



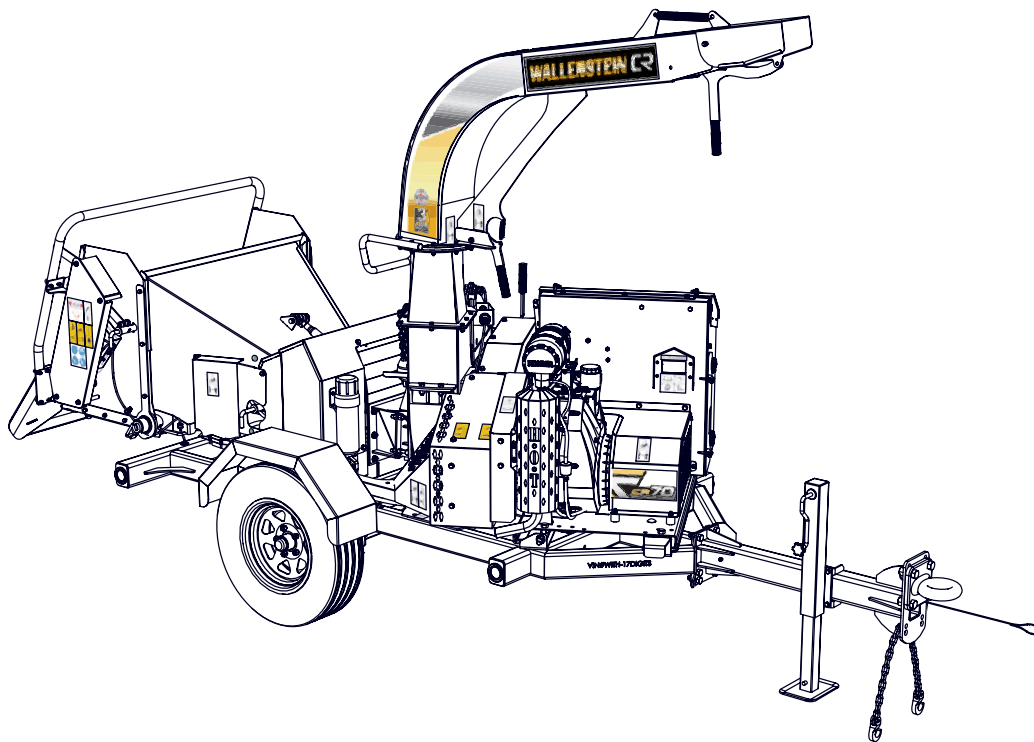
EMB Manufacturing Inc.  
4144 Boomer Line · St. Clements, On · N0B 2M0 · Canada  
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[www.wallensteincr.com](http://www.wallensteincr.com)

# PARTS MANUAL

## CR70

### Trailer Chipper

S/N 2E9US1119H010027 & up



## Foreword

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

Regular maintenance, and replacing old, worn or broken parts with the correct OEM parts, is essential in prolonging the life of your EMB product. Please refer to this manual to identify replacement parts.

To order parts, contact your Wallenstein dealer or distributor. Have the product model and serial number handy.

If your dealer is no longer available, please go to our website: <http://www.wallensteinequipment.com> and click on the [Dealer Locator](#) to find the nearest dealer.

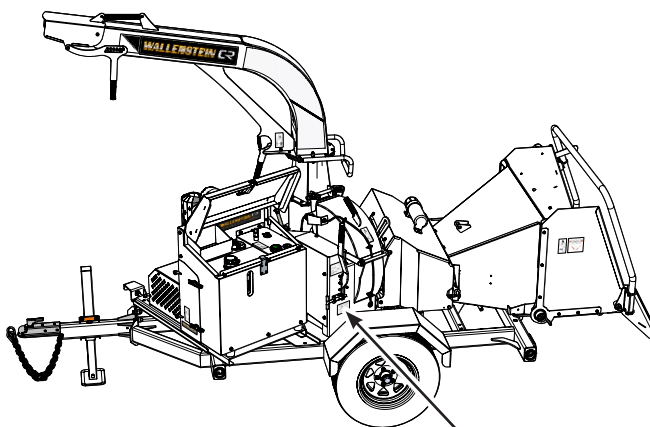
All information contained in this parts manual is current as per the revision date at the bottom of the page. EMB reserves the right to change product specifications at any time without notice.

If your product specifications differ from those contained in this manual, contact EMB Manufacturing for information.

Reproduction of this parts manual of any kind is prohibited without prior written permission from EMB Manufacturing.

## Serial Number Location

Always give your dealer the serial number of your Wallenstein Trailer Wood Chipper and Feed Hopper when ordering parts or requesting service or other information.



Manufactured by: EMB MFG INC, 4144 BOOMER LINE, ST CLEMENTS, ON N0B2M0	
<b>MODEL: CR100####</b>	TYPE OF VEHICLE/TYPE DE VEHICULE: TRA / REM
	GAWR/PNBE (KG): ###
DIMENSION- RIM/JANTE: ###	TIRE/PNEU: ###
COLD INFL. PRESS/PRESS DE CONFLA A FROID (PSI/LPI): ###	THIS VEHICLE CONFORMS TO ALL APPLICABLE STANDARDS PRESCRIBED UNDER THE CANADIAN MOTOR SAFETY REGULATIONS IN EFFECT ON THE DATE OF MANUFACTURE / CE VEHICULE EST CONFORME A TOUTES LES NORMES QUI LI SONT APPLICABLES EN VERTU DU REGLEMENT SUR LA SECURITE DES VEHICULES AUTOMOBILES DU CANADA EN VIGUEUR A LA DATE DE SA FABRICATION
	<b>VIN/ NLV: #####</b>

