

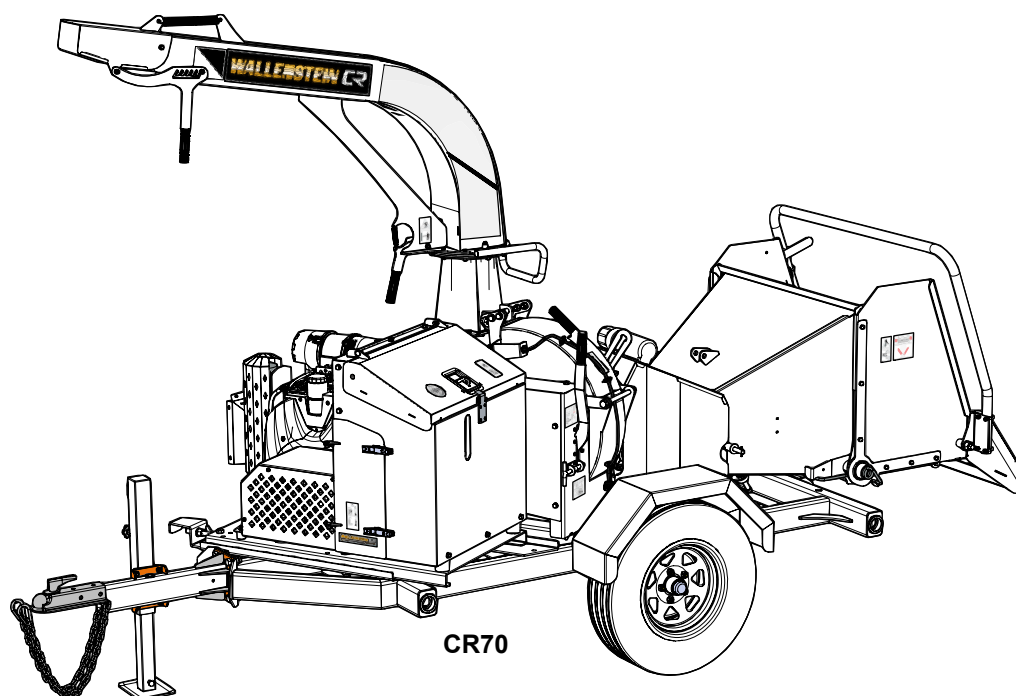


EMB Manufacturing Inc.
4144 Boomer Line · St. Clements, On · N0B 2M0 · Canada
Ph: (519) 699-9283 · Fax: (519) 699-4146
www.wallensteincr.com

CR70 Trailer

Chipper Parts Manual

Starting with S/N 2E9US111XDS010001 to
2E9US1110FS010004



Refer to the operators
manual for safe
operation and
maintenance

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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: www.wallensteincr.com and click on "Contact Us" for information on a local dealer.

Bolt Torque

CHECKING BOLT TORQUE

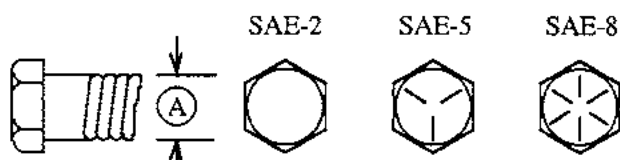
The tables shown below give correct torque values for various bolts and capscrews. Tighten all bolts to the torques specified in chart unless otherwise noted. Check tightness of bolts periodically, using bolt torque chart as a guide. Replace hardware with the same strength bolt.

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.

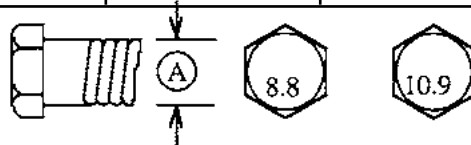
ENGLISH TORQUE SPECIFICATIONS

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	.5	.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.

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

HYDRAULIC FITTING TORQUE					
Tube Size OD	Nut Size Across Flats	Torque Value*		Recommended Turns To Tighten (After Finger Tightening)	
(in.)	(in.)	(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

Wheel Lug Torque

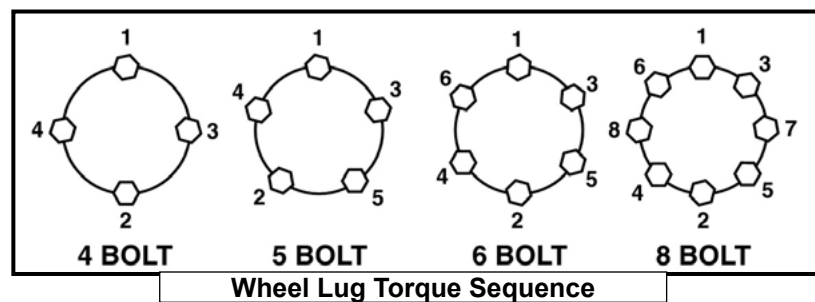
It is extremely important safety procedure to apply and maintain proper wheel mounting torque on your trailer axle. Torque wrenches are the best method to assure the proper amount of torque is being applied to a fastener.

Wheel lugs should be torqued before first road use and after each wheel removal. Check and re torque after the first 16Km (10 miles), 40Km (25 miles), and again at 80Km (50 miles). Check periodically thereafter.

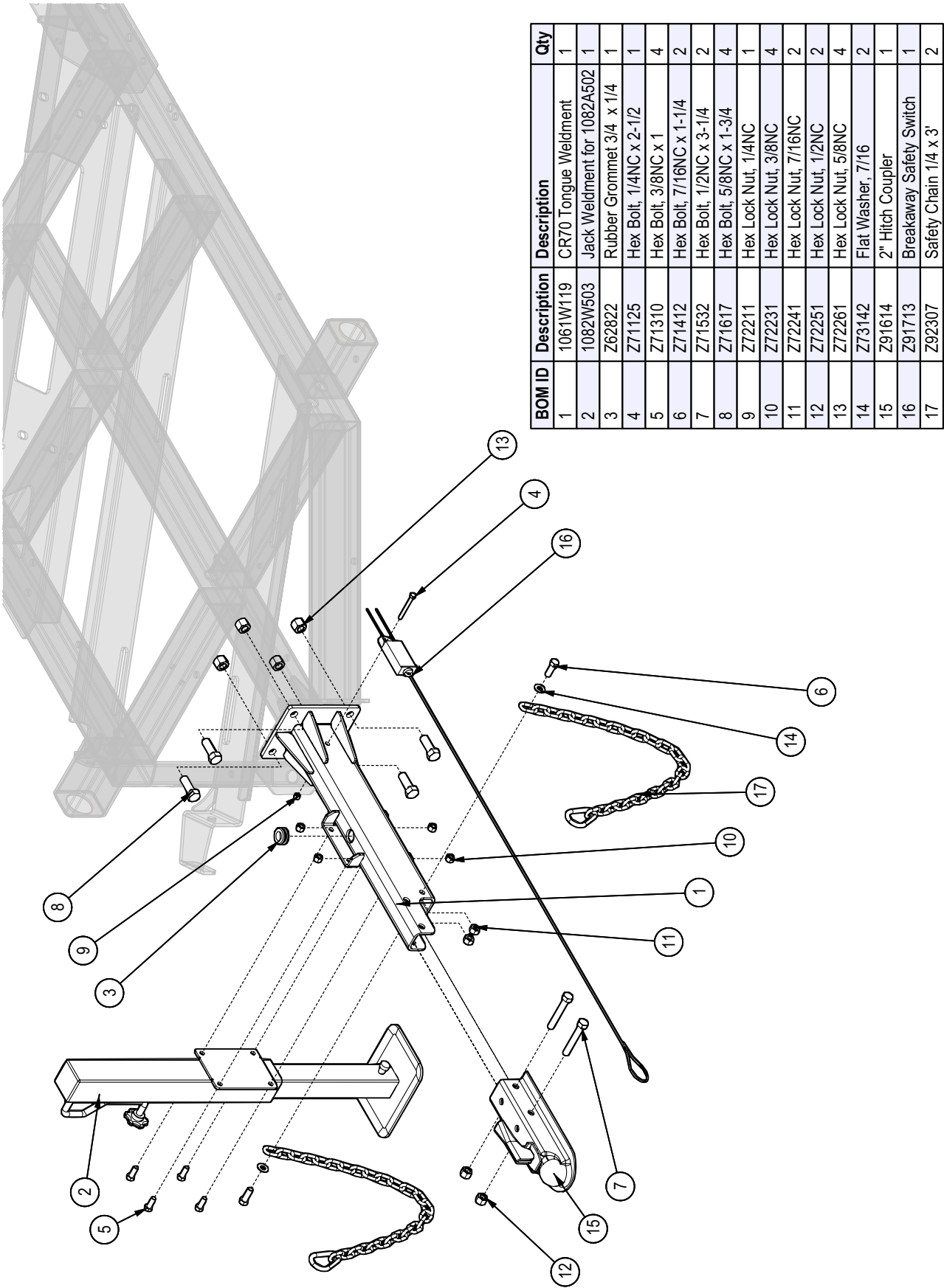
Note: Wheel lugs must be applied and maintained at the proper torque levels to prevent loose wheels, broken studs, and possible dangerous separation of wheels from your axle.

Wheel Torque Requirements				
Wheel Size	Torque Unit	1st Stage	2nd Stage	3rd Stage
8"	ft-lbs	12 - 20	30 - 35	45 - 55
	Nm	16 - 26	39 - 45.5	58.5 - 71.5
12"	ft-lbs	20 - 25	35 - 40	50 - 60
	Nm	26 - 32.5	45.5 - 52	65 - 78
13"	ft-lbs	20 - 25	35 - 40	50 - 60
	Nm	26 - 32.5	45.5 - 52	65 - 78
14"	ft-lbs	20 - 25	50 - 60	90 - 120
	Nm	26 - 32.5	65 - 78	117 - 156
15"	ft-lbs	20 - 25	50 - 60	90 - 120
	Nm	26 - 32.5	65 - 78	117 - 156
16"	ft-lbs	20 - 25	50 - 60	90 - 120
	Nm	26 - 32.5	65 - 78	117 - 156

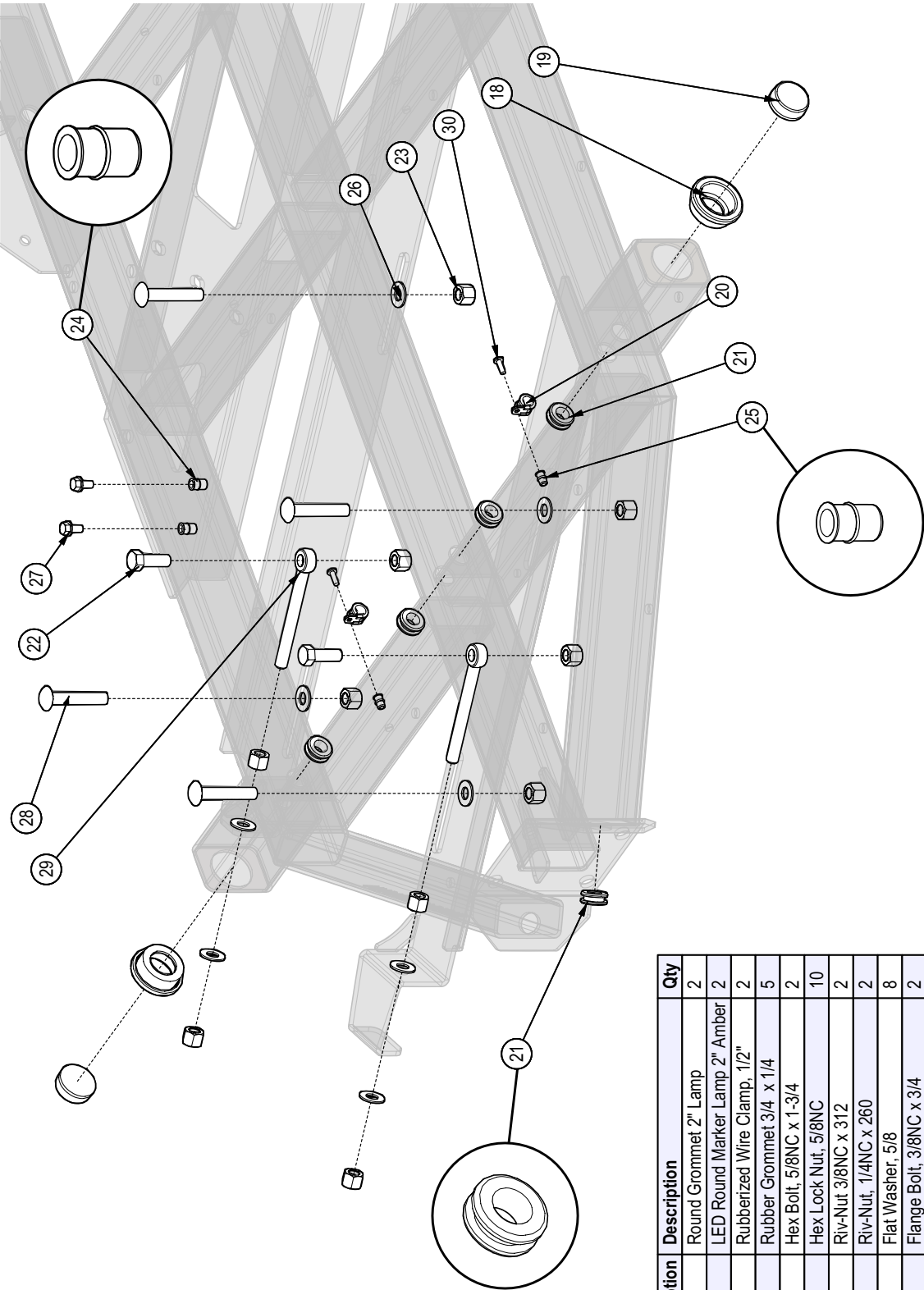
- Start all lugs by hand to prevent cross threading.
- Tighten lugs in sequence, per wheel lug torque sequence chart.
- The tightening of the fasteners should be done in stages. Following the recommended sequence, tighten fasteners per wheel torque requirements chart.



Frame Detail - Tongue & Jack

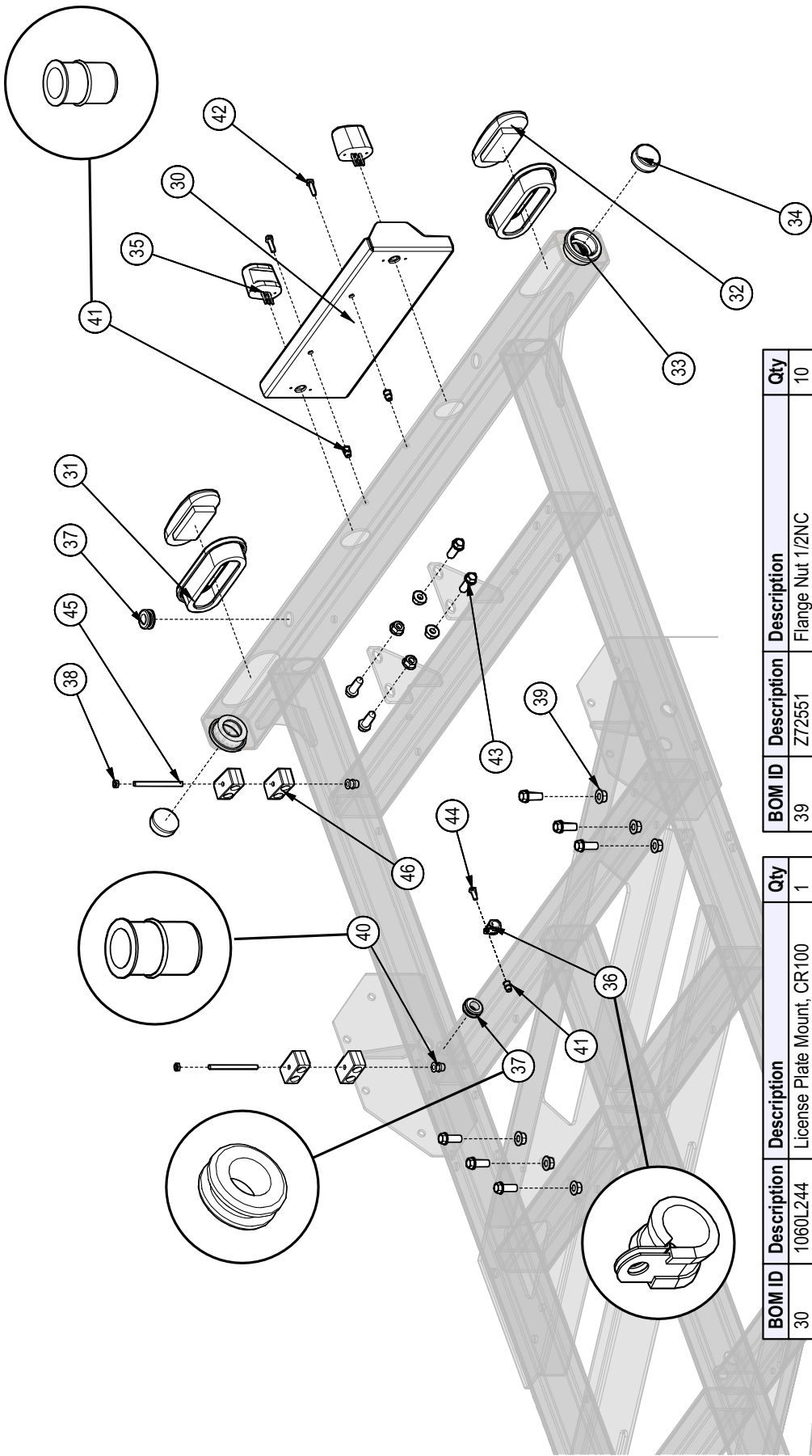


Frame Detail - Front



BOM ID	Description	Description	Qty
18	Z61202	Round Grommet 2" Lamp	2
19	Z61211	LED Round Marker Lamp 2" Amber	2
20	Z62819	Rubberized Wire Clamp, 1/2"	2
21	Z62822	Rubber Grommet 3/4 x 1/4	5
22	Z71617	Hex Bolt, 5/8NC x 1-3/4	2
23	Z72261	Hex Lock Nut, 5/8NC	10
24	Z72959	Riv-Nut 3/8NC x 312	2
25	Z72962	Riv-Nut, 1/4NC x 260	2
26	Z73161	Flat Washer, 5/8	8
27	Z76133	Flange Bolt, 3/8NC x 3/4	2
28	Z76265	Carriage Bolt, 5/8NC x 3-1/2	4
29	Z76561	Rod End, 5/8NC x 6 Full Threads	2
30	Z78301	Machine Screw, 1/4-20NC x 3/4	2

