



2022 PARTS MANUAL
for
Models
1028-S, 1030-S, & 1032 Bale Loaders

v1.4.0 03.01.23



Made in the USA
for
America's Agriculture

5/01/22	MIL-STAK Mfg	2201 Hwy 30 W, Fruitland ID 83619 (208) 452-6045	Page No. 1
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All Parts Are Genuine MIL-STAK

MIL-STAK, *Mfg.* has taken great care in the design and selection of simply the best manufactured parts available to build the MIL-STAK big bale stacker. Breakage of parts and wear are to be expected due to extreme operating conditions. However, you can still be assured that MIL-STAK wants to see you get your work done on time by keeping the parts shelves stocked and ready for you when you need them.

After your wise decision to purchase a MIL-STAK big bale stacker, please consider these points when in need of replacement parts.

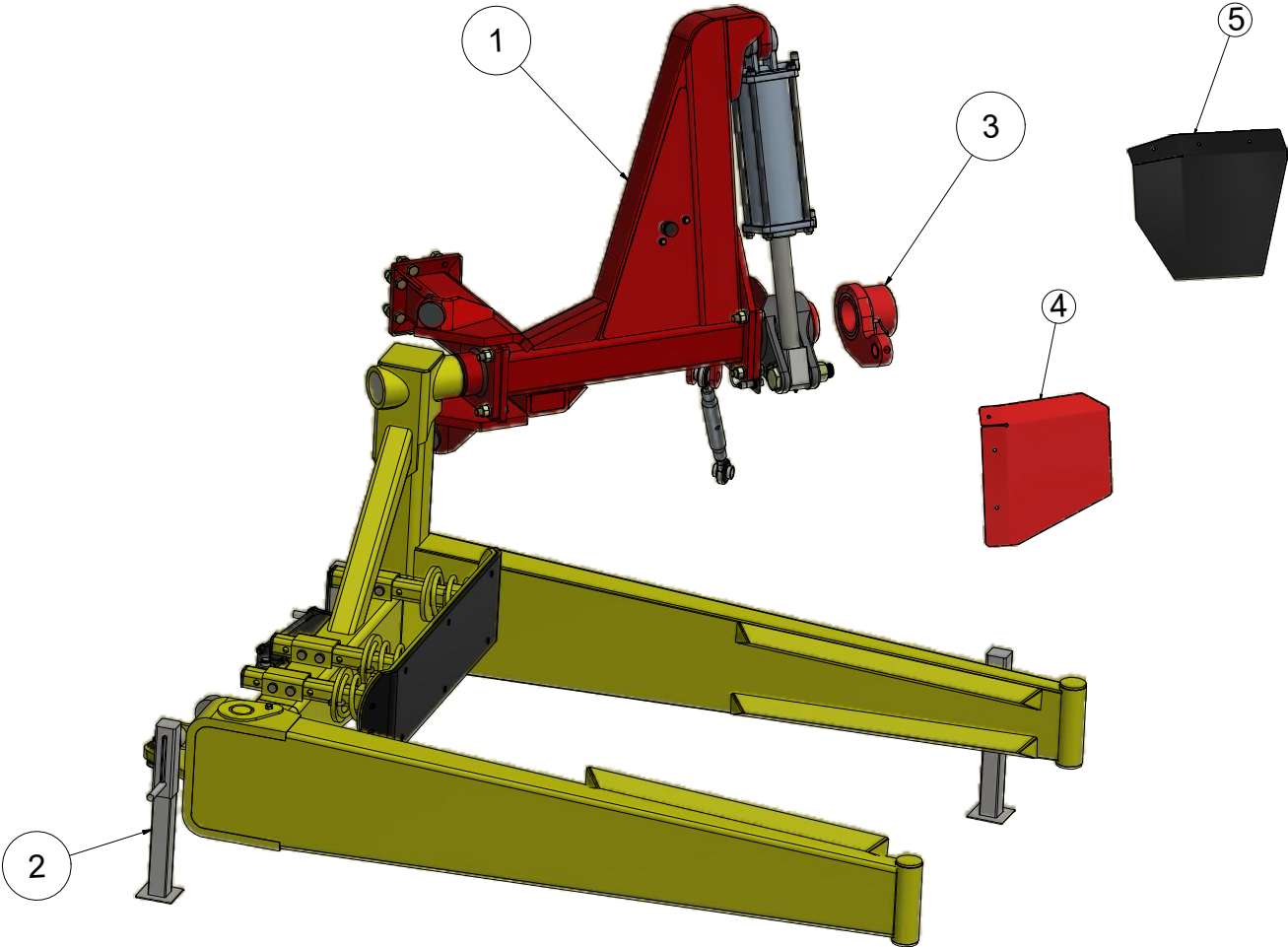
**Original Quality
Availability of Quality Parts
Superior Customer Support
Down to Earth 'Operator to Operator' Knowledge**

**"Large Enough to Provide Quality
Yet Small Enough to Care"**

It is a policy of MIL-STAK Mfg. to improve its products whenever it is possible and practical to do so. MIL-STAK, Mfg. reserves the right to make changes or add improvements in the design or construction of parts at any time without incurring the obligation to install such changes on products previously delivered. Changes and additions to any portion of this manual may be made without notice by MIL-STAK, Mfg. All illustrations, descriptive matter, and part numbers have been supplied by MIL-STAK, Mfg., care has been taken to avoid errors. If you should find a possible error in this manual, please contact MIL-STAK, Mfg. in writing explaining in detail the possible error. MIL-STAK, Mfg. shall not be held responsible for any damages caused by such errors.

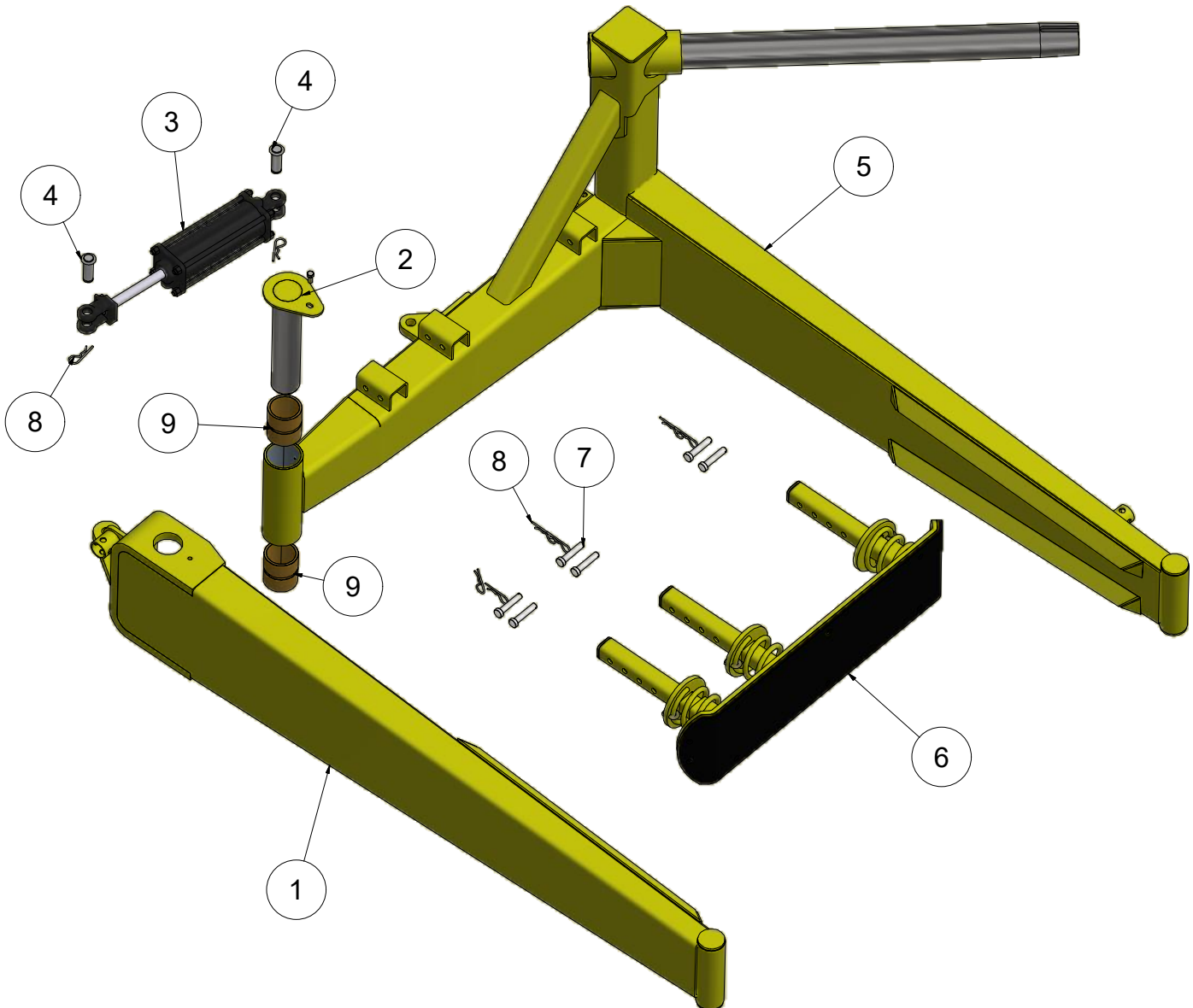
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1028-S &1030-S Bale Loader				
ITEM	ITEM QTY	PART NUMBER	DESCRIPTION	PAGE
1	1	1A0300	Tower Assembly, 1030 & 1032	8
2	3	2P0650	jack assembly	
3	2	1A0120 or102105	Lift Arm, Tapered	8
4		1P0480	Deflector Plate, 1075,85,95 ,RED	
5		1P0485	Deflector PlateBW/H9880 ,Black	

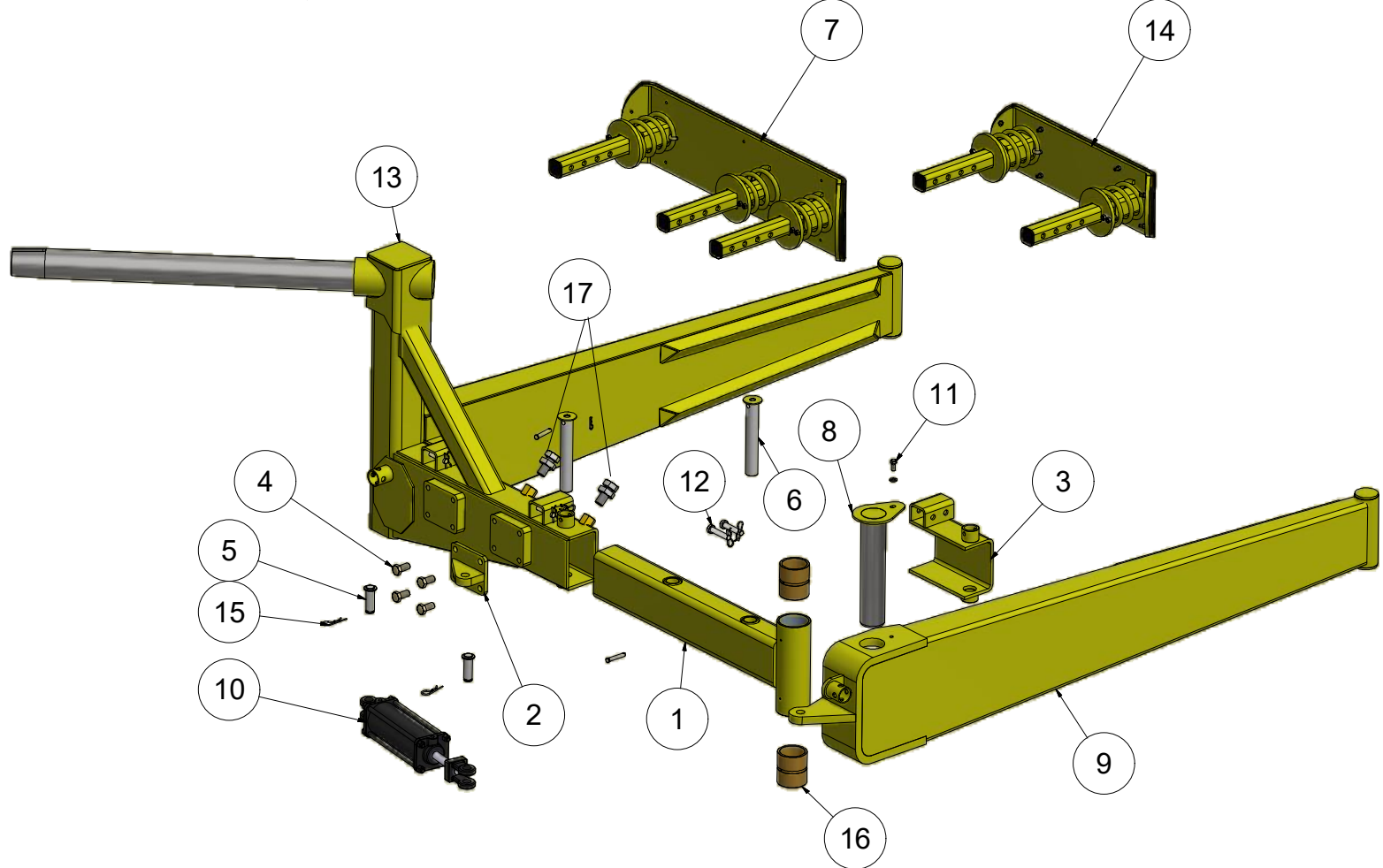


1030S Assembly

ITEM	QTY	PART NUMBER	DESCRIPTION	PAGE
1	1	1P1010	Right Arm	
2	1	1P1510	Pivot Pin, Right Arm	
3	1	2A4100	Hyd Cyl 3.5 x 8	
4	2	2P5100	1" diameter Clevis Pin	
5	1	1P0550	1030-S Left Arm	
6	1	1A2010	Cushion Bumper Assembly, Large	9
7	6	2P6116	Adjusting Pin, Bale Cushion	
8	10	4P5390	Hairpin	
9	2	100611	Bronze Bushing sm	

