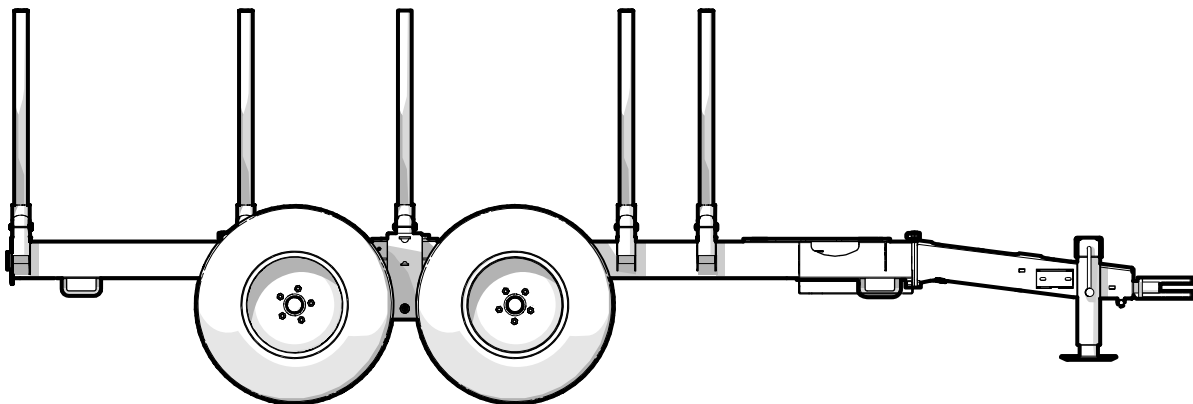


PARTS MANUAL

LT30, LT30A – S/N 30T27 & up

LT30H, LT30HA – S/N 2E9US1116FS030006 & up

LT30, LT30A, LT30H, LT30HA LOG TRAILER



Foreword

EMB Manufacturing has prepared this parts manual to assist customers in ordering quality OEM replacement parts.

Regular maintenance, and replacing old, worn or broken parts with the correct OEM parts, is essential in prolonging the life of your EMB product. Please refer to this manual to identify replacement parts.

To order parts, contact your Wallenstein dealer or distributor. Have the product model and serial number handy.

If your dealer is no longer available, please go to our website: <http://www.wallensteinequipment.com> and click on the [Dealer Locator](#) to find the nearest dealer.

All information contained in this parts manual is current as per the revision date at the bottom of the page. EMB reserves the right to change product specifications at any time without notice.

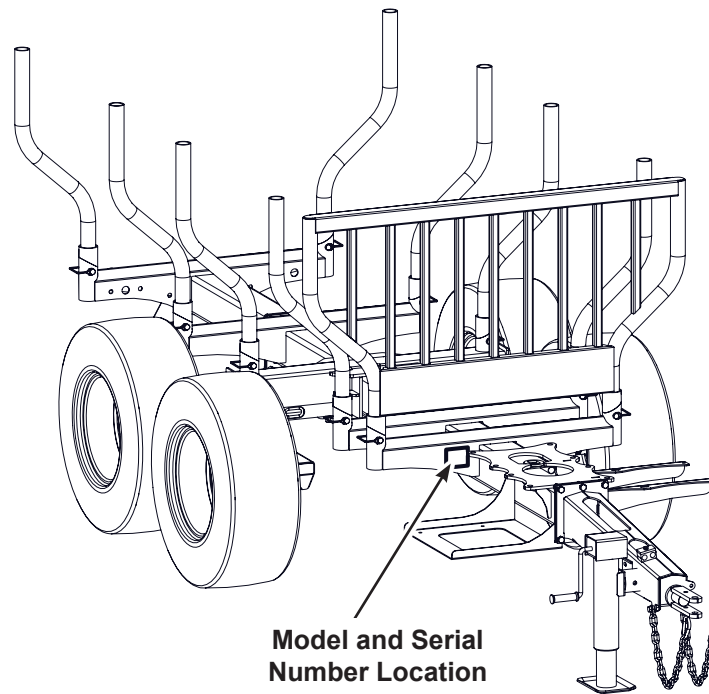
If your product specifications differ from those contained in this manual, contact EMB Manufacturing for information.

Reproduction of this parts manual of any kind is prohibited without prior written permission from EMB Manufacturing.

WARNING!

Refer to the operators manual for safe operation and maintenance.

Maintenance should be performed by trained personnel only.



EMB Manufacturing inc.
4144 Boomer Line, St. Clements ON, Canada, N0B 2M0
www.wallensteinequipment.com

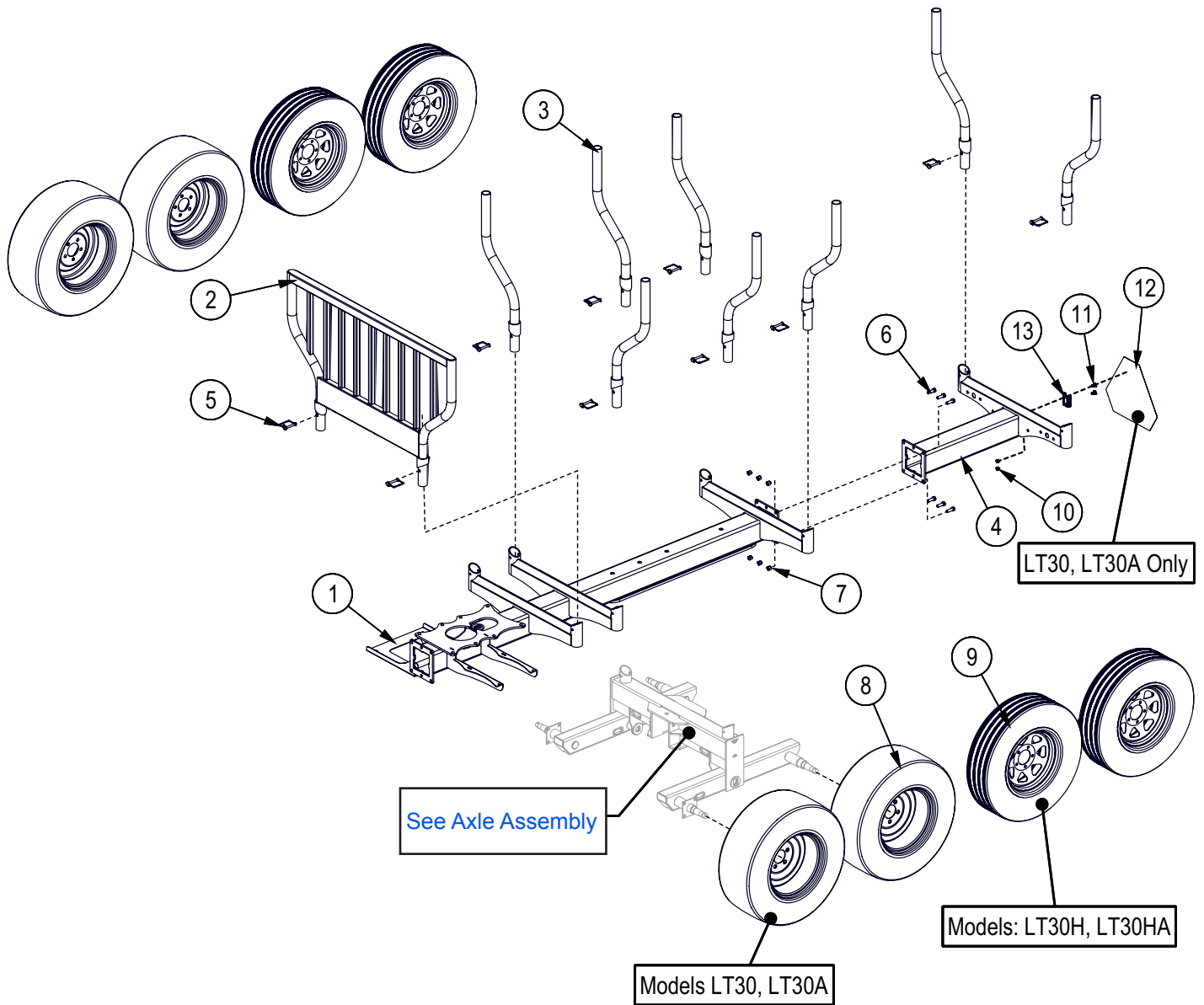
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LX95 / LT30 Variation Chart

