

Parts & Service Manual

**35-60 TON GSL
LOWBOYS**

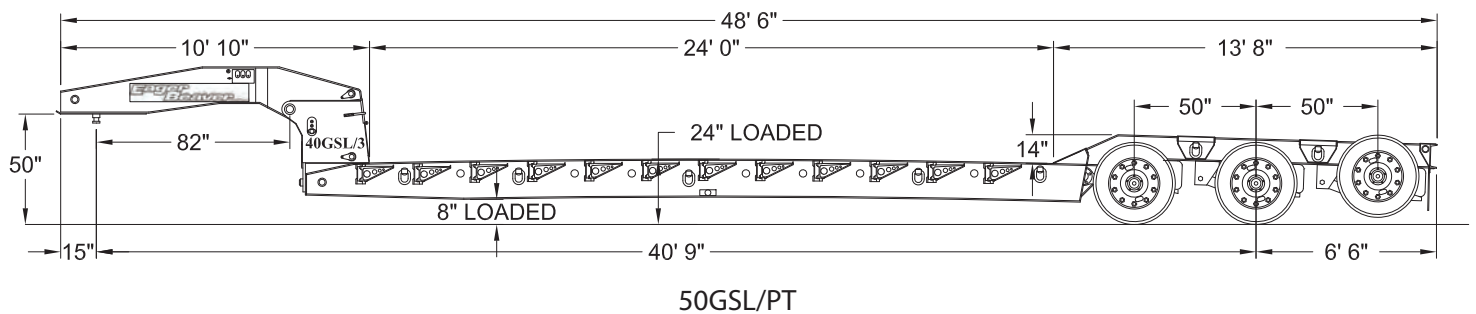
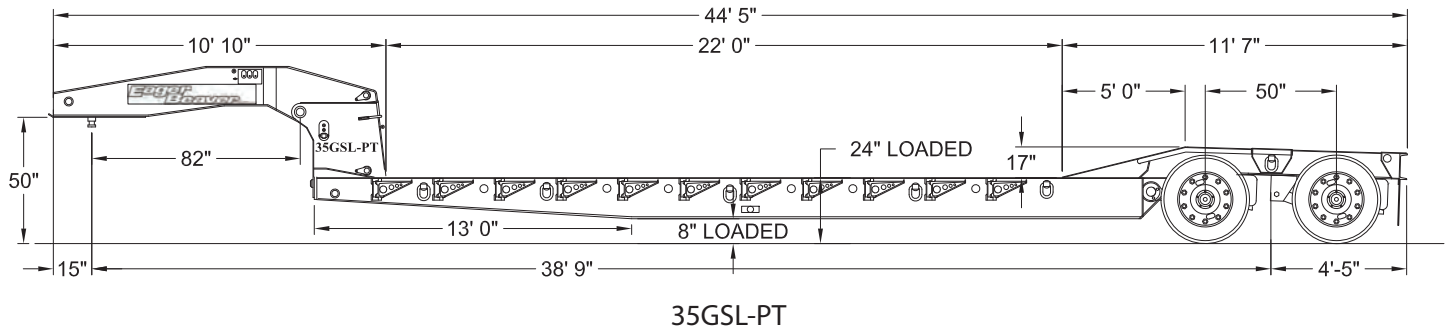
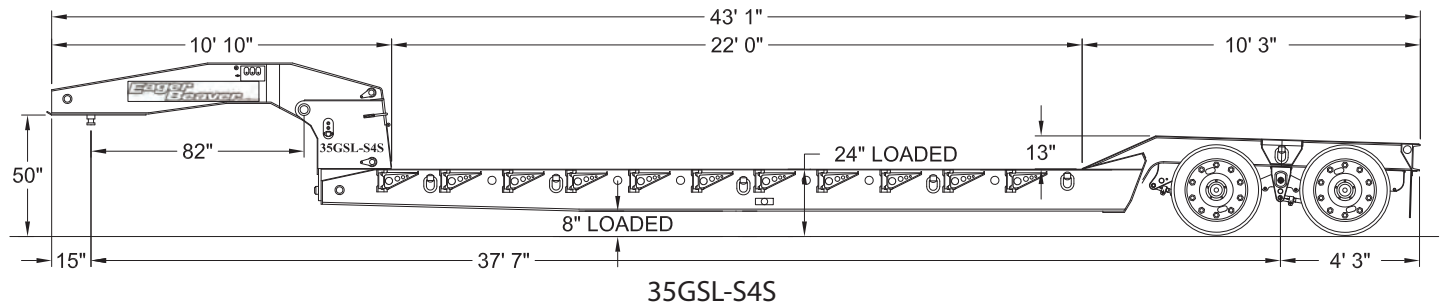
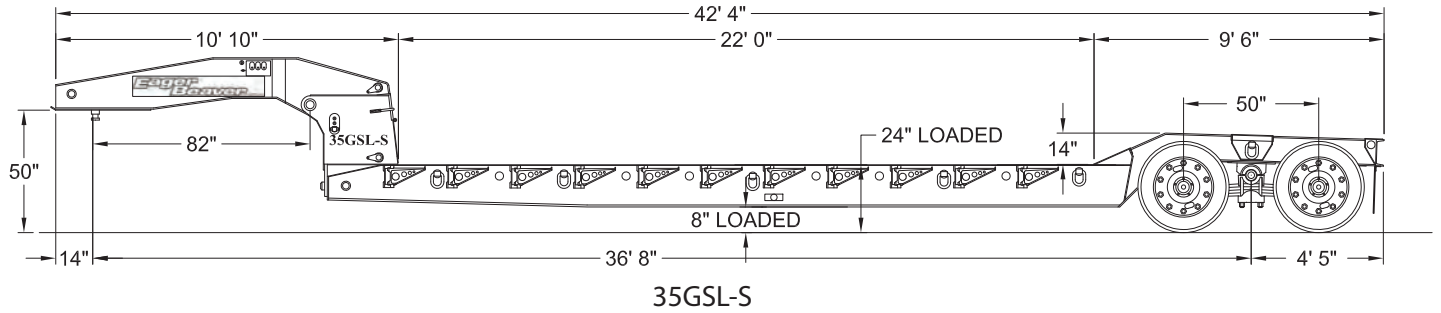
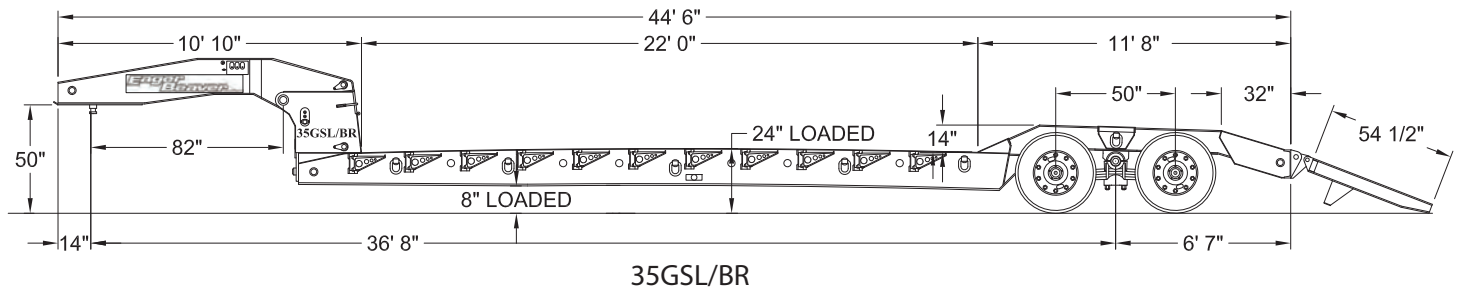
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Parts
(800) 338-7088

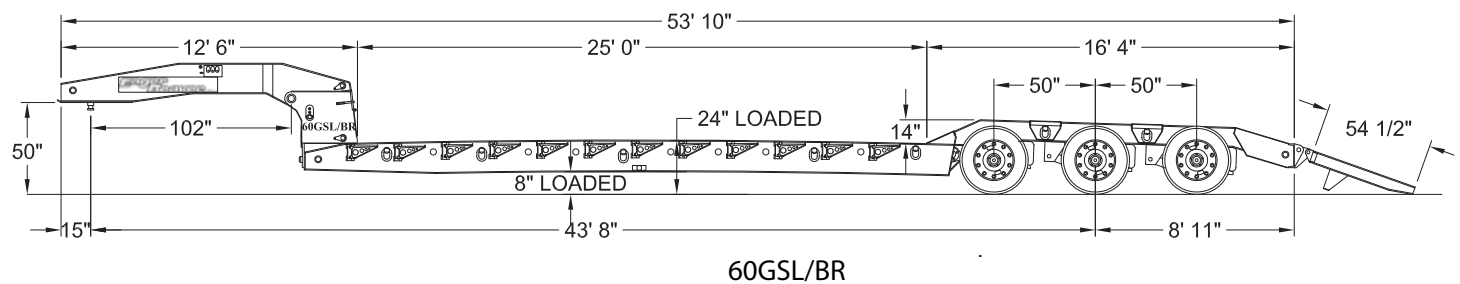
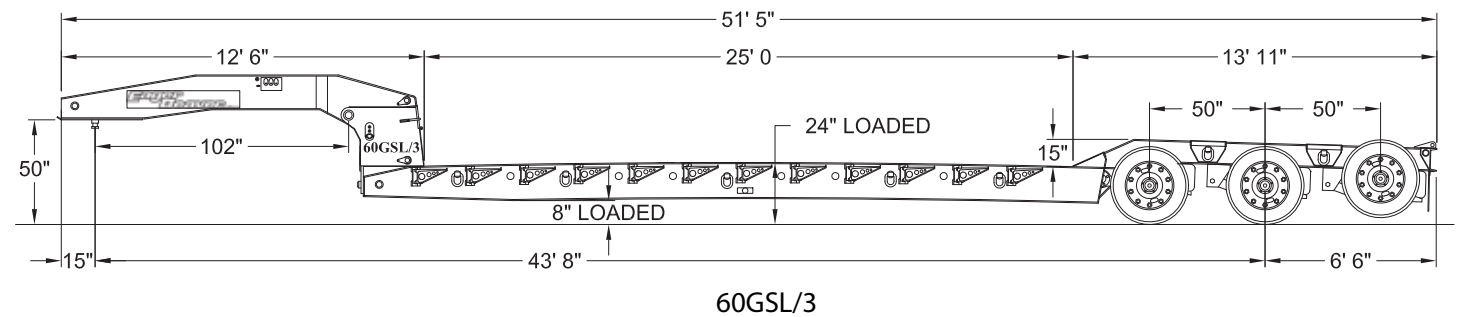
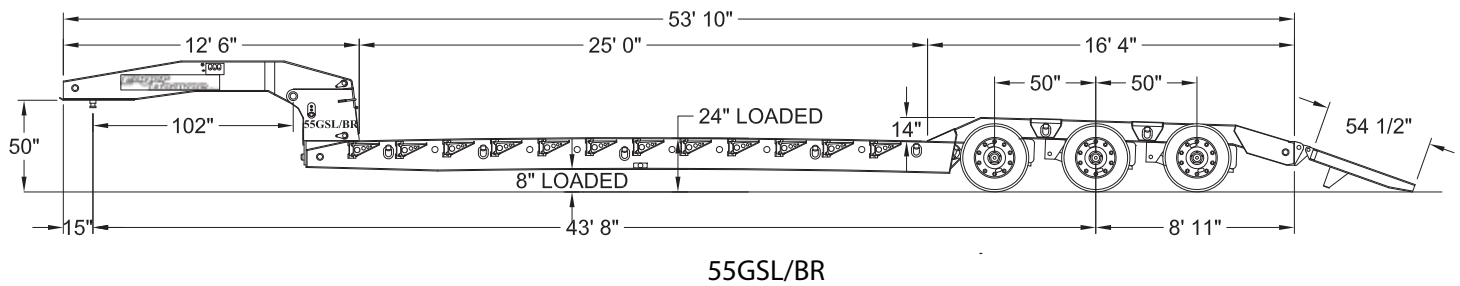
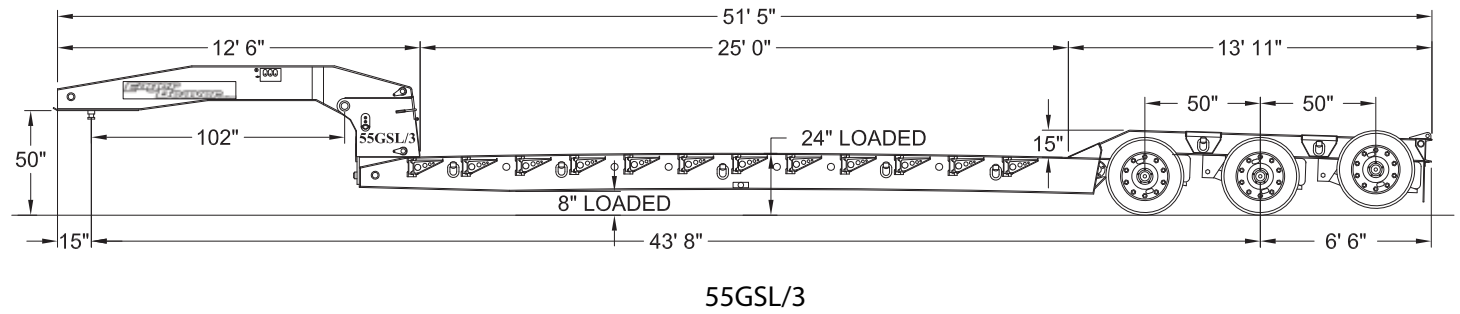
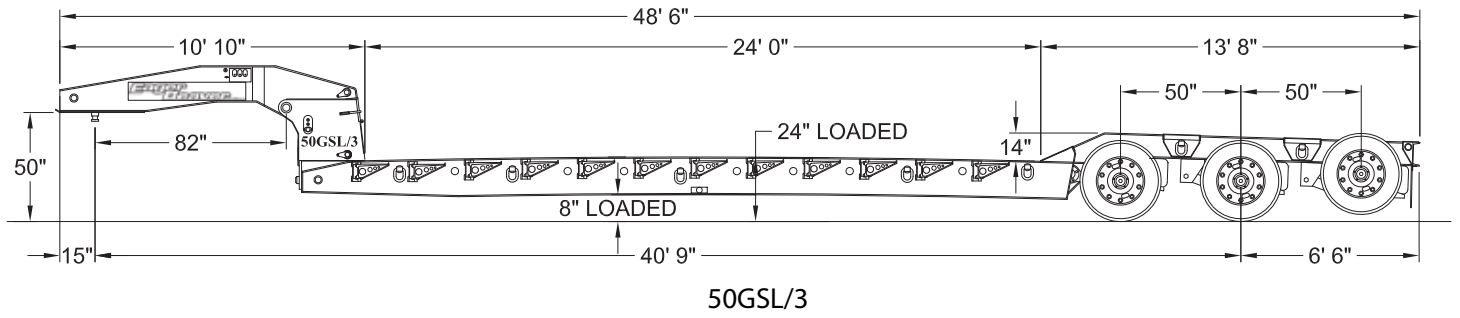
Customer Service
(800) 722-8803
ext: 3251

Sales
(800) 257-8163

STANDARD MODEL DRAWINGS

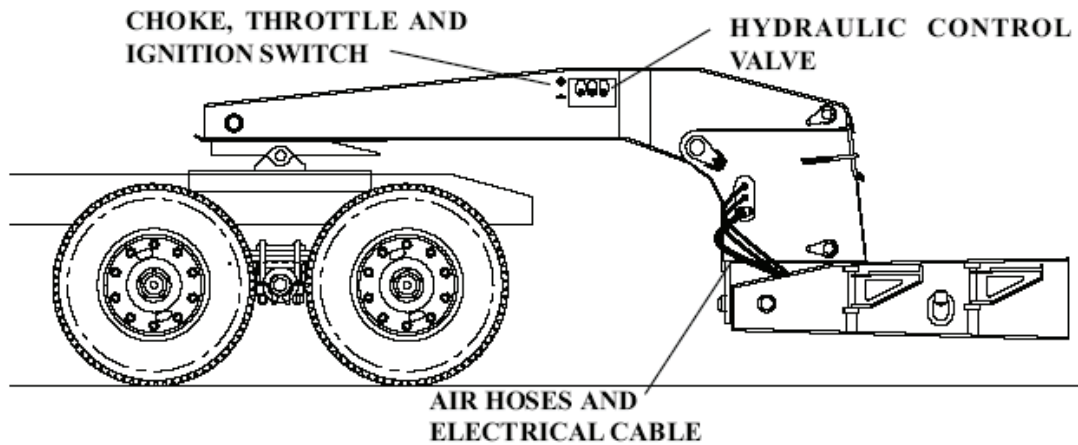


STANDARD MODEL DRAWINGS



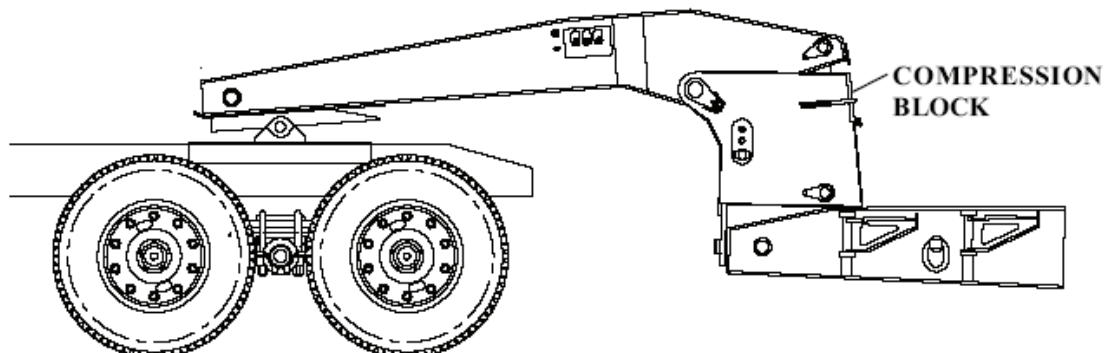
GOOSENECK OPERATION

35-60 GSL's



Gooseneck Disconnection

1. Disconnect the air lines and electrical cable which run from the bed to the gooseneck. Store the air hoses and electrical cable down into the storage area in the deck.
2. Start the engine to the power pack in the gooseneck or attach the tractor PTO system hydraulic lines and engage the PTO.

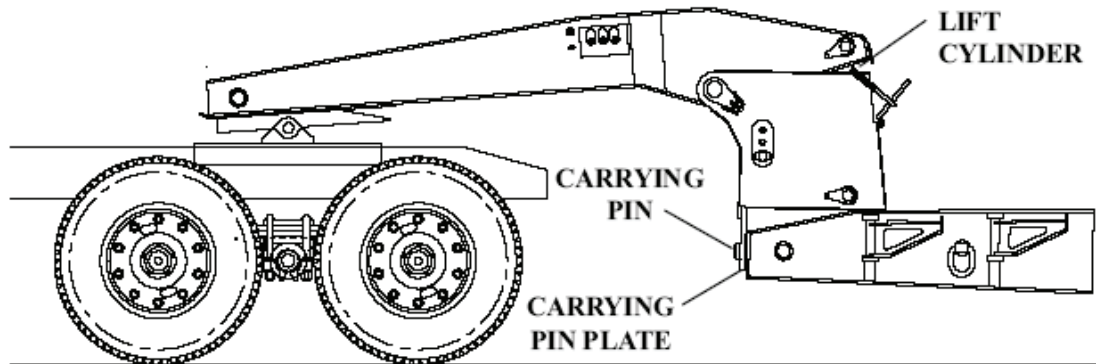


Note: The engine speed may have to be increased to provide proper power to raise the gooseneck.

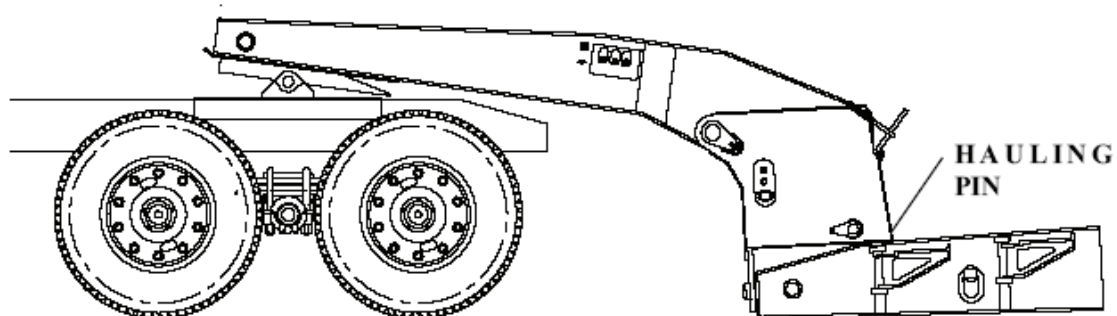
3. Raise the lift cylinder by moving the middle valve handle marked "B" up and raise the gooseneck enough so the hinged compression blocks can be flopped back to the unlocked position.

GOOSENECK OPERATION

35-60 GSL's



4. Lower the lift cylinders down by moving the middle valve handle marked "B" down until the bed rests on the ground. Hold the valve lever "B" in the down position until the gooseneck carrying pins on the front of the bed are approximately centered in the triangular shaped holes in the carrying plates on the lower gooseneck.

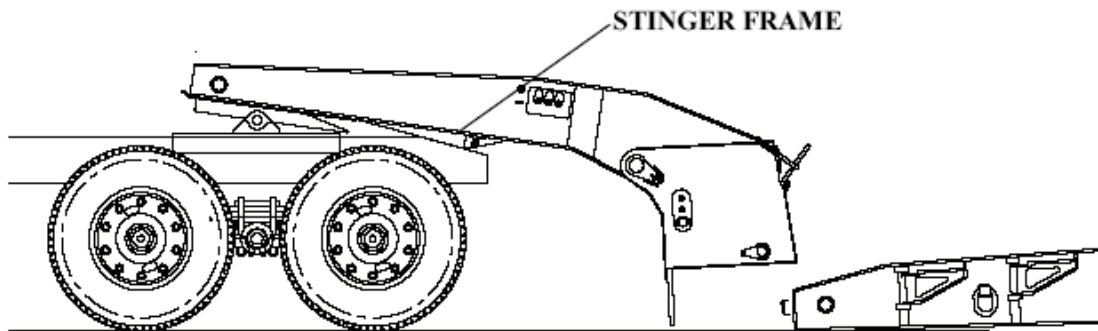


5. Unlock the hauling pin by moving the rear valve handle marked "C" up.

Note: check to make sure the hauling cylinder is completely retracted.

GOOSENECK OPERATION

35-60 GSL's



6. Using the forward valve handle "A", lower the stinger frame down onto the truck frame and force it down until gooseneck starts to lift. Adjust the height so that the gooseneck is just lifted off the trailer bed. Pull gooseneck away from trailer.

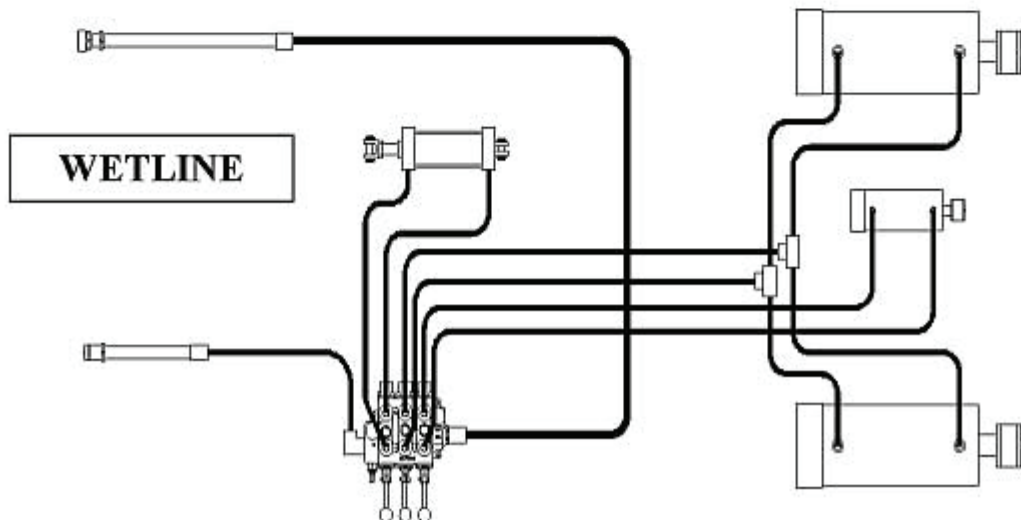
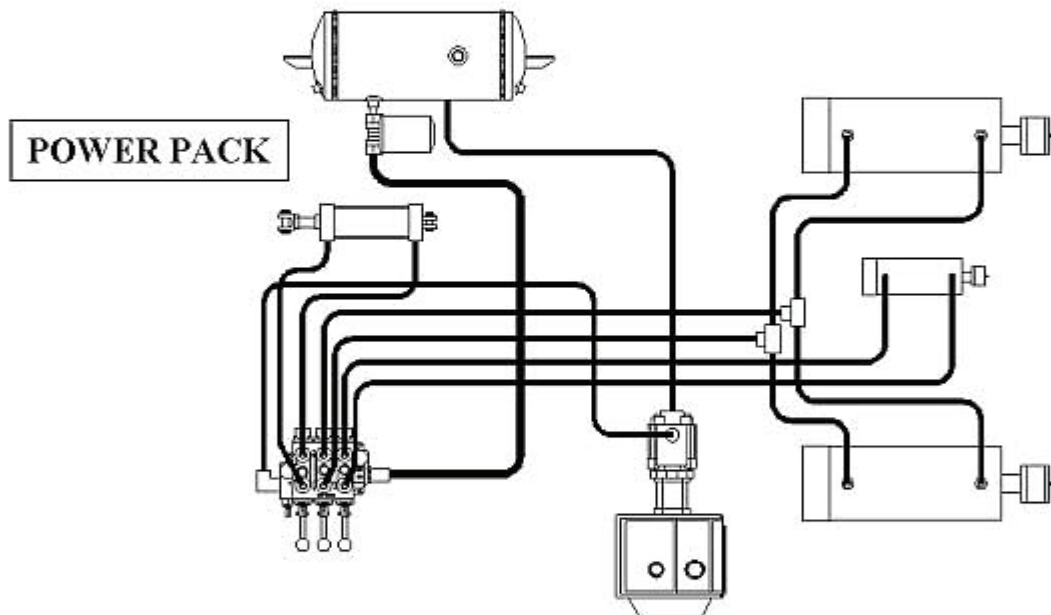
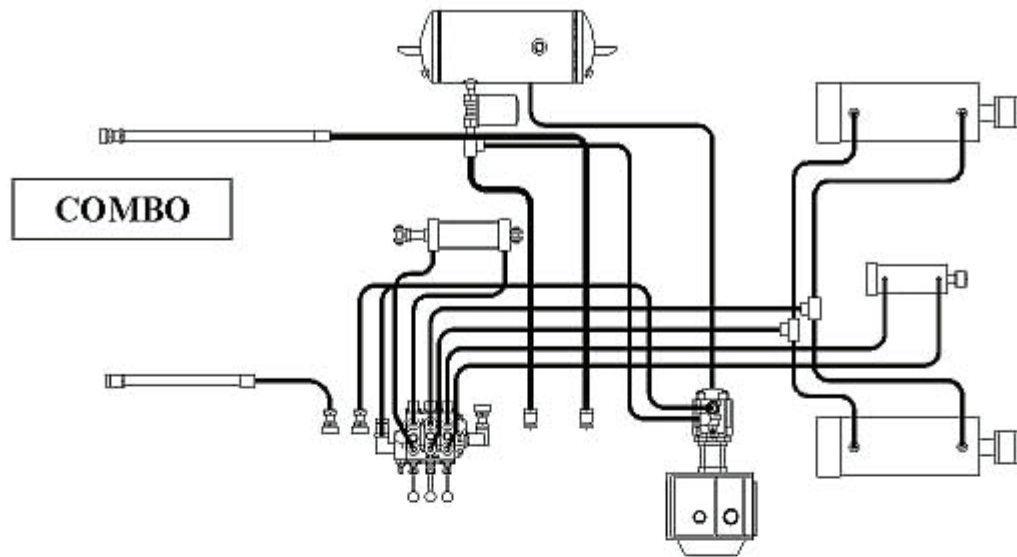
Gooseneck Connection

1. Reverse the steps for gooseneck disconnection

⚠ CAUTION!

