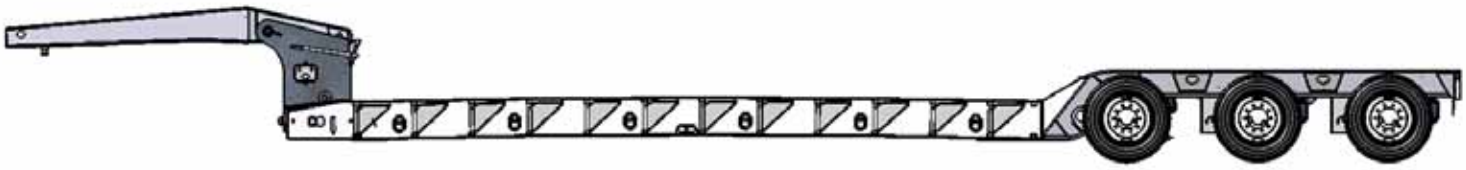
PARTS AND OPERATORS MANUAL FOR DETACHABLE GOOSENECK



SERIAL NUMBER_____

JANUARY 2014

THIS PARTS BOOK
is for the following trailer:

1. Model Number _____

2. Serial Number _____

When ordering parts for this trailer:
A. Order through your Manitex Load King Dealer.
You can reach the factory at 888-264-5522
or on the web at www.loadkingtrailers.com
B. Include the following information:

1. Model Number
2. Serial Number
3. Part Number and Description
4. Quantity
5. Where to ship
6. How to ship and any special instructions

C. Be sure to designate Right hand (Curbside) or Left hand (Roadside) in those cases where similar parts appear on both sides of the trailer. To determine Right or Left hand, face the trailer from the rear.

INDEX

REPORTING SAFETY DEFECTS

If you believe that your vehicle has a defect, which could cause unsafe operating conditions, personal injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying Load King. If NHTSA receives similar complaints, it may open an investigation. If NHTSA finds that a safety defect exists in a group of vehicles, it may order a recall and remedy campaign.

However, NHTSA cannot become involved in any individual problems between you, your dealer, or Load King. To contact NHTSA you may either call the Auto Safety Hotline toll-free at 1-800-424-9393 (366-0123 in Washington, DC area) or write to:

NHTSA
US Department of Transportation
400 7th Street SW, (NSA-11)
Washington, DC 20590

You can also obtain other information about motor vehicle safety from the Hotline.

LIMITATION OF LIABILITY

It is expressly understood that the COMPANY'S liability for its Products, whether due to breach of warranty or otherwise, is limited to the furnished of such replacement parts, F.O.B. factory, and the COMPANY will not be liable for any other injury, loss, damage, or expense, whether direct or consequential, including but not limited to loss of use, income, profit, or production, or increase in cost of operation, or spoilage of or damage to material, arising in connection with the sale, installation, use or inability to use, or the repair or replacement of the COMPANY'S Products.
While Terex/Load King designs and manufactures its specific trailer configurations to industry standards, it is the ultimate responsibility of the buyer/operator to assure that all loads are properly loaded and distributed. All loads must comply with the applicable state and federal load limits.

WARRANTY

"All of COMPANY'S Products are of high quality and are manufactured in conformity with the best commercial practices in the various lines. The COMPANYguarantees all Products manufactured by it to be free from defects in material and manufacture at the time of shipment, for one year from date of delivery. The COMPANY will furnish replacements for such parts as the COMPANY finds to have been defective at the time of delivery or, at the COMPANY'S option, will make or authorize repairs to such parts, provided that, upon request, such parts are returned transportation prepaid, to the factory from which they were shipped.

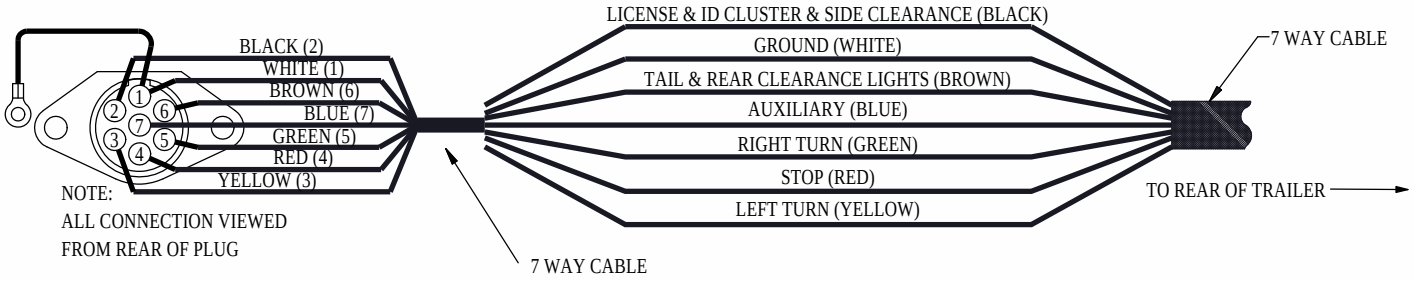
This guarantee shall not apply to any Product which has been subjected to misuse, misapplication, accident, improper installation, neglect (including but not limited to improper maintenance); accident; modification (including but not limited to use of unauthorized parts or attachments) or unauthorized adjustments. Engines, motors and any accessories finished with or used in the COMPANY'S Products, but which are not manufactured by the COMPANY, are not warranted by the COMPANY but are sold only with the express warranty, if any, of the manufacturers thereof. This warranty is limited to the first purchaser/user and is not transferable.

The FOREGOING IS IN LIEU OF ALL OTHER WARRANTIES, WHETHER EXPRESSED OR IMPLIED (INCLUDING THOSE OF MERCHANTABILITY AND FITNESS OF ANY PRODUCT FOR A PARTICULAR PURPOSE), AND OF ANY OTHER OBLIGATION OR LIABILITY ON THE PART OF THE COMPANY."

SAFE TRAILER OPERATION

BEFORE YOU LOAD

1. Use caution when climbing on and off the trailer.
2. Be sure the wiring from the tractor matches the schematic below.



3. Know the equipment you're planning to load and carry. This includes all basic machine functions like levers, controls, switches and gauges.
4. If you don't know how to run the machine safely and correctly, get a trained operator to load and unload the machine for you.
5. Be confident that the physical dimensions of the machine comply with all local and state highway standards.
6. Make sure the towing vehicle can safely support the machine's weight.
7. When using the outriggers and planks, be sure not to exceed 18,900# per outrigger 6" out from flange. See figure 1below.

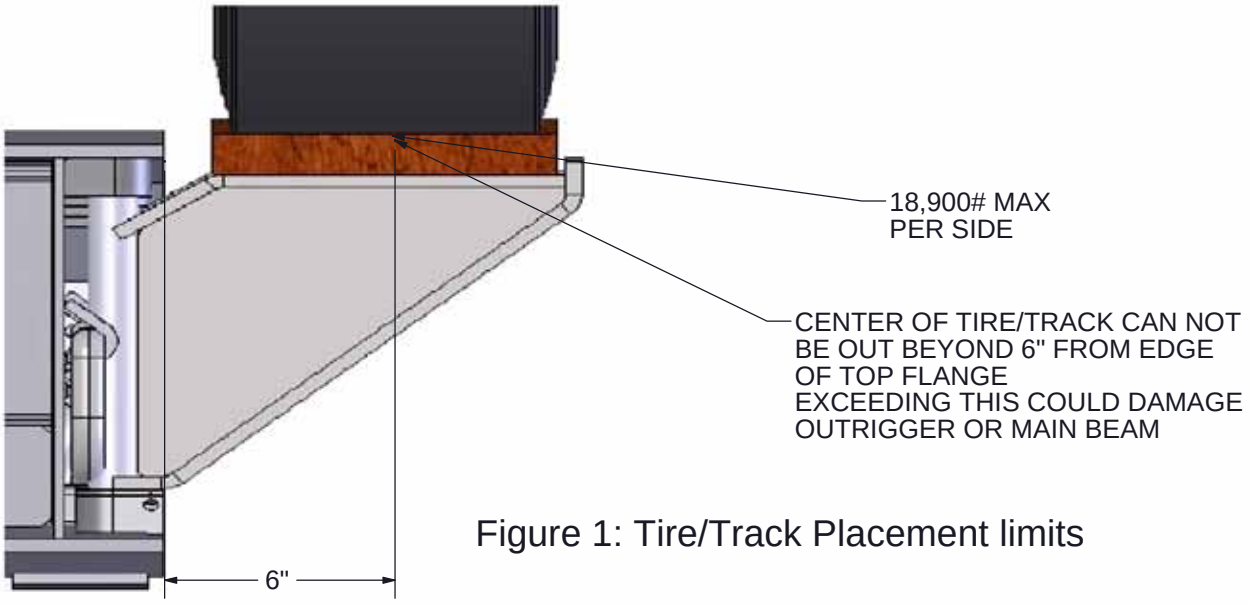


Figure 1: Tire/Track Placement limits

SAFE TRAILER OPERATION

8. To help prevent rolling, use chocks or blocks to secure the wheels of the transport vehicle and the trailer.
9. Make sure the trailer bed and ramps are dry and clean. Oil, grease, mud--even water--can reduce traction when loading.
10. Be sure to look overhead before loading, and make sure the equipment is clear of any overhangs, power lines or other obstructions.
11. Before moving the equipment aboard, lower buckets, blades, forks and other attachments. Try to keep the machine's maximum height as low as possible.
12. Always load equipment from level ground.
13. Do not side load trailer on uneven terrain.

AFTER YOU LOAD

14. Lower and secure buckets, booms and other mounted or loose attachments to the bed of the trailer.
15. Shut off the engine and remove the key. Follow all recommended shutdown procedures, such as placing the transmission in park, and engaging the emergency brake.
16. Place chocks behind the wheels or tracks of the equipment being loaded.
17. Secure the machine to the trailer using chains and load binders.
18. Make sure the tie-downs don't pinch, crimp or cut any hoses, cylinders, valves, rods or tires.

WHEN TRANSPORTING

19. Make sure the truck or towing vehicle has a road emergency kit on board. It should contain things like flares, jumper cables, CB radio, flashlights, tow cable, cell phone etc.
20. Always slow down for curves, wet roads and downgrades.
21. Never operate machinery when fatigued; pull over and rest if you're tired.

SAFE TRAILER OPERATION

22. Avoid driving at night; the potential for over-the-road accidents is three times greater at night than during the day.
23. Don't attempt to pass on hills or curves, and be alert to crosswinds or wind gusts.
24. If you make a fuel or food stop, do a visual inspection of the truck and trailer before you become mobile again.
25. While in transit, if you hear unusual noises or smell something burning, stop at a safe location completely off the highway and check it out.
26. If you should have a flat (either on the trailer or tow vehicle), don't hesitate to proceed slowly until you reach a safe location off the highway. But go slow--the road friction could ignite the flat tire and start a fire. Use flashers and flares.
27. If pulling a flip, stinger/flip, or mechanical booster with height control, make sure the height control swich is on NORMAL for road use.

WHEN UNLOADING

28. In reverse, follow the same basic suggestions that were outlined during the loading procedures.
29. Before operating the machine on the job, look for any damage that could have occurred during transit. Check for broken, missing or damaged parts. Check thetires for cuts or bulges. Check the hydraulic system and hoses for leaks or cuts.

Keep in mind the most common causes of accidents when transporting machinery over the road are generally due to:

1. Operator error.
2. Failure to match speed with driving conditions.
3. Failure to correctly secure the equipment to the trailer.

COLD WEATHER OPERATION

Cold weather causes lubricants to congeal, insulation and rubber parts to become hard, and fabricated parts to become somewhat brittle. These trends may lead to problems found in bearings, electrical systems, air systems, hydraulic systems, and weldments. Moisture attracted by warm parts due to usage can condense, collect and freeze to immobilize equipment. The operator of the tractor/semi-trailer rig must constantly be alert for indication of the effect of cold weather.

During any stop of an extended period, the service and the parking brake should be used with caution as they may freeze up. Use wheel chocks to secure the vehicle from moving. Check all structural fastenings, air system fittings, gaskets or seals, and bearings for looseness that may develop due to cold temperature contraction. **Do not over-tighten**. Check tire inflation. Tire inflation will decrease with temperature reduction. Allow hydraulic systems to warm-up before putting systems into operation.Periodically check drain holes in the bottom of the relay valves and storage compartments. They must be open at all times to operate properly, avoid moisture and ice entrapment.

HOT WEATHER OPERATION

Hot weather operation can create certain problems that must be checked. Expansion of parts may result in tightening of bearings, fasteners, and moving parts. Failure of gasketsand seals may also occur.The semi-trailer should be parked in the shade if possible. Long exposure to the sun will shorten service life of rubber components such as tires, light and hose grommets, hoses and paint. Check tire pressure early in the day before beginning operations. If the area is extremely humid, protect electrical terminals with ignition insulation spray. Coat painted exteriors and bare metal surfaces with an appropriate protective sealer. The use of filler-lubricator in the towing vehicle’s air delivery system is recommended.

HYDRAULIC SYSTEMS

The hydraulic system may have three power supply options:

1. Self-contained
2. Wet kit
3. Combination wet kit/self contained

The hydraulic system is High Pressure/Low Volume. The pressures needed to operate the systems vary from 1,500 PSI to 3,500 PSI. The main control valve has an adjustablepressure relief built into it. The relief setting for each particular trailer is set at the Load King factory. If the relief needs to be adjusted, the relief valve is on the pressure inlet side of the main hydraulic control valve. You would be looking for an Allen head or ½"nut screw with a lock nut next to the valve body. In general, loosening the lock nut and turning the screw in all the way and then back out 3 ¼ turns will get close to a relief of 3,000 PSI. Do not exceed 3,500 PSI relief.

NOTE: Adjusting the relief higher than the recommended setting will cause damage to the control valve, cylinders, and will VOID all warranty on the unit. More than the recommended flow of 10-GPM max will result in valve damage and will VOID all warranty.

RECOMMENDED SERVICE AND MAINTENANCE ON SELF-CONTAINED UNITS

The hydraulic fluid used in this system, on trailers working in normal temperature ranges, is any standard or universal 10-w hydraulic fluid. On trailers specifically ordered for Arctic conditions, Load King recommends the use of Aviation grade hydraulic oil (Pennzoil 5606 Frigitranz, Pennzoil AWX MV Arctic, Tex #15 Aircraft 5-w code 1537, or equivalent).

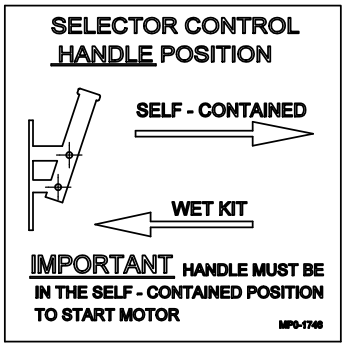
RECOMMENDED SERVICE AND MAINTENANCE ON SELF-CONTAINED UNITS

To properly check the fluid level in the reservoir, ALL cylinders in the system must be fully retracted (rods in). At this time the fluid level in the reservoir should be 1” below the top of the reservoir body. It is recommended, on units with a return line canister filter, to change the filter after every 100 hours* of service or annually. It is further recommended, to change the reservoir fluid after every 1000 hours* of service or annually. When changing the fluid, remove and clean the suction screen in the reservoir. This screen can be cleaned with any recognized cleaning solvent and blown dry before reinstalling.

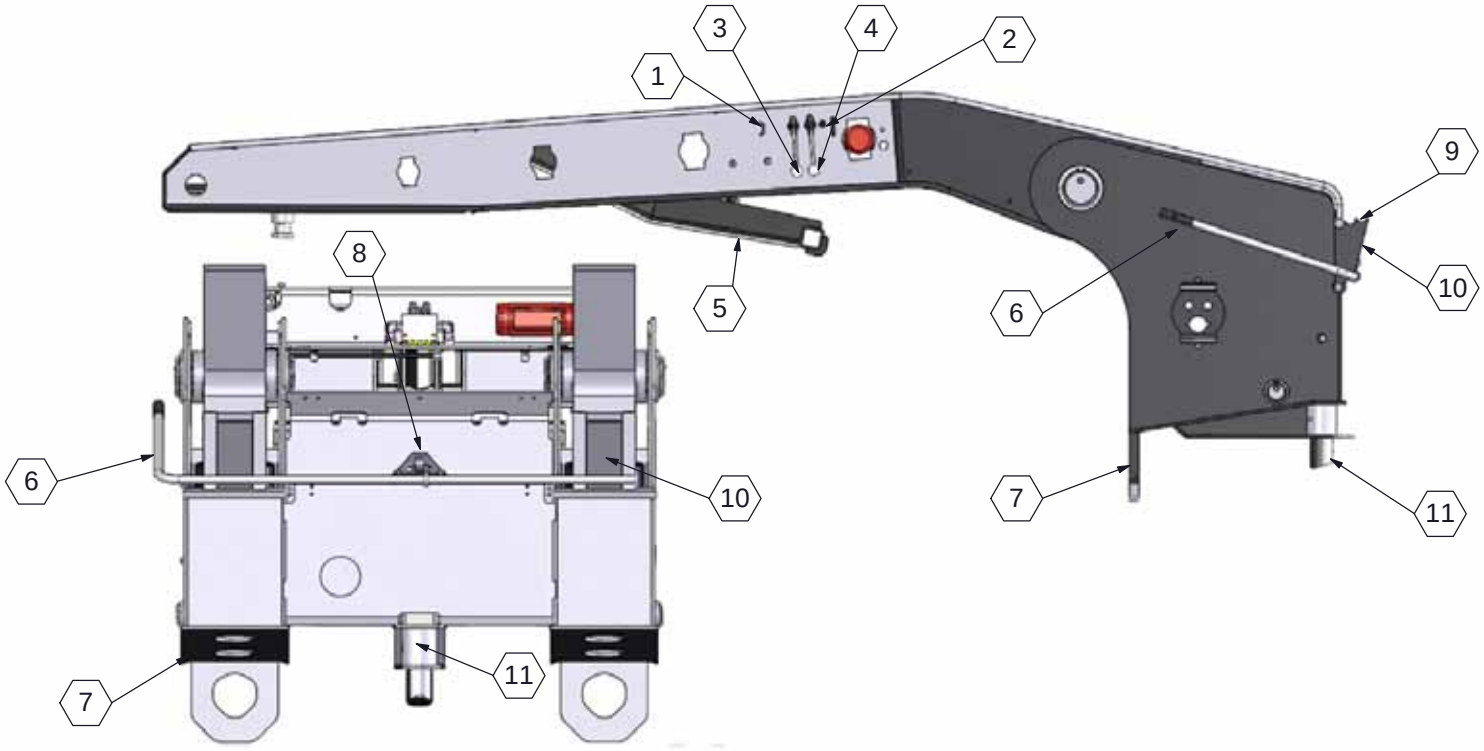
LOAD KING COMBINATION SELF-CONTAINED, WET KIT TRAILERS

Trailers having this feature can be operated either with the self-contained power source or the operator’s tractor supplied power source. To operate the trailer with the selfcontained power source, the handle must be pulled out, causing the spool to be pushed in. For the wet kit operation, the handle must be pushed in, causing the spool to be pulled out.

CAUTION: Starting the self-contained power source with the selector valve in the wet kit mode may damage the selector valve.



LOAD KING DETACHABLE GOOSENECK
OPERATING INSTRUCTIONS



VIEW OF GOOSENECK FROM TRAILER DECK

1. Air Lock Control
2. Pressure Relief Adjuster
3. Frame Lift Control
4. Deck Height Control
5. Frame Lift
6. Lock Plate Lever
7. Gooseneck Connecting Links
8. Safety Lock Pin
9. Lock Seats
10. Lock Plates
11. Air Lock Pin

The controls for this trailer are conveniently mounted on the upper gooseneck. Item 1(Air Lock Control) is a toggle air switch that operates the air cylinder in the gooseneck lock. Items 3 and 4 are hydraulic valves that regulate the frame lift and the deck height respectively. They are two way valves with a neutral detent.

DETACHMENT PROCEDURE

1. To begin the detachment procedure, start the hydraulic supply.
2. Pull out the deck height control lever (4), raising the gooseneck and deck (Figure 2) until the lock plates clear the lock seat (9), then return the height control lever to neutral.
3. Rotate the lock plate lever (6) up, thus swinging the lock plates out to clear the lock seat which also retracts the safety lock pin (8).

FIGURE 1

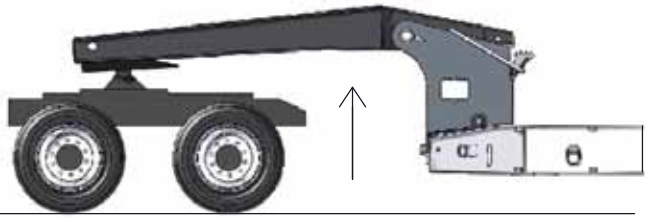


FIGURE 2

4. Push the deck height control lever (4) to lower the deck (Figure 3) to the ground. Continue to lower the gooseneck until there is approximately 1/4" clearance between the bottom of the deck pin and the gooseneck connecting links (7). When this clearance is obtained return the control lever to neutral.
5. Lower the frame lift (5) with the frame lift control lift (3) until the gooseneck is carried by the tractor or dolly, but still free of the deck.
6. Disconnect the air and electrical lines between the gooseneck and deck and place them where they will not be damaged.
7. Flip the air lock control knob (1) to the unlock position which will retract the lock pin from the deck. A minimum of 65 PSI is required for this operation.
8. The gooseneck is now ready to be detached. Pull slowly forward thereby removing the gooseneck from the deck (Figure 4). Once the gooseneck has cleared the lock area, the frame lift may be lowered more to allow for more ground clearance, if the operator desires. Stop the hydraulic supply.

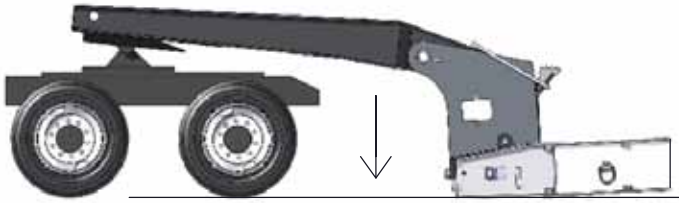


FIGURE 3

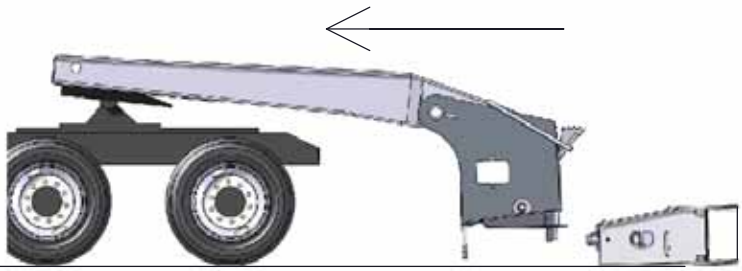


FIGURE 4

REATTACHMENT PROCEDURE

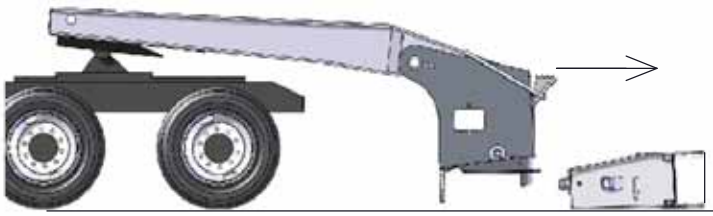


FIGURE 1

FIGURE 2

1. Before the connection can be made, the air lock control knob (1) MUST be flipped to the LOCK position. This lowers the lock pin to automatically lock when the gooseneck is reattached. (Figure 1)
2. The gooseneck is now ready to be reattached. When backing up to the deck, keep the gooseneck aligned with the pin guide (some gooseneck frame lift adjustment may be required) and slowly back into the trailer until the lock pin locks into place.
3. Reconnect the air and electrical lines between the gooseneck and the deck.
4. Retract the frame lift fully into the gooseneck (Figure 2). Never use frame lift to lift the trailer, or damage will result.
5. Pull out the deck height control lever (4) to raise the deck and load from ground level. Raise the deck until the lock plates (10) clear the lock seats (9). When the clearance is established, return the height control lever to the neutral position. (Figure 3)
6. Rotate the lock plate lever (6) down, thus swinging the lock plates under the lock seats. Set lock bar so the lock seat will sit in the second notch from the bottom. This also engages the safety pin (8) over the deck mechanism. If the lock pin is not fully engaged this step cannot be completed. This is a safety device built into all Load King hydraulic detachable goosenecks. Steps 2-5 may need to be repeated if the lock pin is not fully engaged.
7. Push in the height control lever (4), lowering the gooseneck until it rests solidly on the lock plates (Figure 4). Return the lever to the neutral position immediately.
8. Stop the hydraulic power supply and recheck the lock pin, lock plate safety lock positions, the air and electrical lines, and all normal safety checks. The trailer is now ready for transport.

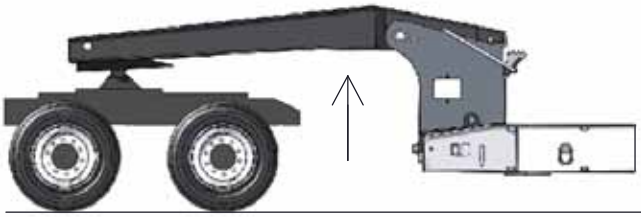


FIGURE 3

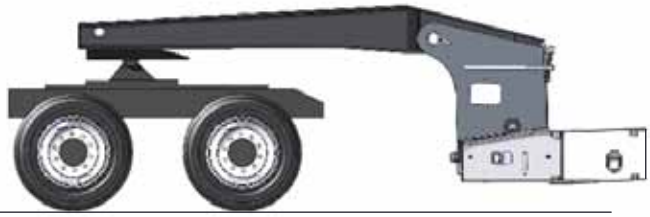


FIGURE 4

REMOVABLE DECK TO SUB-FRAME CONNECTION

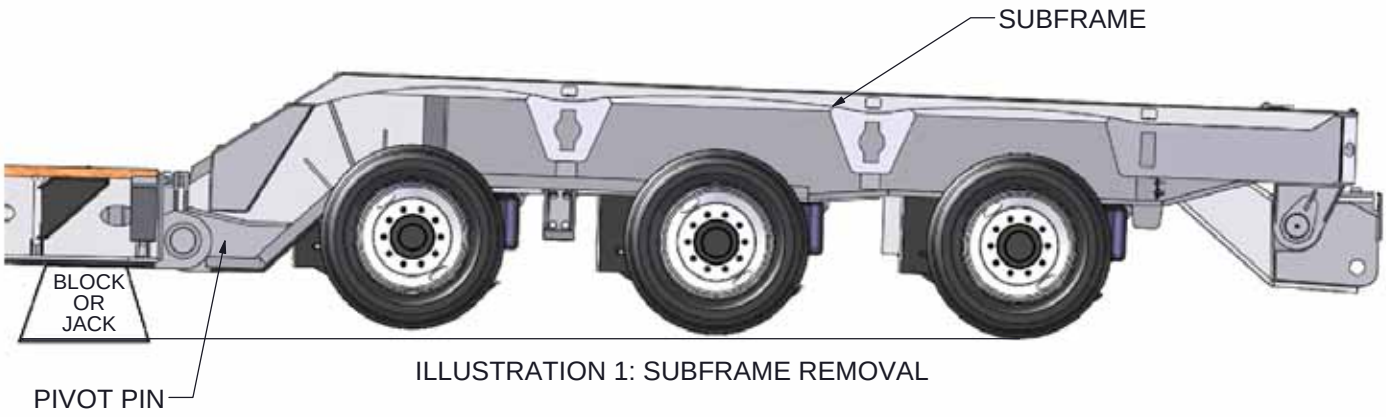


ILLUSTRATION 1: SUBFRAME REMOVAL

This connection style has trailer performance flexibility. The connection can be opened up and shims installed to add pre-load to the sub-frame to change axle load distribution. The other benefit is the deck and the rear sub-frame can be changed for trailer length variation.

ADDING OR TAKING OUT SHIMS IN THE CONNECTION AREA

Switch the air ride suspension to manual, raise the air bags on the suspension, then block the rear of the deck and then release the air pressure off the air bags on the suspension. This will lower the rear sub-frame, pivoting off the blocks and opening up the connection area. If more clearance is needed to install the shims simply lower the gooseneck which will lower the front of the deck.

DISASSEMBLING THE DECK FROM THE SUB-FRAME

Switch the air ride suspension to manual, raise the air bags on the suspension, then block the rear of the deck. Release some of the air in the suspension, lowering the sub-frame to take enough pressure off the pivot pin so it can be driven out.

LOAD KING MECHANICAL BOOSTER TO TRAILER

The booster can be lifted into place or with practice and a spotter, the trailer can be backed into the booster for hookup (Figure 1). The lower connecting pins must be installed first. The height of the trailer can be varied by the hand control on the trailer air ride system. The booster height can be controlled by the landing leg and or hand control on the booster air system.

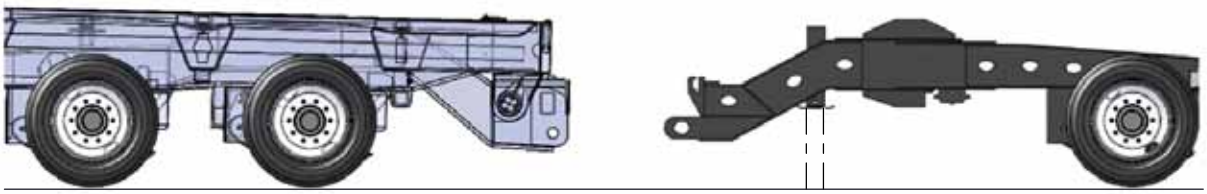
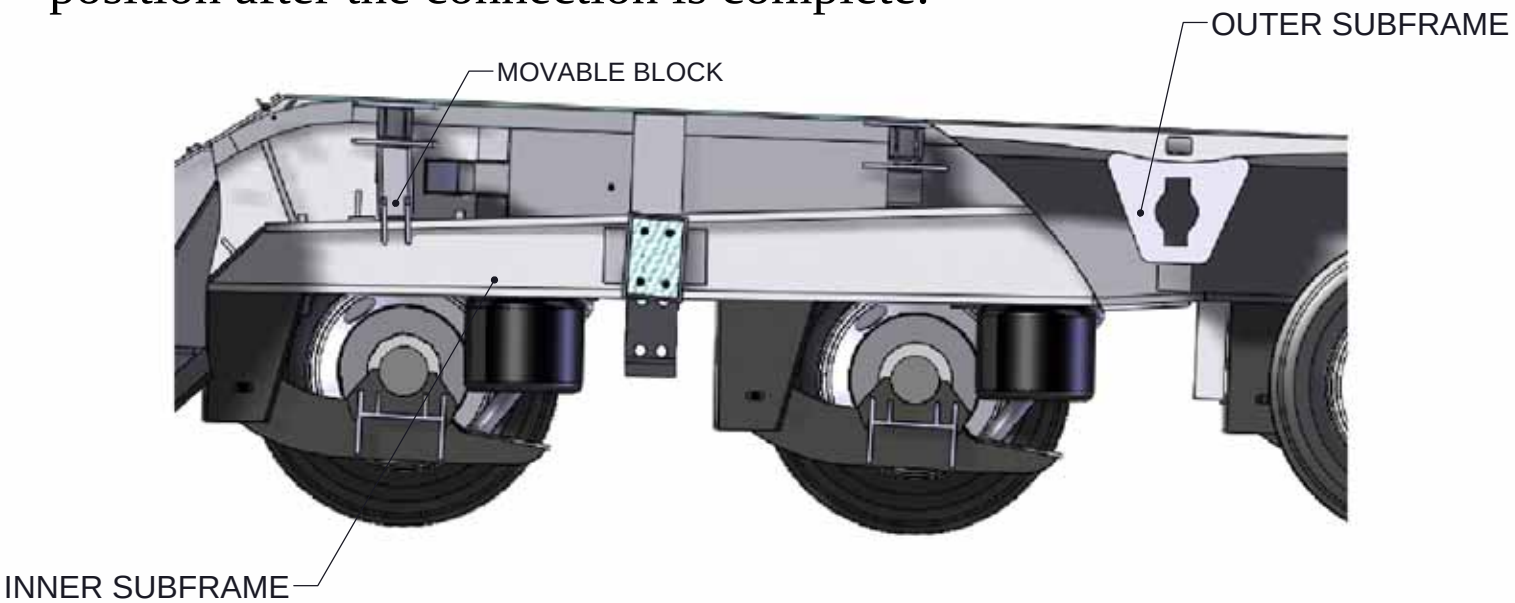


FIGURE 1

Once the bottom connecting pins have been installed; insert the shims required for load before tightening the bolts. (Additional information on that subject follows the next paragraph).

Once the connection is complete; the movable blocks that act as the inner sub-frame stops need to be moved to allow the combined inner sub-frame and booster suspension to oscillate like a walking beam (Figure 2). Not removing these blocks could result in damage to the trailer or booster. When removing the booster these blocks must be repositioned for operating the trailer without the booster. The landing leg must be returned to highest position after the connection is complete.



LOAD KING MECHANICAL BOOSTER TO TRAILER (CONTINUED)

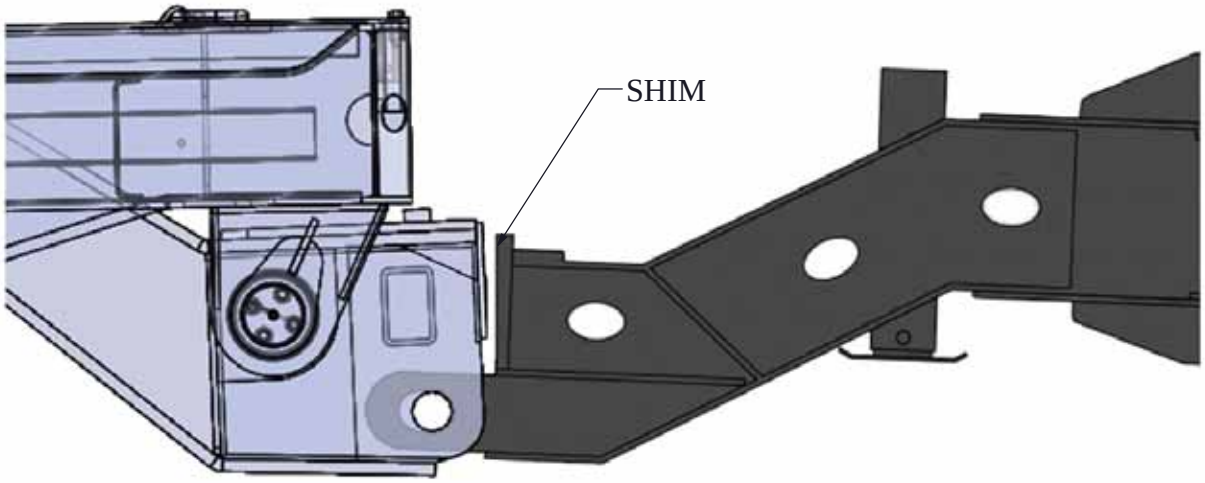


FIGURE 3

To determine which shims you will need, you will a brief overview of the mechanics of this system.

When the booster is assembled to the inner sub-frame at the factory, a 1/2” shim is used between the two units (Figure 3). This allows the customer some additional movement in the system to ease the hookup in the field. Bear in mind this also means, after the lower pins are installed, that you will need at least a 1/2” shim to operate the trailer when it is loaded. Additional shims may be needed as payload is added to trailer. Because each and every trailer is different, it is not possible to specify which shims to add if your load is at say 1/2, 3/4 or full capacity of the trailer.

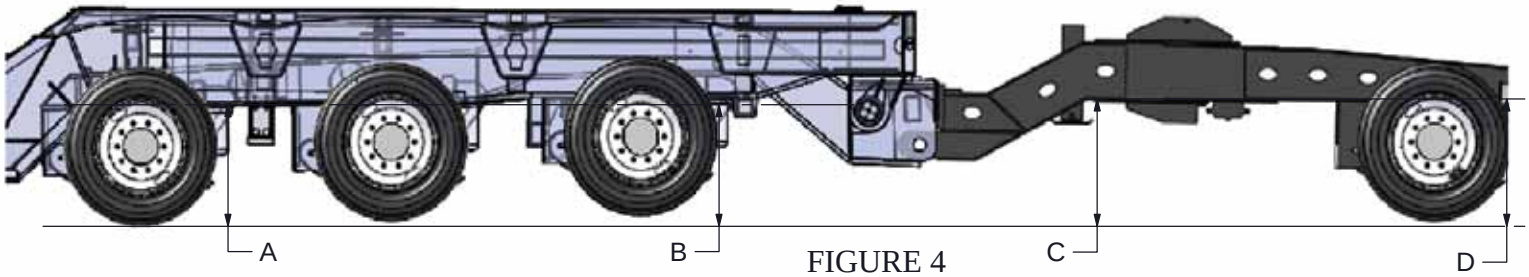


FIGURE 4

Warning: Do not leave booster or stinger attached for travel when trailer is unladen. Loss of trailer braking and directional control could result in serious injury or death.

LOAD KING MECHANICAL BOOSTER TO TRAILER (CONTINUED)

Your goal will be to have enough shims installed so that with the payload on the trailer, the bottom side of the inner sub-frame, and the booster are parallel with the ground (Figure 4). Points A and B should be nearly equal, as is point C and D. When the trailer is loaded you should have nearly equal weight on each axle. To achieve this; before the trailer is loaded, the inner sub-frame and booster must have enough shims added to preload the two sections (Figure 5) Figure 5 is grossly exaggerated, but does illustrate what is needed. Points B and C, when the trailer is unladen need to be more than points A and D, respectively.

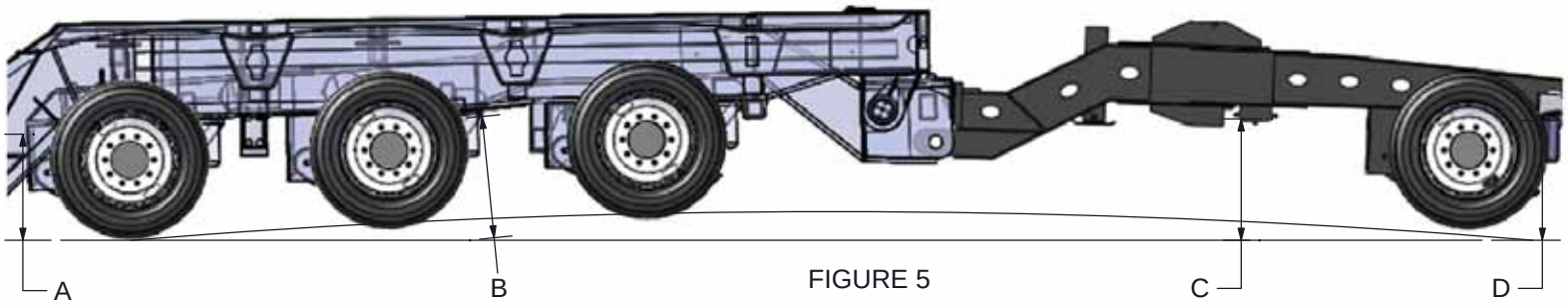


FIGURE 5

When the trailer is loaded, hooked to the tractor, and on level ground, you should have a minimum of 4” clearance between the front of the inner sub-frame and the front crossmember on the outer sub-frame (Figure 6).

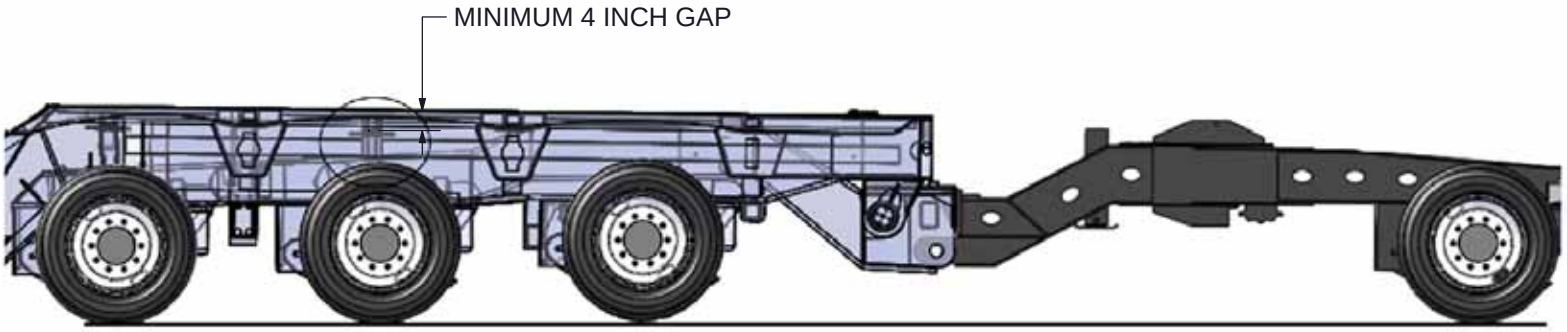


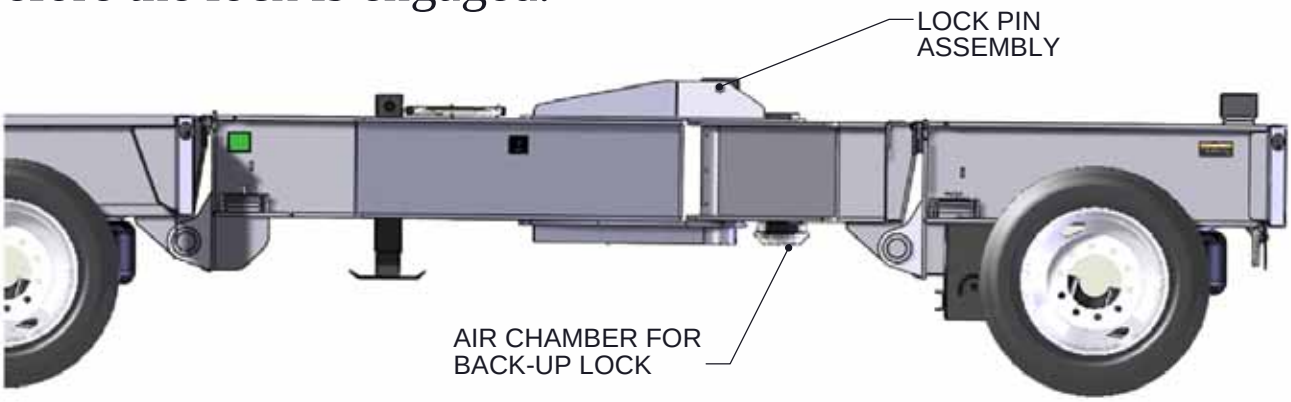
FIGURE 6

While this whole process may sound complicated, after hauling a couple different size loads you will know which shims to use. When you are hooking up to the booster and you know your load will be 3/4 of the capacity of your trailer, you will drop in X amount of shims; full load, Y amount of shims.

Warning: When using booster or stinger the control valve must be in normal postition.

MECHANICAL BOOSTER AND STINGER BACK-UP LOCK

All Load King mechanical boosters or stinger extensions have an air assisted back-up lock. On the left rear section of the booster or stinger will be a palm button that operates the air chamber. The booster or stinger must be in-line with the trailer before the lock is engaged.



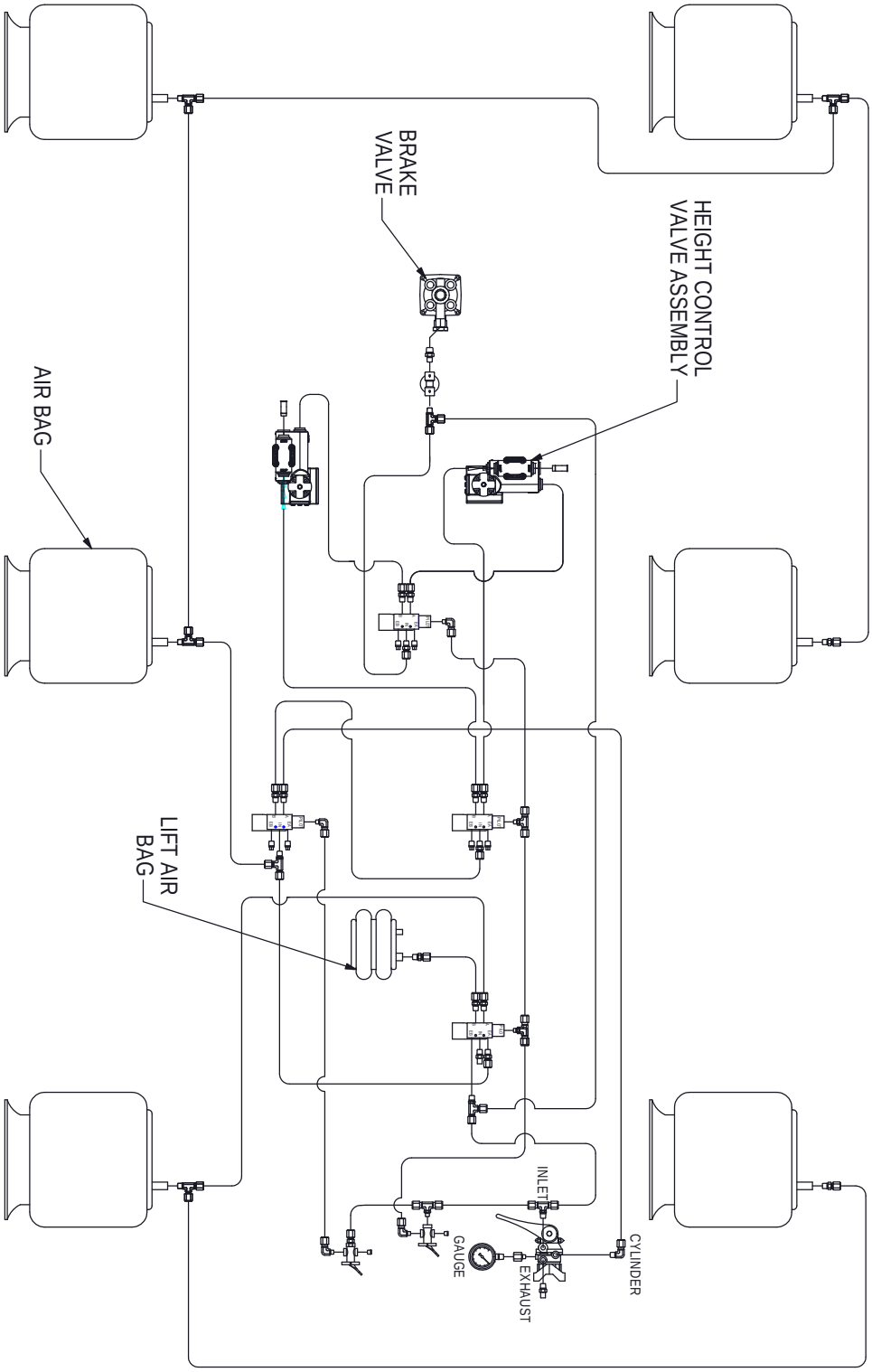
IMPORTANT: This back up feature is only to be used when the trailer is light. This feature is not designed for backing the unit up under load. Also, whether light or under load, it must be in the unlocked position for all normal forward use.