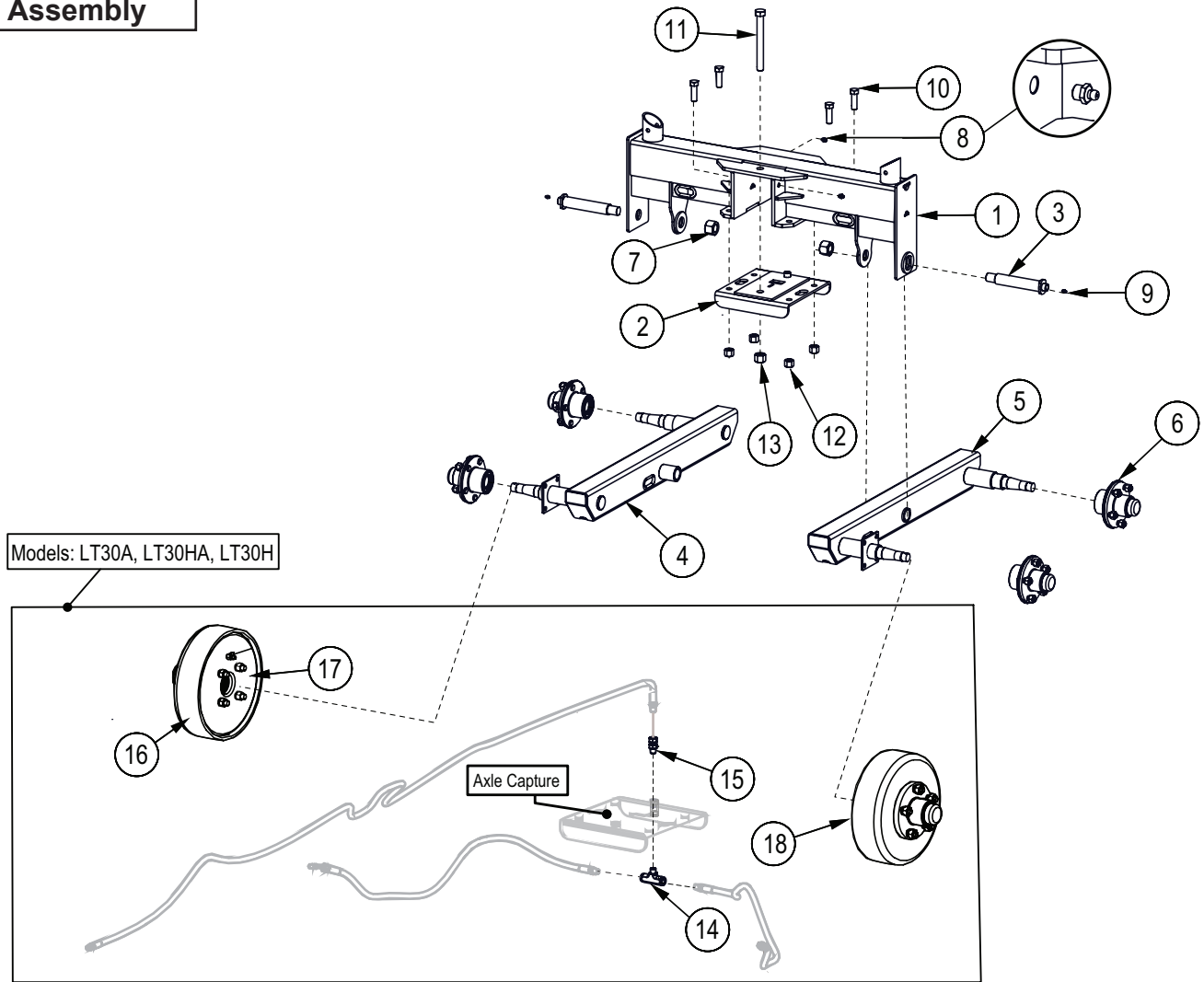
Trailer / Log Loader Cross reference		Boom Mounting Combination		Three Point Hitch	Trailer / Bunk Posts	Dual Speed Winch	Surge Brakes	Highway Kit	Hydraulic Tandem
	Grapple Boom	LX95	X						
	Grapple Boom Off-Road Trailer	LX95	LT30	✓					
	Grapple Boom Trailer - ATV Kit	LX95	LT30A	✓		✓			✓
	Grapple Boom Trailer - Highway Kit	LX95	LT30H	✓		✓	✓		
	Grapple Boom Trailer - Highway & Hydraulic Tandem Kits	LX95	LT30HA	✓		✓	✓	✓	
	Grapple Boom 3 Point Hitch Kit	LX95	L400	✓					
W i n c h M o d e l s	Grapple Boom with Winch	LX95PW	X			✓			
	Grapple Boom with Winch Trailer - ATV Kit	LX95W	LT30A	✓	✓	✓			✓
	Grapple Boom with Winch Trailer - Highway & Hydraulic Tandem Kits	LX95W	LT30HA	✓	✓	✓	✓	✓	
	Grapple Boom with Winch Off-Road Trailer	LX95PW	LT30	✓	✓				
	Grapple Boom with Winch Trailer - Highway Kit	LX95PW	LT30H	✓	✓	✓	✓		
	Grapple Boom with Winch 3 Point Hitch Kit	LX95PW	L400	✓		✓			

Main Frame Assembly



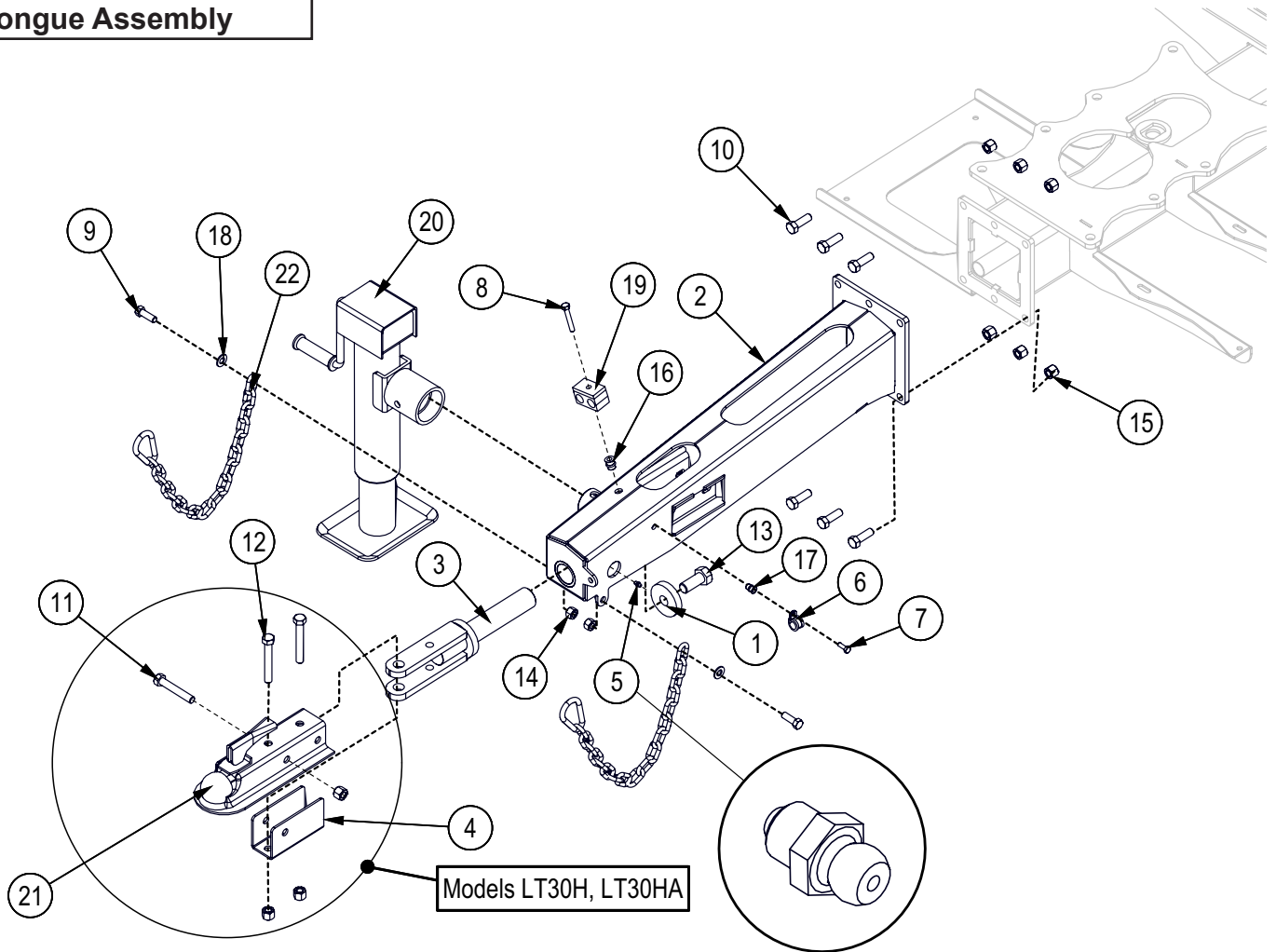
Item No.	Part No.	Description	Qty
1	6050W165	Main Frame	1
2	6050W167	Grill	1
3	6050W168	Bunk Post	8
4	6050W169	Trailer Extension	1
5	Z12432	Snap Lock Pin, 3/8" x 2-1/2"	10
6	Z71515	Hex Bolt, 1/2NC x 1-1/2"	6
7	Z72251	Hex Lock Nut, 1/2NC	6
8	Z91328	27x10.5-15 (TL) 8PR Multi-Trac 5on4-1/2"	4
9	Z91317	ST205/75R14 LRC Radial Trail 5on4-1/2"	4
10	Z72121	Hex Nut, 5/16NC	2
11	Z76221	Carriage Bolt, 5/16NC x 3/4"	2
12	Z94601	Decal, SMV	1
13	Z96603	Socket, Slow Moving Vehicle	1

