



# FX90 Skidding Winch Parts Manual

S/N 5901446 and After



## 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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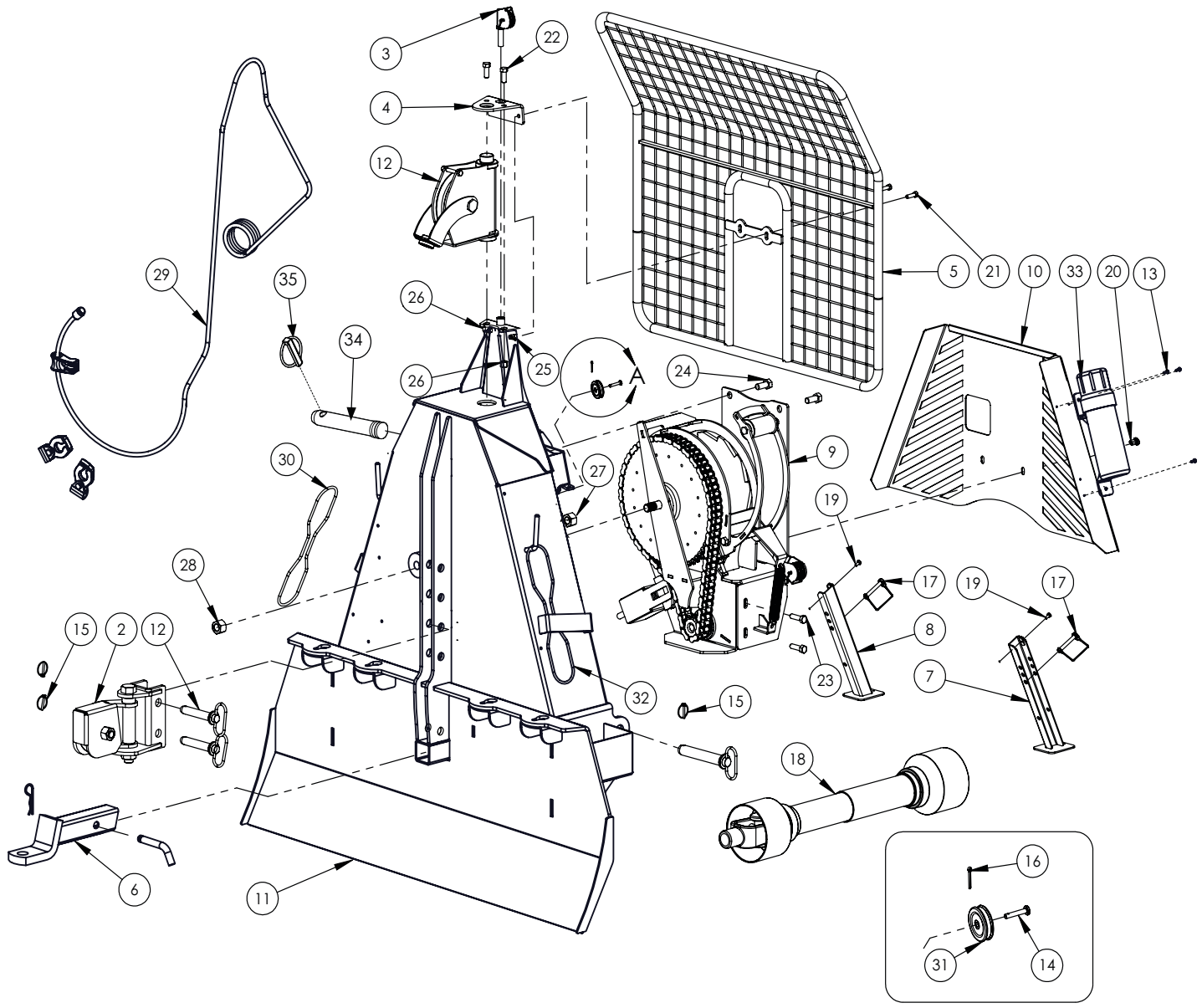
**Note:** Products with factory installed light kits will have a VIN number included. The last six numbers of this VIN number are the splitters serial number

Example: 2E9US1112BSXXXXXX

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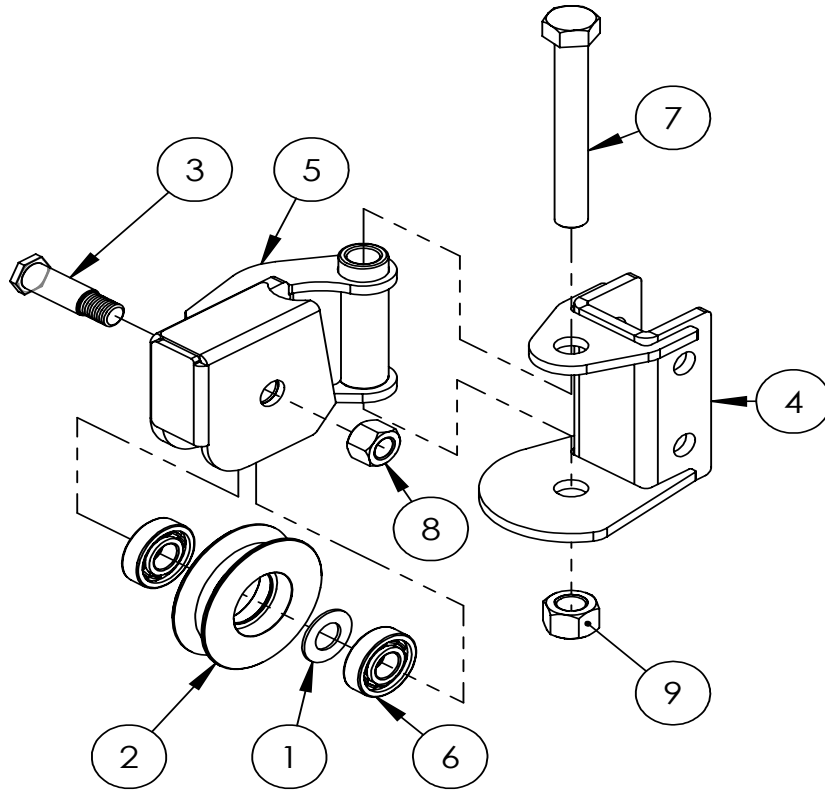


