

# **McFarlane**®

**McFarlane Aviation Products**  
*FAA-PMA Manufacturer of Quality Aircraft Parts*

## **2020 Catalog**



**800-626-7178**

[sales@mcfarlaneaviation.com](mailto:sales@mcfarlaneaviation.com)  
[www.mcfarlaneaviation.com](http://www.mcfarlaneaviation.com)

Photo credit John King - See pg 9 for details

Customer Number

## Our Mission:

*To anticipate and listen to the needs of the aviation community.*

*To continuously develop innovative solutions and improved aviation products that provide value.*

*To produce and offer safe, quality aviation products that instill pride and confidence in the McFarlane brand.*

*To provide fast delivery, a realistic price, and old-fashioned customer service with customer focused technical support.*

*To provide a challenging, rewarding, safe, and fun place to work.*

*To care for our community and environment.*

McFarlane Aviation Products is a manufacturer of replacement parts for Cessna, Piper, Grumman, Beechcraft and Ag-Cat airplanes, as well as experimental, homebuilt and LSA aircraft. We have thousands of FAA-PMA part numbers on the shelf for immediate shipment. Our facility is conveniently located in the center of the United States near Baldwin City, KS on the Vinland Valley Aerodrome (K64). Our growing corporate office and manufacturing facility includes a campus of four buildings with more than 100,000 square feet of office space, inventory storage and factory floor. Our products are not simply duplicates of their OEM counterparts, but are engineered to be superior in quality and have a longer service life. In addition to quality improvements you also get a lower price. In fact, many McFarlane replacement parts sell for up to 60% less than the equivalent aircraft manufacturer's part.

In addition to McFarlane's extensive line of high quality replacement parts, we also:

- Distribute a wide variety of general aviation products and accessories
- Provide custom manufactured Door Cables, Flight Cables and Push-Pull Controls and services.

We maintain a level of inventory that allows us to provide you with amazingly quick delivery. No matter what you purchase from McFarlane Aviation Products, you can rest assured that you are getting the highest quality product at the lowest price – ***providing you true value and excellent service!***

## History of McFarlane



Historic Vinland Kansas

The founder, Dave McFarlane, created McFarlane Aviation in 1970. The company was created to provide aircraft repair and restoration part-time while Dave focused on agricultural aviation activities in Mississippi, Arkansas and Iowa. In 1979 Dave bought the Vinland Valley Aerodrome (K64) in Baldwin City, KS and moved the company there, where it is located today. The runway was built in a beautiful valley on the old railroad right-of-way in Vinland, Kansas, a pioneer ghost town. A few old store buildings, two old churches, several houses and the oldest library in Kansas are all that remains of the once thriving frontier settlement. The area provides a perfect setting for our business. Dave has built the company on time-tested values of integrity, dignity, respect, customer service and lasting relationships.

Fred McClenahan joined Dave and his wife Phylis there, where they provided aircraft repair, rental, restoration, flight instruction and agricultural aviation services. Fred plays a key role today in developing and testing the McFarlane product line.

As the company prospered and grew, it was incorporated as McFarlane Aviation, Inc. in 1986. As the years went by, it became apparent to Dave and Fred that there was room for improvement in many of the aircraft parts they were installing. In 1989 the company started in a new direction, the design and manufacture of general aviation products. Using their knowledge and skills of aircraft repair and restoration, they designed, engineered, manufactured and tested Cessna seat rollers and washers utilizing new materials. These improved products were accepted by Aircraft owners as being far superior to the OEM parts while costing much less. Sales of these first products grew rapidly and customers requested more products. New replacement parts were developed and approved by the FAA while manufacturing equipment, talented people, and quality control systems were added and improved.

McFarlane Aviation quickly became known as the best source for superior quality, durable, low cost parts with excellent customer service, as a result, the business grew rapidly. Over the past two decades we have added capabilities growing the product line, to include Flight Cables, Door Cables and Push Pull Controls. Today McFarlane holds design and FAA-PMA approval for thousands of different replacement parts for numerous makes of aircraft and serves major aviation centers around the world.

The experience of the past and constant input from knowledgeable customers have given McFarlane engineers vast knowledge of aircraft service demands that are the foundation of improved products. The pioneering spirit lives on in Vinland, Kansas and McFarlane Aviation Products will continue with its commitment to develop innovative solutions for aircraft service problems.

## A Letter from the Founder

### McFarlane Aviation, Inc.

696 E 1700 Rd. Baldwin City, KS 66006  
sales@mcfarlaneaviation.com  
accounting@mcfarlaneaviation.com  
www.mcfarlaneaviation.com  
800 544 8594 Fax 785 594 3922



June 20, 2019

McFarlane Valued Customers,

While I reflect on the once future years that have now become the present and past, I am reminded of the many contributions that have been made to this company by our employees and the aviation community.

I would like to express my sincere appreciation to all of the aircraft owners, commercial operators, repair facilities, FBOs and parts distributors that have supported us over the years. Thank you! You are the reason we can continue to develop improved aircraft parts.

Our common goal of reasonably priced replacement parts that work better, safer and last longer is shared by all of us. Without your support we could not survive the tedious and expensive process of product development, testing and FAA certification. Many of you have shared with us your knowledge and insight for new products and improvements that comes from your years of experience in repairing and operating aircraft. Your help has not been forgotten.

I would also like to thank the FAA personnel that have worked with us. Many of them have gone the extra mile in supporting our goals. With the help of all of you, McFarlane Aviation Products has become a leader in light aircraft replacement parts innovation.

I hope we can repay you by providing you with products and service that meet your expectations. I have not forgotten that this company is also your creation.

Best Regards,

A handwritten signature in black ink that reads "Dave McFarlane".

Dave McFarlane  
Founder  
McFarlane Aviation Products



**McFarlane is a unique and diversified company that specializes in providing high quality, affordable FAA-PMA components, but also manufactures flight control cables, aircraft door cables, seat rails, and push-pull controls for the broader aerospace industry. With our extensive manufacturing capabilities and experienced staff of engineers and technicians, we are able to design and deliver custom solutions to meet the unique needs of our customers worldwide.**



## FAA-PMA Parts

McFarlane Aviation Products designs and manufactures thousands of different quality FAA-PMA parts for Cessna, Piper, Grumman, Beechcraft and Ag Cat aircraft. Our products are engineered to be superior in quality, have a longer service life and still be more affordable than the corresponding OEM aircraft parts. In addition to McFarlane aircraft parts, we also distribute many quality replacement aircraft parts for other manufacturers. Each new product we develop is

analyzed by looking at service history and maintenance problems of each component. We then use this data and our decades of experience to consider improvements that could not be foreseen when the parts were originally designed. Many times, new manufacturing technology or high-tech materials that were not available when the parts were first designed allow us to improve products while at the same time reducing the cost. This translates into a better product at a lower cost for you.

## Custom Door Cables

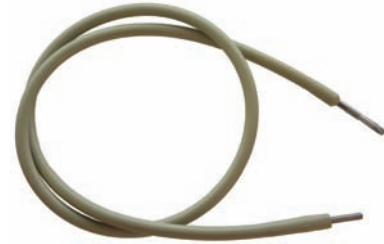
**Are you frustrated with having to make a stock door cable work for you? We have the solution!**



We produce hand-crafted custom door cables fabricated to your specifications. We offer a wide range of color and configuration options. We maintain an extensive stock of cable and fittings that allows us to provide you

with expedited delivery to support your needs.

Quality, dependability, durability and ease of maintenance matter. Our custom pre-formed, stainless steel aircraft cables are built to last. They are sealed with silicone rubber that make them easy to clean, prevents cracking due to wear or climate changes, do not separate from the cable and remain pliable for easy opening and closing of aircraft doors. When you buy our custom door cables you can be assured our products meet your needs with traceability of all materials and tests are maintained for our custom cables.



## Custom Flight Cables

When you purchase our custom flight cables you can rest assured you are purchasing products that meet or exceed all DOD MIL-SPEC and FAA specifications. We are DOD certified (QML listed) to fabricate flight cable assemblies to MIL-DTL-6117 specifications or we can manufacture to your specifications. Our flight cables are produced with standard AN or MS type fittings and are pre-stretched and proof loaded in accordance with MIL-DTL-5688. McFarlane Aviation also manufactures and certifies cable assemblies to the NAS302 through NAS310 standards. If you need cable assemblies requiring special non-standard terminals, we can quickly make them to your specifications or old cable utilizing our precision machine shop, inspection system, and quality-controlled processes. To enhance the longevity of your cables we also offer several industry standard corrosion preventatives. Our experience engineering staff is available to develop cables for your unique applications. Custom cable assemblies are manufactured using the same materials and attention to quality as our FAA-PMA products, however custom flight cables are not FAA-PMA approved.



When you purchase a McFarlane Aviation custom flight cable you can be assured of traceability of all materials and tests are maintained for our flight cables. Our extensive stock of cable and fittings allows us to provide expedited delivery to support our needs for most orders.



## Custom Push-Pull Controls

McFarlane Aviation can manufacture Push-Pull Controls for most any aircraft flying today. All McFarlane Push-Pull custom control cables are built to customer provided specifications. Our custom controls duplicate the original customer supplied controls in regard to length, thread size and pitch, wear sleeve locations, diameter and travel length.

Our custom controls are manufactured to the same standards using the same materials, rigorous testing and inspections as our FAA-PMA approved products; however, custom controls are not FAA-PMA approved. When you purchase a McFarlane Aviation custom control you can be assured of traceability of all materials and tests are maintained for our controls.

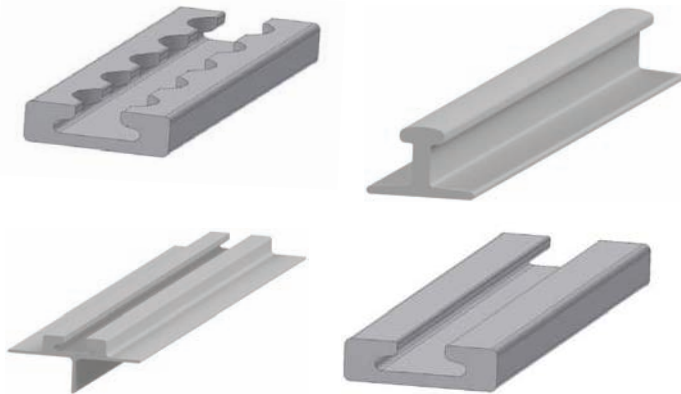
### Overview of our Push-Pull Capabilities

- Push-to-Unlock Dual Controls
- Push-to-Unlock Single Controls / Quadrant Type Controls
- Throttle Controls / Turn-to-Lock Dual Controls
- Turn-to-Lock Single Controls
- Universal Light-Weight Single Controls
- Vernier-Assist Mixture Controls and Throttle Controls
- Vernier Type Controls (Prop and Mixture)



## Custom Seat Rails

We manufacture high quality custom cargo and seat rails built to customer provided specifications, utilizing the same stringent manufacturing and quality processes as we do with our PMA rails. This provides our customers with proven technology that delivers the product on time, on budget, with superior corrosion resistance and added strength. We have a variety of extrusions available for use in your design, as well as state of the art CNC machines for precision cuts and finish.



## Custom Fabricated Parts

McFarlane can make unique FAA-PMA parts that meet customer specifications. Our quality system allows us to make many customer approved parts.



### What are FAA-PMA Parts?

FAA-PMA stands for Federal Aviation Administration Parts Manufacturer Approval. Federal Aviation Regulations (FAR) Part 21.303(a) requires any person producing modification or replacement parts for sale for installation on a type-certificated aircraft to obtain a PMA. The FAA strictly regulates all PMA holders by initially approving all design data, approving all design changes, and auditing production facilities and quality control systems. As a result, the parts produced by a PMA holder meet all rigorous quality standards just like the replacement parts from the original aircraft manufacturer.

We take great pride in our reputation of meeting and exceeding the quality requirements and sound design standards set by the FAA, so that you, our customer can rest assured that the parts you buy are second to none, are available when you need them and at a reasonable price.

### Ordering Information:

To order any of our products please go to our website [www.mcfarlaneaviation.com](http://www.mcfarlaneaviation.com), and either select the FAA-PMA part or click on the link to go to our design form or you can send us a pattern to duplicate. To order a custom door cable, print the form, fill out the required information, and fax, email or mail it to us. Please include your address, phone number, and shipping/payment instructions with all orders.

- 1 Improved, faster search
- 2 Checkout with a registered login or as a guest (no password to remember!)
- 3 Account management
  - update addresses and credit cards
  - change password and email address
  - view invoice history
- 4 Improved search by aircraft
  - option to search by aircraft series
  - save your aircraft make, series, model and S/N between visits
  - refined results differentiate between parts specifically for your aircraft and those that fit a broad range of aircraft (e.g., standard hardware)
- 5 More shipping options, including DHL International, and improved real-time estimates
- 6 Updated product photos
- 7 Many informative FAQ on a variety of topics
- 8 Clickable question marks (?) throughout the site to provide more information
- 9 Mobile device friendly

The screenshot shows the McFarlane website's product selection page. The header includes the McFarlane logo, a search bar, and the phone number 1-866-920-2741. The navigation menu includes Home, Products, Services, Reference, Distributors, Employment, About, Support, and Contact Us. The user is logged in as John Sales. The main content area is titled "Cables and Chains, Flight Control" and features a section for "McFarlane Flight Control Cables" with a description of the products and a "More Detail" button. A sidebar on the left allows users to filter products by aircraft make (Cessna), series (172), and model (172N). Below the sidebar is a table of product categories and a table of products with columns for Part Number, Description, U/M, Retail Price, Your Price, and Stock. The table shows a single product: 1660433-1 PULLEY, EACH, \$229.560, \$194.400.

## Cowl Saver™ Baffle Seals Now with Bi-Flex™

*Rolls available individually or in complete kits*

*Complete kits FAA-PMA approved for Cessna 172R and S models*

**New Bi-Flex™ Technology!**  
Precision laser engraved flex pattern ensures optimum flexibility/stiffness combination for maximum cooling and minimum friction.

**See pages 43-44 for more details.**

## PROP GUARD Anti-Abrasion Boots are back!

**See page 45 to learn more!**

## Certified Aerospace Material A great deal on small lengths!

**Take a look at the "Metal Bar Stock" category at:**  
[www.mcfarlaneaviation.com/products/category/metal-bundles](http://www.mcfarlaneaviation.com/products/category/metal-bundles)

**Push-Pull Controls and Accessories**

Pages 13-37

**Firewall Forward**

Pages 38-64

**Fuel System Parts**

Pages 65-87

**Instruments, Probes and Leads**

Pages 88-91

**Flight Control System**

Pages 92-130

**Flight Control Surface Parts and Attaching Hardware**

Pages 131-140

**Landing Gear and Nose Wheel Steering Parts**

Pages 141-154

**Brake and Wheel Parts**

Pages 155-170

**Seat Rails and Seat Parts**

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**Cargo/Seat Track and Hardware**

Pages 183-184

**Door and Step Parts**

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**Lighting**

Pages 191-198

**Exterior Plastic and Fiberglass Trim and Fairings**

Pages 199-223

**Interior Plastic Trim**

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**Parts Manufactured by PMA Products, Inc.**

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**Parts for Bush Aircraft**

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**208 Caravan Parts**

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**Tools and Miscellaneous**

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- Bolt-Style Wire Clamps.....
- Brake Kits and Parts.....
- Cabin Heat Vents.....
- Cables.....
- Door Cables.....
- Nose Gear Shock Struts Cups and Cones.....
- PT6 Engine Parts.....
- Exhaust Flange Primary.....
- Lighting.....
- Nose Gear Torque Link Assemblies.....
- Step Passenger Door.....
- Tail Tie Down Hantel, Rear.....
- Torque Link Repair Kit.....
- Wheel Seals.....

Pages 268-275

**McFarlane**  
McFarlane Aviation Products

**New! McFarlane 172, 175, 177, 182 and 185 Fuel Valves**

Buy one of our new FAA-PMA approved valves!



Pages 84-85

**New! Aft Seat Rails for 200 Series Aircraft**

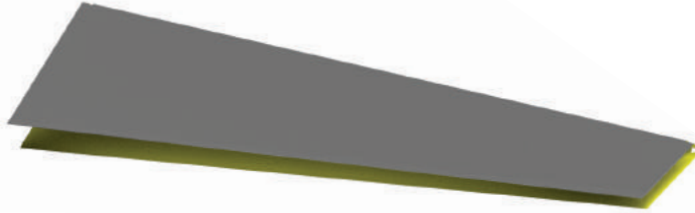
FAA-PMA approved  
Save \$\$



Pages 172-173

**New! Smooth Tail Skins**

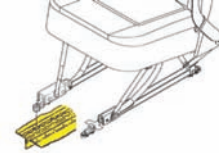
Smooth Elevator and Rudder skins for 152-172 aircraft!



Page 131

**New! Caravan Crew Rails and Cargo Tracks**

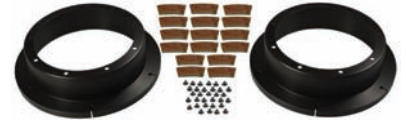
FAA-PMA approved  
Direct replacements!



Page 256

**New! Caravan Brake Kits**

State of the art CNC machined!



Page 250

**New! Door Hinges for Caravan Aircraft**

Bushed options allow easy repair!



Page 256

**New! Fuel Quantity Transmitters for Piper and Maule**

Direct replacements for to find Rochester units!



Page 79

**New! Caravan Flap Indicator**

Reinforced wire hole with steel bushing!



Page 248

**New! Placards**



Page 266

**New! Complete Brake Kit for Pilatus PC-12 Aircraft**

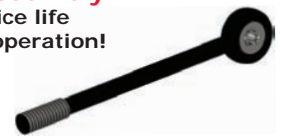
Longer wear life!



Page 166

**New! Caravan Trim Tab Screw Assembly**

Increased service life and smoother operation!



Page 248

**New! Carburetor Heat Air Box Assembly**

Install new not rebuilt!  
A cost effective, improved air/heat system.



Page 39

**New! Articulating Boroscopes**

Starting at less than \$200!



Page 261

**New! Trim Actuator**

Greatly improved design!



Page 129

**New! Australian Nose Strut Seal Kit**

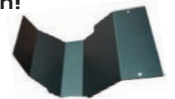
Nothing compares!  
Go years without servicing.



Page 148

**New! Engine Mount Heat Shield**

Improved Heat Protection!



Page 45

**New! Steering Rod Boots for 182E-T Cessna Aircraft**

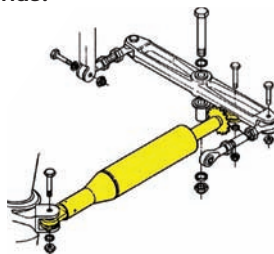
15 times the fire protection!



Page 143

**New! Steering Bungee for 182E-T Cessna Aircraft**

Save thousands!



Pages 143

**New! Shimmy Dampener**

Temperature compensated hydraulics for consistent dampening action!



Page 150



**Cover Photo - 1976 Cessna 172M 160hp with Powerflow exhaust, wingtip extensions and Vortex generators.**  
Pilots - Brian and Ginette Ricketts of Gander, Newfoundland.  
On a beautiful day off the east coast next to a small community called Open Hall, air traffic controller Brian and his wife, co-pilot Ginette, flying low along the coastline found this gorgeous iceberg.  
Co-worker John King who was off shore kayaking saw them flying overhead and captured the McFarlane 2020 Catalog cover photo.

**Cessna Upper Torque Link Assembly for Cessna 210 Aircraft**  
FAA-PMA approved  
Save thousands \$\$



Page 145

**337 Skymaster Spinner Bulkhead**  
Most Skymaster 337 Rear Spinner Bulkhead are cracked!



Page 40

**Control Arms, Shafts, Bearing Housings for Cessna Air Boxes**  
Includes eligibility for 177 and 205 thru 310 aircraft  
Kits and individual components



Page 38

**Aircraft and Engine Components for Learjet**  
Complete Service Kit!



Page 258

**D A M™ Aircraft Window Cleaner**  
This stuff is so D A M good we had to share it!



Page 257

**Cowl Flap Hinges for Cessna Aircraft**  
Replace worn-out cowl flap hinges at half the cost!



Page 64

**Eye Bolts, Mooring**  
Save money and replace with McFarlane's affordable eye bolts!



Page 259

**New! Fuel Cap Gaskets for Cessna Aircraft**  
No more leaking or hard to open fuel caps



Page 81

**Fuel Selector Valve Cam and Bearing for Cessna Aircraft**  
Improved corrosion protection inside the valve when customers use McFarlane's new aluminum bearing with the cam.



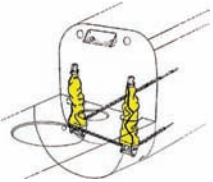
Page 81

**Vacuum Saver**  
Vacuum Pump Cooling Kit!  
Increase the life of your oil cooling pump!  
Complete kits including all hardware



Page 40

**Trim Actuator Boot and Clamp**



Page 130

**Doubler for Cessna Aircraft**  
Doubler for 150-152 aircraft



Page 143

**Main and Nose Strut Seal and Repair Kits for Piper Aircraft**




Page 152

**Cabin Door Hinges and Hinge Pins for Cessna Aircraft**  
New Design!



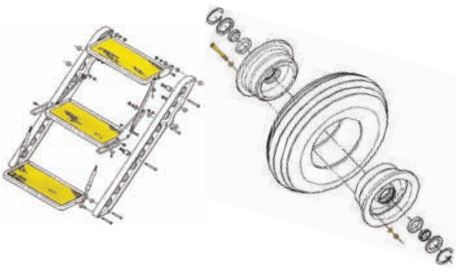
Page 190

**Door and Window Seals for Beechcraft, Cessna, Mooney, and Piper Aircraft**  
High performance aircraft door and window seals!



Pages 188-189

**More Caravan Parts**



Page 255

**Seat Roller Housings for Cessna Aircraft**  
 Now FAA-PMA Approved and In Stock!  
 Use convenient one of a kind flowchart to determine the correct housing for your seat configuration.



Pages 177-180

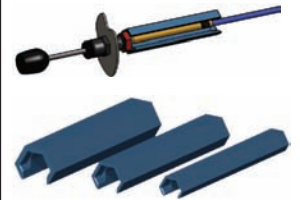
Save \$\$

**AeroLEDs lighting...  
 See the Difference**  
 Drastically improve visibility and safety with efficient long life LED lighting.



Pages 191-198

**Push-Pull Control Wrench Set**  
 Install and remove push-pull control nuts behind the panel



Page 267

**Quasar Cx LED  
 Lighted Wing Tips**  
 Built in Landing/Taxi/Recognition lights!



Page 198

**Interior Plastic Trim  
 for Cessna and Piper Aircraft**  
 McFarlane now stocks hundreds of interior plastic parts!



Page 224-234



**Valve Guide  
 Cleaning  
 Reamers for  
 Continental and  
 Lycoming Engines**  
 Find out why you need these!



Page 265

**Landing Gear Fairings**  
 Weather and UV resistant, won't become brittle and are easily repairable.



Pages 199-223

**Bush Parts for Cessna Aircraft**

**Landing Gear Box Shims** - For Cessna aircraft using leaf spring landing gear  
**Breather Tube** - Cost effective replacements  
**Horizontal Stabilizer Spacer** - Save!  
**Exhaust Shroud** - Quality Construction  
**Trim Wheel Shaft** - Huge Savings!  
**Nosegear Drag Link** - 1/2 of Cessna price!  
**V-Brace Assembly** - Heavy Duty  
**Alternator Adjust Arm** - 1/4 of Cessna price!  
 Pages 242-246



**Parts for Cessna 208 and 208B Aircraft**  
 See Caravan section on pages 247-256



**Save \$\$ on these in stock items!**

**Email Newsletter**

Stay up to date with the release of new McFarlane products, promotions, and helpful maintenance tips by subscribing to our email newsletter. An email is sent about once a month, and your email address will not be shared or sold to anyone else. To subscribe call 888-626-7178 or visit our website: [www.mcfarlaneaviation.com/signup/](http://www.mcfarlaneaviation.com/signup/)

**Carb Heat and Alt Air Controls for Piper Aircraft**

- Longer life and save up to \$200!
- Special, heavier wire for more fatigue strength and reliability.



Pages 22-23

**Cabin Environment Controls for Piper Aircraft**

- Improved friction mechanism
- Anti-rotate feature to reduce stress on the inner wire



Replacement Knobs!  
Pages 25, 35

Page 24

**Flap Trailing Edge Stiffener for Cessna Aircraft**

- New streamline shape and improved fit to reduce stress cracks
- Logbook entry only!



Page 133

**Control Yoke Universal Joint Kits for Piper Aircraft**

Helps comply with AD 2010-15-10!

- Kits include u-joint, shaft, taper pin and hardware.
- Individual parts available separately!
- Taper reamer saves you \$100!



Page 127

**Cargo/Seat Track and Hardware**



Pages 183-184

**Adel Clamps**

Both standard and high temp versions for the engine area.



Page 63

**Door Cables**



Now manufactured by McFarlane!  
Pages 185-186

**Small Radius 1/8" Tube Bender**

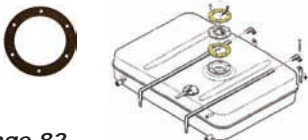
Ideal for fuel injection, primer, oil pressure, and oxygen lines!



Page 260

**Fuel Filler Neck and Fuel Tank Adapter Gaskets for Cessna Aircraft**

Replace dry, brittle gaskets to prevent water contamination in fuel



Page 82

**Cabin Environment and Fuel Shut Off Controls for Cessna Aircraft**

Page 21



**Alternator V-Belt for Piper Aircraft**

- High quality
- Direct replacement
- Save \$\$



Page 266

**Vernier-Assist™ Throttle and Mixture Controls**

- Light weight and compact behind the dash
- Safer - no vernier threads to jam!
- Patented drive mechanism
- Totally new type of control only from McFarlane!



Page 34

**Aircraft Tire Balancer**

- Fast, accurate, affordable!
- Portable, fits in your toolbox



Page 263

**U-Joint Taper Pin Removal Tool for Piper Control Yoke**

- Makes removal of stuck pins easy
- Compact to get in tight places



Page 127

**Seat Roller Housing Gauge for Cessna Aircraft**

- Save time! Two times faster than calipers
- Measures all three dimensions



Pages 177 and 260

**Brake Bleeder Valves for Cleveland and McCauley Wheels**

Improved - No more rust

- FAA-PMA direct replacements
- Convenient kits

Now approved for many STC conversions!



Pages 168-169

**Nose Gear Torque Link Repair Kits for Piper Aircraft**

All commonly replaced torque link parts in convenient kits



Pages 146-147

Kits for Cessna aircraft also available!

**Fuel Drain Valve for King Air**

10 Year Warranty!

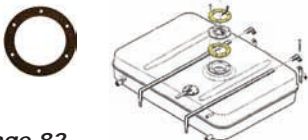
Page 66

Save!!



**Fuel Filler Neck and Fuel Tank Adapter Gaskets for Cessna Aircraft**

Replace dry, brittle gaskets to prevent water contamination in fuel



Page 82

**Cabin Environment and Fuel Shut Off Controls for Cessna Aircraft**

Page 21



**Alternator V-Belt for Piper Aircraft**

- High quality
- Direct replacement
- Save \$\$



Page 266

**Oil Access Door**

Now manufactured by McFarlane!

Page 64



**Cabin Entry Step**

Now manufactured by McFarlane!

Page 187



**Buss Fuses**

Hard to find  
9/32" OD  
4AG/AGS/ABS Series  
Glass or ceramic tube



Page 264

## Beechcraft

### Bonanza Push-Pull Controls

Developing push pull controls for the Bonanza aircraft. Starting with the most popular Bonanzas. These are our first PMA push-pull controls for these aircraft. We have made 100's of customs for Bonanzas over the years.



## Caravan

**Trim Screw Assembly** - PMA Rod End assembly used as part of the trim systems of the Cessna Caravan aircraft. These PMA parts improve corrosion protection and reduce cost to operators. Components highly controlled by maintenance inspections and are regularly replaced.



**Flap Indicator** - New PMA product for Cessna Caravans. It is the actual indicator (arrow) that shows the pilot flap position. We have improved it to prevent wear (the main failure mode).

**Shimmy Dampeners** - New PMA dampeners coming

## Cessna

**Bonding Straps** - Electrical bonding straps for Cessna aircraft. These 18 small, simple, and required PMA straps allow static electricity to flow properly though the aircraft. Cessna is charging a premium for these, we won't.



**Flap Indicator Cable** - Approx 18 New PMA conduit over cables used to communicate flap position to the pilot for various Cessna aircraft.

**172 Seat Control Cable** - Under pilot seat control cable that releases the seat stops on the Restart Cessna aircraft. This control was originally made poorly by Cessna and breaks way too soon.

**Door Hinges** - More door hinges to come.

## Mooney

**Push-Pull Controls** - New PMA controls coming! Throttle, Propeller and Mixture.



## Piper



**Alternator Belts** - Currently developing 8 new v-belts for use on Piper aircraft. These belts cover alternators and air conditioning pumps.

**Single and Multi-engine push-pull controls** - New PMA controls coming.

**Shimmy Dampeners** - New PMA dampeners coming.

- Solid metal construction
- Pilot friendly knobs
- Lifetime lubrication
- Superior low friction conduit
- Custom controls available

## Metal Construction

Unlike the controls of our competitors that use plastic, McFarlane control fittings and components are made from stainless steel, plated steel, anodized aluminum, and brass. All critical swage connections are metal for continued dependability. Our Vernier controls feature locking devices that are precision formed and heat treated in all critical wear areas.

## A Superior Conduit System

McFarlane Aviation's unique conduit has always been the heart of our controls. The conduit is made from carbon steel wire that has been specially formed for increased strength and to give a smooth inside diameter. Two of these specially formed wires are coiled in tandem for increased tensile strength without sacrificing flexibility. A Teflon jacket extruded over the coiled housing provides additional strength and wear resistance to chafing. A virgin Teflon® liner occupies the center of the conduit to reduce friction and ensure reliable operation at all temperature extremes. This system gives our controls good flexibility and smooth low friction operation even when routed with multiple tight bends. The tandem long lay coiling gives our controls good tensile strength and a solid feel under heavy push loads without sacrificing flexibility.

## Knobs Make a Difference

Our "pilot friendly" knobs are all compression molded from a reinforced phenolic or a reinforced melamine-phenol resin. Unlike the soft injection molded knobs of our competitors, our knobs are hard and thermally stable. They resist scratching and do not deteriorate with age. The McFarlane knobs meet the latest F.A.R. requirements for shape and color.

## Vibration Dampening Features

The McFarlane metal swivel joints have a unique Viton® rubber vibration dampening sleeve with a spring load system that dampens engine induced vibration in the push rod guide tube and metal swivel joint. Molded Viton® boots are also used on the push rod guides to seal out contaminants. The Viton® rubber withstands the high temperature of the engine environment while resisting degradation from oil and solvents. This system drastically reduces the vibration fretting and wear that leads to premature control failure.

## Special Lubrication

During assembly, the McFarlane controls have a special lifetime lubrication applied to critical sliding surfaces. This molybdenum disulfide and Teflon® based lubricant with a synthetic grease base has been specially formulated to reduce friction and prevent galling and contamination locking of the control components from -70° F to over 1000° F. This lubricant is available only in McFarlane Aviation controls.

## Consistent Quality

The assembly of McFarlane engine controls is interrupted many times for inspections of all critical elements to ensure only the highest quality controls are produced. Each inner wire swage, each push rod, each conduit fitting and terminal is inspected by our assembly team. As a further measure of quality, a second inspector also checks each critical detail to make sure only controls of the highest quality pass inspection. Attention is given to every detail at McFarlane Aviation. For instance, we verify the torque required to operate every Vernier control to ensure it operates properly and has that smooth feel our customers have come to expect.

## Tough in any Environment

The McFarlane controls have had an outstanding performance and reliability record in all environments. Bush pilots like our controls because they work freely at 50° below zero and have been proven in harsh salt-water environments. Temperatures approaching the melting point of the steel components cannot stop the McFarlane controls from functioning. We have tested our controls in the harshest environments to ensure that they will provide a long reliable service life for the most demanding engine installations.

## Time Tested

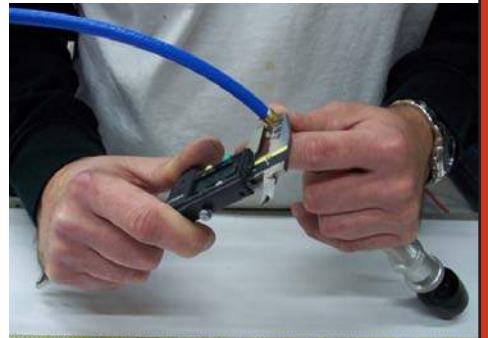
With over 25 years of experience building aircraft engine controls and with thousands of units in airplanes flying on every continent (yes, even Antarctica), McFarlane controls have a proven track record and are universally recognized for their high quality.

## Recommended Service Life

Due to the criticalness of engine controls and considering their operating environment the maximum recommended in service time for McFarlane engine controls is equal to the maximum time between engine overhauls as recommended by the engine manufacturer.

## Custom Controls

Custom engine controls can be manufactured for aircraft not listed in the approved application charts. All McFarlane custom control cables are built to customer provided specifications. McFarlane custom engine controls duplicate the original customer supplied controls in regard to length, thread size and pitch, wear sleeve locations, diameter and travel length. McFarlane custom controls are manufactured to the same standards using the same materials, rigorous testing and inspections as our FAA-PMA products; however, custom controls are not FAA-PMA approved.



**Throttle, Mixture, and Propeller Controls**

- Solid metal construction
- Pilot friendly knobs
- Lifetime lubrication
- Superior low friction conduit

**Carb Heat Controls**

**Longer life and up to 40% off OEM list price!**

- High temperature Teflon lined conduit for reduced vibration wear, longer life and smooth, consistent control
- Cheap controls with poly liners will not tolerate engine temperatures
- Special heavier wire for more fatigue strength and reliability
- Improved friction mechanism
- High quality scratch resistant phenolic knob
- Updated square knob meets the latest FAA standards



Photo courtesy of Dean Zinter 1956 Cessna 172 TD

**The most often replaced Cessna part just got better and now costs less!**

**McFarlane rod ends and wire clamps sold separately!**

Model	Serial Number	Throttle Control	Propeller Control	Mixture Control	Cowl Flap Left Hand	Cowl Flap Right Hand	Carb Heat Control
		Rod End	Rod End	Rod End or Wire Clamp			Wire Clamp
120	8003 thru 15075	MC0411091-7 MCS1104-3 <b>2</b> Rod End		MC600-72 <b>4</b> Wire Clamp N/A			Control N/A MCS2323-1 Wire Clamp
140 <b>1</b>	8001 thru 11846	MC0411091-7 MCS1104-3 <b>2</b> Rod End		MC600-72 <b>4</b> Wire Clamp N/A			Control N/A MC0713302-5CH <b>3</b> MCS2323-1 Wire Clamp
140 <b>1</b> , 140A	11847 thru 15724	MC0411091-7 MCS1104-3 <b>2</b> Rod End		MC600-72 <b>4</b> Wire Clamp N/A			MC0411090-4CH <b>3</b> MCS2323-1 Wire Clamp
150 <b>1</b>	17001 thru 17683	MC0411091-7 MCS1104-3 Rod End		MC600-72 <b>4</b> MCS2323-6 Wire Clamp			Control N/A MCS2323-1 Wire Clamp
150 <b>1</b>	17684 thru 59018	MC0411091-7 MCS1104-3 Rod End		MC600-72 <b>4</b> MCS2323-6 Wire Clamp			MC0713302-5CH <b>3</b> MCS2323-1 Wire Clamp
150A,B,C,D,E,F	All	MCS1222-11S MCS1104-3 Rod End		MC600-72 <b>4</b> MCS2323-6 Wire Clamp			MCS1230-2 MCS2323-1 Wire Clamp
150G	All	MCS1222-14S MCS1104-3 Rod End		MC600-72 <b>4</b> MCS2323-6 Wire Clamp			MCS1230-2 MCS2323-1 Wire Clamp
150H,J,K,L	All	MCC299505-0202S MCS1104-3 Rod End		MC600-72 <b>4</b> MCS2323-6 Wire Clamp			MCS1230-19 MCS2323-1 Wire Clamp
150M	All	MCC299505-0202S MCS1104-3 Rod End		MC600-72 <b>4</b> MCS2323-12 Wire Clamp			MCS1230-19 MCS2323-1 Wire Clamp
A150K,L	All	MCC299505-0202S MCS1104-3 Rod End		MC600-72 <b>4</b> MCS2323-6 Wire Clamp			MCS1230-19 MCS2323-1 Wire Clamp
A150M	All	MCC299505-0202S MCS1104-3 Rod End		MC600-72 <b>4</b> MCS2323-12 Wire Clamp			MCS1230-19 MCS2323-1 Wire Clamp
F150F	All	MCS1222-11S MCS1104-3 Rod End		Control N/A MCS2323-6 Wire Clamp			MCS1230-2 MCS2323-1 Wire Clamp
F150G	All	MCS1222-14S MCS1104-3 Rod End		MC600-72 <b>4</b> MCS2323-6 Wire Clamp			MCS1230-2 MCS2323-1 Wire Clamp
F150H,J,K,L	All	MCC299505-0202S MCS1104-3 Rod End		MC600-72 <b>4</b> MCS2323-6 Wire Clamp			MCS1230-19 MCS2323-1 Wire Clamp
F150M	All	MCC299505-0202S MCS1104-3 Rod End		MC600-72 <b>4</b> MCS2323-12 Wire Clamp			MCS1230-19 MCS2323-1 Wire Clamp
FA150K, <b>L1</b>	FA1500001 thru FA1500120	MCC299505-0202S MCS1104-3 Rod End		MC600-72 <b>4</b> MCS2323-6 Wire Clamp			MCS1230-19 MCS2323-1 Wire Clamp
FA150L <b>1</b>	FA1500121 thru FA1500261	MCC299505-0202S MCS1104-3 Rod End		Control N/A MCS2323-6 Wire Clamp			Control N/A MCS2323-1 Wire Clamp
FA150M	FA1500262 thru FA1500336	MCC299505-0202S MCS1104-3 Rod End		Control N/A MCS2323-12 Wire Clamp			Control N/A MCS2323-1 Wire Clamp
FRA150L, <b>M1</b>	FRA1500121 thru FRA1500311	MCC299505-0202S MCS1104-3 Rod End		Control N/A MCS2323-12 Wire Clamp			MCS1230-19 MCS2323-1 Wire Clamp
FRA150M <b>1</b>	FRA1500312 thru FRA1500336	Control N/A MCS1104-3 Rod End		Control N/A MCS2323-12 Wire Clamp			MCS1230-19 MCS2323-1 Wire Clamp
152 <b>1</b>	15279406 thru 15282031	MC9863053-20 MCS1104-3 Rod End		MC600-72 <b>4</b> MCS2323-13 Wire Clamp			MCS1230-19 MCS2323-5 Wire Clamp
152 <b>1</b>	15282032 thru 15285939	MC9863056-1 MCS1104-3 Rod End		MC600-72 <b>4</b> MCS2323-13 Wire Clamp			MCS1230-19 MCS2323-5 Wire Clamp
152 <b>1</b>	15285940 thru 15286033	MC9863056-1 MCS1104-3 Rod End		MC600-72 <b>4</b> MCS2323-13 Wire Clamp			Control N/A MCS2323-5 Wire Clamp
A152 <b>1</b>	A1520735 thru A1520808	MC9863053-20 MCS1104-3 Rod End		MC600-72 <b>4</b> MCS2323-13 Wire Clamp			MCS1230-19 MCS2323-5 Wire Clamp
A152 <b>1</b>	A1520809 thru A1521049	MC9863056-1 MCS1104-3 Rod End		MC600-72 <b>4</b> MCS2323-13 Wire Clamp			MCS1230-19 MCS2323-5 Wire Clamp

**1** Partial model eligibility.  
**2** If replacing P/N S1186-1 or P/N 0550158 also order RE-KT-1 hardware kit.  
**3** Eligible for use as a carburetor heat control only.  
**4** P/N MC600-72 is a vernier control. Installation is approved as a minor alteration (No STC or Form 337) and may require enlarging the instrument panel mounting hole to 3/4" diameter.

# Push-Pull Controls and Accessories

## Engine, Cowl Flap & Carb Heat Controls - Cessna

Model	Serial Number	Throttle Control	Propeller Control	Mixture Control	Cowl Flap Left Hand	Cowl Flap Right Hand	Carb Heat Control
		Rod End	Rod End	Rod End or Wire Clamp			Wire Clamp
F152 <sup>1</sup>	F15201429 thru F15201528	MC9863053-20		MC600-72 <sup>4</sup>			MCS1230-19
		MCS1104-3 Rod End		MCS2323-13 Wire Clamp			MCS2323-5 Wire Clamp
F152 <sup>1</sup>	F15201529 thru F15201952	MC9863056-1		MC600-72 <sup>4</sup>			MCS1230-19
		MCS1104-3 Rod End		MCS2323-13 Wire Clamp			MCS2323-5 Wire Clamp
F152 <sup>1</sup>	F15201953 thru F15201980	MC9863056-1		MC600-72 <sup>4</sup>			Control N/A
		MCS1104-3 Rod End		MCS2323-13 Wire Clamp			MCS2323-5 Wire Clamp
FA152 <sup>1</sup>	FA1520337 thru FA1520347	MC9863053-20		MC600-72 <sup>4</sup>			MCS1230-19
		MCS1104-3 Rod End		MCS2323-13 Wire Clamp			MCS2323-5 Wire Clamp
FA152 <sup>1</sup>	FA1520348 thru FA1520387	MC9863056-1		MC600-72 <sup>4</sup>			MCS1230-19
		MCS1104-3 Rod End		MCS2323-13 Wire Clamp			MCS2323-5 Wire Clamp
FA152 <sup>1</sup>	FA1520388 thru FA1520425	MC9863056-1		MC600-72 <sup>4</sup>			Control N/A
		MCS1104-3 Rod End		MCS2323-13 Wire Clamp			MCS2323-5 Wire Clamp
170	All	MC0411091-2		MC600-72 <sup>4</sup>			MC0411090-4CH <sup>3</sup>
		Rod End N/A		MCS2323-2 Wire Clamp			MCS2323-1 Wire Clamp
170A	All	MC0411091-2		MC600-72 <sup>4</sup>			MC0411090-4CH <sup>3</sup>
		MCS1104-3 <sup>2</sup> Rod End		MCS2323-2 Wire Clamp			MCS2323-1 Wire Clamp
170B <sup>1</sup>	20267 thru 25372	MC0411091-2		MC600-72 <sup>4</sup>			MC0411090-4CH <sup>3</sup>
		MCS1104-3 <sup>2</sup> Rod End		Wire Clamp N/A			MCS2323-1 Wire Clamp
170B <sup>1</sup>	25373 thru 27169	MCS1222-2S <sup>5</sup>		MC600-72 <sup>4</sup>			MC0411090-22CH <sup>3</sup>
		MCS1104-3 <sup>2</sup> Rod End		Wire Clamp N/A			MCS2323-1 Wire Clamp
172 <sup>1</sup>	28000 thru 36965	MCS1222-2S		MC600-72 <sup>4</sup>			MC0411090-22CH <sup>3</sup>
		MCS1104-3 <sup>2</sup> Rod End		MCS2323-2 Wire Clamp			MCS2323-1 Wire Clamp
172 <sup>1</sup>	36966 thru 46754	MCS1222-2S		MC600-72 <sup>4</sup>			MC0713302-5CH <sup>3</sup>
		MCS1104-3 <sup>2</sup> Rod End		MCS2323-2 Wire Clamp			MCS2323-1 Wire Clamp
172A	All	MCS1222-2S		MC600-72 <sup>4</sup>			MC0713302-5CH <sup>3</sup>
		MCS1104-3 <sup>2</sup> Rod End		MCS2323-2 Wire Clamp			MCS2323-1 Wire Clamp
172B,C	All	MCS1222-2S		MC600-72 <sup>4</sup>			MCS1224-4
		MCS1104-3 <sup>2</sup> Rod End		MCS2323-2 Wire Clamp			MCS2323-5 Wire Clamp
172D	All	MCS1222-2S		MC600-72 <sup>4</sup>			MCS1224-4 <b>New!</b>
		MCS1104-3 Rod End		MCS2323-2 Wire Clamp			MCS2323-5 Wire Clamp
172E,F	All	MCS1222-15S		MC600-72 <sup>4</sup>			MCS1224-4
		MCS1104-3 Rod End		MCS2323-2 Wire Clamp			MCS2323-5 Wire Clamp
172G,H	All	MCS1222-15S		MC600-72 <sup>4</sup>			MCS1230-7
		MCS1104-3 Rod End		MCS2323-2 Wire Clamp			MCS2323-5 Wire Clamp
172I,K,L,M <sup>1</sup>	17256513 thru 17263458	MCC299505-0102		MC600-72 <sup>4</sup>			MCS1230-17
		MCS1104-3 Rod End		MCS2323-2 Wire Clamp			MCS2323-5 Wire Clamp
172M <sup>1</sup>	17263459 thru 17267584	MCC299505-0102		MC600-72 <sup>4</sup>			MCS1230-17
		MCS1104-3 Rod End		MCS2323-13 Wire Clamp			MCS2323-5 Wire Clamp
172N <sup>1</sup>	17267585 thru 17271034	MC9863053-15		MC600-72 <sup>4</sup>			MCS1230-17
		MCS1104-3 Rod End		MCS2323-4 Wire Clamp			MCS2323-5 Wire Clamp
172N <sup>1</sup>	17271035 thru 17274009	MC9863056-3		MC600-72 <sup>4</sup>			MCS1230-17
		MCS1104-3 Rod End		MCS2323-4 Wire Clamp			MCS2323-5 Wire Clamp
172P	17274010 thru 17276654	MC9863056-3		MC600-72 <sup>4</sup>			MCS1230-17
		MCS1104-3 Rod End		MCS2323-13 Wire Clamp			MCS2323-5 Wire Clamp
172Q	All	MC9863056-3		MC600-72 <sup>4</sup>			MCS1241-49
		MCS1104-3 Rod End		MCS2323-4 Wire Clamp			MCS2323-5 Wire Clamp
172R,S	All	MC565-549-021		MC565-548-041			
		MCS1104-3 Rod End		MCS1104-3 Rod End			
172RG	All	MC9863056-8	MC345-085-9	MC600-72 <sup>4</sup>			Control N/A
		MCS1104-3 Rod End	MCS1104-3 Rod End	MCS2323-11 Wire Clamp			MCS2323-7 Wire Clamp
F172D	All	MCS1222-2S		MC600-72 <sup>4</sup>			MCS1224-4 <b>New!</b>
		MCS1104-3 Rod End		MCS2323-2 Wire Clamp			MCS2323-5 Wire Clamp
F172E,F	All	MCS1222-15S		MC600-72 <sup>4</sup>			MCS1224-4
		MCS1104-3 Rod End		MCS2323-2 Wire Clamp			MCS2323-5 Wire Clamp
F172G,H <sup>1</sup>	F172-0180 thru F172-0559	MCS1222-15S		MC600-72 <sup>4</sup>			MCS1230-7
		MCS1104-3 Rod End		MCS2323-2 Wire Clamp			MCS2323-5 Wire Clamp
F172H <sup>1</sup> ,K	F172-0560 thru F17200804	MCC299505-0203S		MC600-72 <sup>4</sup>			MCS1230-17
		MCS1104-3 Rod End		MCS2323-2 Wire Clamp			MCS2323-5 Wire Clamp
F172L,M <sup>1</sup>	F17200805 thru F17201034	MCC299505-0203S		MC600-72 <sup>4</sup>			MCS1230-17
		MCS1104-3 Rod End		MCS2323-2 Wire Clamp			Wire Clamp N/A
F172M <sup>1</sup>	F17201035 thru F17201234	MCC299505-0102		MC600-72 <sup>4</sup>			
		MCS1104-3 Rod End		MCS2323-2 Wire Clamp			
F172M <sup>1</sup>	F17201235 thru F17201514	MCC299505-0102		MC600-72 <sup>4</sup>			MCS1230-17
		MCS1104-3 Rod End		MCS2323-13 Wire Clamp			MCS2323-5 Wire Clamp
F172N <sup>1</sup>	F17201515 thru F17201749	MC9863053-15		MC600-72 <sup>4</sup>			MCS1230-17
		MCS1104-3 Rod End		MCS2323-4 Wire Clamp			MCS2323-5 Wire Clamp
F172N <sup>1</sup>	F17201750 thru F17202039	MC9863056-3		MC600-72 <sup>4</sup>			MCS1230-17
		MCS1104-3 Rod End		MCS2323-4 Wire Clamp			MCS2323-5 Wire Clamp
F172P	F17202040 thru F17202254	MC9863056-3		MC600-72 <sup>4</sup>			MCS1230-17
		MCS1104-3 Rod End		MCS2323-13 Wire Clamp			MCS2323-5 Wire Clamp
FP172	All	MCS1222-4	MCC299506-0105	Control N/A			Control N/A
		MCS1106-4 Rod End	MCS1104-3 Rod End	MCS2323-4 Wire Clamp			MCS2323-5 Wire Clamp
FR172E	All	Control N/A	MCS1223-17	Control N/A			
		MCS1104-3 Rod End	MCS1104-3 Rod End	MCS1104-3 Rod End			
FR172F,G,H, <sup>1</sup>	FR17200061 thru FR17200530	MCC299505-0204S	MCC299506B0104	Control N/A			
		MCS1104-3 Rod End	MCS1104-3 Rod End	MCS1104-3 Rod End			
FR172J <sup>1</sup>	FR17200531 thru FR17200590	MCC299505-0204S	MCC299506B0104	MC9862066-6			
		MCS1104-3 Rod End	MCS1104-3 Rod End	MCS1104-3 Rod End			

<sup>1</sup> Partial model eligibility.

<sup>2</sup> If replacing P/N S1186-1 or P/N 0550158 also order RE-KT-1 hardware kit.

<sup>3</sup> Eligible for use as a carburetor heat control only.

<sup>4</sup> P/N MC600-72 is a vernier control. Installation is approved as a minor alteration (No STC or Form 337) and may require enlarging the instrument panel mounting hole to 3/4" diameter.

<sup>5</sup> The original Cessna adapter P/N 0513004-16 must be used to angle the control and avoid interference behind the instrument panel.

## Push-Pull Controls and Accessories

### Engine, Cowl Flap & Carb Heat Controls - Cessna

Push Pull Controls and Accessories

Model	Serial Number	Throttle Control		Propeller Control		Mixture Control		Cowl Flap Left Hand		Cowl Flap Right Hand		Carb Heat Control	
		Rod End	Rod End	Rod End	Rod End	Rod End or Wire Clamp	Rod End or Wire Clamp					Wire Clamp	Wire Clamp
FR172K <sup>4</sup>	FR17200591 thru FR17200630	MC9863053-10 MCS1104-3 Rod End	MCC299506B0104	MCS1104-3 Rod End	MCS1104-3 Rod End	MC9862066-6		MCS1391-26 (one per aircraft)					
FR172K <sup>1</sup>	FR17200631 thru FR17200675	MC9863055-10 MCS1104-3 Rod End	MCC299506B0104	MCS1104-3 Rod End	MCS1104-3 Rod End	MC9862066-6		MCS1391-26 (one per aircraft)					
P172D	All	MCS1222-4 MCS1106-4 Rod End	MCC299506-0105	MCS1104-3 Rod End	MCS1104-3 Rod End	MC600-72 <sup>6</sup>							MCS1224-4 MCS2323-5 Wire Clamp
R172K <sup>1,4</sup>	R1722000 thru R1722929	MC9863053-10 MCS1104-3 Rod End	MCC299506B0104	MCS1104-3 Rod End	MCS1104-3 Rod End	MC9862066-6		MCS1391-26 (one per aircraft)					
R172K <sup>1</sup>	R1722930 thru R1723454	MC9863055-10 MCS1104-3 Rod End	MCC299506B0104	MCS1104-3 Rod End	MCS1104-3 Rod End	MC9862066-6		MCS1391-26 (one per aircraft)					
175 <sup>1</sup>	55001 thru 55703	MC0411091-27 MCS1106-4 Rod End	Control N/A	Control N/A	Control N/A	MC600-72 <sup>6</sup>							MC0411090-22CH <sup>3</sup> MCS2323-5 Wire Clamp
175 <sup>1</sup>	55704 thru 56238	MC0411091-30 MCS1106-4 Rod End	Control N/A	Control N/A	Control N/A	MC600-72 <sup>6</sup>							MC0713302-5CH <sup>3</sup> MCS2323-5 Wire Clamp
175A	All	MCS1222-4 MCS1106-4 Rod End	Control N/A	Control N/A	Control N/A	MC600-72 <sup>6</sup>							MC0713302-5CH <sup>3</sup> MCS2323-5 Wire Clamp
175B,C	All	MCS1222-4 MCS1106-4 Rod End	Control N/A	Control N/A	Control N/A	MC600-72 <sup>6</sup>							MCS1224-4 MCS2323-5 Wire Clamp
177	All	MCS1222-19 MCS1104-3 Rod End	Control N/A	Control N/A	Control N/A	MC600-72 <sup>6</sup>							MCS1788-2 Wire Clamp N/A
177A	All	MCC299505-0301 MCS1104-3 Rod End	Control N/A	Control N/A	Control N/A	MC600-72 <sup>6</sup>							MCS1230-19 MCS2323-5 Wire Clamp
177B <sup>1</sup>	17701371 thru 17702539	MCC299505-0301 MCS1104-3 Rod End	MCC299506-0105	MCS1104-3 Rod End	MCS1104-3 Rod End	MC600-72 <sup>6</sup>		MCS1391-25	MCS1391-26				MCS1230-19 MCS2323-5 Wire Clamp
177B <sup>1</sup>	17702540 thru 17702752	MCS565-549-013 MCS1104-3 Rod End	MCS345-085-4	MCS1104-3 Rod End	MCS1104-3 Rod End	MC600-72 <sup>6</sup>		MCS1391-25	MCS1391-26				MCS1230-19 MCS2323-5 Wire Clamp
177RG <sup>1</sup>	177RG0001 thru 177RG1051	MCC299505-0401 MCS1104-3 Rod End	MCC299506-0105	MCS1104-3 Rod End	MCS1104-3 Rod End	MC600-72 <sup>6</sup>		MCS1391-27	MCS1391-27				
177RG <sup>1</sup>	177RG1052 thru 177RG1366	Control N/A MCS1104-3 Rod End	MC345-085-4	Control N/A	Control N/A	MC600-72 <sup>6</sup>		MCS1391-27	MCS1391-27				
F177RG <sup>1</sup>	F177RG0001 thru F177RG0160	MCC299505-0401 MCS1104-3 Rod End	MCC299506-0105	MCS1104-3 Rod End	MCS1104-3 Rod End	MC600-72 <sup>6</sup>							
F177RG <sup>1</sup>	F177RG0161 thru F177RG0177		MC345-085-4 Rod End N/A										
180 <sup>1</sup>	30000 thru 32150	MCS1222-1S MCS1106-4 Rod End	MCS1223-4	MCS1104-3 <sup>2</sup> Rod End	MCS1104-3 Rod End	MC600-72 <sup>6</sup>		MC0713041-1 or MC0713041-1B <sup>7</sup> (Dual control, one per aircraft)					MC0411090-22CH <sup>3</sup> MCS2323-5 Wire Clamp
180 <sup>1</sup>	32151 thru 32160	MCS1222-1S MCS1106-4 Rod End	MCS1223-4	MCS1104-3 <sup>2</sup> Rod End	MCS1104-3 Rod End	MC600-72 <sup>6</sup>		Control N/A (Dual control, one per aircraft)					Control N/A MCS2323-5 Wire Clamp
180 <sup>1</sup> ,180A	32161 thru 50355	MCS1222-1S MCS1106-4 Rod End	MCS1223-4	MCS1104-3 <sup>2</sup> Rod End	MCS1104-3 Rod End	MC600-72 <sup>6</sup>		MC0713041-1 or MC0713041-1B <sup>7</sup> (Dual control, one per aircraft)					MC0713050-2 MCS2323-5 Wire Clamp
180B	50356 thru 50661	MCS1222-1S MCS1106-4 Rod End	MCS1223-4	MCS1104-3 <sup>2</sup> Rod End	MCS1104-3 Rod End	MC0713050-2 <sup>6,7</sup>		MC0713041-1 or MC0713041-1B <sup>7</sup> (Dual control, one per aircraft)					MC0713050-2 MCS2323-5 Wire Clamp
180C	All	MCS1222-1S MCS1106-4 Rod End	MCS1223-4	MCS1104-3 <sup>2</sup> Rod End	MCS1104-3 Rod End	MC0713050-2 <sup>6,7</sup>		MC0713306-1 (Dual control, one per aircraft)					MC0713302-5CH <sup>3</sup> MCS2323-5 Wire Clamp
180D,E	All	MCS1222-1S MCS1106-4 Rod End	MCS1223-4	MCS1104-3 <sup>2</sup> Rod End	MCS1104-3 Rod End	MC600-72 <sup>6</sup>		MCS1245-1	MCS1245-2				MC0713302-5CH <sup>3</sup> MCS2323-5 Wire Clamp
180F	All	MCS1222-1S MCS1106-4 Rod End	MCS1223-4	MCS1104-3 <sup>2</sup> Rod End	MCS1104-3 Rod End	MC600-72 <sup>6</sup>		MCS1245-1	MCS1245-2				MCS1230-2 MCS2323-5 Wire Clamp
180G	All	MCS1222-1S MCS1106-4 Rod End	MCS1223-4	MCS1104-3 Rod End	MCS1104-3 Rod End	MC600-72 <sup>6</sup>		MCS1245-3	MCS1245-2				MCS1230-2 MCS2323-5 Wire Clamp
180H <sup>1</sup>	18051446 thru 18051875	MCS1222-13S MCS1106-4 Rod End	MCS1223-5	MCS1104-3 Rod End	MCS1104-3 Rod End	MC600-72 <sup>6</sup>		MCS1572-1	MCS1245-2				MCS1230-2 MCS2323-5 Wire Clamp
180H <sup>1</sup> , J	18051876 thru 18052770	MCC299505-0201S MCS1106-4 Rod End	MCC299506-0103	MCS1104-3 Rod End	MCS1104-3 Rod End	MC600-72 <sup>6</sup>		MCS1572-1	MCS1245-2				MCS1230-19 MCS2323-5 Wire Clamp
180K <sup>1</sup>	18052771 thru 18053000	MC9863053-5 MCS1106-4 Rod End	MCS345-085-3	MCS1104-3 Rod End	MCS1104-3 Rod End	Control N/A		MC9860074-3	MC9860074-4				MCS1230-19 MCS2323-5 Wire Clamp
180K <sup>1</sup>	18053001 thru 18053203	MC9863055-9 MCS1106-4 Rod End	MCS345-085-3	MCS1104-3 Rod End	MCS1104-3 Rod End	Control N/A		MC9860074-3	MC9860074-4				MCS1230-19 MCS2323-5 Wire Clamp
182	All	MCS1222-1S MCS1106-4 Rod End	MCS1223-4	MCS1104-3 <sup>2</sup> Rod End	MCS1104-3 Rod End	MC600-72 <sup>6</sup>							Control N/A MCS2323-5 Wire Clamp
182A	All	MCS1222-1S MCS1106-4 Rod End	MCS1223-4	MCS1104-3 <sup>2</sup> Rod End	MCS1104-3 Rod End	MC600-72 <sup>6</sup>							MCS2323-5 Wire Clamp
182B,C	All	MCS1222-1S MCS1106-4 Rod End	MCS1223-4	MCS1104-3 <sup>2</sup> Rod End	MCS1104-3 Rod End	MC0713050-2 <sup>6,7</sup>		MC0713306-1 (Dual control, one per aircraft)					MC0713302-5CH <sup>3</sup> MCS2323-5 Wire Clamp
182D	All	MCS1222-1S MCS1106-4 Rod End	MCS1223-4	MCS1104-3 <sup>2</sup> Rod End	MCS1104-3 Rod End	MC600-72 <sup>6</sup>		MCS1245-1	MCS1245-2				MC0713302-5CH <sup>3</sup> MCS2323-5 Wire Clamp
182E,F,G	All	MCS1222-6S MCS1106-4 Rod End	MCS1223-3	MCS1104-3 <sup>2</sup> Rod End	MCS1104-3 Rod End	MC600-72 <sup>6</sup>		MC9860058-3	MC9860058-4				MCS1230-3 MCS2323-5 Wire Clamp
182H,J,K	All	MCS1222-13S MCS1106-4 Rod End	MCS1223-6	MCS1104-3 Rod End	MCS1104-3 Rod End	MC600-72 <sup>6</sup>		MC9860058-3	MC9860058-4				MCS1230-3 MCS2323-5 Wire Clamp
182L,M,N <sup>1</sup>	18258506 thru 18260445	MCC299505-0201S MCS1106-4 Rod End	MCC299506-0102	MCS1104-3 Rod End	MCS1104-3 Rod End	MC600-72 <sup>6</sup>		MC9860058-3	MC9860058-4				MCS1230-10 MCS2323-5 Wire Clamp
182N <sup>1</sup> , P <sup>1</sup>	18260446 thru 18261425	MCC299505-0201S MCS1106-4 Rod End	MCC299506-0102	MCS1104-3 Rod End	MCS1104-3 Rod End	MC600-72 <sup>6</sup>		MC9860058-3	MC9860058-4				MCS1230-10 MCS2323-5 Wire Clamp

<sup>1</sup> Partial model eligibility.

<sup>2</sup> If replacing P/N S1186-1 or P/N 0550158 also order RE-KT-1 hardware kit.

<sup>3</sup> Eligible for use as a carburetor heat control only.

<sup>4</sup> S/Ns FR17200591 thru FR17200620 and R1722000 thru R1722880 prop control is only eligible for installation if aircraft has been modified as per Cessna Service Letter 78-51.

<sup>5</sup> The MC600-72 control is an approved alternate control for this aircraft. See note <sup>6</sup>.

<sup>6</sup> P/N MC600-72 is a vernier control. Installation is approved as a minor alteration (No STC or Form 337) and may require enlarging the instrument panel mounting hole to 3/4" diameter.

<sup>7</sup> See page 20 for details.

Eligibility continued on next page



# Push-Pull Controls and Accessories

## Engine, Cowl Flap & Carb Heat Controls - Cessna

Push Pull Controls and Accessories

Model	Serial Number	Throttle Control	Propeller Control	Mixture Control	Cowl Flap Left Hand	Cowl Flap Right Hand	Carb Heat Control
		Rod End	Rod End	Rod End or Wire Clamp			Wire Clamp
182P	18261426 thru 18264835	MCC299505-0205 MCS1106-4 Rod End	MCC299506-0102 MCS1104-3 Rod End	MC600-72 4	MC9860058-3	MC9860058-4	MCS1230-10 MCS2323-5 Wire Clamp
182P	18264836 thru 18265175	MC9863053-5 MCS1106-4 Rod End	MCC299506-0102 MCS1104-3 Rod End	MC600-72 4 MCS2323-4 Wire Clamp	MC9860058-3	MC9860058-4	MCS1230-10 MCS2323-5 Wire Clamp
182Q	18265176 thru 18266590	MC9863053-5 MCS1106-4 Rod End	MC9862067-3 MCS1104-3 Rod End	MC600-72 4 MCS2323-4 Wire Clamp	MC9860058-3	MC9860058-4	MCS1230-10 MCS2323-5 Wire Clamp
182Q	18266591 thru 18267715	MC9863055-9 MCS1106-4 Rod End	MC9862067-3 MCS1104-3 Rod End	MC600-72 4 MCS2323-4 Wire Clamp	MC9860058-3	MC9860058-4	MCS1230-10 MCS2323-5 Wire Clamp
182R	All	MC9863055-9 MCS1106-4 Rod End	MC9862067-3 MCS1104-3 Rod End	MC600-72 4 MCS2323-4 Wire Clamp	MC9860058-3	MC9860058-4	MCS1230-10 MCS2323-5 Wire Clamp
182S, 182T, T182T	All	MC565-549-031 MCS1104-3 Rod End	MC565-580-038 MCS1104-3 Rod End	MC565-548-042 MCS1104-3 Rod End	MC580-703-024	MC580-703-025	
A182J,K,L,N		Control N/A MCS1106-4 Rod End	Control N/A MCS1104-3 Rod End	Control N/A MCS2323-4 Wire Clamp			MCS2323-5 Wire Clamp MCS1230-10
F182P	All	MC9863053-5 MCS1106-4 Rod End	MCC299506-0102 MCS1104-3 Rod End	MC600-72 4 MCS2323-4 Wire Clamp			MCS2323-5 Wire Clamp MCS1230-10
F182Q	F18200026 thru F18200094	MC9863053-5 MCS1106-4 Rod End	MC9862067-3 MCS1104-3 Rod End	MC600-72 4 MCS2323-4 Wire Clamp			MCS1230-10 MCS2323-5 Wire Clamp
F182Q	F18200095 thru F18200169	MC9863055-9 MCS1106-4 Rod End	MC9862067-3 MCS1104-3 Rod End	MC600-72 4 MCS2323-4 Wire Clamp			MCS1230-10 MCS2323-5 Wire Clamp
FR182	FR18200001 thru FR18200020	MC9863053-11 MCS1104-3 Rod End	MC345-085-5 MCS1104-3 Rod End	Control N/A MCS2323-11 Wire Clamp			MCS1230-10 MCS2323-1 Wire Clamp
FR182	FR18200021 thru FR18200045	MC9863056-6 MCS1104-3 Rod End	MC345-085-5 MCS1104-3 Rod End	Control N/A MCS2323-11 Wire Clamp			MCS1230-10 MCS2323-1 Wire Clamp
FR182	FR18200046 thru FR18200070	MC9863056-6 MCS1104-3 Rod End	MC345-085-8 MCS1104-3 Rod End	Control N/A MCS2323-11 Wire Clamp			MCS1230-10 MCS2323-1 Wire Clamp
R182	R18200001 thru R18200583	MC9863053-11 MCS1104-3 Rod End	MC345-085-5 MCS1104-3 Rod End	Control N/A MCS2323-11 Wire Clamp	MC9860075-3	MC9860075-4	MCS1230-10 MCS2323-1 Wire Clamp
R182	R18200584 thru R18201313	MC9863056-6 MCS1104-3 Rod End	MC345-085-5 MCS1104-3 Rod End	Control N/A MCS2323-11 Wire Clamp	MC9860075-3	MC9860075-4	MCS1230-10 MCS2323-1 Wire Clamp
R182	R18201314 thru R18202041	MC9863056-6 MCS1104-3 Rod End	MC345-085-8 MCS1104-3 Rod End	Control N/A MCS2323-11 Wire Clamp	MC9860075-3	MC9860075-4	MCS1230-10 MCS2323-1 Wire Clamp
T182	All	MC9863056-7 Rod End N/A	MC345-085-8 MCS1104-3 Rod End	Control N/A MCS2323-11 Wire Clamp	MC9860075-3	MC9860075-4	Control N/A MCS2323-3 Wire Clamp
TR182	R18200584 thru R18201313	MC9863056-7 MCS1104-3 Rod End	MC345-085-6 MCS1104-3 Rod End	Control N/A MCS2323-11 Wire Clamp	MC9860075-3	MC9860075-4	Control N/A MCS2323-3 Wire Clamp
TR182	R18201314 thru R18202041	MC9863056-7 MCS1104-3 Rod End	MC345-085-8 MCS1104-3 Rod End	Control N/A MCS2323-11 Wire Clamp	MC9860075-3	MC9860075-4	Control N/A MCS2323-3 Wire Clamp
185	All	MC1213228-3 MCS1104-3 Rod End	MC1213228-3 MCS1104-3 Rod End	MC1213229-2 MCS1104-3 Rod End	MCS1245-3	MCS1245-2	MCS1230-2 Wire Clamp N/A
185A,B,C,D,E	All	MCS1294-1 MCS1104-3 Rod End	MCS1223-5 MCS1104-3 Rod End	MCS1220-4 MCS1104-3 Rod End	MCS1572-1	MCS1245-2	MCS1230-2 Wire Clamp N/A
A185E	185-0968 thru 185-1300	MCS1294-1 MCS1104-3 Rod End	MCS1223-5 MCS1104-3 Rod End	MCS1220-4 MCS1104-3 Rod End	MCS1572-1	MCS1245-2	MCS1230-2 Wire Clamp N/A
A185E	185-1301 thru 18502007	MCC299505-0301 MCS1104-3 Rod End	MCC299506-0103 MCS1104-3 Rod End	MCC299507-0201 MCS1104-3 Rod End	MCS1572-1	MCS1245-2	
A185E	18502008 thru 18502025	MCC299505-0501 MCS1104-3 Rod End	MCC299506-0201 MCS1104-3 Rod End	MCC299507-0401 MCS1104-3 Rod End	MCS1572-1	MCS1245-2	
A185E	18502026 thru 18502027	MCC299505-0301 MCS1104-3 Rod End	MCC299506-0103 MCS1104-3 Rod End	MCC299507-0201 MCS1104-3 Rod End	MCS1572-1	MCS1245-2	
A185E	18502028 thru 18502090	MCC299505-0501 MCS1104-3 Rod End	MCC299506-0201 MCS1104-3 Rod End	MCC299507-0401 MCS1104-3 Rod End	MCS1572-1	MCS1245-2	
A185F	18502091 thru 18502310	MCC299505-0501 MCS1104-3 Rod End	MCC299506-0201 MCS1104-3 Rod End	MCC299507-0401 MCS1104-3 Rod End	MCS1572-1	MCS1245-2	
A185F	18502311 thru 18503153	MCC299505-0501 MCS1104-3 Rod End	MCC299506-0201 MCS1104-3 Rod End	MCC299507-0401 MCS1104-3 Rod End	MCS1572-1	MCS1245-2	
A185F	18503154 thru 18503683	MC9863053-17 MCS1104-3 Rod End	MC345-085-7 MCS1104-3 Rod End	MC9862066-3 MCS1104-3 Rod End	MC9860074-3	MC9860074-4	
A185F	18503684 thru 18504448	MC9863056-5 MCS1106-3 Rod End	MC345-085-7 MCS1104-3 Rod End	MC9862066-3 MCS1104-3 Rod End	MC9860074-3	MC9860074-4	
188,188A	All	MCS1391-18 MCS1104-3 Rod End	MCS1391-19 MCS1104-3 Rod End	MCS1220-13 MCS1104-3 Rod End			Control N/A MCS2323-5 Wire Clamp
188B,A-188B	All	MCS2149-1 MCS1106-3 Rod End	MCS2149-2 MCS1106-3 Rod End	MCC299507-0301 MCS1106-3 Rod End			Control N/A MCS2323-5 Wire Clamp
A188B	All	MCS1391-20 MCS1104-3 Rod End	MCS1391-19 MCS1104-3 Rod End	MCS1220-13 MCS1104-3 Rod End			Control N/A MCS2323-5 Wire Clamp
A188B	18802349 thru 18802745 18802349T thru 18802745T	MCS2149-1 MCS1106-3 Rod End	MCS2149-2 MCS1106-3 Rod End	MCC299507-0301 MCS1106-3 Rod End			Control N/A MCS2323-5 Wire Clamp
A188B	18802746 thru 18803973 18802746T thru 18803973T	MCC299508-0301 MCS1106-3 Rod End	MCC299508-0302 MCS1106-3 Rod End	MCC299508-0401 MCS1106-3 Rod End			Control N/A MCS2323-5 Wire Clamp
T188C	All	MCS1106-3 Rod End MC0411091-4	MCS1106-3 Rod End MC0311031-1	MCS1106-3 Rod End Control N/A			
190	All	MCS1106-3 Rod End MC0411091-4	MCS1104-3 Rod End MC0311031-2	MCS1104-3 Rod End Control N/A			
195,195A,B	All	MCS1106-3 Rod End MCS1219-1	MCS1104-3 Rod End MCS1223-17	MCS1104-3 Rod End MCS1220-3			
210-5 (205) 210-5A (205A)	All	MCS1104-3 Rod End MCS1104-3 Rod End	MCS1104-3 Rod End MCS1104-3 Rod End	MCS1104-3 Rod End MCS1104-3 Rod End	MCS1244-5	MCS1244-31	

1 Partial model eligibility.  
 2 If replacing P/N S1186-1 or P/N 0550158 also order RE-KT-1 hardware kit.  
 3 Controls not eligible for A188, A188A, or A188B with Continental O-470 engine.  
 4 P/N MC600-72 is a vernier control. Installation is approved as a minor alteration (No STC or Form 337) and may require enlarging the instrument panel mounting hole to 3/4" diameter.

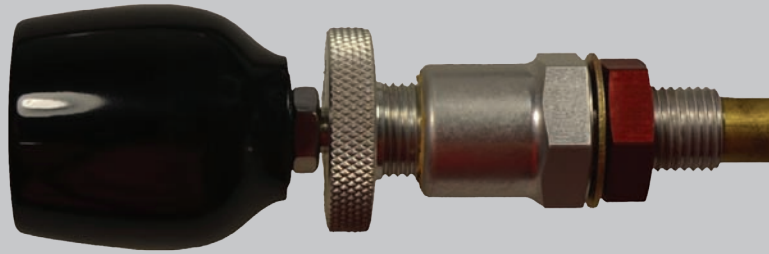
Eligibility continued on next page

Model	Serial Number	Throttle Control		Propeller Control		Mixture Control		Cowl Flap		Carb Heat Control	
		Rod End	Rod End	Rod End	Rod End	Left Hand	Right Hand	Wire Clamp	Wire Clamp		
206	All	MCS1219-1	MCS1223-17	MCS1220-3	MCS1244-5	MCS1244-31					
206H	All	MCS1104-3 Rod End	MCS1104-3 Rod End	MCS1104-3 Rod End	MCS1244-5	MCS1244-31					
		MCS565-549-041	MCS565-580-012	MCS565-548-043	MCS580-703-026	MCS580-703-027					
P206,P206A,B	All	MCS1104-3 Rod End	MCS1104-3 Rod End	MCS1104-3 Rod End	MCS1244-5	MCS1244-31					
		MCS1222-10A	MCS1223-4	MCS1220-3							
P206C,D,E	All	MCC299505-0101	MCC299506-0101	MCC299507-0101	MCS1244-5	MCS1244-31					
		MCS1104-3 Rod End	MCS1104-3 Rod End	MCS1104-3 Rod End							
T206H	All	MCS565-549-041	MCS565-580-012	MCS565-548-043	MCS580-703-026	MCS580-703-027					
TP206A	P2060161 thru P2060274	MCS1222-10A	MCS1223-4	MCS1220-3	MCS1244-5	MCS1244-31					
		MCS1104-3 Rod End	MCS1104-3 Rod End	MCS1104-3 Rod End							
TP206A	P2060275 thru P2060419	MCS1222-10A	MCS1223-4	MCS1220-3	MCS1244-32	MCS1244-31					
		MCS1104-3 Rod End	MCS1104-3 Rod End	MCS1104-3 Rod End							
TP206C,D,E	All	MCC299505-0101	MCC299506-0101	MCC299507-0101	MCS1244-32	MCS1244-31					
		MCS1104-3 Rod End	MCS1104-3 Rod End	MCS1104-3 Rod End							
TU206A	U2060438 thru U2060617	MCS1222-10A	MCS1223-4	MCS1220-3	MCS1244-5	MCS1244-31					
		MCS1104-3 Rod End	MCS1104-3 Rod End	MCS1104-3 Rod End							
TU206A	U2060618 thru U206-0914	MCS1222-10A	MCS1223-4	MCS1220-3	MCS1244-32	MCS1244-31					
		MCS1104-3 Rod End	MCS1104-3 Rod End	MCS1104-3 Rod End							
TU206C,D,E,F	All	MCC299505-0101	MCC299506-0101	MCC299507-0101	MCS1244-32	MCS1244-31					
		MCS1104-3 Rod End	MCS1104-3 Rod End	MCS1104-3 Rod End							
TU206G	U20603522 thru U20604649	MC9863053-13	MC9862067-1	MC9862066-1	MCS1244-32	MCS1244-31					
		MCS1104-3 Rod End	MCS1104-3 Rod End	MCS1104-3 Rod End							
TU206G	U20604650 thru U20607020	MC9863056-2	MC9862067-1	MC9862066-1	MCS1244-32	MCS1244-31					
		MCS1104-3 Rod End	MCS1104-3 Rod End	MCS1104-3 Rod End							
U206,U206A,B	All	MCS1222-10A	MCS1223-4	MCS1220-3	MCS1244-5	MCS1244-31					
		MCS1104-3 Rod End	MCS1104-3 Rod End	MCS1104-3 Rod End							
U206C,D,E	All	MCC299505-0101	MCC299506-0101	MCC299507-0101	MCS1244-5	MCS1244-31					
		MCS1104-3 Rod End	MCS1104-3 Rod End	MCS1104-3 Rod End							
U206F	U20601701 thru U20602199	MCC299505-0101	MCC299506-0101	MCC299507-0101	MCS1244-5	MCS1244-31					
		MCS1104-3 Rod End	MCS1104-3 Rod End	MCS1104-3 Rod End							
U206F	U20602200 thru U20603521	MCC299505-0101	MCC299506-0101	MCC299507-0101	MCS1244-32	MCS1244-31					
		MCS1104-3 Rod End	MCS1104-3 Rod End	MCS1104-3 Rod End							
U206G	U20603522 thru U20604649	MC9863053-13	MC9862067-1	MC9862066-1	MCS1244-32	MCS1244-31					
		MCS1104-3 Rod End	MCS1104-3 Rod End	MCS1104-3 Rod End							
U206G	U20604650 thru U20607020	MC9863056-2	MC9862067-1	MC9862066-1	MCS1244-32	MCS1244-31					
		MCS1104-3 Rod End	MCS1104-3 Rod End	MCS1104-3 Rod End							
207,T207	All	MCS1222-25A	MCS1223-16	MCS1220-12A	MCS1244-29	MCS1244-30					
		MCS1104-3 Rod End	MCS1104-3 Rod End	MCS1104-3 Rod End							
207A	20700363 thru 20700482	MC9863053-16	MC9862067-12	MC9862066-5	MCS1244-29	MCS1244-30					
		MCS1104-3 Rod End	MCS1104-3 Rod End	MCS1104-3 Rod End							
207A	20700483 thru 20700788	MC9863056-4	MC9862067-12	MC9862066-5	MCS1244-29	MCS1244-30					
		MCS1104-3 Rod End	MCS1104-3 Rod End	MCS1104-3 Rod End							
210,210A	All	MC1213228-2	MCS1223-17	MC1213229-1	MC1213040-1	MC1213040-2					
		MCS1104-3 Rod End	MCS1104-3 Rod End	MCS1104-3 Rod End							
210B,C,D	All	MCS1219-1	MCS1223-17	MCS1220-3	MCS1244-5	MCS1244-31					
		MCS1104-3 Rod End	MCS1104-3 Rod End	MCS1104-3 Rod End							
210E,F,G	All	MCS1222-10A	MCS1223-4	MCS1220-3	MCS1244-5	MCS1244-31					
		MCS1104-3 Rod End	MCS1104-3 Rod End	MCS1104-3 Rod End							
210H,J	All	MCC299505-0101	MCC299506-0101	MCC299507-0101	MCS1244-5	MCS1244-31					
		MCS1104-3 Rod End	MCS1104-3 Rod End	MCS1104-3 Rod End							
210K	21059200 thru 21059240	MCC299505-0101	MCC299506-0101	MCC299507-0101	MCS1244-5	MCS1244-31					
		MCS1104-3 Rod End	MCS1104-3 Rod End	MCS1104-3 Rod End							
210K	21059241 thru 21061573	MCC299505-0101	MCC299506-0101	MCC299507-0101	MCS1244-32	MCS1244-31					
		MCS1104-3 Rod End	MCS1104-3 Rod End	MCS1104-3 Rod End							
210M	All	MC9863053-13	MC9862067-1	MC9862066-1	MCS1244-32	MCS1244-31					
		MCS1104-3 Rod End	MCS1104-3 Rod End	MCS1104-3 Rod End							
210N	All	MC9863056-2	MC9862067-1	MC9862066-1	MCS1244-32	MCS1244-31					
		MCS1104-3 Rod End	MCS1104-3 Rod End	MCS1104-3 Rod End							
210R	All	MCC299513-0101	Control N/A	Control N/A							
		MCS1104-3 Rod End	MCS1104-3 Rod End	MCS1104-3 Rod End							
P210N	P21000001 thru P21000150	MC9863053-13	MC9862067-1	MC9862066-1	MCS1244-32	MCS1244-31					
		MCS1104-3 Rod End	MCS1104-3 Rod End	MCS1104-3 Rod End							
P210N	P21000151 thru P21000834	MC9863056-2	MC9862067-1	MC9862066-1	MCS1244-32	MCS1244-31					
		MCS1104-3 Rod End	MCS1104-3 Rod End	MCS1104-3 Rod End							
P210R	All	MCC299513-0101	Control N/A	Control N/A	Control N/A	Control N/A					
		MCS1104-3 Rod End	MCS1104-3 Rod End	MCS1104-3 Rod End	MCS1106-3 Rod End	MCS1106-3 Rod End					
T210F	All	MCS1222-10A	MCS1223-4	MCS1220-3	MCS1244-5	MCS1244-31					
		MCS1104-3 Rod End	MCS1104-3 Rod End	MCS1104-3 Rod End							
T210G	All	MCS1222-10A	MCS1223-4	MCS1220-3	MCS1244-32	MCS1244-31					
		MCS1104-3 Rod End	MCS1104-3 Rod End	MCS1104-3 Rod End							
T210H,J	All	MCC299505-0101	MCC299506-0101	MCC299507-0101	MCS1244-32	MCS1244-31					
		MCS1104-3 Rod End	MCS1104-3 Rod End	MCS1104-3 Rod End							
T210K	21059200 thru 21059240	MCC299505-0101	MCC299506-0101	MCC299507-0101	MCS1244-5	MCS1244-31					
		MCS1104-3 Rod End	MCS1104-3 Rod End	MCS1104-3 Rod End							
T210K	21059241 thru 21061573	MCC299505-0101	MCC299506-0101	MCC299507-0101	MCS1244-32	MCS1244-31					
		MCS1104-3 Rod End	MCS1104-3 Rod End	MCS1104-3 Rod End							
T210M	All	MC9863053-13	MC9862067-1	MC9862066-1	MCS1244-32	MCS1244-31					
		MCS1104-3 Rod End	MCS1104-3 Rod End	MCS1104-3 Rod End							
T210N	All	MC9863056-2	MC9862067-1	MC9862066-1	MCS1244-32	MCS1244-31					
		MCS1104-3 Rod End	MCS1104-3 Rod End	MCS1104-3 Rod End							
T210R	All	MCC299513-0101	Control N/A	Control N/A	Control N/A	Control N/A					
		MCS1104-3 Rod End	MCS1104-3 Rod End	MCS1104-3 Rod End	MCS1106-4 Rod End	MCS1106-4 Rod End					

Partial model eligibility.

**Maintenance Tip:**

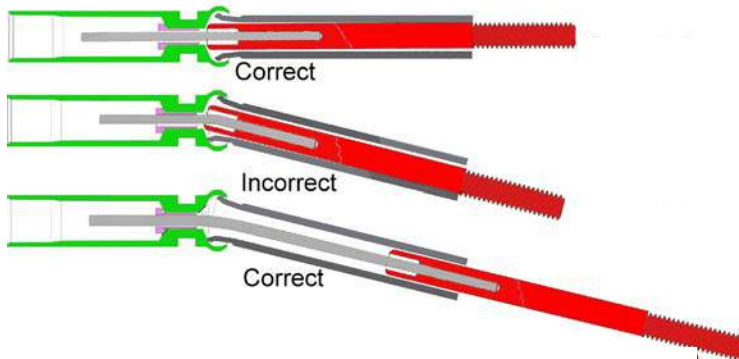
McFarlane does not recommend any lubrication of our controls, especially the throttle control. A special laminated leather packing is used on our throttle controls to allow smooth friction adjustments as the friction nut is rotated. When lubrication is applied to the control (even at the engine end), the oil can work up the inner core cable and conduit to the leather packing area causing loss of locking friction. The McFarlane controls are built with a self-lubricating Teflon® liner and a stainless steel inner core. A lifetime anti-seize paste lubricant is applied in specific areas to prevent galling and control lockup if the control becomes contaminated in service. The oil can compromise the anti-seize compound installed at the factory. McFarlane and Cessna both recommend new controls at time intervals equal to engine overhaul. Engine controls absorb tremendous vibration over an engine service cycle and the resultant wear and damage cannot be seen from the control exterior. The rubber boots must be kept in good condition as they keep contamination out and are critical to prevent vibration wear. Never re-install a control that has excess friction as this friction is the best indicator of overload internal damage and pending failure.



# Coming Soon - Beechcraft Engine Controls

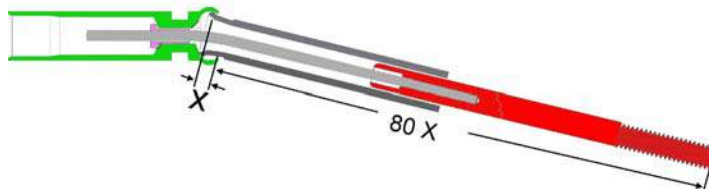
**Engine Control Rigging**

- Pushrod must be extended when angles
- Inner flex cable is stressed when pushrod is retracted and angled



**Engine Controls Can Be Damaged**

- The pushrod has extreme leverage on the swivel joint
- Do not sideload the pushrod during installation



**Always Replace Vibration Boots and Spring After Installation**

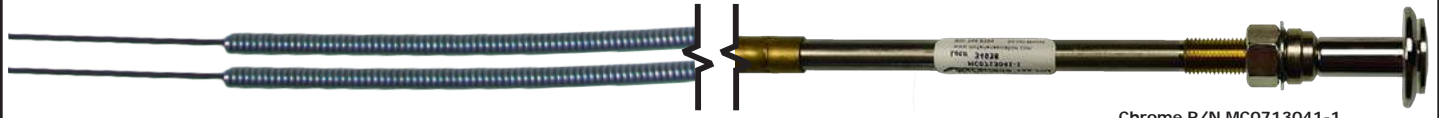
- Stops vibration erosion and wear
- Seals out dirt



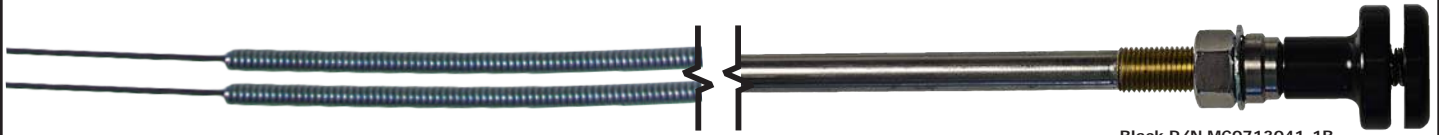
**Dual Cowl Flap Controls for Cessna Aircraft**

Models 180, 180A and 180B

- Solid wire ends
- Choose a chrome or black knob to match your panel!



Chrome P/N MC0713041-1

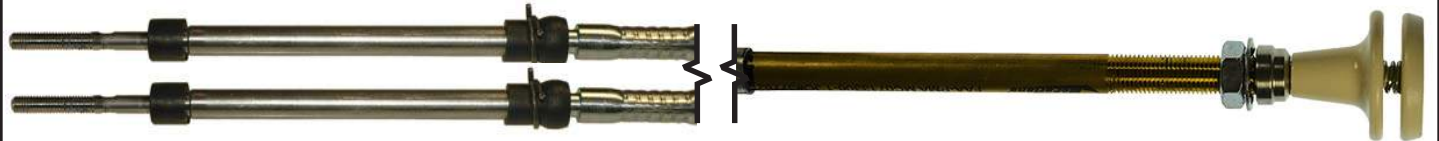


Black P/N MC0713041-1B

Models 180C, 182B and 182C

P/N MC0713306-1

- Higher locking force than the original prevents cowl flap slippage
- Superior low friction Teflon lined conduit to reduce wear
- Heavier inner wire and conduit mean less deflection under load
- Powder coated aluminum knob for a durable finish
- Push rod ends



**Starter Control Cable**

P/N 0513142-14

- Fits some earlier model Cessna aircraft
- Manufactured by Cessna
- Panel Mounted

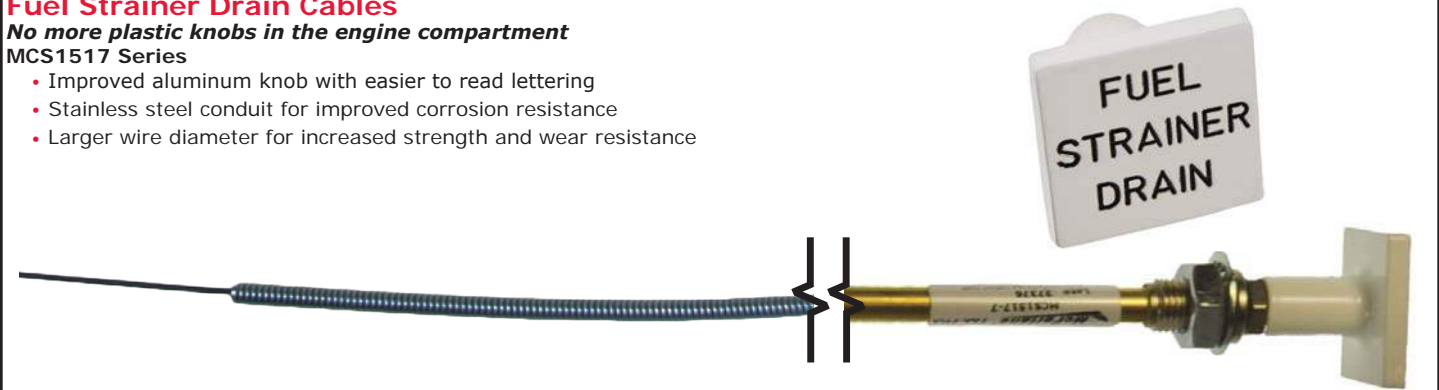


**Fuel Strainer Drain Cables**

**No more plastic knobs in the engine compartment**

MCS1517 Series

- Improved aluminum knob with easier to read lettering
- Stainless steel conduit for improved corrosion resistance
- Larger wire diameter for increased strength and wear resistance



See pages 67-68 for eligibility and fuel strainer kits.

**Vacuum Pump Wrench**

Finally a vacuum pump wrench that can get into those really tight spots!

P/N TOOL133 (use for small pumps)

P/N TOOL133-L (use for large pumps)

A different wrench for the two sizes of pumps (one wrench can't do both pumps well)

- Heat treated tool steel
- Precision made
- 1/4" square drive
- Black oxide finish
- Torque wrench friendly



## Cabin Environment and Fuel Shut Off Controls for Cessna Aircraft

- Special, heavier wire for more fatigue strength and reliability
- Improved push-to-unlock mechanism - more holding strength
- Longer life
- High temperature Teflon lined conduit
- Reduced vibration wear
- Most knobs match originally equipped knobs



Aircraft	Serial Number	Part Number	Aux Cabin Air	Cabin Air	Cabin Air LH	Cabin Air RH	Cabin Heat	Cabin Vent.	Cold Air	Defrost	Fuel Shut Off	Fuel Valve	Fwd Air
180F,G,H	18051184 thru 18051875	MCS1241-1					•						
182E,F,G,H,J,K	All	MCS1241-1		•									
182L,M,N	18258506 thru 18260445	MCS1241-27		•									
182N,P,Q,R,S,T	18260446 and On	MCS1241-34					•						
F182P,Q, FR182	All	MCS1241-34					•						
R182, T182, T182T ,TR182	All	MCS1241-34					•						
185, 185A	185-0001 thru 185-0413	MCS1241-1					•						
185A,B	185-0414 thru 185-0653	MCS1241-1					•					•	
185C	All	MCS1241-1					•						
185D,E	All	MCS1241-1					•						
A185E	185-0968 thru 185-1300	MCS1241-1					•				•		
	185-1301 thru 185-1599	MCS1241-27									•		
	18501600 thru 18501679	MCS1241-34									•		
188B	18800986 thru 18801824	MCS1241-34						•					
	18801825 thru 18802348	MCS1241-34	•										
	18800986 thru 18801824T	MCS1241-34						•					
A188B, A188B (w/large hopper)	18801825 thru 18802348T	MCS1241-34	•										
	18802349 thru 18802745T	MCS1241-34	•										
	18802746 thru 18803973T	MCS1241-34							•				
T188C	All	MCS1241-34							•				
210-5(205)	205-0001 thru 205-0126	MCS1241-1	•	•			•						
	205-0127 and On	MCS1241-1	•	•	•		•						
206	All	MCS1241-1	•	•			•						
206H	20600001 thru 20608082	MCS1241-34		•			•						
	20608083 and On	MCS1241-34		•			•				•		
P206, P206A,B	All	MCS1241-1	•	•			•						
P206C,D	All	MCS1241-27	•	•			•						
P206E	U20601445 thru U20601587	MCS1241-34		•			•						
	T20608001 thru T20608146	MCS1241-34		•			•						
T206H	T20608147 and On	MCS1241-34		•			•				•		
TP206A,B	All	MCS1241-1		•			•						
TP206C	All	MCS1241-27	•	•			•						
TP206D,E	All	MCS1241-27		•			•						
TU206A	All	MCS1241-1		•			•						
TU206B	All	MCS1241-1	•	•			•						
TU206C,D	All	MCS1241-27	•	•			•						
TU206E,F	U20601445 thru U20602199	MCS1241-27		•			•						
TU206F	U20602200 thru U20603521	MCS1241-34		•			•						
TU206G	All	MCS1241-34		•			•				•		
U206	All	MCS1241-1		•			•						
U206A,B	All	MCS1241-1	•	•			•						
U206C,D	All	MCS1241-27	•	•			•						
U206E,F	All	MCS1241-34		•			•						
U206G	All	MCS1241-34		•			•				•		
207, T207	20100001 thru 20700148	MCS1241-27	•	•			•						
	20700149 thru 20700362	MCS1241-34		•			•						
207A, T207A	All	MCS1241-34		•			•				•		
210B	21057841 thru 21057940	MCS1241-1			•		•						
	21057941 thru 21058085	MCS1241-1					•						
210C	All	MCS1241-1					•						
210D	All	MCS1241-1					•						
210E	All	MCS1241-1	•				•						
210F	All	MCS1241-1	•				•						
210G	All	MCS1241-1	•	•			•						
210H,J	All	MCS1241-27	•	•			•						
210K,L,M,N,R	All	MCS1241-34		•			•						
P210N,R	All	MCS1241-34					•						•
T210F	All	MCS1241-1		•			•						
T210G	All	MCS1241-1	•	•			•						
T210H,J	All	MCS1241-27	•	•			•						
T210K,L,M,N,R	All	MCS1241-34		•			•						

Partial model eligibility

Push Pull Controls and Accessories

**Throttle, Mixture and Propeller Controls**

- Solid metal construction
- Pilot friendly knobs
- Lifetime lubrication
- Superior low friction conduit



**Carb Heat and Alt Air Controls**

Longer life and save up to \$200.00

- The most commonly replaced controls just got better!
- Special, heavier wire for more fatigue strength and reliability
- Improved friction mechanism
- Reduced vibration wear
- Anti-rotate feature to reduce stress on the inner wire
- High temperature Teflon lined conduit
- Realistic price



Model	Serial Number	Throttle Control	Propeller Control	Mixture Control	Carb Heat or Alt Air Control
PA-18, PA-18"105" (Special)	All			MC454-120 5 7 or MC600-72 3	MC454-120 2
PA-18"125" (Army L-21A)	All			MC454-120 5 7 or MC600-72 3	MC454-120 2
PA-18"135" (Army L-21B)	All			MC454-120 5 7 or MC600-72 3	MC454-120 2
PA-18"150"	All			MC454-120 5 7 or MC600-72 3	MC454-120 2
PA-18A, PA-18A"135",A"150"	All			MC454-120 5 7 or MC600-72 3	MC454-120 2
PA-18AS"125", AS"135", AS"150"	All			MC454-120 5 7 or MC600-72 3	MC454-120 2
PA-18S, PA-18S"105",S"125",S"135"	All			MC454-120 5 7 or MC600-72 3	MC454-120 2
PA-18S "150"	1809001 thru 1809113			MC454-120 5 7 or MC600-72 3	MC454-120 3
PA-18S "150"	18-3771 thru 18-8309025			MC454-120 5 7 or MC600-72 3	MC454-120 2
PA-19, PA19S,L-18C	All			MC600-72	
PA-20, PA-20S	20-01 thru 20-811	MC455-139		MC454-120 5 7 or MC600-72 3	MC454-120 2
PA-20, PA-20S	20-812 thru 20-1121	MC455-139		MC454-120 5 7 or MC600-72 3	MC454-120 2
PA-20, PA-20S	20-1122 and On			MC454-120 5 7 or MC600-72 3	MC454-120 2
PA-20"115", PA-20S"115"	20-01 thru 20-1121	MC455-139		MC454-120 5 7 or MC600-72 3	MC454-120 2
PA-20"115", PA-20S"115"	20-1122 and On			MC454-120 5 7 or MC600-72 3	MC454-120 2
PA-20"135", PA-20S"135"	20-877 thru 20-1121	MC455-139		MC454-120 5 7 or MC600-72 3	MC454-120 2
PA-20"135", PA-20S"135"	20-1122 and On			MC454-120 5 7 or MC600-72 3	MC454-120 2
PA-22	All	MC455-139		MC454-120 5 7 or MC600-72 3	MC454-120 2
PA-22-108	22-8000 and On	MC12693-04		MC454-120 5 7 or MC600-72 3	MC454-120 1
PA-22-135	22-534 thru 22-2377	MC455-139		MC454-120 5 7 or MC600-72 3	MC454-120 2
PA-22-135	22-2379 thru 22-2424	MC455-139		MC454-120 5 7 or MC600-72 3	MC454-120 2
PA-22-135	22-2378, 22-2425 thru 22-3217	MC12693-04		MC454-120 5 7 or MC600-72 3	MC454-120 3
PA-22-135	22-3219 thru 22-3386	MC12693-04		MC454-120 5 7 or MC600-72 3	MC454-120 3
PA-22S-135	22-534 thru 22-2377			MC454-120 5 7 or MC600-72 3	MC454-120 2
PA-22S-135	22-2379 thru 22-2424			MC454-120 5 7 or MC600-72 3	MC454-120 2
PA-22S-135	22-2378, 22-2425 thru 22-3217	MC12693-04		MC454-120 5 7 or MC600-72 3	MC454-120 3
PA-22S-135	22-3219 thru 22-3386	MC12693-04		MC454-120 5 7 or MC600-72 3	MC454-120 3
PA-22-150, PA-22S-150	22-2378, 22-2425 thru 22-7642	MC12693-04		MC454-120 5 7 or MC600-72 3	MC454-120 3
PA-22-160, PA-22S-160	22-5139, 22-5603 thru 22-7642	MC12693-04		MC454-120 5 7 or MC600-72 3	MC454-120 3
PA-24	24-1 thru 24-2969			MC454-120 1 7 or MC600-72 3	
PA-24-250	24-1 thru 24-104			MC454-120 1 7	
PA-24-250	24-105 thru 24-2174		MC455-184	MC454-120 1 7 or MC600-72 3 Carb. Engine Only	
PA-24-250	24-2175 thru 24-2969		MC455-252	MC454-120 1 7 or MC600-72 3 Carb. Engine Only	
PA-24-250	24-2970 thru 24-3687		MC455-252	MC600-72 3 Carb. Engine Only	
PA-24-260	24-3642, 24-4000 thru 24-4803		MC455-252	MC600-72 Carb. Engine Only	
PA-24-260	24-4804 thru 24-5034			MC600-72 Carb. Engine Only	
PA-24-400	26-2 thru 26-148			MC22633-04	
PA-28-140	28-20002 thru 28-21095	MC12693-04		MC600-72	MC63902-003 4
PA-28-140	28-21096 thru 28-24999	MC12693-04		MC600-72	MC63902-016 6
PA-28-140	28-25000 thru 28-25821	MC455-353		MC455-352	MC554-167
PA-28-140	28-25822 thru 28-7425418	MC455-353		MC455-352	MC554-093 1
PA-28-140	28-7425419 thru 28-7725290	MC455-353		MC455-352	MC554-094 1
PA-28-150	28-1 thru 28-2627	MC12693-04		MC600-72	MC63902-003 4
PA-28-150	28-2628 thru 28-4377	MC12693-04		MC600-72	MC63902-016 6
PA-28-151	All	MC455-350		MC455-352	MC554-093 1
PA-28-160	28-1 thru 28-2627	MC12693-04		MC600-72	MC63902-003 4
PA-28-160	28-2628 thru 28-4377	MC12693-04		MC600-72	MC63902-016 6
PA-28S-160	28-1 thru 28-1760			MC600-72	MC63902-003 4
PA-28-161	2816001 thru 2816110 (Less 2816066)	MC455-350		MC455-352	MC554-093 1
PA-28-161	2816111 thru 2816119				MC554-093 1
PA-28-161	2841001 thru 2842999	MC455-350		MC455-352	MC554-093 1
PA-28-161	28-7716002 thru 28-8616057	MC455-350		MC455-352	MC554-093 1
PA-28-180	28-671 thru 28-1760	MC12693-04		MC600-72	MC63902-003 4
PA-28-180	28-1761 thru 28-2627	MC12693-04		MC600-72	MC63902-003 4
PA-28-180	28-2628 thru 28-4377	MC12693-04		MC600-72	MC63902-016 6
PA-28-180	28-4378 thru 28-5152	MC455-333		MC455-332	MC66856-007
PA-28-180	28-5153 thru 28-5398	MC455-350		MC455-352	MC66856-007
PA-28-180	28-5399 and On	MC455-350		MC455-352	MC554-095 1
PA-28R-180	28R-30005 thru 28R-30481	MC455-322	MC455-322	MC455-322	
PA-28R-180	28R-30483 thru 28R-31092	MC455-322	MC455-322	MC455-322	
PA-28R-180	28R-31093 thru 28R-31279	MC455-322	MC455-322	MC455-322	MC554-092 1
PA-28R-180	28R-7130001 thru 28R-7130013	MC455-322	MC455-322	MC455-322	MC554-130 1

Eligibility continued on the next page. See notes regarding the Mixture, Carburetor Heat and Alternate Air controls on the next page.

See page 29 for  
Piper rod ends!



# Push-Pull Controls and Accessories Engine Controls - Piper/Van's RV Series



Push Pull Controls and Accessories

Model	Serial Number	Throttle Control	Propeller Control	Mixture Control	Carb Heat or Alt Air Control
PA-28R-180	28R-7130014 thru 28R-7130019	MC455-322	MC455-322	MC455-322	
PA-28S-180	28-671 thru 28-2627			MC600-72	MC63902-003 <b>4</b>
PA-28S-180	28-2628 thru 28-4377			MC600-72	MC63902-016 <b>6</b>
PA-28S-180	28-4378 thru 28-5398				MC66856-007
PA-28S-180	28-5399 thru 28-28-7205234				MC554-095 <b>1</b>
PA-28-181	2843001 thru 2843999			MC455-352	MC554-094 <b>1</b>
PA-28-181	2890001 thru 2890205			MC455-352	MC554-095 <b>1</b>
PA-28-181	2890206 thru 2890231			MC455-352	MC554-094 <b>1</b>
PA-28-181	28-7690001 thru 28-8290174	MC455-350		MC455-352	MC554-095 <b>1</b>
PA-28-181	28-8390001 and On	MC455-350		MC455-352	MC554-095 <b>1</b>
PA-28-201T	28-7921001 thru 28-7921095	MC455-322	MC455-322	MC455-361	MC554-387 <b>1</b>
PA-28R-200	28R-30482, 28R-35001 thru 28R-35225	MC455-322	MC455-322	MC455-322	
PA-28R-200	28R-35226 thru 28R-35830	MC455-322	MC455-322	MC455-322	MC554-092 <b>1</b>
PA-28R-200	28R-7135001 thru 28R-7635545	MC455-322	MC455-322	MC455-322	MC554-130 <b>1</b>
PA-28R-201	2837001 thru 2837061	MC455-322	MC455-322	MC455-322	MC554-130 <b>1</b>
PA-28R-201	2844001 thru 2844999				MC554-130 <b>1</b>
PA-28R-201	28R-7737002 thru 28R-7837317	MC455-322	MC455-322	MC455-322	MC554-130 <b>1</b>
PA-28R-201T	28R-7703002 thru 28R-7803372	MC455-322	MC455-322	MC455-361	MC554-387 <b>1</b>
PA-28R-201T	2803001 thru 2803015	MC455-322	MC455-322	MC455-361	MC554-387 <b>1</b>
PA-28RT-201	28R-7918001 thru 28R-8018116	MC455-322	MC455-322	MC455-322	MC554-130 <b>1</b>
PA-28RT-201	28R-8018117 thru 28R-8118000				MC554-130 <b>1</b>
PA-28RT-201	28R-8118001 and On	MC455-322	MC455-322	MC455-322	MC554-130 <b>1</b>
PA-28RT-201T	2831001 thru 2831038				MC554-387 <b>1</b>
PA-28RT-201T	28R-7931001 thru 28R-8031188	MC455-322	MC455-322	MC455-361	MC554-387 <b>1</b>
PA-28RT-201T	28R-8031189 thru 28R-8131000				MC554-387 <b>1</b>
PA-28RT-201T	28R-8131001 and On	MC455-322	MC455-322	MC455-361	MC554-387 <b>1</b>
PA-28-235	28-10003 thru 28-11038	MC12693-04		MC600-72	
PA-28-235	28-11039	MC12693-04			
PA-28-235	28-11040 thru 28-11252	MC455-333		MC455-332	MC66856-007
PA-28-235	28-11253 thru 28-11393	MC455-333		MC455-332	MC554-094 <b>1</b>
PA-28-235	28-710001 thru 28-7210033	MC455-333		MC455-332	MC554-094 <b>1</b>
PA-28-235	28-7310001 thru 28-7710089	MC455-333	MC455-344	MC455-332	MC554-094 <b>1</b>
PA-28-236	28-11001 thru 2811050				MC554-094 <b>1</b>
PA-28-236	28-7911001 thru 28-8211060	MC455-333	MC455-344	MC455-332	MC554-094 <b>1</b>
PA-28-236	28-8311001 and On	MC455-333	MC455-344	MC455-332	MC554-094 <b>1</b>
PA-32-260	32-451 thru 32-1110				MC63902-021 <b>6</b>
PA-32-260	32-1111 thru 32-1320	MC455-360		MC455-361	MC554-053
PA-32-260	32-7100001 thru 32-7800008	MC455-360		MC455-361	MC554-053
PA-32-300	32-40000 thru 32-40565	MC69530-02	MC65451-04		
PA-32-300	32-40566 thru 32-41018	MC455-358			MC554-051
PA-32-300	32-41019 thru 32-7140000				MC554-051
PA-32-300	32-7140001 thru 32-7940282	MC455-358			MC554-051
PA-32-300	32-7940283 and On				MC554-051
PA-32R-300	All				MC554-051
PA-32RT-300	All				MC554-051
PA-32S-300	32S40566 thru 32S-7240137				MC554-051
PA-32-301	32-8006001 thru 32-8406020	MC455-358			MC554-051
PA-32-301	32-8406021 thru 32-8506000	MC455-358			MC554-051
PA-32-301	32-8506001 and On	MC455-358			MC554-051
PA-32-301FT	All				MC554-051
PA-32-301T	32-8024001 thru 32-8424002	MC455-344		MC455-344	MC553-874
PA-32-301T	32-8524001 and On	MC455-344		MC455-344	
PA-32R-301	3213001 thru 3213103				MC554-051
PA-32R-301	3246001 thru 3246999				MC653-658
PA-32R-301	32R-8013001 thru 32R-8613006				MC554-051
PA-32R-301T	3229001 thru 3229003				MC553-885
PA-32R-301T	3257001 thru 3257999				MC653-658
PA-32R-301T	32R-8029001 thru 32R-8229078	MC455-360		MC455-360	MC553-885
PA-32R-301T	32R-8229079 thru 32R-8329000				MC553-885
PA-32R-301T	32R-8329001 and On	MC455-360		MC455-360	MC553-885
PA-32RT-300T	32R-7787001 thru 32R-7887000				MC554-466
PA-32RT-300T	32R-7887001 thru 32R-7987126	MC455-360		MC455-360	MC554-466
PA-38-112	All				MC554-511 <b>1</b>

- 1** Knob not included.
  - 2** Knob not included. Order P/N MC471-052
  - 3** Knob not included. Order P/N MC471-060
  - 4** Knob P/N MC471-084 included with control.
  - 5** Knob not included. Order P/N MC471-053
  - 6** Knob P/N MC571-131 included with control.
  - 7** P/N MC454-120 duplicates original control.
  - 8** P/N MC600-72 is a vernier control. Installation is approved as a minor alteration (No STC or Form 337) and may require enlarging the instrument panel mounting hole to 3/4" diameter.
- Additional knob eligibility is shown on the following pages.  
Rod end part numbers and eligibility can be found on the following pages.

## Engine Controls for Van's RV Series Aircraft

- Quick delivery, No long lead times
- High quality and affordable
- Lifetime lubrication
- Non certified, designed for listed aircraft models only
- See page 157 for APS brake discs and linings



Model	Throttle	Venier-Assist Throttle	Mixture	Prop
RV-10	MCRV10-T	MCRV10-TV	MCRV10-M	MCRV10-P
RV-10 W/Aerosport Products Panel	MCRV10-T-A	MCRV10-TV-A		MCRV10-P-A
RV-12		MCRV12-TV		

Controls designed to work with Van's firewall forward kit. Call for custom installations.

**Cabin Environment Controls for Piper Aircraft**

Longer life and save up to \$200.00

- Special, heavier wire for more fatigue strength and reliability
- Improved friction mechanism
- Reduced vibration wear
- Anti-rotate feature to reduce stress on the inner wire
- High temperature Teflon lined conduit
- Realistic price



P/N MC454-120 without knob



P/N MC454-120 with  
P/N MC471-052 Knob



P/N MC454-120 with  
P/N MC471-060 Knob

Aircraft	Serial Number	Cabin Heat Control	Cabin Heat Rear Control	Cold Air Inlet Control	Defrost Control	Parking Brake Control
PA-18, PA-18A, PA-18S	All	MC454-120 2				
PA-18 "105" (Special), PA-18S "105" (Special)	All	MC454-120 2				
PA-18 "125" (Army L-21A), PA-18AS "125", PA-18S "125"	All	MC454-120 2				
PA-18 "135" (Army L-21B), PA-18A "135", PA-18S "135"	18-1 thru 18-2167	MC454-120 2				
PA-18 "135" (Army L-21B), PA-18A "135", PA-18S "135"	18-2168 and On	MC454-120 2		MC454-120 2		
PA-18AS "135", PA-18 "150"	All	MC454-120 1				
PA-18A "150", PA-18AS "150"	All	MC454-120 2		MC454-120 2		
PA-18S "150"	1809001 thru 1809113	MC454-120 3		MC454-120 1		
PA-18S "150"	18-3771 thru 18-8309025	MC454-120 2		MC454-120 2 3		
PA-20, PA-20S	20-1 thru 20-553	MC454-120 2				
PA-20, PA-20S	20-554 thru 20-811	MC454-120 2		MC454-120 2		
PA-20, PA-20S	20-812 and On	MC454-120 2	MC454-120 2	MC454-120 2		
PA-20 "115", PA-20S "115"	All	MC454-120 2				
PA-20 "135", PA-20S "135"	20-877, 20-881, 20-885, 20-888	MC454-120 2		MC454-120 2		
PA-20 "135", PA-20S "135"	20-878 thru 20-880	MC454-120 2	MC454-120 2	MC454-120 2		
PA-20 "135", PA-20S "135"	20-882 thru 20-884	MC454-120 2	MC454-120 2	MC454-120 2		
PA-20 "135", PA-20S "135"	20-886 thru 20-887	MC454-120 2	MC454-120 2	MC454-120 2		
PA-20 "135", PA-20S "135"	20-889 and On	MC454-120 2	MC454-120 2	MC454-120 2		
PA-22	All	MC454-120 2	MC454-120 2	MC454-120 2		MC454-120 2
PA-22-108	All	MC454-120 3	MC454-120 3	MC454-120 3		MC454-120 1
PA-22-135	22-534 thru 22-539, 22-543	MC454-120 2		MC454-120 2		MC454-120 2
PA-22-135	22-540 thru 22-542	MC454-120 2	MC454-120 2	MC454-120 2		MC454-120 2
PA-22-135	22-544 thru 22-2377	MC454-120 2	MC454-120 2	MC454-120 2		MC454-120 2
PA-22-135	2378	MC454-120 3	MC454-120 3	MC454-120 3		MC454-120 1
PA-22-135	22-2379 thru 22-2424	MC454-120 2	MC454-120 2	MC454-120 2		MC454-120 2
PA-22-135	22-2425 and On	MC454-120 3	MC454-120 3	MC454-120 3		MC454-120 1
PA-22S-135	22-534 thru 22-2377 and 22-2379 thru 22-2424	MC454-120 2 4	MC454-120 1	MC454-120 2		
PA-22S-135	22-2378, 22-2424 and On	MC454-120 3 4	MC454-120 3	MC454-120 3		
PA-22-150, PA-22S-150, PA-22-160, PA-22S-160	22-2378, 22-2425 thru 22-5138	MC454-120 3	MC454-120 3	MC454-120 3		MC454-120 3
PA-22-150, PA-22S-150, PA-22-160, PA-22S-160	22-2379 thru 22-2424	MC454-120 2	MC454-120 1	MC454-120 2		MC454-120 2
PA-22-150, PA-22S-150, PA-22-160, PA-22S-160	22-5139, 22-5603 and On	MC454-120 3	MC454-120 3	MC454-120 3		MC454-120 1
PA-22-150, PA-22S-150, PA-22-160, PA-22S-160	22-5140 thru 22-5602	MC454-120 3	MC454-120 3	MC454-120 3		MC454-120 3
PA-24, PA-24-250	24-1 thru 24-2174	MC454-120 1		MC454-120 1	MC454-120 1	MC454-120 1
PA-24, PA-24-250	24-2176 thru 24-2298			MC454-120 1		MC454-120 1

1 Knob not included.

2 Knob not included. Order P/N MC471-052

3 Knob not included. Order P/N MC471-060

4 Quantity 2 each of the Cabin Heat Control is required for this aircraft.

**Additional knob eligibility is on shown on the following page.**

**Swivel Fittings and Studs (Bug Nuts) for Piper Aircraft**

P/N 70371-002 swivel fitting and 70371-003 stud are used to attach to solid wire push-pull controls. They wear out due to vibration.

There are two FAA-PMA replacement options. The PMA Products CA70371-002 swivel fitting and CA70371-003 stud, or the Univair U70371-000 swivel assembly.

The U70371-000 replaces Piper P/Ns 70371-000 or 70371-800. These are service kits that include the -002 fitting, the -003 stud as well as an AN320-3 castle shear nut, MS24665-132 cotter pin, and two special sized Piper specific washers.



P/N CA70371-002 and  
P/N CA70371-003  
Swivel Fitting and Stud

P/N U70371-000  
Swivel Assembly

Part Number	Description	Eligible Models
CA70371-002	Swivel Fitting Stud	PA18, PA18-150, PA22, PA23-150, 160, 235, 250, PA24-180, 250, 260, 400, PA25-150, 235, 260, PA28-140, 150, 151, 160, 161, 180, 181, 201T, 235, 236
CA70371-003		PA28R-180, 200, 201, 201T, PA28RT-201, 201T, PA30, PA39, PA31-300, 310, 325, 350, PA31-350, T1020, PA31T, 1, 2, PA31P, 350, PA32-260, 300, 301, 301T, PA32R-300, 301, 301T, PA32RT, PA34-200, 200T, 220T, PA36-285, 300, 375, PA38, PA42, PA42-720, 1000, PA44-180, PA46, PA46-310P, 350P
U70371-000	Swivel Fitting Assy.	PA20, PA20S, PA20-135, PA20S-135, PA22-135, PA22S-135, PA22-150, PA22S-150, PA22-160, PA22S-160, PA22-108, PA23, PA23-160



## Control Knobs for Piper Aircraft

Give your panel an upgrade -  
replace old discolored knobs!

- "Original" look
- Superior quality
- 10-32 thread



Part Number	Knob Type
MC571-131	Alternate Air (Chrome)
MC571-131	Cabin Heat (Chrome)
MC471-060	Cabin Heat (Black)
MC471-052	Cabin Heat (Ivory)
MC471-052	Cabin Heat (Rear)
MC471-052	Cabin Heat Front (Ivory)
MC471-084	Carburetor Heat (Black)
MC471-060	Carburetor Heat (Black)
MC471-052	Carburetor Heat (Chrome)
MC571-131	Cold Air Inlet (Chrome)
MC471-060	Cold Air Inlet (Black)
MC471-052	Cold Air Inlet (Ivory)
MC571-131	Defrost (Chrome)
MC471-060	Mixture Control (Ivory)
MC471-052	Parking Brake (Black)
MC471-052	Parking Brake (Ivory)

Aircraft	Serial Number	MC571-131	MC571-131	MC471-060	MC471-052	MC471-052	MC471-052	MC471-084	MC571-131	MC471-060	MC471-052	MC571-131	MC471-060	MC471-052	MC471-052	MC471-052	MC471-052	MC471-052
PA-18, PA-18A, PA-18S	All																	
PA-18 "105" (Special), PA-18S "105"	All																	
PA-18 "125" (Army L-21A), PA-18AS "125", PA18S "125"	All																	
PA-18 "135" (Army L-21B), PA-18A "135", PA-18S "135"	18-1 thru 18-2167																	
PA-18AS "135"	18-1 thru 18-2167																	
PA-18 "135" (Army L-21B), PA-18A "135", PA-18S "135"	18-2168 thru 18-7632																	
PA-18AS "135"	18-2168 thru 18-7632																	
PA-18A "150", PA-18AS "150"	All																	
PA-18S "150"	1809001 thru 1809113																	
PA-18S "150"	18-3771 thru 18-8309025																	
PA-20, PA-20S	20-1 thru 20-553																	
PA-20, PA-20S	20-554 thru 20-811																	
PA-20, PA-20S	20-812 and On																	
PA-20 "115", PA-20S "115"	All																	
PA-20 "135", PA-20S "135"	All																	
PA-22	All																	
PA-22-108	All																	
PA-22-135	22-534 thru 22-539																	
PA-22-135	22-540 thru 22-542																	
PA-22-135	22-543																	
PA-22-135	22-544 thru 22-2377																	
PA-22-135	22-2378																	
PA-22-135	22-2379 thru 22-2424																	
PA-22-135	22-2425 and On																	
PA-22S-135	22-534 thru 22-2377 and 22-2379 thru 22-2424																	
PA-22S-135	22-2378, 22-2425 and On																	
PA-22-150, PA-22S-150, PA-22-160, PA-22S-160	22-2378																	
PA-22-150, PA-22S-150, PA-22-160, PA-22S-160	22-2379 thru 22-2424																	
PA-22-150, PA-22S-150, PA-22-160, PA-22S-160	22-2425 thru 22-5138																	
PA-22-150, PA-22S-150, PA-22-160, PA-22S-160	22-5139																	
PA-22-150, PA-22S-150, PA-22-160, PA-22S-160	22-5140 thru 22-5602																	
PA-22-150, PA-22S-150, PA-22-160, PA-22S-160	22-5603 and On																	
PA-25-235	All																	
PA-25-260	All																	
PA-28-140	28-20002 thru 28-21095																	
PA-28-140	28-21096 thru 28-24999																	
PA-28-150, PA-28-160	28-0001 thru 28-2627																	
PA-28-150, PA-28-160	28-2628 thru 28-4377																	
PA-28S-160	28-1 thru 28-1760																	
PA-28-180, PA-28S-180	28-671 thru 28-2627																	
PA-28-180	28-2628 thru 28-4277																	
PA-28-180	28-4278 thru 28-4377																	
PA-28S-180	28-671 thru 28-2627																	
PA-28S-180	28-2628 thru 28-4377																	
PA-28-235	28-10003 thru 28-10675																	
PA-28-235	28-10676 thru 28-11039																	
PA-32-260	32-1 thru 32-1110																	
PA-32-300	32-40000 thru 32-40565																	
PA-32-300S	32S-15 thru 32S-40565																	

■ Quantity 2 each of knob Cabin Heat (Ivory) is required for these aircraft.



P/N MC471-084  
With P/N 6289 Carb Heat Decal  
(Decal sold separately)



P/N MC471-052



P/N MC471-053



P/N MC471-060



P/N MC571-131

Push Pull Controls and Accessories

Push Pull Controls and Accessories

## Solid Wire Vernier Mixture Control for Beechcraft, Mooney, Maule, and Stinson Aircraft

FAA-PMA Approved

- Precise mixture control for less than the original replacement part
- Extra long - trim to exact length
- High quality McFarlane manufacture

Make	Model	Serial Number	Part Number
Raytheon (Beechcraft)	19A, M19A, B19,23, A23-19, B23	All	MC600-120
Raytheon (Beechcraft)	35, A35, B35, C35, D35, E35, F35, G35, H35	All	MC600-72
Mooney	M20, M20A, M20B, M20C, M20D	All	MC600-72
Maule	Bee Dee M-4, M4, M-4C, M-4S, M-4T	All with Carbureted Engine	MC600-72
Maule	M-4-220, M-4-220-C, M-4-220S	All with Carbureted Engine	MC600-72
Maule	M-4-220T, M-4-180C, M-4-180S, M-4-180T	All with Carbureted Engine	MC600-72
Maule	M-5-180C, M-5-220T, M-5-235C	All with Carbureted Engine	MC600-72
Maule	M-5-210TC, M-6-180, M-6-235, MX-7-160	All with Carbureted Engine	MC600-72
Maule	MXT-7-160, MX-7-180, MX-7-180A	All with Carbureted Engine	MC600-72
Maule	MXT-7-180, MXT-7-180A, MX-7-180B	All with Carbureted Engine	MC600-72
Maule	MX-7-180C, M-7-235, MX-7-235	All with Carbureted Engine	MC600-72
Maule	MX-7-235A, MX-7-235B, MX-7-235C, M-8-235	All with Carbureted Engine	MC600-72
Univair (Stinson)	108, 108-1, 108-2, 108-3, 108-5	All	MC600-72



## Throttle Controls for Grumman Aircraft

FAA-PMA Approved

- Throttle Controls for aircraft manufactured by Grumman American, Gulfstream Aerospace Corp. or Tiger Aircraft LLC
- McFarlane has developed a longer conduit terminal that allows extra clearance between the swivel joint and the air filter box at the clamp location
- Thread length has been tailored to allow full adjustment of the Grumman swivel assembly
- Push rod length has been tailored to ensure that McFarlane throttle controls duplicate the original controls in fit and function

Model	Serial Number	Part Number
AA-1	AA1-0433 and On	MC507005-1
AA-1A	AA1A-0001 and On	MC507005-1
AA-1B	AA1B-0001 and On	MC507005-1
AA-1C	AA1B-0601	MC507005-1
AA-1C	AA1C-0001 and On	MC507005-1
AA-5	AA5-0001 and On	MC507005-2
AA-5A	AA5A-0283 and On	MC507005-2
AA-5B	AA5B-0001 and On	MC507005-3



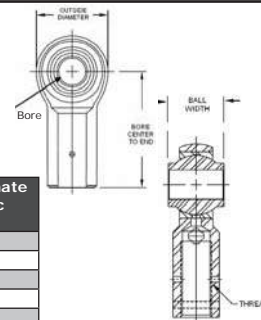
## Engine Controls for Bellanca Viking Aircraft

FAA-PMA Approved

Model	Serial Number	Throttle	Propeller	Mixture
17-30A	30263 and On, and aircraft with a S/N prefix: "75-"	MCS191783-18	MCS191783-1	MCS191783-16
17-31A	73-32-128 and On, and aircraft with a S/N prefix "75-"	MCS191783-18	MCS191783-1	MCS191783-17
17-31ATC	73-31067 and On, and aircraft with a S/N prefix "75-"	MCS191783-18	MCS191783-1	MCS191783-17

## Rod Ends for Experimental Aircraft

**Not for use on certified aircraft.  
Not FAA-PMA approved.  
See pages 27-29 for  
FAA-PMA approved rod ends.**

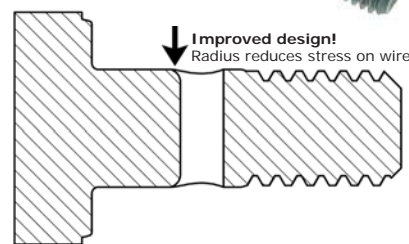
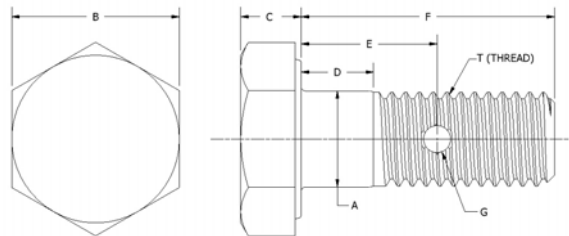


P/N	Bore (in)	O.D. (in)	Bore Ctr to End (in)	Ball Width (in)	Thread (in)	Thread Type	Ultimate Static Load (lbs)
MW-3M-500	0.190	0.625	1.062	0.312	10-32	Internal	1,531
GMW-3M-470	0.190	0.750	1.375	0.437	1/4-28	Internal	2,881
GMW-4M-470	0.250	0.812	1.375	0.437	1/4-28	Internal	2,950
MM-3M-500	0.190	0.625	1.250	0.312	10-32	External	1,169

## Bolt Style Wire Clamps for Solid Wire Controls for Cessna Aircraft

FAA-PMA Approved

- Unique design to reduce wire stress
- Heat treated stainless steel for wear and corrosion resistance
- The best for less!
- See pages 14-17 to find the correct clamp for your mixture or carb heat control.
- Go to <http://www.mcfarlaneaviation.com/products> to find the correct clamp for all other applications.



Part Number	A Bolt Dia. (in)	B Wrench Size (in)	C Thick (in)	D Grip Length (in)	E Hole Position (in)	F Shank Length (in)	G Hole Dia. (in)	T Thread (-)	Application
MCS2323-1	0.188	3/8	0.125	0.250	0.183	0.653	0.073	10-32	Carb heat, starter, mixture, cabin heat, fuel shutoff, strainer drain, defrost, shutter, wastegate, oxygen control, de-ice, heater, airbox, alternate air, flap/elevator, pressure air dump, heat exchanger
MCS2323-2	0.250	7/16	0.156	0.312	0.325	0.781	0.073	1/4 - 28	cabin heat, mixture, defrost
MCS2323-3	0.250	7/16	0.156	0.188	0.199	0.539	0.073	1/4 - 28	strainer drain, cowl flaps, carb heat, alternate air
MCS2323-4	0.250	7/16	0.156	0.313	0.312	0.781	0.073	1/4 - 28	mixture, flap indicator, flap guide, fuel shut-off
MCS2323-5	0.188	3/8	0.125	0.125	0.188	0.531	0.073	10-32	cabin air, carb heat, starter, airbox, defrost, flap, shutter, oxygen
MCS2323-6	0.250	7/16	0.156	0.188	0.355	0.656	0.073	1/4 - 28	mixture, hopper, induction
MCS2323-7	0.188	3/8	0.125	0.250	0.192	0.656	0.076	10-32	fuel shut-off, alternate air, flap elevator trim
MCS2323-8	0.188	3/8	0.125	0.250	0.202	0.656	0.096	10-32	fuel shut-off, oxygen control
MCS2323-9	0.250	7/16	0.156	0.438	0.343	0.906	0.129	1/4 - 28	flap control, flap guide
MCS2323-10	0.188	3/8	0.125	0.125	0.204	0.477	0.079	10-32	fuel shut-off, heat exchanger
MCS2323-11	0.188	3/8	0.125	0.250	0.266	0.656	0.076	10-32	mixture, bleed air, fuel selector, flap/elevator
MCS2323-12	0.250	7/16	0.156	0.188	0.357	0.656	0.073	1/4 - 28	mixture, cabin heat, pressurization
MCS2323-13	0.250	7/16	0.156	0.313	0.271	0.781	0.073	1/4 - 28	mixture, alternate air, bleed air
MCS2323-14	0.188	3/8	0.125	0.125	0.132	0.531	0.082	10-32	cabin heat, cabin air
MCS2323-19	0.188	3/8	0.125	0.125	0.200	0.531	0.094	10-32	defroster



**Rod Ends for Cessna Aircraft**

- Many applications!
- See pages 10-14 for rod ends for Cessna 120-210 engine controls.



Model	Part Number	ALLERON PUSH ROD	ALT AIR CONTROL	CARGO DOOR	COOLING MODULATOR	COWL FLAP	COWL FLAP CONTROL	ELEVATOR BOB WEIGHT LINKAGE	FLAP ACTR PUSH ROD	FLAP CONTROL	FLAP PUSH ROD	INERTIAL SEPARATOR ACTR PUSH ROD	INERTIAL SEPARATOR CONTROL	MAIN GEAR DOOR	MAIN GEAR DOOR ACTUATOR	MIXTURE CONTROL	MIXTURE LINKAGE	NG STEERING ROD	NOSE GEAR DOOR	NOSE GEAR DOOR ACTUATOR	OUTBOARD FLAP PUSH ROD	PROP CONTROL	PROP SYNCRO PUSH ROD	REAR PRESSURIZATION CONTROL	RUDDER BAR	RUDDER BELLCRANK PUSH ROD	SPRAY VALVE PUSH ROD	THROTTLE CONTROL	THROTTLE LINKAGE	WATER RUDDER STEERING
P210N	MCS1106-3																													
S/N P21000198 thru P21000212	S1819-3																													
P210N	MCS1106-3																													
S/N P21000213 thru P21000834	S1819-3																													
P210R	MCS1106-3																													
T210F	MCS1106-3																													
T210G	MCS1106-3																													
T210H,J	MCS1106-3																													
T210K,L,M	MCS1106-3																													
T210N	MCS1106-3																													
T210R	MCS1106-3																													
310,310B	MCS1106-3																													
310C,D,F,G,H,I,J,J-1,K	MCS1106-3																													
310L,N	MCS1106-3																													
310P,Q	MCS1106-3																													
310R	MCS1106-3																													
E310H,J	MCS1106-3																													
T310P,Q	MCS1106-3																													
T310R	MCS1106-3																													
320,320-1,320A,B,C	MCS1106-3																													
320D,E,F	MCS1106-3																													
335	MCS1106-3																													
336	MCS1106-3																													
337	MCS1106-3																													
337A,B	MCS1106-3																													
337C	MCS1106-3																													
337D	MCS1106-3																													
337E,F	MCS1106-3																													
337G,H	MCS1106-3																													
F337E,F	MCS1106-3																													
F337G,H	MCS1106-3																													
FT337E,F	MCS1106-3																													
FT337GP (FP337)	MCS1106-3																													
FT337HP (FP337H)	MCS1106-3																													
M337B	MCS1106-3																													
P337H	MCS1106-3																													
T337B,C,D	MCS1106-3																													
T337E,F	MCS1106-3																													
T337G	MCS1106-3																													
T337H	MCS1106-3																													
T337H-SP	MCS1106-3																													

■ Partial model eligibility

Rod End Dimensions		
Part Number	Bore/Eye	Thread
MCS1104-3	0.19	10-32 Internal
MCS1105-3	0.19	10-32 External
MCS1106-3	0.19	1/4-28 Internal
MCS1106-4	0.25	1/4-28 Internal
S1107-3	0.19	3/8-24 External
S1819-3	0.19	1/4-28 Internal
S1823-3	0.19	3/8-24 External
S2022-3	0.25	3/8-24 LH
S2022-3L	0.25	3/8-24 RH
MCS1819-4	0.25	1/4-28 Internal



MCS1104-3



MCS1105-3



MCS1106-3



MCS1106-4



S1107-3



S1819-3



S1823-3



S2022-3



S2022-3L



MCS1819-4



## Rod Ends for Piper Aircraft

Model	Part Number	Description/Application	Piper Rod End Dimensions		
			Part Number	Eye	Thread
PA-18/18A, PA-18-105/125/135/150 & PA-18A-125/135/150 S/N's 18-1 thru 18-8309025 and PA18-150 S/N's 1809001 thru 1809113	CA452-335A	Wing panel assembly, uncovered			
PA-22 & PA-22-108/135/150/160	CA452-335A	Wing panel assembly, nose wheel			
PA-23-150/160 PA 23-235/PA23-250 / PA 23-250	CA452-335A	Nose gear, main gear			
PA-24-180/250/260/400	CA452-412	Landing gear retraction system, flap control mechanism, control surfaces			
	CA452-334A	Steering push rod & shimmy dampener, main gear bearing, control system			
	CA452-335A	Bungee assembly, nose wheel, landing gear door			
PA-28-140/150/160/180/235/R-180/200	CA452-336A	Flap control, nose gear assembly			
	CA452-368	Main gear			
	CA452-584	Landing gear door			
	CA452-860A	Shimmy dampener			
PA-28-151/161 S/N 715001 thru 28-7715314, 28-7716001 thru 28-8616057 & 2816001 thru 2816119	CA452-334A	Nose gear			
PA-28-161 S/N 2841001 thru 2841365	CA452-335A	Nose gear, control system, flap control			
	CA452-334A	Nose gear			
PA-28-161 S/N 2842001 & up	CA452-335A	Control system, flap control			
	CA452-336A	Flap control			
PA-28-181 S/N 28-7690001 thru 28-8690056 & 2890001 thru 2890231	CA452-334A	Nose gear			
PA-28-181 S/N 2843001 & up	CA452-335A	Control system			
	CA452-336A	Flap control			
PA-28R-201/201T S/N 28R-773700, 2837001 thru 2837061, 28R7703002 thru 28R-7803372 & 2803001 thru 2803015	CA452-334A	Nose landing gear, main landing gear			
	CA452-335A	Landing gear door, control system, flap control			
	CA452-336A	Flap control			
	CA452-584	Landing gear door			
	CA452-334A	Nose landing gear			
PA-28R-201 S/N 2844001 & up	CA452-335A	Landing gear door, control system, flap control			
	CA452-336A	Flap control			
	CA452-368	Main landing gear			
PA-28RT-201/201T	CA452-334A	Nose landing gear			
PA-30/39	CA452-335A	Landing gear door			
PA-31P	CA452-412	Landing gear retraction system, flap control mechanism			
	CA452-335A	Cabin door step			
	CA452-412	Cabin door latch, nose landing gear, nose gear steering,			
	CA452-335A	Cabin door step			
PA-31P-350	CA452-412	Cabin door latch, nose landing gear, nose gear steering, elevator trim			
PA-31-300/325, PA-31-350, PA-31-350T1020	CA452-412	Nose landing gear, nose gear steering mechanism			
	CA452-335A	Cabin door step, engine control			
PA-31T/T1/T2	CA452-412	Cabin door latch, nose landing gear			
	CA452-860A	Cabin door snubber			
PA-31T3	CA452-335A	Engine controls			
	CA452-412	Nose landing gear, nose gear steering			
	CA452-334A	Nose gear, main gear, control system			
PA-32-260/300/R-300	CA452-335A	Landing gear door, flap control			
	CA452-368	Main gear			
	CA452-584	Landing gear door			
	CA452-860A	Nose gear			
	CA452-334A	Nose gear			
PA-32-301/301T	CA452-335A	Aileron control, flap control			
	CA452-336A	Aileron control, flap control			
	CA452-860A	Nose gear			
PA-32-301 XTC	CA452-334A	Nose gear			
	CA452-335A	Aileron control, flap control			
PA-32-301FT	CA452-336A	Aileron control			
	CA452-860A	Nose gear			
PA-32R-301/301T S/N 32R-8013001 thru 32R-8613005, 321001 thru 3213103, 32R-8029001 thru 32R-8629006 & 3229001 thru 3229003	CA452-334A	Nose gear, main gear			
	CA452-335A	Landing gear door, aileron control, flap control			
	CA452-336A	Aileron control, flap control			
	CA452-368	Main gear			
PA-32R-301/301T S/N 3246001 & up & 3257001 & up	CA452-334A	Main gear			
	CA452-335A	Landing gear door, aileron control, flap control			
	CA452-336A	Aileron control, flap control			
	CA452-368	Main gear			
PA-34-200	CA452-334A	Nose gear, aileron control, rudder trim, hydraulic system			
	CA452-335A	Nose & main gear door actuation, flap control			
	CA452-336A	Flap control			
	CA452-368	Main gear			
PA-34-200T	CA452-334A	Air conditioning, Condenser & scoop, nose gear, hydraulic system rudder trim			
	CA452-335A	Nose & main gear door actuation			
	CA452-336A	Flap control			
	CA452-368	Main gear			
	CA452-584	Aileron assembly, nose & main gear actuation			
PA-34-220T S/N 34-8133001 thru 34-8633031, 3433001 & up, & 3448001 & up, PA-34-220T S/N 3447001 thru 3447029, & 3449001 & up	CA452-334A	Nose gear, rudder trim hydraulic system, air conditioning, condenser & scoop			
	CA452-335A	Nose & main gear door actuation, aileron control, flap control			
	CA452-336A	Flap control			
PA-34RT-300/300T	CA452-334A	Nose gear, main gear, control system			
	CA452-335A	Landing gear door, flap control			
	CA452-336A	Flap control			
	CA452-368	Main gear			
	CA452-584	Landing gear door			
PA-36-285/300/375	CA452-584	Elevator & elevator trim control			
PA-42/PA42-720	CA452-335A	Cabin door step, engine controls			
PA-42-1000	CA452-412	Cabin door latch, nose landing gear, nose gear steering, elevator control			
PA-44-180/180T S/N 44-7995001 thru 44-8207020 & 4495001 thru 4495013	CA452-334A	Nose landing gear, main gear			
PA-44-180 S/N4496001 & up	CA452-335A	Landing gear door, aileron control, flap control			
	CA452-336A	Aileron control, flap control			
	CA452-584	Landing gear door			
PA-46-310P/350P S/N 46-8408001 thru 46-8608067, 4608001 thru 4608140 & 4622001 thru 4622200	CA452-334A	Nose gear, nose & main gear door, actuation			
	CA452-335A	Nose & main gear door actuation			
	CA452-412	Flap drive - electrical			
	CA452-860A	Flap drive - electrical, flap drive & hydraulic			
PA-46-350P S/N 4636001 & up	CA452-334A	Nose gear, nose & main gear door actuation			
PA-46R-350T S/N 4692001 & up	CA452-335A	Main gear			
	CA452-412	Flap Drive-Mechanical			
	CA452-860A	Flap Drive-Mechanical			
PA-46-500TP S/N 4697002,4697340,4697399 & up with G1000	CA452-334A	Nose gear, nose gear door actuation			
	CA452-335A	Main gear door actuation			
	CA452-412	Flap Drive-Mechanical			
	CA452-860A	Flap Drive-Mechanical			
PA-46-500TP S/N4697001 & up without G1000	CA452-334A	Nose gear, nose & main gear door actuation			
	CA452-335A	Nose & main gear door actuation			
	CA452-412	Flap Drive-Mechanical			
	CA452-860A	Flap Drive-Mechanical			

## Push-to-Unlock Controls

Perfect for home built or custom projects!

- Quality stainless steel construction with bright powder coated aluminum knobs
- High temperature Teflon lined conduit for smooth, consistent control (Cheap controls with poly liners will not tolerate engine temperatures)
- Heavy duty strength and long life
- Custom laser marking of the knobs is available
- Not for use on certified aircraft, flight controls or flight control trim tabs

### Round knob with solid wire end (MC6150 series):

Order part number MC6150-071XXLLL where **XX** is the knob color code and **LLL** is the length in inches.

- Round Knob - Red, black, blue and clear (silver) or Chrome plated bronze (designed to match vintage controls)
- Available in 4, 6, 8, 10, 12 foot and custom lengths
- May be trimmed to length

### Square knob with solid wire end (MC6160 series):

Order part number MC6160-071XXLLL where **XX** is the knob color code and **LLL** is the length in inches.

- Square black knob with a black or clear (silver) push-button
- Available in 6, 8, 12 foot and custom lengths
- May be trimmed to length
- Ideal for carburetor heat or alternate air

### Round knob with 10-32 threaded push rod end (MC6250 series):

Order part number MC6250-XXLLL where **XX** is the knob color code and **LLL** is the length in inches.

- Round Knob - Red, black, blue and clear (silver)
- Available in 4, 5, 6, 7, 8, 9, 10 foot and custom lengths

### Round knob with dual solid wire ends (MC6350 series):

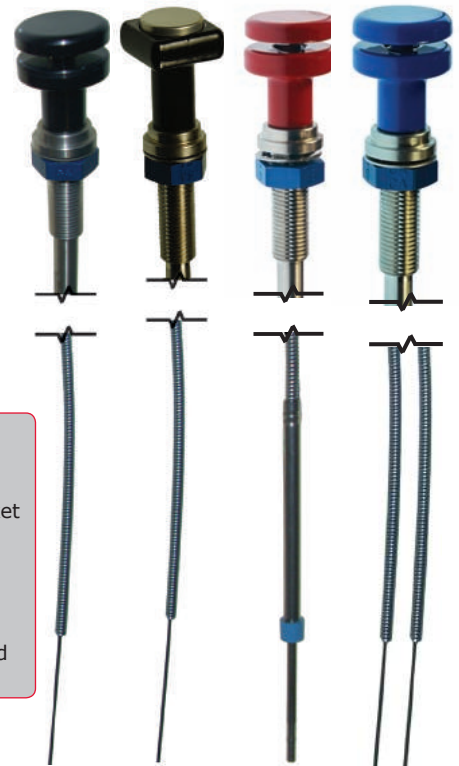
Order part number MC6350-XXLLL where **XX** is the knob color code and **LLL** is the length in inches.

- Round Knob - Red, black, blue and clear (silver)
- Available in 4, 6, 8, 12 foot and custom lengths
- May be trimmed to length

### Specifications:

- Travel (stroke): 3" minimum
- Conduit (dual wire controls): 0.188 inch OD Teflon lined wound conduit
- Conduit (single wire controls): 0.24 inch OD Teflon lined wound conduit with a Teflon jacket
- Max Work Loads: Pull: ~25 lbs; Push: ~10 lbs\*
- Minimum Locking Force (measured at the knob): 15 lbs tensile, 10 lbs compression
- Operating Temp: -65 to 450 deg F (knob/housing assembly: -65 to 250 deg F)
- Panel Fitting: 7/16-20 thread

\*Max push load for solid wire end designs is dependent on wire diameter, length of trimmed wire (unsupported by conduit), geometry of wire rigging, and the actuator configuration.



MC6150 series

MC6160 series

MC6250 series

MC6350 series

### Custom Engraved Knobs:

Custom laser marking of the knobs is available for a small additional fee. Call for details.



Laser Marking  
Clean and Durable!



Vintage Chrome  
also available!

Knob/Color Codes	
Code	Description
BB	Black powder coated aluminum
RR	Red powder coated aluminum
LL	Blue powder coated aluminum
CC	Clear (Silver) anodized aluminum
CB	Black powder coated aluminum with Clear (Silver) push button
HH	Chrome plated brass knob

### Turn-to-Lock Controls

Perfect for homebuilt or custom projects!

These versatile controls are ideal for many applications. They feature a turn-to-lock mechanism that requires a quarter turn of the knob to lock or unlock the control.

- Quality stainless steel construction
- High temperature Teflon lined conduit for smooth, consistent control (Cheap controls with poly liners will not tolerate engine temperatures)
- Wire end - may be trimmed to length
- Not for use on certified aircraft, flight controls or flight control trim tabs

**Dual twisted wire ends:** P/N MCTL1014D LLL-K (LLL = length in inches, K = Knob style)

- 1/16" diameter 7X7 stainless steel
- ~ 30 lbs minimum locking force
- Includes two adjustable barrel stops to attach to Rotax choke arms
- Available in 4, 6, 8 and 12 ft lengths

**Dual solid wire ends:** P/N MCTL2254D072-K (K = Knob style)

- 0.071" diameter music wire
- ~ 55 lbs minimum locking force
- 6 foot length

**Single twisted wire end:** P/N MCTL1034-072-K (K = Knob style)

- 1/16" diameter 1X7 stainless steel
- ~ 30 lbs minimum locking force
- 6 foot length

**Single solid wire end:** P/N MCTL2254-072-K (K = Knob style)

- 0.071" diameter music wire
- ~ 55 lbs minimum locking force
- 6 foot length

Call us with your custom requirements!

**Specifications:**

- Travel (stroke): 4.0" maximum
  - Conduit (dual wire controls): 0.188 in OD Teflon lined
  - Conduit (single wire controls): 0.25 in OD Teflon lined, Teflon jacket
  - Max Work Loads: Pull: ~25 lbs; Push: ~10 lbs\*
  - Operating Temp: -65 to 450°F (knob/housing assembly: -65 to 250°F)
  - Panel Fitting: 1/2-20 UNF thread
- \*Push loads apply to controls with solid wire only and depend on wire diameter, length of wire not supported by conduit, geometry of wire rigging, and the actuator configuration.



MCTL1014D series  
MCTL2254D series

MCTL1034 series  
MCTL2254 series

Knob Style Suffix (-K)	Knob Style
-B	Ball
-F	Fluted
-P	4-Prong
-T	Shortened T-Handle
-FA	Fluted, engraved "Airbox Lock"
-FH	Fluted, engraved "Cabin Heat Lock"
-FL	Fluted, engraved "Lock"
-PL	4-Prong, engraved "Lock"
-TC	T-Handle, engraved "Choke Lock"
-TL	T-Handle, engraved "Lock"
	No knob

### Universal Light-Weight Controls

- For use in non-certified aircraft applications such as carb heat, cabin heat, cabin air, and defrost
- Keyed shaft prevents rotation and maintains knob alignment
- High quality brass and aluminum construction
- Teflon lined conduit for smooth, consistent control (Cheap controls with poly liners will not tolerate engine temperatures)
- Many knob styles available or provide your own knob with 10-32 thread
  - Knobs are not included with the control, see page 35 for knob choices
- Available in 4,6,8,10 and 12 ft and custom lengths - Wire end - Easily trimmed to length
  - Measured from panel fitting to end of conduit, wires extend at least 3" beyond conduit
- Available with optional creep resistant feature to prevent creep due to engine vibration



**Standard Control:** P/N MCU124-LLL (LLL = length in inches)

**Control with creep resistant feature:** P/N MCU224-LLL (LLL = length in inches)

**Specifications:**

- Travel (stroke): 3.75" maximum\*
- Conduit: 0.188 inch OD Teflon lined
- Max Work Loads: Pull: ~10 lbs; Push: ~5 lbs\*\*
- Operating Temp: -65 to 450°F
- Inner Wire: 0.061 inch solid wire
- Screw thread for knob attachment: 10-32 X .3
- Screw thread for instrument panel: 3/8-24 X .5

\*Installer must ensure maximum travel is not exceeded during installation and rigging of the control.

\*\*Maximum push load with 3-1/2" of wire extending from the conduit. Push loads depend on wire diameter, length of wire not supported by conduit, geometry of the rigging and the actuator configuration.



Push Pull Controls and Accessories

## Controls for Dual Carburetor 912/914 Series Rotax Engines

Allows a neat, clean installation without a clunky splitter box

- Quality metal construction
- High temperature Teflon lined conduit for smooth consistent control (Cheap controls with poly liners will not tolerate engine temperatures)
- Available in 4, 6, 8 and 12 foot and custom lengths - Easily trimmed to length
- Manufactured to the same quality standards as McFarlane's FAA-PMA parts
- Not for use on certified aircraft, or for flight controls or flight control trim tabs



## Throttle Controls for 912/914 Series Rotax Engines

- Includes throttle hardware kit P/N 6408 with lightweight throttle return springs (P/N 6822 and 7235) to prevent throttle creep (see page 33)
- Inner Wire: Heavy duty 0.062 inch diameter, flexible 1/16 1X7 stainless steel twisted wire
- Conduit: 0.188 inch OD Teflon lined for smooth consistent control
- Design work load: 10 lbs (pull only)
- Operating temp: -65 to 450°F



P/N 6408  
Dual hardware throttle kit

**Panel Mount:** P/N MCT100DLLL (LLL = length in inches. Add a "-B" for a ball knob)

- Super smooth friction lock
- Travel (stroke): 3.75" max
- Typical locking force: 1 to 10 lbs (locking force dependent on friction lock engagement)
- Panel fitting: 1/2-20 UNF thread
- Control length is measured from panel fitting to end of conduit, wires extend 6 inches beyond conduit.
- Two knob options (ball or standard barrel shape)

P/N EC03  
Standard style knob

P/N EC53  
Ball style knob



## Vernier-Assist™ Panel Mount:

P/N MCTV0005DLLLL with knob or MCVA0005-30DLLLL without knob<sup>1</sup> (LLL = length in inches)

- Travel (stroke): 3.5" max
- Typical locking force: 1 to 10 lbs (locking force dependent on friction lock engagement)
- Panel fitting: 3/4-16 UNF X 0.875 inch thread
- Control length is measured from panel fitting to end of conduit, wires extend 6 inches beyond conduit.
- See page 34 for additional details



A vernier without a release button!  
See page 34



**Quadrant Style:** P/N MCQ100DLLLL (LLL = length in inches)

- Includes convenient dual conduit clamp P/N 6433-1 for simple quadrant mounting
- Viton boot to dampen vibration and seal out dust on the quadrant end
- Travel (stroke): 4" max
- Pushrod thread (quadrant end): 10-32 UNF X 0.65 inch thread
- Control length equals the conduit length, wires extend a minimum of 6 inches beyond the conduit.



P/N 6433-1  
Dual Conduit Clamp

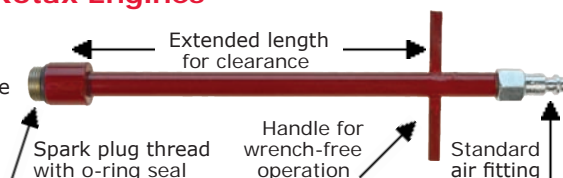


<sup>1</sup> Requires a knob with 1/4-20 thread. See page 37 for available knob options.

## Compression Tester Extension for Rotax Engines

P/N EXTENSION CT12 (12mm thread)

- Wrench-free compression testing
- Allows for exhaust system and baffling clearance
- Makes compression testing easier





### Choke Controls for 912/914 Series Rotax Engines

- Includes two adjustable barrel stops P/N 6515 to attach to the carb choke arms (no swaging or soldering necessary)
- Inner Wire: Heavy duty 0.062 inch diameter, flexible 1/16 7X7 stainless steel twisted wire
- Many knob styles available
- Conduit: 0.188 inch OD Teflon lined for smooth consistent control
- Design work load: 25 lbs (pull only)
- Operating temp: -65 to 450°F (knob housing assembly: -65 to 250°F)
- Control length is measured from panel fitting to end of conduit, wires extend 6 inches beyond conduit



#### Turn-to-Lock: P/N MCTL1014LLLL-K (LLL = length in inches, K = Knob style - see page 37)

These controls feature a turn-to-lock mechanism that requires a quarter turn of the knob to lock or unlock the control at any position.

- Travel (stroke): 4.0" max
- Minimum locking force ~30 lbs
- Panel fitting: 1/2-20 UNF thread



#### Non-Locking: P/N MCC1014LLLL-K (LLL = length in inches, K = Knob style - see table below)

Internal elastomer seal to dampen vibration and provide a small amount of resistance. If your choke installation features a return spring, this control will return to the closed position when released.

- Travel (stroke): 3.5" max
- Panel fitting: 7/16-20 X 1.3" UNF thread



Knob Style Suffix (-K)	Knob Style
-RB	Round, Black
-RC	Round, Clear (silver)
-RL	Round, Blue
-RR	Round, Red
-RBC	Round, Black, engraved with "Choke"
-RCC	Round, Clear (silver), engraved with "Choke"
-RLC	Round, Blue, engraved with "Choke"
-RRC	Round, Red, engraved with "Choke"



### Throttle Return Springs

#### Stop throttle creep! Kit P/N 7140

A common complaint about the Rotax 912/914 engines is that the throttle return springs are too strong. McFarlane stocks a variety of springs so you can choose the one that best fits your application. All McFarlane throttle controls for Rotax engines contain P/N 7140. A new design limits potential contact with adjacent parts.

Individual springs can also be purchased, see table on right. For use on non-certified aircraft.



Spring P/N	Relaxed Spring Length (max in)	Approx. Pre Load (lbf)	Spring Rate (lbf/in)
6822, Red, Left	1.6	1.5	2.1-2.7
7235, Blue, Right	1.6	1.5	2.1-2.7
Rotax Original	1.8 (approx.)	2.0	8-12 (approx.)

### Throttle Hardware Kit for Rotax Engines

#### Dual Throttle Hardware Kit P/N 6408

Parts also available separately. For use on non-certified aircraft

#### Slip Fit Conduit Terminal P/N 6271

- M6x1 x 1.00 inch thread for easy adjustment
- Three installation options - (1) Free Fitting: Slip on the conduit, (2) Semi-Permanent: Secure to conduit with provided set screws, (3) Permanent: Epoxy to conduit with set screws

#### Adjustable cable stops P/N 6270

Prevents damage to the carburetor from excessive pilot force at the idle-cutoff position. If needed, install cable stop assembly on control wire(s). Locate stop so that when carburetor is at full idle, the cable stop is against part number 6271 conduit terminal.

#### Alternate Carburetor Arm Return Spring P/N 6822 (Red, Left) and 7235 (Blue, Right)

- Less than half the strength of the original stock Rotax springs
- Prevents throttle "creep" due to excessive return spring force
- Requires 1 per carburetor (2 per engine)
- Installer must determine whether this spring is appropriate for their application.

#### Kit contains:

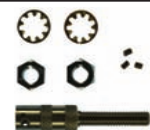
2 each 6271 Slip Fit Conduit Terminal Assemblies, 2 each 6270 Adjustable Cable Stop Assemblies  
1 each 6822 (Red, Left) and 7235 (Blue, Right) Spring, 1 each Hex Wrench



### Slip Fit Conduit Terminals

#### P/N 6271 (for 0.188" diameter conduit), P/N 7002 (for 0.258" diameter conduit)

- M6x1 x 1.00 inch thread for easy adjustment
- Three installation options - (1) Free Fitting: Slip on the conduit, (2) Semi-Permanent: Secure to conduit with provided set screws, (3) Permanent: Epoxy to conduit with set screws



### Conduit Terminal P/N 6424

May be used as a slip fit conduit terminal, or swaged or epoxied onto the conduit. Fits 0.188" diameter conduit. OD is 0.25".

- 2 per control
- Stainless Steel



### Barrel Stop Assembly P/N 6515

- Attach to the carburetor choke arm
- No swaging or soldering necessary
- Accepts 1/16" wire

For MCTL1014D series Turn-to-Lock Choke Controls and MCC101D series Non-Locking Choke Controls.



**Vernier-Assist™ Engine Controls**

**Precision Control**

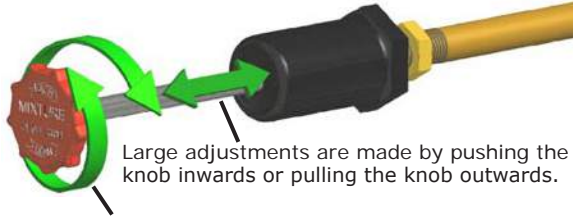
New roller action vernier provides smooth jam-proof coarse and fine adjustment without a release button. (US Pat. No. 8,485,057)

- Light weight and compact behind the dash
- Safer - Our roller action cannot jam!
- Not for use on certified aircraft

*Call us with your unique requirements!*

**MCMV Mixture Series**

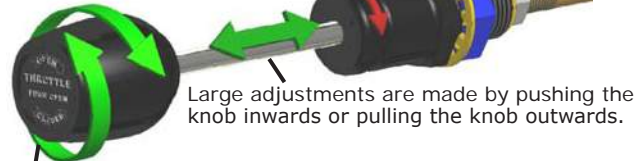
**Vernier action with only a 3/8" panel hole!**



**MCTV Throttle Series**

**Vernier and friction lock - The best of both!**

Tension and vernier action is increased by tightening the tension nut.



Fine adjustments are made by rotating the knob clockwise or counterclockwise. The McFarlane Vernier-Assist™ controls use a patented roller action and do not use a positive lock thread engagement. For extreme conduit routing or heavy carburetor load installations, slight inward or outward assist pressure could be required during rotation.

**Alternate knobs available**

- All controls below are offered with or without a knob
- As a propeller control use knob P/N 6730
- See page 35 for complete list of 1/4-20 thread knobs



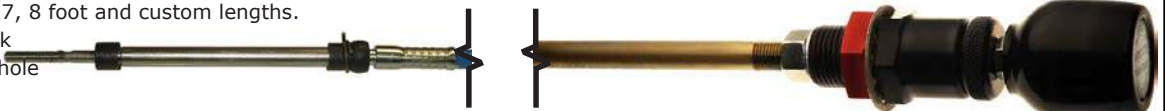
**Vernier Assist Roller Pin P/N 6518**

Now sold in six packs!

**Throttle Control with 10-32 threaded end:**

P/N MCTV1035-LLL with knob or MCVA1035-20-LLL without knob<sup>1</sup> (LLL = length in inches)

- Available in 3, 4, 5, 6, 7, 8 foot and custom lengths.
- Vernier and friction lock
- Requires a 3/4" panel hole



**Throttle Control with 1/4-28 threaded end:**

P/N MCTV2035-LLL with knob or MCVA2035-20-LLL without knob<sup>1</sup> (LLL = length in inches)

- Available in 3, 4, 5, 6, 7, 8 foot and custom lengths.
- Vernier and friction lock
- Requires a 3/4" panel hole



**Throttle Control with 5/64" diameter 1X7 twisted stainless wire end:**

P/N MCTV3035-LLL with knob or MCVA3035-20-LLL without knob<sup>1</sup> (LLL = length in inches)

- Available in 4, 6, 8, 12 foot and custom lengths.
- Vernier and friction lock
- Includes P/N 6515 Barrel Stop assembly. See page 33
- Requires a 3/4" panel hole



**Dual Throttle Control with 1/16" diameter 1X7 twisted stainless wire ends:**

P/N MCTV0005DLLL with knob or MCVA0005-30DLLL without knob<sup>1</sup> (LLL = length in inches)

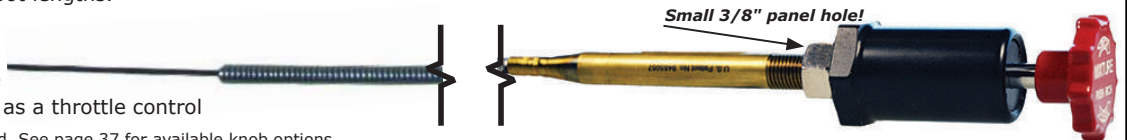
- Available in 4, 6, 8, 12 foot and custom lengths.
- Vernier and friction lock
- Includes P/N 6408 hardware kit. See page 33
- Perfect for Rotax 912/914 engines! See page 32
- Requires a 3/4" panel hole



**Mixture Control with 0.061" diameter solid wire end:**

P/N MCMV0241-LLL with knob or MCVA0241-03-LLL without knob<sup>1</sup> (LLL = length in inches)

- Available in 4, 6, and 10 foot lengths.
- May be trimmed to length
- Compact behind the dash
- Requires a 3/8" panel hole
- Not recommended for use as a throttle control



<sup>1</sup> Requires a knob with 1/4-20 thread. See page 37 for available knob options.

## Replacement Knobs for McFarlane Push-Pull Controls Photos on page 37

Parts used on FAA-PMA approved controls are FAA-PMA approved. All other parts are non FAA-PMA approved.

Knobs:						
Part Number	Figure	Description	Thread	Color	Marking	Use Eligibility
1536A-B	1	T-Handle	10-32	Black		MCU series controls
1536A-C	2	T-Handle	10-32	Clear		MCU series controls
1536A-GN	3	T-Handle	10-32	Green		MCU series controls
1536A-L	4	T-Handle	10-32	Blue		MCU series controls
1536A-R	5	T-Handle	10-32	Red		MCU series controls
1536A-W	6	T-Handle	10-32	White		MCU series controls
1536A-Y	7	T-Handle	10-32	Yellow		MCU series controls
1536B-B	8	T-Handle	1/4-20	Black		MCTL series controls
1536B-C	9	T-Handle	1/4-20	Clear		MCTL series controls
1536B-GN	10	T-Handle	1/4-20	Green		MCTL series controls
1536B-L	11	T-Handle	1/4-20	Blue		MCTL series controls
1536B-R	12	T-Handle	1/4-20	Red		MCTL series controls
1536B-W	13	T-Handle	1/4-20	White		MCTL series controls
1536B-Y	14	T-Handle	1/4-20	Yellow		MCTL series controls
6277B	15	Round powder coated aluminum	10-32	Black		MCC101D and MCU series controls
6277C	16	Round anodized aluminum	10-32	Clear (silver)		MCC101D and MCU series controls
6277L	17	Round powder coated aluminum	10-32	Blue		MCC101D and MCU series controls
6277R	18	Round powder coated aluminum	10-32	Red		MCC101D and MCU series controls
6307-BK	19	Round powder coated aluminum	10-32	Black		MCU series controls
6307-RD	20	Round powder coated aluminum	10-32	Red		MCU series controls
6417	21	T-Handle	1/4-20	Black		MCTL series controls
6418	22	T-Handle	1/4-20	Black	"Lock" w/arrows	MCTL series controls
6427	23	4 Prong	1/4-20	Black		MCTL series controls
6428	24	4 Prong	1/4-20	Black	"Lock" w/arrows	MCTL series controls
6429	25	Fluted	1/4-20	Black		MCTL series controls
6430	26	Fluted	1/4-20	Black	"Lock" w/arrows	MCTL series controls
6432	27	Shortened T-Handle	1-4-20	Black		MCTL series controls
6489B	28	Square powder coated aluminum	10-32	Black		MCU series controls
6489C	29	Square anodized aluminum	10-32	Clear (silver)		MCU series controls
6489L	30	Square powder coated aluminum	10-32	Blue		MCU series controls
6489R	31	Square powder coated aluminum	10-32	Red		MCU series controls
6495-01B	32	Phenolic	10-32	Black		MCU series controls
6495-02B	33	Phenolic	10-32	Black		MCU series controls
6495-03B	34	Phenolic	10-32	Black		MCU series controls
6495-04B	35	Phenolic	10-32	Black		MCU series controls
6512B	36	Triangle powder coated aluminum	10-32	Black		MCU series controls
6512C	37	Triangle anodized aluminum	10-32	Clear (silver)		MCU series controls
6512L	38	Triangle powder coated aluminum	10-32	Blue		MCU series controls
6512R	39	Triangle powder coated aluminum	10-32	Red		MCU series controls
6570	40	Vernier-Assist Mixture	1/4-20	Red		Vernier-Assist Mixture series controls
6620	41	Vernier-Assist Throttle	1/4-20	Black		Vernier-Assist Throttle series controls
6660	42	T-Handle	1/4-20	Black	Choke Lock	MCTL series controls
6661	43	Fluted	1/4-20	Black	Cabin Heat Lock	MCTL series controls
6662	44	Fluted	1/4-20	Black	Airbox Lock	MCTL series controls
6730	45	Vernier-Assist Propeller	1/4-20	Blue		Vernier-Assist series controls
EC03	46	Black Knob	1/4-20	Black		Throttle controls
EC53	47	Black Ball Knob	1/4-20	Black		P/N MC12693-04 or MC455-139, MCT100D, MCTL and MCC101D series controls
EC125-1	48	2" Hemisphere	1/4-20	Black		
MC471-060	49	Round, Phenolic	10-32	Black		Piper Cabin Environment Controls
MC471-053	50	Round, Phenolic	10-32	Red		Piper Mixture Controls
MC471-052	51	Round, Phenolic	10-32	Ivory		Piper Cabin Environment and Carb Heat Controls
MC471-084	52	Round, Phenolic	10-32	Black		Piper Carb Heat Controls
MC571-131	53	Round, Phenolic	10-32	Clear (Silver)		Piper Cabin Environment and Carb Heat Controls
Knob Adapter	54	Adapts the McFarlane throttle to the early hemisphere style knobs. Inner thread size is 1/4-20. Outer thread size is 1/4-28.				

See Knob Options table below for Color and Marking Codes

Knob Options	
Color Code	Primary Marking Code (Secondary)
B-Black	A-CABIN AIR only on 6277 series knobs (PULL ON)
C-Clear (Silver)	B-CARB HEAT only on 6489 series knobs (PULL ON)
GN-Green	
L-Blue	C-CHOKE use on 6277 series knobs
R-Red	D-DEFROST only on 6277 series knobs (PULL ON)
W-White	
Y-Yellow	
	H-CABIN HEAT only on 6277 series knobs (PULL ON)
	P-PARK BRAKE only on 6277 series knobs (PULL ON)
Knob Jam Nuts and Lock Washers	
Part Number	Description
EC33	1/4-20 Jam Nut
Use Eligibility:	
MCTL Series Controls Throttle controls using 1/4-20 threaded fittings (except p/n MC12693-04 & MC455-139)	
MS35650-304 10-32 Jam Nut	
Use Eligibility: MCC101D series controls	
MS35333-40 1/4" Steel Lock Washer	
Use Eligibility: MCTL and MCC101D Series Controls	
Decals	
6289	Carb Heat Decal
Use Eligibility: Piper Carb Heat Controls	



Custom engraved knobs are available for a small additional fee. Call for details.

## Replacement Parts for McFarlane Push-Pull Controls

Photos on page 37

Parts used on FAA-PMA approved controls are FAA-PMA approved. All other parts are non FAA-PMA approved.

Boots: Fuel, oil and temperature resistant, keeps trash out of the control and dampens vibration.

Part Number	Figure	Description	Use Eligibility
235	62	3/16" Pushrod Boot	Controls with a 3/16" pushrod
272	63	1/4" Pushrod Boot	Controls with a 1/4" pushrod
EC04	64	Swivel Boot	Controls employing a swivel joint

Retaining Nuts and Lock Washers: The retaining nut threads onto the threaded section of the control on the back side of the instrument panel to secure the control.

Part Number	Figure	Description	Use Eligibility
6060-8	65	1/2-20 Retaining Nut	Throttle controls using 1/2-20 threaded fittings
EC111	66	1/2" Lock Washer	Throttle controls using 1/2" threaded fittings
MS35333-44	67	Same as EC111	
6060-12	68	3/4-16 Retaining Nut	Throttle controls using 3/4-16 threaded fittings
EC112	69	3/4" Lock Washer	Throttle controls using 3/4" threaded fittings
MS35333-47	70	Same as EC112	
6196	71	3/8-24 Jam Nut	Cessna carb heat controls
6197	72	3/8" Lock Washer	Cessna carb heat controls
6133	73	7/16-20 Retaining Nut	Throttle controls using 7/16-20 threaded fittings
6260	74	7/16-20 Retaining Nut, Modified	MC6350 Dual Push-to-Unlock controls
EC38	75	7/16" Lock Washer	
EC61	76	3/8" Lock Washer	P/N MC12693-04 or MC455-139
EC62	77	3/8-24 Retaining Nut	P/N MC12693-04 or MC455-139
EC65	78	Throttle Spacer Bushing	P/N MC12693-04 or MC455-139
EC119	79	3/4-16 Retaining Nut Extended Nut	McFarlane vernier controls using 3/4-16 threaded fittings

Threaded Wear Sleeve Nuts and Lock Washers: Threaded wear sleeves are used on many McFarlane controls to secure the control to the firewall and/or mounting brackets.

Part Number	Figure	Description	Use Eligibility
EC38	80	7/16" Lock Washer	MC565-548 series controls
EC70	81	12M x 1.25 Jam Nut	MC565 series controls
EC72	82	12mm Lock Washer	MC565 series controls

### Spring

Part Number	Figure	Description	Use Eligibility
6822	83	Spring, Throttle, Red	Alternate carburetor arm return spring for dual carburetor 912/914 series Rotax engines. Less than half the strength of the original stock Rotax springs. Prevents throttle "creep" due to excessive return spring force.
7235	107	Spring, Throttle, Blue	
7140	108	Spring, Throttle Kit (one red and one blue)	Requires 1 per carburetor (2 per engine). See page 28.

### Adjustable Friction Lock Service Kits

Part Number	Figure	Description	Use Eligibility
EC12SK	84	Friction Packing Service Kit	Throttle controls using a 1/2" friction nut
EC312SK	85	Friction Packing Service Kit	Throttle controls using a 9/16" friction nut

### Miscellaneous

Part Number	Figure	Description	Use Eligibility
6135	86	1/8" Ball Bearing, sold in 5 packs.	Replaces the ball bearing used in the locking mechanism for the MC6150, MC6250 and MC6350 series Push-to-Unlock controls.
6270	87	Cable Stop Assembly	Rotax Engines
6271	88	Conduit Terminal Assembly, Slip Fit	Rotax Engines
6290-06-12K	89	Panel Hole Reducer 0.375 X 0.75	Includes a flat washer. Not for use on certified aircraft.
6290-08-12K	90	Panel Hole Reducer 0.50 X 0.75	Includes a flat washer. Not for use on certified aircraft.
6408	91	Dual Throttle Hardware Kit	Rotax Engines
6409	92	Allen Wrench	MCTL series controls
6415	93	Panel Bolt, Turn-to-Lock	MCTL series controls
6416	94	Pin, Turn-to-Lock	MCTL series controls
6420	95	Ferrule, Turn-to-Lock, Brass	MCTL series controls
6423	96	Ferrule, Turn-to-Lock, Nylon	MCTL series controls
6424	97	Conduit Terminal	Rotax Choke Controls
6433-1	98	Conduit Clamp	MCQ100 series controls
6515	99	Barrel Stop Assembly	MCC101D and MCTL series controls
6518	100	Vernier Assist Roller Pin	Vernier Assist series controls
6797	101	Control Clip Plate	Typically used on quadrant style controls
7002	102	Slip Fit Terminal	Rotax Engines
EC02	103	1/2" Friction Adjust Wheel	Throttle controls using a 1/2" friction adjust wheel
EC89	104	Wedge Washer	One used on each side of the instrument panel to angle a control (approx 6.5°) to avoid interference behind the panel. 9/16" ID, sold in pairs. Included with Cessna 170 aircraft throttle control.
EC98	105	9/16" Friction Adjust Wheel	Throttle controls using a 9/16" friction adjust wheel
M83248/1-006	106	O-ring	MCC101D series controls

## Conduit Clamps

### Standard (AN742 Series)

MIL-SPEC standard clamps.

### Extra Grip (6317 Series)

Similar to standard AN742 clamps, but include a detent groove for better grip on coiled wire conduit.

### Cushioned CJ Type MIL-Spec (MS21919WCJ Series)

Adel clamps for high temp application. (See page 63)

Part Number	Material	Approximate Conduit Diameter
6317-3	Steel	3/16"
6317-4	Steel	1/4"
6317D3	Aluminum	3/16"
6317D4	Aluminum	1/4"
AN742-3	Steel	3/16"
AN742-4	Steel	1/4"
AN742D3	Aluminum	3/16"
AN742D4	Aluminum	1/4"



AN742 Series















































































































6317 Series



MS21919 Series

McFarlane recommends using steel clamps near the engine or exhaust instead of aluminum clamps.

Figures 1-108 Photos are not to scale relative to each other. Product details are on pages 35-36.

1  P/N 1536A-B	2  P/N 1536A-C	3  P/N 1536A-GN	4  P/N 1536A-L	5  P/N 1536A-R	6  P/N 1536A-W	7  P/N 1536A-Y	8  P/N 1536B-B	9  P/N 1536B-C
10  P/N 1536B-GN	11  P/N 1536B-L	12  P/N 1536B-R	13  P/N 1536B-W	14  P/N 1536B-Y	15  P/N 6277B	16  P/N 6277C	17  P/N 6277L	18  P/N 6277R
19  P/N 6307-BK	20  P/N 6307-RD	21  P/N 6417	22  P/N 6418	23  P/N 6427	24  P/N 6428	25  P/N 6429	26  P/N 6430	27  P/N 6432
28  P/N 6489B	29  P/N 6489C	30  P/N 6489L	31  P/N 6489R	32  P/N 6495-01B	33  P/N 6495-02B	34  P/N 6495-03B	35  P/N 6495-04B	36  P/N 6512B
37  P/N 6512C	38  P/N 6512L	39  P/N 6512R	40  P/N 6570	41  P/N 6620	42  P/N 6660	43  P/N 6661	44  P/N 6662	45  P/N 6730
46  P/N EC03	47  P/N EC53	48  P/N EC125-1	49  P/N MC471-052	50  P/N MC471-053	51  P/N MC471-060	52  P/N MC471-084	53  P/N MC571-131	54  P/N KNOB ADAPTER
<b>Examples of marked knobs</b>         								
64  P/N EC04	65  P/N 6060-8	66  P/N EC111	67  P/N MS35333-44	68  P/N 6060-12	69  P/N EC112	70  P/N MS35333-47	71  P/N 6196	72  P/N 6197
73  P/N 6133	74  P/N 6260	75  P/N EC38	76  P/N EC61	77  P/N EC62	78  P/N EC65	79  P/N EC119	80  P/N EC38	81  P/N EC70
82  P/N EC72	83  P/N 6822	84  P/N EC12SK	85  P/N EC312SK	86  P/N 6135	87  P/N 6270	88  P/N 6271	89  P/N 6290-06-12K	90  P/N 6290-08-12K
91  P/N 6408	92  P/N 6409	93  P/N 6415	94  P/N 6416	95  P/N 6420	96  P/N 6423	97  P/N 6424	98  P/N 6433-1	99  P/N 6515
100  P/N 6518	101  P/N 6797	102  P/N 7002	103  P/N EC02	104  P/N EC89	105  P/N EC98	106  P/N M83248/1-006	107  P/N 7235	108  P/N 7140

**Control Arms, Shafts and Bearing Housings for Cessna Air Boxes**

**Unique elastomer bearing replaces needle bearing**

McFarlane's elastomer bearing is assembled with tension between the mating surfaces. This tension prevents micro-movement and its related metal erosion. The bearing contact area that transfers vibration motion from the heat box to the butterfly shaft is hundreds of times greater than that of the original needle bearing. This large surface effectively prevents localized metal erosion.

- Absorbs shaft and butterfly vibration
- Eliminates needle bearing failures
- Increases service life of **all** components
- Direct replacement for original parts

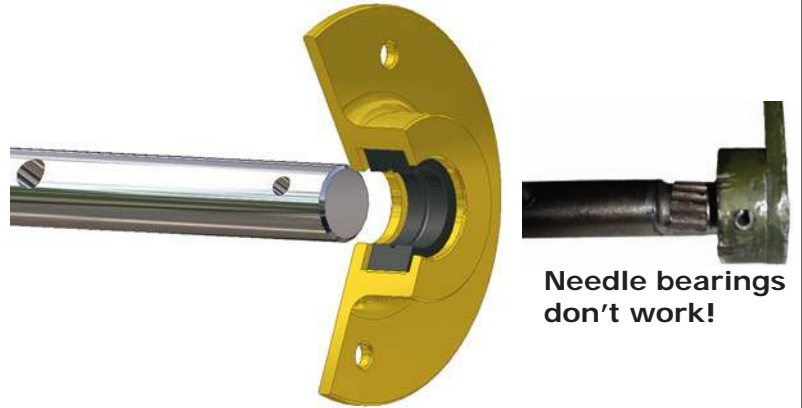
**Proven Design**

- Tested to over 700,000 cycles while exposed to avgas, heat and vibration without any change in performance
- Extremely rugged and wear resistant in high temperature and fuel environments

**Convenient**

- Discontinued part numbers through the factory are now manufactured by McFarlane
- Also available in kits containing the shaft, arm, bearing housings, monel rivets, and roll pin

**New approvals for 177 and 205 thru 310 aircraft!**



Firewall Forward

Model	Serial Number	Shaft P/N	Arm P/N	Roll Pin P/N <sup>1</sup>	Rivet P/N	Bearing Housing P/N	Kit P/N
152	All	MC0450068-2	MCS2280-8-00	NASM16562-17	MS20615-4M9	MC0750113-1	CCH-KT-1
A152	All	MC0450068-2	MCS2280-8-00	NASM16562-17	MS20615-4M9	MC0750113-1	CCH-KT-1
F152	All	MC0450068-2	MCS2280-8-00	NASM16562-17	MS20615-4M9	MC0750113-1	CCH-KT-1
FA152	All	MC0450068-2	MCS2280-8-00	NASM16562-17	MS20615-4M9	MC0750113-1	CCH-KT-1
172B,C	All	MC0550180-16	<sup>2</sup>	<sup>2</sup>	MS20615-4M9	MC0750113-1	CCH-KT-2
172D,E,F,G	All	MC0550180-28	<sup>2</sup>	<sup>2</sup>	MS20615-4M9	MC0750113-1	CCH-KT-3
F172D,E,F,G	All	MC0550180-28	<sup>2</sup>	<sup>2</sup>	MS20615-4M9	MC0750113-1	CCH-KT-3
172H,I,K,L,M,N,P	All	MC0550180-16	<sup>2</sup>	<sup>2</sup>	MS20615-4M9	MC0750113-1	CCH-KT-2
F172H,K,L,M,N,P	All	MC0550180-16	<sup>2</sup>	<sup>2</sup>	MS20615-4M9	MC0750113-1	CCH-KT-2
172Q	All	MC0509068-6	MC0750111-19	NASM16562-17	MS20615-4M9	MC0750113-3	CCH-KT-4
P172	All	Not Available	Not Available	Not Available	MS20615-4M9	MC0750113-1	N/A
175, 175A	All	MC0750133-8	MC0750111-19	NASM16562-17	MS20615-4M9	MC0750113-3	CCH-KT-5
175B,C	All	Not Available	Not Available	Not Available	MS20615-4M9	MC0750113-1	N/A
177	All	Not Available	Not Available	Not Available	MS20615-4M9	MC0750113-3	N/A
177A,B	All	MC1752078-4	MC0750111-19	NASM16562-16	MS20615-4M9	MC955	CCH-KT-17
180 <sup>1</sup>	30000 thru 32150	MC0750112	MC0750111-19	NASM16562-16	MS20615-4M9	MC0750113-1	CCH-KT-7
180 <sup>1</sup> , 180A,B	32151 thru 50661	MC0750126-19	MC0750111-19	NASM16562-16	MS20615-4M9	MC0750113-3	CCH-KT-8
180C,D,E,F,G,H,J,K	All	MC0750133-8	MC0750111-19	NASM16562-16	MS20615-4M9	MC0750113-1	CCH-KT-9
182, 182A,B,C,D,E,F,G,H	All	MC0750133-8	MC0750111-19	NASM16562-16	MS20615-4M9	MC0750113-1	CCH-KT-9
182J,K,L,M,N,P,Q,R	All	MC0750133-8	MC0750111-19	NASM16562-16	MS20615-4M9	MC0750113-1	CCH-KT-9
F182P,Q	All	MC0750133-8	MC0750111-19	NASM16562-16	MS20615-4M9	MC0750113-1	CCH-KT-9
R182	All	Not Available	MCS2280-3-157	NASM16562-205	MS20615-4M9	MC0750113-1	N/A
FR182	All	Not Available	MCS2280-3-157	NASM16562-205	MS20615-4M9	MC0750113-1	N/A
185, 185A,B,C,D,E/A185E <sup>1</sup>	185-0001 thru 185-1300	MC0750173-3	MC0750111-19	NASM16562-16	MS20615-4M9	MC0750113-1	CCH-KT-10
A185E <sup>1</sup>	185-1301 thru 18501832	MC0750173-4	MC0750111-19	NASM16562-16	MS20615-4M9	MC0750113-1	CCH-KT-11
188	188-0001 thru 18802348	MC0750133-8	MC0750111-19	NASM16562-16	MS20615-4M9	MC0750113-1	CCH-KT-9
210-5 (205), 210-5A (205A)	All	MC1250311-1	N/A	N/A	MS20470AD4-7	MC1250309-1 <sup>4</sup>	CCH-KT-12
		MC0850500-37	N/A	N/A	MS20470AD4-7	MC0850500-31 <sup>4</sup>	CCH-KT-13
		MC1250311-1	MC0850500-30	MS16562-27	MS20470AD4-7	MC1250309-1 <sup>4</sup>	CCH-KT-14
		MC0850500-37	MC0850500-30	MS16562-27	MS20470AD4-7	MC0850500-31 <sup>4</sup>	CCH-KT-15
206, U206, U206A,B, P206, P206A,B	All	MC1250311-1	N/A	N/A	MS20470AD4-7	MC1250309-1 <sup>4</sup>	CCH-KT-12
		MC0850500-37	N/A	N/A	MS20470AD4-7	MC0850500-31 <sup>4</sup>	CCH-KT-13
		MC1250311-1	MC0850500-30	MS16562-27	MS20470AD4-7	MC1250309-1 <sup>4</sup>	CCH-KT-14
		MC0850500-37	MC0850500-30	MS16562-27	MS20470AD4-7	MC0850500-31 <sup>4</sup>	CCH-KT-15
U206C,D,E,F,G, P206C,D,E	All	MC1250311-1	N/A	N/A	MS20470AD4-7	MC1250309-1 <sup>4</sup>	CCH-KT-12
		MC1250311-1	MC0850500-30	MS16562-27	MS20470AD4-7	MC1250309-1 <sup>4</sup>	CCH-KT-14
207, 207A	All	MC1250311-1	N/A	N/A	MS20470AD4-7	MC1250309-1 <sup>4</sup>	CCH-KT-12
		MC1250311-1	MC0850500-30	MS16562-27	MS20470AD4-7	MC1250309-1 <sup>4</sup>	CCH-KT-14
210, 210A,B,C	All	MC1250311-1	N/A	N/A	MS20470AD4-7	MC1250309-1 <sup>4</sup>	CCH-KT-12
		MC0850500-37	N/A	N/A	MS20470AD4-7	MC0850500-31 <sup>4</sup>	CCH-KT-13
		MC1250311-1	MC0850500-30	MS16562-27	MS20470AD4-7	MC1250309-1 <sup>4</sup>	CCH-KT-14
		MC0850500-37	MC0850500-30	MS16562-27	MS20470AD4-7	MC0850500-31 <sup>4</sup>	CCH-KT-15
210D,E,F,G	All	MC1250311-1	N/A	N/A	MS20470AD4-7	MC1250309-1 <sup>4</sup>	CCH-KT-12
		MC1250311-1	MC1250718-1	MS16562-27	MS20470AD4-7	MC1250309-1 <sup>4</sup>	CCH-KT-16
210H,H,K,L,M,N <sup>1</sup>	21058937 thru 21064535	MC1250311-1	N/A	N/A	MS20470AD4-7	MC1250309-1 <sup>4</sup>	CCH-KT-12
		MC1250311-1	MC0850500-30	MS16562-27	MS20470AD4-7	MC1250309-1 <sup>4</sup>	CCH-KT-14
310, 310B		N/A	MC0850500-30	N/A	N/A	N/A	N/A

<sup>1</sup> Partial model eligibility

<sup>2</sup> The control arm is integral with the shaft.

<sup>3</sup> Attach shaft to arm with the specified roll pin

<sup>4</sup> P/N MC0850500-31 and MC1250309-1 are not for sale individually unless the customer has previously purchased the eligible corresponding shaft P/N MC0850500-37 or MC1250311-1.

**Costs less!**

**Vibration Absorbing Bearings!  
Lasts 10 times longer!**



## Cessna Carburetor Heat Air Box Assembly

Get rid of that tired, old air box!! Install NEW, not rebuilt!

Finally a cost effective, improved air/heat system!

- New with improved components
- Direct replacement of original assembly
- Quality built with McFarlane bearing housings
- Transport Canada Part Design Approval - ships with Transport Canada Form One

Stop wasting time and money cobbling together that old air box. Newly constructed air boxes reduce maintenance headaches, increase efficiency of the induction system and include vibration absorbing parts. Eliminate cracks, unsightly repairs and carburetor heat application. Effective control and application of carburetor heat is a must. Damaged components, mis-repair and inferior seals can cause dangerous conditions and the inability to clear away ice. Improved components extend the service life of all components through the use of McFarlane vibration absorbing bearings, no more needle bearing failures!

Replacement components including flange and flappers are available separately.

Manufactured by Acorn Welding



P/N 0552113-11AWL

Save\$\$



P/N 0552169-6AWL



P/N 0552164-4AWL



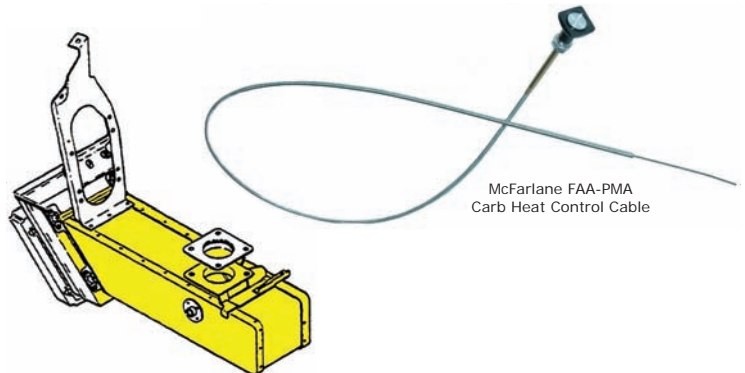
Aircraft Model	Part Number	Description
152, A152, F152, FA152	0550180-13AWL	Carb Attach Flange
172B,C,D,E,F,G,H	0750133-9AWL	Flapper Standoff
	0550180-10AWL	Flapper Assembly
172I,K	0550180-13AWL	Carb Attach Flange
	0550180-10AWL	Flapper Assembly
172L,M	0552113-11AWL	Carb Air Box
	0750133-9AWL	Flapper Standoff
	0550180-10AWL	Flapper Assembly
172N,P	0550180-13AWL	Carb Attach Flange
	0552113-13AWL	Carb Air Box
172R,G	0750133-9AWL	Flapper Standoff
	0552164-4AWL	Carb Air Box
F172D,E,F,G,H,K	0552169-6AWL	Flapper Assembly
	0550180-13AWL	Carb Attach Flange
F172L,M	0550180-10AWL	Flapper Assembly
	0550180-13AWL	Carb Attach Flange
	0552113-13AWL	Carb Air Box
F172N,P	0750133-9AWL	Flapper Standoff
	0550180-13AWL	Carb Attach Flange
P172D, 175, 175A,B,C, 177A,B	0552164-4AWL	Carb Air Box
	0552169-6AWL	Flapper Assembly
180A,B	0750288-1AWL	Carb Attach Flange
180C,D,E,F,G,H,J,K		
182,182A,B,C,D,E,F,G,H,J,K,L,M,N,P,Q,R	0750133-9AWL	Flapper Standoff
F182Q	0750288-1AWL	Carb Attach Flange
188, 188A,B, A188, A188A		
■ P/N 0552113-11AWL and 0552113-13AWL is offered with Dynamic Propeller STC/PMA seal P/N DP0552130-11 as a special order item.		

### Maintenance Tip:

When there is excessive "slack" or lack of "sufficient friction" on the carb heat control cable the flapper will vibrate back and forth wearing the airbox, the carb heat cable and create unneeded vibration.

McFarlane's carb heat cables have a friction/tension system built in for reduced vibration wear, longer life and smooth, consistent control and a special heavier wire for more fatigue strength and reliability!

Replace your old, worn, carb heat cable with a new McFarlane FAA-PMA approved cable (see pages 14-17).



McFarlane FAA-PMA Carb Heat Control Cable

## Avglas™ STC Repair Kit for Continental Carburetor Heat Boxes

New hardened stainless steel bearing for improved vibration resistance and longer life!

FAA-PMA, STC Kits include:

- Replacement shaft, arm and detent spring assembly
- Bearings
- Bearing housing
- Locknut and washer
- Complete instructions

Engine Model	Continental Airbox P/N	Avglas P/N
C-75	50256	FG-100
C-85	50256	FG-100
C-90	50256	FG-100
O-200	628122, 653675, 641534	FG-100
O-300	530852, 531143	FG-105

Note: Avglas repair kits are only applicable to aircraft.

### Installation:

The butterfly (not included in kit) must be brazed or tack welded to the shaft during installation, and the bearing housings must be brazed, tack welded or flush riveted to the carburetor heat box. Avoid applying excessive heat during brazing or tack welding or the heat treated stainless steel bearing may be damaged.

See the installation instructions for complete details.

### Spring Service Kit P/N FG-SK-1

Eligible for installation on P/N FG-100 and FG-105.

Service kit contains (1) FG102S Spring and (2) MS20613-3-P3 Rivets



P/N FG-SK-1

FAA-PMA Approved

**337 Skymaster Spinner Bulkhead**

Most Skymaster 337 Rear Spinner Bulkhead are cracked!

P/N MC1557300-5

- Now FAA-PMA approved!
- Less than half the price and 15 times the crack resistance!
- Spun to shape, heat treated, and spun again
- Kit includes anodized aluminum pressure plate reinforcement
- One piece construction 2x the thickness
- Precision machined to final trueness and balanced
- Epoxy primed and balanced with installation hardware
- 5 year warranty!



**Maintenance Tip:**  
The spinner bulkhead needs to be removed to find the cracks around the attachment bolts.

Aircraft
337, 337B,C,D,E,F,G,H
F337E,F,G,H
FT337E,F,GP,HP
P337H
T337B,C,D,E,F,G,H, T337H-SP

**Vacuum Pump Cooling Kits**

P/N's KIT #10, KIT #11, and KIT #20

Increase the life of your vacuum pump!

- Keeps cooler air flowing around the pump housing
- Powered by ram air forward of the engine baffle
- Easy installation, minimal tools and RTV silicone adhesive required
- FAA-PMA STC approved



Aircraft	Kit #10 1	Kit #11 2	Kit #20 3
<b>Beechcraft</b>			
F33A, S35, V35, V35A, V35B, 36, A36, A36TC, B36TC	•	•	•
<b>Cessna</b>			
152, A152	•		
172K,L,M,N,P,Q	•		
182G,H,J,K,L,M,N,P,Q, R182, TR182, T182	•		
206, U206, U206A,B,C,D,E,F,G, TU206A,B,C,D,E,F,G	•		
P206A,B,C,D,E, TP206A,B,C,D,E	•		
210L,M,N,R, P210N,R, T210L,M,N	•	•	•
310P,Q,R, T310P,Q,R	•	•	•
<b>Piper</b>			
PA-28-140,150,151,160, S-160,161, S-180,181,235,236,201T	•		
PA-28R-180, R-200, R-201, R-201T, RT-201, RT-201T	•		
PA-32-260,300,301, S-300,R-300,R-301,RT-300	•	•	•
PA-34-200T, 220T	•	•	•
<b>Mooney</b>			
M20E,F,J,K	•	•	•

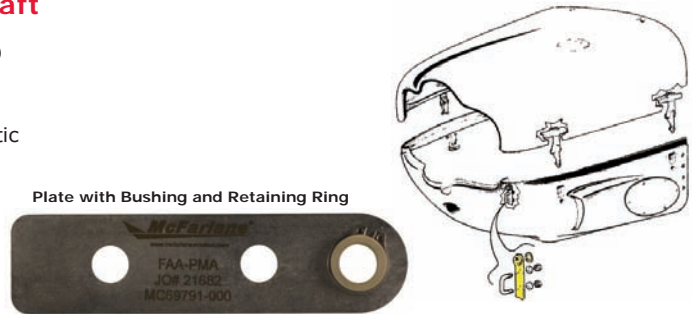
1 KIT #10 for Airborne model 200 thru 212CW, CC Dry Air Pumps, Tempest models AA3215CC and AA3216CW Dry Air Pumps.  
 2 Kit #11 for EDO-AIRE model 1U128, 1U12BA and 1U128B and Sigma Tek model 1U128B Dry Air Pumps.  
 3 Kit #20 for Airborne model 400-Serues Dry Air Pumps and Tempest AA441CC and AA442CW.

Component List for Vacuum Pump Cooling Kits			
	Qty	Part Number	Description
P/N KIT #10	1	2CDH	Cooling Shroud (3.96" O.D.)
	1	2CDH-1	Flange 1"
	13 - 14"	2CDH-2	1" ID SCAT Aeroduct Ducting
	2	2CDH-3	Cable Ties
	4	AN526-632R8	Screws
	4	AN365-632	Nuts
P/N KIT #11	4	AN960-6	Washers
	1	4ADH	Cooling Shroud (3.96" O.D. Modified)
	1	2CDH-1	Flange
	17 - 18"	2CDH-2	1" ID SCAT Aeroduct Ducting
	2	2CDH-3	Cable Ties
	4	AN526-632R8	Screws
P/N KIT #20	4	AN365-632	Nuts
	4	AN960-6	Washers
	1	6ADH	Cooling Shroud (4.20" O.D.)
	1	6CDH-1	Flange
	17 - 18"	6CDH-2	1.25" ID SCAT Aeroduct Ducting
	2	2CDH-3	Cable Ties
4	AN526-632R8	Screws	
4	AN365-632	Nuts	
4	AN960-6	Washers	

**Cowl Attach Plates and Bushings for Piper Aircraft**

Bushing P/N MC69790-00 with Retaining Ring P/N MC484-840  
 Plate P/N MC69791-000 (Includes Bushing and Retaining Ring)  
**New bushing material. Stronger and Tougher!**

- High temperature stainless steel plates and retaining ring.
- Bushing is made from high temperature/high strength thermoplastic that lasts longer than original Nylon and Teflon bushing materials!
- Save up to 50%
- Each component sold separately



Model Series	Serial Numbers	Model Series	Serial Numbers
PA-28-150	28-1761 and On	PA-28R-201	All
PA-28-160	28-1761 and On	PA-28RT-201	All
PA-28-180	28-1761 and On	PA-32-260	All
PA-28-181	28-7690001 and On	PA-32-300	All
PA-28-235	28-10003 and On	PA-32R-300	All
PA-28R-180	28-30005 and On	PA-32RT-300	All
PA-28R-200	28-35001 and On		





## SAFE-HEET Silicone Pad Aircraft Engine Heaters

### Easy to Use

Preheat in cold weather for longer engine life.

- Permanent installation - thin flexible pad bonds to engine oil sump
- FAA-PMA for Continental, Lycoming and Franklin engines
- No STC or 337 form required (log book entry only)
- No engine or airframe modifications required
- Kit contains instructions and all necessary materials
- Uses standard 110V AC
- Can be used alone or with a timer, or with a temperature controller

### Economical and Efficient

- Puts the heat where it is needed
- Heats the air inside the engine
- Uses about 300 Watts (less than the price of a cup of coffee a day!)
- Warms the engine oil from subzero to safe starting temperature in less than 1 hour
- Thermally conductive adhesive for efficient heat transfer and lower surface temperatures
- Bonded heatsink distributes heat evenly
- Reduces costly starter and engine abuse during cold weather starts

### Safe

- UL recognized components. 100% thermal fused element
- External ground wire grounds the engine and airframe to the electrical outlet, reducing the risk of electrical shock in damp outdoor locations
- Thermostatically controlled to maintain oil sump temperature less than 160°F.
- No flame or hot air to burn cowling or plastic parts
- Reduces the risk of fires associated with cold starts
- Ground Fault Circuit Interrupter (GFCI) included to reduce the risk of electrical shock and power surge damage.

Ground fault protected for improved safety!



Firewall Forward

### Installation Tip:

SAFE-HEET engine heaters are installed with a two-part adhesive. The engine heater can be installed quickly and easily by using the 707 temperature controller at half power. At temperatures below 70°F the temperature controller must be used to ensure proper adhesive cure. Proper adhesive cure is essential to full service life of the heater.

## Eligibility for SAFE-HEET Engine Heaters

Model Series	P/N
<b>Teledyne Continental Aircraft Engines</b>	
A65, A75, C-75, C-85, C-90, O200	705
C-125, C-145, O-300, GO-300, E165, E185, E225, IO-360, TIO-360, LTSIO-360	700
O-470, IO-470, LIO-470, FSO-470, TSO-470, GIO-470, IO-520, GTSIO-520, LTSIO-520, IO-550	720B
<b>Textron Lycoming Aircraft Engines</b>	
O-235, O-290, O-320 (EXCEPT O-320-H), IO-320, AIO-320, LIO-320, AEIO-320, O-360, HO-360, LO-360, IO-360, HIO-360, AIO-360, LHO-360, LHIO-360, AEIO-360, VO-360, IVO-360, TIO-360, TO-360, TIO-360, LTO-360, O-435, GO-435, VO-435, GO-480, GSO-480, IGSO-480	700
O-540, VO-540, TVO-540, IO-540, HIO-540, AEIO-540, IGO-540, IGSO-540, IVO-540, TIO-540, LTIO-540, TIVO-540, IO-720	720B
<b>Franklin Aircraft Engines</b>	
6A4-150, 6A4-165	700 or 720

### Notes:

- Engine oil sump configurations may vary for specific engine models. There is insufficient oil sump or oil tank area and clearances as specified in the SAFE-HEET Installation Instructions for use of the SAFE-HEET engine heaters on some engine-airframe installations.
- For dry sump engines, use SAFE-HEET pads on the oil tank. The installer must evaluate as per the SAFE-HEET Installation Instructions the available oil sump or oil tank area below the oil level for use of SAFE-HEET pads on all engine models.
- Where the oil sump area is limited, Model 700 may be used. Specifically; 182RG Aircraft are equipped with an O-540 engine. Eligibility shows to use model 720 SAFE-HEET. We have found that there is a limited area to install the 720 model, and customers with a 182RG should use model 700 SAFE-HEET.

Now with surge protection!

Complete installation instructions can be found on our website: [www.mcfarlaneaviation.com/safe-heet](http://www.mcfarlaneaviation.com/safe-heet)



**SAFE-HEET P/N 700**  
200 Watts  
4" X 4"



**SAFE-HEET P/N 705**  
150 Watts  
3.5" X 7.3"



**SAFE-HEET P/N 720**  
300 Watts  
4" X 7"

## Variable Temperature Controller

P/N 707  
Makes installation fast and easy!

SAFE-HEET engine heaters can be plugged into the controller to speed and improve engine heater installation. The controller allows the SAFE-HEET engine heater pad to cure the special thermo conductive adhesive using its own heat energy at a reduced rate. SAFE-HEET engine heaters can be installed during much colder temperatures using the 707 Temperature Controller.

The variable temperature controller can also be used for continuous engine heating. Lower temperature settings help prevent the internal engine corrosion normally associated with leaving heaters on at full power. The variable temperature controller allows the user to adjust the heat to best fit each unique situation.

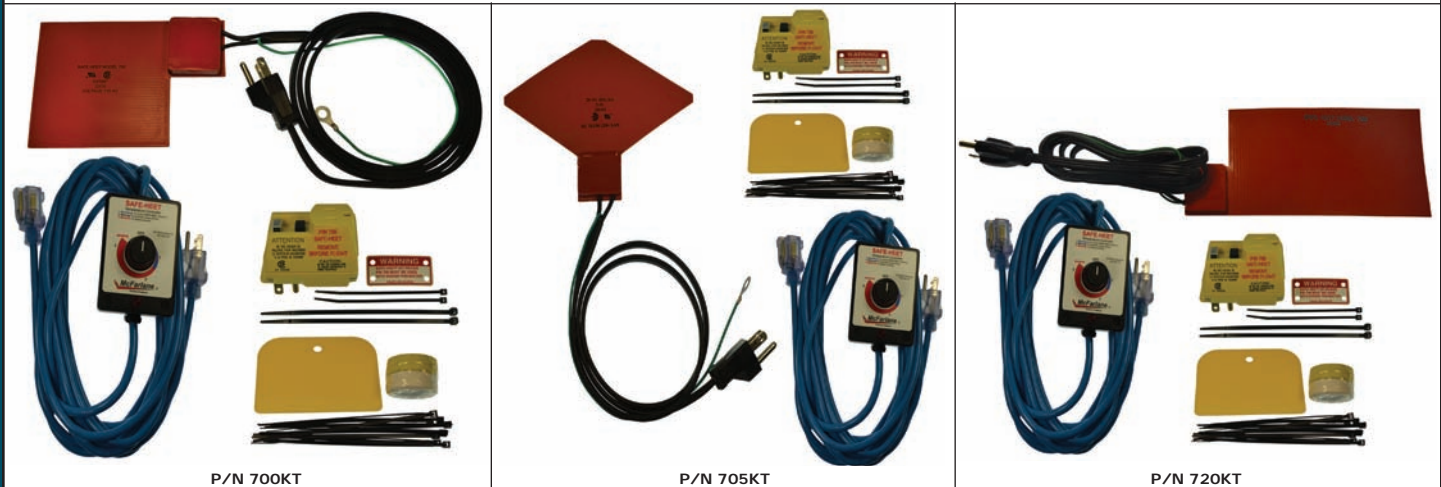
McFarlane's Variable Temperature Controller may be used with other brand engine heaters.



## Convenient SAFE-HEET Kits with Temperature Controller

P/Ns 700KT, 705KT, 720KT

Kits include a SAFE-HEET engine heater and a temperature controller. Use the temperature controller to make installation fast and easy!



Firewall Forward

## Ground Fault Circuit Interrupter (GFCI)

P/N 709SK

Included with every SAFE-HEET is a Ground Fault Circuit Interrupter. 709SK is used to protect the SAFE-HEET and engine from any ground fault (insulation failure) situation. The 600 Watt Ground Fault Circuit Interrupter will open the circuit if more than 5 mA is detected not returning through the GFCI. This prevents lethal electrical shocks to the operator and electrical arcing between the engine and the heat pad. Insulation failure of the heat pad could be caused by lightning, electrical surge or mechanical damage. In some situations arcing between the heat pad and the engine pan could cause oil leakage and subsequent engine failure. Each GFCI is individually tested.

McFarlane's GFCI may be used with other brand engine heaters.



## A New McFarlane Product from D A M™

Fast and easy aircraft window cleaner!  
This stuff is so D A M good we had to share it!

Aircraft size 1.5 oz. P/N DAM17-1.5  
Hangar size 16 oz. P/N DAM17-16

A fast, streak free liquid spray designed for acrylic and other surfaces.

The carnauba wax and polymer formula fills minor scratches and leaves a slick clean surface that makes cleaning bugs easier next time.

- Liquid spray - No smeary paste
- No ammonia and only a harmless trace of alcohol
- Anti-static - Repels dust
- Safe on all surfaces
- Amazing *Melt Away* cleaning power
- Economical - a little goes a long way
- Hazes off for a streak free polish finish
- Improves visibility in the rain



## Cotton Windshield Towels

Stop scratching your window with paper towels!