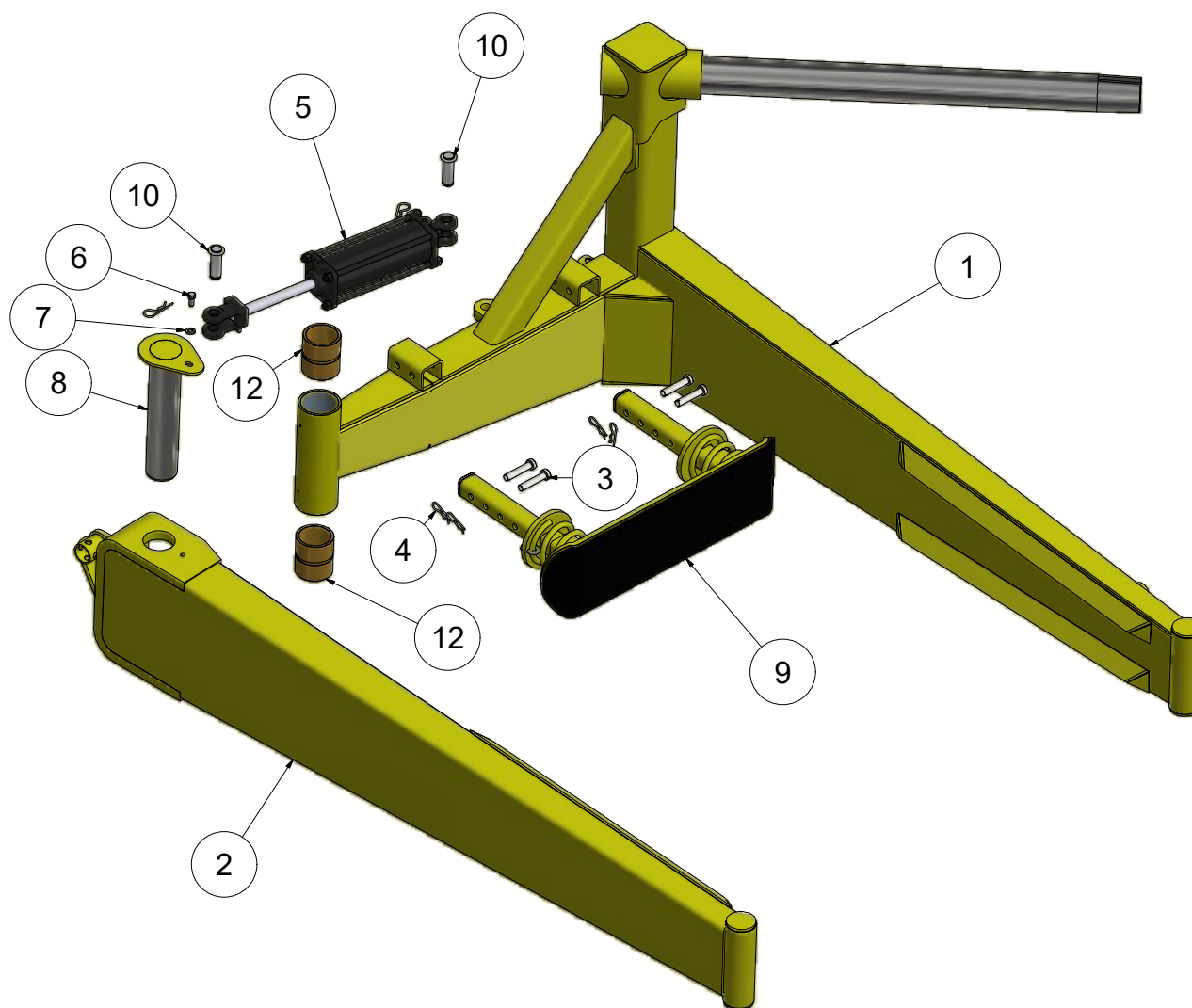


1032 Clamp Assembly			
ITEM	PART NUMBER	DESCRIPTION	PAGE
1	1P0650	Clamping Arm Extension Tube	
2	1P0620	Mount, Clamping Cylinder Rear	
3	1P2200	Bumper Adapter "C" Bracket	
4	3R9171	Bolt, 3/4-10 x 1.5	
5	2P5100	1" diameter Clevis Pin	
6	1P1550	Pin, Extension Tube Position x 2	
7	1A2010	Cushion Bumper Assembly, Large	
8	1P1510	Plate, Clamping Arm Pin	
9	1P1010	Right Arm	
10	2A4100	Hydraulic Cylinder, 3.5 x 8	
11	3R9104	Bolt - UNC 1/2-13 x 1	
12	2P6116	Adjusting Pin, Bale Cushion	
13	100515	1032 Adjustable Left Arm	
14	1A2100	3 x 3 Cushion Bumper Assembly	
15	4P5170	Hairpin, Size 9	
16	100611	Bronze Bushing	
17		1"-14 x 2.5" Hex bolt and jam nut x 2	



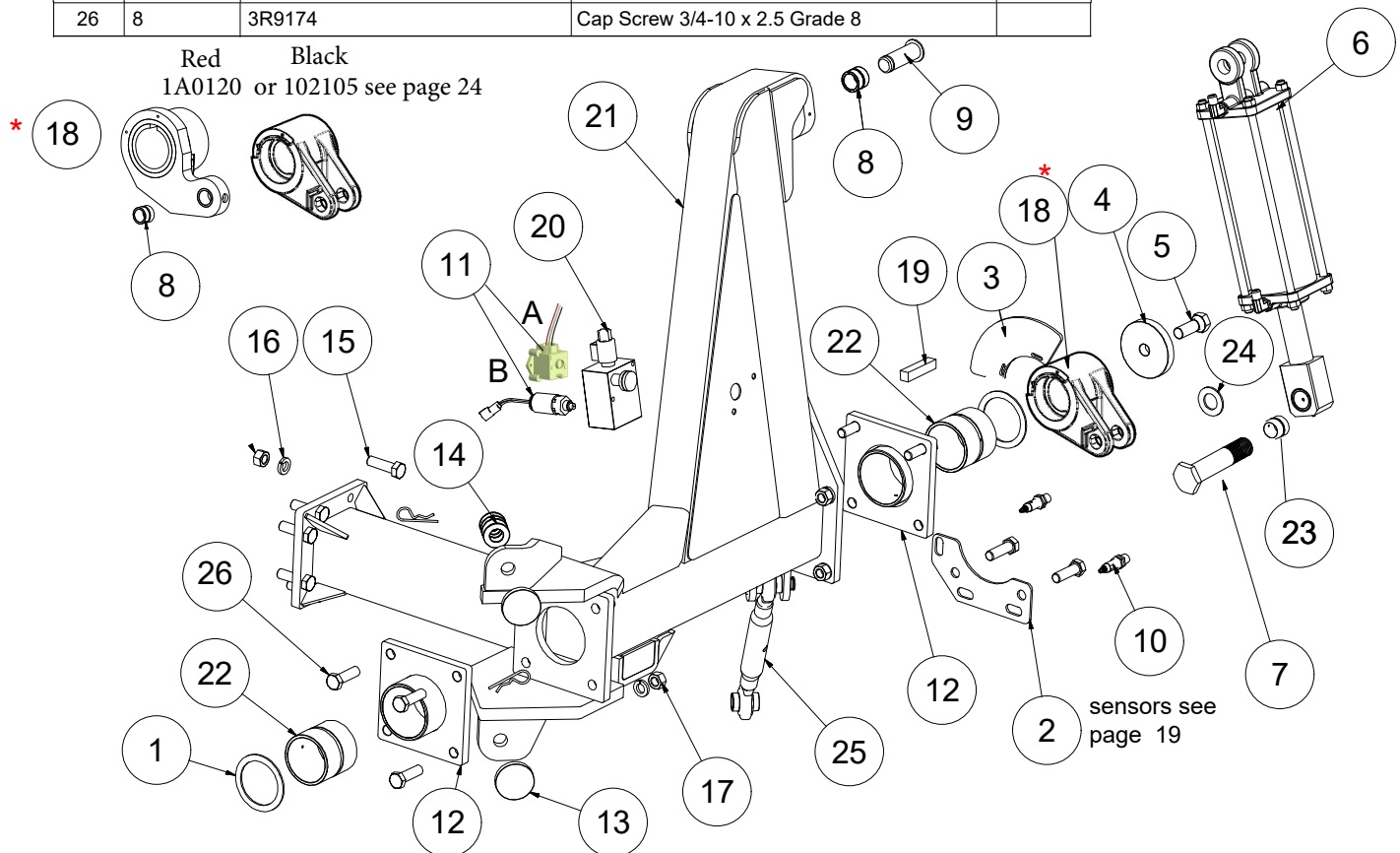
1028-S Bale Clamp Assembly

ITEM	QTY	PART NUMBER	DESCRIPTION	PAGE
1	1	1P0555	1028 S Left Arm	
2	1	1P1010	Right Arm	
3	4	2P6116	Adjusting Pin, Bale Cushion	
4	4	2P6104	Hairpin	
5	1	2A4100	Hydraulic Cylinder, 3.5 x 8	17
6	1	3R9104	Bolt - UNC 1/2-13 x 1	
7	1	4P5100	Washer, 1/2, Spring Lock	
8	1	1P1510	Pivot Pin, Right Arm	
9	1	1A2100	3 x 3 Cushion Bumper Assembly	10
10	2	2P5100	1" diameter Clevis Pin	
11	2	4P5170	Hairpin, Size 9	
12	2	100611	Bronze Bearing	



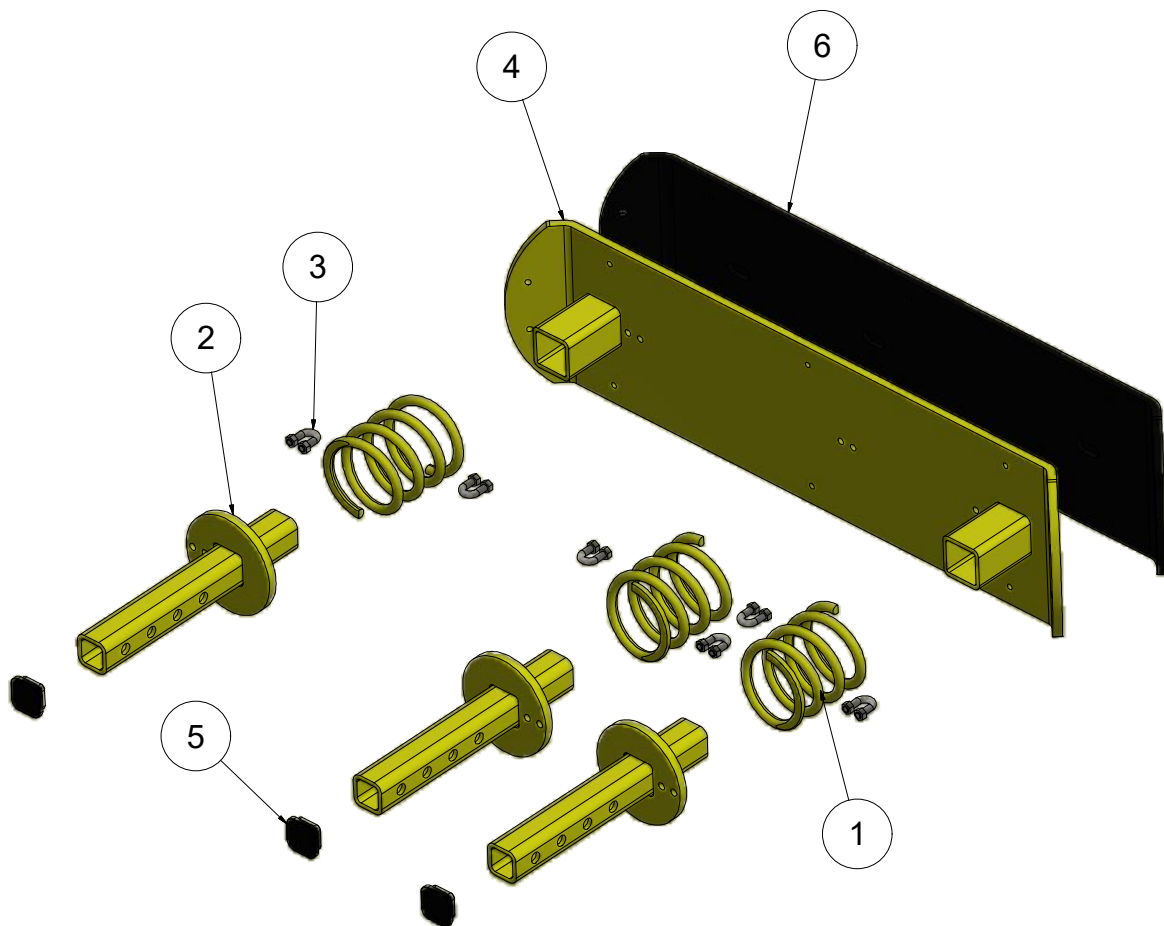
Tower Assembly- 1028S,1030S and 1032

ITEM	QTY	PART NUMBER	DESCRIPTION	PAGE
1	2 or as needed	100586	Shim, .125, Pivot Shaft as needed	
2	1	3P1501	Sensor Bracket	
3	1	3P1505	Sensor Target	
4	1	1P0132	Retaining Plate, Lift Arm	
5	1	2P5475	Bolt, 7/8-14 x 2.5, Grade 8	
6	1	2A4020 clevis / 2A4025 Pineye	Hydraulic Cylinder, 5 x 12	14,15
7	1	5P5375	1.5-6 machined Bolt x6.5 with Nut 4P5380	
8		1P0129	Hardened bushing	
9	1	2P5112	Clevis Pin, 1 1/4" Diameter	
10	2	2P7500	Proximity Sensor NH 87342073	19
11	1	(A) 2P4100 / (B) 4P4031	Pressure Switch (A) Magnalloy, (B)Nason	
12	2	1P0112	Bearing Housing w/o insert	
13	2	1P0140	Adjustable Stop	
14	4	2P0142	Shim, Clamp Frame Stop	
15	8	3R9451	Bolt, 5/8-18 x 2.5, Grade 8	
16	9	2P5440	Washer, 3/4, Spring Lock, Grade 8	
17	8	2P5445	Nut 3/4-10, Grade 8	
* 18	1	102105 black/1A0120 red	Double lift arm(Black)/ Single arm(Red)	24
19	1	1P0122	Key Stock 3/4 x 3/4 x 3.5	
20	1	1A4150	Cushion Valve	
21	1	1P0010	Tower, 1030 series Bale Loader	
22	2	1P0116	Bronze Insert	
23	3	3P4205	Bushing, Pineye	
24	1	4P0570	Washer, Rolling Rack Roller	
25	1	1P0050	Tower,top Link assembly	
26	8	3R9174	Cap Screw 3/4-10 x 2.5 Grade 8	



