

EAGER BEAVER

New 2022 Edition

Parts & Service Manual

9-15 Ton HDB

10-12 Ton HA



ORDER GENUINE



General Engines Co., Inc., 548 Swedesboro Ave., Mickleton, NJ 08056

Parts
(800) 338-7088

Customer Service
parts@eagerbeavertrailers.com

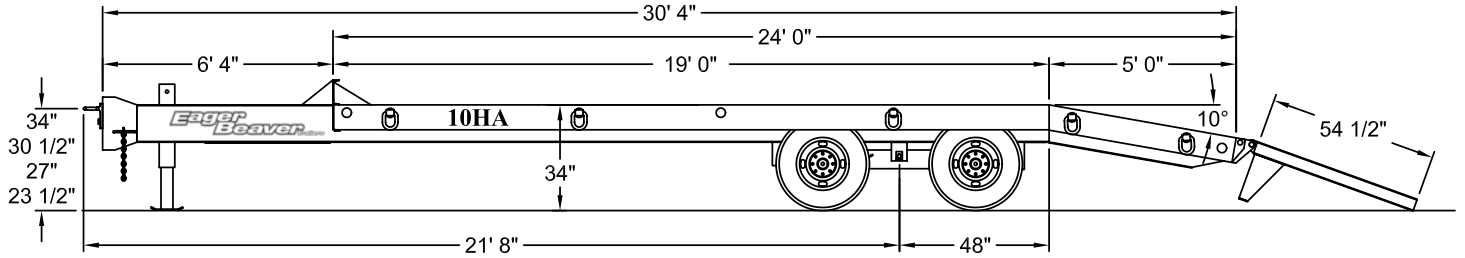
Sales
(800) 257-8163

EagerBeaverTrailers.com

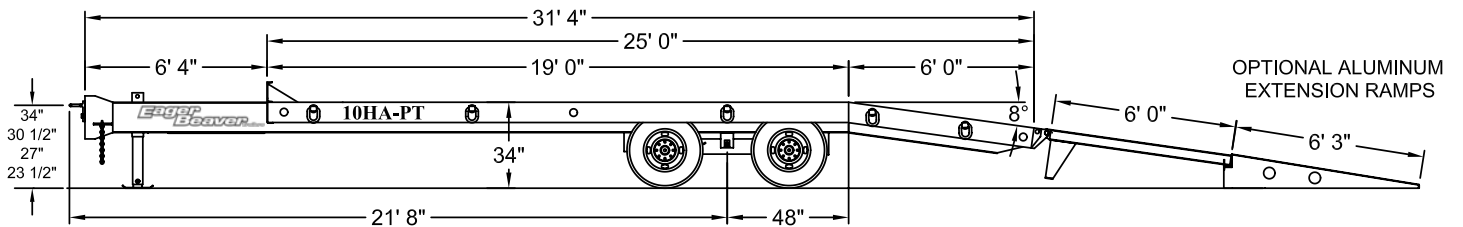
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Standard Model Drawings

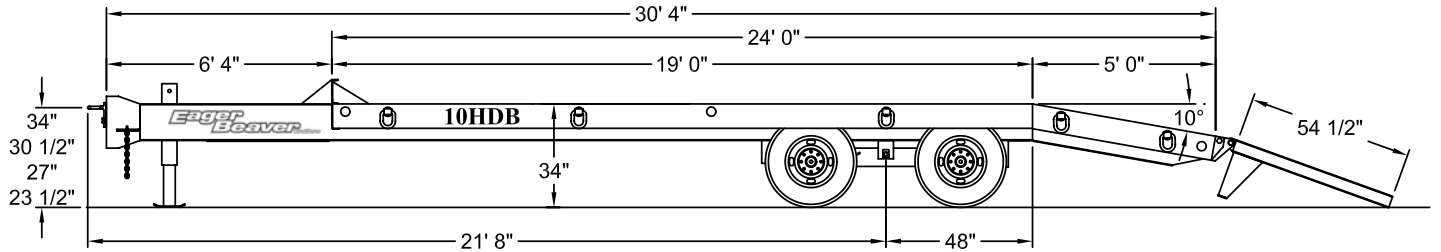
Model: 10HA



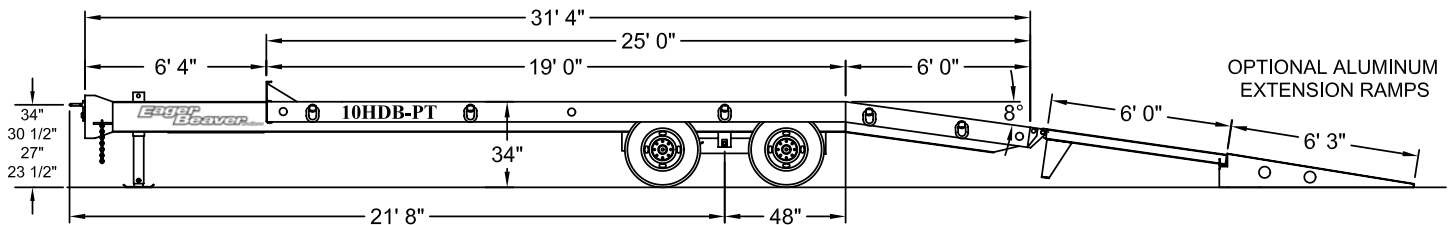
Model: 10HA-PT



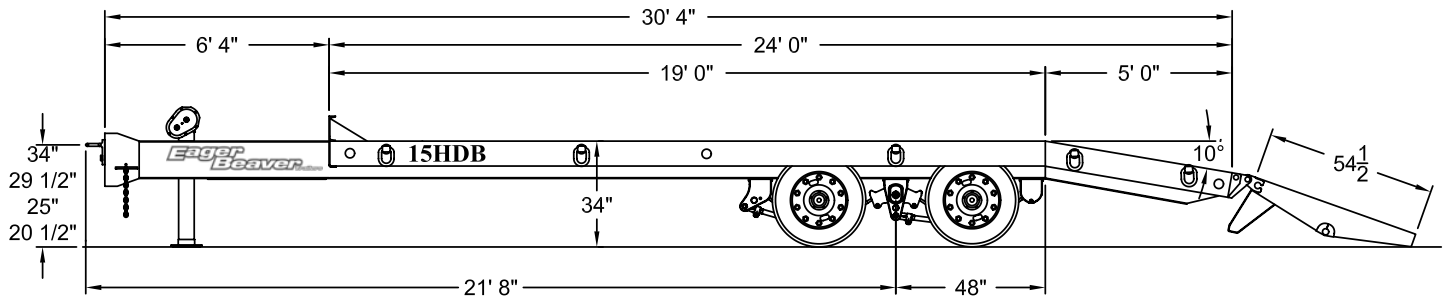
Model: 10HDB



Model: 10HDB-PT

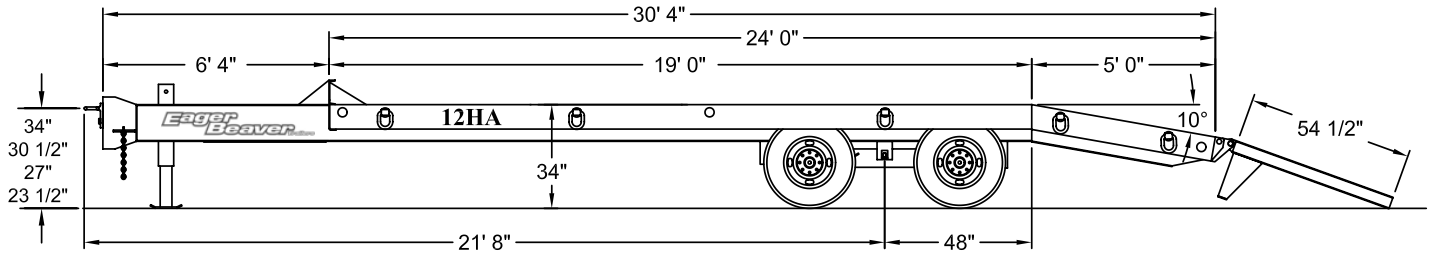


Model: 15HDB

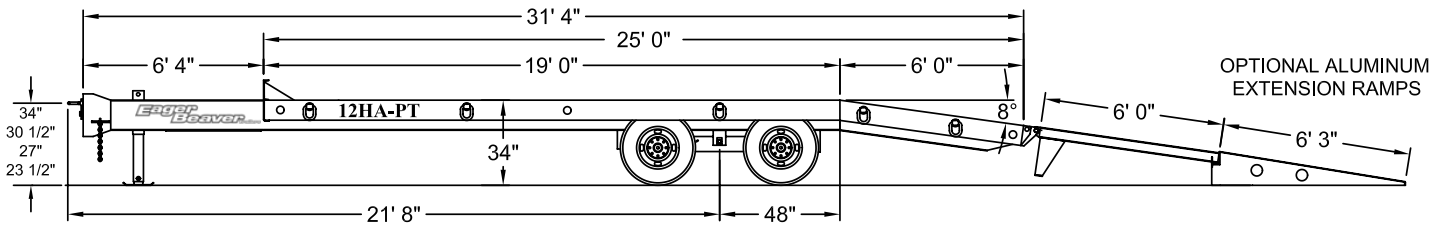


Standard Model Drawings

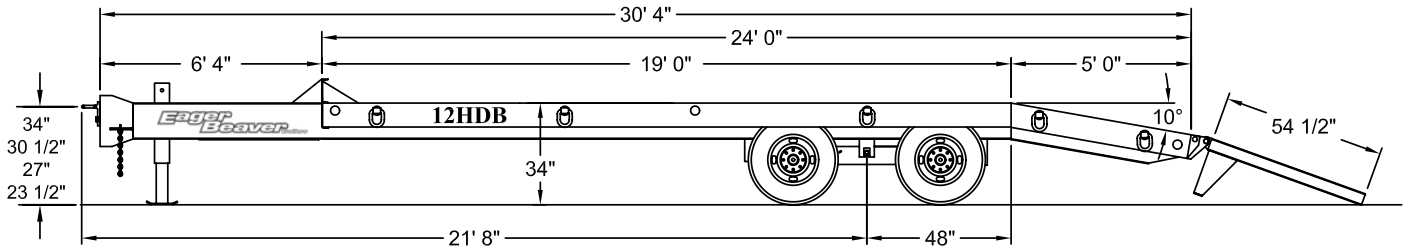
Model: 12HA



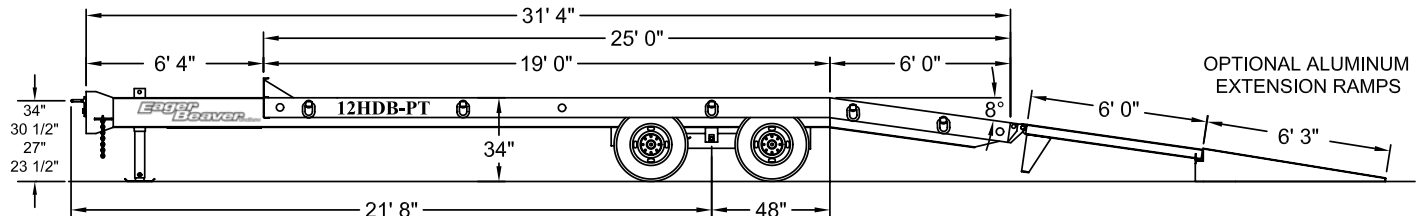
Model: 12HA-PT



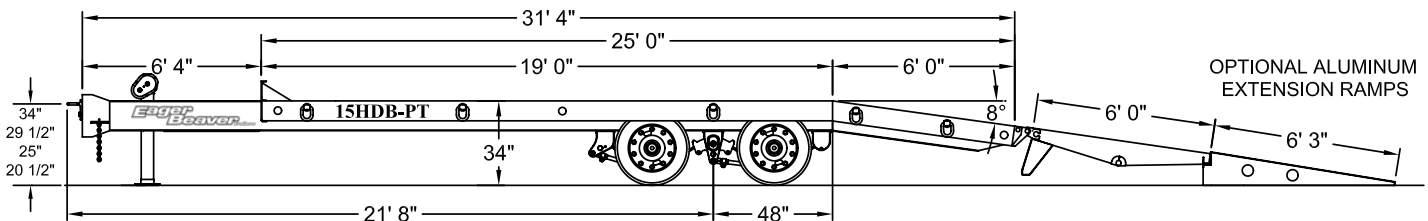
Model: 12HDB



Model: 12HDB-PT



Model: 15HDB-PT





Trailer Setup All tow Behind Trailers

Setting up a trailer, especially a tow behind, has several aspects that are often not known or are misunderstood. Here is a description of the setup procedures for tow behind trailers.

Pre-Delivery

Perform the described pre-delivery procedure for tow behind trailers. See the pre-delivery sheet provided with each trailer. You can request a copy from customer service.

Tow Hitch

We will assume that the tow hitch is already installed on the tow vehicle. It is important to make sure that the tow hitch is completely compatible with the trailer hitch in both size and capacity. Eager Beaver can provide an appropriately sized pintle hook or ball when the trailer is ordered or through our parts department.

Attach the lunette eye or ball hitch to the nose plate using the holes that, once hitched, allows the nose end of the trailer to be 2"- 3" high at the front with the trailer unloaded. This will aid the trailer suspension in providing better weight distribution to all axles especially the rear. Once the trailer is loaded the trailer should be level or just a bit high in the front. The hitch should preferably be installed with the retaining bolt below the hitch if possible. Tighten the hitch shaft nut first until the lock washer is completely compressed, then tighten the retaining bolt nut until its lock washer is completely compressed.

CAUTION! Do not use any lunette eye, ball hitch or tow hitch that is excessively loose, large, damaged in any way or binds when the trailer turns.

Truck Wiring

See the trailer service manual for a schematic that shows how to properly wire the tow vehicle. For electric brake trailers, Eager Beaver can supply a proper truck harness and a brake controller. Refer to the literature provided with the brake controller for greater detail in installing the controller. Only a good sealing type tap connectors should be used for splicing into the truck wiring to prevent corrosion. Truck harness and controller sold separately.

Trailer Setup

All tow Behind Trailers

Electrical Cable

Plug electrical nose harness into the tow vehicle receptacle. Make sure that there is sufficient slack to allow trailer to fully articulate without the cable getting too tight or, at the same time, not allow it to touch the ground when traveling straight.

Air Lines

On air brake trailers only, attach the two air line jumper hoses and check for the same slack clearance as for electrical cable.

Safety Chains

Attach the chains by looping them through an appropriate lash ring on the tow vehicle and then securing the hook to a chain link This is for our standard slip hook. If a safety hook with latch is used, then simply attach hook to the tow ring. The chains should be attached to the tow vehicle by using a crossing pattern, under the trailer tongue. Make sure that there is sufficient slack in the chains to allow the trailer to fully articulate without the chains getting too tight and yet not having the chains drag on the ground, when trailer is straight.

CAUTION! Do not install chains on a tow vehicle that does not have an appropriate lashing ring for attaching chains.

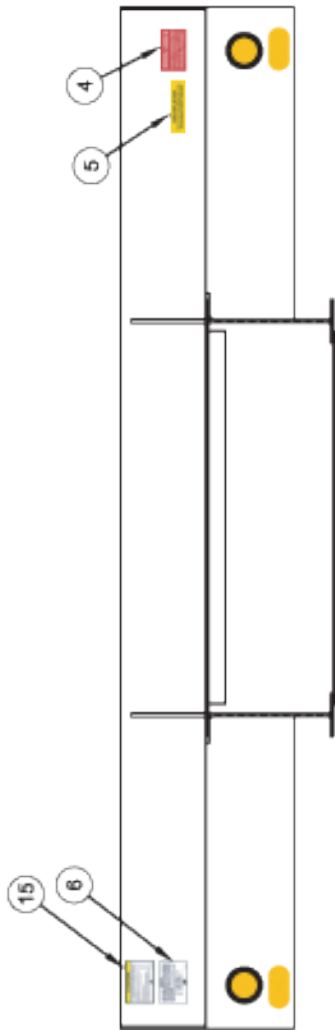
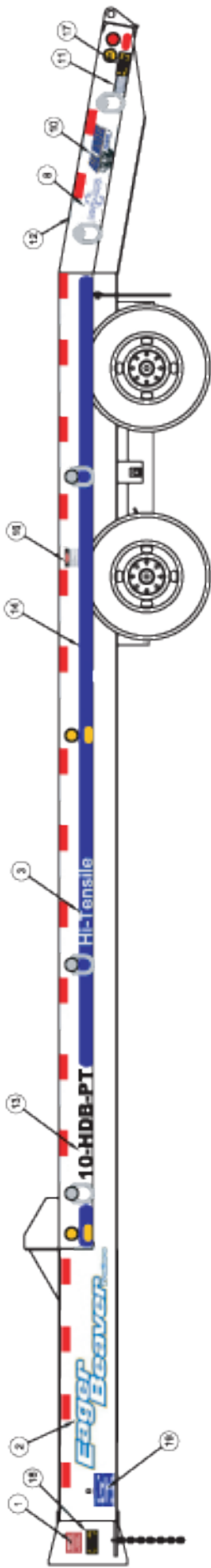
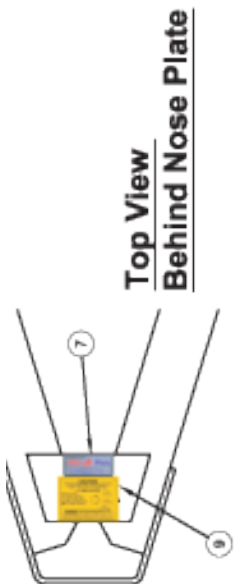
Break-away

On electric brake trailers, see the instructions supplied with the break-away switch. The instructions and miscellaneous parts for the break-away switch are shipped in the loose box of parts. The break-away system will only operate after both the coupling and safety chains have failed. The break-away is not a parking brake.

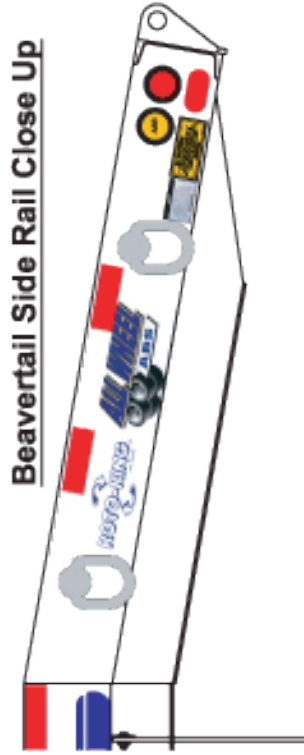
Conclusion

The final step in any setup is to make sure that all systems, electrical, air, hitching or break-away, all function properly before the trailer leaves the dealers yard. A safe trailer is good for your customer and good for business.

Decal Arrangement for 9-15 Ton Tag



Front of Headboard



Rear of Tailboard

Eager Beaver 9 - 12 Ton Tag Trailer Decals

ITEM	PART #	QTY	DESCRIPTION
1	2059014	1	TRAILER CONNECTED WARNING
2	2059370	2	LARGE BLUE EAGER BEAVER, GOLD TRIM
3	2059325	2	HI TENSILE, WHITE
4	2059016	1	CHECK WHEEL LUG
5	2059162	1	TIRE INFLATION INFO
6	2062207	1	SUSPENSION TORQUE
7	2062208	1	USA HARNESS DECAL (NOT IN KIT)
8	2060618	2	ROTO-RING
9	2062003	1	CAUTION TRAILER EQPT W / ABS BRAKES*
	2062006	1	CAUTION TRAILER EQPT W / ELECTRIC BRAKES
10	2061051	2	ALL-WHEEL ABS*
11	2062004	1	ABS INDICATOR LAMP INSTRUCTIONS*
12	2060608	50	RED-WHITE CONSPICUITY STRIPING
13	2059167	2	9HDB WHITE
	2059168	2	10HDB WHITE
	2069168	2	10HDB-PT WHITE
	2059163	2	10HA WHITE
	2062356	2	10HA-PT WHITE
	2059171	2	12HDB WHITE
	2062398	2	12HDB-PT WHITE
	2059219	2	12HA WHITE
	2062399	2	12HA-PT WHITE
14	2059249	40	BLUE STRIPE (EB YELLOW TRAILERS)
	2061081	40	WHITE STRIPE (RED, BLUE, BLACK TRAILERS)
15	2062209	1	WHEEL TORQUE
16	2062179	1	DANGER SPRING BRAKES*
17	2062173	1	REPLACE DAMAGED WOOD
18	2062174	1	PREVENT DAMAGE - LOAD ON EVEN GROUND
19	2062178	1	COLD DUAL VIN PLATE (NOT IN KIT)

* ONLY ON TRAILERS WITH AIR BRAKES (HA Model)

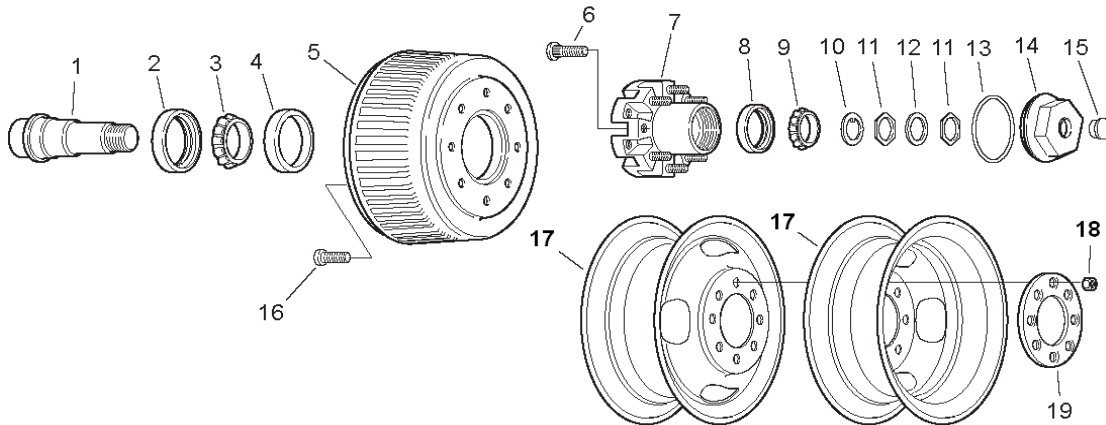
PART #	COMPLETE DECAL KIT**
2062201	10HDB (BLUE STRIPING)
2062202	10HDB (WHITE STRIPING)
2062203	10HA (BLUE STRIPING)
2062204	10HA (WHITE STRIPING)

** SPECIFY IF "PT" MODEL WHEN ORDERING

Eager Beaver 15 Ton Tag Trailer Decals

ITEM	PART #	QTY	DESCRIPTION
1	2059014	1	TRAILER CONNECTED WARNING
2	2059370	2	LARGE BLUE EAGER BEAVER, GOLD TRIM
3	2059325	2	HI TENSILE, WHITE
4	2059016	1	CHECK WHEEL LUG
5	2059162	1	TIRE INFLATION INFO
6	2062400	1	HUTCH H9700 TORQUE
7	2062208	1	USA HARNESS DECAL
8	2060618	2	ROTO-RING
9	2062006	1	CAUTION TRAILER EQPT W / ELECTRIC BRAKES
10			Not Used on Electric Brake Trailers
11			Not Used on Electric Brake Trailers
12	2060608	50	RED-WHITE CONSPICUITY STRIPING
13	2062401	2	15HDB WHITE
	2062402	2	15HDB-PT WHITE
14	2059249	40	BLUE STRIPE (EB YELLOW TRAILERS)
	2061081	40	WHITE STRIPE (RED, BLUE, BLACK TRAILERS)
15	2062209	1	DEXTER WHEEL TORQUE
16			Not Used on Electric Brake Trailers
17	2062173	1	REPLACE DAMAGED WOOD
18	2062174	1	PREVENT DAMAGE - LOAD ON EVEN GROUND
19	2062178	1	COLD DUAL VIN PLATE

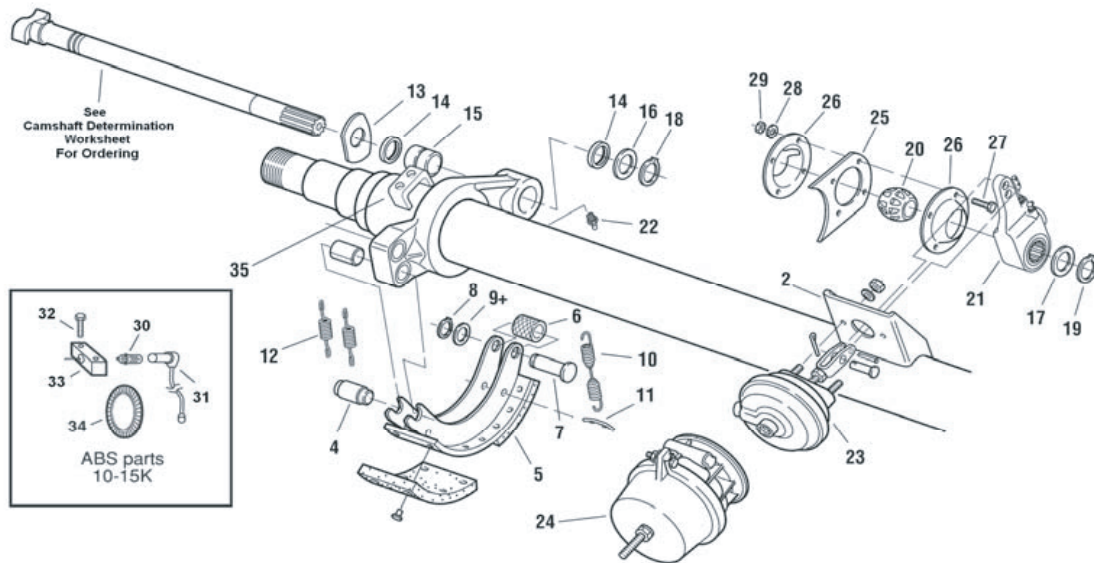
Eager Beaver Trailers 10HA & 12 HA



Item Description	Part #	Part #
	10 HA	12 HA
1 Axle Beam (36"SC, 71"TR)	2057591	2057592
Axle Beam (43"SC, 71"TR)	Special Order	Special Order
Axle Beam (43"SC, 77"TR)	Special Order	Special Order
2 Seal	2057502	2057502
3 Inner Bearing	2057503	2057585
4 Inner Race	2057504	2057586
5 Drum with ABS Toner Ring *	2062126	2062127
Drum (Pre ABS)	2057561	2057507
6 Stud	2057589	2057589
7 Hub, Hi-profile (shown)	2057562	2062279
7 Hub, Lo-Pro (for 14.5" rim only)	N/A	2057508
8 Outer Race	2057509	2057588
9 Outer Bearing	2057510	2057587
10 Spindle Washer	2059067	2059067
11 Spindle Nut	2057511	2057511
12 Tang Washer	2059068	2059068
13 Oil Cap O-Ring	2057513	2057513
14 Oil Cap	2059371	2059371
15 Oil Cap Plug	2057515	2057515
16 Drum Mounting Bolt	2057518	2057518
17 Rim 16.5 X 6.75	2057640	N/A
Rim 16.0 X 6.00 (since 1998)	2061092	2061092
Rim 14.5 X 7.00	N/A	2057641
18 Wheel Mounting Nut	2057646	2057646
19 Clamp Ring	2057083	2057083
Complete Axle (36"SC, 71"TR)	2059427	2059428
Complete Axle (43"SC, 71"TR)	331075	2061098
Complete Axle (43"SC, 77"TR)	331076	331078
Mounted Spare 235/85R16E (1998-2/2008)	no longer stocked	
Mounted Spare 235/80R16E (begin 3/2008)	2062301	2062301

* ABS Required By Law on March 1, 1998. ABS began shipping in mid-Feb 1998.

