

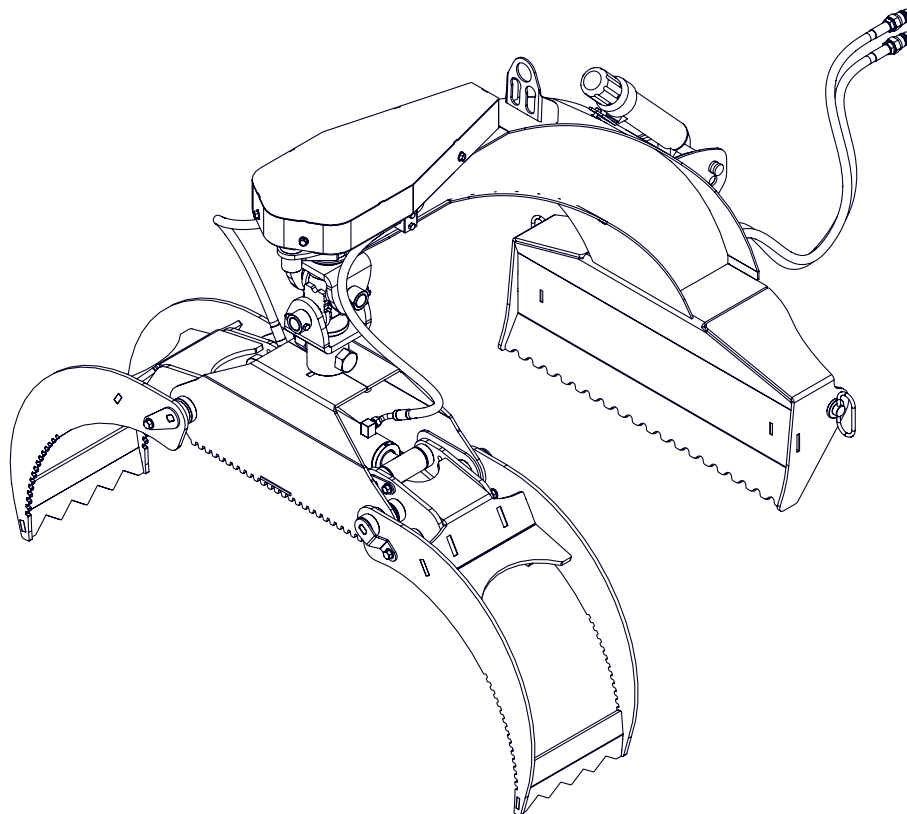


EMB Manufacturing Inc.
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LXG320S

Three Point Hitch Grapples

Starting with S/N's
320S001 and on



Refer to the operators
manual for safe
operation and
maintenance

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
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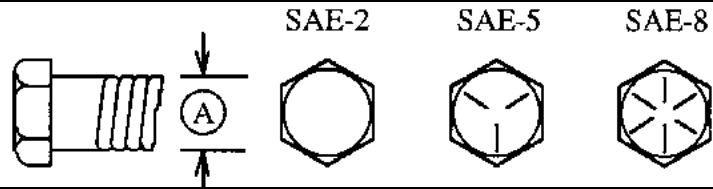
Bolt Torque

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.

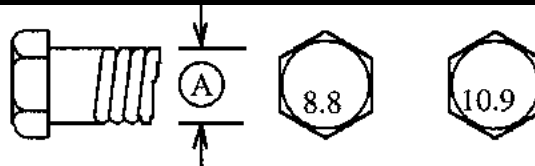
ENGLISH TORQUE SPECIFICATIONS

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



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



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.

