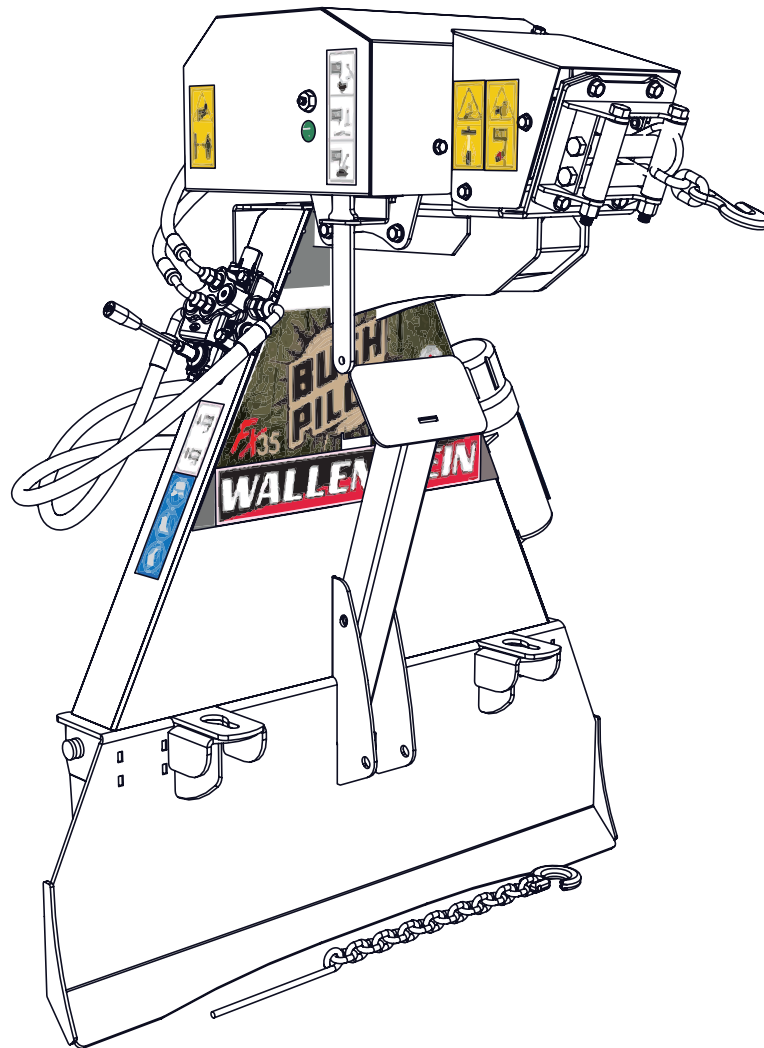




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FX35 Skidding Winch Parts Manual



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 Wallenstein parts are essential to prolonging the life of your Wallenstein 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.embmfg.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.



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Bolt Torque

CHECKING BOLT TORQUE

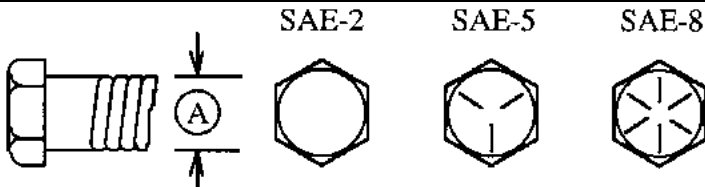
The tables shown below give correct torque values for various bolts and capscrews. Tighten all bolts to the torques specified in chart unless otherwise noted. Check tightness of bolts periodically, using bolt torque chart as a guide. Replace hardware with the same strength bolt.

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.