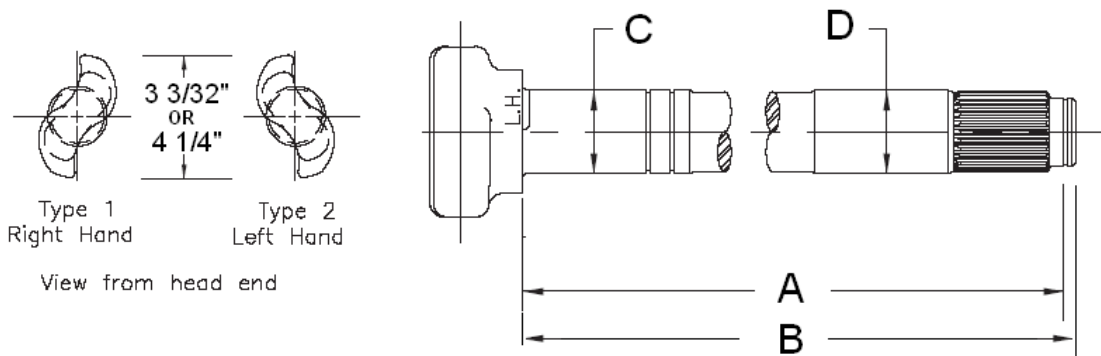
Eager Beaver Trailers 10 & 12 HA Air Brake Components



Item Description	10 HA Part #	12 HA Part #
1 Camshaft LH or RH	See Worksheet	See Worksheet
2 Air Chamber Bracket	2061091	2061091
3 Bushing Spider Anchor	In Brake Repair Kit	In Brake Repair Kit
4 Anchor Pin	In Brake Repair Kit	In Brake Repair Kit
5 "PQ" Brake Shoe (2 Per Wheel)	2060851	2060852
"P" Brake Shoe (2 Per Wheel)	2060492	2060493
6 Roller	In Brake Repair Kit	In Brake Repair Kit
7 Roller Pin	In Brake Repair Kit	In Brake Repair Kit
8 Roller Pin Retainer	In Brake Repair Kit	In Brake Repair Kit
9 Roller Pin Spacer	In Brake Repair Kit	+ Not Used
10 Retractor Spring	In Brake Repair Kit	In Brake Repair Kit
11 Retainer Pin	In Brake Repair Kit	In Brake Repair Kit
12 Shoe Keeper Spring	In Brake Repair Kit	In Brake Repair Kit
"PQ" Brake Repair Kit (for 1 Wheel)	2060900	2060900
"P" Brake Repair Kit (for 1 Wheel)	2058058	2058058
13 "D" Washer	In CAM Repair Kit	In CAM Repair Kit
14 Grease Seal	In CAM Repair Kit	In CAM Repair Kit
15 Camshaft Bushing	In CAM Repair Kit	In CAM Repair Kit
16 Washer- Camshaft Spider End	In CAM Repair Kit	In CAM Repair Kit
17 Camshaft Washer	In CAM Repair Kit	In CAM Repair Kit
18 Retainer - Camshaft	In CAM Repair Kit	In CAM Repair Kit
19 Retainer - Camshaft End	In CAM Repair Kit	In CAM Repair Kit
20 Camshaft Support Bushing	In CAM Repair Kit	In CAM Repair Kit
21 Slack Adjuster	See Worksheet	See Worksheet
22 Grease Fitting	In CAM Repair Kit	In CAM Repair Kit
	CAMSHAFT Repair Kit	
23 Air Chamber	2060632	2060632
24 Spring Brake Chamber (Begin 9/2011)	2059400	2059401
Spring Brake Chamber (Before 9/2011)	2062026	2062026
25 Plate - Camshaft Support Bracket	2060363	2060363
26 Plate Bushing Retainer	2059399	2059399
27 Bolt, Retainer Plate	2060638	2060638
28 Lock Washer	2060637	2060637
29 Nut	2060636	2060636
30 ABS Sensor Retaining Clip	2062085	2062085
31 ABS Sensor with 1' Cable	2062086	2062086
ABS Sensor 6' Extension Cable	2062102	2062102
32 Mounting Screw, Sensor Block	2060631	2060631
33 ABS Sensor Mounting Block	2060633	2060633
34 ABS Toner Ring (Supplied with Drum)	Special Order	Special Order
35 ABS Sensor Block Base (Weld On)	2060634	2060634

Note: "P" Style Both Ends Open, Used Until 1992
 "PQ" Style One End Open, Used Since 1993

Cam Shaft Determination & Ordering Worksheet



Step 1 Decide whether the cam is a LEFT or a RIGHT hand and whether it is a SMALL (3 3/32") or LARGE (4 1/4 ") head.

Step 2 Measure the length of the cam. It is best to provide both the dimensions "A", the distance from head to snap ring groove, and dimension "B", the distance from the head to the end of the cam.

Step 3 Measure the diameter of the cam at both "C", just behind the head, and "D" just inside the spline.

Step 4 Finally, determine whether the cam is a 10 spline or 28 tooth spline.

Please fill in the chart below when ordering a cam shaft

HEAD STYLE

LEFT HAND SMALL	<input type="checkbox"/>
RIGHT HAND SMALL	<input type="checkbox"/>
LEFT HAND LARGE	<input type="checkbox"/>
RIGHT HAND LARGE	<input type="checkbox"/>

DIMENSION

"A"	<input type="text"/>
"B"	<input type="text"/>
"C"	<input type="text"/>
"D"	<input type="text"/>

SPLINE

10	<input type="checkbox"/>
28	<input type="checkbox"/>

Fax the completed worksheet to Eager Beaver Trailers @ 856-423-0999.

Your Name: _____.

Your Voice Tel #: _____.

Eager Beaver Trailers

Slack Adjuster Determination & Ordering Worksheet

When ordering Slack Adjusters, please provide the following information:

1. Whether Automatic or Manual
2. Whether adjuster arm (which attaches to air brake chamber) is Straight or Curved
3. Whether it has 10 or 28 Splines
4. Manufacturer name and any part numbers from old slack adjuster

Circle Applicable Feature on Below Matrix

		Slack Adjuster			
		EB Part #	Application		
Automatic Begin Oct 1994	Straight	10 Spline	2060873 2062263	C.B. 10-12 Ton ** Spicer, Haldex 20-25 Ton (pre-'97) *	
		28 Spline	2060934 2060971 2060940	C.B. 10-12 Ton **; 20-25 Ton DX Axles ^ Spicer, Haldex 35-60 Ton * C.B., Lowboys Only Begin 7/2009	
		Curved	10 Spline	2060755	Spicer, Haldex 20-25 Ton (older) *
			28 Spline	2061083	Spicer, Haldex 20-25 Ton *
	Manual Before Oct 1994	Straight	10 Spline	2058077	
		Curved	10 Spline	2059480	

* Spicer Automatic Slack Adjuster Bracket 2061084 Not included with Slack

** 10K axles - attach Brake Chamber Clevis to 5" Hole in Slack; 12K uses 6" Hole in Slack

^ 22.5K Dexter Axles used intermittently between 2-2014 & 2-2015; and extensively after 2-2015

Original Slack Manufacturer:

OEM Part Number on Original Slack

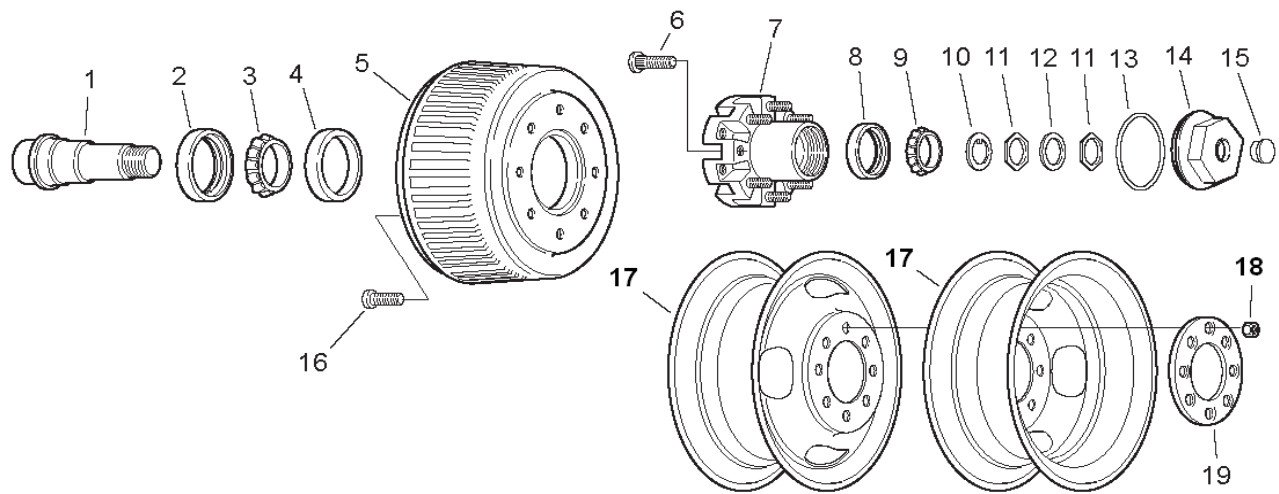
Fax your order to Eager Beaver Trailer Parts: 856-423-0999

Your Name:

Your Voice Telephone:

Eager Beaver Trailers - 548 Swedesboro Ave, Mickleton, NJ 08056
Telephone 800-338-7088; FAX 856-423-0999

Eager Beaver Trailers 10HDB - 12HDB Hub & Drum (7 Bolt Backing Plate)



Item Description	Part #	Part #
	10HDB	12HDB
1 Axle Beam (36"SC, 71" TR)	2059258	2059259
Axle Beam (43"SC, 71" TR)	2059263	Special Order
Axle Beam (43"SC, 77" TR)	Special Order	Special Order
2 Seal	2057502	2057502
3 Inner Bearing	2057503	2057585
4 Inner Race	2057504	2057586
5 Drum	2057561	2057507
6 Stud	2057589	2057589
7 Hub, Hi-profile (shown)	2057562	2062279
7 Hub, Lo-Pro (for 14.5" rim only)	N/A	2057508
8 Outer Race	2057509	2057588
9 Outer Bearing	2057510	2057587
10 Spindle Washer	2059067	2059067
11 Spindle Nut	2057511	2057511
12 Tang Washer	2059068	2059068
13 Oil Cap O-Ring	2057513	2057513
14 Oil Cap	2059371	2059371
15 Oil Cap Plug	2057515	2057515
16 Drum Mounting Bolt	2057518	2057518
17 Rim 16.5 X 6.75	2057640	N/A
Rim 16.0 X 6.00 (since 1998)	2061092	2061092
Rim 14.5 X 7.00	N/A	2057641
18 Wheel Mounting Nut	2057646	2057646
19 Clamp Ring	2057083	2057083
Complete Axle (36"SC, 71"TR)	2057564	2057522
Complete Axle (43"SC, 71"TR)	2057565	331087
Complete Axle (43"SC, 77"TR)	331086	331088
Mounted Spare 235/85R16E (1998-2/2008)	no longer stocked	
Mounted Spare 235/80R16E (Begin 3/2008)	2062301	2062301

Model 9HDB with 12 1/4" x 3 3/8" Electric Brakes & 7 Hole Brake Flange

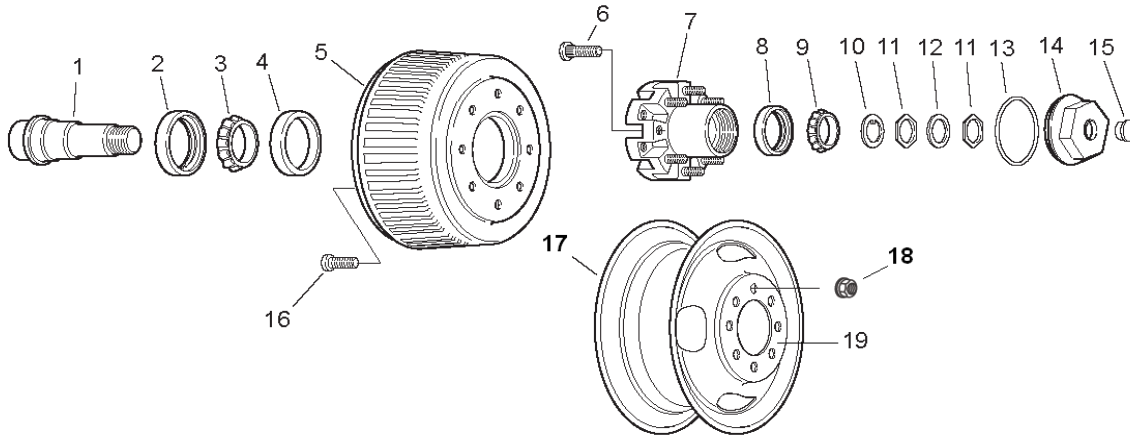
Two-Piece Hub & Drum (used from Feb 1990 until Aug 2009) *

One-Piece Hub & Drum (used Aug 2009 - May 2013) *

New Design Two-Piece Hub & Drum introduced May 2013

New Design 2-Piece Hub & Drum is NOT interchangeable with the pre-2009 2-piece design

-- Note: Two-Piece Hub & Drum Shown --



Item Description	Pre Aug 2009 2-Piece Hub & Drum	Aug 2009-May 2013 1-Piece Hub & Drum	Begin May 2013 2-Piece Hub & Drum
1 Axle Beam (37"SC, 65" TR)	2059288	2059288	2059288
Axle Beam (43"SC, 71" TR)	2060758	2060758	2060758
2 Seal	2059252	2059252	2059252
3 Inner Bearing	2057510	2057510	2057510
4 Inner Race	2057509	2057509	2057509
5 Drum (2-Piece use only)	2059257	NA	009-123-01
6 Stud, 5/8"-18	2057589	2057589	2057589
7 Hub, Hi-profile (2-Piece use only)	2059256	NA	008-430-03
One-Piece Hub & Drum Assy	NA	2059375	NA
8 Outer Race	2054856	2054856	2054856
9 Outer Bearing	2054855	2054855	2054855
10 Spindle Washer	2060354	2060354	2060354
11 Spindle Nut	2060352	2060352	2060352
12 Tang Washer	2059261	2059261	2059261
13 Oil Cap O-Ring	2057513	2059372	2059372
14 Oil Cap	2059371	2059373	2059373
15 Oil Cap Plug	2057515	2057515	2057515
16 Drum Mounting Bolt	2057518	NA	2057518
17 Rim 16.5 X 6.75	2057640	2057640	2057640
18 Nut, 5/8" - 18, 90° Cone	2057646	2057646	2057646
19 Clamp Ring (use with 90° Cone nut)	2057083	2057083	2057083
Complete Axle (37"SC, 65"TR)	Use 2059084 *	Use 2059084 *	2059084
Complete Axle (43"SC, 71"TR)	331031 *	Special Order	Special Order

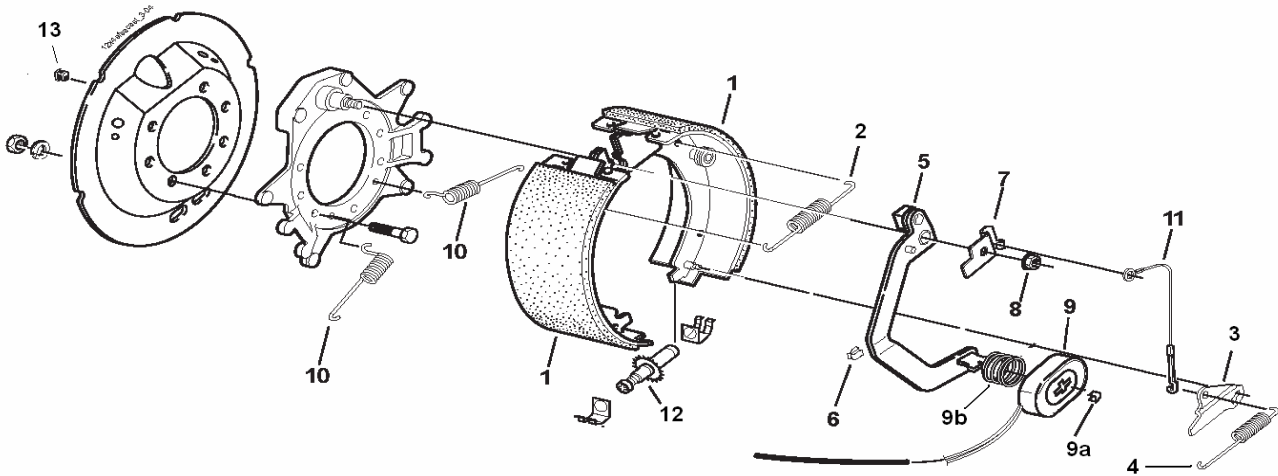
* Replaced by new style 2-piece hub & drum effective May 2013

* Same 7 Bolt Hole Brake Assembly used in both 1 and 2-Piece Hub & Drums

Eager Beaver Trailers

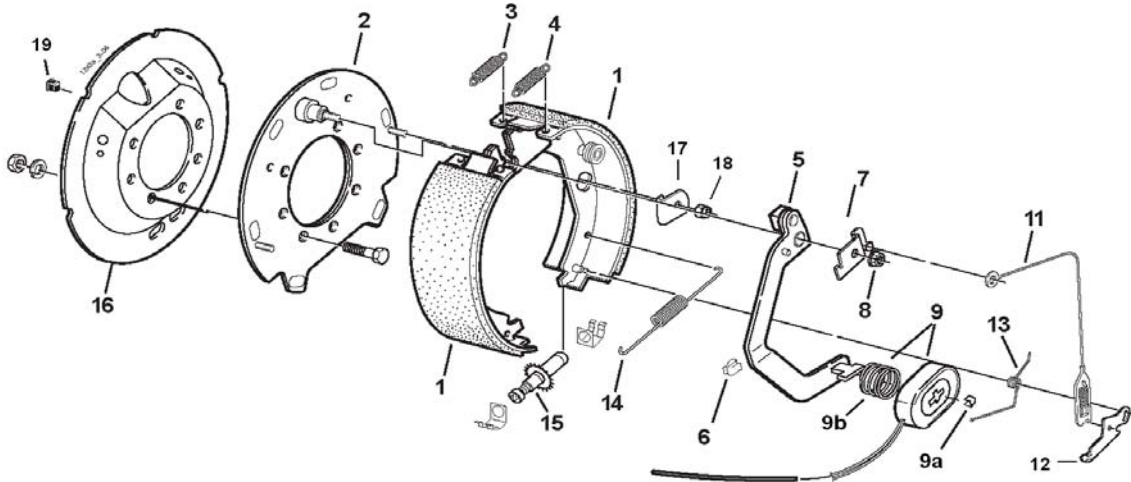
"New Style" 9HDB - 12HDB Electric Brake Components

Cast Steel Brake Flange after April 2000



Item Description	9HDB Part #	10HDB Part #	12 HDB Part #
1 Shoe & Lining Kit LH	2062069	2062071	2062073
Shoe & Lining Kit RH	2062070	2062072	2062074
2 Shoe Return Spring	2062049	2062049	2062049
3 Adjuster Lever LH	2062052	2062052	2062052
Adjuster Lever RH	2062053	2062053	2062053
4 Adjuster Spring	2062054	2062054	2062054
5 Actuator Arm LH	2059349	2059349	2059351
Actuator Arm RH	2059350	2059350	2059352
6 Wire Clip	2060742	2060742	2060742
7 Actuator Arm Retainer LH	2057557	2057557	2057557
Actuator Arm Retainer RH	2057558	2057558	2057558
8 Flange Nut	2060351	2060351	2060351
9 Magnet Kit	2059353	2059353	2059354
9a Magnet Clip	2059419	2059419	2059419
9b Magnet Spring	2059420	2059420	2059420
10 Centering Spring (2 pr brake)	2062050	2062050	2062050
11 Adjuster Cable	2062051	2062051	2062051
12 Adj Screw Assy LH	2062055	2062055	2062055
Adj Screw Assy RH	2062056	2062056	2062056
13 Wire Grommet	2054843	2054843	2054843
Complete Brake Assy LH	2059187	2059033	2059035
Complete Brake Assy RH	2059188	2059034	2059036

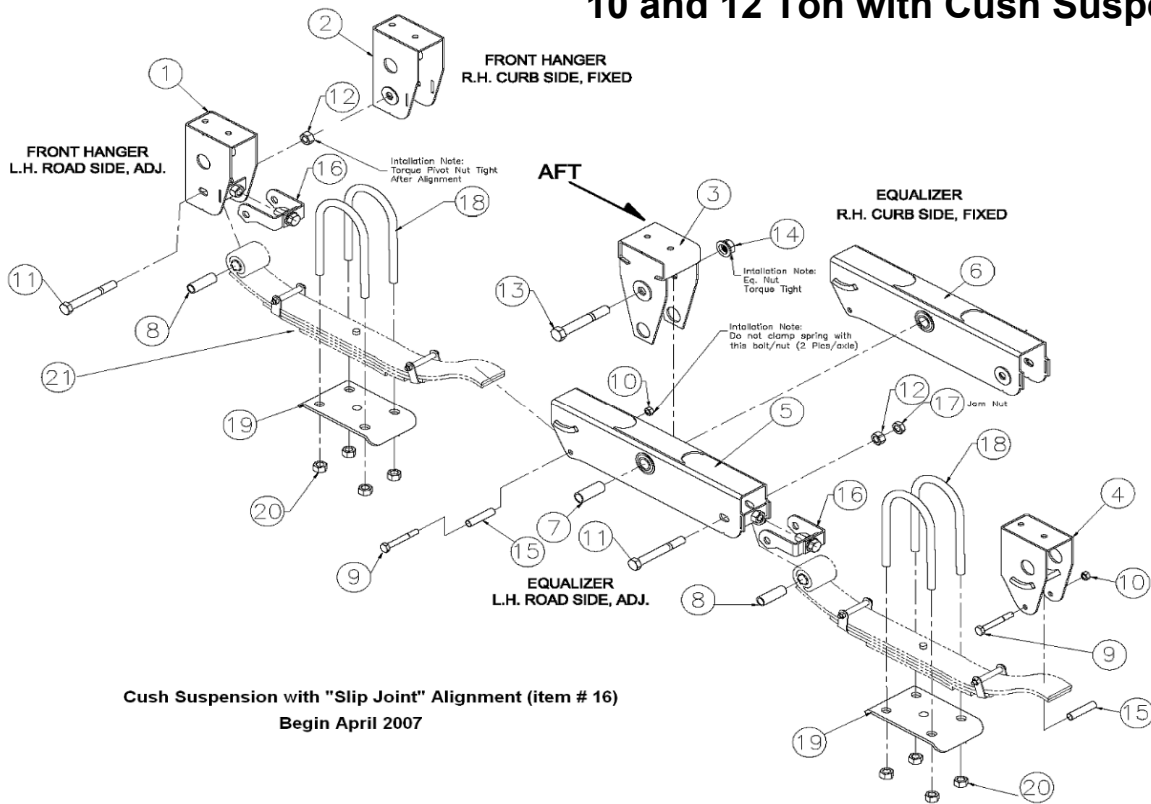
**Eager Beaver Trailers "Old Style" 9HDB - 12HDB Electric Brake Components
Fabricated Steel 7 Bolt Backing Plate (pre April 2000)**



Item	Description	Part # 9HDB	Part # 10HDB	Part # 12HDB
1	Shoe & Lining Kit LH	2057232	2057551	2057529
	Shoe & Lining Kit RH	2057231	2057552	2057528
2	Backing Plate Assy	2059037	2059031	2059039
3	Shoe Return Spring	2057533	2057533	2057533
4	Shoe Return Spring	2057533	2057533	2057533
5	LH Actuator Arm Assy	2059349	2059349	2059351
	RH Actuator Arm Assy	2059350	2059350	2059352
6	Wire Clip	2060742	2060742	2060742
7	LH Arm/Shoe Retainer	2057557	2057557	2057557
	RH Arm/Shoe Retainer	2057558	2057558	2057558
8	Flange Nut	2060351	2060351	2060351
9	Magnet Kit (mag, clip, spring)	2059353	2059353	2059354
9a	Clip Only	2059419	2059419	2059419
9b	Spring Only	2059420	2059420	2059420
10	Not used			
11	Adjuster Cable	2057547	2057547	2057547
12	LH Adjuster Lever	2057546	2057546	2057546
	RH Adjuster Lever	2059234	2059234	2059234
13	LH Adjuster Lever Spring	2057544	2057544	2057544
	RH Adjuster Lever Spring	2057545	2057545	2057545
14	Adjuster Spring	2057536	2057536	2057536
15	LH Adjuster Assy	2057534	2057534	2057534
	RH Adjuster Assy	2057535	2057535	2057535
16	Dust Shield	2057229	2060890	2057526
17	Shoe Hold Down Washer	2057530	2057530	2057530
18	Lock Nut	2057531	2057531	2057531
19	Wire Grommet	2054843	2054843	2054843
	Complete Brake Assy LH *	2059187	2059033	2059035
	Complete Brake Assy RH *	2059188	2059034	2059036

