

# WALLENSTEIN

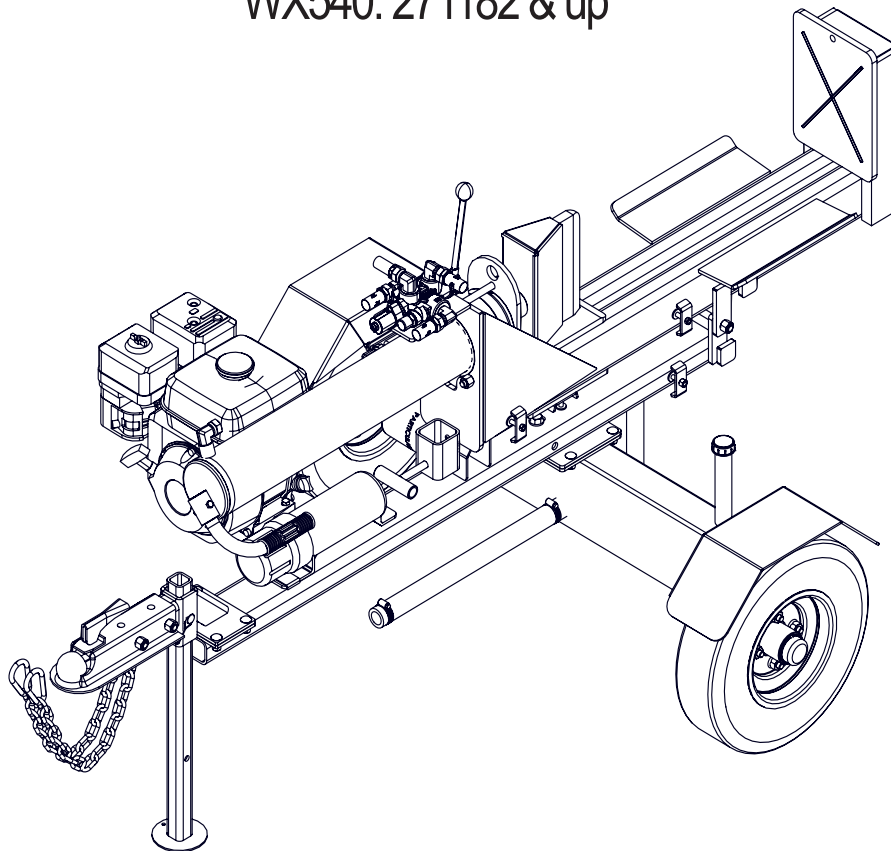
EMB Manufacturing Inc.  
4144 Boomer Line · St. Clements, Ontario · N0B 2M0 · Canada  
[www.wallensteinequipment.com](http://www.wallensteinequipment.com)

## PARTS MANUAL

### WX540 Series Trailer Log Splitter

Serial Number WX540L: 2E9US1115ES271182 & up

WX540: 271182 & up



Refer to the operators manual for safe  
operation and maintenance

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## 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, please contact your dealer for further information. 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.

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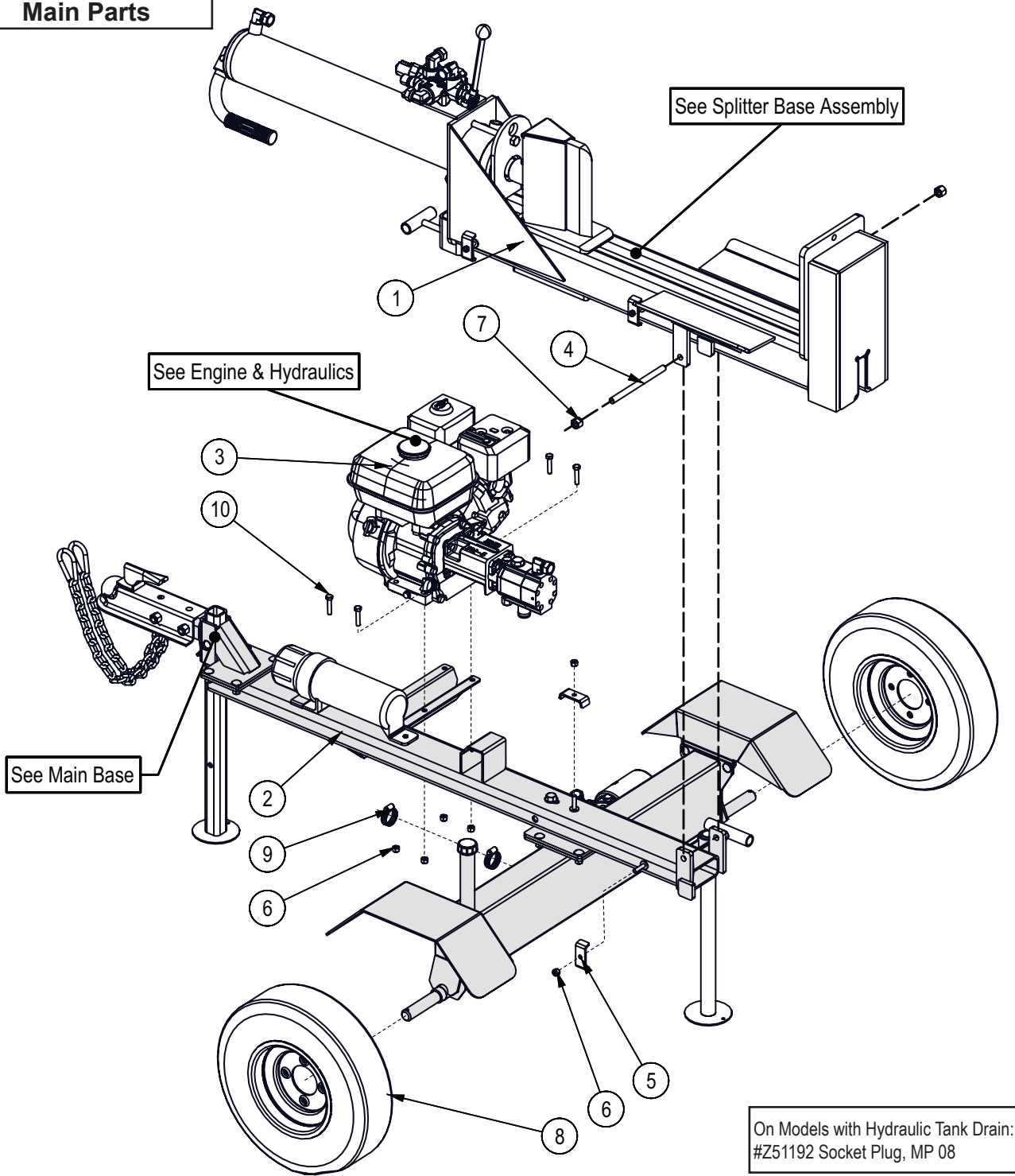
### WARNING!