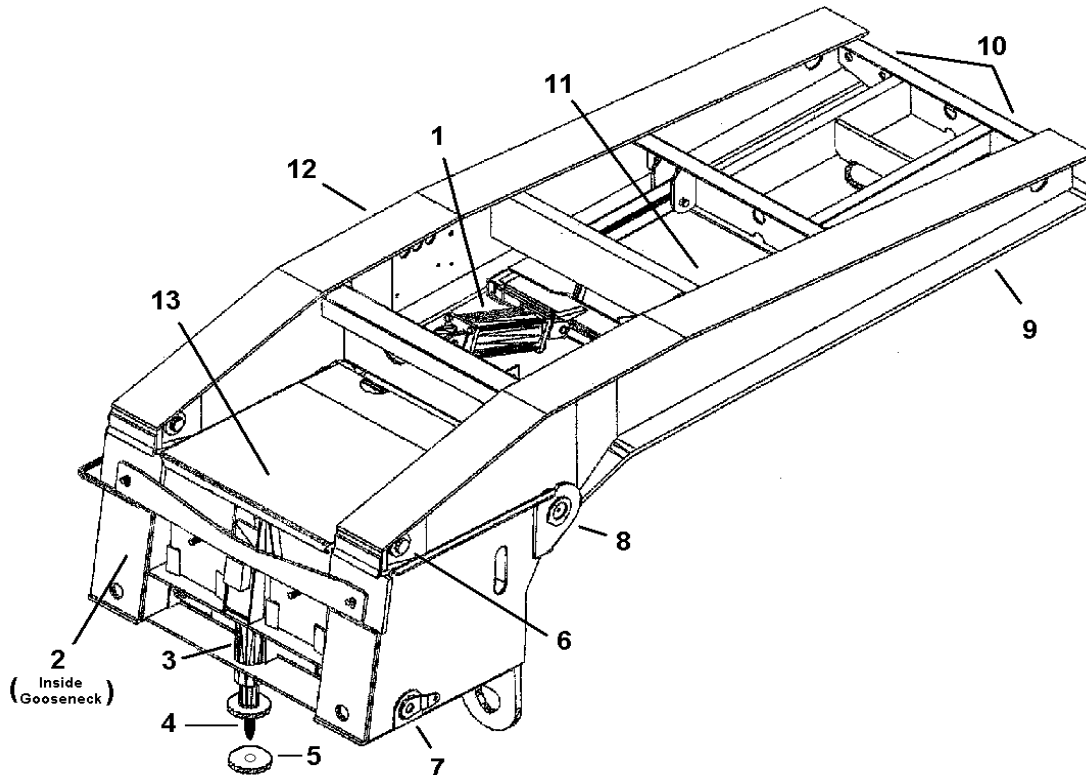
Be sure to check that the hauling pin is fully engaged or the possibility exists that the gooseneck can become disconnected in use.

Gooseneck Hydraulic Systems



Eager Beaver Trailers GSL Hydraulic Components & Cylinder Pins

Item	Hydraulic System Components	Part #	Packing Kit Only PN	Notes
1	Stinger Cylinder - All GSL	2060898	2060804	
1	Pin Set - Stinger Cylinder	2060965	N/A	
1	Clevis End - Stinger Cylinder	2062209	N/A	
2	35-40 GSL Lift Cylinder After 1987	2060513	2059965	Pre 1987 requires bottom mounting tube trim
2	35 & 50 GSL-PT Lift Cylinder after 8/2002	2062100	2062235	Pre 8/2002 had 12.5" barrel length. Replace in pairs w 11.5"
2	50 GSL Lift Cyl After July 1994	2062128	2060907	
2	55 & 60 GSL Lift Cyl After July 1995	2062246	2062234	
2	55 & 60 GSL-PT Begin Mar 2010	371206	Sp. Order	55/60PT models only 7.75" Bore x 11.5" Stroke
3	Hauling Pin Cylinder - All GSL	2060922	2060961	Cylinder has internal safety relief valve on retract.
3	Lower Pin (3.25" Cylinder-to-Hauling Pin)	2060923	N/A	Top Pin (5.75" long Cylinder-to-Frame) PN 185511
4	Hauling Pin - All GSL Models	2062188	N/A	Except Models 35GSL-PT and 50GSL-PT
4	Hauling Pin - 35 & 50 PT models only	2063319	N/A	
5	Hauling Pin Collar ("Doughnut")	2063097	N/A	Weld On - Underside of Alignment Tray
6	Lift Cylinder Top Pin after 1989	2063081	N/A	8" Long x 2" Diameter
7	Lift Cylinder Bottom Pin after 1989	2063082	N/A	11.75" Long x 2" Diameter
8	Main Pivot Pin RH 35-40 Ton before 1994	2060871	N/A	2.5" Diameter Pin
8	Main Pivot Pin LH 35-40 Ton before 1994	2060872	N/A	2.5" Diameter Pin
8	Main Pivot Pin - LH 1994 - 2005	obsolete	N/A	3" Dia; Replace with Headless Pin Retro Kit PN 2063089
8	Main Pivot Pin - RH 1994 - 2005	obsolete	N/A	3" Dia; Replace with Headless Pin Retro Kit PN 2063089
8	Main Pivot Pin - LH 2005-Sept 2006	2063085	N/A	3" Dia; Keeper in Eng Compartment (or use Retro Kit)
8	Main Pivot Pin - RH 2005-Sept 2006	2063086	N/A	3" Dia; Keeper in Eng Compartment (or use Retro Kit)
8	Headless Pin Retro Kit (LH or RH)	2063089	N/A	3" Dia; When Replacing old style pins, order qty 2 kits
8	Main Pivot Headless Pin Begin Oct 2006	2062292	N/A	3" Dia; 1 Pin & 2 Snap Rings (Central Lube Sys only)
9	King Pin (Weld on Replacement)	2060054	N/A	SAE 2" - Fixed GN Swing Clearance (not removable)
9	King Pin (Drop in) - Optional After 1995	405021	N/A	SAE 2" - Multi-Position GN Swing Clearance (drop in from top)
10	Hydraulic Quick Disconnect - Male	2059941	N/A	3/4" Female NPT Thread
10	Hydraulic Quick Disconnect - Female	2059942	N/A	3/4" Female NPT Thread
11	Hydraulic Oil Filter	2056554	N/A	25 Micron (Power Pack Trailers only)
11a	Hydraulic Oil Tank, 6 Gallon Capacity	2059365	N/A	Power Pack Trailers Only (Chevron AW ISO 68 Hyd Oil)
12	3-Spool 4-Way Control Valve	2060823	2060992	O-ring Kit Only (Centering Spring Not Included)
13	Hyd Pump (6-10 GPM @ 2,500-3,00 PSI)	2059919	2062339	Seal Kit includes Shaft Seal (shaft seal only, PN 2062289)



Eager Beaver Trailers

Power Pack Keys, Switches, Controls & Filters

Keys - Switch - Ignition Harness	PN	Notes
Honda Ignition Key Only	2062001	Replacement Key Only
Honda Ignition Switch	2062147	Includes Keys
Honda Ignition Harness	2062150	72" Switch Extension Harness (between Switch and Engine)
Kohler Ignition Key Only	2059876	Replacement Key Only
Kohler Ignition Switch	2058207	Includes Keys
Kohler Ignition Switch Harness	2059202	All GFG-GHG and GSLs with Kohler Engines
Robins Ignition Key Only	2060892	Replacement Key Only
Robins Ignition Switch	2060848	Includes Keys (Robins EY40, EH34 & EH41 Engines)
Robins Ignition Switch Harness	2060897	

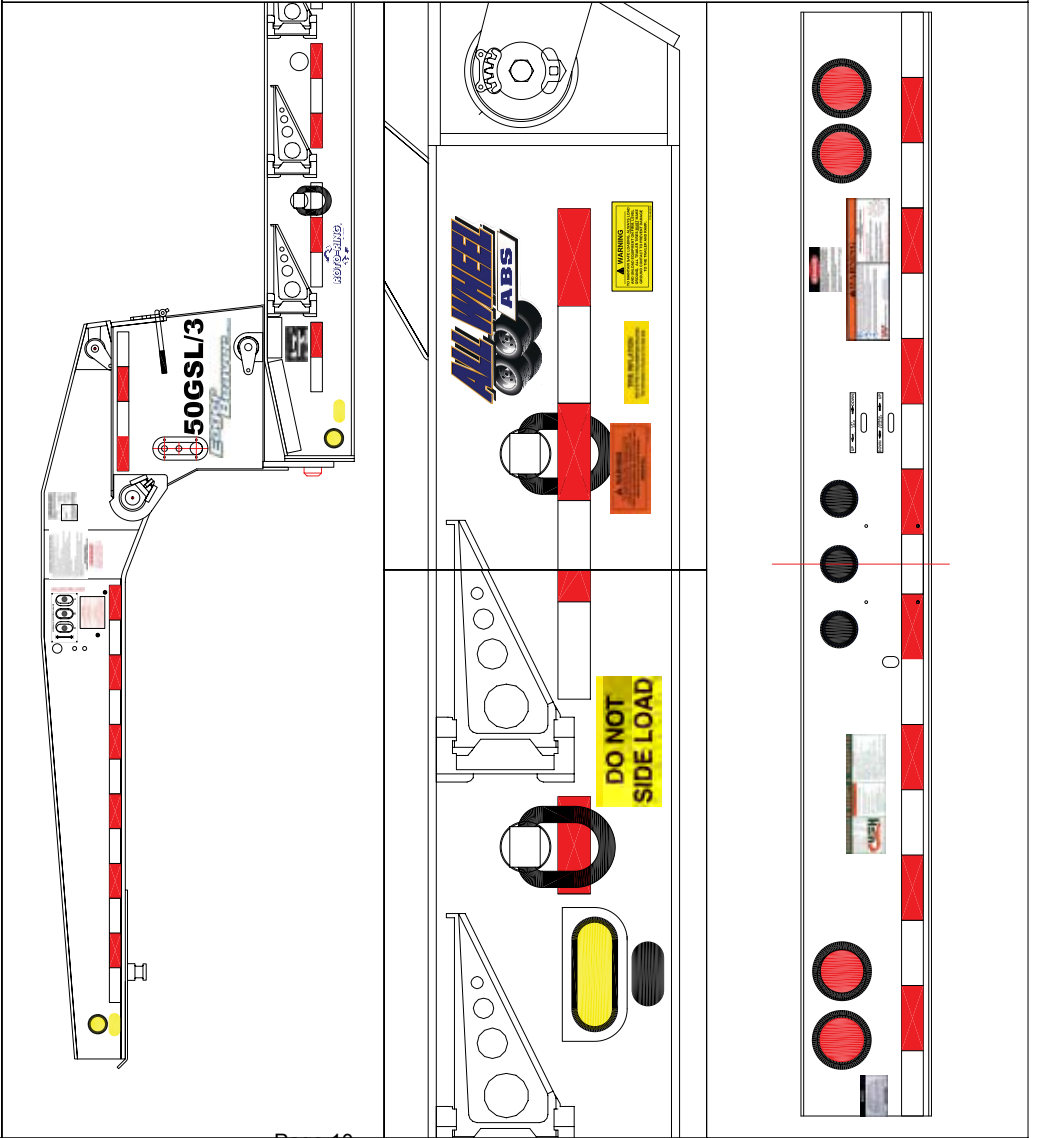
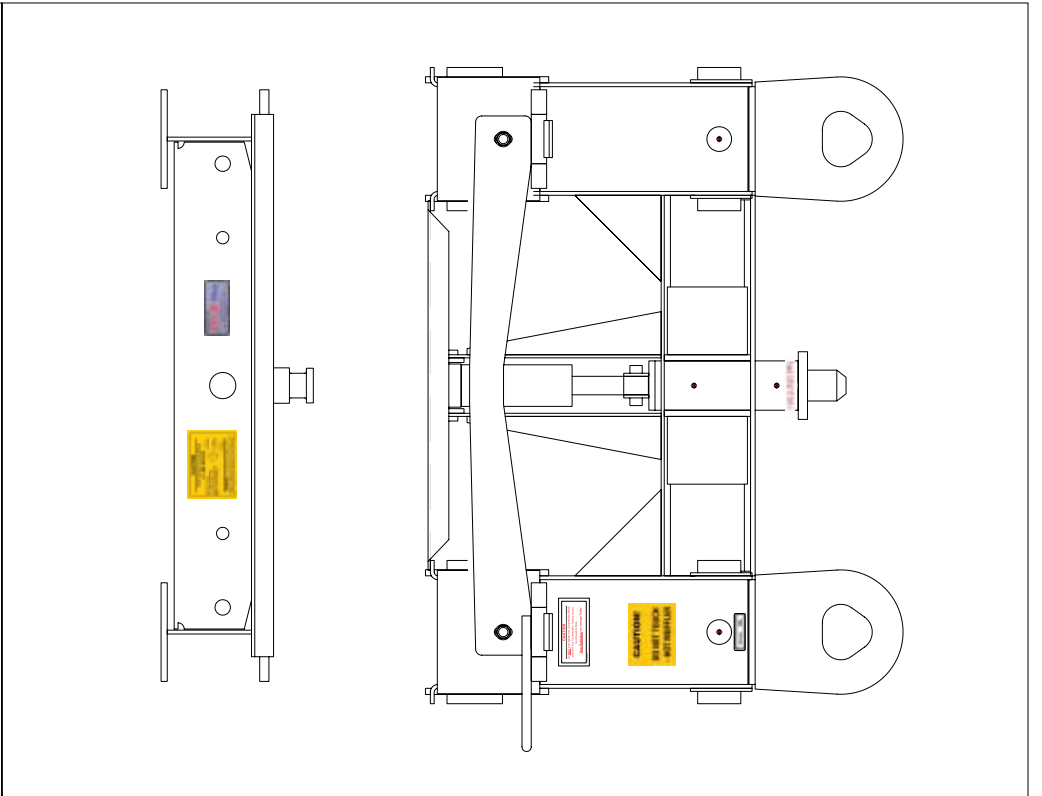
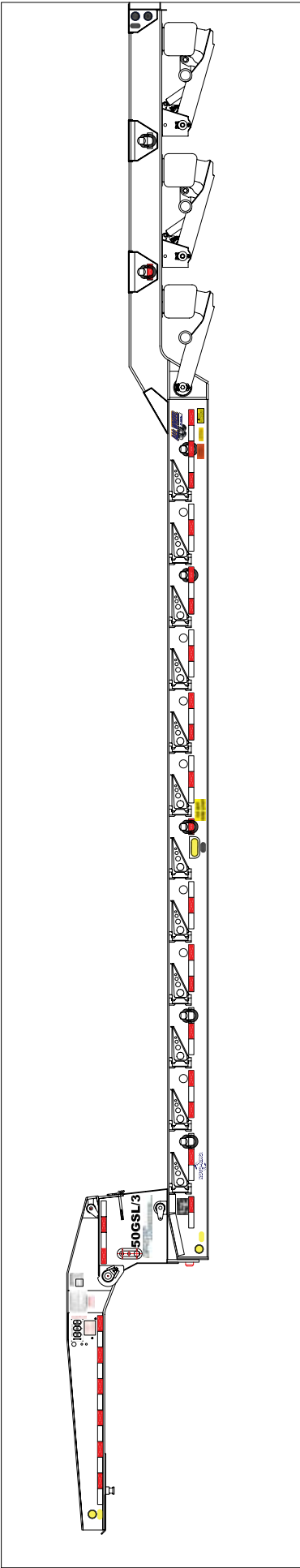
Choke & Throttle Cables	PN	Notes
Choke Cable 96"	2059149	All Lowboys with Powerpack (Except Hatz Diesel)
Honda 13HP Choke Linkage Kit	2062149	Honda engine Only
Throttle Cable 84" Long	2059148	All Lowboys with Powerpack

Filters & Starter Motors	PN	Notes
Air Filter - HONDA	2062145	Honda GX390
Air Filter - ROBINS EY40	2061022	Robins EY 40 Only (Round, Cone Shaped)
Air Filter - ROBINS EH41	2062270	Robins EH 41 Only (5 Sided, not Cone Shaped)
Starter Motor - HONDA	2062146	Honda GX390 up to SN GCANK 1414795 (2005 - 2007 only)
Hydraulic Oil Filter (25 Micron)	2056554	All Lowboys with Powerpack

Hydraulic Control Valve and Pump

Component	PN	Notes
3-Spool 4-Way Control Valve	2060823	Packing Kit Only PN 2060992
Replacement Handle	2061080	Handle only, no knob
Black Ball Knob for Handle End	2062189	Knob only, no handle
Handle, Knob & Linkage Kit	2062266	

Hydraulic Pump	2059919	Prince SP-F26 **
Seal Kit	2062339	Seal Kit includes Shaft Seal
Shaft Seal ONLY	2062289	
Lovejoy half 9/16" shaft	2062324	Hydraulic Pump shaft (All Pumps)
Lovejoy half 1" shaft	2060478	Engine shaft - Honda, Robins Subaru, & Hatz Diesel Only
Lovejoy half 1 1/8" shaft	2060477	Engine shaft - Kohler Only
Lovejoy Spider	2062325	
Pump-to-Engine Mounting Housing	2060267	Honda, Robins Subaru, & Hatz Diesel only
Pump-to-Engine Mounting Housing	372011	Kohler only

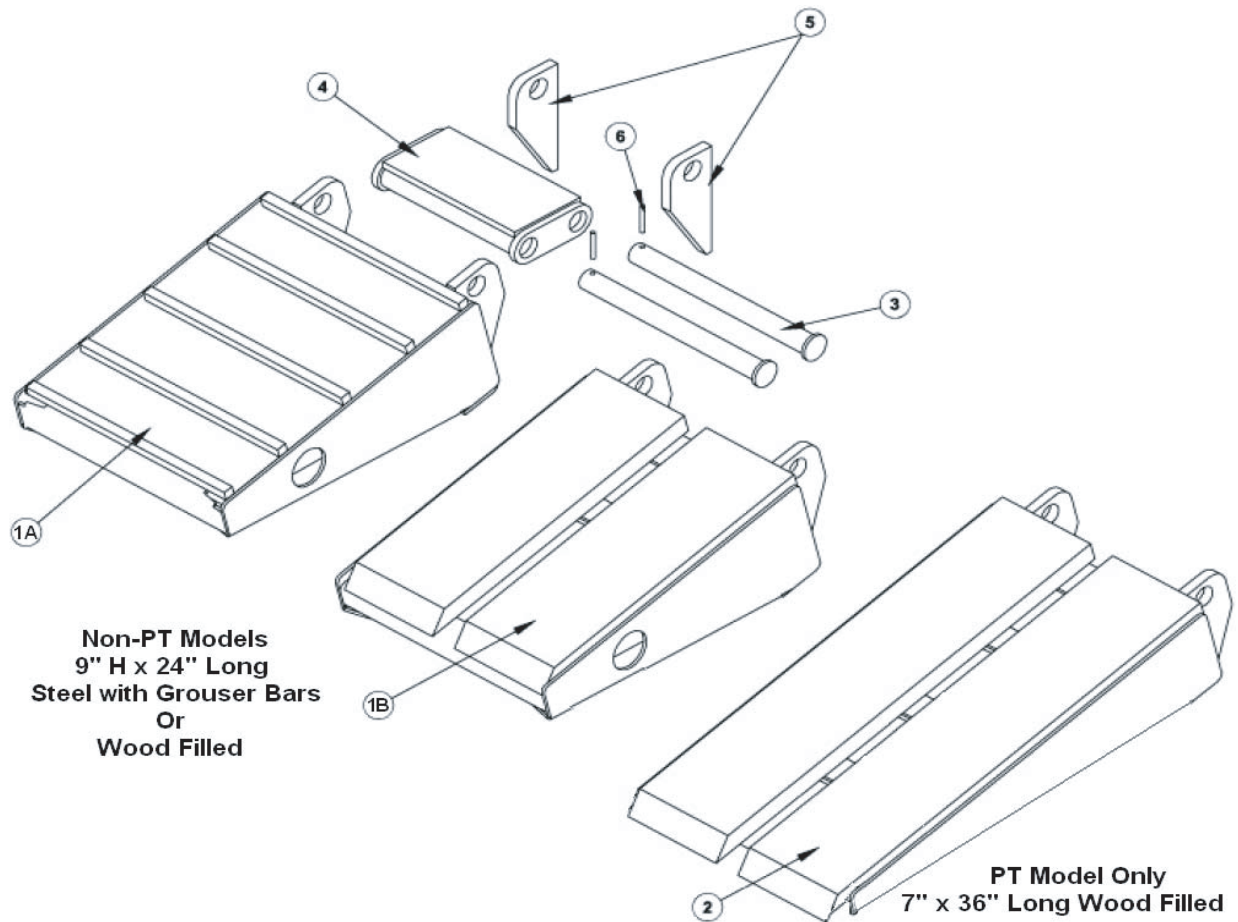


Eager Beaver Trailers Lowboy Trailer Decals

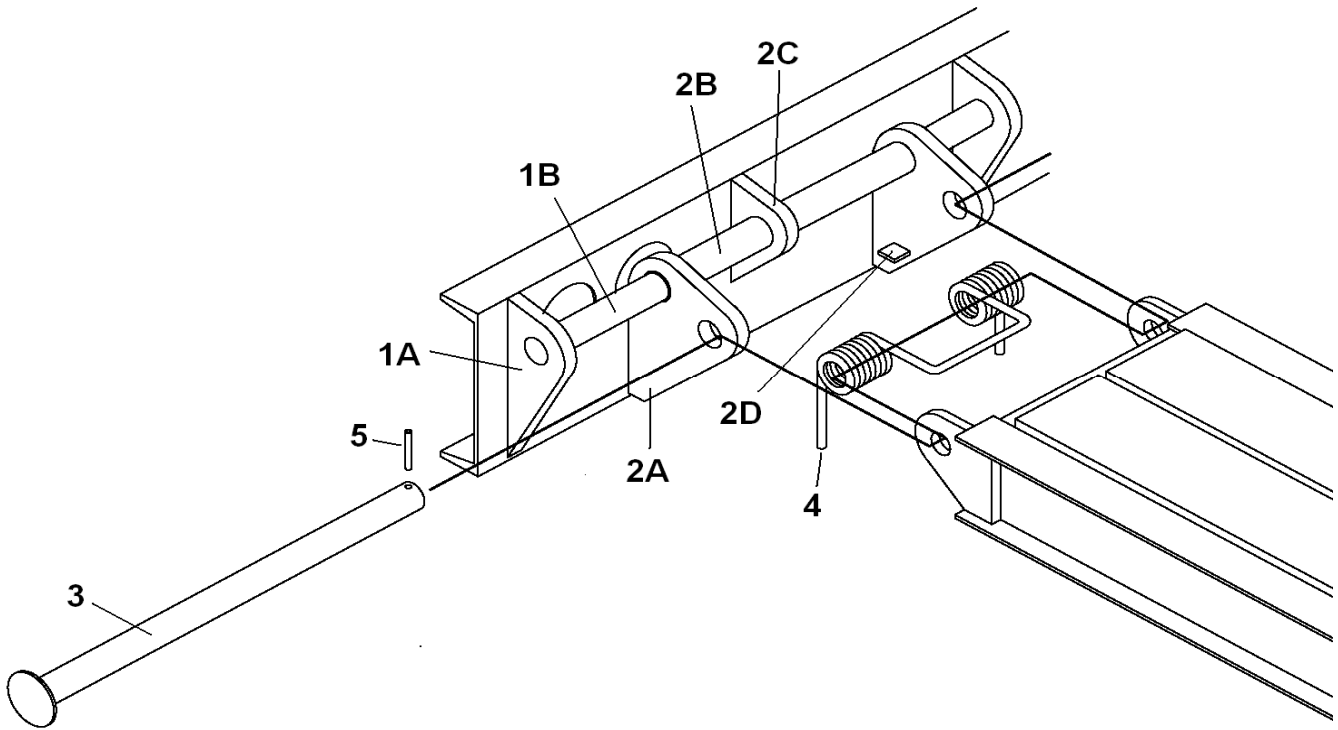
PART #	QTY	DESCRIPTION
2059016	2	CHECK WHEEL LUGS DECAL
2060618	2	ROTO-RING™ DECAL
2062005	2	CAUTION CENTERLINE DECAL
2060608	48	RED/WHITE CONSPICUITY STRIPING ("DOT STRIPING")
2059181	2	"DO NOT SIDE LOAD" DECAL
2062007	1	WEB WHEEL TORQUE DECAL
2059162	2	RECOMMENDED TIRE PRESS DECAL
2059370	2	EAGER BEAVER TRAILERS DECAL - LARGE *
2062208	1	USA HARNESS DECAL
2062173	1	REPLACE DAMAGED WOOD DECAL
<i>With Detachable Hydraulic Gooseneck, Add the Following:</i>		
2059329	1	"HAULING PIN" DECAL
2059348	1	"HAULING PIN LEVER" DECAL
2059585	1	WARNING HAULING PIN" DECAL
2062009	9	"GREASE" FITTING DECAL
2062010	1	"LUBRICATION" DECAL
2062011	1	HAULING PIN "INTERLOCK WARNING" DECAL
2062012	1	COMPRESSION BLOCK NUT TIGHTEN DECAL
<i>With ABS, Add the Following:</i>		
2062003	1	CAUTION TRAILER EQUIPPED W/ABS BRAKES
2061051	2	ABS DECAL(ALL WHEEL)
2062004	1	ABS INDICATOR LAMP INSTRUCTIONS
2062179	1	DANGER SPRING BRAKES
2063521	KIT	GSL WITH ABS DECAL KIT (Includes All Decals Listed Above)
<i>Add Trailer Model Decal (specify if "PT" or "BR" Model)</i>		
2059281	2	DECAL "25GLB" WHITE (specify if 35, 50 or 60 GLB)
2059275	2	DECAL "35GSL" WHITE
2059277	2	DECAL "50GSL" WHITE
2062244	2	DECAL "55GSL" WHITE
2059278	2	DECAL "60GSL" WHITE
<i>With Cush Air Ride Suspension, Add the Following:</i>		
2062245	1	CUSH SUSPENSION TORQUE
2062143	1	AIRBAG EXHAUST OPERATION
<i>With Pony Motor, Add the Following:</i>		
2062249	1	NOTICE - FUEL SHUT OFF VALVE
2062008	1	"HOT MUFFLER" DECAL
<i>With a Lift Axle (All 50 - 60 Ton Trailers), Add the Following:</i>		
2062142	1	LIFT AXLE OPERATION
<i>*For Goosenecks with Fenders or Relief Neck, Replace PN 2059370 with:</i>		
2062020	2	EAGER BEAVER TRAILERS DECAL - SMALL

