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AMERICAN HYDRAULICS Cushioning Unit & Car Pocket Parts

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MULTI-MAX[®] RAILCAR

166	Suggested Stock Items: Ramp
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GREENBRIER CASTINGS

We specialize in reconditioning all types of couplers, yokes, side frames and bolsters. We maintain a large selection of fully finished inventory in order to offer short lead times on common part types. Our services meet AAR Certification to M-212, M-214 and M-1003 and include: classification, reconditioning, heat treatment, and finishing.

Our products include:

- Reconditioned coupler bodies and yokes
- Fully assembled couplers (new and reconditioned)
- Knuckles and small parts for couplers (new and secondhand)
- Reconditioned draft gears
- Reconditioned side frames and bolsters
- Reconditioned air brake parts

COUPLERS



E60R	E S Shank Cplr Recd
SE60R	E Short Shank Cplr Rec'd
SE60N	E Short Shank Cplr New
SBE60R	E Short Shank Cplr Rec'd
SBE60N	E Short Shank Cplr New
E67R	E S Shank Cplr Recd
SBE67R	E Short Shank Cplr Rec'd
SBE67N	E Short Shank Cplr New
E68R	E Long Shank Cplr Recd
SE68R	E Long Shank Cplr Recd
SBE68R	E Long Shank Cplr Recd
SBE68N	E Long Shank Cplr New
E69R	E Long Shank Cplr Recd
E69N	E Long Shank Cplr New
SBE69R	E Long Shank Cplr Recd
SBE69N	E Long Shank Cplr New
EF511R	E Long Shank Cplr Rec'd
EF511N	E Long Shank Cplr New
EF512R	E Long Shank Cplr Rec'd
EF512N	E Long Shank Cplr New

EF525R	E Long Shank Cplr Reconditiond
EF528R	E Long Shank Cplr Rec'd
EF60R	E Long Shank Cplr Recd
EF601R	E Long Shank Cplr Rec'd
EF603R	E LONG SHANK CPLR RECD
EF603N	E LONG SHANK CPLR NEW
F70R	F Type Cplr Recd
SF70R	F Type Cplr Recd
F73R	F TYPE CPLR RECOND
F79R	F Type Cplr Recd
FR205R	F Rotary Cplr Rec'd
FR207R	F Rotary Cplr Rec'd
FR207N	F Rotary Cplr New
FR208R	F ROTARY COUPLER RECD
FR208N	F Rotary Coupler
FR209N	F Rotary Coupler
FR304R	F Rotary Cplr Rec'd
FR304N	F Rotary Cplr New
SBE4936R	E LOCO CPLR RECD
E8316R	E Loco Cplr Recd
F8306R	Recond Loco Coupler
BE108NN	New Loco Coupler
BE110NN	New Loco Coupler



YOKES

SY40R	SY40 Yoke Reconditioned
Y40R	Y40 Yoke Recd
Y45R	Y45 Yoke Recd
SY40N	New Yoke



KNUCKLES

E50N	E50 Knuckle New
F51N	F51 Knuckle-New
H50N	H50 Knuckle-New



COUPLER PARTS

C11N	C11 Cotter Pin-New
C2N	C2 Support Pin-New
DK17N	Draft Gear Cross Key 17"
DK18N	Draft Gear Cross Key 18"
DK19N	Draft Gear Cross Key 19"
DKLOCK	Draft Key Lock
DKRET	Draft Key Retainer
DKWASH	Retainer Key Washer

Please Note: This is a limited catalog. For more information regarding our additional product offerings, please contact our customer service at **877.94.PARTS.**

COUPLER PARTS (CONTINUED)

MK50R	Draft Gear Recd
MK50N	Draft Gear-New
MK70N	Draft Gear-New



E STYLE COUPLER PARTS

C10N	C10 Coupler Pin-New
E24N	E24 Lock Lift-New
E25N	Locklift, New
E30N	E30 Thrower-New
E40N	E40 Lock-New
E42N	E42 Lock-New
E6N	E6 Lock Lift-New



F STYLE COUPLER PARTS

C10N	C10 Coupler Pin-New
F10N	F10 Lock Lift-DbI Rotor-New
F31N	F31 Thrower-New
FR41N	FR41N Lock-New
F41N	F41 Lock-New
F45N	F45 Lock-New
F7N	F7 Lock Lift-New
F8N	F8 Lock Lift-Single Rotor-New
F9N	F9 Lock Lift-New

H STYLE COUPLER PARTS

H15N	H15 Lock Lift-New
H16N	H16 Lock Lift-New
H30N	H30 Thrower-New
H40N	H40 Lock-New
H50N	H50 Knuckle-New



WEAR PLATES COUPLER

WP2	Wear Plate
WP3	Wear Plate
WP6	Wear Plate



FOLLOWER BLOCKS

Y44N	Y44 Follower Block-New
Y46N	Y46 Follower Block-New
Y47N	Y47 Yoke Pin-New

SIDE FRAMES AND BOLSTERS



70 TON SIDE FRAME
70 TON BARBER BOLSTER
70 TON BOLSTER RIDE CONTROL
100 TON SIDE FRAME
100 TON BARBER BOLSTER
100 TON BOLSTER RIDE CONTROL
125 TON SIDE FRAME
125 TON BARBER BOLSTER
125 TON BOLSTER RIDE CONTROL



BOLSTER COMPONENT PARTS

BGIBSN	Small Bolster Gib
BGIBLN	Large Bolster Gib

VARIOUS POCKET WEAR PLATES

16SSVWLN	16" Vertical Ring, Stainless Steel
14SSVWLN	14" Vertical Ring, Stainless Steel



FRICTION CASTINGS

17803FCN	ASF 17803 Friction Casting New
17815FCN	ASF 17815 Friction Casting New
17823FCN	ASF 17823 Friction Casting New
17882FCN	ASF 17882 Friction Casting New
609DFCN	609-D Friction Casting New
787CFCN	787-C Friction Casting New
834CFCN	834-C Friction Casting New
876FCN	876 Friction Casting



SPRINGS

3091N	ASF 3091 Friction Cast Sp New
3092N	ASF 3092 Friction Cast Sp New
B432	B432 SIDE SPRING
B433	B433 SIDE SPRING
D-5ILSN	D-5 Inner Load Spring New
D-5OLSN	D-5 Outer Load Spring New



ROLLER BEARING ADAPTERS

6-½x12RBN	6-½x12 New Roller Bearing Adapters
6x11RBN	6 x 11 New Roller Bearing Adapters
6-½x9RBN	6-½x9 New Roller Bearing Adapters

Please Note: This is a limited catalog. For more information regarding our additional product offerings, please contact our customer service at **877.94.PARTS.**



CENTER PINS	
1 3/4CP	1 3/4" CENTER PIN
2CP	2" CENTER PIN

BRAKE BEAMS	
BB18LHN	Brake Beams NO.18 L/H New
BB18RHN	Brake Beams NO.18 R/H New
BSKN	Brake Shoe Key
1.5TGSHOE	1-1/2" TREADGUARD SHOE V625
2BRAKE SHOE	2" Composition shoe
BBWPBN	Plastic Brake Beam Liner, Black
BBWPGN	Plastic Brake Beam Liner, Gray
BBWPMN	Metal Brake Beam Liner



COLUMN WEAR PLATES	
Various Sizes	
Column wear plate bolts	
Column wear plate nuts	

AIRBRAKE PARTS

10ABCYR	10" AB CYLINDER
10ABPSTR	10" AB PISTON RECON'D
10CUP	CUP 10"
12ABPSTR	12" ABU PISTON RECON'D
22AHN	22" AIR HOSE
2BRAKESHOEN	2" New Brake Shoe Comp
3/4GASK	GASKET 3/4" RING
3/8ORING	O-RING 3/8"
33AHN	33" AIR HOSE
3POSGASK	GASKET 3 POSITION
3POSN	3 POSITIONS NEW
3POSR	3 POSITIONS RECON'D
731056	GASKET 1"
7ABPSTR	7-1/2" AB PISTON RECON'D
7WABCYLR	7-1/2" WABCO CYLINDER RECON'D
8ABPSTR	8-1/2" ABU PISTON RECON'D
8CUP	CUP 8-1/2'
8VNTPROT	VENT PROTECTOR #8
8VVR	#8 VENT VALUE RECON'D
8WABCYLR	8-1/2' WABCO CYLINDER RECON'D
8WABPTR	8-1/2" WABCO PISTON RECON'D
9WABPTR	9" WABCO PISTON CUST OWNED

ABDSEMR	ABDS EMERGENCY RECON'D
ABDSVR	ABD SERVICE RECON'D
ABDWEMR	ABDW EMERGENCY RECON'D
ABDWSEMR	ABDWS EMERGENCY RECON'D
ABDXEMR	ABDX EMERGENCY RECON'D
ABDXLEMR	ABDXL EMERGENCY RECON'D
ABDXSVR	ABDX SERVICE RECON'D
ABRSVR	AB RESERVOIR (2PC)
ABVNTPROT	VENT PROTECTOR AB
ACGASK	GASKET, ANGLE COCK
ANGCCKR	ANGLE COCK-REG.RECON'D
B1R	B-1 QUICK SERVICE RECOND
BELLCRN	BELL CRANK NEW
DB10SVR	DB-10 SERVICE REOND
DB20EMR	DB-20 EMERGENCY RECON'D
DCBGN	DIRT COLLECTOR BOWL GASKET
DCR	DIRT COLLECTOR/CUTOUT COCK REC
EMRGASK	GASKET EMERGENCY
GSACN	ANGLE COCK GRIP SEAL NEW
GSACR	ANGLE COCK GRIP SEAL RECON'D
HBGRPNN	HANDBRAKE GROUP N NEW, LONG AND SHORT HANDLE
HBGRPON	HANDBRAKE GROUP O NEW, LONG AND SHORT HANDLE
HBWH	HANDBRAKE WHEEL - SHALLOW
HBWHD	HANDBRAKE WHEEL - DEEP
HOSEXTN	HOSE EXTENSION NEW
HOSEGASK	GASKET HOSE COUPLING
HOSEHANGN	HOSE HANGER NEW
KM2R	KM-2 RECON'D
P1R	P-1 PROPORTION VALVE RECON'D
PBR	PIPE BRACKET RECON'D
PBSTRN	STRAINER, PB
RSVUNIBODR	RESERVOIR UNIBODY RECON'D
SCTRF	SINGLE CAR TESTER - RECOND
SLACKN	SLACK ADJUSTER NEW
SLACKR	SLACK ADJUSTER RECON'D
SVCGASK	GASKET, SERVICE
TCR	CHOKE COUPLING RECON'D
TGR	CAR TESTER GAGE RECON'D

AMERICAN HYDRAULICS

A GREENBRIER COMPANY

The Greenbrier Parts Group offers you...

Repair Services & Parts

The Greenbrier Parts Group offers a broad range of remanufacturing and repair services for most types and brands of cushioning units. For efficient and cost competitive operations, our engineering and manufacturing capabilities are totally integrated. We also have an AAR- and UIC-approved impact testing facilities. Units other than those listed may be repairable. Please contact our Customer Service Department at 866-785-4081 ext.: 225013 for additional information.

Upgrade Conversion

The American Hydraulics “U” design is a upgrade square bodied preload or gas conversion of existing spring return units from any manufacturer to a round bodied unit housing.

A New Preload design is available for all existing spring return, backstop arrangements.

Retrofit

The Greenbrier Parts Group has replacement units for most all unit types.

American Hydraulics Cushion Unit Features

Preload & Gas return—no springs required High gas charge—more positive restoring force Pre-charged— ready for quick installation Induction Hardened, Chrome plated rod—for longer life Unit Condition Indicator* (UCI)— instant performance check Full warranty—call for details.

Cushioning Device Nomenclature

Code letter indentification

For identification of the various cushioning devices other than by part number, AH has assigned an Individual identification code which includes the length of travel as well as other types of information pertaining to the device. These individual identification codes are assigned by unit groups. To assist in identification of these groups, we have also developed style names based on various car pockets utilized in railcar construction over the past 35 years such as:

1. **Cross Key Type Devices** 10E & 10F
2. **Lugged Style Devices** 10A, 10SR & 15H, 15HD
3. **Rigid Yoke Style Devices** 10M,15M, 10VM, 15VM, 15IN, and 15GR
4. **Floating Yoke Devices** 10RE, 15RE, 10KE & 15KE
5. **Center Car Devices** Associated with the devices it replaces

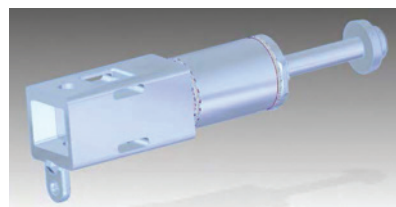
For further identification, letters or numbers are used which most generally have the same meaning but not always.

- [E] or [F] Associated with the coupler and unit in the case of the 10E and 10F
- [C] Conversion from Spring return to gas, from Gas return to Preload, or Reconditioned in-kind, no “C” used if New
- [FS] When after the group designation indicates spring coupler carrier feature
- [D] AAR M921 D (50K Preload) Autorack Performance
- [B] AAR M921 B (100K Preload) Performance
- [E] AAR M921 E (50K Preload) Autorack Performance
- [F] AAR M921 F (100K Preload) Performance
- [SP] When last, indicates Special feature from standard unit type like example: Front Draft Surface to Pin Hole centerline is 8-1/2” vs. 7-1/4”
- [WR] When use as a suffix, indicates a Welded pin retainer plate
- [TR] When use as a suffix, indicates a Threaded pin retainer plate
- [P] When use as a suffix, indicates a Plug or Tab pin retainer with a 7/8” vertical pin retaining system, normally a 13” body height.
- [P1] When used as a suffix, indicates a Plug or Tab pin retainer with a 7/8” vertical pin retaining system, with 12-1/2” body height.
- [LD] When used as a suffix, indicates unit modified for Low Deck car applications.
- [PB] When use as a suffix, indicates a Box or Pin Block pin retainer with a 1-1/2” bolt vertical pin retaining system.
- [K/S] When use as a suffix, indicates a unit that was manufactured at 13” body height instead of the standard 12-1/2”
- [R] Associated with a rigid coupler carrier attached to the unit when used after the repair status “C”

Placement of the numbers & letters typically have a special meaning:

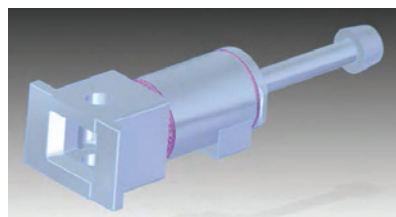
1. Length of travel (10, 12, 15) is the first in the code, but in some devices with Active Draft are be shown as example: 13/2 or 14/1, the larger being Buff travel, and the Smaller is the Draft travel (Some OEM's show them in reverse example: 1/14 or 2/13) and the larger is still the Buff travel, and the smaller the Draft
2. "F" stands for Freightguard Units and follows the travel (Except in Active Draft Devices)
3. Series letters follow the "-" such as "E", "F", "AR", "SR", "H", "HD", "M", "GR", "KE", and "RE"
4. "C" for Repair Status if Conversion, or Reconditioned, and no "C" if a New Device
5. Type of coupler connector only used with "E" type connections, not used on Non cross key type devices
6. Number indication preload precedes the type of coupler (D, B, E, F)
7. Suffix if added for pin retaining system, or special feature examples are: "WR", "TR", "P", "PB", and "SP"

AH produces several hundred different cushioning devices today, following is a short list of different devices listed by style:



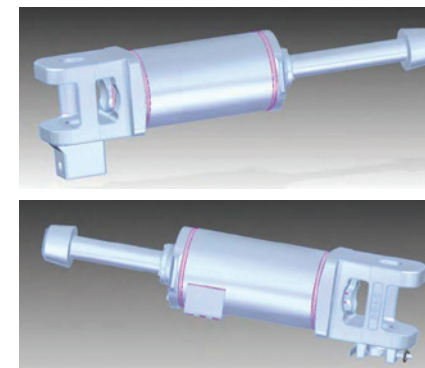
Cross Key Style Devices

10F-FCD WR, 10F-FCD TR, 10F-FCD PB, 10F-FCB WR, 10F-FCB TR, 10F-FCB PB, 10F-FSCB 10F-ECB



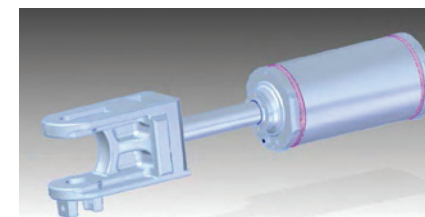
Lugged Style Devices

10F-ACD WR, 10F-ACD TR, 10F-ACD P, 10F-ACD P1, 10F-ACD PB, 10F-ACB WR, 10F-ACB TR, 10F-ACB P, 10F-ACB P1, 10F-ACB PB, 10F-SRCEB, 15F-HCD WR, 15F-HCD TR, 15F-HCD P, 15F-HCD P1, 15F-HCD PB, 15F-HCB WR, 15F-HCB TR, 15F-HCB P, 15FHCB P1, 15F-HCB PB, 15F-HCRB WR, 15F-HCRB TR, 15F-HCRB PB, 15F-HCED, 15F-HCEB



Rigid Yoke Style Devices

10F-MCD PB, 10F-MCD P, 10F-MCD P1, 10F-MCB PB, 10F-MCB P, 10F-MCB P1, 10F-MD PB, 10F-MB PB, 10F-MD P, 10F-MB P, 12F-MCB PB, 12F-MCB P, 12F-MCB P1, 15F-MCD PB, 15F-MCD P, 15F-MCD P1, 15F-MCB PB, 15F-MCB P, 15F-MCB P1, 15F-MD PB, 15F-MB PB, 15F-MD P, 15F-MB P, 13/2MCF, 2/13MCF, 13/1MCF, 1/13MCF (Active Draft,) 10F-MCEB, 10F-MCEB K/S, 10F-MEB K/S, 15F-MCEB, 15F-MCEB K/S, 15F-MEB K/S, 15F-GRB SP, 15F-INCD, 15F-INCB, 15F-INCEB



Floating Yoke Devices

10F-RECD, 10F-RECB, 10F-RED, 10F-REB, 15F-RECD, 15F-RECB, 15F-RED, 15F-REB, 10FRECD LD, 10FRED LD, 15FRECB LD, 15FREB LD, 13/2RECF, 2/13RECF, 14/1RECF, 1/14RECF (Active Draft,) 10F-KECD, 10F-KECB, 10F-KED, 10F-KEB, 15F-KECD, 15F-KECB, 15F-KED, 15F-KEB, 18F-RECB, 16/2RECF, 2/16RECF (Active Draft)



Center of Car Devices

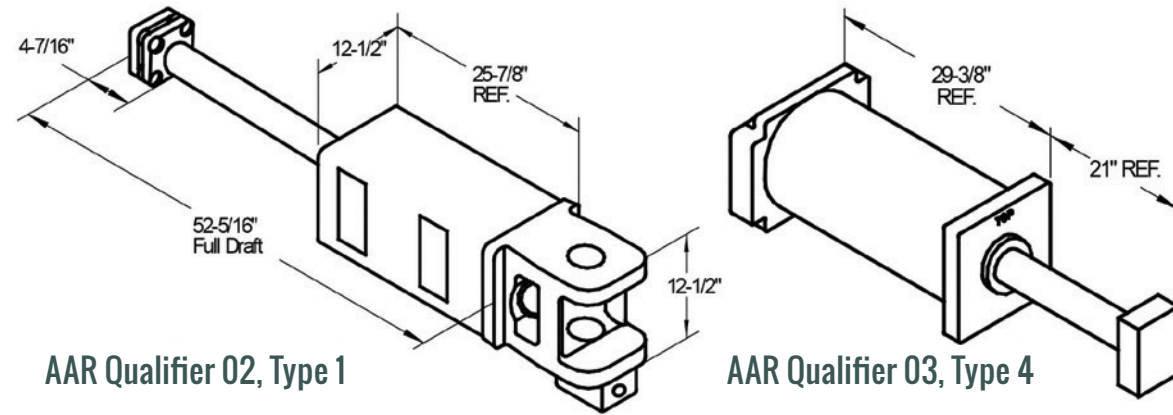
DA20, DA20G, DA20GM, DA20G ATSF, 20BN, SA20G, 20N, 20AN, F20B, F20C, SA20MS, SA20M, SA20GMS, SA20GM, 20PSN, 30BN, F30B

These are only a few of the AH examples. There are many more utilized by current or past manufactures such as ACF Freight Saver, Keystone, Dresser Hydra Cushion, Pullman Standard models. When AH covert a device or adds preload to one of these devices we attempt to retain the original identification and include numbers or letters having the same meaning as the AH device. Each of these devices will fall into one of the device styles listing. For identification of cushioning device nomenclature not covered in the proceeding, or other information pertaining to AH cushioning devices, please contact AH at 866-785-4081.

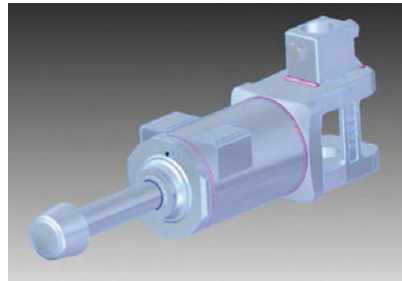
AAR Group EOC 1, 1B, 1D

10", 12", 15" Travel, E69 Series Couplers, TTX Universal Pocket

ORIGINAL CUSHIONING UNITS

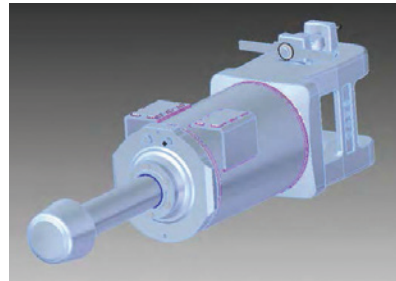


REPLACEMENT CUSHIONING UNITS



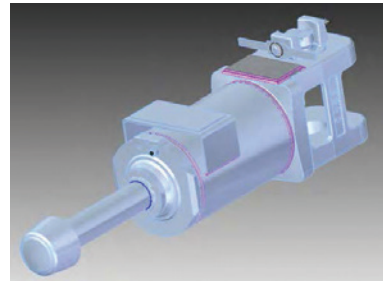
AAR Qualifier 02, Type 1

Spec	Part No.	Model
M-921D	N038PB	15FMCDPB
M-921B	N039PB	15FMCBPB
M-921D	N011PB	15FMDBPB
M-921B	N013PB	15FMBPB



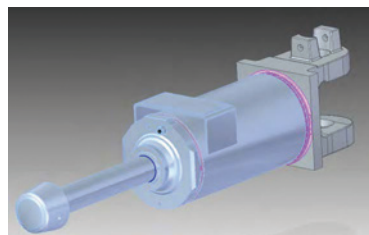
AAR Qualifier 02, Type 1

Spec	Part No.	Model
M-921D	N038P1	15FMCDP1
M-921B	N039P1	15FMCBP1
M-921D	N011P1	15FMDBP1
M-921B	N013P1	15FMBP1



AAR Qualifier 06, Type 2

Spec	Part No.	Model
M-921D	N018P	15FMCDP
M-921B	N021P	15FMCBP
M-921D	N011P	15FMDBP
M-921B	N013P	15FMBP



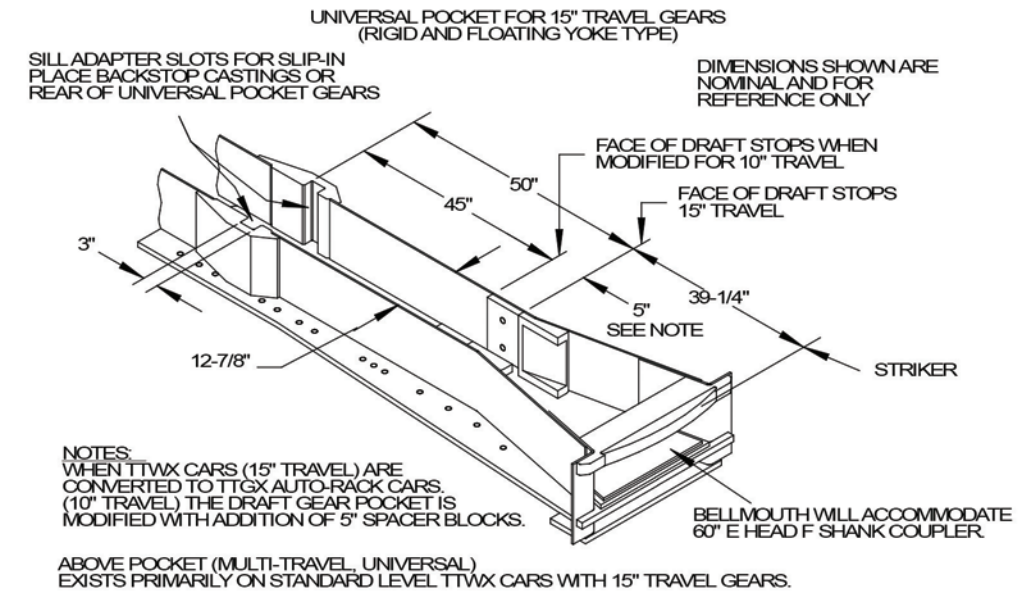
AAR Qualifier 06, Type 2

Spec	Part No.	Model
M-921D	N018P	15FMCDP
M-921B	N021P	15FMCBP

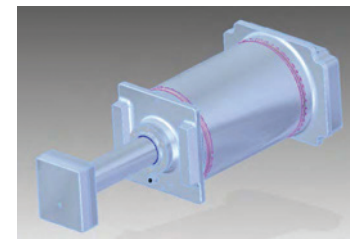
AAR Group EOC 1, 1B, 1D

10", 12", 15" Travel, E69 Series Couplers, TTX Universal Pocket

EOC-1 POCKET LAYOUT

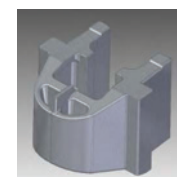


REPLACEMENT CUSHIONING UNITS

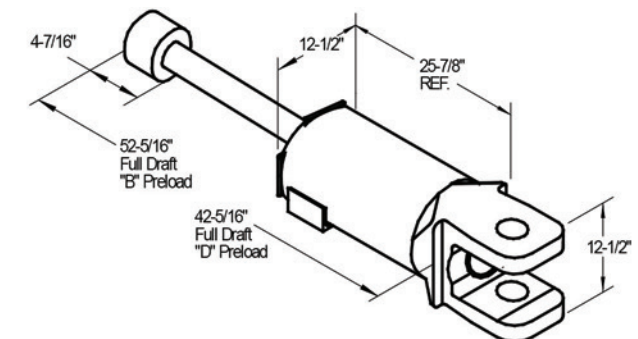


AAR Qualifier 03, Type 4

Spec	Part No.	Model
M-921D	N054	15FKECD
M-921B	N055	15FKECB
M-921D	N124	15FKED
M-921B	N118	15FKEB

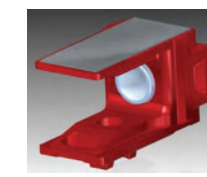


Backstop casting used on all units except qualifier 03, Type 4. part # 87.15406



AAR Qualifier 10, Type 3

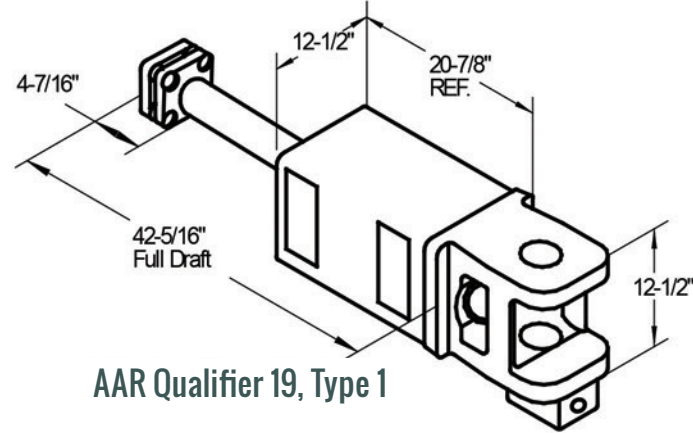
Spec	Part No.	Model
M-921D	N091	15FVMCD
M-921B	N087	15FVMCB



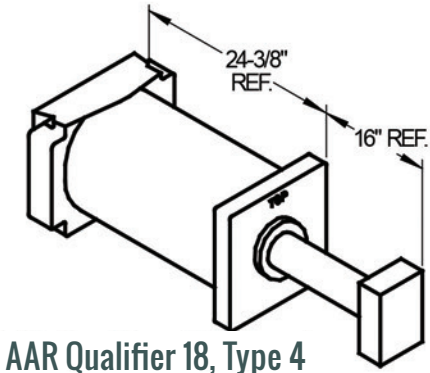
"F" yoke used with qualifier 03, type 4 only. part # 3450

AAR Group EOC 2, 2B, 2D
10" Travel, E69 Series Couplers, TTX Universal Pocket

ORIGINAL CUSHIONING UNITS

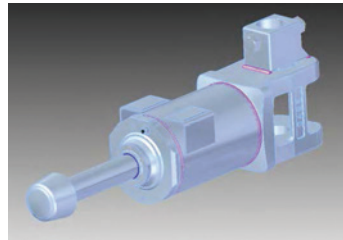


AAR Qualifier 19, Type 1



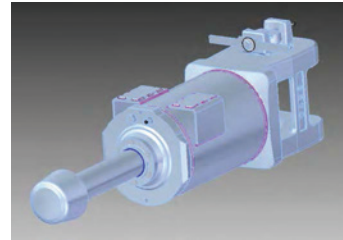
AAR Qualifier 18, Type 4

REPLACEMENT CUSHIONING UNITS



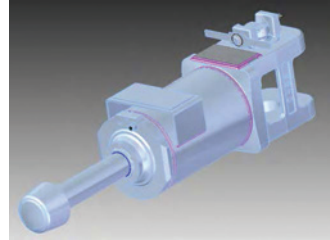
AAR Qualifier 03, Type 1

Spec	Part No.	Model
M-921D	N031PB	10FMCDPB
M-921B	N032PB	10FMCBPB
M-921D	N008PB	10FMDPB
M-921B	N009PB	10FMBPB



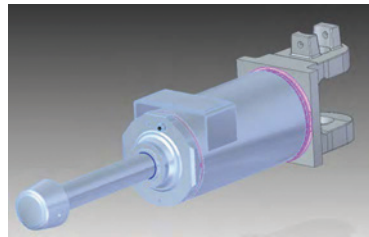
AAR Qualifier 03, Type 1

Spec	Part No.	Model
M-921D	N031P1	10FMCDP1
M-921B	N032P1	10FMCBP1
M-921D	N008P1	10FMDP1
M-921B	N009P1	10FMBP1



AAR Qualifier 12, Type 2

Spec	Part No.	Model
M-921D	N014P	10FMCDP
M-921B	N015P	10FMCBP
M-921D	N008P	10FMDP
M-921B	N009P	10FMBP

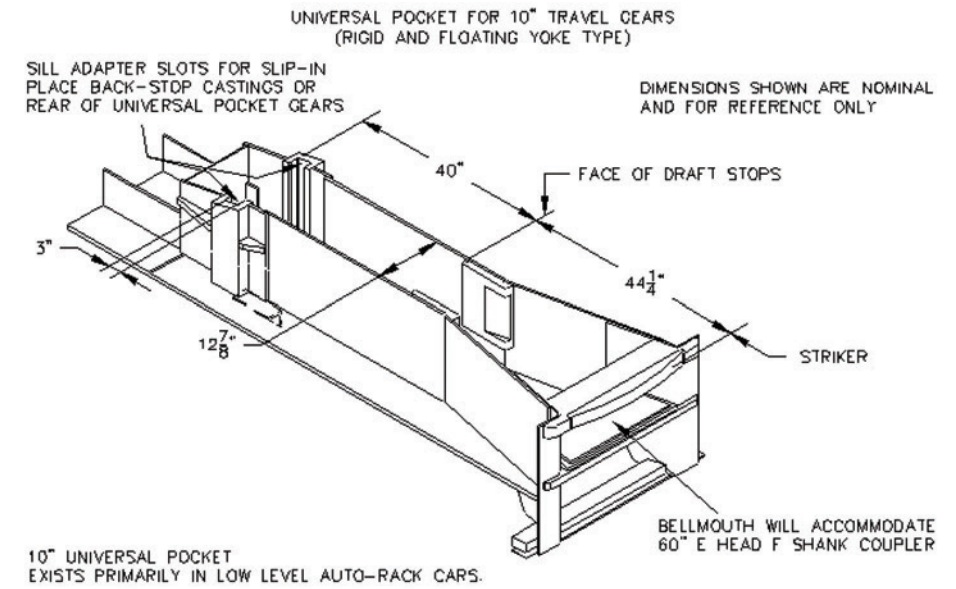


AAR Qualifier 12, Type 2

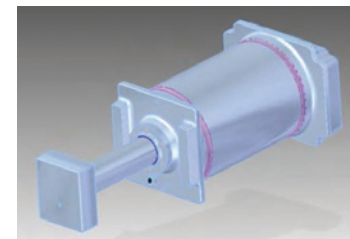
Spec	Part No.	Model
M-921D	N014P	10FMCDP
M-921B	N015P	10FMCBP

AAR Group EOC 2, 2B, 2D
10" Travel, E69 Series Couplers, TTX Universal Pocket

EOC-2 POCKET LAYOUT

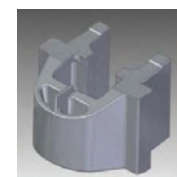


REPLACEMENT CUSHIONING UNITS

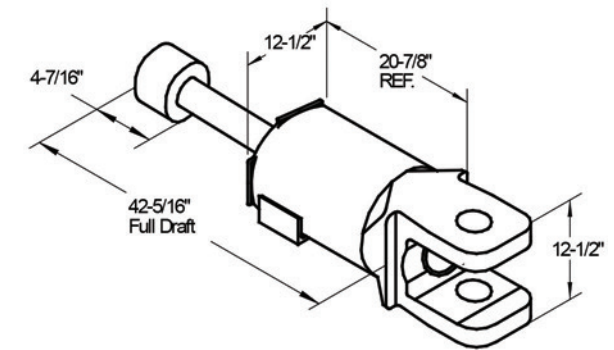


AAR Qualifier 08, Type 4

Spec	Part No.	Model
M-921D	N050	10FKECD
M-921B	N051	10FKECB
M-921D	N081	10FKED
M-921B	N123	10FKEB



Backstop casting used on all units except qualifier 08, Type 4. part # 87.15406



AAR Qualifier 13, Type 3

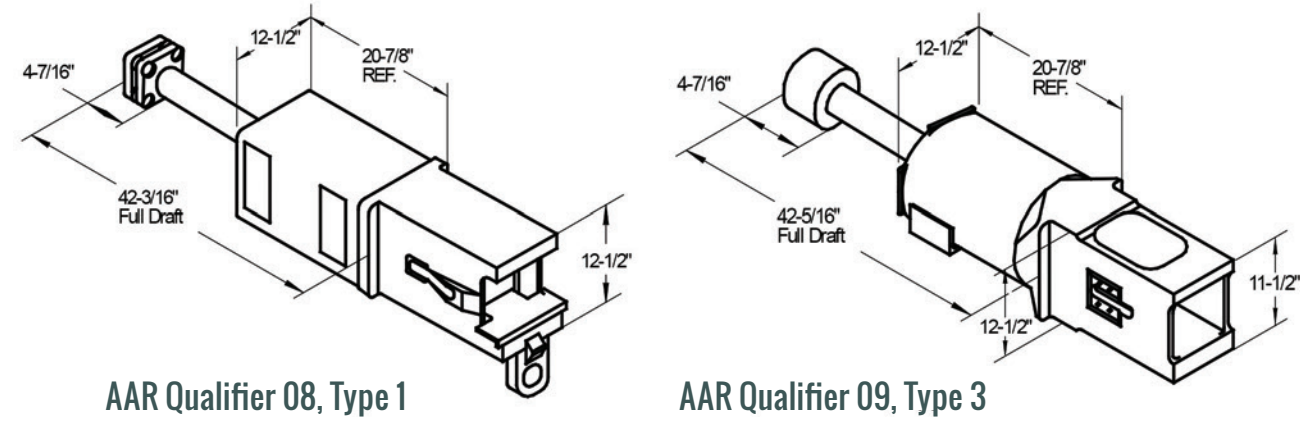
Spec	Part No.	Model
M-921D	N090	10FVMCD
M-921B	N085	10FVMCB



"F" yoke used with qualifier 08, type 4 only. part # 3450

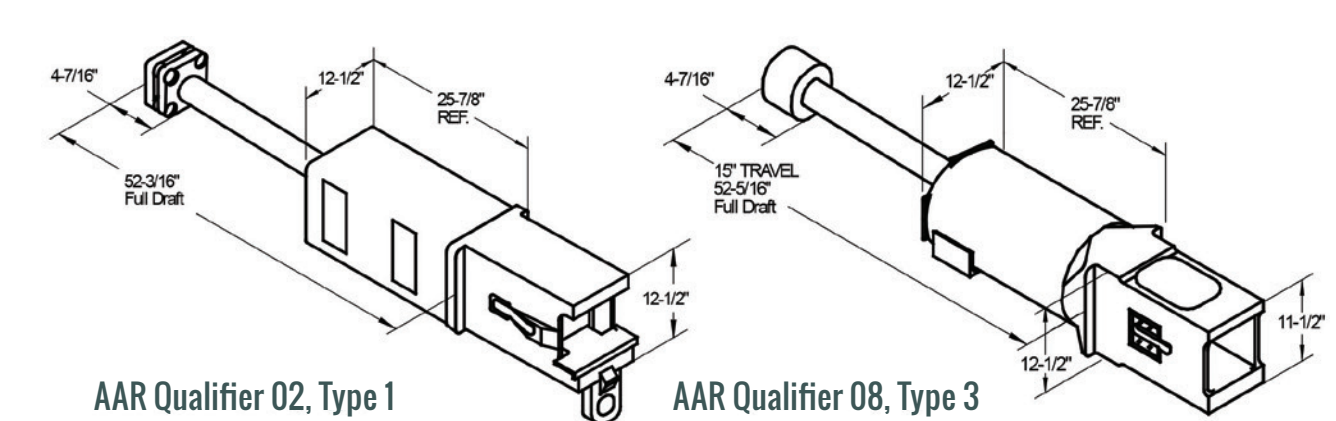
AAR Group EOC 3, 3B, 3D
10" Travel, E60 Series Couplers

ORIGINAL CUSHIONING UNITS

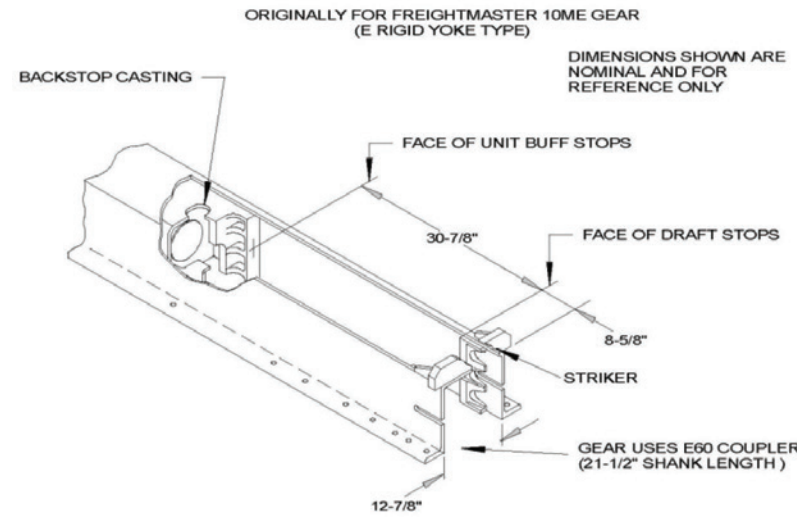


AAR Group EOC 4, 4B, 4D
15" Travel, E60 Series Couplers

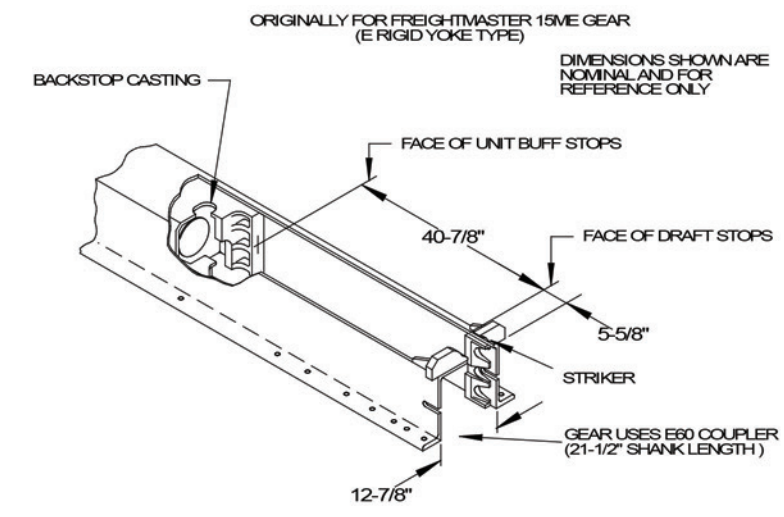
ORIGINAL CUSHIONING UNITS



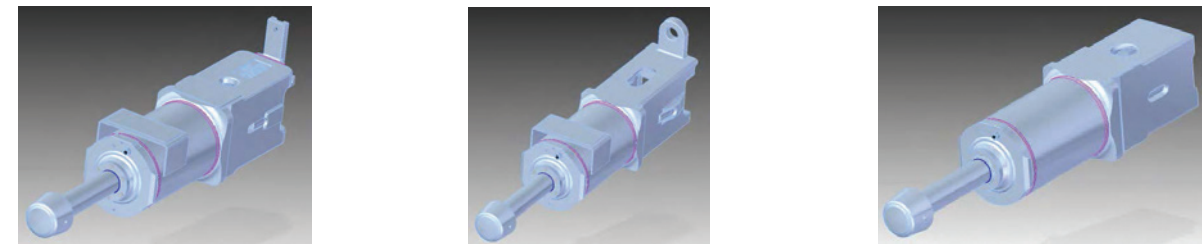
EOC-3 POCKET LAYOUT



EOC-4 POCKET LAYOUT



REPLACEMENT CUSHIONING UNITS



AAR Qualifier 13, Type 2			AAR Qualifier 15, Type 1			AAR Qualifier 12, Type 3		
Spec	Part No.	Model	Spec	Part No.	Model	Spec	Part No.	Model
M-921B	N129	10FMCEB K/S	M-921B	N029	10FMCEB	M-921B	N086	10FVMCEB
M-921B	N069TB	10FMCEB TB						

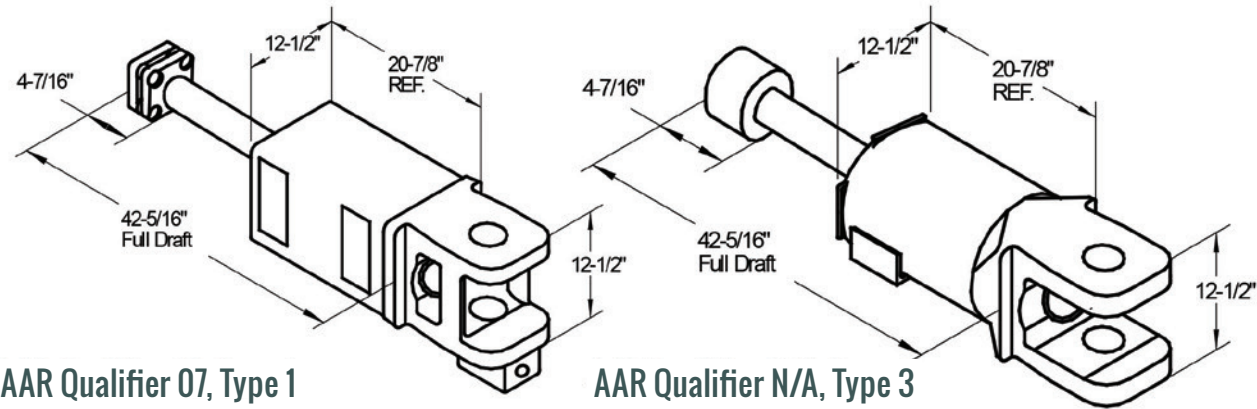
REPLACEMENT CUSHIONING UNITS



AAR Qualifier 15, Type 2			AAR Qualifier 16, Type 1			AAR Qualifier 10, Type 3		
Spec	Part No.	Model	Spec	Part No.	Model	Spec	Part No.	Model
M-921B	N130	15FMCEB K/S	M-921B	N035	15FMCEB	M-921B	N088	15FVMCEB
M-921B	N071TB	15FMCEB TB						

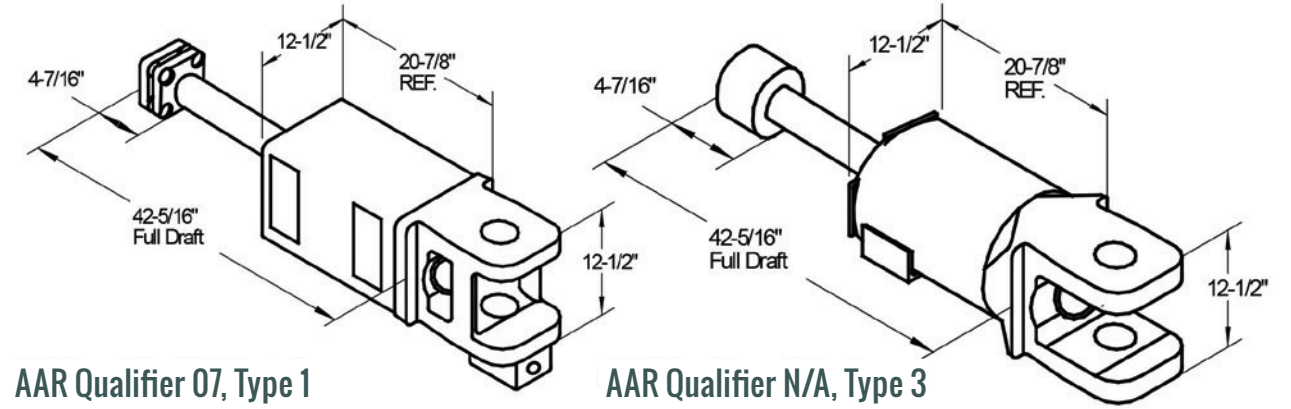
AAR Group EOC 5, 5B, 5D
10" Travel, E68 or E69 Series Couplers

ORIGINAL CUSHIONING UNITS

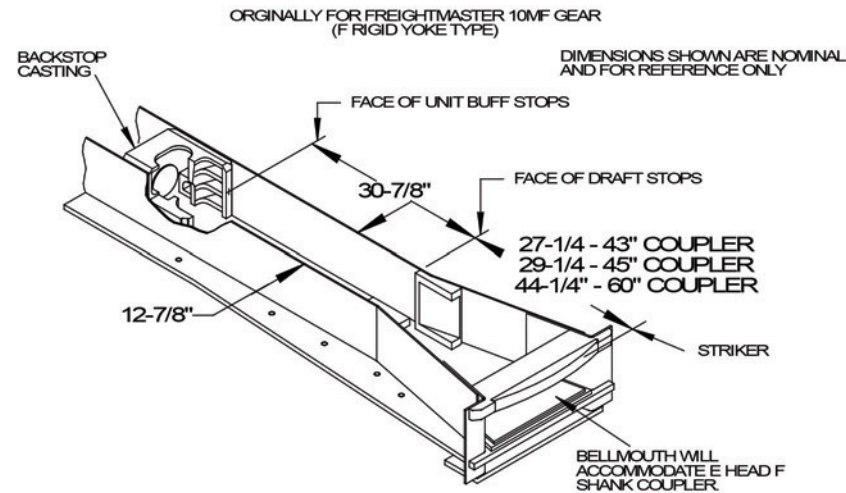


AAR Group EOC 5, 5B, 5D
10" Travel, E68 or E69 Series Couplers

ORIGINAL CUSHIONING UNITS

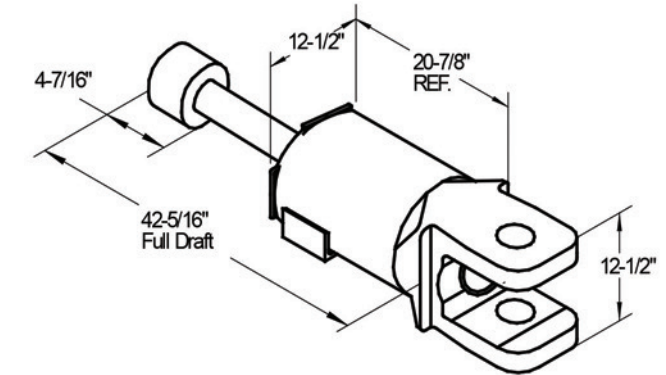
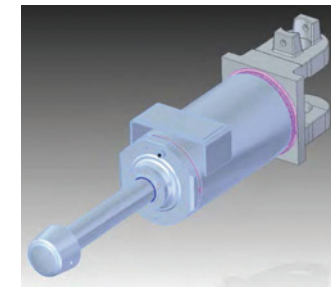


EOC-5 POCKET LAYOUT

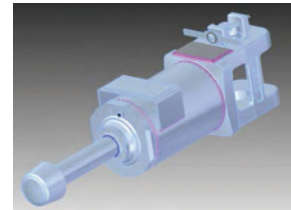
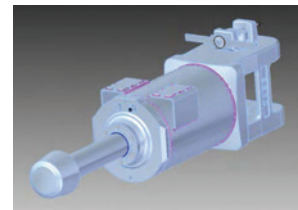
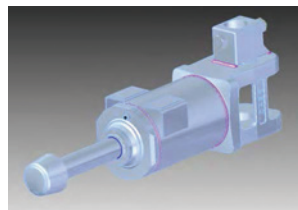


REPLACEMENT CUSHIONING UNITS

(continued)



REPLACEMENT CUSHIONING UNITS



AAR Qualifier 07, Type 1

Spec	Part No.	Model
M-921D	N031	10FMCD PB
M-921B	N032	10FMCB PB
M-921D	N008PB	10FMD PB
M-921B	N009PB	10FMB PB

AAR Qualifier 07, Type 1

Spec	Part No.	Model
M-921D	N031P1	10FMCDP1
M-921B	N032P1	10FMCBP1
M-921D	N008P1	10FMDP1
M-921B	N009P1	10FMBP1

AAR Qualifier 12, Type 2

Spec	Part No.	Model
M-921D	N014P	10FMCDP
M-921B	N015P	10FMCBP
M-921D	N008P	10FMDP
M-921B	N009P	10FMBP

AAR Qualifier 12, Type 2

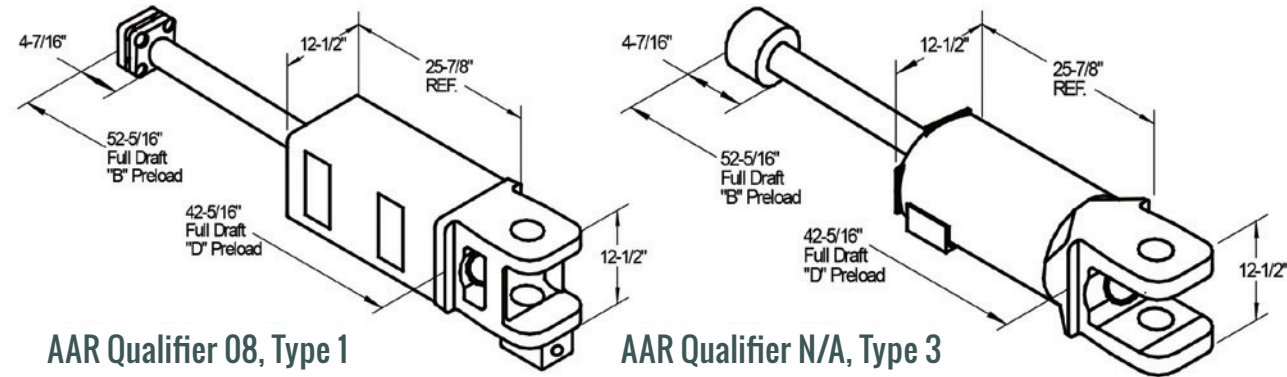
Spec	Part No.	Model
M-921D	N014	10FMCD P
M-921B	N015	10FMCB P
M-921D	N008P	10FMD P
M-921B	N009P	10FMB P

AAR Qualifier 13, Type 3

Spec	Part No.	Model
M-921D	N090	10FVMCD
M-921B	N085	10FVMCB

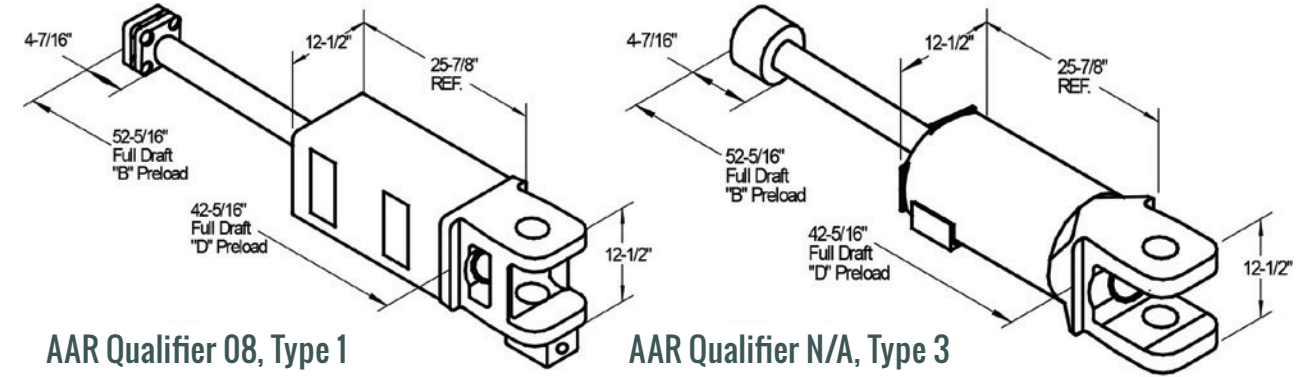
AAR Group EOC 6, 6B, 6D
15" Travel, E68 or E69 Series Couplers

ORIGINAL CUSHIONING UNITS

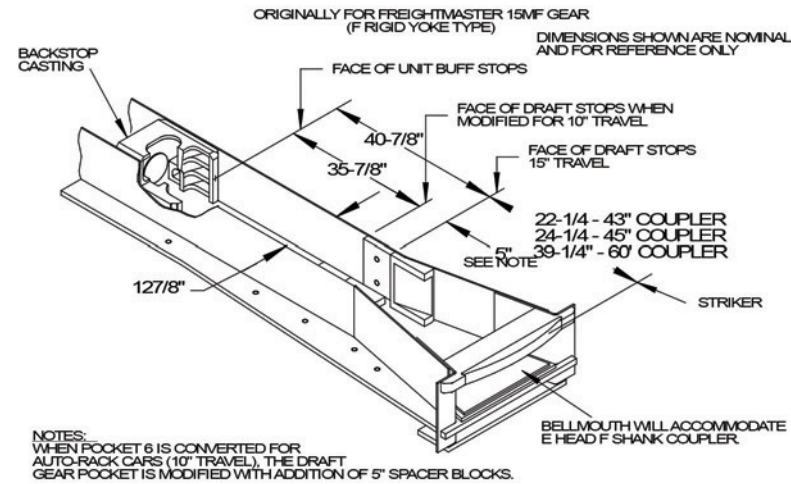


AAR Group EOC 6, 6B, 6D
15" Travel, E68 or E69 Series Couplers

ORIGINAL CUSHIONING UNITS

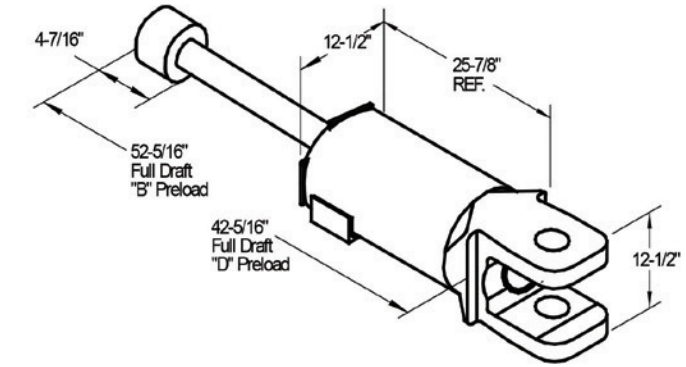
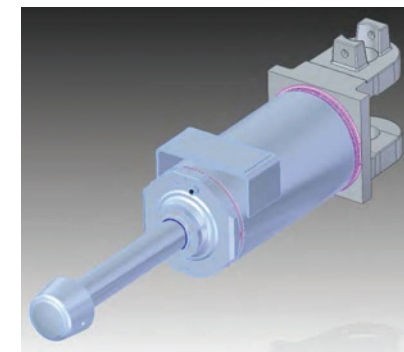


EOC-6 POCKET LAYOUT

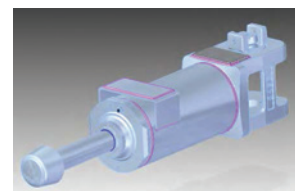
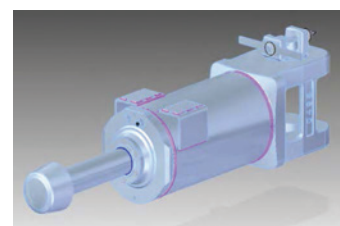
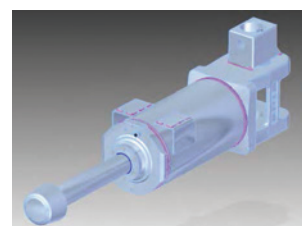


REPLACEMENT CUSHIONING UNITS

(continued)



REPLACEMENT CUSHIONING UNITS



AAR Qualifier 08, Type 1

Spec	Part No.	Model
M-921D	N038PB	15FMCD PB
M-921B	N039PB	15FMCB PB
M-921D	N011PB	15FMD PB
M-921B	N013PB	15FMB PB

AAR Qualifier 08, Type 1

Spec	Part No.	Model
M-921D	N038P1	15FMCDP1
M-921B	N039P1	15FMCBP1
M-921D	N011P1	15FMDP1
M-921B	N013P1	15FMBP1

AAR Qualifier 09, Type 2

Spec	Part No.	Model
M-921D	N018P	15FMCDP
M-921B	N021P	15FMCBP
M-921D	N011P	15FMDP
M-921B	N013P	15FMBP

AAR Qualifier 09, Type 2

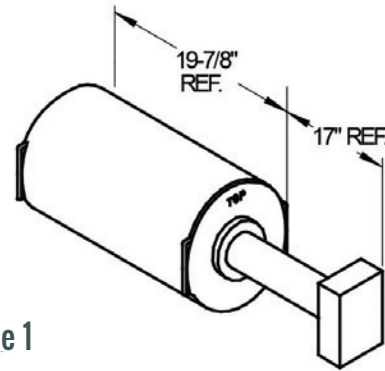
Spec	Part No.	Model
M-921D	N018	15FMCD P
M-921B	N021	15FMCB P
M-921D	N011P	15FMD P
M-921B	N013P	15FMB P

AAR Qualifier 10, Type 3

Spec	Part No.	Model
M-921D	N091	15FVMCD
M-921B	N087	15FVMCB

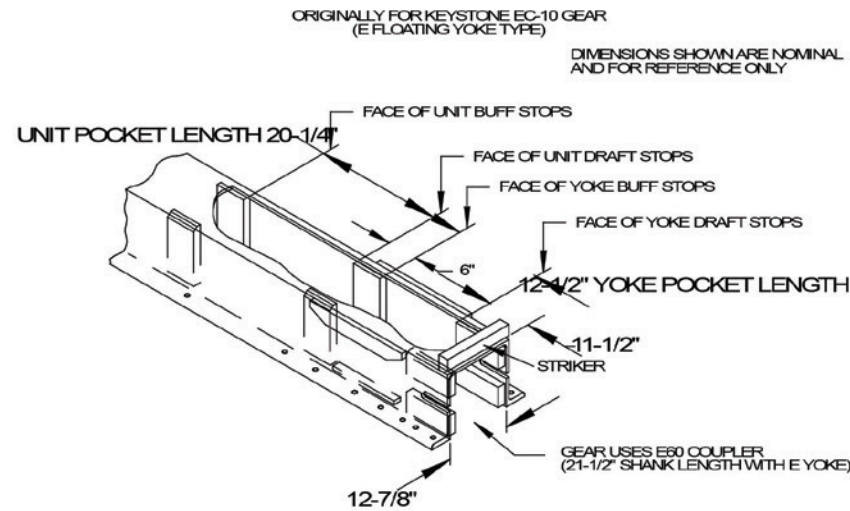
AAR Group EOC 7, 7B
10" Travel, E60 Series Couplers

ORIGINAL CUSHIONING UNITS

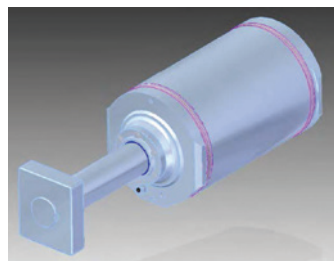


AAR Qualifier 03, Type 1

EOC-7 POCKET LAYOUT



REPLACEMENT CUSHIONING UNITS



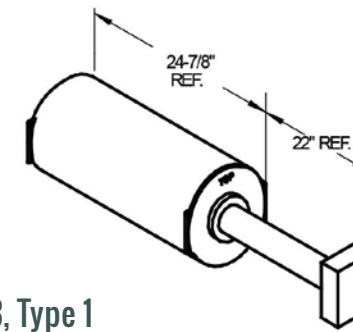
Yoke required for type 1 units
part # 4608N10TB

AAR Qualifier 03, Type 1

Spec	Part No.	Model
M-921B	N064	10FRECB
M-921B	N075	10FREB

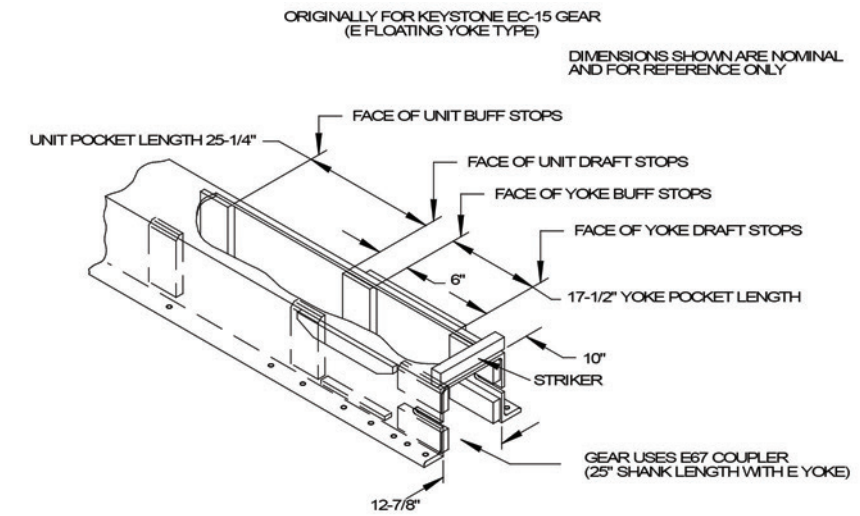
AAR Group EOC 8, 8B
15" Travel, E67 Series Couplers

ORIGINAL CUSHIONING UNITS



AAR Qualifier 03, Type 1

EOC-8 POCKET LAYOUT



REPLACEMENT CUSHIONING UNITS



Yoke required for type 1 units
part # 4608N15TB

AAR Qualifier 03, Type 1

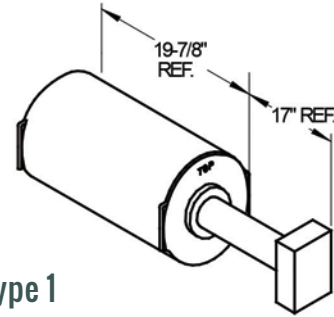
Spec	Part No.	Model
M-921B	N068	15FRECB
M-921B	N084	15FREB
M-921F	N060	13/2RECF
M-921F	N147	14/1RECF

Please Note: This is a limited catalog. For more information regarding our additional product offerings, please contact our customer service at **877.94.PARTS**.