AIR RIDE OPERATION

The standard system automatically regulates the ride height by controlling the air pressure supplied to the air springs. All systems are operated from the compressed air supply of the towing vehicle, 60 PSI to 100 PSI. The height or load on the axles is controlled by the air pressure in the springs. The following diagram illustrates our standard height control arrangement (three axle configuration shown). A dual height control valve system directs the air flow to all three axles insuring weight equalization. The diagram on pg. 20 illustrates an air schematic for general units.

REVISIONS			
REV.	DESCRIPTION	DATE	AUTHORITY
-	-	-	-

AIR RIDE OPERATION SCHEMATIC

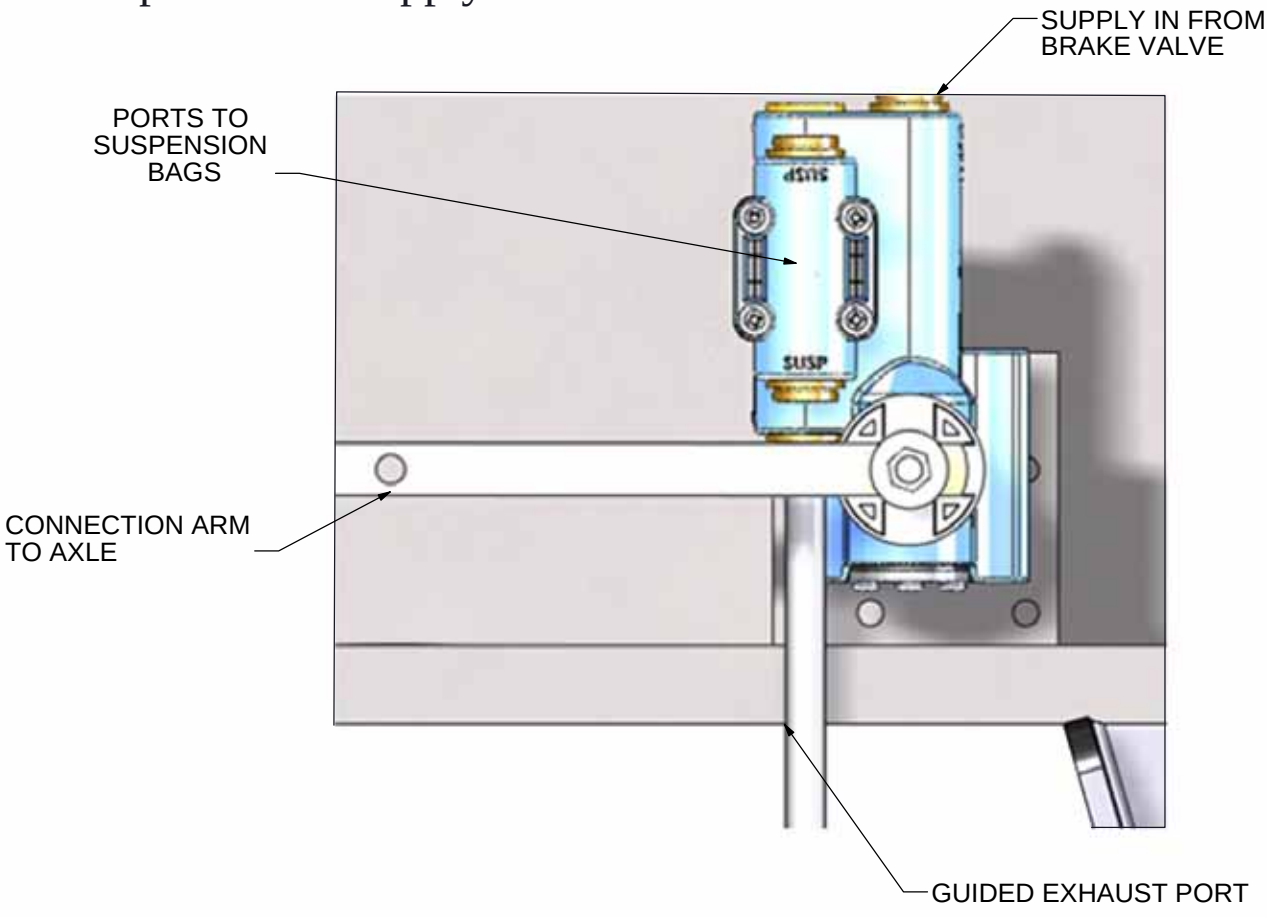


HEIGHT CONTROL VALVE

OPERATIONAL GUIDELINES

The height control valve automatically responds to the relative position of the axle and the trailer frame. It meters air into or out of the air springs. Air is added or exhausted in respect to load or temperature variations. When the actuating lever is moved up the valve opens and connects the air supply to the air spring. When the actuating lever is moved down, the air supply is shut off, the exhaust port of the valve is opened exhausting air from the air springs. A check valve is incorporated into the system to prevent loss of air spring pressure in the event of an air supply failure.

In the central position the height control valve has a dead zone approximately 3/8” wide measured by up and down travel at the end of the lever. A mechanical time delay of five to fifteen seconds is also incorporated into the valve. These two features eliminate constant intake and exhausting of air and system oscillation due to temporary variations in axle position caused by road bumps, etc. By not responding to transient inputs the air system requires very small quantities of air from the compressed air supply.



HEIGHT CONTROL VALVE

SETTING UP VALVE

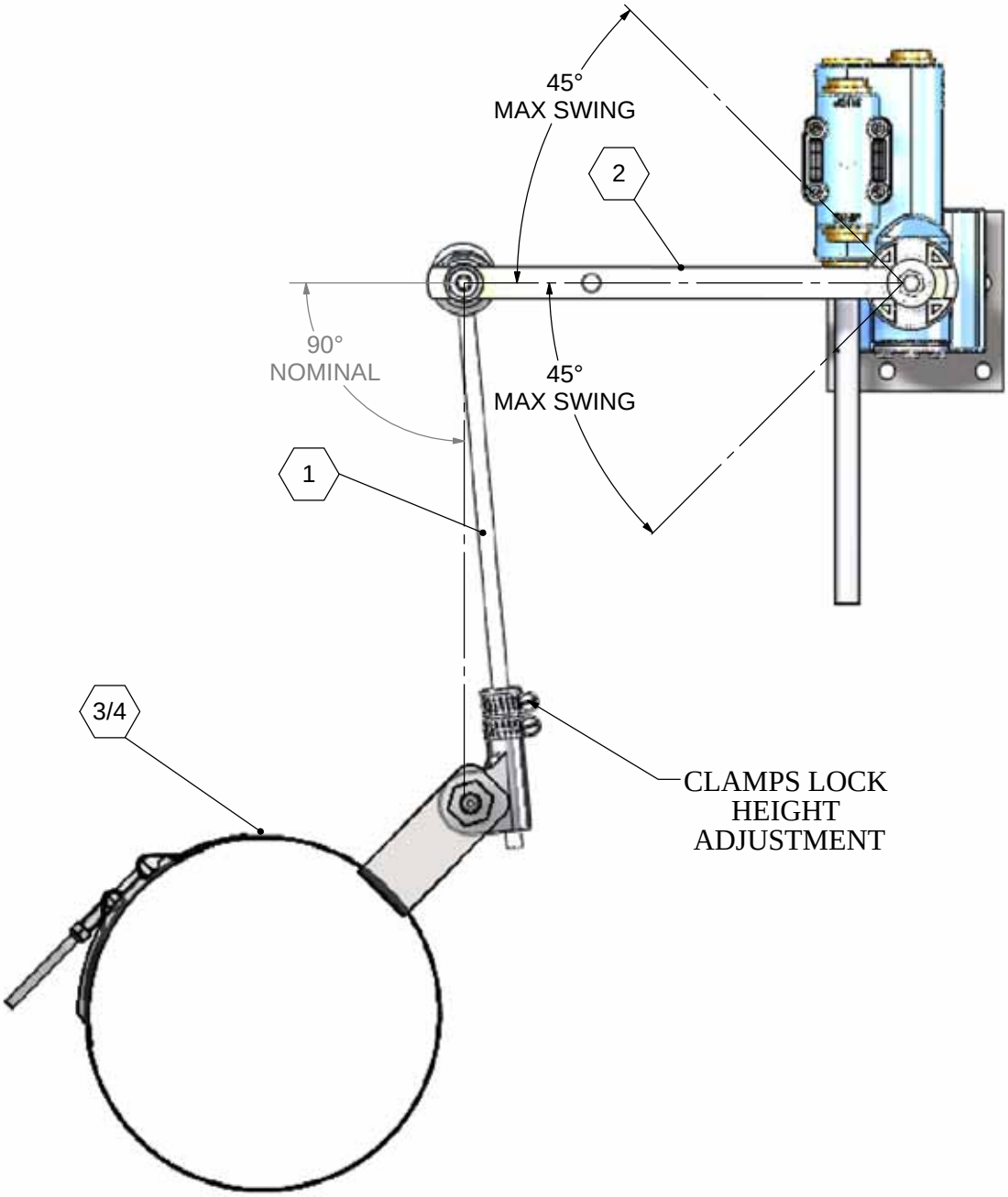
1. Insert ¼” rod through upper (offset) dampener link. Do not tighten clamp until Step 4 adjustment is made.
2. Insert leveling arm into valve with the plated insert & 5/16” capscrew pointing toward vertical linkage & tighten cap to 10 ft. lbs. To make a right hand valve of a left hand valve, hold valve body & rotate lever arm 180 degrees.

Note: This valve has a variable length lever arm with a recommended length of 7”: however this can be increased or decreased. Optimum performance can be achieved when Valve is adjusted accurately to the suspension, by either increasing or decreasing lever arm length to a point where Valve and lever arm approach 45 degree maximum up or down from horizontal (neutral) position.

HOW TO ADJUST VALVE

1. With vehicle on level ground, build and maintain air pressure in excess of 65 PSI.
2. Rotate lever arms down to fully exhaust air springs.
3. On one Valve, rotate lever arm up. This will allow air into air springs. Bring Arm of Valve to neutral position when proper ride height is reached.
4. When proper ride height is reached, place centering pins into Valve. Slide ¼” rod up or down through upper (offset) dampener link, while attaching lower anchor to axle mount. Tighten the clamp on upper dampener link and remove centering pins.
5. Remove the lower dampener grommet from the anchor at axle & rotate lever arm down to exhaust air springs about halfway.
6. Raise arm till lower link pivot aligns with anchor shaft. Air spring should re-inflate to proper dimension.
7. Rotate the arm down to exhaust the air and leave the lower link disconnected. You are now ready to adjust the other Height Control Valve.
8. IMPORTANT: Connect lower dampener links of both Valves simultaneously. All air springs should inflate to proper ride height. At this time, check to see that air springs are of equal firmness.
9. Excessive length of ¼” rod protruding above the upper link can be cut off for actuation clearance.
10. CAUTION: The ¼” rod must engage the full depth of the upper dampener link when operating.

HEIGHT AND LEVELING CONTROL VALVE



ITEM#	PART NUMBER	DESCRIPTION
1.	MP5-3923	VERTICAL LINK
2.	MP5-3922	LEVER ARM
3.	MP5-3924	BAND CLAMP (5" AXLE)
4.	MP5-0471	BAND CLAMP (5 3/4" AXLE)

VALVE REPLACEMENT

The following trouble shooting should be performed before valve is replaced.. This will indicate if problem lie elsewhere.

1. Build and maintain air pressure in excess of 65 PSI.
2. Disconnect lower anchor.
3. Move actuating lever arm up - air should flow into related air springs.
4. Move actuating lever arm to neutral position - air flow should stop.
5. Move actuating lever arm down to exhaust air.
6. Move actuating lever arm to neutral position - air flow should stop
7. Valve is functional if performance is as noted.

CARE AND MAINTENANCE

Normal air brake system maintenance should be practiced. This valve cannot be taken apart and cleaned should it become fouled by unfiltered air or sludge. Back flushing the valve should only be used in emergency situations. Visually inspect the Valve for proper clearance around actuating lever arm to ensure freedom of movement. Except for those parts listed on pg. 23, parts for this valve are not sold seperately.

REGULATED/AUTOMATIC AIR CONTROL SYSTEMS

An optional combination regulated/automatic height control valve system is generally added to trailer systems to increase stability during loading and unloading, as well as to increase component life. This system is controlled manually through the use of air pilot valves and a regulator valve. The drawing on pg. 20 illustrates a typical regulated/automatic air controlsystem.

This system is also used to aid in the connection of trailer options. (Boosters, Flips, etc.) It is also used to clear obstacles such as power lines or railroad tracks. The regulated system is designed for short duration use at a maximum of 5 mph. At highway speeds the system must be returned to the automatic mode. Failure to do so may result in loss of trailer braking and steering. It also could cause damage to shock absorbers and other suspension parts.

REGULATED/AUTOMATIC AIR CONTROL SYSTEMS

WARNING: *Travel with height control valve in regulated could cause loss of trailer steering, resulting in serious injury or death. Control valve must be in normal mode for road travel.*

A typical regulated system adds one pilot valve for the height control valve, one ON/OFF valve and one regulator valve. (See drawing on pg. 20)

The pilot valve is a normally open valve. In the automatic or normal mode air flow through the pilot valve is regulated by the height control valve.

When the regulated position air pressure is applied to the end of the pilot valve causing the spool inside to shift. This cuts off the air flow from the height control valve allowing air flow and pressure to be supplied by the hand regulator. Switching back to the automatic or normal mode cuts off the air supply to the spool end of the pilot valve allowing the spool to return to the normally open position. This in turn gives control of air flow back to the height control valves.

REGULATOR VALVE GUIDELINES

IMPORTANT: During normal use of the trailer, you MUST operate the system in the NORMAL (automatic) mode. When the system is on the REGULATED (manual) side, the automatic height control is being over-ridden and will not function. If you try to run on the REGULATED (manual) side, odds are you will not have the correct air pressure. Too much air pressure is just as destructive to the suspension and shocks as is too little pressure.

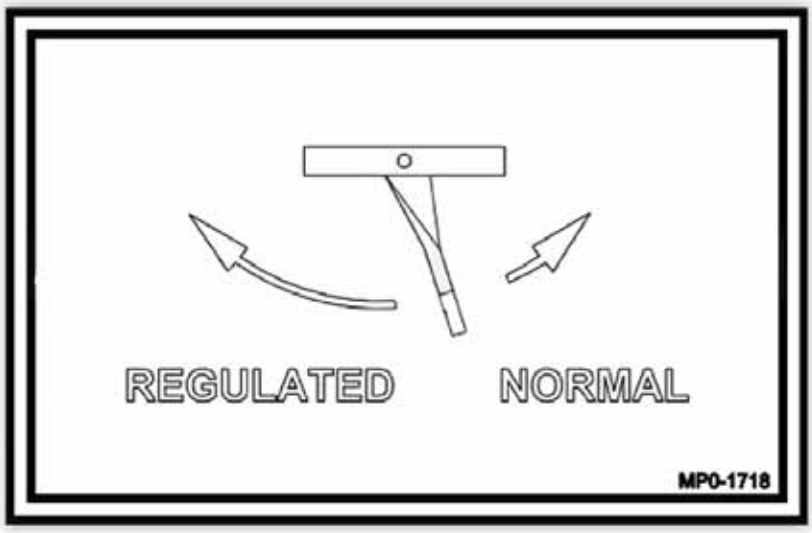
When you shift the ON/OFF CONTROL VALVE from the NORMAL mode to the REGULATED mode, you will hear air being either charged into the system or being exhausted out. This is normal.

REGULATOR VALVE GUIDELINES

The ON/OFF CONTROL VALVE is a toggle type switch located either in the tailgate or on the rear most airbag crossmember. The decal by the switch will show the two valve positions, REGULATED or NORMAL.

REGULATED: Placing the valve in this position allows for MANUAL adjustment of the air ride height.

NORMAL: Placing the valve in this position returns the air ride height adjustment to the automatic (normal) mode.



To use the ON/OFF CONTROL option:

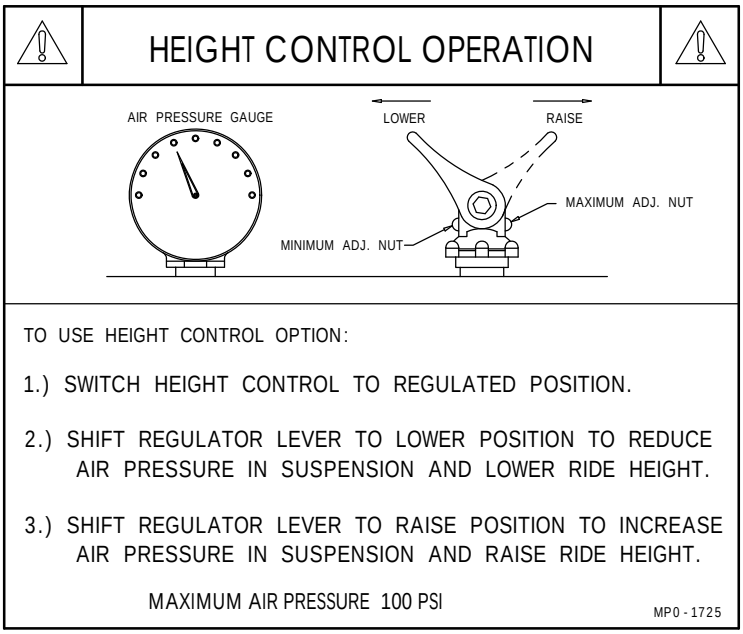
1. Switch the ON/OFF CONTROL to REGULATED.

2. The HAND VALVE REGULATOR (located on the inside of the tailgate) when shifted to the left will exhaust air out of the air ride system, thereby lowering the trailer. When the HAND VALVE is shifted to the right, air pressure will charge the system, raising the unit.

3. A PRESSURE GAUGE is located on the HAND VALVE. This gauge provides air pressure information for adjusting the air system manually. On repetitive loads, you will be able to record and set the pressure that is required to clear a particular obstacle.

REGULATOR VALVE GUIDELINES

The HAND VALVE is set at the factory at 7 PSI minimum and 70 PSI maximum. This is a safe operating range for this system.



The HAND VALVE handle has a tension adjustment. To adjust:

1. Remove valve handle by turning out handle bolt.

2. Using a Allen wrench, tighten three (3) Allen head screws equal amounts until desired tension is obtained.

3. Replace handle and tighten handle bolt securely.

SCALE-O-MATIC

The Scale-o-matic is an option that will measure the pressure (PSI) that the trailer and payload is transmitting to the airbags in the air ride suspension. This PSI reading, taken from the gauge inside the Scale-o-matic protective box (Figure 1), will tell the operatorthe approximate pounds of load on each axle.

SCALE-O-MATIC CONTINUED

This system is accurate on each axle the Scale-o-matic is plumbed into, as long as, each axle is with-in plus or minus 1” of the correct ride height (Figure 2). In other words, if your trailer has a 9” ride height, the center of the axle to the bottom of the trailer frame can vary from an 8” ride height to a 10” ride height and the system will still be accurate.

Check the accuracy of the Scale-o-matic at least once every six months. Re-calibrate, if necessary.

CAUTION: If the leveling valve is re-adjusted or the ride height is mechanically changed, it will be necessary to re-calibrate the system as soon as possible.

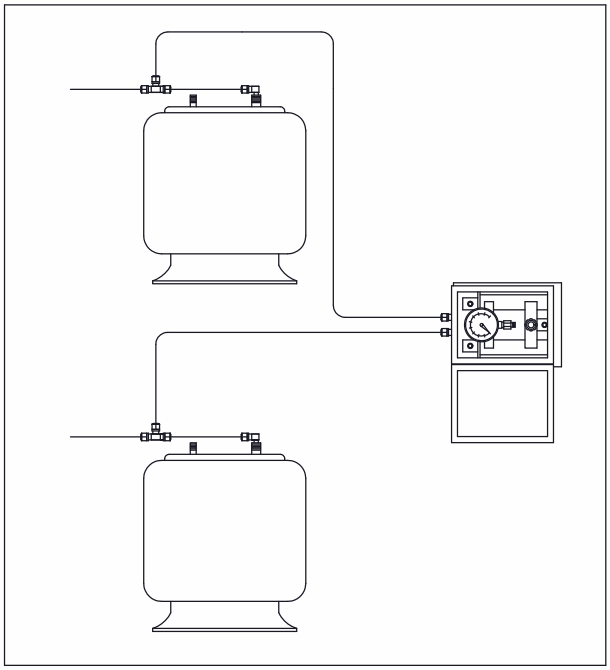
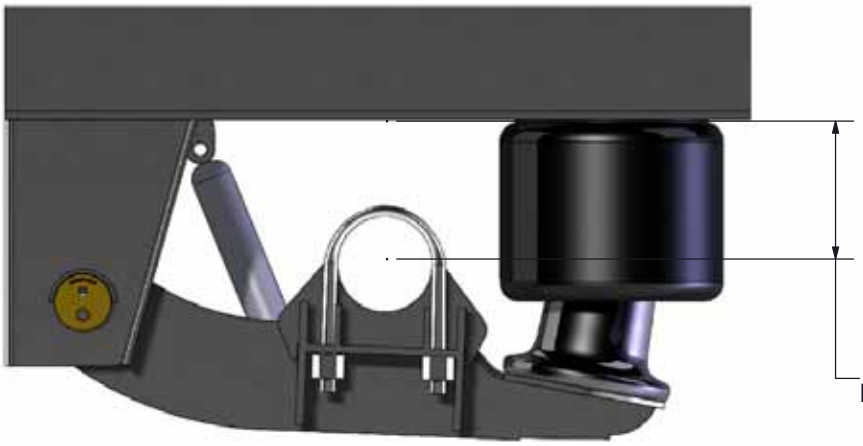


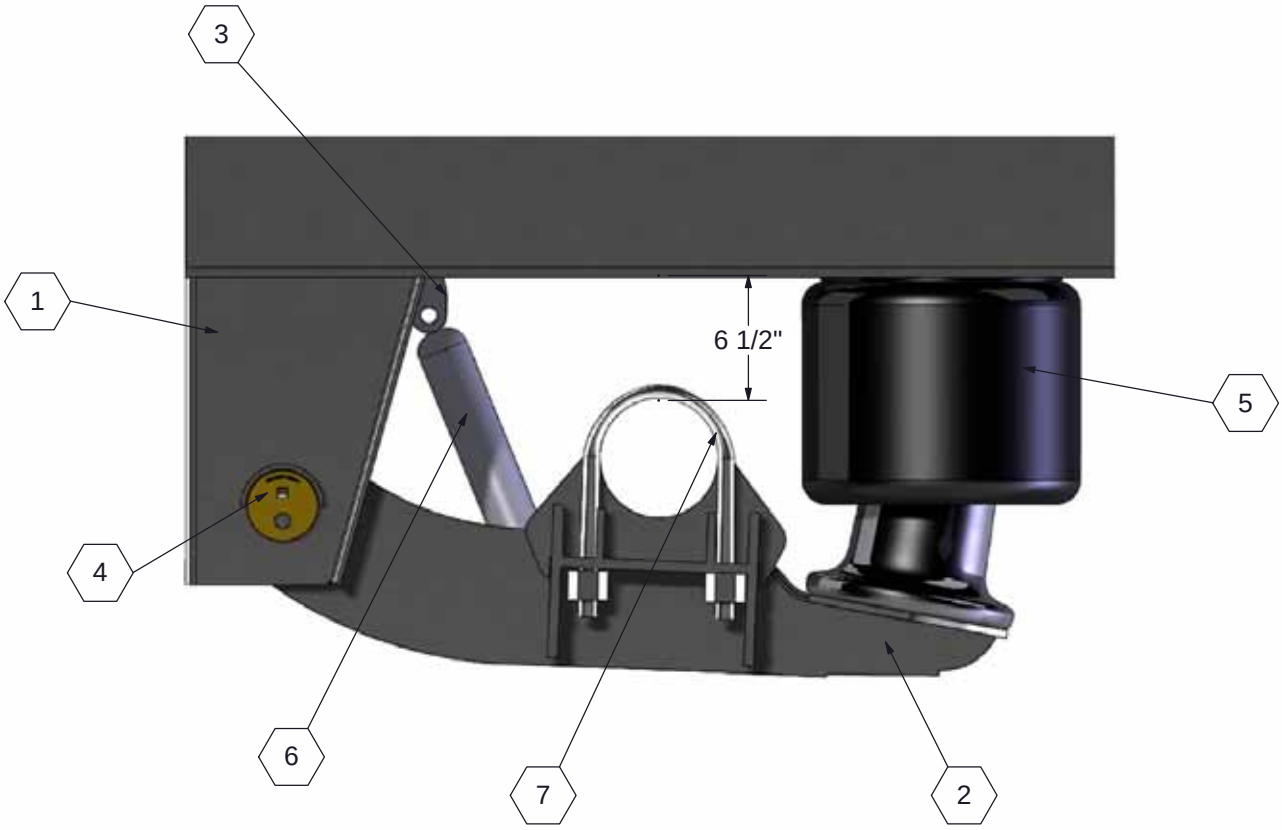
FIGURE 1: SCALE-O-MATIC PLUMBING

FIGURE 2: RIDE HEIGHT



COMPONENTS OF AN AIR RIDE SYSTEM

BOLT TORQUES
Suspension Pivot .....800 Ft. Lbs.
2nd & 3rd axle Pivot.……..500 Ft. Lbs.
Shock Mounting .....170 Ft. Lbs.
Axle U-Bolt .....500 Ft. Lbs.
Air Spring - Upper .....50 Ft. Lbs.
Air Spring - Lower .....50 Ft. Lbs.



ITEM	DESCRIPTION
1	FRAME BRACKET
2	BEAM
3	SHOCK BRACKET
4	ALIGNMENT COLLAR
5	AIR SPRING
6	SHOCK ABSORBER
7	U-BOLT

PLEASE HAVE TRAILER SERIAL NUMBER READY FOR ALL ORDERS

AXLE ALIGNMENT

The suspension on all Load King trailers are set 3/16” long to the roadside from center of the front deck connection at the factory. Then as a final check before delivery, the trailer is taken on a road test to insure that no dog tracking is occurring. If alignment becomes necessary be sure to check for structural damage or damaged bushing before proceeding with realignment.

To check for proper axle alignment, you must have the trailer at its natural working position on a level work area, and the suspension at the proper ride height before making the necessary measurements. Place stands under the deck to hold the trailer at the proper position.

A. Jack up the first axle and remove the outer wheel. Also, remove the oil hub cap from the end of the axle.

B. Make a mark at the center of the front deck connection where “E” and “F” are equal to each other. Measure the distance “A” and “B” to the front axle. (Figure 1) The same person should make both measurements, being careful to pull the tape with equal and even tension. If the tape must go around or up under any part of the trailer, be sure it contacts the trailer at the same point on each side.

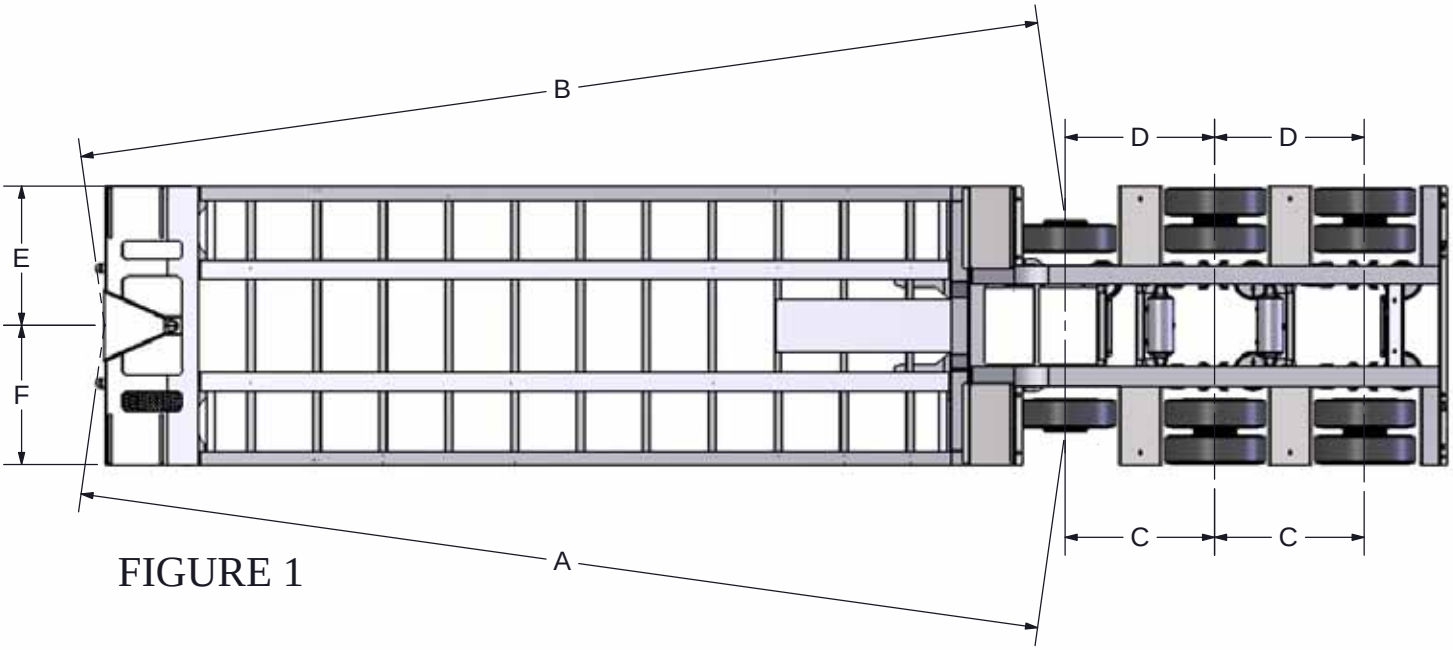


FIGURE 1

AXLE ALIGNMENT CONTINUED

Because most all roads are built with a crown to the center, if distances "A" and "B" are equal, the trailer could dog track to the curb (right) side of the road. The distance "A" 3/16" greater than distance "B" on a three axle trailer. This will compensate for the crown in the road.

C. Distances "C" and "D" should be equal but you are allowed up to 1/16"total difference. Always align any succeeding axles with the front axle, not from the front deck connection.

AIR RIDE REALIGNMENT

If realignment does become necessary, the frame bracket assemblies are slotted to accomplish this without having to remove the frame brackets from the trailer.

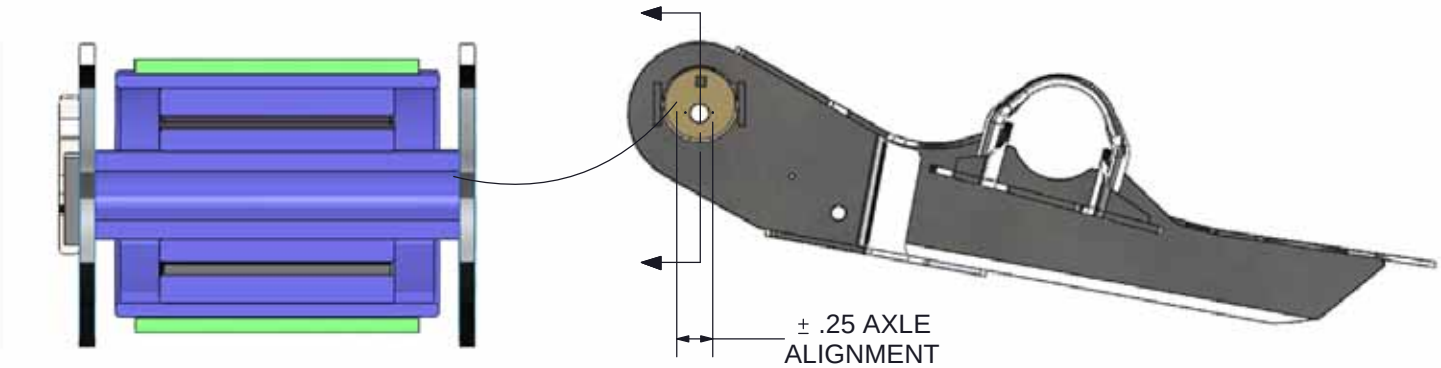
CLOSE MOUNT SUSPENSION (1st. AXLE)

1. To determine which frame bracket will be used for realignment, look inside the frame bracket at the elongated slots and determine which one will allow sufficient movement. The alignment collars will usually only need to be removed from one frame bracket since about 2" of adjustment at the ends of the axle is allowed by these slots.
2. Carefully grind or air arc the welds securing the alignment collars to the frame bracket sides from the selected bracket.
3. Realign the axle and tack weld the inside and outside alignment collars in position.
4. Remove all equipment used to reposition the axle and re-check the alignment. If alignment is satisfactory, proceed.
5. Check the axle centers on all succeeding axles and if realignment is necessary, follow the same procedures. Remember the succeeding axles should be lined up with the front axle, not from the center of the front deck connection. After all axles are repositioned, re-check the alignment on all the axles.

CLOSE MOUNT SUSPENSION (1st. AXLE) CONTINUED

6. If all axle alignments are satisfactory, weld all alignment collars. Be certain to weld the inside collars as well as the outside collars.

7. Cool all welds immediately after welding to avoid damage to the rubber bushings and/or the nylon liners.



SUSPENSION REALINGNMENT 2nd AND 3rd AXLE

1. To determine which frame bracket will be used for realignment, look inside the frame bracket at the elongated slots and determine which one will allow sufficient movement. The alignment collars will usually only need to be removed from one frame bracket since about 2” of adjustment at the ends of the axle is allowed by these slots.

2. Remove the pivot-connection hardware from the axle pivot connection being adjusted and replace with new pivot-connection hardware.

3. Adjust the nuts on both pivot bolts that hold the flanged eccentric collars in place against the adjustment guide. The nuts must be loose enough to permit the bolts to be rotated by hand, not free spinning, with a minimum side-to-side movement.

4. Adjust the eccentric collar to the 12:00 position. IMPORTANT: The eccentric collar must remain flat against the frame bracket throughout the alignment procedure.

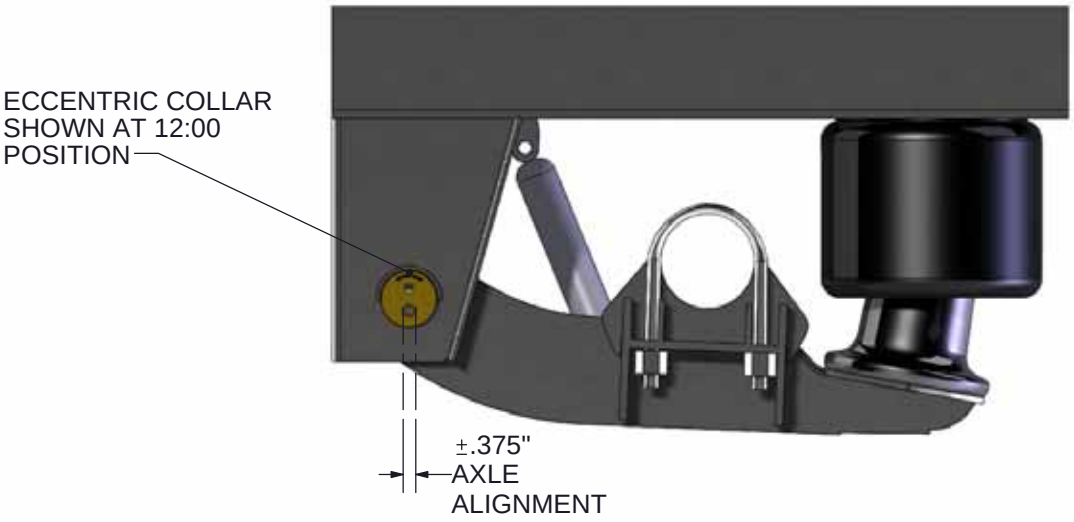
SUSPENSION REALINGNMENT
2nd AND 3rd AXLE (CONTINUED)

5. With both square alignment holes in the 12:00 position, check the axle alignment to the first axle or to the 2nd axle if aligning the third axle. If necessary, insert a ½" breaker into the square adjustment hole on one of the eccentric collars; adjust the axle position by rotating the collar in a fore-and-aft movement.

6. Tap on the flanged concentric collar (inboard side of the frame bracket) with a rubber mallet during adjustment. This allows the concentric and eccentric collars to move in unison. If the collars do not move together, the concentric collar may wedge against the frame bracket during alignment. If the flanged eccentric collar reaches 45 degrees with no alignment being achieved, go to the suspension's other frame bracket and rotate the flanged eccentric collar; repeat step 5.

7. Check the axle centers on all succeeding axles and if realignment is necessary, follow the same procedures. Remember the succeeding axles should be lined up with the front axle, not from the center of the front deck connection. After all axles are repositioned, re-check the alignment on all the axles.

8. If all axle alignments are satisfactory, tighten the shear-type bolt with a ¾" drive socket until the torx head snaps off.



LOAD KING

SERVICE AND MAINTENANCE

SECTION

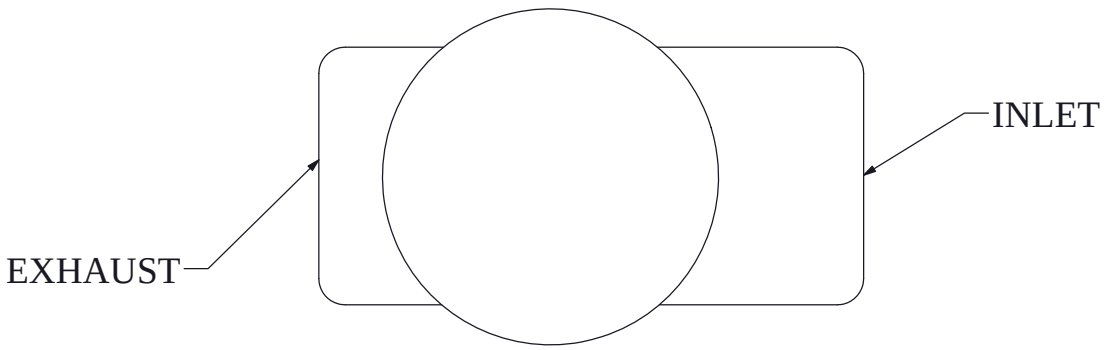
AIR PRESSURE PROTECTION VALVE & FILTER

INSTALLATION - Install Air Pressure Protection Valve (PPV) to air reservoir so that arrows on bottom of valve are directed to the air suspension.

Install air lines to the air suspension as shown. Support air lines where necessary, using clip supports, grommets, and bulk head fittings. Use a drop of oil or loctite to lubricate threaded connections. DO NOT USE a pipe compound or Teflon tape, it may clog valve. After air piping and controls have been installed, pressurize air system with a constant supply of air in excess of 75 P.S.I., and check for air leaks.

The PPV must be checked for proper operation during each brake system inspection. The purpose of the valve is to maintain at least brake operating pressure (60 PSIG/KP0-0305 valve), in the event of a serious air leak in the suspension system. To test the PPV, disconnect air line from downstream (suspension) side of PPV, with the air tank pressure charged above 90 PSIG/KP0-0303 valve. Air should stop flowing through the PPV before the spring brakes begin to apply or before 60 PSIG/KP0-0305, tank pressure is reached. If air does not stop flowing, REPLACE THE VALVE.

PRESSURE PROTECTION VALVE



2000 MILES OR 30 DAY MAINTENANCE CHECK LIST

Every 2,000 miles or 30 days, perform the following inspection of the unit.

AIR BRAKE SYSTEM

A. Check travel of brake chamber push rods. MINOR ADJUSTMENT of brakes can be made without removing wheels from hubs.

1. Release the brakes. Jack up axle so wheels may be freely rotated.
2. With the brake applied, the slack adjuster arm and the brake air chamber pushrod should form an angle slightly greater than 90°. Adjust the linkage by adjusting the clevises on the air chamber pushrods. All slack adjusters on the vehicle should be at the same angle. Push rod travel should be kept to a minimum.

*See pages 50 to 52 for auto slack inspections and adjustments.

B. Check air brake hose for chaffing, bends and crimping.

TIRES

A. Check for signs of uneven tire wear.
B. Check tires for cuts, sidewall breaks, tread cracking, separation, or featheredge wear.
C. Check duals for uneven wear, and rotate if necessary.

BRAKE DRUMS AND WHEELS

A. Check and determine how much brake lining is worn.
B. Inspect closely for worn stud holes, loose nuts.
C. Inspect wheels, rims, hubs for cracks, breaks or other damage.

SUSPENSION ASSEMBLIES

A. Inspect rubber bushing for damage.
B. Inspect mounting brackets for damage or broken parts.

LABELS

A. Check all labels/safety decals. Replace any labels that are illegible or missing.

2000 MILES OR 30 DAY MAINTENANCE CHECK LIST

An important phase of trailer upkeep and maintenance is the inspection and repair, if any, of all structural steel members of the trailer frame. It is readily apparent that the frame must be one solid unit to carry the load safely and quickly without danger of accident or further damage to the trailer. This also prevents subsequent major repair costs and trailer down time.

The need for a complete frame inspection stems from various reasons:

1. Due to heavy load and difficult road conditions upon which they are operated, trailers are subjected to considerable abuse.

2. A trailer loaded to the maximum rated capacity, or greater, and pulled at sustained speeds greater than the accepted design standards, will depreciate at an accelerated rate.

3. This rough handling may also cause structural failures of varying degrees. The failures are the result of metal fatigue due to flexing, twisting, vibration and distortion.

4. Frame failure will show up in the steel frame members as weld cracks, cracked and loosened steel sections and other deformities.

To detect any fractures before they become major failures:

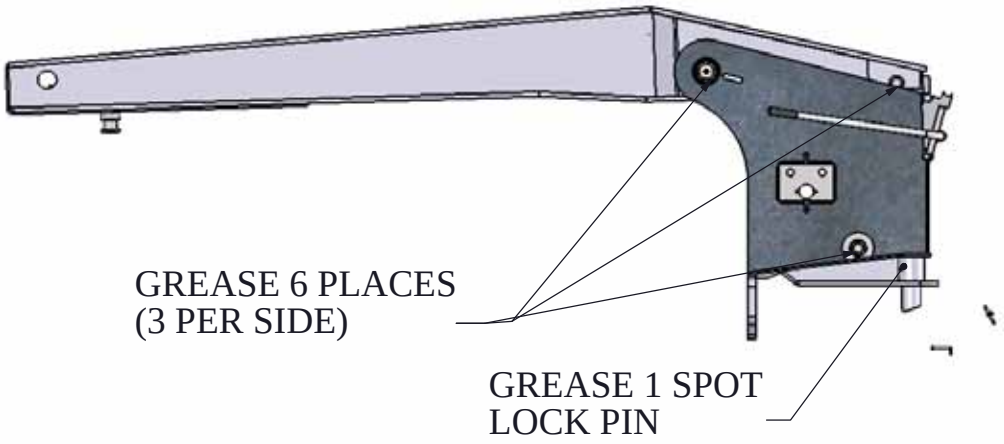
1. Once a month, thoroughly inspect the trailer for any sign or failure, and correct any defects.

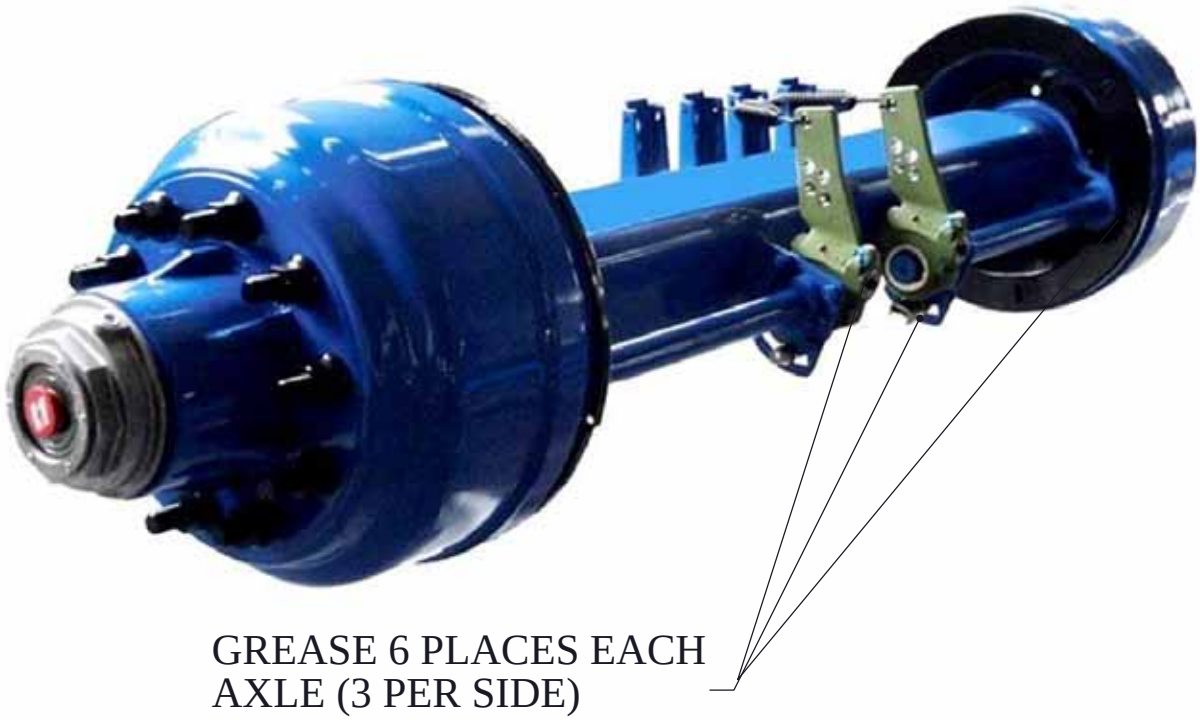
2. It is desirable to have the trailer completely washed down so all the joints and weldments may be closely viewed.

