

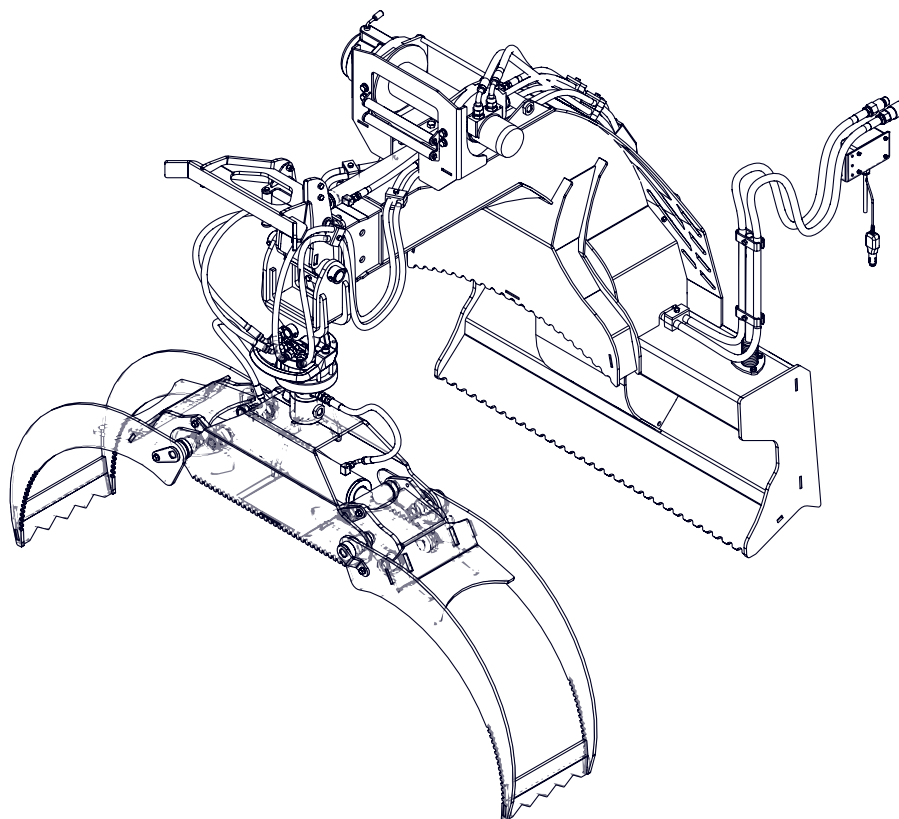


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[www.wallensteinequipment.com](http://www.wallensteinequipment.com)

# LXG430RP

## Skid Steer Grapple

Starting with S/N's  
**430RP001 and on**



Refer to the operators  
manual for safe  
operation and  
maintenance

LXG430RP RevA1.Parts Book .080916  
Rev # 160317

## Foreword

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

Proper and regular service and replacing old, worn or broken parts with the correct OEM parts are essential to prolonging the life of your EMB product. Please refer to this manual before ordering any replacement parts.

All information contained in this parts manual is based on the latest product specification available at the time of printing this manual. If your product differs from the specifications contained within this manual contact EMB Mfg. for information.

EMB reserves the right to alter specifications on their products at any time.

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For parts and information please contact your dealer. If your dealer is no longer available please go to our website: <http://www.wallensteinequipment.com> and click on "FIND A DEALER NEAR YOU" for information on a local dealer.

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Maintenance should be performed by  
trained personnel only.



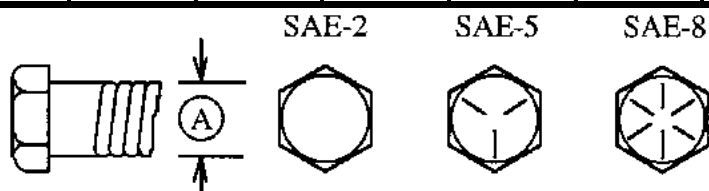
Refer to the operators  
manual for safe  
operation and  
maintenance

**Bolt Torque**

**CHECKING BOLT TORQUE**

The tables shown below give correct torque values for various bolts and capscrews. Tighten all bolts to the torques specified in chart unless otherwise noted. Check tightness of bolts periodically, using bolt torque chart as a guide. Replace hardware with the same strength bolt.

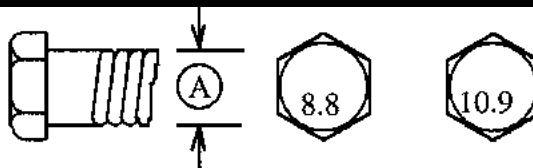
ENGLISH TORQUE SPECIFICATIONS						
Bolt Diameter "A"	Bolt Torque*					
	SAE 2 (N.m) (lb-ft)		SAE 5 (N.m) (lb-ft)		SAE 8 (N.m) (lb-ft)	
1/4"	8	6	12	9	17	12
5/16"	13	10	25	19	36	27
3/8"	27	20	45	33	63	45
7/16"	41	30	72	53	100	75
1/2"	61	45	110	80	155	115
9/16"	95	60	155	115	220	165
5/8"	128	95	215	160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



Torque figures indicated above are valid for non-greased or non-oiled threads and heads unless otherwise specified. Therefore, do not grease or oil bolts or capscrews unless otherwise specified in this manual. When using locking elements, increase torque values by 5%.

\* Torque value for bolts and capscrews are identified by their head markings.

METRIC TORQUE SPECIFICATIONS				
Bolt Diameter "A"	Bolt Torque*			
	8.8 (N.m) (lb-ft)		10.9 (N.m) (lb-ft)	
M3	0.5	0.4	1.8	1.3
M4	3	2.2	4.5	3.3
M5	6	4	9	7
M6	10	7	15	11
M8	25	18	35	26
M10	50	37	70	52
M12	90	66	125	92
M14	140	103	200	148
M16	225	166	310	229
M20	435	321	610	450
M24	750	553	1050	774
M30	1495	1103	2100	1550
M36	2600	1917	3675	2710



## Hydraulic Fitting Torque

### Tightening Flare Type Tube Fittings \*

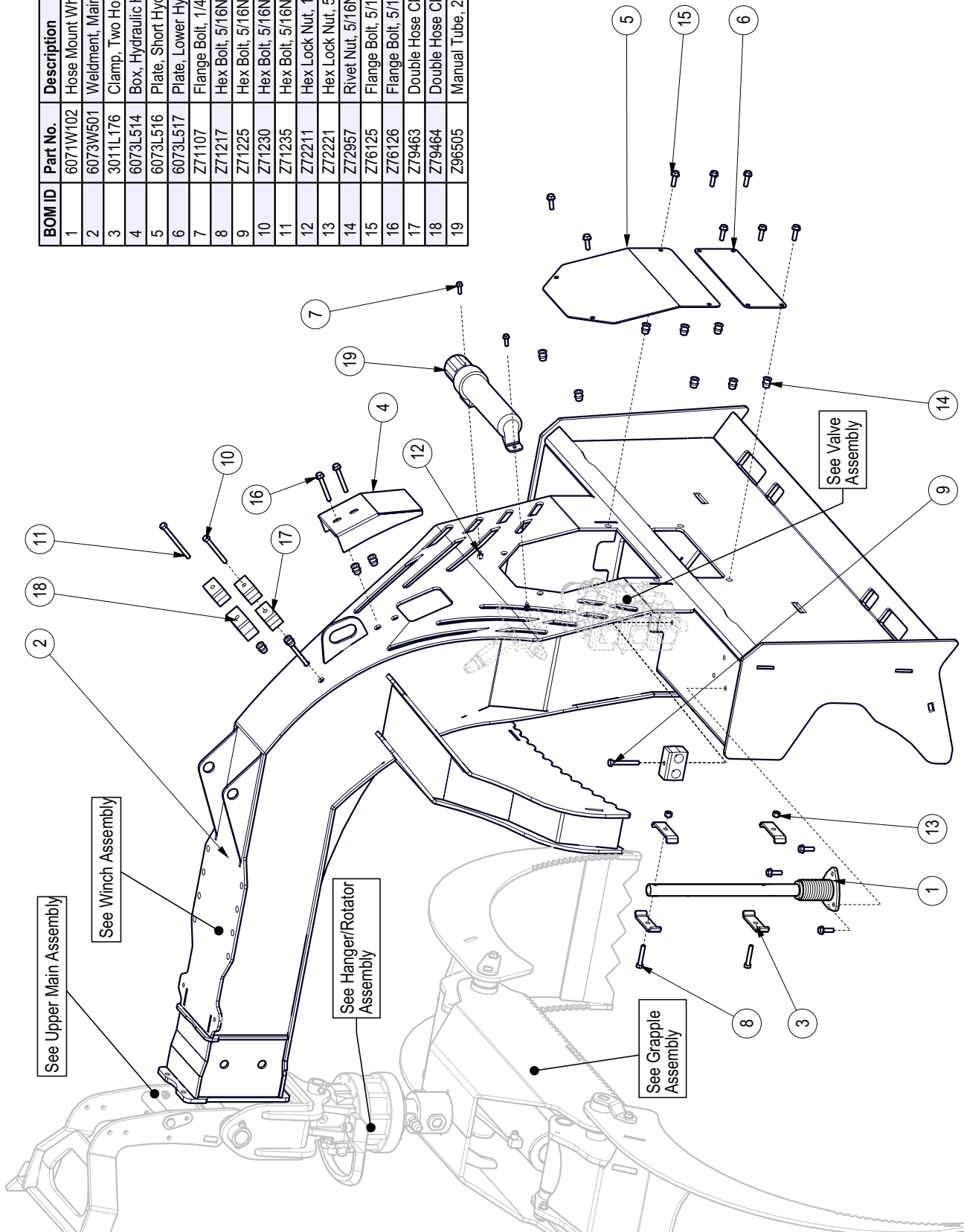
1. Check flare and flare seat for defects that might cause leakage.
2. Align tube with fitting before tightening.
3. Lubricate connection and hand tighten swivel nut until snug.
4. To prevent twisting the tube(s), use two wrenches. Place one wrench on the connector body and with the second tighten the swivel nut to the torque shown.