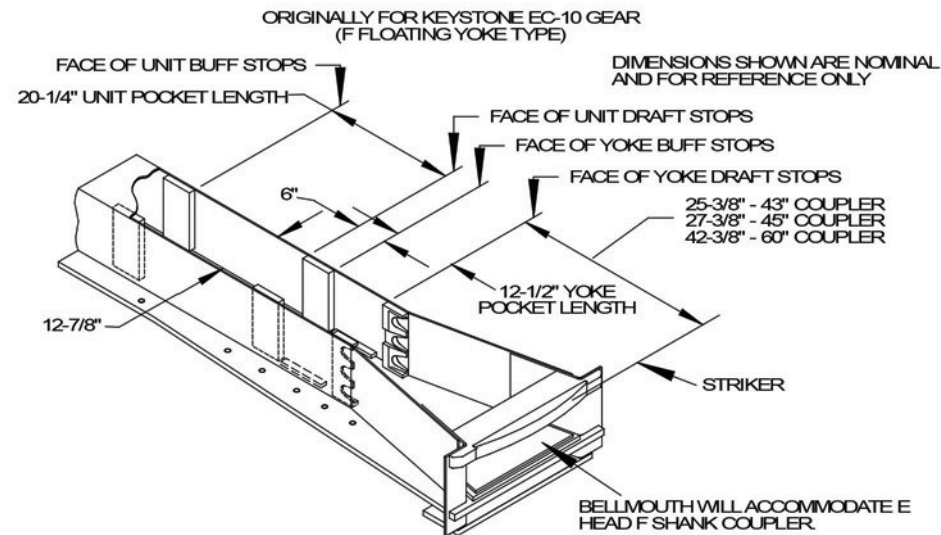
AAR Group EOC 9, 9B, 9D
10" Travel, E68 or E69 Series Couplers

ORIGINAL CUSHIONING UNITS

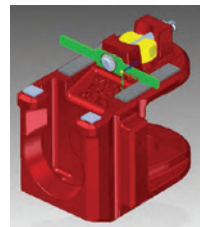
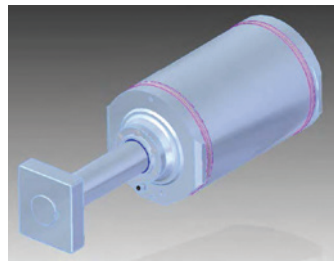
AAR Qualifier 03, Type 1



EOC-9 POCKET LAYOUT



REPLACEMENT CUSHIONING UNITS



Yoke required for type 1 units part # 5704

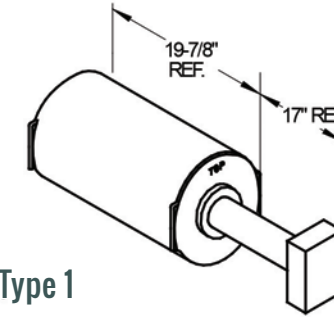
AAR Qualifier 03, Type 1

Spec	Part No.	Model
M-921D	N061	10FRECD
M-921B	N064	10FRECB
M-921D	N076	10FRED
M-921B	N075	10FREB

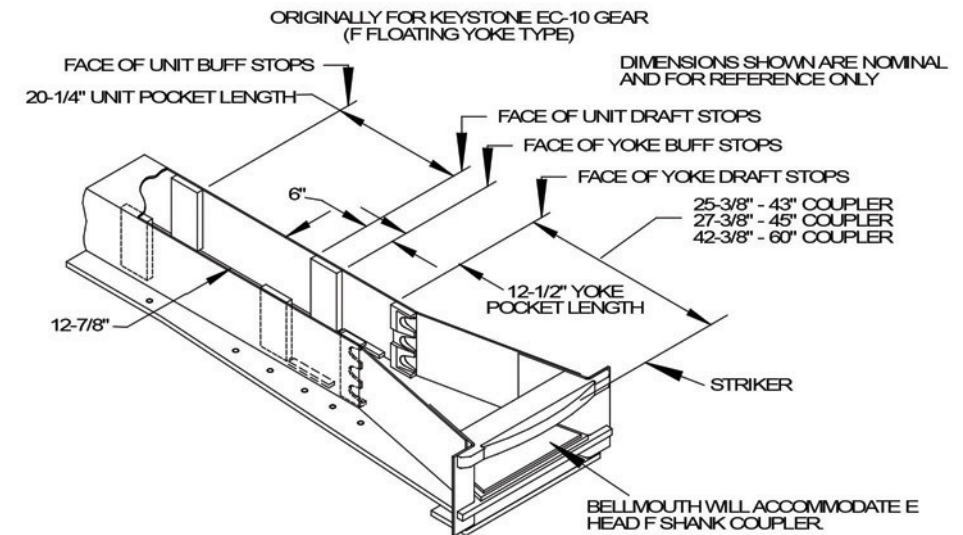
AAR Group EOC 10, 10B, 10D, 10F
15" Travel, E68 or E69 Series Couplers

ORIGINAL CUSHIONING UNITS

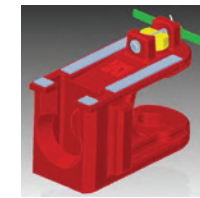
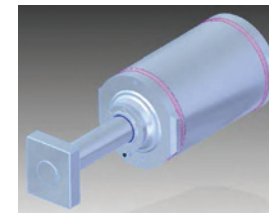
AAR Qualifier 03, Type 1



EOC-10 POCKET LAYOUT



REPLACEMENT CUSHIONING UNITS



Yoke required for type 1 units part # 5704

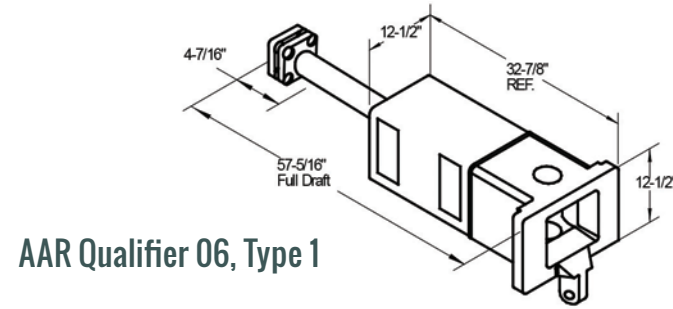
AAR Qualifier 03, Type 1

Spec	Part No.	Model
M-921D	N063	15FRECD
M-921B	N068	15FRECB
M-921D	N117	15FRED
M-921B	N084	15FREB
M-921F	N060	13/2RECF
M-921F	N147	14/1RECF

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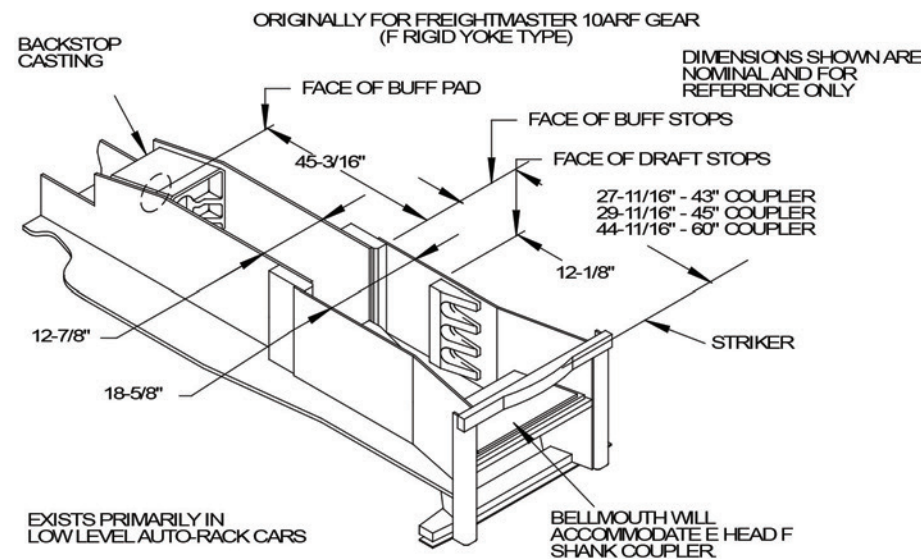
AAR Group EOC 11, 11B, 11D
10" Travel, E68 or E69 Series Couplers

ORIGINAL CUSHIONING UNITS



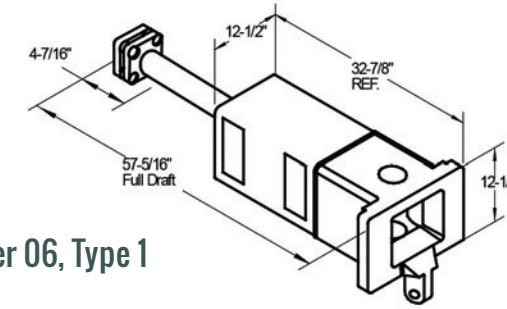
AAR Qualifier 06, Type 1

EOC-11 POCKET LAYOUT



AAR Group EOC 11, 11B, 11D
10" Travel, E68 or E69 Series Couplers

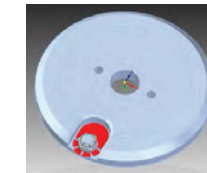
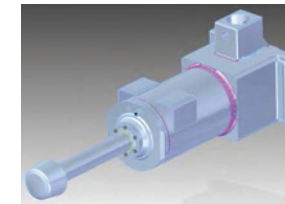
ORIGINAL CUSHIONING UNITS



AAR Qualifier 06, Type 1

REPLACEMENT CUSHIONING UNITS

(continued)

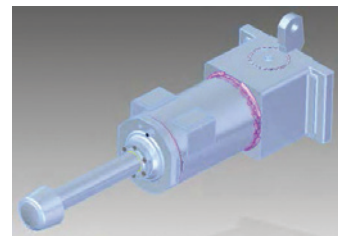


TR = Treaded pin retainer also available for bottom pin loading

AAR Qualifier 2B, 10D, Type 3

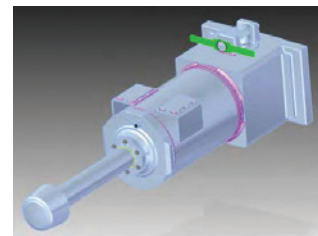
Spec	Part No.	Model
M-921D	N033	10FACD PB
M-921B	N100	10FACB PB

REPLACEMENT CUSHIONING UNITS



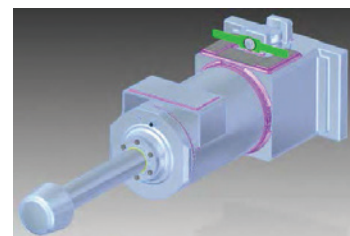
AAR Qualifier 06, Type 1

Spec	Part No.	Model
M-921D	N025	10FACD WR
M-921B	N026	10FACB WR
M-921D	N030	10FACD TR
M-921B	N099	10FACB TR



AAR Qualifier 06, Type 1

Spec	Part No.	Model
M-921D	N097P1	10FACD P1
M-921B	N098P1	10FACB P1

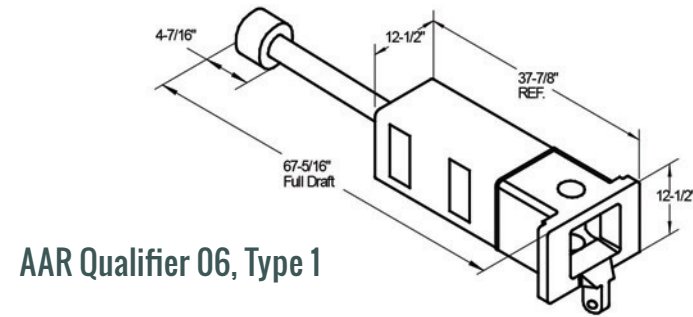


AAR Qualifier 1B, 7D, Type 2

Spec	Part No.	Model
M-921D	N097	10FACD P
M-921B	N098	10FACB P

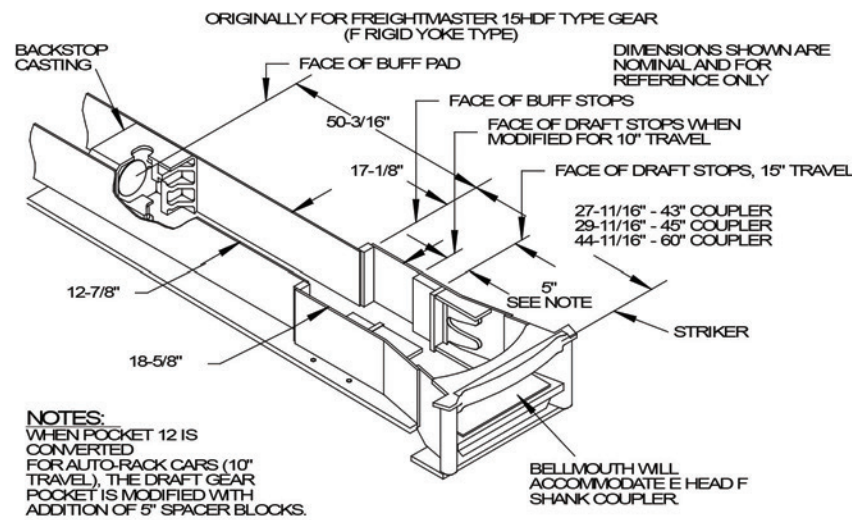
AAR Group EOC 12, 12B, 12D
15" Travel, E68 or E69 Series Couplers

ORIGINAL CUSHIONING UNITS

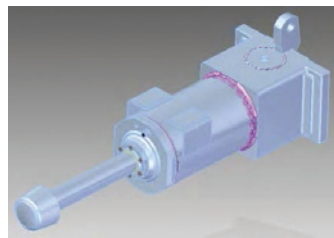


AAR Qualifier 06, Type 1

EOC-12 POCKET LAYOUT

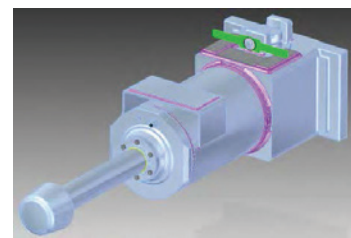


REPLACEMENT CUSHIONING UNITS



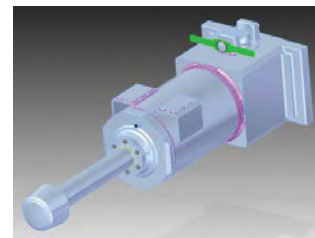
AAR Qualifier 06, Type 1

Spec	Part No.	Model
M-921D	N047	15FHCD WR
M-921B	N046	15FHCB WR
M-921D	N062	15FHCD TR
M-921B	N065	15FHCB TR



AAR Qualifier 06, Type 1

Spec	Part No.	Model
M-921D	N041P1	15FACD P1
M-921B	N049P1	15FACB P1

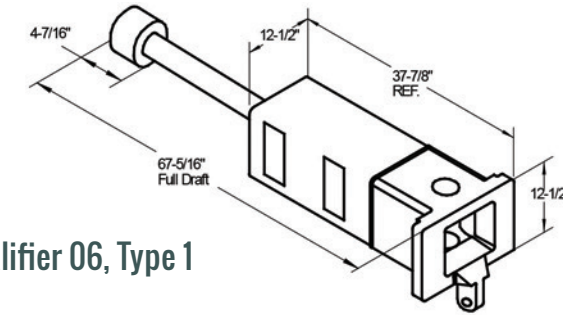


AAR Qualifier 10B, 7D, Type 2

Spec	Part No.	Model
M-921D	N041	15FHCD P
M-921B	N049	15FHCB P

AAR Group EOC 12, 12B, 12D
15" Travel, E68 or E69 Series Couplers

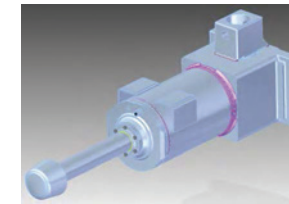
ORIGINAL CUSHIONING UNITS



AAR Qualifier 06, Type 1

REPLACEMENT CUSHIONING UNITS

(continued)



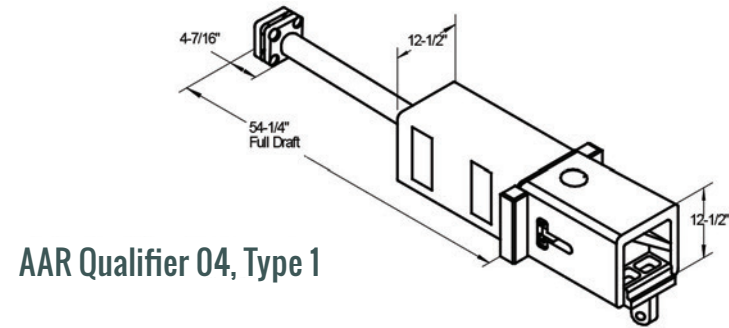
TR = Treated pin retainer also available for bottom pin loading

AAR Qualifier 11B, 10D, Type 3

Spec	Part No.	Model
M-921D	N045	15FHCD PB
M-921B	N048	15FHCB PB

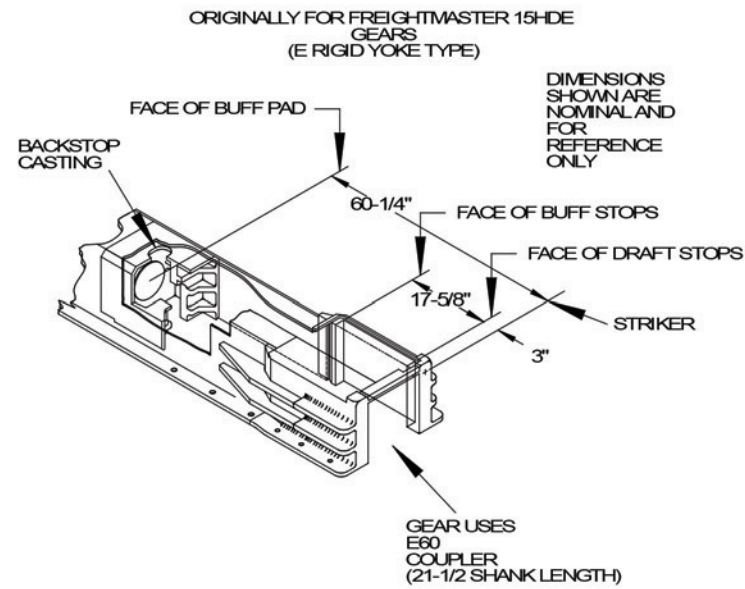
AAR Group EOC 13, 13B
15" Travel, E60 Series Couplers

ORIGINAL CUSHIONING UNITS

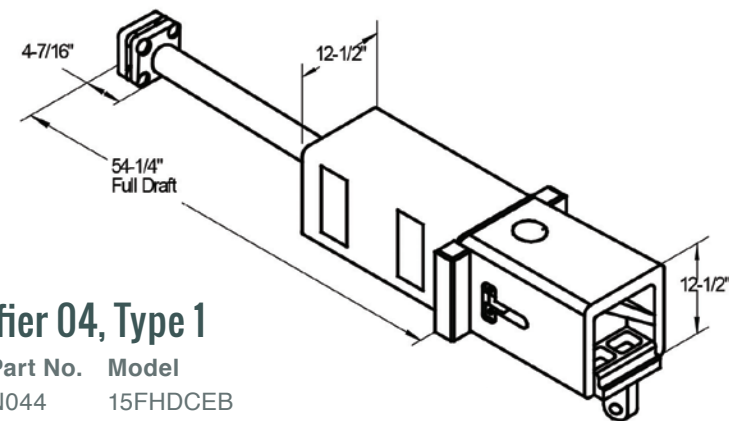


AAR Qualifier 04, Type 1

EOC-13 POCKET LAYOUT



REPLACEMENT CUSHIONING UNITS

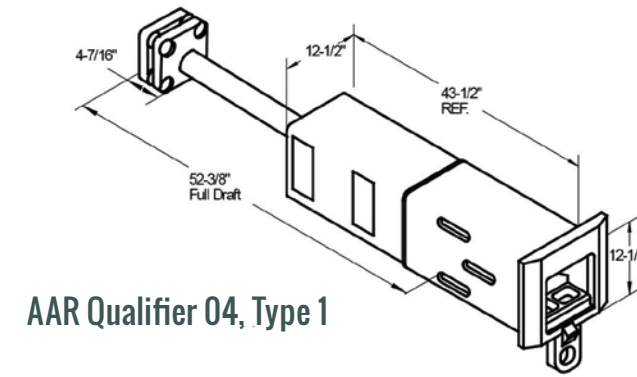


AAR Qualifier 04, Type 1

Spec	Part No.	Model
M-921B	N044	15FHDCEB

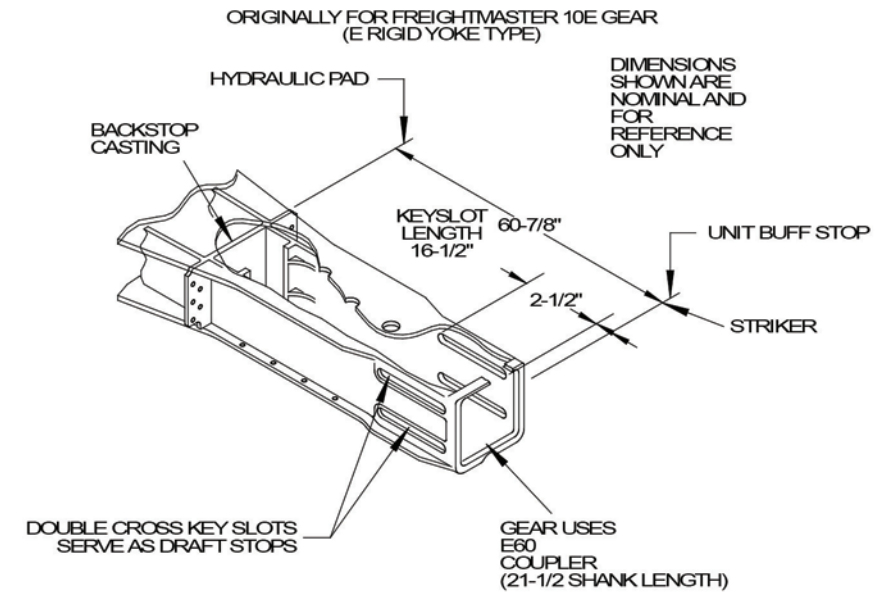
AAR Group EOC 14, 14B
10" Travel, E60 Series Couplers

ORIGINAL CUSHIONING UNITS

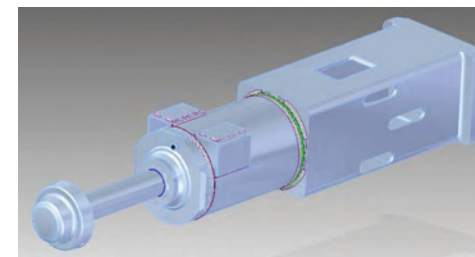


AAR Qualifier 04, Type 1

EOC-14 POCKET LAYOUT



REPLACEMENT CUSHIONING UNITS

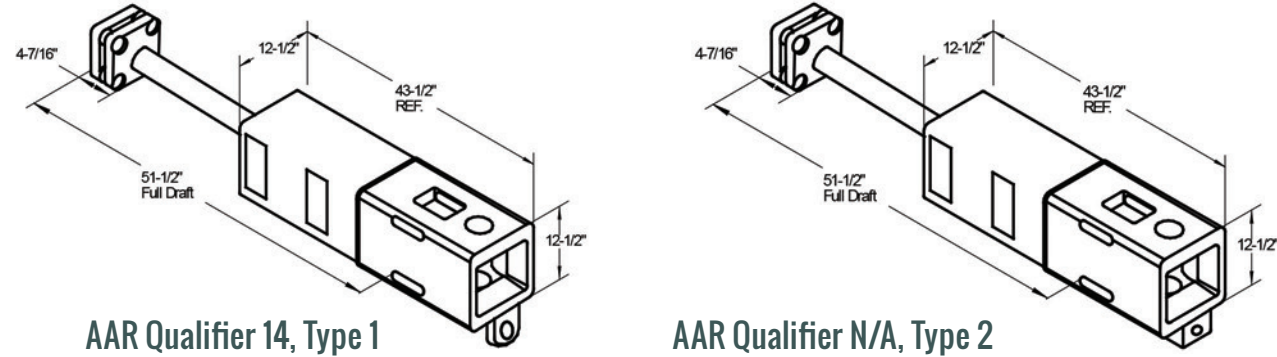


AAR Qualifier 04, Type 1

Spec	Part No.	Model
M-921B	N020	10FECB

AAR Group EOC 15, 15B, 15D
10" Travel, E68 or E69 Series Couplers

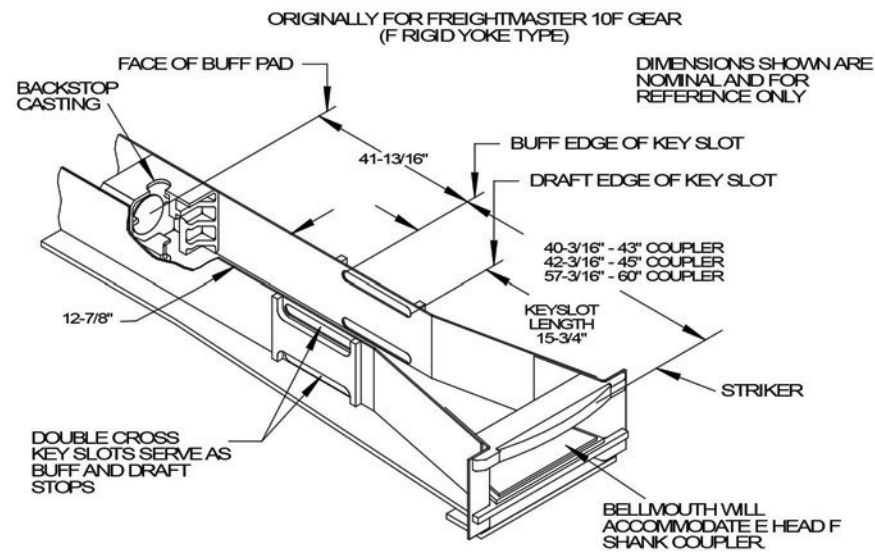
ORIGINAL CUSHIONING UNITS



AAR Qualifier 14, Type 1

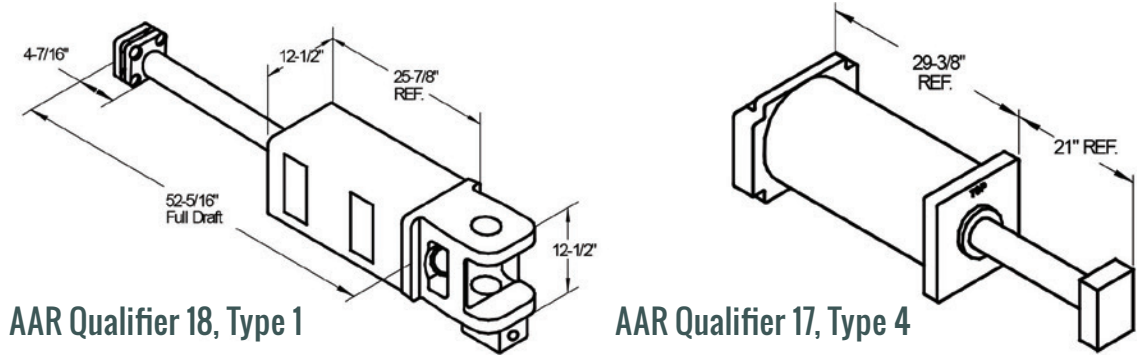
AAR Qualifier N/A, Type 2

EOC-15 POCKET LAYOUT



AAR Group EOC 16, 16B, 16D
12" Travel, for E/F Series Couplers

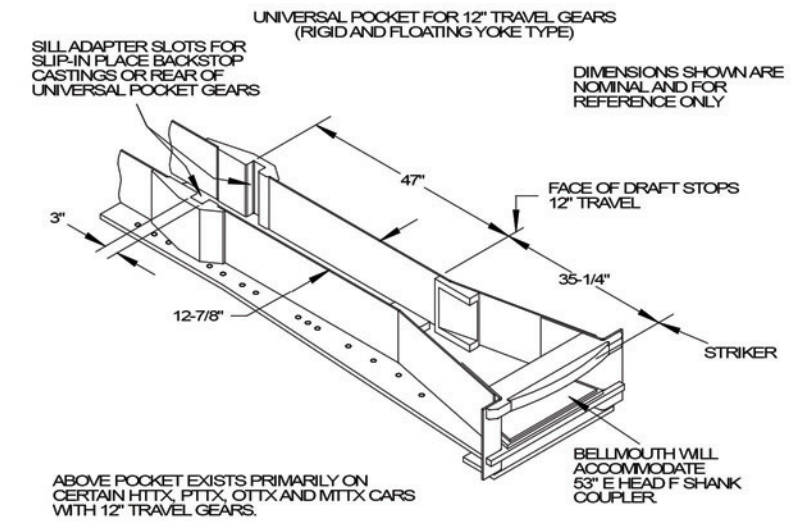
ORIGINAL CUSHIONING UNITS



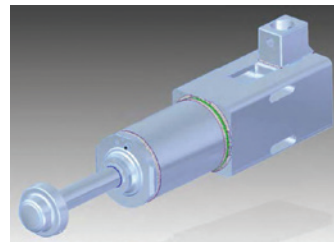
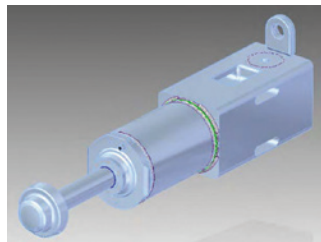
AAR Qualifier 18, Type 1

AAR Qualifier 17, Type 4

EOC-16 POCKET LAYOUT



REPLACEMENT CUSHIONING UNITS



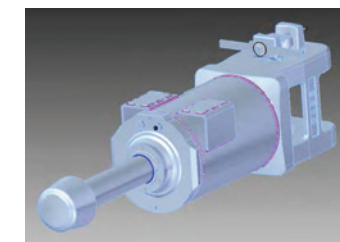
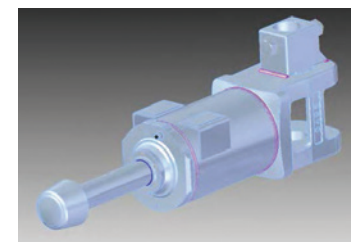
AAR Qualifier 06, Type 1

Spec	Part No.	Model
M-921D	N022	10FFCD WR
M-921B	N023	10FFCB WR
M-921D	N056	10FFCD TR
M-921B	N037	10FFCB TR

AAR Qualifier 10, Type 2

Spec	Part No.	Model
M-921D	N024	10FFCD PB
M-921B	N072	10FFCB PB

REPLACEMENT CUSHIONING UNITS



AAR Qualifier 02, Type 1

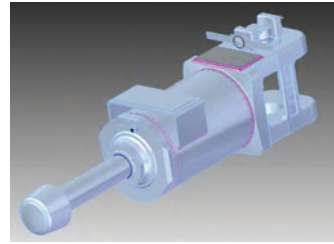
Spec	Part No.	Model
M-921D	N038PB	15FMCDPB
M-921B	N039PB	15FMCBPB
M-921D	N011PB	15FMDBPB
M-921B	N013PB	15FMBPB

AAR Qualifier 02, Type 1

Spec	Part No.	Model
M-921D	N038P1	15FMCDP1
M-921B	N039P1	15FMCBP1
M-921D	N011P1	15FMDP1
M-921B	N013P1	15FMBP1

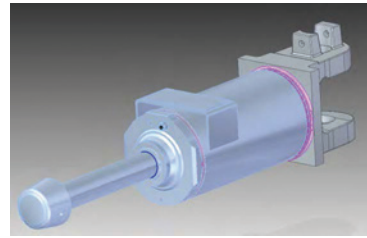
AAR Group EOC 16, 16B, 16D
12" Travel, for E/F Series Couplers

REPLACEMENT CUSHIONING UNITS
(continued)



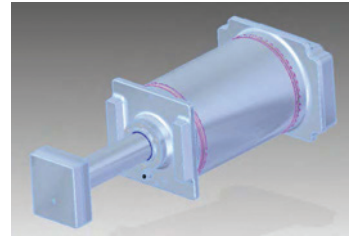
AAR Qualifier 06, Type 2

Spec	Part No.	Model
M-921D	N018P	15FMCDP
M-921B	N021P	15FMCBP
M-921D	N011P	15FMDP
M-921B	N013P	15FMBP



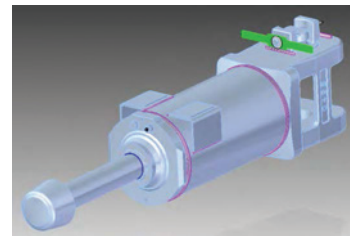
AAR Qualifier 06, Type 2

Spec	Part No.	Model
M-921D	N018P	15FMCDP
M-921B	N021P	15FMCBP



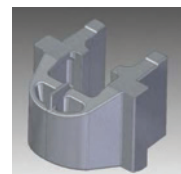
AAR Qualifier 16, Type 4

Spec	Part No.	Model
M-921D	N054	15FKECD
M-921B	N055	15FKECB
M-921D	N124	15FKED
M-921B	N118	15FKEB
M-921B	N010	12FKECB
M-921B	N012	12KEB

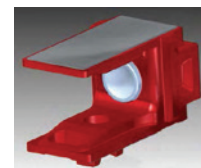


AAR Qualifier 02, Type 1

Spec	Part No.	Model
M-921B	N004	12FMCBP1
M-921B	N007	12FMBP1



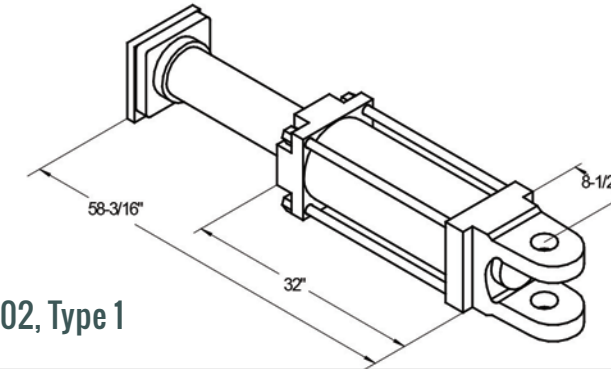
Backstop casting used on all units except qualifier 16, type 4. part # 87.15406



"F" yoke used with qualifier 16, type 4 only. part # 3450

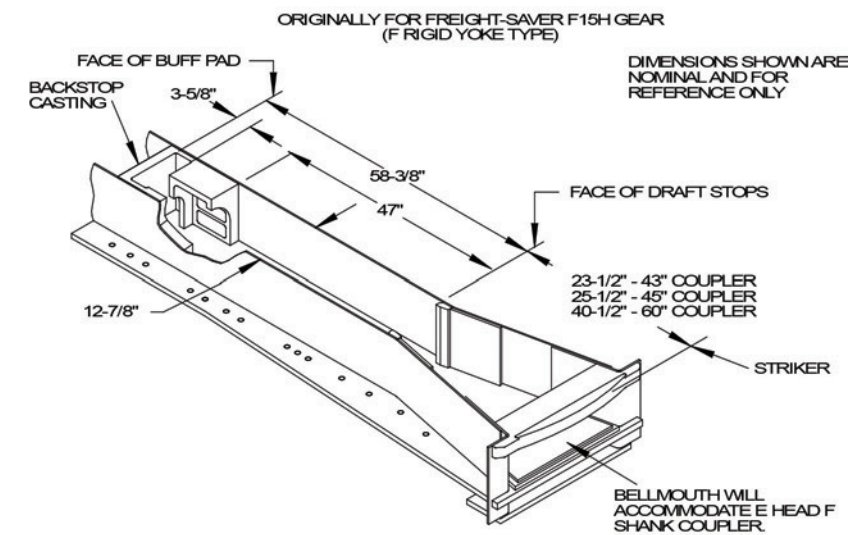
AAR Group EOC 17, 17B, 17D
15" Travel, E69 Series Couplers

ORIGINAL CUSHIONING UNITS

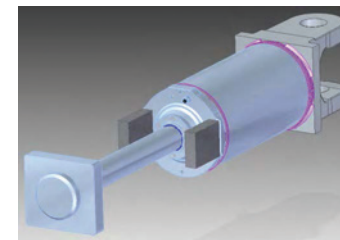


AAR Qualifier 02, Type 1

EOC-17 POCKET LAYOUT

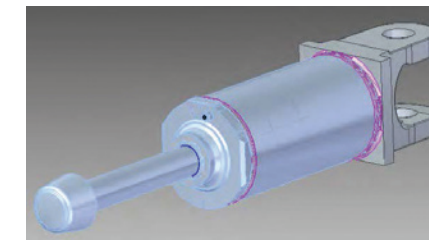


REPLACEMENT CUSHIONING UNITS



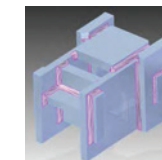
AAR Qualifier 02, Type 1

Spec	Part No.	Model
M-921D	N122	15FINCD
M-921B	N083	15FINCB



AAR Qualifier 04, Type 2

Spec	Part No.	Model
M-921D	N150	15FGRD SP
M-921D	N153	15FMD SP
M-921B	N125	15FGRB SP
M-921B	N152	15FMB SP

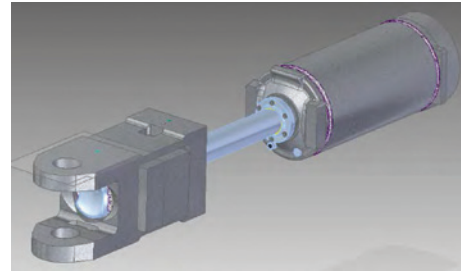


9542 adaptor to use with qualifier # 4, Type 2

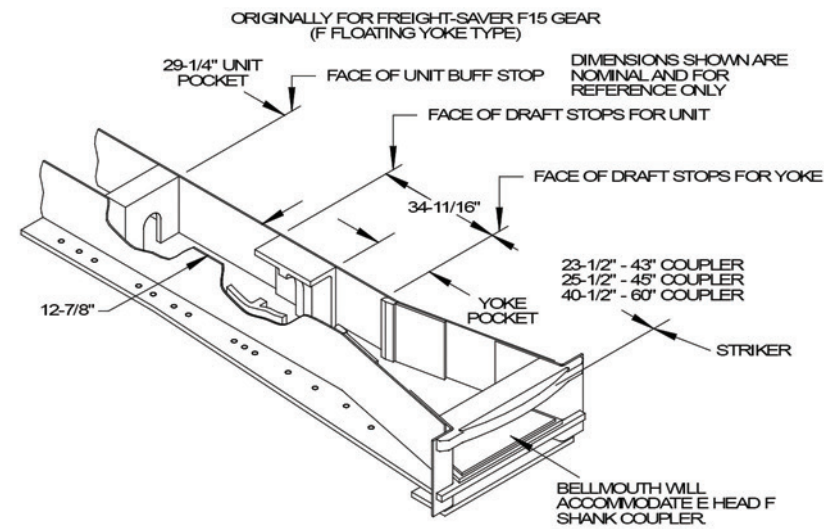
AAR Group EOC 18, 18B, 18D
15" Travel, E69 Series Couplers

ORIGINAL CUSHIONING UNITS

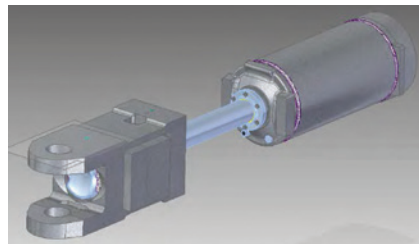
AAR Qualifier 02, Type 2



EOC-18 POCKET LAYOUT



REPLACEMENT CUSHIONING UNITS



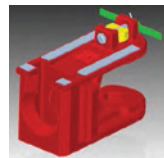
AAR Qualifier 02, Type 2

Spec	Part No.	Model
M-921B	N141	F15CB



AAR Qualifier 01D, 02B, Type 1

Spec	Part No.	Model
M-921D	N063	15FRECD
M-921B	N068	15FRECB
M-921D	N117	15FRED
M-921B	N084	15FREB



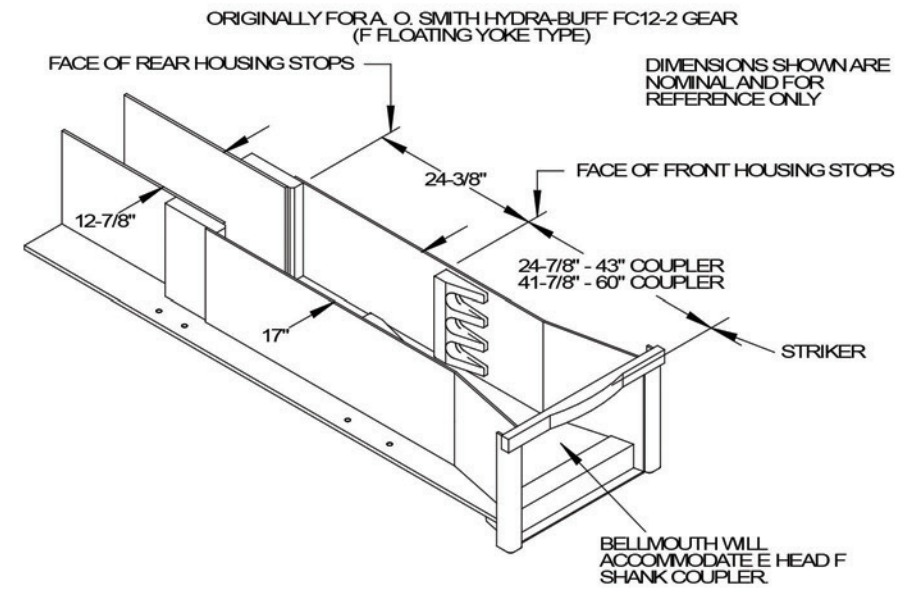
Yoke required for type 1 units part # 5704

AAR Group EOC 19, 19B
14" Travel, E68 Series Couplers

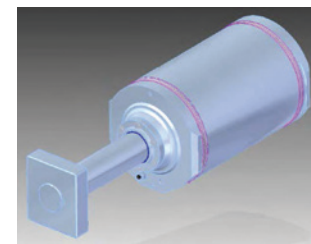
ORIGINAL CUSHIONING UNITS

AAR Qualifier 02, Type 2
A. O. Smith F12/2

EOC-19 POCKET LAYOUT

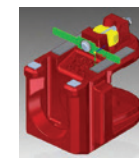


REPLACEMENT CUSHIONING UNITS



AAR Qualifier 02, Type 1

Spec	Part No.	Model
M-921B	N064	10FRECB
M-921B	N075	10FREB



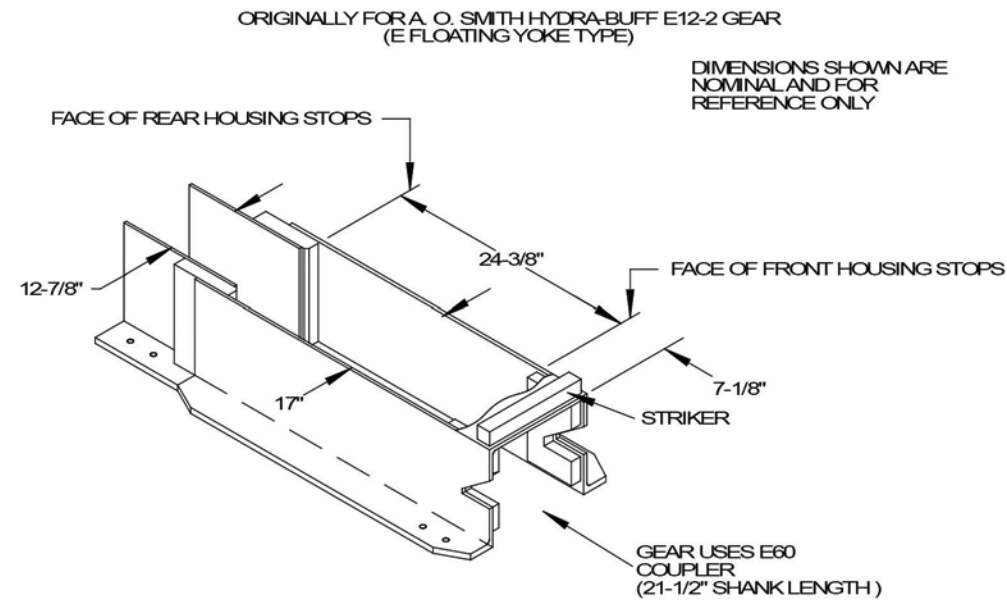
Yoke required for type 1 units part # 5702

AAR Group EOC 20, 20B
14" Travel, E60 Series Couplers

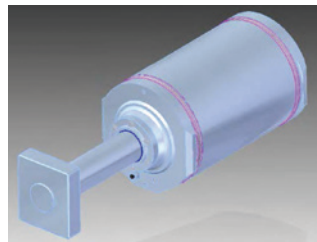
ORIGINAL CUSHIONING UNITS

AAR Qualifier 02, Type 2
A. O. Smith E12/2

EOC-20 POCKET LAYOUT



REPLACEMENT CUSHIONING UNITS



Yoke required for type 1 units part # 4608N10TB

AAR Qualifier 02, Type 1

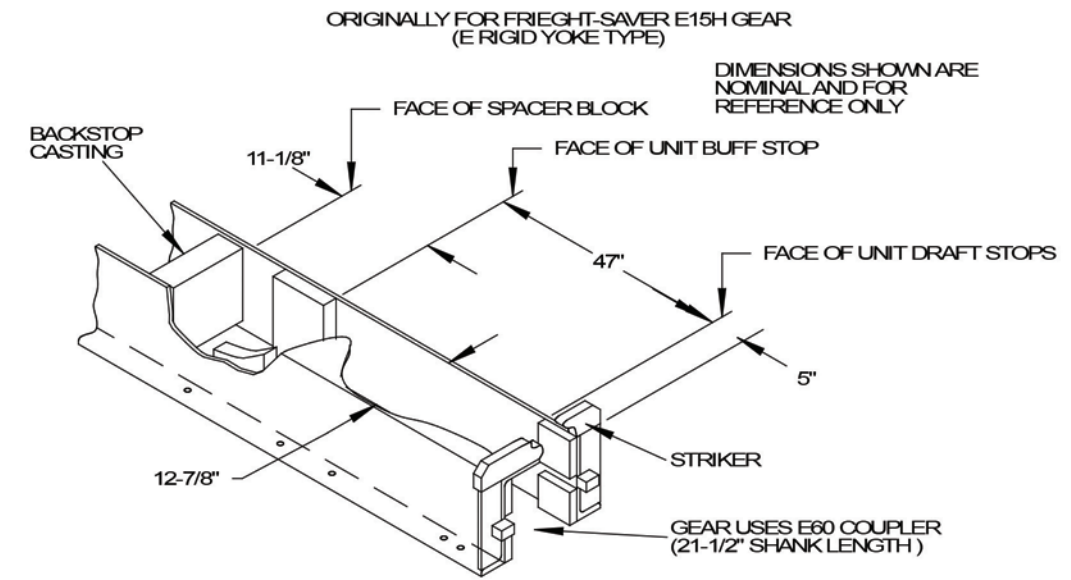
Spec	Part No.	Model
M-921B	N064	10FRECB
M-921B	N075	10FREB

AAR Group EOC 21, 21B
15" Travel, E60 or E67 Series Couplers

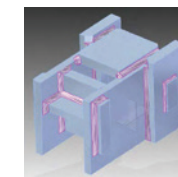
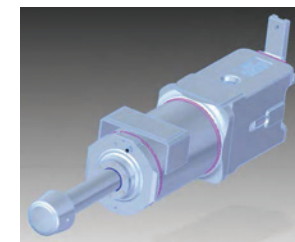
ORIGINAL CUSHIONING UNITS

AAR Qualifier 02, Type 1
ACF E-15H
FMI E15H

EOC-21 POCKET LAYOUT



REPLACEMENT CUSHIONING UNITS



9542 Adaptor to use with qualifier # 03, type 2

AAR Qualifier 03, Type 2

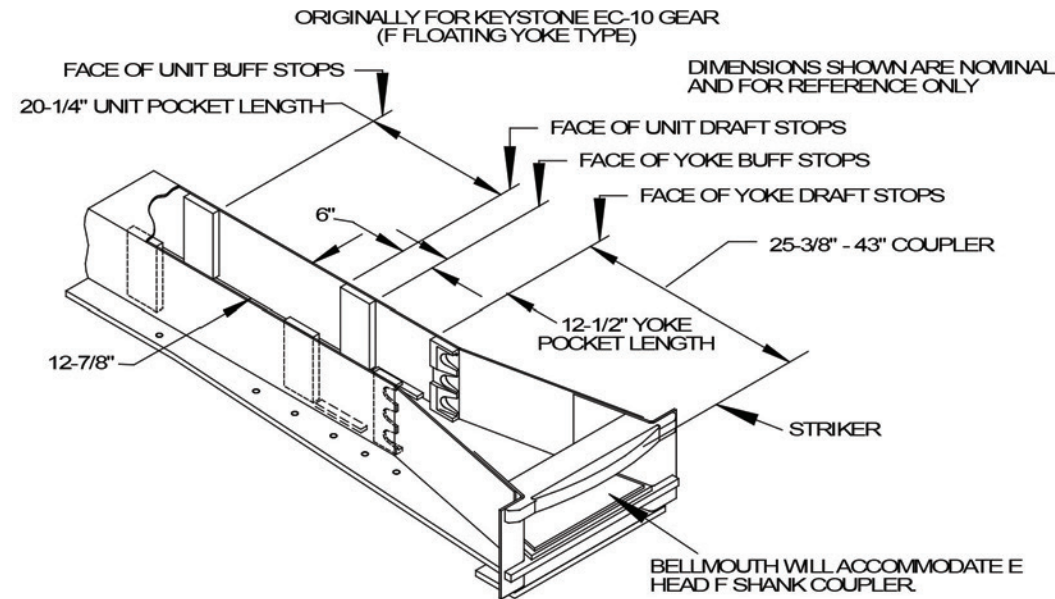
Spec	Part No.	Model
M-921B	N130TB	15FMCEB K/S
M-921B	N071TB	15FMEB TB

AAR Group EOC 22, 22B
12" Travel, E68 Series Couplers

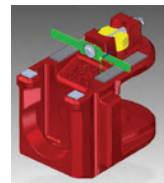
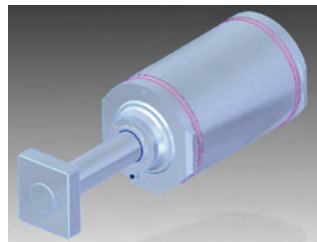
ORIGINAL CUSHIONING UNITS

Pocket Modification Required
AAR Qualifier 02, Type 2
ACF F-12
FMI F-12

EOC-22 POCKET LAYOUT



REPLACEMENT CUSHIONING UNITS



Yoke required for type 1 units part # 5702

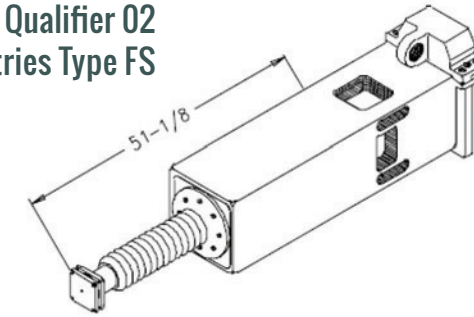
AAR Qualifier 02, Type 1

Spec	Part No.	Model
M-921B	N064	10FRECB
M-921B	N075	10FREB

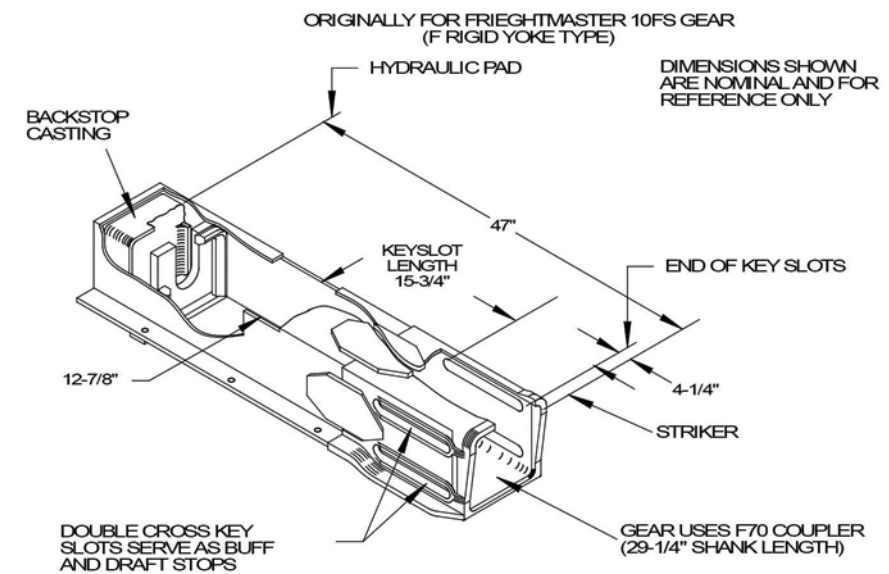
AAR Group EOC 23, 23B
10" Travel, E68 Series Couplers

ORIGINAL CUSHIONING UNITS

AAR Qualifier 02
FM Industries Type FS



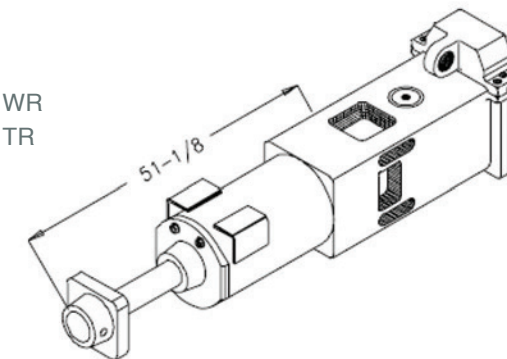
EOC-23 POCKET LAYOUT



REPLACEMENT CUSHIONING UNITS

AAR Qualifier 04, Type 1

Spec	Part No.	Model
M-921B	N078	10FFSCB WR
M-921B	N114	10FFSCB TR

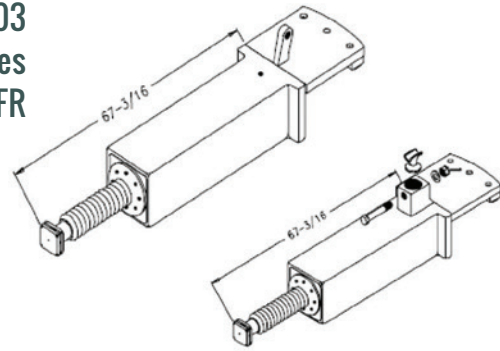


Please Note: This is a limited catalog. For more information regarding our additional product offerings, please contact our customer service at 877.94.PARTS.

AAR Group EOC 24, 24B
15" Travel, E68 Series Couplers

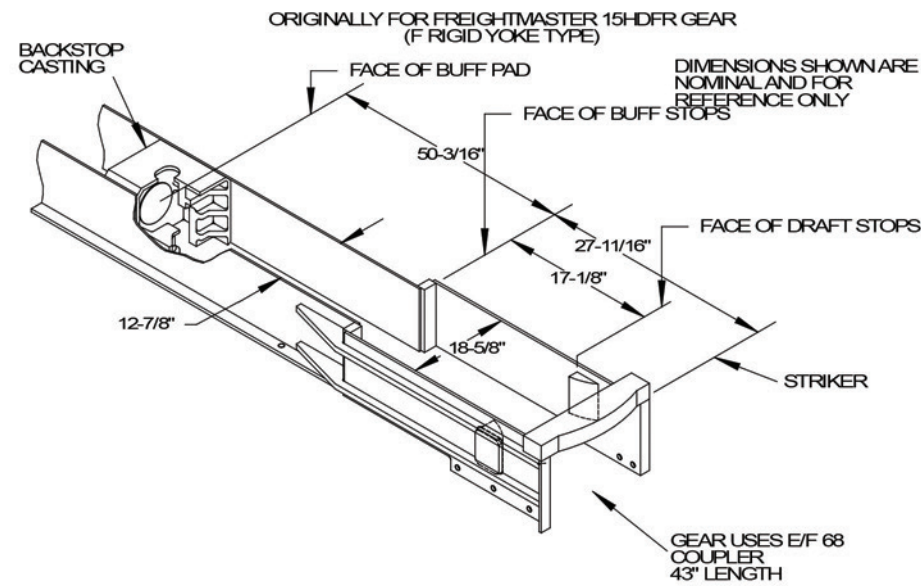
ORIGINAL CUSHIONING UNITS

AAR Qualifier 03
FM Industries
HDFR

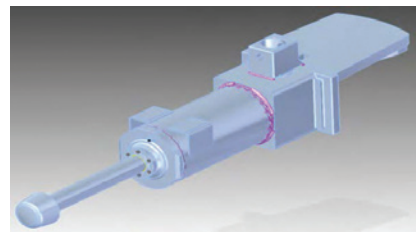
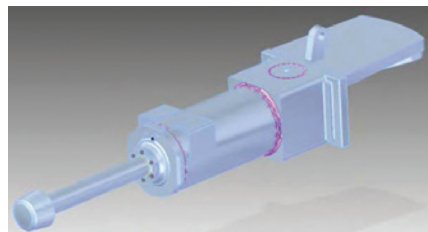


FMI HDFR with
Pin Block

EOC-24 POCKET LAYOUT



REPLACEMENT CUSHIONING UNITS



AAR Qualifier 08, Type 1

Spec	Part No.	Model
M-921B	N043	15FHCRB WR
M-921B	N113	15FHCRB TR

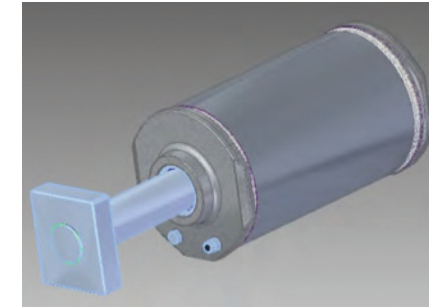
AAR Qualifier 09, Type 2

Spec	Part No.	Model
M-921B	N095	15FHCRB PB

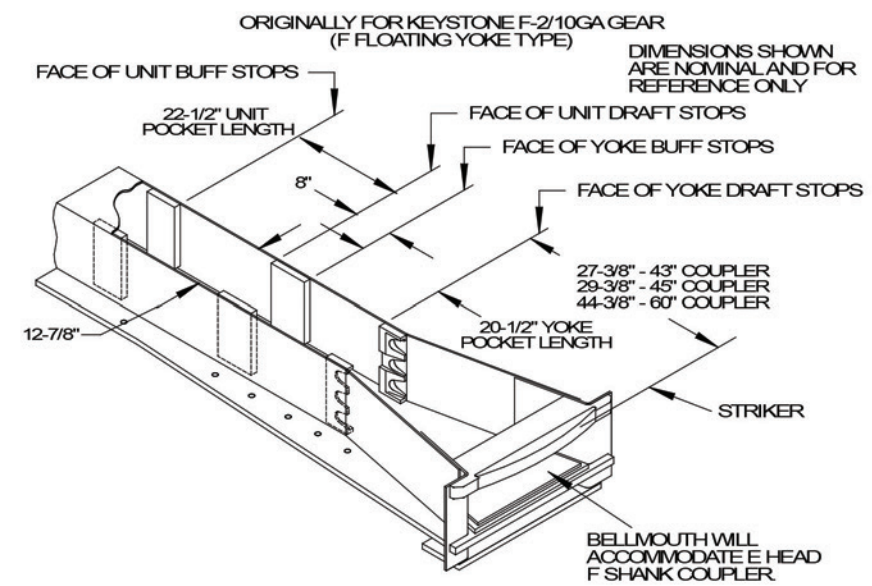
AAR Group EOC 25, 25E
10/2" Travel, E69 Series Couplers

ORIGINAL CUSHIONING UNITS

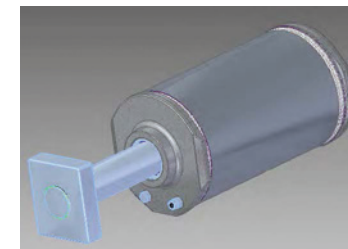
AAR Qualifier 01, Type 1
Twin Guard Unit F-2/10 GA



EOC-25 POCKET LAYOUT



REPLACEMENT CUSHIONING UNITS



Only the unit can be replaced. If the yoke is damaged the pocket must be modified.

Original yoke part # 17079.

AAR Qualifier 01, Type 1

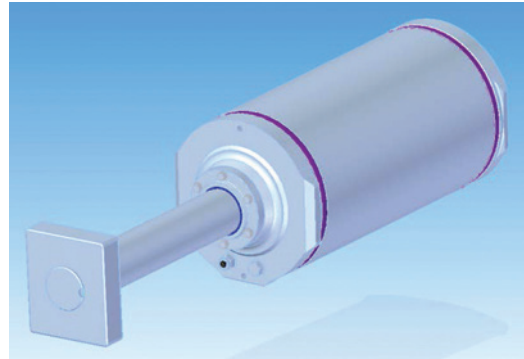
Spec	Part No.	Model
M-921E	N146	10/2RECE

AAR Group EOC 26, 26F

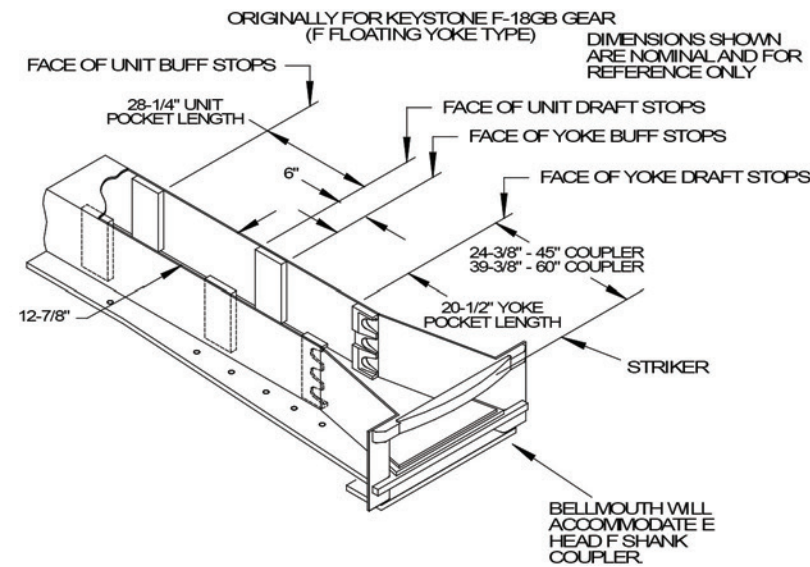
18" Travel, for Application with 45", 53", or 60" Series Couplers

ORIGINAL CUSHIONING UNITS

AAR Qualifier 01, 02, Type 1
KRE F-18G-B
FMI 18KN1F



EOC-26 POCKET LAYOUT

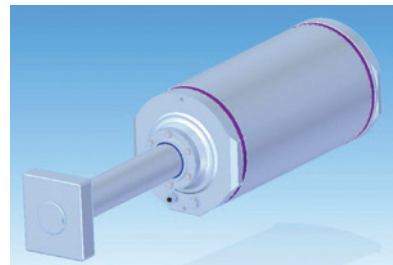


REPLACEMENT CUSHIONING UNITS



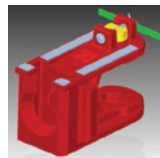
AAR Qualifier 01, Type 1

Spec	Part No.	Model
M-921B	N142	18FRECB
M-921B	N157	18FREB



AAR Qualifier 01, Type 1

Spec	Part No.	Model
M-921F	N119	16/2RECF



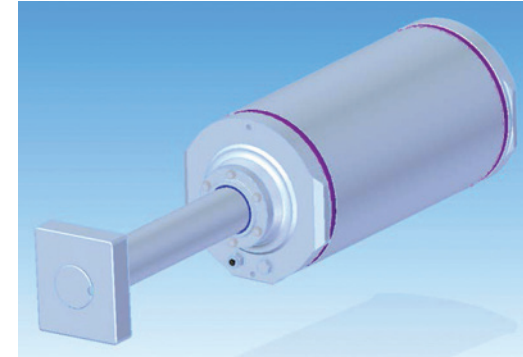
Yoke required for type 1 units part # 5704

AAR Group EOC 27, 27D

10" Travel, for Application with 43", 45", or 60" Series Couplers

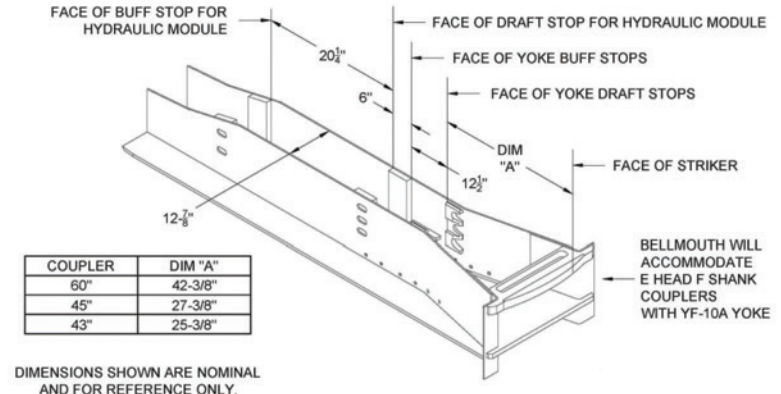
ORIGINAL CUSHIONING UNITS

AAR Qualifier 01, Type 1
10FRECD LD



EOC-27 POCKET LAYOUT

Originally for Keystone F-10G LD



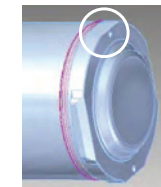
EOC-27 USES THE SAME HYDRAULIC DRAFT GEARS, YOKES AND COUPLERS AS EOC-9. TYPICAL CONFIGURATION SHOWN WITHOUT HYDRAULIC DRAFT GEAR, CARRIER PLATE AND COUPLER. SEE M.I. 15-229 FOR THIS INFORMATION.

REPLACEMENT CUSHIONING UNITS

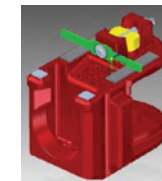


AAR Qualifier 01, Type 1

Spec	Part No.	Model
M-921D	N136	10RECD LD
M-921D	N036	10FRED LD



Top of rear end cap beveled for pocket clearance



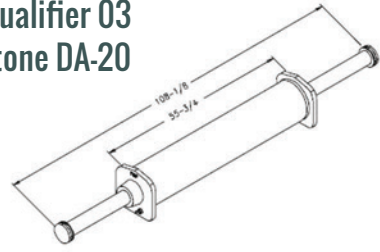
Yoke required for type 1 units part # 5702

AAR Group COC 1

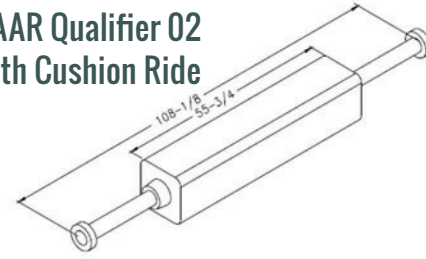
20" Travel

ORIGINAL CUSHIONING UNITS

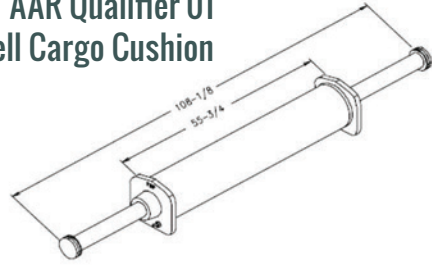
**AAR Qualifier 03
Keystone DA-20**



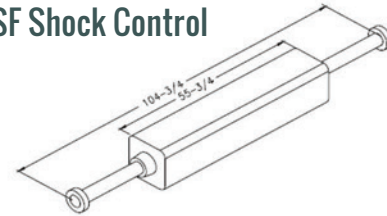
**AAR Qualifier 02
AO Smith Cushion Ride**



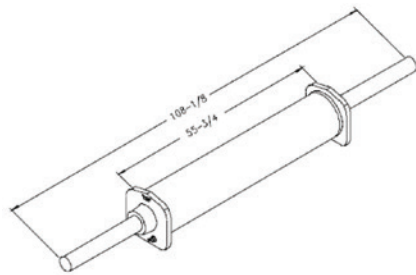
**AAR Qualifier 01
Rockwell Cargo Cushion**



**AAR Qualifier 11
ATSF Shock Control**

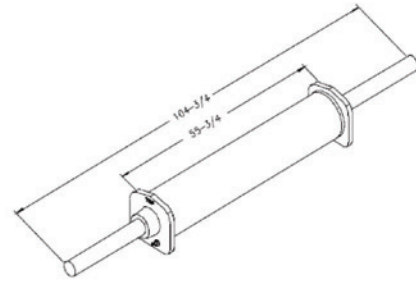


REPLACEMENT CUSHIONING UNITS



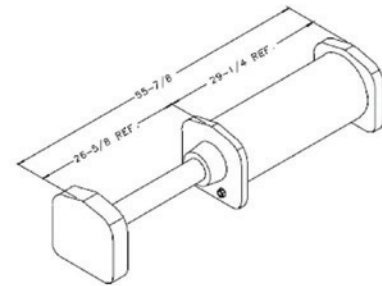
AAR Qualifier 06, Type 1

Spec	Part No.	Model
M-921A	R106	DA20-70
M-921A	R107	DA20-100
M-921A	R119	DA20G



AAR Qualifier 11, Type 2

Spec	Part No.	Model
M-921A	R118	DA20 ATSF



AAR Qualifier 08, Type 4

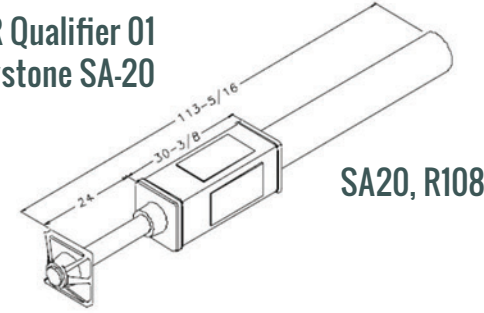
Spec	Part No.	Model
M-921A	R115	SA18G

AAR Group COC 2

20" Travel - American 12-7/8" Sill

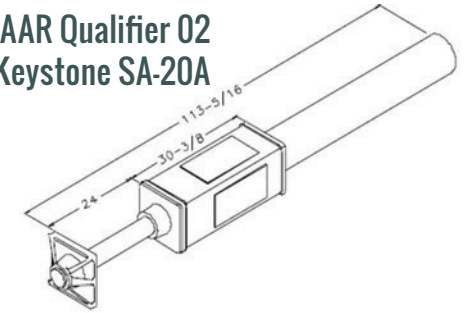
ORIGINAL CUSHIONING UNITS

**AAR Qualifier 01
Keystone SA-20**

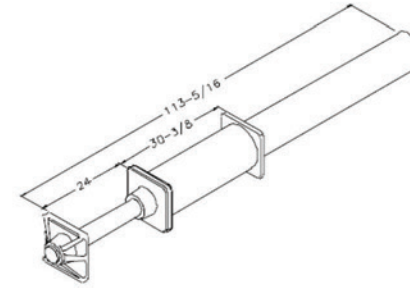


SA20, R108

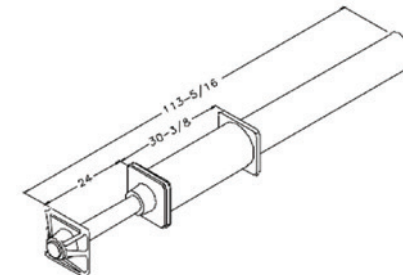
**AAR Qualifier 02
Keystone SA-20A**



**AAR Qualifier 03/02
Keystone SA-20MS/SA-20A**

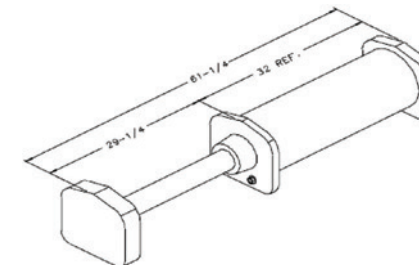


REPLACEMENT CUSHIONING UNITS



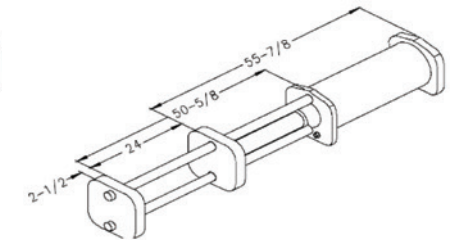
AAR Qualifier 07, Type 2

Spec	Part No.	Model
M-921A	R110	SA20MS



AAR Qualifier 04, Type 3

Spec	Part No.	Model
M-921A	R111	SA20G
M-921A	N139	20N

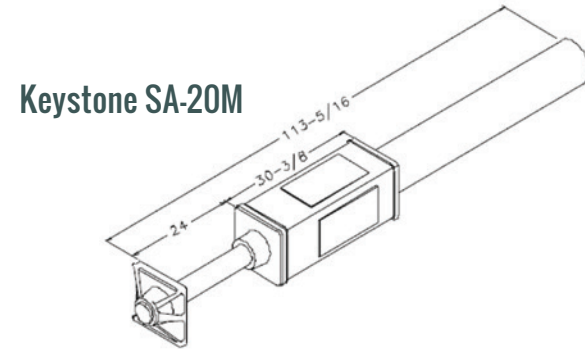


AAR Qualifier 08, Type 4

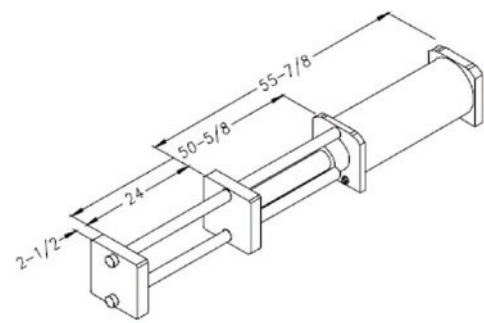
Spec	Part No.	Model
M-921A	R116	SAGMS

AAR Group COC 3
20" Travel - Canadian Narrow Sill

ORIGINAL CUSHIONING UNITS

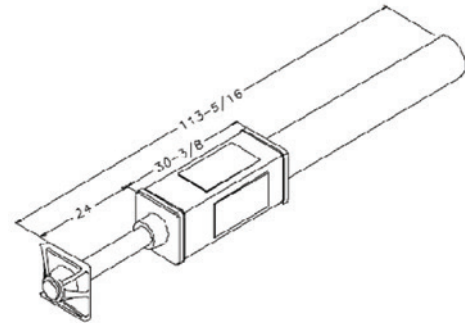


REPLACEMENT CUSHIONING UNITS



AAR Qualifier 06, Type 2

Spec	Part No.	Model
M-921A	N132	SAGMMS



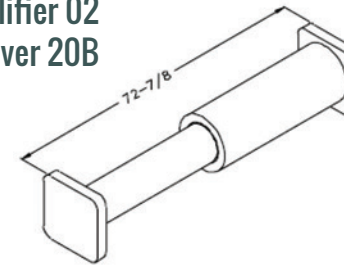
AAR Qualifier 04, Type 1

Spec	Part No.	Model
M-921A	R109	SA20M
M-921A	N133	SA20GM

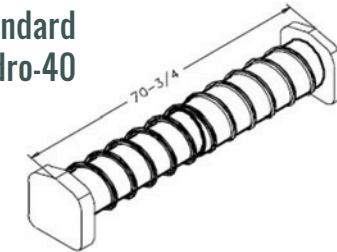
AAR Group COC 4
20" Travel - American 12-7/8" Sill

ORIGINAL CUSHIONING UNITS

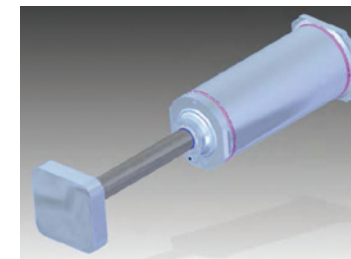
AAR Qualifier 02
ACF Freightsaver 20B



AAR Qualifier 11/12
Pullman Standard
Hydro-40

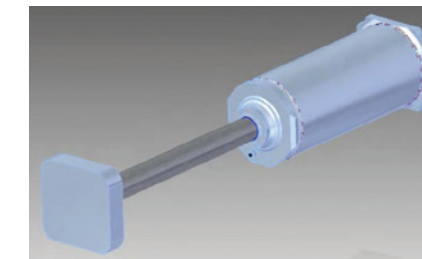


REPLACEMENT CUSHIONING UNITS



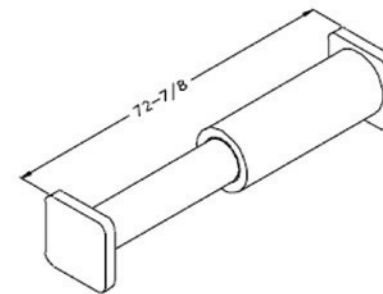
AAR Qualifier 14, Type 2

Spec	Part No.	Model	Length
M-921A	R111	SA20G	61-1/4" LONG
M-921A	R111+	SA20G W/	11-5/8" FILLER
		BLOCK 72-7/8"	
M-921A	N139	20N	61-1/4" LONG