GSL LOWBOY FRONT FLIP RAMPS

Item	Description	Part #
1A	Front Flip Ramp - Steel with Grouser Bars (Non-PT)	2060550
1B	Front Flip Ramp - Wood Filled (Non-PT)	2059196
2	Front Flip Ramp - Wood Filled (PT Model Only)	2059198
Not Shown	Front Flip Ramp - Steel w Grouser Bars PT (7" H x 24" Long)	2059199
3	Ramp Bar - 16" Long	2063071
4	Movable Linkage - 13" Long	2060500
5	Flip Ramp Mounting Linkage - 9" High - Non PT Models Only	2061071
	Flip Ramp Mounting Linkage - 7" High - PT Models Only	2059201
6	Split Pin	2059020



Lowboy Single Acting Rear Ramp Linkage - before September 2008

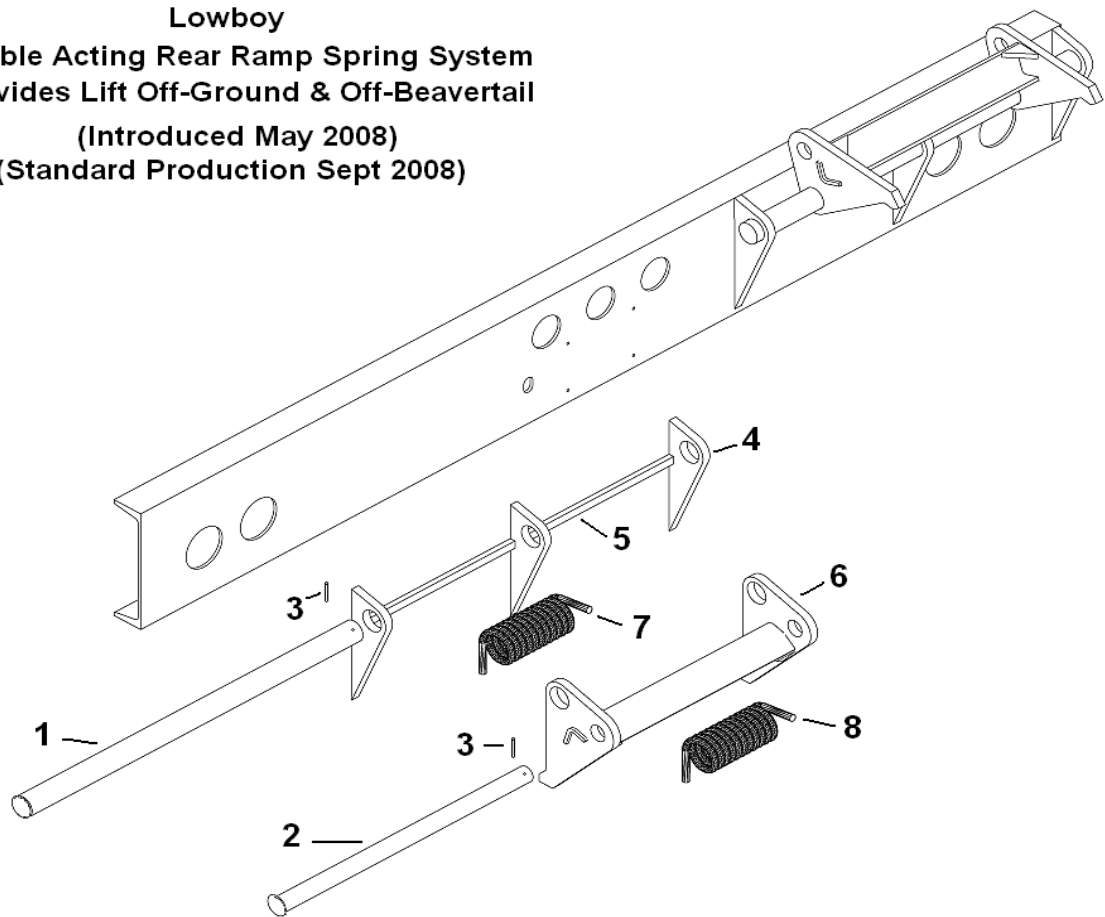


Item #	Part No	Alt Part No	Qty	Unit	Description
1	993880				Order Items 1A & 1B Separately
1A	143721	2060553	2	EA	Tailboard Fixed Linkage 1/2 X 4-5/8 X 11-3/4
1B	188205	2060866	1	EA	Tailboard Hinge Pin 2" Dia. X 32"
2	993881	2059403	1	AY	BR Moveable Link Assy (Includes Items 2A, 2B, 2C, 2D)
2A	143732		2	EA	Tailboard Movable Link 3/4 X 8.5X 11.125
2B	218010		1	EA	2" SCH 40 X 18-3/8 SEAMLESS PIPE
2C	143731		1	EA	Bar Link 1/2 X 4-1/2 X 8
2D	168089		2	EA	Tailboard Link Spring Stop 1/2 X 2X 1.75
3	991822	2054640	1	EA	1.5" Dia. x 22" Dia Ramp Bar Assy
4	402001	2059240	1	EA	Heavy Duty Double Spring
5	411601	2059020	1	EA	Roll Pin - 5/16" Dia x 2.5" Long

Note: Item # 1 not available pre-assembled. Order 1A & 1B separately, as needed
 Items # 1A & 1B require assembly at time of installation to trailer tailboard
 Items # 3, 4, 5 and Ramps not included in any assembly
 Item # 2 available as assembly under PN 2059403

Lowboy
Double Acting Rear Ramp Spring System
Provides Lift Off-Ground & Off-Beavertail

(Introduced May 2008)
(Standard Production Sept 2008)



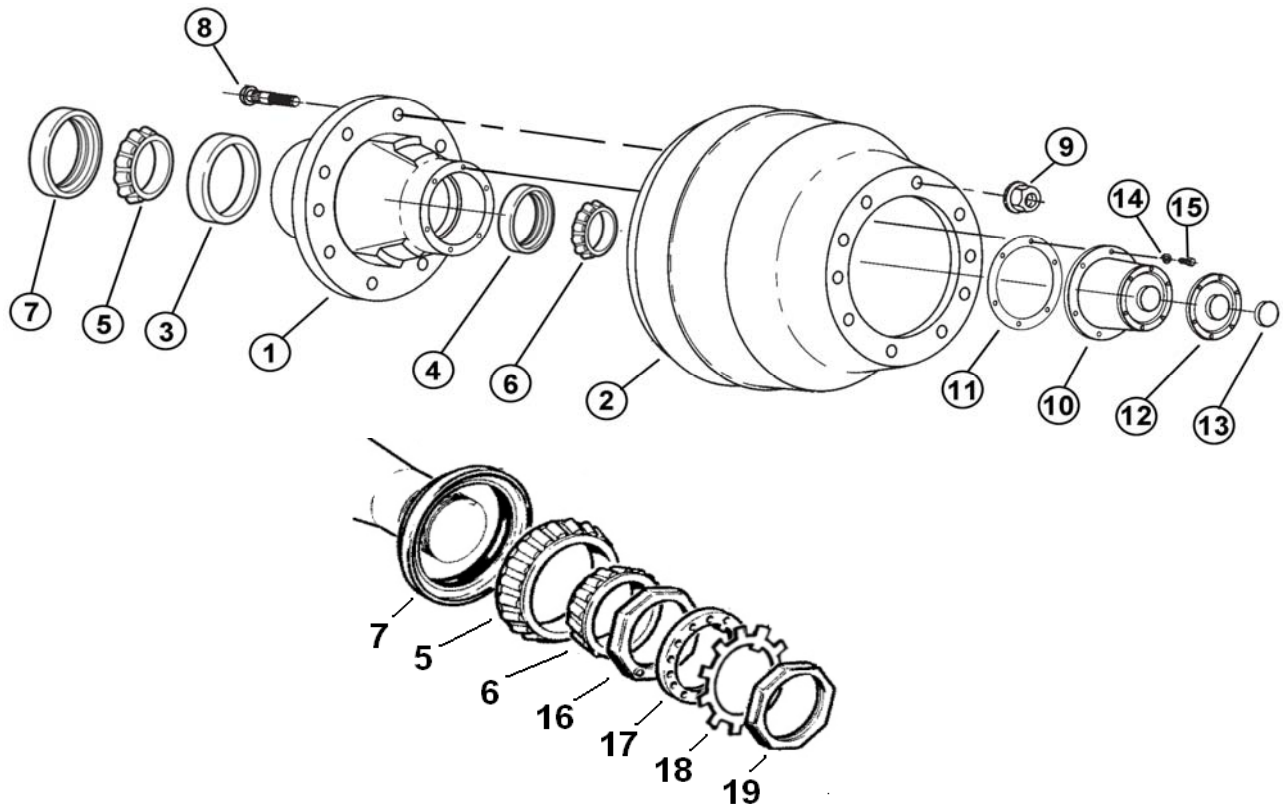
Item #	Part No	Alt Part No	Description
1	991877		2" Dia x 36.5" Ramp Bar
2	991876	2063220	1.5" Dia x 25" Ramp Bar
3	411601	2059020	5/16" Dia x 2.5" Roll Pin
4	173642		Tailboard Fixed Linkage
5	178509		1/2" x 3/4" x 17.5" Long Spring Stop
6	991863		Rotating Linkage
7	402021	2062327	Off-Ground Lift Spring (1 per Ramp)
8	402007	2062134	Off-Beavertail Lift Spring (3 per Ramp)

10 Stud Hub (11.25" BC) Uni-Mount (Hub Piloted)

16 ½" x 7" Outboard Drum with Webb 2023 Series Hub

(Standard Equipment 35-75 Ton Lowboys since 2000)

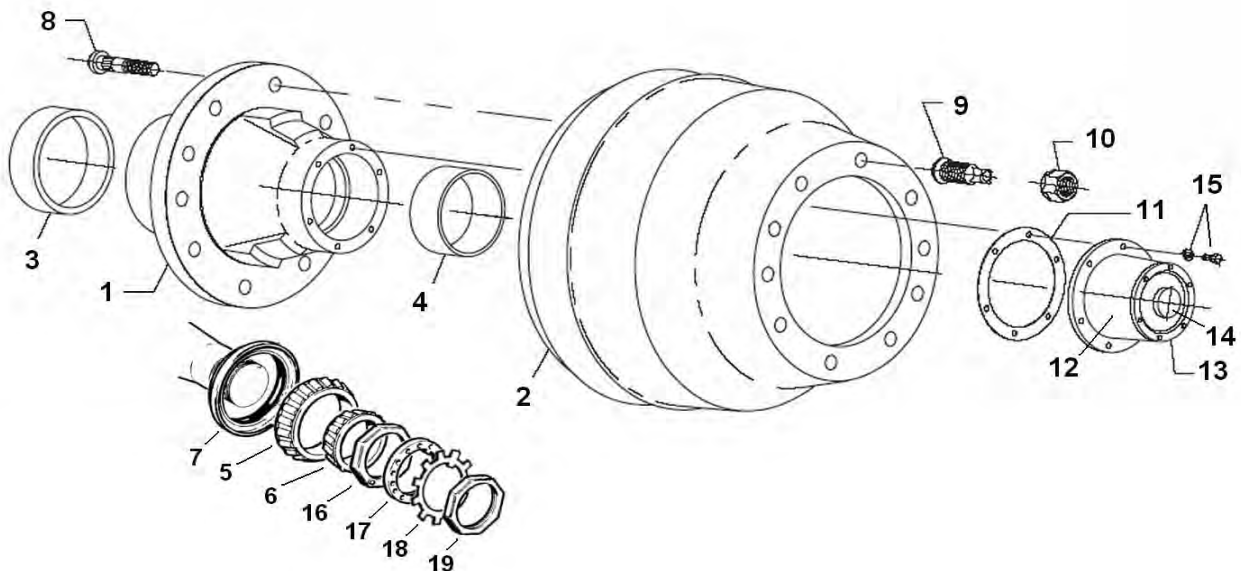
Item	Nomenclature	P/N	Remarks
1	Hub	2062290	Webb 2023 (Includes cups & studs)
2	Drum	2062291	Webb 66864F
3	Inner Bearing Cup	2058307	
4	Outer Bearing Cup	2058306	
5	Inner Bearing	2058309	
6	Outer Bearing	2058308	
7	Oil Seal	2055828	
8	Studs	2061085	
9	Flange Nuts	2061086	
10	Oil Cap w/ plug	2055089	Cap, includes window & plug
11	Gasket - oil cap	2055090	
12	Oil cap window kit	2058056	Window, gasket & plug
13	vent plug	2055749	
14	Lock Washer		Procure locally
15	Machine screw		5/16 - 18 thread x 3/4" long
16	Inner Spindle Nut	2055836	
17	Spindle Lock Nut	2058268	
18	Star Washer	2058267	
19	Outer Spindle Nut	2059229	
	Wheel, Steel	2060825	8.25 X 22.5, 10 Stud Hub piloted
	Axle Beam, 77" Trk	332101	Includes, brakes, camshaft, slack adjusters



10 Stud Hub (11.25" BC) Ball Seat Mount (Stud Piloted)
16 1/2" x 7" Outboard Drum with Webb 2023 Series Hub
(Standard Equipment 35-60 Ton Lowboys 1997-2000)

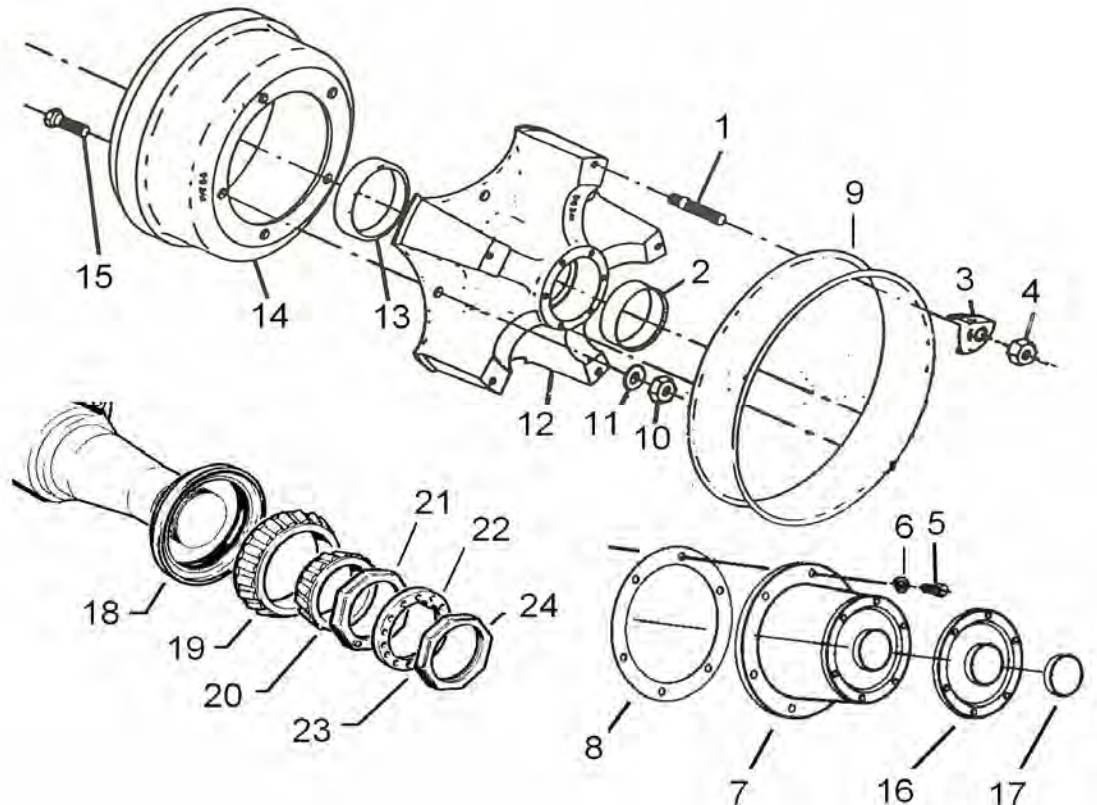
Item	Nomenclature	P/N	Remarks
1a	Hub LH w Studs & Cups (no nuts)	Special Order	Webb 20235-ML #
1b	Hub RH w Studs & Cups (no nuts)	Special Order	Webb 20235-MR #
2	Drum	2062291	Webb 66864F
3	Inner Bearing Cup	2058307	HM218210
4	Outer Bearing Cup	2058306	HM212011
5	Inner Bearing	2058309	HM218248
6	Outer Bearing	2058308	HM212049
7	Oil Seal	2055828	
8a	Stud, LH (Left Tighten)	Special Order	Webb 101173
8b	Stud, RH (Right Tighten)	Special Order	Webb 101172
9a	Inner Cap Nut - LH	2055701	
9b	Inner Cap Nut - RH	2055538	
10a	Outer Cap Nut - LH	2060878	
10b	Outer Cap Nut - RH	2060879	
11	Gasket - oil cap	2055090	
12	Oil Cap (complete)	2055089	Cap, includes window & plug
13	Oil cap window kit	2058056	Window, screws, gasket & plug
14	Oil Cap Rubber Plug	2055749	Included with Window Kit
15	Machine screw & Lock Washer	Procure Locally	5/16 - 18 thread x 3/4" long
16	Inner Spindle Nut	2055836	
17	Spindle Lock Nut	2058268	
18	Star Washer	2058267	
19	Outer Spindle Nut	2059229	
	Rim, 10 Stud 8.25 x 22.5	341018	Special Order

LH Hub with LH Studs go on Left Hand (Street Side) of Trailer
RH Hub with RH Studs go on Right Hand (Curb Side) of Trailer



Lowboy - 35 Ton & Larger - Webb Spoke Type (Open Center)

Item	Nomenclature	P/N	Remarks
1	Studs	2055084	
2	Outer Bearing Cup	2058306	
3	Rim Clamp	2058317	
4	Rim Nut	2055085	
5	Machine screw		Procure locally - 5/16-18 x 3/4 Grade 5
6	Lock Washer		Procure locally - 5/16-18 (fine thread)
7	Oil Cap w/ plug	2055089	Cap, includes window & plug
8	Gasket - oil cap	2055090	
9	Spacer	2058316	
10	Nut		3/4" x 10 (incl with Dayton Kit 13-6583)
11	Washer		Included with Dayton Kit 13-6583
12	Hub	2060453	Webb 7520 - Includes Studs & Cups
13	Inner Bearing Cup	2058307	
14	Drum	2058313	Webb 67518
15	Capscrew		3/4" x 10 x 2" (incl with Dayton Kit 13-6583)
16	Oil cap window kit	2058056	Window, gaskets, & plug
17	Vent plug	2055749	
18	Oil Seal	2055828	
19	Inner Bearing	2058309	
20	Outer Bearing	2058308	
21	Inner Spindle Nut	2055836	
22	Spindle Lock Nut	2058268	
23	Star Washer	2058267	Not Shown in Diagram
24	Outer Spindle Nut	2059229	



Eager Beaver Trailers - Lowboy Air Brake Shoes

All 35-75 Ton Lowboys (16 1/2" x 7" Drums) (See Below 35 Ton Exceptions *)

Shoe (each, need 2 per wheel)	2060915
Brake Repair Kit (per wheel)	2059157
Seal (per wheel)	2055828

35 & 40 Ton* - Pre 1998 (12 1/4" X 7 1/2" Drums)

	Upto '93 (P)	94-'96 (PQ)	After '97 (Spicer)
Shoe (each)	2055842	2060853	2060455
Brake Repair Kit	2058058	2060900	2060956
Seal (per wheel)	2055828	2055828	2055828

P Style	PQ Style	Spicer Style
Both Ends Closed	One End Closed	Both Ends Open

* After 1998 most 35 Tons have 16 1/2" x 7" Drums. Prior to 2002, always have customer verify drum size.

Below are some general guidelines. However, customer verification still required.

- Prior to 1988 all 35 Ton and 3 Axle 40 Tons should have 12 1/4" x 7 1/2" Drums
- Between 1988 & 1998, only 35 Ton BR models should have 12 1/4" x 7 1/2" Drums
- Beginning in 1988 Straight Back (or -S) 35 Ton and 3 Axle 40 Ton models should have 16 1/2" x 7" Drums
- After 1998, with the exception of Model 35GSL-S4S, all 35 Tons had 16 1/2" x 7" Drums
- Between 1998 and 2002, 12 1/4" x 7 1/2" Drums were still used on Model 35GSL-S4S

After 2002, All 35 Tons regardless of model or configuration should have 16 1/2" x 7" Drums

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	Straight	10 Spline	2060873 C.B. 10-12 Ton
		28 Spline	2062263 Spicer, Haldex 20-25 Ton (pre-'97) *
	Curved	10 Spline	2060934 C.B. 10-12 Ton
		28 Spline	2060971 Spicer, Haldex 35-60 Ton *
Manual	Straight	10 Spline	2060755 Spicer, Haldex 20-25 Ton (older) *
	Curved	10 Spline	2061083 Spicer, Haldex 20-25 Ton *

* Spicer Automatic Slack Adjuster Bracket 2061084 Not included with Slack

Original Slack Manufacturer:

OEM Part Number on Original Slack

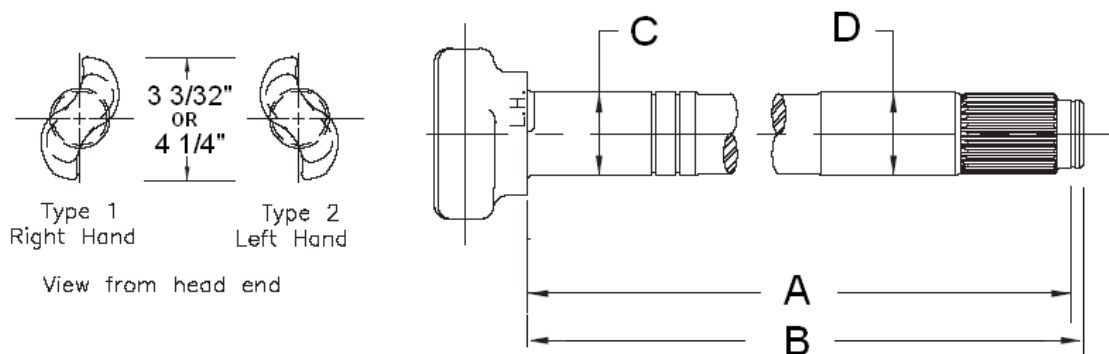
Fax your order to Eager Beaver Trailer Parts: 856-423-0999

Your Name:

Your Voice Telephone:

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

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
RIGHT HAND SMALL
LEFT HAND LARGE
RIGHT HAND LARGE

DIMENSION

"A"
"B"
"C"
"D"

SPLINE

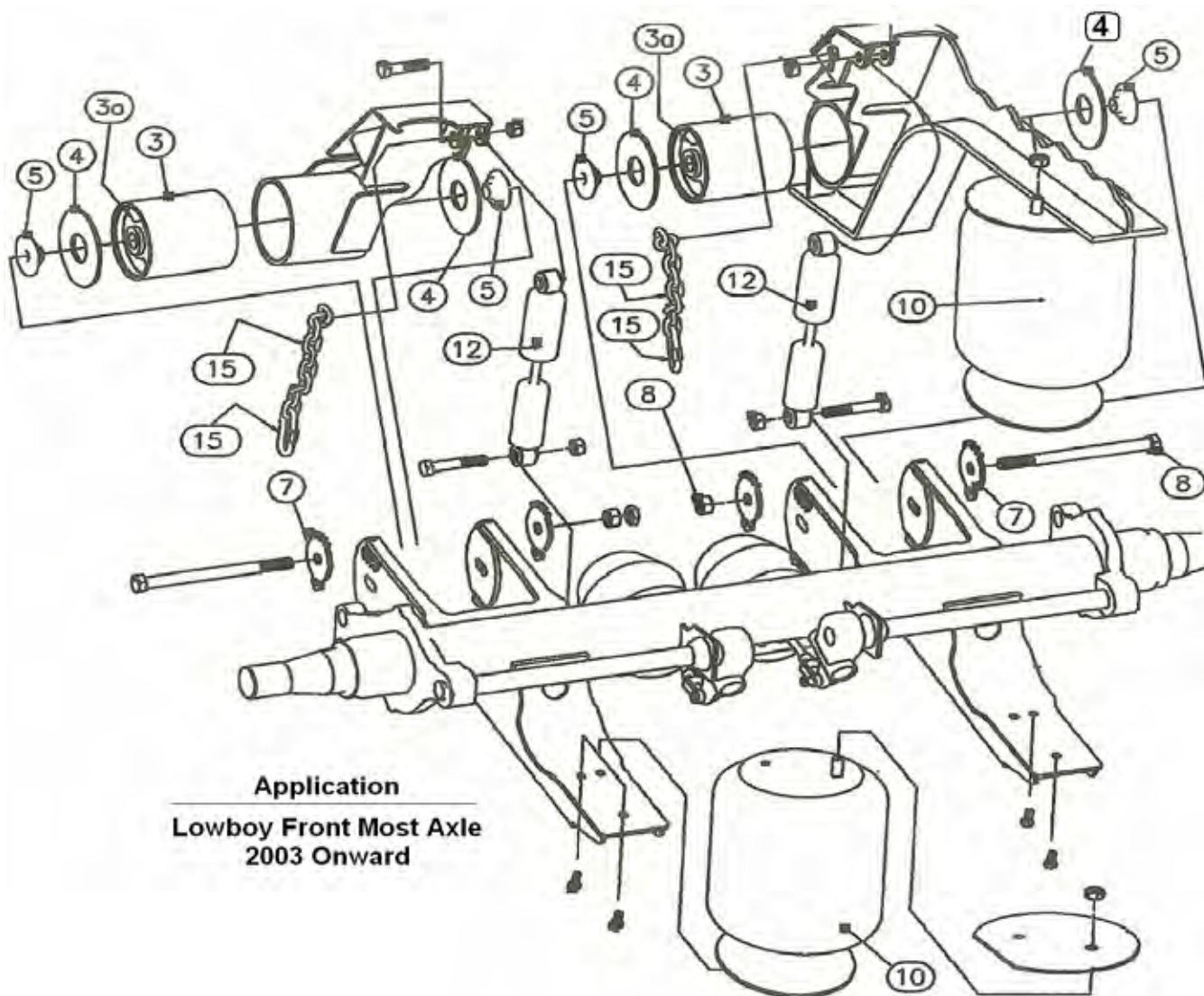
10
28

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

Your Name: _____.