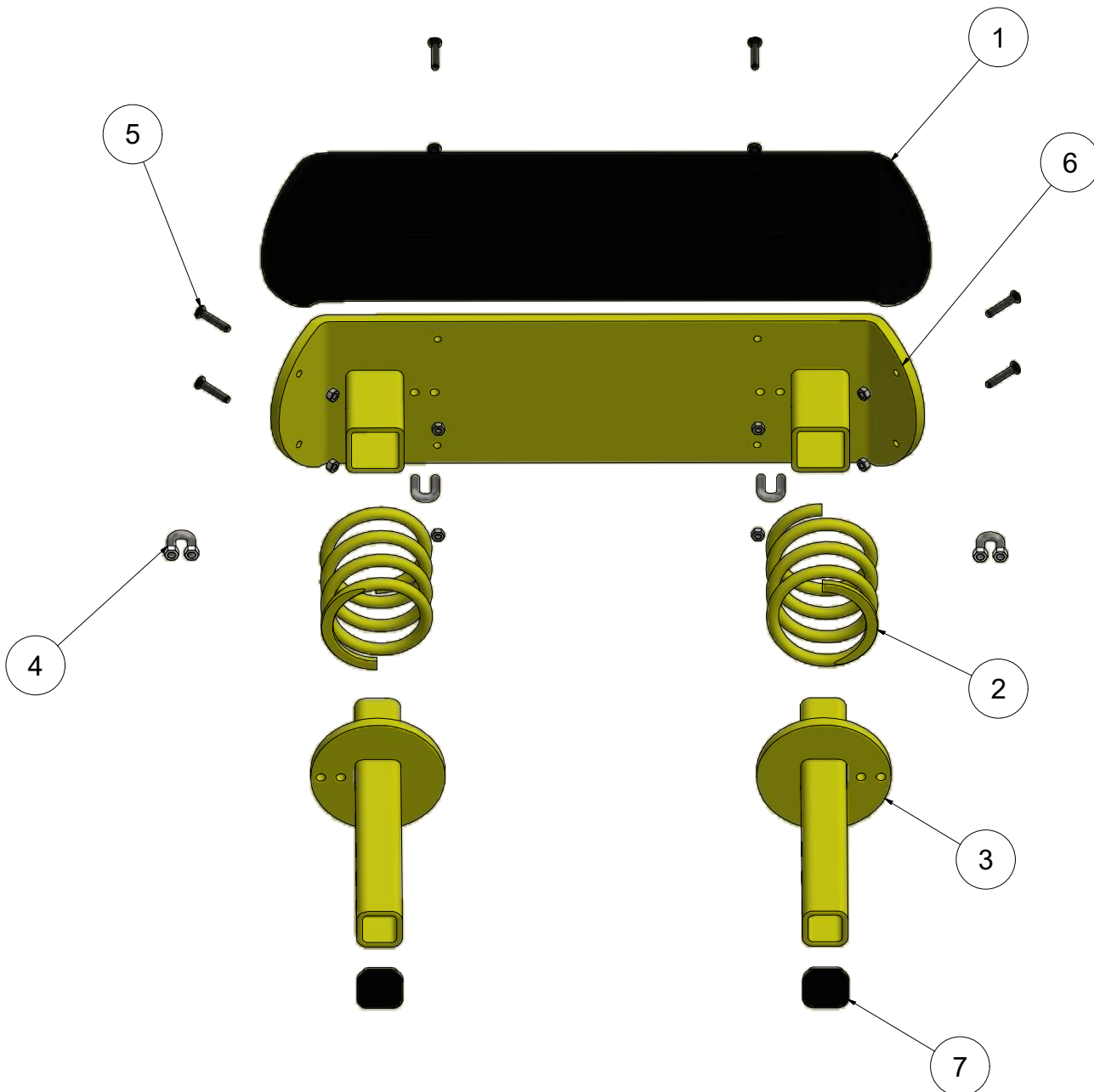
1A2010 3x4 Cushion Bumper and parts

ITEM	PART NUMBER	DESCRIPTION	PAGE
1	2P2115	Spring, Cushion Bumper	
2	1P2125	Cushion Bumper Tube Weldment	
3	1P2114	U-Bolt, 3/8-16	
4	1P2050	Cushion Bumper Shoe, Large	
5	1P2115-00	Cap, Cushion Bumper Tube	
6	1P2120	Cover, UHMW, Bumper Shoe, Large	

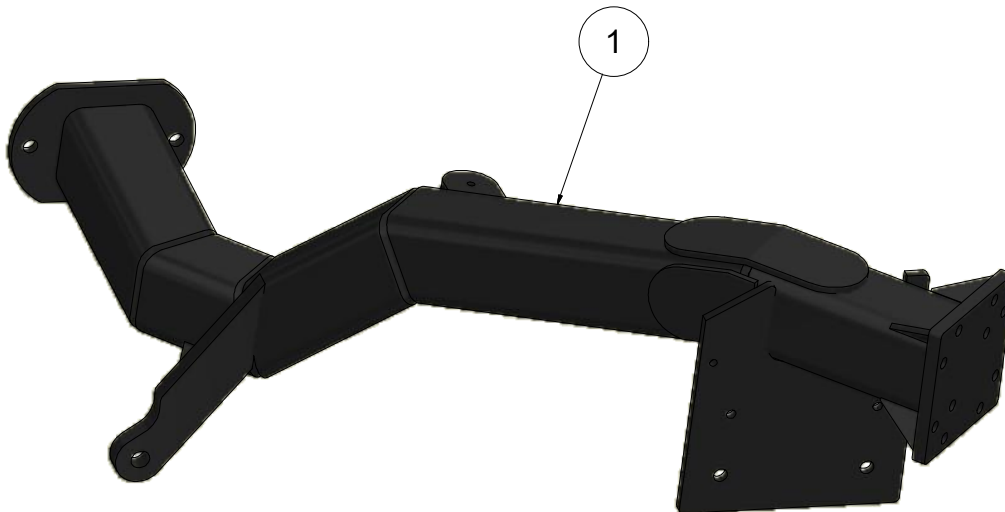
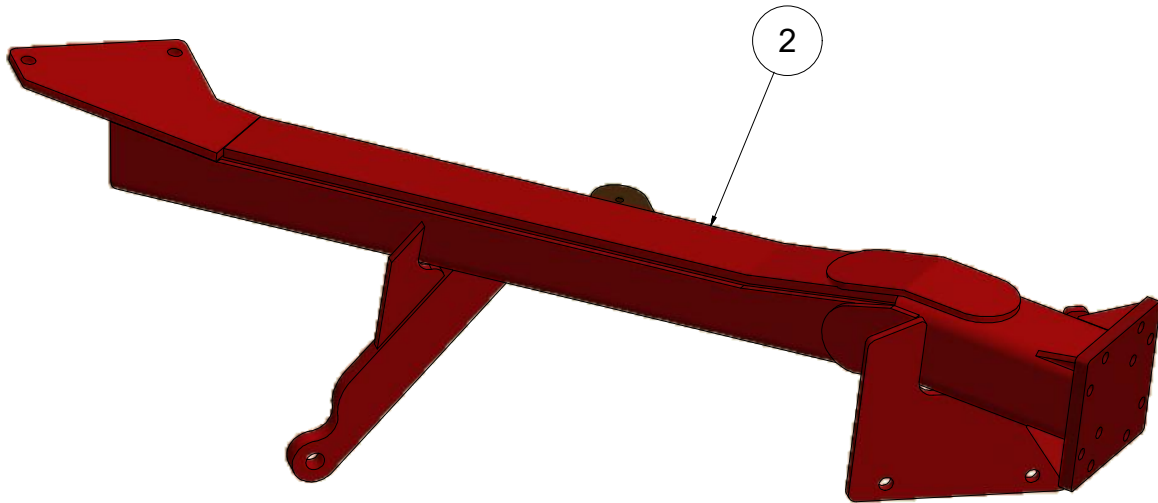


1A2100 3x3 Cushion Bumper

ITEM	PART NUMBER	DESCRIPTION	PAGE
1	1P2085	Cushion Bumper Shoe Cover, 3x3	
2	2P2115	Cushion Bumper Spring	
3	1P2125	Tube & Spring Retainer	
4	Hex nut	Nut, 3/8-16	
5	2P5145	Screw, 5/16-18 X 1.75, Countersunk Socket Head Cap	
6	1P2080	3 x 3 Cushion Bumper Assembly	
7	1P2115-00	Cap, Cushion Bumper Tube	

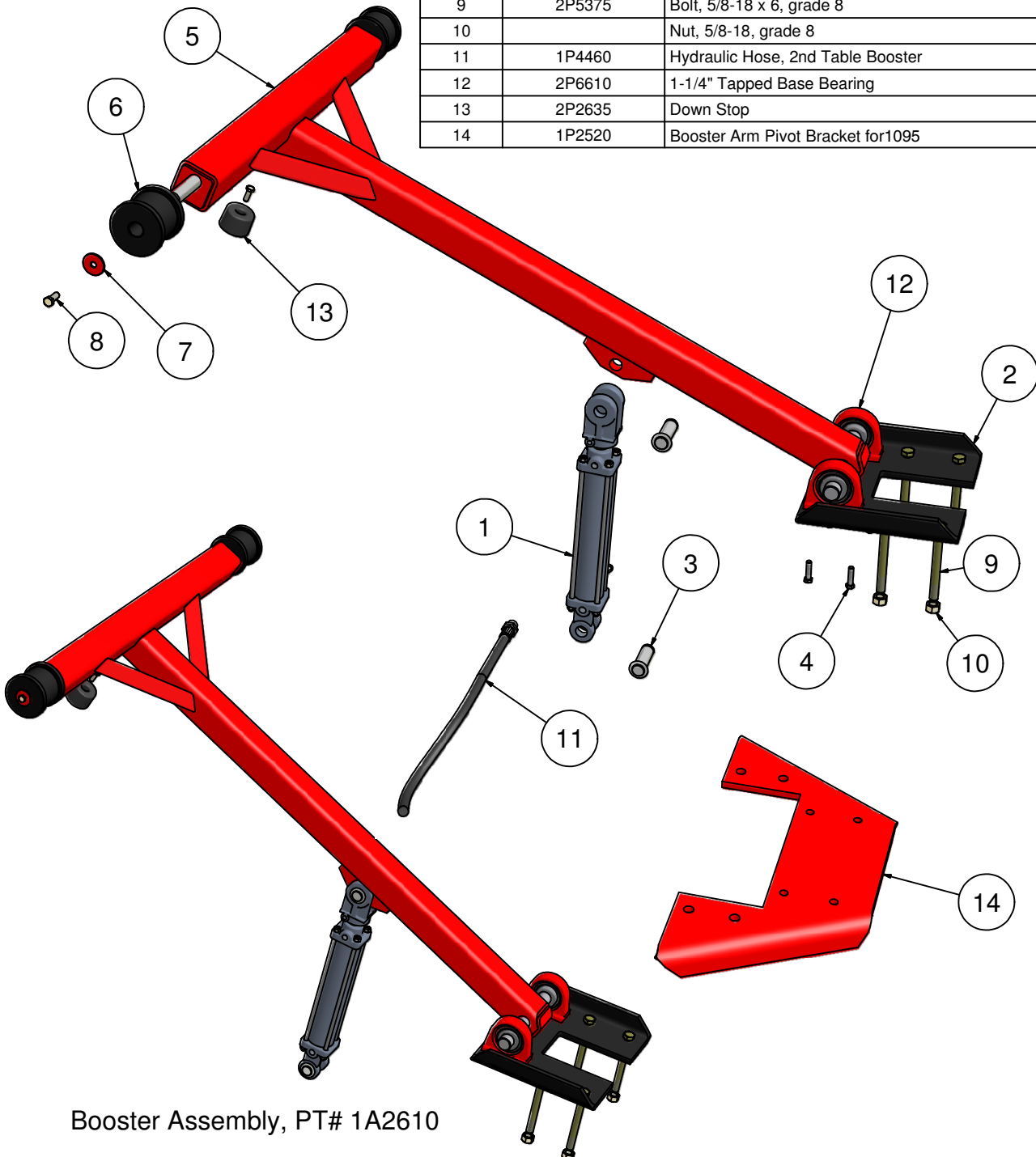


Mounting Bars			
ITEM	PART NUMBER	DESCRIPTION	PAGE
1	100210	BW Mounting Bar XL	
2	1P0180	Mounting Bar, 1075, 1085, 1095	