**Refer to the operators manual for safe operation and maintenance.**

**Maintenance should be performed by trained personnel only.**

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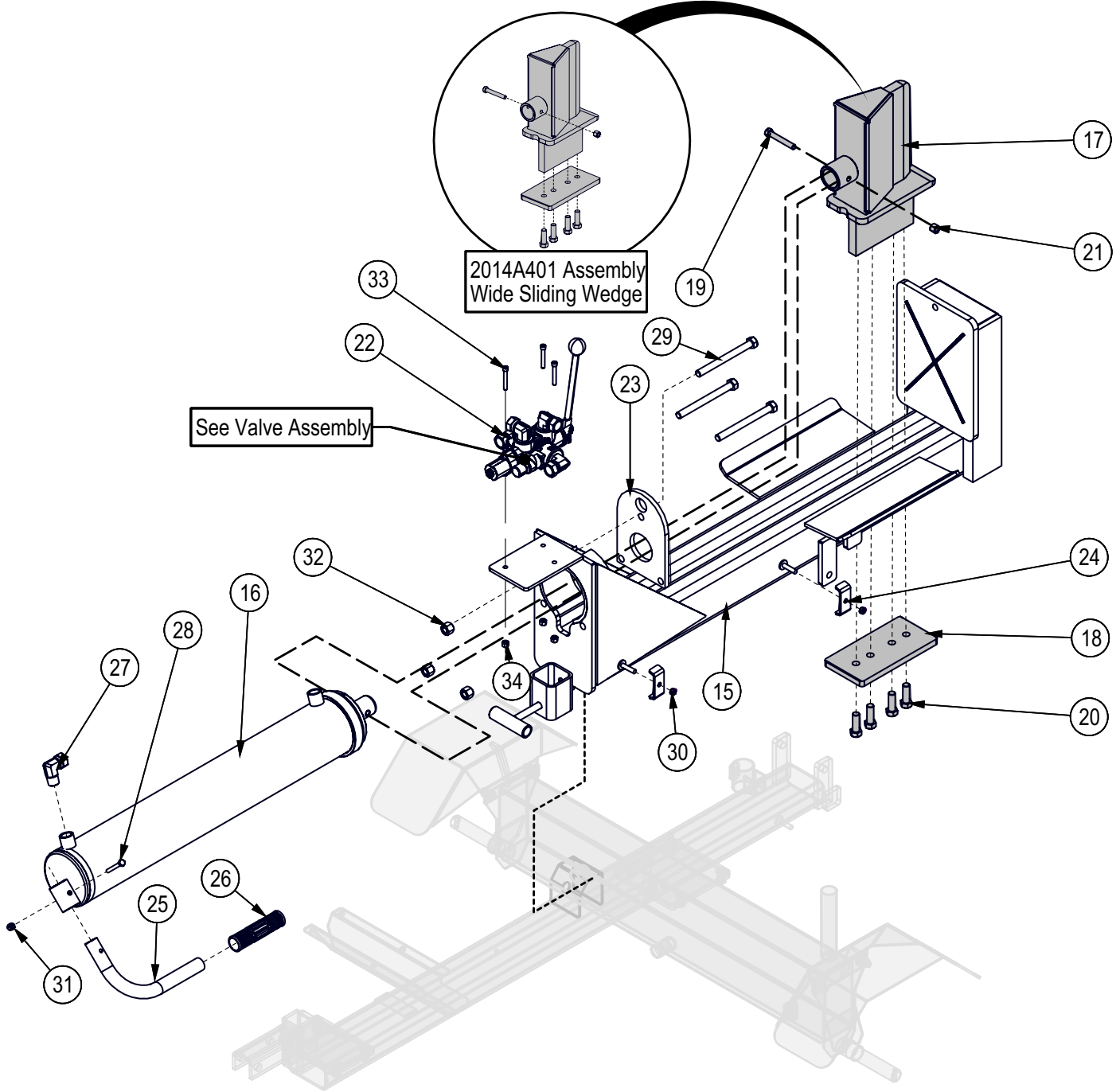
**Main Parts**



ECN0396

Item No.	Part No.	Description	Qty
1	2054A401	Assembly, Splitter Base	1
2	2054A601	Assembly, Main Base	1
3	2052A222	Assembly, GX160 taper x 11gpm Pump	1
4	2016M602	Pin, Pivot Threaded	1
5	2054L412	Clamp, Two Hose	2
6	Z72221	Hex Lock Nut, 5/16NC	6
7	Z72251	Hex Lock Nut, 1/2NC	2
8	Z91301	4.80-8 LRB SportTrail 4on4"	2
9	Z79401	Hose Clamp, SAE #16 (1-1/2")	2
10	Z71215	Hex Bolt, 5/16NC x 1-1/2"	4