### **WARNING!**

**Refer to the operators manual for safe operation and maintenance.**

**Maintenance should be performed by trained personnel only.**

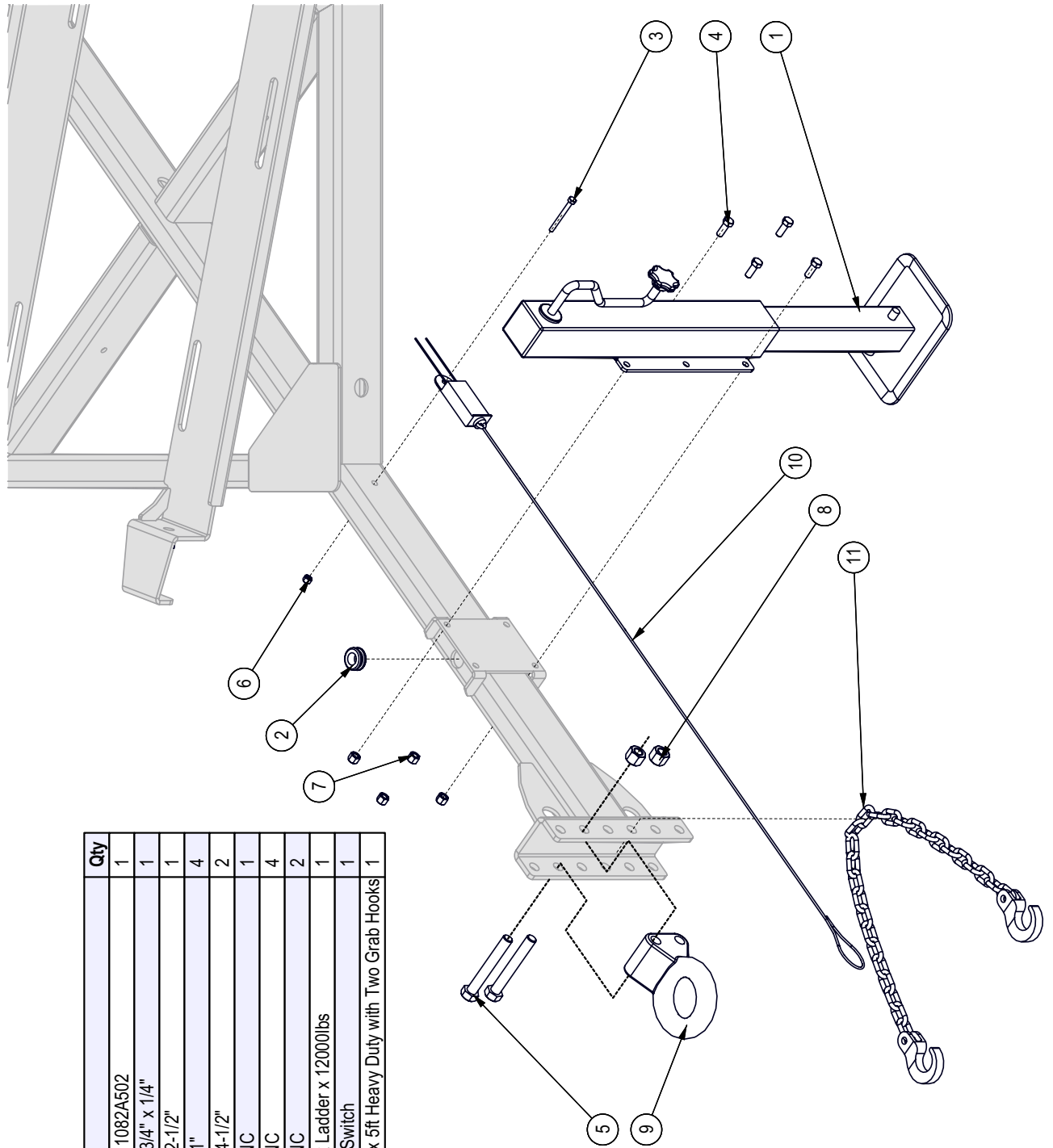
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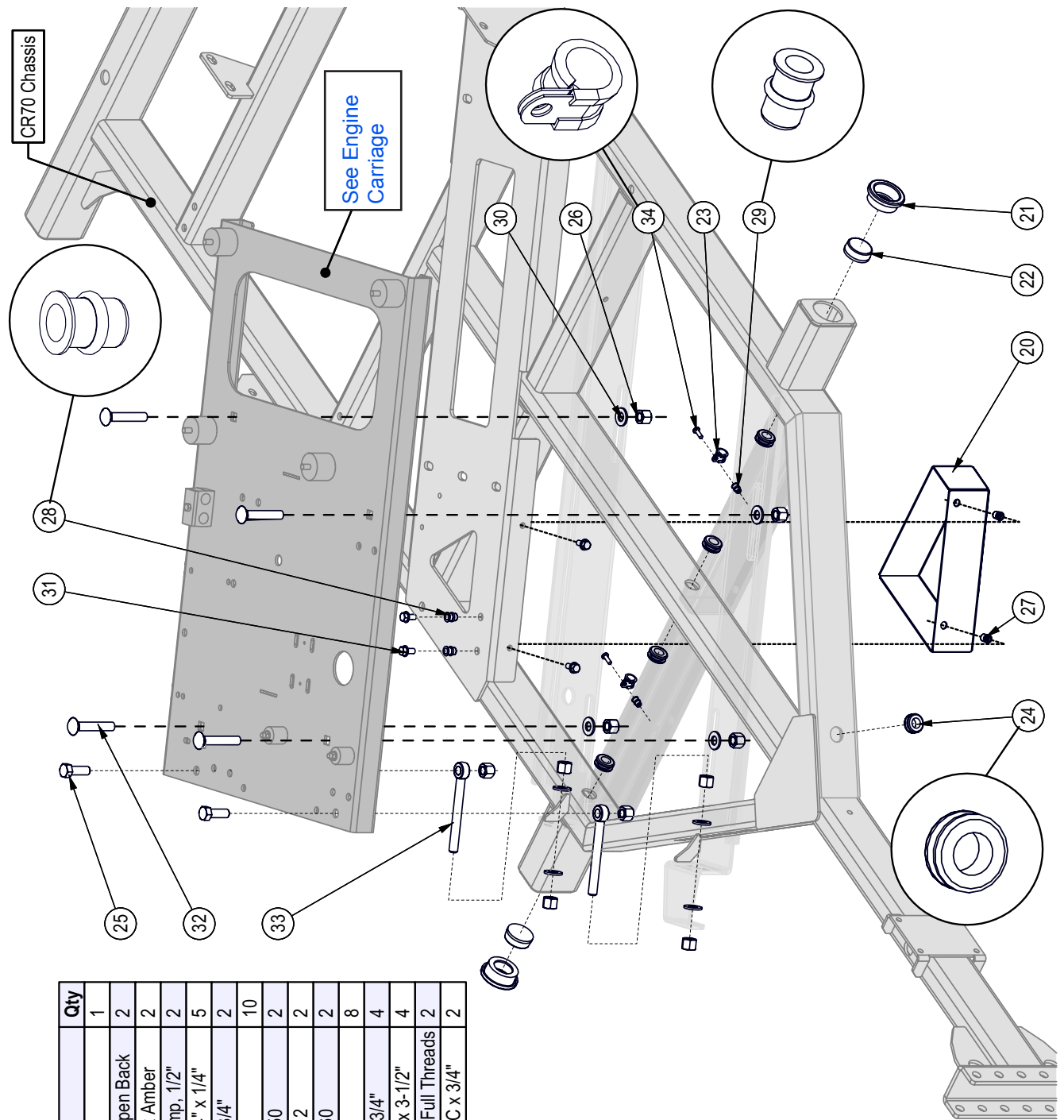
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Frame Detail – Tongue & Jack

BOM ID	Part No.	Description	Qty
1	1082W503	Jack Weldment for 1082A502	1
2	Z62822	Rubber Grommet, 3/4" x 1/4"	1
3	Z71125	Hex Bolt, 1/4NC x 2-1/2"	1
4	Z71310	Hex Bolt, 3/8NC x 1"	4
5	Z71645	Hex Bolt, 5/8NC x 4-1/2"	2
6	Z72211	Hex Lock Nut, 1/4NC	1
7	Z72231	Hex Lock Nut, 3/8NC	4
8	Z72261	Hex Lock Nut, 5/8NC	2
9	Z91622	Pintle, 2-1/2" Eye x Ladder x 12000lbs	1
10	Z91713	Breakaway Safety Switch	1
11	Z92309	Safety Chain, 1/4" x 5ft Heavy Duty with Two Grab Hooks	1