Axle Assembly



Item No.	Part No.	Description	Qty
1	6050W166	Axle	1
2	6050W151	Axle Capture	1
3	6050W157	Pin, Axle Main	2
4	6083W330	Axle, RH Rocker	1
5	6083W330H	Axle, LH Rocker	1
6	Z91207	Idler Hub Assy, 1750lbs x 5on4-1/2"	4
7	Z72292G8	Hex Lock Nut, 1-14NF G8	2
8	Z29201	Grease Fitting, MP02	2
9	Z29202	Grease Fitting, 1/4NF	2
10	Z71620	Hex Bolt, 5/8NC x 2"	4
11	Z71775	Hex Bolt, 3/4NC x 7-1/2"	1
12	Z72261	Hex Lock Nut, 5/8NC	4
13	Z72271	Hex Lock Nut, 3/4NC	1
14	Z51162	Tee, FP x FP x MP 040404	1
15	Z51314	Straight, MP x FPX 0404	1
16	Z91705	Brake Drum, 10" x 1750lbs 5on4-1/2" Complete Assembly	2
17	Z91707	Hydraulic Brake 10 x 2-1/4 x 1750lbs RH	1
18	Z91706	Hydraulic Brake 10 x 2-1/4 x 1750lbs LH	1

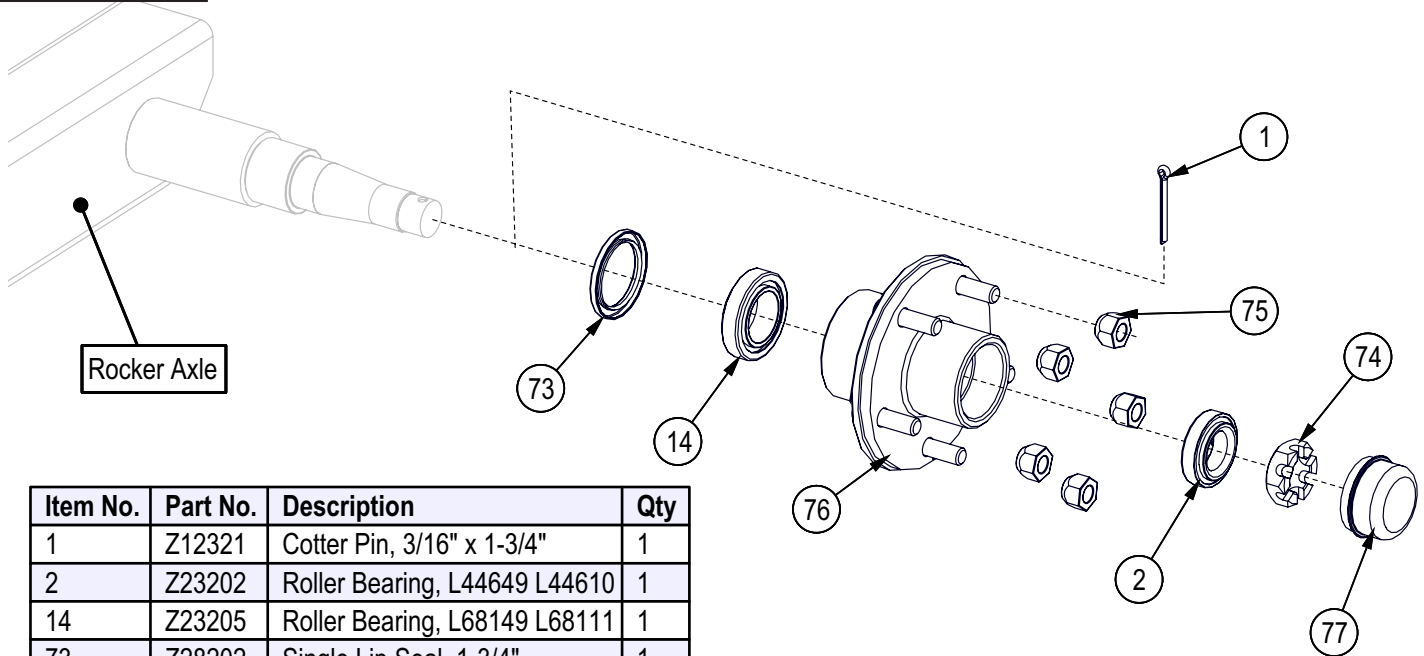
Tongue Assembly



Item No.	Part No.	Description	Qty
1	6050L627	Washer, Hitch Capture	1
2	6050W154	Tongue	1
3	6050W155	Hitch	1
4	6089L350	Ball Hitch Mount	1
5	Z29202	Grease Fitting, 1/4NF	1
6	Z62819	Rubberized Wire Clamp, 1/2"	1
7	Z71107	Hex Bolt, 1/4NC x 3/4"	1
8	Z71220	Hex Bolt, 5/16NC x 2"	1
9	Z71412	Hex Bolt, 7/16NC x 1-1/4"	2
10	Z71515	Hex Bolt, 1/2NC x 1-1/2"	6
11	Z71530	Hex Bolt, 1/2NC x 3"	1
12	Z71535	Hex Bolt, 1/2NC x 3-1/2"	2
13	Z71784G8	Hex Bolt, 3/4NF x 1-3/4"	1
14	Z72241	Hex Lock Nut, 7/16NC	2
15	Z72251	Hex Lock Nut, 1/2NC	9
16	Z72957	Rivet Nut, 5/16NC x 312	1
17	Z72962	Rivet Nut, 1/4NC x 260	1
18	Z73142	SAE Washer, 7/16"	2
19	Z79463	Double Hose Clamp, 11/16" OD	1
20	Z91512	Trailer Jack, Side Wind x 2000lbs	1
21	Z91614	Hitch Coupler, 2" Ball x 2" x 3500lbs	1
22	Z92303	Safety Chain, 1/4" x 2ft with Snap	2