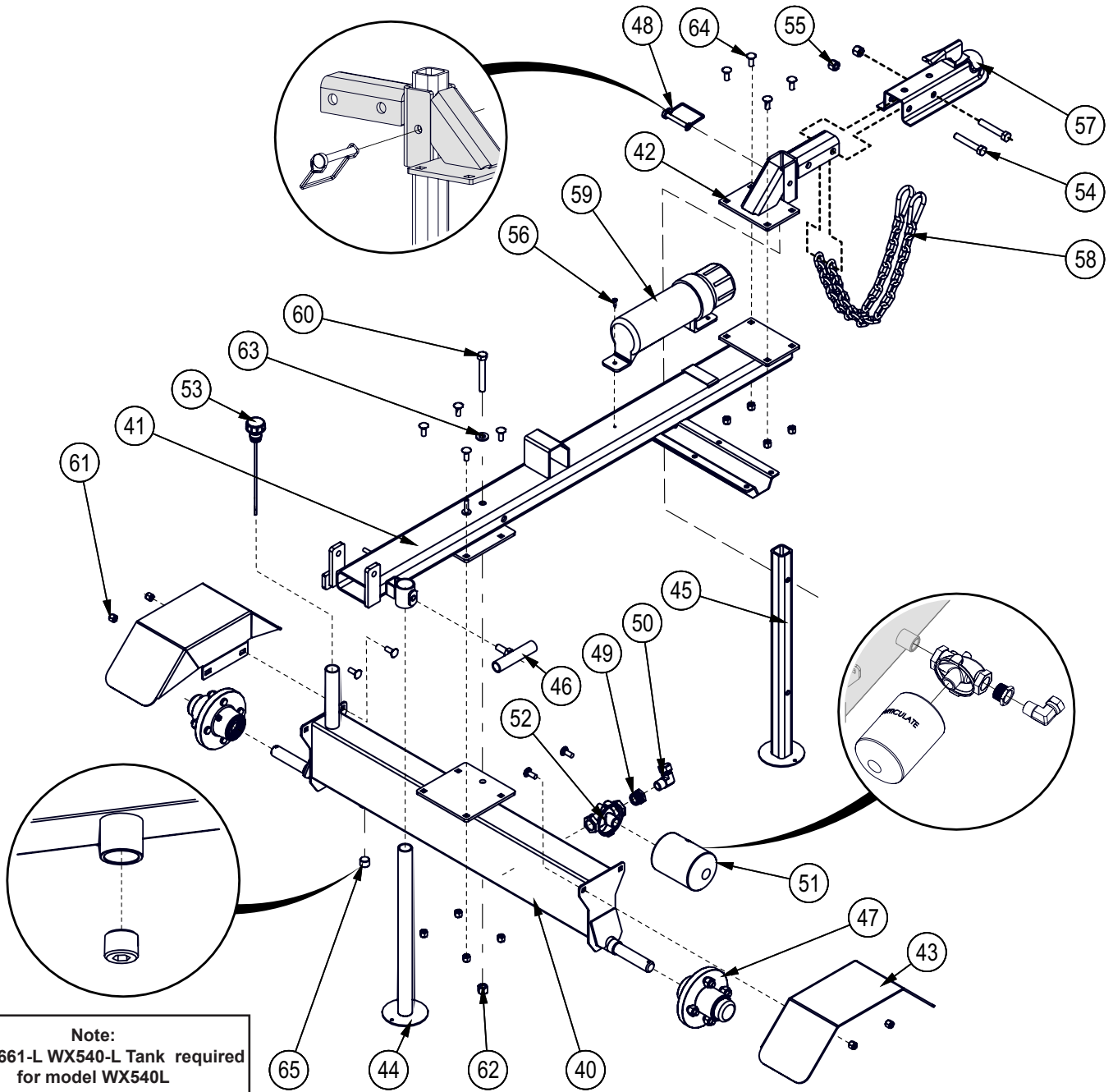
Splitter Base



Item No.	Part No.	Description	Qty
15	2054W409	Splitter Base for WX540	1
16	2011C101	Cylinder, 4 x 24 x 1-1/2"	1
17	2014W402	Sliding Wedge	1
18	2014S414	Plate, Sliding Wedge Capture	1
19	Z71325	Hex Bolt, 3/8NC x 2-1/2"	1
20	Z71576G8	Hex Bolt, 1/2NF x 1-1/2" G8	4
21	Z72231	Hex Lock Nut, 3/8NC	1
22	2011A103	Assembly, Valve with Fittings	1
23	2014S421	Plate, Cylinder Retaining (Bolt)	1
24	2054L412	Clamp, Two Hose	2
25	2054S414	Handle, Lift	1

Item No.	Part No.	Description	Qty
26	Z19321	Handle Grip, 1"	1
27	Z51331	Elbow 90, MP x FPX 0808	1
28	Z71120	Hex Bolt, 1/4NC x 2"	1
29	Z71555	Hex Bolt, 1/2NC x 5-1/2"	3
30	Z72112	Hex Nut, 1/4NF	2
31	Z72211	Hex Lock Nut, 1/4NC	1
32	Z72251	Hex Lock Nut, 1/2NC	3
33	Z75114	SHCS, 1/4NC x 1-3/4"	3
34	Z72211	Hex Lock Nut, 1/4NC	3