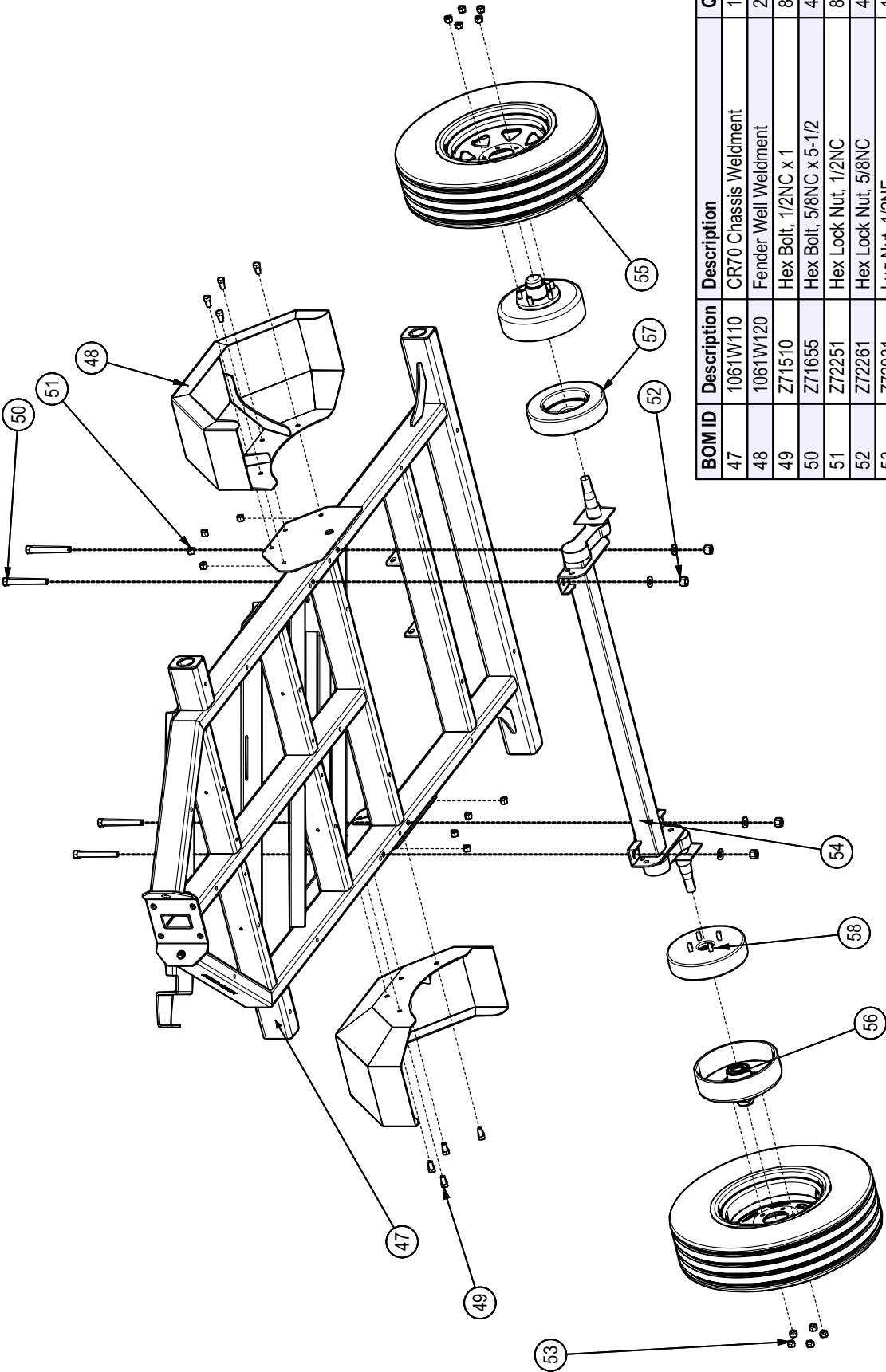
Frame Detail - Rear



BOM ID	Description	Description	Qty
39	Z72551	Flange Nut 1/2NC	10
40	Z72957	Riv-Nut 5/16NC x 312	2
41	Z72962	Riv-Nut, 1/4NC x 260	3
42	Z76114	Flange Bolt, 1/4NC x 1"	2
43	Z76152	Flange Bolt, 1/2NC x 1-1/4	10
44	Z78301	Machine Screw, 1/4-20NC x 3/4	1
45	Z79141	Threaded Stud, 5/16NC x 4"	2
46	Z79463	Double Hose Clamp 1 1/16"	4

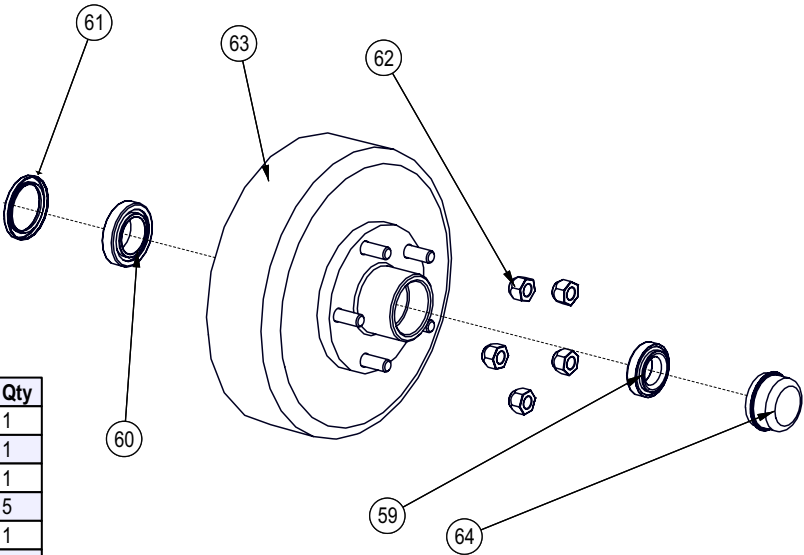
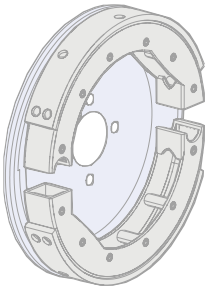
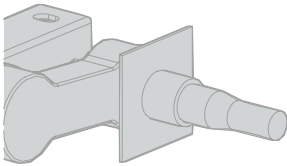
BOM ID	Description	Description	Qty
30	1060L244	License Plate Mount, CR100	1
31	Z61103	Oval Grommet 2-1/2 x 6.76	2
32	Z61114	LED 6" Oval Stop, Tail, Turn Light	2
33	Z61202	Round Grommet 2" Lamp	2
34	Z61210	LED Round Marker Lamp 2" Red	2
35	Z61301	License Lamp	2
36	Z62819	Rubberized Wire Clamp, 1/2"	1
37	Z62822	Rubber Grommet 3/4 x 1/4	2
38	Z72321	Jam Nut, 5/16NC	2

Frame & Fender Assembly



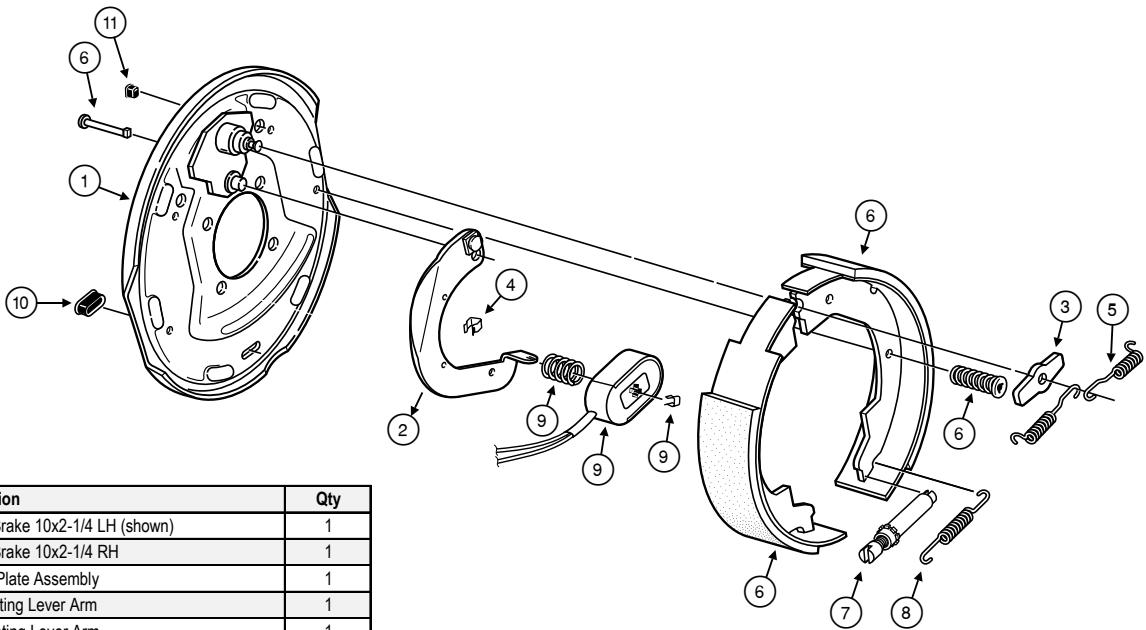
BOM ID	Description	Description	Qty
47	1061W110	CR70 Chassis Weldment	1
48	1061W120	Fender Well Weldment	2
49	Z71510	Hex Bolt, 1/2NC x 1	8
50	Z71655	Hex Bolt, 5/8NC x 5-1/2	4
51	Z72251	Hex Lock Nut, 1/2NC	8
52	Z72261	Hex Lock Nut, 5/8NC	4
53	Z72931	Lug Nut, 1/2NF	10
54	Z91130	#10 Torflex Axle 56 HF 22.5	1
55	Z91317	ST205/75R14 Radial Trail	2
56	Z91708	1750# Brake Drum 10" 5 - 4-1/2 Bolts	2
57	Z91718	Electric Brake 10x2-1/4 LH	1
58	Z91719	Electric Brake 10x2-1/4 RH	1

Hub Assembly



BOM ID	Part No.	Description	Qty
59	Z23202	L44649 Cone, L44610 Cup	1
60	Z23205	L68149 Cone and L68111 Cup	1
61	Z28202	Seal, Single Lip	1
62	Z72931	Lug Nut, 1/2NF	5
63	Z91708	1750# Brake Drum 10" 5 - 4-1/2 Bolts	1
64	Z91801	Dust Cap 1.98 Bore	1

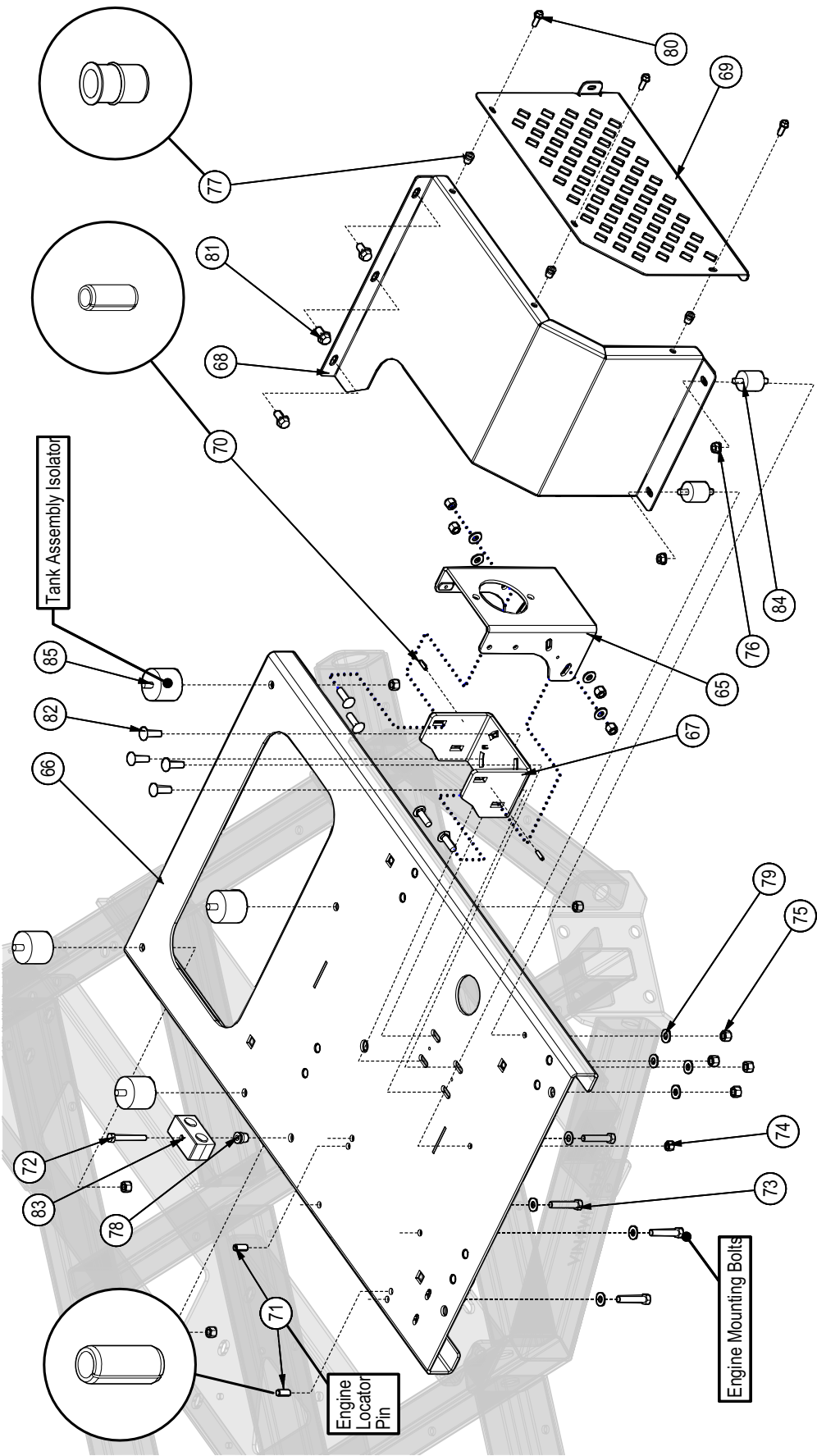
Brake Assembly



Item	Part No.	Description	Qty
	Z91718	Electric Brake 10x2-1/4 LH (shown)	1
	Z91719	Electric Brake 10x2-1/4 RH	1
1	036-019-10	Backing Plate Assembly	1
2	047-019-05	LH Actuating Lever Arm	1
2	047-020-05	RH Actuating Lever Arm	1
3	005-067-00	Washer	1
4	027-005-00	Wire Clip	2
5	046-009-00	Retractor Spring	2
6	K71-047-00	Shoe & Lining Kit Contains:	1
	#040-017-00	Primary Shoe & Lining	1
	#040-021-00	Secondary Shoe & Lining	1
	#049-002-00	Shoe Hold Down Pin #8	2
	#046-077-00	Shoe Hold Down Spring & Cup	2
7	043-004-00	Adjuster Assembly	1
8	046-018-00	Adjusting Screw Spring	1
9	K71-104-00	Magnet Kit Contains:	1
	#042-140-00	Magnet (green wire)	1
	#027-009-00	Magnet Clip	1
	#046-080-00	Magnet Spring	1
10	046-007-00	Adjuster Slot Plug	2
11	046-016-00	Wire Grommet	1

Please note: brake parts are not available from EMB Mfg. Brake part numbers here reference Dexter Axle brake assemblies and are available from your local auto parts dealer. All brake repair and maintenance should be done by a qualified mechanic.