DETAIL A  
SCALE 1 : 8

**FX90 MAIN ASSEMBLY PARTS BREAKDOWN**

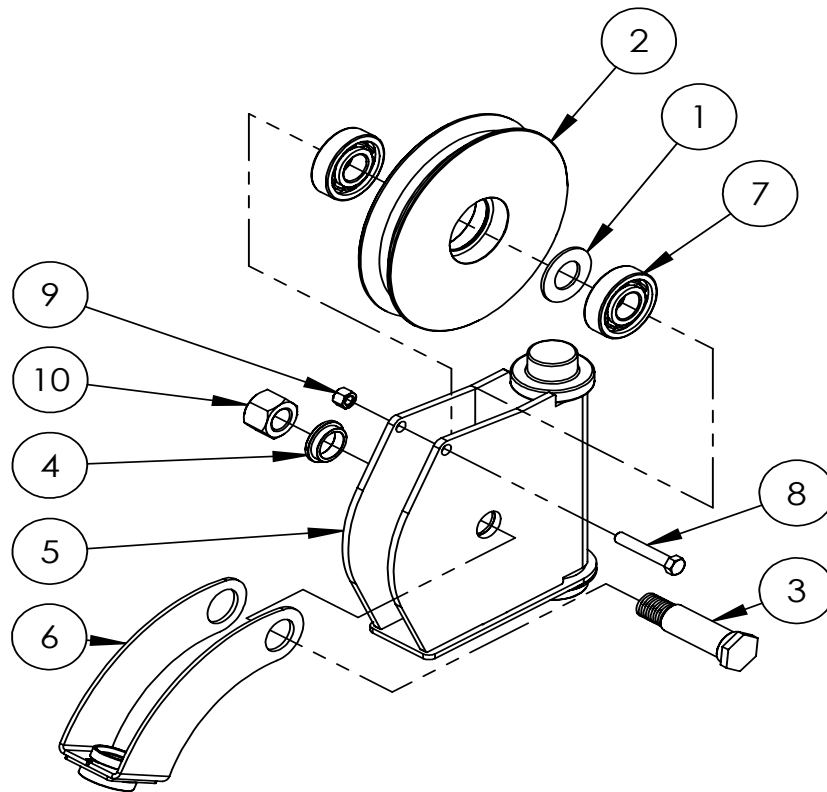
ITEM	PART NO.	DESCRIPTION	QTY
1	5012A205	Top Cable Pulley Assembly	1
2	5012A206	Lower Snatch Block	1
3	5012A207	Clutch Rope Pulley	1
4	5012L285	Top Pulley Capture Bracket	1
5	5012W226	Safety Screen	1
6	Z91641	Ball Mount for 2" Receiver	1
7	5012W217	Support Leg, RH	1
8	5012W218	Support Leg, LH	1
9	5013A201	Cable Drum Assembly	1
10	5013L325	Lower Protective Shield	1
11	5012W225	Main Frame	1
12	Z11251	Hitch Pin 7/8 x 4-1/4	4
13	Z76712	Self-tapping Screw, #10 x 3/4	3
14	Z11311	Clevis Pin 1/4 x 1-1/8	1
15	Z12110	Latch Pin 3/16	4
16	Z12311	Cotter Pin 1/8 X 1	1
17	Z12432	Snapper Pin 3/8 x 2-1/2	2
18	Z44402	#4 Global PTO Shaft M8 Shear	1
19	Z71105	Hex Bolt 1/4NC x 1/2	2
20	Z71307	Hex Bolt 3/8NC x 3/4	2

ITEM	PART NO.	DESCRIPTION	QTY
21	Z71312	Hex Bolt 3/8NC x 1-1/4	2
22	Z71512	Hex Bolt 1/2NC x 1-1/4	2
23	Z71517	Hex Bolt, 1/2NC x 1-3/4	2
24	Z71615	Hex Bolt 5/8NC x 1-1/2	2
25	Z72231	Hex Lock Nut 3/8NC	2
26	Z72251	Hex Lock Nut 1/2NC	4
27	Z72261	Hex Lock Nut 5/8NC	2
28	Z72281	Hex Lock Nut 7/8NC	1
29	Z92120	Winch Cable 7/16" x 165 ft. Forged End & Sliders	1
30	Z92201	Clutch Control Rope	1
31	Z92203	1/4 Groove Pulley 2 Diam.	1
32	Z92205	Drum Brake Rope 18'	1
33	Z96503	Manual Tube 3-1/2 Short	1
34	Z11122	Toplink Pin, 3/4 x 3-7/8	1
35	Z12140	Latch Pin 7/16	1