Your Voice Tel #: _____.

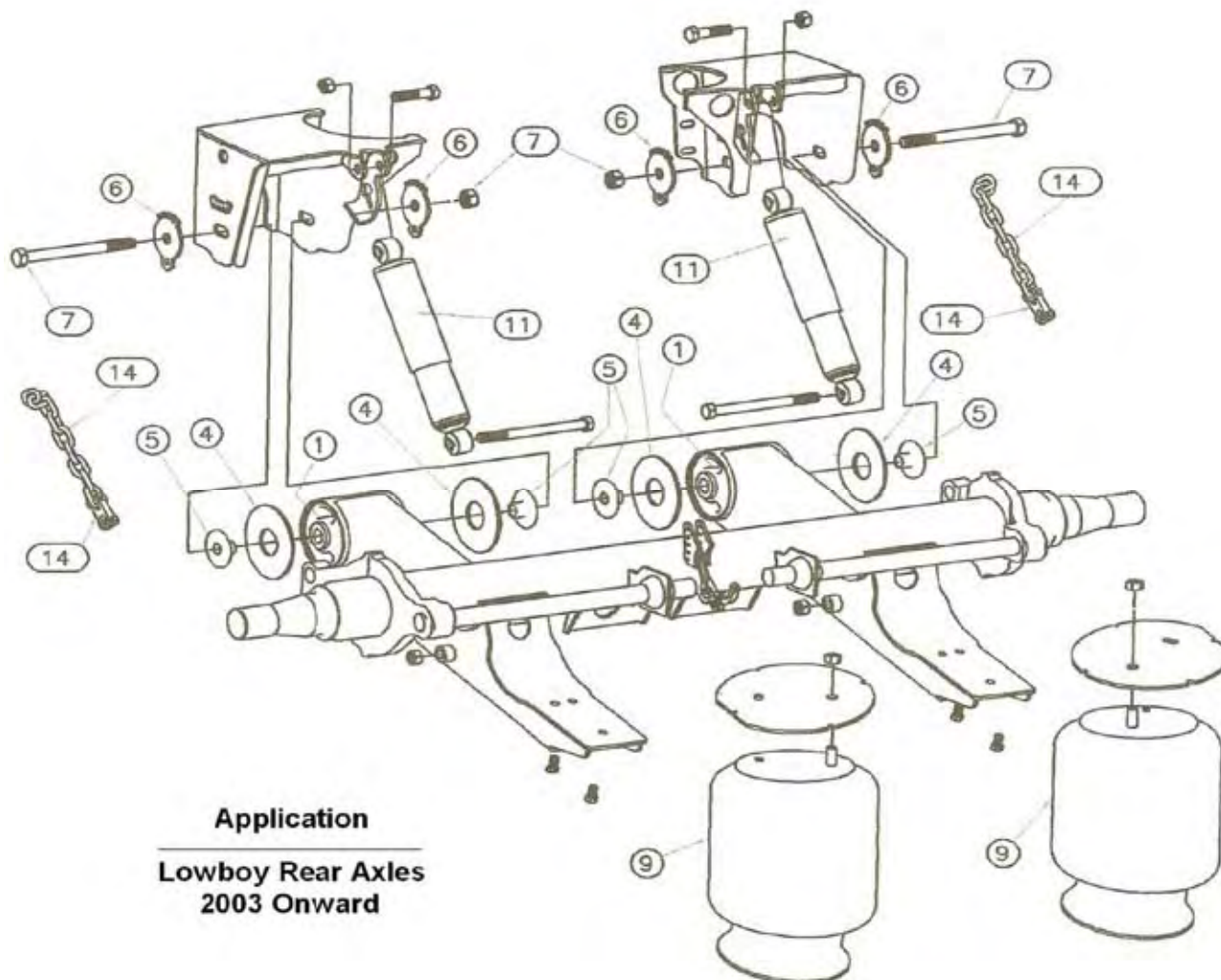
CUSH CLY-25-209



Application
Lowboy Front Most Axle
2003 Onward

ITEM	DESCRIPTION	PART #
3	Sleeve & Bushing Kit	2062280
3a	Bushing Only	2062281
4	Wear Washer	2062282
5	Spacer Collar	2062284
7	Alignment Gear	2062288
8	Bolt Kit - LB Front Axle	2062286
10	Air Spring	2061077
12	Shock Absorber	2062170
15	Chain Kit w/ Clevis Ends	2062287

CUSH CLU-25-009



Application

Lowboy Rear Axles
2003 Onward

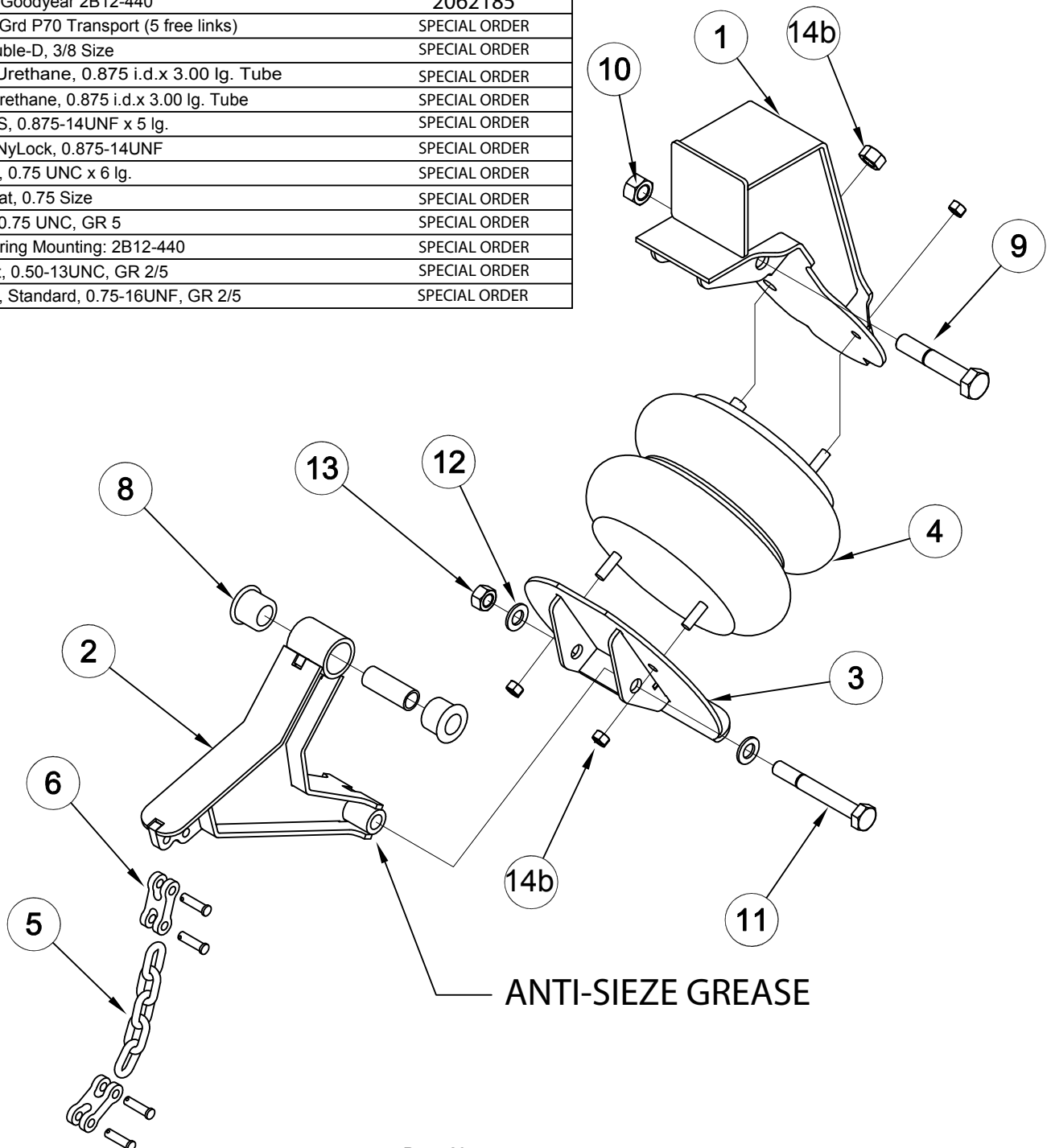
ITEM	DESCRIPTION	PART #
1	Bushing Only	2062281
4	Wear Washer	2062282
5	Spacer Collar	2062283
6	Alignment Gear	2062288
7	Bolt Kit	2062285
9	Air Spring	2061077
11	Shock Absorber	2062170
14	Chain Kit w/ Clevis Ends	2062287

CUSH AIR LIFT MODEL CAL-01

APPLICATION

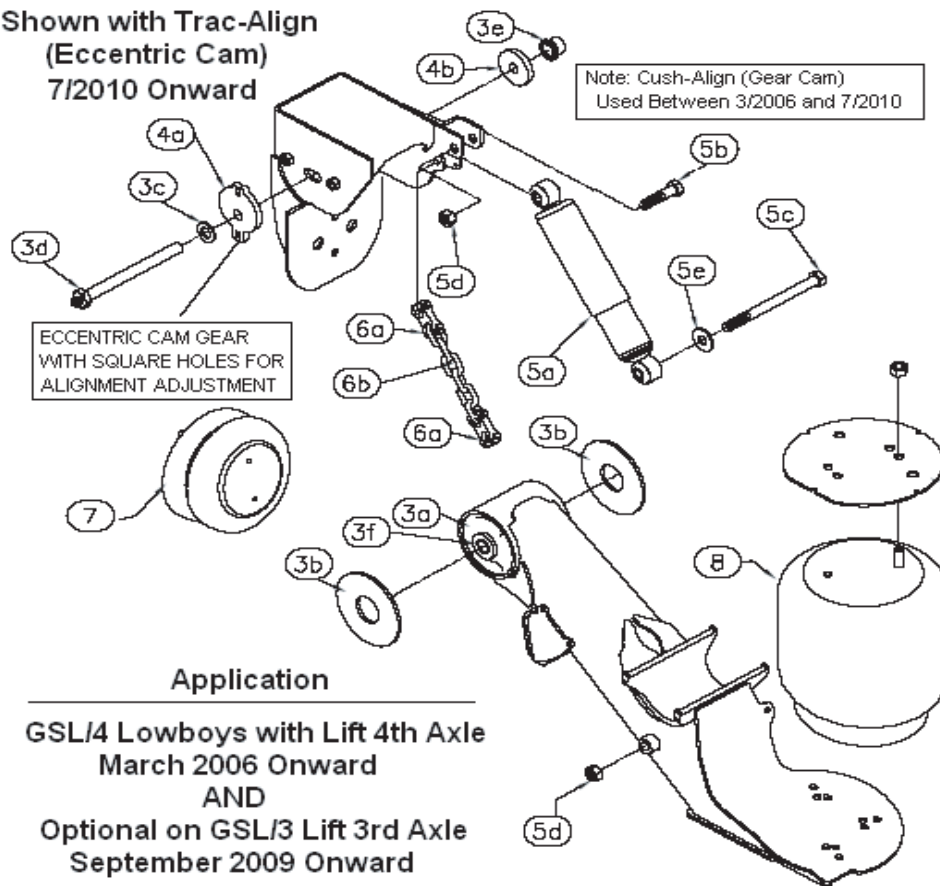
All 35-60 Ton Lowboys with Lift Axle
Used after 2003

Item	Parts List- Description	Part No.
1	Hanger Sub-Assembly, 5" x-mber	SPECIAL ORDER
2	Crank Sub-Assembly	SPECIAL ORDER
3	Air Spring Pivot Sub-Assembly	SPECIAL ORDER
4	Air Spring, Goodyear 2B12-440	2062185
5	Chain, 3/8 Grd P70 Transport (5 free links)	SPECIAL ORDER
6	Clevis, Double-D, 3/8 Size	SPECIAL ORDER
7	Bushing, Urethane, 0.875 i.d.x 3.00 lg. Tube	SPECIAL ORDER
8	Bushing, Urethane, 0.875 i.d.x 3.00 lg. Tube	SPECIAL ORDER
9	Bush HHCS, 0.875-14UNF x 5 lg.	SPECIAL ORDER
10	Bush Nut, NyLock, 0.875-14UNF	SPECIAL ORDER
11	Pin, HHCS, 0.75 UNC x 6 lg.	SPECIAL ORDER
12	Washer, Flat, 0.75 Size	SPECIAL ORDER
13	Nut, Lock, 0.75 UNC, GR 5	SPECIAL ORDER
14	KIT- Air Spring Mounting: 2B12-440	SPECIAL ORDER
14a	Fliglock Nut, 0.50-13UNC, GR 2/5	SPECIAL ORDER
14b	Nylock Nut, Standard, 0.75-16UNF, GR 2/5	SPECIAL ORDER



CUSH CUU-25B09L (Hi Lift)

Shown with Trac-Align
(Eccentric Cam)
7/2010 Onward



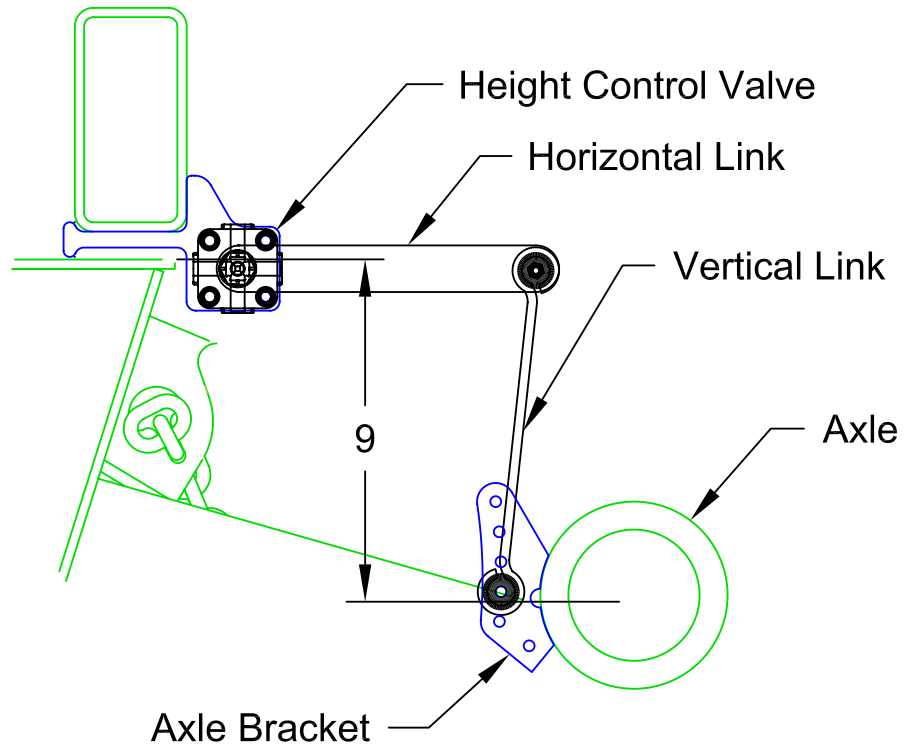
Application

GSL/4 Lowboys with Lift 4th Axle
March 2006 Onward
AND
Optional on GSL/3 Lift 3rd Axle
September 2009 Onward

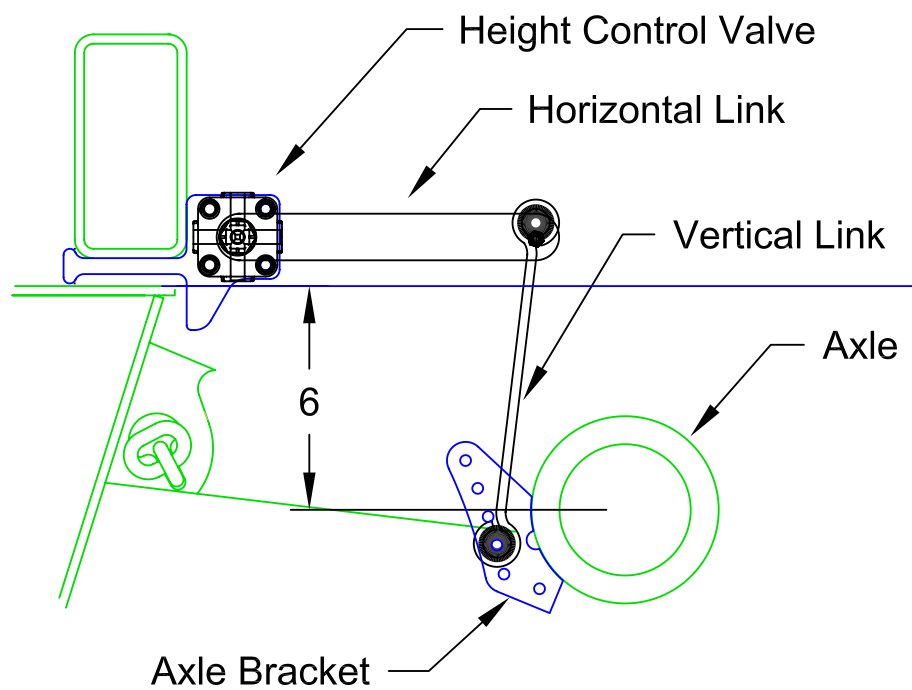
ITEM	DESCRIPTION	PART #
3a	Bushing Only	2062281
3b	Wear Washer	2062282
3c	Washer .875" SAE ID	see Kit K0334
3d	E-20 Torx Bolt .875"-9UNC x 10"	see Kit K0334
3e	SecureLoc Nut .875"-9UNC	see Kit K0334
3f	Reducer fm 1.25" OD to 0.9" ID	see Kit K0334
Pivot Bushing Kit: 1 per swing arm (3a - 3f)		K0334 *
4a	Alignment Gear, eccentric, outer	see Kit K0335
4b	Alignment washer, inner	see Kit K0335
Pivot Alignment Kit: 1 per hanger (4a & 4b)		K0335 *
5a	Shock Absorber	2062170
5b	Bolt .75" - 10UNC x 3.35" GR 5	see Kit K0130
5c	Bolt .75" - 10UNC x 9.5" GR 5	see Kit K0130
5d	Nut, lock, .75" - 10UNC	see Kit K0130
5e	Washer 3/4" ID	see Kit K0130
Shock Bolt Kit: 1 per Shock (5b-5e)		K0130 *
6a	D-D Clevis Link	see Kit K0095
6b	3/8" Chain P70 (7 Links)	see Kit K0095
Chain Restraint Kit, 1 per hanger		K0095*
7	Lift Air Spring (1 per swing arm)	2062186
8	Susp. Air Spring (1 per swing arm)	2061077
*	Special Order	

Ride Height Setting

Lowboy



25XPL



BARKSDALE RIDE HEIGHT CONTROL VALVE

INSTALLATION and ADJUSTMENT PROCEDURES

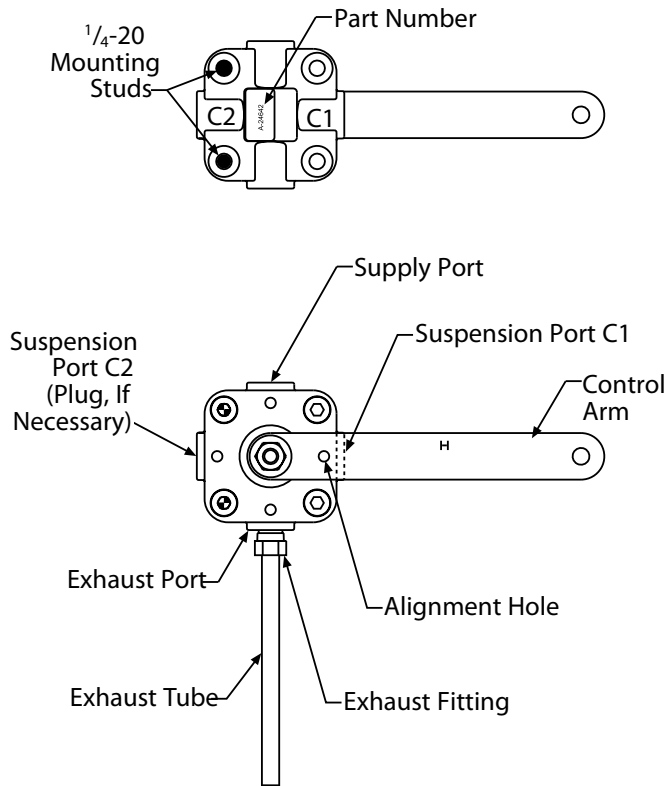


Figure 1. The Barksdale non-delay height control valve

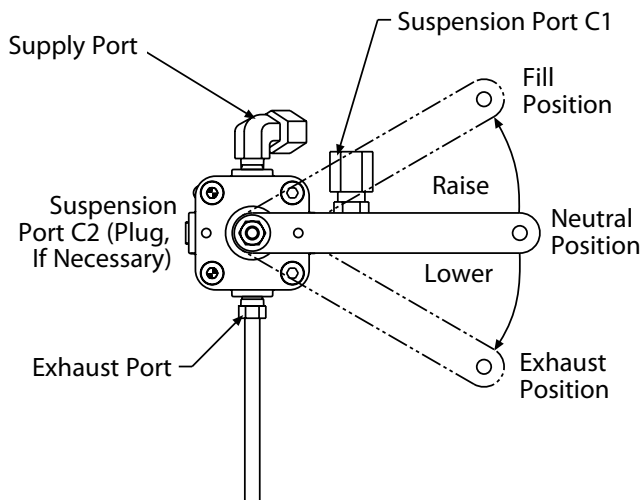


Figure 2. Ride height adjustment

FITTING INSTALLATION

1. Apply thread sealant onto the fitting threads, unless it is already pre-applied.

IMPORTANT: DO NOT APPLY TAPE to the fitting threads; the tape may cause contamination of the air system.

2. Install the supply and suspension fittings on the height control valve.

IMPORTANT: DO NOT OVERTIGHTEN fittings onto the height control valve. Overtightening the fittings may damage the valve body.

VALVE MOUNTING/AIR LINE ATTACHMENT

IMPORTANT: Before installing the height control valve, please review the drawings in the height control valve kit in order to determine the proper mounting and assembly.

1. When tightening the lock nuts on the height control valve mounting studs, DO NOT BACK OUT the studs from the height control valve body.

IMPORTANT: Loosening the studs may cause the height control valve to leak.

2. Ports C1 and C2 on the forward and rear face of the height control valve are the suspension ports. Attach the air line(s) from the air springs to the C1 and/or C2 port(s) (Figure 1).
3. When using only one suspension port, plug the unused port with the $\frac{1}{4}$ -inch NPT pipe plug provided in the height control valve kit.
4. Attach air supply line from the pressure protection valve to the supply port on the top of the height control valve (Figure 1).
5. Install the exhaust fitting into the exhaust port (Figure 1).
6. Tighten all the lines.

RIDE HEIGHT ADJUSTMENT

1. Determine recommended ride height by locating and reading the information on the identification tag; it is on the suspension trailing arm.
2. If necessary, rotate the control arm for the height control valve up to raise or down to lower the axle until the distance between the suspension mounting surface and the axle center matches the recommended suspension ride height (Figure 2).

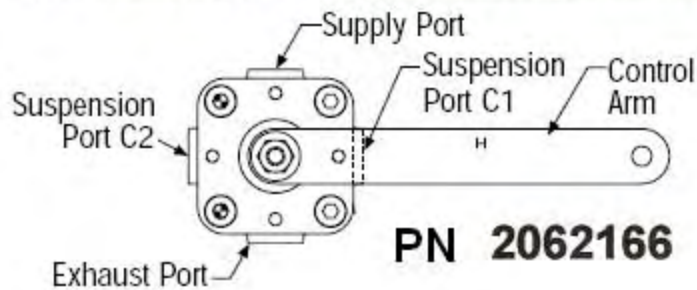
IMPORTANT: After setting the ride height, the control arm must remain in the neutral position.