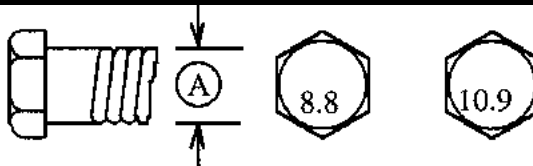
ENGLISH TORQUE SPECIFICATIONS

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

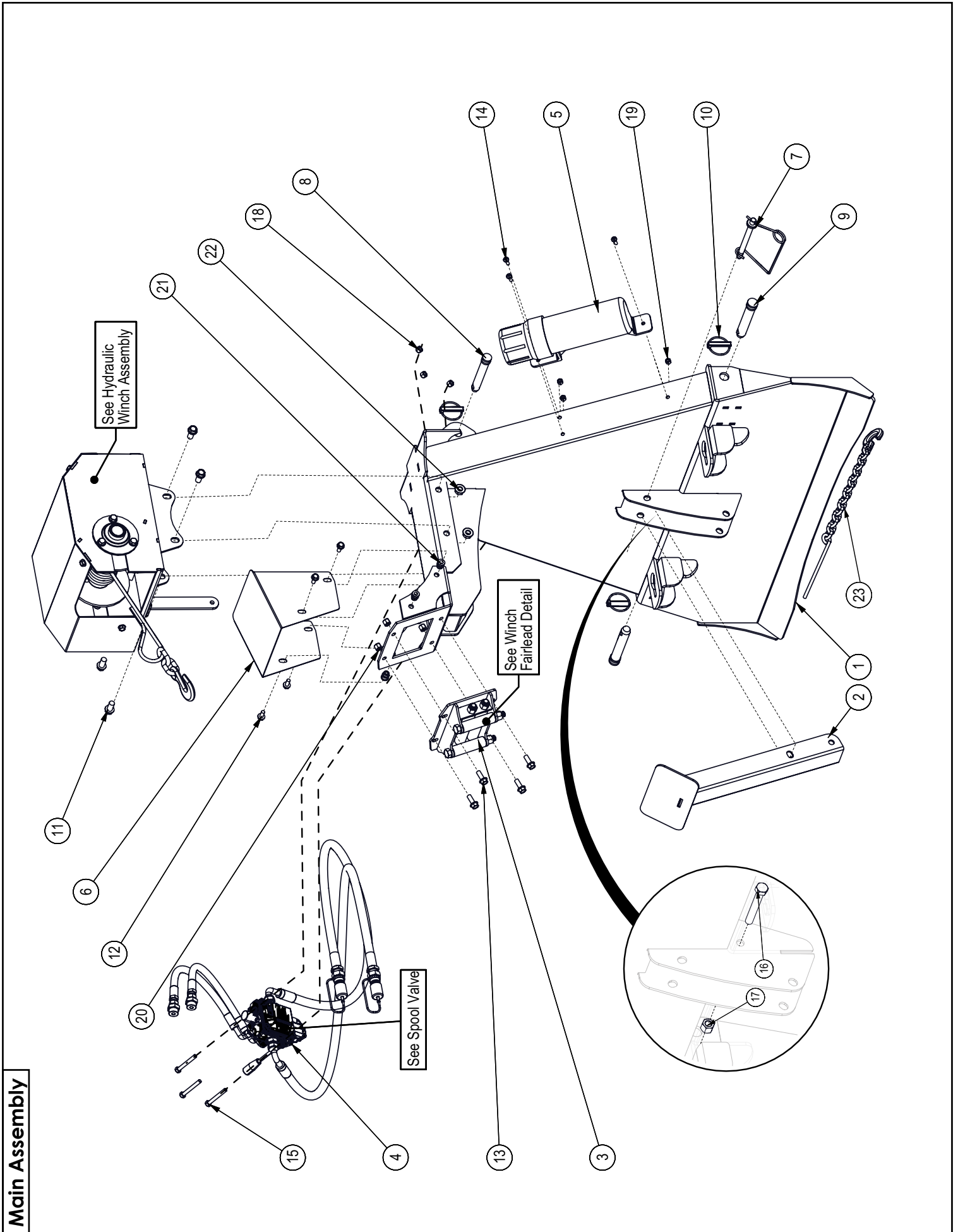


Hydraulic Fitting Torque**Tightening Flare Type Tube Fittings ***

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

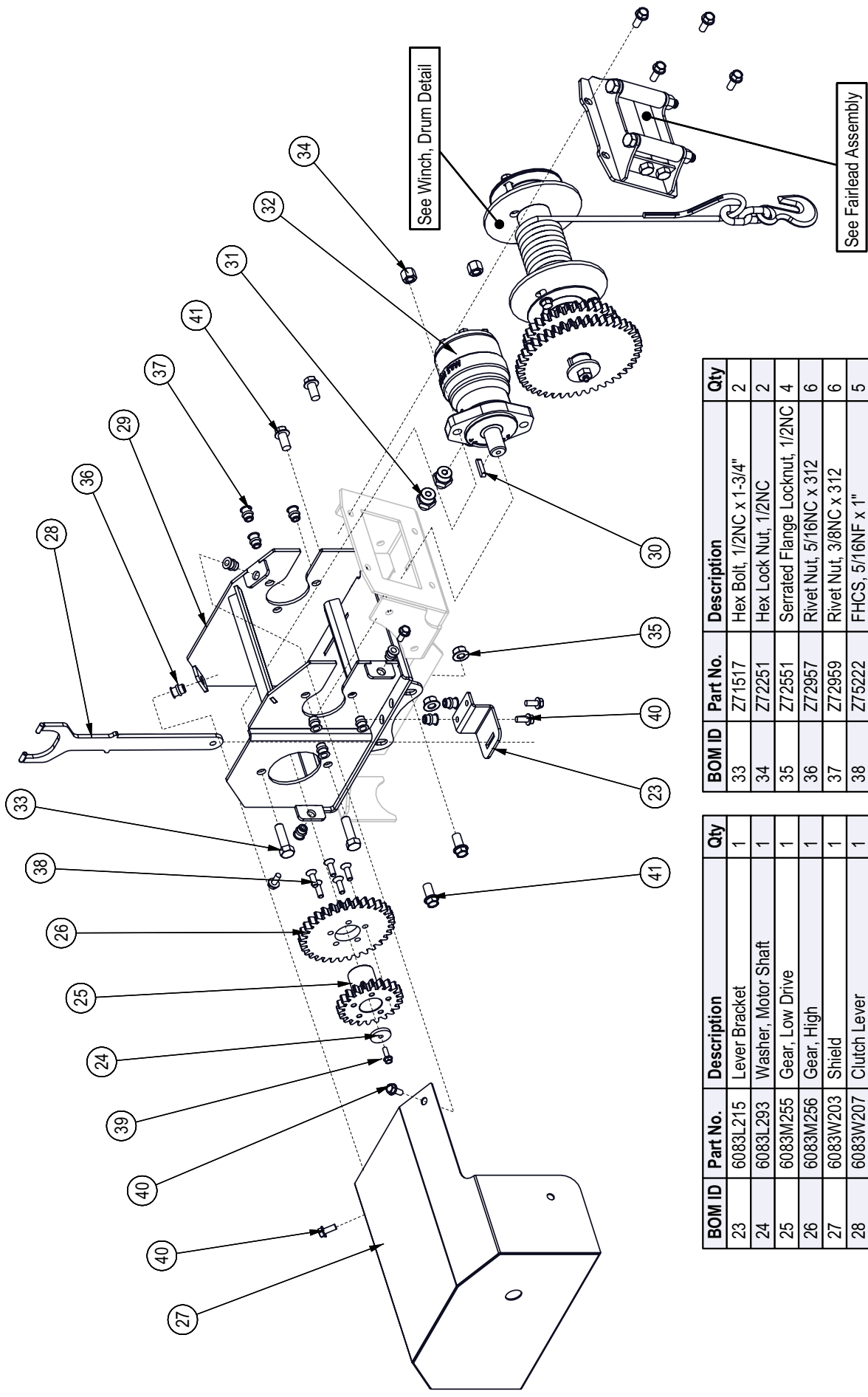
The torque values shown are based on lubricated connections as in reassembly.



Main Assembly - Parts List

BOM ID	Part No.	Description	Qty
1	5016W001	Main Frame	1
2	5016W002	Weldment, Storage Stand	1
3	5081A101	Fairlead	1
4	Z56216	Single Spool Valve, VC Tandem SC x 12GPM	1
5	Z96503	Manual Tube 3-1/2 Short	1
6	5016L020	Guard	1
7	Z12441	Snap Lock Pin, 1/2" x 4-1/2"	1
8	Z11122	Toplink Pin, 3/4" x 3-7/8"	1
9	Z11131	Toplink Pin, 7/8" x 3-7/8"	2
10	Z12140	Lynch Pin, 7/16"	3
11	Z76153	Flange Bolt, 1/2NC x 1"	4
12	Z76121	Flange Bolt, 5/16NC x 3/4"	4
13	Z76134	Flange Bolt, 3/8NC x 1"	4
14	Z78301	Machine Screw, 1/4NC x 3/4"	3
15	Z71225	Hex Bolt, 5/16NC x 2-1/2"	3
16	Z71537	Hex Bolt, 1/2NC x 3-3/4"	1
17	Z72251	Hex Lock Nut, 1/2NC	1
18	Z72221	Hex Lock Nut, 5/16NC	3
19	Z72211	Hex Lock Nut, 1/4NC	3
20	Z72231	Hex Lock Nut, 3/8NC	4
21	Z72957	Rivet Nut, 5/16NC x 312	4
22	Z72551	Serrated Flange Locknut, 1/2NC	4
23	Z92318	Choker Chain, 5/16" x 90"	1