- New t-shirt material with no seams or print, and no abrasive wood fibers (paper towels)
- Won't scratch
- Reusable for many cleanings
- Cheap enough to throw away
- Random sizes - 12 to 24 inches per side

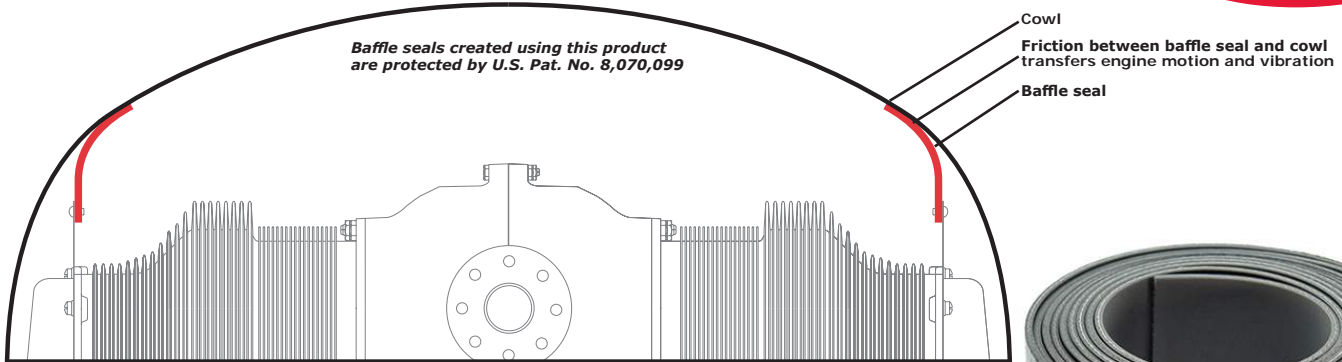


Part Number	Description	Size	Qty.
DAM17-1.5	Aircraft size	1.5 oz.	1
DAM17-1.5C	Aircraft size	Case	14
DAM17-16	Hangar size	16 oz.	1
DAM17-16C	Hangar size	Case	12
<b>Complete Window Cleaning Kit</b>			
DAM17-KIT	Aircraft size	1.5 oz.	1
	Hangar size	16 oz.	1
	Towel, knit, grey	Varies	5
<b>Towels</b>			
1533-5	Towel, knit, grey	Varies	5
1533-20	Towel, knit, grey	Varies	20

Now also available with Bi-Flex™ technology!

### Cowl Saver™ Baffle Seal Material

Reduce Airframe Vibration, Stop Cowl and Firewall Cracks  
You can feel the difference in the cockpit!



### Baffle Seal Friction Causes Airframe Vibration and Destroys Cowls

Typical silicone rubber baffle seals have a coefficient of friction among the highest of any known material. This friction transfers engine vibration into your cowl and firewall causing fastener fretting, fatigue, cracking, chaffing and airframe vibration.

### Cowl Saver™ Baffle Seal Material has 30 Times Less Friction!

- One side is silicone and the other is a low friction Teflon surface unique to the patented Cowl Saver™ baffle seal material.
- Cowl Saver™ dramatically reduces the friction between your cowl and baffle seals.
- Half of the engine vibration you feel in the cockpit is from baffle seal transfer.

### Low Friction Saves You Money!

- Reduces transfer of vibration to the engine cowl and airframe
- Minimizes cowl chaffing and erosion from baffle seals
- Extends baffle seal life
- Reduces expensive cowl and cowl fastener repairs
- Reduces fatigue and cracking in baffles, cowl skins and firewall
- The cowling even goes on easier!



### Unbeatable Performance

- Ideal balance of flexibility and stiffness
- Fiberglass reinforced
- Meets industry standard AMS3320G
- McFarlane quality you can count on!



### Bi-Flex™ Technology

The three inch rolls of Cowl Saver™ material are now also available with a precision laser engraved flex pattern to ensure an optimum flexibility/stiffness combination for maximum cooling and minimum friction. The flex pattern covers a little less than half of the width of the material. See page 44 for more details.

### Convenient Baffle Seal Repair Kits

Kit P/N BAFFLE-KIT-1		
Qty	P/N	Description
1	CS085X3X108G	3 in X 108 in (9ft) Cowl Saver™
1	RIVET-KIT-2	Baffle Seal Rivet Kit
10	6036-012	Baffle Seal Retainer Strips
<i>Best for small aircraft with straight baffle seals</i>		
Kit P/N BAFFLE-KIT-1BF with Bi-Flex™		
1	CS085X3X108GBF	3 in X 108 in (9ft) Cowl Saver™ with Bi-Flex™
1	RIVET-KIT-2	Baffle Seal Rivet Kit
10	6036-012	Baffle Seal Retainer Strips
<i>Best for small aircraft with straight baffle seals</i>		
Kit P/N BAFFLE-KIT-2		
1	CS085X18X36G	18 in X 36 in (3ft) Cowl Saver™
2	RIVET-KIT-2	Baffle Seal Rivet Kit
20	6036-012	Baffle Seal Retainer Strips
<i>Recommended for most aircraft. Allows fabrication of straight, curved or irregular shaped baffle seals.</i>		
Kit P/N BAFFLE-KIT-3		
1	CS085X3X156G	3 in X 156 in (13ft) Cowl Saver™
1	RIVET-KIT-2	Baffle Seal Rivet Kit
14	6036-012	Baffle Seal Retainer Strips
<i>Best for aircraft with straight baffle seals</i>		
Kit P/N BAFFLE-KIT-3BF with Bi-Flex™		
1	CS085X3X156GBF	3 in X 156 in (13ft) Cowl Saver™ with Bi-Flex™
1	RIVET-KIT-2	Baffle Seal Rivet Kit
14	6036-012	Baffle Seal Retainer Strips
<i>Best for aircraft with straight baffle seals</i>		

### Cowl Saver™ Baffle Seal Material

P/N	Thickness	Size
CS085X3G	.085 in	3 in wide, sold by the foot
CS085X3GBF	.085 in	3 in wide, sold by the foot with Bi-Flex™
CS085X18X36G	.085 in	18 in X 36 in (3 ft)
CS085X36X36G	.085 in	36 in X 36 in (3 ft)
CS085X3X108G	.085 in	3 in X 108 in (9 ft)
CS085X3X108GBF	.085 in	3 in X 108 in (9 ft) with Bi-Flex™
CS085X3X156G	.085 in	3 in X 156 in (13 ft)
CS085X3X156GBF	.085 in	3 in X 156 in (13 ft) with Bi-Flex™

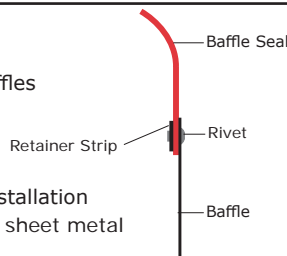
Color: Black/Gray

### Baffle Seal Retainer Strip

P/N 6036-012

Use as a retainer for riveting baffle seals to baffles

- .050 inch thick 6061-T6 aluminum
- Corrosion resistant
- Economical
- 7/16" X 12" strips - cut to length during installation
- Clamps better than washers or light gauge sheet metal



### Baffle Seal Rivet Kit

P/N RIVET-KIT-2

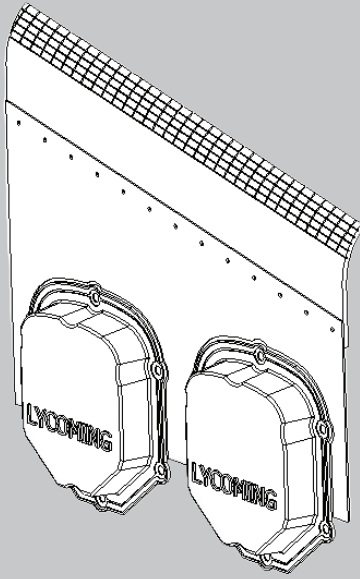
- Soft rivets that won't deform baffles
- Several sizes for various baffle thicknesses and hole sizes

RIVET-KIT-2	
Qty	Rivet P/N
100	MS20470A3-5
100	MS20470A4-5
100	MS20470A4-6

Rivets included are approximate



**Customizable Flexibility for Optimal Cooling**



Cowl Saver™ engine baffle seal material can be customized to be extremely flexible for a perfect seal where it contacts the cowl and rigid elsewhere to prevent the seal from blowing past the cowl contact line. With other baffle seal materials, you must compromise and make a choice: either use material that is rigid enough to not blow past the cowl contact line, or use a material that is flexible enough to blend to the intricate contours of the engine cowl to ensure a good seal. Either choice results in less than optimal engine cooling. With Cowl Saver™ baffle seal material you no longer have to compromise.

**Flexibility can be customized to only the areas of the baffle seal that you want it.**

Cowl Saver™ material has a layer of black Teflon (clear for older material) bonded to a flexible reinforced silicone rubber base. In addition to low friction, the Teflon also gives

the laminate the solid stiffness needed near the engine baffle to prevent the seal from blowing past the cowl contact line. This extra stiffness, however, is not always desirable in the area that the material seals against the contours of the cowl.

Where extra flexibility is needed to make a good air seal, the black Teflon layer can simply be scored in a cross hatch, diagonal or parallel line pattern.

With care, a normal razor blade may be used, or McFarlane P/N TOOL120 may be used for more efficiency and greater control of cutting depth. Alternatively for relatively straight sections, three inch wide rolls of Cowl Saver™ material with Bi-Flex™ technology may be used.

The extreme bond of the Teflon layer is not

For Bi-Flex™ Material with a precision laser engraved flex pattern, see page 43.



**3 inch roll with Bi-Flex™ P/N CS085X3X108GBF**

affected by the scoring. The score line spacing and the extent of the score pattern control the amount of flexibility. The score line orientation and the type of pattern control the direction(s) of flexibility. Score patterns as small as 1/8 inch form little islands of friction free Teflon that has shown good durability while providing the extreme flexibility of soft silicone rubber. This customization can be performed when doing a new baffle seal installation or to perfect the fit and seal of an existing installation. As long as care is taken to just score the Teflon layer and as little of the silicone as possible (do not cut the fiberglass reinforcing layer), the material will still meet the original AMS3306 specification to which it was certified.

**Cowl Saver™ Scoring Tool**  
Customize Your Baffle Seal Flexibility for Optimal Cooling!

P/N TOOL120



**Only for use on the Teflon side of Cowl Saver™ baffle seal material**

Customize Cowl Saver™ engine baffle seal material to be extremely flexible for a perfect seal where it contacts the cowl and rigid elsewhere to prevent the seal from blowing past the cowl contact line.

This unique tool has 3 circular razor blades spaced 0.16" apart and makes it fast and easy to score the stiffer outer layer of the Cowl Saver™ material where more flexibility is required. The spacers also precisely control the depth of the cuts to help prevent damage to the material.

- You control the amount of flexibility.
- Use on a new baffle seal installation or to perfect the fit and seal of an existing installation.
- Material still meets the original AMS3306 specification to which it was certified as long as the fiberglass reinforcing layer has not been cut.
- Replacement blade kit also available (P/N TOOL120-BKT)



**Baffle Seals and Cowl Saver™ Kits for Cessna 172Q, R and S Models**

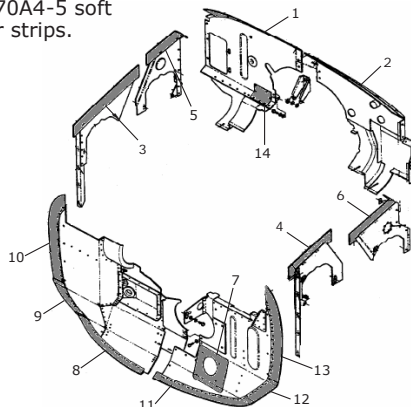
Reduce airframe vibration and stop cowl and firewall cracks with a complete Cowl Saver™ kit!

U.S. Patent No. 8,070,099

- Cut to fit. Saves time.
- Low friction for reduced transfer of engine vibration
- Kit includes all required baffle seals, MS20470A4-5 soft rivets, and McFarlane P/N 6036-012 retainer strips.
- Individual baffle seals also available

**FAA-PMA Approved!**

**Save!**



**Now with Bi-Flex™ Technology!**

Precision laser engraved flex pattern ensures optimum flexibility/stiffness combination for maximum cooling and minimum friction.



Part Number	Idx	Aircraft	Location
BSC-KT-1		172R, S	Baffle Seal Kit
MC0509069-4	1	172R, S	Right Aft
MC0509070-4	2	172Q,R,S	Left Aft
MC0509071-2	3	172Q,R,S	Cylinder 1 Right Forward
MC0509072-4	4	172Q,R,S	Cylinder 2 Left Forward
MC0509073-6	5	172R,S	Cylinder 3 Right Aft
MC0509074-2	6	172Q,R,S	Cylinder 4 Left Aft
MC0509079-2	7	172R,S	Air Intake for Heat Muff
MC055250-17	8	172R,S	Forward Right Lower
MC055250-18	9	172R,S	Forward Right Middle
MC055250-19	10	172R,S	Forward Right Upper
MC055259-25	11	172R,S	Forward Left Lower
MC055259-26	12	172R,S	Forward Left Middle
MC055259-27	13	172R,S	Forward Left Upper
MC245076-1	14	172R,S	Right Aft Sub Panel

**PROP GUARD**

P/N FP1001 for two blades (65")

P/N CS1002 for three blades (92")

**Anti-abrasion Boot for your metal propeller!**

It is more economical to protect your propeller blades with PROP GUARD than to continually file, dress, paint and balance your blades until they have to be replaced. Water, sand, rock, and airborne abrasives are constantly eroding your propeller. As the name suggests, this product can eliminate this destructive process. Virtually all propeller blade failures start as leading edge nicks.

- PROP GUARD is a .014" thick clear anti-abrasion boot that is bonded to the leading edge of the propeller
- PROP GUARD is made from a special high strength heat processed polymer engineered for centrifugal loads. It's NOT just a piece of tape!
- Easy to install (approximately 20 minutes installation time)
- No performance loss
- Fully tested
- Repairable
- FAA-PMA/STC approved (minor alteration, no form 337 required)

**Complete Kit contains:**

PROP GUARD boot for a two or three bladed propeller, adhesion accelerator, placard, lint-free cotton cloth, complete installation instructions and a copy of the STC.

**Repair Kits**

P/N PG-KT-R12 for 12 inches of material

P/N PG-KT-R24 for 24 inches of material

Two convenient repair kits are also now available to allow repair of existing PROP GUARD installations. Each repair kit includes a short length of PROP GUARD boot material, adhesion accelerator, lint-free cotton cloth, a spreader, and complete installation instructions.

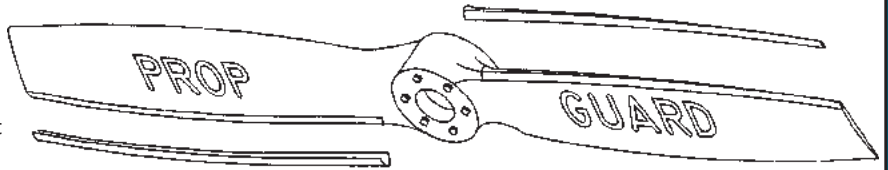
**PROP GUARD Installation Tool**

Saves time and makes installation easier!

P/N TOOL125



This rubber coated roller makes working air bubbles out during installation easier than using the spatula included with the PROP GUARD kits. The rubber conforms to the shape of the propeller, and the rolling action allows you to press harder to eliminate small air bubbles. It is recommended for customers who may be installing more than one PROP GUARD or those who just want to make the job faster and easier.



**Engine Mount Heat Shield for 206, 207 and 210 Cessna Aircraft**

Improved heat protection!

1 each P/N AF1250918-2

4 each P/N KIT AF1250918-2

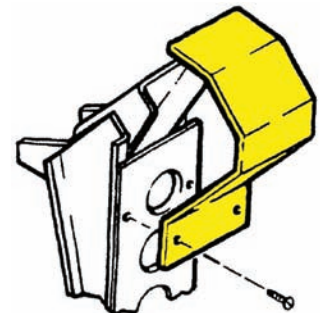
The aluminum construction of the heat shields absorbs less heat than steel, and a Cerakote polymer-ceramic coating on one side inhibits heat transfer to the flexible isolators.

- Extends engine mount life
- Direct replacement for Cessna P/N 1250918-2
- FAA-PMA

**New!**

**SAVE \$\$  
Buy All Four  
and Save More**

Aircraft Model
U206A,B,C,D,E,F
P206A,B,C,D,E
TU206A,B,C,D,E,F
TP206A,B,C,D,E
207, 207A, T207, T207A
210G,H,K,L,M,N,R
T210G,H,J,K,L,M,N,R
P210N



**Airforms Complete FAA-PMA Product Line**

Airforms is located in the heart of the Alaskan aviation scene. Their products are developed from real world needs of experienced Alaskan bush pilots and operators. All Airforms parts are manufactured using state-of-the-art CAD/CAM technology and CNC equipment combined with exemplary craftsmanship to provide the highest quality product.

**Stock in the lower 48 states for fast, economical delivery!!**

**Alaska Bush Tough!**



Firewall Forward

**Complete Engine Baffle Kits**

**Keep your engine cool with new baffle kits! Airforms is the premier manufacturer of FAA-PMA replacement baffle kits for Cessna, Piper and the Beechcraft Baron.**

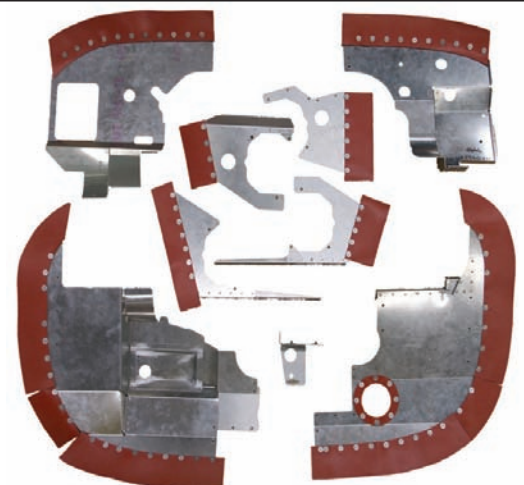
- 6061-T6 aluminum with black high temperature fiberglass reinforced silicone seals pre-installed (orange or blue seals available as special order for an extra charge)
- Bare aluminum or gray powder coat finish
- Individually interchangeable with factory baffles

**Many Improvements:**

- Stainless steel brackets where needed
- Hard rivet construction
- 1/2" back plates to secure seals
- Improved fit

**Notes:**

- If aftermarket components (starter, alternator, exhaust, engine mod, etc) have been installed it is the installer's responsibility to adjust baffles to fit.
- Mounting hardware is not included (nuts, bolts, screws, Tinnerman clips, etc).



**See eligibility and figures on the following pages**



Eligibility for Airforms Engine Baffle Kits

Table with columns: Aircraft Model, Serial Number, Bare Aluminum P/N, Powder Coat P/N, Figure. Lists various aircraft models and their corresponding part numbers for engine baffle kits.

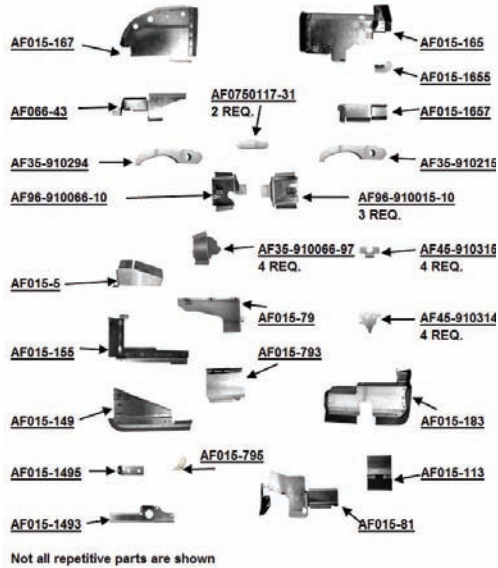
Notes: All kits are available with black, blue or orange seals. Part numbers listed contain black seals. To purchase a kit with blue or orange seals use the following suffix: BRBL (Bare Aluminum Blue Seals), BROR (Bare Aluminum Orange Seals), PCBL (Powder Coat Blue Seals), PCOR (Powder Coat Orange Seals).

1 Partial model eligibility 2 To determine the part number required see oil cooler configuration with applicable figure. 3 Baffle kits and components have received Alternative Method Of Compliance (AMOC) from the FAA for AD 93-23-13. Mandatory 50 hour inspection is no longer required. 4 P/N AF0550165-2 and AF0550165-6 are available in black only. 5 Baffle seals are available in black only.

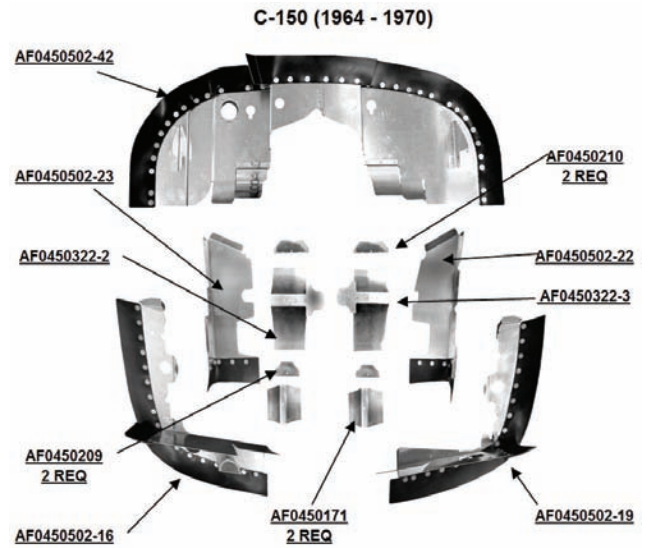
See figures on the following pages

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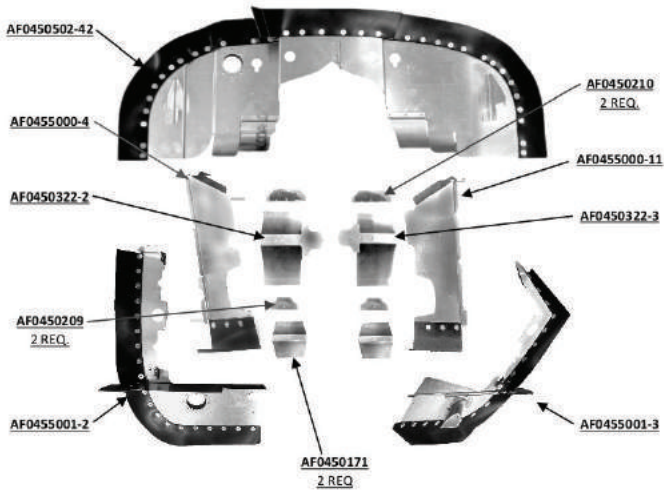
**Figure 1**



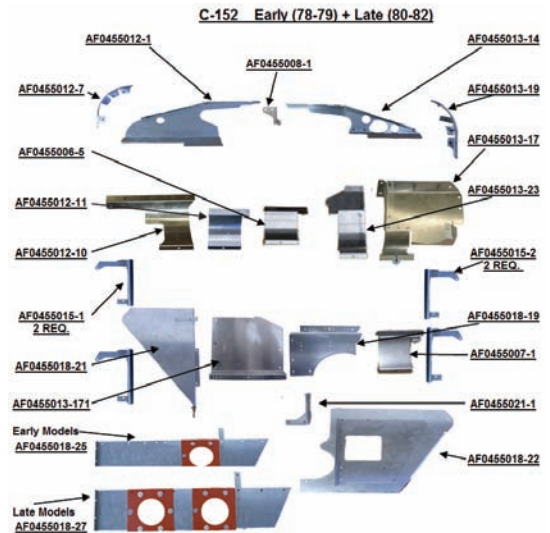
**Figure 2**



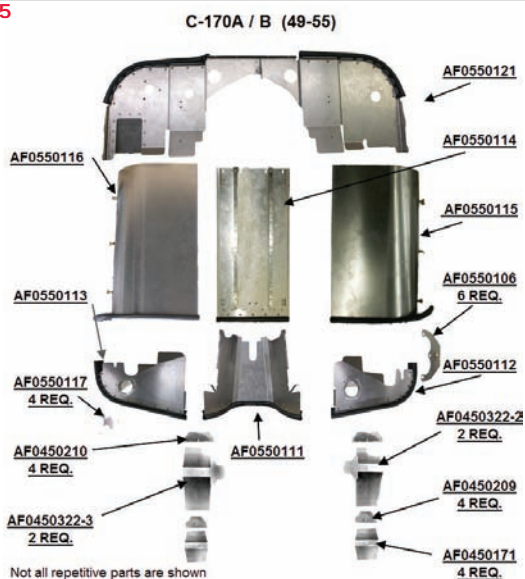
**Figure 3**



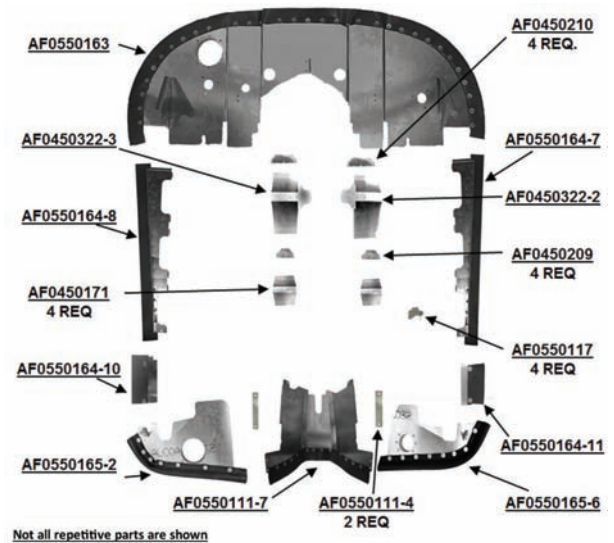
**Figure 4**



**Figure 5**



**Figure 6**



Firewall Forward



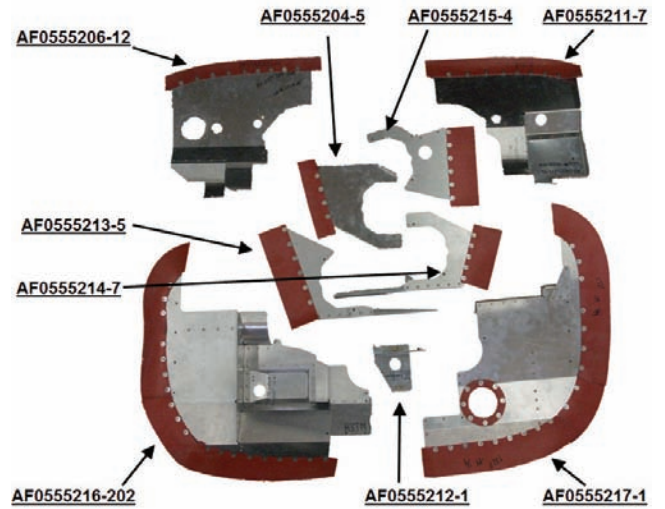
**Figure 7**

C-172IKLM



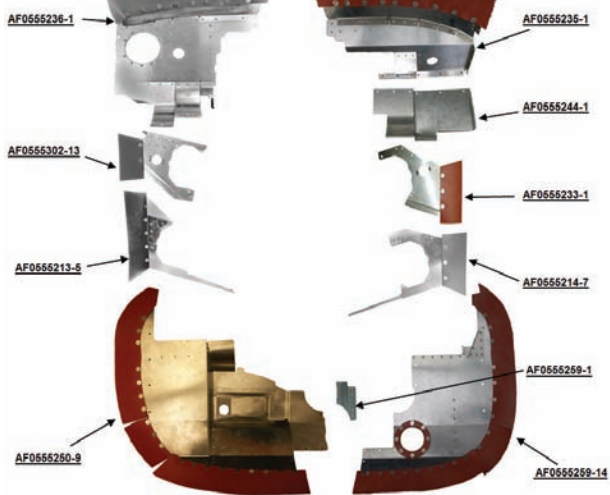
**Figure 8**

C-172M (1974-76)



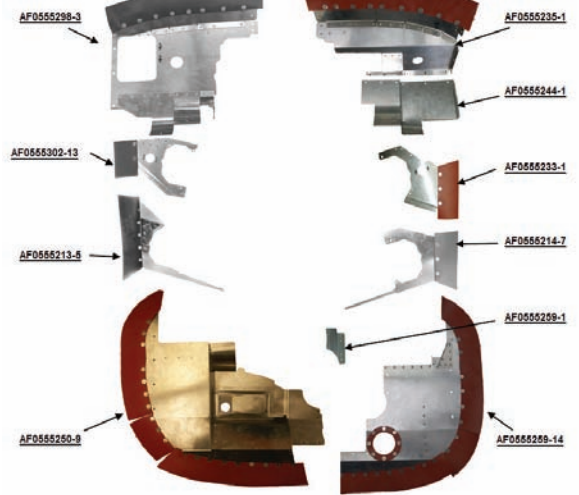
**Figure 9**

C-172N (77-79.5)



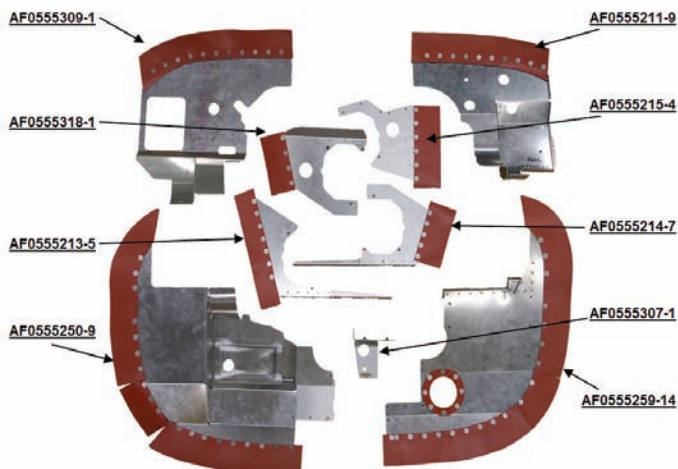
**Figure 10**

C-172N (79.5-80)



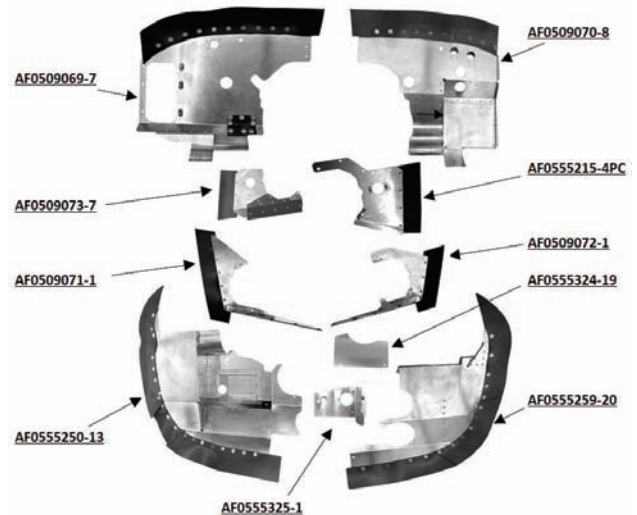
**Figure 11**

C-172P



**Figure 12**

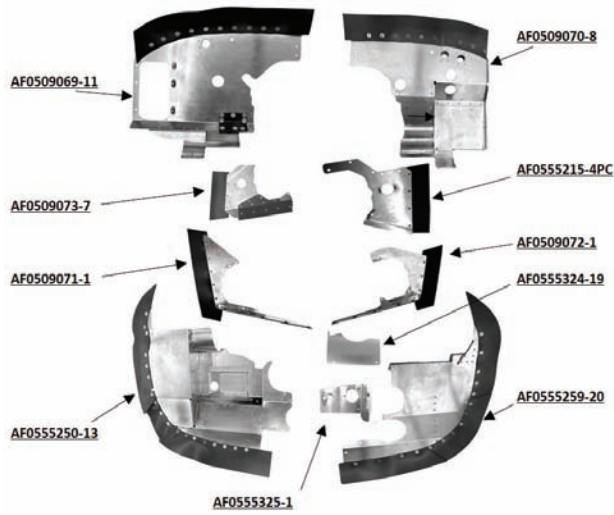
C-172 R (1997-98)



FAA-PMA Approved

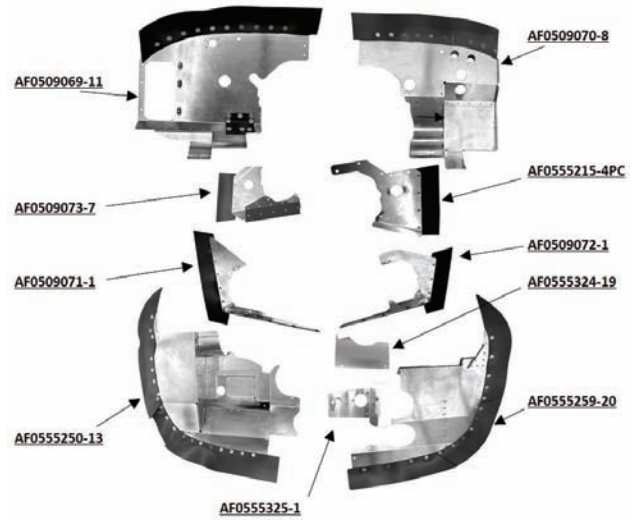
**Figure 13**

**C-172 R (1999-04)**

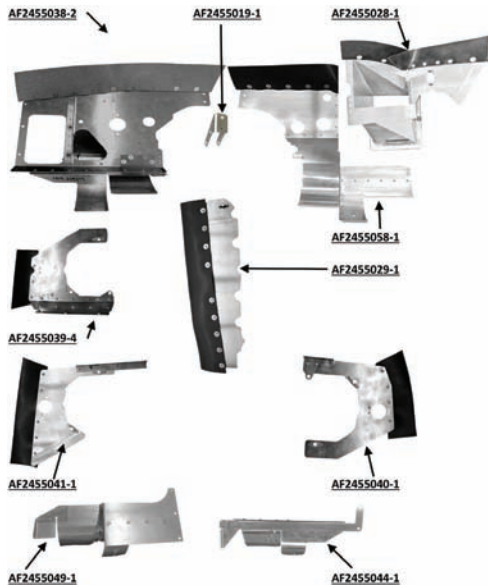


**Figure 14**

**C-172 S**

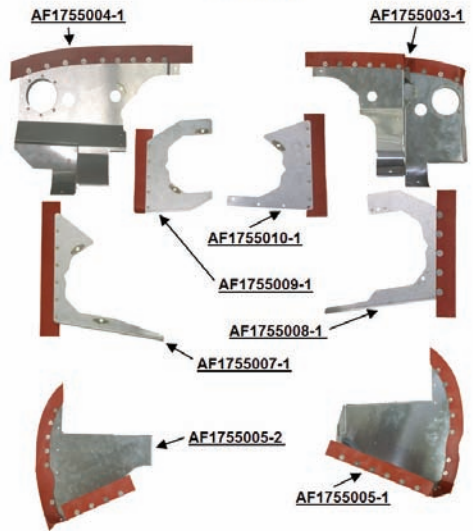


**Figure 15**

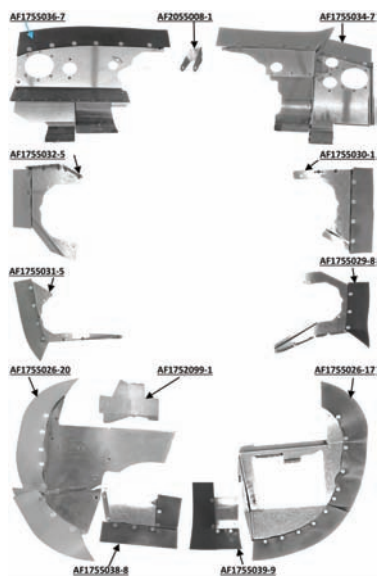


**Figure 16**

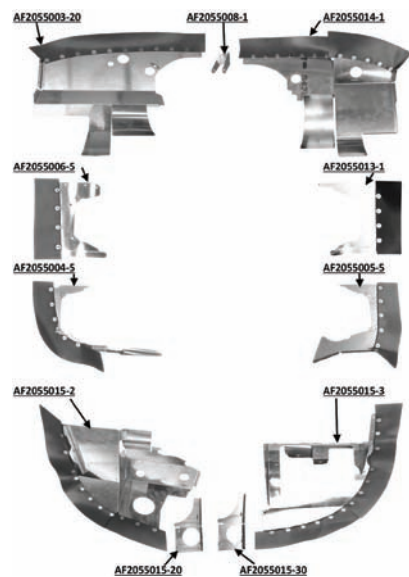
**C-177 (68)**



**Figure 17**



**Figure 18**



Firewall Forward

Figure 19

C-180(56-81)  
C-182(58-73)

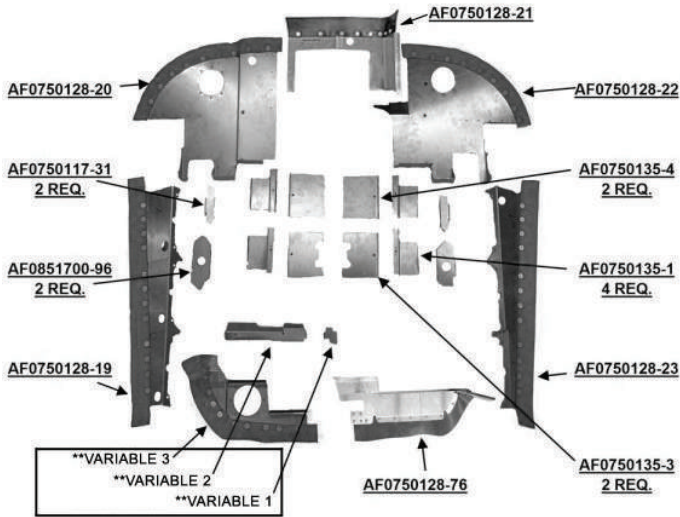
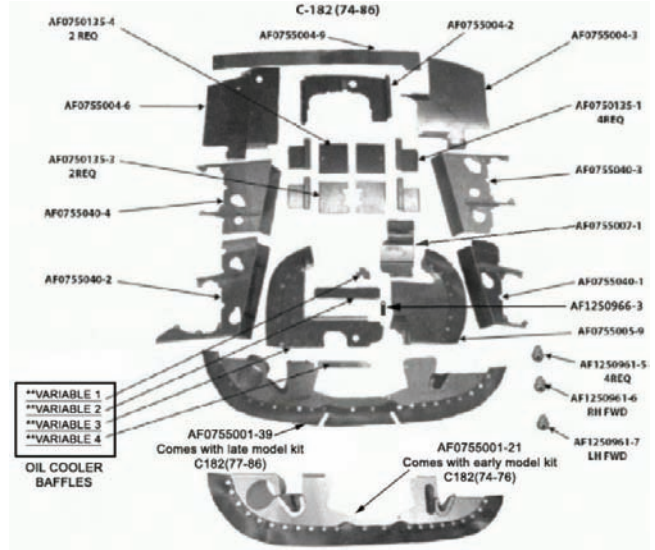
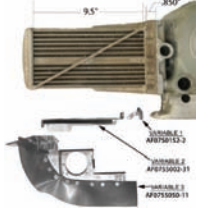


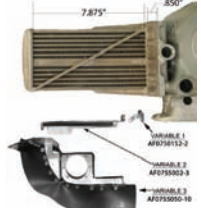
Figure 20



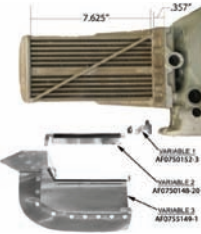
Package A



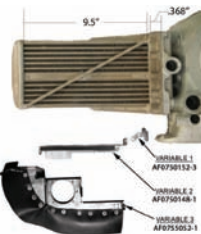
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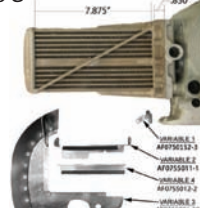
Package C



Package D



Package G



Package H

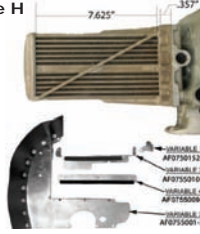
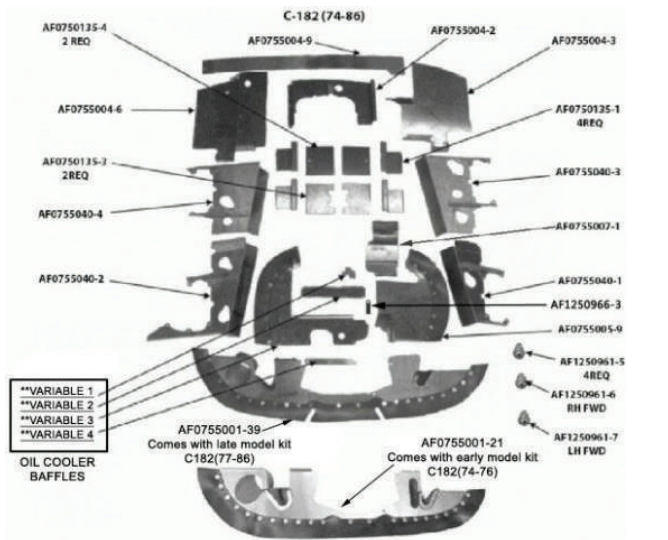
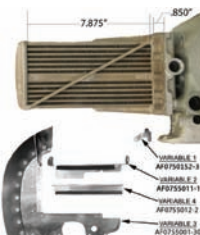


Figure 21



Package G



Package H



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Figure 22

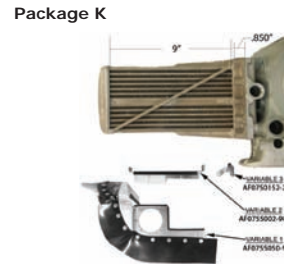
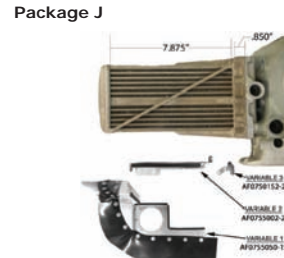
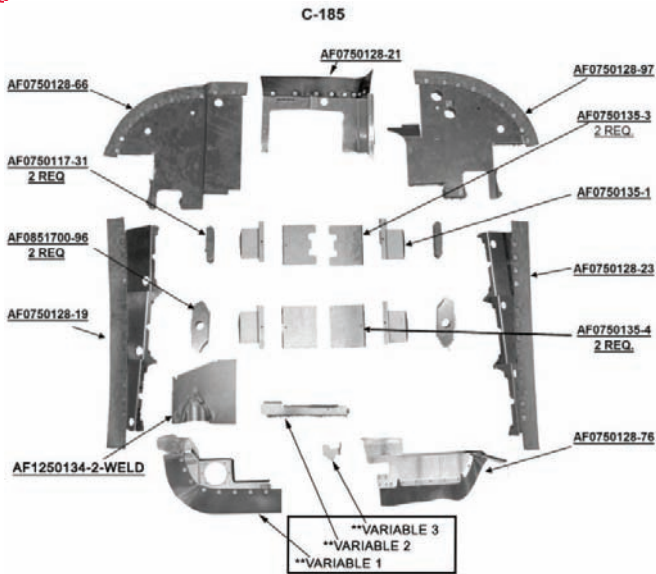


Figure 23

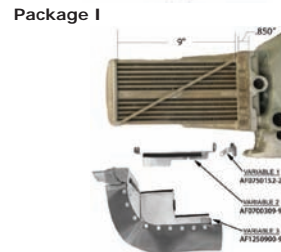
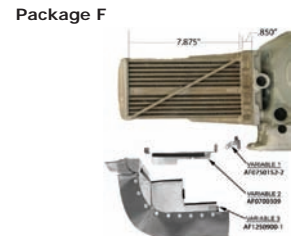
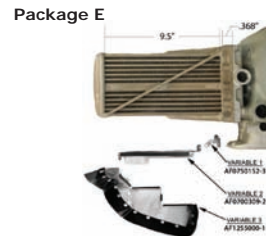
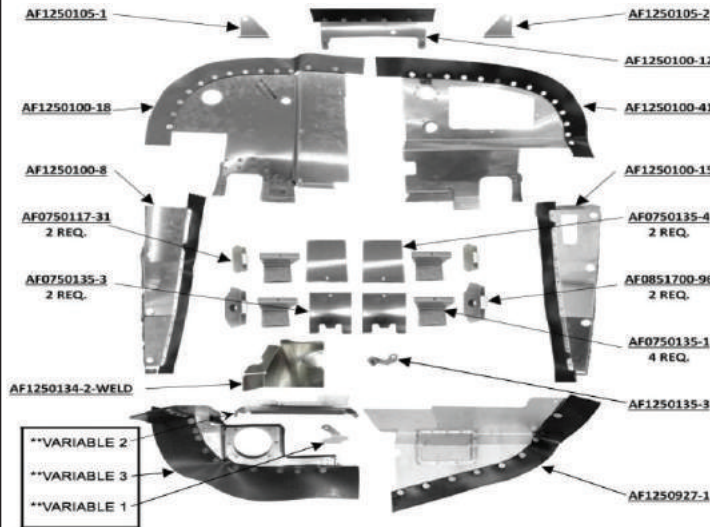
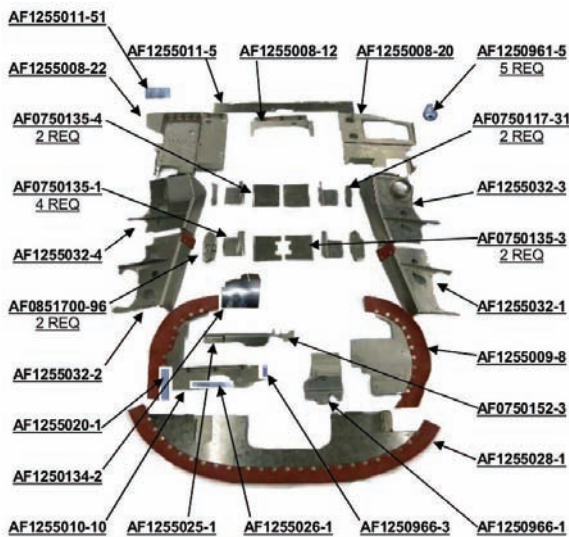
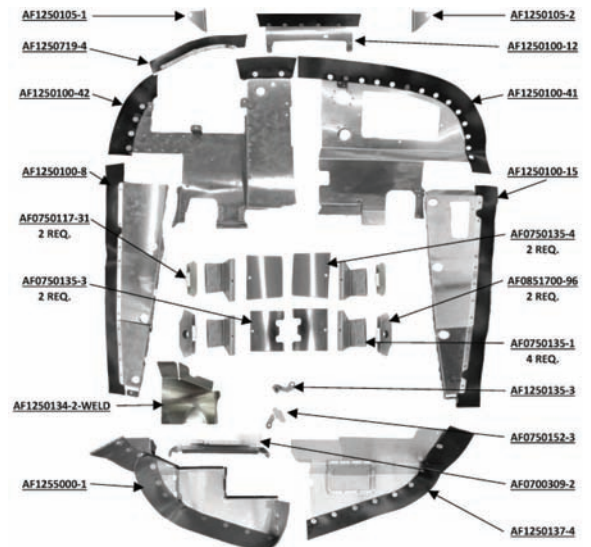


Figure 24



Not all repetitive parts are shown

Figure 25



Firewall Forward

Figure 26

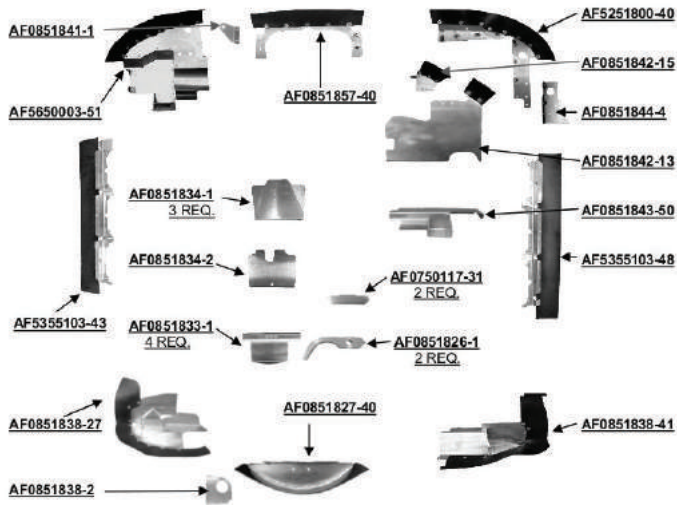


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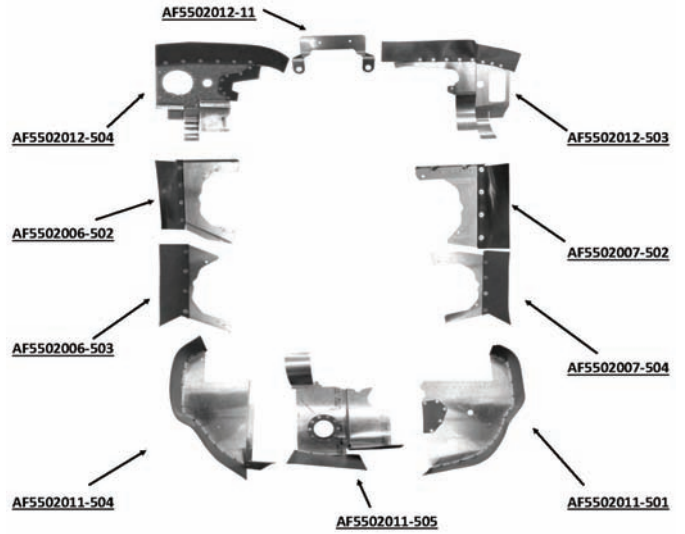


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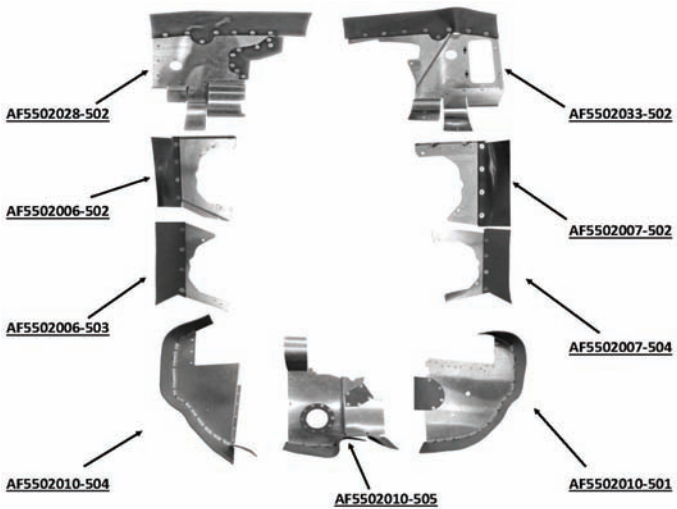


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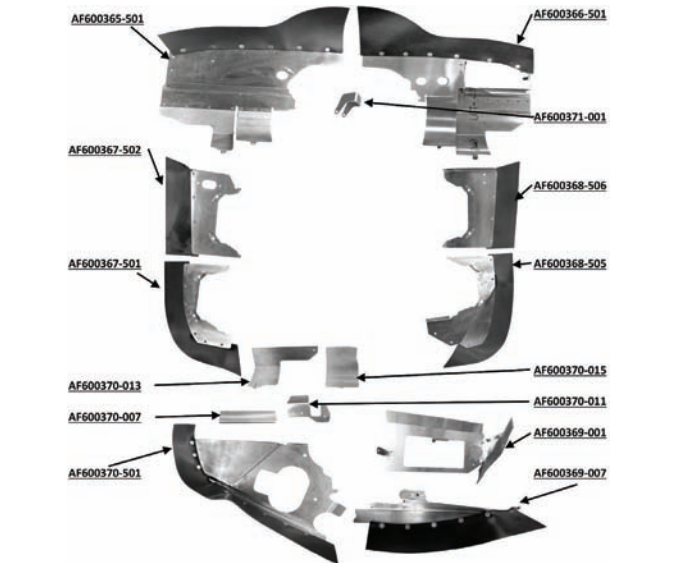


Figure 30

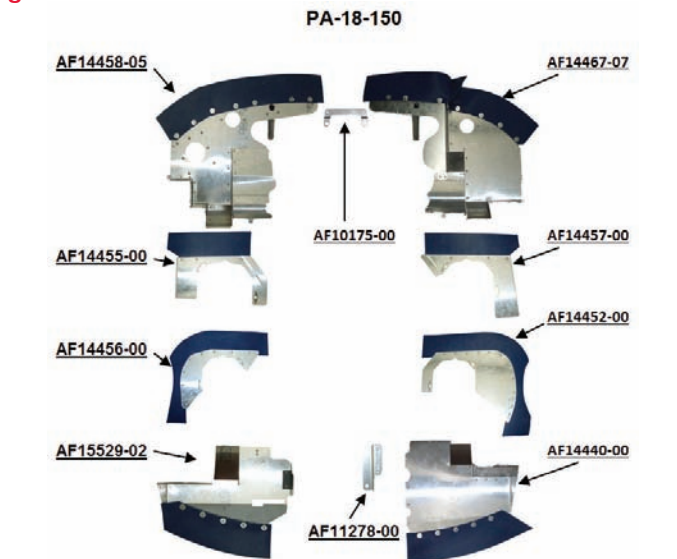


Figure 31

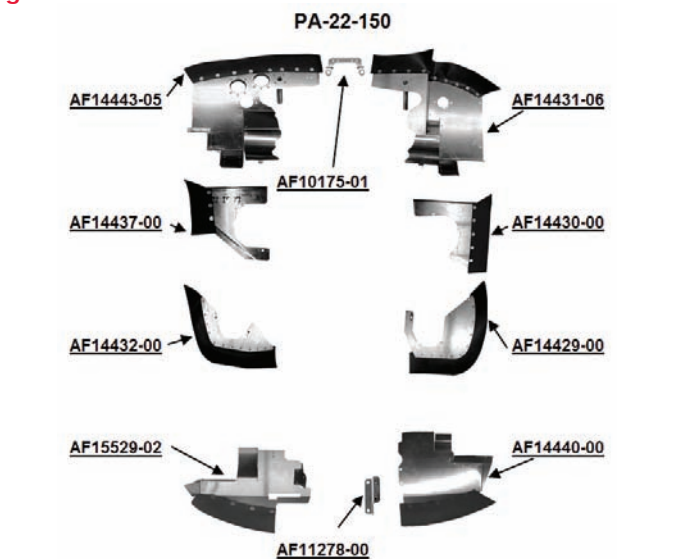


Figure 32

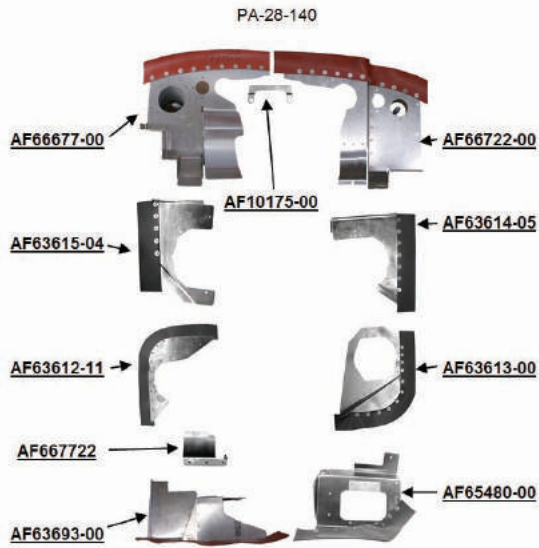


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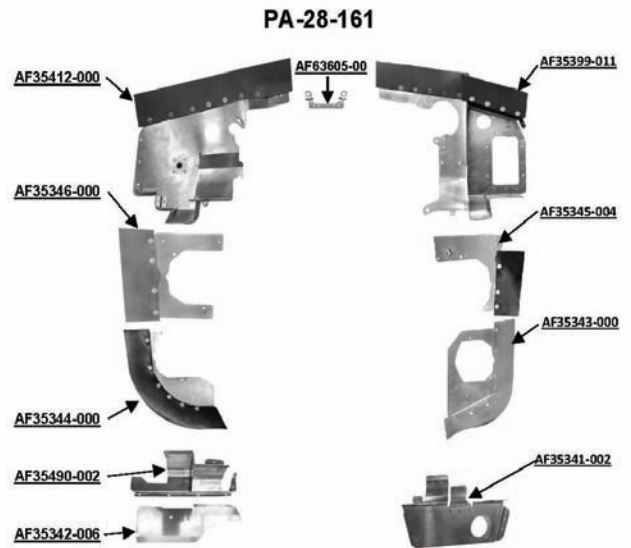


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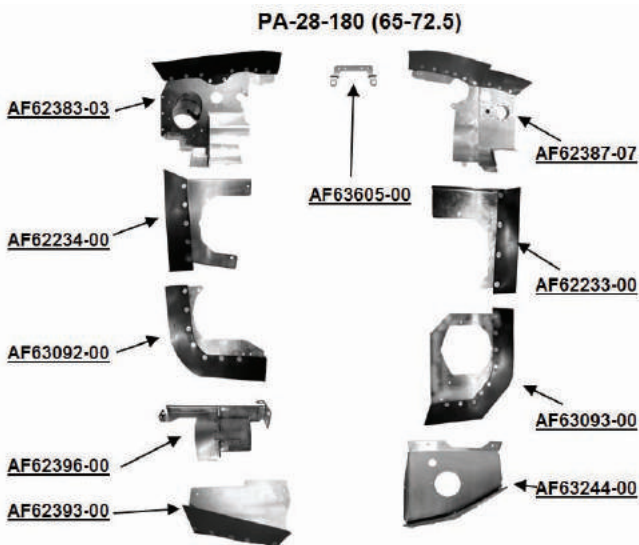


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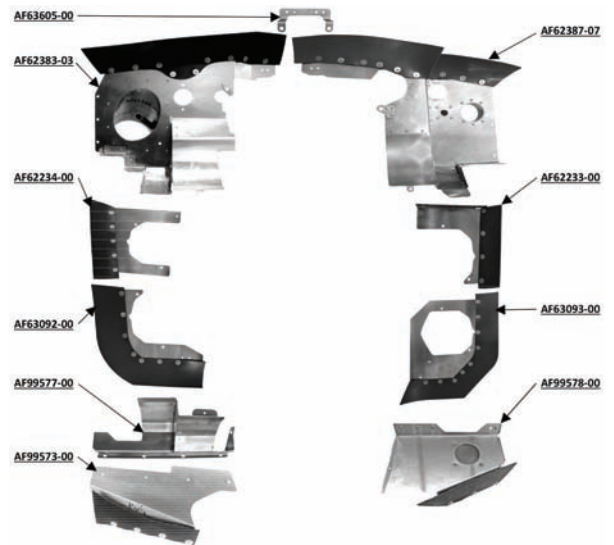


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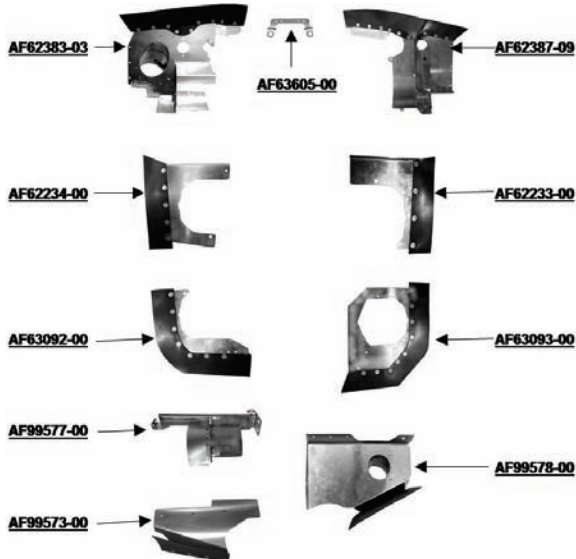
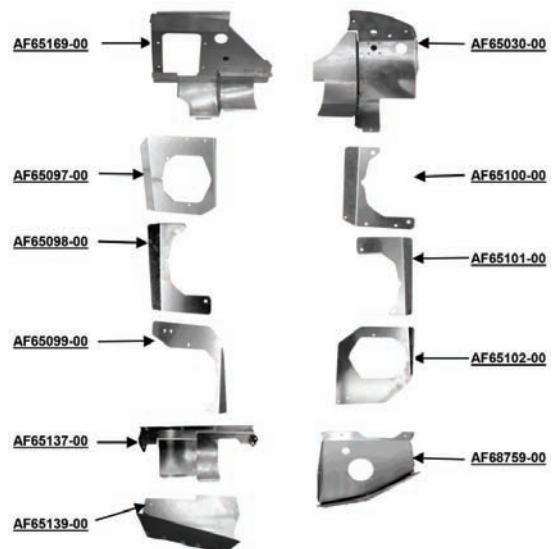
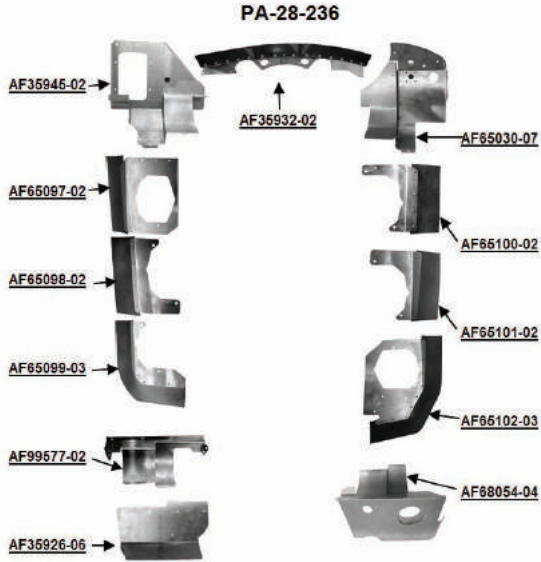


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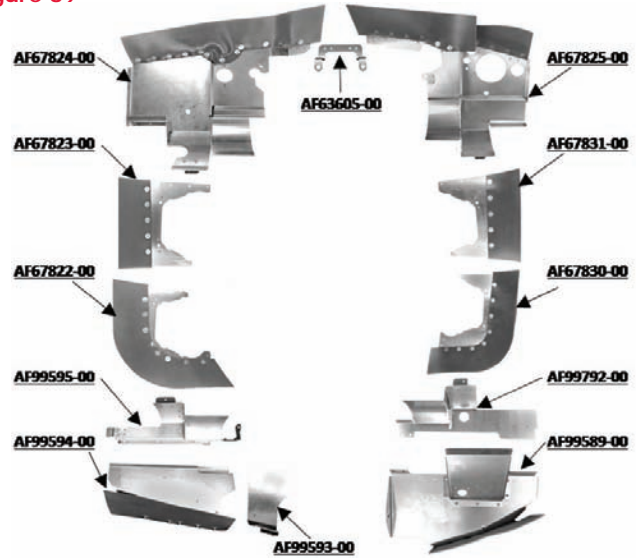


Firewall Forward

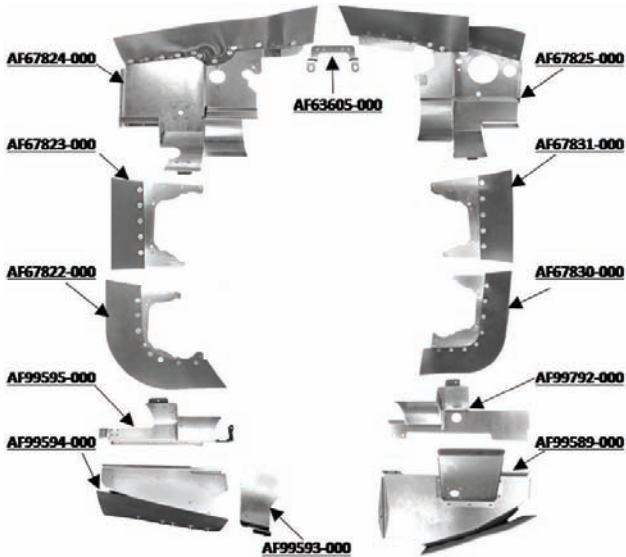
**Figure 38**



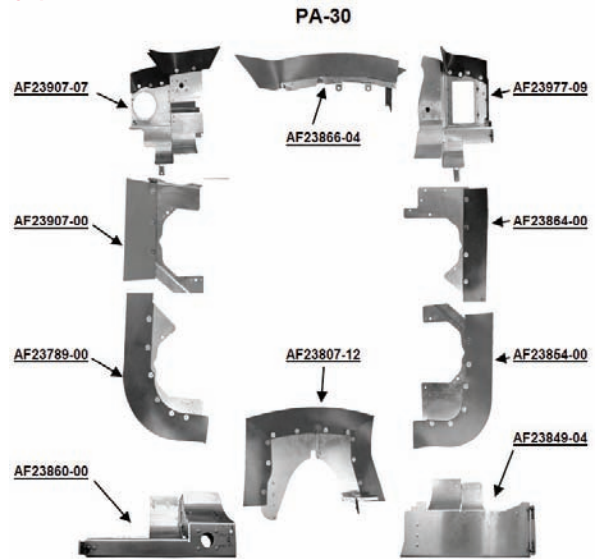
**Figure 39**



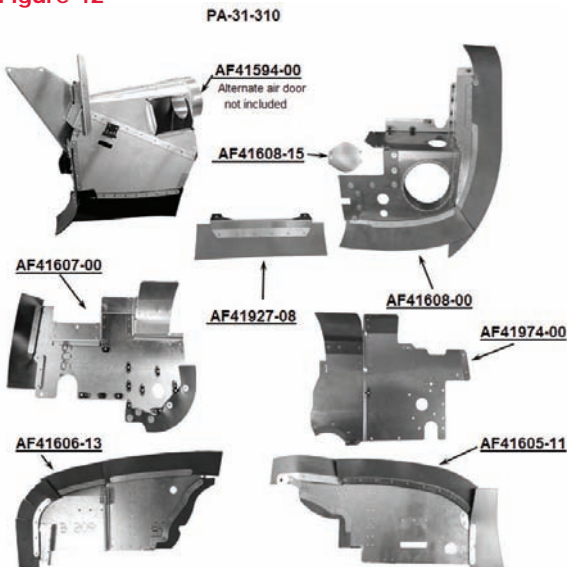
**Figure 40**



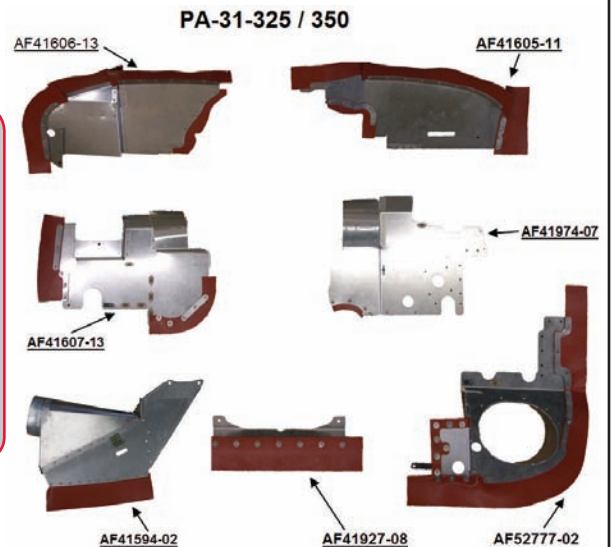
**Figure 41**



**Figure 42**



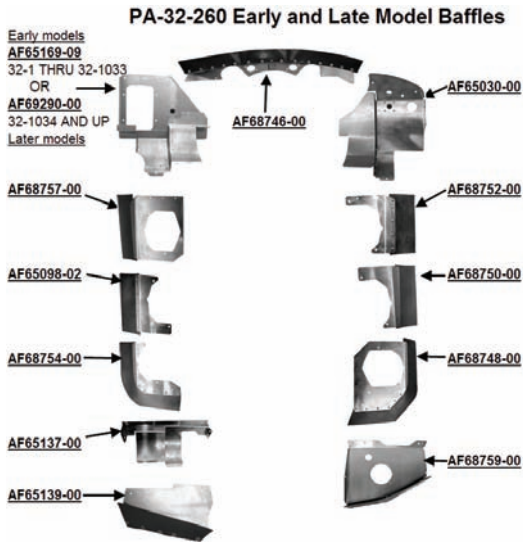
**Figure 43**



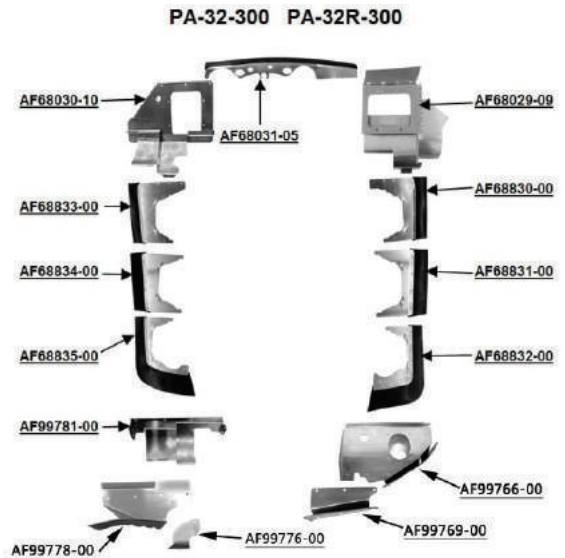
**Baffle kits and components for models PA-31 (PA-31-310), PA-31-325 and PA-31-350 have received Alternative Method Of Compliance (AMOC) from the FAA for AD 93-23-13. Mandatory 50 hour inspection is no longer required.**

FAA-PMA Approved

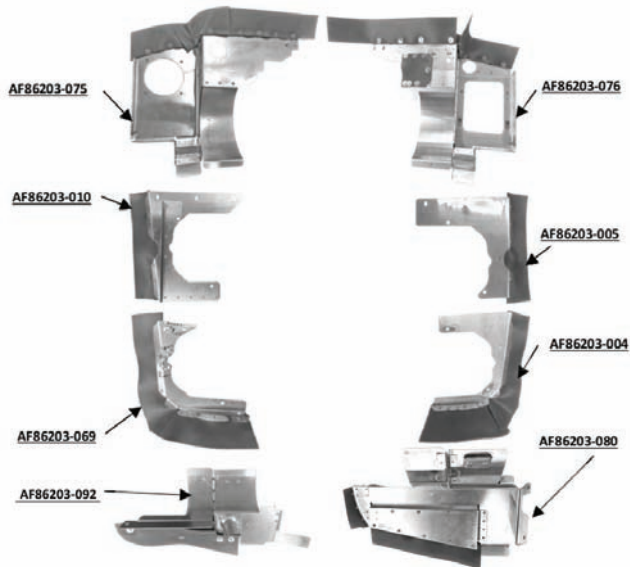
**Figure 44**



**Figure 45**



**Figure 46**



**Parts for Cessna 208 and 208B Aircraft  
 See Caravan section on pages 247-256.**



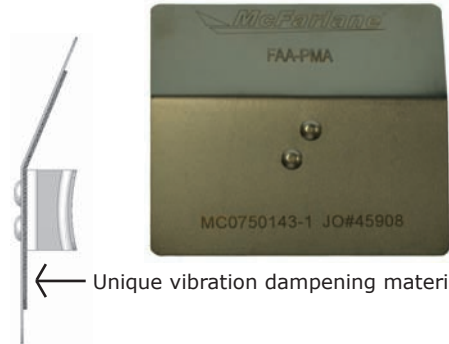
**Save \$\$ on these in stock items!**



### Intake Hose Heat Deflector Shields for Cessna Aircraft with Teledyne Continental Six Cylinder Engines

Improved Design!  
P/N MC0750143-1

- Vibration dampened to prevent cracking
- Polished stainless steel for better heat control
- Much better and 1/2 the price!



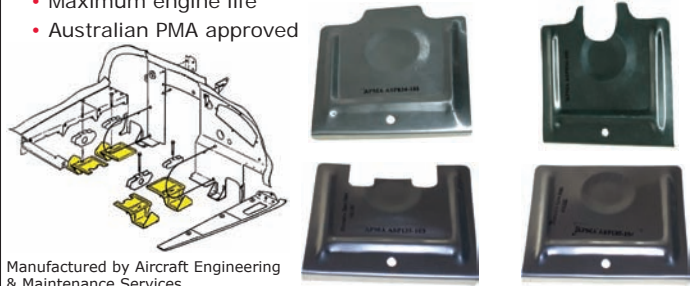
← Unique vibration dampening material

Aircraft Model	Serial Number
175, A,B,C	56083 thru 17557119
P172	P17257120 thru P17257188
180, A,B,C,D,E,F,G,H,J,K	30000 thru 18053203
182, A,B,C,D,E,F,G,H,J,K,L,M,N,P,Q,R	33000 thru 18268615
F182P,Q	F18200001 thru F18200169
A1821,K,L,M,N	A182-0001 thru A182-0148
T182	18267716 thru 18268615
185, A,B,C,D,E/A185E,F	185-0001 thru 18504448
188, A,B/A188, A,B	188-0001 thru 18803968T
T188C	T18803297T thru T18803968T
210-5 (205), 210-5A (205A)	205-0001 thru 205-0577
206	206-0001 thru 206-0275
U206, A,B,C,D,E,F,G	U206-0276 thru U20607020
P206, A,B,C,D,E/TP206A,B,C,D,E	P206-0001 thru P20600647
TU206A,B,C,D,E,F,G	U206-0438 thru U20607020
207, A/T207, A	20700001 thru 20700788
210, A,B,C,D,E,F,G,H,J,K,L,M,N,R	57001 thru 21065009
T210K,L,M,N,R	
P210N,R	P21000001 thru P21000874
T210G,H,J	T210-0198 thru T210-0454

Partial model eligibility  
McFarlane P/N MC0750143-1 replaces Cessna P/N 0750121, 0750121-1, 0750121-2, 0750143-2 and 0750143-3.

### Intercylinder Baffles for Cessna Aircraft with Teledyne Continental Six Cylinder Engines

- Replace worn baffles to maintain optimum engine cooling
- Maximum engine life
- Australian PMA approved



Manufactured by Aircraft Engineering & Maintenance Services

Model	Serial Number	ASP135-103	ASP135-104	ASP833-105	ASP834-101	ASP834-102
180	32151 thru 32661	2	2	4		
180A,B,C,D,E	32662 thru 18051183	2	1	4		
180F,G,H,J,K	18051184 thru 18018053203	3	2	4		
182	33000 thru 33482	2	2	4		
182A,B,C,D,E	33483 thru 18254423	2	1	4		
182F,G,H,J,K,L,M,N,P,Q	18254424 thru 18262465	1	1	4		
182P,Q,R	18262466 thru 18268615	2	2	4		
A185F	All			4		
188, 188A, B, A188, A188A, B, T188C	188-0001 thru T18803968T	2	2	4		
210-5 (205), 210-5A (205A)	205-0001 thru 205-0577	1	2	4		
206, U206, U206A, B, C, D, E, F, G	206-0001 thru U20607020	2	2	4		
P206, P206A, B, C, D, E	P206-0001 thru P20600647	2	2	4		
207, 207A	20700001 thru 20700788	2	2	4		
210, 210A, B, C, D, E, F, G, H, J, K, L, M, N, R	57001 thru 21065009	2	2	4		
310, 310A, B, C, D, E, F, G, H, I, J, K, L, N	35000 thru 310N0198	2	2	4		
T310R	All			4		
320, 320A, B, C	320-0001 thru 320C0073	2	4			
320D, E, F	320D0001 thru 320F0045			4	6	2
335	335-0001 thru 335-0065			4	6	2
340, 340A	340-0001 thru 340A1817			4	6	2
401, 401A, B	401-0001 thru 401B0300			4	6	2
402, 402A, B, C	402-0001 and On			4	6	2
414, 414A	414-0001 and On			4	6	2

Partial model eligibility  
P/N ASP135-103 replaces Cessna P/N 0750135-3  
P/N ASP135-104 replaces Cessna P/Ns 0750135-4 and 0750135-8  
P/N ASP833-105 replaces Cessna P/Ns 0750135-1 and 0851833-1  
P/N ASP834-101 replaces Cessna P/N 0851834-1  
P/N ASP834-105 replaces Cessna P/N 0851834-2

### Motor Mount Bolt Lock Washer for Cessna Aircraft

P/N MC0851559-1

- Up to four times the locking power for less cost!
- FAA approved using stronger material than the original, allowing the standard washer to be eliminated.
- Only the McFarlane washer is embossed for improved locking and no-slip during installation.
- Designed with six tabs instead of two giving extra locking power.
- Easier to use
- Four lock washers required per engine.



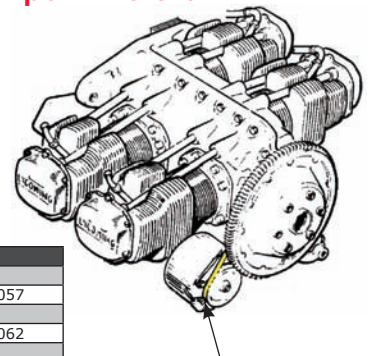
Model	Serial Number
180F,G,H,J,K	18051184 thru 18053203
182E,F,G,H,J,K,L,M,N,P,Q,R	18253599 thru 18268615
A1821,K,L,M,N/F182P,Q	All
185, 185A, B,C,D,E/A185E,F	All
188, 188A, B/A188/A188A, B/T188C	All
210-5 (205), 210-5A (205A)	All
P206, P206A, B,C,D,E, TP206A, B,C,D,E	All
206, U206, U206A, B,C,D,E,F,G	All
TU206A, B,C,D,E,F,G	All
207, 207A, T207, T207A	All
210, 210A, B,C,D,E,F,G,H,J,K,L,M,N,R	All
P210N, R, T210F,G,H,J,K,L,M,N,R	All
310, 310B, C,D,F,G,H,I,J,K,L,N,P,Q,R	All
T310P,Q,R,	All
320D, E, F	All
411, 411A, 414	All
414A	414A0001 thru 414A0680

### Alternator V-Belt for Piper Aircraft

Finally an approved belt at an affordable price!

P/N MC73965-015

- High quality manufacture
- Direct replacement for P/Ns 10069-806, 452-541, 564-852, 73965-015 and 73965-15
- Save \$\$\$



Alternator V-Belt

Model	Serial Number
PA-28-151	All
PA-28-161	28-7716001 thru 28-8616057
PA-28-161	2816001 thru 2816119
PA-28-181	28-7690001 thru 28-8690062
PA-28-181	2890001 thru 2890231
PA-28-236	28-7911001 thru 28-8611008
PA-28R-201	2837001 thru 2837061
PA-28R-201	28R-7737002 thru 28R-7837317
PA-28R-201T	2803001 thru 2803012
PA-28R-201T	28R-7703001 thru 28R-7803373
PA-28RT-201	28R-7918001 thru 28R-8218026
PA-28RT-201T	2831001 thru 2831038
PA-28RT-201T	28R-7931001 thru 28R-8631005
PA-32RT-300	32R-7885002 thru 32R-7985106
PA-32RT-300T	32R-7787001 thru 32R-7987126



FAA-PMA Approved

**AERO-Classics Oil Coolers**

FAA-PMA Approved

- Direct replacements for most oil coolers
- Ideal for many certified and experimental aircraft
- FAA 8130-3 tags included with each oil cooler

**Outstanding Performance**

In side-by-side comparative performance tests, AERO-Classics 7 and 9 plate oil coolers outclassed competitive models, offering better overall cooling and lower weight.

**Direct Replacements for Stewart Warner Oil Coolers**

- HE Series High Efficiency Coolers
- FAA-PMA direct replacement for Stewart Warner (Meggit) oil coolers
- Match or outperform the original
- Save \$\$

Don't be fooled by Stewart Warner oil coolers available from many aviation suppliers. Even though its the same part number and manufacturer, if it didn't come from the aircraft manufacturer or say FAA-PMA, then it is not FAA approved.

**Highest Quality, Best Value**

- Corrosion Protection per MIL-C-5541, Class 1A
- Optimized internal oil flow design
- Low cost
- In-stock for fast delivery
- Pressure tested to 400 psig
- Light-weight
- Two year warranty



Replaces Stewart Warner P/N 8406R

*The best for a lot less!*

**Engine Mount Oil Coolers for Continental Engines**



Front Mount, 12 Bolt Non Congealing Oil Cooler P/N 8000307



Rear Mount Oil Cooler P/N 8000464



Front Mount, 8 Bolt Oil Cooler P/N 8000934



P/N 654117



P/N 652079



P/N 649964

P/N	Description	FAA Approved Replacement for	Eligible Engine Models	Gaskets (not included with oil cooler)
<b>Front-Mount, 8 Bolt Oil Coolers</b>				
8000925		Continental 627392, Niagara 20585A	O-470-A,B,E,G,J,K,L,M,P,R,S,U IO-470- C,D,E,F,G,H,J,K,L,M,N,P,R,S,U,V	654117 649964 (plate)
8000934		Continental 646880, Niagara 20591A	IO-360-A,AB,C,CB,D,DB,G,GB,H,HB,HB9,J,JB,K,KB,ES TSIO-360-A,AB,B,C,CB,D,DB,E,F,GB,H,JB,KB,LB,MB L/TSIO-360-E,EB,F,FB,GB,H,HB,JB,KB,LB,MB,RB	654117, 649964 (plate)
<b>Front-Mount, 12 Bolt Congealing Oil Coolers</b>				
8000683	Non-7th Stud	Continental 626189, Niagara 20573A	O-470-B,J,K,L,M,R,IO-470-D,F,L,M,S IO-520-A,D,E,F,J,K,L, L/TSIO-520-AE, O-550-D	654553 649964 (plate)
8000687	7th Stud	Continental 652671, Niagara 20440A	IO-520-A,D,E,F,J,K,L, L/TSIO-520-AE, IO-550-D	654555, 649964 (plate)
<b>Front-Mount, 12 Bolt Non Congealing Oil Coolers</b>				
8000545	10" Universal 7th Stud	Continental 639171, Niagara 20795A Continental 654595, Niagara 20617A	O-470-R,S,U, IO-520-A,D,E,F,J,K,L TSIO-520-C,G,H,M,P,R,T,AF,CE, IO550-D,E,F,L	654554 652079 (plate)
8000319	11" Universal 7th Stud	Continental 639151, Niagara 20446A	O-470-F,K,L,R, IO-470-L, IO-520-A,D,E,F,J,K,L	654560, 652079 (plate)
8000307	11 7th Stud	Continental 654593, Niagara 20618A	IO-470-L, IO-520-A,D,E,F,J,K,L	654554, 652079 (plate)
8000531	11.5" Universal 7th Stud	Continental 639152, Niagara 20623A	O-470-M, IO-470-D,U,V, IO-520-A,D,E,F,J,K,L	654560, 652079 (plate)
8000127	11.5" 7th Stud	Continental 652759, Niagara 20448A	IO-520-A,D,E,F,J,K,L	654554, 652079 (plate)
<b>Rear-Mount Oil Coolers</b>				
8000440	Valve P/N 639305 small	Continental 654580, Niagara 10279A	TSIO-520-BE,E,J,L,N,VB,WB,EB,JB,LB,NB, 550-E, IO-550-B,C,G	G-KT-1
8000464	Valve P/N 639305 small	Continental 646685, Niagara 10196A	GTSIO-520-C,D,F,H,K,L,M,N	G-KT-2
8000953	Valve P/N 649369 large	Continental 654585, Niagara 10281A	IO-550-G,N,P,R, IO-F550-G,N,P,R, TSIO-550-G	G-KT-3
8000960	Valve P/N 639305 small	Continental 654572, Niagara 10278A	IO-520-B,BA,BB,C,CB,M,MB, TSIO-520-B,D,K,UB, IO-550-A,B,C	G-KT-1
8001213	Valve P/N 649369 large	Continental 655090, Niagara 10280A	IO-550-B,C, IOF-550-B,C, TSIO-520-B	G-KT-5

Continued on next page

Firewall Forward

## Remote Mount Oil Coolers (Typically used with Lycoming Engines)



Bar and Plate P/N 8000356



7 row drawn cup P/N 8000075



HE Series P/N 8001646



HE Series P/N 8001599

**Important: To confirm FAA approved eligibility, verify that your current (or originally) installed oil cooler P/N is listed in the "FAA Approved Replacement for" column for your aircraft model.**

Aircraft Model	FAA Approved Replacement for P/N	Description	P/N
<b>AEROSTAR</b>			
601, 601P, 602P, 700P	Niagara 20015A, 20044A, Harrison 8541336	bar and plate	8000357
<b>Beechcraft</b>			
19, C23, A24R, C24R	Niagara 20002A, Harrison 8526250	7 row drawn cup	8000075
19A, B19, A23, A23A, A24, A24R, B23, C23	Beech 169-910002-23, 169-380001-1, Stewart Warner 8406R	HE Series	8001602
A23-24	Beech 169-910002-23, 169-380001-1, Stewart Warner 8406R Beech 169-380033, Stewart Warner 8432S	HE Series	8001602 8001694
<b>Brittan-Norman (Pilatus)</b>			
BN-2	B-N 354501026, Stewart Warner 8406R	HE Series	8001602
BN-2A	Niagara 20006A, Harrison 8534108 B-N 354501026, Stewart Warner 8406R	13 row drawn cup HE Series	8000215 8001602
BN-2A-2, BN-2A-3, BN-2A-6, BN-2A-8, BN-2A-9, BN-2A-20, BN-2A-21, BN-2A-26, BN-2A-27	B-N 354501026, Stewart Warner 8406R	HE Series	8001602
BN-2B	Niagara 20006A, Harrison 8534108	13 row drawn cup	8000215
BN-2B-20, BN-2B-21, BN-2B-26, BN-2B-27, BN-2T-4R	B-N 354501026, Stewart Warner 8406R	HE Series	8001602
<b>Cessna</b>			
150, 152, A152	Niagara 20002A, Harrison 8526250	7 row drawn cup	8000075
162	Cessna and Stewart Warner 10578R	HE Series	8001535
170	Niagara 20002A, Harrison 8526250	7 row drawn cup	8000075
172	Niagara 20002A, Harrison 8526250 Cessna and Stewart Warner 8406R	7 row drawn cup HE Series	8000075 8001733
175, 177	Niagara 20002A, Harrison 8526250	7 row drawn cup	8000075
177RG	Cessna and Stewart Warner 8406R	HE Series	8001733
172N	Cessna and Stewart Warner 10599R	HE Series	8001599
172R,S	Cessna and Stewart Warner 10877R	HE Series	8001588
182	Cessna and Stewart Warner 10610R	HE Series	8001646
R182, TR182	Cessna and Stewart Warner 10614R Cessna and Stewart Warner 10610R	HE Series	8001643 8001646
T182, TR182, T182T	Cessna and Stewart Warner 10891A	HE Series	8001718
210-5 (205), 210-5A (205A)	Cessna and Stewart Warner 10634R	HE Series	8001652
206, 206H, P206, P206A,B,C,D,E, U206, U206A,B,C,D,E,F,G	Cessna and Stewart Warner 10880A	HE Series	8001713
T206H, TP206A,B,C,D,E, TU206A,B,C,D,E,F,G	Cessna and Stewart Warner 10865B	HE Series	8001701
210, 210A thru 210R, P210N,R, T210F thru T210R	Cessna and Stewart Warner 10634R	HE Series	8001652
<b>Commander, Twin Commander Aircraft LLC</b>			
114, 114A, 500S	Commander 630146-509, Niagara 20009A, Harrison 8533718, 8537798	18 row drawn cup	8000353
<b>Cub Crafters Inc.</b>			
CC18-180, CC18-180A	Niagara 20003A, Harrison 8529245	9 row drawn cup	8000074
<b>Grumman</b>			
AA-5 (Tiger)	5505002-2, Stewart Warner 10568R	HE Series	8001640
AA-5A Series (Cheetah)	5505002-1, Stewart Warner 10578R	HE Series	8001535
<b>Maule</b>			
M-5-180C, M-5-235C, M-6-180, M-6-235	Niagara 20003A, Harrison 8529245	9 row drawn cup	8000074
<b>Mooney</b>			
MC20A, MC20B	Mooney 620036, Stewart Warner 8406R	HE Series	8001602
M20C, M20D	Niagara 20002A, Harrison 8526250 Mooney 620036, Stewart Warner 8406R	7 row drawn cup HE Series	8000075 8001602
M20E, M20F	Mooney 620016, 620052, Stewart Warner 8432R Mooney 6200160501, Stewart Warner 8432S	HE Series	8001689 8001694
M20G	Mooney 620036, Stewart Warner 8406R	HE Series	8001602
M20J	Mooney 620016, 620052, Stewart Warner 8432R	HE Series	8001689
<b>Piper</b>			
PA-18, 18A	Harrison 8521940	bar and plate	8000328
PA-18, -18A, -18S, -18 "105" Special, -18 "125"(Army L-21A), -18S "125", -18AS "125", -18 "135" (Army L-21B), -18A "135", -18S "135", -18AS "135", -18 "150", -18A "150", -18S "150P", -18AS "150", -19 (Army L-18C), -19S	Niagara 20003A, Harrison 8529245	9 row drawn cup	8000074
PA22-135,150,160	Harrison 8521940	bar and plate	8000328
PA-23, S/N 23-163 and up	Piper 18622-00, Niagara 20002A, Harrison 8526250	7 row drawn cup	8000075
PA-23	Niagara 20104A, Harrison 8530016, 8537798	9 row, 2 pass drawn cup	8000343
PA-23-160	Piper 18622-00, Niagara 20002A, Harrison 8526250	7 row drawn cup	8000075
PA23-235,250	Niagara 20104A, Harrison 8530016, 8537798	9 row, 2 pass drawn cup	8000343
PA-23-250	Piper 32330-07, S/W Meggit 10631S	HE Series	8001956
PA-24	Piper 18622-00, Niagara 20002A, Harrison 8526250	7 row drawn cup	8000075
PA-24-260 S/N 24-4783, 24-4804 and up	Niagara 20104A, Harrison 8530016, 8537798	9 row, 2 pass drawn cup	8000343
PA-25	Niagara 20006A, Harrison 8534108	13 row drawn cup	8000215
PA-25-235	Niagara 20104A, Harrison 8530016, 8537798	9 row, 2 pass drawn cup	8000343
PA-28-140,150,151,160,161,180,181	Niagara 20002A, Harrison 8526250	7 row drawn cup	8000075
PA-28R-200,201,201T	Piper 67848-00, Niagara 20017A, Harrison 8537820	13 row, drawn cup with cutout	8000661
PA-28-236	Niagara 20003A, Harrison 8529245	9 row drawn cup	8000074
PA-30	Piper 18622-00, Niagara 20002A, Harrison 8526250 Niagara 20006A, Harrison 8534108	7 row drawn cup 13 row drawn cup	8000075 8000215
PA-31	Niagara 20104A, Harrison 8530016, 8537798	9 row, 2 pass drawn cup	8000343
PA-31-310,325,350	Niagara 20010A, Harrison 8535311	bar and plate	8000356
PA-32-260	Piper 18622-00, Niagara 20002A, Harrison 8526250	7 row drawn cup	8000075
PA-32-300	Niagara 20003A, Harrison 8529245	9 row drawn cup	8000074
PA-32R-300	Piper 556-391, Harrison 8543897	bar and plate	8001201

Eligibility continued on the next page

FAA-PMA Approved

**Important: To confirm FAA approved eligibility, verify that your current (or originally) installed oil cooler P/N is listed in the "FAA Approved Replacement for" column for your aircraft model.**

Eligibility continued from previous page	FAA Approved Replacement for P/N	Description	P/N
<b>Aircraft Model</b>			
<b>Piper Continued</b>			
PA-32RT-300,300T, PA-32R-301,301T	Niagara 20010A, Harrison 8535311	bar and plate	8000356
PA-34-200	Piper 67848-00, Niagara 20017A, Harrison 8537820	13 row, drawn cup with cutout	8000661
PA-39	Piper 18622-00, Niagara 20002A, Harrison 8526250	7 row drawn cup	8000075
<b>Robinson Helicopter</b>			
R22	Niagara 20008A	17 row drawn cup	8000216
R44, R44II	Robinson and Stewart Warner 10886A	HE Series	8001723
<b>Sky International (PITTS)</b>			
S-2B	Niagara 20006A, Harrison 8534108	13 row drawn cup	8000215
	Niagara 20009A, Harrison 8533718, 8537798	18 row drawn cup	8000353
<b>Socata</b>			
TB9, TB10	Niagara 20002A, Harrison 8526250	7 row drawn cup	8000075
TB20, TB200	Niagara 20006A, Harrison 8534108	13 row drawn cup	8000215
	Niagara 20009A, Harrison 8533718, 8537798	18 row drawn cup	8000353
<b>Taylorcraft 2000, LLC</b>			
F22B, F22C, F22R	Niagara 20002A, Harrison 8526250	7 row drawn cup	8000075
<b>Univair (Stinson)</b>			
108, 108-1, 108-2, 108-3	Niagara 20002A, Harrison 8526250	7 row drawn cup	8000075

1 McFarlane engineering is unable to confirm this eligibility entry. P/N 8000215 is for larger (300HP+) engines.

2 When modified with IAW Cub Crafters Inc. STC # SA00718SE or SA92NW.

Firewall Forward

Cross Reference	
<b>Beechcraft P/N</b>	<b>AERO-Classics P/N</b>
169-38001-1	8001602
169-380033	8001694
169-910002-23	8001602
<b>Britten-Norman (Pilatus) P/N</b>	
354501026	8001602
<b>Continental P/N</b>	
626189	8000683
627392	8000925
639151	8000319
639171	8000545
646685	8000464
646880	8000934
652671	8000687
652759	8000127
654572	8000960
654580	8000440
654585	8000953
654593	8000307
654595	8000545
655090	8001213
693152	8000531
<b>Harrison P/N</b>	
8521940	8000328
8526250	8000075
8529245	8000074
8530016	8000343
8533718	8000353
8534108	8000215
8535311	8000356
8537798	8000343
8537820	8000661
8541336	8000357
8543897	8001201
<b>Mooney P/N</b>	
620016	8001689
620036	8001602
620052	8001689
6200160501	8001694
<b>Niagara P/N</b>	
10196A	8000464
10278A	8000960
10279A	8000440
10280A	8001213
10281A	8000953
20002A	8000075
20003A	8000074
20006A	8000215
20008A	8000216

Cross Reference	
Continued from previous column	
<b>Niagara P/N</b>	
20009A	8000353
20010A	8000356
20015A	8000357
20017A	8000661
20044A	8000357
20104A	8000343
20440A	8000687
20446A	8000319
20448A	8000127
20573A	8000683
20585A	8000925
20591A	8000934
20617A	8000545
20618A	8000307
20623A	8000531
20710A	8001080
20795A	8000545
<b>Piper P/N</b>	<b>AERO-Classics P/N</b>
18622-00	8000075
556-391	8001201
67848-00	8000661
85472-012	8001080
<b>Stewart Warner</b>	
8406R	8001733
8406R	8001602
8432R	8001689
8432S	8001694
10568R	8001640
10578R	8001535
10599R	8001599
10610R	8001646
10614R	8001643
10634R	8001652
10865B	8001701
10877A	8001588
10880A	8001713
10886A	8001723
10891A	8001718
<b>Twin Commander P/N</b>	
630146-509	8000353
<b>True Flight Holding LLC P/N</b>	
5505002-1	8001535
5505002-2	8001640

Verify aircraft make and model to ensure direct replacement eligibility. An IPC will confirm the part number that came equipped with the aircraft.

**New Approval for Cessna and Piper Aircraft**  
**FAA-PMA approval for more Cessna and Piper aircraft!**

- Cessna 205 and 210 series
- Piper PA-23-250, PA-28-181 and PA-32-260 aircraft



**Aluminum Oil Cooler for PA18, PA22 Series**  
**Save weight and money!**  
**P/N 8000328**

- The only aluminum Super Cub oil cooler
- FAA-PMA



**Save 3.7 lbs!**

**Stewart Warner Oil Coolers**

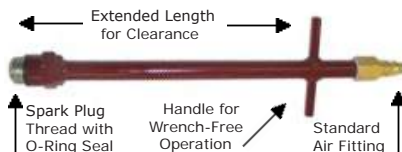
Factory new oil coolers manufactured by Stewart Warner are ideal for many experimental applications. They are identical to Stewart Warner oil coolers used on many certified aircraft but are not FAA-PMA approved. Form 337 field approvals are required for installation on certified aircraft. **Available part numbers: 10611R, 10611S, 10631S, 10655A, 8406S and 8446S.**



**Compression Tester Extension**

- EXTENSION CT1 (18mm thread)**
- EXTENSION CT12 (12mm thread)**
- EXTENSION CT14 (14mm thread)**

- Wrench-free compression testing
- Quality welded construction, o-ring seal
- Allows for exhaust system and baffling clearance
- Makes compression testing easy
- Save time and \$\$



Compression Tester Extension is not FAA-PMA approved.

## APS Rocker Cover Gaskets

Reusable, silicone!

- FAA-PMA Direct replacement for Continental and Lycoming Engines
- For use in certified and experimental aircraft

## APS Intake Manifold Tubes

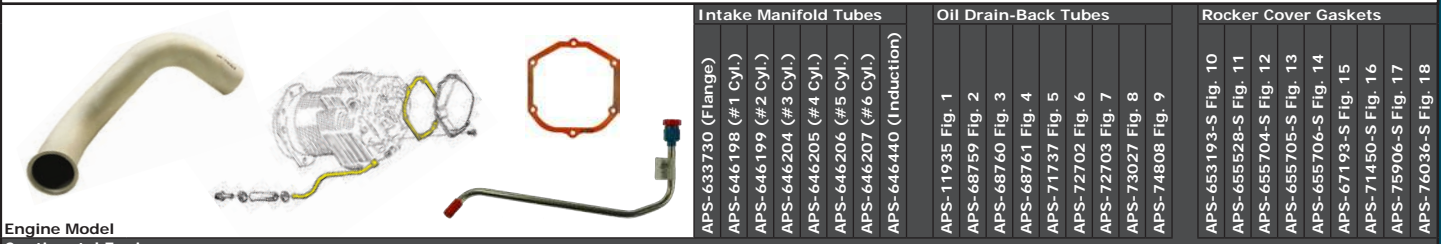
550 Crossflow Style

- FAA-PMA Direct replacement for Continental Engines

## APS Oil Drain-Back Tubes

Save up to 50%

- FAA-PMA direct replacement for Lycoming tubes
- For use in certified and experimental aircraft



### Engine Model

#### Continental Engines

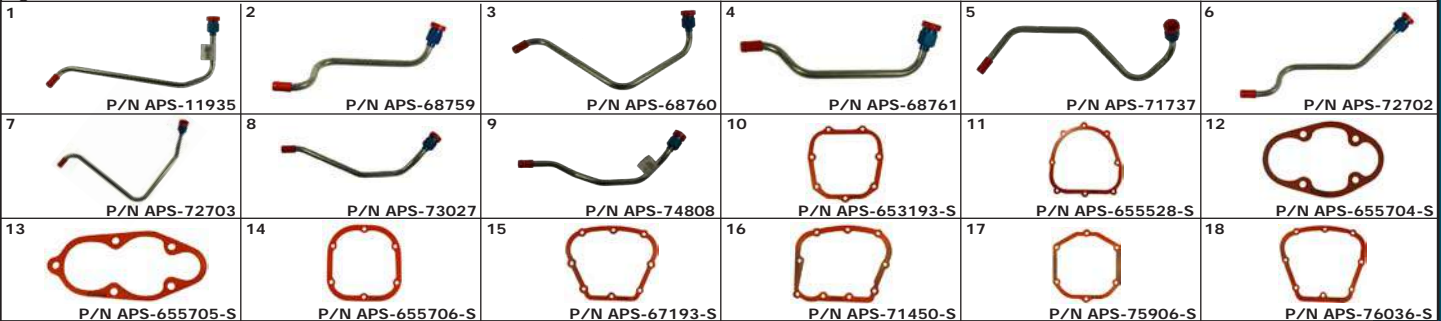
Engine Model	APS-633730 (Flange)	APS-646198 (#1 Cyl.)	APS-646199 (#2 Cyl.)	APS-646204 (#3 Cyl.)	APS-646205 (#4 Cyl.)	APS-646206 (#5 Cyl.)	APS-646207 (#6 Cyl.)	APS-646440 (Induction)	APS-11935 Fig. 1	APS-68759 Fig. 2	APS-68760 Fig. 3	APS-68761 Fig. 4	APS-71737 Fig. 5	APS-72702 Fig. 6	APS-72703 Fig. 7	APS-73027 Fig. 8	APS-74808 Fig. 9	APS-653193-S Fig. 10	APS-65528-S Fig. 11	APS-655704-S Fig. 12	APS-655705-S Fig. 13	APS-655706-S Fig. 14	APS-67193-S Fig. 15	APS-71450-S Fig. 16	APS-75906-S Fig. 17	APS-76036-S Fig. 18	
A-75, A-85, C90, C125, C145 Series																											
E165, E185, E225 Series																											
GO300																											
GT5IO520																											
IO240, IO360 Series																											
IO470																											
IO520 Series																											
IO550																											
IO550F																											
LTSIO520																											
O200, O300 Series																											
O470																											
TSIO360 Series																											
TSIO470																											
TSIO520																											
TSIO550																											
TSIOF550																											

#### Lycoming Engines

A-40, A-50, A-65, A-70 Series																											
AEIO320																											
AEIO360																											
AEIO540																											
AEIO580																											
AIO320																											
AIO360																											
C75, C85 Series																											
GO435																											
HIO360																											
HIO540																											
HO360																											
IGO540																											
IGSO540																											
IHO360																											
IO320																											

Eligibility continued on next page

Figures 1-18 Photos are not to scale relative to each other





FAA-PMA Approved

Continued from previous page



Engine Model

Oil Drain-Back Tubes

Rocker Cover Gaskets

Table with columns for Engine Model, Oil Drain-Back Tubes (APS-11935 Fig. 1 to APS-74808 Fig. 9), and Rocker Cover Gaskets (APS-653193-S Fig. 10 to APS-76036-S Fig. 18). Rows list various engine models and their corresponding part compatibility.

## Adel Clamps (MS21919 W Series)

Loop type, cushioned support clamps, commonly referred to as "Adel Clamps" feature a wedge that is bonded to the cushion to prevent the escape of small wires when used for general purpose wire bundle clamping. Meets the requirements of Mil Spec MS21919.

### Standard MS21919WDGXX Clamps

- Aluminum band with a chlorophrene cushion (black with blue stripe)
- For use in areas contaminated with petroleum based hydraulic fluids and occasional fuel splash
- Ozone resistant
- Rated to 212° F
- Not resistant to phosphate ester based fluids
- Supersedes MS21919-DG series without the wedge

### High Temperature MS21919WCJXX Clamps

**These blue clamps will not get hard and brittle with engine temperatures. A little more expensive but will last a long time in firewall forward applications.**

- Corrosion resistant steel band with a blue fluorosilicone cushion
- Perfect for use in engine area or other areas with elevated temperature and/or where petroleum based fluid contamination is present
- Ozone resistant
- Rated to 450° F
- Not resistant to phosphate ester based fluids



P/N MS21919WCJ2



P/N MS21919WCJ3



P/N MS21919WCJ4



P/N MS21919WCJ5



P/N MS21919WCJ7



P/N MS21919WCJ15



P/N MS21919WDG3



P/N MS21919WDG4



P/N MS21919WDG9



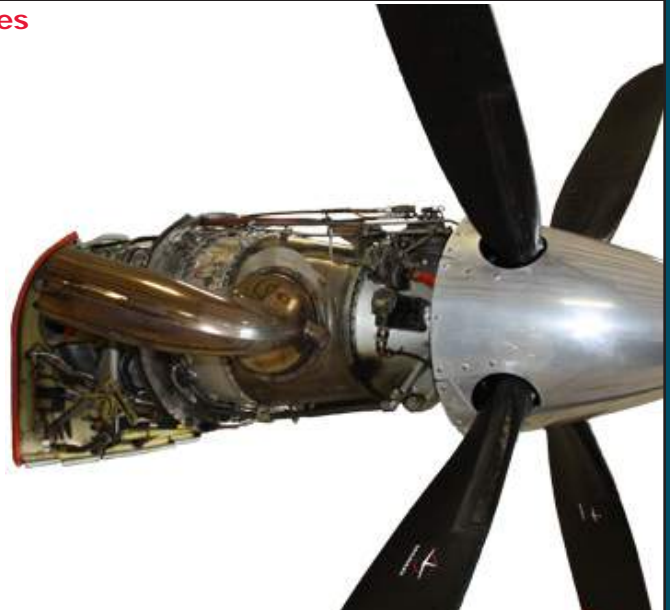
P/N MS21919WDG13

Tube/ Bundle O.D.	Aluminum Band, Chlorophrene Cushion: MS21919WDG Series	Corrosion Resistant Steel Band, Fluorosilicone Cushion: MS21919WCJ Series
1/8"	MS21919WDG2	MS21919WCJ2
3/16"	MS21919WDG3	MS21919WCJ3
1/4"	MS21919WDG4	MS21919WCJ4
5/16"	MS21919WDG5	MS21919WCJ5
3/8"	MS21919WDG6	MS21919WCJ6
7/16"	MS21919WDG7	MS21919WCJ7
1/2"	MS21919WDG8	MS21919WCJ8
9/16"	MS21919WDG9	MS21919WCJ9
5/8"	MS21919WDG10	MS21919WCJ10
11/16"	MS21919WDG11	MS21919WCJ11
3/4"	MS21919WDG12	MS21919WCJ12
13/16"	MS21919WDG13	MS21919WCJ13
7/8"	MS21919WDG14	MS21919WCJ14
15/16"	MS21919WDG15	MS21919WCJ15
1"	MS21919WDG16	MS21919WCJ16

## Parts for the Legendary Pratt & Whitney PT6 Engines

- In stock, no long lead times!
- Save \$\$ on commonly replaced parts

P/N	Description	Eligibility
CA3011155	Fuel Transfer Tube	PT6A-10, 11, 11AG, 15AG, 21, 25, 25A, 25C, 27, 28, 34, 34AG, 34B, 36, 38, 41, 41AG, 42, 45A, 45B, 45R, 50, 60A, 61, 64, 65B, 65R, 65AG, 65AR, 67, 67A, 67B, 67D, 67R, 67AF, 67AG, 110, 112, 114, 114A, 116, 135, 135A, PT6B-36, 36A, 36B, PT6T-3, 3B, 3BE, 6, 6B, ST6T-75
CA3020030	Fuel Transfer Tube	PT6T-3, 3B, 6, ST6T-75, 76
CA3029566	Fuel Nozzle Gasket	PT6A-11, 11AG, 15AG, 110, 112, 114, 114A, 116, 21, 27, 28, 34, 34AG, 34B, 36, 135, 135A, 25, 25A, 25C, PT6T-3, 3B, BE, 6, 6B, PT6B-36, 36A, 36B
CA3029678	Fuel Nozzle Gasket	PT6A-6, 6A, 6B, 20, 20A, 20B
CA3101469-01	Fuel Manifold Gasket	PW118, 118A, 118B, 120A, 121, 123, 123AF, 123B, 123C, 123D, 123E, 125B, 126, 126A, 127B, 127D
CA3103345-01	Retainer Plate	PT6A-10, 11, 11AG, 15AG, 21, 25, 25A, 25C, 27, 28, 34, 34AG, 34B, 36, 38, 41, 41AG, 42, 45A, 45B, 45R, 45AG, 50, 60A, 60AG, 61, 65B, 65R, 110, 112, 114, 116, 135, 135A, PT6B-36, 36A, 36B, PT6T-3, 3B, 3BE, 6, 6B, ST6T-75
CA3103346-01	Diaphragm	PT6-A38, 41, 41AG, 42, 45A, 45B, 45R, 45AG, 50, 65B, 65R
CA3103347-01	Diaphragm	PT6A-10, 11, 11AG, 15AG, 21, 25, 25A, 25C, 27, 28, 34, 34AG, 34B, 36, 110, 112, 114, 114A, 116, 135, 135A, PT6B-36, 36A, 36B, PT6T-3, 3B, 3BE, 6, 6B, ST6T-75
CA3110998-01	Prop Shaft Shim	PT6A, 60A, 65B, 65R, 65AR, 65AG
CA3118962-01	Gasket	PT6A-6, 6A, 6B, 20A, 20B, 21, 25, 25A, 25C, 27, 28, 34, 34AG, 34B, 36, 114, 114A, 116, 135, 135A
CG3011587	Rod End Bearing	PT6A-15AG, 27, 28, 34, 34AG, 34B, 36, 45R, 60A, 61, 135
MS9371-16	Gasket	PT6



Manufactured by PMA Products, Inc.  
Engine photo courtesy of  
Air Associates, Olathe, KS



FAA-PMA Approved

**Cowl Flap Hinges for Cessna Aircraft**  
**Replace worn-out cowl flap hinges at half the cost!**

**Improved!**

- Assembly includes hinge and hinge pin
- No looseness in the hinge to start vibration wear
- Selective fit pins
- FAA-PMA direct replacement



**Save 50%**

Aircraft	PartNumber
FR172J,K	MC0552144-14
R172K	MC0552144-14
177B	MC1752091-13
180, 180A,B	MC0752000-116
180C,D,E,F,G,H,J,K	MC0752014-15
182B,C,D	MC0752014-15
182E,F,G,H,J,K,L,M,N,P	MC0752625-200
182P,Q,R	MC0752625-200
T182	MC0752625-200
185, 185A,B,C,D,E, A185E,F	MC0752014-15
210-5 (205), 210-5A (205A)	MC1213469-205
206, U206, U206A,B,C,D	MC1213469-205
U206E,F,G	MC1213261-200
P206, P206A,B,C,D	MC1213469-205
P206E	MC1213261-200
TP206A,B,C,D, TU206A,B,C,D	MC1213469-205
TU206E,F,G	MC1213261-200
210B,C,D,E,F,G,H	MC1213469-205
210J,K,L,M,N,R, P210R	MC1213261-200
T210F,G,H	MC1213469-205
T210J,K,L,M,N	MC1213261-200

McFarlane Assembly P/N	Replaces Cessna Part Number		
Assembly	Hinge Halves	Hinge Pin	
MC0552144-14	0552144-14	0552144-15, 0552144-16	
MC0752014-15	0752014-15	0752014-15	
MC0752000-116	0752000-116	0752000-114	
MC0752625-200	0752625-200	0752625-200	
MC1213261-200	1213261-200	1213506-5, 1213506-6	
MC1213469-205	1213469-205	1213506-3, 1213506-4	
MC1752091-13	1752091-13	1752091-14, 1752091-15	

Quantity of 2 each required per aircraft. Unless otherwise noted, eligibility is for all aircraft.

- 1 Partial model eligibility
- 2 S/N FR17200441 thru FR17200675
- 3 S/N 18253599 thru 18261425
- 4 S/N 18262466 thru 18268160
- 5 S/N 18267716 thru 18268160

**Oil Access Door for Cessna Aircraft**

P/N WAC752000

- Improved to better match the contour of the cowl
- More affordable than other replacement doors
- Replaces Cessna P/N 0752000-56



**SAVE!**

FAA-PMA Approved

**Now manufactured by McFarlane!**

Model	Serial Number
180-180G	30000 thru 18051445
182-182G	33000 thru 18255844
185-185C	185-0001 thru 185-0776
210-210E	57001 thru 21058715

**Fuel Injection/Hydraulic/Oxygen Line Union Cone**

P/N AN800C2-MOD

Improved Design! These braze-on 316 stainless fittings are an improvement over AN800C2 fittings commonly used on 1/8" stainless steel fuel injection, hydraulic and oxygen lines.



**Improvements include:**

- Witness hole to assure complete braze penetration
- Closer tolerance ID (0.131" - 0.133") to assure compatibility with close tolerance MIL-T-8504/ASTM A632 stainless steel tubing. The precision ID provides ideal clearance for proper braze penetration.

**Note:** Although similar, these parts are not manufactured/certified to AN800 specs. Fittings certified to AN800 are available upon request.

**Exhaust Valve Guide Cleaning Reamers for Continental and Lycoming Engines**

Why McFarlane Special Reamers?

**U.S. Patent No. 9,878,354**

McFarlane now offers special valve guide reamers sized specifically for cleaning Continental and Lycoming exhaust valve guides. Standard valve guide reamers are designed to perfect the guide hole size when reaming new guides. The standard reamer pilot is sized to fit the small bore of a new unfinished guide to insure stability and a straight finished bore. When this same type of reamer is used to clean the valve guides, the pilot is smaller than the finished hole. This causes the reamer to wander and misalign while it is being started and turned in the guide hole.

The McFarlane cleaning reamers have a pilot the same size as the valve stem. This properly sized pilot forces the reamer cutter to start straight and follow the correct valve stem path through the guide hole. **Finally, a tool that is designed for the job!**

While using standard reamers to clean valve guides, you probably have noticed that you have some valve guide metal in the reamer flutes afterwards. This metal is cut from the sides of the guide when hard carbon deposits displace the unguided reamer from the original guide hole, or the reamer was not started in alignment with the guide hole. Wavy or gouged guide holes cause premature carbon buildup, poor heat transfer, and early guide hole wear. Prevent damage to your valve guides by using McFarlane Cleaning Reamers!

**Features and Benefits**

- Discounted pricing for complete set
- Spiral flutes for a better guide finish
- Pilot sized specifically for cleaning
- Cutting pilot cleans guides without notching guide surfaces
- Constructed of precision ground, high speed tool steel
- See page 265 for additional product information

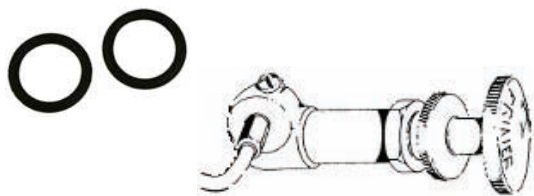




## Fuel Primer Seal Kit

P/N FPS-KT-1

Contains two MIL-SPEC fuel-proof fluoroelastomer (Viton) o-rings required to service most standard fuel primers.



## Improved Fuel Vent Lines for Cessna Aircraft

**Stops fuel waste!**

- Stops asphalt damage
- Stops environmental damage
- Fly with known full tanks
- Extends useful range
- Pays for itself quickly at \$4.00 per gallon
- Adds value to your airplane
- FAA-PMA direct replacement, no STC or 337 form needed

The fuel vent line on most Cessna single engine aircraft attaches to a check valve inside the tank to prevent fuel from flowing out of the vent line, but this valve has a weep hole that allows some fuel to pass to prevent over-pressurization. Unfortunately, this weep hole is much lower than the fuel level with full tanks. Fuel will continuously leak out of the vent line until the fuel level is below the weep hole. With the original vent line, you cannot fill the tanks without wasting a lot of fuel.

The Cessna legacy aircraft also have a tank interconnect vent line that allows fuel from both tanks to leak out of the vent. When parked on an unlevel surface, the fuel loss from these aircraft can be many gallons.

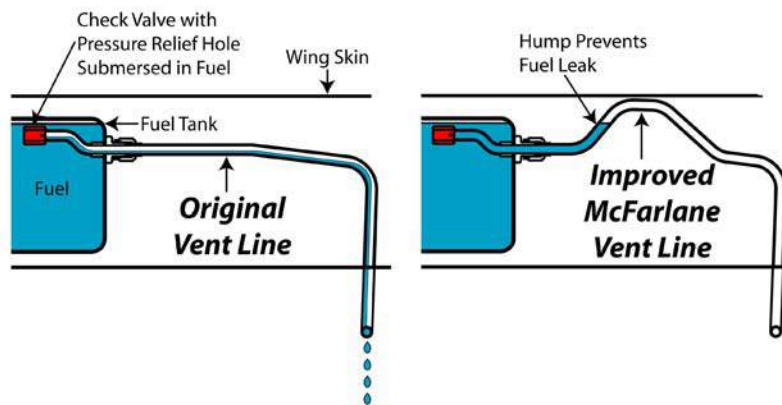
**McFarlane has solved these problems** with a redesigned vent line featuring a unique hump that extends above the top of the tank. Some fuel can still escape through the weep hole and out the vent to prevent over-pressurization. However, once the pressure is relieved, the tanks will remain full.

### Convenient Kits and Components

Kits containing a new connection hose (where required), P/N MCS1495-8 and rubber grommet, P/N MS35489-14 are also available where applicable. Just add a "K" suffix to the part numbers listed below. Rubber tubing sold by the foot is available by ordering P/N R221485.

### Installation Tip:

Access to loosen or tighten the vent line in most of the Cessna aircraft is very tight because the tube flare nut ("B" nut) sits partway in the wing rib. However, with the correct wrench, you can normally loosen the nut from the under-wing inspection holes without removing the top tank access skin. The fitting in the tank has indexing flats and will normally not rotate while the tube flare nut is being loosened and re-tightened for the new line. Use caution in starting the nut as the Cessna tank fitting is a welded assembly with soft aluminum. Be sure not to cross-thread or over tighten the nut as you can easily strip the threads on this fitting.



Aircraft Model	Serial Number	Standard Range Tanks		Extended Range Tanks	
		Left	Right	Left	Right
150, 150A	All	MC0400311-119 Only for use with Cessna vent assembly 0523552-2		MC0400311-121 Only for use with Cessna vent assembly 0523552-2	
150B,C,D,E,F,G,H,J,K,L,M, F150F,G,H,J,K,L,M	All	MC0400311-119		MC0400311-121	
A150K,L,M, FA150K,L,M, FRA150L,M	All	MC0400311-120			
152, F152	All	MC0400311-119		MC0400311-121	
A152, FA152	All	MC0400311-120			
172, 172A,B,C	All	MC0523559-8 Only for use with Cessna vent assembly 0523552-2			
172D,E,F,G,H,I		MC0523559-8			
172K,L,M	17257162 thru 17260805	MC0523559-8		MC0523559-6	
172M ,N	17260806 thru 17274009	MC0523559-12		MC0523559-11	
172P	All	MC0523559-12 MC0523098-1 Integral Cell		MC0523559-11	
172Q	All	MC0523559-11 MC0523098-1 Integral Cell			
172RG	All	MC0523098-1			
F172D,E,F,G,H	F172-0001 thru F172-0561	MC0523559-8			
F172H ,K,L	F172-0560 thru F17200904	MC0523559-8		MC0523559-6	
F172M	F17200905 thru F17201234	MC0523559-12			
F172M ,N	F17201235 thru F17202254	MC0523559-12		MC0523559-11	
FP172	All	MC0523559-6			

Continued on next page

FAA-PMA Approved

**Improved Fuel Vent Lines for Cessna Aircraft**

Continued from previous page

Aircraft Model	Serial Number	Standard Range Tanks		Extended Range Tanks	
		Left	Right	Left	Right
FR172J,K	All	MC0523559-11 MC0523098-1 Integral Cell			
P172D	All	MC0523559-6			
R172K	All	MC0523559-11 MC0523098-1 Integral Cell			
175, 175A,B,C		MC0523559-6 Only for use with Cessna vent assembly 0523552-2			
180	32488 thru 32661	MC0716122 Only for use with Service Kit SK180-6			
180A,B,C,D	All	MC0716127-1			
180E,F	All	MC0716127-1	MC0716127-2 Not used with 0726001-16 RH Standard Fuel Tank	MC1200106-51	MC1200106-52
180G,H,J,K	18051313 thru 18053000	MC0716127-1	MC0716127-2	MC1200106-51	MC1200106-52
180K	18053001 thru 18053203	MC1200106-266	MC1200106-267		
182	All	MC0716122			
182A,B,C,D	All	MC0716127-1			
182E,F,G,H,J,K,L,M,N,P,Q	18253599 thru 18266590	MC0716127-1		MC1200106-51	
182Q	18266591 thru 18299999	MC1200106-266	MC1200106-267		
F182P,Q	F18200001 thru F18200094	MC0716127-1		MC1200106-51	
F182Q	F18200095 thru F18200169	MC1200106-266	MC1200106-267		
FR182	FR18200001 thru FR18200020	MC0716127-1		MC1200106-51	
FR182	FR18200021 thru FR18200070	MC1200106-266	MC1200106-267		
R182	R18200001 thru R18200583	MC0716127-1		MC1200106-51	
R182	R18200584 thru R18202041	MC1200106-266	MC1200106-267		
T182,T182T	All	MC1200106-266	MC1200106-267		
185, 185A,B,C,D,E,A185E,A185F	185-0001 thru 18503683	MC0716127-1	MC0716127-2	MC1200106-51	MC1200106-52
A185F	18503684 thru 18504448	MC1200106-266	MC1200106-267		
210-5 (205), 210-5A (205A)	All	MC0716127-1	MC0716127-2	MC1200106-51	MC1200106-52
206,P206,P206A,B,C,D,E, TP206A,B,C,D,E TU206A,B,C,D,E,F,G U206, U206A,B,C,D,E,F,G	All	MC0716127-1	MC0716127-2	MC1200106-51	MC1200106-52
206H,T206H	All	MC1200106-266	MC1200106-267		
207,207A,T207,T207A	All	MC0716127-1	MC0716127-2	MC1200106-51	MC1200106-52
210,210A,B,C,D,E,F T210F	All	MC0716127-1	MC0716127-2	MC1200106-51	MC1200106-52

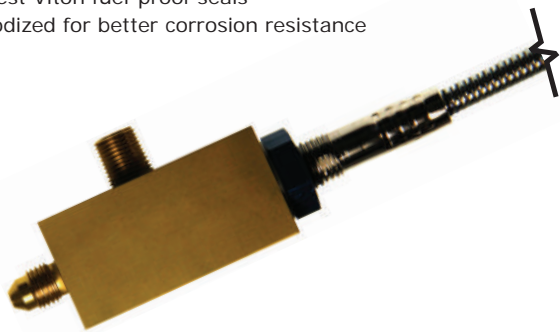
Partial model eligibility

These aircraft originally used 1/4" vent lines, however they may be upgraded to a 3/8" vent line with the installation of the P/N 0523552-2 vent assembly per the applicable IPC. The indicated McFarlane vent lines are only eligible for use with the upgraded vent assembly.

**King Air Fuel Drain Valve**

Improved, repairable valve for thousands less than Beech!  
Fuel Drain Valve P/N MC90-380016-1

- Improved seal design provides a long life reliable valve
- Teflon lined control conduit and stainless steel cable
- Reliable design - proven over 10,000 cycles
- Approved for models A90, B90, C90, C90A, C90GTi, C90GT, E90, F90, 99, 99A, A99, B99, C99, 100 and A100
- Latest Viton fuel-proof seals
- Anodized for better corrosion resistance



P/N MC90-380016-1 consists of two components: a valve housing, and a replaceable valve control/plunger subassembly (P/N 6325K). Only McFarlane valves are repairable, Beech valves do not have replaceable components.

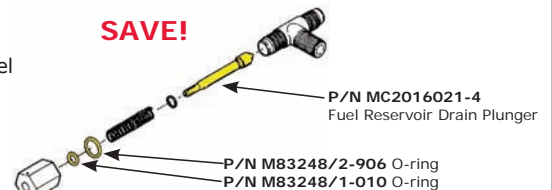
**Unheard of 10 Year Limited Warranty!**

**Cessna 177RG and F177RG Fuel Reservoir Drain Plunger**

- All metal, one piece design eliminates the flimsy C-clip
- McFarlane's Vulcanize bonded blue Viton® rubber tip outlasts the original in any fuel
- Convenient kits available containing the plunger and O-rings, P/N FDV-KT-1



**SAVE!**



## Fuel Strainer Parts for Cessna Aircraft

McFarlane can replace your fuel system parts with high quality McFarlane manufactured parts. Now offering fuel bowls, top assemblies, fuel bowl washers, fuel bowl nuts, standpipes, plungers, stainless steel washers for your plunger, fuel-proof flouorocarbon O-rings, fuel strainer drain cables and fuel strainer seal kits. **Buy any components separately or as convenient kits.**

- Improved safety
- More reliable
- Longer life
- Less money

### Maintenance Tip:

*Cleaning the Fuel Screen - The fuel screen is removed by removing the standpipe. The rubber tipped plunger must be unseated before the standpipe is loosened. Failure to lift the plunger off of its standpipe seat can damage the plunger. Pull the strainer drain knob as if you were draining the fuel bowl. Block or clamp the knob in this position. Insert a smooth round tool such as a screw driver or punch in the standpipe cross-hole and un-screw the standpipe.*

### Fuel Bowl P/N MC0756008-1

- Computer machined (not die cast)
- Gold anodized for additional corrosion resistance
- This bowl is engineered to last!



### Fuel Strainer Plunger P/N MC0756010-11

- Special electro polished shaft for longer O-ring life
- McFarlane's Vulcanize bonded blue Viton® rubber tip outlasts the original in any fuel



### Fuel Strainer Standpipe P/N MC0756011-1

- Stainless steel
- Costs less
- No more corrosion pits
- No more stripped threads
- The last one you will buy!

### Fuel Strainer Drain Cables P/N MCS1517 Series

- Stainless steel conduit
- Improved aluminum knob
- Larger wire diameter



### Fuel Strainer Seal Kits P/Ns FS-KT-1, FS-KT-9, FS-KT-10 and FS-KT-11

- Only McFarlane has approval to replace the old less fuel resistant O-rings with the latest fuel-proof flouorocarbon O-ring.
- Kits include applicable gasket and O-rings to seal the fuel strainer.



### Fuel Strainer Gasket P/N MC0756041-1

- Fuel proof Viton foam won't shrink or harden due to fuel exposure
- Fits restart Cessna aircraft and late U206G/TU206G models



### Maintenance Tip:

*Cessna maintenance manual requires replacement of this gasket every 100 hours.*



### Fuel Top Assembly P/N MC0756005-2

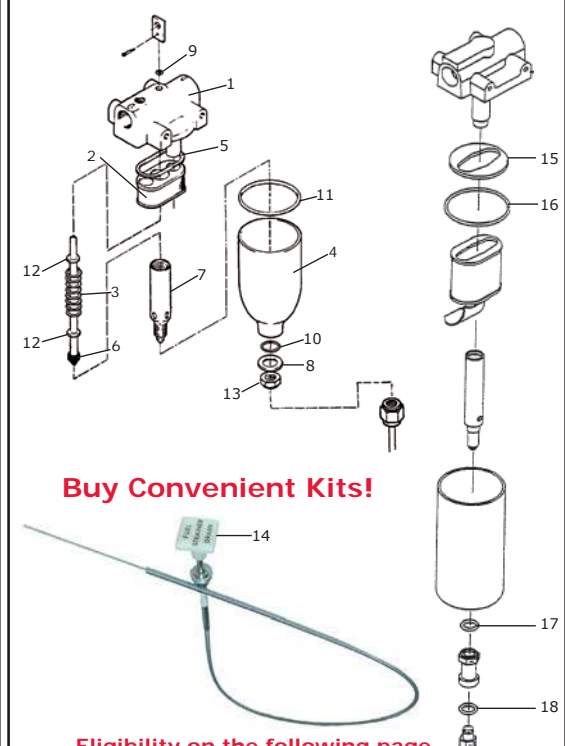
- All aluminum construction prevents galvanic corrosion between housing and inlet tube
- Fully anodized to prevent corrosion and galvanic reaction between the brass filter and aluminum inlet tube
- Improved fuel inlet tube attachment ensures a reliable secure fit
- Save \$\$

## Fuel Strainer Kits for Cessna Aircraft

Save time and money with convenient kits!

**See eligibility on the following page.**

Qty	Part Number	Description	Index
<b>FS-KT-1 Fuel Strainer Seal Kit</b>			
1	MC0756009-8	Gasket	5
1	MCM83248/1-010	O-ring	9
1	MCM83248/1-111	O-ring	10
1	MCM83248/1-138	O-ring	11
<b>FS-KT-2 Fuel Bowl Kit</b>			
1	FS-KT-1	Fuel Strainer Seal Kit	
1	MC0756008-1	Fuel Bowl	4
1	MC0756015-1	Washer	8
1	MCS1573-3	Nut	13
<b>FS-KT-3 Fuel Strainer Rebuild Kit</b>			
1	FS-KT-2	Fuel Bowl Kit	
1	0756012-1	Spring	3
1	MC0756010-11	Plunger	6
1	MC0756011-1	Standpipe	7
2	MCS1450-27A7-032	Washer	12
<b>FS-KT-4 Fuel Strainer Kit</b>			
1	FS-KT-3	Fuel Strainer Kit	
1	MC0756005-2	Top Assembly	1
1	0756009-1	Filter	2
<b>FS-KT-5 Fuel Strainer and Cable Kit</b>			
1	FS-KT-4	Fuel Strainer Kit	
1	MCS1517-7	Strainer Drain Cable	14
<b>FS-KT-6 Fuel Strainer Kit</b>			
1	MC0756005-2	Top Assembly	1
1	0756009-7	Filter	2
1	FS-KT-3	Fuel Strainer Rebuild Kit	
<b>FS-KT-7 Fuel Strainer and Cable Kit</b>			
1	FS-KT-6	Fuel Strainer Kit	
1	MCS1517-7	Strainer Drain Cable	14
<b>FS-KT-9 Fuel Strainer Seal Kit</b>			
1	MC0756041-1	Gasket	15
1	M83248/1-011	O-ring	18
1	M83248/1-111	O-ring	17
1	M83248/1-138	O-ring	16
<b>FS-KT-10 Fuel Strainer Seal Kit</b>			
1	MC0756041-1	Gasket	15
1	M83248/1-010	O-ring	9
1	M83248/1-111	O-ring	17
1	M83248/1-138	O-ring	16
<b>FS-KT-11 Fuel Strainer Seal Kit</b>			
1	MC0756041-1	Gasket	15
1	M83248/1-111	O-ring	17
1	M83248/1-138	O-ring	16
<b>FS-KT-12 Fuel Plunger Kit</b>			
1	FS-KT-1	Fuel Strainer Seal Kit	
1	MC0756010-11	Plunger	6
1	MC0756015-1	Washer	8
1	MCS1573-3	Nut	13



**Buy Convenient Kits!**

**Eligibility on the following page**



FAA-PMA Approved

## Eligibility for Fuel Strainer Parts and Kits for Cessna Aircraft

Fuel System Parts

Cessna Models	Serial Numbers	P/N and Description	MCO756005-2 Fuel Top Assembly	MCO756008-1 Fuel Bowl	MCO756010-11 Fuel Strainer Plunger	MCO756011-1 Fuel Strainer Standpipe	MCS1517-7 Fuel Strainer Drain Cable	FS-KT-1 Fuel Strainer Seal Kit	FS-KT-2 Fuel Bowl Kit	FS-KT-3 Fuel Strainer Rebuild Kit	FS-KT-4 Fuel Strainer Kit	FS-KT-5 Fuel Strainer and Cable Kit	FS-KT-6 Fuel Strainer Kit	FS-KT-7 Fuel Strainer and Cable Kit	FS-KT-9 Fuel Strainer Seal Kit	FS-KT-10 Fuel Strainer Seal Kit	FS-KT-11 Fuel Strainer Seal Kit	FS-KT-12 Fuel Plunger Kit	
150E	15060773 thru 15061152																		
150E, F, G, H, J, K, L, M, A150K, L, M	15061153 thru 15079405 and A1500001 thru A1500734		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
F150F, G, H, J, K, L, M, FA150K, L, M	All		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
FRA150L, M	All		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
152, A152	All		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
F152, FA152	All		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
172D, E, F	17249545 thru 17252533		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
172F, G, H	17252534 thru 17256512 and 638		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
172I, K, L, M, N, P, Q	All		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
172R, S	All		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
172RG	172RG0001 thru 172RG0890 and 691		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
172RG	172RG0891 thru 172RG1191		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
P172D	All		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
F172D, F	F172-0001 thru F172-0139		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
F172F, G, H, K, L, M, N, P	F172-0140 thru F17202254		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
FR172E	All		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
FR172F, G, H, J, K	All		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
R172E	All		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
R172F, G, H	All		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
R172K	All		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
177, 177A, B	All		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
177RG	All		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
F177RG	All		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
180H, J, K	18051497 thru 18051875		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
180H, J, K	18051876 thru 18053203		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
182H, J, K	18256040 thru 18258505 and 675, 18255845		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
182L, M, N, P, Q, R	All		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
182S, T, T182T	All		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
F182P, Q	All		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
FR182	All		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
R182, TR182	All		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
T182	All		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
185D, E	185-0844 thru 185-1149		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
A185E, F	185-0968 thru 185-1149		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
A185E, F	185-1150 thru 185-1300		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
A185E, F	185-1301 thru 18504448		*	*	*	*	2	*	*	*	*	*	*	*	2	*	*	*	*
188, 188A, B	188-0001 thru 18802348 and 653		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
A188, A188A, B (w/fuslge tanks)	188-0001 thru 18802348, 18800833T thru 18802348T and 653, 678T		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
A188, A188A, B (w/wing tanks)	188-0001 thru 18802348, 18800833T thru 18802348T and 653, 678T		*	*	*	*	3	*	*	*	*	*	*	*	*	*	*	*	*
A188B (w/fuselage tank)	18802349 thru 18802745		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
A188B (w/wing tanks)	18802349 thru 18803973, 18802349T thru 18803973T		*	*	*	*	3	*	*	*	*	*	*	*	*	*	*	*	*
T188C	T18803325T thru T18803974T and T18802839T, 3307T, 3308T		*	*	*	*	3	*	*	*	*	*	*	*	*	*	*	*	*
206H, T206H	All		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
P206, P206A, B, TP206A, B	All		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
P206C, D, E, TP206C, D, E	All		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
U206, U206A, B	All		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
U206C, D, E, F, G	U206-0915 thru U20606846 and 676		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
U206G	U20606847 thru U20607020		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TU206A, B	All		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TU206C, D, E, F, G	U206-0915 thru U20606846 and 676		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TU206G	U20606847 thru U20607020		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
207, 207A, T207, T207A	All		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
210E, F, G	All		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
210H, J, K, L, M, N	21058937 thru 21064535		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
210N	21064536 thru 21064897		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
210R, T210R	All		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
T210F, G	All		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
T210H, J, K, L, M, N	T210-0308 thru T210-0454, 21059200 thru 21064535 and 21058140		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
T210N	21064536 thru 21064897		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
P210N	P21000001 thru P21000760		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
P210N	P21000761 thru P21000834		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
337, 337A, B, C, D, E, F	All		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
337G, H (standard range)	All		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
337G, H (long range), F337E, F, G, H	All		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
FT337E, F, FT337GP, FT337HP	All		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
T337B, C, D, E, F	337-0526 thru 33701351 and 337-0001		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
T337F	33701352 thru 33701398		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
T337H (standard range)	All		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
T337H (long range)	All		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
T337G, P337H	All		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
T1137H-SP	All		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

1 Partial model eligibility  
 2 Aircraft without floats use P/N MCS1517-7 and Aircraft with floats use P/N MCS1517-4.  
 3 Models 188, 188A, A188, A188A, B S/N 188-0446 thru 18803926T with wing tanks use P/N MCS1517-12.  
 Model T188C, S/N T18803297T thru T18803926T with wing tanks use P/N MCS1517-15.

## Fuel Gascolator Assemblies

### Fast and Easy to Maintain!

Gascolators are precision machined out of 6061 aluminum and an improved o-ring seal. No more wire bails popping out of the cover! Eliminates stripped thumb wheels and screws.

Gascolator fits in existing Piper mounting brackets. Mounting brackets for Cessna aircraft are available. Each gascolator includes a screen, screen retainer and O-rings that seal the bowl to the top of the gascolator. D Series remote drain bowl also include the drain valve and lever.

- FAA-PMA/STC (SA01026SE) and EASA approved
- STC, AML and installation instructions included
- Unique bayonet tab lock makes maintenance easy
- Tested to 180 PSI
- Great for homebuilt aircraft
- Spare o-ring included with 4 oz. bowls

#### 1/4 NPT (3/8 ID Fuel Line) Gascolators

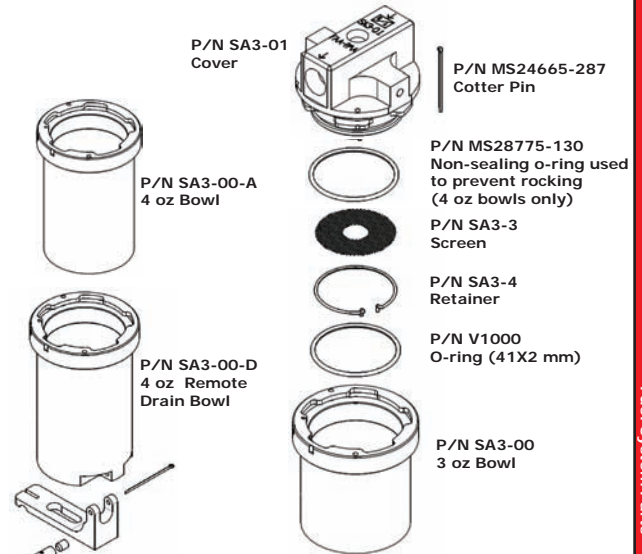
P/N	Description	Remote Drain	Mounting Style	Sediment capacity (oz)	Max fuel tank capacity (gal)
SA3-00	3 oz bowl		Side	3	60
SA3-00-A	4 oz bowl		Side	4	80
SA3-00-B	3 oz bowl with top mount cover		Top	3	60
SA3-00-B-D	4 oz with top mount cover w/ remote drainable bowl	X	Top	4	80
SA3-00-BS	3 oz bowl for Vulcan Air/Partenavia aircraft only		Side	3	60
SA3-00-C	4 oz bowl with top mount cover		Top	4	80
SA3-00-D	4 oz remote drainable bowl	X	Side	4	80

#### 3/8 NPT (1/2 ID Fuel Line) Gascolators

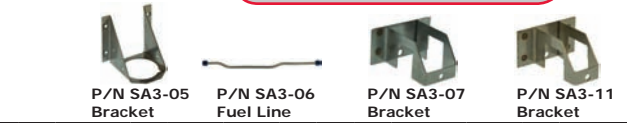
SA3-10	4 oz bowl		Side	4	80
SA3-10-A	4 oz bowl with top mount cover		Top	4	80
SA3-10-A-D	4 oz with top mount cover w/ remote drainable bowl	X	Top	4	80
SA3-10-B	3 oz bowl		Side	3	60
SA3-10-C	3 oz bowl with top mount cover		Top	3	60
SA3-10-D	4 oz remote drainable bowl	X	Side	4	80

#### Individual Components

C-120/140 Kit	Cessna 120/140 fuel line and bracket install kit contains (1) SA3-05 and (1) SA3-06
SA3-3	Screen
SA3-4	Screen Retainer
SA3-05	Bracket for 120/140 aircraft only
SA3-06	Fuel Line for 120/140 aircraft only
SA3-07	Bracket, Side Mount
SA3-11	Bracket, Top Mount
SA3-14	Barrell Nut Assembly used on "D" remote series only
V1000	O-ring (41X2mm)
MS24665-287	Cotter Pin (3/32" X 1-1/4")
MS28775-130	O-ring



**Maintenance Tip:**  
Avoid sealant on 1st thread to avoid contamination in fuel.



Aircraft	S/N	SA3-00 3 oz Bowl	A3-10 4 oz Bowl	SA3-10-A 4 oz Bowl w/Top Cover	A3-D Series Drainable Bowl
<b>Aeronca, Aero Commander (Dync), (Voltaire)</b>					
100-180, 15AC, S15AC	All				
100,100A, 10, 10A	All				
11CC, S11CC	All				
50-C,50-L,50-LA,50-TC,50-TL, 60-TF, 65-C,65-CA,65-LA,65LB,65-TAC,65-TAF, 65-TAL,65-TC,65-TF,65-TL, CF,K,KC,KCA,KS, O-58A,O-58B, S15AC, S-50-C, S-65-C,S-65-CA, SO-58B, YO-58,YO-TC	All				
<b>Aviat</b>					
A-1,A-1A,A-1B	All				
A-1C-200	All				
<b>Bellanca</b>					
14-13,14-13-2,14-13-3,14-13-3W	All				
<b>Britten-Norman (Pilatus)</b>					
BN-2,BN-2A,BN-2A-2,BN-2A-3,BN-2A-6,BN-2A-8,BN-2A-9,BN-2A-20, BN-2A-21,BN-2A-26,BN-2A-27, BN-2B-20,BN-2B-21,BN-2B-26,BN-2B-27	All				
<b>Cessna</b>					
120, 140	All				
150, 150A,B,C,D,E	All				
150F,G,H,J,K,L,M	All <sup>1</sup>				
A150K	All <sup>2</sup>				
A150L,M	All <sup>2</sup>				
152, A152	All <sup>3</sup>				
170A,B	All				
172, 172A,B,C,D,E,F <sup>1</sup>	28000 thru 17252533				
172F <sup>1</sup> ,G,H,I,K,L,M,N,P,Q	17252534 and On <sup>2</sup>				
172R,S	All <sup>3</sup>				
172RG, P172D, R172E,F,G,H,J,K, 175, 175A,B,C	All				

<sup>1</sup> Partial Model Eligibility

<sup>2</sup> Use Bracket P/N SA3-07

<sup>3</sup> Use Bracket P/N SA3-11

<sup>4</sup> Must use consolidated gascolator P/N 5221

<sup>5</sup> Systems with 3/8" fuel lines use SA3-00, systems with 1/2" fuel lines use SA3-10-C

Eligibility continued on next page

FAA-PMA Approved



Continued from previous page

Aircraft	S/N	1/4 NPT (3/8 ID Fuel Line) Gasolators P/Ns	SA3-00 3 oz bowl	SA3-00-A 4 oz bowl	SA3-00-B 3 oz bowl with top mount cover	SA3-00-B-D 3 oz with top mount cover with remote drainable bowl, no bracket	SA3-00-BS 3 oz bowl for Vulcan Air/Partenavia aircraft only	SA3-00-C 4 oz bowl with top mount cover	SA3-00-D 4 oz remote drainable bowl	3/8 NPT (1/2 ID Fuel Line) Gasolators P/Ns	SA3-10 4 oz bowl	SA3-10-A 4 oz bowl with top mount cover	SA3-10-A-D 4 oz with top mount cover with remote drainable bowl, no bracket	SA3-10-B 3 oz bowl	SA3-10-C 3 oz bowl with top mount cover	SA3-10-D 4 oz remote drainable bowl
<b>Cessna</b>																
177, 177A, 177B	All <sup>1</sup>															
180, 180A, B, C, D, E, F, G, H <sup>1</sup>	30000 thru 18051496															
180H <sup>1</sup> J, K	18051497 thru 18053203 <sup>3</sup>															
182, 182A, B, C, D, E, F, G, H <sup>1</sup>	33000 thru 18256039															
182H <sup>1</sup> J, K, L, M, N, P, Q	18256040 and On <sup>1</sup>															
185, 185A, B, C, D <sup>1</sup>	185-0001 thru 185-0843															
185D <sup>1</sup> , E, A185E, F	185-0844 and On <sup>1</sup>															
210-5(205), 210-5A(205A), 206	All															
U206A, B, C, D, E, F, G, TU206A, B, C, D, E, F, G	All <sup>1</sup>															
210, 210A, B, C, D, E, 310, 310A, B, C, D, F, G, H, I, J, K	All															
305A, B, C, D, E, F	All															
<b>Champion/Aeronca</b>																
7AC, 7ACA, 7BC, 7CC, 7DC, 7EC, 7ECA, 7FC, 7KAB, 7AC, 7CCM, 7DC, 7SEC, 8KCAB, 11AC, 11BC, S11AC, S11BC	All															
11CC, S11CC	All															
7GCAA, 7GCBC, 8GCBC	All															
<b>Emigh (Edward Scott Kearns)</b>																
A-2	All															
<b>Ercoupe (Univair)</b>																
A-2	All															
A2-A	All															
415-C, 415-CD, 415-D, F-1, F-1A	All															
415-E	All															
M10	All															
<b>Extra Flugzeugbau GmbH EA</b>																
300, 300/200, 300/L, 300/S	All															
300/LC																
<b>Interstate Aircraft (STOL)</b>																
S-1A, S-1A-65F, S-1A-85F, S-1A-90F	All															
<b>Luscombe</b>																
8, 8A, 8B, 8C, 8D, 8E, 8F, T-8F	All															
<b>Maule Bee Dee</b>																
M-4, 4C, 4S, 4T, M-4-180C, 180S, 180T, M-4-210, 210C, 210S, 210T, 220C, 220S, 220T, M-5-180C, 210C, 210TC, 220C, 235C, M-6-180, 235, M-7-235, M-7-235-A, B, C, M-7-260, 260C, MT-7-235, 260, MX-7-160, 160C, 180, 180AC, 180B, 180C, 235, MXT7-160, 180, 180A, M-8-235,	All <sup>1</sup>															
M-5-200	All															
<b>Mooney</b>																
M10																
M-18C, 18C55, 18L, 18LA, M20, M20A, B, C, D, E, F, G, J, K, L, M, R, S, TN <sup>4</sup>	All															
<b>Navion</b>																
(Sierra Hotel Aero), (Army L-17A), A, B, D, E, F, G, H	All															
<b>Partenavia</b>																
P.68, 68B, 68C, 68C-TC	All															
<b>Piper</b>																
AE-1, HE-1, JC3-40, 50, 50S, 65, 65S, J3F-50, 50S, 60, 60S, 65, 65S, J3L, J3L-65, 65S, J3L-S, J4, J4A, A-S, J4E, J5A, J5A-80, J5B, J5C	All															
PA-11, PA-11S, PA12, PA12S, PA-14, PA-15, PA-16, PA-16S, PA-17	All															
PA-18, PA-18A, PA-18S, PA-18 "105" (Special), PA-18S "105", PA-18 "125", PA-18AS "125", PA-18S "125", PA-18 "135", PA-18A "135", PA-18AS "135", PA-18S "135", PA-18 "150", PA-18A "150", PA-18AS "150", PA-18S "150", PA-19 (Army L-18C), PA-19S	All															
PA-20, PA-20 "115", PA-20 "135", PA-20S	All															
PA-20S "115", PA-20S "135", PA-22, PA-22-108, 135, 150, 160, PA-22S-135, 150, 160	All															
PA-23, PA-23-160, 235, 250, -E23-250	All															
PA-24	24-1 thru 24-2298															
PA-25	All															
PA-25-235, PA-25-260	25-7405573 thru 25-8156024															
PA-28-140, 150, 151, 160, S-160, 161, 180, R-180, S-180, 181, R-200, RT201, RT201T, 236	All															
PA-28-235	All															
PA-28-201T, PA-28R-201, PA-28R-201T, PA-38-112	All															
<b>Robinson</b>																
R22, R44, R44II	All															
<b>Rockwell (Commander Aircraft)</b>																
112	3 thru 220															
<b>Stinson</b>																
108, 108-1	All															
108-2, 108-3	All															
<b>Swift</b>																
GC-1A, 1B	All															
<b>Taylorcraft</b>																
BC, BC12-65, BC12-D, BC12-D1, BC12-D85, BC-65, BCS, BCS12-D, BCS12-D1, BCS12D-85, BCS12D-4-85, BCS12-65, BCS-65, DCI-65	All															
DC-65, DF-65, DL-65, DCO-65, F19, F21	All															

<sup>1</sup> Partial Model Eligibility  
<sup>2</sup> Use Bracket P/N SA3-07  
<sup>3</sup> Use Bracket P/N SA3-11  
<sup>4</sup> Must use consolidated gasolator P/N 5221  
<sup>5</sup> Systems with 3/8" fuel lines use SA3-00. Systems with 1/2" fuel lines use SA3-10-C.

## Improved Fuel Strainer Seal Kits for Piper Aircraft

### Better seal at half the price!

Each kit includes both the upper and lower seal for one fuel strainer. Parts also available individually.

#### PA-23 and PA-44 Series: Kit P/N FSP-KT-1

#### Replace leaky copper crush seals with high performance Stat-O-Seals

McFarlane has FAA-PMA approval to replace the high priced P/N 753-205 copper crush gaskets on the Aztec, Apaches and Seminoles with stainless steel/fluorocarbon Stat-O-Seals. The old copper crush gaskets were unreliable and poorly suited for sealing against the small lip on the bottom of the fuel bowl. They often required several attempts to get a satisfactory seal (expensive at \$12 per seal). With McFarlane's improved Viton Stat-O-Seal design **a positive seal is easy to achieve!** Kit also includes P/N MC751-882 upper gasket.

Graphics not to scale



P/N 753-205  
Copper Crush  
Gasket

FSP-KT-1  
P/N MC751-882 Upper Gasket and  
P/N MC753-205 Lower Stat-O-Seal

#### PA-31, PA-34, PA-36, and PA-46 Series: Kit P/N FSP-KT-2

#### Fuel Proof O-Rings and Stat-O-Seals

Improved FAA-PMA O-rings and Stat-O-Seals feature fuel proof fluorocarbon that won't swell or degrade like the original Buna N seals.

Graphics not to scale



FSP-KT-2  
P/N MC757-255 Upper O-ring and  
P/N MC751-898 Lower Stat-O-Seal

#### PA-24, PA-28-235, PA-30, PA-32, and PA-39 Series: Kit P/Ns FSP-KT-3 and FSP-KT-4

#### Fuel Bowl Gasket and O-Rings

FSP-KT-3 replaces P/N 751-871 upper gasket and MS29513-008 (supersedes Piper P/Ns 755-919, 485-331, and 485-332) lower seal O-ring used on most of these aircraft. However, some PA-28-235 and PA-32 series aircraft use a newer style fuel strainer that use a MS29513-043 (supersedes Piper P/Ns 762-503 and 483-330) O-ring for an upper seal instead of the 751-871 gasket. These aircraft must use P/N FSP-KT-4. Kits contain FAA-PMA gaskets and standard O-rings. These kits include the correct O-rings per Piper Service Bulletin 1198A.



Gasket  
P/N CA751-871

Graphics not to scale

P/N MS29513-008 O-ring  
P/N MS29513-043 O-ring

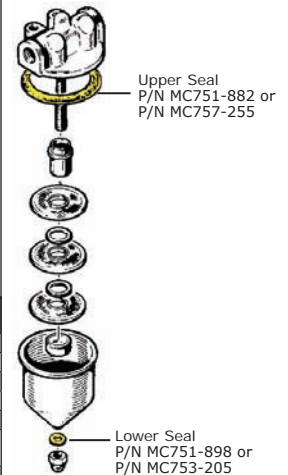
FSP-KT-3  
P/N CA751-871 Gasket and  
P/N MS29513-008 O-ring

FSP-KT-4  
P/N MS29513-043 O-ring and  
P/N MS29513-008 O-ring

#### PA-28 Series (except PA-28-235): P/N CA462-049

#### Fuel Strainer/Gascolator Gasket

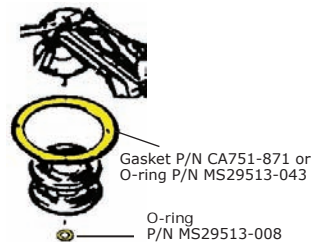
FAA-PMA approved direct replacement for Piper P/N 462-049. P/N CA462-049 not recommended to be used with autogas.



Upper Seal  
P/N MC751-882 or  
P/N MC757-255

Lower Seal  
P/N MC751-898 or  
P/N MC753-205

Aircraft Model	Serial Number	Gasket/O-ring Upper Seal P/N	Gasket/O-ring Lower Seal P/N	Kit P/N
PA-23-235, 250	All	MC751-882	MC753-205	FSP-KT-1
PA-E23-250	All	MC751-882	MC753-205	FSP-KT-1
PA-24-400	All	CA751-871	MS29513-008	FSP-KT-3
PA-28-140, 150, 160, 180	All	CA462-049	N/A	N/A
PA-28-151, 161	All	CA462-049	N/A	N/A
PA-28-181	28-7690001 thru 28-7990626 and 28-8090001 thru 28-8690062	CA462-049	N/A	N/A
PA-28-201T	All	CA462-049	N/A	N/A
PA-28-235	All	CA751-871 (gasket) or MS29513-043 (O-ring)	MS29513-008	FSP-KT-3 (gasket) FSP-KT-4 (O-ring)
PA-28-236	All	CA462-049	N/A	N/A
PA-28R-180	All	CA462-049	N/A	N/A
PA-28R-200	All	CA462-049	N/A	N/A
PA-28R-201, 201T	All	CA462-049	N/A	N/A
PA-28RT-201, 201T	All	CA462-049	N/A	N/A
PA-30	All	CA751-871	MS29513-008	FSP-KT-3
PA-31	All	MC757-255	MC751-898	FSP-KT-2
PA-31-300	All	MC757-255	MC751-898	FSP-KT-2
PA-31-325	All	MC757-255	MC751-898	FSP-KT-2
PA-31-350, 350 (T1020)	All	MC757-255	MC751-898	FSP-KT-2
PA-31P, 350	All	MC757-255	MC751-898	FSP-KT-2
PA-32-260	All	CA751-871 (gasket) or MS29513-043 (O-ring)	MS29513-008	FSP-KT-3 (gasket) FSP-KT-4 (O-ring)
PA-32-300	All	CA751-871 (gasket) or MS29513-043 (O-ring)	MS29513-008	FSP-KT-3 (gasket) FSP-KT-4 (O-ring)
PA-34-200T, 220T	All	MC757-255	MC751-898	FSP-KT-2
PA-36-285, 300, 375	All	MC757-255	MC751-898	FSP-KT-2
PA-38-112	All	CA462-049	N/A	N/A
PA-39	All	CA751-871	MS29513-008	FSP-KT-3
PA-44-180, 180T	All	MC751-882	MC753-205	FSP-KT-1
PA-46-310P, 350P	All when equipped with filter assembly 561-046 or 599-180 (Air Maze)	MC757-255	MC751-898	FSP-KT-2
PA-46R-350T	All when equipped with filter assembly 561-046 or 599-180 (Air Maze)	MC757-255	MC751-898	FSP-KT-2



Gasket P/N CA751-871 or  
O-ring P/N MS29513-043

O-ring  
P/N MS29513-008



Gasket  
P/N CA462-049



**Fuel and Oil Quick Drain Valves**

Save! Large Selection, Low Price

- Simple operation - spring load close
- FAA-PMA, FAA-TSO-C76 or MIL-SPEC approved
- A clean no mess way to test and drain fuel or oil



**SAF-AIR Aviation Products**

SAF-AIR has produced high quality close-tolerance valves since 1959. They are unique because their valves have replaceable O-rings.

- Unique O-ring placement prevents leaks by eliminating an area where dirt can gather
- O-rings can be replaced instead of buying a new valve
- Seal kits available

**Curtis Superior Valve Co. Inc.**

Curtis has produced, engineered, manufactured, and tested aircraft valves to exacting standards since 1944. They have over forty standard valves to solve a wide range of problems

- Corrosion resistant, stainless steel springs
- Specially compounded "cure dated" synthetic rubber seals to withstand a wide variety of liquids over a broad temperature range
- Unique wedge seal design prevents leakage



**Fuel Drain Valve Selection Table**

**Thread:** "UNF" (Fine thread) type are straight, non-sealing threads that rely on an O-ring to provide a seal. "NPT" (Pipe Thread) type are tapered threads that seal as they are tightened. Measure the O.D. of the thread on the valve you are replacing and compare to the thread specifications table on page 75 to determine the correct thread size.

**Locking:** Indicated valves lock in the open position for easy draining.

**Flush mounted:** Indicated valves are designed to mount flush with aircraft skin.

**Use Pin Type Cup:** Pin type cups similar to P/N CCA-39680 or MCCA-39680 may be used with indicated valves for sampling fuel.

**Open Action:** "Spiral" valves require a push and turn action to open, "Push" valves require a push action to open.

**Hose Adapter Size:** A hose may be attached to the indicated valves for ease of draining fuel. The size indicated is the hose I.D.



























































































































Thread	Locking	Flush Mounted	Use Pin Type Cup	Open Action	Hose Adapter Size	Material	Approval Type and Conformity Notes	OEM	Part Number and Notes	See Figure on pg 74	Alternate P/Ns
	•		•	Push	1/2"	360 Brass	FAA-TSO-C76	SAF-AIR	C500	3	22 CCA-3400
	•			Spiral	1/2"	Brass, Unplated	FAA-TSO-C76	Curtis	CCA-3400	9	59 C500
1/8 NPT						360 Brass	FAA-TSO-C76	SAF-AIR	B187		21
1/8 NPT				Push	1/4"	360 Brass	FAA-PMA	SAF-AIR	CAV-110H-4	1	24 BJ1000AH1
1/8 NPT				Spiral		Brass, Cad Plate	FAA-TSO-C76	Curtis	CCA-36150	3	61 BJ1000AS1MY, CAV-110
1/8 NPT			•	Push		360 Brass	FAA-PMA	SAF-AIR	CAV-110	1	23 BJ1000AS1MY, CCA-1250, CCA-1550, CCA-36150, CCA-7450, CCB-36700
1/8 NPT			•	Push		Brass, Cad Plate	FAA-TSO-C76	Curtis	CCB-36700	2	90 BJ1000AS1MY, CAV-110
1/8 NPT			•	Push		Brass, Unplated	FAA-TSO-C76	Curtis	CCA-1800	1	44 CAV-110, BJ1000AS1MY
1/8 NPT			•	Push		303 SS	Experimental	SAF-AIR	110SS		2
1/8 NPT			•	Push	1/4"	303 SS	Experimental	SAF-AIR	110HSS		1
1/8 NPT		•	•	Push		360 Brass	FAA-TSO-C76	SAF-AIR	SA18	1	113 491-806, CCA-2500, F391-18, S2106-3
1/8 NPT		•	•	Push		360 Brass	FAA-TSO-C76	SAF-AIR	SA187	1	114 491-806, CCA-250, F391-187, S2106-3
1/8 NPT		•	•	Push		Brass, Unplated	FAA-TSO-C76	Curtis	CCA-2500	7	53 491-806, F391-187B, F391-88, S2106-3, SA-18, SA-187
1/8 NPT	•			Push		Brass, Unplated	FAA-TSO-C76	Curtis	CCA-1550	3	40 1250, 492-100, 492-022, BJ1000AS1MY, BJ1000A-1, CAV-110
1/8 NPT	•		•	Push		360 Brass	FAA-TSO-C76	SAF-AIR	1250	1	9 BJ1000A-1, CCA-1250, CCA-1550, CCA-7450
1/8 NPT	•			Push	1/4"	360 Brass	FAA-TSO-C76	SAF-AIR	1250H	1	10 BJ1000AH1
1/8 NPT	•			Spiral		Anodized/Aluminum	Experimental	Curtis	CCA-1100	1	33
1/8 NPT	•			Spiral		Anodized/Aluminum	FAA-TSO-C76	Curtis	CCA-1150		34
1/8 NPT	•			Spiral		Brass, Cad Plate	FAA-TSO-C76	Curtis	CCA-4850		70 1250, 492-100, 492-022, BJ1000A-1
1/8 NPT	•			Spiral		Brass, Cad Plate	FAA-TSO-C76	Curtis	CCA-7450	3	78 BJ1000AS1MY, CAV-110, CCA-1250
1/8 NPT	•			Spiral		Brass, Cad Plate	FAA-TSO-C76	Curtis	CCA-9950	7	84
1/8 NPT	•			Spiral		Brass, Unplated	FAA-TSO-C76	Curtis	CCA-1250		36 1250, 492-100, 492-022, BJ1000A-1, BJ1000AS1MY, CAV-110
1/8 NPT	•			Spiral		Stainless Steel	FAA-TSO-C76	Curtis	CCB-36750	7	91 1250, 492-100, 492-022, BJ1000A-1, BJ1000A-2
1/4 NPT				Push	1/4"	360 Brass	FAA-PMA	SAF-AIR	CAV-160H-4	1	26 BJ1000AH2
1/4 NPT			•	Push		303 SS	Experimental	SAF-AIR	160SS		4
1/4 NPT			•	Push	1/4"	303 SS	Experimental	SAF-AIR	160HSS		3
1/4 NPT			•	Push		360 Brass	FAA-PMA	SAF-AIR	CAV-160	1	25 BJ1000AS1MX, CCA-1300, CCA-1600, CCA-4900
1/4 NPT			•	Push		Brass, Unplated	FAA-TSO-C76	Curtis	CCA-1900	1	45 CAV-160, BJ1000AS1MX
1/4 NPT			•	Push		304 Stainless	FAA-TSO-C76	SAF-AIR	SA-60S		119
1/4 NPT			•	Push		360 Brass	FAA-TSO-C76	SAF-AIR	SA14		112 CCA-2600, F391-14
1/4 NPT			•	Push		Brass, Unplated	FAA-TSO-C76	Curtis	CCA-2600	7	54 F391-14, SA-14
1/4 NPT	•		•	Push		360 Brass	FAA-TSO-C76	SAF-AIR	2500	1	11 BJ1000A-2, CCA-1300, CCA-1600, CCA-4900
1/4 NPT	•		•	Push	1/4"	360 Brass	FAA-TSO-C76	SAF-AIR	2500H	1	12 BJ1000AH2
1/4 NPT	•			Push		Brass, Cad Plate	FAA-TSO-C76	Curtis	CCA-3600		60
1/4 NPT	•			Push		Brass, Cad Plate	FAA-TSO-C76	Curtis	CCA-4800	7	69
1/4 NPT	•			Push		Brass, Unplated	FAA-TSO-C76	Curtis	CCA-1600		41 2500, BJ1000A-2
1/4 NPT	•			Spiral		Brass, Cad Plate	FAA-TSO-C76	Curtis	CCA-4900		71 2500, BJ1000A-2
1/4 NPT	•			Spiral		Brass, Unplated	FAA-TSO-C76	Curtis	CCA-1300		37 2500, BJ1000A-2
1/4 NPT	•			Spiral		Stainless Steel	FAA-TSO-C76	Curtis	CCA-39000		63
3/8 NPT	•			Push		Brass, Unplated	FAA-TSO-C76	Curtis	CCA-1650		42 BJ1000A-3, P3750
3/8 NPT	•			Push		Anodized/Aluminum	None	Curtis	CCA-7000		77
3/8 NPT	•		•	Push		360 Brass	FAA-TSO-C76	SAF-AIR	P3750	1	105
3/8 NPT	•			Spiral		Brass, Cad Plate	FAA-TSO-C76	Curtis	CCA-4950		72 BJ1000A-3, P3750
3/8 NPT	•			Spiral		Brass, Unplated	FAA-TSO-C76	Curtis	CCA-1350		38
3/8-24 UNF			•	Push		303 SS	Experimental	SAF-AIR	180SS		8
3/8-24 UNF			•	Push	1/4"	303 SS	Experimental	SAF-AIR	180HSS		7
3/8-24 UNF			•	Push		360 Brass	FAA-PMA	SAF-AIR	CAV-180	1	29 1100B52Z
3/8-24 UNF				Push	1/4"	360 Brass	FAA-PMA	SAF-AIR	CAV-180H-4	1	30

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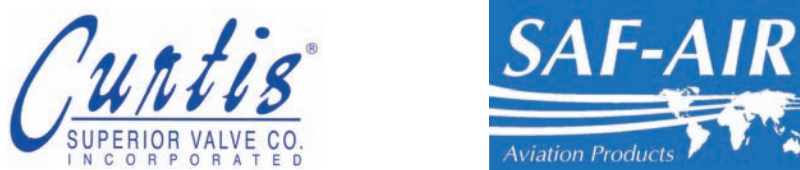


Figures 1-107 Photos are not to scale relative to each other

1  110HSS 1/8 NPT	2  110SS 1/8 NPT	3  160HSS 1/4 NPT	4  160SS 1/4 NPT	5  170HSS 7/16-20 UNF	6  170SS 7/16-20 UNF	7  180HSS 3/8-24 UNF	8  180SS 3/8-24 UNF	9  1250 1/8 NPT	10  1250H 1/8 NPT	11  2500 1/4 NPT	12  2500H 1/4 NPT	13  3750 3/8-24 UNF	14  3750H 3/8-24 UNF	15  4350-6L 7/16-20 UNF
16  4375 7/16-20 UNF	17  4375H 7/16-20 UNF	18  A5020 1/2-20 UNF	19  A5625 9/16-18 UNF	20  A62-INV 5/8-18 UNF	21  B187	22  C500	23  CAV-110 1/8 NPT	24  CAV-110H-4 1/8 NPT	25  CAV-160 1/4 NPT	26  CAV-160H-4 1/4 NPT	27  CAV-170 7/16-20 UNF	28  CAV-170H-4 7/16-20 UNF	29  CAV-180 3/8-24 UNF	30  CAV-180H-4 3/8-24 UNF
31  CAV-2165 M16x1.6	32  CAV-M165H5 M16x1.6	33  CCA-1100 1/8 NPT	34  CCA-1150 1/8 NPT	35  CCA-1200 3/4-16 UNF	36  CCA-1250 1/8 NPT	37  CCA-1300 1/4 NPT	38  CCA-1350 3/8 NPT	39  CCA-1400 1/2 NPT	40  CCA-1550 1/8 NPT	41  CCA-1600 1/4 NPT	42  CCA-1650 3/8 NPT	43  CCA-1700 1/2 NPT	44  CCA-1800 1/8 NPT	45  CCA-1900 1/4 NPT
46  CCA-2000 3/8-24 UNF	47  CCA-2100 7/16-20 UNF	48  CCA-2440 14MM 1.50	49  CCA-2450 12MM 1.75	50  CCA-2460 1/2-20 UNF	51  CCA-2475 12MM 1.75	52  CCA-2485 1/2-20 UNF	53  CCA-2500 1/8 NPT	54  CCA-2600 1/4 NPT	55  CCA-2700 3/8-24 UNF	56  CCA-2800 7/16-20 UNF	57  CCA-2900 1/2-20 UNF	58  CCA-31300 9/16-18 UNF	59  CCA-3400	60  CCA-3600 1/4 NPT
61  CCA-36150 1/8 NPT	62  CCA-36400 9/16-18 UNF	63  CCA-39000 1/4 NPT	64  CCA-39500 9/16-18 UNF	65  CCA-39550 5/8-18 UNF	66  CCA-39560 5/8-18 UNF	67  CCA-4300 7/16-20 UNF	68  CCA-4350 9/16-18 UNF	69  CCA-4800 1/4 NPT	70  CCA-4850 1/8 NPT	71  CCA-4900 1/4 NPT	72  CCA-4950 3/8 NPT	73  CCA-5400 7/16-20 UNF	74  CCA-5800-1 7/16-20 UNF	75  CCA-5800-3 7/16-20 UNF
76  CCA-6000 9/16-18 UNF	77  CCA-7000 3/8 NPT	78  CCA-7450 1/8 NPT	79  CCA-7500 3/4-16 UNF	80  CCA-7500-1 3/4-16 UNF	81  CCA-7500-2 3/4-16 UNF	82  CCA-7500-5 3/4-16 UNF	83  CCA-7600 3/4-16 UNF	84  CCA-9950 1/8 NPT	85  CCB-33000 5/8-18 UNF	86  CCB-36000H 1/2-14 NPT	87  CCB-36350-1 3/4-16 UNF	88  CCB-36450 3/4-16 UNF	89  CCB-36450-5 3/4-16 UNF	90  CCB-36700 1/8 NPT
91  CCB-36750 1/8 NPT	92  CCB-37000 1/2 NPT	93  CCB-37500 3/4-16 UNF	94  CCB-38000 1/2 NPT	95  CCB-4320 7/16-20 UNF	96  F10 1"-18 UNF	97  F167 3/4-16 UNF	98  F175 3/4-14 NPT	99  F50 1/2-14 NPT	100  F62 5/8-18 UNF	101  F75 3/4-16 UNF	102  M12175 12MM 1.75	103  M14150 14MM 1.50	104  M20150 20MM 1.50	105  P3750 3/8 NPT
106  P5000 1/2-14 NPT	107  P7500 3/4-14 NPT	108  S1000 1"-18 UNF	109  S5020J 1/2-20 UNF	110  S6250 5/8-18 UNF	111  S7516 3/4-16 UNF	112  SA14 1/4 NPT	113  SA18 1/8 NPT	114  SA187 1/8 NPT	115  SA32 3/8-24 UNF	116  SA5020 1/2-20 UNF	117  SA53S 7/16-20 UNF	118  SA5817-4C 3/4-16 UNF	119  SA-60S 1/4 NPT	120  SA72 7/16-20 UNF
121  SA82 1/2-20 UNF														



SA82  
1/2-20 UNF





## Locking Oil Drain Valves

Feature a detent to lock in the open position.

### Oil Drain Valves Selection Guide

**Thread:** "UNF" (Fine thread) type are straight, non-sealing threads that rely on an O-ring to provide a seal. "NPT" (Pipe Thread) type are tapered threads that seal as they are tightened. Others are metric threads. Measure the O.D. of the thread on the valve you are replacing and compare to the thread specification table in maintenance tips to determine the correct thread size.

**Open Action:** Spiral valves require a push and turn action to open.

**Hose Adapter:** A hose adapter may be attached to the indicated valves for ease of draining. The size indicates the hose I.D.



P/N S6250

Thread	Open Action	Hose Adapter Size	Material	Approval	OEM	Part Number	See Figure on pg 56
1/2-14 NPT	Push	3/8"	2011 Aluminum, 302 Stainless	FAA-PMA	SAF-AIR	P5000	3 106
1/2-14 NPT	Push		Aluminum	FAA-PMA	Curtis	CCB-38000	3 94
1/2-14 NPT	Spiral	3/8"	360 Brass, 302 Stainless	FAA-PMA	SAF-AIR	F50	3 5 99
1/2-14 NPT	Push		Aluminum	None	Curtis	CCB-36000H <b>New!</b>	3 86
1/2-20 UNF		3/8"		None	SAF-AIR	A5020	3 18
1/2-20 UNF	Push	3/8"	2011 Aluminum, 302 Stainless	FAA-PMA	SAF-AIR	S5020J	3 109
1/2-20 UNF	Spiral	3/8"	Brass, Unplated	None	Curtis	CCA-2460	3 50
1/2-20 UNF	Spiral	3/8"	Brass, Unplated	None	Curtis	CCA-2485	2 52
3/4-14 NPT	Push	3/8"	2011 Aluminum, 302 Stainless	FAA-PMA	SAF-AIR	P7500	3 107
3/4-14 NPT	Spiral	3/8"	360 Brass, 302 Stainless	FAA-PMA	SAF-AIR	F175	3 98
3/4-16 UNF	Push	3/8"	2011 Aluminum, 302 Stainless	FAA-PMA	SAF-AIR	S7516	3 111
3/4-16 UNF	Spiral	3/8"	360 Brass, 302 Stainless	FAA-PMA	SAF-AIR	F167	3 97
5/8-18 UNF	Push	3/8"	2011 Aluminum, 302 Stainless	FAA-PMA	SAF-AIR	S6250	3 110
5/8-18 UNF		3/8"	2011 Aluminum, 302 Stainless	None	SAF-AIR	A62-INV	4 20
5/8-18 UNF	Spiral	3/8"	360 Brass, 302 Stainless	FAA-PMA	SAF-AIR	F62	3 5 100
5/8-18 UNF		3/8"	Aluminum	None	Curtis	CCB-32000 <b>New!</b>	3 85
5/8-18 UNF	Push	3/8"	Aluminum	None	Curtis	CCB-33000 <b>New!</b>	3 85
1"-18 UNF	Push	3/8"	2011 Aluminum, 302 Stainless	FAA-PMA	SAF-AIR	S1000	3 108
1"-18 UNF	Spiral	3/8"	360 Brass, 302 Stainless	FAA-PMA	SAF-AIR	F10	3 5 96
12MM 1.75	Push	3/8"	2011 Aluminum, 302 Stainless	FAA-PMA	SAF-AIR	M12175	3 102
12MM 1.75	Spiral	3/8"	Brass, Unplated	None	Curtis	CCA-2450	49
12MM 1.75	Spiral	3/8"	Brass, Unplated	None	Curtis	CCA-2475	1 51
14MM 1.50	Spiral	3/8"	Brass, Unplated	None	Curtis	CCA-2440	48
20MM 1.50	Push	3/8"	2011 Aluminum, 302 Stainless	FAA-PMA	SAF-AIR	M20150	3 104
		3/8"	2011 Aluminum, 302 Stainless		SAF-AIR	M14150	3 103

- Includes P/N CCA-2450 valve and P/N CCA-2470 adapter
- Includes P/N CCA-2460 valve and P/N CCA-2480 adapter
- Replacement o-ring kits available. Add "K" or "-K" to valve part number.
- Used with AN6, AN8 and AN10 adapters to replace a cap. The valve and adapter are sold together.
- Two piece, low profile valve. P/N F50-180 opener that attaches straight out of the valve is included. P/N F50-90 opener which attaches at a 90 angle is also available.
- For non-certified aircraft only
- For use on UL engines
- Includes P/N CCB-38000 or CCB-32000 valve and P/N CCA-38001 activation tool.

## Oil Drain Valve Adapters and Openers

Used with CCA-2450 and CCA-2460 oil drain valves to adapt to Rotax and Jabiru engines. Adapters are for non-certified aircraft only.



P/N CCA-2470  
P/N CCA-2480



P/N CCA-2474



P/N F50-90



P/N F50-180

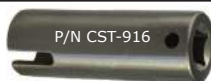


P/N RM12175

P/N	Thread	Material	Description
AN6-INV		2011 Aluminum	Christen inverted oil system
AN8-INV		2011 Aluminum	Christen inverted oil system
AN10-INV		2011 Aluminum	Christen inverted oil system
CCA-2470	12MM 1.75	Aluminum	Rotax 90-Degree adapter for CCA-2450 oil drain valve
CCA-2474	12MM 1.75	Aluminum	Rotax oil tank adapter for late models with CCA-2450 oil drain valve
CCA-2480	1/2-20 UNF	Aluminum	Jabiru 90-Degree adapter for CCA-2460 oil drain valve
F50-90			Opener - attaches at a 90 degree angle from valve.
F50-180			Opener - attaches straight out of the valve.
M1290B	1/2-20 UNF	2011 Aluminum	Banjo Bolt, Rotax for S5020J oil drain valve
M1490B	1/2-20 UNF	2011 Aluminum	Banjo Bolt, Volkswagen for S5020J oil drain valve
RM12175		2011 Aluminum	Rotax, Oil must be used on all new oil tanks being produced by Rotax as they changed the internal design on the tank requiring an adapter to use an oil drain valve.
S5090B	1/2-20 UNF	2011 Aluminum	Banjo Bolt, Jabiru for S5020J oil drain valve
S6290B	5/8-18 UNF	2011 Aluminum	Banjo Bolt, Continental for S6250 oil drain valve

## Installation Sockets

Used to torque valves to desired specifications and also prevents valve damage upon installation and removal.



P/N CST-916

P/N	For use with valve P/N
CST-78	Fits all 7/8 Hex Valves CCA-1400, CCA-1700, CCB-37000, CCA-39550, CCA-39560
CST-716	Fits all 7/16 Hex Valves CCA-1250, CCA-1550, CCA-4850, CCA-7450, CCA-9950, CCA-36150, CCB-36750
CST-916	Fits all 9/16 Hex Valves CCA-1300, CCA-1600, CCA-3600, CCA-4800, CCA-4900, CCA-39000
CST-1116	Fits all 11/16 Hex Valves CCA-1350, CCA-1650, CCA-2440, CCA-2450, CCA-2460, CCB-4320, CCA-4950, CCA-5400, CCA-5800-1
CST-36450	For removal of certain Curtis flush mounted valves CCB-36450, CCB-36450-5

## Maintenance Tips:

Curtis Superior and SAF-AIR valves are designed for installation in a standard NPT port for NPT threaded valves or an AND-10050 style port for UNF threaded valves. Use a sealant on NPT threaded valves or a fuel resistant O-ring of the proper size for UNF threaded valves. Refer to aircraft manufacturer's torque specifications for the aircraft in which it is being used or to the torque specifications in the table below for Curtis valves.

Replace the rubber seals as per the aircraft manufacturer's recommendations or every ten years when no guidance is given. McFarlane stocks replacement seals and seal kits for both Curtis Superior and SAF-AIR. The new Curtis valves use a O-ring type seal instead of the flat seal that was previously used.

SAF-AIR valves are designed to be disassembled and the O-rings replaced. Over time, if the valve should start to leak, check to make sure the drain valve is tight. If drain valve is found to be tight, then check the O-rings. All O-rings used are buna "n", MS29513 Style, MIL-P-5315. SAF-AIR O-ring seal kits are available for most of their valves. Add a "K" or "-K" suffix to the valve part number.

Never have a hose attached in flight to the oil drain valve. Engine vibration and the additional attached mass can cause premature seal and valve wear which could result in valve failure and a loss of engine oil.

Thread Specifications		
Thread O.D.	Thread	Curtis Torque Spec
0.375	3/8-24 UNF	80-85 In. Lbs
0.405	1/8-27 NPT	40-45 In. Lbs
0.438	7/16-20 UNF	80-85 In. Lbs
0.500	1/2-20 UNF	80-85 In. Lbs
0.540	1/4-18 NPT	80-85 In. Lbs
0.563	9/16-18 UNF	80-85 In. Lbs
0.625	5/8-18 UNF	100-115 In. Lbs
0.675	3/8-18 NPT	105-115 In. Lbs
0.750	3/4-16 UNF	80-85 In. Lbs
0.840	1/2-14 NPT	155-165 In. Lbs
Special Threads with Crush Washers		
Valve P/N	Thread	Curtis Torque Spec
CCA-2450	12MM 1.75	60-75 In. Lbs
CCA-2460	1/2-20	60-70 In. Lbs
CCA-2470	12MM 1.75	60-70 In. Lbs
CCA-2480	12-50	60-70 In. Lbs

## Quick Drain Hoses

Curtis Quick Drain Hoses are designed to work with the Curtis Quick Drain Valves. In most cases, a simple push and twist action locks the Quick Drain Hose in place. Waste liquid flows through five feet of high grade vinyl tubing, preventing messy spills and making a safer, cleaner environment. Tubing will not harden in sub-freezing temperatures.



P/N CCB-39600-5

P/N	Connector Color	Used with Valve P/N
CCB-39600-1	Black	CCA-1400, CCA-1700, CCA-39550
CCB-39600-2	Blue	CCA-1350, CCA-2450, CCA-1650, CCA-4950
CCB-39600-3	Yellow	CCA-1300, CCA-1600, CCA-3400, CCA-3600, CCA-4800, CCA-4900, CCA-39000
CCB-39600-4	Silver	CCA-4350, CCA-36400
CCB-39600-5	Brass	CCA-1250, CCA-1550, CCA-4300, CCA-7450, CCA-9950

Manufactured by Curtis Superior Drain Co., Inc.

# Electricity in the Fuel Tank

## Is it Safe?

By Dave McFarlane

Have you ever thought about those fuel quantity transmitters in your fuel tank? Just how much electricity go through them anyway? Is there any chance of a spark? Could they touch off an explosion? Could they be improved? How do they fail? These are some of the questions we had when we started to develop new FAA- PMA replacement fuel transmitters for the Cessna single engine airplanes. What we found out was quite shocking.

The first things we did were to review the aircraft electrical schematics for the fuel quantity system and dissect several fuel gages. A fuel indicating circuit was analyzed while it was working. Then we collected a lot of transmitters that were removed from service and a few new ones. Some of them still worked and some were obviously bad. After disassembly, the transmitter failure modes and defects were noted with the most common electrical defect being actual wear failure of the stainless-steel wire that is wound around a phenolic (laminated plastic) insulator board making up the variable resistor.

One particular defective transmitter caught our attention. The phenolic board was charred and discolored. This clearly indicating the stainless-steel resistor wires had been HOT! How did it get hot? There were no signs of external heat in the transmitter housing or flange that would indicate external heat or fire. Looking at and smelling this transmitter took me back twenty five years to when I ran a repair shop in Iowa. A customer brought in an almost new Cessna Agwagon that had an alternator run away due to a shorted field wire near the alternator. Before the pilot could shut down the master switch, the 28-volt system fried all the electrical components that were turned on at the time and the electrical instruments were brown and filled with smoke. I remember that the over-voltage had also damaged the fuel transmitters.

An over-voltage might explain our one hot transmitter, but Fred McClenahan, our design engineer, and I were not convinced that was the only possibility.

In the normal operating mode, there are only a few milliamps of current flowing through the fuel transmitter to ground. Buss (battery or alternator) voltage is put into the fuel quantity indicator where the fine wire instrument coils reduce the voltage going to the transmitter. The voltage and related amp flow is very small as it goes through the transmitter to the grounded fuel tank. The chance of a spark at the point of contact of the transmitter's resistor wiper arm on the stainless-steel wire is very remote.

***"Our certification tests proved that it will take the vibration and other abuses of the aircraft environment."***

The amp flow through the stainless steel resistive wire is so small it does not generate heat. But what happens when a malfunction occurs that would put full buss voltage directly to the transmitter? We were about to find out. Not having enough available amp power with our lab power supply, we took a good transmitter outside and lifted the hood on the company truck where we had the brute strength of a seven hundred amp Sears Die Hard®. We held the transmitter flange on the negative battery post and put a jumper wire from the positive post to the transmitter wire terminal. What I saw sent a cold chill down my spine. After a few seconds, the transmitter started to emit smoke and the stainless-steel resistor wire began to glow red hot!

Our certification tests proved that it will take the vibration and other abuses of the aircraft environment. Analyzing what this means,

we determined if you had a short in the transmitter wire as it goes up the aircraft door post and this wire was shorted to another buss voltage wire, let's say the navigation light wire, you would have the same situation as we had under the Ford hood. The only difference would be that the smoke and red hot wire would be in your gas tank just before dark and maybe at six thousand feet. Another possibility for this type of failure would be if the wire going to the fuel quantity indicator was to touch the wire leaving the fuel quantity indicator, shorting buss voltage to the normally low voltage transmitter wire. If a mechanic was to accidentally short the transmitter wire to buss voltage, he better yell "IGNITION" and clear the hangar because he just switched on the fuel tank glow plug!

Why haven't we seen a lot of single engine airplanes with fuel tank fires or blown off wings? I guess it says a lot for the wiring reliability designed into our light aircraft. Another factor might be that the fuel air mixture must be correct for a gasoline explosion. If the tank was near full there is very little oxygen in the tank.

Our next question was "what can we do to eliminate this risk?" The choices were to either keep the electricity out of the tank or find a resistor that would be safe at any voltage. Keeping the electricity out of the fuel tank would be very difficult without developing a totally different fuel quantity system with heavy modifications to the fuel

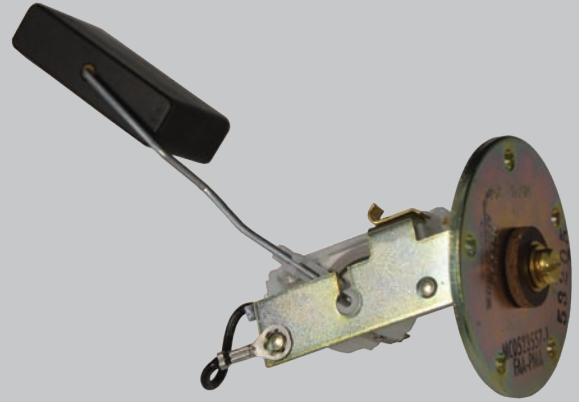
***"What can we do to eliminate this risk?"***

system itself.

Other styles of fuel tank senders were looked at and we finally discovered the new Stewart Warner® "Thick Film Ceramic" transducer technology. This resistor is built by coating a ceramic base with a hard semiconductor film. This film is then laser cut to the exact resistance needed. The beauty of this beast is that being a semiconductor it is "current limiting". In other words, applying more voltage has less effect on the number of amps that will flow through it. With limited amp flow, there is a corresponding limit to the heat that can be generated. The real test was to see how it reacted to the Sears Die-Hard®. When we duplicated our previous test at full voltage there was no heat generated at the higher resistance and about 350° F at the low resistance and the transmitter worked fine after the test.

One of the other advantages of this technology is the hard smooth and flat surface of the semiconductor. The follower arm does not have to jump over wires. Stewart Warner®'s tests show this resistor will out wear their wire wound type many times. The accuracy of the resistance inputs is improved by the laser precision and increased number of resistance divisions built into the resistor. Our certification tests proved that it will take the vibration and other abuses of the aircraft environment.

McFarlane Aviation Products has FAA-PMA transmitters for most single engine Cessna and Piper airplanes at substantial savings over the old wire wound replacements and we are developing them for other aircraft.





## Fuel Quantity Transmitters for Cessna and Piper Aircraft

McFarlane fuel quantity transmitters are direct replacements for originally installed Stewart Warner type fuel quantity transmitters. Eliminates the need for expensive transmitter conversion kits that require replacement of fuel gauges and wiring. McFarlane fuel quantity transmitters are engineered to be compatible with the original fuel quantity gauge and wiring which uses time proven technology and reliability. Each McFarlane fuel quantity transmitter is manufactured using proprietary McFarlane "thick film ceramic" resistor technology. The benefits are longer life and increased accuracy. All components are thoroughly tested to ensure reliable operation.

- Save hundreds of dollars!
- More accurate and lasts longer!
- Proprietary McFarlane thick film resistor technology
- Direct replacement for original factory installed

### Convenient Kits

Available individually or as kits including one transmitter, gasket(s) and screw/seal assemblies as applicable. (See charts below)

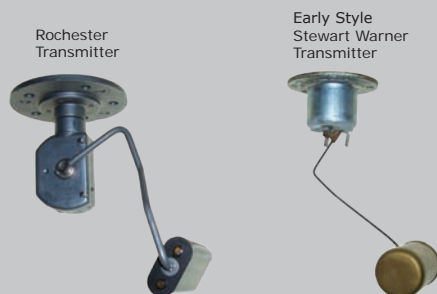


### Installation Warning:

*Do not replace the Rochester fuel quantity transmitter with the Stewart Warner transmitters. The electrical function is not compatible. Stewart Warner transmitters must be used to replace Stewart Warner transmitters only. Replacing the Rochester transmitter with the Stewart Warner transmitter will result in erroneous fuel quantity indications.*

*Some Cessna and Piper aircraft have been modified with a Service Kit to use the Rochester fuel quantity indicating system. This modification required changing the fuel quantity gage, transmitter, and other electrical components. Do not use the McFarlane (Stewart Warner) transmitters as a replacement for these aircraft.*

*McFarlane transmitters for Piper aircraft are not compatible with serial numbers other than those listed in the eligibility data.*



## Gaskets and Screw-Seal Assemblies for Cessna and Piper Aircraft

McFarlane fuel quantity transmitter gaskets are made from Dupont Viton®. Viton is the premier elastomer of the aerospace industry, offering flexibility and fuel resistance at all temperature extremes. Viton gaskets will not dry out or shrink like cork gaskets and do not harden with age like gaskets made from other elastomers. McFarlane gaskets are available for most single engine Cessna and Piper aircraft.

McFarlane screw-seal assemblies for Cessna aircraft have been engineered to eliminate chronic problems associated with fuel quantity transmitter hardware. Hex drive head screws made from stainless steel eliminate the corrosion process. The hex drive promotes ease of installation and eliminates the necessity for destructive down pressure during transmitter screw removal and installation. The stainless steel/Viton seal used on the hex drive screw provides a positive seal around the screw. No more leaks and seeps!

McFarlane screw-seal assemblies for Piper aircraft use the same time proven seals as our Cessna screw/seal assemblies but use a slotted screw with safety wire holes.



## Fuel Transmitter Access Cover Gaskets for Cessna Aircraft

P/Ns MC0523619-1 and MC1422306-1

- Retains position and shape with an adhesive backing!
- Prevents rain and occasional fuel spill from entering the wing!
- Available separately or in fuel quantity transmitter kits
- Fits most Cessna aircraft with fuel transmitter access opening on the top of the wing



## Fuel Quantity Transmitters for Piper and Maule Aircraft

Transmitters by Instrument Tech

Instrument Tech provides FAA-PMA approved fuel quantity transmitters for Piper and Maule aircraft. These are high quality, direct replacements for the original and difficult to find Rochester units. Designed for use with the original OEM fuel quantity gauge, Instrument Tech transmitters do not require any modifications to the fuel system.

Eligibility on page 77.



**New!**



FAA-PMA Approved

## Cessna Aircraft Eligibility for Transmitters, Gaskets and Screw-Seal Assemblies

Aircraft Model	Eligible Serial Numbers	Fuel Quantity Transmitter	Fuel Quantity Transmitter Gasket	Screw/Seal Assembly	Fuel Quantity Transmitter Kit
150 150A,B,C,D,E,F,G,H,I,J,K,L,M A150K,L,M F150F,G,H,J,L,M FA150K,L FRA150L,M	17001 thru 59018 15059019 thru 15079405 A1500001 thru A1500734 F1500001 thru F1500390 FA1500001 thru FA1500120 FRA1500121 thru FRA1500336	Standard Tanks MC0426517-1 <b>2</b>	MCS1588-1 MC0523619-1 (access cover gasket)	MCS35010R10 Replaces Cessna P/Ns S350, AN960D10L and AN52010R8 when used to secure the fuel quantity transmitter. Quantity of 5 required per transmitter	FQT-KT-1 <b>9</b>
150J <b>1</b> F150J <b>1</b>	15069455 thru 15071128 F1500490 thru F1500529	Patrol Tanks N/A	MCS1588-1	MCS35010R14 Replaces Cessna P/Ns S350, AN960D10L and AN52010R14 when used to secure the fuel quantity transmitter. Quantity of 5 required per transmitter	N/A
152 A152 F152 FA152	15279406 thru 15286033 A1520735 thru A1521049 F15201429 thru F15201980 FA1520337 thru FA1520425	Standard Tanks N/A Extended Range Tanks N/A	MCS1588-1	MCS35010R10 Replaces Cessna P/Ns S350, AN960D10L and AN52010R10 when used to secure the fuel quantity transmitter. Quantity of 5 required per transmitter	N/A
172,172A, 172B,C,D,E,F,G,H,I,J,K,L,M,N,P <b>1</b> F172D,E,F,G,H,K,L,M FR172E,F,G,H,J,K R172K FP172 P172D	36966 thru 47746 17247747 thru 17276516 F1720001 thru F17201234 FR17200001 thru FR17200675 R1722000 thru 1723454 FP1720001 thru FP1720003 P17257120 thru P17257188	MC0523557-1 See Notes <b>3</b> , <b>4</b> , <b>5</b>	MCS1588-1 MC0523619-1 (access cover gasket)	MCS35010R10 Replaces Cessna P/Ns S350, AN960D10L and AN52010R10 when used to secure the fuel quantity transmitter. Quantity of 5 required per transmitter	FQT-KT-2 <b>9</b>
175, 175A,B,C	55001 thru 17557119	MC0523557-1	MCS1588-1 MC0523619-1 (access cover gasket)	MCS35010R10 Replaces Cessna P/Ns S350, AN960D10L and AN52010R10 when used to secure the fuel quantity transmitter. Quantity of 5 required per transmitter	FQT-KT-2 <b>9</b>
180A,B,C,D,E,F,G,H,I,J,K <b>1</b>	32662 thru 18053000	MC0726110-1 <b>5</b>	MCS1588-1 <b>8</b> MCS1588-2 <b>8</b>	MS35207-264 <b>7</b>	FQT-KT-3 <b>9</b>
182A,B,C,D,E,F,G,H,I,J,K,L,M,N,P,Q <b>1</b> A182J,K,L,M,N F182P,Q <b>1</b>	33843 thru 18266590 A1820001 thru A1820148 F1820001 thru F18200094	MC0726110-1 <b>5</b>	MCS1588-1 <b>8</b> MCS1588-2 <b>8</b>	MS35207-264 <b>7</b>	FQT-KT-3 <b>9</b>
185,185A,B,C,D,E, A185E,F <b>1</b>	1850001 thru 18503683	MC0726110-1 <b>5</b>	MCS1588-1 <b>8</b> MCS1588-2 <b>8</b>	MS35207-264 <b>7</b>	FQT-KT-3 <b>9</b>
188A, A188, A188A A188B T188C	1880445 thru 18803856 18802349T thru 18803968T T18803297T thru T18803968T	MCC668002-0201 <b>6</b>	MCS1588-1 <b>8</b> MCS1588-2 <b>8</b>	MS35207-264 <b>7</b>	FQT-KT-4 <b>9</b>
210-5 (205), 210-5A (205A)	2050001 thru 2050577	MC0726110-1 <b>5</b>	MCS1588-2 Qty 2	MS35207-264 <b>7</b>	FQT-KT-5 <b>9</b>
206,U206,U206A,B,C,D,E,F,G <b>1</b> TU206A,B,C,D,E,F,G <b>1</b> P206,P206A,B,C,D,E,F,G <b>1</b> TP206A,B,C,D,E	2060001 thru U20604649	MC0726110-1 <b>5</b>	MCS1588-1 <b>8</b> MCS1588-2 <b>8</b>	MS35207-264 <b>7</b>	FQT-KT-3 <b>9</b>
206H, T206H, U206FG, TU206F, G 207,207A <b>1</b> , T207,T207A <b>1</b>	207000001 thru 20700482 20700483 thru 20700788	MC0726110-1 <b>5</b>	MCS2670-1 <b>New!</b> MCS1588-1 MCS2670-1 <b>New!</b>	MS35207-264 <b>7</b>	FQT-KT-6 <b>9</b>
207, 207A, T207, T207A 208, 208B			MCS2670-1 <b>New!</b> MCS1588-1 <b>8</b> MCS1588-2 <b>8</b>		
210, 210A,B,C,D,E,F, T210F	21057001 thru 21058818	MC0726110-1 <b>5</b>	MCS1588-1 <b>8</b> MCS1588-2 <b>8</b>	MS35207-264 <b>7</b>	FQT-KT-3 <b>9</b>
210N,R, P210N,R, T210N,R 337, 377A,B,C,D,E,F,G,H F337E,F,G,H, FT337E,F, FT337GP,HP M337B, P337H, T337B,C,D,E,F,G,H T337H-SP	All		MC1422306-1 <b>New!</b> (access cover gasket)		

**1** Partial model eligibility  
**2** This transmitter does not fit aircraft equipped with extended range fuel tanks.  
**3** Do not use this transmitter with gauge cluster P/N C669562-108 (Rochester® manufacture). This gage cluster could have been factory installed on aircraft built in 1978 or newer beginning with S/N 17269310.  
**4** Do not use this transmitter in aircraft with extended range fuel tanks with gage cluster P/N C669562-0109 (Rochester® manufacture). This gage cluster could have been factory installed on aircraft built in 1979 or newer beginning with S/N 17271035.  
**5** Includes aircraft with extended range fuel tanks.  
**6** 188 model series with wing fuel tanks only.  
**7** A seal is not used in this application. P/N MS35207-264 supercedes P/N AN52010R10. P/N MS35207-264 is an industry standard hardware component.  
**8** Where both MCS1588-1 (thick gasket) and MCS1588-2 (thin gasket) are required, install MCS1588-1 between the transmitter and rib and install MCS1588-2 between the fuel cell and rib.  
**9** Each kit contains one transmitter, one or two gaskets and five screws or screw/seal assemblies as applicable. The fuel transmitter access cover gasket P/N MC0523619-1 is included when purchasing kit P/N FQT-KT-1 and FQT-KT-2.



## Piper Aircraft Eligibility for Transmitters, Gaskets and Screw-Seal Assemblies



Aircraft Model	Eligible Serial Numbers	Fuel Quantity Transmitter	Fuel Quantity Transmitter Gasket	Screw/Seal Assemblies	Fuel Quantity Transmitter Kit
PA-28		9812-0026-101 replaces PS10013-11, 548-671 and 7740-00309			
PA-28-140	28-20551 thru 28-26956, 28-7125001 thru 28-7125651 28-7225001 thru 28-7225612, 28-7325001 thru 28-7325684 28-7425001 thru 28-7425454, 28-7525001 thru 28-7525350 28-7625001 thru 28-7625234, 28-7725001 thru 28-7725290	MC68101-02	MC462-021	MC1802	FQTP-KT-1
PA-28-150, -160	28-1761 thru 28-4377	MC68101-02	MC462-021	MC1802	FQTP-KT-1
PA-28-151	28-7415001 thru 28-7415703, 28-7515001 thru 28-7515449 28-7615002 thru 28-7615435, 28-7715001 thru 28-7715314	MC68101-02	MC461-931	MC1802	FQTP-KT-2
PA-28-161	28-7716002 thru 28-7716323, 28-7816001 thru 28-7816680 28-7916001 thru 28-7916598, 28-8016001 thru 28-8016373 28-8116001 thru 28-8116268, 28-8216007, 28-8216014, 28-8216017, 28-8216019, 28-8216021	MC68101-02	MC461-931	MC1802	FQTP-KT-2
		9812-0026-101 replaces PS10013-11, 548-671 and 7740-00309			
PA-28-180	28-1761 thru 28-5869, 28-7105001 thru 28-7105244 28-7205001 thru 28-7205328, 28-7305001 thru 28-7305611 28-7405001 thru 28-7405290, 28-7505001 thru 28-7505261	MC68101-02	MC462-021	MC1802	FQTP-KT-1
PA-28-181	28-7690001 thru 28-7690467, 28-7790001 thru 28-7790607 28-7890001 thru 28-7890551, 28-7990001 thru 28-7990589 28-8090001 thru 28-8090372, 28-8190001 thru 28-8190279 28-8290017, 28-8290018, 28-8290028, 28-8290033, 28-8290034, 28-8290036	MC68101-02	MC461-931	MC1802	FQTP-KT-2
PA-28R		9812-0026-101 replaces PS10013-11, 548-671 and 7740-00309			
		9812-0023-101 replaces PS10013-5, 550-503 and 7740-00040			
		9812-0024-101 replaces PS10013-6, 550-504 and 7740-00041			
PA-28R-180	28R-30005 thru 28R-30481, 28R-30483 thru 28R-31279 28R-7130001 thru 28R-7130019	MC68101-02	MC462-021	MC1802	FQTP-KT-1
PA-28R-200	28R-30482, 28R-35001 thru 28R-35830 28R-7135001 thru 28R-7135238, 28R-7235001 thru 28R-7235330 28R-7335001 thru 28R-7335455, 28R-7435001 thru 28R-7435331 28R-7535001 thru 28R-7535393, 28R-7635001 thru 28R-7635545	MC68101-02	MC462-021	MC1802	FQTP-KT-1
PA-200T		9812-0023-101 replaces PS10013-5, 550-503 and 7740-00040			
PA-28R-201		9812-0023-101 replaces PS10013-5, 550-503 and 7740-00040			
		9812-0024-101 replaces PS10013-6, 550-504 and 7740-00041			
PA-28R-201T		9812-0023-101 replaces PS10013-5, 550-503 and 7740-00040			
PA-28RT PA-28RT-201 PA-28RT-201T		9812-0024-101 replaces PS10013-6, 550-504 and 7740-00041			
PA-28-235	28-10003 thru 28-11393, 28-7110001 thru 28-7110042 28-7210001 thru 28-7210033, 28-7310001 thru 28-7310187 28-7410001 thru 28-7410120, 28-7510001 thru 28-7510145 28-7610001 thru 28-7610206, 28-7710001 thru 28-7710089	MC68101-02	MC462-021	MC1802	FQTP-KT-1
PA-31 PA-31-300 PA-31-325 PA-31-350 PA-31P	31-1 thru 31-861, 31-7300901 thru 31-8312019 31-5001 thru 31-5004, 31-7305005 thru 31-8553002 31P-1 thru 31P-80, 31P-7300110 thru 31P-7730012	9812-0001-101 replaces PS50149-2, PASC40648-2, 40648-2, 550-695 and 6427512			
		9812-0002-101 replaces PS50149-3, PAC40648-3, 40648-3, 550696 and 6727511			
		9812-0003-101 replaces PS50149-4, PAC40648-4, 40648-4, 550-697 and 6427514			
		9812-0004-101 replaces PS50149-5, PAC40648-5, 40648-5, 550-698 and 6427513			
PA-32-260	32-1 thru 32-1320 32-7100001 thru 32-7100038, 32-7200001 thru 32-7200055 32-7300001 thru 32-7300076, 32-7400001 thru 32-7400061 32-7500001 thru 32-7500053, 32-7600001 thru 32-7600033 32-7700001 thru 32-7700023, 32-7800001 thru 32-7800008	MC68101-02	MC462-021	MC1802	FQTP-KT-1
PA-32-300	32-40000 thru 32-41018, 32-7140001 thru 32-7140086, 32-7240001 thru 32-7240147 32-7340001 thru 32-7340201, 32-7440001 thru 32-7440182 32-7540001 thru 32-7540198, 32-7640001 thru 32-7640142 32-7740001 thru 32-7740113, 32-7840001 thru 32-7840222	MC68101-02	MC462-021	MC1802	FQTP-KT-1
PA-34		9812-0023-101 replaces PS10013-5, 550-503 and 7740-00040			
		9812-0024-101 replaces PS10013-6, 550-504 and 7740-00041			
PA-34-200		9812-0024-101 replaces PS10013-6, 550-504 and 7740-00041			
PA-34-200T		9812-0023-101 replaces PS10013-5, 550-503 and 7740-00040			
PA-34-220T		9812-0023-101 replaces PS10013-5, 550-503 and 7740-00040			
PA-44 PA-44-180		9812-0025-101 replaces PAC86688-002, 548-218 and 7740-00164			

- 1 Transmitter is not interchangeable with "Rochester type" fuel quantity transmitters. Transmitter is not to be used in aircraft equipped with Rochester manufactured fuel gauges that may have been installed as a Piper service spare part, in accordance with a Piper Service Kit.
- 2 Each kit contains (1) Transmitter, (1) Gasket and (5) Screw/Seal Assemblies

## Eligibility for Maule Aircraft Transmitters

Aircraft Model	Fuel Quantity Transmitter P/N
Bee Dee Ms4, M-4, M-4C, M-4S, M-4T, M-4-180C M-4-180S, M-4-180T, M-4-2 IOS, M-4-210T, M-4-220, M-4-220C, M-4-220S, M-4-220T, M-5-180C, M-5-200 M-5-210C, M-5-210TC, M-5-220C, M-5-235C, M-6-180, M-6-235, M-7-235, MX-7-235, MX-7-180, MX-7-420, MXT-7-180, MT-7-235, M-8-235, MX-7-160 MXT-7-160, MX-7-180A, MXT-7-180A, MX-7-180B M-7-235B, M-7-235A, M-7-235C, MX-7-180C, M-7-260, MT-7-260, M-7-260C, M-7-420AC, MX-7-160C, M-7-180AC, M-7-420A, MT-7-420, M-4-1S7V, M-9-235	9812-0028-101 replaces 7740-00304



**New!**

FAA-PMA Approved

**Marvel-Schebler Fuel Inlet Screen Gaskets and Cotter Keys**

The copper gaskets should be changed when finger screens are inspected at each annual inspection.

- Fits many carbureted aircraft!
- Cad plated for corrosion resistance!
- Save up to 70%!