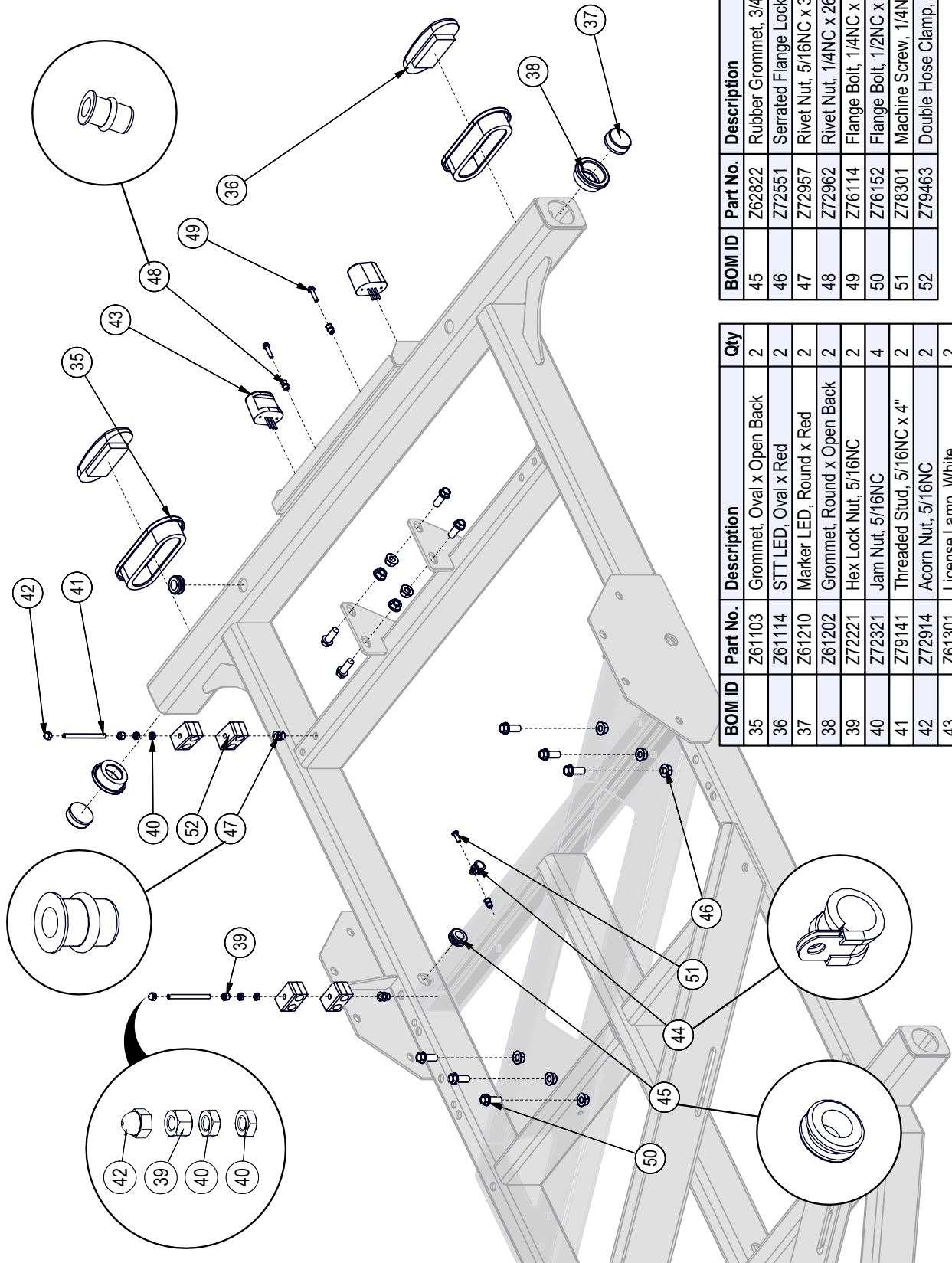


Frame Detail – Front



BOM ID	Part No.	Description	Qty
20	1061L310	Basin, Spill	1
21	Z61202	Grommet, Round x Open Back	2
22	Z61211	Marker LED, Round x Amber	2
23	Z62819	Rubberized Wire Clamp, 1/2"	2
24	Z62822	Rubber Grommet, 3/4" x 1/4"	5
25	Z71617	Hex Bolt, 5/8NC x 1-3/4"	2
26	Z72261	Hex Lock Nut, 5/8NC	10
27	Z72958	Rivet Nut, 3/8NC x 150	2
28	Z72959	Rivet Nut, 3/8NC x 312	2
29	Z72962	Rivet Nut, 1/4NC x 260	2
30	Z73161	SAE Washer, 5/8"	8
31	Z76133	Flange Bolt, 3/8NC x 3/4"	4
32	Z76265	Carriage Bolt, 5/8NC x 3-1/2"	4
33	Z76561	Rod End, 5/8NC x 6" Full Threads	2
34	Z78301	Machine Screw, 1/4NC x 3/4"	2

Frame Detail – Rear

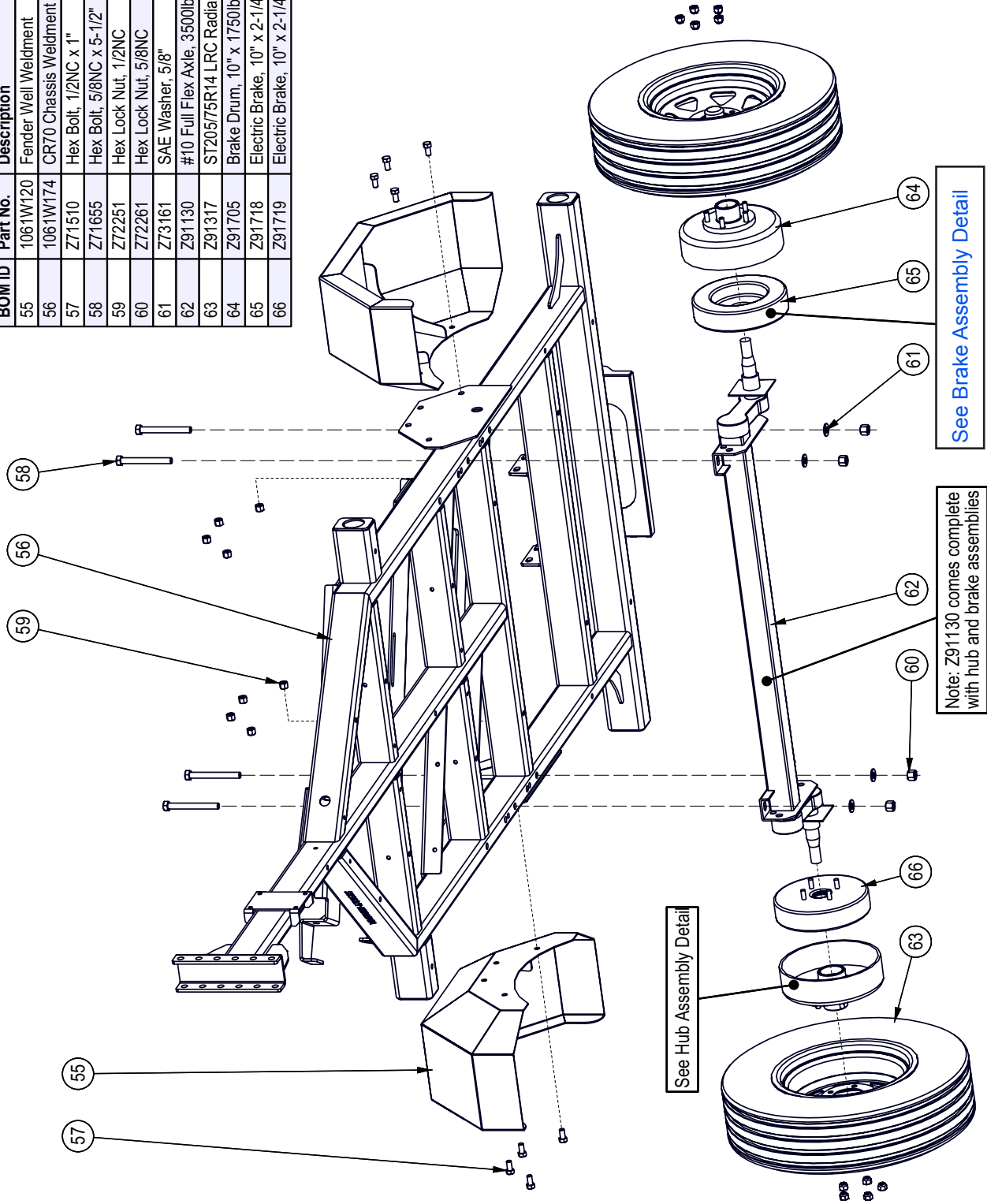


BOM ID	Part No.	Description	Qty
45	Z62822	Rubber Grommet, 3/4" x 1/4"	2
46	Z72551	Serrated Flange Locknut, 1/2NC	10
47	Z72957	Rivet Nut, 5/16NC x 3/12	2
48	Z72962	Rivet Nut, 1/4NC x 260	2
49	Z76114	Flange Bolt, 1/4NC x 1"	2
50	Z76152	Flange Bolt, 1/2NC x 1-1/4"	10
51	Z78301	Machine Screw, 1/4NC x 3/4"	1
52	Z79463	Double Hose Clamp, 11/16" OD	4