Hydraulic Fitting Torque**Tightening Flare Type Tube Fittings ***

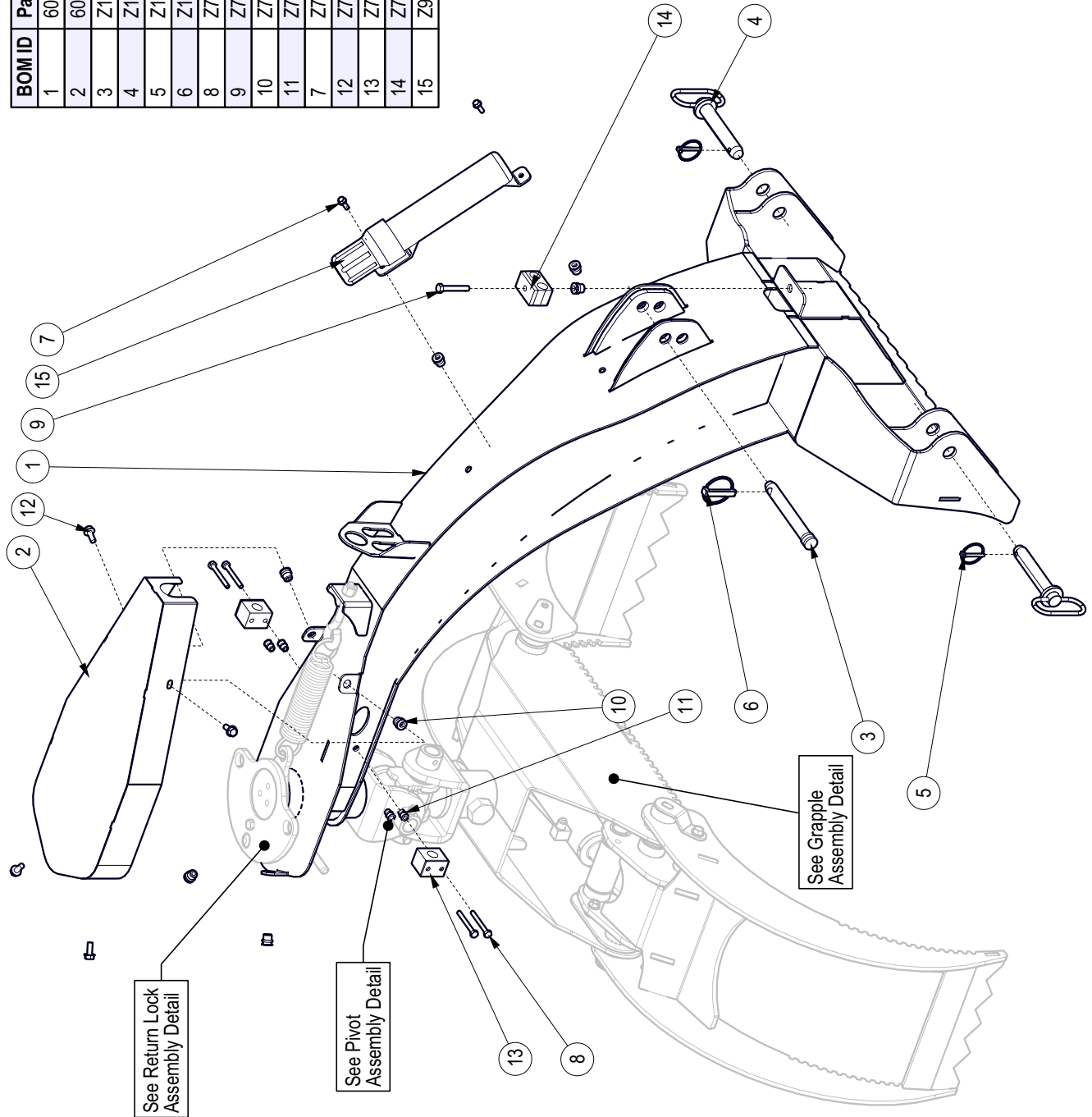
1. Check flare and flare seat for defects that might cause leakage.
2. Align tube with fitting before tightening.
3. Lubricate connection and hand tighten swivel nut until snug.
4. To prevent twisting the tube(s), use two wrenches. Place one wrench on the connector body and with the second tighten the 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
3/8	11/16	24	18	1	1/6
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.