Engine Carriage



BOM ID	Description	Description	Qty
81	Z76133	Flange Bolt, 3/8NC x 3/4	3
82	Z76232	Carriage Bolt, 3/8NC x 1-1/4	8
83	Z79464	Double Hose Clamp 13/16"	1
84	Z79931	Rubber Mount	2
85	Z79932	Rubber Isolator, 2" x 1-5/8 x 3/8NC	4

BOM ID	Description	Description	Qty
73	Z71320	Hex Bolt, 3/8NC x 2	4
74	Z72221	Hex Lock Nut, 5/16NC	2
75	Z72231	Hex Lock Nut, 3/8NC	12
76	Z72521	Flange Nut, 5/16NC	2
77	Z72955	Riv-Nut 1/4NC x 165	3
78	Z72956	Riv-Nut 5/16NC x 150	1
79	Z73131	Flat Washer, 3/8	12
80	Z76111	Flange Bolt, 1/4NC x 3/4	3

BOM ID	Description	Description	Qty
65	1054W491	Pump Mount Weldment	1
66	1061W111	Engine Skid Weldment, CR70	1
67	1054L570	Adapter Weldment Plate	1
68	1061L171	Hydraulic Cover	1
69	1061L173	Air Screen	1
70	Z14152	Roll Pin, 3/16 x 3/4	4
71	Z14301	Roll Pin, 10mm x 22mm	2
72	Z71225	Hex Bolt, 5/16NC x 2-1/2	1

Engine

See Fluid Coupler Detail

See Hydraulic Pump Assembly

Engine Skid Weldment, CR70

Crossover Cover Plate

38hp Engine Assembly, CR70

BOM ID	Part No.	Description	Qty
86	1061L174	Muffler Mount	1
87	1061L176	Muffler Guard, Vertical	1
88	1061L186	Crossover Cover Plate	1
90	Z47501	Kohler CH980 38HP	1
91	Z47510	Whitman Vertical Muffler CH980	1
92	Z47511	Whitman Exhaust Pipe for Z47510	1
93	Z47512	Crossover Manifold, CH980, Non-Starter Side	1
94	Z71320	Hex Bolt, 3/8NC x 2	4
95	Z72231	Hex Lock Nut, 3/8NC	6
96	Z72521	Flange Nut, 5/16NC	2
98	Z72959	Riv-Nut 3/8NC x 312	2
99	Z73111	Flat Washer, 1/4	2
100	Z73131	Flat Washer, 3/8	6
102	Z76121	Flange Bolt, 5/16NC x 3/4	2
103	Z76133	Flange Bolt, 3/8NC x 3/4	4
104	Z47513	Spark arrestor, 1 1/2"	1
105	Z77130	Hex Bolt, M6x1.0x14mm	4

BOM ID	Description	Qty
120	Z51442 #8 JIC x 1/2NPT	1
121	Z51492 Elbow 90 MJIC x BH 0808	1
122	Z51493 BH Locknut, 08	1
123	Z51495 Cap. FJIC08	1
124	Z52284 3/8" Hose, FJIC08 x 90FJIC08 x 5"	1
125	Z71320 Hex Bolt, 3/8NC x 2	2
126	Z72231 Hex Lock Nut, 3/8NC	2
127	Z73131 Flat Washer, 3/8	2
128	Z76133 Flange Bolt, 3/8NC x 3/4	2

Note: for more information on Kohler CH980 Engine, please review the Kohler Owners Manual.

Engine Parts	
Part #	Description
2508301-S	Element, Air Filter - Primary
2508304-S	Element, Air Filter - Safety
5205002-S1	Oil Filter

Hydraulic Pump Assembly

BOM ID	Description	Description	Qty
107	1054M412	Stub Shaft, Kohler Front	1
108	Z46417	L100 Spider	1
109	Z46424	Shaft Coupler, L100 x 3/4"	1
110	Z46427	Shaft Coupler, L100 x 1-3/8"	1
111	Z46523	Key, 3/16 x 3/16 x 1-1/2	1
112	Z46543	Key, 5/16 x 5/16 x 1-1/2	1
113	Z51647	Straight, MJIC x MORB 0810	1
114	Z51659	Elbow 90, MJIC x MORB 1610	1
115	Z53113	Gear Pump, PLP20.4S	1
116	Z71412	Hex Bolt, 7/16NC x 1-1/4	2
117	Z72241	Hex Lock Nut, 7/16NC	2
118	Z74121	Set Screw, 5/16NC	4
119	Z77154	Hex Bolt, M8x1.25x50mm	4

Pump Gasket Kit

Part #	Description
SK PL20-S/D-49	Pump Gasket Kit for #148740

Fluid Coupler Assembly

BOM ID	Description	Description	Qty
106	1061L143	Fluid Coupler Capture Washer	1
107	Z46352	Spacer 1-7/16 x 1.75	1
108	Z46596	Key, 5/16 x 3/8 x 2-1/2	1
109	Z49303	Fluid Coupling, 2B x 4.9P	1
110	Z49303-1	Fusible Plug, 198C	1
111	Z49303-2	Taper Bushing, 1-7/16 Bore	1
112	Z71673	Hex Bolt, 5/8NF x 7-1/2	1

Seal Kit for #Z49303
#107200000183
SEAL KIT, FLUID COUPLING 9KSDF

Note: for more information on Z49303 Transfluid 9KSDF Fluid Coupler, please review the Transfluid Installation and Maintenance Manual.

Caution: Potential for hot oil injury with fluid coupler release.

Tank Compartment

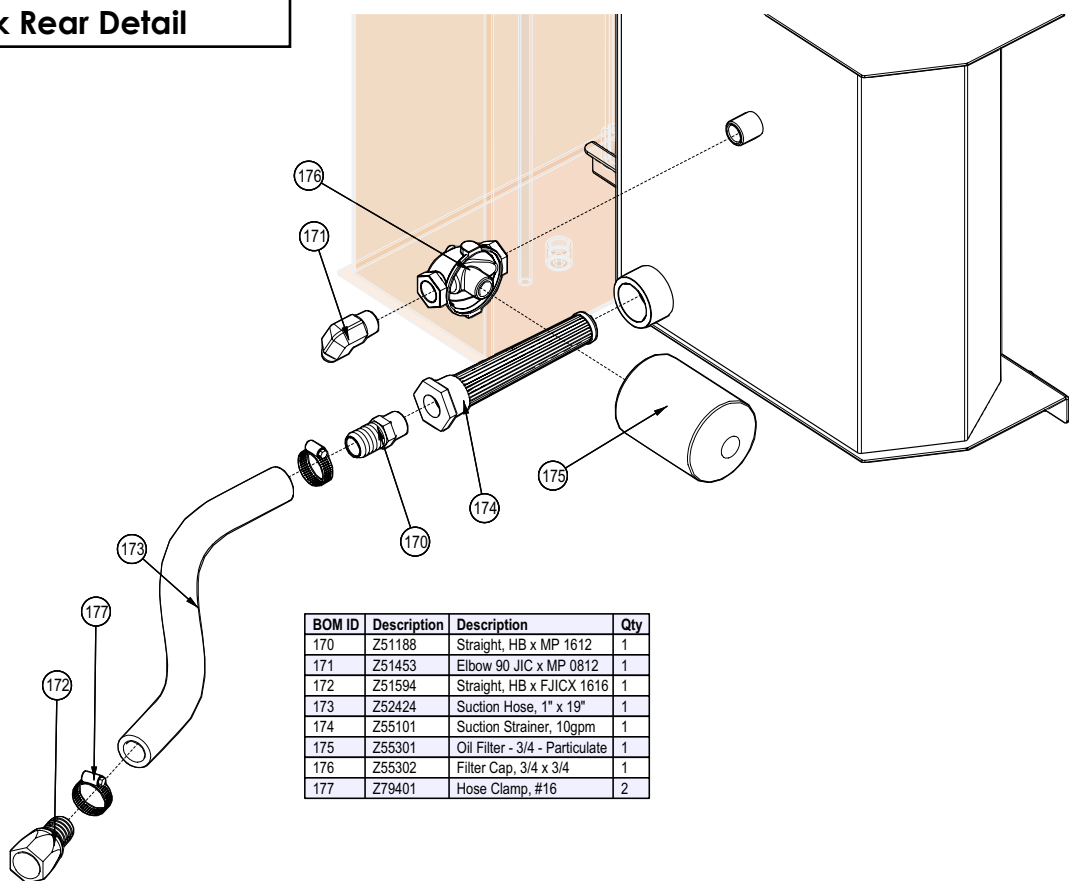
BOM ID	Description	Description	Qty
129	1061L179	CR70 Toolbox	1
130	1061L216	Battery Cage	1
131	1061W114	Tank Shroud Weldment, CR70	1
132	Z62816	Deutsch Mounting Clip	1
133	Z62819	Rubberized Wire Clamp, 1/2"	1
134	Z62823	Rubber Grommet 3/4 x 1/8	2
135	Z66204	Control, IntelliFEED	1
136	Z71207	Hex Bolt, 5/16NC x 3/4	2
137	Z71307	Hex Bolt, 3/8NC x 3/4	2
138	Z72211	Hex Lock Nut, 1/4NC	3
139	Z72221	Hex Lock Nut, 5/16NC	2
140	Z72231	Hex Lock Nut, 3/8NC	2
141	Z72511	Hex Flange Nut, 1/4NC	3
142	Z72958	Riv-Nut 3/8NC x 150	8
143	Z73111	Flat Washer, 1/4	1
144	Z76211	Carriage Bolt, 1/4NC x 3/4	3
145	Z78301	Machine Screw, 1/4-20NC x 3/4	3
146	Z78302	Machine Screw, #10-32NF x 3/8	4
147	Z93308	EPA Carbon Canister 1200cc	1

BOM ID	Description	Description	Qty
148	1060L334	Lock Ring, Tether	1
149	1060S103	Fuel Pickup Tube	1
150	1060m103	Custom Adapter MP08 x FP06	1
151	1061L159	Tank Isolator Rail	1
152	1061W112	Fuel Tank Weldment	1
153	1061W113	Hydraulic Tank Weldment	1
154	Z51189	Elbow 90 HB x MP 0506	1
155	Z51192	Socket Plug MP08	2
156	Z55403	Breather Filler Cap, Locking	1
157	Z55908	Reservoir Sight Level Thermometer	1
158	Z71307	Hex Bolt, 3/8NC x 3/4	3
159	Z72231	Hex Lock Nut, 3/8NC	5
160	Z72958	Riv-Nut 3/8NC x 150	8
161	Z76133	Flange Bolt, 3/8NC x 3/4	8
162	Z78303	Machine Screw, #10-32NF x 1/2	6
163	Z93110	Remote Vent 1/4" Barb	1
164	Z93111	Vent Grommet	1
165	Z93112	Fuel Gauge, Grommet x 18"	1
166	Z93115	Remote Fuel Gauge Grommet	1
167	Z93116	TIPS Rollover Fuel Cap - Diesel	1
168	Z93117	8" Ball Chain Lanyard	1
169	Z93205	Car Battery	1
170	Z93117-1	Tether Wireform 2-1/4"	1

Fuel & Hydraulic Tanks

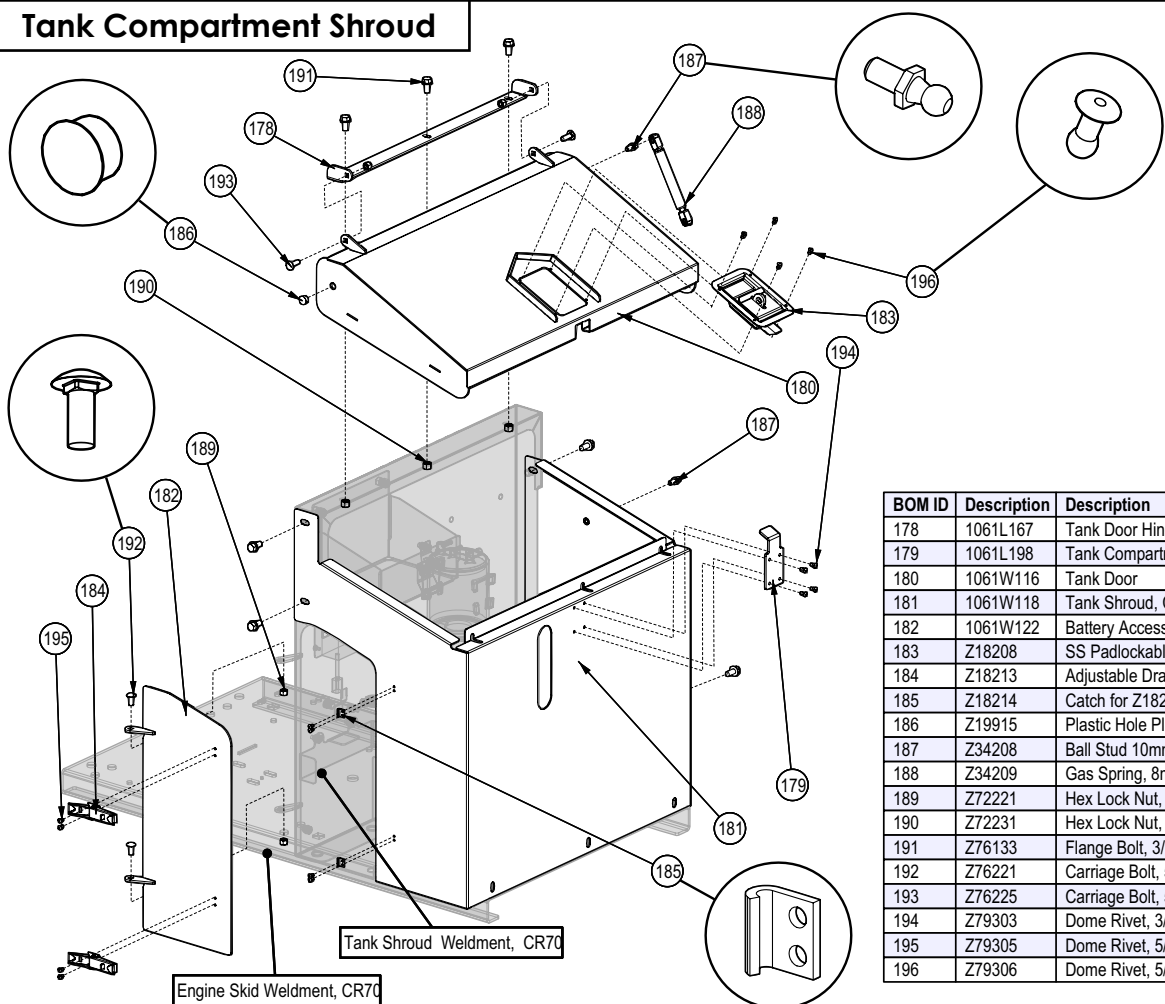
BOM ID	Description	Description	Qty
148	1060L334	Lock Ring, Tether	1
149	1060S103	Fuel Pickup Tube	1
150	1060m103	Custom Adapter MP08 x FP06	1
151	1061L159	Tank Isolator Rail	1
152	1061W112	Fuel Tank Weldment	1
153	1061W113	Hydraulic Tank Weldment	1
154	Z51189	Elbow 90 HB x MP 0506	1
155	Z51192	Socket Plug MP08	2
156	Z55403	Breather Filler Cap, Locking	1
157	Z55908	Reservoir Sight Level Thermometer	1
158	Z71307	Hex Bolt, 3/8NC x 3/4	3
159	Z72231	Hex Lock Nut, 3/8NC	5
160	Z72958	Riv-Nut 3/8NC x 150	8
161	Z76133	Flange Bolt, 3/8NC x 3/4	8
162	Z78303	Machine Screw, #10-32NF x 1/2	6
163	Z93110	Remote Vent 1/4" Barb	1
164	Z93111	Vent Grommet	1
165	Z93112	Fuel Gauge, Grommet x 18"	1
166	Z93115	Remote Fuel Gauge Grommet	1
167	Z93116	TIPS Rollover Fuel Cap - Diesel	1
168	Z93117	8" Ball Chain Lanyard	1
169	Z93205	Car Battery	1
170	Z93117-1	Tether Wireform 2-1/4"	1