* Complete Assembly will be upgraded to "New Style" with Cast Steel Backing Plate

Eager Beaver Trailers 10 and 12 Ton with Cush Suspension



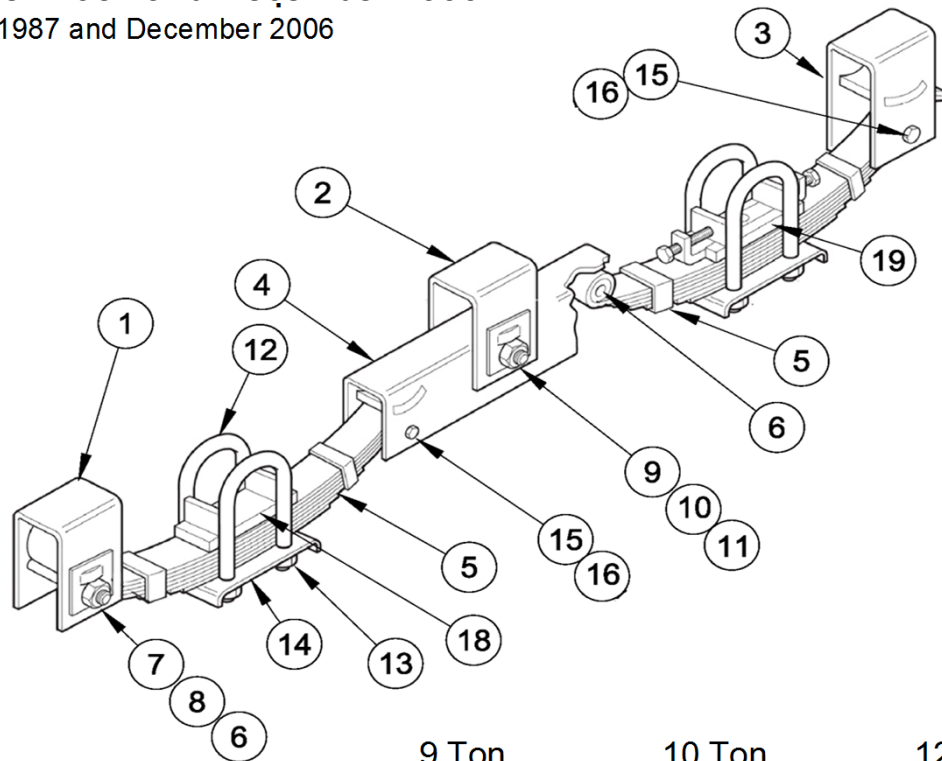
Item	Description	10 Ton Part #	12 Ton Part #
1	Front Hanger, 6.5" LH	2062271	2062271
2	Front Hanger, 6.5" RH	2062272	2062272
3	Equalizer Hanger, 6.5" RH	2062220	2062220
4	Rear Hanger, 6.5" RH	2062221	2062221
5	Equalizer, 48.5" Tandem, Slipper LH	2062273	2062273
6	Equalizer, 48.5" Tandem, Slipper RH	2062274	2062274
7	Equalizer Bushing Insert (1.125" OD x 7/8" ID)	2062225	2062225
Not Shown	Equalizer Bushing, Rubber (Pressed-in)	Included with Equalizer	
8	Spring eye insert (1" OD x .75" ID)	2062226	2062226
9	Bolt, Spring Keeper - 1/2" UNC	2062227	2062227
10	Nut, Spring Keeper - 1/2" UNC	2062228	2062228
11	Bolt, Spring Eye - 3/4" UNC	2062229	2062229
12	Lock Nut, Spring Pivot 3/4-10UNC	2062275	2062275
13	Bolt, Equalizer - 7/8" - 14 UNF	2062231	2062231
14	Nut, Securex - 7/8" - 14 UNF	2062232	2062232
15	Spacer, Spring Slipper	2062276	2062276
16	Slip Joint Yoke Assembly	2062277	2062277
17	Not Used (begin Feb 2009, Rev L) (Replaced by improved Item #12)		
18	U-Bolt, 5/8", 10 Ton Only (until 2/2008)	2059049	N/A
18	U-Bolt, 3/4", 12 Ton & 10 Ton (begin 3/2008)	2059050	2059050
19	Bottom Plate, 10 Ton Only (until 2/2008)	2059060	N/A
19	Bottom Plate, 12 Ton & 10 Ton (begin 3/2008)	2059061	2059061
20	Nut, U-Bolt, 10 Ton Only (until 2/2008)	2059051	N/A
20	Nut, U-Bolt, 12 Ton & 10 Ton (begin 3/2008)	2059052	2059052
21	Leaf Spring	2059045	2059046
Not Shown	Pipe Brace Bars 1 1/4" Sch 80 x 48" Long	218055	218055

ECN 1969 dtd Aug 8, 2012 changed PN 218055 from Schedule 40 to Schedule 80

Eager Beaver Trailers 9-12 Ton Suspension

Used between 1987 and December 2006

1987 and December 2006

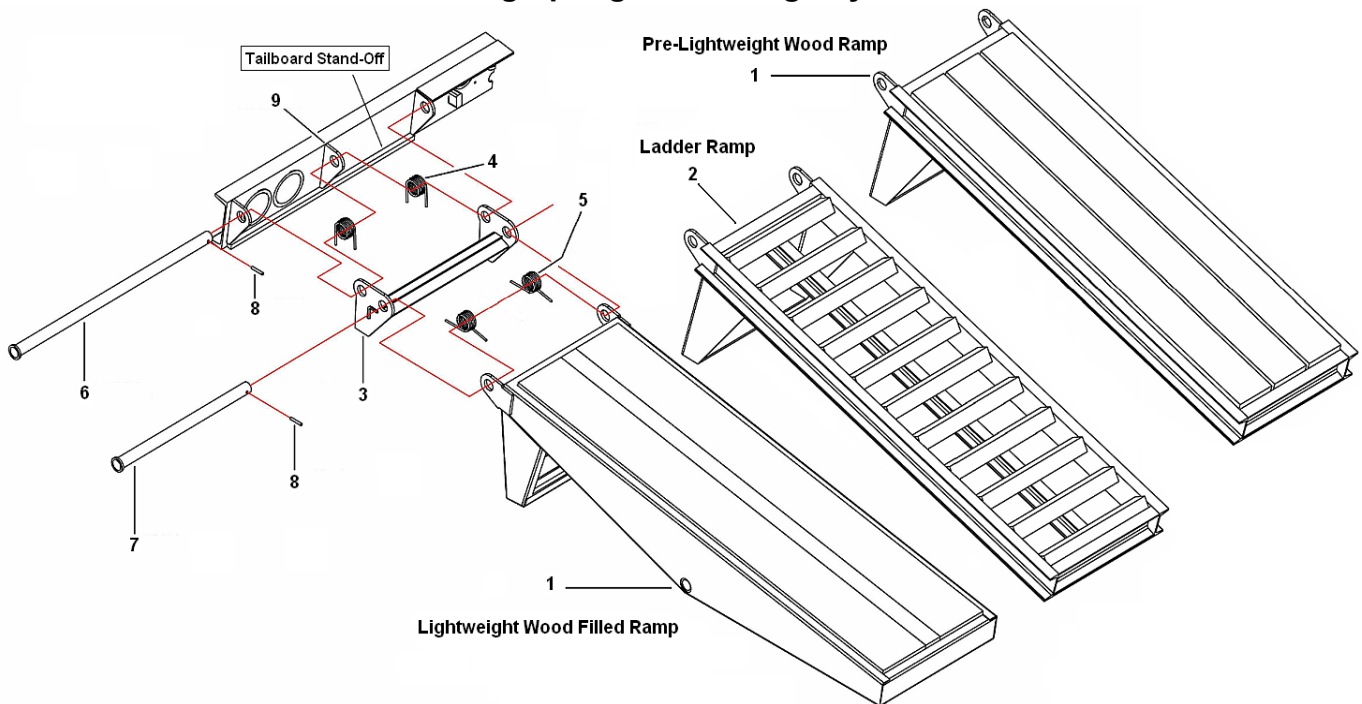


Item	Description	9 Ton Part #	10 Ton Part #	12 Ton Part #
1	Front Hangar	2059079	2059055	2059055
2	Center Hangar	2059077	2059056	2059056
3	Rear Hangar	2059080	2059057	2059057
4	Equalizer LH *	2059078	2059058	2059058
	Equalizer RH *	2059078	2059058	2059058
5	Leaf Spring	2059081	2059045	2059046
6	Spring Eye Bushing	2059082	2059231	2059231
7	Spring Eye Bolt	2059076	2059047	2059047
8	Nut, Spring Eye Bolt	2059051	2059053	2059053
9	Equalizer Bolt	2059075	2059048	2059048
10	Nut, Equalizer Bolt	2059053	2055555	2055555
11	Equalizer Bushing	2060436	2060195	2060195
12	U-Bolt	2057256	2059049	2059050
13	Nut, U-Bolt	2059051	2059051	2059052
14	Tie Plate	2057250	2059060	2059061
15	Keeper Bolt	2059360	2055557	2055557
16	Nut, Keeper Bolt	2059359	2059054	2059054
17	Not Used			
18	Spring Seat - Fixed	2060441	N/A	N/A
19	Spring Seat - Adjustable	N/A	2060888	2060888

* Approximately 2011, 10 & 12 Ton Equalizer design changed to be ambidextrous

(Used between 1987 and 2007)

Eager Beaver 10 - 12 Ton Model Tag Trailers Double Acting Spring and Linkage System Shown



<u>Item</u>	<u>Part No.</u>	<u>Description</u>
1	2062167	10-20 Ton Lightweight 6' Wood 15" Bucket (Double Acting)
	2062099	10-12 Ton pre-LW 6' Wood 15" Bucket (Universal *)
	2054643	10-12 Ton pre-LW 5' Wood 15" Bucket (Universal *)
2	2062098	10-12 Ton 6' Ladder 15" Bucket (Universal *)
	2059342	10-12 Ton 5' Ladder 15" Bucket (Universal *)
3	2062168	Double Acting Movable Link (23" W) LW Style Ramps Only
	991846	Double Acting Movable Link (20" W) Ladder & pre-LW Ramps Only
	2057173	Single Acting** Movable Link (20" W)
4	2062135	Tail Board Side Spring (one leg longer)
	2059230	LD Double Spring - Single Acting** (Not Shown)
5	2062134	Ground Side Spring (both legs same length)
6	2059186	Ramp Pivot Pin 36.5"
7	2063220	1.5" Dia. Ramp Pivot Pin 25" Long (LW Style Ramps Only)
	2054640	1.5" Dia. Ramp Pivot Pin 22" Long (Ladder & pre-LW Ramps Only)
8	2059020	Roll Pin - Ramps
9	2062169	Fixed Link (For Double Acting Movable Link)
	2059364	Fixed Link (For Single Acting** Movable Link)
	2062333	Tailboard standoff 1/2" x 3/4" x 35" (2 required)
	142012	Replacement 15" Bucket - Ladder, Single Acting & Pre-LW Ramps
	2063287	Replacement 15" Bucket - Lightweight Wood Filled Ramp Only

Conversion Kit (Convert old style Single Acting ramp linkage to use Double Acting spring set)

2063261 Includes Double Acting items 3, 6, 7, 8

Conversion Notes: Conversion Kit contain quantity two of items 3,6,7 & 8

Modification or replacement of existing Fixed Link required

Addition of Tailboard Standoff key stock required. Springs not included in conversion kit.

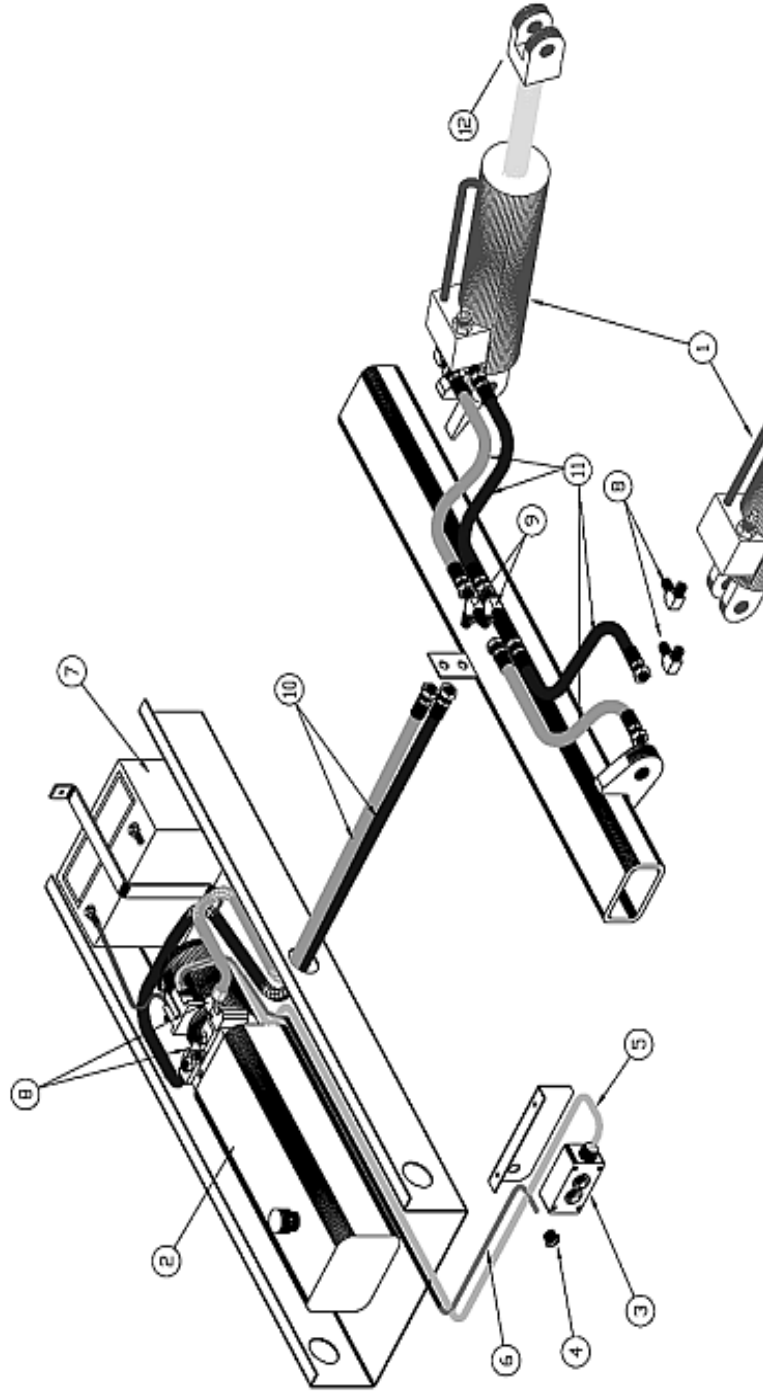
* Universal ramps will work with either Double Acting Or Single Acting springs & linkage

** Single Acting Spring & Ramps Provide Lift Assistance Off Of Ground Only

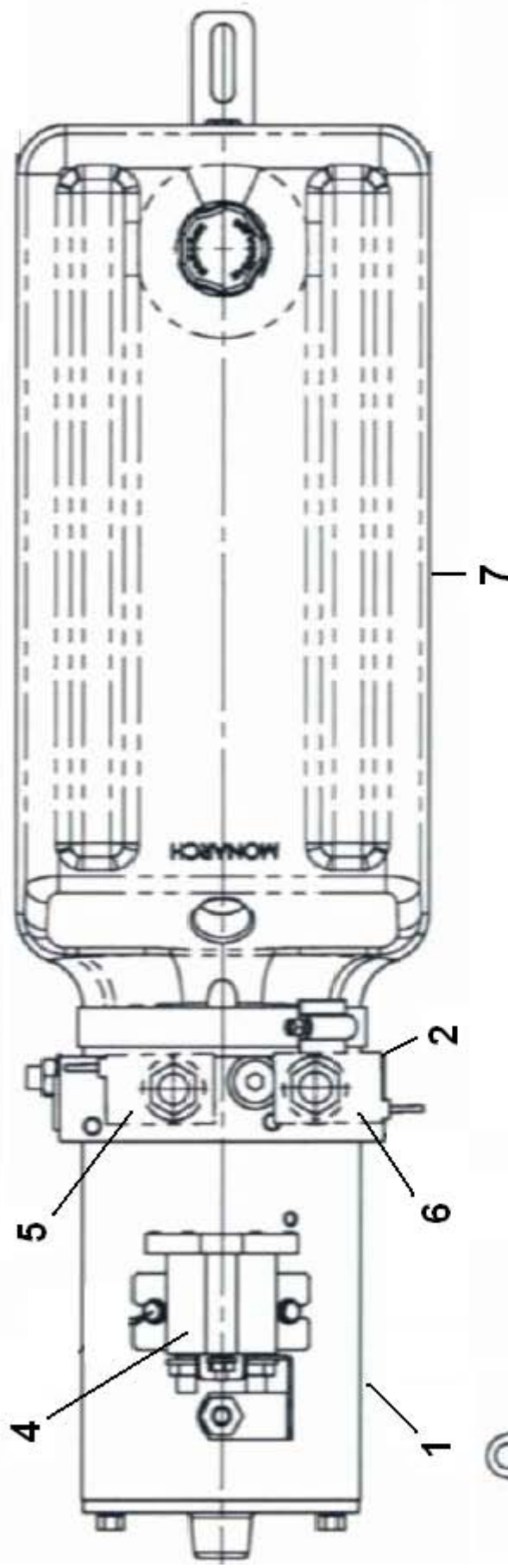
Eager Beaver Trailers

Electric Hydraulic Ramps with Counter Balance Lock (Since June 2007)

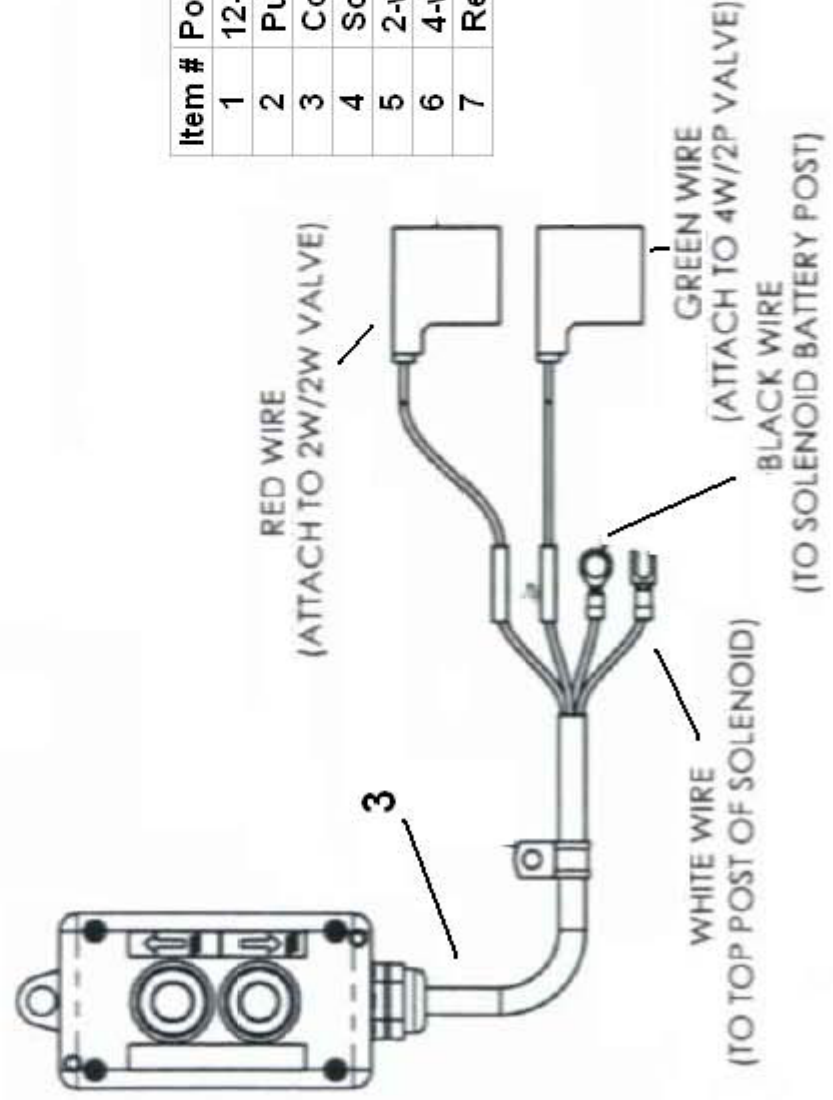
ITEM	DESCRIPTION	PN	NOTES
1	HYDRAULIC CYLINDER	2062326	4" Bore x 11" Stroke with Counter Balance Valve
not shown	PACKING KIT FOR HYDRAULIC CYLINDER	2059362	Prince PMCK-BH-0483
2	MONARCH M3551 MOTOR AND HYD PUMP	373002	
2a	VENT PLUG FOR HYDRAULIC RESEVOIR	2060007	
3	UP-DOWN CONTROL BOX	2057694	Includes Item # 5 Harness
4	ON-OFF SWITCH & KEYS (Waterproof)	2062304	Switch 95060-21 (begin 12-2014) ; -07 switch disc.
4	Universal Spare Key for 95060-21 Switch Only	2059588	will not work with -07 switch
4	ON-OFF SWITCH & KEYS (Non-waterproof)	2062205	Cole Hersee PN M-489 (Prior to March 2008)
5	CONTROL BOX HARNESS	Special Order	
6	HARNESS WITH DEUTSCH DT06-6S CONNECTOR	392612	For waterproof switch only (After Mar 2008)
7	BATTERY (WET CELL) (31DS)	Procure Locally	55 Amp Per hour
12	CLEVIS END ONLY (PIN NOT INCLUDED)	2062296	Also used on Lowboy Stinger Cylinder
12A	PIN, CYLINDER (CLEVIS END & CYLINDER BASE)	2060965	2 Pins per package (1" Dia x 3.1875" L)
not shown	SINGLE POLE PLUG, TRAILER	2057672	Plug Only; Cole Hersee PN 11042
not shown	SINGLE POLE RECEPTACLE, TOW VEHICLE	2057671	Receptacle Only; Cole Hersee PN 11041
	HYDRAULIC OIL	Procure Locally	All Purpose 10W Hydraulic Oil



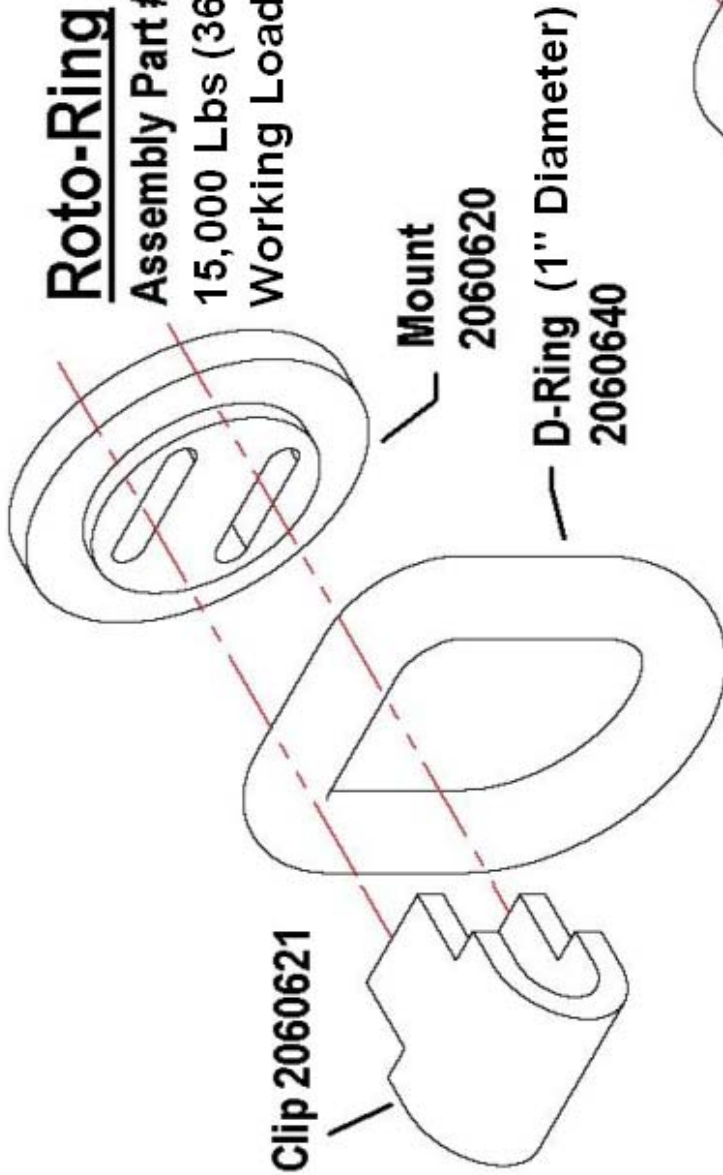
Monarch Powerpack for Hydraulic Ramps



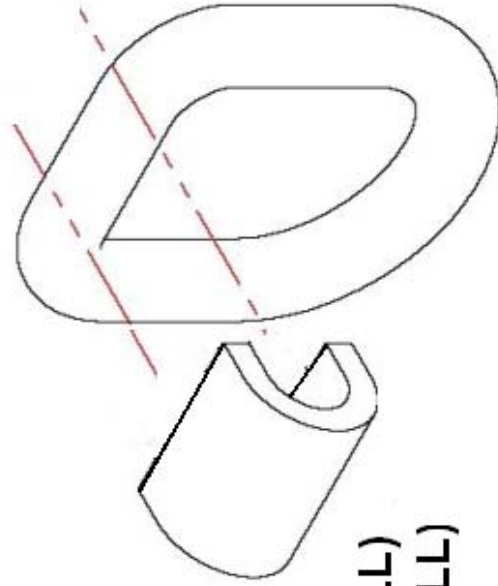
Item #	Powerpack Component	Monarch PN
1	12-VDC motor	8111
2	Pump	12171-250
3	Control Station	04334DH112-120
4	Solenoid Switch	17757
5	2-way cartridge valve	07193-D
6	4-way cartridge valve	00455-D
7	Reservoir	14168