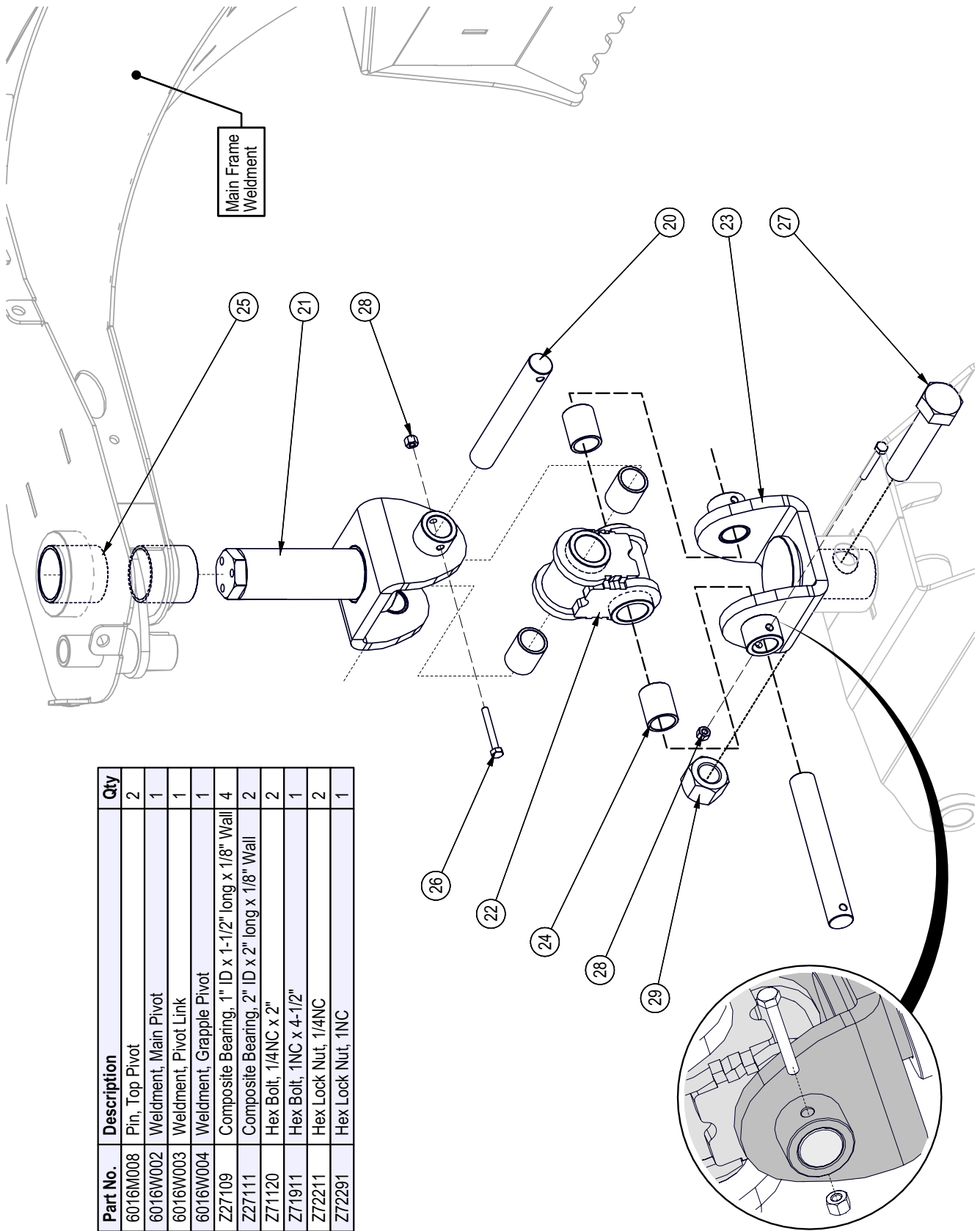
BOM ID	Part No.	Description	Qty
1	6016W005	Weldment, Mainframe	1
2	6016W006	Weldment, Spring Guard	1
3	Z11123	Toplink Pin, 3/4" x 4-3/4"	1
4	Z11251	Hitch Pin, 7/8" x 4-1/4"	2
5	Z12110	Lynch Pin, 3/16"	2
6	Z12140	Lynch Pin, 7/16"	1
8	Z71122	Hex Bolt, 1/4NC x 2-1/4"	4
9	Z71220	Hex Bolt, 5/16NC x 2"	1
10	Z72956	Rivet Nut, 5/16NC x 150	7
11	Z72962	Rivet Nut, 1/4NC x 260	4
7	Z76111	Flange Bolt, 1/4NC x 3/4"	2
12	Z76121	Flange Bolt, 5/16NC x 3/4"	4
13	Z79454	Single Hose Clamp, 11/16" OD	2
14	Z79463	Double Hose Clamp, 11/16" OD	1
15	Z96505	Manual Tube, 2" Short	1