AAR Qualifier 15, Type 3

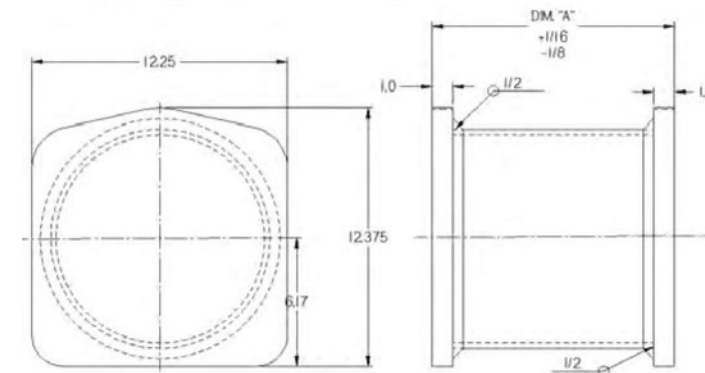
Spec	Part No.	Model	Length
M-921A	R120	20PSN	70-3/4" LONG
M-921A	N149	20PSN	70-3/4" LONG



AAR Qualifier 06, Type 1

Spec	Part No.	Model
M-921A	R104	F20B

FILLER BLOCK OVERALL LENGTHS			
PART #	FOR UNIT TYPE	LENGTH DIM. "A"	Stock Code
AH-8017A	F20B	11.625"	AH8017A
AH-8017B	F30B & HYDRAFRAME 60	37.0"	AH8017B
AH-8017C	NATIONAL 3C	29.25"	AH8017C
AH-8017D	HYDRAFRAME 40	9.5"	AH8017D

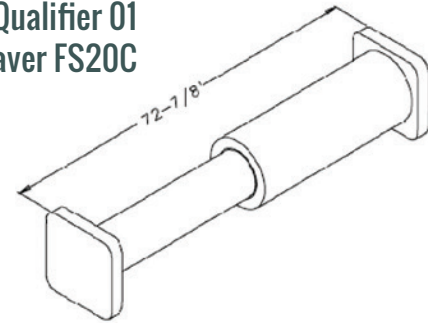


AAR Group COC 5

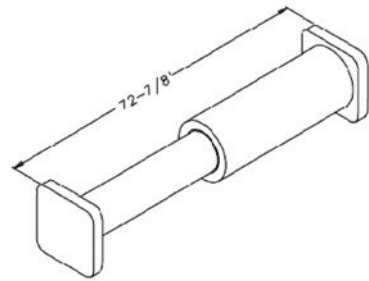
20" Travel - Canadian Narrow Sill

ORIGINAL CUSHIONING UNITS

AAR Qualifier 01
ACF Freightsaver FS20C

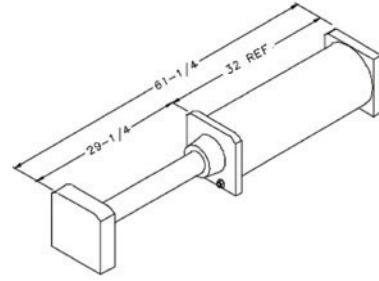


REPLACEMENT CUSHIONING UNITS



AAR Qualifier 03, Type 1

Spec	Part No.	Model
M-921A	N140	F20C



AAR Qualifier 04, Type 2

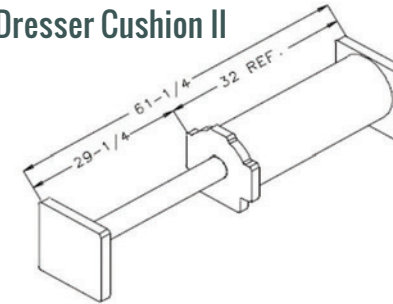
Spec	Part No.	Model
M-921A	N133	SA20GM

AAR Group COC 6

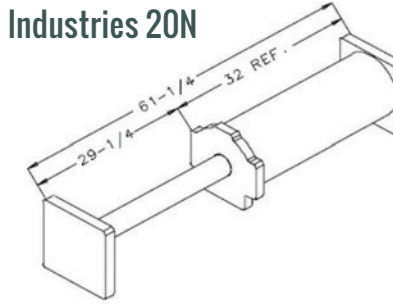
20" Travel

ORIGINAL CUSHIONING UNITS

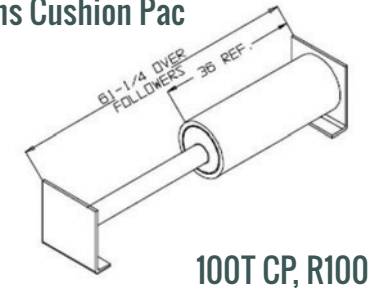
AAR Qualifier 02
Dresser Cushion II



AAR Qualifier 03
FM Industries 20N

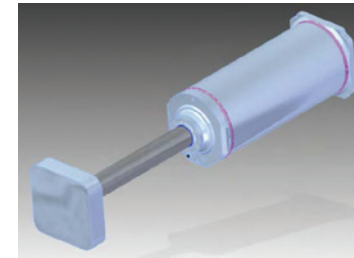


AAR Qualifier 01
Evans Cushion Pac



100T CP, R100

REPLACEMENT CUSHIONING UNITS



AAR Qualifier 04, Type 1

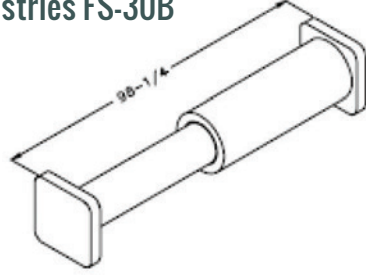
Spec	Part No.	Model
M-921A	R111	SA20G
M-921A	N139	20N

AAR Group COC 7

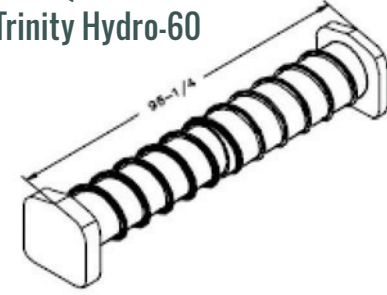
30" Travel

ORIGINAL CUSHIONING UNITS

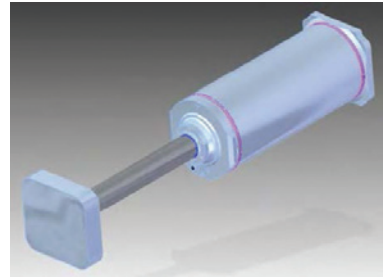
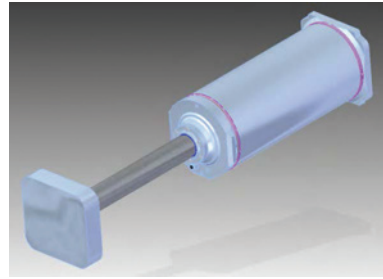
AAR Qualifier 03
FM Industries FS-30B



AAR Qualifier 10
Trinity Hydro-60



REPLACEMENT CUSHIONING UNITS



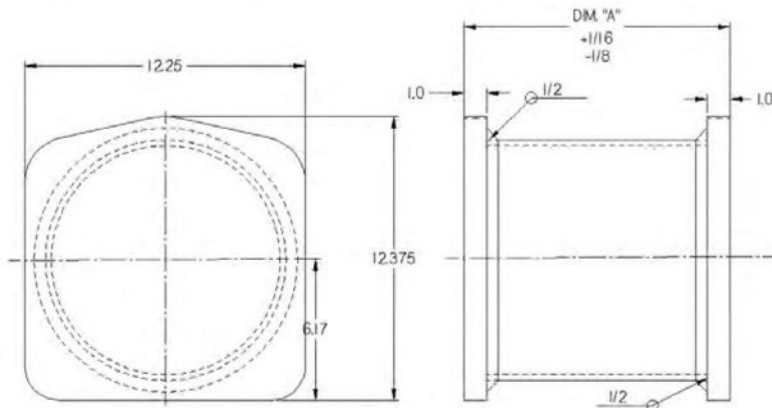
AAR Qualifier 04, Type 1

Spec	Part No.	Model
M-921A	N143	30BN

AAR Qualifier 12, Type 2

Spec	Part No.	Model
M-921A	R111	SA20G W/ AH8017B FILLER
M-921A	N139	20N W/ AH8017B FILLER

FILLER BLOCK OVERALL LENGTHS			
PART #	FOR UNIT TYPE	LENGHT DIM "A"	Stock Code
AH-8017A	F20B	11.625"	AH8017A
AH-8017B	F30B & HYDRAFRAME 60	37.0"	AH8017B
AH-8017C	NATIONAL 3C	29.25"	AH8017C
AH-8017D	HYDRAFRAME 40	9.5	AH8017D

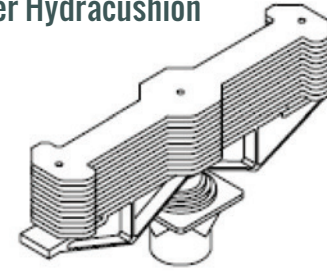


Dresser Application / National Application

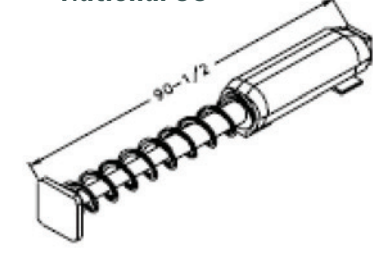
20" Travel

ORIGINAL CUSHIONING UNITS

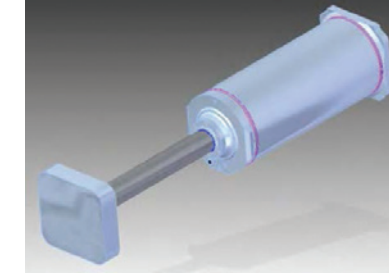
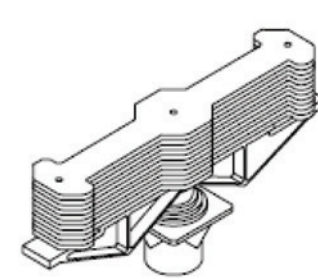
Dresser Hydracushion



National 3C



REPLACEMENT CUSHIONING UNITS



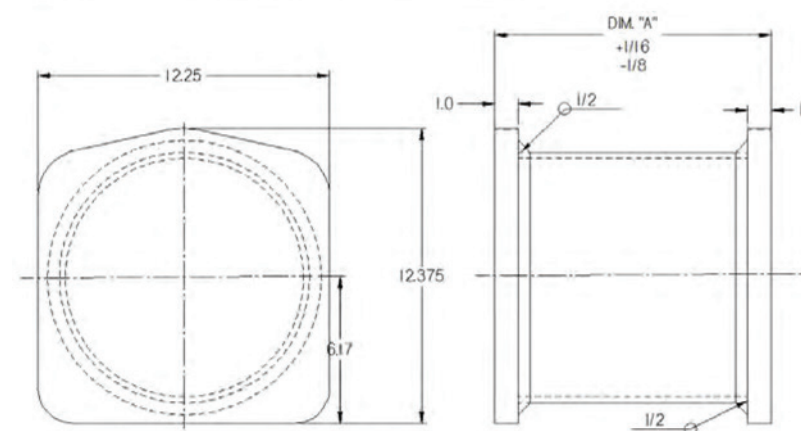
AAR Qualifier 07, Type 1

Spec	Part No.	Model
M-921A	R101	HCU

AAR Qualifier 09, Type 2

Spec	Part No.	Model
M-921A	R111	SA20G W/ AH8017C FILLER
M-921A	N139	20N W/ AH8017C FILLER

FILLER BLOCK OVERALL LENGTHS			
PART #	FOR UNIT TYPE	LENGHT DIM "A"	Stock Code
AH-8017A	F20B	11.625"	AH8017A
AH-8017B	F30B & HYDRAFRAME 60	37.0"	AH8017B
AH-8017C	NATIONAL 3C	29.25"	AH8017C
AH-8017D	HYDRAFRAME 40	9.5	AH8017D



AMERICAN HYDRAULICS

Gas Return Cushioning Devices General Inspection and Maintenance Instructions

CAUTION: All models of American Hydraulics gas return cushioning devices are highly pressurized with nitrogen. Do not attempt to service this equipment before fully reading and understanding the service maintenance instructions and procedures.

I. INSPECTION

A. Examine the application and repair as necessary:

1. Visually examine unit support, carrier plate, rod end support (if applicable), and trainline for damage. Sliding Sills must be centered.
2. Check that all bolts are in place and tight.
 - a) Recommended bolt torque:
 - 7/8"-9UNC - 500ft.-lbs.
 - 3/4"-10UNC - 350ft.-lbs.
 - 5/8"-11UNC - 200ft. - lbs.
3. Visually examine all sliding surfaces for evidence of excessive wearing or galling.
4. Examine draft lugs, unit stops or backstops, yoke and all welds for cracks or other damage.
5. Check that coupler carrier is in good condition and that coupler is shimmed properly in accordance with AAR Interchange rules 16, 17, or 18 as applicable.
6. Check that the draft key or draft pin and retainer hardware are intact and in good condition.
7. Visually examine the unit for excessive oil leakage.

NOTE: The unit allows for a very small amount of oil lubrication to the shaft. Oil stains should not cause concern unless they are extremely heavy and fresh clearly formed droplets are present.

B. Gas pressure check procedure

CAUTION: Do not remove oil fill straight thread o-ring plug. Injury may result from removing fill plug prior to completely exhausting gas pressure. If the oil fill plug is accidentally loosened, a fluid and nitrogen mixture will spray out of a safety warning hole in the side of the plug.

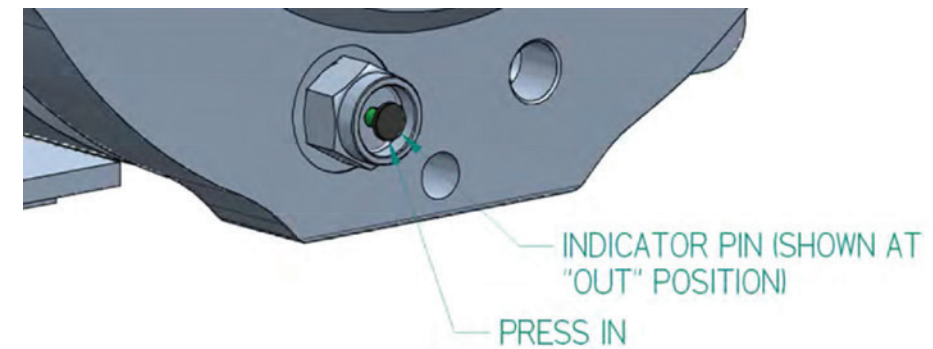
1. For units with a 5/8" hole at charge location. See Section II. MAINTENANCE - AH MANIFOLD SYSTEM
2. For units with a 1" Straight Thread Oring Cap in charge location use Section III. MAINTENANCE - SCHRADER VALVE MANIFOLD SYSTEM

C. UCI pressure indicator operation

NOTE: The American Hydraulics UCI (*) is normally installed in EOC units built since December 1995. The UCI is installed in place of the oil fill straight thread oring plug.

1. For units equipped with the American Hydraulics UCI:
 - a) UCI Standard torque requirements, 95 ft. /lbs.
 - b) UCI Operation

The UCI functions as a gage of gas pressure. The UCI can be used to inspect a unit as shipped, on the ground, or in the sill. Simply locate the UCI and attempt to press in the indicator pin. Use the Table below to determine unit condition. If unacceptable, and there is no evidence of excessive oil leakage, the unit may be charged with nitrogen gas per Section II. A. *Gas pressure charge procedure.*



POSITION OF THE INDICATOR PIN	UNIT CONDITION
Pin is extended out and is hard to push in.	Acceptable
Pin pushes in and returns out. (May not return all at once)	Acceptable
Pin pushes in and stays in.	Unacceptable
Pin already in.	Unacceptable

c) UCI Maintenance

The UCI can be cleaned by removing any foreign matter on or near the indicator pin. Use a clean cloth. Avoid using compressed air which may push matter in the indicator pin hole.

2. For units equipped with fill plug (no UCI):

b) Using a 1" hex socket, remove the charge plug located next to the raised or stamped letter "C" on the lower right of the unit head as shown in Figure 1. The charge tank valve will be under the oring cap. see section III. *Maintenance - Schrader valve manifold system*

a) New and Units converted by American Hydraulics will have only a 5/8" hole, with a European type charge valve seated below the surface of the end cap. A machine screw threads into the end of the European valve body to protect the threads of the valve. see section II. *Maintenance - AH manifold system.*

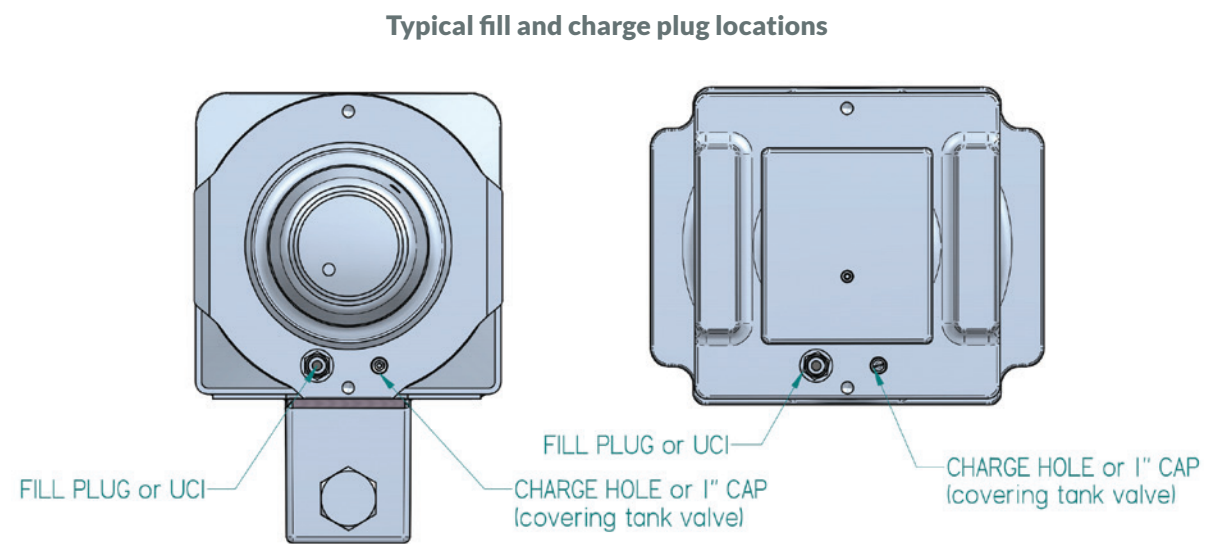
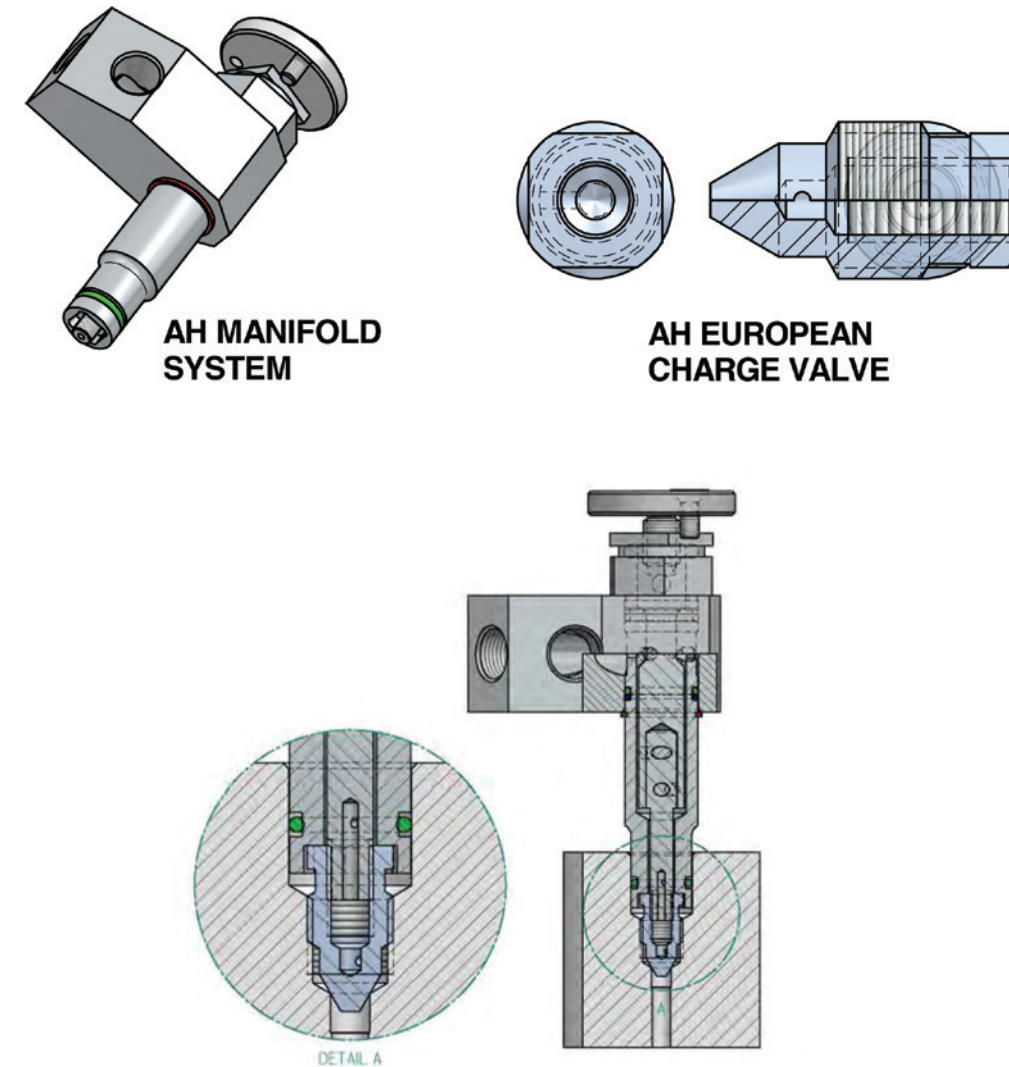


Figure 1

II. MAINTENANCE - AH MANIFOLD SYSTEM

A. Gas pressure charge procedure (Running Unit Pressure Testing & Charging)

1. Unit may be checked in or out of car.
2. Unit may be in vertical or horizontal.
3. Applying "NITROGEN" charge manifold and charging unit.
 - a) Place small end with O-ring seal in charge hole.
 - b) Turn Pressure Relief Handle to start threading the Charge Stem into the Charge Valve.
 - c) Make sure that the Charge Valve shoulder has seated into the recess of the Manifold.
 - d) Do not over tighten with wrench.



4. Charging or Checking

(1) If just checking existing unit pressure use a plugged manifold with pressure gage only. Open Charge Valve by turning the 1" Hex below the Pressure Relief Handle counter clockwise to get pressure reading only. If below 200 PSI and no signs of excessive leaking you can recharge the unit. When finished tighten the 1" Hex in a clockwise direction to close off the valve. Continue with step 4. e) to remove the manifold.

(2) If charging unit continue with step 4. a).

- a)** With Manifold applied, turn "NITROGEN" bottle on and apply 300 psi. to protect from a back pressure of gas and oil into the Manifold.
- b)** Open Charge Valve by turning the 1" Hex below the Pressure Relief Handle counter clockwise to start the flow of gas into the unit.
- c)** Adjust pressure regulator to achieve appropriate psi. and hold for (2) Two minutes to equalize the pressure between the unit and the regulator.
 - (1)** (350 psi.) for all EOC units. (This does not apply to "COC Units See Appendix "A")
- d)** When pressure has equalized, re-tighten the 1" Hex to close off the unit pressure, and then back off the regulator, and then shut off the "NITROGEN" bottle.
- e)** Turn Pressure Relief Handle counter clockwise to release the pressure in the hose and Manifold.
- f)** Continue to turn Pressure Relief Handle to back off the Manifold from the Charge Valve.
- g)** With soapy water test the Charge Valve for leaks, re-tighten if necessary.

B. Uncharged storage unit

4. Unit instructions are the same as Section "A" above except for the charge pressure.

- a)** Uncharged Unit Charge pressure is different than a unit that has been running keeping the oil and nitrogen gas mixed.
- b)** Running Unit
 - (1)** Nitrogen gas absorbs into the oil making an emulsified fluid when stroked (cycled).
 - (a)** Internal pressure drops by almost 100 psi.
- c)** Re-Charge Pressure
 - (a)** 350

d) Uncharged Storage Unit

- (1)** Nitrogen gas has not been introduced to the unit yet.
 - (a)** Internal Pressure will drop 100 psi. when cycled the first time.
- (2)** Initial Charge Pressure
 - (a)** 440-450 psi.

C. Bleeding pressure off to reduce length

This Procedure is for "Multi-Travel Units that are pre-gagged to 15", and need to be shortened for 10" or 12" Travel Pockets or, Units that are removed from the car and are extended beyond pocket length, and need the gas removed to reinstall.

- 4. With unit removed from car and support vertical and or tipped at angle to elevate charge hole to the most top position.
- 5. Let stand at this position for (20) twenty minutes or longer to let gas and oil separate.
- 6. Applying "NITROGEN" charge manifold and charging unit.
 - a)** Place small end with O-ring seal in charge hole.
 - b)** Turn Pressure Relief Handle to start threading the Charge Stem into the Charge Valve.
 - c)** Make sure that the Charge Valve shoulder has seated into the recess of the Manifold.
 - d)** Do not over tighten with wrench.
 - e)** With Manifold applied, turn Pressure Relief Handle counter clockwise just enough to start the flow of gas from the unit.
 - f)** Bleed the gas from the unit, but try not to lose oil. (If foamy let stand to separate longer.)
 - g)** After pressure released, re-tighten Charge Valve and remove Manifold.
 - h)** Compress unit to a dimension less than the pocket size and install.
- 7. After installation follow Section II, A. *Gas pressure charge procedure.*

III. MAINTENANCE - SCHRADER VALVE MANIFOLD SYSTEM (Keystone, FMI)

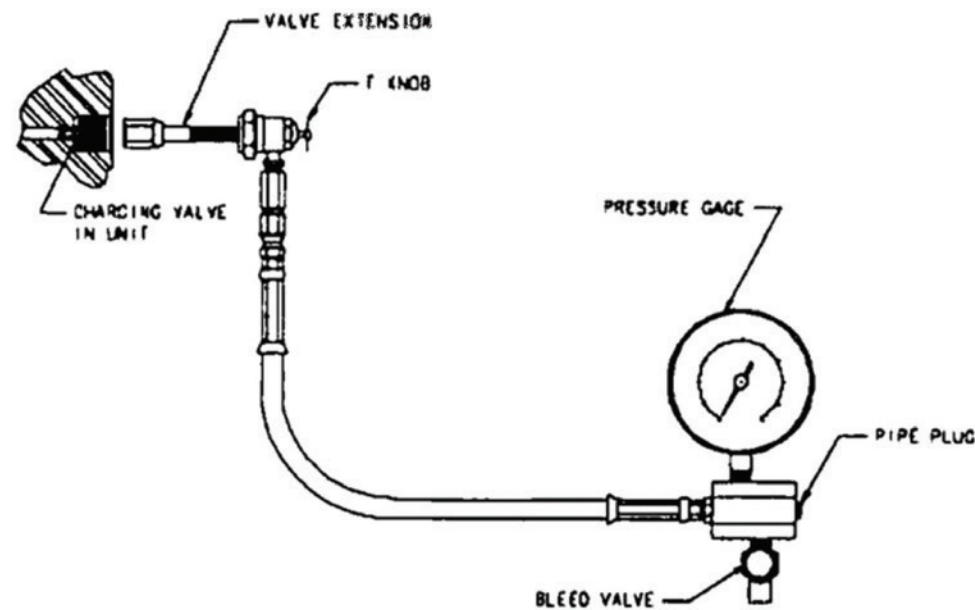
A. Gas pressure check procedure (Running Unit Pressure Testing & Charging)

1. For units using Schrader Tank Valve

a) Using a 1" hex socket, remove the charge plug located next to the raised or stamped letter "C" on the lower right of the unit head as shown in Figure 1. The charge tank valve will be under the o-ring cap.)



b) Refer to Figure 2. Turn valve extension onto the charging valve body of unit. "Snug" down with 7/16" deep socket and thumb wheel. Do not overtighten.



Gage assembly part No. 9555

Figure 2

- c) Fully retract valve pin on high pressure valve by turning the "T" knob counterclockwise.
- d) Attach high pressure valve slip nut to valve extension. "Snug" down with small 6" adjustable wrench.
- e) Turn the "T" knob clockwise until the gage assembly is pressurized.
- f) Read the pressure. **Minimum allowable gas pressure is 200 PSI.** Gas pressure may range up to 1200PSI. Temperature is not important.
- g) If gas pressure is less than 200 PSI, and there is no evidence of excessive oil leakage, the unit maybe charged with nitrogen gas per Section II.

A. Gas pressure charge procedure.

h) If gas pressure is 200 PSI or greater, remove the gage assembly by following the steps below:

(1) To remove gage assembly, first fully retract valve pin on inflation connector by turning "T" knob counterclockwise.

(2) Open bleed valve to vent off gas trapped in gage assembly.

(3) Remove gage assembly, and then install charge plug and torque to approximately 125ft.-lbs.

B. Gas pressure charge procedure

CAUTION: Do not remove oil fill plug. Injury may result from removing fill plug prior to completely draining gas pressure. If the oil fill plug is accidentally loosened, a fluid and nitrogen mixture will spray out of a safety warning hole in the side of the plug.

1. Check gas pressure per the instructions given in Section I. A. *Gas pressure check procedure*, to verify that gas charging is required.
2. Remove gage assembly per Step h. in Section I. A., and attach inflating hose as shown in Figure 3. Remove the 1/4" NPT pipe plug and attach a suitable hose with regulator.

CAUTION: All fittings used must be high pressure, (3000 psi) type.

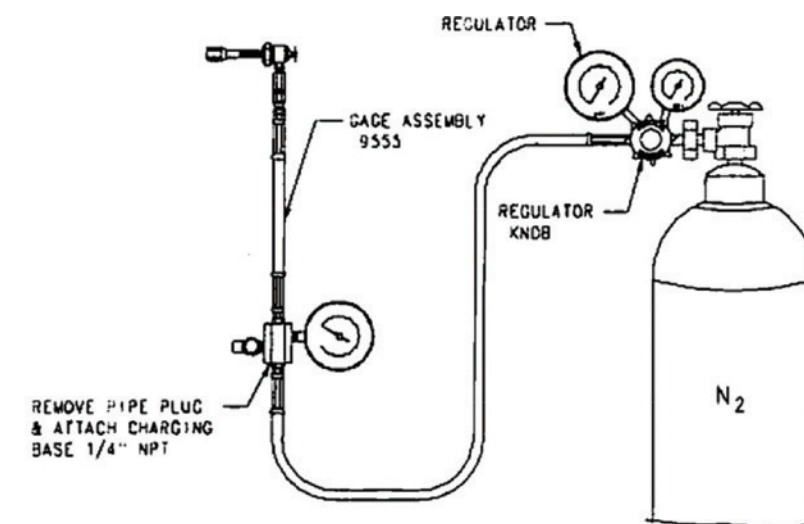


Figure 3

3. Check that the valve pin is fully retracted and that bleed valve is closed.
4. Reattach gage assembly to charging valve and tighten to approximately 5 ft.-lbs. (Hand tight).
5. Turn pressure regulator knob fully counterclockwise to insure that regulator pressure is below 600 PSI.
6. Turn the "T" knob on gage assembly clockwise until charging valve pin is engaged.
7. Turn on nitrogen gas main supply valve.
8. Pressurize EOC (end-of-car) units to 750 PSI and COC (center-of-car) units to 1200 PSI by slowly turning pressure regulator knob clockwise. Hold pressure on the unit for at least 3 minutes. Temperature is not important.
9. Fully retract valve pin on gage assembly.
10. Turn the pressure regulator knob counterclockwise.
11. Turn off main gas supply.
12. Open bleed valve to vent off trapped pressure in the lines, regulator and gage assembly.
13. Remove gage assembly, and then install charge plug and torque to approximately 125ft.-lbs.
14. Stencil in 1 inch letters on side of center sill, "Gas Charged", month, day, year, XXX "PSI."

C. Gas pressure discharge procedure

1. Remove charge plug located at the raised letter "C" on the lower right of the unit head as shown in Figure 1. Note: Not all end caps have the letter "C".
2. Refer to Figure 4. Turn valve extension on to valve body of unit. "Snug" down with 7/16" deep socket and thumb wheel. Do not over tighten.

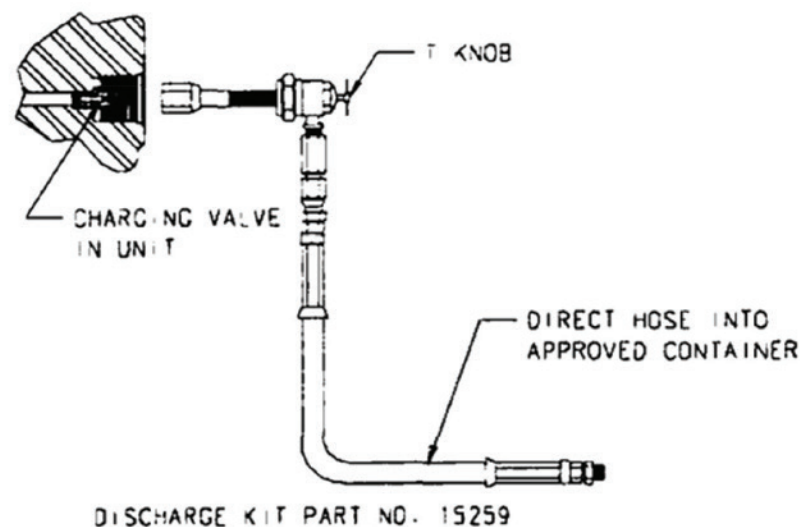


Figure 4

3. Fully retract valve extension on to valve body by turning the "T" knob counter clockwise
4. Attach high pressure valve slip nut to valve extension. "Snug" down with small 6" adjustable wrench.
5. Slowly turn "T" knob on high pressure valve clockwise until gas flow is heard venting from unit. Hold discharge tube securely while directing gas/oil discharge in to receptacle. Do not overturn "T" knob to ensure controlled discharge
6. Allow unit to discharge until gas is no longer exhausted from unit.
7. To ensure full discharge, slowly turn (Clockwise) "T" knob to fully depress valve core. If gas is no longer exhausted, retract high pressure valve (turning-the "T" knob counter clockwise) and remove discharge assembly.
8. "Squeeze" unit off stops. If unit does not return, then all gas has been vented and unit is safe to remove from car. If unit does return, then procedure must be repeated to further vent the gas
9. To ensure no gas build-up, remove the valve core after all gas has been vented, and prior to unit removal from car.

CAUTION: Always use face shield when performing these procedures on all gas return units!

IV. DISCHARGING UNIT FOR EOC POCKET REPAIR (Either style)

A. Gas pressure discharge

1. Using the correct procedures above for the style of Charging System on the unit remove the oil from the unit, and capture the oil in a clean container for the purpose of returning the removed oil back into the unit prior to the re-installation/ or for measuring the amount of oil removed to reapply new oil of the same amount back into the unit.
2. In either case you use whether returning the same oil or replacing with new you never want to add more than you have removed due to over filling the unit and causing the unit to bulge and/or burst from being over filled.
3. After removing enough oil to reduce the unit length to remove from the car pocket set the unit aside to replace the oil.

B. Replacing the unit oil removed

1. To replace the oil stand the unit upright or with the shaft end and UCI elevated above a 45° to remove the UCI (Unit Condition Indicator) without any more loss of oil.
2. Remove the UCI which has a larger fill hole opening into the cushioning unit to reapply the oil

3. Place a funnel into the UCI hole and reapply the removed oil and/or the new oil equivalent back into the unit. If necessary raise shaft end up higher to achieve more space for oil.
4. After oil is replaced reapply the UCI Indicator and torque to 95 ft. /lbs.
5. The unit is now ready to be returned to the car pocket upon completion of the car repair.

“APPENDIX “A”

Unit Type	UP		Field Charging Pressures	Shop Charging Pressures
	Eff 1/08	UP Ref #		
10FACD TR	6270006		350	450
10FECB	6270065		350	450
10FFCB TR	6270120		350	450
10FFCD TR	6270124		350	450
10FFSCB TR	6270180		350	450
10FKECB			350	450
10FKECD	6270627		350	450
10FMCB PB	6270626		350	450
10FMCD PB	6270628		350	450
10FMCEB	6270457		350	450
10FRECB	6270015		350	450
10FRECD	6270018		350	450
*10FVMCB	6270765		350	450
*10FVMCD			350	450
*10FVMCEB	6270755		350	450
*15FVMCB			350	450
*15FVMCD			350	450
*15FVMCEB			350	450
15FHCB TR	6270301		350	450
15FHCD TR	6270317		350	450
15FHCEB	6270235		350	450
15FHCRB WR			350	450
15FHCRB TR	6270350		350	450
15FHCRB PB	6276210		350	450
15FFRBC-B TR	6271037		350	450
15FHDFSCB	6270405		350	450
15FINCB	6270787		350	450
15FINCEB			350	450
15FKECB	6270896		350	450
15FKECD	6270898		350	450
15FMCB PB	6270684		350	450
15FMCD PB	6270758		350	450
15FMCEB	6270515		350	450
15FRECB	6270885		350	450
15FRECD	6270887		350	450
DA20-70				
DA20-100				
DA20G	6271089		850	1200
DA20G ATSF			850	1200
20BN	FMI UNIT		600	850
20PSN	FMI UNIT		600	850
F20B	6270909		SEE CHART	
F20A			SEE CHART	
20AN				
HCU	6270994			

Unit Type	UP Ref #	Field Charging Pressures		Shop Charging Pressures	
UNIVERSAL (K)	6284325				
10F YOKE	6284350				
15F YOKE					
10-15E YOKE					
SA18G	6271040	850		1200	
SA20G CB		850		1200	
SA20G	6270950/KEY 6270930/FMI	850		1200	
SAGMS	6271130	850		1200	
SA20					
SA20MS	6271192				
SA20M					
H57	6307834				
H57-100	6307846				

TEMP (F°)	INFLATION PRESSURES (PSI)	
	MODELS	
	20A,20B,30B	20,30
-10	210	135
0	215	140
10	225	145
20	230	150
30	235	153
40	240	157
50	245	160
60	255	165
70	260	170
80	270	175
90	275	180
100	280	185
110	290	190

AMERICAN HYDRAULICS

Cushioning Unit & Car Pocket Parts

KEY & PIN RETAINING SYSTEM PARTS MISC. PART CATALOG

NOTE: Pricing subject to change without notice, please call for current pricing

LISTED UNDER DRAWING	AH PART#	DESCRIPTION
5036RSKC	5036RSKC	5036 Key Retaining System w/Draft Key & Carrier
	AH5036B	retainer stud, FMI ME style
	AH5036D2	key retainer plate, FMI ME swing gate
	AH8090	forged draft key, tapered crosskey
	AH5036C2	key retainer, forged crosskey tee
	AH5036A	tab washer, FMI ME style
	AH8102	bolt, 3/4 X 1 1/2 Shallow Head
	AH8073	coupler carrier wear plate, manganese
4608RSK	4608RSK	4608 Key Retaining System
	AH8099	screw, 5/8 x 1-1/2 Flat Head
	AH8068	key retainer plate
	AH8081	forged draft key, E yoke crosskey
	AH8069A	key retainer, E yoke
	AH8070	tab washer, E yoke
	AH8100	bolt, 5/8 x 1-1/2, GR 5
	AH12692	wear plate, E yoke
3450RSP	3450RSP	Type "F"-KNU Retention System
	23102451	7/8" vertical retainer pin
	RE035705	draft pin retainer, K yoke
	23102541	t pin keeper, retainer vertical pin
	RA030009	flat washer, 7/8 hardened
	AH8089	vertical coupler pin
	KS033451	coupler follower, butt pad
	5702RSP	Type "F"-KN Series Retention System
5702RSP	23102451	7/8" vertical retainer pin
	KS033452	draft pin retainer, R yoke
	23102541	pin keeper, retainer vertical pin
	RA030009	flat washer, 7/8 hardened
	AH8089	vertical coupler pin
	23108911	cotter pin 5/16 X 2

LISTED UNDER DRAWING	AH PART#	DESCRIPTION
8114RSKC	8114RSKC	8114 Key Retainint System w/Draft Key & Carrier
	AH8099	screw, 5/8 x 1-1/2 Flat Head
	AH8067A	key retainer plate
	AH8081	forged draft key, E yoke crosskey
	AH8066A	key retainer
	AH8072	tab washer, E10&E15GR
	AH8101	bolt, 1/2 x 1-1/2, GR 5
	AH8073	coupler carrier wear plate, manganese
8230RSKC	8230RSKC	8230 Key Retaining System w/Crosskey and Carrier
	AH8143	draft key, E 10/15VM crosskey
	23103511	key retainer (AH8110)
	23103501	tab retainer (AH8111)
	AH8224	Bolt, 1/2 x 1-1/2, 10-15 VME Key Retainer
FMRPBN	C246913	coupler carrier
	FMRPN	Type "MF" Series Retaining System
	RA030004	bolt pin retainer, 1-1/2 X 10, 6 TPI Gr 5
	RA030003	coupler pin retainer, MF style
	RA030005	nut,1-1/2 stover crimp
SNFRPBN	AH8089	vertical coupler pin
	SNFRPBN	Type "SNF" Series Retaining System
	RA030004	bolt pin retainer, 1-1/2 X 10, 6 TPI Gr 5
	AH8104	draft pin retainer
	RA030005	nut,1-1/2 stover crimp
AH5033C	AH8089	Vertical coupler pin
	AH5033C	AH Threaded Pin Plate Kit
	AH5033C3	Pin plate threaded assm, includes C1 & C2
	AH5033C5	Tab washer, retainer plate
	AH5033C4	Nut, 3/8 x 16 jam
AH8112AC	AH5033C4	Bolt, 3/8 x 5/8 flat head
	AH8112AC	7/8" Vertical Pin Retention System, Double End
	RA030009	Flat washer, 7/8 hardened
	23110831	Pin Vertical 7/8" Machined AH-8112, For Double End System
	23108911	Cotter pin 5/16 X 2
	23103401	Retainer pin keeper 11 ga material
AH8105AC	AH8105AC	7/8" Vertical Pin Retention System, Standard Single Strap
	RA030009	flat washer, 7/8 hardened
	23108911	cotter pin 5/16 X 2
	23102451	7/8" vertical retainer pin
	23102541	pin keeper, retainer vertical pin

MISCELLANEOUS

AH PART#	DESCRIPTION
87.15132	Crosskey, 1.5" X 6", 17.5" Long C1050 Key Stock Cut To Length
23111921	EOC-17B Fabricated Adapter AH-9542
23113251	E-325G, Yoke Support Plate 5/8" Grade 50 Steel
6A644300	Washer, Draft Key, Std 1-5/8"
AH8166	Draft Key Washer, 4.5" wide
AH6037	Shim, Std. Carrier Plate 5/8 X 3 X 3 A36
AH6038	Shim, Std. Carrier Plate 3/16 X 3 X 3 A36
AH8017A	11 5/8" Filler Block Assy For F20B
AH8017B	37" Filler Block Assy, Complete For F30B, Hydraframe 60
AH8017C	29-1/4" Filler Block Assy for National C3
AH8017D	9-1/4" Filler Block Assy For Hydraframe 40
AH8021	Wear Plate, Top Sill, 15G YE Yoke 3/16 X 8 X 32, AR235 Min.
AH8022	Wear Plate, Top Sill, 15G YF Yoke 3/16X8X36, AR235 Min.
AH8033	Wear Plate, Top Sill, 15G YF Yoke 3/16X8X31-1/2, AR340 Min.
AH8203	Wear Plate, Top Sill, 10G YF Yoke 3/16X8X26-1/2, AR235 Min.
AH8207	Wear Plate, Top Sill, 10G YE Yoke 3/16X8X28-1/2, AR235 Min.
AH8050 E	Yoke Guide Bar
AH8051	E10-15 G Top Draft Lug
AH8052	E10-15 G Bottom Draft Lug
AH8053	Unit Stops, "F" Floating Yokes 1-1/2 x 6 x 11-1/2, GR50 Plate
AH8061	Yoke Guide Bar, 15-G Unit 3/4 x 1-1/2 x 17, GR50
AH8062	Unit Support Strap, 10-18G Unit 3/4 x 2-1/2 x 20-3/8, 1018 CR
AH8106	Front Draft Lug Forging
8090401047	Schrader High Pressure Tank Valve
AH8088	HDE forged draft key
AH8087	HDE Key Retainer Plate

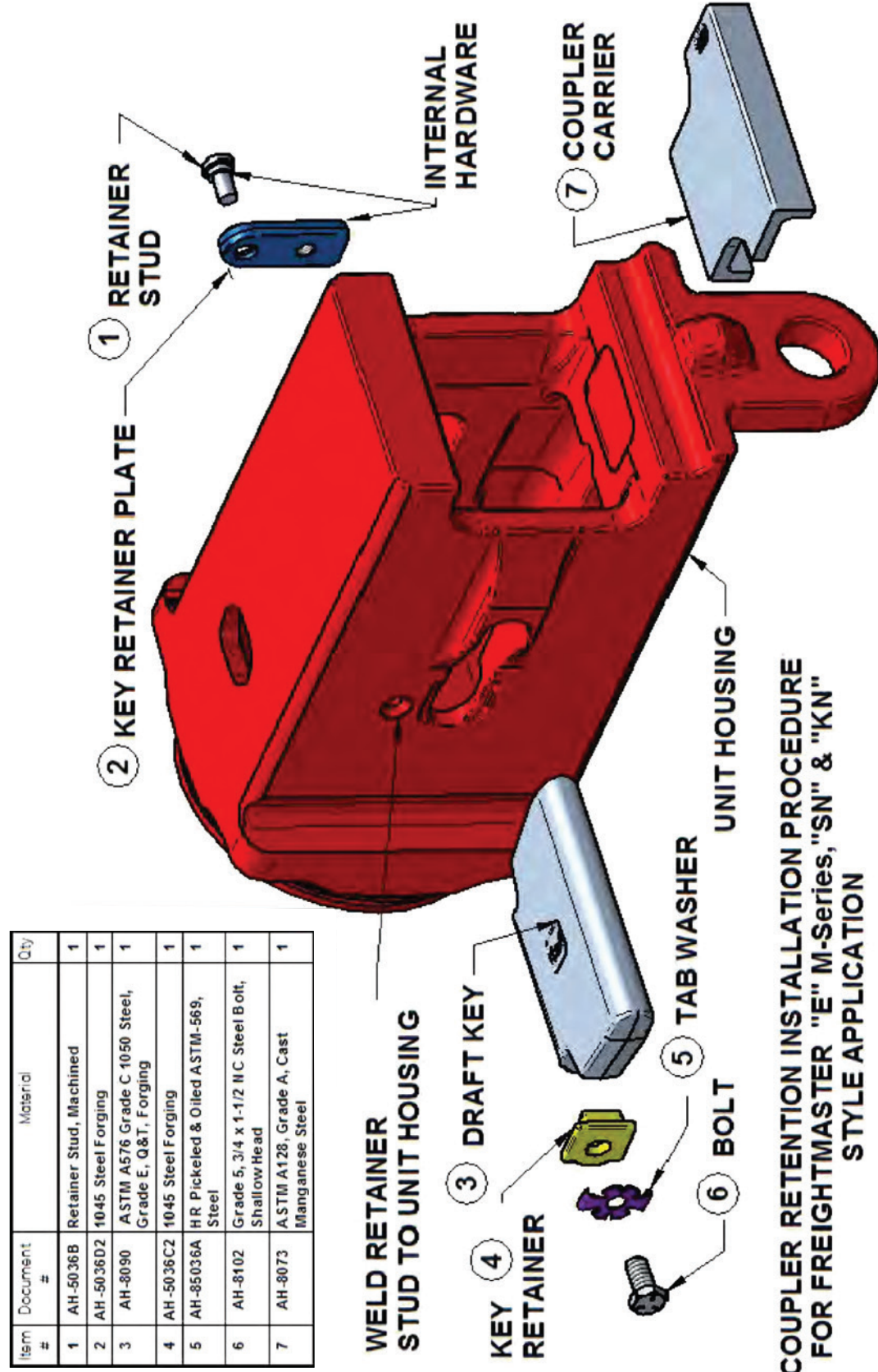
MANIFOLD CHARGE/DISCHARGE PARTS

AH STOCK CODE	STOCK CODE FOR MAINFOLDS ONLY	DESCRIPTION	LONG DESCRIPTION	DRAWING NUMBER	LIST PRICE MANIFOLDS ONLY
23111661		Schrader high pressure charge	Connector #5560099 (T valve)		
23112261		3" Valve Stem Extension	HE-371, Haltec Corp		
23112251		6" Valve Extension	HE-393, Haltec Corp		
23111691		1/4" X 12" High Pressure Hyd	Hose Assy For Manifold Kit		
23111701		1/4" X 15" High Pressure Hyd	Hose Assy For Manifold Kit		
23111681		2-1/2" STNLS LM 0-1000 PSI LIQ	Dixon Gauge, 1/4" LMT		
23112191		Regulator, VIC0781-1428	Charging Kit Add-on, Nitrogen		
	23112281	Schrader Manifold Valve Body	1" Stressproof Hex, #SCM-1001	SCM-1001	
		D-PRO Purge Valve	1/8" Male NPT, Brass, PE Ball		104.00
		Schrader High Pressure Charge	Connector, #5560099		
		Elbow connection			
		Oleo Manifold Relief Handle			
		Oleo Manifold Charging Stem			
	23112271	Oleo Style Manifold Valve Body	Stainless Steel	KS038084A	456.00
		Oleo Style Manifold Adaptor			
		Oleo Manifold Stem Holder			
23111721		Schrader, Manifold Complete Bleed	Kit Assy, W/ 12" Hose/female quick disconnect		
23111711		Schrader, Manifold Complete Charge	Kit Assy, W/15' Hose		
23112241	*	Schrader Manifold Complete	w/15' Hose, and Regulator		
23107211	*	Oleo, Manifold Complete Bleed	Kit Assy, W/ 12" Hose/female quick disconnect		
23112211		Oleo, Manifold Complete Charge	Kit Assy, W/15' Hose		
23102811		Oleo Manifold Complete	w/15' Hose, and Regulator		

* For a complete charge & discharge kit for both units type, item 23112241 & 23107211 both need to be ordered and includes all items pictured
NOTE: the Oleo is also known as the AH or European valve

5036 KEY RETAINING SYSTEM W/ DRAFT KEY & CARRIER

STOCK CODE: 5036RSKC



Item #	Document #	Material	Qty
1	AH-5036B	Retainer Stud, Machined	1
2	AH-5036D2	1045 Steel Forging	1
3	AH-8090	ASTM A576 Grade C 1050 Steel, Grade E, Q&T, Forging	1
4	AH-5036C2	1045 Steel Forging	1
5	AH-85036A	HR Pickled & Oiled ASTM-569, Steel	1
6	AH-8102	Grade 5, 3/4 x 1-1/2 NC Steel Bolt, Shallow Head	1
7	AH-8073	ASTM A128, Grade A, Cast Manganese Steel	1

WELD RETAINER STUD TO UNIT HOUSING

KEY RETAINER

3 DRAFT KEY

5 TAB WASHER

6 BOLT

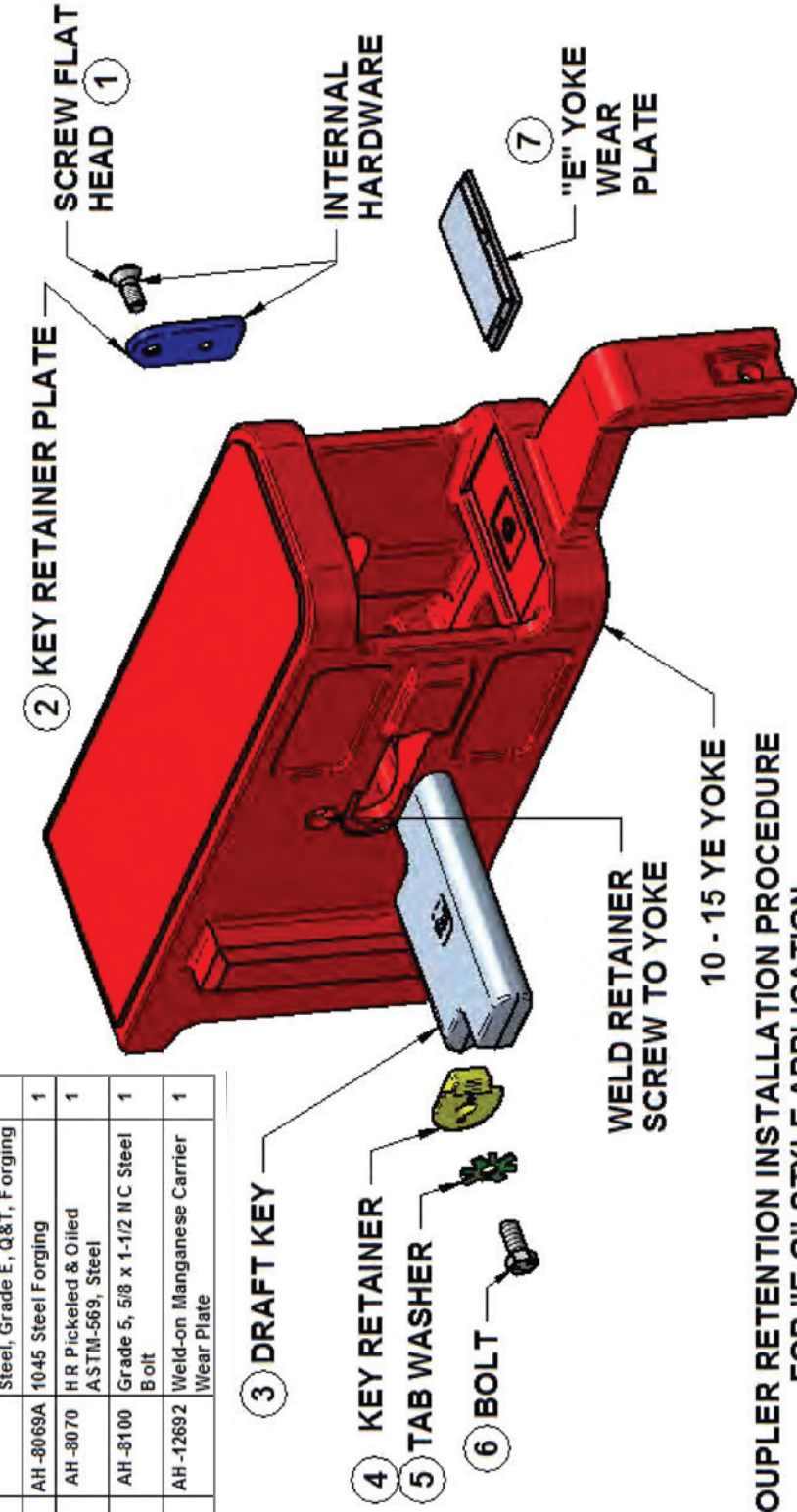
UNIT HOUSING

COUPLER RETENTION INSTALLATION PROCEDURE FOR FREIGHTMASTER "E" M-Series, "SN" & "KN" STYLE APPLICATION

INSTALL COUPLER, DRAFT KEY, KEY RETAINER, TAB WASHER AND BOLT, TORQUE BOLT TO 125-170 FT/LBS, BEND AT LEAST (2) TABS OVER ONTO THE FLATS OF THE BOLT.

4608 KEY RETAINING SYSTEM

STOCK CODE: 4608RSK



Item #	Document #	Material	Qty
1	AH-8099	5/8 x 1-1/2 Flat Head Screw	1
2	AH-8068	1045 Steel Forging	1
3	AH-8081	ASTM A576 Grade C 1050 Steel, Grade E, Q&T, Forging	1
4	AH-8069A	1045 Steel Forging	1
5	AH-8070	HR Pickled & Oiled ASTM-569, Steel	1
6	AH-8100	Grade 5, 5/8 x 1-1/2 NC Steel Bolt	1
7	AH-12692	Weld-on Manganese Carrier Wear Plate	1

3 DRAFT KEY

4 KEY RETAINER

5 TAB WASHER

6 BOLT

WELD RETAINER SCREW TO YOKE

10 - 15 YE YOKE

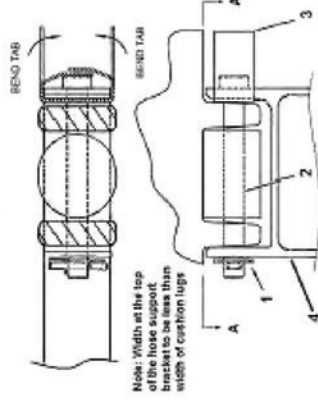
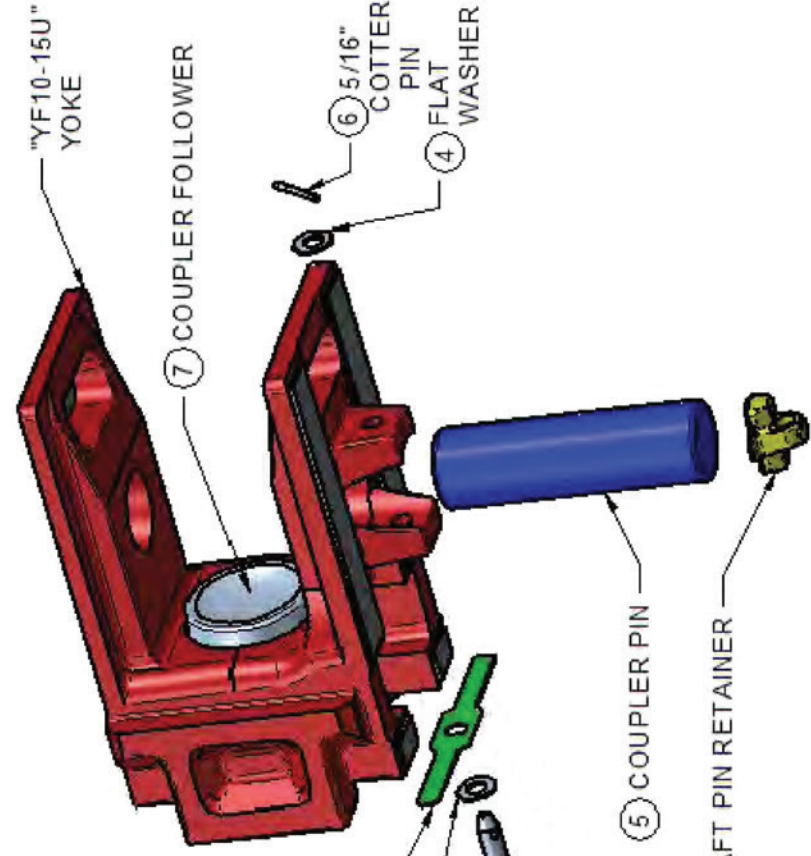
COUPLER RETENTION INSTALLATION PROCEDURE FOR "E-G" STYLE APPLICATION

INSTALL COUPLER, DRAFT KEY, KEY RETAINER, TAB WASHER AND BOLT, TORQUE BOLT TO 25 FT/LBS, BEND AT LEAST (3) TABS OVER ONTO THE FLATS OF THE BOLT.

TYPE "F" -KNU RETENTION SYSTEM

STOCK CODE: 3450 RSP

Item #	Document #	Stock Code	Title	Material	Qty
1	AH8105AC	23102451	7/8" Std. Pin Retainer, Pin	4140 Q&T Steel, BNH 300-350 Hardness	1
2	RE-03-5705	RE035705	Draft Pin Retainer	ASTM A27, Class 70 - 40 Steel Casting	1
3	AH8105AC	23102541	Pin Keeper / Single Strap	A569 or A1011 Steel, 11 Ga.	1
4	AH8105AC	RA030009	Plain washer type A ANSI B18.22.1 narrow 7/8	Hardened steel	2
5	AH-8089	AH8089	Coupler Pin	AISI C-1060 or Equivalent	1
6	AH8105AC	23108911	Cotter pin ANSI B18.8.1 5/16	Steel, ANSI B18.8.1 Hardened	1
7	K3-03-3451	K3033451	Coupler Follower #1	AISI C-1030, Steel Forging, 311 BNH MIN.	1



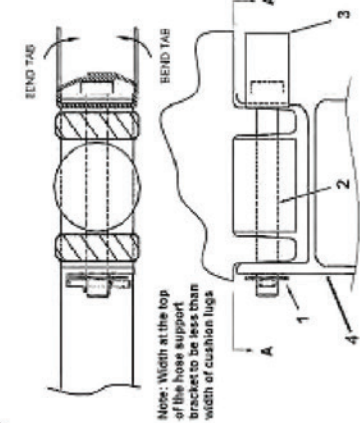
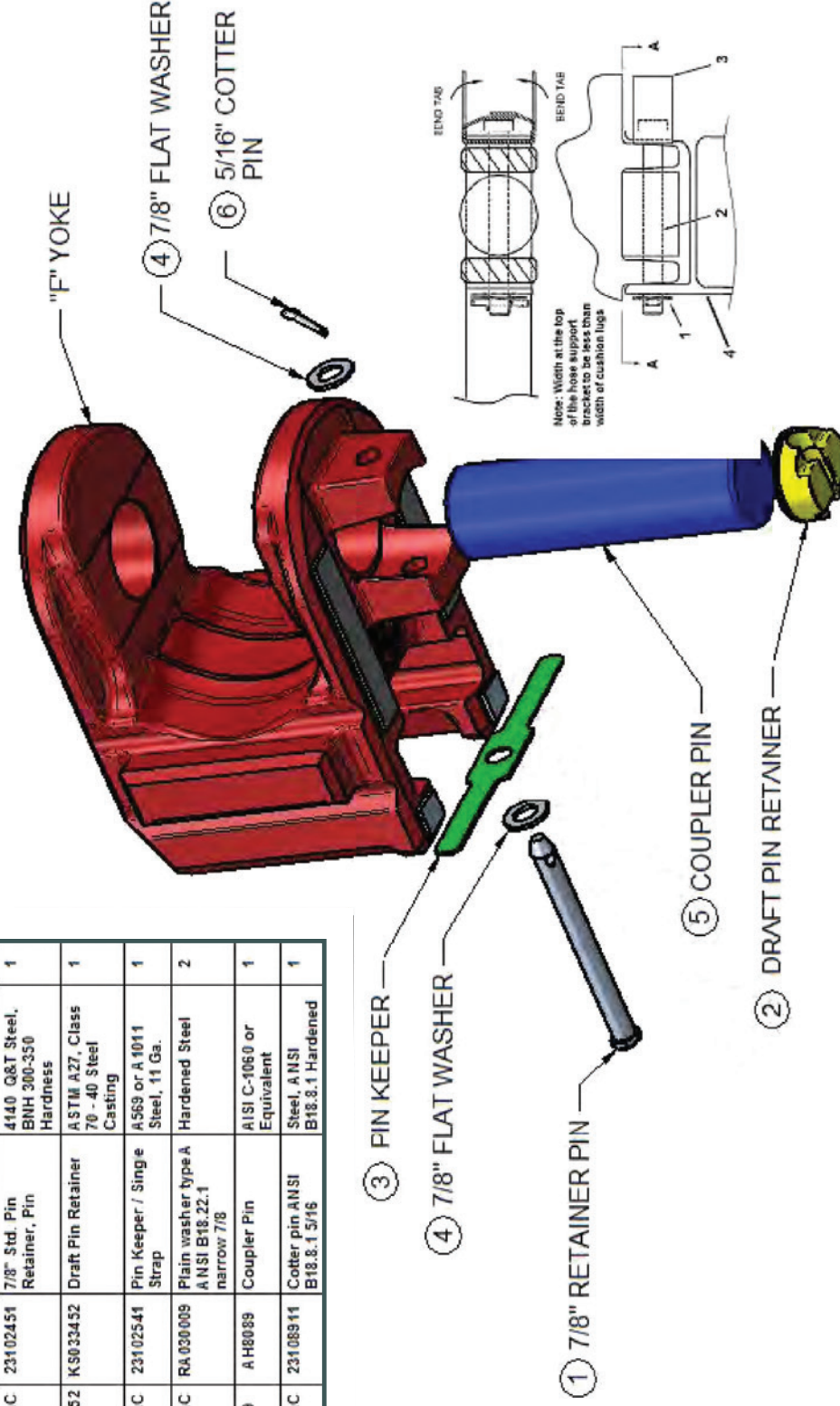
INSTALL COUPLER, DRAFT PIN, DRAFT PIN RETAINER, INSERT 7/8" RETAINER PIN, FLAT WASHER, PIN KEEPER, FLAT WASHER, AND COTTER PIN, BEND BOTH LEGS OF COTTER PIN.

COUPLER RETENTION INSTALLATION PROCEDURE FOR FREIGHTMASTER TYPE "F"-KNU SERIES STYLE APPLICATION

TYPE "F" -KN SERIES RETENTION SYSTEM

STOCK CODE: 5702RSP

Item #	Document #	Stock Code	Title	Material	Qty
1	AH8105AC	23102451	7/8" Std. Pin Retainer, Pin	4140 Q&T Steel, BNH 300-350 Hardness	1
2	KS-03-3452	K5033452	Draft Pin Retainer	ASTM A27, Class 70 - 40 Steel Casting	1
3	AH8105AC	23102541	Pin Keeper / Single Strap	A569 or A1011 Steel, 11 Ga.	1
4	AH8105AC	RA030009	Plain washer type A ANSI B18.22.1 narrow 7/8	Hardened Steel	2
5	AH-8089	AH8089	Coupler Pin	AISI C-1060 or Equivalent	1
6	AH8105AC	23108911	Cotter pin ANSI B18.8.1 5/16	Steel, ANSI B18.8.1 Hardened	1



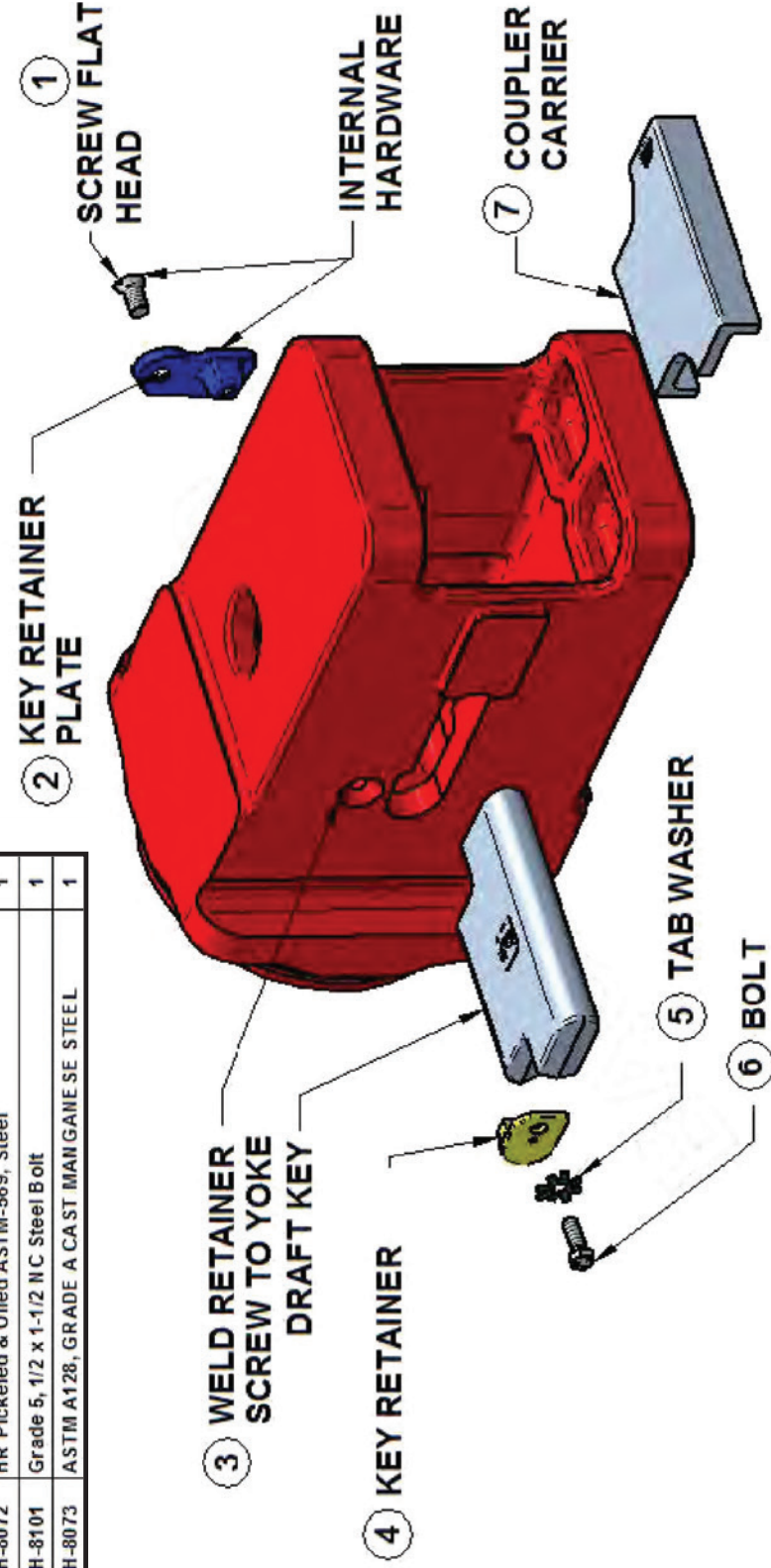
INSTALL COUPLER, DRAFT PIN, DRAFT PIN RETAINER, INSERT 7/8" RETAINER PIN, FLAT WASHER, PIN KEEPER, FLAT WASHER, AND COTTER PIN, BEND BOTH LEGS OF COTTER PIN.