Hub Assembly Detail

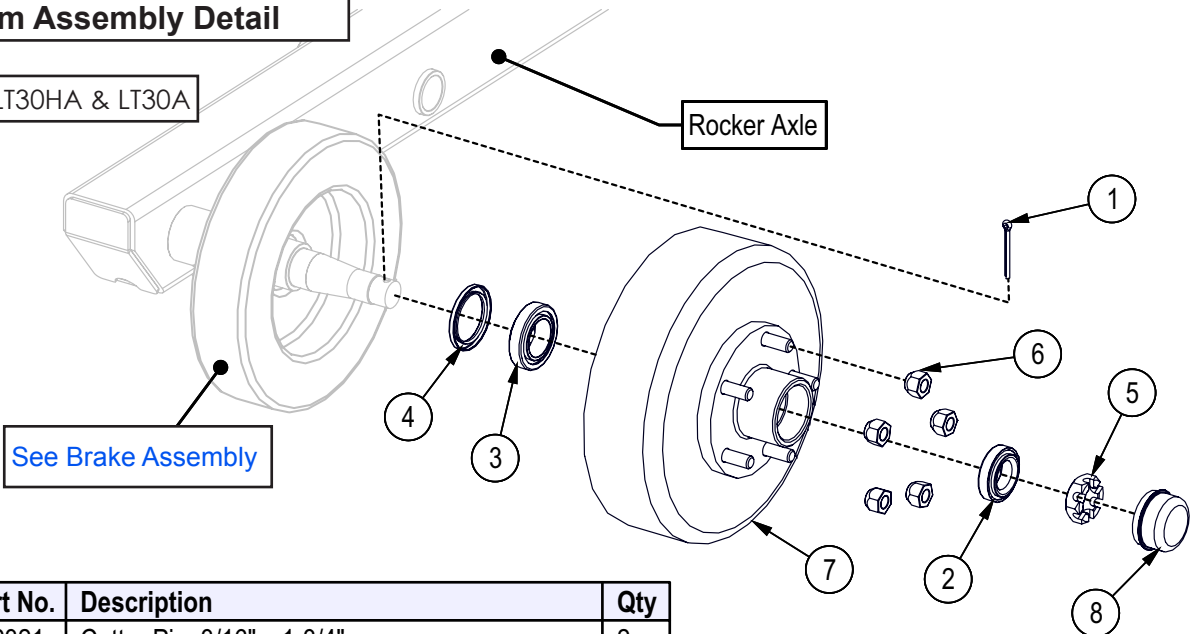
Model LT30H



Item No.	Part No.	Description	Qty
1	Z12321	Cotter Pin, 3/16" x 1-3/4"	1
2	Z23202	Roller Bearing, L44649 L44610	1
14	Z23205	Roller Bearing, L68149 L68111	1
73	Z28202	Single Lip Seal, 1-3/4"	1
74	Z72691	Castle Nut, 1NF x 9/16" Thick	1
75	Z72931	Lug Nut, 1/2NF	5
76	Z91208	Hub, 1750lbs x 5on4-1/2"	1
77	Z91801	Dust Cap, 1.98 Bore	1

Brake Drum Assembly Detail

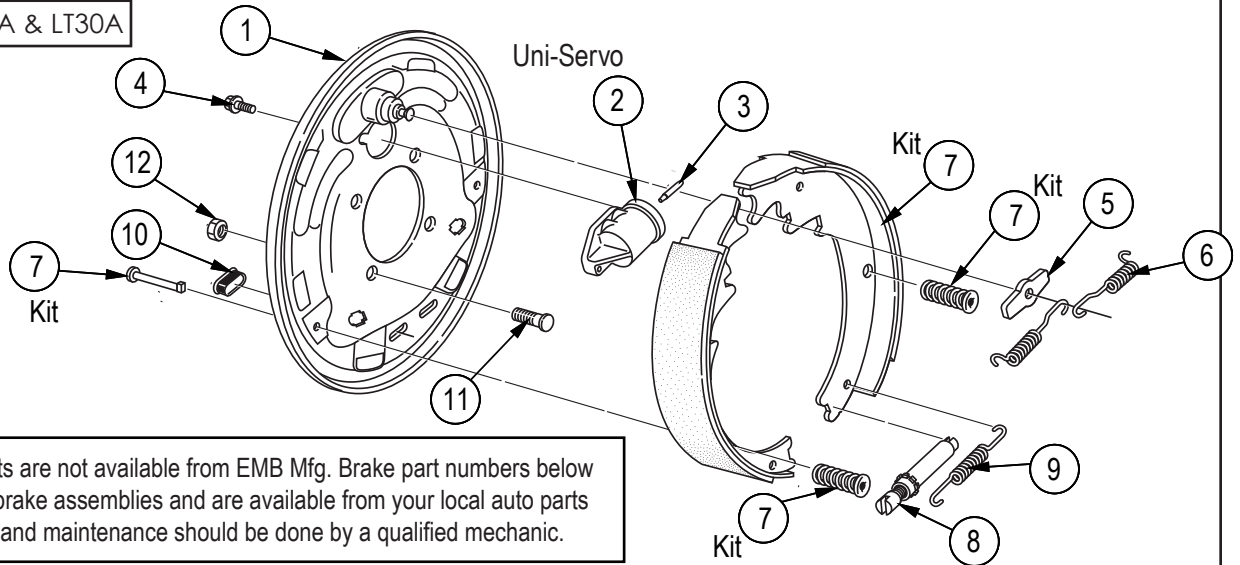
Model LT30H, LT30HA & LT30A



Item No.	Part No.	Description	Qty
1	Z12321	Cotter Pin, 3/16" x 1-3/4"	2
2	Z23202	Roller Bearing, L44649 L44610	2
3	Z23205	Roller Bearing, L68149 L68111	1
4	Z28202	Single Lip Seal, 1-3/4"	1
5	Z72691	Castle Nut, 1NF x 9/16" Thick	1
6	Z72931	Lug Nut, 1/2NF	5
7	Z91708	Brake Drum, 10" x 1750lbs 5on4-1/2" Drum Only	1
8	Z91801	Dust Cap, 1.98 Bore	1

Hydraulic Brake Assembly Detail

Model LT30H, LT30HA & LT30A

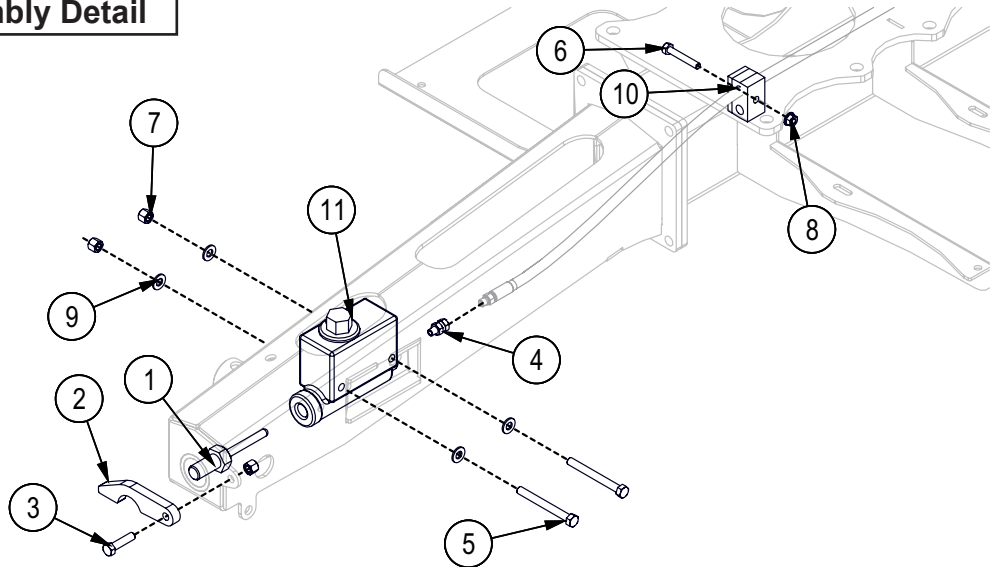


Please note: brake parts are not available from EMB Mfg. Brake part numbers below reference Dexter Axle brake assemblies and are available from your local auto parts dealer. All brake repair and maintenance should be done by a qualified mechanic.

Item No.	Part No.	Description	Qty	Item No.	Part No.	Description	Qty
	K23-312-00	LH Complete Brake Assembly-Uni Servo	1	7	K71-267-00	Shoe & Lining Kit Contains:	1
	K23-313-00	RH Complete Brake Assembly-Uni Servo (shown)	1		#040-210-00	Primary Shoe & Lining	1
1	036-094-03	Backing Plate Assembly (includes item #11)	1		#040-211-00	Secondary Shoe & Lining	1
2	054-064-00	LH Brake Cylinder Uni-Servo	1		#046-077-00	Shoe Hold Down Spring & Cup	2
2	054-065-00	RH Brake Cylinder Uni-Servo	1		#049-002-00	Shoe Hold Down Pin #8	2
3	054-060-00	Cylinder Push Rod	1	8	043-004-00	Adjuster Assembly	1
4	087-001-00	Sems (screw & washer assembly)	2	9	046-018-00	Adjusting Screw Spring	1
5	005-113-00	Anchor Post Washer	1	10	046-007-00	Adjuster Slot Plug	1
6	046-009-00	Retractor Spring	2	11	007-041-00	Brake Mounting Bolt - Press-in	4
				12	Z72242	Hex Lock Nut, 7/16NF	4
				not shown	054-089-00	Bleeder Screw (included with item #2)	1