**Main Base Assembly**

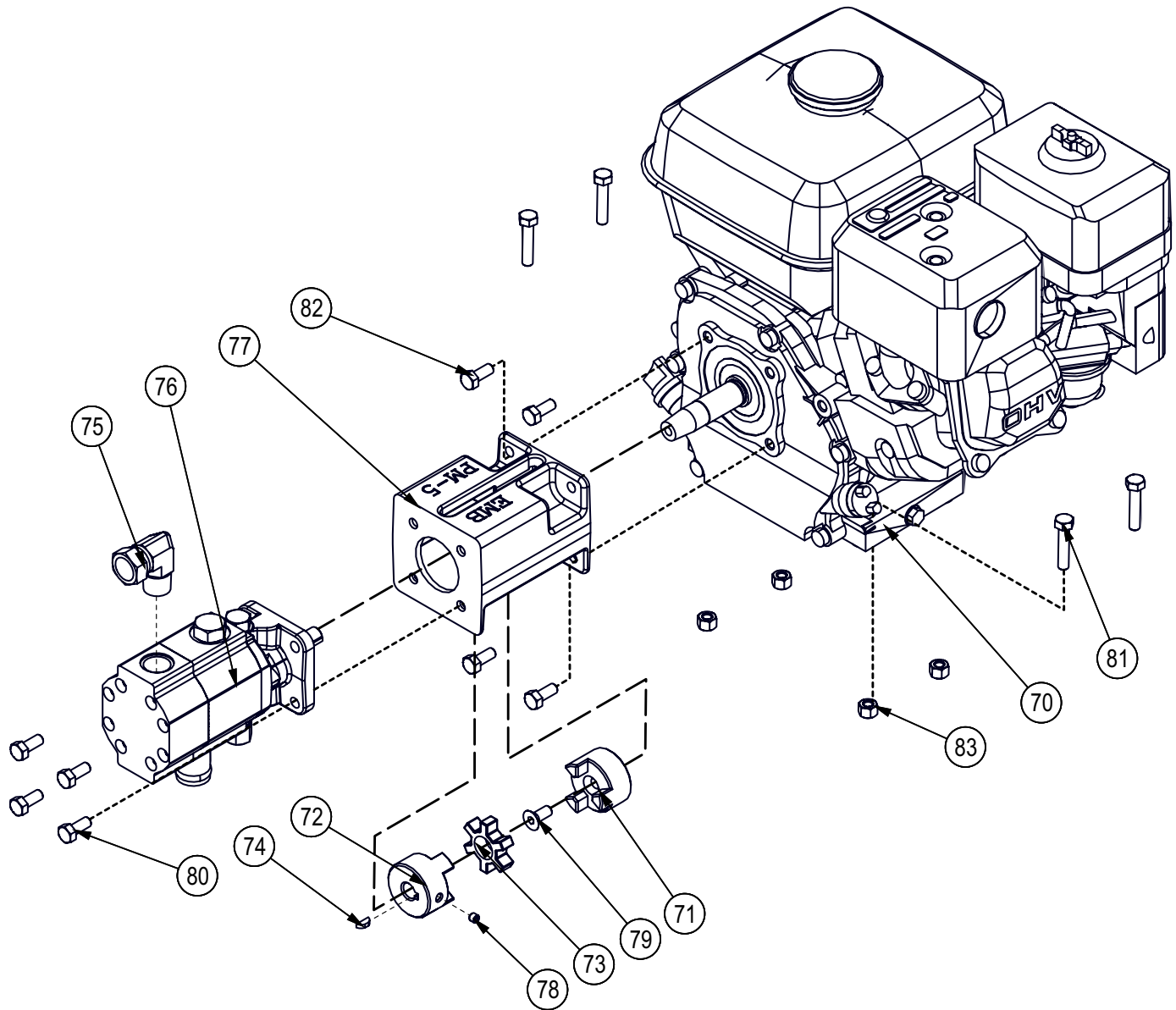


**Note:**  
2054W661-L WX540-L Tank required  
for model WX540L

Item No.	Part No.	Description	Qty
40	2054W661	WX540 Tank - Axle	1
41	2054W602	Trailer Spine	1
42	2054W604	Hitch Mount	1
43	2054W408	Fender	2
44	2054W405	Jack Stand, Rear	1
45	2054W406	Jack Stand, Front	1
46	2054W407	Handle, Rear Jack Lock	1
47	Z91202	Idler Hub Assy, 1000lbs x 4on4" x 1"	2
48	Z12432	Snap Lock Pin, 3/8" x 2-1/2"	1
49	Z51221	Straight, MP x FP 1208	1
50	Z51331	Elbow 90, MP x FPX 0808	1
51	Z55301	Particulate Filter, FP12	1
52	Z55302	Filter Cap, MP12 x FP12	1
53	Z55404	Vented Plug Dipstick x 9"	1

Item No.	Part No.	Description	Qty
54	Z71530	Hex Bolt, 1/2NC x 3"	2
55	Z72251	Hex Lock Nut, 1/2NC	2
56	Z76712	Self-tapping Screw, #10 x 3/4"	1
57	Z91614	Hitch Coupler, 2" Ball x 2" x 3500lbs	1
58	Z92303	Safety Chain, 1/4" x 2ft with Snap	2
59	Z96503	Manual Tube, 3-1/2" Short	1
60	Z71535	Hex Bolt, 1/2NC x 3-1/2"	1
61	Z72231	Hex Lock Nut, 3/8NC	12
62	Z72251	Hex Lock Nut, 1/2NC	1
63	Z73151	SAE Washer, 1/2"	1
64	Z76231	Carriage Bolt, 3/8NC x 1"	12
65	Z51192	Socket Plug, MP 08	1

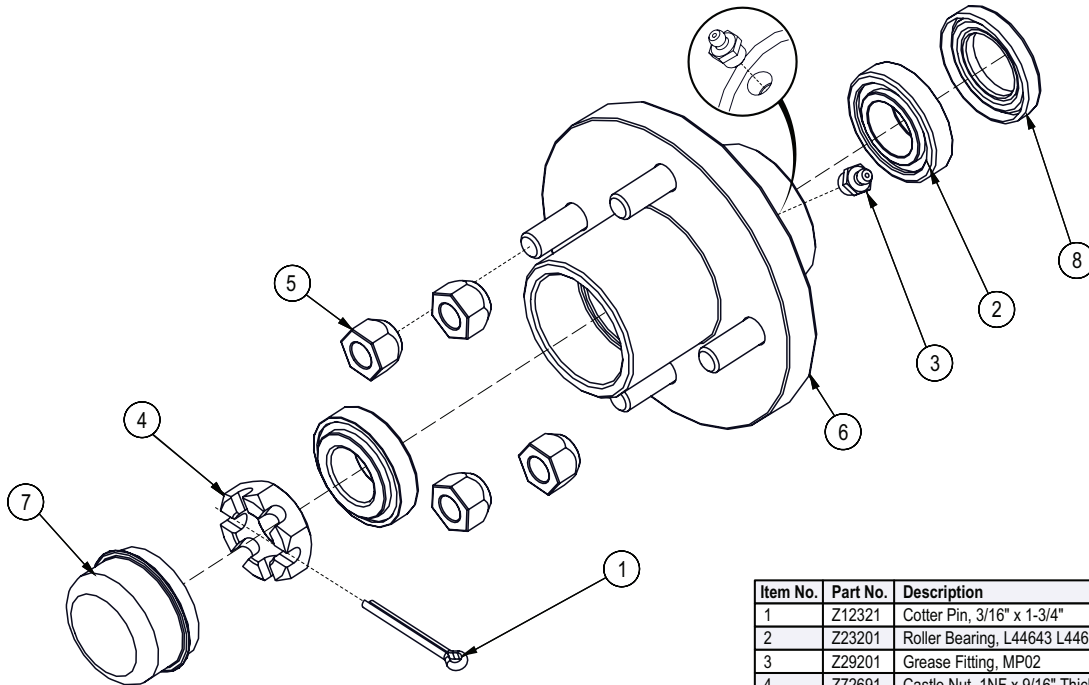
**Engine and Hydraulics Assembly**



Item No.	Part No.	Description	Qty
70	Z47128	Honda GX160U1VX2, Taper x Rope	1
71	2052M206	Shaft Coupler, L075 x Taper	1
72	Z46410	Shaft Coupling, L075 x 1/2"	1
73	Z46442	Spider, L075 x Open Center	1
74	Z46592	Woodruff Key, 1/8" x 1/2"	1
75	Z51331	Elbow 90, MP x FPX 0808	1
76	Z53204	Two-Stage Pump, 11GPM	1
77	Z53801	Pump Mount, PM-5	1