Engine Model	Marvel-Schebler/Facet Carburetor Models	P/N
<b>Continental Series</b> A-65, A-75, C-85, C-90, O-200, C-125, C-145, O-300	MA-3, MA-3PA, MA-3A, MA-3SPA, MA-4SPA	MC16-A36
GO-300, O-470	MA-4-5, MA-5AA, MA-4-5AA, MA-5, MA-6, MA-6AA, HA-6	MC16-A48
	MA4-5, MA-4-5AA, MA-5, MA-6AA, HA-6	MC16-A108
	MA-4-5, MA-4-5AA, MA-5, MA-5AA, MA-6AA	MC82-1
A-65, A-75, C-85, C-90, O-200, C-125, C-145, O-300, GO-300, O-470	MA-3, MA-3A, MA-3PA, MA-3SPA, MA-4SPA, MA-4-4, MA-4-5AA, MA-5, MA-5AA, MA-6, MA-6AA	MC82-11
	MA-3A, MA-3PA, MA-3SPA, MA-4SPA, MA-4-5, MA-5, MA-5AA, MA-6, MA-6AA, HA-6	MC82-14

**Fuel Caps for Piper Aircraft**

Improved materials and better design

- Fuel caps with "CA" prefix have fuel resistant elastomer to resist swelling, and a stronger lever that resists bending
- P/N 3267- a vented cap with a vertical fin on top for easy removal and made of stainless steel to prevent corrosion



P/N	Cap	Replaces OEM P/N	Eligible Models
3267	Vented	10188-00, 454009	PA-11, PA-11S, PA-12, PA-12S, PA-14, PA-18, PA-20, PA-22 Series
CA16097N	Vented	160297-000	PA-23-235 and PA-23-250, s/n 27-1 thru 27-7554168
CA17672N	Vented	454-084, 17672-000	PA-23, PA-23-160
CA21821N		21821-000, 27221-000	PA-24-250, 260 S/N 24-2299 and On (aux. fuel system only). Shorter, easier to remove from the filler opening.
CA27221N	Non-vented	27221-00, 554-180	PA-24-180,-250,-260,-400, PA-30,PA-39

Manufactured by PMA Products, Inc. and F Atlee Dodge

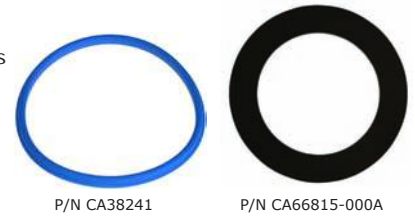
**Fuel Valve for PA-28 Series Aircraft**  
P/N 491-947



**Fuel Cap Seals for Piper, Beech, Mooney, and Cessna Citations**

Don't pay \$750.00 for a fuel cap when you only need to replace the seal!

- P/Ns CA38241 and CA457-98:
  - The only seals that legally replace the main seal on many Beech, Cessna and Mooney fuel caps
  - Made of a fluorosilicone material with unlimited shelf life
  - CA38241: Molded seal with a lip - designed for "lightning proof" fuel caps
  - CA457-98: Round O-ring seal
- P/N CA66815-000A: Round O-ring seal made of Viton to eliminate any swelling issues experienced when using AutoGas



Part Number	Replaces OEM P/N	Eligible Models
CA38241	Beech P/N 38241, 38283 used with P/N 38339, 100-381005-1 or 100-381005-5 fuel caps only Cessna Mooney seals used with P/N 457-370 fuel caps only	99, 99A, A99A, B99, C99, 100, A100, B100, 200, 200T, 200C, 200CT, B200, B200T, B200C, B200CT, B300, B300C, 1900, 1900C, 1900D 525 s/n 0549 and On, 650 s/n 0001 thru 0101 incorporating SB650-28-23, and 0102 and On, 680,750
CA457-98	Beech P/N 457-98, 457-98-1	M20C,D,E,F,G,J (with O&N Aircraft Mod. fuel bladders per STC SA2277CE and SA2350CE) E90, F90, 99, 99A, A99A, B99, C99, 100, A100, B100, 200, 200T, 200C, 200CT, B200, B200T, B200C, B200CT
CA66815-000A	Piper P/N 66815-000, 462-056 used with fuel cap assemblies P/N 66817-00, 39824-02, 38599-02 or 66817-02 only	PA-28-140, PA-28-150, -160, -180 s/n 28-1761 and on, PA-28-151, -161, PA-28-181, PA-28-201T, PA-28-235, PA-28-236, PA-28R-180, PA-28R-200 s/n 28R-30482, 28R-35001 thru 28F-7135238, PA-28-201, PA-28R-201, PA28R-201T, PA-28RT-201, PA32-260, PA-32-300 s/n 32-40000 thru 32-7840222 and 32-7940001 and on, PA-32R-300, PA-32RT-300, PA-32RT-300T, PA-32-301, 301T, PA-32R-301, PA-32R-301T, PA-34-200, PA-34-220T, PA-38-112, PA-44-180, -180T

Manufactured by PMA Products, Inc.

**Fuel and Alcohol Pumps for Cessna, Piper, and Beech Aircraft**

Save over \$400 off OEM List!

- FAA-PMA approved - unconditional one year warranty
- Modern solid state pumps - more dependable and use less current than the old breaker point pumps
- Internal check valve to prevent backflow
- Replacement filter kit P/N CA42370 available for each fuel pump



Part Number	Replaces OEM P/N	Eligible Models
CA476284E-1	Beechcraft P/N 476284	55,A55,B55,C55,D55,E55,56TC,A56TC,58,58P,58TC,60,A60,B60,A65,70,B80,E95,C90,E90, F90 s/n LA-2 thru LA-56,100,A100 s/n B-1 thru B-247,200 s/n BB-2 thru BB-665,200T s/n BT-1 thru BT-16, 200C s/n BL-1 thru BL-9,99,99A,A99A,B99,C99,T-34C s/n GL-1 and On,T-44A
CA6508092-1A	Cessna P/N 476411, 6508091-1, and 6508092	310Q,310R,335,340,340A,401B,402B,402C,404,414,414A,421B,421C,425,441,500,511,525,550,560,650
CA35328-800E	Piper P/N 35328-800 and 481-666 (STC)	PA23, PA-23-150,-160,-235,-250,-250 (6 place), s/n 27-1 thru 27-2504 (14v), PA24, PA-24-180,-250,-260, s/n 24-3642,24-4000 thru -4782, and 24-4781 thru -4803,PA-28-140,-150,-160,-180,PA-28-151,-161 (14v),-181 s/n 28-7690001 thru -7990626 and -8090001 and On (14v),PA-38-112
CA62220-004	Piper P/N 62220-004	PA-28-161 S/N 2816110 thru 2816119 and 2842001 and up. PA-28-181 S/N 2890206 thru 2890231, 2843001 thru 2843820, 2843822 thru 2843851 and 2843853 and up with Lycoming O-360-A4M engine.
CA65628-800E	Piper P/N 65628-800 (STC)	PA-28-235,-236,PA-32-260,PA-44-180 with STC SA02579AT installed

Approved for all S/Ns including S/N 500-0001 thru 500-0040 incorporating SB30-1, and S/N 500-0001 thru 500-0213 incorporating SB21-9.

Manufactured by PMA Products, Inc.



## Fuel Cap for Cessna Aircraft

Replace worn out caps!  
P/N C156003-0101

- Fits most Cessna aircraft
- Vented
- Manufactured by Cessna



## Fuel Cap Gaskets for Cessna Aircraft

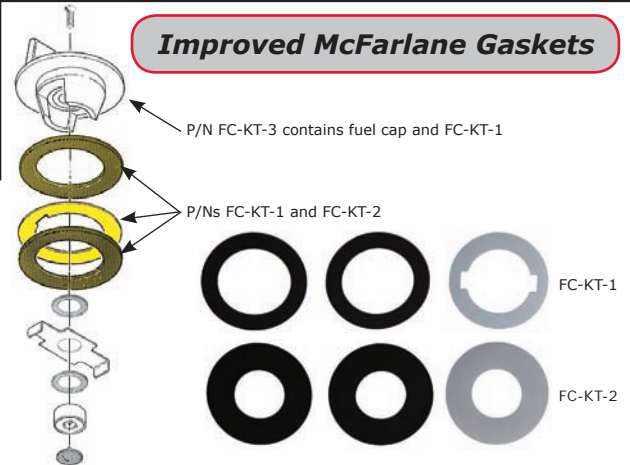
No more leaking or hard to open fuel caps!  
P/N FC-KT-1 (for caps P/N C156003-0101 and P/N C156004-0101)  
P/N FC-KT-2 (for cap P/N 0426015-1)

Our unique double gasket slip ring arrangement combined with our FAA approved instructions for adjusting the tightness of the cap allows leak free fuel caps that don't require super-human strength to open.

- Kit contains required gasket and slip ring as required
- Fuel proof Viton® and Teflon® for long life

## New! Fuel Cap Gasket Kit for Cessna Aircraft

P/N FC-KT-3<sup>2</sup> contains one P/N C156003-0101 and one P/N FC-KT-1



Aircraft	Serial Number	Kit P/N FC-KT-1 <sup>2</sup>	Kit P/N FC-KT-2 <sup>3</sup>
140A	All	•	•
150, 150A,B,C,D,E,F,G,H,J,K	All	•	•
150L <sup>1</sup>	15072004 thru 15072628	•	•
150L <sup>1</sup> , M	15072629 thru 15079405	•	•
A150K	All	•	•
A150L <sup>1</sup>	A1500227 thru A1500276	•	•
A150L <sup>1</sup> , M	A1500277 thru A1500734	•	•
F150F,G,H,J,K,L <sup>1</sup>	F150-0001 thru F1500738	•	•
F150L <sup>1</sup> , M	F15000739 thru F15001428	•	•
FA150K, L <sup>1</sup>	FA1500001 thru FA1500166	•	•
FA150L <sup>1</sup> , M	FA1500167 thru FA1500336	•	•
FRA150L, M	FRA1500121 thru FRA1500166	•	•
	FRA1500167 thru FRA1500336	•	•
152	15279406 thru 15279629	•	•
	15279630 thru 15286033	•	•
A152	A1520735 thru A1520741	•	•
	A1520742 thru A1521049	•	•
F152	F15201429 thru F15201528	•	•
	F15201529 thru F15201980	•	•
FA152	FA1520337 thru FA1520347	•	•
	FA1520348 thru FA1520425	•	•
170, 170A,B	18729 thru 27169	•	•
172, 172A,B,C,D,E,F,G,H,I,K,L <sup>1</sup>	28000 thru 17259823	•	•
172L <sup>1</sup> , M, N <sup>1</sup>	17259824 thru 17269468	•	•
172N <sup>1</sup> , P,Q,R,S, 172RG	17269469 thru 172599999	•	•
F172D,E,F,G,H,J,K	F172-0001 thru F17200804	•	•
F172L,M,N <sup>1</sup>	F17200805 thr F17201749	•	•
F172N <sup>1</sup> , P	F17201750 thru F17202254	•	•
FR172E,F,G,H <sup>1</sup>	FR17200001 thru FR17200300	•	•
FR172 H <sup>1</sup> , J, K <sup>1</sup>	FR17200301 thru FR17200630	•	•
FR172K <sup>1</sup>	FR17200631 thru FR17200675	•	•
R172K	R1722000 thru R1722751	•	•
	R1722752 thru R1723454	•	•
FP172, P172D	All	•	•
175, 175A,B,C	All	•	•
177, 177A,B	All	•	•
177RG, F177RG	All	•	•
180, 180A,B,C,D,E,F,G,H,J,K	All	•	•

Aircraft	Serial Number	Kit P/N FC-KT-1 <sup>2</sup>	Kit P/N FC-KT-2 <sup>3</sup>
182, 182A,B,C,D,E,F,G,H,J,K,L,M, N,P,Q,R	33000 thru 18268434	•	•
182R,S,T, T182T	18268435 and On	•	•
F182P,Q	All	•	•
FR182	All	•	•
R182	R18202000 thru R18202041	•	•
	R18200001 thru R18201999	•	•
T182	18268435 thru 18268541	•	•
	18267716 thru 18268434	•	•
TR182 <sup>1</sup>	R18200584 thru R18501999	•	•
	R18202000 and On	•	•
185, 185A,B,C,D,E, A185E, F <sup>1</sup>	185-0001 thru 18504424	•	•
A185F <sup>1</sup>	18504425 thru 18504448	•	•
188 <sup>1</sup> , 188A,B, A188A, A188B <sup>1</sup>	188-0446 thru 18803296	•	•
	18803297 and On	•	•
A188B <sup>1</sup>	18800967T thru 18803296T	•	•
	18803297T thru 18803973T	•	•
T188C	T18803325T thru T18803974T	•	•
210-5 (205), 210-5A, (205A)	All	•	•
206	All	•	•
206H, T206H	All	•	•
P206, P206A,B,C,D,E	All	•	•
TP206A,B,C,D,E	All	•	•
U206, U206A,B,C,D,E,F,G <sup>1</sup>	U206-0276 thru U20606846	•	•
TU206A,B,C,D,E,F,G <sup>1</sup>	U20606847 and On	•	•
U206G <sup>1</sup> , TU206G <sup>1</sup>	U20606847 and On	•	•
207, 207A, T207, T207A	All	•	•
210, 210A,B,C,D,E,F,G,H,J,K <sup>1</sup>	57001 thru 21059361	•	•
T210F,G,H,J	All	•	•
210N <sup>1</sup> , R, T210N <sup>1</sup> , R	21064136 thru 21065009	•	•
336, 337, 337A,B,C,D,E,F,G,H	All	•	•
F337E,F,G,H, FT337GP, FT337HP, M337B, P337H T337G,H	All	•	•

<sup>1</sup> Partial model eligibility  
<sup>2</sup> P/N FC-KT-1 and FC-KT-3 are only eligible for the indicated aircraft when they are equipped with fuel cap P/Ns C156003-0101 or C156004-0101.  
<sup>3</sup> P/N FC-KT-2 is only eligible for the indicated aircraft when they are equipped with fuel cap P/N 0426015-1.

## Fuel Selector Valve Cam and Bearing for Cessna Aircraft

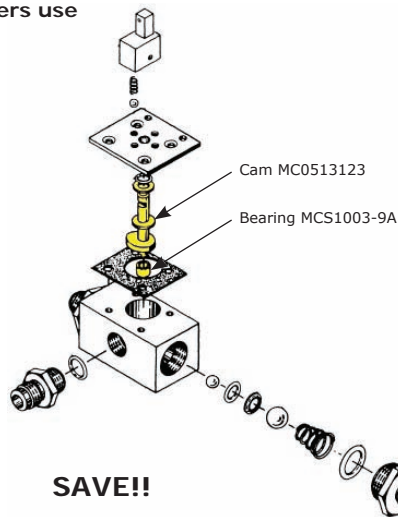
Improved corrosion protection inside the valve when customers use McFarlane's new aluminum bearing with the cam.

P/N MC0513123 Cam

P/N MCS1003-9A Bearing

- Anodized aluminum cam
- Aluminum bearing eliminates galvanic corrosion
- Save \$\$!

Aircraft	Cam MC0513123	Bearing MCS1003-9A
170B	•	•
172, 172A,B,C,D,E,F,G,H,I,K,L	•	•
172M	•	•
F172D,E,F,G,H,K,L	•	•
F172M	•	•
FP172, P172D	•	•
R172E,F,G,H	•	•
R172K	•	•
FR172E,F,G,H	•	•
FR172J,K	•	•
175, 175A,B,C	•	•
177, 177A,B	•	•
180F,G,H,J	•	•



## Fuel Bowl Gaskets for Cessna 300 and 400 Series Aircraft

P/N CAB33-11-1

Replaces OEM P/N B3-11-1

**Eligible Models**  
300 series (except 303), 400 series (except 402C, 406, 425, 441)  
Manufactured by PMA Products, Inc.



FAA-PMA Approved

**Cessna Fuel Filler Neck and Fuel Tank Adapter Gaskets**

Replace dry, brittle gaskets to prevent water contamination in fuel.

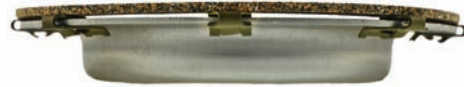
Gaskets required to seal between the wing skin, fuel filler neck, fuel tank adapter and fuel tank.

- Realistically priced!
- Cork/rubber composite gaskets meet strict MIL-SPEC requirements for fuel resistance
- Never reuse these gaskets

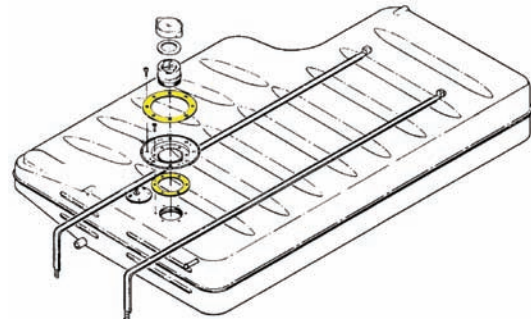
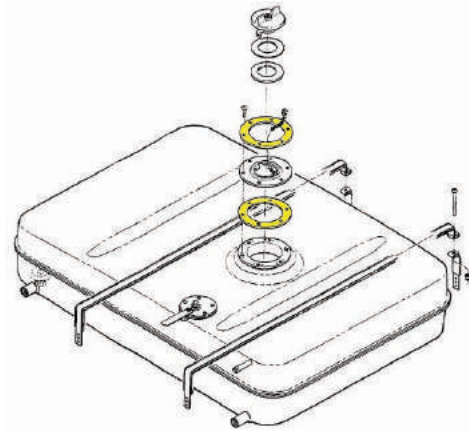
Aircraft	Serial Number	Qty per Aircraft	Part Number
140A	All	2	MC0523531
		2	MC0523532
150, 150A,B,C,D,E,F,G,H,I	17001 thru 15069454	2	MC0523531
		4	MC0523532
150J	15069455 thru 15071128	2	MC0523531
		4	MC0523532
150K,L	15071129 thru 15072628	2	MC0523531
		4	MC0523532
150L,M	15072629 thru 15079405	2	MC0426013-1
		2	MC0426013-2
A150K,L	A1500001 thru A1500276	2	MC0523531
		4	MC0523532
A150L,M	A1500277 thru A1500734	2	MC0426013-1
		2	MC0426013-2
F150F,G,H,J	All	2	MC0523531
		4	MC0523532
F150K,L	F15000530 thru F15000738	2	MC0523531
		4	MC0523532
F150L,M	F15000739 thru F15001428	2	MC0426013-1
		2	MC0426013-2
FA150K,L	FA1500001 thru FA1500166	2	MC0523531
		4	MC0523532
FA150L,M	FA1500167 thru FA1500336	2	MC0426013-1
		2	MC0426013-2
152, A152, F152, FA152	All	2	MC0426013-1
		2	MC0426013-2
170A	All	A/R	MC0523531
		4	MC0523532
170B	All	2	MC0523531
		4	MC0523532
172, 172A,B,C,D,E,F,G,H,I	All	2	MC0523531
		4	MC0523532
172K,L	17257162 thru 17259823	2	MC0523531
		4	MC0523532
172L	17259824 thru 17259903	2	MC0523531
		4	MC0523532
172L,M	17259904 thru 17263458	2	MC0426013-1
		2	MC0426013-2
172M,N,P,Q	17263459 thru 17276654	2	MC0523531
		2	MC0426013-2
F172D,E,F,G,H	F172-0001 thru F172-0559	2	MC0523531
		4	MC0523532
F172H,K	F172-0560 thru F17200804	2	MC0523531
		4	MC0523532
F172L,M	F17200805 thru F17201234	2	MC0426013-1
		2	MC0426013-2
F172M,N,P	F17201235 thru F17202254	2	MC0523531
		2	MC0426013-2
FP172, P172D	All	2	MC0523531
		4	MC0523532
FR172E,F,G,H	FR17200001 thru FR17200300	2	MC0523531
		4	MC0523532
FR172H,J,K	FR17200301 thru FR17200675	2	MC0426013-1
		2	MC0523531
R172E,F,G,H	R172-0302 thru R1720494	2	MC0523531
		4	MC0523532
R172H	R1720495 thru R1720620	2	MC0426013-2
		2	MC0426013-1
R172K	R1722000 thru R1723454	2	MC0523531
		4	MC0523532

1 Partial model eligibility

2 Requires 8 each per aircraft for aircraft with long range tanks



**Improved Upper Gasket**  
**P/N MC0523531**  
 Thicker, softer material for a better seal around the tinnerman clips.



P/N MC0426013-1  
 Thickness 0.062"



P/N MC0426013-2  
 Thickness 0.031"



P/N MC0523532  
 Thickness 0.062"



P/N MC0523531  
 Thickness 0.094"

## Fuel Selector and Fuel Shut-Off Valves For Cessna Aircraft

### New or Repaired Valves

Buy one of our new FAA-PMA approved valves, purchase a repaired one in stock.

Many valves are in stock and ready to ship!

- Repaired by experienced technicians
- Cleaned, inspected and assembled with all fluorocarbon O-rings, seals, gaskets, hardware and parts as required
- Pressure tested for leaks and evaluated for proper fuel flow
- "Return to Service" tag provided

### Repair kits - P/Ns FSO-KT-1 thru FSO-KT-24

Contains all required hardware to reseal and perform a repair (seals, springs, O-rings, roll pins, washers, screws, balls and plug). FSO-KT-1 for 0716613 series valves includes the parts contained in Cessna P/N 0716613-200 and -201 seal kits plus additional hardware required for a basic repair. All parts are FAA approved or certified industry standard hardware.

**Many Cessna Fuel valves (including the 0716613 series) require special tools and processes for reassembly. It's often more cost effective to have McFarlane repair your valve.**

### Seal Kits - P/Ns FSS-KT-1 thru FSS-KT-20

**Only McFarlane has FAA approval to replace the old, less fuel resistant O-rings with the latest fuel-proof fluorocarbon O-rings!**

Fuel Selector Valve and Shut Off Valve Seal kits are conveniently packaged to include all of the necessary O-rings and/or gaskets applicable to specific single engine Cessna aircraft models. McFarlane replaces the old Buna N or Nitrile (MS Series) O-rings and early synthetic rubber (NAS Series) O-rings with fluorocarbon elastomer, which has improved fuel and heat resistance. Cork/Rubber gaskets meet tough government standards for fuel resistance.

### Replacement Parts

McFarlane has a complete line of replacement parts for Cessna fuel valves including detent plates, springs, plastic seals, cams and much more in stock and ready to ship.

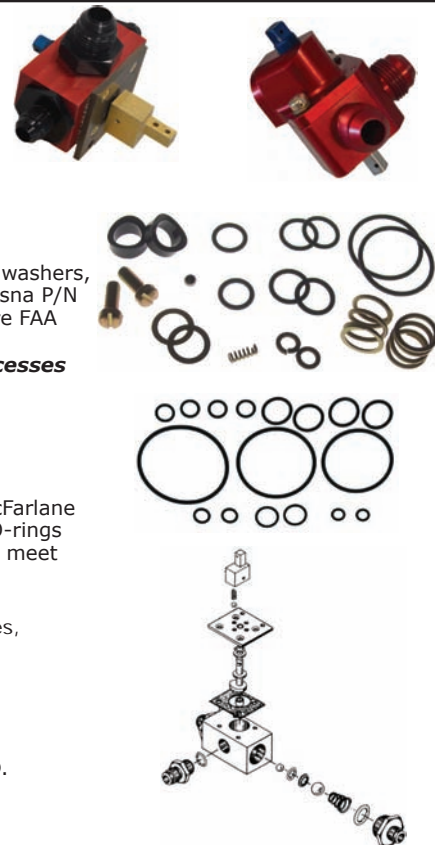
### Gaskets and O-rings

Gaskets can be purchased individually or as convenient kits.

O-rings can be purchased in quantities of 10 each or as convenient kits!

### Fittings

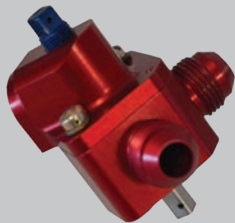
Commonly replaced AN fittings in stock! 45° plug P/N AN823-8D and 90° plug P/N MS20822-8D.



**New!**

## New FAA-PMA Valves at Realistic Prices!

### McFarlane 170, 172, 175, 177, 182 and 185 FAA-PMA Fuel Valve!



#### Why not just repair my valve?

Many of the original valves have too much damage to be repaired cost-effectively. The original Cessna fuel valve that started in model 170 was a simple but ingenious cam ball design that has proven very reliable over the years. McFarlane has repaired a lot of these original Cessna valves, and we know them well. However, we are now rejecting a big percentage of the valve cores sent to us. A lot of them have corrosion damage in the main body that is too severe to fix, or the O-ring retention area is damaged and too rough to seal. Many of the fittings are corroded through. The cam bearing is brass and easily corrodes the aluminum alloy cam. Due to the poor condition of many original valves, McFarlane developed **a totally new valve that was designed just like the original valve but with improvements where needed.**

#### Proven Design with Improvements

**Improved corrosion resistance:** McFarlane's new valves are totally anodized where the original valves were Alodine® conversion coated. This change drastically improves the surface durability, wear resistance, and corrosion resistance of all the components, and they will stay pretty too! Corrosion protection is important since the valves are at the lowest point in the fuel system without any upstream water separation or contaminate screening. We have also eliminated the brass bushing that corrodes the cam.

**Improved O-ring retention:** Modern machining processes lets us precision machine the O-ring capture cavity. The original valve O-rings were retained by staking (stamp forming) the housing. This process was inconsistent at best and distressed and weakened the surrounding aluminum structure.

**More balanced fuel flow:** Yesterday's manual machining process of the original valves were often inconsistent enough to let one port flow more fuel than needed while the other port might flow a very marginal amount of fuel. The new McFarlane valve is computer machined for a perfect balance of fuel flow.

#### Fully Tested

You can rest assured that if it's a new McFarlane valve or a valve repaired by McFarlane, it will be pressure, functional, and flow tested to perform to the highest standards.

#### Now for more good news!!

All of the improved parts that go into our new valve are interchangeable with the original Cessna valve. This means that if your valve is good with the exception of a few parts, we can fix it at a reasonable price! Whether you need your valve repaired or a new valve, McFarlane will save you money.





FAA-PMA Approved

**New FAA-PMA approved fuel selector valves for most 172-177 and 182-185 aircraft!**

New! McFarlane FAA-PMA approved fuel valves!



It is critical on models 172M and F172M, S/Ns 17260759 thru 17267584, and F17200905 thru F17201514 that before ordering you identify the detent housing style your fuel valve has. Order either MC0513120-8 or MC0513120-200 based on the style installed in your aircraft.



MC0513120-8



MC0513120-200

**Eligibility for New, Repaired Fuel Selector and Fuel Shut Off Valves and Kits for Cessna Aircraft**

Model	Serial Number	Fuel Selector Valve			Fuel Shut-Off Valve		
		McFarlane P/N 5	Seal Kit	Repair Kit	McFarlane P/N 5	Seal Kit	Repair Kit
120,140	8001 thru 15075	0411716S, 08HD1/4X1/4X1S					
140A	15200 thru 15724	0413020-3S					
150 <sup>1</sup>	17001 thru 17769				0411803-2S, 9851078-2S <sup>3</sup>		
150 <sup>1</sup> , 150A,B,C,D,E,F,G	17770 thru 15067198				0411803-5S 0411803-6S		
150H,J,K,L <sup>1</sup>	15067199 thru 15073658				0411803-6S		
150L <sup>1</sup> ,M <sup>1</sup>	15073659 thru 15078505				0411803-8S		
150M <sup>1</sup>	15078506 thru 15079405				9851070-2S	FSS-KT-1	FSO-KT-2
A150K,L <sup>1</sup>	A1500001 thru A1500342				0411803-6S		
A150L <sup>1</sup>	A1500343 thru A1500523				0411803-8S		
A150 <sup>1</sup>	A1501001 thru A1501018				0411803-6S		
A150L <sup>1</sup> ,M <sup>1</sup>	A1501019 thru A1500684				0411803-8S		
A150M <sup>1</sup>	A1500685 thru A1500734				9851070-2S	FSS-KT-1	FSO-KT-2
A-A150L <sup>1</sup>	A-A1500001 thru A-A1500006				0411803-6S		
A-A150L <sup>1</sup>	A-A1500007 thru A-A1500009				0411803-8S		
F150F,G,H,J,K,L <sup>1</sup>	F150-0001 thru F15000863				0411803-6S		
F150L <sup>1</sup> ,M <sup>1</sup>	F15000864 thru F15001338				0411803-8S		
F150M <sup>1</sup>	F15001339 thru F15001428				9851070-2S	FSS-KT-1	FSO-KT-2
FA150K,L <sup>1</sup>	FA1500001 thru FA1500166				0411803-6S		
FA150L <sup>1</sup> ,M <sup>1</sup>	FA1500167 thru FA1500311				0411803-8S		
FA150M <sup>1</sup>	FA1500312 thru FA1500336				9851070-2S	FSS-KT-1	FSO-KT-2
FRA150L <sup>1</sup>	FRA1500121 thru FRA1500166				0411803-6S		
FRA150L <sup>1</sup> ,M <sup>1</sup>	FRA1500167 thru FRA1500311				0411803-8S		
FRA150M <sup>1</sup>	FRA1500312 thru FRA1500336				9851070-2S	FSS-KT-1	FSO-KT-2
152/A152/F152/FA152	All				9851070-2S	FSS-KT-1	FSO-KT-2
170 <sup>1</sup>	18003 thru 18573	0511122S <sup>3</sup>					
170 <sup>1</sup>	18574 thru 18729	0511160S					
170A,B <sup>1</sup>	18730 thru 20285	0413020-3S					
170B <sup>1</sup>	20286 thru 27169	MC0513120-5 <b>New FAA-PMA!</b>	FSS-KT-2	FSO-KT-17			
172, 172A,B,C	28000 thru 17249544	MC0513120-5 <b>New FAA-PMA!</b>	FSS-KT-2	FSO-KT-17			
172D,E	17249545 thru 17251822	MC0513120-6 <b>New FAA-PMA!</b>	FSS-KT-2	FSO-KT-17			
172F,G,H,I,K,L,M <sup>1</sup>	17251823 thru 17263458	MC0513120-8 <sup>7</sup> <b>New FAA-PMA!</b>	FSS-KT-2	FSO-KT-17			
172M <sup>1</sup>	17263459 thru 17267584	MC0513120-200 <sup>7</sup> <b>New FAA-PMA!</b>	FSS-KT-2	FSO-KT-17			
172N,P <sup>1</sup>	17267585 thru 17275034	9851067-4S	FSS-KT-5	FSO-KT-13			
172P <sup>1</sup> , Q	17275035 thru 17276259	9851096-2S, 9851096-5S	FSS-KT-4 <sup>2</sup>	FSO-KT-7 <sup>2</sup>			
172P <sup>1</sup>	17276260 thru 17276654	9851096-5S	FSS-KT-4 <sup>2</sup>	FSO-KT-7 <sup>2</sup>			
172R,S	17280001 & On, 172S8001 & On	9851096-5S	FSS-KT-4	FSO-KT-7	S1903-2		
172RG <sup>1</sup>	172RG0001 thru 172RG0890	9851067-7S	FSS-KT-4	FSO-KT-15			
172RG <sup>1</sup>	172RG0891 thru 172RG1177	9851096-2S, 9851096-5S	FSS-KT-4	FSO-KT-7			
172RG <sup>1</sup>	172RG1178 thru 172RG1191	9851096-5S	FSS-KT-4	FSO-KT-7			
F172D,E	F172-0001 thru F172-0085	MC0513120-6 <b>New FAA-PMA!</b>	FSS-KT-2	FSO-KT-17			
F172F,G,H,K,L,M <sup>1</sup>	F172-0086 thru F17201234	MC0513120-8 <sup>7</sup> <b>New FAA-PMA!</b>	FSS-KT-2	FSO-KT-17			
F172M <sup>1</sup>	F17201235 thru F17201514	MC0513120-200 <sup>7</sup> <b>New FAA-PMA!</b>	FSS-KT-2	FSO-KT-17			
F172N,P <sup>1</sup>	F17201515 thru F17202134	9851067-4S	FSS-KT-5	FSO-KT-13			
F172P <sup>1</sup>	F17202135 thru F17202254	9851096-2S, 9851096-5S	FSS-KT-4 <sup>2</sup>	FSO-KT-7 <sup>2</sup>			
FR172E,F,G,H,J <sup>1</sup>	FR17200001 thru FR17200390	MC0513120-8 <b>New FAA-PMA!</b>	FSS-KT-2	FSO-KT-17	0716111-1SF	FSS-KT-16	FSO-KT-3
FR172J <sup>1</sup>	FR17200391 thru FR17200530	MC0513120-8 <b>New FAA-PMA!</b>	FSS-KT-2	FSO-KT-17	0716111-2S <sup>3</sup>		
FR172J <sup>1</sup>	FR17200531 thru FR17200590	MC0513120-200 <b>New FAA-PMA!</b>	FSS-KT-2	FSO-KT-17			
R172K, FR172K	All	MC0513120-200 <b>New FAA-PMA!</b>	FSS-KT-2	FSO-KT-17	0716109-1S	FSS-KT-17	FSO-KT-5
P172/FP172	All	MC0513120-6 <b>New FAA-PMA!</b>	FSS-KT-2	FSO-KT-17			
175, 175A,B	All	MC0513120-5 <b>New FAA-PMA!</b>	FSS-KT-2	FSO-KT-17			
175C	17557003 thru 17557119	MC0513120-6 <b>New FAA-PMA!</b>	FSS-KT-2	FSO-KT-17			
177, 177A,B	All	MC0513120-9 <b>New FAA-PMA!</b>	FSS-KT-2	FSO-KT-17	S1903-1S	FSS-KT-16	FSO-KT-4
177RG <sup>1</sup>	177RG0001 thru 177RG0282				0716111-4S, S1903-2S	FSS-KT-16	FSO-KT-4 <sup>6</sup>
177RG <sup>1</sup>	177RG0283 thru 177RG0314	MC0716613-4 <b>New FAA-PMA!</b>	FSS-KT-18	FSO-KT-1			
177RG <sup>1</sup>	177RG0315 thru 177RG1051	MC0716613-5 <b>New FAA-PMA!</b>	FSS-KT-18	FSO-KT-1			
177RG <sup>1</sup>	177RG1052 thru 177RG1366	9851067-6S	FSS-KT-5	FSO-KT-13			
F177RG <sup>1</sup>	F177RG0001 thru F177RG0062				0716111-4S, S1903-2S	FSS-KT-16	FSO-KT-4 <sup>6</sup>
F177RG <sup>1</sup>	F177RG0063 thru F177RG0077	MC0716613-4 <b>New FAA-PMA!</b>	FSS-KT-18	FSO-KT-1			
F177RG <sup>1</sup>	F177RG0078 thru F177RG0160	MC0716613-5 <b>New FAA-PMA!</b>	FSS-KT-18	FSO-KT-1			
F177RG <sup>1</sup>	F177RG0161 thru F177RG0177	9851067-6S	FSS-KT-5	FSO-KT-13			

Eligibility continued on next page

- <sup>1</sup> Partial model eligibility
- <sup>2</sup> Use FSS-KT-3 and FSO-KT-8 if equipped with air conditioner
- <sup>3</sup> Part number listed for reference only
- <sup>4</sup> The detent housing type must be verified by McFarlane's technician before purchasing an exchange unit from our stock. Please call 888-624-3153.
- <sup>5</sup> The "S", "SF" or "SP" suffix indicates a McFarlane repaired valve. The applicable Cessna part number is the McFarlane part number without the suffix. Reference the Cessna part number for all maintenance procedures.
- <sup>6</sup> FSO-KT-4 only works with valve S1903-2S
- <sup>7</sup> It is critical on model 172M, S/N 17260759 thru 17267584 that before ordering you identify the detent housing style your fuel valve has. See pictures at the top of the page.



## Eligibility for Repaired Fuel Selector and Fuel Shut Off Valves and Kits for Cessna Aircraft

Model	Serial Number	Fuel Selector Valve			Fuel Shut-Off Valve		
		McFarlane P/N 4	Seal Kit	Repair Kit	McFarlane P/N 4	Seal Kit	Repair Kit
F177RG 1	F177RG0161 thru F177RG0177	9851067-6S	FSS-KT-5	FSO-KT-13			
180,180A,B,C,D,E,F,G,H,J	30000 thru 18052770	0311070-1S	FSS-KT-6	FSO-KT-16			
180K	18052771 thru 18053203	9851067-5S	FSS-KT-5	FSO-KT-13			
182,182A,B,C,D	33000 thru 18253598	0311070-1S	FSS-KT-6	FSO-KT-16			
182E,F,G,H,J,K,L,M,N,P	18253599 thru 18265175	MC0716613-1 <b>New FAA-PMA!</b>	FSS-KT-18	FSO-KT-1			
182Q,R 1	18265176 thru 18268055	9851067-5S	FSS-KT-5	FSO-KT-13			
182R 1	18268056 thru 18268434	9851096-1S	FSS-KT-5	FSO-KT-6			
182R 1, 182S	18268435 and On	9851096-3S	FSS-KT-7	FSO-KT-9			
182T	18280945 thru 18299999	9851116-1S, 9851116-2S	FSS-KT-8	FSO-KT-23			
A182J,K,L,N 1	A182-0001 thru A182-0148	0716613-1S	FSS-KT-18	FSO-KT-1			
F182P	F18200001 thru F18200025	MC0716613-1 <b>New FAA-PMA!</b>	FSS-KT-18	FSO-KT-1			
F182Q	F18200026 thru F18200169	9851067-5S	FSS-KT-5	FSO-KT-13			
FR182	FR18200001 thru FR18200070	9851067-4S	FSS-KT-5	FSO-KT-13			
R182 1, TR182 1	R18200001 thru R18201798	9851067-4S	FSS-KT-5	FSO-KT-13			
	R18201799 thru R18201999	9851096-2S	FSS-KT-4	FSO-KT-7			
	R18201799 thru R18202041	9851096-5S	FSS-KT-4	FSO-KT-7			
T182 1	18267716 thru 18268055	9851067-4S	FSS-KT-5	FSO-KT-13			
	18268056 thru 18268541	9851096-2S, 9851096-5S	FSS-KT-4	FSO-KT-7			
T182T	T18208001 thru T18299999	9851116-1S, 9851116-2S	FSS-KT-8	FSO-KT-23			
185, 185A 1	185-0001 thru 185-0413				0716109-1S	FSS-KT-17	FSO-KT-25
185A 1	185-0414 thru 185-0512	Fuel Valve Control P/N MCS1241-1			0716111-1S 2	FSS-KT-16	FSO-KT-3
185B	185-0513 thru 185-0653	MC0716613-3 <b>New FAA-PMA!</b>	FSS-KT-18	FSO-KT-1	0716111-1S 2	FSS-KT-16	FSO-KT-3
185C	All	MC0716613-3 <b>New FAA-PMA!</b>	FSS-KT-18	FSO-KT-1	0716111-1S 2	FSS-KT-16	FSO-KT-3
185D,E, A185E 1	185-0777 thru 185-1300	MC0716613-3 <b>New FAA-PMA!</b>	FSS-KT-18	FSO-KT-1	0716111-1S 2	FSS-KT-16	FSO-KT-3
A185E 1	18501301 thru 18501599	MC0716613-4 <b>New FAA-PMA!</b>	FSS-KT-18	FSO-KT-1	0716111-1S 2	FSS-KT-16	FSO-KT-3
	18501600 thru 18501679	MC0716613-4 <b>New FAA-PMA!</b>	FSS-KT-18	FSO-KT-1	Fuel Shut Off Control P/N MCS1241-27	FSS-KT-16	FSO-KT-3
A185E 1, A185F 1	18501680 thru 18502310	MC0716613-4 <b>New FAA-PMA!</b>	FSS-KT-18	FSO-KT-1	Fuel Shut Off Control P/N MCS1241-34	FSS-KT-16	FSO-KT-3
A185F 1	18502311 thru 18503153	0716613-4S	FSS-KT-18	FSO-KT-1	0716111-1S 2	FSS-KT-16	FSO-KT-3
	18503154 thru 18504328	9851067-5S	FSS-KT-5	FSO-KT-13	9851070-2S	FSS-KT-1	FSO-KT-2
	18504329 thru 18504424	9851096-1S	FSS-KT-5	FSO-KT-6	9851070-2S	FSS-KT-1	FSO-KT-2
	18504425 thru 18504448	9851096-4S	FSS-KT-5	FSO-KT-6	9851070-2S	FSS-KT-1	FSO-KT-2
188,188A,B,A188,A188A,A188B Without Wing Tanks	188-0001 thru 18802348				1616016-1S 3		
A188 With Wing Tanks	188-0446 thru 188-0572				1H14-2S 3		
A188A 1, A188B 1 With Wing Tanks	18800573 thru 18802348				0716111-1S 2	FSS-KT-16	FSO-KT-3
A188B 1	18802349 thru 18802745T				0716111-5S	FSS-KT-16	FSO-KT-3
A188B 1, T188C	18802746 thru 18803974T				9851070-2S	FSS-KT-1	FSO-KT-2
190 1, 195 1, 195A,B	7004 thru 16083	0311070S					
	16084 thru 16183	0311070-1S	FSS-KT-6	FSO-KT-16			
210-5 (205) 1, 210-5A (205A) 1	205-0001 thru 205-0550	1216405-1S	FSS-KT-10	FSO-KT-21			
210-5A (205A) 1	205-0552 thru 205-0555	1216405-1S	FSS-KT-10	FSO-KT-21			
	205-0551, 205-0556 thru 205-0577	HE764S	FSS-KT-9	FSO-KT-24			
206/U206,U206A,B,C,D,E,F 1	U206-0001 thru U20602199	C291503S	FSS-KT-11	FSO-KT-10			
TU206F 1, G 1, U206F 1, G 1	U20602200 thru U20605919	1216100-1S, C291503-0101S	FSS-KT-11	FSO-KT-11			
TU206A,B,C,D,E,F 1	U206-0487 thru U20602199	C291503S	FSS-KT-11	FSO-KT-10			
TU206G 1, U206G 1	U20605920 thru U20606439	1216100-2S	FSS-KT-11	FSO-KT-11			
	U20606440 thru U20607020	1216100-1S	FSS-KT-11	FSO-KT-11			
P206,P206A,B,C,D,E	All	C291503S	FSS-KT-11	FSO-KT-10			
TP206A,B,C,D,E	All	C291503S	FSS-KT-11	FSO-KT-10			
206H,T206H	20608001 thru T20699999	9851096-5S	FSS-KT-4	FSO-KT-7			
207,T207,207A 1, T207A 1	20700001 thru 20700654	1216100-1S, C291503-0101S	FSS-KT-11	FSO-KT-11			
207A 1, T207A 1	20700655 thru 20700729	1216100-2S	FSS-KT-11	FSO-KT-11			
	20700730 thru 20700788	1216100-1S	FSS-KT-11	FSO-KT-11			
210,210A	57001 thru 21057840	1216001-1S	FSS-KT-12	FSO-KT-12			
210B,C	21057841 thru 21058220	1216405-1S	FSS-KT-10	FSO-KT-21			
210D,E,F, T210F	All	HE764S	FSS-KT-9	FSO-KT-24			
210G,H,J	All	C291503S	FSS-KT-11	FSO-KT-10			
T210G,H,J	T210-0198 thru T210-0392	C291503S	FSS-KT-11	FSO-KT-10			
210K,L,M,N 1, T210K,L,M,N 1	21059200 thru 21064535	1216100-1S, C291503-0101S	FSS-KT-11	FSO-KT-11			
210N 1, R/T210N 1, R	21064536 thru 21065009	9851110-3S	FSS-KT-15	FSO-KT-22			
P210N 1	P21000001 thru P21000760	1216100-1S, C291503-0101S	FSS-KT-11	FSO-KT-11			
P210N 1, R	P21000761 thru P21000874	9851110-3S	FSS-KT-15	FSO-KT-22	0716111-4S		
310, 310B,C,D	35000 thru 39299	0855013-1S	FSS-KT-6	FSO-KT-18			
310F,G,H,I,J,J-1,K	310-0001 thru 310K0245	0855013-1S,	FSS-KT-6	FSO-KT-18			
		0855020-4S (Aux)	FSS-KT-19	FSO-KT-19			
320, 320-1, 320A,B,C	320-0001 thru 320C0073	0855013-1S	FSS-KT-6	FSO-KT-18			
		0855020-4S (Aux)	FSS-KT-19	FSO-KT-19			
320D	320D0001 thru 320D0130	0855020-5S	FSS-KT-20	FSO-KT-20			

1 Partial model eligibility  
 2 For aircraft with flared threads use P/N 0716111-1SF. For aircraft with pipe threads use P/N 0716111-1SP.  
 3 Part number listed for reference only  
 4 The "S", "SF" or "SP" suffix indicates a McFarlane repaired valve. The applicable Cessna part number is the McFarlane part number without the suffix. Reference the Cessna part number for all maintenance procedures.

### Maintenance Tip:

The fuel selector valve works in unscreened fuel. Contaminated fuel can cause selector valve seal damage. When fueling from possibly contaminated fuel sources McFarlane recommends the use of a fuel filter, such as Mr. Funnel or another filtering device, to reduce trash in the fuel system. See page 242 for additional information on Mr. Funnel fuel filters.



## CJ Aviation FAA-PMA Fuel Pumps

Precisely machined for better seal life!

CJ Aviation has been manufacturing the best fuel pumps in the industry for more than 20 years, offering direct replacement for Dukes fuel pumps for Beechcraft, Cessna, Diamond, Maule, Mooney, Lake and Navion aircraft.



### Better

- Direct replacements
- Two year warranty

### Stronger

- Redesigned motor
- Tighter tolerances

### Faster

- In stock
- Most orders ship same day

Aircraft	14 Volt P/N	28 Volt P/N
<b>Beechcraft</b>		
35-C33	4140-00-7NVCJ	
35-C33A	4140-00-39NVCJ	
36	4140-00-39NVCJ	1296-00-1NVCJ
		4613-00-3NVCJ
		4613-00-5NVCJ
A36, G36		4613-00-3NVCJ
		4613-00-5NVCJ
58		4404-00-7NVCJ
95-B55		4404-00-7NVCJ
E33	4140-00-7NVCJ	
E33A, E33C	4140-00-39NVCJ	
E55		4404-00-7NVCJ
F33	4140-00-7NVCJ	
F33A, F33C	4140-00-39NVCJ	1296-00-1NVCJ
G33	4140-00-39NVCJ	
S35	4140-00-39NVCJ	
V35	4140-00-39NVCJ	1296-00-1NVCJ
V35A		1296-00-1NVCJ
<b>Cessna</b>		
172R,S		5100-00-4CJ
FR172E,F,G,H,J,K,L	4140-00-17CJ <sup>6</sup>	
FR172K <sup>1</sup>		4140-00-15CJ <sup>7</sup>
R172K	4140-00-17CJ <sup>8</sup>	4140-00-15CJ <sup>9</sup>
177RG	4140-00-17CJ <sup>10</sup>	4140-00-15CJ <sup>11</sup>
F177RG	4140-00-17CJ <sup>12</sup>	
R182, TR182 <sup>13</sup>		4140-00-15CJ <sup>13</sup>
A188, A188A,B	4140-00-17CJ <sup>3</sup>	4140-00-15CJ <sup>2</sup>
206	4140-00-17CJ	
206H, T206H		4140-00-15CJ
P206, P206A,B,C, TP206A,B,C	4140-00-17CJ	
P206D,E, TP206D,E	4140-00-17CJ <sup>14</sup>	4140-00-15CJ
U206, U206A,B,C, TU206A,B,C	4140-00-17CJ	
U206D,E,F,G, TU206D,E,F,G	4140-00-17CJ <sup>15</sup>	4140-00-15CJ
207, 207A, T207, T207A	4140-00-17CJ <sup>16</sup>	4140-00-15CJ <sup>15</sup>
210D,E,F,G,H,J,K, T210K	4140-00-17CJ	
210L,M,N <sup>17</sup> , T210L,M,N <sup>17</sup>		4140-00-15CJ <sup>16</sup>
P210N <sup>17</sup>		4140-00-15CJ <sup>17</sup>
T210F,G,H,J	4140-00-17CJ	
310, E310H,J, T310P,Q,R		4140-00-15CJ <sup>2</sup>
320, 320A,B,C,D,E,F		4140-00-15CJ <sup>2</sup>
340, 340A		4140-00-153CJ
401, 401A,B, 402, 402A,B		4140-00-153CJ
		4140-00-153CJ
411, 411A		4140-00-153CJ
414, 414A		4140-00-153CJ
421, 421A,B		4140-00-153CJ
		4140-00-153CJ
<b>Diamond</b>		
DA 40, 40F, 42		5100-00-9CJ <sup>18</sup>
<b>Lake Aircraft (Revo)</b>		
LA-4-200	4140-00-19ACJ	
<b>Maule</b>		
M-4	1184-00-3CJ	
	1471-00-3CJ	
	4140-00-57CJ <sup>4</sup>	
M-4-180V, M-4-220	1184-00-3CJ	4140-00-401CJ
	1471-00-3CJ	
	4140-00-400CJ	
M-5-180C, M5-5-200	1184-00-3CJ	4140-00-401CJ
	1471-00-3CJ	
M-5-210C, M-5-210TC	4140-00-400CJ	
	4140-00-57CJ <sup>4</sup>	
M-5-220C	4140-00-57CJ <sup>4</sup>	
	1184-00-3CJ	
	1471-00-3CJ	
	4140-00-57CJ	

Aircraft	14 Volt P/N	28 Volt P/N
<b>Maule (continued from previous column)</b>		
M-5-235C	1184-00-3CJ	4140-00-401CJ
	1471-00-3CJ	
	4140-00-57CJ <sup>4</sup>	
M-6-180	4140-00-400CJ	
	1184-00-3CJ	4140-00-401CJ
	1471-00-3CJ	
	4140-00-400CJ	
M-6-235	1184-00-3CJ	4140-00-401CJ
	1471-00-3CJ	
	4140-00-400CJ	
M-7-235, M-7-235A,B,C, MT-7-235	1184-00-3CJ	4140-00-401CJ
	1471-00-3CJ	
	4140-00-400CJ	
M-7-260, M-7-260C, MT-7-260	1184-00-3CJ	4140-00-401CJ
	1471-00-3CJ	
	4140-00-400CJ	
M-7-420A, M-7-420AC	1184-00-3CJ	4140-00-401CJ
	1471-00-3CJ	
	4140-00-400CJ	
MT-7-420	4140-00-400CJ	4140-00-401CJ
MXT-7-160, MX-7-180, MXT-7-180, MX-7-180A, MX-7-180A, MX-7-180AC,B,C, MX-7-235, M-8-235	1184-00-3CJ	4140-00-401CJ
	1471-00-3CJ	
	4140-00-400CJ	
<b>Mooney</b>		
M20D,E <sup>1</sup>	4140-00-21ACJ	
M20E <sup>1</sup> , F	4140-00-19ACJ	
M20G	4140-00-21ACJ	
M20J,K	4140-00-19ACJ	
<b>Navion (Sierra Hotel Aero)</b>		
H5	4140-00-17NCJ	

- 1 Partial model eligibility
- 2 When originally equipped with Dukes P/N 4140-00-15 or P/N C291504-0201
- 3 When originally equipped with Dukes P/N 4140-00-17 or P/N C291504-0101
- 4 When equipped with Franklin 6A-300 series engine
- 5 When equipped with IO-520-B or IO-520-BA engine
- 6 S/N FR172-0001 thru F17200620
- 7 S/N FR17200621 and On
- 8 S/N R1722000 thru R1722724
- 9 S/N R1722725 and On
- 10 S/N 177RG0283 thru 177RG1266
- 11 S/N 177RG1267 and On
- 12 S/N F177RG0063 thru F177RG0177
- 13 S/N R18200584 thru R18201628
- 14 S/N 20700001 thru 20700414
- 15 S/N 20700228 and On
- 16 S/N 21059503 thru 21064535
- 17 S/N P21000001 thru P21000760
- 18 When equipped with aux. fuel pumps on the left and right hand firewall locations
- 19 If used by a flight school warranty is void

## Dukes to CJ Aviation Cross Reference

Dukes P/N	Use CJ Aviation P/N
1184-00-1 and 1184-00-3	1184-00-3CJ
1296-00-1NV	1296-00-1NVCJ
1471-00-1 and 1471-00-3	1471-00-3CJ
4140-00-7 and 4140-00-7NV	4140-00-7NVCJ
4140-00-15	4140-00-15CJ
4140-00-17	4140-00-17CJ
4140-00-17N	4140-00-17NCJ
4140-00-19A	4140-00-19ACJ
4140-00-21A	4140-00-21ACJ
4140-00-39NV	4140-00-39NVCJ
4140-00-57	4140-00-57CJ
4140-00-153	4140-00-153CJ
4258-22-15NV	4258-00-15NVCJ
4404-00-7NV	4404-00-7NVCJ
4613-00-3 and 4613-00-3NV	4613-00-3NVCJ
4613-00-5 and 4613-00-5NV	4613-00-5NVCJ
5100-00-1, 5100-3 and 5100-00-4	5100-00-4CJ
5100-00-9	5100-00-9NCJ
5140-00-400	4140-00-400CJ
4140-00-401	4140-00-401CJ



**Note:** A refundable core charge is included in the price of all CJ Aviation FAA-PMA pumps. See the following page for a Dukes to CJ part number cross reference.

## CJ Aviation Overhauled Fuel Pumps

FAA and EASA approved certified repair station

Overhauled fuel pumps are available for general aviation aircraft and experimental aircraft with exchanges on Airborne, Dukes and Weldon pumps. Quick turn around with same day shipping on standard fuel pump part numbers. **Call for details.**

Dukes		Weldon						
14 Volt P/N	28 Volt P/N	JA Style Lip Seal	J Style Lip Seal	J Style Face Seal	JC Style Lip Seal	JC Style Face Seal	JL Style Lip Seal	L Style
1171-00-1NV	1296-00-1NV	A8120-B	33959-2	900107	8150-B	A8150-B	10054-A	10024-B
1184-00-3	1500-00-31	A8120-C	33959-3	269A8304-19	8152-B	A8150-B1	10054-B	10028-A
1458-00-1	1500-00-35	A8120-D	481-766	269A8304-21	8153-C	A8152-B	10062-B	42113-5
1471-00-3	1500-00-38	A8121-B	481-780	461-758	8154-A	A8153-B	A10050-C	42113-6
1499-00-19	1817-00-1NV	A8122-A	8007-B	8018-A	8154-B	A8153-C	A10050-D	48885-2
1499-00-21	4140-00-111		8008-C	8027-C	8157-B	A8159-A	A10051-D	53050-2
1816-00-1NV	4140-00-15		8009-A	A8007-B	8158-A	A8160-B	A10053-A	A10008-F
4140-00-103NV	4140-00-153		8009-B	A8008-D	8158-B	A8160-D	A10053-B	A10009-F
4140-00-11NV	4140-00-400		8010-A	A8016-B	8159-A	A8163-A	A10055-B	A10009.1-A
4140-00-17	4140-00-401		8016-B	A8016-B1	8160-B	A8163-A1	A10056-B	A10009.1-B
4140-00-17N	4140-00-47		8017-A	A8017-A	8163-A	A8163-B	A10063-A	A10014-D
4140-00-19A	4140-00NV		8115-B	A8019-A	8163-B	A8164-A		A10014-D40
4140-00-19B	4404-00-7NV		8116-B	A8020-A	8164-A	A8168-A		A10014-D42
4140-00-1NV	4613-00-3NV		8120-G	A8020-B	8168-A	A8170-A		A10014-D44
4140-00-218	4613-00-5NV		8120-H	A8123-H	8169-A	A8171-A		A10014-E
4140-00-21A	5100-00-4		8120-J	A8127-A	8170-A	A8172-A		A10017-C
4140-00-39NV	5100-00-9		8120-K	A8127-B	8171-B	A8174-B		A10019-C
4140-00-57	5217-00-1R		8120-L	A8136-B	8172-A	A8176-B		A10019-D
4140-00-7NV	5217-00-3		8120-M	A8148-A	8174-A	A8177-A		A10019-E
4258-00-15NV			8123-H	A8148-B	8174-B	A8177-B		A10019-E1
5367-00-1			8136-B	B8009-A	8175-A	A8178-A		A10057-B
			8140-B	B8009-B	8175-B	A8178-B		B10000-F
			A8009-A	B8110-F	8176-B	A8179-A		B10000-F1
			A8009-B	B8110-G	8177-A	A8181-A		B10003-F
			A8110-C	B8118-A	8177-B	A8183-A		B10007-D
			A8110-F	B8120-G	8178-A	A8184-A		B10010-F
			A8110-G	B8120-H	8178-B	A8185-B		B10010-FW
			AA8001-G	B8120-J	8179-A	A8186-B		B10014-E
			AA8001-H	B8120-K	8180-B	A8188-B		B10014-F
			B8001-G	B8120-M	8190-B	A8189-B		TA1-23-84
			B8001-H	C8009-A		A8250-B		
			B8103-F	C8009-B		C8187-B		
			C8100-E	D8100-E		MY103-280		
			C8100-F	D8100-F				
			C8100-L					



## Alcal 2000+ EGT/CHT/TIT System Tester/Calibrator

Trusted by aviation technicians since 1970!

P/N 85337

The Alcal 2000+ provides everything needed for accurate calibration and troubleshooting of EGT/CHT/TIT, Type K, J, and E systems. The tester simulates thermocouple output millivolts so that instruments can be calibrated on the ramp or in the shop. The Alcal 2000+ also accepts a millivolt input while testing Alcor thermocouples installed in its special heater for accurate analysis at operating temperatures.

The Alcal 2000+ is also designed to check the accuracy of an entire system or the individual components. While the thermocouple is in the heater, the instrument can be read in the panel and recalibrated as necessary while simulating temperatures up to 1750°F. An easy-to-read LCD display makes accurate settings a snap. With its rugged Pelican case, the Alcal 2000+ is ready to use anywhere! Certification of the Alcal 2000+ is traceable to the National Institute of Standards and Technology (NIST).



First annual calibration free!

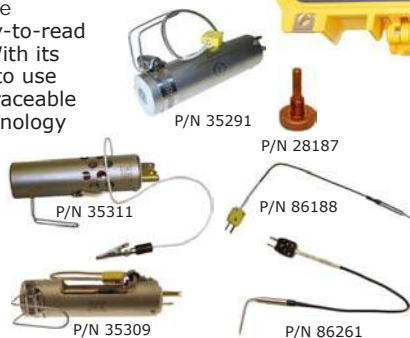
New removable lid

New version of the trusted Alcal 2000 with these great improvements

- Pelican case redesigned with removable lid
- Internal carrying handle for transporting w/o lid
- 3rd EGT/TIT Heater (p/n 35291) capable of accepting competitors larger probes
- Easy access to the fuse for quick replacement if necessary
- Includes all reference probes and accessories needed for testing and calibrating EGT, TIT, and CHT systems

### Alcal Accessories and Replacement Parts

28187	Adapter for gasket style CHT thermocouples
28202	CHT Adapter
35291	EGT Heater for Alcal 2000 with 0.128" hole
35309	EGT Heater for older Alcal systems
35311	CHT Heater for Alcal 2000
72112	Eutectic Refill, EGT
86188	EGT/TIT Reference Thermocouple for Alcal 2000
86261	CHT Reference Thermocouple for Alcal 2000



## JPI, EI and Westach to Alcor Probe Adapter

Makes upgrading to premium Alcor EGT/TIT probes easy!  
P/N 74291

- Adapts small diameter (faster response) clamp style Alcor probes to exhaust hole diameters up to 0.25"
- Provides positive exhaust gas seal
- For EGT clamp style Probes



## Syringe for TCP Fuel Treatment

P/N 73138

Make precise measurement easy!



FAA-PMA Approved

**Alcor Instruments and Probes**

Don't waste your money on cheap instruments and probes. There is a big difference!

**Increase engine life and enhance safety through proper monitoring**

- Faster responding probes than low dollar alternatives
- Temperature compensated gauges for accuracy all year round at any altitude
- Single gauges monitor one cylinder, dual gauges for twin engine aircraft monitor one cylinder per engine. Add a selector switch to make an economical full engine analyzer *Lighted gauges and custom dials also available!*

**Alcor: A name you can trust**

- Over 50 years experience – Designed, manufactured and supported in the USA
- Generous warranty: 3 years for gauges, 5 years for grounded probes, 1 year for ungrounded probes
- FAA-PMA/STC approved for all aircraft with reciprocating engines



**Simple installation**

- No power required from the aircraft (lighted gauges require power)
- Works even with an electrical failure
- Great for homebuilt or antique aircraft with no electrical system
- Gauges include all mounting hardware
- Standard 2 1/4" or 3 1/8" gauge sizes

**Full Stock for Fast Delivery!**

**CHT Gauges**

Indicates true temperature from 200-600°F or 100-300°C in 25° increments

P/N	Description	Compatible Thermocouple Type	Size	Calibration 1
46171	CHT Gauge Celsius	J - Black and Yellow	2 1/4"	250C @ 8.0 Ω
46151	CHT Gauge	J - Black and Yellow	2 1/4"	500F @ 8.0 Ω
46127	CHT/CHT Dual Gauge	J - Black and Yellow	2 1/4"	500F @ 8.0 Ω
46157	CHT/CHT Dual Gauge	J - Black and Yellow	3 1/8"	500F @ 8.0 Ω

1 Factory calibrated at the specified temperature for any Alcor type J leads and probes.



**Save with kits on the next page!**

**EGT Gauges**

Save on fuel costs with precision leaning!

- Quick visual reference to peak EGT
- Set peak reference with easy in-flight calibration – special calibration screwdriver included!
- Single 2 1/4" and dual 3 1/8" models include an adjustable reference needle
- Two marking options: Relative to peak (lean to peak temperature indicated with an \* - must be calibrated in flight) or true temperature from 1200-1700°F in 25° increments



P/N 45993 (Type E)  
P/N 46000-1  
P/N 46000-3  
P/N 46000-7  
P/N 46115 (w/light)  
P/N 46155

P/N	Description	Compatible Thermocouple Type	Size	True Temp or Relative to Peak	Calibration 1
46000-1	EGT/EGT Dual Gauge	K - Red and Yellow	3 1/8"	TT	1650F @ 8.2 Ω (264") 2
46000-3	EGT/EGT Dual Gauge	K - Red and Yellow	3 1/8"	TT	1550F (100") 2 Front 3.6 Ω Rear 7.8 Ω (250") 2
46000-7	EGT/EGT Dual Gauge	K - Red and Yellow	3 1/8"	TT	1650F @ 7.6 Ω (240") 2
46115	EGT/EGT Dual Gauge w/Light 24V	K - Red and Yellow	3 1/8"	RTP	1600F @ 7.44 Ω 3
46125	EGT/EGT Dual Gauge	K - Red and Yellow	2 1/4"	RTP	1600F @ 7.44 Ω 3
46148	EGT Gauge w/Light 12V	K - Red and Yellow	2 1/4"	RTP	1600F @ 3.63 Ω 3
46149	EGT Gauge w/Light 24V	K - Red and Yellow	2 1/4"	RTP	1600F @ 3.63 Ω 3
46150	EGT Gauge	K - Red and Yellow	2 1/4"	RTP	1600F @ 3.63 Ω 3
46155	EGT/EGT Dual Gauge	K - Red and Yellow	3 1/8"	RTP	1600F @ 7.44 Ω 3
46162	EGT Gauge w/Green Arc	K - Red and Yellow	2 1/4"	TT	1650F @ 3.3 Ω (90") 2
46164	EGT Gauge	K - Red and Yellow	2 1/4"	TT	1650F @ 3.3 Ω (90") 2
46188-3	EGT Dual Gauge w/Light	K - Red and Yellow	2 1/4"	RTP	1600F @ 7.44 Ω 3
45993	EGT/EGT Dual Gauge	E - Red and Brown	3 1/8"	RTP	1550F @ 8.9 Ω 3
46244	EGT Gauge w/Green Arc	K - Red and Yellow	2 1/4"	TT	1650F @ 7.6 Ω (240") 2

1 Factory calibrated at the specified temperature for the specified total probe and lead resistance. Calibration temperature also indicates the location of the \* or red line.

2 Factory calibrated for leads of the indicated length but may be recalibrated for different lead lengths either at the factory or with an Alcor 2000 or 2000+ System.

3 Factory calibrated for the specified total lead and probe resistance, but may be easily recalibrated in flight.

**Save \$\$ with kits on the next page!**

Instruments, Probes and Leads



## Combination CHT/EGT Gauges

- CHT indicates true temperature from 200-600°F in 25° increments
- EGT indicates temperature relative to peak in 25° increments (lean to peak temperature indicated with an \* - must be calibrated in flight)
- 3 1/8" size includes adjustable reference needle for the EGT



P/N 46126



P/N 46156

P/N	Description	Compatible Thermocouple Type	Size	Calibration 1
46126	CHT/EGT Dual Gauge	J - Black and Yellow (CHT) K - Red and Yellow (EGT)	2 1/4"	500F @ 8.0 Ω / 1600F @ 3.63 Ω
46156	CHT/EGT Dual Gauge	J - Black and Yellow (CHT) K - Red and Yellow (EGT)	3 1/8"	500F @ 8.0 Ω / 1600F @ 3.63 Ω

1 Factory calibrated for any Alcor type J leads and probes. EGT Factory calibrated for specified total lead and probe resistance, but may be re-calibrated in flight.

**See below for money saving kits!**

## TIT Gauges

- Dual gauges for twin engine aircraft
- Indicates true temperature from 1200-1700°F in 25° increments



P/N 46243



P/N 46124


 P/N 46224  
P/N 46000-4

P/N	Description	Compatible Thermocouple Type	Size	Calibration 1
46000-4	TIT/TIT Dual Gauge w/Light 24V	K - Red and Yellow	3 1/8"	Scale 1650F @ 6.2 Ω (192") 2
46224	TIT/TIT Dual Gauge	K - Red and Yellow	3 1/8"	Scale 1650F @ 7.44 Ω (216") 2
46243	TIT Gauge	K - Red and Yellow	2 1/4"	Scale 1650F @ 3.63 Ω (90") 2
46124	TIT/TIT Dual Gauge	K - Red and Yellow	2 1/4"	Scale 1650F @ 7.6 Ω (240") 2

1 Factory calibrated at the specified temperature for the specified total probe and lead resistance. Calibration temperature also indicates the location of the red line.

2 Factory calibrated for leads of the indicated length but may be recalibrated for different lead lengths either at the factory or with an Alcal 2000 or 2000+ System.

## Universal Cylinder Selector Switches

An inexpensive way to create a full engine monitor!

P/N 80825 for all single 2 1/4" Alcor gauges

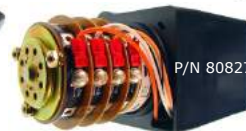
- Allows one gauge to monitor up to seven temperatures
- With a CHT gauge you can monitor CHT for all four or six cylinders for a single engine
- With an EGT gauge you can monitor EGT for all four or six cylinders plus TIT for a turbocharger for a single engine

P/N 80827 for all dual 2 1/4" Alcor gauges

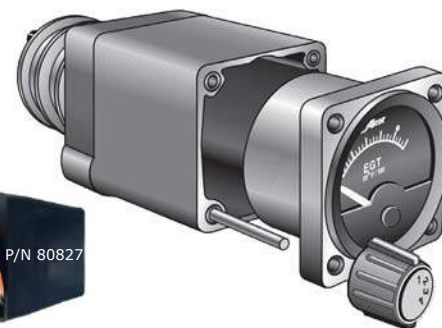
- Allows one gauge to monitor up to 14 temperatures
- With a CHT/EGT gauge you can monitor CHT and EGT for all four or six cylinders plus TIT for a turbocharger for a single engine
- With a dual EGT gauge you can monitor EGT for all four or six cylinders plus TIT for a turbocharger for two engines



P/N 80825



P/N 80827



**Can also be used with non-Alcor gauges!**

## Complete Kits

- Save with complete kits from McFarlane!
- Includes everything you need!



Kit P/N	Description	Kit Contents			
		Gauge	Probes	Leads	Accessories (included)
211-110	2 1/4" EGT, Clamp Probe, 90" Lead	(1) 46150	(1) 86255	(1) 42525	
211-140	2 1/4" EGT, Clamp Probes, 90" Leads, 4 Cylinder Switch	(1) 46150	(4) 86255	(4) 42525	(1) 80825
211-160	2 1/4" EGT, Clamp Probes, 90" Leads, 6 Cylinder Switch	(1) 46150	(6) 86255	(6) 42525	(1) 80825
211-210	2 1/4" EGT, Clamp Probe, 144" Lead	(1) 46150	(1) 86255	(1) 42526	
213-101	2 1/4" CHT, Bayonet Probe, 90" Lead	(1) 46151	(1) 86251	(1) 42535	(1) 28202
213-104	2 1/4" CHT, Bayonet Probes, 90" Leads, 4 Cylinder Switch	(1) 46151	(4) 86251	(4) 42535	(4) 28202, (1) 80825
213-201	2 1/4" CHT, Bayonet Probe, 144" Lead	(1) 46151	(1) 86251	(1) 42536	(1) 28202
222-111	2 1/4" CHT/EGT Bayonet/Clamp Probes, 90" Leads	(1) 46126	(1) 86251, (1) 86255	(1) 42525, (1) 42535	(1) 28202
222-144	2 1/4" CHT/EGT Bayonet/Clamp Probes, 90" Leads, 4 Cylinder Switch	(1) 46126	(4) 86251, (4) 86255	(4) 42525, (4) 42535	(4) 28202, (1) 80827
222-211	2 1/4" CHT/EGT Bayonet/Clamp Probes, 144" Leads	(1) 46126	(1) 86251, (1) 86255	(1) 42526, (1) 42536	(1) 28202
222-266	2 1/4" CHT/EGT Bayonet/Clamp Probes, 144" Leads, 6 Cylinder Switch	(1) 46126	(6) 86251, (6) 86255	(6) 42526, (6) 42536	(6) 28202, (1) 80827
46126-Kit	2 1/4" CHT/EGT Dual Meter Kit	(1) 46126	(1) 86202, (1) 86255	(1) 42525, (1) 42535	
322-111	3 1/8" CHT/EGT Bayonet/Clamp Probes, 90" Leads	(1) 46156	(1) 86251, (1) 86255	(1) 42525, (1) 42535	(1) 28202
1136-B20A	3 1/8" Dual EGT, Screw-In Probes 240" Leads	(1) 46155	(2) 86245	(2) 42527	

FAA-PMA Approved

**Thermocouple Probes**

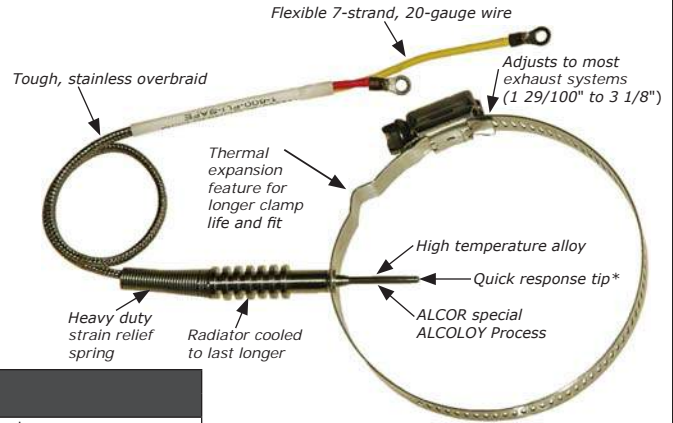
With over 50 years of aviation manufacturing experience, Alcor makes the highest quality, longest lasting, and fastest responding probes.

- Best warranty in the industry (5 year on grounded probes, 1 year on grounded probes)
- Improved design features
- Designed, manufactured and supported in the USA

**Thermocouple Types: What's the difference?**

A thermocouple is formed by the junction between two metals. When the junction is heated, a very small voltage measured in millivolts (1/1000V) is generated. The higher the temperature, the higher the voltage. Each metal combination is best suited for a specific temperature range. The type of thermocouple indicates the metal combination.

Three types are used in aviation EGT, CHT, and TIT applications:



**\*Alcor probe tips are the smallest in the industry for the fastest response time**

**Save \$\$ with kits see page 89!**

Type	Wires			Description
	Color	Polarity	Material	
J	Yellow	-	constantan	Very sensitive. Limited to lower temps. Not for EGT or TIT probes. Standard for CHT probes. Required for all Alcor CHT gauges.
	Black	+	iron	
K	Red	-	alumel	Sensitive over a broad range of temps. Standard for EGT and TIT probes and some amplified or digital CHT gauges from other companies.
	Yellow	+	chromel	
E	Red	-	constantan	Used in older EGT systems. Alcor still supplies Type E gauges and a limited supply of probes, but not supply leads. If new probes or leads are required, it is a good time to upgrade to a Type K system. Brown wire may look tan or silver.
	Brown	+	chromel	

The type of thermocouple must match the type of gauge and lead.

**Grounded vs Ungrounded**

**Grounded** probes have the thermocouple junction welded directly to the probe shaft. They have faster response time, longer life, and lower cost, but since they have continuity with the engine ground, they are susceptible to more electrical noise. This noise does not affect Alcor gauges, but can cause problems with some amplified or digital gauges from other manufacturers. All Alcor gauges can use grounded thermocouple, although some airframe manufacturers require ungrounded probes.

**Ungrounded** probes have the thermocouple junction isolated from the probe shaft so there is no continuity between the thermocouple and the engine ground resulting in less electrical noise. They are required for some amplified or digital gauges from other manufacturers and by some airframe manufacturers.

**Connectors**

Most probes have ring terminal connectors however some have a Omega style male plug connector. Omega style plugs are **now available** for converting an existing ring terminal installation.



**Stagger**

The two different color probe wires are typically different lengths to ensure the correct polarity when reattaching them to the lead going to the gauge. Stagger refers to which color wire is longer.

For Type K probes, two options are available:

*Normal:* The yellow probe wire is longer

*Reverse:* The yellow probe wire is shorter



Normal and reverse stagger probes and leads are all completely compatible, however, having the correct stagger ensures a neat installation and correct polarity. P/N 42523 EGT Lead Stagger Adapter is available to convert a normal stagger to a reverse stagger.

**Alumel EGT Lead Stagger Adapter**

**P/N 42523**

Converts a probe from normal to reverse stagger

**Fiberglass Fire Sleeve**

**P/N 49297**

Protects wires from engine and exhaust heat. 6" length

**CHT Thermocouple Probes**

Includes fire sleeve and ring terminal hardware. Two different mount styles are available:

**Bayonet Mount**

These twist and lock into a screw-in adapter. The probe is spring loaded to ensure contact with metal instead of air. Choose bayonet style if the engine model is equipped with threaded thermowell receptor and/or bayonet adapter in the cylinders. (see below for adapter)

**Gasket Mount**

These do not require a screw-in adapter. The 18mm gasket fits on many common spark plugs. Some engine designs, such as radial engines, the O-235 and O-200, may prevent the use of bayonet style or may not allow for the use of a bayonet adapter. Choose gasket style if the engine model is NOT equipped with threaded thermowell receptor and/or bayonet adapter in the cylinders.



P/N	Description	Thermocouple Type	Mount	Grounded or Ungrounded	Stagger	Resistance
86251	CHT Probe	J - Black and Yellow	Bayonet	Grounded	Normal	0.24 ± .05 Ω
86202	CHT Probe	J - Black and Yellow	Gasket, 18 mm	Grounded	Normal	0.13 ± .16 Ω - .05 Ω
86252	CHT Probe	K - Red and Yellow	Bayonet	Grounded	Reverse	0.66 ± .10 Ω
86268	CHT Probe	K - Red and Yellow	Gasket, 18 mm	Grounded	Normal	0.60 ± .10 Ω
86268-2	CHT Probe	K - Red and Yellow	Gasket, 14 mm	Grounded	Normal	0.60 ± .10 Ω

1 Does not require bayonet adapter. Screws directly into thermowell.

**CHT Bayonet Adapter**

**P/N 28202** 3/8"-24 UNF thread

- Threads into cylinder thermowell
- Adapts to standard bayonet probes



Instruments Probes and Leads

## EGT and TIT Thermocouple Probes

Alcor EGT probes are accurate +/-25° at 1500°F. Includes fire sleeve and ring terminal hardware. Two different mount styles are available:

### Screw-In Mount

This option provides the neatest installation. Many engines now come with a hole already threaded for a screw-in probe. If not, a threaded weld boss (P/N 28113) can be purchased to retrofit an engine. Alcor screw-in probes are available in 7/16"-20 UNF thread common in Continentals or 1/4"-18 NPT thread common in Lycomings. Some probes are available with adjustable depth to accommodate different weld boss heights. The probe tip should be 3/4" into the tube. Screw-in probes are also available with a 90° bend or an 8° bend to allow for an engine design that will not accommodate the straight-in style.

P/N	Description	Thermocouple Type	Mount	Grounded or Ungrounded	Stagger	Resistance
86143 <sup>1</sup>	EGT/TIT Probe	K - Red and Yellow	Screw-In, 1/4" NPT	Grounded	Normal	0.89 ± .10 Ω
86160 <sup>2</sup>	EGT/TIT Probe	K - Red and Yellow	Screw-In, 7/16"-20	Grounded	Reverse	0.70 ± .10 Ω
86161 <sup>1</sup>	EGT/TIT Probe 90° Bend	K - Red and Yellow	Screw-In, 1/4" NPT	Grounded	Reverse	0.70 ± .10 Ω
86230 <sup>1</sup>	EGT/TIT Probe 8° Bend	K - Red and Yellow	Screw-In, 1/4" NPT	Grounded	Normal	0.89 ± .10 Ω
86240	EGT/TIT Probe	K - Red and Yellow	Screw-In, 7/16"-20	Grounded	Normal	0.80 ± .10 Ω
86245 <sup>2</sup>	EGT/TIT Probe, 11.56"	K - Red and Yellow	Screw-In, 7/16"-20	Grounded	Reverse	0.70 ± .10 Ω
86307 <sup>1,2</sup>	EGT/TIT Probe	K - Red and Yellow	Screw-In, 1/4" NPT	Ungrounded	Normal	0.71 ± .03 Ω
86308 <sup>1,2</sup>	EGT/TIT Probe	K - Red and Yellow	Screw-In, 7/16"-20	Ungrounded	Normal	0.71 ± .03 Ω
86309 <sup>2</sup>	EGT/TIT Probe, Long Lead	K - Red and Yellow	Screw-In, 7/16"-20	Ungrounded	Normal	1.60 Ω
86341 <sup>1</sup>	EGT/TIT Probe	K - Red and Yellow	Screw-In, 1/8" NPT	Ungrounded	N/A	0.94 ± .10 Ω

- <sup>1</sup> Adjustable depth tip
- <sup>2</sup> Built in radiator

### Clamp Mount

This is the most common option because installation is easy and no welding is required. A hole is simply drilled in the exhaust near the mounting flange. The probe is inserted in the hole and a hose-clamp style clamp secures it in place. Clamps are available in various sizes to accommodate different sized exhaust tubes.

P/N	Description	Thermocouple Type	Mount	Grounded or Ungrounded	Stagger	Resistance
86226 <sup>2</sup>	EGT/TIT Probe	K - Red and Yellow	Clamp, 3 1/4" Max	Grounded	Reverse	0.70 ± .10 Ω
86255 <sup>2,4</sup>	EGT/TIT Probe	K - Red and Yellow	Clamp, 1 1/8" to 3 3/8"	Grounded	Normal	0.80 ± .10 Ω
86275 <sup>2</sup>	EGT/TIT Probe, 13.8"	K - Red and Yellow	Clamp, 3 1/4" Max	Grounded	Normal	0.80 ± .10 Ω
86281 <sup>2</sup>	EGT/TIT Probe	K - Red and Yellow	Clamp, 3 1/4" Max	Grounded	Normal	0.85 ± .10 Ω
86310 <sup>2</sup>	EGT/TIT Probe	K - Red and Yellow	Clamp, 2.35" Max	Ungrounded	Normal	1.60 Ω
86343 <sup>2,3</sup>	EGT/TIT Probe	K - Red and Yellow	Clamp, 3 1/4" Max	Ungrounded	Normal	0.80 Ω

- <sup>2</sup> Built in radiator
- <sup>3</sup> Omega style male plug connector. Does not include fire sleeve.
- <sup>4</sup> Connector hardware kit P/N 38094 contains 2 each Nuts, Washers and Screws. Can be purchased separately and is included with P/N 86255.

### Weld Boss Plug

P/N 28204

- Screws into unused weld boss ports
- 7/16"-20 UNF thread



### EGT/TIT Weld Boss

P/N 28113

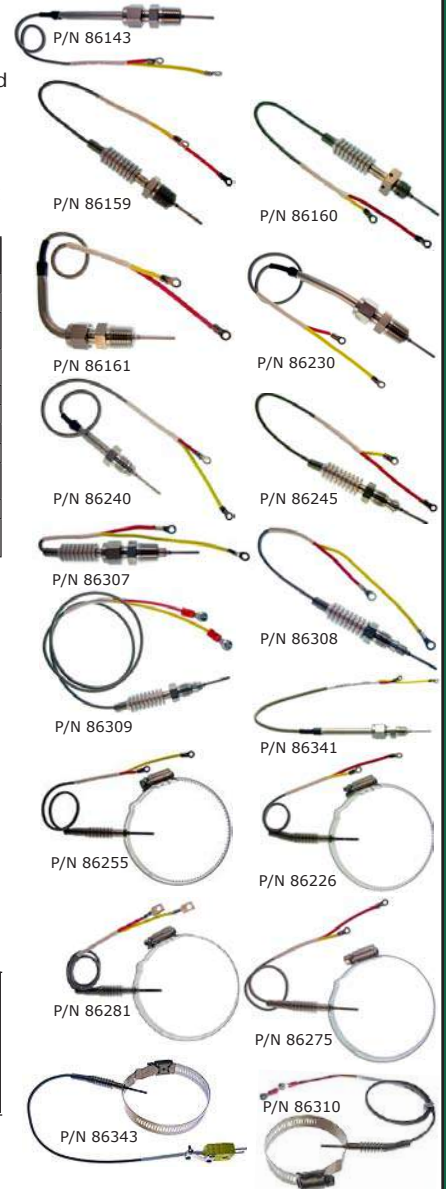
- Weld to exhaust tube to use screw-in probes
- 7/16"-20 UNF thread



### Copper Gasket

P/N 70354

Used as a seal with EGT/TIT Probe, P/N 86160 and Weld Boss, P/N 28113.



## Leads

- High quality stranded material for flexibility and long life (cheap single stranded leads are prone to break)
- Used to attach a thermocouple probe to a gauge
- Must be of the same type as the thermocouple (e.g., a Type K probe must use Type K leads)
- Do not shorten or splice as this will alter the resistance and require recalibration of the gauge. See calibration note

### CHT Leads

- Integrated resistor ensures the same resistance regardless of length
- Choose leads based on the distance from the probe to the gauge

### EGT/TIT Leads

- Each length has a different resistance
- Total resistance of the lead and the probe must match the calibration of the gauge
- Choose replacement leads based on the calibration of the existing gauge
- For a new system, choose leads based on the distance from the probe to the gauge and choose a gauge with the corresponding calibration



**Bulk wire now available!**  
P/N 98156 (Type K Thermocouple Extension)  
P/N 98204 (Type J)  
P/N 98211 (Type K)

CHT Type J Black and Yellow		
P/N	Resistance	Length
42535	7.76 ± .20 Ω	90"
42536	7.76 ± .20 Ω	144"
42543	7.76 ± .20 Ω	216"
42537	7.76 ± .20 Ω	240"

EGT Type K Red and Yellow		
P/N	Resistance	Length
42525	4.34 ± .08 Ω	90"
42526	2.71 ± .06 Ω	144"
42528	6.52 ± .11 Ω	216"
42527	7.25 ± .12 Ω	240"

### Calibration note:

EGT gauges with relative lean to peak markings may be easily recalibrated in flight per the instructions provided with the gauge. TIT, CHT and EGT gauges with True Temperature markings must either be recalibrated with an Alcal System Tester or returned to Alcor for recalibration if the total lead and probe resistance does not match the gauge calibration.

Digital or amplified gauges from other manufacturers are not sensitive to lead resistance, therefore leads may be shortened as needed for these applications without requiring recalibration.

**Save with kits see page 89!**

**Custom Cables**

Custom cable assemblies can be fabricated and certified to specification MIL-DTL-6117, or certified to your special specifications. McFarlane custom cables with standard fittings are pre stretched and proof loaded in accordance with MIL-DTL-5688. Cables using nonstandard fittings are proof loaded and pre stretched when possible, but cannot be certified to the MIL-DTL-5688 or MIL-DTL-6117 standards.

McFarlane can also manufacture and certify cable assemblies to the NAS302 through NAS310 standards. Cable assemblies requiring special non-standard terminals can be made quickly to your data or old cable using our precision machine shop, inspection system, and quality controlled processes. Several industry standard corrosion preventative coatings are also available. Our experienced engineering staff is available to develop cables for unique applications.

Traceability of all materials and test reports are maintained for our custom cables.

Our extensive stock of cable and fittings allows us to provide one to three day service for most orders. A custom cable design form is available at [www.mcfarlaneaviation.com](http://www.mcfarlaneaviation.com) or send us your old cable.

Custom assemblies are manufactured using the same materials and attention to quality as our FAA-PMA products, however, custom cables are not FAA-PMA approved.

**Stainless Steel or Galvanized Steel Cable?**

Stainless steel is corrosion resistant and works well in environments such as salt air, water saturation, or agricultural chemicals. Galvanized carbon steel and stainless cables are soaked in a MIL-SPEC rust preventative and lubricating compound. In normal environments the galvanized cable will not suffer from corrosion damage for decades.

The advantages of galvanized cable are its wear resistance and cost. Galvanized cable resists abrasion wear four or five times longer than stainless steel.

Stainless steel wire is high in nickel and therefore softer than the carbon steel wire. Stainless steel cable will show signs of wire wear at pulleys and fairleads much quicker than the galvanized carbon steel wire.

We recommend using galvanized steel cables except in coastal geographical areas, agricultural aircraft, float planes, and other applications where the cable is exposed directly to water. **Only McFarlane has FAA-PMA approved galvanized cables for the new production Cessna aircraft.**

All Beechcraft cables are made from galvanized steel cable and coated with a modified MIL-PRF-16173 compound. This is the same process used on Beechcraft original cables. It provides additional corrosion protection beyond the standard MIL-SPEC rust preventative oil. This provides both exceptional wear resistance and corrosion protection for many years.

**Bulk Cable**

McFarlane buys certified cable in large quantities direct from the mill. This allows us to provide low prices on bulk cable. McFarlane offers pre-packaged bulk cable in a variety of sizes. Cable can be ordered in 100 ft. or 500 ft. lengths. Certification from the cable manufacturer is given with every order.

**Pulleys**

McFarlane stocks all pulleys required for Cessna single engine aircraft. Our FAA-PMA approval on pulleys replace the AN, NAS and S series pulleys commonly used on the Cessna aircraft. Pulley kits are available that contain all the pulleys and cotter pins required for one aircraft. See the pulley section on pages 122-124 of the catalog for more details.

**Trim Control Chains**

McFarlane offers the trim control chains for Cessna single engine and most Beechcraft aircraft. Don't forget to replace your trim control chains and connecting links where necessary!

**Hardware**

McFarlane stocks an extensive inventory of cable hardware. We offer terminals, turnbuckles, eye ends, sleeves, locking clips, barrels and balls. Let our purchasing volume save you money!

**Buy Complete Kits and Save!**

McFarlane has complete flight control cable and trim chain kits for each of the different cable groups required to service most single engine aircraft from the Cessna model 120 through model 210 and cable kits for most Piper single engine airplanes. Most of the light aircraft fleet has seen many years of service and have endured many flight hours. Worn, rusty, and frayed cables are now common. It is a tedious, time consuming job to research the part manuals for all of the cables required for a complete aircraft. McFarlane has done the research and has all of the part numbers required for your aircraft.

We stock kits in either galvanized-carbon steel or stainless steel. All components are fully traceable and carry a one year limited warranty.

**Stock**

McFarlane has over 4,500 cable assemblies and chains in stock. We have FAA-PMA approved cables available in corrosion resistant stainless or high strength galvanized steel for most 100 and 200 series Cessna aircraft, PA28, PA32 and PA34 series Piper aircraft and G-164 series Ag-Cat aircraft. McFarlane also stocks cables for single engine piston and many turbine and twin engine Beechcraft, and stabilator adjust cables for Piper J-3, PA-11, PA-12, PA-14, PA-16, PA-18, PA-18A, PA-20 and PA-22.

**Quality**

McFarlane aircraft flight control cables offer quality that is second to none in the aircraft industry. Our quality assurance procedures and personnel are relentless, insuring that our aircraft flight control cables meet the highest standards possible. These standards exceed the military specifications that govern aircraft flight control cables.

Each McFarlane cable assembly is made from the highest quality U.S. manufactured materials from suppliers that have been listed by the U.S. government as being tested and qualified for government use (QPL listed). Before cable assemblies are accepted a sample from each lot of cable assemblies is subjected to a test load equal to 100% of their rated minimum breaking strength and then destroyed. Every cable terminal swaged on a cable assembly is inspected for proper dimension. All cable assemblies produced are pre-stretched to eliminate rigging and growth changes after installation. In addition each and every McFarlane cable assembly must endure a sustained proof load equal to 60% of the cable's minimum rated breaking strength assuring the safest and highest quality aircraft flight control cables available.

**We are one of a few DOD QML-6117 certified manufacturers of aircraft cable assemblies!**

- McFarlane quality is second to none!
- Over 25 years of cable experience!
- Cables available in galvanized and stainless steel
- Cables are sold in kits or separately
- When you order cable and cable terminals from McFarlane you will always receive a certified product!
- Our large volume purchases give you great prices!





















# Flight Control System

## Flight Control Cables - Cessna

Continued from previous page  
**Qty P/N Galv SS Location**  
 4 MCS2294-25 Chain Connecting Link  
 4 MC0422280 Bellcrank Aileron Bushing

**A185F1 A185F1 1971-1-1973**  
 S/N 18501902 thru 18502206  
 Complete Cable Kit P/N CCTK185-06G (Galvanized)  
 Complete Cable Kit P/N CCTK185-06S (Stainless Steel)  
 Complete Pulley Kit P/N PULL-KT-84\*

**Qty P/N Galv SS Location**  
 1 MC0510105-51 or 151 Rudder Forward LH  
 1 MC0510105-71 or 171 Rudder Forward RH  
 2 MC0510105-52 or 152 Rudder Aft  
 2 MC0510105-323 Tailwheel Steering  
 1 MC0510105-73 or 173 Rudder Trim  
 1 MC0510105-82 or 182 Elevator Trim  
 1 MC0510105-24 or 124 Elevator Upper  
 1 MC0510105-25 or 125 Elevator Lower  
 2 MC0510105-28 or 128 Stabilator Trim Forward  
 2 MC0510105-29 or 129 Stabilator Trim Aft  
 1 MC0510105-215 or 315 Aileron Yoke LH  
 1 MC0510105-214 or 314 Aileron Yoke RH  
 1 MC0510105-213 or 313 Aileron Yoke Primary  
 1 MC0510105-216 or 316 Aileron Yoke Transition  
 2 MC0510105-222 or 322 Aileron Direct  
 1 MC0510105-13 or 113 Aileron Carry Thru  
 2 MC0510105-225 or 325 Flap Direct Outboard  
 2 MC0510105-60 or 160 Flap Return Outboard  
 1 MC0510105-63 or 163 Flap Return Inboard LH  
 1 MC0510105-64 or 164 Flap Return Inboard RH  
 1 MC0510105-227 or 327 Flap Direct Inboard LH  
 1 MC0510105-226 or 326 Flap Direct Inboard RH  
 1 MC0510105-21 or 121 Flap Return Forward  
 1 MC0510105-22 or 122 Flap Direct Forward  
 1 MC0510105-232 Parking Brake  
 1 MCS2295P25-321 Chain Stabilator Trim Fwd  
 1 MCS2295-25-185 Chain Stabilator Trim Aft  
 4 MCS2294-25 Chain Connecting Link  
 4 MC0422280 Bellcrank Aileron Bushing

**A185F1 1973**  
 S/N 18502207 thru 18502310  
 Complete Cable Kit P/N CCTK185-11G (Galvanized)  
 Complete Cable Kit P/N CCTK185-11S (Stainless Steel)  
 Complete Pulley Kit P/N PULL-KT-84\*

**Qty P/N Galv SS Location**  
 1 MC0510105-51 or 151 Rudder Forward LH  
 1 MC0510105-237 or 337 Rudder Forward RH  
 2 MC0510105-52 or 152 Rudder Aft  
 2 MC0510105-323 Tailwheel Steering  
 1 MC0510105-73 or 173 Rudder Trim  
 1 MC0510105-82 or 182 Elevator Trim  
 1 MC0510105-24 or 124 Elevator Upper  
 1 MC0510105-25 or 125 Elevator Lower  
 2 MC0510105-28 or 128 Stabilator Trim Forward  
 2 MC0510105-29 or 129 Stabilator Trim Aft  
 1 MC0510105-215 or 315 Aileron Yoke LH  
 1 MC0510105-214 or 314 Aileron Yoke RH  
 1 MC0510105-213 or 313 Aileron Yoke Primary  
 1 MC0510105-216 or 316 Aileron Yoke Transition  
 2 MC0510105-222 or 322 Aileron Direct  
 1 MC0510105-13 or 113 Aileron Carry Thru  
 2 MC0510105-225 or 325 Flap Direct Outboard  
 2 MC0510105-60 or 160 Flap Return Outboard  
 1 MC0510105-63 or 163 Flap Return Inboard LH  
 1 MC0510105-64 or 164 Flap Return Inboard RH  
 1 MC0510105-227 or 327 Flap Direct Inboard LH  
 1 MC0510105-226 or 326 Flap Direct Inboard RH  
 1 MC0510105-21 or 121 Flap Return Forward  
 1 MC0510105-22 or 122 Flap Direct Forward  
 1 MC0510105-232 Parking Brake  
 1 MCS2295P25-321 Chain Stabilator Trim Fwd  
 1 MCS2295-25-185 Chain Stabilator Trim Aft  
 4 MCS2294-25 Chain Connecting Link  
 4 MC0422280 Bellcrank Aileron Bushing

**A185F1 1974-1976**  
 S/N 18502311 thru 18503153  
 Complete Cable Kit P/N CCTK185-07G (Galvanized)  
 Complete Cable Kit P/N CCTK185-07S (Stainless Steel)  
 Complete Pulley Kit P/N PULL-KT-33\*

**Qty P/N Galv SS Location**  
 1 MC0510105-51 or 151 Rudder Forward LH  
 1 MC0510105-237 or 337 Rudder Forward RH  
 2 MC0510105-52 or 152 Rudder Control Aft  
 2 MC0510105-323 Tailwheel Steering  
 1 MC0510105-73 or 173 Rudder Trim  
 1 MC0510105-82 or 182 Elevator Trim  
 1 MC0510105-24 or 124 Elevator Upper  
 1 MC0510105-25 or 125 Elevator Lower  
 2 MC0510105-28 or 128 Stabilator Trim Forward  
 2 MC0510105-29 or 129 Stabilator Trim Aft  
 1 MC0510105-215 or 315 Aileron Yoke LH  
 1 MC0510105-214 or 314 Aileron Yoke RH  
 1 MC0510105-213 or 313 Aileron Yoke Primary  
 1 MC0510105-216 or 316 Aileron Yoke Transition

Kit continues in next column

Continued from previous column  
**Qty P/N Galv SS Location**  
 2 MC0510105-222 or 322 Aileron Direct  
 1 MC0510105-13 or 113 Aileron Carry Thru  
 2 MC0510105-225 or 325 Flap Direct Outboard  
 2 MC0510105-60 or 160 Flap Return Outboard  
 1 MC0510105-63 or 163 Flap Return Inboard LH  
 1 MC0510105-64 or 164 Flap Return Inboard RH  
 1 MC0510105-227 or 327 Flap Direct Inboard LH  
 1 MC0510105-226 or 326 Flap Direct Inboard RH  
 1 MC0510105-21 or 121 Flap Return Forward  
 1 MC0510105-22 or 122 Flap Direct Forward  
 1 MC0510105-232 Parking Brake  
 1 MCS2295P25-321 Chain Stabilator Trim Fwd  
 1 MCS2295P25-185 Chain Stabilator Trim Aft  
 4 MCS2294-25 Chain Connecting Link  
 4 MC0422280 Bellcrank Aileron Bushing

Available separately for aircraft equipped with floats  
 1 MC0742022-1 Rudder Return  
 1 MC0742022-2 Rudder Return

**185F1 1977-1980**  
 S/N 18503154 thru 18504138  
 Complete Cable Kit P/N CCTK185-08G (Galvanized)  
 Complete Cable Kit P/N CCTK185-08S (Stainless Steel)  
 Complete Pulley Kit P/N PULL-KT-33\*

**Qty P/N Galv SS Location**  
 1 MC0510105-51 or 151 Rudder Forward LH  
 1 MC0510105-237 or 337 Rudder Forward RH  
 2 MC0510105-52 or 152 Rudder Control Aft  
 2 MC0760135-106 Tailwheel Steering  
 1 MC0510105-394 Tailwheel Lock  
 1 MC0510105-73 or 173 Rudder Trim  
 1 MC0510105-82 or 182 Elevator Trim  
 1 MC0510105-24 or 124 Elevator Upper  
 1 MC0510105-25 or 125 Elevator Lower  
 2 MC0510105-28 or 128 Stabilator Trim Forward  
 2 MC0510105-29 or 129 Stabilator Trim Aft  
 1 MC0510105-215 or 315 Aileron Yoke LH  
 1 MC0510105-214 or 314 Aileron Yoke RH  
 1 MC0760135-8 or 108 Aileron Yoke Primary  
 1 MC0510105-216 or 316 Aileron Yoke Transition  
 2 MC0510105-222 or 322 Aileron Direct  
 1 MC0510105-13 or 113 Aileron Carry Thru  
 2 MC0510105-225 or 325 Flap Direct Outboard  
 2 MC0510105-60 or 160 Flap Return Outboard  
 1 MC0510105-63 or 163 Flap Return Inboard LH  
 1 MC0510105-64 or 164 Flap Return Inboard RH  
 1 MC0510105-227 or 327 Flap Direct Inboard LH  
 1 MC0510105-226 or 326 Flap Direct Inboard RH  
 1 MC0510105-21 or 121 Flap Return Forward  
 1 MC0510105-22 or 122 Flap Direct Forward  
 1 MC0510105-232 Parking Brake  
 1 MCS2295P25-321 Chain Stabilator Trim Fwd  
 1 MCS2295P25-185 Chain Stabilator Trim Aft  
 4 MCS2294-25 Chain Connecting Link  
 4 MC0422280 Bellcrank Aileron Bushing

Available separately for aircraft equipped with floats  
 1 MC0742022-1 Rudder Return  
 1 MC0742022-2 Rudder Return

**185F1 1981-1982**  
 S/N 18504139 thru 18504379, 18504381 thru 18504391  
 Complete Cable Kit P/N CCTK185-09G (Galvanized)  
 Complete Cable Kit P/N CCTK185-09S (Stainless Steel)  
 Complete Pulley Kit P/N PULL-KT-33\*

**Qty P/N Galv SS Location**  
 1 MC0510105-51 or 151 Rudder Forward LH  
 1 MC0510105-237 or 337 Rudder Forward RH  
 2 MC0510105-52 or 152 Rudder Control Aft  
 2 MC0760135-106 Tailwheel Steering  
 1 MC0510105-394 Tailwheel Lock  
 1 MC0510105-73 or 173 Rudder Trim  
 1 MC0510105-82 or 182 Elevator Trim  
 1 MC0510105-24 or 124 Elevator Upper  
 1 MC0510105-25 or 125 Elevator Lower  
 2 MC0510105-28 or 128 Stabilator Trim Forward  
 2 MC0510105-29 or 129 Stabilator Trim Aft  
 1 MC0510105-215 or 315 Aileron Yoke LH  
 1 MC0510105-214 or 314 Aileron Yoke RH  
 1 MC0760135-8 or 108 Aileron Yoke Primary  
 1 MC0510105-216 or 316 Aileron Yoke Transition  
 2 MC0510105-222 or 322 Aileron Direct  
 1 MC0510105-13 or 113 Aileron Carry Thru  
 2 MC0510105-225 or 325 Flap Direct Outboard  
 2 MC0510105-60 or 160 Flap Return Outboard  
 1 MC0510105-63 or 163 Flap Return Inboard LH  
 1 MC0510105-64 or 164 Flap Return Inboard RH  
 1 MC0510105-227 or 327 Flap Direct Inboard LH  
 1 MC0510105-226 or 326 Flap Direct Inboard RH  
 1 MC0510105-21 or 121 Flap Return Forward  
 1 MC0510105-22 or 122 Flap Direct Forward  
 1 MC0510105-278 Parking Brake  
 1 MCS2295P25-321 Chain Stabilator Trim Fwd  
 1 MCS2295P25-185 Chain Stabilator Trim Aft  
 4 MCS2294-25 Chain Connecting Link

Kit continues in next column

Continued from previous column  
**Qty P/N Galv SS Location**  
 4 MC0422280 Bellcrank Aileron Bushing  
 Available separately for aircraft equipped with floats  
 1 MC0742022-1 Rudder Return  
 1 MC0742022-2 Rudder Return

**A185F1 1982-1985**  
 S/N 18504380, 18504392 thru 18504448  
 Complete Cable Kit P/N CCTK185-10G (Galvanized)  
 Complete Cable Kit P/N CCTK185-10S (Stainless Steel)  
 Complete Pulley Kit P/N PULL-KT-33\*

**Qty P/N Galv SS Location**  
 1 MC0510105-51 or 151 Rudder Forward LH  
 1 MC0510105-237 or 337 Rudder Forward RH  
 2 MC0510105-52 or 152 Rudder Aft  
 2 MC0760135-106 Tailwheel Steering  
 1 MC0510105-394 Tailwheel Lock  
 1 MC0510105-73 or 173 Rudder Trim  
 1 MC0510105-82 or 182 Elevator Trim  
 1 MC0510105-24 or 124 Elevator Upper  
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 1 MC0510105-227 or 327 Flap Direct Inboard LH  
 1 MC0510105-226 or 326 Flap Direct Inboard RH  
 1 MC0510105-21 or 121 Flap Return Forward  
 1 MC0510105-22 or 122 Flap Direct Forward  
 2 MC0510105-60 or 160 Flap Return Outboard  
 1 MC0510105-63 or 163 Flap Return Inboard LH  
 1 MC0510105-64 or 164 Flap Return Inboard RH  
 1 MC0510105-278 Parking Brake  
 1 MCS2295P25-321 Stabilator Trim Forward  
 1 MCS2295P25-185 Stabilator Trim Aft  
 4 MCS2294-25 Chain Connecting Link  
 4 MC0422280 Bellcrank Aileron Bushing

Available separately for aircraft equipped with floats  
 1 MC0742022-1 Rudder Return  
 1 MC0742022-2 Rudder Return

**188, A188 1966-1967**  
 S/N 1880001 thru 1880293  
 Complete Cable Kit P/N CCTK188-01  
 Complete Pulley Kit P/N PULL-KT-41\*

**Qty P/N Location**  
 1 MC1660300-13 Flap Direct LH Bellcrank  
 1 MC1660300-12 Flap Direct RH Bellcrank  
 1 MC1660300-15 Flap Retract LH Bellcrank  
 1 MC1660300-14 Flap Retract RH Bellcrank  
 1 1660300-17 Flap Retract to Lever  
 1 1660300-16 Flap Direct to Lever  
 2 MC1660300-8 Aileron Direct to Torque Tube  
 2 MC1660300-9 Aileron Direct to Bellcrank  
 1 MC1660300-11 Aileron Carry Thru LH  
 1 MC1660300-10 Aileron Carry Thru RH  
 1 MC1660300-3 Elevator Down Forward  
 1 MC1660300-5 Elevator Up  
 1 MC1660300-4 Elevator Down Aft  
 1 MC1660300-6 Elevator Trim Forward Upper  
 1 MC1660300-7 Elevator Trim Forward Lower  
 1 MC0510105-187 Elevator Trim Aft Lower  
 1 MC0510105-198 Elevator Trim Aft Upper  
 1 MCS2295-25-70 Elevator Trim Chain Forward  
 1 MCS2295P25-71 Elevator Trim Chain Aft  
 4 MCS2294-25 Connecting Link  
 2 MC1660300-1 Rudder Forward  
 2 MC1660300-2 Rudder Center  
 2 MC0510105-152 Rudder Aft  
 2 MC0510105-323 Tailwheel Steering  
 4 MC0422280 Bellcrank Aileron Bushing

**188, A188 1966-1967**  
 S/N 1880294 thru 1880317  
 Complete Cable Kit P/N CCTK188-02  
 Complete Pulley Kit P/N PULL-KT-41\*

**Qty P/N Location**  
 1 MC1660300-13 Flap Direct LH Bellcrank  
 1 MC1660300-12 Flap Direct RH Bellcrank  
 1 MC1660300-15 Flap Retract LH Bellcrank  
 1 MC1660300-14 Flap Retract RH Bellcrank  
 1 1660300-17 Flap Retract to Lever  
 1 1660300-16 Flap Direct to Lever  
 2 MC1660300-8 Aileron Direct to Torque Tube  
 2 MC1660300-9 Aileron Direct to Bellcrank

Kit continues on next page

\* See pages 122-124 for Pulley Kit Components  
 1 Partial model eligibility  
 2 Included in both galvanized and stainless kits.  
 3 For S/N 18502566 thru 18503153 only





















Continued from previous page

Qty	P/N	Galv	SS	Location
1	MC1260505-326 or 426			Elevator Trim Aft RH
1	MC1260505-73 or 173			Flap Down LH Trmbkl to Act
2	MC1260505-48 or 148			Flap Up Bellcrank to Trnbkl
2	MC1260505-47 or 147			Flap Down LH/RH Bellcrank to Turnbuckle
1	MC1260505-71 or 171			Flap Down RH Trmbkl to Act
1	MC1260505-70 or 170			Flap Up LH Turnbuckle to Act
1	MC1260505-72 or 172			Flap Up RH Turnbuckle to Act
1	MC1260475-5 or 105			Rudder Forward LH
1	MC1260475-6 or 106			Rudder Forward RH
1	MC1260505-329 or 429			Rudder Aft LH
1	MC1260505-330 or 430			Rudder Aft RH
6	MCS2294-25			Chain Connecting Link

\* See pages 122-124 for Pulley Kit Components  
 1 Partial model eligibility  
 2 Included in both galvanized and stainless kits.

### How to Determine Flight Cable Composition

Using a magnet to determine if a cable is galvanized steel or stainless steel alloy can be unreliable as stainless steel can display magnetic properties which can make alloy discrimination difficult. The unreliability comes from variation in the amount of magnetic permeability found in the stainless steel cable and from strength differences in the magnets used. Stainless steel cables become magnetic in the process of cold working stainless steel wires into cable. The amount of magnetic permeability varies with the amount of cold working the cable was subject to. It is also possible cables in-service will become more magnetic over time as they work-harden through use.



A better test is to use an ohm meter to measure the resistance in a length of cable. Stainless steel has more electrical resistance than zinc or tin coated high carbon steel, which allows us to identify cable composition by the amount of resistance in a length of cable. This test is applicable to the most common aircraft cable diameters: 1/16 through 5/32 with 7x7 or 7x19 construction. To ensure accuracy in cable resistance measurements, use the following procedure:

- You will need access to at least 3 feet of cable
- The ohm meter and leads must be in good condition
- Electrical isolation of the cable from the aircraft is required for an accurate resistance measurement. The cable should be removed from the aircraft or at least one end of the cable disconnected from the aircraft. Ensure the cable is not touching anything conductive between the freed end and the area of the measurement
- For non-auto ranging multimeters, set the resistance range to the lowest scale (typically 1x) and zero the meter
- Measure the resistance of the cable across a span of at least 3 feet. Assure that the cable is clean and you are getting good contact between the cable and the ohm meter leads
- Do not allow your fingers to touch the metallic probes of the ohm meter leads when measuring
- Galvanized cable and tin coated cable will register less than 1 ohm resistance while stainless steel will indicate more than 1 ohm
- If possible, check your meter on a length of cable where the alloy is known

If the cable is to be returned to service, reinstall and rig the cable as per the aircraft manufacturer's service manual. Install all required safety devices.

### Stabilator Adjust Cables for Piper Aircraft

- Time tested 'long splice' method for strength and reliability
- Available in galvanized or stainless
- Custom lengths available for your antique projects



Model	S/N	P/N	Cable Comp.
J-3, PA-11	All	MC41671-2	Galvanized
PA-12	All	MC41671-5	Galvanized
PA-12	All	MC41671-6	Stainless
J-3, PA-11	All	MC41671-8	Stainless
PA-14	All	MC41671-9	Galvanized
PA-16, PA-20	All	MC41671-11	Galvanized
PA-14	All	MC41671-12	Galvanized
PA-18, PA-18A	1 thru 548	MC41671-13	Galvanized
PA-16	All	MC41671-14	Stainless
PA-18, PA-18A	All with Floats	MC41671-15	Stainless
PA-20, PA-22	All	MC41671-16	Galvanized
PA-18, PA-18A	549 and On	MC41671-17	Galvanized
PA-22	354 and On	MC41671-18	Stainless
PA-18, PA-18A	All with Floats	MC41671-19	Stainless

### Adjustable Elevator Neutral Rigging Tool for Cessna Aircraft

Save time, you'll always have the correct tool!  
**P/N TOOL126**

Proper elevator rigging is necessary for full range of motion and maneuverability of the airplane. Many Cessna maintenance manuals require the fabrication of a tool to hold the yoke in the neutral position while the mechanic rigs the elevator control system. These tools utilize the holes for the control gust lock. At least 17 different sizes of rigging tools are required to cover the various Cessna aircraft. Now there is one tool to replace them all.

The McFarlane Elevator Neutral Rigging Tool is adjustable from 0.4" to 2.5" and universal in design, consisting of six different pin sizes to fit your application. This tool may also be used to properly rig other makes of aircraft with similar elevator neutral rigging requirements.

#### Features and Benefits

- Replaces 17 costly tools
- Quick setup and adjustment
- Simple to use instructions
- Includes compact storage box
- Replacement parts available separately
- Stainless steel components



#### Note:

Refer to your Cessna maintenance manual to determine if your model requires the use of the elevator neutral rigging tool and follow its guidelines for proper pin selection and adjustment guidelines.

### Cables for AG-CAT Aircraft

Aileron Cables			
Model	Location	Part Number	Per A/C
G-164	Upper Sector	MCA1860-101	2
G-164	Lower Sector	MCA1860-101	2
G164A	Upper Sector	MCA1860-401	2
G164A	Lower Sector	MCA1860-101	2
G164B	Upper Sector	MCA2860-7	2
G164B	Lower Sector	MCA2860-5	2
Rudder Cables			
G164, G164A	Left Hand	MCA1860-35	1
G164, G164A	Right Hand	MCA1860-36	1
G164B	Left & Right	MCA3860-3	2



Subassemblies consisting of a long and short cable are available. Call for details.



**Fits most Cessna  
150 thru 425  
aircraft!**

Elevator Neutral Rigging Tool Replacement Parts	
Part Number	Description
6409	.050"/1.3mm Hex Wrench
6870	Square Nut
6868-4	Pin, .188, Short
6868-3	Pin, .188, Long
6868-1	Pin, .209, Short
6868-2	Pin, .209, Long
6869-1	Pin, .250, Short
6869-2	Pin, .250, Long



### FAA-PMA Approved

Flight Control System

**PA28-140**  
S/N 28-20002 thru 28-20656  
Complete Kit P/N PKCT140-01  
Stabilator Kit P/N PKCT-STAB-01 1

Qty	Part Number	Location
1	MC62701-016	Stabilator Trim Indicator Aft
1	MC62701-032	Stabilator Trim
1	MC62701-010 1	Stabilator Forward LH
1	MC62701-011 1	Stabilator Forward RH
1	MC62701-012 1	Stabilator Aft Bottom
1	MC62701-013 1	Stabilator Aft Top
2	MC62701-006	Rudder Forward LH and RH
2	MC62701-008	Rudder Aft LH and RH
2	MC62701-002	Aileron Forward LH and RH
2	MC62701-003	Aileron Wing LH and RH
1	MC62701-004	Aileron Balance LH
1	MC62701-005	Aileron Balance RH
1	MC62701-014	Flap

**PA28-140**  
S/N 28-20002 thru 28-20656  
with Kit #756-896 or Kit #756-930 Installed,  
28-20657 thru 28-26956, 28-7125001 thru 28-7225612 with  
Kit #756-896 or Kit #756-930 Installed  
Complete Kit P/N PKCT140-02 (Manual Trim)  
Complete Kit P/N PKCT140-05 (Electric Trim)  
Stabilator Kit P/N PKCT-STAB-01 1

Qty	Part Number	Location
1	MC62701-016	Stabilator Trim Indicator Aft
1	MC62701-045 2	Stabilator Trim Forward (Manual)
1	MC62701-047	Stabilator Trim Aft
1	MC62701-044 3	Stabilator Trim Forward (Electric)
1	MC62701-010 1	Stabilator Forward LH
1	MC62701-011 1	Stabilator Forward RH
1	MC62701-012 1	Stabilator Aft Bottom
1	MC62701-013 1	Stabilator Aft Top
2	MC62701-006	Rudder Forward LH and RH
2	MC62701-008	Rudder Aft LH and RH
2	MC62701-002	Aileron Forward LH and RH
2	MC62701-003	Aileron Wing LH and RH
1	MC62701-004	Aileron Balance LH
1	MC62701-005	Aileron Balance RH
1	MC62701-014	Flap

**PA28-140**  
S/N 28-7325001 thru 28-7625234,  
28-7725001 thru 28-7725290  
Complete Kit P/N PKCT140-03 (Manual Trim)  
Complete Kit P/N PKCT140-04 (Electric Trim)  
Stabilator Kit P/N PKCT-STAB-01 1

Qty	Part Number	Location
2	MC62701-002	Aileron Forward LH and RH
2	MC62701-003	Aileron Wing LH and RH
1	MC62701-004	Aileron Balance LH
1	MC62701-005	Aileron Balance RH
2	MC62701-006	Rudder Forward LH and RH
2	MC62701-008	Rudder Aft LH and RH
1	MC62701-010 1	Stabilator Forward LH
1	MC62701-011 1	Stabilator Forward RH
1	MC62701-012 1	Stabilator Aft Bottom
1	MC62701-013 1	Stabilator Aft Top
1	MC62701-047	Stabilator Trim Aft
1	MC62701-016	Stabilator Trim Indicator Aft
2	MC62701-056 4	Stab Trim Fwd LH and RH (Manual)
1	MC62701-057 3	Stab Trim Fwd LH (Electric)
1	MC62701-014	Flap

**PA28-150**  
S/N 28-1 thru 28-1410  
Complete Kit P/N PKCT150-01  
Stabilator Kit P/N PKCT-STAB-01 1

Qty	Part Number	Location
2	MC62701-002	Aileron Forward LH and RH
2	MC62701-003	Aileron Wing LH and RH
1	MC62701-004	Aileron Balance LH
1	MC62701-005	Aileron Balance RH
2	MC62701-006	Rudder Forward LH and RH
2	MC62701-008	Rudder Aft LH and RH
1	MC62701-010 1	Stabilator Forward LH
1	MC62701-011 1	Stabilator Forward RH
1	MC62701-012 1	Stabilator Aft Bottom
1	MC62701-013 1	Stabilator Aft Top
1	MC62701-016	Stabilator Trim Indicator Aft
1	MC62701-015	Stabilator Trim Forward
1	MC62701-014	Flap

**PA28-150**  
S/N 28-1 thru 28-2171  
With Kit # 756-896 or Kit #756-930 Installed  
Complete Kit P/N PKCT150-02  
Stabilator Kit P/N PKCT-STAB-01 1

Qty	Part Number	Location
2	MC62701-002	Aileron Forward LH and RH
2	MC62701-003	Aileron Wing LH and RH
1	MC62701-004	Aileron Balance LH
1	MC62701-005	Aileron Balance RH
2	MC62701-006	Rudder Forward LH and RH
2	MC62701-008	Rudder Aft LH and RH

**Continued from previous column**

Qty	Part Number	Location
1	MC62701-010 1	Stabilator Forward LH
1	MC62701-011 1	Stabilator Forward RH
1	MC62701-012 1	Stabilator Aft Bottom
1	MC62701-013 1	Stabilator Aft Top
1	MC62701-016	Stabilator Trim Indicator Aft
1	MC62701-045	Stabilator Trim Forward
1	MC62701-047	Stabilator Trim Aft
1	MC62701-014	Flap

**PA28-150**  
S/N 28-1411 thru 28-2171  
Complete Kit P/N PKCT150-03  
Stabilator Kit P/N PKCT-STAB-01 1

Qty	Part Number	Location
2	MC62701-002	Aileron Forward LH and RH
2	MC62701-003	Aileron Wing LH and RH
1	MC62701-004	Aileron Balance LH
1	MC62701-005	Aileron Balance RH
2	MC62701-006	Rudder Forward LH and RH
2	MC62701-008	Rudder Aft LH and RH
1	MC62701-010 1	Stabilator Forward LH
1	MC62701-011 1	Stabilator Forward RH
1	MC62701-012 1	Stabilator Aft Bottom
1	MC62701-013 1	Stabilator Aft Top
1	MC62701-014	Flap
1	MC62701-016	Stabilator Trim Indicator Aft
1	MC62701-032	Stabilator Trim

**PA28-150**  
S/N 28-2172 thru 28-4377  
Complete Kit P/N PKCT150-04 (Manual Trim)  
Complete Kit P/N PKCT150-05 (Electric Trim)  
Stabilator Kit P/N PKCT-STAB-01 1

Qty	Part Number	Location
2	MC62701-002	Aileron Forward LH and RH
2	MC62701-003	Aileron Wing LH and RH
1	MC62701-004	Aileron Balance LH
1	MC62701-005	Aileron Balance RH
2	MC62701-006	Rudder Forward LH and RH
2	MC62701-008	Rudder Aft LH and RH
1	MC62701-010 1	Stabilator Forward LH
1	MC62701-011 1	Stabilator Forward RH
1	MC62701-012 1	Stabilator Aft Bottom
1	MC62701-013 1	Stabilator Aft Top
1	MC62701-016	Stabilator Trim Indicator Aft
1	MC62701-045 2	Stab Trim Forward (Manual)
1	MC62701-047	Stabilator Trim Aft
1	MC62701-044 3	Stab Trim Forward (Electric)
1	MC62701-014	Flap

**PA28-151**  
S/N 28-7415001 thru 28-7715314  
Complete Kit P/N PKCT151-01 (Manual Trim)  
Complete Kit P/N PKCT151-02 (Electric Trim)  
Stabilator Kit P/N PKCT-STAB-03 1

Qty	Part Number	Location
2	MC62701-099	Aileron Forward LH and RH
2	MC62701-122	Aileron Wing LH and RH
1	MC62701-123	Aileron Balance LH
1	MC62701-124	Aileron Balance RH
2	MC62701-100	Rudder Forward LH and RH
2	MC62701-008	Rudder Aft LH and RH
1	MC62701-113 1	Stabilator Forward LH
1	MC62701-114 1	Stabilator Forward RH
1	MC62701-012 1	Stabilator Aft Bottom
1	MC62701-013 1	Stabilator Aft Top
1	MC62701-101	Flap
1	MC62701-047	Stabilator Trim Aft
2	MC62701-104 4	Stab Trim Fwd LH and RH (Manual)
1	MC62701-111 3	Stab Trim Forward LH (Electric)

**PA28-160**  
S/N 28-1 thru 28-1410  
Complete Kit P/N PKCT160-01  
Stabilator Kit P/N PKCT-STAB-01 1

Qty	Part Number	Location
2	MC62701-002	Aileron Forward LH and RH
2	MC62701-003	Aileron Wing LH and RH
1	MC62701-004	Aileron Balance LH
1	MC62701-005	Aileron Balance RH
2	MC62701-006	Rudder Forward LH and RH
2	MC62701-008	Rudder Aft LH and RH
1	MC62701-010 1	Stabilator Forward LH
1	MC62701-011 1	Stabilator Forward RH
1	MC62701-012 1	Stabilator Aft Bottom
1	MC62701-013 1	Stabilator Aft Top
1	MC62701-016	Stabilator Trim Indicator Aft
1	MC62701-015	Stabilator Trim
1	MC62701-014	Flap

**PA28-160**  
S/N 28-1 thru 28-2171  
With Kit # 756-896 or Kit #756-930 Installed  
Complete Kit P/N PKCT160-02  
Stabilator Kit P/N PKCT-STAB-01 1

Qty	Part Number	Location
2	MC62701-002	Aileron Forward LH and RH
2	MC62701-003	Aileron Wing LH and RH
1	MC62701-004	Aileron Balance LH
1	MC62701-005	Aileron Balance RH
2	MC62701-006	Rudder Forward LH and RH
2	MC62701-008	Rudder Aft LH and RH
1	MC62701-010 1	Stabilator Forward LH
1	MC62701-011 1	Stabilator Forward RH
1	MC62701-012 1	Stabilator Aft Bottom
1	MC62701-013 1	Stabilator Aft Top
1	MC62701-016	Stabilator Trim Indicator Aft
1	MC62701-045	Stabilator Trim Forward
1	MC62701-047	Stabilator Trim Aft
1	MC62701-014	Flap

**PA28-160**  
S/N 28-1411 thru 28-2171  
Complete Kit P/N PKCT160-03  
Stabilator Kit P/N PKCT-STAB-01 1

Qty	Part Number	Location
2	MC62701-002	Aileron Forward LH and RH
2	MC62701-003	Aileron Wing LH and RH
1	MC62701-004	Aileron Balance LH
1	MC62701-005	Aileron Balance RH
2	MC62701-006	Rudder Forward LH and RH
2	MC62701-008	Rudder Aft LH and RH
1	MC62701-010 1	Stabilator Forward LH
1	MC62701-011 1	Stabilator Forward RH
1	MC62701-012 1	Stabilator Aft Bottom
1	MC62701-013 1	Stabilator Aft Top
1	MC62701-014	Flap
1	MC62701-016	Stabilator Trim Indicator Aft
1	MC62701-032	Stabilator Trim

**PA28-160**  
S/N 28-2172 thru 28-4377  
Complete Kit P/N PKCT160-04 (Manual Trim)  
Complete Kit P/N PKCT160-05 (Electric Trim)  
Stabilator Kit P/N PKCT-STAB-01 1

Qty	Part Number	Location
2	MC62701-002	Aileron Forward LH and RH
2	MC62701-003	Aileron Wing LH and RH
1	MC62701-004	Aileron Balance LH
1	MC62701-005	Aileron Balance RH
2	MC62701-006	Rudder Forward LH and RH
2	MC62701-008	Rudder Aft LH and RH
1	MC62701-010 1	Stabilator Forward LH
1	MC62701-011 1	Stabilator Forward RH
1	MC62701-012 1	Stabilator Aft Bottom
1	MC62701-013 1	Stabilator Aft Top
1	MC62701-016	Stabilator Trim Indicator Aft
1	MC62701-045 2	Stab Trim Forward (Manual)
1	MC62701-047	Stabilator Trim Aft
1	MC62701-044 3	Stab Trim Forward (Electric)
1	MC62701-014	Flap

**PA28-161**  
S/N 28-7716002 thru 28-8616057,  
2816001 thru 2816065, 2816067 thru 2816119,  
2841001 thru 2841365, 2842001 thru 2842999  
Complete Kit P/N PKCT161-01 (Manual Trim)  
Complete Kit P/N PKCT161-02 (Electric Trim)  
Stabilator Kit P/N PKCT-STAB-03 1

Qty	Part Number	Location
2	MC62701-099	Aileron Forward LH and RH
2	MC62701-122	Aileron Wing LH and RH
1	MC62701-123	Aileron Balance LH
1	MC62701-124	Aileron Balance RH
2	MC62701-100	Rudder Forward LH and RH
2	MC62701-008	Rudder Aft LH and RH
1	MC62701-113 1	Stabilator Forward LH
1	MC62701-114 1	Stabilator Forward RH
1	MC62701-012 1	Stabilator Aft Bottom
1	MC62701-013 1	Stabilator Aft Top
1	MC62701-101	Flap
1	MC62701-047	Stabilator Trim Aft
2	MC62701-104 4	Stab Trim Fwd LH and RH (Manual)
1	MC62701-111 3	Stabilator Trim Forward LH (Electric)

1 Stabilator kits to assist with Piper AD2013-02-13 include cables designated with 1 plus 2 each MS21251-B5S Barrels and 10 each MS21256-1 Locking Clips.  
2 Included in kits for manual trim aircraft only.  
3 Included in kits for electric trim aircraft only.  
4 Kits for electric trim aircraft include only one of this part number.







Flight Control System

<b>PA28-201T</b> S/N 28-7921001 thru 28-7921095 Complete Kit P/N PKCT201T-01 (Manual Trim) Complete Kit P/N PKCT201T-02 (Electric Trim) Stabilator Kit P/N PKCT-STAB-03 <b>1</b>		
Qty	Part Number	Location
2	MC62701-099	Aileron Forward LH and RH
2	MC62701-122	Aileron Wing LH and RH
1	MC62701-123	Aileron Balance LH
1	MC62701-124	Aileron Balance RH
1	MC62701-100	Rudder Forward LH and RH
2	MC62701-008	Rudder Aft LH and RH
1	MC62701-113 <b>1</b>	Stabilator Forward LH
1	MC62701-114 <b>1</b>	Stabilator Forward RH
1	MC62701-012 <b>1</b>	Stabilator Aft Bottom
1	MC62701-013 <b>1</b>	Stabilator Aft Top
1	MC62701-101	Flap
1	MC62701-047	Stabilator Trim Aft
2	MC62701-104 <b>4</b>	Stab Trim Fwd LH and RH (Manual)
1	MC62701-111 <b>3</b>	Stabilator Trim Forward LH (Electric)
<b>PA28R-180</b> S/N 28R-30005 thru 28R-30481, 28R-30483 thru 28R-31279, 28R-7130001 thru 28R-7130019 Complete Kit P/N PKCTR180-01 (Manual Trim) Complete Kit P/N PKCTR180-02 (Electric Trim) Stabilator Kit P/N PKCT-STAB-04 <b>1</b>		
Qty	Part Number	Location
2	MC62701-002	Aileron Forward LH and RH
2	MC62701-003	Aileron Wing LH and RH
1	MC62701-004	Aileron Balance LH
1	MC62701-005	Aileron Balance RH
2	MC62701-006	Rudder Forward LH and RH
2	MC62701-064	Aft Rudder LH and RH
1	MC62701-062 <b>1</b>	Stabilator Fwd LH
1	MC62701-061 <b>1</b>	Stabilator Fwd RH
1	MC62701-012 <b>1</b>	Stabilator Aft Bottom
1	MC62701-013 <b>1</b>	Stabilator Aft Top
1	MC62701-014	Flap
1	MC62701-047	Stabilator Trim Aft
2	MC62701-056 <b>4</b>	Stab Trim Fwd LH and RH (Manual)
1	MC62701-057 <b>3</b>	Stabilator Trim Forward LH (Electric)
<b>PA28R-200</b> S/N 28R-35001 thru 28R-35830, 28R-7135001 thru 28R-7135238 Complete Kit P/N PKCTR200-01 (Manual Trim) Complete Kit P/N PKCTR200-02 (Electric Trim) Stabilator Kit P/N PKCT-STAB-04 <b>1</b>		
Qty	Part Number	Location
2	MC62701-002	Aileron Forward LH and RH
2	MC62701-003	Aileron Wing LH and RH
1	MC62701-004	Aileron Balance LH
1	MC62701-005	Aileron Balance RH
2	MC62701-006	Rudder Forward LH and RH
2	MC62701-064	Rudder Aft LH and RH
1	MC62701-062 <b>1</b>	Stabilator Fwd LH
1	MC62701-061 <b>1</b>	Stabilator Fwd RH
1	MC62701-012 <b>1</b>	Stabilator Aft Bottom
1	MC62701-013 <b>1</b>	Stabilator Aft Top
1	MC62701-014	Flap
1	MC62701-047	Stabilator Trim Aft
2	MC62701-056 <b>4</b>	Stab Trim Fwd LH and RH (Manual)
1	MC62701-057 <b>3</b>	Stabilator Trim Forward LH (Electric)
<b>PA28R-200</b> S/N 28R-7235001 thru 28R-7635545 Complete Kit P/N PKCTR200-03 (Manual Trim) Complete Kit P/N PKCTR200-04 (Electric Trim) Stabilator Kit P/N PKCT-STAB-05 <b>1</b>		
Qty	Part Number	Location
2	MC62701-099	Aileron Forward LH and RH
2	MC62701-003	Aileron Wing LH and RH
1	MC62701-004	Aileron Balance LH
1	MC62701-005	Aileron Balance RH
2	MC62701-100	Rudder Forward LH and RH
2	MC62701-064	Rudder Aft LH and RH
1	MC62701-103 <b>1</b>	Stabilator Forward LH
1	MC62701-102 <b>1</b>	Stabilator Forward RH
1	MC62701-012 <b>1</b>	Stabilator Aft Bottom
1	MC62701-013 <b>1</b>	Stabilator Aft Top
1	MC62701-101	Flap
1	MC62701-047	Stabilator Trim Aft
2	MC62701-104 <b>4</b>	Stab Trim Fwd LH and RH (Manual)
1	MC62701-111 <b>3</b>	Stabilator Trim Forward LH (Electric)
<b>PA28R-201</b> S/N 28R-7737002 thru 28R-7837317, 2837001 thru 2837061 Complete Kit P/N PKCTR201-01 (Manual Trim) Complete Kit P/N PKCTR201-02 (Electric Trim) Stabilator Kit P/N PKCT-STAB-05 <b>1</b>		
Qty	Part Number	Location
2	MC62701-099	Aileron Forward LH and RH
2	MC62701-143	Aileron Wing LH and RH
1	MC62701-123	Aileron Balance LH
1	MC62701-124	Aileron Balance RH
1	MC62701-101	Flap
1	MC62701-102 <b>1</b>	Stabilator Forward RH
1	MC62701-103 <b>1</b>	Stabilator Forward LH
1	MC62701-169 <b>1</b>	Stabilator Aft Upper
1	MC62701-170 <b>1</b>	Stabilator Aft Lower
2	MC62701-189 <b>4</b>	Stab Trim Fwd LH and RH (Manual)
1	MC62701-155	Stabilator Trim Aft
2	MC62701-100	Rudder Forward RH
1	MC62701-168	Rudder Aft
1	MC62701-193	Stab Trim Fwd LH (Autopilots)
<b>PA28RT-201T</b> S/N 28R-7931001 thru 28R-8631005, 2831001 thru 2831038 Complete Kit P/N PKCTRT201T-01 (Manual Trim) Complete Kit P/N PKCTRT201T-02 (Electric Trim) Stabilator Kit P/N PKCT-STAB-06 <b>1</b>		
Qty	Part Number	Location
2	MC62701-099	Aileron Forward LH and RH
2	MC62701-143	Aileron Wing LH and RH
1	MC62701-123	Aileron Balance LH
1	MC62701-124	Aileron Balance RH
1	MC62701-101	Flap
1	MC62701-102 <b>1</b>	Stabilator Forward RH
1	MC62701-103 <b>1</b>	Stabilator Forward LH
1	MC62701-169 <b>1</b>	Stabilator Aft Upper
1	MC62701-170 <b>1</b>	Stabilator Aft Lower
2	MC62701-189 <b>4</b>	Stab Trim Fwd LH and RH (Manual)
2	MC62701-155	Stabilator Trim Aft
2	MC62701-100	Rudder Forward LH and RH
1	MC62701-168	Rudder Aft
1	MC62701-191 <b>3</b>	Stabilator Trim Fwd LH (Electric)

<b>Continued from previous column</b>		
Qty	Part Number	Location
2	MC62701-100	Rudder Forward LH and RH
2	MC62701-064	Rudder Aft LH and RH
1	MC62701-103 <b>1</b>	Stabilator Forward LH
1	MC62701-102 <b>1</b>	Stabilator Forward RH
1	MC62701-012 <b>1</b>	Stabilator Aft Bottom
1	MC62701-013 <b>1</b>	Stabilator Aft Top
1	MC62701-101	Flap
1	MC62701-047	Stabilator Trim Aft
2	MC62701-104 <b>4</b>	Stab Trim Fwd LH and RH (Manual)
1	MC62701-111 <b>3</b>	Stabilator Trim Forward LH (Electric)
<b>PA28R-201T</b> S/N 28R-7703002 thru 28R-7803372, 2803001 thru 2803015 Complete Kit P/N PKCTR201T-01 (Manual Trim) Complete Kit P/N PKCTR201T-02 (Electric Trim) Stabilator Kit P/N PKCT-STAB-05 <b>1</b>		
Qty	Part Number	Location
2	MC62701-099	Aileron Forward LH and RH
2	MC62701-143	Aileron Wing LH and RH
1	MC62701-123	Aileron Balance LH
1	MC62701-124	Aileron Balance RH
2	MC62701-100	Rudder Forward LH and RH
2	MC62701-064	Rudder Aft LH and RH
1	MC62701-103 <b>1</b>	Stabilator Forward LH
1	MC62701-102 <b>1</b>	Stabilator Forward RH
1	MC62701-012 <b>1</b>	Stabilator Aft Bottom
1	MC62701-013 <b>1</b>	Stabilator Aft Top
1	MC62701-101	Flap
1	MC62701-047	Stabilator Trim Aft
2	MC62701-104 <b>4</b>	Stab Trim Fwd LH and RH (Manual)
1	MC62701-111 <b>3</b>	Stabilator Trim Forward LH (Electric)
<b>PA28RT-201</b> S/N 28R-7918001 thru 28R-8218026 Complete Kit P/N PKCTR201-01 (Manual Trim) Complete Kit P/N PKCTRT201-02 (Electric Trim) Stabilator Kit P/N PKCT-STAB-06 <b>1</b>		
Qty	Part Number	Location
2	MC62701-099	Aileron Forward LH and RH
2	MC62701-143	Aileron Wing LH and RH
1	MC62701-123	Aileron Balance LH
1	MC62701-124	Aileron Balance RH
1	MC62701-101	Flap
1	MC62701-102 <b>1</b>	Stabilator Forward RH
1	MC62701-103 <b>1</b>	Stabilator Forward LH
1	MC62701-169 <b>1</b>	Stabilator Aft Upper
1	MC62701-170 <b>1</b>	Stabilator Aft Lower
2	MC62701-189 <b>4</b>	Stab Trim Fwd LH and RH (Manual)
1	MC62701-155	Stabilator Trim Aft
2	MC62701-100	Rudder Forward LH and RH
1	MC62701-168	Rudder Aft
1	MC62701-191 <b>3</b>	Stabilator Trim Fwd LH (Electric)
<b>PA28RT-201</b> S/N 28R-7918001 thru 28R-8218026 For aircraft with Altimatic IIIC Autopilot Complete Kit P/N PKCTRT201-04 (Electric Trim) Stabilator Kit P/N PKCT-STAB-06 <b>1</b>		
Qty	Part Number	Location
2	MC62701-099	Aileron Forward LH and RH
2	MC62701-143	Aileron Wing LH and RH
1	MC62701-123	Aileron Balance LH
1	MC62701-124	Aileron Balance RH
1	MC62701-101	Flap
1	MC62701-102 <b>1</b>	Stabilator Forward RH
1	MC62701-103 <b>1</b>	Stabilator Forward LH
1	MC62701-169 <b>1</b>	Stabilator Aft Upper
1	MC62701-170 <b>1</b>	Stabilator Aft Lower
2	MC62701-189 <b>4</b>	Stab Trim Fwd LH and RH (Manual)
1	MC62701-155	Stabilator Trim Aft
2	MC62701-100	Rudder Forward RH
1	MC62701-168	Rudder Aft
1	MC62701-193	Stab Trim Fwd LH (Autopilots)
<b>PA28RT-201T</b> S/N 28R-7931001 thru 28R-8631005, 2831001 thru 2831038 Complete Kit P/N PKCTRT201T-01 (Manual Trim) Complete Kit P/N PKCTRT201T-02 (Electric Trim) Stabilator Kit P/N PKCT-STAB-06 <b>1</b>		
Qty	Part Number	Location
2	MC62701-099	Aileron Forward LH and RH
2	MC62701-143	Aileron Wing LH and RH
1	MC62701-123	Aileron Balance LH
1	MC62701-124	Aileron Balance RH
1	MC62701-101	Flap
1	MC62701-102 <b>1</b>	Stabilator Forward RH
1	MC62701-103 <b>1</b>	Stabilator Forward LH
1	MC62701-169 <b>1</b>	Stabilator Aft Upper
1	MC62701-170 <b>1</b>	Stabilator Aft Lower
2	MC62701-189 <b>4</b>	Stab Trim Fwd LH and RH (Manual)
2	MC62701-155	Stabilator Trim Aft
2	MC62701-100	Rudder Forward LH and RH
1	MC62701-168	Rudder Aft
1	MC62701-191 <b>3</b>	Stabilator Trim Fwd LH (Electric)

<b>PA28RT-201T</b> S/N 28R-7931001 thru 28R-8631005, 2831001 thru 2831038 For aircraft with Altimatic IIIC Autopilot Complete Kit P/N PKCTRT201T-04 (Electric Trim) Stabilator Kit P/N PKCT-STAB-06 <b>1</b>		
Qty	Part Number	Location
2	MC62701-099	Aileron Forward LH and RH
2	MC62701-143	Aileron Wing LH and RH
1	MC62701-123	Aileron Balance LH
1	MC62701-124	Aileron Balance RH
1	MC62701-101	Flap
1	MC62701-102 <b>1</b>	Stabilator Forward RH
1	MC62701-103 <b>1</b>	Stabilator Forward LH
1	MC62701-169 <b>1</b>	Stabilator Aft Upper
1	MC62701-170 <b>1</b>	Stabilator Aft Lower
1	MC62701-189 <b>2</b>	Stab Trim Fwd RH
1	MC62701-155	Stabilator Trim Aft
2	MC62701-100	Rudder Forward LH and RH
1	MC62701-168	Rudder Aft
1	MC62701-193	Stab Trim Fwd LH (Autopilots)
<b>PA28S-180</b> S/N 28S-671 thru 28S-2171 Complete Kit P/N PKCTS180-01 Stabilator Kit P/N PKCT-STAB-02 <b>1</b>		
Qty	Part Number	Location
2	MC62701-018	Aileron Wing LH and RH
1	MC62701-019	Aileron Balance LH
1	MC62701-020	Aileron Balance RH
2	MC62701-017	Aileron Forward LH and RH
2	MC62701-023	Rudder Aft LH and RH
1	MC62701-027 <b>1</b>	Stabilator Aft LH
1	MC62701-028 <b>1</b>	Stabilator Aft RH
1	MC62701-031	Stabilator Trim Aft
1	MC62701-046 <b>2</b>	Stabilator Trim Forward LH (Manual)
1	MC62701-049 <b>3</b>	Stabilator Trim Forward LH (Electric)
<b>PA28S-180</b> S/N 28S-2172 thru 28S-5869, 28S-7105001 thru 28S-7205234 Complete Kit P/N PKCTS180-02 (Manual Trim) Complete Kit P/N PKCTS180-03 (Electric Trim) Stabilator Kit P/N PKCT-STAB-02 <b>1</b>		
Qty	Part Number	Location
2	MC62701-018	Aileron Wing LH and RH
1	MC62701-019	Aileron Balance LH
1	MC62701-020	Aileron Balance RH
2	MC62701-017	Aileron Forward LH and RH
2	MC62701-023	Rudder Aft LH and RH
1	MC62701-027 <b>1</b>	Stabilator Aft LH
1	MC62701-028 <b>1</b>	Stabilator Aft RH
1	MC62701-031	Stabilator Trim Aft
1	MC62701-046 <b>2</b>	Stabilator Trim Forward LH (Manual)
1	MC62701-049 <b>3</b>	Stabilator Trim Forward LH (Electric)
<b>PA32-260</b> S/N 32-1 thru 32-1320, 32-7100001 thru 32-7300076 Complete Kit P/N PKCT260-01 (Manual Trim) Complete Kit P/N PKCT260-02 (Electric Trim) Stabilator Kit P/N PKCT-STAB-07 <b>1</b>		
Qty	Part Number	Location
2	MC62701-008	Rudder Aft LH and RH
2	MC62701-036	Aileron Forward LH and RH
2	MC62701-003	Aileron Wing LH and RH
1	MC62701-048	Aileron Balance LH
1	MC62701-005	Aileron Balance RH
2	MC62701-037 <b>1</b>	Rudder Fwd RH/Stabilator Fwd RH
1	MC62701-038	Rudder Forward LH
1	MC62701-040 <b>1</b>	Stabilator Forward LH
1	MC62701-012 <b>1</b>	Stabilator Aft LH
1	MC62701-013 <b>1</b>	Stabilator Aft RH
2	MC62701-041 <b>4</b>	Stab Trim Fwd LH and RH (Manual)
1	MC62701-042 <b>3</b>	Stabilator Trim Forward LH (Electric)
1	MC62701-047	Stabilator Trim Aft
1	MC62701-014	Flap
<b>PA32-260</b> S/N 32-7400001 thru 32-7400061 Complete Kit P/N PKCT260-03 (Manual Trim) Complete Kit P/N PKCT260-04 (Electric Trim) Stabilator Kit P/N PKCT-STAB-07 <b>1</b>		
Qty	Part Number	Location
1	MC62701-134	Rudder Aft LH
1	MC62701-008	Rudder Aft RH
1	MC62701-012 <b>1</b>	Stabilator Aft LH
1	MC62701-013 <b>1</b>	Stabilator Aft RH
2	MC62701-036	Aileron Forward LH and RH
2	MC62701-003	Aileron Wing LH and RH
1	MC62701-048	Aileron Balance LH
1	MC62701-005	Aileron Balance RH

**Kit continues on next page**

**1** Stabilator kits to assist with Piper AD2013-02-13 include cables designated with **1** plus 2 each MS21251-B5S Barrels and 10 each MS21256-1 Locking Clips.

**2** Included in kits for manual trim aircraft only.

**3** Included in kits for electric trim aircraft only.

**4** Kits for electric trim aircraft include only one of this part number.

# Flight Control System

## Flight Control Cables - Piper



**Continued from previous page**

Qty	Part Number	Location
2	MC62701-037 <b>1</b>	Rudder Fwd RH/Stabilator Fwd RH
1	MC62701-038	Rudder Forward LH
1	MC62701-040 <b>1</b>	Stabilator Forward LH
2	MC62701-041 <b>4</b>	Stab Trim Fwd LH and RH (Manual)
1	MC62701-042 <b>3</b>	Stabilator Trim Forward LH (Electric)
1	MC62701-047	Stabilator Trim Aft
1	MC62701-014	Flap

**PA32-260**  
S/N 32-7500001 thru 32-7800008  
Complete Kit P/N PKCT260-05 (Manual Trim)  
Complete Kit P/N PKCT260-06 (Electric Trim)  
Stabilator Kit P/N PKCT-STAB-07 **1**

Qty	Part Number	Location
2	MC62701-008	Rudder Aft LH and RH
1	MC62701-012 <b>1</b>	Stabilator Aft LH
1	MC62701-013 <b>1</b>	Stabilator Aft RH
2	MC62701-036	Aileron Forward LH and RH
2	MC62701-003	Aileron Wing LH and RH
1	MC62701-048	Aileron Balance LH
1	MC62701-005	Aileron Balance RH
3	MC62701-037 <b>1</b>	Rudder Fwd LH&RH/Stab Fwd RH
1	MC62701-040 <b>1</b>	Stabilator Forward LH
2	MC62701-041 <b>4</b>	Stab Trim Fwd LH and RH (Manual)
1	MC62701-042 <b>3</b>	Stabilator Trim Forward LH (Electric)
1	MC62701-047	Stabilator Trim Aft
1	MC62701-014	Flap

**PA32-300**  
S/N 32-40000 thru 32-41018,  
32-7140001 thru 32-7340201  
Complete Kit P/N PKCT300-01 (Manual Trim)  
Complete Kit P/N PKCT300-02 (Electric Trim)  
Stabilator Kit P/N PKCT-STAB-07 **1**

Qty	Part Number	Location
2	MC62701-008	Rudder Aft LH and RH
1	MC62701-012 <b>1</b>	Stabilator Aft LH
1	MC62701-013 <b>1</b>	Stabilator Aft RH
2	MC62701-036	Aileron Forward LH and RH
2	MC62701-003	Aileron Wing LH and RH
1	MC62701-048	Aileron Balance
1	MC62701-005	Aileron Balance RH
2	MC62701-037 <b>1</b>	Rudder Fwd RH/Stab Fwd RH
1	MC62701-038	Rudder Forward LH
1	MC62701-040 <b>1</b>	Stabilator Forward LH
2	MC62701-041 <b>4</b>	Forward Stabilator Trim
1	MC62701-042 <b>3</b>	Electric Trim
1	MC62701-047	Stabilator Trim Aft
1	MC62701-014	Flap

**PA32-300**  
S/N 32-7440001 thru 32-7440182  
Complete Kit P/N PKCT300-03 (Manual Trim)  
Complete Kit P/N PKCT300-04 (Electric Trim)  
Stabilator Kit P/N PKCT-STAB-07 **1**

Qty	Part Number	Location
1	MC62701-134	Rudder Aft LH
1	MC62701-008	Rudder Aft RH
1	MC62701-012 <b>1</b>	Stabilator Aft LH
1	MC62701-013 <b>1</b>	Stabilator Aft RH
2	MC62701-036	Aileron Forward LH and RH
2	MC62701-003	Aileron Wing LH and RH
1	MC62701-048	Aileron Balance LH
1	MC62701-005	Aileron Balance RH
2	MC62701-037 <b>1</b>	Rudder Fwd RH/Stab Fwd RH
1	MC62701-038	Rudder Forward LH
1	MC62701-040 <b>1</b>	Stabilator Forward LH
2	MC62701-041 <b>4</b>	Stab Trim Fwd LH and RH (Manual)
1	MC62701-042 <b>3</b>	Stabilator Trim Forward LH (Electric)
1	MC62701-047	Stabilator Trim Aft
1	MC62701-014	Flap

**PA32-300**  
S/N 32-7540001 thru 32-7940282  
Complete Kit P/N PKCT300-05 (Manual Trim)  
Complete Kit P/N PKCT300-06 (Electric Trim)  
Stabilator Kit P/N PKCT-STAB-07 **1**

Qty	Part Number	Location
2	MC62701-008	Rudder Aft LH and RH
1	MC62701-012 <b>1</b>	Stabilator Aft LH
1	MC62701-013 <b>1</b>	Stabilator Aft RH
2	MC62701-036	Aileron Forward LH and RH
2	MC62701-003	Aileron Wing LH and RH
1	MC62701-048	Aileron Balance LH
1	MC62701-005	Aileron Balance RH
3	MC62701-037 <b>1</b>	Rudd Fwd LH & RH/Stab Fwd RH
1	MC62701-040 <b>1</b>	Stabilator Forward LH
2	MC62701-041 <b>4</b>	Stab Trim Fwd LH and RH (Manual)
1	MC62701-042 <b>3</b>	Stabilator Trim Forward LH (Electric)
1	MC62701-047	Stabilator Trim Aft
1	MC62701-014	Flap

**PA32-301**  
S/N 32-8006001 thru 32-8606023, 3206001 thru 3206060  
Complete Kit P/N PKCT301-01 (Manual Trim)  
Complete Kit P/N PKCT301-02 (Electric Trim)  
Stabilator Kit P/N PKCT-STAB-09 **1**

Qty	Part Number	Location
2	MC62701-036	Aileron Forward LH and RH
2	MC62701-202	Aileron Wing LH and RH
1	MC62701-200	Aileron Balance LH
1	MC62701-201	Aileron Balance RH
1	MC62701-014	Flap
1	MC62701-208 <b>1</b>	Stabilator Aft LH
1	MC62701-205 <b>1</b>	Stabilator Aft RH
1	MC62701-207 <b>1</b>	Stabilator Forward LH
1	MC62701-047	Stabilator Trim Aft
2	MC62701-041 <b>4</b>	Stab Trim Fwd LH and RH (Manual)
1	MC62701-042 <b>3</b>	Stabilator Trim Forward LH (Electric)
2	MC62701-008	Rudder Aft LH and RH
3	MC62701-037 <b>1</b>	Rudd Fwd LH & RH/Stab Fwd RH

**PA32-301**  
S/N 32-8406001 thru 32-8606023, 3206001 thru 3206060  
For aircraft with Century 31 Autopilot  
Complete Kit P/N PKCT301-04 (Electric Trim)  
Stabilator Kit P/N PKCT-STAB-09 **1**

Qty	Part Number	Location
2	MC62701-036	Aileron Forward LH and RH
2	MC62701-202	Aileron Wing LH and RH
1	MC62701-200	Aileron Balance LH
1	MC62701-201	Aileron Balance RH
1	MC62701-014	Flap
1	MC62701-208 <b>1</b>	Stabilator Aft LH
1	MC62701-205 <b>1</b>	Stabilator Aft RH
1	MC62701-207 <b>1</b>	Stabilator Forward LH
1	MC62701-047	Stabilator Trim Aft
1	MC62701-041 <b>2</b>	Stab Trim Fwd RH
1	MC62701-135	Stabilator Trim Forward
2	MC62701-008	Rudder Aft LH and RH
3	MC62701-037 <b>1</b>	Rudd Fwd LH & RH/Stab Fwd RH

**PA32-301T**  
S/N 32-8024001 thru 32-8424002  
Complete Kit P/N PKCT301T-01 (Manual Trim)  
Complete Kit P/N PKCT301T-02 (Electric Trim)  
Stabilator Kit P/N PKCT-STAB-09 **1**

Qty	Part Number	Location
2	MC62701-036	Aileron Forward LH and RH
2	MC62701-202	Aileron Wing LH and RH
1	MC62701-200	Aileron Balance LH
1	MC62701-201	Aileron Balance RH
1	MC62701-014	Flap
1	MC62701-207 <b>1</b>	Stabilator Forward LH
1	MC62701-208 <b>1</b>	Stabilator Aft LH
1	MC62701-205 <b>1</b>	Stabilator Aft RH
1	MC62701-047	Stabilator Trim Aft
2	MC62701-041 <b>4</b>	Stab Trim Fwd LH and RH (Manual)
3	MC62701-037 <b>1</b>	Rudd Fwd LH & RH/Stab Fwd RH
2	MC62701-008	Rudder Aft LH and RH
1	MC62701-042 <b>3</b>	Stabilator Trim Forward LH (Electric)

**PA32-301T**  
S/N S/N 32-8024001 thru 32-8424002  
For aircraft with Century 31 Autopilot  
Complete Kit P/N PKCT301T-04 (Electric Trim)  
Stabilator Kit P/N PKCT-STAB-09 **1**

Qty	Part Number	Location
2	MC62701-036	Aileron Forward LH and RH
2	MC62701-202	Aileron Wing LH and RH
1	MC62701-200	Aileron Balance LH
1	MC62701-201	Aileron Balance RH
1	MC62701-014	Flap
1	MC62701-207 <b>1</b>	Stabilator Forward LH
1	MC62701-208 <b>1</b>	Stabilator Aft LH
1	MC62701-205 <b>1</b>	Stabilator Aft RH
1	MC62701-047	Stabilator Trim Aft
1	MC62701-041	Stab Trim Fwd RH
3	MC62701-037 <b>1</b>	Rudd Fwd LH & RH/Stab Fwd RH
2	MC62701-008	Rudder Aft LH and RH
1	MC62701-135	Stabilator Trim Fwd LH (Autopilot)

**PA32R-300**  
S/N 32R-7680001 thru 32R-7880068  
Complete Kit P/N PKCTR300-01 (Manual Trim)  
Complete Kit P/N PKCTR300-02 (Electric Trim)  
Stabilator Kit P/N PKCT-STAB-07 **1**

Qty	Part Number	Location
2	MC62701-008	Rudder Aft LH and RH
1	MC62701-012 <b>1</b>	Stabilator Aft LH
1	MC62701-013 <b>1</b>	Stabilator Aft RH
2	MC62701-036	Aileron Forward LH and RH
2	MC62701-003	Aileron Wing LH and RH
1	MC62701-048	Aileron Balance LH
1	MC62701-005	Aileron Balance RH
3	MC62701-037 <b>1</b>	Rudd Fwd LH & RH/Stab Fwd RH
1	MC62701-040 <b>1</b>	Stabilator Forward LH
2	MC62701-041 <b>4</b>	Stab Trim Fwd LH and RH (Manual)
1	MC62701-042 <b>3</b>	Stabilator Trim Forward LH (Electric)
1	MC62701-047	Stabilator Trim Aft
1	MC62701-014	Flap

**PA32R-301**  
S/N 32R-8013001 thru 32R-8613006,  
3213001 thru 3213103  
Complete Kit P/N PKCTR301-01 (Manual Trim)  
Complete Kit P/N PKCTR301-02 (Electric Trim)  
Stabilator Kit P/N PKCT-STAB-09 **1**

Qty	Part Number	Location
2	MC62701-036	Aileron Forward LH and RH
2	MC62701-199	Aileron Wing LH and RH
1	MC62701-200	Aileron Balance LH
1	MC62701-201	Aileron Balance RH
1	MC62701-014	Flap
1	MC62701-207 <b>1</b>	Stabilator Forward LH
1	MC62701-205 <b>1</b>	Stabilator Aft RH
1	MC62701-208 <b>1</b>	Stabilator Aft LH
1	MC62701-047	Stabilator Trim Aft
2	MC62701-041 <b>4</b>	Stab Trim Fwd LH and RH (Manual)
3	MC62701-037 <b>1</b>	Rudd Fwd LH & RH/Stab Fwd RH
2	MC62701-008	Rudder Aft LH and RH
1	MC62701-042 <b>3</b>	Stabilator Trim Forward LH (Electric)

**PA32R-301T**  
S/N 32R-8029001 thru 32R-8629008,  
3229001 thru 3229003  
Complete Kit P/N PKCTR301T-01 (Manual Trim)  
Complete Kit P/N PKCTR301T-02 (Electric Trim)  
Stabilator Kit P/N PKCT-STAB-09 **1**

Qty	Part Number	Location
2	MC62701-036	Aileron Forward LH and RH
2	MC62701-199	Aileron Wing LH and RH
1	MC62701-200	Aileron Balance LH
1	MC62701-201	Aileron Balance RH
1	MC62701-014	Flap
1	MC62701-207 <b>1</b>	Stabilator Forward LH
1	MC62701-205 <b>1</b>	Stabilator Aft RH
1	MC62701-208 <b>1</b>	Stabilator Aft LH
1	MC62701-047	Stabilator Trim Aft
2	MC62701-041 <b>4</b>	Stab Trim Fwd LH and RH (Manual)
3	MC62701-037 <b>1</b>	Rudd Fwd LH & RH/Stab Fwd RH
2	MC62701-008	Rudder Aft LH and RH
1	MC62701-042 <b>3</b>	Stabilator Trim Forward LH (Electric)

**PA32RT-300**  
S/N 32R-7885001 thru 32R-7985125  
Complete Kit P/N PKCTR300-01 (Manual Trim)  
Complete Kit P/N PKCTR300-02 (Electric Trim)  
Stabilator Kit P/N PKCT-STAB-10 **1**

Qty	Part Number	Location
2	MC62701-036	Aileron Forward LH and RH
2	MC62701-003	Aileron Wing LH and RH
1	MC62701-048	Aileron Balance LH
1	MC62701-005	Aileron Balance RH
3	MC62701-037 <b>1</b>	Rudd Fwd LH & RH/Stab Fwd RH
1	MC62701-157	Rudder Aft
1	MC62701-040 <b>1</b>	Stabilator Forward LH
1	MC62701-159 <b>1</b>	Stabilator Aft LH
1	MC62701-158 <b>1</b>	Stabilator Aft RH
2	MC62701-041 <b>4</b>	Stab Trim Fwd LH and RH (Manual)
1	MC62701-137	Stabilator Trim Aft
1	MC62701-014	Flap

**PA32RT-300**  
S/N 32R-7885001 thru 32R-7985013,  
For aircraft with Altimatic IIIC Autopilot  
Complete Kit P/N PKCTR300-05 (Electric Trim)  
Stabilator Kit P/N PKCT-STAB-10 **1**

Qty	Part Number	Location
2	MC62701-036	Aileron Forward LH and RH
2	MC62701-003	Aileron Wing LH and RH
1	MC62701-048	Aileron Balance LH
1	MC62701-005	Aileron Balance RH
3	MC62701-037 <b>1</b>	Rudd Fwd LH & RH/Stab Fwd RH
1	MC62701-157	Rudder Aft
1	MC62701-040 <b>1</b>	Stabilator Forward LH
1	MC62701-159 <b>1</b>	Stabilator Aft LH
1	MC62701-158 <b>1</b>	Stabilator Aft RH
1	MC62701-041 <b>4</b>	Stab Trim Fwd LH and RH (Manual)
1	MC62701-137	Stabilator Trim Aft
1	MC62701-135	Stab Trim Fwd LH & RH (Autopilot)
1	MC62701-014	Flap

**PA32RT-300**  
S/N 32R-7985014 thru 32R-7985125,  
For aircraft with Altimatic IIIC Autopilot  
Complete Kit P/N PKCTR300-06 (Electric Trim)  
Stabilator Kit P/N PKCT-STAB-10 **1**

Qty	Part Number	Location
2	MC62701-036	Aileron Forward LH and RH
2	MC62701-003	Aileron Wing LH and RH
1	MC62701-048	Aileron Balance LH
1	MC62701-005	Aileron Balance RH

**Kit continues on next page**  
**1** Stabilator kits to assist with Piper AD2013-02-13 include cables designated with **1** plus 2 each MS21251-B5S Barrels and 10 each MS21256-1 Locking Clips.  
**2** Included in kits for manual trim aircraft only.  
**3** Included in kits for electric trim aircraft only.  
**4** Kits for electric trim aircraft include only one of this part number.

Flight Control System



FAA-PMA Approved

**Continued from previous page**

Qty	Part Number	Location
3	MC62701-037	Rudd Fwd LH & RH/Stab Fwd RH
1	MC62701-157	Rudder Aft
1	MC62701-040	Stabilator Forward LH
1	MC62701-159	Stabilator Aft LH
1	MC62701-158	Stabilator Aft RH
1	MC62701-041	Stab Trim Fwd RH
2	MC62701-137	Stabilator Trim Aft
1	MC62701-183	Stab Trim Fwd LH & RH (Autopilot)

**PA32RT-300T**  
S/N 32R-7887001 thru 32R-7987146  
Complete Kit P/N PCKTRT300T-01 (Manual Trim)  
Complete Kit P/N PCKTRT300T-02 (Electric Trim)  
Stabilator Kit P/N PCKT-STAB-10

Qty	Part Number	Location
2	MC62701-036	Aileron Forward LH and RH
2	MC62701-003	Aileron Wing LH and RH
1	MC62701-048	Aileron Balance LH
1	MC62701-005	Aileron Balance RH
3	MC62701-037	Rudd Fwd LH & RH/Stab Fwd RH
1	MC62701-157	Rudder Aft
1	MC62701-040	Stabilator Forward LH
1	MC62701-159	Stabilator Aft LH
1	MC62701-158	Stabilator Aft RH
2	MC62701-041	Stab Trim Fwd RH
1	MC62701-137	Stabilator Trim Aft
1	MC62701-042	Stabilator Trim Fwd LH (Electric)

**PA32RT-300T**  
S/N 32R-7887003, 32R-7887005 thru 32R-7887050,  
For aircraft with Altimatic IIIC Autopilot  
32R-7887052 thru 32R-7887307,  
32R-7987001 thru 32R-7987035  
Complete Kit P/N PCKTRT300T-05 (Electric Trim)  
Stabilator Kit P/N PCKT-STAB-10

Qty	Part Number	Location
2	MC62701-036	Aileron Forward LH and RH
2	MC62701-003	Aileron Wing LH and RH
1	MC62701-048	Aileron Balance LH
1	MC62701-005	Aileron Balance RH
3	MC62701-037	Rudd Fwd LH & RH/Stab Fwd RH
1	MC62701-157	Rudder Aft
1	MC62701-040	Stabilator Forward LH
1	MC62701-159	Stabilator Aft LH
1	MC62701-158	Stabilator Aft RH
1	MC62701-041	Stab Trim Fwd RH
1	MC62701-137	Stabilator Trim Aft
1	MC62701-135	Stab Trim Fwd LH & RH (Autopilot)

**PA32RT-300T**  
S/N 32R-7987004, 32R-7987051,  
32R-7987036 thru 32R-7987146  
For aircraft with Altimatic IIIC Autopilot  
Complete Kit P/N PCKTRT300T-06 (Electric Trim)  
Stabilator Kit P/N PCKT-STAB-10

Qty	Part Number	Location
2	MC62701-036	Aileron Forward LH and RH
2	MC62701-003	Aileron Wing LH and RH
1	MC62701-048	Aileron Balance LH
1	MC62701-005	Aileron Balance RH
3	MC62701-037	Rudd Fwd LH & RH/Stab Fwd RH
1	MC62701-157	Rudder Aft
1	MC62701-040	Stabilator Forward LH
1	MC62701-159	Stabilator Aft LH
1	MC62701-158	Stabilator Aft RH
1	MC62701-041	Stab Trim Fwd RH
1	MC62701-137	Stabilator Trim Aft
1	MC62701-183	Stab Trim Fwd LH & RH (Autopilot)

**PA32S-300**  
S/N 32S-40000 thru 32S-7240147  
Complete Kit P/N PCKTS300-01 (Manual Trim)  
Complete Kit P/N PCKTS300-02 (Electric Trim)  
Stabilator Kit P/N PCKT-STAB-08

Qty	Part Number	Location
2	MC62701-023	Rudder Aft LH and RH
2	MC62701-051	Rudder Fwd RH/Stab Fwd RH
1	MC62701-037	Rudder Forward LH
1	MC62701-027	Stabilator Aft LH
1	MC62701-028	Stabilator Aft RH
1	MC62701-053	Stabilator Forward LH
2	MC62701-050	Aileron Forward LH and RH
2	MC62701-018	Aileron Wing LH and RH
1	MC62701-055	Aileron Balance LH
1	MC62701-020	Aileron Balance RH
1	MC62701-047	Stabilator Trim Aft
2	MC62701-054	Stab Trim Fwd LH and RH (Manual)
1	MC62701-060	Stabilator Trim Fwd LH (Electric)

**PA34-200**  
S/N 34-7250001 thru 34-7450220  
Complete Kit P/N PCKT200-01 (Manual Trim)  
Complete Kit P/N PCKT200-05 (Electric Trim)  
Stabilator Kit P/N PCKT-STAB-11

Qty	Part Number	Location
2	MC62701-036	Aileron Forward LH and RH
2	MC62701-074	Aileron Wing LH and RH
1	MC62701-076	Aileron Balance LH
1	MC62701-075	Aileron Balance RH
2	MC62701-093	Aileron/Rudder Interconnect Aft
2	MC62701-094	Aileron/Rudder Interconnect Fwd
2	MC62701-081	Rudder Forward
2	MC62701-072	Rudder Aft
2	MC62701-069	Rudder Trim Fwd
1	MC62701-070	Rudder Trim Aft
1	MC62701-078	Stabilator Forward LH
1	MC62701-037	Stabilator Forward RH
1	MC62701-079	Stabilator Aft Upper
1	MC62701-080	Stabilator Aft Lower
2	MC62701-077	Stab Trim Fwd LH and RH (Manual)
1	MC62701-073	Stabilator Trim Aft
1	MC62701-071	Flap
1	MC62701-097	Stab Trim Fwd LH&RH (Autopilot)

**PA34-200**  
S/N 34-7250001 thru 34-7450024,  
34-7450025 thru 34-7450220 with  
Altimatic IIIB Autopilot If Kit 760-776 installed  
Complete Kit P/N PCKT200-10 (Electric Trim)  
Stabilator Kit P/N PCKT-STAB-11

Qty	Part Number	Location
2	MC62701-036	Aileron Forward LH and RH
2	MC62701-074	Aileron Wing LH and RH
1	MC62701-076	Aileron Balance LH
1	MC62701-075	Aileron Balance RH
2	MC62701-093	Aileron/Rudder Interconnect Aft
2	MC62701-094	Aileron/Rudder Interconnect Fwd
2	MC62701-081	Rudder Forward
2	MC62701-072	Rudder Aft
2	MC62701-069	Rudder Trim Fwd
1	MC62701-070	Rudder Trim Aft
1	MC62701-078	Stabilator Forward LH
1	MC62701-037	Stabilator Forward RH
1	MC62701-079	Stabilator Aft Upper
1	MC62701-080	Stabilator Aft Lower
1	MC62701-077	Stab Trim Fwd RH
1	MC62701-073	Stabilator Trim Aft
1	MC62701-071	Flap
1	MC62701-097	Stab Trim Fwd LH (Autopilot)
2	MC62701-128	Interconnect

**PA34-200T**  
S/N 34-7570001 - 34-8170092  
For aircraft with Altimatic IIIB Autopilot  
Complete Kit P/N PCKT200T-01 (Manual Trim)  
Complete Kit P/N PCKT200T-02 (Electric Trim)  
Stabilator Kit P/N PCKT-STAB-12

Qty	Part Number	Location
2	MC62701-036	Aileron Forward LH and RH
2	MC62701-127	Aileron Wing LH and RH
1	MC62701-125	Aileron Balance LH
1	MC62701-126	Aileron Balance RH
2	MC62701-081	Rudder Forward
1	MC62701-072	Rudder Aft
2	MC62701-069	Rudder Trim Control Forward
1	MC62701-070	Rudder Trim Control Aft
1	MC62701-078	Stabilator Forward LH
1	MC62701-037	Stabilator Forward RH
1	MC62701-129	Stabilator Aft Upper
1	MC62701-080	Stabilator Aft Lower
2	MC62701-077	Stab Trim Fwd LH and RH (Manual)
1	MC62701-073	Stabilator Trim Aft
1	MC62701-071	Flap
1	MC62701-097	Stab Trim Fwd LH (Electric)(Autopilot)

**PA34-220T**  
S/N 34-8133001 thru 34-8633031,  
3433001 thru 3433172, 3447001 thru 3449999  
Complete Kit P/N PCKT220T-01  
Stabilator Kit P/N PCKT-STAB-12

Qty	Part Number	Location
2	MC62701-228	Aileron Forward LH and RH
2	MC62701-127	Aileron Wing LH and RH
1	MC62701-125	Aileron Balance LH
1	MC62701-126	Aileron Balance RH
2	MC62701-081	Rudder Forward
1	MC62701-072	Rudder Aft
2	MC62701-069	Rudder Trim Control Forward
1	MC62701-070	Rudder Trim Control Aft
1	MC62701-078	Stabilator Forward LH
1	MC62701-037	Stabilator Forward RH
1	MC62701-129	Stabilator Aft Upper
1	MC62701-080	Stabilator Aft Lower
2	MC62701-077	Stab Trim Fwd LH and RH (Manual)
2	MC62701-073	Stabilator Trim Aft
1	MC62701-071	Flap
1	MC62701-097	Stab Trim Fwd LH (Electric)(Autopilot)

**1 Stabilator kits to assist with Piper AD2013-02-13 include cables designated with 1 plus 2 each MS21251-B55 Barrels and 10 each MS21256-1 Locking Clips.**  
**2 Included in kits for manual trim aircraft only.**  
**3 Included in kits for electric trim aircraft only.**  
**4 Kits for electric trim aircraft include only one of this part number.**  
**5 Kits for electric trim aircraft include two of this part number.**

**General Piper Cable Notes: Corrosion Protection**  
All Piper cables are coated with a modified MIL-PRF-16173 compound. It provides additional corrosion protection beyond the standard MIL-SPEC rust preventive oil. This provides both exceptional wear resistance and corrosion protection for many years.



Flight Control System

# Flight Control System Flight Control Cables - Beechcraft

Models 19, 23 and 24 Musketeer, Sport, Sundowner  
A23-19,19A, M19A, B19, 23, A23, A23A, B23, C23,  
A23-24, A24

Part Number	Location
MCNAS30245-2053	Stabilator Tab
MCNAS31424-0870	Stabilator
MCNAS31424-0934	Rudder Aft LH
MCNAS31424-1152	Stabilator
MCNAS31424-1242	Rudder Fwd RH
MCNAS31425-0820	Stabilator
MCNAS31425-0931	Rudder Aft RH
MCNAS31425-1220	Rudder Fwd LH
MCNAS31425-1411	Stabilator/Elevator Fwd
MCNAS31426-1170	Aileron RH
MCNAS31427-1131	Aileron
MCNAS31427-1370	Aileron LH

Model 24 Musketeer, Sierra  
A24R, B24R, C24R

MCNAS30245-2053	Stabilator Tab
MCNAS31424-0870	Stabilator
MCNAS31424-0934	Rudder Aft LH
MCNAS31424-1242	Rudder Fwd RH
MCNAS31424-1340	Stabilator
MCNAS31425-0820	Stabilator
MCNAS31425-0931	Rudder Aft RH
MCNAS31425-1220	Rudder Fwd LH
MCNAS31425-1345	Stabilator
MCNAS31426-1170	Aileron RH
MCNAS31427-1180	Aileron
MCNAS31427-1370	Aileron LH

Model 33 Debonair and Bonanza  
35-33

Complete Kit P/N BCKT33-01		
Qty	Part Number	Location
2	MC33-524000-17	Elevator Fwd
1	MC33-524000-47 <sup>2</sup>	Elevator Tab
1	MC35-524314 <sup>2</sup>	Aileron
2	MC36-521011-1	Aileron Aft
2	MC36-521011-3	Aileron Fwd
1	MC36-524000-29 <sup>2</sup>	Elevator Tab RH
1	MC36-524000-31 <sup>2</sup>	Elevator Tab LH
1	MCNAS30422-0255	Aileron
1	MCNAS30426-0603	Aileron
2	MCNAS30435-0564	Elevator
2	MCNAS30435-1325	Rudder Fwd
2	33-524000-31 <sup>3</sup>	Rudder Aft
1	MCNAS30466-0173	Aileron
2	MCNAS31237-0790	Elevator Tab

Model 33 Debonair and Bonanza  
35-A33

Complete Kit P/N BCKT33-02		
Qty	Part Number	Location
1	MC33-524000-61	Elevator Down
1	MC36-524000-29 <sup>2</sup>	Elevator Tab RH
1	MC36-524000-31 <sup>2</sup>	Elevator Tab LH
1	MCNAS30266-3242	Elevator Tab
2	MCNAS30435-0564	Elevator
2	MCNAS31237-0790	Elevator Tab
1	MCNAS30434-1520	Elevator Up
1	35-524351-2 <sup>4</sup>	Indicator Actuating
2	MCNAS30435-1325	Rudder Fwd
2	33-524000-31 <sup>3</sup>	Rudder Aft
1	MC35-524314 <sup>2</sup>	Aileron
2	MC36-521011-1	Aileron Aft
2	MC36-521011-3	Aileron Fwd
1	MCNAS30422-0255	Aileron
1	MCNAS30426-0603	Aileron
1	MCNAS30466-0173	Aileron
2	35-815109 <sup>3</sup>	Landing Gear Up Lock

Model 33 Debonair and Bonanza  
35-B33, 35-C33, 35-C33A, E33  
S/N CD-388 thru CD-1234, Except 982, CE-1 thru CE-27

Complete Kit P/N BCKT33-03		
Qty	Part Number	Location
1	MC33-524000-61	Elevator Down
1	MC33-524001-1 <sup>2</sup>	Elevator Tab
1	MC36-524000-29 <sup>2</sup>	Elevator Tab RH
1	MC36-524000-31 <sup>2</sup>	Elevator Tab LH
1	MCNAS30434-1520	Elevator Up
2	MCNAS30435-0564	Elevator
2	MCNAS31237-0790	Elevator Tab
1	35-524647-9 <sup>4</sup>	Indicator Actuating
2	MCNAS30435-1325	Rudder Fwd
2	33-524000-31 <sup>3</sup>	Rudder Aft
1	MC35-524314 <sup>2</sup>	Aileron
2	MC36-521011-1	Aileron Aft
2	MC36-521011-3	Aileron Fwd
1	MCNAS30422-0255	Aileron
1	MCNAS30426-0603	Aileron
1	MCNAS30466-0173	Aileron
2	35-815109 <sup>3</sup>	Landing Gear Up Lock

Model 33 Debonair and Bonanza

35-C33A, E33A, F33, F33A, G33

S/N CE-028 thru CE-315, CD-1235 thru CD-1304

Complete Kit P/N BCKT33-04		
Qty	Part Number	Location
1	MC33-524000-61	Elevator Down
1	MC36-524000-29 <sup>2</sup>	Elevator Tab RH
1	MC36-524000-31 <sup>2</sup>	Elevator Tab LH
1	MCNAS30434-1520	Elevator Up
2	MCNAS30435-0564	Elevator
2	MCNAS31237-0790	Elevator Tab
1	33-524001-7 <sup>4</sup>	Elevator Tab
1	35-524647-9 <sup>4</sup>	Indicator Actuating
2	MCNAS30435-1325	Rudder Fwd
2	33-524000-31 <sup>3</sup>	Rudder Aft
1	MC35-524314 <sup>2</sup>	Aileron
2	MC36-521011-1	Aileron Aft
2	MC36-521011-3	Aileron Fwd
1	MCNAS30422-0255	Aileron
1	MCNAS30426-0603	Aileron
1	MCNAS30466-0173	Aileron
2	35-815109 <sup>3</sup>	Landing Gear Up Lock

Model 33 Debonair and Bonanza

E33C

S/N CJ-001 thru CJ-025

Complete Kit P/N BCKT33-13		
Qty	Part Number	Location
1	MC33-524000-61	Elevator Down
1	MC36-524000-29 <sup>2</sup>	Elevator Tab RH
1	MC36-524000-31 <sup>2</sup>	Elevator Tab LH
1	MCNAS30434-1520	Elevator Up
2	MCNAS30435-0564	Elevator
2	MCNAS31237-0790	Elevator
1	33-524001-7 <sup>4</sup>	Elevator Tab Control
1	35-524647-9 <sup>4</sup>	Indicator Actuating
2	NAS30435-1325 <sup>4</sup>	Rudder Fwd
2	35-524000-67 <sup>4</sup>	Rudder Aft
1	MC35-524314 <sup>2</sup>	Aileron
2	MC36-521011-1	Aileron Aft
2	MC36-521011-3	Aileron Fwd
1	MCNAS30422-0255	Aileron
1	MCNAS30426-0603	Aileron
1	MCNAS30466-0173	Aileron
2	35-815109 <sup>3</sup>	Landing Gear Up Lock

Model 33 Debonair and Bonanza

F33A

S/N CE-316 thru CE-510

Complete Kit P/N BCKT33-05		
Qty	Part Number	Location
1	MC33-524028	Elevator Down
1	MC33-524029	Elevator Down
1	MC36-524000-29 <sup>2</sup>	Elevator Tab RH
1	MC36-524000-31 <sup>2</sup>	Elevator Tab LH
1	MCNAS30434-1520	Elevator Up
2	MCNAS30435-0564	Elevator
2	MCNAS31237-0534	Elevator Tab
1	35-524647-9 <sup>4</sup>	Indicator Actuating
1	MCNAS30435-1321	Rudder Fwd
2	33-524000-31 <sup>3</sup>	Rudder Aft
1	MC35-524314 <sup>2</sup>	Aileron
2	MC36-521011-1	Aileron Aft
2	MC36-521011-3	Aileron Fwd
1	MCNAS30422-0255	Aileron
1	MCNAS30426-0603	Aileron
1	MCNAS30466-0173	Aileron
2	35-815109 <sup>3</sup>	Landing Gear Up Lock

Model 33 Debonair and Bonanza

F33A

S/N CE-511 thru CE-677

Complete Kit P/N BCKT33-06		
Qty	Part Number	Location
1	MC33-524029	Elevator Down
1	MC36-524000-29 <sup>2</sup>	Elevator Tab RH
1	MC36-524000-31 <sup>2</sup>	Elevator Tab LH
1	MCNAS30434-1520	Elevator Up
2	MCNAS30435-0564	Elevator
1	MCNAS31237-0284	Elevator Tab
1	MCNAS31237-0520	Elevator Tab
1	002-524028-3 <sup>2</sup>	Elevator Tab
1	35-524647-9 <sup>4</sup>	Indicator Actuating
1	MC002-524000-23	Rudder
1	NAS304-35-1594 <sup>4</sup>	Rudder
1	NAS304-35-1600 <sup>4</sup>	Rudder
1	MC35-524314 <sup>2</sup>	Aileron
2	MC36-521011-1	Aileron Aft
2	MC36-521011-3	Aileron Fwd
1	MCNAS30422-0255	Aileron
1	MCNAS30426-0603	Aileron
1	MCNAS30466-0173	Aileron
2	35-815109 <sup>3</sup>	Landing Gear Up Lock

Model 33 Debonair and Bonanza

F33A

S/N CE-678 thru CE-680

Complete Kit P/N BCKT33-07		
Qty	Part Number	Location
1	MC002-524028-23 <sup>2</sup>	Elevator Tab
1	MC33-524029	Elevator Down
1	MC36-524000-29 <sup>2</sup>	Elevator Tab RH
1	MC36-524000-31 <sup>2</sup>	Elevator Tab LH
1	MCNAS30434-1520	Elevator Up
2	MCNAS30435-0564	Elevator
1	MCNAS31237-0204	Elevator Tab
1	MCNAS31237-0520	Elevator Tab
1	35-524647-9 <sup>4</sup>	Indicator Actuating
2	MC002-524000-23	Rudder
1	NAS304-35-1594 <sup>4</sup>	Rudder
1	NAS304-35-1600 <sup>4</sup>	Rudder
1	MC35-524314 <sup>2</sup>	Aileron
2	MC36-521011-1	Aileron Aft
2	MC36-521011-3	Aileron Fwd
1	MCNAS30422-0255	Aileron
1	MCNAS30426-0603	Aileron
1	MCNAS30466-0173	Aileron
2	35-815109 <sup>3</sup>	Landing Gear Up Lock

Model 33 Debonair and Bonanza

F33A

S/N CE-681 thru CE-999

Complete Kit P/N BCKT33-08		
Qty	Part Number	Location
1	MC002-524028-23 <sup>2</sup>	Elevator Tab
1	MC33-524029	Elevator Down
1	MC36-524000-29 <sup>2</sup>	Elevator Tab RH
1	MC36-524000-31 <sup>2</sup>	Elevator Tab LH
1	MCNAS30434-1520	Elevator Up
2	MCNAS30435-0564	Elevator
1	MCNAS31237-0204	Elevator Tab
1	MCNAS31237-0520	Elevator Tab
1	35-524647-9 <sup>4</sup>	Indicator Actuating
2	MC002-524000-23	Rudder
1	NAS304-35-1594 <sup>4</sup>	Rudder
1	NAS304-35-1600 <sup>4</sup>	Rudder
1	MC35-524314-2 <sup>2</sup>	Aileron Fuselage
1	MCNAS30422-0255	Aileron
1	NAS304-26-0964 <sup>4</sup>	Aileron
1	NAS304-66-1035 <sup>4</sup>	Aileron
2	MCNAS30537-0647	Aileron Aft
2	MCNAS30537-0667	Aileron Fwd
2	35-815109 <sup>3</sup>	Landing Gear Up Lock

Model 33 Debonair and Bonanza

F33C

S/N CJ-026 thru CJ-128

Complete Kit P/N BCKT33-09		
Qty	Part Number	Location
1	MC33-524000-61	Elevator Down
1	MC36-524000-29 <sup>2</sup>	Elevator Tab RH
1	MC36-524000-31 <sup>2</sup>	Elevator Tab LH
1	MCNAS30434-1520	Elevator Up
2	MCNAS30435-0564	Elevator
2	MCNAS31237-0790	Elevator
1	33-524001-7 <sup>4</sup>	Elevator Tab Control
1	35-524647-9 <sup>4</sup>	Indicator Actuating
2	MCNAS30435-1325	Rudder Fwd
2	33-524000-67 <sup>4</sup>	Rudder Aft
1	MC35-524314 <sup>2</sup>	Aileron
1	MCNAS30422-0255	Aileron
2	MC36-521011-1	Aileron Aft
2	MC36-521011-3	Aileron Fwd
1	MCNAS30426-0603	Aileron
1	MCNAS30466-0173	Aileron
2	35-815109 <sup>3</sup>	Landing Gear Up Lock

Model 33 Debonair and Bonanza

F33C

S/N CJ-129 thru CJ-999

Complete Kit P/N BCKT33-10		
Qty	Part Number	Location
1	MC33-524000-61	Elevator Down
1	MC36-524000-29 <sup>2</sup>	Elevator Tab RH
1	MC36-524000-31 <sup>2</sup>	Elevator Tab LH
1	MCNAS30434-1520	Elevator Up
2	MCNAS30435-0564	Elevator
2	MCNAS31237-0790	Elevator
1	33-524001-7 <sup>4</sup>	Elevator Tab Control
1	35-524647-9 <sup>4</sup>	Indicator Actuating
2	MCNAS30435-1325	Rudder Fwd
2	33-524000-67 <sup>4</sup>	Rudder Aft
1	MC35-524314-2 <sup>2</sup>	Aileron Fuselage
1	MCNAS30422-0255	Aileron
2	MCNAS30537-0647	Aileron Aft
2	MCNAS30537-0667	Aileron Fwd
1	NAS304-26-0964 <sup>4</sup>	Aileron
1	NAS304-66-1035 <sup>4</sup>	Aileron
2	35-815109 <sup>3</sup>	Landing Gear Up Lock

<sup>1</sup> Partial model eligibility  
<sup>2</sup> Cable/Chain assembly  
<sup>3</sup> Pending FAA-PMA approval  
<sup>4</sup> Not available from McFarlane

# Flight Control System

## Flight Control Cables - Beechcraft

FAA-PMA Approved

Model 35 Bonanza  
S/N D-0001 thru D-0014

Complete Kit P/N BCKT35-15

Qty	Part Number	Location
1	MC35-524004	Elevator Fwd
4	MCNAS30227-0590	Tab Actuating
1	MCNAS30266-3636	Elevator Trim Tab Fwd
1	MCNAS30425-0082	Elevator Aft
1	MCNAS30436-0197	Elevator Aft
1	35-524030 <sup>2</sup>	Tab Drum
1	35-524294 <sup>4</sup>	Bungee
1	35-524531-2 <sup>2</sup>	Indicator Actuating
1	MCNAS30425-0100	Rudder Aft RH
1	MCNAS30425-0106	Rudder Aft LH
1	MCNAS30433-0255	Rudder Aft
2	MCNAS31414-1875	Rudder FWD
1	MCNAS30422-0256	Aileron Fwd LH
1	MCNAS30424-0397	Aileron Center LH
1	MCNAS305-24-0514	Aileron Lower RH
1	MCNAS305-25-0546	Aileron, Upper RH
1	MCNAS305-34-0514	Aileron, Lower LH
2	MCNAS305-34-0640	Cable
1	MCNAS305-35-0546	Aileron, Upper LH
2	MCNAS305-35-0672	Cable
1	MCNAS31415-0152	Aileron Aft LH
1	MCNAS31415-0472	Aileron Aft RH
1	35-524174 <sup>4</sup>	Cable Assy, Fwd Aileron

Model 35 Bonanza  
S/N D-0015 thru D-1500

Complete Kit P/N BCKT35-01

Qty	Part Number	Location
1	MC35-524004	Elevator Fwd
4	MCNAS30227-0590	Tab Actuating
1	MCNAS30266-3500	Elevator Trim Tab Fwd
1	MCNAS30425-0082	Elevator Aft
1	MCNAS30436-0197	Elevator Aft
1	35-524030 <sup>2</sup>	Tab Drum
1	35-524294 <sup>4</sup>	Bungee
1	35-524531-2 <sup>2</sup>	Indicator Actuating
1	MCNAS30425-0100	Rudder Aft RH
1	MCNAS30425-0106	Rudder Aft LH
1	MCNAS30433-0255	Rudder Aft
2	MCNAS31414-1875	Rudder FWD
1	MCNAS30422-0256	Aileron Fwd LH
1	MCNAS30424-0397	Aileron Center LH
1	MCNAS305-24-0514	Aileron Lower RH
1	MCNAS305-25-0546	Aileron, Upper RH
1	MCNAS305-34-0514	Aileron, Lower LH
2	MCNAS305-34-0640	Cable
1	MCNAS305-35-0546	Aileron, Upper LH
2	MCNAS305-35-0672	Cable
1	MCNAS31415-0152	Aileron Aft LH
1	MCNAS31415-0472	Aileron Aft RH
1	35-524174 <sup>4</sup>	Cable Assy, Fwd Aileron

Model 35 Bonanza  
A35,B35  
S/N D-1501 thru D-2680

Complete Kit P/N BCKT35-02

Qty	Part Number	Location
4	MCNAS30227-0590	Tab Actuating
1	MCNAS30266-3500	Elevator Trim Tab Fwd
1	MCNAS30425-0082	Elevator Aft
1	MCNAS30436-0197	Elevator Aft
1	MC35-524004	Elevator Fwd
1	35-524030 <sup>2</sup>	Tab Drum
1	35-524294 <sup>4</sup>	Cable Assy, Bungee
1	35-524531-2 <sup>2</sup>	Indicator Actuating
1	MCNAS30425-0100	Rudder Aft RH
1	MCNAS30425-0106	Rudder Aft LH
1	MCNAS30433-0255	Rudder Aft
2	MCNAS31414-1871	Rudder Fwd
1	MCNAS30422-0256	Aileron Fwd LH
1	MCNAS30424-0610	Aileron Center RH
1	MCNAS30426-0603	Aileron
1	MCNAS30466-0170	Aileron Center
2	MC35-521188	Aileron
2	MC35-521189	Aileron
1	MC35-524314 <sup>2</sup>	Cable/Chain, Aileron

Model 35 Bonanza  
C35,D35,E35,F35,G35  
S/N D-2681 thru D-4865

Complete Kit P/N BCKT35-03

Qty	Part Number	Location
4	MCNAS30327-0590	Tab Actuating
1	MCNAS30266-3500	Elevator Trim Tab Fwd
1	MCNAS30266-3636	Elevator Trim Tab Fwd
1	MCNAS30425-0082	Elevator Aft
1	MCNAS30436-0197	Elevator Aft
1	MC35-524385	Elevator Fwd
1	35-524030 <sup>2</sup>	Tab Drum
1	35-524383-4 <sup>2</sup>	Cable Assy, Bungee

Kit continues in next column

Continued from previous column  
Model 35 Bonanza  
C35,D35,E35,F35,G35  
S/N D-2681 thru D-4865

Complete Kit P/N BCKT35-03

Qty	Part Number	Location
1	35-524531-2 <sup>2</sup>	Indicator Actuating
1	MCNAS30425-0100	Rudder Aft RH
1	MCNAS30425-0106	Rudder Aft LH
1	MCNAS30433-0255	Rudder Aft
2	MCNAS31414-1871	Rudder Fwd
1	MCNAS30422-0256	Aileron Fwd LH
1	MCNAS30424-0610	Aileron Center RH
1	MCNAS30426-0603	Aileron
1	MCNAS30466-0170	Aileron Center
2	MC35-521188	Aileron
2	MC35-521189	Aileron
1	MC35-524314 <sup>2</sup>	Cable/Chain, Aileron

Model 35 Bonanza  
H35,J35  
S/N D-4866 thru D-5725

Complete Kit P/N BCKT35-04

Qty	Part Number	Location
1	MCNAS30266-3506	Elevator Trim Tab
1	MCNAS30327-0581	Elevator Trim
1	MCNAS30327-0587	Elevator Trim
1	MCNAS30327-0597	Elevator Trim
1	MCNAS30327-0605	Elevator Trim
1	MCNAS30425-0082	Elevator Aft
1	MCNAS30436-0197	Elevator Aft
1	MC35-524382	Elevator Tab Aft
1	MC35-524385	Elevator Fwd
1	35-524030 <sup>2</sup>	Tab Drum
1	35-524383-4 <sup>2</sup>	Cable Assy, Bungee
1	35-524531-2 <sup>2</sup>	Indicator Actuating
1	MCNAS30425-0100	Rudder Aft RH
1	MCNAS30425-0106	Rudder Aft LH
1	MCNAS30433-0255	Rudder Aft
2	MCNAS31414-1871	Rudder Fwd
1	MCNAS30422-0255	Aileron
1	MCNAS30426-0603	Aileron
1	MCNAS30466-0173	Aileron
2	MC36-521011-1	Aileron
2	MC36-521011-3	Aileron
1	MC35-524314 <sup>2</sup>	Cable/Chain, Aileron

Model 35 Bonanza  
K35<sup>1</sup>  
S/N D-5726 thru D-5727, D-5729 thru D-5747

Complete Kit P/N BCKT35-05

Qty	Part Number	Location
1	MCNAS30266-3506	Elevator Trim Tab
1	MCNAS30327-0581	Elevator Trim
1	MCNAS30327-0587	Elevator Trim
1	MCNAS30327-0597	Elevator Trim
1	MCNAS30327-0605	Elevator Trim
1	MCNAS30425-0082	Elevator Aft
1	MCNAS30436-0197	Elevator Aft
1	MC35-524382	Elevator Tab Aft
1	MC35-524385	Elevator Fwd
1	35-524030 <sup>2</sup>	Tab Drum
1	35-524383-4 <sup>2</sup>	Cable Assy, Bungee
1	35-524531-2 <sup>2</sup>	Indicator Actuating
2	MCNAS30425-0106	Rudder Aft LH and RH
1	MCNAS30433-0247	Rudder Aft
2	MCNAS31514-1871	Rudder Fwd
1	MCNAS30422-0255	Aileron
1	MCNAS30426-0603	Aileron
1	MCNAS30466-0173	Aileron
2	MC36-521011-1	Aileron
2	MC36-521011-3	Aileron
1	MC35-524314 <sup>2</sup>	Cable/Chain, Aileron

Model 35 Bonanza  
K35<sup>1</sup>,M35  
S/N D-5728, D-5748 thru D-6561

Complete Kit P/N BCKT35-06

Qty	Part Number	Location
1	MCNAS30266-3506	Elevator Trim Tab
1	MCNAS30327-0581	Elevator Trim
1	MCNAS30327-0587	Elevator Trim
1	MCNAS30327-0597	Elevator Trim
1	MCNAS30327-0605	Elevator Trim
1	MCNAS30425-0082	Elevator Aft
1	MCNAS30436-0197	Elevator Aft
1	MC35-524382	Elevator Tab Aft
1	35-524030 <sup>2</sup>	Tab Drum
1	35-524383-4 <sup>2</sup>	Cable Assy, Bungee
1	35-524385-4 <sup>2</sup>	Elevator Control Fwd
1	35-524531-2 <sup>2</sup>	Indicator Actuating
2	MCNAS30425-0106	Rudder Aft LH and RH
1	MCNAS30433-0247	Rudder Aft

Kit continues in next column

Continued from previous column  
Model 35 Bonanza  
K35<sup>1</sup>,M35  
S/N D-5728, D-5748 thru D-6561

Complete Kit P/N BCKT35-06

Qty	Part Number	Location
2	MCNAS31514-1871	Rudder Fwd
1	MCNAS30422-0255	Aileron
1	MCNAS30426-0603	Aileron
1	MCNAS30466-0173	Aileron
2	MC36-521011-1	Aileron
2	MC36-521011-3	Aileron
1	MC35-524314 <sup>2</sup>	Cable/Chain, Aileron

Model 35 Bonanza  
N35<sup>1</sup>  
S/N D-6562 thru D-6841

Complete Kit P/N BCKT35-07

Qty	Part Number	Location
1	MCNAS30266-3506	Elevator Trim Tab
1	MCNAS30327-0581	Elevator Trim
1	MCNAS30327-0587	Elevator Trim
1	MCNAS30327-0597	Elevator Trim
1	MCNAS30327-0605	Elevator Trim
1	MCNAS30425-0082	Elevator Aft
1	MCNAS30435-2087	Elevator
1	MCNAS30436-0197	Elevator Aft
1	MC35-524382	Elevator Tab Aft
1	35-524000-3 <sup>4</sup>	Elevator
1	35-524030 <sup>2</sup>	Tab Drum
1	35-524383-4 <sup>2</sup>	Cable Assy, Bungee
1	35-524531-2 <sup>2</sup>	Indicator Actuating
2	MCNAS30425-0106	Rudder Aft LH and RH
1	MCNAS30433-0247	Rudder Aft
2	MCNAS31514-1871	Rudder Fwd
1	MCNAS30422-0255	Aileron
1	MCNAS30426-0603	Aileron
1	MCNAS30466-0173	Aileron
2	MC36-521011-1	Aileron
2	MC36-521011-3	Aileron
1	MC35-524314 <sup>2</sup>	Cable/Chain, Aileron

Model 35 Bonanza  
P35  
S/N D-6842 thru D-7309, except D-7140

Complete Kit P/N BCKT35-09

Qty	Part Number	Location
1	MCNAS30266-3506	Elevator Trim Tab
1	MCNAS30327-0581	Elevator Trim
1	MCNAS30327-0587	Elevator Trim
1	MCNAS30327-0597	Elevator Trim
1	MCNAS30327-0605	Elevator Trim
1	MCNAS30425-0082	Elevator Aft
1	MCNAS30435-2087	Elevator
1	MCNAS30436-0197	Elevator Aft
1	MC35-524382	Elevator Tab Aft
1	MC35-524651-1	Elevator
1	35-524030 <sup>2</sup>	Tab Drum
1	35-524383-4 <sup>2</sup>	Cable Assy, Bungee
1	35-524647-9 <sup>4</sup>	Indicator Actuating
2	MCNAS30425-0106	Rudder Aft LH and RH
1	MCNAS30433-0247	Rudder Aft
2	MCNAS31514-1871	Rudder Fwd
1	MCNAS30422-0255	Aileron
1	MCNAS30426-0603	Aileron
1	MCNAS30466-0173	Aileron
2	MC36-521011-1	Aileron
2	MC36-521011-3	Aileron
1	MC35-524314 <sup>2</sup>	Cable/Chain, Aileron

Model 35 Bonanza  
S35,V35,V35TC,V35A,& V35ATC  
S/N D-7140 and D-7310 thru D-8840

Complete Kit P/N BCKT35-10

Qty	Part Number	Location
1	MCNAS30266-3950	Elevator Trim
1	MCNAS30327-0581	Elevator Trim
1	MCNAS30327-0587	Elevator Trim
1	MCNAS30327-0597	Elevator Trim
1	MCNAS30327-0605	Elevator Trim
1	MCNAS30425-0082	Elevator Aft
1	MCNAS30435-2087	Elevator
1	MCNAS30436-0197	Elevator Aft
1	MC1781-2	Elevator Trim
1	MC35-524382	Elevator Tab Aft
1	MC35-524651-1	Elevator
1	35-524383-4 <sup>2</sup>	Cable Assy, Bungee
1	35-524647-9 <sup>4</sup>	Indicator Actuating
2	MCNAS30425-0106	Rudder Aft LH and RH
2	MCNAS31514-1871	Rudder Fwd

Kit continues on next page

- <sup>1</sup> Partial model eligibility
- <sup>2</sup> Cable/Chain assembly
- <sup>3</sup> Pending FAA-PMA approval
- <sup>4</sup> Not available from McFarlane

Flight Control System



**Flight Control System**  
**Flight Control Cables - Beechcraft**

**McFarlane**  
FAA-PMA Approved

Continued from previous page  
Model 35 Bonanza  
S35, V35, V35TC, V35A, & V35ATC  
S/N D-7140 and D-7310 thru D-8840  
Complete Kit P/N BCKT35-10

Qty	Part Number	Location
1	MCNAS30433-0247	Rudder Aft
1	MCNAS30422-0255	Aileron
1	MCNAS30426-0603	Aileron
1	MCNAS30466-0173	Aileron
2	MC36-521011-1	Aileron
2	MC36-521011-3	Aileron
1	MC35-524314 <sup>2</sup>	Cable/Chain, Aileron

Model 35 Bonanza  
V35A, V35A-TC  
S/N D-8841 thru D-9068 without Electric Trim  
Complete Kit P/N BCKT35-16

Qty	Part Number	Location
1	MCNAS30266-3950	Elevator Trim
1	MCNAS30327-0581	Elevator Trim
1	MCNAS30327-0587	Elevator Trim
1	MCNAS30327-0597	Elevator Trim
1	MCNAS30327-0605	Elevator Trim
1	MCNAS30425-0082	Elevator Aft
1	MCNAS30435-2087	Elevator
1	MCNAS30436-0197	Elevator Aft
1	MC1781-2	Elevator Trim
1	MC35-524382	Elevator Tab Aft
1	35-524670 <sup>2</sup>	Elevator Trim Tab
1	MC35-524651-1	Elevator
1	35-524383-4 <sup>3</sup>	Cable Assy, Bungee
1	35-524647-9 <sup>4</sup>	Indicator Actuating
2	MCNAS30425-0106	Rudder Aft LH & RH
1	MCNAS30433-0247	Rudder Aft
2	MCNAS31514-1871	Rudder Fwd
1	MCNAS30422-0255	Aileron
1	MCNAS30426-0603	Aileron
1	MCNAS30466-0173	Aileron
2	MC36-521011-1	Aileron
2	MC36-521011-3	Aileron
1	MC35-524314 <sup>2</sup>	Cable/Chain, Aileron

Model 35 Bonanza  
S35, V35, V35TC, V35A, & V35ATC  
S/N D-8841 thru D-9068 with Electric Trim  
Complete Kit P/N BCKT35-12

Qty	Part Number	Location
1	MCNAS30266-3950	Elevator Trim
1	MCNAS30327-0581	Elevator Trim
1	MCNAS30327-0587	Elevator Trim
1	MCNAS30327-0597	Elevator Trim
1	MCNAS30327-0605	Elevator Trim
1	MCNAS30425-0082	Elevator Aft
1	MCNAS30435-2087	Elevator
1	MCNAS30436-0197	Elevator Aft
1	MC35-524382	Elevator Tab Aft
1	MC35-524651-1	Elevator
1	35-524383-4 <sup>3</sup>	Cable Assy, Bungee
1	35-524647-9 <sup>4</sup>	Elevator Trim Tab
1	35-524647-9 <sup>4</sup>	Indicator Actuating
2	MCNAS30425-0106	Rudder Aft LH and RH
2	MCNAS31514-1871	Rudder Fwd
1	MCNAS30433-0247	Rudder Aft
1	MCNAS30422-0255	Aileron
1	MCNAS30426-0603	Aileron
1	MCNAS30466-0173	Aileron
2	MC36-521011-1	Aileron
2	MC36-521011-3	Aileron
1	MC35-524314 <sup>2</sup>	Cable/Chain, Aileron

Model 35 Bonanza  
V35B, & V35BTC  
S/N D-9069 thru D-10119 with Electric Trim  
Complete Kit P/N BCKT35-11

Qty	Part Number	Location
1	MCNAS30266-3954	Elevator Trim
1	MCNAS30327-0581	Elevator Trim
1	MCNAS30327-0587	Elevator Trim
1	MCNAS30327-0597	Elevator Trim
1	MCNAS30327-0605	Elevator Trim
1	MCNAS30425-0082	Elevator Aft
1	MCNAS30435-2087	Elevator
1	MCNAS30436-0197	Elevator Aft
1	MC35-524382	Elevator Tab Aft
1	35-524670 <sup>2</sup>	Elevator Trim Tab
1	MC35-524651-1	Elevator
1	35-524383-4 <sup>3</sup>	Cable Assy, Bungee
1	35-524647-9 <sup>4</sup>	Indicator Actuating
2	MCNAS30425-0106	Rudder Aft LH & RH
1	MCNAS30433-0247	Rudder Aft
2	MCNAS31514-1871	Rudder Fwd
1	MCNAS30422-0255	Aileron
1	MCNAS30426-0603	Aileron
1	MCNAS30466-0173	Aileron
2	MC36-521011-1	Aileron

Kit continues in next column  
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Continued from previous column  
Model 35 Bonanza  
V35B, & V35BTC  
S/N D-9069 thru D-99999 with Electric Trim  
Complete Kit P/N BCKT35-11

Qty	Part Number	Location
2	MC36-521011-3	Aileron
1	MC35-524314 <sup>2</sup>	Cable/Chain, Aileron

Model 35 Bonanza  
V35B, V35B-TC  
S/N D-9069 thru D-99999 without Electric Trim  
Complete Kit P/N BCKT35-17

Qty	Part Number	Location
1	MCNAS30266-3954	Elevator Trim
1	MCNAS30277-1156	Elevator Trim
1	MCNAS30327-0581	Elevator Trim
1	MCNAS30327-0587	Elevator Trim
1	MCNAS30327-0597	Elevator Trim
1	MCNAS30327-0605	Elevator Trim
1	MCNAS30425-0082	Elevator Aft
1	MCNAS30435-2087	Elevator
1	MCNAS30436-0197	Elevator Aft
1	MC35-524382	Elevator Tab Aft
1	35-524670 <sup>2</sup>	Elevator Trim Tab
1	MC35-524651-1	Elevator
1	35-524383-4 <sup>3</sup>	Cable Assy, Bungee
1	35-524647-9 <sup>4</sup>	Indicator Actuating
2	MCNAS30425-0106	Rudder Aft LH & RH
1	MCNAS30433-0247	Rudder Aft
2	MCNAS31514-1871	Rudder Fwd
1	MCNAS30422-0255	Aileron
1	MCNAS30426-0603	Aileron
1	MCNAS30466-0173	Aileron
2	MC36-521011-1	Aileron
2	MC36-521011-3	Aileron
1	MC35-524314 <sup>2</sup>	Cable/Chain, Aileron

Model 36 Bonanza  
A36  
S/N E-185 thru E-301  
Complete Kit P/N BCKTA36-01

Qty	Part Number	Location
1	MCNAS30434-1624	Elevator Up
2	MCNAS30435-0564	Elevator
2	MCNAS31237-0534	Elevator Tab
1	MC36-524000-23	Elevator Fwd
1	MC36-524000-29 <sup>2</sup>	Cable/Chain, Elev. Tab RH
1	MC36-524000-31 <sup>2</sup>	Cable/Chain, Elev. Tab LH
1	MC36-524000-41	Cable/Chain, Elev.
1	36-524647-9 <sup>4</sup>	Indicator Actuating
2	MCNAS30435-1425	Rudder Fwd
2	MC36-524000-33	Rudder Aft LH & RH
1	MCNAS30422-0255	Aileron
1	MCNAS30426-0703	Aileron LH
1	MCNAS30466-0173	Aileron
2	MC36-521011-1	Aileron
2	MC36-521011-3	Aileron
1	36-524000-19 <sup>4</sup>	Chain Assy Single Cntr Wheel

Model 36 Bonanza  
A36  
S/N E-302 thru E-571  
Complete Kit P/N BCKTA36-02

Qty	Part Number	Location
2	MCNAS30435-0564	Elevator
2	MCNAS31237-0534	Elevator Tab
1	MCNAS30434-1624	Elevator Up
1	MC36-524000-23	Elevator Fwd
1	MC36-524000-41	Cable/Chain, Elevator
1	MC36-524000-31 <sup>2</sup>	Cable/Chain, Elevator Tab LH
1	MC36-524000-29 <sup>2</sup>	Cable/Chain, Elevator Tab RH
1	36-524647-9 <sup>4</sup>	Indicator Actuating
2	MCNAS30435-1421	Rudder Fwd
2	MC36-524000-33	Rudder Aft LH & RH
1	MCNAS30422-0255	Aileron
1	MCNAS30426-0703	Aileron LH
1	MCNAS30466-0173	Aileron
2	MC36-521011-1	Aileron
2	MC36-521011-3	Aileron
1	36-524000-19 <sup>4</sup>	Cable/Chain, Aileron Fuslg.