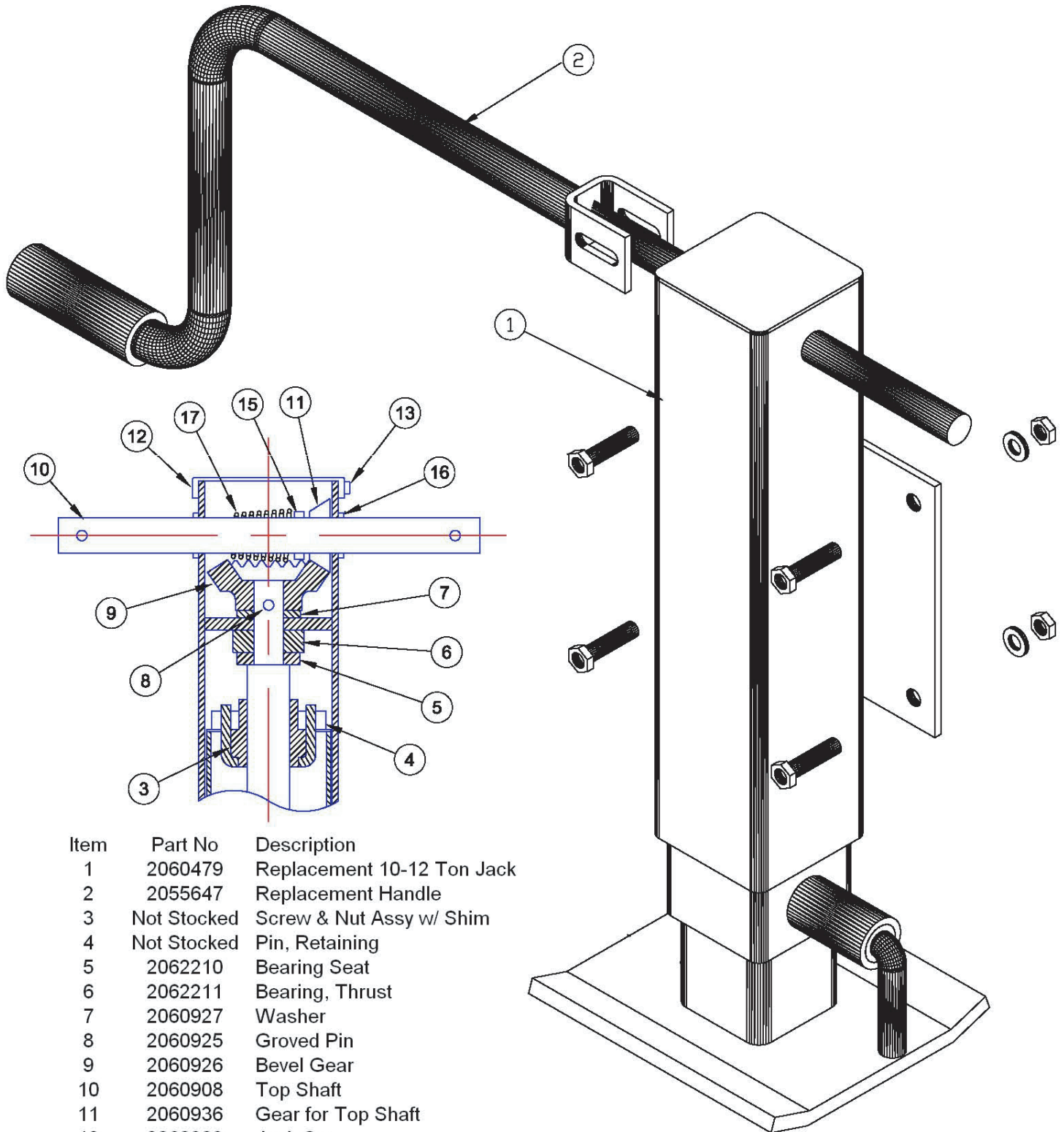
Roto-Ring[®]
Assembly Part #- 2063020
15,000 Lbs (360 Degree)
Working Load Limit



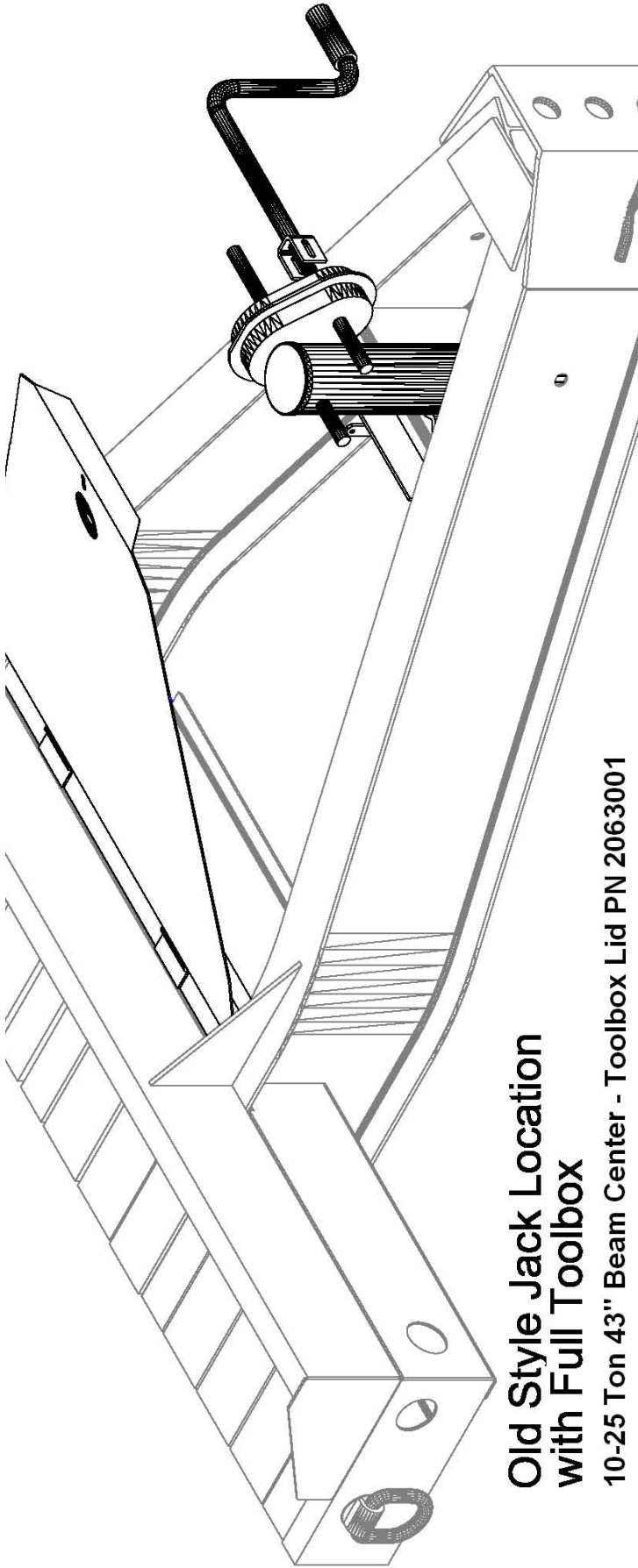
Fixed D-Ring
(D-Ring and Clip included)
Part # 2054792 (1" Dia - 15,000 WLL)
Part # 2054733 (5/8" Dia - 6,130 WLL)



9 - 12 Ton Square Jack



Item	Part No	Description
1	2060479	Replacement 10-12 Ton Jack
2	2055647	Replacement Handle
3	Not Stocked	Screw & Nut Assy w/ Shim
4	Not Stocked	Pin, Retaining
5	2062210	Bearing Seat
6	2062211	Bearing, Thrust
7	2060927	Washer
8	2060925	Grooved Pin
9	2060926	Bevel Gear
10	2060908	Top Shaft
11	2060936	Gear for Top Shaft
12	2060909	Jack Cap
13	Not Stocked	Screw 12-14 x .5"
14	Not Used	
15	2062212	Straight Pin .025 x 1.27
16	2062213	Bushing, Hex
17	2062214	Spring, Compression Spacer

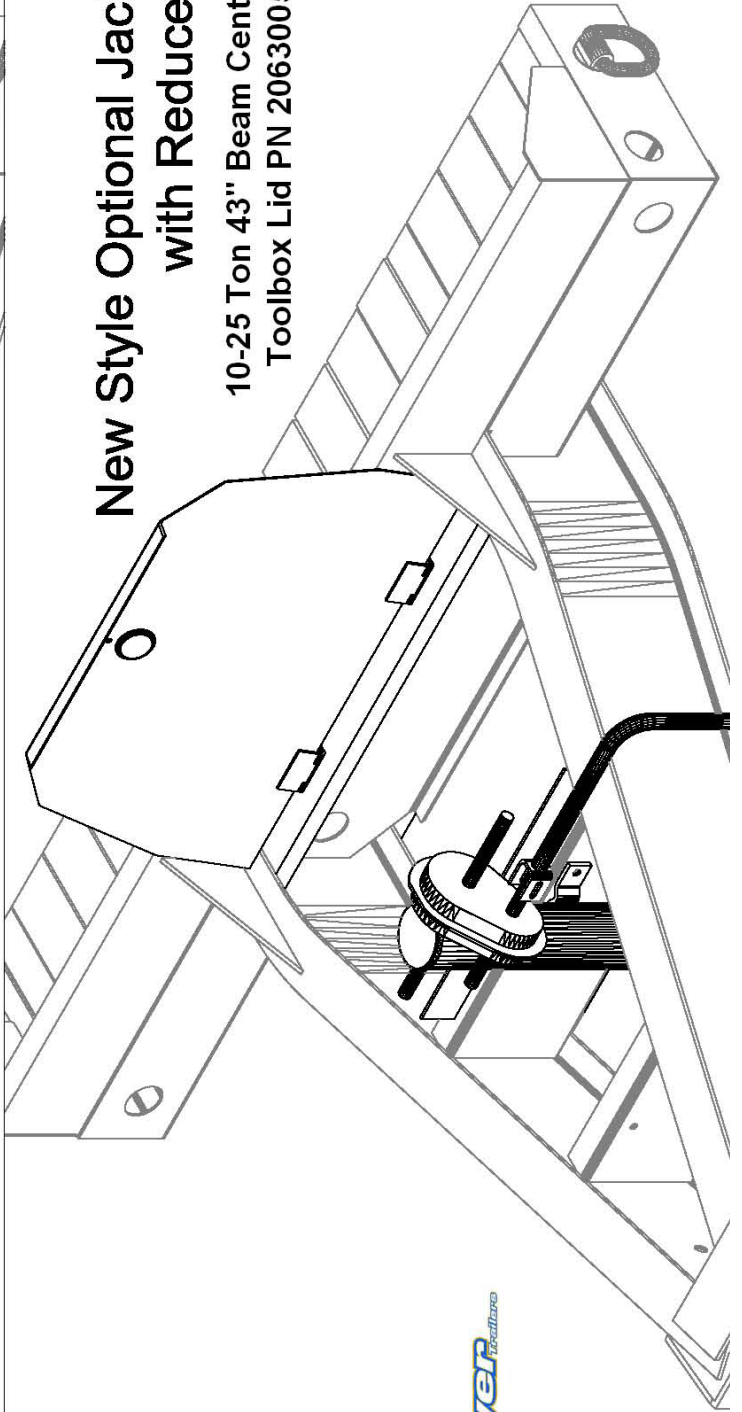


**Old Style Jack Location
with Full Toolbox**

10-25 Ton 43" Beam Center - Toolbox Lid PN 2063001

**New Style Optional Jack Location
with Reduced Toolbox**

10-25 Ton 43" Beam Center
Toolbox Lid PN 2063005

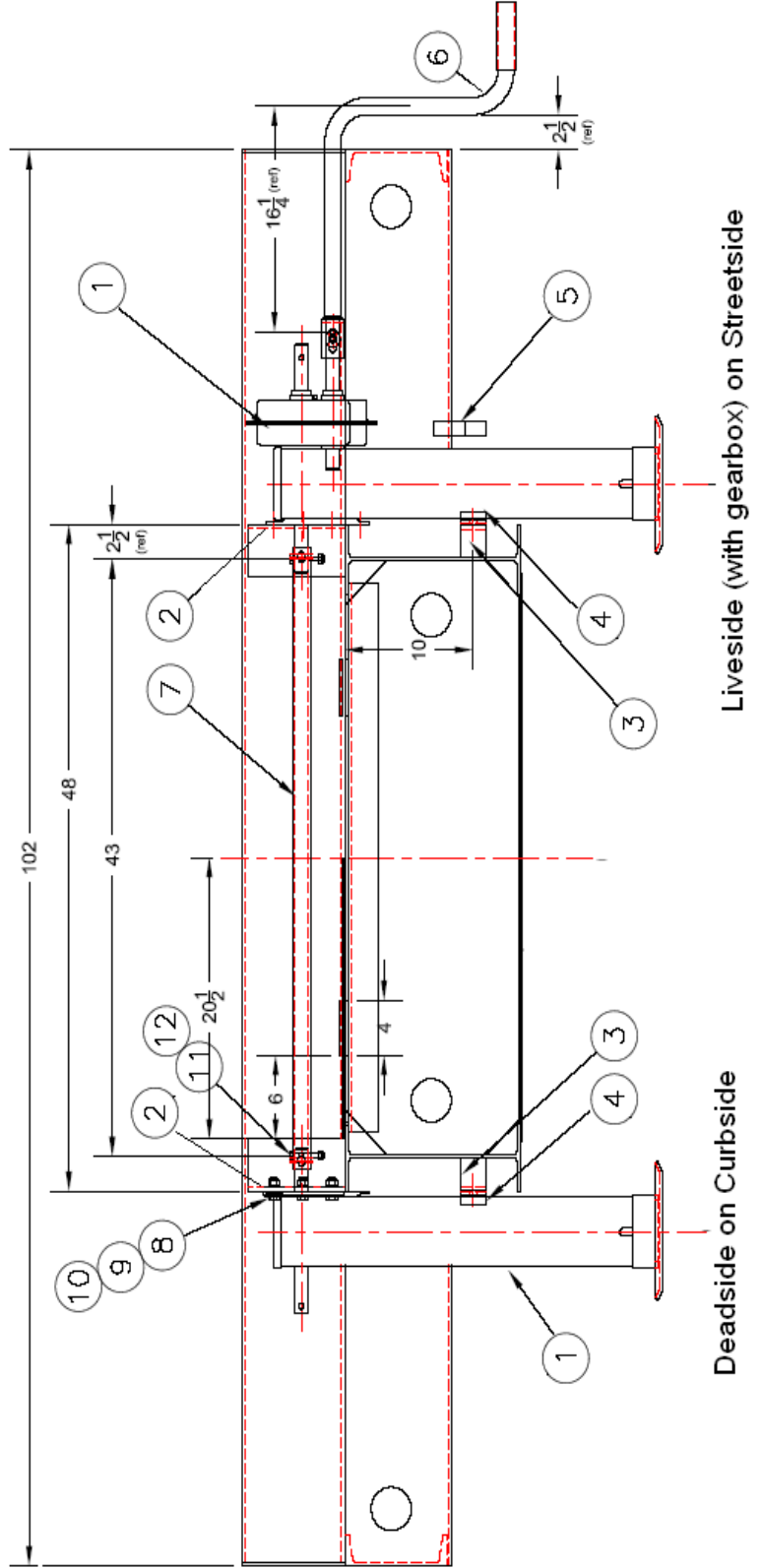


**Eager
Beaver**
Fixature

BOM 2063010 for BDOW, 10-12 Ton Tag Landing Gear Assembly
BOM 2063011 for 15-25 Ton Tag Landing Gear Assembly

Item #	PN	Qty	Description
1	401032	1	2-SPEED LANDING GEAR SET *
2	141212	2	1/4X7.5X16.5 LAND/LEG BRKT PLATE
3**	141441	2	5/16X2X13.5 9-12TON L/G L/MNT BRACKET
3**	141442	2	5/16X2X14.5 15-25TON L/G L/MNT BRACKET
4	167025	2	3/8X2X10 SQ L/G LWR/BRKT
5	401045	1	J-HOOK,CRANK HANGER
6	401042	1	CRANK,BLACK (LONG) 20"(730112)
7	211005	1	1"SCH 40 X 41.5 L/G CROSS TUBE
8	412105	16	5/8-11X2 ZN HXHD CPSCRW GRD 8
9	412203	16	5/8-11 LOCKNUT UNC ZN
10	412304	32	5/8 US.STD FLAT WASHER ZN
11	412101	2	3/8-16X2.5 ZN HXHD TAP BL
12	411321	2	3/8-16 NYLOC LOCKNUT

* Set includes Live Side (with 2 Speed Gear Box) and Dead Side Jacks
 ** 141441 included with BOM 2063010; 141442 included with BOM 2063011



Tires & Wheels

9 HDB and 10HDB/HA (Before 1998)

8.75 X 16.5 (E) Tires

Description	Part #
Wheel 8-Stud, 6.75 X 16.5 Tire & Wheel Assembly	2057640 Not Stocked

12HDB/HA (Before 1998)

9.00 - 14.5 (F) Tires

Description	Part #
Wheel 8-Stud, 7 X 14.5 Tire & Wheel Assembly	2057641 Not Stocked

10 - 12 TON HA & HDB

ST235/80R16 (E) Tires (Begin March 2008)

Description	Part #
Wheel 8-Stud, 6.00 X 16 Tire & Wheel Assembly	2061092 Not Stocked

LT235/85R16 (E) Tires (1998 - March 2008)

Description	Part #
Wheel 8-Stud, 6.00 X 16 Tire & Wheel Assembly	2061092 Not Stocked

15 HDB

215/75R17.5 (H) Tires

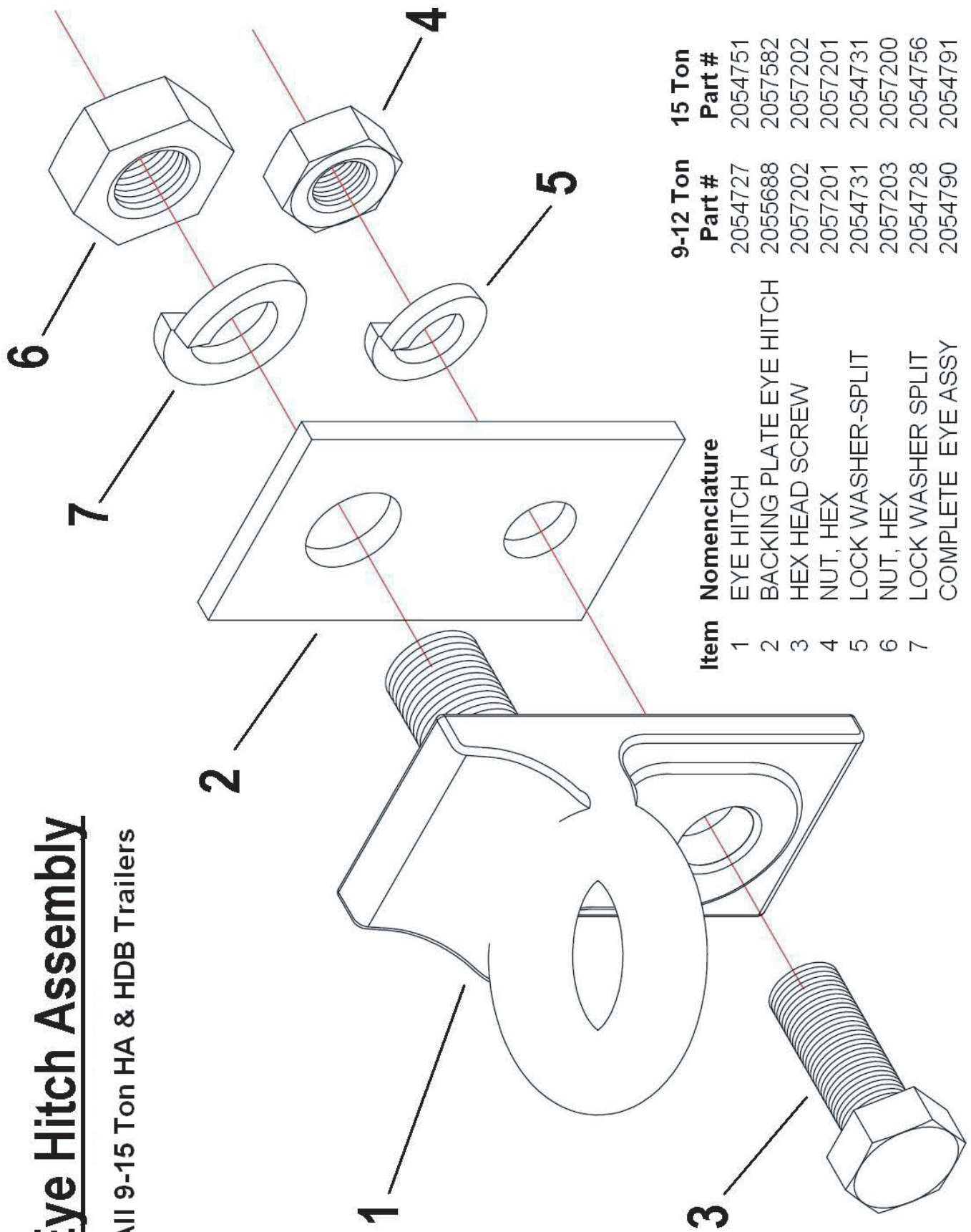
Description	Part #
Wheel 8-Stud, 6.75 X 17.5 (Hub Piloted) Tire & Wheel Assembly (Hub Piloted)	2062125 Not Stocked
Wheel Open Center, 6.75 X 17.5 Tire & Wheel Assembly (Open Center)	2059206 Not Stocked



8-Stud Hub Piloted Wheel
(Shown Above)

Eye Hitch Assembly

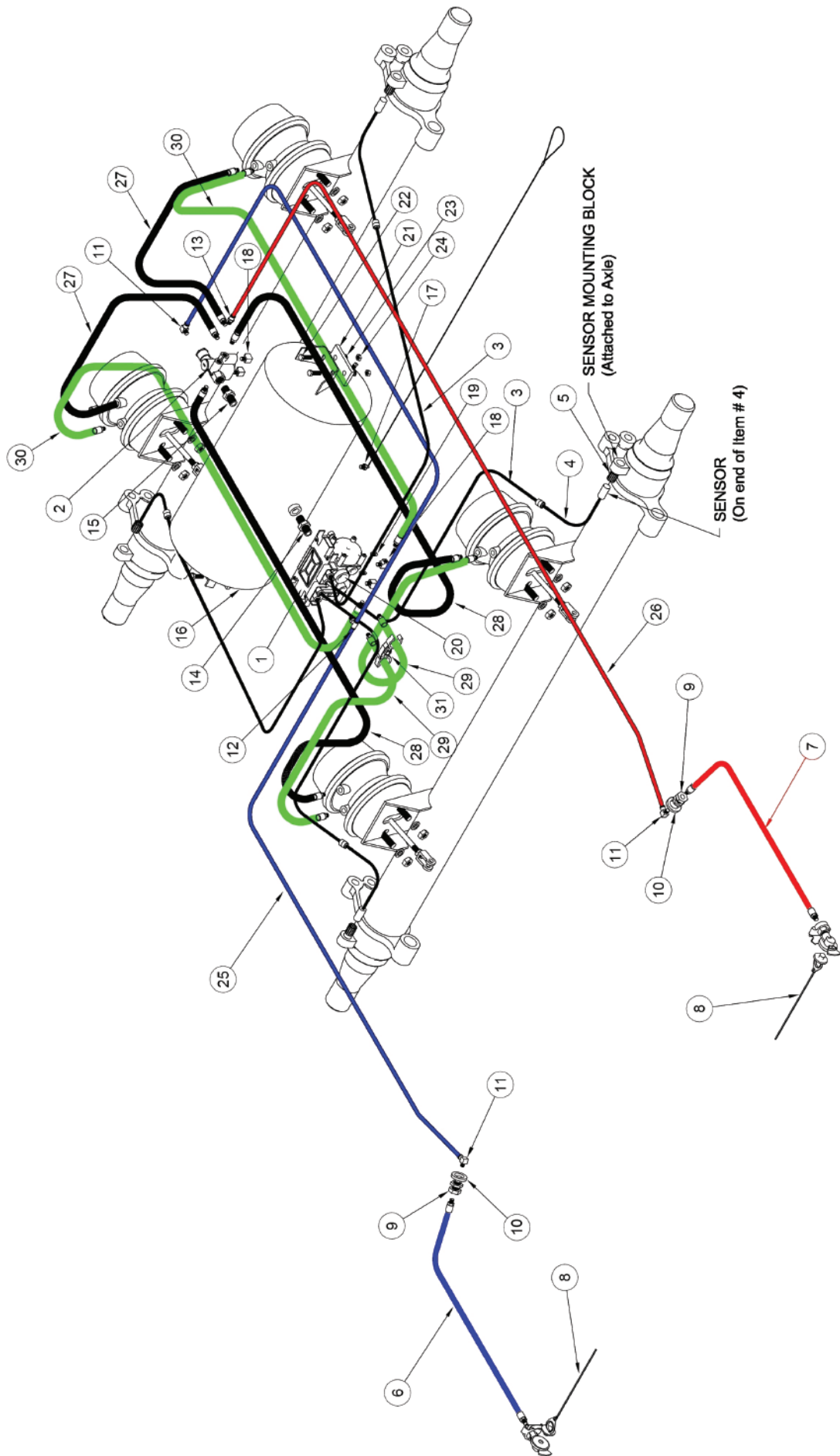
All 9-15 Ton HA & HDB Trailers



Item	Nomenclature	9-12 Ton Part #	15 Ton Part #
1	EYE HITCH	2054727	2054751
2	BACKING PLATE EYE HITCH	2055688	2057582
3	HEX HEAD SCREW	2057202	2057202
4	NUT, HEX	2057201	2057201
5	LOCK WASHER-SPLIT	2054731	2054731
6	NUT, HEX	2057203	2057200
7	LOCK WASHER SPLIT COMPLETE EYE ASSY	2054728	2054756
		2054790	2054791