CAUTION: Be certain the preceding check list inspections have been performed.

NOTE: Perform the maintenance on the minimum schedules, either on the mile or time basis, whichever comes first.

PREVENTATIVE MAINTENANCE & LUBRICATION POINTS





DESCRIPTION	LUBRICATE	
BOTTOM OF 5th WHEEL PLATE	LITHIUM GREASE	2000 MILES OR 30 DAYS
PIVOT PINS	LITHIUM GREASE	2000 MILES OR 30 DAYS
LOCK PIN	LITHIUM GREASE	2000 MILES OR 30 DAYS
AUTO SLACK ADJUSTER	LITHIUM GREASE	2000 MILES OR 30 DAYS
CAM SHAFT BEARING	LITHIUM GREASE	2000 MILES OR 30 DAYS
AXLE OIL SEAL	MINERAL BASED HYPOID OIL SAE 90-140	CHECK DAILY CHANGE AT 100,000 MILES

PLEASE HAVE TRAILER SERIAL NUMBER READY FOR ALL ORDERS

INSPECTION CHECK LIST
FOR THE AIR RIDE SUSPENSION

After your air ride suspension has been in operation for approximately 1,000 miles, check all nuts and bolts for proper torque. See Torque Chart for specific recommendations.

3,000 Miles - Repeat above procedure and at every six (6) months.

5,000 Miles - Requirements listed below:

1. Locate trailer on level surface; build air pressure to approximately 100 PSI; shut off tractor. Check all air lines and fittings for leaks.
2. Check Height Control Valve for continual leakage from the exhaust port. Re-adjust or replace if necessary.
3. Check air spring flexible members for any signs of chafing or wear.
4. Support trailer on jacks or stands, and exhaust all air from the system.
5. Articulate axle up and down and inspect front pivot pin area for any sign of wear or movement.
6. Inspect axle connections for gaps between axle caps and beam seats.
7. Check shock absorbers for leaking hydraulic fluid or worn bushings.

SERVICE NOTES

Service life of component parts will vary from application to application. The following recommendations are based on averages and may not apply in all situations. For best results from your equipment, they should be used as a guide line only.

FRONT PIVOT CONNECTION

Replace front rubber bushings, Delrin Liner and rod bolts at 100,000 miles. Excessive play in this area can cause premature tire wear and erratic handling characteristics.

AIR SPRINGS

If the height control valve is properly adjusted to prevent over-extension, you can expect air spring life to exceed 250,000 miles, discounting foreign object damage. If an air spring fails, the vehicle will settle down on the internal rubber bumpers, allowing you to proceed to the next convenient service facility. Be certain to always determine what caused the air spring failure so you can avoid a costly repeat of the problem.

SHOCK ABSORBERS

Replace shocks at 50,000 miles or the first sign of leaking hydraulic fluid. Contrary to popular belief, shock absorbers do no absorb shock. Shock absorbers absorb energy to prevent suspension oscillation. Shock absorbers are also used as rebound stops in most air suspensions. Air springs can be pulled apart if their stroke is not limited by the shock absorber or some other device.

HEIGHT CONTROL VALVE

The Height Control Valve is a sealed unit and should be serviceable in excess of 100,000 miles. If a valve acts sluggish or slow in building air pressure, check inlet fitting, air lines and brake protection valve.

VALVE REPLACEMENT

Proper inspections can eliminate the unnecessary replacement of Height Control Valve.

1. Apply air pressure in excess of 65 PSI.
2. Disconnect the link.
3. Move control arm up (45 degrees), wait ten (10) seconds--air should flow to air springs.
4. Move control arm to neutral position--valve should shut off air flow.
5. Move control arm down (45 degrees) wait ten (10) seconds--air should exhaust.
6. Move control arm to neutral position--valve should shut off flow.
7. Valve is good if performance is as noted.

25,000 MILE OR YEARLY MAINTENANCE CHECK LIST

Every 25,000 miles or yearly, whichever comes first, perform the following maintenance inspections:

AIR BRAKE SYSTEM:

A. Inspect the brake linings and reline if necessary.
B. Check the brake drum for distortion, heat checking, out of roundness and/or scoring.
C. Remove the brake shoes to examine bushings and anchor pins.
D. Examine the brake cam and brake cam rollers for wear.

50,000 MILE OR YEARLY MAINTENANCE CHECK LIST

Every 50,000 miles or yearly, perform the following checks:

AIR BRAKES:

A. Inspect the brake chambers for leaks and proper function. Replace chamber if necessary.
B. Check slack adjuster bushing and brake chamber yoke pin for wear.

AIR PRESSURE BRAKE SYSTEM:

The air brake system of a trailer is entirely dependent upon the air brake system of the towing vehicle for its air supply and control. Therefore, the air brake system of the towing vehicle must be in good condition, or it will be impossible to obtain good brake performance on the trailer.

NOTE: Perform the above maintenance on the minimum schedule, whether on the mile or calendar basis, whichever comes first.

CAUTION: Be certain the preceding check list inspections have been performed.

TIPS ON PROLONGING BRAKE DRUM LIFE

1. Allow periodic cooling off stops when operating in mountainous terrain, but do not set brakes when drums are extremely hot. Park on level ground in gear for cooling-down period.
2. If possible, avoid water pockets in road that may drench red hot drums and cause cracking.
3. Do not favor tractor or trailer brakes at the expense of the other. This reduces braking action of the unit and places a severe burden on the brake components doing the work.
4. Periodically inspect valves, linings, drums, cams and other brake parts to see that they are properly adjusted and in good working order.
5. Replace bent or distorted brake shoes immediately.
6. Replace worn brake linings before the bolts or rivets have a chance to score the drums.
7. Remove the stones or foreign matter that my occasionally get inside drums.
8. Consult reputable brake lining specialists for recommended makes and grades on lining that will prolong drum life.
9. Do not overload.
10. Balance loads wherever possible to maintain uniform axle-load and therefore brake-drum distribution.
11. Use brake drums of adequate weight and thickness for unusual or severe applications.
12. Practice safe, sensible, driving habits.

HOW TO SERVICE AND INSTALL WHEEL BEARINGS

Wheel bearing life depends on three things: (1) Proper lubrication; (2) Cleanliness; and (3) Proper adjustment. Trailer axle bearings are normally provided with wheel oil seals which require only keeping the oil at the proper level. Whether installing new bearings or servicing a trailer in the shop, here are the steps to follow.

HOW TO SERVICE AND INSTALL WHEEL BEARINGS

Remove the wheel hub and bearing cones. Clean all the old oil from the axle spindle, wheel hub, bearing cones, and hub cap with kerosene or diesel fuel oil (not gasoline and not in hot solution tank or with water-alkaline solutions). Use a stiff fiber brush, but not a steel or brass wire brush. Dry the parts with a clean absorbent cloth or paper. Compressed air can be used to dry the bearing only if the air is filtered, since water in the air line can cause rusting. Also clean and dry the hands and tools. If bearings are not to be used soon, pack with wheel bearing grease and wrap in clean wax paper. Don't lay clean bearings on floor or dirty work bench.

INSPECT FOR DAMAGE

While the bearing is clean and free of oil, inspect it for signs of wear or damage. Excessive wear caused by abrasive dirt is the most common cause for premature bearing failure. This can be recognized by a dull appearance to the rollers and raceways; they may feel rough or show pit marks or indentations. Flaking or spalling on the small end of the rollers on their corresponding cup and cone rolling surfaces is caused by improper loose adjustment. Spalling or excessive wear at the large end of the rollers indicates an over adjustment.

Fractures or fine hairline cracks across the cup or cone may be caused by forcing a cone assembly on an oversize spindle, or forcing a cup into warped hub bore, or by a cocked cup or cocked cone. Brinneling (a series of lines or indentations on the raceways spaced to a definite pattern) indicates a driving force has squeezed the bearing and damaged the rollers and raceways. This can be caused by improper mounting practices or by sudden excessive shock loads.

Corrosion or pock-marks on the raceways and rollers, resulting from water getting into the lubricant, can be caused by a worn or damaged oil seal, or by handling the bearing with moist hands, or by an improper type of lubricant. Overheated bearings have a blue or brown-blue discoloration, and definitely indicates that the bearing metal has been damaged. This can be caused by dirt, lack of lubricant, excessive friction, or too tight of an adjustment.

HOW TO SERVICE AND INSTALL WHEEL BEARING (CONTINUED)

Be sure to check the bearing cone for wear and pits. After the bearing is clean, hold it up so that the bearing is between the eye and the light. Look between the rollers so that the raceway or outer surface of the cone can be seen. Holding the cage, rotate the cone to check for pits over its entire outer surface.

Replace bearings if any of these conditions exist. Also replace worn or damaged grease or oil seals. Always replace a seal if it has been removed from the axle. Before installing the new seal, apply a thin layer of #2 non-hardening sealant to the axle shoulder. Place the oil seal on the spindle so the words “OIL BEARING SIDE” are facing you. A slight step in the inside diameter of the seal ring will allow it to be properly positioned by hand about 1/8” onto the shoulder. WARNING – Do not attempt to install the seal into the hub bore! Place the proper STEMCO Universal Tool over the spindle. Using a 3 to 5 lb. hammer, strike against the end of the tool until the head bottoms against the axle shoulder. The wear ring should be flush and square to the face of the axle shoulder. If not, re-install the tool and strike until ring is flush. Wipe off any excess sealant. Ensure the two components are mated together by pushing with your thumbs against the seal assembly. Coat the O.D. of the seal with a thin layer of lubricant. Place the pre-lubed inner bearing onto the spindle and slide cone back into position at the face of the axle shoulder.

Check the condition of the hub and axle spindle, and remove any nicks or burrs which might prevent proper seating. The bearing cup must fit tightly in hub. This must be a press fit. Use an arbor press to install the cup in the hub, checking to make sure that it is square and completely bottomed. If an arbor press is not available, use an old bearing cup as a driving tool and tap it lightly with a hammer. Never strike the narrow section of a cup directly with a hammer, since this can chip or crack the case hardened surface.

ADJUSTMENT OF BEARINGS

Slide the wheel hub onto the axle spindle, DO NOT ram the hub over the seal by force! Install the pre-lubed outer bearing on the axle spindle and install the thrust washer if used. Screw the wheel bearing adjustment nut on while revolving the wheel. Be sure there is no brake shoe drag which will interfere with the bearing adjustment. Tighten the adjusting nut to 50 foot pounds of torque while rotating the wheel in both directions. This step is necessary to align the individual rollers. If a torque wrench is not available, full arm pressure on a 12 inch wrench will produce about 50 foot pounds.

Back the adjusting nut off to get the proper end play or looseness. For double nut axles (Timken, Shuler, Clark, Utility, Spicer, etc.) back off the adjusting nut about 1/3 turn to 1/4 turn. Then install the lock ring and the jam nut while holding the adjustment. Tighten the jam nut to about 200 foot pounds of torque (full body weight on 12 inch bar). When using a torque wrench, the actual recommendations are between 100 and 150 foot pounds if the thread size is under 2-5/8 inches; and 150 to 200 foot pounds if the thread size is over 2-5/8 inches. Then bend the lock ring over both the adjusting and jam nuts to lock the two in place.

On axle with cotter key, bend the cotter key parallel to the axle to avoid HUB CAP vent. Put a very thin coat of No. 2 Permatex or equal on the HUB CAP flange, position gasket and bolt cap into place using LOCK WASHERS.

OIL.
Mineral based Hypoid Oil SAE 90 to SAE 140 is recommended. Amber color oil is easier to view through the hub cap window. Avoid high detergent lubricants. From 1-1/8 to 1-1/2 pints of oil are required for one hub depending on wheel well design. Allow plenty of time for the oil to seep through the bearings and seek a level on initial fill. Properly filled, oil should be on the level mark of the hub cap window.

HOW TO SERVICE AND INSTALL WHEEL BEARINGS (CONTINUED)

SERVICING.
The oil level should be checked at intervals. If the hub is removed from the spindle to service brakes or drums, check HUB RING for possible damage in removal -- in most all cases it may remain in service. If the HUB RING is removed from the hub, it must be replaced. It is recommended that the HUB RING be changed every 100,000 miles.

WHEEL TORQUE SPECIFICATIONS

!!! DANGER !!!

!!! Read and Understand the installation, service and safety instructions manual before installing or servicing the hub. Failure to do so may result in personal injury or death, and may result in a compromise of your vehicle's safety through loss or failure of a wheel or compromise of the braking system.

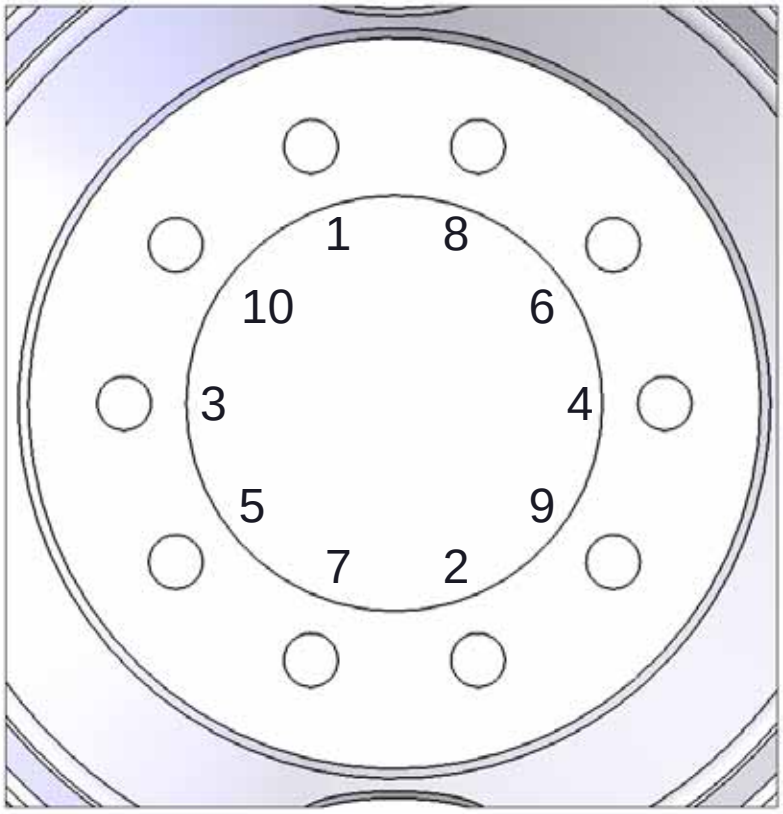
!!! Use a torque wrench to assure proper torque, failure to do so will compromise your products service life and safety. Under torque and over torque can cause thread and/or nut damage, and may result in the loss of a wheel.

!!! Recheck torque after the first 50 to 60 miles of service. Parts may seat naturally, causing the torque to drop. Proper torque is essential for the service, life and safety of this product.

WHEEL TORQUE SPECIFICATIONS

HUBS
(FOR PILOT MOUNTED DISC-WHEELS)
10 STUD HUBS
APPLIES TO M22 X 1.5 STUDS/TWO PIECE FLANGE NUT
RECOMMENDED TORQUE DRY: 500--550 FT. LBS.

All threads are right hand metric. Tighten Flange Nuts to 50 ft. lb. Using sequence shown. Check Disc-Wheels for proper positioning on pads and proper seating against flange. Tighten Flange Nuts to recommended torque using sequence shown.



TROUBLE SHOOTING

ELECTRICAL SYSTEM

Function	Probable Cause	Corrective Action
All lights fail to function.	Inter-Vehicular cable not properly plugged into receptacles on trailer and towing vehicle.	Pull plugs out and reinsert them. Bsure plugs seat properly.
	Light switch on towing vehicle is malfunctioning.	Check light switch.
	No current from towing vehicle.	Check circuit breaker and wiring on towing vehicle.
	Short circuit in wiring.	Check wiring for missing insulation or exposed wire.
	Dirty or corroded contacts in receptacle of on plug of inter-vehicular cable.	Clean receptacle and plug.
	Dirty or corroded contacts in connectors of trailer wiring.	Clean off corroded contacts in connectors.
Lights are dim or flicker.	Loose, dirty or corroded contacts.	Clean and tighten contacts.
	Poor or loose ground.	Clean and tighten contacts on short ground cable in back of receptacle assembly on trailer.
	Defective lights.	Relace defective light.
	Dirty or corroded light sockets or connectors.	Clean or replace light socket or connector.
Individual lights do not function.	Burnt out light.	Replace light.
	Broken or loose connection.	Check cables for breaks and poor connections. Tighten, repair or replace. Clean connections.
	Damaged light assembly.	Repair or replace light assembly.
	Dirty or corroded light socket.	Remove light and clean contacts.
	Dirty or corroded contacts in receptacle or on plug of inter-vehicular cable.	Clean receptacle and plug.

TROUBLE SHOOTING

TUBULAR AXLE

Function	Probable Cause	Corrective Action
Trailer weaves or oscillates on roadway.	Accidental damage to axle from impact event.	Replace axle.
	Damage to axle from overloading.	Replace axle.
	Loose hardware holding shackle box.	Tighten or replace hardware or shackle box.

WHEELS, HUBS, BEARINGS AND TIRES

Hard Pulling	Dragging brakes.	Adjust brakes.
	Improper wheel bearing adjustment.	Adjust wheel bearing.
	Bent axle.	Repair or replace axle.
	Dragging axle.	Align axles and secure.
Noise	Brake shoes dragging on drums.	Adjust brakes.
	Brake drums deformed or out of round.	Replace brake drums.
	Broken brake shoe return spring.	Replace broken return spring.
	Loose wheel stud nuts.	Tighten loose wheel stud nut.
	Damaged wheel bearings.	Replace damaged wheel bearings.
	Wheel bearings not properly adjusted.	Adjust wheel bearings.
	Obstruction between dual wheels or in the tread.	Remove obstruction.
	Bent or damaged wheel hubs	Replace damaged wheel or hubs.

TROUBLE SHOOTING

WHEELS, HUBS, BEARINGS AND TIRES CONTINUED

Function	Probable Cause	Corrective Action
Wobbly or vibrating wheels.	Loose nuts.	Tighten or replace nuts.
	Improperly adjusted or damaged wheel bearings.	Adjust or replace wheel bearings.
	Bent axle spindle.	Replace axle.
	Bent or damaged wheels.	Replace damaged wheel.
Overheated hubs.	Lack of wheel bearing lubricant.	Lubricate wheel bearings.
	Wheel bearings improperly adjusted.	Adjust wheel bearings.
	Damaged bearing or cup.	Replace damaged bearing or cup.
	Damaged hub.	Replace damaged hub
	Bent axle spindle.	Check for bend and replace tubular axle
	Overloading or unbalanced distribution of load.	Check load weights hauled and keep within rated gross capacity. Arrange load evenly to distribute weight.
Overheated brake drums.	Dragging brake shoe assembly.	Adjust brakes.
	Broken brake lining.	Replace brake shoe assembly.
	Broken or weak brake shoe return spring.	Replace defective return spring.
	Bent axle spindle.	Replace axle.
Brakes erratic or unequal.	Impropper lubricant or grease inside brake drum or outside of wheel.	Clean lubricant
	Loose hub cap leaking oil.	Tighten hub cap.
	Defective or leaking oil seals.	Replace defective oil seal.

TROUBLE SHOOTING

WHEELS, HUBS, BEARINGS AND TIRES CONTINUED

Function	Probable Cause	Corrective Action
Excessive wear of any or all tires.	Incorrect tire inflation.	Inflte tires to proper pressure Tighten valve cap finger tight.
	Overloading.	Check load weights hauled and keep within gross capacity.
	Brake action too severe.	Check and adjust brakes.
	Tires not properly matched.	With tires properly inflated, check overall circumference of all tires. The difference in overall circumference must not exceed 3/4" Remove tires and replace with matching circumference.
	Loose wheels.	Tighten wheel nuts.
	Loose wheel bearings.	Replace wheel.
	Bent rim or wheel.	Adjust wheel bearings.
	Bent axle.	Repair or replace bent axle.
	Trailer axles out of alignment.	Align axles.
Air leakage from tires.	Valve core loose or damaged.	Tighten or replace.
	Punctured tire.	Repair tire.

AIR RIDE SYSTEM

All air springs flat.	Insufficient air pressure to suspension.	Build tractor air pressure in excess of 65PSI.
	Defective pressure protection valve.	Remove and replace.
	Height control valve inlet fitting clogged.	Remove and replace.
	Leak in system.	Locate and repair.
	Defective ON/OFF valve.	Remove and replace.

TROUBLE SHOOTING

AIR RIDE SYSTEM CONTINUED

Function	Probable Cause	Corrective Action
Suspension deflates rapidly when parked.	Leak in air suspension system.	Locate and repair.
	Leaking spring.	Remove and replace.
Air spring failure	Punctured, cut or damaged.	Check for obstructions. Replace.
Trailer side tracks to left or right.	Axle out of alignment.	Refrence axle alignment section of manual and adjust accordingly.
	Alignment bolt loose.	Refrence axle alignment section of manual and adjust accordingly.
	Front bushings or Delrin liners worn.	Remove and replace.
Shock absorbers.	Height control valve adjusted too high.	Re-adjust valve to correct ride height.
Excessive trailer sway or lean.	Axle connections loose.	Tighten axle caps metal to metal, front and rear.
	Axle connection bushings worn.	Remove and replace.

AIR BRAKE SYSTEM

Insufficient brakes.	Improper brake adjustment on worn brake linings.	Adjust brakes or replace brake shoe assemblies as necessary.
	Improper slack adjuster adjustment.	Adjust slack adjuster.
	Air leakage in brake system.	Examine for air leakes in brake system. Replace units that are defective.
	Low air pressure.	Check air pressure gauge in towing vehicle. Pressure must not be below 80 PSI.
	Restriction in air hose or lines.	Look for dented or kinked air lines. Examine air hose tomake sure it is not pinched between other units on the trailer.
Slow brake application.	Maximum brake chamber push rod travel.	Adjust slack adjuster and adjust brakes as necessary.
	Weak brake shoe return spring.	Check brake shoe return spring and replace if found to be weak.

TROUBLE SHOOTING

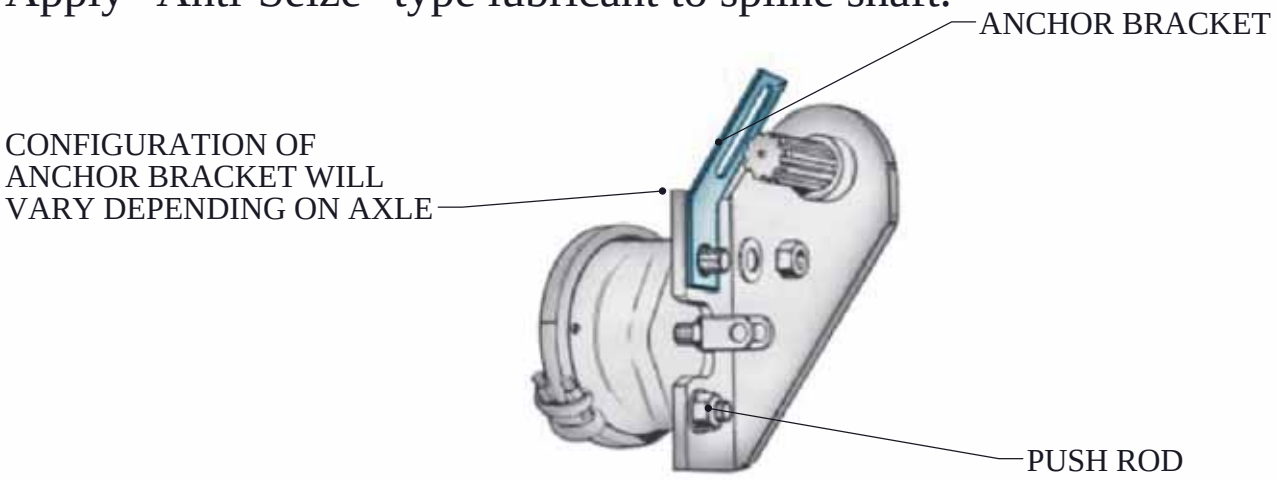
AIR BRAKE SYSTEM CONTINUED

Function	Probable Cause	Corrective Action
Noisey brakes.	Lining or lining rivits loose.	Replace relay emergency valve.
	Weak brake shoe return spring.	Clean brake drum and lining. Replace brake shoe if forign particles are imbedded in liniing.
	Brake drums out of round or scored.	Repair of replace brake drum.
Grabbing brakes or wheels.	Lubricant on brake lining.	Inspect for lubricant on brake linings. Replace if soiled.
	Loose brake lining.	Inspect brake lining for sheared or worn rivits. Replace defective brake shoe assembly.
	Loose or worn wheel bearings.	Adjust wheel bearings. If adjustment of bearings does not correct problem replace bearings.
	Distorted brake linings.	Replace brake shoe assembly.
Service air brake pressure drops.	Excessive leakage in relay emergency valve and exhaust port.	Replace relay emergency valve.
	Air leakage at line connections.	Tighten connectors until air leakage dissapears. If leakage persists, replace defective connectors or lines.
	Leakage at service or emergency line couplings.	Couplings are improperly connected or packing ring gasket in coupling defective.
	Air leakage at service or emergency air hose coupling when towing vehicle service air hose is disconnected.	Connect couplings properly or replace packing ring gasket in coupling. Replace relay emergency valve.
No brakes.	Source of air supply shut off at towing vehicle.	Open air line valves at rear of towing vehicle.
	Air brake hose between trailer and towing vehicle not properly coupled.	Examine air brake hose to make sure that Service and Emergency lines are properly connected between truck and trailer.
	Air reservoir drain cock open.	Check air reservoir drain cocks on truck and trailer are closed.
	To test for air leakes in the RE-6 valves: Apply soapy water to cover plate, vent and exhaust port. Bubbles indicate possible leak.	Replace with new valve unit.
	Air leakage in brake system.	Examine all air hoses, lines and connecting units in the brake system for air leakes. Replace units that are found defective.
	Low air pressure.	Check air pressure gauge on towing vehicle. Pressure should not be lower than 80 PSI.
	Defective relay-emergency valve.	Replace defective valve.
	Brake air chamber inoperative.	Check for punctured diaphragm.
	Brakes need adjustment.	Adjust brakes.

AUTOMATIC SLACK ADJUSTERS INSTALLATION INSTRUCTIONS (HALDEX)

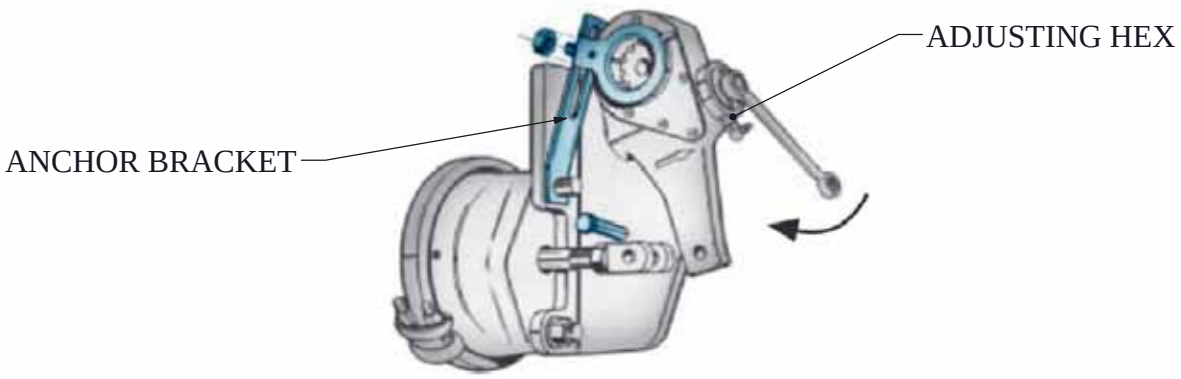
Number One:

1. Block wheels to prevent vehicle from rolling.
2. Check that push rod is fully retracted, apply air to release spring brake. If air is not available, spring brake must be completely caged back.
3. Install anchor bracket loosely as illustrated.
4. Some brackets have two mounting holes. Proper mounting location is determined by the length of the adjuster arm. Five inch and 5-1/2 inch adjuster arm lengths utilize the shorter locations, six inch and 6-1/2 inch lengths are longer.
5. Do not tighten anchor bracket fasteners at this time.
6. Apply "Anti-Seize" type lubricant to spline shaft.



Number Two:

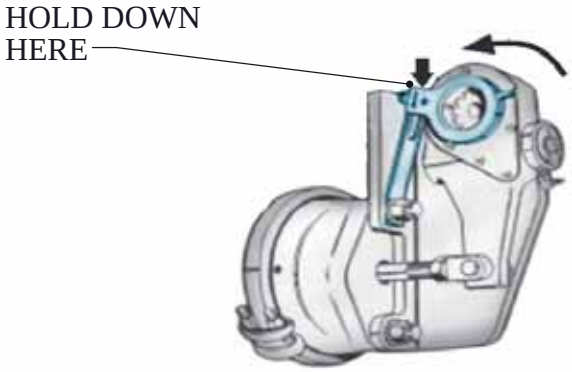
1. Install the brake adjuster onto the cam shaft with the adjusting hex pointing away from the brake chamber.
2. Secure the brake adjuster on the cam shaft.
3. Rotate the 7/16" adjusting hex nut clockwise until the clevis holes line up with the brake adjuster arm hole.
4. Install clevis pin, do no install cotter pin at this time, later it will be necessary to remove the clevis pin to check installation.



AUTOMATIC SLACK ADJUSTERS INSTALLATION INSTRUCTIONS (HALDEX) (CONTINUED)

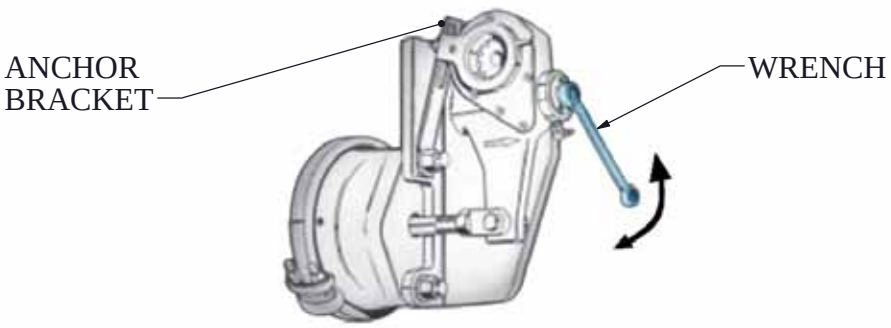
Number Three:

1. Rotate the control arm away from the adjusting hex towards the air chamber, until it comes to a definite internal stop (as illustrated).
2. Most adjusters will be equipped with an "installation indicator".
3. If the control position is wrong, tight brakes will occur.
4. Tighten all anchor bracket fasteners (make sure the control arm does not move from its position while tightening the anchor bracket fasteners).



Number Four:

1. The adjuster must be manually adjusted at this time.
2. Rotate the adjusting hex clockwise until the lining contacts the drum.
3. Then back-off the adjuster by turning the adjusting hex counter-clockwise 1/2 of a turn.
4. A minimum of 13 ft. lbs. is necessary to overcome the internal clutch. A ratcheting sound will occur.
5. Final inspection with full air pressure, release spring and service brake and check that the installation indicator is within the slotted area. Remove clevis pin and check that the clevis hole and adjuster hole remains in alignment. If the air chamber push rod retracts into the air chamber repeat steps 1 through 3. After final inspection install cotter pin into clevis pin.



AUTOMATIC SLACK ADJUSTER (CREWSON BRUNNER)

AUTOMATIC BRAKE ADJUSTER FIELD INSPECTION

No Automatic Brake Adjuster can compensate for Braking System Deficiencies. The brakes should be in good operating condition and be well maintained. Crewson Brunner Automatic Brake Adjusters should not require manual adjustment except for initial installation and brake relines. The Automatic Brake Adjuster unit must be installed with a Crewson Brunner clevis and template.

AUTOMATIC BRAKE ADJUSTER ON THE VEHICLE:

CAUTION: Prior to testing or adjusting the Automatic Brake Adjuster, manually cage the spring brakes or apply air to emergency circuit only.

Note: By constant manual readjustment of the ABA, the internal clutch life will be shortened.
***-If the stroke is correct, the Automatic Brake Adjuster is operating properly. No other tests are necessary. The following only apply if the air chamber stroke is past the readjustment stroke.**

Free Stroke

Free stroke is the distance the slack arm moves in order to make the brake shoes contact the drum. Move the slack arm with a small pry bar and measure the movement distance. This distance should be 3/8" to 5/8". **If free stroke is greater than 5/8", check the foundation brake components. Repair and replace as needed.**

Push Rod Power Stroke

Measure the power stroke (the difference between when the brake is off and when it is fully applied) at 90 PSI application pressure. The adjusted stroke should be less than or equal to 2” with a type 30 brake chamber.

AUTOMATIC SLACK ADJUSTER (CREWSON BRUNNER)

Back Torque

This procedure should only be used if:

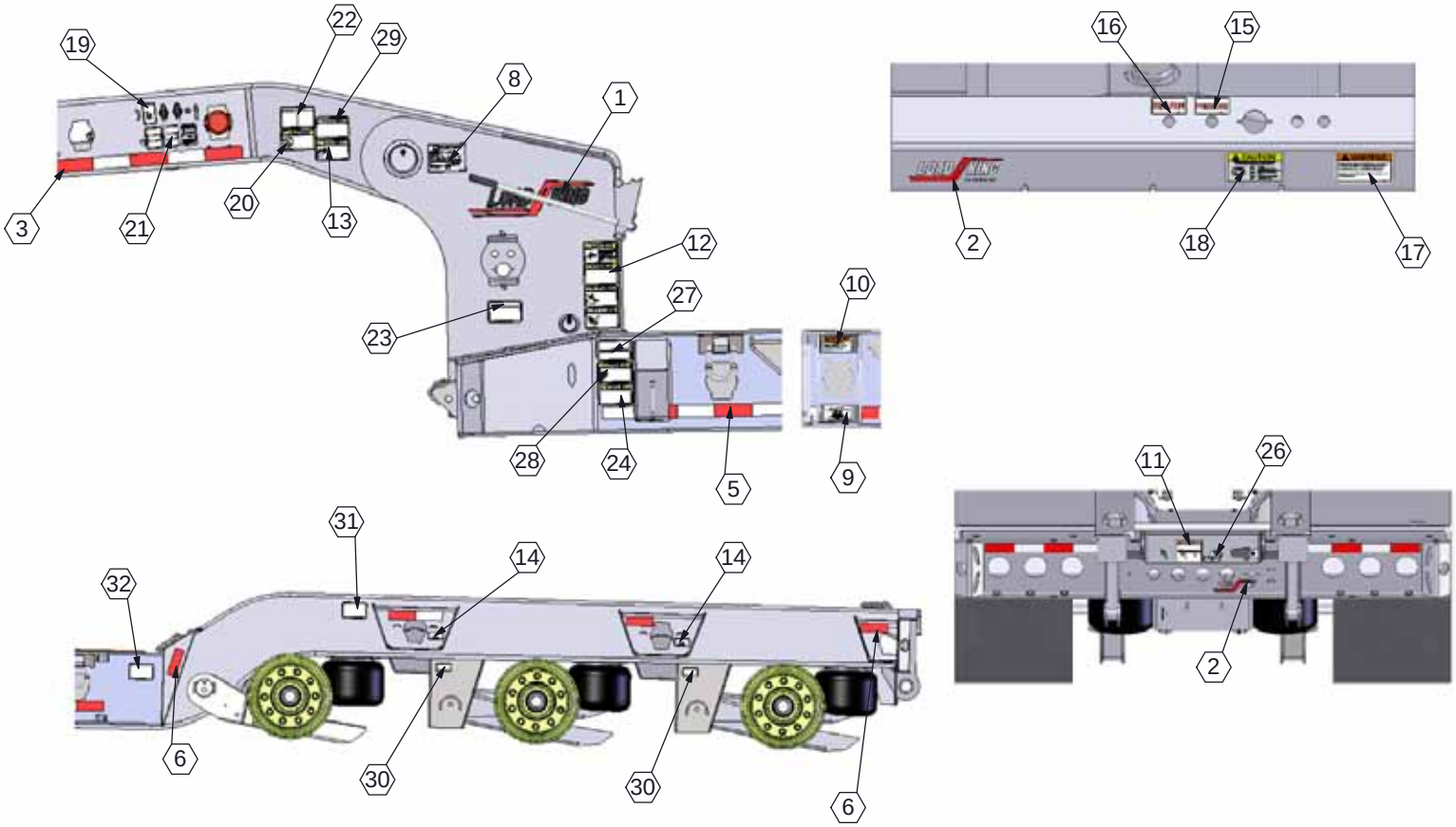
A) The foundation brake system has no deficiencies

B) The Push Rod Power Stroke exceeds the specified values

With the automatic brake adjuster correctly installed on the vehicle or trailer axle back torque (CCW_Rotation of Hex Shaft) can be measured. Using an inch/pound type torque wrench turn the hex adjusting shaft CCW very slowly. Back torque will increase to a peak value, then return to zero as the clutch ratchet teeth disengage.

****NOTE:**** Do not turn the hex adjusting shaft more than 5 “clicks” (ratchet teeth) while taking readings. If the back torque reading is below 120 inch pounds and the Push Rod Power Stroke is beyond the specified limits, replace the Automatic Brake Adjuster. If the Back Torque exceeds 400 inch pounds, replace the Automatic Brake Adjuster.

PARTS SECTION



ITEM#	PART NUMBER	DESCRIPTION	QTY
1	DCL00447-4-W/B	LARGE LOAD KING DECAL	2
2	DCL00447-3-W/B	MANITEX COMPANY LOGO	2
3-7	MP5-2296	2" CONSPICUITY TAPE	PER INCH
8	MPD-1751	N.O.M. PLATE	1
9	DCL00540	SIDE LOADING SUPPORT DECAL	4
10	DCL00541	SIDE LOADING WARNING DECAL	4
11	DCL00543	REGULATED HEIGHT CONTROL DECAL	1
12	DCL00547	WARNING & CAUTION DECAL	1
13	DCL00548	DO NOT GO NEAR LEAKS DECAL	1
14	DCL00549	AIR TANK DRAIN DECAL	2
15	DCL00550	PRESSURE DECAL	1
16	DCL00551	RETURN DECAL	1
17	DCL00552	CHECK WHEEL NUT TORQUE DECAL	1
18	DCL00553	CAUTION 7 WAY DECAL	1
19	DCL00554	LOCK PIN DECAL	1
20	DCL00555	FAILURE TO RAISE FRAMELIFT DECAL	1
21	DCL00571	GOOSENECK HYDRAULIC CONTROL DECAL	1
22	DCL00557	GOOSENECK OPERATION DECAL	1
23	DCL00558	LOCKING AIR CONNECT FITTINGS DECAL	1
24	DCL00559	OUTRIGGER RETAINERS DECAL	1
25	DCL00560	SPECIAL ALLOY STEEL DECAL	1
26	DCL00562	SUSPENSION AIR DECAL	1
27	DCL00563	OUTRIGGER BOARD LOADING DECAL	2
28	DCL00564	OUTRIGGER CAPACITY DECAL	2
29	DCL00565	READ OPERATOR'S MANUAL DECAL	1
30	DCL00566	PULL TO DRAIN DECAL	2
31	L-336b	SUSPENSION TORQUE DEALER DECAL	1
32	SD-002(C)	WEBB WHEEL PRODUCTS DECAL	1

REVISIONS			
REV.	DESCRIPTION	DATE	AUTHORITY
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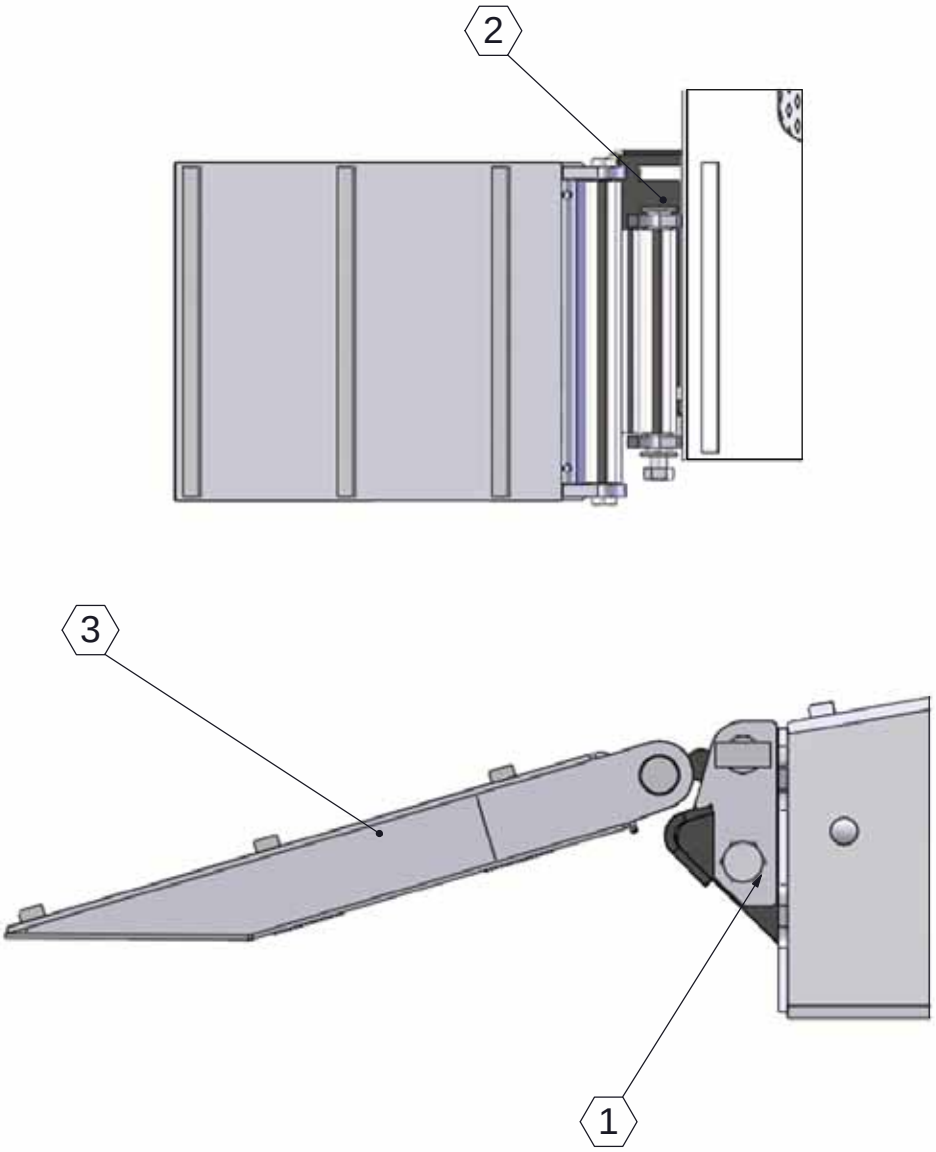

QUANTITIES LISTED BELOW ARE FOR 1 RAMP ASSEMBLY

ITEM#	PART NUMBER	DESCRIPTION	QTY
1	MP5-0096-234	HEX BOLT 1" X 3" UNC-2A GRADE 8	2
2	MP5-0851-1607	LOCK NUT 1-8 UNC	2
3	RM000438	RAMP AND HINGE TUBE ASSEMBLY	1

REVISIONS			
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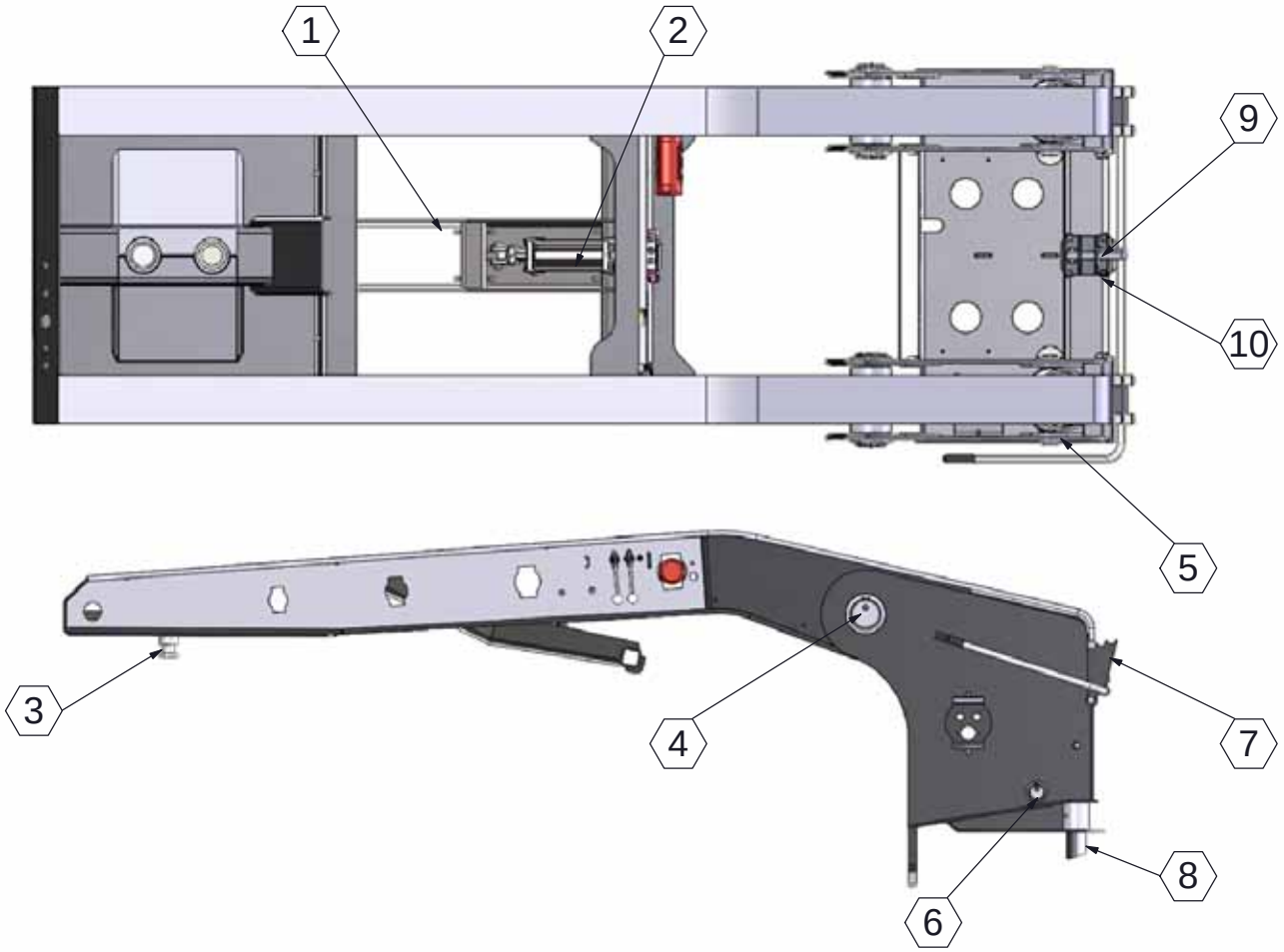