Model 36 Bonanza  
A36  
S/N E-572 thru E-925  
Complete Kit P/N BCKTA36-03

Qty	Part Number	Location
1	MCNAS30434-1624	Elevator Up
2	MCNAS30435-0564	Elevator
1	MCNAS31237-0284	Elevator Tab
1	MCNAS31237-0520	Elevator Tab

Kit continues in next column

Continued from previous column  
Model 36 Bonanza  
A36  
S/N E-572 thru E-925  
Complete Kit P/N BCKTA36-03

Qty	Part Number	Location
1	MC36-524000-23	Elevator Fwd
1	MC36-524000-29 <sup>2</sup>	Cable/Chain Elev. Tab RH
1	MC36-524000-31 <sup>2</sup>	Cable/Chain, Elev. Tab LH
1	002-524028-9 <sup>4</sup>	Elevator Tab
1	002-524028-1 <sup>4</sup>	Cable Assy, Elev. Control
1	35-524647-9 <sup>4</sup>	Indicator Actuating
1	MCNAS30435-1703	Rudder Fwd LH
1	MCNAS30435-1696	Rudder Fwd RH
2	MC002-524000-23	Rudder Control Aft
2	NAS30537-0667 <sup>4</sup>	Aileron
2	NAS30537-0647 <sup>4</sup>	Aileron
1	MCNAS30422-0255	Aileron
1	MCNAS30426-0703	Aileron LH
1	MCNAS30466-0173	Aileron
1	36-524000-19 <sup>4</sup>	Cable/Chain, Aileron Fuslg.

Model 36 Bonanza  
A36  
S/N E-926 thru E-937  
Complete Kit P/N BCKTA36-04

Qty	Part Number	Location
1	MCNAS30434-1624	Elevator Up
2	MCNAS30435-0564	Elevator
1	MCNAS31237-0284	Elevator Tab
1	MCNAS31237-0520	Elevator Tab
1	MC36-524000-23	Elevator Fwd
1	MC36-524000-29 <sup>2</sup>	Cable/Chain, Elev. Tab RH
1	MC36-524000-31 <sup>2</sup>	Cable/Chain, Elev. Tab LH
1	002-524028-9 <sup>4</sup>	Elevator Tab
1	MC45-526011-7	Chain
1	35-524647-9 <sup>4</sup>	Indicator Actuating
1	002-524028-1 <sup>4</sup>	Cable Assy, Elev. Control
1	MCNAS30435-1703	Rudder Fwd LH
1	MCNAS30435-1696	Rudder Fwd RH
2	MC002-524000-23	Rudder Control Aft
1	MCNAS30566-1035	Aileron
2	MCNAS30537-0647	Aileron
1	MCNAS30422-0255	Aileron Aft
2	MCNAS30537-0667	Aileron Fwd
1	MCNAS30426-1064	Aileron LH
1	MC35-524314-12	Cable/Chain, Aileron Fuslg.

Model 36 Bonanza  
A36  
S/N E-938 thru E14945, E-1947 thru E-2103,  
E-2105 thru E-2110  
Complete Kit P/N BCKTA36-05

Qty	Part Number	Location
1	MC002-524028-9	Cable, Elevator Tab
1	MC002-524028-21	Cable/Chain, Elev. Tab
1	MC36-524000-23	Elevator Fwd
1	MC36-524000-29 <sup>2</sup>	Cable/Chain, Elev. Tab RH
1	MC36-524000-31 <sup>2</sup>	Cable/Chain, Elev. Tab LH
1	MCNAS30434-1624	Elevator Up
2	MCNAS30435-0564	Elevator
1	MCNAS31237-0204	Elevator Tab
1	MCNAS31237-0520	Elevator Tab
1	35-524647-9 <sup>4</sup>	Indicator Actuating
1	MCNAS30435-1696	Rudder Fwd RH
2	MC002-524000-23	Rudder Aft
1	MCNAS30435-1703	Rudder Fwd LH
1	MC35-524314-12	Cable/Chain, Aileron Fuslg.
1	MCNAS30422-0255	Aileron
1	MCNAS30426-1064	Aileron LH
2	MCNAS30537-0647	Aileron Aft
1	MCNAS30537-0667	Aileron Fwd
1	MCNAS30566-1035	Aileron

Model 36 Bonanza  
A36  
S/N E-1946, E-2104, E-2111 thru E-3629,  
E-3631 thru E-3635  
Complete Kit P/N BCKTA36-06

Qty	Part Number	Location
1	MC106-524020-57	Cable/Chain, Elevator Tab
1	MC106-524046-7	Elevator Tab Nose Down
1	MC106-524046-9	Elevator Tab Nose Up
1	MC106-524049-1	Elevator Up Fwd
1	MC106-524049-9	Elevator Down Fwd
1	MC106-524050-1	Elevator Up Aft
1	MC106-524050-3	Elevator Down Aft
1	MC36-524000-63	Cable/Chain, Elev. Tab RH
1	MC36-524000-69	Cable/Chain, Elev. Tab LH
1	MC106-524051-5	Rudder RH
1	MC106-524051-7	Rudder LH
1	MC36-524079-5	Rudder Aft RH

Kit continues on next page

<sup>1</sup> Partial model eligibility  
<sup>2</sup> Cable/Chain assembly  
<sup>3</sup> Pending FAA-PMA approval  
<sup>4</sup> Not available from McFarlane

Continued from previous page  
Model 36 Bonanza  
A36  
S/N E-1946, E-2104, E-2111 thru E-3629,  
E-3631 thru E-3635  
Complete Kit P/N BCKTA36-06

Qty	Part Number	Location
1	MC36-524079-7	Rudder Aft LH
1	MC106-524019-47	Cable/Chain, Aileron Tab
1	MC106-524044-19	Aileron
1	MC106-524044-21	Aileron
1	MC106-524044-3	Aileron
1	MC106-524045-5	Aileron
1	MC106-524031-1	Cable/Chain Aileron Tab
1	MC106-524043-11	Aileron Aft LH
1	MC106-524043-5	Aileron Aft RH
2	MC106-524043-7	Aileron Fwd LH & RH

Model 36 Bonanza  
A36TC, B36TC  
S/N EA-001 thru EA-319 & EA-321 thru EA-388  
Complete Kit P/N BCKT36TC-01

Qty	Part Number	Location
1	MC002-524028-9	Cable, Elevator Tab
1	MC002-524028-21	Cable/Chain, Elev. Tab
1	MC36-524000-23	Elevator Fwd
1	MC36-524000-29 2	Cable/Chain, Elev. Tab RH
1	MC36-524000-31 2	Cable/Chain, Elev. Tab LH
1	MCNAS30434-1624	Elevator Up
2	MCNAS30435-0564	Elevator
1	MCNAS31237-0204	Elevator Tab
1	MCNAS31237-0520	Elevator Tab
1	35-524647-9 4	Indicator Actuating
2	MC002-524000-23	Rudder Aft
1	MCNAS30435-1696	Rudder Fwd RH
1	MCNAS30435-1703	Rudder Fwd LH
1	MC35-524314-12	Cable/Chain, Aileron Fuslg.
1	MCNAS30422-0255	Aileron
1	MCNAS30426-1064	Aileron LH
2	MCNAS30537-0647	Aileron Aft
2	MCNAS30537-0667	Aileron Fwd
1	MCNAS30566-1035	Aileron

Model 36 Bonanza  
B36TC  
S/N EA-320, EA-378 thru EA-999  
Complete Kit P/N BCKT36TC-03

Qty	Part Number	Location
1	MC106-524020-57	Cable/Chain, Elevator Tab
1	MC106-524046-7	Elevator Tab Nose Down
1	MC106-524046-9	Elevator Tab Nose Up
1	MC106-524049-1	Elevator Up Fwd
1	MC106-524049-9	Elevator Down Fwd
1	MC106-524050-1	Elevator Up Aft
1	MC36-524000-69	Cable/Chain, Elev. Tab LH
1	MC106-524050-3	Elevator Down Aft
1	MC36-524000-63	Cable/Chain, Elev. Tab RH
1	MC106-524051-7	Rudder LH
1	MC106-524051-5	Rudder RH
1	MC36-524079-5	Rudder Aft RH
1	MC36-524079-7	Rudder Aft LH
1	MC106-524019-47	Cable/Chain, Aileron Tab
1	MC106-524031-1	Cable/Chain, Aileron Tab
1	MC106-524043-11	Aileron Aft LH
1	MC106-524043-5	Aileron Aft RH
2	MC106-524043-7	Aileron Fwd LH & RH
1	MC106-524044-19	Aileron
1	MC106-524044-21	Aileron
1	MC106-524044-3	Aileron
1	MC106-524045-5	Aileron

Model 36 Bonanza  
G36  
S/N E-3630, E-3636 thru-9999  
Complete Kit P/N BCKTG36-01

Qty	Part Number	Location
1	MC36-524000-63	Cable/Chain, Elevator Tab RH
1	MC106-524049-9	Elevator Down Fwd
1	MC106-524046-7	Elevator Tab Nose Down
1	MC106-524049-1	Elevator Up Fwd
1	MC36-524000-69	Cable/Chain, Elevator Tab LH
1	MC106-524046-9	Elevator Tab Nose Up
1	MC106-524050-1	Elevator Up Aft
1	MC106-524020-57	Cable/Chain, Elevator Tab
1	MC106-524050-3	Elevator Down Aft
1	MC36-524079-5	Rudder Aft RH
1	MC36-524079-7	Rudder Aft LH
1	MC106-524051-7	Rudder LH
1	MC106-524051-5	Rudder RH
1	MC106-524031-1	Cable/Chain, Aileron Tab
1	MC106-524043-7	Aileron Fwd LH & RH
1	MC106-524045-5	Aileron
1	MC106-524044-3	Aileron
1	MC106-524019-47	Cable/Chain, Aileron Tab
1	MC106-524031-1	Cable/Chain, Aileron Tab
1	MC106-524044-19	Aileron

Continued from previous column  
Model 36 Bonanza  
G36  
S/N E-3630, E-3636 thru-9999  
Complete Kit P/N BCKTG36-01

Qty	Part Number	Location
1	MC106-524043-5	Aileron Aft RH
1	MC106-524043-11	Aileron Aft LH
1	MC106-524044-21	Cable Assy

Model 50 Twin Bonanza  
D50 (DH-144 thru DH-154), D50B, D50C, D50E,  
E50, F50, H50, J50, G50 (GH-95 thru GH-119)  
Complete Kit P/N BCKTG36-01

Part Number	Location
MCNAS30635-1172	Aileron

Model 55  
95-55, 95-A55

Part Number	Location
MCNAS30435-0564	Elevator
MCNAS30444-3507	Elevator
MCNAS30534-0652	Aileron Fwd
MCNAS30534-1594	Rudder Fwd RH
MCNAS30534-1600	Rudder Fwd LH
MCNAS305-35-0672	Cable
MCNAS30555-1043	Aileron
MCNAS31237-0302	Elevator Tab Down
MCNAS31237-0323	Elevator Tab Up

Model 55  
95-B55

Part Number	Location
Note 1	MCNAS30277-4040 Rudder Tab
Note 2	MCNAS30435-0564 Elevator
Note 3	MCNAS30435-0568 Elevator Aft
Note 4	MCNAS30435-0570 Elevator Aft
Note 5	MCNAS30444-3507 Elevator
	MCNAS30534-0652 Aileron Fwd
	MCNAS30534-1594 Rudder Fwd RH
	MCNAS30534-1600 Rudder Fwd LH
	MCNAS305-35-0672 Cable
	MCNAS30555-1043 Aileron
Note 6	MCNAS31237-0222 Elevator Trim
Note 7	MCNAS31237-0302 Elevator Tab Down
	MCNAS31237-0323 Elevator Tab Up

Model 55  
95-C55

Part Number	Location
Note 1	MCNAS30435-0564 Elevator
Note 2	MCNAS30444-3511 Elevator
Note 1	MCNAS30534-0652 Aileron Fwd
Note 1	MCNAS30534-1594 Rudder Fwd RH
Note 1	MCNAS30534-1600 Rudder Fwd LH
Note 1	MCNAS305-35-0672 Cable
Note 1	MCNAS30555-1043 Aileron
	MCNAS31237-0302 Elevator Tab Down
	MCNAS31237-0323 Elevator Tab Up

Model 55  
95-D55

Part Number	Location
Note 1	MCNAS30435-0564 Elevator
Note 2	MCNAS30444-3511 Elevator
Note 1	MCNAS30534-0652 Aileron Fwd
Note 1	MCNAS30534-1594 Rudder Fwd RH
Note 1	MCNAS30534-1600 Rudder Fwd LH
Note 1	MCNAS305-35-0672 Cable
Note 1	MCNAS30555-1043 Aileron
	MCNAS31237-0302 Elevator Tab Down
	MCNAS31237-0323 Elevator Tab Up

Note 1: Not required for s/n TC-350.

Model 55  
E55

Part Number	Location
Note 1	MCNAS30277-4040 Rudder Tab
Note 2	MCNAS30435-0564 Elevator
Note 3	MCNAS30435-0568 Elevator Aft
Note 4	MCNAS30435-0570 Elevator Aft
Note 5	MCNAS30444-3511 Elevator
	MCNAS30534-0652 Aileron Fwd
	MCNAS30534-1594 Rudder Fwd RH
	MCNAS30534-1600 Rudder Fwd LH
	MCNAS30555-1043 Aileron
	MCNAS31237-0302 Elevator Tab Down
	MCNAS31237-0323 Elevator Tab Up
Note 1	MCNAS31237-0843 Electric Trim

Note 1: TE-633 thru TE-76

Model 55  
E55

Part Number	Location
Note 1	MCNAS30277-4040 Rudder Tab
Note 2	MCNAS30435-0564 Elevator
Note 3	MCNAS30435-0568 Elevator Aft
Note 4	MCNAS30435-0570 Elevator Aft
Note 5	MCNAS30444-3511 Elevator
	MCNAS30534-0652 Aileron Fwd
	MCNAS30534-1594 Rudder Fwd RH
	MCNAS30534-1600 Rudder Fwd LH
	MCNAS305-35-0672 Cable
	MCNAS30555-1043 Aileron
Note 6	MCNAS31237-0222 Elevator Trim
Note 7	MCNAS31237-0302 Elevator Tab Down
	MCNAS31237-0323 Elevator Tab Up
	MCNAS31237-0843 Electric Trim

Note 1: TE-938, TE-943 thru TE-1201  
Note 2: TE-768 thru TE-1192  
Note 3: TE-1193 thru TE-1196  
Note 4: TE-1197 thru TE-1201  
Note 5: TE-768 thru TE-937, TE-939 thru TE-942  
Note 6: TE-1087 thru TE-1201  
Note 7: TE-768 thru TE-1086

Model 56 Baron  
56TC, A56TC

Part Number	Location
MCNAS30277-4040	Rudder Tab
MCNAS30435-0564	Elevator
MCNAS30534-0652	Aileron Fwd
MCNAS305-35-0672	Cable
MCNAS30555-1043	Aileron
MCNAS31237-0302	Elevator Tab Down
MCNAS31237-0342	Elevator Tab Up

Model 58 Baron  
58

Part Number	Location
Note 1	MC106-524049-1 Elevator Up Fwd
Note 1	MC106-524049-9 Elevator Down Fwd
Note 1	MC106-524050-1 Elevator Up Aft
Note 1	MC106-524050-3 Elevator Down Aft
Note 2	MCNAS30277-4240 Rudder Tab
Note 3	MCNAS30435-0564 Elevator
Note 4	MCNAS30435-0568 Elevator Aft
Note 5	MCNAS30435-0570 Elevator Aft
Note 2	MCNAS30534-0652 Aileron Fwd
Note 2	MCNAS30534-1696 Rudder RH
Note 2	MCNAS30534-1703 Rudder LH
Note 2	MCNAS305-35-0672 Cable
Note 2	MCNAS30555-1043 Aileron
Note 6	MCNAS31237-0222 Elevator Trim
Note 7	MCNAS31237-0302 Elevator Tab Down
Note 2	MCNAS31237-0523 Elevator Trim Up
	MCNAS31237-0843 Electric Trim

Note 1: TH-1389, TH-1396 thru TH-2124  
Note 2: TH-1 thru TH-1388, TH-1390 thru TH-1395  
Note 3: TH-1 thru TH-1274  
Note 4: TH-1275 thru TH-1314  
Note 5: TH-1315 thru TH-1388, TH-1390 thru TH-1395  
Note 6: TH-790 thru TH-1388, TH-1390 thru TH-1395  
Note 7: TH-1 thru TH-789

Model 58 Baron  
58P

Part Number	Location
Note 1	MC106-524049-1 Elevator Up Fwd
Note 1	MC106-524049-9 Elevator Down Fwd
Note 2	MCNAS30435-0564 Elevator
Note 2	MCNAS30534-1696 Rudder RH
Note 2	MCNAS30534-1703 Rudder LH
Note 2	MCNAS30555-1043 Aileron
Note 1	TJ-436, TJ-444 thru TJ-497
Note 2	TJ-3 thru TJ-435, TJ-437 thru TJ-443

1 Partial model eligibility  
2 Cable/Chain Assembly

Model 58 Baron  
58TC

Part Number	Location
Note 1	MC106-524049-1 Elevator Up Fwd
Note 1	MC106-524049-9 Elevator Down Fwd
Note 2	MCNAS30277-4240 Rudder Tab
Note 3	MCNAS30435-0564 Elevator
Note 3	MCNAS30534-1696 Rudder RH
Note 4	MCNAS30534-1703 Rudder LH
Note 4	MCNAS30555-1043 Aileron
Note 1	TK-147, TK-151
Note 2	TK-53 thru TK-146, TK-148 thru TK-150
Note 3	Not required for s/n TK-151.
Note 4	Not required for s/n TK-147 or TK-151.

Model 60 Duke  
B60

Part Number	Location
	MCNAS30534-0652 Aileron Fwd
	MCNAS305-35-0672 Cable

Model 76 Duchess  
76

Part Number	Location
	MCNAS31424-1152 Stabilator
	MCNAS31424-1242 Rudder Fwd RH
	MCNAS31425-1220 Rudder Fwd LH
	MCNAS31425-1411 Stabilator/Elevator Fwd

Model 90 King Air  
65-90, 65-A90, C90, C90A,  
C90B (LJ-1288 thru LJ-1305,  
LJ-1307 thru LJ-1315, LJ-1317, LJ-1319,  
LJ-1367 thru LJ-1755), C90GT, E90

Part Number	Location
	MCNAS30635-1172 Aileron

1 Partial model eligibility  
2 Cable/Chain Assembly  
3 Pending FAA-PMA approval  
4 Not available from McFarlane





# Flight Control System

## Flight Control Cables - Beechcraft

Model 90 King Air F90		
Part Number	Location	
MCNAS30266-1814	Elevator Tab	
MCNAS30277-1700	Elevator Tab	
MCNAS30635-1172	Aileron	
Model 100 King Air 100,A100,B100		
Part Number	Location	
MC99-524015	Aileron Tab	
MCNAS30635-1172	Aileron	
Model 200 King Air 200,200C,200CT,200T(All except BT-28), B200, B200C,B200CT,B200T		
Part Number	Location	
MC101-524088-1	Aileron Tab	
Note 1,2 MC1781-1	Elevator Tab	
MCNAS30266-1814	Elevator Tab	
Note 2 MCNAS30277-1700	Elevator Tab	
MCNAS30635-1172	Aileron	
Note 1: Replaces: (1) NAS302-67-6643 (2) 35-524288 Stop Screw, (2) 35-524287 Stop Nut. Note 2: Model 200 s/n BB-39 thru BB-912.		
Model 300 King Air 300,300LW		
Part Number	Location	
MCNAS30266-1814	Elevator Tab	
MCNAS30267-6643	Elevator Tab	
MCNAS30277-1700	Elevator Tab	
MCNAS30624-1176	Aileron	
MCNAS30635-1172	Aileron	
Model 300 King Air B300,B300C(All except FN-1)		
Part Number	Location	
MC101-524088-1	Aileron Tab	
MCNAS30266-1814	Elevator Tab	
MCNAS30277-1700	Elevator Tab	
MCNAS30624-1176	Aileron	
MCNAS30635-1172	Aileron	
Model 1900 Airliner 1900,1900C(UB-1 thru UB-74)		
Part Number	Location	
MCNAS30266-1312	Elevator Tab	
MCNAS30277-1307	Elevator	
MCNAS30624-1176	Aileron	
MCNAS30635-1172	Aileron	
Model 45 and T-34 A45 (T-34A), D45 (T-34B)		
Part Number	Location	
MCNAS305-34-0640	Aileron	
MCNAS305-35-0672	Aileron	
MCNAS305-25-0546	Aileron	
MCNAS305-35-0546	Aileron	
MCNAS305-24-0514	Aileron	
MCNAS305-34-0514	Aileron	
Note 2 MCNAS305-34-0826	Elevator	
MCNAS305-35-0576	Elevator	
Note 2 MCNAS305-34-0996	Elevator	
MCNAS305-35-0564	Elevator Aft	
Note 1 MCNAS305-34-1010	Elevator Fwd	
Note 1 MCNAS305-34-0840	Elevator Fwd	
MCNAS304-34-1271	Rudder	
MCNAS304-35-0712	Rudder	
Note 3 MCNAS304-33-0311	Rudder	
Note 3 MCNAS304-34-1116	Rudder	
Note 1: For model A45 (T-34A) only. Note 2: For model D45 (T-34B) only. Note 3: For aircraft with Beechcraft Kit 45-322A installed.		
Model T-34 T-34C, 34C, T-34C-1		
Part Number	Location	
MCNAS305-34-0640	Aileron	
MCNAS305-35-0672	Aileron	
Note 1 MCNAS305-25-0546	Aileron	
Note 1 MCNAS305-35-0546	Aileron	
Note 1 MCNAS305-24-0514	Aileron	
Note 1 MCNAS305-34-0514	Aileron	
MC104-524023-3	Aileron Trim	
MC104-524023-5	Aileron Trim	
MCNAS305-35-0996	Elevator	
MCNAS305-34-0826	Elevator	
MCNAS305-34-0564	Elevator	
MCNAS305-35-0576	Elevator	
MC104-524020-9	Elevator Trim	
MC104-524020-11	Elevator Trim	
MC104-524046-3	Elevator Trim	
MC104-524046-5	Elevator Trim	
MC104-524021-3	Rudder Trim	
MC104-524021-5	Rudder Trim	
MC104-524022-3	Rudder Trim	
MC104-524022-7	Rudder Trim	
Note 1: For model T-34C only.		

### General Beechcraft Cable

#### Notes: Corrosion Protection

All Beechcraft cables are made from galvanized steel cable and coated with a modified MIL-PRF-16173 compound. This is the same process used on Beechcraft original cables. It provides additional corrosion protection beyond the standard MIL-SPEC rust preventive oil. This provides both exceptional wear resistance and corrosion protection for many years.

### Cable Stop P/N MC6057

- Improved for more consistent holding strength
- Used on the assist step cable on 35, A35 and C35 Beech Bonanzas
- One McFarlane MC6057 cable stop replaces both Beechcraft 35-524287 nut and 35-524288 screw part numbers
- Also included on select cable assemblies as required



### Bulk Cable

Great prices on galvanized or stainless steel! All cable meets MIL-DTL-83420 certification. Manufacturer certification is provided with every order.

- Direct mill purchases let us sell for less!
- Prepackaged in 100 and 500 foot lengths
- Custom lengths available

Diameter	Cable	Galvanized	Stainless
1/16	1X19	•	
	7X7	•	•
	7X19	•	•
1/8	1X19	•	
	7X19	•	•
1/4	7X19	•	•
	1X19	•	
3/32	7X7	•	•
	7X19	•	•
	7X19	•	•
3/16	7X19	•	•
3/8	7X19	•	•
5/32	7X19	•	•
5/16	7X19	•	•



FAA-PMA Approved

## Pulleys and Pulley Kits for Cessna Aircraft

McFarlane stocks all pulleys required for Cessna single engine aircraft. Our MCS378 series pulleys replace the AN, NAS and S378 series pulleys commonly used on the Cessna aircraft. Pulley kits are available that contain all of the pulleys and cotter pins required for one aircraft.



### Improved Bearings

All MCS378 series FAA-PMA pulleys used in McFarlane pulley kits feature high quality sealed precision ball bearings. This style of bearing is far superior to low grade, open seal bearings used in the cheap Cessna S378-()L light duty series pulleys that they replace.

### Available Pulley Part Numbers

1660433-1, 1660433-2, AN210-1B, AN210-2B, AN210-3B, AN210-4B, AN210-5B, AN220-1, AN220-2, AN220-3, AN220-4, MCS378-1, MCS378-2, MCS378-3, MCS378-4, MCS378-5, MS20219-1, MS20219-2, MS20219-3, MS20219-4, MS20219-5, MS20219A1, MS20219A2, MS20219A3, MS20219A4, MS20219A5, MS20220-1, MS20220-2, MS20220-3, MS20220-4, MS24566-1B, MS24566-2B, MS24566-3B, MS24566-4B, MS24566-5B, NAS383-1, NAS383-2, NAS383-3, NAS383-4, S1052-1, S1710-1, S378-4S, S394



**McFarlane Pulley Oil, will not dry out and get sticky. See the following page.**

### Approved Replacements for Cessna Pulleys

Cessna Model/Series	Part Number*	Replaces Cessna Part Number*
120,140,140A,150,A150,A-150, F150,FA150,FRA150,152,A152,F152,FA152,170,172,F172, FR172, 172RG,FP172,P172,R172,175,177,177RG,F177RG,180,182,A182,F182,FR182,R182, TR182,T182,185,A185,188, A188,A-A188,T188,205,206,P206,TU206,T206,TP206,U206,207, T207,208,210,P210,T210,T303,310,T310,320,335,336,337,F337,P337,FP-337,T337,O-2, 340,401,402,404,411,414,421,425,441,500,501	MCS378-1 MCS378-2 MCS378-3 MCS378-4 MCS378-5	S378-1 and S378-1L S378-2, A124, AN210-2B and NAS383-2 S378-3, S378-3L, A130, AN210-3B, BB-208 and NAS383-3 S378-4, A114, AN210-4B and NAS383-4 S378-5

\*Replaces the listed Cessna part numbers in the specific aircraft illustrated parts catalogs. Installer must verify applicability prior to installation.

### Available Cotter Pin Part Numbers

MS24665-132, MS24665-134, MS24665-138, MS24665-140, MS24665-143, MS24665-144, MS24665-155, MS24665-170, MS24665-24, MS24665-281, MS24665-283, MS24665-285, MS24665-287, MS24665-289, MS24665-292, MS24665-295, MS24665-353, MS24665-355, MS24665-357, MS24665-360, MS24665-5, MS24665-7, MS24665-71.



Pulleys and cotter pins available as convenient kits. Pulleys can be purchased separately. Cotter Pins can be purchased in quantities of 10 or 25 each depending on part number.

Model	Serial Number	Kit P/N	Quantity per Kit (Applicable cotter pins also included)					Other Pulleys
			MCS378-1	MCS378-2	MCS378-3	MCS378-4	MCS378-5	
120/140	8000-15075	PULL-KT-01	8	2	10	10	1	
140A	15200-15724	PULL-KT-02		2	8	12	1	(8) NAS383-1
150	17001-59018	PULL-KT-03	8	13	10	12	3	
150A,B,C	15059019-15060087	PULL-KT-04	8	13	10	10	3	
150D, E	15060088-15061083	PULL-KT-05	8	13	10	4	1	(6) MS20220-2
150E	15061084-15061532	PULL-KT-06	8	13	10	4		(6) MS20220-2
150F,G	15061533-15067198	PULL-KT-07	10	10	13	4		(7) MS20220-2
150H	15067199-15069308	PULL-KT-08	14	10	13	4		(7) MS20220-2
150J	15069309-15071128	PULL-KT-09	14	8	13	4		(7) MS20220-2
150K, L	15071129-15074399	PULL-KT-10	14	8	13	4		(7) MS20220-2
A150K, L	A15000001-A1500387	PULL-KT-10	14	8	13	4		(7) MS20220-2
F150K, L	F15000530-F15000943	PULL-KT-10	14	8	13	4		(7) MS20220-2
FA150K, L	FA1500001-FA1500120	PULL-KT-10	14	8	13	4		(7) MS20220-2
FRA150L	FRA1500121-FRA1500211	PULL-KT-10	14	8	13	4		(7) MS20220-2
150L	15074400-15074661	PULL-KT-11	14	10	11	4		(7) MS20220-2
A150L	A1500388-A1500415	PULL-KT-11	14	10	11	4		(7) MS20220-2
F150L	F1500944-F15001062	PULL-KT-11	14	10	11	4		(7) MS20220-2
150L, M	15074662-15079405	PULL-KT-12	14	10	12	4		(7) MS20220-2
FRA150L, M	FRA1500212-FRA1500336	PULL-KT-12	14	10	12	4		(7) MS20220-2
152	15279406-15286033	PULL-KT-13	14	10	12	4		(7) MS20220-2
A152	A1520735-A1521049	PULL-KT-13	14	10	12	4		(7) MS20220-2
F152	F15201429-F015201952	PULL-KT-13	14	10	12	4		(7) MS20220-2
FA152	FA1520337-FA1520387	PULL-KT-13	14	10	12	4		(7) MS20220-2
170	18000-18729	PULL-KT-14		4	7	16	2	(8) NAS383-1
170A	18730-20266	PULL-KT-15			13	14		(8) NAS383-1
170B	20267-27169	PULL-KT-16	8	11	9	22	4	(8) NAS383-1
172A,B,C	28000-17249544	PULL-KT-17	8	11	10	18	4	
172D	17249545-17250572	PULL-KT-18	9	11	10	18	4	
F172D	F1720001-F1720018	PULL-KT-18	9	11	10	18	4	
FP172	FP1720001-FP1720003	PULL-KT-18	9	11	10	18	4	
P172	P17257120-P17257188	PULL-KT-18	9	11	10	18	4	
172E	17250573-17251822	PULL-KT-19	9	11	10	16	4	
F172E	F1720019-F1720085	PULL-KT-19	9	11	10	16	4	
172F,G,H,I,K,L,M	17251823-17263458	PULL-KT-20	13	2	10	16	3	(2) MS20220-1
F172F,G,H,K,L,M	F1720086-F17201234	PULL-KT-20	13	2	10	16	3	(2) MS20220-1
FR172E,F,G,H,J	FR1720001-FR1720590	PULL-KT-21	12	2	10	16	3	(2) MS20220-1
172M,N,P	17263459-17276673	PULL-KT-22	13	2	10	16	3	(2) MS20220-1, (1) S1710-1
F172M,N,P	F17201235-F17202254	PULL-KT-22	13	2	10	16	3	(2) MS20220-1, (1) S1710-1
172R,S	17280001 & On	PULL-KT-19	9	11	10	16	4	
175A,B,C	55001-17557119	PULL-KT-17	8	11	10	18	4	
180A,B	30000-50661	PULL-KT-24	5	11	7	20	4	
180C,D,E	50662-18051183	PULL-KT-25	5	12	7	20	4	
180F,G	18051184-18051445	PULL-KT-26	5	12	7	20	4	(1) MS20220-2
	18051446-18051607	PULL-KT-27	5	12	7	22	4	(1) MS20220-2
180H	18051608-18052206	PULL-KT-28	5	12	7	22	1	8 (1) MS20220-2
180H, J	18052207-18052384	PULL-KT-83	5	12	7	22	1	8 (1) MS20220-2, (1) S1710-1
180, K	18052385-18053203	PULL-KT-29	5	11	7	22	1	8 (2) MS20220-2, (1) S1710-1
182,A,B	33000-52358	PULL-KT-34	5	11	7	20	1	4
182C,D	52359-18053598	PULL-KT-35	5	12	7	20	1	4
182E	18253599-18253929	PULL-KT-36	6	1	6	10	3	(6) MS20220-2, (1) S1052-1
182E, F,G,H,J,K	18253930-18258505	PULL-KT-85	11	3	6	10	3	(6) MS20220-2, (1) S1052-1

Partial model eligibility

Eligibility continues on next page



# Flight Control System Pulleys for Cessna Aircraft

**McFarlane**  
FAA-PMA Approved

Continued from previous page

Model	Serial Number	Kit P/N	Quantity per Kit (Applicable cotter pins also included)					Other Pulleys
			MCS378-1	MCS378-2	MCS378-3	MCS378-4	MCS378-5	
182L,M,N1	18258506-18260445	PULL-KT-37	6	3	6	8	3	(8) MS20220-2, (1) S1052-1
182N1	18260446-18260669	PULL-KT-38	8	3	6	8	3	(8) MS20220-2, (1) S1052-1
182N1,P1	18260670-18262465	PULL-KT-86	8	3	6	8	3	(8) MS20220-2, (1) S1052-1, (1) S1710-1
182P1,Q,R	18262466-18268615	PULL-KT-39	13	3	6	8	3	(8) MS20220-2, (1) S1052-1, (1) S1710-1
T182	18267716-18268615	PULL-KT-39	13	3	6	8	3	(8) MS20220-2, (1) S1052-1, (1) S1710-1
182S, 182T	18280001 & On	PULL-KT-80	13	3	6	8	3	(9) MS20220-2, (1) S1052-1, (1) S1710-1
F182P,Q	F1820001-F18200169	PULL-KT-39	13	3	6	8	3	(8) MS20220-2, (1) S1052-1, (1) S1710-1
FR182	FR1820001-FR18200070	PULL-KT-40	3	1	16	16	3	(8) MS20220-2, (1) S1052-1, (1) S1710-1
R182,TR182	R1820001-R18202041	PULL-KT-40	3	1	16	16	3	(8) MS20220-2, (1) S1052-1, (1) S1710-1
T182	T1820801 & On	PULL-KT-80	13	3	6	8	3	(9) MS20220-2, (1) S1052-1, (1) S1710-1
185A,B,C	1850001-1850776	PULL-KT-30	5	12	7	20	1	(4) MS20220-2
185D	1850777-1850967	PULL-KT-31	5	12	7	22	1	(4) MS20220-2
185E,A185E1	1850968-18501901	PULL-KT-32	5	12	7	22	1	(8) MS20220-2
A185E1,F1	18501902-18502310	PULL-KT-84	5	12	7	22	1	(1) MS20220-2, (1) S1710-1
A185F1	18502311-18504448	PULL-KT-33	5	11	7	22	1	(2) MS20220-2, (1) S1710-1
1881,A1881	1880001-1880317	PULL-KT-41	2	5	6	6	4	(4) 1660433-1, (8) MS20220-1, (2) MS20220-2, (1) MS20220-4
188A1,A188A1	1880318-1880572	PULL-KT-42	4	5	6	6	4	(4) 1660433-1, (8) MS20220-1, (2) MS20220-2, (1) MS20220-4
188A1,A188A1	1880573-1880707	PULL-KT-43	4	5	6	6	6	(4) 1660433-1, (8) MS20220-1, (2) MS20220-2, (1) MS20220-4, (1) S1052-1
188A1,B1	1880708-18801348	PULL-KT-44	4	5	6	6	6	(4) 1660433-2, (10) MS20220-2, (1) MS20220-4, (2) S1052-1
A188A1,B1	18800967T-188001348T	PULL-KT-44	4	5	6	6	6	(4) 1660433-2, (10) MS20220-2, (1) MS20220-4, (2) S1052-1
188B1,A188B1	18801349-18801402 18801349T-18801402T	PULL-KT-45	4	5	6	6	6	(4) 1660433-2, (1) MS20220-1, (10) MS20220-2, (1) MS20220-4, (2) S1052-1
188B1,A188B1	18801403-18803856 18801403T-18803968T	PULL-KT-46	4	5	6	6	6	(4) 1660433-2, (1) MS20220-1, (10) MS20220-2, (1) MS20220-4, (2) S1052-1, (1) S1710-1
T188C	T18803297T-T18803968T	PULL-KT-6	4	5	6	6	6	(4) 1660433-2, (1) MS20220-1, (10) MS20220-2, (1) MS20220-4, (2) S1052-1, (1) S1710-1
210-5 (205), 210-5A (205A)	2050001-2050577	PULL-KT-47	11	3	6	22	3	(5) MS20220-2, (1) S1052-1
206,U206,A,B	2060001-U2060914	PULL-KT-48	7	4	6	26	6	(4) MS20220-1, (9) MS20220-2, (1) S1052-1
TU206A,B	2060438-U2060914	PULL-KT-48	7	4	6	26	6	(4) MS20220-1, (9) MS20220-2, (1) S1052-1
P206,TP206A,B	P2060001-P2060419	PULL-KT-48	7	4	6	26	6	(4) MS20220-1, (9) MS20220-2, (1) S1052-1
U206,TU206C,D,E1	U2060915-U20601667	PULL-KT-49	10	4	6	26	6	(4) MS20220-1, (11) MS20220-2, (1) S1052-1
P206,TP206C,D,E	P2060420-P2060647	PULL-KT-49	10	4	6	26	6	(4) MS20220-1, (11) MS20220-2, (1) S1052-1
U206F1,TU206F1	U20601668-U20601700	PULL-KT-50	10	4	6	26	6	(4) MS20220-1, (9) MS20220-2, (1) S1052-1, (1) S1710-1
U206F1,TU206F1	U20601701-U20601874	PULL-KT-51	8	4	6	26	6	(4) MS20220-1, (11) MS20220-2, (1) S1052-1, (1) S1710-1
U206F1,TU206F1	U20601875-U20602199	PULL-KT-52	7	4	6	26	6	(4) MS20220-1, (11) MS20220-2, (1) S1052-1, (1) S1710-1
U206F1,TU206F1	U20602200-U20602579	PULL-KT-53	7	2	6	26	6	(4) MS20220-1, (9) MS20220-2, (2) MS20220-4, (1) S1052-1, (1) S1710-1
U206F1,G1	U20602580-U20603798	PULL-KT-54	7	1	6	20	6	(4) MS20220-1, (9) MS20220-2, (2) MS20220-4, (1) S1052-1, (1) S1710-1
U206G1,TU206G1	U20603799-U20607020	PULL-KT-55	7	6	6	22	6	(4) MS20220-1, (8) MS20220-2, (2) MS20220-4, (1) S1052-1, (1) S1710-1
T206H	T20608001 & On	PULL-KT-56	7	6	6	18	4	(4) MS20220-1, (8) MS20220-2, (2) MS20220-4, (1) S1052-1, (1) S1710-1
T206H	T20608001 & On	PULL-KT-56	7	6	6	18	4	(4) MS20220-1, (8) MS20220-2, (2) MS20220-4, (1) S1052-1, (1) S1710-1
2071,T2071	20700001-20700204	PULL-KT-57	12	1	4	21	6	(4) MS20220-1, (11) MS20220-2, (7) S1052-1, (2) S1710-1
2071,T2071	20700205-20700227	PULL-KT-58	12	1	4	21	6	(4) MS20220-1, (11) MS20220-2, (7) S1052-1, (3) S1710-1
2071,T2071	20700228-20700267	PULL-KT-59	9	1	4	21	6	(4) MS20220-1, (9) MS20220-2, (7) S1052-1, (3) S1710-1
2071,T207A1	20700268-20700390	PULL-KT-60	9	1	6	15	6	(4) MS20220-1, (9) MS20220-2, (2) MS20220-4, (5) S1052-1, (3) S1710-1
T2071,T207A1	20700391-20700788	PULL-KT-61	9	1	6	17	6	(4) MS20220-1, (8) MS20220-2, (2) MS20220-4, (5) S1052-1, (3) S1710-1
2081	20800001 thru 20800145	PULL-KT-87	3	3	13			(6) MS20220-1, (2) MS20220-3, (18) S378-4S
2081	20800146 thru 20899999	PULL-KT-88	2	13	13			(6) MS20220-1, (2) MS20220-3, (18) S378-4S
208B	All	PULL-KT-89	2	1	13			(6) MS20220-1, (2) MS20220-3, (19) S378-4S
210,A	57001-21057840	PULL-KT-62	5	4	11	22	3	(9) MS20220-2, (2) S1052-1
210B,C	21057841-21058220	PULL-KT-63	7	4	6	28	3	(4) MS20220-2, (2) S1052-1
210D,E,F	21058221-21058818	PULL-KT-64	7	3	6	28	6	(4) MS20220-1, (9) MS20220-2, (1) S1052-1
T210F	T2100001-T2100197	PULL-KT-64	7	3	6	28	6	(4) MS20220-1, (9) MS20220-2, (1) S1052-1
210G	21058819-21058936	PULL-KT-65	7	6	6	28	2	(12) MS20220-2, (2) MS20220-3, (8) S1710-1
T210G	T2100198-T2100307	PULL-KT-65	7	6	6	28	2	(12) MS20220-2, (2) MS20220-3, (8) S1710-1
210H1	21058937-210859030	PULL-KT-66	11	6	6	28	2	(12) MS20220-2, (2) MS20220-3, (8) S1710-1
210H1	21059031-21059061	PULL-KT-67	11	6	6	28	2	(11) MS20220-2, (2) MS20220-3, (4) S1710-1
210H1	T2100308-T2100378	PULL-KT-66	11	6	6	28	2	(12) MS20220-2, (2) MS20220-3, (8) S1710-1
T210H1	T2100379-T2100392	PULL-KT-67	11	6	6	28	2	(11) MS20220-2, (2) MS20220-3, (4) S1710-1
210J	21059062-21059199	PULL-KT-68	15	6	6	28	2	(11) MS20220-2, (2) MS20220-3, (4) S1710-1
T210J	T2100393-T2100454	PULL-KT-68	15	6	6	28	2	(11) MS20220-2, (2) MS20220-3, (4) S1710-1
210K,L1	21059200-21060089	PULL-KT-69	14	1	7	26	2	(11) MS20220-2, (2) MS20220-3, (4) S1710-1
210L1,M,N1	21060090-21064135	PULL-KT-71	12	1	7	28	2	(11) MS20220-2, (2) MS20220-3, (4) S1710-1
210N1,T210N1	21064136-21064897	PULL-KT-77	12	1	7	28	2	(11) MS20220-2, (6) MS20220-3, (5) S1710-1
210R,T210R	21064898-21065009	PULL-KT-78	8	7	7	28	2	(9) MS20220-2, (4) MS20220-3, (5) S1710-1
P210N	P21000001-P210000834	PULL-KT-81	12	1	7	28	2	(11) MS20220-2, (2) MS20220-3, (5) S1710-1
P210R	P21000835-P21000874	PULL-KT-82	8	7	7	28	2	(9) MS20220-2, (4) MS20220-3, (5) S1710-1

Partial model eligibility

## D A M™ Aircraft Pulley Oil

New name, same dependable oil!  
Featuring a re-designed needle oiler.  
Great for unreachable areas with traditional applicators.

- Does not dry out and get sticky
- Loosens old stiff pulley grease
- Save the labor of re-oiling the control system every year!



20" Extension P/N 7249  
now sold separately!



Qty	Description
<b>P/N PULLEY OIL KIT</b>	
1	Pint, Pulley Oil
1	Needle Oiler with Extension, .34 fl oz (10mL)
<b>P/N PULLEY OILER KIT</b>	
1	Needle Oiler with Extension, .34 fl oz (10mL)
<b>P/N PULLEY OIL</b>	
1	Pint, Pulley Oil



FAA-PMA Approved

## General Description of Pulleys

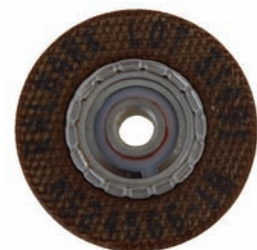
- MCS378- Series: Phenolic flight control pulleys with ball bearings. FAA-PMA approved replacements for the Cessna S378, A-/BB-, and NAS383- series pulleys on Cessna Aircraft
- MS20219- Series: Pulley with high pressure laminated phenolic sheave and fixed ball bearing with contact seal. These supersede the AN219- Series pulleys of like dash number
- MS20219A-Series: Pulley with aluminum alloy sheave and fixed ball bearing with contact seal. Sheave anodized per MIL-A-8625.
- MS20220- Series: Phenolic flight control pulleys with ball bearings. These supersede the AN220- Series pulleys of like dash number.
- MS24566- Series: Phenolic flight control pulleys with ball bearings. These supersede the AN210- series pulleys of like dash number
- NAS383- Series: Phenolic commercial grade pulleys with graphite impregnated bronze sleeve bearings. These are typically used with a bushing. The MCS378- series pulleys supersede these for most Cessna aircraft applications. The MCS378 pulley replaces both the NAS383 pulley and it's bushing
- S394, S1052-1, and S1710-1: Cessna nylon pulleys with no bearings
- S378-4S: Cessna pulley similar to S378-4 but smaller diameter. Used on 177RG s/n 177RG0202 and on, and F177RG0038 and on for routing stabilator, stabilator trim, and rudder cables. Six required per aircraft
- 1660433- Series: Cessna phenolic pulleys with ball bearings



MCS378 Series Pulley



MS20219 Series Pulley



MS24566 Series Pulley

Part Number	Cable Diameter	Outside Diameter	Groove Diameter	Bore Diameter	Pulley Width	Hub Width	Load Limit	Superseded by
A-114	3/16	3.500	2.875	0.380	0.443	----	---	MCS378-4 <sup>1</sup>
A-124	3/32	2.500	2.000	0.255	0.270	----	---	MCS378-2 <sup>1</sup>
A-130	3/16	2.000	1.375	0.380	0.433	----	---	MCS378-3 <sup>1</sup>
AN210-1A	1/16, 5/64, 3/32	1.250	----	0.1900	0.250	0.297	185	MS24566-1B <sup>2</sup>
AN210-2A	1/16, 5/64, 3/32	2.500	----	0.1900	0.250	0.297	500	MS24566-2B <sup>2</sup>
AN210-3A	1/8, 5/32, 3/16	2.000	----	0.2500	0.422	0.484	450	MS24566-3B <sup>2</sup>
AN210-4A	1/8, 5/32, 3/16	3.500	----	0.2500	0.422	0.484	1200	MS24566-4B <sup>2</sup>
AN210-1B	1/16, 5/64, 3/32	1.250	0.972	0.1900	0.250	0.297	300	MS24566-1B
AN210-2B	1/16, 5/64, 3/32	2.500	2.222	0.1900	0.250	0.297	500	MS24566-2B
AN210-3B	1/8, 5/32, 3/16	2.000	1.510	0.2500	0.422	0.484	600	MS24566-3B
AN210-4B	1/8, 5/32, 3/16	3.500	3.010	0.2500	0.422	0.484	1200	MS24566-4B
AN210-5B	3/16, 7/32, 1/4	5.000	4.374	0.3750	0.500	0.620	3000	MS24566-5B
AN220-1	1/8, 5/32, 3/16	1.755	1.255	0.3125	0.422	0.625	500	MS20220-1
AN220-2	1/8, 5/32, 3/16	3.005	2.505	0.3125	0.422	0.625	1680	MS20220-2
AN220-3	1/8, 5/32, 3/16	4.255	3.755	0.3125	0.422	0.625	2500	MS20220-3
AN220-4	1/8, 5/32, 3/16	5.505	5.005	0.3125	0.422	0.625	2500	MS20220-4
BB-208	----	----	----	----	----	----	---	MCS378-3 <sup>1</sup>
MCS378-1	1/16, 5/64, 3/32	1.250	0.972	0.1900	0.250	0.297	300	
MCS378-2	1/16, 5/64, 3/32	2.500	2.222	0.1900	0.250	0.297	500	
MCS378-3	1/8, 5/32, 3/16	2.000	1.510	0.2500	0.422	0.484	600	
MCS378-4	1/8, 5/32, 3/16	3.500	3.010	0.2500	0.422	0.484	1200	
MCS378-5	3/16, 7/32, 1/4	5.000	4.374	0.3750	0.500	0.620	3000	
MS20219-1, MS20219A1	1/16, 3/32	1.312	1.000	0.2500	0.310	0.438	480	
MS20219-2, MS20219A2	1/16, 3/32	1.750	1.438	0.2500	0.310	0.438	480	
MS20219-3, MS20219A3	1/16, 3/32	1.750	1.438	0.6250	0.310	0.438	480	
MS20219-4, MS20219A4	1/16, 3/32	2.625	2.312	0.2500	0.310	0.438	920	
MS20219-5, MS20219A5	1/16, 3/32	2.625	2.312	0.6250	0.310	0.438	920	
MS20220-1	1/8, 5/32, 3/16	1.755	1.255	0.3125	0.422	0.625	500	
MS20220-2	1/8, 5/32, 3/16	3.005	2.505	0.3125	0.422	0.625	1680	
MS20220-3	1/8, 5/32, 3/16	4.255	3.755	0.3125	0.422	0.625	2500	
MS20220-4	1/8, 5/32, 3/16	5.505	5.005	0.3125	0.422	0.625	2500	
MS24566-1B	1/16, 5/64, 3/32	1.250	0.972	0.1900	0.250	0.297	300	
MS24566-2B	1/16, 5/64, 3/32	2.500	2.222	0.1900	0.25	0.297	500	
MS24566-3B	1/8, 5/32, 3/16	2.000	1.510	0.2500	0.422	0.484	600	
MS24566-4B	1/8, 5/32, 3/16	3.500	3.010	0.2500	0.422	0.484	1200	
MS24566-5B	3/16, 7/32, 1/4	5.000	4.374	0.3750	0.500	0.620	3000	
NAS383-1	3/32	1.250	0.875	0.255	0.270	----	---	
NAS383-2	3/32	2.500	2.000	0.255	0.270	----	---	MCS378-2 <sup>1</sup>
NAS383-3	3/16	2.000	1.375	0.380	0.443	----	---	MCS378-3 <sup>1</sup>
NAS383-4	3/16	3.500	2.875	0.380	0.443	----	---	MCS378-4 <sup>1</sup>
S378-1 and -1L	1/16, 5/64, 3/32	1.250	0.972	0.1900	0.250	0.297	300	MCS378-1 <sup>1</sup>
S378-2	1/16, 5/64, 3/32	2.500	2.222	0.1900	0.250	0.297	500	MCS378-2 <sup>1</sup>
S378-3 and -3L	1/8, 5/32, 3/16	2.000	1.510	0.2500	0.422	0.484	600	MCS378-3 <sup>1</sup>
S378-4	1/8, 5/32, 3/16	3.500	3.010	0.2500	0.422	0.484	1200	MCS378-4 <sup>1</sup>
S378-4S	1/8, 5/32, 3/16	~3.0	~2.5	0.2500	0.422	0.484	?	
S378-5	3/16, 7/32, 1/4	5.000	4.374	0.3750	0.500	0.620	3000	MCS378-5 <sup>1</sup>
S394	-----	1.000	0.750	0.250	0.410	0.420	----	
S1052-1	-----	1.060	0.560	0.250	0.690	0.750	----	
S1710-1	-----	0.750	0.560	0.250	0.410	0.410	----	
1660433-1	-----	1.250	1.000	0.190	0.250	0.300	----	
1660433-2	-----	2.250	2.250	0.190	0.250	0.300	----	

Notes:

<sup>1</sup> Cessna aircraft only

<sup>2</sup> Not official supersedure. They are dimensionally identical except the MS24566 pulleys have superior bearings.

The listed dimensions and loads are for reference and identification only and are not guaranteed to be accurate.

## Hardware

Over 100 certified aircraft control cable hardware part numbers in STOCK at discounted prices!!

- Balls, BM Series
- Balls, Single Shank, MS20664 Series
- Balls, Double Shank, MS20663 Series
- Barrels, Brass, MS21251 Series
- Bushings, AN111 Series
- Locking Clips, MS21256 Series
- Shackles, AN115 Series
- Sleeves, Tin and Zinc, MS51844 Series
- Straps, Eye and Fork NAS1435 Series
- Terminals, Eye, MS20668 Series
- Terminals, Fork, MS20667 Series
- Terminals, Stud, MS21259 Series
- Terminals, Turnbuckle MS21260 Series
- Thimbles, AN100 Series
- Turnbuckles, Clevis End, MS21252 Series
- Turnbuckles, Eye end for Pin, MS21254 Series
- Turnbuckles, Eye end for wire rope, MS21255 Series
- Special Terminals

**McFarlane now manufactures NAS1435 and DOD QPL-781 qualified terminals**



## Rudder Pedals for Cessna Aircraft

Completely New Rudder Pedal P/N AP2000-01

- Less money and longer life!
- Bronze bushings at the pivot points resist wear and vibration for longer pedal life.
- Precision cast heat treated aluminum alloy.
- Powder coat finish for durability and corrosion protection.
- FAA-PMA direct replacement for Cessna P/N1460320-1.



**Bronze bushings for a longer life!**

**Now manufactured by McFarlane!**

## Rudder Pedal Bar

Avoid risk of costly damage during assembly

P/N AD1260558-1 (LH)  
P/N AD1260558-2 (RH)

Each bar includes 2 ea. P/N S1003-43A bearings and 1 ea. P/N 1260419-1 tube pre-assembled. This avoids damage commonly caused while pressing the bearings during installation.

FAA-PMA



Aircraft Model	AD1260558-1	AD1260558-2
210-5 (205), 210-5A (205A)	•	•
206, U206G, TU206G	•	•
206H, T206H	•	•
207A, T207A	•	•
210M,N,R, T210M,N,R, P210	•	•

## Rudder Pedal Shaft

P/N AD0411778-2  
FAA-PMA



**Half of Cessna Price!**

Aircraft Model
140A
150, 150A, F150, FA150
152, A152, F152, FA152
170, 170A, B
172, 172A,B,C,D,E,F,G,H,I,J,K,L,M,N,P
F172D,E,F,G,H,I,J,K,L,M,N,P
172RG, P172, R172E,F,G,H,K, FP172, FR172
175, 175A,B
180, 180A,B,C,D,E,F,G,H,J,K
182, 182A,B,C,D,E,F,G,H,I,K,L,M,N,P,Q,R
A182, F182, FR182, R182, TR182
185, 185A,B,C,D,E, A185E,F
190, 190A, 195, 195A,B
210-5 (205), 210-5A (205A)
206, U206, U206A,B,C,D,E
P206, P206A,B,C,D,E
207, T207
210, 210A,B,C,D,E,F,G,H,J,K, T210G,H,J

## Aileron Bellcrank Bushing

P/N MC0422280

- Use on all single engine Cessna
- High strength alloy steel
- Replace when replacing aileron cables
- 4 each included in all applicable Cessna cable kits



## Custom Fabricated Cables

DOD certified custom cable assemblies can be fabricated to specification MIL-DTL-6117, or certified to your special specifications

- Pre-stretched and proof loaded to MIL-DTL-5688
- Manufactured using the same materials and attention to quality as our FAA-PMA products. We cannot provide FAA-PMA approval for custom cables
- Pricing is based on material usage determined upon receipt of specifications or a pattern. Our sales team can provide a quote at that time
- One to three day service for most orders
- We are a DOD QML-6117 certified cable supplier

Download custom forms at <http://www.mcfarlaneaviation.com/services> or call to have one faxed.



## Parking Brake Cables for Cessna Aircraft

Don't forget to replace worn out parking brake cables!

Locate your make, model and serial number on the flight control cable pages to find the correct part number for your aircraft.



FAA-PMA Approved

**Control Yoke Universal Joint with Protective Sleeve for Cessna Aircraft**

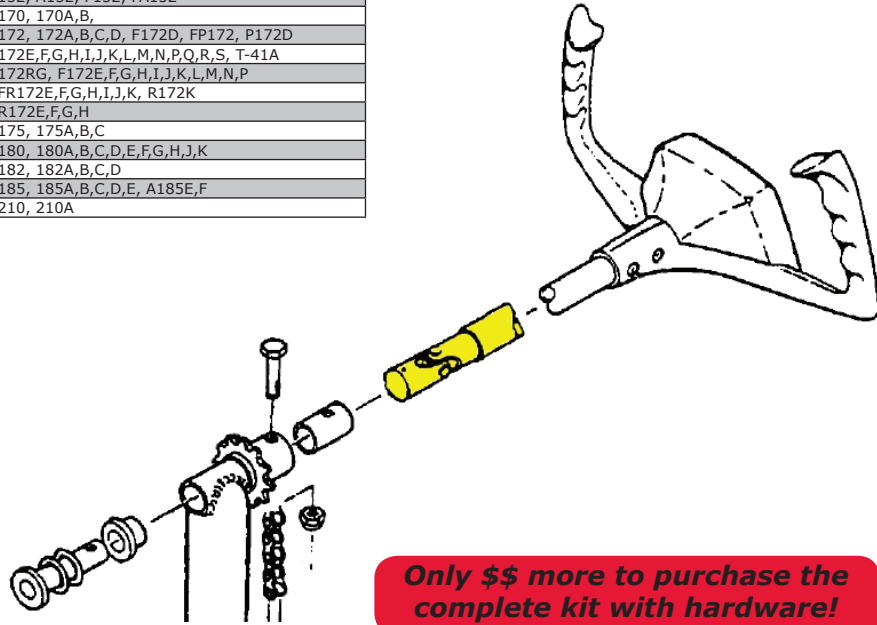
Save over 35%

P/N MC0411257

- Eliminates slack for precise and responsive control
- Replace worn or corroded joints
- Available separately or in a convenient kit including nuts and bolts

**Protective sleeve now included with every universal joint!**

Model
P/Ns MC0411257 and UJC-KT-2 are applicable to each aircraft model listed below
120, 140, 140A
150
150A,B,C,D,E,F,G,H,I,J,K,L,M
A150K,L,M,
F150F,G,H,I,J,K,L,M
FA150K,L,M, FRA150L,M
152, A152, F152, FA152
170, 170A,B,
172, 172A,B,C,D, F172D, FP172, P172D
172E,F,G,H,I,J,K,L,M,N,P,Q,R,S, T-41A
172RG, F172E,F,G,H,I,J,K,L,M,N,P
FR172E,F,G,H,I,J,K, R172K
R172E,F,G,H
175, 175A,B,C
180, 180A,B,C,D,E,F,G,H,I,K
182, 182A,B,C,D
185, 185A,B,C,D,E, A185E,F
210, 210A



**Only \$\$ more to purchase the complete kit with hardware!**

P/N MC0411257  
Universal joint with protective sleeve



P/N UJC-KT-2  
Universal joint with protective sleeve and attaching hardware



Kit P/N	Qty	Component	Description
UJC-KT-2	2	AN3-10A	Bolt
	2	AN3-11A	Bolt
UJC-KT-2	1	MC0411257	Universal Joint (w/sleeve P/N MC6183)
	2	MS21044N3	Nut

**Aileron Gap Kit for Cessna Aircraft**

Increase performance and safety!

P/N 115-100

Aircraft Development FAA-PMA/STC approved aileron gap seal kit includes aluminum strips to minimize air leakage between the rear wing spar and the aileron. Unlike most kits, this kit seals both the upper and lower gap for maximum aerodynamic effectiveness and efficiency. *This kit isn't a STOL kit, and don't expect miracles with any one of these improvements. However, the improvements are real and when all combined together result in a substantial improvement to your aircraft.*

**Increase Performance:**

- Reduced drag
- Increased lift
- Increased cruise speed
- Reduced stall speed
- Higher rate-of-climb
- Increased aileron authority
- Increased range (better fuel efficiency)

**Increase Safety:**

- Better spin resistance
- More aileron authority for crosswinds
- Reduced take-off and landing distances

Model
150 150A,B,C,D,E,F,G,H,I,J,K,L,M, A150K,L,M
152, A152
170B
172, 172A,B,C,D,E,F,G,H,I,J,K,L,M,N,P,Q,R,S
172RG, P172D, R172E,F,G,H,I,J,K
175, 175A,B,C
180, 180A,B,C,D,E,F,G,H,I,K
182, 182A,B,C,D,E,F,G,H,I,J,K,L,M,N,P,Q,R,S,T, T182, TR182, T182T
185, 185A,B,C,D,E, A185E,F
210-5 (205), 210-5A (205A)
210, 210A,B,C



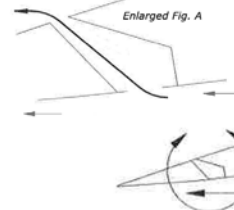
P/N 115-100



Optional hardware kit includes enough rivets to install the aileron gap kit. P/N 115H

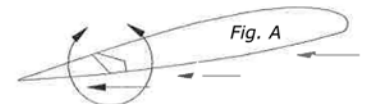
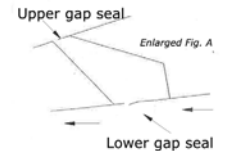
**Aileron with no seal**

High drag gap area and leak path from high pressure underside of wing to low pressure top side of wing.



**Aileron with seal**

Gap seals reduce drag and air leaks.



Manufactured by Aircraft Development

## Control Yoke Universal Joint Kits for Piper Aircraft Helps comply with AD 2010-15-10

**Save over 60% off Piper price. Just our reamer saves you \$100!**

- Individual parts also available separately
- Hardened stainless steel - Nitrided wear surfaces
- Eliminates free motion for precise and responsive control
- Replace worn or corroded joints

AD 2010-15-10 and Piper service bulletin 1197C requires inspection of the connection between the control yoke u-joint and the shaft on the forward (engine) end of the joint. This inspection is a convenient time to replace worn out u-joints. McFarlane has kits including the u-joint, shaft, taper pins, taper reamer, drill bit and other hardware to help comply with this AD, all at a fraction of the cost of buying the parts from Piper.

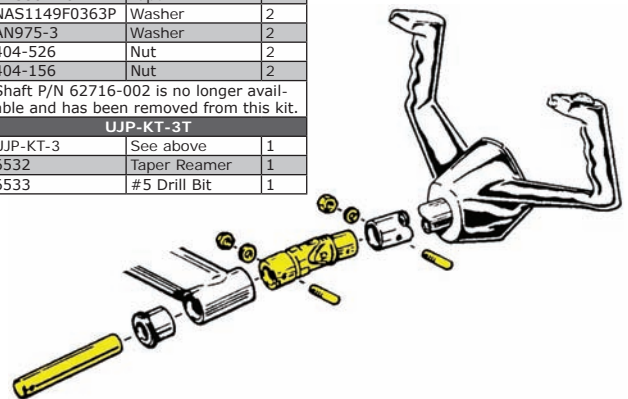


Universal Joint Kits for Piper Aircraft			
Model	Serial Number	Left (Pilot)	Right (Copilot)
PA-28-140	28-20001 thru 28-20160	UJP-KT-3 or 3T	UJP-KT-5 or 5T
	28-20161 thru 28-21845	UJP-KT-4 or 4T	UJP-KT-5 or 5T
	28-21846 thru 28-21930	UJP-KT-1 or 1T	UJP-KT-2 or 2T
	28-21931 thru 28-21934	UJP-KT-4 or 4T	UJP-KT-5 or 5T
	28-21935 thru 28-25400	UJP-KT-1 or 1T	UJP-KT-2 or 2T
	28-25401 thru 28-7725290	UJP-KT-2 or 2T	UJP-KT-2 or 2T
PA-28-150	28-1 thru 28-1760, 28-03, 28-1760A	UJP-KT-3 or 3T	UJP-KT-5 or 5T
	28-1761 thru 28-3377	UJP-KT-4 or 4T	UJP-KT-5 or 5T
	28-3378 thru 28-4377	UJP-KT-1 or 1T	UJP-KT-2 or 2T
PA-28-151	All	UJP-KT-2 or 2T	UJP-KT-2 or 2T
PA-28-160	28-1 thru 28-1760, 28-03, 28-1760A	UJP-KT-3 or 3T	UJP-KT-5 or 5T
	28-1761 thru 28-3377	UJP-KT-4 or 4T	UJP-KT-5 or 5T
PA-28-161	All	UJP-KT-1 or 1T	UJP-KT-2 or 2T
	28-671 thru 28-1760, 28-03	UJP-KT-3 or 3T	UJP-KT-5 or 5T
PA-28-180	28-1761 thru 28-3377	UJP-KT-4 or 4T	UJP-KT-5 or 5T
	28-3378 thru 28-4377	UJP-KT-1 or 1T	UJP-KT-2 or 2T
	28-4378 thru 28-7505260, 28-E13	UJP-KT-2 or 2T	UJP-KT-2 or 2T
PA-28-181	All	UJP-KT-2 or 2T	UJP-KT-2 or 2T
PA-28-201T	All	UJP-KT-2 or 2T	UJP-KT-2 or 2T
PA-28-235	28-10001 thru 28-10486	UJP-KT-3 or 3T	UJP-KT-5 or 5T
	28-10487 thru 28-10719	UJP-KT-4 or 4T	UJP-KT-5 or 5T
	28-10720 thru 28-11039	UJP-KT-1 or 1T	UJP-KT-2 or 2T
	28-11040 thru 28-7710089, 28E-11	UJP-KT-2 or 2T	UJP-KT-2 or 2T
PA-28-236	All	UJP-KT-2 or 2T	UJP-KT-2 or 2T
PA-28R-180	All	UJP-KT-2 or 2T	UJP-KT-2 or 2T
PA-28R-200,201	All	UJP-KT-2 or 2T	UJP-KT-2 or 2T
PA-28R-201T	All	UJP-KT-2 or 2T	UJP-KT-2 or 2T
PA-28RT-201	All	UJP-KT-2 or 2T	UJP-KT-2 or 2T
PA-28RT-201T	All	UJP-KT-2 or 2T	UJP-KT-2 or 2T
PA-28S-160	28-1 thru 28-1760, 28-1760A	UJP-KT-3 or 3T	UJP-KT-5 or 5T
	28-671 thru 28-1760	UJP-KT-3 or 3T	UJP-KT-5 or 5T
	28-1761 thru 28-3377	UJP-KT-4 or 4T	UJP-KT-5 or 5T
	28-3378 thru 28-4377	UJP-KT-1 or 1T	UJP-KT-2 or 2T
PA-28S-180	28-4378 thru 28-7105234	UJP-KT-2 or 2T	UJP-KT-2 or 2T
	32-1 thru 32-600, 32-03, 32-04	UJP-KT-4 or 4T	UJP-KT-5 or 5T
	32-601 thru 32-690	UJP-KT-1 or 1T	UJP-KT-2 or 2T
	32-691 thru 32-7800008	UJP-KT-2 or 2T	UJP-KT-2 or 2T
PA-32-300	32-15, 32-21	UJP-KT-4 or 4T	UJP-KT-5 or 5T
	32-40000 thru 32-40415	UJP-KT-1 or 1T	UJP-KT-2 or 2T
	32-40416 thru 32-7940290	UJP-KT-2 or 2T	UJP-KT-2 or 2T
PA-32-301	All	UJP-KT-2 or 2T	UJP-KT-2 or 2T
PA-32-301T	All	UJP-KT-2 or 2T	UJP-KT-2 or 2T
PA-32R-300	All	UJP-KT-2 or 2T	UJP-KT-2 or 2T
PA-32R-301,301T	All	UJP-KT-2 or 2T	UJP-KT-2 or 2T
PA-32RT-300	All	UJP-KT-2 or 2T	UJP-KT-2 or 2T
PA-32RT-300T	All	UJP-KT-2 or 2T	UJP-KT-2 or 2T
PA-32S-300	32S-15	UJP-KT-4 or 4T	UJP-KT-5 or 5T
	32S-40000 thru 32S-40415	UJP-KT-1 or 1T	UJP-KT-2 or 2T
	32S-40416 thru 32S-7240137	UJP-KT-2 or 2T	UJP-KT-2 or 2T
PA-34-200,200T	All	UJP-KT-2 or 2T	UJP-KT-2 or 2T
PA-34-220T	All	UJP-KT-2 or 2T	UJP-KT-2 or 2T
PA-44-180,180T	All	UJP-KT-2 or 2T	UJP-KT-2 or 2T

Partial model eligibility

Part Number	Description	Qty
<b>UJP-KT-1</b>		
CA62834-802SS	Universal Joint	1
62716-006	Shaft	1
AN386-1-6A	Taper Pin	2
NAS1149F0363P	Washer	2
AN975-3	Washer	2
404-526	Nut	2
404-156	Nut	2
<b>UJP-KT-1T</b>		
UJP-KT-1	See above	1
6532	Taper Reamer	1
6533	#5 Drill Bit	1
<b>UJP-KT-2</b>		
CA62834-802SS	Universal Joint	1
62716-007	Shaft	1
AN386-1-6A	Taper Pin	2
NAS1149F0363P	Washer	2
AN975-3	Washer	2
404-526	Nut	2
404-156	Nut	2
<b>UJP-KT-2T</b>		
UJP-KT-2	See above	1
6532	Taper Reamer	1
6533	#5 Drill Bit	1
<b>UJP-KT-3</b>		
CA62834-000SS	Universal Joint	1
AN386-1-6A	Taper Pin	2
NAS1149F0363P	Washer	2
AN975-3	Washer	2
404-526	Nut	2
404-156	Nut	2
<b>UJP-KT-3T</b>		
UJP-KT-3	See above	1
6532	Taper Reamer	1
6533	#5 Drill Bit	1

Shaft P/N 62716-002 is no longer available and has been removed from this kit.



### Maintenance Tip:

*How do I know if my universal joint needs to be replaced?*

A universal joint attaches to each control yoke shaft behind the instrument panel. Replacement of the universal joint is required if any free motion or rust around the joint pivots is detected or if the joint fails inspection required by AD 2010-15-10.

*What can I do if I cannot separate the shaft from the universal joint?*

We can help! McFarlane offers a service to remove stuck shafts. Call for details.

**New! Universal Joints**  
Now stainless steel for longer life

Contact McFarlane Aviation to have your replacement U-joint, P/N CA62834-802SS precision match drilled and avoid having to re-grip the control system.

### U-Joint Taper Pin Removal Tool

Part number TOOL107

- Save time and money.
- Makes removal of stuck pins easy.
- Prevents damage from hammering behind the panel.
- Compact to get in tight places.
- Heat treated 4140 Alloy Steel.



### Witness Hole Drill Fixture

Piper part number 766-585

A convenient tool for older universal joints that don't have a witness hole. Use to drill a witness hole in Piper universal joints per Piper service bulletin 1197C.

Saves time! Avoids disassembly of U-joint and shaft.



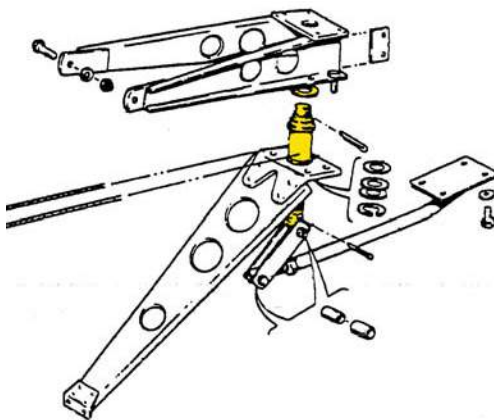
FAA-PMA Approved

**Stabilator Trim Kits for Piper Aircraft**

Save time and money with convenient kits!

- Shafts and barrels manufactured by PMA Products, Inc.
- Bearing manufactured by Piper

Model	Part Number
PA28-140, 150, 151, 160, 161, 180, 181	PSTAB-KT-1
PA28-235, 236	PSTAB-KT-1
PA28-201T S/N 28-7921001 to 28-7921095	PSTAB-KT-1
PA28R-180, 200, 201, 201T	PSTAB-KT-1
PA32, PA32R	PSTAB-KT-1
PA34-200 S/N 34-7350185 and up	PSTAB-KT-2
PA34-200T, PA34-220T	PSTAB-KT-2
<b>PSTAB-KT-1 Contains</b>	
(1) CA65246-100 Trim Shaft (includes instructions and STC)	
(1) CA63530-100 Trim Barrel (includes instructions and STC)	
(2) 452-413 Bearing	
<b>PSTAB-KT-2 Contains</b>	
(1) CA65246-002 Trim Shaft	
(1) CA96596-002 Trim Barrel	
(2) 452-413 Bearing	



**Maintenance Tip:**  
When replacing the stabilator trim barrel, it is normally a good time to also replace the stabilator trim cables. See pages 112-116 to find the correct cable(s) for your aircraft.

**Note:** Some trim barrels supplied by Piper were incorrectly manufactured and must be replaced. See Piper SB1251 or later revised service bulletin for more details. This service bulletin is not applicable to P/N CA63530-100 manufactured by PMA Products, Inc., however P/N CA63530-100 may be used to replace trim barrels affected by the service bulletin.

**Trim Wheel Shafts and Sprockets for Cessna Aircraft**

Elevator trim shaft and sprocket for most 172 thru 185 and early 210 models.

Rudder trim sprocket for many 182, 205, 206, 207 models.

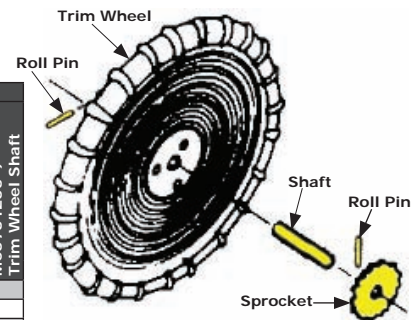
Aileron trim sprocket for Caravan 208 and 208B aircraft.

- Stainless Steel
- Heat treated shafts for extra strength
- Resists roll pin hole wear
- Roll pins in stock - P/N MS16562-25 (qty: 2 required per shaft)

Aircraft Model	MC0432134-1 Sprocket	MC0761210-1 Sprocket	MC0713656-3 Trim Wheel Shaft	MC0761205-2 Trim Wheel Shaft	MC0761205-9 Trim Wheel Shaft
120, 140, 140A	•				
150, 150A,B,C,D,E,F,G,H,J,K,L,M, A150K,L,M, F150F,G,H,J,K,L,M, FA150K,L,M	•				
152, A152, F152, FA152	•				
170, 170A,B	•				
172, 172A,B,C,D,E, F172D,E, FP172, P172	•				
172F,G,H,I,J,K,L,M,N,P,Q,R,S, 172RG, F172F,G,H,K,L,M,N,P, FR172E,F,G,H,J,K, R172E,F,G,H,K	•		•		
175, 175A,B,C	•				
177, 177A,B, 177RG, F177RG	•				
180, 180A,B,C,D,E,F,G,H	•				
180H,I,K	•				•
182, 182A,B,C,D	•				•
182E,F,G,H,J,K,L,M,N,P,Q,R,S,T	•	•	1		
F182P,Q	•	•	1		
FR182	•	•	1		
R182	•	•	1		
T182	•	•	1		
T182T	•	•	1		
TR182	•	•	1		
185, 185A,B,C,D,E, A185E	•				
A185F	•				
188, 188A,B, A188, A188A,B 188B (w/large hopper), T188C	•				
210-5 (205), 210-5A (205A)	•	•	1		
206, 206H, T206H, U206, U206A,B,C,D,E,F,G, TU206A,B,C,D,E,F,G, P206, P206A,B,C,D,E, TP206A,B,C,D,E	•		•	1	
207, 207A, T207, T207A	•		•	1	
208B	•		•	2	
210, 210A	•				•

**Notes:**  
All eligibility shown is for elevator/stabilizer/stabilator trim system except where noted.  
1 Used in rudder trim system  
2 Used in aileron trim system

**Improved Design!**



**Save!**



Flight Control System



## Trim Actuator for Cessna Aircraft

**New!**

### FAA-PMA P/N MC1260074-1

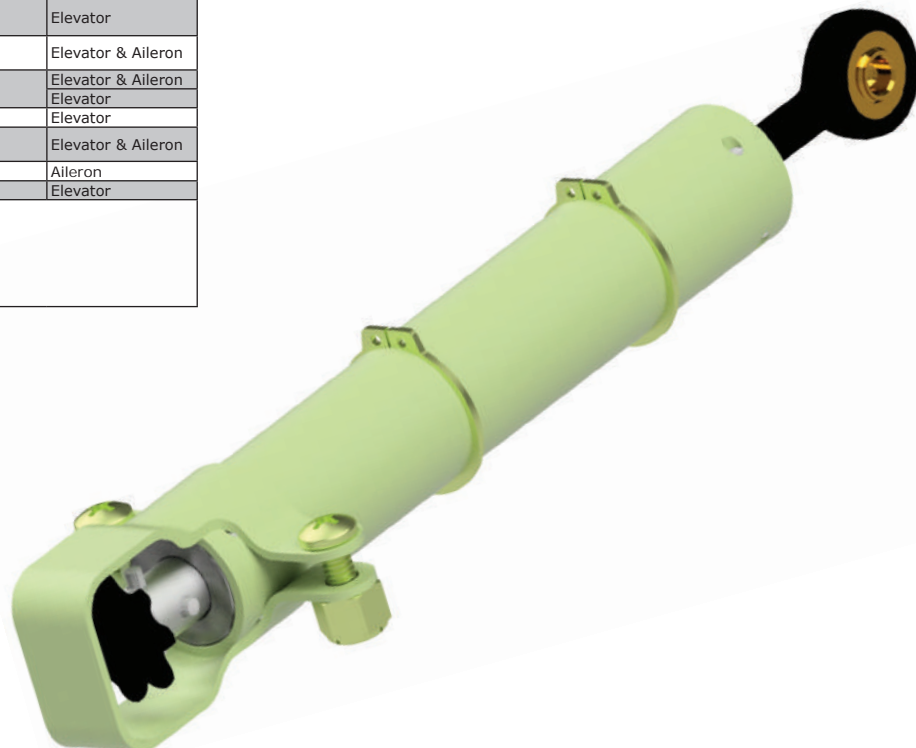
- Greatly improved design
- Half the price

McFarlane Aviation has developed a direct replacement trim jack actuator that incorporates many design improvements. Stronger metals and longer lasting coatings are utilized for increased service life and smoother operation with improved corrosion resistance.

The Screw Assembly is manufactured using high strength stainless steel alloy that has been nitro-carburized for maximum wear, low friction, smoother thread operation, and greatly improved corrosion protection over the OEM part. The sprocket is manufactured using a stronger aluminum and is anodized to keep the surface protected from wear and corrosion.

McFarlane's precision machining significantly reduces the unwanted play found in OEM assemblies. The known problems of original parts have been addressed and resolved with McFarlane's new design!

Trim Jack Actuator P/N MC1260074-1	
Aircraft	Location
120, 140, 140A	Elevator
150, 150A,B,C,D,E,F,G,H,I,K,L,M, A150K,L,M, F150F,G,H,J,K,L,M, FA150K,L,M, FRA150L,M	Elevator
152, A152, F152, FA152	Elevator
170, 170A,B	Elevator
172, 172A,B,C,D,E,F,G,H,I,K,L,M,N,P,Q,R,S, 172RG, F172D,E,F,G,H,K,L,M,N,P, FP172, FR172E,F,G,H,J,K, P172D, R172E,F,G,H,K	Elevator
175, 175A,B,C	Elevator
182E,F,G,H,J,K,L,M,N,P,Q,R,S,T, F182P,Q, FR182, R182, T182, T182T, TR182	Elevator
188, 188A,B, A188, A188A, A188B Includes with large hopper, T188C	Elevator
190, 195, 195A,B	Elevator
210-5 (205), 210-5A (205A)	Elevator
206, P206, P206A,B,C,D,E, TP206A,B,C,D,E, TU206A,B,C,D,E,F, U206, U206A,B,C,D,E,F	Elevator
207, T207 <sup>1</sup>	Elevator
210, 210A,B,C,D,E,F,G,H,J,K,L <sup>2</sup> , T210F,G,H,J,K,L <sup>2</sup>	Elevator
310, 310B,C,D,F,G,H,I,J, J-1, E310H,J	Elevator & Aileron
310K <sup>3</sup>	Elevator & Aileron
310P,Q,R, T310P,Q,R <sup>4</sup>	Elevator
320, 320-1, 320A,B,C,D	Elevator & Aileron
320E <sup>5</sup>	Aileron
411, 411A	Elevator
Notes:	
<sup>1</sup> S/N 20700001 thru 20700227	
<sup>2</sup> S/N 57001 thru 21060089	
<sup>3</sup> S/N 310K0001, 310K0046 thru 310K0245	
<sup>4</sup> S/N 310P0001 thru 310R1500	
<sup>5</sup> S/N 320E0001	



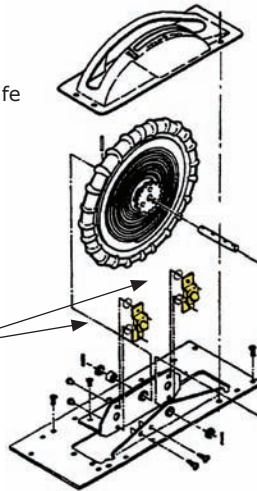
FAA-PMA Approved

**Trim Wheel Stop Catch Assembly for Cessna Aircraft**

Save more than 75%

- FAA-PMA direct replacement
- Improved durable button for extended life
- 2 required per aircraft

P/N	Aircraft
MC0713023-3	180, 180A,B,C,D,E,F
MC0713827-1	180G,H,J,K
MC0713023-3	182, 182A,B,C,D
MC0713023-3	185, 185A,B
MC0713827-1	185C,D,E, A185E,F



Trim wheel stop catch



Longer Service Life!

**Maintenance Tip:**

*If you notice mild creep in the trim system this is often caused by worn out trim wheel stop catches. McFarlane offers improved stop catches at a fraction of the cost from the originals.*

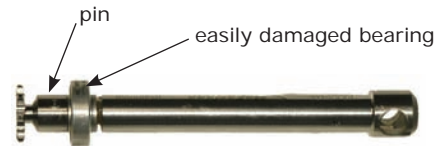
**Stabilizer Jack Screw Pin Tool for Cessna 180, 182 and 185 Aircraft**

P/N TOOL131

- For Cessna 180, 182, 185 jack screws
- Easily and safely remove and install your roll pin with the turn of a wrench
- No more damaging your jack screw by using a punch and hammer
- Manufactured with hardened stainless steel for increased tool life
- Works only with the larger McFarlane pin sold with P/N 1111



**Avoid Costly Damage!**



**Stabilizer Jack Screw Actuator Kit for Cessna 180, 182 and 185 Aircraft**

**Improved Material for Extreme Corrosion Resistance**

McFarlane replaces the original steel components with duplex stainless steel (even better than Monel) components for a long life even in a harsh saltwater environment.

**Improved Bearing**

Precision bearing reduces free play and features extra low temperature grease for easy turning at low temperatures.

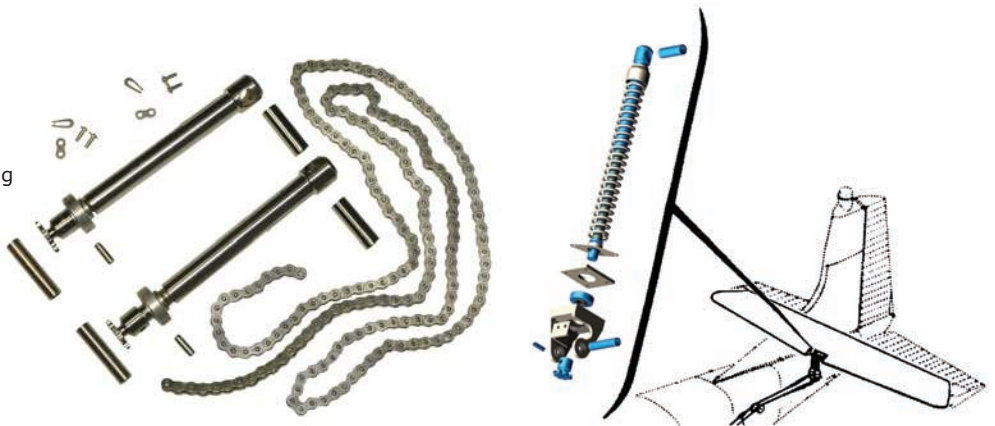
**Improved Strength and Reliability**

The original Cessna actuators use a 3/32" roll pin to attach the sprockets and retaining collars to the screw bars. These pins are critical as the front of the stabilizer would detach from the airframe if they failed. Although the original roll pins are technically strong enough, the original design is marginal in strength. To provide a more robust design, McFarlane redesigned the sprocket and retaining collar to allow the use of a 5/32" roll pin. This more than doubles the strength of the design. The screw and barrel are match machined for a precision fit.

**Convenient Kit**

Stabilizer jack-screw kit P/N 1111 is an FAA-PMA/STC approved kit to replace all wear components for the stabilizer actuator assemblies for many Cessna 180, 180A-K, 182, 182A-D, 185, 185A-E, A185E-F aircraft. P/N 1111 includes all parts required to replace the following Cessna parts in both the left-hand and right-hand actuators:

- 0310332 Sprocket
- 0712500-11 Screw-Bar
- 0712500-13 Barrel
- 0712500-7 Collar-Retainer
- 0712502 Bushing Eccentric
- 0712500-10 Bushing
- MS20201KP6A or AN201KP6A Bearing
- NAS561-3-8 Roll Pin
- 0432138-3 or S2295-25-185 Chain
- 0712500-19 Plug



**Replacement Components**

P/N 1111 contains the following replacement components:

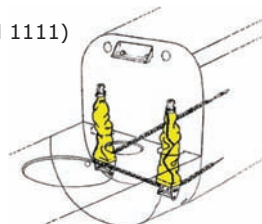
- 6361 Stainless Steel Roller Chain
- 6464 Connecting Link
- 6458 Eccentric Upper Bushing
- 6459 Lower Bushing
- 6460 Bearing
- 6461 Spring Pin (can only be used as a replacement with McFarlane P/N 1111)

**Trim Actuator Boot and Clamp**

Now FAA-PMA approved and manufactured by McFarlane!

Boot P/N MC0712500-18 and Clamp P/N MC7137.

- Fits all 180, 180A-K, 182, 182A-D, 185, 185A-E, A185E-F aircraft
- McFarlane recommends replacing the boot and clamp at the same time
- High quality, flexible, durable, long life material



**Maintenance Tip:**

*If the stabilizer is sluggish or jams, clean the barrel and screw jack and re-apply a coating of MIL-PRF-23827 low temperature grease. Complete instructions can be found at [www.mcfarlaneaviation.com/ICA](http://www.mcfarlaneaviation.com/ICA)*

# Flight Control Surface Parts and Attaching Hardware

## Aileron, Elevator, Elevator Trim, Flap and Rudder Skins for Cessna Aircraft

**New!** Smooth rudder and elevator skins for 150 thru 172 models

- Available as convenient kits or individually
- No pre-drilled holes to misalign
- Cut to shape to match the OEM skins
- More precise corrugation spacing and shape
- FAA-PMA direct replacement (except where noted)

See page 132 for complete skin kit contents

Expanded Eligibility!

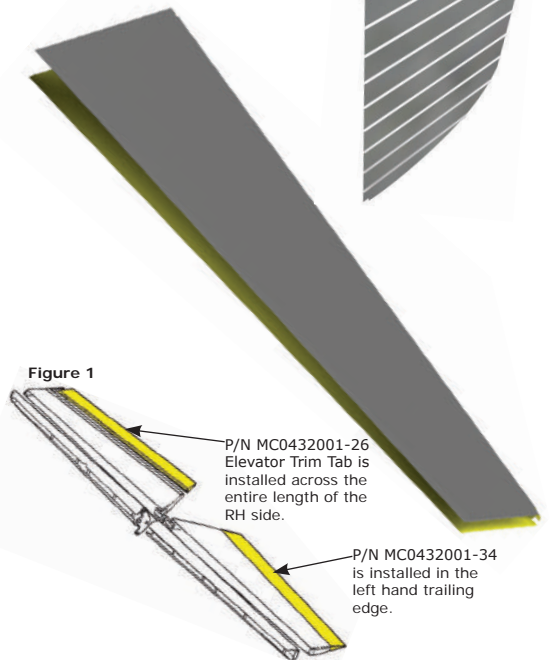
Better and costs less!



New!

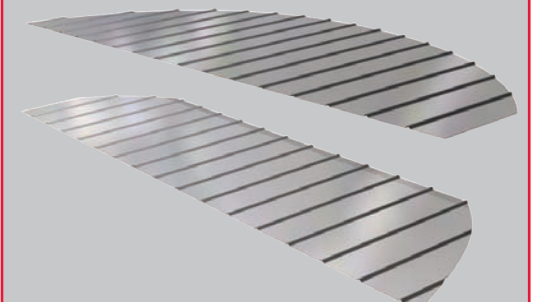
Model	Aileron Skin Kits	Elevator Skins and Kits	Elevator Trim Skins	Flap Skin Kits	Rudder Skins and Kits
120	SKN-KT-AIL4	SKN-KT-ELEV8		N/A	SKN-KT-RUD6
140	SKN-KT-AIL4	SKN-KT-ELEV8		SKN-KT-FLP9	SKN-KT-RUD6
140A	SKN-KT-AIL1	SKN-KT-ELEV9		SKN-KT-FLP10	SKN-KT-RUD6
150,A,B,C,D,E	SKN-KT-AIL1	MC0432001-34 (LH see figure 1)	MC0432001-26 (RH see figure 1)	SKN-KT-FLP1	MC0431001-3 (trl. edge)
150F,G,H,J,K,L	SKN-KT-AIL1	MC0432001-34 (LH see figure 1)	MC0432001-26 (RH see figure 1)	SKN-KT-FLP1	MC0431004-43
150M, A150M, F150M, FA150M	SKN-KT-AIL1	MC0432001-34 (LH see figure 1)	MC0432001-26 (RH see figure 1)	SKN-KT-FLP1	MC0433010-8
A150K, L, F150F,G,H,J,K,L, FA150K,L	SKN-KT-AIL1	MC0432001-34 (LH see figure 1)	MC0432001-26 (RH see figure 1)	SKN-KT-FLP1	MC0431004-43
152, A152, F152, FA152	SKN-KT-AIL1	MC0432001-34 (LH see figure 1)	MC0432001-26 (RH see figure 1)	SKN-KT-FLP1	N/A
170	SKN-KT-AIL4	SKN-KT-ELEV1	N/A	SKN-KT-FLP11	SKN-KT-RUD1
170A	N/A	N/A	N/A	SKN-KT-FLP12	SKN-KT-RUD1
170B	SKN-KT-AIL1	SKN-KT-ELEV2	N/A	SKN-KT-FLP2	SKN-KT-RUD2
172	SKN-KT-AIL1	SKN-KT-ELEV3	N/A	SKN-KT-FLP2	SKN-KT-RUD3
172A,B,C	SKN-KT-AIL1	SKN-KT-ELEV3	N/A	SKN-KT-FLP2	MC0531006-8
172D, E, F	SKN-KT-AIL1	SKN-KT-ELEV4	N/A	SKN-KT-FLP3	MC0531006-8
172F, G, H, I, K, L, M, N, P	SKN-KT-AIL1	SKN-KT-ELEV4	N/A	SKN-KT-FLP3	MC0531006-70
172P, Q, R, S, (T-41A)	SKN-KT-AIL1	SKN-KT-ELEV4	N/A	SKN-KT-FLP3	MC0533150-3 (Aft)
172RG	SKN-KT-AIL1	SKN-KT-ELEV4	N/A	SKN-KT-FLP3	MC0531006-70
172RG	SKN-KT-AIL1	SKN-KT-ELEV4	N/A	SKN-KT-FLP3	MC0533150-3
F172D, E, F	SKN-KT-AIL1	SKN-KT-ELEV4	N/A	SKN-KT-FLP3	MC0531006-8
F172F, G, H, K, L, M, N, P	SKN-KT-AIL1	SKN-KT-ELEV4	N/A	SKN-KT-FLP3	MC0531006-70
F172P	SKN-KT-AIL1	SKN-KT-ELEV4	N/A	SKN-KT-FLP3	MC0533150-3 (Aft)
FP172	SKN-KT-AIL1	SKN-KT-ELEV4	N/A	SKN-KT-FLP3	N/A
FR172E, F, G, H, J	SKN-KT-AIL1	N/A	N/A	SKN-KT-FLP3	MC0531006-70
FR172K	SKN-KT-AIL1	SKN-KT-ELEV4	N/A	SKN-KT-FLP3	MC0531006-70
P172D	SKN-KT-AIL1	SKN-KT-ELEV4	N/A	SKN-KT-FLP3	MC0531006-8
R172E, F, G, H	N/A	N/A	N/A	N/A	MC0531006-70
R172K	SKN-KT-AIL1	SKN-KT-ELEV4	N/A	SKN-KT-FLP3	MC0531006-70
175	SKN-KT-AIL1	SKN-KT-ELEV3	N/A	SKN-KT-FLP2	SKN-KT-RUD3
175A, B, C	SKN-KT-AIL1	SKN-KT-ELEV3	N/A	SKN-KT-FLP2	MC0531006-8
180, A, B, C, D, E	SKN-KT-AIL1	SKN-KT-ELEV5	N/A	SKN-KT-FLP2	SKN-KT-RUD4
180F, G, H, J, K	SKN-KT-AIL1	SKN-KT-ELEV5	N/A	SKN-KT-FLP3	SKN-KT-RUD4
182, 182A, B	SKN-KT-AIL1	SKN-KT-ELEV5	N/A	SKN-KT-FLP2	SKN-KT-RUD4
182C, D	SKN-KT-AIL1	SKN-KT-ELEV5	N/A	SKN-KT-FLP2	N/A
182E, F, G	SKN-KT-AIL1	SKN-KT-ELEV6	N/A	SKN-KT-FLP4	N/A
182H, J, K, L, M, N, P, Q, R, S, T	SKN-KT-AIL1	SKN-KT-ELEV7	N/A	SKN-KT-FLP4	N/A
A182J, K, L, N	SKN-KT-AIL1	N/A	N/A	SKN-KT-FLP4	N/A
F182P, Q, FR182, R182, TR182, T182, T182T	SKN-KT-AIL1	SKN-KT-ELEV7	N/A	SKN-KT-FLP4	N/A
185, A, B, C, D, E, A185E	SKN-KT-AIL1	SKN-KT-ELEV5	N/A	SKN-KT-FLP2	SKN-KT-RUD4
A185E, F	SKN-KT-AIL1	SKN-KT-ELEV5	N/A	SKN-KT-FLP3	SKN-KT-RUD4
188, 188A, B, A188, A188A, B, T188C	SKN-KT-AIL2	SKN-KT-ELEV6	N/A	SKN-KT-FLP4	SKN-KT-RUD4
190, 195, 195A, B	N/A	SKN-KT-ELEV1	N/A	N/A	SKN-KT-RUD5
190, 195, 195A, B	N/A	N/A	N/A	N/A	SKN-KT-RUD5
205 (210-5), 205A (210-5A)	SKN-KT-AIL1	SKN-KT-ELEV6	N/A	SKN-KT-FLP5	N/A
206, U206, U206A, B, TU206A, B	SKN-KT-AIL3	SKN-KT-ELEV7	N/A	SKN-KT-FLP6	N/A
U206C, D, E, F, G, TU206C, D, E, F, G	SKN-KT-AIL3	N/A	N/A	SKN-KT-FLP6	N/A
206H	SKN-KT-AIL3	N/A	N/A	SKN-KT-FLP7	N/A
P206, P206A, B	SKN-KT-AIL3	SKN-KT-ELEV7	N/A	SKN-KT-FLP7	N/A
P206C, D, E, TP206A, B, C, D, E, T206H	SKN-KT-AIL3	N/A	N/A	SKN-KT-FLP7	N/A
207, A, T207, A	SKN-KT-AIL3	N/A	N/A	SKN-KT-FLP8	N/A
210, A	SKN-KT-AIL1	N/A	N/A	SKN-KT-FLP2	N/A
210B	SKN-KT-AIL1	N/A	N/A	SKN-KT-FLP4	N/A
210B	SKN-KT-AIL1	N/A	N/A	SKN-KT-FLP5	N/A
210C	SKN-KT-AIL1	N/A	N/A	SKN-KT-FLP5	N/A
210D, E, F, T210F	SKN-KT-AIL3	N/A	N/A	SKN-KT-FLP7	N/A

New smooth elevator and rudder skins for 150 thru 172 aircraft!



FAA-PMA/STC

Now STC approved for 120, 140, 170 and 195 series aircraft to replace trailing edge spot welds with rivets! STC with instructions included.



Unless otherwise noted, approval is for all serial numbers for each model listed.

Note: Elevator Tab skins only included in SKN-KT-ELEV1.

- 1 Kits are approved S/N F15201429 thru F152201952
- 2 Kits are approved S/N FA1520337 thru FA1520387
- 3 S/N 46755 thru 17252000
- 4 S/N 17252001 thru 17275953
- 5 S/N 17275954 and On
- 6 S/N 172RG0001 thru 172RG1134
- 7 S/N 172RG1135 and On
- 8 S/N F172-0001 thru F172-0119
- 9 S/N F172-0120 thru F17202208
- 10 S/N F17202209 and On

- 11 S/N R172-0302 thru R1720620
- 12 Kits are approved S/N A182-0001 thru A182-0146
- 13 Kits are approved S/N All except R18201315
- 14 Kits are approved S/N 185-0001 thru A185-1167
- 15 Kits are approved S/N 18501168 thru 18504448
- 16 Kits are approved S/N 7004 thru 16083
- 17 Kits are approved S/N 16084 thru 16183
- 18 Kits are approved S/N 21057841 thru 21058003
- 19 Kits are approved S/N 21058004 thru 21058085
- 20 If equipped with rudder assembly 0531006-108 use MC0531006-70. If equipped with rudder assembly 0533150-5 use MC0533150-3

FAA-PMA Approved

## Aileron, Elevator, Flap and Rudder Skins for Cessna Aircraft

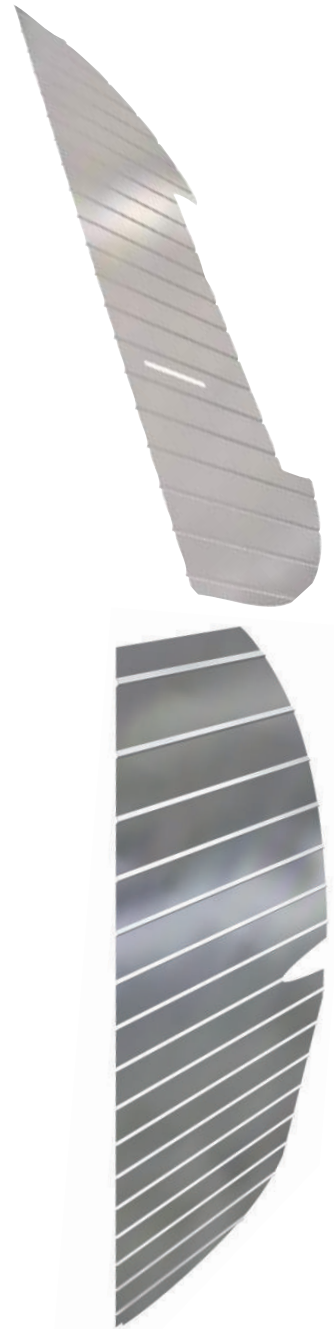
Continued from previous page, see eligibility on page 131.

Aileron Skin Kit Components		
SKN-KT-AIL1		
Qty	P/N	Location
1	MC0523800-6	Upper Inbd LH
1	MC0523800-7	Upper Inbd RH
1	MC0523800-8	Upper Otbd LH
1	MC0523800-9	Upper Otbd RH
1	MC0523800-10	Lower Inbd LH
1	MC0523800-11	Lower Inbd RH
1	MC0523800-12	Lower Otbd LH
1	MC0523800-13	Lower Otbd RH
SKN-KT-AIL2		
1	MC1624001-5	Upper Inbd LH
1	MC1624001-6	Upper Inbd RH
1	MC1624001-9	Upper Otbd LH
1	MC1624001-10	Upper Otbd RH
1	MC1624001-3	Lower Inbd LH
1	MC1624001-4	Lower Inbd RH
1	MC1624001-7	Lower Otbd LH
1	MC1624001-8	Lower Otbd RH
SKN-KT-AIL3		
1	MC1220085-11	Upper LH
1	MC1220085-12	Upper RH
1	MC1220085-13	Lower LH
1	MC1220085-14	Lower RH
SKN-KT-AIL4		
2	MC0424000-10	Aileron
2	MC0424000-20	Aileron
1 FAA-PMA/STC. Includes instructions to replace spot welds with rivets.		

Rudder Skin Kit Components		
SKN-KT-RUD1		
Qty	P/N	Location
1	MC0333000-4	Upper LH
1	MC0333000-5	Upper RH
1	MC0533000-4	Lower LH
1	MC0533000-5	Lower RH
1	MC0333116	Rudder Tab
SKN-KT-RUD2		
1	MC0533000-20	Upper LH
1	MC0533000-21	Upper RH
1	MC0533000-4	Lower LH
1	MC0533000-5	Lower RH
SKN-KT-RUD3		
1	MC0531001-8	LH
1	MC0531001-9	RH
SKN-KT-RUD4		
1	MC0731000-13	LH
1	MC0731000-14	RH
SKN-KT-RUD5		
2	MC0333000-4	LH
2	MC0333000-5	RH
1	MC0333116	Rudder Tab
SKN-KT-RUD6		
1	MC0433000-30	LH
1	MC0433000-40	RH
1	MC0433127	Rudder Tab
1 FAA-PMA/STC. Includes instructions to replace spot welds with rivets.		

Elevator Skin Kit Components		
SKN-KT-ELEV1		
Qty	P/N	Location
1	MC0334100-3	Tab Upper
1	MC0334100-4	Tab Lower
1	MC0334100-5	Upper RH
1	MC0334100-6	Lower RH
1	MC0334200-3	Lower LH
1	MC0334200-4	Upper LH
SKN-KT-ELEV2		
1	MC0534100-4	Upper LH
1	MC0534100-5	Lower LH
1	MC0534101-4	Lower RH
1	MC0534101-5	Upper RH
SKN-KT-ELEV3		
1	MC0532001-36	Upper RH
1	MC0532001-37	Lower LH
1	MC0532001-38	Lower RH
1	MC0532001-39	Upper LH
SKN-KT-ELEV4		
1	MC055044-1	Lower LH
1	MC055044-2	Lower RH
1	MC055044-3	Upper LH
1	MC055044-4	Upper RH
SKN-KT-ELEV5		
2	MC0734600-4	Upper LH & Lower RH
2	MC0734600-9	Upper RH & Lower LH
SKN-KT-ELEV6		
1	MC0734600-4	Upper LH
1	MC0734600-9	Lower LH
1	MC0734600-14	Lower RH
1	MC0734600-15	Upper RH
SKN-KT-ELEV7		
1	MC1234600-5	Upper LH
1	MC1234600-6	Upper RH
1	MC1234600-7	Lower LH
1	MC1234600-8	Lower RH
SKN-KT-ELEV8		
1	MC0434141-1	Upper LH
1	MC0434142-2	Upper RH
1	MC0434142-3	Lower LH
1	MC0434135-4	Lower RH
1	MC0434135-10	Tab Upper
1	MC0434135-11	Tab Lower
1	MC0434141-1	Upper LH
SKN-KT-ELEV9		
1	MC0434140-2	Upper RH
1	MC0434142-3	Lower LH
1	MC0434135-4	Lower RH
1	MC0434135-15	Tab Upper
1	MC0434135-16	Tab Lower
1 FAA-PMA/STC. Includes instructions to replace spot welds with rivets.		

Flap Skin Kit Components		
SKN-KT-FLP1		
Qty	P/N	Location
1	MC0426901-10	Upper RH
1	MC0426901-11	Upper LH
1	MC0426901-6	Lower LH
1	MC0426901-7	Lower RH
SKN-KT-FLP2		
1	MC0523901-4	Upper LH
1	MC0523901-5	Upper RH
1	MC0523901-6	Lower LH
1	MC0523901-7	Lower RH
SKN-KT-FLP3		
2	MC0523901-201	Upper LH, RH
1	MC0523901-6	Lower LH
1	MC0523901-7	Lower RH
SKN-KT-FLP4		
1	MC0523901-21	Upper LH
1	MC0523901-22	Upper RH
1	MC0523901-19	Lower LH
1	MC0523901-20	Lower RH
SKN-KT-FLP5		
1	MC0523901-25	Upper LH
1	MC0523901-26	Upper RH
1	MC0523901-27	Lower LH
1	MC0523901-28	Lower RH
SKN-KT-FLP6		
1	MC0523901-25	Upper Inbd LH
1	MC1220100-20	Upper Inbd RH
1	MC1220100-5	Upper Otbd LH
1	MC1220100-6	Upper Otbd RH
1	MC0523901-27	Lower Inbd LH
1	MC1220100-18	Lower Inbd RH
1	MC1220100-3	Lower Otbd LH
1	MC1220100-4	Lower Otbd RH
SKN-KT-FLP7		
1	MC0523901-25	Upper Inbd LH
1	MC0523901-26	Upper Inbd RH
1	MC1220100-5	Upper Otbd LH
1	MC1220100-6	Upper Otbd RH
1	MC0523901-27	Lower Inbd LH
1	MC0523901-28	Lower Inbd RH
1	MC1220100-3	Lower Otbd LH
1	MC1220100-4	Lower Otbd RH
SKN-KT-FLP8		
1	MC1220100-33	Upper Inbd LH
1	MC1220100-34	Upper Inbd RH
1	MC1220100-5	Upper Otbd LH
1	MC1220100-6	Upper Otbd RH
1	MC1220100-35	Lower Inbd LH
1	MC1220100-36	Lower Inbd RH
1	MC1220100-3	Lower Otbd LH
1	MC1220100-4	Lower Otbd RH
SKN-KT-FLP9		
2	MC0425000-10	Upper
2	MC0425000-20	Lower
SKN-KT-FLP10		
2	MC0426900-2	Upper
2	MC0426900-4	Lower
SKN-KT-FLP11		
2	MC0525000-10	Upper
2	MC0525000-20	Lower
SKN-KT-FLP12		
2	MC0523900-10	Upper
2	MC0523900-20	Lower
1 FAA-PMA/STC. Includes instructions to replace spot welds with rivets.		

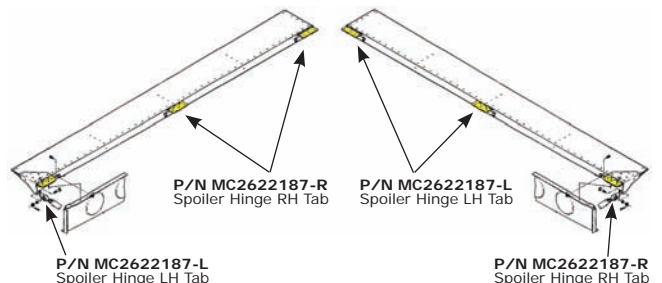


## Caravan Spoiler Hinges

Improved McFarlane hinges feature selective fit pins for a longer service life

P/N MC2622187-L (Replaces 2 each 2622187-7, 1 each 2622226-1)  
 P/N MC2622187-R (Replaces 2 each 2622187-7, 1 each 2622226-2)

- Save \$\$\$
- FAA-PMA direct replacement
- Eligible for all Cessna Caravan 208,208B
- Selective fit pins
- No looseness in the hinge to start vibration wear



# Flight Control Surface Parts and Attaching Hardware

## Flap Track Wear Gauge for Cessna Aircraft

P/N 950

Use to determine if a Cessna flap track is worn beyond service limits.



### Flap Track Wear Gauge Instructions

Run the gauge plug along each slot in each flap track while verifying that the gauge will not enter the slot. Reposition the flaps as required to gauge the entire length of each slot. If the gauge enters a slot at any point, the track is worn beyond service limits. Periodically verify the gauge diameter by measuring the gauge diameter with a calibrated micrometer.

**This gauge will work for all single engine Cessna aircraft except 140A, 170A and 195.**

## Flap Trailing Edge Stiffener for Cessna Aircraft

**New streamline shape and improved fit to reduce stress cracks**

FAA-PMA! Logbook entry is all that is required.

### What is the purpose of a flap trailing edge stiffener?

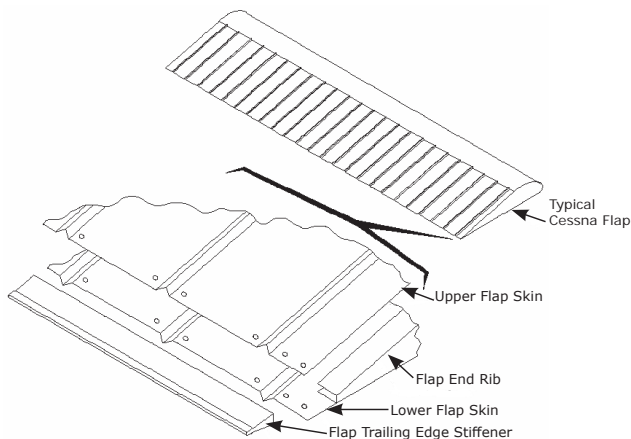
- Reinforce the flap trailing edge making it more resilient to hangar rash
- Ensure a straight trailing edge. Without a stiffener, the trailing edge tends to have "wavy" appearance where the top and bottom skin rivet together
- Reduce stress in the flap skins and prevent cracks around the rivets. Without a stiffener of the proper shape, the skin must abruptly bend where the top and bottom skins rivet together
- Provide a blunt surface, thus preventing diamond shaped cut patterns on the foreheads of pilots and passengers

### New Improved Fit to Reduce Skin Stress

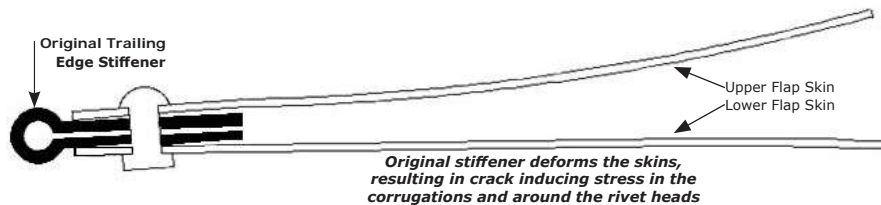
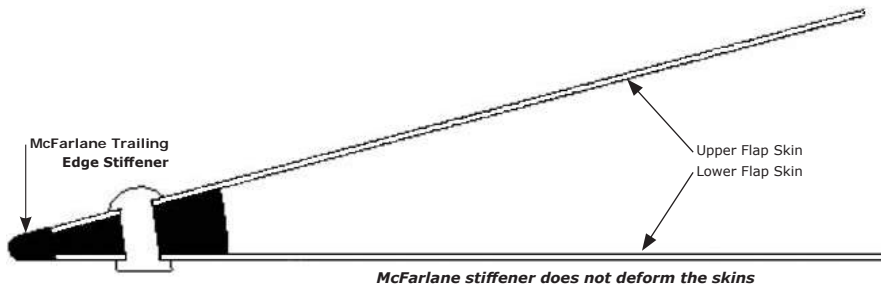
The new McFarlane stiffeners are accurately shaped to the same angle that the top and bottom skins come together to completely eliminate the bending stress due to riveting the skins together. This prevents stress concentrations in the skin corrugations and near the rivets making cracks less likely. McFarlane has improved the stiffener angle as compared to other brand of triangle stiffeners.

### New Streamline Shape

The new McFarlane design smoothly transitions from the skin surface to a blunt trailing edge without an unsightly bulb and resultant drag found on common trailing edge stiffeners. The new shape even weighs less than other bulky stiffeners.



Aircraft	Part Number
150, 150A,B,C,D,E,F,G,H,J,K,L,M	MC1741-79.5
A-150L, A-A150L, A150K,L,M	MC1741-79.5
F150F,G,H,J,K,L,M	MC1741-79.5
FA150K,L,M	MC1741-79.5
FRA150L,M	MC1741-79.5
152, A152, F152, FA152	MC1741-79.5
170B	MC1741-79.5
172, 172A,B,C,D,E,F,G,H,I,K,L,M,N,P,Q,R,S	MC1741-79.5
172RG	MC1741-79.5
F172D,E,F,G,H,K,L,M,N,P	MC1741-79.5
FP172	MC1741-79.5
FR172E,F,G,H,J,K	MC1741-79.5
P172D	MC1741-79.5
R172E,F,G,H,K	MC1741-79.5
175, 175A,B,C	MC1741-79.5
180, 180A,B,C,D,E,F,G,H,J,K	MC1741-79.5
182, 182A,B,C,D,E,F,G,H,J,K,L,M,N,P,Q,R,S,T	MC1741-79.5
F182P,Q	MC1741-79.5
FR182, R182, T182, T182T, TR182	MC1741-79.5
185, 185A,B,C,D,E, A185E,F	MC1741-79.5
188, 188A,B, A188, A188A,B, T188C	MC1741-79.5
(205) 210-5	MC1741-79.5
(205A) 210-5A	MC1741-79.5
206, 206H, T206H	MC1741-116.25
P206, P206A,B,C,D,E	MC1741-116.25
TP206A,B,C,D,E	MC1741-116.25
TU206A,B,C,D,E,F,G	MC1741-116.25
U206, U206A,B,C,D,E,F,G	MC1741-116.25
207, 207A, T207, T207A	MC1741-116.25
210, 210A,B,C	MC1741-79.5
210D,E,F	MC1741-116.25



## Aluminum Aileron Hinge for Cessna

P/N MC0523816-1

- Selective fit, positive capture, stainless steel pin
- No looseness in the hinge to start vibration wear
- No cotter keys to fail
- Anodized for better corrosion and wear resistance
- Replaces part number 0523816-1 and 0523807

### Aircraft

150,152,170,172,175,180,182,185,205,210 (All serial numbers)



## Flap Wear Buttons

P/N S1093-1

- Prevents flap leading edge skin wear
- Nylon construction
- Available in 30 packs

Manufactured by Cessna



## Flap and Aileron Rod Ends

See pages 27-29 for Cessna and Piper rod ends

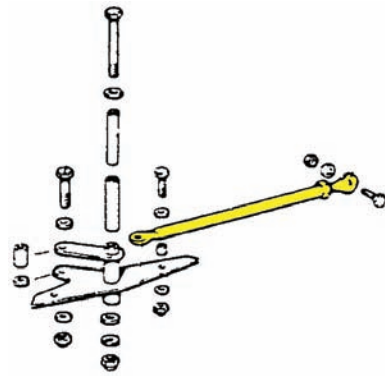


**Aileron Rod Assembly for Piper PA-28/28R Series**

Save \$\$

**40% off Piper!**  
P/N CA62766-000

- High quality 4130 steel construction
- Replaceable aft rod end bearing (P/N CA452-334A)
- Includes ICA with improved inspection procedures



**Maintenance Tip:**

PMA Products recommends replacement when there is:

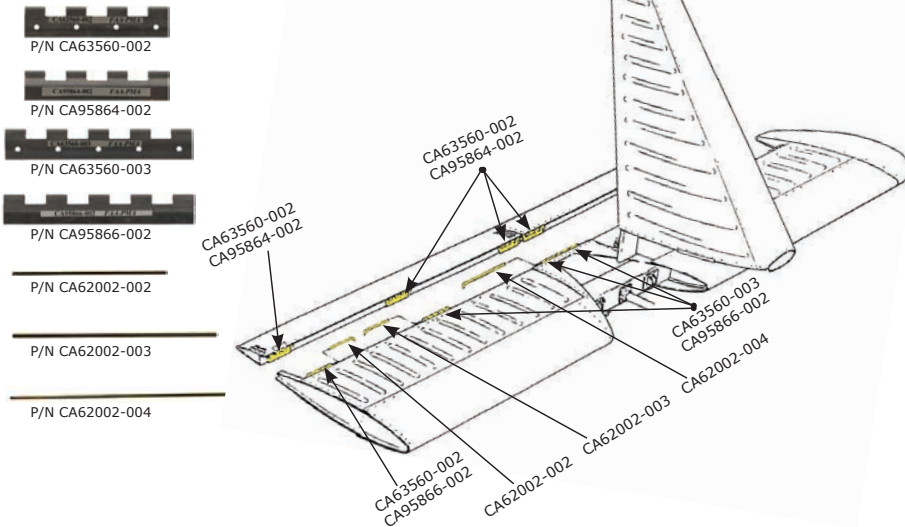
- more than 0.010 inch radial free play in either bearing
- any corrosion on either bearing
- significant corrosion or other damage to the tube
- see ICA at [www.mcfarlaneaviation/reference/](http://www.mcfarlaneaviation/reference/) for details

FAA-PMA approved for aircraft models:  
PA-28-140, 150, 160, 180, 235, PA-28R-180, 200 (All serial numbers)  
2 required per aircraft

Manufactured by PMA Products, Inc.

**Stabilator Trim Tab Hinges for Piper Aircraft**  
**Another convenient fit from McFarlane!**

- Pins and hinge halves each sold separately or as convenient kits
- One kit required per aircraft
- Kit components are FAA-PMA approved



Aircraft	Trim Tab Hinge Kit	Trim Tab Pin Only Kit
PA-28-140, 150, 151, 160, 161	PTH-KT-1	PTP-KT-1
PA-28-180	PTH-KT-1	PTP-KT-1
PA-28-181	PTH-KT-1	PTP-KT-1
PA-28-201T	PTH-KT-1	PTP-KT-1
PA-28-235	PTH-KT-1	PTP-KT-1
PA-28-236	PTH-KT-1	PTP-KT-1
PA-28R-180	PTH-KT-1	PTP-KT-1
PA-28R-200	PTH-KT-1	PTP-KT-1
PA-28R-201, 201T	PTH-KT-1	PTP-KT-1
PA-28RT-201, 201T	PTH-KT-1	PTP-KT-1
PA-32-260	PTH-KT-1	PTP-KT-1
PA-32-300, PA-32R-300	PTH-KT-1	PTP-KT-1
PA-32-301, 301T	PTH-KT-1	PTP-KT-1
PA-32R-301, 301T	PTH-KT-1	PTP-KT-1
PA-32RT-300, 300T	PTH-KT-1	PTP-KT-1
PA-34-200, 200T, 220T	PTH-KT-2	PTP-KT-2
PA-44-180, 180T	PTH-KT-1	PTP-KT-1

Kits are eligible for all serial numbers of each model unless noted below.

- 1 S/Ns 28-671 thru 28-7205328 and 28-7305001 thru 28-7505260 only
- 2 S/Ns 28-10001 thru 28-7210023 and 28-7310001 thru 28-7710089 only
- 3 S/Ns 28R-35001 thru 28R-7135238 and 28R-7235001 thru 28R-7635545 only

Qty	Part Number	Description
<b>Piper Trim Tab Hinge Kit P/N PTH-KT-1</b>		
2	CA62002-002	Pin, Hinge, Outboard
2	CA62002-003	Pin, Hinge, Center
1	CA62002-004	Pin, Hinge, Inboard
8	CA63560-002	Hinge Half
4	CA63560-003	Hinge Half
<b>Piper Trim Tab Pin Kit P/N PTP-KT-1</b>		
2	CA62002-002	Pin, Hinge, Outboard
2	CA62002-003	Pin, Hinge, Center
1	CA62002-004	Pin, Hinge, Inboard
<b>Piper Trim Tab Hinge Kit P/N PTH-KT-2</b>		
4	CA62002-003	Pin, Hinge, Outboard or Center
1	CA62002-004	Pin, Hinge, Inboard
6	CA95864-002	Hinge Half
6	CA95866-002	Hinge Half
<b>Piper Trim Tab Pin Kit P/N PTP-KT-2</b>		
4	CA62002-003	Pin, Hinge, Outboard or Center
1	CA62002-004	Pin, Hinge, Inboard

**Aileron Hinges for Piper Aircraft**

- Hinge pins are Teflon coated
- FAA-PMA/STC approved
- Direct replacement



P/N 62371-108



P/N CA35636-100

Aircraft	62371-108 Qty/Aircraft	CA35636-100 Qty/Aircraft
PA-28-140	4	
PA-28-150	4	
PA-28-151		2
PA-28-160	4	
PA-28-161		2
PA-28-180	4	
PA-28-181	4	2
PA-28-201T	4	2
PA-28-235	4	
PA-28-236	4	2
PA-28-R180	4	
PA-28R-200	4	
PA-28R-201	4	2
PA-28R-201T	4	2
PA-28RT-201	4	2
PA-28RT-201T	4	2
PA-32-260	4	
PA-32-300	4	
PA-32RT-300, 300T	4	
PA-34-200	4	

1 S/Ns 28-7615001 and on  
**Note:**  
When both part numbers are eligible verify correct part number by length:  
P/N 62371-108 is 5"  
P/N CA35636-100 is 7.5"



## Flap Tracks for Cessna Aircraft

**Replace worn-out tracks to prevent dangerous and expensive binding problems!**

- Improved Material
  - 20% Stronger
  - 6 Times fatigue strength
  - Greater resistance to 'mushrooming' and stress cracking
- Precision machined for smooth rolling action
- No pre-drilled holes for a precise, clean installation
- Replace just the track, not the entire rib assembly (Cessna only lists the rib assembly for most aircraft)
  - Eliminates the need to drill into the fuel tank area
- Alodined then epoxy primed per MIL-PRF-23377 for corrosion protection
- Installation instructions included



Cessna Flap Track Rib Assembly Part Number	Cessna Flap Track Part Number	McFarlane Flap Track Part Number
0523231-13		
0523231-21	0523231-14 <sup>5</sup>	MC0523231-14
0523231-23		
0525001-1		
0525001-1S	0525001-2 <sup>6</sup>	MC0525001-2
2425001-1		
1220058-1	1220048-1 <sup>5</sup>	MC1220048-1
1220052-2		
1221010-7		
1221010-7AGW		
1221010-15		
1221010-16	1221010-8 <sup>5</sup>	MC1221010-8
1221010-19		
1221010-19AGW		
1221010-20		
1221010-20AGW		
N/A	1221064-19 <sup>6</sup>	MC1221064-19
	1221064-20 <sup>6</sup>	MC1221064-20
	1221064-21 <sup>6</sup>	MC1221064-21

## Caravan 208 Flap Track

- NDI inspected throughout the manufacturing process
- **Save thousands!**



**See pages 136-138  
for flap roller kits!**

Aircraft	Quantity per Aircraft										
	Part Number	MC0523231-14	MC0525001-2	MC1220048-1	MC1221010-8	MC1221064-19	MC1221064-20	MC1221064-21	MC2622075-4	MC2622075-5	MC2622075-6
150,150A,B,C,D,E,F,G,H,I,K,L,M		4									
A150K,L,M		4									
F150F,G,H,I,K,L,M, FA150K,L,M		4									
152 <sup>1</sup> , S/N 15279406 thru 15285564 <sup>2</sup>		4	4								
152 <sup>1</sup> , S/N 15285565 thru 15286033			4								
A152 <sup>1</sup> , S/N A1520735 thru A1521014 <sup>2</sup>		4	4								
A152 <sup>1</sup> , S/N A1521015 thru A1521049			4								
F152 <sup>1</sup> , S/N F15201429 thru F15201908 <sup>2</sup>		4	4								
F152 <sup>1</sup> , S/N F15201909 thru F15201980			4								
FA152 <sup>1</sup> , S/N FA1520337 thru FA1520387 <sup>2</sup>		4	4								
FA152 <sup>1</sup> , S/N FA1520388 thru FA1520425			4								
170B		4									
172,172A,B,C,D,E,F,G,H,I,K,L,M,N		4									
172P,R,S, F172P			4								
172RG, S/N 172RG0001 thru 172RG0409 <sup>2</sup>		4	4								
172RG, S/N 172RG0410 thru 172RG1191			4								
F172D,E,F,G,H,K,L,M,N		4									
FP172		4									
FR172E,F,G,H,I,K <sup>1</sup>		4									
S/N FR17200591 thru FR17200665			4								
FR172K <sup>1</sup>			4								
S/N FR17200666 thru FR17200675											
P172D		4									
R172E,F,G,H,K		4									
R172K <sup>1</sup> , S/N R1723400 thru R1723454			4								
175,175A,B,C		4									
177,177A,B,177RG,F177RG					2	2	2				
180,180A,B,C,D,E,F,G,H,I,K				4							
182,182A,B,C,D,E,F,G,H,I,K,L,M,N,P,Q				4							
182S,T				4							
F182P,Q		4									
FR182		4									
R182, T182, T182T		4									
185,185A,B,C,D,E,A185E,F		4									
188A,B,A188B		4									
210-5 (205), 210-5A (205A)		4									
206,U206,U206A,B,C,D,E,F,G,TU206FG			2	4							
206H,T206H			6								
P206,P206A,B,C,D,E			2	4							
207,207A,T207,T207A			2	4							
208 S/N 20800001 thru 20800164 <sup>3</sup>									4	2	
208 S/N 20800001 thru 20800164 <sup>4</sup>									2	2	2
208 S/N 20800165 thru 20899999									4	2	
208B S/N 208B0001 thru 208B0194 <sup>3</sup>									4	2	
208B S/N 208B0001 thru 208B0194 <sup>4</sup>									2	2	2
208B S/N 208B0195 thru 208B9999									4	2	
210A,B,C											
210D,E,F			2	4							
210G,H,I,K,L,M,N,R					2	2	2				
P210N,R					2	2	2				
T210F				2	4						
T210G,H,I,K,L,M,N,R						2	2	2			

**Caravan flap roller kits available now,  
see pages 137-138!  
Save 60% on MS21442-121 Bearings**

<sup>1</sup> Partial model eligibility  
<sup>2</sup> Cessna model 152, A152, F152, FA152 and 172RG aircraft may have various flap track rib assemblies installed. If flap track rib assembly part number 0523231-23 is currently installed, then McFarlane part number MC0523231-14 must be used to replace the flap track. If flap track rib assembly part number 0525001-1 or 2425001-1 is currently installed, then McFarlane part number MC0525001-2 must be used to replace the flap track. Flap track rib assembly 0523231-23 includes a 0.160 inch thick flap track with no lightening hole. Flap track rib assemblies 0525001-1, 0525001-1S and 2425001-1 include a 0.25 inch thick flap track with a 2.25 inches lightening hole located between the flap roller slots.  
<sup>3</sup> With service kit SK208-71  
<sup>4</sup> Without service kit SK208-71  
<sup>5</sup> Part numbers do not appear in the Illustrated Parts Catalogs; only track assembly part numbers are listed.  
<sup>6</sup> Part numbers appear directly in Illustrated Parts Catalogs; no assembly part numbers exist.

**Flap Roller Kits for Cessna Aircraft**

McFarlane offers a basic flap roller kit or an upgrade kit to address flap arm wear problems. Each flap roller kit contains enough components for one aircraft. All components are also available separately.

**See eligibility and kit component lists on the following page.**

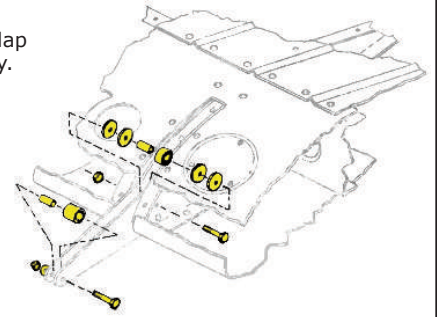
Now available - Flap roller kits for Cessna Caravan 208 and Skymaster 336/337 aircraft!

**Basic kits include**

Rollers, bushings, shims and spacers where required

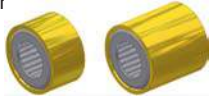
**Upgrade kits include**

Rollers, bushings, shims, spacers where required, MCSK100 Flap Service Kits, wear washers, SEB95-3 Rev. 1 and hardware (nuts, bolts and washers)



**Rollers**

- Cadmium plated for corrosion resistance
- Precision bearings for smooth, reliable operator



**Bushings**

- Heat treated bearing quality stainless steel
- Precision ground
- Improved wear and corrosion resistance



**Shims and Spacers**

- Stainless steel shims
- Self-lubricating nylon spacers



**Hardware**

- Nuts, bolts and washers
- Extra hardware included, installer must determine the correct nut, bolt and washer combination for specific aircraft



**Wear Washers and SEB95-3 Rev. 1**

- Stops forward roller location flap arm wear
- Service Bulletin SEB95-3 Rev. 1 is copyrighted by Cessna



**MCSK100 Flap Roller Service Kits**

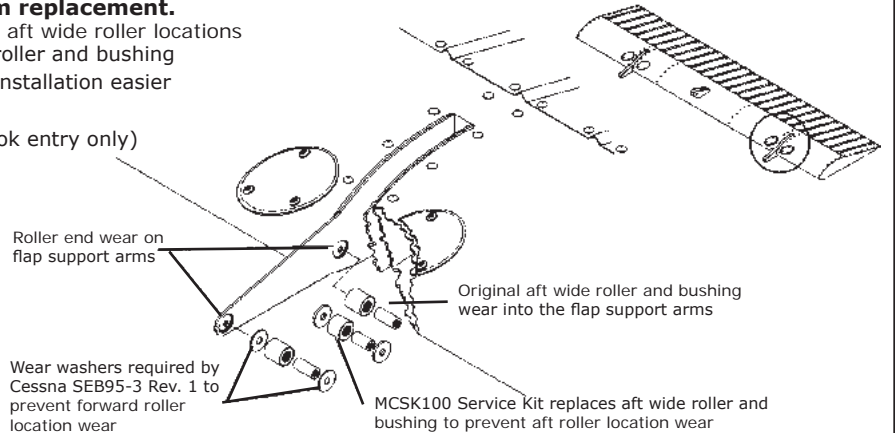
- Stops aft roller location flap arm wear
- Unique McFarlane solution



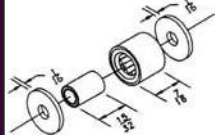
**MCSK100 Flap Roller Service Kit for Cessna Aircraft**

**Stops flap arm wear! Prevents costly flap arm replacement.**

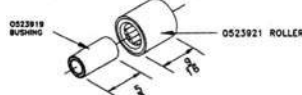
- A permanent solution to the wear problem at the aft wide roller locations
- Includes two stepped washers, a medium width roller and bushing
- Stepped washers interlock with bushing making installation easier
- Replaces the aft wide roller and bushing
- FAA-PMA/STC approved (Minor alteration - logbook entry only)
- Applicable to most single engine Cessna aircraft
- Economical!



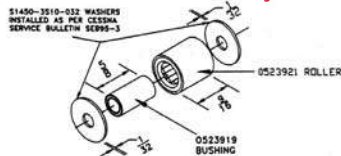
**MCSK100 Flap Roller Service Kit**



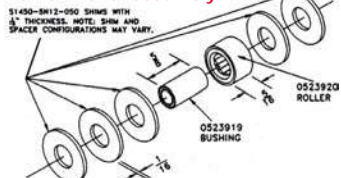
**MCSK100 replaces aft wide roller assembly**



**MCSK100 DOES NOT replace forward wide roller assembly**



**MCSK100 DOES NOT replace narrow roller assembly**



**Technical Background:**

The flap rollers wear into the flap support arms on Cessna aircraft. This wear is caused by the flap rollers due to the asymmetric extension or retraction of the flap during flight. This asymmetry is caused by the inboard or outboard section of the flap leading the retraction or extension of the flap. Many factors, including rusty or damaged rollers or flap track imperfections, can contribute to this condition. This asymmetry causes the rollers to be pressed against the flap support arms (roller end loading) which, over time, causes damage to the flap support arms and structurally weakens the flap.

Cessna Service Bulletin SEB95-3 (Included in all FLP-KT series kits) addresses this issue by calling for the inspection and repair or replacement of the support arms and rollers. Cessna Service Bulletin SEB95-3 also requires the installation of stainless steel washers on each side of the forward rollers to reduce the wear between the roller and the support arms. SEB95-3, however, did not offer a preventative solution to the wear problem experienced at the aft roller locations. MCSK100 is a permanent solution that addresses the aft flap support arm wear problem. Installation is considered a minor alteration and does not require the filing of FAA Form 337. Only a logbook entry is required for this STC.

It is important that the Cessna Service Bulletin SEB95-3 is fully complied with before MCSK100 is installed.

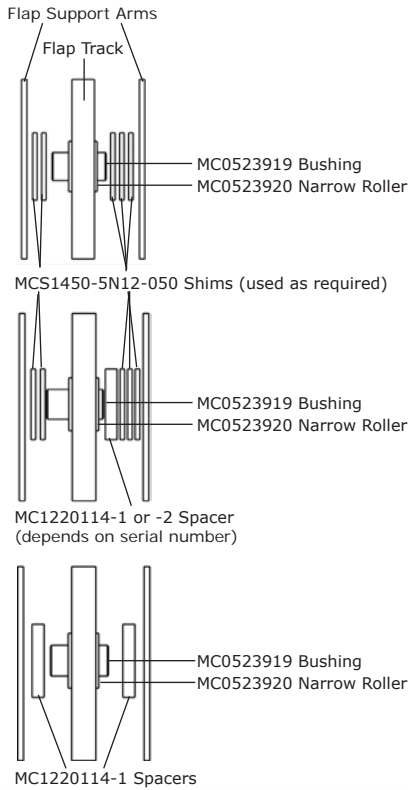




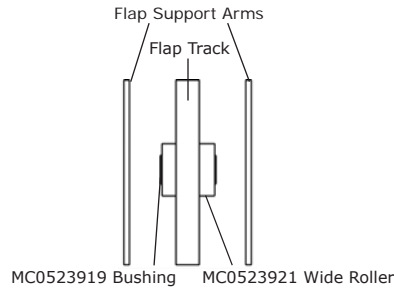
## Cessna Flap Attachment Configurations

- All configurations shown are for example only. Types and quantities of shims and spacers will vary between aircraft. Refer to your aircraft's parts catalog for specific configuration
- McFarlane flap upgrade kits include all required bolts, nuts and washers

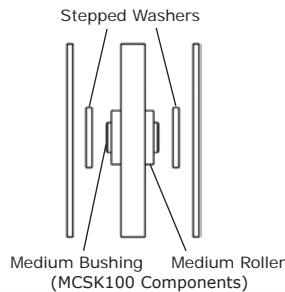
### Aft Narrow Roller Locations (example configurations)



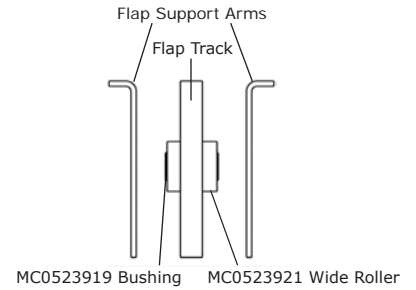
### Aft Wide Roller Locations Original Configuration



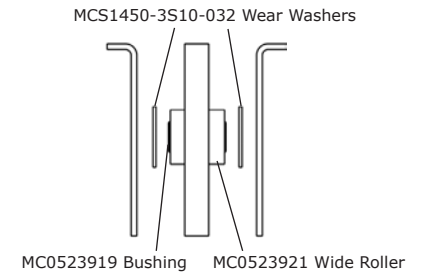
### Aft Wide Roller Locations with MCSK100 Service Kit



### Forward Roller Locations Original Configuration



### Forward Roller Locations with Wear Washers per Cessna SEB95-3 Rev. 1



## Eligibility for Flap Roller Kits for Cessna Aircraft

Model	Serial Number	Part Numbers	Model	Serial Number	Part Numbers
150, 150A, B, C, D, E, F, G, H, J	All	FLP-KT-1 or 1U	FR182	All	FLP-KT-3 or 3U
150K, L, M	All	FLP-KT-2 or 2U	R182(RG)/TR182	All	FLP-KT-3 or 3U
A150K, L, M	All	FLP-KT-2 or 2U	T182T	All	FLP-KT-3 or 3U
F150F, G, H, J	All	FLP-KT-1 or 1U	185, 185A, B, C, D, E/A185E, F	1850001 thru 18502310	FLP-KT-1 or 1U
F150K, L, M	All	FLP-KT-2 or 2U	A185F	18502311 thru 18504448	FLP-KT-8 or 8U
FA150K, L/FRA150L, M	All	FLP-KT-2 or 2U	188, 188A, B/A188A, B	1880001 thru 18802348	FLP-KT-3 or 3U
152	15279406 thru 15285564 15285565 thru 15286033	FLP-KT-2 or 2U FLP-KT-3 or 3U	A188B	18800967T thru 18803968T	FLP-KT-3 or 3U
F152	F15201429 thru F15201908 F15201909 thru F15201980	FLP-KT-2 or 2U FLP-KT-3 or 3U	T188C	All	FLP-KT-3 or 3U
A152	A1520735 thru A1521014 A1521015 thru A1521049	FLP-KT-2 or 2U FLP-KT-3 or 3U	210-5 (205), 210-5A (205A) 206	All	FLP-KT-1 or 1U FLP-KT-4 or 4U
FA152	FA1520337 thru FA1520387 FA1520388 thru FA1520425	FLP-KT-2 or 2U FLP-KT-3 or 3U	206H/T206H P206, A, B, C, D, E	All	FLP-KT-11 or 11U FLP-KT-4 or 4U
170B	All	FLP-KT-1 or 1U	TP206A, B, C, D, E	All	FLP-KT-4 or 4U
172, 172A, B, C	All	FLP-KT-1 or 1U	TU206A, B, C, D, E	U2060487 thru U20601568	FLP-KT-4 or 4U
172D, E, F, G, H, I, K, L, M, N	All	FLP-KT-2 or 2U	TU206E, F, G	U20601569 thru U20607020	FLP-KT-9 or 9U
172RG	172RG0001 thru 172RG0416 172RG0417 thru 172RG1191	FLP-KT-2 or 2U FLP-KT-3 or 3U	U206, U206A, B, C, D, E	U2060276 thru U20601568	FLP-KT-4 or 4U
172P, Q	All	FLP-KT-3 or 3U	U206E, F, G	U20601569 thru U20607020	FLP-KT-9 or 9U
172R	All	FLP-KT-10 or 10U	207, 207A, T207, T207A	All	FLP-KT-4 or 4U
172S	All	FLP-KT-10 or 10U	208, 208A, B	All	FLP-KT-12
F172D, E, F, G, H, K, L, M, N	All	FLP-KT-2 or 2U	210, A, B, C	All	FLP-KT-1 or 1U
F172P	All	FLP-KT-3 or 3U	210D, E, F	All	FLP-KT-6
FR172E, F	All	FLP-KT-1 or 1U	210G, H, J, K, L, M, N, R	All	FLP-KT-7
FR172G, H, J	All	FLP-KT-2 or 2U	P210N, R	All	FLP-KT-7
FR172K	All	FLP-KT-8 or 8U	T210F	All	FLP-KT-6
P172	All	FLP-KT-8 or 8U	T210G, H, J, N	All	FLP-KT-7
R172K	All	FLP-KT-8 or 8U	336	All	FLP-KT-13
175, 175A, B, C	All	FLP-KT-1 or 1U	337, 337A, B, C, D, E, F, G, H	All	FLP-KT-14
177, 177A, B	All	FLP-KT-4 or 4U	F337E, F, G, H	All	FLP-KT-14
177RG	All	FLP-KT-4 or 4U	FT337E, F	All	FLP-KT-14
F177RG	All	FLP-KT-4 or 4U	FT337GP, HP	All	FLP-KT-15
180, A, B, C, D, E, F, G, H, J	30000 thru 18052384	FLP-KT-1 or 1U	M337B	All	FLP-KT-14
180, K	18052385 thru 18053203	FLP-KT-8 or 8U	P337H	All	FLP-KT-15
182, 182A, B, C, D	All	FLP-KT-1 or 1U	T337B, C, D, E, F	All	FLP-KT-14
182, E, F, G, H, J, K, L, M, N, P, Q, R	All	FLP-KT-3 or 3U	T337G	All	FLP-KT-15
182S, T	All	FLP-KT-3 or 3U	T337H	All	FLP-KT-14
A182J, K, L, M, N	All	FLP-KT-3 or 3U	T337H-SP	All	FLP-KT-15
F182P, Q	All	FLP-KT-3 or 3U			

Partial model eligibility

**Save 60% on hard to find MS21442-121 bearings  
included in FLP-KT-12 or purchase separately!**

Kit components are listed on the following page.



## Component List for Flap Roller Kits for Cessna Aircraft

Each flap roller kit contains enough components for one aircraft. All basic kits include the rollers, bushings, shims, spacers, washers where required and a copy of SEB95-3 Service Bulletin. The upgrade kits contain the same components, the wear washers required by Cessna SEB95-3 for the forward locations, MCSK100 Flap Roller Service Kits for the rear locations, and attachment nuts, bolts, and washers. Part numbers for the upgrade kits end in "U".

Note: SEB95-3 REV. 1 Service Bulletin is not applicable to 172R,S, 182S,T, T182T, 206H, T206H, 208, 336 and 337 aircraft.

**Flap Upgrade Kits contain bolts, nuts and washers for several aircraft models. The installer must determine the correct nut, bolt and washer combination for each installation.**

Kit P/N	Qty	Part Number	Description
FLP-KT-1	8	MC0523919	Bushings
	2	MC0523920	Rollers
	6	MC0523921	Rollers
	12	MCS1450-5N12-050	Shims
	1	SEB95-3 REV. 1	Service Bulletin
FLP-KT-1U	4	AN3-10A	Bolts
	8	AN3-11A	Bolts
	6	MC0523919	Bushings
	2	MC0523920	Rollers
	4	MC0523921	Rollers
	8	MCS14503S10-032	Wear Washers
	12	MCS1450-5N12-050	Shims
	2	MCSK100	Service Kits
	8	MS21044N3	Nuts
	8	NAS1149F0363P	Washers
	1	SEB95-3 REV. 1	Service Bulletin
	FLP-KT-2	8	MC0523919
2		MC0523920	Rollers
6		MC0523921	Rollers
2		MC1220114-2	Spacers
12		MCS1450-5N12-050	Shims
FLP-KT-2U	4	AN3-10A	Bolts
	8	AN3-11A	Bolts
	6	MC0523919	Bushings
	2	MC0523920	Rollers
	4	MC0523921	Rollers
	2	MC1220114-2	Spacers
	8	MCS14503S10-032	Wear Washers
	12	MCS1450-5N12-050	Shims
	2	MCSK100	Service Kits
	8	MS21044N3	Nuts
	8	NAS1149F0363P	Washers
	FLP-KT-3	1	SEB95-3 REV. 1
8		MC0523919	Bushings
2		MC0523920	Rollers
6		MC0523921	Rollers
4		MC1220114-1	Spacers
FLP-KT-3U	4	AN3-10A	Bolts
	8	AN3-11A	Bolts
	6	MC0523919	Bushings
	2	MC0523920	Rollers
	4	MC0523921	Rollers
	2	MC1220114-1	Spacers
	8	MCS14503S10-032	Wear Washers
	2	MCSK100	Service Kits
	8	MS21044N3	Nuts
	8	NAS1149F0363P	Washers
	1	SEB95-3 REV. 1	Service Bulletin
	FLP-KT-4	12	MC0523919
10		MC0523920	Rollers
2		MC0523921	Rollers
4		MC1220114-1	Spacers
1		SEB95-3 REV. 1	Service Bulletin

Kit P/N	Qty	Part Number	Description	
FLP-KT-4U	6	AN3-10A	Bolts	
	12	AN3-11A	Bolts	
	8	MC0523919	Bushings	
	2	MC0523920	Rollers	
	6	MC0523921	Rollers	
	4	MC1220114-1	Spacers	
	12	MCS14503S 10-032	Wear Washers	
	4	MCSK100	Service Kits	
	12	MS21044N3	Nuts	
	12	NAS1149F0363P	Washers	
	1	SEB95-3 REV. 1	Service Bulletin	
	FLP-KT-6	2	MC0523920	Rollers
10		MC0523921	Rollers	
12		MC0523919	Bushings	
12		MCS1450-5N12-050	Shims	
FLP-KT-7		6	MC0523920	Rollers
		6	MC0523921	Rollers
		12	MC0523919	Bushings
		12	MC1220114-1	Spacers
		FLP-KT-8	8	MC0523919
2			MC0523920	Rollers
6			MC0523921	Rollers
4			MC1220114-1	Spacers
12	MCS1450-5N12-050		Shims	
1	SEB95-3 REV. 1		Service Bulletin	
FLP-KT-8U	4	AN3-10A	Bolts	
	8	AN3-11A	Bolts	
	6	MC0523919	Bushings	
	2	MC0523920	Rollers	
	4	MC0523921	Rollers	
	4	MC1220114-1	Spacers	
	8	MCS14503S10-032	Wear Washers	
	12	MCS1450-5N12-050	Shims	
	2	MCSK100	Service Kits	
	8	MS21044N3	Nuts	
	8	NAS1149F0363P	Washers	
	FLP-KT-9	12	MC0523919	Bushings
4		MC0523920	Rollers	
8		MC0523921	Rollers	
8		MC1220114-1	Spacers	
1		SEB95-3 REV. 1	Service Bulletin	
FLP-KT-9U		10	AN3-10A	Bolts
		8	AN3-11A	Bolts
		6	MC0523919	Bushings
		4	MC0523920	Rollers
		2	MC0523921	Rollers
		8	MC1220114-1	Spacers
		4	MCS14503S10-032	Wear Washers
	6	MCSK100	Service Kits	
	12	MS21044N3	Nuts	
	12	NAS1149F0363P	Washers	
	1	SEB95-3 REV. 1	Service Bulletin	

Kit P/N	Qty	Part Number	Description
FLP-KT-10	8	MC0523919	Bushings
	2	MC0523920	Rollers
	6	MC0523921	Rollers
	4	MC1220114-1	Spacers
	1	SEB95-3 REV. 1	Service Bulletin
FLP-KT-10U	8	AN3-10A	Bolts
	4	AN3-11A	Bolts
	6	MC0523919	Bushings
	2	MC0523920	Rollers
	4	MC0523921	Rollers
	4	MC1220114-1	Spacers
	8	MCS14503S10-032	Wear Washers
	2	MCSK100	Service Kits
	8	MS21044N3	Nuts
	8	NAS1149F0363P	Washers
	1	SEB95-3 REV. 1	Service Bulletin
	FLP-KT-11	12	MC0523919
4		MC0523920	Rollers
8		MC0523921	Rollers
8		MC1220114-1	Spacers
1		SEB95-3 REV. 1	Service Bulletin
FLP-KT-11U	6	AN3-10A	Bolts
	12	AN3-11A	Bolts
	8	MC0523919	Bushings
	4	MC0523920	Rollers
	4	MC0523921	Rollers
	8	MC1220114-1	Spacers
	8	MCS14503S10-032	Wear Washers
	4	MCSK100	Service Kits
	12	MS21044N3	Nuts
	12	NAS1149F0363P	Washers
	1	SEB95-3 REV. 1	Service Bulletin
	FLP-KT-12	4	AN3-11A
6		AN4-11A	Bolts
4		MC0523919	Bushings
4		MC0523921	Rollers
8		MCS14503S10 032	Wear Washers
FLP-KT-12	4	MS21044N3	Nuts
	6	MS21044N4	Nuts
	6	MS21442-121	Bearings
	4	NAS1149F0332P	Washers
	4	NAS1149F0363P	Washers
	6	NAS1149F0432P	Washers
FLP-KT-13	6	NAS1149F0463P	Washers
	16	AN3-10A	Bolts
	16	MC0523919	Bushings
	8	MC0523920	Rollers
	8	MC0523921	Rollers
	32	MCS1450-5N12-050	Shims
FLP-KT-14	16	MS21045L3	Nuts
	16	AN3-10A	Bolts
	16	MC0523919	Bushings
	8	MC0523920	Rollers
	8	MC0523921	Rollers
FLP-KT-15	16	MC1220114-1	Spacers
	16	MS21045L3	Nuts
	16	AN3-10A	Bolts
	16	MC0523919	Bushings
	8	MC0523920	Rollers
	8	MC0523921	Rollers



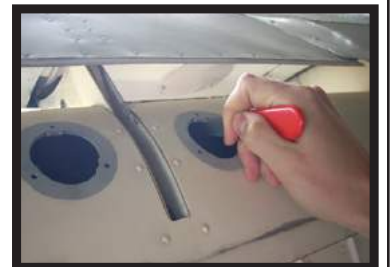
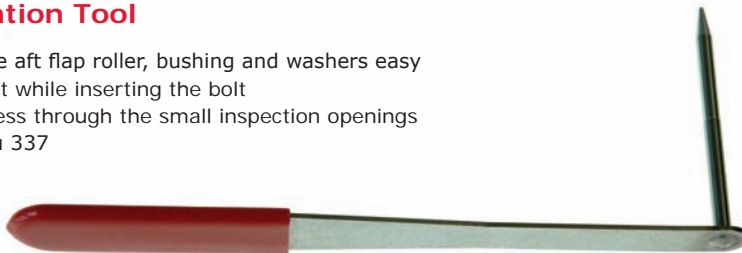
**Flap roller kits for  
208 and 336/337  
aircraft!**

**Save 60% on hard to find  
MS21442-121 bearings!**

## Flap Roller Installation Tool

P/N 970

- Makes installation of the aft flap roller, bushing and washers easy
- Holds parts in alignment while inserting the bolt
- Long handle allows access through the small inspection openings
- Use on Cessna 150 thru 337



# Flight Control Surface Parts and Attaching Hardware

## Rudder and Elevator Bushing Kits for Cessna Aircraft

### Solves all fit problems!

McFarlane supplies two bushing sizes for each hinge location.

This allows a selective fit and solves the common Cessna fit and interference problems.

- Hardened corrosion resistant stainless steel
- Cessna models 120 thru 177
- Convenient kits include all bushings, sintered bronze bearings and hardware for one aircraft
- Note: Kits do not include bellcrank bearings or bushings
- All components are also available separately



Model	Serial Number	Elevator Bushing Kit	Rudder Bushing Kit
120,140,140A	All	EBC-KT-6	RBC-KT-8
150,150A,B,C,D,E	All	EBC-KT-1	RBC-KT-1
150F,G,H,J	All	EBC-KT-1	RBC-KT-2
150K <sup>1</sup> , A150K <sup>1</sup>	150K S/N 15071129 thru 15071621 and A150K S/N A1500001 thru A1500129	EBC-KT-1	RBC-KT-3
150K <sup>1</sup> , L,M, A150K <sup>1</sup> , L,M	150K S/N 15071622 thru 15072003 and A150K S/N A1500130 thru A1500226	EBC-KT-2	RBC-KT-3
A-150L, A-A150L	All	EBC-KT-2	RBC-KT-3
F150F,G,H,J	All	EBC-KT-1	RBC-KT-2
F150K,L <sup>1</sup> , FA150K <sup>1</sup>	F150L S/N F15000659 thru F15000699 and FA150K S/N FA1500001 thru FA1500039	EBC-KT-1	RBC-KT-3
F150L <sup>1</sup> ,M, FA150K <sup>1</sup> ,L,M	F150L S/N F15000700 thru F15001143 and FA150K S/N FA1500040 thru FA1500081	EBC-KT-2	RBC-KT-3
FR150L,M	All	EBC-KT-2	RBC-KT-3
152 <sup>1</sup> , A152 <sup>1</sup>	152 S/N 15279406 thru 15285833 and A152 S/N A1520735 thru A1521025	EBC-KT-3	RBC-KT-3
	152 S/N 15285834 thru 15286033 and A152 S/N A1521026 thru A1521049	EBC-KT-4	RBC-KT-3
F152 <sup>1</sup> , FA152 <sup>1</sup>	F152 S/N F15201429 thru F15201943 and FA152 S/N FA1520337 thru FA1520387	EBC-KT-3	RBC-KT-3
	F152 S/N F15201944 thru F15201980 and FA152 S/N FA1520388 thru FA1520425	EBC-KT-4	RBC-KT-3
170, 170A,B	All		RBC-KT-11
172, 175	172 S/N 28000 thru 46754 and 175 S/N 55001 thru 56238	EBC-KT-5	RBC-KT-4 or RBC-KT-4A <sup>4</sup>
172A,B,C <sup>1</sup> , 175A,B,C <sup>1</sup>	172A,B,C S/N 46755 thru 17249085 and 175A,B,C S/N 56239 thru 17557064	EBC-KT-5	RBC-KT-5
172C <sup>1</sup> , 175C <sup>1</sup>	172C S/N 17249086 thru 17249544 and 175C S/N 17557065 thru 17557119	EBC-KT-5	RBC-KT-6
172D,E,F,G,H,I,K,L,M,N,P <sup>1</sup>	S/N 17249545 thru 17275963	EBC-KT-5	RBC-KT-6
172P <sup>1</sup> , Q,R,S	S/N 17275964 and On	EBC-KT-5	RBC-KT-7
172RG, P172D, R172K	All	EBC-KT-5	RBC-KT-6
F172D,E,F,G,H,K,L,M,N,P <sup>1</sup>	S/N F172-0001 thru F17202208	EBC-KT-5	RBC-KT-6
F172P <sup>1</sup>	S/N F17202209 thru F17202254	EBC-KT-5	RBC-KT-7
FP172, FR172E,F,G,H,J,K	All	EBC-KT-5	RBC-KT-6
177,177A,B,177RG,F177RG	All	No kit available	MC0532104K Bushing Only

<sup>1</sup> Partial model eligibility.

Rudder Bushing Kit Components			
Kit P/N	Qty	Part Number	Description
RBC-KT-1	1	MCS1003-65A	Bearing
	1	MC0432003-1K	Bushing <sup>5</sup>
	1	AN3-7A	Bolt
	1	NAS1149F0363P	Washer
RBC-KT-2	3	MCS1004-42A	Bearing
	3	MC0532104K	Bushing <sup>5</sup>
	3	AN4-11A	Bolt
	3	NAS1149F0463P	Washer
	3	MS21042L4	Nut
	3	MCS1004-42A	Bearing
RBC-KT-3	3	MC0532104K	Bushing <sup>5</sup>
	3	AN4-10A	Bolt
	3	NAS1149F0463P	Washer
	3	MS21042L4	Nut
	2	MCS1003-29A	Bearing
	2	MC0532104K	Bushing <sup>5</sup>
RBC-KT-4 <sup>2</sup>	2	AN4-11A	Bolt
	2	NAS1149F0463P <sup>5</sup>	Washer
	2	MS21042L4 <sup>5</sup>	Nut
	1	RBC-KT-4	Rudder Bushing Kit
RBC-KT-4A <sup>4</sup>	1	AN4-13A	Bolt
	1	MS21042L4	Nut
	1	MS24462-4	Bearing
	1	NAS1149F0432P	Washer
RBC-KT-5	1	NAS1149F0463P	Washer
	2	MCS1003-29A	Bearing
	1	MCS1004-42A <sup>2</sup>	Bearing
	3	MC0532104K	Bushing <sup>5</sup>
	3	AN4-11A	Bolt
	3	NAS1149F0463P	Washer
RBC-KT-6	2	MCS1003-29A	Bearing
	1	MCS1004-42A <sup>2</sup>	Bearing
	3	MC0532104K	Bushing <sup>5</sup>
	3	AN4-11A	Bolt
	2	NAS1149F0463P <sup>5</sup>	Washer
	2	MS21042L4 <sup>5</sup>	Nut
RBC-KT-7	2	MCS1003-29A	Bearing
	1	MCS1004-42A <sup>2</sup>	Bearing
	3	MC0532104K	Bushing <sup>5</sup>
	3	AN4-11A	Bolt
	2	NAS1149F0432P <sup>5</sup>	Washer
	2	MS21042L4 <sup>5</sup>	Nut
RBC-KT-8	2	MC0431119K	Bushing <sup>5</sup>
	2	MCS1003-11A	Bearing
	2	AN3-7A	Bolt
	2	MS21044N3	Nut
	2	AN4-11A	Bolt
	2	MS21044N4	Nut
RBC-KT-11	2	S1K5	Bearing

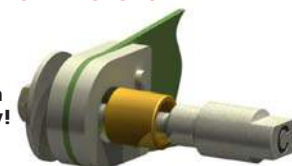
Elevator Bushing Kit Components				
Kit P/N	Qty	Part Number	Description	
EBC-KT-1	2	MCS1003-65A	Bearing	
	2	MC0432003-1K	Bushing <sup>5</sup>	
	2	AN3-7A	Bolt	
	2	NAS1149F0363P	Washer	
EBC-KT-2	2	MCS1003-65A	Bearing	
	2	MC0432003-1K	Bushing <sup>5</sup>	
	2	AN3-7	Bolt	
	2	NAS1149F0363P	Washer	
	2	AN310-3	Nut	
	2	MS24665-132	Pin	
EBC-KT-3	2	MCS1003-65A	Bearing	
	2	MC0432003-1K	Bushing <sup>5</sup>	
	2	AN3-7A	Bolt	
	2	NAS1149F0363P	Washer	
	2	MS21044N3	Nut	
	2	MCS1003-28A	Bearing	
EBC-KT-4	2	MC0432173-3K	Bushing <sup>5</sup>	
	2	AN4-7A	Bolt	
	2	NAS1149F0463P	Washer	
	2	MS21042L4	Nut	
EBC-KT-5	4	MCS1003-29A	Bearing	
	4	MC0532104K	Bushing <sup>5</sup>	
	4	AN4-11A	Bolt	
	4	NAS1149F0463P	Washer	
EBC-KT-6	4	MS21042L4	Nut	
	4	MC0422215	Bushing	
	4	S1997-7G8	Bearing	
	4	AN4-11A	Bolt	
		4	MS21044N4	Nut

**Notes:**  
<sup>2</sup> Lower Hinge Only  
<sup>3</sup> Center and Lower Hinge Only  
<sup>4</sup> Kit RBC-KT-4 contains components to service the upper and middle hinges. Kit RBC-KT-4A contains components to service the upper, middle and lower (bellcrank) hinges.  
<sup>5</sup> Bushing part numbers MC0431119K, MC0432003-1K, MC0432173-3K and MC0532104K include a nominal bushing (with no "K" suffix), an oversized bushing (with a "P1" suffix), and selective fit instructions.  
**Example:** MC0432003-1K includes nominal bushing MC0432003-1 and oversized bushing MC0432003-1P1.



## Elevator and Rudder Bearing Installation Tool for Cessna Aircraft

Makes pressing bearings in or out easy!  
P/N 990

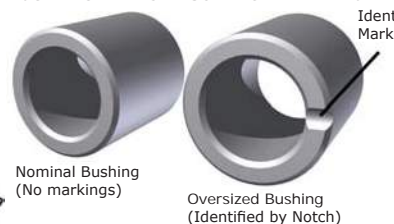


This unique tool is specifically designed to prevent damage when installing and removing **sintered bronze** rudder and elevator hinge bearings contained in kits EBC-KT-1 thru 5 and RBC-KT-1 thru 8.

- Eight piece kit for all sizes of sleeve bearings
- Heat treated stainless steel will last a lifetime
- Comes in a convenient storage pouch



### CONTROL HINGE BUSHING IDENTIFICATION



**Rudder and Elevator Hinge Bearing Kits for Cessna Caravan Aircraft**

**In stock for immediate shipment! Buy with confidence.**

- Convenient kits include bearings and all attaching hardware
- Kits for aircraft equipped with and without hinge modification service kits
- One elevator kit and one rudder kit required per aircraft
- Industry standard hardware



Cessna has issued several non-mandatory service bulletins and service kits for the rudder and elevator hinge bearings on the Caravan due to a corrosion issue with the needle bearing. The service kits require modification to the hinge structure, not just the bearing itself. The new bearing is a different size than the "original" design, so the mounting hardware is different as well. Because of these structural changes any aircraft that has had the service kits installed cannot use hardware from a non-service kit aircraft. McFarlane offers kits for both configurations.

Aircraft	Serial Number	Elevator Kit P/N	Rudder Kit P/N
208	20800001 thru 20800221	EBC-KT-7 <b>1</b>	RBC-KT-9 <b>3</b>
		EBC-KT-8 <b>2</b>	RBC-KT-10 <b>4</b>
208	20800222 thru 20899999	EBC-KT-7	RBC-KT-9
208A	20800007 thru 20800102	EBC-KT-7 <b>1</b>	RBC-KT-9 <b>3</b>
		EBC-KT-8 <b>2</b>	RBC-KT-10 <b>4</b>
208B	208B0001 thru 208B0318	EBC-KT-7 <b>1</b>	RBC-KT-9 <b>3</b>
		EBC-KT-8 <b>2</b>	RBC-KT-10 <b>4</b>
208B	208B0319 thru 208B9999	EBC-KT-7	RBC-KT-9

- 1** With SK208-102, SK208-106, & SK208-107 installed.
- 2** Without SK208-102, SK208-106, & SK208-107 installed.
- 3** With SK208-99, SK208-104 and SK208-105 installed.
- 4** Without SK208-99, SK208-104 and SK208-105 installed.

Save \$\$



**Kit Contents: (Components also available separately)**

P/N EBC-KT-7			P/N EBC-KT-8			P/N RBC-KT-9			P/N RBC-KT-10		
Qty	Part Number	Description	Qty	Part Number	Description	Qty	Part Number	Description	Qty	Part Number	Description
4	AN4-12	Bolt	4	AN5-10	Bolt	3	AN4-12	Bolt	3	AN4-11	Bolt
1	AN4-13	Bolt	1	AN5-13	Bolt	3	MS17825-4	Nut	3	MS17825-4	Nut
5	MS17825-4	Nut	5	MS17825-5	Nut	3	MS24665-134	Cotter Pin	3	MS24462-4	Bearing
4	MS24665-134	Cotter Pin	5	MS24461-5	Bearing	3	MS27641-4	Bearing	3	MS24665-134	Cotter Pin
1	MS24665-136	Cotter Pin	4	MS24665-134	Cotter Pin	3	NAS1149F0432P	Washer	3	NAS1149F0432P	Washer
5	MS27641-4	Bearing	1	MS24665-136	Cotter Pin	6	NAS1149F0463P	Washer	6	NAS1149F0463P	Washer
4	NAS1149F0432P	Washer	10	NAS1149F0563P	Washer						
6	NAS1149F0463P	Washer									

**Hinge and Bellcrank Bearing for Cessna Aircraft**

**Hard to find, frequently replaced! Buy from McFarlane and Save \$\$**  
P/N MS24462-4



**P/N MS24461-4**

Used as aileron and elevator bearings on many single engine Cessna aircraft!



Aircraft Model	Aileron Hinge Qty/Aircraft	Elevator Bellcrank Qty/Aircraft	Center Elev. Hinge Qty/Aircraft	Rudder Hinge Qty/Aircraft	Elevator Hinge Qty/Aircraft	Rudder Bellcrank Qty/Aircraft
172, 175						1
177, 177A,B, 177RG, F177RG	6					
180, 180A,B,C,D,E,F,G,H,J,K			1		4	
182, 182A,B,C,D			1		4	
182E,F,G,H,J,K,L,M,N,P,Q,R,S,T, A182J,K,L,N, F182P,Q, FR182, R182, T182, T182T, TR182			1		4 <b>1</b>	
185, 185A,B,C,D,E, A185E,F			1		4	
188, 188A,B, A188, A188A, A188B, T188C	6				4	
210-5 (205), 210-5A (205A)			1	1	4	
206, U206, U206A,B,C,D,E	4		1		4	
206H, T206H	4	1	1		4 <b>2</b>	
P206, P206A,B,C,D,E	4		1		4	
TP206A,B,C,D,E, TU206A,B,C,D,E	4		1		4	
TU206F,G, U206F,G			1		4	
207, 207A, T207, T207A	4	1	1		4	
210, 210A			1		4	
210B,C			1	1	4	
210D,E,F	4	1	1	1	4	
210G,H,J			1		4	
210K,L,M	6	1	2		4	
210N,R	6	1	1		4	
P210N	6	1	1		4	
P210R	6	1	1		4	
T210F	4	1	1	1	2	
T210G,H,J			1		4	
T210K,L,M	6	1	2		4	
T210N,R	6	1	1		4	

- 1** 182T s/n 18280945 thru 1821642; T182T s/n 18208001 thru 18208447 only
- 2** For installation on 206H, T206H s/n 20608001 thru 20608956 & T20608001 thru T20608956 only

**P/N S1K5 Bearing, Fafnir**

Aircraft Model
170, 170A,B
180, 180A,B,C,D,E,F,G,H,J,K
182, 182A,B
185, 185A,B,C,D,E, A185E,F <b>1</b>
188, 188A,B
A188B <b>2</b>
A188B <b>3</b> (w/ large hopper)
<b>1</b> 185-0001 thru 18504425
<b>2</b> 18802349 thru 18803856
<b>3</b> 18800967T thru 18803968T



Superseded Table	
4NBC6122P	USE MS24461-4
4NCC910P	USE MS24462-4
AR4-1	USE MS24462-4
NAS296-4A	USE MS24462-4
NAS505-4	USE MS24461-4
NAS506-4	USE MS24462-4

Flight Control Surface and Attaching Hardware

## Can You Stop Nose Gear Shimmy?

By Dave McFarlane



**Nose gear shimmy is destructive and not normal, and yes, it can be stopped. Never allow any amount of nose gear shimmy to continue. The quicker you take action, the easier it will be to stop it.**

**"A Cessna nose wheel is supposed to shimmy."**

**"You can't really stop it."**

**"All the Pipers do it."**

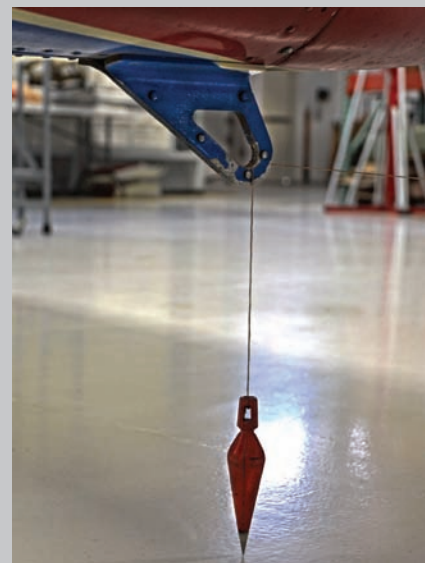
You have heard similar comments many times. My response is always the same question. "Did it shimmy when it was new?" I would like to share with you our experience in solving this problem.

I will bore you with the routine detail of what to look for and how to fix the mechanical issues that allow shimmy to get started in a minute. First, let's talk about the physics of nose gear shimmy. Years ago and after a lot of frustration by us and our customers and a lot of experimenting, we discovered what was causing our shimmy problems. We observed that uncorrectable nose gear shimmy seemed to only happen on hard surface runways and rarely on turf runways. Our customers reported that they could stop the shimmy by either taking weight off the nose gear with the elevator or applying the brakes putting more weight on the nose gear. It didn't seem logical that just changing the weight on the nose gear could affect shimmy since the airplane is designed to function with different loading on the nose gear and the weight change does not significantly change the nose gear geometry. We guessed that our customer's shimmy might have been stopped by the fact that the changing nose weight also changed the tire shape. We assumed that when the tire shape changes so does the contact profile of the tire to the runway. We had already done all of the normal things to perfect the nose gear and shimmy damping system rigging and mechanicals. The customer's tire seemed fine with no unusual wear patterns that could be detected. We still had shimmy! In frustration, an experiment was done by removing some tread rubber from

the tire. It did not seem to be a logical solution, but it worked. The shimmy went away!

There are some interesting dynamics going on during the shimmy action (besides trying to vibrate your airplane apart). When the nose tire is shimmying down the runway it is oscillating from pointing left and then pointing right many times per second while the airplane is going straight. The greater the tire angle diverges from straight ahead, the greater the shimmy inertia and energy. Since the oscillations are equal in divergence angle and time duration, the rubber on your tire is being scuffed in a uniform and distinct pattern that repeats itself each revolution of the tire. This wear pattern shape is directly related to the tire shape created by the amount of weight on the nose tire, the tire pressure, and the speed of the aircraft. The frequency of the shimmy is a derivative of these factors. You might have noticed a braking feel to the airplane when severe shimmying is happening. The braking is from the nose tire skidding sideways during the more extreme angle divergent portion of the shimmy cycle. Since shimmy generally takes place for a short time, the early stages of this wear pattern are microscopic and hard to detect visually or by feeling the tire tread by hand. After the first shimmy, the then created wear pattern tends to start the oscillating action when the airplane speed and nose gear weight matches the speed and weight that the airplane was traveling when the shimmy wear pattern was created. You might have noticed that shimmy starts at about the same landing or taxiing speed each time. The results are that the shimmy gets worse every time it happens even if the mechanical issues that let it start shimmying the first time have been corrected and the shimmy dampener is working and trying to do its job. The shimmy dampener simply is not strong enough to prevent shimmy when a nose tire has an established shimmy wear pattern in the tread. The hidden mystery to this problem is that early shimmy wear patterns in the tire are virtually un-detectable.

## Drop a plumb bob to determine aircraft center line



One of the hardest parts of proper rigging is determining where the nose tire is straight ahead.

The method we use is to create an airplane center line by dropping a plumb bob from the center of the firewall to the ground (center can be determined from the rivet pattern or measuring from the motor mount attachments) and again dropping the plumb bob from the center of the tail tie down hook. Mark both of the plumb bob points on the shop floor and create a chalk line mark between the points. This is your airplane center line. Extend the center line forward as close to the nose tire as possible.

Place a straight 2x4 stud or a piece of straight angle iron against the side of the nose tire. Adjust the nose wheel and tire until the 2x4 is parallel with the airplane center line. Check your results by placing the 2x4 on the other side of the tire. The 2x4 acts as a tire angle multiplier giving you measurable results.

Parallelism can be checked by simply measuring the distance between the 2x4 and the chalk line in two places. Be sure not to move the airplane while you make your nose gear alignment adjustments.

### Prevention Tips

The key to shimmy problems is to prevent shimmy from starting in the first place. You have to start with the routine stuff that is in the service manuals. The Cessna Pilots Association has a very good article on fixing the mechanical issues associated with nose shimmy on Cessna airplanes. Their Tech Note No. 001, Revision 004 dated 04/15/2010 does a good job of describing and illustrating the system and directing corrective repairs. This tech note seems to parallel the Cessna Service Information Letter SE84-21 on the same subject.

Continued on next page

## Continued from previous page

**1** The first step in preventing the problem is to look for any un-damped nose gear movement. This is motion of the nose tire without the shimmy dampener moving. Looseness in the nose gear system cannot be detected with the nose wheel off the ground unless the pressure is released from the nose strut. When you move the nose wheel right and then left, the shimmy dampener should also move. If there is any un-damped motion, tighten or replace the worn components such as the torque link bushings and spacers, the steering collar, and shimmy dampener attachments.

**2** Remove the shimmy dampener attachments. Check the shimmy dampener for proper fluid and proper operation. Check the dampener for seal condition and excessive wear in the piston and dampener bore. The dampener shaft must have considerable resistance to motion when moved quickly but move easily when moved slowly.

**3** Nose gear rigging is important to prevent shimmy. If the steering rods or bungees are biased, damaged, or holding improper tension, shimmy can be started. The aircraft service manuals do a good job of describing proper nose gear rigging procedures. Wheel bearings must be in good condition and properly adjusted.

**4** Bad bearings or adjustments can allow un-damped tire movement. Tire balance is also critical for preventing shimmy as an out of balance tire puts cyclic centrifugal loads on the tire tread. Out of round tires will do the same thing. One of the objectives of preventing shimmy is to not have any type of cyclic loads going into the tire system.

Check the tire itself for casing shift or other damage as follows:

- Take the weight off the nose tire for a period of time to let the tire take its proper shape.
- Assure that the tire is inflated to the proper pressure for the aircraft.
- Spin the tire by hand and look for any significant lateral divergence (tire wobble) or vertical divergence (out of round). The tire must rotate true, but a little out of round is normal.
- If tire casing shape problems are detected, let the tire stabilize longer without weight. If that does not correct the problem, the only fix is to replace the tire.
- If the tire casing seems to run out true and the tire is determined to be airworthy in all aspects, remove the shimmy wear pattern in the tire tread.

How do you remove rubber on a good tire to get rid of this mysterious and evil tread wear pattern that nobody can see or feel? We use an electric disc grinder that is used in the weld shop for grinding welds and smoothing structural steel. Any large sanding disk power tool with a course grit disc or a belt sander would also work. There will be some rubber flying around the shop so this is a good job to do outside. Get someone else to do it if you have allergic reactions to latex or rubber products. Block the nose gear off the ground and give the tire time to stabilize its

**5** shape without weight. Again assure that the tire has the correct inflation pressure. Touch the grinder to the tire at an angle that rotates the tire and removes rubber. With a little practice you will be able to control the tire rotational speed with small grinder angle adjustments. If you allow the tire to rotate too fast, very little rubber will be removed. If you allow the tire to rotate too slow, it is hard to remove the rubber evenly. Taxi speed tire rotation seems to work best. You can actually remove small "out of round" tire conditions by being steady with the grinder and allowing the grinder to work harder on the tire high spots. The grinder must be worked across the tire tread as evenly as you can. Never grind into the sidewall of the tire. You can feel advanced shimmy wear patterns before you start and they will take more work to remove than the patterns you cannot feel. The tire must feel smooth and even when you are done. Only experience will tell you how much rubber to remove. Be sure that the tire has good tread depth when you are finished, and verify that there is not any inadvertent damage to the tire. Clean up the rubber grindings and high speed taxi test the airplane. You will probably be smiling with the results. It is a good idea to re-balance the tire after grinding the tread and before returning the aircraft to service. If the test does fail, repeat the process. Yes, with a little patience, this shimmy beast can be tamed!



**Use a belt sander to remove the shimmy wear pattern in the tread.**



**Use wheel balancer P/N TOOL128 for 3/4" diameter axles or P/N TOOL129 for 1", 1 1/4", and 1 1/2" axles to check tire for proper balance (additional sizes available).  
See page 263 for additional information.**

# Landing Gear and Nose Wheel Steering Parts

Landing Gear and Nose Wheel Steering Parts

## Nose Wheel Steering Rod Boots for Cessna 150 thru 182 Aircraft

**New!** Improved! Extended Life and Better Fire Protection Boot P/N MC0713666-1 for 182E thru 182T  
McFarlane has improved the design of both the boot and the retaining flange. The Cessna boot is prone to ripping and tears caused by fatigue and premature infrared heat related material break down. McFarlane has utilized a three ply material design incorporating both Kevlar and fiberglass, and a supple high temperature rubber coating. Kevlar and fiberglass work together to prevent wear, fatigue, and heat failures while offering 15 times the fire resistance of the original boot for extended fire protection at 2,000 degrees F.

McFarlane has also upgraded the original aluminum flange to a stainless steel firewall material. The flange is included with the boot.

- Kevlar/Fiberglass composite for strength and fire protection
- Fire proof stainless steel flange
- Deeper convoluted design for better flexibility and longer life

### Don't Forget the Hose Clamp, P/N MCS2357-2S!

Cessna failed to list the clamp in the parts catalog, therefore people tend to use a nylon cable tie which will easily melt away with an engine fire. Always use metal clamp P/N MCS2357-2S to attach the boot to the steering link.

### P/N MC0413304-3 for 150 thru 152 series

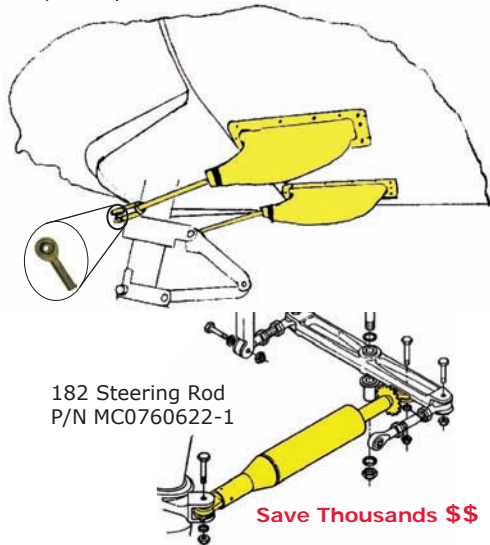
P/N MC0543015-6 for 172, 175 and early 182 series  
McFarlane 150 thru early 182 series steering rod boots are manufactured with a black Kevlar®/fiberglass blend fabric. The fatigue resistance of Kevlar is uniquely mated with the fire resistance of fiberglass. This is a super tough, high temperature fabric that will provide many years of outstanding performance.

- Keeps exhaust and carbon monoxide out of the cabin
- Protects the cabin in case of an engine fire

## Doubler for Cessna Aircraft

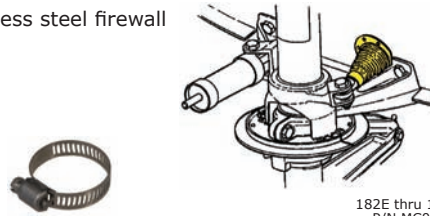
Doubler for 150-152 aircraft is now McFarlane FAA-PMA approved.

- White Poly Paint - ready to install
- 1/2 the price!



182 Steering Rod  
P/N MC0760622-1

Save Thousands \$\$



182E thru 182T Boot  
P/N MC0713666-1

Save Hundreds \$\$



150 thru early  
182 series boot

**These Bad Boys  
Can Take the Abuse!**



**Doubler Now FAA-PMA  
Approved at 1/2 the Price!**

Model	S/N	Boot (2 per A/C)	Steering Rod		Doubler (2 per A/C)	Rod End (2 per A/C)
			Left Hand	Right Hand		
150, 150A,B,C,D,E,F,G,H	All	MC0413304-3	MC0543022-3	MC0543022-4	MC0413304-6	S1107-3
150J,K,L,M	All	MC0413304-3	MC0543022-3	MC0543022-4	MC0413304-6	S1823-3
A150K,L,M	All	MC0413304-3	MC0543022-3	MC0543022-4	MC0413304-6	S1823-3
F150F,G,H	All	MC0413304-3	MC0543022-3	MC0543022-4	MC0413304-6	S1823-3
F150J,K,L,M, FA150K,L	All	MC0413304-3	MC0543022-3	MC0543022-4	MC0413304-6	S1823-3
FRA150L,M	All	MC0413304-3	MC0543022-3	MC0543022-4	MC0413304-6	S1823-3
152, A152, F152, FA152	All	MC0413304-3	MC0543022-3	MC0543022-4	MC0413304-6	S1823-3
172, 172A	All	MC0543015-6	MC0543022-1	MC0543022-2	0543026-1	S1107-3
172B,C	All	MC0543015-6	MC0743008-1	MC0743008-2	0543026-1	S1107-3
172D,E,F,G,H,I,K,L,M,N,P,Q	All	MC0543015-6	MC0543022-1	MC0543022-2	0543026-1	S1823-3
F172D,E,F,G,H,K,L,M,N,P	All	MC0543015-6	MC0543022-1	MC0543022-2	0543026-1	S1823-3
FP172	All	MC0543015-6	MC0543022-1	MC0543022-2	0543026-1	S1823-3
FR172E,F,G,H,J,K	All	MC0543015-6	MC0543022-1	MC0543022-2	0543026-1	S1823-3
P172	All	MC0543015-6	MC0543022-1	MC0543022-2	0543026-1	S1823-3
R172E,F,G,H,K	All	MC0543015-6	MC0543022-1	MC0543022-2	0543026-1	S1823-3
172R,S	All	MC0543015-6	MC0543022-1	MC0543022-2	0543026-1	S1823-3
175, 175A,B,C	All	MC0543015-6	MC0743008-1	MC0743008-2	0543026-1	S1107-3
177, 177A,B	All					S1823-3
182,182A,B,C,D	All	MC0543015-6	MC0743008-1	MC0743008-2	0543026-1	S1107-3
182E,F,G,H,J,K,L,M,N,P,Q,R,S,T F182P,Q, T182, T182T	All	<b>New!</b> MC0713666-1		<b>New!</b> MC0760622-1	<b>New!</b> Hose Clamp P/N MCS2357-2S <b>New!</b> Rod End P/N MCMM3M12	

1 Quantity of one required per aircraft.

2 Models R172E,F,G,H are pending FAA-PMA approval

## Nose Wheel Steering Rods for Cessna Aircraft

Tired of 'soft' worn out steering rods?  
Replace them with improved McFarlane steering rods.

- Redesigned long life springs!
- Stainless steel tubes for improved corrosion resistance (MC0543022 Series)
- Hardened internal washer for greater durability
- Optimum performance even after years of service!

### **New!** Steering Bungee P/N MC0760622-1 for 182E thru 182T

**New!** Sprocket P/N MC0760630-1 for 182E thru 182T  
Anodized to prevent corrosion and wear

**New!** Rod End P/N MCMM3M12 for 182E thru 182T  
Direct replacement



MC0543022 Series

MC0743008 Series

### Maintenance Tip:

How do I know if my steering rods need to be replaced?

- Nose wheel steering is unusually sluggish.
- One or both sides offer little or no spring resistance to steering input.
- More than 1 1/8" of free travel is present in either steering rod.
- The aircraft pulls to either side during taxiing.
- Inconsistent steering or rudder rigging.

FAA-PMA Approved

**Nose Gear Torque Link Repair Kits for Cessna Aircraft**

P/Ns TL-KT-1 thru TL-KT-11

- Includes all commonly replaced torque link parts in a convenient kit
- McFarlane manufactured FAA-PMA approved kits.
- Fits most single engine Cessna aircraft.
- Now with specific model eligibility.
- Prevents Nose Wheel shimmy.

**Kits include:**

Bushings, Spacers, Shims, Nuts, Bolts, Washers and Cotter Pins.

**Brass Nose Gear Torque Link Shim Kit for Cessna Aircraft**

- Eliminates undamped torque link motion to prevent shimmy
- Also available individually or in torque link repair kits

P/N TL-SHIM-KT-1

**Kit contains:**

- (2) MCS1450-6B14-005 .005" Thick
- (2) MCS1450-6B14-007 .007" Thick
- (5) MCS1450-6B14-010 .010" Thick

**Torque Link Spacers for Cessna Aircraft**

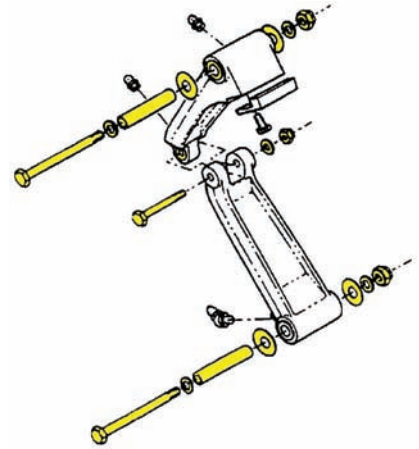
P/N MC0543047-1 and MC0543047-2

- Tightly controlled minimal end chamfer maximizes bearing surface between spacer and fork to ensure a secure clamp and prevent fork wear.
- Precision length



**NAS1149F0316P Ultra-Thin Washers**

These hard to find 3/16" ID, 0.016" thick standard steel washers are sometimes useful for fine tuning the center "knee" joint fit on most Cessna torque links. Available in packs of 5. **Not included in torque link kits.**



Model	Serial Number	Part Number																	
		TL-KT-1	TL-KT-2	TL-KT-4	TL-KT-5	TL-KT-6	TL-KT-7	TL-KT-8 <sup>2</sup>	TL-KT-9 <sup>2,7</sup>	TL-KT-10	TL-KT-11	TL-SHIM-KT-1	MC0543047-1	MC0543047-2	MCS1450-6B14-005	MCS1450-6B14-007	MCS1450-6B14-010		
150, 150A,B,C,D,E,F,G,H,J,K,L,M	All-Except aircraft with heavy duty nose gear	•																	
A150K-M, F150F-M, FA150K-M, FRA150L,M	All	•																	
152, A152, F152, FA152	All	•																	
172 <sup>1</sup>	28000 thru 36141, 36150 thru 36153							•											
172 <sup>1</sup> , 172A,B,C,D,E,F,G,H,I,K,L,M,N,P,Q,R,S	36142 thru 36149, 36154 thru 172S99999	•																	
172RG	All					•													
F172D-P, FP172, FR172E-K, P172D, R172K	All	•																	
175, 175A,B,C	All	•																	
177, 177A,B	All									•									
177RG, F177RG	All					•													
182	All																		
182A,B,C,D,E,F,G,H,J,K,L,M,N,P,Q	All																		
182R	All					•													
182S,T	All	•																	
F182P,Q	All																		
R182, T182, FR182	All																		
T182T	All	•																	
TR182	All																		
205 (210-5) 205A, (210-5A)	All	•																	
206, P206, P206A, TP206A, TU206A, U206, U206A <sup>2</sup>	All	•	•																
P206B,C,D,E <sup>1</sup> , TP206B,C,D,E <sup>1,6</sup>	P206-0307 thru P20600641																		
P206E <sup>1</sup> , TP206E <sup>1</sup>	P20600642 thru P20600647																		
TU206B,C,D,E <sup>1</sup> , U206B,C,D,E <sup>1,6</sup>	U206-0657 thru U20601537																		
TU206E <sup>1</sup> , F <sup>1</sup> , U206E <sup>1</sup> , F <sup>1</sup>	U20601538 thru U20602199																		
TU206F <sup>1</sup> , G, U206F <sup>1</sup> , G	U20602200 thru U20607020					•													
206H, T206H	All																		
207 <sup>1</sup> , T207 <sup>1,4</sup>	20700001 thru 20700228																		
207 <sup>1</sup> , 207A, T207 <sup>1</sup> , T207A	20700229 thru 20700788																		
210, 210A,B,C,D,E,F,G,H,J	All	•																	
210K <sup>2</sup>	All	•	•																
210L <sup>1,5</sup> , T210L <sup>1,5</sup>	21059503 thru 21060255	•																	
210L <sup>1</sup> , M,N,R	21060256 thru 21065009																		
P210N,R	All																		
T210F,G,H,J,K	All	•																	
T210L <sup>1</sup> , M,N,R	21060256 thru 21065009																		

<sup>1</sup> Partial model eligibility

<sup>2</sup> TL-KT-8 and TL-KT-9 torque link kits are used on Cessna model aircraft with heavy duty landing gear that utilizes AN6 size (3/8-24 UNF) bolts in the upper and lower torque link joints. The normal duty landing gear uses AN4 size (1/4-28 UNF) bolts in the upper and lower torque link joints.

<sup>3</sup> Aircraft models in this serial range may use one of two choices for McFarlane Torque Link Kits. The aircraft that have both upper and lower spacers measuring ~ 2 inches long will use McFarlane Torque Link Kit TL-KT-1 (containing two MC0543047-1 spacers). The aircraft that has an upper spacer measuring ~ 2.6 inches and a lower spacer measuring ~2 inches will use McFarlane Torque Link Kit TL-KT-2 (containing one MC0543047-1 and one MC0543047-2 spacer).

<sup>4</sup> Aircraft models in this serial range may use one of two choices for McFarlane Torque Link Kits. The aircraft that have both upper and lower spacers measuring ~ 2 inches long will use McFarlane Torque Link Kit TL-KT-5 (containing two MC0543047-1 spacers). The aircraft that has an upper spacer measuring ~ 2.6 inches and a lower spacer measuring ~2 inches will use McFarlane Torque Link Kit TL-KT-4 (containing one MC0543047-1 and one MC0543047-2 spacer).

<sup>5</sup> Aircraft models in this serial range may use one of two choices for McFarlane Torque Link Kits. The aircraft that have both upper and lower spacers measuring ~ 2 inches long will use McFarlane Torque Link Kit TL-KT-1 (containing two MC0543047-1 spacers). The aircraft that has an upper spacer measuring ~ 2.6 inches and a lower spacer measuring ~2 inches will use McFarlane Torque Link Kit TL-KT-7 (containing one MC0543047-1 and one MC0543047-2 spacer).

<sup>6</sup> Aircraft models in this serial range may use one of two choices for McFarlane Torque Link Kits. The aircraft that have both upper and lower spacers measuring ~ 2 inches long will use McFarlane Torque Link Kit TL-KT-1 (containing two MC0543047-1 spacers). The aircraft that has an upper spacer measuring ~ 2.6 inches and a lower spacer measuring ~2 inches will use McFarlane Torque Link Kit TL-KT-11 (containing one MC0543047-1 and one MC0543047-2 spacer).

<sup>7</sup> Availability of one component of this kit (0841000-63) is limited. Call for current status.



# Landing Gear and Nose Wheel Steering Parts

## Torque Link Stop Lugs and Safety Plate for Cessna Aircraft

Replace worn out stop lugs to reduce drag? Really?

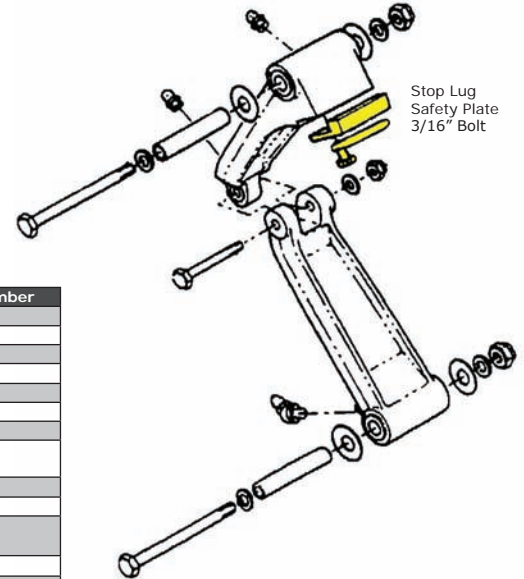
**This often overlooked but important part is affordable at McFarlane!** The torque link stop lug is a sacrificial part that hammers against a flat spot on the lower part of the shock strut outer tube when the strut extends after take off. This prevents the strut from overextending and forces the nose wheel and rudder system into proper alignment for flight.

Due to repeated hammering with every takeoff, these stop lugs must be periodically replaced. Excessive wear can allow overextension of the strut. They also often wear unevenly resulting in inconsistent alignment of the nose wheel in flight which then causes extra drag and yaw. The extra yaw can require increased rudder trim which causes even more drag. So yes, replacing a torque link stop lug can reduce drag!

- Safety plate features bend up tabs to secure stop lug bolts
- Super tough 4130 alloy steel
- Kits include stop lug, safety plate and applicable 3/16" bolts.

### Maintenance Tip:

Replace the stop lug if it is no longer flush with the strut, mushroomed, worn rounded, bent away from the torque link, or if it has stress cracks. The safety plate should not be reused.



Stop Lug  
Safety Plate  
3/16" Bolt

Aircraft	Serial Number	Stop Lug	Safety Plate	Kit Part Number
150D,E,F <sup>1</sup>	15060477 thru 15063457	MC0442506-8 <sup>2</sup>	MC0442506-9 <sup>2</sup>	TLSL-KT-1
150G,H,J,K,L,M	All	MC0442506-8	MC0442506-9	TLSL-KT-1
A150K,L,M	All	MC0442506-8	MC0442506-9	TLSL-KT-1
F150F	F150-0001 thru F150-0055	MC0442506-8	MC0442506-9	TLSL-KT-1
F150G,H,J,K,L,M	All	MC0442506-8	MC0442506-9	TLSL-KT-1
FA150K,L,M	All	MC0442506-8	MC0442506-9	TLSL-KT-1
152, A152, F152, FA152	All	MC0442506-8	MC0442506-9	TLSL-KT-1
172H,I,K,L,M	All	MC0442506-8	MC0442506-9	TLSL-KT-1 <sup>2</sup> TLSL-KT-2 <sup>3</sup>
172N,P,Q	All	MC0442506-8	MC0442506-9	TLSL-KT-2
172R,S	All	MC0442506-8	MC0442506-9	TLSL-KT-1
F172H,K,L,M	All	MC0442506-8	MC0442506-9	TLSL-KT-1 <sup>2</sup> TLSL-KT-2 <sup>3</sup>
F172N,P	All	MC0442506-8	MC0442506-9	TLSL-KT-2
FR172E,F,G	All	MC0442506-8	MC0442506-9	TLSL-KT-1 <sup>2</sup> TLSL-KT-2 <sup>3</sup>
FR172H,J	All	MC0442506-8	MC0442506-9	TLSL-KT-1
FR172K	All	MC0442506-8	MC0442506-9	TLSL-KT-2
R172E,F,G,H,K	All	MC0442506-8	MC0442506-9	TLSL-KT-2
182K,L,M,N	All	MC0442506-8 <sup>2</sup> MC0442506-11 <sup>3</sup>	MC0442506-9	TLSL-KT-2 <sup>2</sup> TLSL-KT-4 <sup>3</sup>
182P <sup>1</sup>	18260826 thru 18262465	MC0442506-11	MC0442506-9	TLSL-KT-4
	18262466 thru 18265175	MC0442506-11	MC0442506-9	TLSL-KT-4
182Q,R	All	MC0442506-11	MC0442506-9	TLSL-KT-4
182S,T	All	MC0442506-11	MC0442506-9	TLSL-KT-3
F182P,Q	All	MC0442506-11	MC0442506-9	TLSL-KT-4
T182T	All	MC0442506-11	MC0442506-9	TLSL-KT-3
206H, T206H	All		MC0442506-9	
P206B,C,D,E	All	MC0442506-8 <sup>2</sup>	MC0442506-9 <sup>2</sup>	TLSL-KT-2
TP206B,C,D,E	All	MC0442506-8 <sup>2</sup>	MC0442506-9 <sup>2</sup>	TLSL-KT-2
TU206B,C,D,E,F <sup>1</sup>	U206-0657 thru U20602199	MC0442506-8 <sup>2</sup>	MC0442506-9 <sup>2</sup>	TLSL-KT-2
TU206F <sup>1</sup> , G	U20602200 thru U20607020		MC0442506-9	
U206B,C,D,E,F <sup>1</sup>	U206-0657 thru U20602199	MC0442506-8 <sup>2</sup>	MC0442506-9 <sup>2</sup>	TLSL-KT-2
U206F <sup>1</sup> , G	U20602200 thru U20607020		MC0442506-9	
207, 207A, T207, T207A	All		MC0442506-9	

<sup>1</sup> Partial model eligibility  
<sup>2</sup> When equipped with heavy duty nose gear  
<sup>3</sup> When equipped with standard duty nose gear

### More Important Than You Think

Overextension of the nose strut due to a worn out stop lug can lead to a cascade of problems. McFarlane A&P mechanics have seen struts over extend to the point where the metering pin comes out of the orifice. This results in loss of dampening action and the pin hammering the orifice every landing and distorting and enlarging it. Over time, the excess nose strut travel and lack of dampening can result in fatigue cracks in the torque link arms. McFarlane recommends thoroughly inspecting all nose strut components when replacing a severely worn stop lug.

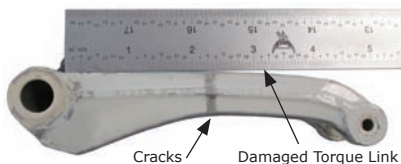
## Cessna Upper Torque Link Assembly

McFarlane has developed a stronger upper torque link for Cessna 210 Aircraft Upper Torque Link Assembly P/N MC1243426-2

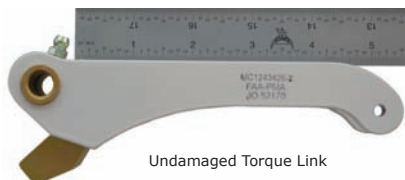
- Direct replacement for the original Cessna parts
- Stronger aluminum alloy and heavier flanges.
- More resistant to the bending
- Bent links allow the strut to overextend

Save Thousands \$\$

FAA-PMA Approved



Cracks Damaged Torque Link



Undamaged Torque Link

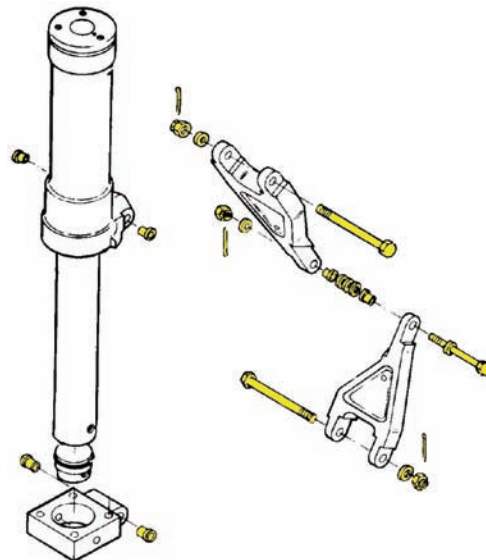


Aircraft	Part Number	Description	Upper Torque Link Assembly	Stop Lug	Bolt, Special	Shim	Lube Fitting	Link Only
210G,H, T210G,H	MC1243426-2	Upper Torque Link Assembly	•	•	•	•	•	•
210J,K,L,M,N,R, T210J,K,L,M,N,R	MC1243038-1	Stop Lug	•	•	•	•	•	•
P210N,R	MC1243422-1	Bolt, Special	•	•	•	•	•	•
	MC1243618-2	Shim	•	•	•	•	•	•
	MC1243618-3	Shim	•	•	•	•	•	•
	AS15002-1P	Lube Fitting	•	•	•	•	•	•
	6951	Link Only	•	•	•	•	•	•

## Nose Gear Torque Link Repair Kits for Piper Aircraft

Prevents shimmy by removing looseness in the torque links.

- Replaces all common wear torque link components in a convenient kit
- Fits most Piper aircraft
- Contains All FAA approved parts and standard hardware
- Save time and money! No more research and ordering of individual parts.



Aircraft	Serial Number	Main Wheel Kit 2 kits req. if not labeled Left/Right	Nose Wheel Kit
PA-23, PA23-160	All	PTL-KT-91	PTL-KT-91
PA-23-235	All	PTL-KT-92 w/o Notched Bushings PTL-KT-93 w/Notched Bushings	PTL-KT-92 w/o Notched Bushings PTL-KT-93 w/Notched Bushings
PA-23-250	All	PTL-KT-92 w/o Notched Bushings PTL-KT-93 w/Notched Bushings	PTL-KT-92 w/o Notched Bushings PTL-KT-93 w/Notched Bushings
PA-E23-250	All	PTL-KT-92 w/o Notched Bushings PTL-KT-93 w/Notched Bushings	PTL-KT-92 w/o Notched Bushings PTL-KT-93 w/Notched Bushings
PA-24, PA-24-250, PA-24-260, PA-24-400	All	PTL-KT-36 Left PTL-KT-75 Right	PTL-KT-95
PA-28-140, PA-28-150, PA-28-160, PA-28-180	All	PTL-KT-11	PTL-KT-31
PA-28-151	All	PTL-KT-13	PTL-KT-29
PA-28-161	2816001 thru 2816119	PTL-KT-4	PTL-KT-31
	2841001 thru 2841365	PTL-KT-10	PTL-KT-26
	2842001 thru 2842999	PTL-KT-5	PTL-KT-32
	28-7716001 thru 28-7816253 28-7816254 thru 28-8616057	PTL-KT-15 PTL-KT-4	PTL-KT-31
PA-28-181	2843001 thru 2843999	PTL-KT-3	PTL-KT-30
	2890001 thru 2890231 28-7690001 thru 28-7890231 28-7890232 thru 28-8690062	PTL-KT-7 PTL-KT-12 PTL-KT-7	PTL-KT-27
	All	PTL-KT-2	PTL-KT-52
PA-28-201T	All	PTL-KT-11	PTL-KT-31
PA-28-235	All	PTL-KT-77	PTL-KT-28
PA-28R-180	28R-30005 thru 28R-31279	PTL-KT-40 Left PTL-KT-59 Right	PTL-KT-78
	28R-7130001 thru 28R-7130013	PTL-KT-40 Left PTL-KT-59 Right	PTL-KT-81
PA-28R-200	28R-35001 thru 28R-7135062	PTL-KT-40 Left PTL-KT-59 Right	PTL-KT-78
	28R-7135063 thru 28R-7635545	PTL-KT-40 Left PTL-KT-59 Right	PTL-KT-81
PA-28R-201, PA-28R-201T	2803001 thru 2837061	PTL-KT-44 Left PTL-KT-61 Right	PTL-KT-81
PA-28R-201	2844001 thru 2844999	PTL-KT-39 Left PTL-KT-68 Right	PTL-KT-80
PA-28R-201, PA-28R-201T	28R-7703001 thru 28R-7837317	PTL-KT-44 Left PTL-KT-61 Right	PTL-KT-81
PA-28RT-201, PA-28RT-201T	All	PTL-KT-43 Left PTL-KT-61 Right	PTL-KT-80
PA-30	All	PTL-KT-95	PTL-KT-95
PA-31, PA-31-300, PA-31-325	31-5 thru 31-7812120	PTL-KT-22 w/Notched Bushings PTL-KT-21 w/o Notched Bushings	PTL-KT-90 w/o Notched Bushings PTL-KT-98 w/Notched Bushings PTL-KT-97 w/Notched Bushings PTL-KT-56 w/o Notched Bushings
	31-7812121 thru 31-8312019		
PA-31-350	31-5001 thru 31-8553002	PTL-KT-25 w/o Notched Bushings PTL-KT-18 w/Notched Bushings	PTL-KT-67 w/o Notched Bushings PTL-KT-73 w/Notched Bushings
PA-31-350 (T1020)	31-8253001 thru 31-8553002	PTL-KT-24 w/o Notched Bushings PTL-KT-17 w/Notched Bushings	PTL-KT-70 w/o Notched Bushings PTL-KT-64 w/Notched Bushings
PA-31P	All	PTL-KT-25 w/o Notched Bushings PTL-KT-18 w/Notched Bushings	PTL-KT-65 w/o Notched Bushings PTL-KT-72 w/Notched Bushings
PA-31P-350	All	PTL-KT-25 w/o Notched Bushings PTL-KT-18 w/Notched Bushings	PTL-KT-65 w/o Notched Bushings PTL-KT-71 w/Notched Bushings
PA-31T, PA-31T1, PA-31T2, PA-31T3	All	PTL-KT-23 w/o Notched Bushings PTL-KT-16 w/Notched Bushings	PTL-KT-65 w/o Notched Bushings PTL-KT-71 w/Notched Bushings
PA-32-260	32-1 thru 32-7700023	PTL-KT-14	PTL-KT-33
	32-7800001 thru 32-7800008	PTL-KT-9	
PA-32-300	32-40000 thru 32-7840043	PTL-KT-14	PTL-KT-33
	32-7840044 thru 32-7940290	PTL-KT-9	
PA-32-301, PA-32-301T	All	PTL-KT-8	PTL-KT-34
PA-32-301FT, PA-32-301XTC	All	PTL-KT-6	PTL-KT-35
PA-32R-300	All	PTL-KT-37 Left	PTL-KT-81
		PTL-KT-69 Right	

Eligibility continued on next page



Eligibility continued from previous page			
Aircraft	Serial Number	Main Wheel Kit 2 kits req. if not labeled Left/Right	Nose Wheel Kit
PA-32R-301, PA-32R-301T	3213001 thru 3229003	PTL-KT-42 Left PTL-KT-60 Right	PTL-KT-81
	3246001 thru 3257999	PTL-KT-45 Left PTL-KT-63 Right	PTL-KT-80
	32R-8013001 thru 32R-8629008	PTL-KT-42 Left PTL-KT-60 Right	PTL-KT-81
PA-32RT-300, PA-32RT-300T	All	PTL-KT-41 Left PTL-KT-60 Right	PTL-KT-80
PA-34-200	All	PTL-KT-42 Left PTL-KT-60 Right	PTL-KT-86
PA-34-200T	All	PTL-KT-38 Left PTL-KT-58 Right	PTL-KT-86
PA-34-220T	3433001 thru 3447029	PTL-KT-57	PTL-KT-86
	3448038 thru 3448079	PTL-KT-57	PTL-KT-86
	3449001 thru 34-8633031	PTL-KT-57	PTL-KT-86
PA-38-112	All		PTL-KT-1
PA-39	All	PTL-KT-95	PTL-KT-95
PA-42, PA-42-720, PA-42-720R	All	PTL-KT-20 PTL-KT-25 w/o Notched Bushings	PTL-KT-65 w/o Notched Bushings PTL-KT-71 w/Notched Bushings
PA-42-1000	All	PTL-KT-19	PTL-KT-65 w/o Notched Bushings PTL-KT-71 w/Notched Bushings
PA-44-180	4495001 thru 4495013		PTL-KT-80
	4496001 thru 4496999	PTL-KT-44 Left PTL-KT-61 Right	PTL-KT-74 PTL-KT-80
	44-7995001 thru 44-8195026		
PA-44-180T	All	PTL-KT-43 Left PTL-KT-62 Right	PTL-KT-80
PA-46-310P	All	PTL-KT-48	PTL-KT-96
PA-46-350P (w/ G1000)	All	PTL-KT-47	PTL-KT-88
PA-46-350P (w/o G1000)	4622001 thru 4622200	PTL-KT-46	PTL-KT-96
	4636001 thru 4636195	PTL-KT-51	
	4636196 thru 4636999	PTL-KT-50	PTL-KT-88
PA-46-500TP (w/ G1000)	All	PTL-KT-54	PTL-KT-87
PA-46-500TP (w/o G1000)	All	PTL-KT-55	PTL-KT-87
PA-46R-350T (w/ G1000)	All	PTL-KT-50	PTL-KT-89
PA-46R-350T (w/o G1000)	All	PTL-KT-50	PTL-KT-88

## Removing Torque Link Bushings (Nose Gear Scissors)

By Dave McFarlane

Removing the flanged bushings from the torque link forging can be difficult as there is not a good surface to press against or grab onto. An easy way to remove them is to thread them with a tap, screw a bolt in the thread you made, and then drive or press against the bolt. The thread does not have to be a full depth thread for the bolt to hold securely in the bushing. The bushing material is somewhat hard, but not so hard that a standard hardware store tap will not do the job. Use cutting oil on the tap to prevent tap damage. Normally the bushing will then come out easily. For stubborn bushings, soak the link assembly in boiling water before pressing the bushing. The heat will expand the aluminum forging more than the steel bushing. This helps loosen the press fit while limiting the temperature to prevent from overheating and harming the heat treat of the aluminum forging. A controlled oven can be substituted for boiling water as a heat source, but do not exceed 350° F. Do not use flame or other non-controlled heat sources. An alternate method is to put dry ice in the bushing before driving or pressing on the bolt you threaded into the bushing. Do not over-press or hammer as the aluminum can gall to the bushing and leave a damaged bushing bore. If the bushing does not come out with light to moderate force take the time to use some heat or cold to help.