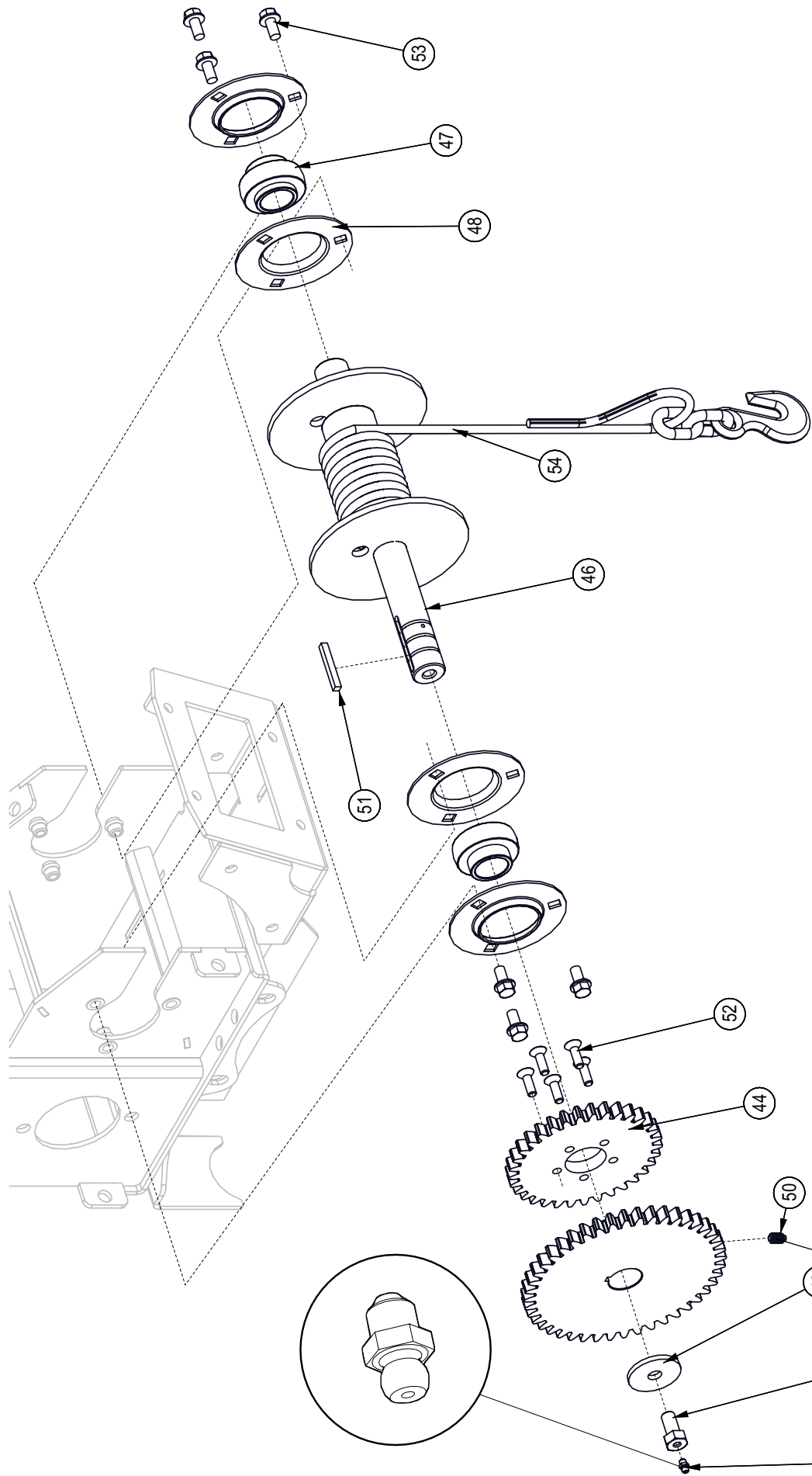
Hydraulic Winch



BOM ID	Part No.	Description	Qty
33	Z71517	Hex Bolt, 1/2NC x 1-3/4"	2
34	Z72251	Hex Lock Nut, 1/2NC	2
35	Z72551	Serrated Flange Locknut, 1/2NC	4
36	Z72957	Rivet Nut, 5/16NC x 3/2	6
37	Z72959	Rivet Nut, 3/8NC x 3/2	6
38	Z75222	FHCS, 5/16NF x 1"	5
39	Z76111	Flange Bolt, 1/4NC x 3/4"	1
40	Z76121	Flange Bolt, 5/16NC x 3/4"	6
41	Z76153	Flange Bolt, 1/2NC x 1"	4

BOM ID	Part No.	Description	Qty
23	6083L215	Lever Bracket	1
24	6083L293	Washer, Motor Shaft	1
25	6083M255	Gear, Low Drive	1
26	6083M256	Gear, High	1
27	6083W203	Shield	1
28	6083W207	Clutch Lever	1
29	6083W215	Housing, Winch	1
30	Z46594	Blind Chipper Key 1/4 x 1-1/4	1
31	Z51645	Straight, MJIC x MORB 0610	2
32	Z54102	Hydraulic Motor, 200CCR	1