Main Assembly

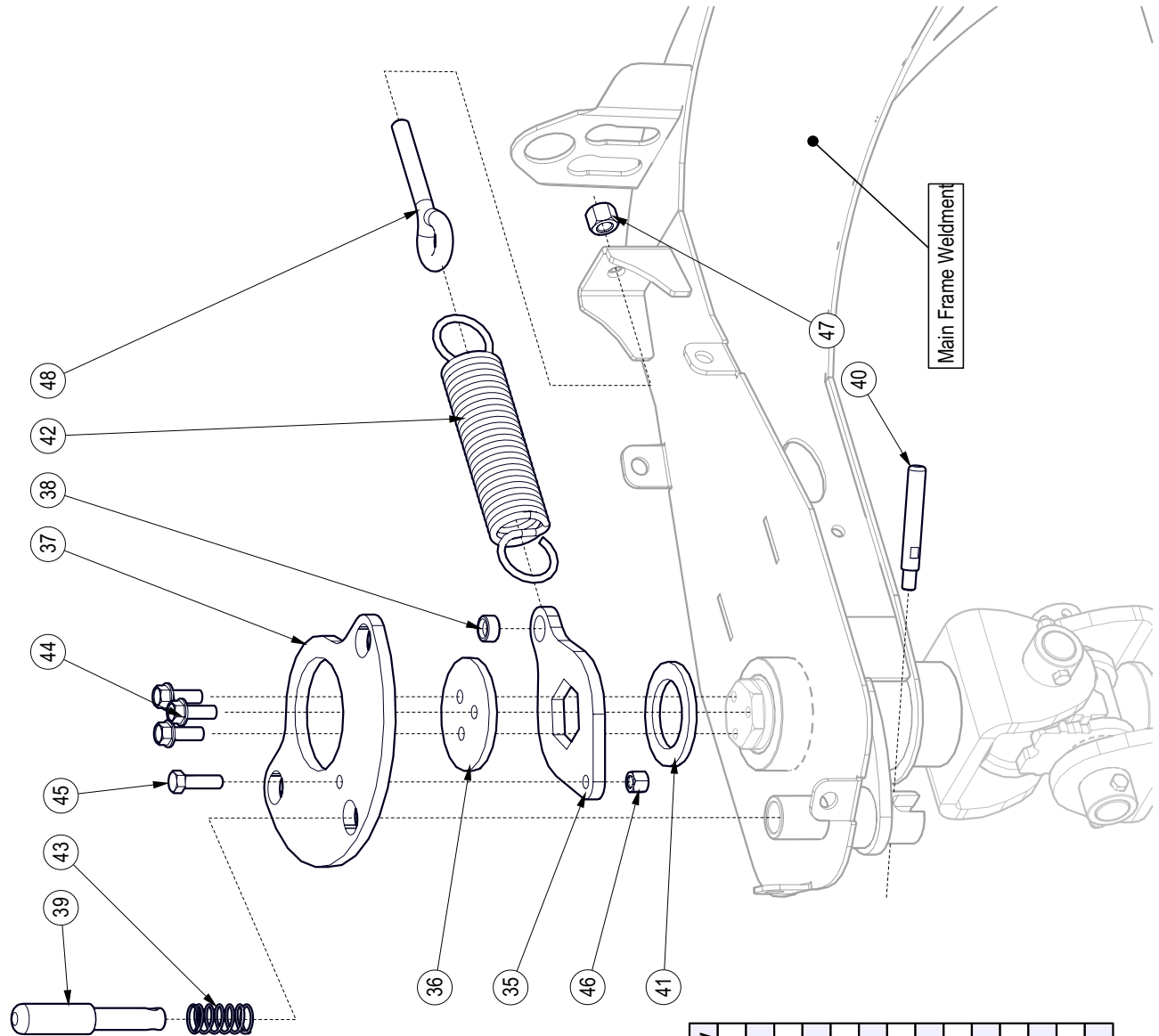


Pivot Assembly Detail

BOM ID	Part No.	Description	Qty
20	6016M008	Pin, Top Pivot	2
21	6016W002	Weldment, Main Pivot	1
22	6016W003	Weldment, Pivot Link	1
23	6016W004	Weldment, Grapple Pivot	1
24	Z27109	Composite Bearing, 1" ID x 1-1/2" long x 1/8" Wall	4
25	Z27111	Composite Bearing, 2" ID x 2" long x 1/8" Wall	2
26	Z71120	Hex Bolt, 1/4NC x 2"	2
27	Z71911	Hex Bolt, 1NC x 4-1/2"	1
28	Z72211	Hex Lock Nut, 1/4NC	2
29	Z72291	Hex Lock Nut, 1NC	1