Tube Size OD	Nut Size Across Flats	Torque Value*		Recommended Turns To Tighten (After Finger Tightening)	
		(N.m)	(lb-ft)	(Flats)	(Turn)
3/16	7/16	8	6	1	1/6
1/4	9/16	12	9	1	1/6
5/16	5/8	16	12	1	1/6
<b>3/8</b>	<b>11/16</b>	<b>24</b>	<b>18</b>	<b>1</b>	<b>1/6</b>
1/2	7/8	46	34	1	1/6
5/8	1	62	46	1	1/6
3/4	1-1/4	102	75	3/4	1/8
7/8	1-3/8	122	90	3/4	1/8

The torque values shown are based on lubricated connections as in reassembly.

**Lower Main Frame Assembly**

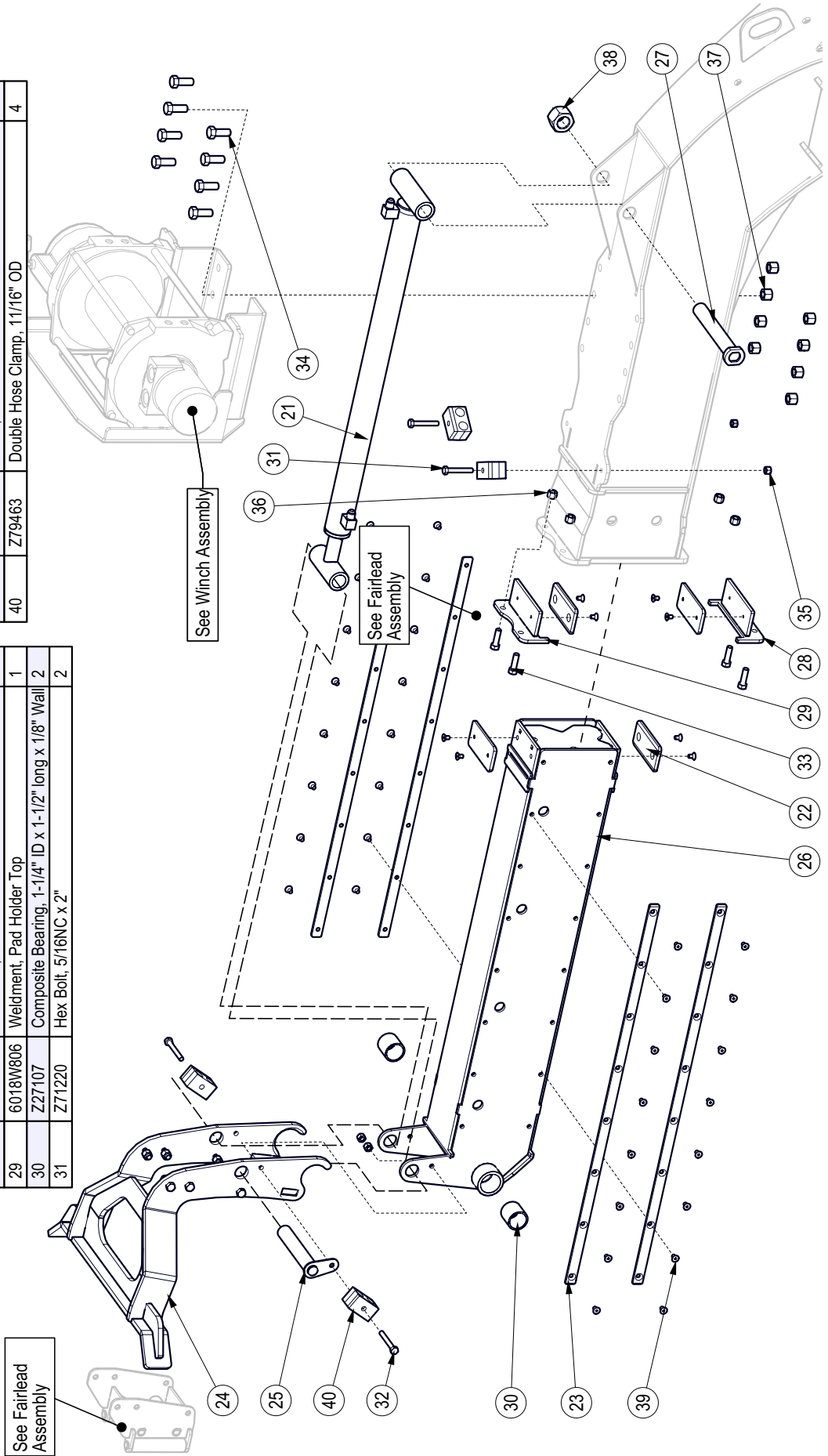
BOM ID	Part No.	Description	Qty
1	6071W102	Hose Mount Whip	1
2	6073W501	Weldment, Mainframe	1
3	3011L176	Clamp, Two Hose	4
4	6073L514	Box, Hydraulic Hose Cover	1
5	6073L516	Plate, Short Hydraulic Cover	1
6	6073L517	Plate, Lower Hydraulic Cover	1
7	Z71107	Flange Bolt, 1/4NC x 3/4"	2
8	Z71217	Hex Bolt, 5/16NC x 1-3/4"	2
9	Z71225	Hex Bolt, 5/16NC x 2-1/2"	1
10	Z71230	Hex Bolt, 5/16NC x 3"	1
11	Z71235	Hex Bolt, 5/16NC x 4"	1
12	Z72211	Hex Lock Nut, 1/4NC	2
13	Z72221	Hex Lock Nut, 5/16NC	2
14	Z72957	Rivet Nut, 5/16NC x 3/2	12
15	Z76125	Flange Bolt, 5/16NC x 1"	11
16	Z76126	Flange Bolt, 5/16NC x 2-1/2"	2
17	Z79463	Double Hose Clamp, 11/16" OD	3
18	Z79464	Double Hose Clamp, 13/16" OD	2
19	Z96505	Manual Tube, 2" Short	1