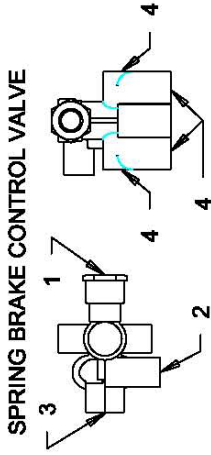
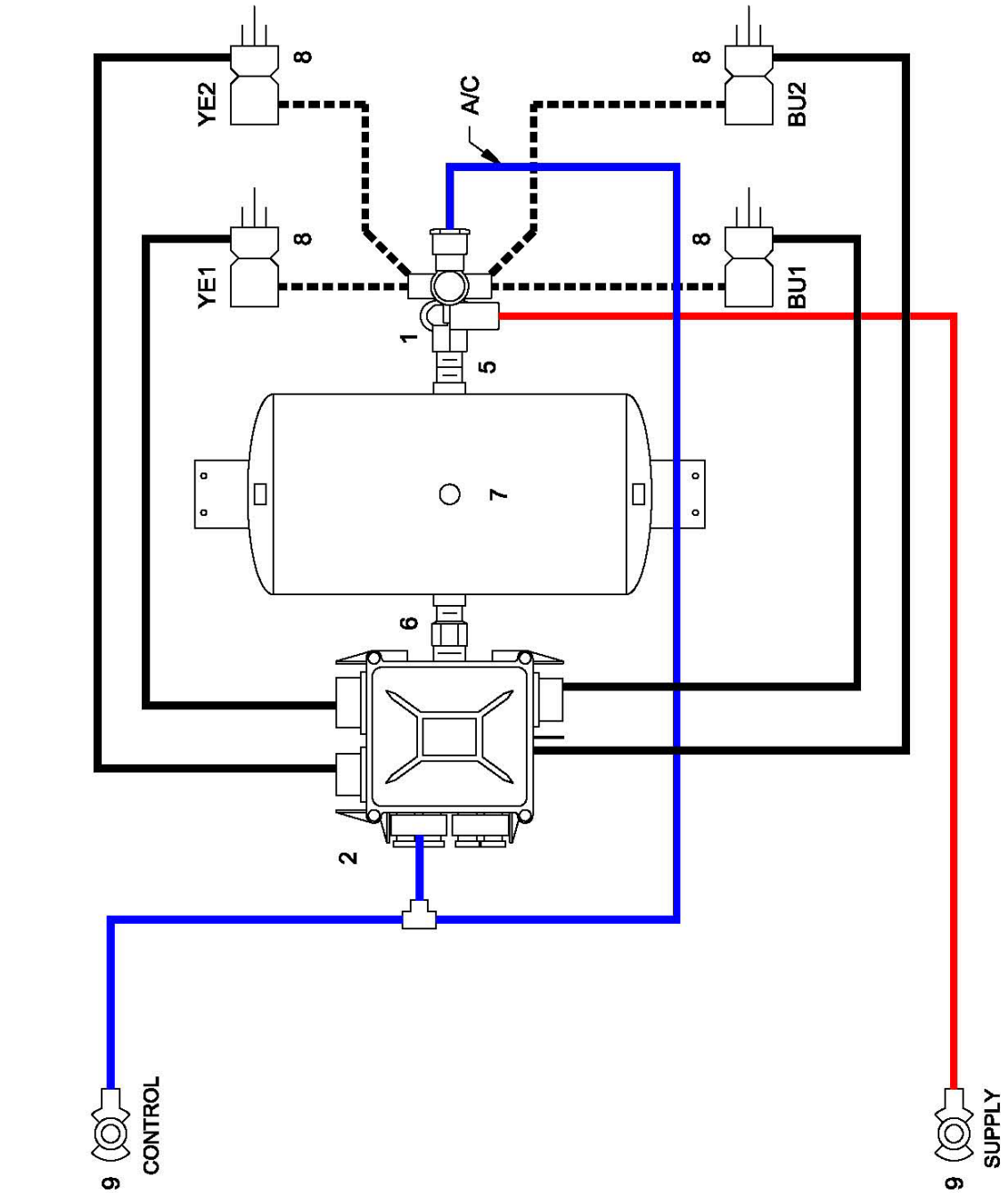
2 AXLE TAG WITH ABS PARTS LIST

Item	PN	Qty	Description
1	2062139	1	4005001030 (2&3 AXLE ECU)
2	2062080	1	SPRING BRAKE VLV,SEALCO 110800
3	2062102	4	4497130180 6' SENSOR EXT CABLE
4	2062086	4	441-032-808-0 SENSOR W 1' CABLE
5	2062085	4	899-759-815-4 SENSOR CLIP
6	381001	1	3/8HOSE X 60" w /SERV, GLADHAND
7	381002	1	3/8HOSE X 60" w/ EMER, GLADHAND
7A	2055360	1	GLADHAND, SERVICE (BLUE)
7A	2055361	1	GLADHAND, EMERGENCY (RED)
7A	2059141	2	3/8" HOSE X 60"
8	2062131	2	SLOAN PACIFIER P/N 441721
9	2055359	2	3/8FPT-3/8FPT BULKHEAD FITTING (BRASS)
10	411471	2	1"SAE FLAT WASHER PLATED
11	382002	2	3/8T-3/8M SWVL 90 ELBOW (
12	381053	1	3/8T-1/4M SWVL BRNCH TEE
13	381031	1	3/8T-3/8M STRAIGHT CONNECTOR
14	381153	1	3/4"HD NIPPLE,SEALCO #6006
15	381156	2	3/4 MALE CON. 3/4TUBEX3/4
16	2062024	1	AIR TANK (2850) #HT-1242 2-PORT
17	2058065	1	REMOTE DRAIN VLV (350002-048)
18	382106	4	3/8 90°STRT ELBOW, BRASS
19	382162	4	3/8 SQHD PLUG (BRASS)
20	382163	1	3/4 HEXHD PLUG (BRASS)
21	420001	2	AIRTANK MOUNTING PAD #1068
22	411121	4	3/8-16X1.25 HEXHD CAPSCREW GR5
23	411501	8	3/8 STD FLAT WASHER, ZINC
24	411321	4	3/8-16 NYLOC LOCKNUT
25	381879	30	3/8OD NYLON BRAKE TUBING- BLUE
26	381878	30	3/8OD NYLON BRAKE TUBING- RED
27	2062120	2	36" 3/8 AIR BRAKE HOSE
28	2055693	2	60" 3/8 AIR BRAKE HOSE
29	2055692	4	24" 3/8 AIR BRAKE HOSE
30	2059140	2	66" 3/8 AIR BRAKE HOSE
31	411821	12	1/2ID HOSE SEPARATOR
	382156	1	1/2"X 3/4"HEX NIPPLE

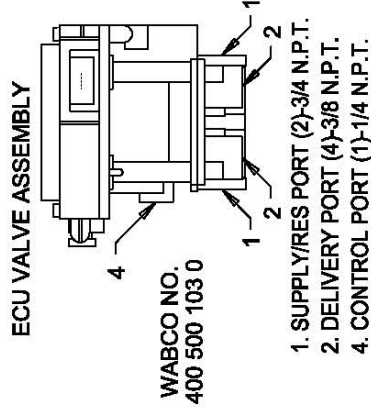


4S-2M Air System Schematic

Tandem Axle Tag Trailers

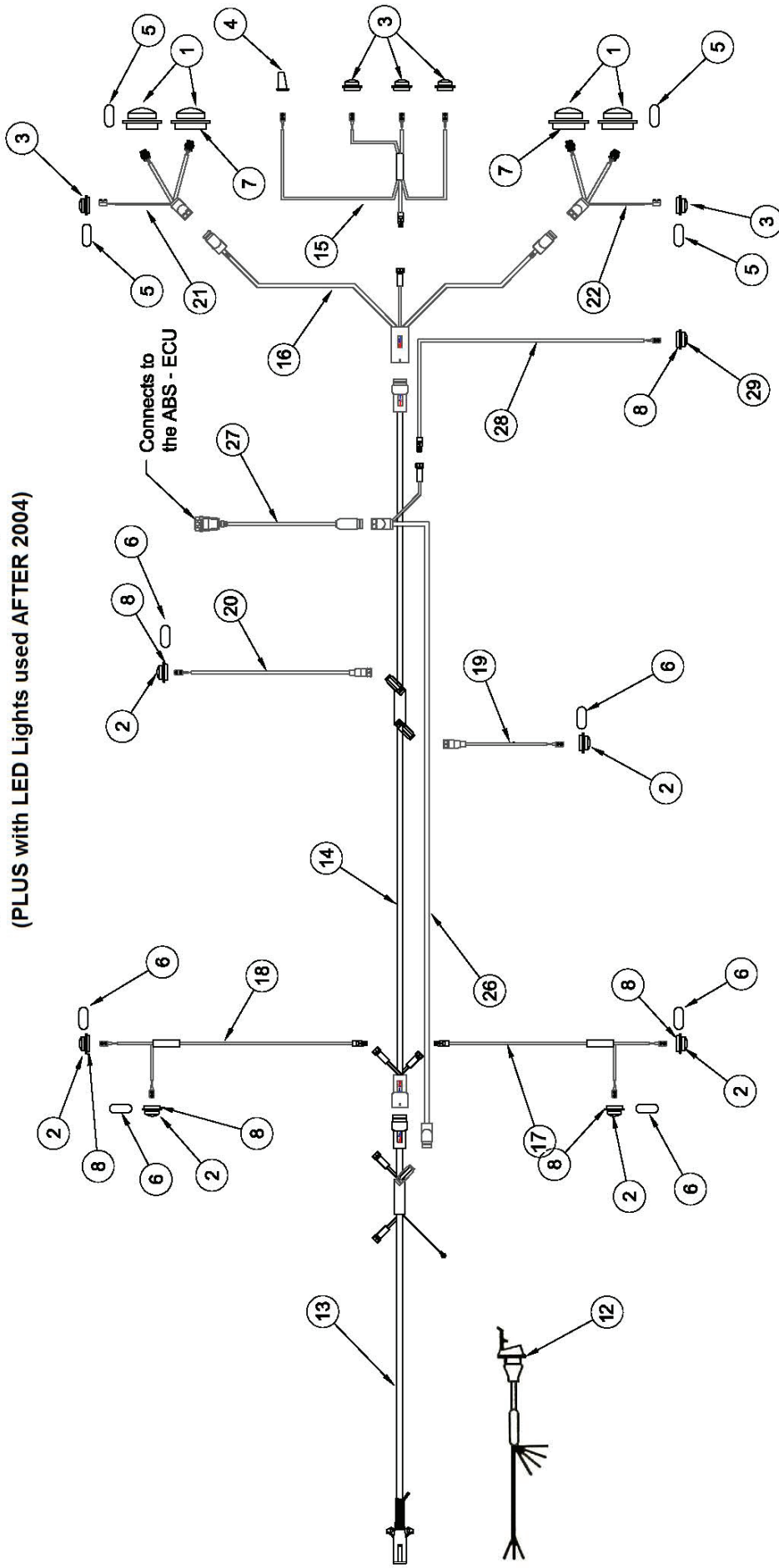


- SEALCO NO. 110800
1. CONTROL PORT (1)-3/8 N.P.T.
 2. SUPPLY PORT (1)-3/8 N.P.T.
 3. RESERVOIR PORT (1)-1/2 N.P.T.
 4. DELIVERY PORT (4)-3/8 N.P.T.

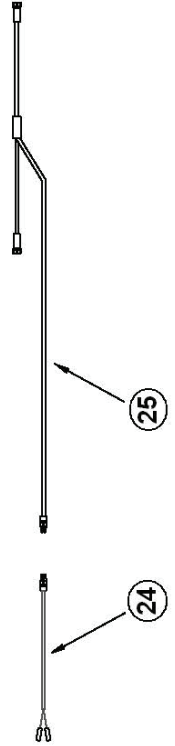


- CONTROL LINE (BLUE)
 - SUPPLY LINE
 - SPRING BRAKE
 - SERVICE BRAKE
- PLUG ALL UNUSED PORTS
A/C ANTI COMPOUNDING

**Eager Beaver 10 - 25 Ton Air Brake Electrical System
with "LED" Lights and USA Harness "PLUS" System Harness
(PLUS with LED Lights used AFTER 2004)**



**10 - 15 Ton Electric Brake Add-On Harness
(Brake Away Switch Jumper & Electric Brake Harness)**

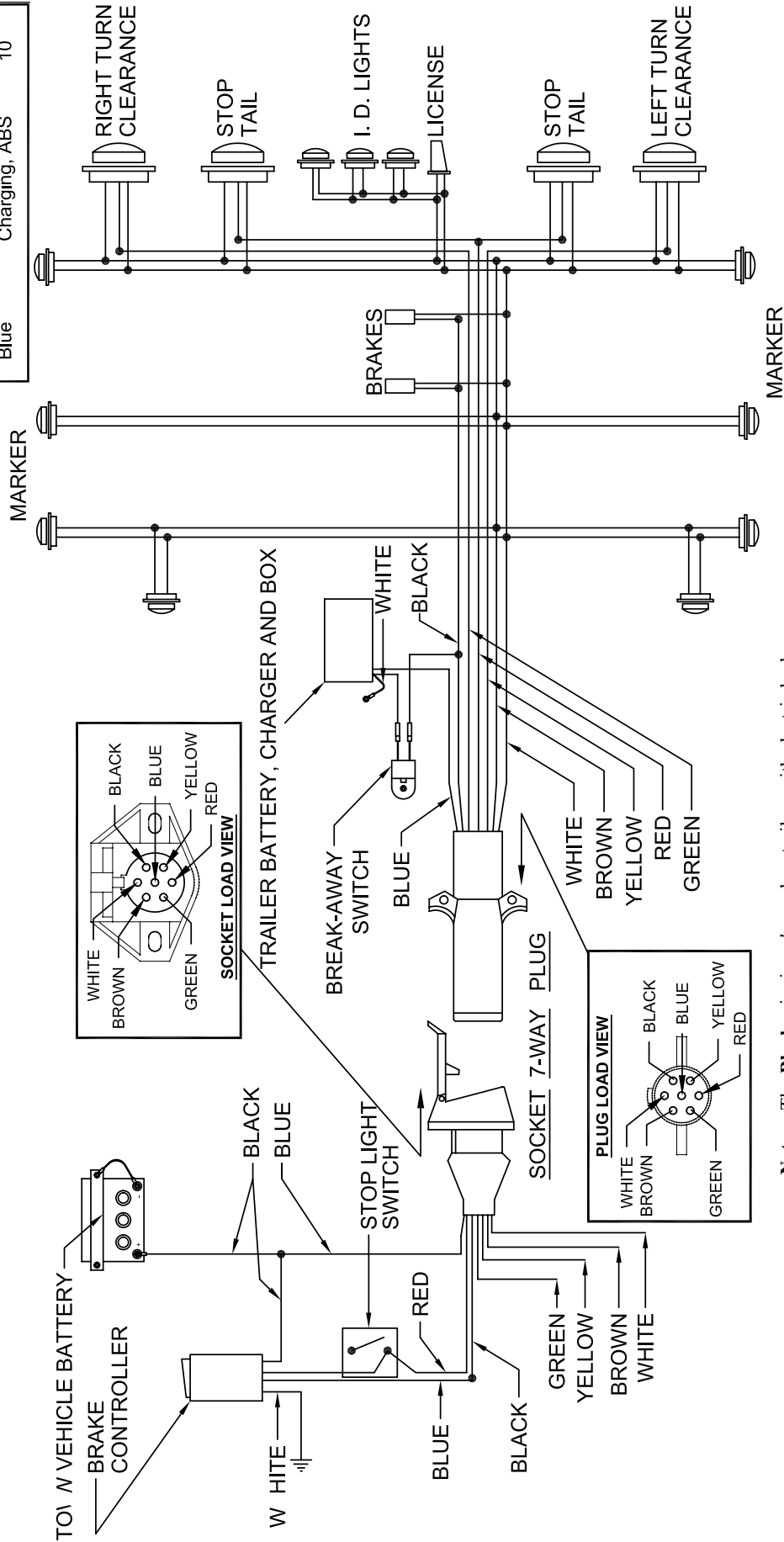


PLUS (Positive Lock Under Seal) Harness & LED Lights Parts List

Item	Part no	Qty	Description
1	2062094	4	S/T/T "LED" LIGHT
2	2062095	6	2.5" AMBER LED MARKER LIGHT
3	2062093	5	2.5" RED LED MARKER LIGHT
4	2057075	1	LICENSE PLATE LIGHT (Non LED, One-Piece)
4a	2057072	1	LICENSE PLATE LIGHT HOUSING (2-piece only)
4a	2057074	1	LICENSE PLATE LIGHT (Non LED, 2-piece only)
5	2062130	2	OBLONG RED REFLECTOR
6	2062129	6	OBLONG AMBER REFLECTOR
7	2057067	4	GROMMET, BLACK S/T/T 4"
8	2057069	12	GROMMET, MARKER 2.5"
9-11			not used
12	2060659	1	TRUCK HARNESS, 18', SAE J560 RECEPTACLE
13	2062107	1	TAG NOSE END, 12'
14	2062108	1	TAG 10-15 MAIN, 26' PLUS
15	2062193	1	TAILBOARD I.D., PLUS LED
16	2062061	1	TAILBOARD CENTER, ALL PLUS
17	2062194	1	FRONT MARKER, 2-LT, 39" PLUS LED
18	2062195	1	FRONT MARKER, 2-LT, 81" PLUS LED
19	2062196	1	CNTR MARKER, 4-POLE, 51" PLUS LED
20	2062197	1	CNTR MARKER, 4-POLE, 87" PLUS LED
21	2062198	1	C/S "LED" PGTL, TAG, 14" PLUS LED
22	2062199	1	S/S "LED" PGTL, TAG, 14" PLUS LED
23			not used
24	2062043	1	BREAK AWAY SWITCH JUMPER
25	2062042	1	ELECTRIC BRAKE HARNESS, 19'
26	2062039	1	TAG ABS ADAPTER, 210"
27	2062040	1	ABS POWER, 41"
28	2062041	1	MARKER, 2-POLE, 155"
29	2061097	1	ABS 2.5" MARKER LIGHT - NON LED
KIT	2062200	1	COMPLETE PLUS HARNESS ASSEMBLY *
* (Less ABS items 26, 27, 28 ; Less Elec Brake Items 24, 25 ; Less Item 12)			
* (Lights & Grommets also not included with Harness Assembly)			
KIT	2061048	1	ELECTRIC BRAKE ITEMS 24 AND 25
KIT	2062119	1	ABS AIR BRAKE ITEMS 26, 27 AND 28

Electrical Wiring Schematic for Tow Behind Trailers with Electric Brakes

Color	Function	Gauge
White	Ground	8
Green	Right Turn	14
Yellow	Left Turn	14
Brown	Tail Lights	14
Red	Stop, ABS	10
Black	un-used	10
Blue	Charging, ABS	10



Notes: The **Black** wire is *only* used on trailers with electric brakes.

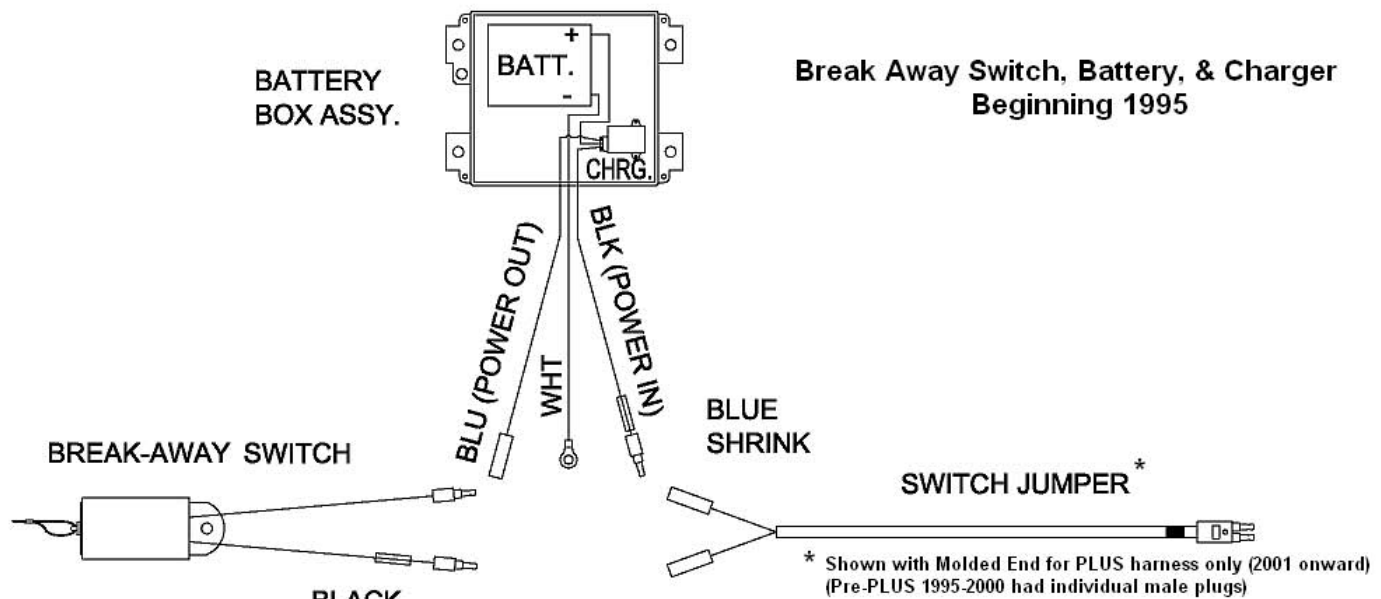
For both air and electric brake trailers, the **BLUE** wire goes to the battery but keyed through the ignition switch and fused (50 amp)

For both air and electric brake trailers, the **RED** wire goes to the stop light switch.

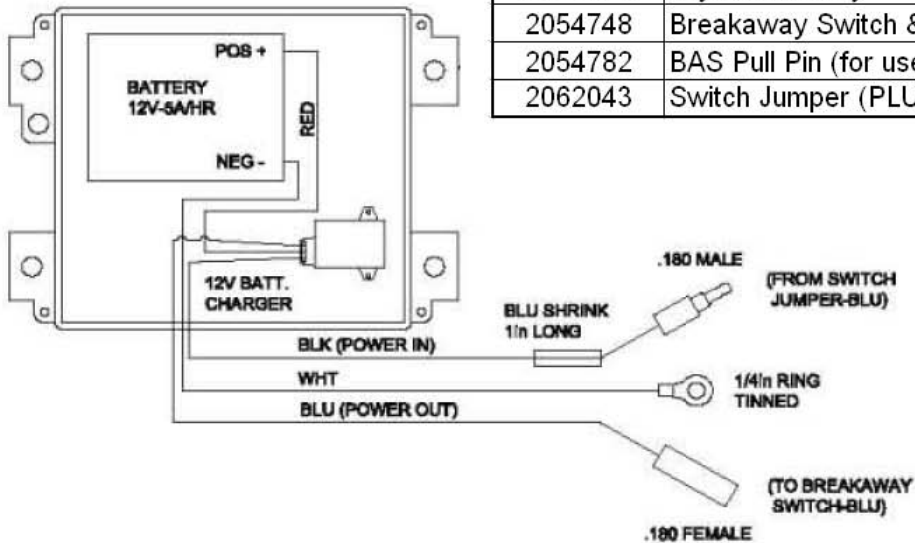
TL-6 trailers do **NOT** use the **RED** stop light circuit wire. The stop light function comes through the Green and Yellow turn signal wires

CAUTION!

Trailers built between October 1, 1993 and February 28, 1998 have the **BLUE** and the **BLACK** function are reversed. **BLUE** for brakes and **BLACK** for charging.