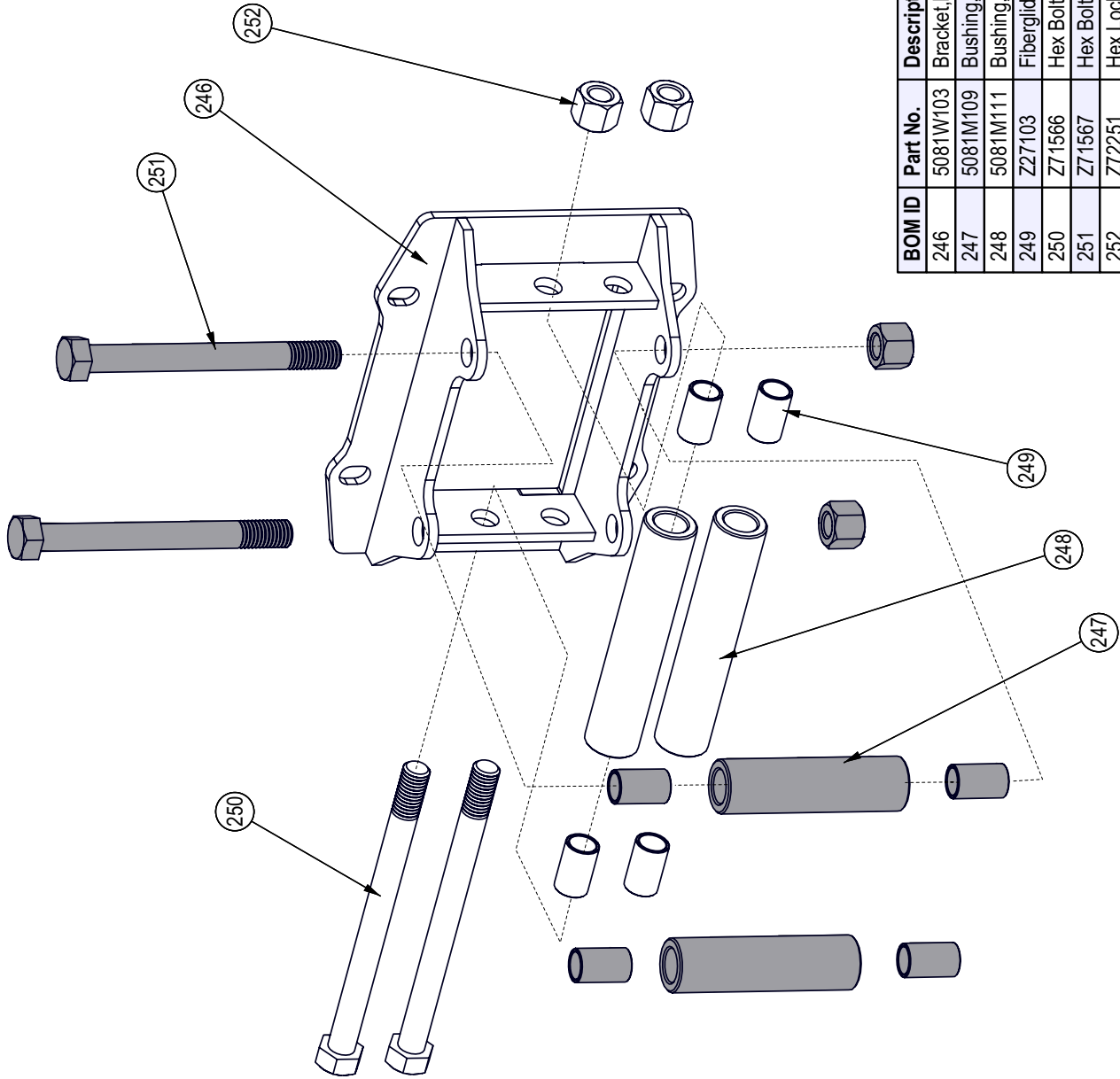
Winch Drum Detail



BOM ID	Part No.	Description	Qty
50	Z34302	Spring Plunger, 3/8NC x 5/8" x 21 lbs	1
51	Z46531	Key, 1/4 x 1/4 x 2	1
52	Z75222	FHCS, 5/16NF x 1"	5
53	Z76133	Flange Bolt, 3/8NC x 3/4"	6
54	Z92118	Synthetic Winch Rope 5/16 x 80' with Hook	1