Hydraulic Surge Brake Assembly Detail

Model LT30H, LT30HA & LT30A

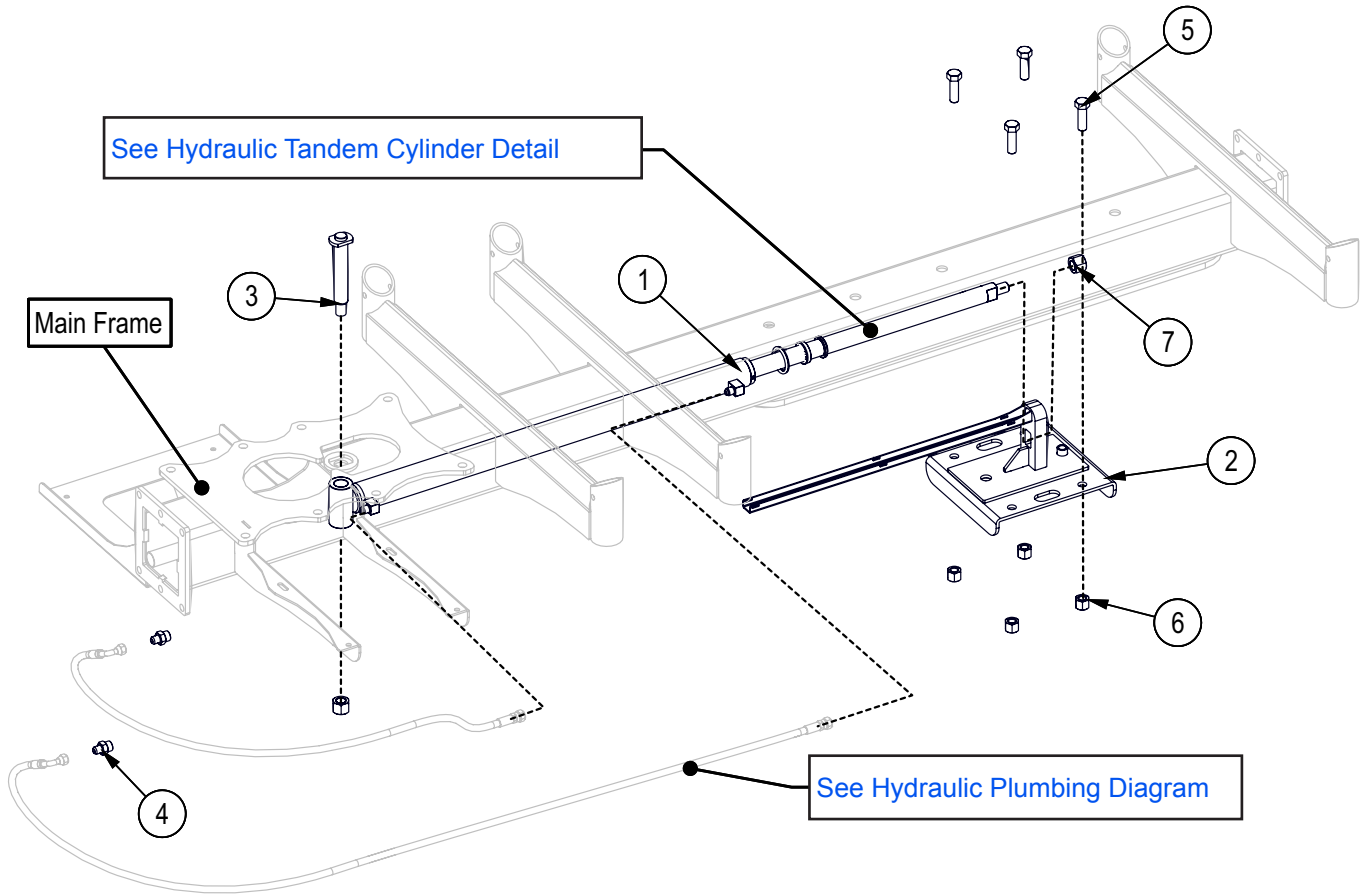


Item No.	Part No.	Description	Qty
1	6050W156	Brake, Plunger	1
2	6050L631	Plate, Brake Plunger Stop	1
3	Z71315	Hex Bolt, 3/8NC x 1-1/2"	1
4	Z51315	Straight, MP x FPX 0202	1
5	Z71335	Hex Bolt, 3/8NC x 3-1/2"	2
6	Z71220	Hex Bolt, 5/16NC x 2"	1

Item No.	Part No.	Description	Qty
7	Z72231	Hex Lock Nut, 3/8NC	3
8	Z72521	Serrated Flange Locknut, 5/16NC	1
9	Z73131	SAE Washer, 3/8"	4
10	Z79462	Double Hose Clamp, 1/2" OD	1
11	Z91709	Master Cylinder, 1-1/4" Bore	1

Adjustable Hydraulic Tandem Assembly

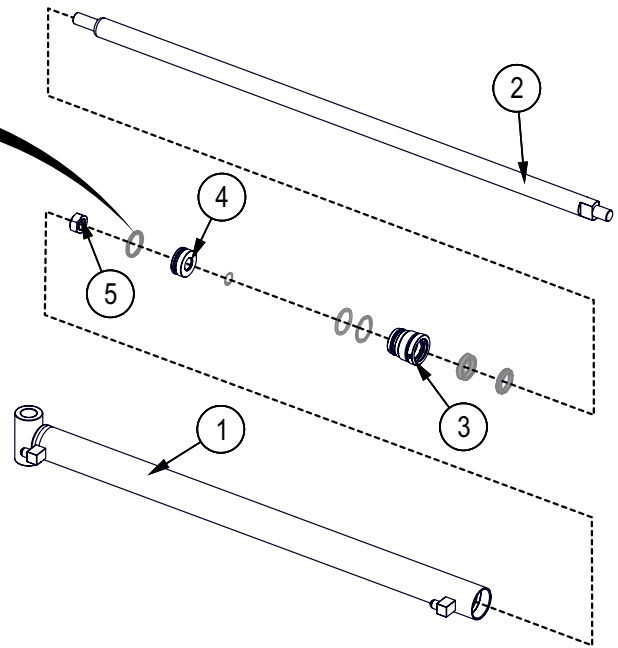
MODEL LT30A and LT30HA



Item No.	Part No.	Description	Qty
1	6050C015	Cylinder, 1-3/4" x 1-1/4" x 29-1/2"	1
2	6083W320	Axle Capture, Hydraulic Tandem	1
3	6050W158	Pin, Axle Cylinder	1
4	Z51644	Straight, MJIC x MORB 0608	2
5	Z71620	Hex Bolt, 5/8NC x 2"	4
6	Z72261	Hex Lock Nut, 5/8NC	4
7	Z72272G8	Hex Lock Nut, 3/4NF G8	2