ITEM#	PART NUMBER	DESCRIPTION	QTY
1	FA000980	FRAME LIFT ASSEMBLY	1
2	MP5-3695	CYLINDER ASSEMBLY	1
3	BB0-0105	KING PIN	1
4	GA003691-1	PIVOT PIN KIT	2
5	GA003692-1	UPPER CYLINDER PIN KIT	2
6	GA003693-1	LOWER CYLINDER PIN KIT	2
7	GA003765	LOCK BAR ASSEMBLY	1
8	BA2-0008	LOCK PIN ASSEMBLY	1
9	MP5-0094-117	HEX BOLT	1
10	MP5-0851-807	LOCK NUT	1
REF	MP5-3520-SK	CYLINDER SEAL KIT	--
REF	MP5-3520-1RC	CYLINDER ROD CLEVIS	--
REF	MP5-3520-1BE	CYLINDER BUTT CLEVIS	--
REF	MP5-3520-CP	CYLINDER CLEVIS PIN	--
REF	MP5-3520-CL	CYLINDER CLIP	--

REVISIONS			
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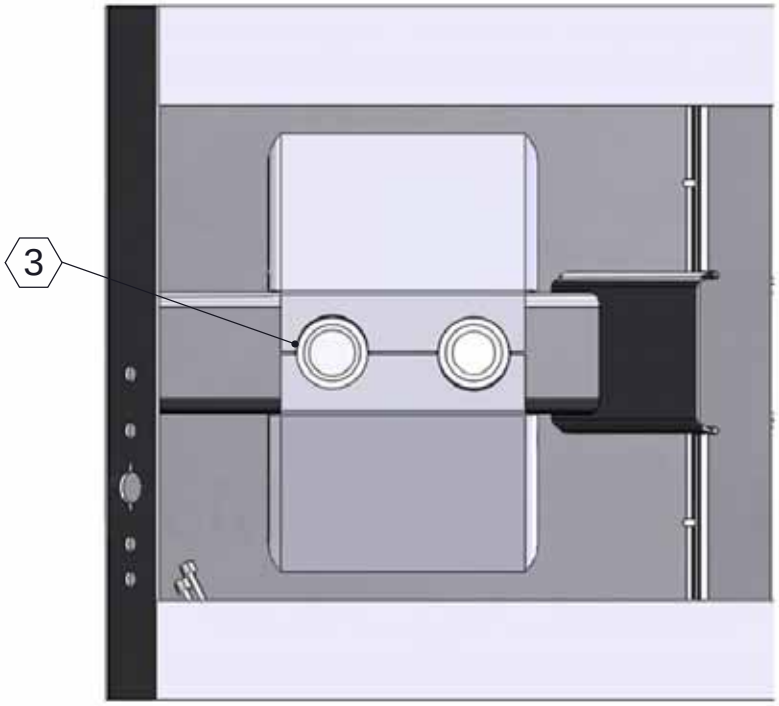

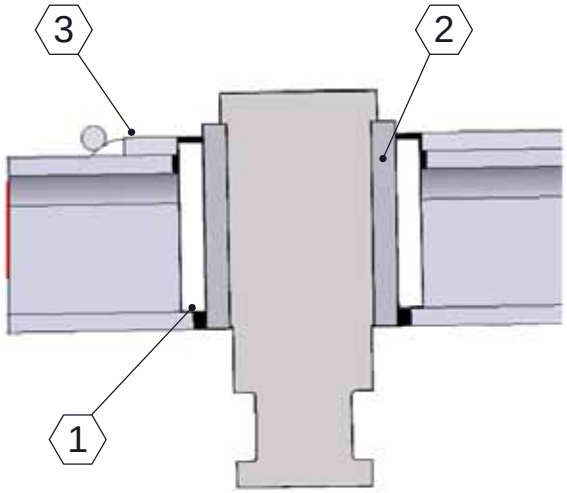

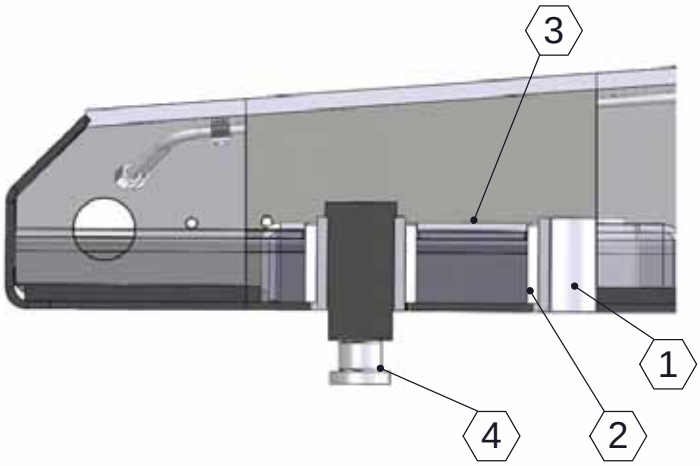

ITEM#	PART NUMBER	DESCRIPTION	QTY
1	BF0-0013	INNER BUSHING	2
2	BF0-0014	OUTER BUSHING	2
3	MC0-0287	TOP PLATE	2
4	MP0-1044	REMOVABLE KINGPIN	1

REVISIONS			
REV.	DESCRIPTION	DATE	AUTHORITY
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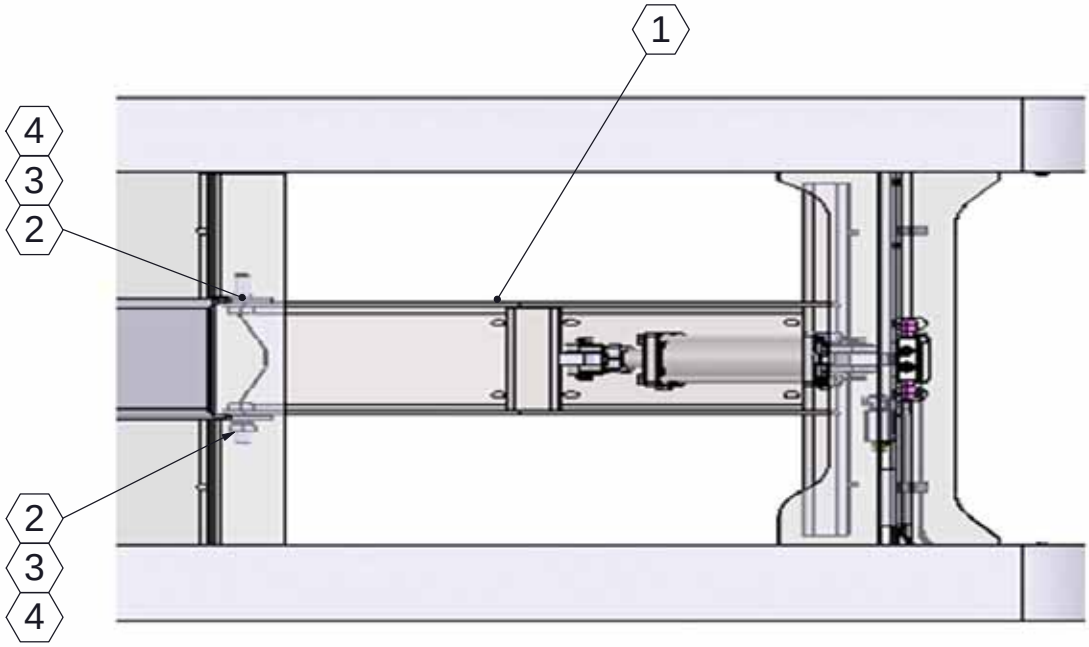
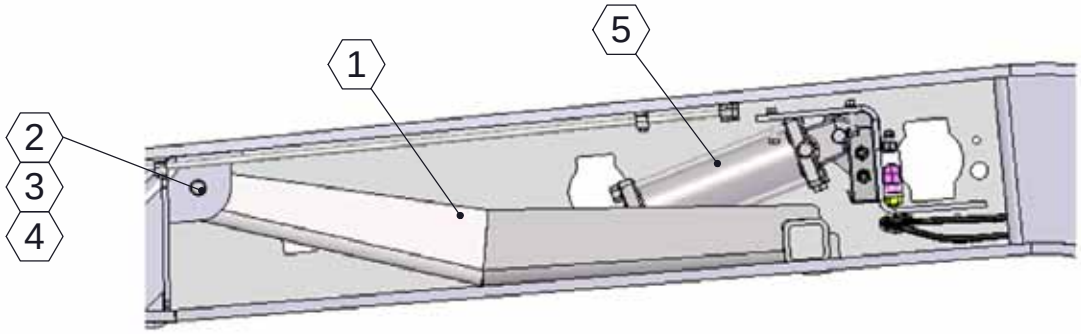
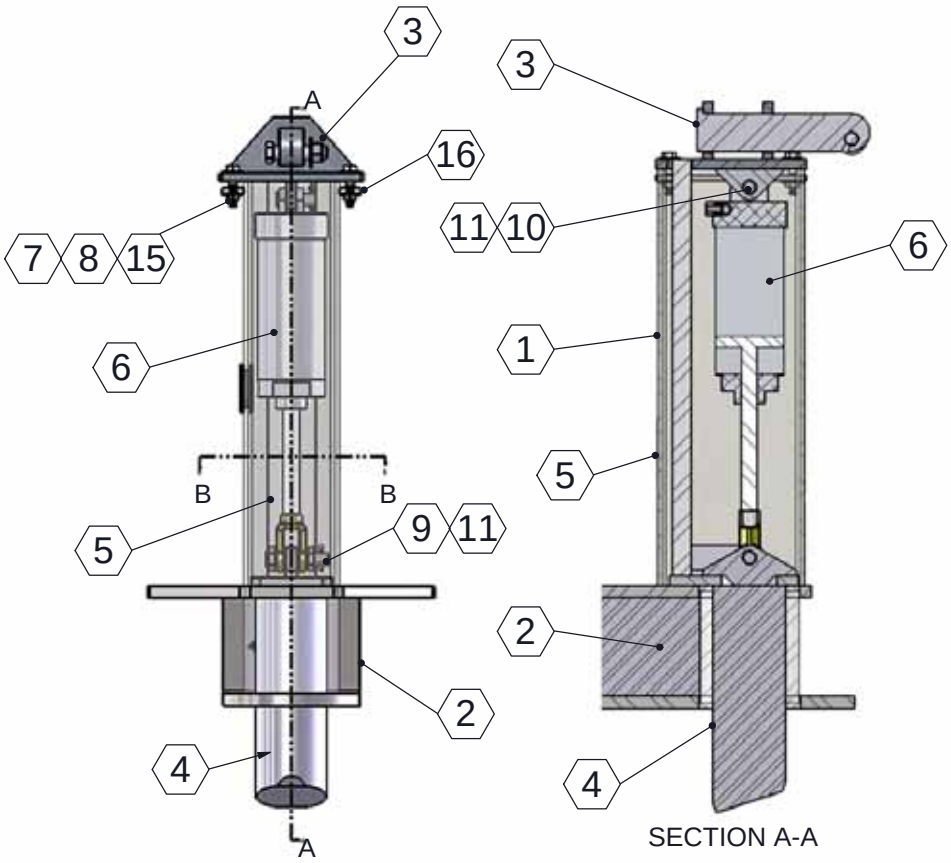
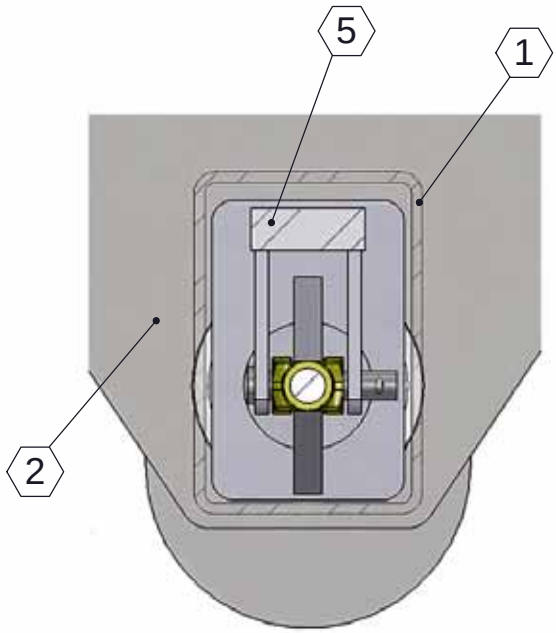




ITEM#	PART NUMBER	DESCRIPTION	QTY
1	FA000980	FRAME LIFT ASSEMBLY	1
2	MP5-0096-232	HEX BOLT	2
3	MP5-0100-27	WASHER	2
4	MP5-0851-1607	LOCK NUT	2
5	MP5-3376	HYDRAULIC CYLINDER	1
REF	MP5-3520-SK	HTDRAULIC CYLINDER SEAL KIT	-
REF	MP5-3520-1RC	CYLINDER ROD CLEVIS	-
REF	MP5-3520-1BE	CYLINDER BUTT CLEVIS	-
REF	MP5-3520-CP	CYLINDER CLEVIS PIN	-
REF	MP5-3520-CL	CYLINDER CLIP	-



SECTION A-A



SECTION B-B

ITEM#	PART NUMBER	DESCRIPTION	QTY
1	FA002069	LOCK TUBE	1
2	BA2-0009	BUSHING ASSEMBLY	1
3	FA002067	CAP ASSEMBLY	1
4	BA2-0011	PIN ASSEMBLY	1
5	BA2-0012	LOCK BAR ASSEMBLY	1
6	BA0-0118	CYLINDER ASSEMBLY	1
6A	BA0-0118-SK	CYLINDER SEAL KIT	-
7	MP5-0094-38	HEX BOLT'	4
8	MP5-0100-12	WASHER	8
9	MP5-0089-233	CLEVIS PIN	1
10	MP5-0089-225	CLEVIS PIN	1
11	MP5-0102-419	COTTER PIN	2
12	MP5-0094-116	HEX BOLT	1
13	MP5-0100-17	WASHER	1
14	MP5-0851-807	LOCKNUT	1
15	MP5-0851-507	LOCKING HEX NUT	4
16	FA002064	BOLT PLATE	2

REVISIONS			
REV.	DESCRIPTION	DATE	AUTHORITY
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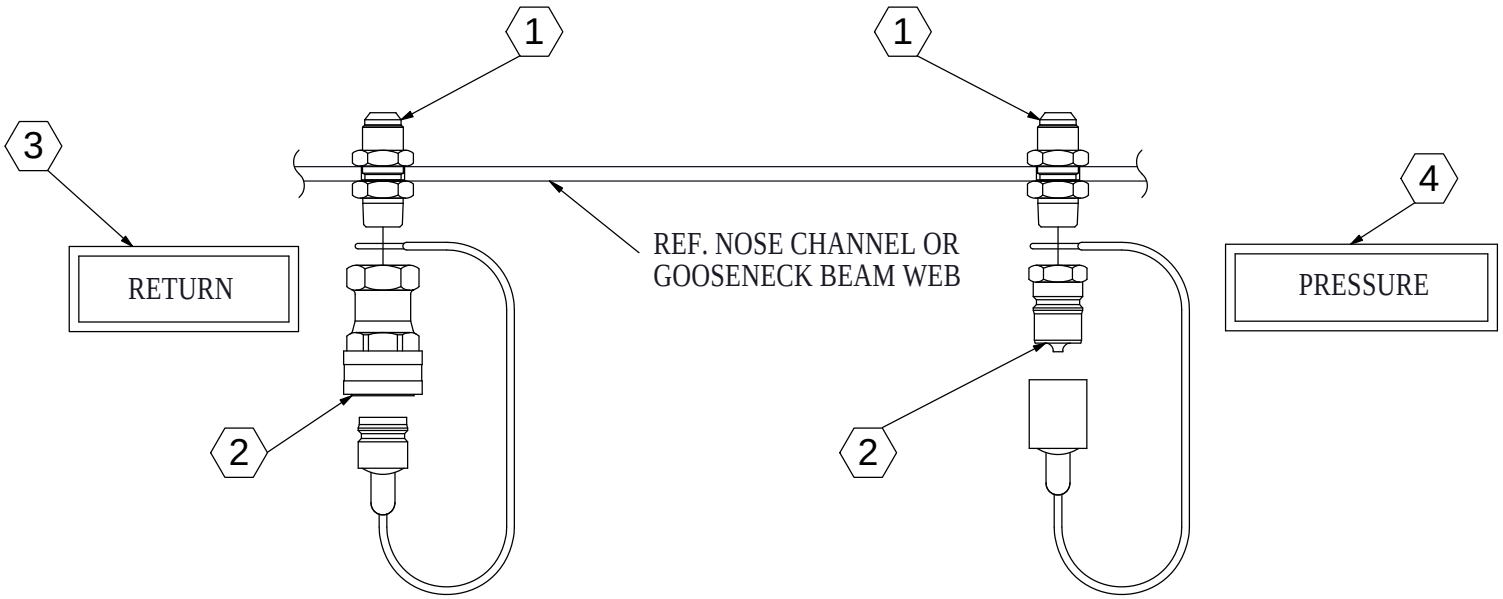

ITEM#	PART NUMBER	DESCRIPTION	QTY
1	MP5-0971-5	BULKHEAD	2
2	MP5-0915-5A	QUICK COUPLERS	1 PAIR
3	MP0-1286	RETURN DECAL	1
4	MP0-1316	PRESSURE DECAL	1

REVISIONS			
REV.	DESCRIPTION	DATE	AUTHORITY
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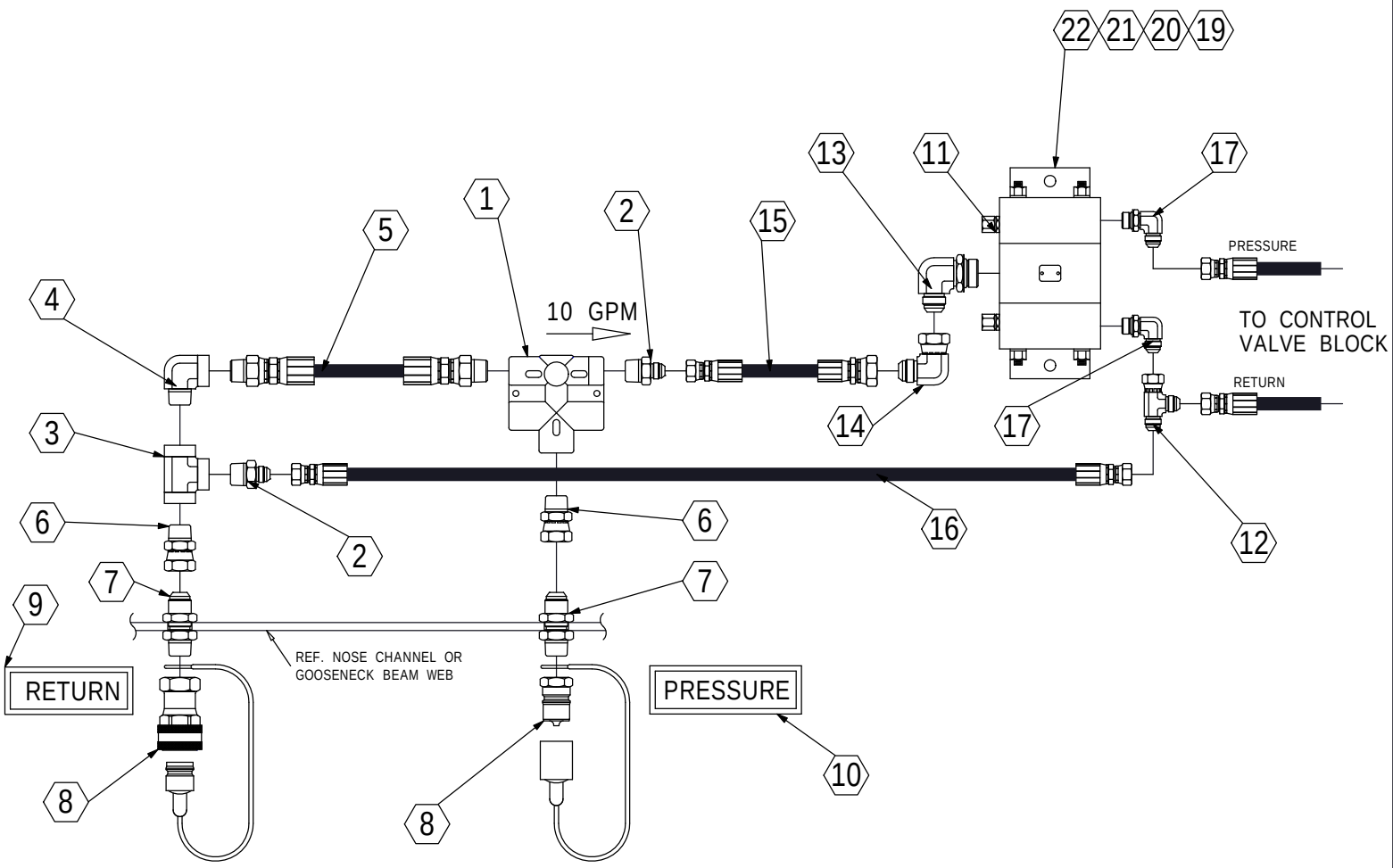

ITEM#	PART NUMBER	DESCRIPTION	QTY
1	LP5-0032-10	PRIORITY FLOW DIVIDER	1
2	MP5-0116-17	MALE CONNECTOR	2
3	MP5-0110-5	TEE	1
4	MP5-0134-5	90˚ STREET ELBOW	1
5	SH0-3009-12	HOSE	1
6	MP5-1282-10	ADAPTER	2
7	MP5-0971-5	BULKHEAD	2
8	MP5-0915-5A	QUICK COUPLERS	1
9	MP5-1286	RETURN DECAL	1
10	MP0-1316	PRESSURE DECAL	1
11	MP5-2805-1	HYDRAULIC PRESSURE INTENSIFIER	1
12	MP5-0558-4	TEE	1
13	MP5-0931-30	90˚ ELBOW	1
14	MP5-0193-8	SWIVEL NUT	1
15	SH0-2023-30	HOSE	1
16	SH0-2016-60	HOSE	1
17	MP5-0931-7	90˚ ELBOW	2
18	BA0-0124	FLOW DIVIDER COVER INSTALL	1
19	MP5-0091-807	NUT	2
20	MP5-0094-115	BOLT	2
21	MP5-0100-17	WASHER	4
22	MP5-0105-10	LOCKWASHER	2

REVISIONS			
REV.	DESCRIPTION	DATE	AUTHORITY
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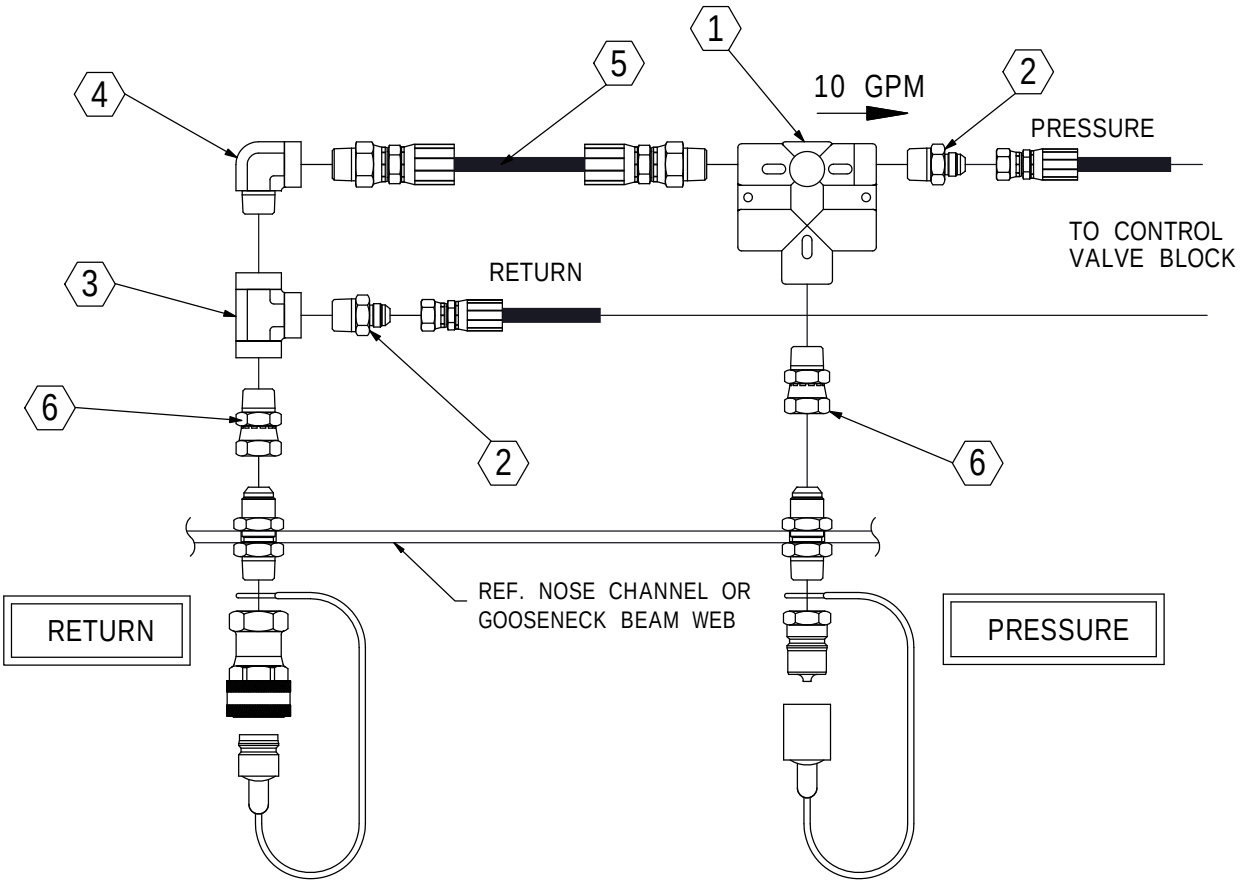

ITEM#	PART NUMBER	DESCRIPTION	QTY
1	LP5-0032-10	PRIORITY FLOW DIVIDER	1
2	MP5-0116-21	MALE CONNECTOR	2
3	MP5-0110-5	TEE	1
4	MP5-0134-5	STREET ELBOW	1
5	SH0-3009-12	3/4" HOSE ASSEMBLY	1
6	MP5-1282-10	ADAPTER	2
7	BA0-0110	FLOW DIVIDER COVER	1

REVISIONS			
REV.	DESCRIPTION	DATE	AUTHORITY
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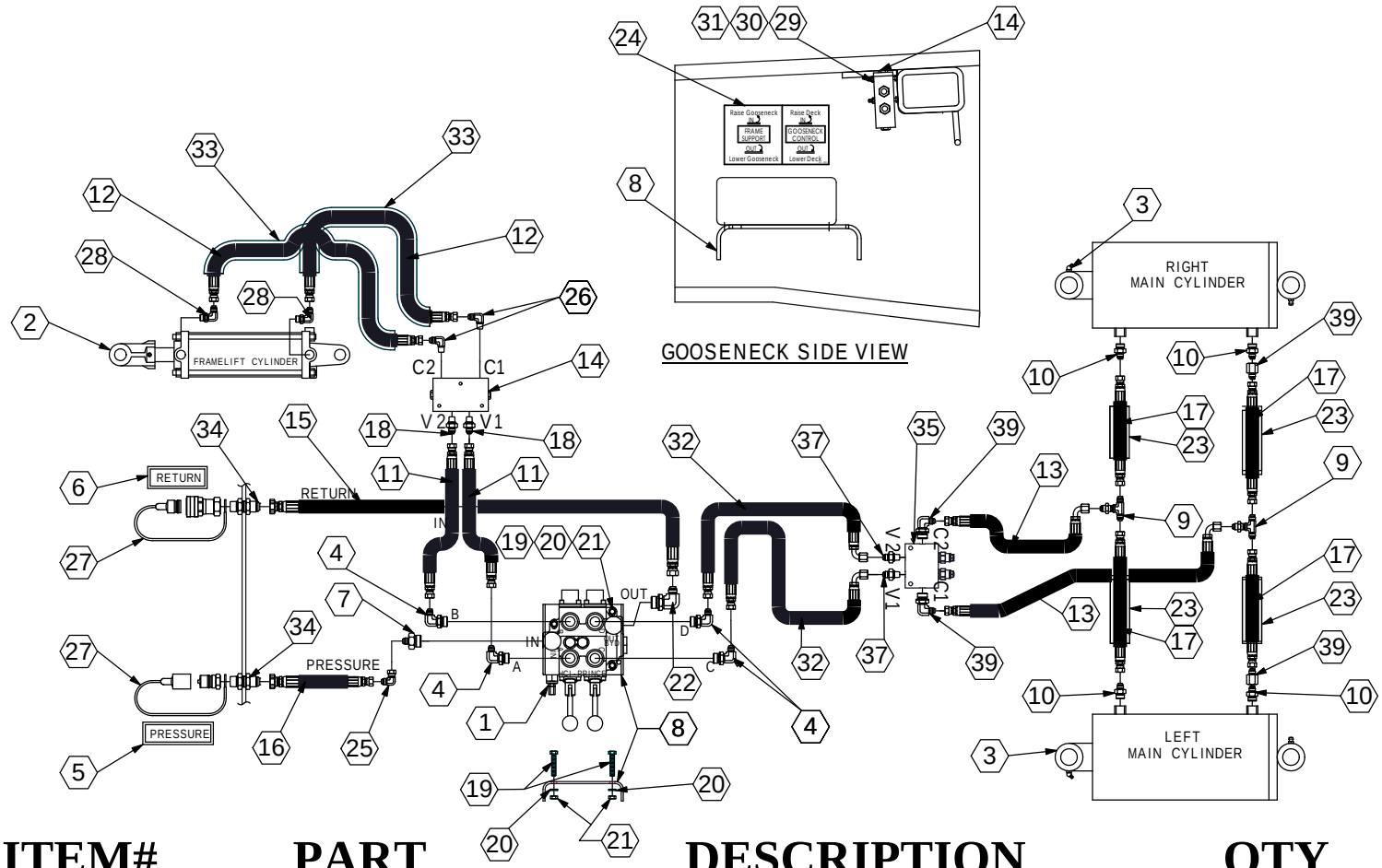

ITEM#	PART NUMBER	DESCRIPTION	QTY
1	MP5-2586	CONTROL VALVE	1
2	MP5-3695	CYLINDER	1
3	REF	CYLINDER	REF
4	MP5-0931-24	90° ELBOW	6
5	MP0-1316	PRESSURE DECAL	REF
6	MP0-1286	RETURN DECAL	REF
7	MP5-0969-20	FITTING	1
8	F00176	CONTROL VALVE MOUNT	REF
9	MP6-0560-5	BULKHEAD BRANCH TEE	2
10	MP5-0969-11	FITTING	4
11	SH0-1037-24	3/8" HOSE 24"L	2
12	SH0-1037-18	3/8" HOSE 18"L	2
13	SH0-1083-36	3/8" HOSE 36"L	2
14	MP5-2781	DOUBLE PILOT CHECK VALVE	1
15	SH0-2023-136	1/2" HOSE 136"L	1
16	SH0-1058-70	3/8" HOSE 70"L	1
17	SH0-1037-38	3/8" HOSE 38"L	4
18	MP5-0116-13	STRAIGHT	2
19	MP5-0094-66	HEX BOLT	3
20	MP5-0105-8	LOCK WASHER	3
21	MP5-0091-607	HEX NUT	3
22	MP5-0931-25	90° ELBOW	1
23	MP0-1236-38	2" CORDURA 38"L	4
24	DCL-0005	GOOSENECK CONTROL DECAL	1
25	MP50193-5	90° ELBOW	1
26	MP5-0121-10	90° ELBOW	2
27	MP5-0915-5A	3/4" QUICK COUPLER	1 PAIR
28	MP5-0931-6	90° ELBOW	2
29	MP5-0094-16	HEX BOLT	4
30	MP5-0091-407	HEX NUT	4
31	MP5-0105-6	LOCK WASHER	4
32	SH0-1083-12	3/8" HOSE 12"L	2
33	MP0-1236-16	2" CORDURA 16"L	2
34	MP5-0971-5	BULKHEAD	2
35	MP5-3788	COUNTER BALANCE VALVE	1
36	MP0-1394	RESTRICTOR	2
37	MP5-0969-15	FITTING	2

REVISIONS			
REV.	DESCRIPTION	DATE	AUTHORITY
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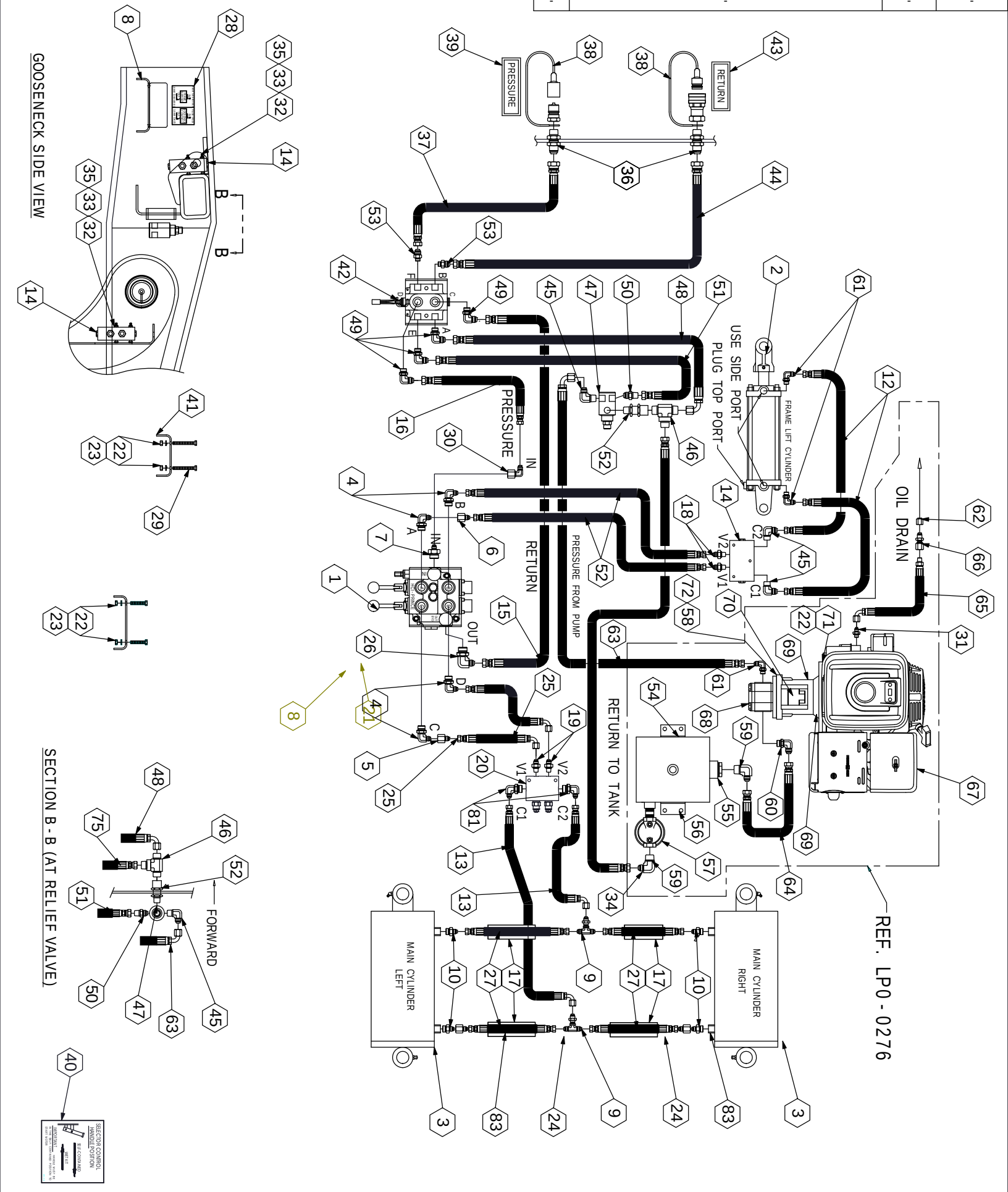

REVISIONS			
REV.	DESCRIPTION	DATE	AUTHORITY
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ITEM#	PART NUMBER	DESCRIPTION	QTY
1	MP5-2586	CONTROL VALVE	1
2	MP5-3695	4" X 8" CYLINDER	1
3	REF	HYDRAULIC CYLINDER	REF
4	MP5-0931-24	90° ELBOW	6
5	MP0-1394	RESTRICTOR	3
6	MP0-1395	RESTRICTOR	1
7	MP5-0969-20	ADAPTER FITTING	1
8	F00176	VALVE MOUNT CHANNEL	REF
9	MP5-0560-5	BULKHEAD TEE	2
10	MP5-0969-11	ADAPTER FITTING	4
11	SH0-1037-24	3/8" HOSE 24"L	2
12	SH0-1037-64	3/8" HOSE 64"L	2
13	SH0-1083-38	3/8" HOSE 38"L	2
14	MP5-2781	DOUBLE PILOT CHECK VALVE	1
15	SH0-2016-36	1/2" HOSE 36"L	1
16	SH0-1047-24	3/8" HOSE 24"L	1
17	SH0-1037-38	3/8" HOSE 38"L	4
18	MP5-0116-13	STRAIGHT	2
19	MP5-0969-15	FITTING	2
20	MP5-3788	COUNTER BALANCE VALVE	1
21	MP5-0094-66	3/8 HEX BOLT	3
22	MP5-0105-8	3/8 LOCKWASHER	5
23	MP5-0091-607	3/8 HEX NUT	5
24	MP0-1236-16	2" CORDURA 16"L	2
25	SH0-1083-12	3/8" HOSE	2
26	MP5-0931-25	90° ELBOW	1
27	MP0-1236	2" CORDURA 48"L	1
28	DCL-0005	GOOSENECK CONTROL DECAL	1
29	MP5-0094-70	3/8 HEX BOLT	2
30	MP5-0193-5	90° ELBOW	1
31	MP5-2160	ADAPTER	REF
32	MP5-0094-16	1/4 HEX BOLT	2
33	MP5-0091-407	1/4 HEX NUT	2
34	SH0-2016-54	1/2" HOSE 54"L	1
35	MP5-0105-6	1/4 LOCKWASHER	2
36	MP5-0971-5	BULKHEAD	2
37	SH0-2023-84	1/2" HOSE 84"L	1
38	MP5-0915-5A	3/4" QUICK COUPLER	1 PAIR
39	MP0-1316	PRESSURE DECAL	1
40	MP0-1746	SELECTOR OPERATION DECAL	1
41	D0113	VALVE MOUNT CHANNEL	REF
42	LF0-0023	SELECTOR VALVE	1
43	MP0-1286	RETURN DECAL	1
44	SH0-2023-102	1/2" HOSE 102"L	1
45	MP5-0121-7	90° ELBOW	3
46	MP5-0201-7	MALE RUN TEE	1
47	LP0-0099	RELIEF VALVE	1
48	SH0-1096-60	3/8" HOSE 60"L	1
49	MP5-0931-7	90° ELBOW	4
50	MP5-0116-16	MALE CONNECTOR	1
51	SH0-1046-60	3/8" HOSE 60"L	1
52	MP5-2870	MALE CLAMPING STUD	1
53	MP5-0969-12	FITTING	2
54	MP5-3346	RESERVOIR	REF
55	MP5-3346	STRAINER	REF
56	MP5-3346	ADAPTER	REF
57	MP5-3346	FILTER	REF
58	MP5-0105-7	5/16 LOCKWASHER	REF
59	MP5-0121014	90° ELBOW	REF
60	MP5-0931-10	90° ELBOW	REF
61	MP5-0931-6	90° ELBOW	2
62	MP5-0387-5	CAP	REF
63	SH0-1083-60	3/8" HOSE 60"L	1
64	SH0-2016-14	1/2" HOSE 14"L	REF
65	SH0-1351-14	3/8" HOSE 14"L	REF
66	MP5-0190-4	BULKHEAD	REF
67	MP5-1964	HONDA MOTOR	REF
68	MP5-3000	JS BARNES PUMP	REF
69	MP5-1558	BUCKEYE PUMP MOUNT	REF
70	MP5-1256	COUPLER ASSEMBLY	REF
71	MP5-0095-60	3/8 HEX BOLT	REF
72	MP5-0094-34	5/16" HEX BOLT	REF
73	MP0-1405	ENGINE OPERATION DECAL	REF
74	MP0-1406	ENGINE OIL DRAIN DECAL	REF

REVISIONS			
REV.	DESCRIPTION	DATE	AUTHORITY
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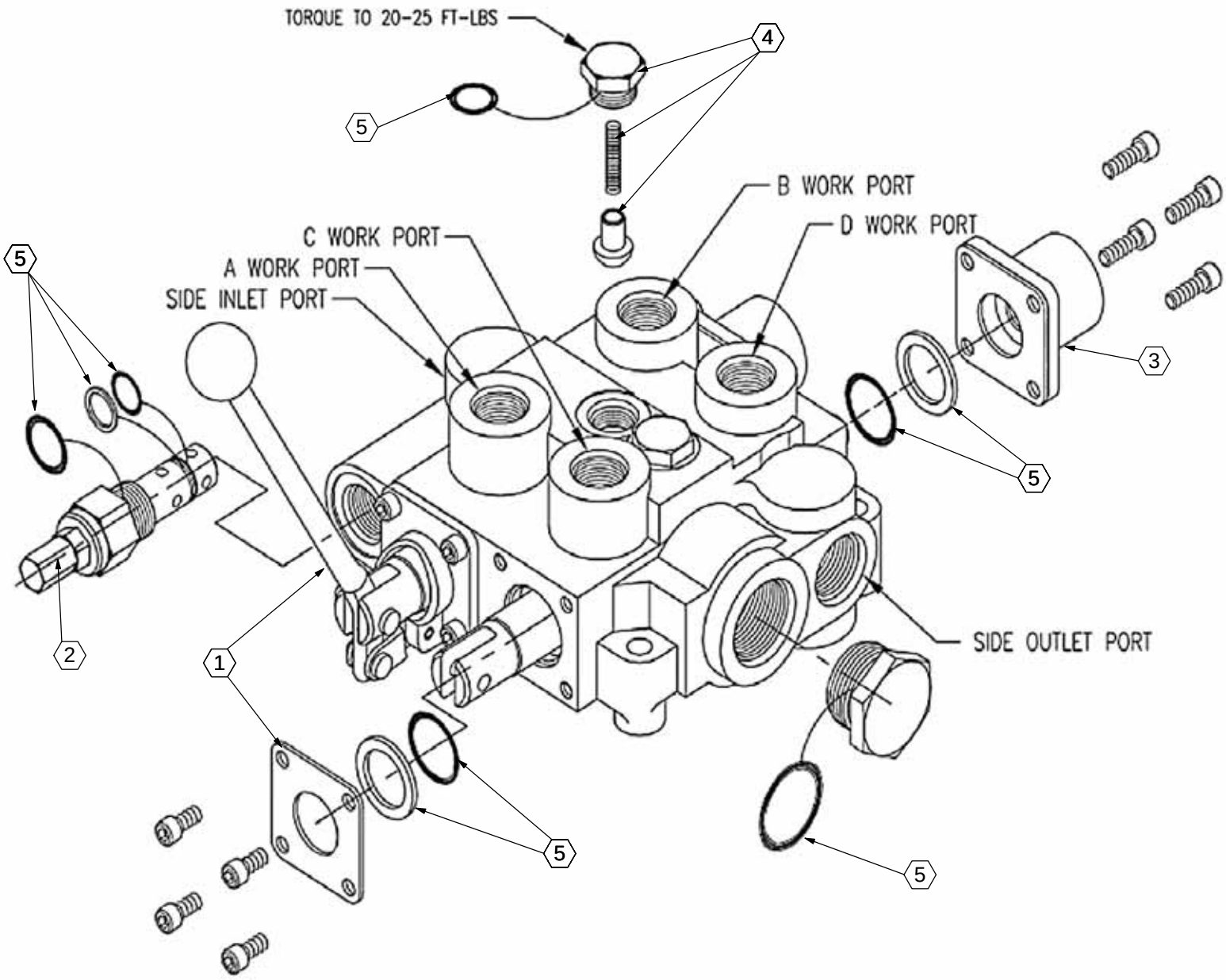

ITEM#	PART NUMBER	DESCRIPTION	QTY
1	MP5-2586-H	HANDLE KIT	2
2	MP5-2486-R	RELIEF CARTRIDGE KIT	1
3	MP5-2586-S	SPRING KIT WITH CAP	2
4	MP5-2586-L	LOAD CHECK KIT	2
5	MP5-2586-SK	SEAL KIT	--