**Upper Main Frame Assembly**

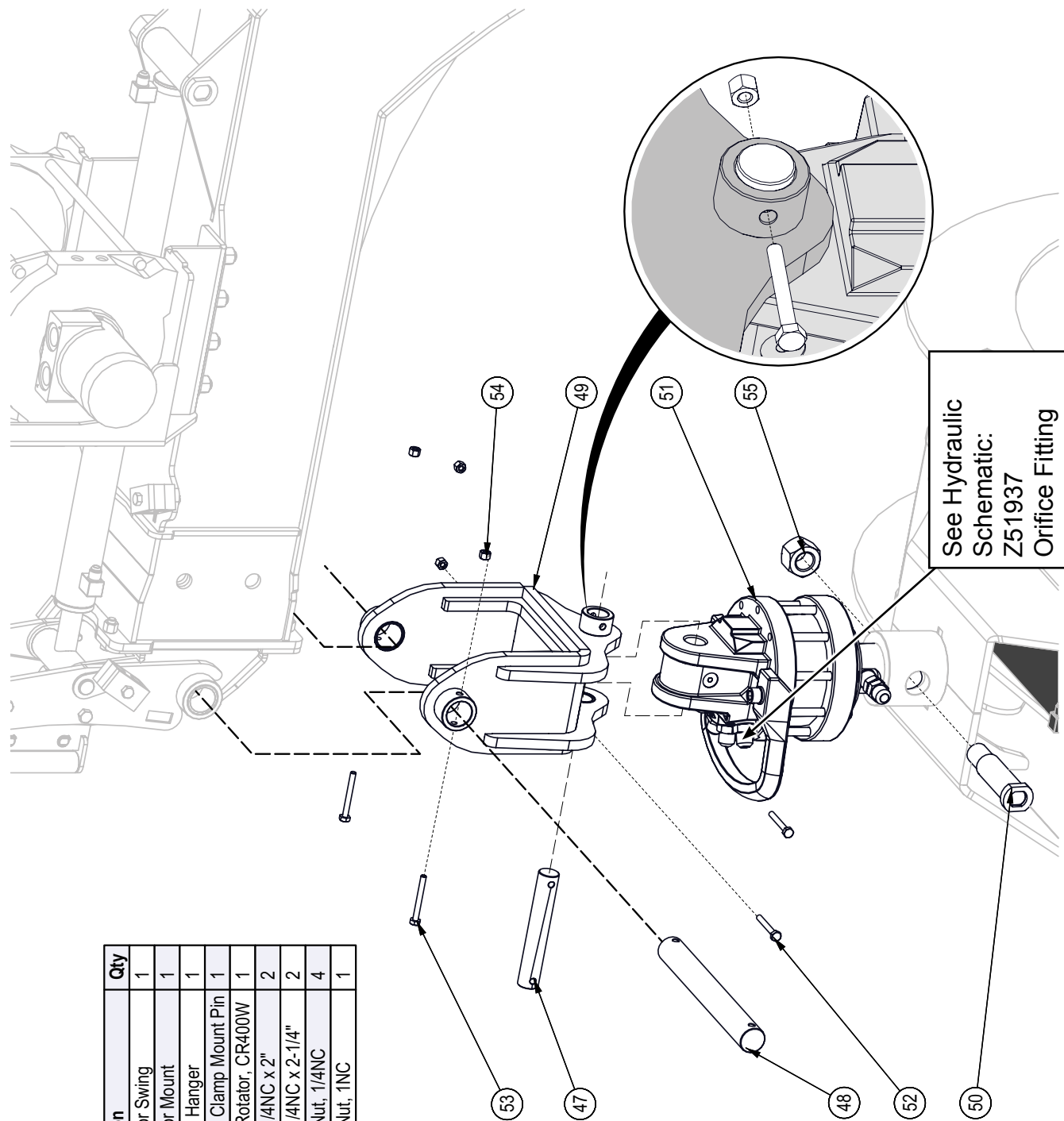
BOM ID	Part No.	Description	Qty
21	6018C801	Cylinder, 1-1/2" x 1" x 24"	1
22	6018S501	Pad, Slide Wear	4
23	6018S803	Pad, Long Slide Wear	4
24	6018W513	Weldment, Push Bar	1
25	6018W515	Weldment, Push Bar Mount Pin	1
26	6018W801	Weldment, Extension Arm	1
27	6018W804	Weldment, Cylinder Pin	1
28	6018W805	Weldment, Pad Holder Bottom	1
29	6018W806	Weldment, Pad Holder Top	1
30	Z27107	Composite Bearing, 1-1/4" ID x 1-1/2" long x 1/8" Wall	2
31	Z71220	Hex Bolt, 5/16NC x 2"	2

BOM ID	Part No.	Description	Qty
32	Z71225	Hex Bolt, 5/16NC x 2-1/2"	2
33	Z71312	Hex Bolt, 3/8NC x 1-1/4"	4
34	Z71512	Hex Bolt, 1/2NC x 1-1/4"	8
35	Z72221	Hex Lock Nut, 5/16NC	4
36	Z72231	Hex Lock Nut, 3/8NC	4
37	Z72251	Hex Lock Nut, 1/2NC	8
38	Z72291	Hex Lock Nut, 1NC	1
39	Z75212	FHCS, 1/4NC x 7/16"	40
40	Z79463	Double Hose Clamp, 11/16" OD	4



**Hanger Rotator Assembly**

BOM ID	Part No.	Description	Qty
47	6018M514	Pin, Rotator Swing	1
48	6018M515	Pin, Rotator Mount	1
49	6018W507	Weldment, Hanger	1
50	6018W514	Weldment, Clamp Mount Pin	1
51	Z54110	Hydraulic Rotator, CR400W	1
52	Z71120	Hex Bolt, 1/4NC x 2"	2
53	Z71122	Hex Bolt, 1/4NC x 2-1/4"	2
54	Z72211	Hex Lock Nut, 1/4NC	4
55	Z72291	Hex Lock Nut, 1NC	1