3. Insert the wooden centering dowel into the control arm alignment hole and engage into the housing (Figure 1).

Cush Air Ride Valves

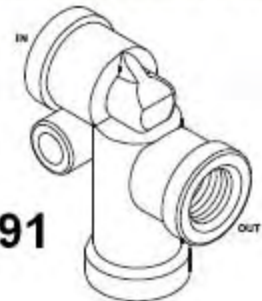
August 2003 Onward

Automatic Height Control Valve



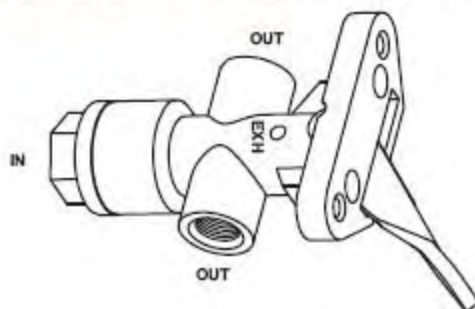
PN 2062166

Brake Protection Valve



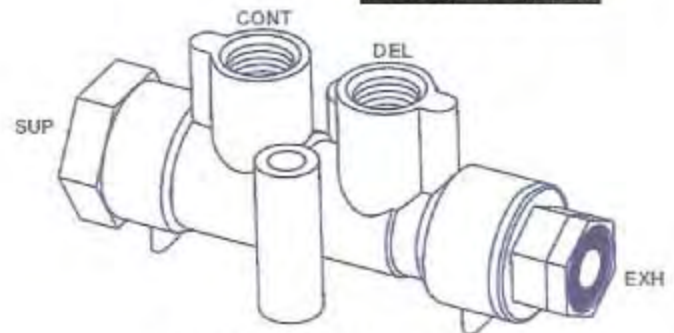
PN 2062091

Toggle Switch Valve *



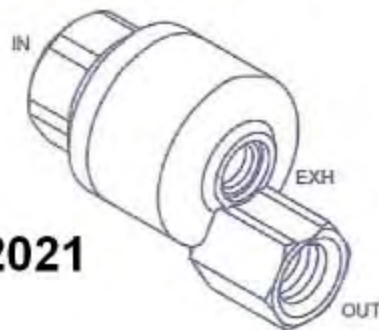
PN 2062082

Pilot Valve *



PN 2060824

Quick Release Valve *

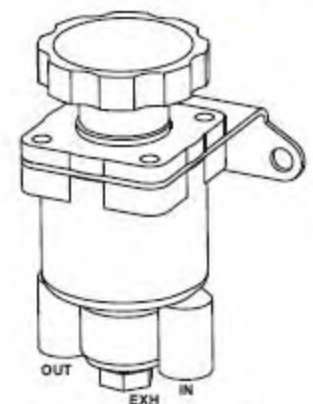


PN 2062021

Pressure Regulator Valve

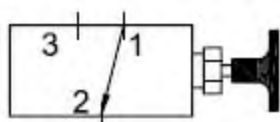


Set at 70 PSI
PN 2062140

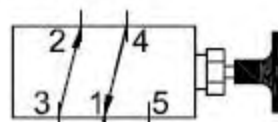


Adj. 5 - 85 PSI
PN 2060560

Push-Pull Valves **



3-Port
PN 2062265



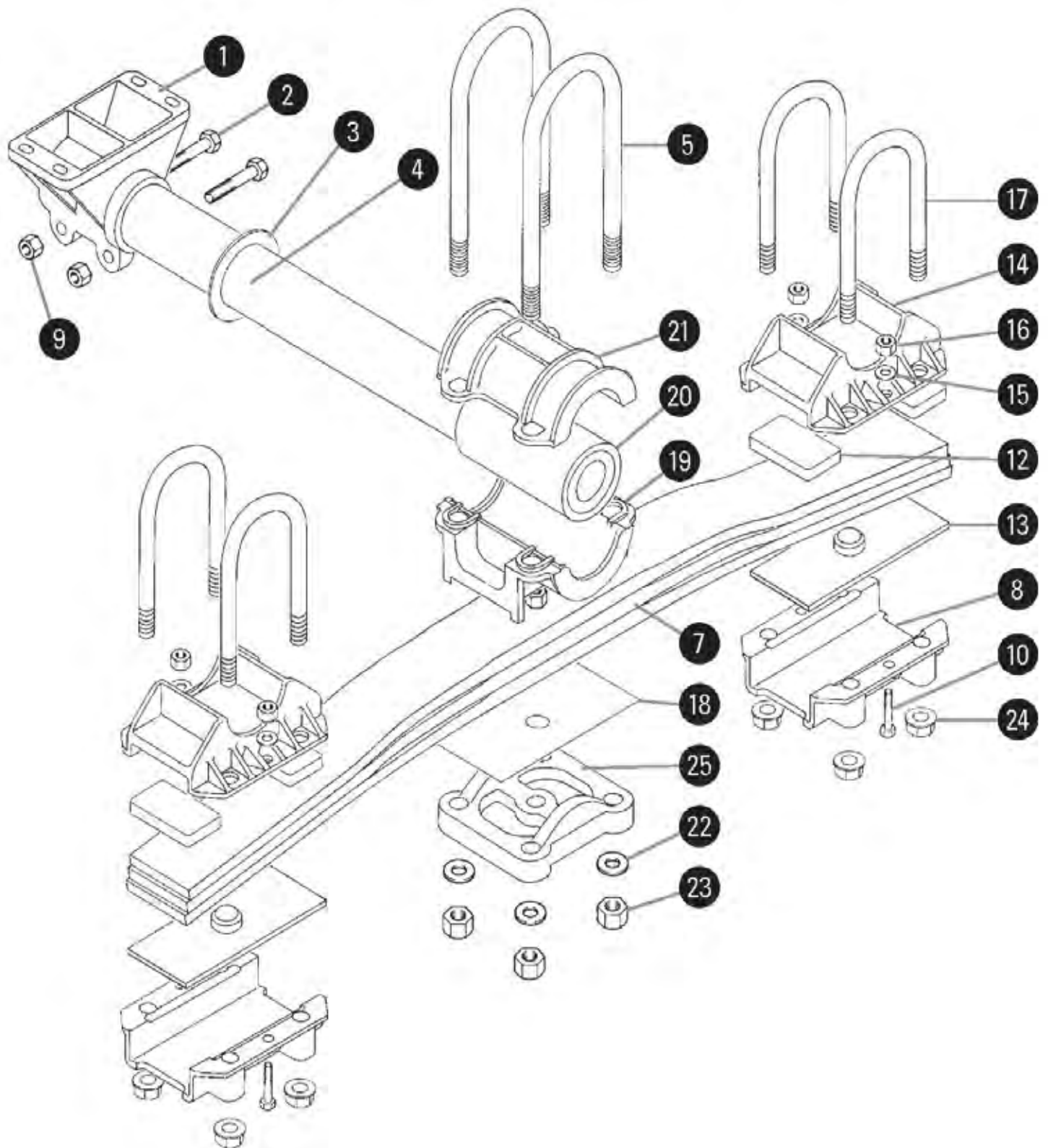
5-Port
PN 2062264

Not Shown: Air Pressure Gauge
PN 322145

* Used until Sept 2006

** Begin Oct 2006 (replaced toggle, quick release and pilot valve)

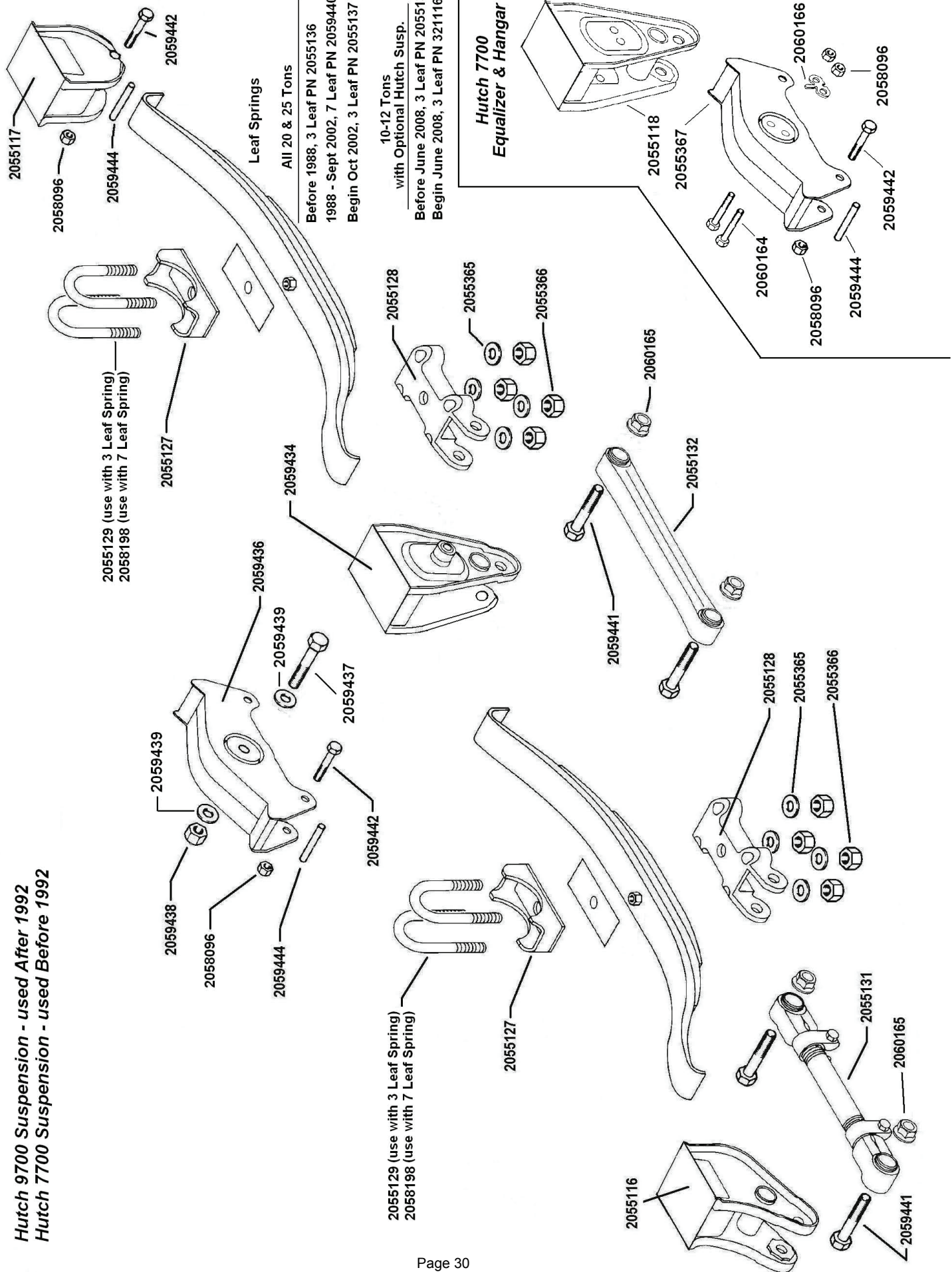
Hutch 900-50 Suspension Underslung Axles & Underslung Trunnion



HUTCH 900-50 SUSPENSION PARTS LIST

Item	Hutch PN	Eager Beaver Stocked PNs	Qty Used	Description
1	10476-03		2	Trunnion Hanger, 4-1/2"
2	10376-00	2058106	4	Hex Bolt 3/4" -16 UNF x 4 1/2" GR5
3	895-00	2058105	2	Washer, 7GA x 4 1/32 ID x 5 3/4 OD
4	893-10		1	Trunnion Tube (42" S.C.) 26-1/8" lg
5	835-04	2058100	4	U-Bolt, Trunnion, 15-3/8"
7	10055-00	2058103	2	Spring, 7 Leaf (50,000 lbs.)
8	9941-02	2058090	4	Spring End Cap
9	841-00		4	Hex Nut, Self Locking 3/4" - 16 UNF
10	9293-00		8	Hex Bolt, 5/8" -18 UNF x 2" GR5
12	814-00	2058091	8	Rubber Pad - Plain 814-00
13	10608-00		4	Adjustment Plate
14	9938-00	2058092	4	Spring Seat
15	10273-00		8	Washer, 1/8" x 21/32 ID x 1 15/16 OD
16	11513-03		8	Hex Lockrrut 5/8" - 18 UNF
17	10064-02	2058093	8	U-Bolt - Axle, 10-1/2" 10064-02
18	12919-01		2	Galvanized Liner - .040 x 4.75 x 10.00
19	891-00		2	Trunnion Hub - Upper Half
20	890-00	2058104	2	Rubber Bushing, Trunnion Hub
21	892-00	2058099	2	Trunnion Hub - Lower Half
22	837-00		8	Washer, 1/8" x 1 1/4 ID x 2 1/4 OD
23	836-00	2058101	8	Hex Nut, 1 1/8" -12 UNF x 1 1/2 HI
24	10562-00	2060165	16	Flange Nut Self Locking 1-14 UNS 10562-00
25	820-00	2058097	2	Spring Clamp Plate

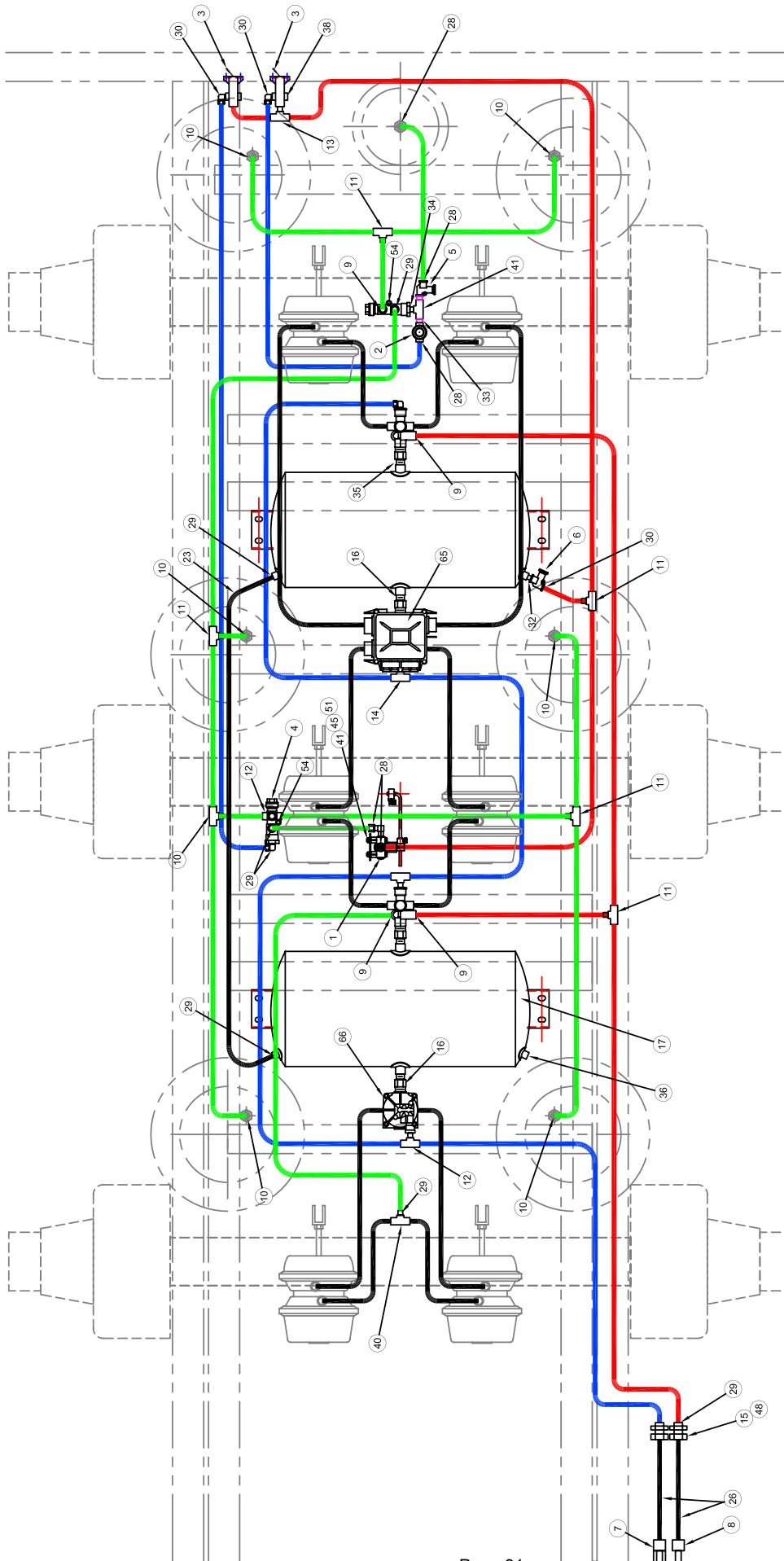
Hutch 9700 Suspension - used After 1992
Hutch 7700 Suspension - used Before 1992



Lowboy Tri-Axle Air System with ABS, Dump Valve and Lift Axle

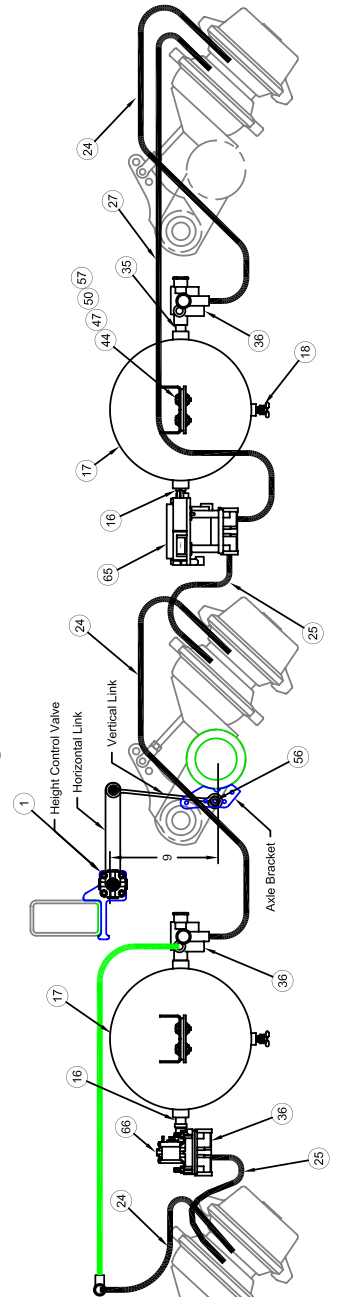
YE1

YE2



BU1

BU2

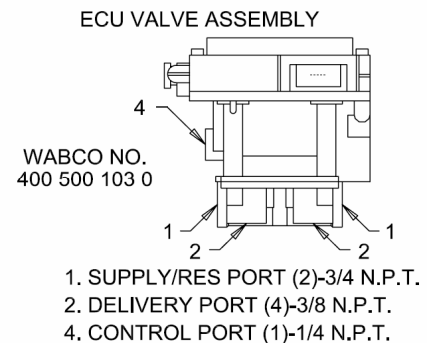
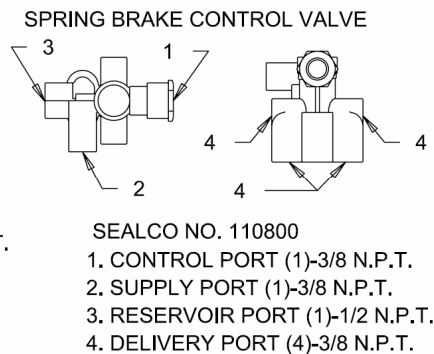
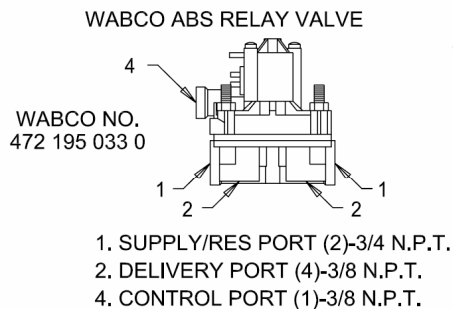


Lowboy Tri-Axle Air System with ABS, Dump Valve and Lift Axle

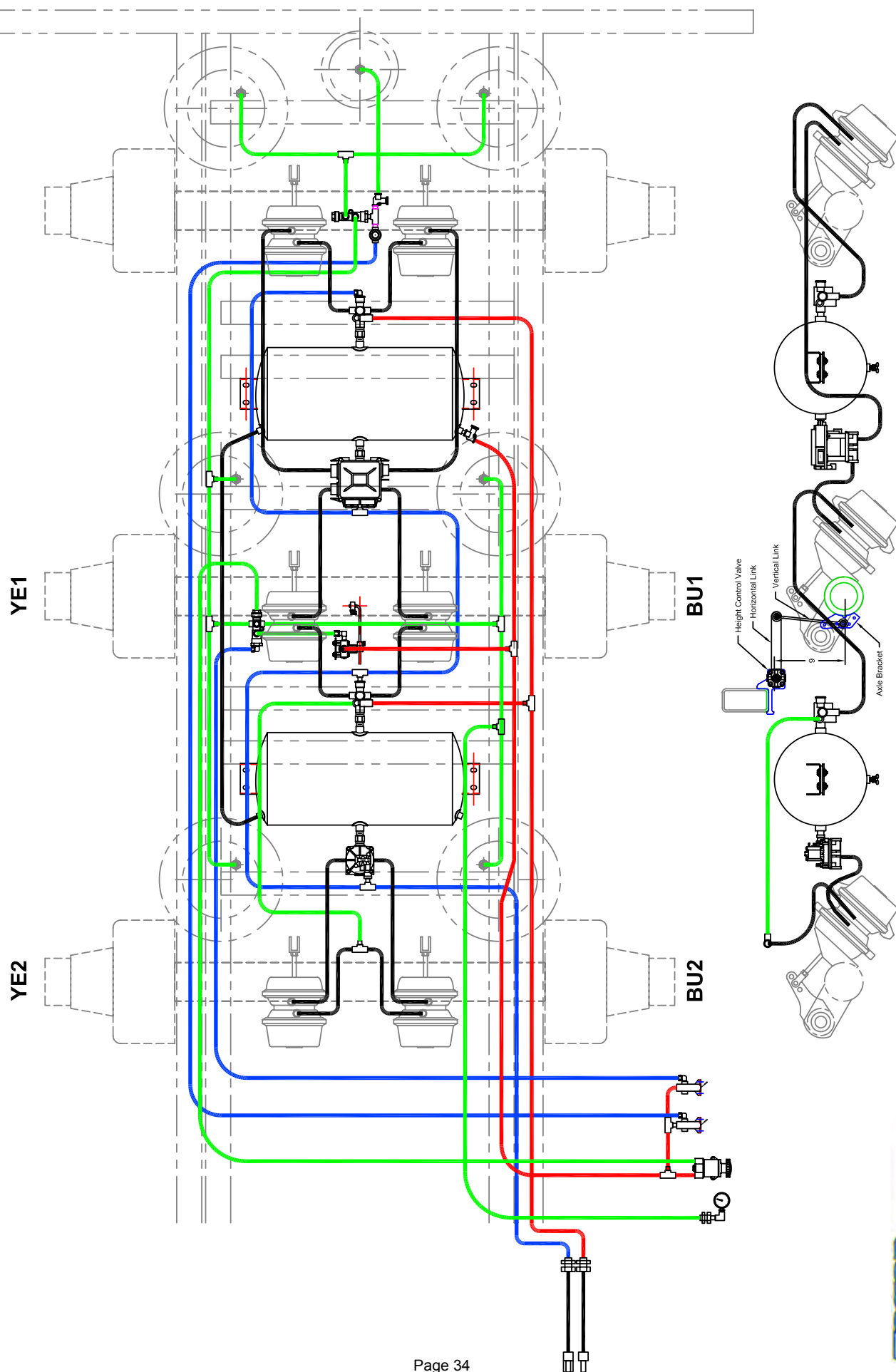
<u>Item</u>	<u>Part</u>	<u>Qty</u>	<u>Description</u>	<u>Comment</u>
1	322071	1	CUSH LWBY HT CONTROL VALVE KIT	
2	322129	1	PRESS REG VALVE, FIXED @ 70 PSI	
3	322132	2	TOGGLE CTRL VLV SEALCO#21600-2	
4	322133	2	AIR PILOT VLV - SEALCO #110591	
5	322135	1	QUICK REL VLV P/N 3800	
6	322139	1	BRAKE PROTECT VALVE #140270	
7	371503	1	3/8FNPT AIR/QD COUPLER	
8	371504	1	3/8FNPT AIR/QD NIPPLE	
9	381031	4	3/8T-3/8M STRAIGHT CONN (QCAB)	
10	381032	6	3/8T-1/4M STRAIGHT CONN (QCAB)	
11	381041	6	3/8TUBE UNION TEE (QCAB)	
12	381051	3	3/8T-3/8M SWVL BRNCH TEE(QCAB)	
13	381052	1	3/8T-1/8M SWVL BRNCH TEE(QCAB)	
14	381053	1	3/8T-1/4M SWVL BRNCH TEE(QCAB)	
15	381101	2	3/8FPT3/8FPT BLKHD CUP (STEEL)	
16	381153	2	3/4"HD NIPPLE, SEALCO #6006	
17	381203	2	AIR TANK (2850)-CUSH, 2PORT	
18	381211	2	REMOTE DRAIN VLV (350002-048)	
19	381302	2	SPRING BRAKE VLV, SEALCO 110800	
20	381878	60	3/8OD NYLON BRAKE TUBING- RED	
21	381879	45	3/8OD NYLON BRAKE TUBING-BLUE	
22	381880	30	3/8OD NYLON BRAKE TUBING-GREEN	
23	381881	10	3/8OD NYLON TUBING (BLACK)	
24	381901	6	24" 3/8 AIR BRAKE HOSE ASSY	
25	381902	4	30" 3/8 AIR BRAKE HOSE ASSY	
26	381904	2	48" 3/8 AIR BRAKE HOSE ASSY	
27	381910	2	54" 3/8 AIR BRAKE HOSE ASSY	
28	382001	5	3/8T-1/4M SWVL 90 ELBOW (QCAB)	
29	382002	10	3/8T-3/8M SWVL 90 ELBOW (QCAB)	
30	382003	3	3/8T-1/8M SWVL 90 ELBOW (QCAB)	
31	382106	10	3/8 90°STRT ELBOW, BRASS, 3400X6	
32	382150	1	3/8"HEX NIPPLE (BRASS)	
33	382151	2	1/4"HEX NIPPLE (BRASS)	
34	382154	2	3/8"X 1/4"HEX NIPPLE (BRASS)	
35	382156	2	1/2"X 3/4"HEX NIPPLE	
36	382162	8	3/8 SQHD PLUG (BRASS)	
37	382163	2	3/4 HEXHD PLUG (BRASS)	
38	382165	2	1/8 HEX SOCKET PLUG (BRASS)	
39	382171	1	1/4 HEX SOCKET PLUG (BRASS)	
40	382224	1	MOUNTED TEE'S (SEALCO)	
41	383121	1	1/4 NPT BRASS TEE, W/H 3700X4	
42	391311	1	ABS 2.5" AMBR MARKERLITE	(Not Shown)
43	411101	2	1/4-20X2 ZN HXHD CPSCRW GR5	
44	411121	8	3/8-16X1.25 HEXHD CPSCRW GR5	
45	411301	2	1/4-20 NYLOCK	