COUPLER RETENTION INSTALLATION PROCEDURE FOR FREIGHTMASTER TYPE "F"-KN SERIES STYLE APPLICATION

8114 KEY RETAINING SYSTEM W/ DRAFT KEY & CARRIER

STOCK CODE: 8114RSKC

Item#	Document #	Material	Qty
1	AH-8099	5/8 x 1-1/4 Flat Head Screw	1
2	AH-8067	1045 Steel Forging	1
3	AH-8081	ASTM A576 Grade C 1050 Steel, Grade E, Q&T, Forging	1
4	AH-8066	1045 Steel Forging	1
5	AH-8072	HR Pickled & Oiled ASTM-569, Steel	1
6	AH-8101	Grade 5, 1/2 x 1-1/2 NC Steel Bolt	1
7	AH-8073	ASTM A128, GRADE A CAST MANGANESE STEEL	1



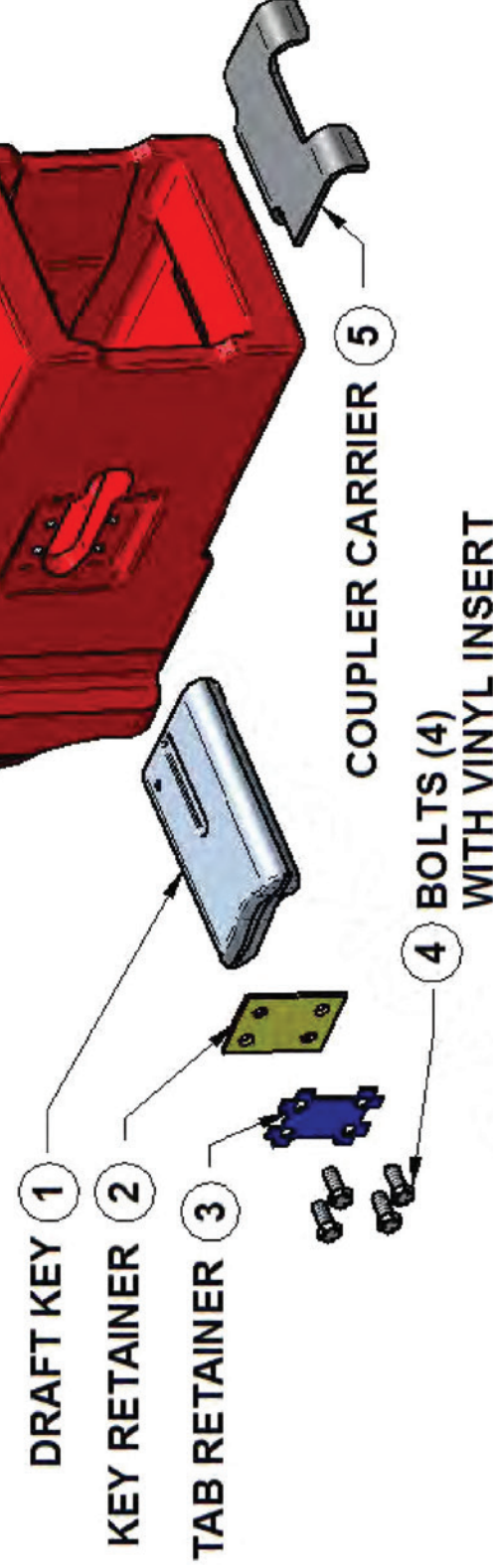
COUPLER RETENTION INSTALLATION PROCEDURE FOR "E10 & E15 GR" STYLE APPLICATION

INSTALL COUPLER, DRAFT KEY, KEY RETAINER, TAB WASHER AND BOLT, TORQUE BOLT TO 25 FT/LBS, BEND AT LEAST (3) TABS OVER ONTO THE FLATS OF THE BOLT.

8230 KEY RETAINING SYSTEM W/ CROSSKEY & CARRIER

STOCK CODE: 8230RSKC

Item Number	Document Number	Material	Quantity
1	AH-8143	ASTM A576 Grade C 1050 Steel, Grade E, Q&T, Forging	1
2	AH-8110	Grade 50, Steel Plate	1
3	AH-8111	HR Pickled & Oiled ASTM-569, Steel	1
4	AH-8224	Grade 5 Bolt, w/vinyl insert	4
5	C246913	ASTM A128, 11%-.14%, Manganese Steel	1



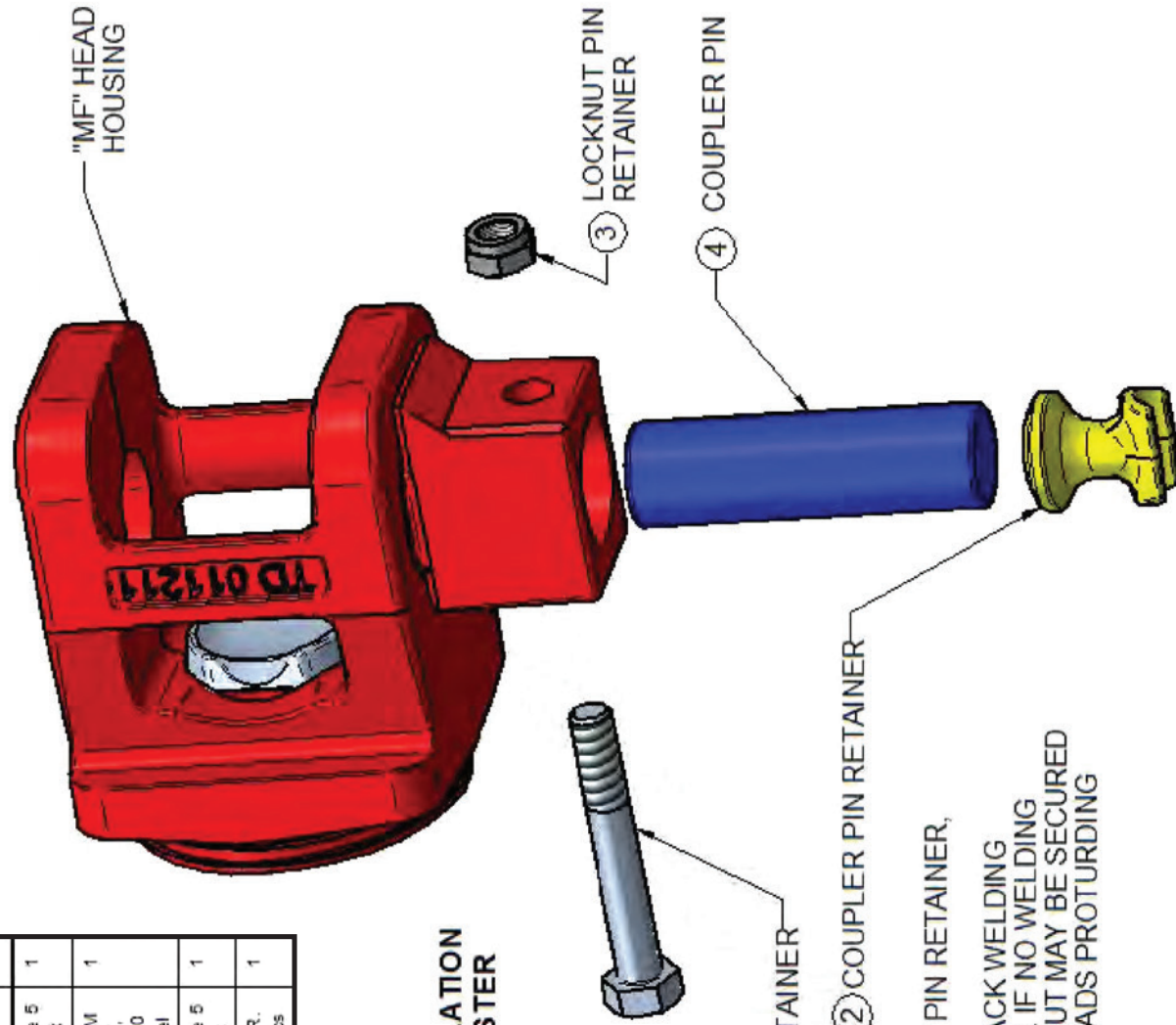
INSTALL COUPLER, DRAFT KEY, KEY RETAINER, TAB RETAINER, AND BOLTS, TORQUE BOLTS TO 20-35 FT/LBS, BEND TABS OF TAB RETAINER AGAINST 2 FLATS OF EACH BOLT HEAD TO SECURE BOLTS.

COUPLER RETENTION INSTALLATION PROCEDURE FOR FREIGHTSAVER TYPE "E-VM" STYLE APPLICATION

TYPE "MF" SERIES RETAINING SYSTEM

STOCK CODE: FMRPBN

Item #	Document Number	Stock code	Title	Material	Qty
1	RA-03-0004	RA030004	Pin Retainer Bolt	Grade 5 bolt	1
2	RA-03-0003	RA030003	Pin Retainer	ASTM A27, 70-40 Steel	1
3	RA-03-0005	RA030005	1-1/2" x 6, Stover Crimp Nut	Grade 5 Nut	1
4	AH-8089	AH8089	Vertical Coupler Pin	A.A.R. Specs	1



COUPLER RETENTION INSTALLATION PROCEDURE FOR FREIGHTMASTER TYPE "F"-M SERIES STYLE APPLICATION

① BOLT PIN RETAINER

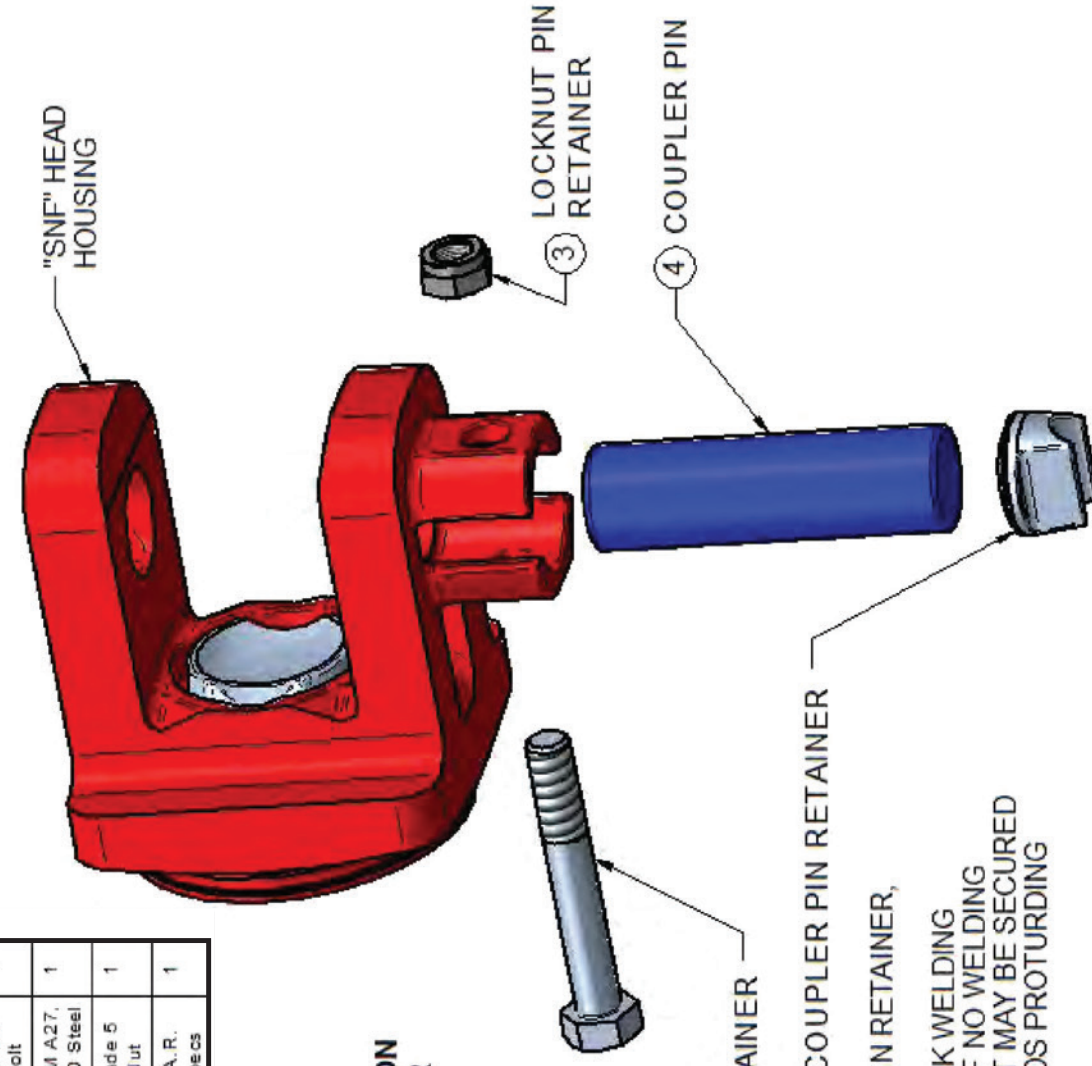
② COUPLER PIN RETAINER

INSTALL COUPLER, DRAFT PIN, DRAFT PIN RETAINER, BOLT AND LOCKNUT. SECURE THE LOCKNUT TO BOLT BY TACK WELDING LOCKNUT TO THE BOLT PIN RETAINER. IF NO WELDING CAPABILITY IS AVAILABLE, THE LOCKNUT MAY BE SECURED BY CHISEL CHECKING THE BOLT THREADS PROTRUDING FROM THE NUT.

TYPE "SNF" SERIES RETAINING SYSTEM

STOCK CODE: SNFRPBN

Item Number	Document Number	Stock code	Title	Material	Qty
1	RA-03-0004	RA030004	Pin Retainer Bolt	Grade 5 bolt	1
2	AH-8104	AH8104	Pin Retainer	ASTM A27, 70-40 Steel	1
3	RA-03-0005	RA030005	1-1/2" x 6, Stover Crimp Nut	Grade 5 Nut	1
4	AH-8089	AH8089	Vertical Coupler Pin	A.A.R. Specs	1



COUPLER RETENTION INSTALLATION PROCEDURE FOR FREIGHTMASTER TYPE "F"-SN SERIES STYLE APPLICATION

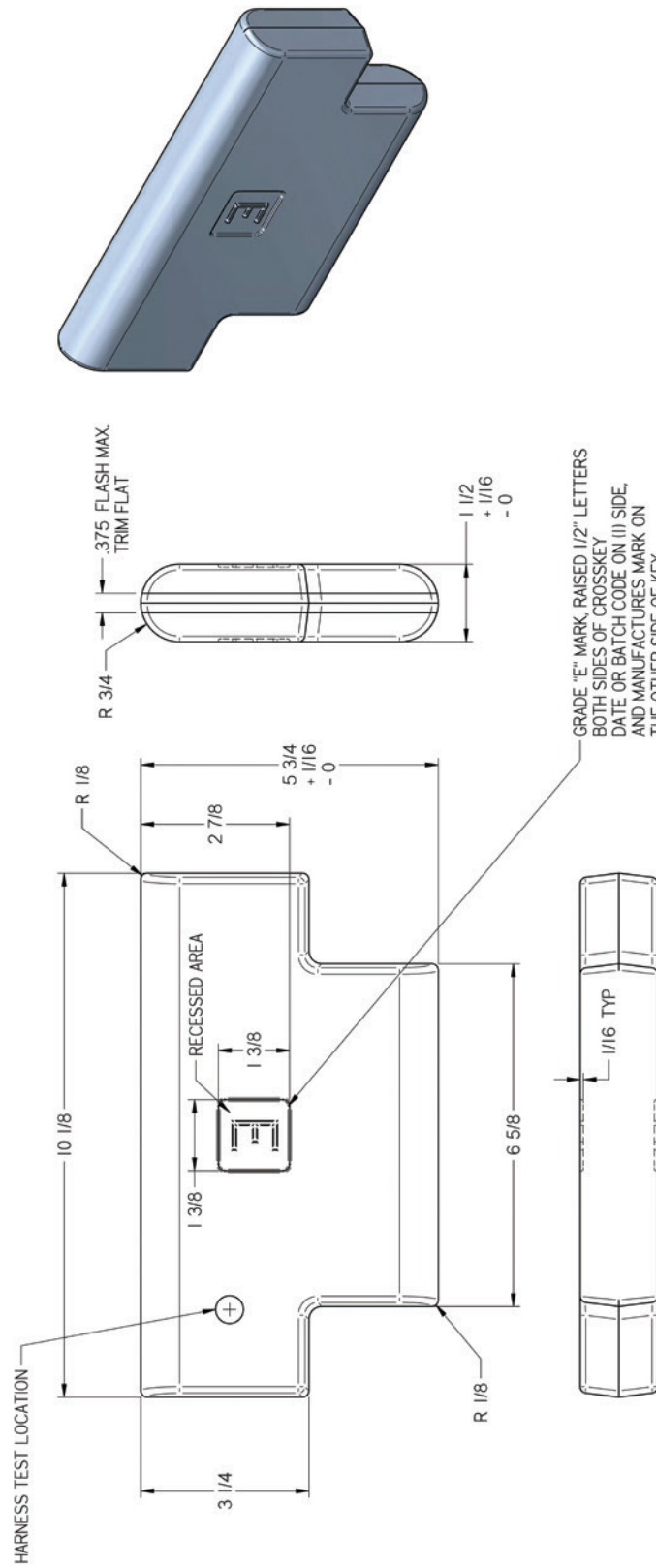
① BOLT PIN RETAINER

② COUPLER PIN RETAINER

INSTALL COUPLER, DRAFT PIN, DRAFT PIN RETAINER, BOLT AND LOCKNUT. SECURE THE LOCKNUT TO BOLT BY TACK WELDING LOCKNUT TO THE BOLT PIN RETAINER. IF NO WELDING CAPABILITY IS AVAILABLE, THE LOCKNUT MAY BE SECURED BY CHISEL CHECKING THE BOLT THREADS PROTRUDING FROM THE NUT.

CROSSKEY "E" YOKE FORGING

WEIGHT: 19.504 LBM
 MATERIAL: ASTM A576 AISI 1050 STEEL
 STOCK CODE: AH8081



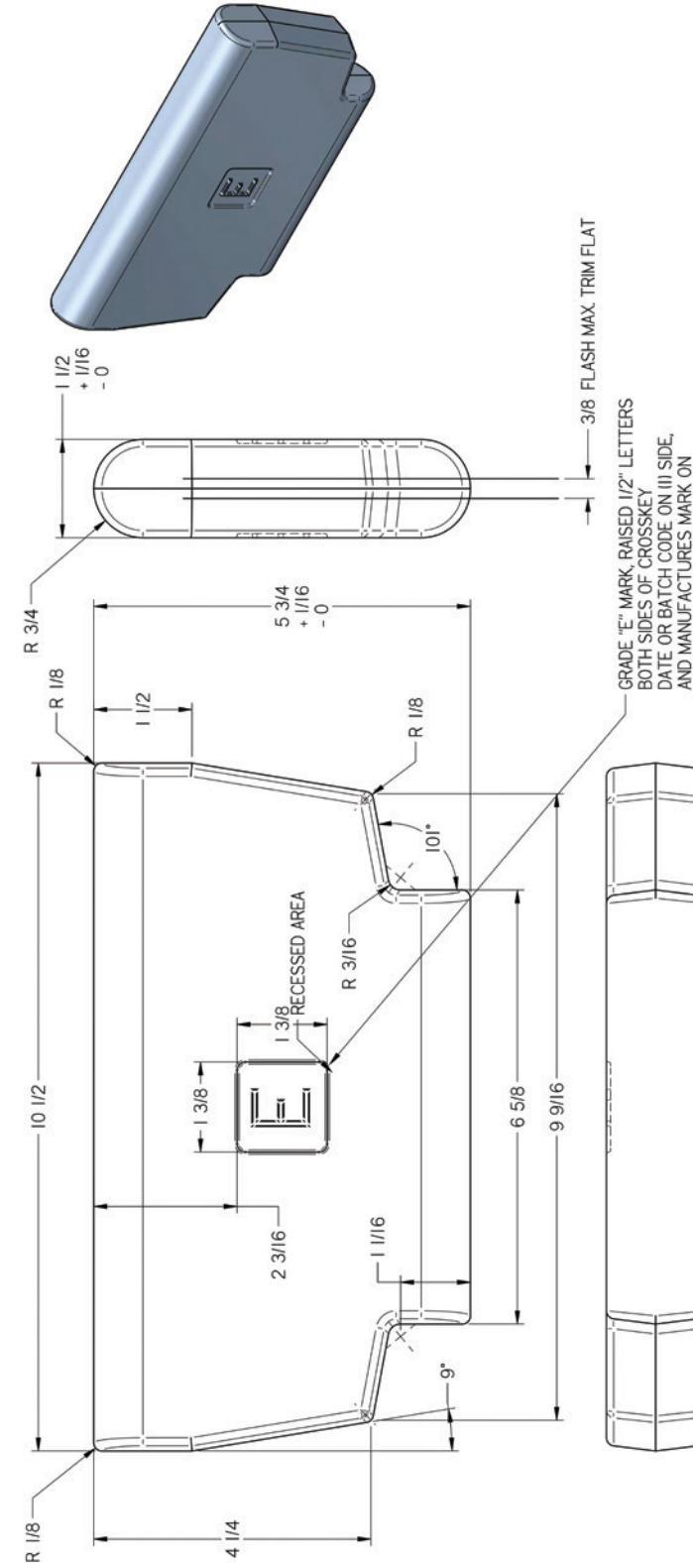
SEE MARKING STD. A.A.R. SPEC. S-121, Revised 2015

NOTE: ASTM A576 AISI 1050 STEEL GRADE "E" DRAFT KEY, QUENCHED AND TEMPER TO A SURFACE HARDNESS OF 262 - 302 BNH. LOCATION TO VERIFY SURFACE HARDNESS MUST HAVE SCALE REMOVED PRIOR TO MEASURING HARDNESS. AREA MAY BE GROUND TO DEPTH OF .06" FILLET RADIUS 1/8".

CORNER RADII 1/8".
 DRAFT ANGLES 7° ± 1/32" MAX.
 FLASH EXTENSION 1/32" MAX.
 MISMATCH 1/32" MAX.

F/M ME CROSSKEY FORGING

WEIGHT: 21.304 LBM
 MATERIAL: ASTM A576 AISI 1050 STEEL
 STOCK CODE: AH8090



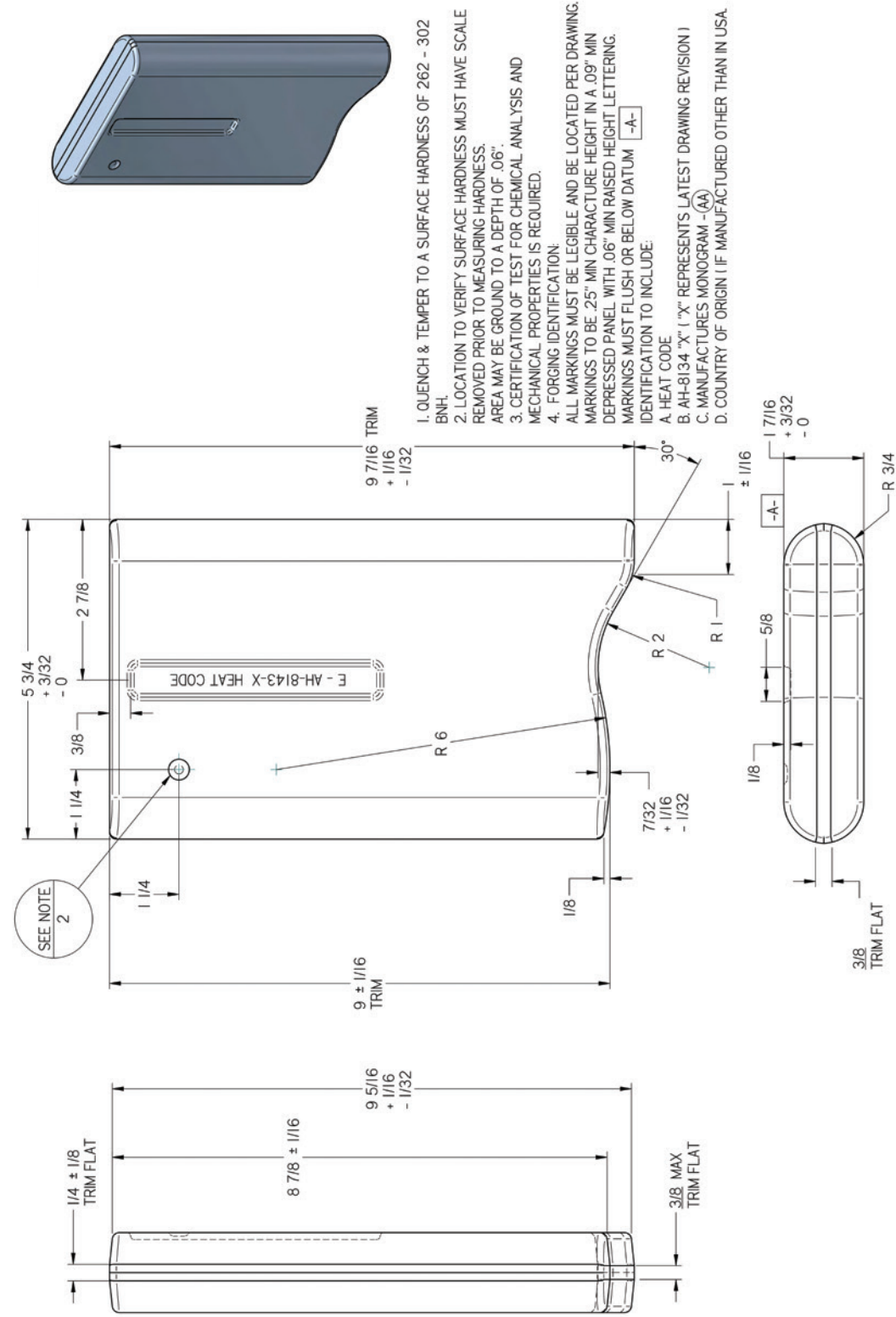
SEE MARKING STD. A.A.R. SPEC. S-121, Revised 2015

NOTE: ASTM A576 AISI 1050 STEEL GRADE "E" DRAFT KEY, QUENCHED AND TEMPER TO A SURFACE HARDNESS OF 262 - 302 BNH. LOCATION TO VERIFY SURFACE HARDNESS MUST HAVE SCALE REMOVED PRIOR TO MEASURING HARDNESS. AREA MAY BE GROUND TO DEPTH OF .06" FILLET RADIUS 1/8".

CORNER RADII 1/8".
 DRAFT ANGLES 7° ± 1/32" MAX.
 FLASH EXTENSION 1/32" MAX.
 MISMATCH 1/32" MAX.

E-10/15YM CROSSKEY

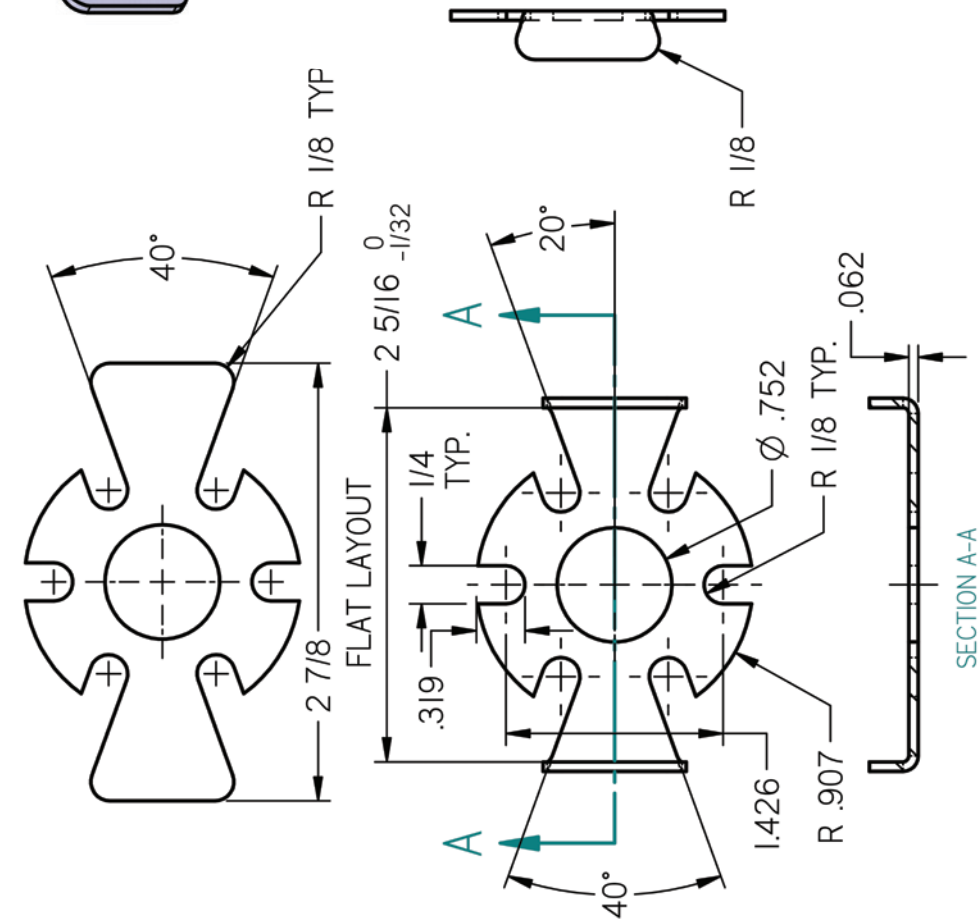
WEIGHT: 19.677 LBM
 MATERIAL: ASTM A-572, AISI 1050 STEEL
 STOCK CODE: AH-8143



1. QUENCH & TEMPER TO A SURFACE HARDNESS OF 262 - 302 BHN.
 2. LOCATION TO VERIFY SURFACE HARDNESS MUST HAVE SCALE REMOVED PRIOR TO MEASURING HARDNESS. AREA MAY BE GROUND TO A DEPTH OF .06".
 3. CERTIFICATION OF TEST FOR CHEMICAL ANALYSIS AND MECHANICAL PROPERTIES IS REQUIRED.
 4. FORGING IDENTIFICATION.
- ALL MARKINGS MUST BE LEGIBLE AND BE LOCATED PER DRAWING. MARKINGS TO BE .25" MIN CHARACTER HEIGHT IN A .09" MIN DEPRESSED PANEL WITH .06" MIN RAISED HEIGHT LETTERING. MARKINGS MUST FLUSH OR BELOW DATUM \square -A.
- IDENTIFICATION TO INCLUDE:
- A. HEAT CODE
 - B. AH-8143 "X" ("X" REPRESENTS LATEST DRAWING REVISION)
 - C. MANUFACTURER'S MONOGRAM - (AA)
 - D. COUNTRY OF ORIGIN (IF MANUFACTURED OTHER THAN IN USA)

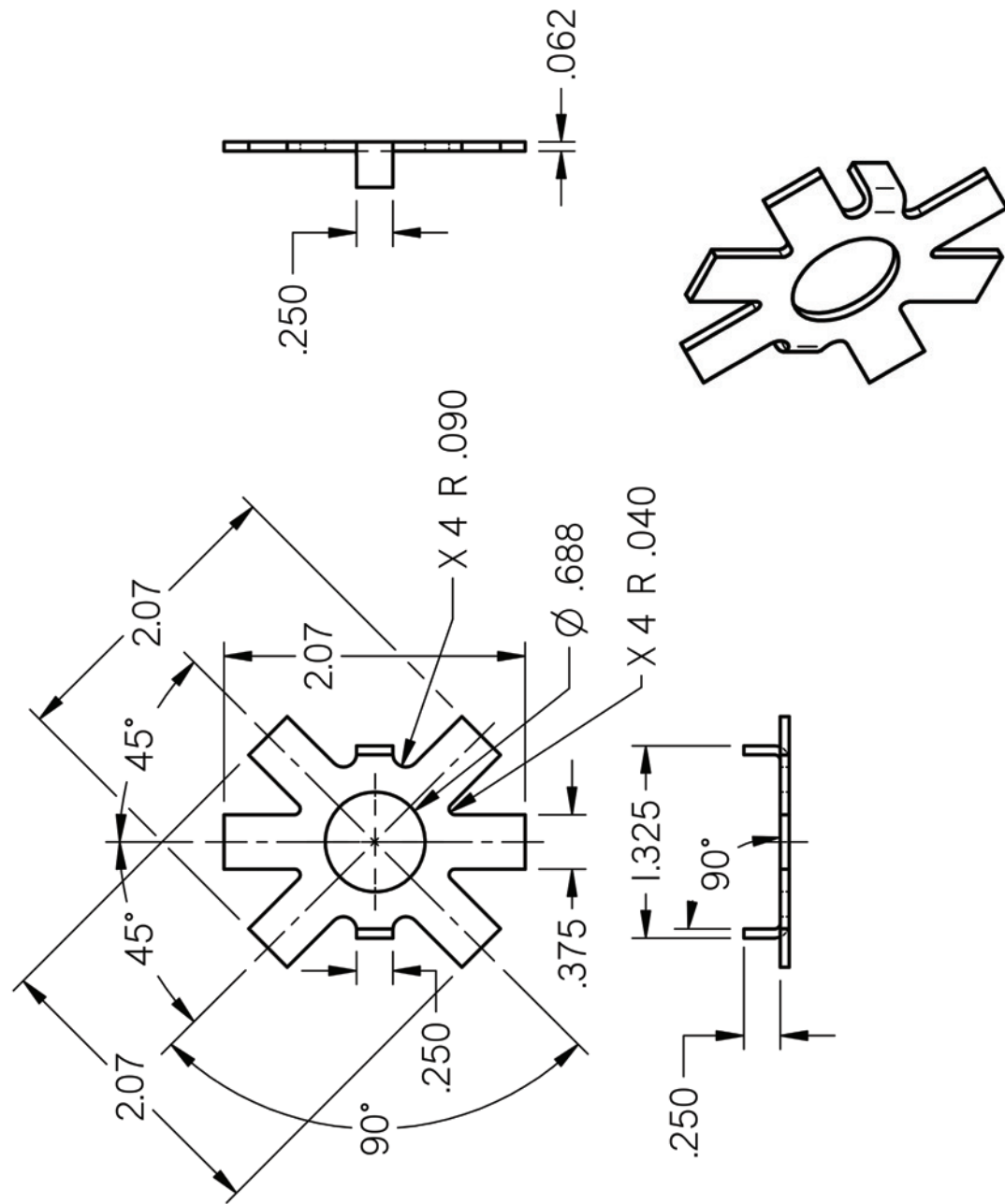
F/M ME CROSSKEY TAB WASHER

WEIGHT: 0.046 LBM
 MATERIAL: STEEL, A36



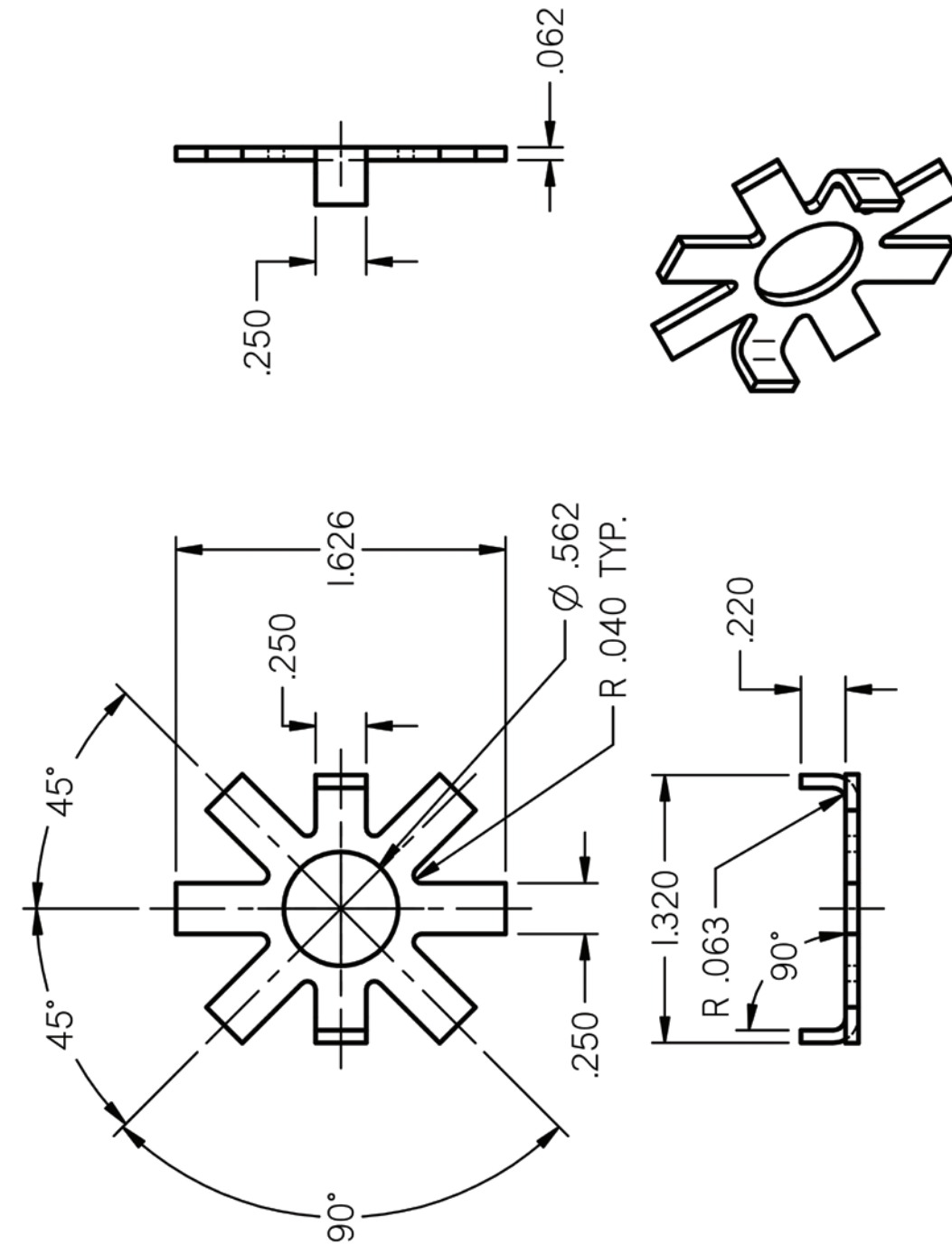
CROSSKEY BOLT LOCKING TAB

WEIGHT: 0.033 LBM
 MATERIAL: HR PICKLED 7 OILED ASTM-569, STEEL
 STOCK CODE: AH8070



CROSSKEY BOLT LOCKING TAB

WEIGHT: 0.020 LBM
 MATERIAL: HR PICKLED & OILED ASTM-569, STEEL
 STOCK CODE: AH-8072

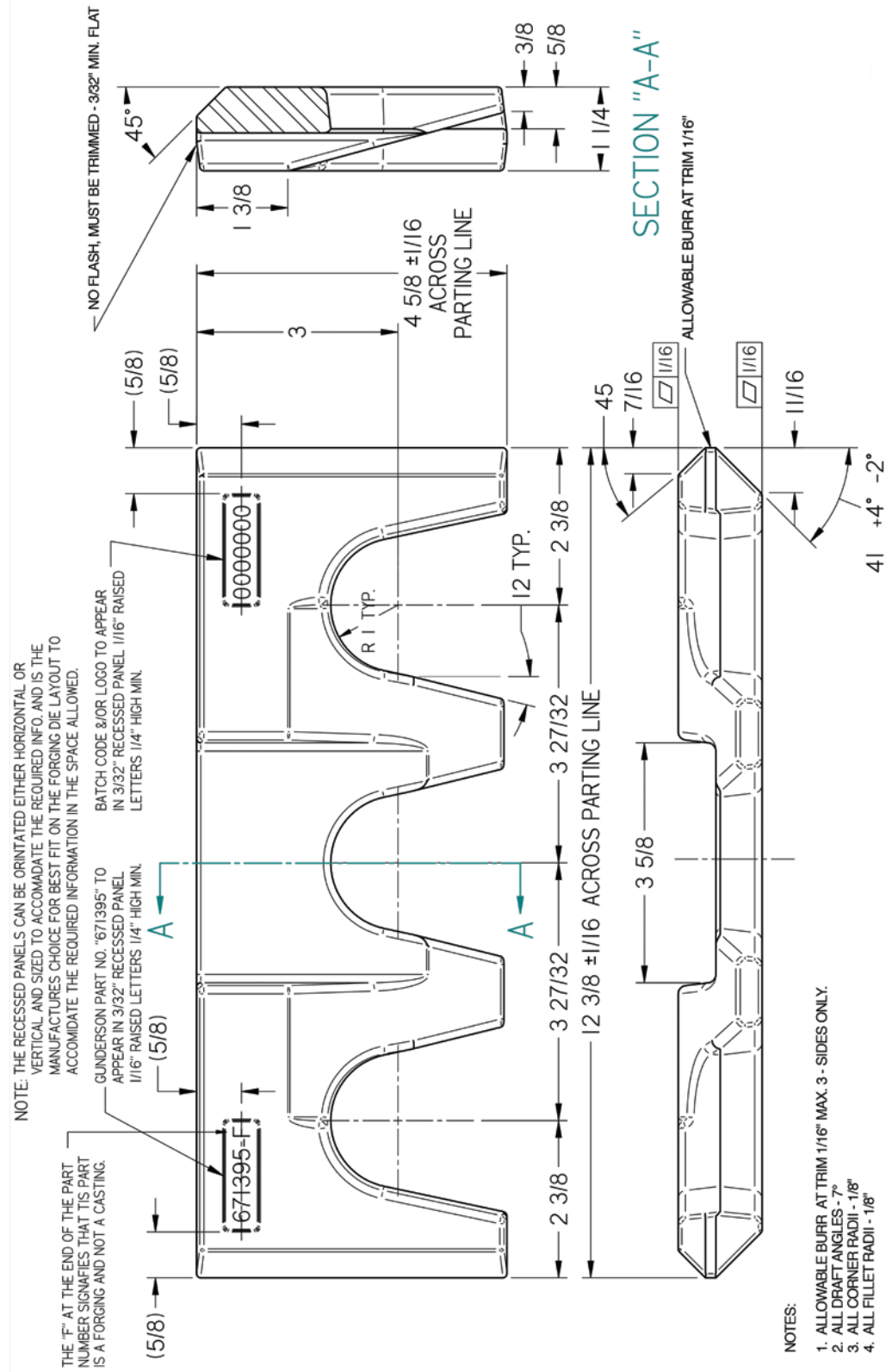


FRONT DRAFT LUG FORGED

WEIGHT: 10.383 LBM

MATERIAL: ASTM A576, AISI 1035 QT, 50 KSI MIN. YIELD, 170 - 220 BNH, 20% MIN. ELONGATION

STOCK CODE: AH8106



- NOTES:
1. ALLOWABLE BURR AT TRIM 1/16" MAX. 3 - SIDES ONLY.
 2. ALL DRAFT ANGLES - 7°
 3. ALL CORNER RADII - 1/8"
 4. ALL FILLET RADII - 1/8"
- TOLERANCES : UNLESS OTHERWISE SPECIFIED
ALL DIMENSIONS ± 1/16"
ALL DRAFT ANGLES +2° - 1°

CERTIFICATIONS: Chemical analysis and mechanical property test certification required

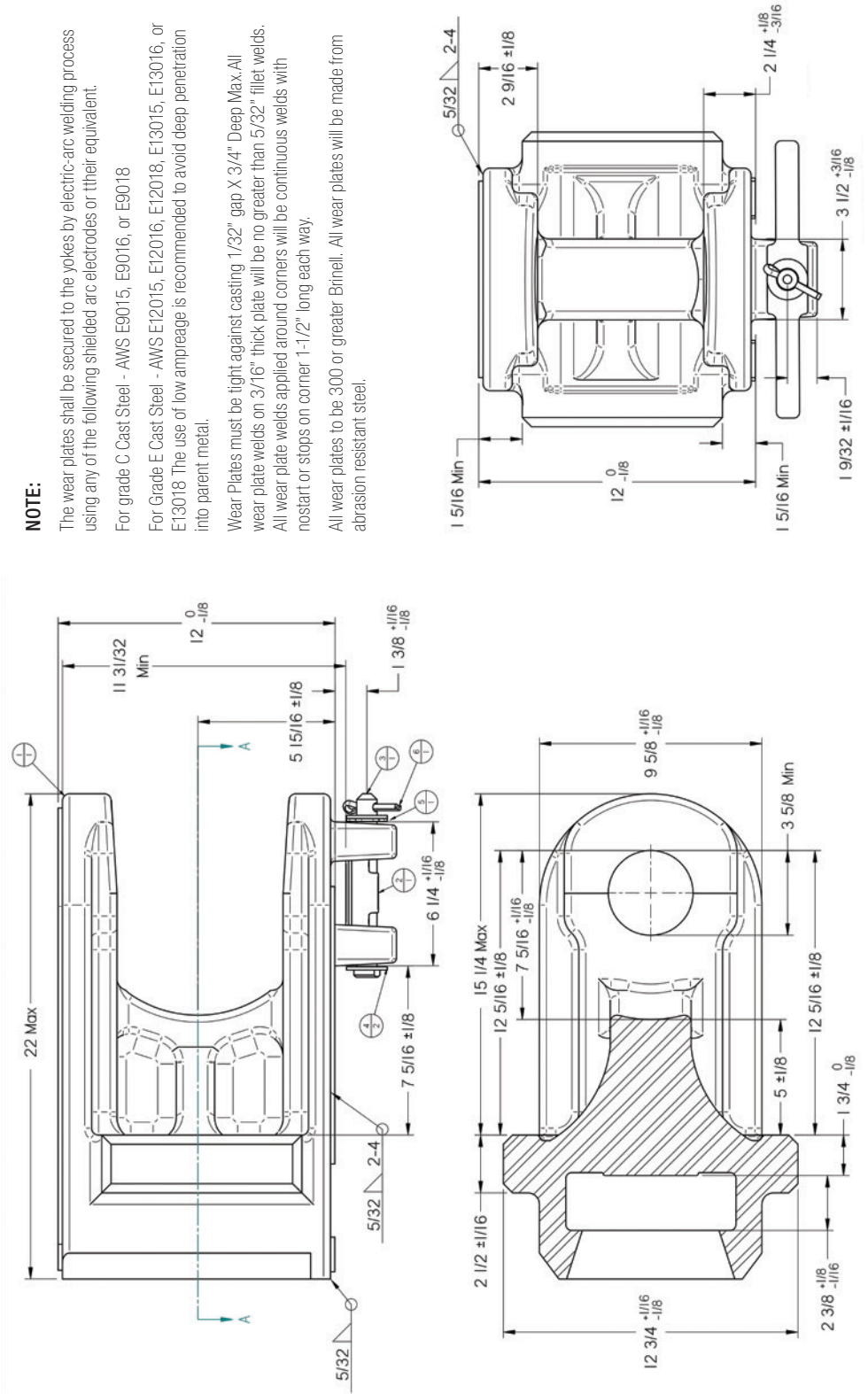
15YF YOKE, EOC POCKETS 10, AND 26

WEIGHT: 294

YOKE MATERIAL: A.A.R. M-201, GRADE "E" STEEL CASTING

STOCK CODE: 5704N /RAW CASTING STOCK CODE: 23102291

SHOW W/ AH-8105 A-C PIN RETAINING SYSTEM



Please Note: This is a limited catalog. For more information regarding our additional product offerings, please contact our customer service at 877.94.PARTS.

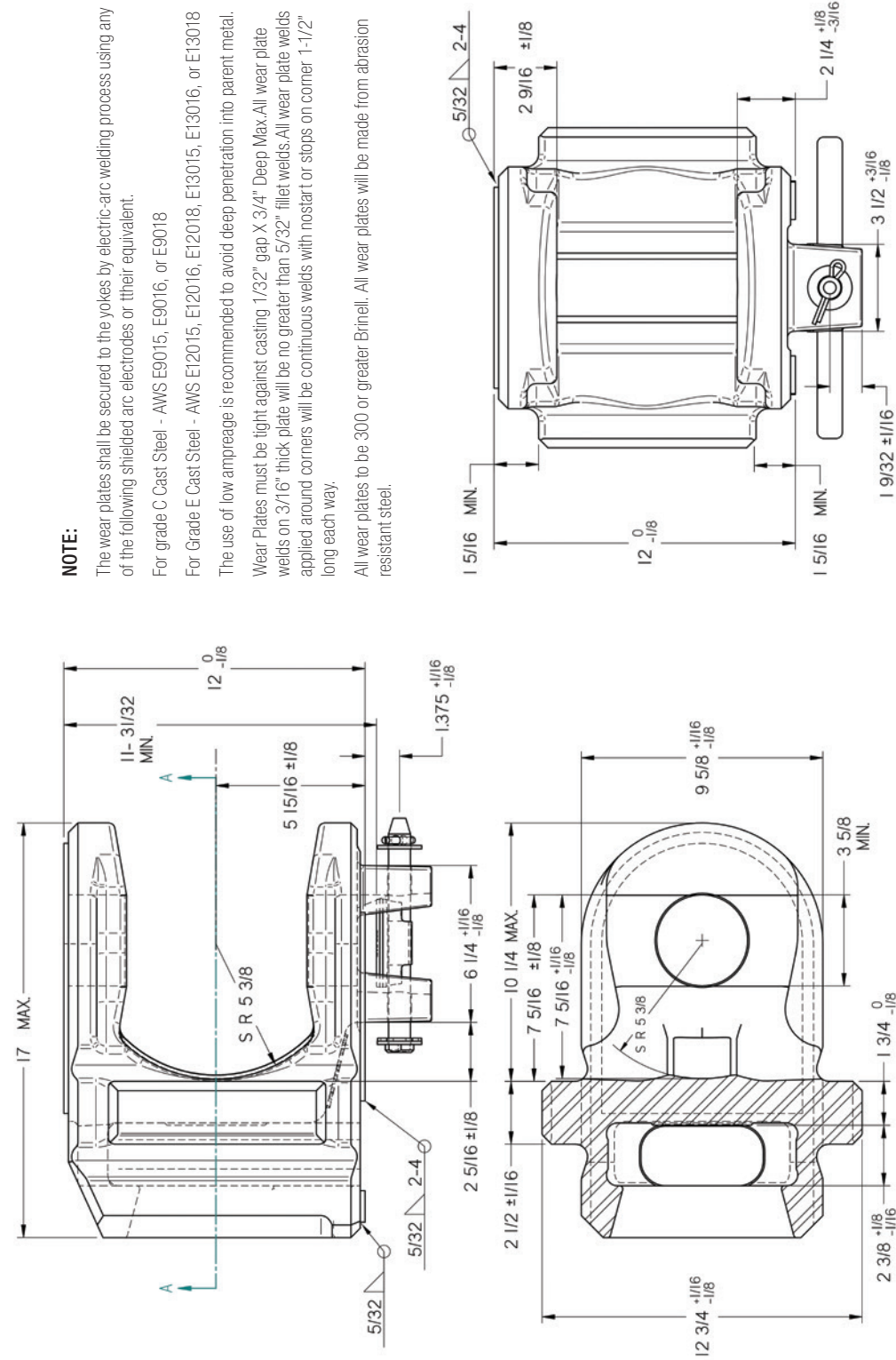
10YF YOKE, EOC 9

WEIGHT: 225.054 lbm

YOKE CASTING MATERIAL: AAR M-201 GRADE "E" STEEL

STOCK CODE: 5702N /RAW CASTING STOCK CODE: 23110281

SHOW W/ AH-8105 A-C PIN RETAINING SYSTEM



NOTE:

The wear plates shall be secured to the yokes by electric-arc welding process using any of the following shielded arc electrodes or their equivalent.

For grade C Cast Steel - AWS E9015, E9016, or E9018

For Grade E Cast Steel - AWS E12015, E12016, E12018, E13015, E13016, or E13018

The use of low amperage is recommended to avoid deep penetration into parent metal.

Wear Plates must be tight against casting 1/32" gap X 3/4" Deep Max. All wear plate welds on 3/16" thick plate will be no greater than 5/32" fillet welds. All wear plate welds applied around corners will be continuous welds with no start or stops on corner 1-1/2" long each way.

All wear plates to be 300 or greater Brinell. All wear plates will be made from abrasion resistant steel.

10-15 YE YOKE

WEIGHT: 440

MATERIAL: A.A.R. M-901, GRADE "E" STEEL CASTING

STOCK CODE: 4608NI5TB

NOTE:

The wear plates shall be secured to the yokes by electric-arc welding process using any of the following shielded arc electrodes or their equivalent.

For grade C Cast Steel - AWS E9015, E9016, or E9018

For Grade E Cast Steel - AWS E12015, E12016, E12018, E13015, E13016, or E13018

The use of low amperage is recommended to avoid deep penetration into parent metal.

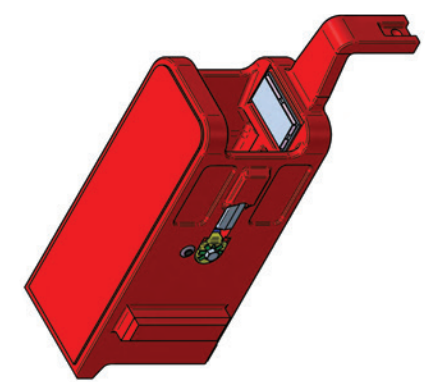
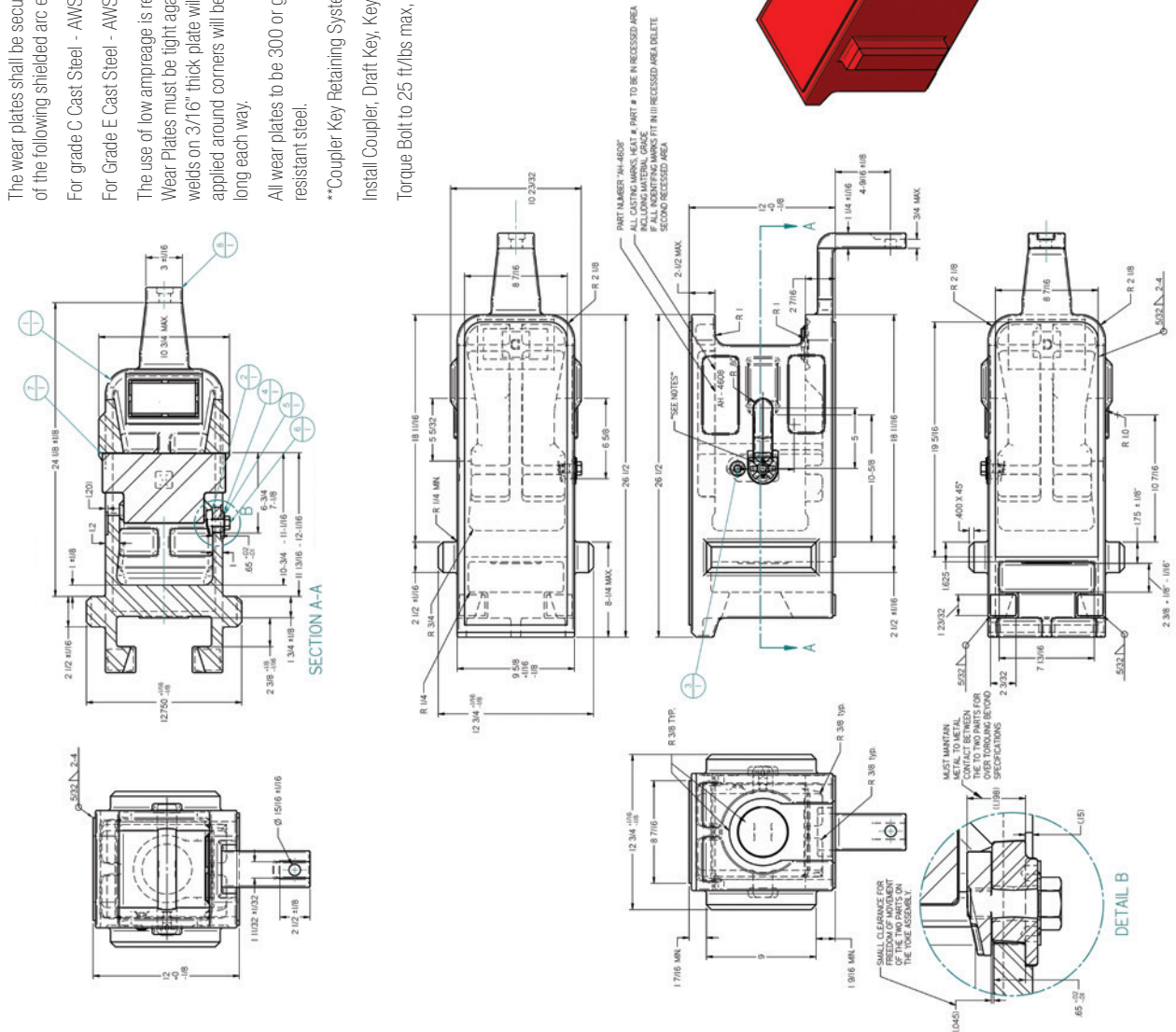
Wear Plates must be tight against casting 1/32" gap X 3/4" Deep Max. All wear plate welds on 3/16" thick plate will be no greater than 5/32" fillet welds. All wear plate welds applied around corners will be continuous welds with no start or stops on corner 1-1/2" long each way.

All wear plates to be 300 or greater Brinell. All wear plates will be made from abrasion resistant steel.

Coupler Key Retaining System :

Install Coupler, Draft Key, Key Retainer, Tab Washer, and Bolt.

Torque Bolt to 25 ft/lbs max. Bend at least (3) Tabs over onto the flats of the Bolt.



Please Note: This is a limited catalog. For more information regarding our additional product offerings, please contact our customer service at **877.94.PARTS**.

10-15 YE YOKE

WEIGHT: 436

MATERIAL: A.A.R. M-201, GRADE "E" STEEL CASTING

STOCK CODE: 4608NIOTB

NOTE:

The wear plates shall be secured to the yokes by electric-arc welding process using any of the following shielded arc electrodes or their equivalent.

For grade C Cast Steel - AWS E9015, E9016, or E9018

For Grade E Cast Steel - AWS E12015, E12016, E12018, E13015, E13016, or E13018

The use of low amperage is recommended to avoid deep penetration into parent metal.

Wear Plates must be tight against casting 1/32" gap X 3/4" Deep Max. All wear plate

welds on 3/16" thick plate will be no greater than .5/32" fillet welds. All wear plate welds

applied around corners will be continuous welds with no start or stops on corner 1-1/2" long each way.

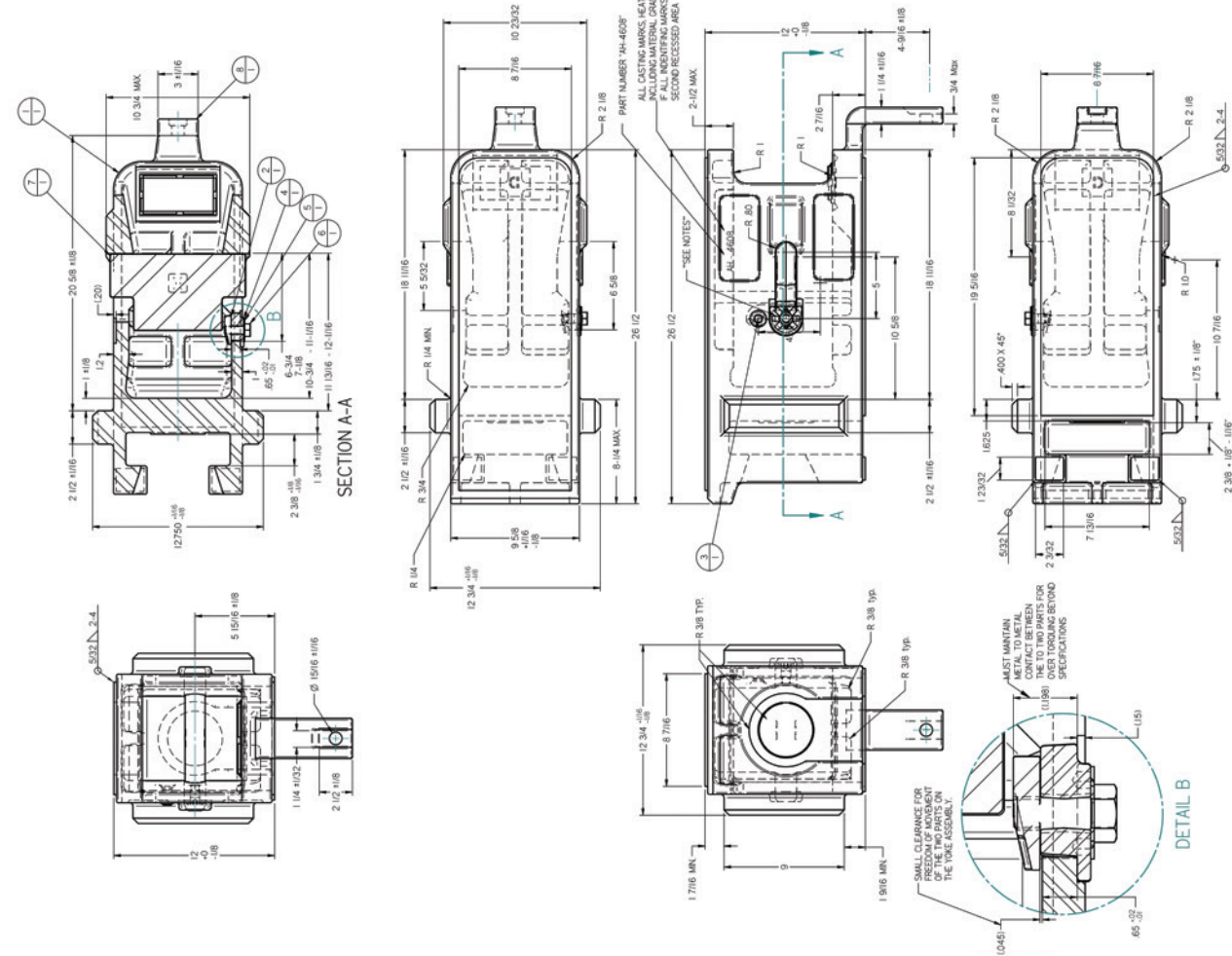
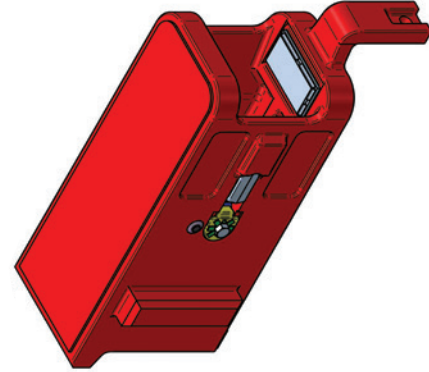
All wear plates to be 300 or greater Brinell. All wear plates will be made from abrasion

resistant steel.

Coupler Key Retaining System:

Install Coupler, Draft Key, Key Retainer, Tab Washer, and Bolt.

Torque Bolt to 25 ft/lbs max. Bend at least (3) Tabs over onto the flats of the Bolt.