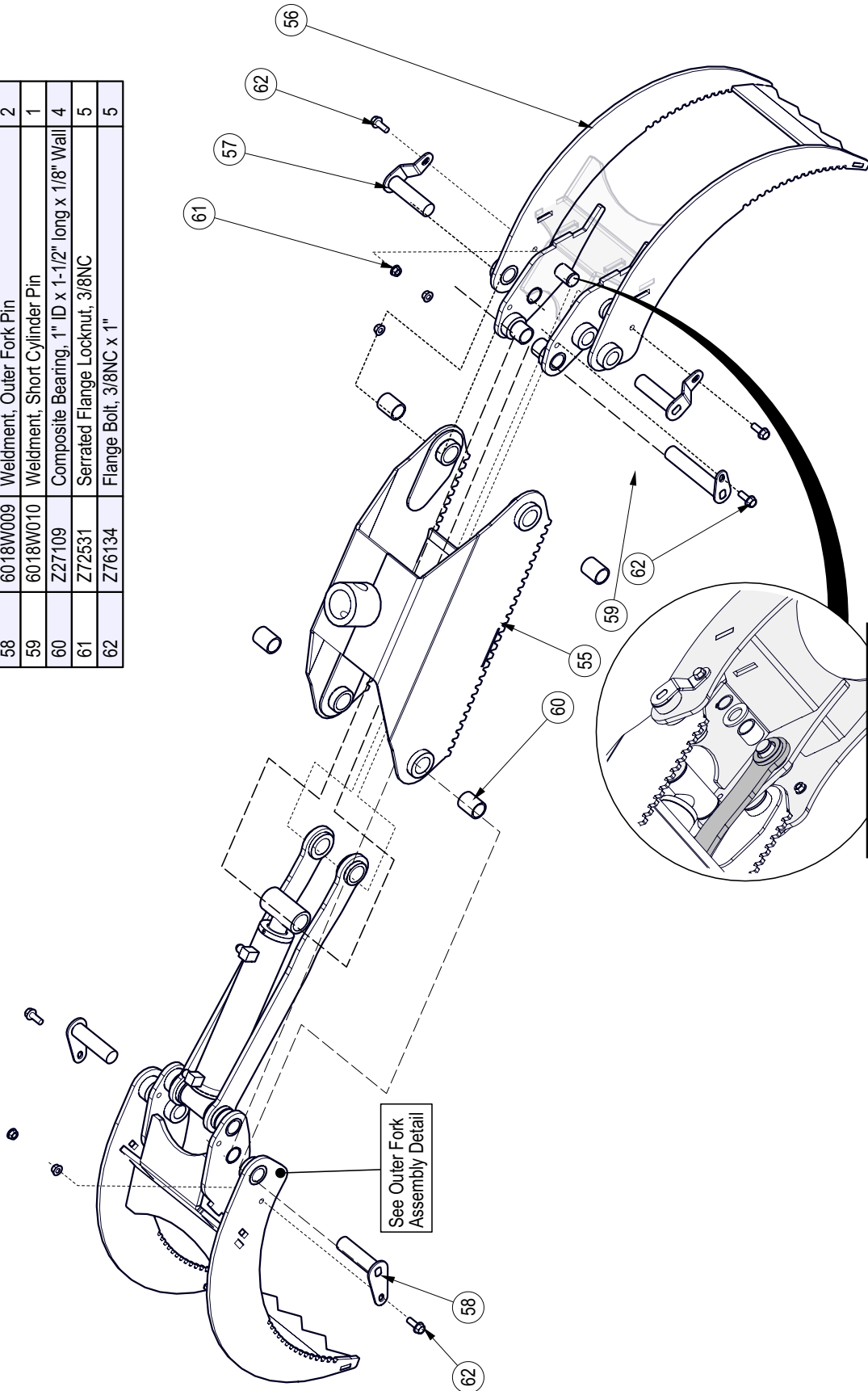
Return Lock Assembly Detail



BOM ID	Part No.	Description	Qty
35	6016L002	Pin, Spring Flange	1
36	6016L003	Plate, Main Pivot Keeper	1
37	6016L005	Plate, Lockout Position	1
38	6016M007	Bushing, Spring	1
39	6016M504	Pin, Grapple Lock	1
40	6016M511	Lever, Grapple Lock	1
41	Z22403	Thrust Washer, 2-1/16" ID x 0.236"	1
42	Z31502	Ext Spring, 1-3/4" OD x 9" x .207"	1
43	Z32306	Comp Spring, 0.845" OD x 1-3/4" x 0.068"	1
44	Z76134	Flange Bolt, 3/8NC x 1"	3
45	Z71312	Hex Bolt, 3/8NC x 1-1/4"	1
46	Z72231	Hex Lock Nut, 3/8NC	1
47	Z72251	Hex Lock Nut, 1/2NC	1
48	Z76551	Eye Bolt, 1/2NC x 3"	1