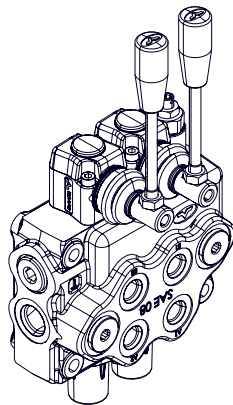
Hydraulic Tandem Cylinder Detail

MODEL LT30A and LT30HA



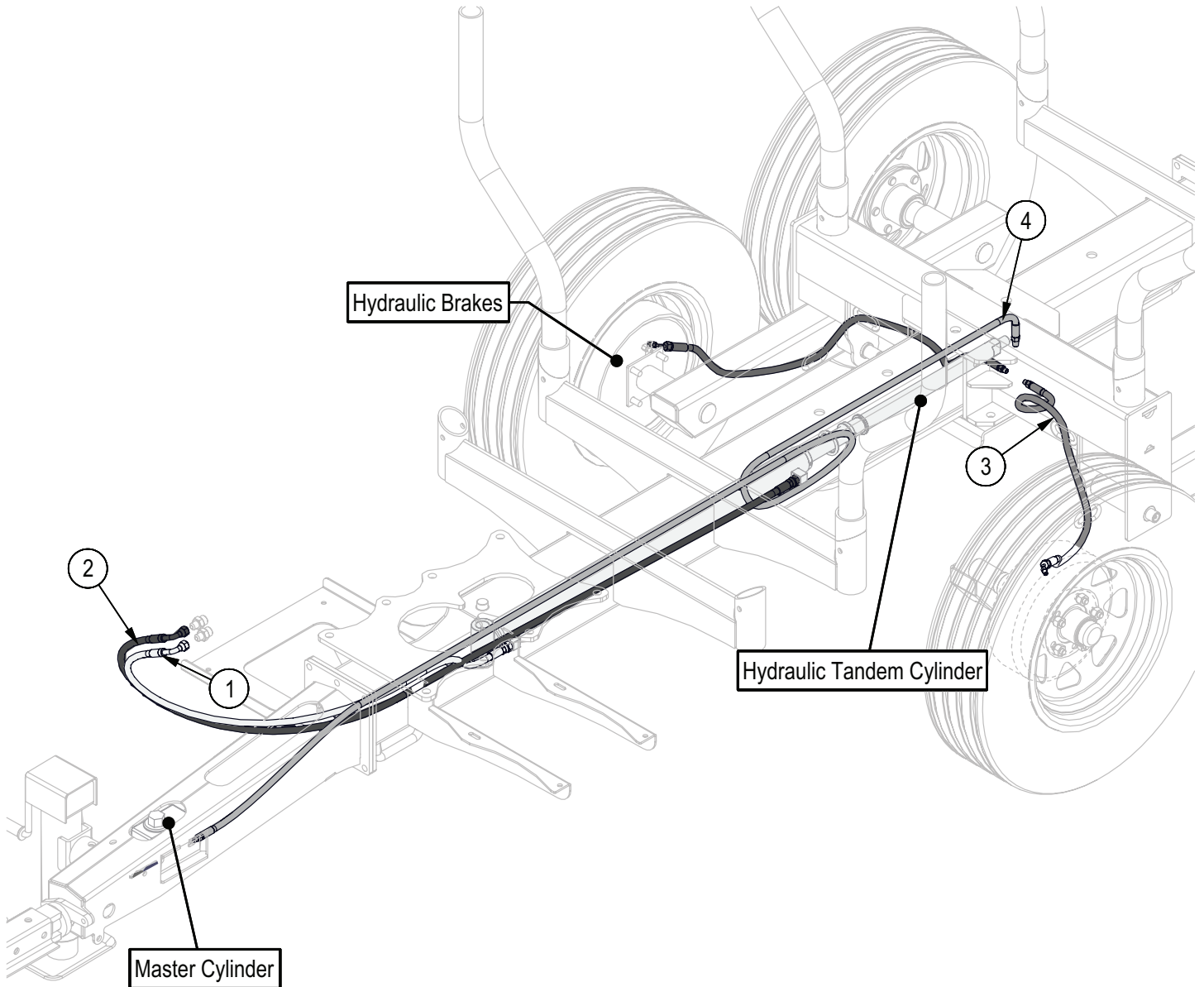
Item No.	Part No.	Description	Qty
1	6050C0154	Barrel, 2" Bore	1
2	6050C0152	Rod, 1-1/4x3/4	1
3	G175-125S	Gland, 1-3/4" x 1-1/4"	1
4	P750-175SP	Piston, 1-3/4" Bore	1
5	Z72275	Hex Top-lock Nut, 3/4NC	1

Seal Kit: Z56219 2-Spool Valve



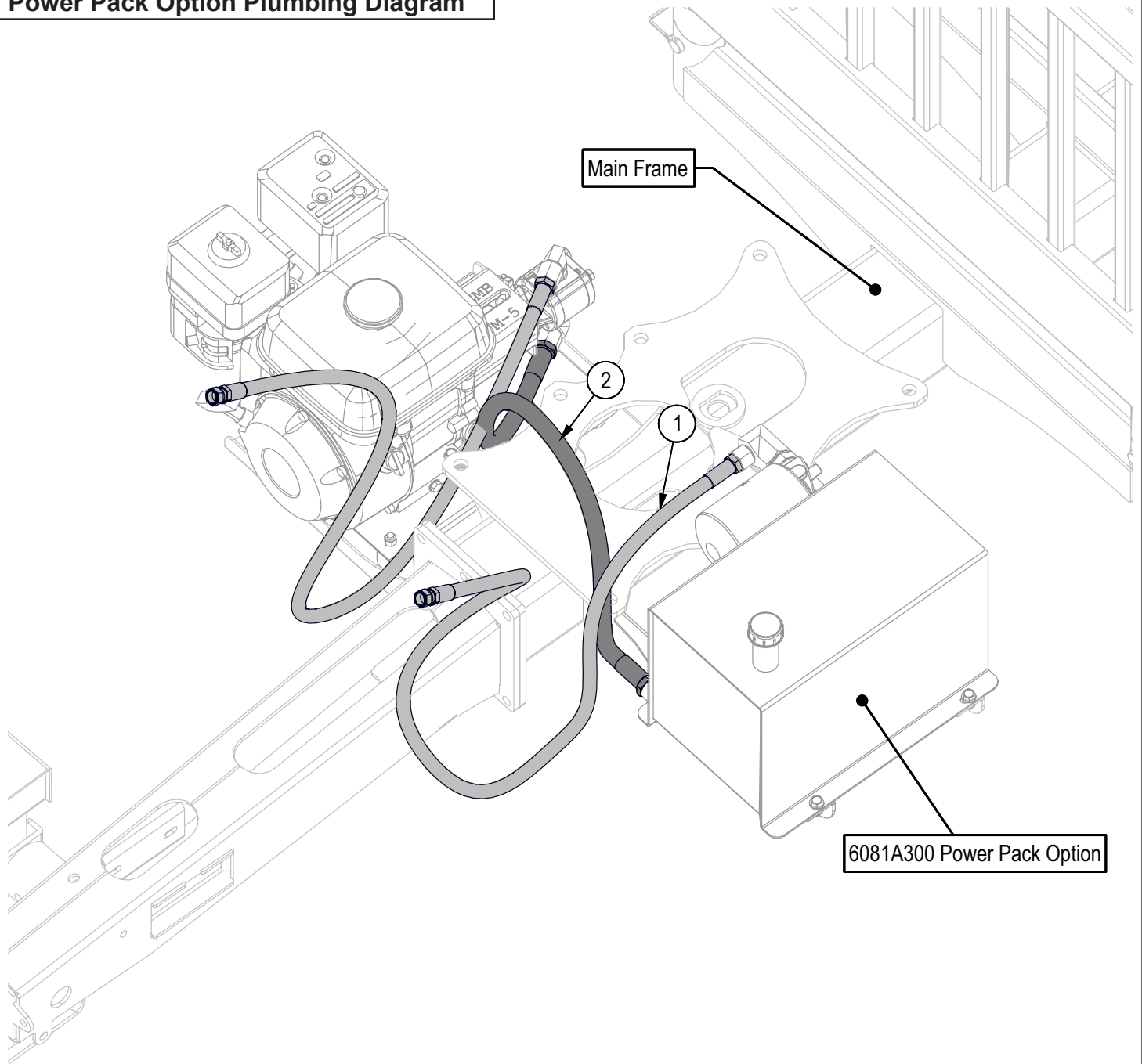
Hydraulic Brakes and Adjustable Tandem Plumbing Diagram