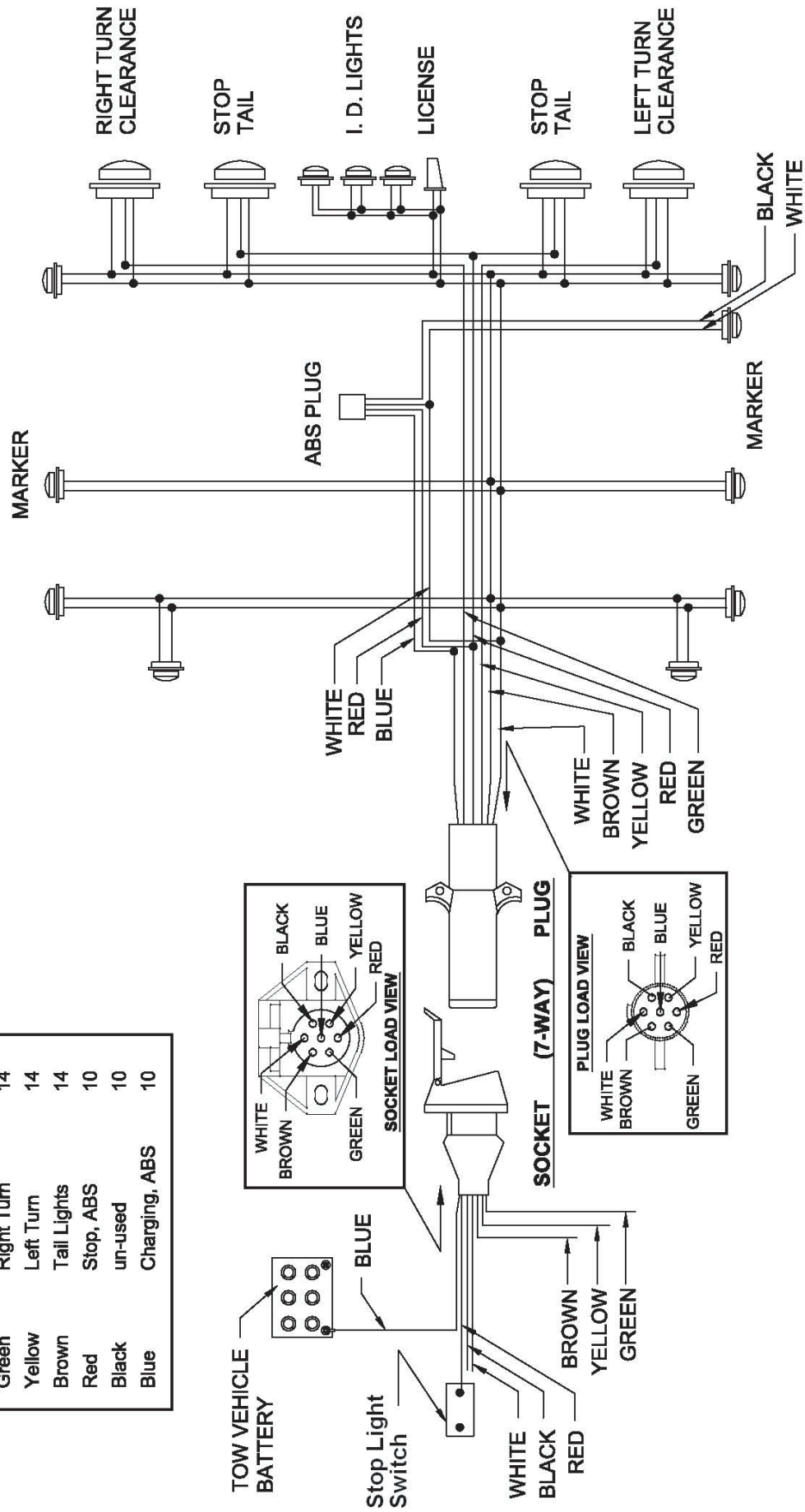


Part #	Description
2060962	Complete Breakaway Kit (Battery, Bat Box, Charger, BAS)
2060882	Dry Cell Battery
2054748	Breakaway Switch & Pull Pin
2054782	BAS Pull Pin (for use with 2054748 only)
2062043	Switch Jumper (PLUS) (Not Included w 2060962)



Electrical Wiring Schematic for Tow Behind Trailers with ABS Brakes

Color	Function	Gauge
White	Ground	8
Green	Right Turn	14
Yellow	Left Turn	14
Brown	Tail Lights	14
Red	Stop, ABS	10
Black	un-used	10
Blue	Charging, ABS	10



Notes: The Black wire is **NOT** used on trailers with ABS air brakes.

The White ground wire on the truck should be a good solid ground.

The Blue ABS wire on the truck **should** be keyed to the ignition and fused, 20-amp.

The Red stop light wire on the truck should be connected to the stop light switch.

EAGER BEAVER

New 2021 Edition

Parts & Service Manual

15 HDB

The following pages are unique only to the 15 ton trailer. Many of the components used on this trailer are also used on the 20 ton trailers.



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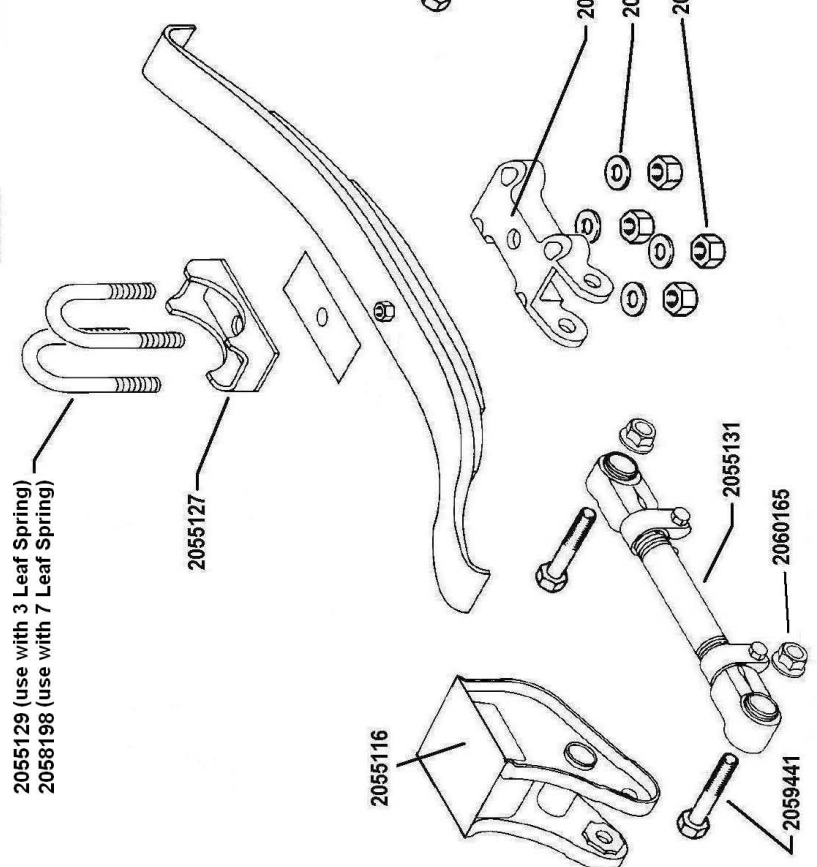
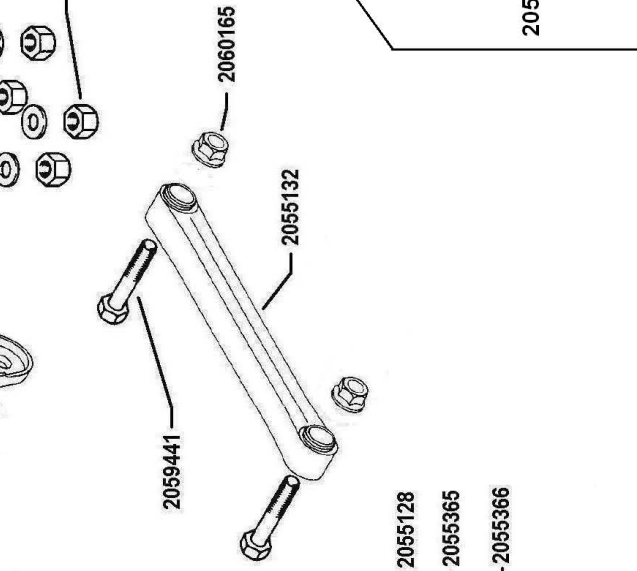
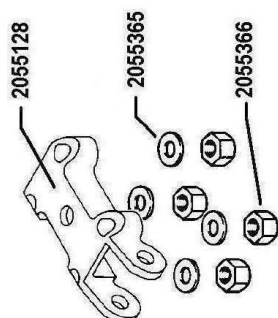
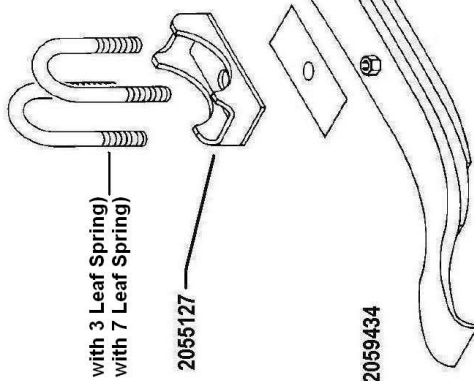
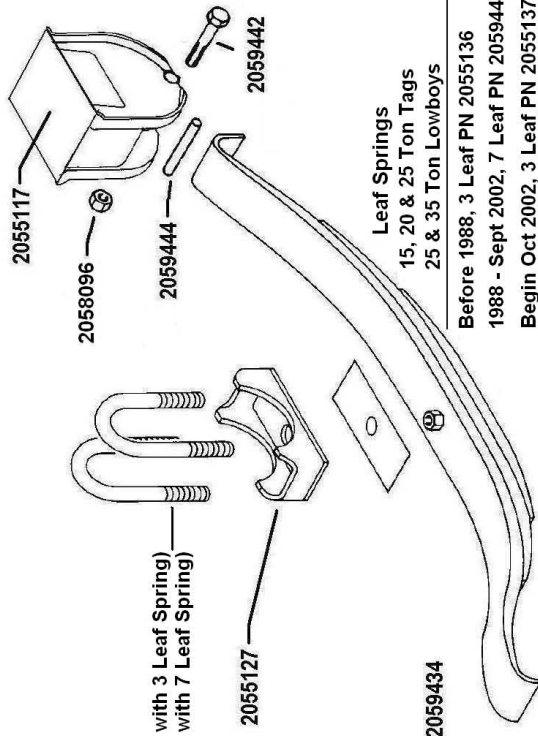
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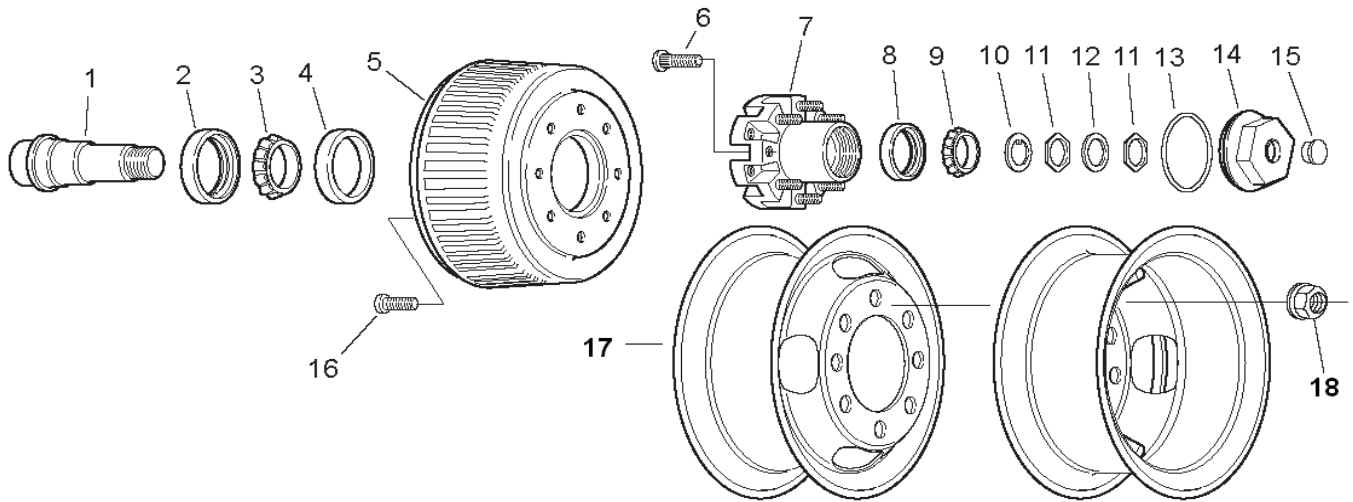
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Hutch 9700 Suspension - used After 1992
Hutch 7700 Suspension - used Before 1992

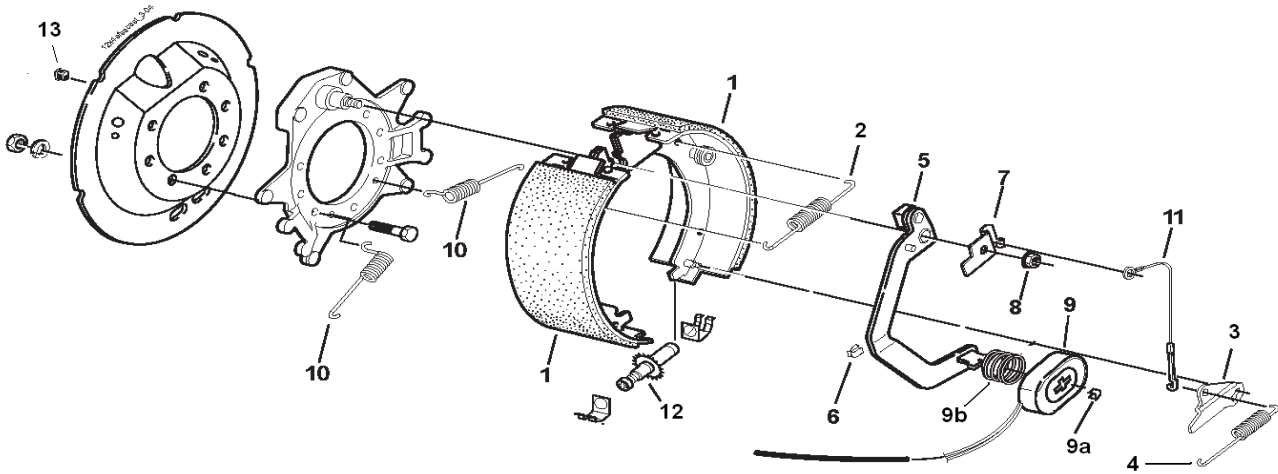


Eager Beaver Trailers 15 HDB Hub & Drum (7 Bolt Backing Plate)



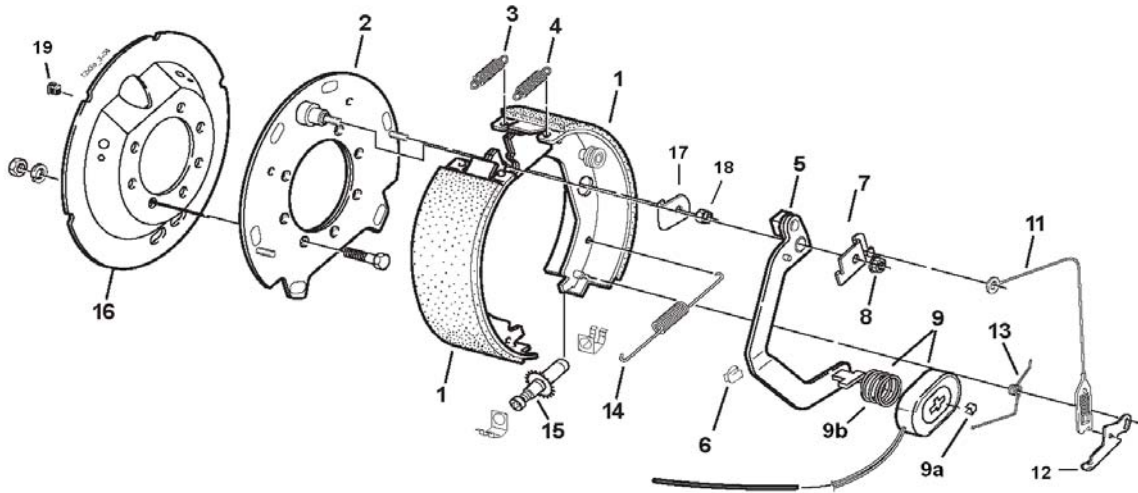
Item Description	Part # 15HDB
1 Axle Beam (36"SC, 71" TR)	Special Order
1 Axle Beam (43"SC, 71" TR)	Special Order
2 Seal	2057502
3 Inner Bearing	2057585
4 Inner Race	2057586
5 Drum	2057507
6 Stud (STD use with Steel Wheels)	007-194-00
6 Stud (Long use with Alum Wheels)	007-195-00
7 Hub with Studs & Races (Std Stud)	008-401-05
7 Hub with Studs & Races (Long Stud)	008-401-06
8 Outer Race	2057588
9 Outer Bearing	2057587
10 Spindle Washer	2059067
11 Spindle Nut	2057511
12 Tang Washer	2059068
13 Oil Cap O-Ring	2057513
14 Oil Cap	2059371
15 Oil Cap Plug	2057515
15 Oil Cap Kit (items 13,14,15)	2060920
16 Drum Mounting Bolt	2057518
17 Rim Hub Piloted 17.5 X 6.75	2062125
18 Flange Nut (swivel)	2061086
18 Mounted Spare 215-75R/17.5	2062136

**Eager Beaver Trailers "New Style" 15 HDB Electric Brake Components
Cast Steel Brake Flange after April 2000**



Item	Description	15HDB Part #
1	Shoe & Lining Kit LH	2062073
	Shoe & Lining Kit RH	2062074
2	Shoe Return Spring	2062049
3	Adjuster Lever LH	2062052
	Adjuster Lever RH	2062053
4	Adjuster Spring	2062054
5	Actuator Arm LH	2059351
	Actuator Arm RH	2059352
6	Wire Clip	2060742
7	Actuator Arm Retainer LH	2057557
	Actuator Arm Retainer RH	2057558
8	Flange Nut	2060351
9	Magnet Kit	2060870
9a	Magnet Clip	2059419
9b	Magnet Spring	2059420
10	Centering Spring (2 pr brake)	2062050
11	Adjuster Cable	2062051
12	Adj Screw Assy LH	2062055
	Adj Screw Assy RH	2062056
13	Wire Grommet	2054843
	Complete Brake Assy LH	K23-446-00
	Complete Brake Assy RH	K23-447-00

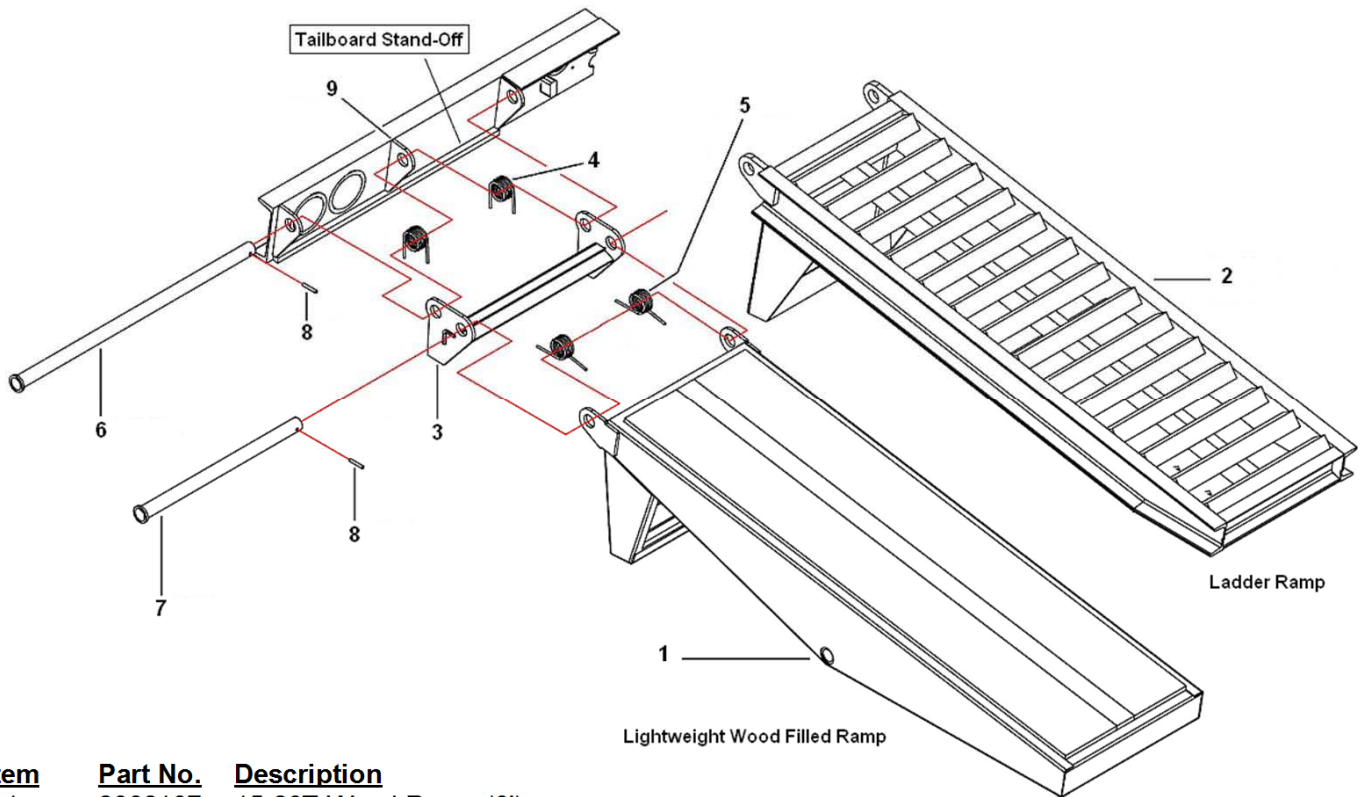
**Eager Beaver Trailers "Old Style" 15HDB Electric Brake Components
Fabricated Steel 7 Bolt Backing Plate (pre April 2000)**



Item	Description	15HDB Part #
1	Shoe & Lining Kit LH	2057529
	Shoe & Lining Kit RH	2057528
2	Backing Plate Assy	2059039
3	Shoe Return Spring	2057533
4	Shoe Return Spring	2057533
5	LH Actuator Arm Assy	2059351
	RH Actuator Arm Assy	2059352
6	Wire Clip	2060742
7	LH Arm/Shoe Retainer	2057557
	RH Arm/Shoe Retainer	2057558
8	Flange Nut	2060351
9	Magnet Kit (mag, clip, spring)	2060870
9a	Clip Only	2059419
9b	Spring Only	2059420
10	Not used	
11	Adjuster Cable	2057547
12	LH Adjuster Lever	2057546
	RH Adjuster Lever	2059234
13	LH Adjuster Lever Spring	2057544
	RH Adjuster Lever Spring	2057545
14	Adjuster Spring	2057536
15	LH Adjuster Assy	2057534
	RH Adjuster Assy	2057535
16	Dust Shield	2057526
17	Shoe Hold Down Washer	2057530
18	Lock Nut	2057531
19	Wire Grommet	2054843

Ramps and Linkage including conversion Kit

15 Ton Tag Trailers

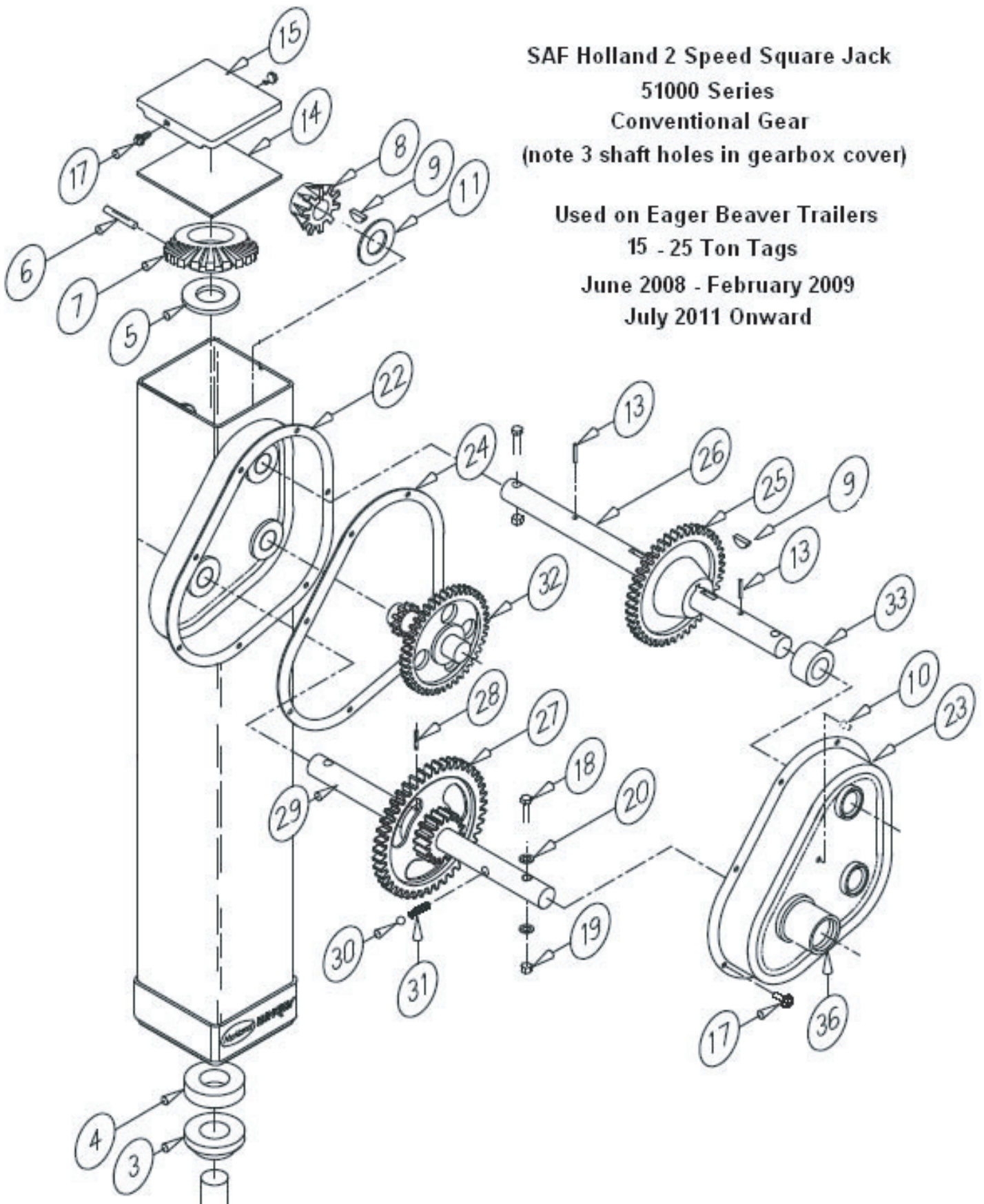


<u>Item</u>	<u>Part No.</u>	<u>Description</u>
1	2062167	15-20T Wood Ramp (6')
2	2060935	15-25T Ladder Ramp (6')
3	2062168	Light Weight Wood Filled Ramp Movable Link 4.5" Hole to Hole Center (23" Wide)
3	2062340	Ladder Ramp Movabe Linkage (21" Wide)
4	2062135	Tail Board Side Spring (one leg longer)
5	2062134	Ground Side Spring (both legs same)
6	2059186	Ramp Pivot Pin 36.5"
7	2063220	Wood Filled Ramp 1.5" Dia. x 25" Long Pivot Pin
7	2063225	Ladder Ramp 1.5" Dia. x 23.5" Long Pivot Pin
8	2059020	Roll Pin - Ramps
9	2062169	Light Weight Ramp Fixed Link (3/8" thick for 15-20 Ton)
9	2059195	Light Weight Ramp Fixed Link (1/2" thick for 25 Ton)
	2062333	Tailboard standoff, 1/2 x 3/4 x 35" bar stock (protects lights from spring damage)
	2063291	Conversion kit: SA to DA LW Wood (15-20T), includes items 3-8 and tailboard stand off
	2060966	Conversion kit: SA to DA Ladder (15-20T), includes items 3-8 and tailboard stand off