Hydraulic Tank Rear Detail



BOM ID	Description	Description	Qty
170	Z51188	Straight, HB x MP 1612	1
171	Z51453	Elbow 90 JIC x MP 0812	1
172	Z51594	Straight, HB x FJICX 1616	1
173	Z52424	Suction Hose, 1" x 19"	1
174	Z55101	Suction Strainer, 10gpm	1
175	Z55301	Oil Filter - 3/4" - Particulate	1
176	Z55302	Filter Cap, 3/4 x 3/4	1
177	Z79401	Hose Clamp, #16	2

Tank Compartment Shroud



BOM ID	Description	Description	Qty
178	1061L167	Tank Door Hinge Rail	1
179	1061L198	Tank Compartment Strike Plate	1
180	1061W116	Tank Door	1
181	1061W118	Tank Shroud, CR70	1
182	1061W122	Battery Access Door	1
183	Z18208	SS Padlockable Paddle Latch	1
184	Z18213	Adjustable Draw Latch, 1-3/4"	2
185	Z18214	Catch for Z18213	2
186	Z19915	Plastic Hole Plug 9/16"	1
187	Z34208	Ball Stud 10mm x 5/16NC	2
188	Z34209	Gas Spring, 8mm x 3.15" Stroke 56lbs	1
189	Z72221	Hex Lock Nut, 5/16NC	4
190	Z72231	Hex Lock Nut, 3/8NC	3
191	Z76133	Flange Bolt, 3/8NC x 3/4"	7
192	Z76221	Carriage Bolt, 5/16NC x 3/4"	2
193	Z76225	Carriage Bolt, 5/16NC x 1"	2
194	Z79303	Dome Rivet, 3/16" x 1/4"	4
195	Z79305	Dome Rivet, 5/32" x 3/16"	8
196	Z79306	Dome Rivet, 5/32" x 1/4"	4

Discharge Chute

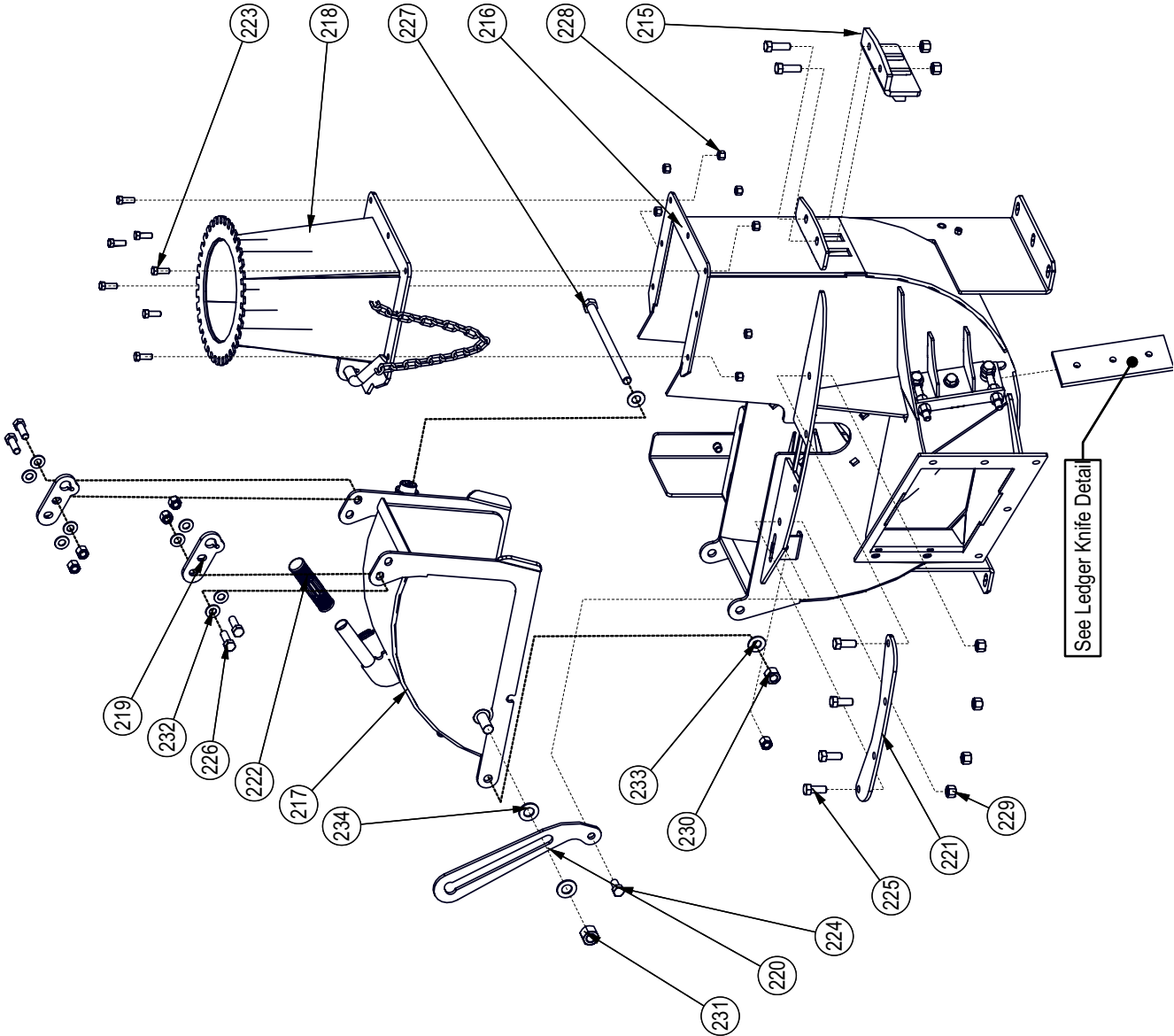
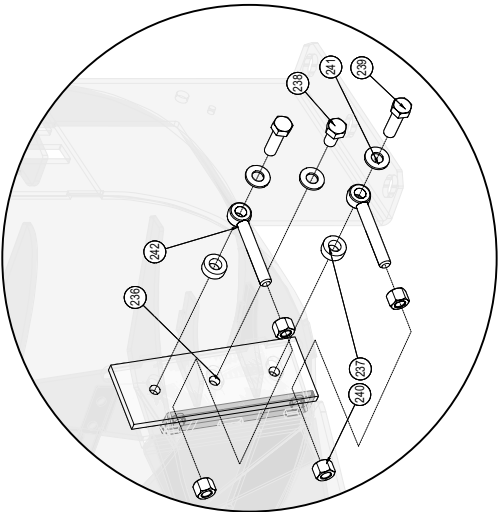
BOM ID	Part No.	Description	Qty
197	1060W127	CR100 Discharge Deflector	1
198	1060W129	Latch Release Weldment	1
199	1060W145	Deflector Handle Weldment	1
200	1061W107	Discharge Chute, CR70	1
201	1060L198	CR100 Hood Capture Ring	2
202	1060L199	CR100 Spacer Ring	2
203	1060S111	Discharge Thrust Bearing, Wide	4
204	1060S112	Discharge Thrust Bearing, Narrow	4
205	Z19321	Grip, 1" x 5"	2
206	Z19914	Plastic Pipe Plug 1" OD	2
207	Z29204	Grease Fitting, 1/8NPT x 45	1
208	Z31305	Spring 5/8 x 3" Medium	1
209	Z31403	Spring 27mm x 178mm x 0.105	1
210	Z71215	Hex Bolt, 5/16NC x 1-1/2	10
211	Z72221	Hex Lock Nut, 5/16NC	10
212	Z72231	Hex Lock Nut, 3/8NC	5
213	Z75552	Shoulder Bolt, 1/2 x 5/8	1
214	Z76231	Carriage Bolt, 3/8NC x 1	2

Rotor Housing Front

BOM ID	Part No.	Description	Qty
235	Z18210	Spring Pin 1/2 x 1" Stroke, No Pegs	1
236	Z62819	Rubberized Wire Clamp, 1/2"	2
237	Z62821	Rubberized Wire Clamp, 5/8"	1
238	Z62822	Rubber Grommet 3/4 x 1/4	1
239	Z62823	Rubber Grommet 3/4 x 1/8	4
240	Z72211	Hex Lock Nut, 1/4NC	3
241	Z72752	Machine Nut, #10-32NF	8
242	Z72959	Riv-Nut 3/8NC x 3/12	6
243	Z75203	FHCS, #10-32NF x 3/4	4
244	Z78301	Machine Screw, 1/4-20NC x 3/4	3

Rotor Housing Rear

BOM ID	Part No.	Description	Qty
215	1060W103	Twig Breaker, CR100	1
216	1061W106	Lower Housing Weldment, CR70	1
217	1061W108	CR70 Upper Housing	1
218	1061W109	Square to Round Weldment, CR70	1
219	1060L284	Hood Closure Interface	2
220	1061L142	Rotation Stop, CR70	1
221	1061L197	Rotor Tie Plate, CR70	1
222	Z19321	Grip, 1" x 5"	1
223	Z71310	Hex Bolt, 3/8NC x 1	7
224	Z71510	Hex Bolt, 1/2NC x 1	1
225	Z71512	Hex Bolt, 1/2NC x 1-1/4	4
226	Z71515	Hex Bolt, 1/2NC x 1-1/2	6
227	Z71662	Hex Bolt, 5/8NC x 10	1
228	Z72231	Hex Lock Nut, 3/8NC	7
229	Z72251	Hex Lock Nut, 1/2NC	11
230	Z72261	Hex Lock Nut, 5/8NC	1
231	Z72271	Hex Lock Nut, 3/4NC	1
232	Z73151	Flat Washer, 1/2	8
233	Z73161	Flat Washer, 5/8	2
234	Z73171	Flat Washer, 3/4"	2
236	1012M204	Knife, BX62 Ledger	1
237	1023L150	Ledger Washer	2
238	Z71572G8	Hex Bolt, 1/2NF x 7/8 Gr8	1
239	Z71579G8	Hex Bolt, 1/2NF x 1-3/4 Gr8	2
240	Z72251	Hex Lock Nut, 1/2NC	4
242	Z73151	Flat Washer, 1/2	3
244	Z76553	Rod End, 1/2NC x 3-1/2" Full Threads	2



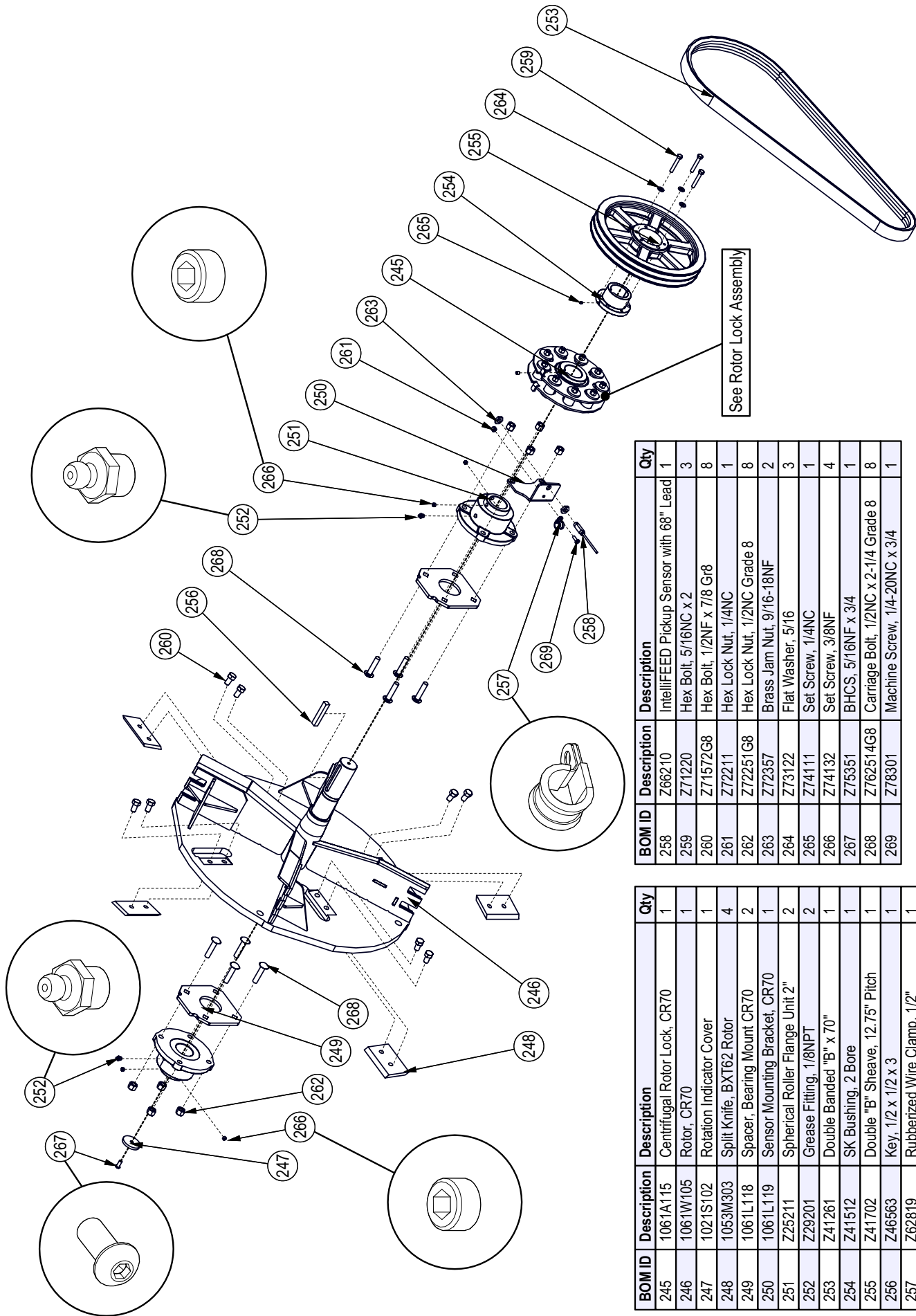
Rotor Interlock Latch

BOM ID	Part #	Description	Qty
243	1056M115	Spacer, Shredder .580	3
245	1060L281	Interlock Handle Base LH	1
246	1060L281H	1060L281 Mirror	1
247	1060L282	Interlock Early Warning	1
248	1060L287	Rotor Hood Safety Latch	1
249	1060L328	Interlock Tip	1
251	1060L330	Linkage	1
252	1060W256	Interlock Engage Handle	1
253	Z19321	Grip, 1" x 5"	1
254	Z31401	Spring 3/4 x 4" Heavy	1
255	Z71112	Hex Bolt, 1/4NC x 1-1/4	2
256	Z71312	Hex Bolt, 3/8NC x 1-1/4	1
257	Z71315	Hex Bolt, 3/8NC x 1-1/2	2
258	Z71317	Hex Bolt, 3/8NC x 1-3/4	1
259	Z71622	Hex Bolt, 5/8NC x 2-1/4	1
260	Z72211	Hex Lock Nut, 1/4NC	8
261	Z72221	Hex Lock Nut, 5/16NC	2
262	Z72231	Hex Lock Nut, 3/8NC	4
263	Z72261	Hex Lock Nut, 5/8NC	3
265	Z73131	Flat Washer, 3/8	5
266	Z73161	Flat Washer, 5/8	7
267	Z73171	Flat Washer, 3/4"	2
268	Z75572	Shoulder Bolt, 3/4 x 3/4	2
269	Z76111	Flange Bolt, 1/4NC x 3/4	6
270	Z76522	Eye Bolt 5/16NC x 2	1

Rotor Interlock Clutch

BOM ID	Part No.	Description	Qty
277	1061W255	Interlock Clutch Weldment, CR70	1
278	1060M106	Interlock Roller	9
279	1060I279	Interlock Roller Head	18
280	Z32601	Die Spring, 1/2" x 1-1/2" Red	9
281	Z71378G8	Hex Bolt, 3/8NF x 2-1/2 Grade 8	9
282	Z72232G8	Hex Lock Nut 3/8NF Grade 8	9
283	Z74122	Set Screw, 5/16NF	1