BOM ID	Part No.	Description	Qty
35	Z61103	Grommet, Oval x Open Back	2
36	Z61114	STT LED, Oval x Red	2
37	Z61210	Marker LED, Round x Red	2
38	Z61202	Grommet, Round x Open Back	2
39	Z72221	Hex Lock Nut, 5/16NC	2
40	Z72321	Jam Nut, 5/16NC	4
41	Z79141	Threaded Stud, 5/16NC x 4"	2
42	Z72914	Acorn Nut, 5/16NC	2
43	Z61301	License Lamp, White	2
44	Z62819	Rubberized Wire Clamp, 1/2"	1

Frame & Fender Assembly

BOM ID	Part No.	Description	Qty
55	1061W120	Fender Well Weldment	2
56	1061W174	CR70 Chassis Weldment	1
57	Z71510	Hex Bolt, 1/2NC x 1"	8
58	Z71655	Hex Bolt, 5/8NC x 5-1/2"	4
59	Z72251	Hex Lock Nut, 1/2NC	8
60	Z72261	Hex Lock Nut, 5/8NC	4
61	Z73161	SAE Washer, 5/8"	4
62	Z91130	#10 Full Flex Axle, 3500lbs x 56" HF With Electric Brakes	1
63	Z91317	ST205/75R14 LRC Radial Trail 5on4-1/2"	2
64	Z91705	Brake Drum, 10" x 1750lbs 5on4-1/2" Complete Assembly	2
65	Z91718	Electric Brake, 10" x 2-1/4" x 1750lbs LH	1
66	Z91719	Electric Brake, 10" x 2-1/4" x 1750lbs RH	1