REVISIONS			
REV.	DESCRIPTION	DATE	AUTHORITY
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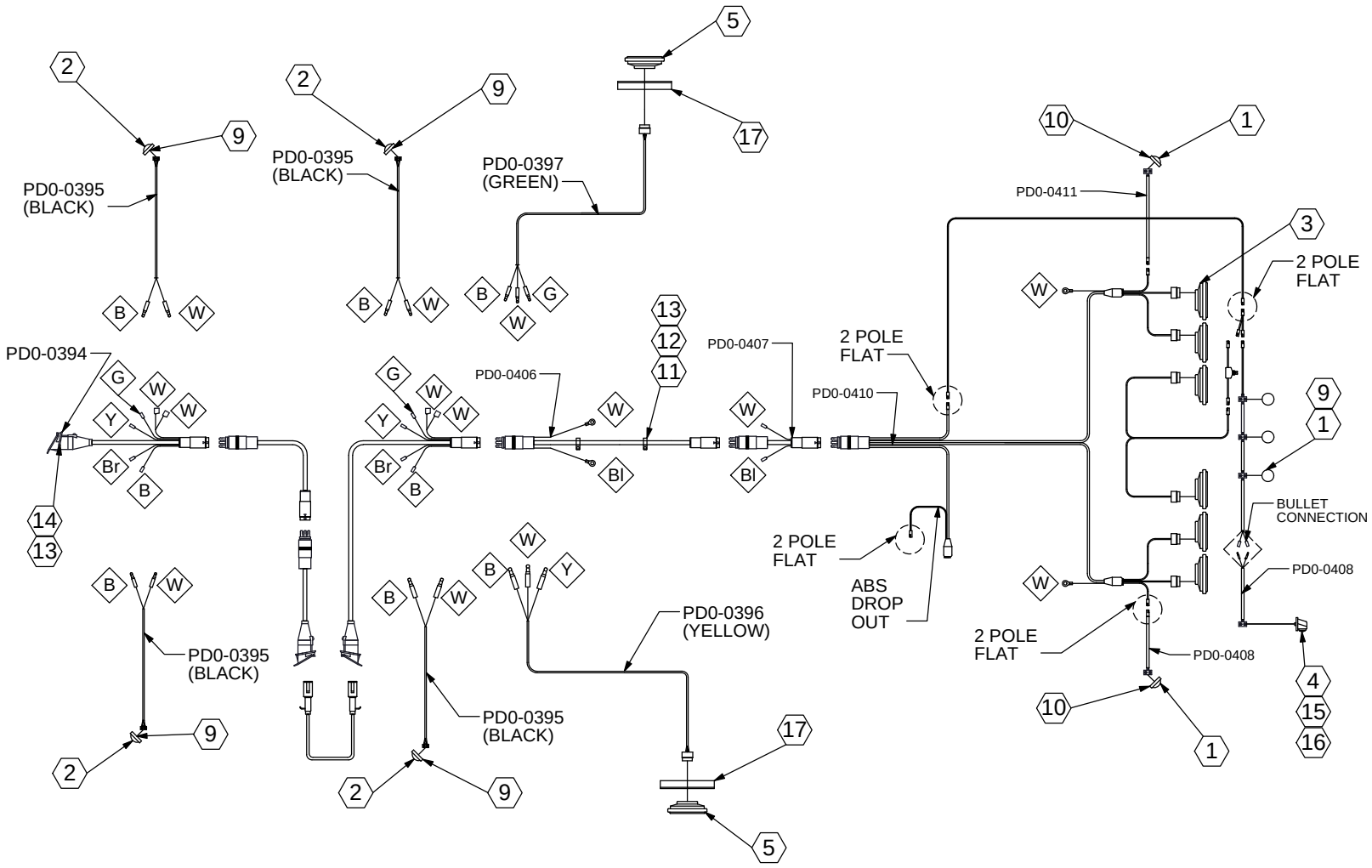
W = WHITE Y = YELLOW
B = BLACK Br = BROWN
G = GREEN Bl = BLUE



ITEM#	PART NUMBER	DESCRIPTION	QTY
1	PD0-0433	2.5" RED LED	REF
2	PD0-0430	2.5" AMBER LED	REF
3	PD0-0431	STOP, TURN TAIL, LED	REF
4	PD0-0432	LICENSE PLATE LAMP	REF
5	PD0-0428	MIDSHIP TURN LED	REF
6	JP001024-H	MAIN HARNESS	1
7	MP5-1642	3/8" SPLIT LOOM	6"
8	PD0-0429	4" AMBER STROBE	REF
9	JP000752	2.5" SHORT GROMMET	5
10	MP5-3437	2.5" TALL GROMMET	4
11	MP5-1056-1	WELD ON STUD	54
12	MP5-0481	3/4" WIRE CLAMP	54
13	MP5-0851-407	1/4" HEX NYLOCK	58
14	MP5-0094-10	1/4" X 1 1/4" BOLT	4
15	MP5-0383-9	1" #10 MACHINE SCREW	6
16	MP5-0091-202	#10 UNC NUT	6
17	JP0-0345	LIGHT BRACKET	2

REVISIONS			
REV.	DESCRIPTION	DATE	AUTHORITY
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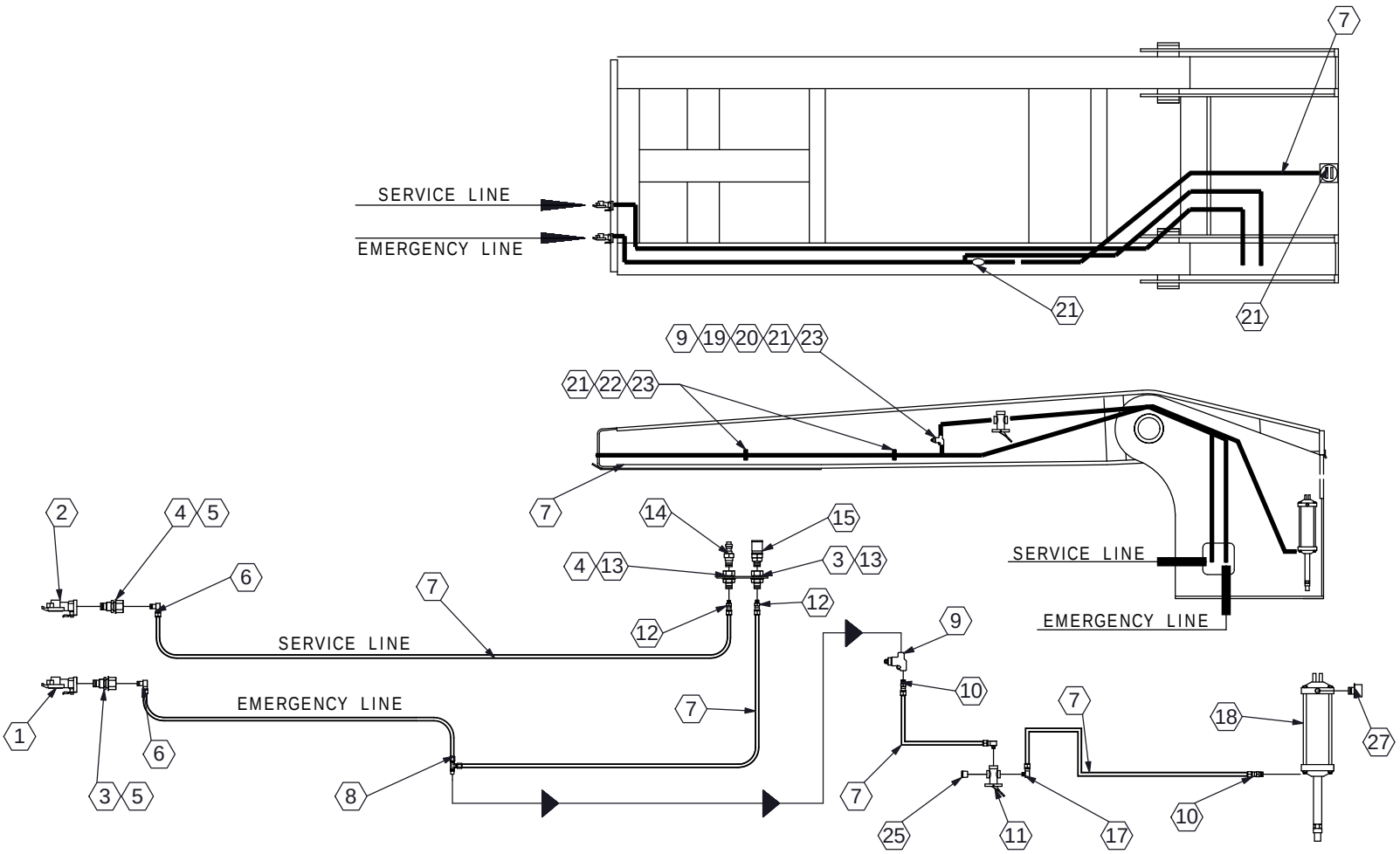

ITEM# PART NUMBER DESCRIPTION QTY

ITEM#	PART NUMBER	DESCRIPTION	QTY
1	MP5-0316	EMERGENCY GLAD HAND	1
2	MP5-0317	SERVICE GLAD HAND	1
3	MP5-0165	EMERGENCY TAG	2
4	KP0-0166	SERVICE TAG	2
5	KP0-0161	MALE CLAMPING STUD	2
6	MP5-2947-5	MALE ELBOW	2
7	MP0-0478	SYNFLEX TUBING	1
8	MP5-2958-3	MALE RUN TEE	1
9	KP0-0214	PRESSURE PROTECTION VALVE	1
10	MP5-2945-5	MALE CONNECTOR	2
11	KP0-0338	AIR TOGGLE VALVE	1
12	MP5-2945-6	MALE CONNECTOR	2
13	MP5-1048	BULKHEAD FITTING	2
14	MP5-1053	QUICK COUPLER MALE	1
15	MP5-2656	QUICK COUPLER FEMALE	1
16	REF	MOUNTING BRACKET	REF
17	MP5-2947-4	MALE ELBOW	2
18	REF	LOCK CYLINDER ASSEMBLY	REF
19	MP5-0096-13	HEX BOLT	1
20	MP5-0100-10	1/4 FLAT WASHER	1
21	MP5-0091-407	1/4 HEX NUT	18
22	MP5-1056-1	WELD ON STUD	18
23	MP5-0105-6	1/4 LOCKWASHER	18
24	JP0-0029	WIRE/LOOM CLAMP	2
25	MP5-0185-1	ALLEN HEAD PIPE PLUG	1
26	MP5-048	3/4 WIRE CLAMP	18
27	MP5-2433	BREATHER VENT	REF

REVISIONS			
REV.	DESCRIPTION	DATE	AUTHORITY
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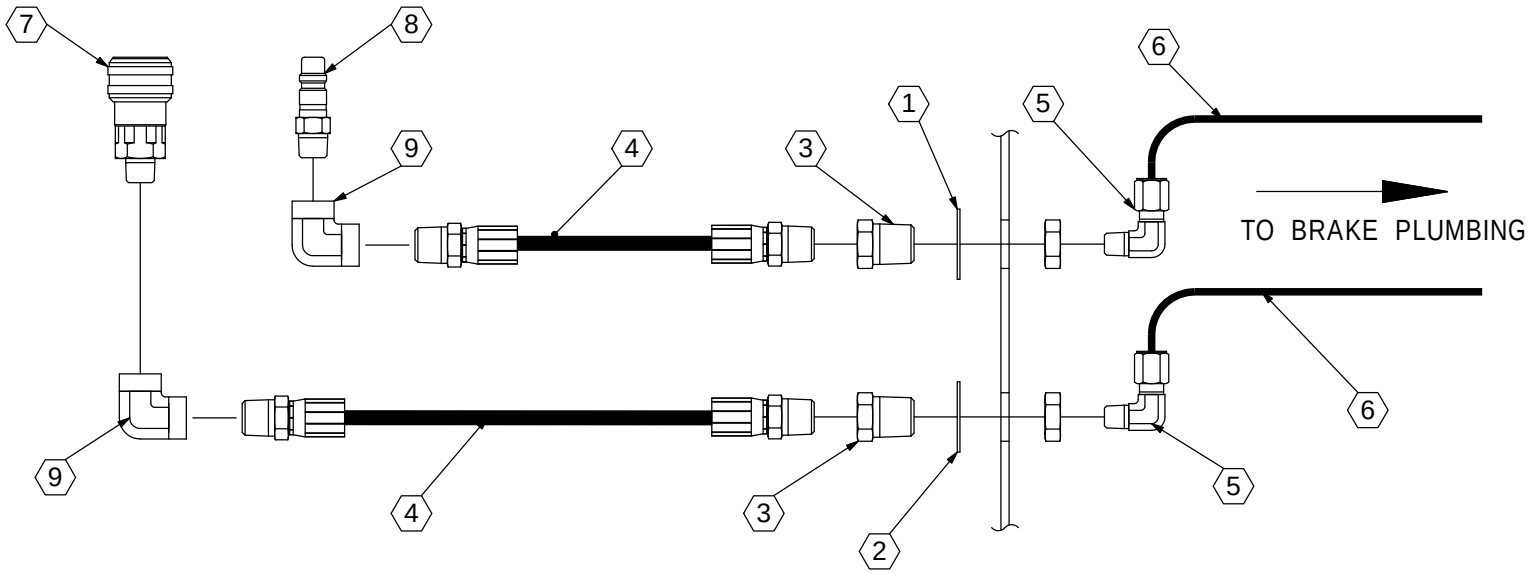

ITEM#	PART NUMBER	DESCRIPTION	QTY
1	KP0-0165	EMERGENCY TAG	1
2	KP0-0166	SERVICE TAG	1
3	KP0-164	FEMALE CLAMPING STUD	2
4	MP0-1917-41	3/8" HOSE 41"L	2
5	MP5-2947-5	90˚ ELBOW	2
6	REF	3/8" SYNFLEX HOSE	REF
7	MP5-2656	FEMALE QUICK COUPLER	1
8	MP5-1053	MALE QUICK COUPLER	1
9	MP5-0107-3	90˚ ELBOW	2
10	MP5-3680-24	4.21" CORDURA 24"L	1

REVISIONS			
REV.	DESCRIPTION	DATE	AUTHORITY
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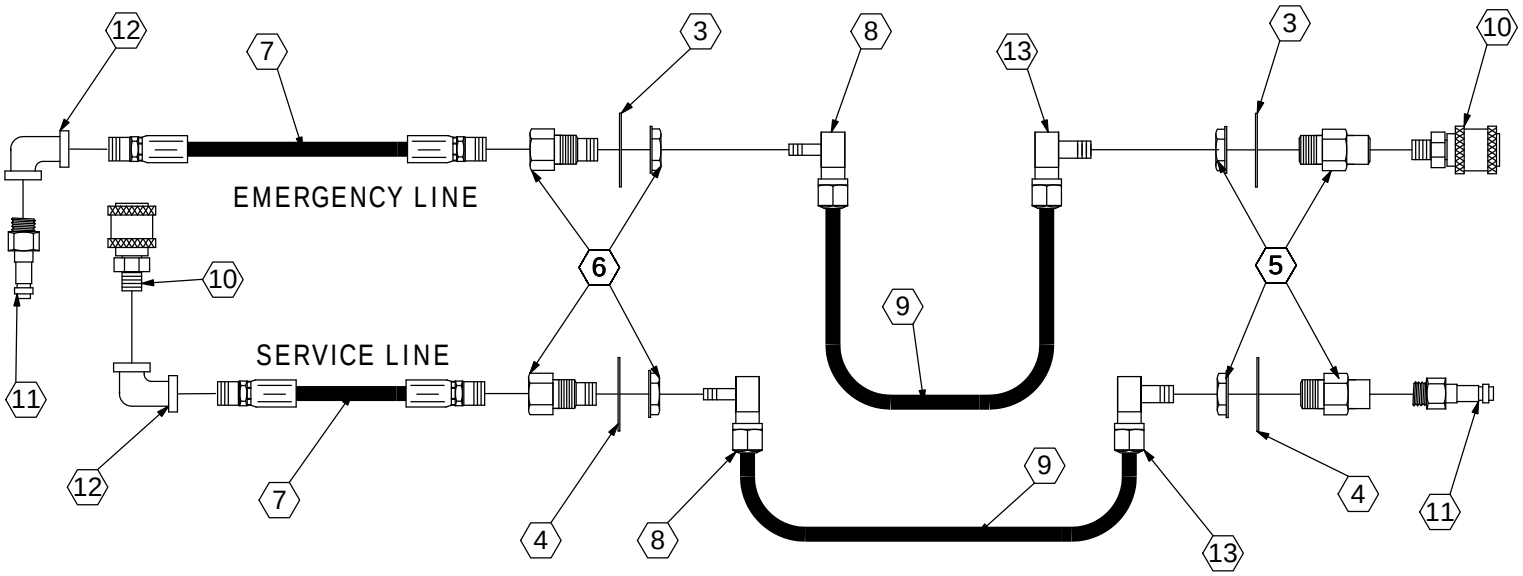

ITEM#	PART NUMBER	DESCRIPTION	QTY
1(13)	MP5-2947-6	90˚ ELBOW	2
2(12)	MP5-0107-3	90˚ STREET ELBOW	2
3	KP0-0165	EMERGENCY TAG	2
4	KP0-0166	SERVICE TAG	2
5	MP5-1048	3/8 BULKHEAD FITTING	2
6	KP0-0164	FEMALE CLAMPING STUD	2
7	MP0-1782-36	3/8 HOSE ASSEMBLY	2
8	MP5-2947-5	90˚ ELBOW	2
9	MP0-0478	3/8 SYNFLEX	A/R
10	MP5-2656	FEMALE QUICK COUPLER	2
11	MP5-1053	MALE QUICK COUPLER	2

REVISIONS			
REV.	DESCRIPTION	DATE	AUTHORITY
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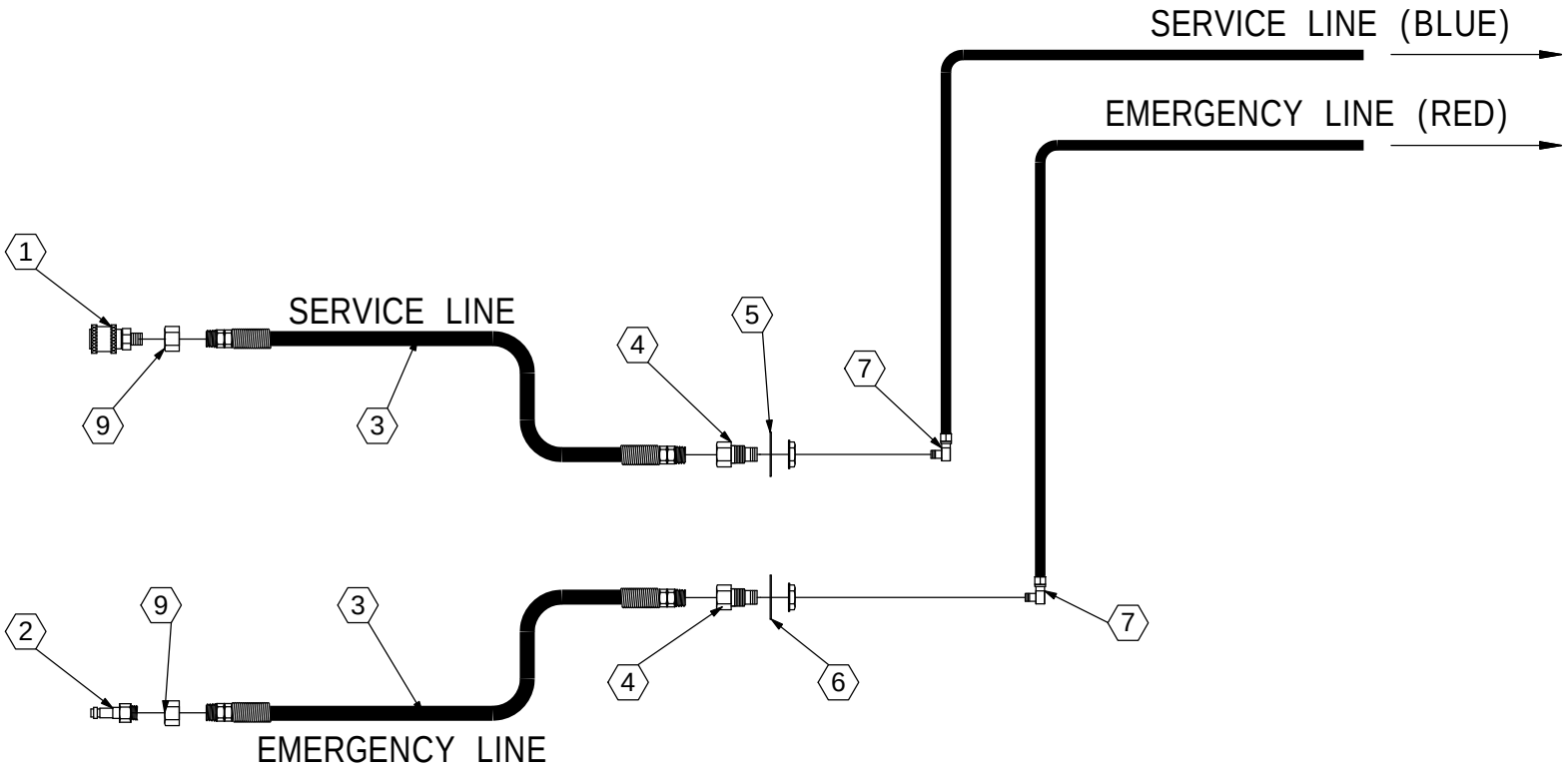

ITEM#	PART NUMBER	DESCRIPTION	QTY
1	MP5-2656	3/8 QUICK COUPLER	1
2	MP5-1053	3/8 MALE QUICK COUPLER	1
3	KP0-0273	HOSE ASSEMBLY 24" L	2
4	KP0-0164-A	FEMALE BULKHEAD	2
5	KP0-0166	SERVICE TAG	1
6	KP0-0165	EMERGENCY TAG	1
7	MP5-2947-5	3/8 90˚ ELBOW	2
8	JP0-0026	GROMMET	2
9	MP5-0206-3	3/8 ADAPTER	2

REVISIONS			
REV.	DESCRIPTION	DATE	AUTHORITY
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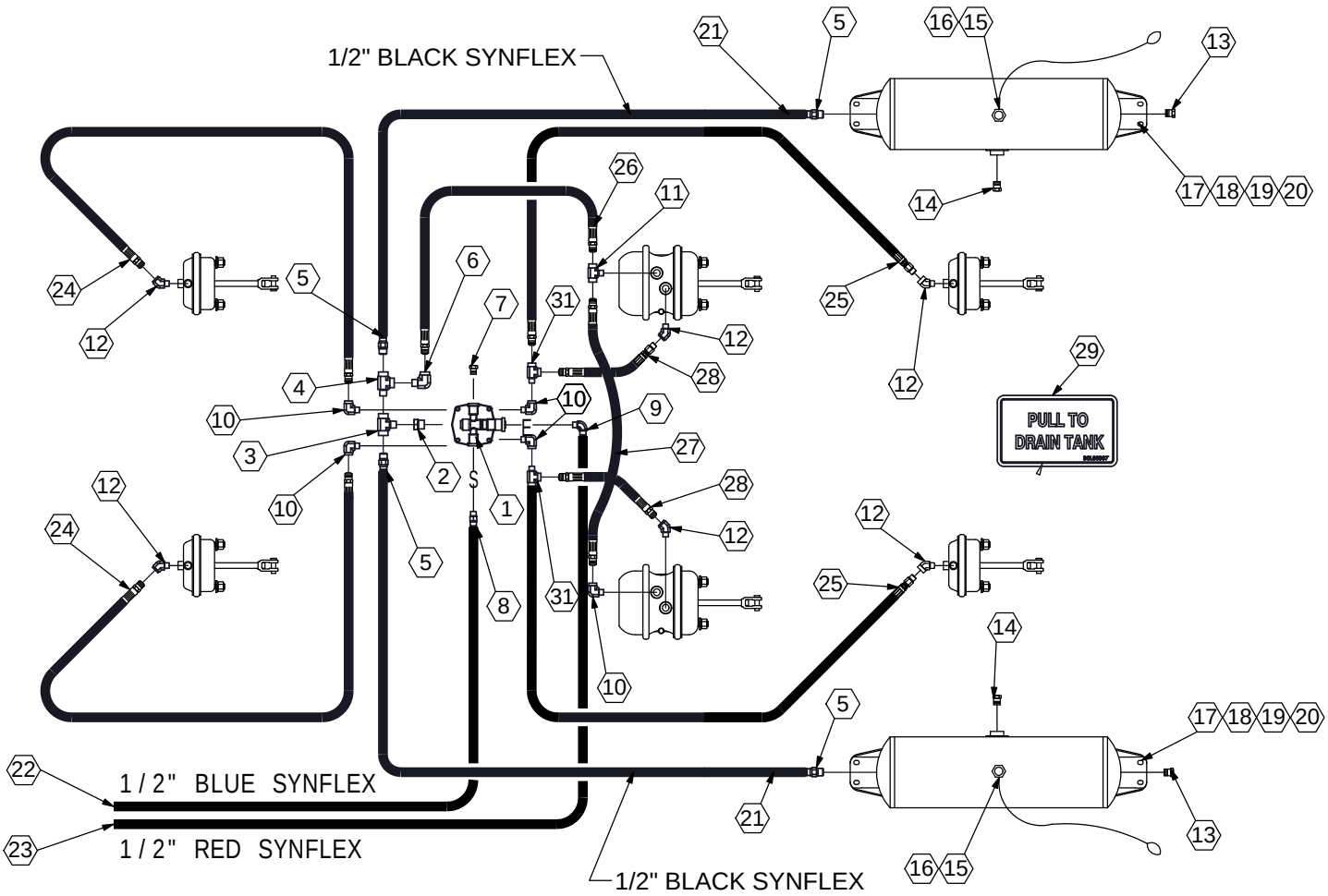

ITEM#	PART NUMBER	DESCRIPTION	QTY
1	KP0-0315	SEALCO BRAKE CONTROL VALVE	1
2	MP5-0113-9	3/4 - 1/2 REDUCER	1
3	MP5-0109-4	1/2 MALE BRANCH T	1
4	MP5-0108-4	1/2 MALE RUN T	1
5	MP5-2945-10	1/2 CONNECTOR	4
6	MP5-0134-4	90˚ STREET ELBOW	1
7	MP5-0185-3	3/8 HEX PLUG	1
8	MP5-2945-9	3/8 - 1/2 CONNECTOR	1
9	MP5-2947-9	90˚ ELBOW	1
10	MP50134-3	90˚ STREET ELBOW	5
11	MP5-0109-3	3/8 MALE BRANCH T	1
12	MP5-0200-3	45˚ STREET ELBOW	6
13	MP5-0185-4	1/2 HEX PLUG	2
14	MP5-0185-5	3/4 HEX PLUG	2
15	MP5-1312	AIR TANK DRAIN W/CABLE	2
16	MP5-0164-2	3/8 CRIMP INSERT	2
17	MP5-4569	8" ∅ RESERVOIR	2
18	MP5-0094-62	3/8 HEX BOLT	8
19	MP5-0105-8	3/8 LOCK WASHER	8
20	MP5-0091-607	3/8 HEX NUT	8
21	MP0-0534	1/2 BLACK SYNFLEX	20 FT
22	MP0-0534-BLU	1/2 BLUE SYNFLEX	60 FT
23	MP0-0534-RED	1/2 RED SYNFLEX	60 FT
24	MP0-1782-72	3/8 HOSE 72"L	2
25	MP0-1782-84	3/8 HOSE 84"L	2
26	MP0-1782-36	3/8 HOSE 36"L	1
27	MP0-1782-24	3/8 HOSE 24"L	1
28	MP0-1782-30	3/8 HOSE 30"L	2
29	DCL00507	"PULL TO DRAIN" DECAL	2
30	MP5-0634	SINGLE LINE CLAMP	16
31	MP5-0108-3	3/8 MALE RUN T	2

REVISIONS			
REV.	DESCRIPTION	DATE	AUTHORITY
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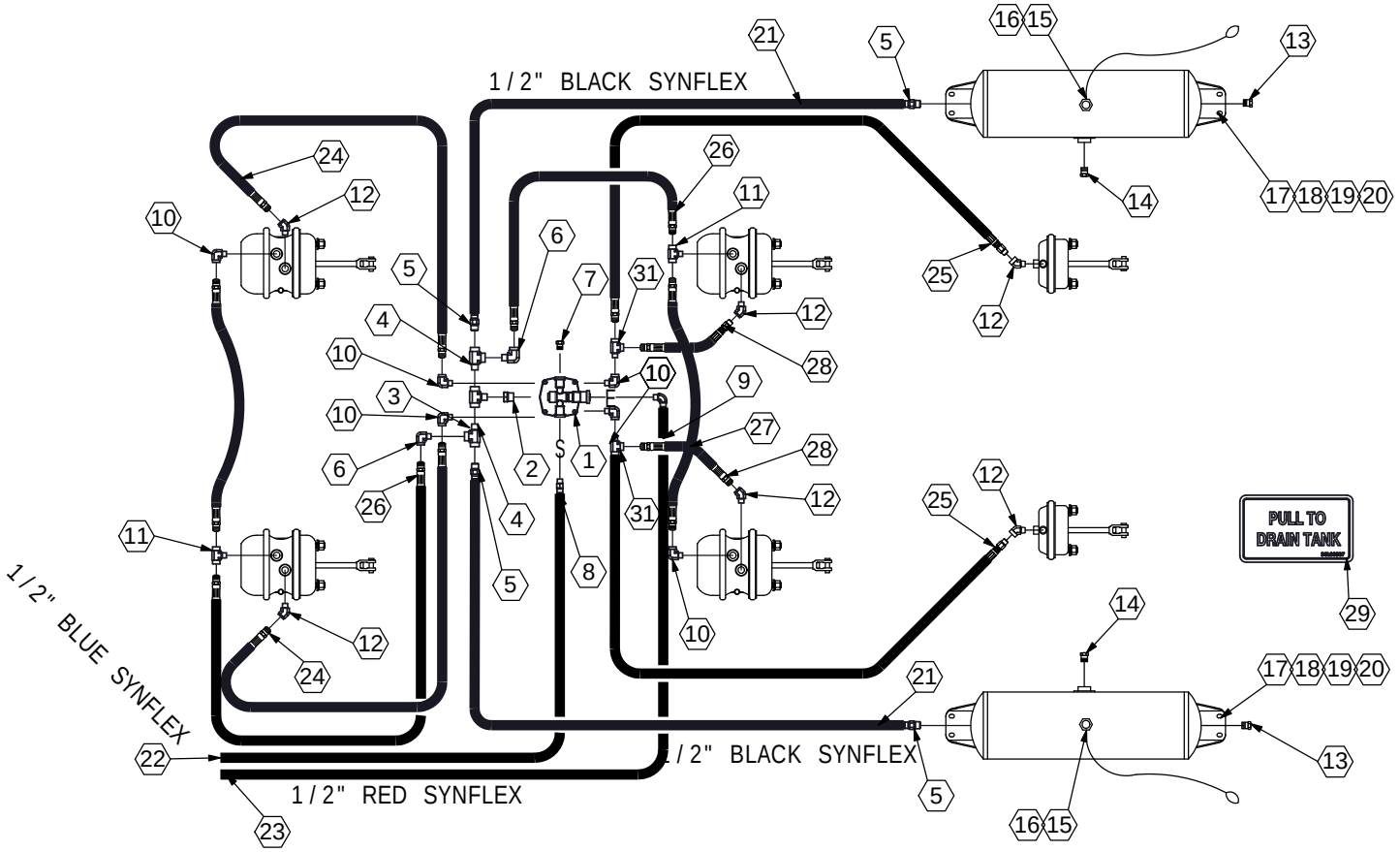
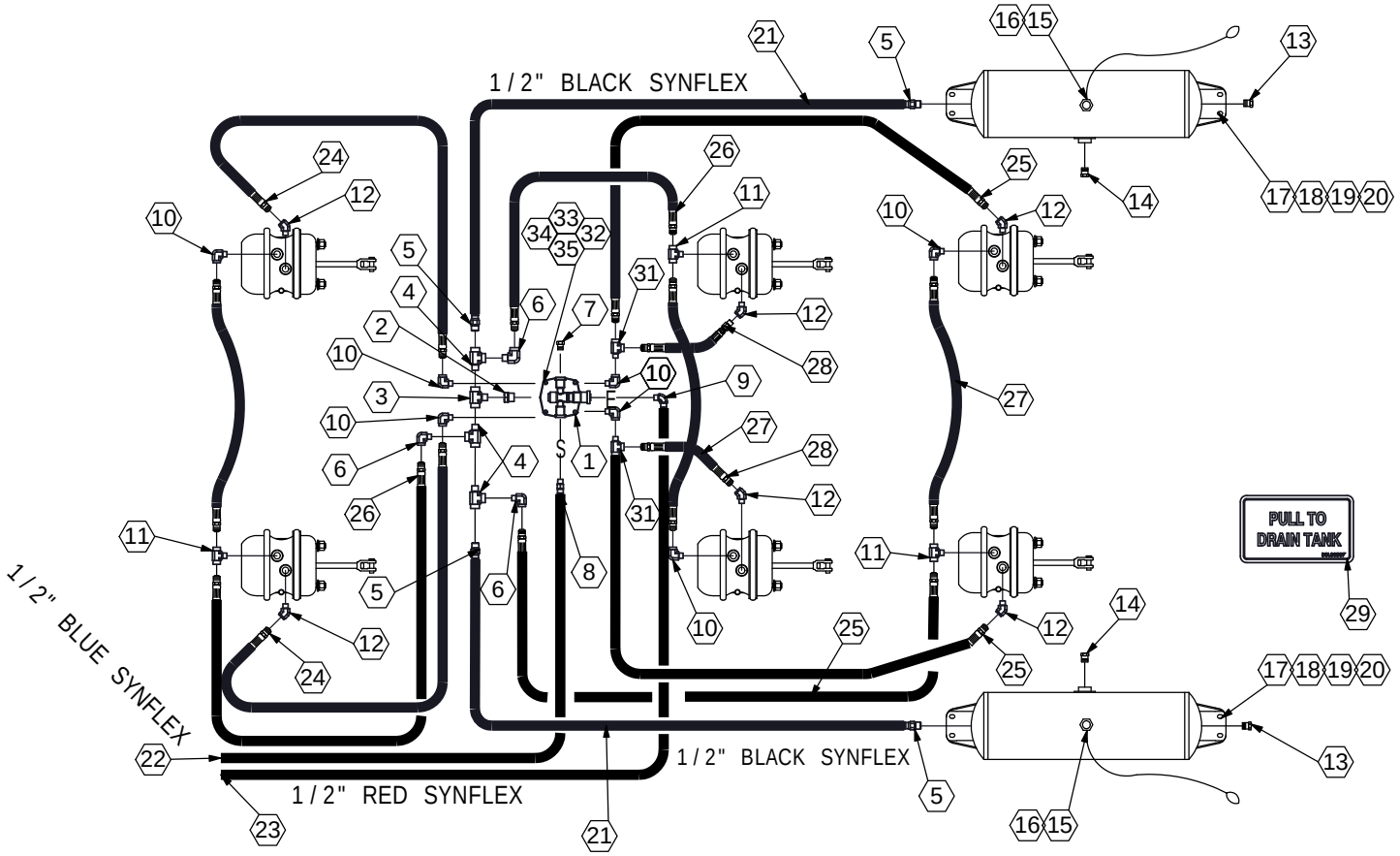


ITEM#	PART NUMBER	DESCRIPTION	QTY
1	KP0-0315	SEALCO BRAKE CONTROL VALVE	1
2	MP5-0113-9	3/4 - 1/2 REDUCED	1
3	MP5-0109-4	1/2 MALE BRANCH T	1
4	MP5-0108-4	1/2 MALE RUN T	2
5	MP5-2945-10	1/2 CONNECTOR	4
6	MP5-0134-4	90˚ STREET ELBOW	2
7	MP5-0185-3	3/8 HEX PLUG	1
8	MP5-2945-9	3/8 CONNECTOR	1
9	MP5-2947-9	90˚ ELBOW	1
10	MP5-0134-3	90˚ STREET ELBOW	6
11	MP5-0109-3	3/8 MALE BRANCH T	2
12	MP5-0200-3	45˚ STREET ELBOW	6
13	MP5-0185-4	1/2 HEX PLUG	2
14	MP5-0185-5	3/4 HEX PLUG	2
15	MP0-1312	AIR TANK DRAIN	2
16	MP5-0164-2	3/8 CRIMP INSERT	2
17	MP5-4569	8" ∅ AIR RESERVOIR	2
18	MP5-0094-62	3/8 HEX BOLT	8
19	MP5-0105-8	3/8 LOCK WASHER	8
20	MP5-0091-607	3/8 HEX NUT	8
21	MP0-0534	1/2 BLACK SYNFLEX	20 FT
22	MP0-0534-BLU	1/2 BLUE SYNFLEX	60 FT
23	MP0-0534-RED	1/2 RED SYNFLEX	60 FT
24	MP0-1782-72	3/8 HOSE 72"L	2
25	MP0-1782-84	3/8 HOSE 84"L	2
26	MP0-1782-36	3/8 HOSE 36"L	2
27	MP0-1782-24	3/8 HOSE 24"L	2
28	NP0-1782-30	3/8 HOSE 30"L	2
29	DCL00507	"PULL TO DRAIN" DECAL	2
30	MP5-0634	SINGLE LINE CLAMP	16
31	MP5-0108-3	3/8 MALE RUN T	2



ITEM#	PART NUMBER	DESCRIPTION	QTY
1	KP0-0315	SEALCO CONTROL VALVE	1
2	MP5-0113-9	3/4 - 1/2 REDUCER	1
3	MP5-0109-4	1/2 MALE BRANCH T	1
4	MP5-0108-4	1/2 MALE RUN T	3
5	MP5-2945-10	1/2 CONNECTOR	4
6	MP5-0134-4	90° STREET ELBOW	3
7	MP5-0185-3	HEX PLUG	1
8	MP5-2945-9	3/8 CONNECTOR	1
9	MP5-2947-9	90° ELBOW	1
10	MP5-0134-3	90° STREET ELBOW	7
11	MP5-0109-3	3/8 MALE BRANCH T	3
12	MP5-0200-3	3/8 45° STREET ELBOW	6
13	MP5-0185-4	1/2 HEX PLUG	2
14	MP5-0185-5	3/4 HEX PLUG	2
15	MP0-1312	AIR TANK DRAIN	2
16	MP5-0164-2	3/8 CRIMP INSERT	2
17	MP5-4569	8" ∅ RESERVOIR	2
18	MP5-0094-62	3/8 HEX BOLT	8
19	MP5-0105-8	3/8 LOCK WASHER	8
20	MP5-2614-4	3/8 U-NUT	8
21	MP0-0534	1/2 BLACK SYNFLEX	20 FT
22	MP0-0534-BLU	1/2 BLUE SYNFLEX	60 FT
23	MP0-0534-RED	1/2 RED SYNFLEX	60 FT
24	MP0-1782-72	3/8 HOSE 72"L	2
25	MP0-1782-84	3/8 HOSE 84"L	3
26	MP0-1782-36	3/8 HOSE 36"L	2
27	MP0-1782-24	3/8 HOSE 24"L	3
28	MP0-1782-30	3/8 HOSE 30"L	2
29	DCL00507	"PULL TO DRAIN" DECAL	2
30	MP5-0634	SINGLE LINE CLAMP	20
31	MP5-0108-3	3/8 MALE RUN T	2
32	MP5-0094-38	5/16 HEX BOLT	2
33	MP5-0091-507	5/16 HEX NUT	2
34	MP5-0105-7	5/16 LOCK WASHER	2
35	MP0-0100-11	5/16 FLAT WASHER	2

REVISIONS			
REV.	DESCRIPTION	DATE	AUTHORITY
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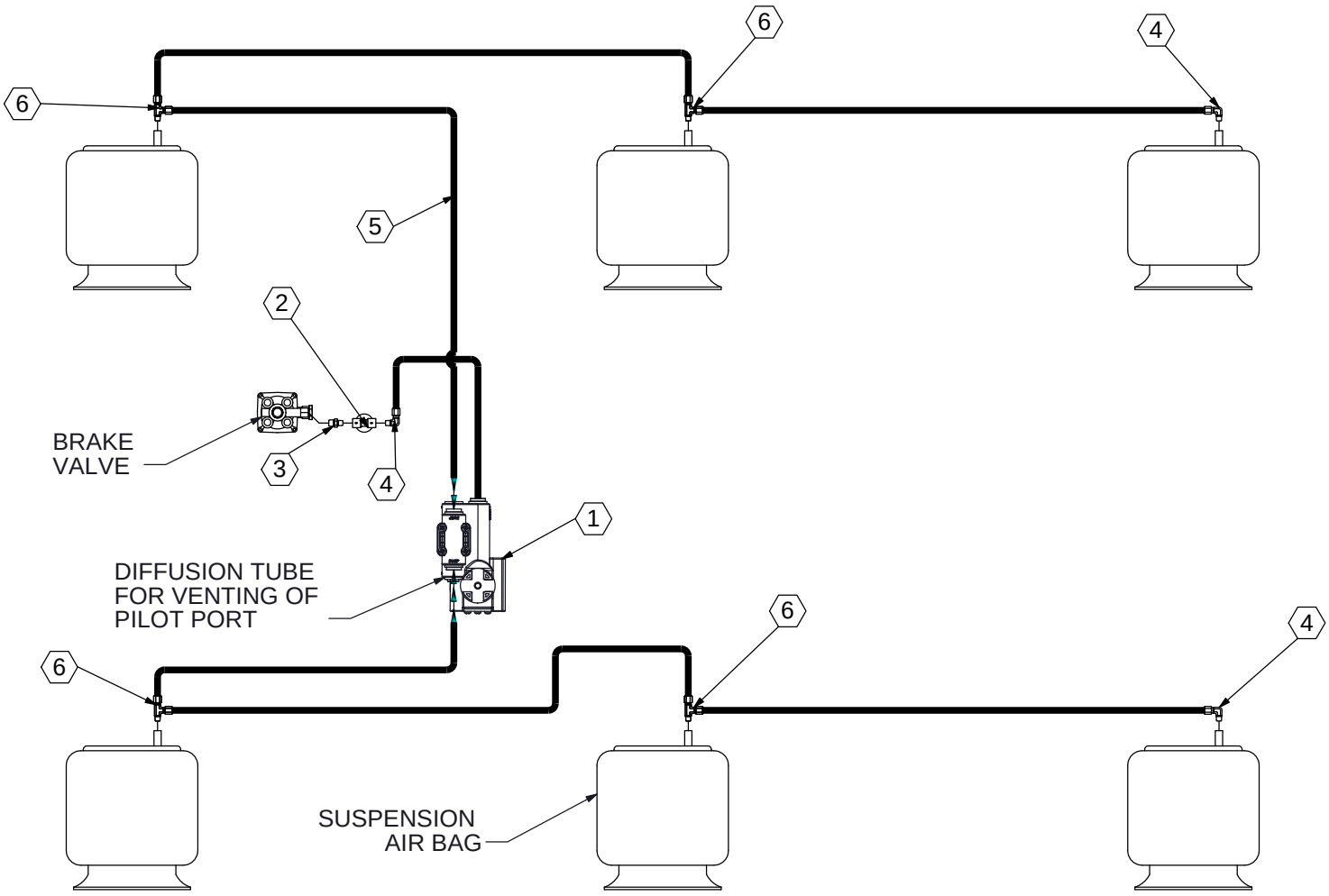

ITEM#	PART NUMBER	DESCRIPTION	QTY
1	MP5-3771	LEVELING VALVE ASSEMBLY	1
2	KP0-0274	PRESSURE PROTECTION VALVE	1
3	MP5-0111-5	3/8 HEX NIPPLE	1
4	MP5-2947-5	3/8 90˚ ELBOW	3
5	MP0-0478	BLACK SYNFLEX TUBE	41
6	MP5-2958-3	3/8 RUN T	4
7	MP5-3018-2	3/8 UNION T	1

REVISIONS			
REV.	DESCRIPTION	DATE	AUTHORITY
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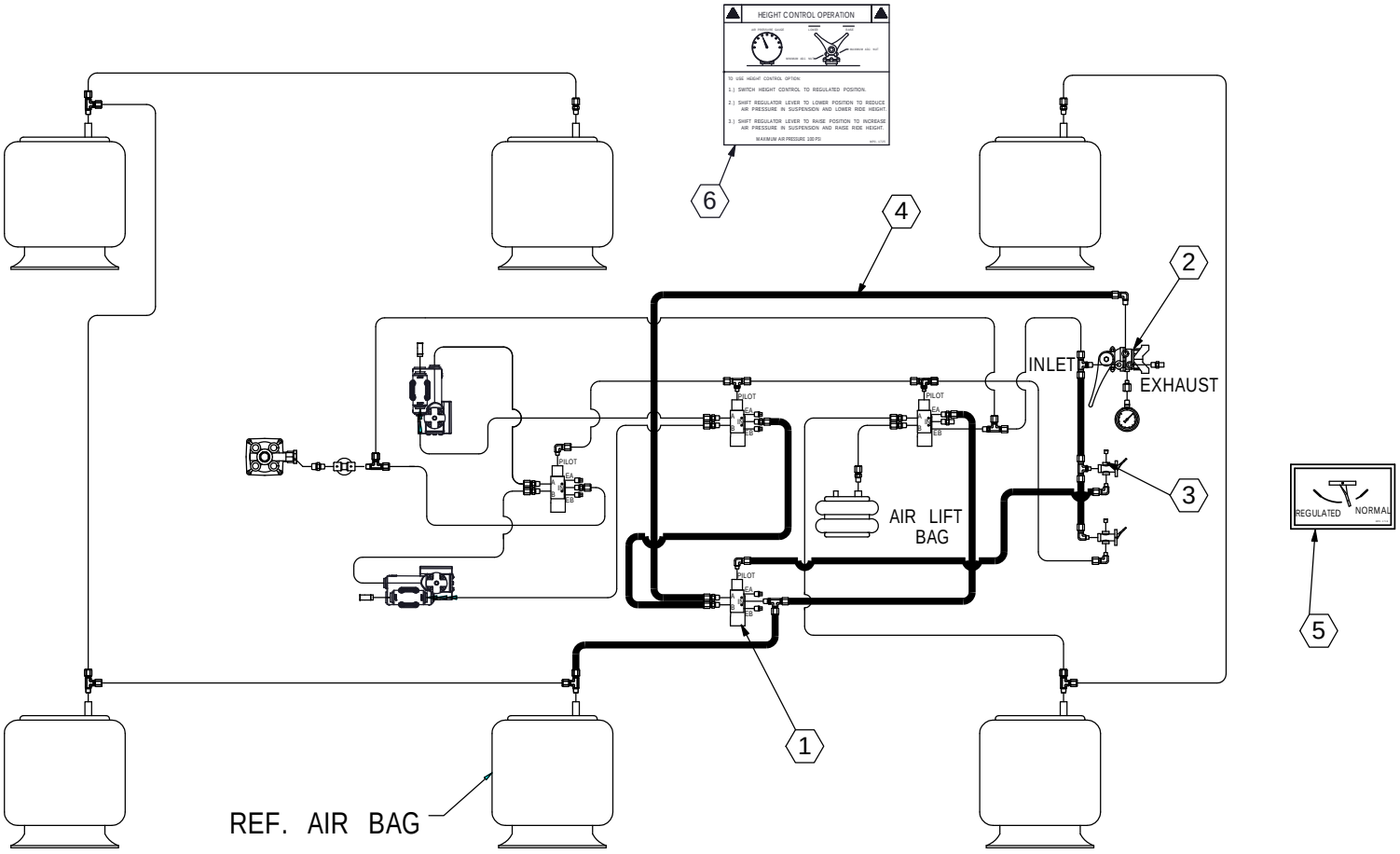