Note: Conversion Kits convert from Single Acting to Double Acting springs and contain quantity six of items 4 & 5.
 Note: Conversion Kits do NOT include ramps; order ramps separately

**SAF Holland 2 Speed Square Jack
51000 Series
Conventional Gear
(note 3 shaft holes in gearbox cover)**

**Used on Eager Beaver Trailers
15 - 25 Ton Tags
June 2008 - February 2009
July 2011 Onward**



SAF Holland RH51 (51000 Series) 2 Speed Square Jack

Item #	Description	Qty	EBT Part	
			Number	Holland PN
3	COLLAR	1	2062315	X8-LG0544
4	THRUST BEARING	1	2062316	X8-BRG-013-77
5	WASHER	1	Spec. Order	X8-PW-016-62
6	GROOVE PIN 3/8 x 2	1	2062308	X8-GP-052-21
7	BEVEL GEAR	1	2062306	XA-LG0570-01
8	PINION GEAR	1	2062305	XB-LG1823-01
9	WOODRUFF KEY	2	2062317	X8-KEY-018-02
10	GREASE FITTING, 1/4-28	3	Spec. Order	X8-GRF-022-16
11	THRUST WASHER	1	Spec. Order	X8-PW-016-19
13	SPRING PIN, 1/4 x 1 1/2	2	2062318	X8-SP-014-27
14	COVER GASKET	1	2062309	X8-LGO893
15	TOP COVER	1	2062307	XA-LGO880
16	TAG, DATE OF MFG (NOT SHOWN)	1	NA	LG1430
17	SELF-TAPPING SCREW	9	Spec. Order	X8-STS-008-11
18	SCREW,HEX. CAP 3/8-16 x 2 1/4	1	Spec. Order	X8-HHC-050-42
19	SELF-LOCKING NUT 3/8-16	1	Spec. Order	X8-SLN-012-04
20	WASHER 3/8 STD. TYPE A	1	Spec. Order	X8-PW-016-03
22	GEARBOX HALF, INSIDE	1	Spec. Order	XB-LG0662
23	GEARBOX HALF, OUTSIDE	1	2062319	X8-LG0663
24	GEARBOX GASKET	1	2062320	X8-LG0428
25	OUTPUT GEAR	1	2062311	LG0543-01
26	JACK SHAFT R.H. UNIVERSAL MT.	1	2062313	LG0928
27	INPUT GEAR	1	2062312	LG0541-01
28	GROOVE PIN, TYPE E 1/4 x 1 1/2	1	2062321	X8-GP-014-07
29	SHIFT SHAFT, UNIVERSAL	1	2062314	LG0261-01
30	SHIFT LOCK BALL, STAINLESS STL.	1	2062322	X8-BAL-023-07
31	SHIFT LOCK SPRING, GALVANIZED	1	2062323	X8-SPG-020-36
32	IDLER GEAR	1	2062310	X8-LG0542-01
33	SPACER BUSHING	1	Spec. Order	XB-LG0219-01
36	SHIFT LOCK BOSS	1	Spec. Order	X8-LG0658-01

Eager Beaver Trailers 9-15 Ton HA & HDB Miscellaneous Parts & Paint Code List

PART NO.	DESCRIPTION
2054869	Deck Washer
2059133	Hex Head Bolt, Deck Washer, 3/8 x 2 1/2
2059134	Nut, Deck Washer, 3/8-16
2059901	Self-Tapping TORX Head Ramp Screw, 5/16-18 X 2 1/2
2060509	Nose Plate, 9-12 Ton HA & HDB
2060510	Nose Plate, 15HDB & 20-25 Ton
2054819	100,000 # Pintle Hook (Wallace Forge)
2060834	Aluminum Extension Ramps (Set)
2058065	Air Tank Remote Drain Valve
2059175	Glad Hand replacement rubber seal
2055360	Glad Hand - Brake Control Service (Blue)
2055361	Glad Hand - Tank Supply (Red)
2054732	9-12 Ton Safety Chain, 3/8" x 41", with Clevis Hook
2059366	9-12 Ton Weld-on Anchor, Safety Chain, 1/2" x 8"
2061063	9-12 Ton Clevis Hook, 3/8", Spring Loaded
2059431	15-25 Ton Safety Chain, 1/2" x 41", with Clevis Hook
2059432	15-25 Ton Weld-on Anchor, Safety Chain, 5/8" x 8"
2061064	15-25 Ton Clevis Hook, 1/2", Spring Loaded
2062129	Oblong Reflector - Amber
2062130	Oblong Reflector - Red
2060659	Truck Wiring Harness
2059270	Electric Brake Controller, Two - Eight Brakes
2060735	Eager Beaver Trailers Mud Flap - White 24" x 18"
2054733	Weld-on 5/8" Dia. Fixed D-Ring & Clip (6,130# WLL)
2063021	Weld-on Spare Tire Carrier for Hub Piloted Wheel
2063021	Weld-on Spare Tire Carrier for 17.5" Budd Wheel
2063022	Weld-on Spare Tire Carrier for 16 or 16.5" Budd

Eager Beaver Standard Colors	Manufactured After 8/6/10 Dupont Imron	MFG between 9/22/06 and 8/6/10 PPG Color Code
Yellow	H7947	FP827
Red	77968	FP703
Black	1640	FP901
Blue	3759	*
White	1632	FP951

* Custom Mixed Color, No Code Assigned

EASYSLOADER

New 2021 Edition

Operation | Maintenance | Service

9-15 Ton HDB

10-12 Ton HA



ORDER GENUINE



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Sales
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EagerBeaverTrailers.com

Model “CAP” Description

The Cush model “CAP” is designed to work with industry standard 3” wide slipper springs for 10,000 lbs to 15,000 lbs units. The Cush model is designed to have several advantage features over the Dexter HAP model unit in that: it allows you to get axles without the adjustment on the axle, has heavier duty hanger and rocker components, uses the same busing as the Dexter HAP, more common replacement bolts, taller hangers for frame and tire clearance, self-locating thru hole for customer furnished pipe cross-member, full front plated hangers, integrated street side axle alignment.

The “CAP” suspension is available in single, tandem, tri-axle, or multiple axle configurations in order for you to:

- Provide protection and stability to the trailer
- Dampen and reduce the effects of road imperfections
- Securely attach the running gear to the trailer

Inspection Schedule

The following inspection schedule is a guide to help with the preventative maintenance of your suspension system. Your air suspension will provide many trouble free miles of service by using the information in this publication.

“CAP” Original Inspection

When reviewing the suspensions on your trailer for the first time, check the following:

- The axles have been aligned properly.
- The suspension frame bracketry have been properly supported.
- Trailer is level
- All welds are of good and acceptable quality
- All fasteners are in place and securely torqued
- No component interferences are visible
- There should be 1" minimum clearance between top of tire and bottom of trailer structure when axle is at full jounce.
- There should be 2" minimum clearance between inside of tire and trailer frame structure for lateral movement.
- There should be ample fore and aft clearances.

Daily Inspection

A quick visual inspection before operating the trailer will often detect obvious problems such as broken or loose parts.

“CAP” 30-day Inspection

Check clearances around all moving suspension parts such as springs, tires, and equalizer for any signs of wear or component interferences.

Check each of the following:

- Fasteners – Not loose, broken or missing
- Pivot Bushings – Not protruding, off-center, torn or worn
- Frame Hangers – Not worn, cracked, bent, or damaged
- Equalizer – Not worn, cracked, bent, or broken



Giving the World a Better Ride!

CUSH SUSPENSIONS SYSTEMS – SERVICE MANUAL

- Axle Beam – Not cracked, bent, or broken
- Tires – No tire wear that might indicate an alignment problem.
- Axle Alignment – No pivot gear movement or inappropriate wear, axles tracking properly
- Trailer – Trailer not leaning, trailer frame suspension attachment structurally sound, no cracked or missing welds at suspension frame attachment.

“CAP” 90-day Inspection and at every brake lining change

Thoroughly check all items checked at the 30-day inspection. Also check:

- All welded connections for signs of deterioration
- All frame attachment joints and pivoting or clamping joints for problems
- All spring eye bushings
- For any sagging or broken leaf springs

“CAP” Axle Alignment Inspection

Check the “Cush-Align” connection for change of position at 30-day, 90-day, and every brake lining change. Re-align if necessary.

Axle Inspection (general notes, see axle manufacturer’s service manual for details). Visually inspect the all axle components, seals, and hub caps for leaks and oil level every 6,000 miles (if oil bath type). Repair if necessary.

At 100,000 miles or 12 months, visually inspect seal and hub cap for contaminants, oil level, or leaks. Check the wheel bearing adjustment. Repair if necessary.

Suspension Maintenance Items

The Cush trailer air suspension system is designed to minimize service issues. With proper maintenance the life of your suspension system can be extended.

Caution Notes

- Trailer walk can occur due to loading, unloading, or damaged parts
- For safe loading and unloading, leave trailer attached to vehicle.
- Do not tow or pull on vehicle by suspension components.
- Fasteners should never be reused, over-torqued, or lubricated.

Do not operate vehicle suspension with:

- Broken welds or metal parts
- Loose, broken, or missing fasteners or suspension components
- Loss of air pressure in brake system



Giving the World a Better Ride!

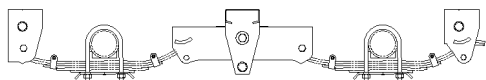
Pub: P080516 Rev: 0
May 20, 2008

Torque Specifications

It is the customer's responsibility to check and tighten fasteners to specified torque at installation, after the suspension has been in operation for 3000 miles, and at suspension inspection cycles. Failure to do so can result in loss of warranty.

- Torque values given are specified for the fasteners in the condition supplied by Cush Corporation.
- DO NOT APPLY ANY ADDITIONAL LUBRICANTS.
- **!CAUTION:** Fasteners should never be reused if removed or loss of clamp load occurs. For proper joint clamping contact Cush for replacement fasteners or use fasteners of equal strength.
- **!CAUTION:** Over-torquing fasteners could result in material failure.

Common Torque Specifications (See Cush Safety and Inspection Sticker on your trailer)



Fastener Torque Specs	Size	Thread	Grade	(Ft*Lbs)		(Nm)	
				Min.	Max.	Min	Max.
Spring Retainer Bolt & Nut	1/2	13-UNC	5/B	65	75	88	102
(10K) U-Bolt & Nut	5/8	11-UNC	8/C	180	210	244	285
Jam Nut	3/4	10-UNC	A/B	80	100	108	136
Spring Pivot Bolt & Nut	3/4	10-UNC	8/C	330	380	447	515
(15K) U-Bolt & Nut	3/4	10-UNC	8/C	330	380	447	515
Equalizer Pivot Bolt & Nut	7/8	14-UNF	8/C	550	600	746	813

10K to 15K Rubber Bushed Spring Suspension Warnings

Alignment: Support vehicle to unload suspension, block equalizers level, loosen spring eye pivots and spring keeper bolts, align vehicle, re-torque fasteners.

Torque: Check torque after "Break-In" period of approximately 1000 miles (1600 km). All bolts and nuts should be checked to insure recommended torque values per inspection schedule. This is required to comply with the CUSH warranty guidelines. It is important that these settings be maintained at all times to insure trouble-free performance.

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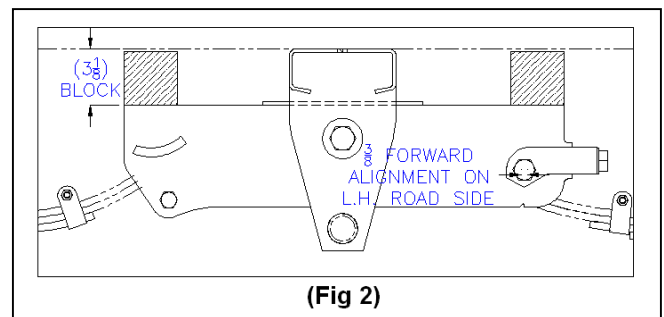
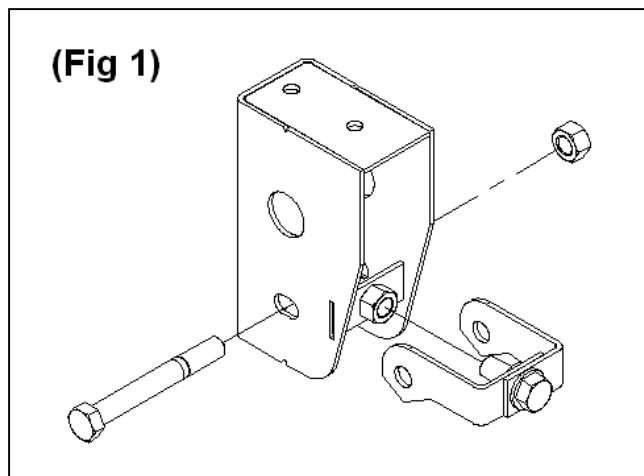
Cush Alignment Style 4

"T-Align" (3/8" alignment on street side / for Spring Suspensions)

The "T-Align" was designed to give our customers that use a leaf spring suspension axle adjustability at the frame hanger rather than having to loosen u-bolts and adjust at the axle seat. The "T-Align" is a positive adjustment that works with springs to eliminate springs affecting the alignment process.

Overview; The "T-Align" pivot joint features a yoke assembly that covers the alignment slot. After alignment, clamp the joint per Cush torque specifications. No weld is required to secure the slip joint after proper tightening.

- Remove load from trailer (empty). Jack the trailer up on a level surface and place appropriate jack stands of sufficient strength/capacity to support the load under the axle near the spring seat areas.
- Tighten all fasteners on the R.H. Curb Side of trailer suspension.
- Check that the **keeper bolts** are not clamping the sides of the springs causing them to be "locked" by the rear hangers or equalizer.
- With ratchet, turn the alignment bolt on the yoke assembly (L.H. ROAD SIDE) so that the pivot bolt is at the "CENTER OF THE SLOT" on the front hanger & equalizer. **DO NOT USE AN IMPACT GUN.** (Fig 1)
- Hand tighten (snug) the pivot nuts of the "T-Align" to be tight enough to hold the joint together but loose enough to permit forward movement of the alignment yoke (able to loosen by hand).
- Block the top side of each equalizer between the frame with 2 blocks (3-1/8" tall) per side, to keep level. (Fig 2)
- Measure from the trailer's kingpin to determine the alignment required on the front axle (L.H. ROAD SIDE) to within 1/16".
- After achieving proper alignment of the forward axle, torque pivot fasteners per Cush installation drawing
- Align additional rearward axles to within 1/16" tolerance of the forward axle per the "T-Align" method.





7700/9700

4-Spring Suspension Series

Maintenance Procedures



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7700/9700 4-Spring Suspension Series

Warning

We strongly emphasize that each of the maintenance procedures that we will discuss have a significant safety purpose. Failure to maintain proper torque values on each of the suspension components can result in a failure of suspension components. Further, use of any visibly worn component can result in a failure. Any of these failures can result in loss of vehicle control and personal injury or death. Safety is the number one concern at Hutchens Industries. We urge you to follow the maintenance procedures set out in our video and in these written instructions.

The first maintenance check should be performed after an initial break-in period of about 1,000 miles. A visual inspection of all suspension components and attachment welds should be performed to reveal any obvious problems, such as cracks or unexpected wear.

During this "walk-around" it is essential to also check the torque on all suspension fasteners. In the course of the initial "shake down" period in which the components of the suspension "seat-in," as much as 25% of the original clamp load on the bolted joints can be lost. After the parts of the suspension have worked together for a very short period of time, re-torquing the bolts is necessary to ensure that undue movement – which results in excessive suspension wear – does not occur.

During the first maintenance check, the trailer's axle alignment should be examined and adjusted to comply with the Truck Trailer Manufacturers Association (TTMA) Recommended Practice #71-05. Alignment should also be checked following any maintenance or repair procedure performed on the suspension. Visual inspections and re-torquing are maintenance procedures that are performed every four months throughout the life of the trailer.

Begin each inspection with a review of the Hutchens torque decal (shown below) for the appropriate torque values for each suspension fastener. The oiled torque values in the first column are for new fasteners with lubricated threads. When you are installing new components, we recommend you lubricate the threads and use the torque values in this column. For maintenance checks on fasteners that have been in service, use the higher torque values in the dry thread column. It is important that you check all bolts and nuts to ensure that the recommended torque values are being maintained.

You cannot rely on your visual inspection to detect loose fasteners. **USE A TORQUE WRENCH!**

 **WARNING**

SAFETY ALERT! (1) FOLLOW ALL TORQUE REQUIREMENTS. (2) DO NOT USE ANY COMPONENT WITH VISIBLY WORN OR DAMAGED THREADS. FAILURE TO FOLLOW THESE SAFETY ALERTS CAN LEAD TO LOSS OF VEHICLE CONTROL, PROPERTY DAMAGE, SERIOUS PERSONAL INJURY OR DEATH.

Hutchens Suspension Torque Requirements
9600-9700 Series (Decal Part Number 16086-01 Rev. J)

After an initial break in period, approximately 1000 miles, and at least every 4 months periodically thereafter, ALL bolts and nuts should be checked to insure that recommended torque values are being maintained.

Oil torque values listed are for new fasteners with lubricated threads. It is recommended that new installations be performed with oiled fasteners. For dry threads which have been in service, use the higher torque values which are noted below.

	OILED	DRY
1 1/8-7 (9600/9700 Rocker Bolt).....	590 lb-ft	790 lb-ft
1-14 or 1-8 (9700 Radius Rod Bolt).....	540 lb-ft	720 lb-ft
7/8-14 (Axle U-Bolts & 9600 Radius Rod Bolt).....	350 lb-ft	470 lb-ft
3/4-16 (Axle U-Bolts).....	310 lb-ft	420 lb-ft
5/8-18 (Radius Rod Clamp Bolt).....	130 lb-ft	170 lb-ft
5/8-18 (Spring Retainer Bolt).....	35 lb-ft	50 lb-ft

Hutchens Industries, Inc., P.O. Box 1427, Springfield, Missouri 65801-1427 Toll Free 1 (800) 654-8824

Hutchens Torque Decal Part No. 16086-01

This decal should be installed on the side of the trailer in a visible location. Decals can be obtained free of charge by contacting Hutchens Industries, Inc.

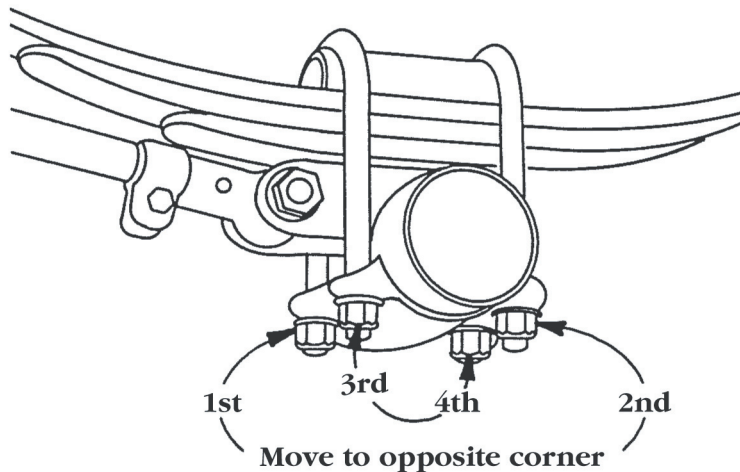
Maintenance Procedures

Now let's look closely at the maintenance requirements for each of the suspension's main component groups.

Axle Clamp Group and Springs

1. Check the torque on the U-bolt nuts by alternately tightening opposing corners of the clamp assembly. See Figure 1.
 - a. When using 7/8" – 14 U-bolts, the nuts should be torqued to a dry level of 470 lb-ft.
 - b. When using 3/4" – 16 U-bolts, the nuts should be torqued to a dry level of 420 lb-ft.

Fig. 1

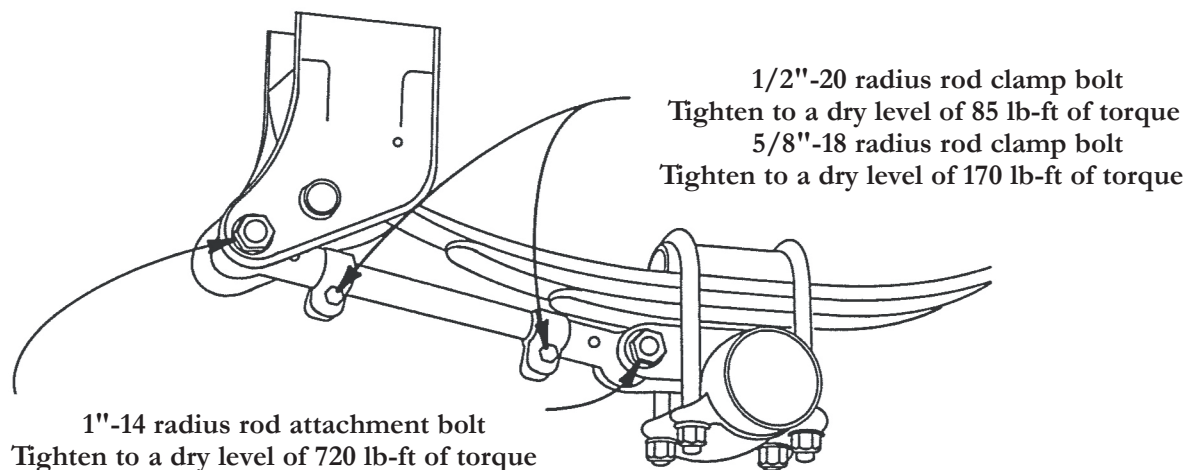


Always carefully inspect the spring and axle clamp components for any signs of wear or cracks, and replace if visible wear or cracks are present.

Radius Rods

- 2a. The 1" – 14 radius rod attachment bolts at the hangers and spring seats should be tightened to a dry level of 720 lb-ft of torque on both the adjustable and non-adjustable radius rods. See Figure 2.

Fig. 2



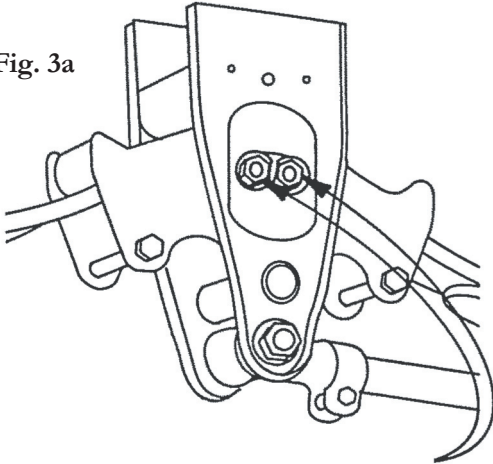
Loose operation of this bolt can result in wear requiring that new components be installed to avoid structural damage. During your visual inspection, if you observe any visible wear or loosening in the bushing, it is imperative that you immediately replace the radius rod bushing and bolt. Failure to replace these components will result in damage to the hanger, spring seat, and/or radius rod.

- 2b. Next check the 1/2" – 20 radius rod clamp bolt, which should be tightened to a dry level of 85 lb-ft of torque. The 5/8" – 18 radius rod clamp bolt should be tightened to a dry level of 170 lb-ft of torque. See Figure 2. If the clamp bolt has not been properly maintained, then wear between the radius rod screw and the eye end may be observed. If so, then the entire radius rod must be replaced. Simply retightening or replacing the clamp bolt will not correct the problem.

Rocker Bushings

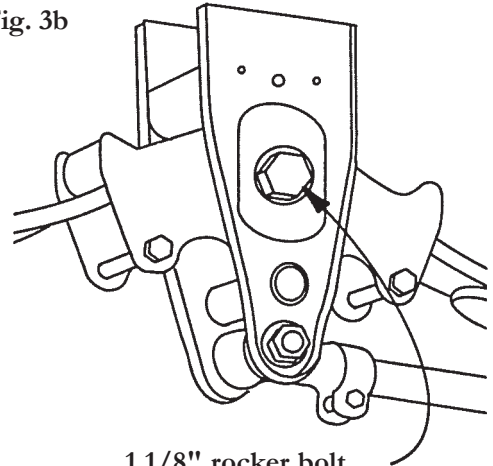
3. The recommended torque values for the rocker bushing clamp bolts are different for each model.
 - a. If you are working on the 7700 model suspension, the 5/8" – 18 rocker step bolts should be tightened to a **dry** level of 170 lb-ft of torque. See Figure 3a.
 - b. If you are working on the 9700 model suspension, the single 1 1/8" – 7 rocker bolt should be tightened to a **dry** level of 790 lb-ft of torque. See Figure 3b.

Fig. 3a



5/8"-18 rocker step bolts
Tighten to a dry level of 170 lb-ft of torque

Fig. 3b



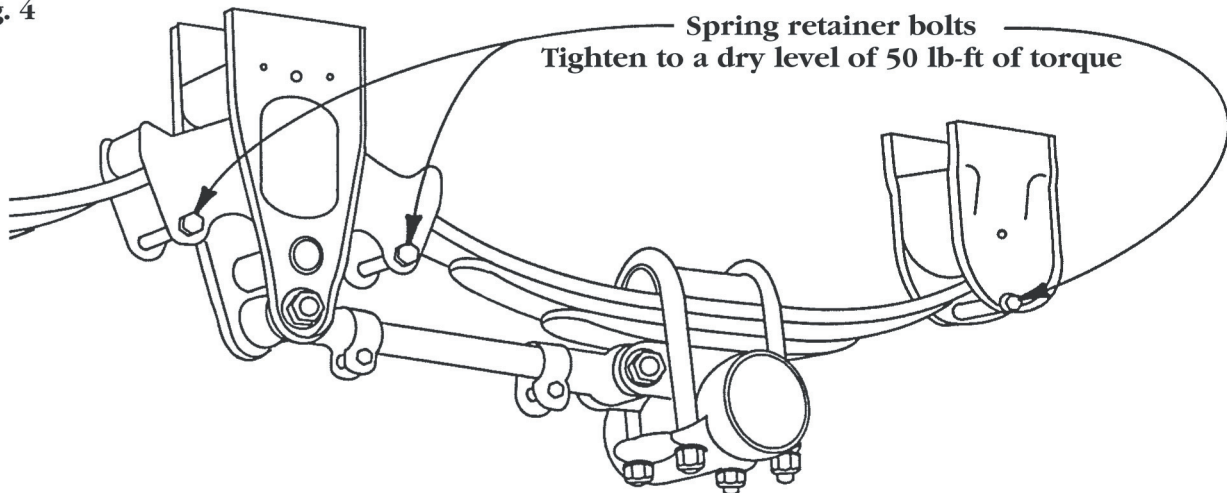
1 1/8" rocker bolt
Tighten to a dry level of 790 lb-ft of torque

During your check, if the bolts are loose a detailed inspection of the rocker is important to ensure that no structural damage has occurred. One way this can be done is by raising the trailer until the trailer weight is taken off the springs. If the rocker is displaced or if the joint is loose, then the rocker should be removed and the rocker and/or rocker bushing be replaced. Again, visually inspect the condition of all rocker/rocker hanger assembly components and replace if visible wear is present.