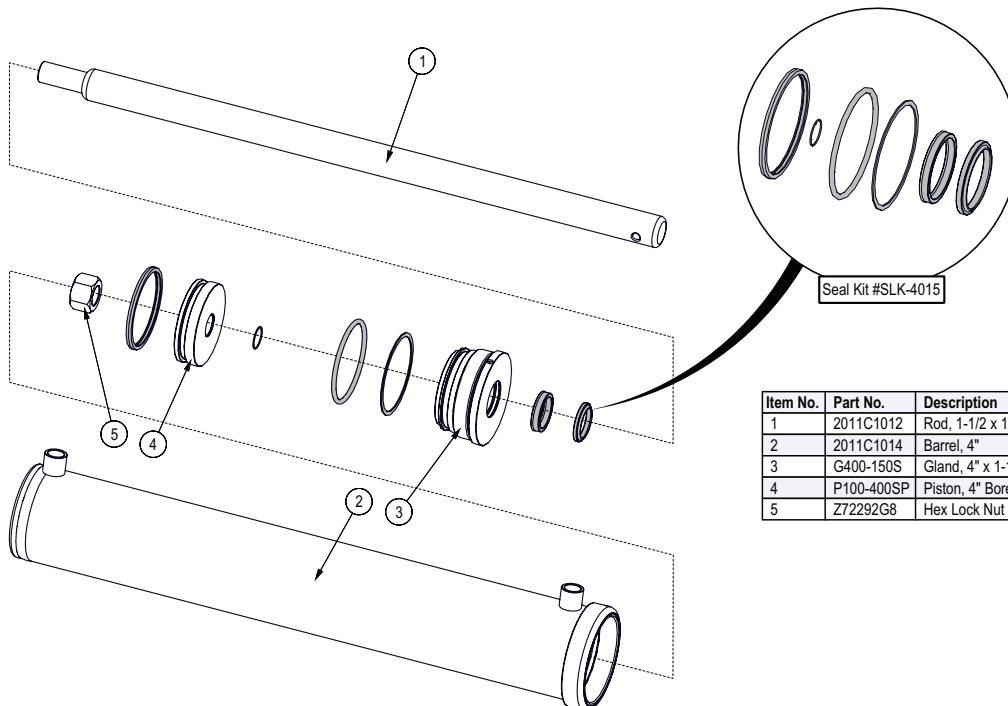
Item No.	Part No.	Description	Qty
78	Z74111	Set Screw, 1/4NC x 1/4"	1
79	Z75223	FHCS, 5/16NF x 3/4"	1
80	Z71207	Hex Bolt, 5/16NC x 3/4"	4
81	Z71215	Hex Bolt, 5/16NC x 1-1/2"	4
82	Z71273	Hex Bolt, 5/16NF x 3/4"	4
83	Z72221	Hex Lock Nut, 5/16NC	4

**Hub Assembly**



Item No.	Part No.	Description	Qty
1	Z12321	Cotter Pin, 3/16" x 1-3/4"	1
2	Z23201	Roller Bearing, L44643 L44610	2
3	Z29201	Grease Fitting, MP02	1
4	Z72691	Castle Nut, 1NF x 9/16" Thick	1
5	Z72931	Lug Nut, 1/2NF	4
6	Z91201	Hub, 1000lbs x 4on4	1
7	Z91801	Dust Cap, 1.98 Bore	1
8	Z28301	Double Lip Seal, 1-1/4"	1

**Cylinder Assembly**

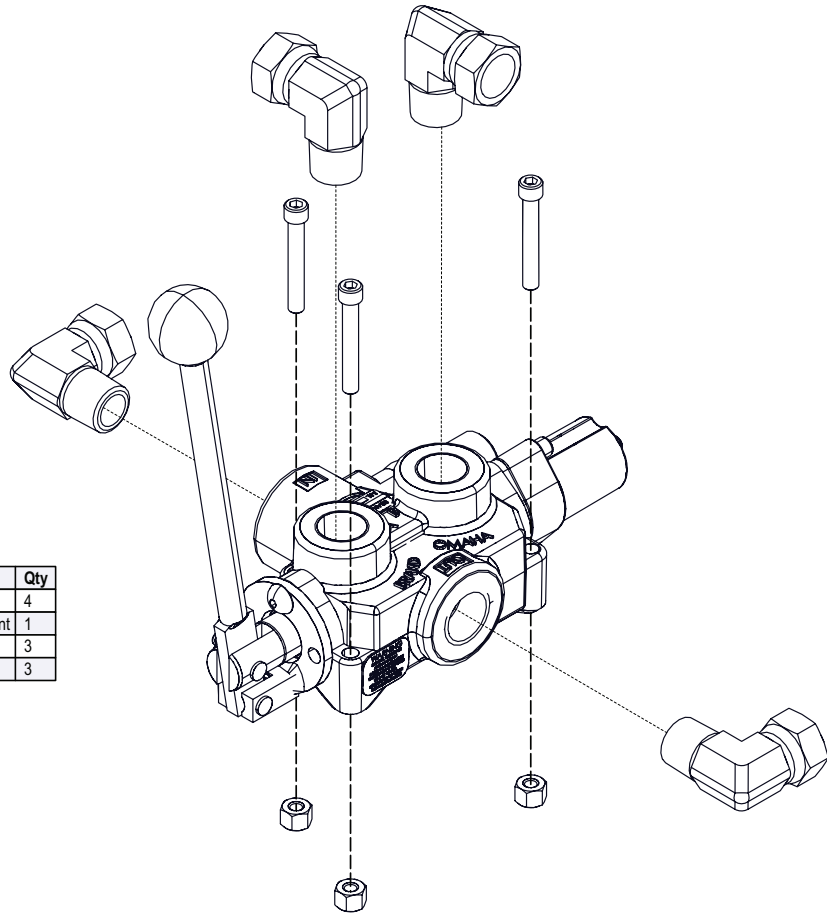


Item No.	Part No.	Description	Qty
1	2011C1012	Rod, 1-1/2 x 1	1
2	2011C1014	Barrel, 4"	1
3	G400-150S	Gland, 4" x 1-1/2"	1
4	P100-400SP	Piston, 4" Bore	1
5	Z72292G8	Hex Lock Nut 1NF Grade 8	1