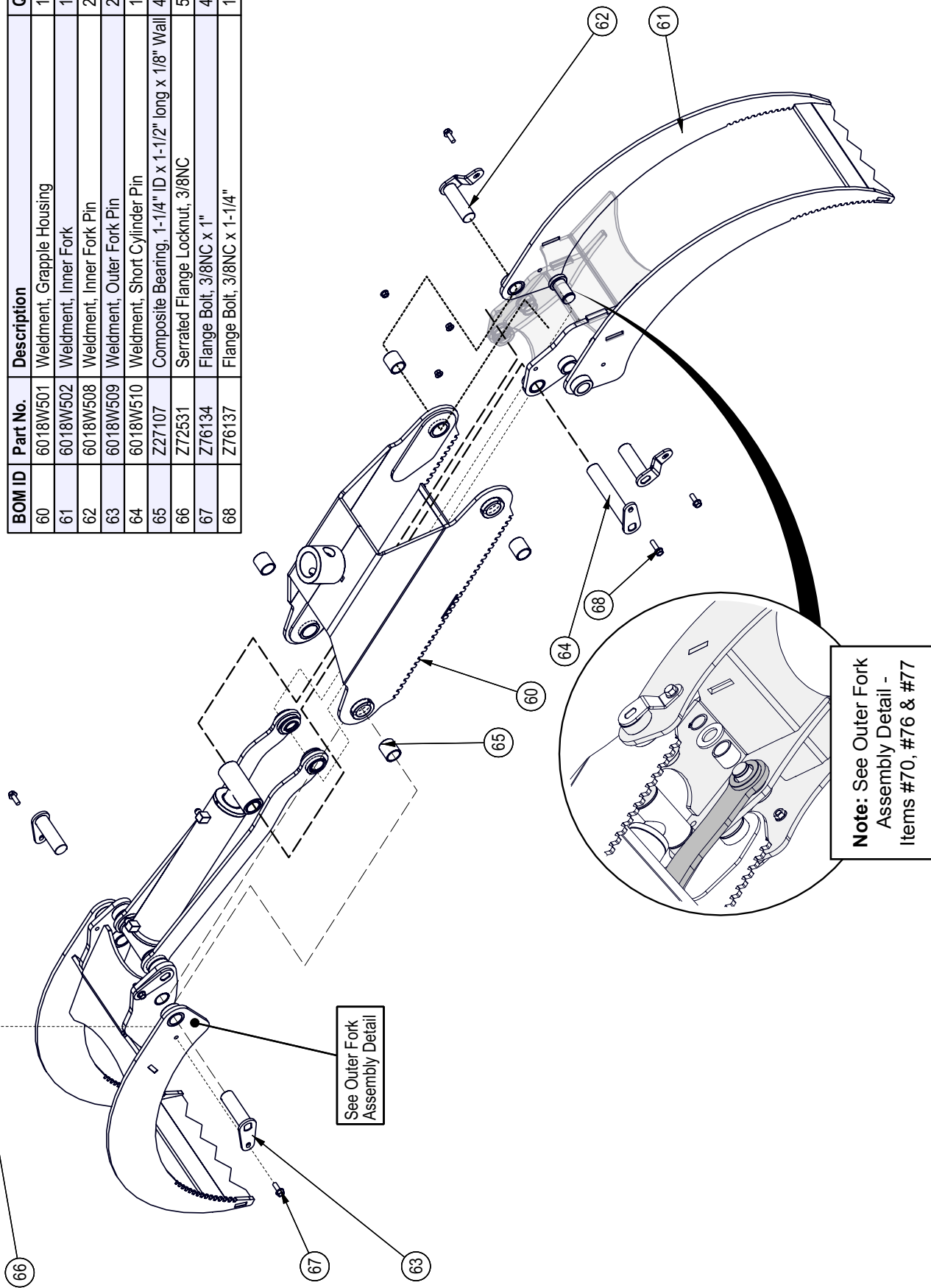


See Hydraulic Schematic: Z51937 Orifice Fitting

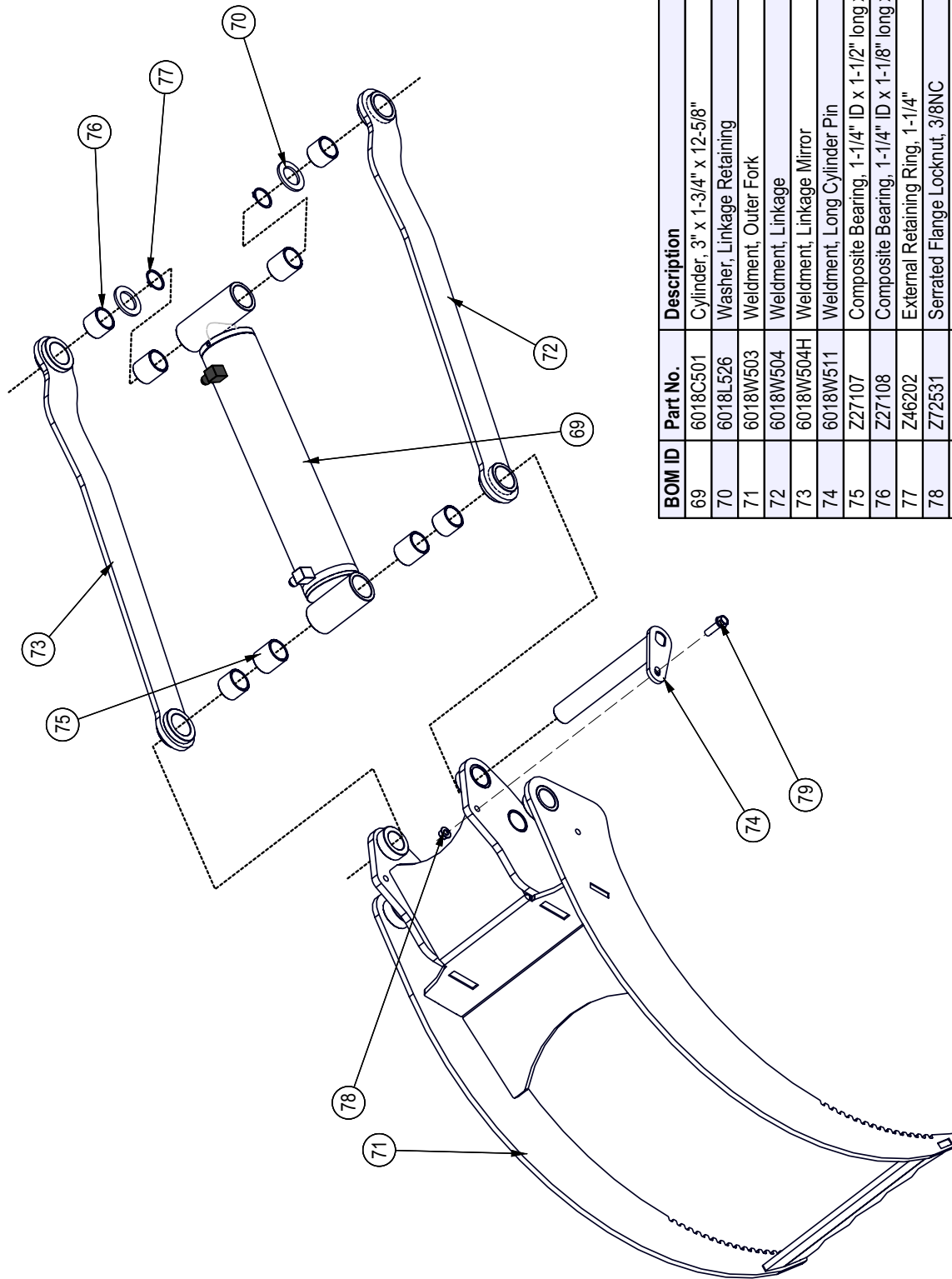


**Grapple Assembly**

BOM ID	Part No.	Description	Qty
60	6018W501	Weldment, Grapple Housing	1
61	6018W502	Weldment, Inner Fork	1
62	6018W508	Weldment, Inner Fork Pin	2
63	6018W509	Weldment, Outer Fork Pin	2
64	6018W510	Weldment, Short Cylinder Pin	1
65	Z27107	Composite Bearing, 1-1/4" ID x 1-1/2" long x 1/8" Wall	4
66	Z72531	Serrated Flange Locknut, 3/8NC	5
67	Z76134	Flange Bolt, 3/8NC x 1"	4
68	Z76137	Flange Bolt, 3/8NC x 1-1/4"	1