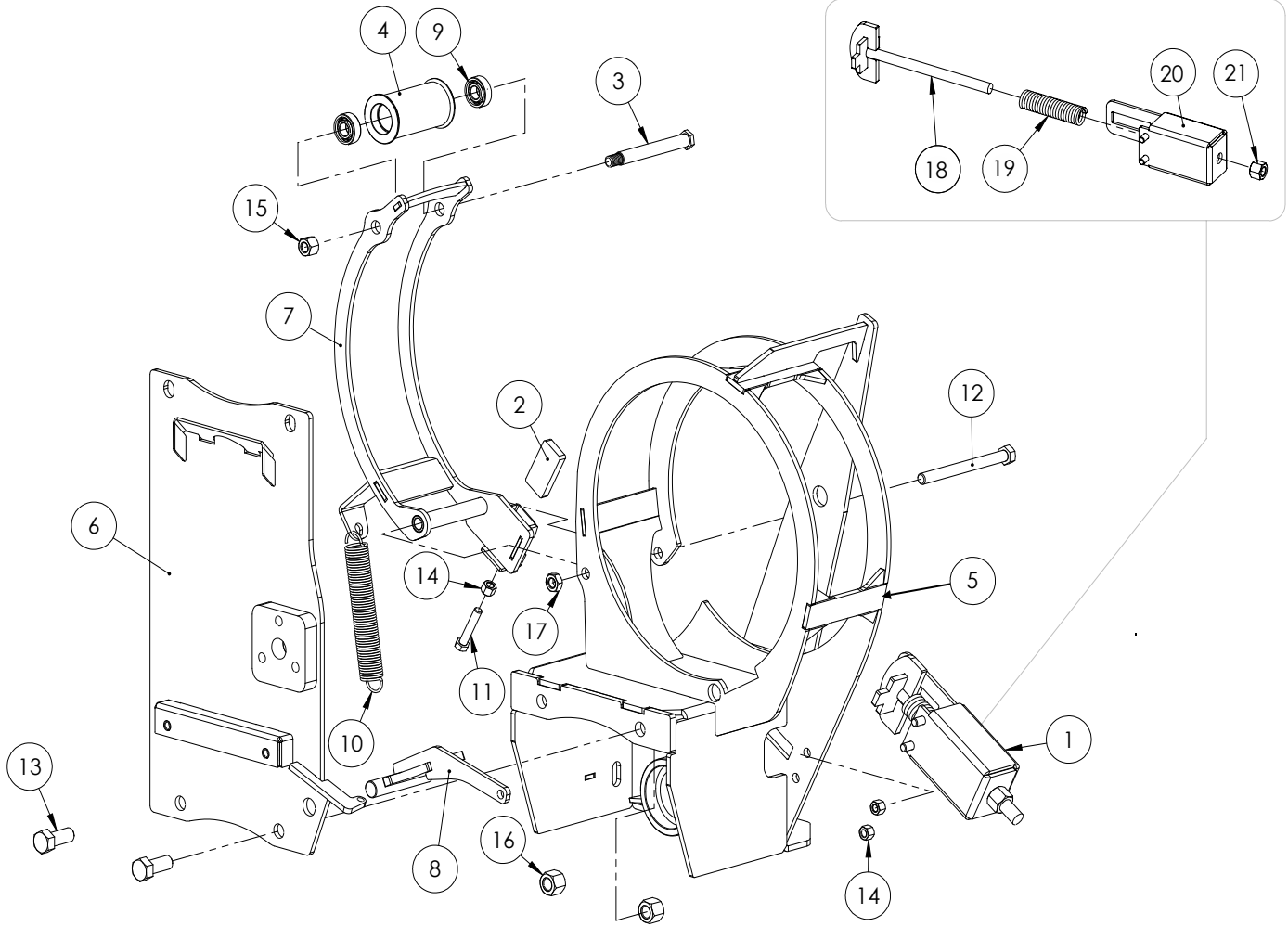
### LOWER SNATCH BLOCK ASSEMBLY

ITEM	PART NO.	DESCRIPTION	QTY
1	5012L264	Washer, Bearing Spacer	1
2	5012M223	Snatch Block Pulley	1
3	5012M224	Snatch Block Pulley Pin	1
4	5012W212	Snatchblock Base	1
5	5012W213	Snatchblock Swivel Housing	1
6	Z21201	Ball Bearing 6305 RS	2
7	Z71915	Hex Bolt 1NC x 8	1
8	Z72281	Hex Lock Nut 7/8NC	1
9	Z72291	Hex Lock Nut 1NC	1



## TOP CABLE PULLEY ASSEMBLY

ITEM	PART NO.	DESCRIPTION	QTY
1	5012L264	Washer, Bearing Spacer	1
2	5012M220	Top Cable Pulley	1
3	5012M221	Top Pulley Pin	1
4	5012M222	Cable Guide Swing Bushing	1
5	5012W210	Top Pulley Housing	1
6	5012W211	Cable Guide	1
7	Z21201	Ball Bearing 6305 RS	2
8	Z71322	Hex Bolt, 3/8NC x 2-1/4	1
9	Z72231	Hex Lock Nut 3/8NC	1
10	Z72281	Hex Lock Nut 7/8NC	1