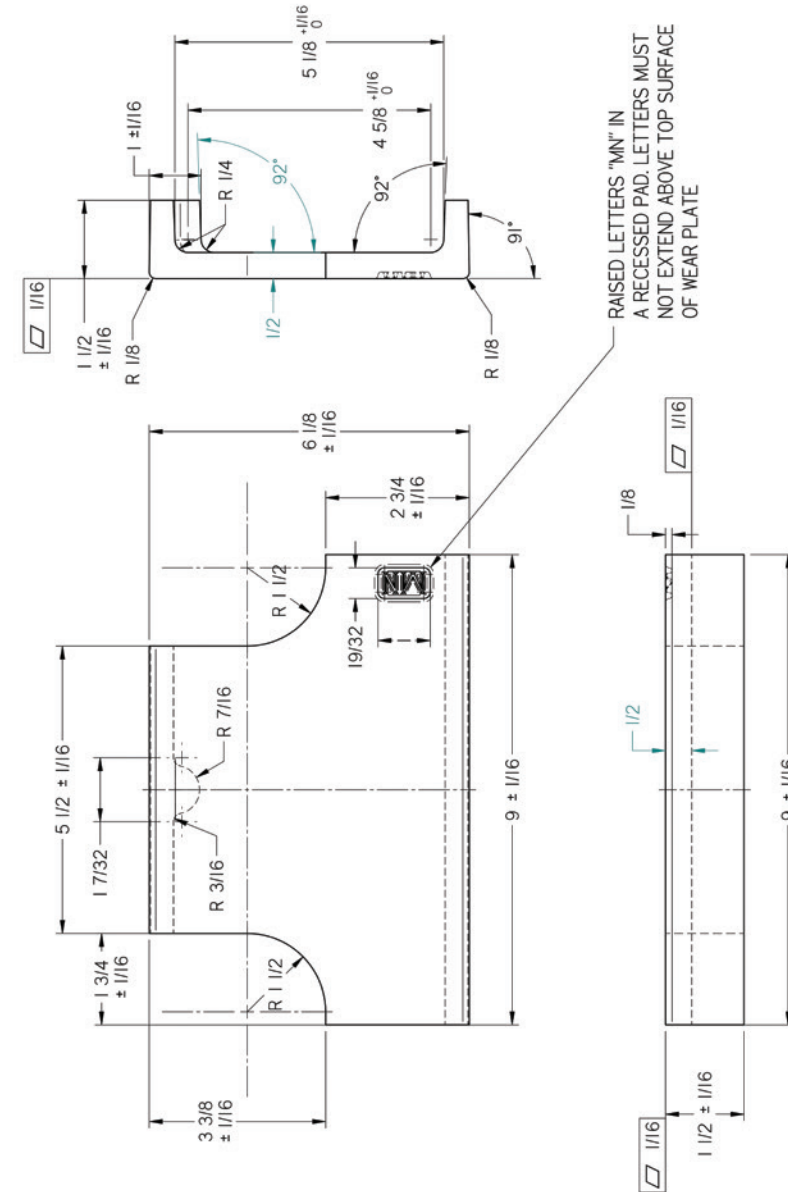
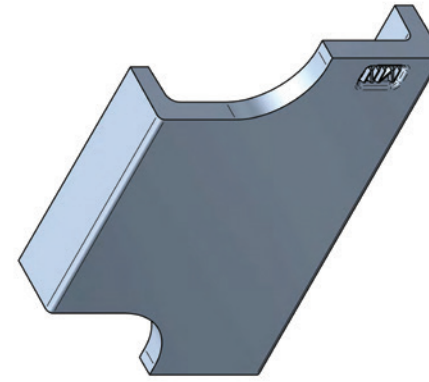


ME STYLE MN WEAR PLATE

WEIGHT: 8.297 LBM

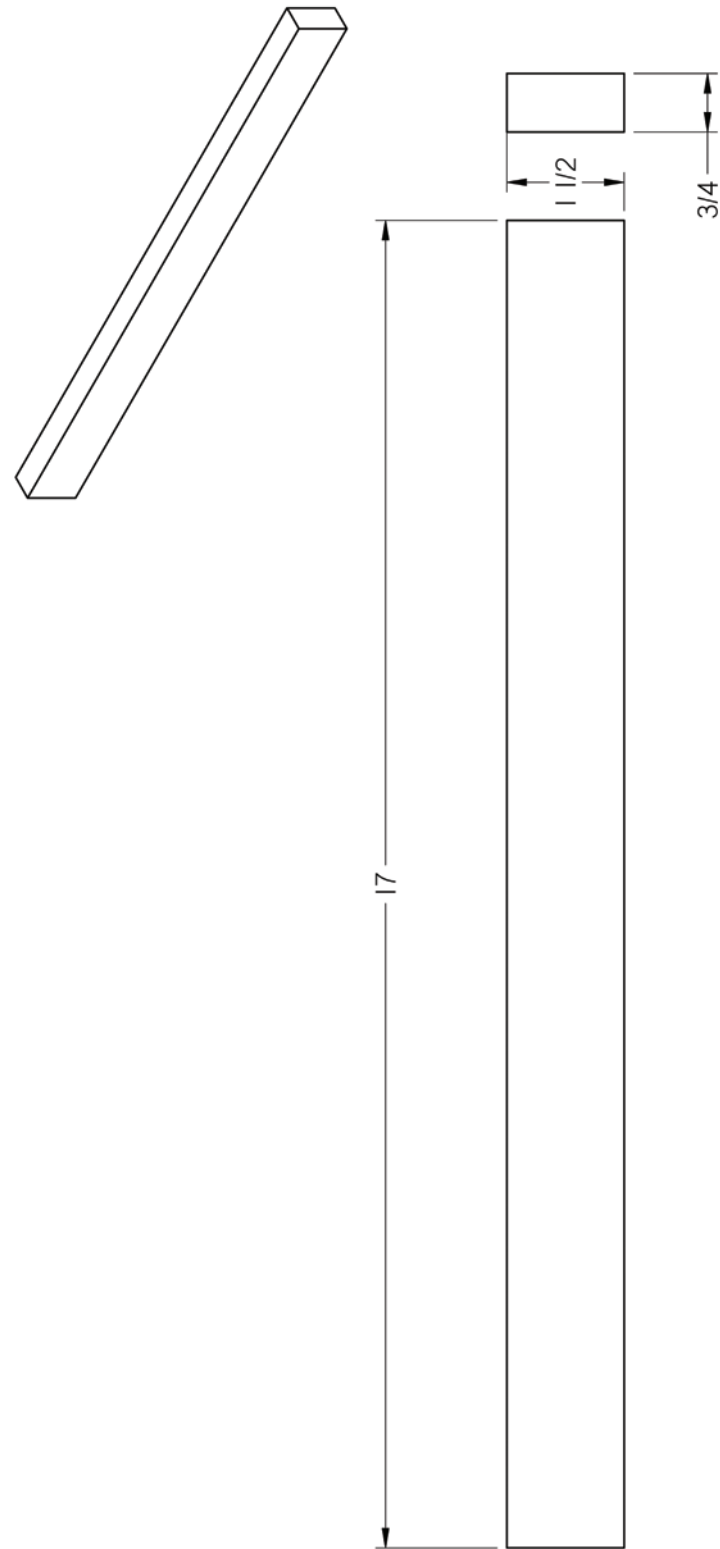
MATERIAL: ASTM A128, GRADE A CAST MANGANESE STEEL

STOCK CODE: AH8073



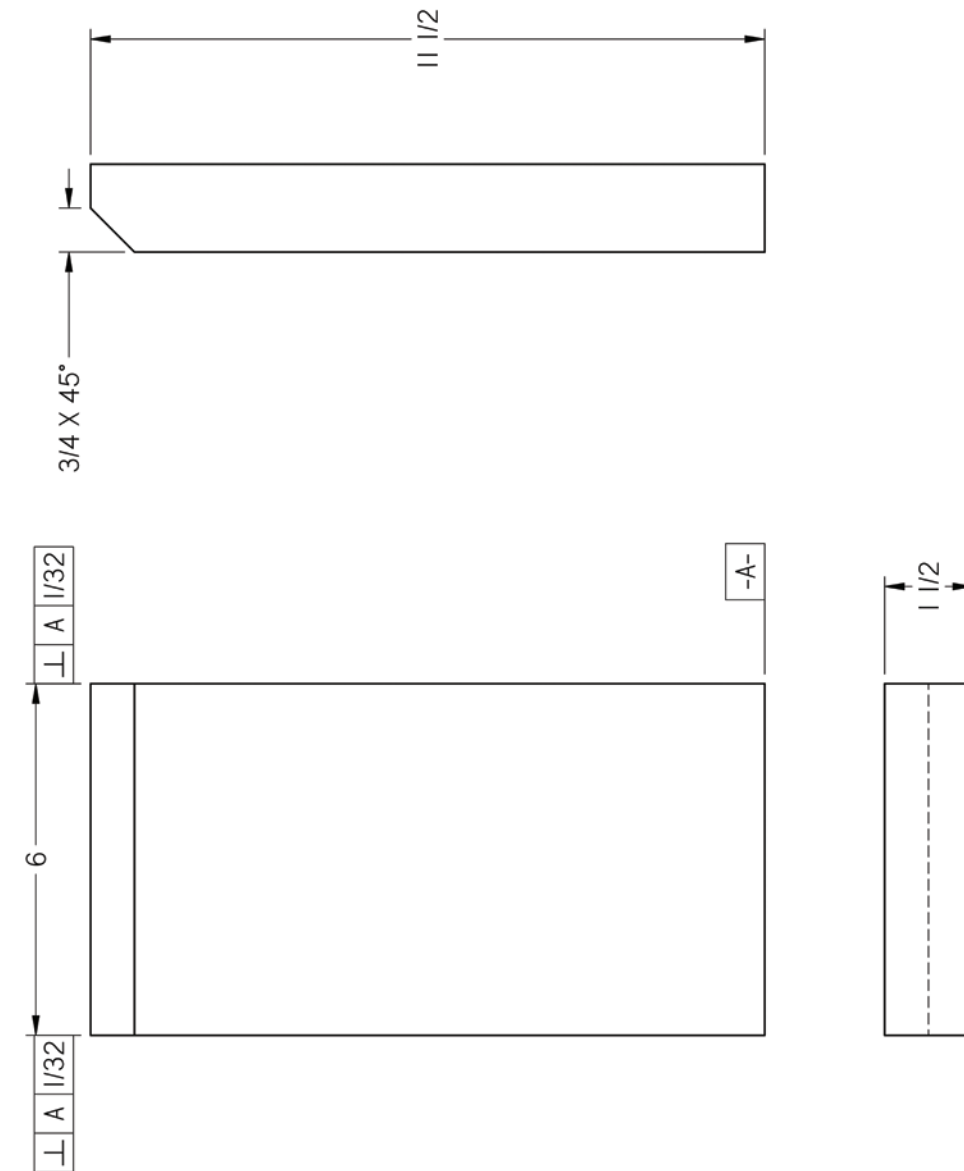
EOC-10 YOKE GUIDE BAR

WEIGHT: 5.412 LBM
 MATERIAL: A-572, GR. 50 PLATE STEEL
 STOCK CODE: AH8061



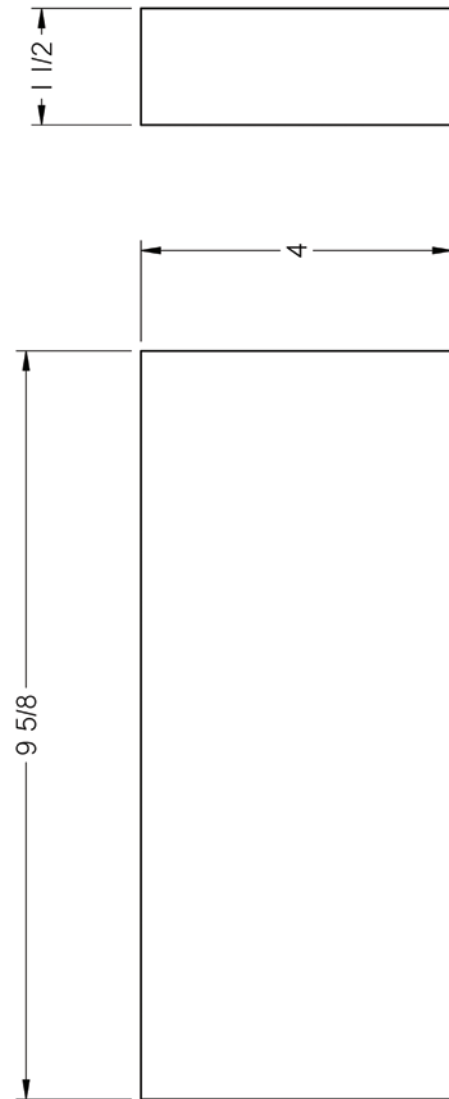
10-15 G UNIT STOP

WEIGHT: 28.811 LBM
 MATERIAL: A-572, GR. 50 PLATE STEEL
 STOCK CODE: AH8053



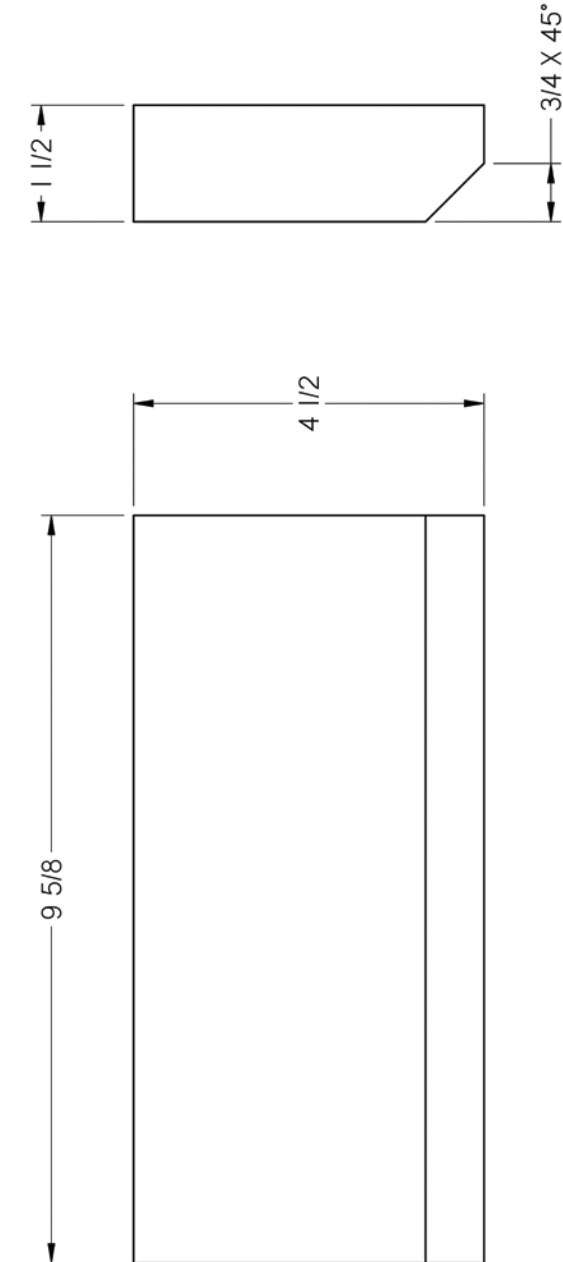
E10-15 G BOTTOM DRAFT LUG

WEIGHT: 16.342 LBM
 MATERIAL: A-572, GR. 50 PLATE STEEL
 STOCK CODE: AH8052



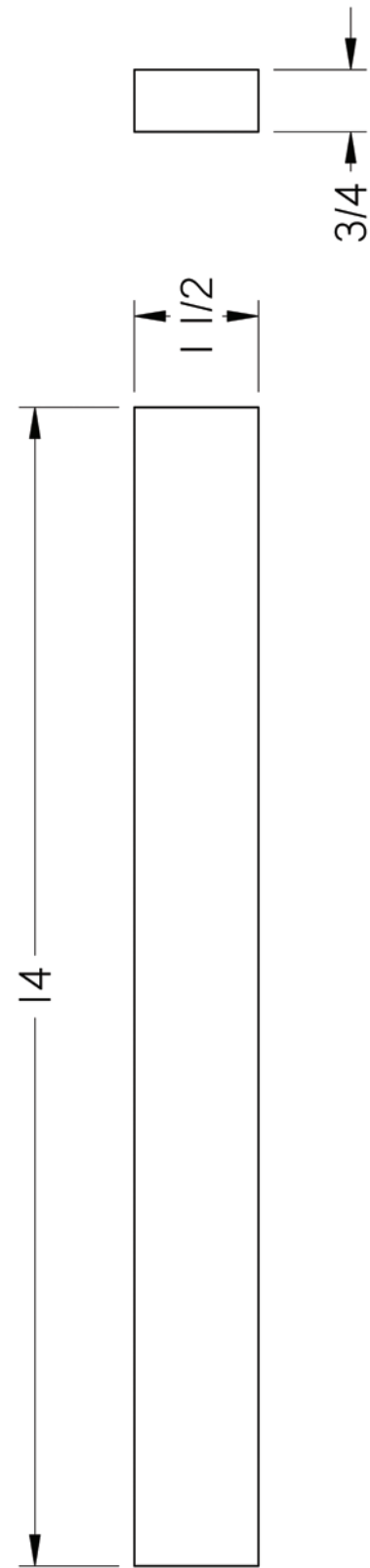
E10-15 G TOP DRAFT LUG

WEIGHT: 17.619 LBM
 MATERIAL: A-572, GR. 50 PLATE STEEL
 STOCK CODE: AH8051



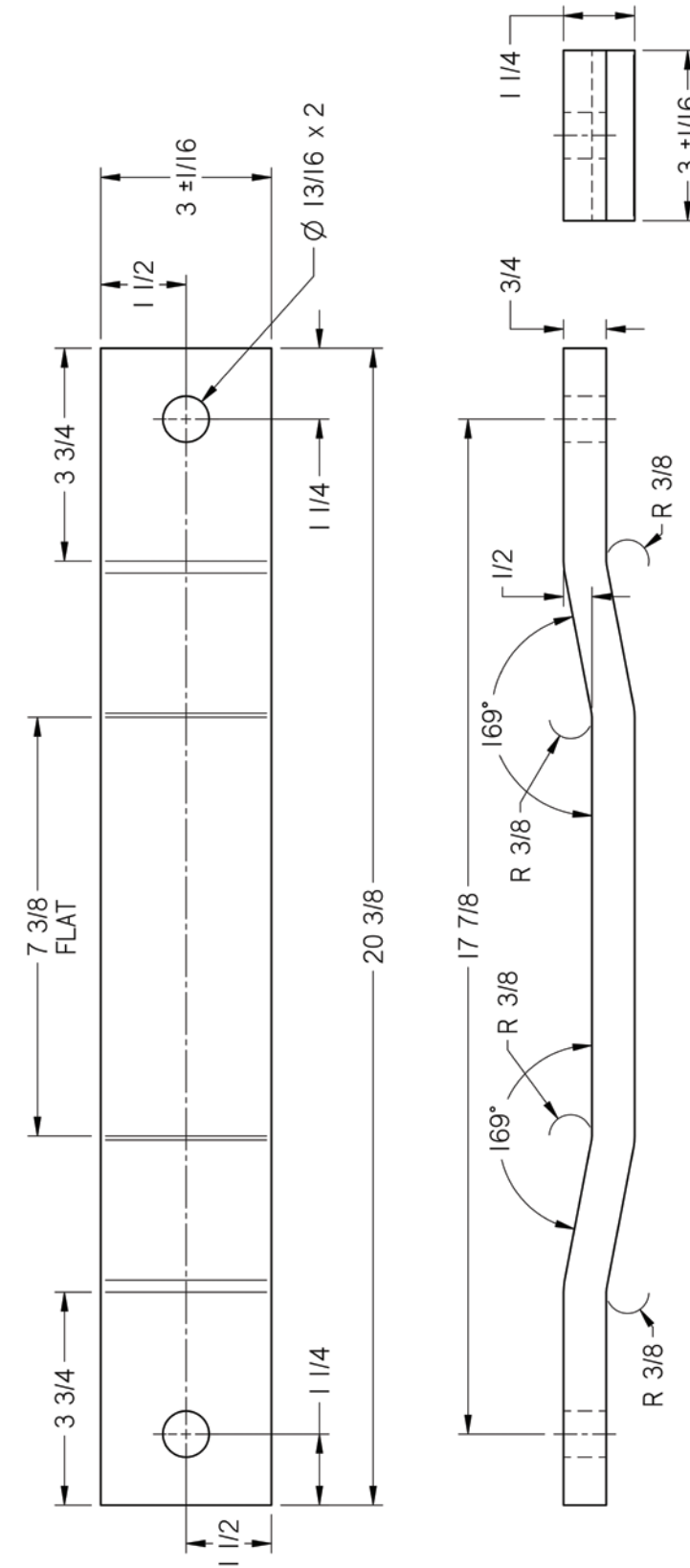
E YOKE GUIDE BAR 15G

WEIGHT: 4.457 LBM
 MATERIAL: HR PICKLED 7 OILED ASTM-569, STEEL
 STOCK CODE: AH8050



UNIT SUPPORT BAR

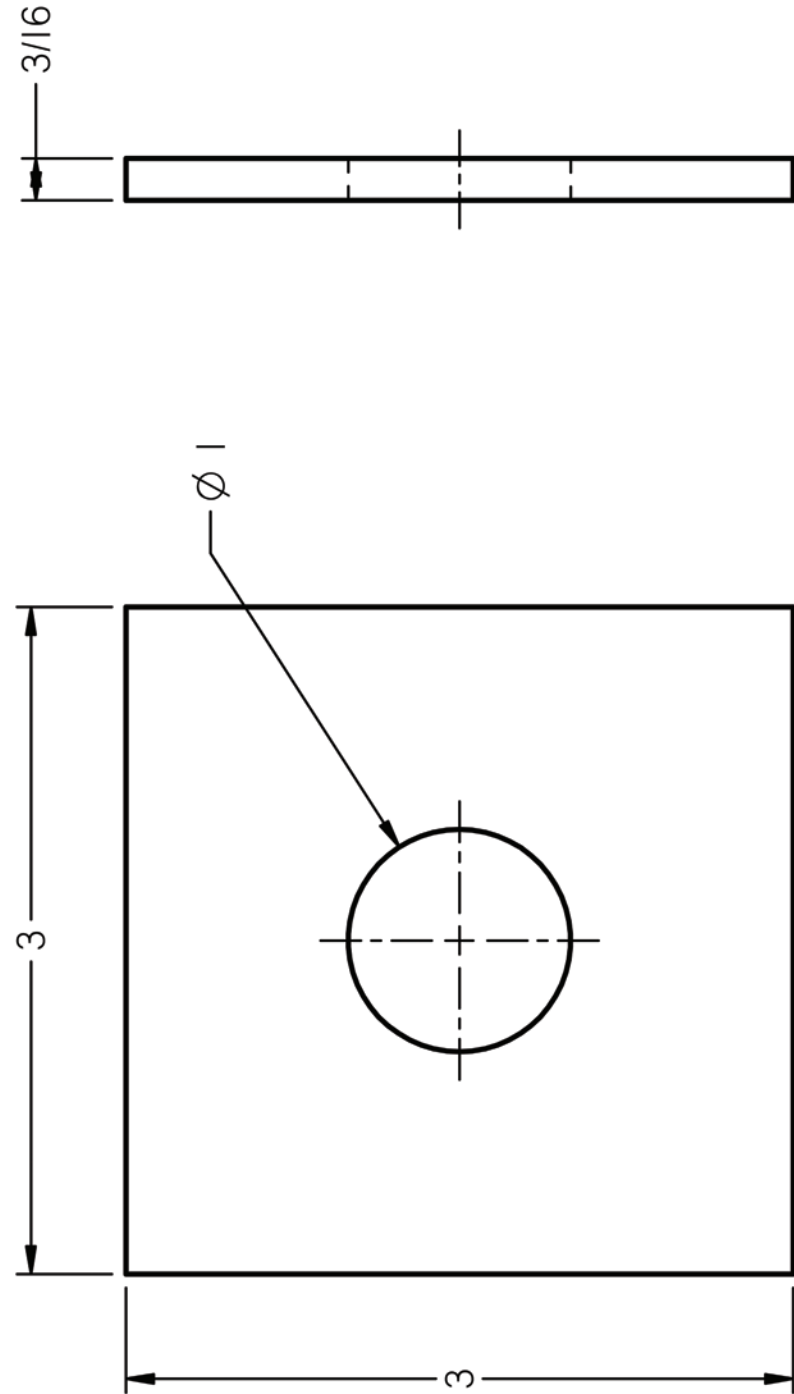
WEIGHT: 10.663 LBM
 MATERIAL: STEEL, 1018 CR
 STOCK CODE: AH-8062, REV D



Please Note: This is a limited catalog. For more information regarding our additional product offerings, please contact our customer service at **877.94.PARTS**.

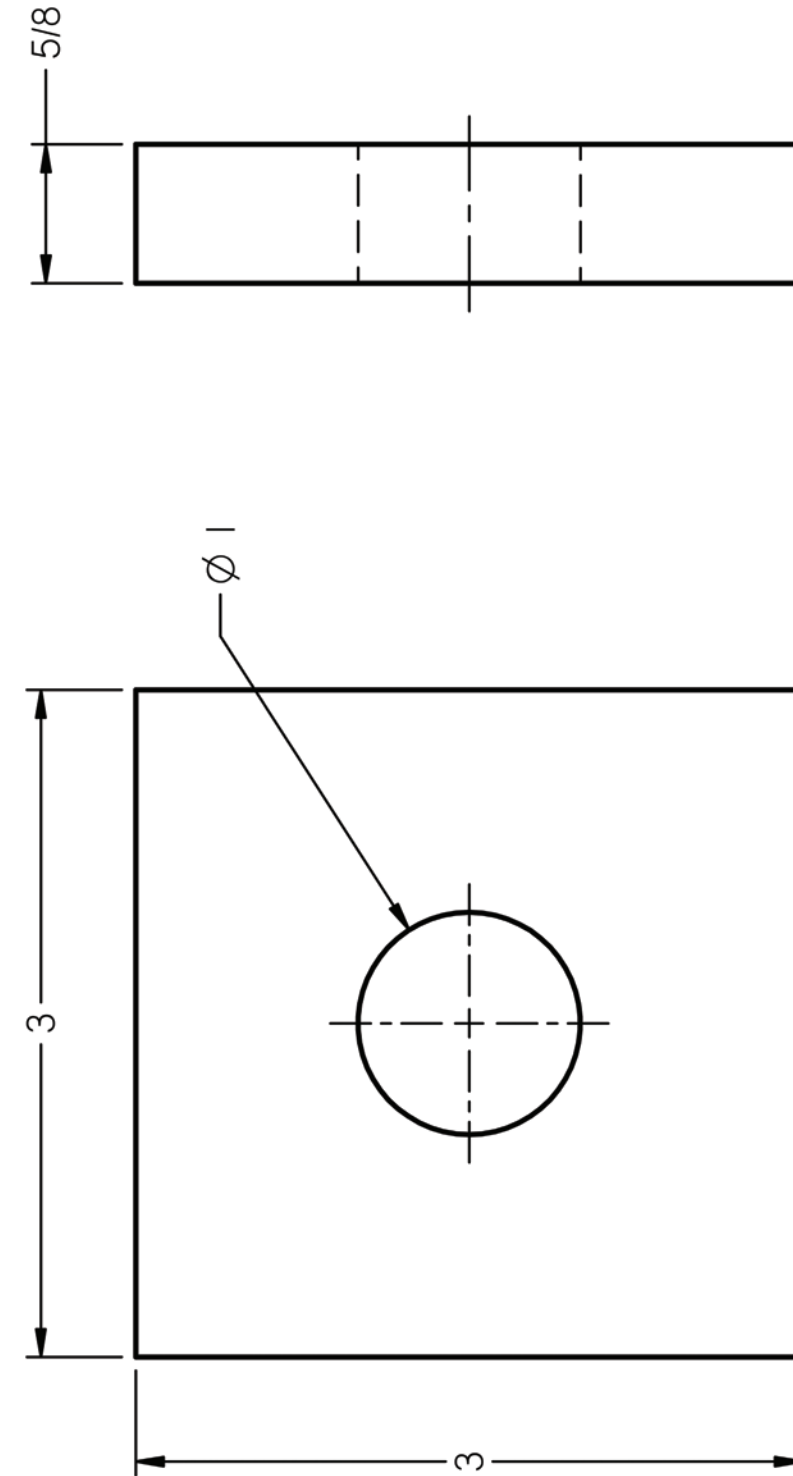
STD CARRIER PLATE SHIM 3/16

WEIGHT: 0.436 LBM
 MATERIAL: A36 STEEL
 STOCK CODE: AH6038



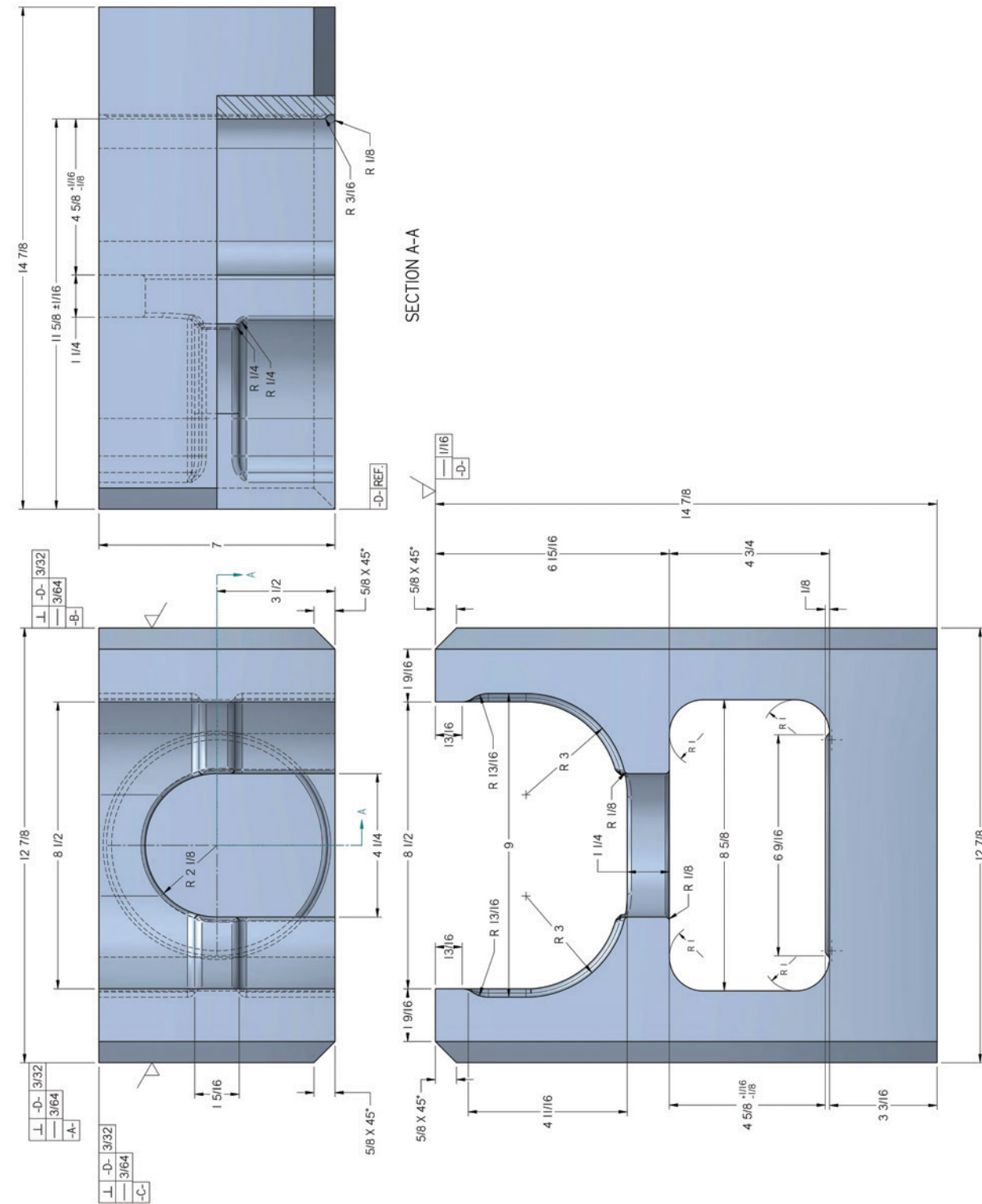
STD CARRIER PLATE SHIM

WEIGHT: 1.453 LBM
 MATERIAL: A36 STEEL
 STOCK CODE: AH6037



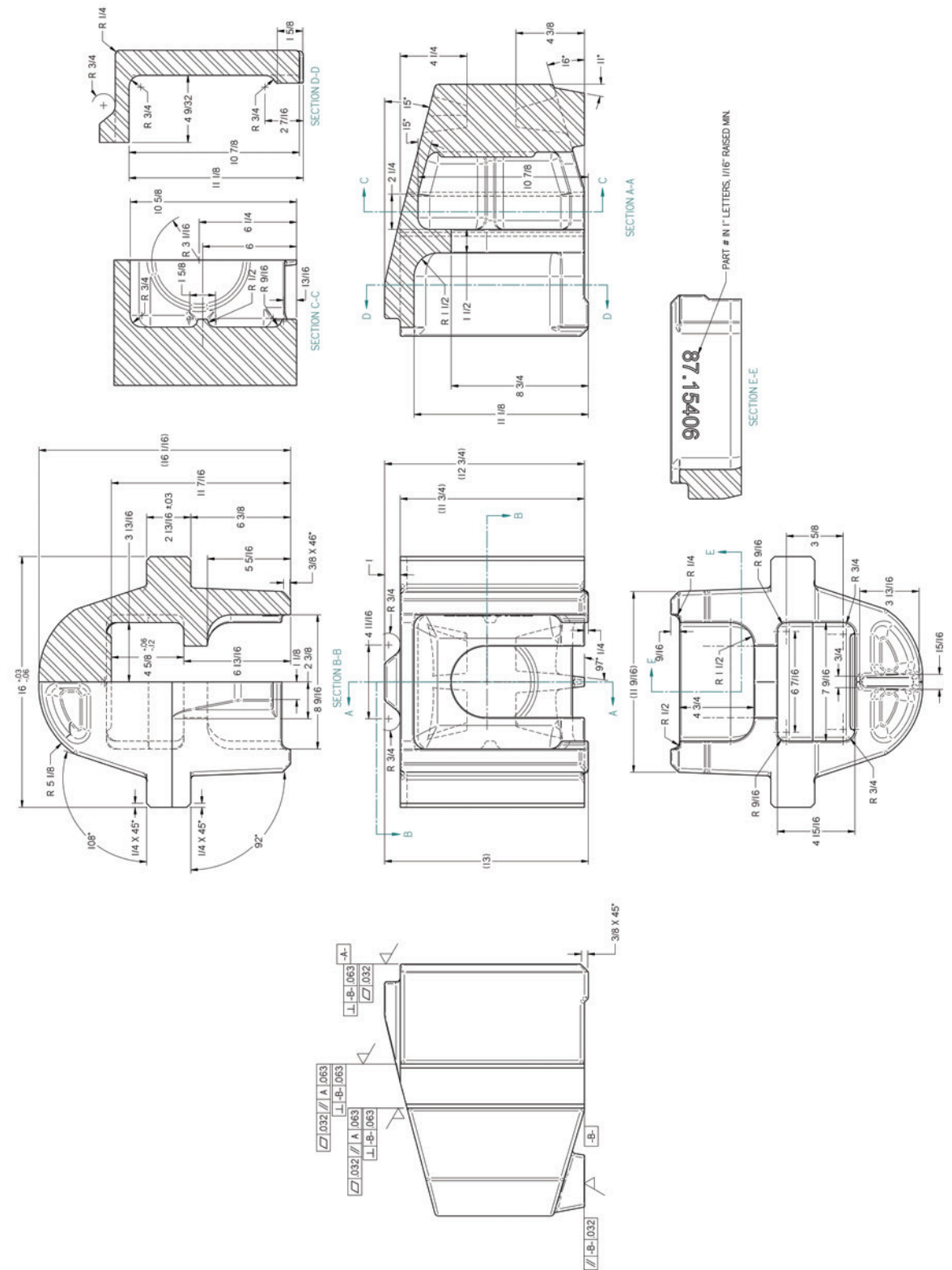
BACKSTOP CASTING EOC-3,4,5,6

WEIGHT: 199.211 LBM
 MATERIAL: A.A.R. M201, GRADE "B+" STEEL CASTING
 STOCK CODE: 87.15306



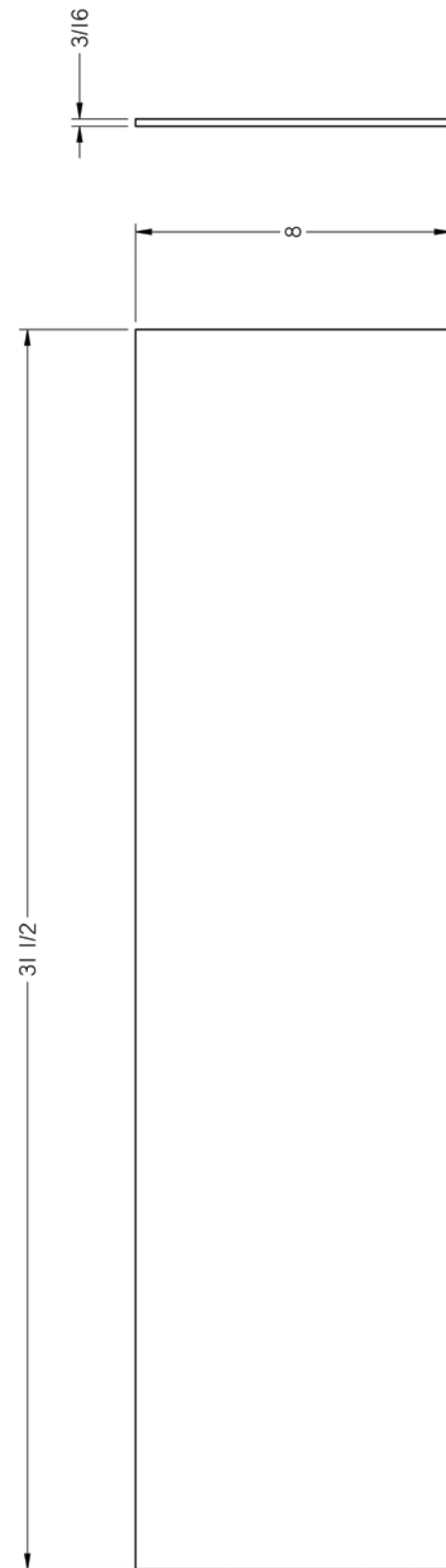
BACKSTOP CASTING EOC-1,2,16

WEIGHT: 300.059 LBM
 MATERIAL: A.A.R. M-201, GRADE "B+" STEEL CASTING
 STOCK CODE: 87.15406



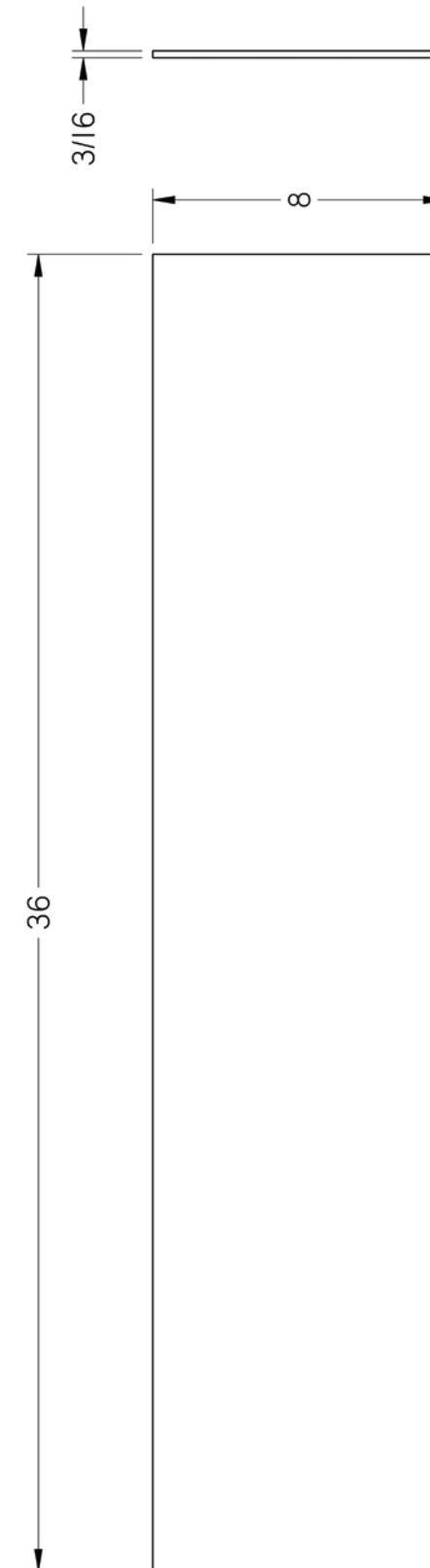
3/16 x 8 x 31-1/2 WEAR PLATE F15G

WEIGHT: 13.371 LBM
 MATERIAL: AR400 BNH
 STOCK CODE: AH8033



TOP SILL WP F15G

WEIGHT: 15.281 LBM
 MATERIAL: T-1 TYPE A (ASTM A514 GR. B) 340-400 BNH OR AR400 BNH, 360 MIN. BNH
 STOCK CODE: AH8022

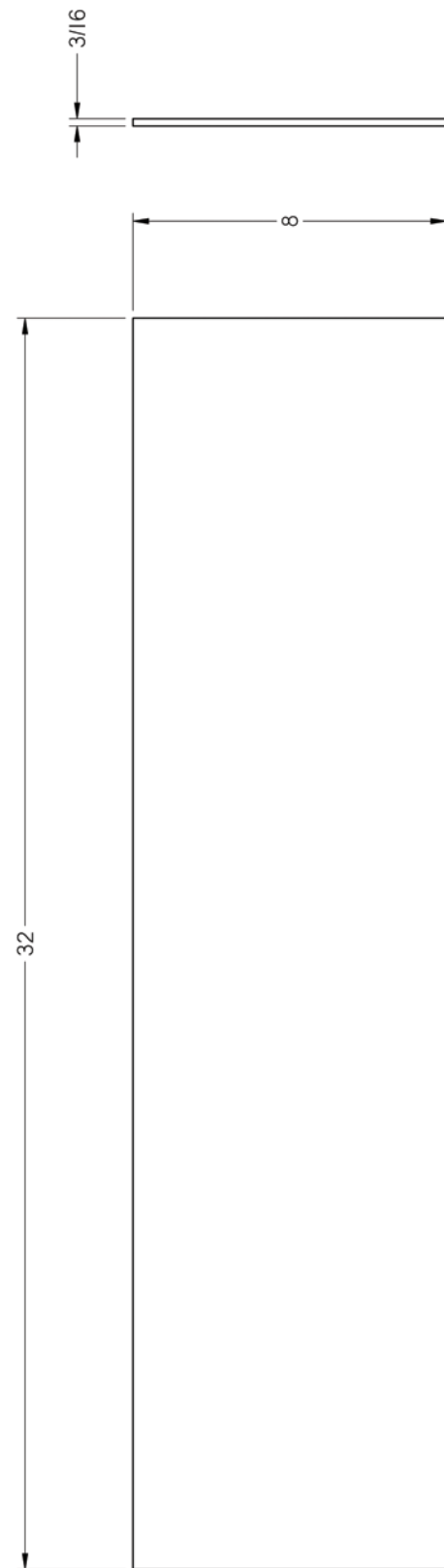


3/16 x 8 x 32 WEAR PLATE E15G

WEIGHT: 13.583 LBM

MATERIAL: T-1 TYPE A (ASTM A514 GR B) 340-400 BNH OR AR400 BNH

STOCK CODE: AH8021

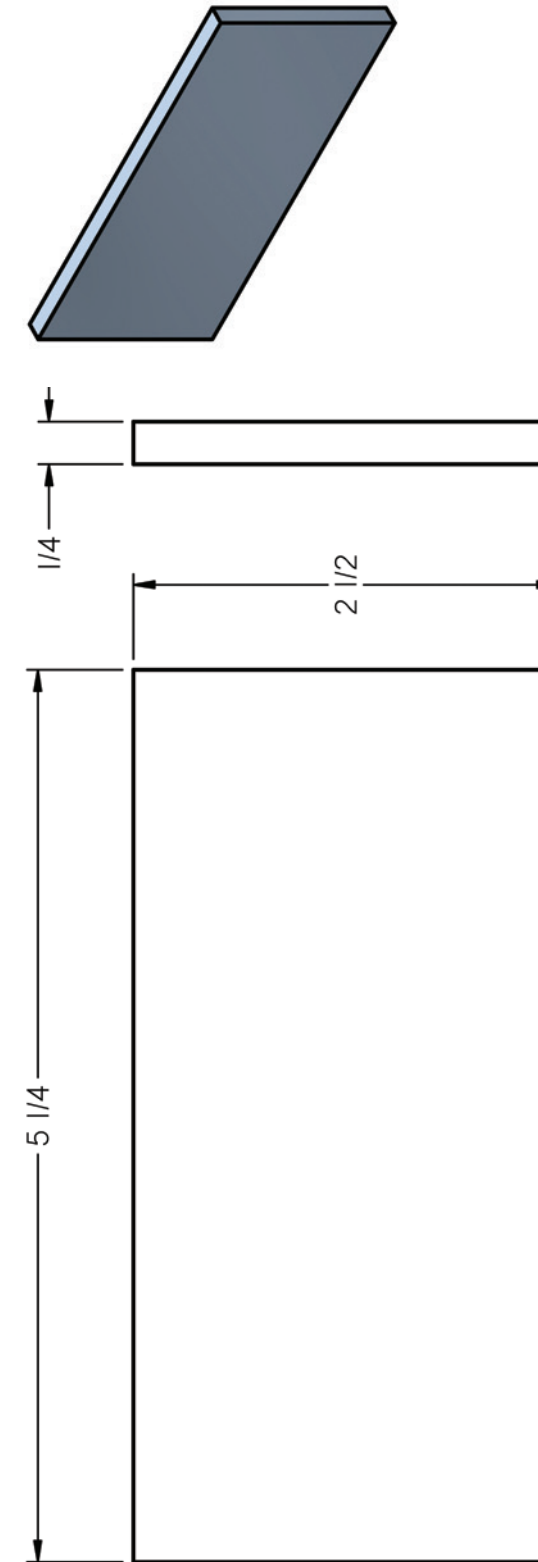


“E” YOKE COUPLER WEAR PLATE

WEIGHT: 0.938 LBM

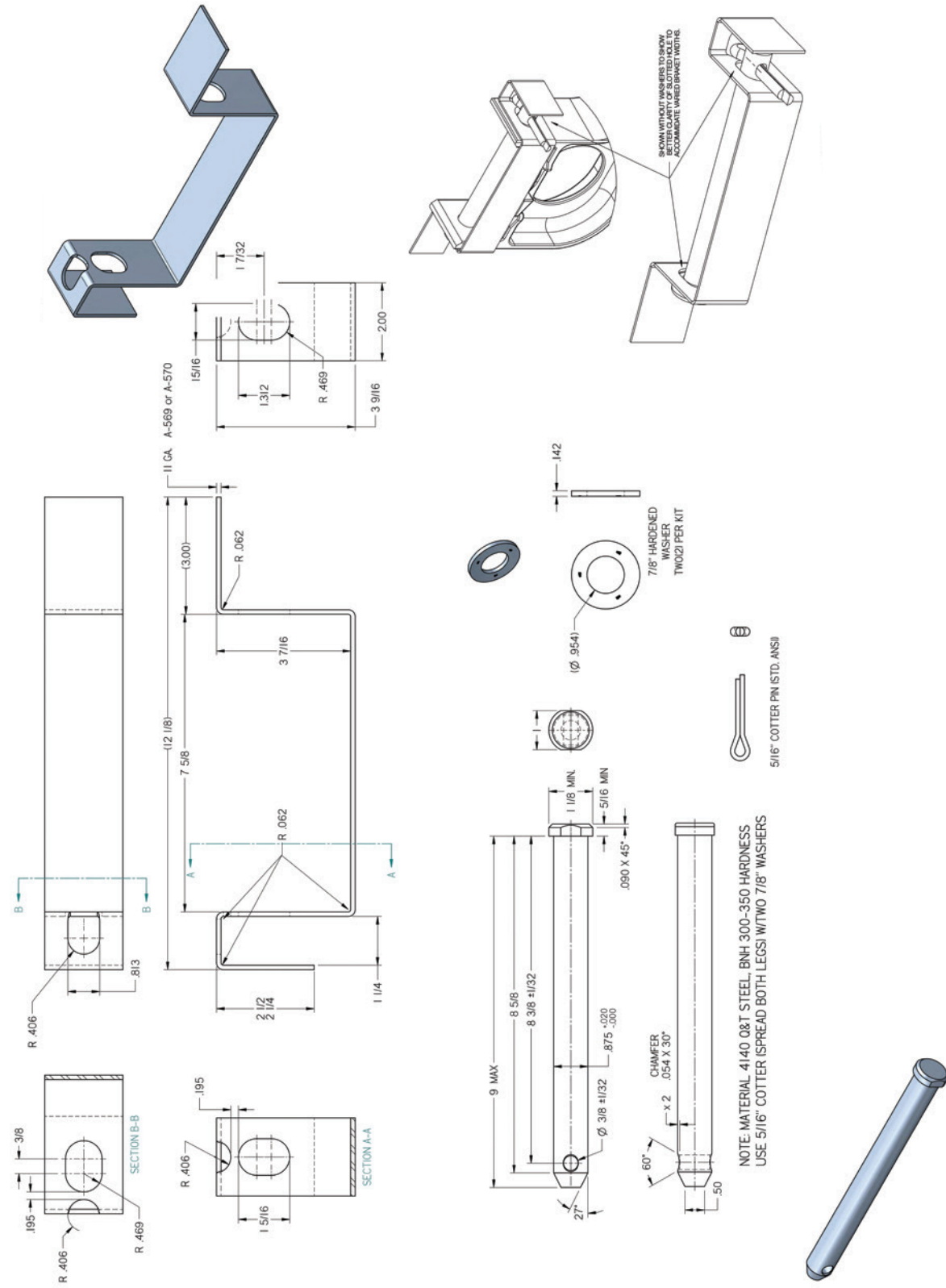
MATERIAL: ASTM A128, 11%-14%, MANGANESE STEEL

STOCK CODE: AH-12692



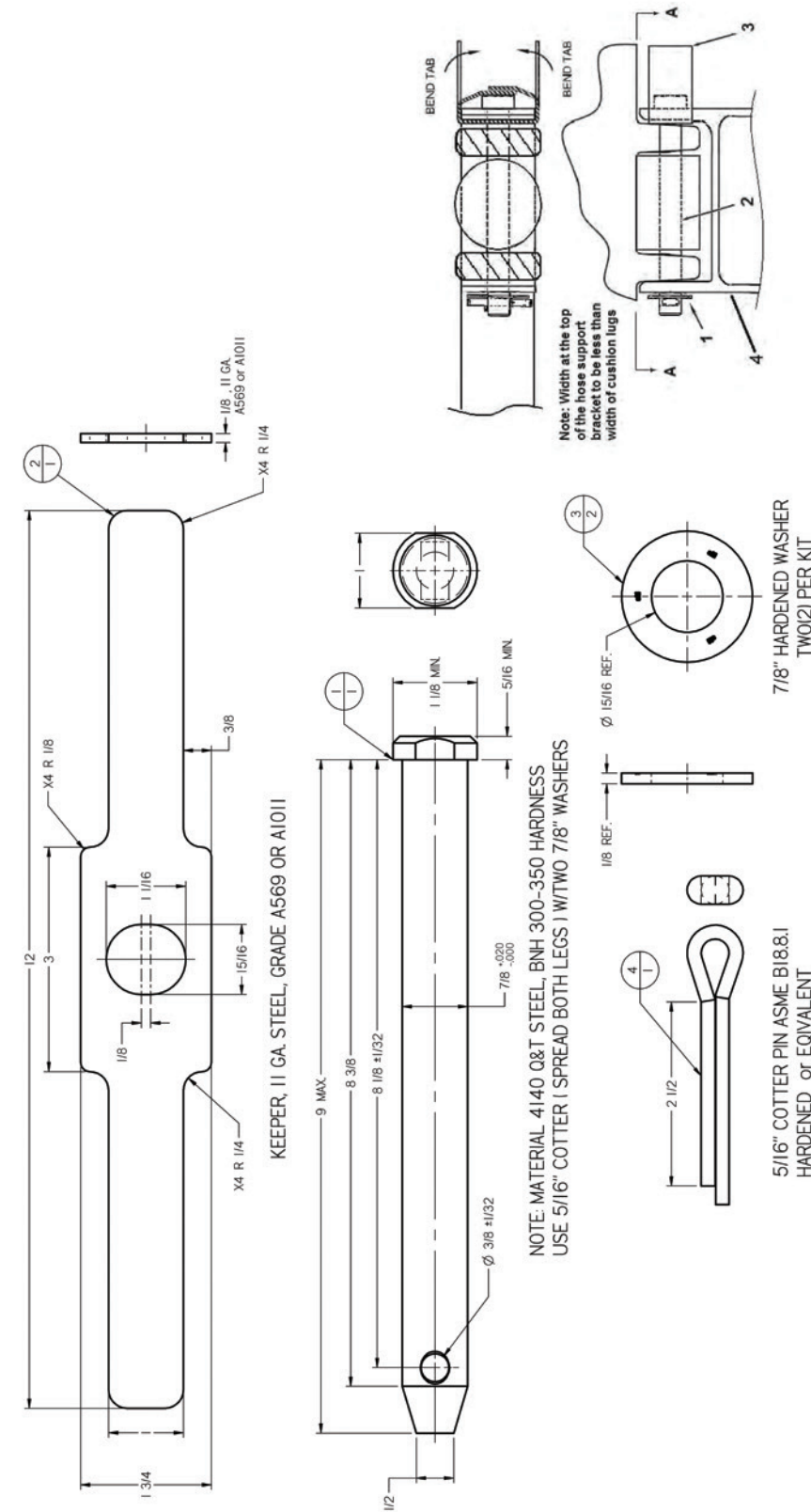
7/8" VERTICAL PIN RETAINING SYSTEM

FOR BOTH ENDS
STOCK CODE: AH8112 A-C



7/8" VERTICAL PIN RETAINING SYSTEM

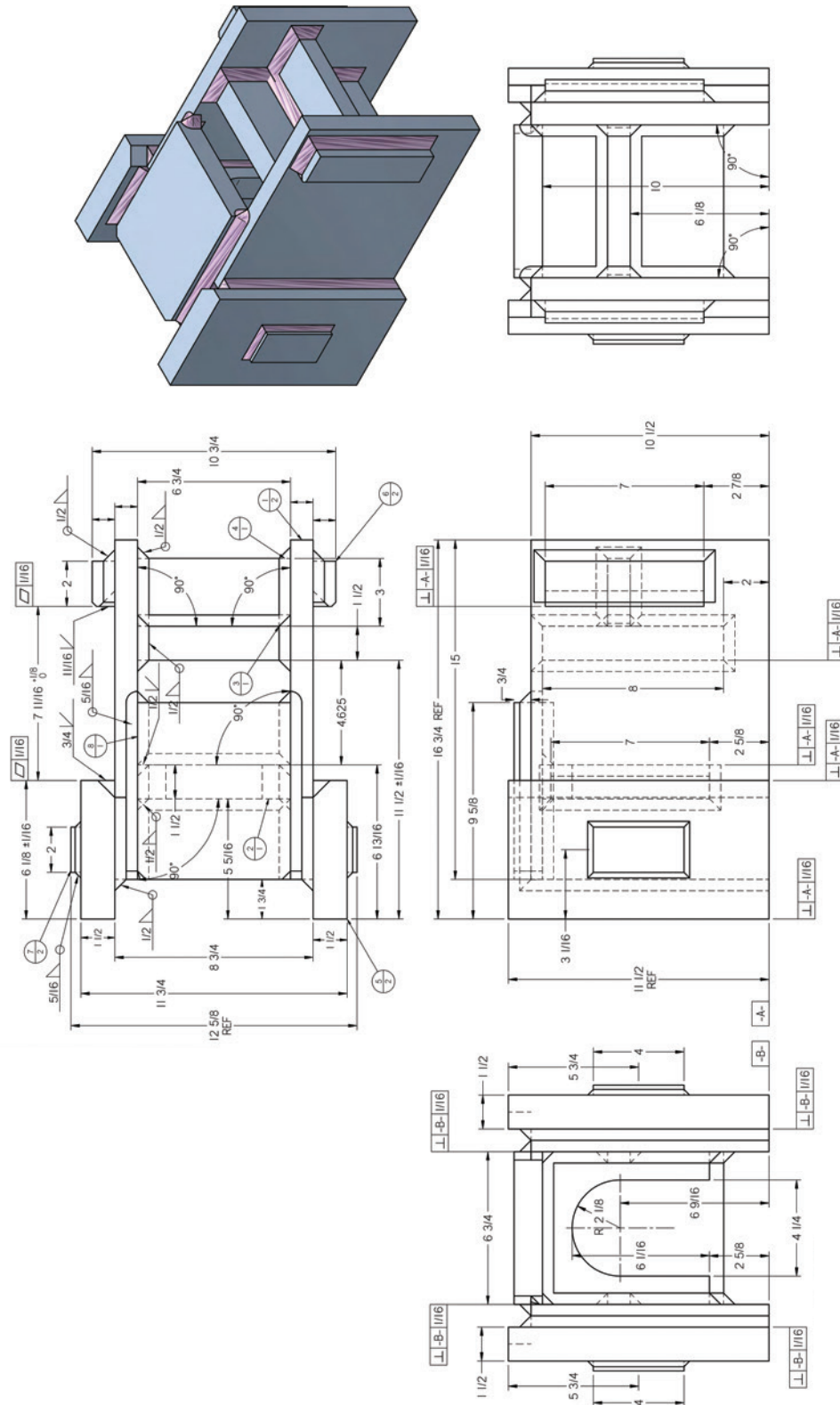
STOCK CODE: AH-8105 A-C



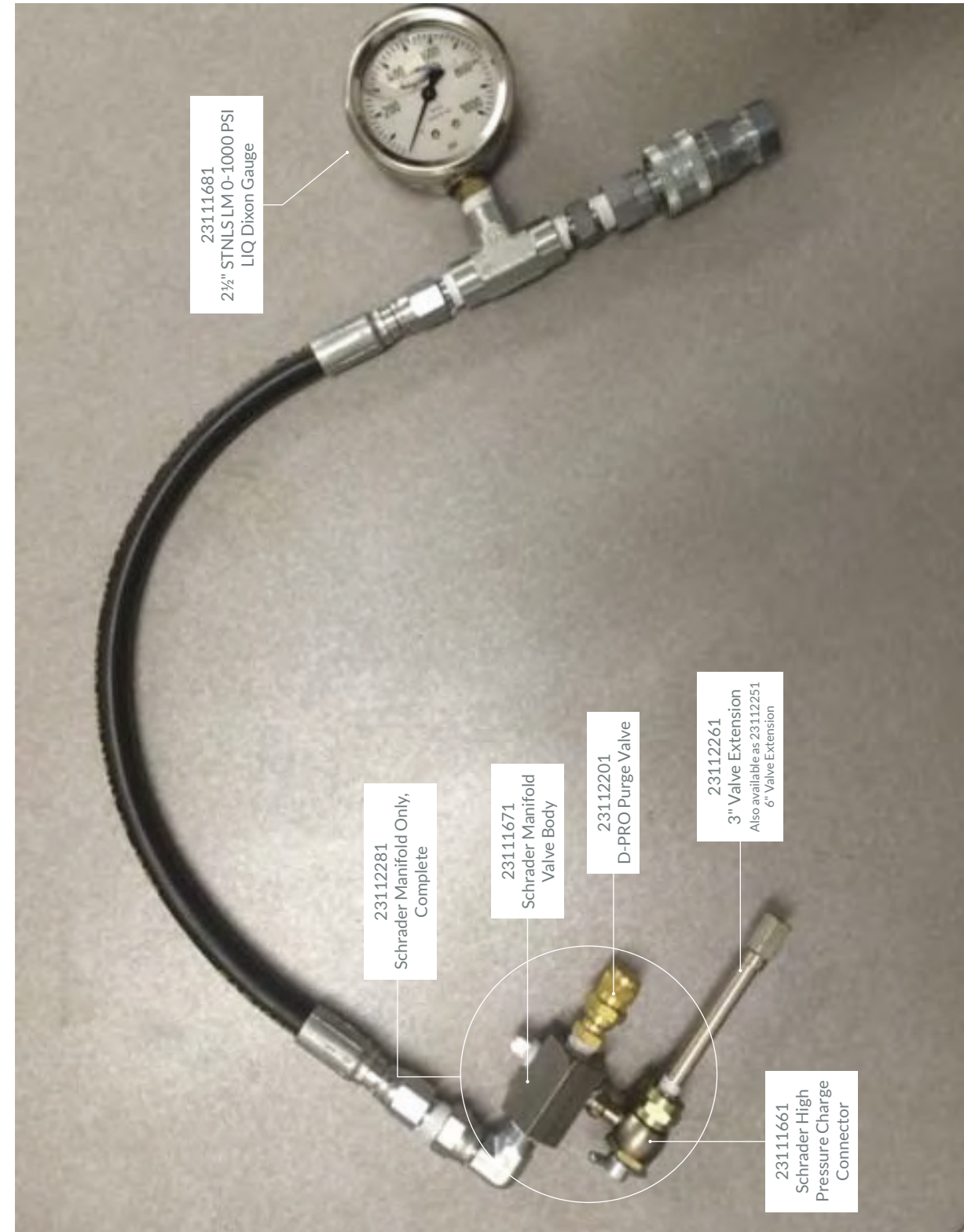
9542 ADAPTOR

WEIGHT: 206

MATERIAL: ASTM-A-514 GRADE B, OR ASTM A-517 GRADE B USS T-1 TYPE A
 100,000 YIELD, 110,000 - 135,000 TENSILE

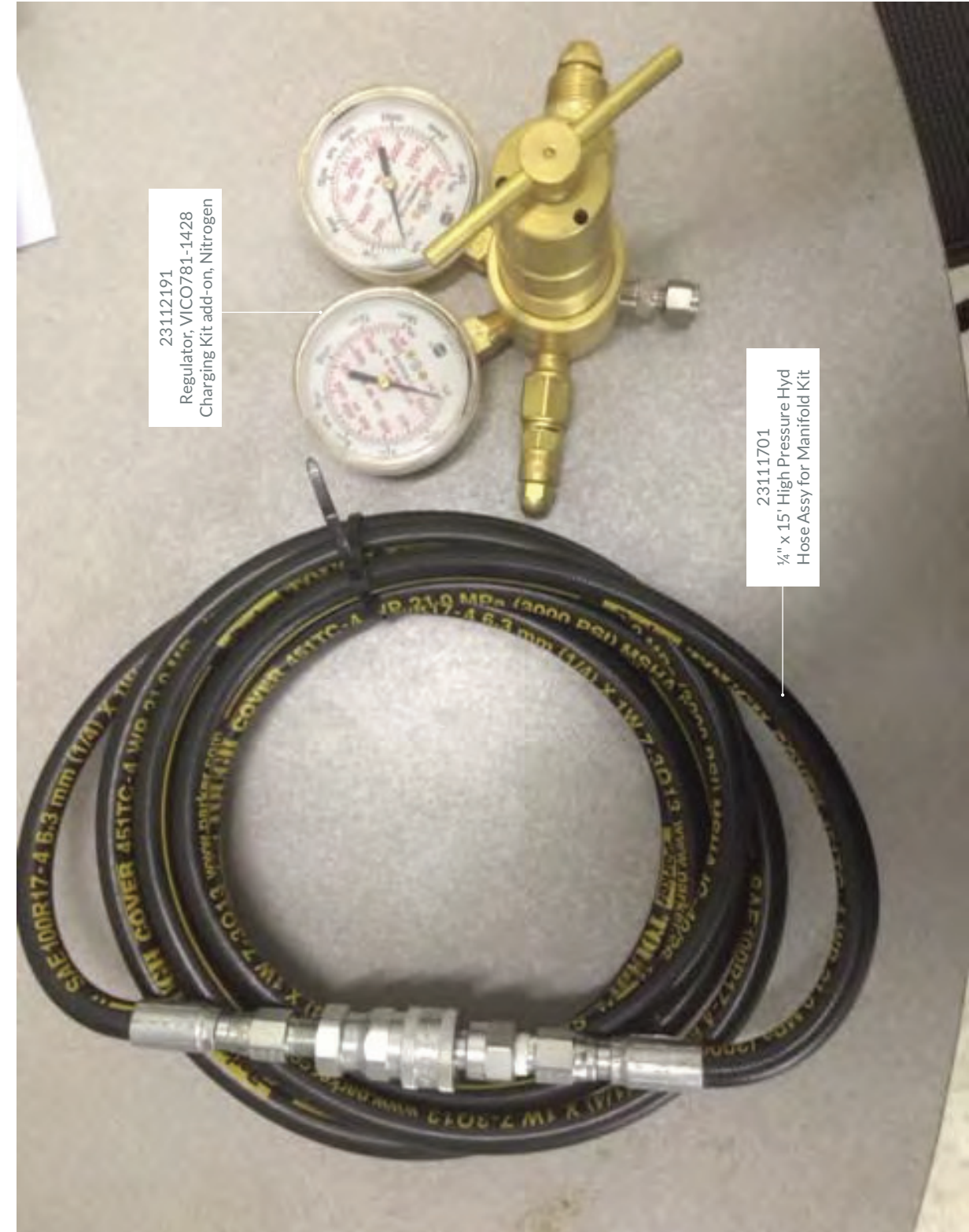
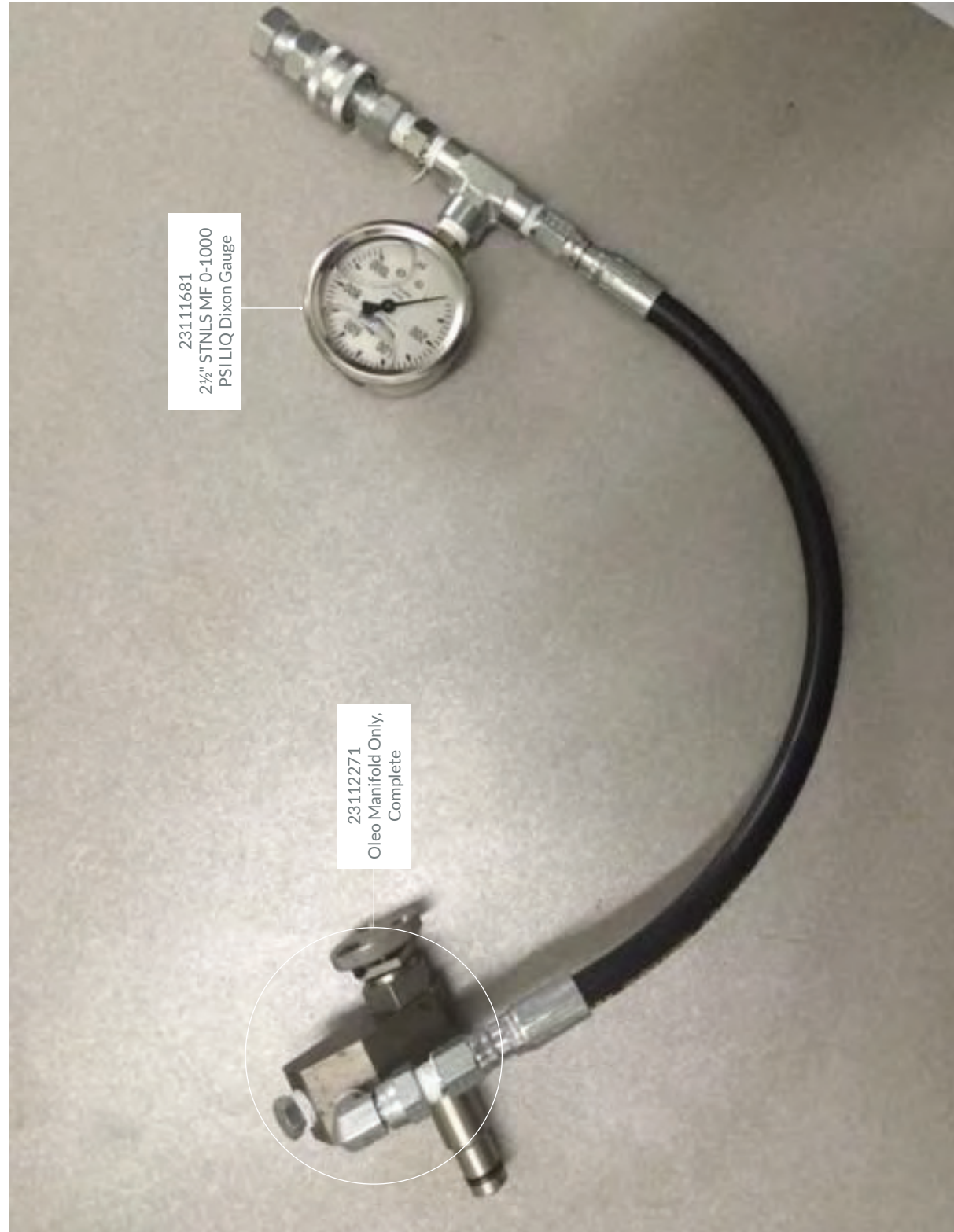


23111721 SCHRADER, MANIFOLD COMPLETE BLEED



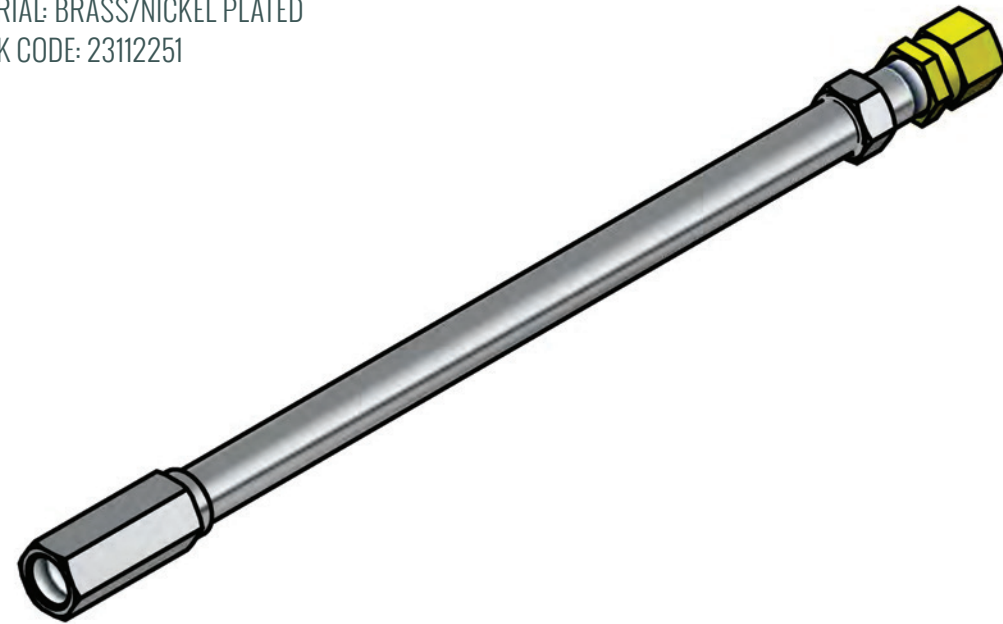
Please Note: This is a limited catalog. For more information regarding our additional product offerings, please contact our customer service at **877.94.PARTS**.