Lowboy Tri-Axle Air System with ABS, Dump Valve and Lift Axle

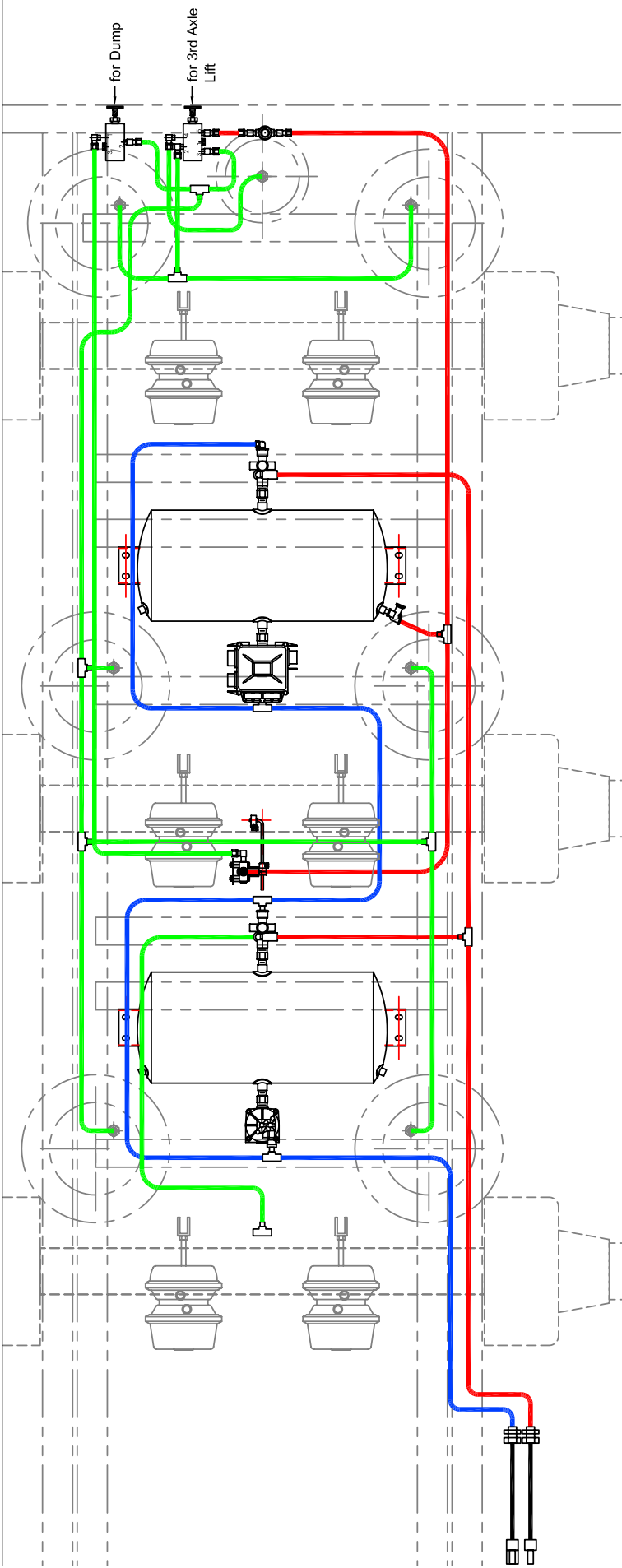
<u>Item</u>	<u>Part</u>	<u>Qty</u>	<u>Description</u>	<u>Comment</u>
46	411309	2	5/16-18 HEXNUT ZN GR.2	
47	411321	8	3/8-16 NYLOC LOCKNUT	
48	411402	2	3/8 RBC CLAMP	(Not Shown)
49	411471	2	1"SAE FLAT WASHER PLATED	
50	411501	16	3/8 STD FLAT WASHER,ZN	
51	411503	4	1/4"U.S.STD.FLAT WASHER,ZN	
52	411553	10	24" TIE WRAP #CT24HD	(Not Shown)
53	411626	10	10-32X3/4 PANHD SCRW TYPE F ST	
54	411821	18	1/2ID HOSE SEPARATOR	(Not Shown)
55	413002	2	5/16-20X2 1/2 TORXHD DECKSCREW	
56	413041	1	1/4X1.375" SAFETY SNAP PIN	
57	420001	2	AIRTANK MOUNTING PAD #1068	
58	423002	1	2.5"GROMMET PET#B142-18	(Not Shown)
59	440041	1	"CAUTION TRLR EQPT W/ABS BRKS"	(Not Shown)
60	440042	2	"ALL-WHEEL ABS"6.125X12.125	(Not Shown)
61	440043	1	"ABS INDICATOR LAMP INSTRUCTN"	(Not Shown)
62	445844	1	DECAL (LIFT AXLE)	(Not Shown)
63	445845	1	DECAL (AIRBAG EXHAUST)	(Not Shown)
64	445850	1	DECAL -DANGER,SPRING BRAKES	(Not Shown)
65	451007	1	4005001030 (2&3 AXLE ECU),ESII	
66	451010	1	472-195-033-0 RELAY VALVE	
67	451022	6	4497130180 6' SENSOR EXT CBLE	(Not Shown)
68	451056	1	4494410300 10' RELAY CABLE,ESII	(Not Shown)
69	451020	4	4410328080 SENSOR W 1' CABLE	(Not Shown)
70	451015	4	8997598154 SENSOR RETAINER CLIP	(Not Shown)



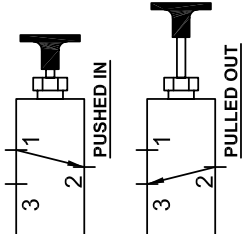
Lowboy Tri-Axle Air System with ABS, Manual Raise & Lower and Lift Axle



Tri-Axle Lowboy Air System with Push/Pull Valves (NO Toggle or Pilot Valves)



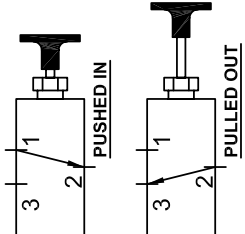
1st & 2nd Axle Dump Valve (p/n 322130)



DUMP VALVE(3) Port x (2) Position - Knob IN		
PORT No	Description	
1	HCV	Connected
2	Air Bags	Blocked
3	Exhaust	Blocked

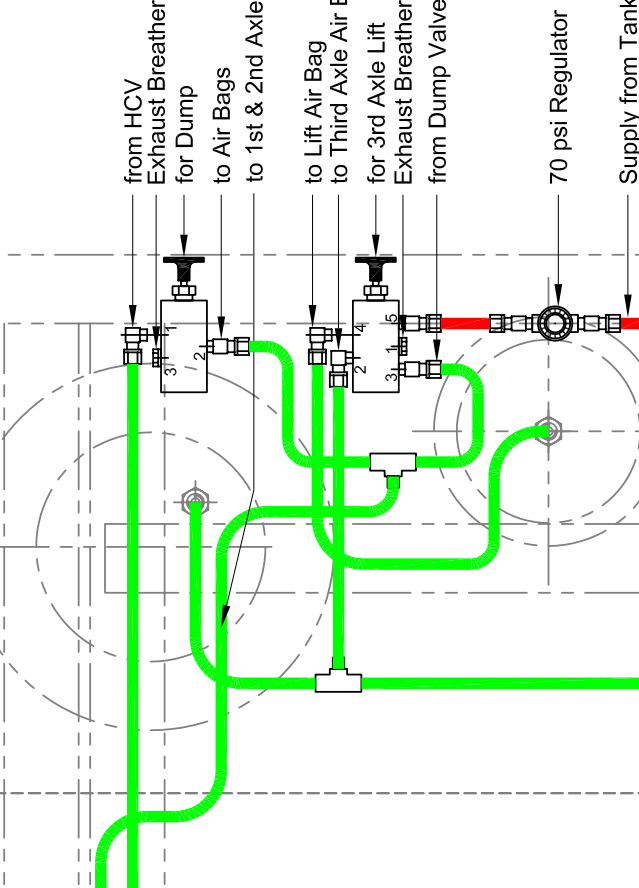
DUMP VALVE(3) Port x (2) Position - Knob OUT		
PORT No	Description	
1	HCV	Blocked
2	Air Bags	Connected
3	Exhaust	Connected

3rd Axle Lift/Dump Valve (p/n 322128)

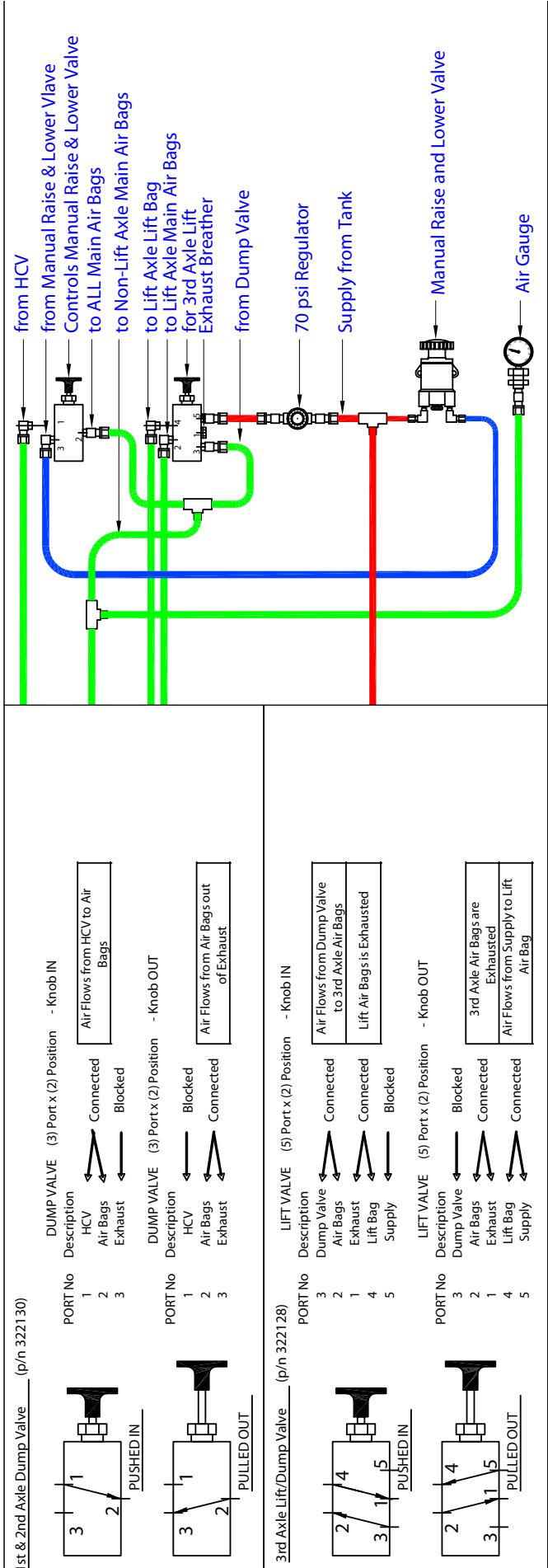
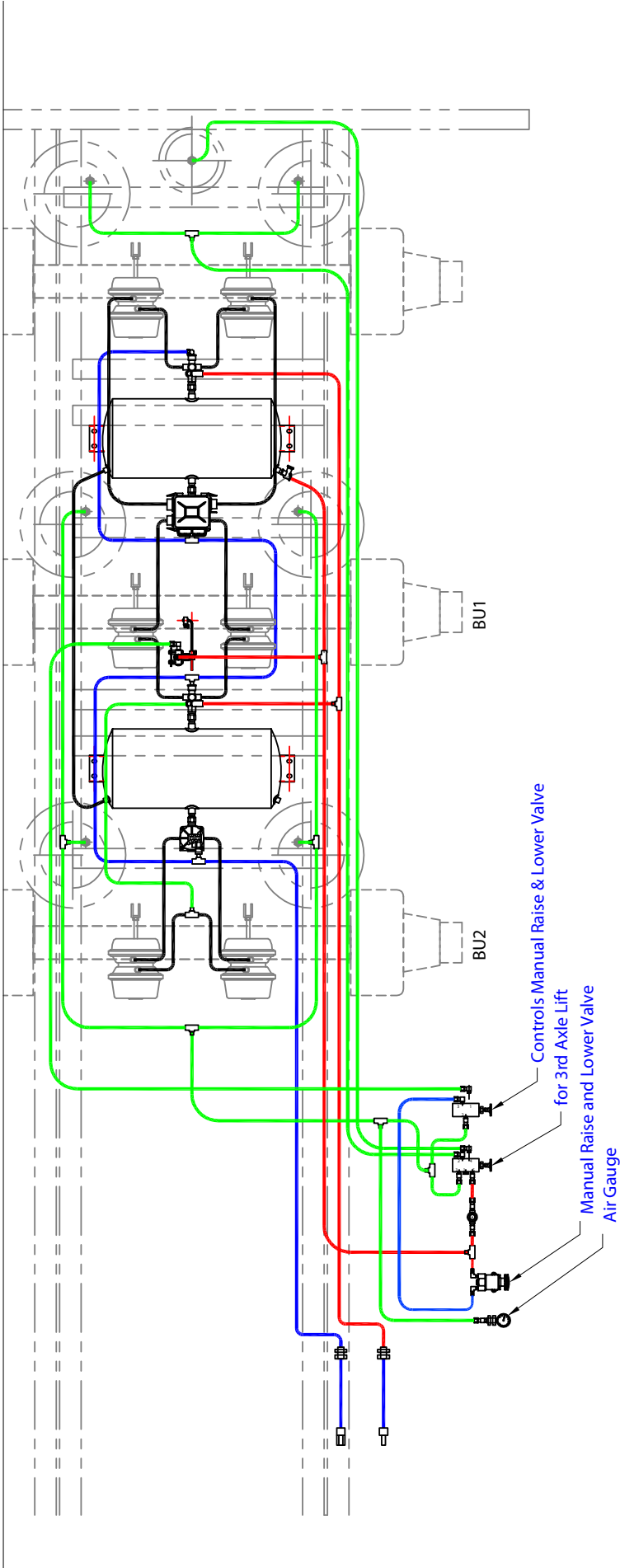


LIFT VALVE(5) Port x (2) Position - Knob IN		
PORT No	Description	
3	Dump Valve	Connected
2	Air Bags	Connected
1	Exhaust	Connected
4	Lift Bag	Blocked
5	Supply	Blocked

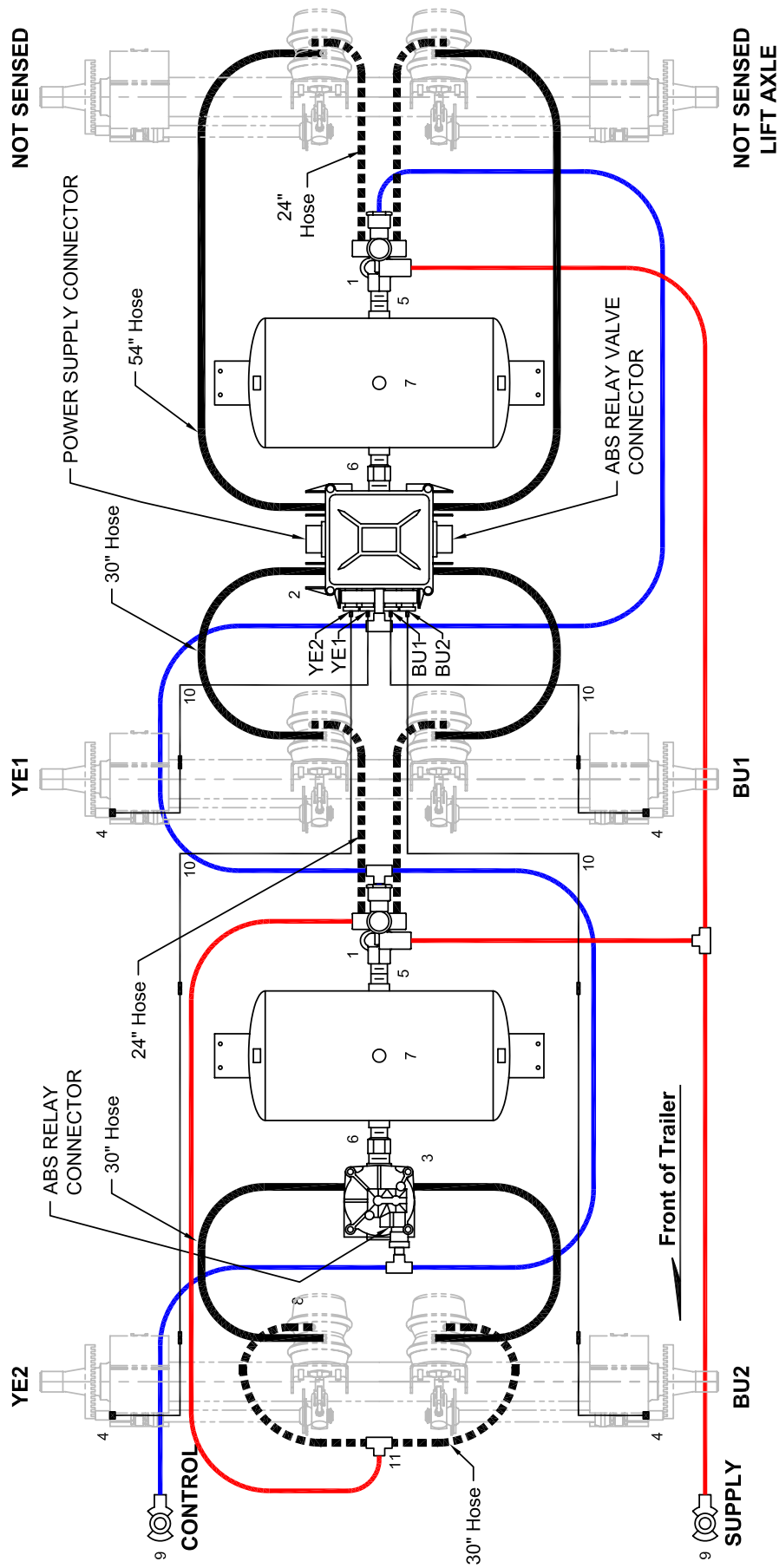
LIFT VALVE(5) Port x (2) Position - Knob OUT		
PORT No	Description	
3	Dump Valve	Blocked
2	Air Bags	Connected
1	Exhaust	Connected
4	Lift Bag	Connected
5	Supply	Connected



Tri-Axle Lowboy Air System with Push/Pull Valves (NO Pilot Valves) and Manual Raise & Lower

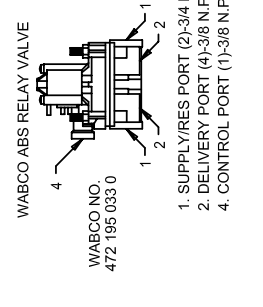
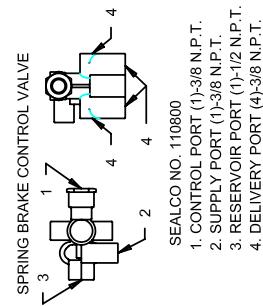
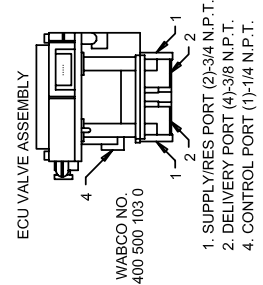


4S-3M Air System Schematic for Tri-Axle Lowboy with Lift Third



Item	Description
1	Spring Brake Valve
2	ECU ABS Valve
3	ABS Relay Valve
4	Wheel Sensors
5	3/4" x 3/4" Nipple
6	3/4" x 1/2" Nipple
7	2850 Culin Air Tank
8	Air Brake Chambers
9	Glad-hands
10	Sensor Extension Cable
11	Mounting Tee

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



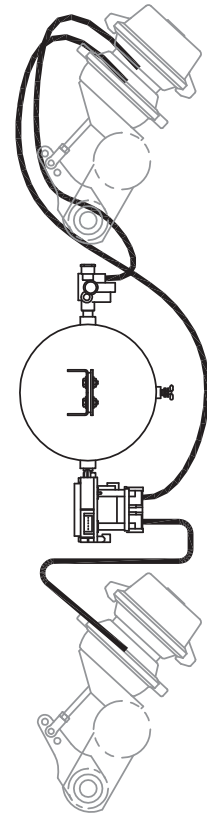
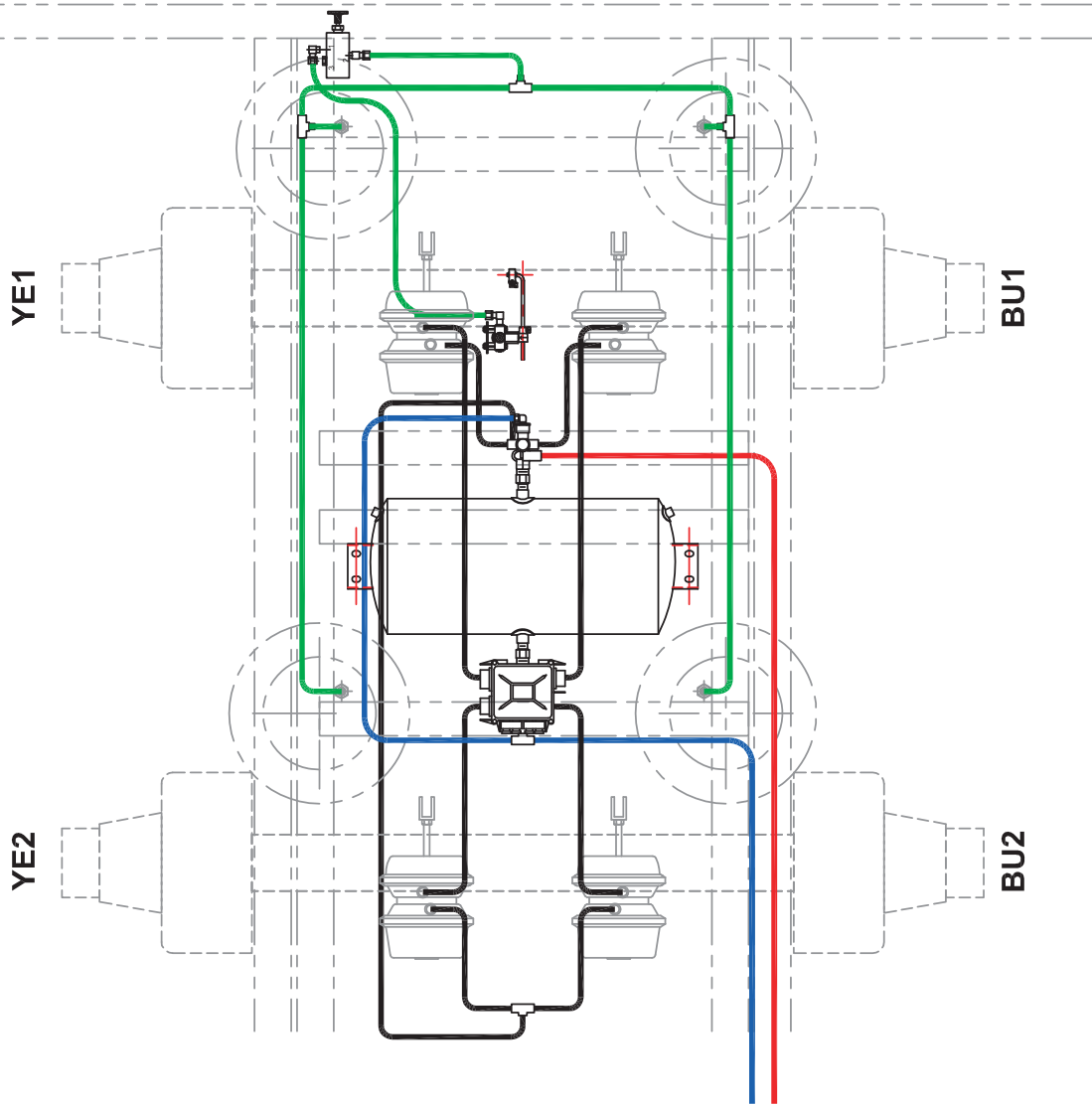
Note: ALL air lines and hoses must be properly routed and secured, so to prevent contact with any surfaces or each other.



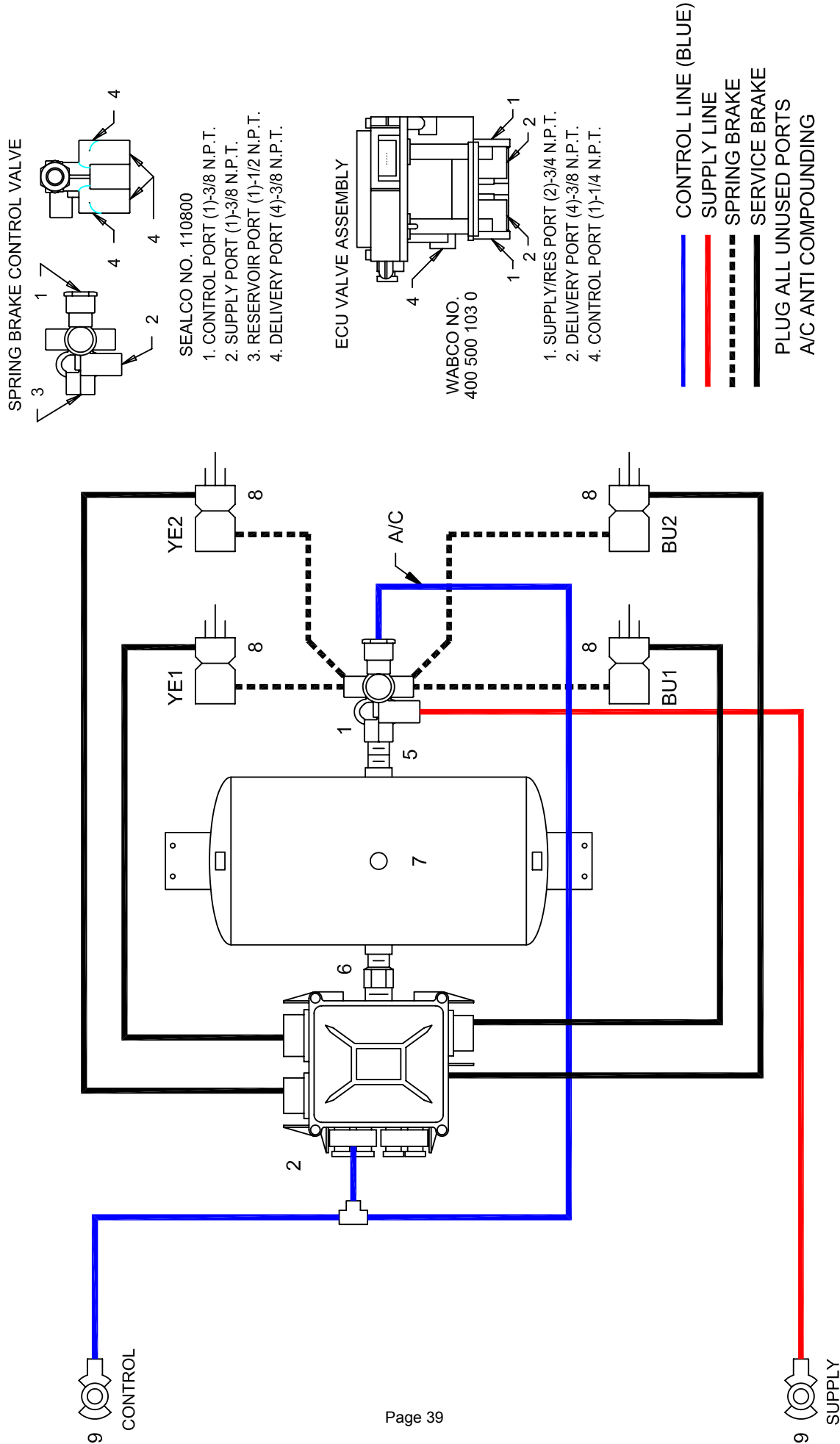
General Engine Co., Inc. 1480 Highway 27, Lake Wales, Florida, USA, 33859, 1-800-227-4143
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must be constructed in accordance with the specifications of General Engine Co., Inc. and must
be constructed in accordance with the specifications of General Engine Co., Inc. without
incurring any obligation to such changes.