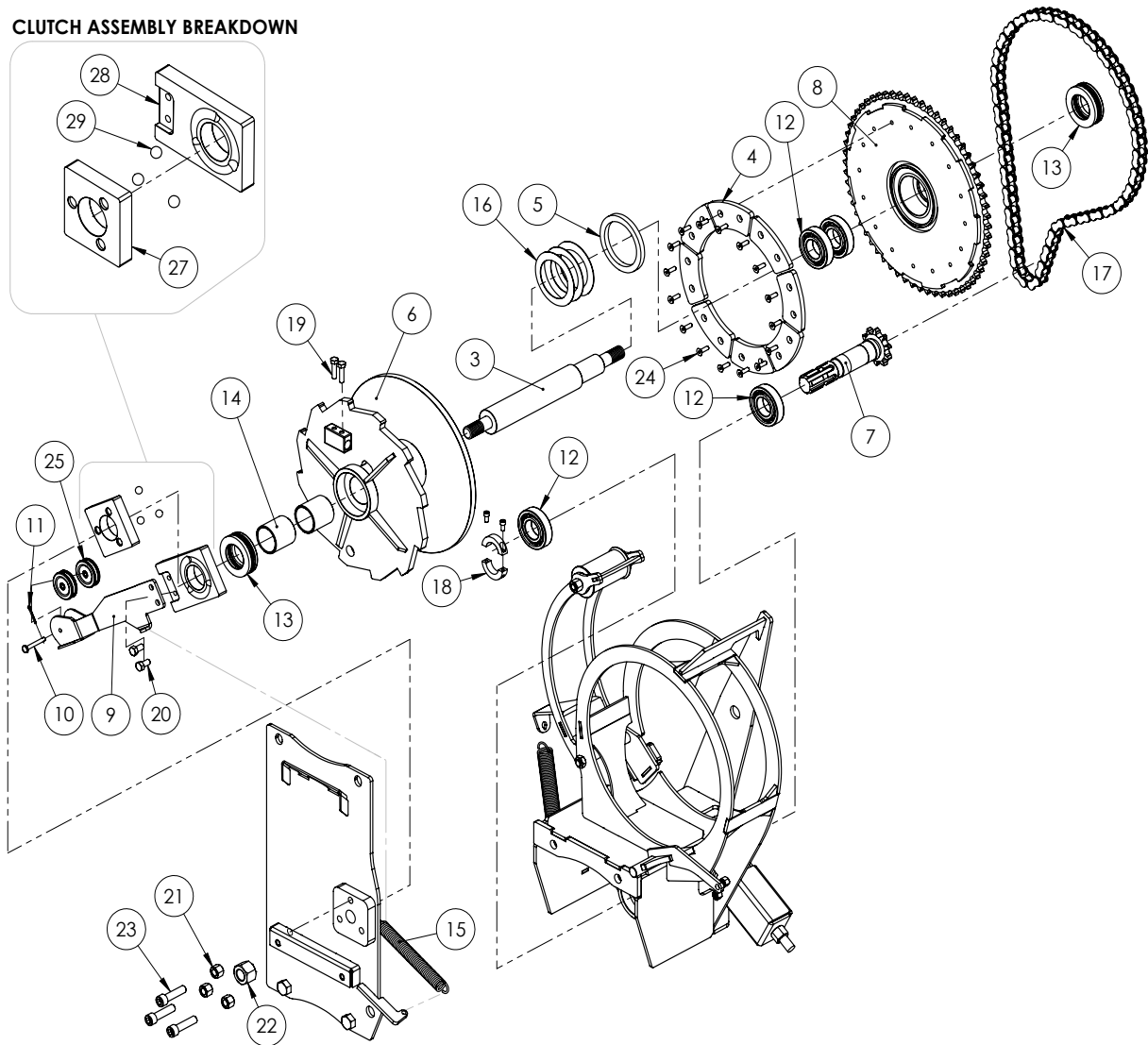


### DRUM FRAME ASSEMBLY

ITEM	PART NO.	DESCRIPTION	QTY
1	5012A203	Single Auto Chain Tightener	1
2	5012M204	Block, Drum Brake	1
3	5012M205	Cable Roller Pin	1
4	5012M206	Brake Arm Cable Roller	1
5	5012W202	Drum Frame Base	1
6	5012W203	Drum Frame Capture Plate	1
7	5012W204	Drum Brake Arm	1
8	5012W206	Lock Dog	1
9	Z21203	Ball Bearing 6202 RS	2
10	Z31403	Spring 25mm x 178mm x 0.105	1
11	Z71320	Hex Bolt 3/8NC x 2	1
12	Z71555	Hex Bolt 1/2NC x 51/2	1
13	Z71615	Hex Bolt 5/8NC x 11/2	2
14	Z72231	Hex Lock Nut 3/8NC	3
15	Z72251	Hex Lock Nut 1/2NC	1
16	Z72261	Hex Lock Nut 5/8NC	2
17	Z72451	Hex Jam Lock Nut, 1/2NC	1
18	5012W205	Chain Tightener Plunger	1
19	Z32401	Heavy Spring 1 x 7	1
20	5012W221	Chain Tightener Housing	1
21	Z72261	Hex Lock Nut 5/8NC	1