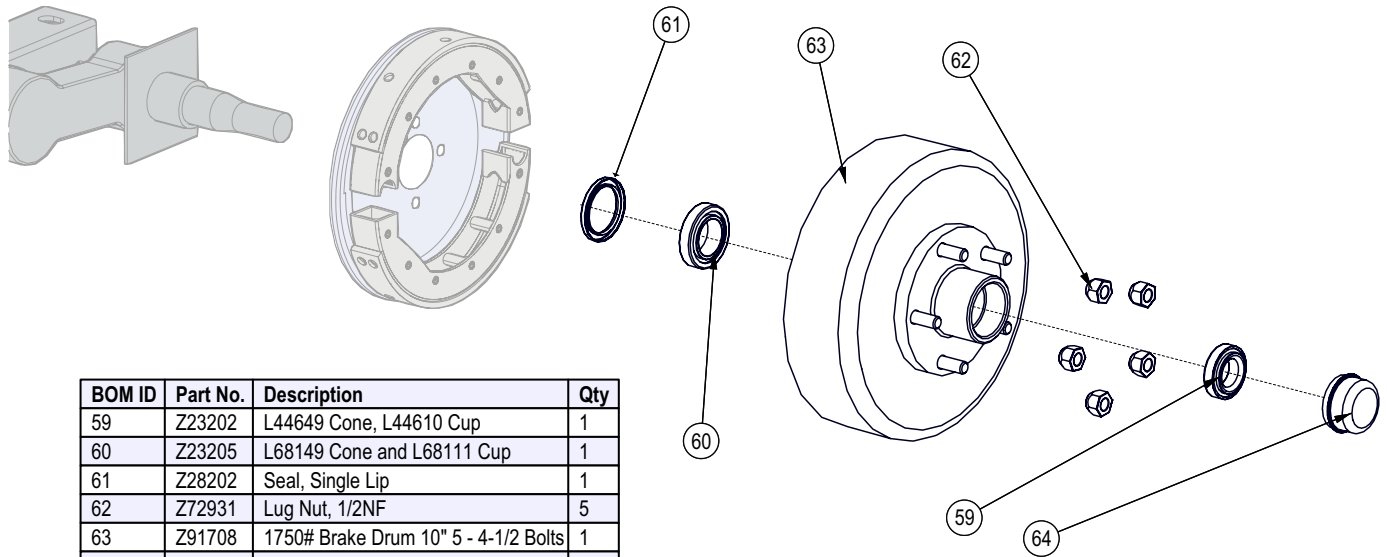


See Brake Assembly Detail

Note: Z91130 comes complete with hub and brake assemblies

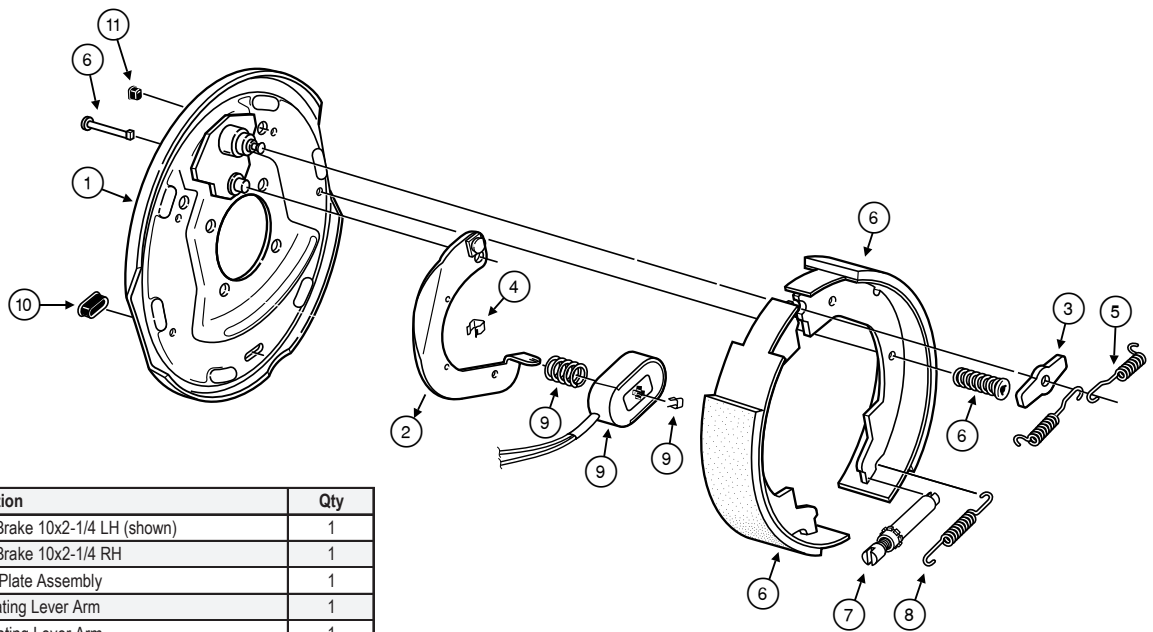
See Hub Assembly Detail

**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

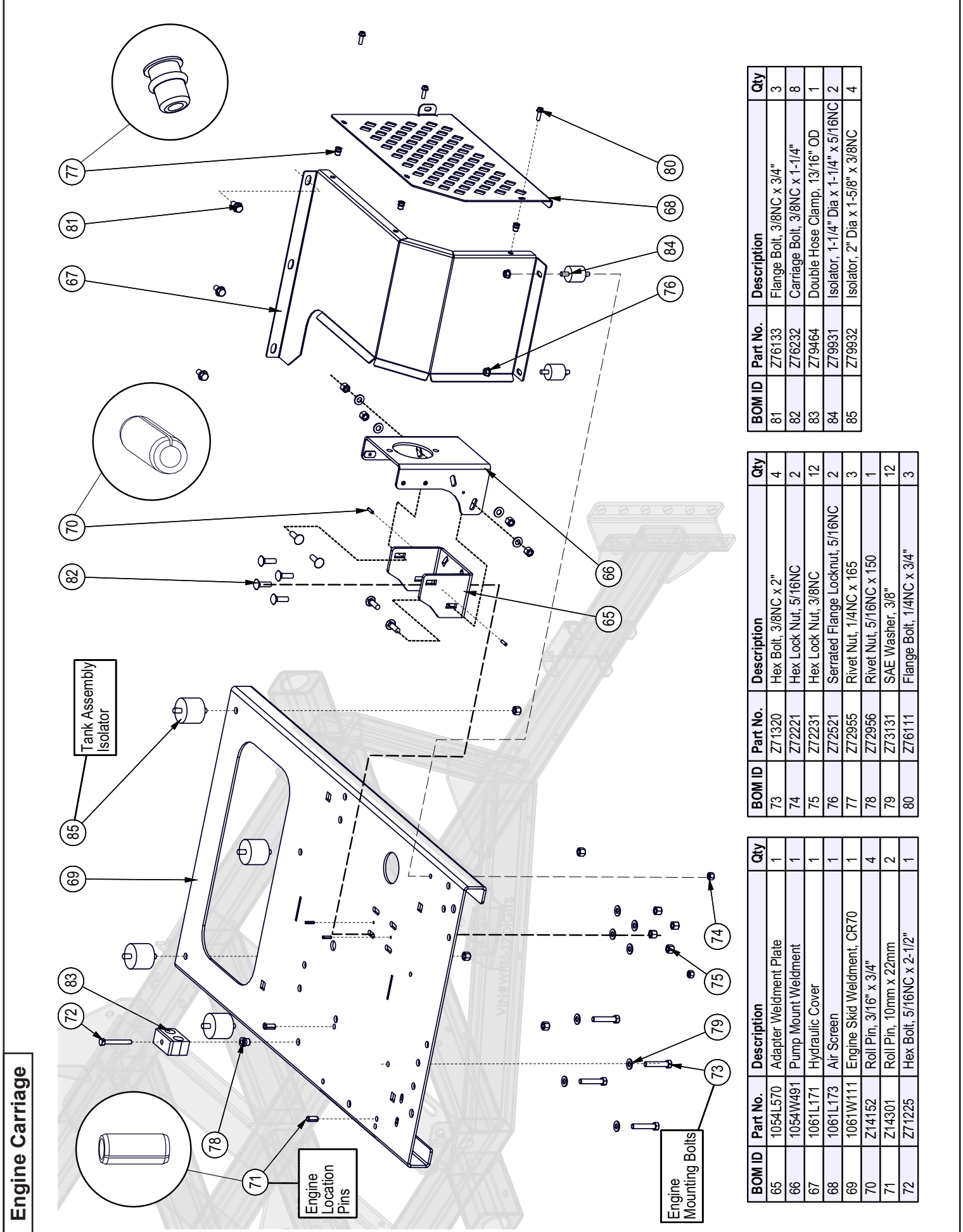
**Brake Assembly**



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	Part No.	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" OD	1
84	Z79931	Isolator, 1-1/4" Dia x 1-1/4" x 5/16NC	2
85	Z79932	Isolator, 2" Dia x 1-5/8" x 3/8NC	4

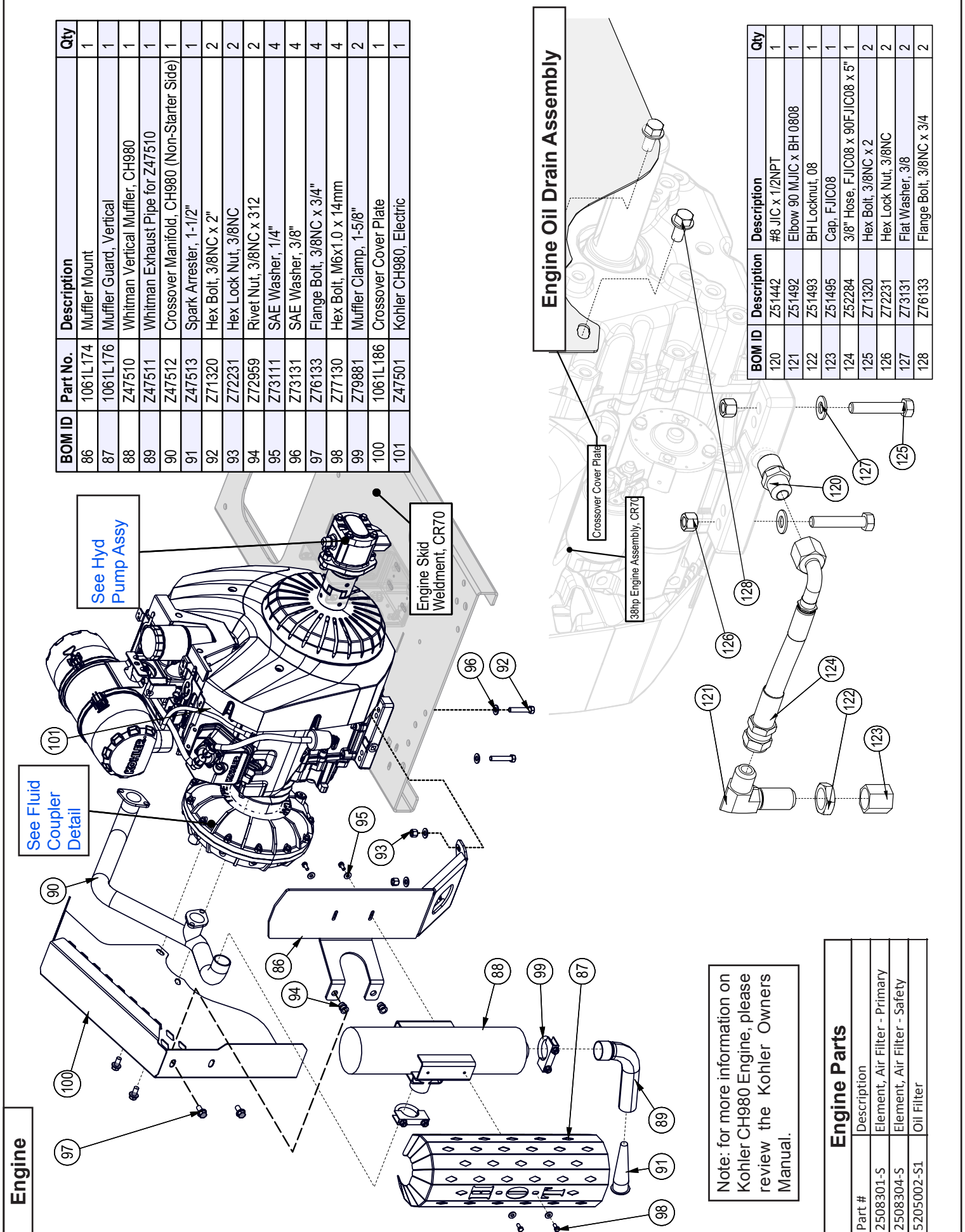
BOM ID	Part No.	Description	Qty
73	Z71320	Hex Bolt, 3/8NC x 2"	4
74	Z72221	Hex Lock Nut, 5/16NC	2
75	Z72231	Hex Lock Nut, 3/8NC	12
76	Z72521	Serrated Flange Locknut, 5/16NC	2
77	Z72955	Rivet Nut, 1/4NC x 165	3
78	Z72956	Rivet Nut, 5/16NC x 150	1
79	Z73131	SAE Washer, 3/8"	12
80	Z76111	Flange Bolt, 1/4NC x 3/4"	3

BOM ID	Part No.	Description	Qty
65	1054L570	Adapter Weldment Plate	1
66	1054W491	Pump Mount Weldment	1
67	1061L171	Hydraulic Cover	1
68	1061L173	Air Screen	1
69	1061W111	Engine Skid Weldment, CR70	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