23107211 OLEO MANIFOLD COMPLETE BLEED



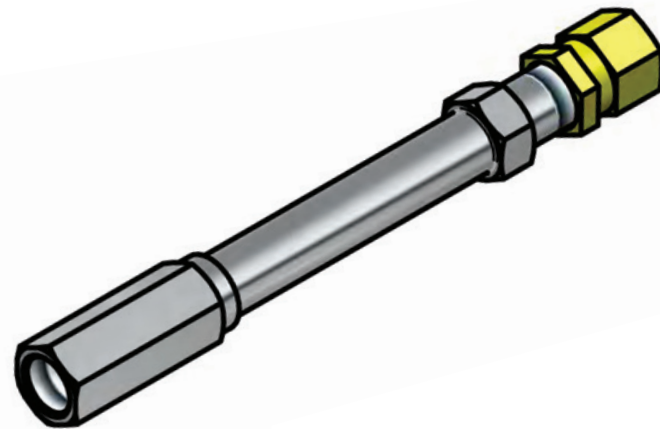
HE-393 6" VALVE EXTENSION

EFFECTIVE LENGTH: 6"
 WEIGHT: 0.160 LBM
 MATERIAL: BRASS/NICKEL PLATED
 STOCK CODE: 23112251



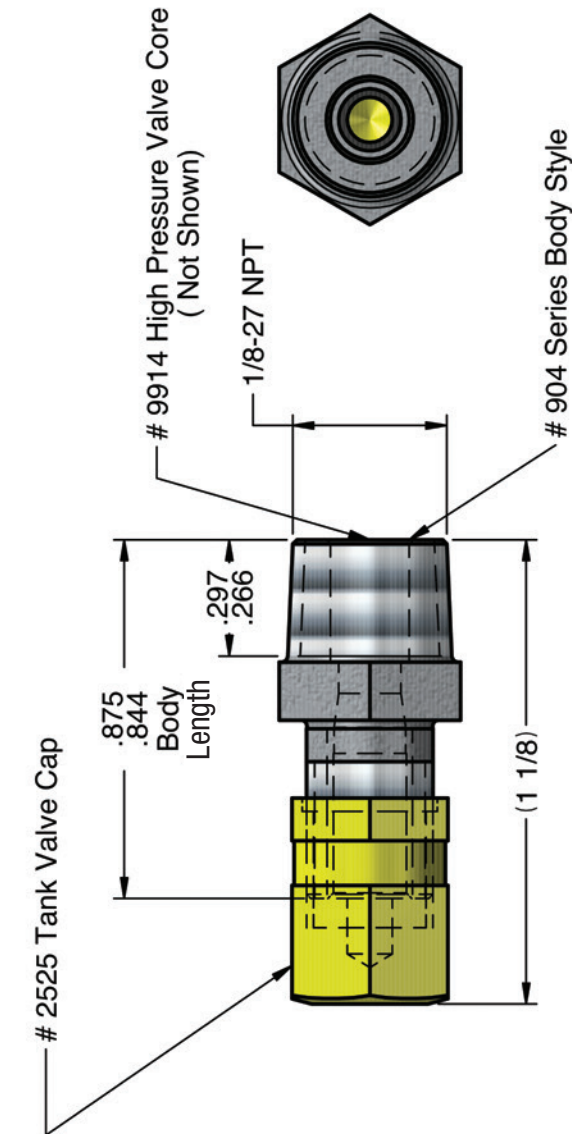
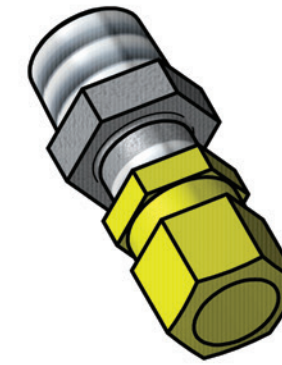
HE-371, 3" VALVE EXTENSION

EFFECTIVE LENGTH: 2-15/16"
 WEIGHT: 0.095 LBM
 MATERIAL: BRASS/NICKEL PLATED
 STOCK CODE: 23112261



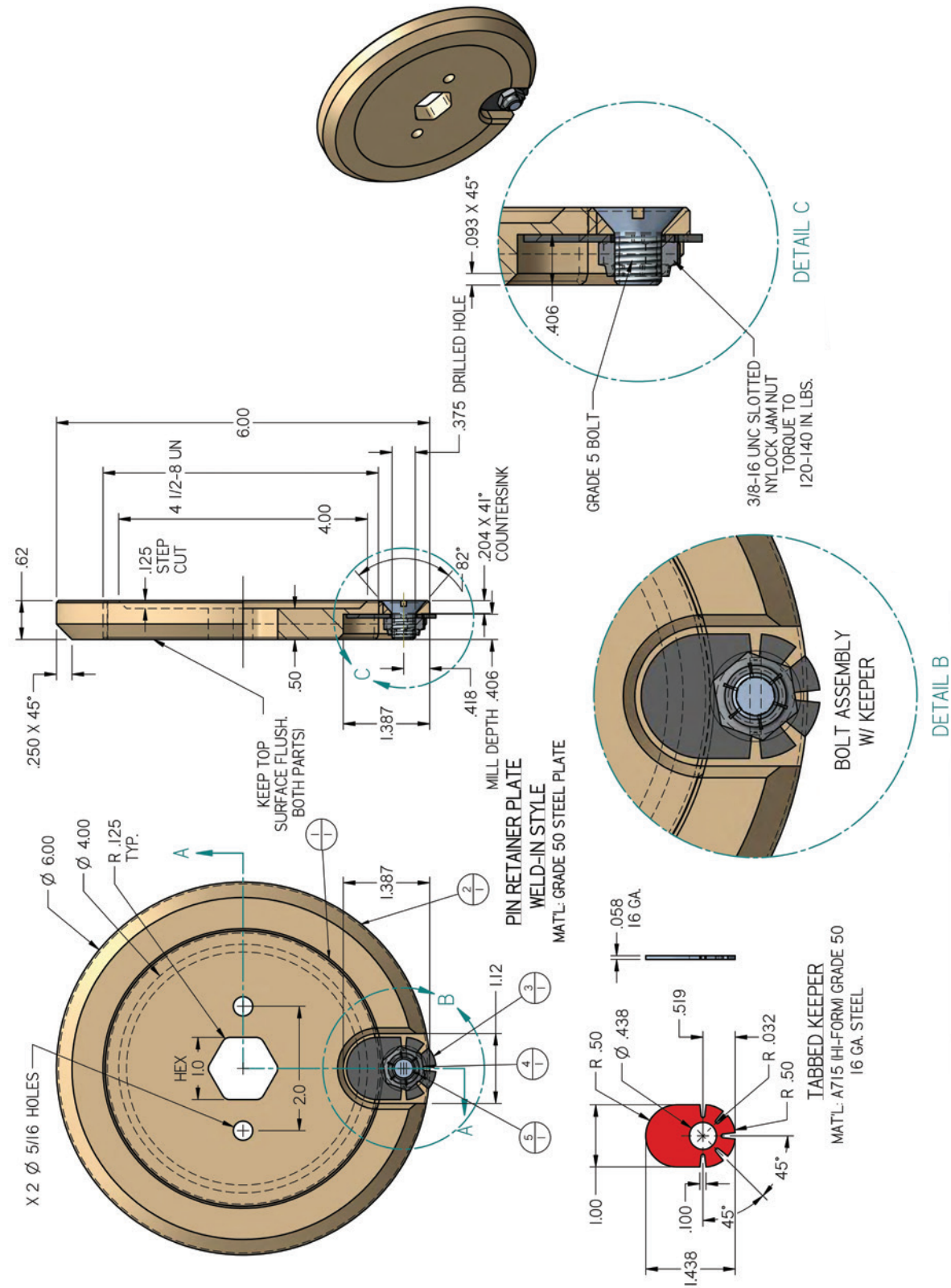
SCHRADER HIGH PRESSURE TANK VALVE

STOCK CODE: 23103701
 SCHRADER INTERNATIONAL PART #: 8090401047

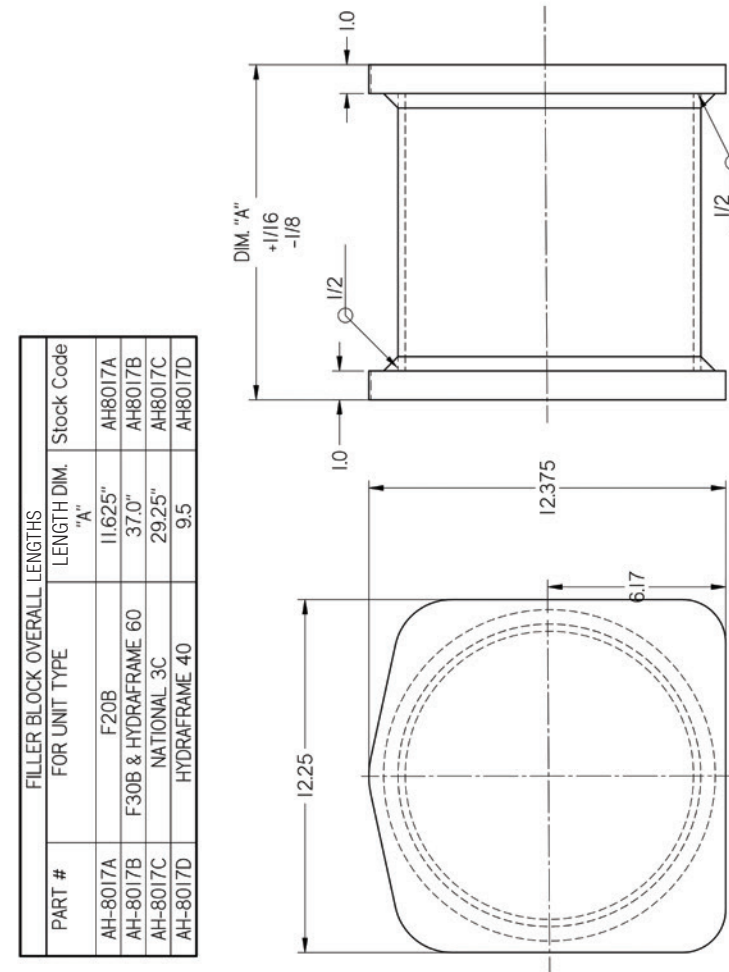
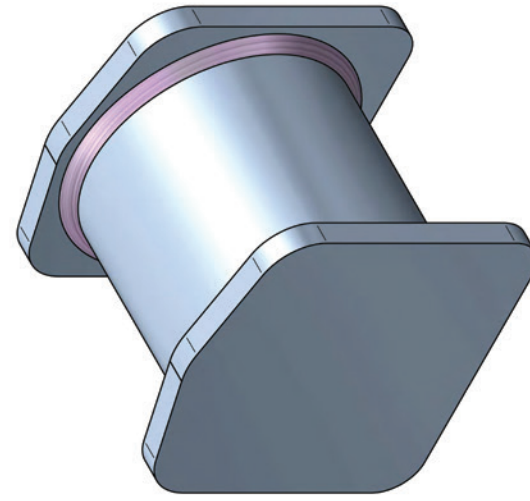


AH THREADED PIN PLATE

WEIGHT: 4.314 LBM
STOCK CODE: AH-5033C



FILLER BLOCK ASSEMBLY



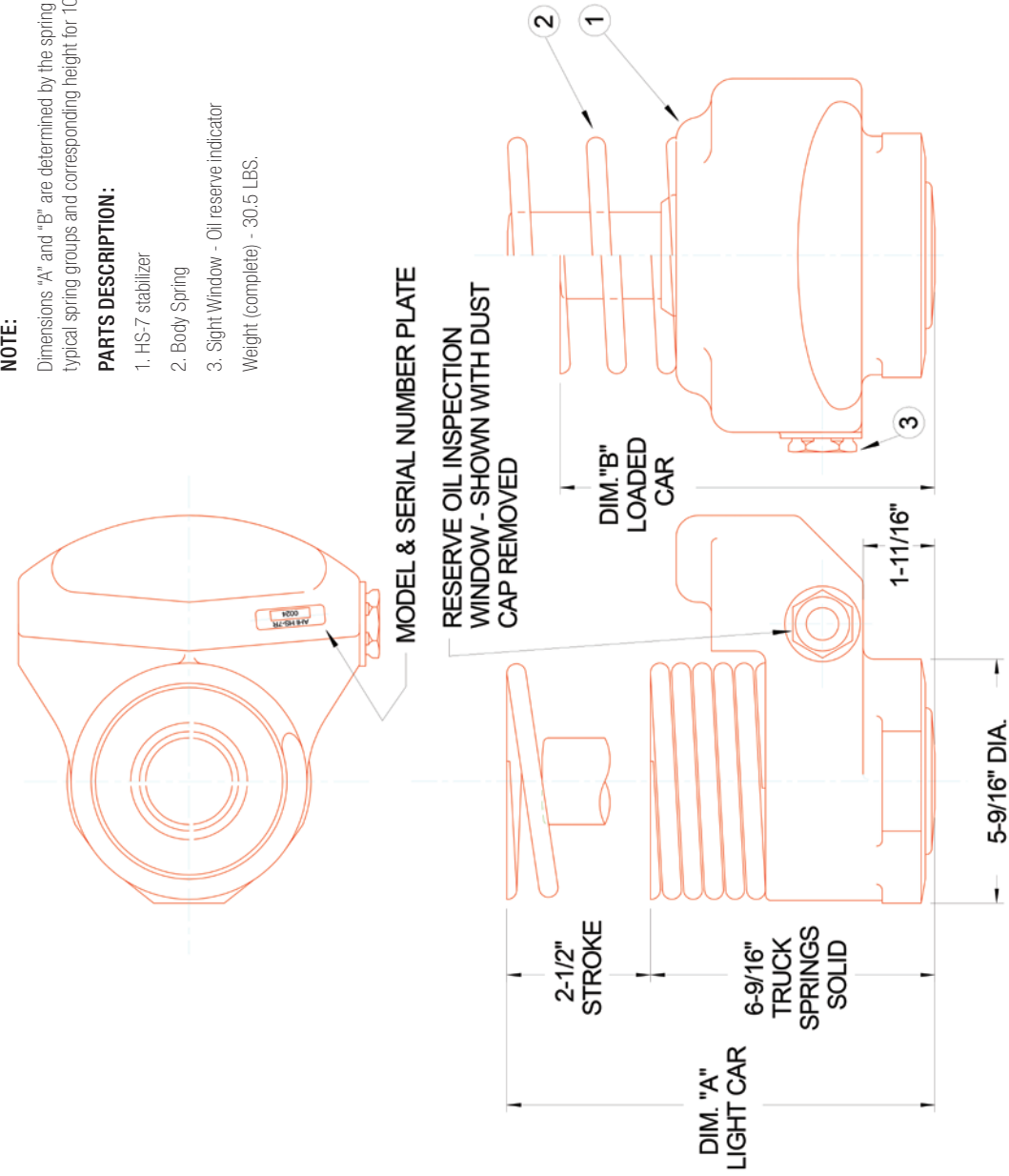
Please Note: This is a limited catalog. For more information regarding our additional product offerings, please contact our customer service at **877.94.PARTS**.

HS-7 SNUBBER

NOTE:
Dimensions "A" and "B" are determined by the spring group arrangement. for use in typical spring groups and corresponding height for 100 ton cars.

PARTS DESCRIPTION:

1. HS-7 stabilizer
2. Body Spring
3. Sight Window - Oil reserve indicator
Weight (complete) - 30.5 LBS.

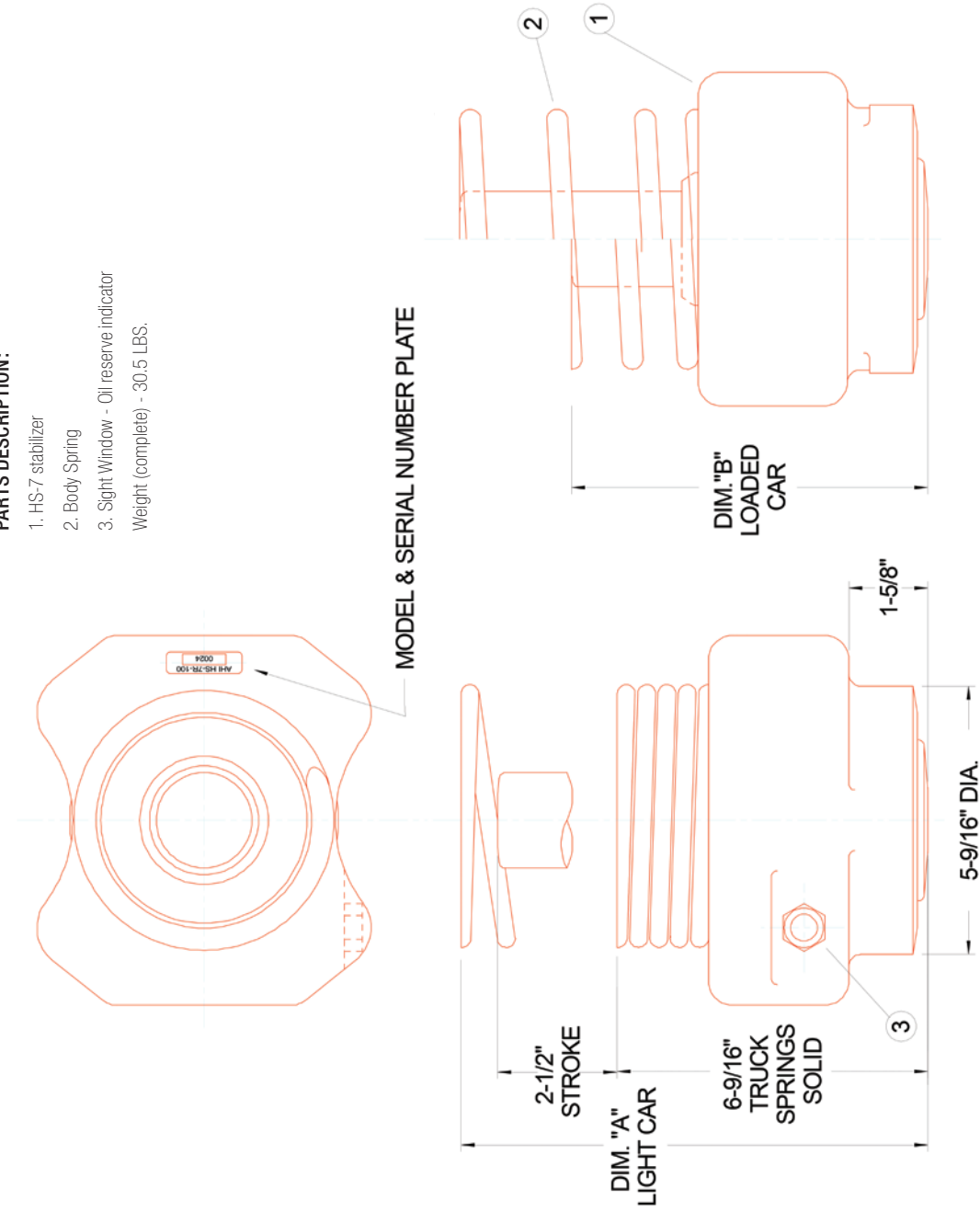


HS-7-100 SNUBBER

NOTE:
Dimensions "A" and "B" are determined by the spring group arrangement. for use in typical spring groups and corresponding height for 100 ton cars.

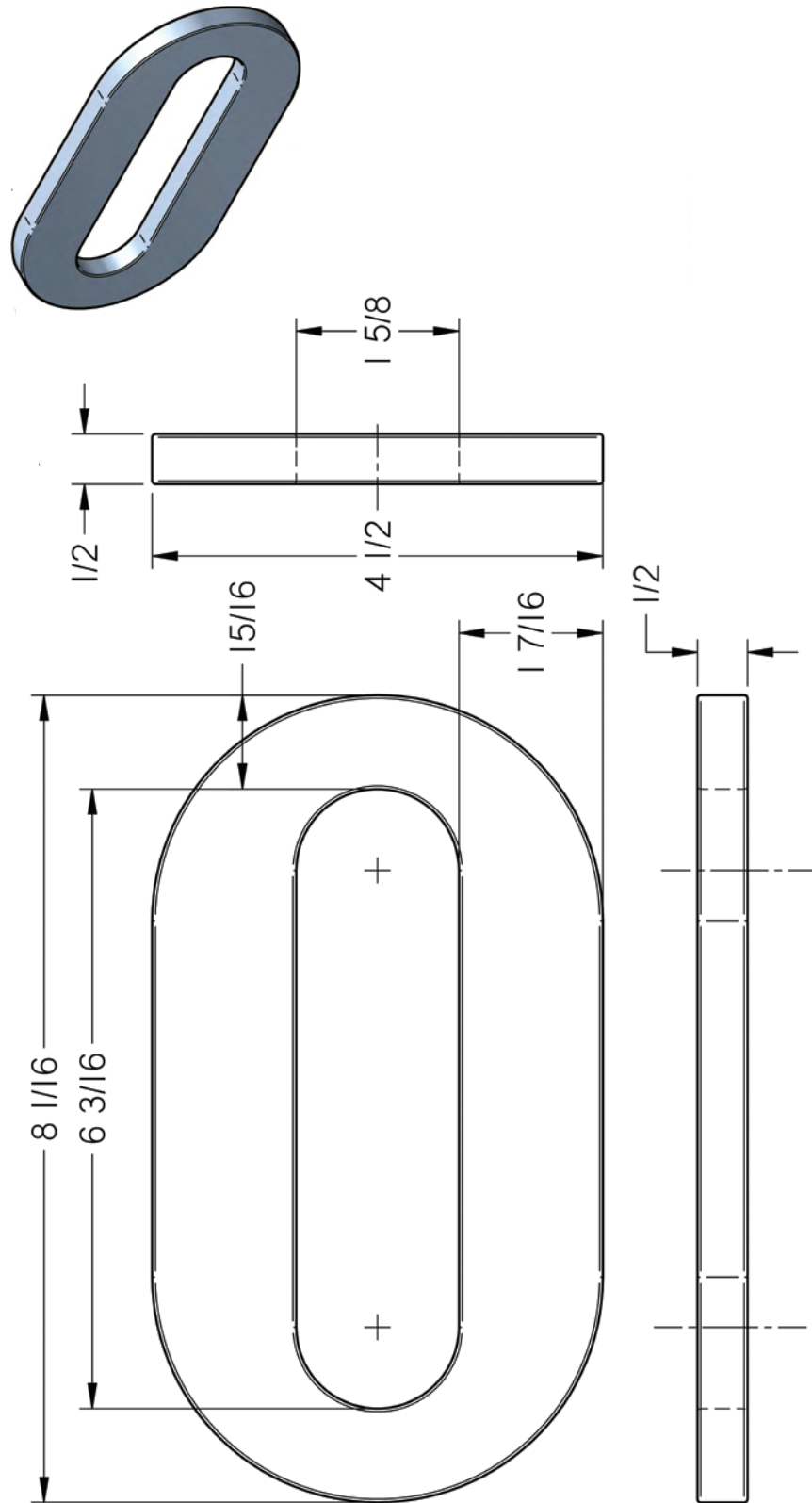
PARTS DESCRIPTION:

1. HS-7 stabilizer
2. Body Spring
3. Sight Window - Oil reserve indicator
Weight (complete) - 30.5 LBS.



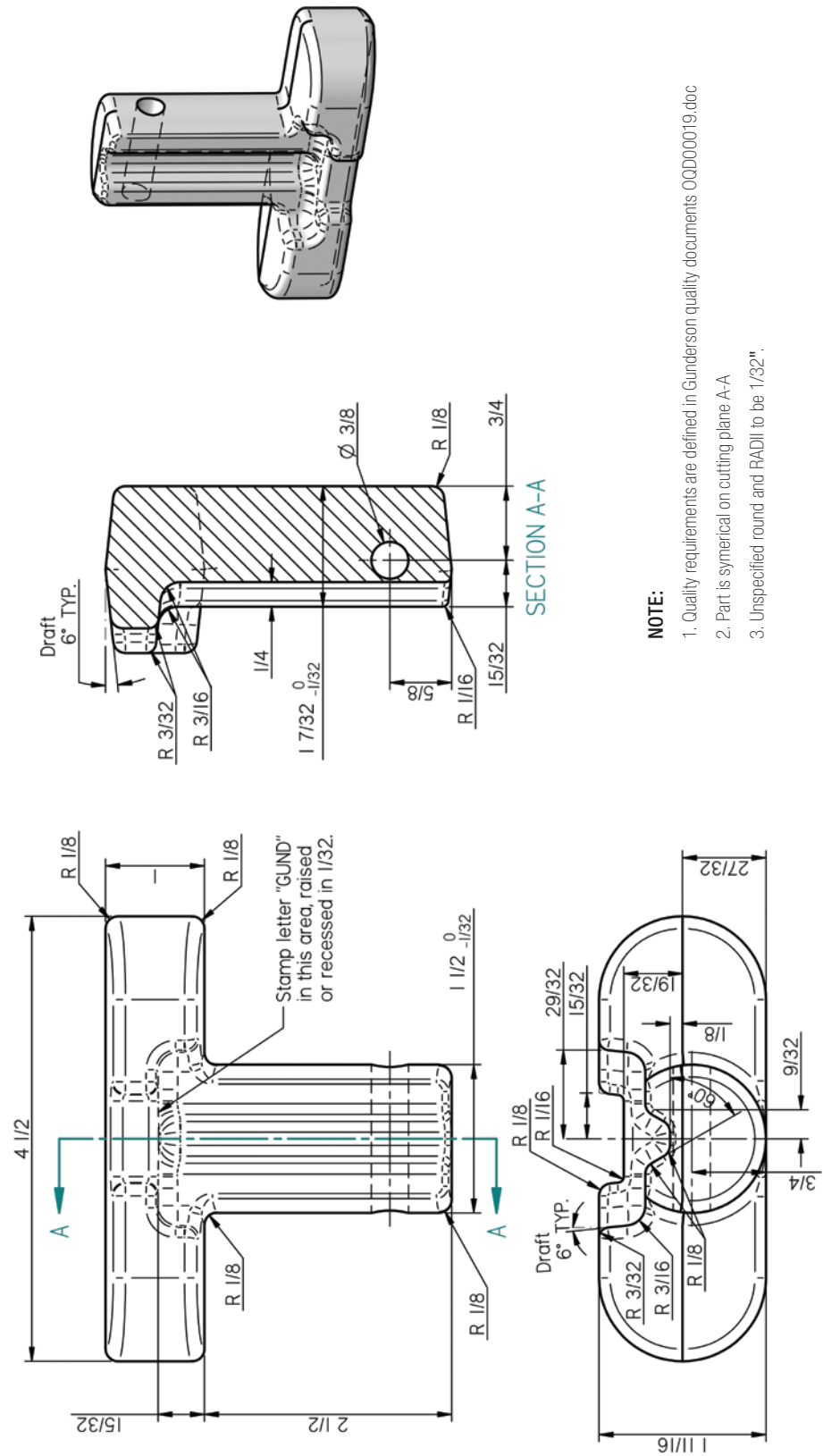
DRAFT KEY WASHER

WEIGHT: 3.172 LBM
 MATERIAL: ASTM A576 GRADE C 1030 STEEL
 PART #: 90004397



DRAFT KEY RETAINER

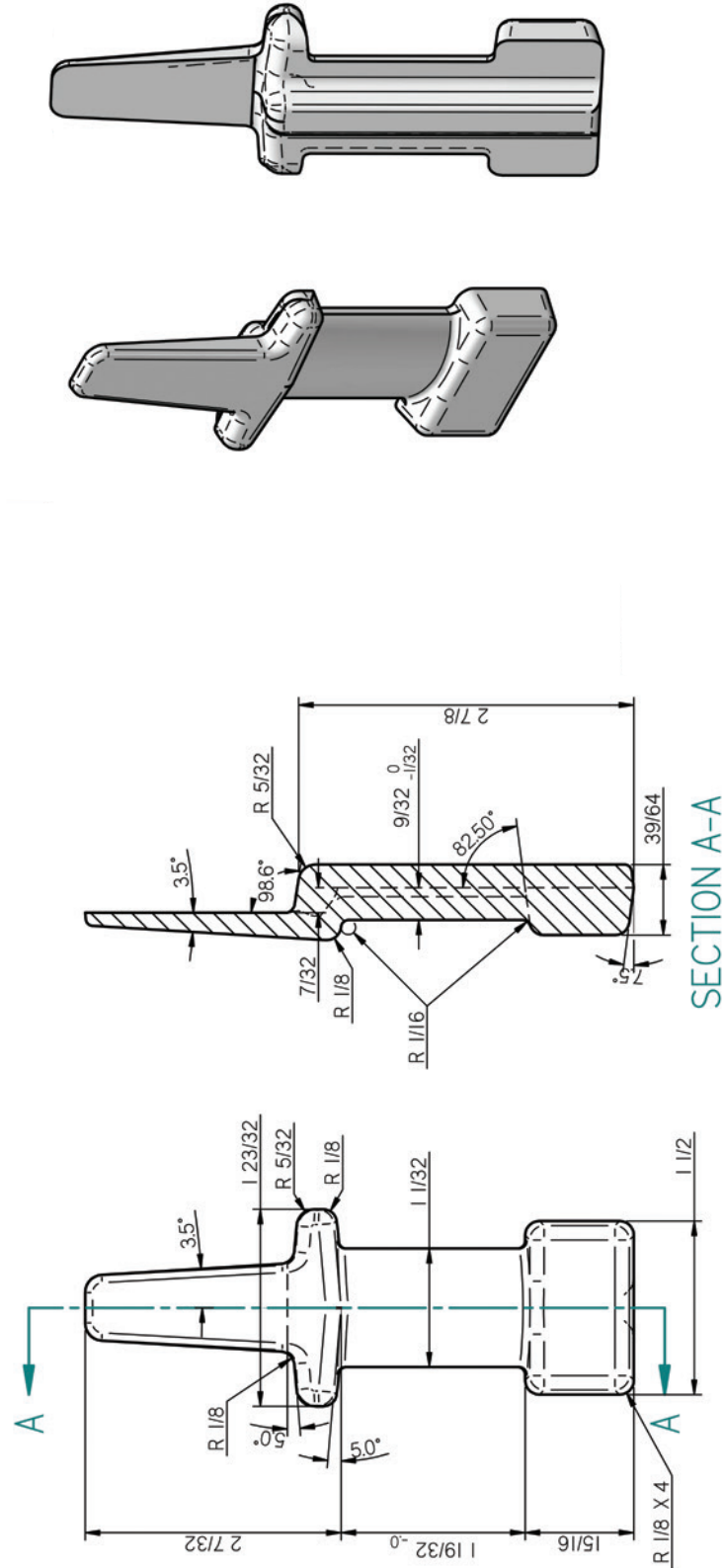
WEIGHT: 2.629 LBM
 MATERIAL: DROP FORGED, ANSI C-1030 STEEL
 STOCK CODE: AH671011-03



- NOTE:**
1. Quality requirements are defined in Gundersen quality documents OOD000019.doc
 2. Part is symmetrical on cutting plane A-A
 3. Unspecified round and RADII to be $\frac{1}{32}$ ".

DRAFT KEY LOCK

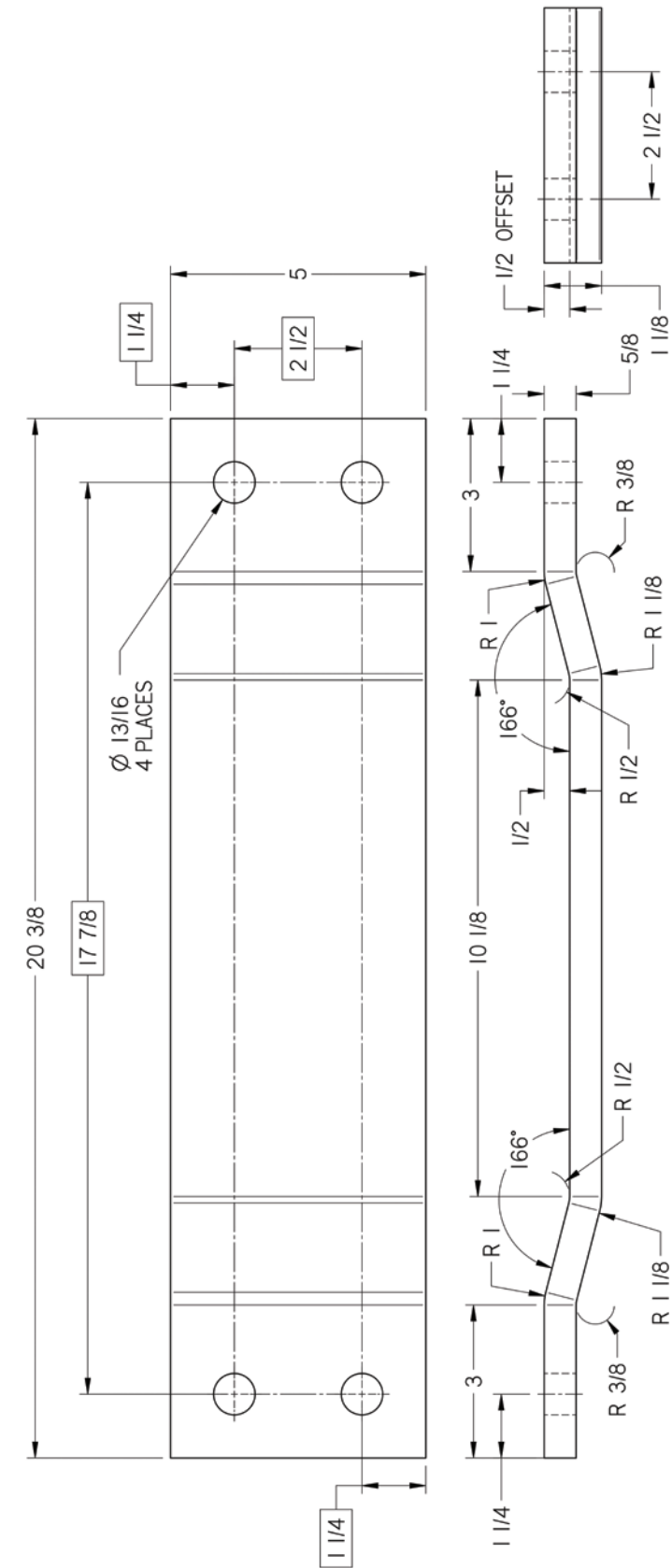
WEIGHT: 0.438 LBM
 MATERIAL: DROP FORGED, ANSI C-1020 STEEL
 PART #: AH671011-04



- NOTE:**
1. Quality requirements are defined in gunderson quality documents OOD000019.doc
 2. Part is symetrical on cutting plane A-A
 3. Unspecified RADII to be 1/32".
 4. Draft angle to be 5° unless otherwise specified.

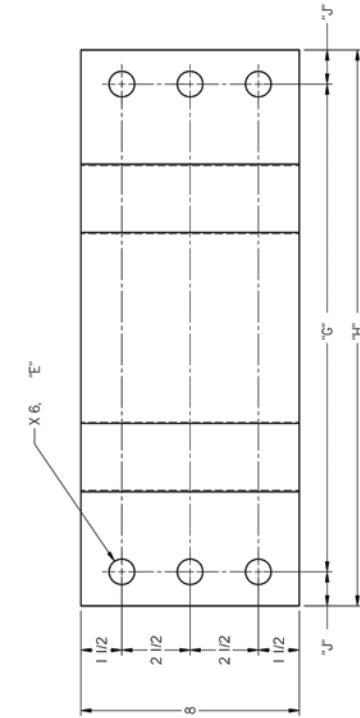
EOC UNT SUPPORT WIDE

WEIGHT: 17.760 LBM
 MATERIAL: 1018 CR STEEL
 STOCK CODE: C-1883



DRAFT GEAR CARRIER

MATERIAL: A.A.R. SPEC. M-116, GRADE A, MILD STEEL

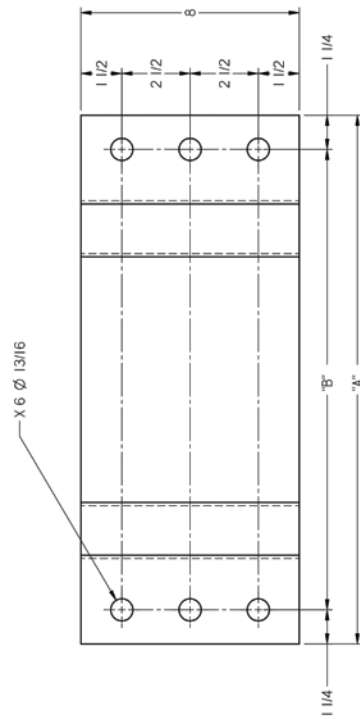


STYLE # 2



2 - PER CAR

STYLE # 2, DRAFT GEAR CARRIER PLATE											
STOCK CODE	UP CAR CLASS	S.I. NO.	A	B	C	D	E	F	G	H	J
20F-227	B-50-40, A-50-22, H-40-1, GH-70-4-5-7-8	20F-227	5/8"	7"	2-1/2"	4-3/16"	15/16"	3/8"	17-7/8"	20-3/8"	1-1/4"
20F-249	CH-70-2-5	20F-249	1"	7"	2-1/2"	4-3/16"	15/16"	1/4"	17-7/8"	20-3/8"	1-1/4"
20F-95	B-50-41, HK-70-2, R-40-10, B-50-18-19	20F-95	5/8"	7"	2-1/2"	4-3/16"	13/16"	3/8"	17-7/8"	20-3/8"	1-1/4"
20F-263	F-20-1, F-50-15, F-50-16	20F-263	5/8"	7"	2-1/2"	5"	13/16"	1/4"	19-1/2"	22"	1-1/4"
20F-296	RF-70-1,5,7,8	20F-296	5/8"	7"	2-1/2"	5"	15/16"	1/4"	19-1/2"	22"	1-1/4"



STYLE # 1



2 - PER CAR

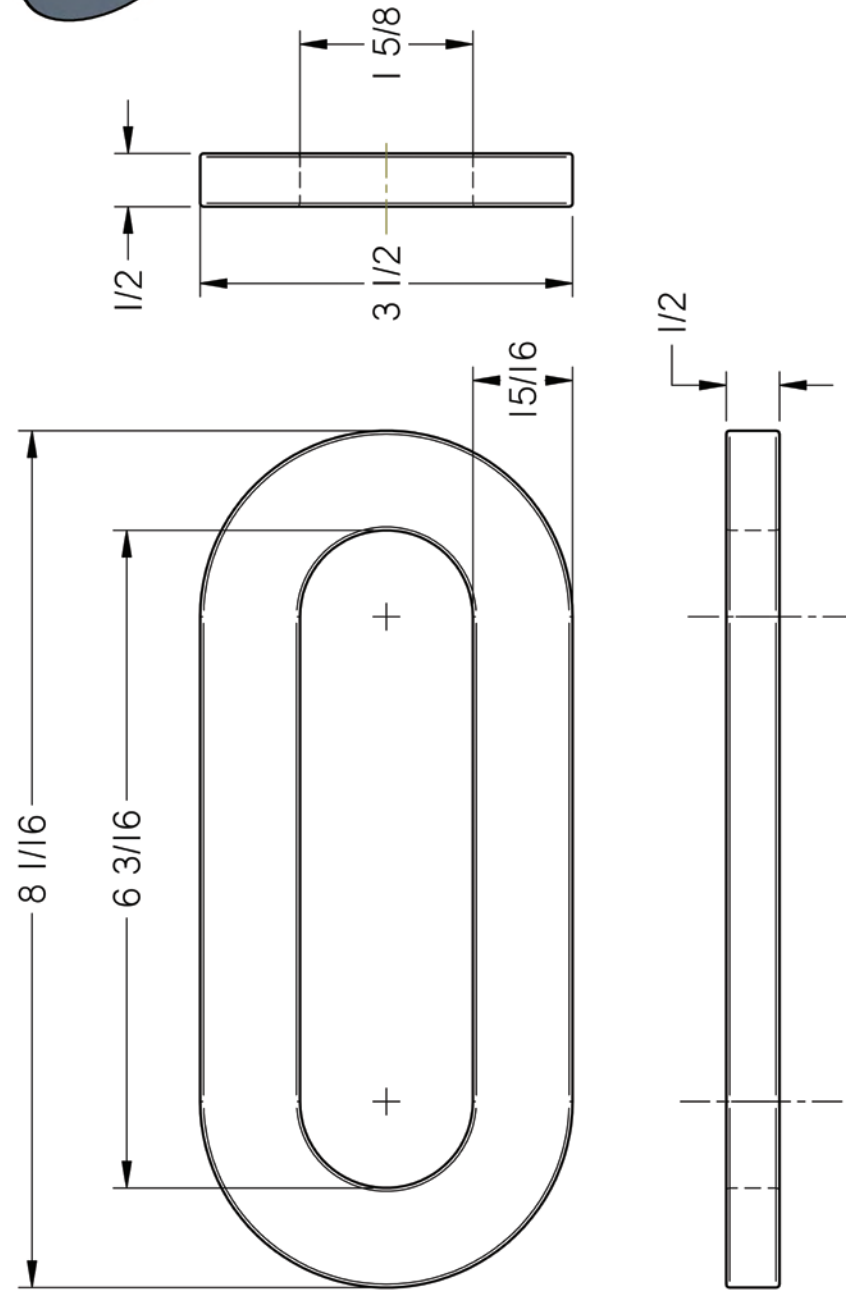
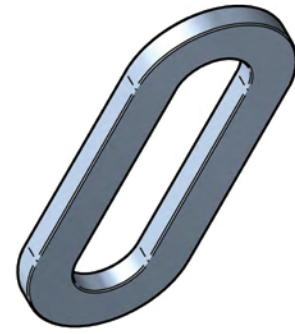
STYLE # 1, DRAFT GEAR CARRIER PLATE							
STOCK CODE	UP CAR CLASS	S.I. NO.	A	B	C	D	E
18054	R-40-1	18054	19-3/8"	16-7/8"	9"	1-15/16"	3-1/4"
20F-294	B-50-44	20F-294	20-3/8"	17-7/8"	10"	3/4"	4-7/16"

DRAFT KEY WASHER

WEIGHT: 2.274 LBM

MATERIAL: ASTM A576 GRADE C 1030 STEEL

PART #: 6A644300

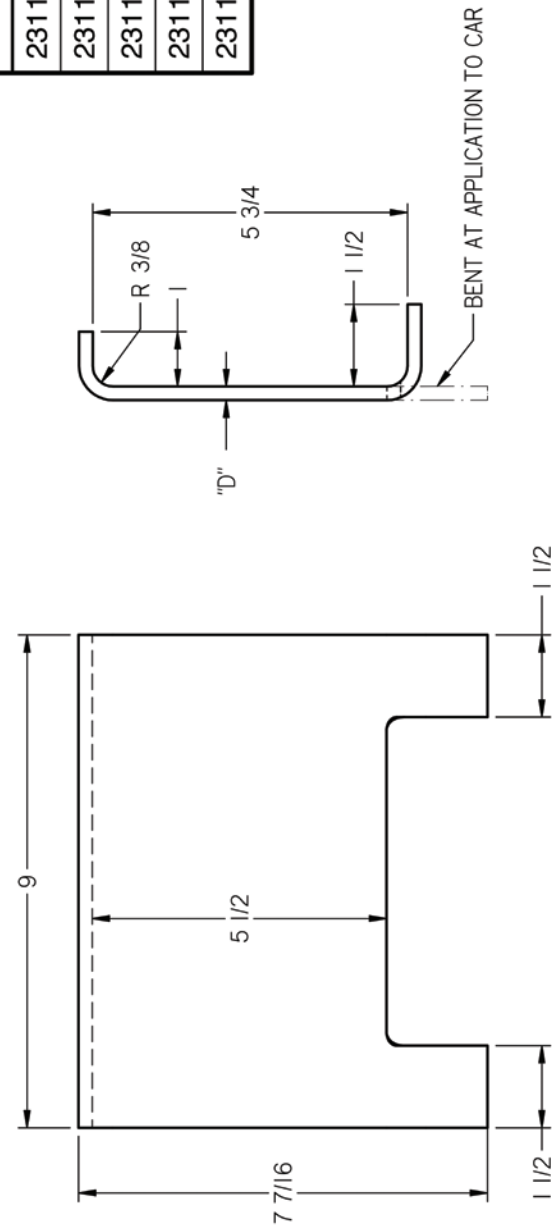


Please Note: This is a limited catalog. For more information regarding our additional product offerings, please contact our customer service at **877.94.PARTS**.

DRAFT GEAR COUPLER SHIM

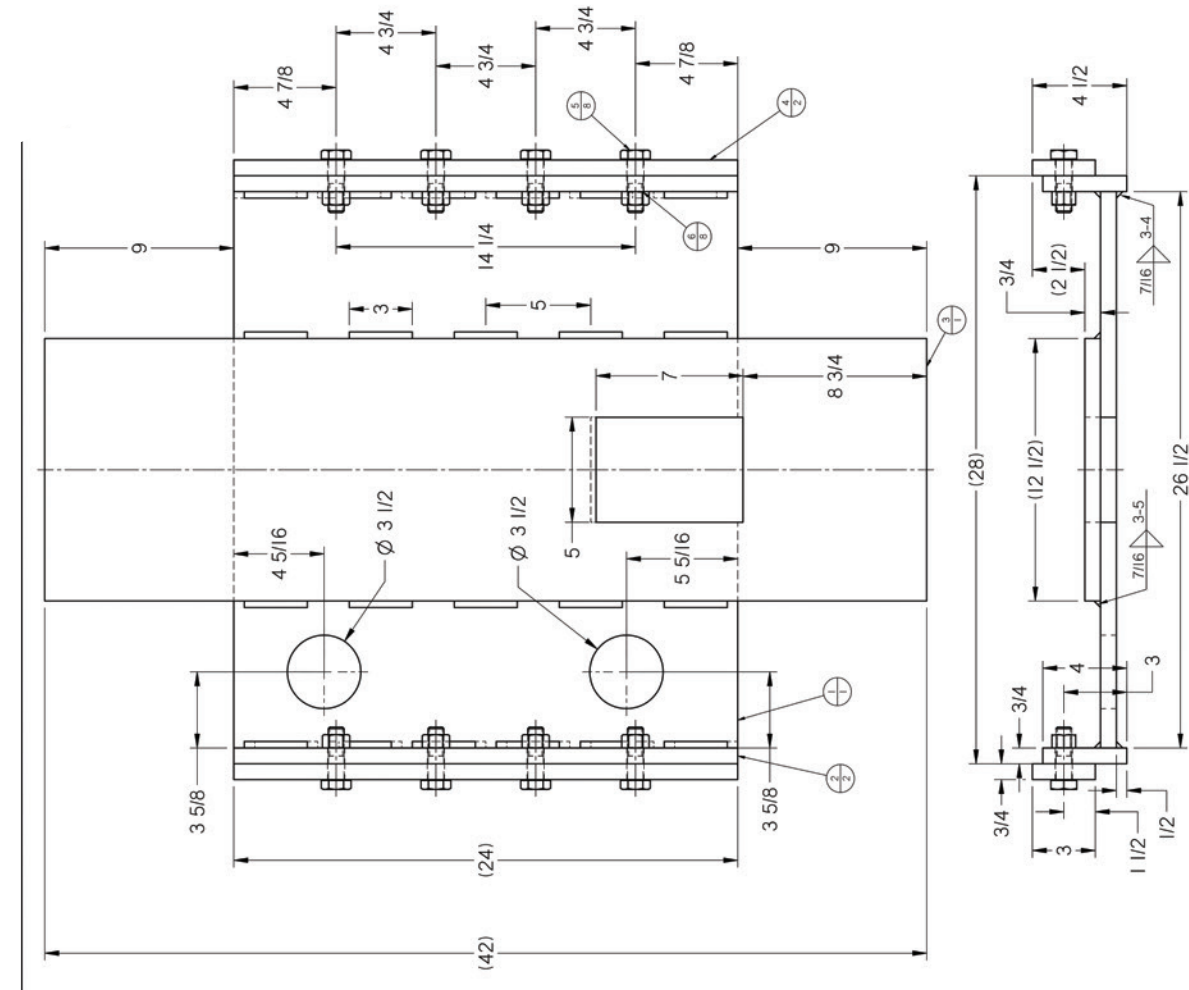
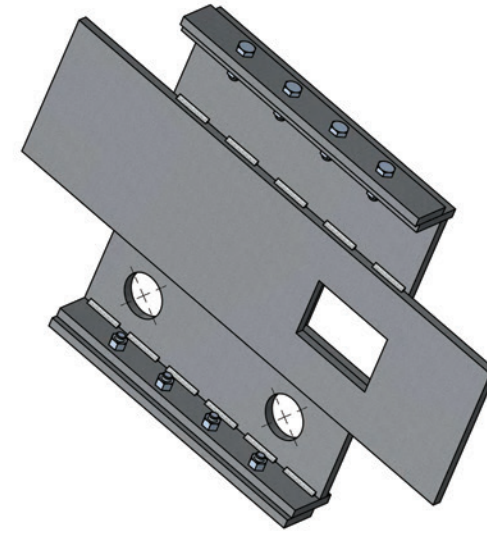
MATERIAL: GRADE 50, STEEL PLATE

DRAFT GEAR COUPLER SHIM	STOCK CODE	UP PART #	"D"
	23113901	20F-222	1/4"
	23113911	20F-223	3/8"
	23113921	20F-224	1/2"
	23113931	20F-225	5/8"
	23113941	20F-226	3/4"



SA-G-HR CARRIER ASSEMBLY

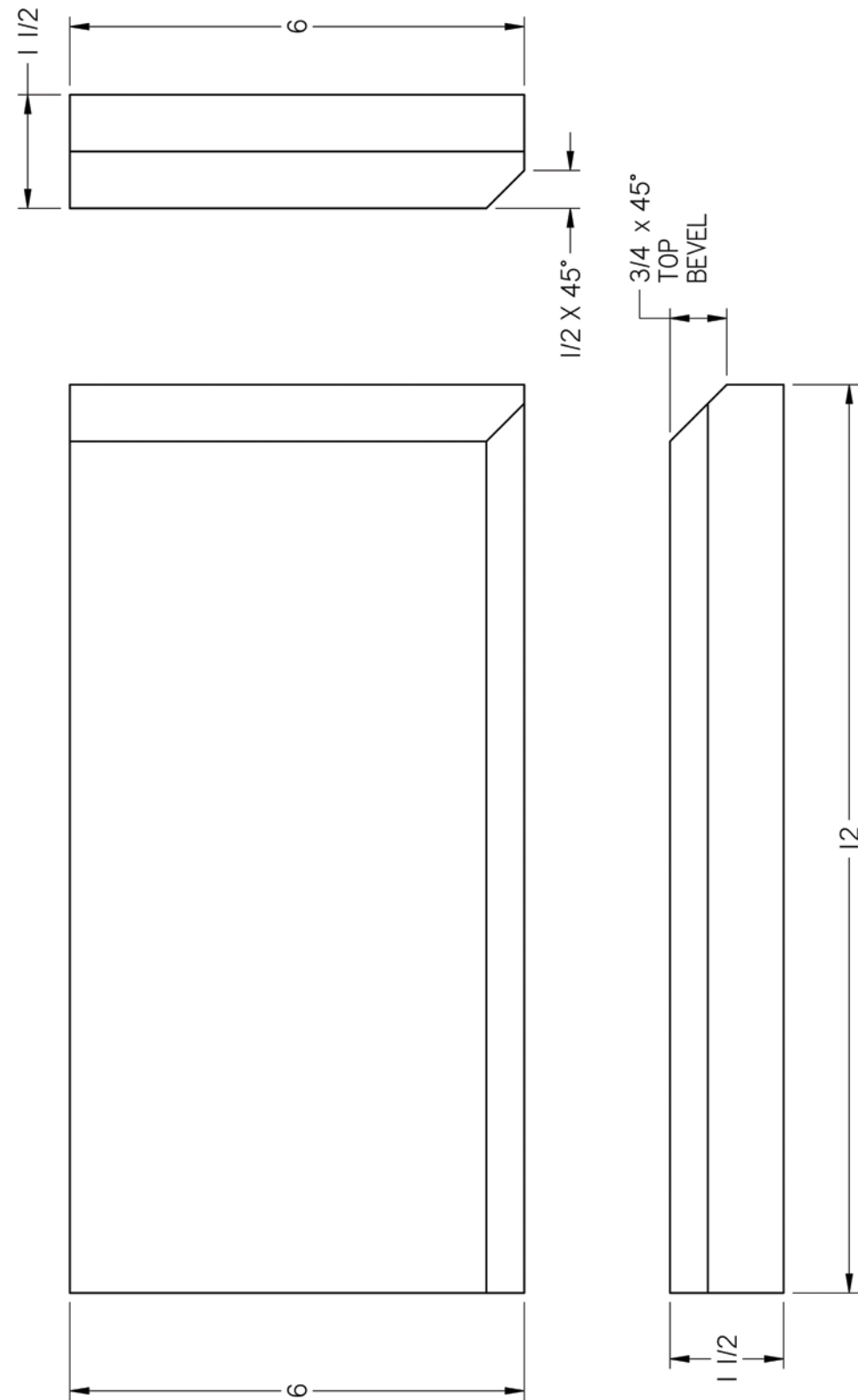
WEIGHT: 303.386 LBM
 MATERIAL: GRADE 50 PLATE
 STOCK CODE: D-16793



Please Note: This is a limited catalog. For more information regarding our additional product offerings, please contact our customer service at **877.94.PARTS**.

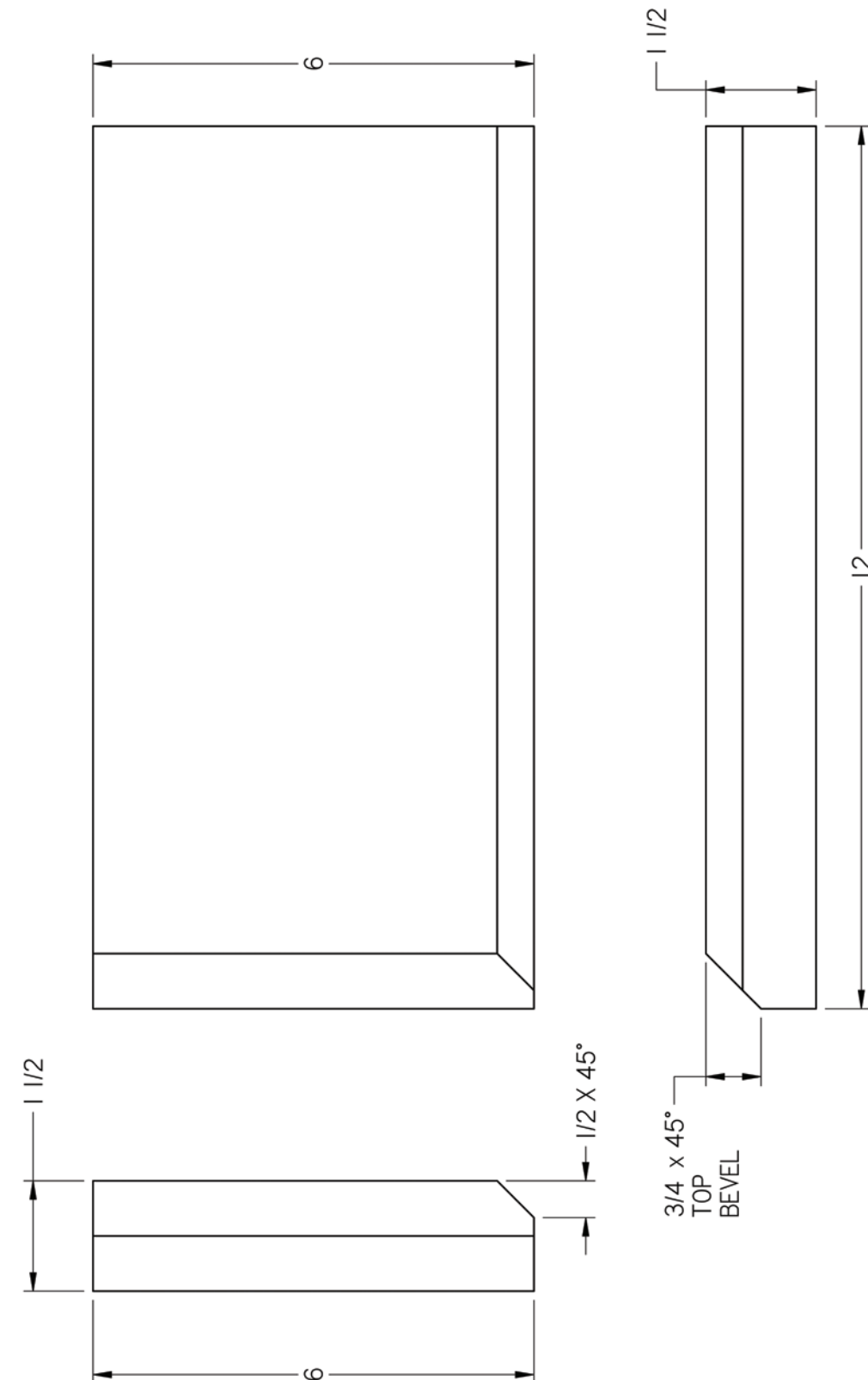
GHR UNIT STOP RIGHT SIDE

WEIGHT: 29.681 LBM
 MATERIAL: A-572, GR. 50 PLATE STEEL
 STOCK CODE: GHR-1006



GHR UNIT STOP LEFT SIDE

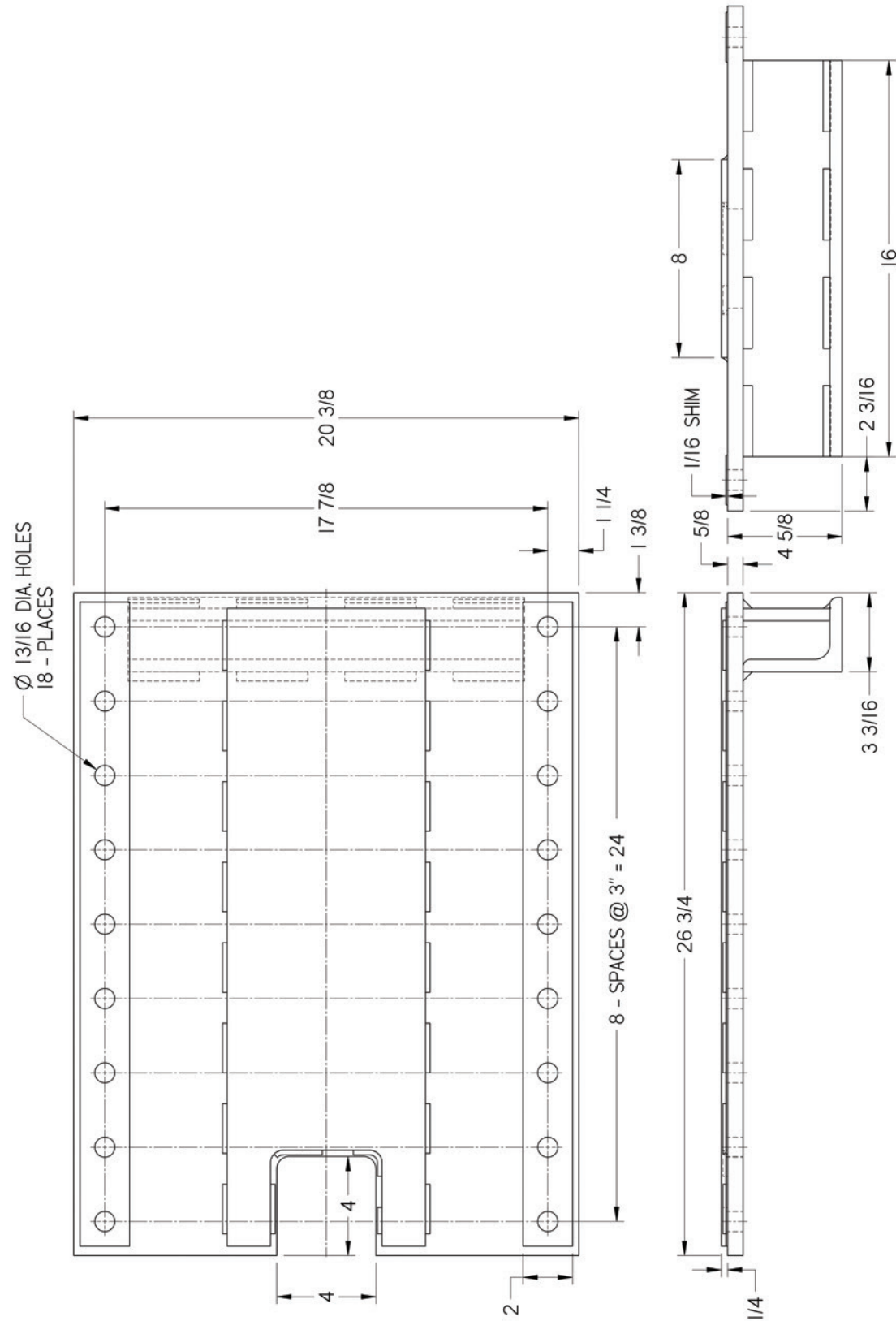
WEIGHT: 29.681 LBM
 MATERIAL: A-572, GR. 50 PLATE STEEL
 STOCK CODE: GHR-1005



Please Note: This is a limited catalog. For more information regarding our additional product offerings, please contact our customer service at **877.94.PARTS**.

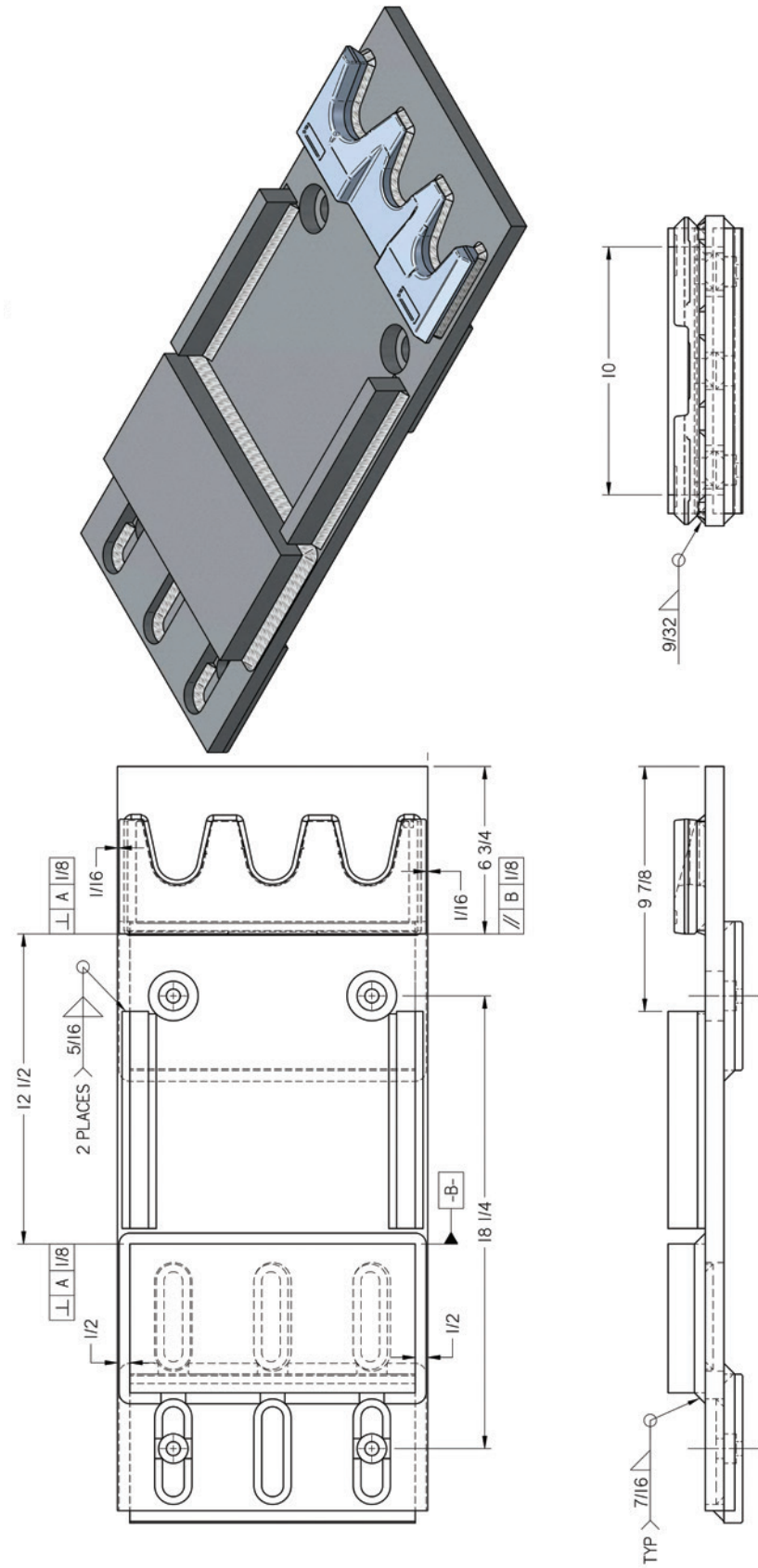
10" YOKE CARRIER

WEIGHT: 128.905 LBM
STOCK CODE: SC-3317



SILL ADAPTOR

WEIGHT: 143.985 LBM
STOCK CODE: 10446

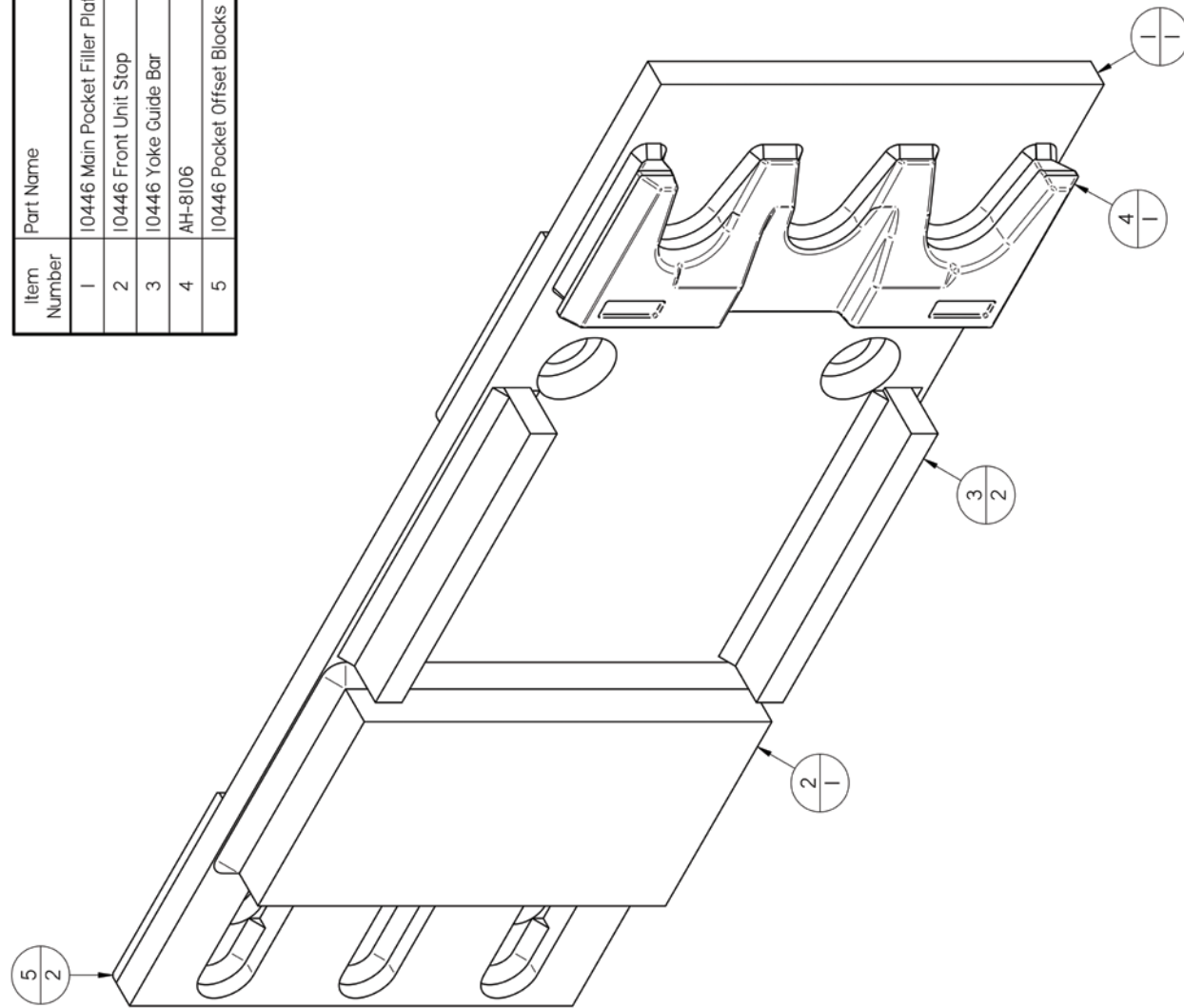


Please Note: This is a limited catalog. For more information regarding our additional product offerings, please contact our customer service at **877.94.PARTS**.

10446 SILL ADAPTOR PARTS LIST

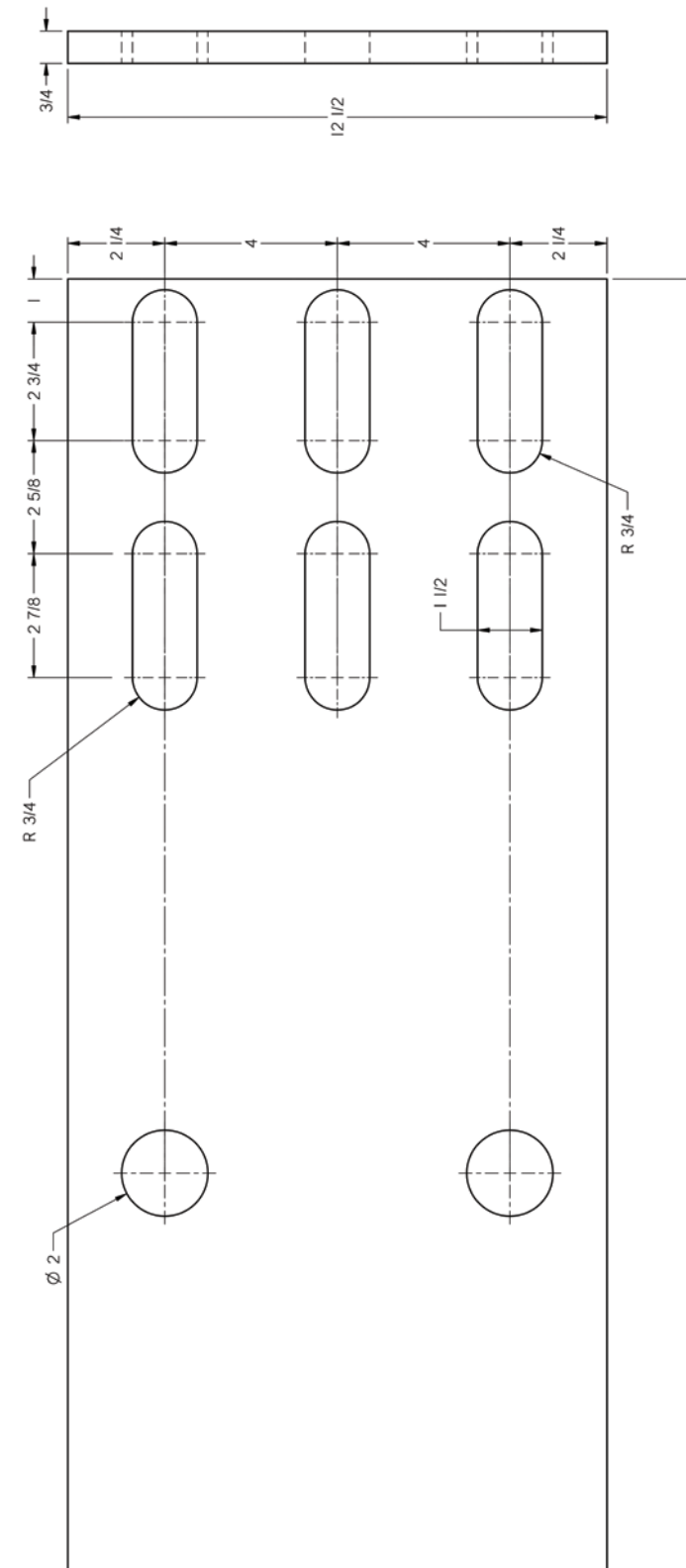
WEIGHT: 3.172 LBM
 MATERIAL: ASTM A576 GRADE C 1030 STEEL
 PART #: 90004397

Item Number	Part Name	Quantity
1	10446 Main Pocket Filler Plate	1
2	10446 Front Unit Stop	1
3	10446 Yoke Guide Bar	2
4	AH-8106	1
5	10446 Pocket Offset Blocks	2



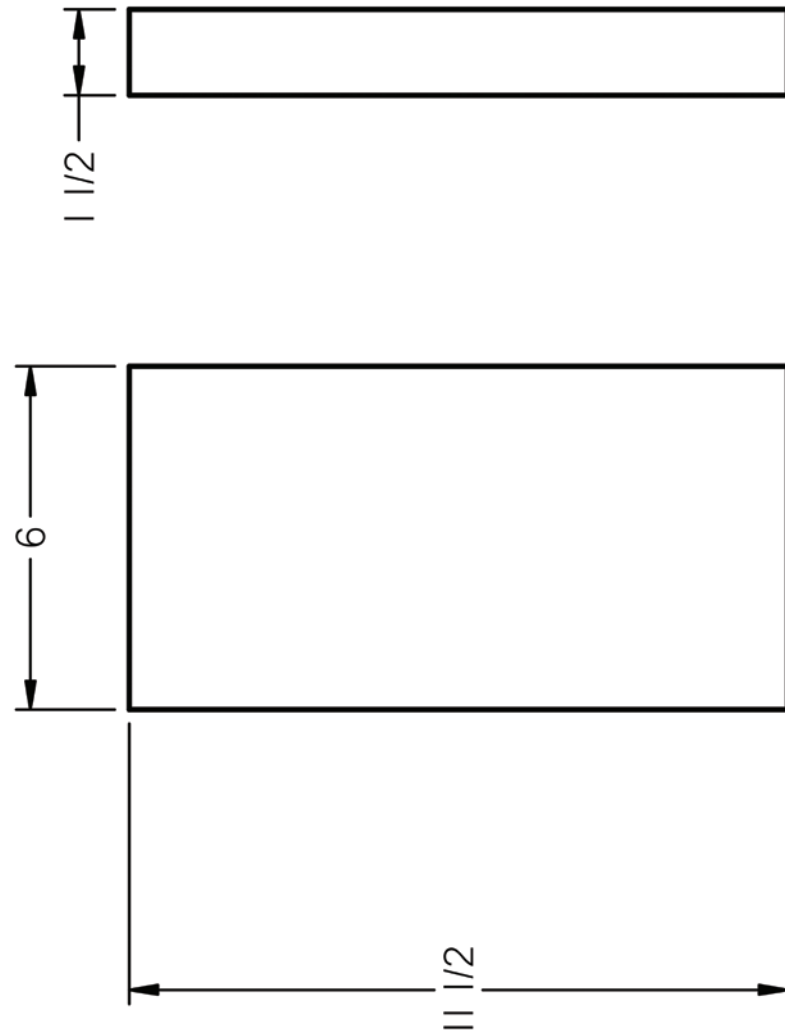
10446 MAIN POCKET FILLER PLATE

WEIGHT: 70.633 LBM
 MATERIAL: STEEL, GRADE 50 PLATE



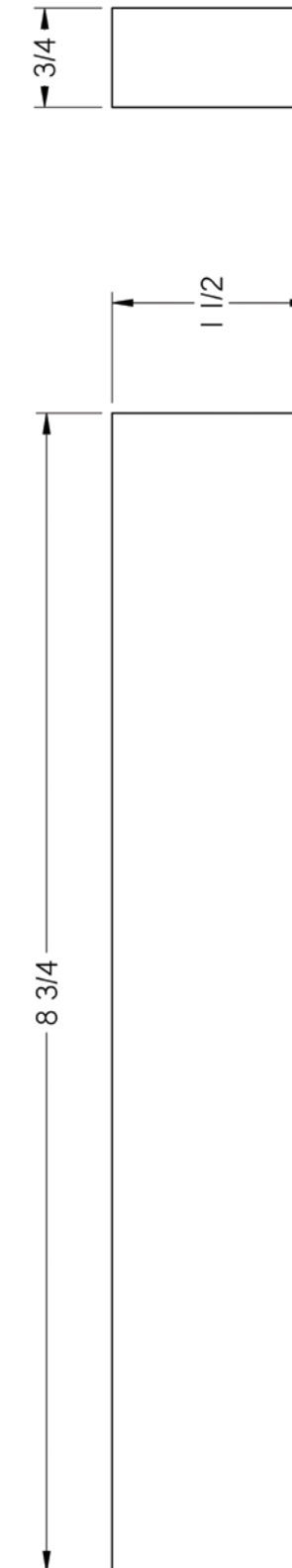
10446 FRONT UNIT STOP

WEIGHT: 29.289 LBM
 MATERIAL: STEEL, GRADE 50 PLATE



10446 YOKE GUIDE BAR

WEIGHT: 2.786 LBM
 MATERIAL: STEEL, GRADE 50 PLATE



FRONT DRAFT LUG FORGED

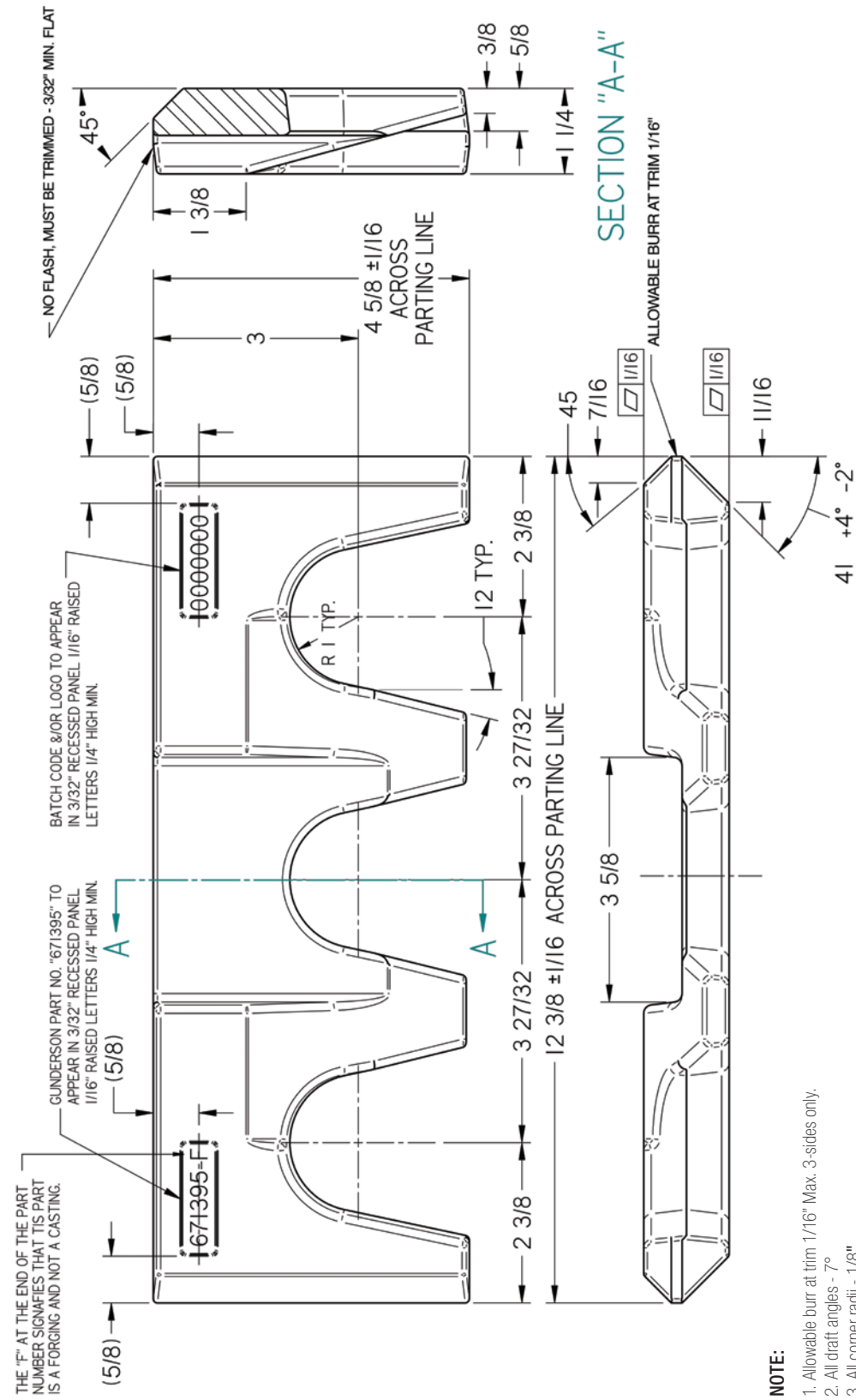
WEIGHT: 10.383 LBM

MATERIAL: ASTM A576, AISI 1035 QT, 50 KSI MIN. YIELD, 170-220 BNH, 20% MIN. ELONGATION

STOCK CODE: AH8106

NOTE:

The recessed panels can be orientated either horizontal or vertical and sized to accommodate the required info and is the manufactures choice for best fit on the forging die layout to accommodate the required information in the space allowed.