Lowboy Tandem Axle Air System with Push/Pull Valves (NO Toggle or Pilot Valves)

Item No	Part No	Qty	Description
1	451022	4	4497130180 6"SENSOR EXT CBLE
2	451007	1	4005001030 (2&3 AXLE ECU),ESII
3	445850	1	DECAL -DANGER,SPRING BRAKES
4	440043	1	"ABS INDICATOR LAMP INSTRUCTN"
5	440042	2	"ALL-WHEEL ABS"6.125X12.125
6	440041	1	"CAUTION TRLR EQPT W/ABS BRKS"
7	423002	1	2.5"GROMMET PET#B142-18
8	420001	2	AIRTANK MOUNTING PAD #1068
9	411821	8	1/2ID HOSE SEPARATOR
10	411675	2	1/4-20X 1 ZN TYPE F HEXWASH
11	411626	2	10-32X3/4 PANHD SCRW TYPE F ST
12	411553	10	24" TIE WRAP #CT24HD
13	411501	8	3/8 STD FLAT WASHER,ZN
14	411471	2	1"SAE FLAT WASHER PLATED
15	411402	2	3/8 RBC CLAMP
16	411321	4	3/8-16 NYLOC LOCKNUT
17	411121	4	3/8-16X1.25 HEXHD CPSCRW GR5
18	391311	1	ABS 2.5" AMBR MARKERLITE
19	382224	1	MOUNTED TEE'S (SEALCO)
20	382163	1	3/4 HEXHD PLUG (BRASS)
21	382162	4	3/8 SQHD PLUG (BRASS)
22	382156	1	1/2"X 3/4"HEX NIPPLE
23	382154	1	3/8"X 1/4"HEX NIPPLE (BRASS)
24	382106	4	3/8 90°STRT ELBOW,BRASS;3400X6
25	382002	3	3/8T-3/8M SWVL 90 ELBOW (QCAB)
26	382002	2	3/8T-3/8M SWVL 90 ELBOW (QCAB)
27	382001	1	3/8T-1/4M SWVL 90 ELBOW (QCAB)
28	381910	2	54" 3/8 AIR BRAKE HOSE ASSY
29	381901	6	24" 3/8 AIR BRAKE HOSE ASSY
30	381879	45	3/8OD NYLON BRAKE TUBING-BLUE
31	381878	60	3/8OD NYLON BRAKE TUBING- RED
32	381302	1	SPRING BRAKE VLV,SEALCO 110800
33	381211	1	REMOTE DRAIN VLV (350002-048)
34	381202	1	AIR TANK (2850) #HT-1242 2PORT
35	381153	1	3/4"HD NIPPLE,SEALCO #6006
36	381101	2	3/8FPT3/8FPT BLKHD CUP (STEEL)
37	381053	3	3/8T-1/4M SWVL BRNCH TEE(QCAB)
38	381031	1	3/8T-3/8M STRAIGHT CONN (QCAB)
39	371504	1	3/8FNPT AIR/QD NIPPLE
40	371503	1	3/8FNPT AIR/QD COUPLER

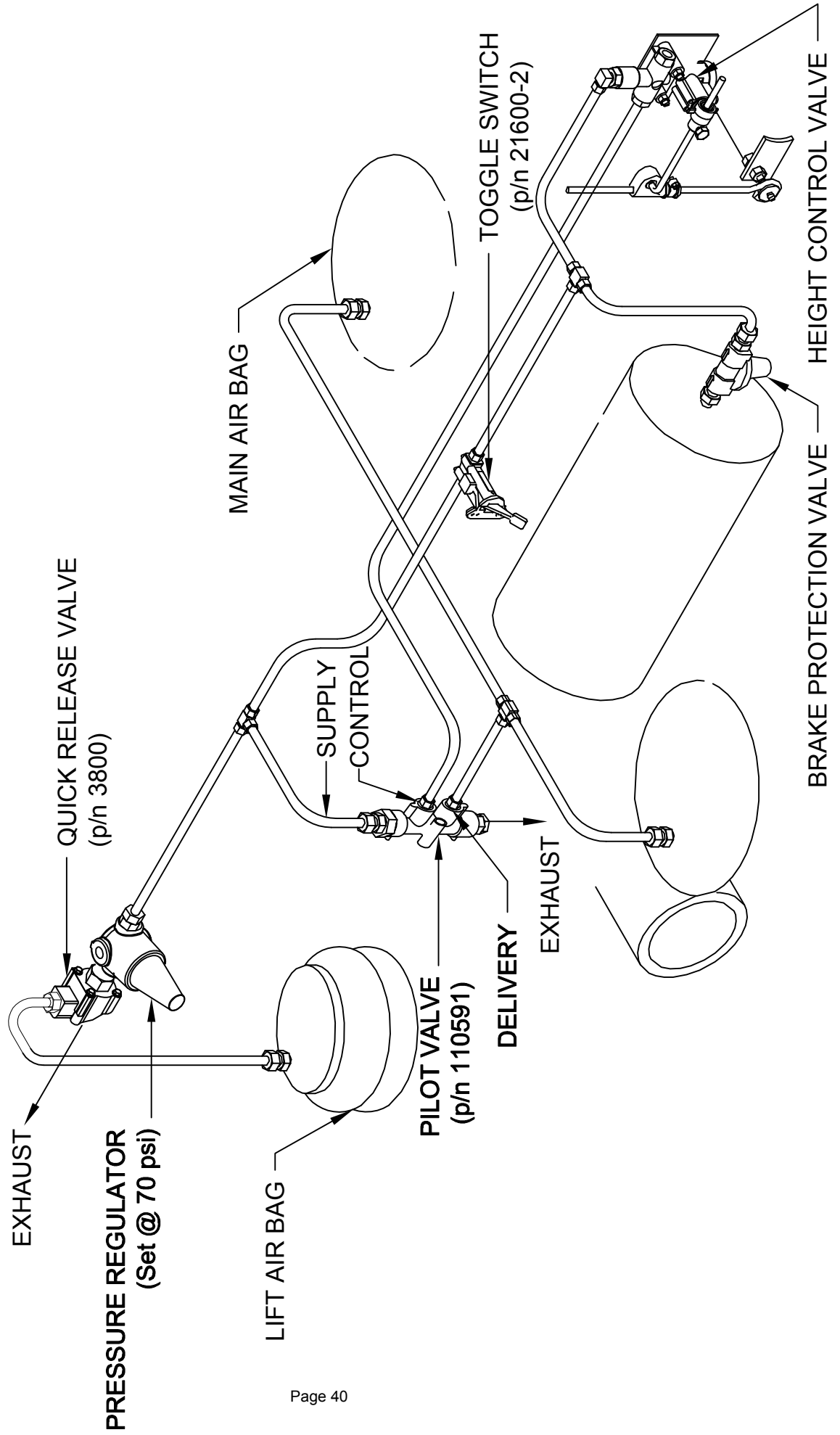


4S-2M Air System Schematic



LIFT AXLE AIR SYSTEM

Applicable to Lowboy Trailers with Toggle Control Switch
(manufactured before October 2006)



REMOVABLE AXLE OPERATING INSTRUCTIONS

Removable Axle *ONLY* Install

When the Removable Axle is close coupled to the trailer, simply connect the bottom and top pins, bottom pins first. If equipped, use the Manual override controls on the Removable Axle to raise or lower the Removable Axle until the upper pins can be inserted.

Attach **ALL** air and electrical connections. See the final Check List at the end of this document for removable axle operational notes.



WARNING! Make sure that the manual over ride control are turned OFF before moving trailer. To turn off the manual override control, push in the knob labeled PULL TO TURN ON MANUAL OVERRIDE. See label to right.



Removable Axle and Nitro-Booster Install

When the Removable Axle is used with a Nitro-Spreader Bar, simply connect the bottom and top pins of both the spreader bar and the Removable Axle, bottom pins first. Using the manual raise and lower controls for both the trailer and Removable Axle, as well the jack on the Nitro-Spreader bar can facilitate this connecting procedure. See the operational instruction decal on the Nitro-Spreader Bar for detail instructions of its use.



WARNING! The Nitro-Spreader bar is for use with **ONE** Removable Axle **ONLY**. Using more than one Removable Axle can damage the Nitro-Spreader bar.



WARNING! Make sure that the manual over ride controls on the trailer and Removable Axle are turned OFF before moving trailer.

Removable Axle and East Coast Spreader Install

When the Removable Axle is used with an East Coast Spreader Bar, a shimming process is required to transfer the proper weight to the Removable Axle.

Install the bottom pins only of both the spreader bar and the Removable Axle. DO NOT install the top pins. Connect **SUPPLY RED** air line. This will allow the use of the Removable Axle's manual override controls to raise and lower the Removable Axle. Install equal amounts of Shims at the spreader to trailer connection as are used at the Removable Axle to spreader connection. Make sure that the shims on each side of the trailer are always the same. Use the Manual Override controls on both the trailer and Removable Axle to raise or lower the trailer rear and the Removable Axle until the proper amount of shims can be inserted. This is usually achieved by raising the trailer rear and lowering the Removable Axle.

Changing the shim thickness may need to be done several times until ALL the axle loads are equal. Checking axle loads requires a certified scale.



CAUTION! Confirmation of axle loads should only be checked at Certified Scales. Unequal axle loads can damage the trailer frame or suspensions.



WARNING! Make sure that the any manual over ride control are turned OFF before moving trailer.

Removable Axle Operation Check List

- Make sure that the electrical plugs are firmly inserted and locked into the electrical socket at the rear of the trailer and spreader bar, if installed. Check ALL Lights for proper operation (Stop/Tail/Turn, Marker, Clearance and Strobe or Back-Up Lights (if equipped)).
- Make sure that all Air Lines are connected at both the rear of the trailer and spreader bar, if installed. Check that the Air Brake will apply and release. Removable Axles do NOT have the ABS function. The brake application is independent of the trailer brakes and receives it supply (Emergency Line) and control (Service Line) directly from the tractor. See chart below for air connection labeling.

Decal Image



RED SUPPLY (Emergency) air line from tractor.

BLUE Control (Service) air line from tractor.

Supply line from trailer tank brake protection valve.

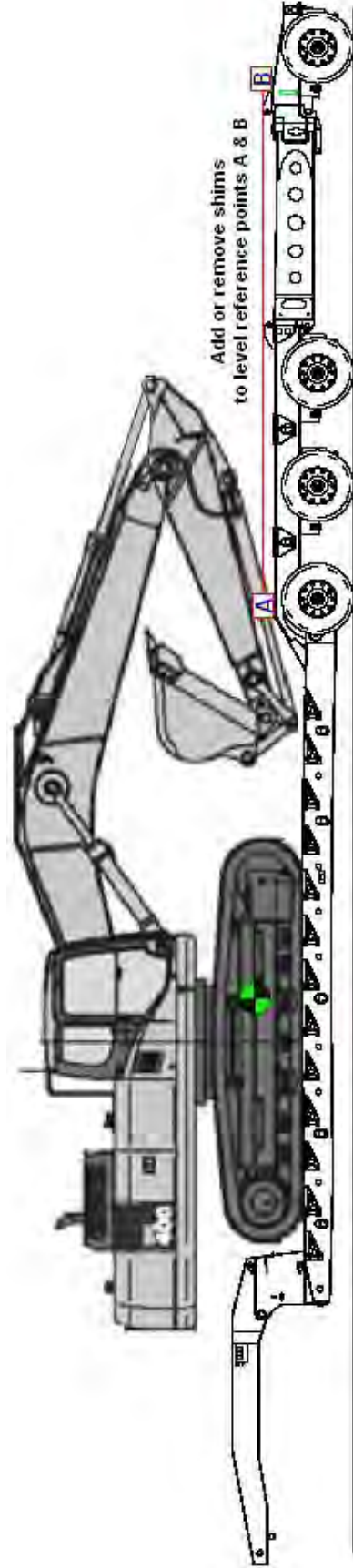
Air Ride Supply air from trailer Automatic Height Control Valve.

- The air suspensions air supply comes from the trailers Automatic Height Control Valve (HCV), so the ride height should be the same as the trailers axles when loaded. The Removable Axle should NOT be used when traveling empty or minimal load. The Removable Axle can be complete removed or flipped over onto the trailer for storage.



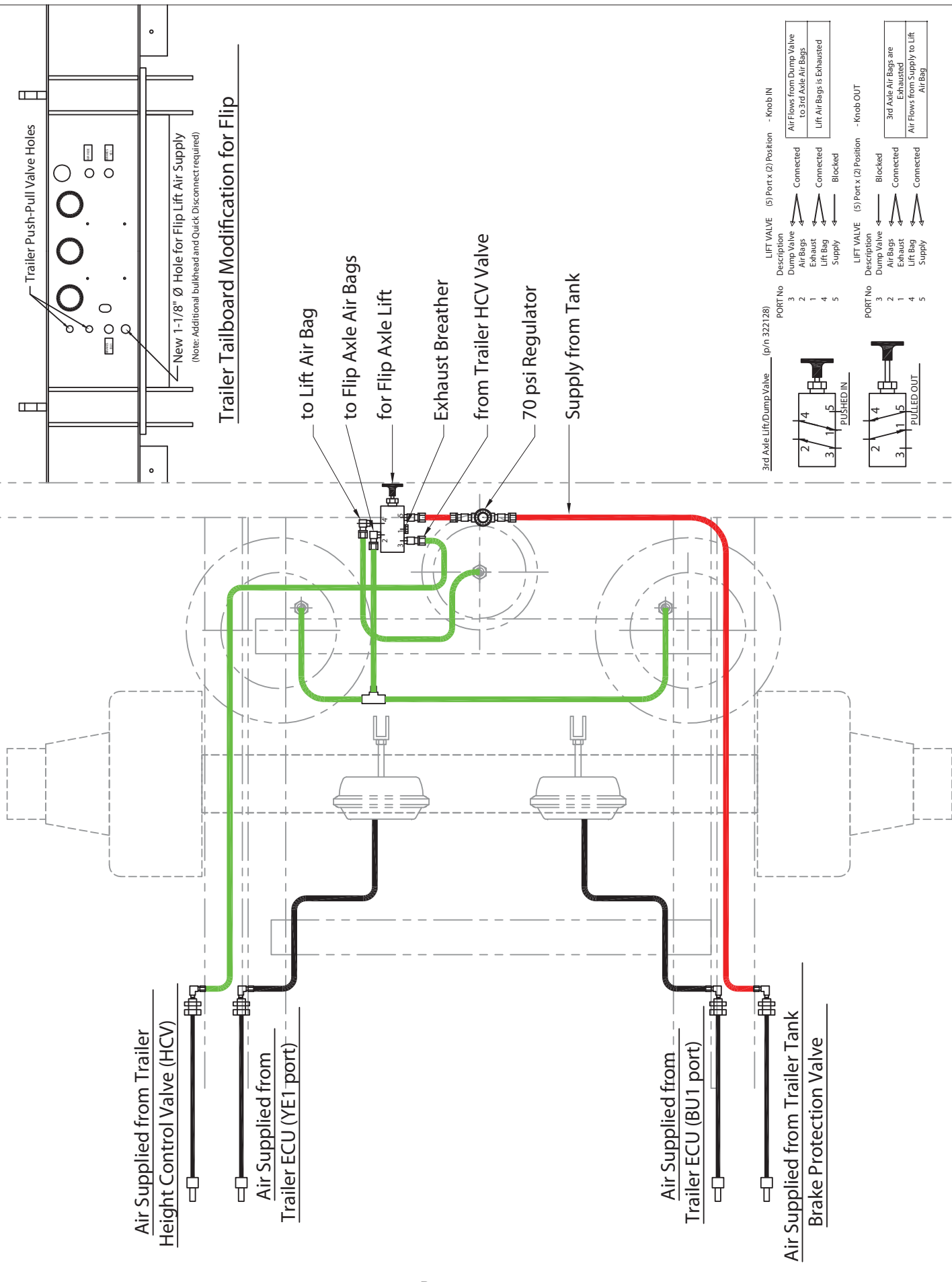
WARNING! Make sure that the manual over ride control are turned OFF and back to automatic before moving the trailer. Failure to do so may damage either the trailer frame or suspensions.

Universal Spread Axle Shimming and Trailer Scaling Recommendations

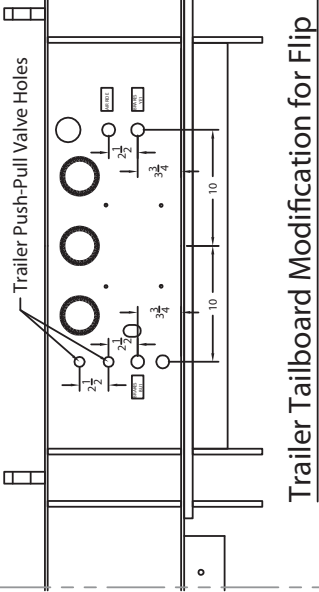
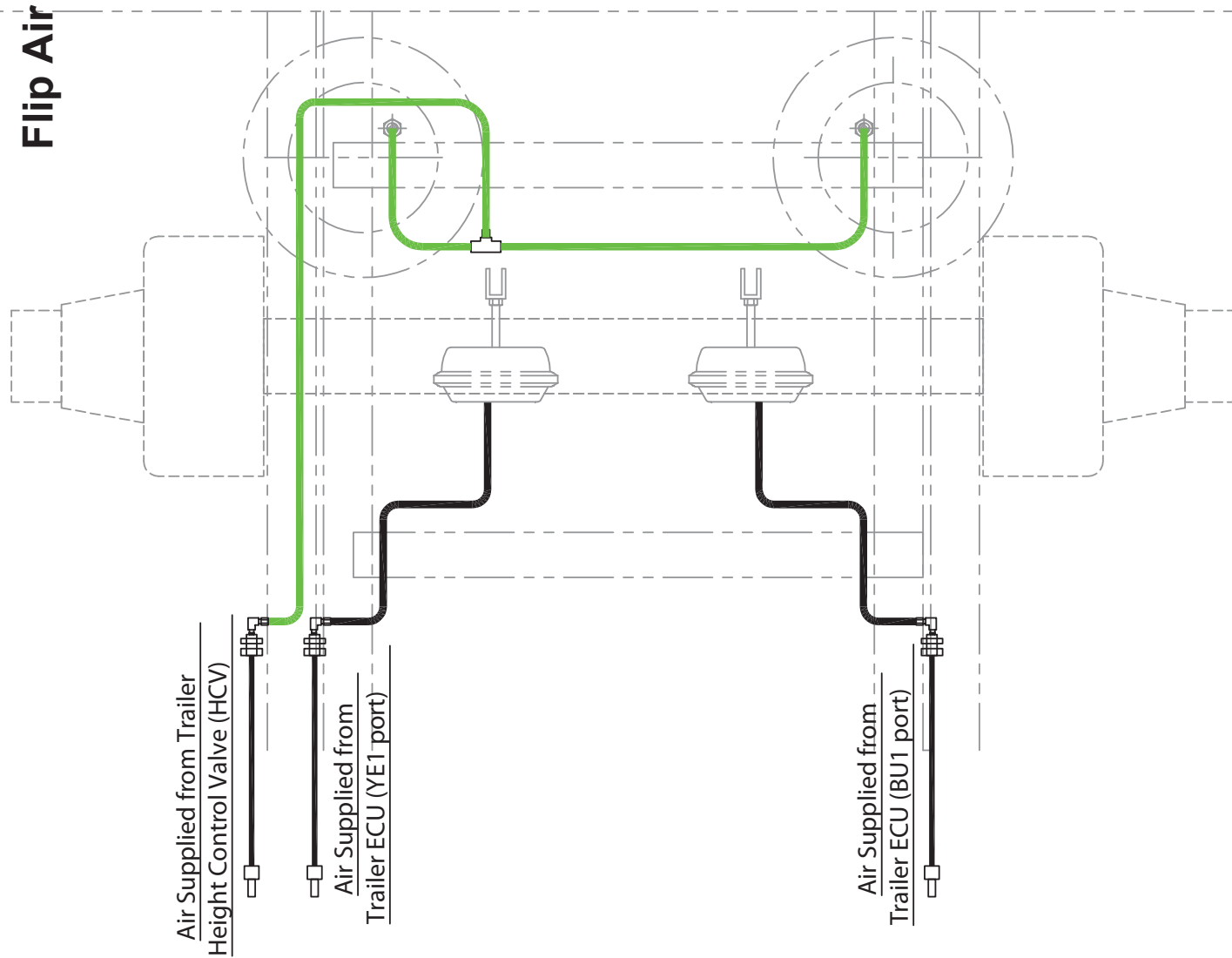


1. With a load on the trailer, scale 3 trailer axles. To do this, either remove the spreader or remove all shims and dump spread axle air to ensure negligible weight distributed to spread axle. Record the scale weight of the three trailer axles. Goal will be to distribute 25% of this weight to spread axle. For example, if 3 axles scale at 78,000 lbs, goal will be to distribute 19,500 lbs to the spread axle, thereby reducing the weight on the 3 trailer axles from 78,000 to 58,500.
2. With a load on the trailer, add or remove shims as necessary between trailer & spreader and between spreader & the +1 spread axle to make top of trunnion beam over trailer axle almost level with top of beam on spread axle (see Reference Point A & B, respectively, in above diagram). Use the manual raise - lower valve on both trailer (if installed) and spread axle as a tool to raise & lower rear of trailer and spread axle to assist with adding shims. In order to achieve separation between the spreader and +1 axle, blocking may need to be placed under the rear of the spreader in conjunction with dumping the air from the +1 axle suspension.
3. Push in the Push-Push air control valve on the +1 axle to engage automatic ride height control. Scale load with 3+1 axle configuration. Make final shim adjustments to achieve 25% load distribution goal. In essence, add shims to increase weight distribution to the +1 axle; remove shims to decrease the weight distribution to the +1 axle.

Flip with Lift Air System with Push/Pull Valves

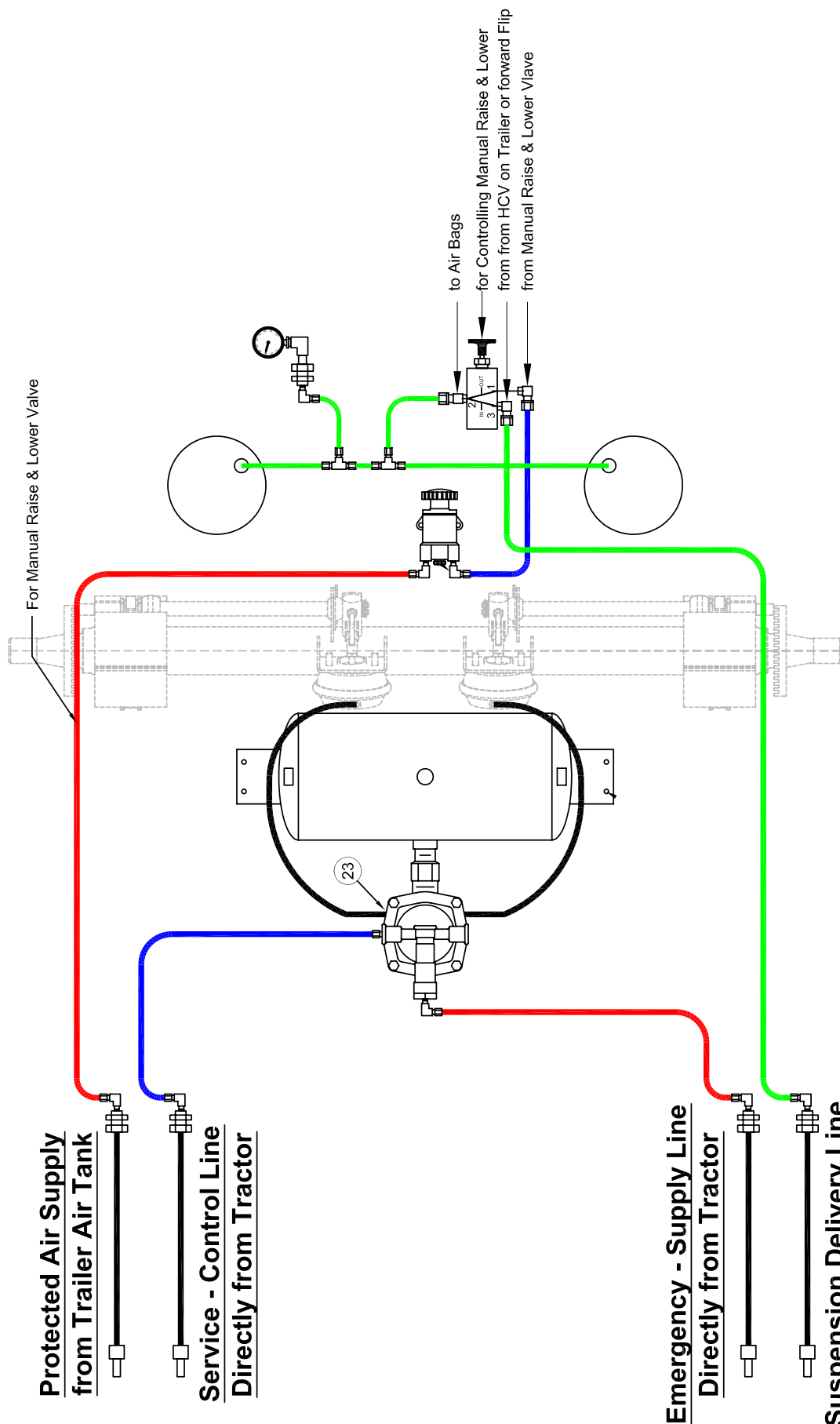


Flip Air System



Booster Flip Air System (NO Pilot)

NOT SENSED



NOT SENSED

Flip Axle
NO Spring Brakes

Note: ALL air lines and hoses must be properly routed and secured, so to prevent contact with any surfaces or each other.