2nd Table T-Booster Assembly Parts List

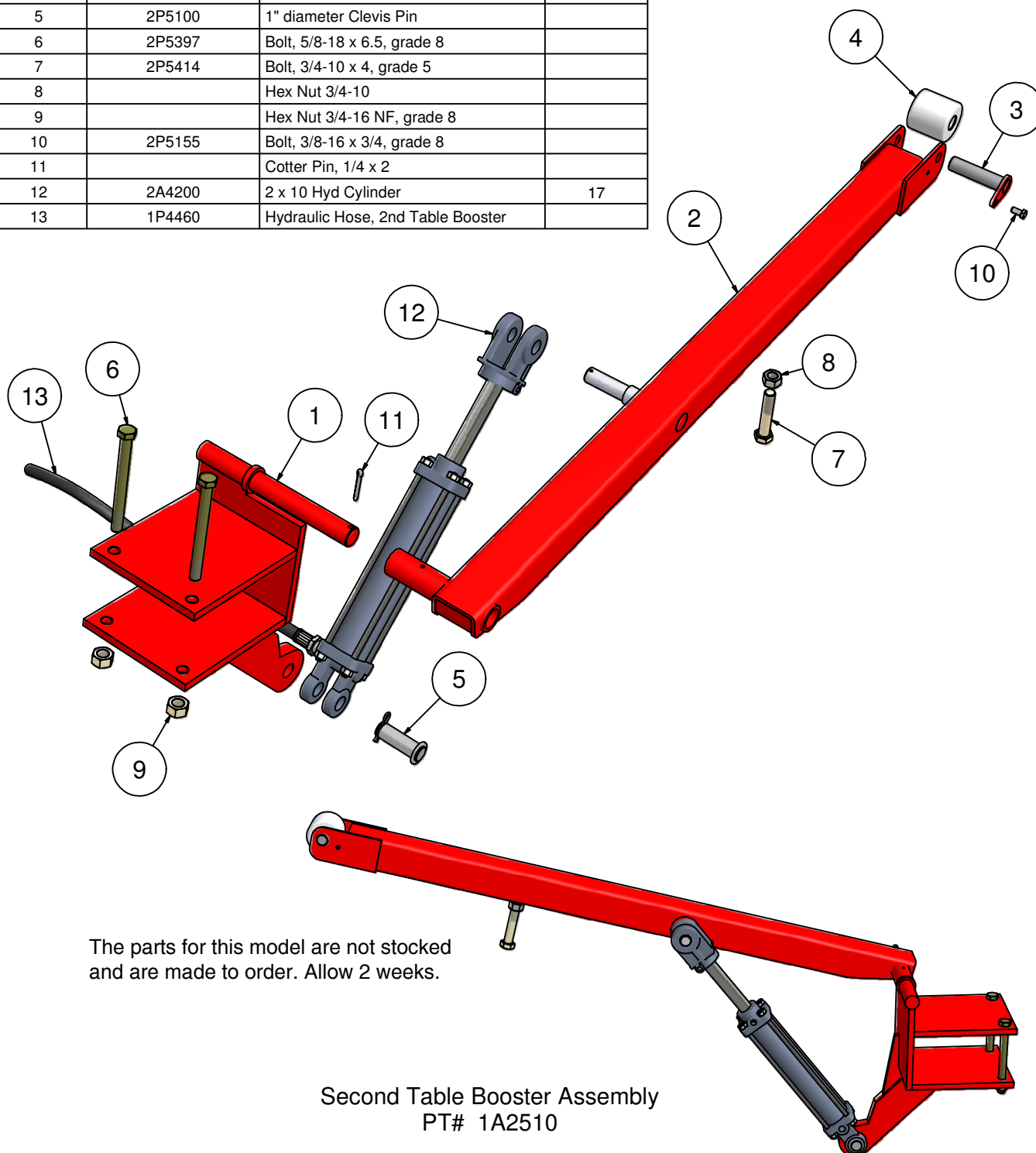
ITEM	PART NUMBER	DESCRIPTION	PAGE
1	2A4200	2 x 10 Hydraulic Cylinder	18
2	1P2621	Booster Bracket, Lift Arm BW 28/BW 38/H9870/H9880	
3	2P5100	1" diameter Clevis Pin	
4	2P5158	Bolt, 1/2"-13 x 1.5, grade 8	
5	1P2630	Booster Arm, BW 28	
6	1P2640	Roller	
7	1P2642	Flat Washer, 3/8	
8	2P5156	Bolt, 3/8-16 x 1, grade 8	
9	2P5375	Bolt, 5/8-18 x 6, grade 8	
10		Nut, 5/8-18, grade 8	
11	1P4460	Hydraulic Hose, 2nd Table Booster	
12	2P6610	1-1/4" Tapped Base Bearing	
13	2P2635	Down Stop	
14	1P2520	Booster Arm Pivot Bracket for 1095	



Booster Assembly, PT# 1A2610

1068 Second Table Booster Assembly

ITEM	PART NUMBER	DESCRIPTION	PAGE
1	1P2550	Mounting Bracket, 2nd Table Booster	
2	1P2530	Lifting Arm, 2nd Table Booster	
3	1P2570	Roller Pin	
4	1P2540	BOOSTER ROLLER, NYLON	
5	2P5100	1" diameter Clevis Pin	
6	2P5397	Bolt, 5/8-18 x 6.5, grade 8	
7	2P5414	Bolt, 3/4-10 x 4, grade 5	
8		Hex Nut 3/4-10	
9		Hex Nut 3/4-16 NF, grade 8	
10	2P5155	Bolt, 3/8-16 x 3/4, grade 8	
11		Cotter Pin, 1/4 x 2	
12	2A4200	2 x 10 Hyd Cylinder	17
13	1P4460	Hydraulic Hose, 2nd Table Booster	



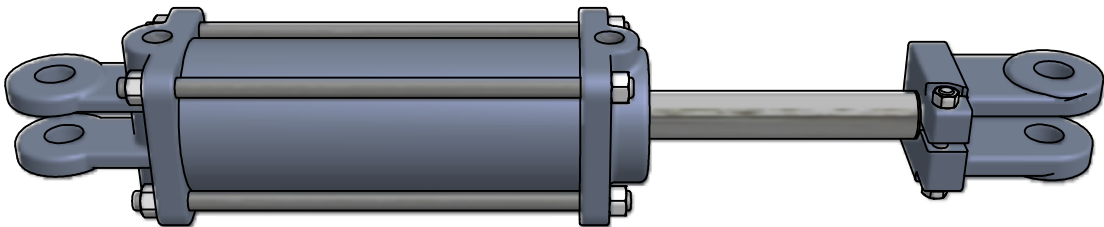
The parts for this model are not stocked and are made to order. Allow 2 weeks.

Second Table Booster Assembly
PT# 1A2510

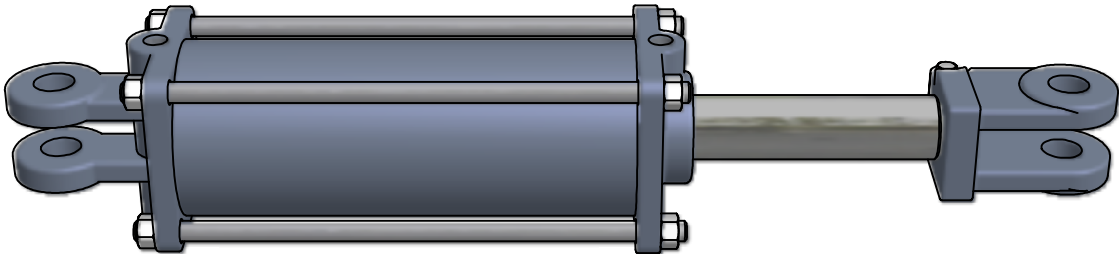
Hydraulic Cylinders for Bale Loaders			
ITEM	PART NUMBER	DESCRIPTION	PAGE
1	2A4200	2" Bore x 10" Stroke Hydraulic Cylinder	13
2	2A4100	3.5" Bore x 8" Stroke Hydraulic Cylinder	7
3	2A4020	5" Bore x 12" Stroke Hydraulic Cylinder	
4	2A4025	5" Bore x 12" Stroke Hydraulic Cylinder	



Item 1, Second Table Booster Hydraulic Cylinder
PT# 2A4200



Item 2, Clamp Arm Hydraulic Cylinder
PT# 2A4100

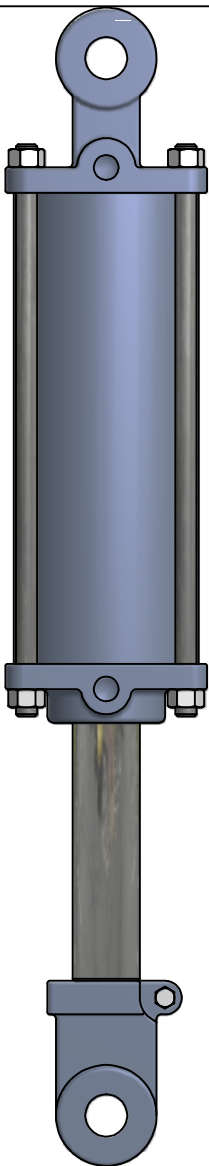
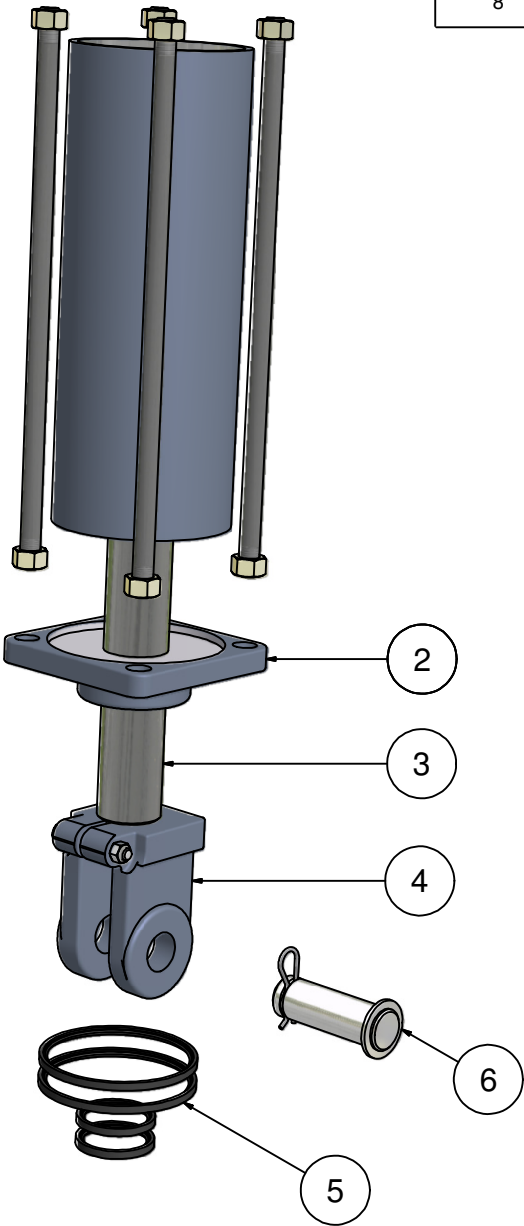
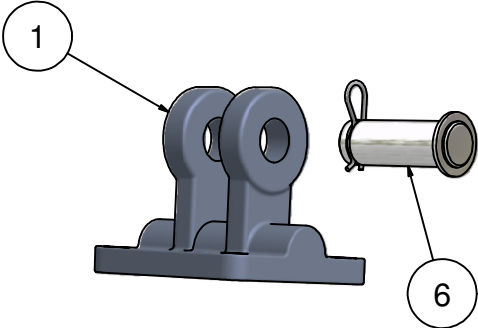


Item 3, Tower Hydraulic Cylinder
use on single arm hub 1A0120
PT# 2A4020

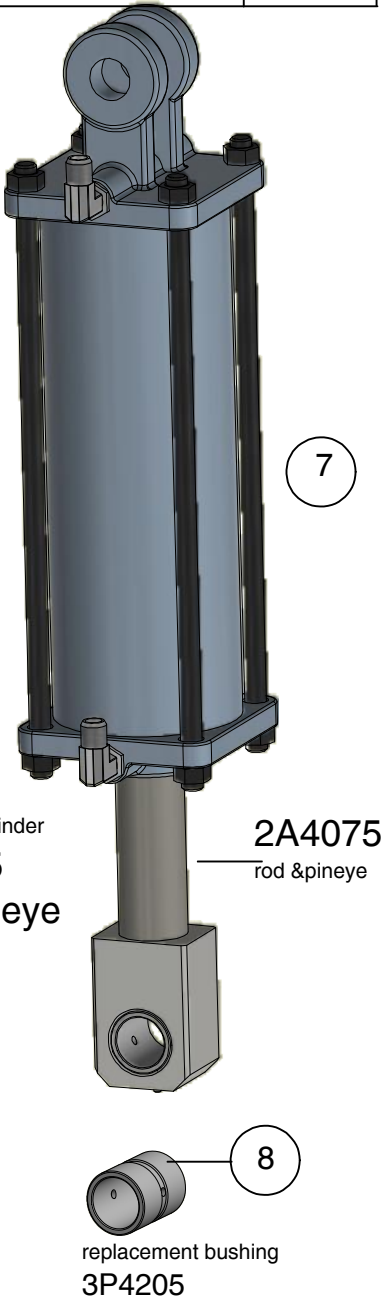


Item 4,used with lift arm 102105
PT#2A4025

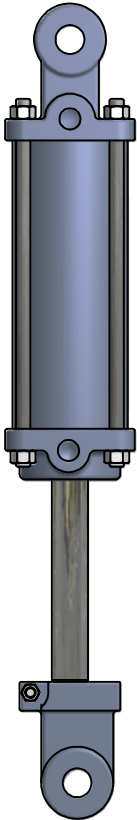
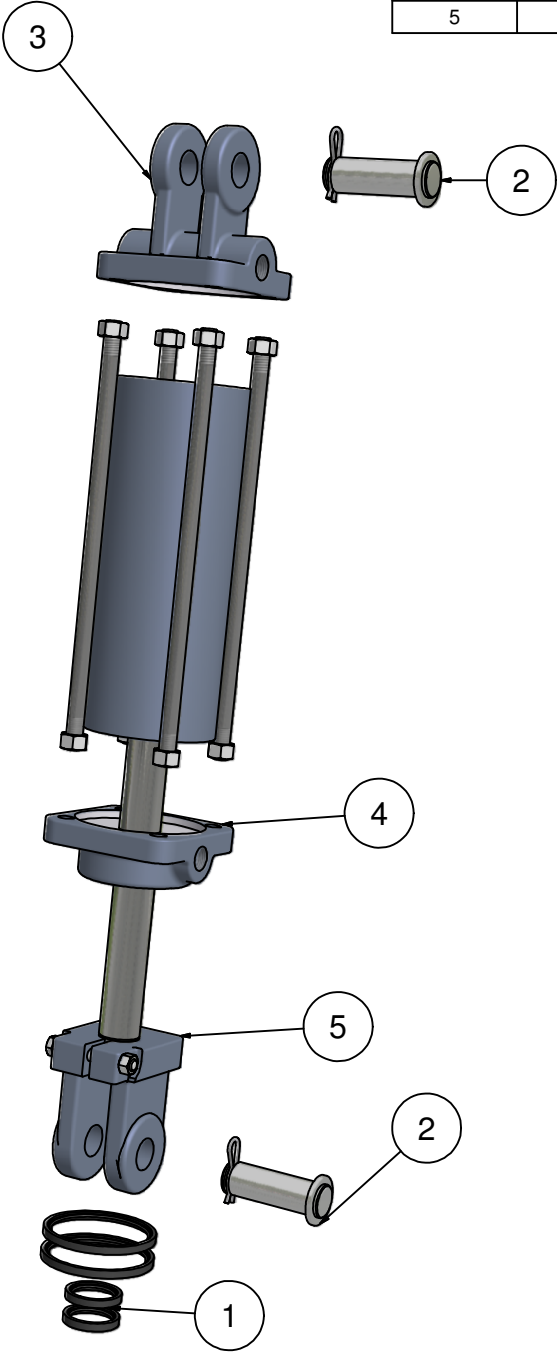
2A4020 with clevis			
5 x 12 Hydraulic Cylinder			
ITEM	PART NUMBER	DESCRIPTION	PAGE
1	2A4050	End Cap, Mounting End, 5 x 12 Hyd Cylinder	
2	2A4060	End Cap, Shaft End, 5 x 12 Hyd Cylinder	
3	2P4070	Shaft, 5 x 12 Hyd Cylinder	
4	2P4075	Clevis, 5 x 12 Hyd Cylinder	
5	2P4040	5 x 12 Seal Kit	
6	2A5110	1 1/4 OD Clevis & Hairpin	
7	2A4025	5x12 cylinder with pineye	
8	3P4205	Hardened pineye bushing	