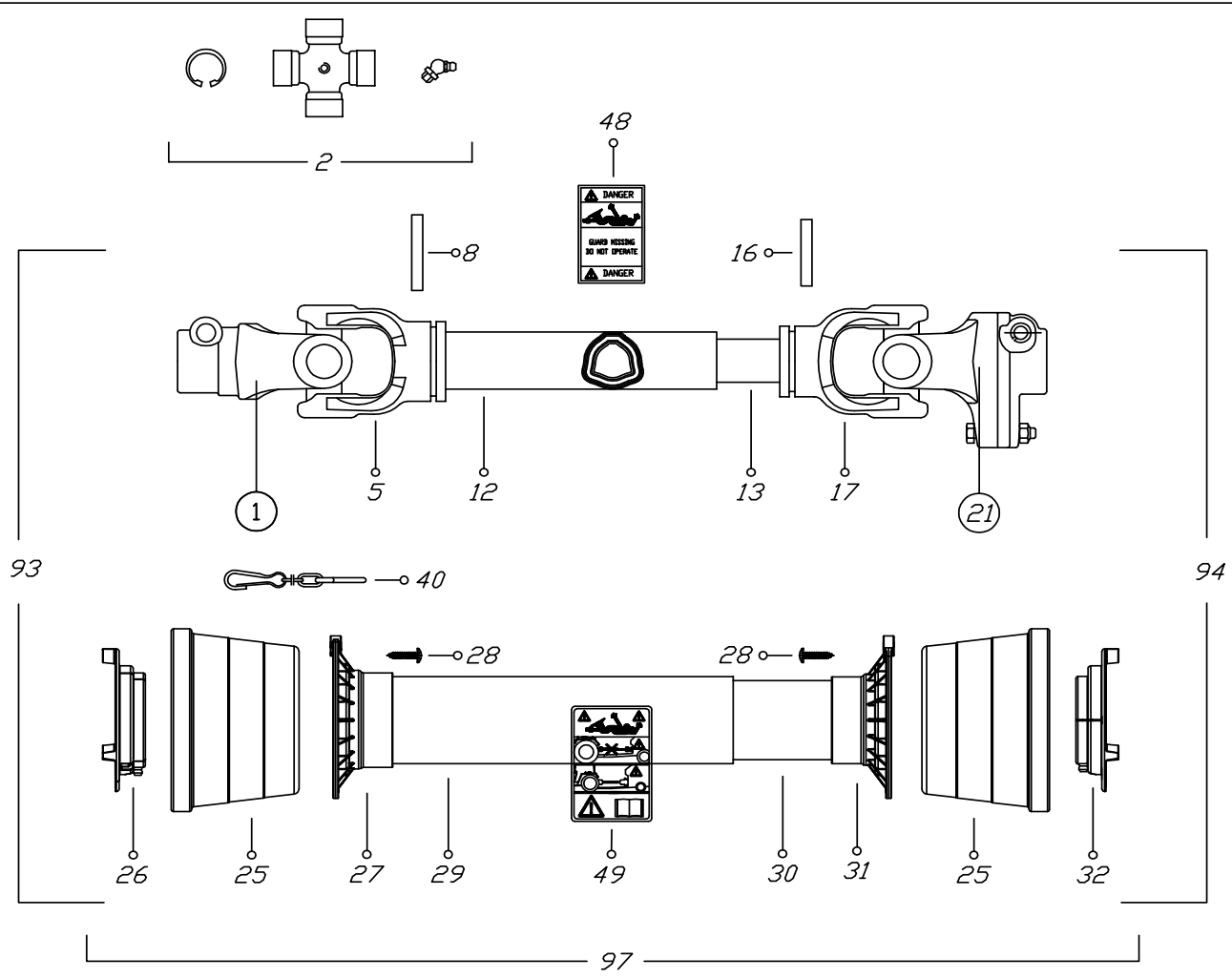


**CLUTCH ASSEMBLY BREAKDOWN**

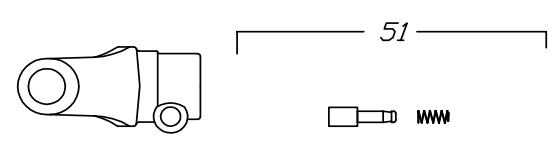


**CABLE DRUM ASSEMBLY**

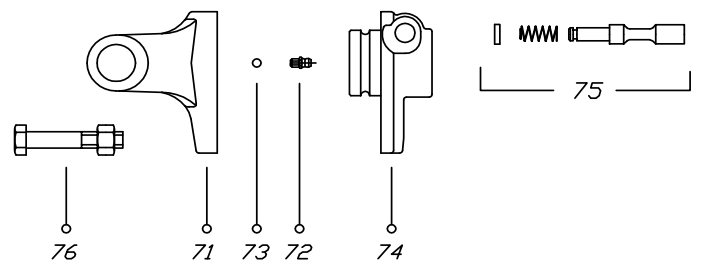
ITEM	PART NO.	DESCRIPTION	QTY
1	5012A202	Cable Drum Frame	1
2	5012A204	Clutch Assembly	1
3	5012M214	Main Drum Shaft	1
4	5012M215	Clutch Pad Set (8 pieces)	1
5	5012M228	Nylon Bearing Washer	1
6	5012W207	FX90 Cable Drum	1
7	5012W208	PTO Spine Shaft w/ Sprocket	1
8	5012W209	60 Tooth Sprocket	1
9	5012W220	Clutch Lever	1
10	Z11312	Clevis Pin 1/4 x 1-5/8	1
11	Z12311	Cotter Pin 1/8 X 1	1
12	Z21202	Ball Bearing 6207-RS	4
13	Z22101	Thrust Bearing, 1-3/4 Bore	2
14	Z27101	Fiberglide Bearing 1-3/4 x 2	2
15	Z31405	Spring 7/8 x 7 Heavy	1
16	Z34101	Cup Spring, 2-3/4	3
17	Z42151	#60 Chain 76 Links	1
18	Z46311	Clamp-on Shaft Collar	1
19	Z71212	Hex Bolt 5/16NC x 1-1/4	2
20	Z71307	Hex Bolt 3/8NC x 3/4	2
21	Z72252	Hex Lock Nut 1/2NF	3
22	Z72281	Hex Lock Nut 7/8NC	1
23	Z75151	Cap Screw 1/2NF x 2	3
24	Z75211	FHCS, 1/4NC x 7/8	16
25	Z92203	1/4 Groove Pulley 2 Diam.	2
ITEM	PART NO.	DESCRIPTION	QTY
27	5012M212	Clutch Engagmnet Nut	1
28	5012M213	Clutch, Engagement Block-Handle	1
29	Z29101	Roller Ball, 1/2	3



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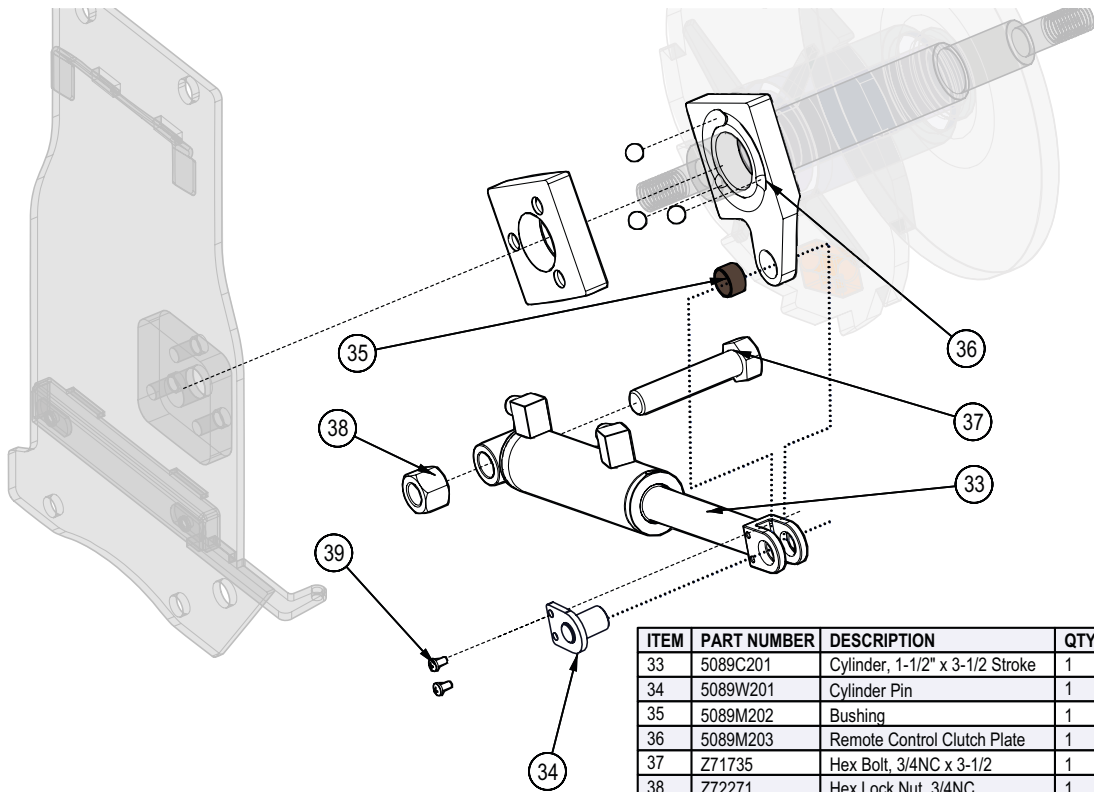
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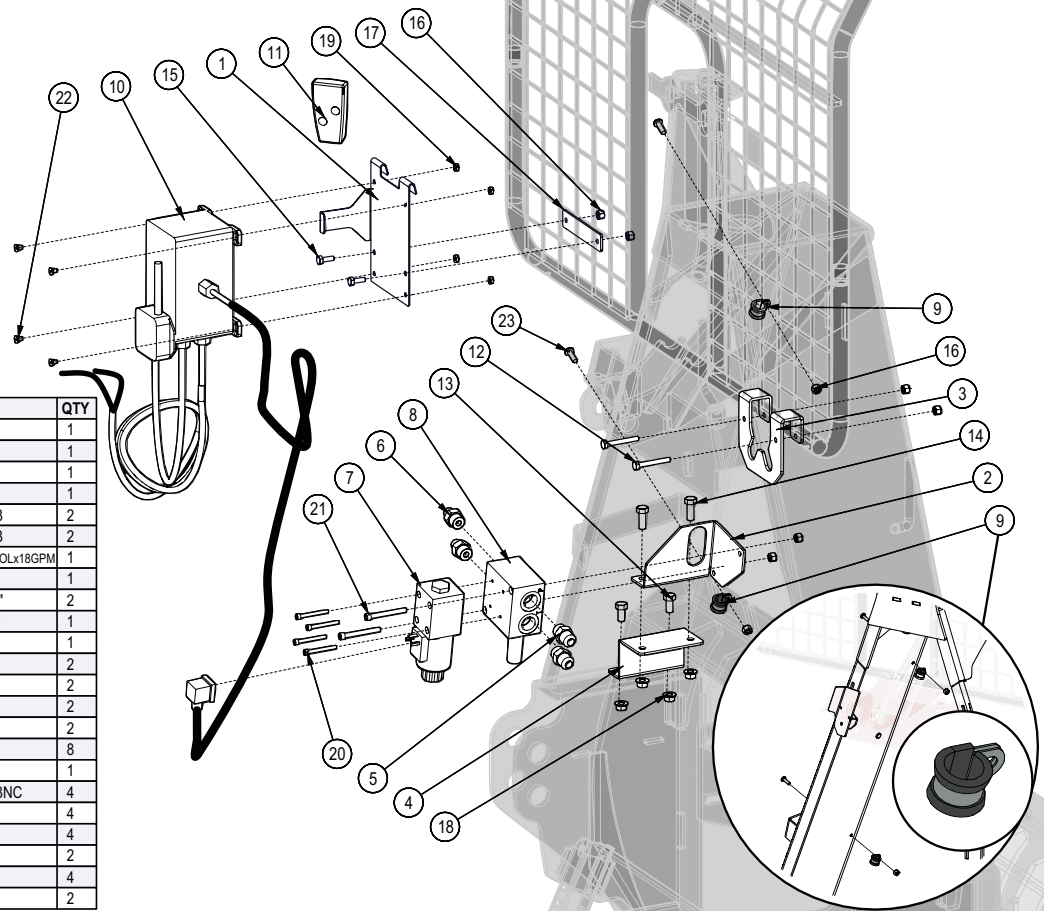
<b>Binacchi SPARE PARTS LIST : B4N061USA60098</b>			
<b>POS.</b>	<b>DESCRIPTION</b>	<b>Q.</b>	<b>Part #</b>
01	YOKE	1	0800403
02	CROSS JOURNAL ASS.	2	08204
05	OUTER TUBE YOKE	1	08004021
08	FLEXIBLE PIN	1	098700860
12	CM. 100 CARDAN TUBE(*)	1	09881433100
13	CM. 100 CARDAN TUBE(*)	1	09881364100
16	FLEXIBLE PIN	1	098700855
17	INNER TUBE YOKE	1	08004011
21	SHEAR BOLT	1	08804
25	CONE SHIELD BELL 03-04	2	021904C001
26	OUTER BEARING 03-04	1	025504C001
27	OUTER BASE CONE 03-04	1	025404C001
28	SCREW	6	0998052242
29	OUTER SAFETY TUBE	1	0988966NB4061
30	INNER SAFETY TUBE	1	0988961NB4061
31	INNER BASE CONE 03-04	1	025404C002
32	INNER BEARING 03-04	1	025504C002
40	CHAIN	1	0252000001
48	LABEL DANGER OUTER DRIVE TUBE	1	09872006
49	EXTERNAL SHIELD LABEL	1	09872003
51	COMPLETE PUSH BUTTTON	1	0986014047
71	YOKE FOR LB4	1	08896904
72	GREASE NIPPLE	1	0984010150
73	STEEL BALL	23	098680104
74	HUB	1	088964
75	PUSH PIN SET	1	0986014075
76	NUT AND BOLT M8 x 1.25 x 45 10.9	1	Z44902
93	OUTER HALF SHAFT	1	B4N061US2
94	INNER HALF SHAFT	1	B4N061US1098
97	SAFETY GUARD	1	083US04061