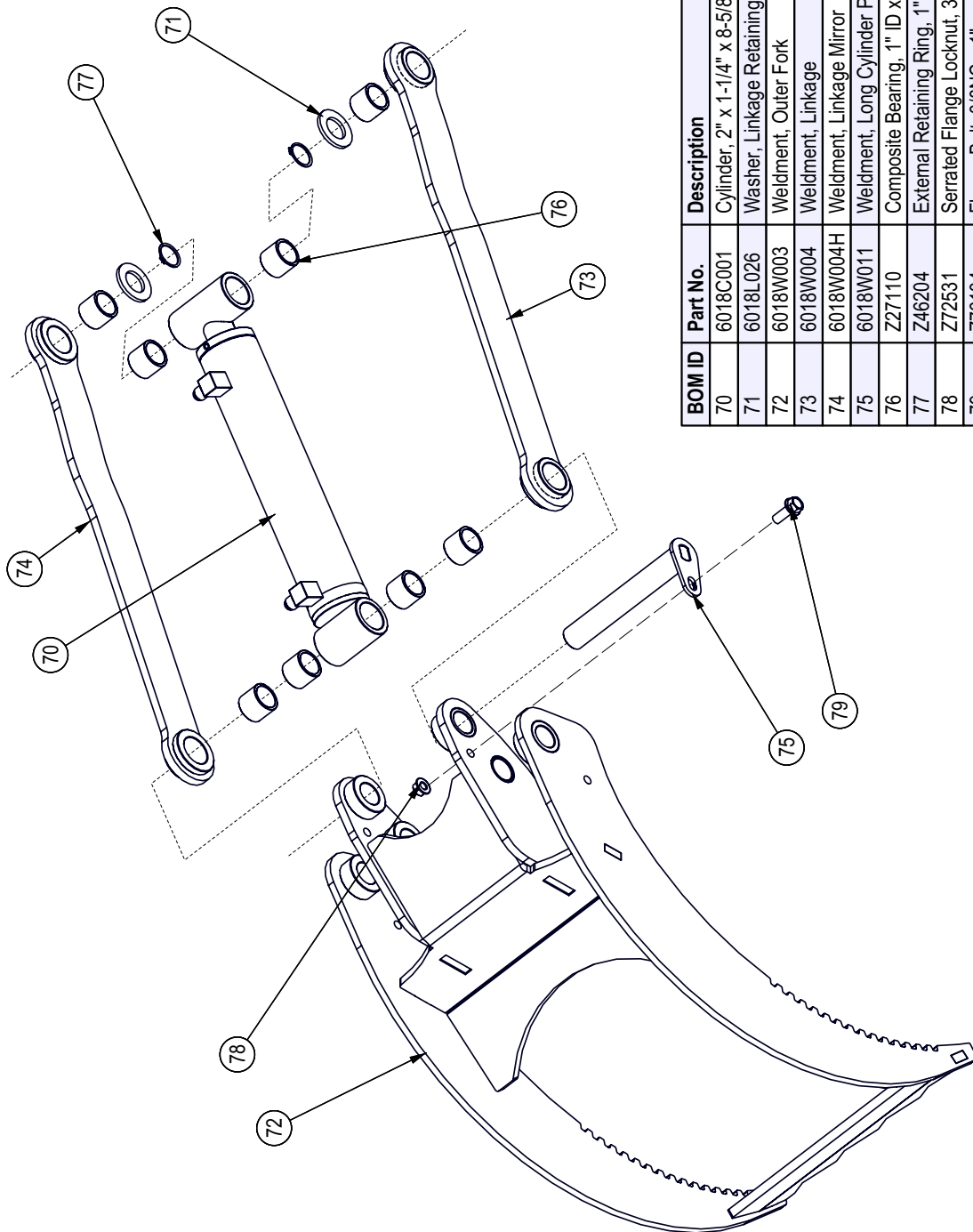
Grapple Assembly

BOM ID	Part No.	Description	Qty
55	6018W001	Weldment, Grapple Housing	1
56	6018W002	Weldment, Inner Fork	1
57	6018W008	Weldment, Inner Fork Pin	2
58	6018W009	Weldment, Outer Fork Pin	2
59	6018W010	Weldment, Short Cylinder Pin	1
60	Z27109	Composite Bearing, 1" ID x 1-1/2" long x 1/8" Wall	4
61	Z72531	Serrated Flange Locknut, 3/8NC	5
62	Z76134	Flange Bolt, 3/8NC x 1"	5



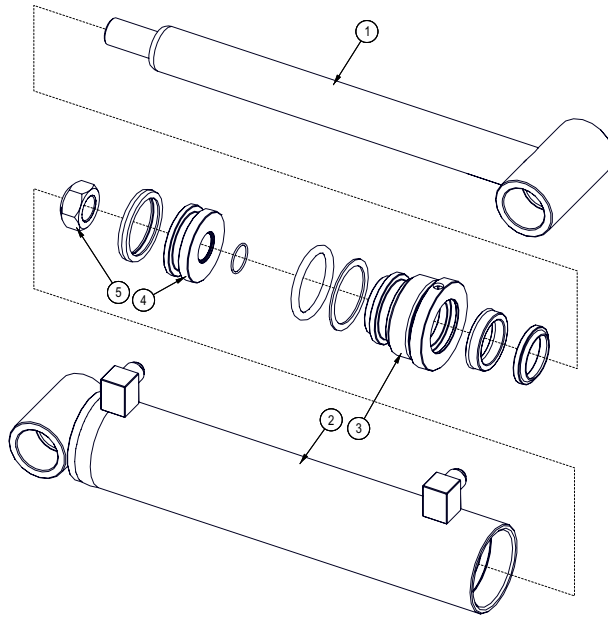
Note: See Outer Fork Assembly Detail - Items #71, #76 & #77

Outer Fork Assembly Detail



BOM ID	Part No.	Description	Qty
70	6018C001	Cylinder, 2" x 1-1/4" x 8-5/8"	1
71	6018L026	Washer, Linkage Retaining	2
72	6018W003	Weldment, Outer Fork	1
73	6018W004	Weldment, Linkage	1
74	6018W004H	Weldment, Linkage Mirror	1
75	6018W011	Weldment, Long Cylinder Pin	1
76	Z27110	Composite Bearing, 1" ID x 1" long x 1/8" Wall	8
77	Z46204	External Retaining Ring, 1"	2
78	Z72531	Serrated Flange Locknut, 3/8NC	1
79	Z76134	Flange Bolt, 3/8NC x 1"	1