ITEM#	PART NUMBER	DESCRIPTION	QTY
1	KP000596-4	PILOT VALVE ASSEMBLY	1
2	KP000601	REGULATOR VALVE ASSEMBLY	1
3	KP000600-1	AIR TOGGLE VALVE ASSEMBLY	1
4	MP0-0478	BLACK SYNFLEX	15'
5	MP0-1718	REGULATED/NORMAL DECAL	1
6	MP0-1725	REGULATED HEIGHT CONTROL VALVE	1

REVISIONS			
REV.	DESCRIPTION	DATE	AUTHORITY
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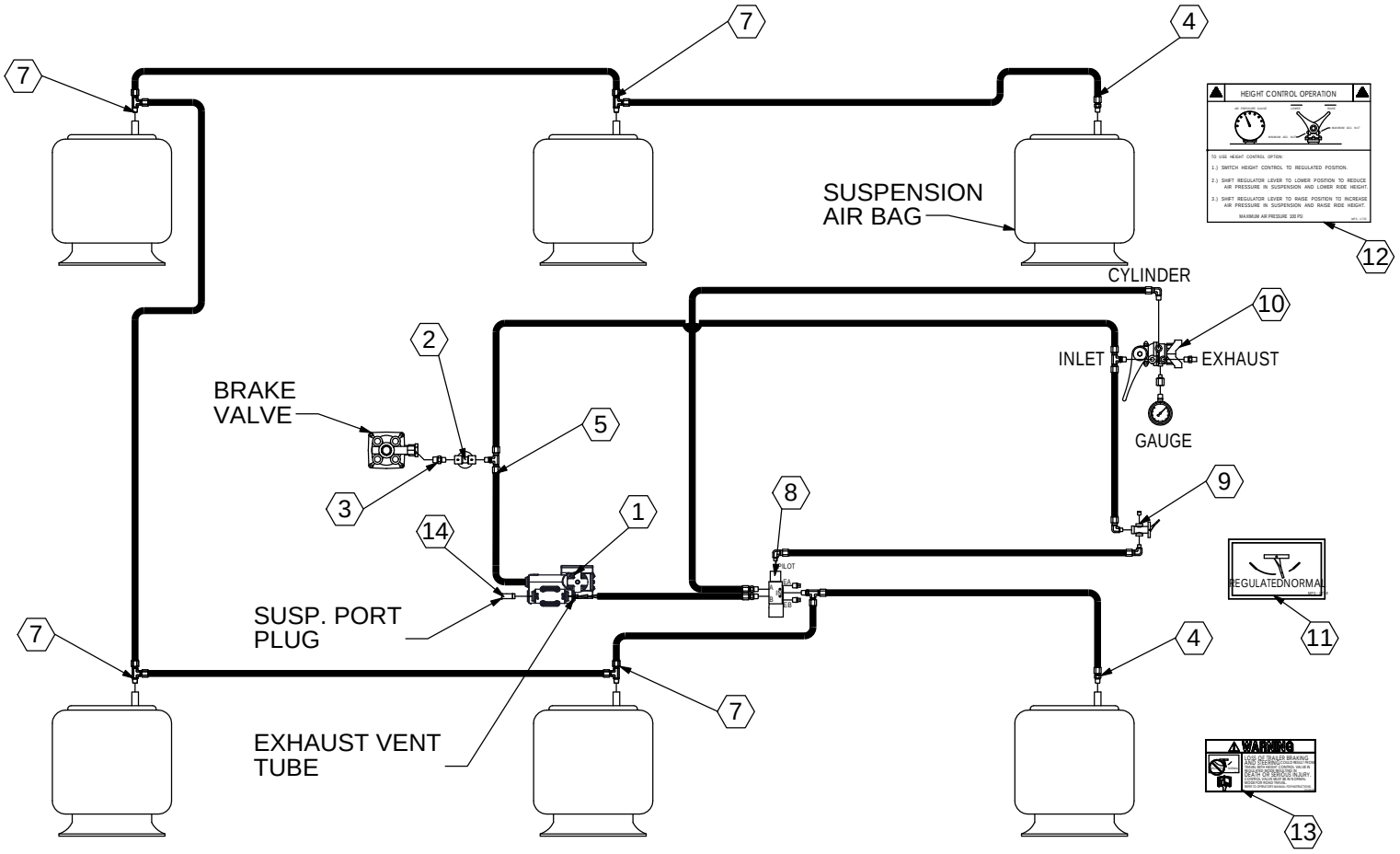

ITEM#	PART NUMBER	DESCRIPTION	QTY
1	MP5-3771	LEVELING VALVE ASSEMBLY	1
2	KP0-0274	PRESSURE PROTECTION VALVE	REF
3	MP5-0111-5	3/8 HEX NIPPLE	1
4	MP5-2945-5	3/8 CONNECTOR	2
5	MP5-2959-3	SWIVEL BRANCH T	1
6	MP0-0478	BLACK SYNFLEX (Ft)	52
7	MP5-2958-3	RUN T	4
8	KP000596-4	PILOT VALVE ASSEMBLY	1
9	KP000600-2	AIR TOGGLE VALVE ASSEMBLY	1
10	KP000601	REGULATOR VALVE ASSEMBLY	1
11	MP0-1718	REGULATED/NORMAL DECAL	1
12	MP0-1725	HEIGHT CONTROL DECAL	1
13	DCL00182	BRAKE AND STEERING DECAL	1
14	MP5-2964-2	3/8 TUBE PLUG (KIT)	REF

REVISIONS			
REV.	DESCRIPTION	DATE	AUTHORITY
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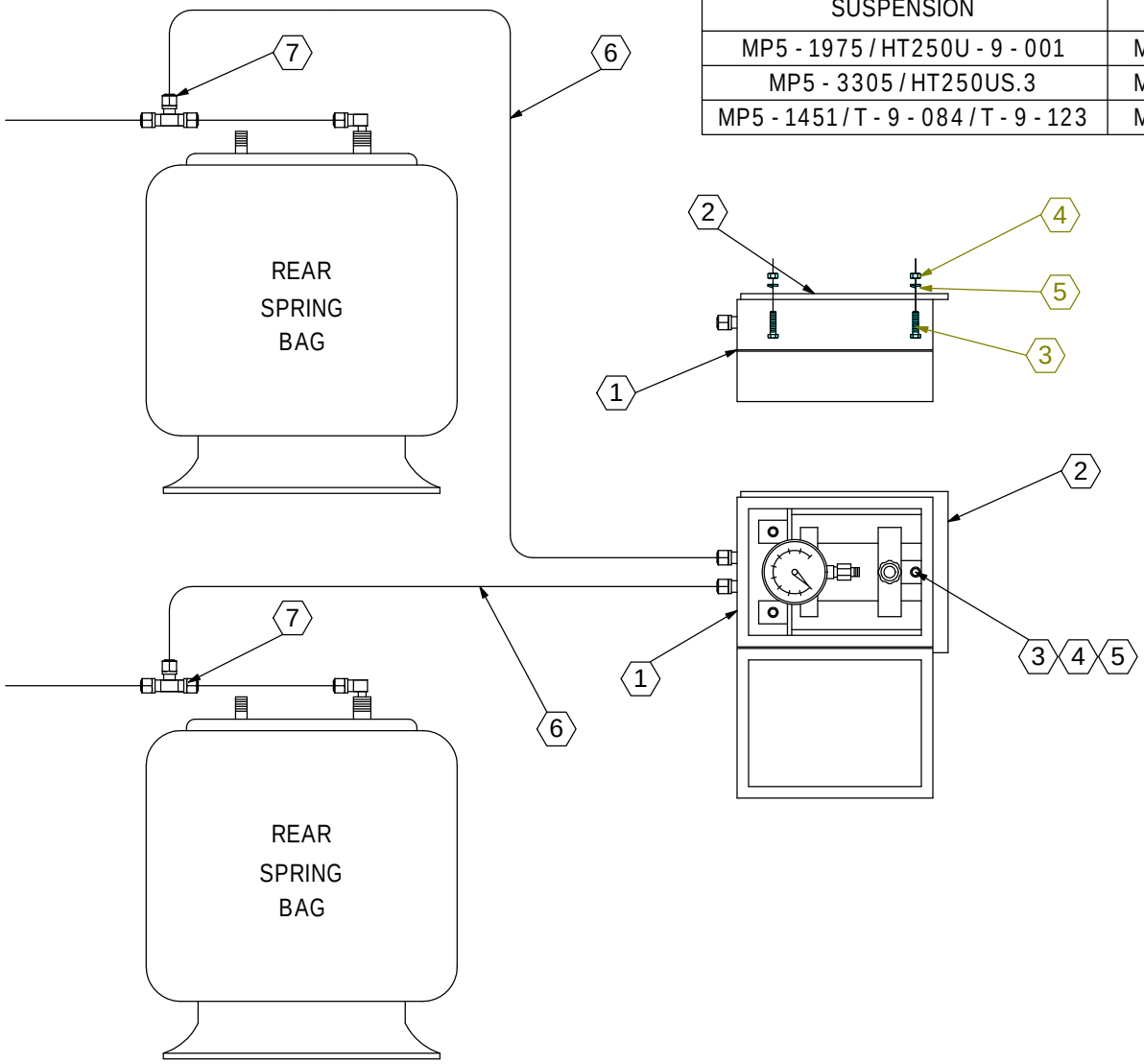
SUSPENSION	DECAL #	DASH #
MP5 - 1975 / HT250U - 9 - 001	MP0 - 1816	- 1
MP5 - 3305 / HT250US.3	MP0 - 1921	- 2
MP5 - 1451 / T - 9 - 084 / T - 9 - 123	MP0 - 1818	- 3



ITEM#	PART NUMBER	DESCRIPTION	QTY
1	KP0-0285	SCALE-O-MATIC	1
2	KP000670	BOX BRACKET	1
3	MP5-0094-8	1/4 HEX BOLT	3
4	MP5-0091-407	1/4 HEX NUT	3
5	MP5-0105-6	1/4 LOCK WASHER	3
6	MP0-1327	1/4 SYNFLEX TUBE	2
7	MP5-3018-2	1/4 3/8 UNION T	2

REVISIONS			
REV.	DESCRIPTION	DATE	AUTHORITY
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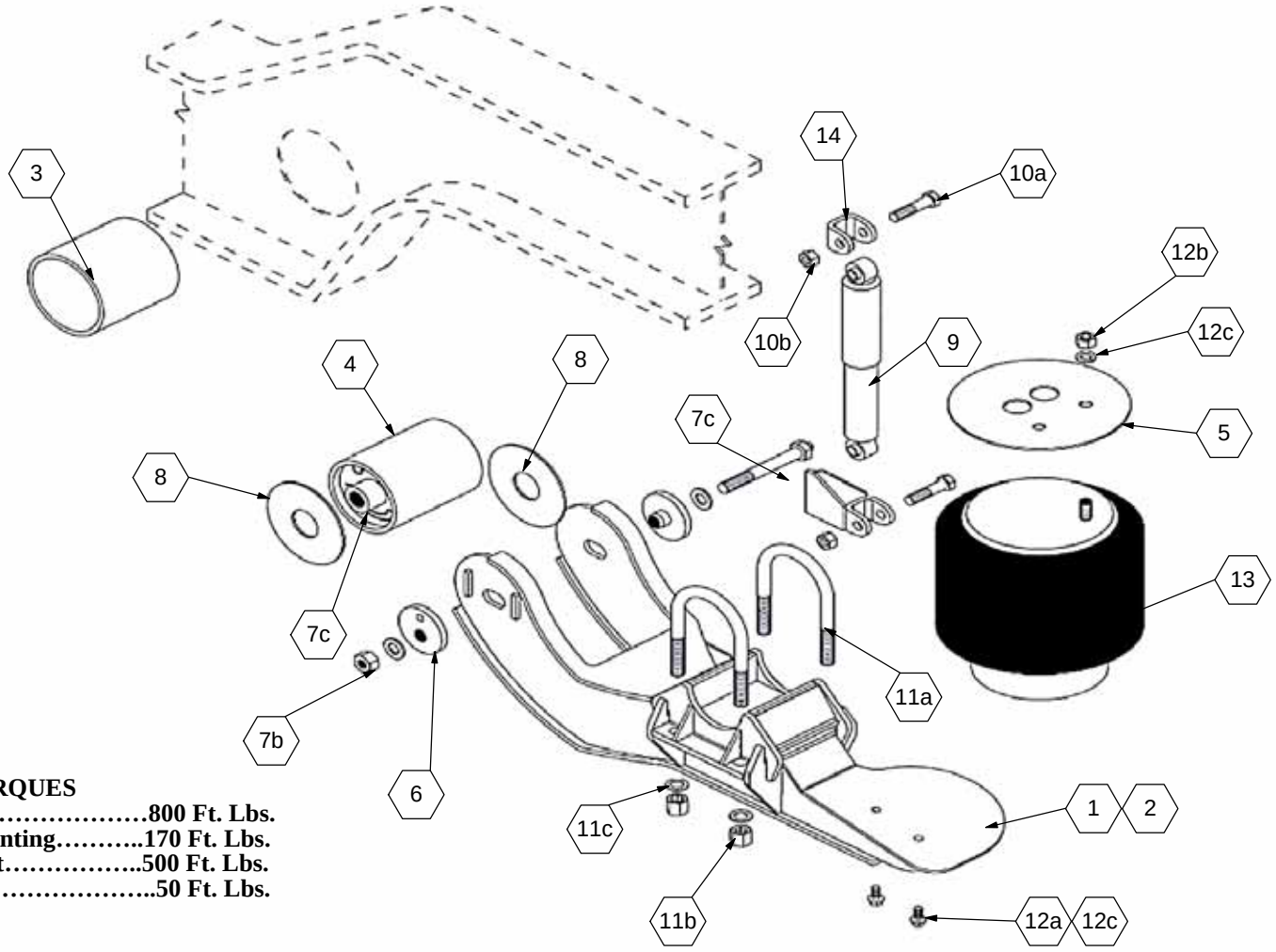

BOLT TORQUES
Suspension……800 Ft. Lbs.
Shock Mounting……..170 Ft. Lbs.
Axle U-Bolt……..500 Ft. Lbs.
Air Spring……..50 Ft. Lbs.

ITEM#	PART NUMBER	DESCRIPTION
1	MP5-2100	BEAM & AXLE SEAT ASSEMBLY (LH)
2	MP5-2101	BEAM & AXLE SEAT ASSEMBLY (RH)
3	MP5-2111	BUSHING ASSEMBLY
4	MP5-2112	TUBE SLEEVE
5	MP5-2103	PLATE
6	MP5-2102	ALIGNMENT COLLAR
7	MP5-2107	PIVOT BOLT KIT
7a	MP5-2859	PIVOT BOLT
7b	MP5-0851-1807	LOCK NUT
7c	MP0-1425	DELRIN LINER
8	MP5-2113	WEAR PAD BUSHING
9	MP5-2105	SHOCK ABSORBER
10	MP5-2110	SHOCK BOLT KIT
10a	MP0-1426	SHOCK BOLT
10b	MP5-0851-1207	SHOCK LOCK NUT
11	MP5-2108	U-BOLT KIT
11a	MP0-1704-1	U-BOLT
11b	MP0-1704-2	HEX HEIGHT NUT
11c	MP0-1704-3	WASHER
12	MP5-2109	AIR SPRING BOLT KIT
12a	MP5-0094-111	HEX HEAD BOLT
12b	MP5-1412-1227	HEX NUT
12c	MP5-0105-10	LOCK WASHER
12d	MP5-0105-13	LOCK WASHER
13	MP5-2324	AIR SPRING
14	MP5-2106	SHOCK CLEVIS
15	MP1-0090-1	SHOCK STRAP
16	MP5-2860	PIVOT BUSHING KIT

REVISIONS			
REV.	DESCRIPTION	DATE	AUTHORITY
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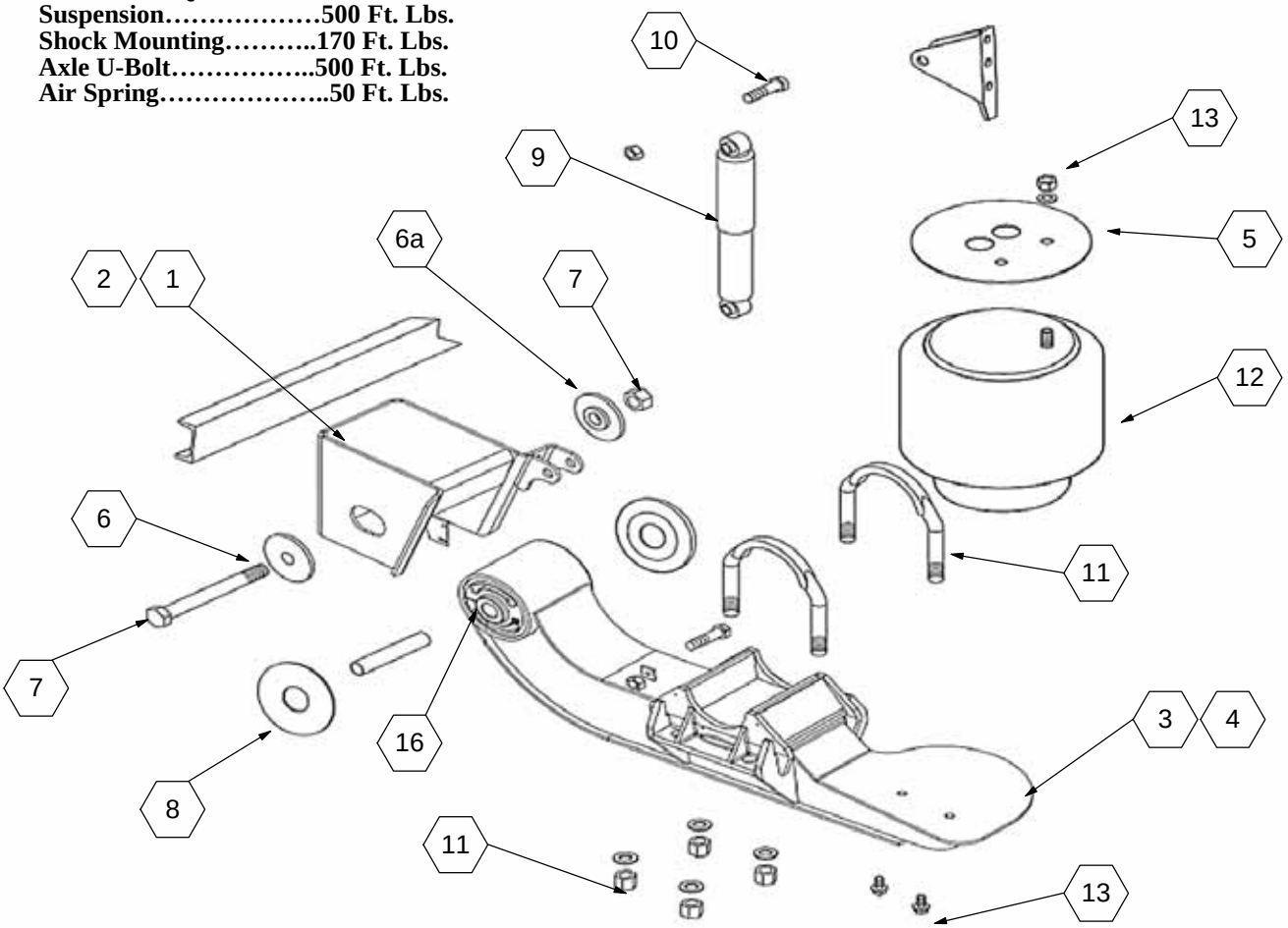
BOLT TORQUES
Suspension……500 Ft. Lbs.
Shock Mounting……..170 Ft. Lbs.
Axle U-Bolt……..500 Ft. Lbs.
Air Spring……..50 Ft. Lbs.



ITEM#	PART NUMBER	DESCRIPTION
1	MP5-3307-L	FRAME BRACKET ASSEMBLY (LH)
2	MP5-3307-R	FRAME BRACKET ASSEMBLY (RH)
3	MP5-3308-L	BEAM & AXLE SEAT (LH)
4	MP5-3308-R	BEAM & AXLE SEAT (RH)
5	MP5-2103	PLATE
6	MP5-3309	ECCENTRIC ALIGNMENT COLLAR
6a	MP5-3310	CONCENTRIC ALIGNMENT COLLAR
7	MP5-3311	PIVOT BOLT KIT
8	MP5-2113	WEAR PAD BUSHING
9	MP5-3312	SHOCK ABSORBER
10	MP5-3313	SHOCK BOLT KIT
11	MP5-2030	U-BOLT KIT
12	MP5-2324	AIR SPRING
13	MP5-2109	AIR SPRING BOLT KIT
14	MP1-0090-1	SHOCK STRAP
15	MP5-2034	AXLE SPACER
16	MP0-1923	TRI-FUNCTIONAL BUSHING KIT

REVISIONS			
REV.	DESCRIPTION	DATE	AUTHORITY
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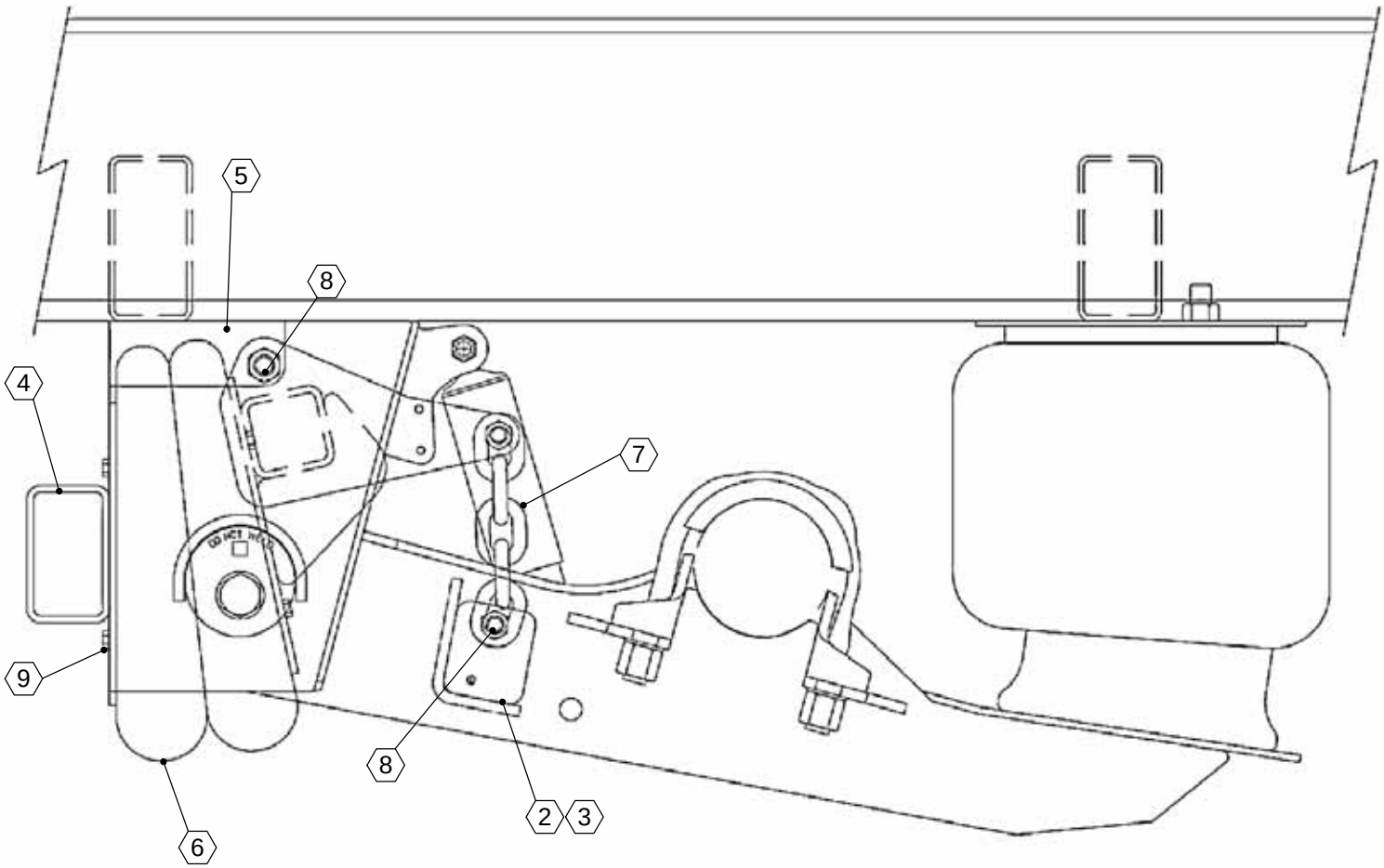

ITEM#	PART NUMBER	DESCRIPTION	QTY
1	MP5-2079	CENTER LIFT ASSEMBLY	1
2	MP5-3632	CHAIN BRACKET	1
3	MP5-3633	CHAIN BRACKET	1
4	MP5-2082	SUPPORT TUBE ASSEMBLY	1
5	MP5-2083	PIVOT PLATE	2
6	MP5-2084	AIR SPRING	1
7	MP5-3631	CHAIN	2
8	MP5-3634	CENTER LIFT BOLT KIT	1
9	MP5-2087	AIR SPRING BOLT KIT	1

REVISIONS			
REV.	DESCRIPTION	DATE	AUTHORITY
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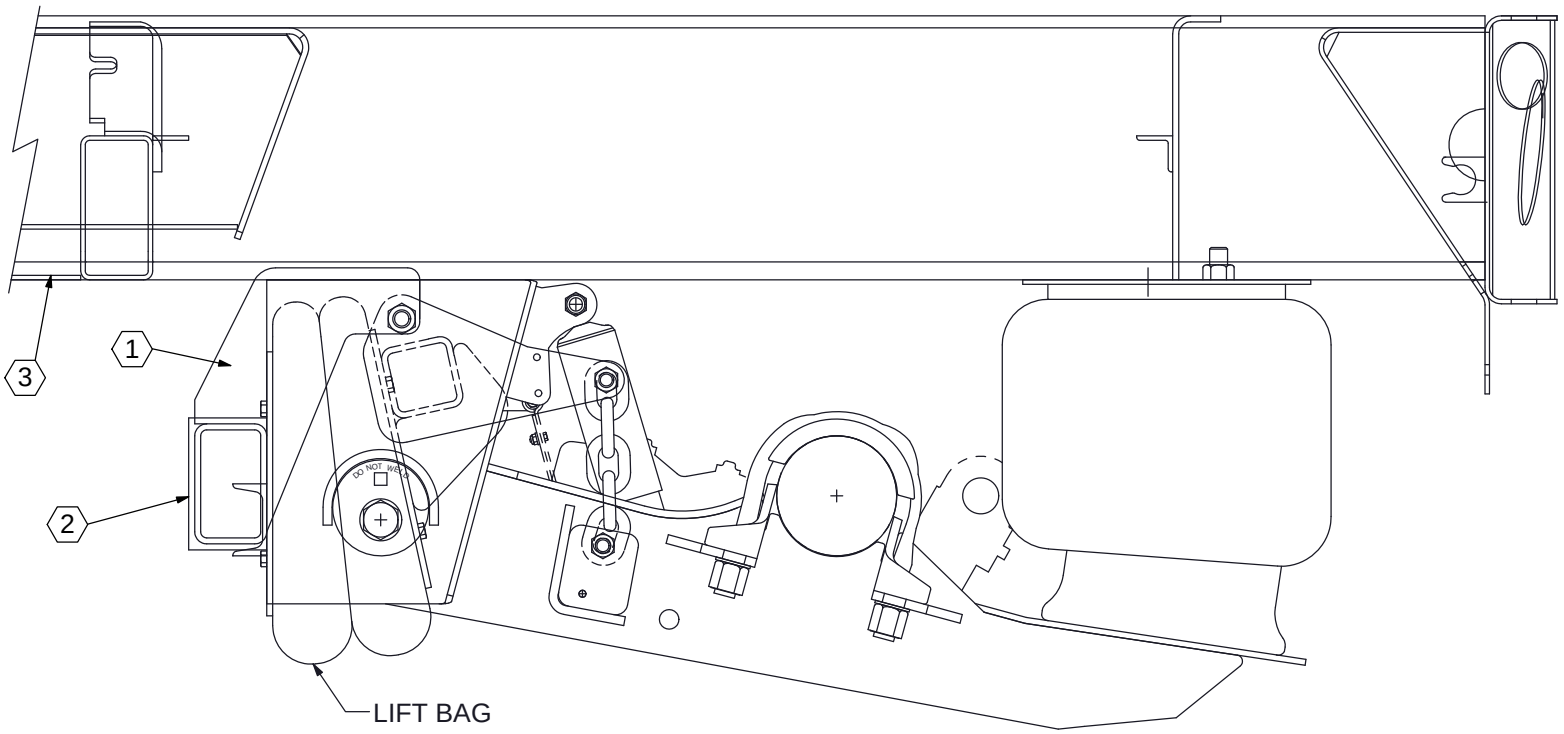

ITEM#	PART NUMBER	DESCRIPTION	QTY
1	GD0-0482	AIR LIFT BRACKET	2
2	ST0010	3-1/4 X 5-1/2 CAP PLATE	2
3	FA001961	AIR TANK BRACKET	2

REVISIONS			
REV.	DESCRIPTION	DATE	AUTHORITY
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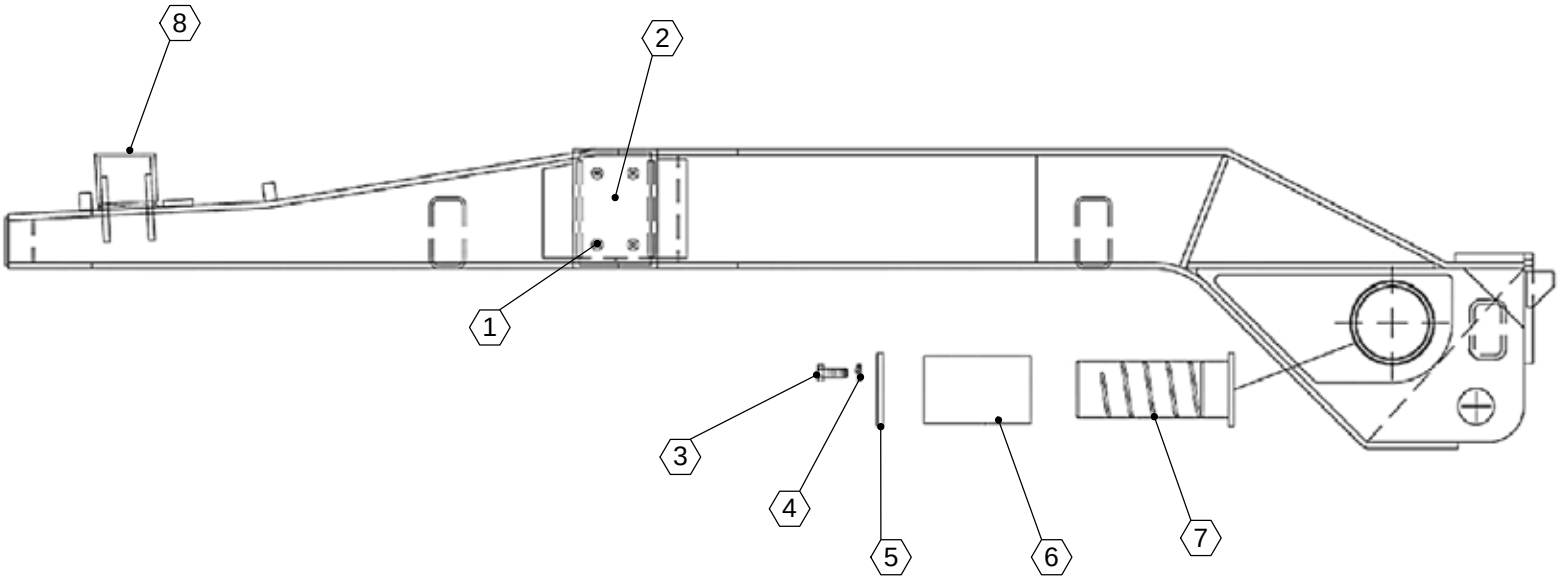

ITEM#	PART NUMBER	DESCRIPTION	QTY
1	ES1-0014	WEAR PAD	1
2	MP5-0092	FLATHEAD BOLT	1
3	MP5-0096-187	HEX BOLT	1
4	MP5-0105-13	LOCK WASHER	1
5	ES1-0010	END CAP PLATE	1
6	ES0-0134	CENTER BEARING	1
7	SC1-0003	PIN	1
8	D02046	BLOCK ASSEMBLY	1

REVISIONS			
REV.	DESCRIPTION	DATE	AUTHORITY
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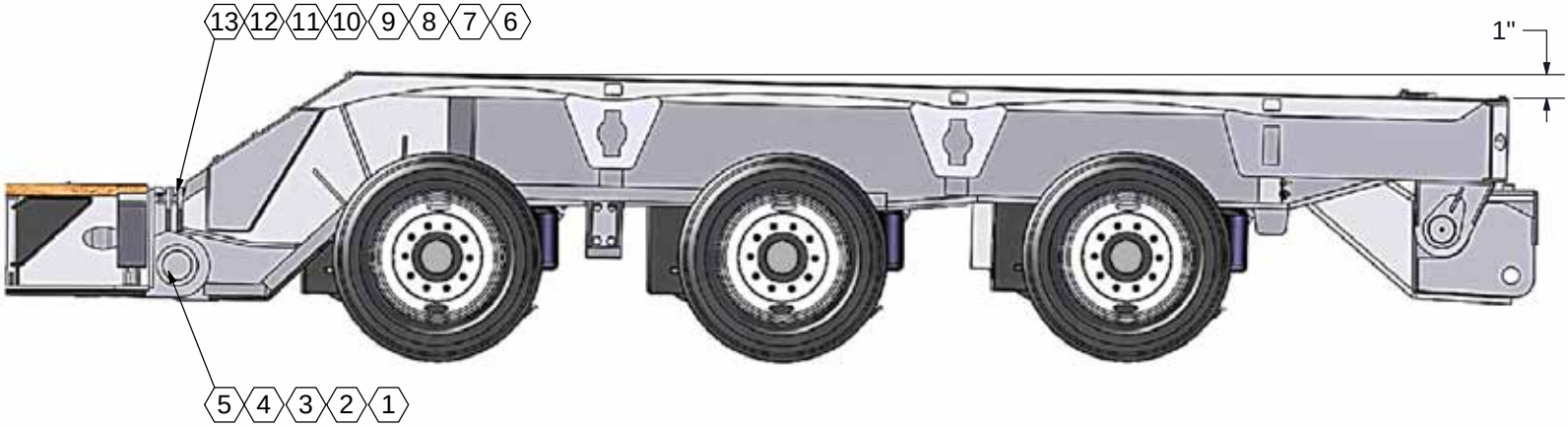
NOTE: FOR PRELIMINARY SET-UP
1. SET UP DECK, DECK SECTION, AND SUBFRAME USING ½" SHIMS.
2. PRELOAD AT SUBRAME TAILGATE SHOULD BE 1" OFF THE SUBFRAME STRAIGHT LINE.
3. CHECK ALL CONNECTIONS.
4. SHIM REQUIRMENTS WILL VARY WITH LOADS.



ITEM#	PART NUMBER	DESCRIPTION	QTY
1	D01165	PIN ASSEMBLY	2
2	D01168	PIN WASHER	2
3	MP5-0100-17	FLAT WASHER	4
4	MP5-0096-123	HEX BOLT	2
5	MP5-0851-807	LOCK NUT	2
6	MC0-1162-1	1/4 SHIM	2
7	MC0-1162-2	3/8 SHIM	2
8	MC0-1162-3	1/2 SHIM	2
9	MC0-1162-4	3/4 SHIM	2
10	MC0-1162-5	1" SHIM	2
11	MP5-0096-238	HEX BOLT	4
12	MP5-0105-15	LOCK WASHER	4
13	MP5-1412-1607	HEX NUT	4

REVISIONS

REV.	DESCRIPTION	DATE	AUTHORITY
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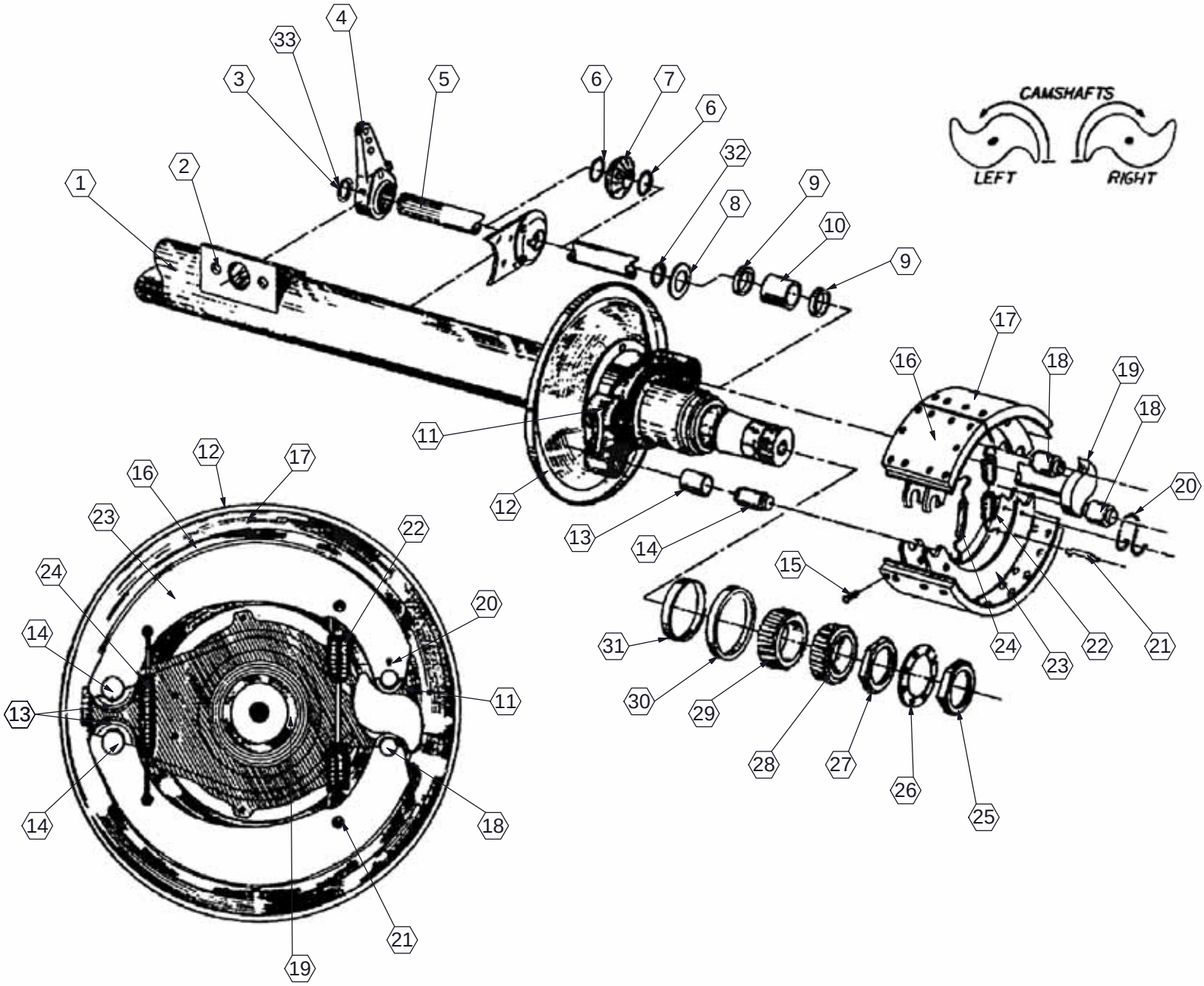

ITEM#	PART NUMBER	DESCRIPTION	QTY
1	REF	AXLE BAR	1
2	MP5-0299	AIR CHAMBER BRACKET	2
3	MP5-2844	CAM SHAFT LOCK RING	4
4	MP5-1920-H28	AUTOMATIC SLACK ADJUSTER	2
5	MP5-2617-L	CAM BRACKET WITH BUSHING	1
5	MP5-2617-R	CAM BRACKET WITH BUSHING	1
6	MP5-2845	CAM BRACKET & O-RING	4
7	MP5-2846	GREASE FITTING	2
8	MP5-2847	CAM WASHER	2
9	MP5-2848	GREASE SEAL SPIDER	4
10	MP5-2849	SPIDER BUSHING	2
11	MP5-2850	BRAKE SPIDER	2
12	MP0-0114	DUST SHIELD	2
13	MP5-2851	STAINLESS STEEL BUSHING	2
14	MP5-0282	BRAKE ANCHOR PIN	2
15	MP5-0288	LINING RIVET	A/R
16	MP5-2852	BRAKE LINING ANCHOR	4
17	MP5-2853	BRAKE LINING CAM END	4
18	MP5-2854	BRAKE SHOE ROLLER	4
19	MP5-2680-R	BRAKE CAM SHAFT (RIGHT)	1
19	MP5-2680-L	BRAKE CAM SHAFT (LEFT)	1
20	MP0-0051	ROLLER RETAINING SPRING	4
21	MP0-0053	RETRACT SPRING PIN	4
22	MP5-0290	BRAKE RETRACT SPRING	2
23	MP5-0287	BRAKE SHOE	4
24	MP5-0302	BRAKE RETAINING SPRING	2
25	MP0-0023	OUTER SPINDLE NUT	2
26	MP0-0021	SPINDLE NUT LOCK	2
27	MP0-0020	INNER SPINDLE NUT	2
28	MP0-0018	OUTER BEARING CONE	2
29	MP0-0019	INNER BEARING CONE	2
30	MP5-3536	UNITIZED OIL SEAL & AXLE RING	2
31	MP5-3536	UNITIZED OIL SEAL & AXLE RING	2
32	MP5-2856	CAM SNAP RING	2
33	MP5-2857	CAM WASHER	2
34	MP5-2858	CAM SHAFT REPAIR KIT	A/R

NOTES:

1. ITEM 5 (CAM BRACKET) INCLUDES ITEMS 6 & 7. ITEMS 6 & 7 NOT SOLD SEPARATELY.
2. ITEM 23 (BRAKE SHOE) INCLUDES ITEMS 16, 17, 18, 20 AND 21.
3. ITEM 34 (CAM SHAFT REPAIR KIT) INCLUDES ITEMS 3, 5, 6, 7, 8, 9, 10, 32 AND 33.
4. MEASURE CAM SHAFT LENGHT BEFORE ORDERING - CAM LENGTH IS DISTANCE BETWEEN HEAD AND SPLINE END.

REVISIONS			
REV.	DESCRIPTION	DATE	AUTHORITY
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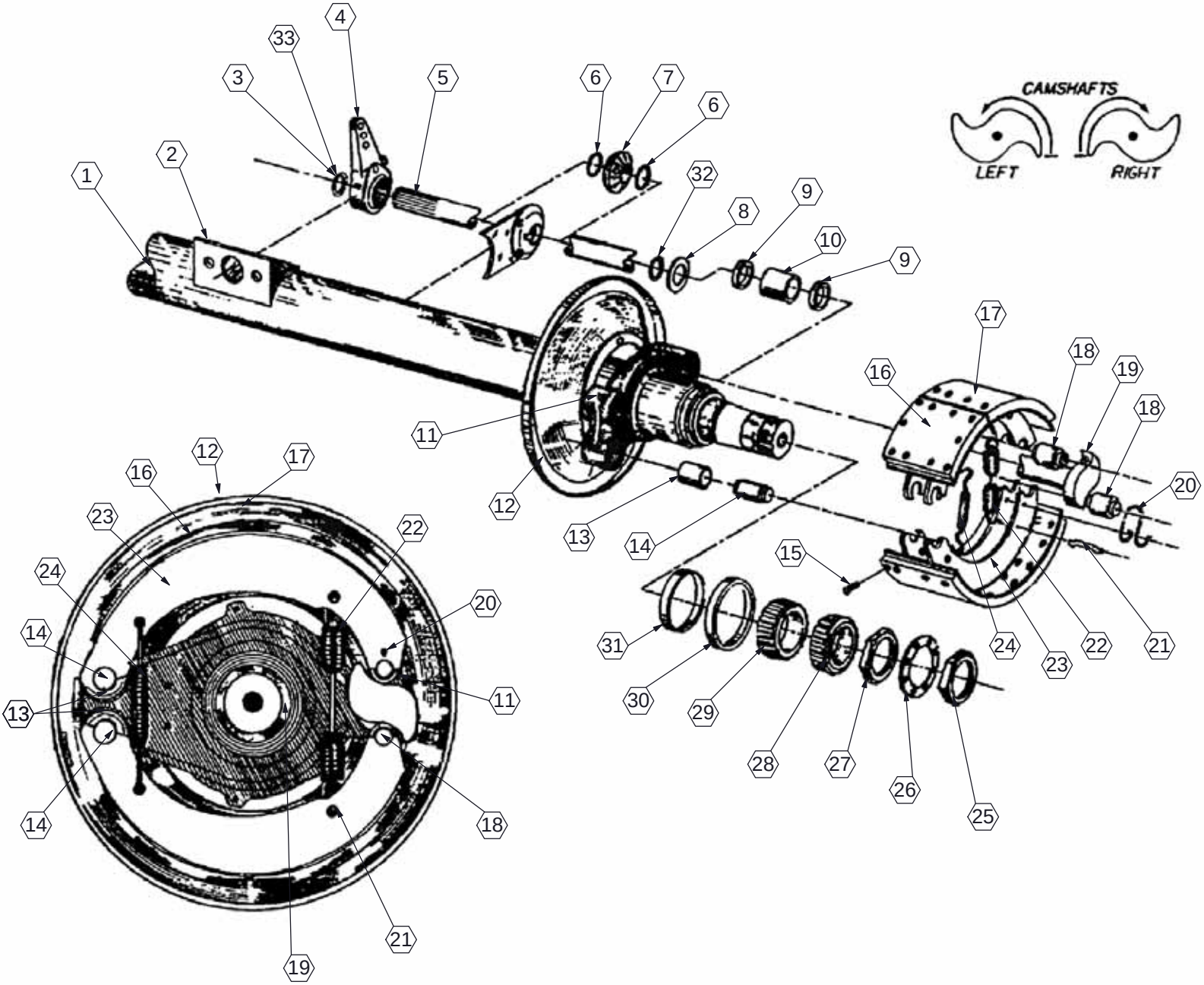

ITEM#	PART NUMBER	DESCRIPTION	QTY
1	REF	AXLE BAR	1
2	MP5-0299	AIR CHAMBER BRACKET	2
3	MP5-2844	CAM SHAFT LOCK RING	4
4	MP5-1920-C28	AUTOMATIC SLACK ADJUSTER	2
5	MP5-2617-L	CAM BRACKET WITH BUSHING	1
5	MP5-2617-R	CAM BRACKET WITH BUSHING	1
6	NOT SEPERATE	CAM BRACKET O-RING	4
7	NOT SEPERATE	GREASE FITTING	2
8	MP5-2847	CAM WASHER	2
9	MP5-3612	GREASE SEAL SPIDER	4
10	MP5-3611	SPIDER BUSHING	2
11	MP5-2850	BRAKE SPIDER	2
12	MP0-0114	DUST SHIELD	2
13	MP5-2851	STAINLESS STEEL BUSHING	2
14	MP5-0282	BRAKE ANCHOR PIN	2
15	MP5-0288	LINING RIVET	A/R
16	MP5-2852	BRAKE LINING ANCHOR	4
17	MP5-2853	BRAKE LINING CAM END	4
18	MP5-2854	BRAKE SHOE ROLLER	4
19	MP5-3609-R	BRAKE CAM SHAFT (RIGHT)	1
19	MP5-3609-L	BRAKE CAM SHAFT (LEFT)	1
20	MP0-0051	ROLLER RETAINING SPRING	4
21	MP0-0053	RETRACT SPRING PIN	4
22	MP5-0290	BRAKE RETRACT SPRING	2
23	MP5-0287	BRAKE SHOE	4
24	MP5-0302	BRAKE RETAINING SPRING	2
25	MP0-0023	OUTER SPINDLE NUT	2
26	MP0-0021	SPINDLE NUT LOCK	2
27	MP0-0020	INNER SPINDLE NUT	2
28	MP0-0018	OUTER BEARING CONE	2
29	MP0-0019	INNER BEARING CONE	2
30	MP5-3536	UNITIZED OIL SEAL & AXLE RING	2
31	MP5-3536	UNITIZED OIL SEAL & AXLE RING	2
32	MP5-2856	CAM SNAP RING	2
33	MP5-2857	CAM WASHER	2
34	MP5-3610	CAM SHAFT REPAIR KIT	A/R

NOTES:

1. ITEM 5 (CAM BRACKET) INCLUDES ITEMS 6 & 7. ITEMS 6 & 7 NOT SOLD SEPARATELY.
2. ITEM 23 (BRAKE SHOE) INCLUDES ITEMS 16, 17, 18, 20 AND 21.
3. ITEM 34 (CAM SHAFT REPAIR KIT) INCLUDES ITEMS 3, 5, 6, 7, 8, 9, 10, 32 AND 33.
4. MEASURE CAM SHAFT LENGHT BEFORE ORDERING - CAM LENGTH IS DISTANCE BETWEEN HEAD AND SPLINE END.