Cylinder / Clutch Plate Assembly - FX90



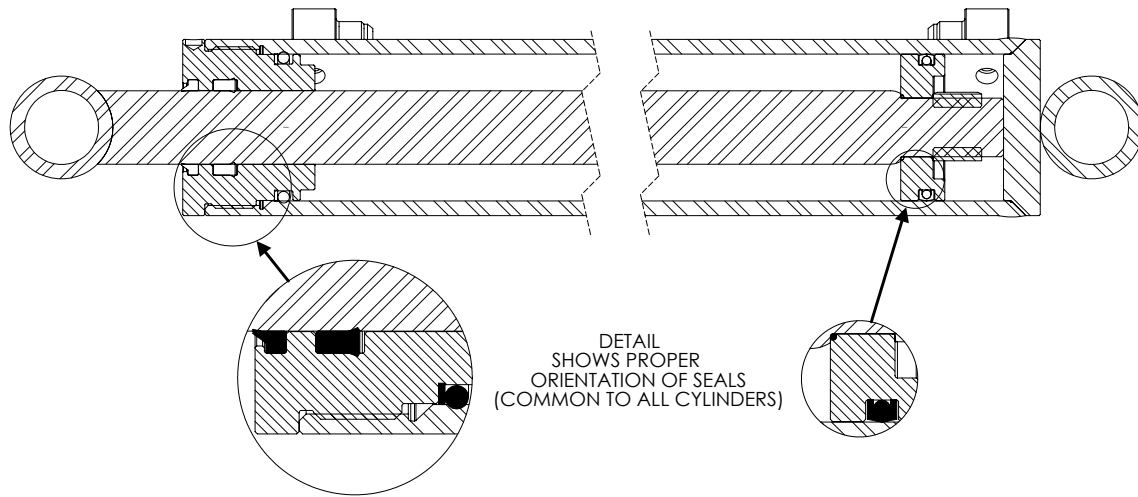
ITEM	PART NUMBER	DESCRIPTION	QTY
33	5089C201	Cylinder, 1-1/2" x 3-1/2 Stroke	1
34	5089W201	Cylinder Pin	1
35	5089M202	Bushing	1
36	5089M203	Remote Control Clutch Plate	1
37	Z71735	Hex Bolt, 3/4NC x 3-1/2	1
38	Z72271	Hex Lock Nut, 3/4NC	1
39	Z78302	Machine Screw, #10-32NF x 3/8	2