NOTE:

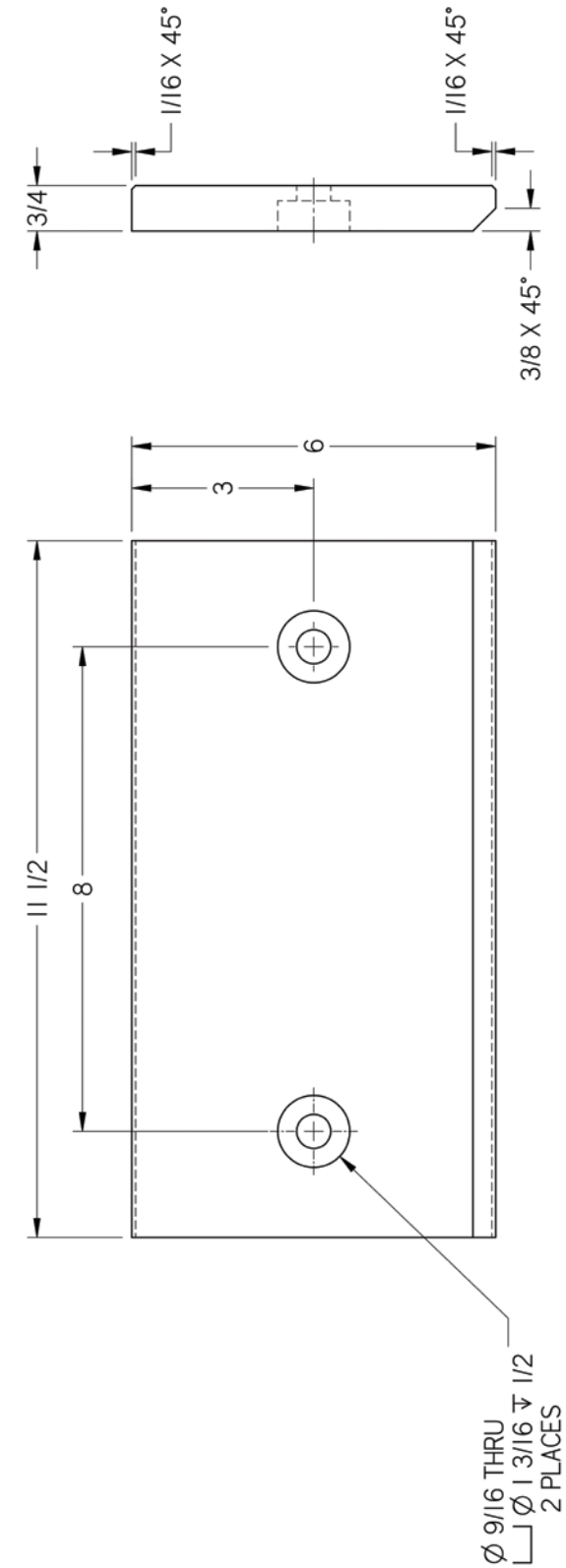
1. Allowable burr at trim 1/16" Max. 3-sides only.
2. All draft angles - 7°
3. All corner radii - 1/8"
4. All fillet radii - 1/8"

Tolerances: unless otherwise specified
All dimensions ± 1/16"
All draft angles +2° -1°

10446 POCKET OFFSET BLOCKS

WEIGHT: 14.054 LBM

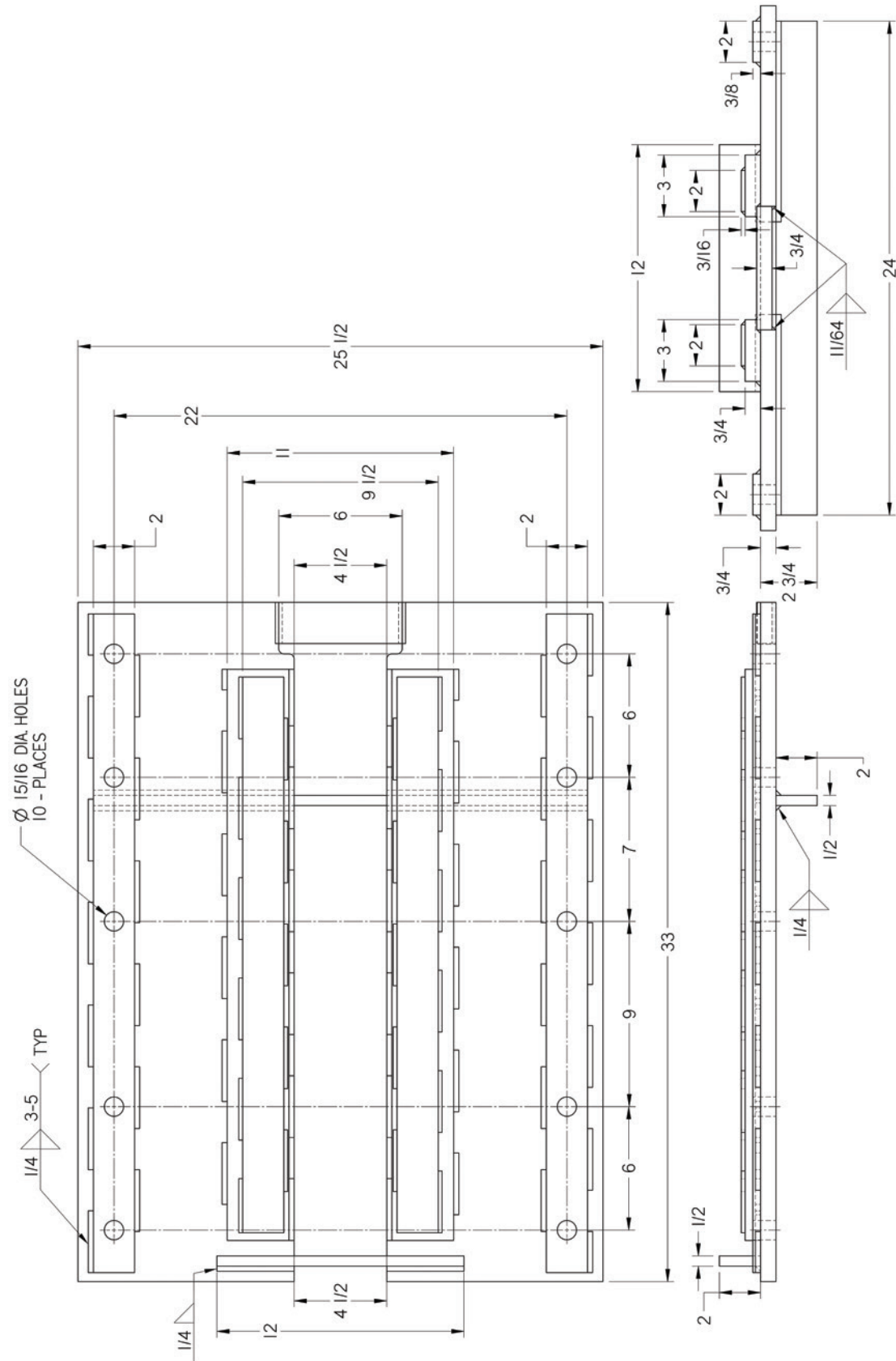
MATERIAL: STEEL, GRADE 50 PLATE



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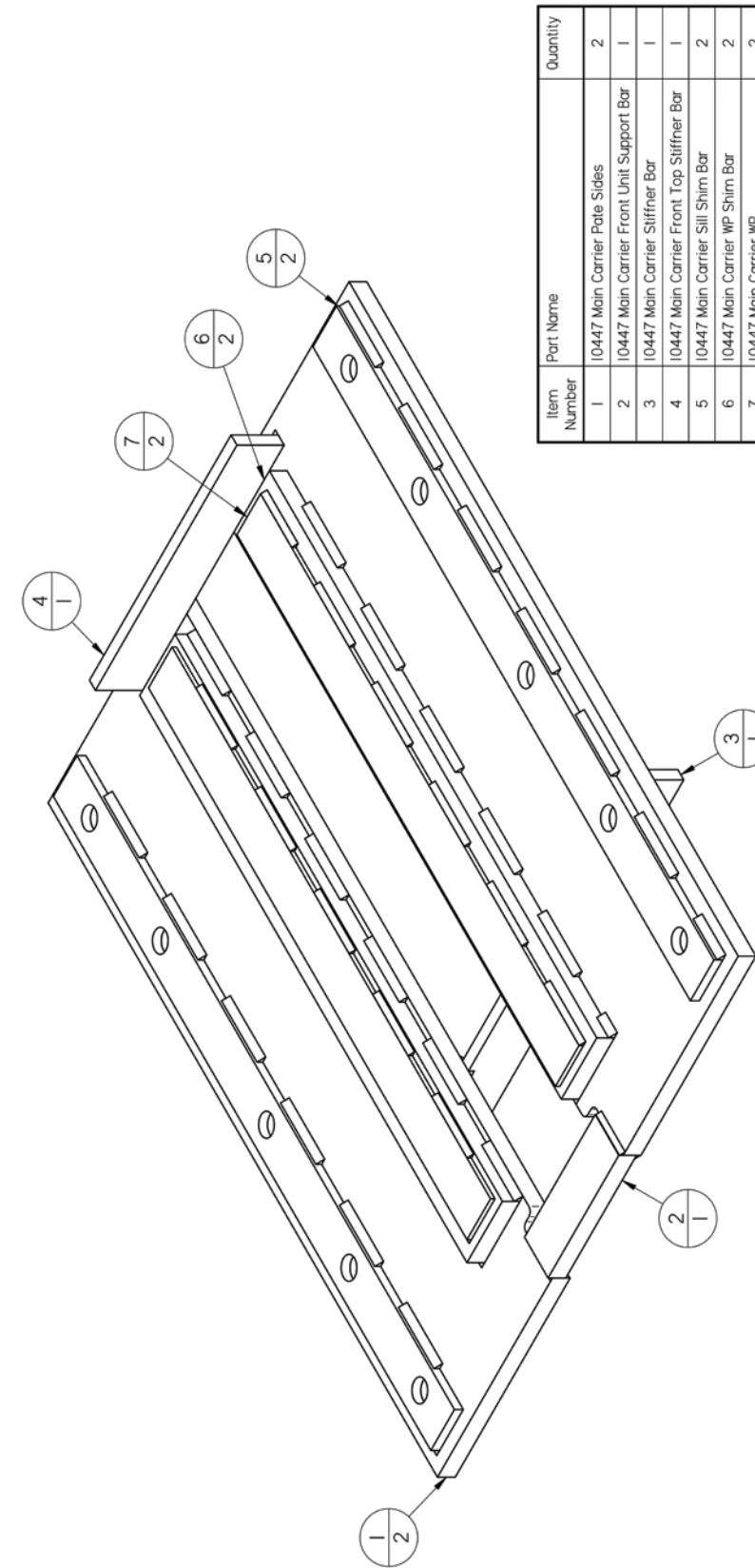
AO SMITH TO 10G CARRIER ASSY

WEIGHT: 211.474 LBM
 STOCK CODE: SC-10447 CARRIER ASSY



10447 CARRIER ASSY PARTS LIST

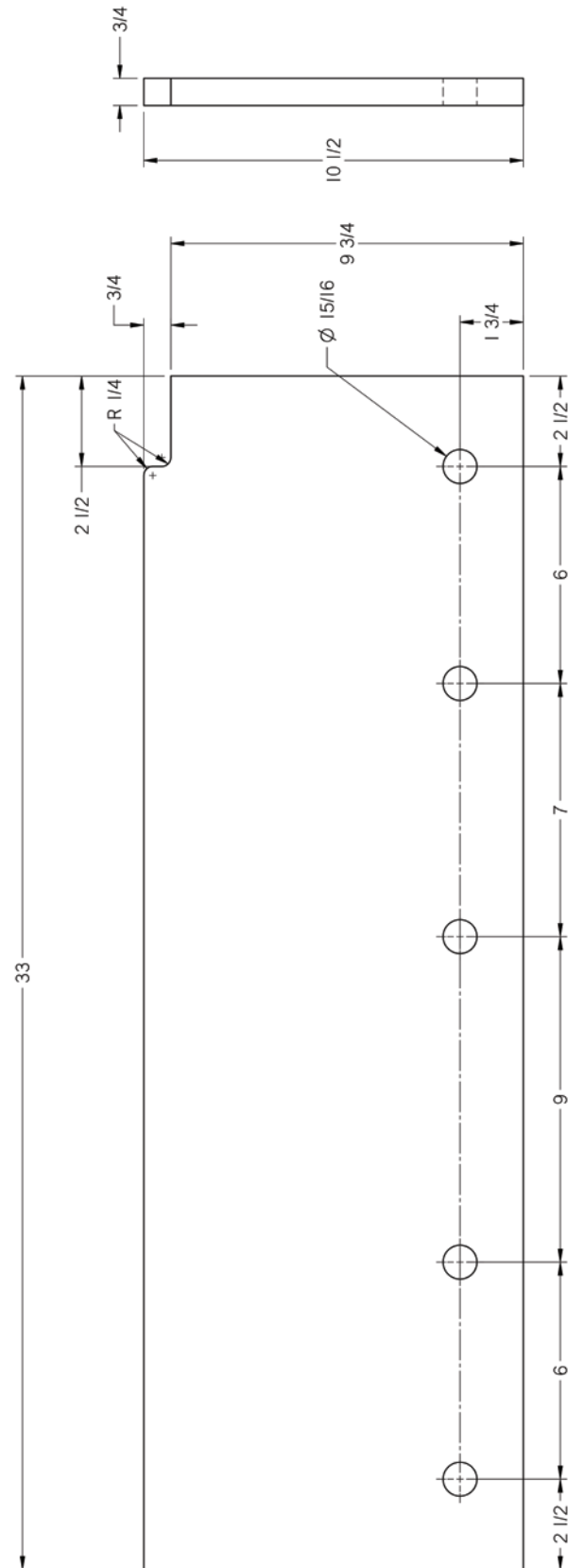
WEIGHT: 211.474 LBM
 STOCK CODE: 10447



Item Number	Part Name	Quantity
1	10447 Main Carrier Plate Sides	2
2	10447 Main Carrier Front Unit Support Bar	1
3	10447 Main Carrier Stiffner Bar	1
4	10447 Main Carrier Front Top Stiffner Bar	1
5	10447 Main Carrier Sill Shim Bar	2
6	10447 Main Carrier WP Shim Bar	2
7	10447 Main Carrier WP	2

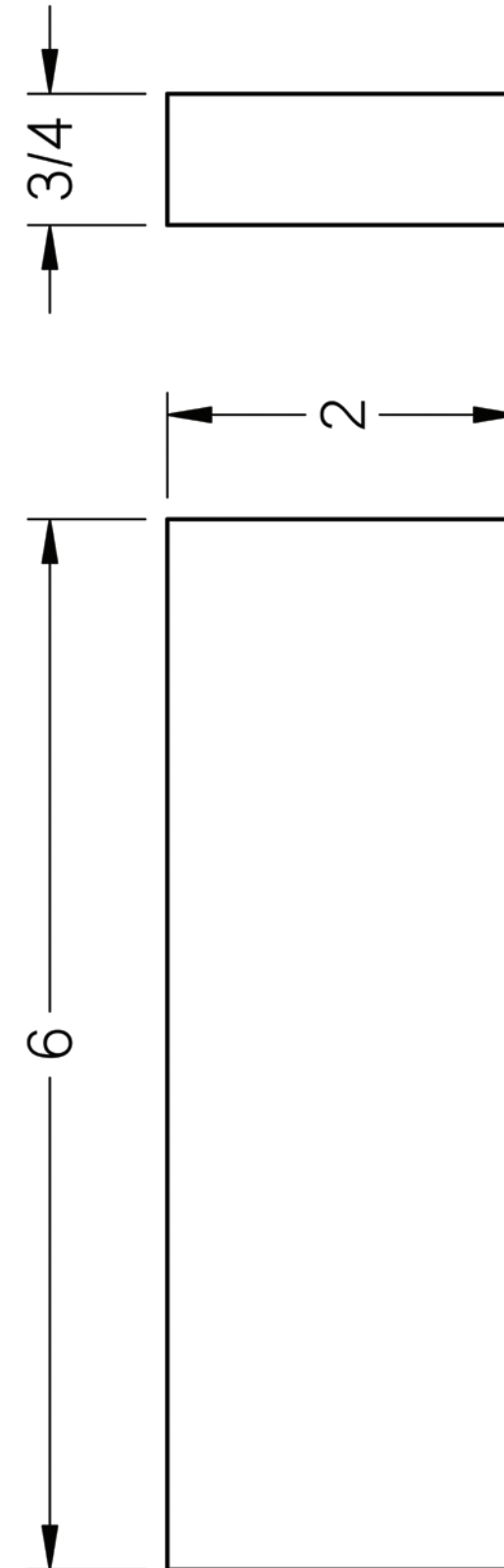
10447 MAIN CARRIER PLATE SIDES

WEIGHT: 72.410 LBM
 MATERIAL: STEEL, GRADE 50 PLATE



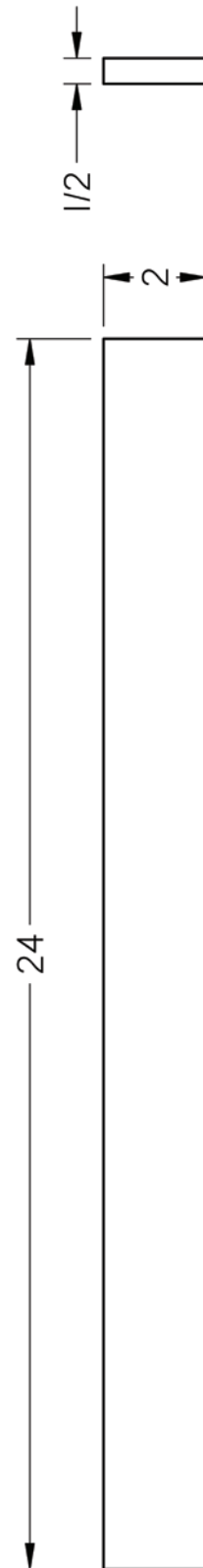
10447 MAIN CARRIER FRONT UNIT SUPPORT BAR

WEIGHT: 2.547 LBM
 MATERIAL: STEEL, GRADE 50 PLATE



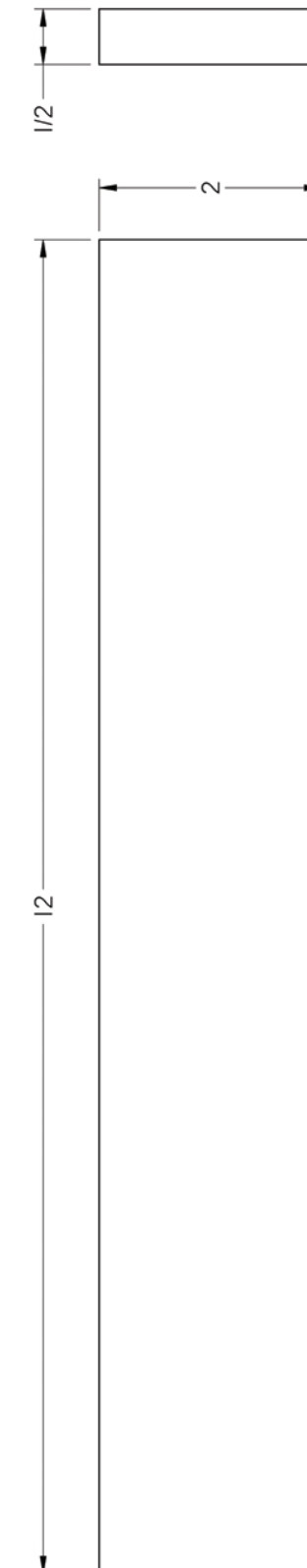
10447 MAIN CARRIER STIFFENER BAR

WEIGHT: 6.792 LBM
 MATERIAL: STEEL, GRADE 50 PLATE



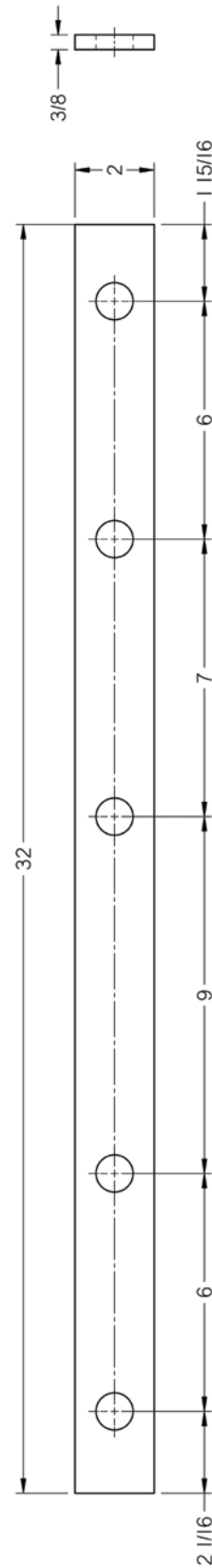
10447 MAIN CARRIER FRONT TOP STIFFENER BAR

WEIGHT: 3.396 LBM
 MATERIAL: STEEL, GRADE 50 PLATE



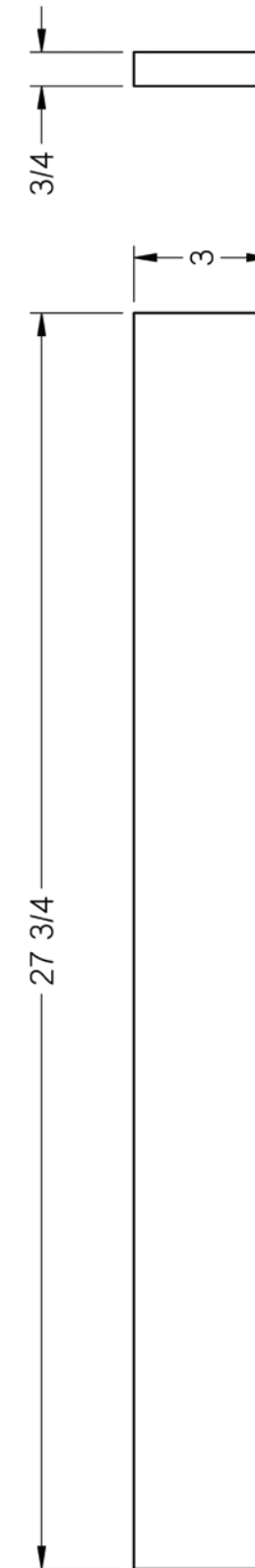
10447 MAIN CARRIER SILL SHIM BAR

WEIGHT: 6.425 LBM
 MATERIAL: STEEL, A36



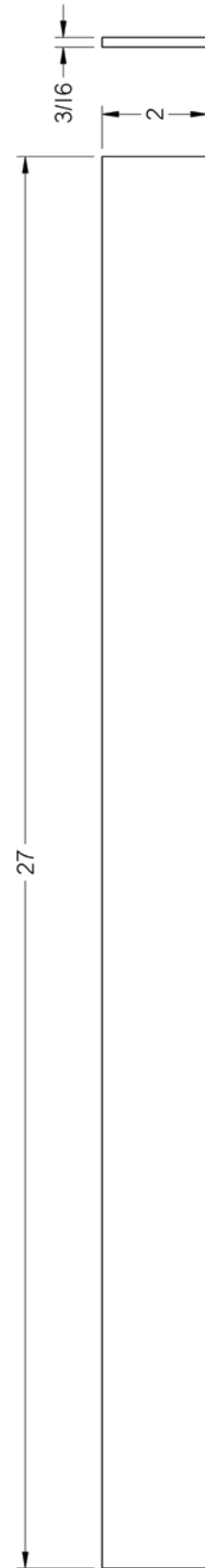
10447 MAIN CARRIER WP SHIM BAR

WEIGHT: 17.669 LBM
 MATERIAL: STEEL, GRADE 50 PLATE

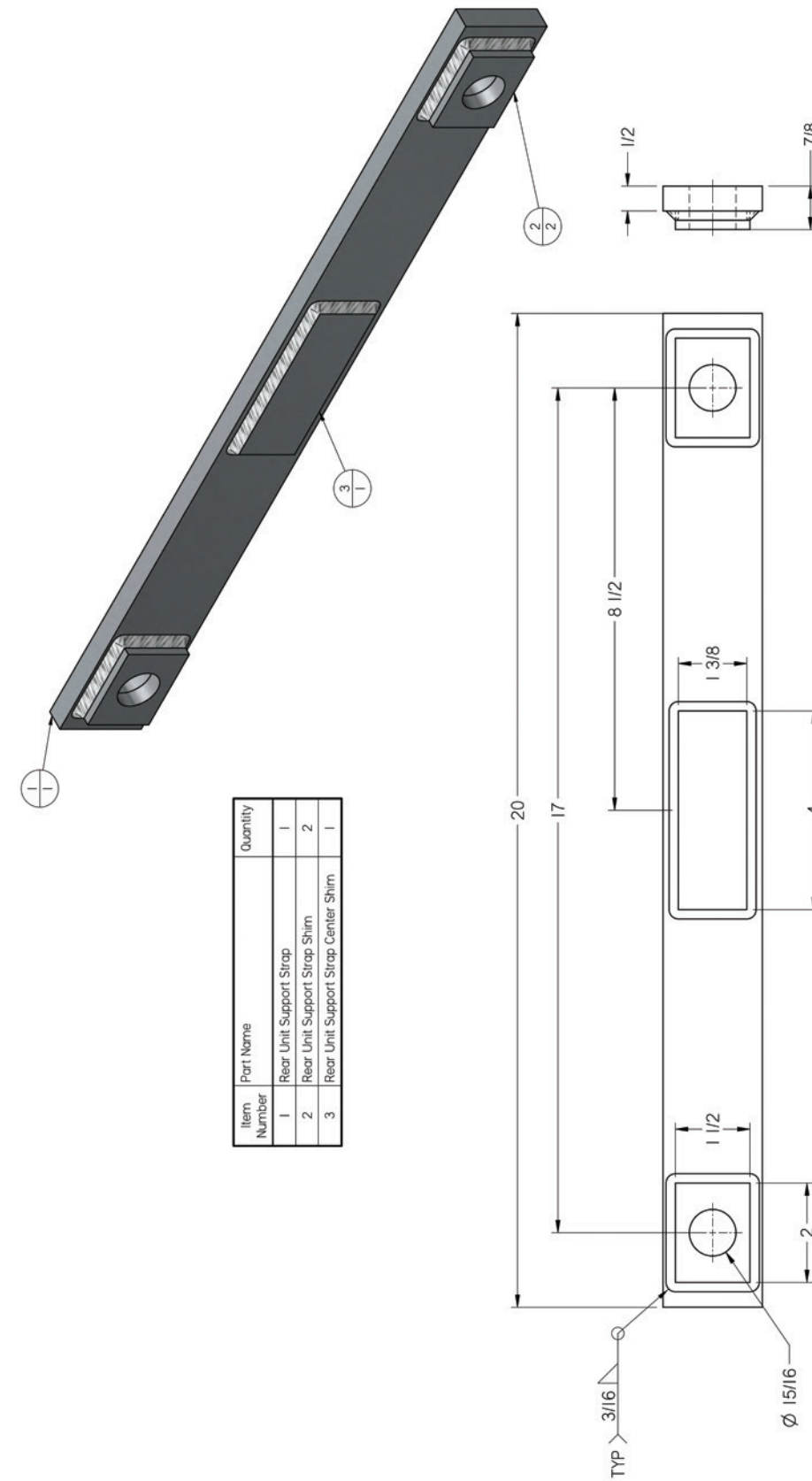


10447 MAIN CARRIER WP

WEIGHT: 2.865 LBM
 MATERIAL: AR 300 MIN. STEEL

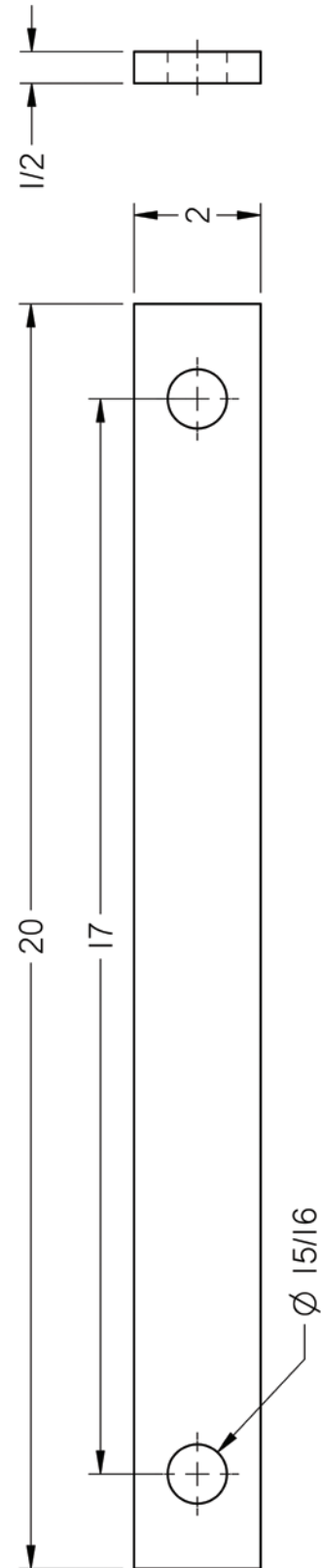


10448 REAR UNIT SUPPORT STRAP



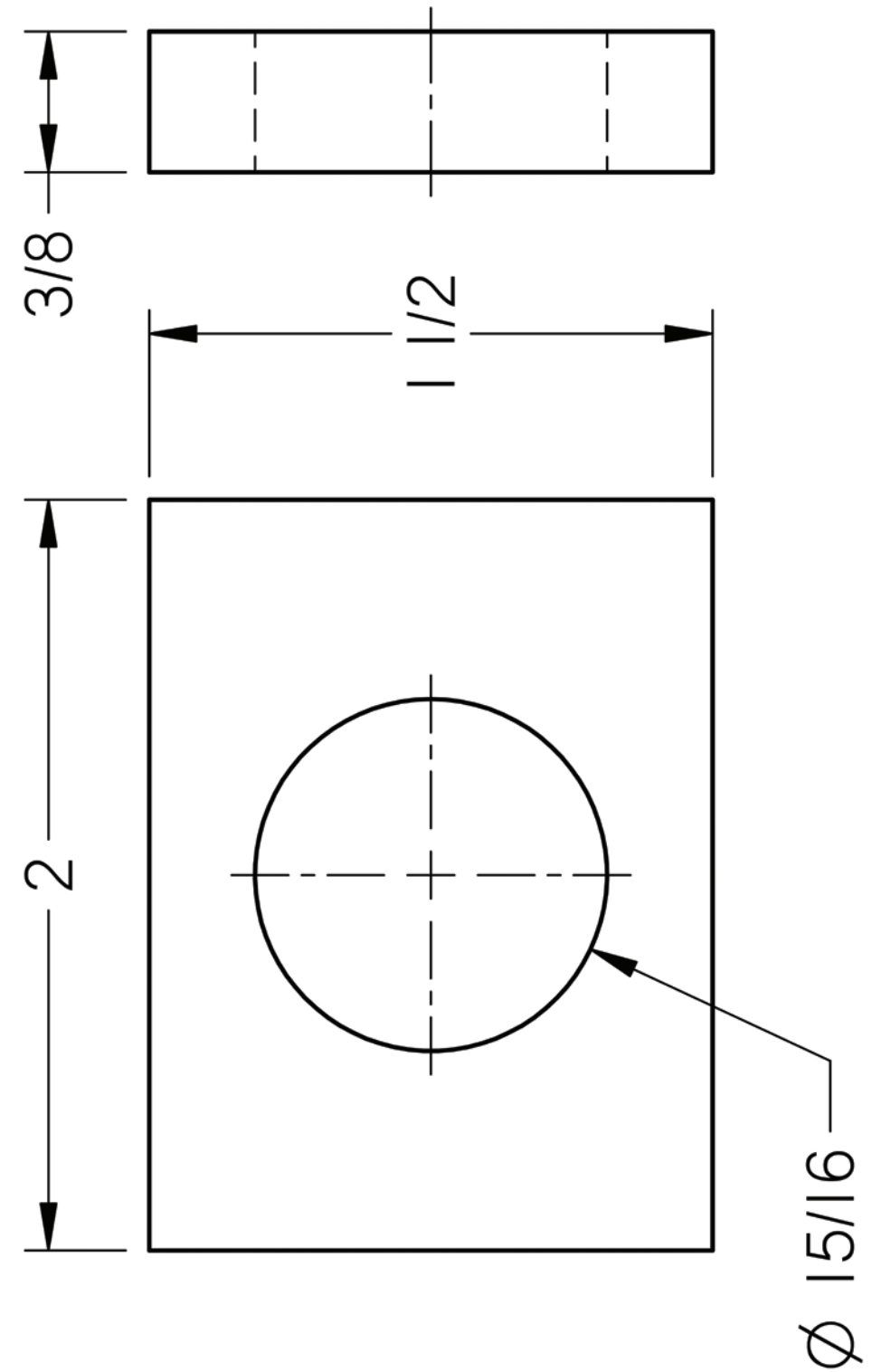
REAR UNIT SUPPORT STRAP

WEIGHT: 5.464 LBM
 MATERIAL: STEEL, GRADE 50 PLATE



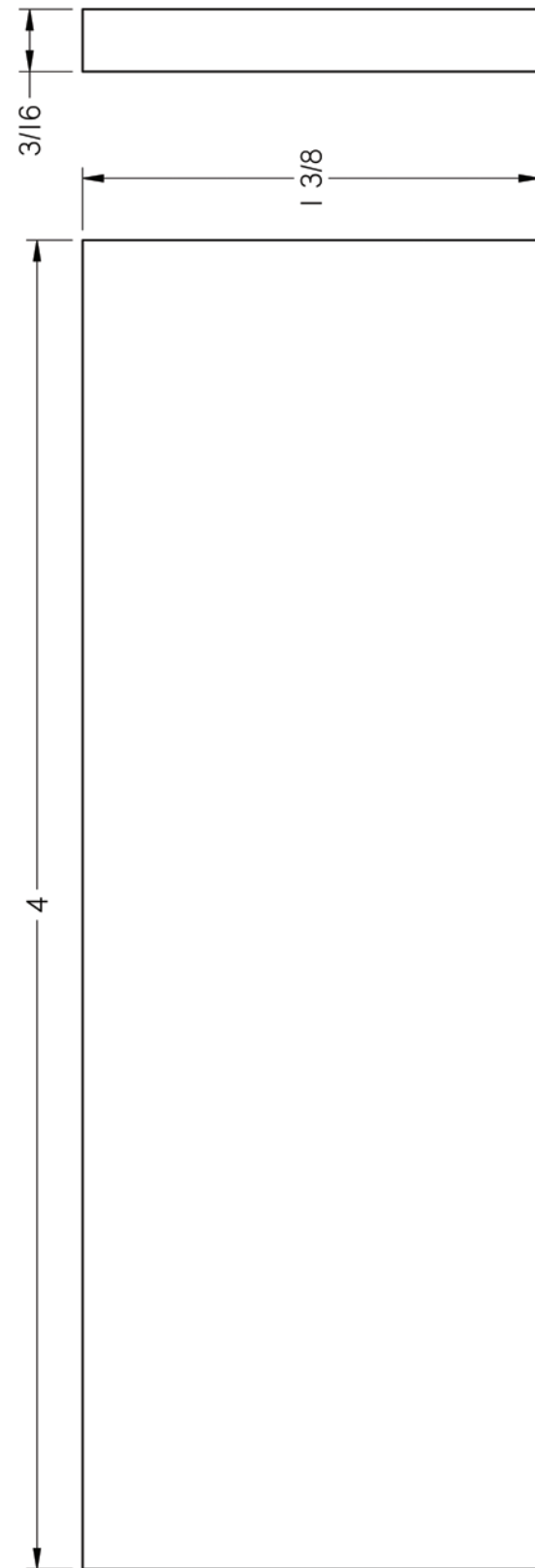
REAR UNIT SUPPORT STRAP CENTER SHIM

WEIGHT: 0.245 LBM
 MATERIAL: STEEL, GRADE 50 PLATE



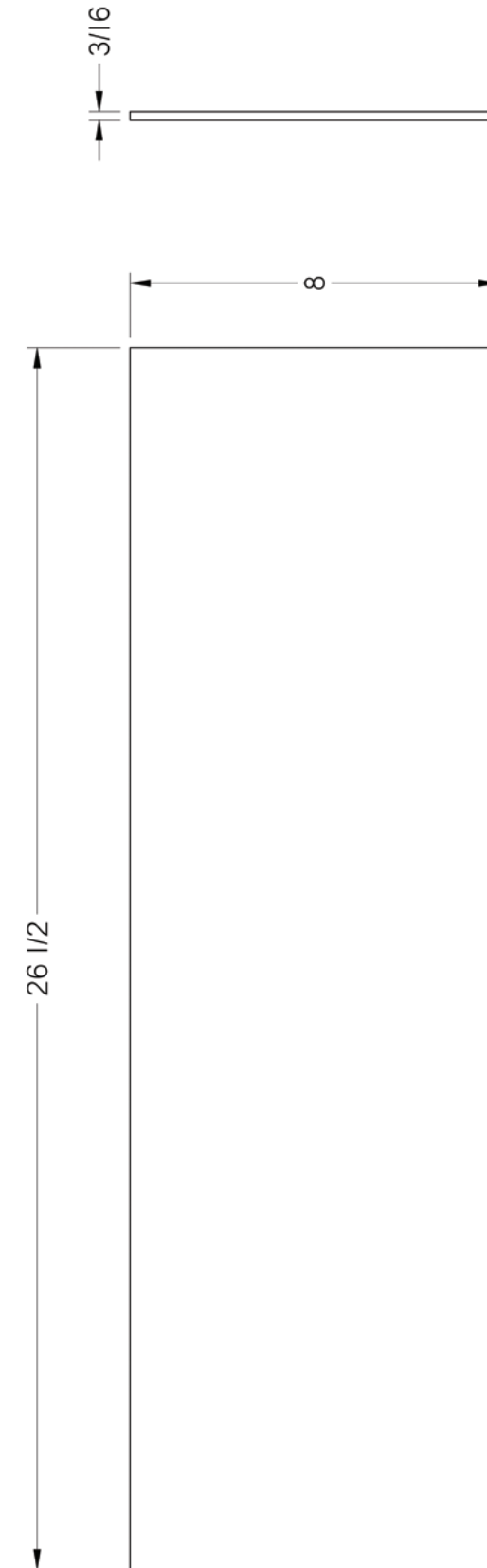
REAR UNIT SUPPORT STRAP CENTER SHIM

WEIGHT: 0.292 LBM
 MATERIAL: STEEL, GRADE 50 PLATE



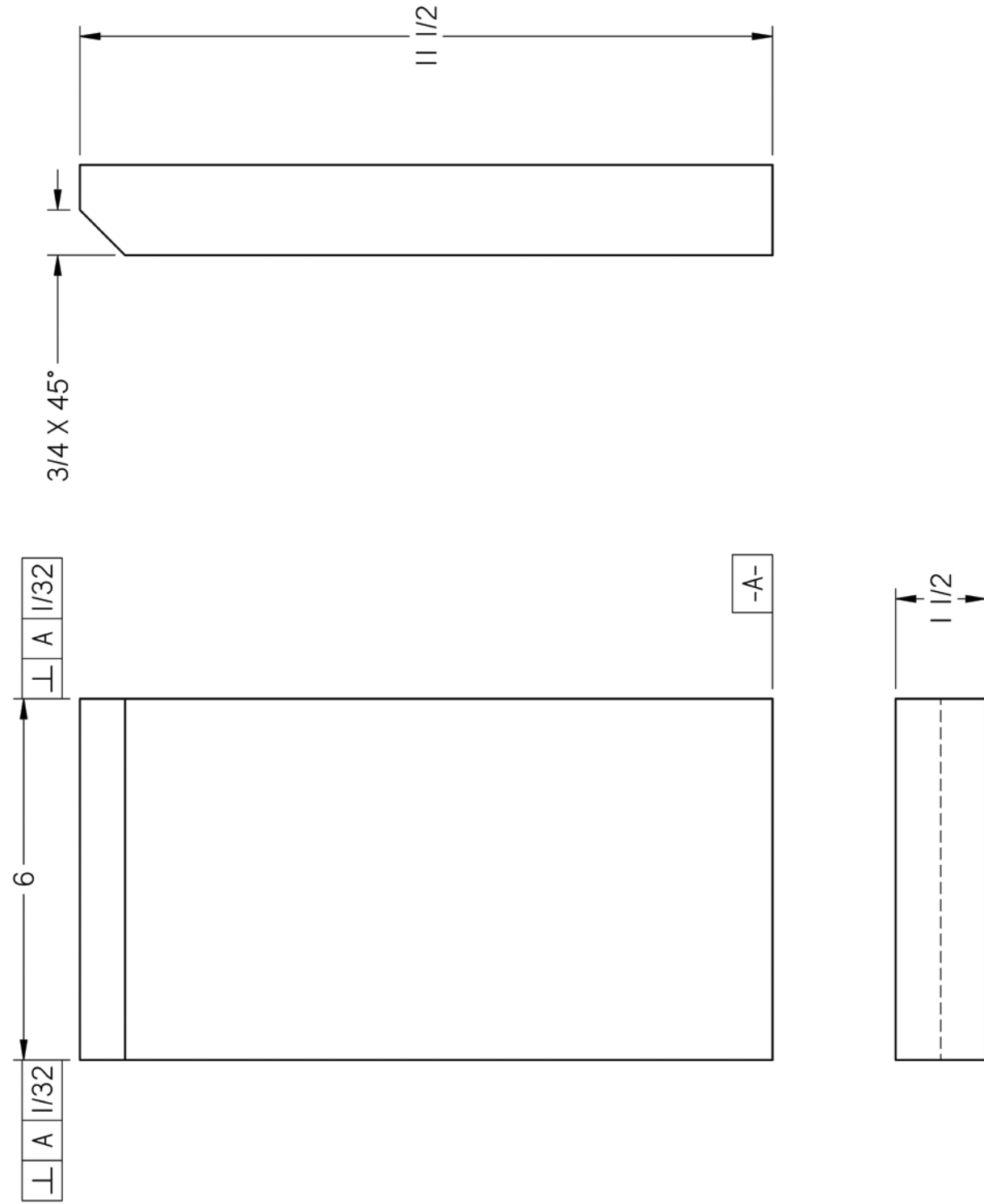
AO F12-2 TO 10G TOP SILL WP

WEIGHT: 11.249 LBM
 MATERIAL: AR 300 MIN. STEEL
 STOCK CODE: 6459

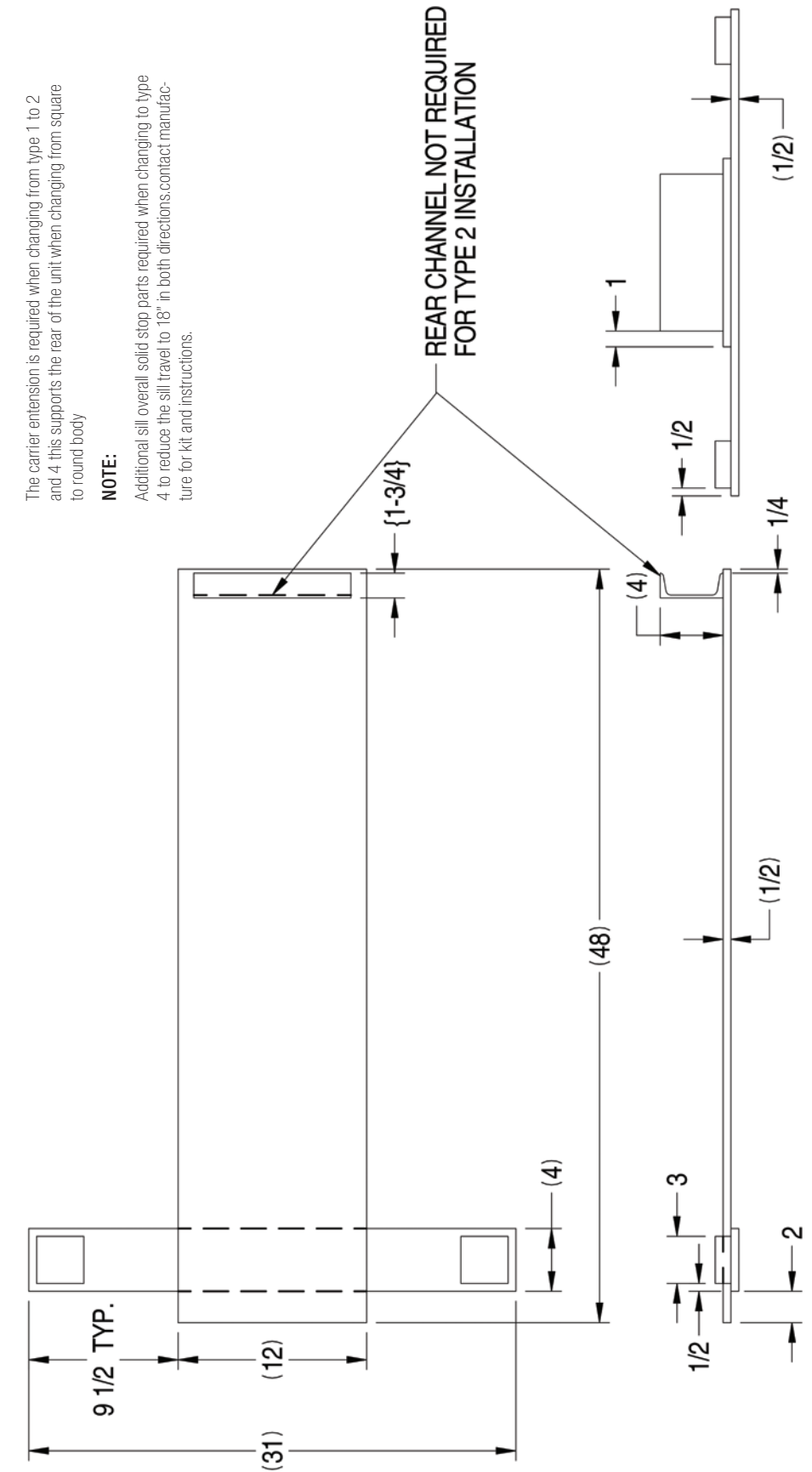


10-15 G UNIT STOP

WEIGHT: 28.811 LBM
 MATERIAL: A-572, GR. 50 PLATE STEEL
 STOCK CODE: AH8053



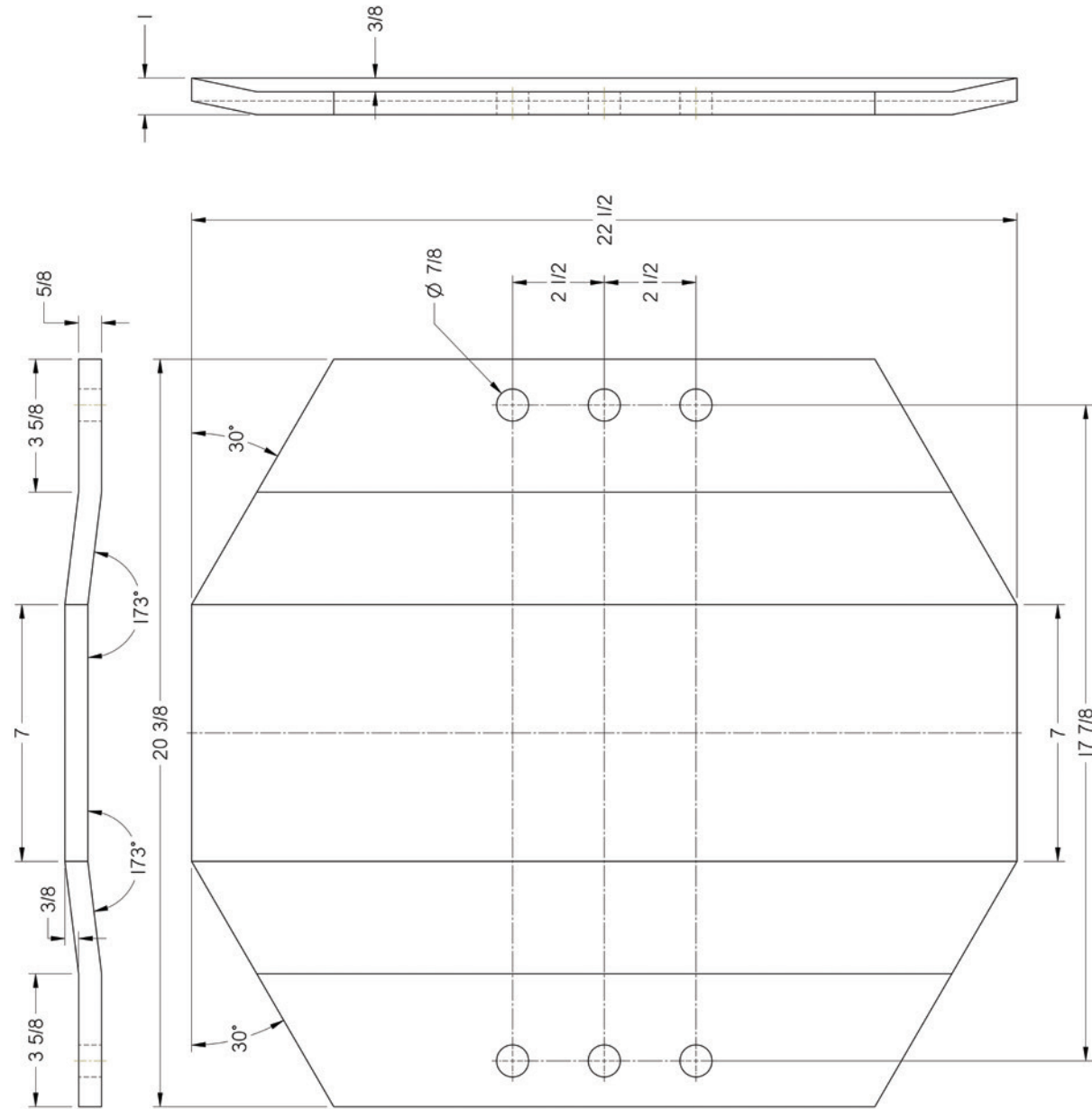
COC-2 POCKET, CARRIER EXTENSION



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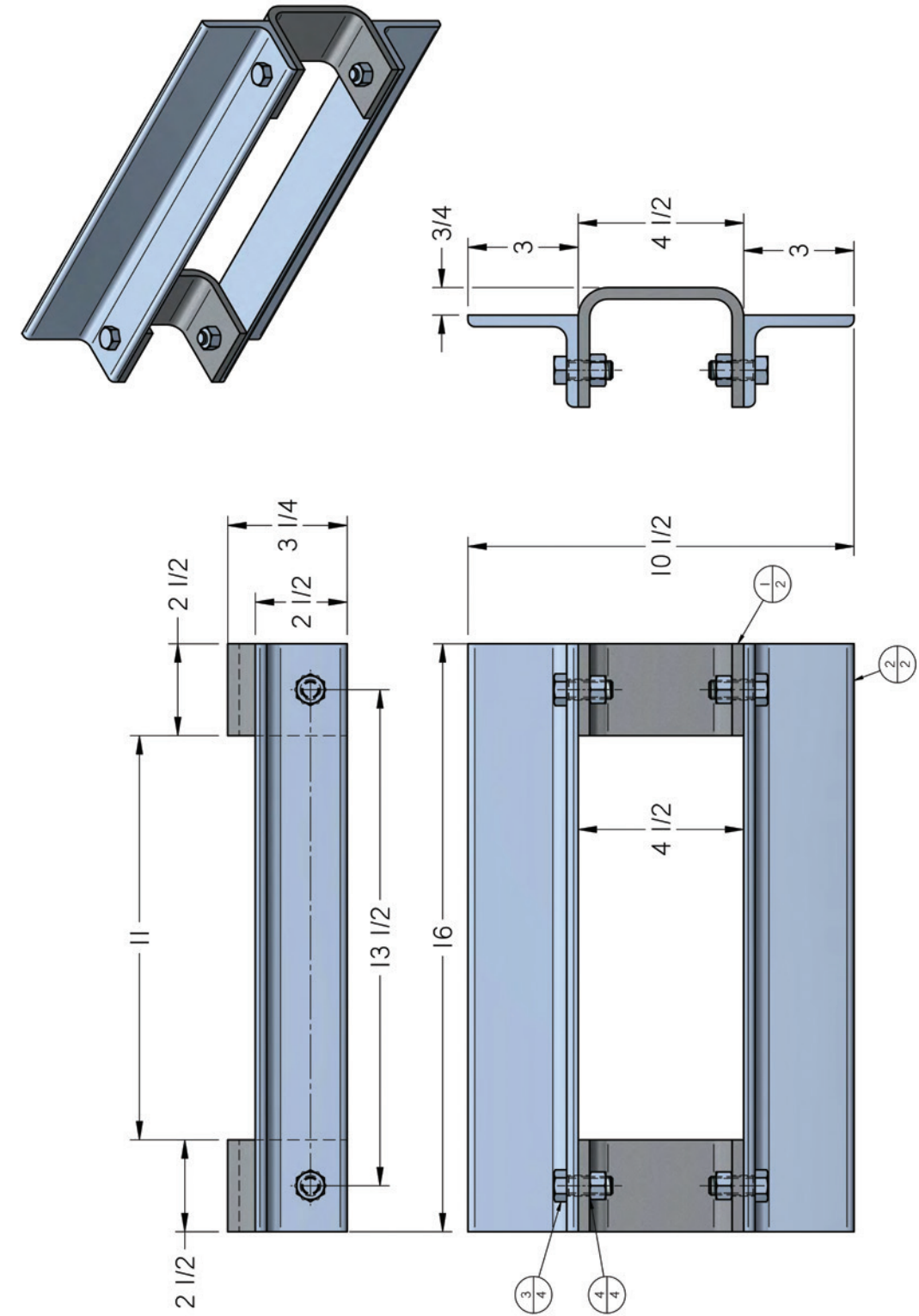
E-325G YOKE SUPPORT PLATE

WEIGHT: 71.277 LBM
 MATERIAL: GRADE 50, STEEL PLATE
 STOCK CODE: SD-20120



ASSEMBLY - DRAFT KEY RETAINER

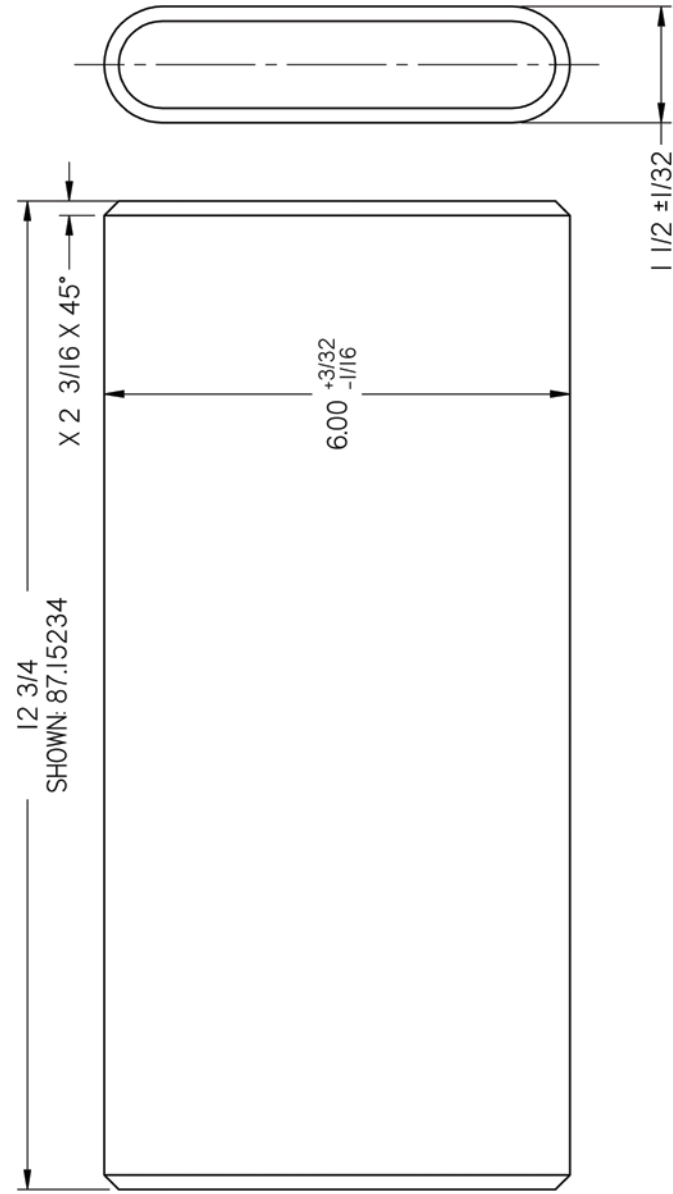
WEIGHT: 19.618 LBM
 STOCK CODE: 23113851



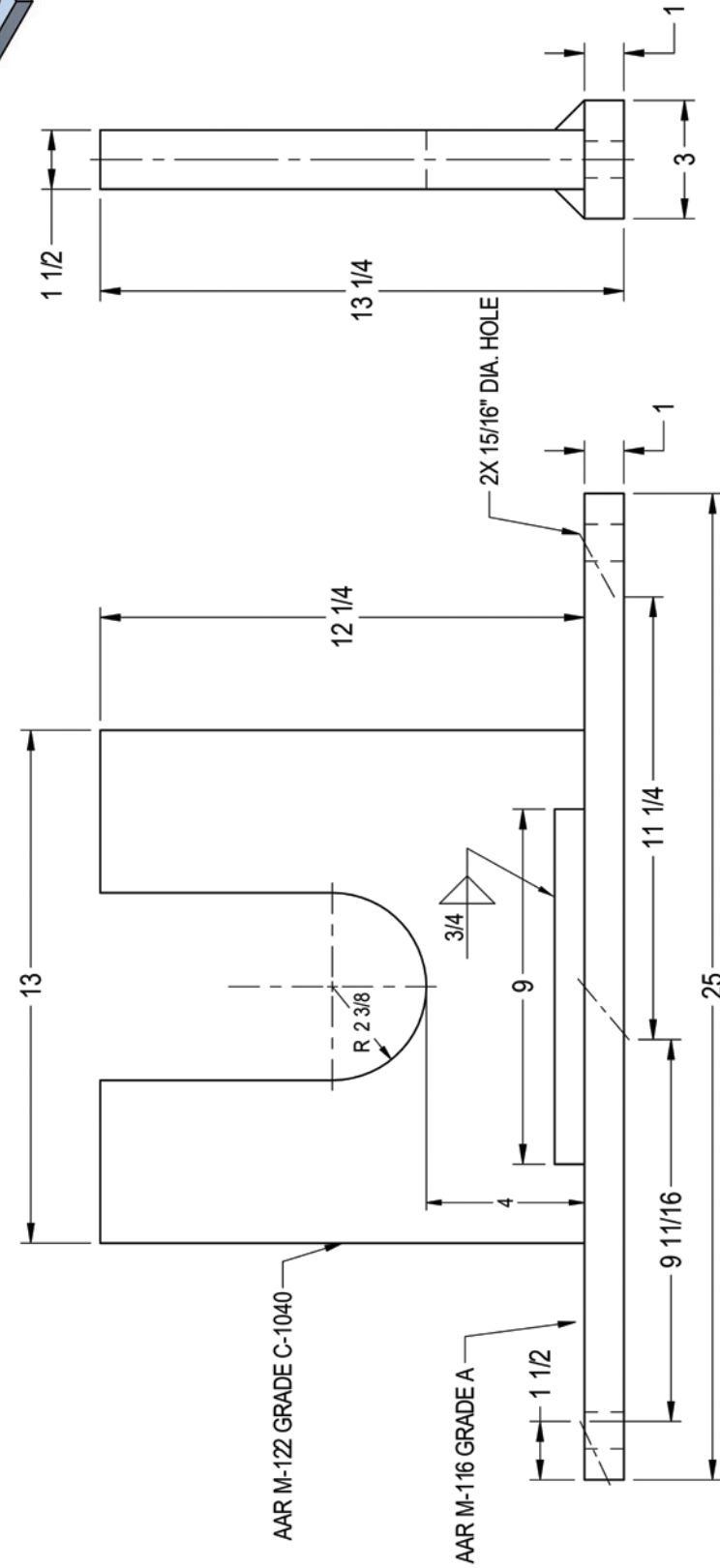
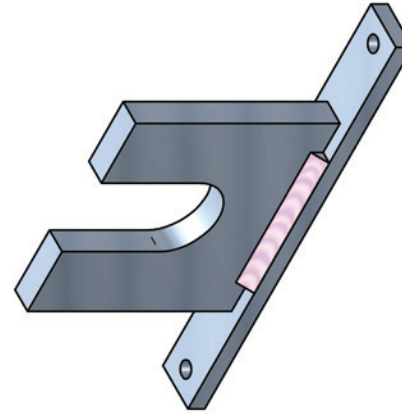
FMI KEY STOCK CHART

WEIGHT: 30.598 LBM
MATERIAL: STEEL, C1050 HR

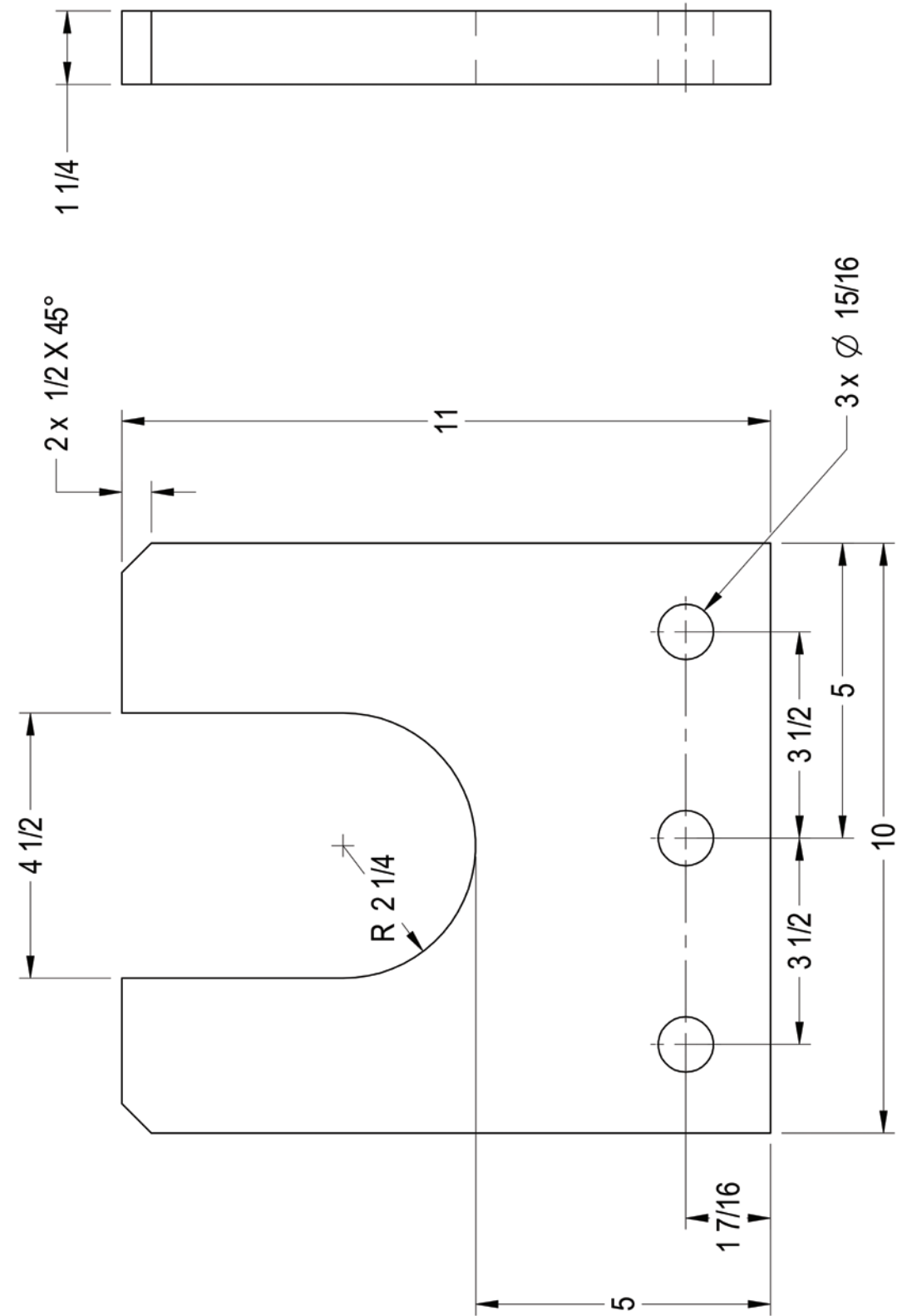
KEY TABLE		
KEY PART NO.	REV.	Length
86.80242	B	11 1/2
87.13357	A	17 5/8
87.13427	A	18 1/2
87.13568	C	21
87.13887	A	17
87.13930	A	18 3/4
87.13971	A	19 3/4
87.15132	E	17 1/2
87.15234	C	12 3/4
87.15483	A	18 1/4
87.15856	A	26
87.15857	A	18 1/2
87.18012	A	26
87.18172	A	16 7/8
87.18541	A	16 3/4
87.18568	A	18
87.18714	A	17 3/4
87.18828	A	27
87.18841	A	20 1/4
87.18947	A	22 1/2
87.18949	A	17 1/4
87.19941	A	17 3/8
87.19942	A	16 1/8
87.19962	A	16 1/2