## Cessna Brake Line Fairing Extrusion

**Reduce Drag!**  
P/N P580058

- Paintable
- Easily attaches with super glue
- Replaces P/N S1511-1

White rubber extrusion that attaches to the trailing edge of flat Cessna landing gears and serves as a fairing for the brake line.

This extrusion was original equipment on later model aircraft with flat gears. Many mechanics use this as an improvement for the earlier aircraft.



**McFarlane's FAA-PMA Australian Nose Strut Seal Kit Solves the Problem!**

Don't waste your time with substandard seals, nothing compares!!



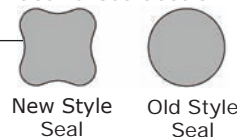
- Double edge ("X" style) seal that will not twist and leak!
- Solves the continuous leak and re-service problems with the Cessna nose strut.
- Go years without servicing!

**P/N MCSK172-1F**

- FAA-PMA direct replacement for Cessna P/N SK172-1F.
- Also includes AN901-5A gasket.
- Improved lock rings are made of 304 stainless steel for better corrosion resistance.
- Components also available separately.



**Seal Cross Section:**



Aircraft	MCSK172-1F Contains		
	Qty	P/N	Description
All 150, 152, 172, 175 and 177RG series	1	AN901-5A	Gasket
182E-T, A182J,K,L,N	1	MC0841200-19	Lock Ring
F182P,Q, FR182, R182, TR182, T182, T182T	1	MC0841200-25	Lock Ring
210-5A (205A)	2	MCS1628-329	Backup Ring
206, 207 series	1	MCS2418-1	Scraper Ring
210B-R, P210N,R, T210F-R	1	MS28775-010	O-ring
T303	1	MS28775-221	O-ring
337 series	1	MS28775-225	O-ring
	1	MS28775-228	O-ring
	1	1100	Square Seal

Note: P/N NSS-KT-2 doesn't contain the improved square ("X" style) O-ring. Adding this improved part is pending FAA-PMA approval.

NSS-KT-2		Description
Qty	P/N	
1	AN901-5A	Gasket
1	MC0841200-19	Lock Ring
1	MC0841200-25	Lock Ring
2	MS28782-32	Packing Retainer
1	MCS2418-1	Scraper Ring
1	MS28775-010	O-ring
1	MS28775-221	O-ring
1	MS28775-225	O-ring
1	MS28775-228	O-ring
1	MS28775-329	O-ring

Aircraft	Qty	P/N	Description
182, 182A,B,C,D	1	MCS2418-1	Scraper Ring
210-5 (205)	1	MS28775-010	O-ring
210, 210A	1	MS28775-221	O-ring
310, 310B,C,D,F,G,H,I,J,-1,K,L,N,P,Q	1	MS28775-225	O-ring
320, 320-1, 320A,B,C,D,E,F	1	MS28775-228	O-ring
336	1	MS28775-329	O-ring



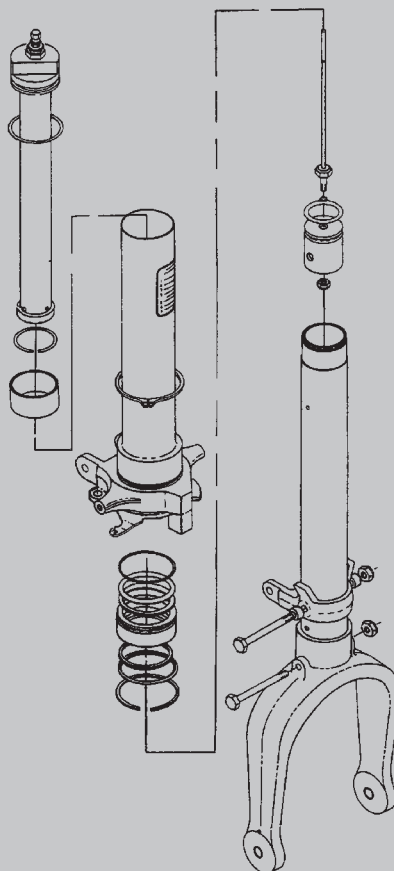
**Maintenance Tip:**  
Wipe the chrome strut down with Stoddard solvent (mineral spirits) periodically to soften and remove any dried oil film, dirt, dust and bugs.

**Why Does My Cessna Nose Strut Keep Leaking Down?**

By Dave McFarlane

Cessna Nose strut "leak down" has plagued Cessna owners for the last 65 years. Why is it that a month after you reseal the nose strut you find the strut down again or just low and showing signs of a little MIL-5606 on the pretty chrome? It always happens on Sunday when no one is around to help you service it. You service it up the next week only to have it to do it again next month. After several strut reseals most people just resign to servicing it often and consider it part of owning a Cessna. Piper and Beech struts do not leak down or need to be resealed often and they are high pressure!

With a strong belief that everything that goes wrong on an airplane has a reason that can be explained by physics, we did some research. It was observed that the low time leaking O-ring that was removed always showed signs of being slightly twisted and otherwise like new. Further experiments and close evaluations proved that the O-ring would twist from friction caused by an oxidized hydraulic fluid film on the chrome strut. You probably have noticed how MIL-5606 hydraulic fluid tends to dry and get sticky after it is exposed to air. Add a little runway dust to the back side of the strut and it really gets sticky. The low operating pressures of the Cessna strut does not put a lot of holding pressure to stabilize the sealing O-ring. It was observed that the sticky film on the chrome strut can grab and adhere to the O-ring during a normal strut action cycle. If the sticky film is not evenly dispersed on the strut, the O-ring is rolled a little on the filmy side only. This uneven rolling action puts a slight twist in the O-ring. This slight twist can break the normal seal between the strut and the



O-ring allowing a slow unpredictable leak.

It seemed logical that if you lowered the friction on the O-ring surface you could eliminate the problem. A hunt was on for a low friction O-ring that would resist being rolled and would have good durability. After many experiments with Teflon® coated and other specialty O-rings only partial success was achieved. They either were not as durable or the sealing characteristics were not as good as the standard rubber O-ring.

A break finally came at Airventure Oshkosh when Tony Brand of Horsham Aviation Services located in Horsham, Victoria, Australia came by and explained how they solved the problem. They had observed the same twisting of the strut O-ring and went on to explain how they replaced the round O-ring with a square ("X" style) O-ring that can not rotate. The standard backup rings were simply reversed to match the square sides of the new style O-ring. The "X" O-rings have the same material as the standard ones. Brilliant! Why didn't we think of that!?! We rushed home and changed all the O-ring seals in five of the airplanes on the field. One of them was our 152 trainer that takes a lot of abuse. We were going to find out if those innovative Aussies knew what they were talking about. Sure enough, that was almost five years ago and we have never had to service the nose strut (not even with air) on any of the aircraft with the square O-rings! My hat goes off to the boys from Down Under for saving the industry thousands of man hours every year and making the Cessna fleet more reliable! Thank you!

Our FAA-PMA seal kit, P/N MCSK172-1F now includes the square ("X" style) O-ring and instructions for reversing the back up rings.

# Landing Gear and Nose Wheel Steering Parts

## Shimmy Dampener Parts for Cessna Aircraft

### Save \$\$ – Repair your fluid dampener

Don't buy a disposable rubber dampener. Save money with replacement PMA parts. McFarlane now has affordable repair parts for the original fluid dampener. Save over \$400.

- More cost effective than a throwaway unit
- Proven design

### Improved Shimmy Dampener Shaft

Save more than 50% - Lasts longer!

- Perfected chrome finish for improved o-ring life and seal
- Durable one piece design — heat treated 4130 steel

### Head Bearings and Piston

Precision Machined, Direct Replacements

### Convenient Assemblies and Kits

- Simplify your repair process
- Assembled kits make overhaul more efficient
- One part number gives you everything you need

#### Maintenance Tip:

Measure the diameter of the head bearing to determine the correct piston assembly or repair kit.

**Piston Assemblies** includes pre-assembled shaft, head bearing, piston, head bearing o-rings, and roll pin.



Piston Assembly  
P/N MC0542118-5  
(with 1 3/16" head bearing)

**Quick and Easy!**  
We have done the assembly



Piston Assembly  
P/N MC0542118-1  
(with 1 5/16" head bearing)



P/N MC0542120-1  
Shaft



P/N MC0542102-1  
Head Bearing  
(1 3/16" diameter)



P/N MC0542102-3  
Head Bearing  
(1 3/16" diameter)



P/N MC0842400-3  
Piston

#### Seal Kit

P/N SDKT-1

Includes all necessary o-rings and backup rings



#### Repair Kit

P/N SDKT-2 (1 5/16" diameter)

Includes piston assembly, snap ring(s) and housing o-ring.



#### Repair Kit

P/N SDKT-3 (1 3/16" diameter)

Includes piston assembly, snap ring(s) and housing o-ring.



#### Hardware Kit

P/N SDKT-4

Includes all nuts, bolts, washers, cotter keys, and bushings to attach the shimmy dampener to the nose strut.



#### Seal Kits

P/N SDKT-5 and SDKT-6

Includes all necessary o-rings and backup rings



## Shimmy Dampener Replacement Parts for Cessna Aircraft

Aircraft	Serial Number	Part Number/Description	MC0542102-1 Head Bearing (1 3/16" diameter head bearing)	MC0542102-3 Head Bearing (1 3/16" diameter head bearing)	MC0542118-1 Piston Assembly (1 3/16" diameter head bearing)	MC0542118-5 Piston Assembly (1 3/16" diameter head bearing)	MC0842400-3 Piston	MC0542120-1 Shaft	SDKT-1 Seal Kit	SDKT-2 Repair Kit (1 5/16" diameter head bearing)	SDKT-3 Repair Kit (1 3/16" diameter head bearing)	SDKT-4 Hardware Kit	SDKT-5 Seal Kit	SDKT-6 Seal Kit
150, 150A,B,C,D,E,F, F150F	17879 and On		4	3				2						
150G <sup>1</sup>	1506453 thru 15067056		4	3	4	3	2	2	2	4	3	2		
150G <sup>1</sup> ,H,J	15067057 and On			3		3	2	2	2		3	2		
150K,L,M, A150K,L,M, FA150K,L,M, FRA150L,M	All			3		3	2	2	2		3	2		
F150G	All		4	3	4	3	2	2	2	4	3	2		
F150H,J	All			3		3	2	2	2		3	2		
F150K,L,M	All			3		3	2	2	2		3	2		
152, A152, F152, FA152	All			3		3	2	2	2		3	2		
172, 172A,B,C,D,E,F,G,H <sup>1</sup>	46433 thru 17256449		4	3	4	3	2	2	2	4	3	2		
172H <sup>1</sup> ,I,J,K,L,M,N,P,Q,R,S	17256450 and On			3		3	2	2	2		3	2		
F172D,E,F,G,H <sup>1</sup>	F172-0001 thru F172-0519		4	3	4	3	2	2	2	4	3	2		
F172H <sup>1</sup> ,K,L,M,N,P	F172-0520 thru F17202254			3		3	2	2	2		3	2		
FP172, P172D	All		4	3	4	3	2	2	2	4	3	2		
FR172E,F,G,H,J,K, R172K	All			3		3	2	2	2		3	2		
175, 175A,B,C	55896 and On		4	3	4	3	2	2	2	4	3	2		
177, 177A,B	ALL												2	
182B,C,D	All		4	3	4	3	2	2	2	4	3	2		
182E	18253599 thru 18254143		4											
182K,L,M,N,P,Q,R,S,T <sup>1</sup>	18257626 thru 18281197													2
A182K,L,N	All													2
F182P,Q	All													2
T182T	T18208001 thru T18299999													2

<sup>1</sup> Partial model eligibility

<sup>2</sup> When equipped with fluid filled dampener (not a Lord rubber dampener)

<sup>3</sup> When equipped with fluid filled dampener with a 1 3/16" diameter head bearing

<sup>4</sup> When equipped with fluid filled dampener with a 1 5/16" diameter head bearing

FAA-PMA Approved

## Shimmy Dampener Assembly

Replace the Lord throw away dampener with our fully repairable Shimmy Dampener Assembly!

P/N MC0442512-1 for Cessna 150, 152, 172, 175 and 182 Aircraft

Improved design for consistent dampening action!

Direct replacement for part numbers 0442512-1 and 0542119-1

It's everything the original should have been and more than the rubber units ever could be!!

- Oversize shaft for rigid strength
- Wear resistant hard anodized housing
- Better shimmy dampening
- Totally repairable
- Self lubricating
- Costs less than the throw away rubber dampener



**New!**

### Temperature compensated hydraulics

- Almost no service required
- Even the first minor movements are dampened
- Consistent dampening action
- No oil leaks

### Seal Kit P/N SDKT-7

- Designed specifically to re-seal McFarlane shimmy dampeners
- Contains all required O-rings and back up rings

**Hundreds \$\$  
less than Lord  
throw away  
dampener!**

<p><b>Shimmy dampener assembly</b> P/N MC0442512-1 is eligible for all serial numbers of the aircraft listed except 175, as noted.</p> <p>150G,H,J,K,L,M, A150K,L,M F150G,H,J,K,L,M FA150K,L,M FRA150L,M</p> <p>152, A152, F152, FA152</p> <p>172, 172A, B,C,D,E,F,G,H,I,K,L,M,N,P,Q,R,S F172D,E,F,G,H,K,L,M,N,P, FP172, P172D, FR172E,F,G,H,J,K, R172K</p> <p>175, 175A, B,C</p> <p>182B,C,D</p> <p>■ S/N 55896 and On</p>
---

Replacement Parts	Description
1520 ■	Barrel
1521	Bearing, Head, Shimmy Dampener
1522	Bearing, Head, Shimmy Dampener W/ Fill Hole
1523	Shaft, Shimmy Dampener
1524 ■	Piston (base number)
1525	Piston, Floating, Shimmy Dampener
1526	Screw, Set
1527	Spring, Shimmy Dampener
1530	Tool, Extraction, Floating Piston
1531	Tool, Spring Insertion
1532	Screw, Seal
AN565AC624H6	Screw, Set, 3/8-24 X 3/8"
MS1665-1137	Ring, Retaining
MS28775-216	O-Ring
MS51031-137	Screw, Set, 3/8-24, SS
NAS561P4-16	Pin, Retaining

■ Barrel and piston are performance matched. Letter code on piston to match letter code marked on outside of barrel, see McFarlane ICA drawing 7106 for details.



P/N MC0442512-1 installed on a 152

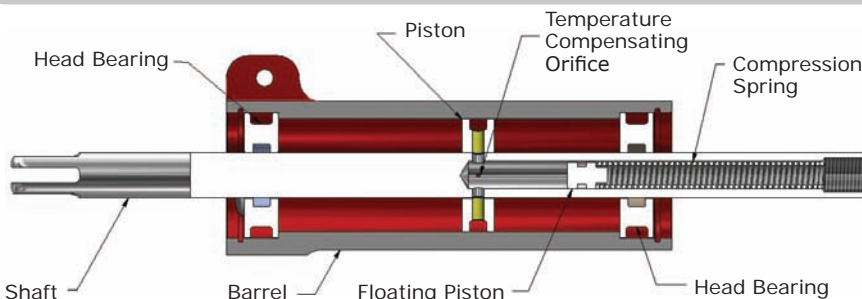
## What Does Temperature Compensated Mean?

By Dave McFarlane

When hydraulic oil changes temperature, the volume of the oil also changes. This volume change from a temperature reduction will create a vacuum in the oil chamber of the original Cessna uncompensated shimmy dampener. This vacuum will cause the oil to vaporize giving the oil a foamy expanded mixture that is compressible. The shimmy dampener action is then drastically degraded. An increase in temperature will increase the oil volume causing a drastic pressurization of the dampener oil chamber. This pressure will force small quantities of oil past the dampener shaft seals. The decrease in oil will then aggravate any temperature reduction with

increased chamber vacuum and related oil vaporization. This process explains why continuous servicing of the original shimmy dampener is required.

The temperature compensation system works by having a small chamber of oil that is spring pressurized through a very small passage into the main dampening restrictive orifice of the shimmy dampener. The spring loaded oil chamber can adjust for oil volume changes as temperature changes. A similar system is built into your car shock absorbers. The temperature compensated hydraulic system requires very little service over extended periods of time and assures stable shimmy dampening action.



## Why is a hydraulic shimmy dampener better than a rubber dampener?

By Dave McFarlane

A rubber based dampener is continuously fatiguing the rubber components as it changes direction of motion. The rubber system depends on stable friction of the rubber riding in a metal tube. This is very difficult to achieve over extended usage. There are inherent differences in static friction of rubber and dynamic friction of rubber that affect dampening performance. Long term use changes the performance of the dampener caused by all of these un-repairable factors. The hydraulic system works in a film of oil with stable performance for long periods of time and it is totally repairable.

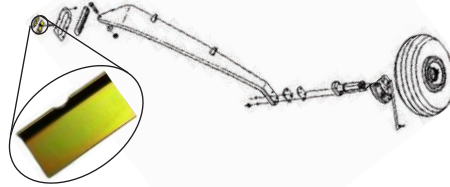
Landing Gear and Nose Wheel Steering Parts

# Landing Gear and Nose Wheel Steering Parts

## Landing Gear Box Shims

- P/N ADO441023-2  
.100" tapered shim
- P/N ADO441023-160  
.160" tapered shim
- P/N ADO741022-1  
.040" shim
- P/N ADO741022-2  
.050" shim

- For Cessna aircraft using leaf spring landing gear
- 4130N steel, plated
- FAA-PMA



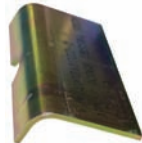
Save \$\$



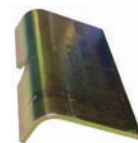
P/N ADO441023-2  
.100" Tapered Shim



P/N ADO441023-160  
.160" Tapered Shim



P/N ADO741022-1  
.040" Shim



P/N ADO741022-2  
.050" Shim

Manufactured by F Atlee Dodge

## Tail Wheel Fork Bearing for Cessna Aircraft

- Bearing Cup  
P/N 08231
- Bearing Cone  
P/N 08118
- Direct replacement  
for Cessna  
P/N 0742400-12



## Main Gear Scraper Ring

- P/N MS28776M2-18
- Fits Piper Models  
PA28-140,150,151,161,  
PA28-180,181,235,236,  
PA32-260,300



## Main Gear Quad Ring

- P/N CA484-769
- Fits Piper Models  
PA-28-140,150,151,160,161,  
PA-28-180,181,235,236,201T,  
PA-32, PA-32-260,300,301,301T



## Nose Gear Quad Ring

- P/N CA484-770
- Fits Piper Models  
PA28-140,150,151,160,161,  
PA28-180,181,235,236,  
PA32-260,300,301,301T



Manufactured by PMA Products, Inc.

## Axles for Cessna Aircraft

Don't lose an airplane because of a broken aluminum axle!

### Steel axle

P/N AF1441003-1

- Weighs only 2.28 lbs
- Save hundreds of \$\$

### Titanium axle

P/N AF1441003-1T

- Reduces weight by 2 lbs per A/C vs. steel axles
- Will not rust



Model	Serial Number
170, 170A,B	18000 thru 27169
180, 180A-H	30000 thru 18052284
182, 182A-S	33000 and On
T182, R182, TR182	1820001 thru R18202041
185, 185A-E, A185E-F	1850001 thru 18504448
206, U206, U206A-G, TU206A-G	206-0001 thru U20607020
P206, P206A-E, TP206A-E	P206-0001 thru P20600647
206H, T206H	All

Manufactured by Airforms, Inc.

## Nose Baggage Compartment Cargo Door

### Up Latch for all Cessna 207 Aircraft

No more holding up the door while loading!

P/N AF1213922-1

- Improved strength
- Nickel plated for corrosion resistance



Manufactured by Airforms, Inc.

## High Strength Parts for Helio H-295

### Courier Aircraft

Parts are manufactured from high strength material and machined from a single billet - stronger than original welded assemblies!

Axle P/N AF250-040-495

- Cad plated for increased durability
- Precision fit - drop in direct replacement
- Accommodates wheel-ski installation



Manufactured by Airforms, Inc.

## Wheel Pant Mounting Plates for Cessna Aircraft

P/Ns MC0441225-1, MC0441225-2,  
MC0541220-1 and MC0541220-2

- Machined from high strength aluminum alloy
- Anodized for corrosion resistance
- Nut plates are riveted in place - ready to install!



### Maintenance Tip:

*Wheel pant mounting plates commonly crack around the axle. If any cracks are present, they should be replaced. The cracks are caused by wheel pant vibration. Assume that the wheel pant axle bolts are tight. Proper wheel balance will lessen wheel pant vibration. See page 263 for a simple but effective wheel balancer.*

Model	Serial Number	Left	Right
150L, M	15074851 thru 15079405	MC0441225-1	MC0441225-2
F150L, M	F15001014 thru F15001428	MC0441225-1	MC0441225-2
A150L, M	A1500430 thru A1500734	MC0441225-1	MC0441225-2
FRA150L, M	FRA1500212 thru FRA1500336	MC0441225-1	MC0441225-2
152	15279406 thru 15286033	MC0441225-1	MC0441225-2
A152	A1520735 thru A1521049	MC0441225-1	MC0441225-2
F152	F15201429 thru F15201980	MC0441225-1	MC0441225-2
FA152	FA1520337 thru FA1520425	MC0441225-1	MC0441225-2
172M, N, P, Q	17261899 thru 17276673	MC0541220-1	MC0541220-2
172R	17280001 and On	MC0541220-1	MC0541220-2
172S	172S80001 and On	MC0541220-1	MC0541220-2
F172M, N, P	F17201035 thru F17202254	MC0541220-1	MC0541220-2
FR172, K	FR17200441 thru FR17200675	MC0541220-1	MC0541220-2
R172K	R17220000 thru R1723454	MC0541220-1	MC0541220-2

■ Partial model eligibility

## Main and Nose Strut Seal and Repair Kits for Piper Aircraft

Precise eligibility for PA-22 thru PA-46 aircraft

McFarlane developed main and nose strut seal and repair kits that are now model and serial number specific giving you only the parts required, saving you time and money. All components are industry standard meeting the applicable MIL-SPEC or original Piper parts.

- Save money!
- Each kit contains exactly the parts required for the job
- Other kits are missing important parts

Now manufactured by  
McFarlane Aviation Products!



More Kits  
Added!

**PSS seal kits contain rubber and plastic parts.  
PSR repair kits contain the required PSS seal kit and commonly needed metal parts.**

Aircraft Model	Serial Number	Main Strut				Nose Strut			
		Seal Kit	Qty per Aircraft	Repair Kit	Qty per Aircraft	Seal Kit	Qty per Aircraft	Repair Kit	Qty per Aircraft
PA-22, PA-22-108, PA-22-135, PA-22-150, PA-22-160 PA-22S-135, PA-22S-150, PA22S-160	All	N/A	N/A	N/A	N/A	PSS-KT-19	1	PSR-KT-31	1
PA-23-235, PA-23-250, PA-E23-250	All	PSS-KT-3	2	PSR-KT-14	3	PSS-KT-3	1	PSR-KT-14	3
PA-24, PA-24-250, PA-24-260	24-1 thru 24-214 24-215 thru 5034	PSS-KT-1	2	PSR-KT-1	2	PSS-KT-1	1	PSR-KT-1	1
PA-24-400	All	PSS-KT-4	2	PSR-KT-15	2	PSS-KT-1	1	PSR-KT-2	1
PA-28-140, PA-28-150, PA-28-160, PA-28-180, PA-28-235	28-01 thru 28-3281, 28-10003 thru 28-10719, 28-20002 thru 28-21639 28-3282 thru 4377, 28-10720 thru 28-7710089, 28-21640 thru 28-7725290	PSS-KT-10	2	PSR-KT-34	2	PSS-KT-18	1	PSR-KT-26	1
PA-28-151	All	PSS-KT-36	2	PSR-KT-58	2	PSS-KT-20	1	PSR-KT-60	1
PA-28-161	2816001 thru 2816119, 2841001 thru 2841365, 28-7716001 thru 28-8616057	PSS-KT-36	2	PSR-KT-58	2	PSS-KT-20	1	PSR-KT-60	1
PA-28-181	2843001 thru 2843999, 28-7690001 thru 28-7790451 2890001 thru 2890231 28-7790452 thru 28-8690062	PSS-KT-36	2	PSR-KT-58	2	PSS-KT-20	1	PSR-KT-60	1
PA-28R-180, PA-28R-200	All	PSS-KT-14	2	PSR-KT-11	2	PSS-KT-4	1	PSR-KT-20	1
PA-28-201T	All	PSS-KT-31	2	PSR-KT-44	2	PSS-KT-37	1	PSR-KT-59	1
PA-28R-201	2844001 thru 2844999 2837001 thru 2837061 28R-7737002 thru 28R-7837317	PSS-KT-4	2	PSR-KT-17	2	PSS-KT-14	1	PSR-KT-10	1
PA-28R-201T	2803001 thru 2803012 28R-7703001 thru 28R-7803373	PSS-KT-11	2	PSR-KT-8	2	PSS-KT-4	1	PSR-KT-18	1
PA-28RT-201, PA-28RT-201T	All	PSS-KT-4	2	PSR-KT-17	2	PSS-KT-11	1	PSR-KT-9	1
PA-28-236	2811001 thru 2811050, 28-7911001 thru 28-8611008	PSS-KT-31	2	PSR-KT-44	2	PSS-KT-20	1	PSR-KT-60	1
PA-30	All	PSS-KT-1	2	PSR-KT-1	2	PSS-KT-1	1	PSR-KT-15	1
PA-31, PA-31-300, PA-31-325	31-2 thru 31-7812120 31-7812121 thru 31-8312016 31-8312017 thru 31-8312019	PSS-KT-35	2	PSR-KT-57	2	PSS-KT-39	1	PSR-KT-61	1
PA-31-350	31-5001 thru 31-8352036 31-8352037 thru 8553002	PSS-KT-23	2	PSR-KT-56	2	PSS-KT-34	1	PSR-KT-52	1
PA-31-350 (T1020)	All	PSS-KT-32	2	PSR-KT-48	2	PSS-KT-34	1	PSR-KT-53	1
PA-31P	All	PSS-KT-22	2	PSR-KT-47	2	PSS-KT-16	1	PSR-KT-68	1
PA-31P-350	All	PSS-KT-13	2	PSR-KT-67	2	PSS-KT-33	1	PSR-KT-49	1
PA-31T	31T-7400002 thru 31T-8120050 31T-8120051 thru 31T-8120104 31T-1104004 thru 31T-7804000	PSS-KT-22	2	PSR-KT-47	2	PSS-KT-34	1	PSR-KT-53	1
PA-31T1	31T-7804001 thru 31T-8104055 31T-8104056 thru 31T-8304003	PSS-KT-22	2	PSR-KT-47	2	PSS-KT-16	1	PSR-KT-68	1
PA-31T2	31T-1166001 thru 31T-8166000 31T-8166001 thru 31T-8166013 31T-8166014 thru 31T-8166076	PSS-KT-13	2	PSR-KT-67	2	PSS-KT-33	1	PSR-KT-49	1
PA-31T3	All	PSS-KT-22	2	PSR-KT-47	2	PSS-KT-33	1	PSR-KT-49	1
PA-32-260	32-1 thru 32-505 32-506 thru 32-1110 32-1111 thru 32-7800008	PSS-KT-35	2	PSR-KT-52	2	PSS-KT-33	1	PSR-KT-49	1
PA-32-300	32-40000 thru 32-40565 32-40566 thru 32-7940290	PSS-KT-12	2	PSR-KT-32	2	PSS-KT-33	1	PSR-KT-49	1
PA-32-301, PA-32-301T	All	PSS-KT-12	2	PSR-KT-32	2	PSS-KT-15	1	PSR-KT-12	1
PA-32-301FT, PA-32-301XTC	All	PSS-KT-9	2	PSR-KT-33	2	PSS-KT-5	1	PSR-KT-23	1
PA-32R-300	All	PSR-KT-50	2	PSR-KT-58	2	PSS-KT-5	1	PSR-KT-23	1
PA-32R-301, PA-32R-301T	3213001 thru 3213103 3229001 thru 3229003 3246001 thru 3246999 3257001 thru 3257999 32R-8013001 thru 32R-8613006 32R-8029001 thru 32R-8629008	PSS-KT-4	2	PSR-KT-22	2	PSS-KT-20	1	PSR-KT-38	1
PA-32RT-300, PA-32RT-300T	All	PSS-KT-28	2	PSR-KT-40	2	PSS-KT-14	1	PSR-KT-10	1
PA-34-200	All	PSS-KT-28	2	PSR-KT-40	2	PSS-KT-4	1	PSR-KT-20	1
PA-34-200T	All	PSS-KT-14	2	PSR-KT-11	2	PSS-KT-11	1	PSR-KT-9	1
PA-34-220T	3447001 thru 3447029 3449001 thru 3449999 3448001 thru 3448079 3433001 thru 3433172 34-8133001 thru 34-8633031	PSS-KT-11	2	PSR-KT-11	2	PSS-KT-28	1	PSR-KT-20	1
				PSR-KT-40	2	PSS-KT-4	1	PSR-KT-20	1
				PSR-KT-40	2	PSS-KT-28	1	PSR-KT-39	1
				PSR-KT-11	2	PSS-KT-7	1	PSR-KT-29	1
				PSR-KT-8	2	PSS-KT-7	1	PSR-KT-29	1
				PSR-KT-7				PSR-KT-27	
				PSR-KT-5 <sup>1</sup>	2			PSR-KT-27 <sup>2</sup>	1
				PSR-KT-6 <sup>2</sup>				PSR-KT-28 <sup>1</sup>	

Eligibility continued on the next page

- <sup>1</sup> Use only when bearing has O-ring groove on ID
- <sup>2</sup> Use only when bearing has T-seal and backup ring



# Landing Gear and Nose Wheel Steering Parts

Aircraft Model Continued from previous column	Serial Number	Main Strut				Nose Strut			
		Seal Kit	Qty per Aircraft	Repair Kit	Qty per Aircraft	Seal Kit	Qty per Aircraft	Repair Kit	Qty per Aircraft
PA-39	All	PSS-KT-1	2	PSR-KT-1	2	PSS-KT-1	1	PSR-KT-15	1
PA-42, PA-42-720, PA-42-720R	All	PSS-KT-40	2	PSR-KT-63	2	PSS-KT-42	1	PSR-KT-65	1
PA-42-1000	All	PSS-KT-41	2	PSR-KT-64	2	PSS-KT-42	1	PSR-KT-65	1
PA-44-180	4495001 thru 4495013 44-7995001 thru 44-8195026 4496001 thru 4496999	PSS-KT-4	2	PSR-KT-40	2	PSS-KT-28	1	PSR-KT-51	1
PA-44-180T	All	PSS-KT-4	2	PSR-KT-40	2	PSS-KT-28	1	PSR-KT-51	1
PA-46-310P	All	PSS-KT-29	2	PSR-KT-36	2	PSS-KT-27	1	PSR-KT-51	1
PA-46-350P (w/G1000)	All	PSS-KT-24	2	PSR-KT-37	2	PSS-KT-27	1	PSR-KT-35	1
PA-46-350P (w/o G1000)	4622001 thru 4622200 4636001 thru 4636195 4636196 thru 4636999	PSS-KT-24	2	PSR-KT-36	2	PSS-KT-27	1	PSR-KT-35	1
PA-46R-350T (w/G1000)	All	PSS-KT-21	2	PSR-KT-43	2	PSS-KT-27	1	PSR-KT-35	1
PA-46R-350T (w/o G1000)	All	PSS-KT-21	2	PSR-KT-43	2	PSS-KT-30	1	PSR-KT-35	1
PA-46-500TP (with or without G1000)	All	PSS-KT-21	2	PSR-KT-43	2	PSS-KT-27	1	PSR-KT-35	1

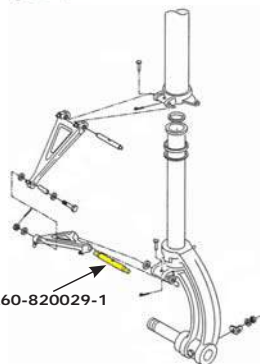
- 1 Use only when bearing has O-ring groove on ID
- 2 Use only when bearing has T-seal and backup ring

## Main and Nose Strut Seal Kit for Beechcraft Aircraft

Aircraft	Main P/N	Nose P/N
B-33, F-33, V-35B, 36, A36, G36, A36TC, B36TC	JMBZMS	JMBZNS

## Tow Pin for Beechcraft Aircraft

P/N RA60-820029-1



Aircraft
35-A33, 35-B33, 35-C33, 35-C33A, E33, F33, G33, E33A, F33A, F33C
N35, P35, S35, V35, V35A, V35B, 36, A36, A36TC, B36TC,
95-55, 95-A55, 95-B55, 95-C55, D55, E55
56TC, A56TC
58, 58TC, 58P
B60
Manufactured by Rapco

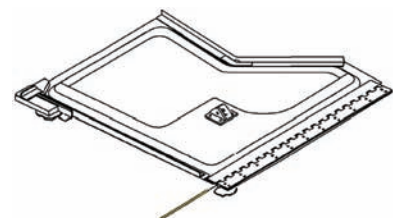


## Main Gear Door Hinge Pin for Cessna Citation 550 and 560 Aircraft

P/N MS20253-2-2050

- Corrosion resistant
- Two required per aircraft
- Direct replacement

Save \$\$



Manufactured by PMA Products, Inc.

## Nose Gear Torque Link Assemblies

Improved to reduce wear and prevent cracks  
Upper P/N AF2643084-1  
Lower P/N AF2643084-2

- Approved for all 208 and 208B aircraft
- Hard aluminum surface to reduce wear
- Precision fit - drop in direct replacement
- Designed to prevent cracking in threaded grease fitting holes
- Ready for installation
- Durable powder coating finish



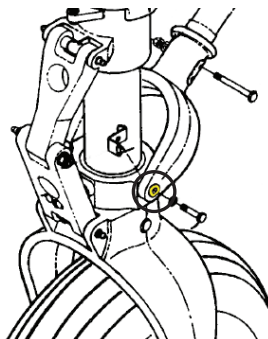
P/N AF2643084-1 (Upper)

P/N AF2643084-2 (Lower)

## Nose Gear Spring Fork Needle Bearing for Caravan Aircraft

P/N MS24462-5

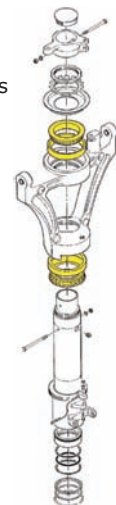
- Fits all Cessna 208 models
- 2 required per aircraft
- Save 30%



## Nose Gear Shock Strut Bearing Cups and Cones for Caravan Aircraft

Bearing Cup  
P/N L217813  
Bearing Cone  
P/N L217849

- Fits all Cessna 208 models
- 2 required per aircraft

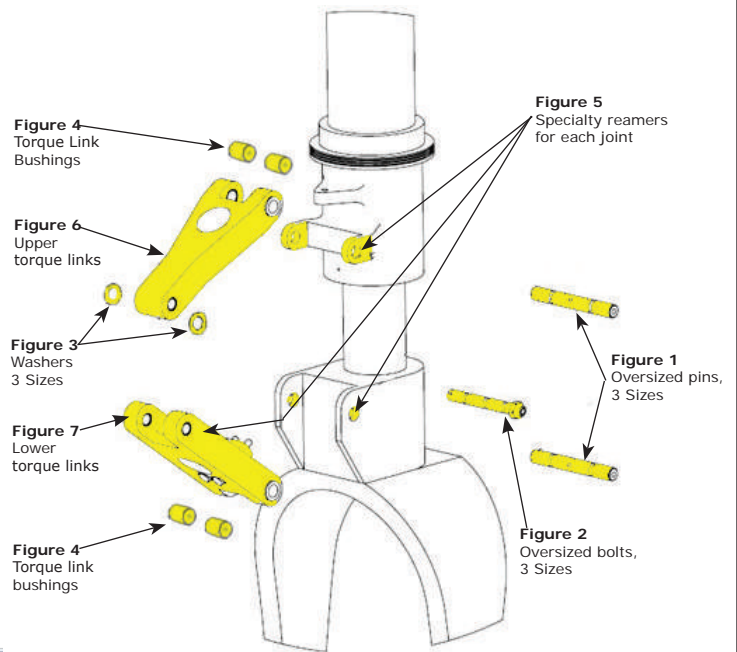


FAA-PMA Approved

## Cessna Caravan Torque Link Repair STC

Minimal downtime repair to keep 208/208B nose gears shimmy-free  
 This STC will dramatically reduce nose gear swaps

- Save over \$15K and be flying the same-day
- Reduce downtime by repairing in the field
- Convenient tool kit allows for on-airplane repair
- EASA approved



P/N AF2643092-1010, BOLT

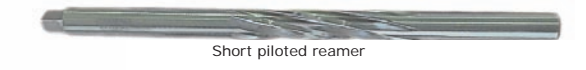


P/N AF2643091-1010, PIN



Tap handle

**Tool kits contain:**  
 Short and long piloted reamers and tap handle



Short piloted reamer



Long piloted reamer

**Eligible model series:**  
 Fits all Cessna 208/208B with "double lug" torque links. Includes all S/N's after 2080133/208B0098 or earlier S/N's equipped with SK208-51.

Figure	Part Number	Description	Approval Type
5	TOOL KIT + .010	REAMERS, Oversized .010 - short and long piloted reamers + tap handle	STC
5	TOOL KIT + .020	REAMERS, Oversized .020 - short and long piloted reamers + tap handle	STC
5	TOOL KIT + .030	REAMERS, Oversized .030 - short and long piloted reamers + tap handle	STC
5	TOOL KIT 32-604-56-01	REAMERS, all three sizes	STC
6	AF2643084-1	Upper Torque Link	PMA
7	AF2643084-2	Lower Torque Link	PMA
1	AF2643091-1	PIN, Nominal	PMA
1	AF2643091-1010	PIN, Oversize .010	PMA
1	AF2643091-1020	PIN, Oversize .020	PMA
1	AF2643091-1030	PIN, Oversize .030	PMA
2	AF2643092-1	BOLT, Nominal	PMA
2	AF2643092-1010	BOLT, Oversize .010	PMA
2	AF2643092-1020	BOLT, Oversize .020	PMA
2	AF2643092-1030	BOLT, Oversize .030	PMA
3	32-604-37-22005	WASHER, .005 thickness	STC
3	32-604-37-22010	WASHER, .010 thickness	STC
3	32-604-37-22015	WASHER, .016 thickness	STC
4	AF2643085-200	BUSHING, Torque Link	PMA
	STC-TORQUE LINK	Torque Link STC	STC

Landing Gear and Nose Wheel Steering Parts

Wheel Bearings Cups and Cones

FAA-PMA approved Timken wheel bearings for Goodyear, Cleveland, and McCauley wheels.

- Class 2 aviation grade bearings (Timken designates these with a -20629 suffix)
- When landing the wheel bearings must go from Zero RPM to 1384 RPM, or more, instantaneously. Automotive bearings aren't designed for this type of service
- Tighter tolerance and higher quality control than Class 4 automotive bearings
- Save \$\$



Don't be tempted to buy cheap automotive bearings

Because Timken uses the same part number for both the automotive and aviation versions of these bearings, many people mistakenly use the lower quality automotive bearings in their airplane. It is critical that the FAA-PMA Class 2 version be used for aircraft applications for two reasons:

- They are a higher class of bearing with tighter tolerance and have been subjected to more stringent quality control procedures. Due to the smaller diameter of aircraft wheels, at a given ground speed the bearings rotate at a much higher RPM and require the tighter tolerances to prevent premature failure. Example: At a 70 mph touchdown speed (equivalent to highway speed of a car), a typical 17 inch diameter airplane tire is rotating at 1384 RPM, whereas a typical 27 inch car tire is only rotating at 871 RPM. So even though the aircraft bearing is only subject to intermittent use, some of the performance demands are much higher than a typical automotive application.
- It is a violation of FAA regulations to use non-approved automotive bearings on certified aircraft.

See the table on the next page to find the correct bearing for your wheels.

Wheel Grease Seal Kits

Finally a low cost alternative! FAA-PMA approved for Cessna aircraft with Cleveland, and McCauley wheels.

Convenient Kits now available

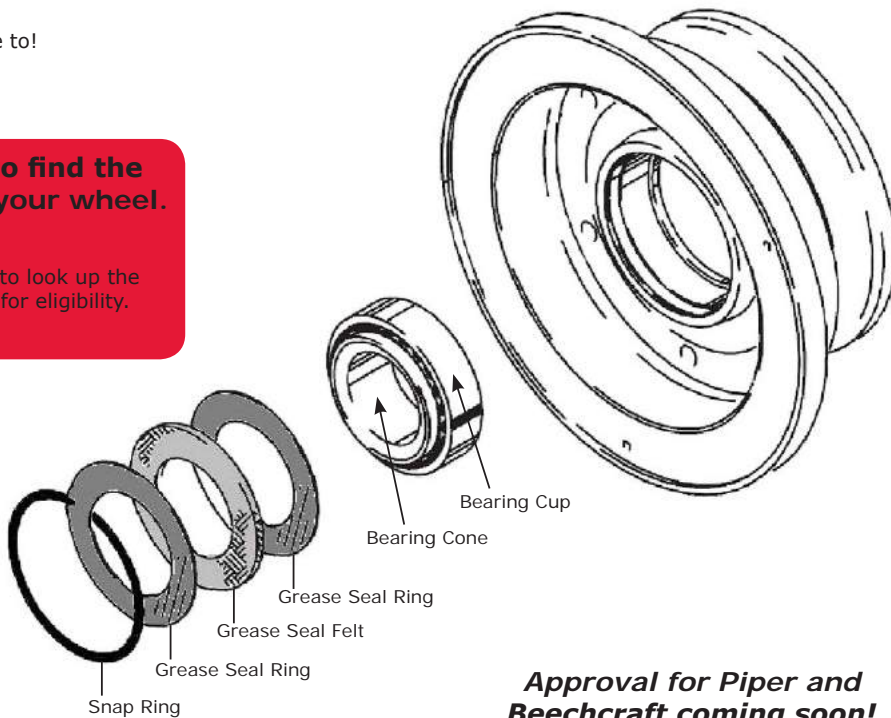
- Each kit contains everything required to service one wheel: grease seal rings, plates, snap rings and felts; even screws and washers when required.
- We have done the research so you don't have to!
- Hard to find parts in stock.
- Save \$\$



See the table on the next page to find the correct kit and components for your wheel.

Not sure what wheel you have?

Go to [www.mcfarlaneaviation.com/wheel-seals](http://www.mcfarlaneaviation.com/wheel-seals) to look up the original equipment wheels for your aircraft and for eligibility.



Approval for Piper and Beechcraft coming soon!

Hard to find grease seal rings and plates!

Figure A Flat Ring, Figure B Plate, Figure C Cupped Ring, Figure D Plate



Grease Seal Rings and Plates				
Part Number	ID	OD	Thickness	Figure
MC153-00300	1-33/64	2-1/2	0.034	A
MC153-00400	1-45/64	2-5/8	1/32	A
153-00500	1-3/4	2-3/4	5/32	B
MC153-00800	1-53/64	2-23/64	1/32	A
MC153-01000	2-1/16	2-3/4	1/8	B
MC153-01500	2-1/16	2-5/8	13/64	C
MC153-30013	1-11/16	2-39/64	1/32	A
153-30014	2-1/16	2-5/8	11/64	C
MC153-30015	1-17/32	2-35/64	1/32	A
MC156-00100	1-3/4	3/22-32	1/8	D

Grease Seal Felt			
Part Number	ID	OD	Thickness
154-01400	1-3/4	2-6	1/8
MC154-00300	1-5/8	2-5/8	1/8
MC154-00600	1-3/4	2-13/32	1/8
MC154-00900	2-1/8	2-7/16	1/8
MC154-01300	2-1/8	2-1/2	3/16
MC154-30010	2-1/8	2-17/32	1/8
Snap Ring			
MC155-00100	9/64	2-3/4	1/32
MC155-00200	9/64	2-1/2	0.025
MC155-11800	5/32	2-1/2	1/32
MC155-11900	5/32	2-3/4	1/32

Dimensions are approximate and for identification only. All dimensions are in inches.

Bearing Cups		
P/N	OD	Width
07196	1.9687	0.3750
07204	2.0470	0.5000
08231	2.3125	0.4219
13830	2.5000	0.3750
13836	2.5625	0.3750
18337	3.3750	0.5000
19268	2.6250	0.4688
39412	4.1250	0.6250
A4138	1.3775	0.3437
L217813	5.0000	0.7500
LL217810	4.7812	0.4375
LM29710	2.5625	0.5500
LM67010	2.3280	0.4650
LM501310	73.431	0.5800

Bearing Cones		
P/N	Bore	Inner Ring Width
07100	1.0000	0.5614
08118	1.1875	0.5937
08125	1.2500	0.5937
13889	1.5000	0.4688
18200	2.0000	0.7190
19150	1.5000	0.6504
39250	2.5000	0.8661
A4050	0.5000	0.4326
L217849	3.5000	0.5938
LL217849	3.5000	0.5938
LM29749	1.5000	0.7200
LM67048	1.2500	0.6600
LM501349	41.275	0.7800

Visit [mcfarlaneaviation.com](http://mcfarlaneaviation.com) for aircraft eligibility



Wheel to Seal Kit and Bearing Cross Reference					
Wheel Manufacturer	Wheel Manufacturer P/N	Cessna Wheel P/N	Wheel Seal Kit P/N	Bearing Cone P/N	Bearing Cup P/N
CLEVELAND	040-07502	C163001-0301	WH-KT-2	13889	13836
CLEVELAND	40-101	C163001-0601	WH-KT-22	LM29749	LM29710
CLEVELAND	40-101A		WH-KT-22	LM29749	LM29710
CLEVELAND	40-113	C163001-0104	WH-KT-2	13889	13836
CLEVELAND	40-12	0441179-2	WH-KT-15	08125	08231
CLEVELAND	40-135A	9910393-2, 9910393-6	WH-KT-28	LM29749 and 07100	LM29710 and 07204
CLEVELAND	40-138A		WH-KT-17	LM29749 and 07100	LM29710 and 07204
CLEVELAND	40-140A	9910194-8	WH-KT-39	13889	13836
CLEVELAND	40-142	C163001-0701	WH-KT-2	13889	13836
CLEVELAND	40-177A	C163001-0901	WH-KT-42	13889	13836
CLEVELAND	40-179	040-17900	WH-KT-42	LM29749	LM29710
CLEVELAND	40-18	0441179-14	WH-KT-34	08125	08231
CLEVELAND	40-19	0441156-13	WH-KT-15	08125	08231
CLEVELAND	40-20	0441156-14	WH-KT-34	08125	08231
CLEVELAND	40-21	0441156-15	WH-KT-11	13889	13836
CLEVELAND	40-32	0741026-3	WH-KT-8	13889	13836
CLEVELAND	40-35	0743001-4	WH-KT-34	08125	08231
CLEVELAND	40-40A	5041016-3	WH-KT-28	LM29749 and 07100	LM29710 and 07196
CLEVELAND	40-40D	5041016-5	WH-KT-28	LM29749 and 07100	LM29710 and 07204
CLEVELAND	40-55	0441156-16	WH-KT-38	13889	13836
CLEVELAND	40-57	0441156-17	WH-KT-8	13889	13836
CLEVELAND	40-57A		WH-KT-11		
CLEVELAND	40-66	0441156-18	WH-KT-8	13889	13836
CLEVELAND	40-67	0441156-19	WH-KT-11	13889	13836
CLEVELAND	40-68	0441156-20	WH-KT-34	08125	08231
CLEVELAND	40-73	1241156-11	WH-KT-39	13889	13836
CLEVELAND	40-75	1241156-10	WH-KT-2	13889	13836
CLEVELAND	40-75B	040-07502, 1241156-10, C163001-0301	WH-KT-2	13889	13836
CLEVELAND	40-75D	C163001-0302	WH-KT-2	13889	13836
CLEVELAND	40-75T	040-07518-1	WH-KT-2	13889	13836
CLEVELAND	40-76	1241156-11	WH-KT-39	13889	13836
CLEVELAND	40-76A	1241156-11, 1241156-43	WH-KT-39	13889	13836
CLEVELAND	40-76B	0441156-16	WH-KT-42	13889	13836
CLEVELAND	40-77	1241156-12, 0441156-14, 0441156-20, 0441179-14, 0743001-4	WH-KT-34	08125	08231
CLEVELAND	40-78	1241156-13	WH-KT-34	08125	08231
CLEVELAND	40-79	1241156-14	WH-KT-2	13889	13836
CLEVELAND	40-79A	1241156-14	WH-KT-2	13889	13836
CLEVELAND	40-96E	C163001-0401	WH-KT-2	13889	13836
CLEVELAND	40-97	C163001-0102	WH-KT-2	13889	13836
CLEVELAND	40-97A	C163001-0102, C163001-0103	WH-KT-2	13889	13836
CLEVELAND	40-98A	C163001-0501	WH-KT-2	13889	13836
CLEVELAND	40-98H	C163001-0801	WH-KT-2	13889	13836
CLEVELAND	40-127, 40-137, 40-174			18200	18337
CLEVELAND	40-211, 40-279, 40-279A			39250	39412
GOODYEAR	9532522	0541183-9		13889	13830
GOODYEAR	9532673	0541160-13		13889	13830
GOODYEAR	511960S	0441016-1		13889	13830
GOODYEAR	95-3472	0441016-1		13889	13830
MCCAULEY	D30480	C163003-0401	WH-KT-35	LM67048	LM67010
MCCAULEY	D30065	C163002-0101		LM29749	LM29710
MCCAULEY	D30256	C163003-0101		LM29749	LM29710
MCCAULEY	D30291-1	C163004-0101	WH-KT-5	LM29749	LM29710
MCCAULEY	D30291-2	C163004-0102	WH-KT-5	LM29749	LM29710
MCCAULEY	D30291-3	C163004-0103	WH-KT-5	LM29749	LM29710
MCCAULEY	D30291-6	C163004-0104	WH-KT-5	LM29749	LM29710
MCCAULEY	D30500	C163002-0201, C163003-0201, C163005-0201	WH-KT-35	LM67048	LM67010
MCCAULEY	D30580	C163003-0102	WH-KT-5	LM29749	LM29710
MCCAULEY	D30660-1	C163002-0101, C163003-0101, C163005-0101, C163006-0101	WH-KT-5	LM29749	LM29710
MCCAULEY	D30660-2	C163006-0102	WH-KT-5	LM29749	LM29710
MCCAULEY	D30660-3	C163006-0103	WH-KT-5	LM29749	LM29710
MCCAULEY	D30665	9910194-1, C163002-0301, C163003-0301, C163003-0302, C163006-0201	WH-KT-47	LM29749	LM29710
		95-3472		13889	13830
		3244		A4050	A4138
		0441150-6, 0441150-7		LL217849	LL217810
GOODYEAR		0441150-8, 0441150-9, 0541116-2, 0541116-3		LL217849	LL217810

**Note:**  
 For FAA-PMA approved aircraft model eligibility, see [www.mcfarlaneaviation.com](http://www.mcfarlaneaviation.com).  
 ■ Cone P/N LM29749 and Cup P/N LM29710 are used on the outboard of the wheel and Cone P/N 07100 and Cup P/N 07196 or P/N 07204 are used on the inboard of the wheel.

Wheel Seal Kits			
Kit P/N	Qty	Part Number	Description
WH-KT-2	1	MC154-00300	Felt, Grease Seal
	1	MC154-01300	Felt, Grease Seal
	1	MC153-00300	Ring Grease Seal, Flat
	2	MC153-00400	Ring Grease Seal, Flat
	1	MC153-01500	Ring Grease Seal, Cupped
WH-KT-5	2	MC155-00100	Ring, Snap
	1	MC154-00300	Felt, Grease Seal
	1	MC154-30010	Felt, Grease Seal
	2	MC153-30013	Ring Grease Seal, Flat
	1	153-30014	Ring Grease Seal, Cupped
WH-KT-8	1	MC153-30015	Ring Grease Seal, Flat
	2	MC155-11900	Ring, Snap
	1	154-00400	Felt, Grease Seal
	1	153-00500	Plate, Grease Seal
	1	MC156-00100	Plate, Grease Seal
	6	MS35265-45	Screw, Drilled
WH-KT-11	6	MS35333-38	Lock Washer
	1	154-00400	Felt, Grease Seal
	1	MC154-00900	Felt, Grease Seal
	1	MC153-00300	Ring Grease Seal, Flat
	1	153-00500	Plate, Grease Seal
	1	MC153-01000	Plate, Grease Seal
WH-KT-15	1	MC156-00100	Plate, Grease Seal
	6	MS35265-45	Screw, Drilled
	6	MS35333-38	Lock Washer
	1	MC154-00600	Felt, Grease Seal
	2	MC153-00800	Ring Grease Seal, Flat
	2	MC155-00200	Ring, Snap
WH-KT-17	1	154-00800	Felt, Grease Seal
	2	153-00900	Ring Grease Seal, Flat
	1	MC155-00100	Ring, Snap
WH-KT-22	1	155-00600	Ring, Snap
	1	154-01400	Felt, Grease Seal
	2	153-00900	Ring Grease Seal, Flat
WH-KT-28	2	MC155-00200	Ring, Snap
	1	154-03000	Molded Seal
	1	MC155-00100	Ring, Snap
WH-KT-34	1	155-00600	Ring, Snap
	2	MC154-00600	Felt, Grease Seal
	4	MC153-00800	Ring Grease Seal, Flat
	2	MC155-00200	Ring, Snap
WH-KT-35	2	MC154-00600	Felt, Grease Seal
	4	MC153-00800	Ring Grease Seal, Flat
	2	MC155-11800	Ring, Snap
WH-KT-38	2	MC154-00900	Felt, Grease Seal
	2	MC153-00300	Grease Seal Plate
	2	MC153-01000	Plate, Grease Seal
	6	MS35265-45	Screw, Drilled
	6	MS35333-38	Lock Washer
	2	MC154-01300	Felt, Grease Seal
WH-KT-39	2	MC153-00300	Ring Grease Seal, Flat
	2	MC153-01500	Ring Grease Seal, Cupped
	2	MC155-00100	Ring, Snap
	2	154-03000	Molded Seal
WH-KT-42	2	MC155-00100	Ring, Snap
	2	MC154-30010	Felt, Grease Seal
WH-KT-47	2	153-30014	Ring Grease Seal, Cupped
	2	MC153-30015	Ring Grease Seal, Flat
	2	MC155-11900	Ring, Snap

**Wheel Seal Kits and Components for Piper Aircraft Coming Soon!**



## APS BlackSteel® Brake Discs and Linings

Improved braking performance with superior rust pit resistance

APS is a leading manufacturer of FAA-PMA replacement brake components. Their proprietary **BlackSteel** brake discs and linings are designed to provide optimal braking performance and strength with longer service life.

### Installation Tip:

One of the most important factors in disc and lining performance and safety margins is proper break-in.

For break-in procedures go to:

[www.mcfarlaneaviation.com/pdfDocuments/APSBreak-InProcedures.pdf](http://www.mcfarlaneaviation.com/pdfDocuments/APSBreak-InProcedures.pdf)

## APS BlackSteel® Brake Discs

State-of-the-art CNC machined from a one-piece forging

The high quality APS **BlackSteel** brake discs are CNC machined from one piece forgings, eliminating weld failures. When the metal is forged, it creates a directional grain flow that follows the contour of the disc. This allows for a much stronger disc that has a reduced risk of the cracking, distortion and catastrophic failures associated with inferior welded designs.

Proprietary heat treatment provides strength and corrosion resistance

**BlackSteel** discs are put through a proprietary heat treating process that strengthens the steel by bonding the carbon, oxygen, and nitrogen in the top layer of the metal. The process is not a coating, but a transformation of the top layer of the metal, providing corrosion resistance. The heat treatment gives the steel its black appearance and provides the surface with a high resistance to the corrosion and oxidation associated with the extreme thermal cycling experienced in aircraft braking systems. This makes it an excellent choice for agricultural aircraft that work in a harsh, chemical environment, as well as for anyone who leaves their aircraft outside most of the time.

The reduction of corrosion, pitting, rusting and longer service life result in enhanced safety, durability and value, while providing optimum braking performance and strength. APS discs can be used with APS lining or other PMA or OEM lining.



**A Truly Superior Product!  
Don't Buy Yesterday's Technology!**



P/N APS164-02706



P/N APS164-00300



P/N APS164-03006

## APS Brake Linings

Superior stopping power

Two types of brake linings are available: semi-metallic/organic (abrasive) and metallic (adherent).

The part number of the brake assembly as determined by the OEM dictates which type of lining is to be used.

APS linings can be used with APS discs or other PMA or OEM discs.

### Semi-Metallic Brake Linings

The semi-metallic linings are made with Kevlar fibers integrated into the material, providing the greatest stopping power and long lining life. The optimal operating temperature of the semi-metallic linings is 600-900 deg F.

### Metallic Brake Linings

APS metallic brake linings are constructed from an innovative design and durable materials, providing longer wear and superior stopping power for greater safety. The main ingredient in the metallic linings is iron. In an adherent system, a thin layer of lining material transfers and adheres to the disc during break-in. The optimal operating temperature range of the metallic linings is 950-1200 deg F.



P/N APS66-10900



P/N APS66-10800



P/N APS66-10600



P/N APS66-02200

**Improved!**



Top Lining  
P/N APS66-04400  
Bottom Lining



**Improved in 2012 to Break-In Easier and Last Longer!**

## APS Lining Retaining Rivets and Pins

Lining retaining pins are used on various metallic brake linings and rivets are used on various organic brake linings. Retaining pins are sold individually and rivets are sold in packages of 25.

### Rivets and Pins

Part Number	Description	Head Diameter	Shank Diameter
APS105-00200	Rivet	5/16"	5/32"
APS105-06700	Rivet	5/16"	3/16"
APS177-00300	Pin	5/16"	5/32"
APS177-00400	Pin	5/16"	3/16"
APS177-01600	Pin	3/8"	3/16"



P/N APS105-00200



P/N APS177-00300

**See the following pages for use eligibility**



FAA-PMA Approved

Brake Disc, Lining and Rivet Eligibility for Aircraft with Original Wheel and Brake Assemblies

Note: The wheel and brake assemblies on many aircraft have been changed. Verify the wheel and brake assembly part numbers on your aircraft to ensure proper selection. See the table on pages 164-165 for eligibility for aircraft with conversion kits installed.

Brake and Wheel Parts

Aircraft Model	Serial Number	Wheel Assy P/N	Brake Assy P/N	Brake Disc P/N	Lining P/N	Linings per Wheel	Rivet or Pin P/N
<b>Aer Res</b>							
J-2	All	40-78B	30-9	APS164-01700	APS66-10600	2	APS105-00200
<b>Aerofab</b>							
LA-250 (6-Place) Renegade	All	40-74B	30-51B	APS164-00700	APS66-10600	4	APS105-00200
LA-4	246 and up <sup>2</sup>	40-113X	30-75X	APS164-04000	APS66-10500	2	APS105-00200
		40-74 or 40-74B	30-51 or 30-51B	APS164-00700	APS66-10600	4	APS105-00200
		40-74A	30-51	APS164-04700	APS66-10600	4	APS105-00200
<b>Aerospatiale/Socata</b>							
100,110,125,150,180 Series 110ST Calopin		40-97D	30-63J	APS164-02601	APS66-10500	2	APS105-00200
160ST Gamement, 180T Gairien, 180GT Gallaard	All	40-97D	30-63J	APS164-02601	APS66-10500	2	APS105-00200
220,236 Series, 235G Guerrier, 235GT Gabrier, 235CA Gaucho, TB20, 21 Trinidad	All	40-84	30-41B	APS164-01900	APS66-10600	4	APS105-00200
TB30 Epsilon	All	40-90B	30-23B	APS164-02201	APS66-06500	2	APS177-00300
TB9 Tampicp, TB10 Tobago, TB200	All	40-97E	30-63J	APS164-02601	APS66-10500	2	APS105-00200
<b>Aero Commander</b>							
112,112A	All	40-113A	30-79	APS164-04300	APS66-10500	2	APS105-00200
112B,112TC,112TCA,114, 114A,B	All	40-75H	30-52H	APS164-01501	APS66-10500	4	APS105-00200
<b>Air Tractor</b>							
AT-300,301,302	All	40-101	30-67X 30-89	APS164-03006	APS66-10800 APS66-10800	4 6	APS105-00200
AT-400	All	40-133	30-98C	APS164-05806	APS66-10800	12	APS105-00200
AT-400A	All	40-101	30-67X 30-89	APS164-03006	APS66-10800 APS66-10800	4 6	APS105-00200
AT-401,401A	All	40-234	30-184	APS164-05606	APS66-10800	8	APS105-00200
AT-402,501,502,503,503A	All	40-133	30-98C	APS164-05806	APS66-10800	12	APS105-00200
AT-602	All	40-403	30-231	APS164-22202	APS66-06600	12	APS177-00300
AT-802	All <sup>2</sup>	40-279	30-210	APS164-23001	APS66-13100	16	APS105-06700
		40-279A	30-210A	APS164-23002	APS66-13100	16	APS105-06700
<b>Aircraft Designs</b>							
Stallion		40-75B	30-52	APS164-01501	APS66-10500	4	APS105-00200
<b>American Champion</b>							
7ACA	All <sup>2</sup>	40-28D 40-78B	30-19A 30-9	APS164-00500 APS164-01700	APS66-10600 APS66-10600	2 2	APS105-00200
7ECA, 7GCAA, 7GCBC, 7KCAB	All	40-28D	30-19A	APS164-00500	APS66-10600	2	APS105-00200
8GCBC Scout	All	40-47	30-32B	APS164-01100	APS66-10600	4	APS105-00200
8KCAB	All	40-28D	30-19A	APS164-00500	APS66-10600	2	APS105-00200
T-250 Aries		40-75G	30-52S	APS164-01501	APS66-10500	4	APS105-00200
<b>Arctic Aircraft</b>							
S1B2 Arctic Tern	001 thru 1021 1022 and up	40-28 40-86B	30-18 30-55	APS164-00500 APS164-02000	APS66-10600 APS66-10500	2 2	APS105-00200
<b>ASTA GAF (Nomad)</b>							
N22B, N22S	All	40-75T	30-52Q	APS164-08300	APS66-10500	4	APS105-00200
N24A	All <sup>2</sup>	40-75T 40-143	30-52Q 30-129	APS164-08300 APS164-08200	APS66-10500 APS66-06200	4 4	APS105-00200 APS177-00300
<b>Avions Pierre Robin</b>							
140, 160	All	40-97D	30-52T	APS164-03601	APS66-10500	4	APS105-00200
DR400 Series	All	40-97D	30-63E	APS164-02601	APS66-10500	2	APS105-00200
HR100	All <sup>2</sup>	40-97D	30-63D or 30-63E	APS164-02601	APS66-10500	2	APS105-00200
HR120	All	40-97D	30-52N APS164-03601	APS66-10500	APS66-10500	4	APS105-00200
HR120	All <sup>2</sup>	40-97D	30-63D or 30-63E	APS164-02601	APS66-10500	2	APS105-00200
HR200	All	40-97D	30-52N APS164-03601	APS66-10500	APS66-10500	4	APS105-00200
HR210	All	40-97D	30-52T	N/A	APS66-10500	4	APS105-00200
HR400 Series	All	40-97D	30-52T	N/A	APS66-10500	4	APS105-00200
R1000, R2000, R3000 Series	All	40-97D	30-63E	N/A	APS66-10500	2	APS105-00200
R2160	All	40-97A	30-63E	APS164-02601	APS66-10500	2	APS105-00200
<b>Ayres</b>							
S2R-PZL600 Thrush	R35-001 and up 1939 thru 2529R	40-133 40-129	30-98D 30-94	APS164-05806 APS164-05606	APS66-10800 APS66-10800	12 8	APS105-00200
S2R-600 Thrush	2530R and up	40-133	30-98D	APS164-05806	APS66-10800	12	APS105-00200
S2R-711 Turbo Thrush	T11-001 and up	40-133	30-98D	APS164-05806	APS66-10800	12	APS105-00200
S2R-800 Thrush	5000R thru 5082R 5083R and up	40-129 40-133	30-94 30-98	APS164-05806	APS66-10800 APS66-10800	8 12	APS105-00200
S2RHG-T65 Turbo Thrush	All	40-133	30-98D	APS164-05806	APS66-10800	12	APS105-00200
S2R-R1340, S2R-R1820, S2R-R3S	All	40-133	30-98D	APS164-05806	APS66-10800	12	APS105-00200
S2R-T15 Turbo Thrush	All	40-133	30-98	APS164-05806	APS66-10800	12	APS105-00200
S2R-T34 Turbo Thrush	6000 and up	40-133	30-98D	APS164-05806	APS66-10800	12	APS105-00200
S2R-T41 Turbo Thrush	T41-089 and 090	40-133	30-98D	APS164-05806	APS66-10800	12	APS105-00200
S2R-T65 Turbo Thrush	All	40-133	30-98D	APS164-05806	APS66-10800	12	APS105-00200
<b>Beechcraft</b>							
M19A, B19 <sup>1</sup> A23, A23A, A23-19, A23-24 B23, C23 <sup>1</sup> A24R, B24R, C24R <sup>1</sup> 33, A33	MB-461 thru MB-865 All M-1095 thru M-1979 MC-22 thru MC-536	40-113C	30-75B or 30-79A	APS164-04300	APS66-10500	2	APS105-00200
B33 <sup>1</sup>	CD-388 thru CD-639	40-37	30-24	APS164-00700	APS66-10600	4	APS105-00200
F33A <sup>1</sup>	CE-301 thru CE-634 CE635 thru CE-1071	40-83 40-83A	30-54 30-54C	APS164-02505 APS164-02505	APS66-10500 APS66-10500	4 4	APS105-00200
F33C <sup>1</sup>	CJ-125 thru CJ-155	40-83A	30-54C	APS164-02505	APS66-10500	4	APS105-00200
G33 <sup>1</sup>	CD-1272 thru CD-1304	40-83	30-54	APS164-02504	APS66-10500	4	APS105-00200
V35B <sup>1</sup>	D-9862 thru D-10403	40-83	30-54A	APS164-02504	APS66-10500	4	APS105-00200
36, A36 <sup>1</sup>	E-1 thru E-824	40-83	30-54	APS164-02505	APS66-10500	4	APS105-00200
A36 <sup>1</sup>	E-825 thru E-3635	40-83A	30-54,54A,or 54C	APS164-02505	APS66-10500	4	APS105-00200

<sup>1</sup> Partial model eligibility  
<sup>2</sup> Must verify wheel or brake assembly P/N

Eligibility continued on next page.



# Brake and Wheel Parts Brake Discs and Linings



Continued from previous page

Aircraft Model	Serial Number	Wheel Assy P/N	Brake Assy P/N	Brake Disc P/N	Lining P/N	Linings per Wheel	Rivet or Pin P/N
A36TC, B36TC	EA-1 thru EA-695	40-83A or 40-83B	30-54A or 30-54C	APS164-02505	APS66-10500	4	APS105-00200
B55	All	40-128D	30-93B	APS164-06106	APS66-09700	6	APS177-00300
	TC-2092 thru TC-2180	40-128	30-93B	APS164-06106	APS66-04400	6	APS177-00300
	TC-2181 thru TC-2456	40-98G	30-66G	APS164-02706	APS66-09700	4	APS177-00300
C55, D55	All	40-98	30-66	APS164-02706	APS66-04400	4	APS177-00300
	All	40-128D	30-93C	APS164-06106	APS66-09700	6	APS177-00300
E55	TE-768 thru TE-1142	40-98	30-66	APS164-02706	APS66-04400	4	APS177-00300
	TE-1143 thru TE-1201	40-98	30-66	APS164-02706	APS66-04400	4	APS177-00300
		40-98G	30-66G	APS164-09700	APS66-09700	4	APS177-00300
56TC, A56TC	All	40-98	30-69A	APS164-02706	APS66-02200	4	APS177-00300
58	All	40-128D	30-93C	APS164-06106	APS66-09700	6	APS177-00300
	TH-1 thru TH-972	40-98	30-66	APS164-02706	APS66-04400	4	APS177-00300
	TH-973 thru TH-2124	40-98	30-66	APS164-02706	APS66-04400	4	APS177-00300
40-98G	30-66G	APS164-02706	APS66-09700	4	APS177-00300		
58P1	TJ-436 thru TJ-497	40-171	30-145	APS164-20806	APS66-09700	6	APS177-00300
B60	All	40-171	30-145	APS164-20806	APS66-09700	6	APS177-00300
76	All	40-83	30-54B	APS164-02504	APS66-10500	4	APS105-00200
<b>Bellanca</b>							
17-30A, 17-31A, 17-31ATC	All	40-75E	30-52M	APS164-01501	APS66-10500	4	APS105-00200
DW-1	All	40-101	30-89A	APS164-03006	APS66-10800	6	APS105-00200
<b>Burkhart Grob</b>							
G103, G103C Twin II Sailplane	All	40-97A	30-63A	APS164-02601	APS66-10500	2	APS105-00200
G109 Series Power Glider	All	40-78B	30-9	APS164-01700	APS66-10600	2	APS105-00200
<b>Cessna</b>							
120, 140, 140A	All	40-97A	30-63A	APS164-02601	APS66-10500	2	APS105-00200
150A, B	15059119 thru 15059700	40-12	30-9	APS164-00400	APS66-10600	2	APS105-00200
150C	All	40-57	30-40	APS164-00400	APS66-10600	2	APS105-00200
150D, E	All	40-79A	30-40	APS164-01600	APS66-10600	2	APS105-00200
150F, G	All	40-97	30-63	APS164-02601	APS66-10500	2	APS105-00200
150H, J, K	15072004 thru 15074850	40-97A	30-63A	APS164-02601	APS66-10500	2	APS105-00200
		D-30063	C-30018	N/A	APS66-10900	2	APS105-00200
		40-113	30-75	APS164-04000	APS66-10500	2	APS105-00200
150L, M	15074851 thru 15077403 15077380, 15077402, 15077404 thru 15079113	40-113	30-75	APS164-04000	APS66-10500	2	APS105-00200
		40-113	30-75	APS164-04000	APS66-10500	2	APS105-00200
		D30291-6	C30018 or C30018-4	APS164-30440	APS66-10900	2	APS105-00200
		40-97A	30-63A	APS164-02601	APS66-10500	2	APS105-00200
A150K	All	40-97A	30-63A	APS164-02601	APS66-10500	2	APS105-00200
A150L, M	A1500227 thru A1500429 A1500430 thru A15000641	D-30063	C-30018	N/A	APS66-10900	2	APS105-00200
		40-113	30-75	APS164-04000	APS66-10500	2	APS105-00200
		40-113	30-75	APS164-04000	APS66-10500	2	APS105-00200
A150M	A15000642 thru A1500717	40-113	30-75	APS164-04000	APS66-10500	2	APS105-00200
F150F, G	All	D30291-6	C30018 or C30018-4	APS164-30440	APS66-10900	2	APS105-00200
F150H, J	All	40-97	30-63	APS164-02601	APS66-10500	2	APS105-00200
F150K, L, M	All	40-97A	30-63A	APS164-02601	APS66-10500	2	APS105-00200
F150M	F1500530 thru F15001332	40-113	30-75	APS164-04000	APS66-10500	2	APS105-00200
FA150K, L	F15001333 thru F15001418	40-113	30-75	APS164-04000	APS66-10500	2	APS105-00200
		D30291-6	C30018-4	APS164-30440	APS66-10900	2	APS105-00200
		40-113	30-75	APS164-04000	APS66-10500	2	APS105-00200
FRA150L	All	40-113	30-75	APS164-04000	APS66-10500	2	APS105-00200
152	All	40-113	30-75	APS164-04000	APS66-10500	2	APS105-00200
A152, F152	All	D30063	C-30018	N/A	APS66-10900	2	APS105-00200
		40-113	30-75	APS164-04000	APS66-10500	2	APS105-00200
		40-113	30-75	APS164-04000	APS66-10500	2	APS105-00200
FA152	All	D-30660-1	C-30018-5	APS164-30615-4	APS66-10900	2	APS105-00200
		D-30600-1	C-30018-5	N/A	APS66-10900	2	APS105-00200
		D-30580	C-30018-4	APS164-30195	APS66-10900	2	APS105-00200
		D-30291-6	C-30018-4	APS164-30440	APS66-10900	2	APS105-00200
172, 172A, B, C	17246421 thru 17249544	40-113	30-75	APS164-04000	APS66-10900	2	APS105-00200
172D, E, F, G, H, I, K	All	40-97A	30-56, 30-63, 30-63A	APS164-02601	APS66-10500	2	APS105-00200
172L, M	17259224 thru 17263458	40-97A	30-56, 30-63,	APS164-02601	APS66-10500	2	APS105-00200
		D-30063	C-30018-2	N/A	APS66-10900	2	APS105-00200
		40-113	30-63A, 30-75A	APS164-04000	APS66-10500	2	APS105-00200
172M, N, P, Q, R, S	17263459 and on	40-113	30-75A	APS164-04000	APS66-10500	2	APS105-00200
172RG	All	D-30660-1	C-30018-6, C-30764-5	APS164-30615-4	APS66-10900	2	APS105-00200
F172F, G, H	All	40-97A	30-56, 30-63A	APS164-02601	APS66-10500	2	APS105-00200
F172K	All	40-113	30-75A	APS164-04000	APS66-10500	2	APS105-00200
F172L	F17200805 thru F17200904	40-113	30-75A	APS164-04000	APS66-10500	2	APS105-00200
F172M	F17200905 thru F17201514	40-113	30-75A	APS164-04000	APS66-10500	2	APS105-00200
		D-30260, D30580	C-30018-2	APS164-30195	APS66-10900	2	APS105-00200
		D-30600-1	C-30018-6	N/A	APS66-10900	2	APS105-00200
F172N	F17201515 thru F17201639	40-113	30-75A	APS164-04000	APS66-10500	2	APS105-00200
		D-30660-1	C-30018-6, C30764-6	APS164-30615-4	APS66-10900	2	APS105-00200
F172N, P	F17201640 thru F17202254	40-113	30-75A	APS164-04000	APS66-10500	2	APS105-00200
F172RG	All	40-113	30-75	APS164-04000	APS66-10500	2	APS105-00200
FR172J	FR17200351 thru FR17200590	D-30260	C-30018-2	APS164-30195	APS66-10900	2	APS105-00200
FR172K	FR17200591 thru FR17200620 FR17200621 thru FR17200675	D-30600-1	C-30018-6	N/A	APS66-10900	2	APS105-00200
		D-30660-1	C-30018-6, C30764-6	APS164-30615-4	APS66-10900	2	APS105-00200
R172H	R1720453 thru R1720603	D-30063	C-30018-2	N/A	APS66-10900	2	APS105-00200
175, A, B	17555876 thru 17557119	40-97A	30-63A	APS164-02601	APS66-10500	2	APS105-00200
177A, B	17701165 thru 17701530	40-97A	30-63A	APS164-02601	APS66-10500	2	APS105-00200
177B	17701531 thru 17702123	40-113	30-45	APS164-04000	APS66-10500	2	APS105-00200
177B	17702124 thru 17702313 17702314 thru 17702522 17702523 thru 17702672 17702673 thru 17702752	40-113	30-45	APS164-04000	APS66-10500	2	APS105-00200
		D-30580	C-30018-4	APS164-30195	APS66-10900	2	APS105-00200
		40-113	30-45	APS164-04000	APS66-10500	2	APS105-00200
		D-30291-6	C-30018-4	APS164-30440	APS66-10900	2	APS105-00200
		40-113	30-45	APS164-04000	APS66-10500	2	APS105-00200
		D-30660-1	C-30018-5	N/A	APS66-10900	2	APS105-00200

1 Partial model eligibility

2 Must verify wheel or brake assembly P/N

Eligibility continued on next page.



FAA-PMA Approved

Continued from previous page

Brake and Wheel Parts

Aircraft Model	Serial Number	Wheel Assy P/N	Brake Assy P/N	Brake Disc P/N	Lining P/N	Linings per Wheel	Rivet or Pin P/N	
Cessna	177RG0001 thru 177RG0592	40-113	30-75	APS164-04000	APS66-10500	2	APS105-00200	
	177RG0593 thru 177RG0787	40-113	30-75	APS164-04000	APS66-10500	2	APS105-00200	
	177RG	177RG0788 thru 177RG1051	D-30580	C-30018-4	APS164-30195	APS66-10900	2	APS105-00200
			40-113	30-75	APS164-04000	APS66-10500	2	APS105-00200
	177RG	177RG1052 thru 177RG1266	D-30291-6	C-30018-4	APS164-30440	APS66-10900	2	APS105-00200
			40-113	30-75	APS164-04000	APS66-10500	2	APS105-00200
177RG	177RG1267 thru 177RG1366	D-30660-1	C-30018-5	N/A	APS66-10900	2	APS105-00200	
		40-113	30-75	APS164-04000	APS66-10500	2	APS105-00200	
	D-30660-1	N/A	APS164-30615-4	APS66-10900	2	APS105-00200		
	F177RG0001 thru F177RG0122	40-113	30-75	APS164-04000	APS66-10500	2	APS105-00200	
F177RG	F177RG0123 thru F177RG0138	40-113	30-75	APS164-04000	APS66-10500	2	APS105-00200	
		D-30580	C-30018-4	APS164-30195	APS66-10900	2	APS105-00200	
	F177RG0139 thru F177RG0160	40-113	30-75	APS164-04000	APS66-10500	2	APS105-00200	
		D-30291-6	C-30018-4	APS164-30440	APS66-10900	2	APS105-00200	
F177RG0161 thru F177RG0177	40-113	30-75	APS164-04000	APS66-10500	2	APS105-00200		
	D-30660-1	C-30018-5	N/A	APS66-10900	2	APS105-00200		
180G	All	40-75B	30-52	APS164-01501	APS66-10500	4	APS105-00200	
180H	18051775 thru 18051993	40-66	30-21	APS164-00700	APS66-10600	4	APS105-00200	
	18052011 thru 18052284	40-75D	30-52D, 30-52N	APS164-03601	APS66-10500	4	APS105-00200	
180J	18052285 thru 18052500	D-30063-1	C-30018-1	N/A	APS66-10900	2	APS105-00200	
		D30291-3	C30118-4	APS164-30414	APS66-10900	2	APS105-00200	
		40-75B	30-52D	APS164-01501	APS66-10500	2	APS105-00200	
		40-75D	30-52N	APS164-03601	APS66-10500	2	APS105-00200	
180J, K	18052501 thru 18052924	40-75B	30-52D	APS164-01501	APS66-10500	2	APS105-00200	
		40-75D	30-52N	APS164-03601	APS66-10500	2	APS105-00200	
180K	18052925 thru 18053203	D30291-3	C30118-4	APS164-30414	APS66-10900	2	APS105-00200	
		40-75B	30-52D	APS164-01501	APS66-10500	2	APS105-00200	
		40-75D	30-52N	APS164-03601	APS66-10500	2	APS105-00200	
182B, C, D, E, F, G, H, J, K, L, M, N	18251886 thru 18260445	D30660-2	C30118-5	APS164-30615-2	APS66-10900	2	APS105-00200	
		40-97A	30-63A, 30-56A	APS164-02601	APS66-10500	2	APS105-00200	
182N	18260446 thru 18260825	40-113	30-75	APS164-04000	APS66-10500	2	APS105-00200	
182P	18260826 thru 18264295	40-113	30-75	APS164-04000	APS66-10500	2	APS105-00200	
		40-113	30-75	APS164-04000	APS66-10500	2	APS105-00200	
	18264296 thru 18265175	D-30291-6	C-30018-4	APS164-30440	APS66-10900	2	APS105-00200	
		40-113	30-75	APS164-04000	APS66-10500	2	APS105-00200	
182Q	18265176 thru 18265328	D-30600-1	C-30018-5	N/A	APS66-10900	2	APS105-00200	
		40-113	30-75	APS164-04000	APS66-10500	2	APS105-00200	
	18265329 thru 18265965	D-30600-1	C-30018-5	N/A	APS66-10900	2	APS105-00200	
		D30660-1	C-30018-5	APS164-30615-4	APS66-10900	2	APS105-00200	
18265966 thru 18267715	40-113	30-75	APS164-04000	APS66-10500	2	APS105-00200		
	D-30600-1	C-30018-5	APS164-30615-4	APS66-10900	2	APS105-00200		
182R	18267716 thru 18268541	D30660-3	D30118-4	APS164-30615-3	APS66-10900	2	APS105-00200	
182S, T, T182T	All	40-75B	30-52E	APS164-01501	APS66-10500	4	APS105-00200	
F182P	All	D-30291-6	C-30018-4	APS164-30440	APS66-10900	2	APS105-00200	
F182Q	F18200026 thru F18200064	D-30600-1	C-30018-5	N/A	APS66-10900	2	APS105-00200	
F182Q	F18200065 thru F18200169	D-30600-1	C-30018-5	APS164-30615-4	APS66-10900	2	APS105-00200	
FR182, R182, TR182, T182	All	D-30660-3	D-30118-3	APS164-30615-3	APS66-10900	4	APS105-00200	
185, 185A	All	40-32	30-21	APS164-00700	APS66-10600	4	APS105-00200	
185B	All	40-66	30-21	APS164-00700	APS66-10600	4	APS105-00200	
185C, D, E	185-0654 thru 185-1149	40-75B	30-52	APS164-01501	APS66-10500	4	APS105-00200	
A185E	185-1150 thru 18502090	40-66	30-21	APS164-00700	APS66-10600	4	APS105-00200	
		40-75B	30-52	APS164-01501	APS66-10500	4	APS105-00200	
		40-75D	30-52D	APS164-03601	APS66-10500	4	APS105-00200	
		40-75B	30-52	APS164-01501	APS66-10500	4	APS105-00200	
A185F	All	40-75D	30-52D	APS164-03601	APS66-10500	4	APS105-00200	
		D-30291-3	D-30118-5	APS164-30414	APS66-10900	4	APS105-00200	
		D-30291-1	D-30118-5	APS164-30388	APS66-10900	4	APS105-00200	
		D-30660-2	D-30118-5	APS164-30615-2	APS66-10900	4	APS105-00200	
		40-75B	30-52B	APS164-01501	APS66-10500	4	APS105-00200	
188, 188A, 188B, A188, A188A	188-0001 thru 18801040	40-101A	30-67	APS164-03106	APS66-10800	4	APS105-00200	
		40-101	30-67A	APS164-03006	APS66-10800	4	APS105-00200	
		40-101A	30-67A	APS164-03106	APS66-10800	4	APS105-00200	
A188B, T188C	18801041 thru 18803521 18801041T thru T18803521T	40-98A	30-66A	APS164-02707	APS66-11000	4	APS105-00200	
210-5 (205)	All	40-67	30-35	APS164-00700	APS66-10600	4	APS105-00200	
210-5A (205A)	All	40-75B	30-52	APS164-01501	APS66-10500	4	APS105-00200	
206, U206, A, B, C, D	206-0001 thru U206-1256	40-75B	30-52	APS164-01501	APS66-10500	4	APS105-00200	
U206D, E	U2061257 thru U20601700	40-75B	30-52	APS164-01501	APS66-10500	4	APS105-00200	
		40-75D	30-52N	APS164-03601	APS66-10500	4	APS105-00200	
U206F	U20601701 thru U20602199	40-75B	30-52	APS164-01501	APS66-10500	4	APS105-00200	
		40-75D	30-52N	APS164-03601	APS66-10500	4	APS105-00200	
U206F, G	U20602200 thru U20604649	D-30291-1	D-30118-6	APS164-30388	APS66-10900	4	APS105-00200	
		40-75D	30-52N	APS164-03601	APS66-10500	4	APS105-00200	
	U20604650 thru U20607020	D-30291-1	D-30118-6	APS164-30388	APS66-10900	4	APS105-00200	
		D-30660-2	D-30118-6	APS164-30615-2	APS66-10900	4	APS105-00200	
	40-75D	30-52N	APS164-03601	APS66-10500	4	APS105-00200		
D-30660-3	D-30118-4	APS164-30615-3	APS66-10900	4	APS105-00200			
206H, T206H	All	40-75B	30-52U	APS164-01501	APS66-10500	4	APS105-00200	
P206, P206A, B, C, D	P206-0001 thru P206-0566	40-75B	30-52	APS164-01501	APS66-10500	4	APS105-00200	
P206D, E	P206-0557 thru P20600647	40-75D	30-52N	APS164-03601	APS66-10500	4	APS105-00200	
207, 207A, T207, T207A	All	40-75B	30-52F	APS164-01501	APS66-10500	4	APS105-00200	
		40-75D	30-52A	APS164-03601	APS66-10500	4	APS105-00200	
208, 208A, B	All	40-179	30-163 or 30-182	APS164-22201	APS66-03300 APS66-15300	8	APS177-00300	

**1** Partial model eligibility  
**2** Must verify wheel or brake assembly P/N  
**3** Aircraft with 30-182A calipers installed must use APS66-15300 linings. Aircraft with 30-182 calipers installed may use either APS66-03300 or APS66-15300 linings in complete sets. **Caution:** Never mix APS66-03300 linings on the same caliper as the APS66-15300's. APS66-15300 linings are .035" thicker than the APS66-03300's.  
**4** Complete Brake Kit P/N 208-BRK-KT-1 contains: brake discs, brake linings, pins, bleeder seat, bleeder needle, needle cap and O-ring.

Eligibility continued on next page.





# Brake and Wheel Parts Brake Discs and Linings



FAA-PMA Approved

Continued from previous page

Aircraft Model	Serial Number	Wheel Assy P/N	Brake Assy P/N	Brake Disc P/N	Lining P/N	Linings per Wheel	Rivet or Pin P/N
<b>Cessna</b>							
210C	21058086 thru 21058220	40-21	30-45	APS164-00900	APS66-11100	2	APS105-00200
210D,E,F,G,H,J,K,L <sup>1</sup>	21058221 thru 21060089 <sup>2</sup>	40-75B D-30291-2	30-52 or 30-52V D-30118-4	APS164-01501 APS164-30398	APS66-10500 APS66-10900	4	APS105-00200 APS105-00200
210L <sup>1</sup> ,M,N,R	21060090 thru 21065009 <sup>2</sup>	40-75B D-30291-2 D-30660-3	30-52 or 30-52V D-30118-4 D-30118-4	APS164-01501 APS164-30398 APS164-30615-3	APS66-10500 APS66-10900 APS66-10900	4	APS105-00200 APS105-00200 APS105-00200
P210N,R	All <sup>2</sup>	40-75B 40-142	30-52V 30-127C	APS164-01501 APS164-07800	APS66-10500 APS66-06200	4	APS105-00200 APS177-00300
T210F,G,H,J	All	40-75 or 40-75B	30-52	APS164-01501	APS66-10500	4	APS105-00200
303, T303	All <sup>2</sup>	40-142 40-98H	30-127C 30-66F	APS164-07800 APS164-08406	APS66-06200 APS66-04400	4	APS177-00300 APS177-00300
305	All <sup>2</sup>	40-75F 40-97E	30-52L 30-63K	APS164-01501 APS164-02601	APS66-10500 APS66-10500	4	APS105-00200 APS105-00200
310R <sup>1</sup>	310R0501 thru 310R2140 <sup>2</sup>	40-40A 40-40D	30-28B 30-28B	APS164-00806 APS164-20206	APS66-03300 APS66-03300	6	APS177-00400 APS177-00400
335	All	40-40A	30-28B	APS164-00806	APS66-03300	6	APS177-00400
336	3360001 thru 3360098 3360099 and up	40-67 40-75B	30-35 30-52	APS164-00700 APS164-01501	APS66-10600 APS66-10600	4	APS105-00200 APS105-00200
337, 337A	All	40-96A	30-61	APS164-02504	APS66-10500	4	APS105-00200
337B <sup>1</sup> ,C,D	3370526 thru 337-0619 3370526 thru 3371193	40-96A	31-61A 31-61D	APS164-02504 APS164-02504	66-03600 <sup>3</sup> APS66-10500	4	APS105-00200 APS105-00200
337E	All	40-98A	30-69B	APS164-02707	APS66-02200	4	APS177-00300
340, 340A <sup>1</sup>	340-0001 thru 340A1200	40-40A	30-28B	APS164-00806	APS66-03300	6	APS177-00400
340A <sup>1</sup>	340A1201 thru 340A1817	40-40D	30-28B	APS164-20206	APS66-03300	6	APS177-00400
401 Series	All	40-40A	30-28B	APS164-00806	APS66-03300	6	APS177-00400
402,A,B <sup>1</sup>	4020001 thru 402C0400	40-135	30-100	APS164-06406	APS66-06600	8	APS177-01600
402B,C <sup>1</sup>	402C0401 thru 402C1020 <sup>2</sup>	40-135 40-135A	30-100 30-100	APS164-06406 APS164-20306	APS66-06600 APS66-06600	8	APS177-01600 APS177-01600
404	All	40-132	30-97	APS164-09100	APS66-06400	8	APS177-01600
411, 411A <sup>1</sup>	All <sup>2</sup>	40-40A	30-28B	APS164-00806	APS66-03300	6	APS177-00400
414	All	McCauley	N/A	N/A	APS66-06600		APS177-01600
414A <sup>1</sup>	414A0001 thru 414A0600 <sup>2</sup>	40-135	30-100	APS164-06406	APS66-06600	8	APS177-01600
		40-40A	30-28B	APS164-00806	APS66-03300	6	APS177-00400
		40-135	30-100	APS164-06406	APS66-06600	8	APS177-01600
		40-40A	30-28B	APS164-00806	APS66-03300	6	APS177-00400
421C <sup>1</sup>	421C0001 thru 421C0910 421C1001 thru 421C1807	40-135	30-100	APS164-06406	APS66-06600	8	APS177-01600
		40-135A	30-100	APS164-20306	APS66-06600	8	APS177-01600
425	All	40-138 or 40-138A	30-113 or 30-113A	APS164-05500	APS66-06400	8	APS177-01600
<b>Cirrus Design Group</b>							
SR-20	1601 and up	40-75P	30-52AB	APS164-01501	APS66-10500	4	APS105-00200
SR-22	1740 and up	40-406	30-233B	APS164-02504	APS66-06200	4	APS177-00300
<b>Daimler Benz/ M.B.B.</b>							
B.O. 209 Monsun	All	40-78B	30-9	APS164-01700	APS66-10600	2	APS105-00200
<b>Diamond Aircraft</b>							
DA20	All	40-78E	30-9D	APS164-24200	APS66-10600	2	APS105-00200
DA40	All	40-14A	30-239	APS164-24400	APS66-14100	2	APS105-00200
DA42 Twin Star	All	40-75Z	30-52Z	APS164-01501	APS66-10500	4	APS105-00200
<b>Eagle Aircraft</b>							
220, 300 Eagle	All	40-101	30-89A	APS164-03006	APS66-10800	6	APS105-00200
<b>Explorer Aeronautique</b>							
Private Explorer Float	All	40-101	30-67B	APS164-03006	APS66-10800	4	APS105-00200
<b>FFA Flugzeugwerke</b>							
AS202-18A4 Bravo	All	40-97A	30-63A	APS164-02601	APS66-10500	2	APS105-00200
<b>Found Brothers</b>							
100 Centennial	All	40-75B	30-52	APS164-01501	APS66-10500	4	APS105-00200
<b>GAF Australia</b>							
N22B, N22S	All	40-75T	30-52Q	APS164-08300	APS66-10500	4	APS105-00200
N24A	All <sup>2</sup>	40-75T 40-143	30-52Q 30-129	APS164-08300 164-08200 <sup>4</sup>	APS66-10500 APS66-06200	4	APS105-00200 APS177-00300
<b>General Aviation (Italy)</b>							
F.20 Pegaso, F.20TP condor	All	40-75G	30-52P	APS164-01501	APS66-10500	4	APS105-00200
F.22 Pinguino	All	40-151	30-164	APS164-08500	APS66-06200	2	APS177-00300
<b>Great Lakes</b>							
2T-1A	All	40-113	30-75	APS164-04000	APS66-10500	2	APS105-00200
<b>Grob</b>							
G103, G103C	All	40-97A	30-63A	APS164-02601	APS66-10500	2	APS105-00200
G109, G109B	All	40-78B	30-9	APS164-01700	APS66-10600	2	APS105-00200
<b>Grumman</b>							
AA-1, AA-5	All	40-86A	30-55B	APS164-02000	APS66-10500	2	APS105-00200
AA-1A, AA-1B, AA-5A, AA-5B	All	40-88C	30-56B	APS164-02000	APS66-10500	2	APS105-00200
700	All	40-128C	30-93A	APS164-05006	APS66-02200	6	APS177-00300
450, 600	All	40-101	30-67	APS164-03006	APS66-10800	4	APS105-00200
G164	All	40-47	30-32C	APS164-01100	APS66-10600	4	APS105-00200
G164A	All	40-101	30-67	APS164-03006	APS66-10800	4	APS105-00200
G164B, G164C, G164D	All	40-133	30-84	APS164-05806	APS66-10800	8	APS105-00200
GA-7	All	40-90	30-23B	APS164-02201	APS66-06500	2	APS177-00300
<b>Helio</b>							
H-250, H-295, H-391, H-395	All <sup>2</sup>	40-75D	30-52N	APS164-03601	APS66-10500	4	APS105-00200
		40-75E	30-52A	APS164-01501	APS66-10500	4	APS105-00200
		40-75T	30-52N	APS164-08300	APS66-10500	4	APS105-00200
		40-98A	30-66A	APS164-02707	APS66-10500	4	APS105-00200
<b>Hunting Firecracker A/C</b>							
NDN1T Turbo Firecracker	All	40-120C	30-83A	N/A	APS66-06200	4	APS177-00300
<b>Industria Unidas SA</b>							
A-9B Sparrow, Quail	All	40-99	30-41	APS164-02800	APS66-10600	4	APS105-00200

<sup>1</sup> Partial model eligibility  
<sup>2</sup> Must verify wheel or brake assembly P/N  
<sup>3</sup> OEM lining must be used  
<sup>4</sup> OEM disc must be used

Eligibility continued on next page.

Brake and Wheel Parts



FAA-PMA Approved

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Aircraft Model	Serial Number	Wheel Assy P/N	Brake Assy P/N	Brake Disc P/N	Lining P/N	Linings per Wheel	Rivet or Pin P/N
<b>Marsh Aviation</b>							
G-164C-T Turbo Cat	All	40-133	30-84	APS164-05806	APS66-10800	8	APS105-00200
S2R-T Turbo Thrush	All <sup>2</sup>	40-129 or 40-133	30-94	APS164-05606	APS66-10800	8	APS105-00200
<b>Maule Air</b>							
M4, M5, M6 Series	All	40-97D	30-63E	APS164-02601	APS66-10500	2	APS105-00200
M7, M9 Series	All	40-75D	30-52A or 30-52N	APS164-03601	APS66-10500	4	APS105-00200
<b>Mcculloch</b>							
J-2 Helicopter	All	40-78B	30-9	APS164-01700	APS66-10600	2	APS105-00200
<b>Mooney</b>							
M10 Cadet	All <sup>2</sup>	40-97 or 40-97A	30-63 or 30-63A	APS164-02601	APS66-10500	2	APS105-00200
M20A, B <sup>1</sup>	1401 thru 3466	40-24	30-5	APS164-00900	APS66-11100	N/A	APS105-00200
M20C <sup>1</sup>	670001 thru 690098	40-86	30-56A	APS164-02000	APS66-10500	2	APS105-00200
M20D	All	40-24	30-5	APS164-00900	APS66-11100	N/A	APS105-00200
M20E <sup>1</sup>	101 thru 1308	40-24	30-5	APS164-00900	APS66-11100	N/A	APS105-00200
	670001 thru 700061	40-86	30-56A	APS164-02000	APS66-10500	2	APS105-00200
M20F <sup>1</sup>	660003 thru 700072	40-86	30-56A	APS164-02000	APS66-10500	2	APS105-00200
M20G, J, K	All	40-86	30-56A	APS164-02000	APS66-10500	2	APS105-00200
M20M	All	40-92A	30-65	APS164-02300	APS66-10500	4	APS105-00200
<b>NDN Aircraft</b>							
NDN6 Fieldmaster	All	40-175	30-149	164-21100 <sup>4</sup>	APS66-06600	12	APS177-01600
<b>Pacific Aerospace</b>							
FU24-954; FU24A-954	240, 247 and up	40-47	30-32C	APS164-01100	APS66-10600	4	APS105-00200
08-600 Cresco	All	40-101	30-89	APS164-03006	APS66-10800	6	APS105-00200
<b>Partenavia</b>							
P.64B, P.66B	All	40-28	30-18	APS164-00500	APS66-10600	2	APS105-00200
P.66C-160, P.66T	All	40-86B	30-55	APS164-02000	APS66-10500	2	APS105-00200
P.68, P.68B, P.68C, P.68C-TC	All	40-142	30-127	APS164-07800	APS66-06200	4	APS177-00300
<b>Partenavia Series 300</b>							
Series 300	All	40-163	30-139	APS164-20500	APS66-06200	8	APS177-00300
<b>Performance Aircraft</b>							
Legend	All	40-96E	30-61E	APS164-02504	APS66-10500	4	APS105-00200
<b>Pilatus Britten-Norman</b>							
BN-2 Series	All <sup>2</sup>	40-90F	30-23D	APS164-01506	APS66-06500	2	APS177-00300
		40-90	30-23A	APS164-02201	APS66-06500	2	APS177-00300
		40-90B	30-23C	APS164-02201	APS66-06500	2	APS177-00300
		40-98F	30-66D	APS164-02706	APS66-02200	4	APS177-00300
<b>Pilatus Britten-Norman Defender 4000</b>							
Defender 4000	All	40-128E	30-93E	164-23300 <sup>4</sup>	APS66-04400	6	APS177-00300
<b>Piper</b>							
J-3, PA-11, PA-12, PA-14, PA-16	All	40-60	30-60	APS164-06700	APS66-10600	4	APS105-00200
PA-18	All <sup>2</sup>	40-60	30-60	APS164-06700	APS66-10600	4	APS105-00200
		40-84	30-41	APS164-01900	APS66-10600	4	APS105-00200
PA-18-150, PA-18A-150	All	40-60	30-60	APS164-06700	APS66-10600	4	APS105-00200
PA-20	All <sup>2</sup>	40-60	30-60	APS164-06700	APS66-10600	4	APS105-00200
		40-84	30-41	APS164-01900	APS66-10600	4	APS105-00200
PA-22	All	40-84	30-41	APS164-01900	APS66-10600	4	APS105-00200
PA-22-108	All	40-28	30-18	APS164-00500	APS66-10600	2	APS105-00200
PA-23-150, 160	All	40-3	30-13	159-00200 <sup>4</sup>	APS66-10600	4	APS105-00200
PA-23-235	All	40-4	30-8	APS164-00206	APS66-10600	8	APS105-00200
PA-E23-250 <sup>1</sup>	27-3738 thru 27-7554 and 27-7554139 27-7554141 thru 27-7554149 and 27-7554138	40-116	30-72	APS164-03206	APS66-06500	4	APS177-00300
		40-116 or 40-131	30-96	APS164-05700	APS66-06200	8	APS177-00300
PA-24-180,250,260 <sup>1</sup>	24-1 thru 24-3306 24-3307 and On <sup>2</sup>	40-5	30-12	159-00100 <sup>4</sup>	APS66-10600	4	APS105-00200
		40-58	30-41	APS164-00900	APS66-10600	4	APS105-00200
		40-84	30-41B	APS164-01900	APS66-10600	4	APS105-00200
PA-25, PA-25-235	25-1 thru 25-1999 25-2000 thru 25-4171 25-4172 and on	40-5	30-12	159-00100 <sup>4</sup>	APS66-10600	4	APS105-00200
		40-61	30-41	APS164-01300	APS66-10600	4	APS105-00200
		40-84A	30-41B	APS164-03300	APS66-10600	4	APS105-00200
PA-28-140	28-20002 thru 28-20520 28-20521 thru 28-7725290	40-28	30-18	APS164-00500	APS66-10600	2	APS105-00200
		40-86	30-55	APS164-02000	APS66-10500	2	APS105-00200
PA-28-150	All	40-28	30-18	APS164-00500	APS66-10600	2	APS105-00200
PA-28-151	All	40-86B	30-55	APS164-02000	APS66-10500	2	APS105-00200
PA-28-160	All	40-86	30-55	APS164-02000	APS66-10500	2	APS105-00200
PA-28-161	All	40-86B	30-55	APS164-02000	APS66-10500	2	APS105-00200
		40-28	30-18	APS164-00500	APS66-10600	2	APS105-00200
PA-28-180 <sup>1</sup>	28-1 thru 28-1760 28-1761 thru 28-5869 28-7105001 thru 28-7505260	40-86	30-55	APS164-02000	APS66-10500	2	APS105-00200
		40-86	30-55	APS164-02000	APS66-10500	2	APS105-00200
		40-84	30-41	APS164-01900	APS66-10600	4	APS105-00200
PA-28-180	All <sup>2</sup>	40-86	30-55	APS164-02000	APS66-10500	2	APS105-00200
		40-86B	30-55	APS164-02000	APS66-10500	2	APS105-00200
PA-28-181	All	40-86B	30-55	APS164-02000	APS66-10500	2	APS105-00200
PA-28-200 <sup>1</sup>	28R-35001 thru 28R-7135109 28R-7135110 thru 28R-7635545	40-84	30-41	APS164-01900	APS66-10600	4	APS105-00200
		40-86 or 40-86B	30-55	APS164-02000	APS66-10500	2	APS105-00200
PA-28-201T, PA-28R-201	All	40-86B	30-55	APS164-02000	APS66-10500	2	APS105-00200
PA-28R-201T, PA-28RT-201	All	40-86B	30-55	APS164-02000	APS66-10500	2	APS105-00200
PA-28-235	All	28-7410001 thru 28-7710089	40-86	30-55	APS164-02000	2	APS105-00200
PA-28-236	All <sup>2</sup>	40-86B	30-55	APS164-02000	APS66-10500	2	APS105-00200
		40-90A	30-65	APS164-02300	APS66-10500	4	APS105-00200
PA-30	30-2 - 30-845 30-846 thru 30-2000	40-34	30-23	APS164-01000	APS66-06500 <sup>3</sup>	2	APS177-00300
		40-90	30-23	APS164-02201	APS66-06200 <sup>3</sup>	2	APS177-00300
PA-31-300,310 <sup>1</sup>	All	31-5 thru 31-7300962	40-102	30-68	APS164-03506	6	APS177-00400
PA-31-325	All	40-102A	30-68A	APS164-04406	APS66-03300	6	APS177-00400
PA-31-350 <sup>1</sup>	31-5001 thru 31-8452021	40-102A	30-68A	APS164-04406	APS66-03300	6	APS177-00400
		40-130	30-95A	APS164-07906	APS66-06600	8	APS177-01600
PA-31-350 <sup>1</sup> (T-1020)	Heavy Duty Option 31-8253001 thru 31-8453021	40-141	30-123	APS164-07700	APS66-06800	12	APS177-01600
		40-130	30-95A	APS164-07906	APS66-06600	8	APS177-01600
PA-31T1,2,3 (T-1020)	All	40-106	30-106	APS164-03906	APS66-06800	16	APS177-01600

<sup>1</sup> Partial model eligibility

<sup>2</sup> Must verify wheel or brake assembly P/N

<sup>3</sup> Use P/N APS66-06200 on the back plate and P/N APS66-06500 on the pressure plate.

<sup>4</sup> OEM disc must be used

Eligibility continued on next page.



# Brake and Wheel Parts Brake Discs and Linings



Continued from previous page

Aircraft Model Piper	Serial Number	Wheel Assy P/N	Brake Assy P/N	Brake Disc P/N	Lining P/N	Linings per Wheel	Rivet or Pin P/N
PA-32-260	Heavy Duty Option	40-120	30-63	AOS164-21600	APS66-06200	4	APS177-00300
	32-1 thru 32-7300076	40-90	30-65	APS164-02201	APS66-10500	4	APS105-00200
	32-7400001 thru 32-7800008 <sup>2</sup>	40-90	30-65	APS164-02201	APS66-10500	4	APS105-00200
		40-90A	30-65	APS164-02300	APS66-10500	4	APS105-00200
PA-32-300	Heavy Duty Option	40-120	30-83	APS164-21600	APS66-06200	4	APS177-00300
	32-40000 thru 32-7440000	40-90	30-65	APS164-02201	APS66-10500	4	APS105-00200
	32-7440001 thru 32-7940290 <sup>2</sup>	40-90	30-65	APS164-02201	APS66-10500	4	APS105-00200
PA-32R-300, PA-32RT-300	Heavy Duty Option	40-120	30-83	APS164-21600	APS66-06200	4	APS177-00300
	All	40-90A	30-65	APS164-02300	APS66-10500	4	APS105-00200
PA-32RT-300T	Heavy Duty Option	40-120	30-83	APS164-21600	APS66-06200	4	APS177-00300
	32R-7887002 thru 32R-7987126	40-90A	30-65	APS164-02300	APS66-10500	4	APS105-00200
PA-32-301, PA-32-301T	Heavy Duty Option	40-120C	30-83A	APS164-21600	APS66-06200	4	APS177-00300
	All	40-90A	30-65	APS164-02300	APS66-10500	4	APS105-00200
PA-34-200	Heavy Duty Option	40-120	30-83	APS164-21600	APS66-06200	4	APS177-00300
	34-7250001 thru 34-7350353	40-90	30-65	APS164-02201	APS66-10500	4	APS105-00200
	34-7450001 thru 34-7450220 <sup>2</sup>	40-90	30-65	APS164-02201	APS66-10500	4	APS105-00200
PA-34-200T	Heavy Duty Option	40-120	30-83	APS164-21600	APS66-06200	4	APS177-00300
	All	40-90A	30-65	APS164-02300	APS66-10500	4	APS105-00200
PA-34-220T	Heavy Duty Option	40-120	30-83A	APS164-21600	APS66-06200	4	APS177-00300
	All	40-90A	30-65	APS164-02300	APS66-10500	4	APS105-00200
PA-36-285, PA-36-300, PA-36-375	All	40-101	30-67B	APS164-03006	APS66-10800	4	APS105-00200
PA-38-112	All <sup>2</sup>	40-78B	30-9B	APS164-01700	APS66-10600	2	APS105-00200
		40-59D	30-53A	APS164-06900	APS66-11200	2	APS105-00200
PA-39	All	40-90	30-23	APS164-02201	APS66-06500 <sup>3</sup> APS66-06200 <sup>3</sup>	2 2	APS177-00300
PA-44-180	Heavy Duty Option	40-120	30-83	APS164-21600	APS66-06200	4	APS177-00300
	All	40-90A	30-65	APS164-02300	APS66-10500	4	APS105-00200
PA-44-180T	All	40-120	30-83	APS164-21600	APS66-06200	4	APS177-00300
PA-46-310P, 350P	All	40-120C	30-83A	APS164-21600	APS66-06200	4	APS177-00300
PA-60-600,601,601P,700P	All	40-124	30-88	APS164-05006	APS66-02200	8	APS177-00300
<b>Pitts</b>							
A-1	All	40-60	30-60	APS164-06700	APS66-10600	4	APS105-00200
S-1S,2	All	40-79B	30-9	APS164-01700	APS66-10600	2	APS105-00200
<b>Quest Aircraft Design</b>							
Kodiak 100	All	40-179	30-182	APS164-22201	APS66-03300 <sup>5</sup> APS66-15300 <sup>5</sup>	8	APS177-00300
<b>SAAB-Scania</b>							
MF1-15, MF1-17	All	40-97D	30-63D	APS164-02601	APS66-10500	2	APS105-00200
<b>Sadler Aircraft</b>							
A-22 Lasa, 18-1000PV	All	40-78B	30-9	APS164-01700	APS66-10600	2	APS105-00200
<b>Schleicher</b>							
ASW21, 20, 22, 23 Sailplane	All	40-78B	30-9	APS164-01700	APS66-10600	2	APS105-00200
<b>Shaefer Aircraft mods</b>							
PA-31-350 Comanchero 500	All	40-195	30-158	APS164-21900	APS66-06800	12	APS177-01600
PA-31T Comanchero 750	All	40-106	30-106	APS164-03906	APS66-06800	16	APS177-01600
<b>SIAI Marchetti</b>							
SF.205	All	40-97E	30-63M	APS164-02601	APS66-10500	2	APS105-00200
SF.260, SF.260C	All	40-3	30-13	159-00200 <sup>4</sup>	APS66-10500	4	APS105-00200
SF.260SW	All	40-90A	30-65A	APS164-02300	APS66-10500	4	APS105-00200
<b>Slingsby Aviation</b>							
T67M	All	40-86B	30-55	APS164-02000	APS66-10500	2	APS105-00200
<b>Stinson</b>							
108, 108-1,2,3,5	108-1 and up	40-28	30-18	APS164-00500	APS66-10600	2	APS105-00200
<b>Stol Aircraft</b>							
UC-1	All	40-74	30-51A	APS164-00700	APS66-10600	4	APS105-00200
<b>Taylorcraft</b>							
F-19, F-21, F-21A, F-22	All	40-86	32-55	APS164-02000	APS66-10500	2	APS105-00200
<b>Univair</b>							
A-2, A-2A	All	40-97A	30-63A	APS164-02601	APS66-10500	2	APS105-00200
<b>Varga</b>							
2150A, 2180	VAC-50 and up	40-97E	30-63E	APS164-02601	APS66-10500	2	APS105-00200
<b>Waco</b>							
Meteor, Minerva, Vela	All	40-97A	30-63A	APS164-02601	APS66-10500	2	APS105-00200
<b>Weatherly Aviation</b>							
201A, 201B, 201C	All	40-101	30-67D	APS164-03006	APS66-10800	4	APS105-00200
620, 620TP	1501 thru 1519	40-101	30-67D	APS164-03006	APS66-10800	4	APS105-00200
620A	1520 thru 1584	40-101	30-67D	APS164-03006	APS66-10800	4	APS105-00200
		40-101	30-89B	APS164-03006	APS66-10800	6	APS105-00200
620B	1550 and up	40-101		APS164-03006	APS66-10800	4	APS105-00200
	1520 and up	40-101 or 40-101E		APS164-03006	APS66-10800	6	APS105-00200
620TP	1520 thru 1584	40-101		APS164-03006	APS66-10800	6	APS105-00200
<b>Wing Aircraft</b>							
D-1	2 and up	40-84		APS164-01900	APS66-10600	4	APS105-00200

<sup>2</sup> Must verify wheel or brake assembly P/N

<sup>3</sup> Use P/N APS66-06200 on the back plate and P/N APS66-06500 on the pressure plate.

<sup>4</sup> OEM disc must be used

<sup>5</sup> Aircraft with 30-182 calipers installed may use either APS66-03300 or APS66-15300 linings in complete sets. **Caution:** Never mix APS66-03300 linings on the same caliper as the APS66-15300's. APS66-15300 linings are .035" thicker than the APS66-03300's.



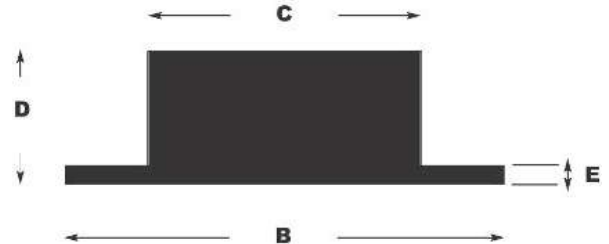
APS BlackSteel® Brake Disc Dimensions

Brake and Wheel Parts

Table with columns: Brake Disc P/N, OD Wear, OD Base, Overall Height, Thickness Wear Surface, Number Bolt Holes, OEM Brake Manufacturer. Lists various brake disc models and their specifications.

Table with columns: Brake Disc P/N, OD Wear, OD Base, Overall Height, Thickness Wear Surface, Number Bolt Holes, OEM Brake Manufacturer. Lists various brake disc models and their specifications.

This is not a complete list of all brake discs offered. Please visit www.mcfarlaneaviation.com for additional dimensions.



Brake Disc, Lining, and Rivet Eligibility for Aircraft with Cleveland Conversion Kits Installed (Includes Experimental Aircraft)

Table with columns: Aircraft Model, Cleveland Kit P/N, Wheel Assy P/N, Brake Assy P/N, Brake Disc P/N, Lining P/N, Linings per Wheel, Rivet or Pin P/N. Lists aircraft models and their compatibility with various brake components.

Eligibility continued on next page.



# Brake and Wheel Parts Brake Discs and Linings



Continued from previous page

Aircraft Model	Cleveland Kit P/N	Wheel Assy P/N	Brake Assy P/N	Brake Disc P/N	Lining P/N	Linings per Wheel	Rivet or Pin P/N
<b>Cessna</b>							
A185E,F <sup>1</sup>	199-60	40-75B	30-52	APS164-01501	APS66-10500	4	APS105-00200
	199-155	40-75J	30-52Y	APS164-03601	APS66-10500	4	APS105-00200
A185F <sup>1</sup>	199-62	40-75D	30-52N	APS164-03601	APS66-10500	4	APS105-00200
190, 195, 195A,B	199-61	40-40C	30-28C	APS164-00806	APS66-03300	6	APS177-00400
U206E,F, TU206E,F	199-60	40-75B	30-52	APS164-01501	APS66-10500	4	APS105-00200
	199-155	40-75J	30-52Y	APS164-03601	APS66-10500	4	APS105-00200
TU206E,F,G	199-62A	40-75T	30-52N	APS164-08300	APS66-10500	4	APS105-00200
U206E,F, TU206E,F	199-155	40-75J	30-52Y	APS164-03601	APS66-10500	4	APS105-00200
U206E,F, TU206E,F	199-62	40-75D	30-52N	APS164-03601	APS66-10500	4	APS105-00200
210,A,B,C,K,L,M, T210,K,L,M,N	199-60	40-75B	30-52	APS164-01501	APS66-10500	4	APS105-00200
P210N <sup>2</sup>	199-60A	40-75B	30-52U	APS164-01501	APS66-10500	4	APS105-00200
310,310A,B,C,D,E,F,G,H,I,J,K,L,N,P,Q,R 310J-1, E310H,J, T310P,Q,R	199-64	40-40B	30-1	APS164-01406	APS66-03300	2	APS177-00400
340, 340A	199-76	40-135A	30-100	APS164-20306	APS66-06600	8	APS177-01600
	199-72	N/A	30-100	APS164-06406	APS66-06600	8	APS177-01600
401,401A,B, 402,402A,B	199-76	40-135A	30-100	APS164-20306	APS66-06600	8	APS177-01600
	199-72	N/A	30-100	APS164-06406	APS66-06600	8	APS177-01600
402,402A,B,C	199-76	40-135A	30-100	APS164-20306	APS66-06600	8	APS177-01600
404	199-78	40-132	30-97	APS164-09100	APS66-06400	8	APS177-01600
411,411A, 414	199-72	N/A	30-100	APS164-06406	APS66-06600	8	APS177-01600
414,414A, 421,421A,B,C	199-76	40-135A	30-100	APS164-20306	APS66-06600	8	APS177-01600
441	199-115	40-169	30-143	APS164-20700	APS066-07300	6	APS177-01600
<b>D.L.F. Holdings</b>							
Tango	199-152	40-151	30-133	164-09900 <sup>2</sup>	APS66-10500	2	APS105-00200
<b>De Havilland</b>							
Chipmunk DHC-1-21,22,22A, DHC-1B,-2, -S3,-S5	199-79	40-97D	30-63P	APS164-02601	APS66-10500	2	APS105-00200
Beaver DHC-2 MK 1,2,3	199-95	40-134	30-99	APS164-06306	APS66-06600	8	APS177-01600
Twin Otter DHC-6-1,100,200,300	199-92	40-21101	30-170	APS164-22400	APS66-10000	8	APS177-01600
<b>Ercoupe</b>							
415-C, CD, D, E, F-1, F-1A <sup>3</sup> , G	199-69	40-41	30-30	APS164-00300	APS66-10500	2	APS105-00200
<b>Explorer Aeronautique</b>							
Private Explorer Std	199-62	40-75D	30-52N	APS164-03601	APS66-10500	4	APS105-00200
Private Explorer Float	N/A	40-101	30-67B	APS164-03006	APS66-10800	4	APS105-00200
<b>Express Aircraft</b>							
Express 2000/2000RG	199-60	40-75B	30-52	APS164-01501	APS66-10500	4	APS105-00200
<b>Four Winds Aircraft</b>							
192/210/250T	199-60	40-75B	30-52	APS164-01501	APS66-10500	4	APS105-00200
<b>Globe Swift</b>							
GC1A, GC1B	199-48	40-113C	30-79B	APS164-04300	APS66-10500	2	APS105-00200
<b>Gulfstream Aerospace</b>							
500,A,B,S,U	199-122	40-198	30-159B	APS164-22000		8	APS177-01600
500,A,B,S,U	199-122A	40-198	30-159C	APS164-22000		8	APS177-01600
560F,680F, FL.FLP,T,V,W,681, 685, 690, 690A,B,C,D, 695,A,B	199-80	40-107A	30-107E	APS164-07200		8	APS177-01600
<b>Hensely Aircraft</b>							
F-19 Wolf Aerobatic	199-46	40-97A	30-63A	APS164-02601	APS66-10500	2	APS105-00200
F-19 Wolf Utility	199-62	40-75B	30-52	APS164-01501	APS66-10500	4	APS105-00200
<b>Lancair</b>							
IV High Energy, Energy Upgrade	199-224, 224A	40-406	30-233	APS164-02504	APS66-06200	4	APS177-00300
IV Standard	199-208	40-963	30-61E	APS164-02504	APS66-10500	4	APS105-00200
Legacy FG/RG	199-152	40-151	30-133	164-09900 <sup>2</sup>	APS66-10500	2	APS105-00200
<b>Murphy Manufacturing</b>							
Rebel	199-71	40-60A	30-60A	APS164-06700	APS66-10600	4	APS105-00200
<b>Navion</b>							
A,B,D,E,F,G,H	199-52/199-52A	40-98D	30-66B	APS164-02707	APS66-11000	4	APS105-00200
<b>Piper</b>							
J3, PA-11,12,13,14,15,16,17,18,20	199-71A	40-97D	30-60A	APS164-02601	APS66-10600	4	APS105-00200
	199-71	40-60	30-60A	APS164-06700	APS66-10600	4	APS105-00200
PA-18A-150	199-71A	40-97D	30-60A	APS164-02601	APS66-10600	4	APS105-00200
	199-71	40-60	30-60A	APS164-06700	APS66-10600	4	APS105-00200
PA-31, -300,325,350	199-100	40-162	30-138	APS164-07700	APS66-06800	12	APS177-01600
PA-31-310,325,350	199-66	N/A	30-95A	APS164-07906	APS66-06600	8	APS177-01600
PA-31P (425 HP), PA31-350	199-83	40-141	30-123	APS164-07700	APS66-06800	12	APS177-01600
PA-31-350 <sup>4</sup>	199-119	40-198	30-158	APS164-21900	APS66-06800	12	APS177-01600
PA-31T, PA-3T1	199-89	40-106	30-106	APS164-03906	APS66-06800	16	APS177-01600
PA-31T2	199-111	40-167	30-142	APS164-20600	APS066-07300	8	APS177-01600
PA-42, PA-42-720	199-112	40-166	30-141	APS164-07400	APS066-07300	8	APS177-01600
<b>Pitts</b>							
Pitts Special	199-103	40-78J	30-9C	APS164-01700	APS66-10600	2	APS105-00200
S1-S	199-102	40-78B	30-9	APS164-01700	APS66-10600	2	APS105-00200
<b>RANS</b>							
S-16	199-102	40-78B	30-9	APS164-01700	APS66-10600	2	APS105-00200
S-7C	199-104	40-59A	30-59A	APS164-07500 <sup>5</sup>	APS66-11200	2	APS105-00200
<b>Skystar Aircraft</b>							
Kit Fox	199-215	40-281	30-224	164-23400 <sup>2</sup>	APS66-10500	2	N/A
Pulsar	199-102	40-78B	30-9	N/A	APS66-10600	2	APS105-00200
<b>Steen Aero Lab</b>							
Skybolt	199-104	40-59A	30-59A	APS164-07500 <sup>5</sup>	APS66-11200	2	APS105-00200
	199-105	40-113X	30-75X	APS164-04000	APS66-10500	2	APS105-00200
<b>Swift</b>							
GC-1A, GC-1B	199-98	40-113C	30-79B	APS164-04300	APS66-10500	2	APS105-00200
<b>Univair</b>							
108 Series	188-87	40-97D	30-63Q	APS164-02601	APS66-10500	2	APS105-00200
<b>Van's Aircraft</b>							
RV-3, RV-9	199-102	40-75B	30-9	APS164-01700	APS66-10600	2	APS105-00200
RV-10	199-104	40-59A	30-59A	APS164-07500 <sup>5</sup>	APS66-11200	2	APS105-00200
<b>Velocity Aircraft</b>							
SE/XL	199-60	40-75B	30-52	APS164-01501	APS66-10600	4	APS105-00200

<sup>1</sup> Partial model eligibility  
<sup>2</sup> OEM brake disc or lining must be used, this part is not FAA-PMA approved.  
<sup>3</sup> This part is not FAA-PMA approved  
<sup>4</sup> Modified by Schaefer STC SA678SW  
<sup>5</sup> S/N 813 and on



**APS BlackSteel® Brakes for Pilatus PC-12**

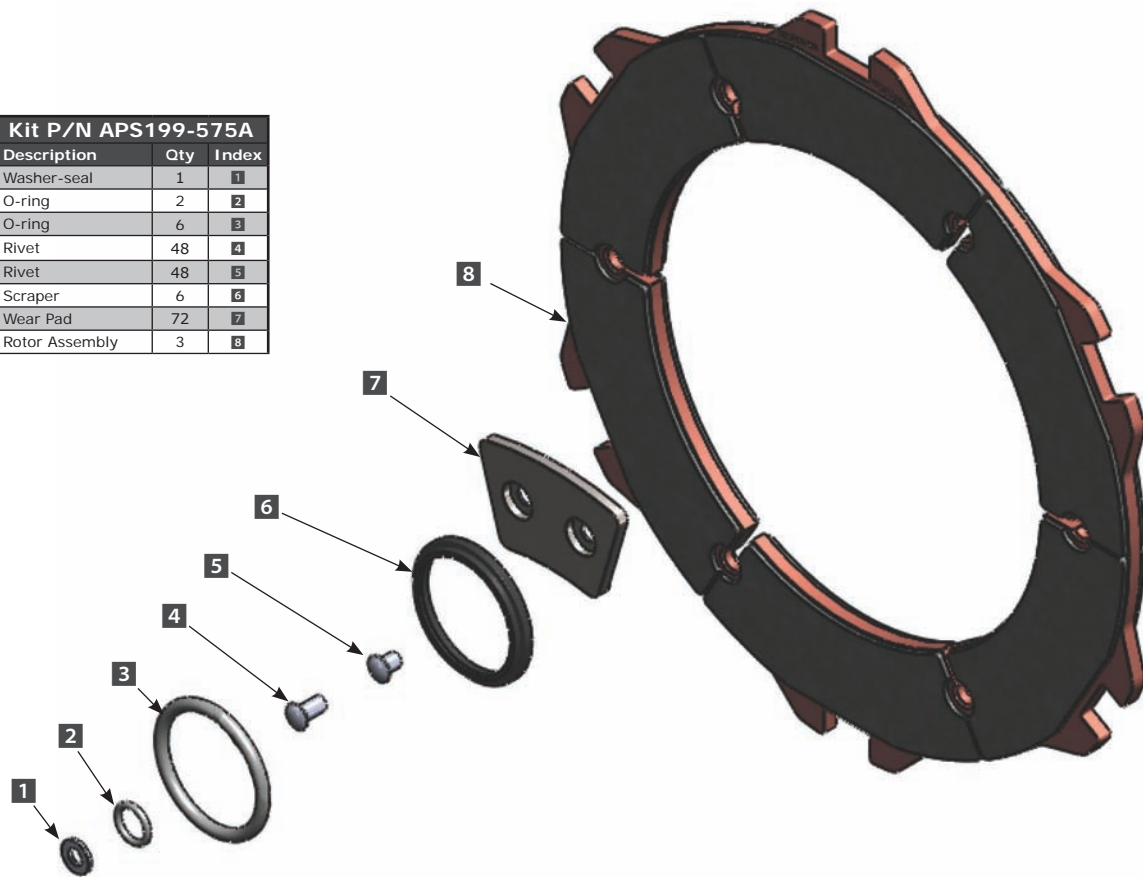
Cost effective replacement brake parts for the PC-12 with Cleveland Brakes

- All parts are FAA-PMA approved
- Longer wear life
- Parts are offered individually or as a convenient brake overhaul kit

**New!**

Brake and Wheel Parts

Kit Includes P/N	Description	Qty	Index
APS095-01100	Washer-seal	1	1
APS101-00700	O-ring	2	2
APS101-02500	O-ring	6	3
APS105-02401	Rivet	48	4
APS105-08701	Rivet	48	5
APS107-03700	Scraper	6	6
APS109-03000	Wear Pad	72	7
APS159-07400	Rotor Assembly	3	8



**APS Blacksteel Brakes for Caravan Aircraft**

Improve braking performance!

- One piece forged disc eliminates weld failure
- Heat treated to reduce corrosion & rust
- FAA-PMA Approved



**APS Extended Life Brake Lining**

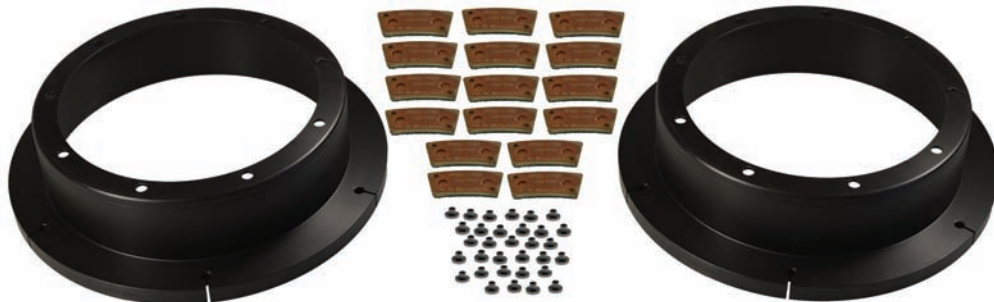
Reduce cost per landing

- Lining is .035" thicker
- 35% longer life!
- FAA-PMA Approved

**Complete Brake Kit**

P/N APS164-22201-1 contains:

2 brake discs P/N APS164-22201,  
16 brake linings P/N APS66-15300  
32 pins P/N APS177-00300



**McFarlane Aircraft Tire Balancers**

Tire balance is important.

Now it's fast, accurate and affordable!

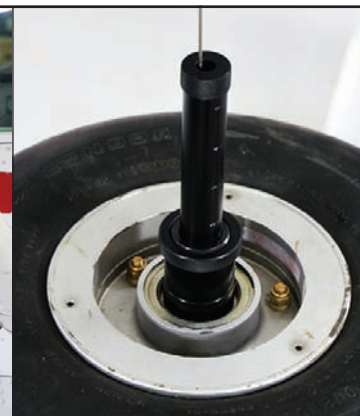
Aircraft tires spin 1.6 times faster than car tires. Out-of-balance tires cause a long list of maintenance problems:

- Uneven tire wear
- Premature bearing wear
- Shimmy and resulting torque link damage
- Destructive and distracting airframe vibration

McFarlane's tire balancer is a suspension tire balancer with a patented design featuring a pivot point that is easily adjustable on-the-fly for maximum balance sensitivity. It is small enough to fit in a tool box and doesn't require a bulky stand. The McFarlane design is more precise than other static balancing methods, and allows the wheel and tire to be balanced with the bearings and seals installed.

**It's fast and easy.** Due to the horizontal balancing orientation, test weights can be temporarily set in place and easily adjusted while balancing. This eliminates the need to tape the test weights. The McFarlane tire balancers are precision machined with a black, hard anodized finish, and comes in an oiled wooden case. This is a **lifetime tool** that fits almost all light aircraft wheel/tire assemblies.

- On-the-fly adjustable pivot point for maximum sensitivity (U.S. Patent No. US 9,032,793 B1)
- Portable – small enough to fit in your toolbox
- Does not require removal of bearings or seals
- Complete instructions included
- Multiple models and add-on bushing kits to accommodate 3/4", 1", 1 1/4", 1 1/2", 1 3/4" and 2" axles
- Conveniently packaged in a durable wooden box
- Doubles as a propeller balancer when used with our optional bushings



**New and Improved  
More Axle Sizes!**

Part Number	Description
TOOL128	Tire balancer for 3/4" diameter axles (common on experimental aircraft)
TOOL129 (Supersedes TOOL108)	Tire balancer for 1", 1 1/4", and 1 1/2" axles, including Cessna 300 and 400 Series tapered axles with 1 1/2" and 1" bearing bores.
TOOL129 LA-KT	Large Axle Bushing Kit for 1 1/4" and 2" axles (compatible with TOOL129 only)
TOOL108 LA-KT	Large Axle Bushing Kit for 1 1/2" and 2" axles (compatible with TOOL108 only)



P/N TOOL129 LA-KT



P/N TOOL129



**Costs less and more accurate  
than axle style balancers.  
Now available to accommodate  
standard and taper axle sizes  
ranging from 3/4" to 2".**

FAA-PMA Approved

**Brake Bleeder Valves for Cleveland and McCauley Wheels**  
**Improved - No more rust, no more rounded wrench flats**

Save \$\$

**Bleeder Screw**

- Strong heat treated 17-4 stainless steel prevents corrosion and rounding of the hex
- Increased hex size further resists rounding of the wrench hex

**Bleeder Seat**

- Stainless steel for corrosion resistance
- Type III class 3 cadmium plating sure is ugly, but it's the best protection against galvanic corrosion with the magnesium housing.

**Even the Rubber Cap is Improved!**

- Improved material prevents cracking
- Shorter design results in a more secure fit

**Convenient Kits**

- Two kits required per aircraft
- Components also available separately



Brake and Wheel Parts

MCBB-KT-1		
Qty	Part Number	Description
1	MC081-00100	Bleeder Seat
1	MC079-00300	Bleeder Screw
1	MC183-00100	Needle Cap

MCBB-KT-2		
Qty	Part Number	Description
1	MC081-00200	Bleeder Seat
1	MC079-00300	Bleeder Screw
1	MC183-00100	Needle Cap
1	MS28775-012	O-ring

MCBB-KT-3		
Qty	Part Number	Description
1	MC081-00500	Bleeder Seat
1	MC079-00300	Bleeder Screw
1	MC183-00100	Needle Cap
1	MS28775-011	O-ring

MCBB-KT-4		
Qty	Part Number	Description
1	MC081-00600	Bleeder Seat
1	MC079-00300	Bleeder Screw
1	MC183-00100	Needle Cap
1	NAS1612-4A	O-ring

MCBB-KT-5		
Qty	Part Number	Description
1	MC081-30169	Bleeder Seat
1	MC079-00300	Bleeder Screw
1	MC183-00100	Needle Cap
1	MS28775-011	O-ring

**FAA-PMA Direct Replacements**

Currently approved for most Cessna

Description	McFarlane P/N	Cleveland P/N	Cessna P/N	McCauley P/N
Bleeder Seat	MC081-00100	081-00100	37-206	A30030
Bleeder Screw	MC079-00300	079-00300	FC6446	A30085
Bleeder Seat	MC081-30169	081-30169		A30169
Needle Cap	MC183-00100	183-00100		A30040
Needle Cap	MC183-00100	183-1		A30040
Needle Cap	MC183-00100	183-0100		A30040

Aircraft	Serial Number	When equipped with brake number or Cleveland conversion kit:	Part Number
120, 140, 140A	All	Only for use with Cleveland conversion kit 199-46	MCBB-KT-1
150A,B,C,D,E,F,G,H,J,K,L,M	All		MCBB-KT-1
A150K,L,M	All		MCBB-KT-1
F150F,G,H,J,K,L,M	All		MCBB-KT-1
FA150K,L,M	All		MCBB-KT-1
152	15279406 thru 15285161	C163032-0110 or C163030-0113 (30-75)	MCBB-KT-1
	15285162 thru 15286033	C163033-0101 (C30018)	MCBB-KT-5
A152	All	C163032-0110 or C163030-0113 (30-75)	MCBB-KT-1
	A1520984 thru A1521049	C163033-0101 (C30018)	MCBB-KT-5
F152, FA152	All		MCBB-KT-1
170, 170A,B	All	Only for use with Cleveland conversion kit 199-46, 199-62, or 199-62A	MCBB-KT-1
172, 172A,B,C,D,E	All	Only for use with Cleveland conversion kit 199-46, 199-62, or 199-62A	MCBB-KT-1
172F,G,H,I,K,L,M,N	All		MCBB-KT-1
172P	17274010 thru 17275034	C163030-0111 (30-75A), C163032-0105, C163032-0113 (C30018-6) or equipped with Cleveland conversion kit 199-62, or 199-62A	MCBB-KT-1
	17275035 thru 17275868	C163033-0102 (C30764-6)	MCBB-KT-5
172Q	All	Only for use with Cleveland conversion kit 199-62, or 199-62A	MCBB-KT-1
172R,S	All		MCBB-KT-5
172R	172RG0001 thru 172RG0890		MCBB-KT-1
	172RG0891 thru 172RG1191		MCBB-KT-5
F172D,E,F,G,H,K,L,M,N,P	All		MCBB-KT-1
FR172E,F,G,H,J,K, R172E,F,G,H,K	All		MCBB-KT-1
P172D	All	Only for use with Cleveland conversion kit 199-46	MCBB-KT-1
175, 175A,B,C	All	Only for use with Cleveland conversion kit 199-46, 199-62, or 199-62A	MCBB-KT-1
177, 177A,B, 177RG, F177RG	All		MCBB-KT-1
180	All	Only for use with Cleveland conversion kit 199-46, 199-60, 199-62 or 199-62A	MCBB-KT-1
180A,B,C,D,E,F	All	Only for use with Cleveland conversion kit 199-46, 199-60, or 199-62	MCBB-KT-1
180G,H	All		MCBB-KT-1

Continued on next page



# Brake and Wheel Parts



MCBB-KT-1



MCBB-KT-2



MCBB-KT-3



MCBB-KT-4



MCBB-KT-5

Continued from previous page			
Aircraft	Begin Serial	When equipped with brake number or Cleveland conversion kit:	Part Number
180J	18052285 thru 18052384	1241157-1, C163030-0303 (30-52), C163030-0305 (30-52D), or C163030-0113 (30-75) or equipped with Cleveland conversion kit 199-60	MCBB-KT-1
	18052385 thru 18052770	C163030-0303 (30-52) or C163030-0113 (30-75) or equipped with Cleveland conversion kit 199-62	MCBB-KT-1
	All	C163032-0205 (30-52U), C163032-0206 (D30118-4), C163032-0207 (D30118-5), or C163032-0208 (D30118-6)	MCBB-KT-5
180K	All	C163030-0303 (30-52) or C163030-0113 (30-75) or equipped with Cleveland conversion kit 199-62	MCBB-KT-1
182	All	C163032-0205 (30-52U), C163032-0206 (D30118-4), C163032-0207 (D30118-5), or C163032-0208 (D30118-6)	MCBB-KT-5
182A,B,C,D,E,F,G	All	Only for use with Cleveland conversion kit 199-46	MCBB-KT-1
182H,J,K,L,M,N,P,Q	All	Only for use with Cleveland conversion kit 199-46, 199-62, or 199-62A	MCBB-KT-1
182R	All		MCBB-KT-1
182S	All	Only for use with Cleveland conversion kit 199-62, or 199-62A	MCBB-KT-1
182T, T182T	All		MCBB-KT-3
A182J,K,L,N	All		MCBB-KT-1
F182P,Q	All		MCBB-KT-1
FR182	All		MCBB-KT-5
R182, T182, TR182	All		MCBB-KT-5
185, 185A,B,C,D,E, A185E	All		MCBB-KT-1
A185F	18502091 thru 18502300	C163032-0205 (30-52U), C163032-0206 (D30118-4), C163032-0207 (D30118-5), or C163032-0208 (D30118-6)	MCBB-KT-5
	18502091 thru 18502310	1241157-1, C163030-0303 (30-52), C163030-0305 (30-52D), or C163030-0113 (30-75) or when equipped with Cleveland conversion kit 199-60 or 199-62	MCBB-KT-1
	18502311 thru 18504448	C163030-0303 (30-52) or C163030-0113 (30-75)	MCBB-KT-1
188, 188A,B, A188, A188A,B, A188B	18800001 thru 18802348	C163030-0301 (30-52B) or C163030-0302 (30-52B)	MCBB-KT-1
188, 188A,B, A188, A188A,B	18800001 thru 18802348	30-67A, C163030-0601 (30-67C), C163030-0503 (30-66A), or C163030-504 (30-66A)	MCBB-KT-2
A188B	18802349 thru 18803973		MCBB-KT-2
A188B (w/large hopper)	18800833T thru 18802348T	C163030-0301 (30-52B) or C163030-0302 (30-52B)	MCBB-KT-1
	18800833T thru 18802348T	30-67A, C163030-0601 (30-67C), C163030-0503 (30-66A), or C163030-504 (30-66A)	MCBB-KT-2
	18802349T thru 18803973T		MCBB-KT-2
T188C	All		MCBB-KT-2
190, 195, 195A,B	All	Only for use with Cleveland conversion kit 199-61	MCBB-KT-2
210-5 (205), 210-5A (205A)	All		MCBB-KT-1
206, 206H	All		MCBB-KT-1
P206, P206A,B,C,D,E	All		MCBB-KT-1
T206H	All		MCBB-KT-1
TP206A,B,C,D,E, TU206A,B,C,D,E	All		MCBB-KT-1
TU206F, U206F	U20601701 thru U20602199		MCBB-KT-1
TU206F,G, U206F,G	U20602200 thru U20607020	C163030-0303 (30-52) or C163030-0313 (30-52N) or when equipped with Cleveland conversion kit 199-62	MCBB-KT-1
	All	C163032-0205 (30-52U), C163032-0206 (D30118-4), C163032-0207 (D30118-5), or C163032-0208 (D30118-6)	MCBB-KT-5
U206, U206A,B,C,D,E	All		MCBB-KT-1
207, 207A, T207, T207A	All		MCBB-KT-1
208, 208A,B	All		MCBB-KT-3
210, 210A,B	All	Only for use with Cleveland conversion kit 199-60	MCBB-KT-1
210C,D,E,F,G,H,J,K	All		MCBB-KT-1
210L,M	All	C163030-0303 (30-52) or when equipped with Cleveland conversion kit 199-60	MCBB-KT-1
	21060090 thru 21062954	C163032-205 (30-52U) or C163032-206 (D30118-4)	MCBB-KT-5
210N	21062955 thru 21063114	121494-3 or 121494-4	MCBB-KT-2
	21063115 thru 21064135	C163030-0315 (30-52V), C163030-0316 (30-52V), 30-05220, or 30-05270	MCBB-KT-3
	21064136 thru 21065009		MCBB-KT-3
	All	C163032-209 or C163032-210	MCBB-KT-5
210R, T210R	All		MCBB-KT-3
P210N	P21000001 thru P21000150	C163032-205 (30-52U) or C163032-206 (D30118-4)	MCBB-KT-5
	P21000151 thru P21000191	121494-3 or 121494-4	MCBB-KT-2
	All	Only for use with Cleveland conversion kit 199-60	MCBB-KT-1
P210R	All	C163030-0315 (30-52V) or C163030-0316 (30-52V) or when equipped with Cleveland conversion kit 199-60A	MCBB-KT-3
T210F,G,H,J,K	All	C163030-0901 (30-127) or C163030-0902 (30-127)	MCBB-KT-3
T210L,M	All	C163030-0303 (30-52) or when equipped with Cleveland conversion kit 199-60	MCBB-KT-1
	21060090 thru 21062954	C163032-205 (30-52U) or C163032-206 (D30118-4)	MCBB-KT-5
T210N	21062955 thru 21063114	121494-3 or 121494-4	MCBB-KT-2
	21063115 thru 21064135	C163030-0315 (30-52V), C163030-0316 (30-52V), 30-05220, or 30-05270	MCBB-KT-3
	21064136 thru 21065009		MCBB-KT-3
	All	C163032-209 or C163032-210	MCBB-KT-5
310, 310B,C,D,F,G,H,I,J,J-1,K,L,N,P,Q	All	Only for use with Cleveland conversion kit 199-64	MCBB-KT-2
E310H,J	All	Only for use with Cleveland conversion kit 199-64	MCBB-KT-2
T310P,Q	All	Only for use with Cleveland conversion kit 199-64	MCBB-KT-2
320, 320-1, 320A,B,C,D,E,F	All	Only for use with Cleveland conversion kit 199-64	MCBB-KT-2
336	All		MCBB-KT-1
337E,F, F337E,F, FT337E,F, T337E,F	All		MCBB-KT-1
310R, T310R	All		MCBB-KT-2
335	All		MCBB-KT-2
340, 340A	All		MCBB-KT-2
401, 401A,B	All	Only for use with Cleveland conversion kit 199-72 or 199-76	MCBB-KT-2
402, 402A,B	All	Only for use with Cleveland conversion kit 199-72 or 199-76	MCBB-KT-2
402C	All		MCBB-KT-2
404	All	Only for use with Cleveland conversion kit 199-78	MCBB-KT-2
411, 411A	All		MCBB-KT-2
414, 414A	All		MCBB-KT-2
421	All	Only for use with Cleveland conversion kit 199-76	MCBB-KT-2
421C	All		MCBB-KT-2
441	All	Only for use with Cleveland conversion kit 199-115	MCBB-KT-2
500, 501	All	91891-003 (030-18902 formerly 30-189B) or when equipped with Cleveland conversion kit 199-60	MCBB-KT-4
550, 551	All	030-18902 formerly 30-189B or when equipped with Cleveland conversion kit 199-60	MCBB-KT-4
S550	All	Only for use with Cleveland conversion kit 199-177	MCBB-KT-4

Brake and Wheel Parts

**Brake Assembly and Master Cylinder Seal Kits for Cessna Aircraft**

Save time and \$\$ with kits containing just the parts you need!

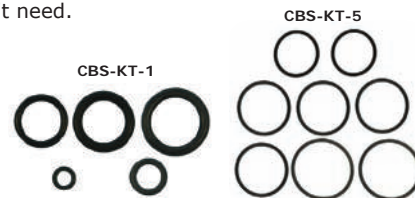
McFarlane has done the research so you don't have to. Now buy one kit per brake assembly or master cylinder and get the right seals for the job without wasting money on expensive parts you don't need.

All parts are standard hardware or Cessna original parts with 8130-3 tags.

Six new kits to replace TCBMD

- Expanded eligibility (188 thru 210, 337 and Caravan models)
- McFarlane original kit
- One kit required per brake assembly or master cylinder
- Approved parts

Save \$\$



Aircraft Model	Serial Number	Master Cylinder Seal Kits				Brake Assembly Seal Kits	
		CBS-KT-1	CBS-KT-2	CBS-KT-3	CBS-KT-4	CBS-KT-5	CBS-KT-6
120, 140	All						
150, 150A,B,C,D,E,F,G,H,J,K,L,M	All	•				•	
F150F,G,H,J,K,L,M, FA150K,L,M, FRA150L,M	All	•				•	
A-150L, A-A150L, A150K,L,M	All	•				•	
152, A152, F152,FA152	All	•				•	
170, 170A	All				•		
170B	All	•				•	
172, 172A,B,C,D,E,F,G,H,I,K,L,M,N	28000 thru 17271034						
172N,P,Q	17271035 and On		•			•	
F172D,E,F,G,H,K,L,M,N	F172-0001 thru F17201749	•				•	
F172N,P	F17201750 thru F17202254		•			•	
R172K	R1722000 thru R1722929	•				•	
FR172E,F,G,H,J	R1722930 thru R1723454		•			•	
FR172K	All	•				•	
FR172K	FR17200591 thru FR17200630	•				•	
R172E,F,G,H	FR17200631 thru FR17200675		•			•	
175, 175A,B,C	All	•				•	
177, 177A,B	All	•				•	
177RG	All	•				•	
180, 180A,B,C,D,E,F,G,H,J,K	All	•	2	3		•	
180K	30000 thru 18053000	•				•	
180K	18053001 and On	•	•			•	
182, 182A,B,C,D,E,F,G,H,J,K,L,M,N,P,Q	33000 thru 18266590	•				•	
182Q,R,S,T	18266591 and On	•	•			•	
F182P,Q	F18200001 thru F18200094	•				•	
F182Q	F18200095 and On	•	•			•	
FR182	FR18200001 thru FR18200020	•				•	
FR182	FR18200021 thru FR18000070	•	•			•	
T182, T182T, TR182	All	•	•			•	
185, 185A,B,C,D,E, A185E,F	185-0001 thru 18503683	•				•	
A185F	18503684 and On	•	•			•	
188, 188A,B, A188, A188A,B	188-0001 thru 18803296	•				•	
A188B	18803297 and On	•	•			•	
A188B (w/ large hopper)	18800833T thru 18803296T	•				•	
A188B (w/ large hopper)	18803297T and On	•	•			•	
206, U206, U206A,B,C,D,E,F,G, TU206A,B,C,D,E,F,G	All	•				•	
P206, P206A,B,C,D,E, TP206A,B,C,D,E	All	•				•	
206H, T2006H	All	•				•	
208, 208B	All	•				•	
210, 210A,B	All	•				•	
210C,D,E,F,G,H,J,K,L,M, T210F,G,H,J,K,L,M	All	•				•	
210N,R, T210N,R	All	•				•	
337, 337A,B,C,D,E,F,G,H	337-0002 thru 33701874	•				•	
337H	33701875 and On	•	•			•	
T337B,C,D	All	•				•	

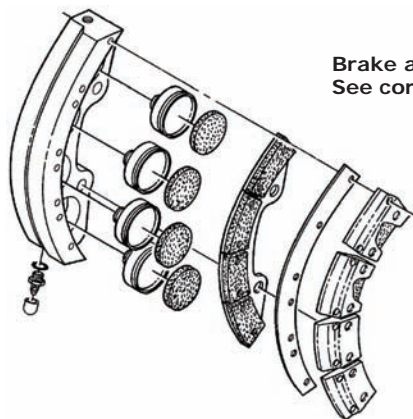
- 1 Partial model eligibility
- 2 Use this kit when NOT equipped with master cylinder assembly P/N 9882010-1
- 3 Use this kit when equipped with master cylinder assembly P/N 9882010-1

Kit P/N	Kit Type	Qty	Component P/N	Description
CBS-KT-1	Master Cylinder Seal Kit	1	MS28775-110	O-ring
		1	MS28775-111	O-ring
		1	MS28775-009	O-ring
		1	MS28778-4	O-ring
		1	800-001-6	Lock-O-Seal
CBS-KT-2	Master Cylinder Seal Kit	1	MS28775-110	O-ring
		1	S1628-110	Backup Ring
CBS-KT-3	Master Cylinder Seal Kit	1	MS28775-112	O-ring
		1	MS28775-110	O-ring
		1	MS28775-016	O-ring
		1	S1628-110	Backup Ring
CBS-KT-4	Master Cylinder Seal Kit	1	600-0115-6	Stat-O-Seal
		1	MS28775-012	O-ring
CBS-KT-5	Brake Assembly Seal Kit	2	MS28775-224	O-ring
		2	MS28775-218	O-ring
		4	MS28775-222	O-ring
CBS-KT-6	Brake Assembly Seal Kit	1	MS28775-225	O-ring
		1	MS28775-327	O-ring
		1	MS28775-224	O-ring
1	MS28775-222	O-ring		



P/N TCBMD supersedes to CBS-KT-1 thru CBS-KT-6. See eligibility to determine the required kit.

Brake assembly and master cylinder seal kits for Caravan brakes. See complete Caravan section on pages 247-256



## Seat Rails for Cessna Aircraft

- Carefully engineered with many improvements
- Increased strength and longer life
- Anodized for corrosion and wear resistance
- Easier installation
- Full interchangeability with the original Cessna parts

## New Seat Rails for 205-207 aircraft!



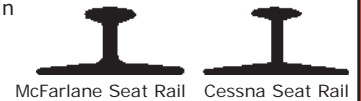
### No Pre-Drilled Rivet Holes for Precise Installation

McFarlane seat rails do not have pre-drilled rivet holes in the rail base allowing the installer to exactly match the aircraft floor rivet pattern. McFarlane discovered while installing and developing our replacement seat rails that the seat rail attachment hole pattern was not consistent from aircraft to aircraft. Even small inconsistencies in the hole locations in the aircraft floor make installation of new seat rails very difficult. For this reason, McFarlane does not pre-drill rivet holes at the factory. (Existing stock may have a few pilot attachment holes drilled at the factory.) This allows the installer to precisely locate the attachment holes to match the holes in the aircraft floor. All special sized or machined attachment holes are machined to finish dimensions. It is necessary to replace all fasteners when the seat rails are installed.

**Installation Tip:**  
The aircraft floor is subject to corrosion from moisture under the seat rails. Be sure to remove and treat any corrosion before installing the new seat rails.

### More Material in the Right Places

After studying countless worn and failed seat rails McFarlane's rails were designed with 15% more metal in critical areas. The result is more crack resistance, durability, strength and longer life.



Model	Serial Number	Inboard LH	Outboard LH	Outboard RH	Inboard RH	Template
150A,B,C,D,E,F	15059019 thru 15063059	MC0411545-2	MC0411545-1 2	MC0411545-1 2	MC0411545-2	
150F	15063060 thru 15063735	MC0411545-4	MC0411545-3 2	MC0411545-3 2	MC0411545-4	
150F,G,H,J,K,L	15063736 thru 15072628	MC0410219-2	MC0410219-1 2	MC0410219-1 2	MC0410219-2	
150L	15072629 thru 15073658	MC0410230-2	MC0410230-3 2	MC0410230-2	MC0410230-3	
150L,150M	15073659 thru 15079405	MC0410235-6 2	MC0410235-1	MC0410235-2	MC0410235-6 2	
A150K,L	A1500001 thru A1500276	MC0410219-2	MC0410219-1 2	MC0410219-1 2	MC0410219-2	
A150L	A1500277 thru A1500342	MC0410230-2	MC0410230-3 2	MC0410230-2	MC0410230-3	
A150L,M	A1500343 thru A1500734	MC0410235-6 2	MC0410235-1	MC0410235-2	MC0410235-6 2	
F150F	F1500001 thru F1500029	MC0411545-2	MC0411545-1 2	MC0411545-1 2	MC0411545-2	
F150F	F1500030 thru F1500067	MC0411545-4	MC0411545-3 2	MC0411545-3 2	MC0411545-4	
F150G,H,J,K,L	F1500068 thru F15000738	MC0410219-2	MC0410219-1 2	MC0410219-1 2	MC0410219-2	
F150L	F15000739 thru F15000863	MC0410230-2	MC0410230-3 2	MC0410230-2	MC0410230-3	
F150L,M	F15000864 thru F15001428	MC0410235-6 2	MC0410235-1	MC0410235-2	MC0410235-6 2	
FA150K,L	FA1500001 thru FA1500120	MC0410219-2	MC0410219-1 2	MC0410219-1 2	MC0410219-2	
FRA150L	FRA1500121 thru FRA1500166	MC0410219-2	2	MC0410219-1 2	MC0410219-2	
FRA150L,M	FRA1500167 thru FRA1500336	MC0410235-6 2	MC0410235-1	MC0410235-2	MC0410235-6 2	
152	15279406 thru 15286033	MC0410235-6 2	MC0410235-1	MC0410235-2	MC0410235-6 2	
A152	A1520735 thru A1521049	MC0410235-6 2	MC0410235-1	MC0410235-2	MC0410235-6 2	
F152	F15201429 thru F15201980	MC0410235-6 2	MC0410235-1	MC0410235-2	MC0410235-6 2	
FA152	FA1520337 thru FA1520425	MC0410235-6 2	MC0410235-1	MC0410235-2	MC0410235-6 2	
170, 170A,B	18000 thru 27169	MC0511000-14	MC0511000-15 2	MC0511000-14	MC0511000-15 2	SRTEM1
172, 172A,B,C	28000 thru 17249544	MC0511293-1	MC0511293-3 2	MC0511293-4	MC0511293-2 2	SRTEM1
172D,E	17249545 thru 17251822	MC0511240-4	MC0511240-2 2	MC0511240-3	MC0511240-6 2	SRTEM2
172F,G,H,I,K	17251823 thru 17258656	MC0511240-5	MC0511240-2 2	MC0511240-3	MC0511240-6 2	SRTEM2
172K	17258657 thru 17259223	MC0511240-9	MC0511240-7 2	MC0511240-8	MC0511240-10 2	SRTEM2
172L	17259224 thru 17260758	MC0511240-15	MC0511240-11 2	MC0511240-12	MC0511240-14 2	SRTEM2
172M,N	17260759 thru 17272884	MC0511243-4 2	MC0511243-5 2	MC0511243-6 2	MC0511243-4 2	SRTEM2
172N	17272885 thru 17276516	MC2414002-2 2	MC2414002-1 2	MC2414002-2 2	MC2414002-1 2	SRTEM2
172P	17276517 thru 17276654	MC0514209-4 2	MC0514209-1 2	MC0514209-2 2	MC0514209-3 2	SRTEM2
NOTE: Cessna Parts Manual has the location reversed on P/N 0514209-3 & 0514209-4. The information contained here has been verified to be correct.						
172RG	172RG0001 thru 172RG1191	MC2414002-2 2	MC2414002-1 2	MC2414002-2 2	MC2414002-1 2	SRTEM2
F172D,E	F1720001 thru F1720085	MC0511240-4	MC0511240-2 2	MC0511240-3	MC0511240-6 2	SRTEM2
F172F,G,H	F1720086 thru F17200739	MC0511240-5	MC0511240-2 2	MC0511240-3	MC0511240-6 2	SRTEM2
F172H	F17200740 thru F17200754	MC0511240-9	MC0511240-7 2	MC0511240-8	MC0511240-10 2	SRTEM2
F172K,L	F17200755 thru F17200904	MC0511240-15	MC0511240-11 2	MC0511240-12	MC0511240-14 2	SRTEM2
F172M,N	F17200905 thru F17201909	MC0511243-4 2	MC0511243-5 2	MC0511243-6 2	MC0511243-4 2	SRTEM2
F172N	F17201910 thru F17202238	MC2414002-2 2	MC2414002-1 2	MC2414002-2 2	MC2414002-1 2	SRTEM2
F172P	F17202239 thru F17202254	MC0514209-4 2	MC0514209-1 2	MC0514209-2 2	MC0514209-3 2	SRTEM2
NOTE: Cessna Parts Manual has the location reversed on P/N 0514209-3 & 0514209-4. The information contained here has been verified to be correct.						
FP172	FP1720001 thru FP1720003	MC0511240-4	MC0511240-2 2	MC0511240-3	MC0511240-6 2	SRTEM2
FR172E,F,G	FR1720001 thru FR17200190	MC0511240-5	MC0511240-2 2	MC0511240-3	MC0511240-6 2	SRTEM2
FR172G	FR17200191 thru FR17200225	MC0511240-9	MC0511240-7 2	MC0511240-8	MC0511240-10 2	SRTEM2
FR172H	FR17200226 thru FR17200350	MC0511240-15	MC0511240-11 2	MC0511240-12	MC0511240-14 2	SRTEM2
FR172J,K	FR17200351 thru FR17200655	MC0511243-4 2	MC0511243-5 2	MC0511243-6 2	MC0511243-4 2	SRTEM2
NOTE: Cessna Parts Manual has the location reversed on P/N 0511243-5 & 0511243-6. The information contained here has been verified to be correct.						
FR172K	FR17200656 thru FR17200675	MC2414002-2 2	MC2414002-1 2	MC2414002-2 2	MC2414002-1 2	SRTEM2
P172	P17257120 thru P17257188	MC0511240-4	MC0511240-2 2	MC0511240-3	MC0511240-6 2	SRTEM2
R172K	R1720000 thru R1723199	MC0511243-4 2	MC0511243-5 2	MC0511243-6 2	MC0511243-4 2	SRTEM2
R172K	R1723200 thru R1723454	MC2414002-2 2	MC2414002-1 2	MC2414002-2 2	MC2414002-1 2	SRTEM2
175	55001 thru 56777	MC0511293-1	MC0511293-3 2	MC0511293-4	MC0511293-2 2	SRTEM1
175A,B,C	17556778 thru 17557119	MC0511293-1	MC0511293-3 2	MC0511293-4	MC0511293-2 2	SRTEM1
177,A,B	17700001 thru 17701636	MC1711015-3	MC1711015-1 2	MC1711015-2	MC1711015-4 2	SRTEM3
177B	17701637 thru 17702752	MC1711015-9 2	MC1711015-7 2	MC1711015-8 2	MC1711015-10 2	SRTEM3
177RG	177RG0105 thru 177RG01366	MC2011015-9 2	MC2011015-5 2	MC2011015-10 2	MC2011015-8 2	SRTEM3
F177RG	F177RG0007 thru F177RG0177	MC2011015-9 2	MC2011015-5 2	MC2011015-10 2	MC2011015-8 2	SRTEM3
180, 180A,B,C,D,E,F	30000 thru 18051312	MC0511000-14	MC0511000-15 2	MC0511000-14	MC0511000-64 2	SRTEM1
180G,H	18051313 thru 18051490	MC0511000-68	MC0511000-69 2	MC0511000-68	MC0511000-70 2	SRTEM1
180H	18051491 thru 18052103	MC0711693-1	MC0711693-2 2	MC0711693-1	MC0711693-2 2	SRTEM1
180H	18052104 thru 18052215	MC0711693-1	MC0711693-4 2	MC0711693-1	MC0711693-4 2	SRTEM1
180H,J	18052216 thru 18052500	MC0711693-8	MC0711693-6 2	MC0711693-8	MC0711693-6 2	SRTEM1
180J	18052501 thru 18052620	MC0711693-8	MC0711693-7 2	MC0711693-8	MC0711693-7 2	SRTEM1
180J,K	18052621 thru 18053203	MC0711693-9 2	MC0711693-11 2	MC0711693-10 2	MC0711693-7 2	SRTEM1

1 Partial model eligibility  
2 These rails have seat adjust holes



FAA-PMA Approved

**New! Seat Rails for Cessna 205, 206 and 207 Aircraft**

**New!**

- 34 new part numbers for the center and rear locations.
- Includes rails for aircraft with cameras and club seating.
- With many seat configurations, McFarlane has the rails!

Seat Rails

Model	Serial Number	Inboard LH	Outboard LH	Outboard RH	Inboard RH	Template
182, 182A,B,C,D	33000 thru 18253598	MC0511293-1	MC0511293-3 2	MC0511293-4	MC0511293-2 2	SRTEM1
182E,F,G,H,J,K,L,M,N1	18253599 thru 18260445	MC0710618-1	MC0710618-5 2	MC0710618-4	MC0710618-6 2	SRTEM1
182N1,P,Q,R,T182	18260446 thru 18268615	MC0710658-2 2	MC0710658-2 2	MC0710658-2 2	MC0710658-2 2	SRTEM1
A182J,K,L,M,N	A1820001 thru A1820148	MC0710618-1	MC0710618-5 2	MC0710618-4	MC0710618-6 2	SRTEM1
F182P,Q	F18200001 thru F18200169	MC0710658-2 2	MC0710658-2 2	MC0710658-2 2	MC0710658-2 2	SRTEM1
F182RG	FR1820001 thru FR18200070	MC0710658-2 2	MC0710658-2 2	MC0710658-2 2	MC0710658-2 2	SRTEM1
R182/TR182	R18200001 thru R18202041	MC0710658-2 2	MC0710658-2 2	MC0710658-2 2	MC0710658-2 2	SRTEM1
185,A,B,C,D1	1850001 thru 1850806	MC0511000-68	MC0511000-69 2	MC0511000-68	MC0511000-70 2	SRTEM1
185D1,E, A185E1	1850807 thru 18501599	MC0711693-1	MC0711693-2 2	MC0711693-1	MC0711693-2 2	SRTEM1
A185E1	18501600 thru 18501954	MC0711693-1	MC0711693-4 2	MC0711693-1	MC0711693-4 2	SRTEM1
A185E1, A185F1	18501955 thru 18502565	MC0711693-8	MC0711693-6 2	MC0711693-8	MC0711693-6 2	SRTEM1
A185F1	18502566 thru 18502838	MC0711693-8	MC0711693-7 2	MC0711693-8	MC0711693-7 2	SRTEM1
A185F1	18502839 thru 18504448	MC0711693-9 2	MC0711693-11 2	MC0711693-10 2	MC0711693-7 2	SRTEM1
A188B	18800944 thru 18803968T		Left- MC1613423-3 2		Right-MC1613423-3 2	SRTEM1
T188C	T18803307T thru T18803968T		Left- MC1613423-3 2		Right-MC1613423-3 2	SRTEM1
190, 195	7001 thru 7999	MC0311715-4 2	MC0311715-3 2	MC0311715-3 2	MC0311715-4 2	SRTEM1
190, 195	16000 thru 16183	MC0311715-4 2	MC0311715-3 2	MC0311715-3 2	MC0311715-4 2	SRTEM1
<b>New!</b> 210-5 (205), 210-5A (205A)	All	MC1210408-1 (Center) MC1211642-5	MC1210408-5 2 (Center) MC1211642-3	MC1210408-4 (Center) MC1211642-4	MC1210408-6 2 (Center) MC1211642-8	SRTEM1
<b>New!</b> 206	2060001 thru 2060275	MC1210408-1 (Center) MC1211642-5	MC1210408-5 2 (Center) MC1211642-3	MC1210408-8 (Center) MC1211657-1	MC1210408-6 2 (Center) MC1211642-8 (Rear Fwd Aft) MC1211671-1	SRTEM1
<b>New!</b> U206, U206A,B,C,D TU206A,B,C,D	U206-0276 thru U206-1444	MC1210408-1 (Center) MC1211642-5	MC1210408-5 2 (Center) MC1211642-3	MC1210408-8 (Center) MC1211657-1 (Rear Fwd Aft) MC1211671-1	MC1210408-6 2 (Center) MC1211642-8	SRTEM1
<b>New!</b> P206A,B,C,D TP206A,B,C,D	All	MC1210408-1 (Center) MC1211642-5	MC1210408-5 2 (Center) MC1211642-3	MC1210408-4 (Center) MC1211642-4	MC1210408-6 2 (Center) MC1211642-8	SRTEM1
<b>New!</b> U206E1, TU206E1	U20601445 thru U20601587	MC1210408-1 (Center) MC1211642-5	MC1210408-5 2 Not available	MC1210408-8 (Center) MC1211657-1	MC1210408-6 2 (Center) MC1211642-8	SRTEM1
	U20601588 thru U20601604	Not available (Center) MC1211642-5	MC1210408-21 2 Not available	MC1210408-14 (Center) MC1211657-1	MC1210408-12 2 (Center) MC1211642-8	SRTEM1
	U20601605 thru U20601618 and U2061633	Not available (Center) MC1211642-11 (Rear) MC1211782-7	MC1210408-21 2 (Center) MC1211642-13 (Rear) MC1211783-3	MC1210408-14 (Center) MC1211657-2 (Rear) MC1211785-2	MC1210408-12 2 (Center) MC1211642-12 (Rear) MC1211782-8	SRTEM1
	U20601619 thru U20601632	Not available (Center) MC1211642-5	MC1210408-21 2 Not available	MC1210408-14 (Center) MC1211657-1	MC1210408-12 2 (Center) MC1211642-8	SRTEM1
	U20601634 thru U20601700	Not available Not available	MC1210408-21 2 (Center) MC1211642-13	MC1210408-14 Not available	MC1210408-12 2 Not available	SRTEM1
	<b>New!</b> P206E, TP206E	All	MC1210408-1 (Center) MC1211642-5	MC1210408-5 2 Not available	MC1210408-4 Not available	MC1210408-6 2 (Center) MC1211642-8
<b>New!</b> U206F, TU206F	U20601701 thru U2063521	Not available (Center) MC1211642-11 (Rear) MC1211782-7	MC1210408-21 2 (Center, Includes Camera) MC1211642-13 (Rear, Includes Camera) MC1211783-3	MC1210408-14 (Center) MC1211657-2 (Rear, Includes Camera) MC1211785-2	MC1210408-12 2 (Center) MC1211642-12 (Rear) MC1211782-8	SRTEM1
<b>New!</b> U206G1, TU206G1	U20603522 thru U20604120	MC1210408-18 2	MC1210408-21 2	MC1210408-17 2	MC1210408-12 2	SRTEM1
	U20604122 thru U20604133					
	U20604135 thru U20604137					
	U20604139 thru U20604146	(Center) MC1211642-11	(Center, Includes Camera) MC1211642-13	(Center) MC1211657-2	(Center) MC1211642-12	SRTEM1
	U20604149 thru U20604151					
	U20604155 thru U20604157					
	U20604159 thru U20604160					
	U20604162 thru U20604171	(Rear) MC1211782-7	(Rear, Includes Camera) MC1211783-3	(Rear, Includes Camera) MC1211785-2	(Rear) MC1211782-8	SRTEM1
	U20604173 thru U20604176					
	U20604178 thru U20604179					
U20604181 thru U20604183						
U20604185						
U20604186 thru U20604188	MC1210408-18 2	MC1210408-21 2	MC1210408-17 2	MC1210408-12 2	SRTEM1	
U20604191 thru U20604199	Not available	(Center, Includes Camera) MC1211642-13	Not available	Not available	SRTEM1	
	Not available	(Rear, Includes Camera) MC1211783-3	(Rear, Includes Camera) MC1211785-2	Not available	SRTEM1	
U20604121, U20604134	MC1210408-18 2	MC1210408-21 2	MC1210408-17 2	MC1210408-12 2	SRTEM1	
U20604138						
U20604147 thru U20604148	(Center) MC1211871-3	(Center Includes Camera) MC1211871-1	(Center Includes Camera) MC1211871-2	(Center) MC1211871-4	SRTEM1	
U20604152 thru U20604154						
U20604158, U20604161						
U20604184	(Rear Includes Club) MC1211875-3	(Rear, Includes Camera) MC1211875-1	(Rear, Includes Camera) MC1211875-2	(Rear Includes Club) MC1211875-4	SRTEM1	
U20604189 thru U20604190						
U20604200 thru U20605309	MC1210408-18 2	MC1210408-21 2	MC1210408-17 2	MC1210408-12 2	SRTEM1	
U20604172, U20604177, U20604180	Not available	(Center, Includes Camera) MC1211871-1	(Center Includes Camera) MC1211871-2	Not available	SRTEM1	
	(Rear Includes Club) MC1211875-3	(Rear, Includes Camera) MC1211875-1	(Rear, Includes Camera) MC1211875-2	(Rear Includes Club) MC1211875-4	SRTEM1	
U20605310 thru U20607020	MC1210408-24 2	MC1210408-21 2	MC1210408-23 2	MC1210408-12 2	SRTEM1	
	(Center) MC1211871-3	(Center Includes Camera) MC1211871-1	(Center Includes Camera) MC1211871-2	(Center) MC1211871-4	SRTEM1	
	(Rear, Includes Club) MC1211875-13	(Rear, Includes Camera) MC1211875-11	(Rear, Includes Camera) MC1211875-12	(Rear, Includes Club) MC1211875-14	SRTEM1	

1 Partial model eligibility  
2 These rails have seat adjust holes

Eligibility continued on next page



**Eligibility continued from previous page**

Model	Serial Number	Inboard LH	Outboard LH	Outboard RH	Inboard RH	Template
2071, T2071	20700001 thru 20700215	MC1210408-1	MC1210408-9	Not Available	MC1210408-6	SRTEM1
<b>New!</b> 2071, T207, 207A1, T207A1	20700216 thru 20700562	MC1210408-18	MC1210408-15	MC1210408-16	MC1210408-12	SRTEM1
		(Center) MC1212863-7 (Rear Inboard) MC1211782-7	(Center Includes Camera) MC1212863-9 (Rear Outboard Includes Camera) MC1211783-3	(Center Includes Camera) MC1212863-6 (Center Includes Camera) MC1211783-3	(Center) MC1212863-8 (Rear Inboard) MC1211782-7	SRTEM4
<b>New!</b> 207A1, T207A1	20700563 thru 20700788	MC1210408-24	MC1210408-15	MC1210408-22	MC1210408-12	SRTEM1
		(Center) MC1212863-13 (Rear) MC1211875-13	(Center Includes Camera) MC1212863-11 (Rear) MC1211875-11	(Center Includes Camera) MC1212863-10 (Rear) MC1211875-12	(Center) MC1212863-12 (Rear) MC1211875-14	SRTEM4 SRTEM1
		Not Available	MC1210025-3	Not Available	MC1210025-2	SRTEM1
210, 210A	21057001 thru 21057840	MC1210408-1	MC1210408-5	MC1210408-4	MC1210408-6	SRTEM1
210B,C,D,E,F,G,H,J	21057841 thru 21059199	MC1210408-1	MC1210408-5	MC1210408-4	MC1210408-6	SRTEM1
210K,L,T210K,L	21059200 thru 21060539	Fwd MC1210520-11 Removable MC1210520-3	Fwd MC1210520-9	Fwd MC1210520-12	Fwd MC1210520-2 Removable MC1210520-4	SRTEM1
210L,M,T210L,M	21060540 thru 21062954	Fwd MC1210520-11 Removable MC1210520-3	Fwd MC1211514-1	Fwd MC1211514-1	Fwd MC1210520-2 Removable MC1210520-4	SRTEM1
210N,R,T210N,R	21062955 thru 21065009	Fwd MC1210520-15	Fwd MC1211514-2	Fwd MC1211514-2	Fwd MC1210520-16	SRTEM1/3
P210N	P21000001 thru P21000150	Fwd MC1210520-11 Removable MC1210520-3	Fwd MC1211514-1	Fwd MC1211514-1	Fwd MC1210520-2 Removable MC1210520-4	SRTEM1
P210N,R	P21000151 thru P21000874	Fwd MC1210520-15	Fwd MC1211514-2	Fwd MC1211514-2	Fwd MC1210520-16	SRTEM1/3
T210F,G,H,J	T2100001 thru T2100454	MC1210408-1	MC1210408-5	MC1210408-4	MC1210408-6	SRTEM1
305A,B,C,D,E,F	All	Front Seat Left-MC0611134-3		Front Seat Right-MC0611134-2		SRTEM1
Most 310 and 320	Cessna Manufactured	Left-0812200-125		Right-0812200-126		SRTEM1

1 Partial model eligibility  
2 These rails have seat adjust holes

## Templates for Cessna Seat Rails

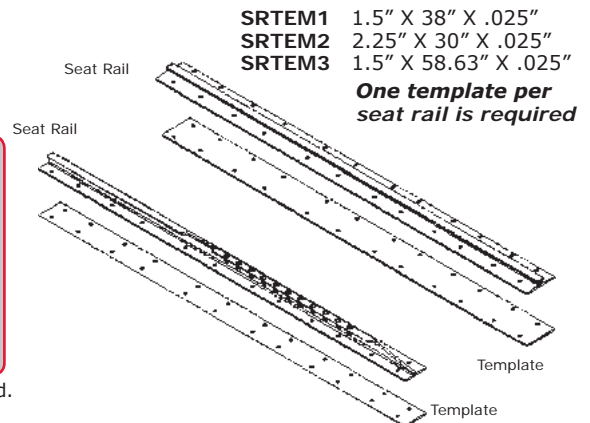
Templates make the job of transferring the original rivet hole pattern from the old seat rail to the new seat rail easy!

- Inexpensive
- Achieve a precise fit every time

**To use the templates:**

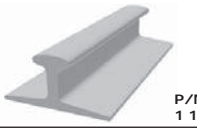



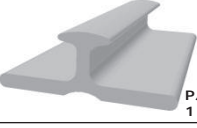
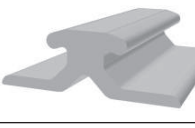




1. Clamp the template to your old seat rail.
2. Drill holes through the holes in the old seat rail into the template.
3. Clamp the template to the new seat rail and drill several holes through the template and new seat rail.
4. Set the new seat rail in position in the aircraft and check for proper seat rail alignment. The seat rails must be properly aligned and parallel with each other.
5. Clamp the templates again to the new seat rail and make any required alignment adjustments discovered during the aircraft test installation.
6. Drill all of the required holes through the template and the new seat rail.

Models 150-152 and 190-195 do not require templates as the screw holes are pre-drilled. See seat rail eligibility for the template for your seat rails.



## Seat Rail Extrusion

Ideal for the home built aircraft! For custom projects McFarlane offers eight design types. Blank extrusion can be cut to most any length and is sold by the inch. We can also custom machine to your specifications.

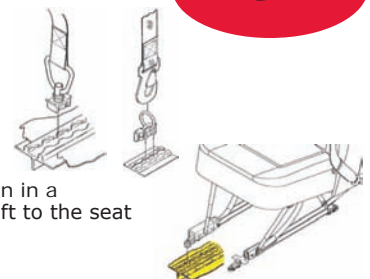
 P/N STE101 1 1/2" X 7/10" X 1/2"	 P/N STE102 2 3/10" X 7/10" X 1/2"	 P/N STE103 1 1/2" X 1/2" X 1/2"	 P/N STE104 2 3/10" X 1/2" X 1/2"
 P/N STE108 1 3/4" X 5/8" X 1/2"	 P/N STE109 2 3/10" X 3/4" X 1"	 P/N STE105 1.34" X 0.37"	 P/N 6656 1.34" X 0.37"
 P/N STES2343-1 1 1/2" X 15/16" X 5/8"	 P/N STES2617-1 2 5/8" X 1 1/8" X 1 1/4"		

## Crew Rails and Cargo Tracks for Cessna Caravan

The manufacturing leader of seat rails now has FAA-PMA approval on rails and tracks for 208 series aircraft!

- FAA-PMA direct replacements
- Improved thickness and stability
- Fits all Cessna 208/208B aircraft
- Anodized for superior wear and corrosion resistance
- Polyurethane undercoating for optimal corrosion resistance

With two versions available, drilled or undrilled, McFarlane seat rails will meet your needs. McFarlane offers the Seat Rails with the rivet holes drilled in the bottom flange, and in an "S" suffix part number which has the rivet holes in the flange omitted. This undrilled version allows for easier installation in a replacement part situation as it allows the installer to match drill the original holes from the frame/aircraft to the seat rail. Example P/N MC2601088-1 (drilled) and P/N MC2601088-1S (undrilled).

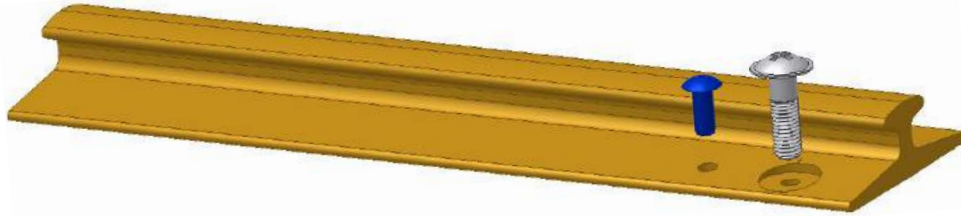


See eligibility in the Caravan section on page 256

**Seat Rail Rivet and Screw Kits**

McFarlane offers either rivets or screws as convenient kits containing AN and MS hardware. Since it is difficult to install many of the rivets required to attach the seat rail, it is permissible to substitute screws with ultimate tensile strength exceeding 50 ksi with lock nuts provided the holes are ream fit and spotfaced. Each kit contains enough rivets or screws to install four seat rails. These kits do not contain all required hardware for Cessna model 177 seat rails.

Installation hardware items are also available separately.



RIVET KIT 1		
1/8 & 5/32 Universal Head Rivet Kit		
Qty	U/M	Part Number
22	Grams	MS20470 AD4-5
11	Grams	MS20470 AD4-6
14	Grams	MS20470 AD4-7
6	Grams	MS20470 AD4-10
6	Grams	MS20470 AD4-12
18	Grams	MS20470 AD5-5
13	Grams	MS20470 AD5-6
13	Grams	MS20470 AD5-7
10	Grams	MS20470 AD5-10
10	Grams	MS20470 AD5-12

**SR150-SCREW-KIT**

Contains #10 screws and hardware required for all Cessna 150/152 models

Qty	Part Number	Desc.	Size
40	MS27039-1-08	Screw	10-32 X .531
2	MS27039-1-09	Screw	10-32 X .594
2	MS27039-1-17	Screw	10-32 X 1.094
40	MS21044N3	Nut	Nylon Lock, 10-32

**SR6-SCREW-KIT**

Contains #6 and #8 screws and hardware

Qty	Part Number	Desc.	Size
140	MS35206-229	Screw	6-32 X .438
16	MS35206-230	Screw	6-32 X .5
12	MS27039-0811	Screw	8-32 X .719
12	MS27039-0812	Screw	8-32 X .781
12	MS27039-0813	Screw	8-32 X .844
12	MS27039-0814	Screw	8-32 X .906
35	NAS21042-08	Nut	Small Wrench Surface
80	NAS21042-06	Nut	Small Wrench Surface
80	MS21044N06	Nut	Nylon Lock, 6-32
200	AN960-6L	Washer	#6 Thin
100	AN960-8L	Washer	#8 Thin

**SR8-SCREW-KIT**

Contains #8 screws and hardware

Qty	Part Number	Desc.	Size
140	MS27039-0808	Screw	8-32 X .531
12	MS27039-0809	Screw	8-32 X .594
12	MS27039-0810	Screw	8-32 X .656
12	MS27039-0811	Screw	8-32 X .719
12	MS27039-0812	Screw	8-32 X .781
12	MS27039-0813	Screw	8-32 X .844
12	MS27039-0814	Screw	8-32 X .906
80	NAS21042-08	Nut	Small Wrench Surface
80	MS21044N08	Nut	Nylon Lock, 8-32
200	AN960-8L	Washer	#8 Thin

**FAA General Aviation Airworthiness Information Bulletin CE-90-03R2, 08/26/2002 Original Issue 01/16/1991**

This alert gives direction for the replacement of seat rails for most Cessna airplanes as required by AD 87-20-03R2. This alert advises all owners and operators of the necessity to install all required fasteners when seat rails are being replaced. Many seat rails are manufactured with pilot holes only and do not contain all holes required for installation of the seat rail in the airplane. It is, therefore, necessary for the installer to assure that there are sufficient holes to accommodate all required fasteners.

**Note these recommendations:**

1. When replacing a seat rail, note the number and location of all fastener holes on the seat rail being removed.
2. Match these holes against the holes in the replacement seat rail. If the replacement seat rail does not have all of the same holes at the same locations, they must be drilled.
3. Since it is difficult to install many of the rivets required to attach the seat rail, it is permissible to substitute screws with ultimate tensile strength exceeding 50 ksi. Example of such screws are AN515, AN520, AN525, MS35206, MS35207, MS35214, MS35215, MS35218, MS35219, MS51957 or MS51958 with lock nuts, provided the holes are ream fit and spotfaced. For further information contact your local FAA office.

**Spotface Kit**

Now modified for rail cap clearance!

**Kit P/N SPOTFACE KIT**

Contains a tool used with an electric drill to make a flat spot for screws. Cutter comes with three pilots.

Components sold as a kit or separately by part number.

- Cutter P/N 6080,
- 1/8" pilot P/N 6078
- 5/32" pilot P/N 6076
- 3/16" pilot P/N 6077
- Pouch P/N 6090



**Cargo Tie Downs**

**Secure your cargo**

**P/N TDC-208**

Cessna 208 and 208B aircraft Clamps to seat rails to provide tie down points to secure cargo.

- 4 required for every 100 lbs of cargo
- Anodized aluminum for durability

Note: This product is not to be used as a seat stop.

Manufactured by F Atlee Dodge

**FAA-PMA**



**Folding Rear Seats**

Convert from people to cargo in just a few minutes!

Left P/N 3187L, Right P/N 3187R

See page 244 for additional information

Aircraft Model
170, 170A,B
172 thru 172S
175, 175A,B,C
180, 180A,B,C,D,E,F,G,H,J,K
182 thru 182T
185, 185A,B,C,D,E,A185E,A185F

**20 Pounds Lighter!**



Manufactured by F Atlee Dodge

**Heavy Duty Seat Back Frame**

10 oz. heavier with less tendency to wear out!

P/N 3226

206 Series aircraft, see page 244 for additional information.

Manufactured by F Atlee Dodge



**Safari Seat for PA-18, PA-19 Series**

P/N 6151

Easily installed and removed

Clamps in and designed for easy removal with quick release pins.

**Weight saver**

Lightweight folding rear seat saves 10 pounds over existing seat.

STC-PMA



**Saves 10 Pounds!**

Manufactured by F Atlee Dodge

**Folding Front Seat Kit for PA-18, PA-19 Series**

Makes entry and loading much easier

P/N 3186

FAA-PMA/STC



Manufactured by F Atlee Dodge

**Seat Feet for Beechcraft**

**Queen Air, King Air and Airliner**

**Save**

**up to**

**64%**

P/N CA100-530448-5	P/N CA100-530448-7	P/N CA50-534436-5
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Part Number	Model Eligibility
CA100-530448-5	C90,C90A,C90(SE),E90,F90,A100,B100,200,200T,200C,200CT,B200,B200C,B200CT
CA100-530448-7	C90,C90A,E90,F90,A100,B100,200,200T,200C,200CT,B200,B200C,B200CT
CA50-534436-5	65,80,A80,88,90,A90,99,99A,A99A,B90,B99,C99,100,A100,B100

Manufactured by PMA Products

## Pilot/Copilot Seat Rail Repair Kit for Cessna Citation Aircraft

**P/N MCSK101**

**Save time and money!**

McFarlane has created a patented solution, using input from Citation mechanics and our extensive experience with Cessna seat rails.

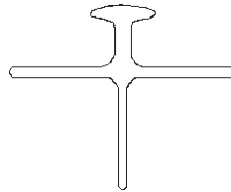
Eligible for installation on all Cessna 500 and 501 series aircraft.

- FAA-PMA/STC approved
- Stronger than the Cessna splice repair
- No splice kit needed
- Makes future replacements bolt-in only
- Complete installation tool kit may be purchased or rented
- No cutting or riveting below the floor level

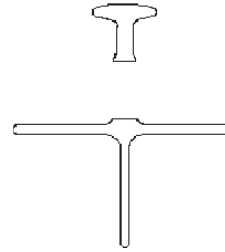
**Patent Number 7,168,674 B2**



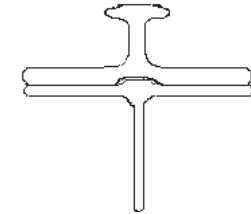
**Original Cessna Seat Rail Extrusion**



**Cut the rail cap off using the McFarlane tool kit**



**Bolt the McFarlane replacement seat rail to the Cessna extrusion**



## Seat Stop Kits for Cessna Aircraft

**McFarlane Seat stops are stronger than the originals!**

Kits contain FAA-PMA and industry standard components



Model	Serial Number	Part Number
150F, G,H,J,K,L	15063763 thru 15073658	Seat Stop Kit 3
A150K, L	A1500001 thru A1500342	Seat Stop Kit 3
F150G,H,J,K,L	F1500068 thru F15000863	Seat Stop Kit 3
FA150K, L	FA1500001 thru FA1500166	Seat Stop Kit 3
172A,B,C	28000 thru 17249544	Seat Stop Kit 1
172D, E,F,G,H,I,K,L,M,N,P,Q	17249545 thru 17276516	Seat Stop Kit 2
F172M,N,P	F17200905 thru F17202238	Seat Stop Kit 2
FR172E,F,J,K	FR17200001 thru FR17200675	Seat Stop Kit 2
P172	P17257120 thru P17257188	Seat Stop Kit 2
172P	17276517 thru 17276673	Seat Stop Kit 1
F172P	F17202239 thru F17202254	Seat Stop Kit 1
R172K	R1722000 thru R1723454	Seat Stop Kit 2
172RG	172RG0001 thru 172RG1191	Seat Stop Kit 2
175	55001 thru 17557119	Seat Stop Kit 1
177, A,B	17700001 thru 17702752	Seat Stop Kit 2
177RG	177RG0001 thru 177RG1366	Seat Stop Kit 2
180, A,B,C,D,E,F,G,H,J,K	30000 thru 18053203	Seat Stop Kit 1
182, A,B,C,D,E,F,G,H	33000 thru 18256684	Seat Stop Kit 1
182J, K,L,M,N,P,Q,R	18256685 thru 18268586	Seat Stop Kit 1
F182P,Q	F18200001 thru F18200169	Seat Stop Kit 1
FR182	FR18200001 thru FR18200070	Seat Stop Kit 1
T182	18267716 thru 18268541	Seat Stop Kit 1
R182/ TR182	R18200001 thru R18202041	Seat Stop Kit 1
185, A,B,C,D,E, A185E,F	1850001 thru 18504448	Seat Stop Kit 1
188, A, A188, A	1880001 thru 18800832	Seat Stop Kit 1
188B	188002349 thru 18803846	Seat Stop Kit 1
T188C	188002349T thru 18803968T	Seat Stop Kit 1
T188C	T18803297T thru T18803968T	Seat Stop Kit 1
<b>Standard Seats</b>		
188B	18800833 thru 18802348	Seat Stop Kit 1
A188B	18800967T thru 18802348T	Seat Stop Kit 1
<b>Infinitely Adjustable Seats</b>		
188B	18800833 thru 18802348	Seat Stop Kit 2
A188B	18800967T thru 18802348T	Seat Stop Kit 2
<b>Pilot/Copilot &amp; Middle Seats</b>		
210-5 (205), 210-5A (205A)	205-0001 thru 205-0577	Seat Stop Kit 1
<b>Pilot/Copilot Seats</b>		
206	206-0001 thru 206-0275	Seat Stop Kit 1
U206, A,B,C,D, TU206A, B,C,D	U206-0276 thru U206-1444	Seat Stop Kit 1
P206, A,B,C,D, TP206A, B,C,D	P206-0001 thru P206-0603	Seat Stop Kit 1
U206E, F,G, TU206E, F,G	U20601588 thru U20607020	Seat Stop Kit 1
<b>Standard Pilot/Copilot Seats</b>		
U206E, TU206E	U20601445 thru U20601587	Seat Stop Kit 1
P206E, TP206E	P20600604 thru P20600647	Seat Stop Kit 1
<b>Infinitely Adjustable Pilot/Copilot Seats</b>		
U206E, TU206E	U20601445 thru U20601587	Seat Stop Kit 2
P206E, TP206E	P206-0604 thru P206-0647	Seat Stop Kit 2
<b>Middle Seats</b>		
206, U206, A,B,C,D,E,F,G	206-0001 thru 206-0275	Seat Stop Kit 1
TU206A, B,C,D,E,F,G	U206-0276 thru U20607020	Seat Stop Kit 1
P206, A,B,C,D,E	P206-0001 thru P206-0647	Seat Stop Kit 1
TP206A, B,C,D,E	P206-0001 thru P206-0647	Seat Stop Kit 1

Model	Serial Number	Part Number
<b>Standard Pilot/Copilot Seats</b>		
207, T207	20700001 thru 20700215	Seat Stop Kit 1
<b>Infinitely Adjustable Pilot/Copilot Seats</b>		
207, T207	20700149 thru 20700215	Seat Stop Kit 2
<b>Pilot/Copilot Seats</b>		
207A, T207A	20700216 thru 20700788	Seat Stop Kit 1
<b>Middle Seats</b>		
207, A, T207, A	20700001 thru 20700788	Seat Stop Kit 1
<b>Pilot/Copilot Seats</b>		
210, A,B,C,D,E,F,G,H,I,K,L,M,N,R	57001 thru 21065009	Seat Stop Kit 1
T210	T210-0001 thru T210-0454	Seat Stop Kit 1
<b>Middle Seat</b>		
210K, L,M,N,R	21059200 thru 21065009	Seat Stop Kit 1
T210K, L,M,N,R	21059200 thru 21065009	Seat Stop Kit 1
P210N, R	P21000001 thru P210000867	Seat Stop Kit 1
<b>Rear Seats</b>		
210D, E,F,G,H,J	21058221 thru 21059199	Seat Stop Kit 1
T210	T210-0001 thru T210-0454	Seat Stop Kit 1
<b>Pilot/Copilot Seats</b>		
T210F, G,H,J	T2100001 thru T2100454	Seat Stop Kit 1
P210N, R	P2100001 thru P21000874	Seat Stop Kit 1



SEAT STOP KIT 1

SEAT STOP KIT 2

SEAT STOP KIT 3

SEAT STOP KIT 1		
Qty	P/N	Description
1	MC0713074-1	Seat Stop "U" Design
1	MS24665-132	Cotter Pin, 1/16" X 1/2"
1	MS20392-1C21	Clevis Pin
SEAT STOP KIT 2		
Qty	P/N	Description
1	MC0511242-1	Seat Stop "Bar Design"
1	MS35265-41	Screw
SEAT STOP KIT 3		
Qty	P/N	Description
1	MC0713074-1	Seat Stop "U" Design
1	MS24665-132	Cotter Pin, 1/16" X 1/2"
1	MS20392-1C21	Clevis Pin
2	NAS43DD1-9FC	Spacer

FAA-PMA Approved

**Seat Roller Kits for Cessna Aircraft**

Now also approved for 300-400 series aircraft!

McFarlane seat parts were developed to assist in complying with the parts replacement requirements of FAA Airworthiness Directive 87-20-03. This AD requires the periodic inspection and replacement of seat components of the entire Cessna light aircraft fleet. Our parts are direct replacements for the wear related seat components. All parts are available individually or as convenient kits.

**Rollers**

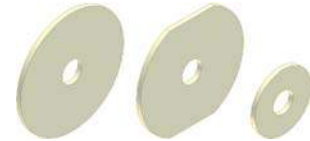
- Fabricated from molydisulfide filled nylon for improved strength and self-lubrication.
- Fully machined from extruded stock for a finer surface finish and higher strength.

**Bushings**

- Machined from alloy steel
- Longer life
- Greater wear resistance

**Washers**

- Super tough acetyl plastic
- Resists wear and aging
- MC1714000-41 full round washer also available



**Choose the Correct Kit**

The seat related replacement parts are not serial number specific, as the type of seat installed in the aircraft was optional when the aircraft was ordered from the factory. A common seat configuration is the pilot seat being "articulating" or "infinitely adjustable" while the co-pilot seat is the "standard" or "vertically adjustable" style. **One kit per seat is required.**

The most positive way to ensure that you are choosing the proper seat kit for your aircraft is to measure the rollers.

**SEAT-KT-1**

**Roller diameter approximately 1 3/8"**

This kit is used with the "infinitely adjustable" or "articulating" seats installed in the Cessna single engine aircraft from 1963 through 1986. Two adjustment crank handles identify this seat. The backrest angle is adjusted with a crank. It is also used with some 336-337 series aircraft. The SEAT-KT-1 contains the same components as four of the Cessna 1714000K200 kits.

All seats in the 177 Cardinal will use the large seat roller and require this kit. These parts are not used on models 150-152.

- (8) MC1714000-22 Washer
- (4) MCS1704-1 Roller
- (4) MC1414104-54 Bushing



**SEAT-KT-2**

**Roller diameter approximately 5/8"**

This kit is used with the "Standard" or "Vertically adjustable" seat installed in Cessna single engine aircraft from 1963 through 1986. This seat is identified by one or no adjustment crank handles. The seat back angle is adjusted with a lever on the side of the seat back. It is also used with some 336-337 series aircraft. The SEAT-KT-2 contains the same components as four of the Cessna 1414100-212 kits.

These parts are not used on models 150-152.

- (8) MCS1554-1 Washer
- (4) MCS1551-1 Roller
- (4) MC1414104-54 Bushing



**SEAT-KT-3**

**Roller diameter approximately 7/8" with no wear washers**

This kit is used with all seats in the Cessna 150-152 series aircraft and all Cessna single engine aircraft built before 1963. A welded steel tubing seat frame easily identifies these seats. It is also used with some Cessna twin engine aircraft.

- (4) MC0311310 Roller
- (4) MC0311586 Bushing



**Obsolete Roller 1964-1965**

Cessna aircraft manufactured in 1964 and 1965 had a spool shape roller with a smaller bushing. Use SEAT-KT-2 to replace this style roller.

The complete kit must be used, as the bushing size is different.



**Seat Rail Wear Gauge for Cessna Aircraft**

Checks seat rail wear limits as per FAA AD 2011-10-09

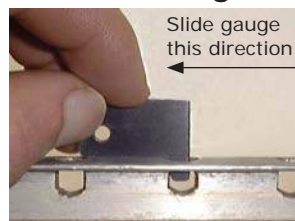
**Seat Rail Directive**

The McFarlane Seat Rail Wear Gauge is designed to check for seat rail pin engagement hole wear on Cessna aircraft, as required by FAA AD 2011-10-09. This gauge is designed to measure the actual radius wear near the seat stop holes and allows for the 0.020 upper surface wear permitted by the AD. This gauge is very precisely machined.

**Fast and Positive - No More Guessing!!**



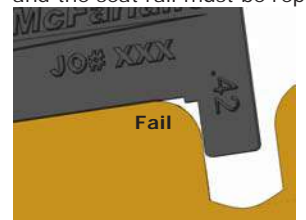
1. Place the gauge into each hole location showing wear.



2. Slide gauge back along top center of the rail until it contacts the hole edge. Make sure to keep the gauge parallel and square to the unworn rail surface.



3. If the step touches the rail, lifting the gauge up, the wear is less than 0.42. If the step does not touch the rail, the wear is more than 0.42 and the seat rail must be replaced.



**Note:** Earlier versions of the McFarlane Seat Rail Hole Wear Gauge feature a 0.36 and a 0.42 step. The 0.36 step was included per an earlier version of the Airworthiness Directive and is no longer used.



P/N GAUGE SR1



# Seat Rails and Seat Parts Seat Roller Housings

## Seat Roller Housing Gauge for Cessna Aircraft

P/N TOOL110

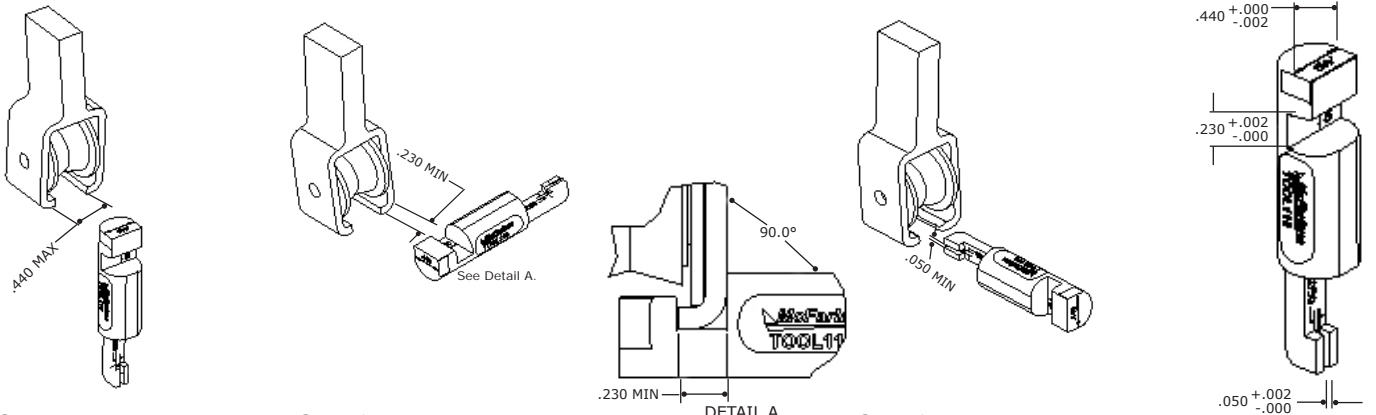
- Hardened Stainless Steel
- Save time! Ten times faster than calipers
- Step by step instructions
- Measures all three dimensions without removing rollers

### Checks Cessna seat roller housing limits as per FAA AD 2011-10-09

The McFarlane Seat Roller Housing Gauge is designed to facilitate inspection of seat roller housings for wear in Cessna aircraft as required by mandatory FAA AD 2011-10-09. Designed for seat roller housings that are replaceable, this gauge simplifies determining whether the housing is in or out of tolerance by allowing the areas of concern to be gauged, as opposed to measuring individual attributes on each seat roller housing with calipers. Do not use on welded/non-replaceable seat roller housings.



P/N TOOL110



**Step 1.**  
.440 gauge surfaces must not enter space between housing tangs.

**Step 2.**  
The bend area of the tang must not enter the space on the gauge marked .230. See Detail A.

**Step 3.**  
The .050 space on the gauge must not fit on the worn area of the tang.

To calibrate; ensure gauge dimensions are within the tolerances shown above.

## Seat Roller Housings for Cessna Aircraft

Save \$\$

- Anodized for improved wear and corrosion resistance
- Precision machined with perfected dimensions for smooth installation and operation
- FAA-PMA direct replacement
- Seat roller housings for most single engine Cessna and Skymaster
- Replace out of spec housings as required by FAA AD 2011-10-09
- Convenient flowchart to determine correct housings for your aircraft



P/N MC1714000-33



P/N MC1200603-42



P/N MC1414104-39



P/N MC1414104-61B

### Housing/Bracket Assemblies - P/N's with B suffix

Save time and money with housing/bracket assemblies. Most housings with a locking pin hole are available with or without the MC1414104-8 bracket. Just add a "B" suffix to the housing part number to buy the complete assembly.

**McFarlane highly recommends buying complete assemblies. The bracket rivet spacing is very close making riveting difficult without special tooling.**

Bracket also available separately.