Remote Control Components - FX90

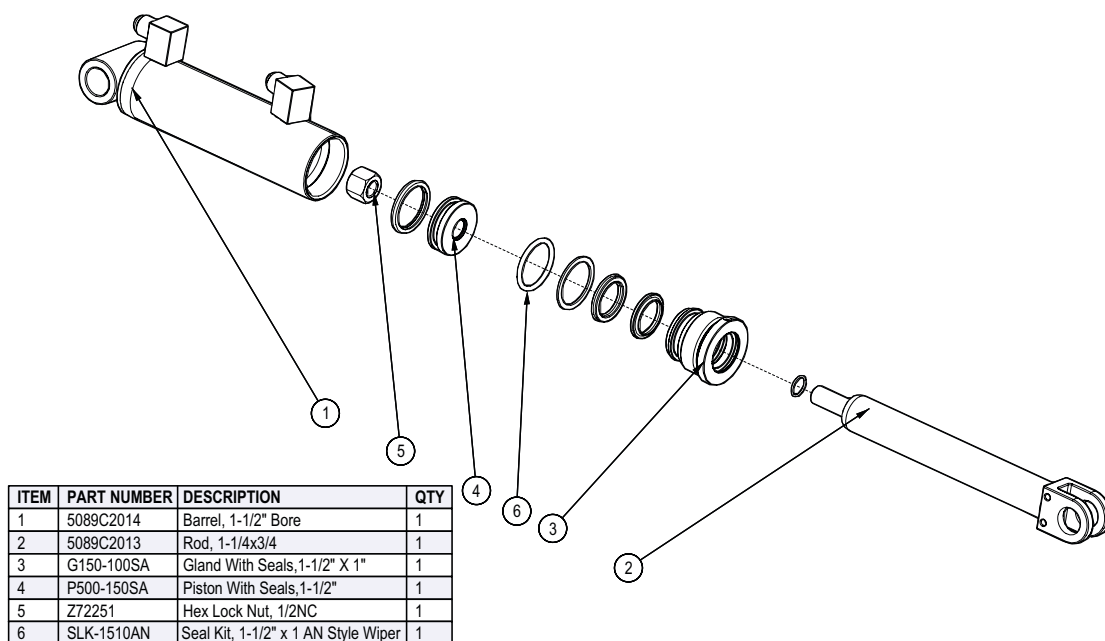


ITEM	PART NUMBER	DESCRIPTION	QTY
1	5089L215	Remote Box Mount	1
2	5089L208	Hydraulic Mount Base	1
3	5089L209	Hose Hanger	1
4	5089L210	Valve Mount Extension	1
5	Z51643	Straight, MJIC x MORB 0808	2
6	Z51644	Straight, MJIC x MORB 0608	2
7	Z56509	Single Spool Valve, OC Motor SOLx18GPM	1
8	Z56511	Subplate, Relief x 3000PSI	1
9	Z62819	Rubberized Wire Clamp, 1/2"	2
10	Z66208	Dual State Remote Receiver	1
11	Z66209	Remote Handset for Z66208	1
12	Z71120	Hex Bolt, 1/4NC x 2	2
13	Z71307	Hex Bolt, 3/8NC x 3/4	2
14	Z71310	Hex Bolt, 3/8NC x 1	2
15	Z71107	Hex Bolt, 1/4NC x 3/4	2
16	Z72211	Hex Lock Nut, 1/4NC	8
17	5089L216	Trap Plate	1
18	Z72531	Serrated Flange Locknut, 3/8NC	4
19	Z72752	Machine Nut, #10NF	4
20	Z75102	SHCS, #10NC x 1-3/4	4
21	Z75117	SHCS, 1/4NC x 2-1/4	2
22	Z75202	FHCS, #10NF x 3/8	4
23	Z78301	Machine Screw, 1/4NC x 3/4	2

Cylinder Seal Installation - FX90

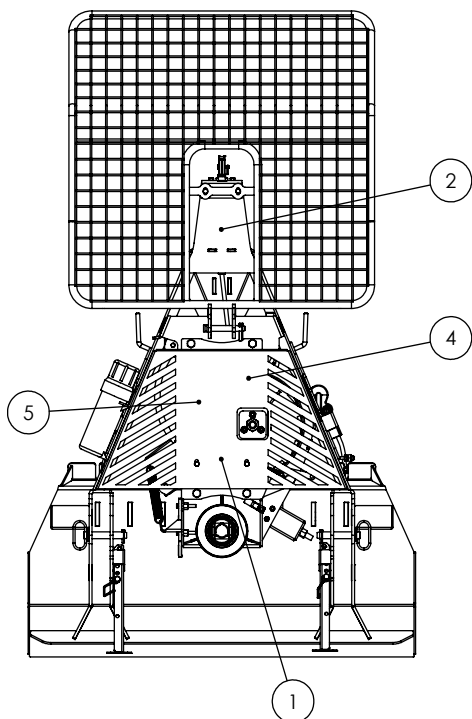
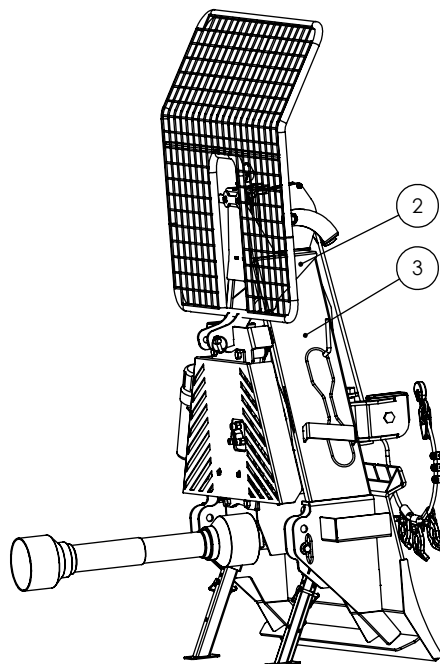
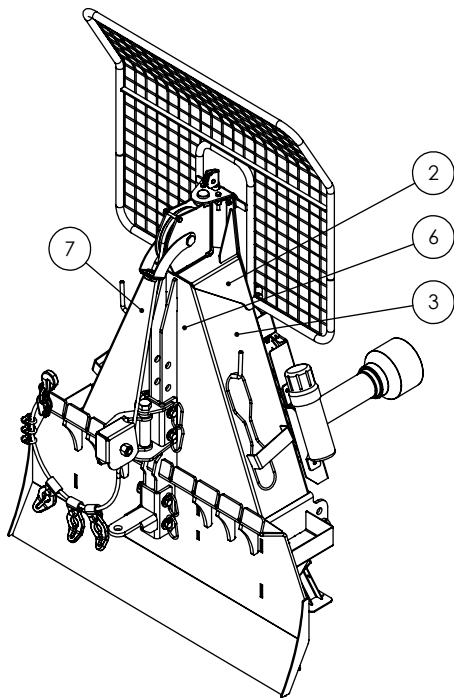