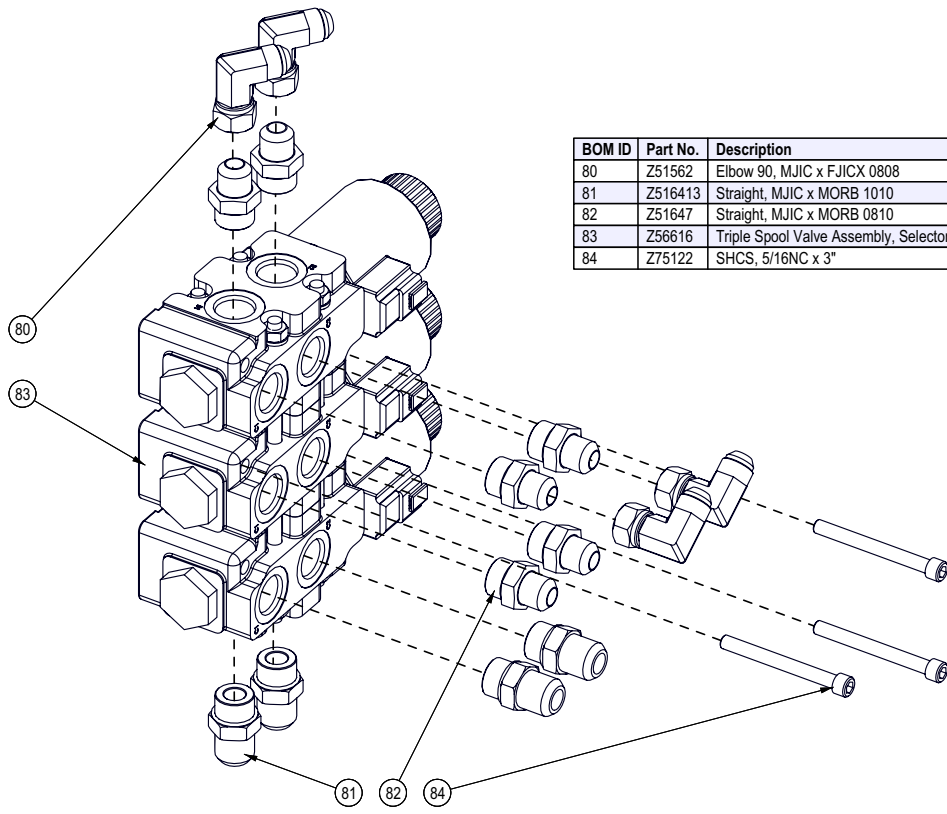


**Outer Fork Assembly Detail**



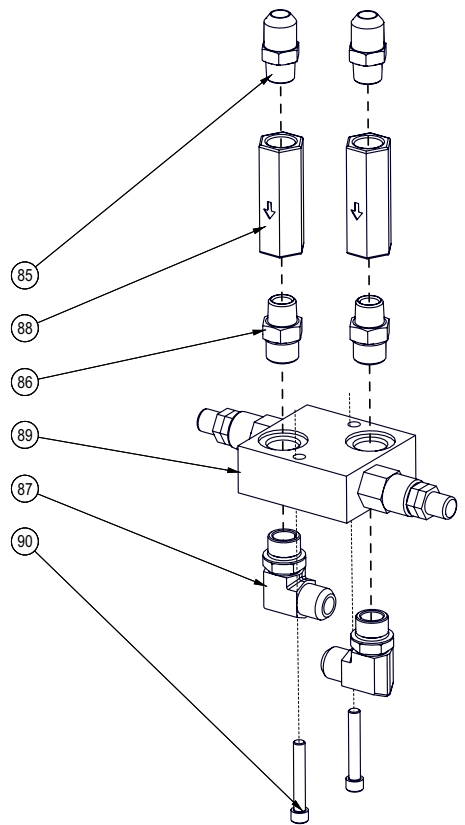
BOM ID	Part No.	Description	Qty
69	6018C501	Cylinder, 3" x 1-3/4" x 12-5/8"	1
70	6018L526	Washer, Linkage Retaining	2
71	6018W503	Weldment, Outer Fork	1
72	6018W504	Weldment, Linkage	1
73	6018W504H	Weldment, Linkage Mirror	1
74	6018W511	Weldment, Long Cylinder Pin	1
75	Z27107	Composite Bearing, 1-1/4" ID x 1-1/2" long x 1/8" Wall	4
76	Z27108	Composite Bearing, 1-1/4" ID x 1-1/8" long x 1/8" Wall	4
77	Z46202	External Retaining Ring, 1-1/4"	2
78	Z72531	Serrated Flange Locknut, 3/8NC	1
79	Z76137	Flange Bolt, 3/8NC x 1-1/4"	1

### Spool Valve Assembly

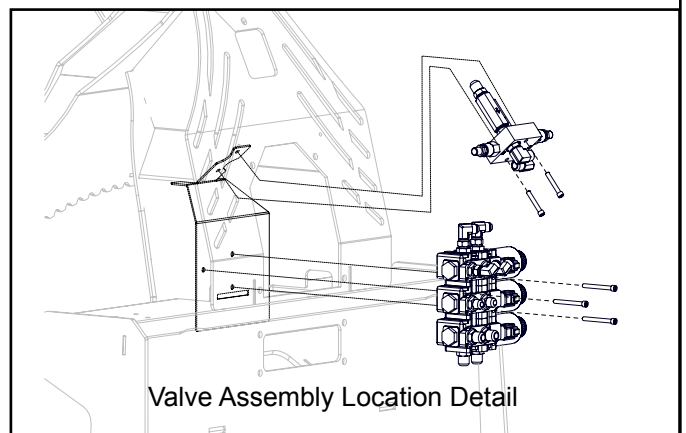


BOM ID	Part No.	Description	Qty
80	Z51562	Elbow 90, MJIC x FJICX 0808	4
81	Z516413	Straight, MJIC x MORB 1010	4
82	Z51647	Straight, MJIC x MORB 0810	6
83	Z56616	Triple Spool Valve Assembly, Selector SOL 21 GPM	1
84	Z75122	SHCS, 5/16NC x 3"	3

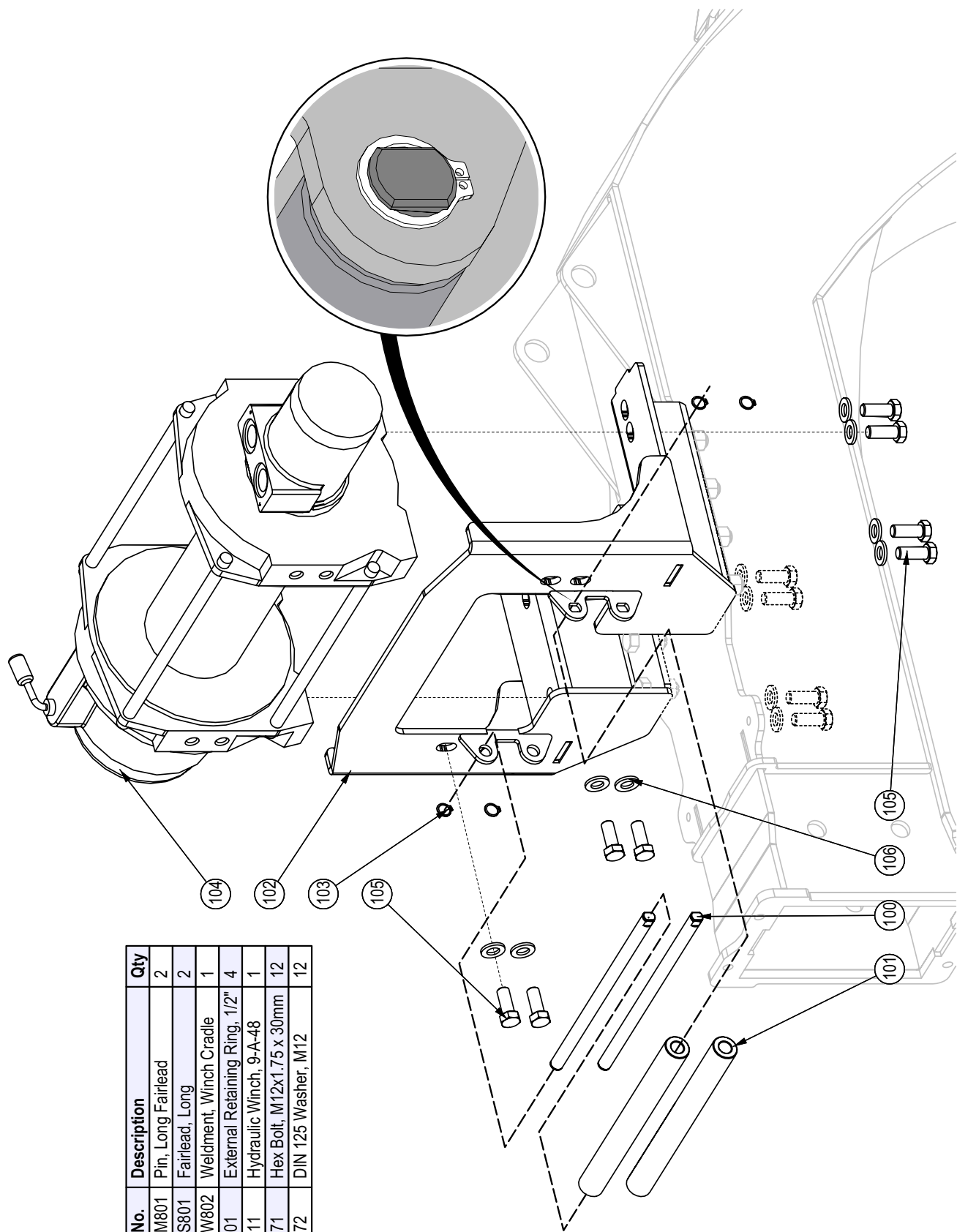
### Relief Valve Assembly



BOM ID	Part No.	Description	Qty
85	Z51449	Straight, MJIC x MP 1008	2
86	Z51611	Straight, MORB x MP 1008	2
87	Z516502	Elbow 90, MJIC x MORB 1010	2
88	Z56107	Check Valve, FP08 x 0.110"	2
89	Z56407	Crossover Relief Valve x 2200PSI	1
90	Z75123	SHCS, 5/16NC x 2"	2