Rotor Assembly

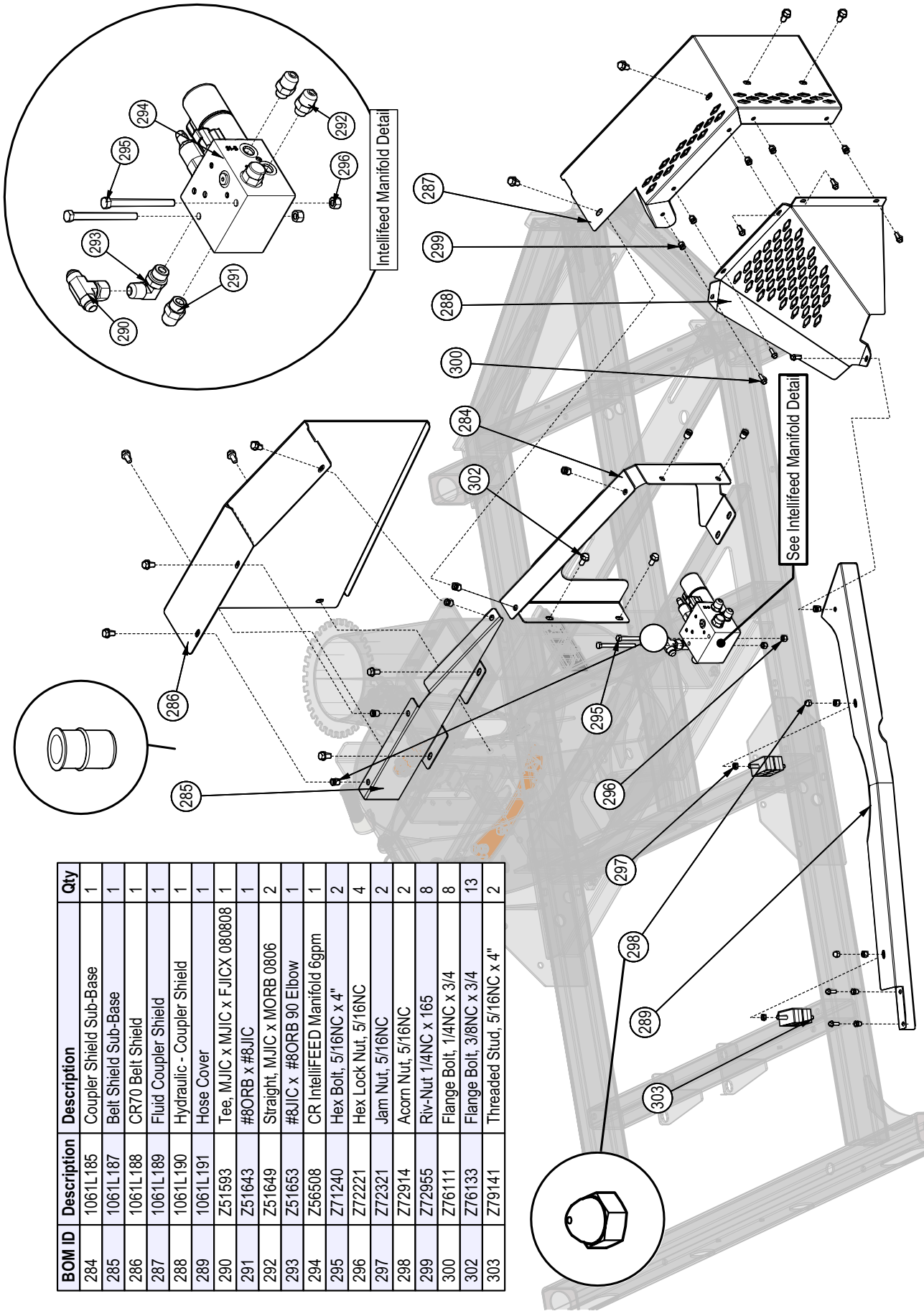


BOM ID	Description	Description	Qty
258	Z66210	IntelliFEED Pickup Sensor with 68" Lead	1
259	Z71220	Hex Bolt, 5/16NC x 2	3
260	Z71572G8	Hex Bolt, 1/2NF x 7/8 Gr8	8
261	Z72211	Hex Lock Nut, 1/4NC	1
262	Z72251G8	Hex Lock Nut, 1/2NC Grade 8	8
263	Z72357	Brass Jam Nut, 9/16-18NF	2
264	Z73122	Flat Washer, 5/16	3
265	Z74111	Set Screw, 1/4NC	1
266	Z74132	Set Screw, 3/8NF	4
267	Z76351	BHCS, 5/16NF x 3/4	1
268	Z762514G8	Carriage Bolt, 1/2NC x 2-1/4 Grade 8	8
269	Z78301	Machine Screw, 1/4-20NC x 3/4	1

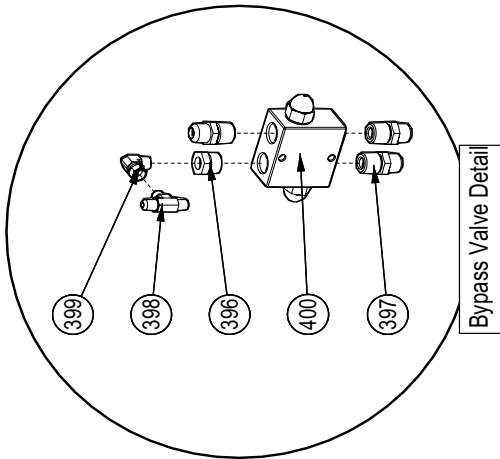
BOM ID	Description	Description	Qty
245	1061A115	Centrifugal Rotor Lock, CR70	1
246	1061W105	Rotor, CR70	1
247	1021S102	Rotation Indicator Cover	1
248	1053M303	Split Knife, BXT62 Rotor	4
249	1061L118	Spacer, Bearing Mount CR70	2
250	1061L119	Sensor Mounting Bracket, CR70	1
251	Z25211	Spherical Roller Flange Unit 2"	2
252	Z29201	Grease Fitting, 1/8NPT	2
253	Z41261	Double Banded "B" x 70"	1
254	Z41512	SK Bushing, 2 Bore	1
255	Z41702	Double "B" Sheave, 12.75" Pitch	1
256	Z46563	Key, 1/2 x 1/2 x 3	1
257	Z62819	Rubberized Wire Clamp, 1/2"	1

Pulley Shroud

BOM ID	Description	Qty
284	1061L185 Coupler Shield Sub-Base	1
285	1061L187 Belt Shield Sub-Base	1
286	1061L188 CR70 Belt Shield	1
287	1061L189 Fluid Coupler Shield	1
288	1061L190 Hydraulic - Coupler Shield	1
289	1061L191 Hose Cover	1
290	Z51593 Tee, MJIC x MJIC x FJICX 080808	1
291	Z51643 #8ORB x #8JIC	1
292	Z51649 Straight, MJIC x MORB 0806	2
293	Z51653 #8JIC x #8ORB 90 Elbow	1
294	Z56508 CR IntelliFEED Manifold 6gpm	1
295	Z71240 Hex Bolt, 5/16NC x 4"	2
296	Z72221 Hex Lock Nut, 5/16NC	4
297	Z72321 Jam Nut, 5/16NC	2
298	Z72914 Acorn Nut, 5/16NC	2
299	Z72955 Riv-Nut 1/4NC x 165	8
300	Z76111 Flange Bolt, 1/4NC x 3/4	8
302	Z76133 Flange Bolt, 3/8NC x 3/4	13
303	Z79141 Threaded Stud, 5/16NC x 4"	2

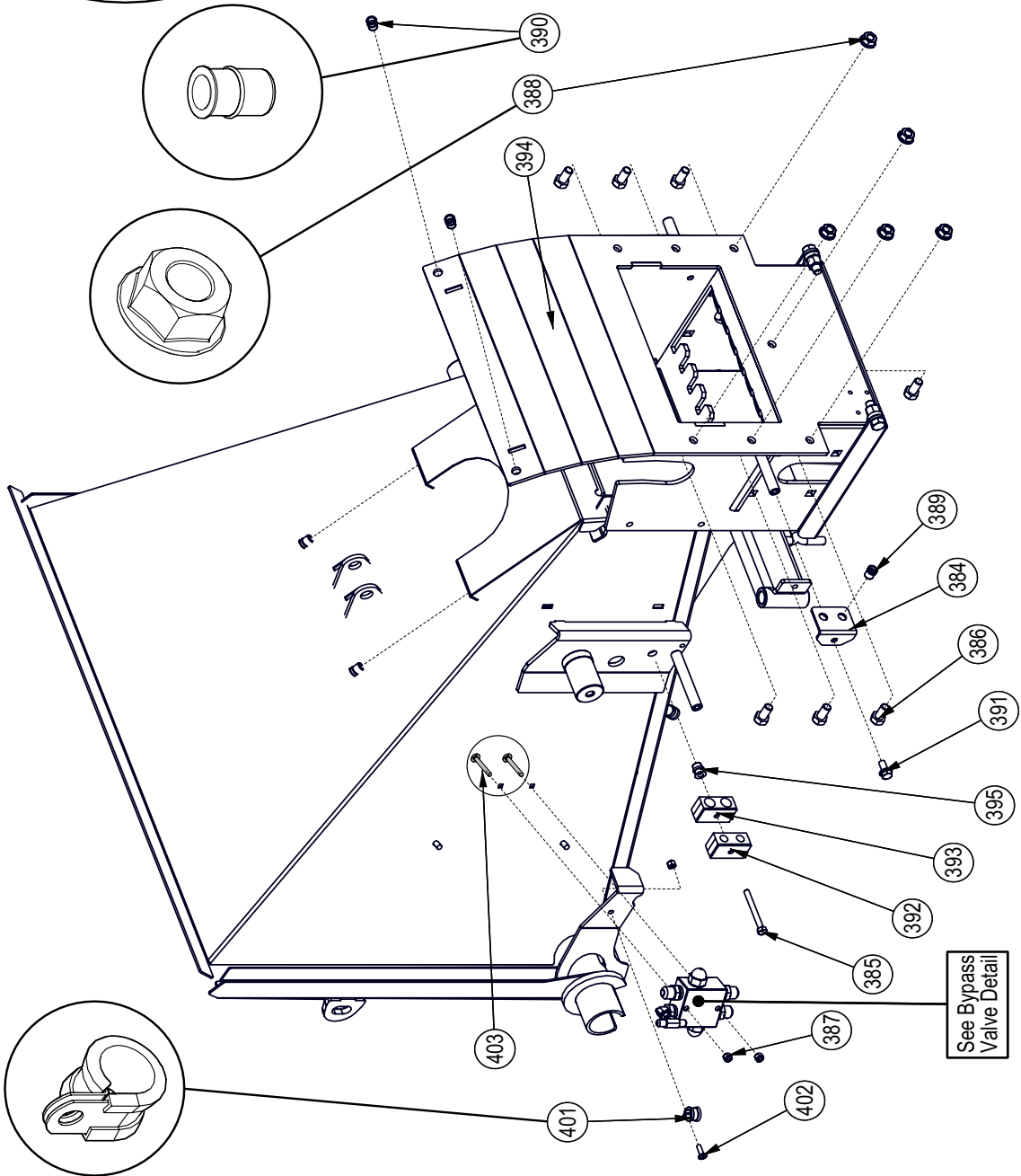


Hopper Top / Back View



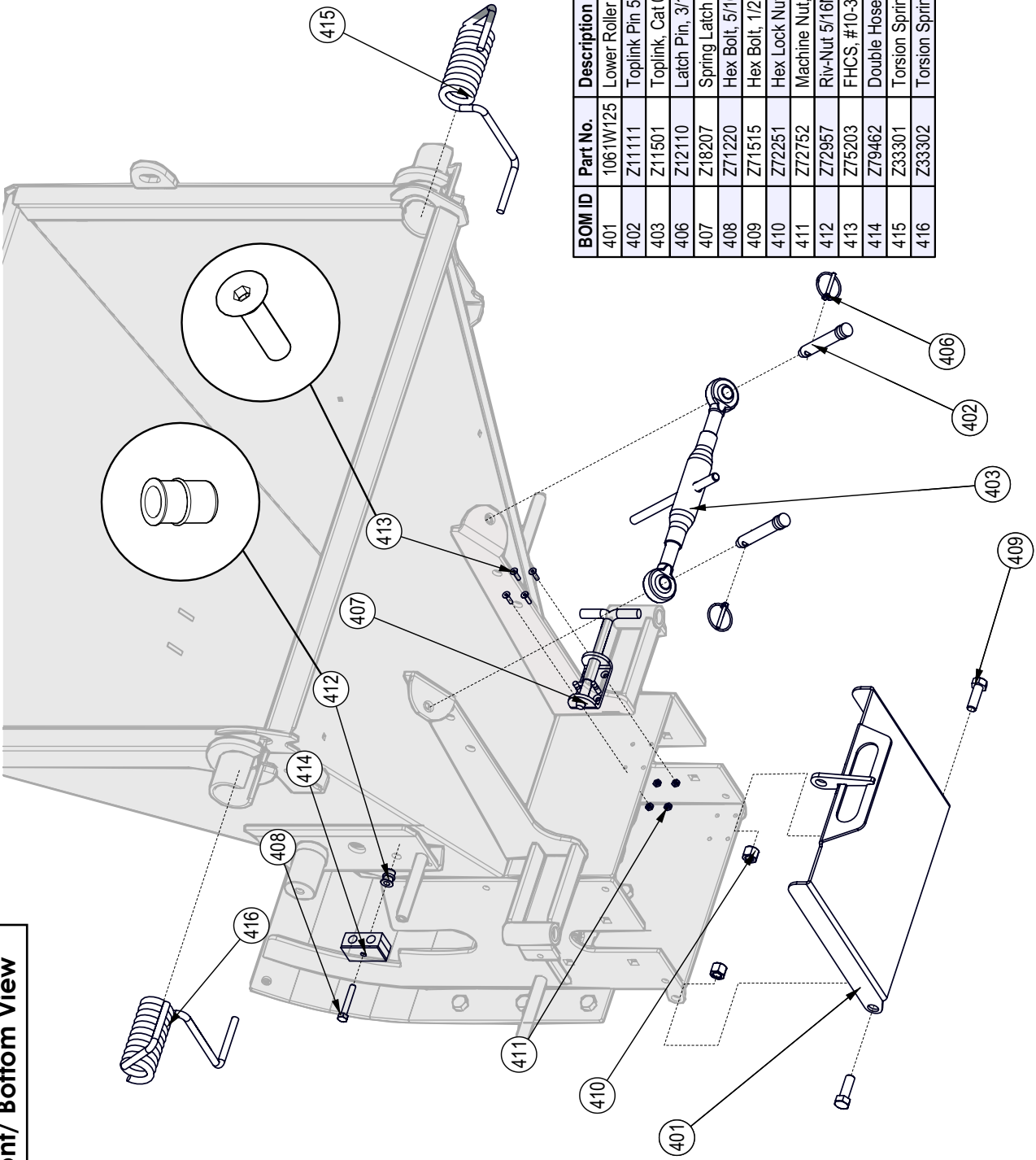
Bypass Valve Detail

BOM ID	Part No.	Description	Qty
384	1023L300	Bridge Guard Mount	1
385	Z71230	Hex Bolt, 5/16NC x 3	1
386	Z71510	Hex Bolt, 1/2NC x 1	7
387	Z72211	Hex Lock Nut, 1/4NC	3
388	Z72551	Flange Nut 1/2NC	5
389	Z72958	Riv-Nut 3/8NC x 150	3
390	Z72959	Riv-Nut 3/8NC x 312	2
391	Z76133	Flange Bolt, 3/8NC x 3/4	1
392	Z79462	Double Hose Clamp 1/2"	1
393	Z79463	Double Hose Clamp 11/16"	1
394	1061W102	CR70 Main Hopper Weldment	1
395	Z72957	Riv-Nut 5/16NC x 312	1
396	Z51222	Reducer, 1/2MP x 1/4FP	1
397	Z51442	#8 JIC x 1/2NPT	2
398	Z51488	Tee MJIC x MJIC x MJIC 040404	1
399	Z51522	Elbow 90 MP x FJICX 0404	1
400	Z56401	Crossover Relief Valve	1
401	Z62819	Rubberized Wire Clamp, 1/2"	1
402	Z78301	Machine Screw, 1/4-20NC x 3/4	1
403	Z76213	Carriage Bolt, 1/4NC x 2	2