Typical seat roller housing



Typical seat roller housing-bracket assembly



Bracket  
P/N MC1414104-8

**Roller housing/bracket assemblies save time. The old bracket does not have to be removed and reinstalled.**

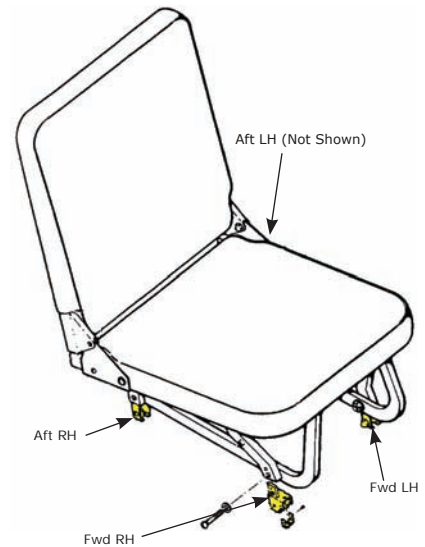
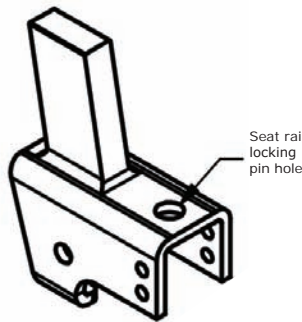
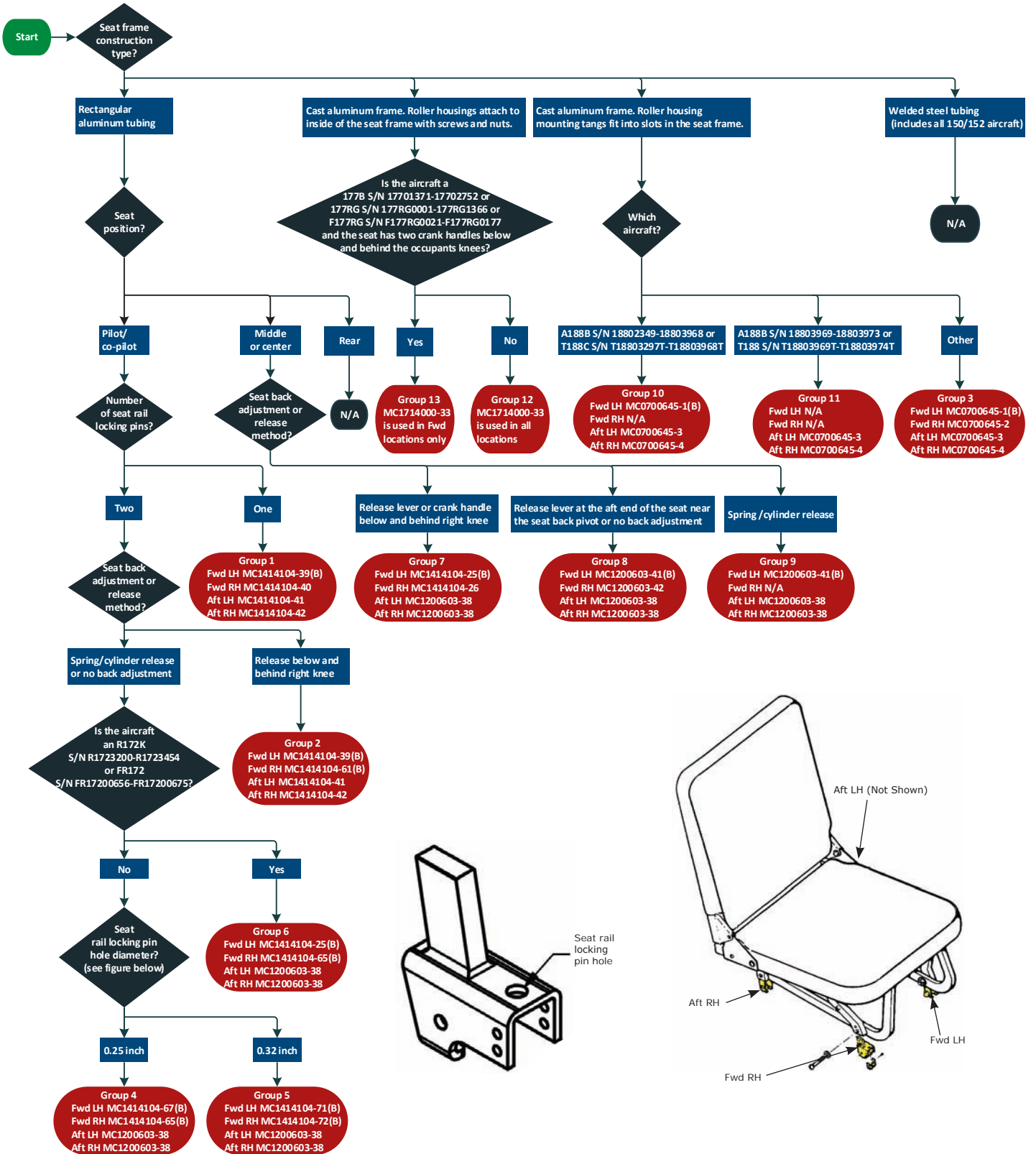
Flowchart to determine correct housings on the following page

# Seat Rails and Seat Parts Seat Roller Housings

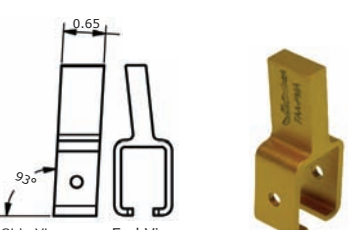
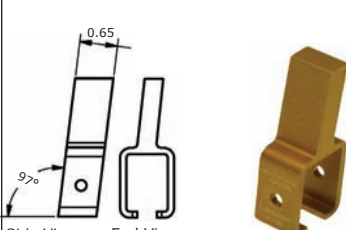
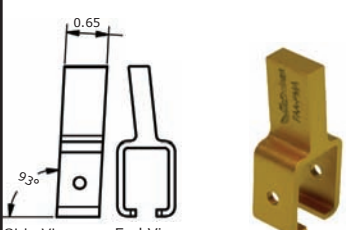
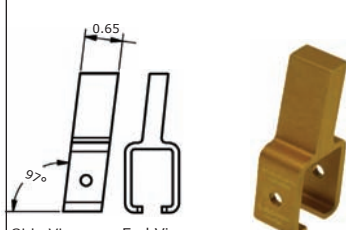
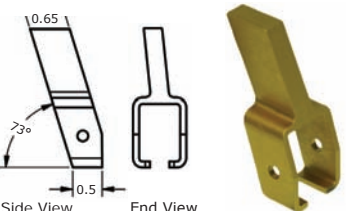
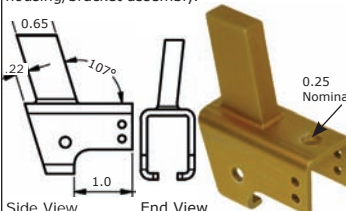
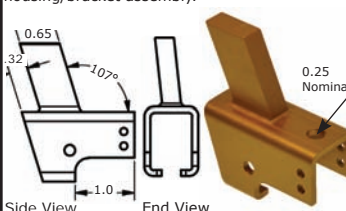
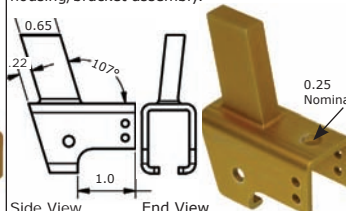
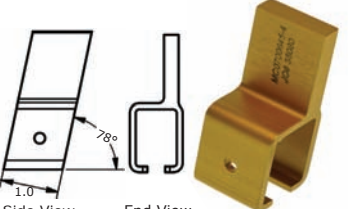
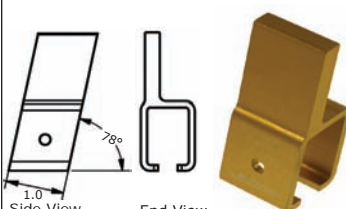

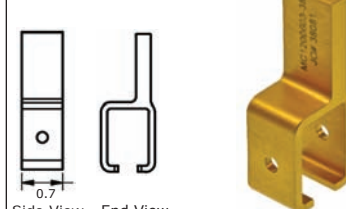
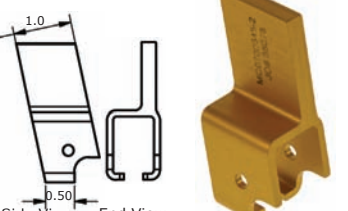
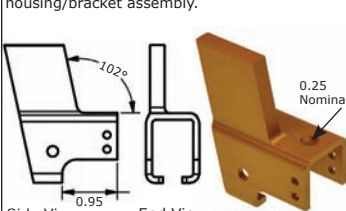
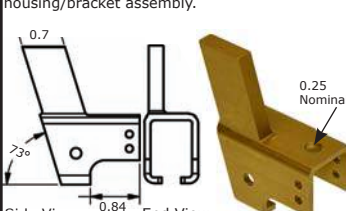
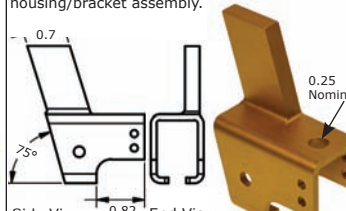
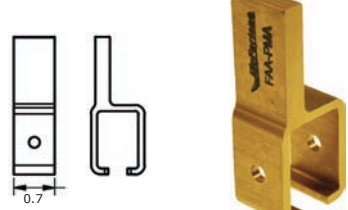
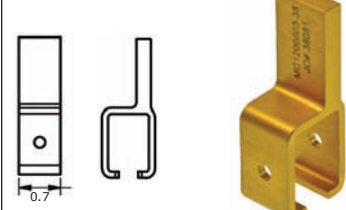
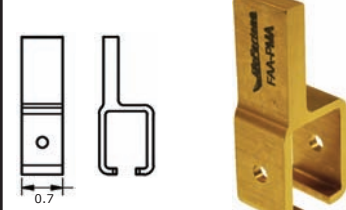
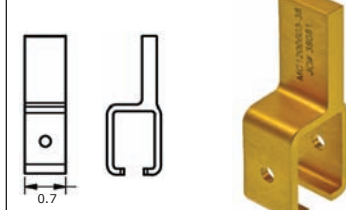
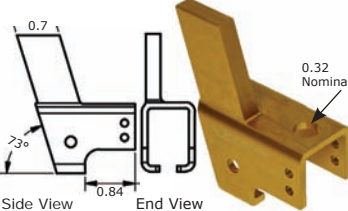
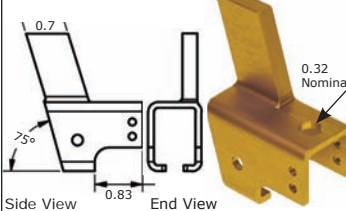
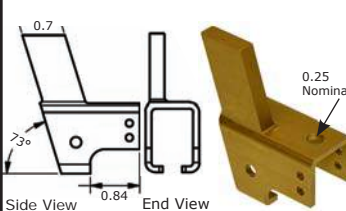
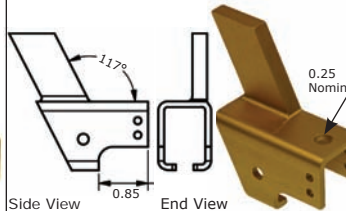
## Need help selecting the correct housing for your seat?

With over two dozen part numbers and many different seat options, this can be very challenging. Only McFarlane has a convenient flowchart to make it easy!

Seat Rails

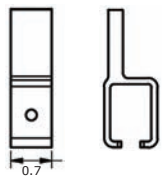
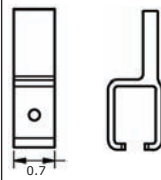
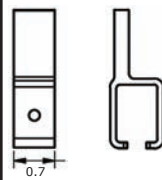
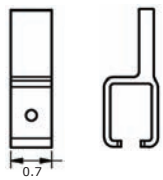
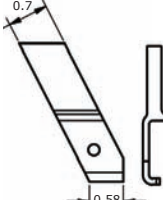
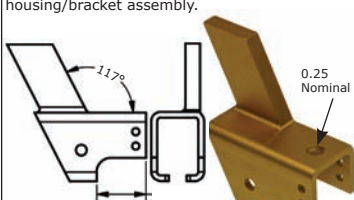
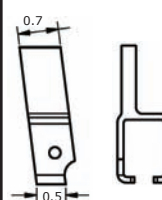
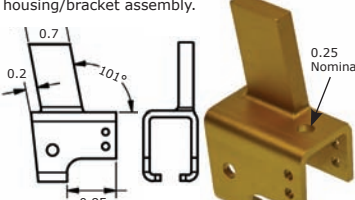
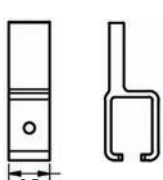
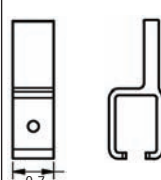
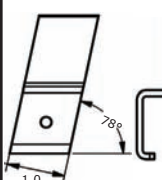
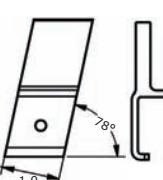
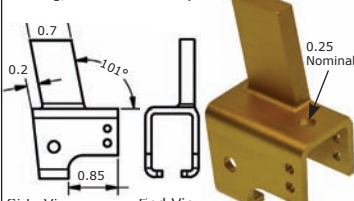
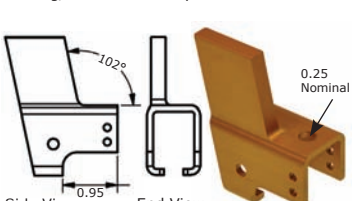
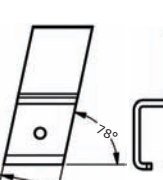
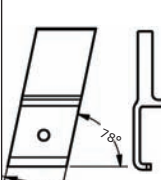








# Seat Rails and Seat Parts Seat Roller Housings

Group 1		Group 2	
<p><b>Aft RH P/N MC1414104-42</b></p>  <p>Side View    End View</p>	<p><b>Aft LH P/N MC1414104-41</b></p>  <p>Side View    End View</p>	<p><b>Aft RH P/N MC1414104-42</b></p>  <p>Side View    End View</p>	<p><b>Aft LH P/N MC1414104-41</b></p>  <p>Side View    End View</p>
<p><b>Fwd RH P/N MC1414104-40</b></p>  <p>Side View    End View</p>	<p><b>Fwd LH P/N MC1414104-39</b> P/N MC1414104-8 bracket available. Add "B" suffix to housing P/N for housing/bracket assembly.</p>  <p>Side View    End View</p>	<p><b>Fwd RH P/N MC1414104-61</b> P/N MC1414104-8 bracket available. Add "B" suffix to housing P/N for housing/bracket assembly.</p>  <p>Side View    End View</p>	<p><b>Fwd LH P/N MC1414104-39</b> P/N MC1414104-8 bracket available. Add "B" suffix to housing P/N for housing/bracket assembly.</p>  <p>Side View    End View</p>
Group 3		Group 4	
<p><b>Aft RH P/N MC0700645-4</b></p>  <p>Side View    End View</p>	<p><b>Aft LH P/N MC0700645-3</b></p>  <p>Side View    End View</p>	<p><b>Aft RH P/N MC1200603-38</b></p>  <p>Side View    End View</p>	<p><b>Aft LH P/N MC1200603-38</b></p>  <p>Side View    End View</p>
<p><b>Fwd RH P/N MC0700645-2</b></p>  <p>Side View    End View</p>	<p><b>Fwd LH P/N MC0700645-1</b> P/N MC1414104-8 bracket available. Add "B" suffix to housing P/N for housing/bracket assembly.</p>  <p>Side View    End View</p>	<p><b>Fwd RH P/N MC1414104-65</b> P/N MC1414104-8 bracket available. Add "B" suffix to housing P/N for housing/bracket assembly.</p>  <p>Side View    End View</p>	<p><b>Fwd LH P/N MC1414104-67</b> P/N MC1414104-8 bracket available. Add "B" suffix to housing P/N for housing/bracket assembly.</p>  <p>Side View    End View</p>
Group 5		Group 6	
<p><b>Aft RH P/N MC1200603-38</b></p>  <p>Side View    End View</p>	<p><b>Aft LH P/N MC1200603-38</b></p>  <p>Side View    End View</p>	<p><b>Aft RH P/N MC1200603-38</b></p>  <p>Side View    End View</p>	<p><b>Aft LH P/N MC1200603-38</b></p>  <p>Side View    End View</p>
<p><b>Fwd RH P/N MC1414104-72</b> P/N 2514044-2 bracket used with this housing is not available from McFarlane at this time.</p>  <p>Side View    End View</p>	<p><b>Fwd LH P/N MC1414104-71</b> P/N 2514044-2 bracket used with this housing is not available from McFarlane at this time.</p>  <p>Side View    End View</p>	<p><b>Fwd RH P/N MC1414104-65</b> P/N MC1414104-8 bracket available. Add "B" suffix to housing P/N for housing/bracket assembly.</p>  <p>Side View    End View</p>	<p><b>Fwd LH P/N MC1414104-25</b> P/N MC1414104-8 bracket available. Add "B" suffix to housing P/N for housing/bracket assembly.</p>  <p>Side View    End View</p>

# Seat Rails and Seat Parts Seat Roller Housings

Seat Rails

Group 7		Group 8			
<p><b>Aft RH P/N MC1200603-38</b></p>  <p>Side View End View</p>	<p><b>Aft LH P/N MC1200603-38</b></p>  <p>Side View End View</p>	<p><b>Aft RH P/N MC1200603-38</b></p>  <p>Side View End View</p>	<p><b>Aft LH P/N MC1200603-38</b></p>  <p>Side View End View</p>		
<p><b>Fwd RH P/N MC1414104-26</b></p>  <p>Side View End View</p>	<p><b>Fwd LH P/N MC1414104-25</b> P/N MC1414104-8 bracket available. Add "B" suffix to housing P/N for housing/bracket assembly.</p>  <p>Side View End View</p>	<p><b>Fwd RH P/N MC1200603-42</b></p>  <p>Side View End View</p>	<p><b>Fwd LH P/N MC1200603-41</b> P/N MC1414104-8 bracket available. Add "B" suffix to housing P/N for housing/bracket assembly.</p>  <p>Side View End View</p>		
Group 9		Group 10			
<p><b>Aft RH P/N MC1200603-38</b></p>  <p>Side View End View</p>	<p><b>Aft LH P/N MC1200603-38</b></p>  <p>Side View End View</p>	<p><b>Aft RH P/N MC0700645-4</b></p>  <p>Side View End View</p>	<p><b>Aft LH P/N MC0700645-3</b></p>  <p>Side View End View</p>		
N/A	<p><b>Fwd LH P/N MC1200603-41</b> P/N MC1414104-8 bracket available. Add "B" suffix to housing P/N for housing/bracket assembly</p>  <p>Side View End View</p>	N/A	<p><b>Fwd LH P/N MC0700645-1</b> P/N MC1414104-8 bracket available. Add "B" suffix to housing P/N for housing/bracket assembly.</p>  <p>Side View End View</p>		
Group 11		Group 12		Group 13	
<p><b>Aft RH P/N MC0700645-4</b></p>  <p>Side View End View</p>	<p><b>Aft LH P/N MC0700645-3</b></p>  <p>Side View End View</p>	<p><b>Aft RH P/N MC1714000-33</b></p> 	<p><b>Aft LH P/N MC1714000-33</b></p> 	N/A	N/A
N/A	N/A	<p><b>Fwd RH P/N MC1714000-33</b></p> 	<p><b>Fwd LH P/N MC1714000-33</b></p> 	<p><b>Fwd RH P/N MC1714000-33</b></p> 	<p><b>Fwd LH P/N MC1714000-33</b></p> 

## Seat Rail for Piper Aircraft

P/N MC62557-004 (seat rail - used in all positions)

- Direct replacement - used in all positions
- Precision machined
- Gold anodized for corrosion resistance
- Dry lubricant applied for long service life
- They are prettier too!

Save hundreds of \$\$

## Seat Rollers and Bushings for Piper Aircraft

P/N CA18968-000 (small roller - 0.42" OD)

P/N CA87332-002 (large roller - 0.62" OD)

P/N CA41413-038 (bushing - .3060" OD)

- Direct replacement
- Save!



P/N CA18968-000



P/N CA87332-002



P/N CA41413-038

Model	Serial Number	Seat Rail MC62557-004	Seat Roller CA18968-000	Seat Roller CA87332-002	Seat Bushing CA41413-038
PA-23, PA-23-160	All		•		
PA-23-235	All		•		•
PA-23-250	27-1 thru 27-3836, 27-3838 thru 27-3943 27-3837, 27-3944 thru 27-7554168, 27-7654001 and On		•		•
PA-24-250, 400	All		•		
PA-24-260	24-3462 thru 24-4246, 24-4248 thru 24-4299 24-4247, 24-4300 and On		•		•
PA25, PA25-235	25-1 thru 25-4171				•
PA-28-140, PA-28-150, 151, 160, 161	All	•	■	■	
PA-28-180, PA-28R-180	All	•	■	■	
PA-28-181	All	•	■	■	
PA-28R-200	All	•	■	■	
PA-28-201T, PA-28R-201, 201T	All	•	•	•	
PA-28RT-201, 201T	All	•	■	■	
PA-28-235	All	•	■	■	
PA-28-236	All	•	■	■	
PA-30	30-1 thru 30-852, 30-854 thru 30-901 30-853, 30-902 and On		•		•
PA-31-300, 325	All		•		•
PA-31-350, PA-31P, PA-31P-350, PA-31T, 31T1, 31T2, 31T3	All		•		•
PA-32-260	All	•	■	■	
PA-32-300,301,301T, PA-32R-300,301,301T, PA-32RT-300, 300T	All	•	■	■	
PA-34-200,200T,220T	All	•	■	■	
PA-39, PA-42, PA-42-720, PA-42-1000	All		•		•
PA-44-180 180T	All	•	•		
PA-46-310P, PA-46-350P (w/ G1000)	All			•	

■ To determine which roller your aircraft requires, verify the outer diameter at the center of the roller:  
0.42" use P/N CA18968-000, 0.62" use P/N CA87332-002

## Cargo Tie Down

P/N TDP-31

### Secure your cargo

Clamps to seat rails to provide tie down points to secure cargo.

- 4 req. for every 100 lbs of cargo
- Anodized aluminum for durability
- FAA-PMA Piper
- NOT to be used as a seat stop



### Approved models:

PA31, PA31-300, 325,350, P-350, 31P, 31T,31T1, T2, T3



FAA-PMA Approved

**Seat Adjustment Springs for Piper Aircraft**

**Replacement springs just got more affordable!**

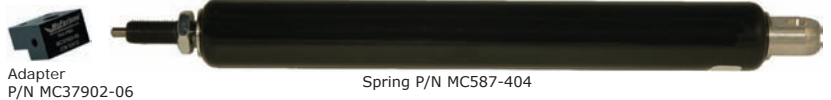
**Save\$\$**

- Direct replacement - no conversion kit required
- One required per bucket seat
- Avoid downtime and expense of repeated overhauls

**Replacements for both styles now available**

**Gas Spring Style  
P/N MC587-404**

- Replaces Piper P/N 587-404 or 89178-010<sup>1</sup>
- Originals were manufactured by Stabilus Bloc-O-Lift or Gas Springs Corp Easy Lift
- M10x1 metric thread (~0.39 inch diameter)
- Adapter P/N MC37902-06 also available (threads on end of spring - see figure)



**Coil Spring/Hydraulic Style  
P/N MC555-692**

- McFarlane replaces the old coil spring/hydraulic style with a gas spring
- Replaces Piper P/N 76445-000 or 555-692
- Originals were manufactured by P. L. Porter Hydrolok
- 3/8-24 UNF thread



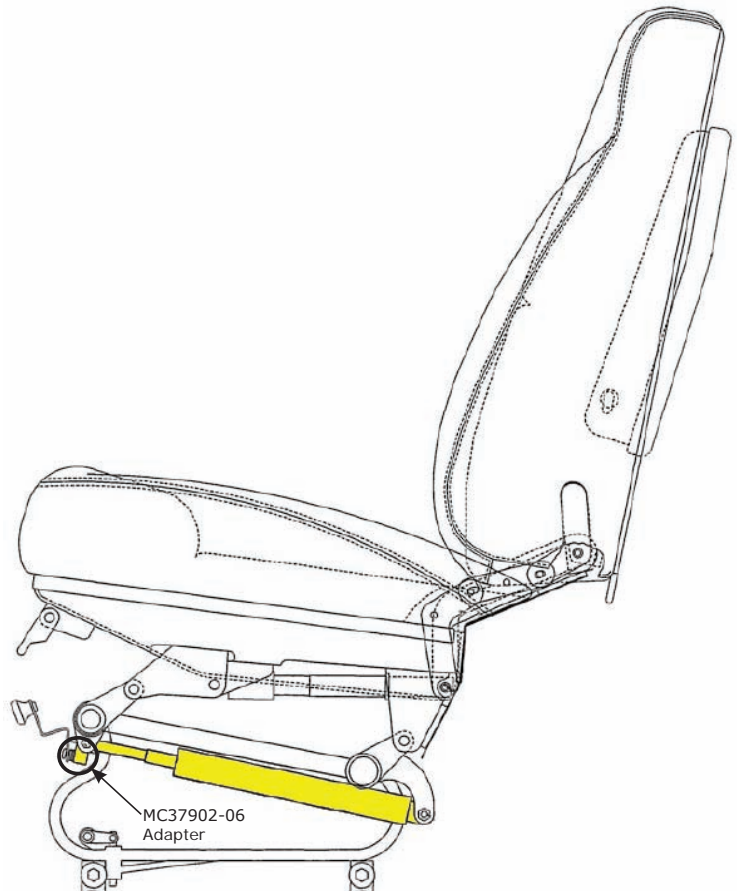
**Maintenance Tip:**

Aircraft make, model and serial number are not sufficient to ensure the correct replacement spring as many aircraft may have been originally equipped with either one or retrofitted with a conversion kit. If the spring you are replacing is marked with a brand name (e.g. P.L. Porter or Stabilus) the correct replacement is readily identified. The coil spring/hydraulic style are also identifiable by a 1 1/4" diameter visible coil spring. The thread may also be measured to verify the correct identification.



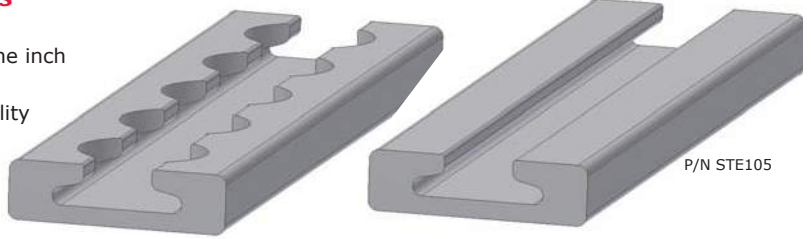
Model	Serial Number	Qty per A/C	Spring MC555-692 (3/8-24 thread)	Spring MC587-404 (M10x1 thread)	Adapter P/N MC37902-06
PA-28-140 <sup>1</sup>	28-7425061 and On	2	4	2	2
PA-28-151	All	2	4	2/3	2/3
PA-28-161	2816001 thru 2816119	2	4	2	2
	2841001 thru 2842999	2		2	2
	28-7716001 thru 28-7716073	2	4	2/3	2/3
	28-7716074 thru 28-8616057	2	4		
PA-28-180 <sup>1</sup>	28-7405035 and On	2	4	2	2
	2843001 thru 2843999	2		2	2
PA-28-181	2890001 thru 2890205	2	4		
	2890206 thru 28-7790358	2	4	2	2
	28-7790359 thru 28-8690062	2	4		
	All	2			
PA-28-201T	All	2			
PA-28-235 <sup>1</sup>	28-7410027 thru 28-7710089	2	4	2	2
PA-28-236	All	2			
PA-28R-200 <sup>1</sup>	28R-7435035 thru 28R-7635545	2	4	2	2
	2837001 thru 2837061	2	4	2	2
	2844001 thru 2844999	2		2	2
PA-28R-201	28R-7737002 thru 28R-7837317	2	4	2	2
	All	2	4	2	2
	All	2			
PA-28RT-201T	All	2			
PA-32-260 <sup>1</sup>	32-7400001 thru 32-7800008	2	4	2	2
PA-32-300 <sup>1</sup>	32-7440001 thru 32-7940290	2	4	2	2
PA-32-301, 301T	All	2			
PA-32R-300	All	2	4	2	2
PA-32R-301, 301T	All	2			
PA-32RT-300, 300T	All	2			
PA-34-200 <sup>1</sup>	34-7450033 thru 34-7450220	2	4	2	2
	All	2	4	2	2
PA-34-220T	All	2			
PA-44-180, 180T	All	2			
PA-46-310P	All	4			
PA-46-350P	4622001 thru 4622200	4			
	4636001 thru 4636999	6			
PA-46-500TP	All	4			
PA-46R-350T	All	4			

<sup>1</sup> Partial model eligibility  
<sup>2</sup> When equipped with Piper P/N 587-404 or 89178-010. This includes seats converted per Piper Service Letter 813 using Piper kit number 761 103V, 761 104V or 761 105V.  
<sup>3</sup> Some Piper parts catalogs do not list part number 587-404 separately, but list an assembly part number of 89178-010 instead. McFarlane P/N MC587-404 replaces the spring component of this assembly and adapter P/N MC37902-06 replaces the block.  
<sup>4</sup> When equipped with Piper P/N 76445-000 or 555-692.



## Browline Style Seat Tracks/Cargo Tracks

- Perfect for homebuilt or experimental projects
- Slotted extrusion with 0.785" diameter openings every one inch
- Precision machined and quality controlled
- Aerospace grade 7075-T6511 aluminum with full traceability
- Compatible with common MS33601 cargo tie down and seat stud fittings (see below)



### Standard Lengths

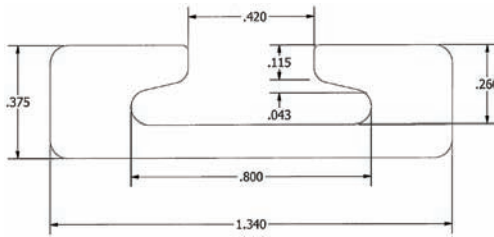
**P/N 6656-L (L = the minimum length in inches)**  
Anodized for corrosion protection.  
Available in 6, 12, 18, 24, 36, 48, 72, 96, 120, 144, 160, and 179 inch lengths.

### P/N STE105

Slotted extrusion without machined 0.785" diameter openings. Non-anodized. Available by the inch.

### Custom Tracks

Custom lengths and machining available. Call for details.



## Filler Strip for Browline Style Track

P/N FE200751

- Provides a finished look
- Keeps debris out of the track
- May be cut to length, sold in 25 ft. roll



## Browline Style Anchor Plate

P/N 40000-11

- For use with single stud fittings
- Small and low profile, providing damage protection to cargo and baggage
- An ideal way to support single location fastening of nets, straps, or other equipment
- NSN Number 1560-01-286-1030
- Aluminum alloy, anodized

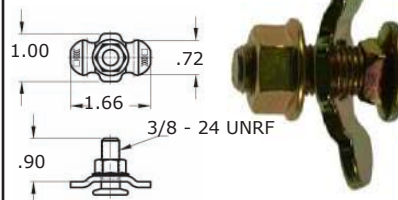
### Working load limit:

4000 lbs @ 0° vertical pull  
2000 lbs @ 90° horizontal pull



## Threaded Single Stud Fitting with Nut for Browline Style Track

P/N FE200744



### Specifications

Material: Carbon Steel  
Finish: Zinc Plated  
Working Load Limit:  
5000 lbs @ 0° vertical pull  
2000 lbs @ 90° horizontal pull

## Chair Leg Stud Quick Release Anchor

P/N MC41528-14

- Use with Browline style track
- Spring loaded fitting snaps securely into place and can be easily moved to different positions.
- Designed to mate with 1" O.D. 0.035" wall tube or a 0.720" O.D. stud.
- 7075 Aluminum



## Cargo Tie Down Fittings for Browline Style Track

- Use with Browline style track (McFarlane P/N series 6656) or other MS33601 compatible track - sometimes called L-track
- Perfect for net or strap restraint applications
- Spring loaded fitting snaps securely into place and can be easily moved to different positions



P/N	Description	Figure	A	B	C	D	E	F	0° Vertical Working Load Limit lbs.	90° Horizontal Pull Angle Working Load Limit lbs.
32401	Single Stud Fitting with Ring	1	1.99"	0.93"	1.18"	0.19"	0.63"	1.23"	1333	1000
40340-20	Single Stud Fitting with Ring	1	1.87"	0.87"	1.12"	0.19"	0.71"	1.43"	1000	500
40340-21	Single Stud Fitting with D-Ring	2	2.00"	1.09"		0.19"	0.71"	1.43"	1000	500
47981-10	Double Stud Fitting with Round Ring	3	1.75"	2.32"	2.34"	0.31"	0.76"		10000	5000
47981-11	Double Stud Fitting with Twisted Ring	4	1.56"	2.32"	3.76"	0.27"	0.76"		5000	5000
32505	Triple Stud Fitting without Ring	5	1.12"	0.90"	2.60"				2167	1670
32507	Triple Stud Fitting with Pear Shaped Ring	6	1.12"	0.90"	1.16"	0.25"	4.90"		2000	1670

1 NSN Number 1670-01-243-8877

2 NSN Number 1670-01-261-0567

3 60° Pull angle working load limit = 2000 lbs.

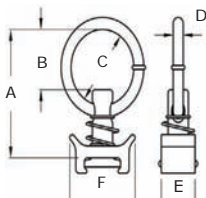


Figure 1

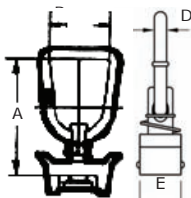


Figure 2

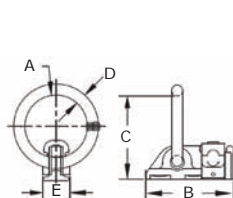


Figure 3

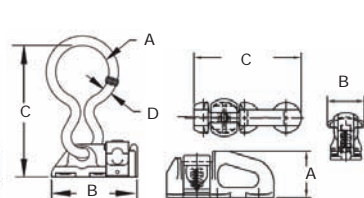


Figure 4

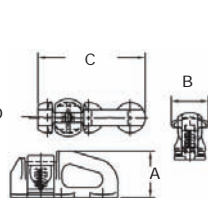


Figure 5

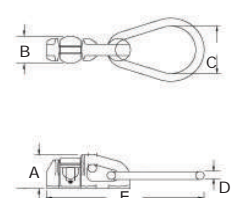
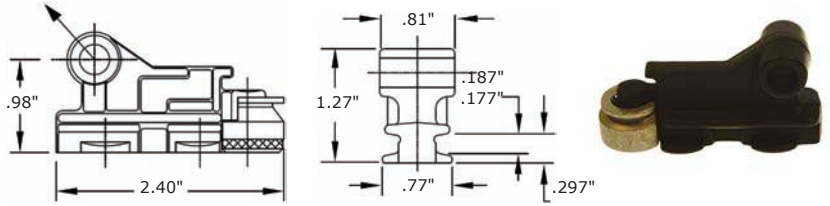


Figure 6

**Rear Leg Seat Fitting**

P/N 42854-11

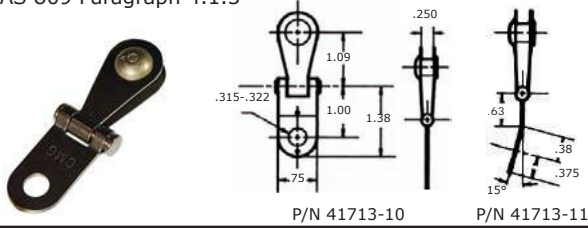
- Compatible with Browline style track
- 8000 lb load capacity at 48° angle from horizontal
- Cad plated with teflon coating
- Weight .24 lb



**Seat Belt Shackles**

P/N 41713-10 and 41713-11

- High strength, low profile design
- Made especially for today's lightweight seats
- Stainless steel, cad plated
- Meets the load requirements of NAS 809 Paragraph 4.1.3



**Cargo Tie Downs**

- Clamps to seat rails to provide tie down points to secure cargo
- 4 required per every 100 lbs of cargo
- Anodized aluminum for durability
- FAA-PMA/STC

Note: This product is not to be used as a seat stop

P/N	Color	Aircraft Model Eligibility
TDC-208	Green	Cessna 208, 208A, and 208B
TDP-31	Blue	Piper PA31, PA31-300,-325,-350, PA31P, PA31P-350, PA31-T, PA31-T1,T2,T3



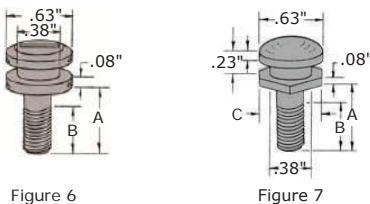
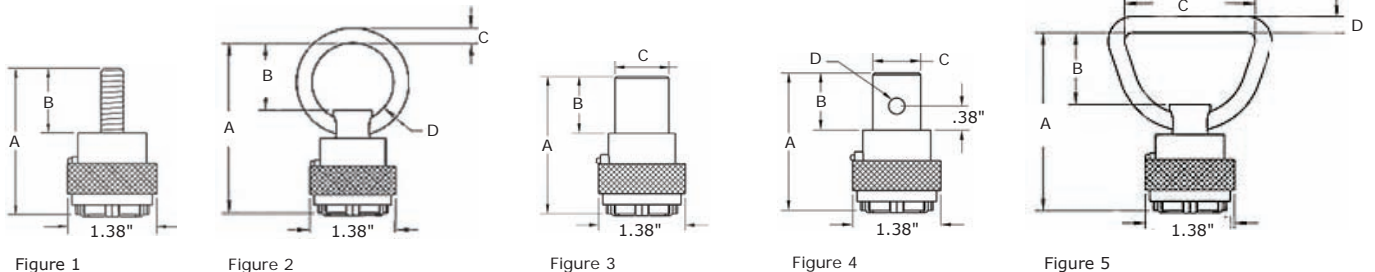
**12-Jaw Seat/Cargo Tie Down Quick Disconnect Adapters and Studs (MS22034 style)**

- Spring loaded ring locks jaws around stud, and spring loaded lock pin prevents accidental release
- Use with seat cargo studs shown below. Also works with any MS21234, MS21235 and AM7516 style seat/cargo attach fittings



P/N	Description	Figure	A	B	C	D	0° Vertical Breaking Strength lbs.	90° Pull Angle Breaking Strength lbs.
33115	12-Jaw, Threaded Stud, 1" x 3/8-24UNF Threaded Stud	1	2.26"	1.00"			5475	2300
33116	12-Jaw, Threaded Stud, 3/4" x 3/8-24UNF Threaded Stud	1	2.01"	0.75"			5475	2300
32326	12-Jaw, Ring	2	2.85"	1.13"	0.25"	1.31"	5475	2300
32334	12-Jaw, Chair Leg Stud, 0.85"	3	2.16"	0.90"	0.85"		N/A	2300
32336	12-Jaw, Chair Leg Stud, 0.88" with 1/4" Hole	4	2.16"	0.90"	0.88"	0.25"	5475	2300
32340	12-Jaw, Chair Leg Stud, 0.85" with 1/4" Hole	4	2.16"	0.90"	0.85"	0.25"	5475	2300
32343	12-Jaw, D-Ring	5	2.82"	1.10"	2.01"	0.25"	5475	2300
32367	12-Jaw, Chair Leg Stud, 0.75" with 3/8" Hole	4	2.32"	1.06"	0.75"	0.375"	5475	2300
FD4015	Stud, 12-Jaw, 1/4-28 UNF with slot	6	0.63"	0.57"			4000	N/A
FD4015M8	Stud, 12-Jaw, 3/8-24 UNF with hex	7	0.63"	0.57"	0.57"		4000	N/A

- 1 Replaces MS22034-1B
- 2 Replaces MS22034-2
- 3 Replaces MS22034-1
- 4 Replaces MS22034-3



**Ankra Interior Cargo Fittings**

McFarlane is now a full distributor!  
Quantity discounts available  
Call or visit [mcfarlaneaviation.com](http://mcfarlaneaviation.com)  
for more information.





## Door Cables for Beechcraft, Cessna, Piper and Lear Aircraft

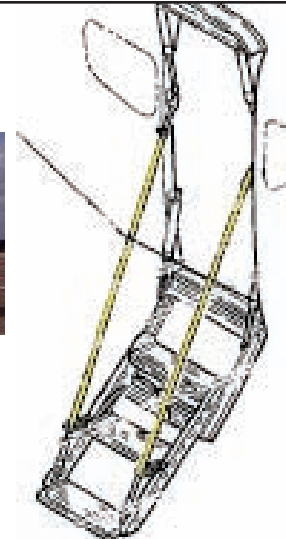
**Save \$\$**

Pre-stretched, silicone covered aircraft cables are easy to clean, will not crack due to wear or climate changes, does not separate from the cable and remains pliable for easy opening and closing of aircraft doors.

- Hand-crafted with the highest quality standards.
- FAA-PMA Approved
- New color options



**Aero-Cable Corp designs and approvals are now owned and manufactured by McFarlane!**



**Don't settle for the factory color, choose a color to match your interior!**  
Standard color is indicated for each part number. Add the appropriate color suffix to the P/N to order a different color.

### Cessna Twins

Model	Serial Number	Lower Cabin Door Forward	Lower Cabin Door Aft	Cargo Door Fwd and Aft
T303	T30300001 thru T30300247	51-00(303)		
340A	340A0201 thru 340A0600	32-75	31-25	
	340A0601 thru 340A1800	32-75 <sup>1</sup> , 51-00 <sup>2</sup>	31-25 <sup>1</sup> , 49-75 <sup>2</sup>	
	340A1801 and on <sup>3</sup>	48-75	50-00 <sup>3</sup>	
402C	402C0001 thru 402C0200	32-75 <sup>1</sup> , 48-75 <sup>2</sup>	32-75 <sup>1</sup> , 50-00 <sup>2</sup> <sup>3</sup>	31-25 <sup>4</sup>
	402C0201 thru 402C0800	51-00 <sup>1</sup> <sup>4</sup> , 32-75 <sup>1</sup> <sup>5</sup> , 48-75 <sup>2</sup> <sup>6</sup>	49-75 <sup>1</sup> <sup>4</sup> , 32-75 <sup>5</sup> , 50-00 <sup>2</sup> <sup>6</sup>	31-25 <sup>4</sup>
	402C0801 and on	48-75 <sup>6</sup>	50-00 <sup>6</sup>	31-25 <sup>4</sup>
404	404-0401 thru 404-0600	32-75	32-75	32-75 <sup>5</sup>
	404-0601 and on	49-75	49-75	32-75 <sup>5</sup>
414	414-0001 thru 414-0900	56-00	47-625	
	414-0901 and on		47-625	
414A	414A0201 thru 414A0400	31-25 <sup>1</sup> , 48-75 <sup>2</sup>	31-25 <sup>1</sup> , 48-75 <sup>2</sup>	
421A	All		47-625 <sup>7</sup>	
421B	421B0001 thru 421B0970	56-00	47-625	
	421C0001 thru 421C0200	56-00	47-625	
421C	421C0601 thru 421C1000	31-25 <sup>1</sup> , 48-75 <sup>2</sup>	31-25 <sup>1</sup> , 48-75 <sup>2</sup>	
	421C1001 thru 421C1400	51-00 <sup>1</sup> , 48-75 <sup>2</sup>	51-00 <sup>1</sup> , 48-75 <sup>2</sup>	
	421C1401 and on	48-75	48-75	
425	425-0002 thru 425-0176	49-75 <sup>7</sup> , 50-00 <sup>3</sup> <sup>8</sup>	49-75 <sup>7</sup> , 50-00 <sup>3</sup> <sup>8</sup>	
	425-0177 and on	50-00 <sup>8</sup>	50-00 <sup>8</sup>	
441	441-0071 thru 441-0224	32-75	31-25	
	441-0225 thru 441-0311	49-75 <sup>7</sup> , 50-00 <sup>3</sup> <sup>8</sup>	49-75 <sup>7</sup> , 50-00 <sup>3</sup> <sup>8</sup>	
	441-0312 and on	50-00 <sup>8</sup>	50-00 <sup>8</sup>	

- <sup>1</sup> For aircraft incorporating SK421-117
- <sup>2</sup> For aircraft NOT incorporating SK421-117
- <sup>3</sup> Eligibility for this aircraft is currently under review.
- <sup>4</sup> Used with pneumatic extender
- <sup>5</sup> Used without pneumatic extender
- <sup>6</sup> Eligibility for this aircraft is currently under review.
- <sup>7</sup> For aircraft incorporating SK441-71
- <sup>8</sup> For aircraft NOT incorporating SK441-71
- <sup>9</sup> This cable is used at both the forward and aft location

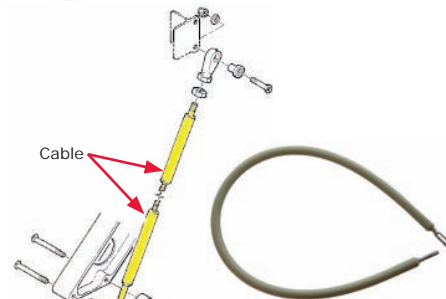
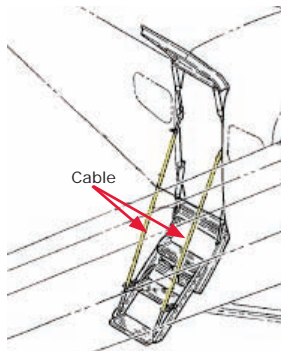
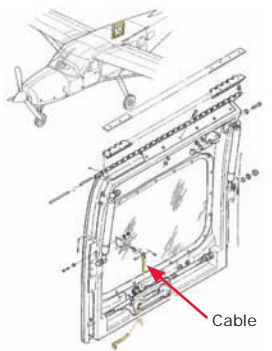
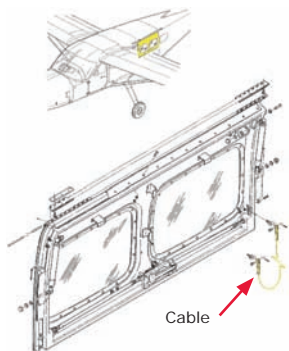


Silicone Covering Color Chart		
Description	Color Suffix	
Gray Si cover Pantone 409C		-LTGYO
Butternut Si cover Fed Spec 30145		-MDBNO
Black Si cover Fed Spec 27038		-DKBKO
Green Si cover Pantone 5783U		-LTGNO
Gray Si cover Fed Spec 26008		-DKGYO
Gray Si cover Fed Spec 36173		-DKGY1
Translucent (no color)		-LTTLO

Cable Specs				Supersedures	
P/N	Length	End Types	Std Color	Cessna P/N	Aero-Cables P/N
31-25	31.25"	Eye/Stud	-LTGNO	10888	51-00 (T303)
32-75	32.75"	Eye/Stud	-LTGNO	5111508-59	47-625
47-625	47.625"	Eye/Stud	-LTGNO	5111561-22	56-00
48-75	48.75"	Stud/Stud	-LTGNO	71540-1	32-75
49-75	49.75"	Eye/Stud	-LTGNO	71540-10	50-00
50-00	50.00"	Stud/Stud	-LTGNO	71540-2	31-25
51-00	51.00"	Eye/Stud	-LTGNO	71540-3	51-00
51-00(303)	51.00"	Eye/Fork	-DKGYO	71540-4	49-75
56-00	56.00"	Eye/Stud	-LTGNO	71540-6	49-75
				71540-7	51-00
				71540-8	49-75
				71540-9	48-75

### Cessna 208 Caravan

Model	S/N	P/N	Location	Std Color
208, 208B	All	S2837-1EH	Passenger Door Step, Lower	LTGNO
		S2837-2EH	Passenger Door Step, Lower, (Float Plane)	LTGNO
		S2814-1EH	Cargo Door Pull, Upper	LTGNO
		S2814-2EH	Passenger Door Pull, Upper	LTGNO
Now manufactured by McFarlane			Only standard color available	LTGNO



**Eligibility continues on the next page**

FAA-PMA Approved

**Beechcraft - Handrail and Door Support Cables**

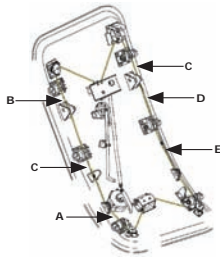
Model	Serial Number	Cabin Door Upper	Cabin Door Lower	Handrail Fwd Lower	Handrail Aft Upper	Handrail Aft Lower	Airstair Door	Other Locations
65	LC-15 and on	6800	2275					
65-80, 65-A80	All	6800	2275					
65-B80, 65-88								
65-90, 65-A90, 65-B90								
C90								
C90, C90A	LJ-1011 thru LJ-1287				6900	2375		
C90A	LJ-1288 thru LJ-1755			2300 <sup>1</sup>	6900	2375		
E90	LW-179 and on	6900	2375					
F90	All				6900	2375		
100	B-2 thru B-51	6800	2275					
100, A100, B100	B-52 and On	6900	2375					
B200, B200T	All			2300	6900	2375		7618 7405 3904 3636
B200C, B200CT							6300 <sup>7</sup> <sup>9</sup> 2375 <sup>3</sup>	
300, 300LW					6900	2375		
B300	All			2300	6900	2375		
B300C	All						6300 <sup>7</sup> <sup>9</sup> 2375 <sup>3</sup>	
1900, 1900C	All						7525 <sup>2</sup> 7310 <sup>2</sup> <sup>9</sup> 2100 <sup>3</sup> 1790 <sup>2</sup> 1528 <sup>3</sup>	7525 <sup>2</sup> 3750 <sup>2</sup> <sup>9</sup> 7225 <sup>2</sup> 3437 <sup>2</sup>

- <sup>1</sup> Except for S/Ns LJ-1289 thru LJ-1294, and LJ-1296 thru LJ-1299
- <sup>2</sup> Eligibility for this aircraft is currently under review.
- <sup>3</sup> Fwd Door, Fwd and Aft
- <sup>4</sup> Aft Door, Fwd and Aft
- <sup>5</sup> Fwd and Aft Door, Aft
- <sup>6</sup> Fwd and Aft Door, Fwd
- <sup>7</sup> Upper
- <sup>8</sup> Lower
- <sup>9</sup> Price list shows this P/N with (CABLE) suffix.



**Beechcraft - Airstair Door Latch Cables**

Model	Serial Number	Airstair Door Latch	Index
1900, 1900C, 1900C (C-12J)	All	114-514030-1AC	A
		114-514030-9AC	B
		114-514030-13AC	C
		114-514030-17AC	D
		114-514030-21AC	E
1900D	All	129-514059-1AC	
		129-514059-13AC	
		129-514059-25AC	
		129-514059-33AC	



**Silicone Covering Color Chart**

Description	Color Suffix
Gray Si cover Pantone 409C	-LTGYO
Butternut Si cover Fed Spec 30145	-MDBNO
Black Si cover Fed Spec 27038	-DKBKO
Green Si cover Pantone 5783U	-LTGNO
Gray Si cover Fed Spec 26008	-DKGYO
Gray Si cover Fed Spec 36173	-DKGY1
Translucent (no color)	-LTTLO

**Cable Specs**

P/N	Length	End Types	Std Color
1528	15.37"	Fork/Stud	-DKGYO
1790	17.90"	Fork/Fork	-DKGYO
2100	21.00"	Fork/Fork	-DKGYO
2170	21.70"	Eye/Stud	-DKGYO
2275	22.70"	Eye/Stud	-DKGYO
2300	22.60"	Fork/Stud	-DKGYO
2375	23.60"	Fork/Fork	-DKGYO
3437	34.40"	Fork/Fork	-DKGYO
3636	36.36"	Fork/Fork	-DKGYO
3904	39.04"	Fork/Fork	-DKGYO
6800	68.00"	Eye/Fork	-DKGYO
6900	68.80"	Fork/Fork	-DKGYO
7225	72.39"	Fork/Short Stud	-DKGYO
7310	73.10"	Fork/Fork	-DKGYO
7405	74.05"	Fork/Stud	-DKGYO
7525	75.27"	Fork/Short Stud	-DKGYO
7600	76.00"	Fork/Fork	-DKGYO
7618	76.18"	Fork/Stud	-DKGYO
3750 (CABLE)	37.62"	Fork/Fork	-DKGYO
6300 (CABLE)	63.00"	Eye/Fork	-DKGYO

**Supersedures**

Beech P/N	Aero-Cables P/N
132427-A40	7525
132538-A13	6300 (CABLE)
132538-A18	2170
132538-A19	2375
132538-A20	6900
132538-A21	2300
132538-A28	7600
132538-A29	7310
132538-A3	6800
132538-A30	2100
132538-A32	1790
132538-A34	1528
132538-A37	3904
132538-A4	2275
132538-A41	3750 (CABLE)
132538-A42	7225
132538-A43	3437
1440-13	6300 (CABLE)
1440-18	2170
1440-19	2375
1440-20	6900
1440-21	2300
1440-28	7600
1440-29	7310
1440-3	6800
1440-30	2100
1440-32	1790
1440-34	1528
1440-35	7618
1440-36	7405
1440-37	3904
1440-38	3636
1440-4	2275
1440-40	7525
1440-41	3750 (CABLE)
1440-42	7225
1440-43	3437

**Piper Twins**

Model	Serial Number	Cabin Door Step Support	Cabin Entrance Door	Cargo Door Upper	Cargo Door Lower	Other Locations
PA-31-300	31-228 thru 31-511		48500 (rear)	227 <sup>3</sup>	236 <sup>1</sup> <sup>3</sup> 330 <sup>2</sup> <sup>3</sup> <sup>8</sup>	
PA-31-310	31-5 thru 31-104			227	236 <sup>1</sup> 330 <sup>2</sup> <sup>3</sup> <sup>8</sup>	
PA-31-310	31-105 thru 31-900 31-7300901 and on		48500 (rear)	227	236 <sup>1</sup> 330 <sup>2</sup> <sup>3</sup> <sup>8</sup>	
PA-31-310	31-8312001 to 31-8312019		50000 (front) 48500 (rear)	227	236 <sup>1</sup> 330 <sup>2</sup> <sup>3</sup> <sup>8</sup>	
PA-31-325	31-7400990 thru 31-8212036		48500 (rear)	227 <sup>3</sup>	236 <sup>1</sup> <sup>3</sup> 330 <sup>2</sup> <sup>3</sup> <sup>8</sup>	
PA-31-325	31-8312001 thru 31-8312019		50000 (front) 48500 (rear)	227 <sup>3</sup>	236 <sup>1</sup> <sup>3</sup> 330 <sup>2</sup> <sup>3</sup> <sup>8</sup>	
PA-31-350	31-5001 thru 31-8252085		48500 (rear)	227 <sup>3</sup>	236 <sup>1</sup> <sup>3</sup> 330 <sup>2</sup> <sup>3</sup> <sup>8</sup>	
PA-31-350	31-8352001 and on		50000 (front) 48500 (rear)	227 <sup>3</sup>	236 <sup>1</sup> <sup>3</sup> 330 <sup>2</sup> <sup>3</sup> <sup>8</sup>	
PA-31T	31T-7400002 thru 31T-8120061	73000 (fwd) 70000 (aft) <sup>4</sup>				40250
PA-31T	31T-8120062 and on	73000 (fwd) 70000 (aft) <sup>4</sup>	41250 (lower) <sup>5</sup> 30250 (upper) <sup>5</sup>			40250
PA-31T1	31T-1104004 thru 31T-8304003	73000 (fwd) 70000 (aft) <sup>4</sup>	41250 (lower) <sup>5</sup> 30250 (upper) <sup>5</sup>			40250
PA-31T2	31T-1166001 thru 31T-8166076	73000 (fwd) 70000 (aft) <sup>4</sup>	41250 (lower) <sup>5</sup> 30250 (upper) <sup>5</sup>			40250
PA-42	48-7800001 thru 48-8001035	73000 (fwd)				40250
PA-60-600	All					SP31125 <sup>7</sup> SP31750 <sup>7</sup>
PA-60-601P, 602P, 700P	All					31125 <sup>3</sup> 31750 <sup>3</sup> SP31125 <sup>3</sup> <sup>7</sup> SP31750 <sup>3</sup> <sup>7</sup>

- <sup>1</sup> Cable with link
- <sup>2</sup> Cable without link
- <sup>3</sup> Eligibility for this aircraft is currently under review.
- <sup>4</sup> Used if cargo door is NOT installed
- <sup>5</sup> Used if cargo door is installed
- <sup>6</sup> Used on pressurized aircraft
- <sup>7</sup> Used on non-pressurized aircraft
- <sup>8</sup> Cable is not FAA-PMA approved



**Silicone Covering Color Chart**

Description	Color Suffix
Gray Si cover Pantone 409C	-LTGYO
Butternut Si cover Fed Spec 30145	-MDBNO
Black Si cover Fed Spec 27038	-DKBKO
Green Si cover Pantone 5783U	-LTGNO
Gray Si cover Fed Spec 26008	-DKGYO
Gray Si cover Fed Spec 36173	-DKGY1
Translucent (no color)	-LTTLO

**Cable Specs**

P/N	Length	End Types	Std Color
227	22.70"	Fork/Stud	-DKGYO
236	23.60"	Stud/Stud	-DKGYO
330	33.00"	Eye/Stud	-DKGYO
30250	30.25"	Eye/Stud	N/A
31125	31.125"	Eye/Fork	-LTTLO
31750	31.75"	Eye/Fork	-LTTLO
40250	40.25"	Fork/Stud	-DKGYO
41250	41.25"	Fork/Stud	-DKGYO
48500	48.50"	Eye/Stud	-DKGYO
50000	50.00"	Eye/Stud	-DKGYO
70000	70.00"	Stud/Stud	-DKGYO
73000	73.00"	Stud/Stud	-DKGYO
SP31125	31.125"	Eye/Fork	-DKGYO
SP31750	31.75"	Eye/Fork	-DKGYO

**Supersedures**

Piper P/N	A/C P/N
01679-003	41250
01679-004	30250
250039-001	SP31125
250039-501	SP31750
250039-503	31125
250039-505	31750
44523-003	48500
44523-004	50000
44562-000	227
44563-000	236
44563-000	330
47716-004	70000
47716-005	73000
72930-009	40250

## Nosecone Baggage Door Latch/Lock Kits for Piper Aircraft

Save \$\$ Satisfying AD2009-13-06R1 Requirements for PA-23, PA-31, and PA-42 Series Aircraft

Improved FAA-PMA direct replacement lock and placard kits and convenient kits for all hardware required by Piper Service Bulletin 1194B to comply with AD2009-13-06R1. This AD requires a placard on the baggage door, lube and inspection of all door latching components every 100 hours and replacement of many of the components every 1000 hours.

### Lock Assembly Kit P/N MC88409-002

- Pre-assembled lock and offset cam helps prevent installation mistakes
- Includes clear instructions
- FAA-PMA direct replacement

### Placard Kit P/N MC88451-002

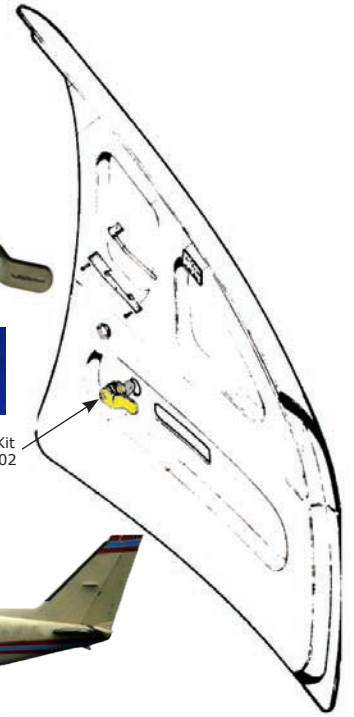
- Kit contains both a black and white version to contrast with any paint scheme
- FAA-PMA direct replacement

### Complete Kits with All 1000 Hour Mandatory Replacement Hardware

Contains: MC88409-002, standard hardware, Piper original springs



Lock Assembly Kit P/N MC88409-002



Model	Complete Hardware Kit	Lock Assembly Kit	Placard Kit
PA-23-250, PA-E23-250	PBDL-KT-1	MC88409-002	MC88451-002
PA-31, PA-31-300, PA-31-325	PBDL-KT-2	MC88409-002	MC88451-002
PA-31-350 and T-1020	PBDL-KT-2	MC88409-002	MC88451-002
PA-31P, PA-31P-350	PBDL-KT-3	MC88409-002	MC88451-002
PA-31T, PA-31T1, PA-31T2, PA-31T3	PBDL-KT-3	MC88409-002	MC88451-002
PA-42, PA-42-720	PBDL-KT-3	MC88409-002	MC88451-002
PA-42-1000	PBDL-KT-3 (Forward)	MC88409-002	MC88451-002
	PBDL-KT-4 (Aft)		

## Cabin Entry Step for Cessna Aircraft

P/Ns WAC711006-1 (left), -2 (right)

- Stronger than the original
- Streamline tubing
- Internally oiled and sealed to prevent corrosion
- Direct replacement for original
- Includes anti-slip tape P/N WAC711006-8
- Step coated with white epoxy primer only. To paint, clean with pre-paint cleaner and scuff lightly with a Scotch-Brite pad or fine sand paper.



Model	Serial Number
170, 170A,B	18000 thru 27169
180, 180A,B,C,D,E,F,G,H	30000 thru 18051875
185, 185A,B,C,D,E, A185E	1850001 thru 1851300

Partial model eligibility

## Door Latch for Piper Navajo PA-31 Aircraft

Will not deform after extended use!

P/N AF472-004

- Improved wear resistance
- Precision wire EDM machined from solid stainless steel
- Precision fit - drop in direct replacement
- Approved for all PA-31-310, 325 and 350 models with and without extended cargo door.



Manufactured by Airforms, Inc.

## Main Gear Long Step

Easy clamp-on modification

Much easier cabin entry

P/N 3195

AE-1, HE-1, J3, J4, J5, PA11, PA12, PA14, PA18, PA19 Series

The Main Landing Gear Long Step is usable on both sides of the aircraft as an entry step or refueling step. Heavy tube with three sizes of clamps.

- A must for bush gear and tires
- Alaska tested
- Durable non-skid surface stays on
- Powder coated white for durable corrosion resistance
- Available in "Wolf Hunter" Black for an additional charge



FAA-PMA/STC

Manufactured by F Atlee Dodge

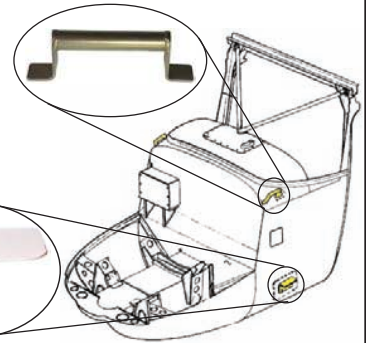
## Boot Cowl Handle

Slightly larger to accommodate gloves!

P/N 3354H

180H,J, A185E,F, U206/TI206A,B,C,D,E,F,G, P206/TP206A

- Includes doubler
- Undrilled
- May not match up with existing bolt pattern due to alternate styles used by OEM.
- Replacement for P/N 0713191-1



## Boot Cowl Step

Slightly larger to accommodate

hunting and fishing footwear!

P/N 3354S

U206/TU206A,B,C,D,E,F,G, P206/TP206A

- Includes doubler
- Undrilled
- White powder coating
- Direct replacement for P/N 124022-5
- 2 per aircraft



Manufactured by F Atlee Dodge

## Refueling Step

No more step ladders

P/Ns 3190/-10, 3190/-11, 3190/-12

J3C-65, J3F-50, J3F-60, J3F-65, J-3L, J3L-65, J-4, J-4A, J-4B, J-5A, J5C, PA-11, 12, 14, 15, 16, PA18-105, 125, 135, A-135, 150, A-150, PA-19, PA-20, PA-20-115, PA-20-135, PA-22-108, 135, 150, 160

Clamps onto the main gear leg for easier refueling.

- Select part number by landing gear front tube OD:  
1.25" OD use P/N 3190/-10  
1.375" OD use P/N 3190/-11  
1.5" OD use P/N 3190/-12
- Powder coated white, available in "Wolf Hunter" Black for an additional charge



Manufactured by F Atlee Dodge

FAA-PMA/STC

FAA-PMA Approved

**Door and Window Seals for Beechcraft, Cessna, Mooney, and Piper Aircraft**

**High performance aircraft door and window seals!**

Nearly a year of development and testing went into creating this revolutionary new sealing material. These new seals for general aviation aircraft are the result of a space age material developed for NASA. The new seals are superior to any seal on the market! The hybrid rubber compound sealing material is unique because it compresses under pressure from the door. When the door stops applying pressure against the seal, the seal no longer compresses and actually makes an impression of the surface pressing against it. This seal conforms to surfaces so well that when you open the door you will actually see a perfect imprint in the seal of every rivet and seam!

- FAA-PMA Approved and made in the USA!
- Conforms to sealing surfaces to create a perfect sealing bond
- Custom extruded from a special hybrid rubber compound
- Seal compresses from its full thickness to as small as 1/32".
- Available at a fraction of the cost of OEM seals
- Airtight and watertight fit
- Greatly reduces cabin noise

**Seal Lube P/N ADS-SL101**

- Apply yearly to keep door seal looking like new!
- It only takes minutes to apply
- Assures maximum life for your door and window seals
- One 1/4 oz. tube will last about a year



P/N ADS-B115	P/N ADS-B127	P/N ADS-B139	P/N ADS-B250	P/N ADS-C1401
P/N ADS-P301-23	P/N ADS-500-602	P/N ADS-500-1002	P/N ADS-500-1003	P/N ADS-900900



**Aircraft Model**

	Part Number	Location	ADS-B115	ADS-B127	ADS-B139	ADS-B250	ADS-C1401	ADS-P301-23	ADS-500-602	ADS-500-1002	ADS-500-1003	ADS-900900	ADS-SL101
Beechcraft													
35-33, 35-A33, 35-B33, 35-C33, 35-C33A, E33, F33C, G33		Main Cabin Door, Hinge Block (2pk)	1	4	6								
E33A		Front Entry Door											
E33C, F33, F33A		Emergency Exit Window thru 1979											
35, A35		Emergency Exit Window 1980 and On											
B35, C35, D35, E35, F35, G35, H35, J35, K35, M35, N35, P35, S35, V35, V35A, V35B, 35R		Cabin Baggage Door (includes large door)											
36, A36, A36TC, B36TC		Storm Window, Frameless											
G36		Storm Window, Framed											
50(L-23A), B50(L-23B), C50, D50(L-23E), D50A, D50B, D50C, D50E, D50E-5990, E50(L-23D, RL-23D), F50, G50, H50, J50		Nose Baggage Door Kit											
19A, B19, M19A, 23, A23, A23A, A23-19, A23-24, B23, C23, A24, A24R, B24R, C24R		Aft Utility Door											
95-B55, 95-B55A, 95-B55B(T-42A), 95-C55, 95-C55A, G58, D55, E55, E55A, 56TC, 95, B95, B95A, D95A, E95, 95-55, 95-A55		Aft Entry Cargo Door, Fuselage Mount											
58, 58A, 58TC, 58TCA		Forward Baggage Door											
D55A, A56TC		Window Seal											
76, 77		Entry Door, Front											
		Baggage Door, Aft											
		Entry Door, Front											
		Baggage Door, Aft											
		Baggage Door, Aft											
		Vent Window											
		Entry Door											
		Entry Door, Front, thru 1975											
		Entry Door, Front, 1976 and On											
		Vent Window											
		Baggage, Aft											
		Entry Door, Aft No Cargo Door											
		Entry Door, Aft With Cargo Door											

Notes can be found on the next page.

Continues on next page

Continued from previous page



ADS-P301-1

ADS-500-1002

**Aircraft Model**

Aircraft Model	ADS-B115 1	ADS-B127 4 6	ADS-B131 3	ADS-B132 3	ADS-B133 4	ADS-B137 3	ADS-B139 3	ADS-B250 2	ADS-B270 4 7	ADS-500602 2 3	ADS-500-700 2	ADS-900900 3	ADS-C1401 4	ADS-C1402 4	ADS-C1420 4	ADS-C1422 4	ADS-500-1002 2	ADS-500-1003 2	ADS-IM1201 4	ADS-P301-1 4	ADS-P301-23 4	ADS-P302 3	ADS-P303 4 9	ADS-P304 4	ADS-P305 5	
<b>Cessna</b>																										
120, 140, 140A																										
150, 150A,B,C,D,E,F,G,H,I,K,L,M																										
152, A152																										
170, 170A,B																										
172, 172A,B																										
172C,D,E,F,G,H,I,K,L,M,N,P,Q,S, 172RG, P172D, R172K																										
175, 175A,B,C																										
177, 177A,B, 177RG																										
180, 180A,B,C,D,E,F,G,H,I,K																										
182, 182A,B,C,D,E,F,G,H,I,K,L,M,N,P,Q,R,S,T																										
A182J,K,L,N, R182, T182, T182T, TR182																										
185, 185A,B,C,D,E																										
190, 195, 195A,B																										
210-5 (205), 210-5A (205A)																										
206H, T206H, U206, U206A,B,C,D,E,F,G, TU206A,B,C,D,E,F,G																										
P206, P206A,B,C,D,E, TP206A,B,C,D,E																										
207, 207A, T207, T207A																										
210A,B,C,D,E,F,G,H,I,K,L,M,N,R, T210F,G,H,I,K,L,M,N,R																										
336, 337, 337A,B,C,D,E,F,G,H																										
F337E,F,G,H, T337B,C,D,E,F,G,H																										
<b>Mooney</b>																										
M20, M20A,B,C,D,E,F,G,J,K,L,M,R,S																										
<b>Piper</b>																										
PA-28-140																										
PA-28-150, PA-28-160, PA-28-180, PA-28R-180																										
PA-28-151, PA-28-161, PA-28-181																										
PA-28S-160, PA-28S-180																										
PA-28R-200																										
PA-28R-201																										
PA-28-201T, PA-28R-201T, PA-28RT-201, PA-28RT-201T																										
PA-28-235																										
PA-28-236																										
PA-32-260, PA-32-300, PA-32R-300																										
PA-32-301, PA-32-301T, PA-32R-301(HP), PA-32R-301(SP), PA-32R-301T,																										
PA-32RT-300, PA-32RT-300T																										
PA-34-200																										
PA-34-200T, PA-34-220T																										

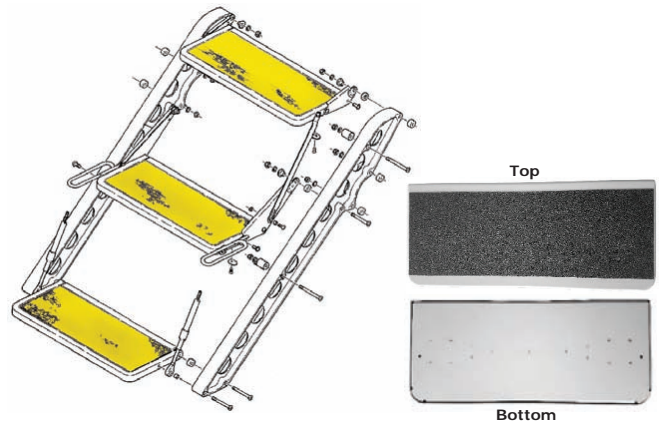
- 1 Kit contains 2 hinge seals, instructions and a packet of seal lube.
  - 2 Kit includes seals for one door, installation instructions and seal lube. Seal has an adhesive backing and does not require additional adhesive.
  - 3 Kit includes seal for one window, installation instructions and seal lube. Seal has an adhesive backing and does not require additional adhesive.
  - 4 Kit includes seal for one door, installation instructions and seal lube.
  - 5 Kit contains seals for one passenger door, one cargo door, instructions and seal lube.
  - 6 Contains P/Ns ADS1200-7 (1 ea), ADS1200-11 (1 ea), ADS1200-15 (2 ea).
  - 7 Contains one each of the following P/Ns ADS1200-3-1, ADS1200-3-2, ADS1200-3-3, ADS1200-3-4, ADS1200-3-5, ADS1200-3-6, ADS1200-3-7, ADS1200-3-8, ADS1200-3-9.
  - 8 Contains one each of the following P/Ns 500-602, 500-602-3.
  - 9 Contains one each of the following P/Ns ADS1200-303-1, ADS1200-303-2, ADS1200-303-3, ADS1200-303-4.
- Manufactured by Knots 2U

## Passenger Door Step for Cessna Caravan

**Durable Aluminum Step with STC!**  
**P/N AF2617076-1**

Engineered for increased longevity and is constructed solely from aluminum to eliminate the incidence of delaminating. Direct replacement for Cessna P/Ns 2617076-1 (lower), 2617076-10 (upper) and 2617076-11 (middle).

- FAA STC Approved - STC comes with the part
- Fits all Cessna 208/208B Aircraft
- Slip resistant tape
- Withstands significantly more weight than OEM part
- Longer service life
- More resistant to weather and the damaging effects of moisture



Door and Step Parts

FAA-PMA Approved

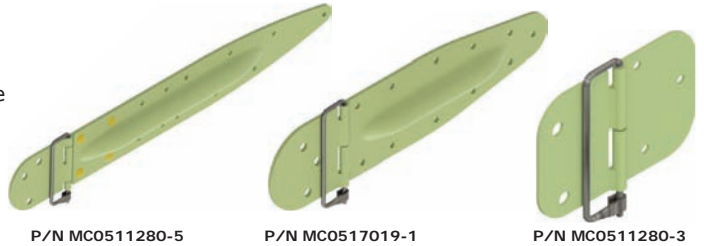
**Cabin Door Hinges for Cessna 172 and 175 Aircraft**

- FAA-PMA solid welded design
- Precision pin holes for longer life
- Straight or bent to fit older aircraft
- Pre-drilled and epoxy primed
- Heat treated where required for extra strength and wear resistance

**Cabin Door Hinge Pin**  
Don't trust old brass pins!

- FAA-PMA approved
- Stainless steel - 5x stronger
- Secure safety pin design
- Easy to inspect
- Fast door removal, makes cabin maintenance easier

**Improved  
McFarlane  
Design!**



P/N MC0511280-5

P/N MC0517019-1

P/N MC0511280-3



P/N 7205-2.00U

**Maintenance Tip:**

The Cessna doors have tremendous leverage on the forward door seals. Door hinge and hinge pins can easily be over stressed and failed by installing incorrect door seals. Always use approved door seals that are designed for your aircraft. Door Seals on pages 188-189.

**Maintenance Tip for Door Hinge Replacement:**

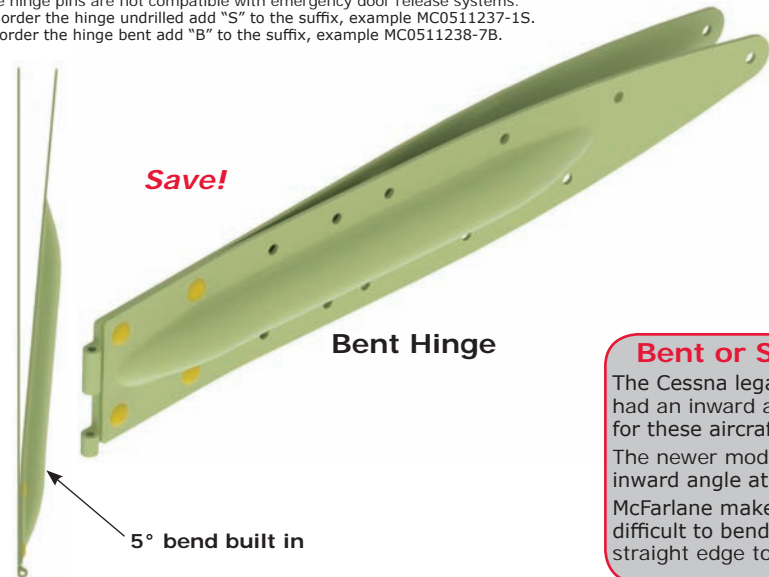
To install new hinges, temporarily attach the replacement hinges to the door using temporary fasteners. Install the door and hinge pins. Verify the door alignment with the door opening. The leading edge of the door should be approximately flush with the adjacent door post skin. Minor bends can be made to the upper hinges to perfect the door fit. Please reference ICA at [www.mcfarlaneaviation.com/media/documents/doc-7089.pdf](http://www.mcfarlaneaviation.com/media/documents/doc-7089.pdf)

**Cessna 170  
Cabin Door Hinges  
Coming Soon!**

Aircraft	Serial Number	Door Hinge Half												Door Hinge Assembly													
		Hinge Pins		Upper Fwd		Upper Aft		Lower Fwd		Lower Aft		Upper		Lower													
		LH	RH	LH	RH	LH	RH	LH	RH	LH	RH	LH	RH														
		7205-1.63D <sup>2</sup>	7205-1.63U <sup>2</sup>	7205-2.00U <sup>2</sup>	MC0511237-1 <sup>3</sup>	MC0511237-2 <sup>3</sup>	MC0511238-7 <sup>4</sup>	MC0511238-8 <sup>4</sup>	MC0511239-1	MC0517019-5 <sup>3</sup>	MC2417002-1 <sup>3</sup>	MC0511239-2	MC0517019-6 <sup>3</sup>	MC2417002-2 <sup>3</sup>	MC0511239-3	MC0517019-3	MC0511239-4	MC0517019-4	MC0511280-5 <sup>4</sup>	MC0511280-6 <sup>4</sup>	MC0511280-3	MC0517019-1	MC2417003-1	MC0511280-4	MC0517019-2	MC2417003-2	
172, 172A,B,C,D,E,F,G,H,I,K,L,M <sup>1</sup>	28000 thru 17265684	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
172M <sup>1</sup> , N	17265685 and On	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
172P,Q,R,S, 172RG	All	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
F172D,E,F,G,H,K,L,M <sup>1</sup>	F172-0001 thru F17201384	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
F172M <sup>1</sup> , N	F17201385 thru F17202039	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
F172P	All	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
FR172E,F,G,H,J <sup>1</sup>	FR17200001 thru FR17200559	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
FR172J <sup>1</sup> , K <sup>1</sup>	FR17200562 thru FR17200665	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
FR172K <sup>1</sup>	FR17200666 thru FR17200675	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
P172D	All	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
R172E,F,G,H	All	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
R172K	R1722000 thru R1723399	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	R1723400 thru R1723454	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
175, 175A,B,C	All	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

Door and Step Parts

- Notes:**
- <sup>1</sup> Partial model eligibility
  - <sup>2</sup> The hinge pins are not compatible with emergency door release systems.
  - <sup>3</sup> To order the hinge undrilled add "5" to the suffix, example MC0511237-1S.
  - <sup>4</sup> To order the hinge bent add "B" to the suffix, example MC0511238-7B.



**Save!**

**Bent Hinge**

5° bend built in

**Now Available Complete Hinge Pin Kit**  
P/N CDHP-KT-1  
**Contains:**  
P/N 7205-1.63D, qty 1  
P/N 7205-1.63U, qty 1  
P/N 7205-2.00U, qty 2

**Bent or Straight Hinges - Only from McFarlane!**  
The Cessna legacy airplanes up until about 1979 had door post skins that had an inward angle where the door hinges mount. The upper long hinges for these aircraft require hinges that have a 5° bend built in.  
The newer model airplanes and new production airplanes do not have an inward angle at the door post skins and use a straight hinge.  
McFarlane makes both a bent hinge and a straight hinge as the hinges are difficult to bend in the field. Be sure to order the correct hinge by using a straight edge to verify if your hinges are bent or straight.

## AeroLEDs Lighting

Increase safety and reduce operating cost!  
See the Difference...



### Know the Difference...

- Increased safety
- Direct replacement
- Up to 80% reduced power consumption
- Long life - over 50,000 hours!
- Lighter weight - no heavy power supply  
- save up to 3 lbs
- Reduced drag
- Zero maintenance

### Increased Safety

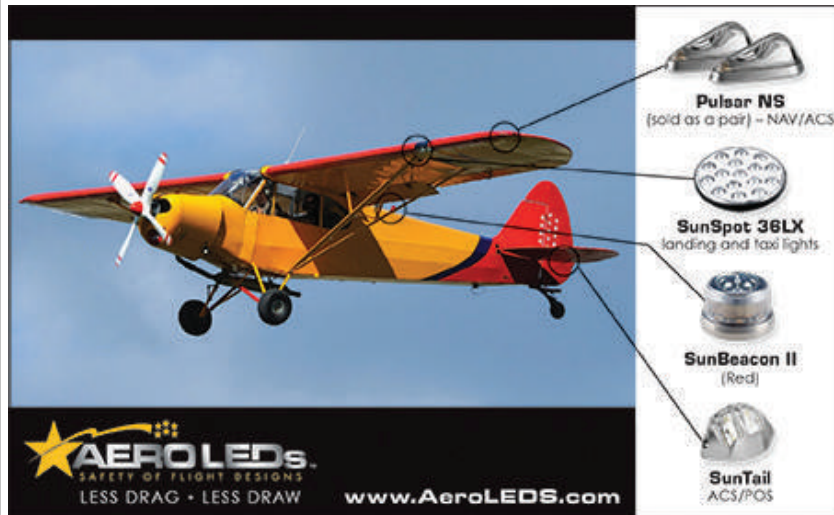
AeroLED lights allow you to comply with the latest FAA recommendations (Operation Lights On) regarding extended use of taxi, landing, and anti-collision lights without fear of reduced light performance or life. They all feature optimized light color (6500k sunlight equivalent) for proven superior air-to-air recognition. The landing and taxi lights also feature an optional pulsed recognition light mode.

### Reduced Power Consumption

High efficiency LED lights use less than 1/3 the power of halogen bulbs. They significantly reduce the load on the electrical system and they won't dim due to low voltage, typical of low RPM final approaches when you need them most! Position lights aerodynamic design results in less drag than original equipment!

### Longer Life - Zero Maintenance

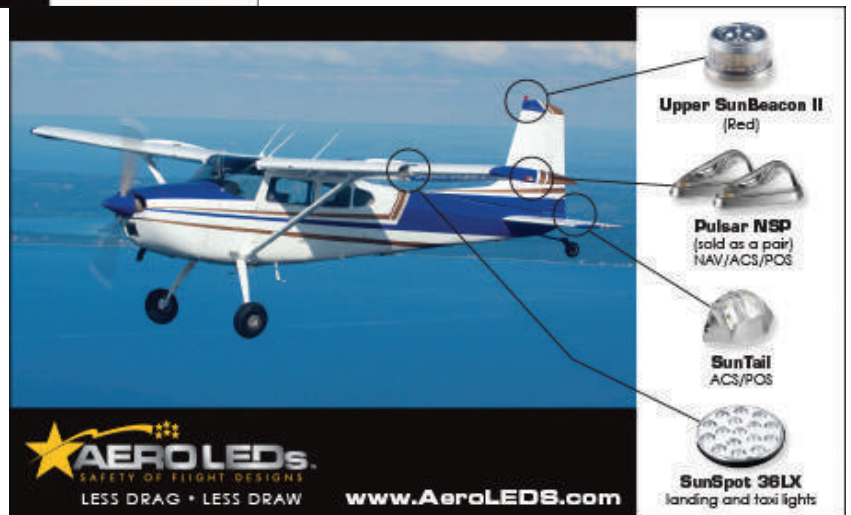
All AeroLED products are designed to be a "lifetime buy." They last over 50,000 hours when properly installed and do not degrade with on/off cycles. They are extremely rugged and hardened against all kinds of electrical damage, shock, and vibration.



## Up to 7 times brighter than other LED landing lights!

PAR36 Landing Light Comparison  
Measured Brightness at 50 Ft.

Manufacturer	Intensity	Lumens
<b>AeroLED</b>	<b>100.7</b>	<b>11,000</b>
GE4509	67	1,500
Whelan Parmetheus Plus	65	1,700
Rigid Industries	50.4	3,400
Alphabeam	39.7	5,600



## AeroLEDs Aircraft Lighting by Series Reference Chart

Series	Light Type	P/N	Voltage	Approval
AeroSun	Landing/Taxi/Recognition/with Pulse	01-2120	9-36V	Pending
Aerosun Vx	Landing /Taxi/Recognition/Left and Right	01-2500 (Pair)		Pending
MicroSun	Landing/Taxi/Recognition	01-1170	9-36V	EXP
MicroSun	Landing/Taxi/Recognition	01-1170-A	14 & 28	EXP
Pulsar	Nav/Position/Strobe/12Volt/Red and Green	11-1100-12		TSO
Pulsar	Nav/Position/Strobe/24Volt/Red and Green	11-1100-24		TSO
Pulsar N	Nav/Left/12V/Red and Green	11-1280-A-12-L		TSO
Pulsar N	Nav/Right/12V/Red and Green	11-1280-A-12-R		TSO
Pulsar N	Nav/Left/24V/Red and Green	11-1280-A-24-L		TSO
Pulsar N	Nav/Right/24V/Red and Green	11-1280-A-24-R		TSO
Pulsar NS	Nav/Strobe/12V/Left/Red and Green	11-1280-B-12-L		TSO
Pulsar NS	Nav/Strobe/12V/Right/Red and Green	11-1280-B-12-R		TSO
Pulsar NS	Nav/Strobe/Left/24V/Red and Green	11-1280-B-24-L		TSO
Pulsar NS	Nav/Strobe/Right/24V/Red and Green	11-1280-B-24-R		TSO
Pulsar NS	Nav/Strobe/12Volt/Left/Red and Green	01-1280-B-12-L		EXP
Pulsar NS	Nav/Strobe/12Volt/Right/Red and Green	01-1280-B-12-R		EXP
Pulsar NS	Nav/Strobe/24Volt/Left/Red and Green	01-1280-B-24-L		EXP
Pulsar NS	Nav/Strobe/24Volt/Right/Red and Green	01-1280-B-24-R		EXP
Pulsar NSP	Nav/Position/Strobe/12Volt/Right/Red and Green	01-1280-C-12-L		EXP
Pulsar NSP	Nav/Position/Strobe/12Volt/Right/Red and Green	01-1280-C-12-R		EXP
Pulsar NSP	Nav/Position/Strobe/24Volt/Right/Red and Green	01-1280-C-24-L		EXP
Pulsar NSP	Nav/Position/Strobe/24Volt/Right/Red and Green	01-1280-C-24-R		EXP
Pulsar NSP	Nav/Strobe/Position/Left/12V/Red and Green	11-1280-C-12-L		TSO
Pulsar NSP	Nav/Strobe/Position/Right/12V/Red and Green	11-1280-C-12-R		TSO
Pulsar NSP	Nav/Strobe/Position/Left/24V/Red and Green	11-1280-C-24-L		TSO
Pulsar NSP	Nav/Strobe/Position/Right/24V/Red and Green	11-1280-C-24-R		TSO
SunBeacon II	Beacon/Red/12V	11-2200-A-12		TSO
SunBeacon II	Beacon/Red/24V	11-2200-A-24		TSO
SunBeacon II	Beacon/White/12V	11-2200-B-12		TSO
SunBeacon II	Beacon/White/24V	11-2200-B-24		TSO
SunBeam	Landing/Taxi/Recognition	90-1000	9-36V	FAA-PMA
SunRay Plus	Landing w/Recognition	01-1150	9-36V	EXP
SunSpot 36-4313	Landing	01-1030-4313	14V	FAA-PMA
SunSpot 36-4313	Landing w/Pulse	01-1030-4313-H	14V	FAA-PMA
SunSpot 36-4314	Taxi	01-1030-4314	14V	FAA-PMA
SunSpot 36-4314	Taxi w/Pulse	01-1030-4314-H	14V	FAA-PMA
SunSpot 36-4587	Taxi	01-1030-4587	28V	FAA-PMA
SunSpot 36-4587	Taxi w/Pulse	01-1030-4587-H	28V	FAA-PMA
SunSpot 36-4596	Landing	01-1030-4596	28V	FAA-PMA
SunSpot 36-4596	Landing w/Pulse	01-1030-4596-H	28V	FAA-PMA
SunSpot 36HX	Taxi w/Recognition	01-1030-H-B	9-36V	FAA-PMA
SunSpot 36HX	Landing w/Recognition	01-1030-H-A	9-36V	FAA-PMA
SunSpot 36LX	Taxi	01-1030-L-B	9-36V	FAA-PMA
SunSpot 36LX	Landing	01-1030-L-A	9-36V	FAA-PMA
SunSpot 46	Landing w/Recognition	01-2130-HX	9-36V	FAA-PMA
SunSpot 46	Landing	01-2130-LX	9-36V	FAA-PMA
SunSpot 46-4554	Taxi	01-2230-4554	28V	FAA-PMA
SunSpot 46-4554	Taxi w/Pulse	01-2230-4554-H	28V	FAA-PMA
SunSpot 46-4580	Landing	01-2230-4580	28V	FAA-PMA
SunSpot 46-4580	Landing w/Pulse	01-2230-4580-H	28V	FAA-PMA
SunSpot PCx	Taxi	900-01-100-C		FAA-PMA
SunSpot PCx	Landing	900-01-100-A		FAA-PMA
SunTail	Position/Strobe/12V	01-1260-12		EXP
SunTail	Position/Strobe/24V	01-1260-24		EXP
SunTail	Position/Strobe/12V	11-1260-12		TSO
SunTail	Position/Strobe/24V	11-1260-24		TSO

Lighting



## Sunspot FAA-PMA/STC Landing and Taxi Lights

Drop-in replacement for PAR36/PAR46 lights  
Almost twice the light for 1/3 the power!

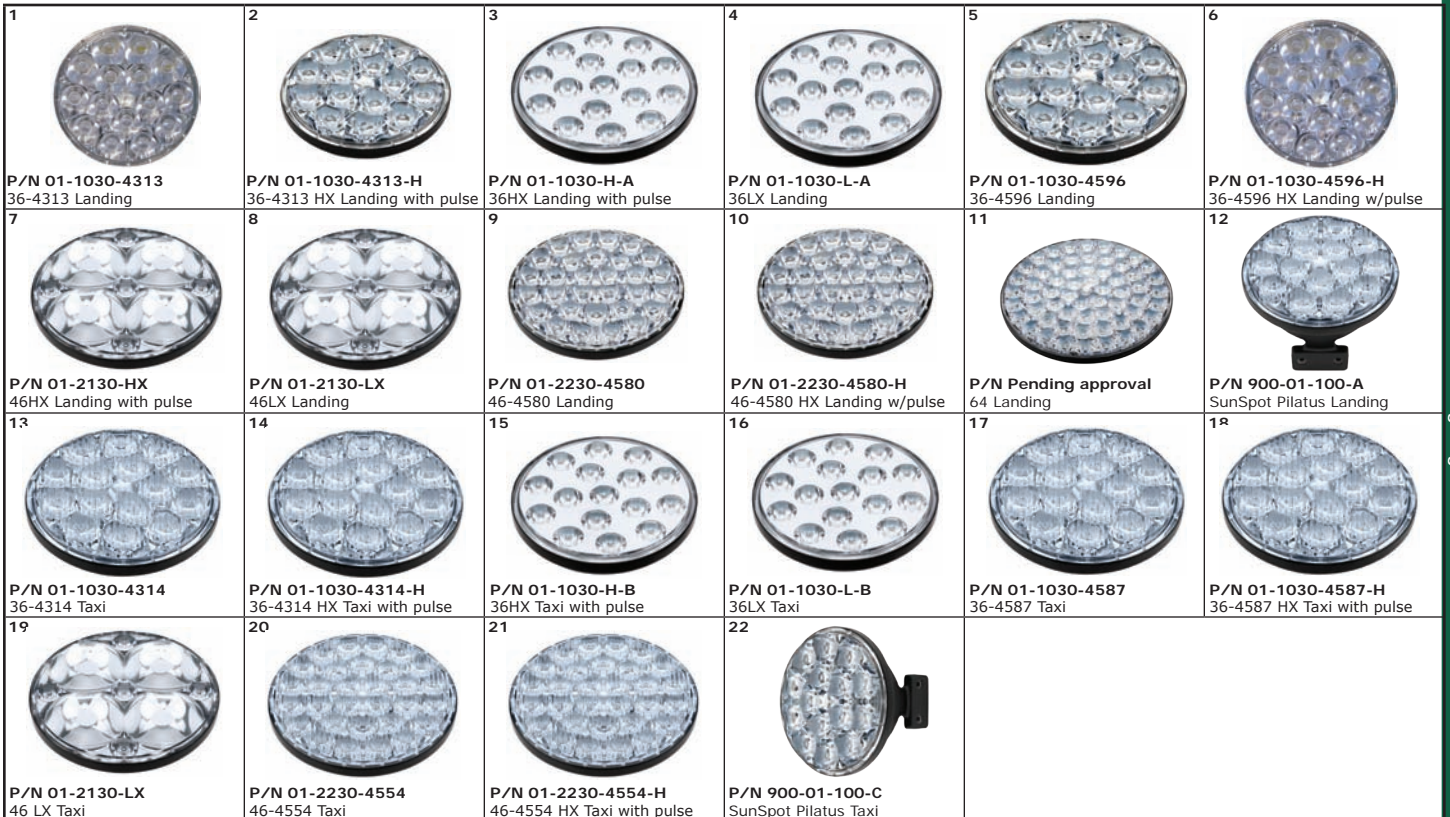
- Huge power savings
- Light weight
- Less heat
- Whiter light - more like daylight
- Improved safety with pulse recognition mode
- Long life - over 50,000 hours!
- FAA certified

### Pulse Recognition Mode

AeroLED lights have a built-in pulse mode to greatly improve safety by alternately blinking the left then right light once per second. All landing light products with pulse can be wired to synchronize in unison or wig-wag to create an alternating flashing pattern for enhanced in flight visibility regardless of model while dramatically increasing visibility to prevent both air and ground collisions. At least one 36HX or 46HX series light must be installed to enable pulse mode. If you have an existing pulse system (pulse light) you don't need to purchase the pulse feature.

Description	P/N	Certification	Figure	Watts	Voltage	Lumens	Weight	Dimensions
<b>Landing</b>								
36-4313 Landing <i>New!</i>	01-1030-4313	FAA-PMA/STC	1	95	14 V	11,000	11.5 oz	4.4" x 4.4" x 2.1"
36-4313 HX Landing with Pulse <i>New!</i>	01-1030-4313-H	FAA-PMA/STC	2	95	14 V	11,000	11.5 oz	4.4" x 4.4" x 2.1"
36HX Landing with Pulse	01-1030-H-A	FAA-PMA/STC	3	45	9-36 VDC	4,950	10.1 oz	4.4" x 4.4" x 1.9"
36LX Landing	01-1030-L-A	FAA-PMA/STC	4	45	9-36 VDC	4,950	10.1 oz	4.4" x 4.4" x 1.9"
36-4596 Landing	01-1030-4596	FAA-PMA/STC	5	100	28 V	11,000	11.5 oz	4.4" x 4.4" x 2.1"
36-4596 HX Landing with Pulse <i>New!</i>	01-1030-4596-H	FAA-PMA/STC	6	100	28 V	11,000	11.5 oz	4.4" x 4.4" x 2.1"
46HX Landing with Pulse	01-2130-HX	FAA-PMA/STC	7	70	9-36 VDC	7,700	20.0 oz	5.6" x 5.6" x 1.7"
46LX Landing	01-2130-LX	FAA-PMA/STC	8	70	9-36 VDC	7,700	20.0 oz	5.6" x 5.6" x 1.7"
46-4580 Landing	01-2230-4580	FAA-PMA/STC	9	170	28 V	19,250	20.0 oz	5.6" x 5.6" x 1.7"
46-4580-HX Landing with Pulse <i>New!</i>	01-2230-4580-H	FAA-PMA/STC	10	170	28 V	19,250	20.0 oz	5.6" x 5.6" x 1.9"
64-4559 Landing <i>Pending Approval!</i>								
SunSpot PCx <i>New!</i>	900-01-100-A	FAA-PMA/STC	12	100	28 V	11,000	11.5 oz	4.4" x 4.4" x 2.25"
<b>Taxi</b>								
36-4314 Taxi <i>New!</i>	01-1030-4314	FAA-PMA/STC	13	95	14 V	11,000	11.5 oz	4.4" x 4.4" x 2.1"
36-4314 HX Taxi with Pulse <i>New!</i>	01-1030-4314-H	FAA-PMA/STC	14	95	14 V	11,000	11.5 oz	4.4" x 4.4" x 2.1"
36HX Taxi with Pulse	01-1030-H-B	FAA-PMA/STC	15	45	9-36 VDC	4,950	10.1 oz	4.4" x 4.4" x 1.9"
36LX Taxi	01-1030-L-B	FAA-PMA/STC	16	45	9-36 VDC	4,950	10.1 oz	4.4" x 4.4" x 1.9"
36-4587 Taxi	01-1030-4587	FAA-PMA/STC	17	100	28 V	11,000	11.5 oz	4.4" x 4.4" x 2.1"
36-4587 HX Taxi with Pulse <i>New!</i>	01-1030-4587-H	FAA-PMA/STC	18	100	28 V	11,000	11.5 oz	4.4" x 4.4" x 2.1"
46LX Taxi	01-2130-LX	FAA-PMA/STC	19	70	9-36 VDC	7,700	20.0 oz	5.6" x 5.6" x 1.7"
46-4554 Taxi	01-2230-4554	FAA-PMA/STC	20	170	28 V	19,250	20.0 oz	5.6" x 5.6" x 1.7"
46-4554 HX Taxi with Pulse <i>New!</i>	01-2230-4554-H	FAA-PMA/STC	21	170	28 V	19,250	20.0 oz	5.6" x 5.6" x 1.9"
SunSpot PCx <i>New!</i>	900-01-100-C	FAA-PMA/STC	22	100	28 V	11,000	11.5 oz	4.4" x 4.4" x 2.25"
<b>Connector Kit</b>								
Molex Connector Kit	KIT-0001							

Figures 1-22 Photos are not to scale relative to each other



FAA-PMA Approved

Aircraft	Landing Lights											
	36HX Landing with Pulse P/N 01-1030-H-A (PAR36)	36LX Landing P/N 01-1030-L-A (PAR36)	36-4596 Landing P/N 01-1030-4596 (PAR36)	46HX Landing with Pulse P/N 01-2130-HX (PAR46)	46HX Landing or Taxi P/N 01-2130-LX (PAR46)	64-4559 Landing (Pending Approval (PAR64)	46-4580 Landing P/N 01-2230-4580 (PAR46)	SunBeam P/N 90-1000	36-4313 Landing P/N 01-1030-4313 (PAR36)	36-4313HX Landing with Pulse P/N 01-1030-4313-H (PAR36)	36-4596HX Landing with Pulse P/N 01-1030-4596H (PAR36)	46-4580-HC Landing with Pulse P/N 01-2230-4580-H (PAR46)
<b>FAA-PMA/STC Eligibility</b>												
<b>Aerostar</b>												
PA-60-600 (600), PA-60-601 (601), PA-60-601P (601P), PA-60-602P (602P), PA-60-700P (700P)	*	*	*	*	*	*	*	*	*	*	*	*
<b>Aviat</b>												
A-1, A-1A, A-1B, A-1C-180, A-1C-200	*	*	*	*	*	*	*	*	*	*	*	*
AT-400, AT-400A, AT-402, AT-402A,B, AT-502, AT-502B, AT-503	*	*	*	*	*	*	*	*	*	*	*	*
<b>Boeing</b>												
DC3C-SC3G, DC3C-S1C3G, DC3C-S4C4G, DC3C-R-1830-90C	*	*	*	*	*	*	*	*	*	*	*	*
<b>Beechcraft (Textron)</b>												
19A, B19, M19A, 23, A23, A23A, A23-24, B23, C23, A24, A24R, B24R, C24R	*	*	*	*	*	*	*	*	*	*	*	*
A23-19	*	*	*	*	*	*	*	*	*	*	*	*
35-33, 35-A33, B33, C33, C33A, E33, E33A, E33C, F33, F33A, F33C, G33, 35, 35R, A35, B35, C35, D35, E35, F35, G35, H35, J35, K35, M35, N35, P35, S35, V35, V35A,B, 36, A36, A36TC, B36TC, G36	*	*	*	*	*	*	*	*	*	*	*	*
50, D50E-5990, 58PA, 58TCA	*	*	*	*	*	*	*	*	*	*	*	*
B50, C50, D50, D50A,B,C,D,E, E50, F50, G50, H50, J50, 95, 95-55, 95-A55, 95-B55, 95-B55A, B55B, C55, C55A, D55, D55A, E55, E55A, 56TC, A56TC, G58, 58, 58A, 58P, 58TC	*	*	*	*	*	*	*	*	*	*	*	*
60, A60, B60, 65, A65, A-65-8200, 65-80, 65-A80, 65-A80-8800, 65-B80, 65-88, 65-90, 65-A90, 70, 76, 77, C90, C90A, C90GT, 65-A90-1,2,3,4, B90, E90, H90, B95, B95A, D95A, E95, 99, 99A, A99A, B99, C99, 100, B100	*	*	*	*	*	*	*	*	*	*	*	*
A100-1, A100, A100A, A100C	*	*	*	*	*	*	*	*	*	*	*	*
200, 200C, 200CT, 200T, A200, A200C, A200CT, B200, B200C, B200CGT, B200CT, B200GT, B200T, 300, 300LW, B300, B300C, 1900, 1900C,D	*	*	*	*	*	*	*	*	*	*	*	*
<b>Cessna (Textron)</b>												
120, 140, 140A	*	*	*	*	*	*	*	*	*	*	*	*
150, 150A,B,C,D,E,F,G,H,J,K,L,M, A150K,L,M, 152, A152	*	*	*	*	*	*	*	*	*	*	*	*
170, 170A,B, 172, 172A,B,C,D,E,F,G,H,I,K,L,M,N,P,Q,R,S, P172D, R172E,F,G,H,J,K, 172RG, 175, 175A,B,C, 177, 177A,B, 177RG	*	*	*	*	*	*	*	*	*	*	*	*
180, 180A,B,C,D,E,F,G,H,J,K, 182, 182A,B,C,D,E,F,G,H,J,K,L,M,N,P,Q,R,S,T, R182, T182, TR182,T182T	*	*	*	*	*	*	*	*	*	*	*	*
185, 185A,B,C,D,E, A185E,F, 188, 188A,B, A188, A188A,B, T188C, 190, 195, 195A,B, 210-5, (205), 210-5A, (205A)	*	*	*	*	*	*	*	*	*	*	*	*
206, 206H, U206, U206A,B,C,D,E,F,G, P206, P206A,B,C,D,E, TU206A,B,C,D,E,F,G, T206H, TP206A,B,C,D,E	*	*	*	*	*	*	*	*	*	*	*	*
207, 207A, T207, T207A, 208, 208B	*	*	*	*	*	*	*	*	*	*	*	*
210, 210A,B,C,D,E,F,G,H,J,K,L,L,M, P210N,R, T210F,G,H,J,K,L,M,N,R	*	*	*	*	*	*	*	*	*	*	*	*
310, 310A,B,C,D,E,F,G,H,I,J, J1,K,L,N,P,Q,R, E310H, T310P,Q,R, 320A,B,C,D,E,F, 335, 320-, 336, 337, 337A,B,C,D,E,F,G,H, F337E,F,G,H, FT337E,F,GP,HP M337B, 337D,E,F,G,H,H-SP	*	*	*	*	*	*	*	*	*	*	*	*
P337H, T337B,C, 340, 340A	*	*	*	*	*	*	*	*	*	*	*	*
401, 401A,B, 402, 402A,B,C, 404, 406, 411, 411A, 414, 414A, 421, 421A,B,C, 425, 441	*	*	*	*	*	*	*	*	*	*	*	*
<b>Commander</b>												
112, 112B, 112TC, 112TCA, 114, 114A,B, 500, 500A,B,S,U, 520, 560, 560-A,E,F, 680, 680E,F,FL,T,V,W, 681, 685, 690, 690A,B,C,D, 695, 695A,B	*	*	*	*	*	*	*	*	*	*	*	*
114TC, 720	*	*	*	*	*	*	*	*	*	*	*	*
<b>Gruman (True Flight Holdings)</b>												
AA-1, AA-1A,1B,1C, AA-5, AA-5A,B, AG-5B	*	*	*	*	*	*	*	*	*	*	*	*
<b>Maule</b>												
M-4, M-4S,T, M-4-180C,S,T, M-4-210, M-4-210C,S, M-5-180C, M-5-200, M-5-210C, M-5-210TC, M-5-220C	*	*	*	*	*	*	*	*	*	*	*	*
M-4C,M-4-210T, M-4-220, M-4-220C,S,T	*	*	*	*	*	*	*	*	*	*	*	*
M-5-235C, M-6-180, M-6-235, M-7-235, M-7-235A,B,C, M-7-260, M-7-260C, M-7-420AC, MT-7-235, MT-7-260, MT-7-420, MX-7-160, MX-7-180, MX-7-235, MX-7-235A,B,C, MX-7-420, MXT-7-180, MXT-7-160, MX-7-180A,B,C, MXT-7-180A, M-8-235	*	*	*	*	*	*	*	*	*	*	*	*
M-7-420A, MS-7-180AC, MX-7-160C	*	*	*	*	*	*	*	*	*	*	*	*
<b>Mooney</b>												
M20, M20A,B,C,D,E,F,G,J,K,L,M,R,S, M20TN, M22	*	*	*	*	*	*	*	*	*	*	*	*
<b>Piper</b>												
J3C-40, J3C-50, J3C-50S, J3C-65, J3C-65S, J3F-50, J3F-50S, J3F-60, J3F-60S, J3F-65, J3F-65S, J3L, J3L-S, J3L-65, J3L-65S, J4, J4A, J4A-S, J4E, PA-11, PA-11S, PA-15, PA-16, PA-16S, PA-17	*	*	*	*	*	*	*	*	*	*	*	*
PA-18, PA-18 "105", PA-18 "125", PA-18 "135", PA-18 "150", PA-18A, PA-18A "135", PA-15A "150"	*	*	*	*	*	*	*	*	*	*	*	*
PA-18AS "125", PA-18AS "135", PA-18AS "150", PA-18S, PA-18S "105", PA-18S "125", PA-18S "135"	*	*	*	*	*	*	*	*	*	*	*	*
PA-18S "150", PA-19, PA-19S, PA-20, PA-20 "115", PA-20 "135", PA-20S, PA-20S "115", PA-20S "135"	*	*	*	*	*	*	*	*	*	*	*	*
PA-22, PA-22-108,135,150,160, PA-22S-135,150,160, PA-23, PA-23-160,235,250, PA-E23-250, PA-24, PA-24-250,260,400	*	*	*	*	*	*	*	*	*	*	*	*
PA-25, PA-25-235,260	*	*	*	*	*	*	*	*	*	*	*	*
PA-28-140,150,151,160,161,180,181,201T,235,236, PA-28R-180,200,201,201T, PA-28RT-201,201T, PA-28S-160,180	*	*	*	*	*	*	*	*	*	*	*	*
PA-30, PA-31, PA-31-300,325,350, PA-31P, PA-31P-350, PA-31T, PA-31T1,T2,T3	*	*	*	*	*	*	*	*	*	*	*	*
PA-32-260,300,301, PA-32-301FT, PA-32-301T, PA-32-301XTC, PA-32R-300,301,301T, PA-32RT-300,300T, PA-32S-300	*	*	*	*	*	*	*	*	*	*	*	*
PA-34-200,200T, PA-34-220T, PA-36-285, PA-36-300, PA-36-375, PA-38-112, PA-39, PA-40, PA-44-180, PA-44-180T	*	*	*	*	*	*	*	*	*	*	*	*
<b>Socata</b>												
100S, 150T, 150ST, 235C,E, MS880B, MS885, MS892A-150,E-150, MS893A,E, MS894A,E, TB9,10,20,21, TB200	*	*	*	*	*	*	*	*	*	*	*	*
<b>Viking Air Limited</b>												
DHC-6-1,100,200,300,DHC-2 Mk.I,II,III, DHC-3	*	*	*	*	*	*	*	*	*	*	*	*
DHC-6-400	*	*	*	*	*	*	*	*	*	*	*	*
<b>Note:</b>												
■ P/N 01-1030-H-A is available with ProTect lens coat, USE P/N 01-1030-H-A-P. P/N 01-1030-L-A is available with ProTect lens coat, USE P/N 01-1030-L-A-P. PAR36 drop in replacement is 4.4" diameter, PAR46 drop in replacement is 5.6" diameter, PAR64 is 8.0" diameter.												

**SunSpot PCx FAA-PMA/STC Landing Light**

P/N 900-01-100-A

100W, DC 28V, 11,000 lm, 11.5 oz, 4.4" x 4.4" x 2.25"

Approved for Pilatus models PC-7, 9, 12, 21

**SunBeam FAA-PMA Landing Light - Includes Pulse Recognition Model!**

P/N 90-1000

25W, DC 9-36V, 1600+ lm, 6.2 oz, 2.8" x 4.0" x 1.4"

The SunBeam is a landing/recognition light with a 6V x 12H degree beam that is twice the light output as the SunRay Plus and has a built-in "wig-wag" or "pulse" feature. The SunBeam is FAA-PMA approved, and can replace the Whelen 70346 series 14V and 28V halogen lamps. Aircraft models that this light fits include the Diamond DA-40, the Cessna Columbia, the Liberty XL, some Cirrus models, and some Grumman models.



Aircraft	Taxi Lights						
	36HX Taxi with Pulse P/N 01-1030-H-B (PAR36)	36 LX Taxi P/N 01-1030-L-B (PAR36)	36-4587 Taxi P/N 01-1030-4587 (PAR36)	46-4554 Taxi P/N 01-2230-4554 (PAR46)	36-4314 Taxi P/N 01-1030-4314 (PAR36)	36-4314HX Taxi with Pulse P/N 01-1030-4314-H (PAR36)	36-4587HX Taxi with Pulse P/N 01-1030-4587H (PAR36)
<b>FAA-PMA/STC Eligibility</b>							
<b>Aerostar</b>							
PA-60-600 (600), PA-60-601 (601), PA-60-601P (601P), PA-60-602P (602P), PA-60-700P (700P)	•	•	•	•	•	•	•
<b>Aviat</b>							
A-1, A-1A, A-1B, A-1C-180, A-1C-200	•						
<b>Beechcraft (Textron)</b>							
19A, B19, M19A, 23, A23, A23A, A23-24, B23, C23, A24, A24R, B24R, C24R	•	•	•	•	•	•	•
A23-19, 50, D50E-5990	•	•	•	•	•	•	•
35-33, 35-A33, B33, C33, C33A, E33, E33A, E33C, F33, F33A, F33C, G33, 35, 35R, A35, B35, C35, D35, E35, F35, G35, H35, J35, K35, M35, N35, P35, S35, V35, V35A,B, 36, A36, A36TC, B36TC, G36	•	•	•	•	•	•	•
B50, C50, D50, D50A,B,C,D,E, E50, F50, G50, H50, J50, 95, 95-55, 95-A55, 95-B55, 95-B55A, B55B, C55, C55A, D55, D55A, E55, E55A, 56TC, A56TC, G58, 58, 58A, 58P, 58TC	•	•	•	•	•	•	•
58PA, 58TCA, A100-1, A100, A100A, A100C	•	•	•	•	•	•	•
60, A60, B60, 65, A65, A-65-8200, 65-80, 65-A80, 65-A80-8800, 65-B80, 65-88, 65-90, 65-A90, 70, 76, 77, C90, C90A, C90GT, 65-A90-1,2,3,4, B90, E90, H90, B95, B95A, D95A, E95, 99, 99A, A99, A99A, B99, C99, 100, B100	•	•	•	•	•	•	•
200, 200C, 200CT, 200T, A200, A200C, A200CT, B200, B200C, B200CGT, B200CT, B200GT, B200T, 300, 300LW, B300, B300C, 1900, 1900C,D	•	•	•	•	•	•	•
<b>Cessna (Textron)</b>							
120, 140, 140A	•	•	•	•	•	•	•
150, 150A,B,C,D,E,F,G,H,J,K,L,M, A150K,L,M, 152, A152	•	•	•	•	•	•	•
170, 170A,B, 172, 172A,B,C,D,E,F,G,H,I,K,L,M,N,P,Q,R,S, P172D, R172E,F,G,H,J,K, 172RG, 175, 175A,B,C, 177, 177A,B, 177RG	•	•	•	•	•	•	•
180, 180A,B,C,D,E,F,G,H,J,K, 182, 182A,B,C,D,E,F,G,H,J,K,L,M,N,P,Q,R,S,T, R182, T182, TR182,T182T	•	•	•	•	•	•	•
185, 185A,B,C,D,E, A185E,F, 188, 188A,B, A188, A188A,B, T188C, 190, 195, 195A,B, 210-5, (205), 210-5A, (205A)	•	•	•	•	•	•	•
206, 206H, U206, U206A,B,C,D,E,F,G, P206, P206A,B,C,D,E, TU206A,B,C,D,E,F,G, T206H, TP206A,B,C,D,E	•	•	•	•	•	•	•
207, 207A, T207, T207A, 208, 208B	•	•	•	•	•	•	•
210, 210A,B,C,D,E,F,G,H,J,K,L,M,N, P210N,R, T210F,G,H,J,K,L,M,N,R	•	•	•	•	•	•	•
310, 310A,B,C,D,E,F,G,H,I,J,K,L,M,N,P,Q,R, E310H, T310P,Q,R, 320A,B,C,D,E,F, 335, 320, 320-, 336, 337, 337A,B,C,D,E,F,G,H, F337E,F,G,H, FT337E,F,G,HP M337B, 337D,E,F,G,H,SP	•	•	•	•	•	•	•
P337H, T337B,C, 340, 340A	•	•	•	•	•	•	•
401, 401A,B, 402, 402A,B,C, 404, 406, 411, 411A, 414, 414A, 421, 421A,B,C, 425, 441	•	•	•	•	•	•	•
<b>Commander</b>							
112, 112B, 112TC, 112TCA, 114, 114A,B, 500, 500A,B,S,U, 520, 560, 560-A,E,F, 680, 680E,F,L,T,V,W, 681, 685, 690, 690A,B,C,D, 695, 695A,B	•	•	•	•	•	•	•
114TC, 720	•	•	•	•	•	•	•
<b>Gruman (True Flight Holdings)</b>							
AA-1, AA-1A,1B,1C, AA-5, AA-5A,B, AG-5B	•	•	•	•	•	•	•
<b>Maule</b>							
M-4, M-4S,T, M-4-180C,S,T, M-4-210, M-4-210C,S, M-5-180C, M-5-200, M-5-210C, M-5-210TC, M-5-220C	•	•	•	•	•	•	•
M-4C,M-4-210T, M-4-220, M-4-220C,S,T	•	•	•	•	•	•	•
M-5-235C, M-6-180, M-6-235, M-7-235, M-7-235A,B,C, M-7-260, M-7-260C, M-7-420AC, MT-7-235, MT-7-260, MT-7-420, MX-7-160, MX-7-180, MX-7-235, MX-7-235A,B,C, MX-7-420, MXT-7-180, MXT-7-160, MX-7-180A,B,C, MXT-7-180A, M-8-235	•	•	•	•	•	•	•
M-7-420A, MS-7-180AC, MX-7-160C	•	•	•	•	•	•	•
<b>Mooney</b>							
M20, M20A,B,C,D,E,F,G,J,K,L,M,R,S, M20TN, M22	•	•	•	•	•	•	•
<b>Piper</b>							
J3C-40, J3C-50, J3C-50S, J3C-65, J3C-65S, J3F-50, J3F-50S, J3F-60, J3F-60S, J3F-65, J3F-65S, J3L, J3L-S, J3L-65, J3L-65S, J4, J4A, J4A-S, J4E	•	•	•	•	•	•	•
PA-11, PA-11S, PA-15, PA-16, PA-16S, PA-17	•	•	•	•	•	•	•
PA-18, PA-18 "105", PA-18 "125", PA-18 "135", PA-18 "150", PA-18A, PA-18A "135", PA-15A "150"	•	•	•	•	•	•	•
PA-18AS "125", PA-18AS "135", PA-18AS "150", PA-18S, PA-18S "105", PA-18S "125", PA-18S "135"	•	•	•	•	•	•	•
PA-18S "150", PA-19, PA-19S, PA-20, PA-20 "115", PA-20 "135", PA-20S, PA-20S "115", PA-20S "135"	•	•	•	•	•	•	•
PA-22, PA-22-108,135,150,160, PA-22S-135,150,160	•	•	•	•	•	•	•
PA-23, PA-23-160,235,250, PA-E23-250, PA-24, PA-24-250,260,400,	•	•	•	•	•	•	•
PA-25, PA-25-235,260	•	•	•	•	•	•	•
PA-28-140,150,151,160,161,180,181,201T,235,236, PA-28R-180,200,201,201T, PA-28RT-201,201T, PA-28S-160,180	•	•	•	•	•	•	•
PA-30, PA-31, PA-31-300,325,350, PA-31P, PA-31P-350, PA-31T, PA-31T1,T2,T3	•	•	•	•	•	•	•
PA-32-260,300,301, PA-32-301FT, PA-32-301T, PA-32-301XTC, PA-32R-300,301,301T, PA-32RT-300,300T, PA-32S-300	•	•	•	•	•	•	•
PA-34-200,200T, PA-34-220T, PA-36-285, PA-36-300, PA-36-375, PA-38-112, PA-39, PA-40, PA-44-180, PA-44-180T	•	•	•	•	•	•	•
<b>Socata</b>							
TB9,10,20,21, TB200, MS880B, MS885, MS894A, MS893A, MS892A-150, MS892E-150, MS893E, MS894E, 100S, 150T, 150ST, 235C,E	•	•	•	•	•	•	•
<b>Viking Air Limited</b>							
DHC-6-1,100,200,300, DHC-2 Mk.I,II,III, DHC-3	•	•	•	•	•	•	•
DHC-6-400	•	•	•	•	•	•	•

**SunSpot PCx FAA-PMA/STC Taxi Light**

P/N 900-01-100-C

100W, DC 28V, 11,000 lm, 11.5 oz, 4.4" x 4.4" x 2.25"

Approved for Pilatus models PC-7, 9, 12, 21

**Polaris Light Bulb Replacement**

12V P/N 01-7500-7512-12 9W (1.1 oz, 1.1" x 1.3" x 2.1")

24V P/N 01-7500-7512-24 9W (1.1 oz, 1.1" x 1.3" x 2.1")

Polaris is an LED bulb replacement for incandescent position light bulbs that provide the forward red and green navigation lights. Polaris is a warm white LED that matches the spectrum of the incandescent bulb that it replaces so that the color produced through the red and green lenses is equivalent and meets the FAR and TSO color requirements for aviation red and green. The light output meets or exceeds that of the bulb that it replaces. FAA-PMA approval pending.



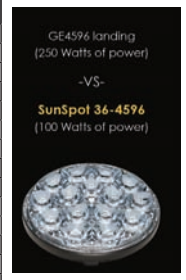
**Starlight Ice Light Bulb Replacement**

28V P/N 01-7079-24 6W (1.4 oz, 1.1" x 1.5" x 2.2")

LED bulb replacement must be installed in an existing approved light housing in a BAY15S socket. The StarLight LED bulb replacement is designed with a single high-power LED. Should the LED fail, the unit must be replaced. FAA-PMA/STC approved.

FAA-PMA Approved

Cross Reference for Landing Lights						AeroLEDs LED Equivalent					
Incandescent Bulb						AeroLEDs LED Equivalent					
GE Bulb #	Size	Voltage	Watts	Peak Candela	Total Lumens	Model	P/N	Voltage	Watts	Peak Candela	Total Lumens
4505	PAR36	28	50	40,000	750	SunSpot 36 LX	01-1030-L-A or 01-1030-H-A	14/28	45	65,000	4,950
4509	PAR36	14	100	110,000	1500	SunSpot 36 LX	01-1030-L-A or 01-1030-H-A	14/28	45	65,000	4,950
						SunSpot 36 HX	01-1030-4313 or 01-1030-4313-H	14	95	150,000	11,000
4313	PAR36	14	250	150,000	3750	SunSpot 36 LX	01-1030-L-A or 01-1030-H-A	14/28	45	65,000	4,950
						SunSpot 36 HX	01-1030-4313 or 01-1030-4313-H	14	95	150,000	11,000
4591	PAR36	28	100	90,000	1500	SunSpot 36 LX	01-1030-L-A or 01-1030-H-A	14/28	45	65,000	4,950
						SunSpot 36-4596 HX	01-1030-4596-H	28	100	150,000	11,000
4594	PAR36	28	100	70,000	1500	SunSpot 36 LX	01-1030-L-A or 01-1030-H-A	14/28	45	65,000	4,950
						SunSpot 36-4596 HX	01-1030-4596-H	28	100	150,000	11,000
4595	PAR36	14	100	60,000	1500	SunSpot 36 LX	01-1030-L-A or 01-1030-H-A	14/28	45	65,000	4,950
						SunSpot 36 HX	01-1030-4313 or 01-1030-4313-H	14	95	150,000	11,000
4596	PAR36	28	250	150,000	3750	SunSpot 36-4596 HX	01-1030-4596 HX	28	100	150,000	11,000
4700	PAR36					SunSpot 36 HX	01-1030-4313 or 01-1030-4313-H	14	95	150,000	11,000
Q4631	PAR36	14	250	80,000	3750	SunSpot 36 LX	01-1030-L-A or 01-1030-H-A	14/28	45	65,000	4,950
						SunSpot 36 HX	01-1030-4313 or 01-1030-4313-H	14	95	150,000	11,000
Q4632	PAR36	14	250	75,000	3750	SunSpot 36 LX	01-1030-L-A or 01-1030-H-A	14/28	45	65,000	4,950
						SunSpot 36 HX	01-1030-4313 or 01-1030-4313-H	14	95	150,000	11,000
4522	PAR46	28	250	290,000	3750	SunSpot 46 LX	01-2130-LX or 01-2130-HX	14/28	70	150,000	7,700
						SunSpot 46 HX	01-2230-4580-H	28	175	250,000	19,250
4537	PAR46	14	250	200,000	3750	SunSpot 46 LX	01-2130-LX or 01-2130-HX	14/28	70	150,000	7,700
4553	PAR46	28	250	300,000	3750	SunSpot 46 LX	01-2130-LX or 01-2130-HX	14/28	70	150,000	7,700
						SunSpot 46 HX	01-2230-4580 or 01-2230-4580-H	28	175	250,000	19,250
4580 or 4581	PAR46	28	450	400,000	6750	SunSpot 46 HX	01-2230-4580 or 01-2230-4580-H	28	175	250,000	19,250
Q4681	PAR46	28	450	310,000	6750	SunSpot 46-4580	01-2230-4580 or 01-2230-4580-H	28	175	250,000	19,250
Q4566	PAR46	28	450	150,000	6750	SunSpot 46-4580	01-2230-4580	28	175	250,000	19,250
Q4567, Q4580, Q4581						SunSpot 46 HX	01-2230-4580-H	28	175	250,000	19,250
4559	PAR64	28	600	600,000	9600	SunSpot 64-4559	01-2250-4559	28	225	400,000	24,750



Cross Reference for Taxi Lights						AeroLEDs LED Equivalent					
Incandescent Bulb						AeroLEDs LED Equivalent					
GE Bulb #	Size	Voltage	Watts	Peak Candela	Total Lumens	Model	P/N	Voltage	Watts	Peak Candela	Total Lumens
4503	PAR36	14	40	11,000	640	SunSpot 36 LX	01-1030-L-B or 01-1030-H-B	14/28	45	15,000	4,950
4502	PAR36	28	50	10,000	800	SunSpot 36 LX	01-1030-L-B or 01-1030-H-B	14/28	45	15,000	4,950
4587	PAR36	28	250	40,000	4000	SunSpot 4587/HX	01-1030-4587 or 01-1030-4587-H	28	100	50,000	11,000
4589	PAR36	28	50	5,000	800	SunSpot 36 LX	01-1030-L-B or 01-1030-H-B	14/28	45	15,000	4,950
4593	PAR36	28	50	1,500	800	SunSpot 36 LX	01-1030-L-B or 01-1030-H-B	14/28	45	15,000	4,950
4626	PAR36	28	150	25,000	2400	SupSpot 4587 HX	01-1030-4587-H	28	100	50,000	11,000
						SunSpot 36 LX	01-1030-L-B or 01-1030-H-B	14/28	45	15,000	4,950
4627	PAR36	28	100	3,000	1600	SunSpot 36 HX	01-1030-4314 or 01-1030-4314-H	14	95	50,000	11,000
						SunSpot 4587 HX	01-1030-4587-H	28	100	50,000	11,000
4551	PAR46	28	250	75,000	4000	SunSpot 46 LX/HX	01-2230-4554 or 01-2230-4554-H	28	175	100,000	19,250
4554	PAR46	28	450	90,000	7200	SunSpot 46 LX/HX	01-2230-4554 or 01-2230-4554-H	28	175	100,000	19,250
4570	PAR46	28	150	32,000	2400	N/A					
4571	PAR46	28	150	7,000	2400	N/A					
4572						SunSpot 46 HX	01-2230-4554-H	28	175	100,000	19,250
4582	PAR46	28	450	20,000	7200	SunSpot 46 LX Taxi	01-2230-4554	28	175	100,000	19,250
Q4629	PAR46	28	250	20,000	4000	N/A					
Q4551, Q4554, Q5551, Q5554, Q4554, Q4597, Q4598						SunSpot 46 LX/HX	01-2230-4554 or 01-2230-4554-H	28	175	100,000	19,250



**Landing and Taxi Lights for Non-Certified Aircraft**  
**Includes Pulse Recognition Mode!**

**SunRay Plus**

P/N 01-1150

10W, DC 9-36V, 1000+ lm, 4.5 oz, 4.0" x 2.8" x 1.1"

The SunRay Plus is a landing/recognition light with a 6° beam that has a built-in "wig-wag" or "pulse" feature.



**AeroSun**

P/N 01-2120

36 W, DC 9-36V, 1200+ lm, 8 oz, 2.3" x 5.0" x 1.5"

The AeroSun can be seen miles away in broad daylight especially while in the built-in "wig-wag" or "pulse" feature.

It has been designed as a landing, taxi and recognition light that was designed for the leading edge, wingtip cutout or landing gear on an aircraft.



**AeroSun Vx**

P/N 01-2500

60W per light, DC 9-36V, 5000+ lm per light, 31 oz, 5.7" x 6.4" x 3.8"

The AeroSun Vx was designed for the Vans RV 7, 8, 9, 10 and 14 wingtips as a landing, taxi and recognition light. The Vx offers separate taxi, landing light circuits and has a built-in "wig-wag" or "pulse" feature. Sold as a pair.



**MicroSun**

P/N 01-1170

21W per light, DC 9-36V, 1500+ lm per light, 3.6 oz, 2.0" x 1.9" x 2.0"

The MicroSun is a small compact light that projects a lot of light and was designed as a landing, taxi and recognition light. The MicroSun can be installed in the leading edge, wingtip cutout, landing gear or in the cowl on an aircraft and has a built-in "wig-wag" or "pulse" feature.



P/N 01-1170-A

24W per light, DC 9-36V, 2640 lm per light, 2.2 oz, 3.1" x 1.9" x 0.9"

**Accessories**

Connector Pin Crimpers P/N 02-1000

20 AGW, 3 C Tefzel Shielded Wire (25 ft spools) P/N 00-8664

AeroSun Mount Kit P/N KIT-0012, SunRay Plus Mount Kit P/N KIT-0035

Lighting

## Pulsar Navigation/Position/Strobe Lights

### High Efficiency, Low Drag

Streamlined design takes advantage of the small size of LED light sources to create an aerodynamic profile that produces less drag than traditional Xenon strobe housings.

### Differences between the Pulsar NS and the Pulsar NSP

The Pulsar NS has a forward red or green navigation light, and a strobe that covers 180° from each wing tip. The Pulsar NSP are the same as the Pulsar NS but also have a rear white position light.

**Pulsar** (9.5 oz, 5.6" x 1.9" x 1.5")

Sold as a pair

TSO P/N 11-1100-12 (12V), 11-1100-24 (24V)

17W, DC 9-36V

The Pulsar (Navigation/Anti-collision Strobe/Position) wingtip lights are designed to be installed on the wingtips of an aircraft where the navigation (red and green) and position (white) lights can be seen to determine the direction of the aircraft.



**Pulsar N** (6.6 oz, 4.0" x 1.9" x 1.5")

TSO P/N 11-1280-A-12 (12V), 11-1280-A-24 (24V)

add -L (Left) or -R (Right)

5.6W, DC 9-36V, lumens exceed TSO candela

requirements. The Pulsar N (Navigation) lights are designed to be installed on the wingtips or in the wingtip cut outs of an aircraft. The Pulsar N provides forward facing red/green lights.



**Pulsar NS** (6.6 oz, 4.0" x 1.9" x 1.5")

TSO P/N 11-1280-B-12 (12V), P/N 11-1280-B-24 (24V)

add -L (Left) or -R (Right)

15W, DC 9-36V, lumens exceed TSO candela requirements,

EXP P/N 01-1280-B-12 (12V), P/N 01-1280-B-24 (24V)

add -L (Left) or -R (Right)

18W, DC 9-36V

The Pulsar NS (Navigation and Anti-collision Strobe) lights are designed to be installed on the wingtip or in the wingtip cut outs of an aircraft. The SunTail (Anti-collision Strobe and Position) light for the tail of the aircraft is recommended with the Pulsar NS lights. The strobes on the SunTail and Pulsar NS lights will sync to strobe together.

**Pulsar NSP** (6.6 oz, 4.0" x 1.9" x 1.5")

TSO P/N 11-1280-C-12 (12V), P/N 11-1280-C-24 (24V)

add -L (Left) or -R (Right)

17W, DC 9-36V, lumens exceed TSO candela requirements,

EXP P/N 01-1280-C-12 (12V), P/N 01-1280-C-24 (24V)

add -L (Left) or -R (Right)

The TSO'd Pulsar NSP (Navigation/Anti-collision Strobe/Position) wingtip lights are designed to be installed on the wingtips of an aircraft where the navigation (red and green) and position (white) lights can be seen to determine the direction of the aircraft.

**SunTail** (2.6 oz, 2.2" x 1.7" x 1.4")

TSO P/N 11-1260-12 (12V), P/N 11-1260-24 (24V)

12W, DC 9-36V, lumens exceed TSO candela requirements,

EXP P/N 01-1260-12 (12V), P/N 01-1260-24 (24V) Navigation/Position/Strobe

**SunBeacon II** (4.1 oz, 2.5" x 2.5" x 1.5")

TSO P/N 11-2200-A-12 (12V), P/N 11-2200-A-24 (24 Volt) (Red Beacon) 12W, DC 9-36V, TSO-C96A Class II

TSO P/N 11-2200-B-12 (12V), P/N 11-2200-B-24 (24 Volt) (White Beacon) 12W, DC 9-36V, TSO-C96A Class II

The compact SunBeacon II is a direct replacement for the standard beacon.

It is available in solid red or white. A mount bracket is optional.

## Pulsar NS Series Comparison Chart

### NAVIGATION / ANTI-COLLISION STROBE / POSITION



	Pulsar N	Pulsar NS	Pulsar NSP
Features	Navigation Red Position Navigation Green Position	Navigation Red Position Navigation Green Position + Anti-Collision Strobe	Navigation Red Position Navigation Green Position + Anti-Collision Strobe + Rear White Position
Recommended Application	<ul style="list-style-type: none"> <li>• Helicopter Nav Lights</li> <li>• Leading Edge</li> <li>• Wing Tip Inserts</li> </ul>	<ul style="list-style-type: none"> <li>• Leading Edge</li> <li>• Wing Tip Inserts</li> </ul> (SunTail is recommended for the rear position/strobe)	<ul style="list-style-type: none"> <li>• Edge of Wing Tip</li> </ul> (Recommended for where rear position is visible from behind)



FAA-PMA Approved

### Quasar Cx LED Lighted Wing Tips

Integrated LED Landing lights with pulse recognition mode

- FAA-PMA/STC approved
- Brighter than any other product on the market
- Works with existing cowl mounted lights
- Recognition mode integrated into the light assembly
- No additional light controllers required
- Enhanced in flight recognition of the aircraft
- Accommodates legacy nav/strobe lights but optimized for use with AeroLED navigation/strobe lighting



This all new wing tip lighting package brings the latest technology in LED lighting to the general aviation market with integrated landing, taxi, and recognition modes. The package is brighter than any other product on the market including other PAR36 LED and HID lighting solutions.

Recognition mode is integrated into the light assembly and does not require any additional light controllers to flash the LED lights. This mode of operation dramatically enhances in flight recognition of the aircraft therefore reducing the possibilities of mid-air collisions.

The built-in mounting location for the nav/strobe assembly is designed to accommodate legacy nav/strobes but is optimized for use with the AeroLED Pulsar NSP LED nav/strobes.

The wing tips are built by Stene Aviation using the latest resins and aviation grade E-glass weaves to insure the highest quality of part.

**Optional Installation Kit**

P/N **INSTALL14V** 14v Installation Kit

P/N **INSTALL28V** 28v Installation Kit

Contains all hardware required for installation including shielded wire, all connectors, switches, and breaker. One kit required per aircraft.



**Lighted Wing Tip Kit P/N SA-0523565-2930LL**

Aircraft
150, 150A,B,C,D,E,F,G,H,J,K,L,M, A150L,M
152, A152
170, 170A,B
172, 172A,B,C,D,E,F,G,H,I,K,L
F172D,E,F,G,H,K,L
FP172D, P172D
175, 175A,B,C
180, 180A,B,C,D,E,F,G,H
182, 182A,B,C,D,E,F,G,H,J,K,L,M,N
185, 185A,B,C,D,E, A185E
210-5 (205), 210-5A (205A)
206, U206, U206A,B,C,D,E, TU206A,B,C,D,E
P206, P206A,B,C,D, TP2006A,B,C,D, P206E, TP206E
207, 207A, T207, T207A
210, 210A,B,C,D,E,F, T210F

**Lighted Wing Tip Kit P/N SA-0723200-56LL**

172M,N,P,Q,R,S, 172RG, R172K
F172,M,N,P
180J,K
182P,Q,R,S, R182, TR182, T182
182T, T182T, F182P,Q, FR182
A185F
U206F,G, TU206F,G, 206H, T206H

Wing Tip Types	Integrated Operational Modes	Multi-Voltage Operation	Power (Watts)	Lumens	Candela	Recognition Wig-Wag Mode
Quasar Cx LED lighted wing tips	Landing	Yes, 14/28v	190	17,000+	300,000+	Built-in
	Taxi		38	3,500	26,000+	
	Recognition		95	8,500+	150,000+	
Whelen PAR36 LED lighted wing tips	None		38	3496	120,000	No
HID lighted wing tips	None		70	6440	250,000	No

### Stene Wing Tips for AeroLED Lighting

Optimized for use with AeroLED Pulsar LED navigation/strobe lighting

The wing tips are built by Stene Aviation using the latest resins and aviation grade E-glass weaves to insure the highest quality of part.



### Polaris Light Bulb Replacement

(1.1 oz, 1.1" x 1.3" x 2.1")

12V P/N 01-7500-7512-12 9W

24V P/N 01-7500-7512-24 9W

Polaris is an LED bulb replacement



for incandescent position light bulbs that provide the forward red and green navigation lights. Polaris is a warm white LED that matches the spectrum of the incandescent bulb that it replaces so that the color produced through the red and green lenses is equivalent and meets the FAR and TSO color requirements for aviation red and green. The light output meets or exceeds that of the bulb that it replaces. FAA-PMA approval pending.

**Accessories**


Description	Figure	P/N
Connector pin crimpers	1	02-1000
20 AGW, 3 C Tefzel Shielded Wire (25 ft spools)	N/A	00-8664
NS Mount Kit (Single kit)	4	KIT-0008
SunBeacon II Twist Mount Kit	7	01-1096
Synchronizer	5	00-8120
ProTech Lens Cover Sunspot 36	9	KIT-0003
Mount Kit, Aerosun	2	KIT-0012
ProTech Lens Cover Sunspot 46	9	KIT-0013
RV KIT Pulsar NS, SunTail	8	KIT-0016
RV KIT Pulsar NS, SunTail, 2 AeroSun	8	KIT-0017
RV KIT Pulsar NS, SunTail, 2 SunRay Plus	N/A	KIT-0018
RV KIT Pulsar Exp, 2 AeroSuns	N/A	KIT-0019
Light Bulb, Replacement Starlight 28V	N/A	01-7079-24
Mount Kit, Sunray Plus	6	KIT-0035

### Lighting Accessories from



	LH	RH
SA-0523565-29LED	•	•
SA-0723200-5LED	•	•
SA-0523565-30LED	•	•
SA-0723200-6LED	•	•

Aircraft	SA-0523565-29LED	SA-0723200-5LED	SA-0523565-30LED	SA-0723200-6LED
150, 150A,B,C,D,E,F,G,H,J,K,L,M, A150L,M	•	•	•	•
152, A152	•	•	•	•
170, 170A,B	•	•	•	•
172, 172A,B,C,D,E,F,G,H,I,K,L	•	•	•	•
172M,N,P,Q,R,S, 172RG, R172K	•	•	•	•
175, 175A,B,C	•	•	•	•
180, 180A,B,C,D,E,F,G,H	•	•	•	•
180J,K	•	•	•	•
182, 182A,B,C,D,E,F,G,H,J,K,L,M,N	•	•	•	•
182P,Q,R,S, R182, TR182, T182	•	•	•	•
185, 185A,B,C,D,E, A185E	•	•	•	•
A185F	•	•	•	•
210-5 (205), 210-5A (205A)	•	•	•	•
206, U206, U206A,B,C,D,E, TU206A,B,C,D,E	•	•	•	•
U206F,G, TU206F,G, 206H, T206H	•	•	•	•
P206, P206A,B,C,D, TP2006A,B,C,D	•	•	•	•
207, 207A, T207, T207A	•	•	•	•
210, 210A,B,C,D,E,F, T210F	•	•	•	•

1 P/N 02-1000 	2 P/N KIT-0012 	3 Coming Soon!
4 P/N KIT-0008 	5 P/N 00-8120 	6 P/N KIT-0035 
7 P/N 01-1096 	8 P/Ns KIT-0016 and KIT-0017 	9 P/N KIT-0013 

Lighting

**McFarlane now offers a huge selection of plastic and fiberglass trim and fairings for your aircraft!**

Plastic and fiberglass interior and exterior parts from Aircraft Development, Knots2U, Stene Aviation and Texas Aeroplastics offer high quality FAA-PMA replacement parts at affordable prices.



**Aircraft Development**

Aircraft Development replacement wing tips and landing gear fairings are made from an epoxy fiberglass construction and are six times stronger and twelve times stiffer than original plastic. They are weather and UV resistant, won't become brittle and are easily repairable.



**Knots 2U**

Knots 2U replacement parts are made from the highest quality hand laid fiberglass. This provides for superior strength, reduced weight, and long life. The latest technology resins are used to prevent warping and shrinkage that can happen with other fiberglass. Advanced tooling and pattern techniques assure a superior fit.



**Stene Aviation**

Stene Aviation fiberglass replacement parts are five times stronger than the original plastic parts offered by Cessna. They are exact replacements of the originals and come primed and ready for paint. The product line includes Cessna wing tips, strut cuffs, fin caps, rudder caps/bottoms, stabilizer tips, wheel pants, and much more.



**Texas Aeroplastics**

Texas Aeroplastics replacement parts are made from top grade ABS plastic with an average service life of 15-20 years when properly fitted and professionally painted. ABS plastic parts are repairable and most have been trimmed for easy installation. All exterior ABS plastic parts are white.



**Wing Tips**

- Available in plastic and fiberglass
- Conical wing tips accommodate both a strobe and nav light
- Symmetrical wing tips accommodate a strobe light



**Main Wheel Fairings (Wheel Pants)**

Easy tire valve access!

- Available in fiberglass
- Knots 2U main wheel fairings feature an access door to easily check tire pressure.
- Stene Aviation main wheel fairings feature a removable plastic plug to easily check tire pressure



**Nose Wheel Fairings (Wheel Pants)**

Easy tire valve access!

- Available in ABS plastic and fiberglass
- Knots 2U nose gear fairings feature an access door to easily check tire pressure.
- Stene Aviation and Texas Aeroplastics nose gear fairings feature a removable plastic plug to easily check tire pressure.



**Strut Fairings**

**Strut to Wing and Strut to Fuselage Fairings**

Plastic un-split (FAA-PMA) fairings by Texas Aeroplastics.

Fiberglass split fairings (FAA-PMA/STC) for easy installation, and un-split (FAA-PMA) by Stene Aviation.

Plastic PRO split fairings (FAA-PMA) for easy installation by Knots 2U.

Fiberglass split fairings (FAA-PMA) for easy installation by Aircraft Development.



**Lower Rear Wing Fairings**

Available in fiberglass



**Main Landing Gear Fairings**

Split for easy installation. Available in plastic from Texas Aeroplastics...



...and in fiberglass from Aircraft Development and Stene Aviation



**Tailcone Fairings**

Available in plastic and fiberglass



**Cowl Fairings**

Available in fiberglass



**Vertical Fin Caps**

Available in plastic and fiberglass

**No flashing beacon**



**2-1/4" Beacon Base**



**3-1/2" Beacon Base**



**Brake Cover Fairings**

Split for easy installation Available in plastic and fiberglass



**Fuel Strainer Cover**

Available in fiberglass



**Tailwheel Steering Cable Fairings**

Available in fiberglass



**Trailing Edge Wing Root Fairing**

Available in fiberglass



**Elevator Tips**

Available in plastic and fiberglass



**Rudder Caps**

Available in plastic and fiberglass

**Rudder Top Caps**



**Rudder Butts**



**Dorsal Fin Tips**

Available in plastic and fiberglass

**Forward Dorsal Fin Tips**

Small triangle at the front of the dorsal fin



**Aft Dorsal Fin Tips**

Dorsal fin transition into the vertical fin



**Horizontal Stabilizer Tips**

Available in plastic and fiberglass





# Exterior Plastic and Fiberglass Trim and Fairings Cessna 150-152 Series Aircraft



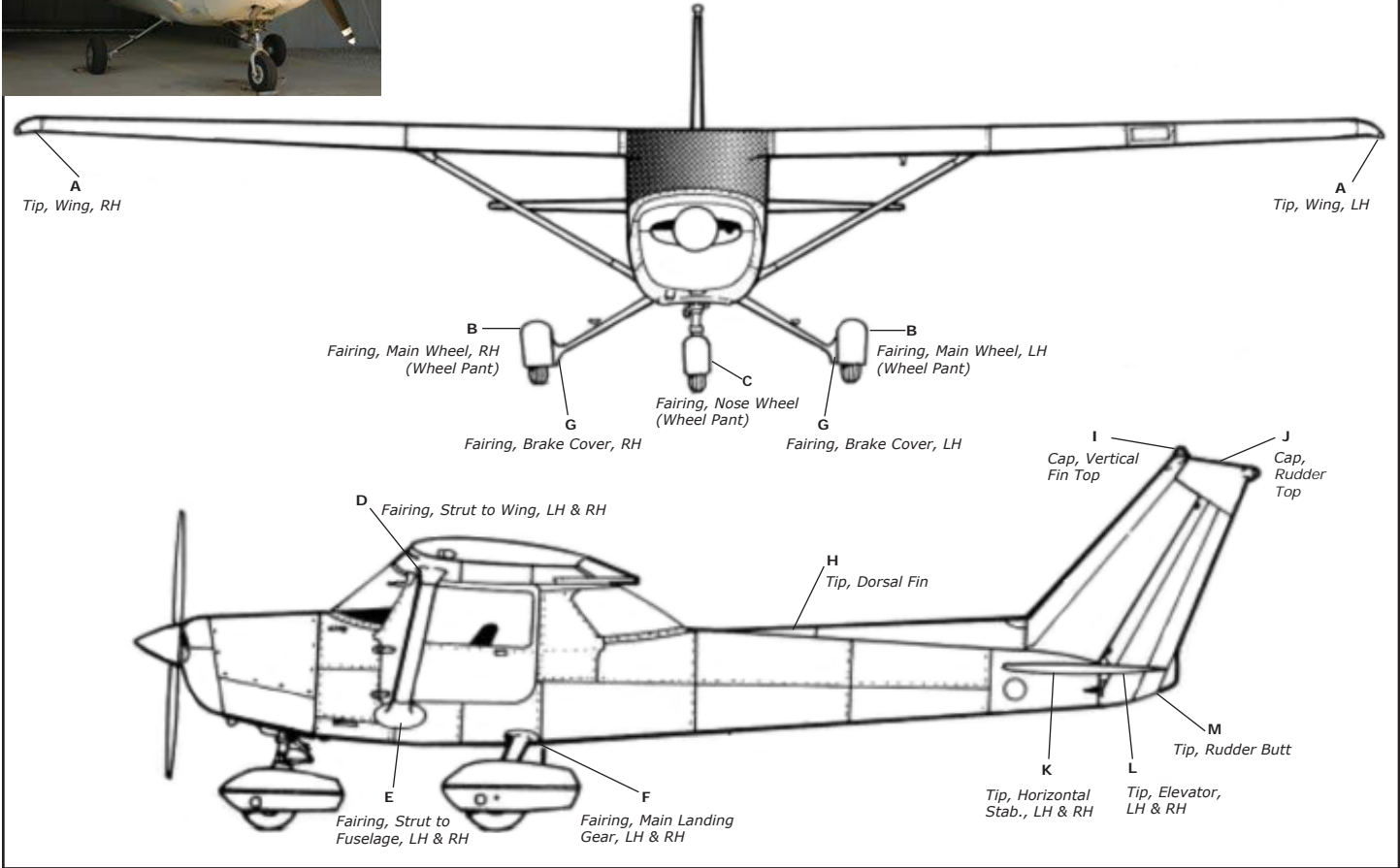
**Improve the appearance and performance of your aircraft!**

Wing tips, strut and landing gear fairings, and tail surface fairings for Cessna 150-152 series aircraft available in plastic and fiberglass.

**SAVE!!**

Eligibility tables for Cessna 150-152 aircraft with item descriptions, index reference and part numbers can be found on the following pages.

Go to [www.mcfarlaneaviation.com](http://www.mcfarlaneaviation.com) for more details about specific part numbers.



150, 150A, B, C, D, E S/N 17001 thru 15061532			
Description	Idx	Part Number	
Fairing, Main Lndg Gear LH	F	FS-150-LG	11
Fairing, Main Lndg Gear RH	F	FS-150-RG	11
Fairing, Strut to Fuslg LH	E	118-4-27	A
		SA-0421002-1SP	2 3 S
Fairing, Strut to Fuslg RH	E	118-4-26	A
Fairing, Strut to Wing, LH	D	SA-0421002-2SP	3 3 S
		118-4-5	A
Fairing, Strut to Wing, RH	D	SA-0522150-3SP	3 3 S
		118-4-4	A
		SA-0522150-4SP	3 3 S
Rudder Bottom	M	K0430004-1-791	1 1 K
		SA-0430004-1	9
Rudder Top	J	GF0430004-2-791	1 1 K
		SA-0430004-2	1 1 S
		SA-0430004-8	2 2 S
Tip, Dorsal Fin, Vertical	H	GF0430004-00	1 1 K
		GF0430004-7-791	2 2 K
		SA-0430004-4	1 1 S
		SA-0430004-7	2 2 S
		26-09	11
Tip, Elevator, LH or RH	L	GF0430004-10791	2 2 K
		GF0430004-5-791	1 1 K
		SA-0430004-10	2 2 S
		SA-0430004-5	1 1 S
Tip, Horiz., Stab., LH or RH	K	26-08	11
		GF0430004-11791	1 1 K
		SA-0430004-11	2 2 S
Tip, Vertical & Horizontal Stab	I	GF0430004-6-791	1 1 K
		SA-0430004-6	1 1 S
Tip, Vertical, No Beacon	I	SA-0430004-9	2 2 S
Tip, Wing, Conical, LH	A	SA-0523565-29	5 6 S
Tip, Wing, Conical, RH	A	SA-0523565-30	5 6 S

Eligibility continues in the next column

Manufacturer/Material: A Aircraft Development/Fiberglass, K Knots 2U/Fiberglass, S Stene Aviation/Fiberglass, T Texas Aeroplastics/ABS Plastic Parts

Continued from previous column			
Description	Idx	Part Number	
Tip, Wing, Std., LH or RH	A	K0723615-200	3 K
		SA-0723615-200	5 S
Tip, Wing, Hoerner Style	A	11004 (set of two)	4 K
Wing Pos., Light Shield, LH	A	219-4-5	4 4 A
Wing Pos., Light Shield, RH	A	219-4-6	4 4 A
		1 S/N 17001 thru 15060087 only	
		2 S/N 15060088 and on	
		3 FAA-PMA/STC approved split Fairing for easy installation and removal.	
		4 For a wing with a standard leading edge radius	
		5 For kits including LH and RH see page 203.	
		6 Add "LL" suffix for FAA-PMA/STC wing tips including Quasar LED landing/taxi lights and optimized to accept LED nav/strobe lights. Must purchase as a LH and RH kit. See page 203.	
		Add "LED" suffix for FAA-PMA/STC wing tips optimized to accept LED nav/strobe lights.	
150F, G, H, J, K S/N 15061533 thru 15072003			
Description	Idx	Part Number	
Cap, Rudder Top	J	26-0431013-1-80A	11
		SA-0431013-1	5 S
Cap, Vertical Fin Top	I	K0431013-3-791	1 1 K
No Beacon Base	I	SA-0431013-3	5 S
Cap, Vertical Fin Top	I	26-0431017-1-80A	11
2 1/4" Beacon Base	I	SA-0431017-1	5 S
Fairing, Main Lndg Gear LH	F	FS-150-LG	11
Fairing, Main Lndg Gear RH	F	FS-150-RG	11
Fairing, Main Wheel, LH (Wheel Pant)	B	K0741046-203	3 3 K
Fairing, Main Wheel, RH (Wheel Pant)	B	K0741046-202	3 3 K

Eligibility continues in the next column

Continued from previous column			
Description	Idx	Part Number	
Fairing, Nose Wheel (Wheel Pant)	C	K0743625-14	3 3 K
Fairing, Strut to Fuselage, LH	E	118-4-27	A
		150-LFS	1 1 T
		K0421002-1	2 6 T
		SA-0421002-1	5 2 S
Fairing, Strut to Fuselage, RH	E	118-4-26	A
		150-RFS	1 1 T
		K0421002-2	2 6 T
		SA-0421002-2	5 2 S
Fairing, Strut to Wing, LH	D	118-4-5	A
		150-LWS	1 1 T
		K0522150-3	2 6 K
		SA-0522150-3	5 2 S
Fairing, Strut to Wing, RH	D	118-4-4	A
		150-RWS	1 1 T
		K0522150-4	2 6 K
		SA-0522150-4	5 2 S
Tip, Dorsal Fin	H	SA-0431024-1	5 S
		26-09	11
Tip, Elevator, LH or RH	L	GF0430004-10791	1 1 K
		SA-0430004-10	5 S
		26-08	11
Tip, Horizontal Stab., LH or RH	K	GF0430004-11791	1 1 K
		SA-0430004-11	5 S
Tip, Rudder Butt	M	26-11	11
		GF0431005-1-791	1 1 K
		SA-0431005-1	5 S
Tip, Wing, Conical, LH	A	20-51L-80A	4 4 T
		SA-0523565-29	8 9 S
Tip, Wing, Conical, RH	A	20-51R-80A	4 4 T
		SA-0523565-30	8 9 S

Eligibility continues on the next page

**Cessna 150-152 Series Aircraft**

Continued from previous page				
Description	Idx	Part Number		
Tip, Wing, Sym., LH or RH	A	26-0423008-3-80A <b>T</b> SA-0423008-3 <b>S</b>		
Tip, Wing, Hoerner Style	A	11004 (set of two) <b>K</b>		
Wing Pos., Light Shield, LH	A	219-4-5 <b>7A</b>		
Wing Pos., Light Shield, RH	A	219-4-6 <b>7A</b>		
<p><b>1</b> S/N 15064533 and on  <b>2</b> S/N 15067199 and on  <b>3</b> S/N 15069309 and on  <b>4</b> S/N 15071129 and on  <b>5</b> Also available as a FAA-PMA/STC approved split Fairing for easy installation and removal; add an "SP" suffix to the P/N.  <b>6</b> This is an ABS plastic part, split for easy installation.  <b>7</b> For a wing with a standard leading edge radius  <b>8</b> For kits including LH and RH see page 203.  <b>9</b> Add "LL" suffix for FAA-PMA/STC wing tips including Quasar LED landing/taxi lights and optimized to accept LED nav/strobe lights. Must purchase as a LH and RH kit. See page 203.                      Add "LED" suffix for FAA-PMA/STC wing tips optimized to accept LED nav/strobe lights.</p>				
150L,M S/N 15072004 thru 15079405				
Description	Idx	Part Number		
Cap, Rudder Top	J	26-0431013-1-80A <b>2T</b> 26-15-80A <b>5T</b> GF0430011-2 <b>5K</b> SA-0430011-2 <b>5S</b> SA-0431013-1 <b>2S</b>		
	I	K0431013-3-791 <b>K</b> SA-0431013-3 <b>S</b>		
	Cap, Vertical Fin Top No Beacon Base	I	26-0431017-1-80A <b>2T</b> 26-12 <b>5T</b> GF0430011-1 <b>5K</b> SA-0430011-1 <b>5S</b> SA-0431017-1 <b>2S</b>	
		Fairing, Brake Cover, LH	G	26-07-LBC <b>5T</b> SA-0441227-1 <b>S</b>
Fairing, Brake Cover, RH			G	26-07-RBC <b>5T</b> SA-0441227-2 <b>S</b>
	Fairing, Main Landing Gear, LH	F	244-4-13 <b>A</b> 26-06L <b>T</b> SA-0441217-15 <b>S</b>	
Fairing, Main Landing Gear, RH		F	244-4-14 <b>A</b> 26-06R <b>T</b> SA-0441217-14 <b>S</b>	
	Fairing, Main Wheel, LH (Wheel Pant)	B	GF0541223-01 <b>4K</b> SA-0541203-1 <b>1S</b> SA-0541223-17 <b>3S</b>	
Fairing, Main Wheel, RH (Wheel Pant)		B	GF0541223-02 <b>4K</b> SA-0541203-2 <b>1S</b> SA-0541223-16 <b>3S</b>	
		Fairing, Nose Wheel (Wheel Pant)	C	20-40N-80A <b>T</b> GF0543079-00 <b>6B</b> SA-0543065-1 <b>1S</b> SA-0543079-3 <b>3S</b>
	Fairing, Strut to Fuselage, LH		E	118-4-27 <b>A</b> 150-LFS <b>T</b> K0421002-1 <b>8T</b> SA-0421002-1 <b>7S</b>
Fairing, Strut to Fuselage, RH			E	118-4-26 <b>A</b> 150-RFS <b>T</b> K0421002-2 <b>8T</b> SA-0421002-2 <b>7S</b>
			Fairing, Strut to Wing, LH	D
		Fairing, Strut to Wing, RH		D
	Tip, Dorsal Fin			H
Tip, Elevator, LH or RH				L
	Tip, Horizontal Stab., LH or RH		K	26-08 <b>T</b> GF0430004-11791 <b>K</b> SA-0430004-11 <b>S</b>
Tip, Rudder Butt		M	26-11 <b>T</b> GF0431005-1-791 <b>K</b> SA-0431005-1 <b>S</b>	
	Tip, Wing, Conical Camber, LH	A	20-51L-80A <b>T</b> GF0523565-29791 <b>K</b> SA-0523565-29 <b>10S</b>	
Tip, Wing, Conical Camber, RH		A	20-51R-80A <b>T</b> GF0523565-30791 <b>K</b> SA-0523565-30 <b>10S</b>	
	Tip, Wing, Sym., LH or RH	A	26-0423008-3-80A <b>T</b> SA-0423008-3 <b>S</b>	

Continued from previous column				
Description	Idx	Part Number		
Tip, Wing, Conical, RH	A	20-51R-80A <b>T</b> GF0523565-30791 <b>K</b> SA-0523565-30 <b>10S</b>		
	Tip, Wing, Sym., LH or RH	A	26-0423008-3-80A <b>T</b> SA-0423008-3 <b>S</b>	
		Tip, Wing, Hoerner Style	A	11004 (set of two) <b>K</b>
Wing Pos., Light Shield, LH	A		219-4-5 <b>7A</b>	
	Wing Pos., Light Shield, RH	A	219-4-6 <b>7A</b>	
<p><b>1</b> S/N 15072004 thru 15074850 only  <b>2</b> S/N 15072004 thru 15075781 only  <b>3</b> S/N 15074851 and on  <b>4</b> S/N 15074851 thru 15077005 only  <b>5</b> S/N 15075782 and on  <b>6</b> Not for aircraft with heavy duty nose gear  <b>7</b> Also available as a FAA-PMA/STC approved split Fairing for easy installation and removal; add an "SP" suffix to the P/N.  <b>8</b> This is an ABS plastic part, split for easy installation.  <b>9</b> For a wing with a standard leading edge radius  <b>10</b> For kits including LH and RH see page 203.  <b>11</b> Add "LL" suffix for FAA-PMA/STC wing tips including Quasar LED landing/taxi lights and optimized to accept LED nav/strobe lights. Must purchase as a LH and RH kit. See page 203.                      Add "LED" suffix for FAA-PMA/STC wing tips optimized to accept LED nav/strobe lights.</p>				
A150K,L,M S/N A1500001 thru A1500734				
Description	Idx	Part Number		
Cap, Rudder Top	J	26-0431013-1-80A <b>2T</b> 26-15-80A <b>7T</b> GF0430011-2 <b>7K</b> SA-0430011-2 <b>7S</b> SA-0431013-1 <b>2S</b>		
	Cap, Vertical Fin Top No Beacon Base	I	K0431013-3-791 <b>2K</b> 26-12 <b>7T</b>	
		Cap, Vertical Fin 2 1/4" Beacon Base	I	GF0430011-1 <b>7K</b> SA-0430011-1 <b>7S</b> SA-0431017-1 <b>2S</b>
	Fairing, Brake Cover, LH		G	SA-0441227-1 <b>7S</b> SA-0431017-1 <b>2S</b>
Fairing, Brake Cover, RH		G	SA-0441227-2 <b>7S</b> 244-4-13 <b>A</b>	
	Fairing, Main Landing Gear, LH	F	26-06L <b>T</b> SA-0441217-15 <b>S</b>	
Fairing, Main Landing Gear, RH		F	244-4-14 <b>A</b> 26-06R <b>T</b> SA-0441217-15 <b>S</b>	
	Fairing, Main Landing Gear, RH	F	244-4-14 <b>A</b> 26-06R <b>T</b> SA-0441217-14 <b>S</b>	
Fairing, Main Wheel, LH (Wheel Pant)		B	GF0541223-01 <b>4K</b> SA-0541203-1 <b>1S</b> SA-0541223-17 <b>3S</b>	
		Fairing, Main Wheel, RH (Wheel Pant)	B	GF0541223-02 <b>4K</b> SA-0541203-2 <b>1S</b> SA-0541223-16 <b>3S</b>
	Fairing, Main Wheel, RH (Wheel Pant)		B	20-40N-80A <b>T</b> GF0543079-00 <b>6B</b> SA-0543065-1 <b>1S</b> SA-0543079-3 <b>3S</b>
Fairing, Nose Wheel (Wheel Pant)			C	118-4-27 <b>A</b> 150-LFS <b>T</b> K0421002-1 <b>8T</b> SA-0421002-1 <b>7S</b>
		Fairing, Strut to Fuselage, LH	E	118-4-26 <b>A</b> 150-RFS <b>T</b> K0421002-2 <b>8T</b> SA-0421002-2 <b>7S</b>
			Fairing, Strut to Fuselage, RH	E
	Fairing, Strut to Wing, LH			D
Tip, Dorsal Fin				H
		Tip, Elevator, LH or RH		L
Tip, Horizontal Stab., LH or RH			K	26-08 <b>T</b> GF0430004-11791 <b>K</b> SA-0430004-11 <b>S</b>
	Tip, Rudder Butt	M	26-11 <b>T</b> GF0431005-1-791 <b>K</b> SA-0431005-1 <b>S</b>	
Tip, Wing, Conical Camber, LH		A	20-51L-80A <b>T</b> GF0523565-29791 <b>K</b> SA-0523565-29 <b>10S</b>	
	Tip, Wing, Conical Camber, RH	A	20-51R-80A <b>T</b> GF0523565-30791 <b>K</b> SA-0523565-30 <b>10S</b>	
Tip, Wing, Sym., LH or RH		A	26-0423008-3-80A <b>T</b> SA-0423008-3 <b>S</b>	

Continued from previous column				
Description	Idx	Part Number		
Wing Pos., Light Shield, LH	A	219-4-5 <b>8A</b>		
Wing Pos., Light Shield, RH	A	219-4-6 <b>8A</b>		
<p><b>1</b> S/N A1500001 thru A1500226  <b>2</b> S/N A1500001 thru A1500523 only  <b>3</b> S/N A1500227 thru A1500429 only  <b>4</b> S/N A1500227 and on  <b>5</b> S/N A1500430 thru A1500523 only  <b>6</b> S/N A1500430 and on  <b>7</b> S/N A1500524 and on  <b>8</b> For a wing with a standard leading edge radius  <b>9</b> For kits including LH and RH see page 203.  <b>10</b> Add "LL" suffix for FAA-PMA/STC wing tips including Quasar LED landing/taxi lights and optimized to accept LED nav/strobe lights. Must purchase as a LH and RH kit. See page 203.                      Add "LED" suffix for FAA-PMA/STC wing tips optimized to accept LED nav/strobe lights.</p>				
F150F,G,H,J,K,L,M, FA150K,L,M, FRA150L,M S/N F150-0001 thru F15001428, FA1500001 thru FA1500336, FRA1500121 thru FRA1500261				
Description	Idx	Part Number		
Cap, Rudder Top	J	26-0431013-1-80A <b>3T</b> 26-15-80A <b>15T</b> GF0430011-2 <b>14K</b> SA-0431013-1 <b>3S</b>		
	Cap, Vertical Fin Top No Beacon Base	I	K0431013-3-791 <b>1K</b>	
		Cap, Vertical Fin 2 1/4" Beacon Base	I	SA-0430011-1 <b>14S</b> SA-0441227-1 <b>14S</b> SA-0441227-2 <b>14S</b>
	Fairing, Brake Cover, LH		G	SA-0441227-1 <b>14S</b> SA-0441227-2 <b>14S</b>
Fairing, Brake Cover, RH		G	SA-0441227-2 <b>14S</b> 26-06L <b>11T</b> SA-0441217-15 <b>11S</b>	
	Fairing, Main Lndg Gear LH	F	26-06R <b>11T</b> SA-0441217-14 <b>11S</b>	
Fairing, Main Lndg Gear RH		F	26-06R <b>11T</b> SA-0441217-14 <b>11S</b>	
	Fairing, Main Wheel, LH (Wheel Pant)	B	GF0541223-01 <b>12K</b> K0741046-203 <b>17K</b> SA-0541203-1 <b>9S</b> SA-0541223-17 <b>11S</b>	
Fairing, Main Wheel, RH (Wheel Pant)		B	GF0541223-02 <b>11K</b> K0741046-202 <b>17K</b> SA-0541203-2 <b>9S</b> SA-0541223-16 <b>11S</b>	
		Fairing, Main Wheel, RH (Wheel Pant)	B	20-40N-80A <b>11T</b> GF0543079-00 <b>12K</b> SA-0543065-1 <b>9S</b> SA-0543079-3 <b>13S</b>
	Fairing, Strut to Fuselage, LH		E	150-LFS <b>22T</b> K0421002-1 <b>6T</b> SA-0421002-1 <b>6S</b> SA-0522150-7 <b>19S</b>
Fairing, Strut to Fuselage, RH			E	150-RFS <b>22T</b> K0421002-2 <b>6T</b> SA-0421002-2 <b>6S</b> SA-0522150-6 <b>19S</b>
			Fairing, Strut to Wing, LH	D
		Fairing, Strut to Wing, RH		D
	Tip, Dorsal Fin			H
Tip, Elevator, LH or RH				L
	Tip, Rudder Butt		M	26-08 <b>T</b> GF0430004-11791 <b>4K</b> SA-0430004-11 <b>5S</b>
Tip, Horizontal Stab., LH or RH		K	26-08 <b>T</b> GF0430004-11791 <b>4K</b> SA-0430004-11 <b>5S</b>	
	Tip, Wing, Con. Camber LH	A	GF0523565-29791 <b>K</b> SA-0523565-29 <b>10S</b>	
Tip, Wing, Con. Camber RH		A	GF0523565-30791 <b>K</b> SA-0523565-30 <b>10S</b>	
	Tip, Wing, LH	A	20-51L-80A <b>8T</b>	
Tip, Wing, RH		A	20-51R-80A <b>8T</b>	
	Tip, Wing, Symmetrical	A	26-0423008-3-80A <b>T</b> SA-0423008-3 <b>2S</b>	

Eligibility continues in the next column

Eligibility continues in the next column

Eligibility continues on the next page

Manufacturer/Material: **A** Aircraft Development/Fiberglass, **K** Knots 2U/Fiberglass, **S** Stene Aviation/Fiberglass, **T** Texas Aeroplastics/ABS Plastic Parts

**Cessna 150-152 Series Aircraft**

**Continued from previous page**

1 S/N F150-0001 thru F15000523, and S/N FA1500001 thru FA1500261 only  
 2 S/N F150-0001 thru F15000658  
 3 S/N F150-0001 thru F15001143 and S/N FA1500001 thru FA1500261 only  
 4 S/N F150-0001 thru F15001428, and S/N FA1500001 thru FA1500336 only  
 5 S/N F150-0001 thru F15001428, and S/N FA1500001 thru FA1500261 only  
 6 S/N F150-0220 thru F15001428 only  
 7 S/N F15000530 thru F15001428 only  
 8 S/N F15000530 thru F15001428, and S/N FA1500001 thru FA1500336 only  
 9 S/N F15000659 thru F15001143, and S/N FA1500082 thru FRA1500120 only  
 10 S/N F15000659 thru F15001428, and S/N FA1500082 thru FRA1500261 only  
 11 S/N F15000659 thru F15001428, and S/N FA1500082 thru FRA1500336 only  
 12 S/N F15001014 thru F15001428 only  
 13 S/N F15001144 thru F15001428, and S/N FA1500082 thru FA1500336 only  
 14 S/N F15001144 thru F15001428, and S/N FA1500262 thru FA1500336 only  
 15 S/N F15001144 thru F15001428, and S/N FA1500262 thru FA1500336, and S/N FRA1500262 thru FRA1500336 only  
 16 S/N F150-0390 thru F15000658 and S/N FA1500001 thru FA1500081 only  
 17 S/N F15000530 thru F15000658 and S/N FA1500001 thru FA1500081 only  
 18 S/N FA1500001 thru FA1500120 only  
 19 S/N FA1500001 thru FA1500261 only  
 20 This is an ABS plastic part, split for easy installation.  
 21 For kits including LH and RH see page 203.  
 22 S/N F150-0001 thru F15001428 only

**152, A152, F152, FA152**  
 S/N 15279406 thru 15286033, A1520735 thru A1521049, F15201429 thru F15201980, FA1520337 thru FA1520425

Description	Idx	Part Number
Cap, Rudder Top	J	26-15-80A <b>T</b>
		GF0430011-2 <b>G K</b>
		SA-0430011-2 <b>S</b>
Cap, Vertical Fin Top 2 1/4" Beacon Base	I	26-12 <b>2 T</b>
		GF0430011-1 <b>2 K</b>
		SA-0430011-1 <b>S</b>
Fairing, Brake Cover, LH	G	26-07-LBC <b>1 T</b>
		SA-0441227-1 <b>S</b>
Fairing, Brake Cover, RH	G	26-07-RBC <b>1 T</b>
		SA-0441227-2 <b>S</b>
Fairing, Main Landing Gear LH	F	244-4-13 <b>A</b>
		26-06L <b>T</b>
		SA-0441217-15 <b>S</b>
Fairing, Main Landing Gear RH	F	244-4-14 <b>A</b>
		26-06R <b>T</b>
		SA-0441217-14 <b>S</b>
Fairing, Main Wheel, LH (Wheel Pant)	B	GF0541223-01 <b>K</b>
		SA-0541223-17 <b>S</b>
Fairing, Main Wheel, RH (Wheel Pant)	B	GF0541223-02 <b>K</b>
		SA-0541223-16 <b>S</b>
Fairing, Nose Wheel (Wheel Pant)	C	20-40N-80A <b>T</b>
		GF0543079-00 <b>K</b>
		SA-0543079-3 <b>S</b>
Fairing, Strut to Fuselage, LH	E	118-4-27 <b>1 A</b>
		150-LFS <b>4 T</b>
		K0421002-1 <b>1 10 T</b>
		SA-0421002-1 <b>1 8 S</b>
		SA-0421002-3 <b>7 S</b>
Fairing, Strut to Fuselage, RH	E	118-4-26 <b>1 A</b>
		150-RFS <b>4 T</b>
		K0421002-2 <b>1 9 T</b>
		SA-0421002-2 <b>1 8 S</b>
		SA-0421002-4 <b>7 S</b>
Fairing, Strut to Wing, LH	D	118-4-5 <b>1 A</b>
		150-LWS <b>4 T</b>
		K0522150-3 <b>4 9 K</b>
		SA-0522150-3 <b>1 8 S</b>
Fairing, Strut to Wing, RH	D	SA-0522150-7 <b>7 S</b>
		118-4-4 <b>1 A</b>
		150-RWS <b>4 T</b>
		K0522150-4 <b>4 9 K</b>
Tip, Dorsal Fin	H	SA-0522150-4 <b>1 8 S</b>
		26-09 <b>T</b>
		SA-0522150-6 <b>7 S</b>
Tip, Elevator, LH or RH	L	26-10 <b>1 T</b>
		SA-0431024-1 <b>1 8 S</b>
Tip, Horizontal Stab., LH or RH	K	GF0430004-10791 <b>K</b>
		SA-0430004-10 <b>1 8 S</b>
		GF0430004-11791 <b>K</b>
		SA-0430004-11 <b>2 S</b>

**Eligibility continues in the next column**

**Continued from previous column**

Tip, Rudder Butt	M	26-11 <b>2 T</b>
		GF0431005-1-791 <b>K</b>
		SA-0431005-1 <b>7 5</b>
Tip, Wing, Conical, LH	A	20-51L-80A <b>T</b>
		GF0523565-29791 <b>K</b>
		SA-0523565-29 <b>12 13 S</b>
Tip, Wing, Conical, RH	A	20-51R-80A <b>T</b>
		GF0523565-30791 <b>K</b>
		SA-0523565-30 <b>12 13 S</b>
Tip, Wing, Symmetrical	A	26-0423008-3-80A <b>T</b>
Wing Pos., Light Shield, LH	A	219-4-5 <b>10 A</b>
Wing Pos., Light Shield, RH	A	219-4-6 <b>10 A</b>

1 Model 152 only  
 2 Models 152, A152 only  
 3 Models 152, A152, F152 only  
 4 Models 152 and F152 only  
 5 S/N 15279406 thru 15286033, and S/N F15201429 thru F15201952, and S/N FA1520337 thru FA1520387 only  
 6 S/N A1520735 thru A1521049 only  
 7 Also available as a FAA-PMA/STC approved split Fairing for easy installation and removal; add an "SP" suffix to the P/N.  
 8 This is an ABS plastic part, split for easy installation.  
 9 For a wing with a standard leading edge radius  
 10 For kits including LH and RH see page 203.  
 11 Add "LL" suffix for FAA-PMA/STC wing tips including Quasar LED landing/taxi lights and optimized to accept LED nav/strobe lights. Must purchase as a LH and RH kit. See page 203.  
 12 Add "LED" suffix for FAA-PMA/STC wing tips optimized to accept LED nav/strobe lights.

Description	Idx	Part Number
Cap, Rudder Top	J	26-15-80A <b>T</b>
		GF0430011-2 <b>G K</b>
		SA-0430011-2 <b>S</b>
Cap, Vertical Fin Top 2 1/4" Beacon Base	I	26-12 <b>2 T</b>
		GF0430011-1 <b>2 K</b>
		SA-0430011-1 <b>S</b>
Fairing, Brake Cover, LH	G	26-07-LBC <b>1 T</b>
		SA-0441227-1 <b>S</b>
Fairing, Brake Cover, RH	G	26-07-RBC <b>1 T</b>
		SA-0441227-2 <b>S</b>
Fairing, Main Landing Gear LH	F	244-4-13 <b>A</b>
		26-06L <b>T</b>
		SA-0441217-15 <b>S</b>
Fairing, Main Landing Gear RH	F	244-4-14 <b>A</b>
		26-06R <b>T</b>
		SA-0441217-14 <b>S</b>
Fairing, Main Wheel, LH (Wheel Pant)	B	GF0541223-01 <b>K</b>
		SA-0541223-17 <b>S</b>
Fairing, Main Wheel, RH (Wheel Pant)	B	GF0541223-02 <b>K</b>
		SA-0541223-16 <b>S</b>
Fairing, Nose Wheel (Wheel Pant)	C	20-40N-80A <b>T</b>
		GF0543079-00 <b>K</b>
		SA-0543079-3 <b>S</b>
Fairing, Strut to Fuselage, LH	E	118-4-27 <b>1 A</b>
		150-LFS <b>4 T</b>
		K0421002-1 <b>1 10 T</b>
		SA-0421002-1 <b>1 8 S</b>
		SA-0421002-3 <b>7 S</b>
Fairing, Strut to Fuselage, RH	E	118-4-26 <b>1 A</b>
		150-RFS <b>4 T</b>
		K0421002-2 <b>1 9 T</b>
		SA-0421002-2 <b>1 8 S</b>
		SA-0421002-4 <b>7 S</b>
Fairing, Strut to Wing, LH	D	118-4-5 <b>1 A</b>
		150-LWS <b>4 T</b>
		K0522150-3 <b>4 9 K</b>
		SA-0522150-3 <b>1 8 S</b>
Fairing, Strut to Wing, RH	D	SA-0522150-7 <b>7 S</b>
		118-4-4 <b>1 A</b>
		150-RWS <b>4 T</b>
		K0522150-4 <b>4 9 K</b>
Tip, Dorsal Fin	H	SA-0522150-4 <b>1 8 S</b>
		26-09 <b>T</b>
		SA-0522150-6 <b>7 S</b>
Tip, Elevator, LH or RH	L	26-10 <b>1 T</b>
		SA-0431024-1 <b>1 8 S</b>
Tip, Horizontal Stab., LH or RH	K	GF0430004-10791 <b>K</b>
		SA-0430004-10 <b>1 8 S</b>
		GF0430004-11791 <b>K</b>
		SA-0430004-11 <b>2 S</b>

**Kits for 150-152 aircraft**

Kit P/N	Kit Description	Part Number	Item Description
20-51-80A	Conical Wing Tip Kit	20-51L-80A	Tip, Wing, LH
		20-51R-80A	Tip, Wing, RH
26-04-80A	Strut Fairing Kit, Plastic	150-LFS	Fairing, Strut to Fuselage, LH
		150-RFS	Fairing, Strut to Fuselage, RH
		150-LWS	Fairing, Strut to Wing, LH
		150-RWS	Fairing, Strut to Wing, RH
26-05-80A	Landing Gear Fairing Kit Flat Gear Only	FS-150-LG	Fairing, Main Landing Gear, LH
		FS-150-RG	Fairing, Main Landing Gear, RH
26-06-80A	Landing Gear Fairing Kit Tube Gear Only	26-06L	Fairing, Main Landing Gear, LH
		26-06R	Fairing, Main Landing Gear, RH
26-07-80A	Brake Cover Fairing Kit	26-07-LBC	Fairing, Brake Cover, LH
		26-07-RBC	Fairing, Brake Cover, RH
		118-4-27	Fairing, Strut to Fuselage, LH
118-92	Strut Fairing Kit, Fiberglass	118-4-26	Fairing, Strut to Fuselage, RH
		118-4-5	Fairing, Strut to Wing, LH
		118-4-4	Fairing, Strut to Wing, RH
KPS04	Split Strut Fairing Kit, Plastic	K0421002-1	Fairing, Strut to Fuselage, LH
		K0421002-2	Fairing, Strut to Fuselage, RH
		K0522150-3	Fairing, Strut to Wing, LH
		K0522150-4	Fairing, Strut to Wing, RH
SA-0421002-1234	Fairing Kit, Fiberglass For FAA-PMA/STC split Fairings add an "SP" suffix to the kit P/N.	SA-0421002-1	Fairing, Strut to Fuselage, LH
		SA-0421002-2	Fairing, Strut to Fuselage, RH
		SA-0522150-3	Fairing, Strut to Wing, LH
		SA-0522150-4	Fairing, Strut to Wing, RH
SA-0523565-2930	Wing Tips <b>1 2</b>	SA-0523565-29	Tip, Wing, Conical, LH
		SA-0523565-30	Tip, Wing, Conical, RH

1 Add "LL" suffix for FAA-PMA/STC wing tips including Quasar LED landing/taxi lights and optimized to accept LED nav/strobe lights. Optional installation kit including all hardware required for installation of Quasar LED lighted wing tips is available. Kits include shielded wire, all connectors, switches and breaker. 14v installation kit USE P/N INSTALL14V.  
 28v installation kit USE P/N INSTALL28V.  
 2 Add "LED" suffix for FAA-PMA/STC wing tips optimized to accept LED nav/strobe lights.

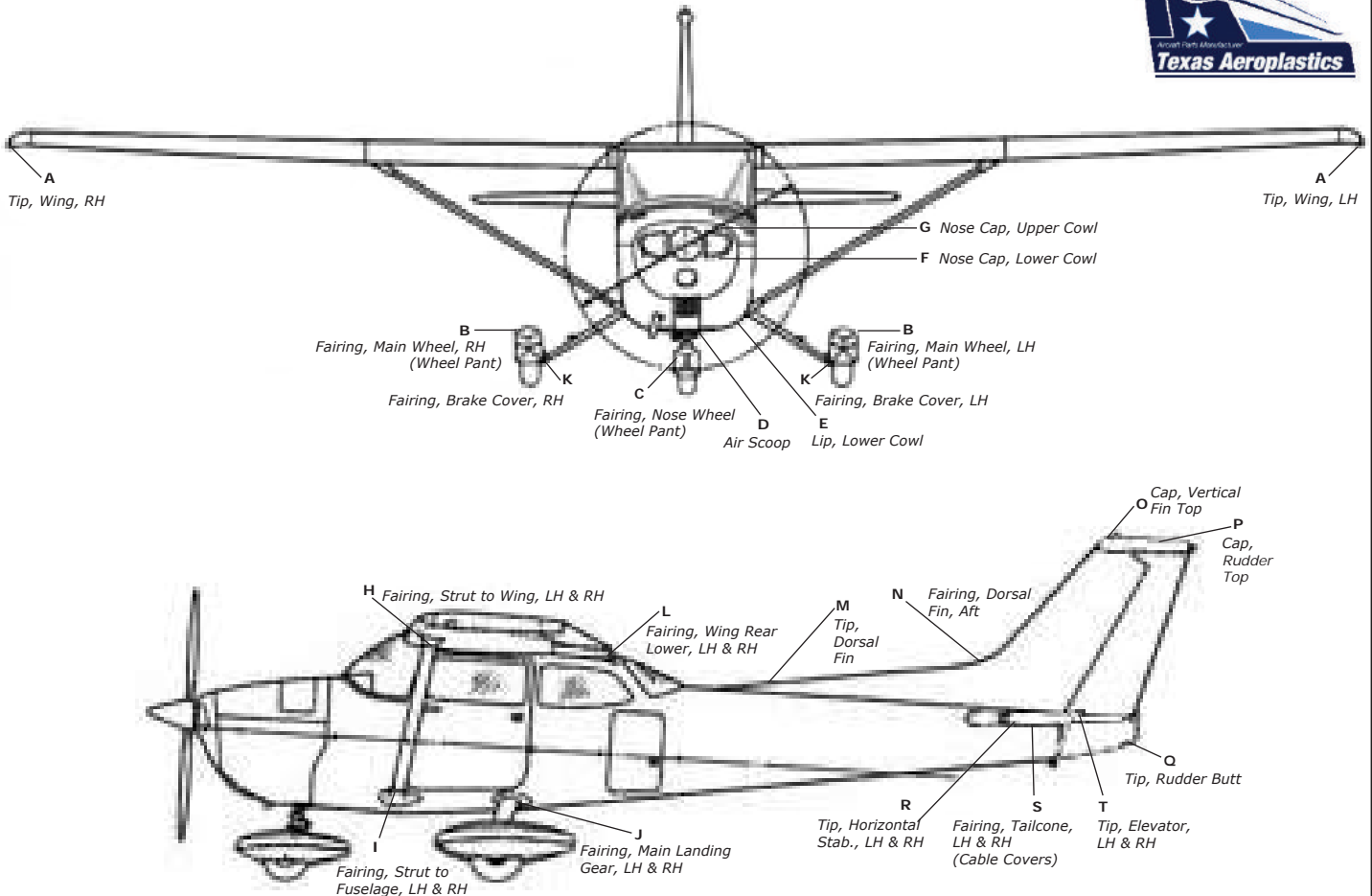
**Improve the appearance and performance of your aircraft!**

Strut and landing gear fairings, tail surface fairings, wing tips, and cowling fairings for Cessna 170-177 series aircraft available in ABS plastic and fiberglass.

**SAVE!!**



Eligibility tables for Cessna 170, 172, 175 and 177 aircraft with item descriptions, index reference and part numbers can be found on the following pages.



**Cessna 170, 172, 175 and 177 Series Aircraft**

170, 170A,B S/N 18000 thru 27169		
Description	Idx	Part Number
Air Scoop	D	GF0552001-16 <b>2 K</b>
Fairing, Strut To Fuslg LH	I	118-4-7 <b>1 A</b>
		SA-0522150-1SP <b>1 S</b>
Fairing, Strut To Fuslg RH	I	118-4-6 <b>1 A</b>
		SA-0522150-2SP <b>1 S</b>
Fairing, Strut To Wing LH	H	118-4-5 <b>1 A</b>
Fairing, Strut To Wing RH	H	118-4-4 <b>1 A</b>
Lip, Lower Cowl	E	GF55200-00 <b>3 K</b>
Nose Cap, Lower Cowl	F	GF0552002-51 <b>1 K</b>
Nose Cap, Upper Cowl	G	GF0595000-3 <b>1 K</b>
Tip, Wing, Conical, LH	A	SA-0523565-29 <b>1 S 7 S</b>
Tip, Wing, Conical, RH	A	SA-0523565-30 <b>1 S 7 S</b>
Tip, Wing, LH or RH	A	SA-0723615-200 <b>5</b>
Tip, Wing, Hoerner Style	A	11004 (set of two) <b>3 K</b>
Wing Pos., Light Shield, LH	A	219-4-5 <b>6 A</b>
Wing Pos., Light Shield, RH	A	219-4-6 <b>6 A</b>

**1** S/N 18730 and on  
**2** S/N 19200 and on  
**3** S/N 20267 and on  
**4** S/N 25373 and on  
**5** FAA-PMA/STC approved split fairing for easy installation and removal.  
**6** For a wing with a standard leading edge radius  
**7** Add "LL" suffix for FAA-PMA/STC wing tips including Quasar LED landing/taxi lights and optimized to accept LED nav/strobe lights. Must purchase as a LH and RH kit. See page 207.  
**8** Add "LED" suffix for FAA-PMA/STC wing tips optimized to accept LED nav/strobe lights.

172, 172A, B, C, D, E, F, G, H, I S/N 28000 thru 17257161		
Description	Idx	Part Number
Air Scoop	D	GF0552001-16 <b>2 K</b>
Cap, Rudder Top	P	28-531006-34-80A <b>7 T</b>
		K0531006-34 <b>11 K</b>
		SA-0531006-34 <b>7 S</b>
Cap, Vertical Fin No Beacon Base	O	28-531006-33-80A <b>7 T</b>
		SA-0531006-33 <b>7 S</b>
Cap, Vertical Fin 2 1/4" Beacon Base	O	SA-0531001-36 <b>2 S</b>
		28-0531109-180A <b>13 T</b>
Cap, Vertical Fin 3 1/2" Beacon Base	O	SA-0531009-1 <b>12 S</b>
		SA-0531004-3 <b>2 S</b>
Fairing, Main Wheel, LH (Wheel Pant)	B	K0741046-203 <b>13 K</b>
Fairing, Main Wheel, RH (Wheel Pant)	B	K0741046-202 <b>13 K</b>
Fairing, Nose Wheel		K0743625-14 <b>13 K</b>
Fairing, Strut To Fuslg LH	I	118-4-7 <b>A</b>
		28-07-LFS <b>T</b>
		K0522150-1 <b>6 T</b>
		SA-0522150-1 <b>14 S</b>
Fairing, Strut To Fuslg RH	I	118-4-6 <b>A</b>
		28-07-RFS <b>T</b>
		K0522150-2 <b>6 T</b>
		SA-0522150-2 <b>14 S</b>
Fairing, Strut To Wing, LH	H	118-4-5 <b>17 A</b>
		118-4-15 <b>17 A</b>
		28-06-LWS <b>6 T</b>
		K0522150-3 <b>6 T</b>
		SA-0522150-3 <b>14 S</b>
Fairing, Strut To Wing, RH	H	118-4-4 <b>17 A</b>
		118-4-14 <b>17 A</b>
		28-06-RWS <b>6 T</b>
		K0522150-4 <b>6 T</b>
		SA-0522150-4 <b>14 S</b>
Fairing Wing Rear Low, LH	L	GF0520006-01 <b>11 K</b>
Fairing Wing Rear Low, RH	L	GF0520006-02 <b>11 K</b>
Fairing, Tailcone (Cable Covers) LH or RH	S	28-18 <b>10 T</b>
Lip, Lower Cowl	E	GF55200-00 <b>3 K</b>
Nose Cap, Lower Cowl	F	GF0552002-51 <b>1 K</b>
Nose Cap, Upper Cowl	G	GF0595000-3 <b>1 K</b>
Nose Cap, Skin	N/A	K0552010-17 <b>10 K</b>
Tip, Dorsal Fin	M	28-15 <b>12 T</b>
Tip, Elevator, LH	T	220-4-7 <b>11 A</b>
		28-09-L <b>11 T</b>
		GF0532001-94 <b>11 K</b>
		SA-0532001-94 <b>11 S</b>
Tip, Elevator, RH	T	220-4-8 <b>11 A</b>
		28-09-R <b>11 T</b>
		GF0532001-100 <b>11 K</b>
		SA-0532001-100 <b>11 S</b>

**13** S/N 17257162 thru 17259223 only  
**14** S/N 17257162 thru 17259903 only  
**15** S/N 17257162 thru 17260758 only  
**16** S/N 17257162 thru 17265684 only  
**17** S/N 17259224 thru 17260758 only  
**18** S/N 17259224 thru 17261898 only  
**19** S/N 17259224 thru 17263458 only  
**20** S/N 17259224 and on  
**21** S/N 17259904 and on  
**22** S/N 17260759 and on  
**23** S/N 17261899 and on  
**24** S/N 17263459 and on  
**25** S/N 17265485 and on  
**26** S/N 17265685 and on  
**27** Also available as a FAA-PMA/STC approved split Fairing for easy installation and removal; add an "SP" suffix to the P/N.  
**28** For a wing with a standard leading edge radius  
**29** For a wing with STOL leading edge radius  
**30** For kits including LH and RH see page 207.  
**31** Add "LL" suffix for FAA-PMA/STC wing tips including Quasar LED landing/taxi lights and optimized to accept LED nav/strobe lights. Must purchase as a LH and RH kit. See page 207.  
**32** Add "LED" suffix for FAA-PMA/STC wing tips optimized to accept LED nav/strobe lights.

Continued from previous column		
Description	Idx	Part Number
Tip, Elevator, LH or RH	T	K0532001-62 <b>8 K</b>
		SA-0532001-62 <b>8 S</b>
Tip, Rudder Butt	Q	28-21-80A <b>7 T</b>
		K0531006-35 <b>7 K</b>
		K0531104 <b>2 K</b>
		SA-0531104 <b>2 S</b>
		SA-0531006-35 <b>7 S</b>
Tip, Horiz. Stab., LH or RH	R	K0532001-61 <b>9 K</b>
		SA-0532001-61 <b>9 S</b>
		28-10 <b>11 T</b>
Tip, Wing, Conical, LH	A	GF0532001-00 <b>11 K</b>
		SA-0532001-93 <b>11 S</b>
		SA-0523565-29 <b>16 17 S</b>
Tip, Wing, Conical, RH	A	SA-0523565-30 <b>16 17 S</b>
Tip, Wing, Hoerner Style	A	11004 (set of two) <b>K</b>
Tip, Wing, Sym., LH or RH	A	K0723615-200 <b>5 K</b>
Wing Pos., Light Shield, LH	A	219-4-5 <b>13 A</b>
Wing Pos., Light Shield, RH	A	219-4-6 <b>13 A</b>

**11** S/N 28000 thru 36965 only  
**12** S/N 28000 thru 46754 only  
**13** S/N 28000 thru 47746 only  
**14** S/N 28000 thru 17248734 only  
**15** S/N 28000 thru 17249544 only  
**16** S/N 28000 thru 17258486 only  
**17** S/N 46518 and on  
**18** S/N 46755 and on  
**19** S/N 17247747 thru 17249085 only  
**20** S/N 17247747 thru 17249544 only  
**21** S/N 17247747 thru 17253392 only  
**22** S/N 17249545 and on  
**23** S/N 17254425 and on  
**24** S/N 17254893 and on  
**25** Also available as a FAA-PMA/STC approved split Fairing for easy installation and removal; add an "SP" suffix to the P/N.  
**26** For a wing with a standard leading edge radius  
**27** For kits including LH and RH see page 207.  
**28** Add "LL" suffix for FAA-PMA/STC wing tips including Quasar LED landing/taxi lights and optimized to accept LED nav/strobe lights. Must purchase as a LH and RH kit. See page 207.  
**29** Add "LED" suffix for FAA-PMA/STC wing tips optimized to accept LED nav/strobe lights.

172K, L, M S/N 17257162 thru 17267584		
Description	Idx	Part Number
Cap, Rudder Top	P	28-19-80A <b>T</b>
		28-04-80A <b>10 T</b>
		K0533009-1-791 <b>4 K</b>
		K0531006-112 <b>14 K</b>
		SA-0533009-1 <b>4 S</b>
Cap, Vertical Fin All with 2 1/4" Beacon Base	O	SA-0531006-112 <b>14 S</b>
		28-24-80A <b>T</b>
		28-02 <b>13 T</b>
		GF0531033-1 <b>14 K</b>
		SA-0531003-1 <b>14 S</b>
Fairing, Brake Cover, LH	K	SA-0531013-1 <b>9 S</b>
		28-08-LBC <b>11 T</b>
Fairing, Brake Cover, RH	K	SA-0541224-1 <b>10 S</b>
		28-08-RBC <b>11 T</b>
Fairing, Dorsal Fin, Aft	N	SA-0541224-2 <b>10 S</b>
		28-17 <b>2 T</b>
		K0531012-2 <b>9 K</b>
Fairing, Landing Gear, LH	J	SA-0531012-2 <b>8 S</b>
		244-4-9 <b>8 A</b>
		28-05-LGF <b>8 T</b>
Fairing, Landing Gear, RH	J	SA-1741005-239 <b>8 S</b>
		244-4-10 <b>8 A</b>
		28-05-RGF <b>8 T</b>
Fairing, Main Wheel, LH (Wheel Pant)	B	SA-1741005-240 <b>8 S</b>
		GF0541223-01 <b>11 K</b>
Fairing, Main Wheel, RH (Wheel Pant)	B	K0741046-203 <b>1 K</b>
		SA-0541203-1 <b>6 S</b>
Fairing, Nose Wheel	C	SA-0541223-17 <b>11 S</b>
		GF0541223-02 <b>11 K</b>
		K0741046-202 <b>1 K</b>
Fairing, Main Wheel, RH (Wheel Pant)	B	SA-0541203-2 <b>6 S</b>
		SA-0541223-16 <b>11 S</b>
		20-40N-80A <b>10 T</b>
		GF0543079-00 <b>11 K</b>
Fairing, Main Wheel, LH (Wheel Pant)	B	K0743625-14 <b>1 K</b>
		SA-0543065-1 <b>7 S</b>
		SA-0543079-3 <b>12 S</b>

**11** S/N 17257162 thru 17259223 only  
**12** S/N 17257162 thru 17259903 only  
**13** S/N 17257162 thru 17260758 only  
**14** S/N 17257162 thru 17265684 only  
**15** S/N 17259224 thru 17260758 only  
**16** S/N 17259224 thru 17261898 only  
**17** S/N 17259224 thru 17263458 only  
**18** S/N 17259224 and on  
**19** S/N 17259904 and on  
**20** S/N 17260759 and on  
**21** S/N 17261899 and on  
**22** S/N 17263459 and on  
**23** S/N 17265485 and on  
**24** S/N 17265685 and on  
**25** Also available as a FAA-PMA/STC approved split Fairing for easy installation and removal; add an "SP" suffix to the P/N.  
**26** For a wing with a standard leading edge radius  
**27** For a wing with STOL leading edge radius  
**28** For kits including LH and RH see page 207.  
**29** Add "LL" suffix for FAA-PMA/STC wing tips including Quasar LED landing/taxi lights and optimized to accept LED nav/strobe lights. Must purchase as a LH and RH kit. See page 207.  
**30** Add "LED" suffix for FAA-PMA/STC wing tips optimized to accept LED nav/strobe lights.

Continued from previous column		
Description	Idx	Part Number
Fairing, Strut To Fuslg, LH	I	118-4-7 <b>A</b>
		28-07-LFS <b>T</b>
		K0522150-1 <b>6 T</b>
Fairing, Strut To Fuslg, RH	I	SA-0522150-1 <b>15 S</b>
		118-4-6 <b>A</b>
		28-07-RFS <b>T</b>
Fairing, Strut To Wing, LH	H	K0522150-2 <b>6 T</b>
		SA-0522150-2 <b>15 S</b>
		118-4-5 <b>3 A</b>
Fairing, Strut To Wing, RH	H	118-4-15 <b>10 A</b>
		28-06-LWS <b>3 T</b>
		28-07-LWS <b>10 T</b>
		K0522150-3 <b>3 T</b>
		SA-0522150-3 <b>3 15 S</b>
		SA-0523047-1 <b>10 15 S</b>
Fairing, Tailcone (Cable Covers) LH or RH	S	118-4-4 <b>3 A</b>
		118-4-14 <b>10 A</b>
		28-06-RWS <b>3 T</b>
Fairing Wing Rear Low, LH	L	GF0520006-01 <b>K</b>
Fairing Wing Rear Low, RH	L	GF0520006-02 <b>K</b>
Tip, Dorsal Fin	M	28-15 <b>2 T</b>
		28-16 <b>9 T</b>
Tip, Elevator, LH	T	SA-0531020-1 <b>8 S</b>
		28-09-L <b>T</b>
		GF0532001-94 <b>K</b>
Tip, Elevator, RH	T	SA-0532001-94 <b>S</b>
		28-09-R <b>T</b>
Tip, Rudder Butt	Q	GF0532001-100 <b>K</b>
		SA-0532001-100 <b>S</b>
		28-12 <b>T</b>
Tip, Horiz. Stab., LH or RH	R	GF0531006-80-791 <b>K</b>
		SA-0531006-80 <b>S</b>
Tip, Wing, Conical, LH	A	SA-0532001-93 <b>S</b>
		20-51L-80A <b>3 T</b>
		20-52L-80A <b>10 T</b>
		GF0523565-29-791 <b>5 K</b>
		GF0723200-5 <b>10 K</b>
Tip, Wing, Conical, RH	A	SA-0723200-5 <b>10 18 19 S</b>
		SA-0523565-29 <b>3 18 19 S</b>
		20-51R-80A <b>3 T</b>
		20-52R-80A <b>10 T</b>
		GF052356530-791 <b>5 K</b>
Tip, Wing, Hoerner Style	A	GF0723200-6 <b>10 K</b>
		SA-0523565-30 <b>3 18 19 S</b>
		SA-0723200-6 <b>10 18 19 S</b>
Tip, Wing, Sym., LH or RH	A	SA-0523565-30 <b>3 18 19 S</b>
		SA-0523565-30 <b>3 18 19 S</b>
Wing Pos., Light Shield, LH	A	219-4-5 <b>13 A</b>
Wing Pos., Light Shield, RH	A	219-4-6 <b>13 A</b>

**11** S/N 17257162 thru 17259223 only  
**12** S/N 17257162 thru 17259903 only  
**13** S/N 17257162 thru 17260758 only  
**14** S/N 17257162 thru 17265684 only  
**15** S/N 17259224 thru 17260758 only  
**16** S/N 17259224 thru 17261898 only  
**17** S/N 17259224 thru 17263458 only  
**18** S/N 17259224 and on  
**19** S/N 17259904 and on  
**20** S/N 17260759 and on  
**21** S/N 17261899 and on  
**22** S/N 17263459 and on  
**23** S/N 17265485 and on  
**24** S/N 17265685 and on  
**25** Also available as a FAA-PMA/STC approved split Fairing for easy installation and removal; add an "SP" suffix to the P/N.  
**26** For a wing with a standard leading edge radius  
**27** For a wing with STOL leading edge radius  
**28** For kits including LH and RH see page 207.  
**29** Add "LL" suffix for FAA-PMA/STC wing tips including Quasar LED landing/taxi lights and optimized to accept LED nav/strobe lights. Must purchase as a LH and RH kit. See page 207.  
**30** Add "LED" suffix for FAA-PMA/STC wing tips optimized to accept LED nav/strobe lights.

**Cessna 170, 172, 175 and 177 Series Aircraft**

172N,P,Q,R,S S/N 17267585 thru 172S9999		
Description	Idx	Part Number
Cap, Rudder Top	P	28-04-80A <b>4 1 T</b>
		K0533155-2 <b>8 3 K</b>
		K0531006-112 <b>2 1 K</b>
		SA-0531006-112 <b>4 1 S</b>
Cap, Vertical Fin 2 1/4" Beacon Base	O	28-02 <b>1 1 T</b>
		GF0531033-1 <b>1 K</b>
		SA-0531003-1 <b>1 1 3 S</b>
Fairing, Brake Cover, LH	K	28-08-LBC <b>1 T</b>
		SA-0541224-1 <b>1 S</b>
Fairing, Brake Cover, RH	K	28-08-RBC <b>1 T</b>
		SA-0541224-2 <b>1 S</b>
Fairing, Dorsal Fin, Aft	N	K0531012-2 <b>1 K</b>
		SA-0531012-2 <b>1 S</b>
Fairing, Landing Gear, LH	J	244-4-9 <b>4 1 A</b>
		28-05-LGF <b>4 1 T</b>
		SA-1741005-239 <b>4 1 S</b>
		SA-1741005-59 <b>8 1 S</b>
Fairing, Landing Gear, RH	J	244-4-10 <b>4 1 A</b>
		28-05-RGF <b>4 1 T</b>
		SA-1741005-240 <b>4 1 S</b>
		SA-1741005-60 <b>8 1 S</b>
Fairing, Main Wheel, LH (Wheel Pant)	B	GF0541223-01 <b>1 K</b>
		SA-0541223-17 <b>1 S</b>
Fairing, Main Wheel, RH (Wheel Pant)	B	GF0541223-02 <b>1 K</b>
		SA-0541223-16 <b>1 S</b>
Fairing, Nose Wheel	C	20-40N-80A <b>1 T</b>
		GF0543079-00 <b>1 K</b>
		SA-0543079-3 <b>1 S</b>
Fairing, Strut To Fuslg, LH	I	118-4-7 <b>1 A</b>
		28-07-LFS <b>1 T</b>
		K0522150-1 <b>1 T</b>
		SA-0522150-1 <b>1 S</b>
Fairing, Strut To Fuslg, RH	I	118-4-6 <b>1 A</b>
		28-07-RFS <b>1 T</b>
		K0522150-2 <b>1 T</b>
		SA-0522150-2 <b>1 S</b>
Fairing, Strut To Wing, LH	H	118-4-15 <b>1 A</b>
		28-07-LWS <b>1 T</b>
		SA-0523047-1 <b>1 S</b>
Fairing, Strut To Wing, RH	H	118-4-14 <b>1 A</b>
		28-07-RWS <b>1 T</b>
		SA-0523047-2 <b>1 S</b>
Fairing, Tailcone (Cable Covers) LH or RH	S	28-18 <b>1 T</b>
		SA-0530011-2 <b>1 S</b>
Fairing Wing Rear Low, LH	L	GF0520006-01 <b>4 1 K</b>
Fairing Wing Rear Low, RH	L	GF0520006-02 <b>4 1 K</b>
Tip, Dorsal Fin	M	28-16 <b>1 T</b>
		SA-0531020-1 <b>1 S</b>
Tip, Elevator, LH	T	28-09-L <b>1 T</b>
		GF0532001-94 <b>1 K</b>
Tip, Elevator, RH	T	SA-0532001-94 <b>1 S</b>
		28-09-R <b>1 T</b>
Tip, Rudder Butt	Q	GF0532001-100 <b>1 K</b>
		SA-0532001-100 <b>1 S</b>
		28-11 <b>7 1 T</b>
Tip, Horiz. Stab., LH or RH	D	28-12 <b>2 1 T</b>
		GF053100680-791 <b>2 1 K</b>
		K0533155-1 <b>8 1 K</b>
		SA-0531006-80 <b>4 1 S</b>
Tip, Wing, LH	A	SA-0533155-1 <b>8 1 S</b>
		28-10 <b>7 1 T</b>
		GF0532001-00 <b>7 1 K</b>
		SA-0532001-93 <b>1 S</b>
Tip, Wing, RH	A	20-52L-80A <b>1 T</b>
		GF0723200-5 <b>5 1 K</b>
		SA-0723200-5 <b>5 1 1 1 2 S</b>
		SA-0723205-1 <b>8 1 S</b>
Wing Pos., Light Shield, LH	A	20-52R-80A <b>1 T</b>
		GF0723200-6 <b>5 1 K</b>
		SA-0723200-6 <b>5 1 1 1 2 S</b>
Wing Pos., Light Shield, RH	A	SA-0723205-2 <b>8 1 S</b>
		219-4-7 <b>10 1 A</b>
		219-4-8 <b>10 1 A</b>

**Continued from previous column**

1 S/N 17267585 thru 17274009 only  
 2 S/N 17267585 thru 17275953 only  
 3 S/N 17267585 thru 17276260 only  
 4 S/N 17267585 thru 17276654 only  
 5 S/N 17267585 and on  
 6 S/N 17274010 thru 17276654 only  
 7 S/N 17275954 and on  
 8 S/N 17280001 and on  
 9 Also available as a FAA-PMA/STC approved split Fairing for easy installation and removal; add an "SP" suffix to the P/N.  
 10 For a wing with STOL leading edge radius  
 11 For kits including LH and RH see page 207.  
 12 Add "LL" suffix for FAA-PMA/STC wing tips including Quasar LED landing/taxi lights and optimized to accept LED nav/strobe lights. Must purchase as a LH and RH kit. See page 207.  
 Add "LED" suffix for FAA-PMA/STC wing tips optimized to accept LED nav/strobe lights.

**172RG, FP172, FR172E, FR172K, P172D, R172E,F,G,H,J,K**  
 S/N 172RG0001 thru 172RG1191  
 S/N FP172-0001 thru FP172-0003  
 S/N FR172-0001 thru FR172-0060  
 S/N FR17200591 thru FR17200675  
 S/N P17257120 thru P17257188  
 S/N R172-0001 thru R1723454

Description	Idx	Part Number
Cap, Rudder Top	P	28-04-80A <b>2 1 T</b>
		K0531006-34 <b>12 1 K</b>
		K0531006-112 <b>13 1 K</b>
		SA-0531006-112 <b>7 1 S</b>
Cap, Vertical Fin All with 2 1/4" Beacon Base	O	GF0531033-1 <b>1 1 10 K</b>
		SA-0531003-1 <b>5 1 S</b>
Fairing, Brake Cover, LH	K	SA-0541224-1 <b>3 1 S</b>
Fairing, Brake Cover, RH	K	SA-0541224-2 <b>3 1 S</b>
Fairing, Dorsal Fin, Aft	N	K0531012-2 <b>3 1 K</b>
Fairing, Landing Gear, LH	J	244-4-9 <b>3 1 A</b>
		SA-1741005-239 <b>3 1 S</b>
Fairing, Landing Gear, RH	J	244-4-10 <b>2 1 A</b>
		SA-1741005-240 <b>2 1 S</b>
Fairing, Main Wheel, LH (Wheel Pant)	B	GF0541223-01 <b>3 1 K</b>
		SA-0541223-17 <b>3 1 S</b>
Fairing, Main Wheel, RH (Wheel Pant)	B	GF0541223-02 <b>3 1 K</b>
		SA-0541223-16 <b>3 1 S</b>
Fairing, Nose Wheel	C	GF0543079-00 <b>3 1 K</b>
		SA-0543079-3 <b>3 1 S</b>
Fairing, Strut To Fuslg, LH	I	118-4-7 <b>13 1 A</b>
		K0522150-1 <b>11 1 T</b>
Fairing, Strut To Fuslg, RH	I	118-4-6 <b>13 1 A</b>
		K0522150-2 <b>11 1 T</b>
Fairing, Strut To Wing, LH	H	118-4-15 <b>14 1 A</b>
		K0522150-3 <b>8 1 T</b>
		SA-0523047-1 <b>5 1 S</b>
Fairing, Strut To Wing, RH	H	SA-0522150-3 <b>8 1 S</b>
		118-4-14 <b>14 1 A</b>
		K0522150-4 <b>8 1 T</b>
Fairing, Tailcone (Cable Covers) LH or RH	S	SA-0530011-2 <b>5 1 S</b>
		GF0520006-01 <b>1 1 K</b>
		GF0520006-02 <b>1 1 K</b>
Tip, Dorsal Fin	M	SA-0531020-1 <b>5 1 S</b>
		GF0532001-94 <b>9 1 K</b>
Tip, Elevator, LH	T	SA-0532001-94 <b>6 1 S</b>
		GF0532001-100 <b>9 1 K</b>
Tip, Elevator, RH	T	SA-0532001-100 <b>6 1 S</b>
		GF053100680-791 <b>7 1 K</b>
Tip, Rudder Butt	Q	K0531006-35 <b>8 1 K</b>
		SA-0531006-80 <b>5 1 S</b>
Tip, Horiz. Stab., LH or RH	R	GF0532001-00 <b>9 1 K</b>
		SA-0532001-93 <b>5 1 S</b>
Tip, Wing, LH	A	20-52L-80A <b>7 1 T</b>
		GF0723200-5 <b>1 1 3 K</b>
		SA-0723200-5 <b>7 1 1 1 3 S</b>
Tip, Wing, RH	A	20-52R-80A <b>7 1 T</b>
		GF0723200-6 <b>1 1 3 K</b>
		SA-0723200-6 <b>7 1 1 1 3 S</b>
Tip, Wing, Sym., LH or RH	A	K0723615-200 <b>8 1 K</b>
		219-4-7 <b>16 1 A</b>
Wing Pos., Light Shield, LH	A	219-4-7 <b>16 1 A</b>
		219-4-8 <b>16 1 A</b>

**Continued from previous column**

1 S/N 172RG0001 thru 172RG1178 only  
 2 Model 172RG only  
 3 Model R172K only  
 4 Model P172D only  
 5 Models 172RG and R172K only  
 6 Models 172RG, R172K and P172D only  
 7 Models 172RG, FR172K and R172K only  
 8 Models FP172 and P172D only  
 9 Models FP172, FR172K, P172 and R172K only  
 10 Models FR172K and R172K only  
 11 Models 172RG, FP172, R172K and P172D only  
 12 Models P172D, FP172, FR172E only  
 13 Models R172K and 172RG S/N 172RG0001 thru 172RG1134  
 14 Models R172RG, P172D, R172E,F,G,H,J,K only  
 15 Also available as a FAA-PMA/STC approved split Fairing for easy installation and removal; add an "SP" suffix to the P/N.  
 16 For a wing with STOL leading edge radius  
 17 For kits including LH and RH see page 207.  
 18 Add "LL" suffix for FAA-PMA/STC wing tips including Quasar LED landing/taxi lights and optimized to accept LED nav/strobe lights. Must purchase as a LH and RH kit. See page 207.  
 Add "LED" suffix for FAA-PMA/STC wing tips optimized to accept LED nav/strobe lights.