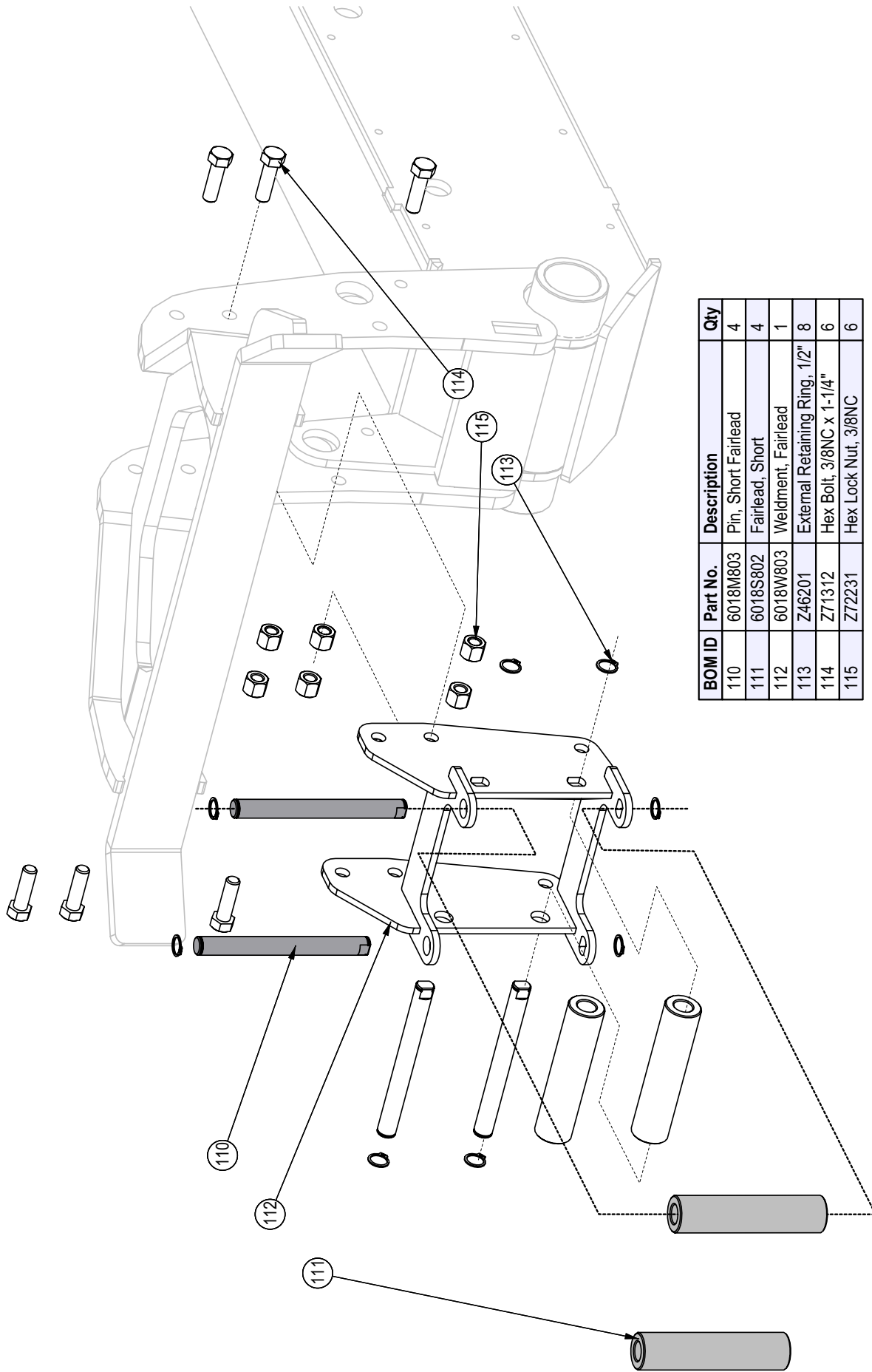


**Winch Assembly**



BOM ID	Part No.	Description	Qty
100	6018M801	Pin, Long Fairlead	2
101	6018S801	Fairlead, Long	2
102	6018W802	Weldment, Winch Cradle	1
103	Z46201	External Retaining Ring, 1/2"	4
104	Z54111	Hydraulic Winch, 9-A-48	1
105	Z77171	Hex Bolt, M12x1.75 x 30mm	12
106	Z77372	DIN 125 Washer, M12	12

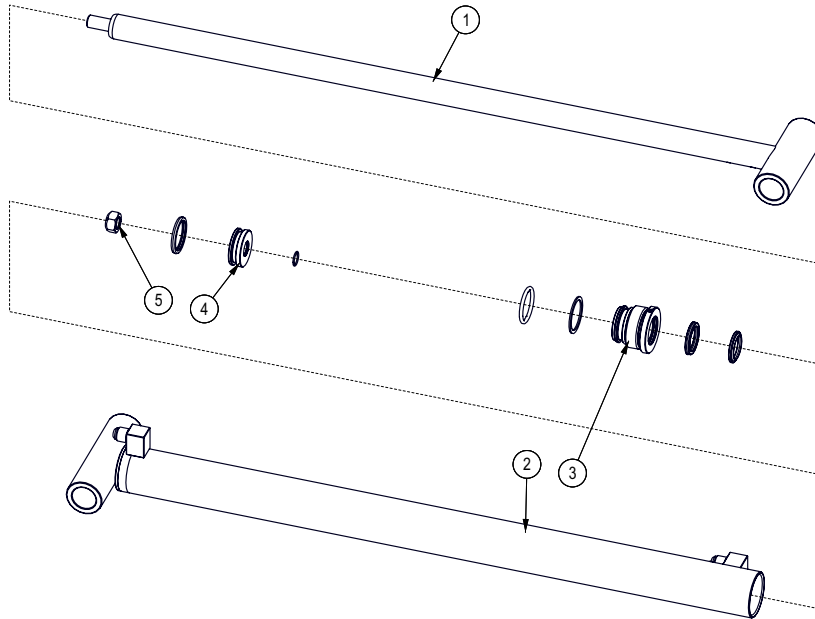
**Fairlead Assembly**



BOM ID	Part No.	Description	Qty
110	6018M803	Pin, Short Fairlead	4
111	6018S802	Fairlead, Short	4
112	6018W803	Weldment, Fairlead	1
113	Z46201	External Retaining Ring, 1/2"	8
114	Z71312	Hex Bolt, 3/8NC x 1-1/4"	6
115	Z72231	Hex Lock Nut, 3/8NC	6

**Extension Arm Cylinder Detail**

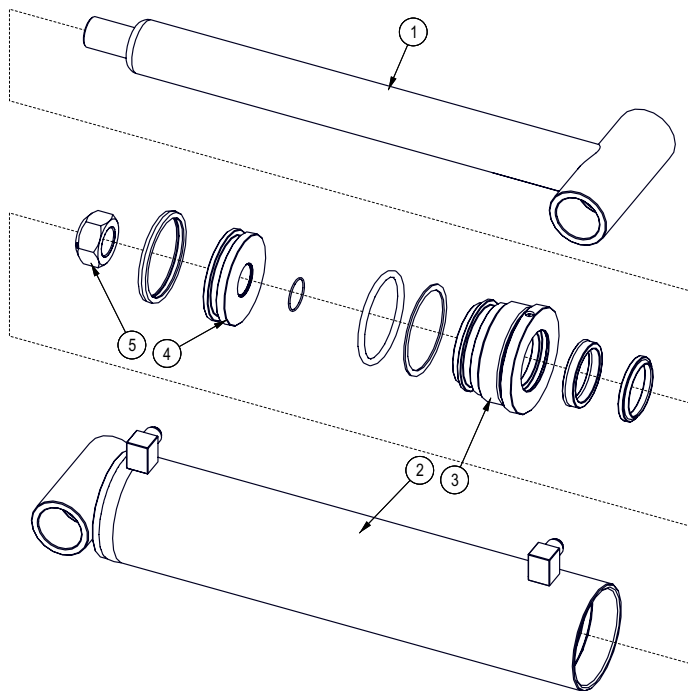
**Seal Kit #SLK-1510AN**



BOM ID	Part No.	Description	Qty
1	6018C8013	Rod, 1-1/4" x 3/4NF	1
2	6018C8014	Barrel, 1-1/2"	1
3	G150-100S	Gland, 1-1/2" x 1"	1
4	P500-150SP	Piston, 1-1/2" Bore	1
5	Z72255G8	Hex Top-lock Nut, 1/2NC G8	1