Hangers

4. Check all of the spring retainer bolts found in the rockers and rear hangers. A **dry** value of 50 lb-ft of torque should be maintained on all of these bolts. See Figure 4.

Fig. 4



Loose fasteners that are allowed to operate for any period of time will result in irreversible suspension damage and possible loss of vehicle control. **Retightening a worn fastener will not correct a situation created by loose operation!**



Hubs/Drums/Bearings

Hub Removal

Whenever the hub equipment on your axle must be removed for inspection or maintenance the following procedure should be utilized.

1. Elevate and support the trailer unit per manufacturers' instructions.

CAUTION

Do not lift or support the trailer on any part of the axle or suspension system. Never go under any trailer unless it is properly supported on jack stands which have been rated for the load. Improperly supported vehicles can fall unexpectedly and cause serious injury or death.

2. Remove the wheel(s).
3. Remove the grease or oil cap by unscrewing it counterclockwise while holding the hub stationary.
4. Bend the locking tang down from the outer spindle nut and remove spindle nut.
5. Remove the tang washer and unscrew the inner spindle nut (counterclockwise) and remove the spindle washer.
6. Remove the hub from the spindle, being careful not to allow the outer bearing cone to fall out. The inner bearing cone will be retained by the seal.

Note: A gear puller may be necessary to remove hub from spindle.

Brake Drum Inspection

There are two areas of the brake drum that are subject to wear and require periodic inspection. These areas are the drum surface where the brake shoes make contact during stopping and the armature surface where the magnet contacts (only in electric brakes.)

The drum surface should be inspected for excessive wear or heavy scoring. If worn more than .020" oversized, or the drum has worn out of round by more than .015", then the drum surface should be re-machined. If scoring or other wear is greater than .090" on the diameter, the drum must be replaced. When turning the drum surface, the maximum rebore diameter for a 12¼" brake drum is 12.340".

For electric brakes only, the machined inner surface of the brake drum that contacts the brake magnet is called the armature surface. If the armature surface is scored or worn unevenly, it should be refaced to a 120 micro inch finish by removing not more than .030" of material. To insure proper contact between the armature face and the magnet face, the magnets should be replaced whenever the armature surface is refaced and the armature surface should be refaced whenever the magnets are replaced.

Note: It is important to protect the wheel bearing bores from metallic chips and contamination which result from drum turning or armature refacing operations. Make certain that the wheel bearing cavities are clean and free of contamination before reinstalling bearing and seals. The presence of these contaminants will cause premature wheel bearing failure.

Bearing Inspection

Wash all grease and oil from the bearing cone using a suitable solvent. Dry the bearing with a clean, lint-free cloth and inspect each roller completely. If any pitting, spalling, or corrosion is present, then the bearing must be replaced. The bearing cup inside the hub must be inspected.

IMPORTANT: Bearings must always be replaced in sets of a cone and a cup.



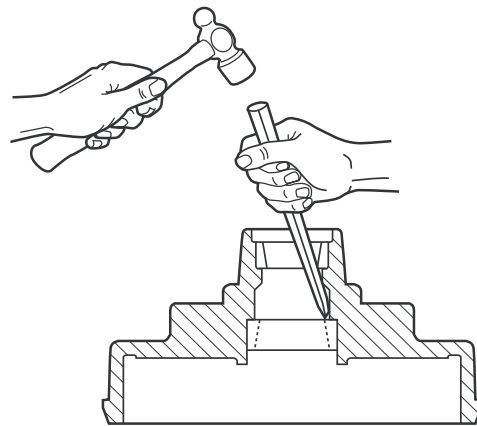


⚠ CAUTION

Be sure to wear safety glasses when removing or installing force fitted parts. Failure to comply may result in serious eye injury.

When replacing the bearing cup proceed as follows:

1. Place the hub on a flat work surface with the cup to be replaced on the bottom side.
2. Using a brass drift punch, carefully tap around the small diameter end of the cup to drive out.
3. After cleaning the hub bore area, replace the cup by tapping in with the brass drift punch. *Be sure the cup is seated all the way up against the retaining shoulder in the hub.*



Replace only with bearings as specified in the Bearing Replacement Chart.

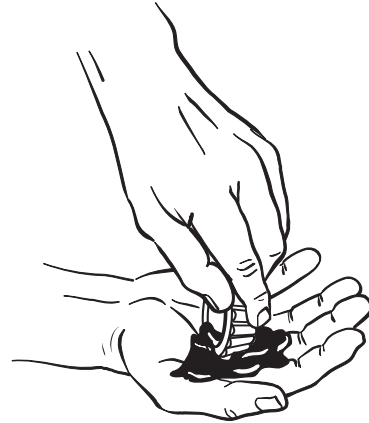
Bearing Lubrication - Grease

CAUTION

Do not mix Lithium, calcium, sodium or barium complex greases due to possible compatibility problems. When changing from one type of grease to another, it is necessary to insure all the old grease has been removed.

Grease should be replaced every 12,000 miles or 12 months. Prior to repacking bearings, all old grease should be removed from the wheel hub cavity and bearings. Bearings should be packed by machine if possible. If a machine is unavailable, packing by hand method is acceptable. The method to pack bearing cones is as follows:

1. Place a quantity of grease onto the palm of your hand.
2. Press a section of the widest end of bearing into the outer edge of the grease pile closest to the thumb forcing grease into the interior of the bearing between two adjacent rollers.
3. Repeat this while rotating the bearing from roller to roller.
4. Continue this process until you have the entire bearing completely filled with grease.
5. Before reinstalling, apply a light coat of grease onto the bearing cup mating surface.



Bearing Lubrication - Oil

If your axles are equipped with oil lubricated hubs, then your lubrication procedure is to periodically fill the hub with a high quality hypoid gear oil to the level indicated on the clear plastic oil cap. The oil can be filled through the rubber plug hole in the cap.

Recommended Wheel Bearing Lubrication Specifications

Grease:

Thickener Type	Lithium Complex
Dropping Point	230°C (446°F) minimum
Consistency	NLGI No. 2
Additives	EP, Corrosion & Oxidation Inhibitors
Base Oil	Solvent Refined Petroleum Oil
Base Oil Viscosity	@40°C (104°F) 150cSt(695 SUS) Min.
Viscosity Index	80 Minimum
Pour Point	-10°C (14°F) Minimum





Approved Sources:

Mobil Oil	Mobilgrease HP
Exxon/Standard	Ronex MP
Kendall Refining Co.	Kendall L-427
Ashland Oil Co.	Valvoline Val-plex EP Grease
Pennzoil Prod. Co.	Premium Wheel Bearing Grease 707L

Oil:

SAE 90 Hypoid Gear (Hypoid Rear Axle Oil)

Use only with hubs equipped with oil option.

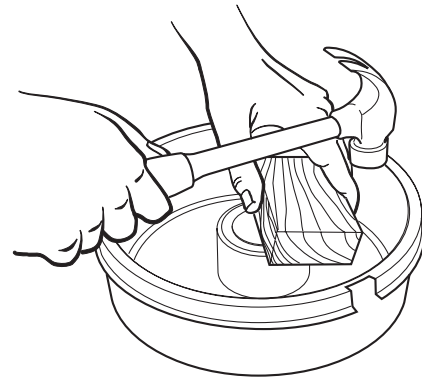
Approved Sources:

Union Oil Co.	Union MP, Gearlube - LS
Exxon Co. USA	Gear Oil GX 80W-90
Mobil Oil Corp.	Mobilube SHC 75W-90
Pennzoil Prod. Co.	Multipurpose Gear Lubricant 4092, Multipurpose Gear Lubricant 4096

Seal Inspection and Replacement

Whenever the hub is removed, inspect the seal to assure that it is not nicked or torn and is still capable of properly sealing the bearing cavity. If there is any question of condition, replace the seal. Use only the seals specified in the Seal Replacement Chart. To replace the seal:

1. Pry the seal out of the hub with a seal puller. Never drive the seal out with the inner bearing as you may damage the bearing.
2. Apply a PERMATEX sealant to the outside of the new seal.
3. Tap the new seal into place using a clean, hard wood block.



Installation/Adjustment

For ABS installation:

- A. Assure that the ABS sensor is pushed fully into its retainer clip. (Sensor tip is as far outboard as possible.)

- B. Install hub and drum squarely to the spindle centerline so that the exciter ring inside the drum will contact the sensor tip and push it back to the proper sensor to exciter ring running clearance. (Gap should not exceed 1/16" inch.)
- C. Proceed with step 1.
1. Install the bearing and washer into the hub. Thread on the inner nut, rotate the hub and tighten the nut until the hub will not rotate. This requires a minimum of 100 ft-lb. of torque.
 2. Loosen the nut to remove preload torque.
 3. Hand tighten the nut, then back it off ¼ to ⅜ turn.
 4. Place the tang washer on the spindle and bend two tangs inward over the nut. This will keep the inner nut from turning while torque is applied to the outer nut.
 5. Install the outer nut and torque it to 100-150 ft-lb. Insure that the inner nut does not turn . Bend two tangs from the tang washer over the outer nut flats to secure.
 6. Install cap with the O-ring and plug installed. Rotate the hub and check the bearing adjustment. The allowable end play is .001"- .010".

 **CAUTION**

FAILURE TO BACK OFF THE INNER ADJUSTING NUT COULD CAUSE BEARING AND AXLE SPINDLE OVERHEATING OR DAMAGE, WHICH COULD RESULT IN THE WHEEL LOCKING UP OR COMING OFF DURING VEHICLE OPERATION AND LEAD TO AN ACCIDENT, INJURIES OR DEATH.

 **CAUTION**

FAILURE TO TORQUE THE OUTER LOCKNUT PROPERLY COULD CAUSE THE WHEEL END TO COME OFF DURING VEHICLE OPERATION WHICH COULD RESULT IN AN ACCIDENT, INJURIES OR DEATH.



 **CAUTION**

Do not attempt to repair or modify a wheel. Even minor modifications can have a great effect. Do not install a tube to correct a leak through the rim. If the rim is cracked, the air pressure in the tube may cause the pieces of the rim to explode with great force and can cause serious injury or death.

Torque Requirements

It is extremely important to apply and maintain proper wheel mounting torque on your trailer axle. Torque is a measure of the amount of tightening applied to a fastener (nut or bolt) and is expressed as length times force. For example, a force of 90 pounds applied at the end of wrench one foot long will yield 90 lbs.-ft. of torque. Torque wrenches are the best method to assure the proper amount of torque is being applied to a fastener.

 **CAUTION**

Wheel nuts or bolts must be tightened and maintained at the proper torque levels to prevent loose wheels, broken studs, and possible dangerous separation of wheels from your axle, which can lead to an accident, personal injuries or death.

Be sure to use only the fasteners matched to the cone angle of your wheel (usually 60° or 90°.) The proper procedure for attaching your wheels is as follows:

1. Start all bolts or nuts by hand to prevent cross threading.
2. Tighten bolts or nuts in the following sequence.
3. The tightening of the fasteners should be done in stages. Following the recommended sequence, tighten fasteners per wheel torque requirements diagram.

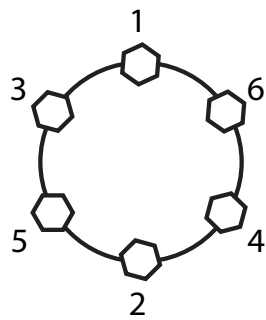




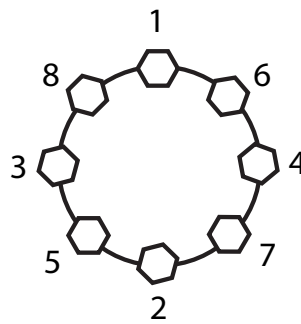
4. Wheel nuts/bolts should be torqued before first road use and after each wheel removal. Check and re-torque after the first 50 miles and again at 100 miles. Check periodically thereafter.

Wheel Torque Sequence

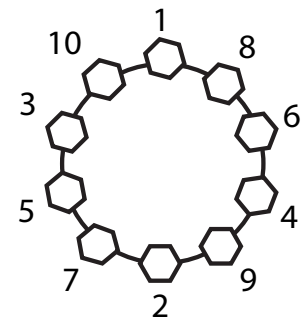
Description	Application	Part No.	Torque	
			Min Ft-Lbs.	Max Ft-Lbs.
$\frac{5}{8}$ -18 90° Cone Nut	Clamp Ring 033-052-01	006-109-00	190	210 Greased Threads
$\frac{3}{4}$ -10 Hex Nut	Demountable Rim Clamp	006-117-00	210	260
$\frac{3}{4}$ -16 Spherical Nut	Sgl Whl	006-064-01,02	450	500
	Inner Dual	006-069-01,02	450	500
$1\frac{1}{8}$ -16 Spherical Nut	Outer Dual	006-070-01,02	450	500
$\frac{5}{8}$ -18 Flange Nut	Wheels	006-058-00	275	325



6 BOLT



8 BOLT

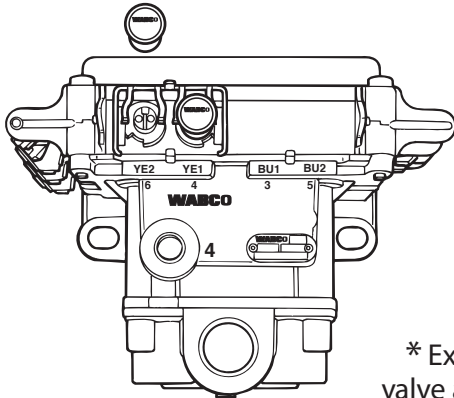


10 BOLT

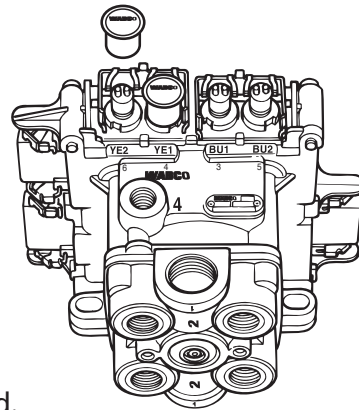
MERITOR WABCO

Easy-Stop™ and Enhanced Easy-Stop with PLC Trailer ABS Blink Code Diagnostic Guide

Easy-Stop™
2S/1M Basic
ECU/Modulator Valve Assembly



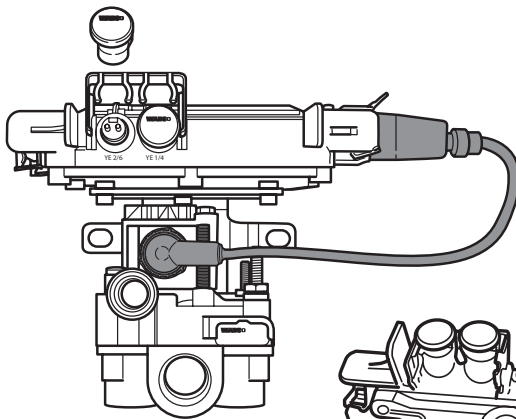
Easy-Stop™ 2S/1M,
2S/2M*, 4S/2M*, 4S/3M*
ECU/Modulator Valve Assembly



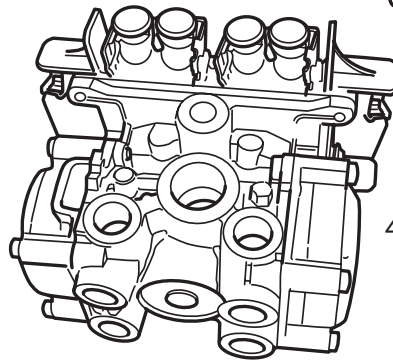
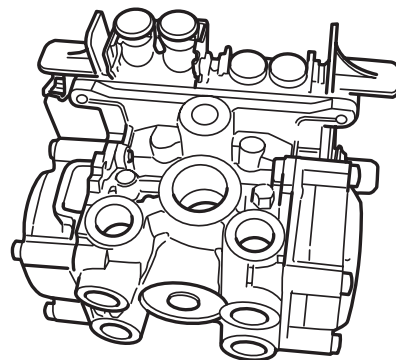
* External modulator valve and cable required.

Enhanced Easy-Stop™ with PLC

2S/1M Basic ECU/Single
Modulator Valve Assembly



2S/2M Standard ECU/Dual
Modulator Valve Assembly



2S/2M, 4S/2M,
4S/3M * Premium ECU/Dual
Modulator Valve Assembly

* External modulator valve and cable required.

This publication covers all Enhanced Easy-Stop™ ECU/Valve Assemblies and Easy-Stop™ ECU/Valve Assemblies with serial numbers 3080002746 and higher. For Easy-Stop™ ECU/Valve Assemblies with serial numbers 3080002745 or lower, please call 1-800-535-5560 for assistance. Serial numbers are located on the bar-coded label on the side of the ECU/Valve Assembly.

Troubleshooting and Repair

Enhanced Easy-Stop™ blink codes may be accessed by ignition circuit and counting flashes on the trailer ABS indicator lamp on the side of the trailer.

To access blink codes:

- Turn ignition ON for one second,
- Turn ignition OFF for one second,
- Turn ignition ON and count the flashes on the ABS lamp.

With Enhanced Easy-Stop™, the Blink Code tool and the ABS Lamp on the trailer do not function simultaneously.

BLINK CODE	CAUSE OF FAULT	ACTION REQUIRED
0	No faults.	System O.K. No action needed.
3	Sensor BU1: Cable break, short circuit or out of adjustment.	Check sensor, sensor cable and cable connection; adjust sensor; or check for excessive hub runout, a sensor gap that is too wide or damage to the tooth wheels.
4	Sensor YE1: Cable break, short circuit or out of adjustment.	Check sensor, sensor cable and cable connection; adjust sensor; or check for excessive hub runout, a sensor gap that is too wide or damage to the tooth wheels.
5	Sensor BU2: Cable break, short circuit or out of adjustment.	Check sensor, sensor cable and cable connection; adjust sensor; or check for excessive hub runout, a sensor gap that is too wide or damage to the tooth wheels.
6	Sensor YE2: Cable break, short circuit or out of adjustment.	Check sensor, sensor cable and cable connection; adjust sensor; or check for excessive hub runout, a sensor gap that is too wide or damage to the tooth wheels.
7	Ext. Modulator (RD): Short to power, cable break or open, short to ground or cable damaged, or ECU/Valve Assembly Failure.	Check ABS valve and cable. Replace as required.
9	Easy-Stop™: External Modulator (BU) Enhanced Easy-Stop™: Internal Modulator Failure, Inlet Valve #2: Short to power, cable break or open, short to ground or cable damaged, or ECU/Valve Assembly Failure.	Easy-Stop™ Check ABS valve and cable. Replace as required. Enhanced Easy-Stop™ Verify correct installation. If code continues, contact Meritor WABCO for assistance.
10	Easy-Stop™: ECU/Valve Assembly Modulator (YE) Enhanced Easy-Stop™: Internal Modulator Failure, Inlet Valve #1: Short to power, cable break or open, short to ground or cable damaged, or ECU/Valve Assembly Failure.	Easy-Stop™ Check ABS valve and cable. Replace as required. Enhanced Easy-Stop™ Verify correct installation. If code continues, contact Meritor WABCO for assistance.
11	Internal Modulator Failure, Outlet Valve. Enhanced Easy-Stop™ Only.	Verify correct installation. If code continues, contact Meritor WABCO for assistance.
14	Power Supply: Over or under voltage, current low, or internal failure.	Repair vehicle power supply, check vehicle voltage output and connector; check ECU's configuration.
15	ECU — Internal Failure Internal failure.	Internal failure, contact Meritor WABCO.
16	SAE J1708 Failure	Internal failure, contact Meritor WABCO.
17	Generic SAE J2497 (PLC) Failure	Internal failure, contact Meritor WABCO.
18	Generic I/O Failure	Verify correct electrical installation. Check power supply. Make necessary corrections.

Note:(Easy-Stop® only) If the blink code indicates there are no faults, but the trailer ABS indicator lamp continues to come on and stay on when you apply the brakes to the moving vehicle, there is an intermittent fault that must be repaired. Refer to Maintenance Manual No. 33, Expert Mode Diagnostics.

For further information on blink code diagnostics, refer to Maintenance Manual No. 33 (Easy-Stop™), Maintenance Manual MM-0180 (Enhanced Easy-Stop™) or call: **800-535-5560**

These manuals are posted on our website at meritorwabco.com

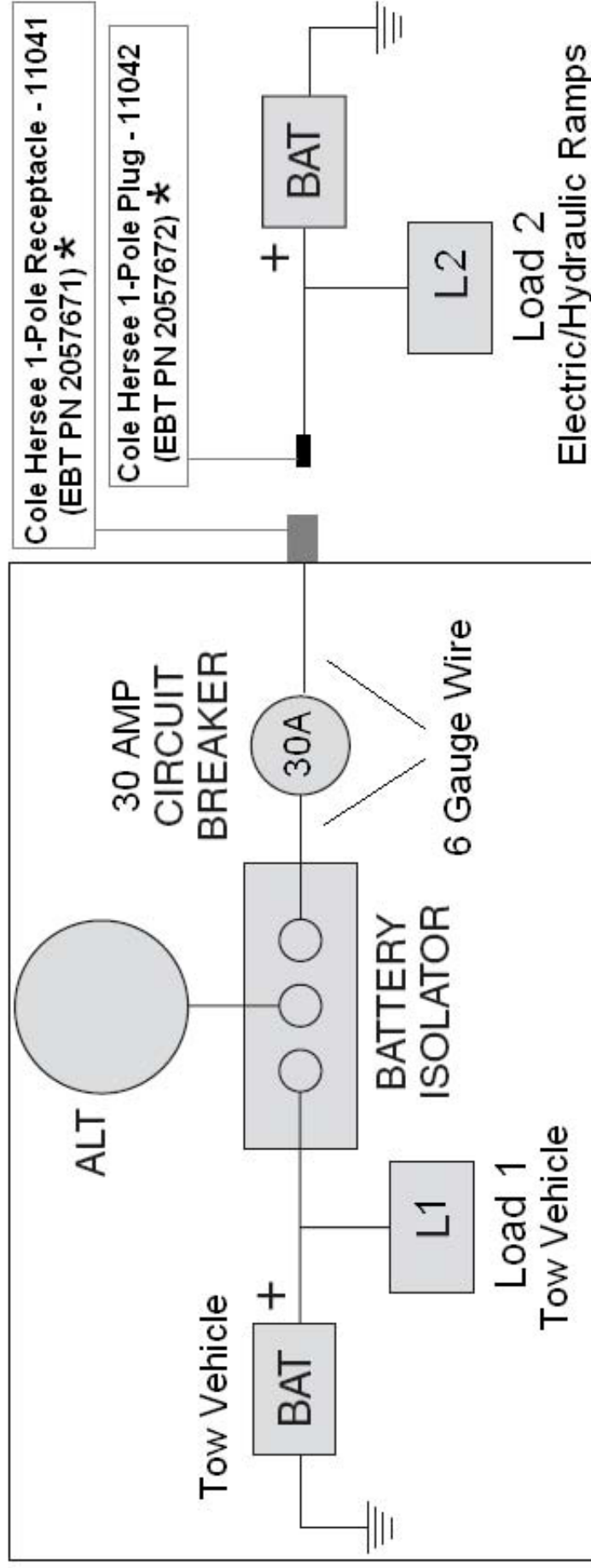
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Revised 12-07
16579/22882

Eager Beaver Trailers - Hydraulic Ramp Wiring



Tow Vehicle Wiring

Optimal hookup (shown) - 6 gauge wire with 30 Amp Circuit Breaker and Dual Battery Isolator
 Optional hookup - 6 gauge wire with 30 Amp Circuit Breaker or Fuse Connected directly to Tow Vehicle positive battery post or other suitably rated charging source

*Cole Hersee Receptacle with 25' of 6 gauge wire provided with trailers which have hydraulic ramps. Additional components for tow vehicle (ie, fuse & battery isolator) not included.

PNs are for replacement Plug and Receptacle only, and do not include the 6 gauge wire.

Additional Part Numbers for Plug & Receptacle with 6 gauge wire as follows:
 PN 2062294 - Plug w/ 40' 6 Gauge Wire. PN 2062295 - Receptacle w/ 25' 6 Gauge Wire.

Trailer Wiring

Electric/Hydraulic Ramps

OEM Service Manuals

Complete Service Manuals for the various OEM components are available for download from the internet at the following web site locations.

Cush Suspensions	http://cushcorp.com/pdfs/P1203-1_Manual.pdf
Hutch 9700 Suspension	http://www.hutchensindustries.com/pdfs/resource_suspensionMaintenance.pdf
Dexter Axle Maintenance	http://www.dexteraxle.com/products___literature
Meritor Wabco ABS (Premium ECU)	http://www.meritorwabco.com/MeritorWABCO_document/mm0180.pdf

If you do not have internet access, please call Eager Beaver Trailers at 800-257-8163 and we will send you the OEM Service Manuals on CD Rom.

Eager Beaver Trailers Parts Manuals may also be downloaded from the internet at www.eagerbeavertrailers.com