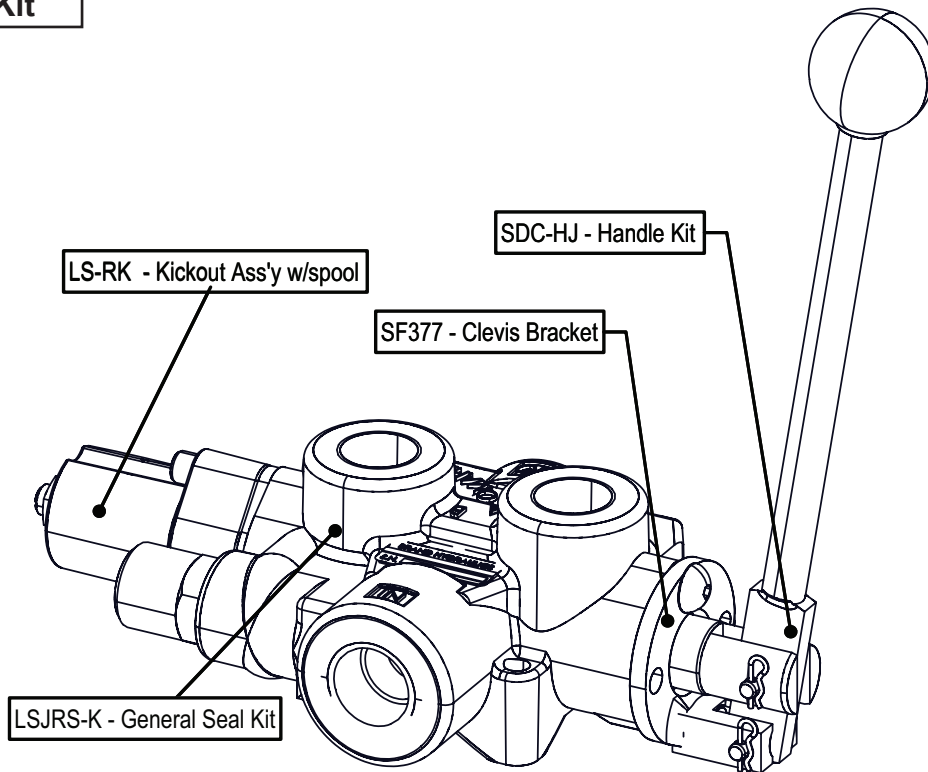


**Valve Assembly**

Item No.	Part No.	Description	Qty
1	Z51331	Elbow 90 MP x FPX 0808	4
2	Z56209	Valve, Single Function Detent	1
3	Z72211	Hex Lock Nut, 1/4NC	3
4	Z75114	SHCS, 1/4NC x 1-3/4"	3