MODEL LT30A and LT30HA



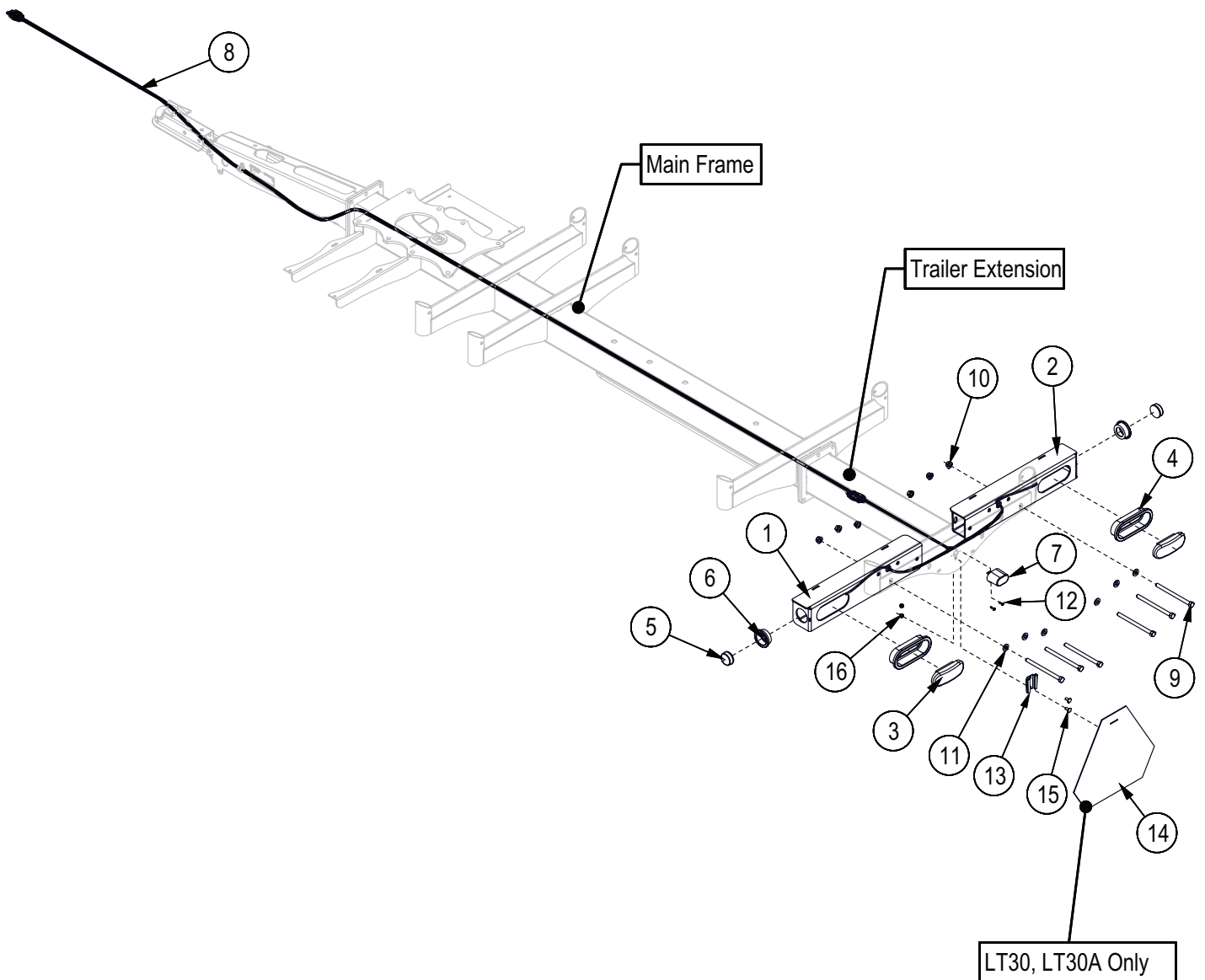
Item No.	Part No.	Description	Qty
1	6083F301	1/4" Hose, FJIC06 x 90FJIC06 x 45"	1
2	6083F302	1/4" Hose, FJIC06 x 90FJIC06 x 74"	1
3	6083F303	1/4" Hose, MP04 x 45 Male Inverted Flare 02 x 34"	2
4	6083F304	1/4" Hose, MP04 x MP02 x 116"	1

Power Pack Option Plumbing Diagram



Item No.	Part No.	Description	Qty
1	Z52260	3/8" Hose, FJIC06 x MP08 x 48"	2
2	Z52347	1/2" Hose, MP08 x MP08 x 30"	1

Electrical Harness



Item No.	Part No.	Description	Qty
1	6089W372	Light Bracket, LH	1
2	6089W372H	Light Bracket, RH	1
3	Z61102	STT Lamp, Oval	2
4	Z61103	Grommet, Oval x Open Back	2
5	Z61201	Marker Lamp, Round x Red	2
6	Z61202	Grommet, Round x Open Back	2
7	Z61301	License Lamp, White	1
8	Z62113	Harness, LT30 Lights	1
9	Z71568	Hex Bolt, 1/2NC x 7"	6
10	Z72551	Serrated Flange Locknut, 1/2NC	6
11	Z73151	SAE Washer, 1/2"	6
12	Z76712	Self-tapping Screw, #10 x 3/4"	2
13	Z96603	Socket, Slow Moving Vehicle	1
14	6050W163	SMV Bracket	1
15	Z76221	Carriage Bolt, 5/16NC x 3/4"	2
16	Z72121	Hex Nut, 5/16NC	2

IMPORTANT! When assembling or replacing wire harnesses, apply a thin coating of silicone dielectric grease to the harness connectors.

Clean off any corrosion or loose particles, then apply a small amount to the surfaces of the connectors where they meet. The grease helps to stop any possibility of future corrosion.

Reassemble the connection. If grease squeezes out, wipe off with a rag or towel.

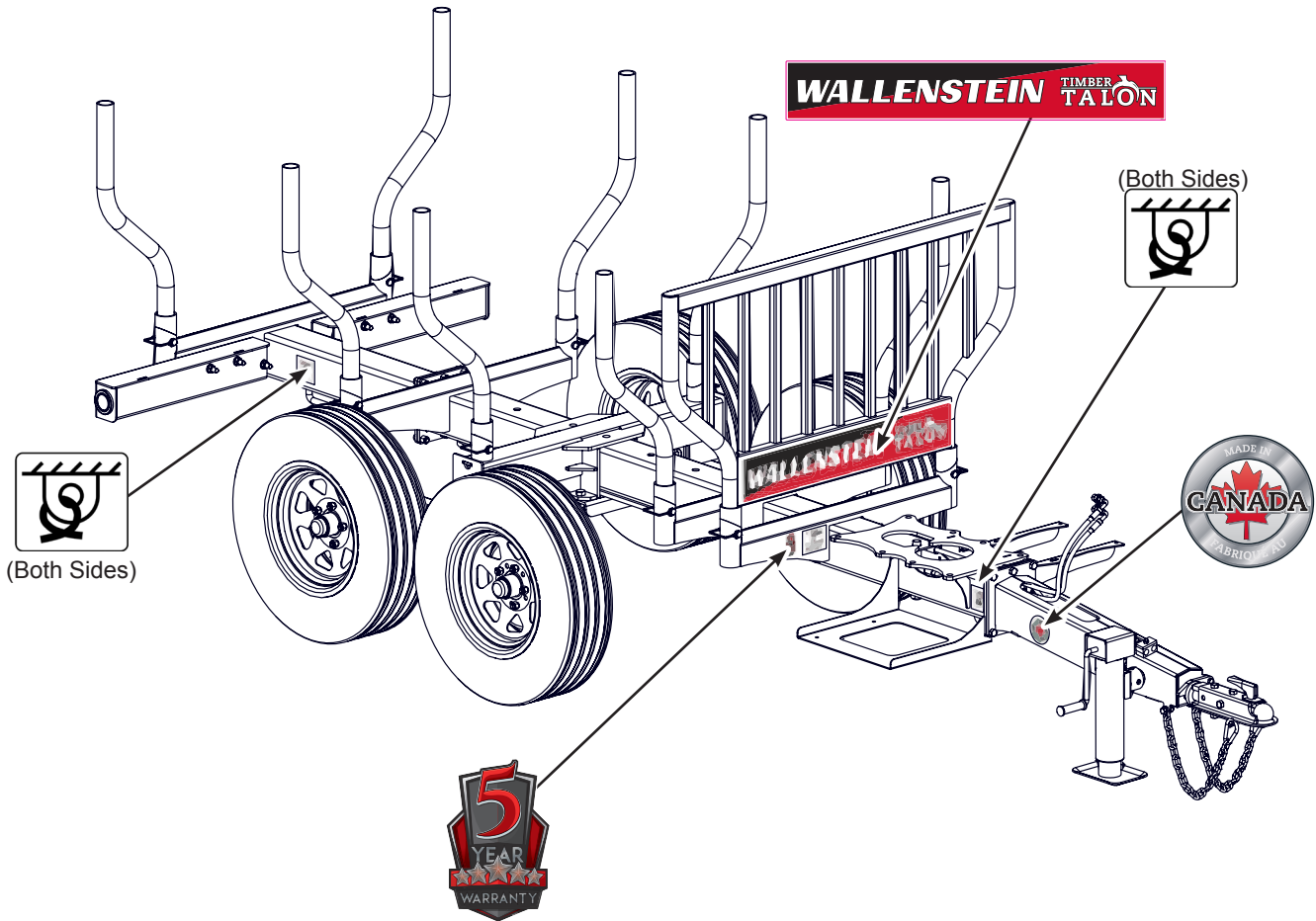
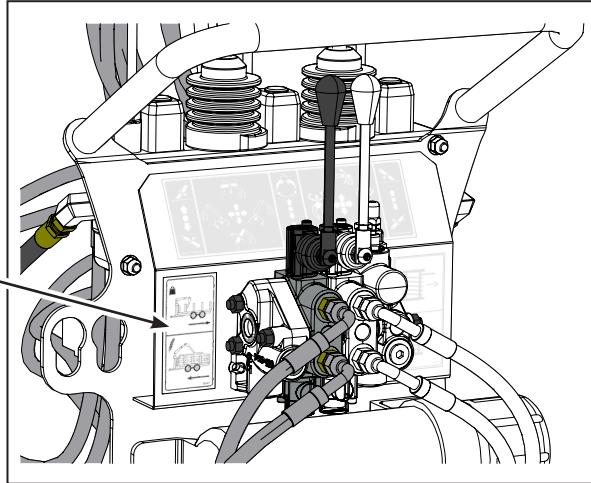
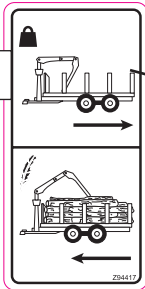
Decal Layout

IMPORTANT! If parts are replaced that have safety signs on them, new signs must be applied. Safety signs must always be replaced if they become damaged, are removed, or become illegible.