REVISIONS			
REV.	DESCRIPTION	DATE	AUTHORITY
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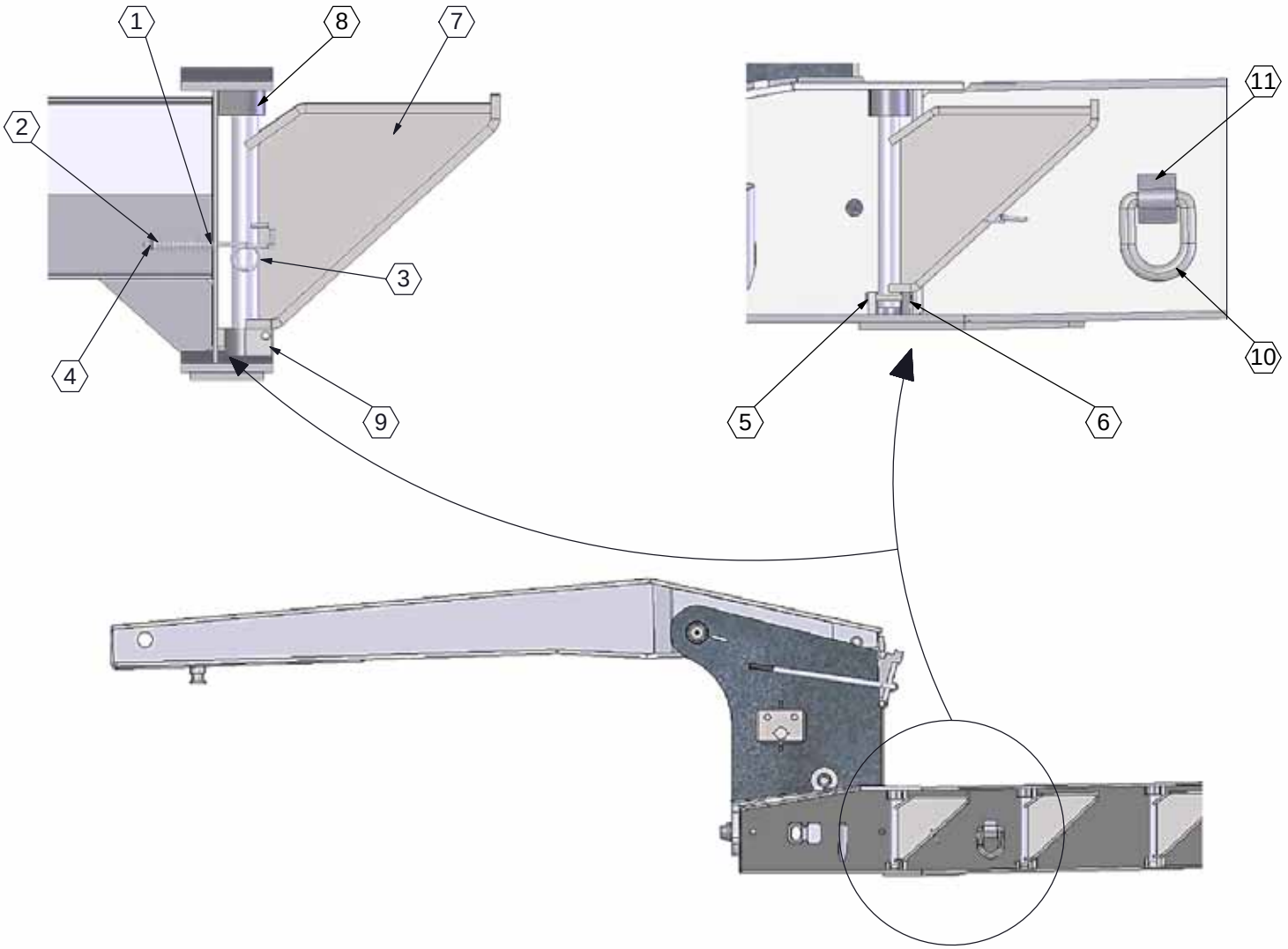

ITEM#	PART NUMBER	DESCRIPTION
1	MP5-0100-9	RETAINING WASHER
2	MP5-1416	RETAINING SPRING
3	MP1-0017	RETAINING HOOK
4	MP5-0102-285	COTTER PIN
5	MP5-0089-177	CLEVIS PIN
6	MP5-1594	SPLIT RING
7	BC0-0028	OUTRIGGER
8	BC0-0018-4	UPPER YOKE
9	BC0-0019-3	LOWER YOKE
10	MP1-0015	LASH RING
11	MP1-0014	LASH RING CLIP
12	BC1-0032	OUTRIGGER RETAINER KIT(#1-6)
13	MP5-2635-L	OUTRIGGER PLANKS (2 X 10-1/4 X L)
14	MP5-0407-L	DECKING (1-5/8 X 7-1/4 X L)
15	MP0-0919-A	DECKING BOLT, NUT & CLIP (KIT)
16	MP0-0919	DECKING CLIP

REVISIONS			
REV.	DESCRIPTION	DATE	AUTHORITY
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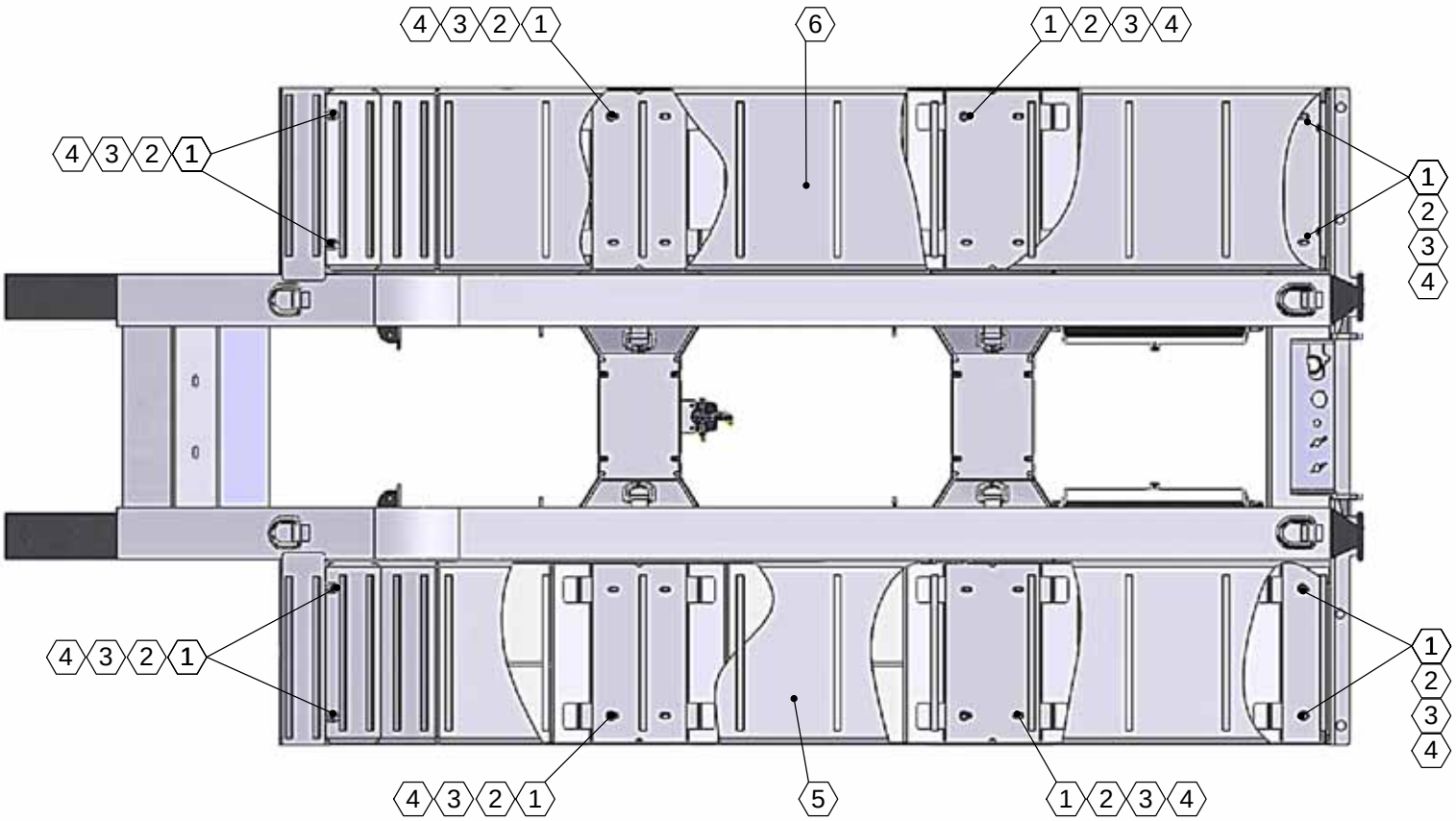

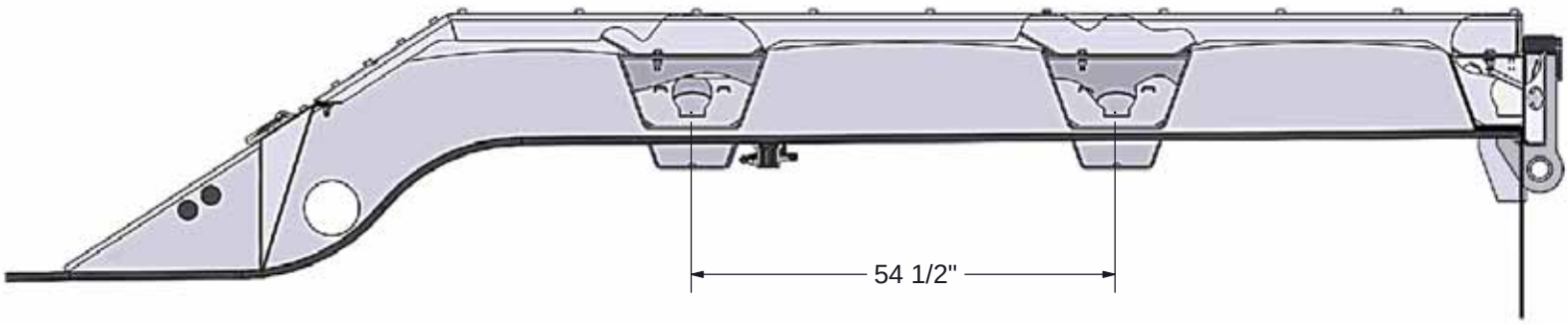

ITEM#	PART NUMBER	DESCRIPTION	QTY
1	MP5-0096-165	5/8 HEX BOLT	12
2	MP5-0100-205	5/8 FLAT WASHER	24
3	MP5-0105-12	5/8 LOCK WASHER	12
4	MP5-1412-1007	5/8 HEX NUT	12
5	SUB00846-1	BOLT ON WHEEL COVER ROADSIDE	1
6	SUB00846-2	BOLT ON WHEEL COVER CURBSIDE	1

REVISIONS			
REV.	DESCRIPTION	DATE	AUTHORITY
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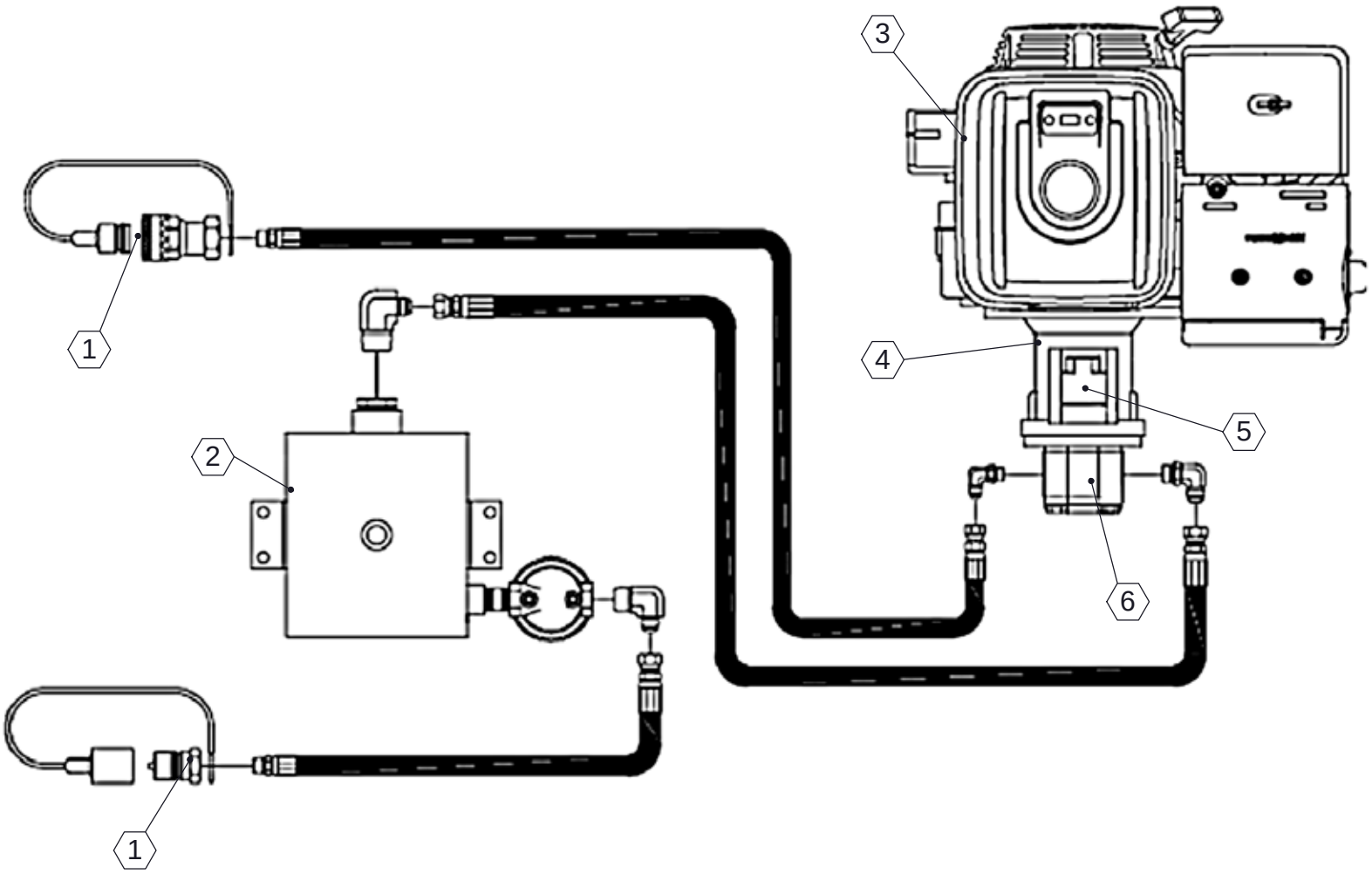

ITEM#	PART NUMBER	DESCRIPTION
1	MP5-0914-5A	QUICK COUPLERS
2	MP5-3346	RESERVOIR ASSEMBLY
3	MP5-1964	ENGINE
4	MP5-1558	PUMP MOUNT
5	MP5-1256	COUPLER ASSEMBLY
6	MP5-3000	HYDRAULIC PUMP

REVISIONS			
REV.	DESCRIPTION	DATE	AUTHORITY
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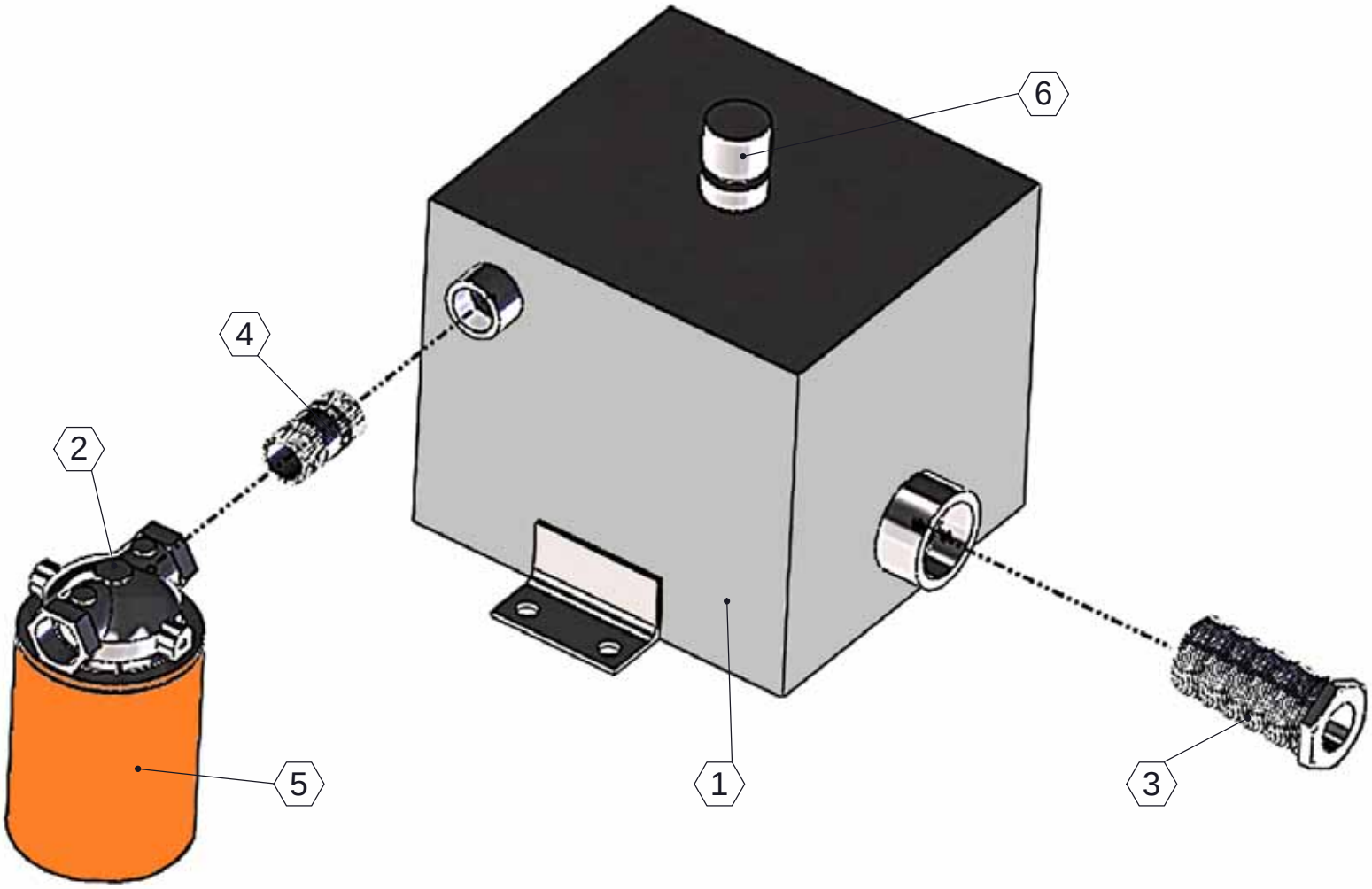

ITEM#	PART NUMBER	DESCRIPTION	QTY
1	MP5-3346-R	RESERVOIR W/CAP	1
2	MP5-3346-FA	FILTER ASSEMBLY W/FILTER	1
3	MP5-3346-S	SUCTION STRAINER	1
4	P5-3346-A	ADAPTER	1
5	MP5-2985-FE	FILTER ONLY	A/R
6	MP5-3346-C	CAP	1

REVISIONS			
REV.	DESCRIPTION	DATE	AUTHORITY
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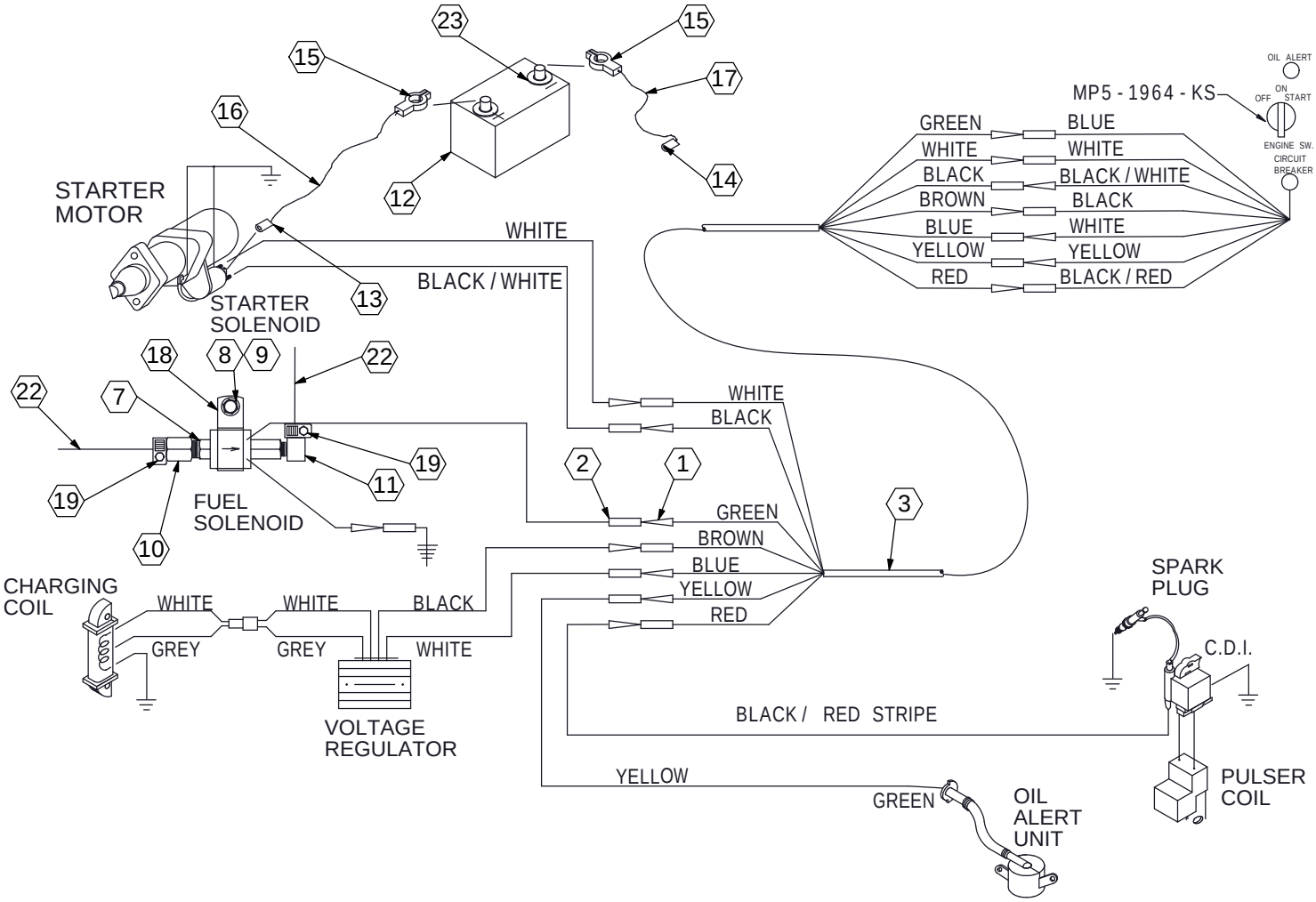

ITEM#	PART NUMBER	DESCRIPTION	QTY
1	JP5-0022	MALE BULLET CONN.	14
2	JP5-0021	FEMALE BULLET CONN.	14
3	JP0-0623-120	7-WAY ELECTRICAL CABLE	1
4	MP5-2488	CHOKE & THROTTLE CABLE	2
5	MP5-0935	GAS LINE	2 Ft
6	MP5-2163	GAS LINE	2 Ft
7	MP5-2699	FUEL SHUTOFF SOLENOID	1
8	MP5-0094-58	HEX BOLT	1
9	MP5-0851-607	LOCKNUT	1
10	MP5-2700-4	MALE CONNECTOR	1
11	MP5-2701-4	FEMALE CONNECTOR	1
12	LC0-0007-1	BATTERY	REF
13	JP0-0439	BATTERY CABLE END	1
14	JC5-0002	BATTERY CABLE END	1
15	JC5-0111	BATTERY TERMINAL CLAMP	2
16	JC5-0004-24	RED BATTERY CABLE	1
17	JC5-0004-B-20	BLACK BATTERY CABLE	1
18	MP5-2702-1	TUBE CLIP	1
19	MP5-2703-1	HOSE CLAMP	4

REVISIONS			
REV.	DESCRIPTION	DATE	AUTHORITY
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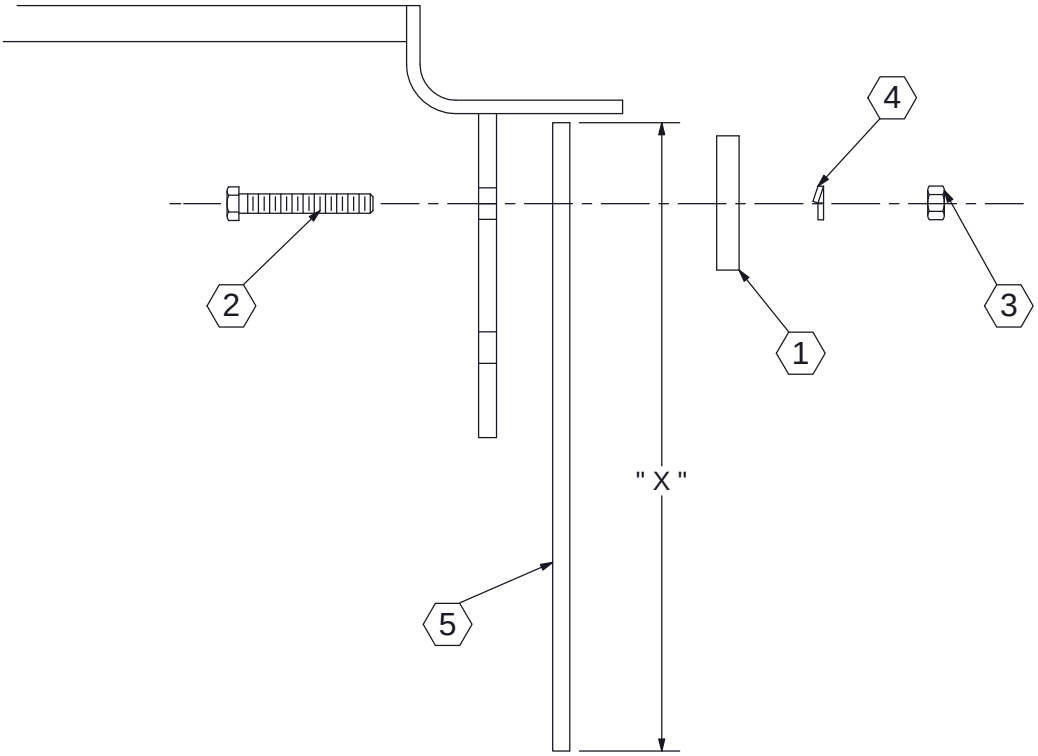
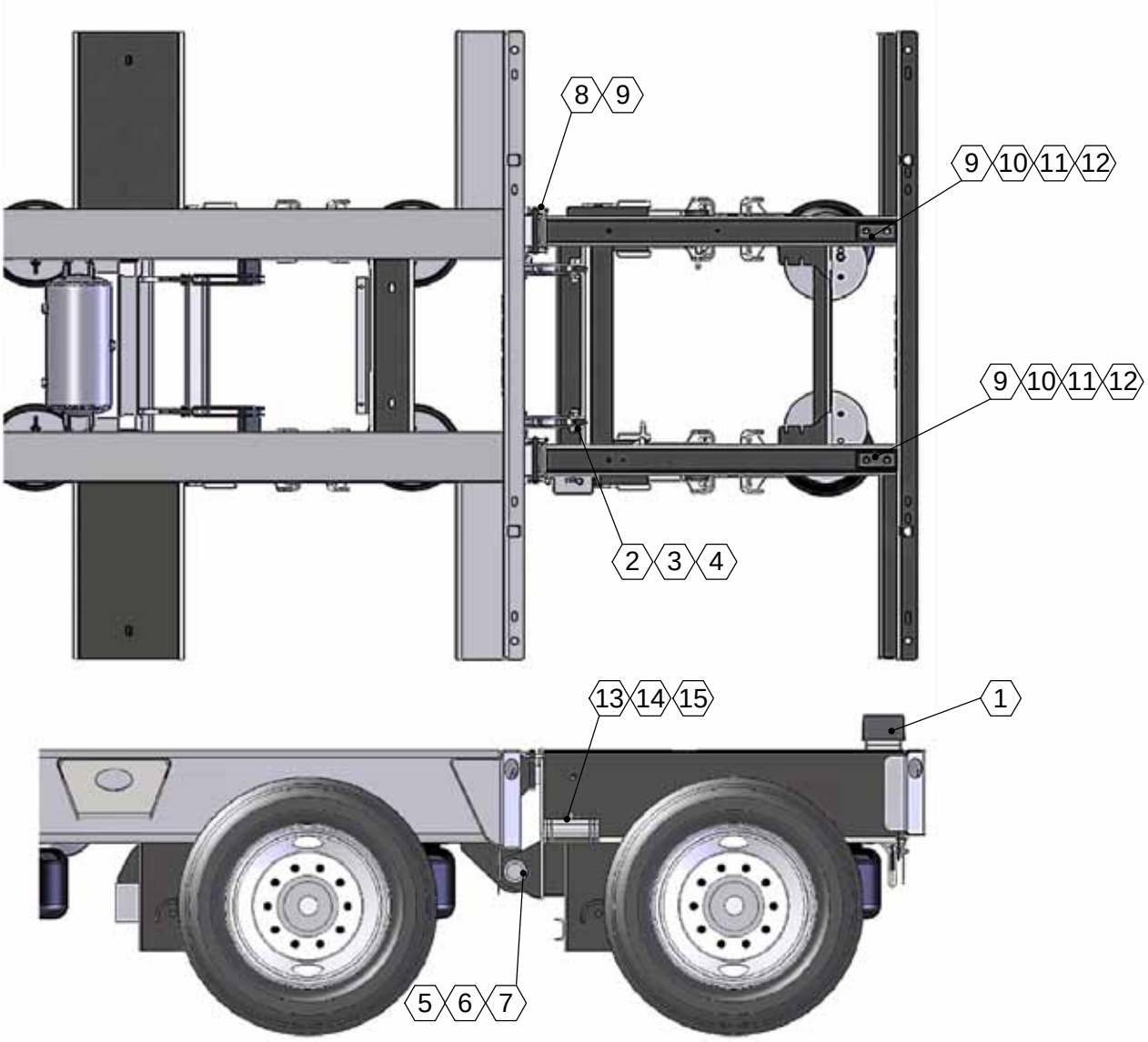


ITEM#	PART NUMBER	DESCRIPTION	QTY
1	BB0-0080	OUTER BRACKET (PAINTED)	2
2	MP5-0094-64	3/8 HEX BOLT	8
3	MP5-0091-607	3/8 HEX NUT	8
4	MP5-0105-8	3/8 LOCKWASHER	8
5	MP5-3935	24 X 24 MUD FLAP (STD)	2

AUXILIARY AXLE PARTS



ITEM#	PART NUMBER	DESCRIPTION	QTY
1	ED000562	BUMPER SHIM	4
2	D00957	UPPER CLEVIS ASSEMBLY	2
3	MP5-0096-212	HEX BOLT	4
4	MP5-0851-1407	LOCK NUT	4
5	GD0-0006	LOWER HINGE ASSEMBLY	2
6	D01208	PIN WASHER	4
7	MP5-0662-28-11	SNAPPER PIN	2
8	MP5-0096-117	HEX BOLT	4
9	MP5-0851-807	LOCK NUT	8
10	MP5-3546	RUBBER BUMPER	2
11	MP5-0094-127	BOLT	4
12	MP5-0100-17	WASHER	4
13	ED000616-1	SHIM	2
14	ED000616-2	SHIM	2
15	ED000616-3	SHIM	2
16	MP0-1499	TRANSPORT DECAL	2

REVISIONS			
REV.	DESCRIPTION	DATE	AUTHORITY
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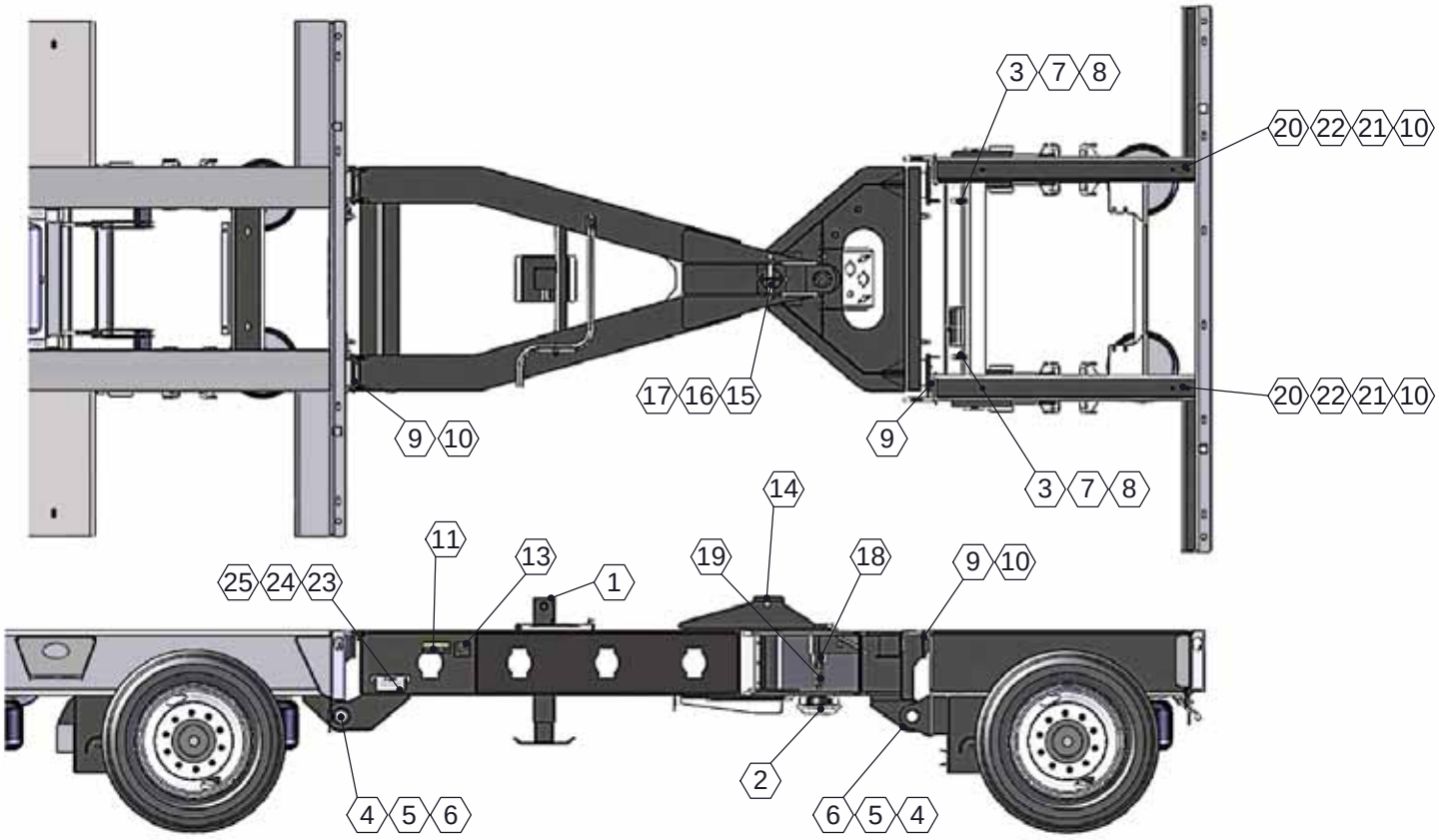

ITEM#	PART NUMBER	DESCRIPTION	QTY
1	MP5-1055	LANDING LEG	1
2	MP0-0038	BRAKE CHAMBER	1
3	D00957	UPPER FLIP CLEVIS ASSEMBLY	2
4	GD0-0006	LOWER HINGE ASSEMBLY	4
5	D01208	PIN WASHER	8
6	MP5-0662-28-11	SNAPPER PIN	4
7	MP5-0096-212	HEX BOLT	4
8	MP5-0851-1407	LOCK NUT	4
9	MP5-0096-117	HEX BOLT	8
10	MP5-0851-807	LOCK NUT	12
11	DCL-0026	SPACER DECAL	1
12	MP0-1498	BACK UP DECAL	1
13	MP0-1499	TRANSPORT DECAL	2
14	D01197	MAIN PIN ASSEMBLY	1
15	MP5-0096-471	HEX BOLT	1
16	MP5-1412-1207	HEX NUT	1
17	MP5-0105-13	LOCK WASHER	1
18	ED1-0023	LOCK PIN	1
19	MP5-1035	SPRING	2
20	MP5-3546	RUBBER BUMPER	2
21	MP5-0094-121	BOLT	4
22	MP5-0100-17	WASHER	4
23	ED000616-1	SHIM	2
24	ED000616-2	SHIM	2
25	ED000616-3	SHIM	2

REVISIONS			
REV.	DESCRIPTION	DATE	AUTHORITY
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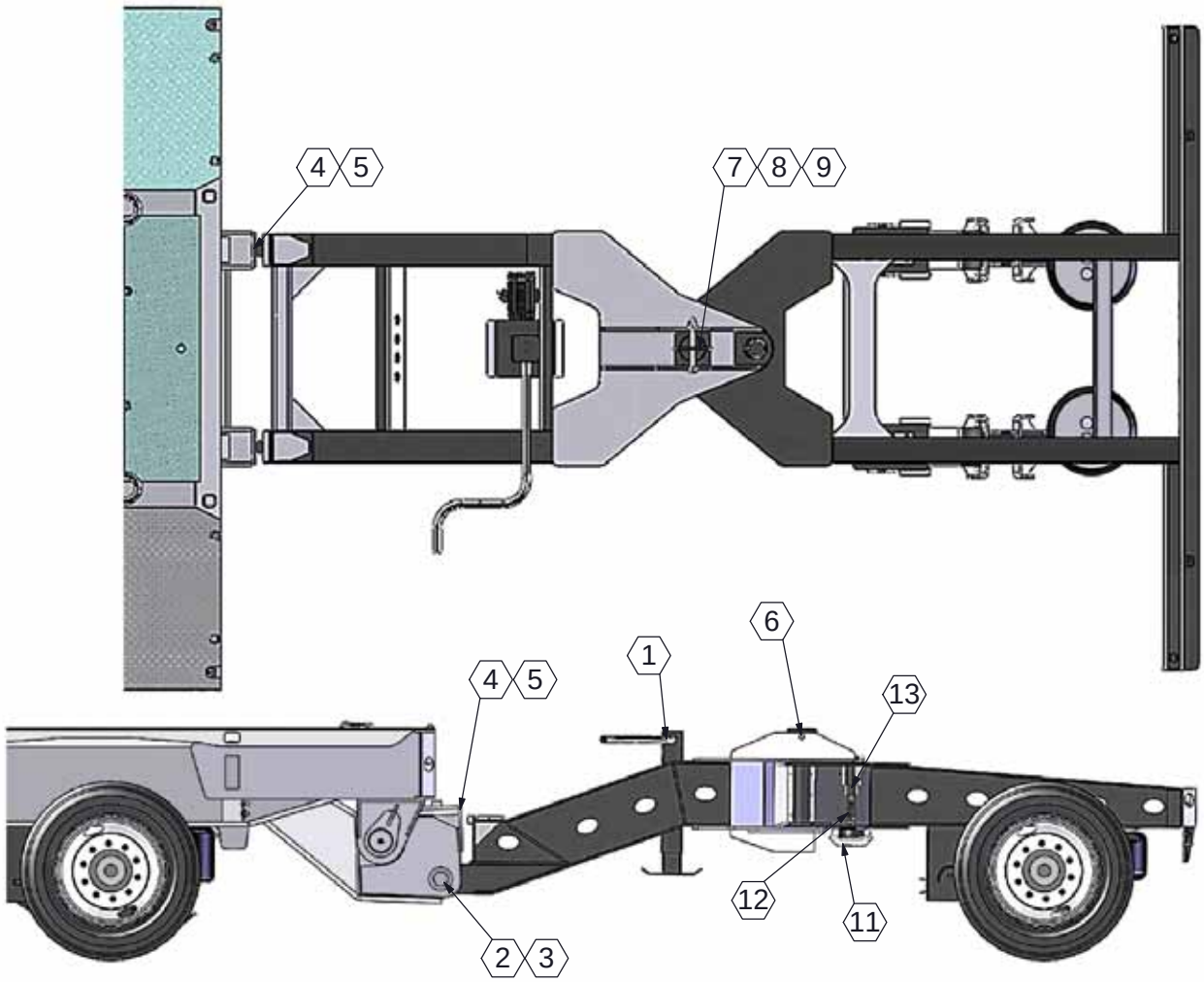

ITEM#	PART NUMBER	DESCRIPTION	QTY
1	MP5-0988	2 SPEED LANDING LEG	1
2	D01301	CLEVIS GUIDE PIN	2
3	MP5-2188-9	SNAP LOCK	2
4	MP5-0096-117	HEX BOLT	4
5	MP5-0851-807	LOCK NUT	4
6	D01296	MAIN PIN ASSEMBLY	1
7	MP5-0096-471	HEX BOLT	1
8	MP5-1412-1207	HEX NUT	1
9	MP5-0105-13	LOCK WASHER	1
10	GA0-0718	SHIM HOLDER & SHIMS	1
11	MP0-0038	BRAKE CHAMBER	1
12	MP5-1035	SPRING	2
13	ED1-0023	LOCK PIN	1

REVISIONS			
REV.	DESCRIPTION	DATE	AUTHORITY
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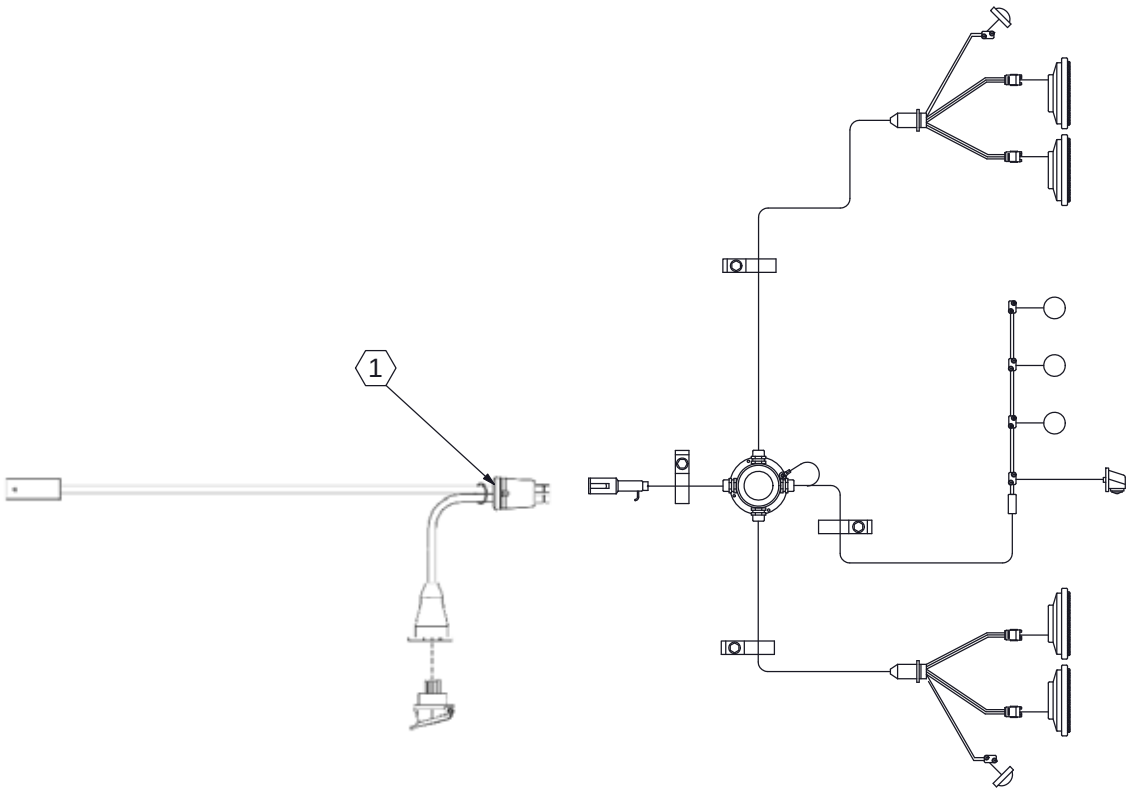