Cylinder Assembly



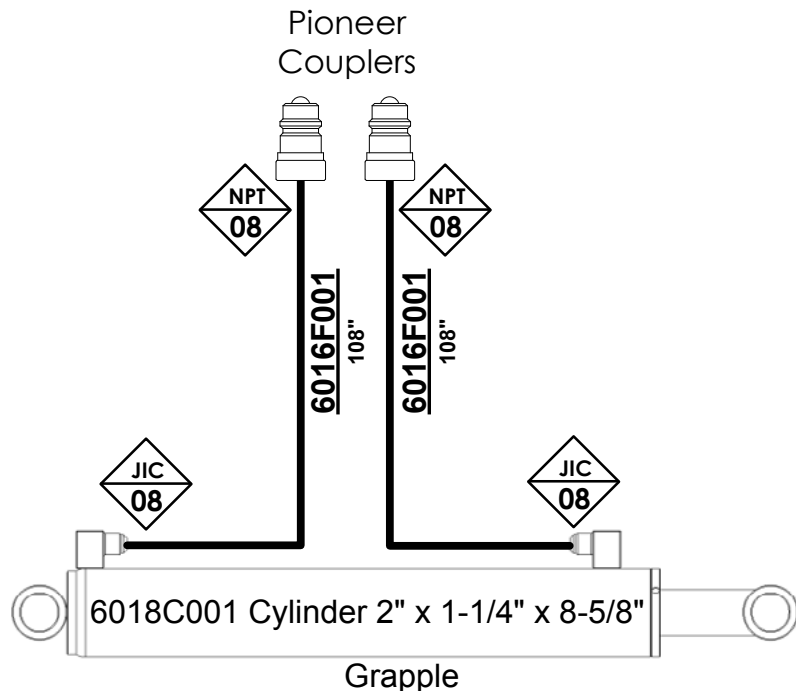
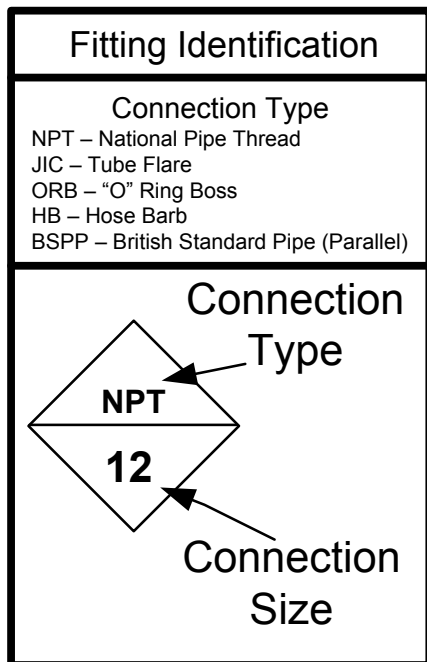
Seal Kit #SLK-2012

BOM ID	Part No.	Description	Qty
1	6018C0013	Rod, 1-1/4" x 3/4NF	1
2	6018C0014	Barrel, 2"	1
3	G200-126S	Gland, 2" x 1-1/4"	1
4	P750-200SP	Piston, 2" Bore	1
5	Z72276G8	Hex Top-lock Nut, 3/4NF G8	1