**F172D,E,F,G,H,K,L,M,N,P**  
 S/N F172-0001 thru F17202254

Description	Idx	Part Number
Cap, Rudder Top	P	28-04-80A <b>17 1 T</b>
		28-0531006-34-80A <b>11 1 T</b>
		28-19-80A <b>11 1 T</b>
		K0531006-34 <b>1 1 K</b>
		K0531006-112 <b>17 1 K</b>
Cap, Vertical Fin No Beacon Base	O	SA-0531006-34 <b>2 1 S</b>
		SA-0531006-112 <b>16 1 S</b>
		SA-0531009-1 <b>6 1 S</b>
		SA-0533009-1 <b>8 1 S</b>
Cap, Vertical Fin 2 1/4" Beacon Base	O	28-0531006-33-80A <b>11 1 T</b>
		SA-0531006-33 <b>4 1 S</b>
		28-0531109-180A <b>5 1 T</b>
Fairing, Brake Cover, LH	K	28-24-80A <b>10 1 T</b>
		GF0531033-1 <b>18 1 K</b>
		SA-0531013-1 <b>8 1 S</b>
Fairing, Brake Cover, RH	K	SA-0531033-6 <b>16 1 S</b>
		SA-0541224-1 <b>16 1 S</b>
		SA-0541224-2 <b>16 1 S</b>
Fairing, Dorsal Fin, Aft	N	28-17 <b>10 1 T</b>
		K0531012-2 <b>1 K</b>
Fairing, Landing Gear, LH	J	GF0541223-01 <b>16 1 K</b>
		SA-1741005-239 <b>13 1 S</b>
Fairing, Landing Gear, RH	J	GF0541223-02 <b>16 1 K</b>
		SA-1741005-240 <b>13 1 S</b>
Fairing, Main Wheel, LH (Wheel Pant)	B	28-17 <b>10 1 T</b>
		K0741046-203 <b>2 1 K</b>
		SA-0541203-1 <b>14 1 S</b>
Fairing, Main Wheel, RH (Wheel Pant)	B	SA-0541223-17 <b>16 1 S</b>
		K0741046-202 <b>2 1 K</b>
		SA-0541203-2 <b>14 1 S</b>
Fairing, Nose Wheel	C	SA-0541223-16 <b>16 1 S</b>
		20-40N-80A <b>16 1 T</b>
		GF0543079-00 <b>16 1 K</b>
Fairing Wing Rear Low, LH	L	SA-0543065-1 <b>14 1 K</b>
		SA-0543065-2 <b>14 1 K</b>
		SA-0543079-3 <b>16 1 S</b>
Fairing Wing Rear Low, RH	L	K0522150-1 <b>1 T</b>
		SA-0522150-1 <b>1 S</b>
		K0522150-2 <b>1 T</b>
Fairing, Strut To Wing, LH	H	SA-0522150-2 <b>1 S</b>
		K0522150-3 <b>3 1 T</b>
		SA-0522150-3 <b>3 1 S</b>
Fairing, Strut To Wing, RH	H	SA-0523047-1 <b>16 1 S</b>
		K0522150-4 <b>3 1 T</b>
		SA-0522150-4 <b>3 1 S</b>
Fairing, Tailcone (Cable Covers) LH or RH	S	SA-0530011-2 <b>5 1 S</b>
		GF0520006-01 <b>1 1 K</b>
		GF0520006-02 <b>1 1 K</b>
Tip, Dorsal Fin	M	SA-0531020-1 <b>5 1 S</b>
		GF0532001-94 <b>9 1 K</b>
Tip, Elevator, LH	T	SA-0532001-94 <b>6 1 S</b>
		GF0532001-100 <b>9 1 K</b>
Tip, Elevator, RH	T	SA-0532001-100 <b>6 1 S</b>
		GF053100680-791 <b>7 1 K</b>
Tip, Rudder Butt	Q	K0531006-35 <b>8 1 K</b>
		SA-0531006-80 <b>5 1 S</b>
Tip, Horiz. Stab., LH or RH	R	GF0532001-00 <b>9 1 K</b>
		SA-0532001-93 <b>5 1 S</b>
Tip, Wing, LH	A	20-52L-80A <b>7 1 T</b>
		GF0723200-5 <b>1 1 3 K</b>
		SA-0723200-5 <b>7 1 1 1 3 S</b>
Tip, Wing, RH	A	20-52R-80A <b>7 1 T</b>
		GF0723200-6 <b>1 1 3 K</b>
		SA-0723200-6 <b>7 1 1 1 3 S</b>
Tip, Wing, Sym., LH or RH	A	K0723615-200 <b>8 1 K</b>
		219-4-7 <b>16 1 A</b>
Wing Pos., Light Shield, LH	A	219-4-7 <b>16 1 A</b>
		219-4-8 <b>16 1 A</b>
Wing Pos., Light Shield, RH	A	219-4-7 <b>16 1 A</b>
		219-4-8 <b>16 1 A</b>

Eligibility continues in next column

Eligibility continues in next column

Eligibility continues on next page

Manufacturer/Material: **A** Aircraft Development/Fiberglass, **K** Knots 2U/Fiberglass, **S** Stene Aviation/Fiberglass, **T** Texas Aeroplastics/ABS Plastic Parts

Cessna 170, 172, 175 and 177 Series Aircraft

Continued from previous page		
Tip, Wing, LH	A	20-51L-80A 7 T 20-52L-80A 16 T SA-0523565-29 13 19 S SA-0723200-5 16 19 S
Tip, Wing, RH	A	20-51R-80A 7 T 20-52R-80A 16 T SA-0523565-30 13 19 S SA-0723200-6 16 19 S
Tip, Wing, Sym., LH or RH	A	K0723615-200 2 K
1 S/N F172-0001 thru F172-0559 only 2 S/N F172-0001 thru F17200754 only 3 S/N F172-0001 thru F17200904 only 4 S/N F172-0019 thru F17200754 only 5 S/N F172-0320 thru F172-0559 only 6 S/N F172-0320 thru F17200754 only 7 S/N F172-0320 thru F17200904 only 8 S/N F172-0320 thru F17201514 9 S/N F172-0320 and on 10 S/N F172-0560 thru F17201234 only 11 S/N F172-0560 thru F17201384 only 12 S/N F172-0560 and on 13 S/N F17200755 thru F17200904 14 S/N F17200755 thru F17201514 15 S/N F17200755 and on 16 S/N F17200905 and on 17 S/N F17201385 thru F17202208 only 18 S/N F17201385 and on 19 For kits including LH and RH see page 207.		
175, 175A, B, C S/N 55001 thru 17557119		
Description	Idx	Part Number
Cap, Rudder Top	P	SA-0531006-34 4 S
Cap, Vertical Fin	O	SA-0531001-36 1 S
No Beacon Base		SA-0531006-33 4 S
Cap, Vertical Fin	O	SA-0531004-3 1 S
3 1/2" Beacon Base		
Fairing, Strut To Fuslg, LH	I	118-4-7 A 28-07-LFS 2 T K0522150-1 2 T SA-0522150-1 5 S
Fairing, Strut To Fuslg, RH	I	118-4-6 A 28-07-RFS 2 T K0522150-2 2 T SA-0522150-2 5 S
Fairing, Strut To Wing, LH	H	118-4-5 A 28-06-LWS 2 T K0522150-3 2 T SA-0522150-3 5 S
Fairing, Strut To Wing, RH	H	118-4-4 A 28-06-RWS 2 T K0522150-4 2 T SA-0522150-4 5 S
Tip, Elevator, LH or RH	T	K0532001-62 3 K SA-0532001-62 3 S
Tip, Rudder Butt	Q	28-21-80A 4 T K0531104 1 K SA-0531104 1 S SA-0531006-35 4 S
Tip, Horiz. Stab., LH or RH	R	K0532001-61 4 K SA-0532001-61 4 S
Tip, Wing, Conical, LH	A	SA-0523565-29 8 9 S
Tip, Wing, Conical, RH	A	SA-0523565-30 8 9 S
Tip, Wing, Hoerner Style	A	11004 (set of two) K
Tip, Wing, Sym., LH or RH	A	K0723615-200 K SA-0723615-200 S
Wing Pos., Light Shield, LH	A	219-4-5 6 A
Wing Pos., Light Shield, RH	A	219-4-6 6 A

177, 177A, B, 177RG, F177RG		
S/N 17700001 thru 17702752		
S/N 177RG0001 thru 177RG1366		
S/N F177RG0001 thru F177RG0177		
Description	Idx	Part Number
Cap, Rudder Top	P	K1733009-2 K SA-1733009-2 6 S
Cap, Vertical Fin	O	SA-1731009-4 6 S K1731009-4 6 K
Fairing, Brake, LH	K	SA-0741634-13 2 S SA-1741027-1 4 S
Fairing, Brake, RH	K	SA-0741634-14 2 S SA-1741027-2 4 S
Fairing, Landing Gear, LH	J	SA-1741005-43 5 S
Fairing, Landing Gear, RH	J	SA-1741005-44 5 S
Fairing, Main Wheel, LH (Wheel Pant)	B	GF0541223-01 4 K K0741046-203 5 K SA-0541203-1 3 S
Fairing, Main Wheel, RH (Wheel Pant)	B	GF0541223-02 4 K K0741046-202 5 K SA-0541203-2 3 S
Fairing, Nose Wheel	C	20-40N-80A 3 T GF0543079-00 4 K K0743625-14 5 K SA-0543065-1 3 S
Tip, Horiz. Stab., LH or RH	R	GF1732024-1-791 K SA-1732024-1 6 S GF1723005-11 8 K
Tip, Wing, LH	A	SA-1723000-201 1 S SA-1723005-11 7 S
Tip, Wing, RH	A	GF1723005-12 8 K SA-1723000-200 1 S SA-1723005-12 7 S

Continued from previous column	
1	Model 177, 177A S/N 17700001 thru 17701370 only
2	Model 177B, S/N 17701371 thru 17702123 only
3	Model 177B S/N 17701371 and on
4	Model 177B S/N 17702124 and on
5	Model 177, 177A, B only
6	Model 177, 177A, B and 177RG only
7	Model 177B and 177RG only
8	Model 177B, 177RG and F177RG

Kits available for 170, 172, 175 and 177 aircraft

Kit P/N	Kit Description	Part Number	Item Description
118-12	Strut Fairing Kit, Fiberglass	118-4-7	Fairing, Strut To Fuselage, LH
		118-4-6	Fairing, Strut To Fuselage, RH
		118-4-5	Fairing, Strut To Wing, LH
118-32	Strut Fairing Kit, Fiberglass	118-4-4	Fairing, Strut To Wing, RH
		118-4-7	Fairing, Strut To Fuselage, LH
		118-4-6	Fairing, Strut To Fuselage, RH
28-05-80A	Landing Gear Fairing Kit	118-4-15	Fairing, Strut To Wing, LH
		118-4-14	Fairing, Strut To Wing, RH
		28-05-LGF	Fairing, Landing Gear, LH
28-06-80A	Strut Fairing Kit, Plastic	28-05-RGF	Fairing, Landing Gear, RH
		28-07-LFS	Fairing, Strut To Fuselage, LH
		28-07-RFS	Fairing, Strut To Fuselage, RH
28-07-80A	Strut Fairing Kit, Plastic	28-06-LWS	Fairing, Strut To Wing, LH
		28-06-RWS	Fairing, Strut To Wing, RH
		28-07-LFS	Fairing, Strut To Fuselage, LH
28-08-80A	Brake Cover Fairing Kit	28-07-RFS	Fairing, Strut To Fuselage, RH
		28-07-LWS	Fairing, Strut To Wing, LH
		28-07-RWS	Fairing, Strut To Wing, RH
KPS03	Split Strut Fairing Kit, Plastic	28-08-LBC	Fairing, Brake Cover, LH
		28-08-RBC	Fairing, Brake Cover, RH
		K0522150-1	Fairing, Strut to Fuselage, LH
SA-0522150-3412	Strut Fairing Kit, Fiberglass For FAA-PMA/STC split Fairings add an "SP" suffix to the kit P/N.	K0522150-2	Fairing, Strut to Fuselage, RH
		K0522150-3	Fairing, Strut to Wing, LH
		K0522150-4	Fairing, Strut to Wing, RH
SA-0523047-1212	Strut Fairing Kit, Fiberglass For FAA-PMA/STC split Fairings add an "SP" suffix to the kit P/N.	SA-0522150-1	Fairing, Strut to Fuselage, LH
		SA-0522150-2	Fairing, Strut to Fuselage, RH
		SA-0523047-1	Fairing, Strut to Wing, LH
SA-0523565-2930	Wing Tips 1 2	SA-0523047-2	Fairing, Strut to Wing, RH
		SA-0523565-29	Tip, Wing, Conical, LH
		SA-0523565-30	Tip, Wing, Conical, RH
SA-0723200-56	Wing Tips 1 2	SA-0723200-5	Tip, Wing, Conical, LH
		SA-0723200-6	Tip, Wing, Conical, RH

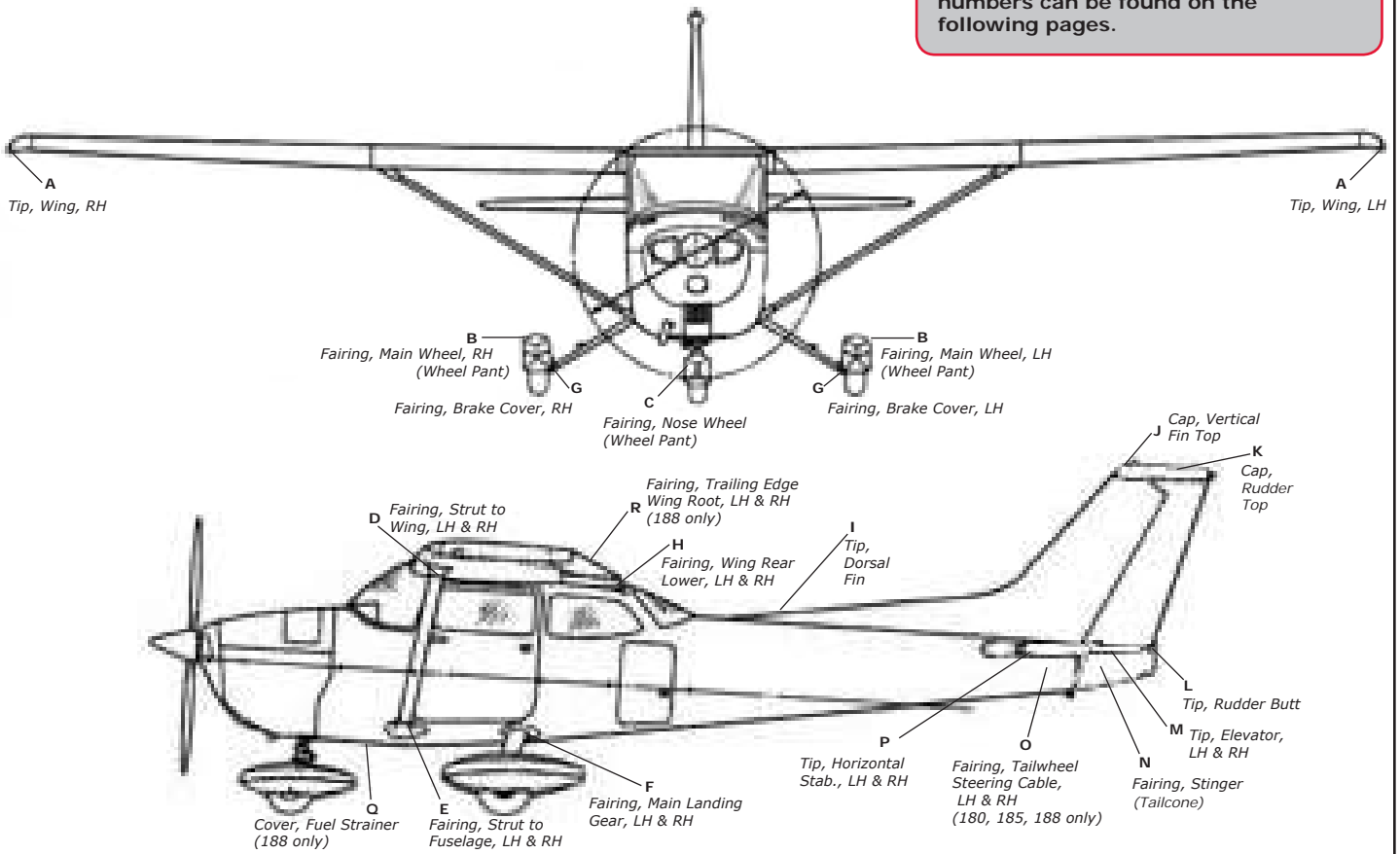
1 Add "LL" suffix for FAA-PMA/STC wing tips including Quasar LED landing/taxi lights and optimized to accept LED nav/strobe lights. Optional installation kit including all hardware required for installation of Quasar LED lighted wing tips is available. Kits include shielded wire, all connectors, switches and breaker. 14v installation kit USE P/N INSTALL14V. 28v installation kit USE P/N INSTALL28V.  
 2 Add "LED" suffix for FAA-PMA/STC wing tips optimized to accept LED nav/strobe lights.

Exterior Plastic/Fiberglass Trim and Fairings

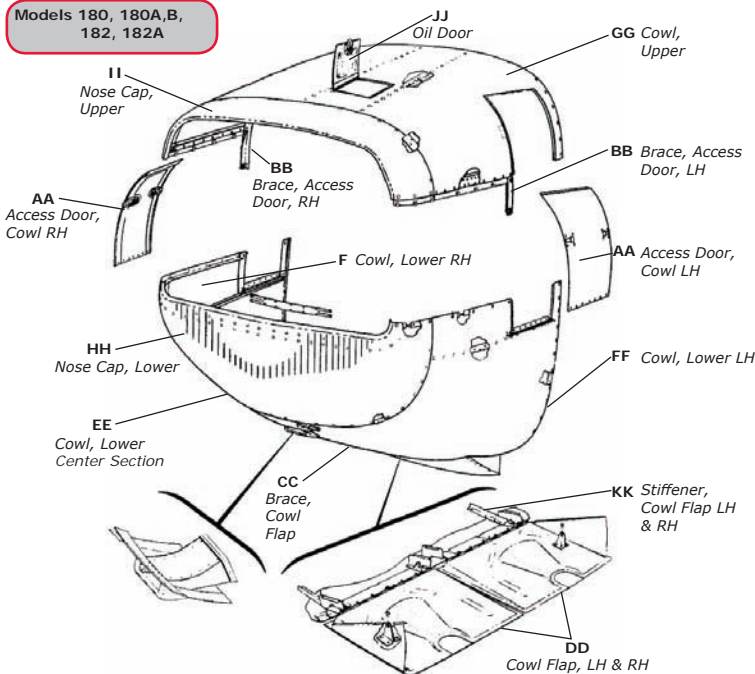
Improve the appearance and performance of your aircraft!

Strut and landing gear fairings, tail surface fairings, wing tips, and cowling fairings for Cessna 180-188 series aircraft available in ABS plastic and fiberglass.

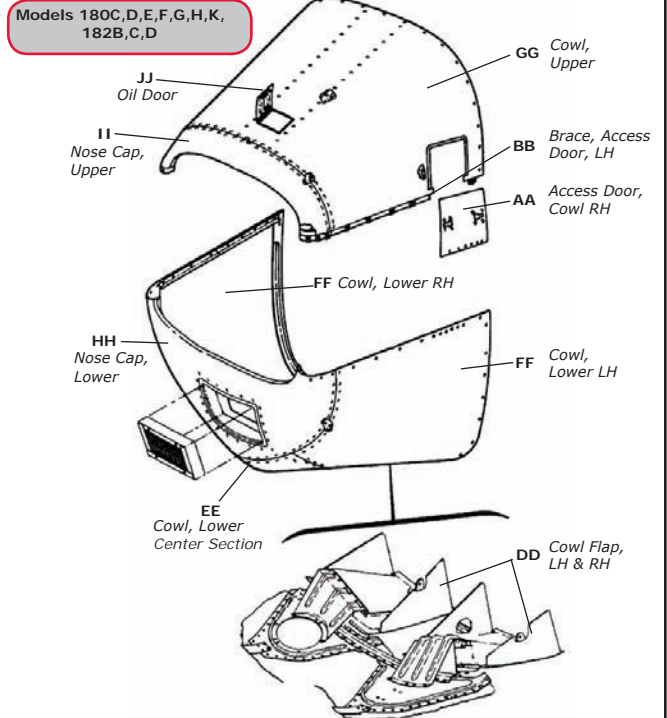
Eligibility tables for Cessna 180, 182, 185 and 188 aircraft with item descriptions, index reference and part numbers can be found on the following pages.



**Models 180, 180A,B, 182, 182A**



**Models 180C,D,E,F,G,H,K, 182B,C,D**



Exterior Plastic/Fiberglass Trim and Fairings



**Cessna 180, 182, 185 and 188 Series Aircraft**

180, 180A,B,C,D,E,F,G,H,J,K S/N 30000 thru 18053203	
Description	Idx Part Number
Access Door, Cowl LH	AA SC180701-1 <b>2</b> <b>K</b> SC180703-1 <b>1</b> <b>K</b> SC180704-1 <b>2</b> <b>K</b>
Access Door, Cowl RH	AA SC180702-1 <b>2</b> <b>K</b>
Brace Access Door, LH	BB SC180900-1 <b>2</b> <b>K</b>
Brace Access Door, RH	BB SC180900-2 <b>2</b> <b>K</b>
Brace, Cowl Flap	CC SC180901-2 <b>2</b> <b>K</b>
Cap, Vertical Fin No Beacon Base	J SA-0731000-200 <b>16</b> <b>S</b>
Cap, Vertical Fin 2 1/4" Beacon Base	J SA-0731019-1 <b>19</b> <b>S</b> SA-0731019-2 <b>20</b> <b>S</b>
Cap, Vertical Fin 3 1/2" Beacon Base	J SA-0700031-2 <b>2</b> <b>S</b>
Cowl Flap, LH	DD SC180804-1 <b>12</b> <b>K</b>
Cowl Flap, RH	DD SC180805-1 <b>12</b> <b>K</b> SC180800-1 <b>1</b> <b>K</b> SC180802-1 <b>7</b> <b>K</b>
Cowl Flap, LH Exhst Cutout	DD SC180801-1 <b>1</b> <b>K</b> SC180803-1 <b>7</b> <b>K</b>
Cowl Flap, RH Exhst Cutout	DD SC180501-1 <b>1</b> <b>K</b> SC180502-1 <b>7</b> <b>K</b> SC180504-1 <b>10</b> <b>K</b> SC180505-1 <b>17</b> <b>K</b>
Cowl, Lower Center Section	EE SC180405-1 <b>13</b> <b>K</b> SC180401-1 <b>2</b> <b>K</b> SC180403-1 <b>9</b> <b>K</b> SC180406-1 <b>15</b> <b>K</b> SC180402-1 <b>2</b> <b>K</b> SC180404-1 <b>9</b> <b>K</b>
Cowl, Lower Left (Camloc)	FF SC180401-1 <b>2</b> <b>K</b> SC180403-1 <b>9</b> <b>K</b> SC180406-1 <b>15</b> <b>K</b> SC180402-1 <b>2</b> <b>K</b> SC180404-1 <b>9</b> <b>K</b>
Cowl, Lower Left (Screws)	FF SC180401-1 <b>2</b> <b>K</b> SC180403-1 <b>9</b> <b>K</b> SC180406-1 <b>15</b> <b>K</b> SC180402-1 <b>2</b> <b>K</b> SC180404-1 <b>9</b> <b>K</b>
Cowl, Lower Right (Camloc)	FF SC180401-1 <b>2</b> <b>K</b> SC180403-1 <b>9</b> <b>K</b> SC180406-1 <b>15</b> <b>K</b> SC180402-1 <b>2</b> <b>K</b> SC180404-1 <b>9</b> <b>K</b>
Cowl, Lower Right (Screws)	FF SC180401-1 <b>2</b> <b>K</b> SC180403-1 <b>9</b> <b>K</b> SC180406-1 <b>15</b> <b>K</b> SC180402-1 <b>2</b> <b>K</b> SC180404-1 <b>9</b> <b>K</b>
Cowl, Upper	GG SC180200-1 <b>2</b> <b>K</b> SC180201-1 <b>9</b> <b>K</b> SC180202-1 <b>13</b> <b>K</b> SC180203-1 <b>13</b> <b>K</b> SC180204-1 <b>20</b> <b>K</b>
Fairing, Brake Cover, LH	G SA-0741059-1 <b>5</b>
Fairing, Brake Cover, RH	G SA-0741059-2 <b>5</b>
Fairing, Main Wheel, LH (Wheel Pant)	B SA-0741070-1 <b>24</b> <b>S</b>
Fairing, Main Wheel, RH (Wheel Pant)	B SA-0741070-2 <b>24</b> <b>S</b>
Fairing, Stinger (Tailcone)	N SA-0712400-9 <b>5</b> 118-4-11 <b>A</b> 180-LFS-T <b>T</b> K0723605-1 <b>9</b> <b>T</b> SA-0723605-1 <b>26</b> <b>S</b>
Fairing, Strut To Fuslg, LH	E 118-4-10 <b>A</b> 180-RFS-T <b>T</b> K0723605-2 <b>8</b> <b>T</b> SA-0723605-2 <b>26</b> <b>S</b>
Fairing, Strut To Fuslg, RH	E 118-4-9 <b>A</b> 180-LWS <b>T</b> K0723605-3 <b>8</b> <b>T</b> SA-0723605-3 <b>26</b> <b>S</b>
Fairing, Strut To Wing, LH	D 118-4-8 <b>A</b> 180-RWS <b>T</b> K0723605-4 <b>8</b> <b>T</b> SA-0723605-4 <b>26</b> <b>S</b>
Fairing, Tailwhl Strg Cbl LH	O SA-0712309-9 <b>5</b>
Fairing, Tailwhl Strg Cbl RH	O SA-0712309-10 <b>5</b>
Nose Cap, Lower (Camloc Air Filter)	HH SC180604-1 <b>14</b> <b>K</b> SC180605-1 <b>18</b> <b>K</b>
Nose Cap, Lower (Camloc Landing Light)	HH SC180606-1 <b>23</b> <b>K</b>
Nose Cap, Lower (Screws)	HH SC180601-1 <b>1</b> <b>K</b> SC180602-1 <b>8</b> <b>K</b>
Nose Cap, Lower (Screws Air Filter)	HH SC180603-1 <b>9</b> <b>K</b>
Nose Cap, Upper	II SC180301-1 <b>1</b> <b>K</b> SC180302-1 <b>7</b> <b>K</b> SC180303-1 <b>9</b> <b>K</b> SC180304-1 <b>14</b> <b>K</b> SC180305-1 <b>20</b> <b>K</b> SC180752-1 <b>20</b> <b>K</b>
Oil Door	JJ WAC752000 <b>3</b> <b>T</b>
Stiffener, Cowl Flap LH	KK SC180900-3 <b>2</b> <b>K</b>
Stiffener, Cowl Flap RH	KK SC180900-4 <b>2</b> <b>K</b>
Tip, Horiz. Stab., LH or RH	P 31-11 <b>6</b> <b>T</b> SA-0732613-1 <b>1</b> <b>K</b> 20-51L-80A <b>18</b> <b>T</b> 20-52L-80A <b>22</b> <b>T</b> GF0723200-5 <b>22</b> <b>K</b> SA-0723200-5 <b>22</b> <b>30</b> <b>31</b> <b>S</b>
Tip, Wing, LH	A 20-51L-80A <b>18</b> <b>T</b> 20-52R-80A <b>22</b> <b>T</b> GF0723200-6 <b>22</b> <b>K</b> SA-0723200-6 <b>22</b> <b>30</b> <b>31</b> <b>S</b>

Continued from previous column		
Description	Idx	Part Number
Tip, Wing, RH	A	20-51R-80A <b>18</b> <b>T</b> 20-52R-80A <b>22</b> <b>T</b> GF0723200-6 <b>22</b> <b>K</b> SA-0723200-6 <b>22</b> <b>30</b> <b>31</b> <b>S</b>
Tip, Wing, Conical, LH	A	GF0523565-29791 <b>19</b> <b>K</b> SA-0523565-29 <b>21</b> <b>30</b> <b>31</b> <b>S</b>
Tip, Wing, Conical, RH	A	GF0523565-30791 <b>19</b> <b>K</b> SA-0523565-30 <b>21</b> <b>30</b> <b>31</b> <b>S</b>
Tip, Wing, Hoerner Style	A	11004 (set of two) <b>5</b> <b>K</b>
Tip, Wing, Sym., LH or RH	A	K0723615-200 <b>6</b> <b>K</b> SA-0723615-200 <b>5</b> <b>S</b>
Wing Pos., Light Shield, LH	A	219-4-5 <b>5</b> <b>28</b> <b>A</b> 219-4-7 <b>22</b> <b>29</b> <b>A</b>
Wing Pos., Light Shield, RH	A	219-4-6 <b>5</b> <b>28</b> <b>A</b> 219-4-8 <b>22</b> <b>29</b> <b>A</b>
1 S/N 30000 thru 32261 only		
2 S/N 30000 thru 50661 only		
3 S/N 30000 thru 18051445 only		
4 S/N 30000 thru 18051774 only		
5 S/N 30000 thru 18052284 only		
6 S/N 30000 thru 18052384 only		
7 S/N 32662 thru 50661 only		
8 S/N 50386 and on		
9 S/N 50662 thru 50911 only		
10 S/N 50662 thru 18051183 only		
11 S/N 50662 thru 18051445 only		
12 S/N 50662 and on		
13 S/N 18050912 thru 18051445		
14 S/N 18050912 thru 18052284		
15 S/N 18050912 and on		
16 S/N 18051184 thru 18052770 only		
17 S/N 18051184 and on		
18 S/N 18051446 thru 18052284 only		
19 S/N 18051446 thru 18052989 only		
20 S/N 18051446 and on		
21 S/N 18052176 thru 18052284 only		
22 S/N 18052285 and on		
23 S/N 18052385 and on		
24 S/N 18052771 and on		
25 S/N 30000 thru 32261 that have been modified with the Kenmore gross weight increase and have the large vertical fin.		
26 Also available as a FAA-PMA/STC approved split Fairing for easy installation and removal; add an "SP" suffix to the P/N.		
27 P/N WAC752000 is an aluminum oil door manufactured by McFarlane Aviation Products.		
28 For a wing with a standard leading edge radius		
29 For a wing with STOL leading edge radius		
30 For kits including LH and RH see page 212.		
31 Add "LL" suffix for FAA-PMA/STC wing tips including Quasar LED landing/taxi lights and optimized to accept LED nav/strobe lights. Must purchase as a LH and RH kit. See page 212.		
32 Add "LED" suffix for FAA-PMA/STC wing tips optimized to accept LED nav/strobe lights.		
182, 182A,B,C,D,E,F,G,H,J,K,L,M,N S/N 33000 thru 18260825		
Description	Idx	Part Number
Access Door, Cowl LH	AA	SC180701-1 <b>1</b> <b>K</b> SC180703-1 <b>8</b> <b>K</b>
Access Door, Cowl RH	AA	SC180702-1 <b>1</b> <b>K</b>
Brace Access Door, LH	BB	SC180900-1 <b>3</b> <b>K</b>
Brace Access Door, RH	BB	SC180900-2 <b>3</b> <b>K</b> GF0731606-04 <b>13</b> <b>K</b> GF0731606-01 <b>16</b> <b>K</b> SA-0731006-6 <b>16</b> <b>S</b> SA-1231001-2 <b>17</b> <b>S</b>
Cap, Rudder Top	K	GF0731606-03 <b>12</b> <b>K</b> K0731606-1 <b>16</b> <b>K</b> SA-0731606-1 <b>16</b> <b>S</b> SA-0731000-200 <b>2</b> <b>S</b>
Cap, Vertical Fin No Beacon Base	J	SA-0731000-200 <b>2</b> <b>S</b>
Cap, Vertical Fin Small Beacon Base	J	K0731606-3 <b>16</b> <b>K</b>
Cap, Vertical Fin 2 1/4" Beacon Base	J	SA-0731019-1 <b>2</b> <b>S</b> SA-0731606-3 <b>16</b> <b>S</b>
Cap, Vertical Fin 3 1/2" Beacon Base	J	SA-0700031-2 <b>2</b> <b>S</b> SA-1200039-2 <b>10</b> <b>S</b>
Cowl Flap, LH	DD	SC180804-1 <b>8</b> <b>K</b>
Cowl Flap, RH	DD	SC180805-1 <b>8</b> <b>K</b>
Cowl, Lower Center Section	EE	SC180502-2 <b>1</b> <b>K</b> SC180504-1 <b>8</b> <b>K</b>
Cowl, Lower Left (Camloc)	FF	SC180405-1 <b>13</b> <b>K</b>
Cowl, Lower Left (Screws)	FF	SC180403-1 <b>7</b> <b>K</b>
Cowl, Lower Left (Screws, No Cowl Flap)	FF	SC180401-2 <b>1</b> <b>K</b>

Continued from previous column		
Description	Idx	Part Number
Cowl, Lower Right (Camloc)	FF	SC180406-1 <b>11</b> <b>K</b>
Cowl, Lower Right (Screws)	FF	SC180404-1 <b>7</b> <b>K</b>
Cowl, Lower Right (Screws, No Cowl Flap)	FF	SC180402-2 <b>1</b> <b>K</b>
Cowl, Upper	GG	SC180200-1 <b>1</b> <b>K</b> SC180201-1 <b>7</b> <b>K</b> SC180202-1 <b>11</b> <b>K</b>
Fairing, Main Wheel, LH (Wheel Pant)	B	K0741046-203 <b>15</b> <b>K</b> SA-0541203-1 <b>18</b> <b>S</b>
Fairing, Main Wheel, RH (Wheel Pant)	B	K0741046-202 <b>15</b> <b>K</b> SA-0541203-2 <b>18</b> <b>S</b>
Fairing, Nose Wheel	C	K0743625-14 <b>15</b> <b>K</b> SA-0543065-1 <b>18</b> <b>S</b> K1212010-19 <b>13</b> <b>K</b> SA-1212010-15 <b>5</b>
Fairing, Stinger (Tailcone)	N	118-4-11 <b>3</b> <b>A</b> 118-4-17 <b>13</b> <b>A</b> 182-LFS <b>T</b> K0723612-3 <b>13</b> <b>T</b> SA-0723605-1 <b>3</b> <b>20</b> <b>S</b> SA-0723612-3 <b>13</b> <b>20</b> <b>S</b>
Fairing, Strut To Fuslg, LH	E	118-4-10 <b>3</b> <b>A</b> 118-4-16 <b>13</b> <b>A</b> 182-RFS <b>T</b> K0723612-4 <b>13</b> <b>T</b> SA-0723605-2 <b>3</b> <b>20</b> <b>S</b> SA-0723612-4 <b>13</b> <b>20</b> <b>S</b>
Fairing, Strut To Fuslg, RH	E	118-4-9 <b>A</b> 180-LWS <b>T</b> K0723605-3 <b>9</b> <b>T</b> SA-0723605-3 <b>20</b> <b>S</b>
Fairing, Strut To Wing, LH	D	118-4-8 <b>A</b> 180-RWS <b>T</b> K0723605-4 <b>9</b> <b>T</b> SA-0723605-4 <b>20</b> <b>S</b>
Fairing, Strut To Wing, RH	D	118-4-8 <b>A</b> 180-RWS <b>T</b> K0723605-4 <b>9</b> <b>T</b> SA-0723605-4 <b>20</b> <b>S</b>
Nose Cap, Lower (Camloc Air Filter)	HH	SC180604-1 <b>11</b> <b>K</b>
Nose Cap, Lower (Screws)	HH	SC180602-1 <b>1</b> <b>K</b>
Nose Cap, Lower (Screws Air Filter)	HH	SC180603-1 <b>7</b> <b>K</b>
Nose Cap, Upper	II	SC180302-1 <b>1</b> <b>K</b> SC180303-1 <b>7</b> <b>K</b> SC180304-1 <b>11</b> <b>K</b>
Oil Door (Aluminum)	JJ	WAC752000 <b>4</b> 31-10 LEFT <b>14</b> <b>T</b> GF1234608-01 <b>14</b> <b>K</b> SA-1234608-3 <b>14</b> <b>S</b>
Tip, Elevator, LH	M	31-10 RIGHT <b>14</b> <b>T</b> GF1234608-02 <b>14</b> <b>K</b> SA-1234608-4 <b>14</b> <b>S</b>
Tip, Elevator, RH	M	31-11 <b>4</b> <b>T</b> 31-09 <b>T</b>
Tip, Horiz. Stab., LH or RH	P	SA-0732613-1 <b>2</b> <b>S</b> GF1232604-1 <b>14</b> <b>K</b> SA-1232604-1 <b>14</b> <b>S</b>
Tip, Wing, LH	A	20-51L-80A <b>18</b> <b>T</b>
Tip, Wing, RH	A	20-51R-80A <b>18</b> <b>T</b>
Tip, Wing, Conical, LH	A	GF0523565-29791 <b>19</b> <b>K</b> SA-0523565-29 <b>22</b> <b>23</b> <b>S</b>
Tip, Wing, Conical, RH	A	GF0523565-30791 <b>19</b> <b>K</b>
Tip, Wing, Hoerner Style	A	11004 (set of two) <b>5</b> <b>K</b>
Tip, Wing, Sym., LH or RH	A	K0723615-200 <b>6</b> <b>K</b> SA-0723615-200 <b>5</b> <b>S</b>
Wing Pos., Light Shield, LH	A	219-4-5 <b>21</b> <b>A</b>
Wing Pos., Light Shield, RH	A	219-4-6 <b>21</b> <b>A</b>

Eligibility continues in next column

Eligibility continues in next column

Eligibility continues on next page

Manufacturer/Material: **A** Aircraft Development/Fiberglass, **K** Knots 2U/Fiberglass, **S** Stene Aviation/Fiberglass, **T** Texas Aeroplastics/ABS Plastic Parts

**Cessna 180, 182, 185 and 188 Series Aircraft**

Continued from previous page

1 S/N 33000 thru 51556 only  
 2 S/N 33000 thru 52358 only  
 3 S/N 33000 thru 18253598 only  
 4 S/N 33000 thru 18255844 only  
 5 S/N 33000 thru 18259305 only  
 6 S/N 33000 thru 18260055 only  
 7 S/N 51557 thru 53007 only  
 8 S/N 51557 thru 18253598 only  
 9 S/N 51557 and on  
 10 S/N 52359 thru 18257625 only  
 11 S/N 18253008 thru 18253598 only  
 12 S/N 18253599 thru 18257625 only  
 13 S/N 18253599 and on  
 14 S/N 18255845 and on  
 15 S/N 18257626 thru 18260445 only  
 16 S/N 18257626 and on  
 17 S/N 18258686 and on  
 18 S/N 18260056 thru 18260825 only  
 19 S/N 18260446 thru 18260825 only  
 20 Also available as a FAA-PMA/STC approved split Fairing for easy install & removal; add "SP" suffix to the P/N.  
 21 For a wing with a standard leading edge radius  
 22 For kits including LH and RH see page 212.  
 23 Add "LL" suffix for FAA-PMA/STC wing tips including Quasar LED landing/taxi lights and optimized to accept LED nav/strobe lights. Must purchase as a LH and RH kit. See page 212.  
 Add "LED" suffix for FAA-PMA/STC wing tips optimized to accept LED nav/strobe lights.

**182P,Q,R, T182**  
 S/N 18260826 thru 18268586

Description	Idx	Part Number
Cap, Rudder Top	K	GF0731606-04 [K] GF0731606-01 [3K] SA-0731606-6 [3S] SA-0731606-9 [10S]
Cap, Vertical Fin No Beacon Base	J	GF0731606-03 [10K] K0731606-1 [3K] SA-0731606-1 [3S] SA-0731606-10 [10S]
Cap, Vertical Fin Small Beacon Base	J	K0731606-3 [3K] K1231064 [10K]
Cap, Vertical Fin 2 1/4" Beacon Base	J	SA-0731606-3 [1S] SA-1231059-1 [3S] SA-1231064-1 [10S]
Fairing, Brake Cover, LH	G	31-07-LBC [2T] 31-08-LBC [8T] SA-0741634-11 [8S] SA-0741634-17 [2S] SA-0741641-15 [12S]
Fairing, Brake Cover, RH	G	31-07-RBC [2T] 31-08-RBC [8T] SA-0741634-10 [8S] SA-0741634-18 [2S] SA-0741641-14 [12S]
Fairing, Gear Leg, LH	F	244-4-1 [3A] SA-1741005-201 [4S]
Fairing, Gear Leg, RH	F	244-4-2 [3A] SA-1741005-200 [4S]
Fairing Land. Gear Strut LH	F	244-4-7 [10A] 31-03-LGF [10T] SA-0741052-201 [10S]
Fairing Land. Gear Strut RH	F	244-4-8 [10A] 31-03-RGF [10T] SA-0741052-200 [10S]
Fairing, Main Wheel, LH (Wheel Pant)	B	GF0541223-01 [9K] SA-0541223-17 [9S]
Fairing, Main Wheel, RH (Wheel Pant)	B	GF0541223-02 [9K] SA-0541223-16 [9S]
Fairing, Nose Wheel	C	20-40N-80A [T] GF0543079-00 [9K] SA-0543079-3 [9S]
Fairing, Stinger (Tailcone)	N	K1212010-19 [K] SA-1212010-15 [S] 118-4-17 [A] 182-LFS [T] K0723612-3 [T] SA-0723612-3 [13S]
Fairing, Strut To Fuslg, LH	E	118-4-16 [A] 182-RFS [T] K0723612-4 [T] SA-0723612-4 [13S]
Fairing, Strut To Wing, LH	D	118-4-9 [A] 180-LWS [T] K0723605-3 [T] SA-0723605-3 [13S]

Eligibility continues in next column  
 Manufacturer/Material: [A] Aircraft Development/Fiberglass, [K] Knots 2U/Fiberglass, [S] Stene Aviation/Fiberglass, [T] Texas AeroPlastics/ABS Plastic Parts

Continued from previous column		
Description	Idx	Part Number
Fairing, Strut To Wing, RH	D	118-4-8 [A] 180-RWS [T] K0723605-4 [T] SA-0723605-4 [13S]
Tip, Dorsal Fin	I	31-12 [7T]
Tip, Elevator, LH	M	31-10 LEFT [T] GF1234608-01 [K] SA-1234608-3 [S]
Tip, Elevator, RH	M	31-10 RIGHT [T] GF1234608-02 [K] SA-1234608-4 [S]
Tip, Horiz. Stab., LH or RH	P	31-09 [5T] GF1232604-1 [5K] GF1232604-2 [11K] SA-1232604-1 [5S]
Tip, Wing, LH	A	20-52L-80A [T] GF0723200-5 [K] SA-0723200-5 [1516S]
Tip, Wing, RH	A	20-52R-80A [T] GF0723200-6 [K] SA-0723200-6 [1516S]
Wing Pos., Light Shield, LH	A	219-4-7 [14A]
Wing Pos., Light Shield, RH	A	219-4-8 [14A]

1 S/N 18260826 thru 18261425 only  
 2 S/N 18260826 thru 18263475 only  
 3 S/N 18260826 thru 18264295 only  
 4 S/N 18260826 thru 18265175 only  
 5 S/N 18260826 thru 18267300 only  
 6 S/N 18261426 thru 18264295 only  
 7 S/N 18262466 and on  
 8 S/N 18263476 thru 18265590 only  
 9 S/N 18263476 and on  
 10 S/N 18264296 and on  
 11 S/N 18267301 and on  
 12 S/N 18265176 and on  
 13 Also available as a FAA-PMA/STC approved split Fairing for easy installation and removal; add an "SP" suffix to the P/N.  
 14 For a wing with STOL leading edge radius  
 15 For kits including LH and RH see page 212.  
 16 Add "LL" suffix for FAA-PMA/STC wing tips including Quasar LED landing/taxi lights and optimized to accept LED nav/strobe lights. Must purchase as a LH and RH kit. See page 212.  
 Add "LED" suffix for FAA-PMA/STC wing tips optimized to accept LED nav/strobe lights.

**182S, T, T182T**  
 S/N 18280001 thru 18299999 and  
 S/N T18208001 thru T18299999

Description	Idx	Part Number
Cap, Rudder Top	K	GF0731606-04 [1K] SA-0731606-9 [S]
Cap, Vertical Fin Small Beacon Base	J	K1231064 [K]
Cap, Vertical Fin 2 1/4" Beacon Base	J	SA-0731606-11 [1S] SA-1231064-10 [2S]
Fairing, Brake Cover, LH	G	31-08-LBC [T] SA-0741641-15 [1S]
Fairing, Brake Cover, RH	G	31-08-RBC [T] SA-0741641-14 [1S]
Fairing Land. Gear Strut LH	F	SA-0741052-11 [S]
Fairing Land. Gear Strut RH	F	SA-0741052-12 [S]
Fairing, Main Wheel, LH (Wheel Pant)	B	K0741648-01 [2K] GF0541223-01 [1K] SA-0541223-17 [1S] SA-0741647-1 [2S] K0741648-02 [2K] GF0541223-02 [1K] SA-0541223-16 [1S] SA-0741647-2 [2S]
Fairing, Main Wheel, RH (Wheel Pant)	B	20-40N-80A [T] GF0543079-00 [1K] K0743050 [2K] SA-0543079-3 [1S] SA-0743050-14 [2S]
Fairing, Nose Wheel	C	K1212010-19 [K] SA-1212010-15 [S] 118-4-17 [1A] 182-LFS [T] K0723612-3 [1T] SA-0720702-9 [2S] SA-0723612-3 [13S]
Fairing, Stinger (Tailcone)	N	K1212010-19 [K] SA-1212010-15 [S] 118-4-17 [1A] 182-LFS [T] K0723612-3 [1T] SA-0720702-9 [2S] SA-0723612-3 [13S]
Fairing, Strut To Fuslg, LH	E	118-4-16 [A] 182-RFS [T] K0723612-3 [1T] SA-0720702-9 [2S] SA-0723612-3 [13S]

Eligibility continues in next column

Continued from previous column		
Description	Idx	Part Number
Fairing, Strut To Fuslg, RH	E	118-4-16 [1A] 182-RFS [T] K0723612-4 [1T] SA-0720702-10 [2S] SA-0723612-4 [13S]
Fairing, Strut To Wing, LH	D	118-4-9 [1A] 180-LWS [T] K0723605-3 [1T] SA-0720702-1 [2S] SA-0723605-3 [13S]
Fairing, Strut To Wing, RH	D	118-4-8 [1A] 180-RWS [T] K0723605-4 [1T] SA-0720702-2 [2S] SA-0723605-4 [13S]
Tip, Elevator, LH	M	GF1234608-01 [1K] SA-1234608-3 [S]
Tip, Elevator, RH	M	GF1234608-02 [1K] SA-1234608-4 [S]
Tip, Horiz. Stab., LH or RH	P	GF1232604-2 [1K] SA-1232604-2 [S]
Tip, Wing, LH	A	20-52L-80A [T] GF0723200-5 [1516S] SA-0723200-5 [1516S] SA-0723205-1 [2S]
Tip, Wing, RH	A	20-52R-80A [T] GF0723200-6 [1K] SA-0723200-6 [1516S] SA-0723205-2 [2S]
Wing Pos., Light Shield, LH	A	219-4-7 [14A]
Wing Pos., Light Shield, RH	A	219-4-8 [14A]

1 Model 182S only  
 2 Models 182T, T182T only  
 3 Also available as a FAA-PMA/STC approved split Fairing for easy installation and removal; add an "SP" suffix to the P/N.  
 4 For a wing with STOL leading edge radius  
 5 For kits including LH and RH see page 212.  
 6 Add "LL" suffix for FAA-PMA/STC wing tips including Quasar LED landing/taxi lights and optimized to accept LED nav/strobe lights. Must purchase as a LH and RH kit. See page 212.  
 Add "LED" suffix for FAA-PMA/STC wing tips optimized to accept LED nav/strobe lights.

**A182J,K,L,N, F182P,Q, FR182, R182, TR182**  
 S/N A182-0001 thru A182-0148  
 F18200001 thru F18200169  
 FR18200001 thru FR18200070  
 R18200001 thru R18202041

Description	Idx	Part Number
Cap, Rudder Top	K	GF0731606-04 [7K] SA-0731606-9 [7S]
Cap, Vertical Fin No Beacon Base	J	GF0731606-03 [5K] SA-0731606-10 [4S]
Cap, Vertical Fin Small Beacon Base	J	K1231064 [6K]
Cap, Vertical Fin 2 1/4" Beacon Base	J	SA-1231064-1 [7S]
Fairing, Brake Cover, LH	G	SA-0741641-15 [4S]
Fairing, Brake Cover, RH	G	SA-0741641-14 [4S]
Fairing Land. Gear Strut LH	F	SA-0741052-201 [4S]
Fairing Land. Gear Strut RH	F	SA-0741052-200 [4S]
Fairing, Main Wheel, LH (Wheel Pant)	B	GF0541223-01 [4K] K0741046-203 [10K] SA-0541223-17 [4S]
Fairing, Main Wheel, RH (Wheel Pant)	B	GF0541223-02 [4K] K0741046-202 [10K] SA-0541223-16 [4S]
Fairing, Main Wheel, RH (Wheel Pant)	B	20-40N-80A [4T] GF0543079-00 [4K] K0743625-14 [10K] SA-0543079-3 [4S]
Fairing, Stinger (Tailcone)	N	K1212010-19 [K] SA-1212010-15 [7S] 118-4-17 [8A] 182-LFS [T] K0723612-3 [7T] SA-0720702-9 [8S] SA-0723612-3 [4S]
Fairing, Strut To Fuslg, LH	E	118-4-16 [8A] 182-RFS [T] K0723612-4 [7T] SA-0720702-10 [8S] SA-0723612-4 [4S]

Eligibility continues on next page

**Cessna 180, 182, 185 and 188 Series Aircraft**

Continued from previous page		
Description	Idx	Part Number
Fairing, Strut To Wing, LH	D	118-4-9 <b>8 A</b>
		180-LWS <b>1 T</b>
		K0723605-3 <b>7 T</b>
		SA-0720702-1 <b>8 S</b>
		SA-0723605-3 <b>7 9 S</b>
Fairing, Strut To Wing, RH	D	118-4-8 <b>8 A</b>
		180-RWS <b>1 T</b>
		K0723605-4 <b>7 T</b>
		SA-0720702-2 <b>8 S</b>
		SA-0723605-4 <b>7 9 S</b>
Tip, Elevator, LH	M	GF1234608-01 <b>6 K</b> SA-1234608-3 <b>7 S</b> GF1234608-02 <b>6 K</b> SA-1234608-4 <b>7 S</b>
Tip, Elevator, RH	M	GF1234608-01 <b>6 K</b> SA-1234608-3 <b>7 S</b> GF1234608-02 <b>6 K</b> SA-1234608-4 <b>7 S</b>
Tip, Horiz. Stab., LH or RH	P	GF1232604-1 <b>2 K</b> GF1232604-2 <b>3 K</b>
Tip, Wing, LH	A	20-52L-80A <b>7 T</b> GF0723200-5 <b>8 K</b> SA-0723200-5 <b>7 12 13 S</b>
Tip, Wing, RH	A	20-52R-80A <b>7 T</b> GF0723200-6 <b>8 K</b> SA-0723200-6 <b>7 12 13 S</b>
Tip, Wing, Sym., LH or RH	A	K0723615-200 <b>1 K</b>
Wing Pos., Light Shield, LH	A	219-4-7 <b>8 11 A</b>
Wing Pos., Light Shield, RH	A	219-4-8 <b>8 11 A</b>
<b>1</b> S/N A182-0001 thru A182-0116 only <b>2</b> S/N 18200001 thru 18201313 only <b>3</b> S/Ns 18201314 and on and FR18200046 thru FR18200070 <b>4</b> Models F182P,Q only <b>5</b> Models F182P,Q, FR182 and R182 only <b>6</b> Models F182P,Q, FR182, R182 and TR182 only <b>7</b> Models F182P,Q, R182 and TR182 only <b>8</b> Models R182 and TR182 only <b>9</b> Also available as a FAA-PMA/STC approved split Fairing for easy installation and removal; add an "SP" suffix to the P/N. <b>10</b> Models A182K,L,N only <b>11</b> For a wing with STOL leading edge radius <b>12</b> For kits including LH and RH see page 212. <b>13</b> Add "LL" suffix for FAA-PMA/STC wing tips including Quasar LED landing/taxi lights and optimized to accept LED nav/strobe lights. Must purchase as a LH and RH kit. See page 212. Add "LED" suffix for FAA-PMA/STC wing tips optimized to accept LED nav/strobe lights.		
<b>185, 185A,B,C,D,E, A185E, F</b> S/N 185-0001 thru 18504448		
Description	Idx	Part Number
Cap, Vertical Fin No Beacon Base	J	SA-0742025-1 <b>5 S</b>
Cap, Vertical Fin 2 1/4" Beacon Base	J	SA-0731019-2 <b>5 S</b>
Cap, Vertical Fin 3 1/2" Beacon Base	J	SA-0731015-1 <b>5 S</b>
Fairing, Brake Cover, LH	G	SA-0741059-1 <b>5 S</b>
Fairing, Brake Cover, RH	G	SA-0741059-2 <b>5 S</b>
Fairing, Main Wheel, LH (Wheel Pant)	B	SA-0741070-1 <b>8 S</b>
Fairing, Main Wheel, RH (Wheel Pant)	B	SA-0741070-2 <b>8 S</b>
Fairing, Stinger (Tailcone)	N	SA-0712400-9 <b>5 S</b>
Fairing, Strut To Fuslg, LH	E	180-LFS-T <b>5 T</b>
		SA-0723605-1 <b>1 S</b>
		SA-1227002-3SP <b>9 S</b>
Fairing, Strut To Fuslg, RH	E	180-RFS-T <b>5 T</b>
		SA-0723605-2 <b>1 S</b>
		SA-1227002-2SP <b>9 S</b>
Fairing, Strut To Wing, LH	D	180-LWS <b>1 T</b>
		SA-0723605-3 <b>1 S</b>
		SA-1227002-11SP <b>9 S</b>
Fairing, Strut To Wing, RH	D	180-RWS <b>1 T</b>
		SA-0723605-4 <b>1 S</b>
		SA-1227002-10SP <b>9 S</b>
Fairing, Tailwheel Strg Cbl LH	O	SA-0712309-9 <b>5 S</b>
Fairing, Tailwheel Strg Cbl RH	O	SA-0712309-10 <b>5 S</b>
Tip, Horiz. Stab., LH or RH	P	SA-0732613-3 <b>5 S</b>
Tip, Wing, LH	A	20-51L-80A <b>6 T</b>
		20-52L-80A <b>8 T</b>
		GF0723200-5 <b>K</b>
		SA-0723200-5 <b>8 12 13 S</b>

Continued from previous column		
Description	Idx	Part Number
Tip, Wing, RH	A	20-51R-80A <b>6 T</b>
		20-52R-80A <b>8 T</b> GF0723200-6 <b>K</b> SA-0723200-6 <b>8 12 13 S</b>
Tip, Wing, Conical, LH	A	GF0523565-29791 <b>7 K</b> SA-0523565-29 <b>7 12 13 S</b>
Tip, Wing, Conical, RH	A	GF0523565-30791 <b>7 K</b> SA-0523565-30 <b>7 12 13 S</b>
Tip, Wing, Hoerner Style	A	11004 (set of two) <b>3 K</b>
Tip, Wing, Sym., LH or RH	A	K0723615-200 <b>3 K</b> SA-0723615-200 <b>3 S</b>
Wing Pos., Light Shield, LH	A	219-4-5 <b>4 10 A</b>
		219-4-7 <b>8 11 A</b>
Wing Pos., Light Shield, RH	A	219-4-6 <b>4 10 A</b>
		219-4-8 <b>8 11 A</b>
<b>1</b> S/N 185-0001 thru 185-0237 only <b>2</b> S/N 185-0001 thru 185-0967 only <b>3</b> S/N 185-0001 thru 185-1149 only <b>4</b> S/N 185-0001 thru 185-1599 only <b>5</b> S/N 185-0001 thru 18502310 only <b>6</b> S/N 185-0968 thru 18502090 only <b>7</b> S/N 18501833 thru 18502090 only <b>8</b> S/N 18502091 and on <b>9</b> FAA-PMA/STC approved split Fairing for easy installation and removal. <b>10</b> For a wing with a standard leading edge radius <b>11</b> For a wing with STOL leading edge radius <b>12</b> For kits including LH and RH see page 212. <b>13</b> Add "LL" suffix for FAA-PMA/STC wing tips including Quasar LED landing/taxi lights and optimized to accept LED nav/strobe lights. Must purchase as a LH and RH kit. See page 212. Add "LED" suffix for FAA-PMA/STC wing tips optimized to accept LED nav/strobe lights.		
<b>188, 188A,B, A188, A188A,B, T188C</b> S/N 188-0001 thru 18803973		
Description	Idx	Part Number
Cover, Fuel Strainer	Q	SA-1616036-1 <b>1 S</b>
		SA-1621410-7 <b>2 S</b>
Fairing, Gear Leg, LH	F	SA-1613420-11 <b>4 S</b>
		SA-1613220-23 <b>3 S</b>
Fairing, Gear Leg, RH	F	SA-1621410-8 <b>2 S</b>
		SA-1613420-12 <b>4 S</b>
Fairing, Stinger (Tailcone)	N	SA-1613220-24 <b>3 S</b>
		SA-0712400-9 <b>5 S</b>
Fairing, Strut Upper, LH	E	SA-1613220-11 <b>4 S</b> SA-1620024-1 <b>4 S</b>
Fairing, Strut Upper, RH	E	SA-1613220-12 <b>4 S</b> SA-1620024-2 <b>4 S</b>
Fairing, TE Wing Root, LH	R	SA-1600011-1 <b>1 S</b>
Fairing, TE Wing Root, RH	R	SA-1600011-2 <b>1 S</b>
Tip, Wing, LH	A	20-52L-80A <b>T</b>
		SA-0723200-5 <b>5 6 S</b>
Tip, Wing, RH	A	20-52R-80A <b>T</b>
		SA-0723200-6 <b>5 6 S</b>
<b>1</b> Model T188C not eligible <b>2</b> Models 188B and A188B only <b>3</b> Models 188A,B and A188A,B only <b>4</b> Models 188, 188A, A188, A188A only <b>5</b> For kits including LH and RH see page 212. <b>6</b> Add "LL" suffix for FAA-PMA/STC wing tips including Quasar LED landing/taxi lights and optimized to accept LED nav/strobe lights. Must purchase as a LH and RH kit. See page 212. Add "LED" suffix for FAA-PMA/STC wing tips optimized to accept LED nav/strobe lights.		

Eligibility continues in next column

Manufacturer/Material: **A** Aircraft Development/Fiberglass, **K** Knots 2U/Fiberglass, **S** Stene Aviation/Fiberglass, **T** Texas Aeroplastics/ABS Plastic Parts

## Cessna 180, 182, 185 and 188 Series Aircraft

### Kits available for 180, 182, 185 and 188 aircraft

Kit P/N	Kit Description	Part Number	Item Description
118-22	Strut Fairing Kit, Fiberglass	118-4-11	Fairing, Strut To Fuselage, LH
		118-4-10	Fairing, Strut To Fuselage, RH
		118-4-9	Fairing, Strut To Wing, LH
		118-4-8	Fairing, Strut To Wing, RH
118-32	Strut Fairing Kit, Fiberglass	118-4-7	Fairing, Strut To Fuselage, LH
		118-4-6	Fairing, Strut To Fuselage, RH
		118-4-15	Fairing, Strut To Wing, LH
		118-4-14	Fairing, Strut To Wing, RH
118-4-42	Strut Fairing Kit, Fiberglass	118-4-17	Fairing, Strut To Fuselage, LH
		118-4-16	Fairing, Strut To Fuselage, RH
		118-4-9	Fairing, Strut To Wing, LH
		118-4-8	Fairing, Strut To Wing, RH
20-51-80A	Conical Wing Tip Kit	20-51L-80A	Tip, Wing, LH
		20-51R-80A	Tip, Wing, RH
20-52-80A	Conical Wing Tip Kit	20-52L-80A	Tip, Wing, LH
		20-52R-80A	Tip, Wing, RH
30-04-80A	Wing Strut Fairing Kit	180-LFS-T	Fairing, Strut To Fuselage, LH
		180-RFS-T	Fairing, Strut To Fuselage, RH
		180-LWS	Fairing, Strut to Wing, LH
		180-RWS	Fairing, Strut to Wing, RH
31-01-80A	Wing Strut Fairing Kit	182-LFS	Fairing, Strut To Fuselage, LH
		182-RFS	Fairing, Strut To Fuselage, RH
		180-LWS	Fairing, Strut to Wing, LH
		180-RWS	Fairing, Strut to Wing, RH
31-03-80A	Landing Gear Fairing Kit	31-03-LGF	Fairing, Land. Gear Strut, LH
		31-03-RGF	Fairing, Land. Gear Strut, RH
31-07-80A	Brake Cover Fairing Kit	31-07-LBC	Fairing, Brake Cover, LH
		31-07-RBC	Fairing, Brake Cover, RH
31-08-80A	Brake Cover Fairing Kit	31-08-LBC	Fairing, Brake Cover, LH
		31-08-RBC	Fairing, Brake Cover, RH
KPS01	Split Strut Fairing Kit, Plastic	K0723612-3	Fairing, Strut to Fuselage, LH
		K0723612-4	Fairing, Strut to Fuselage, RH
		K0723605-3	Fairing, Strut to Wing, LH
		K0723605-4	Fairing, Strut to Wing, RH
KPS02	Split Strut Fairing Kit, Plastic	K0723605-1	Fairing, Strut to Fuselage, LH
		K0723605-2	Fairing, Strut to Fuselage, RH
		K0723605-3	Fairing, Strut to Wing, LH
		K0723605-4	Fairing, Strut to Wing, RH
SA-0523565-2930	Wing Tips <b>1 2</b>	SA-0523565-29	Tip, Wing, Conical, LH
		SA-0523565-30	Tip, Wing, Conical, RH
SA-0720702-1234	Strut Fairing Kit	SA-0720702-9	Fairing, Strut to Fuselage, LH
		SA-0720702-10	Fairing, Strut to Fuselage, RH
		SA-0720702-1	Fairing, Strut to Wing, LH
		SA-0720702-2	Fairing, Strut to Wing, RH
SA-0723200-56	Wing Tips <b>1 2</b>	SA-0723200-5	Tip, Wing, Conical, LH
		SA-0723200-6	Tip, Wing, Conical, RH
SA-0723605-1234	Strut Fairing Kit, Fiberglass For FAA-PMA/STC split Fairings add an "SP" suffix to the kit P/N.	SA-0723605-1	Fairing, Strut to Fuselage, LH
		SA-0723605-2	Fairing, Strut to Fuselage, RH
		SA-0723605-3	Fairing, Strut to Wing, LH
		SA-0723605-4	Fairing, Strut to Wing, RH
SA-0723612-3434	Strut Fairing Kit, Fiberglass For FAA-PMA/STC split Fairings add an "SP" suffix to the kit P/N.	SA-0723612-3	Fairing, Strut to Fuselage, LH
		SA-0723612-4	Fairing, Strut to Fuselage, RH
		SA-0723605-3	Fairing, Strut to Wing, LH
		SA-0723605-4	Fairing, Strut to Wing, RH
SA-1227002-1145SP	Split Strut Fairing Kit, Fiberglass	SA-1227002-3SP	Fairing, Strut to Fuselage, LH
		SA-1227002-2SP	Fairing, Strut to Fuselage, RH
		SA-1227002-11SP	Fairing, Strut to Wing, LH
		SA-1227002-10SP	Fairing, Strut to Wing, RH

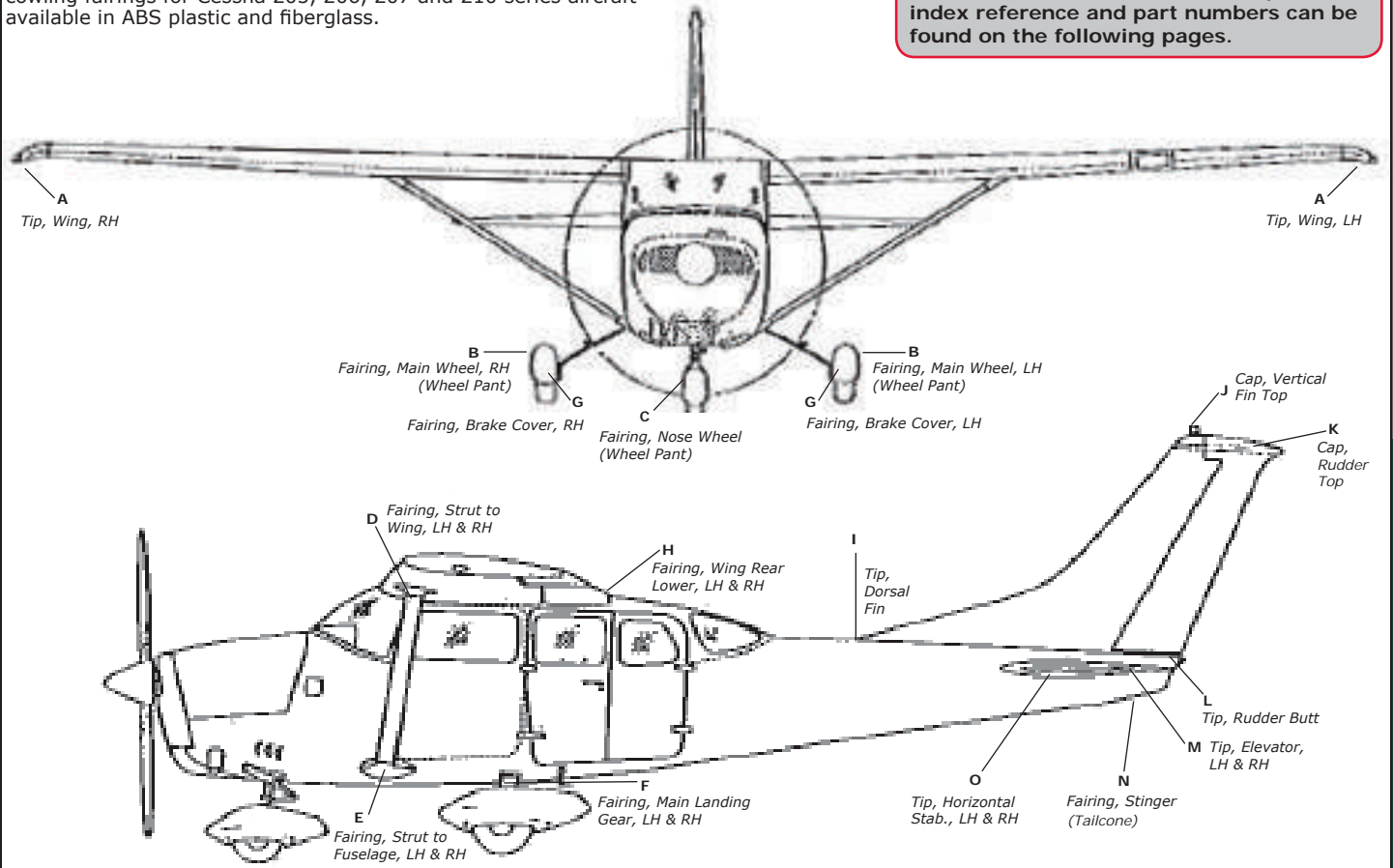
**1** Add "LL" suffix for FAA-PMA/STC wing tips including Quasar LED landing/taxi lights and optimized to accept LED nav/strobe lights. Optional installation kit including all hardware required for installation of Quasar LED lighted wing tips is available. Kits include shielded wire, all connectors, switches and breaker. 14v installation kit USE P/N INSTALL14V. 28v installation kit USE P/N INSTALL28V.

**2** Add "LED" suffix for FAA-PMA/STC wing tips optimized to accept LED nav/strobe lights.

# Exterior Plastic and Fiberglass Trim and Fairings Cessna 205, 206, 207 and 210 Series Aircraft

**Improve the appearance and performance of your aircraft!**  
Strut and landing gear fairings, tail surface fairings, wing tips, and cowling fairings for Cessna 205, 206, 207 and 210 series aircraft available in ABS plastic and fiberglass.

Eligibility tables for Cessna 205, 206, 207 and 210 aircraft with item descriptions, index reference and part numbers can be found on the following pages.



210-5(205), 210-5A(205A) S/N 205-0001 thru 205-0577		
Description	Idx	Part Number
Cap, Rudder Top	K	GF0731606-04 <b>K</b> SA-0731606-10 <b>S</b> SA-1231001-2 <b>S</b>
Cap, Vertical Fin	J	GF0731606-03 <b>K</b>
Fairing, Stinger (Tailcone)	N	SA-1212010-14 <b>S</b>
Fairing, Strut To Fuslg, LH	E	SA-1227401-5 <b>1 S</b>
Fairing, Strut To Fuslg, RH	E	SA-1227401-4 <b>1 S</b> 118-4-19 <b>A</b> SA-1227002-11 <b>1 S</b>
Fairing, Strut To Wing, LH	D	118-4-18 <b>A</b> SA-1227002-10 <b>1 S</b>
Fairing, Strut To Wing, RH	D	118-4-18 <b>A</b> SA-1227002-10 <b>1 S</b>
Tip, Horiz. Stab., LH or RH	O	SA-0732613-1 <b>S</b>
Tip, Wing, LH	A	SA-1223000-7 <b>S</b>
Tip, Wing, RH	A	SA-1223000-8 <b>S</b>
Wing Pos., Light Shield, LH	A	219-4-5 <b>2 A</b>
Wing Pos., Light Shield, RH	A	219-4-6 <b>2 A</b>
<b>1</b> Also available as a FAA-PMA/STC approved split Fairing for easy installation and removal; add an "SP" suffix to the P/N. <b>2</b> For a wing with a standard leading edge radius		
Description	Idx	Part Number
Cap, Rudder Top	K	GF0731606-04 <b>3 K</b> GF0731606-01 <b>3 K</b> SA-0731606-6 <b>3 S</b> SA-1231001-2 <b>1 S</b> SA-1233736-1 <b>1 S</b>
Cap, Vertical Fin No Beacon Base	J	K0731606-1 <b>6 K</b>

Continued from previous column		
Description	Idx	Part Number
Cap, Vertical Fin Small Beacon Base	J	K0731606-3 <b>6 K</b>
Cap, Vertical Fin 2 1/4" Beacon Base	J	SA-0731606-3 <b>6 S</b>
Fairing, Main Wheel, LH (Wheel Pant)	B	K0741046-203 <b>8 K</b>
Fairing, Main Wheel, RH (Wheel Pant)	B	K0741046-202 <b>8 K</b>
Fairing, Nose Wheel	C	K0743625-14 <b>10 K</b> 118-4-21 <b>A</b> SA-1227402-3 <b>12 S</b> 118-4-20 <b>A</b> SA-1227402-4 <b>12 S</b> 118-4-19 <b>A</b>
Fairing, Strut To Fuslg, LH	E	SA-1227402-3 <b>12 S</b> 118-4-20 <b>A</b> SA-1227402-4 <b>12 S</b> 118-4-19 <b>A</b>
Fairing, Strut To Fuslg, RH	E	SA-1227402-3 <b>12 S</b> 118-4-20 <b>A</b> SA-1227402-4 <b>12 S</b> 118-4-19 <b>A</b>
Fairing, Strut To Wing, LH	D	SA-1227002-11 <b>12 S</b> 118-4-18 <b>A</b> SA-1227002-10 <b>12 S</b>
Fairing, Strut To Wing, RH	D	118-4-18 <b>A</b> SA-1227002-10 <b>12 S</b>
Fairing, Stinger (Tailcone)	N	GF1212010-00 <b>K</b> SA-1212010-14 <b>S</b> GF1234608-01 <b>2 K</b> K1234640-1 <b>7 K</b> SA-1234608-3 <b>3 S</b> SA-1234640-1 <b>7 S</b> GF1234608-02 <b>2 K</b> K1234640-2 <b>7 K</b> SA-1234608-4 <b>3 S</b> SA-1234640-2 <b>7 S</b>
Tip, Elevator, LH	M	SA-1232604-1 <b>4 K</b> SA-1232604-1 <b>3 S</b> SA-1232012-1 <b>11 S</b> SA-1232616-1 <b>9 S</b>
Tip, Elevator, RH	M	GF1232604-1 <b>4 K</b> SA-1232604-1 <b>3 S</b> SA-1232012-1 <b>11 S</b> SA-1232616-1 <b>9 S</b>
Tip, Horiz. Stab., LH or RH	O	SA-1232604-1 <b>4 K</b> SA-1232604-1 <b>3 S</b> SA-1232012-1 <b>11 S</b> SA-1232616-1 <b>9 S</b>
Tip, Wing, LH	A	SA-1223000-7 <b>S</b>
Tip, Wing, RH	A	SA-1223000-8 <b>S</b>
Wing Pos., Light Shield, LH	A	219-4-5 <b>14 A</b>

Continued from previous column		
Description	Idx	Part Number
Wing Pos., Light Shield, RH	A	219-4-6 <b>14 A</b>
<b>1</b> Models 206, U206 only <b>2</b> Models 206, U206, U206A,B only <b>3</b> Models 206, U206, U206A,B,C,D only <b>4</b> Models 206, TU206B, U206, U206A, only <b>5</b> Models TU206A,B, U206A,B only <b>6</b> Models TU206B,C,D, U206B,C,D only <b>7</b> Models TU206C,D, U206C,D only <b>8</b> Models U206B,C,D only <b>9</b> Models U206C only <b>10</b> S/N U206-0657 thru U206-1389 only <b>11</b> S/N U206-1161 thru U206-1444 only <b>12</b> Also available as a FAA-PMA/STC approved split Fairing for easy installation and removal; add an "SP" suffix to the P/N. <b>13</b> For aircraft with factory float kit option only <b>14</b> For a wing with a standard leading edge radius		
P206, P206A,B,C,D,E, TP206A,B,C,D,E S/N P206-0002 thru P206-0647		
Description	Idx	Part Number
Cap, Rudder Top	K	GF0731606-04 <b>1 K</b> GF0731606-01 <b>5 K</b> SA-0731606-6 <b>5 S</b> SA-1231001-2 <b>1 S</b>
Cap, Vertical Fin No Beacon Base	J	K0731606-1 <b>5 K</b>
Cap, Vertical Fin Small Beacon Base	J	K0731606-3 <b>5 K</b>
Cap, Vertical Fin 2 1/4" Beacon Base	J	SA-0731606-3 <b>5 S</b>
Fairing, Main Wheel, LH (Wheel Pant)	B	K0741046-203 <b>5 K</b>
Fairing, Main Wheel, RH (Wheel Pant)	B	K0741046-202 <b>5 K</b>
Fairing, Nose Wheel	C	K0743625-14 <b>4 K</b> 118-4-21 <b>S</b> SA-1227402-3 <b>9 S</b>
Fairing, Strut To Fuslg, LH	E	SA-1227402-3 <b>9 S</b>

Eligibility continues in next column

Manufacturer/Material: **A** Aircraft Development/Fiberglass, **K** Knots 2U/Fiberglass, **S** Stene Aviation/Fiberglass, **1** Texas Aeroplastics/ABS Plastic Parts

Exterior Plastic/Fiberglass Trim and Fairings

**Cessna 205, 206, 207 and 210 Series Aircraft**

Continued from previous page

Description	Idx	Part Number
Fairing, Strut To Fuslg, RH	E	118-4-20 SA-1227402-4 <b>9 S</b>
Fairing, Strut To Wing, LH	D	118-4-19 SA-1227002-11 <b>9 S</b>
Fairing, Strut To Wing, RH	D	118-4-18 SA-1227002-10 <b>9 S</b>
Fairing, Stinger (Tailcone)	N	GF1212010-00 <b>K</b> SA-1212010-14 <b>S</b>
Tip, Elevator, LH	M	GF1234608-01 <b>2 K</b> K1234640-1 <b>7 K</b> SA-1234608-3 <b>3 S</b> SA-1234640-1 <b>7 S</b>
Tip, Elevator, RH	M	GF1234608-02 <b>2 K</b> K1234640-2 <b>7 K</b> SA-1234608-4 <b>2 S</b> SA-1234640-2 <b>7 S</b>
Tip, Horiz. Stab., LH or RH	O	GF1232604-1 <b>2 K</b> SA-1232604-1 <b>3 S</b> SA-1232012-1 <b>8 S</b> SA-1232616-1 <b>6 S</b>
Tip, Wing, LH	A	20-51L-80A <b>8 T</b> SA-1223000-7 <b>S</b>
Tip, Wing, RH	A	20-51R-80A <b>8 T</b> SA-1223000-8 <b>S</b>
Wing Pos., Light Shield, LH	A	219-4-5 <b>10 A</b>
Wing Pos., Light Shield, RH	A	219-4-6 <b>10 A</b>

1 Models P206, P206A only  
2 Models P206, P206A,B only  
3 Models P206A,B, TP206A,B only  
4 Models P206B,C,D only  
5 Models P206B,C,D,E only  
6 Models P206C,D only  
7 Models P206C,D,E, TP206C,D,E only  
8 Models P206D,E, TP206D,E only  
9 Also available as a FAA-PMA/STC approved split Fairing for easy installation and removal; add an "SP" suffix to the P/N.  
10 For a wing with a standard leading edge radius

TU206E,F,G, U206E,F,G  
S/N U20601445 thru U20607020

Description	Idx	Part Number
Cap, Rudder Top	K	GF0731606-04 <b>5 K</b> GF0731606-01 <b>9 K</b> SA-0731606-6 <b>8 S</b> SA-0731606-9 <b>17 S</b> SA-1233736-1 <b>10 S</b>
Cap, Vertical Fin No Beacon Base	J	K0731606-1 <b>9 K</b>
Cap, Vertical Fin Small Beacon Base	J	K0731606-3 <b>9 K</b> K1231064 <b>17 K</b>
Cap, Vertical Fin 2 1/4" Beacon Base	J	SA-0731606-3 <b>8 S</b> SA-1231064-1 <b>17 S</b>
Cap, Vertical Fin 2 1/2" Beacon Base	J	SA-1231059-1 <b>13 S</b>
Fairing, Brake, LH	G	SA-1241113-1 <b>6 S</b> SA-1241232-1 <b>6 S</b>
Fairing, Brake, RH	G	SA-1241113-2 <b>6 S</b> SA-1241232-2 <b>6 S</b>
Fairing, Main Gear, LH	B	GF0541223-01 <b>16 K</b> SA-0541203-1 <b>10 S</b> SA-0541223-17 <b>10 S</b> SA-1241229-1 <b>3 S</b>
Fairing, Main Gear, RH	B	GF0541223-02 <b>16 K</b> SA-0541203-2 <b>10 S</b> SA-0541223-16 <b>16 S</b> SA-1241229-2 <b>3 S</b>
Fairing, Main Wheel, LH (Wheel Pant)	B	K0741046-203 <b>7 K</b>
Fairing, Main Wheel, RH (Wheel Pant)	B	K0741046-202 <b>7 K</b>
Fairing, Nose Wheel	C	20-40N-80A <b>12 T</b> GF0543079-00 <b>16 K</b> SA-0543065-1 <b>10 S</b> SA-0543079-3 <b>16 S</b> SA-1234045-1 <b>3 S</b>
Fairing, Strut To Fuslg, LH	E	118-4-21 <b>4 A</b> 118-4-25 <b>14 A</b> SA-1227010-1 <b>3 S</b> SA-1227402-3 <b>1 18 S</b>

Continued from previous column

Description	Idx	Part Number
Fairing, Strut To Fuslg, RH	E	118-4-20 <b>4 A</b> 118-4-24 <b>14 A</b> SA-1227010-2 <b>3 S</b> SA-1227402-4 <b>1 18 S</b>
Fairing, Strut To Wing, LH	D	118-4-19 <b>4 A</b> 118-4-35 <b>13 A</b> SA-1227002-11 <b>1 18 S</b> SA-1227005-5 <b>13 S</b>
Fairing, Strut To Wing, RH	D	118-4-18 <b>4 A</b> 118-4-34 <b>13 A</b> SA-1227002-10 <b>1 18 S</b> SA-1227005-6 <b>13 S</b>
Fairing, Stinger (Tailcone)	N	GF1212010-00 <b>K</b> SA-1212010-14 <b>S</b>
Tip, Elevator, LH	M	K1234640-1 <b>K</b> SA-1234640-1 <b>S</b>
Tip, Elevator, RH	M	K1234640-2 <b>K</b> SA-1234640-2 <b>S</b>
Tip, Horiz. Stab., LH or RH	O	GF1232012-1 <b>3 K</b> SA-1232012-1 <b>S</b>
Tip, Wing, LH	A	20-51L-80A <b>4 T</b> 20-52L-80A <b>2 T</b> GF0723200-5 <b>3 K</b> SA-0723200-5 <b>3 12 23 S</b>
Tip, Wing, RH	A	20-51R-80A <b>4 T</b> 20-52R-80A <b>2 T</b> GF0723200-6 <b>3 K</b> SA-0723200-6 <b>3 12 23 S</b>
Tip, Wing, Conical, LH	A	GF0523565-29791 <b>11 K</b> SA-0523565-29 <b>11 23 23 S</b>
Tip, Wing, Conical, RH	A	GF0523565-30791 <b>11 K</b> SA-0523565-30 <b>11 23 23 S</b>
Wing Pos., Light Shield, LH	A	219-4-5 <b>4 20 A</b> 219-4-7 <b>3 21 A</b>
Wing Pos., Light Shield, RH	A	219-4-6 <b>4 20 A</b> 219-4-8 <b>3 21 A</b>

1 Models TU206E,U206E only  
2 Models TU206F,U206F only  
3 Models TU206F,G,U206F,G only  
4 Model U206E only  
5 Models U206E,F,G only  
6 Model U206G only  
7 S/N U20601445 thru U20601587 only  
8 S/N U20601445 thru U20601905 only  
9 S/N U20601445 thru U20603020 only  
10 S/N U20601588 thru U20602199 only  
11 S/N U20601605 thru U20601700 only  
12 S/N U20601701 thru U20603521 only  
13 S/N U20601906 thru U20603020 only  
14 S/N U20602200 and On  
15 S/N U20602576 and On  
16 S/N U20602580 and On  
17 S/N U20603021 and On  
18 Also available as a FAA-PMA/STC approved split Fairing for easy installation and removal; add an "SP" suffix to the P/N.  
19 For aircraft with factory float kit option only  
20 For a wing with a standard leading edge radius  
21 For a wing with STOL leading edge radius  
22 For kits including LH and RH see page 216.  
23 Add "LL" suffix for FAA-PMA/STC wing tips including Quasar LED landing/taxi lights and optimized to accept LED nav/strobe lights. Must purchase as a LH and RH kit. See page 216.  
Add "LED" suffix for FAA-PMA/STC wing tips optimized to accept LED nav/strobe lights.

206H, T206H  
S/N 20608001 thru 20699999, T20608001 thru T20699999

Description	Idx	Part Number
Cap, Rudder Top	K	SA-0731606-9 <b>S</b>
Cap, Vertical Fin 2 1/4" Beacon Base	J	SA-0731606-11 <b>S</b>
Cap, Vertical Fin 2 1/2" Beacon Base	J	K1231064 <b>K</b>
Fairing, Main Gear, LH	B	GF0541223-01 <b>2 K</b> SA-0541223-17 <b>S</b> SA-1241229-1 <b>S</b>
Fairing, Main Gear, RH	B	GF0541223-02 <b>2 K</b> SA-0541223-16 <b>S</b> SA-1241229-2 <b>S</b>
Fairing, Nose Wheel	C	SA-0543079-3 <b>S</b> SA-1243045-12 <b>6 S</b>
Fairing, Strut To Fuslg, LH	E	SA-1227010-1 <b>S</b>
Fairing, Strut To Fuslg, RH	E	SA-1227010-2 <b>S</b>
Fairing, Strut To Wing, LH	D	118-4-35 <b>A</b> SA-1227011-5 <b>S</b>
Fairing, Strut To Wing, RH	D	118-4-34 <b>A</b> SA-1227011-6 <b>S</b>
Tip, Elevator, LH	M	K1234640-1 <b>K</b> SA-1234640-1 <b>9 S</b>

Eligibility continues on next page

207, 207A, T207, T207A  
S/N 20700001 thru 20700788

Description	Idx	Part Number
Cap, Rudder Top	K	GF0731606-04 <b>8 K</b> GF0731606-01 <b>4 K</b> SA-0731606-6 <b>4 S</b> SA-0731606-9 <b>8 S</b>
Cap, Vertical Fin No Beacon Base	J	K0731606-1 <b>4 K</b>
Cap, Vertical Fin Small Beacon Base	J	K0731606-3 <b>4 K</b> K1231064 <b>8 K</b>
Cap, Vertical Fin 2 1/4" Beacon Base	J	SA-0731606-3 <b>2 S</b> SA-1231064-1 <b>8 S</b>
Cap, Vertical Fin 2 1/2" Beacon Base	J	SA-1231059-1 <b>6 S</b>
Fairing, Brake, LH	G	SA-1241228-1 <b>8 S</b>
Fairing, Brake, RH	G	SA-1241228-2 <b>8 S</b>
Fairing, Gear Leg, LH	F	SA-1241217-1 <b>S</b>
Fairing, Gear Leg, RH	F	SA-1241217-2 <b>S</b>
Fairing, Main Gear, LH	B	GF0541223-01 <b>8 K</b>
Fairing, Main Gear, RH	B	GF0541223-02 <b>8 K</b> GF0543079-00 <b>8 K</b>
Fairing, Nose Wheel	C	K0743625-14 <b>5 K</b> SA-0543079-3 <b>5 S</b>
Fairing, Stinger (Tailcone)	N	GF1212010-00 <b>K</b> SA-1212010-14 <b>S</b>
Fairing, Strut To Fuslg, LH	E	118-4-25 <b>A</b> SA-1227010-1 <b>S</b>
Fairing, Strut To Fuslg, RH	E	118-4-24 <b>A</b> SA-1227010-2 <b>S</b>
Fairing, Strut To Wing, LH	D	118-4-35 <b>A</b> SA-1227011-5 <b>S</b>
Fairing, Strut To Wing, RH	D	118-4-34 <b>A</b> SA-1227011-6 <b>S</b>
Tip, Elevator, LH	M	K1234640-1 <b>K</b> SA-1234640-1 <b>9 S</b>

Eligibility continues on next page

Exterior Plastic/Fiberglass Trim and Fairings

**Cessna 205, 206, 207, 210, 310, 336 and 337 Series Aircraft**

Continued from previous page		
Description	Idx	Part Number
Tip, Elevator, RH	M	K1234640-2 SA-1234640-2
Tip, Horiz. Stab., LH or RH	O	GF1232012-1 SA-1232012-1
Tip, Wing, LH	A	20-51L-80A SA-1223000-7
Tip, Wing, RH	A	SA-0523565-29 20-51R-80A SA-1223000-8 SA-0523565-30
Tip, Wing, Conical, LH	A	GF0523565-29791
Tip, Wing, Conical, RH	A	GF0523565-30791
Wing Pos., Light Shield, LH	A	219-4-5
Wing Pos., Light Shield, RH	A	219-4-6

- 1 S/N 20700001 thru 20700148 only
- 2 S/N 20700001 thru 20700216 only
- 3 S/N 20700001 thru 20700254 only
- 4 S/N 20700001 thru 20700314 only
- 5 S/N 20700001 thru 20700362 only
- 6 S/N 20700217 thru 20700314 only
- 7 S/N 20700192 and on
- 8 S/N 20700315 and on
- 9 S/N 20700363 and on
- 10 For a wing with a standard leading edge radius
- 11 For kits including LH and RH see page 216.
- 12 Add "LL" suffix for FAA-PMA/STC wing tips including Quasar LED landing/taxi lights and optimized to accept LED nav/strobe lights. Must purchase as a LH and RH kit. See page 216.
- Add "LED" suffix for FAA-PMA/STC wing tips optimized to accept LED nav/strobe lights.

**210, 210A, B, C, D, E, F**  
S/N 57001 thru 21058818

Description	Idx	Part Number				
Cap, Rudder Top	K	GF0731606-04 SA-1231001-2				
Cap, Vertical Fin	J	GF0731606-03				
Fairing, Strut To Fuslg, LH	E	34-01-01-LFS SA-1227002-3 SA-1227401-3 SA-1227402-1 SA-1227402-3				
		Fairing, Strut To Fuslg, RH	E	34-01-01-RFS SA-1227002-2 SA-1227401-2 SA-1227402-2 SA-1227402-4		
				Fairing, Strut To Wing, LH	D	118-4-19 34-01-05-LWS SA-1227002-11 SA-1227002-5
						Fairing, Strut To Wing, RH
Fairing, Stinger (Tailcone)	N					
		Tip, Elevator, LH	M			
				Tip, Elevator, RH	M	
						Tip, Horiz. Stab., LH or RH
Tip, Wing, Hoerner Style	A					
		Tip, Wing, LH	A			
				Tip, Wing, RH	A	

- 1 Models 210, 210A only
- 2 Models 210, 210A,B,C only
- 3 Models 210, 210A,B,C,D,E only
- 4 Models 210B,C only
- 5 Models 210D,E only
- 6 Models 210D,E,F only
- 7 Model 210F only

**210G,H,J,K,L,M,N,R**  
S/N 21058819 thru 21065009

Description	Idx	Part Number		
Cap, Rudder Top	K	GF0731606-04 GF0731606-01 SA-0731606-6 SA-0731606-9		
		Cap, Vertical Fin No Beacon Base	J	GF0731606-03 K0731606-1 SA-0731606-1 SA-0731606-10
				Cap, Vertical Fin Small Beacon Base
Cap, Vertical Fin 2 1/4" Beacon Base	J			
		Cap, Vertical Fin 2 1/2" Beacon Base	J	
				Fairing, Stinger (Tailcone)
Tip, Elevator, LH	M			
		Tip, Elevator, RH	M	
				Tip, Horiz. Stab., LH or RH
Tip, Wing, LH	A			
		Tip, Wing, RH	A	

**P210N R**  
S/N P21000001 thru P21000874

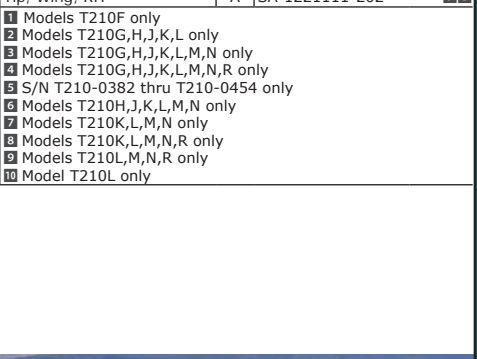
Description	Idx	Part Number
Cap, Rudder Top	K	GF0731606-04
Cap, Vertical Fin No Beacon Base	J	GF0731606-03
Cap, Vertical Fin Small Beacon Base	J	K1231064
Fairing, Stinger (Tailcone)	N	GF1212010-00 SA-1212010-14
Tip, Elevator, LH	M	K1234640-1 SA-1234640-1
Tip, Elevator, RH	M	K1234640-2 SA-1234640-2
Tip, Wing, LH	A	SA-1221111-203
Tip, Wing, RH	A	SA-1221111-202

**T210F,G,H,J,K,L,M,N,R**  
S/N T210-0001 thru T210-0454

Description	Idx	Part Number
Cap, Rudder Top	K	GF0731606-04 GF0731606-01 SA-1231001-2
Cap, Vertical Fin No Beacon Base	J	GF0731606-03 K0731606-1 K0731606-3
Cap, Vertical Fin Small Beacon Base	J	K1231064
Cap, Vertical Fin 2 1/2" Beacon Base	J	SA-1231059-1
Fairing, Stinger (Tailcone)	N	GF1212010-00 SA-1212010-14 GF1234608-01
Tip, Elevator, LH	M	K1234640-1 SA-1234608-3 SA-1234640-1
Tip, Elevator, RH	M	GF1234608-02 K1234640-2 SA-1234608-4 SA-1234640-2

Eligibility continues in next column

Continued from previous column				
Description	Idx	Part Number		
Tip, Horiz. Stab., LH or RH	O	SA-1232012-1 GF1232012-1 GF1232604-1 SA-1232604-1		
		Tip, Wing, LH	A	SA-1221111-203
		Tip, Wing, RH	A	SA-1221111-202
		1 Models T210F only		
2 Models T210G,H,J,K,L only				
3 Models T210G,H,J,K,L,M,N only				
4 Models T210G,H,J,K,L,M,N,R only				
5 S/N T210-0382 thru T210-0454 only				
6 Models T210H,J,K,L,M,N only				
7 Models T210K,L,M,N only				
8 Models T210K,L,M,N,R only				
9 Models T210L,M,N,R only				
10 Model T210L only				



**310, 310P**

Description	Part Number
Cap, Nose, Left	GF0851119-1
Cap, Nose, Right	GF0851119-2
Fairing, Stinger (Tailcone)	GF0831372-1
Tip, Stabilizer, Left or Right	GF0832115-1
1 Model 310P S/N 310P0001 thru 310P0094 only	
2 Model 310 only	



**336, 337, 337A,B,C,D,E,F,G,H, F337E,F,G,H, FT337E,F, P337H, T337G**

Description	Part Number
Fairing, Strut To Fuslg, LH	33-06-LFS SA-1412251-3 SA-1521002-1
Fairing, Strut To Fuslg, RH	33-06-RFS SA-1412251-4 SA-1521002-2
Fairing, Strut To Wing, LH	33-06-LWS SA-1421001-5 SA-1521002-3
Fairing, Strut To Wing, RH	33-06-RWS SA-1421001-6 SA-1521002-4
Tip, Rudder	GF1431001-8 SA-1431001-8 GF1431001-11
Tip Vertical Fin, Lower	SA-1431001-11
Tip, Vertical Fin, Upper	GF1531003-9 SA-1531003-9
Tip, Vertical Fin, Upper LH	GF1431001-10
Tip, Wing, LH	SA-1520008-23
Tip, Wing, RH	SA-1520008-24

- 1 Models 337, 337A,B,C,D,E,F only
- 2 Models 336, 337, 337A,B,C,D,E,F,G,H, F337E,F,G,H, FT337E,F,P337H,T337G only
- 3 Models 337G,H, F337G, P337H,T337G only
- 4 Models 336, 337, F337E,F,G,H, FT337E,F, P337H, T337G only
- 5 Models 337E,F, T337E,F only
- 6 Models 337G,H, T337H only

Exterior Plastic/Fiberglass Trim and Fairings

**Cessna 205, 206, 207, 210, 340, 401 and 402 Series Aircraft**



340, 401, 401A,B, 402, 402A,B,C	
Description	Part Number
Tip, Stabilizer, Left or Right	GF0832115-1

**Kits available for 205, 206, 207 and 210 aircraft**

Kit P/N	Kit Description	Part Number	Item Description
118-4-62	Strut Fairing Kit, Fiberglass	118-4-25	Fairing, Strut To Fuselage, LH
		118-4-24	Fairing, Strut To Fuselage, RH
		118-4-35	Fairing, Strut To Wing, LH
		118-4-34	Fairing, Strut To Wing, RH
118-4-72	Strut Fairing Kit, Fiberglass	118-4-21	Fairing, Strut To Fuselage, LH
		118-4-20	Fairing, Strut To Fuselage, RH
		118-4-19	Fairing, Strut To Wing, LH
		118-4-18	Fairing, Strut To Wing, RH
20-51-80A	Conical Wing Tip Kit	20-51L-80A	Tip, Wing, LH
		20-51R-80A	Tip, Wing, RH
20-52-80A	Conical Wing Tip Kit	20-52L-80A	Tip, Wing, LH
		20-52R-80A	Tip, Wing, RH
SA-0523565-2930	Wing Tips <b>1</b> <b>2</b>	SA-0523565-29	Tip, Wing, Conical, LH
		SA-0523565-30	Tip, Wing, Conical, RH
SA-0723200-56	Wing Tips <b>1</b> <b>2</b>	SA-0723200-5	Tip, Wing, LH
		SA-0723200-6	Tip, Wing, RH
SA-1227010-1256	Strut Fairing Kit, Fiberglass	SA-1227010-1	Fairing, Strut to Fuselage, LH
		SA-1227010-2	Fairing, Strut to Fuselage, RH
		SA-1227005-5	Fairing, Strut to Wing, LH
		SA-1227005-6	Fairing, Strut to Wing, RH
SA-1227010-5612	Strut Fairing Kit, Fiberglass	SA-1227010-1	Fairing, Strut to Fuselage, LH
		SA-1227010-2	Fairing, Strut to Fuselage, RH
		SA-1227011-5	Fairing, Strut to Wing, LH
		SA-1227011-6	Fairing, Strut to Wing, RH
SA-1227401-2345	Strut Fairing Kit, Fiberglass For FAA-PMA/STC split Fairings add an "SP" suffix to the kit P/N.	SA-1227401-5	Fairing, Strut to Fuselage, LH
		SA-1227401-4	Fairing, Strut to Fuselage, RH
		SA-1227002-11	Fairing, Strut to Wing, LH
		SA-1227002-10	Fairing, Strut to Wing, RH
SA-1227402-3456	Strut Fairing Kit, Fiberglass For FAA-PMA/STC split Fairings add an "SP" suffix to the kit P/N.	SA-1227402-3	Fairing, Strut to Fuselage, LH
		SA-1227402-4	Fairing, Strut to Fuselage, RH
		SA-1227002-11	Fairing, Strut to Wing, LH
		SA-1227002-10	Fairing, Strut to Wing, RH

**1** Add "LL" suffix for FAA-PMA/STC wing tips including Quasar LED landing/taxi lights and optimized to accept LED nav/strobe lights. Optional installation kit including all hardware required for installation of Quasar LED lighted wing tips is available. Kits include shielded wire, all connectors, switches and breaker. 14v installation kit USE P/N INSTALL14V. 28v installation kit USE P/N INSTALL28V.  
**2** Add "LED" suffix for FAA-PMA/STC wing tips optimized to accept LED nav/strobe lights.

**Commander 112/114 Series Aircraft Fiberglass parts by Knots 2U**

**Vertical Fin Tip**

112 S/N 126 thru 499  
 112B S/N 500 and Up  
 112TC S/N 13000 thru 13149  
 112TCA S/N 13150 and Up  
 114, 114A,B,  
 114TC S/N 14000-14624  
 P/N GF44300-3



**Tailcone Stinger**

114  
 P/N GF43367-210



**Dorsal Fin Tip**

112, 114 Series  
 P/N GF43650-501



**Stabilator Tip**

112,A,B,TC,TCA  
 114  
 P/N GF44324-400  
 Fits left or right.



**Rudder Tip**

112 S/N 126 thru 499  
 112B S/N 500 and Up  
 112TC S/N 13000 thru 13149  
 112TCA S/N 13150 and Up  
 114,A,B  
 P/N GF44233-11



**Wing Tips**

112, 112A, 114  
 P/N GF142242-17 (Left) P/N GF175009-3 (Left)  
 P/N GF142242-18 (Right) P/N GF175009-8 (Right)

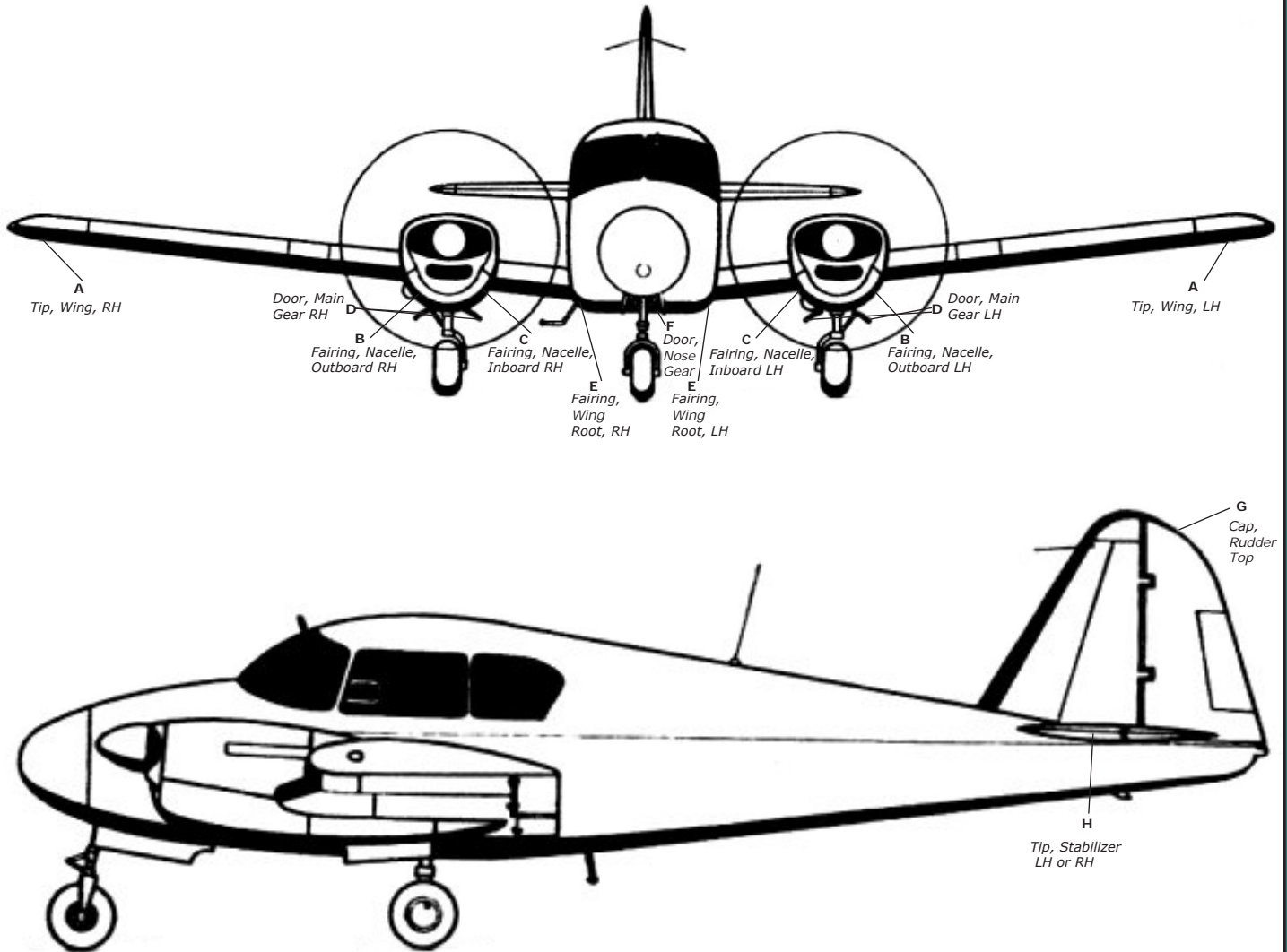


Photo courtesy of Lauren Sobkowiak

Manufacturer/Material: **A** Aircraft Development/Fiberglass, **K** Knots 2U/Fiberglass, **S** Stene Aviation/Fiberglass, **T** Texas AeroPlastics/ABS Plastic Parts



# Exterior Plastic and Fiberglass Trim and Fairings Piper PA-23, PA-30, PA-39 Series Aircraft



### PA-23-235, PA-23-250

Description	Idx	Part Number	
CAP, Rudder Top	G	33448-000K	4 K
		K16792-00	1 K
Door, Main Gear, LH	D	GF31466-00	2 6 K
Door, Main Gear, RH	D	GF31466-01	2 6 K
Door, Nose Gear, LH	F	GF31515-00	2 6 K
Door, Nose Gear, RH	F	GF31515-01	2 6 K
Fairing, Nacelle, Inboard LH	C	GF32466-00	3 K
Fairing, Nacelle, Inboard RH	C	GF32466-01	3 K
Fairing, Nacelle, Outboard LH	B	GF32471-00	3 K
Fairing, Nacelle, Outboard RH	B	GF32471-01	3 K
Fairing, Wing Root, LH	E	GF32464-00	3 K
Fairing, Wing Root, RH	E	GF32464-01	3 K
Tip, Stabilizer, Set, RH and LH	H	GF28466-00	K
Tip, Stabilizer, LH or RH	H	GF16109-00	K
Tip, Wing, LH	A	GF34267-00	5 K
Tip, Wing, RH	A	GF34267-01	5 K

1 Models PA-23-235, PA-23-250 S/N 27-1 thru 27-3070 and 27-4445 thru 27-7305134

2 S/N 27-2505 and On

3 S/N 27-3889 and On

4 S/N 27-7305135 and On

5 S/N 27-7654001 thru 27-7954087

6 Only sold in a set containing both LH and RH

### PA-30, 39

Description	Idx	Part Number	
Cap, Rudder Top	G	GF23595-00	K
Tip, Stabilizer, LH or RH	H	GF25066	2 K
		GF21556-00	1 K

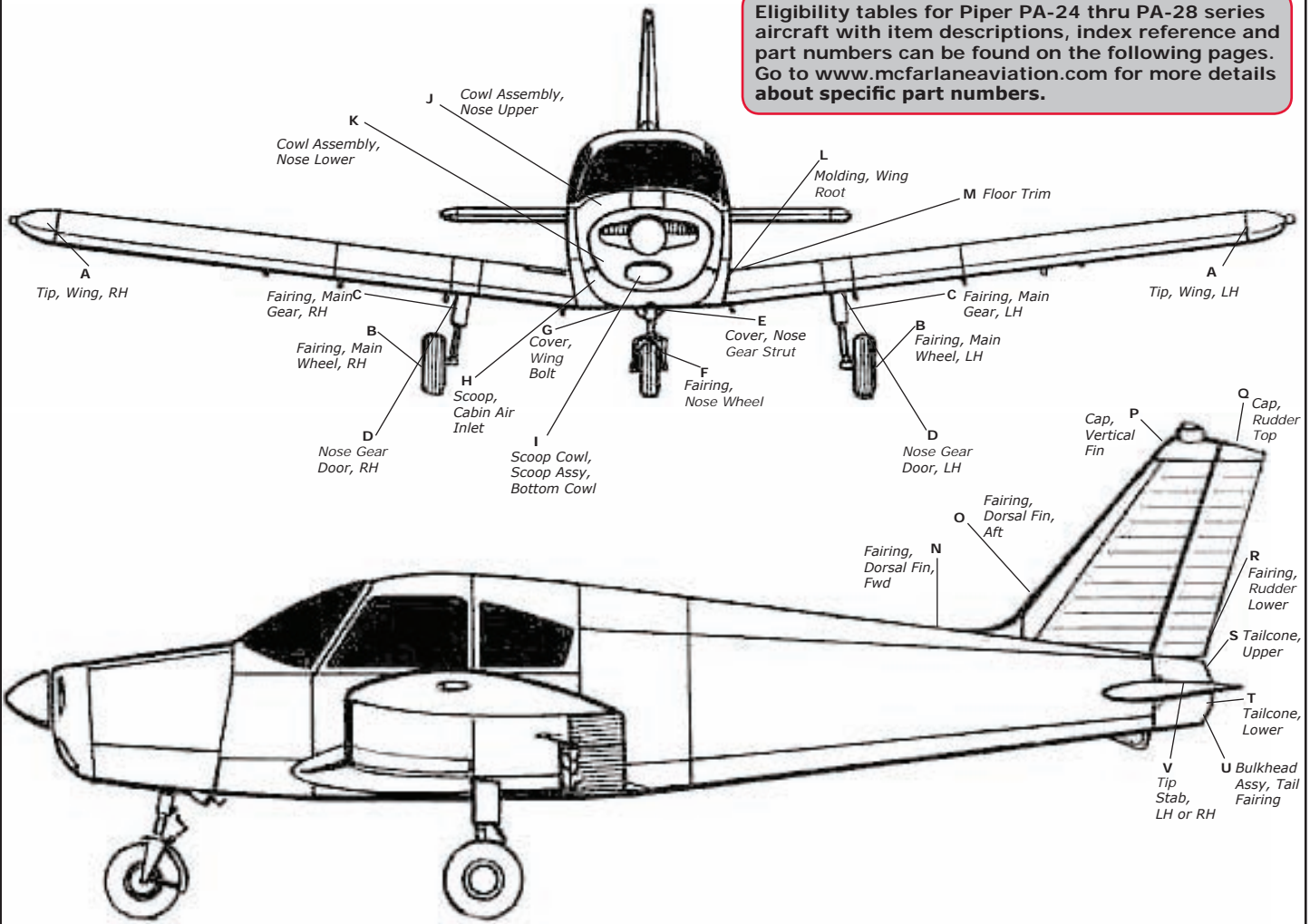
1 Model PA-30 S/N 30-2 thru 30-1744 except 30-1717

2 Model PA-30 S/N 30-1717, 30-1745 and On, PA-39

Manufacturer/Material: K Knots 2U/Fiberglass



Eligibility tables for Piper PA-24 thru PA-28 series aircraft with item descriptions, index reference and part numbers can be found on the following pages. Go to [www.mcfarlaneaviation.com](http://www.mcfarlaneaviation.com) for more details about specific part numbers.



PA-24, PA-24-250, PA-24-260, PA-24-400		
Description	Idx	Part Number
Bulkhead Assy, Tail Fairing	U	GF20804-12 <b>2</b> <b>K</b>
		GF21605-05 <b>1</b> <b>K</b>
		GF21555-00 <b>K</b>
Cap, Rudder Top, w/o slot	Q	K23451-00 <b>10</b> <b>K</b>
		GF24846-00 <b>9</b> <b>K</b>
Cap, Rudder Top, with slot	Q	GF21555-02 <b>K</b>
Cap, Vertical Fin	P	GF21557-00 <b>K</b>
		GF24896-00 <b>9</b> <b>K</b>
Scoop Assy, Bottom Cowl	I	GF21143 <b>5</b> <b>K</b>
Scoop, Cabin Air Inlet	H	K21933-00 <b>4</b> <b>K</b>
Scoop, Cowl	I	K21947-00 <b>3</b> <b>K</b>
Tip, Stabilizer, LH or RH	V	GF16109-00 <b>10</b> <b>K</b>
		GF21556-00 <b>7</b> <b>K</b>
		GF28041-00 <b>3</b> <b>K</b>
Tip, Wing, Hoerner Style (set)	A	11050-1 <b>K</b>
<b>1</b> PA-24 S/N 24-1 thru 24-3336 only (except 24-3335) PA-24-250 S/N 24-105 thru 24-2843 PA-24-400 S/N All		
<b>2</b> PA-24 S/N 24-3337 thru 24-3687 only PA-24-250 S/N 24-2844 thru 24-3687 PA-24-260 S/N All		
<b>3</b> Model PA-24, PA-24-250 only		
<b>4</b> Model PA-24 and PA-24-250 S/N 24-1330 and on		
<b>5</b> Model PA-24 only, not for use on PA-24 aircraft with Cowl P/Ns 21950-07/-14, 22858-02, 22857-12, 24895-02/-17, or if carburetor air filter kit 754 285 is installed.		
<b>6</b> Model PA-24 S/N 24-1477 and On, PA-24-250 All, but can only be installed on PA-24-250, S/N 24-103 thru 24-1476 if carburetor air filter kit 754-285 has been installed.		
<b>7</b> Model PA-24, PA-24-250, PA-24-260 only (except 24-3335)		
<b>8</b> Model PA-24-250, PA-24-260 only		
<b>9</b> Model PA-24-260 only		
<b>10</b> Model PA-24-400 only		

PA-28-140		
Description	Idx	Part Number
Cap, Vertical Fin, Rotating Beacon	P	60-27 <b>T</b>
		60-28 <b>5</b> <b>T</b>
		GF63514-00 <b>2</b> <b>K</b>
Cover, Wing Bolt, LH	G	60-63942-00-80A <b>T</b>
		GF63942-00 <b>K</b>
Cover, Wing Bolt, RH	G	60-63942-01-80A <b>T</b>
Fairing, Dorsal Fin, Aft	O	RD-0095-00 <b>4</b> <b>K</b>
		60-19 <b>3</b> <b>T</b>
Fairing, Dorsal Fin, Fwd	N	60-24 <b>4</b> <b>T</b>
		GF63517-00 <b>1</b> <b>K</b>
		RD-0096-00 <b>4</b> <b>K</b>
		60-24 <b>4</b> <b>T</b>
Fairing, Main Gear, LH or RH	C	K63338-00 <b>K</b>
Fairing, Main Wheel LH	B	K65203-00 <b>K</b>
Fairing, Main Wheel RH	B	K65203-01 <b>K</b>
Fairing, Nose Wheel	F	K65331-00 <b>K</b>
Moulding, Wing Root	L	K65773-00 <b>K</b>
Tailcone, Assembly	ST	RD-0099-00 <b>K</b>
Tailcone, Lower	T	60-31 <b>T</b>
		RD-0098-00 <b>K</b>
Tailcone, Upper	S	60-30 <b>T</b>
		RD-0097-00 <b>K</b>
Tip, Stabilizer	V	60-23 <b>T</b>
Tip, Stabilizer, LH or RH	V	RD-0094-00 <b>K</b>
Tip, Wing, Hoerner Style (set)	A	11051-1 <b>K</b>
Tip, Wing, LH	A	RD-5010-L <b>6</b> <b>K</b>
Tip, Wing, RH	A	RD-5010-R <b>6</b> <b>K</b>
Tip, Wing, LH, 4" Nav Pad Only	A	GF62090-00 <b>K</b>
Tip, Wing, RH, 4" Nav Pad Only	A	GF62090-01 <b>K</b>
Tip, Wing, LH, 6" Nav Pad Std	A	GF78022-00 <b>K</b>
Tip, Wing, RH, 6" Nav Pad Std	A	GF78022-01 <b>K</b>

Continued from previous column		
Description	Idx	Part Number
<b>1</b> S/N 28-20002 thru 28-7125651 and S/N 28-7225001 and On		
<b>2</b> S/N 28-20002 thru 28-7125651 and S/N 28-7225001 thru 28-7325684		
<b>3</b> S/N 28-20002 thru 28-7225612		
<b>4</b> S/N 28-7225001 and On		
<b>5</b> S/N 28-7425001 and On		
<b>6</b> Kit P/N RMD-005010-PA contains both LH and RH		
<b>PA-28-150, PA-28-160</b>		
Cap, Vertical Fin, Rotating Beacon	P	GF63514-00 <b>K</b>
		60-63942-00-80A <b>T</b>
Cover, Wing Bolt, LH	G	GF63942-00 <b>K</b>
Cover, Wing Bolt, RH	G	60-63942-01-80A <b>T</b>
		GF63942-01 <b>K</b>
Fairing, Dorsal Fin, Fwd	N	60-19 <b>T</b>
		GF63517-00 <b>K</b>
Fairing, Main Gear, LH or RH	C	K63338-00 <b>K</b>
Fairing, Main Wheel LH	B	K65203-00 <b>K</b>
Fairing, Main Wheel RH	B	K65203-01 <b>K</b>
Fairing, Nose Wheel	F	K65331-00 <b>K</b>
Moulding, Wing Root	L	K65773-00 <b>K</b>
Tailcone, Assembly	ST	RD-0099-00 <b>K</b>
Tailcone, Lower	T	RD-0098-00 <b>K</b>
Tailcone, Upper	S	RD-0097-00 <b>K</b>
Tip, Stabilizer	V	60-23 <b>T</b>
Tip, Stabilizer, LH or RH	V	RD-0094-00 <b>K</b>
Tip, Wing, Hoerner Style (set)	A	11051-1 <b>K</b>
Tip, Wing, LH	A	RD-5010-L <b>1</b> <b>K</b>
Tip, Wing, RH	A	RD-5010-R <b>1</b> <b>K</b>
Tip, Wing, LH, 4" Nav Pad Only	A	GF62090-00 <b>K</b>
Tip, Wing, RH, 4" Nav Pad Only	A	GF62090-01 <b>K</b>
Tip, Wing, LH, 6" Nav Pad Std	A	GF78022-00 <b>K</b>
Tip, Wing, RH, 6" Nav Pad Std	A	GF78022-01 <b>K</b>
<b>1</b> Kit P/N RMD-005010-PA contains both LH and RH.		

Eligibility continues in next column

Manufacturer/Material: **K** Knots 2U/Fiberglass, **T** Texas Aeroplastics/ABS Plastic Parts

**Piper PA-24 thru PA-28 Series Aircraft**

PA-28-151, PA-28-161		
Description	Idx	Part Number
Cap, Vertical Fin, Rot. Beacon	P	60-28 GF65345-03
Cover, Nose Gear Strut, Aft	E	GF35838-10 W/Door
		GF35838-10 (No Door)
Cover, Nose Gear Fairing, Aft	E	GF36568-03
Cover, Nose Gear Fairing, Fwd	E	GF36568-02
Cover, Nose Gear Strut Fairing Aft	E	GF37893-07 GF37928-04
Cover, Nose Gear Strut Fairing, Fwd	E	GF37893-06 GF37928-03
Cover, Wing Bolt, LH	G	60-63942-00-80A GF63942-00
Cover, Wing Bolt, RH	G	60-63942-01-80A GF63942-01
Cowl Assy, Nose Upper	J	K35699-02
Cowl Assy, Nose Lower	K	K35699-03
Fairing, Dorsal Fin, Aft	O	RD-0095-00
Fairing, Dorsal Fin, Fwd	N	RD-0096-00
Fairing, Main Gear, LH or RH	C	K63338-00
Fairing, Main Wheel LH	B	K65203-00
Fairing, Main Wheel RH	B	K65203-01
Fairing, Main Wheel Access Panel, LH	B	GF79890-02
Fairing, Main Wheel Access Panel, RH	B	GF79890-03
Fairing, Main Wheel Shell, LH	B	GF79890-00
Fairing, Main Wheel Shell, RH	B	GF79890-01
Fairing, Main Wheel, Fwd Up LH	B	GF79892-04
Fairing, Main Wheel, Fwd Up RH	B	GF79892-05
Fairing, Main Wheel, Aft Up RH	B	GF79892-09
Fairing, Main Wheel, Aft Up LH	B	GF79892-10
Fairing, Nose Wheel	F	K35512-00
Moulding, Wing Root	L	K65773-00
Tailcone, Assembly	ST	RD-0099-00
Tailcone, Lower	T	RD-0098-00
Tailcone, Upper	S	RD-0097-00
Tip, Stabilizer, LH or RH	V	60-23 RD-0094-00
Tip, Wing, LH	A	60-33L-4-80A 60-33L-6-80A GF35115-00
		RD-6010-L
		60-33R-4-80A 60-33R-6-80A GF35115-01
Tip, Wing, RH	A	RD-6010-R

Continued from previous column		
Description	Idx	Part Number
Tip, Stabilator LH or RH	V	60-23 RD-0094-00
Tip, Wing, Hoerner Style (set)	A	11051-1
Tip, Wing, LH	A	RD-5010-L
Tip, Wing, LH, 4" Nav Pad Only	A	GF62090-00
Tip, Wing, LH, 4" Nav Pad Std	A	GF78022-00
Tip, Wing, LH, 6" Nav Pad Std	A	GF78022-02
Tip, Wing, RH	A	RD-5010-R
Tip, Wing, RH, 4" Nav Pad Only	A	GF62090-01
Tip, Wing, RH, 4" Nav Pad Std	A	GF78022-01
Tip, Wing, RH, 6" Nav Pad Std	A	GF78022-03
<ol style="list-style-type: none"> <li>S/N 28-671 thru 28-7105244</li> <li>S/N 28-671 thru 28-7205328</li> <li>S/N 28-3978 thru 28-7505260</li> <li>S/N 28-7205001 thru 28-7505260</li> <li>S/N 28-7335001 thru 28-7505260</li> <li>S/N 28-7405001 and On</li> </ol>		

PA-28R-180		
Description	Idx	Part Number
Cap, Vertical Fin, Rotating Beacon	P	60-27 60-28 GF65345-03
Cover, Wing Bolt, LH	G	60-63942-00-80A GF63942-00
Cover, Wing Bolt, RH	G	60-63942-01-80A GF63942-01
Door, Nose Gear, LH	D	GF67352-00
Door, Nose Gear, RH	D	GF67352-01
Fairing, Dorsal Fin, Fwd	N	60-19
		GF63517-00
Moulding, Wing Root	L	K65773-00
Tailcone, Assembly	ST	RD-0099-00
Tailcone, Lower	T	RD-0098-00
Tailcone, Upper	T	60-30 RD-0097-00
Tip, Stabilator, Ext. LH or RH	V	K2U65300-00
Tip, Wing, Hoerner Style (set)	A	11051-1
Tip, Wing, LH	A	RD-5010-L
Tip, Wing, LH, 4" Nav Pad Only	A	GF62090-00
Tip, Wing, LH, 4" Nav Pad Std	A	GF78022-00
Tip, Wing, LH, 6" Nav Pad Std	A	GF78022-02
Tip, Wing, RH	A	RD-5010-R
Tip, Wing, RH, 4" Nav Pad Only	A	GF62090-01
Tip, Wing, RH, 4" Nav Pad Std	A	GF78022-01
Tip, Wing, RH, 6" Nav Pad Std	A	GF78022-03

Continued from previous column		
Description	Idx	Part Number
Tip, Wing, RH	A	60-33R-4-80A 60-33R-6-80A GF35115-01
Tip, Wing, RH	A	RD-6010-R
<ol style="list-style-type: none"> <li>S/N 2843001 thru 2890231 only</li> <li>S/N 28-7690001 thru 28-7790000</li> <li>S/N 28-7690001 thru 28-7790607</li> <li>S/N 28-7690001 thru 28-8690062</li> <li>S/N 28-7790001 and On</li> <li>S/N 28-7890001 and On</li> <li>S/N 28-7890001 thru 28-7921095 only</li> <li>S/N 28-7890001 thru 28-8690062 only</li> </ol>		
<ol style="list-style-type: none"> <li>Kit P/N RMD-006010-PA contains both LH and RH</li> </ol>		

PA-28R-200, PA-28R-201T, PA-28R-201, PA-28R-201T, PA-28RT-201, PA-28RT-201T		
Description	Idx	Part Number
Cap, Vertical Fin, Rotating Beacon	P	60-27 60-28 GF65345-03
Cover, Nose Gear Fairing, Aft	E	GF35832-07
Cover, Wing Bolt, LH	G	60-63942-00-80A GF63942-00
Cover, Wing Bolt, RH	G	60-63942-01-80A GF63942-01
Door, Nose Gear, LH	D	GF67352-00
Door, Nose Gear, RH	D	GF67352-01
Fairing, Dorsal Fin, Aft	O	RD-0095-00 K78913-07
Fairing, Dorsal Fin, Fwd	N	60-19 60-24 RD-0096-00
		GF78913-00
		GF63517-00 K65773-00
Fairing, Main Gear, LH or RH	C	K63338-00
Fairing, Main Wheel Access Panel, LH	B	GF79890-02
Fairing, Main Wheel Access Panel, RH	B	GF79890-03
Fairing, Main Wheel Shell, LH	B	GF79890-00
Fairing, Main Wheel Shell, RH	B	GF79890-01
Fairing, Main Wheel, Up, Fwd LH	B	GF79892-04
Fairing, Main Wheel, Up, Fwd RH	B	GF79892-05
Fairing, Main Wheel, Up, Aft LH	B	GF79892-10
Fairing, Main Wheel, Up, Aft RH	B	GF79892-09
Fairing, Nose Gear Strut, Fwd	F	GF35832-06
Fairing, Rudder, Lower, No Position Light	R	GF35885-10
Fairing, Rudder, Lower, w/ Light Receptacle	R	GF35885-03
Tailcone, Assembly	ST	RD-0099-00
Tailcone, Lower	T	60-31 RD-0098-00
Tailcone, Upper	S	60-30 RD-0097-00
Tip, Stabilator LH or RH	V	60-23 RD-0094-00
Tip, Stabilator LH or RH, Ext.	V	K2U65300-00
Tip, Wing, LH	A	60-33L-4-80A 60-33L-6-80A GF35115-00
		RD-5010-L
		RD-6010-L

Eligibility continues in next column  
 Manufacturer/Material: Knots 2U/Fiberglass, Texas Aeroplastics/ABS Plastic Parts

Eligibility continues in next column

Continued from previous column		
Description	Idx	Part Number
Fairing, Nose Wheel 6.00 X 6 w/Door	F	GF35944-15
Moulding, Wing Root	L	K65773-00
Tailcone, Assembly	ST	RD-0099-00
Tailcone, Lower	T	60-31 RD-0098-00
Tailcone, Upper	T	60-30 RD-0097-00
Tip, Stabilator LH or RH	V	60-23 RD-0094-00
Tip, Wing, Left	A	60-33L-4-80A 60-33L-6-80A GF35115-00
		RD-6010-L
		60-33R-4-80A 60-33R-6-80A GF35115-01
Tip, Wing, LH, 4" Nav Pad	A	GF62090-00
Tip, Wing, LH, 4" Nav Pad Std	A	GF78022-00
Tip, Wing, LH, 6" Nav Pad Std	A	GF78022-02
Tip, Wing, RH	A	60-33R-4-80A 60-33R-6-80A GF35115-01
		RD-6010-R
		60-33L-4-80A 60-33L-6-80A GF35115-00
Tip, Wing, RH, 4" Nav Pad	A	GF62090-01
Tip, Wing, RH, 4" Nav Pad Std	A	GF78022-01
Tip, Wing, RH, 6" Nav Pad Std	A	GF78022-03

Eligibility continues on next page

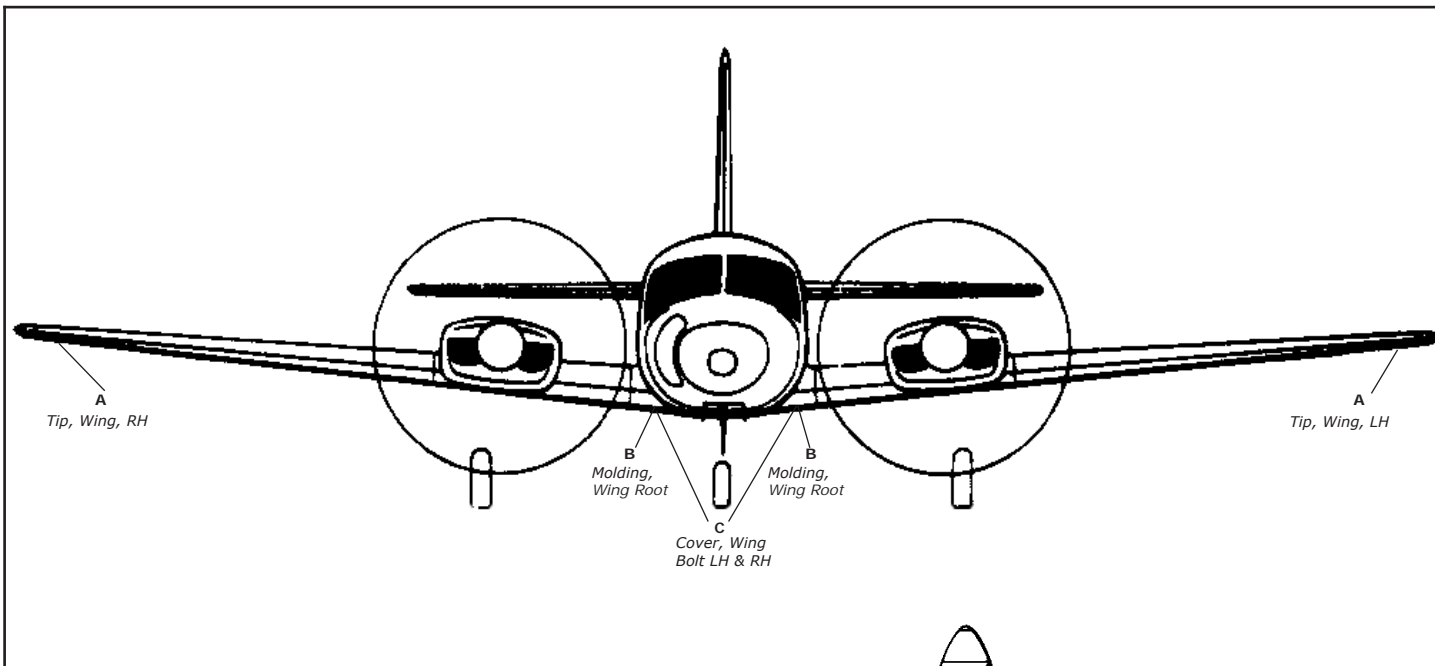
**Piper PA-24 thru PA-28 Series Aircraft**

Continued from previous page		
Description	Idx	Part Number
Tip, Wing, RH	A	60-33R-4-80A <b>14 T</b>
		60-33R-6-80A <b>14 T</b>
		GF35115-01 <b>13 K</b>
		RD-5010-R <b>1 13 K</b>
RD-6010-R <b>14 17 K</b>		
Tip, Wing, Hoerner Style (set)	A	11051-1 <b>1 K</b>
Tip, Wing, LH, 4" Nav Pad Only	A	GF62090-00 <b>6 K</b>
Tip, Wing, RH, 4" Nav Pad Only	A	GF62090-01 <b>6 K</b>
<b>1</b> Model PA-28R-200 only <b>2</b> Models PA-28R-200, PA-28R-201, PA-28R-201T only <b>3</b> Models PA-28R-200, PA-28R-201, PA-28R-201T, PA-28RT-201 and PA-28RT-201T only <b>4</b> Models PA-28R-200, PA-28R-201, PA-28R-201T, PA-28RT-201 only <b>5</b> Model PA-28R-200 S/N 28R-35001 thru 28R-7135238 <b>6</b> Model PA-28R-200 S/N 28R-35001 thru 28R-7235000 <b>7</b> Model PA-28R-200 S/N 28R-35001 thru 28R-7135238 and Models PA-28-201T, PA-28R-201T <b>8</b> Model PA-28R-200 S/N 28R-7135239 thru 28R-7635545 and Models PA-28-201T, PA-28R-201, PA-28R-201T <b>9</b> Model PA-28R-200 S/N 28R-7235001 thru 28R-7635545 and Models PA-28R-201, PA-28R-201T <b>10</b> Model PA-28R-200 S/N 28R-7235001 thru 28R-7635545 and Models PA-28-201T, PA-28R-201, PA-28R-201T <b>11</b> Model PA-28-201T only <b>12</b> Models PA-28RT-201 and PA-28RT-201T only <b>13</b> Model PA-28RT-201 S/N 28R-7918001 thru 28R-8118092 and Model PA-28RT-201T S/N 28R-7931001 thru 28R-8131229 <b>14</b> Models PA-28R-201 and PA-28R-201T, PA-28RT-201, PA-28RT-201T only <b>15</b> Models PA-28-201T, PA-28R-201 and PA-28R-201T, PA-28RT-201, PA-28RT-201T only <b>16</b> Kit P/N RMD-005010-PA contains both LH and RH <b>17</b> Kit P/N RMD-006010-PA contains both LH and RH <b>PA-28-235, PA-28-236</b>		
Description	Idx	Part Number
Cap, Vertical Fin, Rotating Beacon	P	60-27 <b>5 T</b>
		60-28 <b>5 T</b>
		GF65345-03 <b>K</b>
Cover, Nose Gear Fairing, Aft	E	GF35946-02 <b>10 K</b>
		GF37926-04 <b>10 K</b>
Cover, Nose Gear Fairing, Fwd	E	GF37926-03 <b>10 K</b>
Cover, Wing Bolt, LH	G	60-63942-00-80A <b>5 T</b>
		GF63942-00 <b>6 K</b>
Cover, Wing Bolt, RH	G	60-63942-01-80A <b>5 T</b>
		GF63942-01 <b>6 K</b>
Fairing, Dorsal Fin, Aft	O	RD-0095-00 <b>7 K</b>
Fairing, Dorsal Fin, Fwd	N	60-24 <b>7 T</b>
		RD-0096-00 <b>7 K</b>
Fairing, Main Wheel LH	B	K65203-00 <b>1 K</b>
Fairing, Main Wheel RH	B	K65203-01 <b>1 K</b>
Fairing, Main Wheel Access Panel, LH	B	GF79890-02 <b>10 K</b>
Fairing, Main Wheel Access Panel, RH	B	GF79890-03 <b>10 K</b>
Fairing, Main Wheel Shell, LH	B	GF79890-00 <b>10 K</b>
Fairing, Main Wheel Shell, RH	B	GF79890-01 <b>10 K</b>
Fairing, Main Wheel, Up, Fwd LH	B	GF79892-04 <b>10 K</b>
Fairing, Main Wheel, Up, Fwd RH	B	GF79892-05 <b>10 K</b>
Fairing, Main Wheel, Up, Aft RH	B	GF79892-09 <b>10 K</b>
Fairing, Main Wheel, Up, Aft LH	B	GF79892-10 <b>10 K</b>
Fairing, Main Gear, LH or RH	C	K63338-00 <b>K</b>
Fairing, Nose Wheel 6.00 X 6 w/o Door	F	GF35944-014 <b>10 K</b>
Fairing, Nose Wheel	F	K65331-00 <b>2 K</b>
Fairing, Nose Gear Strut, Fwd	F	GF35931-06 <b>12 K</b>
Fairing, Nose Gear Strut, Aft	F	GF35931-07 <b>12 K</b>
Floor Trim	M	60-18 <b>3 K</b>
Molding, Wing Root	L	K65773-00 <b>K</b>
Tailcone, Assembly	ST	RD-0099-00 <b>6 K</b>
Tailcone, Lower	T	60-31 <b>6 T</b>
		RD-0098-00 <b>6 K</b>
Tailcone, Upper	S	60-30 <b>6 T</b>
		RD-0097-00 <b>6 K</b>
Tip, Stabilator LH or RH	V	60-23 <b>9 T</b>
		RD-0094-00 <b>3 K</b>
Tip, Stabilator LH or RH, Ext.	V	K2U65300-00 <b>4 K</b>
Tip, Wing, LH	A	60-33L-4-80A <b>10 T</b>
		60-33L-6-80A <b>10 T</b>
		GF35115-00 <b>11 K</b>
		RD-5010-L <b>1 13 K</b>
RD-6010-L <b>10 14 K</b>		

Continued from previous column		
Description	Idx	Part Number
Tip, Wing, RH	A	60-33R-4-80A <b>10 T</b>
		60-33R-6-80A <b>10 T</b>
		GF35115-01 <b>11 K</b>
		RD-5010-R <b>1 13 K</b>
RD-6010-R <b>10 14 K</b>		
<b>1</b> Model PA-28-235 only <b>2</b> Model PA-28-235 S/N 28-10001 thru 28-7310187 <b>3</b> Model PA-28-235 S/N 28-10003 thru 28-10719 <b>4</b> Model PA-28-235 S/N 28-10003 thru 28-7210033 <b>5</b> Model PA-28-235 S/N 28-10003 thru 28-7710089 <b>6</b> Model PA-28-235 S/N 28-10003 thru 28-7710089 and Model PA-28-236 <b>7</b> Model PA-28-235 S/N 28-7210001 thru 28-7710089 and Model PA-28-236 <b>8</b> Model PA-28-235 S/N 28-7210034 thru 28-7710089 and Model PA-28-236 <b>9</b> Model PA-28-235 S/N 28-7310001 thru 28-7710089 and Model PA-28-236 <b>10</b> Model PA-28-236 only <b>11</b> Model PA-28-236 S/N 28-7911001 thru 28-8611008 <b>12</b> Model PA-28-236 S/N 28-8111081 thru 28-8611008 <b>13</b> Kit P/N RMD-005010-PA contains both LH and RH <b>14</b> Kit P/N RMD-006010-PA contains both LH and RH		

Eligibility continues in next column

Manufacturer/Material: **K** Knots 2U/Fiberglass, **T** Texas Aeroplastics/ABS Plastic Parts



**PA-31, PA-31-300, PA-31-325, PA-31-350, PA-31P, PA31P-350, PA-31T, PA-31T1, PA-31T2, PA-31T3**

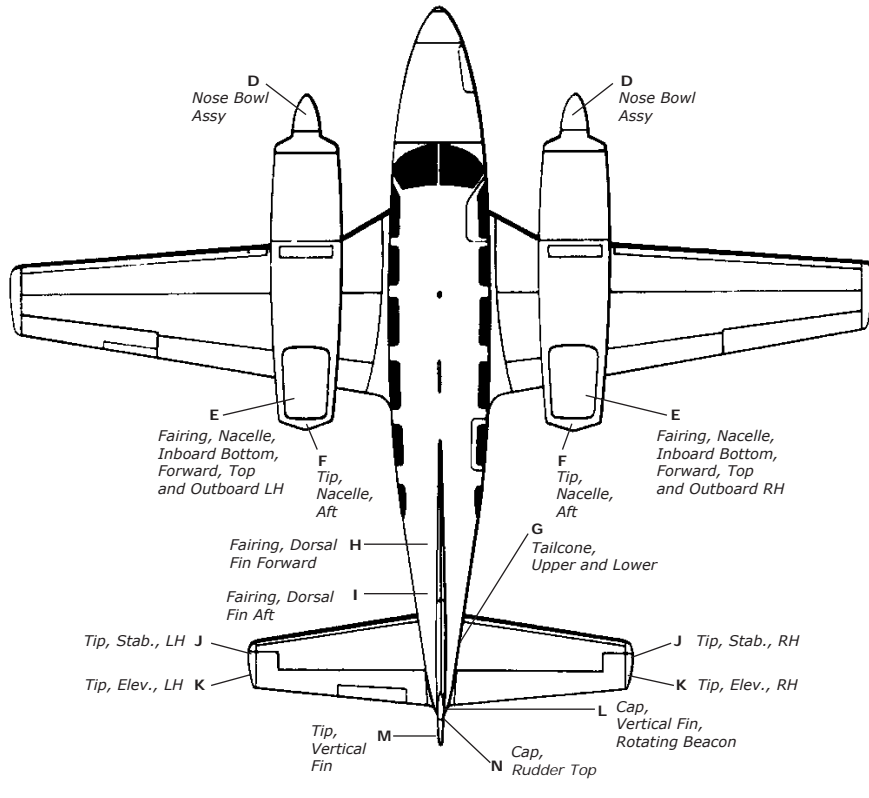
Description	Idx	Part Number
Fairing, Nacelle, Inbrd Btm, LH	E	GF42455-04
Fairing, Nacelle, Inbrd Btm, RH	E	GF42455-05
Fairing, Nacelle, Inbrd Fwd, LH	E	GF42455-02
Fairing, Nacelle, Inbrd Fwd, RH	E	GF42455-03
Fairing, Nacelle, Inbrd Top, LH	E	GF42455-00
Fairing, Nacelle, Inbrd Top, RH	E	GF42455-01
Fairing, Nacelle, Outboard, LH	E	GF42426-00
Fairing, Nacelle, Outboard, RH	E	GF42426-01
Tip, Elevator, Leading Edge	K	GF43786-00
Tip, Elevator, LH	K	GF43741-00
Tip, Elevator, RH	K	GF43741-01
Tip, Stabilizer, LH or RH	J	GF40364-02
Tip, Vertical Fin	M	GF44943-00
Tip, Wing, Lens LH	A	GF42027-04
Tip, Wing, Lens RH	A	GF42027-05
Tip, Wing, LH, with Reco Light	A	GF55802-12
Tip, Wing, RH, with Reco Light	A	GF55802-13

- 1 Models PA-31, PA-31-300, PA-31-325 and PA-31-350 S/N 31-5 and On
- 2 Model PA-31-350 S/N 31-7305053 and On, Model PA-31P-350 S/N 31P-8414001 and On
- 3 Model PA-31-350 S/N 31-7852001 and On
- 4 Models PA-31-300, PA-31-325, PA-31-350
- 5 Models PA-31, PA-31-300, PA-31-325 S/N 31-5 thru 31-7300961, PA-31-350 S/N 31-5001 thru 73605052, PA-31P S/N 31P-3 thru 31P-7300146

**PA-34-200, PA-34-200T, PA-34-220T**

Description	Idx	Part Number
Cap, Rudder Top	N	GF95907-00
Cover, Wing Bolt, LH	C	60-63942-00-80A GF63942-00
Cover, Wing Bolt, RH	C	60-63942-01-80A GF63942-01
Fairing, Tailcone, Lower	G	GF96338-08
Fairing, Tailcone, Upper	G	GF96338-04
Moulding, Wing Root	B	K65773-00
Nose Bowl Assembly	D	GF67998
Tip, Horizontal Stab., LH or RH	J	GF95620-07
Tip, Wing, LH	A	RD-5010-L
Tip, Wing, RH	A	RD-5010-R
Tip, Wing, LH, 4" Nav Pad Only	A	GF62090-00
Tip, Wing, RH, 4" Nav Pad Only	A	GF62090-01
Tip, Wing, LH, 4" Nav Pad Std	A	GF78022-00
Tip, Wing, RH, 4" Nav Pad Std	A	GF78022-01
Tip, Wing, LH, 6" Nav Pad Std	A	GF78022-02
Tip, Wing, RH, 6" Nav Pad Std	A	GF78022-03

- 1 Models PA-34-200, PA-34-200T
- 2 Models PA-34-200, PA-34-200T and PA-34-220T, S/N 3448038 and On
- 3 Models PA-34-200 S/N 34-7250001 thru 32-7250370, PA-34-200T, PA-34-220T
- 4 Sold in pairs only, Kit P/N RMD-005010-PA



**PA-44-180, PA-44-180T**



Description	Idx	Part Number
Cover, Wing Bolt, LH	C	60-63942-00-80A GF63942-00
Cover, Wing Bolt, RH	C	60-63942-01-80A GF63942-01
Fairing, Dorsal Fin, Aft	I	K78913-07
Fairing, Dorsal Fin, Fwd	H	GF78913-00
Fairing, Tailcone, w/o receptacle	G	K36721-003
Fairing, Tailcone, with receptacle	G	K86597-02
Moulding, Wing Root	B	K65773-00
Tip, Nacelle, Aft	F	GF86298-02
Tip, Stabilizer, LH or RH	J	RD-0094-00

- 1 Model PA-44-180
- 2 Model PA-44-180T

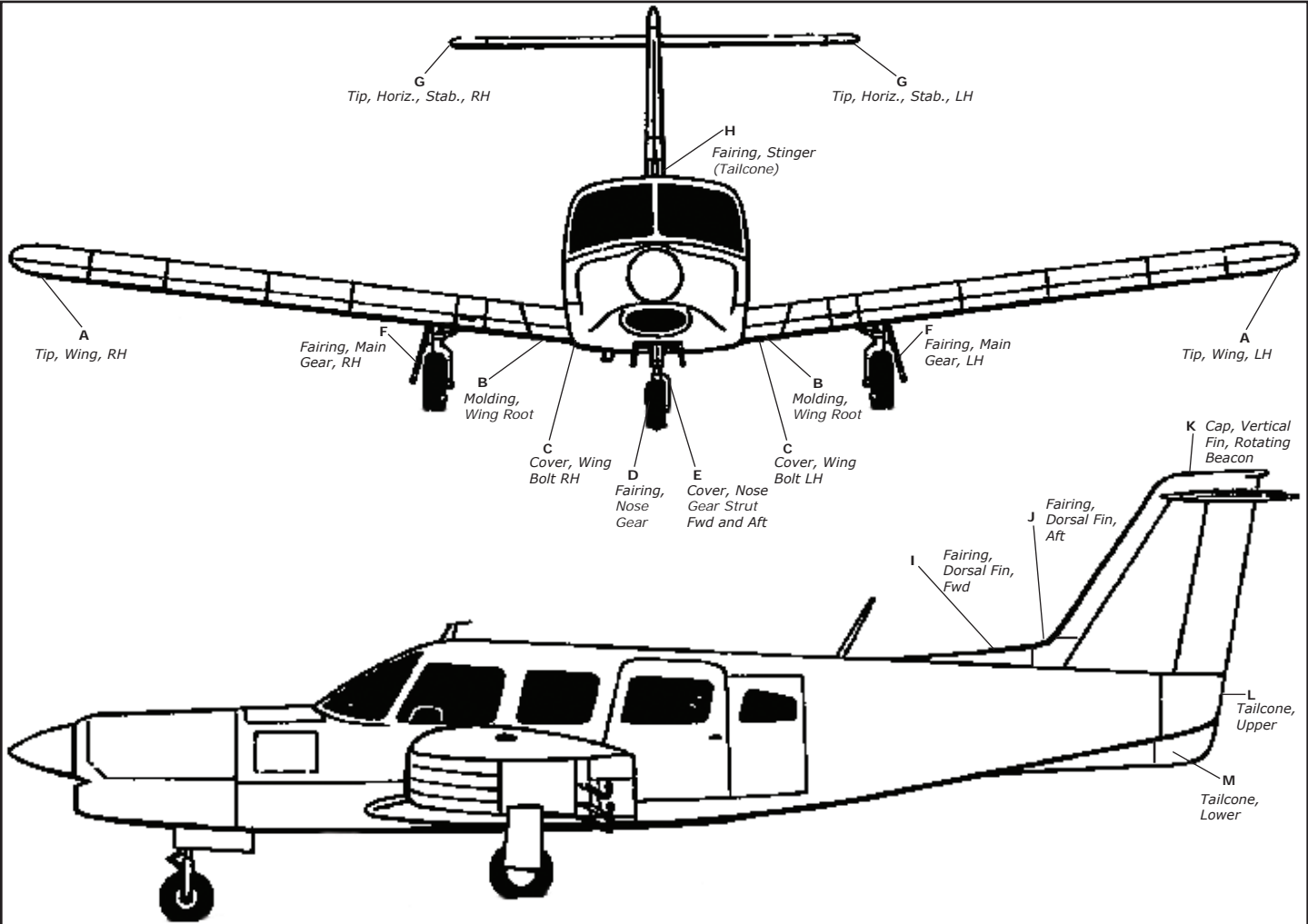
**PA-60-600, PA-60-601, PA-60-601P, PA-60-602P, PA60-700P**

Description	Idx	Part Number
Tip, Horizontal, LH or RH	K	GF220021-903
Tip, Vertical, w/o Beacon	M	GF220021-505
Tip, Vertical, with Beacon	M	GF220021-913
Tip Long, Wing Short, LH	A	GF200038-901
Tip Long, Wing Short, RH	A	GF200038-902
Tip Short, Wing Long, LH	A	GF200102-901
Tip Short, Wing Long, RH	A	GF200102-902

- 1 Models PA-60-600, PA-60-601, PA-60-601P, PA-60-602P
- 2 Models PA-60-601, PA-60-601P, PA-60-602P, PA-60-700P
- 3 Models PA-60-601 S/N 0341 and On, PA-60-601P, S/N 0213 and On

Manufacturer/Material:  Knots 2U/Fiberglass,  Texas Aeroplastics/ABS Plastic Parts

Exterior Plastic/Fiberglass Trim and Fairings



PA-32-260, PA-32-300, PA-32-301, PA-32-301T, PA-32-301FT, PA-32-301XTC, PA-32R-300, PA-32R-301, PA-32R-301T, PA-32RT-300, PA-32RT-300T, PA-32S-300

Description	Idx	Part Number
Cap, Vertical Fin, Rotating Beacon	K	GF65345-03 <span style="float:right">16 K</span>
Cover, Nose Gear Strut, Aft	E	GF35838-10 <span style="float:right">18 K</span>
		GF36559-803 <span style="float:right">4 12 K</span>
		GF37891-807 <span style="float:right">11 K</span>
		GF37926-04 <span style="float:right">1 K</span>
Cover, Nose Gear Strut, Fwd	E	GF38700-02 <span style="float:right">19 K</span>
		GF36559-804 <span style="float:right">4 K</span>
		GF37891-806 <span style="float:right">11 K</span>
		GF37926-03 <span style="float:right">1 K</span>
Cover, Wing Bolt, LH	C	GF38700-04 <span style="float:right">19 K</span>
		60-63942-00-80A <span style="float:right">7 T</span>
Cover, Wing Bolt, RH	C	GF63942-00 <span style="float:right">23 K</span>
		60-63942-01-80A <span style="float:right">7 T</span>
Fairing, Dorsal Fin, Aft	J	GF63942-01 <span style="float:right">23 K</span>
		K78913-07 <span style="float:right">22 K</span>
Fairing, Dorsal Fin, Fwd	I	RD-0095-00 <span style="float:right">13 K</span>
		60-19 <span style="float:right">8 T</span>
		60-24 <span style="float:right">9 T</span>
		GF63517-00 <span style="float:right">13 K</span>
Fairing, Main Gear, LH or RH	F	GF78913-00 <span style="float:right">22 K</span>
		RD-0096-00 <span style="float:right">13 K</span>
Fairing, Main Gear LH	F	K63338-00 <span style="float:right">1 K</span>
Fairing, Main Gear RH	F	K65203-00 <span style="float:right">6 K</span>
Fairing, Main Gear Access Panel, LH	F	K65203-01 <span style="float:right">6 K</span>
Fairing, Main Gear Access Panel, RH	F	GF79890-02 <span style="float:right">12 K</span>
Fairing, Main Gear Shell, LH	F	GF79890-03 <span style="float:right">12 K</span>
Fairing, Main Gear Shell, RH	F	GF79890-00 <span style="float:right">12 K</span>

Continued from previous column

Description	Idx	Part Number
Fairing, Main Gear Shell, RH	F	GF79890-01 <span style="float:right">12 K</span>
Fairing, Main Gear, Up., Fwd, LH	F	GF79892-04 <span style="float:right">12 K</span>
Fairing, Main Gear, Up., Fwd, RH	F	GF79892-05 <span style="float:right">12 K</span>
Fairing, Main Gear, Up., Aft, RH	F	GF79892-09 <span style="float:right">12 K</span>
Fairing, Main Gear, Up., Aft, LH	F	GF79892-10 <span style="float:right">12 K</span>
Fairing, Nose Gear	D	K65331-00 <span style="float:right">6 K</span>
Fairing, Nose Gear, 6.00 X 6 w/o Door	D	GF35944-014 <span style="float:right">21 K</span>
Fairing, Nose Gear, 6.00 X 6 w/Door	D	GF35944-14 <span style="float:right">10 K</span>
Fairing, Stinger (Tailcone)	H	K78912-11 <span style="float:right">22 K</span>
Fairing, Tailcone, Upper	L	60-30 <span style="float:right">5 T</span>
Fairing, Tailcone, Lower	M	RD-0097-00 <span style="float:right">3 K</span>
		60-31 <span style="float:right">5 T</span>
Moulding, Wing Root	B	K65773-00 <span style="float:right">K</span>
Tip, Horizontal Stab., LH or RH	G	60-23 <span style="float:right">2 T</span>
		RD-0094-00 <span style="float:right">17 K</span>
Tip, Wing, LH	A	GF35115-10 <span style="float:right">20 K</span>
Tip, Wing, RH	A	GF35115-11 <span style="float:right">20 K</span>

Eligibility continues in next column

Continued from previous column

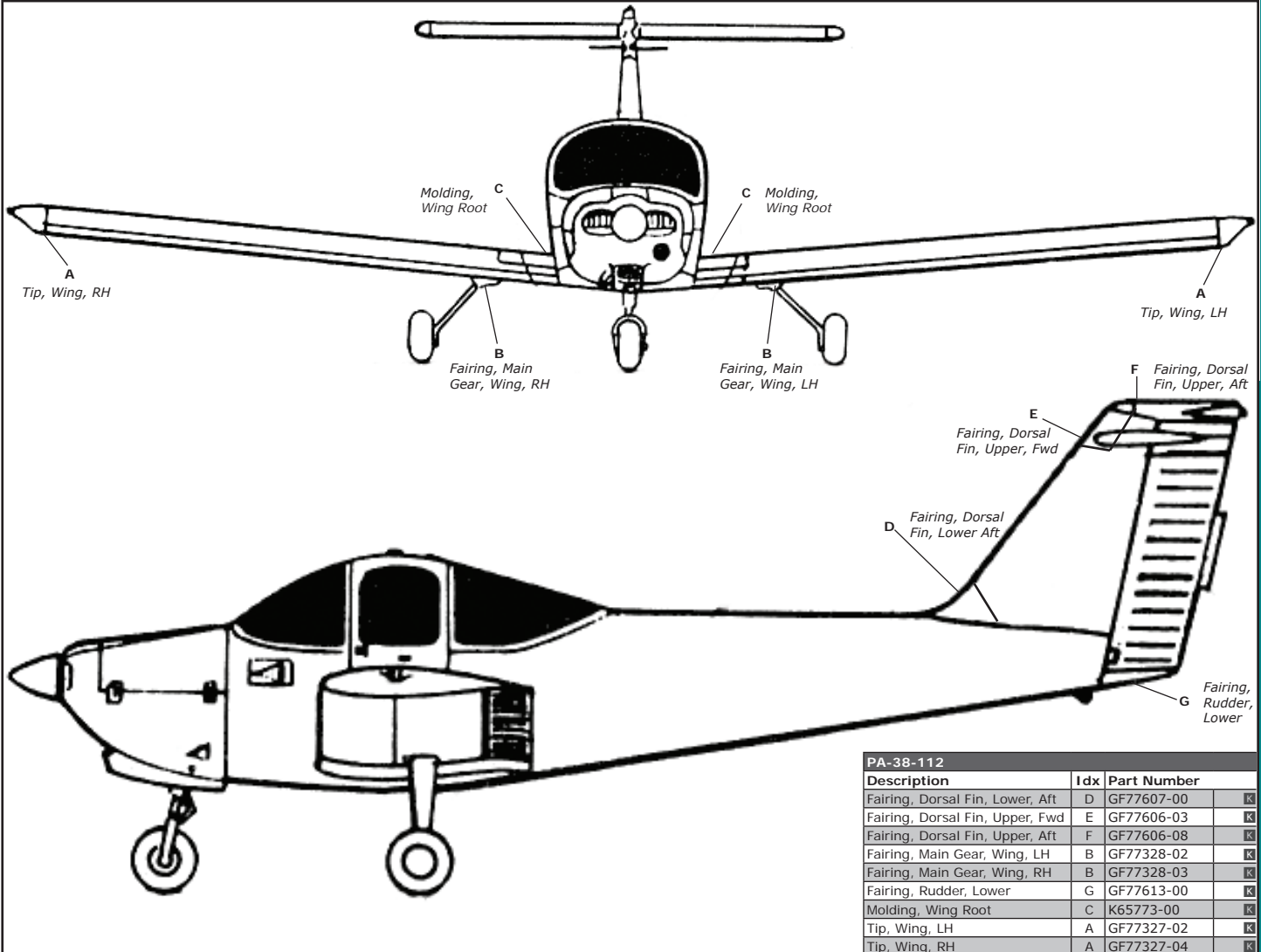
10 Models PA-32-260 S/N 32-7800001 and On, PA-32-300 S/N 32-7740113 and On
11 Models PA-32-260 S/N 32-7800001 thru 32-7800008, PA-32-300 S/N 32-7840001 thru 32-7940290 and PA-32-301
12 Models PA-32-260 S/N 32-7800001 and On, PA-32-300 S/N 32-7840001 and On, PA-32-301, PA-32-301T
13 Models PA-32-260 S/N 32-7200061 and Up, PA-32-300 S/N 32-7240001 and Up, PA-32R-300, PA-32R-300T, PA-32-301FT, PA-32-301XTC, PA-32R-301, PA-32R-301T, PA-32-301, PA-32-301T
14 Model PA-32-300, PA-32-301T
15 PA-32-300 S/N 32-40000 thru 32-7140086
16 Models PA-32-300, PA-32R-300, PA-32-301 S/N 32-8006002 thru 32-8106110, PA-32-301T S/N 32-8024001 and On, PA-32-301, PA-32-301T
17 Models PA-32-260, PA-32-300, PA-32-300S, PA-32R-300, PA-32RT-300, PA-32RT-300T, PA-32-301FT, PA-32-301XTC, PA-32R-301, PA-32R-301T PA-32-301, PA32-301T
18 Models PA-32-301 and PA-32-301T
19 Models PA-32-301 S/N 32-8006002 thru 32-8006116, 32-8106110, 32-8206050, 32-8306032, 32-8406020, PA-32-301T S/N 32-8024001 thru 32-8024062, S/Ns 32-8124046, 32-8224024, 32-8324016, 32-8424002 32-8524001 and On
20 Models PA-32R-301 S/N 32R-8113071 thru 32R-8613005, 3213001 thru 3213041, 3213098 excluding 3213029, PA-32R-301T S/N 32R-8129073 and up, PA-32-301FT, PA-32-301FT and PA-32-301XTC
21 Models PA-32-260 S/N 32-7800001 and On, PA-32-300 S/N 32-7840001 and On, PA-32-301, PA-32-301T, PA-32-301FT and PA-32-301XTC
22 Models PA-32RT-300 and PA-32RT-300T
23 W/O Door 6.00 X 6 Tire, 1978 and up
24 With 5.00 X 5 Tire
25 All Models except PA-32-301FT, PA-32-301XTC and PA-32S-300

Eligibility continues in next column

Manufacturer/Material: K Knots 2U/Fiberglass, T Texas Aeroplastics/ABS Plastic Parts

Exterior Plastic/Fiberglass Trim and Fairings

# Exterior Plastic and Fiberglass Trim and Fairings Piper PA38 Series Aircraft



PA-38-112		
Description	Idx	Part Number
Fairing, Dorsal Fin, Lower, Aft	D	GF77607-00
Fairing, Dorsal Fin, Upper, Fwd	E	GF77606-03
Fairing, Dorsal Fin, Upper, Aft	F	GF77606-08
Fairing, Main Gear, Wing, LH	B	GF77328-02
Fairing, Main Gear, Wing, RH	B	GF77328-03
Fairing, Rudder, Lower	G	GF77613-00
Molding, Wing Root	C	K65773-00
Tip, Wing, LH	A	GF77327-02
Tip, Wing, RH	A	GF77327-04

## Cirrus and Beechcraft Aircraft

Cirrus SR20-SR22 Series Aircraft		
Fairing, Nose Gear Wheel Pant	K15312-001	1 K
	K26873-001	2 K
<b>1</b> Models SR20 S/N 1005 thru 1430, 1476 thru 1885 and SR22 S/N 0528 thru 2437 <b>2</b> Models SR20 S/N 1886 and On, SR22 S/N 2438 and On, and Model SR22T		
<b>19A, A23-19, B19, M19A, 23, A23, A23A, B23, C23, A23-24, A24R, B24R, C24R</b>		
Description	Part Number	
Drain Cover, Fuel Sump	GF169-420028-11	1 K
Fairing, Dorsal	GF169-440013-11	K
Fairing, Lower Cowl	GF169-910013-157	2 K
Seal (Storm Window)	ADS1200-17	K
Tail Cone	GF169-4411-S	3 K
Tip, Stabilizer Left	GF169-620001-27	4 K
	GF169-620000-113	5 K
Tip, Stabilizer Right	GF169-620001-28	4 K
	GF169-620000-114	5 K
Tip, Vertical Stabilizer	K169-640000-97	K
Tip, Wing, Left	GF169-1100-00	K
Tip, Wing, Right	GF169-1100-01	K
<b>1</b> Models B19, C23, C24R <b>2</b> Models A23-19, B19, 23, A23, A23A, B23, C23, A24 <b>3</b> Models 19A, A23-19, B19, M19A, 23, A23, A23A, A23-24, A24R, B24R, C24R <b>4</b> All Models and S/Ns except Model 23, S/N M-2, M-4 thru M-554 <b>5</b> Model 23 S/N M-2, M-4 thru M554		

35-33, 35-A33, 35-B33, 35-C33, 35-C33A, C33, C33A, E33, E33A, E33C, F33, F33A, F33C, G33		
Description	Part Number	
Fairing, Dorsal	K33-440011-27	K
	K33-600011-1	1 K
Fairing, Dorsal Fin	K33-600012-3	2 K
Seal (Storm Window)	ADS1200-17	K
Tip, Wing, Hoerner Style	11052-1	3 K
<b>1</b> Model 35-B33 <b>2</b> Models 35-C33, 35-C33A <b>3</b> Model 35-C33 S/N CD-814 thru CD-1026 (Set of two)		
<b>35, 35R, A35, B35, C35, D35, E35, F35, G35, H35, J35, K35, M35, N35, P35, R35, S35, V35, V35A, V35B</b>		
Description	Part Number	
Seal (Storm Window)	ADS1200-17	K
Tip, Wing, Hoerner Style	11052-1	1 K
<b>1</b> Models A35, B35, C35, D35, E35, F35, G35, H35, J35, K35, M35, N35, P35, S35		
<b>36, A36, A36TC, B36TC, G36</b>		
Description	Part Number	
Seal (Storm Window)	ADS1200-17	K
Fairing, Dorsal	K33-440011-27	K
<b>50, B50, C50, D50, D50A, D50B, D50C, D50E, E50, F50, G50, H50, J50</b>		
Description	Part Number	
Seal (Storm Window)	ADS1200-17	K
Tip, Wing, Hoerner Style	11052-1	1 K
<b>1</b> Models B50, C50, D50, D50A, D50B, E50, F50, G50 (Set of two)		

95-55, 95-A55, 95-B55, 95-B55A, 95-B55B, 95-C55, 95-C55A, D55, D55A, E55, E55A, 56TC, A56TC, 58, 58TC, 58P, G58, 76, 77, 95, B95, B95A, D95A, E95		
Description	Part Number	
Fairing, Dorsal Fin	95-440015-17K	1 K
Fairing, Engine Nacelle, Outbrd, LH	GF96110010-17	2 K
Fairing, Engine Nacelle, Outbrd, RH	GF96110010-19	2 K
Fairing, Engine Nacelle, Inboard LH	GF96110010-21	2 K
Fairing, Engine Nacelle, Inboard, RH	GF96110010-23	2 K
Saddle, Dorsal	GF96-4415-00	3 K
Seal (Storm Window)	ADS1200-17	4 K
Tip, Wing, Left	GF105-1010-00	4 K
	GF108-1700-00	5 K
Tip, Wing, Right	GF105-1010-01	4 K
	GF108-1700-01	5 K
<b>1</b> Models B95, B95A, D95A, E95 <b>2</b> Model 95-A55 S/N TC-191 thru TC-349, TC-351 thru TC-370, TC-372 thru TC-379, Models 95-B55 and 95-B55A S/N TC-371, TC-502 thru TC-1392, TC-1397 thru TC-2456, and Models 95-B55B, 95-C55, 95-C55A (Except S/N TE-50), D55, D55A, E55, E55A, 56TC, A56TC, 58, 58TC, 58P <b>3</b> All models except 58P, 76 and 77 <b>4</b> Model 76 <b>5</b> Model 77 <b>6</b> Model 95-B55 S/N TC-371, TC-502 thru TC-1392, TC-1397 thru TC-2456, and Models E55 and 58		

Manufacturer/Material: K Knots 2U/Fiberglass, T Texas Aeroplastics/ABS Plastic Parts



**Texas AeroPlastics**

Texas AeroPlastics replacement parts are made from top grade ABS plastic with an average service life of 15-20 years when properly fitted and professionally painted. ABS plastic parts are repairable and most have been trimmed for easy installation. All interior parts are fire rated, top-grade Royalite with an ivory or off-white haircell finish.



**Premier Aerospace Services and Technology, Inc.**

Premier Aerospace Services and Technology, Inc. is a state of the art plastic components manufacturer providing high quality FAA-PMA replacement parts manufactured using PVC/Acrylic.

Improve the appearance and performance of your aircraft! Interior plastic trim parts for Cessna and Piper series aircraft. Eligibility tables with item descriptions, figure reference and part numbers can be found on the following pages. Go to [www.mcfarlaneaviation.com](http://www.mcfarlaneaviation.com) for more details about specific part numbers.



Cessna Series Aircraft (see pages 229-234 for Piper Aircraft)

Eligibility tables for Cessna series aircraft with item descriptions, figure reference and part numbers can be found on pages 227-228.

Figures 1-24 Photos are not to scale relative to each other


































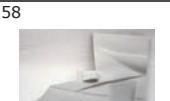

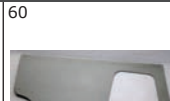



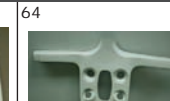



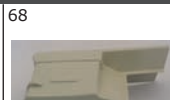





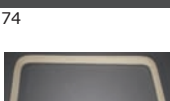
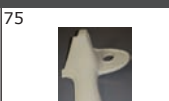

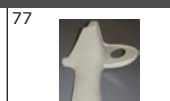


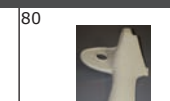

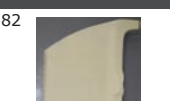



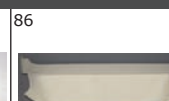

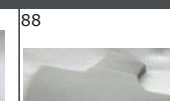
Arm Rest				Baggage Compartment			
1  P5119139-4 Panel Assy Co-Pilot	2  P5119057-13 Panel Assy Pilot	3  P5219153-1 Storage Pilot's	4  28-01 Support	5  P0715079-7 Door Cover	6  P0515018-14 Door Frame Aft	7  P0500210-95 Door Frame Cover Fwd	8  P0515036-2 Door Frame Cover Fwd
Baggage Compartment							
9  P0515036-8 Door Hinge Cover	10  P0515012-17 Baggage Compartment	11  P0515012-18 Baggage Comp. Lower	12  26-26 Panel	13  P0500210-42 Panel Rear	14  P0500210-97 RH	15  P2415014-16 RH	16  P0515019-15 Upper
Baggage Compartment		Cable Access Panel		Center Console			Center Post
17  P0715081-1 Panel	18  P0515015-22 Upper	19  P0519044-3 LH	20  P0519044-4 RH	21  26-23 Center Console	22  28-0500233-80A Center Console w/Trim	23  28-0500233RT-80A Center Console w/Trim	24  P0500210-198 Cover



# Interior Plastic Trim Cessna Aircraft

Figures 25-88 Photos are not to scale relative to each other

Interior Plastic Trim

Door							
25  P0519078-25 Accent Panel, LH	26  P0519078-26 Accent Panel, RH	27  P0713777-3 Assy. Map Compartment	28  P0519095-1 Insert Panel, LH	29  P0519095-2 Insert Panel, RH	30  P0519078-18 Panel, RH	31  P0719032-7 Post, Cover Closeout LH	32  P0719032-8 Post, Cover Closeout RH
Door							
33  P0515028-1 Post, LH Aft	34  P0500210-81 Post, LH Rear	35  P0413484-22 Post, LH	36  P0515050-9 Post, LH	37  P0719032-29 Post, LH	38  P0515028-2 Post RH Aft	39  P0500210-82 Post RH Rear	40  P0515026-20 Post, RH
Door							
41  P0515026-8 Post, RH	42  P0719032-28 Post, RH	43  P0700702-17 Post, Shield, Light LH	44  P0700702-18 Post, Shield, Light RH	45  66-150LD Panel LH	46  67-82-150LD Panel LH	47  27-32-03L Panel LH	48  30-0715064-380A Panel LH
Door						Handle	
49  66-150RD Panel RH	50  67-82-150RD Panel RH	51  27-32-03R Panel RH	52  30-0715064-480A Panel RH	53  P0515075-79 Plug, Door Handle, LH	54  P0515075-78 Plug, Door Handle, RH	55  P5214018-7 Trim Assy, Upper Cargo	56  P5011128-1 Cup
Kick Panel				Miscellaneous			
57  P0519081-11 LH Fwd	58  P0519081-12 RH Fwd	59  P0519078-27 Accent Panel, LH Aft	60  P0519081-15 Accent Panel, LH Fwd	61  P0519078-28 Accent Panel, RH Aft	62  P0519081-16 Accent Panel, RH Fwd	63  P0414013-19 Cover Assembly	64  P5119137-2 Cover Assembly
Miscellaneous							
65  P0511326-1 Cover Assembly	66  P5017516-8 Cover Assy Cockpit Lgt	67  P5017561-10 Cover Assy Rheostat	68  P5114534-5 Cover Face, LH	69  P5114534-6 Cover Face, RH	70  P5014016-5 Cover Inside, LH	71  P5014016-6 Cover Inside, RH	72  P5014016-3 Cover Outside, LH
Miscellaneous							
73  P5014016-4 Cover Outside, RH	74  P0715032-19 Molding LH	75  P0715044-1 Molding LH	76  P0715044-11 Molding LH	77  P0715044-9 Molding LH	78  P0715032-18 Molding RH	79  P0715044-10 Molding RH	80  P0715044-2 Molding RH
Miscellaneous							
81  P0715044-8 Molding RH	82  P0715088-1 Panel Assembly, LH	83  P0715087-1 Panel Assembly, RH	84  P0519095-3 Panel Insert, Aft LH	85  P0519095-4 Panel Insert, Aft RH	86  P0715080-1 Panel, Canted	87  P0519081-13 Panel, Aft LH	88  P0519078-21 Panel Upper Aft, LH








Figures 89-131 Photos are not to scale relative to each other

Interior Plastic Trim

Miscellaneous

89  P0519081-14 Panel, Aft RH	90  P0519078-22 Panel Upper Aft, RH	91  P0715052-6-532 Panel, Trim	92  P0414013-15 Shield	93  P05111326-5 Shield	94  P0711133-50 Shield Assy., RH	95  P0515024-25 Trim, LH	96  P0515024-26 Trim, RH
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Miscellaneous





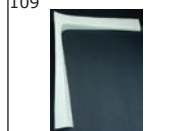



97  P0519076-4 Reel Cover Plate	98  26-13L Cover, Post, LH	99  28-13L Cover, Post, LH	100  26-13R Cover, Post, RH	101  28-12R Cover, Post, RH	102  26-19 Panel, Interior Seatback	103  20-14 Tray	104  P0511327-3 Cover
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Miscellaneous

Window

Window, Cent. Aft

Window, Cent. Fwd

105  P0514068-2 Cover	106  P0715044-15 Molding, LH	107  P0715044-16 Molding, RH	108  P0715010-3 Molding, Upper Aft, LH	109  P0715010-4 Molding, Upper Aft, RH	110  P5014046-8 Trim	111  P5014046-5 Trim	112  P5014046-6 Trim
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Window Door








Window, Emergency

Window, Fwd

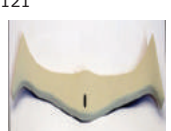


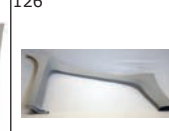

Window, Co-Pilot

Window, Pilot

Window, Rear




113  P0715069-1 Molding, RH	114  P5014046-4 Trim	115  P5014046-3 Trim	116  P5014044-4 Trim	117  P5014044-3 Trim	118  P0515053-8 Molding	119  P0500210-135 Molding, Lower	120  P0500210-132 Molding, Upper
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Window Side

121  P0515014-8 Molding, Upper	122  P0515027-21 Aft, LH	123  P0514071-1 LH	124  P0515027-3 LH	125  P5014046-10 Aft	126  P0515027-22 Aft, RH	127  P0514071-2 RH	128  P0515027-4 RH
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Window, Up. Door

Windshield

129  P5014046-42 Trim, LH	130  P5014045-5 Trim, Center	131  P5014045-3 Trim, Upper	
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# Interior Plastic Trim Cessna Aircraft

Interior Plastic Trim

All parts for Cessna aircraft marked with note **1** are available in either light beige or light gray. Add -LB for light beige or -LG for light gray.



## Eligibility for Cessna Aircraft

Description	Fig	Part Number	
Center Console	21	26-23	3 T
Panel, Baggage Cmp.	12	26-26	4 T
Panel, Door, LH	45	66-150LD	1 T
	46	67-82-150LD	2 T
Panel, Door, RH	49	66-150RD	1 T
	50	67-82-150RD	2 T
Panel, Interior Seatback	102	26-19	3 T
Tray, Shoulder Harness	103	20-14	3 T

- 1 S/N 15061533 thru 15064532 only
- 2 S/N 15064533 and on
- 3 S/N 15069309 and on
- 4 S/N 15071129 thru 15075781 only
- 5 S/N 15074851 and on
- 6 S/N 15077006 and on

F150F,G,H,J,K,L,M S/N F1500-0001 thru F15001428			
Description	Fig	Part Number	
Tray, Shoulder Harness	103	20-14	1 T

152, A152 S/N 15279406 thru 15286033, A1520735 thru A1521049			
Description	Fig	Part Number	
Center Console	21	26-23	3 T
Cover, Post, LH	98	26-13L	2 T
Cover, Post, RH	100	26-13R	2 T
Panel, Interior Seatback	102	26-19	1 T
Tray, Shoulder Harness	103	20-14	T

170, 170A, B S/N 18000 thru 27169			
Description	Fig	Part Number	
Panel, Door, LH	47	27-32-03L	T
Panel, Door, RH	48	30-0715064-380A	T
	51	27-32-03R	T
Panel, Door, RH	52	30-0715064-480A	T
	52	30-0715064-480A	T

172, 172A, B, C, D, E, F, G, H, I, J, K, L, M, N, P, Q, R, S S/N 28000 thru 17259999			
Description	Fig	Part Number	
Arm Rest Support	4	28-01	30 T
Baggage Comp. Upper	18	P0515015-22	1 20 P
Baggage Door Cover	5	P0715079-7	1 5 P
Baggage Door Frame, Aft	6	P0515018-14	1 23 P
Baggage Door Frame Cover Fwd	7	P0500210-95	1 9 P
Baggage Door Hinge Cover	9	P0515036-8	1 36 P
Center Post Cover	24	P0500210-198	1 5 P
Center Console	N/A	P0500233-4	7 P
Console, Cent. w/o Rudder Trim	22	28-0500233-80A	11 T
Console, Center w/ Rudder Trim	23	28-0500233RT-80A	11 T

Eligibility continued from previous column			
Description	Fig	Part Number	
Cover Assembly	63	P0414013-19	1 19 P
	65	P0511326-1	1 29 P
Cover, Console	N/A	P0500233-14	2 P
Cover, Console w/Rudder Trim	N/A	P0500233-15	2 P
Cover, Emergency Locator Trans	N/A	P0515047-1	1 24 P
Cover, Closeout Door Post, LH	31	P0719032-7	1 33 P
Cover, Closeout Door Post, RH	32	P0719032-8	1 33 P
Cover, Post, LH	99	28-13L	24 T
Cover, Post, RH	101	28-12R	24 T
Cover, Speaker	104	P0511327-3	1 21 P
	105	P0514068-2	1 17 P
Door Assembly, Glove Box	N/A	P0513085-17	23 P
Door Assembly, Map Case	N/A	P0513390-29	13 P
Door Post, LH	N/A	P0413484-10	1 13 P
	35	P0413484-22	1 20 P
	36	P0515050-9	1 26 P
	37	P0719032-29	1 36 P
	41	P0515026-8	1 20 P
Door Post, RH	40	P0515026-20	1 33 P
	42	P0719032-28	1 36 P
	N/A	P0711133-62	1 13 P
Door Post, LH Aft	33	P0515028-1	1 20 P
	38	P0515028-2	1 21 P
	34	P0500210-81	1 4 P
	39	P0500210-82	1 4 P
	N/A	P0413484-18	1 19 P
	N/A	P0515026-6	1 19 P
	N/A	P0415023-1	1 21 P
	N/A	P0415023-3	1 21 P
	10	P0515012-17	1 23 P
	11	P0515012-18	1 23 P
	118	P0515053-8	1 33 P
	120	P0500210-132	1 15 P
121	P0515014-8	1 22 P	
119	P0500210-39	1 13 P	
119	P0500210-135	1 10 P	
N/A	P0500210-43	1 13 P	
N/A	P0500210-41	2 P	
N/A	P0500210-40	1 2 P	
87	P0519081-13	1 36 P	
89	P0519081-14	1 36 P	
88	P0519078-21	1 36 P	
90	P0519078-22	1 36 P	
59	P0519078-27	1 36 P	
61	P0519078-28	1 36 P	
60	P0519081-15	1 36 P	
62	P0519081-16	1 36 P	
13	P0500210-42	1 4 P	
14	P0500210-97	1 10 P	
N/A	P2415014-4	1 31 P	
15	P2415014-16	1 36 P	

Eligibility continued from previous column			
Description	Fig	Part Number	
Panel Baggage Comp. Upper	16	P0515019-15	1 23 P
Panel, Cable Access, LH	19	P0519044-3	1 36 P
Panel, Cable Access, RH	20	P0519044-4	1 36 P
Panel, Door, LH	47	27-32-03L	T
	48	30-0715064-380A	T
Panel, Door, RH	N/A	P0519078-17	1 36 P
	51	27-32-03R	T
Panel, Door, RH	52	30-0715064-480A	T
	30	P0519078-18	1 36 P
Panel Door Accent, LH	25	P0519078-25	1 36 P
Panel Door Accent, RH	26	P0519078-26	1 36 P
Panel Door Insert, LH	28	P0519095-1	1 36 P
Panel Door Insert, RH	29	P0519095-2	1 36 P
Panel Door Insert, Aft LH	84	P0519095-3	1 36 P
Panel Door Insert, Aft RH	85	P0519095-4	1 36 P
Panel, Kick, Fwd LH	57	P0519081-11	1 36 P
Panel, Kick, Fwd RH	58	P0519081-12	1 36 P
Plug, Door Handle, LH	53	P0515075-79	1 36 P
Plug, Door Handle, RH	54	P0515075-78	1 36 P
Reel, Cover Plate	97	P0519076-4	1 36 P
Seat Back, Trim Assy, Rear	N/A	P0514109-1	1 21 P
Shield	N/A	P0511326-5	1 20 P
Shield Assembly, LH	N/A	P0414013-12	1 14 P
Shield Assembly, RH	94	P07111333-50	1 12 P
Shield, Instrument Light	92	P0414013-15	1 19 P
Tiara Assembly	N/A	P0514113-1	1 20 P
Tiara Assembly, LH	N/A	P0514127-1	1 29 P
Tiara Assembly, RH	N/A	P0514127-3	1 27 P
Tray, Shoulder Harness	103	20-14	25 T
Trim, LH	95	P0515024-25	1 36 P
Trim, RH	96	P0515024-26	1 36 P
Window, Side, Aft, LH	122	P0515027-21	1 33 P
Window, Side, Aft, RH	126	P0515027-22	1 33 P
Window, Side, LH	123	P0514071-1	1 15 P
	124	P0515027-3	1 20 P
Window, Side, RH	N/A	P0514012-2	1 13 P
	127	P0514071-2	1 17 P
	128	P0515027-4	1 20 P
	128	P0515027-4	1 20 P

Eligibility continues in next column

Eligibility continues in next column

Eligibility continues on next page

Manufacturer/Material: **1** Premier Aerospace Services and Technology/PVC/Acrylic **2** Texas Aeroplastics/ABS Plastic Parts

## Eligibility for Cessna Aircraft

Interior Plastic Trim

Eligibility continued from previous page		
Description	Fig	Part Number
1 Add -LB for light beige or -LG for light gray		
2 S/N 17249545 thru 17257161 only		
3 S/N 17249545 thru 17257161 only		
4 S/N 17249545 thru 17267584 only		
5 S/N 17249545 and on		
6 S/N 17250573 thru 17259223 only		
7 S/N 17250573 thru 17267584 only		
8 S/N 17250573 thru 17276654 only		
9 S/N 17251823 thru 17267584 only		
10 S/N 17251823 thru 17274009 only		
11 S/N 17251823 thru 17276654 only		
12 S/N 17254893 thru 17259223 only		
13 S/N 17257162 thru 17259223 only		
14 S/N 17257162 thru 17267584 only		
15 S/N 17257162 thru 17267584 only		
16 S/N 17257162 thru 17274009 only		
17 S/N 17259224 thru 17267584 only		
18 S/N 17259224 thru 17276211 only		
19 S/N 17260759 thru 17267584 only		
20 S/N 17260759 thru 17274009 only		
21 S/N 17260759 thru 17276654 only		
22 S/N 17260759 and on, includes model 172Q		
23 S/N 17260759 and on, does not include model 172Q		
24 S/N 17263459 thru 17276654 only		
25 S/N 17263459 and on		
26 S/N 17263459 and on		
27 S/N 17267585 thru S/N 17274009 only		
28 S/N 17267585 thru S/N 17275034 only		
29 S/N 17267585 thru S/N 17276654 only		
30 S/N 17272885 thru 17275759 only		
31 S/N 17274010 thru 17275759 only		
32 S/N 17274010 thru 17276654 only		
33 S/N 17274010 and on		
34 S/N 17275035 and on		
35 S/N 17280001 and on (172R,S)		
36 Add -0 for 1997-2000 year models and -N for 2001 and up		
<b>172RG, R172K</b>		
S/N All		
Description	Fig	Part Number
Tray, Shoulder Harness	103	20-14
<b>180, 180A, B, C, D, E, F, G, H, J, K</b>		
S/N 30000 thru 18053203		
Description	Fig	Part Number
Panel, Door, LH	47	27-32-03L 1 T
	48	30-0715064-3-80A 1 T
Panel, Door, RH	51	27-32-03R 1 T
	52	30-0715064-4-80A 1 T
1 S/N 30000 thru 18052770 only		
<b>182, 182A, B, C, D, E, F, G, H, J, K, L, M, N, P, Q, R</b>		
S/N 33000 thru 18268586		
Description	Fig	Part Number
Baggage Doorpost Cover	N/A	P0700702-9 1 S P
Cover, Access	N/A	P0714051-8 1 B P
	N/A	P0711778-5 1 B P
Cover Assembly	N/A	P0713811-5 1 P
	N/A	P0713811-7 1 P
Cover, Brow	N/A	P0713791-3 1 P
Cover, LH	N/A	P0715024-1 1 B P
Cover, RH	N/A	P0715024-2 1 B P
Cover Side Window, LH Light	N/A	P0700702-15-434 1 B P
Cover Side Window, RH Light	N/A	P0700702-16-434 1 B P
Cover, Side Window Frame, LH	N/A	P0715009-1 1 B P
Door Assy, Map Compartment	27	P0713777-3 7 P
Escutcheon, Dome Light	N/A	P0711779-2 1 B P
Escutcheon, LH	N/A	P1715047-3 1 B P
Escutcheon, RH	N/A	P1715047-4 1 B P
Headliner Assembly	N/A	P0714051-1 1 B P
Headliner Assembly, Molded	N/A	P0714002-7 1 B P
	74	P0715032-19 1 B P
	75	P0715044-1 1 B P
	77	P0715044-9 1 B P
	76	P0715044-11 1 B P
	78	P0715032-18 1 B P
	80	P0715044-2 1 B P
	81	P0715044-8 1 B P
	79	P0715044-10 1 B P
Molding, LH	N/A	P0715022-3 1 B P
Molding, RH	N/A	P0715044-5 1 B P
	81	P0715044-8 1 B P
	79	P0715044-10 1 B P
Molding, Doorpost, LH	N/A	P0715008-3 1 B P
Molding Door Sill	N/A	P0715032-15 1 B P
Molding, Door Window, LH	N/A	P0715008-4 1 B P
Molding, Door Window, RH	N/A	P0715032-16 1 B P
Molding Assy, Door Window, RH Openable	113	P0715069-1 1 B P
	N/A	P0715032-3 1 B P
Molding, Window, LH	N/A	P0715032-9 1 B P
	106	P0715044-15 1 B P
	N/A	P0715022-10 1 B P
	N/A	P0715032-4 1 B P
Molding, Window, RH	N/A	P0715032-10 1 B P
	107	P0715044-16 1 B P
Molding, Window Aft	N/A	P0700702-12 1 A P
	N/A	P0715010-2 1 B P

Eligibility continued from previous column		
Description	Fig	Part Number
Molding, Window, Up, Aft, LH	108	P0715010-3 1 B P
Molding, Window, Up, Aft, RH	109	P0715010-4 1 B P
Panel Assembly, LH	N/A	P0715023-3 1 B P
Panel Assembly, RH	N/A	P0715023-16 1 B P
	N/A	P0700702-10 1 B P
Panel, Assembly, Aft Wall	N/A	P0715023-1 1 B P
	N/A	P0715023-5 1 B P
Panel, Assembly, Baggage LH	82	P0715088-1 1 B P
Panel, Baggage Compartment	N/A	P0700702-6 1 B P
	N/A	P0700702-11 1 B P
Panel, Canted	N/A	P0700702-21 1 B P
Panel, Canted, Baggage Comp.	86	P0715080-1 1 B P
	47	27-32-03L 2 T
	48	30-0715064-380A 2 T
Panel, Door, LH	51	27-32-03R 2 T
	52	30-0715064-480A 2 T
Panel, Door, RH	91	P0715052-6-532 1 B P
Panel, Trim	N/A	P0715052-1 1 B P
Panel, Trim, LH	N/A	P0715052-2 1 B P
Panel, Trim, RH	N/A	P1215045-5 1 B P
Shield, LH	N/A	P1215045-6 1 B P
Shield, RH	N/A	P0715007-1 1 B P
	N/A	P0715007-5 1 B P
Shield Doorpost LH	N/A	P0715022-1 1 B P
Shield Doorpost LH, Light	43	P0700702-17 1 B P
Shield Doorpost RH	N/A	P0715007-3 1 B P
	N/A	P0715022-2 1 B P
Shield Doorpost RH, Light	44	P0700702-18 1 B P
Shield, Glare Assembly	N/A	P0713169-1 1 B P
Splice	N/A	P0715049-1 1 B P
Trim Assembly, Seat Back, LH	N/A	P0714023-1 1 B P
	N/A	P0715004-1 1 B P
Trim Assembly, Seat Back, RH	N/A	P0715016-1 1 B P
	N/A	P0714023-2 1 B P
Trim, Strip, LH	N/A	P0715022-7 1 B P
1 Add -LB for light beige or -LG for light gray		
2 S/N 33000 thru 18260055 only		
3 S/N 18255059 thru 18255844 only		
4 S/N 18255059 thru 18259305 only		
5 S/N 18255059 thru 18260825 only		
6 S/N 18255059 thru 18261425 only		
7 S/N 18255846 thru 18257625 only		
8 S/N 18256685 thru 18257625 only		
9 S/N 18256685 thru 18258505 only		
10 S/N 18258506 thru 18260055 only		
11 S/N 18258506 thru 18260825 only		
12 S/N 18259306 thru 18260055 only		
13 S/N 18259306 thru 18265175 only		
14 S/N 18260056 thru 18260825 only		
15 S/N 18260056 thru 18265175 only		
16 S/N 18260056 thru 18267715 only		
17 S/N 18260826 thru 18264295 only		
18 S/N 18260826 thru 18265175 only		
19 S/N 18260826 thru 18267715 only		
20 S/Ns 18260826 thru 18267715 and R1820001 thru R18202041		
21 S/Ns 18260826 thru 18268586 and R1820001 thru R18202041		
22 S/Ns 18260826 thru 18267715, R1820001 thru R18202041 and R18200584 thru R18202041		
23 S/Ns 18265176 thru 18267715 and R1820001 thru R18202041		
24 S/N 18260826 thru 18268586 only		
25 S/N 18260826 thru 18268586 only		
26 S/N 18263476 thru 18267715 only		
27 S/N 18267716 thru 18268586 only		
<b>185, 185A, B, C, D, E, A185E, F</b>		
S/N 185-0001 thru 18504448		
Description	Fig	Part Number
Panel, Door, LH	47	27-32-03L T
With built in arm rest	48	30-0715064-380A T
Panel, Door, RH	51	27-32-03R T
With built in arm rest	52	30-0715064-480A T
<b>U206, U206A, B, C, D, E, P206, P206A</b>		
S/N U206-0276 thru U20601700		
S/N P206-0002 thru P206-0306		
Description	Fig	Part Number
Door Assy, Map Compartment	27	P0713777-3 P
<b>401, 401A, B, 402, 402A, B</b>		
Description	Fig	Part Number
Cover Assy, Cockpit Light and Oxygen	66	P5017516-8 1 B P
Cover Assy, Rheostat Controls	67	P5017561-10 1 B P
Cover, Inside, LH	70	P5014016-5 1 B P
Cover, Inside, RH	71	P5014016-6 1 B P
Cover, Outside, LH	72	P5014016-3 1 B P
Cover, Outside, RH	73	P5014016-4 1 B P
Cup, Handle	56	P5011128-1 1 B P
Trim Assy, Upper Cargo Door	55	P5214018-7 1 B P
Trim, Window, Aft	125	P5014046-10 1 B P

Eligibility continued from previous column		
Description	Fig	Part Number
Trim, Window, Center Aft	110	P5014046-8 1 B P
Trim, Window, Center Fwd	111	P5014046-5 1 B P
	112	P5014046-6 1 B P
Trim, Window, Pilot's	117	P5014044-3 1 B P
Trim, Window, Co-Pilot's	116	P5014044-4 1 B P
Trim Emergency Window	114	P5014046-4 1 B P
Trim Forward Window	115	P5014046-3 1 B P
Trim, Upper Door Window, LH	129	P5014046-42 1 B P
Trim, Windshield, Center	130	P5014045-5 1 B P
Trim, Windshield, Upper	131	P5014045-3 1 B P
1 Add LB for light beige or LG for light gray		
2 Models 401, 401A, B		
3 Models 401, 401A, 402A, B		
4 Models 401, 401A, B, 402, 402A		
5 Models 401, 401A, 402, 402A, B		
6 Models 401, 401A, B, 402, 402A, B		
<b>421B, C</b>		
Description	Fig	Part Number
Cover Assembly	64	P5119137-2 1 B P
Cover Face, LH	68	P5114534-5 1 B P
Cover Face, RH	69	P5114534-6 1 B P
Panel Assy, Armrest, Pilot's	2	P5119057-13 1 B P
Panel Assy, Armrest, Co-Pilot's	1	P5119139-4 1 B P
Storage, Armrest, Pilot's	3	P5219153-1 1 B P
Storage, Armrest, Co-Pilot's	N/A	P5219153-2 1 B P
1 Add -LB for light beige or -LG for light gray		
2 Models 421B, C		
3 Models 421C		
<b>Kits for 150-152 aircraft</b>		
26-02-80A	Door Panel Kit	66-150LD (LH) 66-150LD (RH)
26-03D-80A	Door Panel Kit	67-82-150LD (LH) 67-82-150RD (RH)
26-13-80A	Post Cover Kit, Interior	26-13L (LH) 26-13R (RH)
<b>Kits for 170, 172, 175, 180, 182 and 185 aircraft</b>		
20-01-80A	Door Panel Kit, Universal Fit	27-32-03L (LH) 27-32-03R (RH)
28-13-80A	Post Cover Kit, Interior	28-13L (LH) 28-13R (RH)
30-0715064-80A	Door Panel Kit	30-0715064-3-80A (LH) 30-0715064-4-80A (RH)
1 Models 170, 172 and 175 only		

# Interior Plastic Trim Piper Aircraft



Interior Plastic Trim












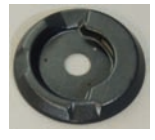




















































Eligibility tables for Piper series aircraft with item descriptions, figure reference and part numbers can be found on pages 232-234.