ITEM#	PART NUMBER	DESCRIPTION	QTY
1	JP000799	7-WAY HARNESS DROP OUT	1

REVISIONS			
REV.	DESCRIPTION	DATE	AUTHORITY
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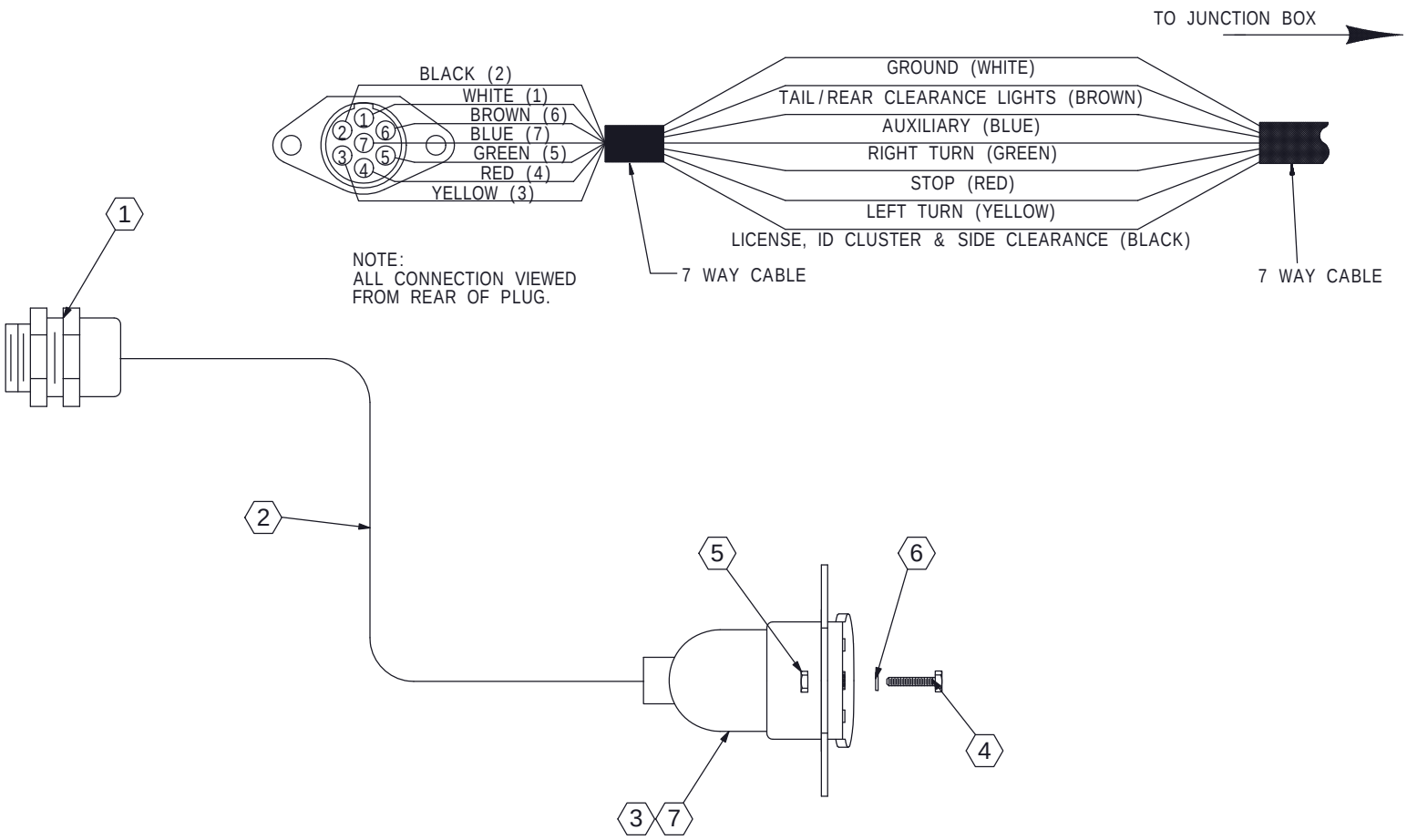

ITEM#	PART NUMBER	DESCRIPTION	QTY
1	JP0-0333	COMPRESSION FITTING	1
2	JP0-0055-10	7-WAY CABLE	1
3	JP0-0031	7-WAY FEMALE RECEPTICLE	1
4	MP5-0094-10	HEX BOLT	2
5	MP5-0091-407	HEX NUT	2
6	MP5-0105-6	LOCK WASHER	2
7	JP0-0066	BOOT	1

REVISIONS			
REV.	DESCRIPTION	DATE	AUTHORITY
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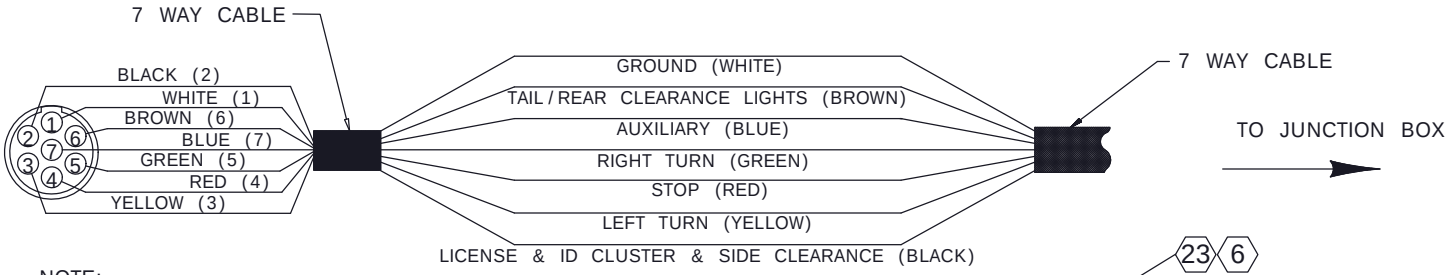
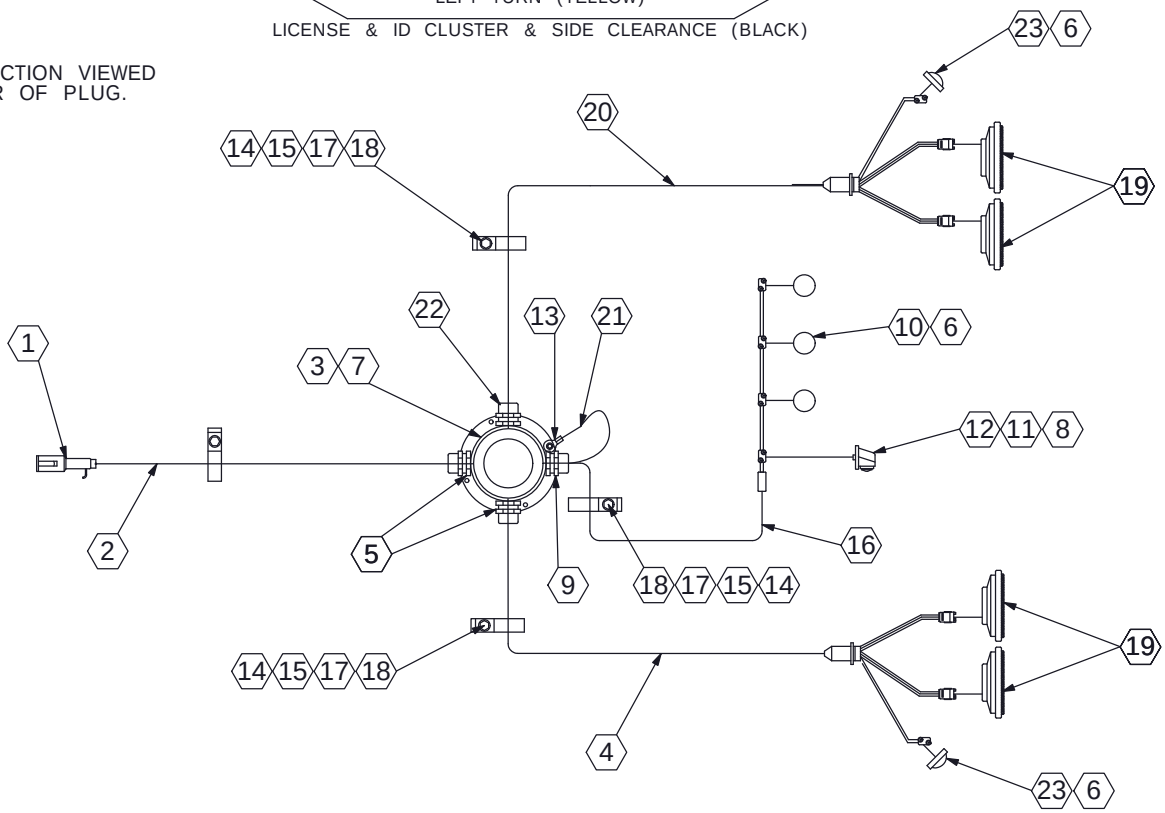


NOTE:
ALL CONNECTION VIEWED FROM REAR OF PLUG.



ITEM#	PART NUMBER	DESCRIPTION	QTY
1	JP0-0183	7-WAY MALE PLUG	1
2	JP0-0055	7 STRAND ELECTRIC CABLE	6
3	JP0-0330	JUNCTION BOX	1
4	JP0-0241-L	TAIL LIGHT HARNESS (LEFT)	1
5	JP0-0333	COMPRESSION FITTING	3
6	JP000751-R	RED CLEARANCE LIGHT	5
7	JP0-0025-1	RING TERMINAL	26
8	JP0-0336	LICENSE PLATE LAMP	1
9	JP0-0332	COMPRESSION FITTING	1
10	JP000752	LIGHT GROMMET	5
11	MP5-0383-9	FASTENER	2
12	MP5-0091-202	NUT	2
13	JP0-0172-1	RING TERMINAL	1
14	MP5-0091-407	NUT	4
15	MP5-0105-6	LOCK WASHER	4
16	JP0-0262-36	I.D LIGHT HARNESS	1
17	MP5-1056	WELD ON STUD	4
18	MP0-0481	WIRE CLAMP	4
19	JP0-0138	STOP, TURN & TAIL LAMP	4
20	JP0-0241-R	TAIL LIGHT HARNESS (RIGHT)	1
21	JP0-0023	WHITE WIRE	1
22	JP0-0331	3/8 COMPRESSION FITTING	1
23	MP5-3437	2-1/2 LIGHT GROMMET	2

DIMENSIONS ARE IN INCHES: TOLERANCES: +/- 1/16 FRACTIONAL ± ANGULAR: MACH ±.5 BEND ±.5 TWO PLACE DECIMAL ± THREE PLACE DECIMAL ±

REVISIONS			
REV.	DESCRIPTION	DATE	AUTHORITY
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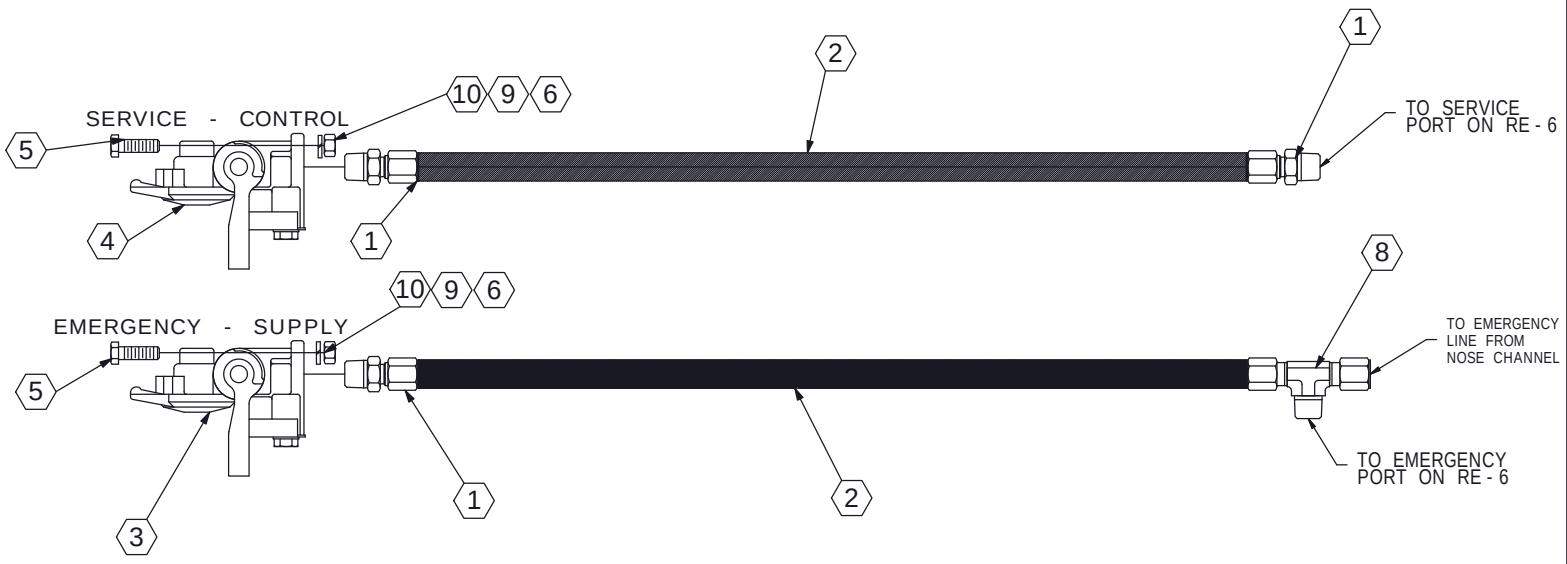

ITEM#	PART NUMBER	DESCRIPTION	QTY
1	MP5-2945-6	3/8 CONNECTOR	3
2	MP0-0478	SYNFLEX AIR LINE	2
3	KP0-0250	EMERGENCY GLADHAND	1
4	KP00251	SERVICE GLADHAND	1
5	MP5-0094-34	5/16 HEX BOLT	4
6	MP5-0091-507	5/16 HEX NUT	4
7	MP5-0105-6	1/4 LOCK WASHER	2
8	MP5-2959-4	MALE BRANCH T	1
9	MP5-0100-9	1/4 FLAT WASHER	2

REVISIONS			
REV.	DESCRIPTION	DATE	AUTHORITY
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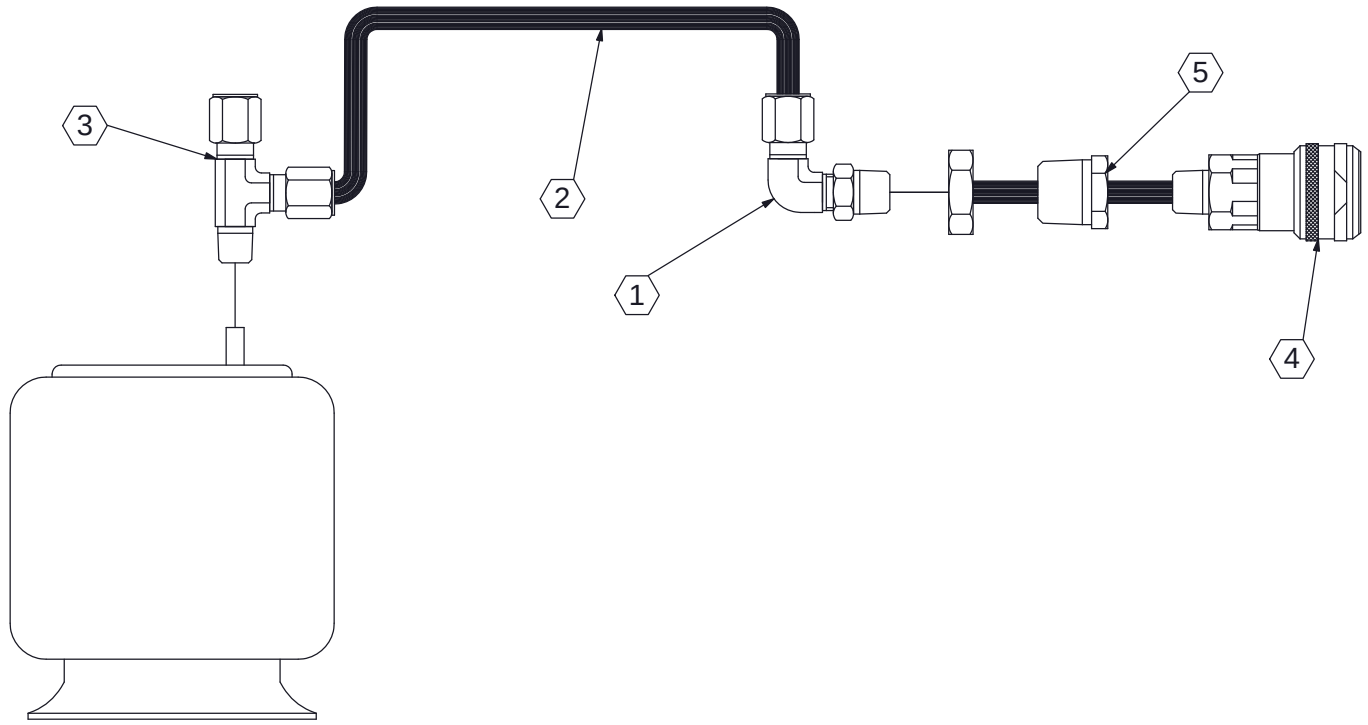

ITEM#	PART NUMBER	DESCRIPTION	QTY
1	MP5-2947-6	3/8 90 ° ELBOW	1
2	MP0-0478	3/8 SYNFLEX AIR LINE	6 Ft
3	MP5-2958-3	MALE RUN T	1
4	MP5-2656	FEMALE QUICK COUPLER	1
5	MP5-1048	3/8 BULKHEAD FITTING	1

REVISIONS			
REV.	DESCRIPTION	DATE	AUTHORITY
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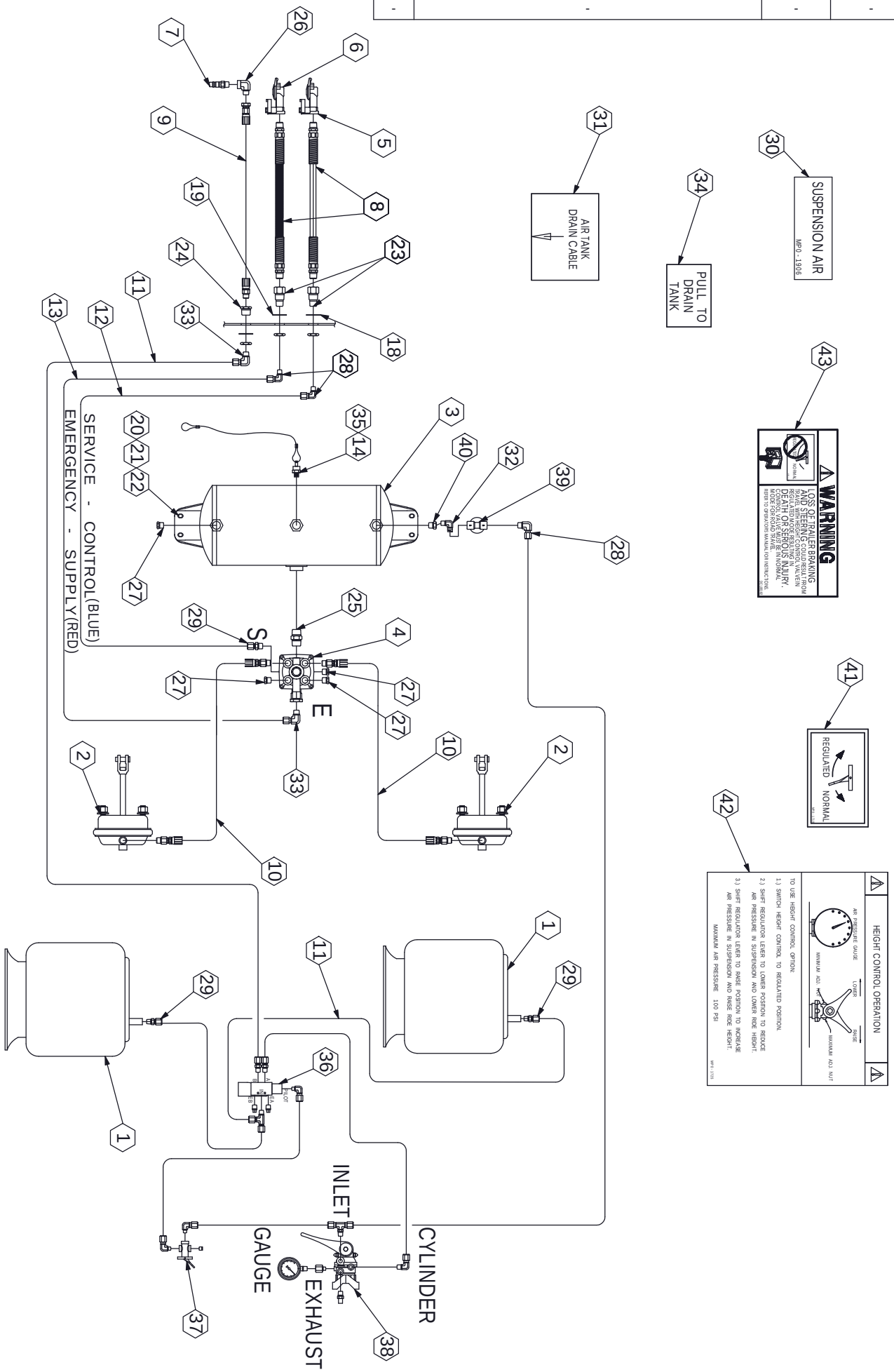

DIMENSIONS ARE IN INCHES: TOLERANCES: +/- 1/16 FRACTIONAL ± ANGULAR: MACH ±.5 BEND ±.5 TWO PLACE DECIMAL ± THREE PLACE DECIMAL ±

ITEM#	PART NUMBER	DESCRIPTION	QTY
1	SUSPENSION	SUSPENSION AIR BAG	2
2	MP0-0038-M	TYPE 30 BRAKE CHAMBER	REF
3	KP0-0098	AIR TANK	1
4	KP0-0315	BRAKE CONTROL VALVE	1
5	MP5-0317	SERVICE GLADHAND	1
6	MP5-0316	EMERGENCY GLADHAND	1
7	MP5-1053	3/8 MALE QUICK COUPLER	1
8	KP0-0273	3/8 HOSE	2
9	SH0-9024-36	3/8 HOSE 36"L	1
10	MP0-1782-36	3/8 HOSE 36"L	2
11	MP0-0478	BLACK SYNFLEX AIR LINE	30
12	MP0-0478-BLU	BLUE SYNFLEX AIR LINE	1
13	MP0-0478-RED	RED SYNFLEX AIR LINE	1
14	MP0-1312	DRAIN COCK & CABLE	1
15	DCL00182	HEIGHT CONTROL WARNING DECAL	1
16	DCL00512	HEIGHT CONTROL OPERATION DECAL	1
17	MP0-1718	REGULATED/NORMAL DECAL	1
18	KP0-0166	SERVICE TAG	1
19	KP0-0165	EMERGENCY TAG	1
20	MP5-0094-62	3/8 HEX BOLT	4
21	MP5-0105-8	3/8 LOCK WASHER	4
22	MP5-0091-607	3/8 HEX NUT	4
23	KP0-0164	FEMALE CLAMPING STUD	2
24	MP5-1048	BULKHEAD	1
25	MP5-0111-10	HEX CLOSE NIPPLE	1
26	MP5-0134-3	90° STREET ELBOW	1
27	MP5-0185-3	PIPE PLUG	4
28	MP5-2947-5	90° ELBOW	3
29	MP5-2945-6	STRAIGHT CONNECTOR	3
30	MP0-1906	SUSPENSION AIR DECAL	1
31	MP0-1465	AIR TANK DRAIN DECAL	1
32	MP5-0106-2	90° ELBOW	1
33	MP5-2947-6	90° MALE ELBOW	2
34	MP0-1448	PULL TO DRAIN TANK DECAL	1
35	MP5-0164-2	BRASS INSERT	1
36	KP000596-4	PILOT VALVE ASSEMBLY	1
37	KP000600-2	AIR TOGGLE VALVE ASSEMBLY	1
38	KP000601	REGULATOR VALVE ASSEMBLY	1
39	KP0-0274	PRESSURE PROTECTION VALVE	1
40	MP5-0113-3	HEX BUSHING	1

REVISIONS			
REV.	DESCRIPTION	DATE	AUTHORITY
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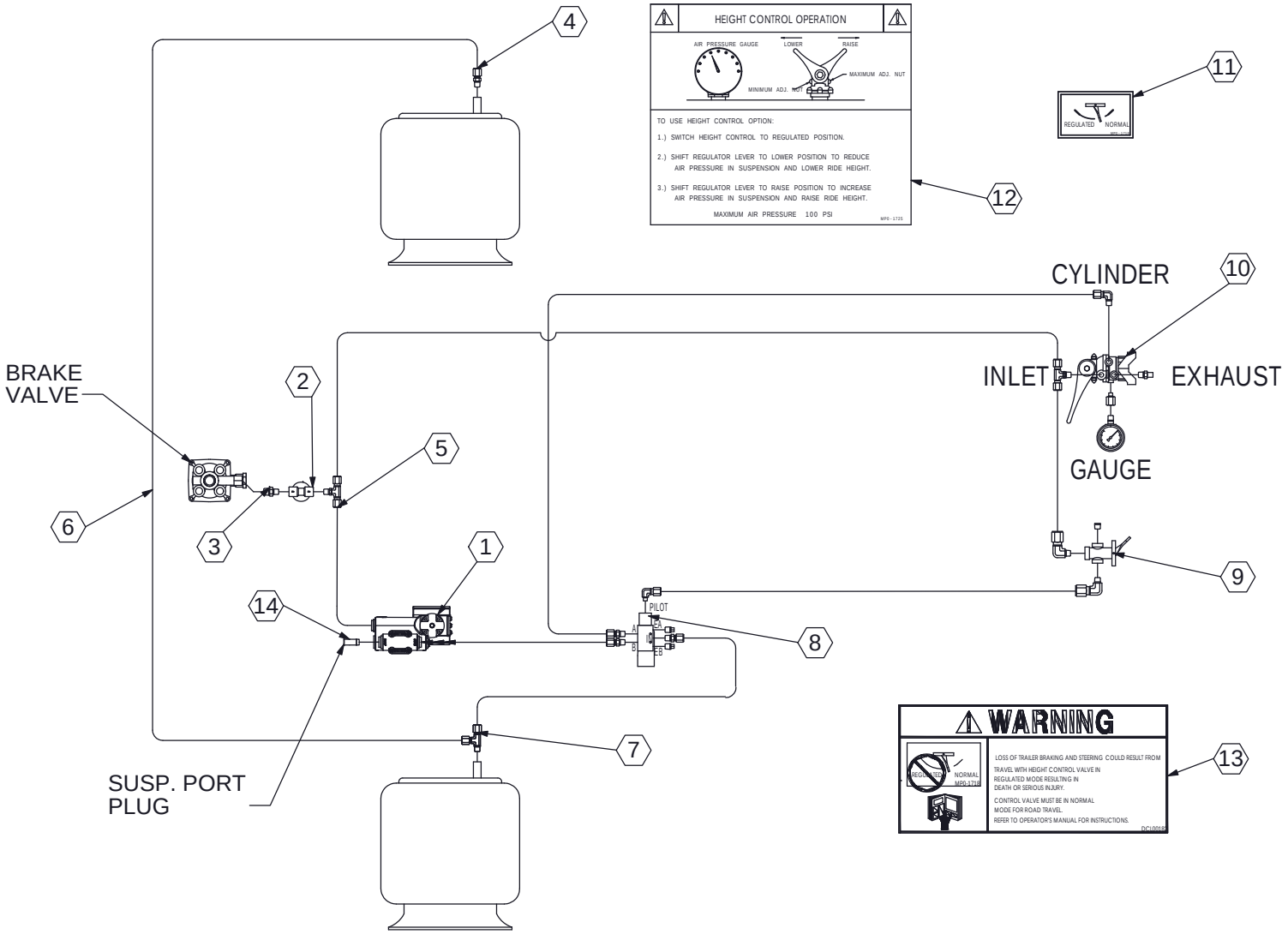

ITEM#	PART NUMBER	DESCRIPTION	QTY
1	MP5-3771	LEVELING VALVE ASSEMBLY	1
2	KP0-0274	PRESSURE PROTECTION VALVE	REF
3	MP5-0111-5	HEX NIPPLE	1
4	MP5-2945-5	CONNECTOR	1
5	MP5-2959-3	SWIVEL BRANCH T	1
6	MP0-0478	BLACK SYNFLEX	32
7	MP5-2958-3	RUN T	1
8	KP000596-5	PILOT VALVE ASSEMBLY	1
9	KP000600-2	AIR TOGGLE VALVE	1
10	KP000601	REGULATOR VALVE	1
11	MP0-1718	REGULATED/NORMAL DECAL	1
12	MP0-1725	HEIGHT CONTROL OPERATION DECAL	1
13	DCL00182	HEIGHT CONTROL WARNING DECAL	1
14	MP5-2964-2	PORT PLUG	REF

REVISIONS			
REV.	DESCRIPTION	DATE	AUTHORITY
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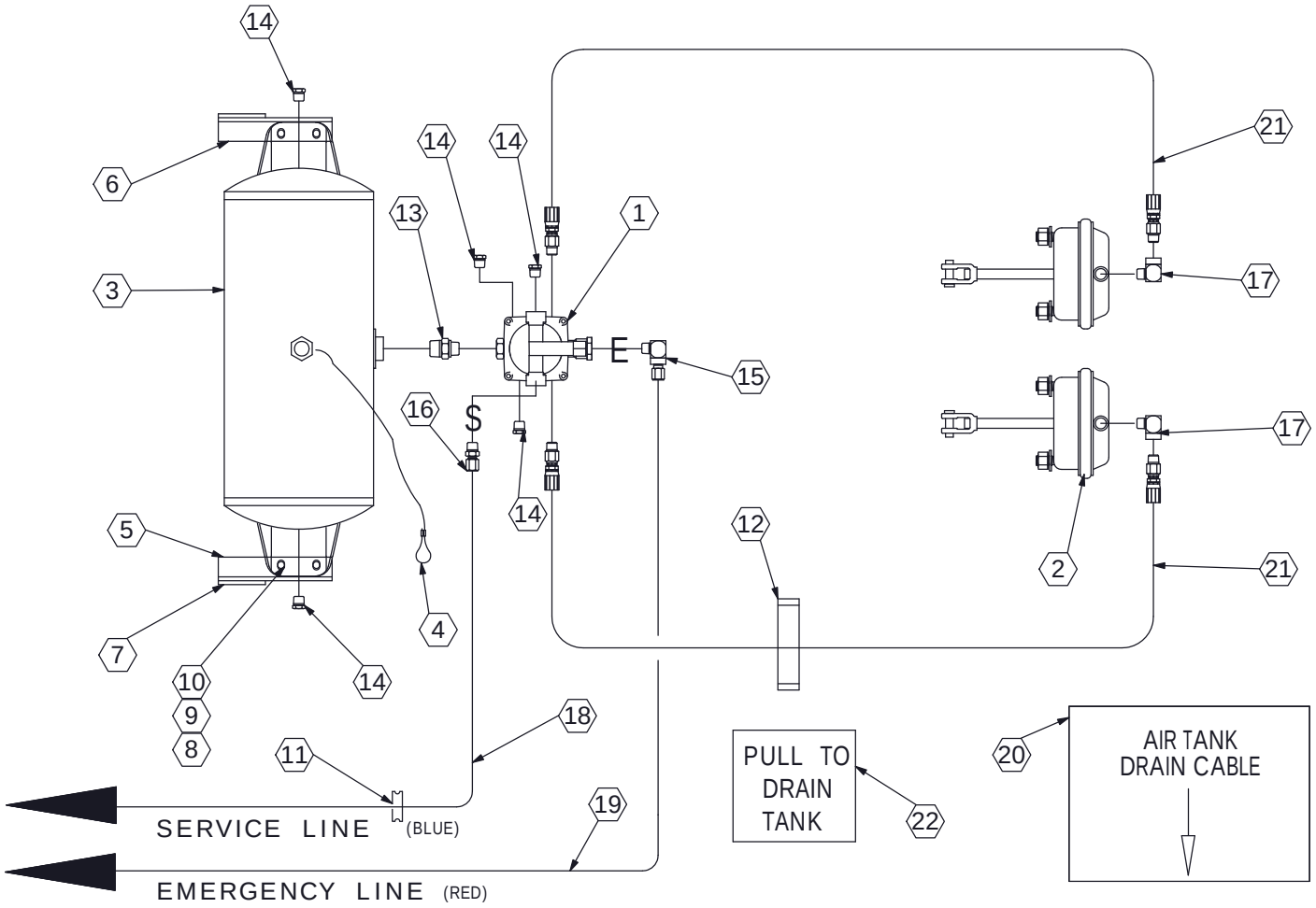

ITEM#	PART NUMBER	DESCRIPTION	QTY
1	KP0-0315	BRAKE CONTROL VALVE	1
2	MP0-0038M	TYPE 30 BRAKE CHAMBER	REF
3	KP0-0098	AIR TANK	1
4	MP0-1312	DRAIN COCK & CABLE	1
5	BB0-0035-L	AIR TANK MOUNTING BRACKET (L)	1
6	BB0-0035-R	AIR TANK MOUNTING BRACKET(R)	1
7	STG011-3-3	GUSSET	2
8	MP5-0094-62	3/8 HEX BOLT	4
9	MP5-0105-8	3/8 LOCK WASHER	4
10	MP5-0091-607	3/8 HEX NUT	4
11	JP0-0026	GROMMET	2
12	MP5-1294	BRAKE HOSE CLAMP	1
13	MP5-0111-10	NIPPLE	1
14	MP5-0186-3	PLUG	5
15	MP5-2947-6	90 ° ELBOW	1
16	MP5-2945-6	STRAIGHT CONNECTOR	1
17	MP5-0134-3	90 ° STREET ELBOW	4
18	MP0-0478-540-BLUE	BLUE SYNFLEX AIR LINE	1
19	MP0-0478-540-RED	RED SYNFLEX AIR LINE	1
20	MP0-1465	AIR TANK DRAIN DECAL	1
21	MP0-1782-48	3/8 HOSE ASSEMBLY	2
22	MP0-1448	PULL TO DRAIN TANK DECAL	1

REVISIONS			
REV.	DESCRIPTION	DATE	AUTHORITY
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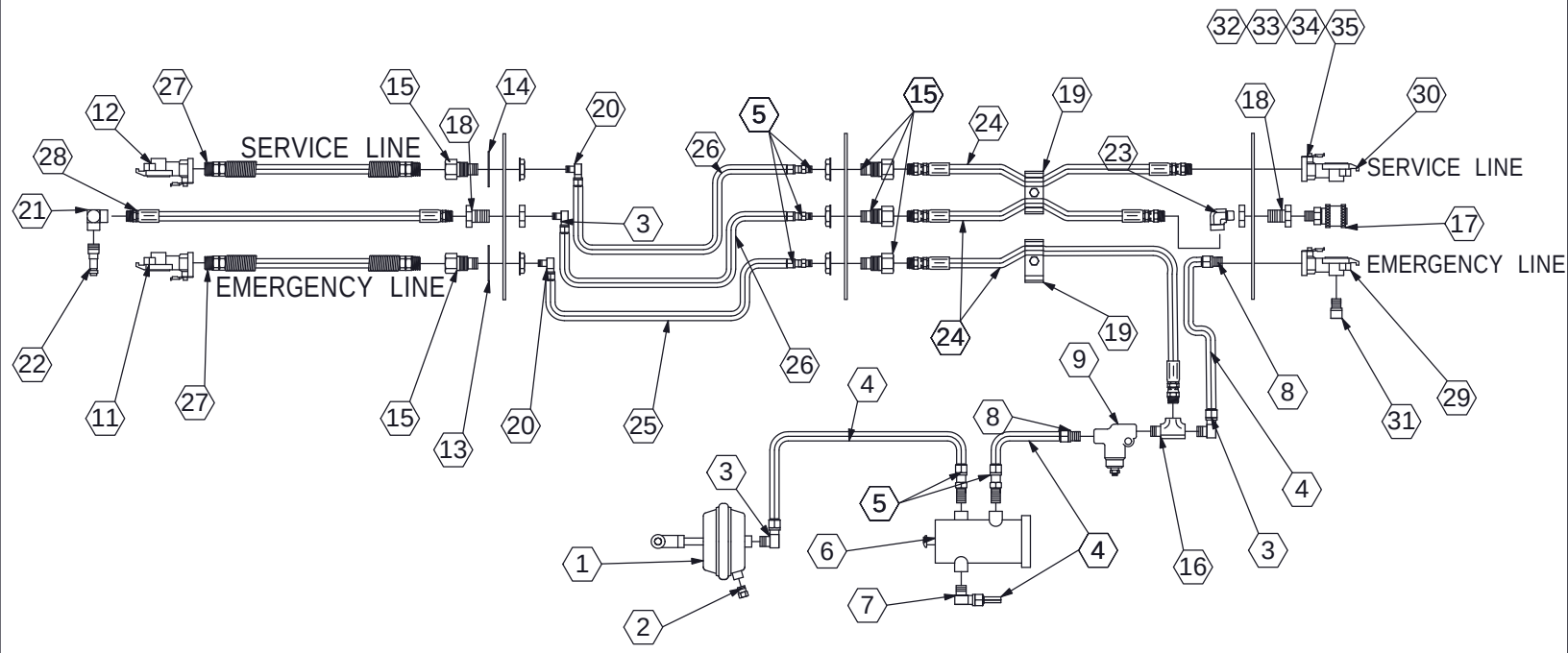

ITEM#	PART NUMBER	DESCRIPTION	QTY
1	MP0-0444	AIR CHAMBER	1
2	MP5-0185-3	HEX HEAD PLUG	1
3	MP5-2947-6	90° MALE ELBOW	3
4	MP0-0478-RED	RED SYNFLEX TUBE	2
5	MP5-2945-5	MALE CONNECTOR	5
6	MP5-0240	AUTOMATIC SHUT-OFF VALVE	1
7	MP5-2947-4	90° ELBOW	1
8	MP5-2945-6	MALE CONNECTOR	2
9	KP0-0305	PRESSURE PROTECTION VALVE	1
10	MP5-0480	3" CORDURA	3Ft
11	MP5-0316	EMERGENCY GLAD HAND	1
12	MP5-0317	SERVICE GLAD HAND	1
13	KP0-0165	EMERGENCY TAG	1
14	KP0-0166	SERVICE TAG	1
15	KP0-0164	FEMALE BULKHEAD	5
16	MP5-0108-3	MALE RUN T	1
17	MP5-2656	FEMALE QUICK COUPLER	1
18	MP5-1048	BULKHEAD FITTING	2
19	MP0-1330-1	HOSE CLAMP	2
20	MP5-2947-5	90° MALE ELBOW	2
21	MP5-0107-3	90° ELBOW	1
22	MP5-1053	MALE QUICK COUPLER	1
23	MP5-0134-3	90° STREET ELBOW	1
24	MP0-1917-60	3/8 HOSE ASSEMBLY	3
25	MP0-0478-RED	RED SYNFLEX TUBE	1
26	MP0-0478-BLU	BLUE SYNFLEX TUBE	2
27	KP0-0273	3/8 HOSE ASSEMBLY	2
28	MP0-1782-48	3/8 HOSE ASSEMBLY	1
29	KP0-0250	EMERGENCY GLAD HAND (SO)	1
30	KP0-0251	SERVICE GLAD HAND (SO)	1
31	MP5-0186-2	1/4 PLUG	1
32	MP5-0094-34	5/16 HEX BOLT	4
33	MP5-0100-11	5/16 WASHER	4
34	MP5-0105-7	5/16 LOCK WASHER	4
35	MP5-0091-507	5/16 HEX NUT	4

REVISIONS			
REV.	DESCRIPTION	DATE	AUTHORITY
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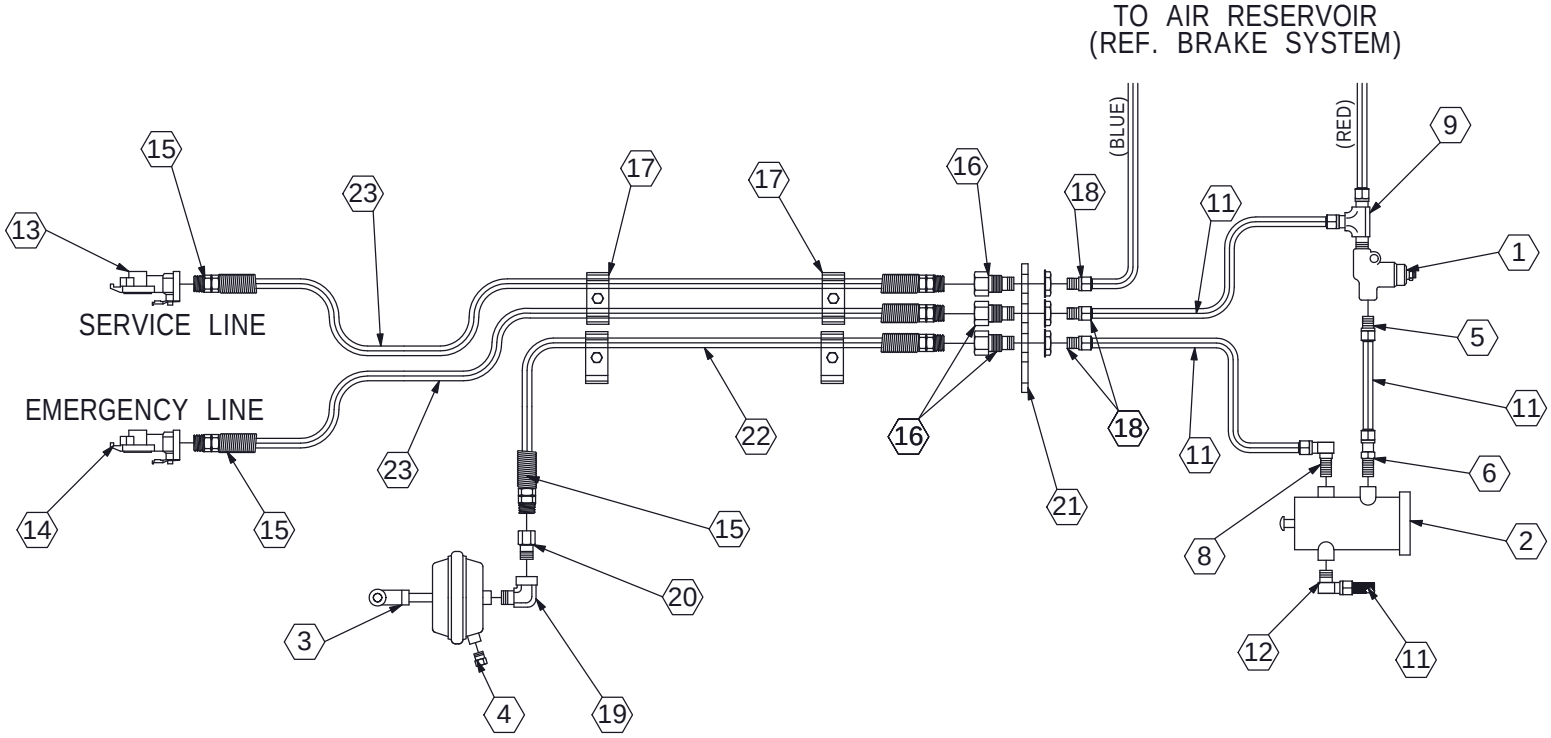

ITEM#	PART NUMBER	DESCRIPTION	QTY
1	KP0-0305	PRESSURE PROTECTION VALVE	1
2	MP5-0240	AUTOMATIC SHUTOFF VALVE	1
3	MP0-0444	AIR CHAMBER	1
4	MP5-0185-3	HEX HEAD PLUG	1
5	MP5-2945-6	MALE CONNECTOR	1
6	MP5-2945-5	MALE CONNECTOR	1
7	MP5-2945-7	90˚ ELBOW	1
8	MP5-2945-5	MALE CONNECTOR	1
9	MP5-2948-4	MALE T SWIVEL	1
10	MP5-2948-4	MALE T SWIVEL	1
11	MP0-0478-RED	RED SYNFLEX TUBING	2Ft
12	MP5-2947-4	90˚ MALE ELBOW	1
13	MP5-0317	SERVICE GLADHAND	1
14	MP5-0316	EMERGENCY GLADHAND	1
15	KP0-0275	REUSABLE CONNECTOR	6
16	KP0-0164-A	FEMALE BULKHEAD	3
17	MP0-1330-1	HOSE CLAMP	4
18	MP5-2945-5	MALE CONNECTOR	3
19	MP5-0134-3	STREET ELBOW	1
20	MP5-0206-3	ADAPTER	1
21	GD0-0543	BULKHEAD MOUNTING PLATE	1
22	KP0-0240-40	BRAKE HOSE 40"L	1
23	KP0-0240-84	BRAKE HOSE 84"L	2