Hydraulic Cylinder Detail - FX90



### FX90 SKIDDING WINCH DECAL BREAKDOWN

ITEM	PART NO.	DESCRIPTION	QTY
1	Z94042	Rotating Driveline Hazard	1
2	Z94019	Made in Canada	3
3	Z94043	Flying Object Hazard	2
4	Z94058	Clutch Adjustment	1
5	Z94041	Read Manual	1
6	Z94001	Wallenstein Skidding Winch	1
7	Z94002	FX90	1



# FX90 Decals

Z94042



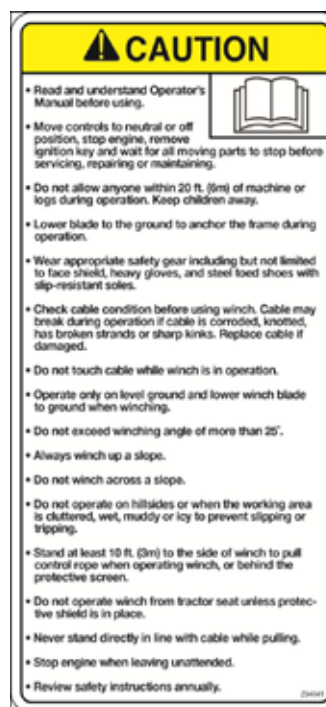
Z94058



Z94019



Z94041



Z94043



Z94002



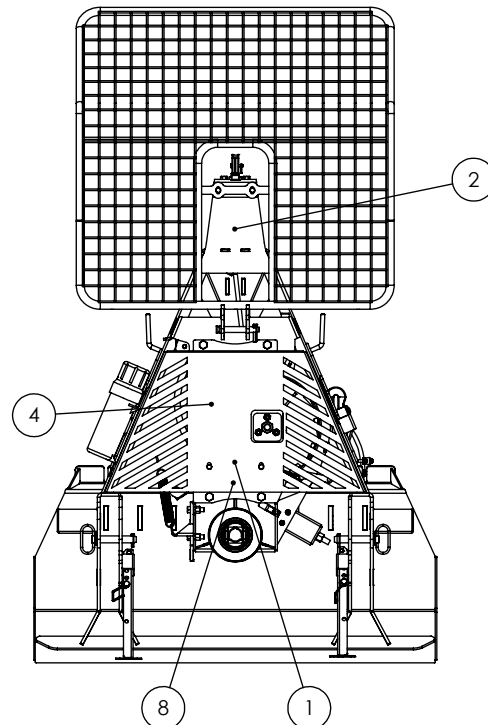
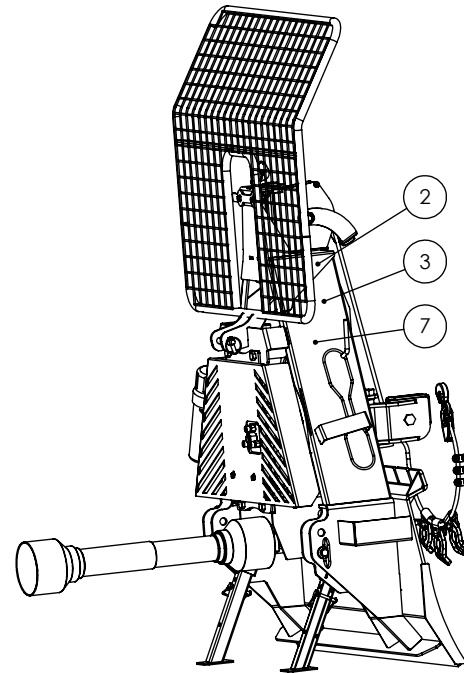
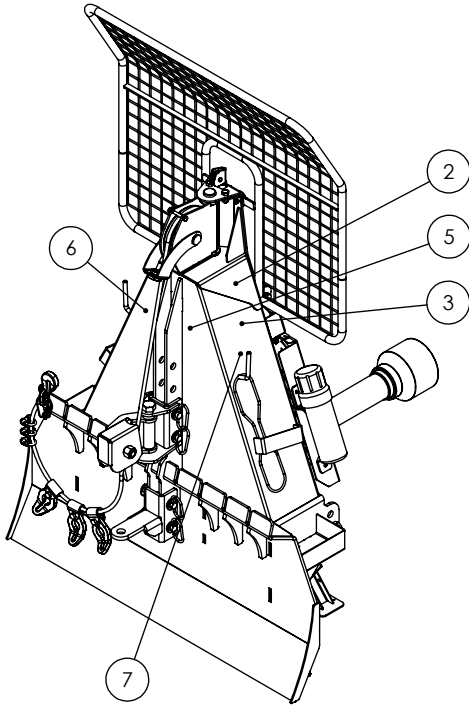
Z94001





## TWO PANEL FX90 SKIDDING WINCHDECAL BREAKDOWN

ITEM	PART NO.	DESCRIPTION	QTY
1	Z94118	Rotating Driveline Hazard	1
2	Z94019	Made in Canada	3
3	Z94114	Flying Object Hazard	2
4	Z94119	Read Manual	1
5	Z94001	Wallenstein Skidding Winch	1
6	Z94002	FX90	1
7	Z94160	Winch Operation	2
8	Z94161	Max RPM	1





### Two Panel FX90 Decals

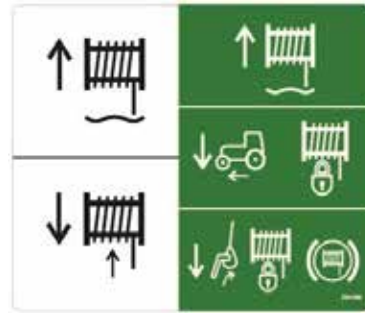
Z94161



Z94019



Z94160



Z94118



Z94119



Z94114



Z94002



Z94001





**WALLENSTEIN Products Manufactured by:**

**EMB MFG Inc.**

4144 Boomer Line  
St. Clements, Ontario  
Canada N0B 2M0  
Phone: 1-877-695-9283  
Fax: 519-699-4146  
[www.embmfg.com](http://www.embmfg.com)