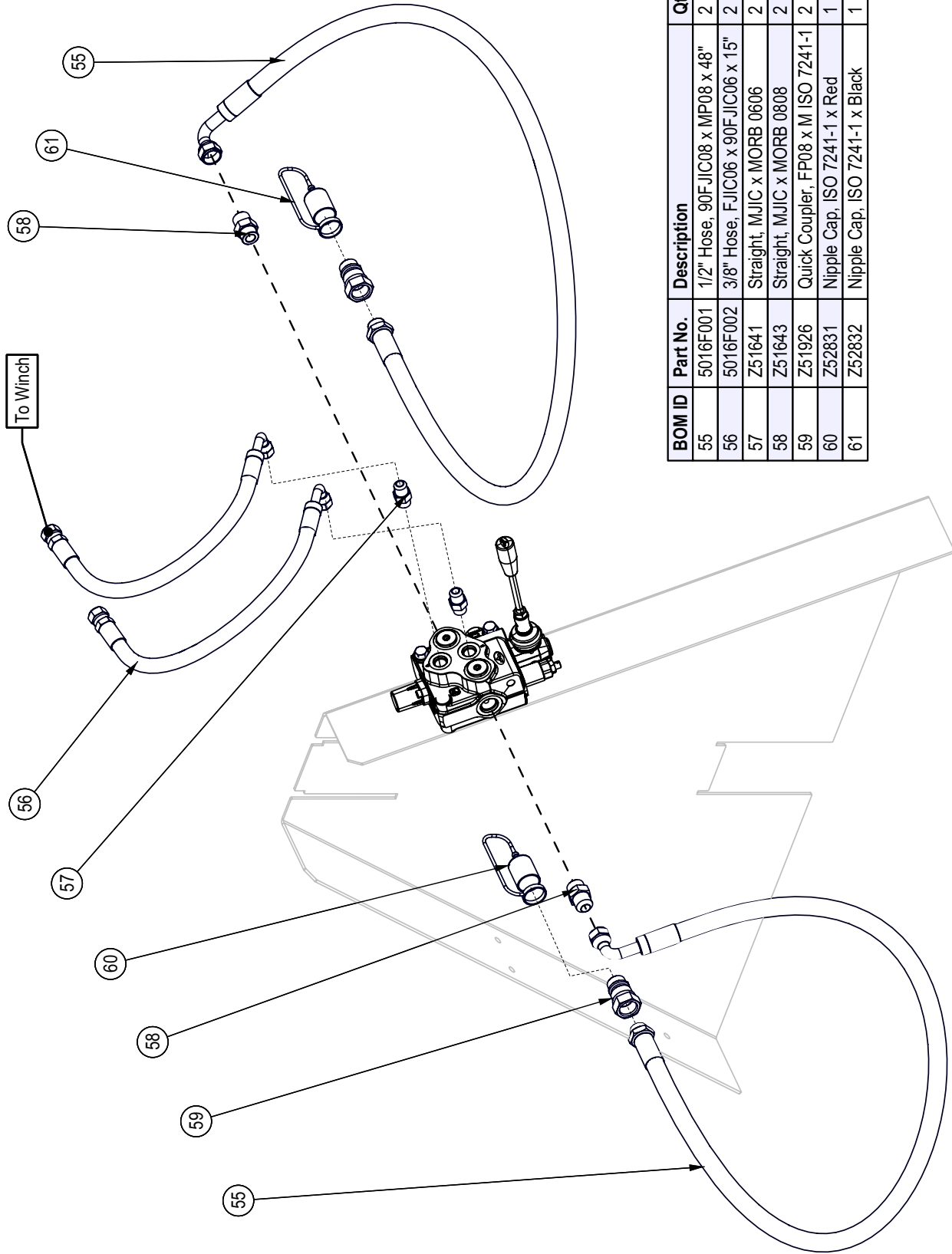
BOM ID	Part No.	Description	Qty
42	6083L207	Washer, Capture	1
43	6083M252	1/2-13 x 1 Bolt Modified	1
44	6083M256	Gear, High	1
46	6083W201	Drum, Main Cable	1
47	Z25207	Z25203 Insert Only	2
48	Z25301	PF206 Flange Only	4
49	Z29202	Grease Zerk 1/4NF	1