Complete Hydraulic Cylinder
2A4020



Clamping Arm 3 1/2 x 8 Hydraulic Cylinder			
ITEM	PART NUMBER	DESCRIPTION	PAGE
1	2P4110	Seal Kit, 3 1/2 x 8 Hyd Cylinder	
2	2A5100	Clevis 1" OD and Hair Pin	
3	2P4135	End Cap, Mounting End, 3.5 x 8 Hyd Cylinder	
4	2P4140	End Cap, Shaft End, 3.5 Hyd Cylinder	
5	2P4155	Clevis, 3.5 x 8 Hyd Cylinder	

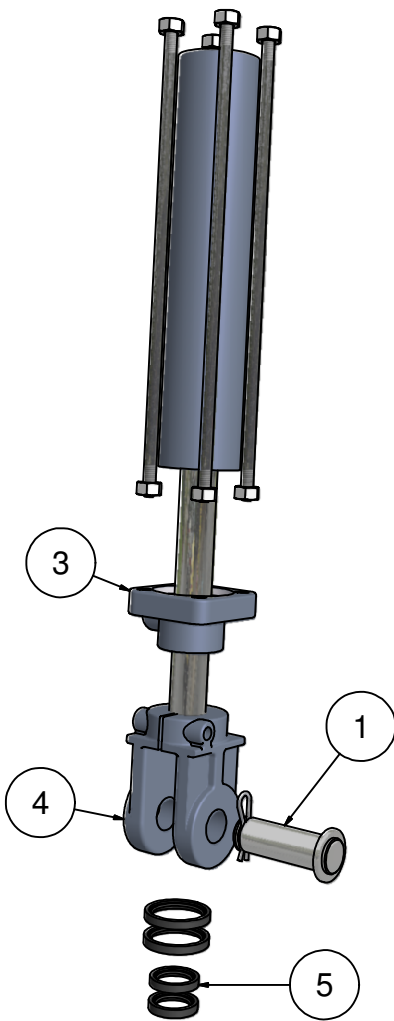
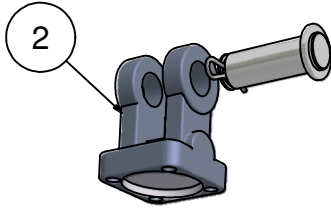


Complete Hydraulic Cylinder
PT# 2A4100

2nd Table Booster

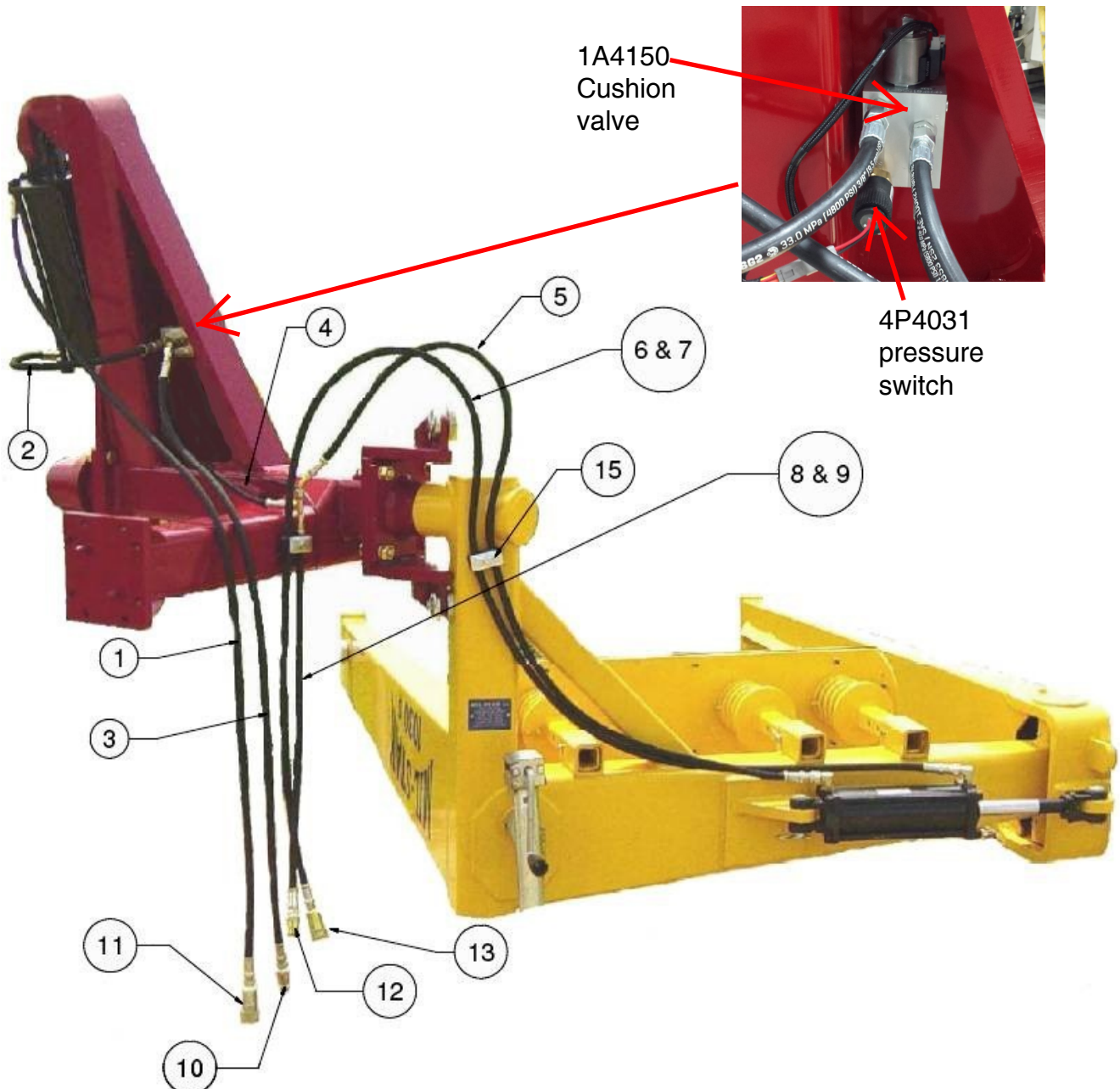
2 x 10 Hydraulic Cylinder Parts List

ITEM	PART NUMBER	DESCRIPTION	PAGE
1	2A5100	Clevis 1" OD and Hair Pin	
2	2P4225	End Cap, Mounting End, 2 x 10 Hyd Cylinder	
3	2P4230	End Cap, Shaft End, 2 x 10 Hyd Cylinder	
4	2P4250	Clevis, 2 x 10 Hyd Cylinder	
5	2P4210	Seal Kit, 2 x 10 Hyd Cylinder	



Complete Hydraulic Cylinder
PT# 2A4200

Table		
Item	Part Number	Part Description
1	1P4410	Tower Cylinder Hose - A
2	1P4415	Tower Cylinder Hose - B
3	1P4420	Tower Cylinder Hose - C
4	1P4425	Cushion Valve Hose
5	1P4430	Cylinder Clamp Hose - A
6	1P4440	Cylinder Un-Clamp Hose for Models 1068, 1078, 1095, BW28
7	1P4445	Cylinder Un-Clamp Hose for Models 1075, 1085
8	1P4450	Cylinder Clamp Hose - C for Models 1068, 1078, 1095, BW 28
9	1P4455	Cylinder Clamp Hose -C for Models 1075, 1085
10	2P4210	Quick Coupler, Male 1/2" FNPT
11	2P4215	Quick Coupler, Female 1/2" FNPT
12	2P4220	Quick Coupler, Male 3/8" FNPT
13	2P4225	Quick Coupler, Female 3/8" FNPT
14	2P4240	Twin Hose Bracket

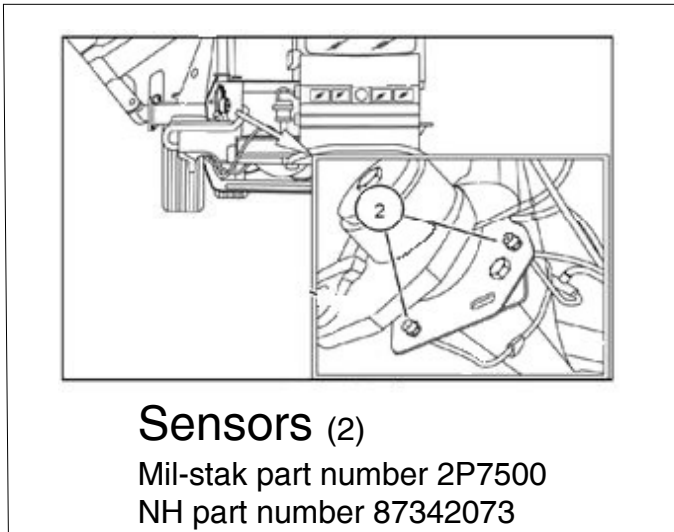




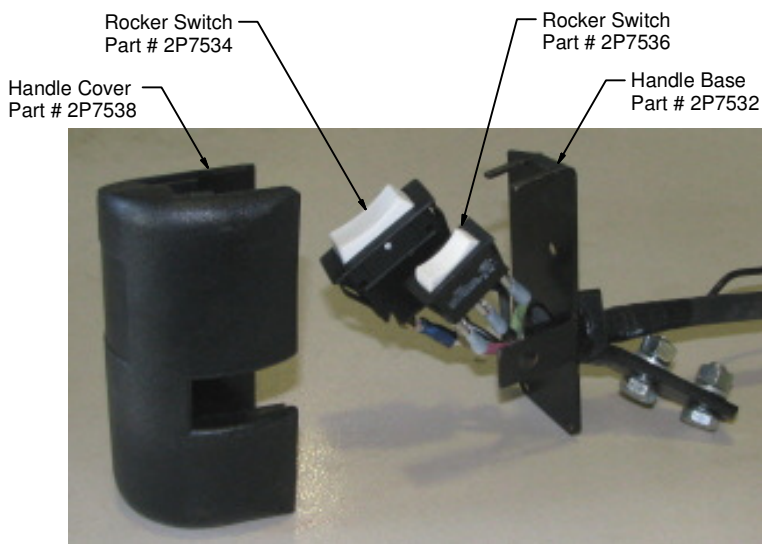
BW 28 Interface & Wire Harness
Part # 1P7510 (pre automation)
limited availability.