See Bypass Valve Detail

Hopper Front/ Bottom View

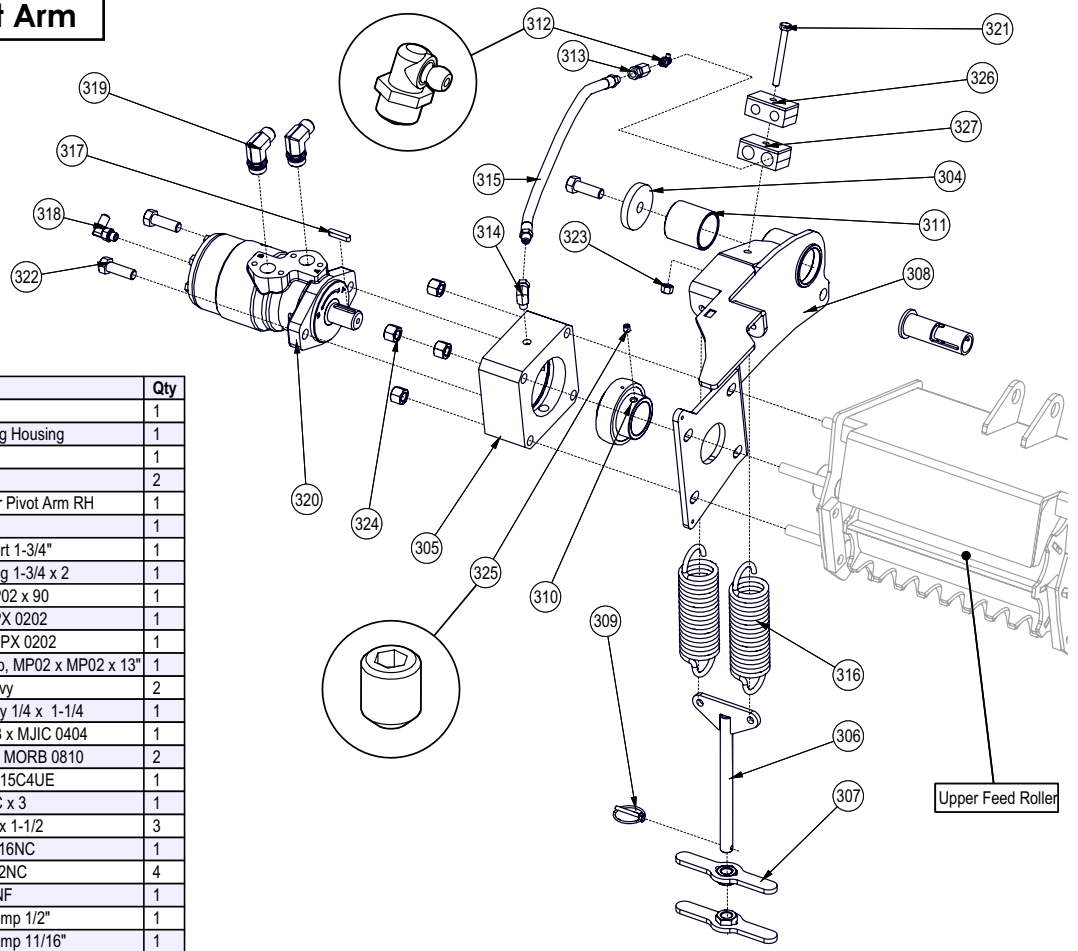


BOM ID	Part No.	Description	Qty
401	1061W125	Lower Roller Cover Weldment	1
402	Z11111	Toplink Pin 5/8 x 2-3/4	2
403	Z11501	Toplink, Cat 0	1
406	Z12110	Latch Pin, 3/16	2
407	Z18207	Spring Latch Pin 1/2 x 1" Stroke	1
408	Z71220	Hex Bolt, 5/16NC x 2	1
409	Z71515	Hex Bolt, 1/2NC x 1-1/2	2
410	Z72251	Hex Lock Nut, 1/2NC	2
411	Z72752	Machine Nut, #10-32NF	4
412	Z72957	Riv-Nut 5/16NC x 312	1
413	Z75203	FHCS, #10-32NF x 3/4	4
414	Z79462	Double Hose Clamp 1/2"	1
415	Z33301	Torsion Spring 3/8wire x 2 O.D. x 5" RH	1
416	Z33302	Torsion Spring 3/8wire x 2 O.D. x 5" LH	1

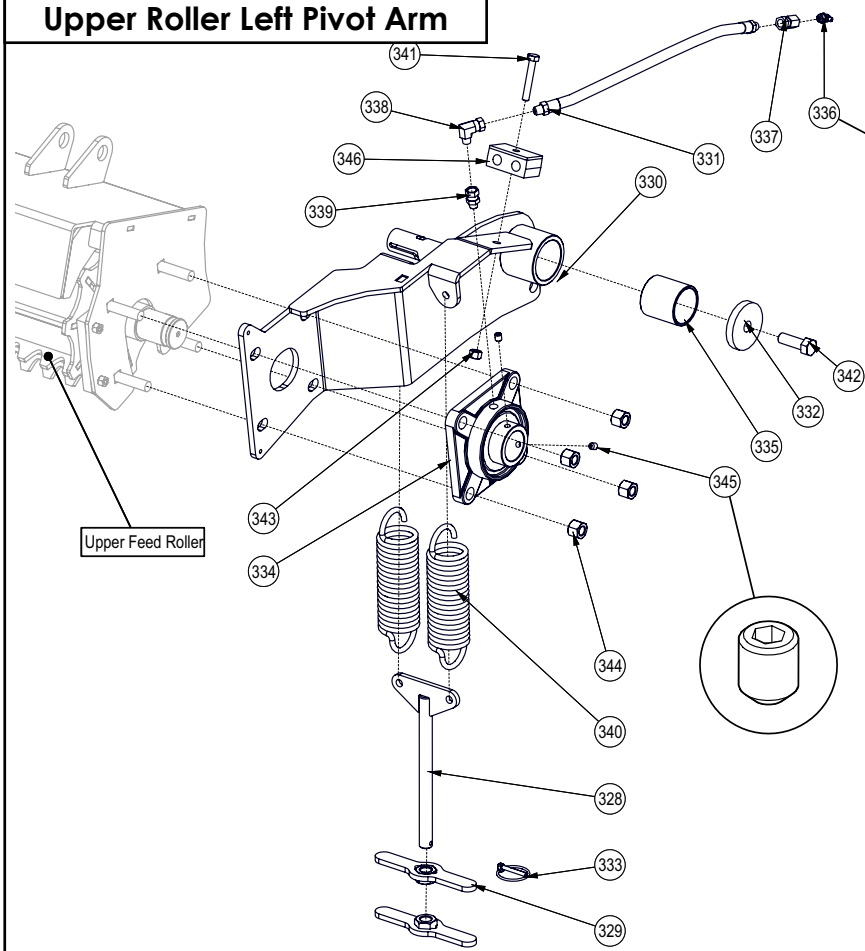
Upper Roller Right Pivot Arm

Seal Kit for
#Z54201 Geroller
Motor, 315C4UE
SK MLHR-U/D,E

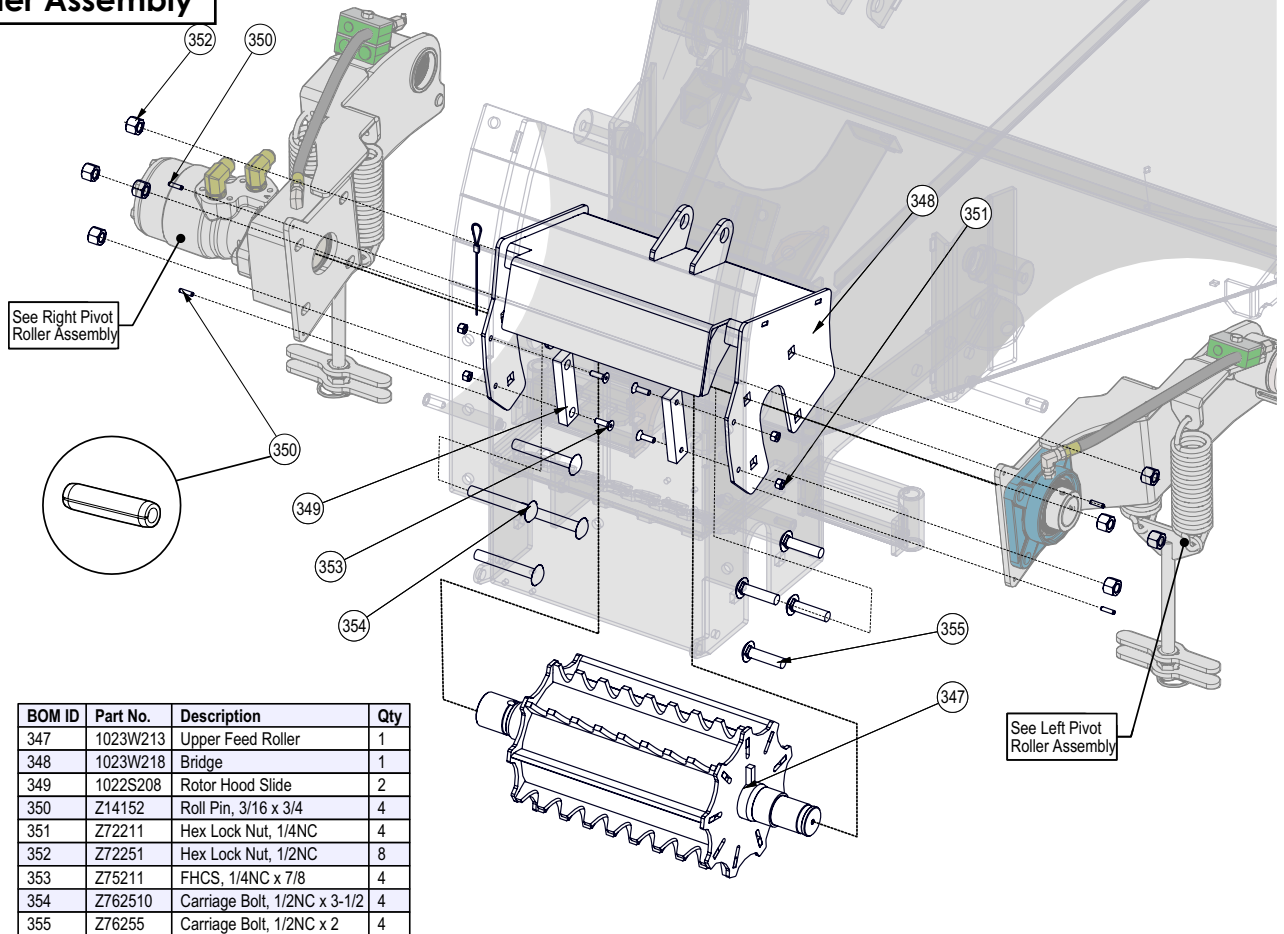
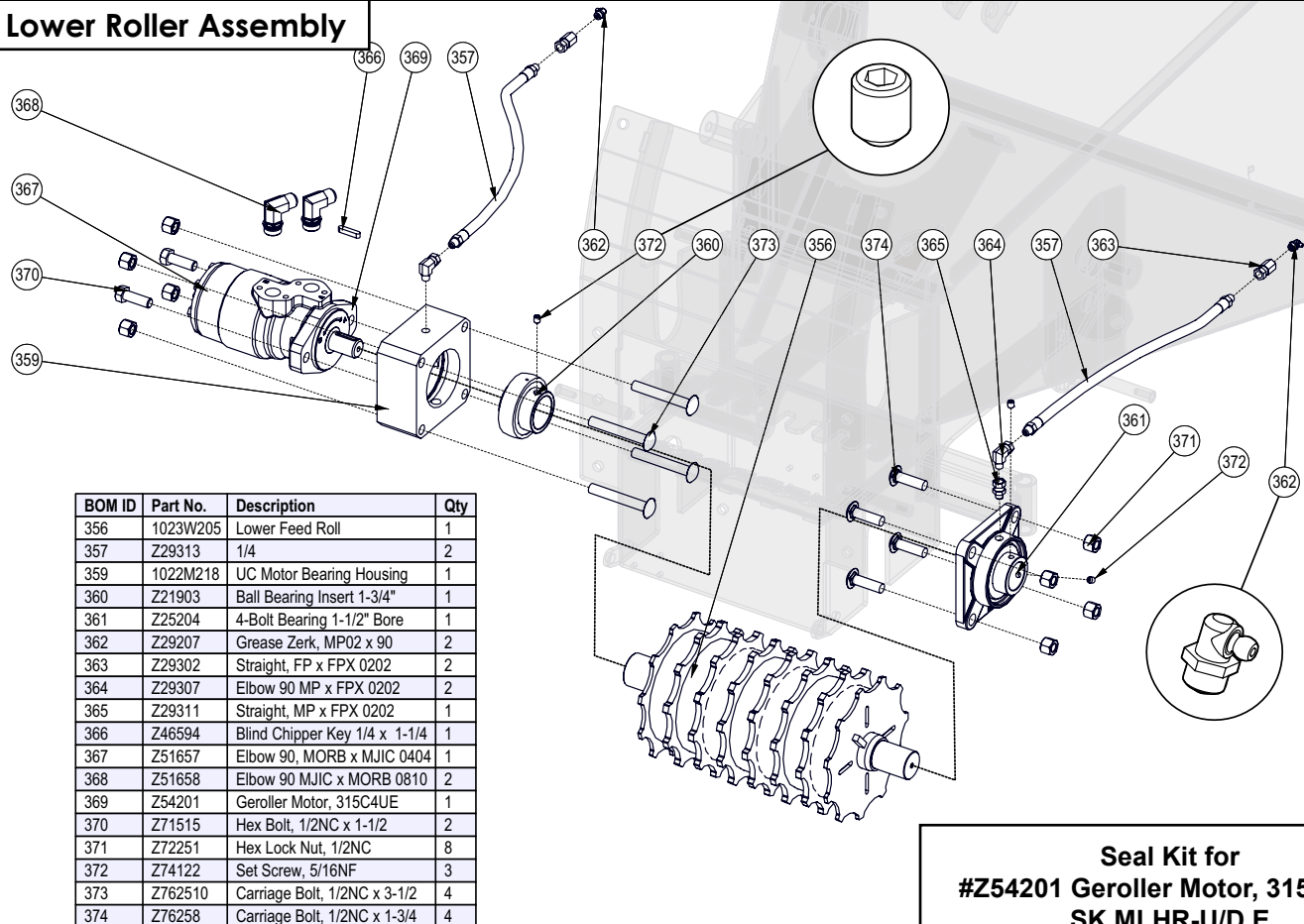
BOM ID	Part No.	Description	Qty
304	1015L618	Capture Washer	1
305	1022M218	UC Motor Bearing Housing	1
306	1022W206	Spring Yoke	1
307	1022W220	Nut Handle	2
308	1061W103H	Weldment, Roller Pivot Arm RH	1
309	Z12110	Latch Pin, 3/16	1
310	Z21903	Ball Bearing Insert 1-3/4"	1
311	Z27101	Fiberglide Bearing 1-3/4 x 2	1
312	Z29207	Grease Zerk, MP02 x 90	1
313	Z29302	Straight, FP x FFX 0202	1
314	Z29307	Elbow 90 MP x FFX 0202	1
315	Z29312	1/4" Grease Whip, MP02 x MP02 x 13"	1
316	Z31501	Spring 2 x 7 Heavy	2
317	Z46594	Blind Chipper Key 1/4 x 1-1/4	1
318	Z51657	Elbow 90, MORB x MJIC 0404	1
319	Z51658	Elbow 90 MJIC x MORB 0810	2
320	Z54201	Geroller Motor, 315C4UE	1
321	Z71230	Hex Bolt, 5/16NC x 3	1
322	Z71515	Hex Bolt, 1/2NC x 1-1/2	3
323	Z72221	Hex Lock Nut, 5/16NC	1
324	Z72251	Hex Lock Nut, 1/2NC	4
325	Z74122	Set Screw, 5/16NF	1
326	Z79462	Double Hose Clamp 1/2"	1
327	Z79463	Double Hose Clamp 11/16"	1