Winch Fairlead Detail

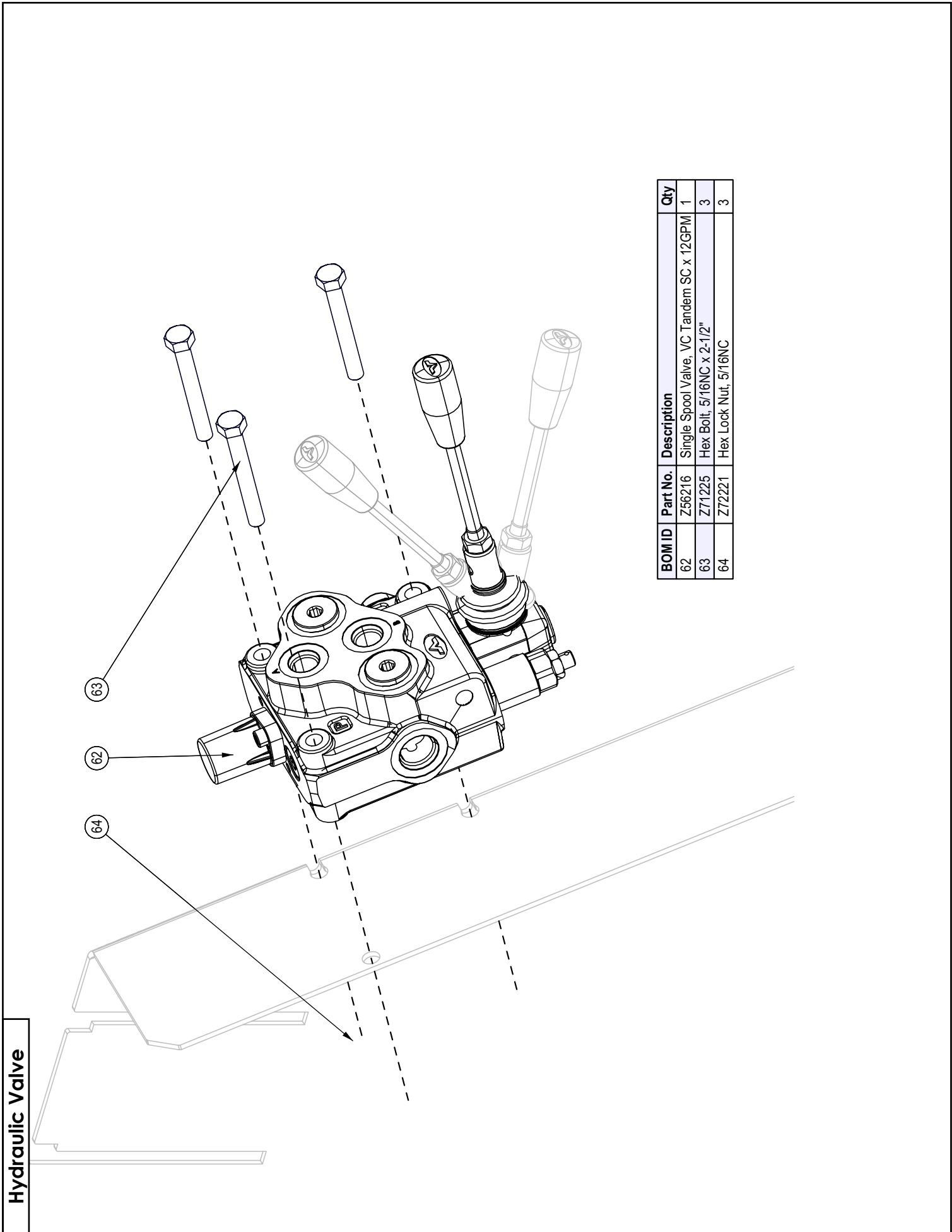


BOM ID	Part No.	Description	Qty
246	5081W103	Bracket, Fairlead	1
247	5081M109	Bushing, Fairlead Side	2
248	5081M111	Bushing, Fairlead Top	2
249	Z27103	Fiberglide Bearing, 1/2" ID x 1" long x 1/16" wall	8
250	Z71566	Hex Bolt, 1/2NC x 6-1/4" x 5-1/4" Shank	2
251	Z71567	Hex Bolt, 1/2NC x 5" x 4" Shank	2
252	Z72251	Hex Lock Nut, 1/2NC	4