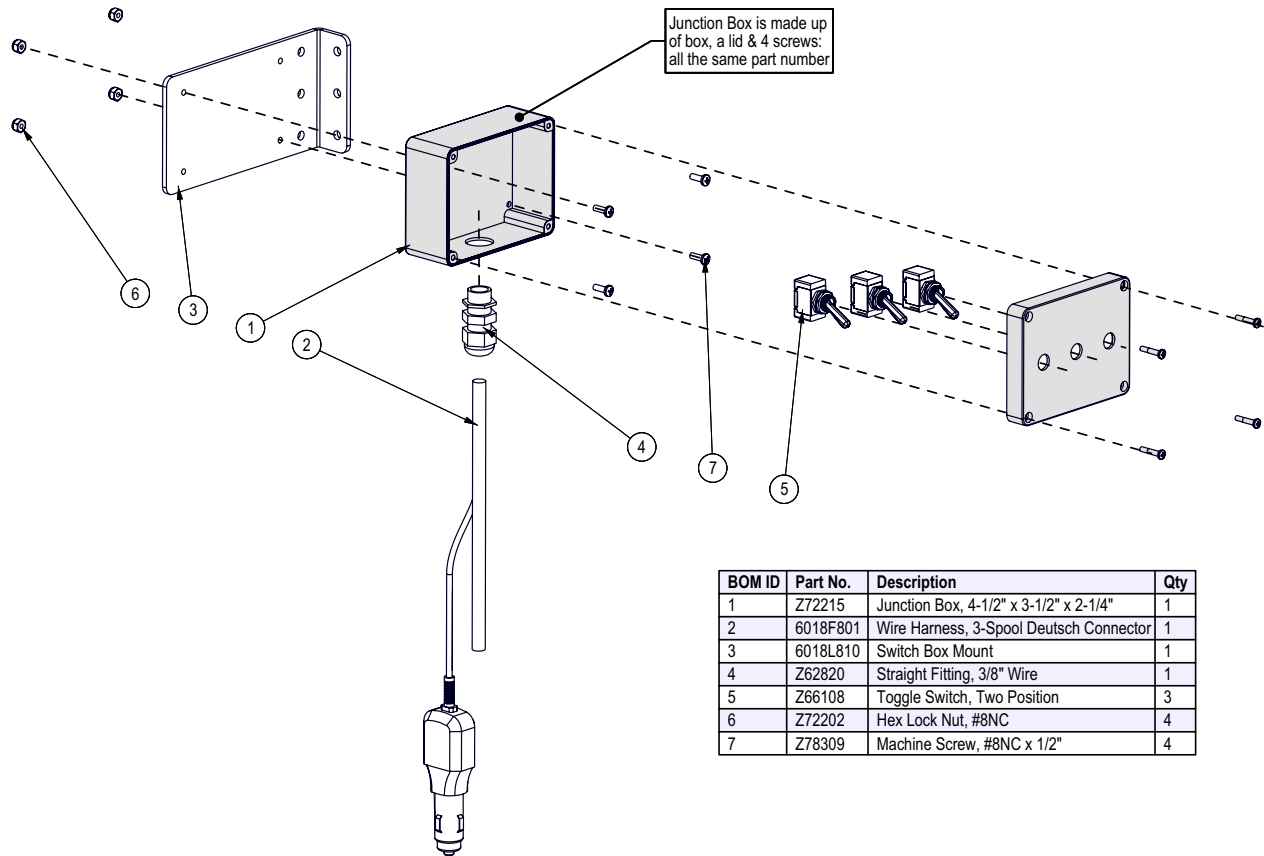
**Grapple Cylinder Detail**

**Seal Kit #SLK-3017**



BOM ID	Part No.	Description	Qty
1	6018C5013	Rod, 1-3/4" 1"	1
2	6018C5014	Barrel, 3"	1
3	G300-175S	Gland, 3" x 1-3/4"	1
4	P100-300SP	Piston, 3" Bore	1
5	Z722909G8	Hex Top-lock Nut, 1-14NF G8	1

**Control Box**

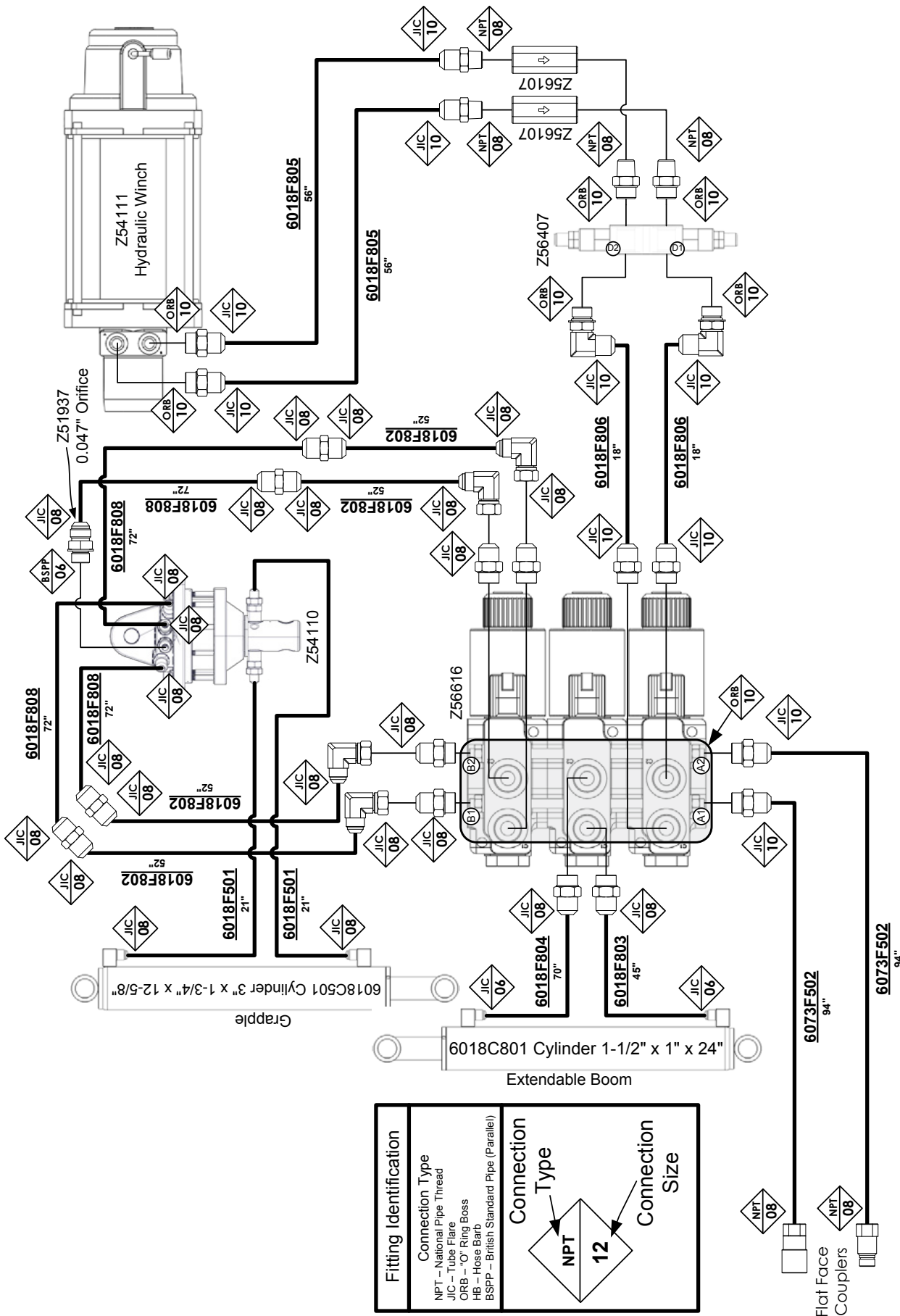


BOM ID	Part No.	Description	Qty
1	Z72215	Junction Box, 4-1/2" x 3-1/2" x 2-1/4"	1
2	6018F801	Wire Harness, 3-Spool Deutsch Connector	1
3	6018L810	Switch Box Mount	1
4	Z62820	Straight Fitting, 3/8" Wire	1
5	Z66108	Toggle Switch, Two Position	3
6	Z72202	Hex Lock Nut, #8NC	4
7	Z78309	Machine Screw, #8NC x 1/2"	4