WEIGHT: 72.825 LBM

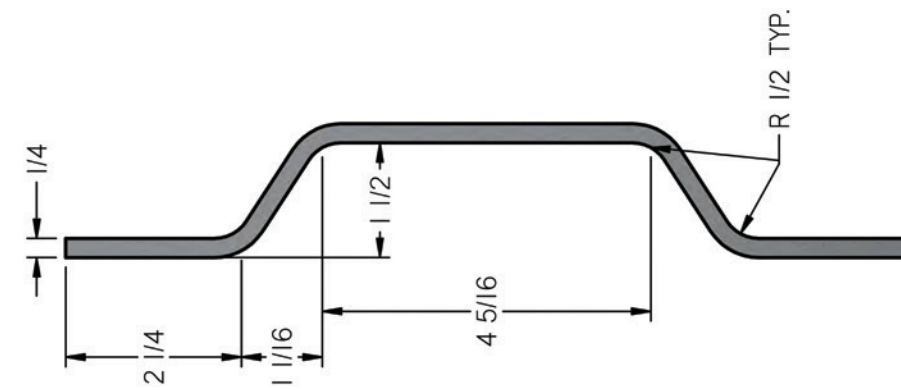
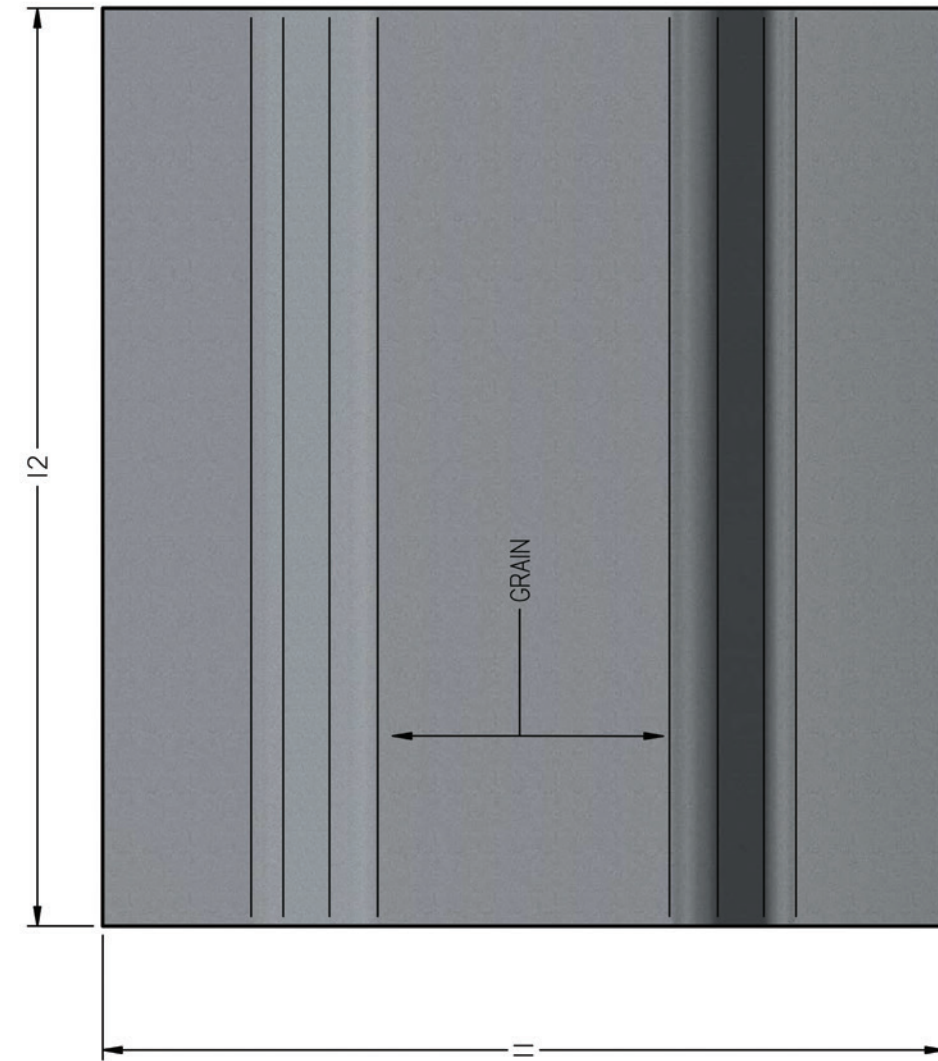


WEIGHT: 29.307 LBM
 MATERIAL: GRADE 50 PLATE STEEL



HYD. DRAFT KEY RETAINER 10F GEAR 1-1/2" OFFSET

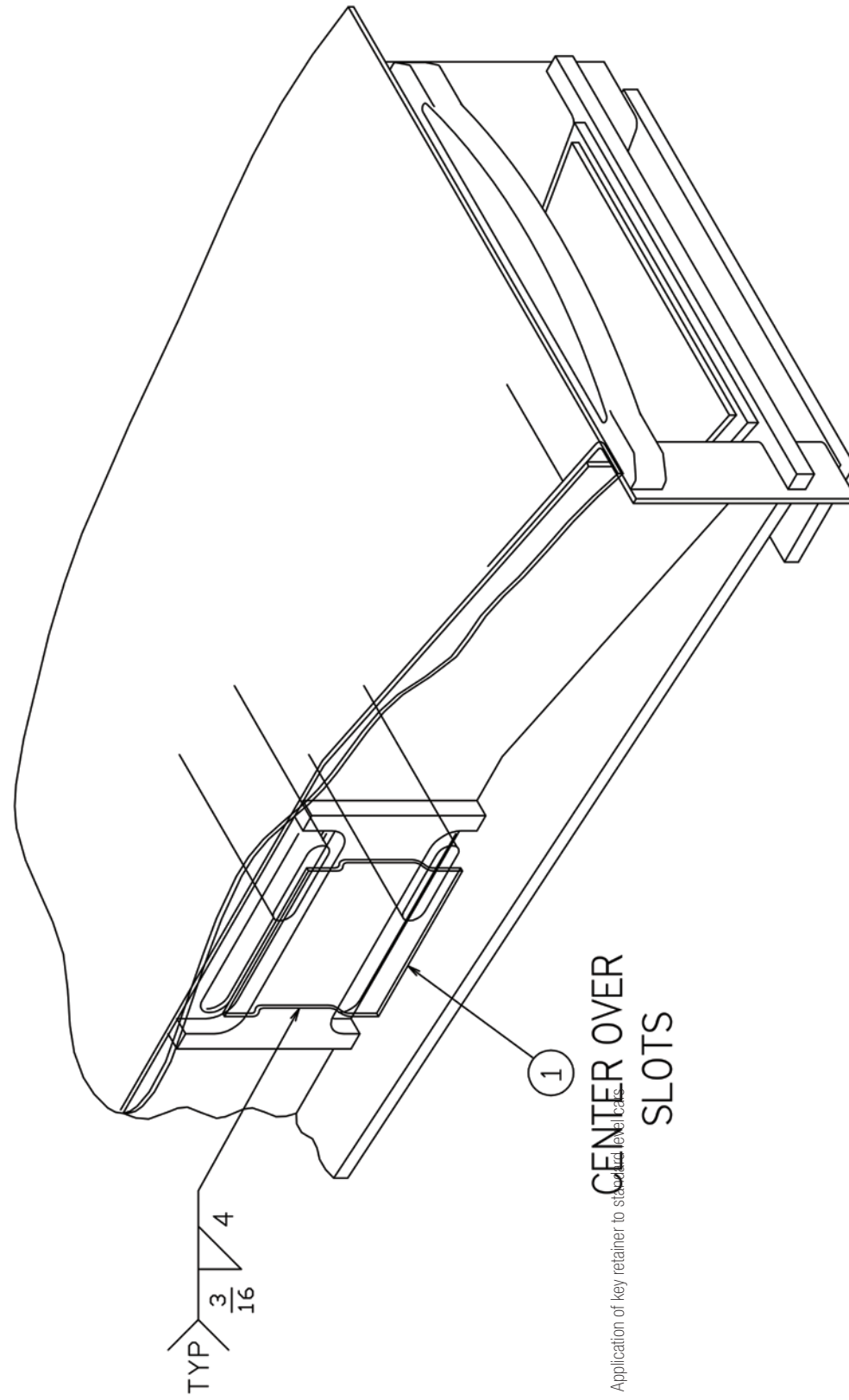
WEIGHT: 10.528 LBM
 MATERIAL: GRADE 50, STEEL PLATE, TYPE 2
 STOCK CODE: 23113811



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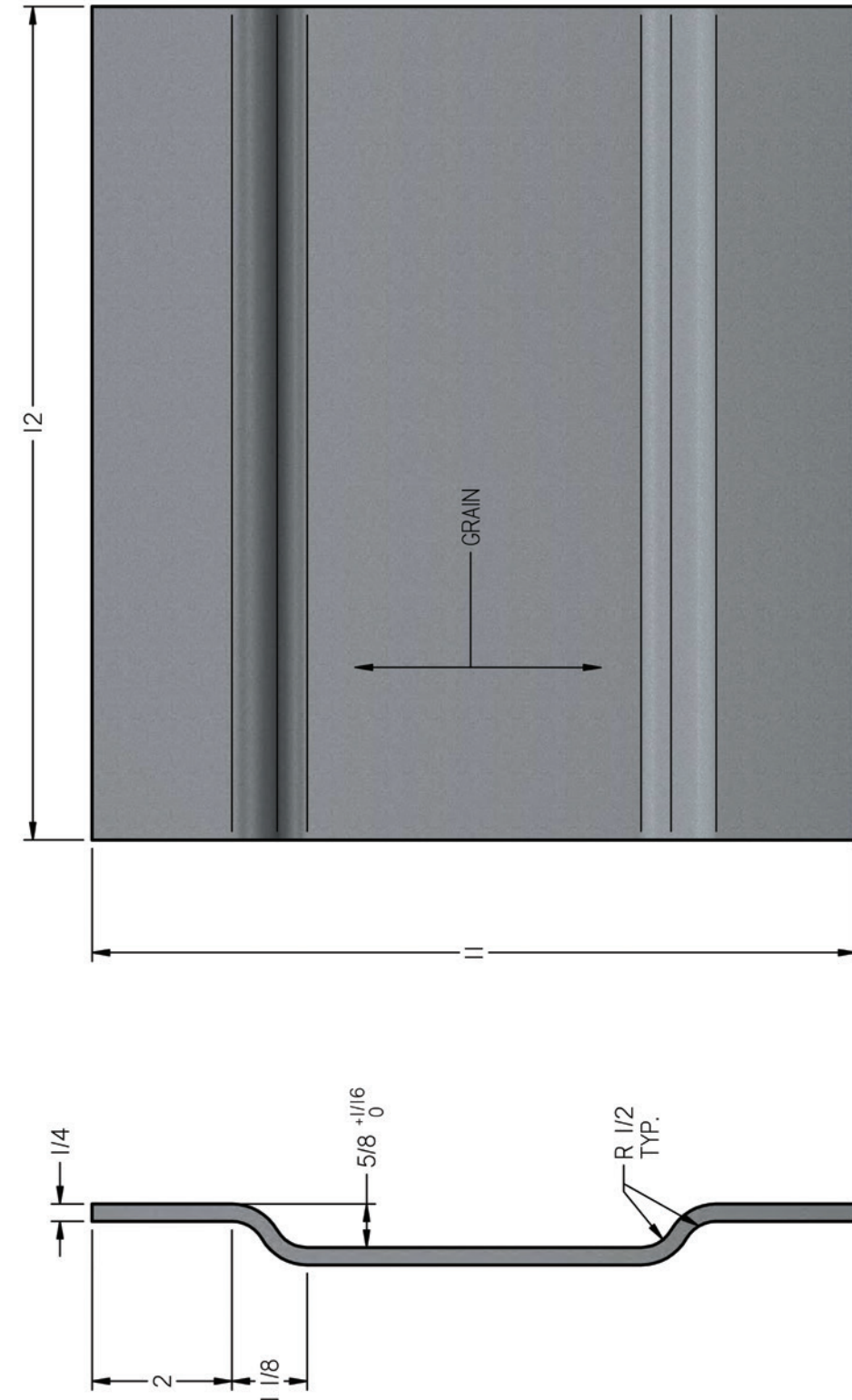
B-11215, DRAFT KEY RETAINER APPLICATION

WEIGHT: 12.3 LBM



HYD. DRAFT KEY RETAINER 10F GEAR 5/8" OFFSET

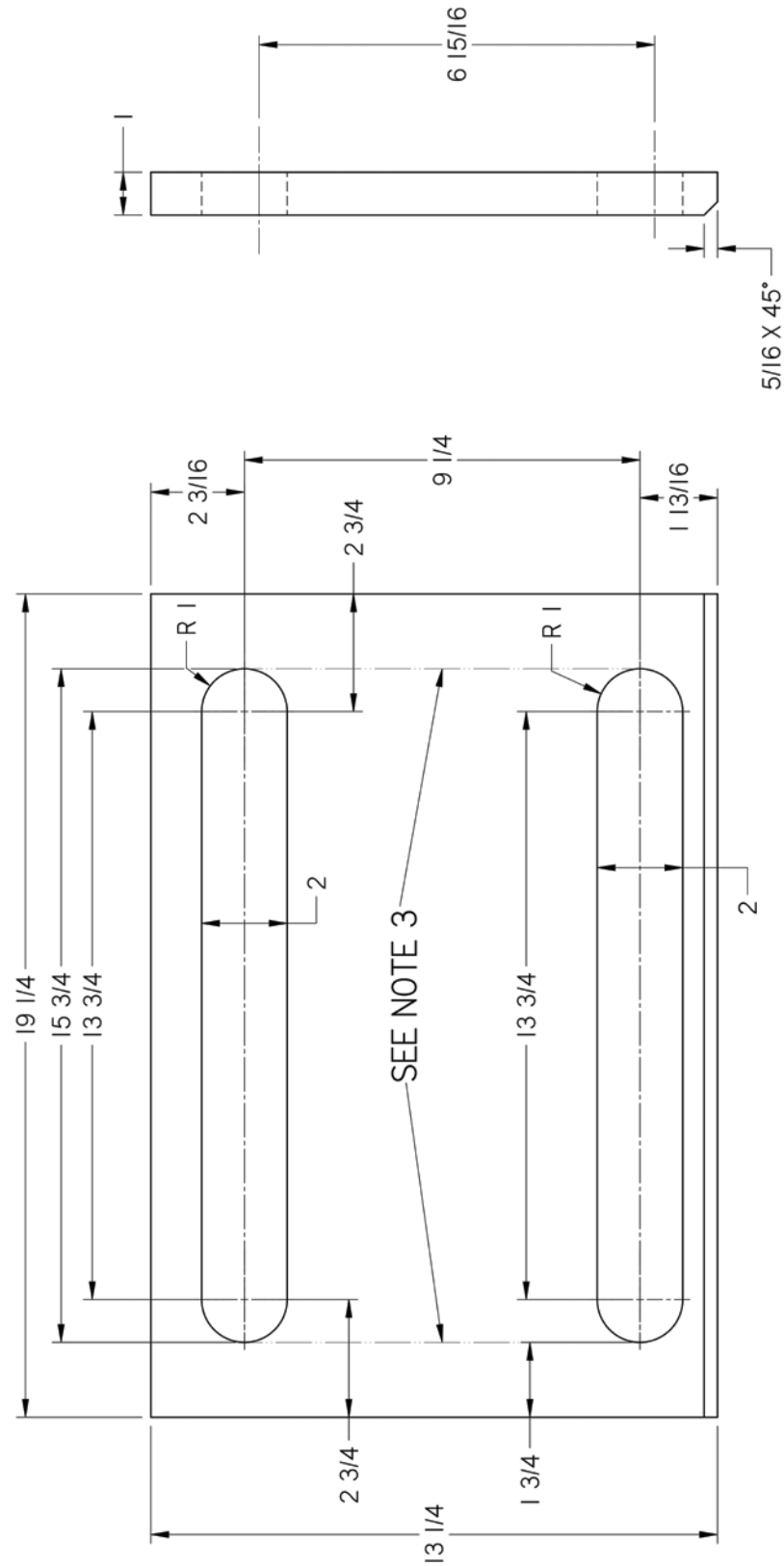
WEIGHT: 9.723 LBM
 MATERIAL: GRADE 50, STEEL PLATE, TYPE 2
 STOCK CODE: 23113821



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EOC-15, KEYSLOT REINFORCEMENT PLATE

WEIGHT: 54.571 LBM
 MATERIAL: A-572, GRADE 50, STEEL, TYPE 2
 STOCK CODE: 23113861

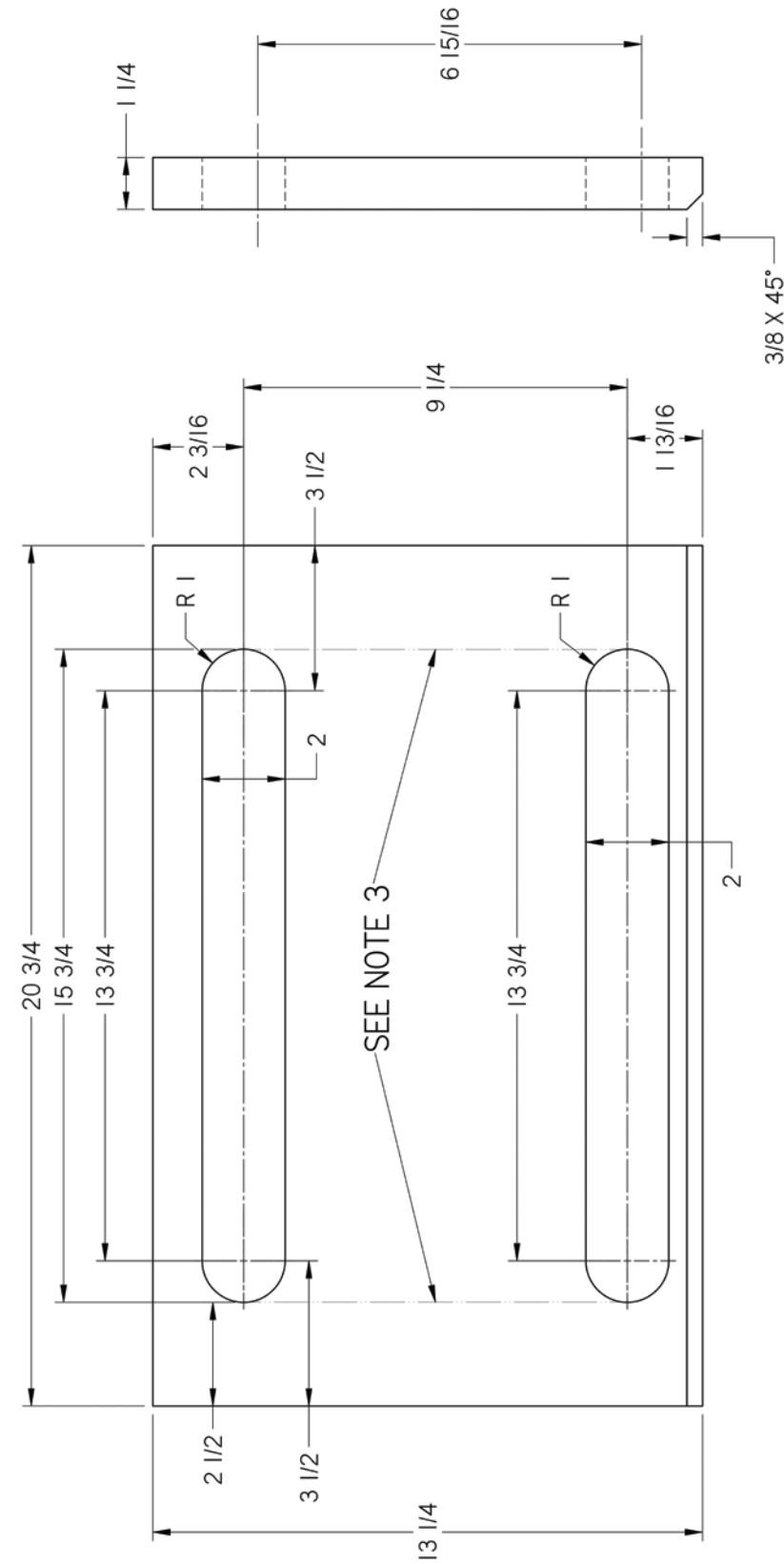


NOTE:

1. All edges to be smooth, parallel and free from burrs for welding
2. Radius must be smooth and free from burrs and nicks
3. Ends of slots must be in alignment within 1/32"

EOC-15, KEYSLOT REINFORCEMENT PLATE

WEIGHT: 75.163 LBM
 MATERIAL: GRADE 50, STEEL
 STOCK CODE:



NOTE:

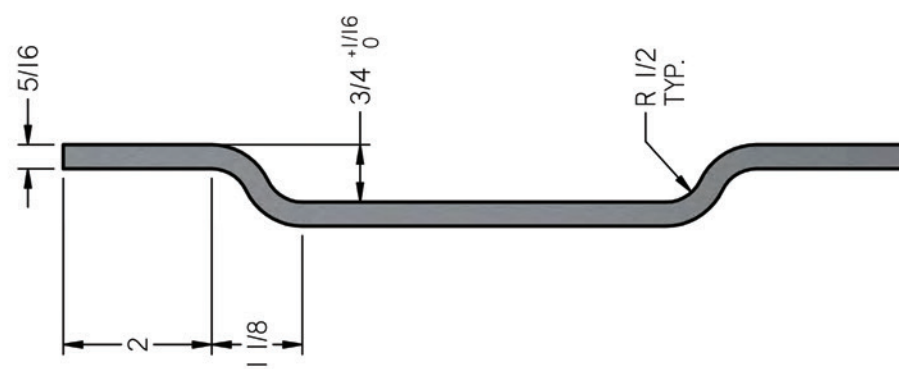
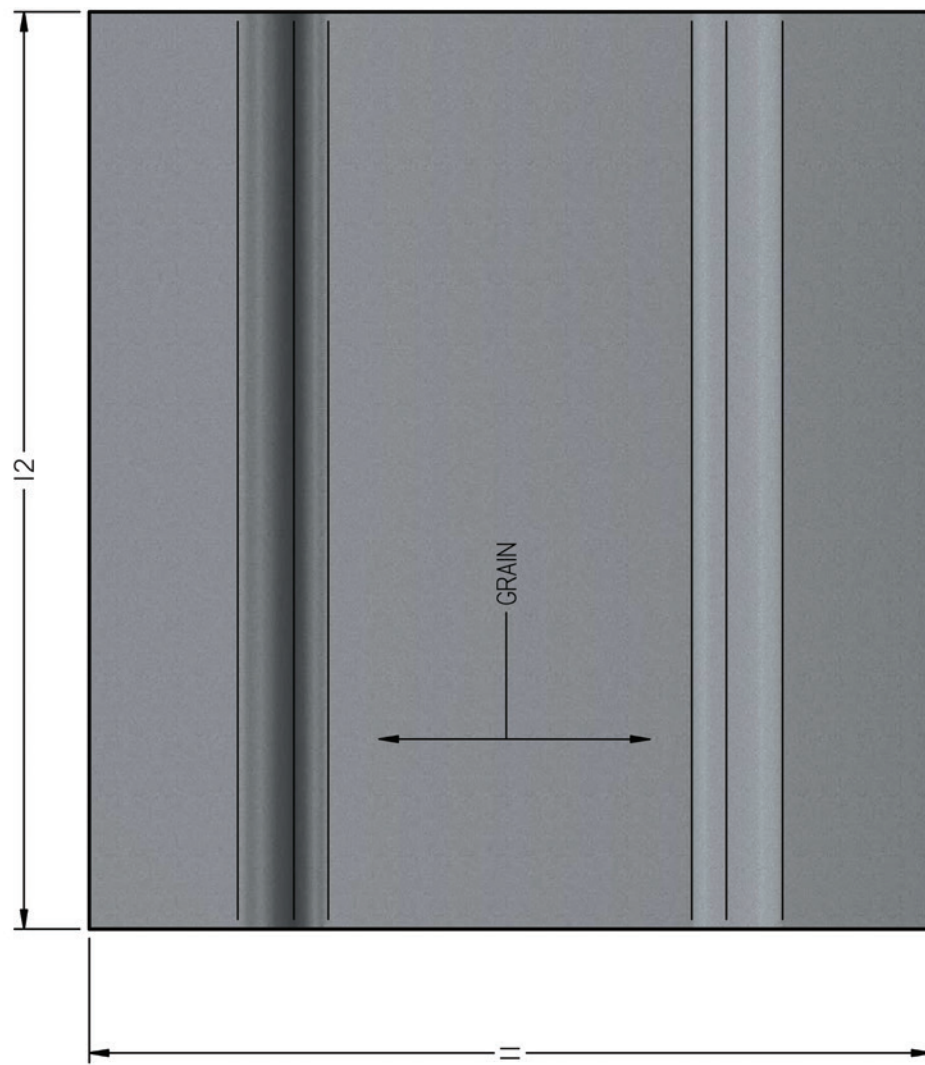
1. All edges to be smooth, parallel and free from burrs for welding
2. Radius must be smooth and free from burrs and nicks
3. Ends of slots must be in alignment within 1/32"

HYD. DRAFT KEY RETAINER 10F GEAR 3/4" OFFSET

WEIGHT: 12.298 LBM

MATERIAL: GRADE 50, STEEL PLATE, TYPE 2

STOCK CODE: 23113801



NOTES

Area for technical notes or specifications, consisting of multiple horizontal lines for writing.



MULTI-MAX® RAILCAR PARTS CATALOG



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Lake Oswego, Oregon 97035

Phone: 877.94.PARTS
Toll Free: 800.343.7188
Fax: 888.868.4793

gbrx.com
grs.info@gbrx.com

SUGGESTED STOCK ITEMS: RAMP

198 Bridge Plate Rotator, BL/AR
Bridge Plate Rotator, BR/AL
Caulking
Center Hasp
Chain, 5/0 Coil 15
Chain, 5/0 Coil 48

199 Clevis Pin
Deck Lift Spring
Deck Lock Gusset
Door Chain Door Anchor
Door Pin Assembly
Door Stop BL/AR

200 Door Stop BR/AL
Door Strap
Handle
Latch Spring Right
Lock Pin

201 MULTI-MAX Deck Hinge
Paint, Yellow
Spring Extension For Door
Spring Latch Pin
Strap Keeper

SUGGESTED STOCK ITEMS: BACKSHOP

202 BL/AR Lock Rod Assembly (HV-SH)
BR/AL Lock Rod Assembly (HV-SH)
Bracket, BL/AR Lower Keeper
Bracket, BR/AL Lower Keeper

203 Break Pan
Bushings, Guide PL
Bushings, Rod Guide
Continuous Hinge Unequal Leg
Deck Hold Tool
Deck Lift Spring

204 Deck Lock Gusset
Door Latch Assembly BL/AR
Door Latch Assembly BR/AL
Door Panel, P#2
Door Panel, P#3
Door Panel, Center

205 Door Panel, Middle, MULTI-MAX
Door Panel, Center, MULTI-MAX
Door Panel, End, MUTI-MAX
Door Pin Asse
Door Pin Assembly
Left Offset Door Pin

INDEX

206 Right Offset Door Pin
Door Stiffener Assembly
End Panel Inner Stiffener
End Panel Stiffener BL/AR
End Panel Stiffener BR/AL

207 End Side Sheet BR/AL
End Side Sheet with Cutout BL
Front Panel Stop
Guide Plate
Gussett
Hinge, Continuous

208 Hinge, Continuous
Hinge, Continuous, Unequal Leg
Keeper, Lower
Keeper, Upper Lever RH
Ladder Assembly, BL/AR

209 Ladder Assembly, BR/AL
Ladder Assembly, BL/AR
Ladder Assembly, MULTI-MAX
Latch Hook Assembly Left

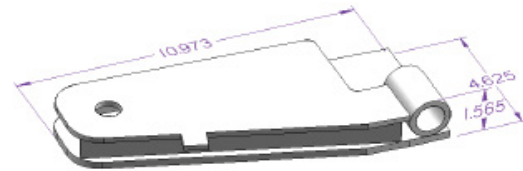
210 Lower Keeper Brace
Middle Panel Stiffener
MULTI-MAX Bottom Roller Left Hand
MULTI-MAX Bottom Roller Right Hand
Outer Door Reinforcement
Pin Assembly

211 Reinforcement Plate
Rod Guide
Screen Retainer Top
Seal Plate
Seal Pin

212 Side Sheet
Spacer
Spring Attach Bracket
Spring, Extension for latch bar
Strap Tensioner
Top Guide Roller Left Hand

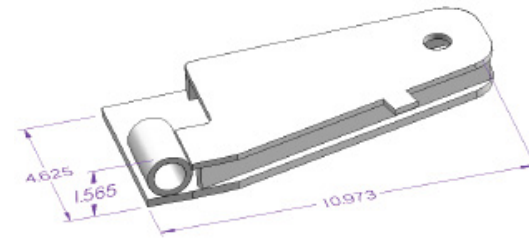
213 Top Guide Roller Right Hand
Track
Z Door Protection

SUGGESTED STOCK ITEMS: RAMP



Bridge Plate Rotator, BL/AR

Part Number: A10002661
Galvanized
Weight: 6.05 lbs



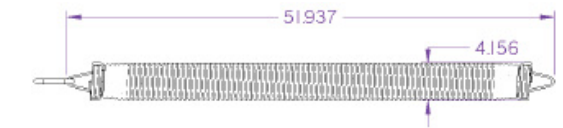
Bridge Plate Rotator, BR/AL

Part Number: A10002660
Galvanized
Weight: 6.05 lbs



Clevis Pin

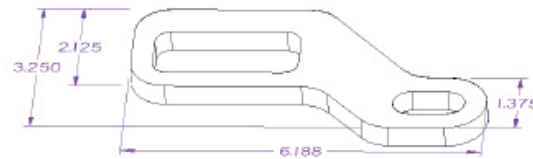
Part Number: 671849-07
3/4 X 2-1/2
Weight: 0.35 lbs



Deck Lift Spring

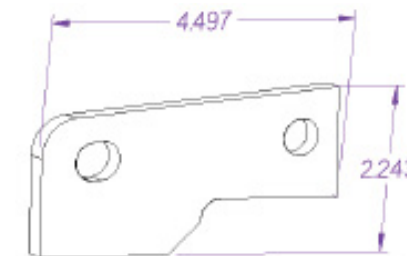
Part Number: 100014660
ZEFTEK ZT-726-06,
Use in place of 100008391
Weight: 56.93 lbs

Picture Not Available



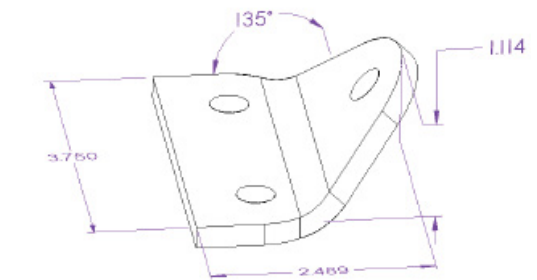
Caulking

Part Number: 531000050
3M 550 SCOTCH-SEAL
Polyurethane Adhesive Selant



Center Hasp

Part Number: 100010850
PL 3/8 X 3 1/4 X 6 3/16
ASTM A36
Weight: 0.74 lbs



Deck Lock Gusset

Part Number: 100010519
Use in place of 100008237
Weight: 0.49 lbs

Door Chain Door Anchor

Part Number: 100010245
PL 1/4 X 3 X 3 3/4
ASTM A36 W/.2% CU
Weight: 0.57 lbs
Used on road numbers 690500-692933

Picture Not Available

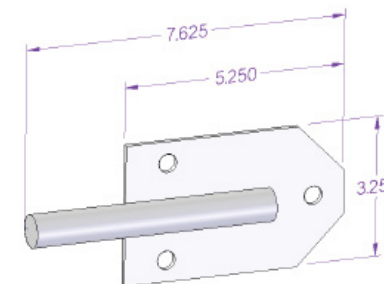
Chain, 5/0 Coil 15

Part Number: 121370-02
15 3/16 +/-3/4 Long (10 Links)
Zinc, (None)
Used on road numbers 690000-690548

Picture Not Available

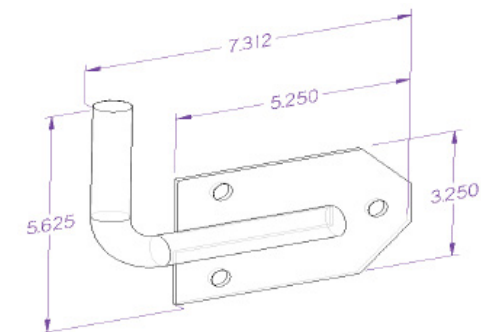
Chain, 5/0 Coil 48

Part Number: 121370-04
3/8 +/-3/4 Long (32 Links)
Zinc, (None)
Used on road numbers 690549-692933



Door Pin Assembly

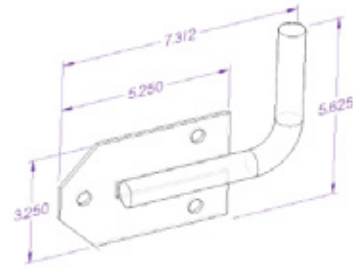
Part Number: A26606-01
Weight: 1.20 lbs



Door Stop BL/AR

Part Number: A14799-02
Weight: 1.56 lbs
Used on road numbers 690000-692933

SUGGESTED STOCK ITEMS: RAMP



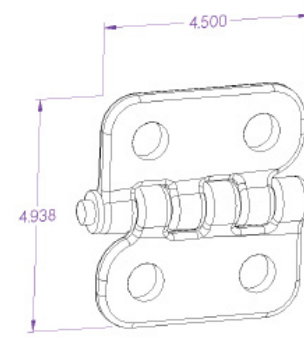
Door Stop BR/AL

Part Number: A14799-01
Weight: 1.56 lbs
 Used on road numbers 690000-692933

Picture Not Available

Door Strap

Part Number: 100008419
3000 lb Minimum Breaking Strength
Weight: 49 lbs
 Used on road numbers 690000-690548
 See also 100010463



MULTI-MAX Deck Hinge

Part Number: A10001631
Weight: 2.43 lbs

Picture Not Available

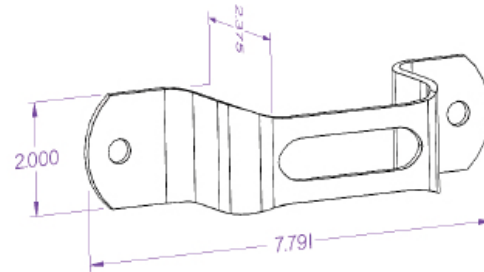
Paint, Yellow

Part Number: 521000316
 Paint, Yello Reflective
 (SEE ALSO 521000287)

Picture Not Available

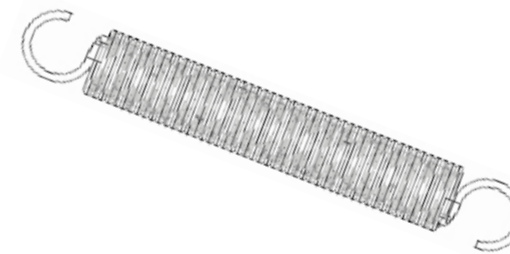
Door Strap

Part Number: 100010463
 Blue
 3000 lb Minimum Breaking Strength
Weight: 0.3 lbs
 Used on road numbers 690549-onward.
 See also 100008419



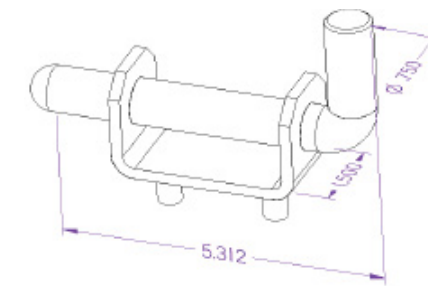
Handle

Part Number: 121351-00
 6-1/2 X 1-7/8 Galv
Weight: 0.65 lbs



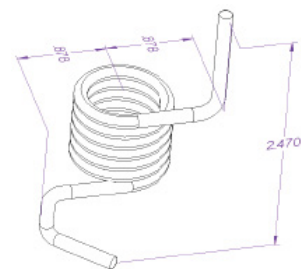
Spring Extension For Door

Part Number: 161122-00
 Zinc, Extension, 2" OD
 14" Long, 0.207 Wire Dia., 8.4#/in.
 Used on road numbers 690000-692933



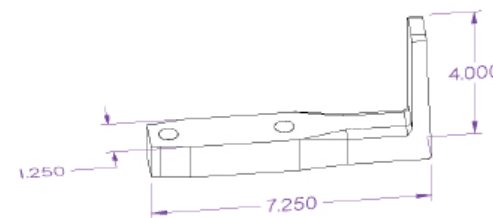
Spring Latch Pin

Part Number: 100011273
 PANELOC 784
 Zinc
Weight: 1.34 lbs
 Used on road numbers 692934-onward



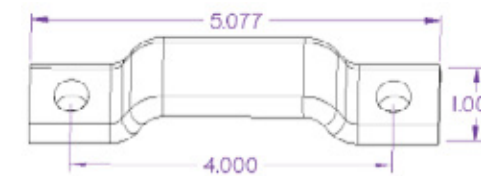
Latch Spring Right

Part Number: 101749-01
 ASTM A313 TYPE 302
Weight: 0.04 lbs
 Used on road numbers 690000-692933



Lock Pin

Part Number: 100013804
 Use in place of A10002205
Weight: 2.51 lbs



Strap Keeper

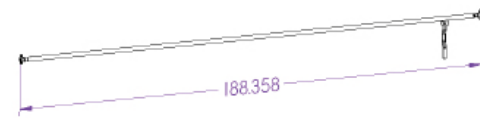
Part Number: 100009588
FB 1/4 X 1 X 5 1/4
 ASTM A276 T304 LCBR 1T
 All edges rounded 0.125
Weight: 0.35 lbs
 Request drawing before ordering

SUGGESTED STOCK ITEMS: BACKSHOP



BL/AR Lock Rod Assembly (HV-SH)

Part Number: A14587-01
Weight: 27.71 lbs
 Request drawing before ordering.
 Not preferred replacement part.
 See [Lockrod Rework Instructions.pdf](#)



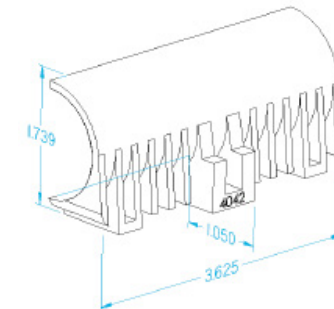
BR/AL Lock Rod Assembly (HV-SH)

Part Number: A14587-02
Weight: 27.71 lbs
 Request drawing before ordering.
 Not preferred replacement part.
 See [Lockrod Rework Instructions.pdf](#)



Break Pan

Part Number: 100008785
HRS 0.1196 X 31 15/16 X 24 15/16
ASTM A1011 SS GR40 W/.2% CU
Weight: 27.63 lbs



Bushings, Guide PL

Part Number: 121347-00
 Anti-Seize
Weight: 0.38 lbs



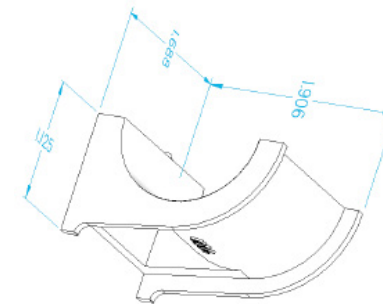
BL/AR Lock Rod Assembly (HV-SH)

Part Number: A15330-01
Weight: 27.6 lbs
 Request drawing before ordering



BR/AL Lock Rod Assembly (HV-SH)

Part Number: A15330-02
Weight: 27.6 lbs
 Request drawing before ordering



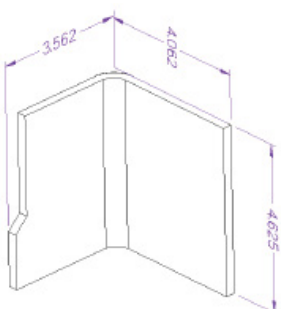
Bushings, Rod Guide

Part Number: 121346-00
 Anti-Seize
 Half Bushing



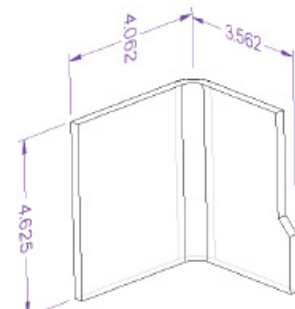
Continuous Hinge Unequal Leg

Part Number: 101796-00
 Cad/Zinc Pltd
 .120 X 5 X 72, 3/8 Dia Brass Pin
Weight: 18.00 lbs
 Request drawing before ordering



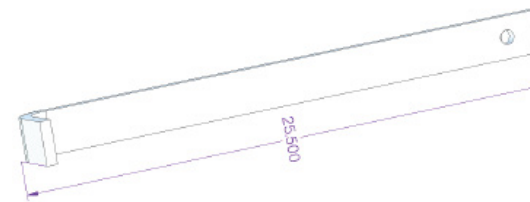
Bracket, BL/AR Lower Keeper

Part Number: 101766-01
 PL 1/4 X 4 5/8 X 7 3/32
 ASTM A36 W/.2% CU
Weight: 2.25 lbs
 Not preferred for replacement
 (used on road numbers 690000-690599)
 See [Lockrod Rework Instructions.pdf](#)



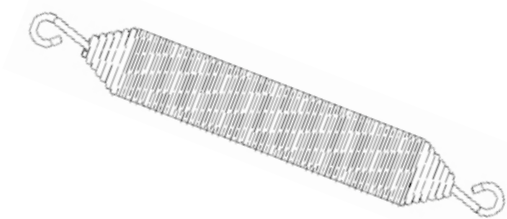
Bracket, BR/AL Lower Keeper

Part Number: 101766-02
 PL 1/4 X 4 5/8 X 7 3/32
 ASTM A36 W/.2% CU
Weight: 2.25 lbs
 Not preferred for replacement
 (used on road numbers 690000-690599)
 See [Lockrod Rework Instructions.pdf](#)



Deck Hold Tool

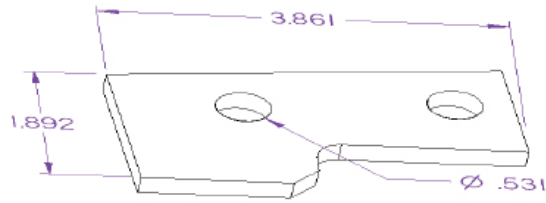
Part Number: 100016808
Weight: 8 lbs
 Used for conversion from tri-bi
 (only needed on 694034-onward)



Deck Lift Spring

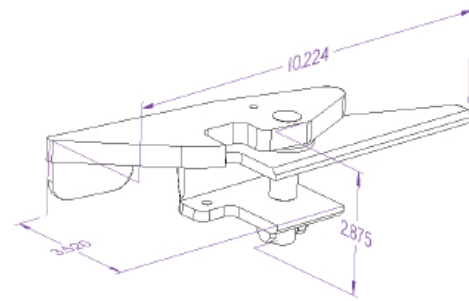
Part Number: 100008391
****superseded** use 100014660**
Weight: 19.75 lbs

SUGGESTED STOCK ITEMS: BACKSHOP



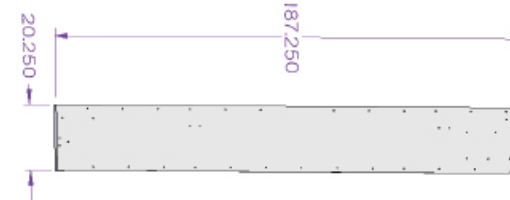
Deck Lock Gusset

Part Number: 100008237
PL 1/4 X 2 1/4 X 3 7/8
ASTM A572 GR50 W/.2% CU
Weight: .41 lbs
**** superseded ** use 100010519**



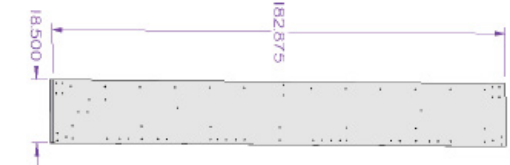
Door Latch Assembly BL/AR

Part Number: A14659-02
Weight: 3.44 lbs
 Used on road numbers 690000-692933



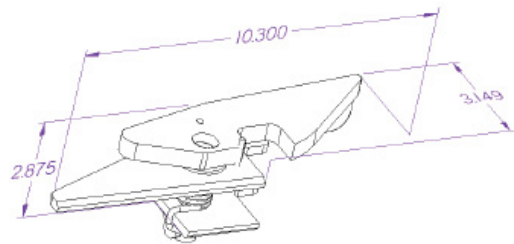
Door Panel, Middle, MULTI-MAX

Part Number: 100007761
MULTI-MAX
 Plastic
Weight: 72.99 lbs
 Request drawing before ordering



Door Panel, Center, MULTI-MAX

Part Number: 100007762
Plastic
Weight: 65.78 lbs
 Request drawing before ordering



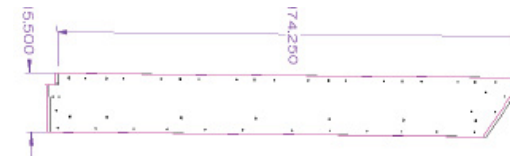
Door Latch Assembly BR/AL

Part Number: A14659-01
Weight: 3.44 lbs
 Used on road numbers 690000-692933



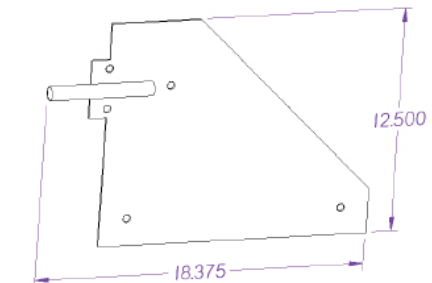
Door Panel, P#2

Part Number: 100010910
MULTI-MAX II
 Plastic
Weight: 73.01 lbs
 Request drawing before ordering



Door Panel, End, MUTI-MAX

Part Number: 100007782
Wood
 3/4 X 15 1/2 X 177 3/4
Weight: 51.07 lbs
 Request drawing before ordering



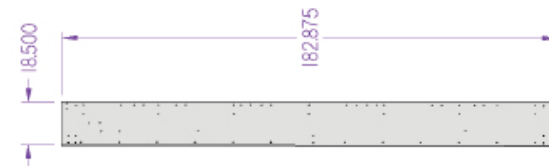
Door Pin Assembly

Part Number: A15147-01
Weight: 5.41 lbs
 Request drawing before ordering



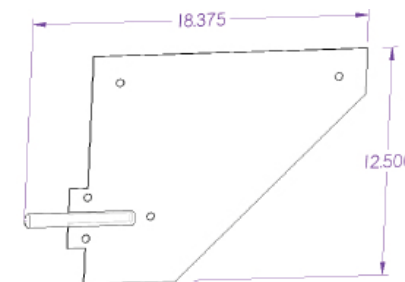
Door Panel, P#3

Part Number: 100010909
MULTI-MAX II
 Plastic
Weight: 65.82 lbs
 Request drawing before ordering



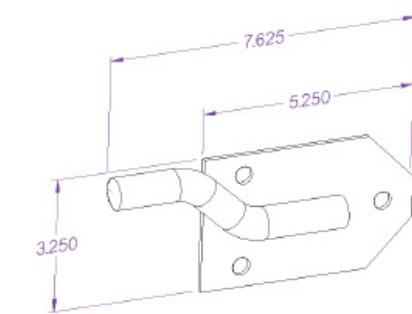
Door Panel, Center

Part Number: 100010266
MULTI-MAX
PLASTIC
Weight: 65.78 lbs
 Request drawing before ordering



Door Pin Assembly

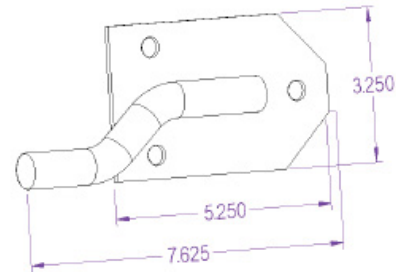
Part Number: A15147-02
Weight: 5.41 lbs
 Request drawing before ordering



Left Offset Door Pin

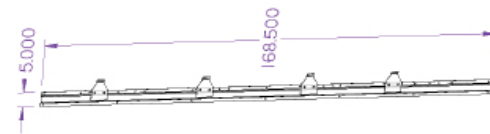
Part Number: A14960-02
Weight: 1.25 lbs
 Used on road numbers 690000-692933

SUGGESTED STOCK ITEMS: BACKSHOP



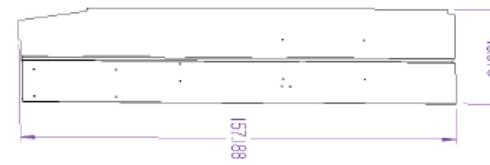
Right Offset Door Pin

Part Number: A14960-01
Weight: 1.25 lbs
 Used on road numbers 690000-692933



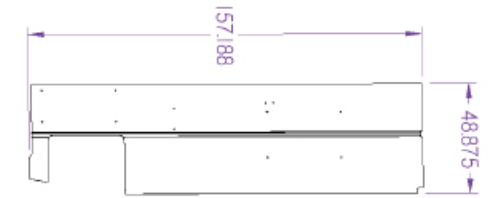
Door Stiffener Assembly

Part Number: A10001901
Weight: 28.31 lbs
 Request drawing before ordering



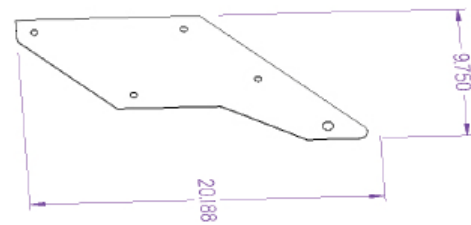
End Side Sheet BR/AL

Part Number: 101801-02
 SHT 0.1196 X 49 11/16 X 157 3/16
 ASTM A1011 SS GR50 W/.2% CU
Weight: 266.19 lbs



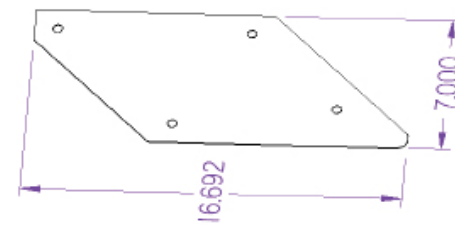
End Side Sheet with Cutout BL

Part Number: 101801-03
 SHT 0.1196 X 49 11/16 X 157 3/16
 ASTM A1011 SS GR50 W/.2% CU
Weight: 240.52 lbs



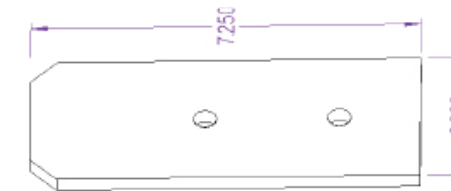
End Panel Inner Stiffener

Part Number: 100009099
 SHT 0.SHT 0.0747 X 9 3/4 X 19 15/32
 ASTM A1011 HSLAS-F GR80,
 100KSI MIN TENSILE
Weight: 1.99 lbs
 Request drawing before ordering



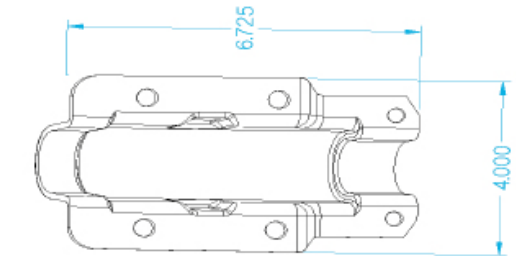
End Panel Inner Stiffener

Part Number: 100010279
 SHT 0.0747 X 7 X 16 3/4
 ASTM A1011 SS GR40 W/.2% CU
Weight: 1.78 lbs
 Request drawing before ordering



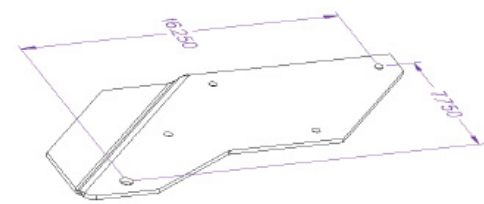
Front Panel Stop

Part Number: 100009172
 PL 1/4 X 3 X 7 1/4
 ASTM A572 GR50 W/.2% CU
Weight: 1.50 lbs
 Request drawing before ordering



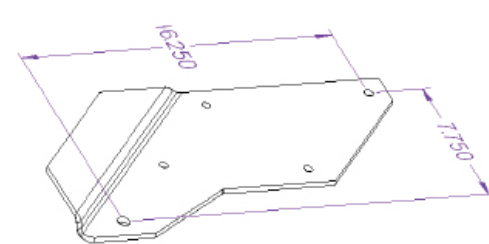
Guide Plate

Part Number: 121339-00
Weight: 1.52 lbs



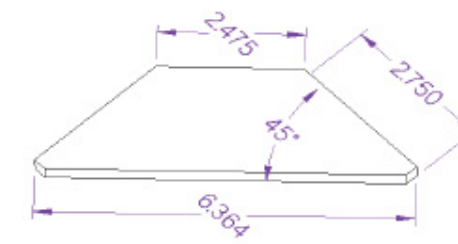
End Panel Stiffener BL/AR

Part Number: 101955-02
 PL 1/4 X 9 3/4 X 19 11/16
 ASTM A572 GR50 W/.2% CU
Weight: 9.03 lbs
 Used on road numbers 690000-692933



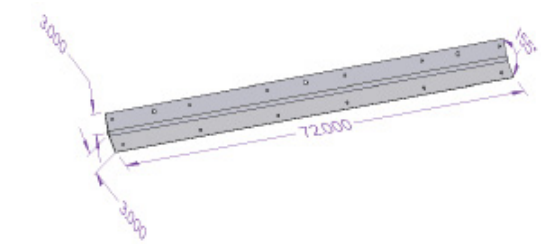
End Panel Stiffener BR/AL

Part Number: 101955-01
 PL 1/4 X 9 3/4 X 19 11/16
 ASTM A572 GR50 W/.2% CU
Weight: 9.02 lbs
 Used on road numbers 690000-692933



Gussett

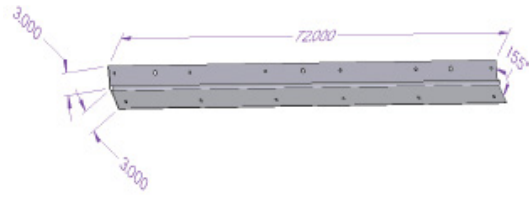
Part Number: 100010282
 1/4 X 4 1/4 X 4 1/4,
 PL 1/4 X 4 1/2 X 4 1/2
 ASTM A36 W/.2% CU
Weight: 0.69 lbs
 Request drawing before ordering



Hinge, Continuous

Part Number: 102187-00
 304 Stainless
 0.120 X 6 X 72, 3/8 Dia Pin
Weight: 26.48 lbs
 Request drawing before ordering

SUGGESTED STOCK ITEMS: BACKSHOP



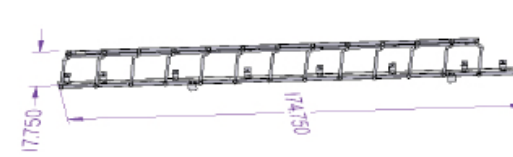
Hinge, Continuous

Part Number: 121366-00
 Cad/Zinc Pltd
 .120 X 6 X 72
 3/8 Dia Brass Pin
Weight: 25.87 lbs
 Request drawing before ordering



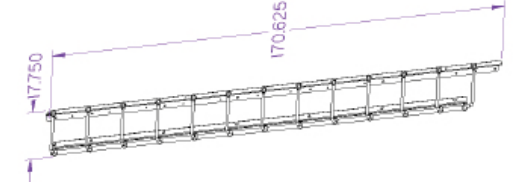
Hinge, Continuous, Unequal Leg

Part Number: 102186-00
 304 Stainless
 0.120 X 5 X 72, 3/8 Dia Pin
Weight: 18.00 lbs
 Request drawing before ordering



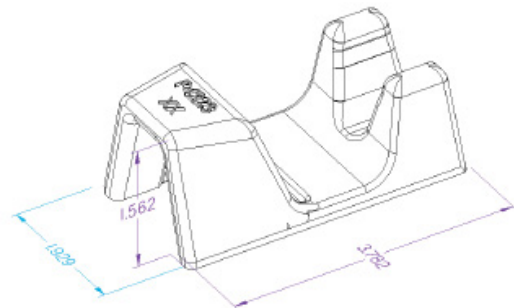
Ladder Assembly, BR/AL

Part Number: A10001543
Weight: 124.43 lbs
 Request drawing before ordering



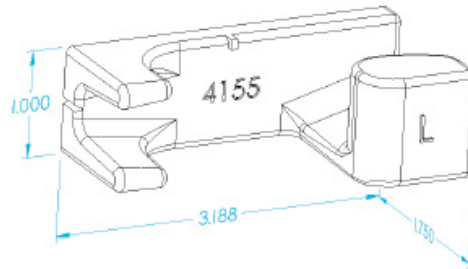
Ladder Assembly, BL/AR

Part Number: A10002289
Weight: 126.19 lbs
 Request drawing before ordering



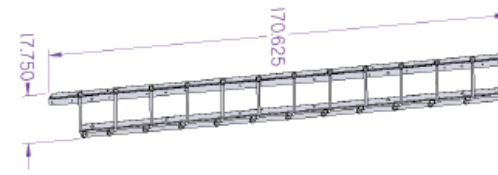
Keeper, Lower

Part Number: 121343-00
Weight: 0.99 lbs



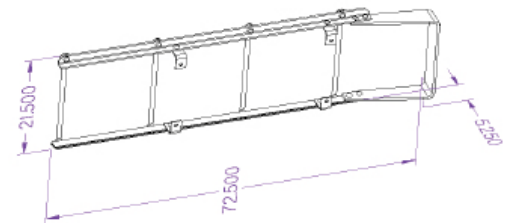
Keeper, Upper Lever LH

Part Number: 121342-00
Weight: 0.54 lbs



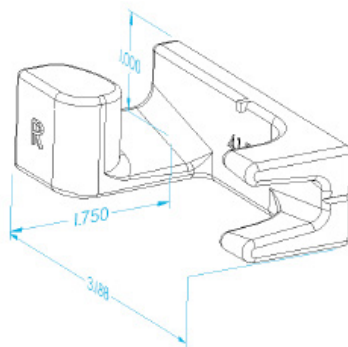
Ladder Assembly BR/AL

Part Number: A10002281
Weight: 126.19 lbs
 Request drawing before ordering



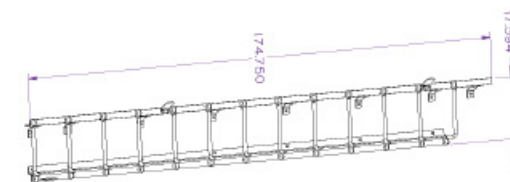
Ladder Assembly, MULTI-MAX

Part Number: A10001676
 16 Wide X 18 Deep Sill Step
Weight: 61.18 lbs
 Used on road numbers 690000-692133



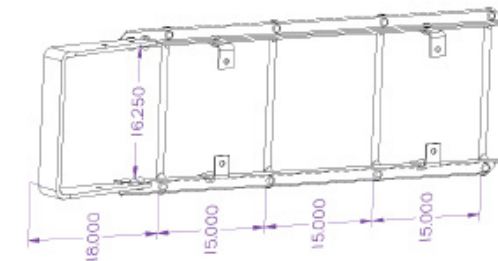
Keeper, Upper Lever RH

Part Number: 121341-00
Weight: 0.54 lbs



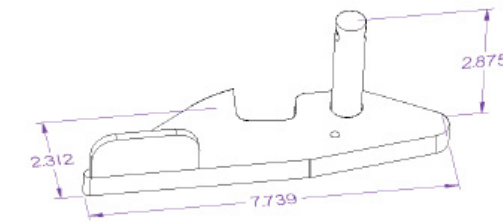
Ladder Assembly, BL/AR

Part Number: A10001715
Weight: 124.43 lbs
 Request drawing before ordering



Ladder Assembly, MULTI-MAX

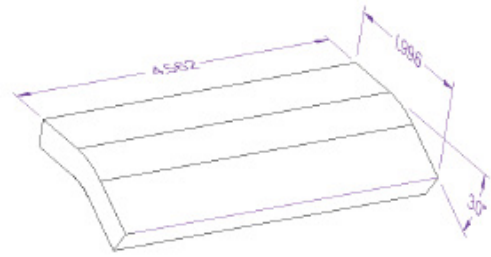
Part Number: A10002628
 16 Wide X 18 Deep Sill Step
Weight: 57.55 lbs
 Used on road numbers 692134-onward



Latch Hook Assembly Left

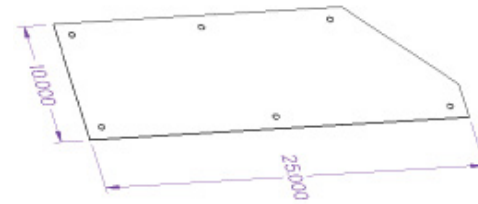
Part Number: A14663-02
Weight: 1.79 lbs
 Used on road numbers 690000-692933

SUGGESTED STOCK ITEMS: BACKSHOP



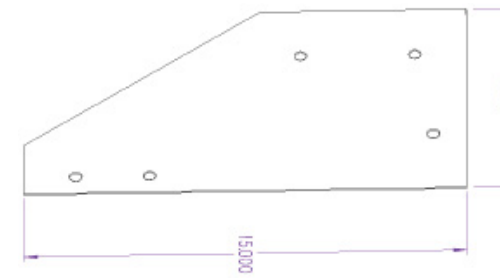
Lower Keeper Brace

Part Number: 100008286
PL 3/8 X 2 X 4 9/16
ASTM A36 W/.2% CU
Weight: .65 lbs
 Used on road numbers 690000-690599



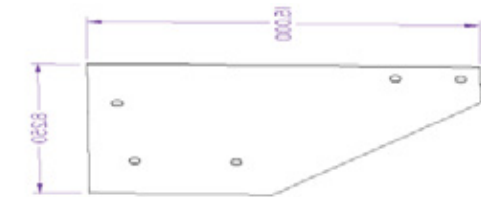
Middle Panel Stiffener

Part Number: 100009098
SHT 0.0747 X 10 X 25
ASTM A1011 SS GR40 W/.2% CU
Weight: 4.94 lbs
 Request drawing before ordering



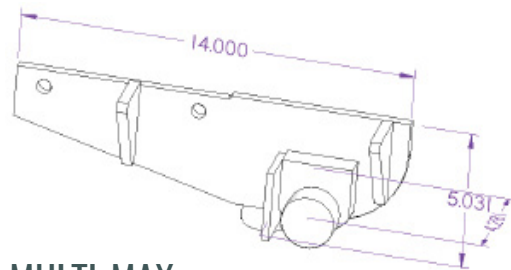
Reinforcement Plate

Part Number: 100010283
SHT 0.0747 X 8 1/4 X 15
ASTM A1011 SS GR40 W/.2% CU
Weight: 2.15 lbs
 Request drawing before ordering



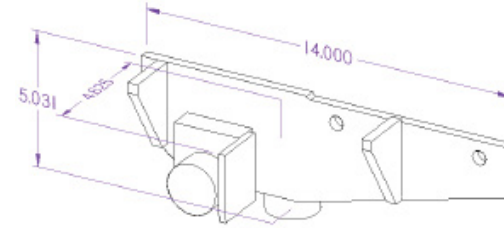
Reinforcement Plate

Part Number: 100009619
SHT 0.0747 X 8 1/4 X 15
ASTM A1011 HSLAS-F
 GR80 W/.2%CU, 100KSI MIN TENSILE
Weight: 2.15 lbs
 Request drawing before ordering



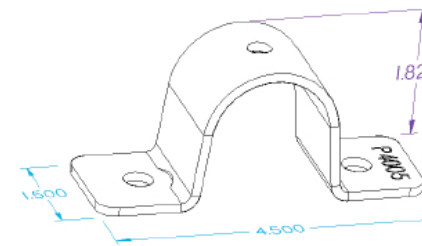
**MULTI-MAX
 Bottom Roller Left Hand**

Part Number: A14745-02
Weight: 9.97 lbs
 Used for conversion from tri-bi



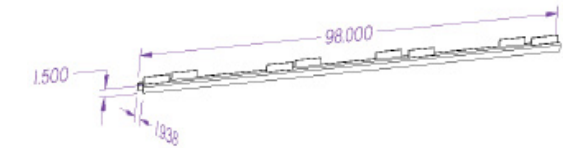
**MULTI-MAX
 Bottom Roller Right Hand**

Part Number: A14745-01
Weight: 9.97 lbs
 Used for conversion from tri-bi



Rod Guide

Part Number: 121340-00
Weight: 0.36 lbs



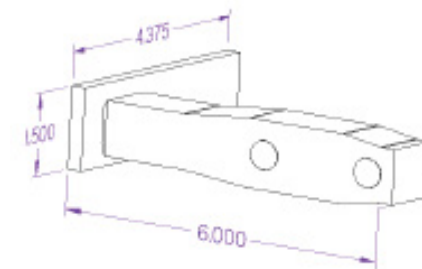
Screen Retainer Top

Part Number: A10001629
Weight: 25.97 lbs
 Request drawing before ordering



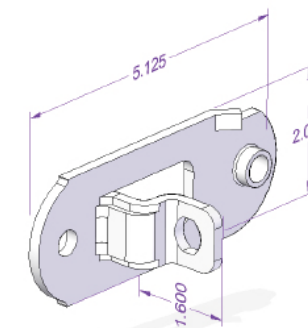
Outer Door Reinforcement

Part Number: 100008939
SHT 0.0747 X 5 X 171 1/2
ASTM A1011 HSLAS-F GR80 W/.2%CU
100KSI Min Tensile
Weight: 18.55 lbs
 Request drawing before ordering



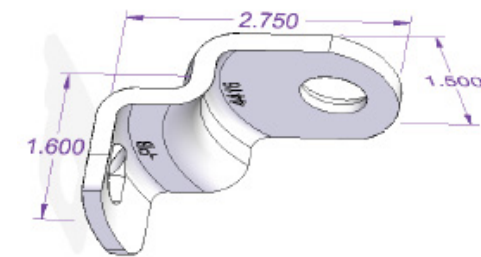
Pin Assembly

Part Number: A10002205
Weight: 2.15 lbs
 ** superseded ** use 100013804



Seal Plate

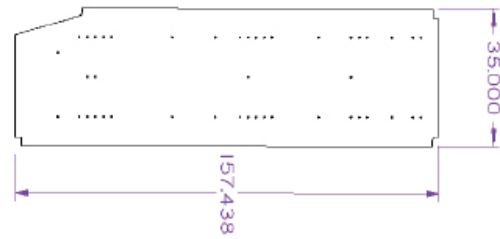
Part Number: 121344-00
Weight: 0.47 lbs



Seal Pin

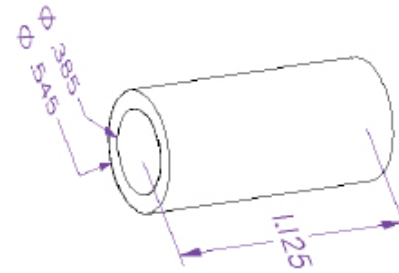
Part Number: 121345-00
Weight: 0.38 lbs

SUGGESTED STOCK ITEMS: BACKSHOP



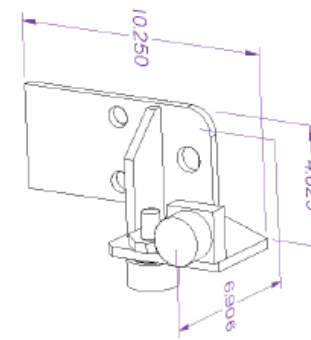
Side Sheet

Part Number: 100008150
SHT 0.1196 X 35 X 157 7/16
ASTM A1011 HSLAS GR50
CLASS 2 W/.2% CU
Weight: 186.59 lbs



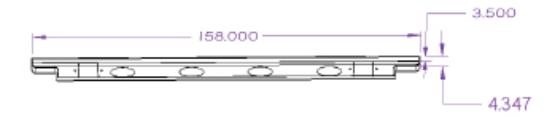
Spacer

Part Number: 100010923
 Zinc
 Steel 0.38 Min ID
 0.54 OD X 1-1/8" Long
Weight: 0.03 lbs
 Request drawing before ordering



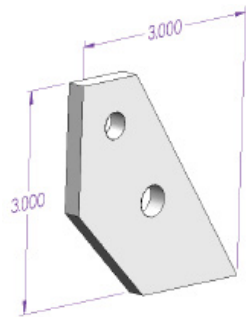
Top Guide Roller Right Hand

Part Number: A14748-01
Weight: 11.37 lbs
 Used for conversion from tri-bi



Track

Part Number: A10004131
Weight: 80.54 lbs
 Used for conversion from tri-bi
 (only needed on 694034-onward)



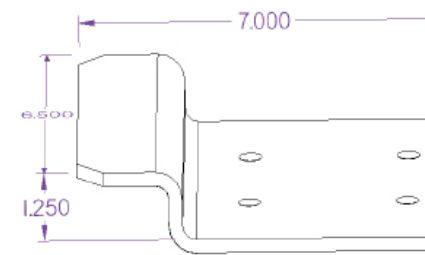
Spring Attach Bracket

Part Number: 211005541
 PL 1/4 X 3 X 3
 ASTM A36 W/.2% CU
Weight: 0.36 lbs
 Used on road numbers 690000-692933



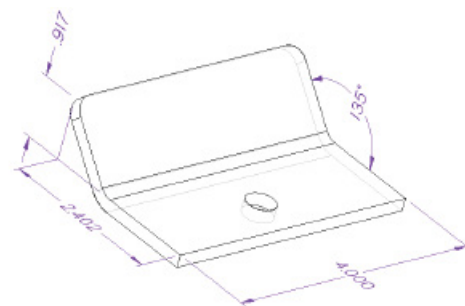
Spring, Extension for latch bar

Part Number: 100001067
Extension K=3.7LB/IN
 5 lb Initial
 Steel, Zinc Plated
Weight: 0.36 lbs



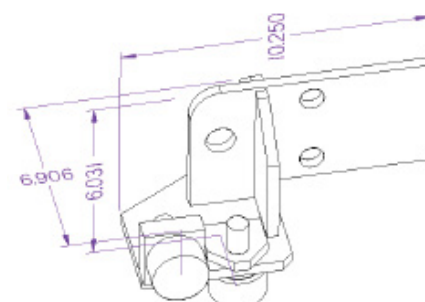
Z Door Protection

Part Number: 100009114
 PL 1/4 X 6 1/2 X 7 13/16
 ASTM A572 GR50 W/.2% CU LCBR 1T
Weight: 3.67 lbs
 Request drawing before ordering



Strap Tensioner

Part Number: 100010803
 PL 3/16 X 2 13/16 X 4
 ASTM A36 W/.2% CU
Weight: 0.59 lbs
 Used on road numbers 690000-690599



Top Guide Roller Left Hand

Part Number: A14748-02
Weight: 11.37 lbs
 Used for conversion from tri-bi