Hydraulic Lines

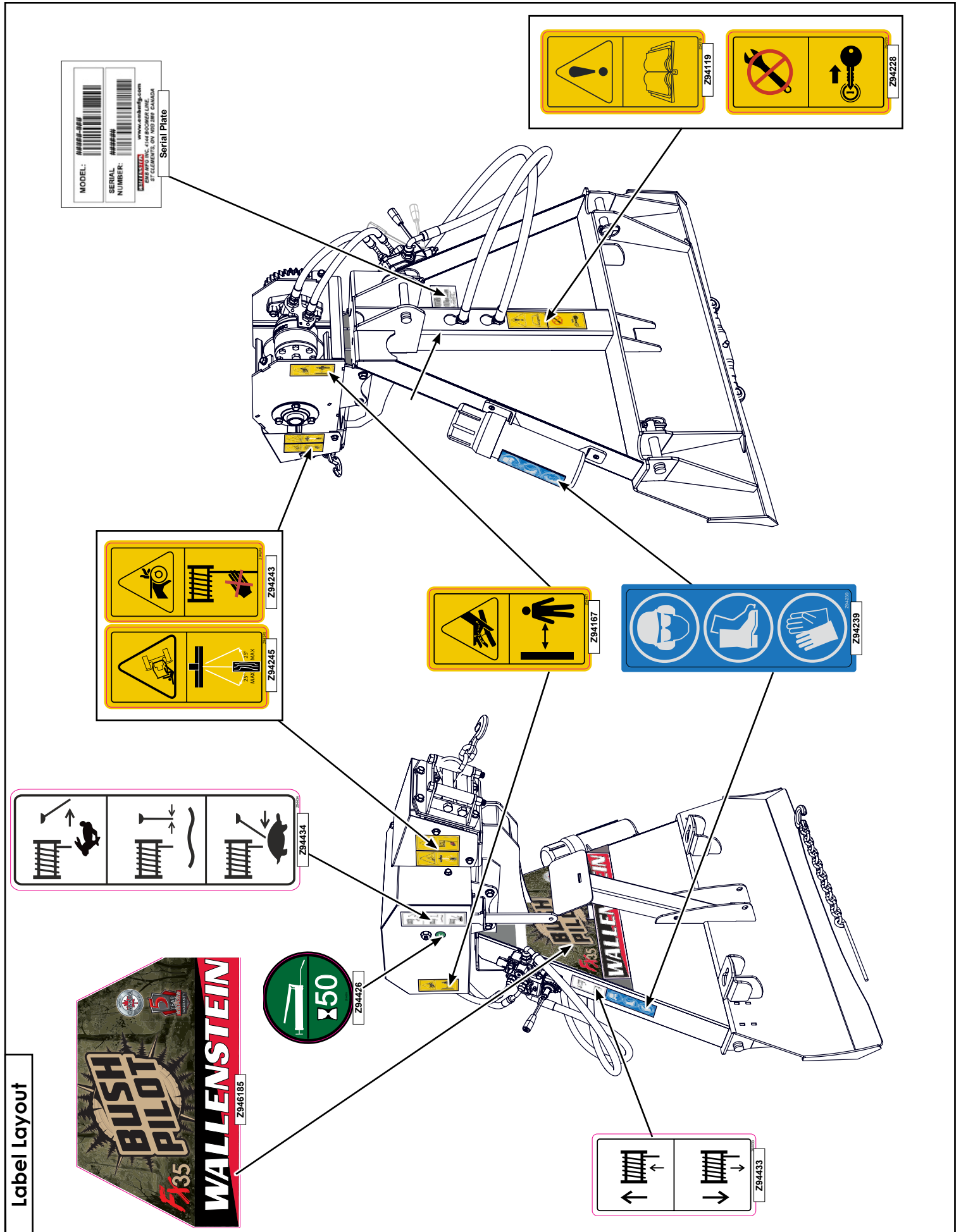


BOM ID	Part No.	Description	Qty
55	5016F001	1/2" Hose, 90F JIC08 x MP08 x 48"	2
56	5016F002	3/8" Hose, FJIC06 x 90FJIC06 x 15"	2
57	Z51641	Straight, MJIC x MORB 0606	2
58	Z51643	Straight, MJIC x MORB 0808	2
59	Z51926	Quick Coupler, FP08 x M ISO 7241-1	2
60	Z52831	Nipple Cap, ISO 7241-1 x Red	1
61	Z52832	Nipple Cap, ISO 7241-1 x Black	1



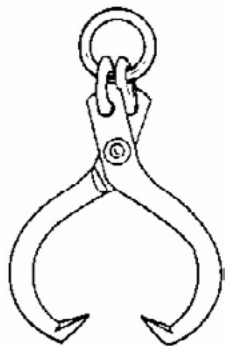
BOM ID	Part No.	Description	Qty
62	Z56216	Single Spool Valve, VC Tandem SC x 12GPM	1
63	Z71225	Hex Bolt, 5/16NC x 2-1/2"	3
64	Z72221	Hex Lock Nut, 5/16NC	3

Hydraulic Valve

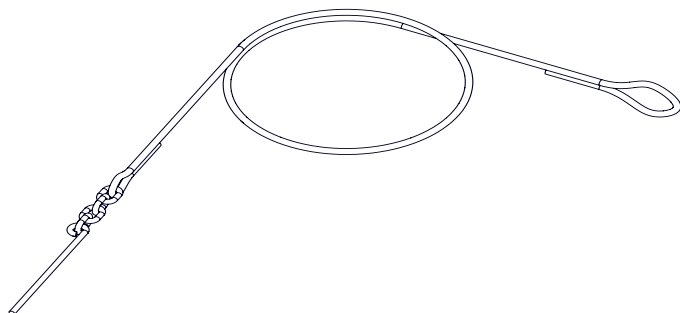


Label Layout

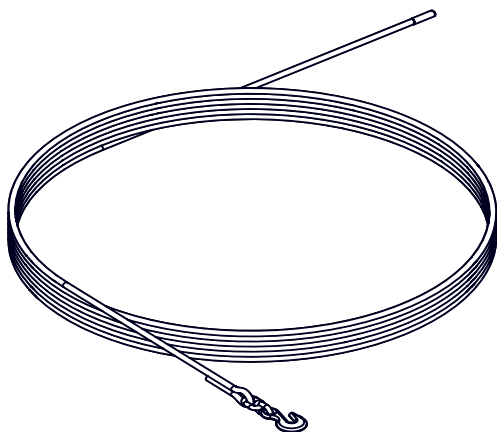
Accessories



#Z99003 LOGGING TONGS



#Z92125 5 FT SYNTHETIC CHOKER WITH ROD CHAIN END
#Z92126 7 FT SYNTHETIC CHOKER WITH ROD CHAIN END



#Z92123 200 FT 7/16" SYNTHETIC MAINLINE WITH HOOK

#Z97091 OPERATORS MANUAL
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