**Hydraulic Hose List**

Part No.	Description	Qty
6018F501	3/8" Hose, FJIC08 x 90FJIC06 x 21	2
6018F802	3/8" Hose, FJIC08 x FJIC08 x 52	4
6018F803	3/8" Hose, FJIC06 x 90FJIC08 x 45	1
6018F804	3/8" Hose, FJIC06 x 90FJIC08 x 70	1
6018F805	1/2" Hose, FJIC10 x 90FJIC10 x 56	2
6018F806	1/2" Hose, FJIC10 x 90FJIC10 x 18	2
6018F808	3/8" Hose, FJIC08 x 45FJIC08 x 72	4
6073F502	1/2" Hose, MP08 x 90FJIC10 x 94	2

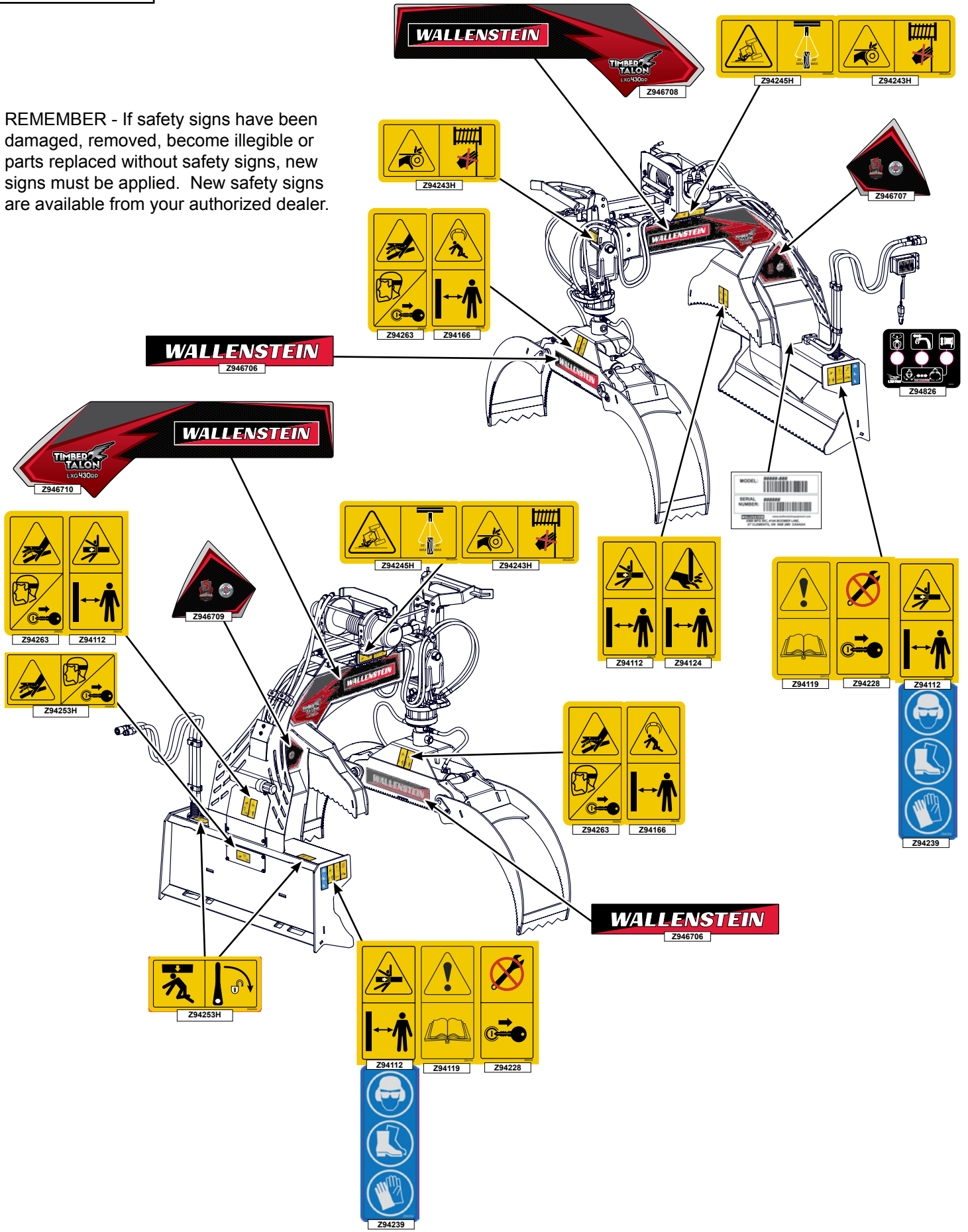
**Hydraulic Schematic**



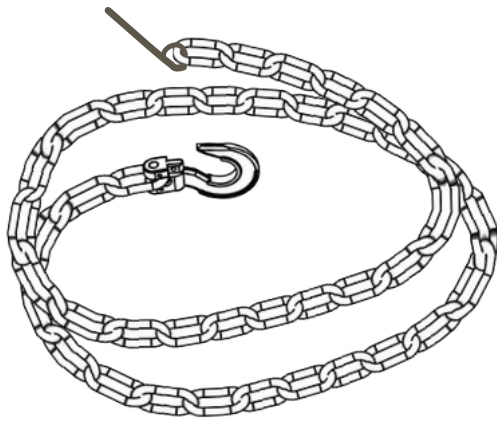


Labels

REMEMBER - If safety signs have been damaged, removed, become illegible or parts replaced without safety signs, new signs must be applied. New safety signs are available from your authorized dealer.



**Accessories**



#Z92318

Chokers:

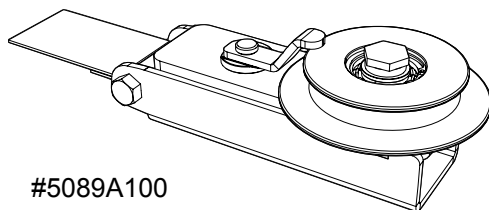
**#Z92318 CHOKER CHAIN 5/16" X 7.5 FT**

**#Z92126 SYNTHETIC CHOKER, 7/16"X 7 FT**

**#Z92125 SYNTHETIC CHOKER, 3/8"X 5 FT**

Eases winching activities by providing a secure support when winching and skidding.

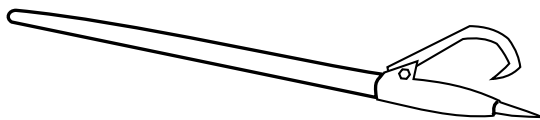
Synthetic rope chokers (braided UHMW) is a high strength polyethylene, lighter and easier to use than chain.



#5089A100

**#5089A100 SELF RELEASING SNATCH BLOCK**

When obstacles prevent direct winching, or to prevent damage to other trees, the Wallenstein self-releasing snatchblock should be used. The snatchblock releases the rope when the keyhole slider reaches it.

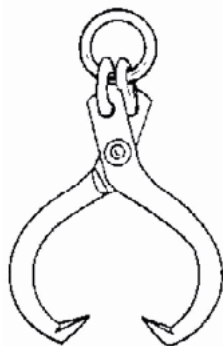


#Z99001

**#Z99001 48" LOG PEAVEY**

Quality 2 3/8" diameter hardwood handle, with a Western Duck Bill Hook.

Helps to move those heavy log timbers into position.



#Z99003

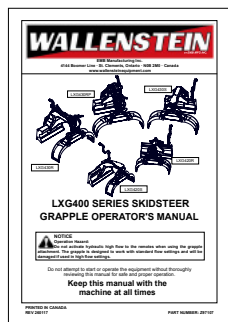
**#Z99003 SKIDDING TONGS**

Heavy Duty Forged Ring Skidding Tongs

Maximum Opening: 25"

Minimum Opening: 4-1/2"

Tough log skidding tongs are a quick and easy way to skid logs.



**#Z97107 GRAPPLE OPERATOR'S MANUAL**

Available as a download at [www.wallensteinequipment.com](http://www.wallensteinequipment.com)

For replacement parts or accessory's, call your dealer for pricing and availability.