1075 & 1085 Control Harness
Part # 1P7530

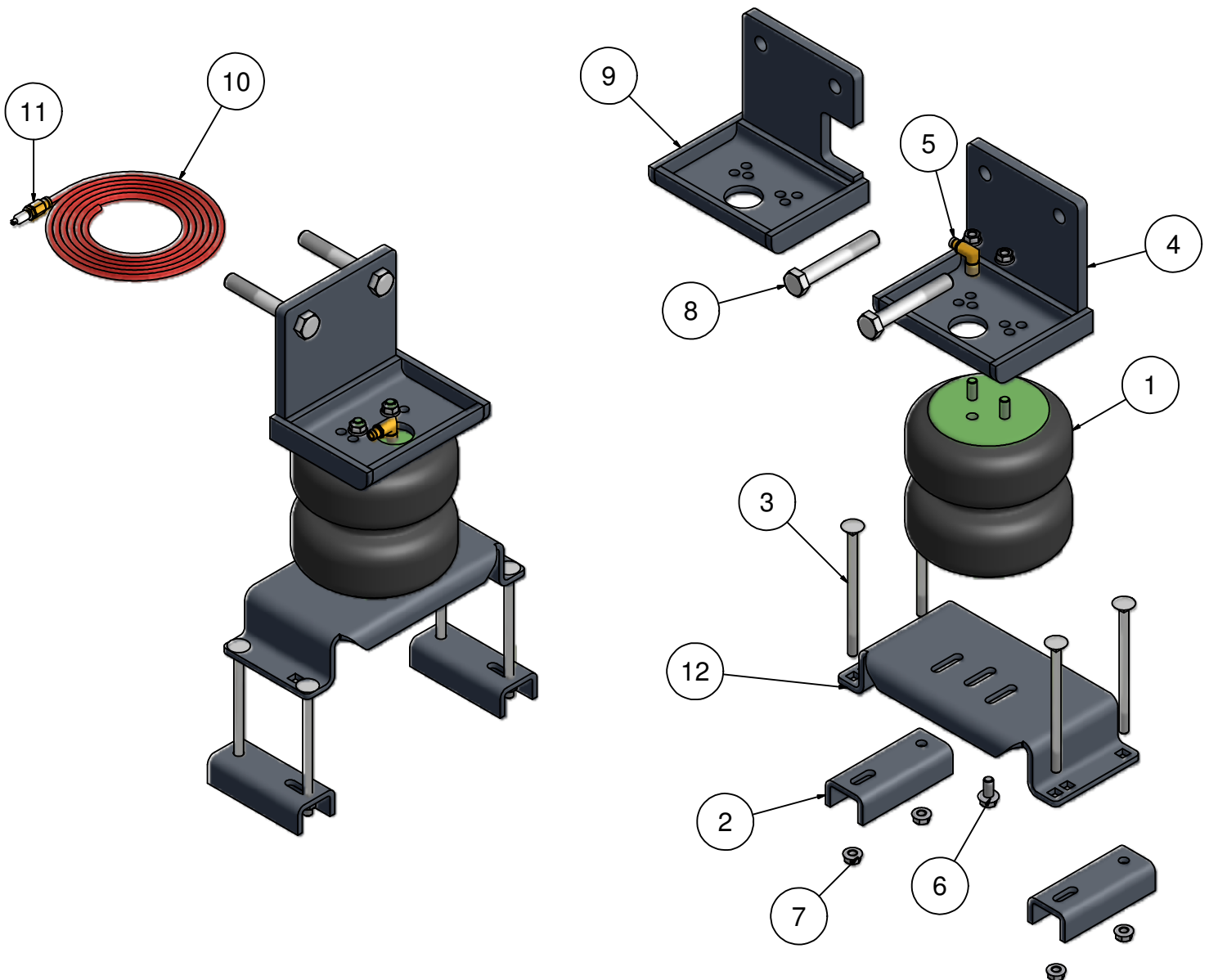


Wagon to clamp. BWs- Part # 1P7501



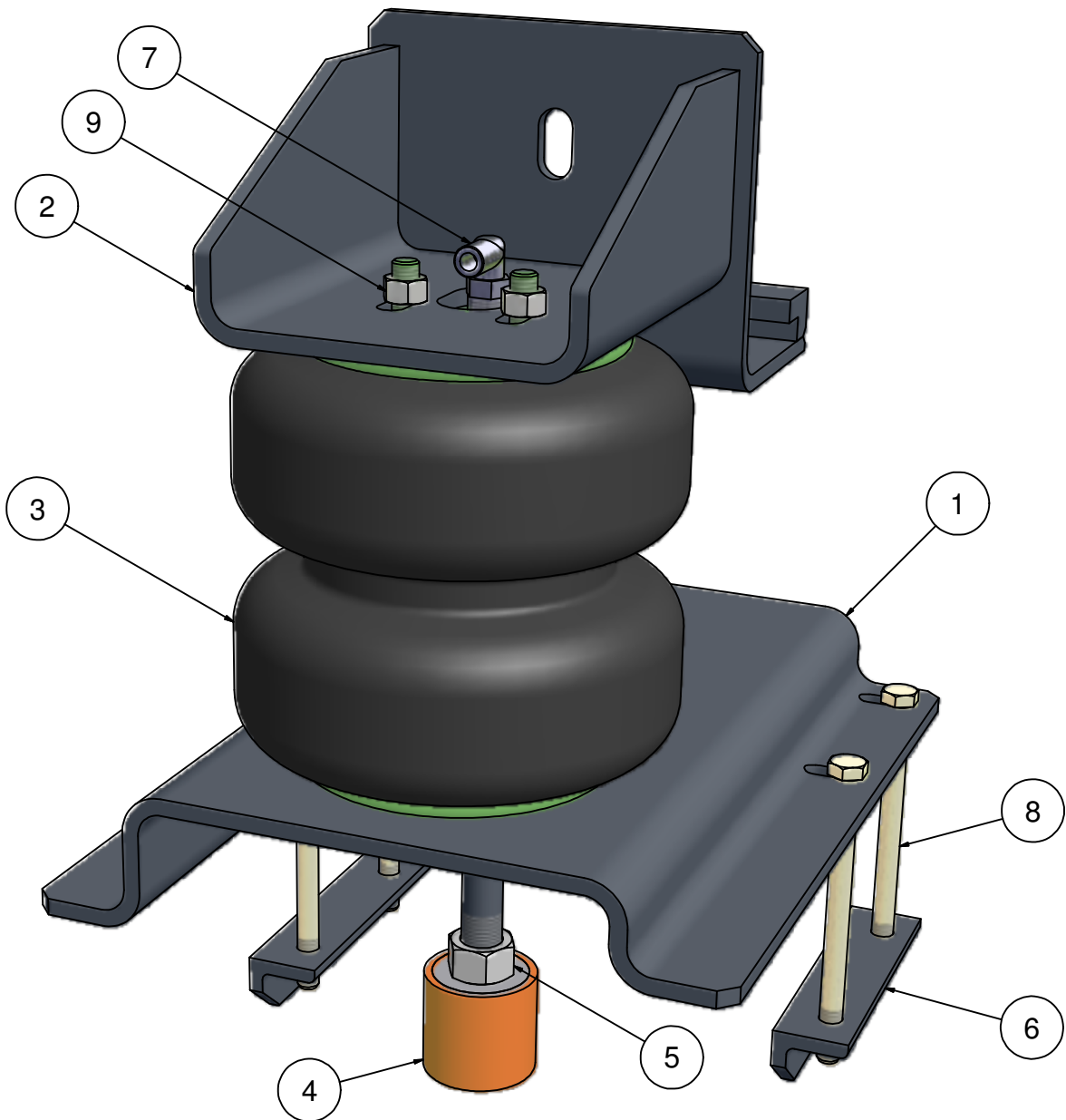
Air Bag and Mounting Brackets

ITEM	PART NUMBER	DESCRIPTION	PAGE
1	2P6560	Air Bag	
2	2P6580	Air Bag Mounting Bracket Clamp Bar	
3	3R5039	Carriage Bolt, 3/8-16 x 5	
4	1P6590	Air Bag Mounting Bracket, 1095 & 1089	
5	2P6651	Air Bag Elbow Fitting	
6	2P5197	Flange Bolt, 3/8-16 x 3/4	
7	-	Flange Nut, 3/8-16	
8	2P5198	Bolt, 5/8-18 x 4	
9	1P6591	Air Bag Mounting Bracket, 1068, 1069, 1078, 1079, 1075, 1085	
10	2P6655	Air Bag Tube	
11	2P6652	Air Bag Straight Fitting	
12	2P6570	Air Bag Leaf Spring Mounting Bracket	



BW 28, BW 38, H9870, H9880 Air Bag Assembly

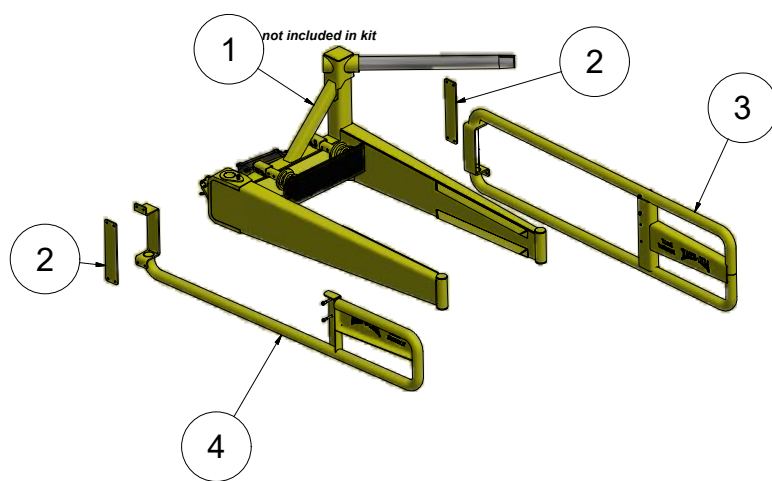
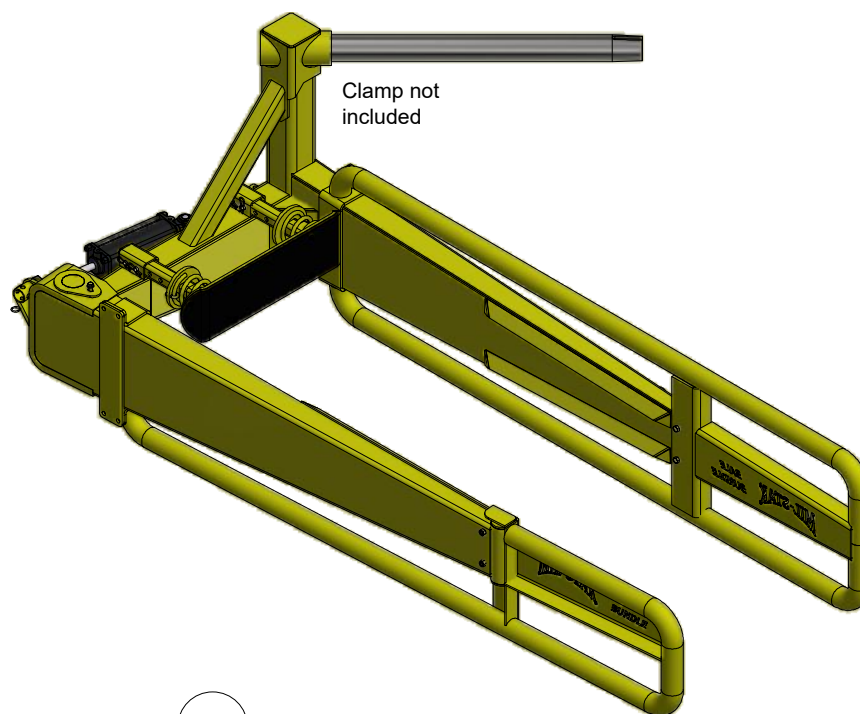
ITEM	PART NUMBER	DESCRIPTION	PAGE
1	1P6610	Air Bag Leaf Spring Bracket	
2	1P6620	Air Bag Frame Bracket	
3	2P6560	Air Bag	
4	2P6630	Air Bag Support Bumper	
5	3R9562	Hex Nut, 5/8-18	
6	1P6640	Leaf Spring Bracket Clamp Bar	
7	2P6650	1/4 NPT Instant tube fitting, 90 deg. swivel nickel plate	
8	2P5168	Hex Cap Screw 3/8-16 x 5, grade 8	
9	3R9563	Hex Nut 3/8-16	



Complete Assembly PT# 1A6600

The Mil-Stak Bundle attachment for Bale Bundles

100669 Attachment, Bale Bundle				
ITEM	QTY	PART NUMBER	DESCRIPTION	PAGE
1	1	1028-S	1028 S Bale Clamp (not included in Kit)	
2	2	100528	Bale Bundle Clamp plate	
3	1	100523	Left Arm Paddle	
4	1	100527	Right Arm Paddle	



**Bale Bundle
Attachment Asm
Part # 100669**

MIL-STAK

Vinyl Graphics and Decals

Complete kit

part # **#1K3000**



Mil-Stak only

#3P3015

1028s only

#1P3010

#1K3005



1030s only

#1P3015

#1K3010



1032 only

1P3020

MIL-STAK

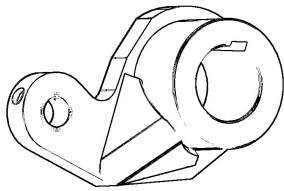
2201 Hwy 30, Fruitland ID 83619
(208) 452-6045

Service Bulletin.

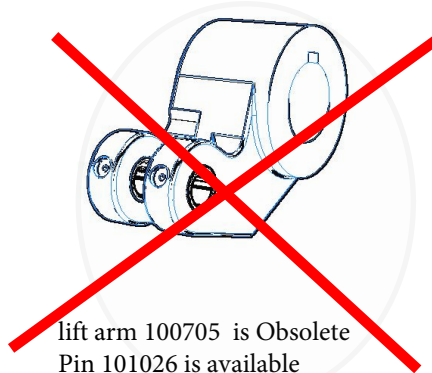
Part number 100705 ductile iron Lift Arm is now obsolete and will no longer be available. Pin 101026 is still available .

It is being replaced with 102105 Cast Steel Lift Arm.

The new part 102105 will fit all Mil-Stak Clamps which would require a couple of changes .This lift arm 102105 requires a different hydraulic 5 x 12 cylinder, part number 2A4025 and a different configuration of the sensor bracket and bolt orientation.



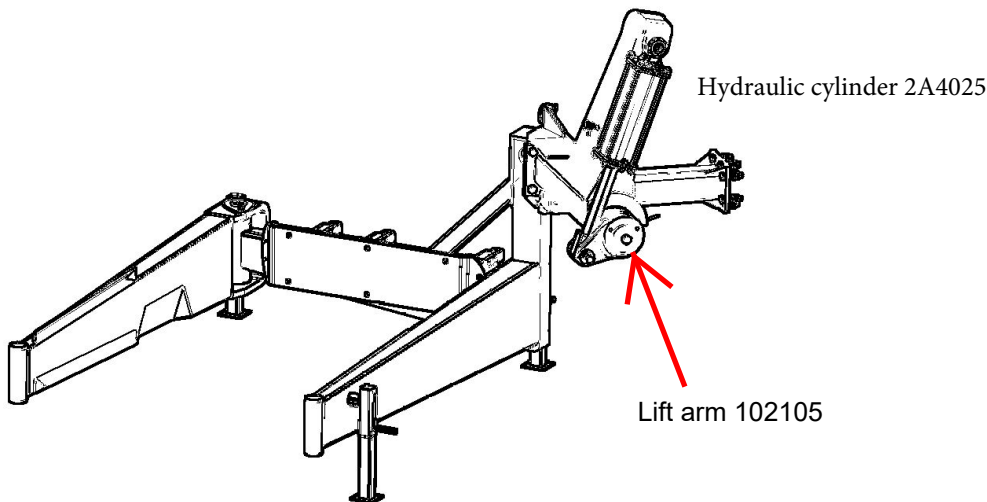
1A1020 Used previous 2020
requires hydraulic cylinder
2A4020 Red
Replacement bushing
1P0129