Safety signs are included in the product decal kit available from your authorized dealer. Decals are not available separately.

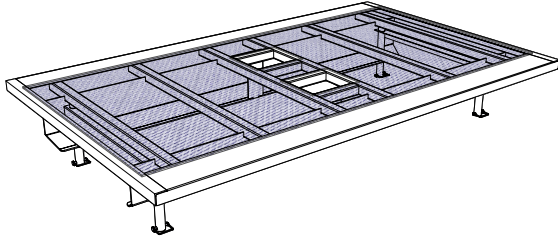
LT30A - LT30HA

*Available only on LX95 equipped trailers



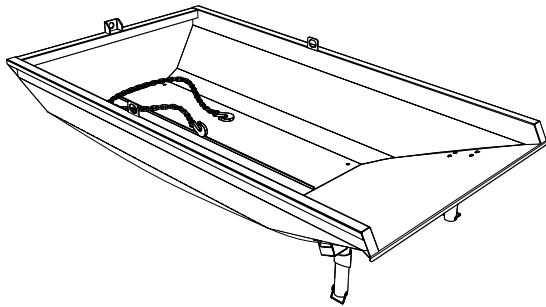
Accessories

Call your dealer for pricing and availability

**LT30 Expanded Metal Flat bed – P/N L330**

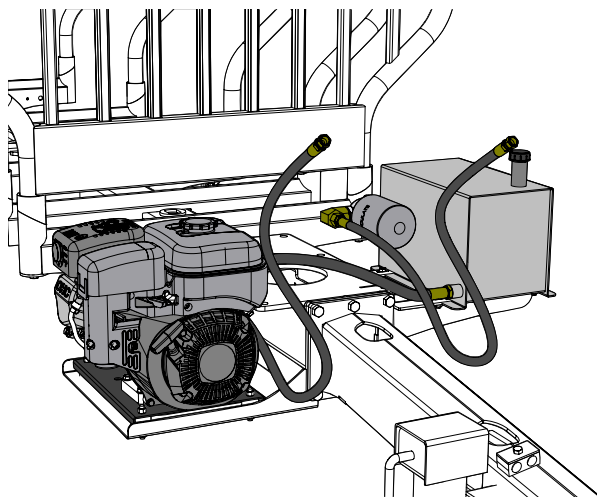
Transporting material and equipment made easy. Simply drop on this flat bed and you're set to go!

L330 has a 274 cm x 152 cm (9.0' x 5.0') cargo bed.

**LT30 Dump Box – P/N L310**

Load, transport and easily dump your loads. Made for use with the back hoe kit. The L310 holds 0.7 m³ (25 ft³).

Each dump box comes complete with a 1.8 m (6 ft) chain used for dumping.

**LX95 Power Pack – P/N L301**

Independently power the LX grapple.

The **L301 for LX95** features a 6 hp Subaru engine.

Power packs include hydraulic pump and 17.5 L (4.6 US gal) reservoir.


Common Bolt Torque Values

Checking Bolt Torque

The tables shown give correct torque values for various bolts and capscrews. Tighten all bolts to the torque values specified in the table, unless indicated otherwise. Check tightness of bolts periodically.

IMPORTANT! If replacing hardware, use fasteners of the same grade.

IMPORTANT! Torque figures indicated in the table are for non-greased or non-oiled threads. Do not grease or oil threads unless indicated otherwise. When using a thread locker, increase torque values by 5%.

 **NOTE:** Bolt grades are identified by their head markings.

Imperial Bolt Torque Specifications

Bolt Diameter	Torque Value					
	SAE Gr. 2		SAE Gr. 5		SAE Gr. 8	
	lbf•ft	N•m	lbf•ft	N•m	lbf•ft	N•m
1/4"	6	8	9	12	12	17
5/16"	10	13	19	25	27	36
3/8"	20	27	33	45	45	63
7/16"	30	41	53	72	75	100
1/2"	45	61	80	110	115	155
9/16"	60	95	115	155	165	220
5/8"	95	128	160	215	220	305
3/4"	165	225	290	390	400	540
7/8"	170	230	420	570	650	880
1"	225	345	630	850	970	1320



SAE Gr. 2



SAE Gr. 5



SAE Gr. 8

Metric Bolt Torque Specifications

Bolt Diameter	Torque Value			
	Gr. 8.8		Gr. 10.9	
	lbf•ft	N•m	lbf•ft	N•m
M3	0.4	0.5	1.3	1.8
M4	2.2	3	3.3	4.5
M6	7	10	11	15
M8	18	25	26	35
M10	37	50	52	70
M12	66	90	92	125
M16	166	225	229	310
M20	321	435	450	610
M30	1,103	1 495	1,550	2 100
M36	1,917	2 600	2,700	3 675



8.8



10.9

Hydraulic Fitting Torque Values

Tightening Flare Type Tube Fittings

1. Check flare and flare seat for defects that might cause leakage.
2. Align tube with fitting before tightening.
3. Hand-tighten swivel nut until snug.
4. To prevent twisting the tube, use two wrenches. Place one wrench on the connector body and tighten the swivel nut with the second. Torque to values shown.

If a torque wrench is not available, use the FFFT (Flats From Finger Tight) method.

Hydraulic Fitting Torque					
Tube Size OD	Hex Size Across Flats	Torque value		Flats From Finger Tight	
		lbf•ft	N•m	Flats	Turns
3/16	7/16	6	8	2	1/6
1/4	9/16	11–12	15–17	2	1/6
5/16	5/8	14–16	19–22	2	1/6
3/8	11/16	20–22	27–30	1-1/4	1/6
1/2	7/8	44–48	59–65	1	1/6
5/8	1	50–58	68–79	1	1/6
3/4	1-1/4	79–88	107–119	1	1/8
1	1-5/8	117–125	158–170	1	1/8

Values shown are for non-lubricated connections.

Wheel Lug Torque Values

It is extremely important safety procedure to apply and maintain proper wheel mounting torque on your trailer axle. Torque wrenches are the best method to assure the proper amount of torque is being applied to a fastener.

Wheel lugs should be torqued before first road use and after each wheel removal. Check and re torque after the first 10 miles (16 km), 25 miles (40 km), and again at 50 miles (80 km). Check periodically thereafter.

NOTE: *Wheel lugs must be applied and maintained at the proper torque levels to prevent loose wheels, broken studs, and possible dangerous separation of wheels from your axle.*

- Start all lugs by hand to prevent cross threading.
- Tighten lugs in sequence, per wheel lug torque sequence chart.
- The tightening of the fasteners should be done in stages. Following the recommended sequence, tighten fasteners per wheel torque requirements chart.

Wheel Lug Nut Torque				
Wheel Size	Units	1st Stage	2nd Stage	3rd Stage
8"	lbf•ft N•m	12–20 16–26	30–35 39–45.5	45–55 58.5–71.5
12"	lbf•ft N•m	20–25 26–32.5	35–40 45.5–52	50–60 65–78
13"	lbf•ft N•m	20–25 26–32.5	35–40 45.5–52	50–60 65–78
14"	lbf•ft N•m	20–25 26–32.5	50–60 65–78	90–120 117–156
15"	lbf•ft N•m	20–25 26–32.5	50–60 65–78	90–120 117–156
16"	lbf•ft N•m	20–25 26–32.5	50–60 65–78	90–120 117–156

Wheel Lug Torque Pattern