Upper Roller Left Pivot Arm

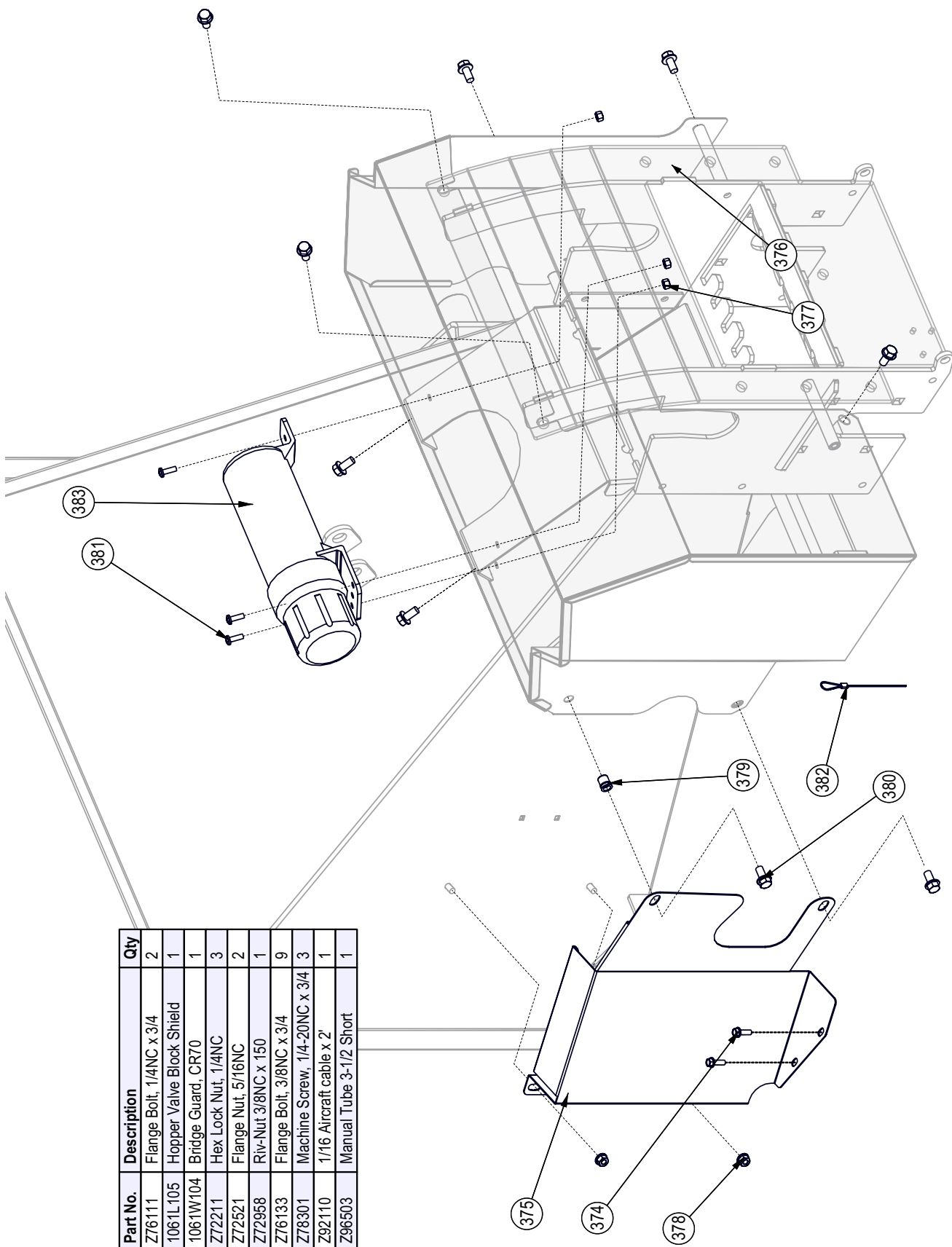


BOM ID	Part No.	Description	Qty
328	1022W206	Spring Yoke	1
329	1022W220	Nut Handle	2
330	1061W103	Weldment, Roller Pivot Arm LH	1
331	Z29312	1/4" Grease Whip, MP02 x MP02 x 13"	1
332	1015L618	Capture Washer	1
333	Z12110	Latch Pin, 3/16	1
334	Z25204	4-Bolt Bearing 1-1/2" Bore	1
335	Z27101	Fiberglide Bearing 1-3/4 x 2	1
336	Z29207	Grease Zerk, MP02 x 90	1
337	Z29302	Straight, FP x FFX 0202	1
338	Z29307	Elbow 90 MP x FFX 0202	1
339	Z29311	Straight, MP x FFX 0202	1
340	Z31501	Spring 2 x 7 Heavy	2
341	Z71220	Hex Bolt, 5/16NC x 2	1
342	Z71515	Hex Bolt, 1/2NC x 1-1/2	1
343	Z72221	Hex Lock Nut, 5/16NC	1
344	Z72251	Hex Lock Nut, 1/2NC	4
345	Z74122	Set Screw, 5/16NF	2
346	Z79462	Double Hose Clamp 1/2"	1

Upper Roller Assembly**Lower Roller Assembly**

**Seal Kit for
#Z54201 Geroller Motor, 315C4UE
SK MLHR-U/D,E**

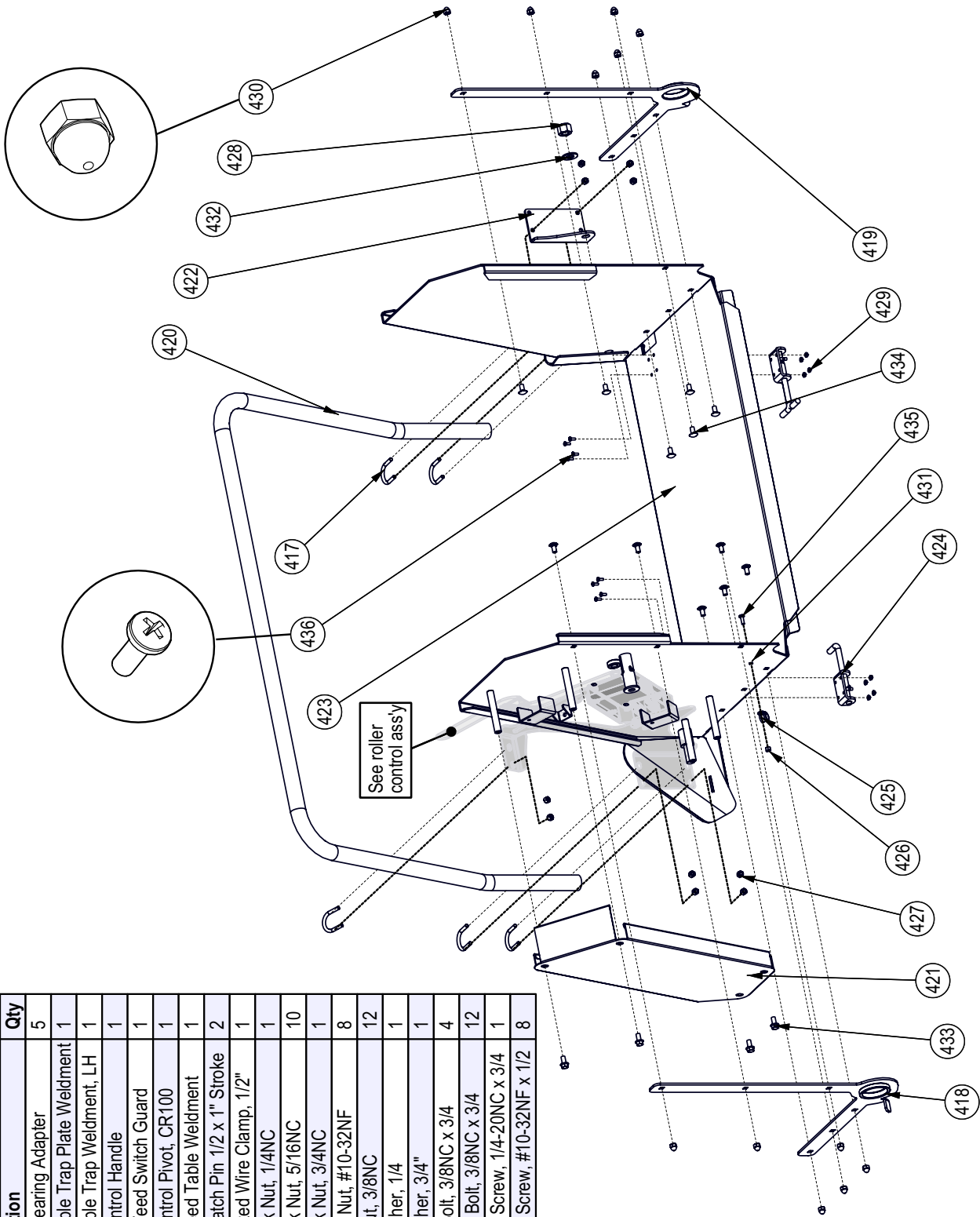
Hopper Roller Shrouding



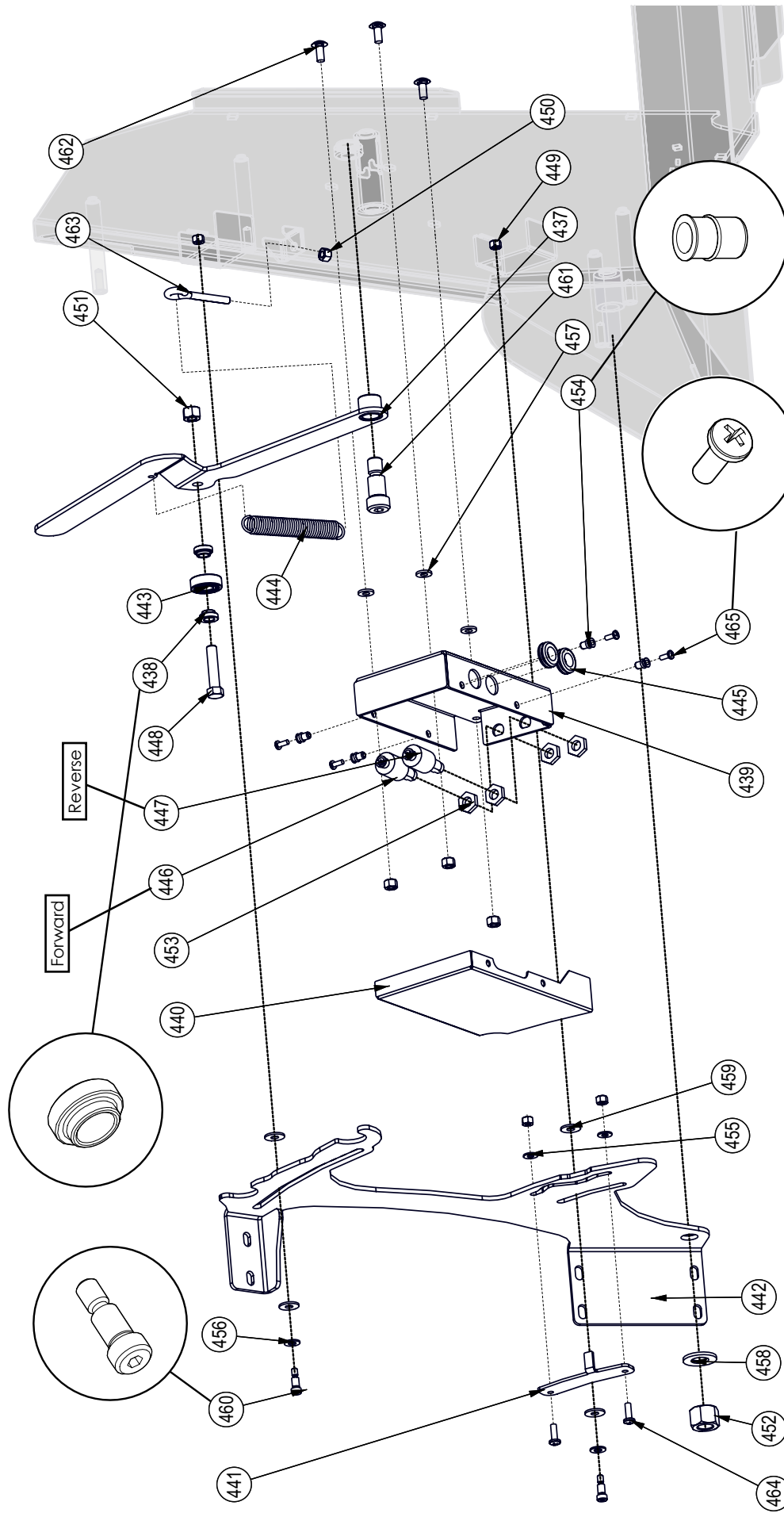
BOM ID	Part No.	Description	Qty
374	Z76111	Flange Bolt, 1/4NC x 3/4	2
375	1061L105	Hopper Valve Block Shield	1
376	1061W104	Bridge Guard, CR70	1
377	Z72211	Hex Lock Nut, 1/4NC	3
378	Z72521	Flange Nut, 5/16NC	2
379	Z72958	Riv-Nut 3/8NC x 150	1
380	Z76133	Flange Bolt, 3/8NC x 3/4	9
381	Z78301	Machine Screw, 1/4-20NC x 3/4	3
382	Z92110	1/16 Aircraft cable x 2'	1
383	Z96503	Manual Tube 3-1/2 Short	1

Feed Table

BOM ID	Part No.	Description	Qty
417	1015S538	U-bolt, Bearing Adapter	5
418	1022W230	Feed Table Trap Plate Weldment	1
419	1022W230H	Feed Table Trap Weldment, LH	1
420	1023S203	Feed Control Handle	1
421	1060L302	CR100 Feed Switch Guard	1
422	1060L306	Feed Control Pivot, CR100	1
423	1061W101	CR70 Feed Table Weldment	1
424	Z18207	Spring Latch Pin 1/2 x 1" Stroke	2
425	Z62819	Rubberized Wire Clamp, 1/2"	1
426	Z72211	Hex Lock Nut, 1/4NC	1
427	Z72221	Hex Lock Nut, 5/16NC	10
428	Z72271	Hex Lock Nut, 3/4NC	1
429	Z72752	Machine Nut, #10-32NF	8
430	Z72911	Acorn Nut, 3/8NC	12
431	Z73111	Flat Washer, 1/4	1
432	Z73171	Flat Washer, 3/4"	1
433	Z76133	Flange Bolt, 3/8NC x 3/4	4
434	Z76233	Carriage Bolt, 3/8NC x 3/4	12
435	Z78301	Machine Screw, 1/4-20NC x 3/4	1
436	Z78303	Machine Screw, #10-32NF x 1/2	8



Feed Roller Control Detail

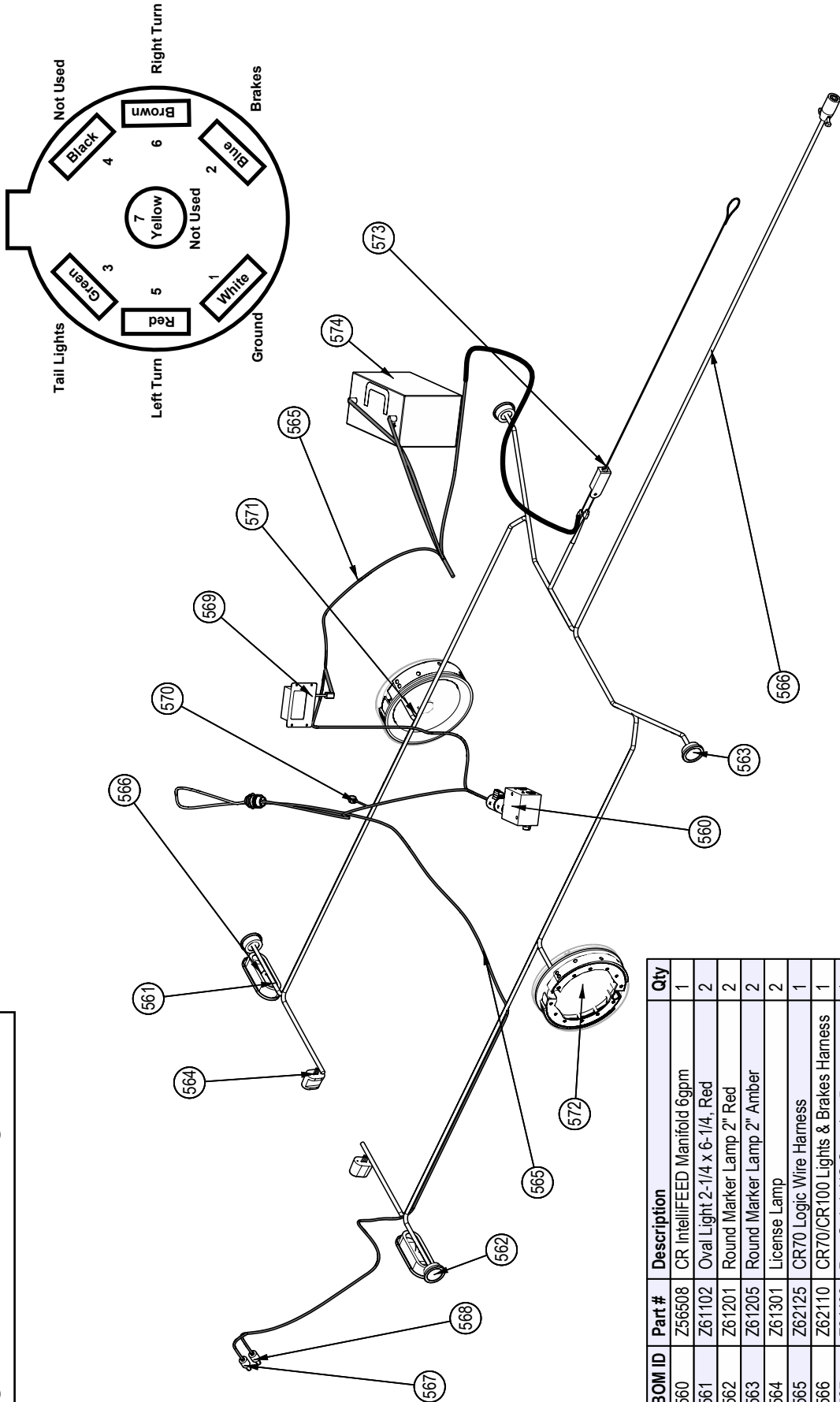


BOM ID	Part No.	Description	Qty
437	1060W302	Detent Reset Weldment, CR100	1
438	1015M537	Bushing, Bearing	2
439	1060L301	Switch Mount Plate, CR100	1
440	1060L303	Sensor Box Lid, CR100	1
441	1060L304	Feed Pickup Trigger, CR100	1
442	1060L305	CR100 Control Base Pivot Link	1
443	Z21203	Ball Bearing 6202 2RS	1
444	Z31401	Spring 3/4 x 4" Heavy	1
445	Z62823	Rubber Grommet 3/4 x 1/8	2
446	Z64403	Prox Switch NO Sourcing 5amp	1