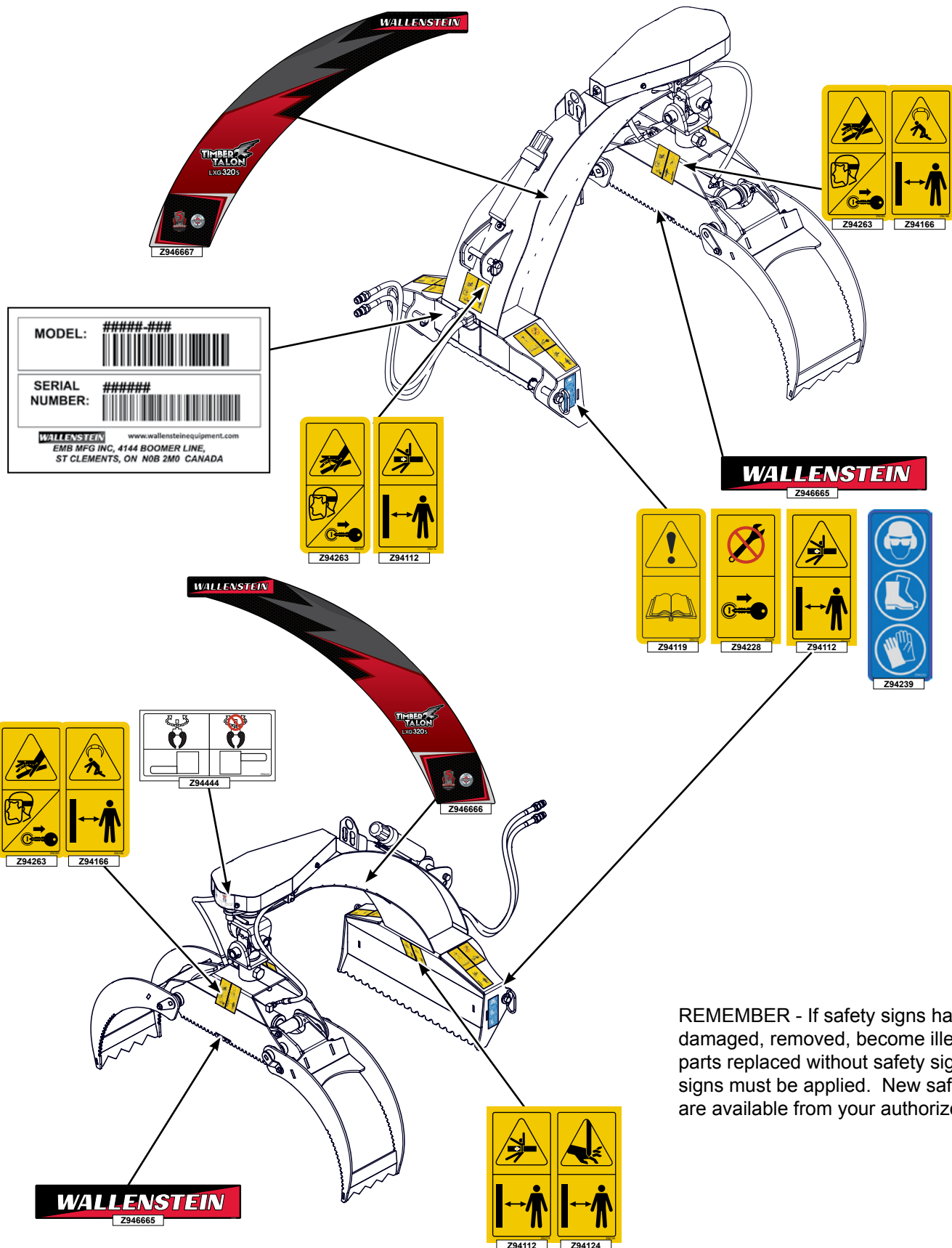
Hydraulic Hose List

Part No.	Description	Qty
6016F001	3/8" Hose, 90FJIC06 x MP08 x 116	2

Hydraulic Schematic

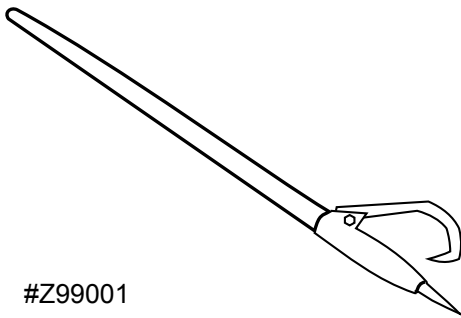


Labels



Accessories

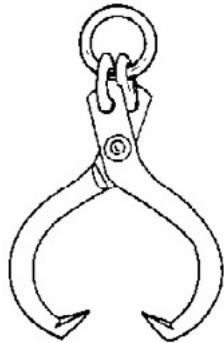
Call your dealer for pricing and availability



#Z99001

#Z99001 48" LOG PEAVEY

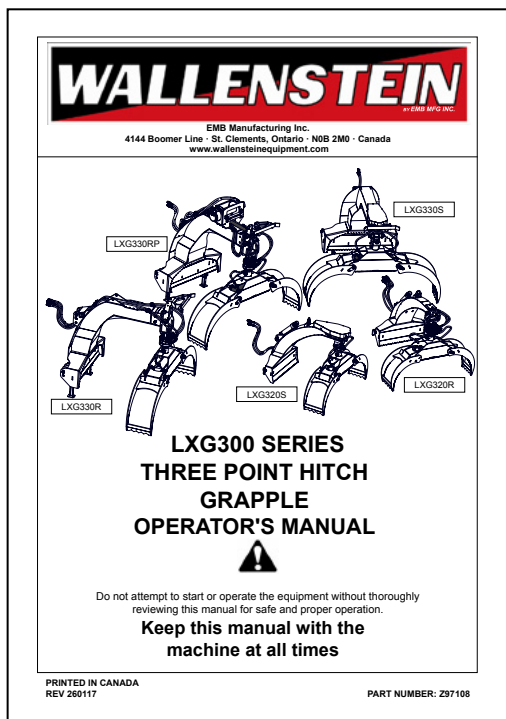
Quality 2 3/8" diameter hardwood handle, with a Western Duck Bill Hook.
Helps to move those heavy log timbers into position.



#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.



#Z97108 GRAPPLE OPERATOR'S MANUAL

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