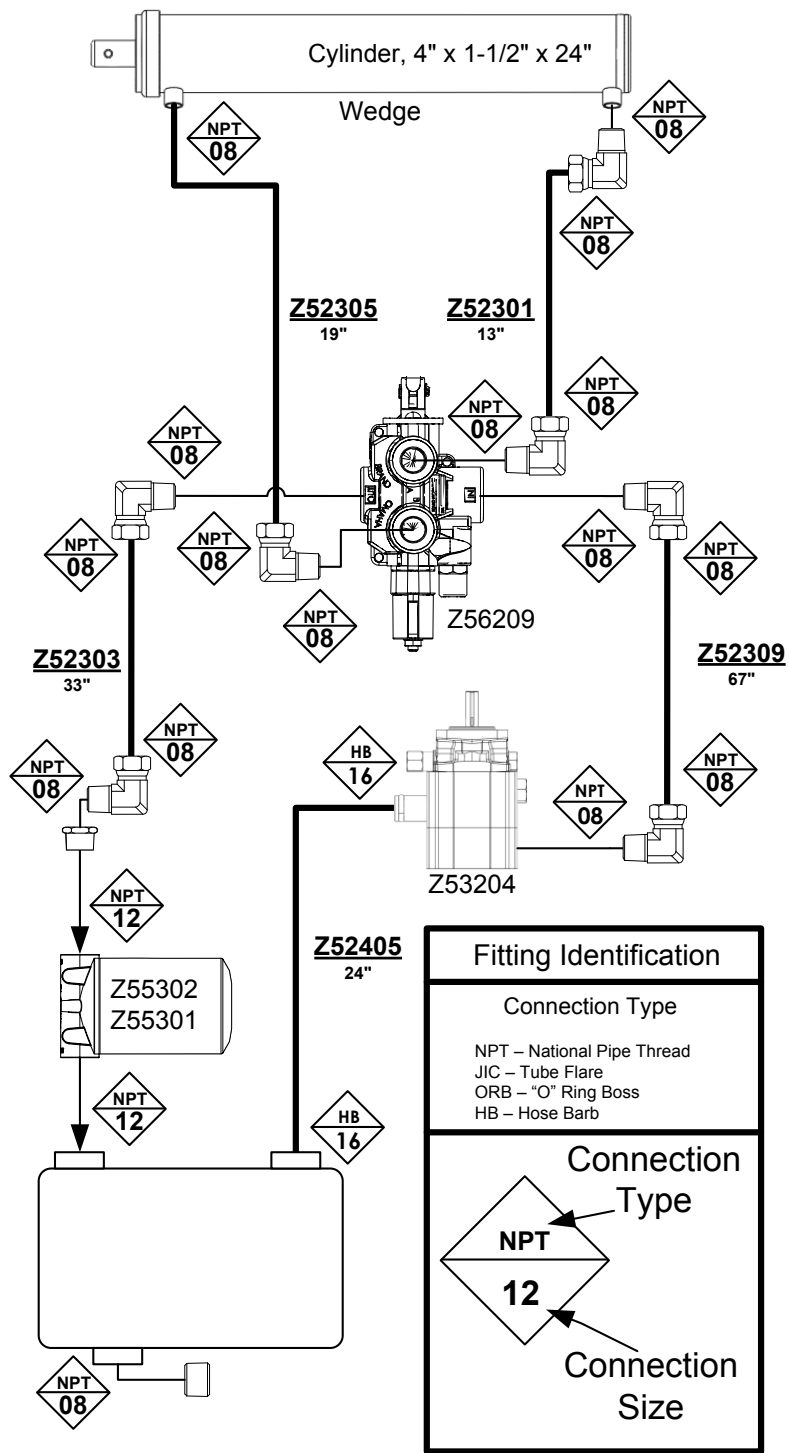
**Z56209 Service Kit**



**Z56209 Single Spool Valve - PLS50T4JRSHEMB1**

**Note: Z56210 Closed Center Valve Required For "C" Models**

**Hydraulic Plumbing Diagram**



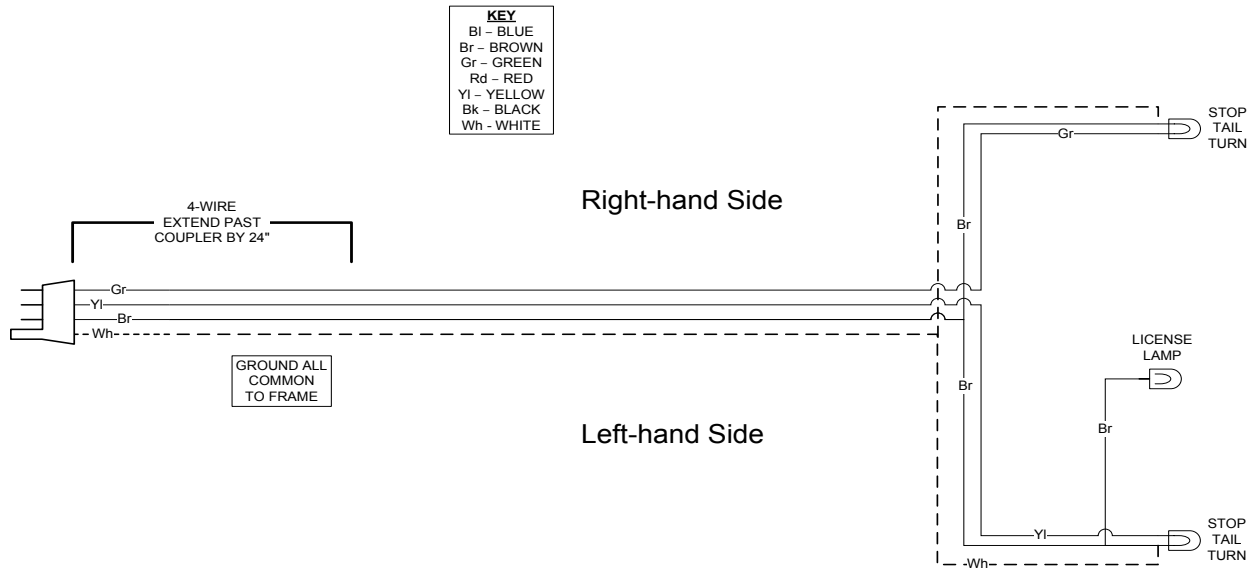
**Note:**  
2054W661-L WX540-L Tank  
required for model WX540L

**Hydraulic Hose List**

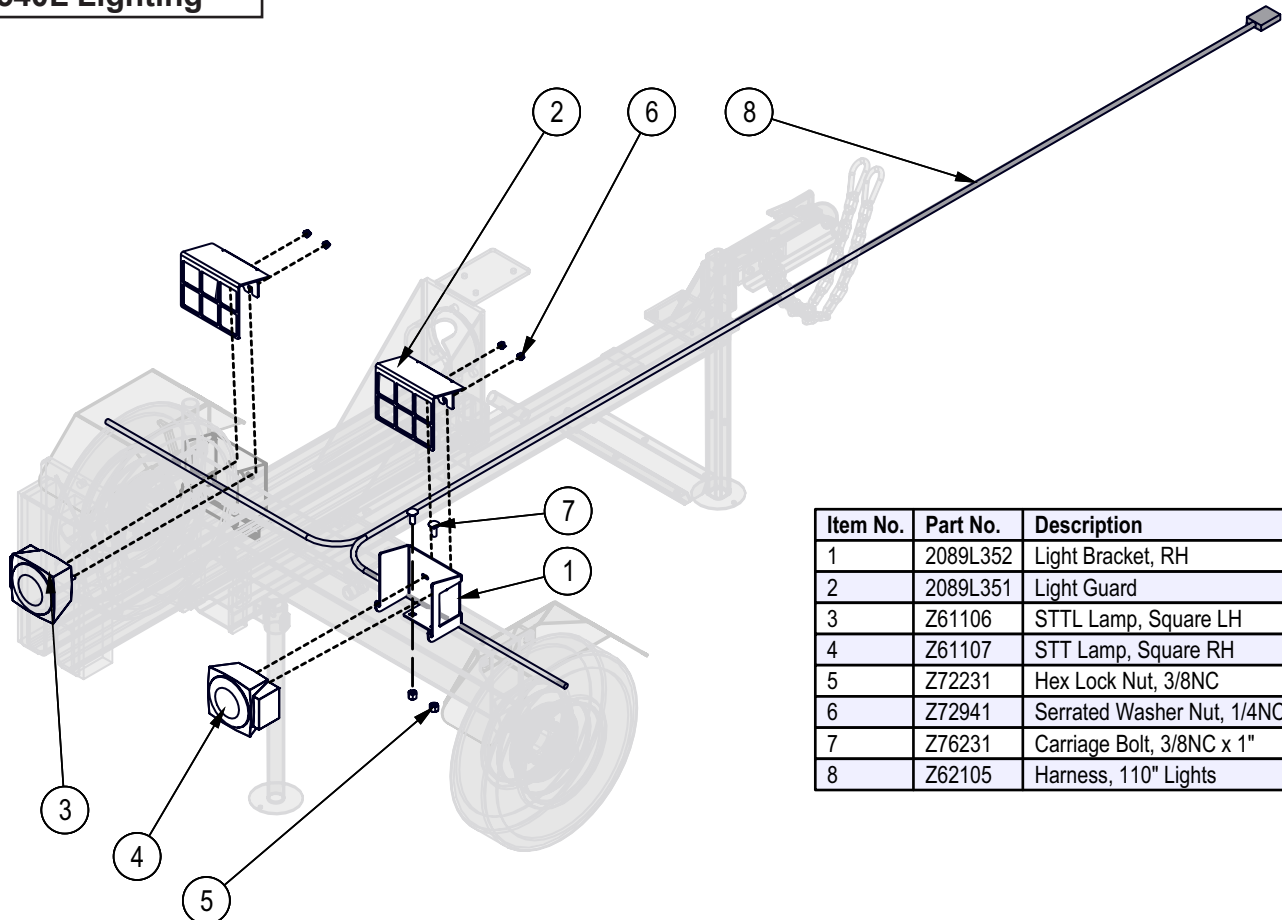
Part No.	Description	Qty
Z52405	Suction Hose, 1 x 24	1
Z52301	1/2" Hose, MP08 x MP08 x 13	1
Z52305	1/2" Hose, MP08 x MP08 x 19	1
Z52309	1/2" Hose, MP08 x MP08 x 67	1
Z52311	1/2" Hose, MP08 x MP08 x 72	1