Figures 1-40 Photos are not to scale relative to each other




















1 <b>Arm Rest</b>  H65238-10 LH	2  H65238-11 RH	3 <b>Assist Strap</b>  H79456-00 Cap	4 <b>Battery Box Cover</b>  H35201-00	5 <b>Bulkhead Interconnect</b>  H35498-00 Flange	6 <b>Cabin Light</b>  H12715-00 Lens	7  H69751-06 Duct	8  H69991-02 Duct
9  H76307-00 Duct	10  H79855-02 Duct	11  H99541-00 Duct	12  H99541-02 Duct	13 <b>Cluster Assembly</b>  H79381-00 Lens	14 <b>Compass</b>  H79600-00 Housing Assembly	15  H69676-00 Support	16 <b>Console</b>  H67330-10 Cover
17 <b>Console</b>  H69654-19 Cover	18 <b>Console, Overhead</b>  H76496-02	19  H99500-06	20 <b>Door</b>  H79542-04 Cover, Trim, Upper	21  H79542-16 Cover, Trim, Upper	22  H79542-05 Panel, Latch	23 <b>Drain</b>  H35507-02 Cover	24  H65461-19 Cover Quik Drain
25 <b>ELT Switch</b>  H79463 Cover	26 <b>Engine Control</b>  H67232-40-41 Cover	27  H69344-28 Cover	28  H95808-08 Cover	29 <b>Evaporator</b>  H99550-02 Filter	30  H99550-03 Filter	31 <b>Flap Handle</b>  60-65224-80A Cover	32  60-67785-17-80A Cover
33  60-69596-80A Cover	34  H38178-02 Cover	35  H65224-07 Cover	36  H67593-09 Cover	37  H67785-17 Cover	38  H67917-06 Cover	39  H69596-14 Cover	40  H96555-07 Cover

Interior Plastic Trim

Figures 41-104 Photos are not to scale relative to each other

Forward Air		Fresh Air			Fuel Selector			
41  H62827-07 Shield, Cover	42  H65672-05 Shield, Cover	43  H69749-04 Duct	44  H69750-00 Duct	45  H69990-02 Duct	46  H76494-02 Duct	47  H76494-04 Duct	48  H79186-08 Duct	
Fuel Selector		Glove Box			Handhold		Heat	
49  H35773-02 Cover	50  H69652-12 Cover	51  H78320-13 Cover	52  H99635-09 Cover	53  H69330-04 Cover	54  H20596-00 Door	55  H67235-00 Grip	56  H36511 Duct	
Instrument Panel								
57  H65891 Cover	58  H67228-04 Cover, LH	59  H67228-09 Cover, LH	60  H69338-02 Cover, LH	61  H95919-00 Cover, LH	62  H67229-06 Cover, RH	63  H69831-05 Cover, RH	64  H95920-00 Cover, RH	
Instrument Panel								
65  H37369-00 Cover, Lower LH	66  H69817-00 Cover, Lower LH	67  H69817-03 Cover, Lower LH	68  H86740-02 Cover, Lower LH	69  H66918-16 Cover, Lower LH	70  H66918-18 Cover, Lower LH	71  H66918-20 Cover, Lower LH	72  H66983-12 Cover, Lower LH	
Instrument Panel								
73  H67920-14 Cover, Lower LH	74  H37371-00 Cover, Lower RH	75  H69901-02 Cover, Lower RH	76  H79527-02 Cover, Lower RH	77  H86741-03 Cover, Lower RH	78  H95284-08 Cover, Lower RH	79  H67227-12 Cover, Upper	80  H36567-05 Cover, Upper LH	
Instrument Panel				Mag Switch				Miscellaneous
81  H69661-00 Cover, Upper LH	82  H69816-03 Cover, Upper LH	83  H79044-06 Cover, Upper LH	84  H69659-00 Cover, Upper RH	85  H99959-04 Cover, Upper RH	86  H99959-05 Cover, Upper RH	87  H96730-00	88  H86733-06 Cover	
Miscellaneous								
89  H36551-03 Cover, Aft Trim	90  H36551-02 Cover, Forward Trim	91  H67313-02 Cover, LH	92  H67314-02 Cover, RH	93  H65674/H65674-15 Cover, Trim	94  H66615-14 Cover, Trim	95  H86781-02 Cover, Trim	96  H86775-04H Cover, Trim LH	
Miscellaneous								
97  H95893-20 Cover, Trim LH	98  H86775-05H Cover, Trim RH	99  H95893-21H Cover, Trim RH	100  H68736-00 Cup	101  H65735C Cup	102  H65735F Flange	103  H63428-06 Panel Assembly	104  H63428-09 Panel Assembly	

Figures 105-161 Photos are not to scale relative to each other

Miscellaneous							
105  H69746-13 Panel Assembly	106  H69989-03 Panel Assembly	107  H99222-04 Panel Assembly	108  H65846-00 Plate	109  H69669-44 Plate	110  H69669-45 Plate	111  H95804-02 Plate	112  60-18 Trim, Floor
Oxygen Gauge	Radio	Rudder Trim	Seat				
113  H69991-07 Duct	114  H79404-00 Cover, Cooling	115  H63295-05 Cover	116  H68091-14 Channel, Trim, Center LH	117  H68091-15 Channel, Trim, Center RH	118  H68090-16 Channel, Trim, Rear LH	119  H68090-17 Channel, Trim, Rear RH	120  H78041 Cover, Seat Back
Seat	Shoulder Harness			Sun Visor		Switch Panel	
121  H78041-08 Seat Back, RH	122  H78054-02 Cover, LH	123  H99801-02 Cover, RH	124  H67762-13 Inertia Reel, LH	125  H67762-12 Inertia Reel, RH	126  H65866-00 Blade	127  H65866-02 Blade	128  H96954-03
Switch Plate	Vent, Bulkhead		Vent, Exhaust	Window			
129  H69976-03 Cover	130  H79182-02 Cover	131  H76305-00 Duct	132  H76308-00 Duct	133  H99252-10 Cover	134  H79171-11 Cover, Frame Center LH	135  H79171-08 Cover, Frame Center RH	136  H78349-17 Cover, Frame Front LH
Window							
137  H79171-14 Cover, Frame Front LH	138  H79171-10 Cover, Frame Rear LH	139  H79171-09 Cover, Frame Rear RH	140  H67311-02 Cover, Rear LH	141  H67312-02 Cover, Rear RH	142  H79171-02 Cover, RH	143  H63125-04 Trim Strip, Post LH	144  H63126-04 Trim Strip Post RH
Windshield							
145  H79171-13 Cover, Bow Lower RH	146  H63149-20 Cover, Bow Upper LH	147  H63149-21 Cover, Bow Upper RH	148  H63149-22 Cover, Trim LH	149  H63149-23 Cover, Trim RH	150  H68688-04 Cover, Trim LH	151  H68688-05 Cover, Trim RH	152  H63149-12 Cover, Upper LH
Windshield							
153  H63149-16 Cover, Upper LH	154  H63149-13 Cover, Upper RH	155  H63149-17 Cover, Upper RH	156  H63149-14 Trim Strip LH	157  H63149-15 Trim Strip RH	158  H66615-14 Trim	159  H67556-04 Trim	160  H63942-00 Cover, LH
Wing Bolt							
161  H63942-01 Cover, RH							

# Interior Plastic Trim

## Eligibility for Piper Aircraft

Interior Plastic Trim

PA-24, PA-24-250, PA-24-260, PA-24-400			
Description	Fig	Part Number	
Box Assembly, Cabin Air Outlet	N/A	P25574-00	4 P
Molding Assy., Front Window	N/A	P25416-00	4 P
Molding, Cabin Door Window	N/A	P23314-06	2 P
Molding, Center Window, RH	N/A	P20758-09	1 P
Molding, Front Window, LH	N/A	P25418-00	4 P
Molding, Front Window, RH	N/A	P23308-06	3 P
Molding, Front Window, RH	N/A	P23314-02	5 P
Molding, Rear Window, LH	N/A	P25417-00	4 P
Panel Assy	N/A	P22452-00	2 P
1 Models PA-24 and PA-24-250 only			
2 Models PA-24, PA-24-250 and PA-24-260 only			
3 Models PA-24-250, PA-24-260 and PA-24-400 only			
4 Model PA-24-260 only			
5 Model PA-24-400 only			
PA-28-140, -150, -160, -180, PA-28R-180			
Description	Fig	Part Number	
Armrest, LH	1	H65238-10	1 6 P
Armrest, RH	2	H65238-11	1 6 P
Battery Box Cover	4	H35201-00	3 P
Blade, Sun Visor	126	H65866-00	3 P
Cap, Assist Strap	3	H79456-00	3 P
Compass Housing Assembly	14	H79600-00	3 P
Console, Overhead	19	H99500-06	3 P
Cover, Console	16	H67330-10	4 P
Cover, Elt Switch	25	H79463	4 P
Cover, Engine Control	26	H67232-40-41	5 P
Cover, Exhaust Vent	133	H99252-10	4 P
31 60-65224-80A			
32 60-67785-17-80A			
Cover, Flap Handle	35	H65224-07	2 P
	36	H67593-09	2 P
	37	H67785-17	2 P
Cover, Fuel Selector	52	H99635-09	2 P
Cover, Instrument Panel	57	H65891	2 P
Cover, Instr. Panel, LH	58	H67228-04	2 P
	59	H67228-09	8 P
Cover, Instr. Panel, Lower, LH	69	H66918-16	3 P
	72	H66983-12	9 P
Cover, Instr. Panel, Lower RH	76	H79527-02	3 P
Cover, Instr. Panel, RH	62	H67229-06	3 P
Cover, Instr. Panel, Upper RH	85	H99959-04	3 P
	86	H99959-05	2 P
	79	H67227-12	8 P
Cover, Instr. Panel, Upper, LH	83	H79044-06	2 P
Cover, LH	91	H67313-02	10 P
Cover, RH	92	H67314-02	10 P
Cover, Radio Cooling	114	H79404-00	2 P
Cover, Rudder Trim	115	H63295-05	2 P
Cover, Seat Back	120	H78041	1 5 P
Cover, Shoulder Harness, LH	122	H78054-02	5 P
Cover, Shoulder Harness, RH	123	H99801-02	5 P
Cover, Shoulder Hrns., Rear, LH	N/A	P99920-02	10 P
Cover, Shoulder Hrns., Rear, RH	N/A	P99920-03	10 P
Cover, Transponder Antenna	N/A	P99991-00	3 P
Cover, Trim	N/A	H65674	2 P
	93	H65674-15	2 P
Cover, Window Frame, Cntr, LH	N/A	P99904-05	8 P
Cover, Window, RH	142	H79171-02	2 P
Cover, Window, Rear LH	140	H67311-02	9 P
Cover, Window, Rear RH	141	H67312-02	9 P
Cover, Windshield Bow, Low, RH	145	H79171-13	2 P
Cover, Windshield Bow, Up, LH	146	H63149-20	2 P
Cover, Windshield Bow, Up, RH	147	H63149-21	2 P
	152	H63149-12	2 P
Cover, Windshield, Upper LH	153	H63149-16	4 P
	154	H63149-13	2 P
	155	H63149-17	4 P
Cover, Windshield, Upper RH	160	H63942-00	2 P
Cover, Wing Bolt, LH	161	H63942-01	2 P
Cover, Wing Bolt, RH	101	H65735C	1 3 P
Cup, Air Vent	100	H68736-00	6 P
Door Assembly, Rear Bulkhead	N/A	P79445-00	4 P
Door, Glove Box	54	H20596-00	2 P
Duct, Bulkhead Vent	132	H76308-00	3 P
Duct, Center Vent	9	H76307-00	8 P
	9	H76307-07	8 P
P/N H76307-00 w/o recess	11	H99541-00	8 P
P/N H76307-07 w/recess	12	H99541-02	8 P
Duct, Fresh Air	48	H79186-08	2 P
Duct, Heat	56	H36511	8 P
Evaporator Filter	29	H99550-02	8 P
	30	H99550-03	2 P
Flange, Air Vent	102	H65735F	1 2 P
Grip, Handhold	55	H67235-00	3 P
Inertia Reel, LH	124	H67762-13	6 P
Interconnect, Ventilation Bulk	N/A	P79192-00	4 P
Inertia Reel, RH	125	H67762-12	6 P
Lens, Cabin Light	6	H12715-00	2 P
Lens, Cluster Assembly	13	H79381-00	3 P

Eligibility continued from previous column			
Description	Fig	Part Number	
Panel Assembly			
	104	H63428-09	2 P
	107	H99222-04	5 P
Panel, Door Latch	22	H79542-05	1 2 P
Plate, Placard Engine Control	108	H65846-00	3 P
Seat Back, RH	121	H78041-08	1 3 P
Shield, Flap Handle Cover	41	H62827-07	2 P
	42	H65672-05	4 P
Trim, Floor	112	60-18	7 T
Trim Strip, Window Post, LH	143	H63125-04	2 P
Trim Strip, Window Post, RH	144	H63126-04	2 P
Trim Strip, Windshield, LH	156	H63149-14	4 P
Trim Strip, Windshield, RH	157	H63149-15	4 P
Trim, Windshield	159	H67556-04	3 P
1 Add -B for black or -W for white			
2 Model PA-28-140 only			
3 Models PA-28-140 and PA-28-180 only			
4 Model PA-28-140, PA-28-180 and PA-28R-180 only			
5 Model PA-28-140 and PA-28R-180 only			
6 Models PA-28-150, PA-28-160 and PA-28-180 only			
7 Models PA-28-150, 160, 180 S/N 28-1761 thru 28-3977			
8 Model PA-28-180 only			
9 Model PA-28R-180 only			
10 Model PA-28-180 and PA-28R-180 only			
PA-28-151, -161, -181, -201T			
Description	Fig	Part Number	
Battery Box Cover	4	H35201-00	3 P
Blade, Sun Visor	126	H65866-00	3 P
Cap, Assist Strap	3	H79456-00	3 P
Compass Housing Assembly	14	H79600-00	3 P
Console, Overhead	18	H76496-02	2 P
	19	H99500-06	3 P
Cover, Console	16	H67330-10	4 P
Cover, Drain	23	H35507-02	2 P
Cover, Elt Switch	25	H79463	4 P
Cover, Engine Control	26	H67232-40-41	5 P
Cover, Exhaust Vent	133	H99252-10	4 P
Cover, Flap Handle	32	60-67785-17-80A	7 T
	37	H67785-17	2 P
Cover, Fuel Selector	49	H35773-02	5 P
	52	H99635-09	2 P
Cover, Instrument Panel, LH	58	H67228-04	2 P
	59	H67228-09	8 P
Cover, Instr. Panel, Lower RH	69	H66918-16	7 P
	70	H66918-18	5 P
	71	H66918-20	7 P
Cover, Instrument Panel, RH	62	H67229-06	7 P
Cover, Instr. Panel, Upper RH	85	H99959-04	4 P
	86	H99959-05	2 P
	80	H36567-05	7 P
Cover, Instr. Panel, Upper, LH	83	H79044-06	7 P
Cover, Radio Cooling	114	H79404-00	2 P
Cover, Rudder Pedal Stop Bracket	N/A	P78735-02	6 P
Cover, Seat Back	120	H78041	1 1 P
Cover, Shoulder Harness, LH	122	H78054-02	5 P
Cover, Shoulder Harness, RH	123	H99801-02	5 P
Cover, Shoulder Hrns., Rear, LH	N/A	P99920-02	6 P
Cover, Shoulder Hrns., Rear, RH	N/A	P99920-03	6 P
Cover, Trim	93	H65674	2 P
	94	H65674-15	2 P
Cover, Window Frame, Cent. LH	134	H79171-11	2 P
Cover, Window Frame, Cent. RH	135	H79171-08	2 P
Cover, Window Frame, Front LH	137	H79171-14	2 P
Cover, Window Frame, Rear LH	138	H79171-10	2 P
Cover, Window Frame, Rear RH	139	H79171-09	2 P
Cover, Window, RH	142	H79171-02	2 P
Cover, Windshield Bow, Low, RH	145	H79171-13	2 P
Cover, Windshield Bow, Up, LH	146	H63149-20	2 P
Cover, Windshield, Upper LH	153	H63149-16	2 P
	154	H63149-13	2 P
	155	H63149-17	2 P
Cover, Windshield, Upper RH	160	H63942-00	2 P
Cover, Wing Bolt, LH	161	H63942-01	2 P
Cup, Air Vent	101	H65735C	1 P
Door Assembly, Rear Bulkhead	N/A	P79445-00	3 P
Duct, Bulkhead Vent	132	H76308-00	3 P
Duct, Center Vent	9	H76307-00	3 P
	9	H76307-07	3 P
P/N H76307-00 w/o recess	10	H79855-02	3 P
P/N H76307-07 w/recess	12	H99541-02	3 P
Duct, Heat	56	H36511	3 P
Evaporator Filter	29	H99550-02	3 P
Flange, Air Vent	102	H65735F	1 P
Flange, Bulkhead Interconnect	5	H35498-00	2 P
Grip, Handhold	55	H67235-00	4 P
Interconnect, Ventilation Bulk	N/A	P79192-00	3 P
Lens, Cabin Light	6	H12715-00	2 P
Lens, Cluster Assembly	13	H79381-00	2 P
Plate, Placard Engine Control	108	H65846-00	7 P
	110	H69669-45	3 P

Eligibility continued from previous column			
Description	Fig	Part Number	
Shield, Flap Handle Cover	42	H65672-05	2 P
Trim, Windshield	159	H67556-04	2 P
1 Add -B for black or -W for white			
2 Models PA-28-151 and PA-28-161 only			
3 Models PA-28-151 PA-28-161 and PA-28-201T only			
4 Model PA-28-181 only			
5 Model PA-28-201T only			
6 Models PA-28-181 and PA-28-201T only			
7 Models PA-28-151 PA-28-161 and PA-28-181 only			
8 Models PA-28-161, PA-28-181 and PA-28-201T only			
PA-28-235, PA-28-236			
Description	Fig	Part Number	
Armrest, LH	1	H65238-10	1 2 P
Armrest, RH	2	H65238-11	1 2 P
Battery Box Cover	4	H35201-00	3 P
Blade, Sun Visor	126	H65866-00	3 P
Cap, Assist Strap	3	H79456-00	3 P
Compass Housing Assembly	14	H79600-00	3 P
Console, Overhead	19	H99500-06	3 P
Cover, Console	16	H67330-10	4 P
Cover, Drain	23	H35507-02	3 P
Cover, Elt Switch	25	H79463	4 P
Cover, Engine Control	26	H67232-40-41	5 P
	31	60-65224-80A	2 T
	32	60-67785-17-80A	2 T
	35	H65224-07	2 P
	37	H67785-17	2 P
Cover, Fuel Selector	50	H69652-12	2 P
	52	H99635-09	3 P
Cover, Instrument Panel, LH	59	H67228-09	2 P
Cover, Instr. Panel, Lower, LH	69	H66918-16	2 P
	71	H66918-20	3 P
Cover, Instrument Panel, RH	62	H67229-06	2 P
Cover, Instr. Panel, Upper RH	86	H99959-05	2 P
Cover, Instr. Panel, Upper, LH	80	H36567-05	3 P
	83	H79044-06	2 P
Cover, Quick Drain	24	H65461-19	2 P
Cover, Radio Cooling	114	H79404-00	2 P
Cover, Rudder Pedal Stop Bracket	N/A	P78735-02	3 P
Cover, Seat Back	120	H78041	1 1 P
Cover, Shoulder Harness, LH	122	H78054-02	2 P
Cover, Shoulder Harness, RH	123	H99801-02	2 P
Cover, Shoulder Hrns., Rear, LH	93	P99920-02	2 P
Cover, Shoulder Hrns., Rear, RH	94	P99920-03	2 P
Cover, Transponder Antenna	N/A	P99991-00	2 P
Cover, Trim	N/A	H65674	2 P
	N/A	H65674-15	2 P
Cover, Window Frame, Cent. LH	134	H79171-11	2 P
Cover, Window Frame, Cent. LH	N/A	P99904-05	2 P
Cover, Window Frame, Cent. RH	135	H79171-08	2 P
Cover, Window Frame, Front LH	137	H79171-14	2 P
Cover, Window Frame, Front LH	137	H79171-14	2 P
Cover, Window Frame, Rear LH	138	H79171-10	2 P
Cover, Window Frame, Rear RH	139	H79171-09	2 P
Cover, Window, RH	142	H79171-02	2 P
Cover, Windshield Bow, Low, RH	145	H79171-13	2 P
Cover, Windshield Bow, Up, LH	146	H63149-20	2 P
Cover, Windshield Bow, Up, RH	147	H63149-21	2 P
Cover, Windshield, Upper LH	153	H63149-16	2 P
	154	H63149-13	2 P
	155	H63149-17	2 P
Cover, Windshield, Upper RH	160	H63942-00	2 P
Cover, Wing Bolt, LH	161	H63942-01	2 P
Cup, Air Vent	101	H65735C	1 P
	100	H68736-00	5 P
Door Assembly, Rear Bulkhead	N/A	P79445-00	2 P
Door, Glove Box	54	H20596-00	2 P
Duct, Bulkhead Vent	132	H76308-00	2 P
Duct, Center Vent	9	H76307-00	2 P
	9	H76307-07	2 P
P/N H76307-00 w/o recess	10	H79855-02	2 P
P/N H76307-07 w/recess	12	H99541-02	2 P
Duct, Heat	56	H36511	2 P
Evaporator Filter	29	H99550-02	2 P
Flange, Air Vent	102	H65735F	1 P
Grip, Handhold	55	H67235-00	2 P
Inertia Reel, LH	124	H67762-13	2 P
Inertia Reel, RH	125	H67762-12	2 P
Lens, Cabin Light	6	H12715-00	2 P
Interconnect, Ventilation Bulk	N/A	P79192-00	2 P
Lens, Cluster Assembly	13	H79381-00	2 P
Panel Assembly	103	H63428-06	2 P
Panel, Door Latch	22	H79542-05	1 2 P
Plate, Placard Engine Control	108	H65846-00	2 P
	110	H69669-45	2 P
Seat Back, RH	121	H78041-08	1 2 P
Shield, Flap Handle Cover	41	H62827-07	2 P
	42	H65672-05	2 P
Trim, Floor	112	60-18	4 T
Trim Strip, Window Post, LH	143	H63125-04	2 P



# Interior Plastic Trim Eligibility for Piper Aircraft

Eligibility continued from previous page		
Trim Strip, Window Post, RH	144	H63126-04
Trim, Windshield	159	H67556-04
<b>1</b> Add -B for black or -W for white <b>2</b> Model PA-28-235 only <b>3</b> Model PA-28-236 only <b>4</b> Model PA-28-235, S/N 28-10003 thru 28-10719 <b>PA-28R-200, PA-28R-201, PA-28R-201T, PA-28RT-201, PA-28RT-201T</b>		
Description	Fig	Part Number
Battery Box Cover	4	H35201-00
Blade, Sun Visor	126	H65866-00
Cap, Assist Strap	3	H79456-00
Compass Housing Assembly	14	H79600-00
Console, Overhead	19	H99500-06
Cover, Console	16	H67330-10
Cover, Drain	23	H35507-02
Cover, Elt Switch	25	H79463
Cover, Engine Control	26	H67232-40-41
Cover, Exhaust Vent	136	H99252-10
Cover, Flap Handle	36	H67593-09
	38	H67917-06
Cover, Fuel Selector	49	H35773-02
	52	H99635-09
Cover, Instrument Panel, LH	59	H67228-09
Cover, Instr. Panel, Lower, LH	72	H66983-12
	73	H67920-14
Cover, Instr. Panel, Lower RH	76	H79527-02
Cover, Instrument Panel, RH	62	H67229-06
	85	H99959-04
	86	H99959-05
Cover, Instr. Panel, Upper RH	80	H36567-05
	83	H79044-06
Cover, LH	91	H67313-02
Cover, RH	92	H67314-02
Cover, Radio Cooling	116	H79404-00
Cover, Rudder Pedal Stop Bracket	N/A	P78735-02
Cover, Seat Back	120	H78041
Cover, Shoulder Harness, LH	122	H78054-02
Cover, Shoulder Harness, RH	123	H99801-02
Cover, Shoulder Hrns, Rear, LH	N/A	P99920-02
Cover, Shoulder Hrns, Rear, RH	N/A	P99920-03
Cover, Transponder Antenna	N/A	P99991-00
Cover, Trim	N/A	H65674
	93	H65674-15
Cover, Window Frame, Cent. LH	134	H79171-11
N/A	P99904-05	
Cover, Window Frame, Cent. RH	135	H79171-08
Cover, Window Frame, Front LH	137	H79171-14
Cover, Window Frame, Rear LH	138	H79171-10
Cover, Window Frame, Rear RH	139	H79171-09
Cover, Window, Rear LH	140	H67311-02
Cover, Window, Rear RH	141	H67312-02
Cover, Window, RH	142	H79171-02
Cover, Windshield Bow, Low. RH	145	H79171-13
Cover, Windshield Bow, Up. LH	146	H63149-20
Cover, Windshield Bow, Up. RH	147	H63149-21
Cover, Windshield, Upper LH	152	H63149-12
	153	H63149-16
	154	H63149-13
	155	H63149-17
Cover, Wing Bolt, LH	160	H63942-00
Cover, Wing Bolt, RH	161	H63942-01
Cup, Air Vent	101	H65735C
	100	H68736-00
Door Assembly, Rear Bulkhead	N/A	P79445-00
Duct, Bulkhead Vent	131	H76305-00
Duct, Center Vent	9	H76307-00
P/N H76307-00 w/o recess	9	H76307-07
P/N H76307-07 w/recess	12	H99541-02
Duct, Fresh Air	46	H76494-02
	47	H76494-04
Duct, Heat	57	H36511
Evaporator Filter	29	H99550-02
Flange, Air Vent	102	H65735F
Grip, Handhold	55	H67235-00
Interconnect, Ventilation Bulk	N/A	P79192-00
Lens, Cabin Light	6	H12715-00
Lens, Cluster Assembly	13	H79381-00
Panel Assembly	107	H99222-04
Panel, Door Latch	22	H79542-05
Plate, Placard Engine Control	110	H69669-45
Seat Back, RH	121	H78041-08
Shield, Flap Handle Cover	42	H65672-05
Trim Strip, Window Post, LH	143	H63125-04
Trim Strip, Window Post, RH	144	H63126-04
Trim Strip, Windshield, LH	156	H63149-14
Trim Strip, Windshield, RH	157	H63149-15
Trim, Windshield	159	H67556-04

Eligibility continued from previous column		
<b>1</b> Add -B for black or -W for white <b>2</b> Model PA-28R-200 only <b>3</b> Model PA-28R-200 and PA-28R-201 only <b>4</b> Models PA-28R-200 and PA-28RT-201 only <b>5</b> Models PA-28R-200, PA-28R-201 and PA-28R-201T only <b>6</b> All models except PA-28RT-201T <b>7</b> Models PA-28R-201T and PA-28RT-201T only <b>8</b> Models PA-28R-200 and PA-28RT-201T only <b>9</b> Models PA-28R-200, PA-28RT-201 and PA-28RT-201T only <b>10</b> Models PA-28RT-201 and PA-28RT-201T only <b>11</b> All models except PA-28RT-201 <b>12</b> Models PA-28R-201, PA-28RT-201 and PA-28RT-201T only <b>13</b> All models except PA-28R-200		
PA-30, PA-39		
Description	Fig	Part Number
Box Assembly, Cabin Air Outlet	N/A	P25574-00
Molding Assembly, Front Window	N/A	P25416-00
Molding, Cabin Door Window	N/A	P23314-06
Molding, Front Window, LH	N/A	P25418-00
Molding, Front Window, RH	N/A	P23308-06
Molding, Rear Window, LH	N/A	P25417-00
Panel Assembly	N/A	P22452-00
<b>11</b> Model PA-30 Only		
<b>PA-32-260, PA-32-300, PA-32-301, PA-32-301T, PA-32R-300, PA-32R-301, PA-32R-301T, PA-32RT-300, PA-32RT-300T</b>		
Description	Fig	Part Number
Battery Box Cover	4	H35201-00
Blade, Sun Visor	127	H65866-02
Cap, Assist Strap	3	H79456-00
Channel, Seat Trim, Center LH	116	H68091-14
Channel, Seat Trim, Center RH	117	H68091-15
Channel, Seat Trim, Rear LH	118	H68090-16
Channel, Seat Trim, Rear RH	119	H68090-17
Compass Housing Assembly	14	H79600-00
Cover, Aft Trim	89	H36551-03
Cover, Glove Box	N/A	P69330-03
Cover, Cargo Door Upper	N/A	P69859-07
Cover, Console	17	H69654-19
Cover, Door Trim, Upper	20	H79542-04
	21	H79542-16
Cover, Elt Switch	25	H79463
Cover, Engine Control	27	H69344-28
Cover, Flap Handle	33	60-69596-80A
	34	H38178-02
	39	H69596-14
Cover, Forward Trim	90	H36551-02
Cover, Fuel Selector	50	H69652-12
Cover, Glove Box	53	H69330-04
Cover, Instr. Panel, Lower, LH	66	H69817-00
	67	H69817-03
Cover, Instr. Panel, Lower RH	75	H69901-02
Cover, Instrument Panel, RH	63	H69831-05
Cover, Instr. Panel, Upper RH	84	H69659-00
Cover, Instr. Panel, Upper, LH	81	H69661-00
Cover, Quick Drain	24	H65461-19
Cover, Radio Cooling	114	H79404-00
Cover, Rudder Pedal Stop Bracket	N/A	P78735-02
Cover, Seat Back	120	H78041
Cover, Shoulder Harness, LH	N/A	H78054-02
Cover, Shoulder Harness, RH	123	H99801-02
	129	H69976-03
Cover, Switch Plate	130	H79182-02
Cover, Transponder Antenna	N/A	P99991-00
Cover, Terminal Strip	N/A	P79205-00
Cover, Trim	N/A	H65674
	93	H66615-14
Cover, Window Frame, Front LH	136	H78349-17
Cover, Window, RH	142	H79171-02
Cover, Window Trim, Rear RH	N/A	P78349-11
Cover, Windshield Bow, Aft	N/A	P68732-02
	148	H63149-22
Cover, Windshield Trim, LH	150	H68688-04
	149	H63149-23
	151	H68688-05
Cover, Wing Bolt, LH	160	H63942-00
Cover, Wing Bolt, RH	161	H63942-01
Cup, Air Vent	101	H65735C
Door Assembly, Rear Bulkhead	N/A	P79445-00
Duct, Center Air	7	H69751-06
	8	H69991-02
	43	H69749-04
Duct, Forward Air	44	H69750-00
	45	H69990-02
Duct, Oxygen Gauge	113	H69991-07
Evaporator Filter	29	H99550-02
Flange, Air Vent	102	H65735F
Grip, Handhold	55	H67235-00
Interconnect, Ventilation Bulk	N/A	P79192-00
Lens, Cabin Light	6	H12715-00

Eligibility continued from previous column		
Description	Fig	Part Number
Panel Assembly	105	H69746-13
	106	H69989-03
Panel, Door Latch	22	H79542-05
Panel, Overhead, Rear	N/A	H68445-02
Plate, Placard Engine Control	109	H69669-44
Seat Back, RH	121	H78041-08
Shield, Flap Handle Cover	41	H62827-07
Support, Compass	15	H69676-00
<b>11</b> Add -B for black or -W for white <b>2</b> Models PA-32-260 and PA-32-300 only <b>3</b> Includes all models except PA-32-260 <b>4</b> Models PA-32-260, PA-32-300 and PA-32R-300 only <b>5</b> Models PA-32-260, PA-32-300 and PA-32RT-300 only <b>6</b> Models PA-32-260, PA-32-300, PA-32-301, PA-32-301T, PA-32R-300, PA-32RT-300 and PA-32RT-300T only <b>7</b> Models PA-32-260, PA-32-300, PA-32R-300, PA-32R-301, PA-32R-301T and PA-32RT-300T only <b>8</b> Models PA-32-260, PA-32-300, PA-32R-300, PA-32R-301, PA-32R-301T, PA-32RT-300 and PA-32RT-300T only <b>9</b> Models PA-32-300, PA-32-301, PA-32-301T, PA-32R-301, PA-32R-301T and PA-32RT-300T only <b>10</b> Models PA-32-300, PA-32R-300, PA-32RT-300 and PA-32RT-300T only <b>11</b> Models PA-32-300, PA-32R-300, and PA-32RT-300T only <b>12</b> Models PA-32-300, PA-32R-300, -301, PA-32-301T, PA-32R-301, PA-32R-301T and PA-32RT-300T only <b>13</b> Models PA-32R-300, PA-32R-301, PA-32R-301T, PA-32RT-300 and PA-32RT-300T only <b>14</b> Models PA-32-300, PA-32-301, 301T, PA-32R-301, PA-32R-301T, PA-32RT-300 and PA-32RT-300T only <b>15</b> Model PA-32-301T only <b>16</b> Model PA-32-301T, PA-32R-301 and PA-32R-301T only <b>17</b> Models PA-32-301, PA-32-301T, PA-32R-301, PA-32R-301T, PA-32RT-300 and PA-32RT-300T only <b>18</b> Includes all models except PA-32R-300 <b>19</b> Models PA-32-301T, PA-32R-301, PA-32R-301T, PA-32RT-300 and PA-32RT-300T only <b>20</b> Add -S for standard seating and -C for club seating <b>PA-34-200, PA-34-200T, PA-34-220T</b>		
Description	Fig	Part Number
Blade, Sun Visor	127	H65866-02
Cap, Assist Strap	3	H79456-00
Channel, Seat Trim, Center LH	116	H68091-14
Channel, Seat Trim, Center RH	117	H68091-15
Channel, Seat Trim, Rear LH	118	H68090-16
Channel, Seat Trim, Rear RH	119	H68090-17
Compass Housing Assembly	14	H79600-00
Cover, Aft Trim	89	H36551-03
Cover, Assy, Electric Bus	N/A	P96525-00
Cover, Assy Pitot Pressure Pump	N/A	P96842-02
Cover, Cargo Door Upper	N/A	P69859-07
Cover, Door Trim, Upper	20	H79542-04
	21	H79542-16
Cover, Elt Switch	25	H79463
Cover, Engine Control	28	H95808-08
Cover, Flap Handle	40	H96555-07
Cover, Fuel Selector	51	H78320-13
	53	H69330-04
Cover, Glove Box	N/A	P69330-03
Cover, Hydraulic Lines	N/A	P96998-00
Cover, Mag Switch	87	H96730-00
Cover, Instrument Panel, LH	61	H95919-00
Cover, Instr. Panel, Lower, LH	65	H37369-00
Cover, Instr. Panel, Lower RH	74	H37371-00
	78	H95284-08
Cover, Instrument Panel, RH	64	H95920-00
Cover, Instr. Panel, Upper RH	84	H69659-00
Cover, Instr. Panel, Upper, LH	82	H69816-03
Cover, Quick Drain	24	H65461-19
Cover, Radio Cooling	114	H79404-00
Cover, Seat Back	120	H78041
Cover, Selector Valve Lever	N/A	P96046-00
Cover, Shoulder Harness, LH	122	H78054-02
Cover, Shoulder Harness, RH	123	H99801-02
Cover, Starter Solenoid	N/A	P96600-00
Cover, Terminal Strip	N/A	P79205-00
Cover, Terminal Strip, Aft	N/A	P95213-00
Cover, Trim	158	H66615-14
Cover, Trim, LH	97	H95893-20
Cover, Trim, RH	99	H95893-21
Cover, Trim, Spar Box/Fuel Ln LH	N/A	P78132-00
Cover, Window Frame, Front LH	136	H78349-17
Cover, Window, RH	142	H79171-02
Cover, Window Trim Rear, RH	N/A	P78349-11
Cover, Windshield Bow, Aft	N/A	P96046-00
Cover, Windshield Trim, LH	148	H63149-22
	150	H68688-04
	149	H63149-23
Cover, Windshield Trim, RH	151	H68688-05
Cover, Wing Bolt, LH	160	H63942-00

Interior Plastic Trim

## Interior Plastic Trim Eligibility for Piper Aircraft

Interior Plastic Trim

Eligibility continued from previous page		
Description	Fig	Part Number
Cover, Wing Bolt, RH	161	H63942-01
Cup, Air Vent	101	H65735C
Deck, Electrical Equip. LH	N/A	P96463-00
Deck, Electrical Equip. RH	N/A	P96464-00
Door Assembly, Rear Bulkhead	N/A	P79445-00
Duct, Center Air	7	H69751-06
	8	H69991-02
	43	H69749-04
Duct, Forward Air	44	H69750-00
	45	H69990-02
Duct, Oxygen Gauge	113	H69991-07
Evaporator Filter	29	H99550-02
Fitting Assembly, Air	N/A	P78609-00
Grip, Handhold	55	H67235-00
Interconnect, Ventilation Bulk	N/A	P79192-00
Lens, Cabin Light	6	H12715-00
Lens, Cluster Assembly	13	H79381-00
Panel Assembly	105	H69746-13
	106	H69989-03
Panel, Baggage Cmpt, Lower LH	N/A	P96285-00
Panel, Baggage Cmpt, Upper LH	N/A	P96284-00
Panel, Baggage Cmpt, RH	N/A	P96803-00
Panel, Door Latch	22	H79542-05
Panel, Hydlic. Pump Protector	N/A	P96502-00
Panel, Overhead, Rear	N/A	P68445-02
Panel, Switch	128	H96954-03
Plate, Placard Engine Control	111	H95804-02
Seat Back, RH	121	H78041-08
Support, Compass	15	H69676-00

**1** Add -B for black or -W for white  
**2** Model PA-34-200 only  
**3** Model PA-34-200T only  
**4** Model PA-34-220T only  
**5** Models PA-34-200 and PA-34-200T only  
**6** Models PA-34-200T and PA-34-220T only  
**7** Add -S for standard seating and -C for club seating

PA-38-112		
Description	Fig	Part Number
Cover Assy., Console, Forward	N/A	P77733-302
Cover Assy., Trim Control Wheel	N/A	P77733-21
Cover, Control Quadrant	N/A	P77773-02
Cover-Seat Back Trim	N/A	P77752-02
Housing Assembly Compass	N/A	P77760-02
Panel Assy., Trim, Lower Aft	N/A	P77725-21
Panel Assy., Trim, Frnt Side LH	N/A	P77725-04
Panel Assy., Trim, Frnt Side RH	N/A	P77725-03
Panel, Trim, Lower Door, LH	N/A	P77500-08
Panel, Trim, Upper Door	N/A	P77500-10
Panel, Trim, Up. Dr. Frame, LH	N/A	P77725-26
Panel, Trim, Tunnel Side, RH	N/A	P77766-05

**PA-44-180, PA-44-180T**

Description	Fig	Part Number
Blade, Sun Visor	127	H65866-02
Cap, Assist Strap	3	H79456-00
Compass Housing Assembly	14	H79600-00
Console, Overhead	19	H99500-06
Cover, Window Frame Front LH	88	H86733-06
Cover, Door Trim, Upper	20	H79542-04
Cover, Drain	23	H35507-02
Cover, Elt Switch	25	H79463
Cover, Engine Control	28	H95808-08
Cover, Exhaust Vent	133	H99252-10
Cover, Instr. Panel, Lower, LH	68	H86740-02
Cover, Instr. Panel, Lower RH	77	H86741-03
Cover, Instr. Panel, Upper RH	86	H99959-05
Cover, Instr. Panel, Upper, LH	80	H36567-05
	83	H79044-06
Cover, Radio Cooling	114	H79404-00
Cover, Rudder Pedal Stop Brack	N/A	P78735-02
Cover, Seat Back	120	H78041
Cover, Shoulder Harness, LH	122	H78054-02
Cover, Shoulder Harness, RH	123	H99801-02
Cover, Shoulder Hrns, Rear, LH	N/A	P99920-02
Cover, Shoulder Hrns, Rear, RH	N/A	P99920-03
Cover, Trim	96	H86781-02
Cover, Trim, LH	97	H86775-04H
Cover, Trim, RH	99	H86775-05H
Cover, Window Frame, Cent. LH	N/A	P86733-04
Cover, Windshield Bow, Up., LH	146	H63149-20
Cover, Windshield Bow, Up., RH	147	H63149-21
Cover, Wing Bolt, LH	160	H63942-00
Cover, Wing Bolt, RH	161	H63942-01
Cup, Air Vent	101	H65735C
Door Assembly, Rear Bulkhead	N/A	P79445-00
Duct, Bulkhead Vent	131	H76305-00
Duct, Center Vent	9	H76307-00
	9	H76307-07
Duct, Fresh Air	46	H76494-02
	47	H76494-04

Eligibility continues in next column

Eligibility continued from previous column		
Description	Fig	Part Number
Interconnect, Ventilation Bulk	N/A	P79192-00
Lens, Cabin Light	6	H12715-00
Lens, Cluster Assembly	13	H79381-00
Plate, Placard Engine Control	111	H95804-02
Trim, Windshield	159	H67556-04

**1** Add -B for black or -W for white  
**2** Model PA-44-180 only  
**3** P/N H76307-00 w/o recess, P/N H76307-07 w/recess  
 Manufacturer/Material: **P** Premier/PVC/Acrylic

All parts for Piper aircraft marked with note **1** are available in either black or white. Add -B for black or -W for white.

Add -B for black where note **1** is applicable



Add -W for white where note **1** is applicable



## Parts Manufactured by PMA Products, Inc.



CA101-810089-1A  
Main Gear Bolt



CA50-810326  
Main Strut Upper Bearing



CA101-810024-3  
Main Torque Link Bushing



CA3026  
Brush Block



CA3044  
Brush Block Assembly



CA101-810090-1  
Bolt, Beechcraft

CA41413-038  
Bushing



CA99-820099  
Bearing

### Beechcraft

Description	Part Number	Model
Bearing, Main Strut Upper	CA50-810326	1900,1900C,D,F90,99,99A,A99A,B99,C99,100,A100,B100,200,200T,200C,200CT,B200,B200C,CT,T, 300,300LW,B300, B300C
Bearing, Nose Gear	CA99-820099	C90,E90,F90,99,99A,A65,70,B80,A99A,B99,C99,100,A100,B100,200,200T,200C,200CT,B200, B200C, B200CT,B200T
Bolt	CA101-810089-1	1900,1900C,1900D,F90,C99,200,200T,200C,200CT,B200,B200C,B200CT,B200T
Bolt, Main Gear	CA101-810090-3	1900,1900C,F90,C99,200,200T,200C,200CT,B200,B200C,B200CT,B200T
Bolt, Main Gear Drag Brace	CA101-810090-1	1900,1900C,1900D
	CA101-810145-1	
	CA101-810146-1	300,300LW,B300,B300C
Bolt, Nose Gear	CA90-820011-1	C90,E90,F90,99,99A,A99A,B99,C99,100,A100,B100,200,200T,200C,200CT,B200,B200C, B200CT, B200T, 1900, 1900C,1900D
	CA101-810014-3	F90,99,99A,A99A,B99,C99,100,A100,B100,200,200C,B200,B200C,B200CT,B200T
	CA105739X-YN1437	1900,1900C,1900D
	CA105740X-YK0563	99,99A,A99A,B99
	CA105740X-YN0520	F90,99,99A,A99A,B99,C99,A100,B100
	CA115-610019	99,99A,A99A,B99,C99,100,A100,B100
Bushing	CA115-810066-3	F90,99,99A,A99A,B99,C99,100,A100,B100,200,200T,200C,200CT,B200,B200C,B200CT, B200T,300,300LW,B300, B300C,1900,1900C,1900D
	CA50-524476-1	65,80,A80,88,90,A90,B90,C90,E90
	CA50-524476-3	
	CA99-810064-1	A100,B100,100,B99,200,200T,200C,200CT,F90
	CA99-810064-3	1900,1900C,1900D,F90,C99,B200,B200C,B200CT,B200T,300,300LW,B300,B300C
Bushing, Drag Link	CA90-820010-1	C90
Bushing, Gear Door	CA105740X-ZU0260	F90,99,99A,A99,A99A,B99,C99,100,A100,B100,200,200C,B200,B200C
	CA99-810060-1	F90,99,99A,A99A,B99,C99,A100,B100
Bushing, Landing Gear	CA101-810014-1	F90,99,99A,A99A,B99,C99,100,A100,B100,200,200T,200C,200CT,B200,B200C,B200T,200CT
Bushing, Main Drag Link Center	CA99-810066-1	1900,1900C,1900D,C90,E90,F90,99,99A,A99A,B99,C99,100,A100,B100,200,200T,200C,200CT,B200,B200C,B200CT, B200T,300,300LW, B300,B300C
	CA114-810038-1	1900,1900C,1900D
Bushing, Main Drag Link in Gear	CA114-810042-1	1900,1900C,1900D
	CA114-810049-3	
Bushing, Main Gear	CA115-810064-1	F90,99,99A,A99A,B99,A100,B100,200,200T,200C
Bushing, Main Torque Link Center	CA105740X-YA1625	
	CA105740X-YN0677	1900,1900C,1900D,200,200T,200C,200CT,B200,B200C,B200CT,B200T,300,300LW,B300,B300C
Bushing, Main Torque Link in Gear	CA101-810024-3	1900C,1900D
Bushing, Nose Attach Lug	CA114-820113-1	1900,1900C,1900D
Bushing, Nose Steering	CA105740X-ZV0312	A90,B90,C90,C90A,E90,F90,99,99A,A99A,B99,C99,200,200T,200CT,A200,A200C,B200,B200C,B200CT,B200T
	CA105740X-YA0630	1900,1900C,1900D,90,A90,B90,C90,E90,F90,99,99A,A99A,B99,C99,100,A100,B100,200,200C, 200T,200CT,B200, B200T,B200C,B200CT,300,300LW,B300,B300C
Bushing, Nose Torque Link Center	CA105740X-YN0625	1900,1900C,1900D,300,300LW,B300,B300C,90,A90,B90,C90,C99,E90,F90,99,99A,A99A,B99, 100,A100,B100, 200,200T,200C,200CT,B200,B200C,B200CT,B200T
	CA90-810019-1	C90,E90,F90,C99,100,A100,B100,200,200T,200C,200CT,B200,B200C,B200CT,B200T,300,300LW,B300, B300C,1900,1900C,1900D
Bushing Nose Upper Torque Link	CA50-810034	1900,1900C,1900D,300,300LW,B300,B300C,90,99,99A,A90,A99A,B90,B99,C90,C99,E90,F90,100,A100, B100, 200,200T,200C,200CT,B200,B200C,B200CT,B200T
Bushing, Steering Roller	CA114-820062-1	1900,1900C,1900D
	CA45-815013	33,35,36,55,58
Bushing, Torque Link	CA101-810024-5	1900C,1900D
	CA105740X-YD0160	99,99A,A99A,B99,C99
Carbon Block	CA3026	A90,B90,C90,C90A,E90,F90,99,99A,A99A,B99,C99,100,A100,200,200T,200C,200CT,B200,B200C,B200CT,B200T, 300,300LW,B300,B300C,1900,1900C,1900D
Carbon Block Assembly	CA3044	A90,B90,C90,E90,F90,99,99A,A99A,B99,C99,A100,A100,200,200T,200C,200CT,B200,B200C,B200CT, B200T, 300,300LW,B300,B300C,1900,1900C,1900D
Drag Leg Hook Pins	CA50-810343-5	F90 S/N LA-2 & On, 99,99A,A99A,B99,C99 S/N U-1 thru U-49,U-51 thru U-164,100,A100,B100
	CA50-810343-7	200 S/N BB-2 thru BB-733, BB-735 thru BB-792, BB-794 thru BB-828, BB-830 thru BB-853, BB-871 thru BB-873, BB-892, BB-893 and BB-912, 200T S/N BT-1 thru BT-22, 200C S/N BL-1 thru BL-200CT S/N BN-1, B200 S/N BB-734, BB-793, BB-829, BB-854 thru BB-870, BB-874 B-891, BB-894 thru BB-911, BB-913 thru BB-1157, BB-1159 thru BB-1166, BB1168 thru BB-1192, B200T S/N BT-23 thru B5.235T-27, BT29,BT30,B200C S/N BL-37 thru BL-72, B200CT S/N BN-2-BN-4
Filter & Gasket Kit	CA42370	55,A55,B55,C55,D55,E55,56TC,A56TC,58,58P,58TC,60,A60,B60,A65,70,B80,E95,C90,E90,F90,100,A100,200,200T, 200C,99,99A,A99A,B99,C99
Fuel Pump	CA476284E-1	55,A55,B55,C55,D55,E55,56TC,A56TC,58,58P,58TC,60,A60,B60,A65,70,B80,E95,C90,E90,F90,100,A100,200,200T, 200C,99,99A,A99A,B99,C99
Nose Attach Lug	CA114-820113-1	1900,1900C,1900D
Seal, Drain Valve	CACCA1269	
	CACCA1319	A55,B55,B55A,C55,C55A,D55,D55A,E55,E55A,58,58A,95-55 (not recommended for use with autogas)
Seal, Fuel Cap	CA38241	99,99A,A99A,B99,C99,100,A100,B100,200,200T,200C,200CT,B200,B200C,B200CT ,B200T, B300, B300C, 1900, 1900C,1900D
	CA457-98	E90,F90,99,99A,A99A,B99,C99,100,A100,B100,B200,B200C,B200CT,B200T,200,200T,200C,200CT
	CA100-530448-5	C90,C90A,C90(SE),E90,F90,A100,B100,200,200T,200C,200CT,B200,B200C,B200CT
Seat Foot	CA100-530448-7	C90,C90A,E90,F90,A100,B100,200,200T,200C,200CT,B200,B200C,B200CT
	CA50-534436-5	65,80,A80,88,90,A90,99,99A,A99A,B90,B99,C99,100,A100,B100
Stall Switch Assembly	CA450-742N	35-33,35-A33,35-B33,35-C33,35-C33A,E33,E33A,F33,F33A,F33C,G33,H35,J35,K35,M35,N35,P35,S35, V35,V35A, V35B,36,A36,C35,D35,E35,F35,G35
Static Discharger	ESD-3	Various Models - No FAA-PMA Approval
Switch, Mic	CA601-4300	F90,C99,100,A100,B100,200,200T,200C,200CT,300,300LW,B300,B300C
	CA99-340253-1	1900,1900C,B200,B200C,B200CT,B200T
Torque Link Pin	CA101-810025-1	200, 300 and 1900 Series



CA101-810089-1A  
Main Gear Bolt



CA50-810326  
Main Strut Upper Bearing



CA101-810024-3  
Main Torque Link Bushing



CA3026  
Brush Block



CA3044  
Brush Block Assembly



CA101-810090-1  
Bolt, Beechcraft

CA41413-038  
Bushing



CA99-820099  
Bearing

Continued from previous page

**Beechcraft**

Description	Part Number	Model
Upper Bearing, Main Strut	CA50-810326	F90,99,99A,A99A,B99,C99,100,A100,B100,200,200T,200C,200CT,B200,B200C,B200CT,B200T,300LW,B300,B300C,300,1900,1900C,1900D
Washer	CA50-105000-3	C90,B200,B200C,B200T,300LW,300,B300,B300C,1900,1900C
Washer, Thrust	CA115-810074	F90,99,99A,A99A,B99,100,A100,B100,200,200T,200C,200CT,B200,B200C,B200CT,B200T
Wiper Blade	CA50-384082	A65,70,B80,C90,E90,F90,99,99A,A99A,B99,C99,100,A100,B100,200,200T,200C,200CT,B200,B200C, B200CT,B200T,300LW,B300,B300C,300,1900,1900C,1900D
Yoke	CA3025	A90,B90,C90,E90,F90,99,99A,A99A,B99,C90A,C99,100,A100,200,200T,200C,200CT, B200,B200C, B200CT,B200T,300,300LW,B300,B300C,1900,1900C,1900D

**Cessna**

Filter & Gasket Kit	CA42370	310Q, 310R, 335, 340, 340A, 401B, 402B, 402C, 404, 414, 414A, 421B, 425, 441, 525, 560, 650
Gasket, Fuel Bowl	CAB3-11-1	310,320,335,336,337,340,401,402,404,411,414,421
Pump, Fuel/Alcohol	CA6508092-1A	310Q,310R,335,340,340A,401B,402B,402C,404,414,414A,421B,421C,425,441,500, 525,550,560,650
Seal, Fuel Cap	CA38241	525,650,680,750

**Dehavilland**

Carbon Block Assy	CA4731	HC-6
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**Embraer**

Back up Ring	CABDS3115-026C	120
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**Lear**

Bolt, Main Gear	CA2341114-3	24,25,31,35,36,55,60
Bushing	CA2341120-1	23,24,25,28,29,31,35,36,55,60

**McCaughey Propellers**

Carbon Block	CAB5121	This part number is eligible on all make & model aircraft with the following propellers installed: 3GFR34C701,702,703,4HFR34C754,762,766,768,771,4JFR34C758,5JFR36C1003
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**Mooney**

Seal, Fuel Cap	CA38241	M20C,D,E,F,G,J
Transducer, Fuel Pressure	CA880007-501	M20J
Transducer, Oil Pressure	CA880008-501	M20J

**Piper**

Aileron Rod	CA62766-000	PA28-140,150,160,180,235, PA28R-180,200
Barrel, Trim	CA63530-100	PA28 Series, PA32-260,300,301,301T,PA32R-300,301,301T PA28-201T S/N 28-7921001 to 28-7921095
Bearing	CA96596-002	PA34-200,200T,220T
Bearing, Flap	CA67026-011	PA28R-200,201,201T,PA28RT-201,201T,PA32R-300,301,301T,PA32RT,PA44-180,180T
Bearing, Main Gear	CA452-387	PA28-140,150,151,160,161,180,181,235,236,201T,PA28R-180,200,201,201T,PA28RT-201,201T,PA32-260,300,301,301T,PA32R-300,301,301T,PA32RT,PA34-200,200T,220T,PA44-180,PA46-310P,350P
Bearing, Rod End	CA452-575	PA24-180,250,260,400,PA28R-180,200,201,201T,PA28RT-201,201T,PA30,PA32R-300,301,301T,PA32RT,PA34-200,200T,220T,PA39,PA44-180
Bearing, Rod End	CA452-334A	PA28-140,150,151,160,161,180,181,235,236,201T,PA28R-180,200,201,201T,PA28RT-201,201T,PA32-260,300,301,301T,PA32R-300,301,301T,PA32RT-300,300T,PA34-200,200T,220T,PA44-180,PA46-310P,350P
Bearing, Rod End	CA452-335A	PA23-150,160,235,250,PA28-140,150,151,160,161,180,181,235,236,201T,PA28R-180,200,201,201T,PA28RT-201,201T,PA31P,PA31P-350,PA31T1,2,PA32-260,300,301,301T,PA32R-300,301,301T,PA32RT-300,300T,PA34-200,200T,220T,PA42,PA42-720,1000,PA44-180,PA46-310,350P
Bearing, Rod End	CA452-336A	PA28-140,150,151,160,161,180,181,235,236,201T,PA28R-180,200,201,201T,PA28RT-201,201T,PA32-260,300,301,301T,PA32R-300,301,301T,PA32RT-300,300T,PA34-200,200T,220T,PA44-180
Bearing, Rod End	CA452-368	PA28R-180,200,201,201T,PA28RT-201,201T,PA32R-300,301,301T,PA32RT,PA34-200,200T
Bearing, Rod End	CA452-412	PA24-180,250,260,400,PA31-300,310,325,350,PA42,PA42-720,1000,PA31P-350,PA31P,PA31T,1,2,PA30,PA31-350-T1020,PA39,PA46-301P
Bearing, Rod End	CA452-439	PA23-235,250,250(6),PA28RT-201,201T,PA31-300,310,325,350,PA31-350-T1020,PA31T-1,2,PA31P,PA31P-350,PA32RT,PA42,PA42-720,1000,PA44-180
Bearing, Rod End	CA452-860A	PA46-310P,350P
Bearing, Rod End	CA452-584	PA28-151,161,PA28R-180,200,201,201T,PA32R-300,301,301T,PA32RT-300T,PA34-200T,220T,PA36-285,300,375,PA44-180
Bearing, Stabilator Hinge	CA452-394	PA28-151,161,181,236,201T,PA28R-201,201T,PA32-260,300,301,301T,PA32R-300,301,301T
Bearing, Stabilator Hinge	CA452-538	PA28RT-201,201T,PA32RT,PA34-200,200T,220T,PA44-180
Bulkhead Spinner Forward	CA87325-010	PA28-161
Bulkhead Spinner Forward	W35323-012	PA28-151
Bulkhead, Spinner Rear	W587-330	PA28-151
Bumper, Nose Gear Torque Link Ext	CA79072-000	PA28-140,150,151,160,161,180,181,235,236,PA32-260,300,301,301T
Bushing, Main Gear Torque Link	CA20737-040	PA31-300,325,350,PA31-350-T1020,PA31P,PA31P-,350,PA31T,1,2,PA42,PA42-720,1000
Bushing, Nose Gear Torque Link Lower	CA453-903	PA31P-350
Bushing, Main Gear Retract Truss Act. Attachment	CA63900-089	PA28R-180,200,201,201T,PA28RT-201,201T,PA32R-300,301,301T,PA32RT,PA34-200T,220T,PA44-180
Bushing, Outboard Flap Track	CA86102-104	PA31-300,310,325,350,PA31P,PA31P-350,PA31T,1,2
Bushing, Center Flap Track	CA86102-105	PA31-300,310,325,350,PA31P,PA31P-350,PA31T,1,2
Bushing, Inboard Flap Track	CA86102-106	PA31-300,310,325,350,PA31P,PA31P-350,PA31T,1,2
Bushing, Aileron Center Hinge	CA95061-108	PA28-151,161
Bushing, Nose Gear Torque Link Upper	NAS75-5-011	PA31-300,PA31-350,PA31-350-T1020,PA31P,PA31P-T1040,PA42-720,1000
Bushing, Main Gear Torque Link Upper	NAS75-6-011	PA31-300,PA31-350,PA31-350-T1020,PA31P,PA31P-350,PA31T,1,2,3-T1040,PA42-720,1000
Bushing, Main Gear Torque Link Center	NAS75-7-011	PA31-300,PA31T-1,2,3-T1040,PA31P,PA31P-350,PA31-350-T1020,PA42-720,1000
Bushing, Nose Gear Retract Brace Upper Attach	NAS75-7-014	PA31
Bushing, Stabilator Trim Linkage	NAS76A3-004	
Bushing, Stabilator Trim Linkage	NAS76A3-019	PA34-200,200T,220T
Bushing, Stabilator Trim Linkage	NAS76A3-023	
Bushing, Main Gear Attach Trunnion	NAS77-10-094	PA31-300,PA31-350,PA31-350-T1020,PA31P,PA31P-350,PA31T-1,2,3-T1040
Bushing, Main Gear Retract Brace Upper Attach	NAS77-18-050	PA31P-350,PA42-720,1000
Bushing, Nose Gear Torque Link Center	NAS77-4-042	PA31T-1,2,3-T1040,PA31P,PA31P-350,PA31-350-T1020,PA42-720,1000
Bushing, Elevator Tab Hinge Assy	NAS77-5-019	PA31-300,350,T1020,PA31P-350,PA31T-1,2,3-T1040
Bushing, Nose Gear Torque Link Upper	NAS77-5-042	PA31-300,PA31-350,PA31-350-T1020,PA31P,PA31P-350,PA31T,1,2,3-T1040,PA42-720,1000
Bushing, Main Gear Torque Link Center	NAS77-7-035	PA31-300,PA31-350,PA31-350-T1020,PA31P,PA31P-T1040,PA42-720,1000

Approved for all S/Ns including S/N 500-0001 thru 500-0040 incorporating SB30-1, and S/N 500-0001 thru 500-0213 incorporating SB21-9.

Continues on next page



CAB5121  
Carbon Block



CA50-810326  
Main Strut  
Upper Bearing



CA50-384082  
Wiper Blade Refill



CA3025  
Yoke



CA115-810074  
Thrust Washer



FAA-PMA  
CA476284E-1 Pump  
PMA Products, Inc.  
Liberty, NC



CA601-4300  
Microphone Switch



ESD-3  
Static Wick



CA880007-501  
Fuel Pressure Transducer

Continued from previous page

## Piper

Description	Part Number	Model
Bushing, Nose Gear Retract Link to Brace Attachment	NAS777-7-038	PA31-300,PA31-350,PA31-350-T1020,PA31P,PA31P-350,PA31T,1,2,3-T1040,PA42-720,1000
Bushing, Nose Gear Retract Brace Upper Attach	NAS777-7-040	PA31-300,PA31-350,PA31-350-T1020,PA31P,PA31P-350,PA31T,1,2,3-T1040,PA42-720,1000
Bushing, Nose Gear Retract Link to Brace Attach	NAS777-7-068	PA31-300,PA31-350,PA31-350-T1020,PA31P-350,PA31T,1,2,3-T1040,PA42-720,1000
Bushing, Main Gear Retract Brace Upper Attach	NAS77-8-038	PA31P-350
Bushing, Main Gear, Link to Strut Attach	NAS77-8-044	PA31-300,PA31-350,PA31-350-T1020,PA31P,PA31P-350,PA31T-1
Bushing, Main Gear Retract Brace Upper Attach	NAS77-8-084	PA31-300,PA31-350,PA31-350-T1020,PA31P,PA31P-350,PA31T-1
Bushing, Main Gear Retract Link to Brace Attach	NAS77-8-072	PA31P-350
Bushing, Cabin Door Mechanism	CA20737-044 CA41413-041	PA31-300,310,325,350,PA31-350-T1020
Bushing, Flap Hinge, Center and Outboard	CA63900-019	PA28-140,150,160,180,235,PA28R-180,200,201,201T,PA28RT-201,201T,PA32-260,300,301,301T, PA32R-300,301,301T,PA32R-300,301,301T,220T,PA44-180
Bushing, Flap Track Inboard, Outboard, Center	CA41413-005	PA31-300,310,350,PA31P,PA31P-350,PA31T-1,2
Bushing, Main Gear Housing Attach	CA20737-023	PA31-300,310,325,350,PA31-350-T1020,PA31P,PA31P-350,PA31T,2
Bushing, Main Gear Retract Brace Upper Attach	CA14843-016	PA24-180,250,260,400,PA28R-180,200,201,201T,PA30,PA32R-301,301T,PA32-300,PA32RT,PA34-200,200T,PA39
Bushing, Nose Gear Retract Link to Brace Attach	CA14843-018	PA24-180,250,260,400,PA30,PA39
Bushing, Main Gear Side Brace Stud Brace Attach	CA65003-041	PA28RT-201,201T,PA32R-301,301T,PA34-200,200T,PA44-180
Bushing, Main Gear Brace to Link Attach	CA65003-044	PA28R-180,200,201,201T,PA28RT-201,201T,PA32R-300,301,301T,PA32RT,PA34-200,200T,PA44
Bushing, Main Gear Side Brace Stud to Wing Attach	CA67026-012	PA34-200T,PA44-180
Bushing, Main Gear Torque Link Lower	CA43256-002	PA31P,PA31P-350,PA31-300,310,325,350,PA31-350-T1020,PA31T,1,2,PA42-720,1000,PA42
Bushing, Main Gear Housing Attach	CA43256-005	PA31P-350,PA31-300,310,325,350,PA31-350-T1020,PA31T,1,2
Bushing, Nose Wheel Steering Arm Inner	CA63900-109	PA28R-180,200,201,PA28RT-201,PA32R-300,301,301T,PA32RT
Bushing, Nose Wheel Steering Arm Outer	CA63900-122	PA28R-180,200,201,PA28RT-201,PA32R-300,301,301T,PA32RT
Bushing, Nose Gear Retract Link to Housing Attach	CA65003-046	PA28R-180,200
Bushing, Nose Gear Retract Brace RH Upper Attach	CA95061-133	PA32R-300,301,301T,PA32RT-300,300T
Bushing, Nose Gear Retract Brace Upper Attach	CA65003-045	PA28R-180,200,201,201T,PA28RT-201,201T,PA32R-300,301,301T,PA44-180
Bushing, Nose Gear Housing Top and Bottom	CA40250-002	PA31-300,310,325,350,PA31-350-T1020,PA31P,PA31P-350,PA31T-1,2,PA42,PA42-720,1000
Bushing, Main Gear Torque Link Upper	CA43256-006	PA23-235,250,250(6),PA31P, PA31P-350,PA31-300,310,325,350,PA31-350-T1020,PA31T-1,2,3, T1040,PA42,PA42-720,1000
Bushing, Nose Gear Retract Idler to Link Attach	CA20737-032	PA31-300,310,325,350,PA31P,PA31P-350,PA31T-1,2,PA42,PA42-720,1000
Bushing, Seat Roller	CA41413-038	PA23-235,250,PA24-260,PA25-150,235,PA31-300,310,325,350,T1020,PA31P,PA31P-350,PA31T-1,2, PA30,PA39,PA42-720,1000
Bushing, Nose Gear Steering Arm Outer	CA14976-102	PA30,PA31-300,310,325,350,PA31-350-T1020,PA39
Bushing, Main Gear Torque Link Spacer Upper & Lower	CA63310-000	PA28-140,150,151,160,161,180,181,235,236,201T,PA32-260,300,301,301T
Bushing, Main or Nose Torque Link Lower Attach	CA67026-007	PA28R-180,200,PA28RT-201,201T,PA32R-300,301,301T,PA32RT,PA34-200,200T,220T,PA44-180, PA46-310P,350P
Bushing, Nose Gear Torque Link Center	CA77780-005	PA38
Capacitor Assembly, Alternator Output	CA63897-006	PA28-140,151,180,181,R-200,RT-201,RT-201T, PA32-260,R-300,RT-300,301,R301,301T
Fastener, Fuel Cap Cover Door 1/2 Turn	CA26246-000	PA24-180,250,260,PA30,PA32-260,300,301,PA32R-300,301,PA32RT-300,PA39
Filter & Gasket Kit for Bendix Style Electric Fuel Pump	CA42370	PA23,PA23-160,250,250(6),PA24,PA24-250,260,PA28-140,151,161,150,160,180,181,PA28-235,236, PA32-260, PA38-112,PA44-180
Fuel Cap, Thermos Type	CA16097N CA17672N CA27221N	PA23-235,250 PA23, PA23-160 PA24-180,250,260,400,PA30,PA39
Fuel Cap Gasket	CA66815-000A	PA28-140,150,151,160,161,180,181,201,235,236,201T,PA28R-180,200,PA28RT-201,201T,PA32-260, 300,301,301T,PA32R-300,301,301T,PA32RT-300,300T,PA34-200,220T,PA38-112,PA44-180,180T
Fuel Pump, Electric	CA35328-800E CA65628-800E	PA23,PA23-160,250,250(6),PA24,PA24-250,260,PA28-140,151,161,150,160,180,181,PA38-112 PA28-235,236,PA32-260,PA44-180
Gasket, Fuel Strainer (not recommended for use with autogas)	CA462-049	PA28-140,150,151,160,161,180,181,236,201T,PA28R-180,200,201,201T,PA28RT-201,201T,PA38
Gasket, Fuel Strainer	CA751-871	PA24-400,PA28-235,PA32-260,300,PA30,PA39
Hinge, Aileron	62371-108 CA35636-100	PA28-140,150,160,180,181,235,236,201T,PA28R-180,200,201,201T,PA28RT-201,201T,PA32-260, 300, PA32RT-300,300T,PA34-200 PA28-151,161,181,PA28R-201,201T,PA28-236,201T,PA28RT-201,201T
Hinge Pin, Stabilator Tab Outboard	CA62002-002	PA28-140,151,151,160,161,180,181,201T,235,236,PA28R-180,200,201,201T,PA28RT-201,201T, PA32-260,300,301,301T,PA32R-300,301,301T,PA32RT-300,300T,PA44-180,180T
Hinge Pin, Stabilator Tab Center	CA62002-003	PA28-140,151,151,160,161,180,181,201T,235,236,PA28R-180,200,201,201T,PA28RT-201,201T, PA32-260,300,301,301T,PA32R-300,301,301T,PA32RT-300,300T,PA34-200,220T,PA44-180,180T
Hinge Pin, Stabilator Tab Inboard	CA62002-004	PA28-140,151,151,160,161,180,181,201T,235,236,PA28R-180,200,201,201T,PA28RT-201,201T, PA32-260,300,301,301T,PA32R-300,301,301T,PA32RT-300,300T,PA34-200,220T,PA44-180,180T
Hinge, Tab, Stabilator Outboard	CA63560-002	PA28,PA28R,PA32,PA32R
Hinge, Tab, Stabilator Inboard and Center	CA63560-003	PA28-140,150,151,160,161,180,181,235,236,201T,PA28R-180,200,201,201T,PA32,PA32R
Hinge, Tab, Stabilator Half	CA95864-002 CA95866-002	PA34-200,200T,220T
Nose Wheel Axle	CA31797-000	PA23-150,160,250,250(6),PA31-300,310,325 S/N 31-5 to 31-7812120 W/out 763-981 installed
Pitot Heater Element	CA464-356 CA464-357 CA464-440 CA464-441	PA28-151,161 PA28-161
Quad Ring, Main Gear Strut	CA484-769	PA28-140,150,151,160,161,180,181,235,236,201T,PA32,PA32-260,300,301,301T
Quad Ring, Nose Gear Strut	CA484-770	PA28-140,150,151,160,161,180,181,235,236,PA32-260,300,301,301T
Ring Scraper, Main Gear Strut	MS28776M2-18	PA28-140,150,151,161,180,181,235,236,PA32-260,300
Seat Roller CA18698-000 (measures 0.42") CA87332-002 (measures 0.62")	CA18698-000 CA87332-002	PA28-140,150,151,160,161,180,181,235,236,PA28R-180,200,PA32-260,300,301,301T,PA32R-300,301, 301T,PA32RT,PA34-200,200T,220T,PA46-310P,350P

Continues on next page



Continued from previous page

**Piper**

Description	Part Number	Model
Shaft, Stabilator Trim Jack Screw	CA65246-002	PA34-200,200T,220T
Stall Switch Assembly	CA450-742N	PA28-140,150,151,160,161,180,181,235,236,201T S/N 28-7921001 to 28-7921095, PA28R-180,200,201,201T, PA32-260,300,301,301T,PA32R-300,301,301T
Strut, Alternator Brace	CA78483-000	PA28-150,160,180,235,PA28R-180,200
Switch, LH Main Gear Down Limit	CA67411-002	PA28R-180,200,201,201T,PA28RT-201,201T,PA32R-300,301,301T,PA32RT,PA34-200,200T,220T
Switch, Nose Gear Down Limit	CA67411-003	PA28R-180,200,201,201T,PA28RT-201,201T
Switch, RH Main Gear Down Limit	CA67411-004	PA28R-180,200,201,201T,PA28RT-201,201T,PA32R-300,301,301T,PA32RT,PA34-200,200T,220T
Switch, LH Main Gear Up Limit	CA67411-005	PA28R-180,200,201,201T,PA28RT-201,201T,PA32R-300,301T,PA32RT,PA34-200,200T
Switch, Nose Gear Up Limit	CA67411-006	PA28R-180,200,201,201T,PA28RT-201,201T,PA32R-300,301,301T,PA32RT
Switch, RH Main Gear Up Limit	CA67411-007	PA28R-180,200,201,201T,PA28RT-201,201T,PA32R-300,301,301T,PA32RT,PA34-200
Switch, LH Main Gear Squat	CA67411-008	PA28R-180,200,201,201T,PA28RT-201,201T,PA32R-300,301,301T,PA32RT,PA34-200,200T
Switch, RH Main Gear Up Limit & Ground Op. Fan	CA67411-020	PA34-200T
Switch, Nose Gear Down Limit	CA67411-021	PA32R-300,301,301T,PA32RT
Swivel Fitting, Cable Attach	CA70371-002	PA18,PA18-150,PA22,PA23-150,160,235,250,PA24-180,250,260,400,PA25-150,235,260
Swivel Fitting, Stud Cable Attach	CA70371-003	PA28-140,150,151,160,161,180,181,201T,235,236,PA28R-180,200,201,201T,PA28RT-201,201T, PA30, PA30,39, PA31-300,310,325,350,PA31-350,T1020,PA31T,1,2,PA31P,PA32-260,300,301,301T,PA32R-300,301,301T, PA32RT,PA34-200,200T,220T,PA36-285,300,375,PA38,PA42, PA42-720,1000,PA44-180,PA46, PA46-310P,350P
Swivel Fitting, Cable Attach	U70371-000	J3,J5A,J5A-80,J5C(S/N5-784 & UP), PA12,PA12S,PA14,PA24,PA24-250,PA25,PA25-235,260, PA28-140 (TO S/N 28-24999),150,160,180 (TO S/N 28-43771), PA28-235 (TO S/N 11039)
Transducer, Fuel Pressure	CA486-439	PA-28-181 S/N 2843001 thru 2843027 and 2890206 and up if electric fuel pressure sender is installed. PA38-112, PA-44-180
Transducer, Oil Pressure	CA486-440	PA38-112
Tube, Nose Gear Strut Inner Lower	CA65280-000	PA28-140,150,151,161,180,181,235,236,PA32-260,300
Universal Joint, Control Wheel Shaft	CA46203-002	PA31-300,310,325,350,350-T1020,31P-350,31T,31T1,31T2
Universal Joint, Control Wheel Shaft For complete eligibility see page 127	CA62834-802SS	PA28-140,150,151,160,161,180,181,235,236,PA28R-180,200,201,201T, PA32-260,300,301T,PA32R-300,301,301T,PA32S-300,PA34-200,200T,220T
Wiper Strip	CA187-625	PA-22, PA-22-108,135,150,160, PA-23, PA-23-160,235,250, PA-24, PA-24-250,260,400, PA28-140,150,151,160,161, 180,181,235,236, PA-30, PA-39, PA-32-260,300,301FT,301XTC,301,301T
<b>Pratt &amp; Whitney</b>		
Bearing, Rod End	CG3011587	See page 253
Fuel Transfer Tube	CA3011155 CA3020030	See page 253
Diaphragm	CA3103346-01 CA3103347-01	See page 253
Gasket	CA3118962-01	See page 253
Gasket Fuel Manifold	CA3101469-01	See page 253
Gasket Fuel Nozzle	CA3029566 CA3029678 MS9371-16	See page 253
Retainer Plate	CA3103345-01	See page 253
Shim, Prop Shaft	CA3110998-01	See page 253
<b>SAAB</b>		
Bushing	CAIR130986 CAIR130988	340 Series S/N 004 thru 999



Parts manufactured by PMA Products



# Create Your Go-Anywhere Adventure! Alaskan Bush Pilot Tested for over 50 Years!

Photo courtesy of F Atlee Dodge Aircraft Service

## Parts for Bush Aircraft manufactured by F. Atlee Dodge Complete FAA-PMA Product Line

F. Atlee Dodge Aircraft Services is well known for high quality STC modifications and FAA-PMA products for Piper Super Cubs and Cessna aircraft. Their innovative designs are the result of over 50 years of experience keeping planes flying and productive in the rugged Alaskan wilderness.

- Make your airplane more rugged (**Alaskan Bush Tough!**)
- Improve safety
- Improve Horsepower
- Increase utility
- Decrease weight

Complete stock  
in the lower 48 for  
fast, economical  
delivery!!

### Carb Heat Box

Longer Life  
P/N AD15005-00

- PA-18 Series aircraft
- Self lubricating bearing for longer service life
- Manufactured from 304 stainless steel to prevent corrosion and rust.
- FAA-PMA



### Weld on Float Fittings

Better than cheap copies  
P/N 3143-12

PA-12, 12S, PA-14

P/N 3143-18

PA-18S-125, PA-18AS-125,  
PA-18S-135, PA-18AS-135,  
PA-18S-150, PA-18AS-150

Beefy, heavy construction, made from 4130 alloy steel.

- Used with Aerocet, Bauman, and EDO floats
- Sold in pairs - FAA-PMA/STC



**Copied but never duplicated!**

### Air Filter Dome for PA18-150

Reinforced to go the distance  
P/N 3281

- Reinforced with a doubler around the attach hole
- Powder coated white
- FAA-PMA approved



### Two Piece Pre-Heat Shroud for PA-18

Makes exhaust inspection easy  
P/N 3182

- No need to remove the exhaust stack to remove the shroud.
- Clamps tight over the muffler
- FAA-PMA/STC approved



### Heavy Duty Muffler for PA18

This muffler will last!  
P/N 3241

- Heavier 321 stainless steel
- FAA-PMA/STC approved

Eliminates 50 hour inspections for AD68-05-01.

### HOT-ROD Muffler for PA18

P/N 3241HR

More Horsepower, increased rate of climb and throttle response!

#### Lower oil and exhaust gas temperatures

- Larger chamber can and exhaust pipe for better gas flow
- No core or baffling inside to improve flow
- Larger inside diameter lets the engine breathe

#### Direct replacement FAA-PMA/STC approved

- New shroud, clamps and tailpipe clamp included
- Eliminates AD-68-05-01
- No modification to the cowling required
- Longer tailpipe keeps the airplane cleaner



**More Horsepower!**

### Muffler Shroud for PA-18

Don't fight the old lock bars!  
P/N 3236

Quicker and easier to install than the original.

- Fits tight
- Two Piece
- FAA-PMA/STC approved





**Make sure your Landing Gear can Take the Abuse!**



Photo courtesy of Steve Pierce taken at Mile High Cliffs, Wrangell St. Elias National Park, Alaska

**Heavy Duty Main Landing Gear**  
2000 lb gross weight model

PA-18 series and PA-19

**Standard Height Gear**

- 1-1/4" axle use P/N 3225-1 (LH) and 3225-2 (RH) **1**
- 1-1/2" axle use P/N 3225-1A (LH) **1** and 3225-2A (RH) **1**

**3" Extended Height Gear**

- 1-1/4" axle use P/N 3284-1 (LH) and 3284-2 (RH)
- 1-1/2" axle use P/N 3284-1A (LH) **1** and 3284-2A (RH) **1**

The 3" extended landing gear gives more height and prop clearance, which is especially important for sand or gravel landings.

FAA-PMA/STC approved.

Powder coat finish. Also available with Epoxy primer, Gloss White or "Wolf Hunter" Black for an additional charge.

**Note:**

Can be used on models J-3, PA-11, PA-12 and PA-14, but requires another STC modification involving additional parts and welding. Call for more information.

**1** FAA Approval Pending



**Safety Cables**

Don't let a bungee failure cost you an airplane!

P/Ns 2089-12, 2089-18, 3344-12 **1** and 3344-18 **1**

- PA-12, PA-12S, PA-14 with Std Gear use P/N 2089-12
- PA-12, PA-12S, PA-14 with 3" Ext Gear use P/N 3344-12
- PA-18 and PA-19 series with Std Gear use P/N 2089-18
- PA-18 and PA-19 series with 3" Ext Gear use P/N 3344-18

**Heavy 1/4" cable will get you home!**

**1** FAA Approval Pending



**Main Gear Shock Struts**

Heavy duty - but lightweight

P/Ns 3164-1, 3164-2, 3164-3 and 3164-4

- PA-12, PA-12S, PA-14, PA-18, PA-18-135, 150, PA-18-A135, A150
- PA-18 with std. landing gear use P/N 3164-1
- PA-12, PA-14 with std. landing gear use P/N 3164-2
- PA-18 with 3" ext. landing gear use P/N 3164-3
- PA-12, PA-14 with 3" ext. landing gear use P/N 3164-4

- For std landing gear or 3" ext. landing gear
- Sold individually, uses 2 per aircraft
- Powder coat finish. Also available with Epoxy primer, Gloss White or "Wolf Hunter" Black for an additional charge.



**Cabane Vee**

Alaska tough!

P/N 3166-1 and 3166-2

- PA-12, PA-12S, PA-14 use P/N 3166-2
- PA-18, PA-18-105, PA-18-125, PA-18-135, PA-18-A135, PA-18-150, PA-18-A150 use P/N 3166-1

- Beefed up in the right places
- Tough powder coat finish.
- Available in Gloss White for an additional charge
- 2 sizes - stock and 3" extended gear
- FAA-PMA/STC approved



**Refueling Step**

No more step ladders

P/Ns 3190/-10, 3190/-11, 3190/-12

- J3C-65, J3F-50, J3F-60, J3F-65, J-3L, J3L-65, J-4, J-4A, J-4B, J-5A, J5C, PA-11, 12, 14, 15, 16, PA18-105, 125, 135, A-135, 150, A-150, PA-19, PA-20, PA-20-115, PA-20-135, PA-22-108, 135, 150, 160

Clamps onto the main gear leg for easier refueling.

- Select part number by landing gear front tube OD: 1.25" OD use P/N 3190/-10
- 1.375" OD use P/N 3190/-11
- 1.5" OD use P/N 3190/-12
- Powder coated white, available in "Wolf Hunter" Black for an additional charge
- FAA-PMA/STC approved



**Main Gear Long Step**

Easy clamp-on modification

Much easier cabin entry

P/N 3195

- AE-1, HE-1, J3, J4, J5, PA11, PA12, PA14, PA18 and PA19 Series

The Main Landing Gear Long Step is usable on both sides of the aircraft as an entry step or refueling step. Heavy tube with 3 sizes of clamps.

- A must for bush gear and tires
- Alaska tested
- Durable non-skid surface stays on
- Powder coated white for durable corrosion resistance
- Available in "Wolf Hunter" Black at no additional charge
- FAA-PMA/STC approved



**Silver Aircraft Ski Spring**

Consistent tension regardless of temperature

P/N 2097

- J3, PA-11, PA-12, PA-14, PA-18, PA-19, PA-20, PA-22 Series

- Replaces ski bungee
- FAA-PMA/STC approved



**Spar Reinforcing Strut Bracket**

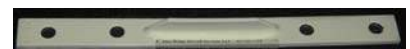
Spreads out lift strut spar loading

P/Ns 3192-12 and 3192-18

- PA-12, PA-14 series use P/N 3192-12
- PA-18, PA-19 series use P/N 3192-18

Protrudes out of the wing and attaches to the lift strut, preventing spar flex by reinforcing the front.

- Install during wing maintenance
- Powder coated white - stainless steel construction
- FAA-PMA/STC approved



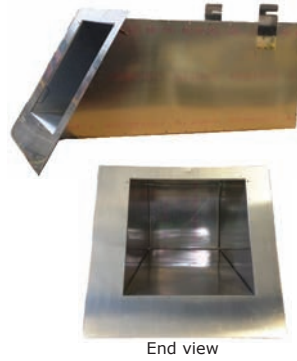




## Extended Baggage Kit for PA-18 "150" Series

No welding required - Extends baggage area by almost 3 feet!  
P/N 2103

- FAA-PMA/STC approved for most PA-18 aircraft
- Requires PA-18 "150" fuselage or equivalent previously approved 1750 lb gross weight modification at longitudinal station 99.0
- No welding required, may be assembled with blind or solid rivets
- Approximate compartment dimensions: 14" high X 15" wide X 35" deep
- Rated for 20 lbs of baggage



End view

## Safari Seat for PA-18, PA-19 Series

P/N 6151

Easily installed and removed  
Clamps in and designed for easy removal with quick release pins.

### Weight saver

Lightweight folding rear seat saves 10 pounds over existing seat.

FAA-PMA/STC

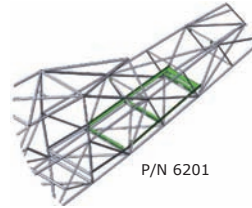


**Saves 10 Pounds!**

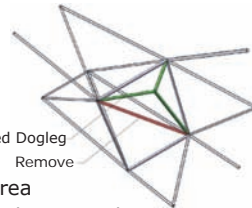
## 'Weld-In' Extended Baggage Kit for PA-18 and PA-19 Series

Large volume for bulky, light-weight cargo!  
P/N 6201

- FAA-STC approved for PA-18 and PA-19 aircraft
- Weld-In modification consisting of steel support frame and support tabs
- Great for storing wing covers, engine blankets, sleeping bags, paragliding sails and more
- Approximate dimensions: 22-1/2" wide at the front X 17-1/2" wide at the back X 43-1/2" deep
- 10 lb maximum load



P/N 6201



Inverted Dogleg Remove

## Inverted Dogleg STC for PA-11, PA-12, PA-18 and PA-19 Series

Makes loading baggage easier! STC SA02436AK

- Relocates the diagonal tube to the upper right corner
- FAA/STC approved for PA-11, PA-12, PA-18 and PA-19 aircraft
- Allows easy access to the aft baggage area from the baggage door
- No more catching your gear when removing it from the extended baggage area
- Longer cargo can be placed at an angle for easier insert/removal through the baggage door

## Under Seat Battery Rack for PA-18, PA-19 Series

Easy battery removal  
P/N 3304

Mounts under front seat for easy removal and warm-up of battery.

- Uses FAA-PMA Battery P/N 0769-4005
- FAA-PMA/STC approved



**Saves 15 Pounds!**

## Lightweight Dry Battery - 680 Amps

Superior vibration resistance  
P/N 0769-4005

- Big power in a little box
- Leak proof, high G rated
- 12 year design life and 6 to 10 year service life
- Required with under seat battery rack P/N 3304
- FAA-PMA



**Saves 15 Pounds!**

## Rear Seat Heater for PA18 Series

A must for winter flying  
Alaska proven!  
P/N 3175

- Heater modification using warm exhaust heat to heat back seat
- Requires some modification to the firewall
- Log book entry only - no FAA 337 form required
- Complete with firewall valve and control
- FAA-PMA/STC approved



## Folding Front Seat and Seat Kit for PA-18, PA-19 Series

Makes entry and loading much easier!  
P/N 3186 Folding Seat Kit  
FAA-PMA/STC



## Aircraft Tie-Down Brackets for PA-12, PA-18 Series

Prevents failure at the lift strut attach point  
P/N 3197

Designed to take the load off the attach point.

- Sold individually
- Uses 2 per aircraft
- FAA-PMA/STC approved



## Removable Rear Seat Crossbar

Makes loading easy  
P/N 3146-1

PA-18-105, 125, 135, 150, PA-18S-105, 125, 135, 150, PA-19S, PA-19

- FAA-PMA/STC approved
- Installation instructions, pins, and blocks included



## Cargo Tie Down

Secure your cargo  
FAA-PMA

P/N TDP-31

Piper PA31, PA31-300, PA31-325, PA31-350, PA31P, PA31P-350, PA31-T, PA31-T1, PA31-T2 and PA31-T3 series

Clamps to seat rails to provide tie down points to secure cargo.

- 4 req. for every 100 lbs of cargo
- Anodized aluminum for durability
- FAA-PMA/STC approved

Note: This product is not to be used as a seat stop.



## Pilot Seat Belt Attachment Kit

Weld on front seat belt attach kit!  
P/N 3246

PA11, PA11S and PA18 series aircraft

- Relocates seat belts to floorboard
- Secures pilot to fuselage in the event of an accident.
- FAA-PMA



## Parts for Bush Aircraft




**Husky Main Landing Gear**  
 Heavy Duty!  
 P/Ns AD45017-501HD and AD45017-502HD  
 A-1, A1A and A1B series Aviat Husky aircraft

- 1.3 lbs. heavier per side
- Used primarily on aircraft equipped with skis
- Replaces P/Ns 45017-501 and 45017-502

**Firewall, Stainless Steel and Titanium**  
 P/N 8007-01 for Stainless Steel  
 P/N 8007-02 for Titanium


PA18 series aircraft, PA19 and PA19S

- Replaces P/Ns 12365-003, 12365-005, 12365-007 and 12365-009
- Titanium is 2.8 lbs lighter than stainless steel



**Strobe Light Mounting Bracket for PA-18, PA-19 Series**  
 P/N 2087

For use with small Whelan strobe lights  
 FAA-PMA/STC



**Header Tank**  
 Direct replacement for original sheet metal tank  
 Front P/N 3169-1A  
 Rear P/N 3169-2

PA-18, 18-105, 125, 135, 150, A-150, PA-19

- Heavy-duty welded aluminum
- Light weight
- Eliminates cracking
- FAA-PMA/STC approved



**Vented Fuel Cap**  
 Easy removal - No more corrosion  
 P/N 3267


PA-11, PA-11S, PA-12, PA-12S, PA-14, PA-18 and PA-19 Series

- Vertical fin on top for easy removal.
- Gasket is included for Avgas
- Eliminates A.D.
- FAA-PMA/STC approved



**Aluminum Oil Cooler for PA18, PA22 Series**  
 Save weight and money!  
 P/N 8000328


- The only aluminum Super Cub oil cooler
- FAA-PMA



**Save 3.7 lbs!**

**Brake Reinforcing Channel for PA-18 Series**  
 No more cracking!  
 P/N 4231

- Made with 4130 steel for durability
- Located underneath the brake system and the front seat. The brake pedal is attached to the brake channel.
- FAA-PMA approved



**Upper and Lower Cowling Channel for PA-18 Series**  
 No More Rust or Vibration  
 Upper P/N 3276  
 Lower P/N 3277

- Stainless steel - Eliminates rust and vibration failure
- No pre-drilled holes, allowing for a precise fit.
- Sold individually - 2 upper and 2 lower required per aircraft
- FAA-PMA



**Front and Rear Shoulder Harness Attach Bracket**  
 Make your Cub safer!  
 Front Bracket P/N 3232-1  
 Rear Bracket P/N 3232-2  
 FAA-PMA

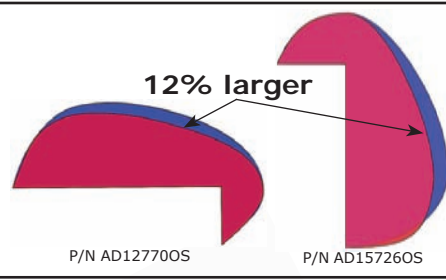
J-3C, 3F, 3L, J-5A,5B, 5C, PA-11, PA-11S, PA-12, PA-12S, PA-18 Series



**Oversize Rudders and Elevators**  
 Increased control authority!  
 P/N AD15726OS (rudder)  
 P/N AD12770OS (elevator)

PA-12, PA-12S, PA-14, PA-18 Series, PA-19S

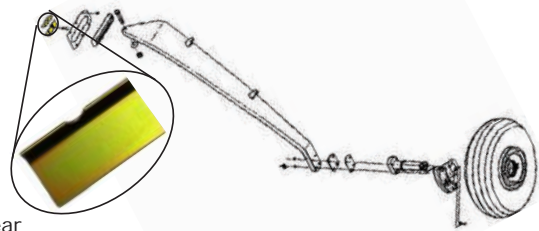
- Approximately 12% larger
- Powder coated grey with bushings installed
- FAA-PMA/STC approved



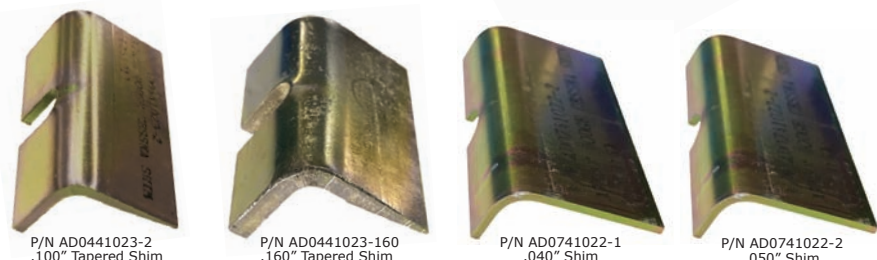
## Bush Parts for Cessna Aircraft

**Landing Gear Box Shims**  
 P/N AD0441023-2  
 .100" tapered shim  
 P/N AD0441023-160  
 .160" tapered shim  
 P/N AD0741022-1  
 .040" shim  
 P/N AD0741022-2  
 .050" shim

- For Cessna aircraft using leaf spring landing gear
- 4130N steel, plated
- FAA-PMA



Save \$\$



Model	Qty per Aircraft			
	AD0441023-2	AD0741022-1	AD0741022-2	AD0441023-160
120, 140, 140A		A/R		
150A	2-4	A/R		
150B,C,D,E,F,G,H,J,K	2-4	A/R		2
A150K				2
A150L, F150F,G,H,J	2-4	A/R		
F150K, FA150K	2-4	A/R		2
170, 170A,B		A/R		
180, 180A,B,C,D,E		A/R		
180F	2-4	A/R		
180G,H,J,K	2-4	A/R		A/R
180J,K	2-4	A/R	A/R	A/R
185, 185A,B,C,D,E, A185E	2-4	A/R		A/R
A185F	2-4	A/R	A/R	A/R
190, 195A,B		A/R		

A/R = use as required

Parts manufactured by F. Atlee Dodge



Photos courtesy of Henry Brown, Bob & Ruthie Warner and Dave Hayden, members of the International 180-185 Club

**Cargo Tie Down**

Secure your cargo  
TDC-208

FAA-PMA/STC approved

Caravan 208, 208A, 208B

Clamps to Cessna seat rails to provide tie down points to secure cargo.

- 4 required for every 100 lbs of cargo
- Anodized aluminum for durability

Note: This product is not to be used as a seat stop.



**V-Brace**

Stainless Steel  
P/Ns 180VBE and  
AD1242001-18

FAA-PMA

- 180, 180A, 180B use P/N 180VBE
- 206, U206, T206A-G, U206A-G and 207, T207 use P/N AD1242001-18

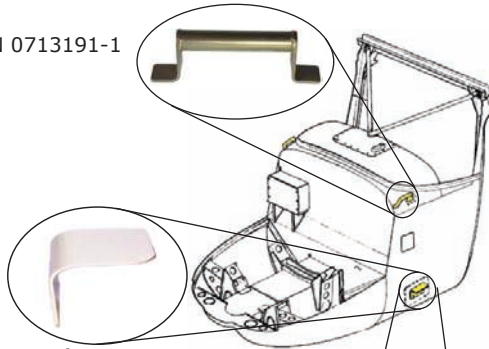


**Boot Cowl Handle**

Slightly larger to accommodate gloves!  
P/N 3354H

180H,J, A185E,F, U206/TU206A,B,C,D,E,F,G, P206/TP206A

- May not match up with existing bolt pattern due to alternate styles used by OEM.
- Undrilled
- Replacement for P/N 0713191-1
- FAA-PMA



**Boot Cowl Step**

Slightly larger to accommodate hunting and fishing footwear!  
P/N 3354S

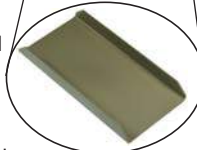
U206/TU206A,B,C,D,E,F,G, P206/TP206A

- Undrilled
- White powder coating
- 2 per aircraft
- Direct replacement for P/N 124022-5
- FAA-PMA

**Boot Cowl Doubler**

P/N 3354D

Doubler P/N 3354D is a convenience item useful for reinforcing the mounting locations for P/N 3354H and 3354S Boot Cowl Handles and Steps. For mounting locations that do not have enough clearance for the doubler the installer must rely on existing stringers, other existing structure, and/or a custom fabricated doubler. It is up to the installer to verify the structural integrity of the attachment.



**Tailpipes**

Heavier duty and longer to keep exhaust away from airplane!

FAA-PMA



AD1250256-7 AD1250264-6 AD1242013-1 AD1242013-2

AD1254004-3 AD1254004-4

Aircraft Model	Part Number	AD1242013-1 LH Seaplane	AD1242013-2 RH Seaplane	AD1250256-7 LH Landplane	AD1250264-6 RH Landplane	AD1254004-3 LH Assembly	AD1254004-4 RH Assembly
210-5 (205), 210-5A (205A)		•	•	•	•		
206, U206, U206A,B,C,D,E,F,G		•	•	•	•		
P206, P206A		•	•	•	•		
P206B,C,D,E				•	•		
207, 207A, T207, T207A						•	•
210C,D,E,F,G,H,J,K,L,M,N,R				•	•		

**Rudder Pedal Bar**

Avoid risk of costly damage during assembly  
P/Ns AD1260558-1 (LH) and AD1260558-2 (RH)

Each bar includes 2 ea. P/N S1003-43A bearings and 1 ea. P/N 1260419-1 tube pre-assembled. This avoids damage commonly caused while pressing the bearings during installation.

FAA-PMA



P/N AD1260558-1



P/N AD1260558-2

Aircraft Model	Part Number	AD1260558-1	AD1260558-2
210-5 (205), 210-5A (205A)		•	•
206, U206G, TU206G		•	•
206H, T206H		•	•
207A, T207A		•	•
210M,N,R, T210M,N,R, P210		•	•



**Folding Rear Seats**

Convert from people to cargo in just a few minutes!  
P/N 3187 (includes the left and right seats)

170 thru 170B, 172 thru 172S, 175 thru 175C,  
180 thru 180K, 182 thru 182D

P/N 3187-182E (includes the left and right seats)

FAA Approval Pending

182E thru 182T, 185 thru A185F

**20 Pounds Lighter!**

The FAA-PMA/STC approved folding rear seats replace the existing bench seat and increase the flexibility and utility of your airplane. The seats can be independently folded forward, stowed to the side, or totally removed in minutes to allow cargo and passenger configurations.

- Easy access to baggage
- Easier access to the tail cone for maintenance
- Increased payload! About 20 pounds lighter than the original bench seat



**Frees wasted space**

The original bulky bench seats take nearly twice as much floor space as the compact, yet comfortable folding seats.

- 50% more baggage space
- More leg room

**Convenient installation kit**

Seats are sold in pairs (left and right) as a kit with all required installation hardware, including mounting tracks that attach to the floor and side door frame. (Seat belts, upholstery, cushioning, and stowage straps/bungees not included).

**Upholster to match your interior**

This is not a "jump seat" or "utility seat". You don't have to sacrifice comfort and style. Seats provide room for a cushion and upholstery up to 2 inches thick. Match your interior for an attractive and comfortable finish.



**Heavy Duty Seat Back Frame**

Heavy Duty - 10 oz. heavier with less tendency to wear out!

P/N 3226

206 Series aircraft  
Replaces P/N 1214012-1 and 1214012-4



**Tailpipe Hanger Assembly**

Longer service life for less \$\$  
P/N AD1250255-7

U206E,F,G, 210K,L,M,N,R

Mounting bracket and hanger tab are fabricated from thicker material to ensure longer service life.

- Manufactured with 304 Stainless Steel (except for strap)
- 2 per aircraft
- FAA-PMA

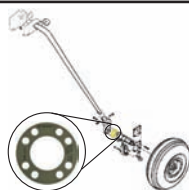


**Landing Gear Axle Shim**

Tapered shim to adjust axle alignment  
P/N AD1941007-1

207, 207A, T207, T207A

- 2 per aircraft
- FAA-PMA
- Save \$\$\$ **1/3 of Cessna Price!**



**Firewall Mounted Battery Rack**

Easier access and less weight!  
P/N 8008

**Quick and easy mounting**

The Firewall Mounted Battery Rack mounts on the firewall on existing stringers or channels, allowing for quick and easy mounting and easier servicing with no extra support required.

**Shorter wiring**

With shorter wiring, power loss from long wires is eliminated and starting is improved.

- Designed for Lightweight Dry Cell Battery, P/N 0769-4005
- FAA-PMA/STC approved

Model
150K, A150L, F150K, FA150K
170, 170A,B
172B,C,D,E,F,G,H,I,K,L,M,N,P
F172D,E,F,G,H,K,L,M,N,P
R172E,F,G,H,J,K
175, 175A,B,C
180, 180A,B,C,D,E,F,G,H,J,K
182, 182A,B,C,D,E,F,G,H
185, 185A,B,C,D,E, A185E,F

**Saves 19 Pounds!**



**Lightweight Dry Battery - 680 Amps**

Superior vibration resistance P/N 0769-4005

- Big power in a little box. leak proof, high G rated
- FAA-PMA approved for PA18 and PA19 series when STC SA02138AK is installed
- 12 year design life and 6 to 10 year service life
- Fits battery rack P/N 8008
- FAA-PMA

**Saves 15 Pounds!**



**Heavy Duty Muffler Shroud, LH**

Stainless steel shroud for longer life  
P/N AD1250250-6

- 206 and 207 Series aircraft
- Direct replacement for OEM shroud
- FAA-PMA



**Heavy Duty Muffler Shroud**

No more cracking or vibration damage!  
P/N 4236

- Only one pound heavier
- 180 and 185 Series Aircraft
- Tailpipe outlet doubler spot welded on
- FAA-PMA



**Heavy Duty Tailpipe Clamp**

Heavier material and cheaper!  
P/N AD1250259-1

- 206 and 207 Series
- Extra doublers to prevent cracking of the attachment mounts
- FAA-PMA



**Exhaust Deflector Assembly**

Deflects noise and exhaust gasses away from the aircraft!  
P/N 3238

206, U206, P206, P206B-E, U206A-G

- FAA-PMA/STC approved



**Tailpipe Support Assembly**

Heavy Duty!

Mounting bracket and hanger tab are fabricated from thicker material to ensure longer service life.

- Manufactured with 304 Stainless Steel (except for strap)
- FAA-PMA

Model	P/N	Qty per Aircraft
210-5, 210-5A (205, 205A)	AD1250258-1	4
206, U206A,B,C,D,E, P206A,B,C,D,E	AD1250258-1	4
207, 207A, T207, T207A	AD1254003-1 (LH)	2
	AD1254003-2 (RH)	2
210B,C,D,E,F,G,H,J,K, T210F	AD1250258-1	4



P/N AD1250258-1



P/N AD1254003-1



P/N AD1254003-2

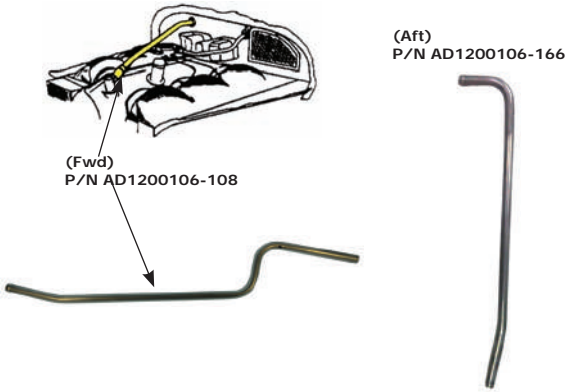


**Breather Tube**

Replace worn breather tubes with **cost effective replacements!**

P/Ns AD1200106-108 (Fwd)  
AD1200106-166 (Aft), AD0700147-9 (Aft)

- Direct replacement at less than half the cost
- FAA-PMA



**Maintenance Tip:**  
Support breather tubes directly to the engine, not the cowl or airframe, to prolong breather tube life.

Model	P/N
180F,G,H,J,K	AD1200106-108 (Fwd)
182D,E	AD1200106-108 (Fwd) AD0700147-9 (Aft)
182H,J,K,L,M,N,P,Q,R	AD1200106-108 (Fwd)
185, 185A,B,C	AD1200106-108 (Fwd)
A185E,F	AD1200106-108 (Fwd) AD0700147-9 (Aft)
188, 188A,B, A188, A188A,B	AD1200106-108 (Fwd)
U206, U206A,B,C,D,E,F,G	AD1200106-108 (Fwd)
TU206A,B,C,D,E,F,G	AD1200106-108 (Fwd)
P206, P206A,B,C,D,E	AD1200106-108 (Fwd)
TP206A,B,C,D,E	AD1200106-108 (Fwd)
207, 207A, T207, T207A	AD1200106-108 (Fwd) AD1200106-166 (Aft)
210D,E,F,G,H,J,K,L,M,N,R	AD1200106-108 (Fwd)
T210F,G,H,J,N	AD1200106-108 (Fwd)

**Shaft, Trim Wheel**

Huge Savings!  
P/N AD0761205-9

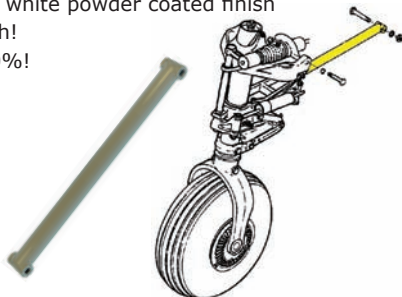
- 180H,J,K, 185D,E, A185E,F
- Save nearly 80%
- Better roll pin engagement - Enlarged or mangled roll pin holes create a safety issue
- FAA-PMA



**Nosegear Drag Link**

Durable, High Quality Construction!  
P/N AD1243600-1

- Corrosion resistant white powder coated finish
- Alaskan Bush Tough!
- Save more than 50%!
- FAA-PMA



Model
U206B,C,D,E,F,G
TU206B,C,D,E,F,G
P206B,C,D,E
TP206B,C,D,E
207, 207A, T207, T207A

**Engine Mount Heat Shield**

Stainless steel for longer service life  
P/N AD1250918-2

- 4 per aircraft
- FAA-PMA



**Save!**

Aircraft Model
U206A,B,C,E,D,E,F,G, P206A,B,C,D,E
TU206A,B,C,D,E,F, TP206A,B,C,D,E
207,207A, T207, T207A
210K,L,M,N,R, P210N, T210G,H,J,K,L,M,N,R

**Exhaust Shroud**

P/N AD1250251-17

- Durable, high quality construction!
- Made from thicker steel to remedy cracking around attach holes.



Model
210-5 (205), 210-5A (205A)
206, U206, U206A,B,C,D,E,F
P206, P206A,B,C,D,E

**Engine Mount Bonding Strap**

P/N AD0750137

- 4 per aircraft
- FAA-PMA



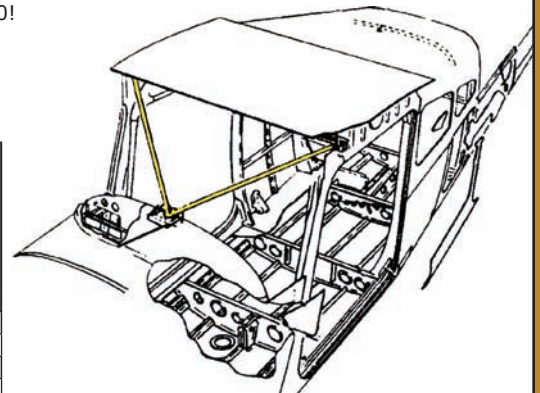
**1/3 of Cessna Price!**

Aircraft Model
180, 180A,B,C,D,E,F,G,H,J,K
182, 182A,B,C,D,E,F,G,H,J,K,L,M,N,P, 182Q,R, T182
185, 185A,B,C,D,E, A185E,F
188, 188A,B, A188, A188A
210-5 (205), 210-5A (205A)
210, 210A,B,C,D,E,F,G,H,J,K,L,M,N,R
P210N,R, T210F,G,H,J,K,L,M,N,R

**V Brace Assembly**

Durable, High Quality Construction!  
P/Ns AD0513003-19, AD0713103-2

- Thicker baseplate and feet to prevent cracking
- Annealed stainless steel legs
- Save almost \$3,000!
- Longer service life
- FAA-PMA

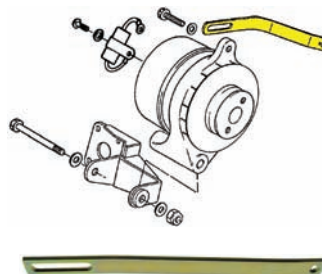


Model	AD0513003-19	AD0713103-2
180, 180A,B,C,D,E,F,G	•	•
180H,J,K	•	•
185, 185A,B,C	•	•
A185E,F	•	•

**Alternator Adjust Arm**

P/N AD0750221-1

- Direct replacement
- 1/4 of the cost of OEM
- FAA-PMA



Model
180F,G,H,J,K
182Q,R, F182Q
185, 185A,B,C,D,E, A185E,F
206, U206, P206

**Entry Step**

Stronger & corrosion resistant  
P/N 8013-01

- 170 thru 170B,
- 180 thru 180F
- 185 thru 185E

The FAA-PMA approved cabin entry seats are made with a reinforced corner, making them stronger than the original. Powder coated white for corrosion resistance.

- Left and right step are universal
- FAA-PMA/STC approved





**Rudder Pedal Bar**

Avoid risk of costly damage during assembly  
 P/Ns AD1260558-1 (LH) and AD1260558-2 (RH)  
 Each bar includes 2 ea. P/N S1003-43A bearings and 1 ea.  
 P/N 1260419-1 tube pre-assembled. This avoids damage  
 commonly caused while pressing the bearings during installation.



Aircraft Model	Part Number
210-5 (205), 210-5A (205A)	AD1260558-1
206, U206G, TU206G	AD1260558-2
206H, T206H	
207A, T207A	
210M,N,R, T210M,N,R, P210	

**Bellcrank Assembly - Seat Back Adjust**

Heavy duty thicker wall to prevent roll pin tear out!  
 P/N AD0514030-4HD

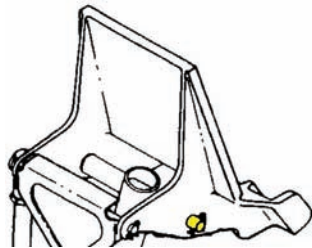
- Robust, improved design
- Two required per seat
- For fully articulating seat
- FAA-PMA



Model
172K,L,M,N,P,Q, R172K, 172RG
F172H,K,L,M,N, FR172G,H,J,K
177RG, 177B, F177RG
180H,J,K
182N,P,Q,R, R182, T182, TR182
F182P,Q, FR182
A185E,F
188B, A188B, T188C
U206E,F,G, TU206E,F,G, P206E, TP206E
207, 207A, T207, T207A
210K,L,M,N,R, T210K,L,M,N,R, P210N,R
337E,F, F337E,F,G,H, FT337E, FT337GP, FT337HP
T337F,G, P337H

**Rudder Pedal Shaft**

P/N AD1460501-21 Aft



Model
150A,B,C,D,E,F,G,H,J,K,L,M
A150K,L,M, F150K,L,M, FA150L,M
172D,E,F,G,H,K,L,M,N,P, 172RG
F172D,E,F,G,H,K,L,M,N,P
FP172, FR172E,F,G,H,J,K, P172D,R172K
177, 177A,B
180F,G,H,J,K
182E,F,G,H,J,K,L,M,N,P,Q,R
F182P,Q, FR182, R182, T182, TR182
185B,C,D,E, A185E,F
188, 188A,B A188, A188A,B, T188C
210-5 (205), 210-5A (205A)
U206F,G
207, 207A, T207, T207A
210C,D,E,G,H,J,K,L,M,N, T210K,L,M,N
336
337, 337A,B,C,D,E,F,G,H, F337E,F,G,H,
FT337E, F337GP, T337B,C,D,E,F,G,H

**Horizontal Stabilizer Bushing**

P/N AD0760679-2

**New!**

- Manufactured with Delrin
- Check bushing when servicing stabilizer jack screws
- Used at the horizontal stabilizer aft attach bracket/hinge
- FAA-PMA Direct Replacement
- Use with horizontal stabilizer spacer P/N AD0732101-7



Model
180, 180A,B,C,D,E,F,G,H,J,K
182, 182A,B,C,D
185, 185A,B,C,D,E, A185E,F

**Horizontal Stabilizer Spacer**

P/N AD0732101-7

- Used at the horizontal stabilizer aft attach bracket/hinge
- Check spacer when servicing stabilizer jack screws
- FAA-PMA Direct Replacement
- Use with horizontal stabilizer bushing P/N AD0760679-2



Model
180A,B,C,D,E,F,G,H,J
182, 182A,B,C,D
185, 185A,B,C,D,E, A185E,F
A188B, T188C
210-5 (205), 210-5A (205A)
210, 210A,B,C

**Rudder Pedal Shaft**

P/N AD0411778-2 Fwd

FAA-PMA

**1/2 of Cessna Price!**



Aircraft Model
140A
150, 150A, F150, FA150
152, A152, F152, FA152
170, 170A,B
172, 172A,B,C,D,E,F,G,H,I,J,K,L,M,N,P
F172D,E,F,G,H,I,J,K,L,M,N,P
172RG, P172, R172E,F,G,H,K, FP172, FR172
175, 175A,B
180, 180A,B,C,D,E,F,G,H,J,K
182, 182A,B,C,D,E,F,G,H,J,K,L,M,N,
182P,Q,R
A182, F182, FR182, R182, TR182
185, 185A,B,C,D,E, A185E,F
190, 190A, 195, 195A,B
210-5 (205), 210-5A (205A)
206, U206, U206A,B,C,D,E
P206, P206A,B,C,D,E
207, T207
210, 210A,B,C,D,E,F,G,H,J,K, T210G,H,J

**Lightweight Dry Battery - 680 Amps**

Superior vibration resistance P/N 0769-4005

- Big power in a little box. leak proof, high G rated
- FAA-PMA approved for PA18 and PA19 series when STC SA02138AK is installed
- 12 year design life and 6 to 10 year service life
- Fits battery rack P/N 8008
- FAA-PMA



**Saves 15 Pounds!**

### Flight Control Cables and Chains

McFarlane stocks complete kits containing all cables and chains for your aircraft, see pages 107.

- Improved terminal to increase strength
- Offset chain link eliminates binding
- Longer service life
- FAA-PMA approved



Save over \$5000 per aircraft when purchasing a complete cable and chain kit!

#### Complete Aircraft Kits

Serial Number	P/N with autopilot	P/N without autopilot
20800001 thru 20800081	CCKT208-03	CCKT208-01
20800082 thru 20800499	CCKT208-04	CCKT208-02
20800500 thru 20899999	CCKT208-05	CCKT208-02
208B0001 thru 208B1999	CCKT208B-02	CCKT208B-01
208B2000 thru 208B9999	CCKT208B-03	CCKT208B-01



McFarlane is the world's largest manufacturer of FAA-PMA replacement flight control cables!

208 S/N 20800001 thru 20899999		
Qty	P/N	Location
1	MC2660001-100	Elevator
1	MC2660001-101	Elevator
1	MC2660001-102	Elevator
1	MC2660001-103	Elevator
1	MC2660001-104	Rudder
1	MC2660001-106	Rudder
1	MC2660001-107	Rudder
1	MC2660001-108	Rudder
1	MC2660001-109	Elevator Trim
1	MC2660001-110	Elevator Trim
1	MC2660001-112	Elevator Trim
2	MC2660001-114	Aileron
1	MC2660001-118	Aileron LH
1	MC2660001-119	Aileron RH
4	MC2660001-122	Aileron
1	MC2660001-123	Control Column Interconnect
1	MC2660001-124	Control Column Interconnect
1	MC2660001-125	Control Column Interconnect
1	MC2660001-126	Control Column Interconnect
1	MC2660001-155	Elevator Trim
1	MC2660001-156	Elevator Trim
2	MC2660001-157	Aileron
1	MC2660029-13 Note 1	Aileron Trim
1	MC2660029-15 Note 1	Aileron Trim
2	MC2660029-4	Aileron Trim
1	MC9864054-9	Flap Indicator
1	MCS2295-25-101	Chain Elevator Trim Note 2
1	MCS2295-25-107 Note 3	Chain Pitch Trim Servo Note 4
1	MCS2295-25-247	Chain Elevator Trim
1	MCS2295-25-35	Chain Aileron Trim
1	MCS2295-25-43 Note 1	Chain Aileron Trim
2	MCS2295-25-87	Chain Elevator Trim
24	MCS2294-25	Chain Connecting Link

Note 1: S/N 20800082 thru 20899999  
 Note 2: When equipped with electric trim  
 Note 3: S/N 20800500 thru 20899999  
 Note 4: When equipped with pitch trim servo

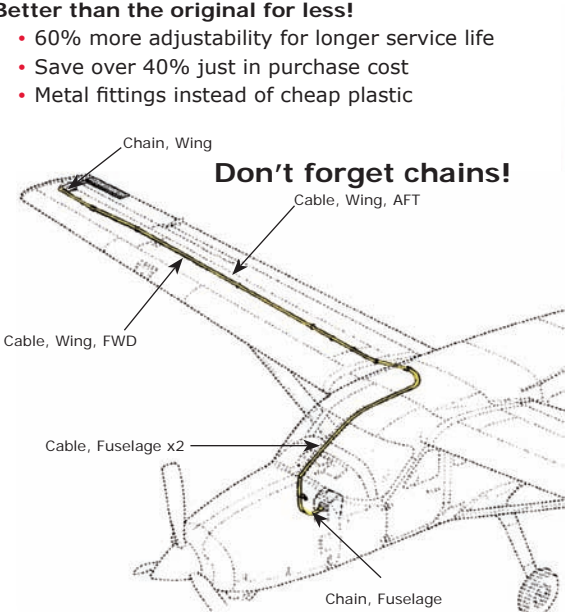
208B S/N 208B0001 thru 208B9999		
Qty	P/N	Location
1	MC2660001-100	Elevator
1	MC2660001-102	Elevator
1	MC2660001-104 Note 1	Rudder
2	MC2660001-105	Flaps
1	MC2660001-107	Rudder
1	MC2660001-109	Elevator Trim
1	MC2660001-110	Elevator Trim
1	MC2660001-112	Elevator Trim
2	MC2660001-114	Aileron
4	MC2660001-122	Aileron
1	MC2660001-123	Control Column Interconnect
1	MC2660001-124	Control Column Interconnect
1	MC2660001-125	Control Column Interconnect
1	MC2660001-126	Control Column Interconnect
1	MC2660001-147	Elevator
1	MC2660001-148	Rudder
1	MC2660001-149	Elevator Trim
1	MC2660001-150	Elevator Trim
1	MC2660001-151	Aileron
1	MC2660001-152	Aileron
1	MC2660001-153	Elevator
1	MC2660001-154	Rudder
2	MC2660001-157	Aileron
2	MC2660029-11	Aileron Trim
1	MC2660029-13	Aileron Trim
1	MC2660029-15	Aileron Trim
1	MC9864054-7	Flap Indicator
1	MCS2295-25-101	Chain Elevator Trim Note 2
1	MCS2295-25-107 Note 3	Chain Pitch Trim Servo Note 4
1	MCS2295-25-247	Chain Elevator Trim
1	MCS2295-25-35	Chain Aileron Trim
1	MCS2295-25-43	Chain Aileron Trim
1	MCS2295-25-87	Chain Elevator Trim
24	MCS2294-25	Chain Connecting Link

Note 1: S/N 208B0001 thru 208B2012, 208B2036 and 208B2048 thru 208B9999  
 Note 2: When equipped with electric trim  
 Note 3: S/N 208B2000 thru 208B9999  
 Note 4: When equipped with pitch trim servo

### Aileron Trim and Flap Indicator Cables for Cessna Caravan

Better than the original for less!

- 60% more adjustability for longer service life
- Save over 40% just in purchase cost
- Metal fittings instead of cheap plastic



Don't forget chains!



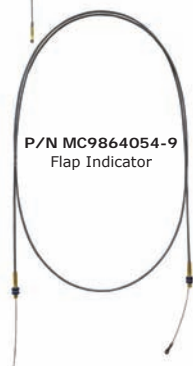
McFarlane Brass Fitting



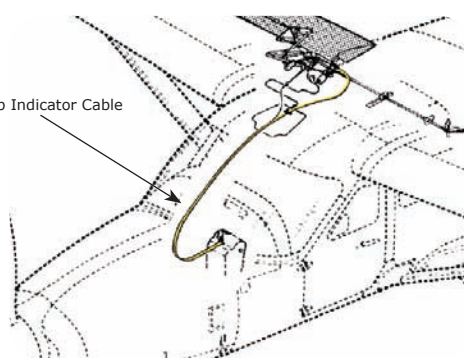
Cessna Plastic Fitting



McFarlane's brass terminal has a superior swage compared to the original plastic terminal.



Flap Indicator Cable



Model	Serial Number	Aileron Trim						Cable, Flap Indicator
		Cable, Wing, Fwd	Cable, Wing, Aft	Cable, Fuselage (2 per aircraft)	Chain, Wing	Chain, Fuselage		
208	20800001 thru 20800081	MC2660029-15	MC2660029-13	MC2660029-4	MCS2295-25-35	MCS2295-25-35	MC9864054-9	
208	20800082 thru 20800499	MC2660029-15	MC2660029-13	MC2660029-4	MCS2295-25-43	MCS2295-25-35	MC9864054-9	
208	20800500 thru 20899999	MC2660029-15	MC2660029-13	MC2660029-4	MCS2295-25-43	MCS2295-25-35	MC9864054-9	
208B	208B0001 thru 208B1999	MC2660029-15	MC2660029-13	MC2660029-11	MCS2295-25-43	MCS2295-25-35	MC9864054-7	
208B	208B2000 thru 208B2012	MC2660029-15	MC2660029-13	MC2660029-11	MCS2295-25-43	MCS2295-25-35	MC9864054-7	
208B	208B2036 Only	MC2660029-15	MC2660029-13	MC2660029-11	MCS2295-25-43	MCS2295-25-35	MC9864054-7	
208B	208B2048 thru 208B9999	MC2660029-15	MC2660029-13	MC2660029-11	MCS2295-25-43	MCS2295-25-35	MC9864054-7	

FAA-PMA Approved

## Flap Indicator for Cessna Caravan

Reinforced wire hole with steel bushing!  
P/N MC2662015-3

Fits all 208 and 208B aircraft.

- More resilient to vibrations
- Bushing is cadmium plated for corrosion protection
- Flap is alodined and primed for longevity of the product

Flap indicator cables MC9854054-7 and -9 along with wire clamp P/N MCS2323-3 is also available.

**Pending  
FAA-PMA  
Approval!**



## Trim Tab Screw Assembly for Cessna Caravan

P/N MC2662015-3 Trim tab screw assembly fits all 208 and 208B aircraft when equipped with 2661215-9, 2661615-10 or 2661615-13 trim tab actuators.

P/N MCS3895-1 Needle roller bearing fits all 208 and 208B aircraft

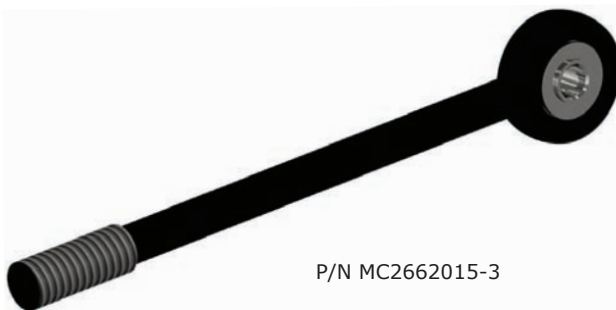
**Coming  
Soon!**

McFarlane Aviation has developed a direct replacement trim tab screw assembly that incorporates many design improvements. Stronger metals and longer lasting coatings are utilized for increased service life and smoother operation with improved corrosion resistance.

The Screw Assembly is manufactured using high strength stainless steel alloy that has been nitro-carburized for maximum wear, low friction, smoother thread operation, and greatly improved corrosion protection over the OEM part.

McFarlane's precision machining significantly reduces the unwanted play found in OEM assemblies. The known problems of original parts have been addressed and resolved with McFarlane's new design!

- Greatly Improved Design
- Save \$\$



P/N MC2662015-3



P/N MCS3895-1



### Adjustable Elevator Neutral Rigging Tool

Save time, you'll always have the correct tool!  
P/N TOOL126

Proper elevator rigging is necessary for full range of motion and maneuverability of the airplane. Many Cessna maintenance manuals require the fabrication of a tool to hold the yoke in the neutral position while the mechanic rigs the elevator control system. These tools utilize the holes for the control gust lock. At least 17 different sizes of rigging tools are required to cover the various Cessna aircraft. Now there is one tool to replace them all!

The McFarlane Elevator Neutral Rigging Tool is adjustable from 0.4" to 2.5" and universal in design, consisting of six different pin sizes to fit your application. This tool may also be used to properly rig other makes of aircraft with similar elevator neutral rigging requirements.

Replaces Cessna P/N NEUTRAL RIGGING TOOL



- Replaces 17 costly tools
- Quick setup and adjustment
- Stainless steel components
- Simple to use instructions
- Includes compact storage box
- Replacement parts available separately

Elevator Neutral Rigging Tool Replacement Parts	
P/N	Description
6409	.050"/1.3mm Hex Wrench
6870	Square Nut
6868-4	Pin, .188, Short
6868-3	Pin, .188, Long
6868-1	Pin, .209, Short
6868-2	Pin, .209, Long
6869-1	Pin, .250, Short
6869-2	Pin, .250, Long

### Rudder and Elevator Hinge Bearing Kits

In stock for immediate shipment! Buy with confidence.

- Convenient kits include bearings and all attaching hardware
- Kits for aircraft equipped with/without hinge modification service kits
- One elevator kit and one rudder kit required per aircraft
- Industry standard hardware



Aircraft	Serial Number	Elevator Kit P/N	Rudder Kit P/N
208	20800001 thru 20800221	EBC-KT-7 <b>1</b>	RBC-KT-9 <b>3</b>
208	20800222 thru 20899999	EBC-KT-8 <b>2</b>	RBC-KT-10 <b>4</b>
208A	20800007 thru 20800102	EBC-KT-7 <b>1</b>	RBC-KT-9 <b>3</b>
208B	208B0001 thru 208B0318	EBC-KT-7 <b>1</b>	RBC-KT-9 <b>3</b>
208B	208B0319 thru 208B9999	EBC-KT-8 <b>2</b>	RBC-KT-10 <b>4</b>

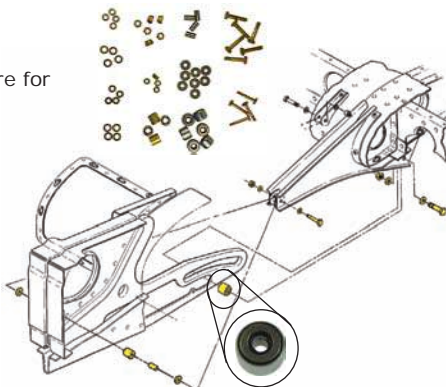
- 1** With SK208-102, SK208-106, & SK208-107 installed.
- 2** Without SK208-102, SK208-106, & SK208-107 installed.
- 3** With SK208-99, SK208-104 and SK208-105 installed.
- 4** Without SK208-99, SK208-104 and SK208-105 installed.

### Flap Roller Kits

Save time!

Contains rollers, bushings, wear washers and hardware for one aircraft.

McFarlane had bushing P/N MS21442-121 specially made to save Caravan operators money!



Save 60% MS21442-121 bearings!

### Pulleys and Pulley Kits

McFarlane stocks all pulleys required for your aircraft

Pulley kits contain all of the pulleys and cotter pins required for one aircraft.

Model	Serial Number	Kit P/N
208	20800001 thru 20800145	PULL-KT-87
	20800146 thru 20899999	PULL-KT-88
208B	All	PULL-KT-89

Save \$\$



### DAM Aircraft Pulley Oil

OIL

P/N PULLEY OIL KIT

- Does not dry out and get sticky
- Loosens old stiff pulley grease
- Save the labor of re-oiling the control system every year!



### Fuel and Oil Drain Valves & Adapters

Large selection - Low price - Many new P/Ns!

- Fits many certified and experimental aircraft
- Simple operation - spring load close
- Manufactured by SAF-AIR and Curtis Superior Valves
- FAA-PMA or FAA-TSO-C76



### Flap Tracks

Replace worn-out tracks to prevent dangerous and expensive binding problems!

P/Ns MC2622075-4, MC2622075-5 and MC2622075-6

- NDI inspected throughout manufacturing
- Save thousands!
- FAA-PMA

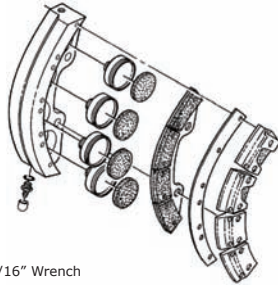
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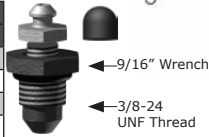
FAA-PMA Approved

**Brake Bleeder Valves for Cleveland and McCauley Wheels**

- Improved - No more rust, no more rounded wrench flats**
- Heat treated bleeder screw prevents rounded wrench flats
  - Cad plated bleeder seat to prevent galvanic corrosion with the magnesium housing
  - Rubber cap has improved material to prevent cracking
  - FAA-PMA Approved



MCBB-KT-3		
Qty	Part Number	Description
1	MC081-00500	Bleeder Seat
1	MC079-00300	Bleeder Screw
1	MC183-00100	Needle Cap
1	MS28775-011	O-ring



**APS Blacksteel Brakes**

- Improve braking performance!**
- One piece forged disc eliminates weld failure
  - Heat treated to reduce corrosion & rust
  - FAA-PMA Approved



**APS Extended Life Brake Lining**

- Reduce cost per landing**
- Lining is .035" thicker
  - 35% longer life!
  - FAA-PMA Approved



**Aileron Trim Sprocket**

- Save! Improved design!**  
P/N MC0761210-1
- Resists roll pin hole wear
  - Stainless steel
  - Roll pins in stock
  - FAA-PMA Approved



**Complete Brake Kit**  
Caravan Brake Kit Components

P/N 208-BRK-KT-1		
Qty	Part Number	Description
2	APS164-22201	Brake Disc
32	APS177-00300	Pin
20	APS66-15300	Brake Lining
2	MC081-00500	Bleeder Seat
2	MC079-00300	Bleeder Screw
2	MC183-00100	Needle Cap
2	MS28775-011	O-ring



**Improved Aircraft Tire Balancers**

- P/N TOOL129
- Now fits more standard and taper axle sizes**
- Multiple models and add-on bushing kits for 3/4", 1", 1 1/4", 1 1/8", 1 5/8" and 2" axles (see page 263)
  - No removal of bearings or seals



**Fast, accurate and affordable!**

**Brake and Master Cylinder Seal Kits**

- Save time and \$\$, just the parts you need
- P/N CBS-KT-3 Master Cylinder Seal Kit
- P/N CBS-KT-5 Brake Assembly Seal Kit
- 1 kit per brake or master cylinder
  - All parts contained in kit are approved



**Complete Wheel Seals**

- P/N WH-KT-42
- Molded Seals and Snap Rings
  - Complete kit or individual components
  - FAA-PMA Approved



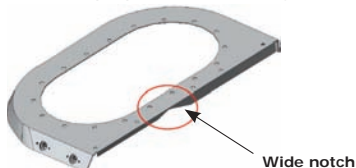
**Tie-Down Trim Plate**

- Aluminum instead of plastic for longer life**  
P/N AF2615118-1
- Approved for all Caravan passenger aircraft only
  - Precision fit - drop in direct replacement
  - Won't shatter when impacted at low temperatures
  - Durable powder coating improves interior fit, finish and longevity



**Primary Exhaust Flange**

- Improved design**  
P/N AF2654006-10
- Direct replacement
  - Precision fit with improved clearance
  - Approved for all Caravan aircraft with 114 or 114A engine
  - Features a wide notch and eliminates a fastener to reduce stress concentration - helps prevent cracking



**Oil Cooler Baffle**

- Reinforced design for longer life**  
P/N AF2650098-5
- Precision fit - drop in direct replacement for 2650098-4 and -5
  - Fits Caravans with PT6A-114A engine and large oil cooler
  - Increased thickness at critical locations to extend life
  - Replaceable low cost seal
  - FAA-PMA approved



Caravan Parts

**Nose Gear Torque Link Assemblies**

Improved to reduce wear and prevent cracks  
Upper P/N AF2643084-1, Lower P/N AF2643084-2

- Approved for all 208 and 208B aircraft
- Hard aluminum surface to reduce wear
- Precision fit - drop in direct replacement
- Designed to prevent cracking in threaded grease fitting holes
- Ready for installation
- Durable powder coating finish



P/N AF2643084-1 (Upper)

P/N AF2643084-2 (Lower)

**Nose Gear Shock Strut Cups and Cones**

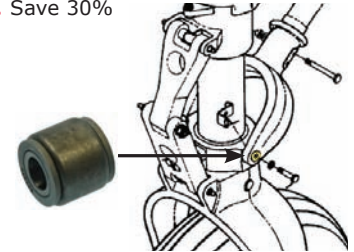
In Stock!  
Bearing Cup  
P/N L217813  
Bearing Cone  
P/N L217849



**Nose Gear Spring Fork Needle Bearing**

P/N MS24462-5

- Fits all Cessna 208 models
- Save 30%



**Crew Door Panels**

Includes retaining straps, fire extinguisher recess, large storage pocket, weight placard and certificate pouch

P/N AF2615180-1 LH  
P/N AF2615180-2 RH

- Color matched to original part
- Brings a modern look and increased utility to your older Caravan
- Precision fit
- FAA-PMA approved for all 208 aircraft
- Direct replacements for P/N 2615180-1 and -2 and the early model P/N 2615054 series door panels



**Tail Tie Down Handle, Rear**

FAA-PMA - Primed and ready for installation  
P/N AF2612035-1

- Approved for all 208 and 208B aircraft
- Precision fit - drop in direct replacement
- Tail stand interface unchanged, works with existing tail stand



**Ankra Interior Cargo Fittings**

McFarlane is now a full distributor!  
Quantity discounts available



**Cargo Tie Downs**

Secure your cargo  
P/N TDC-208

Clamps to seat rails to provide tie down points to secure cargo.

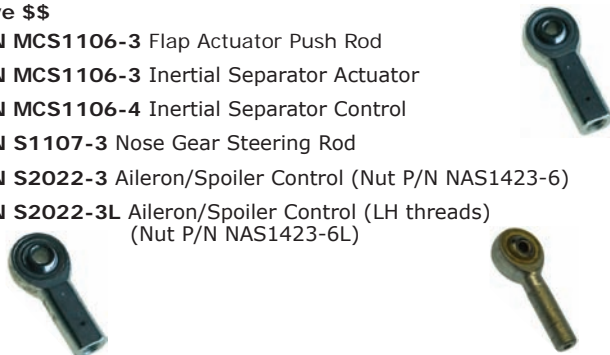
- 4 required for every 100 lbs of cargo
- Anodized aluminum for durability
- FAA-PMA/STC approved



**Rod Ends**

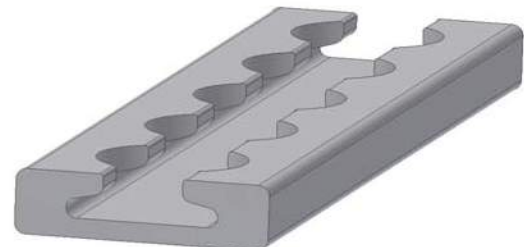
Save \$\$

- P/N MCS1106-3 Flap Actuator Push Rod
- P/N MCS1106-3 Inertial Separator Actuator
- P/N MCS1106-4 Inertial Separator Control
- P/N S1107-3 Nose Gear Steering Rod
- P/N S2022-3 Aileron/Spoiler Control (Nut P/N NAS1423-6)
- P/N S2022-3L Aileron/Spoiler Control (LH threads) (Nut P/N NAS1423-6L)



**Browline Style Seat Tracks/Cargo Tracks**

- Slotted extrusion with 0.785" diameter openings every one inch
- Dimension meet MS33601 except thinner for reduced weight
- Compatible with common MS33601 cargo tie down and seat stud fittings
- Precision machined and anodized for corrosion protection



**Front and Rear Seat Tracks Coming Soon!**

FAA-PMA Approved

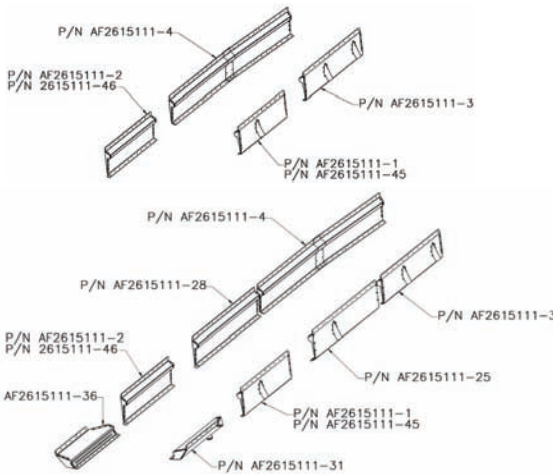
**Cabin Heat Vents**

Reinforced design for longer life

- Replaceable end caps are metal not fragile plastic like the originals
- Precision fit - drop in direct replacement
- Powder coated corrosion resistant



208 Cabin Heat Vents		
P/N	Description	S/N
AF2615111-1	LH Fwd Center	0001 thru 0312
AF2615111-45	LH Fwd Center	0313 and On
AF2615111-2	RH Fwd Center	All
AF2615111-3	LH Aft	All
AF2615111-4	RH Aft	All



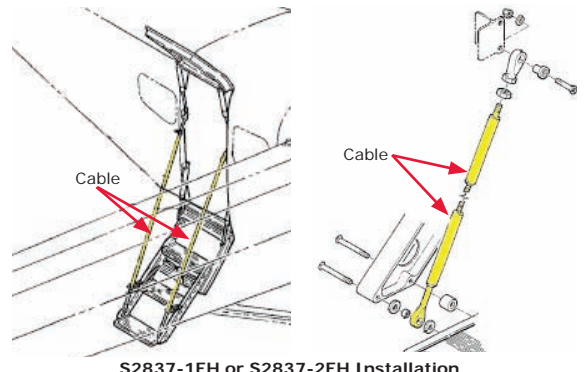
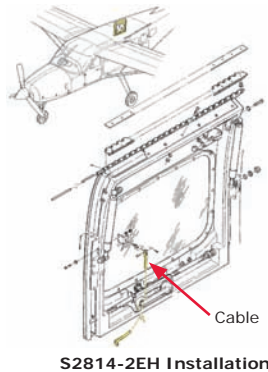
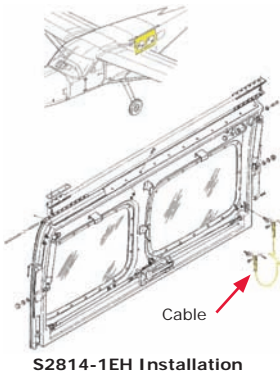
208B Cabin Heat Vents		
P/N	Description	S/N
AF2615111-1	LH Fwd Center	0214 thru 0765
AF2615111-45	LH Fwd Center	0766 and On
AF2615111-2	RH Fwd Center	0214 and On
AF2615111-3	LH Aft	0214 and On
AF2615111-4	RH Aft	0214 and On
AF2615111-25	LH Fwd Aft	0214 and On
AF2615111-28	RH Fwd Aft	0214 and On
AF2615111-31	LH Fwd	0214 and On
AF2615111-36	RH Fwd	0214 and On

1 P/N AF2615111-2 replaces Cessna P/N 2615111-2 and -46.

**Door Cables**

Save \$\$

- Sealed with soft silicon rubber that is easy to clean
- Will not crack due to wear or climate temperature changes
- Does not separate from the cable and remains pliable for easy opening and closing of aircraft doors.
- Unique pre-formed stainless steel aircraft cable
- Hand-crafted with the highest quality standards.
- FAA-PMA Approved



Model	S/N	P/N	Location
208, 208B	All	S2837-1EH	Passenger Door Step, Lower
		S2837-2EH	Passenger Door Step, Lower, (Float Plane)
		S2814-1EH	Cargo Door Pull, Upper
		S2814-2EH	Passenger Door Pull, Upper

**Different colors available! See page 185**

**AeroLEDs Lighting**

Increase safety and reduce operating cost!

See the Difference...

Know the Difference...

- Increased safety
- Direct Replacement
- Up to 80% reduced power consumption
- Long life - over 50,000 hours!
- Lighter weight - no heavy power supply - save up to 3 lbs
- Reduced drag
- Zero maintenance

36HX Taxi with Pulse P/N 01-1030-H-B (PAR36)	36HX Landing with Pulse P/N 01-1030-H-A (PAR36)
36 LX Taxi P/N 01-1030-L-B (PAR36)	36LX Landing P/N 01-1030-L-A (PAR36)
36-4587 Taxi P/N 01-1030-4587 (PAR36)	36-4596 Landing P/N 01-1030-4596 (PAR36)
46-4554 Taxi P/N 01-2230-4554 (PAR46)	46HX Landing with Pulse P/N 01-2130-HX (PAR46)
	46HX Landing or Taxi P/N 01-2130-LX (PAR46)
	46-4580 Landing P/N 01-2230-4580 (PAR46)

See lighting section on pages 191-198 for more information

**GE**

(2) GE4596 (250W Landing Lights) and  
(1) GE4587 (250W Taxi Light)

**AeroLEDs**

(2) SunSpot36-4696 (100W LED Light) and  
(1) SunSpot 4587 100W LED Light

-VS-

**Parts for the Legendary Pratt & Whitney PT6 Engines**

- In stock, no long lead times!
- Save \$\$ on commonly replaced parts

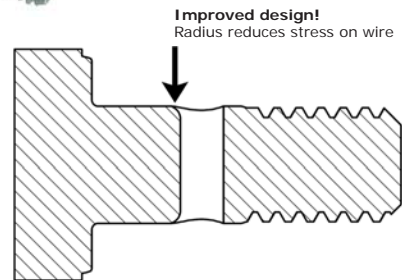
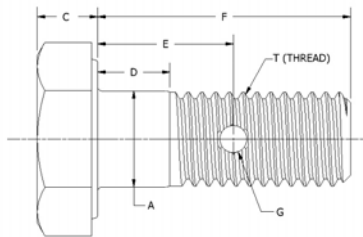
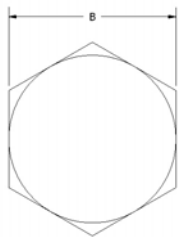
**SAVE!**



<p><b>P/N CA3011155</b> Fuel Transfer Tube</p>	<p><b>P/N CA3020030</b> Fuel Transfer Tube</p>		
<p><b>P/N CA3029566</b> Fuel Nozzle Gasket</p>	<p><b>P/N CA3029678</b> Fuel Nozzle Gasket</p>		
<p><b>P/N CA3101469-01</b> Fuel Manifold Gasket</p>	<p><b>P/N CA3103345-01</b> Retainer</p>		
<p><b>P/N CA3110998-01</b> Shim</p>	<p><b>P/N CA3118962-01</b> Gasket</p>	<p><b>P/N CG3011587</b> Rod End Bearing</p>	<p><b>P/N MS9371-16</b> Fuel Nozzle Gasket</p>

**Bolt Style Wire Clamps**

- Unique design to reduce wire stress
- Heat treated stainless steel for wear and corrosion resistance
- The best for less!
- FAA-PMA approved



Part Number	A Bolt Dia. (in)	B Wrench Size (in)	C Thick (in)	D Grip Length (in)	E Hole Position (in)	F Shank Length (in)	G Hole Dia. (in)	T Thread (-)	Application
MCS2323-3	0.250	7/16	0.156	0.188	0.199	0.539	0.073	1/4 - 28	flap indicator
MCS2323-5	0.188	3/8	0.125	0.125	0.188	0.531	0.073	10-32	cabin air, cabin heat, defrost, fuel shutoff, overhead air, oxygen, parking brake
MCS2323-8	0.188	3/8	0.125	0.250	0.202	0.656	0.096	10-32	oxygen control
MCS2323-11	0.188	3/8	0.125	0.250	0.266	0.656	0.076	10-32	bleed air control
MCS2323-13	0.250	7/16	0.156	0.313	0.271	0.781	0.073	1/4 - 28	bleed air diverter
MCS2323-19	0.188	3/8	0.125	0.125	0.200	0.531	0.094	10-32	defroster valve

FAA-PMA Approved

**Cessna Caravan Torque Link Repair STC**

Minimal downtime repair to keep 208/208B nose gears shimmy-free  
This STC will dramatically reduce nose gear swaps

- Save over \$15k and be flying the same-day
- Reduce downtime by repairing in the field
- Convenient tool kit allows for on airplane repair
- Bolts and pins are cad plated for longer life
- EASA approved



P/N AF2643092-1010, BOLT



P/N AF2643091-1010, PIN



Tap handle

**Maintenance Tip:**  
Always use cutting oil and only drill by hand. Tool kits contain both short and long piloted reamers.



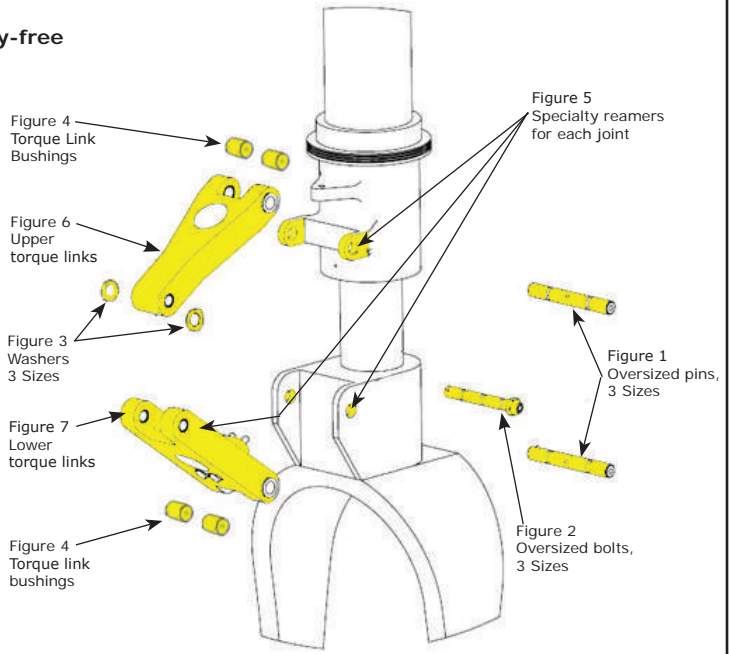
Short piloted reamer



Long piloted reamer



See Dave's article on stopping nose gear shimmy on pages 141-142 or [www.mcfarlaneaviation.com](http://www.mcfarlaneaviation.com)



**Eligible model series:**  
Fits all Cessna 208/208B with "double lug" torque links. Includes all S/N's after 2080133/208B0098 or earlier S/N's equipped with SK208-51.

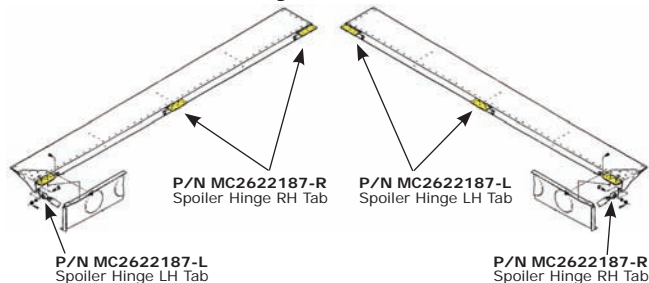
Figure	Part Number	Description	Approval Type
5	TOOL KIT .010	REAMERS, Oversized .010 - short and long piloted reamers + tap handle	STC
5	TOOL KIT .020	REAMERS, Oversized .020 - short and long piloted reamers + tap handle	STC
5	TOOL KIT .030	REAMERS, Oversized .030 - short and long piloted reamers + tap handle	STC
5	TOOL KIT 32-604-56-01	REAMERS, all three sizes	STC
6	AF2643084-1	Upper Torque Link	PMA
7	AF2643084-2	Lower Torque Link	PMA
1	AF2643091-1	PIN, Nominal	PMA
1	AF2643091-1010	PIN, Oversize .010	PMA
1	AF2643091-1020	PIN, Oversize .020	PMA
1	AF2643091-1030	PIN, Oversize .030	PMA
2	AF2643092-1	BOLT, Nominal	PMA
2	AF2643092-1010	BOLT, Oversize .010	PMA
2	AF2643092-1020	BOLT, Oversize .020	PMA
2	AF2643092-1030	BOLT, Oversize .030	PMA
3	32-604-37-22005	WASHER, .005 thickness	STC
3	32-604-37-22010	WASHER, .010 thickness	STC
3	32-604-37-22015	WASHER, .016 thickness	STC
4	AF2643085-200	BUSHING, Torque Link	PMA
	STC-TORQUE LINK	Torque Link STC	STC

**Caravan Spoiler Hinges**

Improved McFarlane hinges feature selective fit components for a longer service life

P/N MC2622187-L (Replaces 2 each 2622187-7, 1 each 2622226-1)  
P/N MC2622187-R (Replaces 2 each 2622187-7, 1 each 2622226-2)

- Save \$\$
- FAA-PMA direct replacement
- Eligible for all Cessna Caravan 208,208B
- Selective fit components
- Cadmium plated stainless spins and anodized aluminum hinges for better corrosion resistance
- No looseness in the hinge to start vibration wear



## Cessna Caravan Main Wheel Bolts STC

For Caravan operators who demand the most from their equipment

The high strength wheel bolts have been proven in the field to reduce fretting between wheel halves and provide an additional margin of safety for the wheel assembly. High strength MS21250 bolts replace the standard AN5 hardware that fasten the wheel halves and brake disc together. High strength nuts and countersunk washers are included with each kit.

Replacement bolts come in two lengths to accommodate aircraft with and without brake disc spacers, and are eligible for aircraft equipped with certain gross weight increase STCs. The high strength wheel bolts are approved for use with any of the Cessna 208/208B tire installations.

The replacement hardware is eligible for installation only on the 10 inch diameter Cleveland wheel and brake assembly P/N 20-244, aircraft equipped with any of the Aeroacoustics Aircraft Systems, Inc. Caravan STCs or on aircraft equipped with or without the Aero Twin, Inc. brake disc spacer STC SA02126AK-D.

### Purchase Options and Part Numbers

#### P/N AFC-208BOLTKIT-STC-Only

Contains a copy of the STC, installation instructions, and permission letter from the manufacturer. Hardware is not included.

#### P/N AFC-208BOLTKIT-STC+058

Contains the 058 hardware kit *for aircraft without disc spacers*, a copy of the STC, installation instructions, permission letter from the manufacturer and complete hardware kit for one aircraft including bolts, nuts, and countersunk washers. The kit includes enough hardware for two wheels (one aircraft).

#### P/N AFC-208BOLTKIT-STC-058

Hardware kit only *for aircraft without disc spacers*. Customer must already have purchased the STC. Includes complete hardware kit for one aircraft with bolts, nuts, and countersunk washers. The kit includes enough hardware for two wheels (one aircraft).

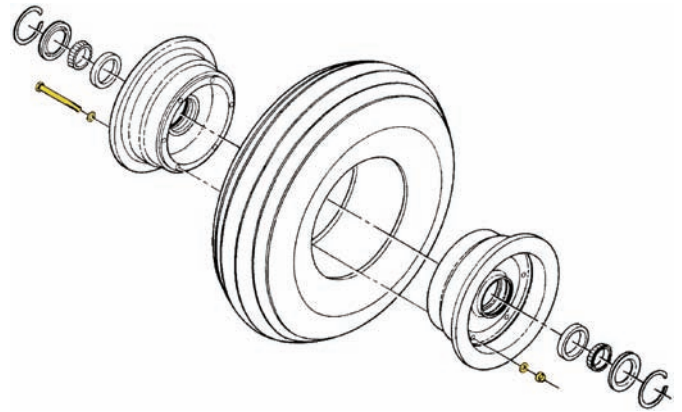
#### P/N AFC-208BOLTKIT-STC+060

Contains the 060 hardware kit *for aircraft with disc spacers*, a copy of the STC, installation instructions, permission letter from the manufacturer and complete hardware kit for one aircraft including bolts, nuts, and countersunk washers. The kit includes enough hardware for two wheels (one aircraft).

#### P/N AFC-208BOLTKIT-STC-060

Hardware kit only *for aircraft with disc spacers*. Customer must already have purchased the STC. Includes complete hardware kit for one aircraft with bolts, nuts, and countersunk washers. The kit includes enough hardware for two wheels (one aircraft).

- High strength hardware helps prevent fastener failure during operations
- Two configurations of bolt kits
- Multiple purchase options
- STC is FAA and EASA approved



## Passenger Door Step for Cessna Caravan

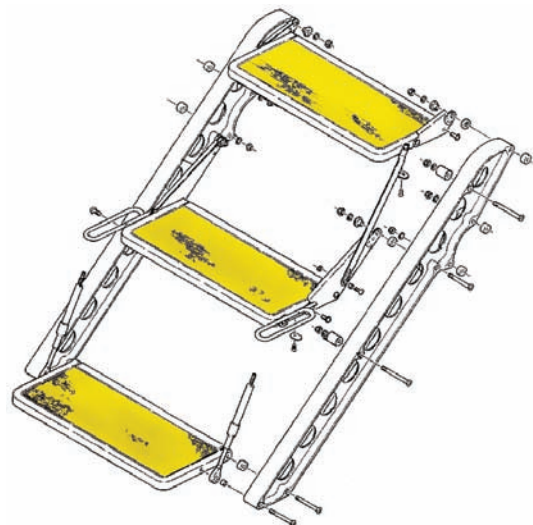
Durable Aluminum Step with STC!

P/N AF2617076-1

Engineered for increased longevity and is constructed solely from aluminum to eliminate the incidence of delaminating. Direct replacement for Cessna P/Ns 2617076-1 (lower), 2617076-10 (upper) and 2617076-11 (middle).

- FAA-PMA STC Approved - STC comes with the part
- Fits all Cessna 208/208B Aircraft
- Slip resistant tread surface
- Withstands significantly more weight than OEM part
- Longer service life
- More resistant to weather and the damaging effects of moisture

Slip resistant tread surface



FAA-PMA Approved

**Door Hinges for Cessna Caravan**

**Door hinges have bushings for longer wear!**

As the original equipment hinge halves wear and the aircraft door starts to sag, Cessna Service Bulletin CAB96-2 allows a one time repair through the use of an oversize door hinge pin. When the hinge again becomes worn and the door sags, the hinge halves must be replaced and an original size hinge pin re-installed.



- FAA-PMA direct replacements
- Fits all Cessna 208/208B aircraft
- Anodized for corrosion resistance
- Precision fit
- Available with or without bushing
- Replaceable bushings allow extended service life!



Hinge bushing, short  
P/N AF2617015-025



Hinge bushing, long  
P/N AF2617015-049

Bushed Hinge P/N	Standard Hinge P/N	Location		OEM P/N
		Cargo Door	Crew Door	
AF2617015-17-B	AF2617015-17		RH Lower Fwd	2617015-1 or 17
AF2617015-18-B	AF2617015-18	Lower Fwd	LH Lower Fwd	2617015-2 or 18
AF2617015-19-B	AF2617015-19		RH Upper Fwd	2617015-11 or 19
AF2617015-20-B	AF2617015-20	Upper Fwd		2617015-4 or 20
AF2617015-21-B	AF2617015-21	Lower, Lower Aft	LH Lower Aft	2617015-13 or 21
AF2617015-22-B	AF2617015-22		LH Upper Fwd	2617015-12 or 22
AF2617015-23-B	AF2617015-23	Upper, Upper Aft	LH Upper Aft	2617015-15 or 23
AF2617015-24-B	AF2617015-24		RH Lower Aft	2617015-14 or 24
AF2617015-26-B	AF2617015-26		RH Upper Aft	2617015-16 or 26



P/N AF2617015-21-B



P/N AF2617015-21

Bushing P/N  
AF2617015-025 (short) AF2617015-049 (long)

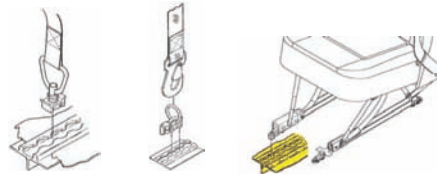
Manufactured by Airforms, Inc.

**Crew Rails and Cargo Tracks for Cessna Caravan**

The manufacturing leader of seat rails now has FAA-PMA approval on rails and tracks for 208 series aircraft!



- FAA-PMA direct replacements
- Improved thickness and stability
- Fits all Cessna 208/208B aircraft
- Anodized for superior wear and corrosion resistance
- Precision fit



The primary source of failure for these tracks is corrosion. This is most likely due to moisture and de-icing compounds getting exposed to the surface of the aluminum and causing corrosion over time. McFarlane Aviation has improved the surface protection on our tracks and rails by anodizing per MIL-A-8625, Type II, providing a far superior wear and corrosion resistant surface. McFarlane rails and tracks are also primed per MIL PRF-23377 on the underside and top of the flanges of the extrusions. McFarlane will also top coat paint the primed area with a top coat polyurethane paint per MIL-PRF-85285 as recommended for corrosion protection in the Cessna 208 maintenance manual. The upper section of the extrusions are not painted or primed to prevent any interference issues with the seat clamps/lugs and cargo attachments interface with these edges.

**With two versions available, drilled or undrilled, McFarlane seat rails will meet your needs.**

McFarlane offers the Seat Rails with the rivet holes drilled in the bottom flange, and in an "S" suffix part number which has the rivet holes in the flange omitted. This undrilled version allows for easier installation in a replacement part situation as it allows the installer to match drill the original holes from the frame/aircraft to the seat rail.

To order drilled rails use the part numbers below. To order undrilled rails add an "S" suffix to the part number below.

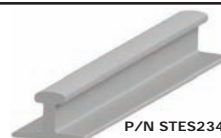
Example P/N MC2601088-1 (drilled) and P/N MC2601088-1S (undrilled).

Model	Serial Number	Type	Crew Rails		Passenger/Cargo Rails					
			Pilot & Copilot		Outboard LH	Inboard LH	Inboard RH	Outboard RH	Center	
208	20800001 thru 20800219	With cargo barrier	MC2601088-1 Inboard LH <b>3</b>							
			MC2601088-3 Outboard LH & RH							
			MC2601088-2 Inboard RH <b>3</b>							
	20800220 thru 20800293	With or without cargo barrier	MC2613039-1 <b>2</b>	MC2611060-3 <b>1</b>	MC2611060-12 <b>1</b>	MC2611060-10 <b>1</b>	MC2611060-8 <b>1</b>	MC2611060-14 <b>2</b>		
			MC2613039-4 <b>2</b>							
208B	208B0001 thru 208B0312	Cargo version	MC2613039-1 <b>2</b>							
			MC2613039-4 <b>2</b>							
	208B0214 thru 208B0312	Passenger version	MC2613039-1 <b>2</b>	MC2611040-5 <b>1</b>	MC2611040-23 <b>1</b>	MC2611040-24 <b>1</b>	MC2611040-12 <b>1</b>	MC2611040-27 <b>2</b>		
			MC2613039-4 <b>2</b>							
208B0313 thru 208B0715	Cargo and passenger version	MC2613039-1 <b>2</b>								
		MC2613039-4 <b>2</b>								
208B0716 thru 208B9999	Cargo and passenger version with cargo barrier	MC2613039-1 <b>2</b>								
		MC2613039-4 <b>2</b>								

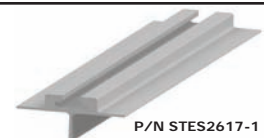
**Notes:**  
To order undrilled seat rails add and "S" suffix to the part number  
**1** Quantity of one per part number required  
**2** Quantity of two per part number required  
**3** Quantity of four per part number required

**Seat Rail Extrusion**

Blank extrusion sold separately by the inch and we can also custom machine to your specifications.



P/N STES2343-1



P/N STES2617-1



### D A M™ Window Cleaner - A New Product from McFarlane

Fast and easy aircraft window cleaner!

**This stuff is so D A M good we had to share it!**

Aircraft size 1.5 oz. P/N DAM17-1.5

Hangar size 16 oz. P/N DAM17-16

A fast, streak free liquid spray designed for acrylic and other surfaces.

The carnauba wax and polymer formula fills minor scratches and leaves a slick clean surface that makes cleaning bugs easier next time.

Freezing and thawing of the D A M window cleaner doesn't affect the performance of the product. Thaw and shake to use.

- Liquid spray - No smeary paste
- No ammonia and only a harmless trace of alcohol
- Anti-static - Repeals dust
- Safe on all surfaces
- Amazing *Melt Away* cleaning power
- Economical - a little goes a long way
- Hazes off for a streak free polish finish
- Improves visibility in the rain

### Cotton Windshield Towels

Stop scratching your window with paper towels!

- New t-shirt material with no seams or print, and no abrasive wood fibers (paper towels)
- Won't scratch
- Reusable for many cleanings
- Cheap enough to throw away
- Random sizes - 12 to 24 inches per side



Part Number	Description	Size	Qty.
DAM17-1.5	Aircraft size	1.5 oz.	1
DAM17-1.5C	Aircraft size	Case	14
DAM17-16	Hangar size	16 oz.	1
DAM17-16C	Hangar size	Case	12
Complete Window Cleaning Kit			
DAM17-KIT	Aircraft size	1.5 oz.	1
	Hangar size	16 oz.	1
	Towel, knit, grey	Varies	5
Towels			
1533-5	Towel, knit, grey	Varies	5
1533-20	Towel, knit, grey	Varies	20

#### Directions:

Shake well. Spray on windows and rub bugs, dirt, and smears with your hand or with a small towel saturated with D A M until contaminants are loose and melted. Keep the surface wet with D A M as you clean. Wipe the window clean but not necessarily completely dry with a soft cotton or micro-fiber towel. The remaining D A M will quickly haze-off. Finish by polishing with a clean dry cotton towel (T-shirt material is recommended). Do not use paper towels as they have wood fiber that can scratch.



FAA-PMA Approved

**Central Texas Aircraft Parts  
Manufacturing FAA-PMA Aircraft  
and Engine Components for TPE 331 Engines**

The parts you need at the prices you want!  
For specific eligibility on products see [www.mcfarlaneaviation.com](http://www.mcfarlaneaviation.com)

**Thrust Reverser Inspection Kits**

Items contained in the HP201TR kits are standard parts used in a 1400HR TR inspection.

The HP200TR kit consists of two HP201TR kits to service both engines. In addition to the PMA'd parts all hardware required is included and there will normally be a few extra parts left over.

Most of these parts are also used on Dassault Falcon 20's that have the Aeronca STC installed and on all Sabreliner model 80 aircraft. The main difference in the 1400 HR kits for these aircraft (P/N HP100TR) is that the Falcons and Sabreliners use the 232-20260-1HP bearing instead of the 45-12216-1HP bearing.

In addition to the standard parts replaced during the 1400 HR inspection P/N 3233190-2HP Vespel bearing (eight per A/C) may or may not be needed.

FAA-PMA approved and industry standard components.



TR Inspection Kits			Part Number
P/N	Description	Qty	HP201 TR HP100TR and HP200TR
AN960C10L	Washer	12	24
AN960-416	Washer	2	4
D6-1	Washer	60	120
D6-4	Washer	4	8
MS21043-3	Nut	14	28
MS21043-4	Nut	4	8
MS24665-151	Cotter Pin	6	12
MS24665-153	Cotter Pin	5	10
MS24665-302	Cotter Pin	2	4
M9364-10	Nut	4	8
M9464-09	Pin	4	8
NAS1291C4M	Nut	10	20
NAS1351C3-8	Screw	10	20
NAS620C416L	Washer	4	8
NAS620-416L	Washer	16	32
232-20268-503HP	Shoulder Bolt	4	8
232-20426-1HP	Bushing	4	8
3515-28-04	Washer	4	8
45-12216-1HP	Bearing	4	8

1 Contains enough components for one engine  
2 Contains enough components for two engines

**FAA-PMA Cable Assemblies for Learjet**

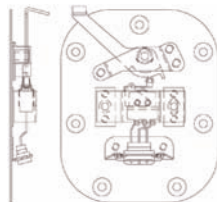
Aircraft Model	Part Number
24, 24A,B,B-A,C,D,D-A,E,F,F-A, 25, 25A,B,C,D,F, 31, 31A, 35, 35A, 36, 36A	HP2411660-13
	HP2411660-15
	HP2411660-34
24, 24A,B,B-A,C,D,D-A,E,F,F-A, 25, 25A,B,C,D,F, 35, 35A, 36, 36	HP2411660-18
55, 55B, 55C, 60	5415530-5HP
55	5415542-16HP
	5415542-23HP
55, 55B, 55C	5415542-26HP
	6015550-002HP
60	6015550-003HP



**DPI - (Door Position Indicator) Switches and Kits for Learjet  
FAA-PMA and industry standard components**

DPI Switch and Plate Kit P/N 45-12370-10TR		
P/N	Description	Qty
45-0008-KIT	DPI Switch and Acuator Kit	1
45-12368-KIT	DPI Pivot Arm Kit	1
45-12370-1HP	Mounting Plate Assy.	1
MS24694-C3	Screw	2
MS35333-72	Washer	2
MS21043-08	Nut	2

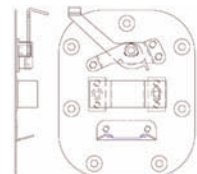
Contains enough components for one engine



DPI Switch and Plate Kit  
P/N 45-12370-10TR

Swiith Plate Kit P/N 45-12370-1HP		
P/N	Description	Qty
45-12368-KIT	DPI Pivot Arm Kit	1
45-12370-1HP	Mounting Plate Assy.	1
MS24694-C3	Screw	2
MS35333-72	Washer	2
MS21043-08	Nut	2

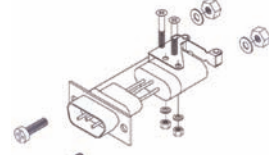
Contains enough components for one engine



Swiith Plate Kit  
P/N 45-12370-1HP

DPI Switch and Actuator Kit P/N 45-0008-KIT		
P/N	Description	Qty
MS21043-08	Nut	2
MS35333-72	Washer	2
MS35206-213	Screw	2
NAS662C2R9	Screw	2
MS21042-02-08	Nut	2
NAS620-4	Washer	2
45-12449-3HP	Actuator	1
45-0008-7HP	Plug/Switch Assy	1

Contains enough components for one engine



DPI Switch and Actuator Kit  
P/N 45-0008-KIT

DPI Pivot Arm Kit P/N 45-12368-TR		
P/N	Description	Qty
45-12356-1HP	Spring	1
45-12370-109	Pin	1
45-12368-9HP	Pivot Arm	1
MS24665-132	Cotter Pin	1

Contains enough components for one engine



DPI Pivot Arm Kit  
P/N 45-12368-TR

DPI Switch Assy (4) req. per A/C		
P/N	Description	Qty
45-12368-9HP	Pivot Arm	1
45-12256-3HP	Bumper Plate	1
45-0008-07HP	Plug and Switch Assy	1
45-12449-3HP	Actuator Assy	1
45-12356-1HP	Spring	1
45-12370-1HP	Switch Plate Assy	1

**TPE331 Bushings, Bearings and Components FAA-PMA approved**

Part Number	Description
3101373-1HP	Lock Plate
3101703-10HP	Bushing
3101703-11HP	Bushing
3101703-12HP	Bushing
3101703-13HP	Bushing
3101703-14HP	Bushing
3101703-15HP	Bushing
3101703-16HP	Bushing
3101703-17HP	Bushing
3101703-18HP	Bushing
3101703-19HP	Bushing

Part Number	Description
3101703-1HP	Bushing
3101703-20HP	Bushing
3101703-24HP	Bushing
3101703-25HP	Bushing
3101703-26HP	Bushing
3101703-27HP	Bushing
3101703-28HP	Bushing
3101703-29HP	Bushing
3101703-2HP	Bushing
3101703-3HP	Bushing
3101703-4HP	Bushing

Part Number	Description
3101703-5HP	Bushing
3101703-6HP	Bushing
3101703-7HP	Bushing
3101703-8HP	Bushing
3101703-9HP	Bushing
3101759-1HP	Bushing
3101759-2HP	Bushing
3101759-3HP	Bushing
3101759-4HP	Bushing
3101759-5HP	Bushing
3101759-6HP	Bushing

Part Number	Description
3101759-7HP	Bushing
865057-7HP	Retainer
865542-5HP	Bearing Sleeve
867595-3HP	Gasket
867681-5HP	Seal Disk
867905-1HP	Valve Seat
868746-6HP	Gasket
869615-1HP	Bearing Sleeve
869615-2HP	Bearing Sleeve
869616-1HP	Bearing Sleeve
869616-2HP	Bearing Sleeve

Part Number	Description
893579-1HP	Bushing

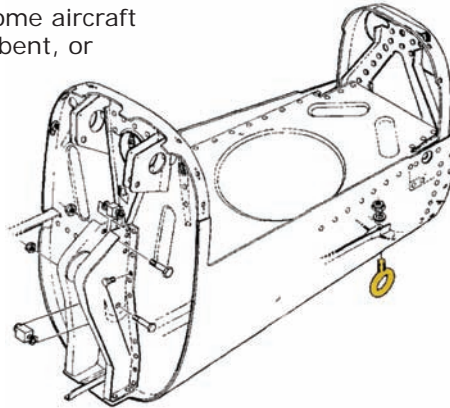
Tools and Miscellaneous

**Tail Tie Down Eye Bolts**

**Save money with McFarlane's affordable eye bolts!**

**P/Ns MC0422344, MC0523613-1 and MC0523613-4**

- FAA approved for the tail tie down for most Cessna aircraft. Also approved for wing and fuselage tie down for some aircraft
- Replace your tie down eye bolts if they are rusted, bent, or ground flat from a tail low landing



P/N MC0422344



P/N MC0523613-1



P/N MC0523613-4

Aircraft Model	Serial Number	Location						
		Part Number	MC00422344	MC00422344	MC00422344	MC0523613-1	MC0523613-4	Wing
150, 150A,B,C,D,E,F,G,H,J, F150F,G,H,J	All					1		
150K,L,M, A150K,L,M, F150K,L,M, FA150K,L,M, FRA150L,M	All						1	
152 A152 F152 FA152	15279406 thru 15284541 A1520735 thru A1520943 F15201429 thru F15201828 FA1520337 thru FA1520372					1		
	15284542 and On A1520944 and On F15201829 and On FA1520373 and On						1	
172, 172A,B,C,D,E,F,G,H,I,K,L,M,N,P,Q,R,S, F172D,E,F,G,H,K,L,M,N,P, FR172E,F,G,H,J,K, P172D, R172K	All		1	1				
172RG, R172E,F,G,H	All			1				
175, 175A,B,C	All		1	1				
180, 180A,B,C,D,E,F	All <b>1</b>				1			
182, 182A,B,C,D	All		1	1				
182E,F,G,H,J,K,L,M,N,P,Q,R,S,T	All			1				
F182P,Q, FR182, R182, T182, T182T, TR182	All			1				
188, 188A,B, A188, A188A, A188B, T188C	All							2
188, 188A, A188, A188A	All		5					
190, 195, 195A,B	All							2
210-5 (205), 210-5A (205A)	All			1				
206, 206H, U206, U206A,B,C,D,E,F,G, P206, P206A,B,C,D,E, T206H, TP206A,B,C,D,E, TU206A,B,C,D,E,F,G	All <b>1 2</b>			1				
207, 207A, T207, T207A	All			1				
208, 208B	All			1				
210, 210A,B,C,D,E,F,G,H,J,K,L,M,N,R, P210N,R, T210F,G,H,J,K,L,M,N,R	All			1				
310, 310B,C,D,F,G,H,I,J,J-1,K, E310H,J	All							2
320, 320-1, 320A,B,C	All							2
336, 337, 337A,B, T337B	All							2

**1** Includes Amphibian and floatplane aircraft.  
**2** Amphibian and floatplane aircraft use two each instead of one.

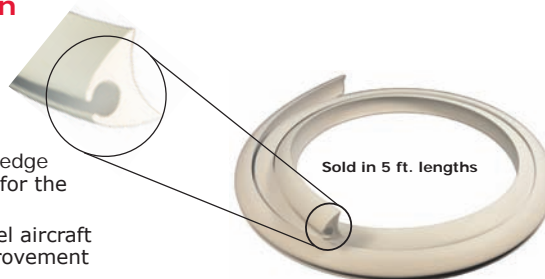
**Cessna Brake Line Fairing Extrusion**

**Reduce Drag!**  
**P/N P580058**

- Paintable
- Easily attaches with super glue
- Replaces P/N S1511-1

White rubber extrusion that attaches to the trailing edge of flat Cessna landing gears and serves as a fairing for the brake line.

This extrusion was original equipment on later model aircraft with flat gears. Many mechanics use this as an improvement for the earlier aircraft.



Tools and Miscellaneous

**Seat Roller Housing Gauge for Cessna Aircraft**

P/N TOOL110

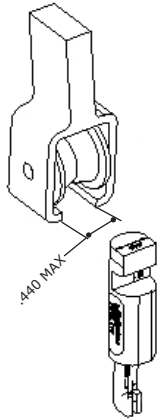
- Hardened Stainless Steel
- Save time! Two times faster than calipers
- Step by step instructions
- Measures all three dimensions

**Checks Cessna seat roller housing limits as per FAA AD 2011-10-09**

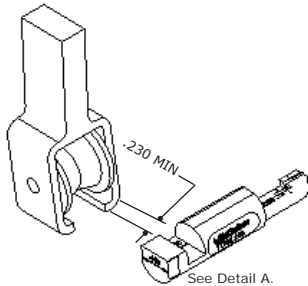
The McFarlane Seat Roller Housing Gauge is designed to facilitate inspection of seat roller housings for wear in Cessna aircraft as required by mandatory FAA AD 2011-10-09. This gauge simplifies determining whether the housing is in or out of tolerance by allowing the areas of concern to be gauged as opposed to measuring each individual attribute on each seat roller housing with calipers.



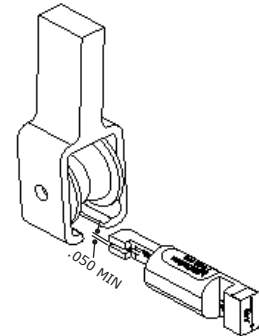
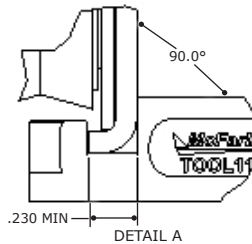
P/N TOOL110



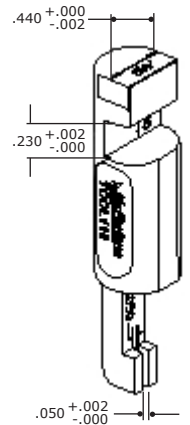
**Step 1.**  
.440 gauge surfaces must not enter space between housing tangs.



**Step 2.**  
The bend area of the tang must not enter the space on the gauge marked .230. See Detail A.



**Step 3.**  
The .050 space on the gauge must not fit on the worn area of the tang.



To calibrate: ensure gauge dimensions are within the tolerances shown.

- .440 + .000 / -.002
- .230 + .002 / -.000
- .050 + .002 / -.000

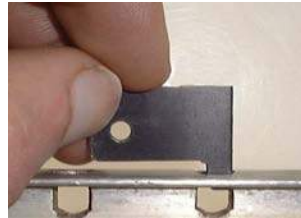
**Seat Rail Wear Gauge for Cessna Aircraft**

Checks seat rail wear limits as per FAA AD 2011-10-09

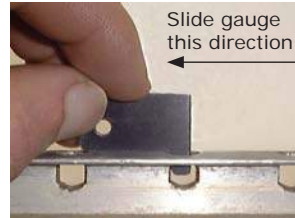
**Seat Rail Directive**

The McFarlane Seat Rail Wear Gauge is designed to check for seat rail pin engagement hole wear on Cessna aircraft, as required by FAA AD 2011-10-09. This gauge is designed to measure the actual radius wear near the seat stop holes and allows for the 0.020 upper surface wear permitted by the AD. This gauge is very precisely machined.

**Fast and Positive - No More Guessing!!**



**1.** Place the gauge into each hole location showing wear.



**2.** Slide gauge back along **top center** of the rail until it contacts the hole edge. Make sure to keep the gauge parallel and square to the unworn rail surface.



**3.** If the step touches the rail, lifting the gauge up, the wear is less than 0.42. If the step **does not** touch the rail, the wear is more than 0.42 and the seat rail must be replaced.



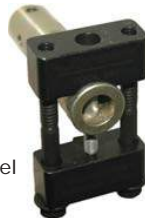
P/N GAUGE SR1

**Note:** Earlier versions of the McFarlane Seat Rail Hole Wear Gauge feature a 0.36 and a 0.42 step. The 0.36 step was included per an earlier version of the Airworthiness Directive and is no longer used.

**U-Joint Taper Pin Removal Tool for Piper Control Yoke**

P/N TOOL107

- Save time and money
- Makes removal of stuck pins easy
- Prevents damage from hammering behind the panel
- Compact to get in tight places
- Heat treated 4140 Alloy Steel



**Small Radius 1/8" Tube Bender**

Ideal for fuel injection, primer, oil pressure, and oxygen lines!  
Tube Bender P/N 364-FH-02

- Easily fabricate 3/8" radius bends up to 180°
- Calibrated to show angle of bend
- For bending 1/8" OD soft copper, aluminum, brass, steel, stainless steel, and other tubing



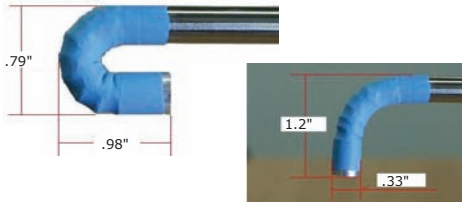
**New!**

**Articulating Borescopes starting at less than \$200**

**Acquire Detailed Visual Inspection with 180° Articulating Probe**

Finally a **low cost**, articulating borescope that really works! Technonlogy has made borescopes a good investment even if you only need it a few times a year.

- Precision optics
- Cost effective
- Look back with 180° articulation
- Connect easily to computer, tablet or phone
- LED illumination
- High quality CMOS sensor
- Durable carrying case



Ideal for detailed visual inspection in hard to reach places. The bendable 0° to 180° continuously adjustable, articulating probe offers a panoramic view of the area being inspected and the wide focal distance makes both close up and general inspection crisp and clear. Six built in LEDs for illumination. Includes a press and release option in addition to a locking and unlocking feature.

AirBox WiFi Converter provides a wireless solution for mobile device users (Apple and Android). AirBox converts the USB feed into a WiFi hot spot enabling functions utilizing the appropriate App to see live images, capture pictures and record videos.

Apple products (i.e. iPhone and iPad) **require** the wireless converter, P/N VA-B2, for viewing and data capture. Android users have the option of connecting directly to the borescope (via USB cable), or by use of the wireless converter.

Each borescope includes an OTG cable adapter, small sleeve changing tool for changing out the silicone sleeves, extra silicone replacement sleeves, case and instruction manual.

P/N	Probe Type	Probe Diameter	Probe Length	Weight	Focal Distance	Resolution	Optical View Lens Angle	USB Cable Length	Compatibility
VA-400	Rigid	8.5mm	42cm (16.5")	12 oz	4cm - 40cm fixed focus	640X480 pixels	60°	200cm	Windows 10/8/7/Vista/XP, Mac OS X with FaceTime software or Android OS 4.1.2 or higher with USB host function (iPhone and iPad when used with VA-B2 converter).
VA-800	Flexible		80cm (31.5")		3cm - 40cm fixed focus				
VA-980	Semi-Rigid	5.9mm	1 mm (39.3")	960X720	180°				
D3160	Flexible		1 mm (39.3")		180°				
D3145	Flexible	4.5mm	1 mm (39.3")						
ME-610	Flexible	6.0mm	1 mm (39.3")				360°	Rechargeable lithium battery	Automotive inspection camera, all way articulation controlled by joystick. Takes pictures and records video.

Notes:  
 ■ Add "KIT" to part number to purchase borescope and VA-B2 converter together, example: VA-400 KIT.

**Vividia AbleScope VA-400 Borescope**

P/N VA-400

Rigid (fixed steel probe)  
 Suitable when you have a direct line to your subject.  
 Convenient for one hand operation.



**Vividia AbleScope VA-800 Borescope**

P/N VA-800

Non-Formable - perfect for snaking the scope into a narrow space.  
 Can be rotated by twisting the probe to change the orientation of the camera.



**Vividia AbleScope VA-980 Borescope**

P/N VA-980

Semi-Rigid Flexible, but stays where you put it.  
 Ideal for general aviation professionals!!!

**WiFi AirBox Converter**

P/N VA-B2

View your Vividia USB borescope wirelessly. The USB cord from your borescope plugs into this small box which acts like a WiFi hotspot.

Connect your phone or tablet to the hotspot to view live feed from the borescope and capture photos and videos. Compatible apps are available for download.



## Flap Track Wear Gauge for Cessna Aircraft

P/N 950

Use to determine if a Cessna flap track is worn beyond service limits.

### Instructions

Run the gauge plug along each slot in each flap track while verifying that the gauge will not enter the slot. Reposition the flaps as required to gauge the entire length of each slot. If the gauge enters a slot at any point, the track is worn beyond service limits. Periodically verify the gauge diameter by measuring the gauge diameter with a calibrated micrometer.

**This gauge will work for all single engine Cessna aircraft except 140A, 170A and 195**



## Flap Roller Installation Tool

P/N 970

- Makes installation of the aft flap roller, bushing and washers easy
- Long handle allows access through the small inspection openings
- Holds parts in alignment while inserting the bolt
- Use on Cessna 150 thru 337



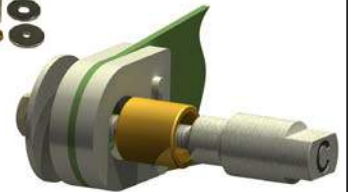
## Elevator and Rudder Bearing Installation Tool for Cessna Aircraft

Makes pressing bearings in or out easy!

P/N 990

This unique tool is specifically designed to prevent damage when installing and removing **sintered bronze** rudder and elevator hinge bearings contained in kits EBC-KT-1 thru 5 and RBC-KT-1 thru 8.

- Eight piece kit for all sizes of sleeve bearings
- Heat treated stainless steel will last a lifetime
- Comes in a convenient storage pouch



## Cowl Saver™ Scoring Tool

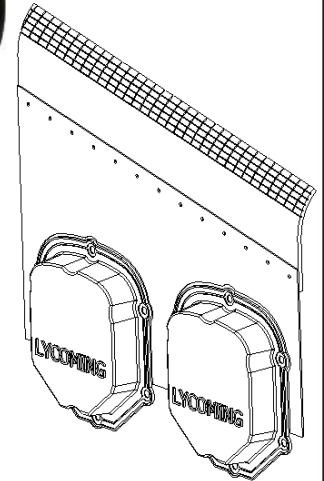
Customize Your Baffle Seal Flexibility for Optimal Cooling!

P/N TOOL120

Customize Cowl Saver™ engine baffle seal material to be extremely flexible for a perfect seal where it contacts the cowl and rigid elsewhere to prevent the seal from blowing past the cowl contact line.

This unique tool has 3 circular razor blades spaced 0.16" apart and makes it fast and easy to score the stiffer outer layer of the Cowl Saver™ material where more flexibility is required. The spacers also precisely control the depth of the cuts to help prevent damage to the material.

- You control the amount of flexibility
- Use during a new baffle seal installation or to perfect the fit and seal of an existing installation
- Material still meets the original AMS3306 specification to which it was certified as long as the fiberglass reinforcing layer hasn't been cut.
- Replacement blade kit also available (P/N TOOL120-BKT)
- See page 44 for more details



**Only for use on the Teflon side of Cowl Saver™ baffle seal material**

## PROP GUARD Installation Tool

Saves time and makes installation easier!

P/N TOOL125

This rubber coated roller makes working air bubbles out during installation easier than using the spatula included with the PROP GUARD kits. The rubber conforms to the shape of the propeller, and the rolling action allows you to press harder to eliminate small air bubbles. It is recommended for customers who may be installing more than one PROP GUARD or those who just want to make the job faster and easier.



### McFarlane Aircraft Tire Balancers

Tire balance is important.

**Now it's fast, accurate and affordable!**

Aircraft tires spin 1.6 times faster than car tires.

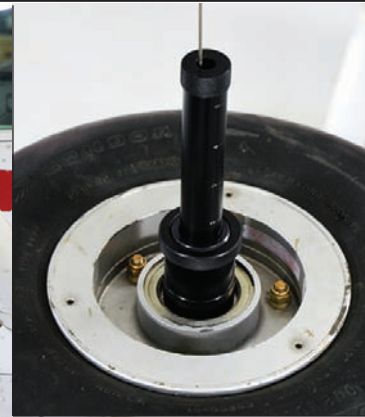
Out-of-balance tires cause a long list of maintenance problems:

- Uneven tire wear
- Premature bearing wear
- Shimmy and resulting torque link damage
- Destructive and distracting airframe vibration

McFarlane's tire balancer is a suspension tire balancer with a patented design featuring a pivot point that is easily adjustable on-the-fly for maximum balance sensitivity. It is small enough to fit in a tool box and doesn't require a bulky stand. The McFarlane design is more precise than other static balancing methods, and allows the wheel and tire to be balanced with the bearings and seals installed.

**It's fast and easy.** Due to the horizontal balancing orientation, test weights can be temporarily set in place and easily adjusted while balancing. This eliminates the need to tape the test weights. The McFarlane tire balancers are precision machined with a black, hard anodized finish, and comes in an oiled wooden case. This is a **lifetime tool** that fits almost all light aircraft wheel/tire assemblies.

- On-the-fly adjustable pivot point for maximum sensitivity (U.S. Patent No. US 9,032,793 B1)
- Portable – small enough to fit in your toolbox
- Does not require removal of bearings or seals
- Complete instructions included
- Multiple models and add-on bushing kits to accommodate 3/4", 1", 1 1/4", 1 1/8", 1 5/8" and 2" axles
- Conveniently packaged in a durable wooden box



**New and Improved More Axle Sizes!**



P/N TOOL129 LA-KT



P/N TOOL129



**Costs less and more accurate than axle style balancers.**

**Now available to accommodate standard and taper axle sizes ranging from 3/4" to 2".**

Part Number	Description
TOOL128	Tire balancer for 3/4" diameter axles (common on experimental aircraft)
TOOL129 (Supersedes TOOL108)	Tire balancer for 1", 1 1/4", and 1 1/2" axles, including Cessna 300 and 400 Series tapered axles with 1 1/2" and 1" bearing bores.
TOOL129 LA-KT	Large Axle Bushing Kit for 1 1/8" and 2" axles (compatible with TOOL129 only)
TOOL108 LA-KT	Large Axle Bushing Kit for 1 1/8" and 2" axles (compatible with TOOL108 only)

### McFarlane Aircraft Propeller Balancing Bushing Kit

**Fine tune propeller balance with this accurate and easy to use bushing kit!**

An out of balance propeller can lead to harmful vibrations and costly aircraft maintenance.

Costly issues that may arise from an out of balance propeller include:

- Excessive load on crankshaft bearings
- Cracking of propeller and spinner bulkheads
- Engine mount wear and deterioration
- Distracting airframe vibration

P/Ns:

**TOOL129 P1-KT (Compatible with TOOL129 Only)**

**TOOL108 P1-KT (Compatible with TOOL108 Only)**



P/N TOOL129 with TOOL129 P1-KT

The McFarlane Propeller Balancing Bushing Kits are add-ons for either P/N TOOL129 or P/N TOOL108 tire balancers. These bushing kits make it possible to check the static balance of a propeller quickly and accurately.

- More accurate than knife edge and mandrel methods
- Allows for a quick check after minor repairs
- Durable wooden storage box
- Works with nearly all fixed pitch propellers
- Includes one 2 1/4" diameter bushing for SAE standard crankshaft bores, two cone bushings for the other side of the hub for bores ranging from 2 1/4" to 5 1/8" diameter and complete instructions **1**

**1** Instructions cover the use of the tool for checking balance. Propeller manufacturer and FAA guidance must be used when changing the balance of a propeller; some manufacturers require the use of an authorized propeller repair station.

Part Number	Description
TOOL129 P1-KT	Propeller balancing bushing kit (compatible with TOOL129 only)
TOOL108 P1-KT	Propeller balancing bushing kit (compatible with TOOL108 only)



**Adjustable Elevator Neutral Rigging Tool for Cessna Aircraft**

Save time, you'll always have the correct tool!  
P/N TOOL126

Proper elevator rigging is necessary for full range of motion and maneuverability of the airplane. Many Cessna maintenance manuals require the fabrication of a tool to hold the yoke in the neutral position while the mechanic rigs the elevator control system. These tools utilize the holes for the control gust lock. At least 17 different sizes of rigging tools are required to cover the various Cessna aircraft. Now there is one tool to replace them all.

The McFarlane Elevator Neutral Rigging Tool is adjustable from 0.4" to 2.5" and universal in design, consisting of six different pin sizes to fit your application. This tool may also be used to properly rig other makes of aircraft with similar elevator neutral rigging requirements.

**Features and Benefits**

- Replaces 17 costly tools
- Quick setup and adjustment
- Simple to use instructions
- Includes compact storage box
- Replacement parts available separately
- Stainless steel components

**Fits most Cessna  
150 thru 425 aircraft!**

Elevator Neutral Rigging Tool Replacement Parts	
Part Number	Description
6409	.050"/1.3mm Hex Wrench
6870	Square Nut
6868-4	Pin, .188, Short
6868-3	Pin, .188, Long
6868-1	Pin, .209, Short
6868-2	Pin, .209, Long
6869-1	Pin, .250, Short
6869-2	Pin, .250, Long



**Note:**

Refer to your Cessna maintenance manual to determine if your model requires the use of the elevator neutral rigging tool and follow its guidelines for proper pin selection and adjustment guidelines.

**Interesting History**

Early Cessna aircraft control gust lock holes were aligned with the elevator in the neutral position. This hole placement created safety concerns after Cessna realized that it would be possible for a pilot to take off with the control lock in place, but the lack of control function would not allow for a safe climb rate. Cessna remedied this safety hazard, beginning in the late 1960's, by moving the hole on the control column closer to the yoke. This change prevents flight. With the hole placement moved, new tools were required to be fabricated to align the elevator in the neutral position during rigging.



**Mr. Funnel**

P/Ns F1C, F3C and F8C

Fuel filter funnel stops water and dirt. The Teflon coated stainless steel filter is so fine that water cannot get past it! Works with all aviation fuels, gasoline, diesel and kerosene.

- Tested and proven in rugged Arctic environment
- Expected 10 year life
- Fast flow rates
- Self cleaning lifetime filter
- Filter stops water and dirt
- Conductive plastic

Part Number	Size	GPM
F1C	6" X 3.5"	2.7 Gallons per minute
F3C	8.75" X 5.5"	3.5 Gallons per minute
F8C	10" X 8.5"	5.0 Gallons per minute

Manufactured by Hopkins Manufacturing Corp.



**Buss Fuses**

**Hard to find 9/32" OD  
4AG/AGS/ABS Series**

The 4AG series fuses are commonly specified in older aircraft. About 30 years ago Buss superseded them to the obsolete AGS series fuses. Even this newer series, is now leaving many aircraft owners struggling to find replacements.

The AGS fuses are now being replaced by ceramic ABS series of fuses that have the same electrical and thermal performance.

McFarlane now has all three series (4AG, AGS, ABS) with a mix of new and new surplus fuses in stock.

**Note:** AGC series auto fuses are smaller (1/4" OD) and have different thermal properties than the 4AG/AGS/ABS fuses.

- Glass or ceramic tube, 9/32" X 1-1/4"
- P/Ns 4AG-#, AGS-#, or ABS-# Where # indicates current rating in Amps (1 to 40 Amps)
- Sold in packs of 5 each





## Exhaust Valve Guide **Cleaning** Reamers for Continental and Lycoming Engines

U.S. Patent  
No. 9,878,354

U. S. Patent No. 9,878,354

### Why McFarlane Special Reamers?

McFarlane now offers special valve guide reamers sized specifically for cleaning Continental and Lycoming exhaust valve guides. Standard valve guide reamers are designed to perfect the guide hole size when reaming new guides. The standard reamer pilot is sized to fit the small bore of a new unfinished guide to insure stability and a straight finished bore. When this same type of reamer is used to clean the valve guides, the pilot is smaller than the finished hole. This causes the reamer to wander and misalign while it is being started and turned in the guide hole.

The McFarlane cleaning reamers have a pilot the same size as the valve stem. This properly sized pilot forces the reamer cutter to start straight and follow the correct valve stem path through the guide hole. **Finally, a tool that is designed for the job!**

While using standard reamers to clean valve guides, you probably have noticed that you have some valve guide metal in the reamer flutes afterwards. This metal is cut from the sides of the guide when hard carbon deposits displace the unguided reamer from the original guide hole, or the reamer was not started in alignment with the guide hole. Wavy or gouged guide holes cause premature carbon buildup, poor heat transfer, and early guide hole wear. Prevent damage to your valve guides by using McFarlane Cleaning Reamers!

### Features and Benefits

- Discounted pricing for complete set
- Spiral flutes for a better guide finish
- Pilot sized specifically for cleaning
- Cleans guides without notching guide surfaces
- Constructed of precision ground, high speed tool steel



**Note:** Reference Lycoming Service Instruction 1425A, SSP-1776 and SSP-578 and the appropriate overhaul manual or the appropriate Continental overhaul manual (Note: There are errors in some of the Continental service bulletins regarding reamer sizes.) to determine which specific valve guide sizes you have and the required reamer size before purchasing the necessary cleaning reamer. Lycoming Mandatory Service Bulletin No. 388C requires exhaust valve guide cleaning every 300 hours for helicopter engines and every 400 hours for all other engines. McFarlane valve guide reamers are for cleaning carbon build-up only and must not be used for finish reaming of new valve guides.



Photo courtesy of Jose Oliveros

Continental Cleaning Reamers		
Part Number	Finished Ream Diameter (Corresponds to valve guide ID)	Pilot Diameter (Corresponds to valve stem diameter)
VGR-CN-KT	Contains one of each sized reamer	
VGR-CN1	0.3750 - 0.3758	0.3715 - 0.3725
VGR-CN2	0.4350 - 0.4362	0.4310 - 0.4320
VGR-CN3	0.4365 - 0.4375	0.4320 - 0.4330
VGR-CN4	0.4370 - 0.4378	0.4325 - 0.4335
VGR-CN5	0.4375 - 0.4385	0.4330 - 0.4340
VGR-CN6	0.3427 - 0.3435	0.3390 - 0.3400
Lycoming Cleaning Reamers		
Part Number	Finished Ream Diameter (Corresponds to valve guide ID)	Pilot Diameter (Corresponds to valve stem diameter)
VGR-LC-KT	Contains one of each sized reamer	
VGR-LC1	0.404-0.405	0.4012-0.402
VGR-LC2	0.437-0.438	0.432-0.4333
VGR-LC3	0.4985-0.4995	0.4935-0.4945
VGR-LC4	0.4995-0.5005	0.4957-0.4965

**Maintenance Tip:**  
Lycoming suggests using ordinary cup grease on the flutes of the reamer to remove deposits with the reamer rather than allowing the deposits to fall into the cylinder.

## Pin Punch Set with Replaceable Tips

Save money on repetitive tool replacement!

P/N TOOL127

How many times have you reached into your toolbox for a pin punch only to find the tip bent or broken from the last job? The McFarlane pin punches feature economical replaceable tips. Spare tips are even included with every set. Simply replace the tip as necessary.

**No more wasted money on fragile pin punches!**

### Superior Material for Longer Tip Life

Traditional pin punches easily bend or distort. McFarlane has solved this problem by using work hardened extra tough steel. McFarlane work hardened punches provide you with superior driving ability.

### Features and Benefits

- Convenient shadowed case
- Economical replacement tips in three different lengths
- Shock absorbing grip - stops "finger sting"
- Hardened tool steel handle
- Work hardened extra tough steel tips



### Pin Punch Set Contents

This convenient set includes three common pin punch sizes: 1/16", 3/32", and 1/8". Two long, four medium, and two short tips are included for each size. You can use a short stable tip to start driving the pin out and then change to a longer tip when you need more length to finish the job.

**CAUTION**  
Always wear eye protection when using punches. Do not reuse broken punch tips.

P/N	Description	Package Qty
704KT	Punch Assortment, 1/16"	2 short, 4 med., 2 long
704LR	Punch Refill, Long, 1/16"	5
704MR	Punch Refill, Med, 1/16"	5
704SR	Punch Refill, Short, 1/16"	5
706KT	Punch Assortment, 3/32"	2 short, 4 med., 2 long
706LR	Punch Refill, Long, 3/32"	5
706MR	Punch Refill, Med, 3/32"	5
706SR	Punch Refill, Short, 3/32"	5
707KT	Punch Assortment, 1/8"	2 short, 4 med., 2 long
707LR	Punch Refill, Long, 1/8"	5
707MR	Punch Refill, Med, 1/8"	5
707SR	Punch Refill, Short, 1/8"	5

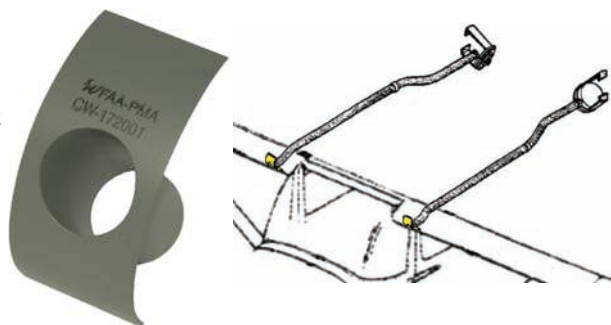
FAA-PMA Approved

**Vent Tube Adapter for Cessna Aircraft**  
**Improved vent tube adapter restores rear seat airflow**  
 P/N CW-172001

- Improved! Aluminum won't crack like the cheap OEM plastic adapters
- Direct replacement for Cessna P/Ns 0501030-2, 0700325-1 and 0700325-2
- Limited lifetime warranty
- Save up to 50%
- Two required per aircraft
- Includes installation instructions

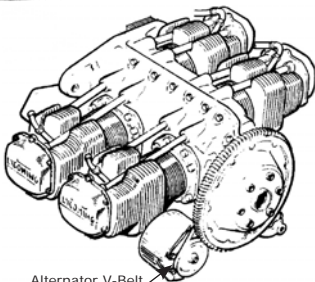
Model
172, 172A,B,C,D,E,F,G,H,J,K,L,M,N,P,Q
172RG, FR172E,F,G,H,J,K
175A,B,C
180, 180A,B,C,D,E,G,H,J
182, 182A,E
185, 185A,B,C,D,E, A185E,F
210-5 (205)
210B,C,D,E

Manufactured by Wingate Aero & Fabrication LLC



**Alternator V-Belt for Piper Aircraft**  
**Finally an approved belt at an affordable price!**  
 P/N MC73965-015

- High quality manufacture
- Direct replacement for P/Ns 10069-806, 452-541, 564-852, 73965-015 and 73965-15
- Save \$\$



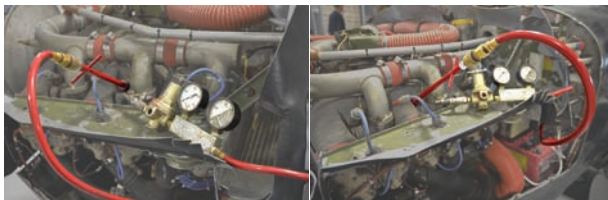
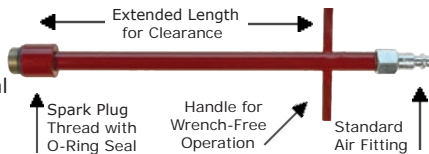
Alternator V-Belt

Model	Serial Number
PA-28-151	All
PA-28-161	28-7716001 thru 28-8616057
PA-28-161	2816001 thru 2816119
PA-28-181	28-7690001 thru 28-8690062
PA-28-181	2890001 thru 2890231
PA-28-236	28-7911001 thru 28-8611008
PA-28R-201	2837001 thru 2837061
PA-28R-201	28R-7737002 thru 28R-7837317
PA-28R-201T	2803001 thru 2803012
PA-28R-201T	28R-7703001 thru 28R-7803373
PA-28RT-201	28R-7918001 thru 28R-8218026
PA-28RT-201T	2831001 thru 2831038
PA-28RT-201T	28R-7931001 thru 28R-8631005
PA-32RT-300	32R-7885002 thru 32R-7985106
PA-32RT-300T	32R-7787001 thru 32R-7987126

**Compression Tester Extension**

P/Ns  
**EXTENSION CT1 (18mm thread)**  
**EXTENSION CT12 (12mm thread)**  
**EXTENSION CT14 (14mm thread)**

- Wrench-free compression testing
- Quality welded construction, o-ring seal
- Allows for exhaust system and baffling clearance
- Makes compression testing easier
- Save time and \$\$



Manufactured by Baines Specialties LLC

**Pitot Heater Elements**

Fits Piper PA-28-151 and PA-28-161 aircraft

- Each pitot tube requires two heaters
- Diameter of each part number is 3/16"

Manufactured by PMA Products Inc



Part Number	Aircraft	Serial Number	Voltage	Power	Length <sup>2</sup>
CA464-356	PA-28-151	All	14V	70 watts	3.25"
CA464-356	PA-28-161	2816001 thru 28-8216059	14V	70 watts	3.25"
CA464-357	PA-28-151	All	14V	100 watts	4.25"
CA464-357	PA-28-161	2816001 thru 28-8216059	14V	100 watts	4.25"
CA464-440	PA-28-161	All	28V	100 watts	4.25"
CA464-441	PA-28-161	All	28V	70 watts	3.25"

<sup>1</sup> P/N CA464-357 and CA464-440 are installed at an angle within the pitot tube.

<sup>2</sup> Length is approximate

**Placards**

Commonly replaced placards available!  
 Each placard measures 3 1/2" X 1 1/4".

**New!**

Part Number	Description
JM-005	No Step
JM-006	No Push
JM-007	No Lift
JM-008	Lift Here
JM-012	80-87
JM-013	100/130
JM-014	Auto Fuel
JM-015	No Smoking
JM-016	External Power 12 Vol
JM-017	External Power 24 Vol
JM-018	Aux Tank
JM-019	Zero Fuel Weight
JM-020	Maximum Baggage Weight
JM-021	Jet Fuel Only
JM-022	Avgas Only
JM-023	Fasten Seat Belt
JM-028	Door Warning
JM-100	100LL



Manufactured by J&M Aircraft

**Nylon Washers**

- Protects the aluminum surfaces under cowl, spinners and fairing screws!
- High quality industry standard washers
- These will not deform like soft washers
- Sold in convenient 100 packs!

P/Ns:

- NAS1515H04L
- NAS1515H06L
- NAS1515H08L
- NAS1515H3
- NAS1515H4



**Standard Hardware**

AN, MS and NAS series. Please call or view online.



**Pitot Tube Screws**

P/N MS24693S224

- Replaces special extra fine thread AN507-640R4 screws
- Used on many pitot tube assemblies



Sold in 10 packs!

Tools and Miscellaneous

### D A M™ Aircraft Pulley Oil

New name, same dependable oil!  
Featuring a re-designed needle oiler.  
Great for unreachable areas with traditional applicators.

- Does not dry out and get sticky
- Loosens old stiff pulley grease
- Save the labor of re-oiling the control system every year!



Qty	Description
<b>P/N PULLEY OIL KT</b>	
1	Pint, Pulley Oil
1	Needle Oiler with Extension, .34 fl oz (10mL)
<b>P/N PULLEY OILER KT</b>	
1	Needle Oiler with Extension, .34 fl oz (10mL)
<b>P/N PULLEY OIL</b>	
1	Pint, Pulley Oil

20" Extension  
P/N 7249  
now sold  
separately!



### Spark Plug Gasket

Best price - quantity discount!  
MS17840-1 18mm solid copper



### McFarlane T-Shirt

- 50/50 Cotton/Polyester
- Available in sizes S, M, L, XL \$6.95.
- Also available in 2X, 3X and 4X.



### KROIL and AEROKROIL Penetrating Oil

Throw away your other penetrating oil! This stuff works!!

P/N AEROKROIL - 10 oz. aerosol can of kroil

P/N KROIL GAL - One gallon can

- Loosens frozen metal parts
- Creeps into openings as small as one millionth of an inch!
- KROIL will loosen the toughest stuck together or rusted metal parts.
- Use Kroil to loosen nuts, bolts, studs, screws, pulleys, shafts, bearings, pipe threads, valve guides, exhaust parts or any corroded metal parts.
- For industrial use only. KROIL and AEROKROIL meets and exceeds military specifications AA50493 and VV-P-216.



### Stabilizer Jack Screw Pin Removal Tool

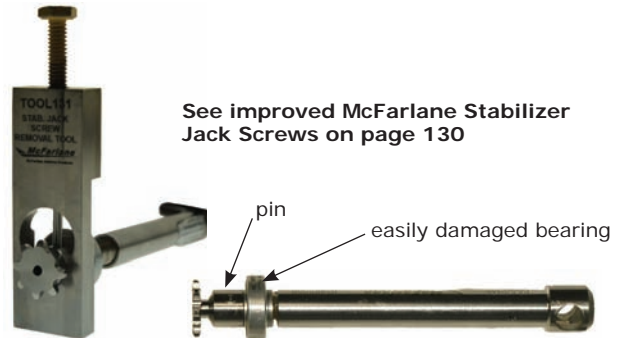
for Cessna Aircraft

P/N TOOL131

- For Cessna 180/182/185 jack screws
- Easily and safely remove and install your roll pin with the turn of a wrench
- No more damaging your jack screw by using a punch and hammer
- Manufactured with hardened stainless steel for increased tool life
- Works only with the larger McFarlane pin sold with P/N 1111
- Includes adapter Barrel P/N 7011 for installation of new roll pin



P/N 7011  
also sold separately



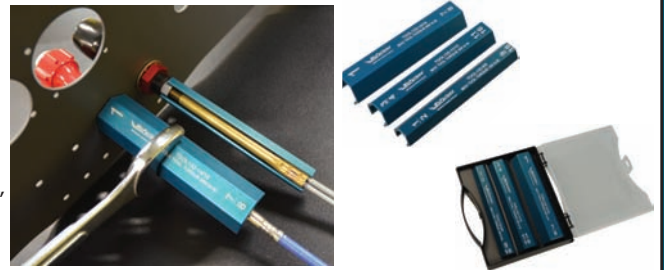
See improved McFarlane Stabilizer Jack Screws on page 130

### Push-Pull Control Wrench Set

Install and remove push-pull control nuts behind the panel

P/N TOOL132

- Slot allows access to nut on installed control
- Wrench anywhere on the external hex
- 5 1/2" length reaches deep, hard to access nuts
- Lightweight aluminum is easy to handle when using overhead
- Works with all controls - six nut sizes: 1/2, 9/16, 11/16, 3/4, 7/8 and 1"
- Many other uses (brake/fuel/vent/hydraulic lines, etc)
- Includes case



### Tempest Oil Filters

P/N AA48103-2,  
P/N AA48108-2,  
P/N AA48109,  
P/N AA48110-2



### Champion Oil Filter Kit

P/N CFO-100-1  
Oil Filter  
P/N CH48104-1



### Vacuum Pump Wrench

Finally a vacuum pump wrench that can get into those really tight spots!

P/N TOOL133 (use for small pumps)  
P/N TOOL133-L (use for large pumps)

A different wrench for the two sizes of pumps (one wrench can't do either pump well)

- Heat treated tool steel
- Precision made
- 1/4" square drive
- Black oxide finish
- Torque wrench friendly



### Aeroshell Oil

P/N AEROSHELL W15W-50



### Phillips Oil

P/N PHILLIPS XC 20W50



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# Notes



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### WARRANTY

All products are warranted for one year from the date of sale to the original consumer against defects in workmanship and materials. McFarlane Aviation, Inc.'s only obligation shall be to repair or replace the product at the manufacturer's option provided it is returned transportation prepaid to the factory within one year from the date of sale to the original consumer. Defects or failures due to incorrect installation, improper usage or handling, or by any other condition beyond our control, as to any and all of which McFarlane Aviation, Inc. will be sole judge, are specifically excluded from this warranty. This warranty gives you specific legal rights.

Warranty for product not manufactured by McFarlane is determined by the manufacturer. Contact a McFarlane representative before returning product for information and instructions. Not all products need to be returned. Shipping may be refunded after evaluation but customer assumes risk of loss while in transit.

EXCEPT AS PROVIDED IN THIS AGREEMENT, THERE ARE NO EXPRESS WARRANTIES COVERING THE PRODUCTS, AND MCFARLANE AVIATION, INC. SHALL NOT BE RESPONSIBLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES RELATING TO, OR RESULTING FROM ANY DAMAGE TO, OR DEFECT IN, SAID PRODUCTS. TO THE EXTENT ALLOWED BY LAW, EXCEPT FOR THE WARRANTY EXPRESSLY PROVIDED IN THIS AGREEMENT, MCFARLANE AVIATION, INC. HEREBY DISCLAIMS ANY IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

### JURISDICTION AND VENUE

The sales agreement was formed in the state of Kansas and shall be governed by the laws of the state of Kansas. By purchasing a product(s) from McFarlane Aviation, Inc., customer hereby submits itself to the jurisdiction of the State of Kansas for all disputes arising from or relating to this Agreement or either parties' performance (or lack thereof) of any obligation under this Agreement. Venue for adjudicating the merits of any claim arising from this agreement shall be solely the Kansas District Court for Douglas County, Kansas, and Customer hereby waives any claim of improper venue or that such forum is not convenient; provided, however, that notwithstanding the foregoing, a lawsuit may be filed by a party (the "Plaintiff" against the other party (the "Defendant") in a court located in the State and County in which the Defendant's primary place of business is located. Claims made under this agreement shall be made within twelve months of the date of purchase, and the parties to this agreement hereby waive any longer statute of limitations that may be applicable.

In the event that legal action be instituted to enforce the terms of this agreement, the prevailing party shall be entitled to reasonable attorney's fees and costs including costs of collection and reclaiming inventory.

### TRACEABILITY

All McFarlane Aviation, Inc. parts are fully traceable with the lot number that is marked on each part or its packaging. McFarlane maintains traceability to all purchases, raw materials, processing, inspections and testing using this number. Record this number in your aircraft maintenance records and you will always have traceability of our replacement parts. Upon request with a valid lot number, specific information will be provided at no charge. If a complete or extensive level of detail is requested (e.g. details for all levels of sub-assemblies), then an administrative fee may be charged as the amount of data can be substantial.

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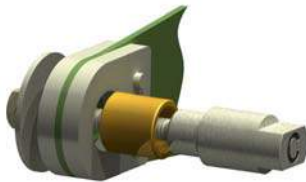


**Valve Guide  
Cleaning Reamers  
for Continental and Lycoming  
Engines**

U.S. Patent  
No. 9,878,354



**Elevator and Rudder Bearing  
Installation Tool for  
Cessna Aircraft**



**Push-Pull Control Wrench Set**



**U-Joint Taper Pin Removal  
Tool for Piper Control Yoke**

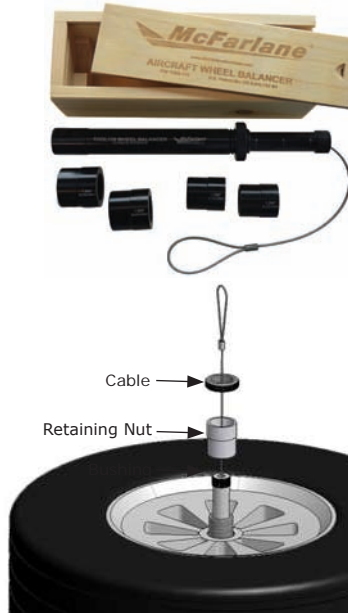


Witness hole drill  
fixture, see page 104

**Adjustable Elevator  
Neutral Rigging Tool  
for Cessna Aircraft**



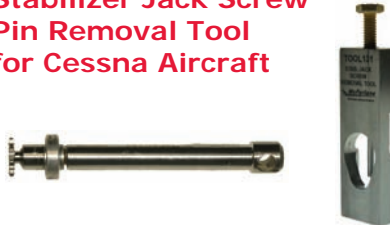
**McFarlane Aircraft  
Prop and Wheel Balancer**



**Small Radius 1/8" Tube Bender**



**Stabilizer Jack Screw  
Pin Removal Tool  
for Cessna Aircraft**



**Vacuum Pump Wrench**



**Pin Punch Set with  
Replaceable Tips**



**Seat Roller Housing Gauge  
for Cessna Aircraft**



**Seat Rail Wear Gauge  
for Cessna Aircraft**



**Flap Roller Installation Tool**



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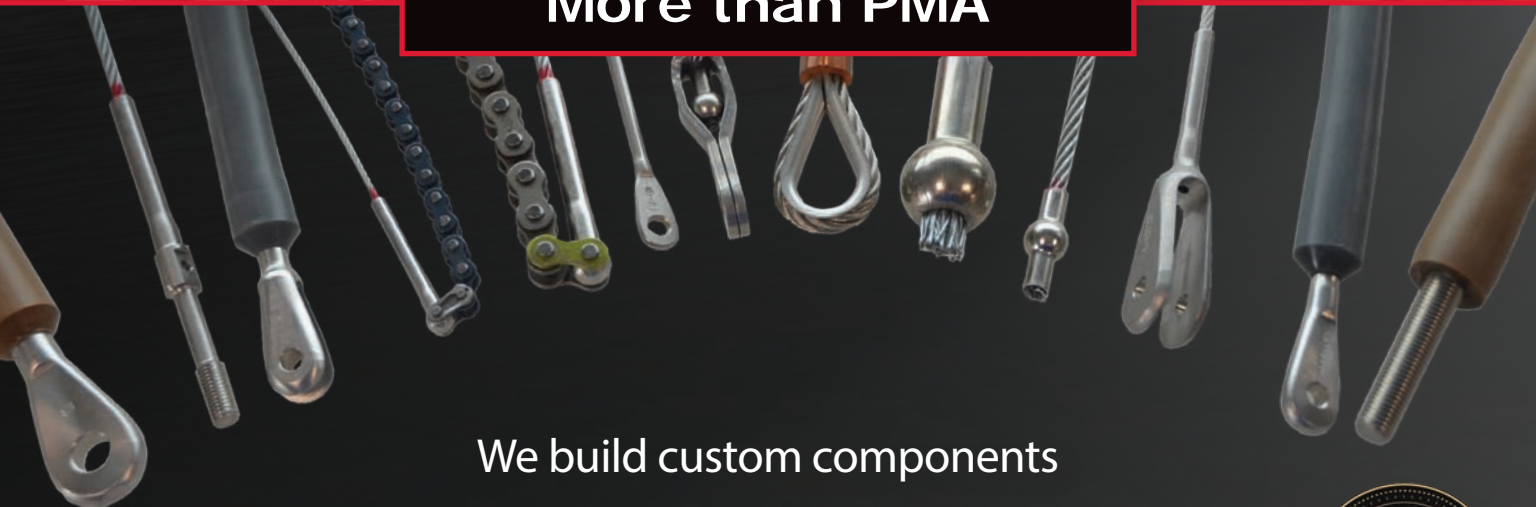
Push-Pull Controls



Seat and Cargo Rails



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