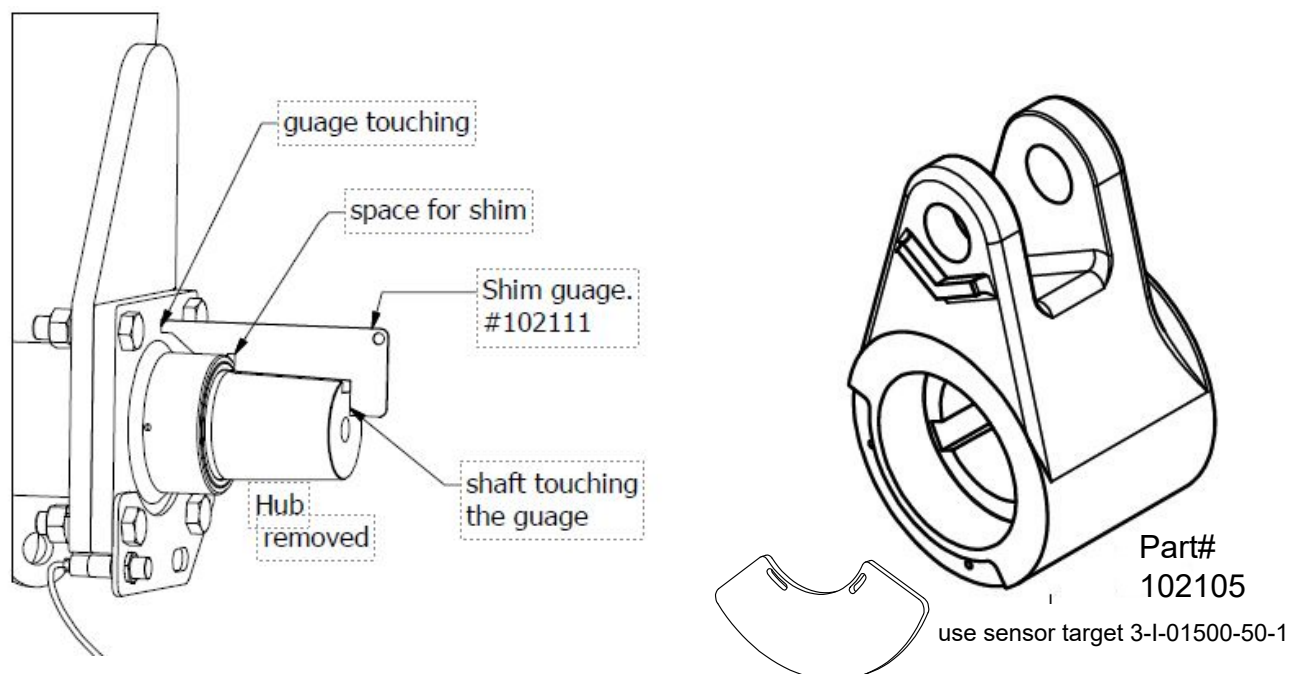
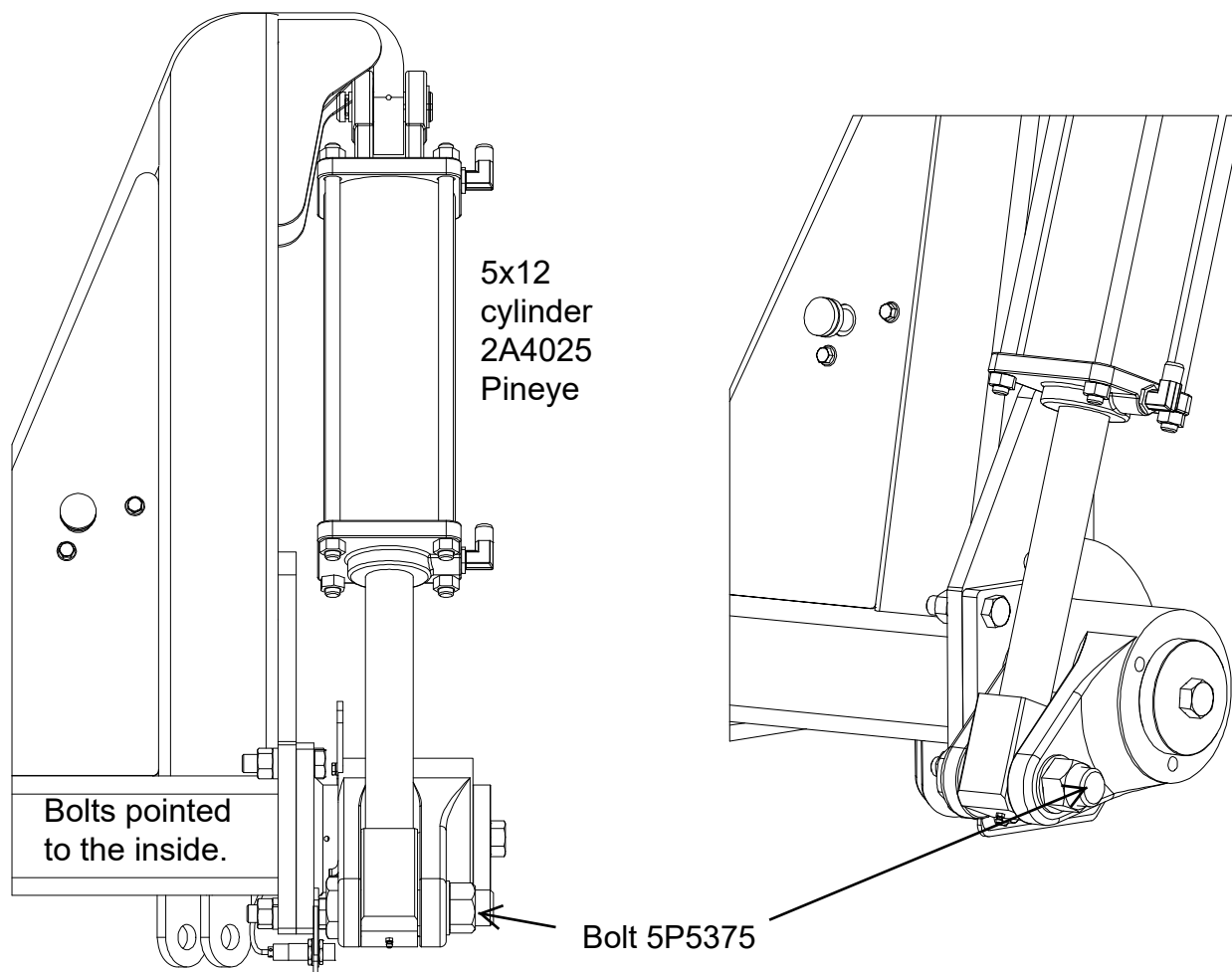


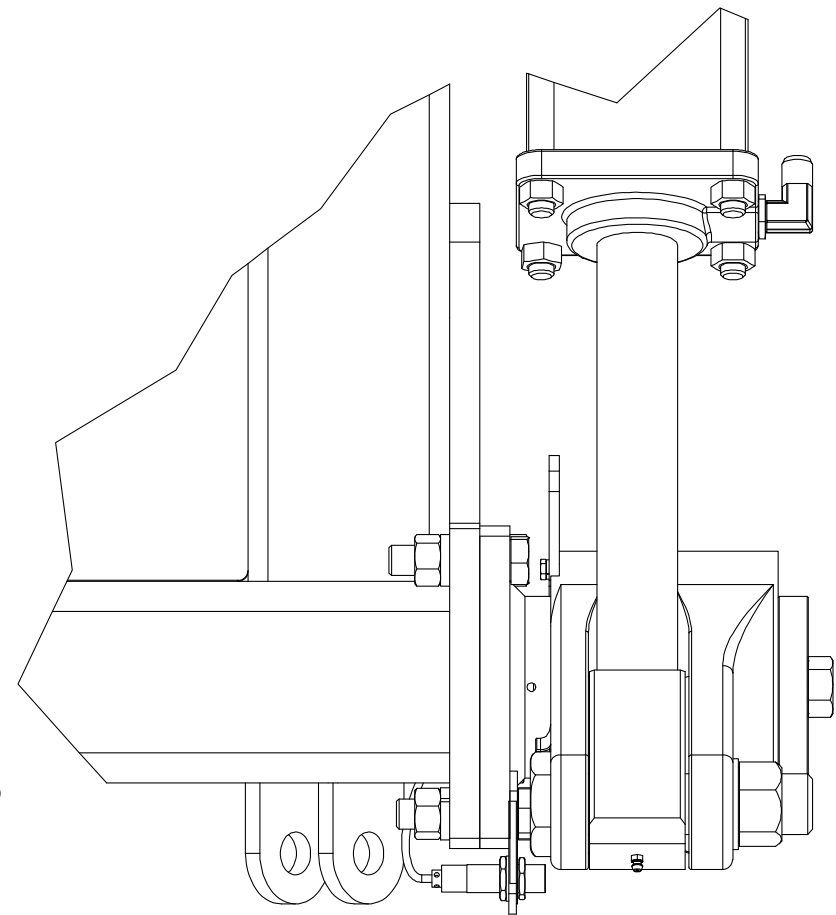
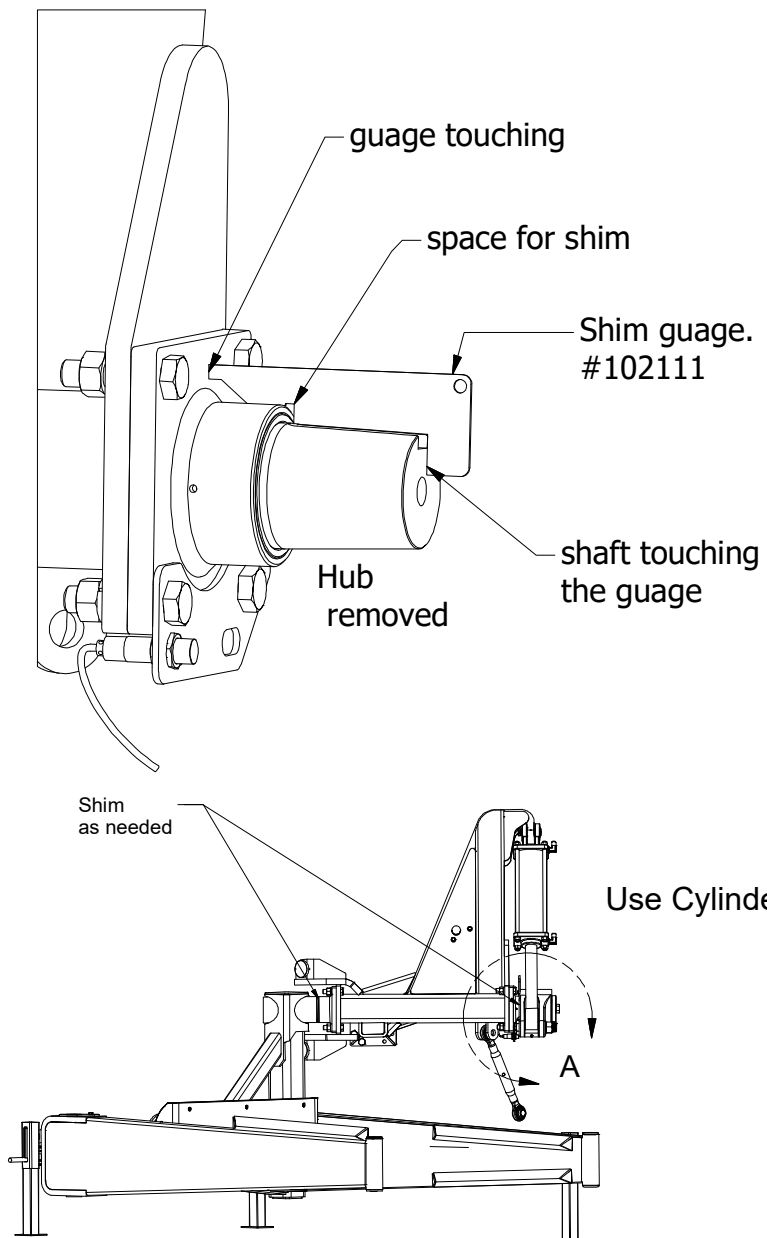
lift arm 100705 is Obsolete
Pin 101026 is available