**WX540L Wiring Schematic**

**WX TRAILER SPLITTER WIRING**

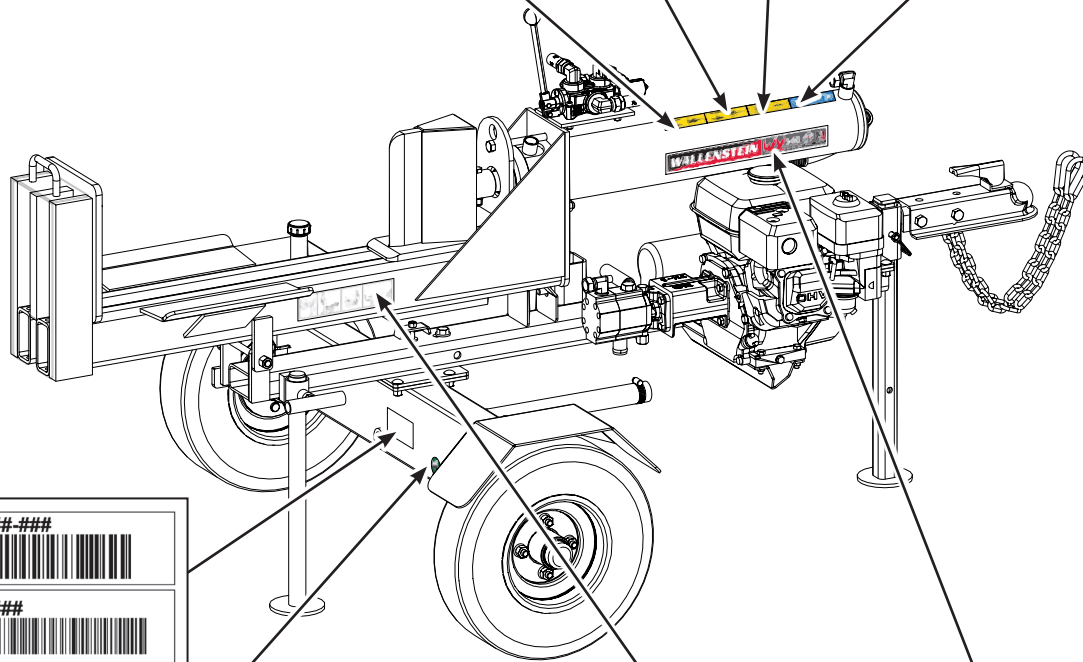


**WX540L Lighting**



Item No.	Part No.	Description	Qty
1	2089L352	Light Bracket, RH	1
2	2089L351	Light Guard	2
3	Z61106	STTL Lamp, Square LH	1
4	Z61107	STTL Lamp, Square RH	1
5	Z72231	Hex Lock Nut, 3/8NC	2
6	Z72941	Serrated Washer Nut, 1/4NC	4
7	Z76231	Carriage Bolt, 3/8NC x 1"	2
8	Z62105	Harness, 110" Lights	1

Label Layout

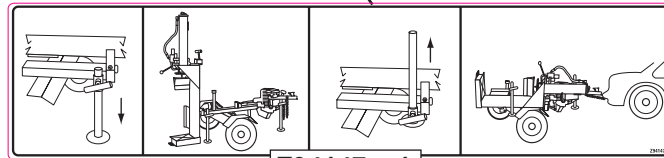


MODEL: #####

SERIAL NUMBER: #####

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Serial Location



Z94147 x 1



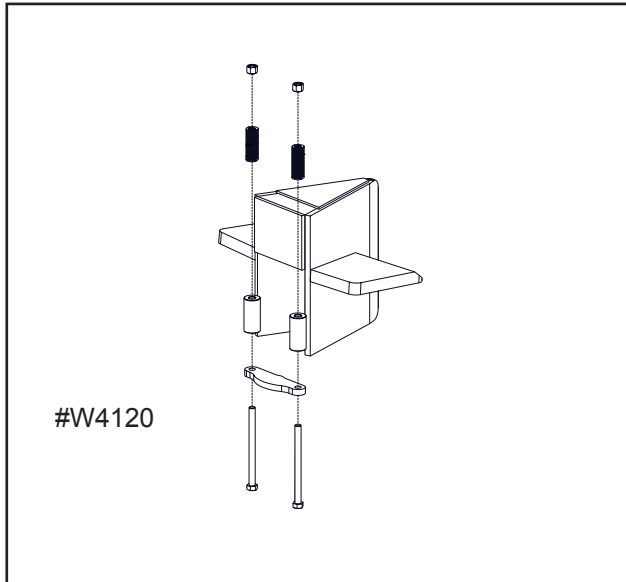
Z94428 x 2



WX540 Z94683 x 2  
 WX540L Z94781 x 2

**Accessories**

Call your dealer for pricing and availability



#W4120

**#W4120 4 Way Wedge**

Boost your productivity and make quick work out of logs by splitting four pieces at once. This is an ideal way to save time.

**#Z97043  
TRAILER WOODSPLITTER  
OPERATOR'S MANUAL**

Available as a download at  
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**Bolt Torque**

**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



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



### Hydraulic Fitting Torque

#### 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

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