BOM ID	Part No.	Description	Qty
447	Z64405	Prox Switch NO Sinking 5amp	1
448	Z71420	Hex Bolt, 7/16NC x 2	1
449	Z72211	Hex Lock Nut, 1/4NC	4
450	Z72221	Hex Lock Nut, 5/16NC	4
451	Z72241	Hex Lock Nut, 7/16NC	1
452	Z72271	Hex Lock Nut, 3/4NC	1
453	Z72357	Brass Jam Nut, 9/16-18NF	4
454	Z72954	Riv-Nut #10-32NF - 130	4
455	Z73111	Flat Washer, 1/4	2
456	Z73122	Flat Washer, 5/16	2

BOM ID	Part No.	Description	Qty
457	Z73123	Rubber Flat Washer, 5/16 x 0.093"	3
458	Z73171	Flat Washer, 3/4"	1
459	Z73222	PTFE Flat Washer, 5/16 x 0.080"	4
460	Z75522	Shoulder Bolt, 5/16 x 1/2"	2
461	Z75574	Shoulder Bolt, 3/4 x 1	1
462	Z76221	Carriage Bolt, 5/16NC x 3/4	3
463	Z76522	Eye Bolt 5/16NC x 2	1
464	Z78301	Machine Screw, 1/4-20NC x 3/4	2
465	Z78303	Machine Screw, #10-32NF x 1/2	4

IntelliFeed Wiring Harness & Lights and Brakes Wiring Harness

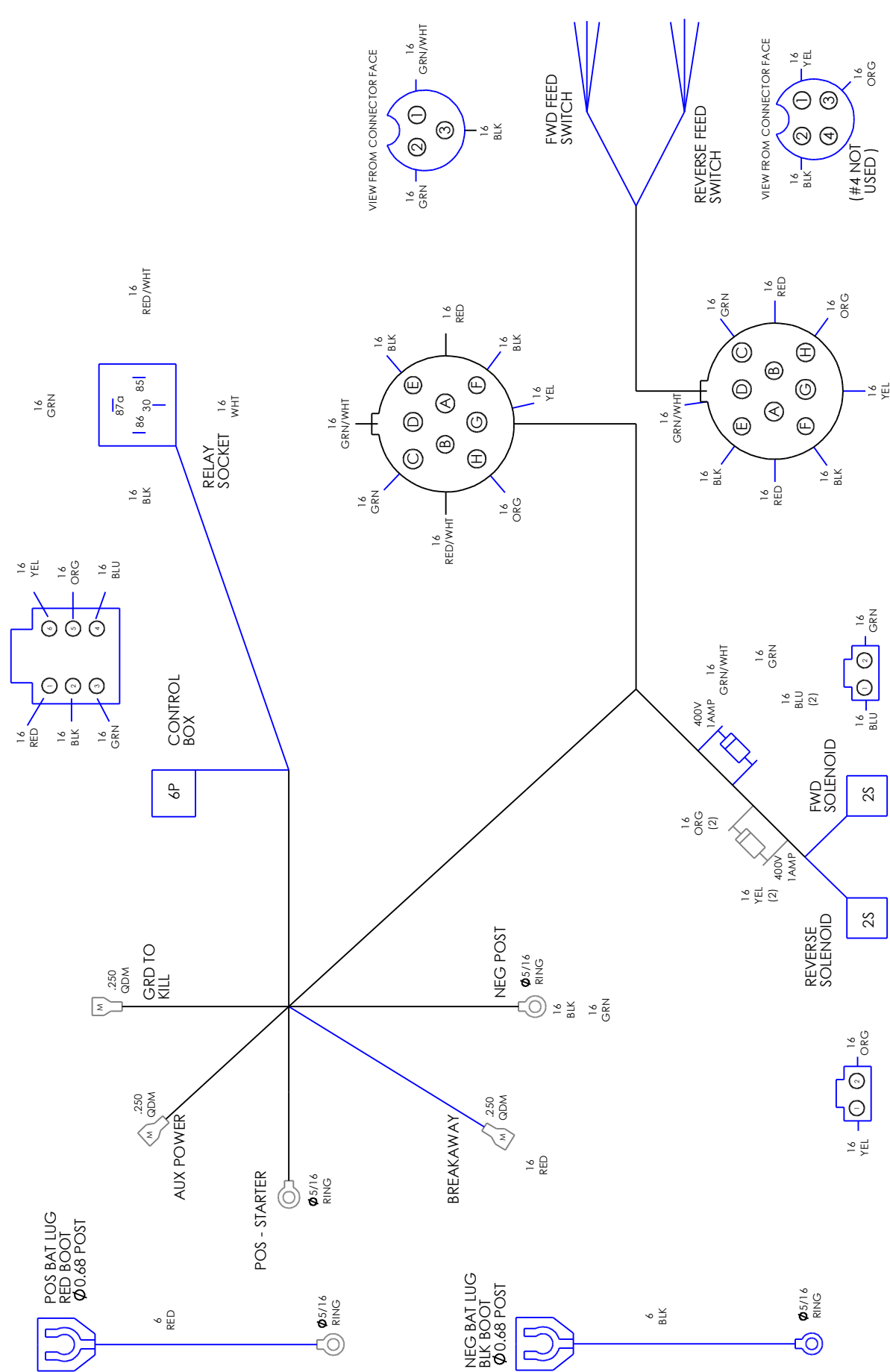


BOM ID	Part #	Description	Qty
560	Z56508	CR IntelliFEED Manifold 6gpm	1
561	Z61102	Oval Light 2-1/4 x 6-1/4, Red	2
562	Z61201	Round Marker Lamp 2" Red	2
563	Z61205	Round Marker Lamp 2" Amber	2
564	Z61301	License Lamp	2
565	Z62125	CR70 Logic Wire Harness	1
566	Z62110	CR70/CR100 Lights & Brakes Harness	1
567	Z64403	Prox Switch NO Sourcing 5amp	1
568	Z64405	Prox Switch NO Sinking 5amp	1
569	Z66204	Control, IntelliFEED	1
570	Z66210	IntelliFEED Pickup Sensor with 68" Lead	1
571	Z91708	Electric Brake, 2 1/4 x10 LH	1
572	Z91719	Electric Brake, 2 1/4 x10 RH	1
573	Z91713	Breakaway Safety Switch	1
574	Z93205	Car Battery	1

Light Bulb Replacement	
Part #	Description
Z61201	Round Marker Lamp 2" Red
Z61205	Round Marker Lamp 2" Amber
Z61102	Oval Light 2 1/4 x 6 1/4, Red
Z61301	License Lamp

Intellifeed Wiring Diagram #Z62125

NOTE: HARNESS IS BRAIDED



Hydraulic Hose Parts List

The Chart below is a complete list of hydraulic hoses for the CR70. For information on your model and its hose connections please review the hydraulic schematics on the following pages.

Part Number	Description	Qty
Z52126	1/4" Hose, FJIC04 x 90FJIC04 x 34"	1
Z52127	1/4" Hose, FJIC04 x 90FJIC04 x 26"	1
Z52250	3/8" Hose, FJIC08 x 90FJIC08 x 23"	2
Z52281	3/8" Hose, FJIC08 x 90FJIC08 x 68"	1
Z52282	3/8" Hose, FJIC08 x 90FJIC08 x 56"	1
Z52283	3/8" Hose, FJIC08 x 90FJIC08 x 75"	1
Z52353	1/2" Hose, 90FJIC08 x 90FJIC08 x 42"	1
Z52354	1/2" Hose, FJIC08 x FJIC08 x 38"	1
Z52424	Suction Hose, 1" x 19"	1

Fitting Identification

Connection Type

NPT – National Pipe Thread
JIC – Tube Flare
ORB – “O” Ring Boss
HB – Hose Barb

Connection Type

NPT

Connection Size

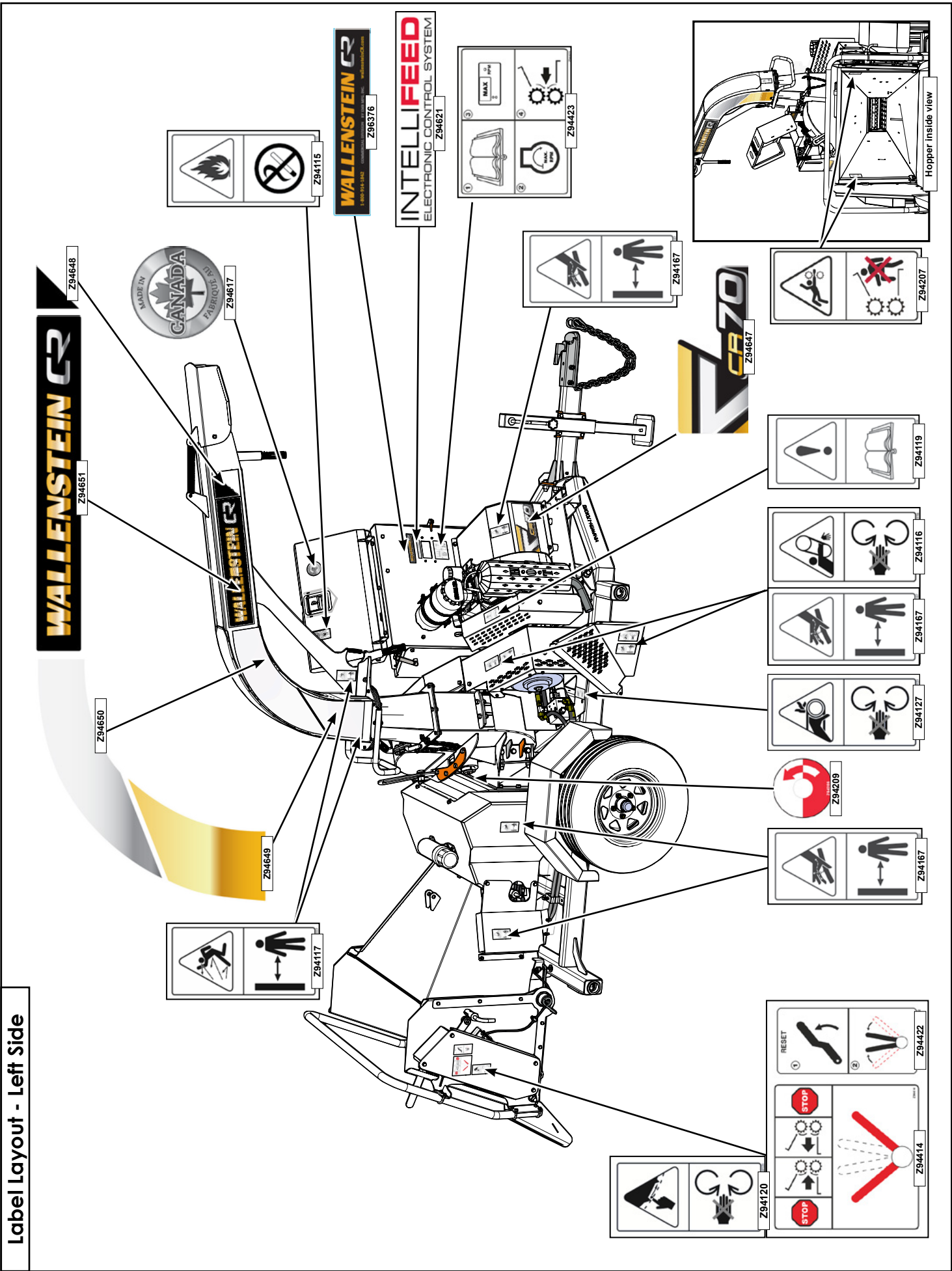
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Hydraulic Schematic Details:

- Hydraulic Pump:** Z53113
- Filters:** Z55101 (Filter), Z55302 (Filter Cap)
- Rollers:** Z54201 (Top Roller), Z54201 (Bottom Roller)
- Valves:** Z56401 (Top Roller Valve), Z56508 (Bottom Roller Valve)
- Hoses and Fittings:**
 - Z52126: 34" (86cm)
 - Z52127: 26" (66cm)
 - Z52250: 23" (59cm)
 - Z52283: 75" (191cm)
 - Z52250: 23" (59cm)
 - Z52281: 68" (143cm)
 - Z52424: 19" (49cm)
 - Z52282: 56" (143cm)
 - Z52353: 42" (107cm)
- Connections:** JIC 04, JIC 08, JIC 12, JIC 16, ORB 04, ORB 06, ORB 08, ORB 10, HB 16, NPT 04, NPT 08, NPT 12

Label Layout - List

CR70: Label Part Number & Designation List		
Prt No.	Description	CR70
Z94115	FIRE HAZARD - NO SMOKING	2
Z94116	DRIVELINE - ARM ENTANGLEMENT HAZARD - KEEP HANDS AWAY	2
Z94117	FLYING OBJECT HAZARD - KEEP BACK	4
Z94119	HAZARD - READ MANUAL	1
Z94120	ROTATING CUTTER HAZARD - KEEP HANDS AWAY	4
Z94127	DRIVELINE - HAND ENTANGLEMENT HAZARD - KEEP HANDS AWAY	1
Z94143	NOISE - 121db NOISE	1
Z94167	HYDRAULIC RUPTURE HAZARD - KEEP BACK	5
Z94207	ENTANGLEMENT HAZARD - DO NOT CLIMB IN HOPPER	2
Z94209	COUNTER CLOCKWISE ROTATION - ROUND	1
Z94215	FROZEN BATTERY HAZARD	1
Z94414	ROLLER FEED CHIPPER - FEED CONTROL RH	1
Z94419	ROLLER FEED CHIPPER - FEED CONTROL LH	1
Z94422	FEED CONTROL LOCK	1
Z94423	CR70 Intell.Max.Rpm INSTRUCTIONS	1
Z94424	CR70 ROTOR LOCK	1
Z94617	WALLENSTEIN 3" DIA. MADE IN CANADA	1
Z94620	CR100 TABLE BOTTOM.WALLENSTEIN	1
Z94621	INTELLIFEED	1
Z94646	CR70 TOOL BOX.CR70	1
Z94647	CR70 HYDRAULIC PUMP COVER.CR70	1
Z94648	CR70 L&R CHUTE END.WALLENSTEIN	2
Z94649	CR70 CHUTE RIGHT BOTTOM GOLD	1
Z94650	CR70 CHUTE RIGHT ELBOW SILVER	1
Z94651	CR70 L&R CHUTE MID.WALLENSTEIN	2
Z94653	CR70 CHUTE LEFT BOTTOM GOLD	1
Z94654	CR70 CHUTE LEFT ELBOW SILVER	1
Z96376	CR Marketing Sticker 7.0 x 1.5	2
Z96377	CR Marketing Sticker 13.0 x 2.5	1
	VIN Label - CR70	1



Label Layout - Left Side

Label Layout - Right Side



Accessories	
#1012L269 	#1012L269 LEDGER CLEARANCE SETTING GAUGE For CR70 Series An easy and accurate way of setting the critical clearances between the ledger blade and the rotor chipper blade.
	#Z97071 CR70 COMMERCIAL TRAILER WOOD CHIPPER OPERATOR'S MANUAL Available as a download at www.wallensteincr.com