BOM ID	Part No.	Description	Qty
86	1061L174	Muffler Mount	1
87	1061L176	Muffler Guard, Vertical	1
88	Z47510	Whitman Vertical Muffler, CH980	1
89	Z47511	Whitman Exhaust Pipe for Z47510	1
90	Z47512	Crossover Manifold, CH980 (Non-Starter Side)	1
91	Z47513	Spark Arrester, 1-1/2"	1
92	Z71320	Hex Bolt, 3/8NC x 2"	2
93	Z72231	Hex Lock Nut, 3/8NC	2
94	Z72959	Rivet Nut, 3/8NC x 3/12	2
95	Z73111	SAE Washer, 1/4"	4
96	Z73131	SAE Washer, 3/8"	4
97	Z76133	Flange Bolt, 3/8NC x 3/4"	4
98	Z77130	Hex Bolt, M6x1.0 x 14mm	4
99	Z79881	Muffler Clamp, 1-5/8"	2
100	1061L186	Crossover Cover Plate	1
101	Z47501	Kohler CH980, Electric	1

**Engine Oil Drain Assembly**

BOM ID	Description	Description	Qty
120	Z51442	#8 JIC x 1/2NPT	1
121	Z51492	Elbow 90 M/JIC x BH 0808	1
122	Z51493	BH Locknut, 08	1
123	Z51495	Cap. F JIC08	1
124	Z52284	3/8" Hose, F JIC08 x 90F JIC08 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

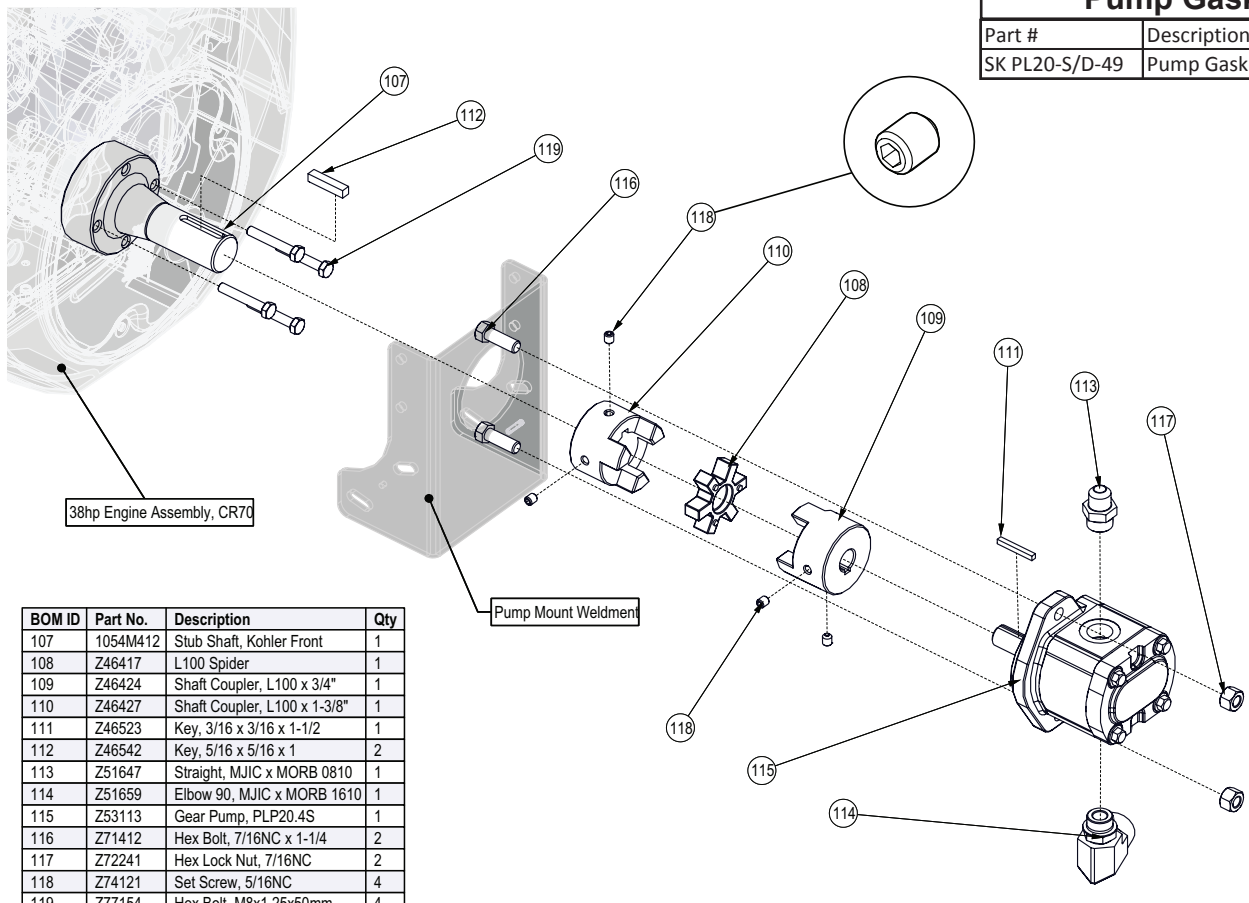


Engine Parts	
Part #	Description
2508301-S	Element, Air Filter - Primary
2508304-S	Element, Air Filter - Safety
5205002-51	Oil Filter

**Hydraulic Pump Assembly**

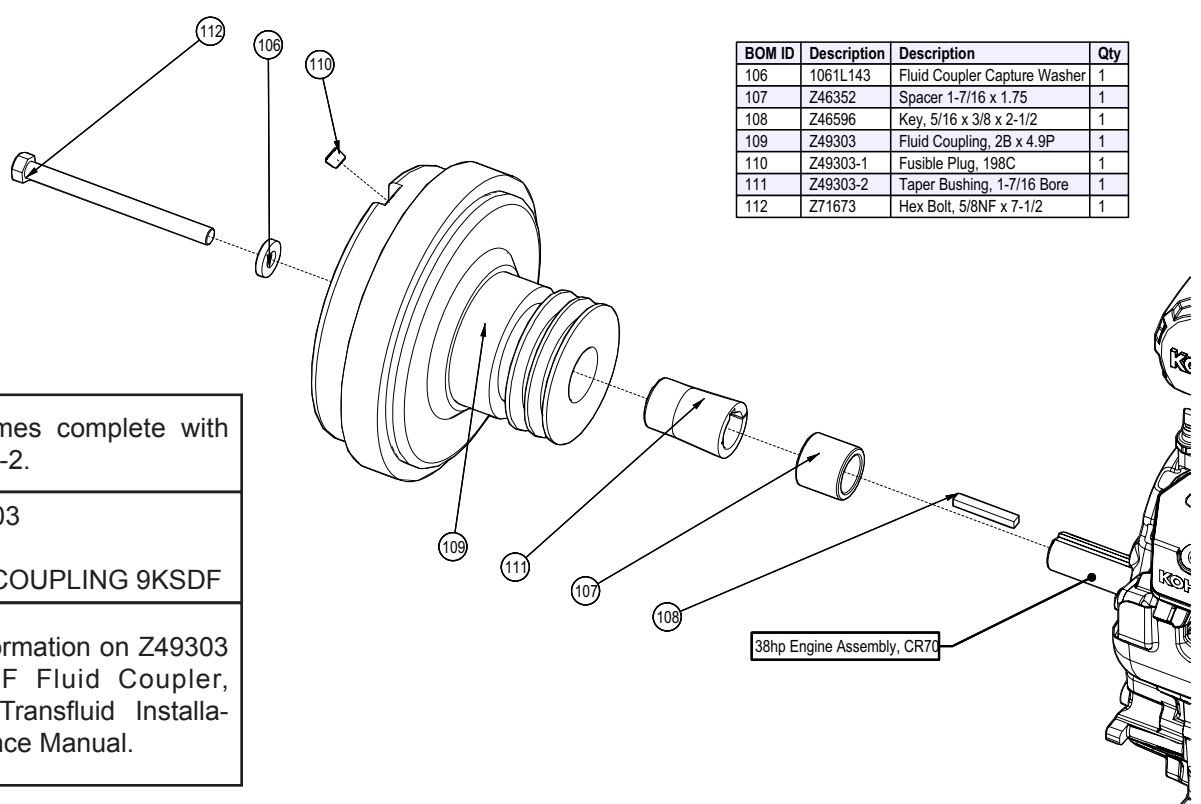
**Pump Gasket Kit**

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



BOM ID	Part No.	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	Z46542	Key, 5/16 x 5/16 x 1	2
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

**Fluid Coupler Assembly – Transfluid**



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

Note: Z49303 comes complete with Z94303-1 & Z9303-2.