102105 Newest version
requires hydraulic
cylinder 2A4025 Black

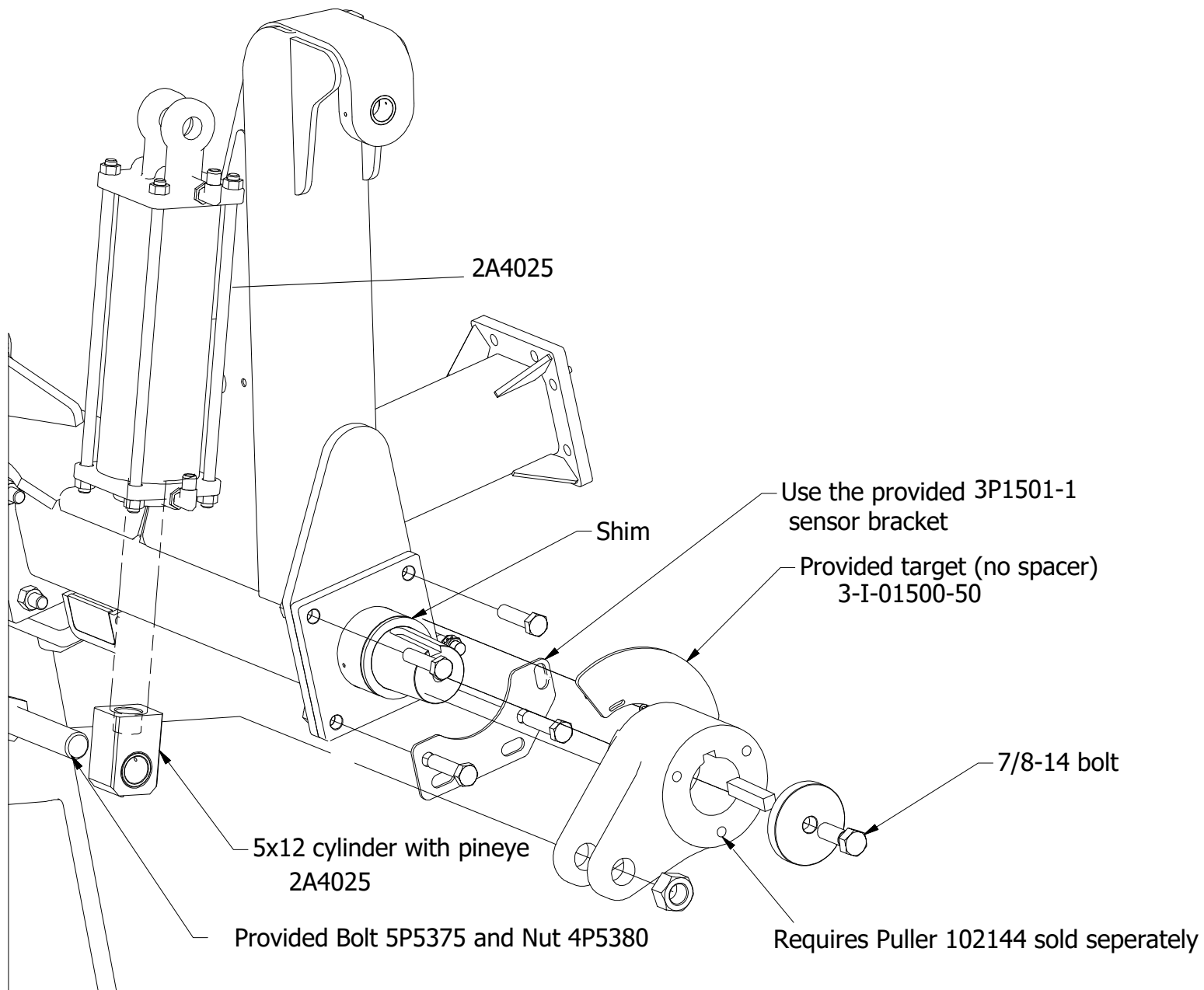




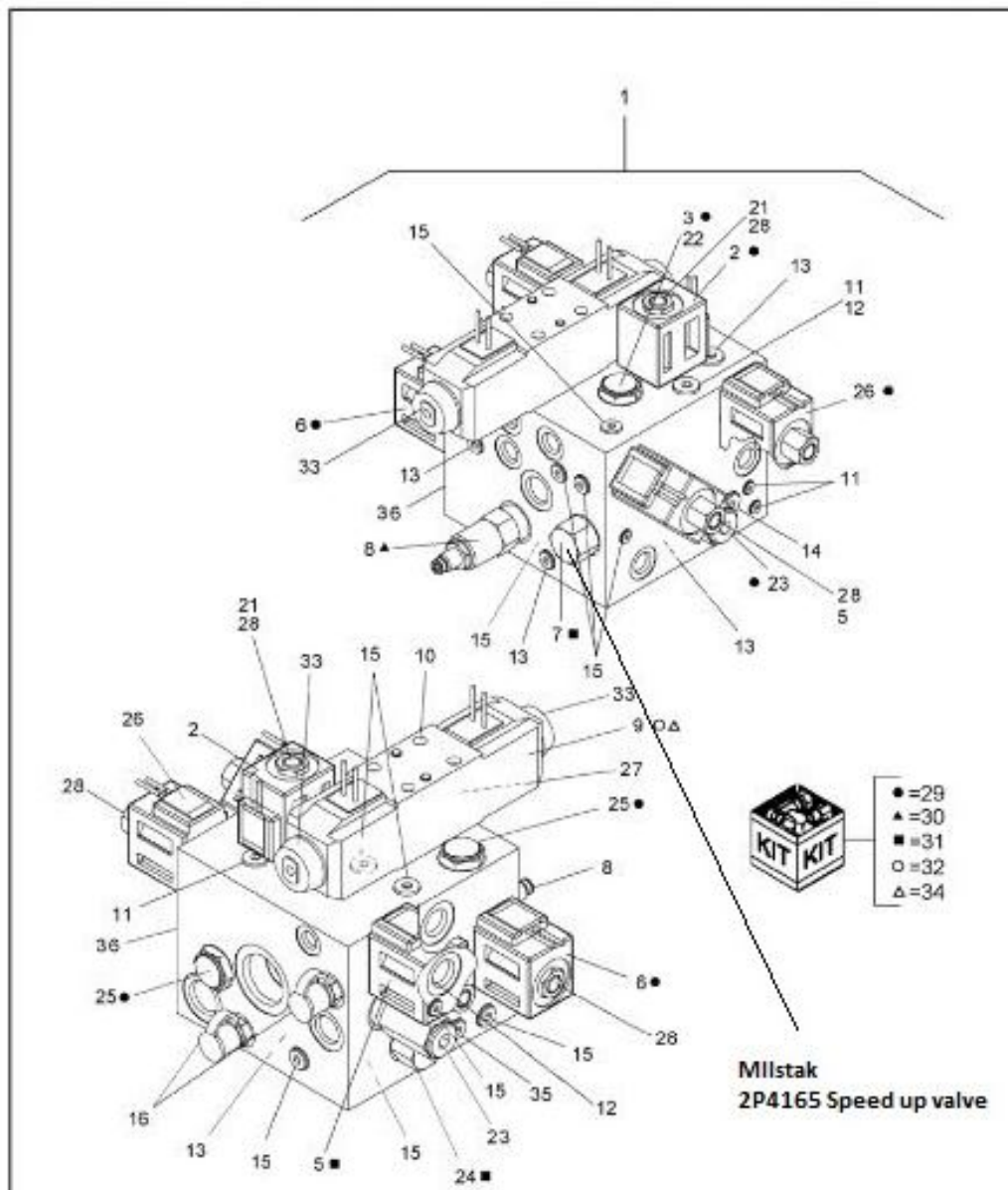


view A

Shim as needed to remove any end play in the main pivot shaft so that the Hydraulic cylinder clevises line up with both ends. Shims may be needed on either end of the pivot shaft to accomplish alignment. Do not over shim ,creating tension on end play.

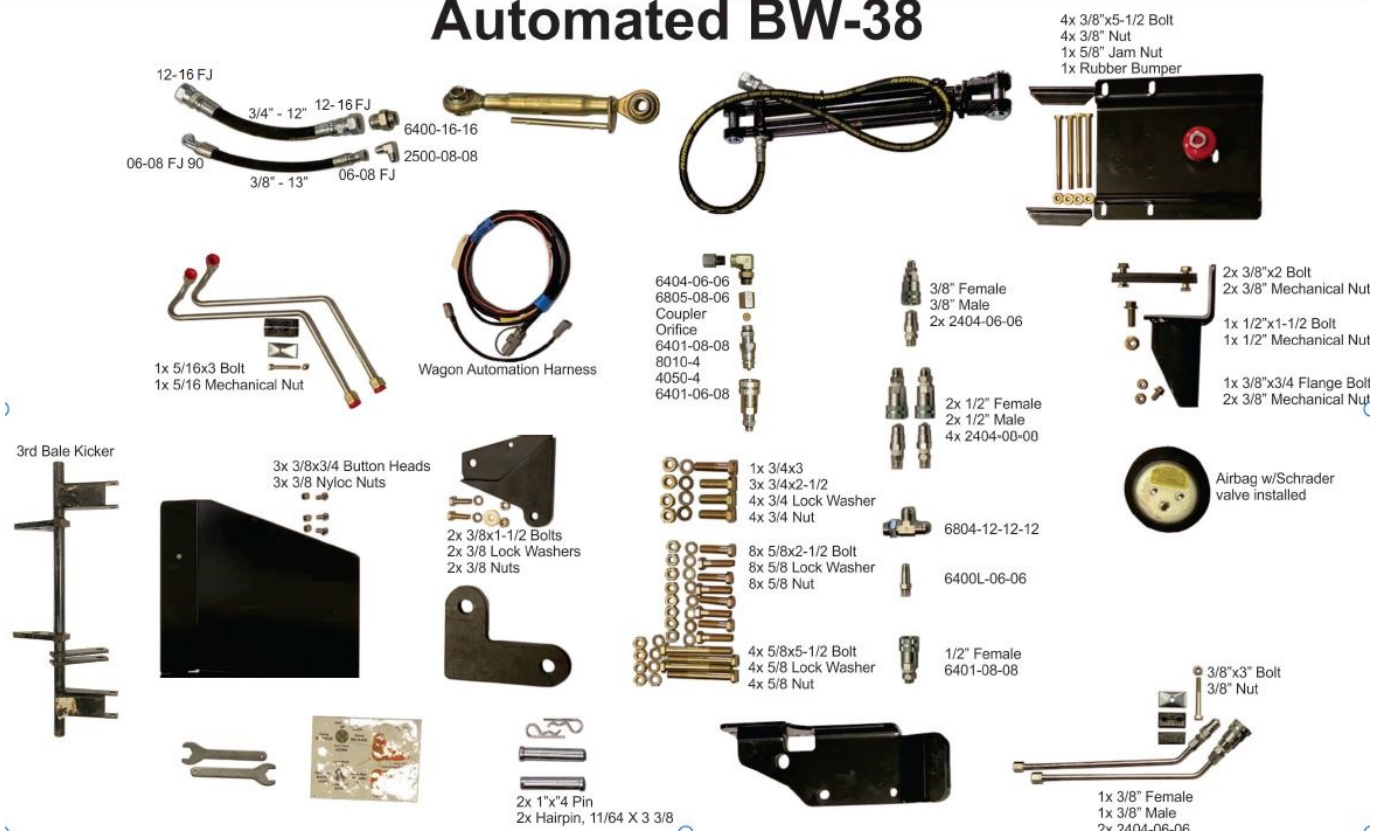


REV	DESCRIPTION	DATE	TOLERANCES UNLESS SPECIFIED		MIL-STAK	PART	REV	STOCK
	Initial Revision	0/0/2000	DECIMALS:	in		102105	0	
			.X	± .1	DRAWN	DESCRIPTION Cast Steel Double arm Hub 4130		
			.XX	± .02	RRC	FILE NAME		
			.XXX	± .005	DATE	SHEET 1 OF 1		
			ANGULAR	± .5°	2/4/2022			
					SIZE			
					SCALE			
					.125			

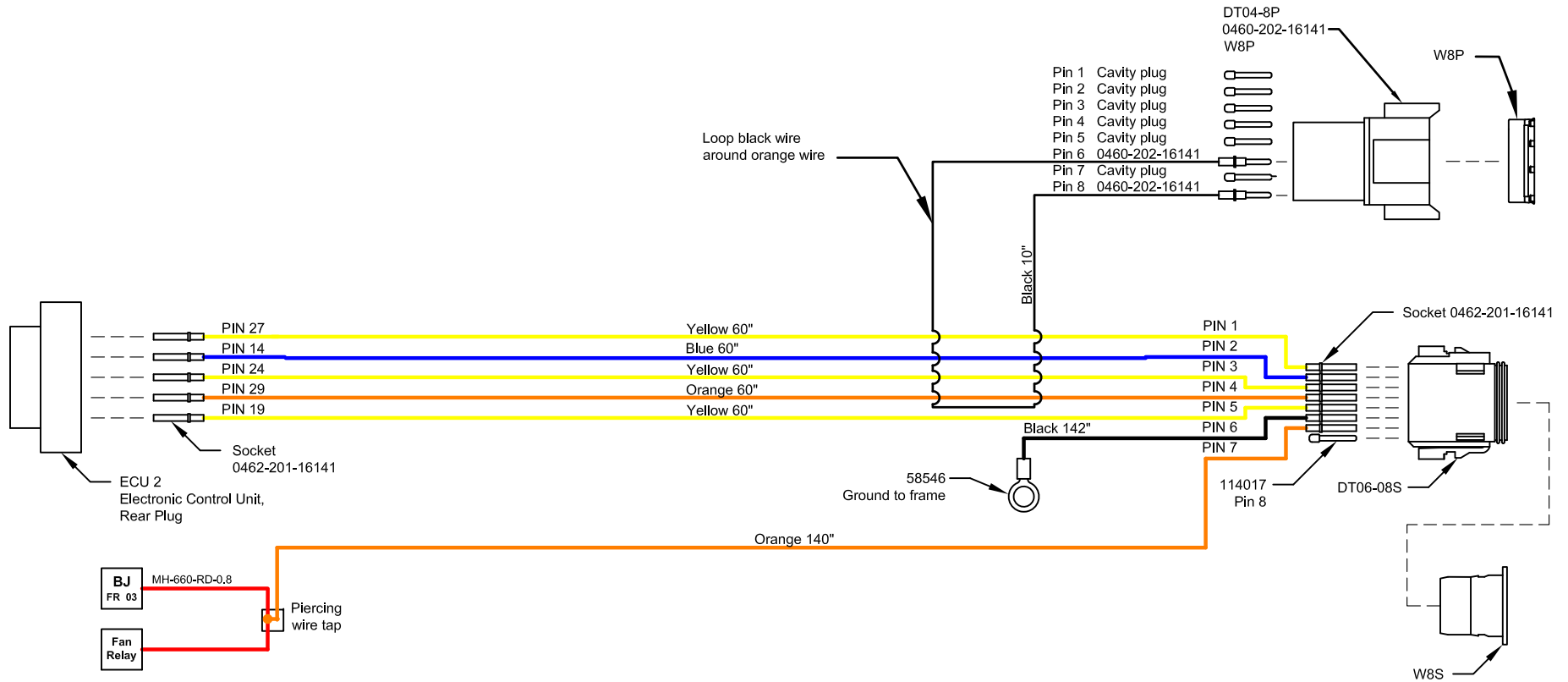


Adjustable flow valve can be added to an older valve block that doesn't have it, to give the Mil-Stak a little more speed.

Automated BW-38



BW-28/38 Automatic Conversion Wire Harness



Part #	Qty	Description
DT04-2P	2	2 Pin Receptical
0460-202-16141	4	Pin
W2P	2	Wedgelock
DT06-2S	2	2 Socket Plug
0462-201-16141	16	Socket
W2S	2	Wedgelock
DT06-08S	1	8 Socket Plug
W8S	1	Wedgelock
114017	1	Cavity Plug
58546	1	Ring Terminal

WIRE CUT LENGTHS			
COLOR	QTY	WIRE GA.	LENGTH
BLACK	1	18	142"
BLUE	1	18	60"
ORANGE	1	18	60"
ORANGE	1	18	140"
YELLOW	3	18	60"
Black	1	18	10"

LEGEND	
SYMBOL	DESCRIPTION
✕	NO CONNECTION
— —	GROUND
•	UNION
⌒	JUMP

Additional Hardware Needed		
NH Part #	Qty	Description
87473300	2	Steel Line
87000149	1	Clamp
87000230	1	Plate
87751196	1	Support