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Booster 4th Axle & Flip 4th Axle Pins

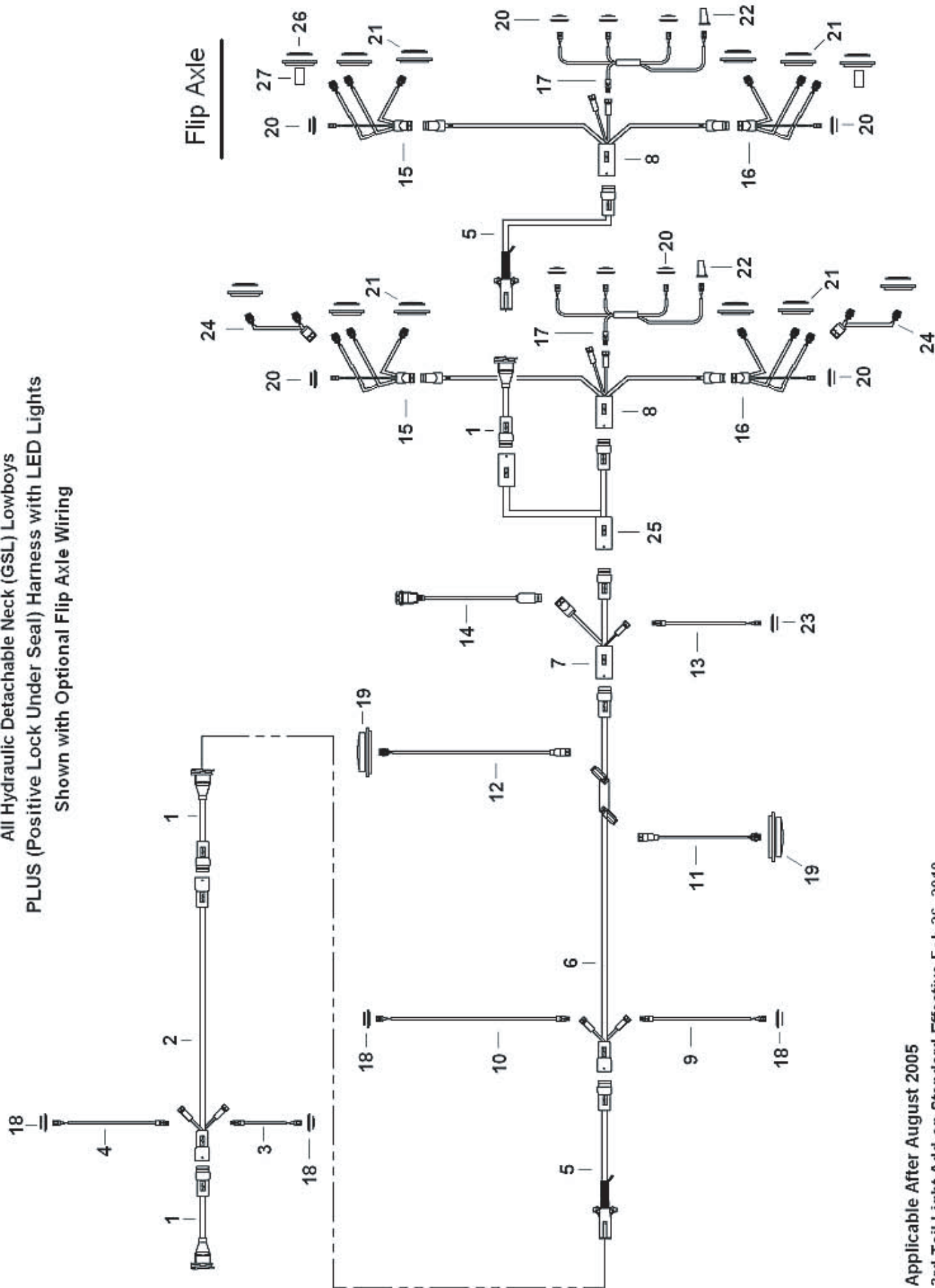
	Bolt Style "No Shim" Until	No Bolt Style with Shims Begin	Universal with Shims Begin
	Nov 2005	Dec 2005	Dec 2007
Booster and Universal Flip Axle Pins & Shims			
Upper Pin - 1.5" Dia x 4" Long	2063091	2063091	NA
Lower Pin - 2.5" Dia x 10" Long	2063093	2063093	NA
Universal Flip Upper Pin - 1.75" Dia x 9" Long (includes snap pins)	NA	NA	2063095
Universal Flip & 1 Axle Spreader Lower Pin - 2" Dia x 9 " Long (incl. snap pins)	NA	NA	2063094
Universal Flip & 2 Axle Spreader Lower Pin - 2.5" Dia x 10" Long (incl. snap pins)	NA	NA	2063093
Shim Kit	NA	987135	987175
Snap Pin to secure Upper Pin (2 of PN 413043 or 1 of PN 413042 per pin)	413042	413042	413043
Snap Pin to secure Lower Pin (2 per pin required)	413043	413043	413043

Standard Flip 4th Axle ONLY (Pre Universal)

Beginning in December 2007 Universal Booster Flip used on All Lowboys

	All Models	
	Before Dec 2007	
Standard Flip 4th Axle Pins (Not for use with Universal)		
Upper Flip Pin - 1.5" Dia x 4" Long	2063091	
Lower Flip Pin - 2" Dia x 7" Long	2063092	
Snap Pin to secure upper & lower pins (1 per pin)	413042	

Eager Beaver Trailers
 All Hydraulic Detachable Neck (GSL) Lowboys
 PLUS (Positive Lock Under Seal) Harness with LED Lights
 Shown with Optional Flip Axle Wiring



Applicable After August 2005
 3rd Tail Light Add-on Standard Effective Feb 26, 2010

All Model GSL Lowboys - PLUS Harness with LED Lights

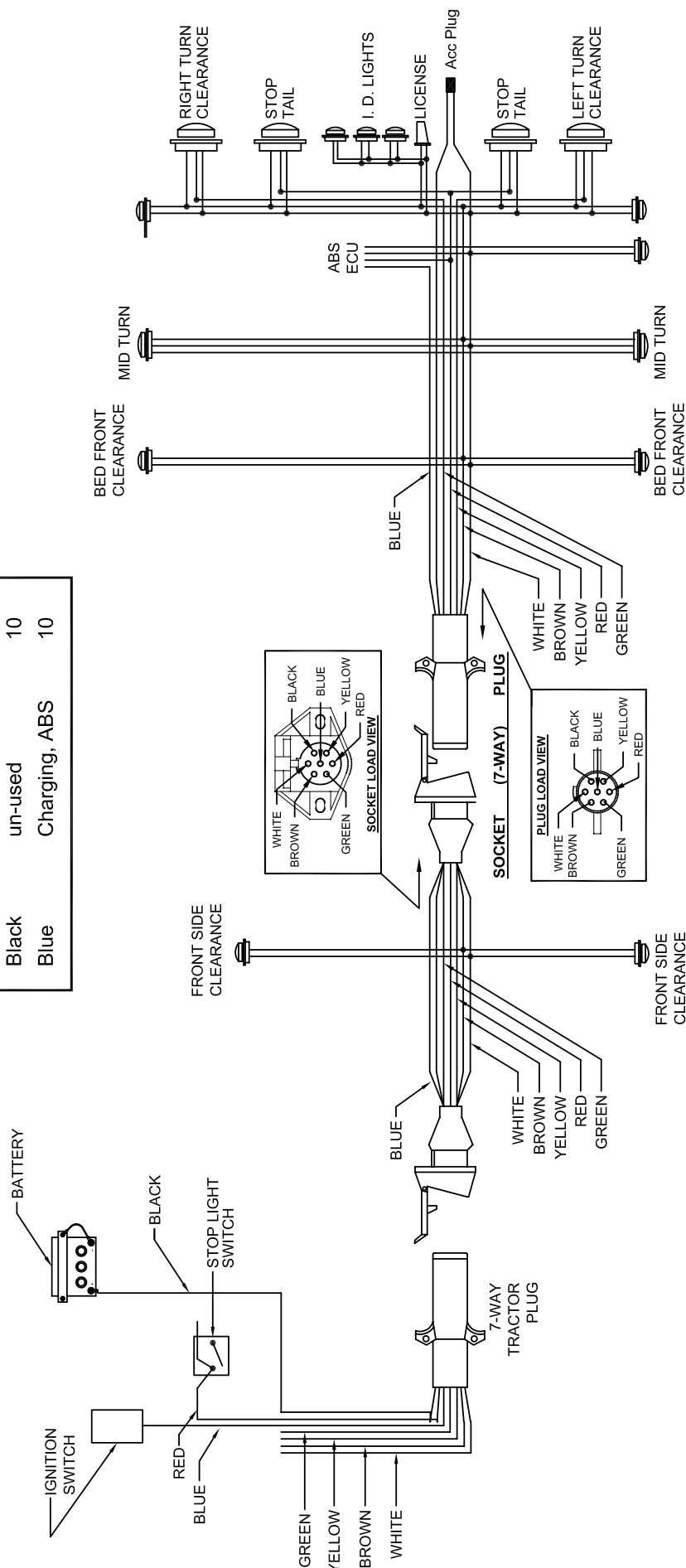
Item	Part No.	Qty	Description
1	2062045	2	LOWBOY SOCKET,12"
2	2062046	1	LOWBOY GSL G/N MAIN,11'
3	2062251	1	MARKER,2-POLE,19" "LED"
4	2062252	1	MARKER,2-POLE,51" "LED"
5	2062057	1	LOWBOY GSL BED JUMPER,6'
6	2062058	1	LOWBOY BED MAIN HARNESS
7	2062068	1	LOWBOY ABS ADAPTER,84"
8	2062061	1	TAILBOARD CENTER, UNIVERSAL **
9	2062252	1	MARKER,2-POLE,51" "LED"
10	2062256	1	MARKER,2-POLE,117" "LED"
11	2062253	1	MID TURN,"LED",4-POLE,47"
12	2062254	1	MID TURN,"LED",4-POLE,80"
13	2052063	1	MARKER,2-POLE,117", ABS WARNING
14	2062067	1	ABS POWER,41"
15	2062198	1	C/S "LED"PGTL,10" (With Strobe Lead *)
16	2062199	1	S/S "LED"PGTL,10" (With Strobe Lead *)
17	2062193	1	TAILBOARD I.D., "LED"
18	2062095	4	2.5" AMBER LED MARKER LIGHT
18A	2057069	4	GROMMET, MARKER 2.5"
19	2062096	2	MID TURN AMBER LED MARKER LIGHT
19A	2062242	2	MID TURN MARKER BRACKET (WELD ON)
19B	2062243	2	GROMMET, OBLONG MID TURN
20	2062093	5	2.5" RED LED MARKER LIGHT
20A	2057069	5	GROMMET, MARKER 2.5"
21	2062094	4	S/T/T "LED" LIGHT
21A	2057067	4	GROMMET, BLACK S/T/T 4"
22	2057075	1	LICENSE PLATE LIGHT (Non LED, One-Piece)
22A	2057072	1	LICENSE PLATE LIGHT HOUSING (2-piece only)
22B	2057074	1	LICENSE PLATE LIGHT (Non LED, 2-piece only)
23	2061097	1	ABS 2.5" MARKER LIGHT - NON LED
23A	2057069	1	GROMMET, MARKER 2.5"
24	2062335	2	SPLITTER HARNESS - 3rd TAIL LIGHT *
25	2062337	1	Y ADAPTER FOR OPTIONAL FLIP AXLE
26	2062338	2	AMBER LED LIGHT (OPTIONAL)
27	2062336	2	ELECTRONIC STROBE FLASHER (OPTIONAL)
	2062130	2	OBLONG RED REFLECTOR
	2062129	6	OBLONG AMBER REFLECTOR
KIT	2062255	1	GOOSENECK NECK HARNESS KIT (ITEMS 1 - 4)
KIT	2062257	1	TRAILER BED HARNESS KIT (ITEMS 5 - 17)

* ECN 1604 2/26/10 - Add Strobe Lead to STT Pigtail; 3rd Tail Light Std

** Universal TB Center Harness w/ Strobe Toggle Switch Lead std Feb 2010

Electrical Wiring Schematic for Lowboy Trailers

<u>Color</u>	<u>Function</u>	<u>Gauge</u>
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



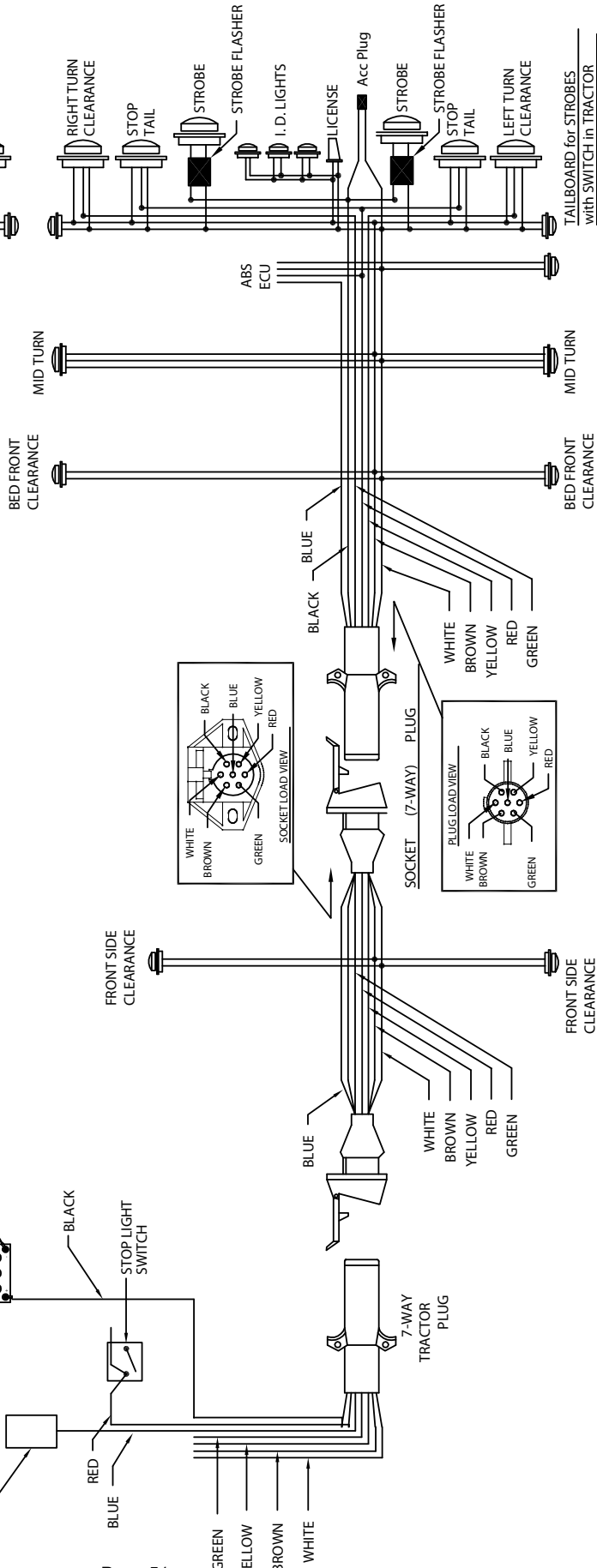
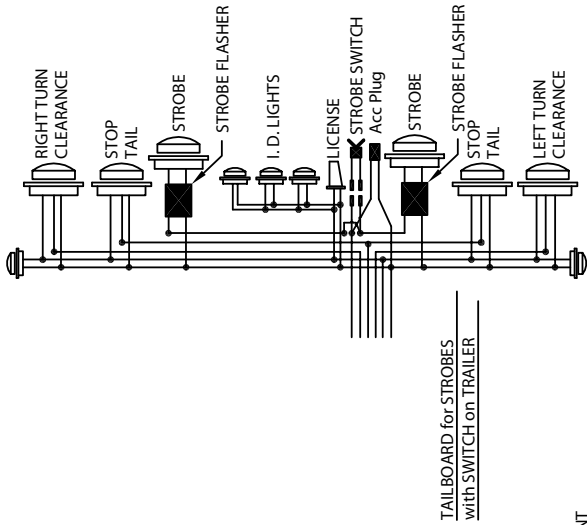
Notes: The **Black** wire is **NOT** used on trailers with ABS air brakes.

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.

Electrical Wiring Schematic for Lowboy Trailers with Strobe Lights

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



Notes: The Black wire is NOT normally used on trailers with ABS air brakes, but can be used for Trailers with Back-Up Lights, Strobe Lights or for Auxiliary Power.
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.

AUXILARY FLASHER KIT (PLUS)

Note: Power feed to charge Flasher is through the Blue Harness Wire
All trailer lights connected to the Brown wire (ie, side markers & tail lights) will Flash when flasher switch (or toggle switch) are in the ON position

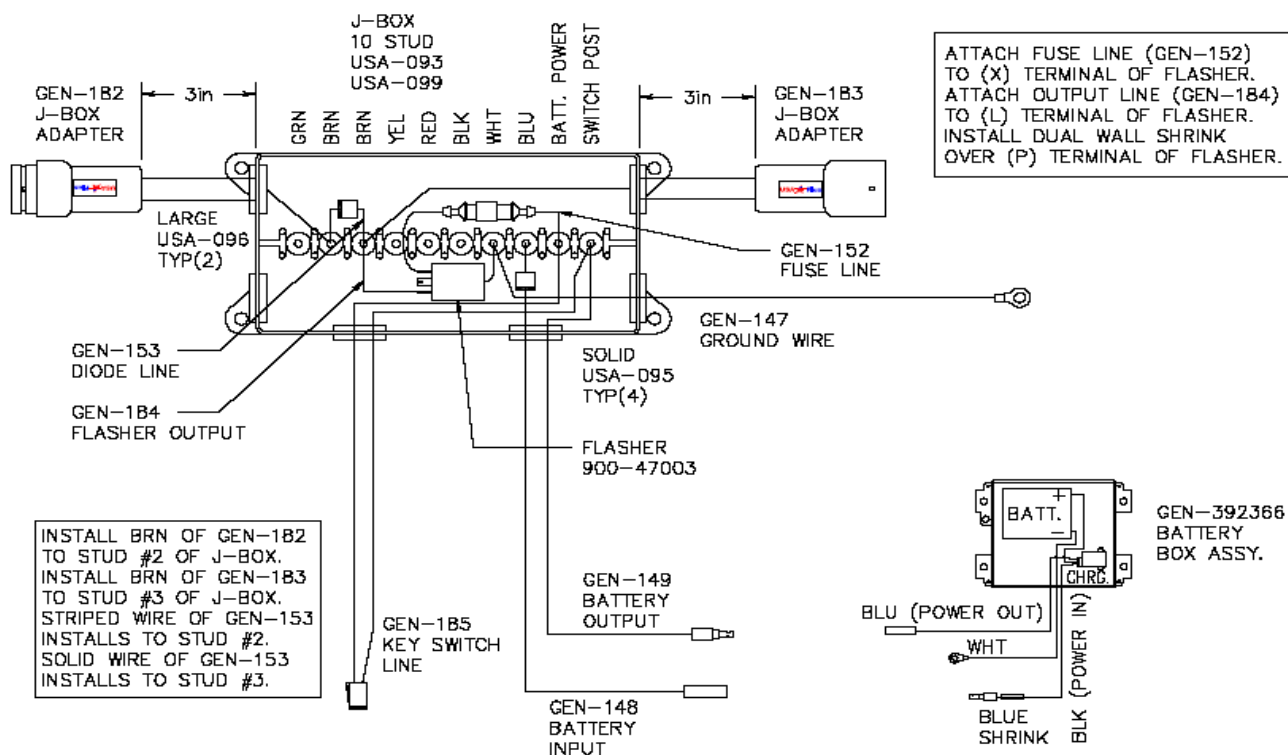
PN	Qty	Description
999406	1	USA-Lowboy Flasher Kit, PLUS with DT06 (Deutsch) Connector
391921	1	Key Switch, CH 95060 (waterproof with booted key)
999405	1	USA-Lowboy Flasher Kit, PLUS w 2 Wire Switch Feed
391905	1	Key Switch, CH M489 (non-waterproof)
999405	1	USA-Lowboy Flasher Kit, PLUS w 2 Wire Switch Feed
391915	1	TGL SWT,CH #5582-10 ON-OFF PVC
391931	1	TGL SWT MTG PL, CH #5543-15

PN 999406 became standard production in October 2008 and supports waterproof key switch

PN 999405 has a non-waterproof switch harness and connects to either non-waterproof switch or on/off toggle

PN 999406 Shown Below (Note waterproof DT06 Connector at end of harness GEN-185)

PN 999405 identical except key switch line has 2-wires with ring terminals instead of DT06 connector



AMBER "LED" STROBE LITE ON TAILBOARD ADD-ON KIT

Part # 2063158

Component PN	Qty	Description
2062338	2	"LED" AMBER LIGHT, TL #44871Y
2062336	2	"LED" ELECTRONIC STROBE FLASHER, # 97253
2057537	1	TOGGLE SWITCH, CH #5582-10 ON-OFF *
2057538	1	TOGGLE SWITCH MOUNTING PLATE, CH #5543-1 *
2057539	1	T/BOARD HARNESS-TO-TOGGLE SWITCH, 2 Pole, 24" *
2062198 **	1	C/S "LED" STT PIGTAIL, WITH STROBE LEAD **
2062199 **	1	S/S "LED" STT PIGTAIL, WITH STROBE LEAD
2062061 **	1	TAILBOARD CENTER HARNESS, UNIVERSAL *
2057067	2	4"GROMMET B426-18

2057540 1 JUMPER, BLACK CIRCUIT, T/BRD CENTER HARNESS, UNIV ***

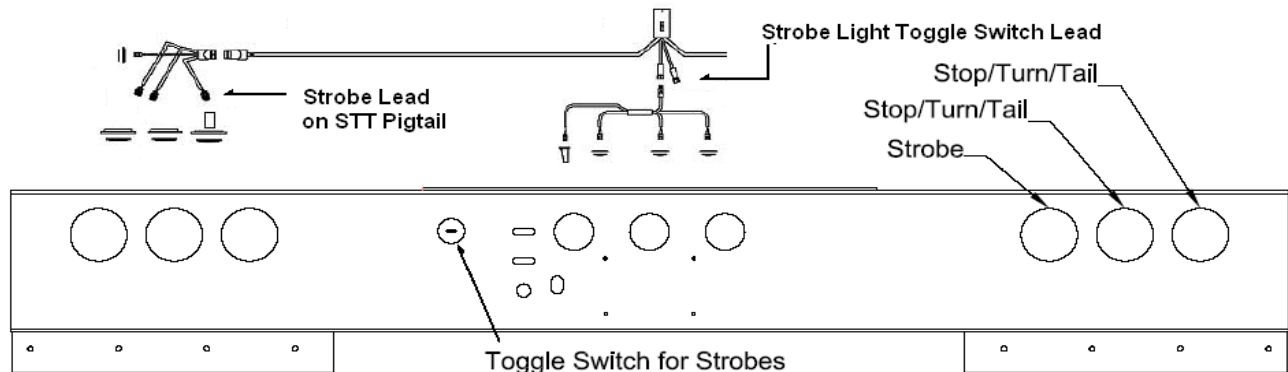
* May be omitted from Kit if Strobe On/Off to be controlled ONLY via switchd power in the tow vehicle (via Black Wire). Asterik items are required in order to have a remote (i.e., on the trailer) tailboard mounted On/Off toggle control.

** Trailers manufactured after January 2010, may have Universal Tailboard Harness (PN 2062061) with Strobe Lead and black circuit jumper (PN 2057540) on the Strobe lead. Between Feb - April 2010 C/S & S/S STT Pigtails phased out and replaced with Pigtails that include Strobe lead. Therefore, new Tailboard Harness and Pigtails may not be required for Strobe Lite Add-on Kit for trailers mfg between Feb - April 2010. (Subtract \$160 if not required)

*** Not Included in Kit. Comes installed on Universal Center Harness. Jumper must be installed to close circuit if there is no On/Off toggle switch being used to close circuit.

Note: Kit contains replacement tailboard wiring with the additional leads and switch necessary to power the strobe lights. Power to the Strobe lights is supplied via the black wire in the nose harness. This lead should be connected to a power source on the tow vehicle.

Customer will either need to cut two 4.5" Diameter holes in the Tailboard to mount the rubber grommets and amber strobe lights or, manufacture a weld-on surface bracket with a 4.5" Dia. Hole in which to mount the strobe light. A small hole through the tailboard for the strobe wires is required. For trailers Mfg after Feb 2010 with a 3rd Tail light, replace the 3rd Red STT light & "Y" Splitter with an amber LED Light & Electronic Flasher and connect to the Strobe Lead on STT Pigtail. Order Toggle Switch and Switch Harness for optional remote On/Off.



Eager Beaver Trailers 35 - 60 Ton Lowboy Miscellaneous Parts 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
2060659	Truck Wiring Harness
2058065	Air Tank Remote Drain Valve
2062129	Oblong Reflector - Amber
2062130	Oblong Reflector - Red
2060735	Eager Beaver Trailers Mud Flap - White 24" x 18"
2063020	Roto-Ring® Assembly
2054792	Weld-on HD Fixed D-Ring & Clip
2061023	Air Fitting, Nipple, 3/8 Male NPT
2061024	Air Fitting, Coupler, 3/8 Male NPT
2061025	Air Fitting, Coupler, 3/8 Female NPT
2061026	Air Fitting, Nipple, 3/8 Female NPT
2062175	Cast Steel Outrigger
2062176	Cast Steel Outrigger Bracket
425001	Gooseneck Lube System Access Hole Cover

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

OEM Service Manuals

Complete Service Manuals for the various OEM components used by Eager Beaver Trailers are available for download from the internet at the below web site locations.

Cush Suspensions	http://cushcorp.com/pdfs/P1203-1_Manual.pdf
Hutch 900 Suspension	http://www.hutchensindustries.com/pdfs/ssLib_900.pdf
Hutch 9700 Suspension	http://www.hutchensindustries.com/pdfs/resource_suspensionMaintenance.pdf
Hendrickson D22 Axle	http://www.hendrickson-intl.com/pdfs/trailer_PDFs/L1061.pdf
Meritor Wabco ABS (Premium ECU)	http://www.meritorwabco.com/MeritorWABCO_document/mm0180.pdf
Honda GX390 Engine	http://www.honda-engines.com/Engines_owners_manuals/ownersmanuals/gx390.htm
Hatz 1B40 Diesel Engine	http://www.hatz-diesel.de/index.php?id=50&L=1

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