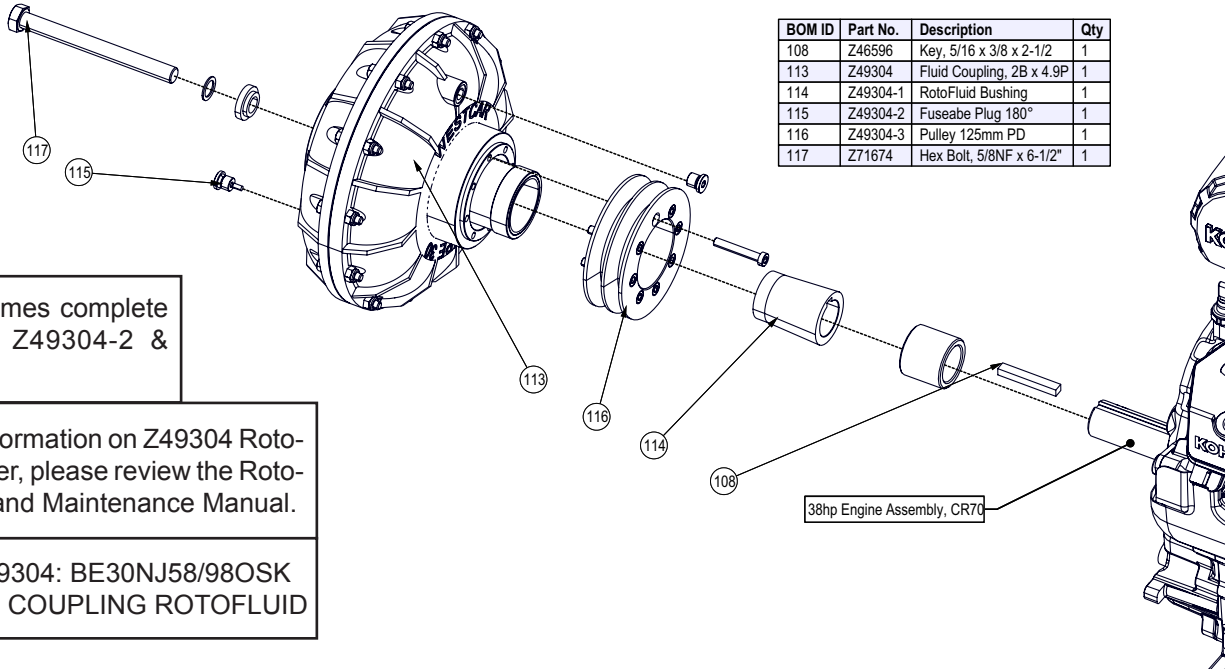
Seal Kit for #Z49303  
#107200000183  
SEAL KIT, FLUID COUPLING 9KSDF

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

**Fluid Coupler Assembly – Rotofluid**

Note: Z49304 Rotofluid is interchangeable with Z49303 Transfluid

BOM ID	Part No.	Description	Qty
108	Z46596	Key, 5/16 x 3/8 x 2-1/2	1
113	Z49304	Fluid Coupling, 2B x 4.9P	1
114	Z49304-1	RotoFluid Bushing	1
115	Z49304-2	Fuseable Plug 180°	1
116	Z49304-3	Pulley 125mm PD	1
117	Z71674	Hex Bolt, 5/8NF x 6-1/2"	1



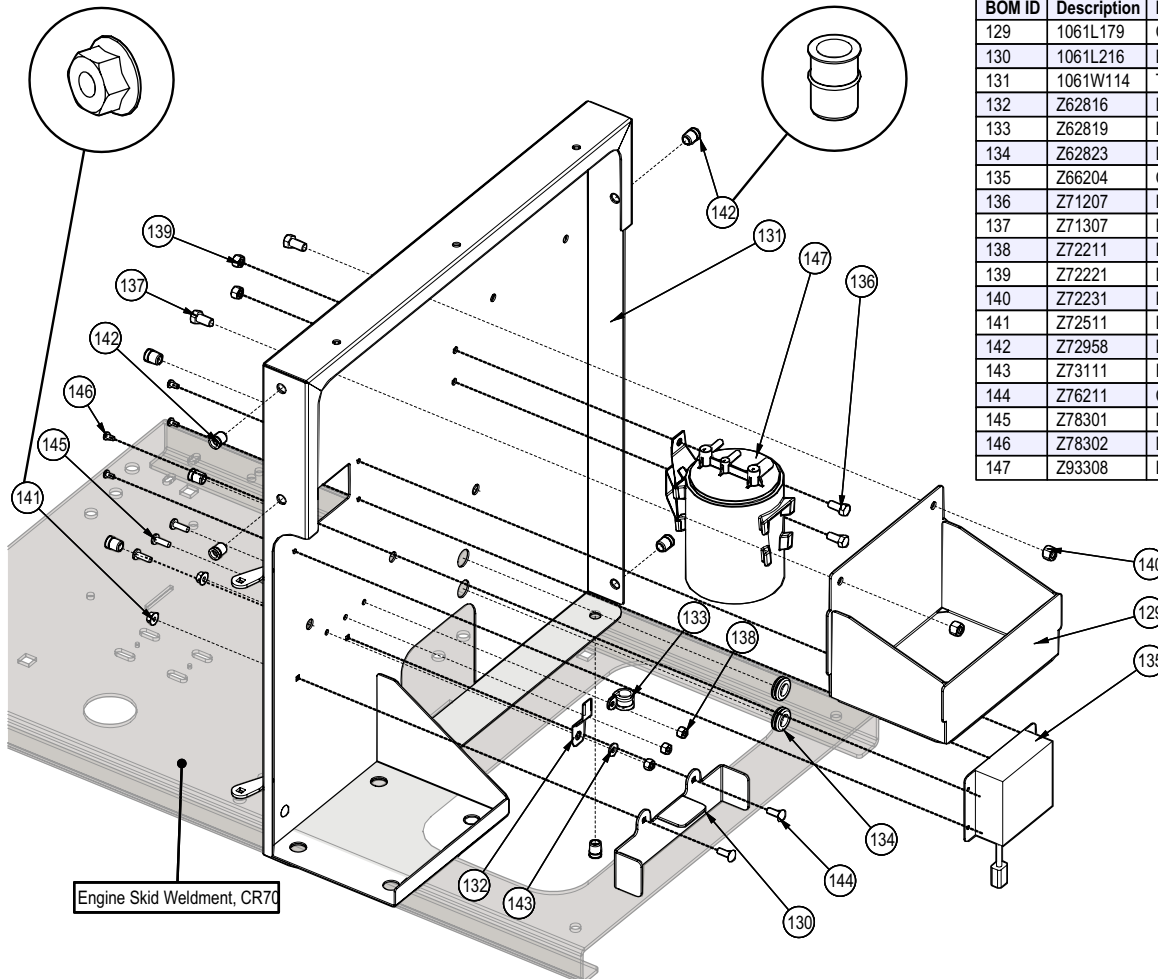
Note: Z49304 comes complete with Z49304-1, Z49304-2 & Z49304-3.

Note: for more information on Z49304 Roto-Fluid Fluid Coupler, please review the Roto-fluid Installation and Maintenance Manual.

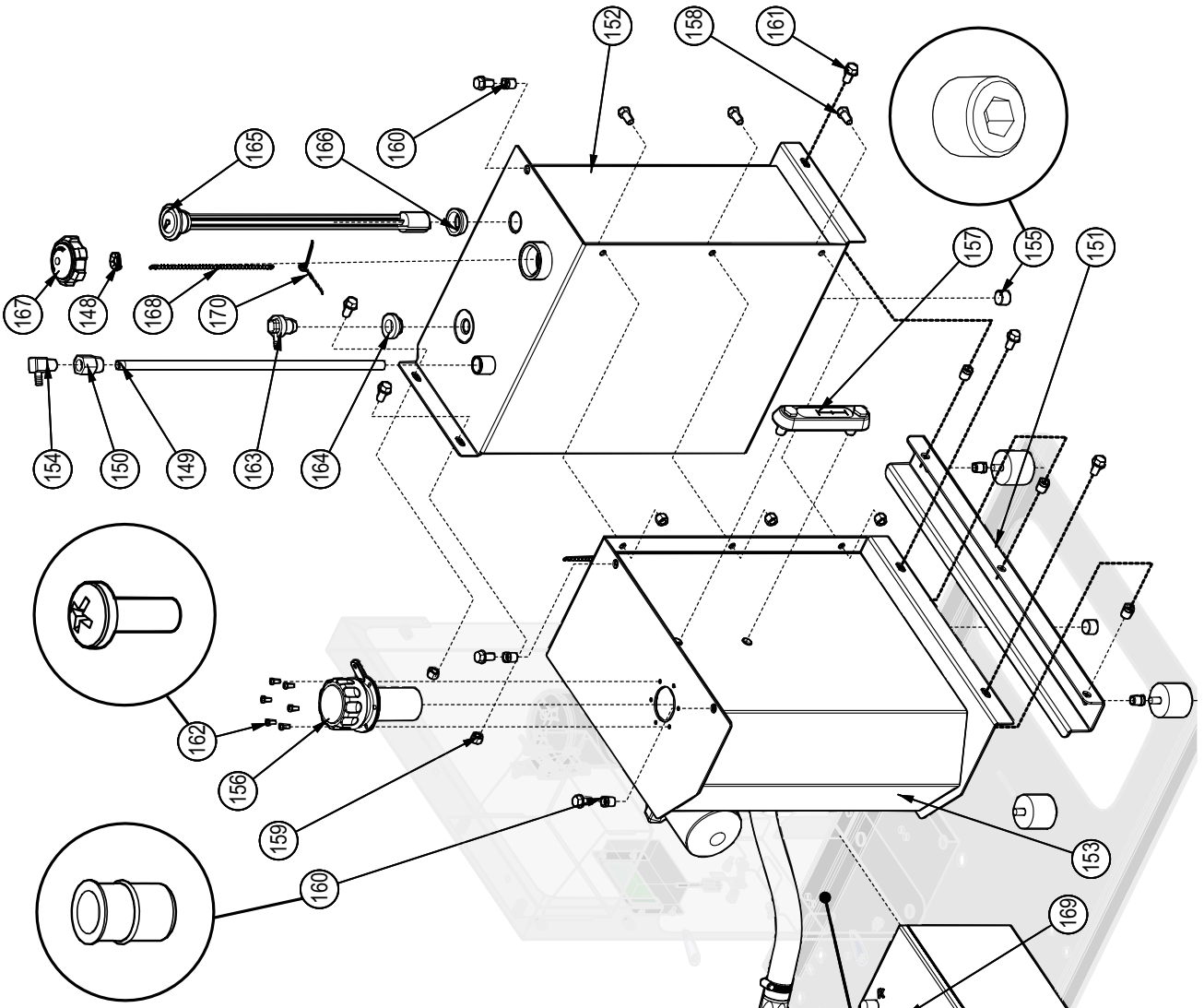
Seal Kit for #Z49304: BE30NJ58/98OSK SEAL KIT, FLUID COUPLING ROTOFLUID

**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



Fuel & Hydraulic Tanks



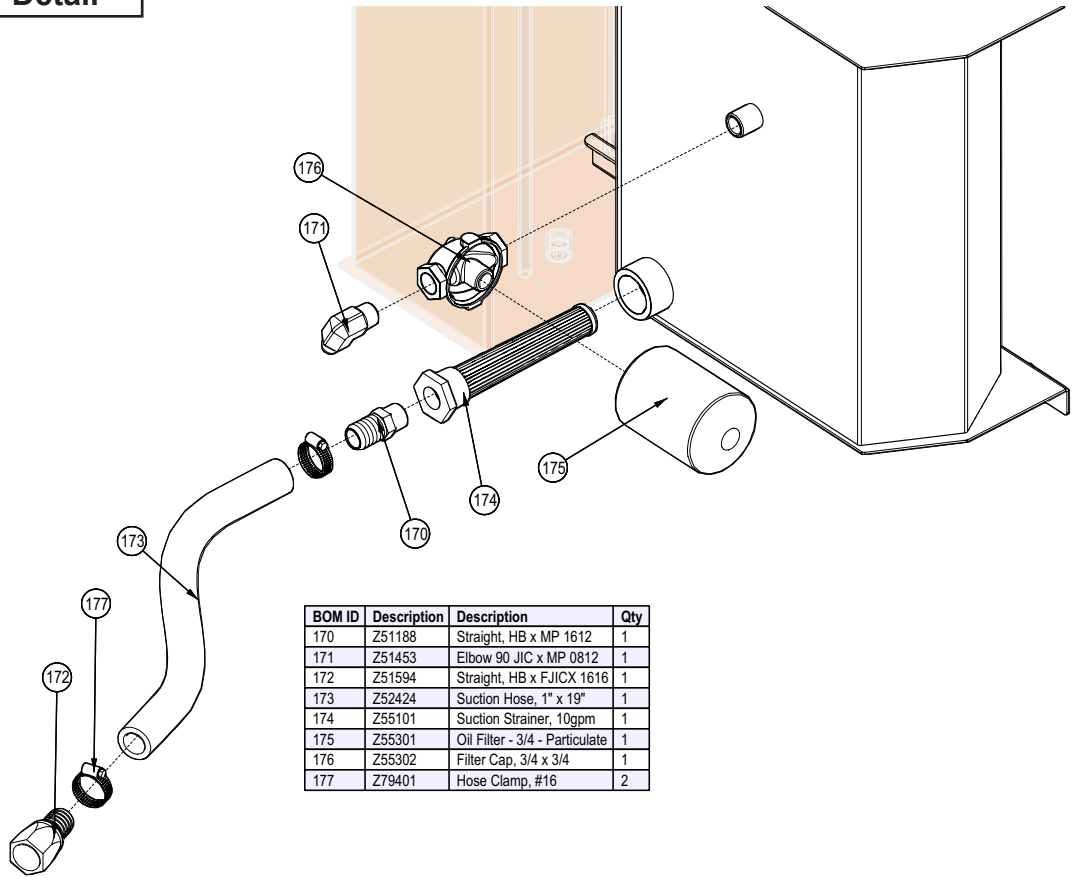
BOM ID	Description	Qty
148	1060L334 Lock Ring, Tether	1
149	1060S103 Fuel Pickup Tube	1
150	1060m103 Custom Adapter MP08 x FP06	1
151	1061L159 Tank Isolator Rail	1
152	1061W112 Fuel Tank Weldment	1
153	1061W113 Hydraulic Tank Weldment	1
154	Z51189 Elbow 90 HB x MP 0506	1
155	Z51192 Socket Plug MP08	2
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

See Hyd Tank Detail

Tank Shroud Weldment, CR70

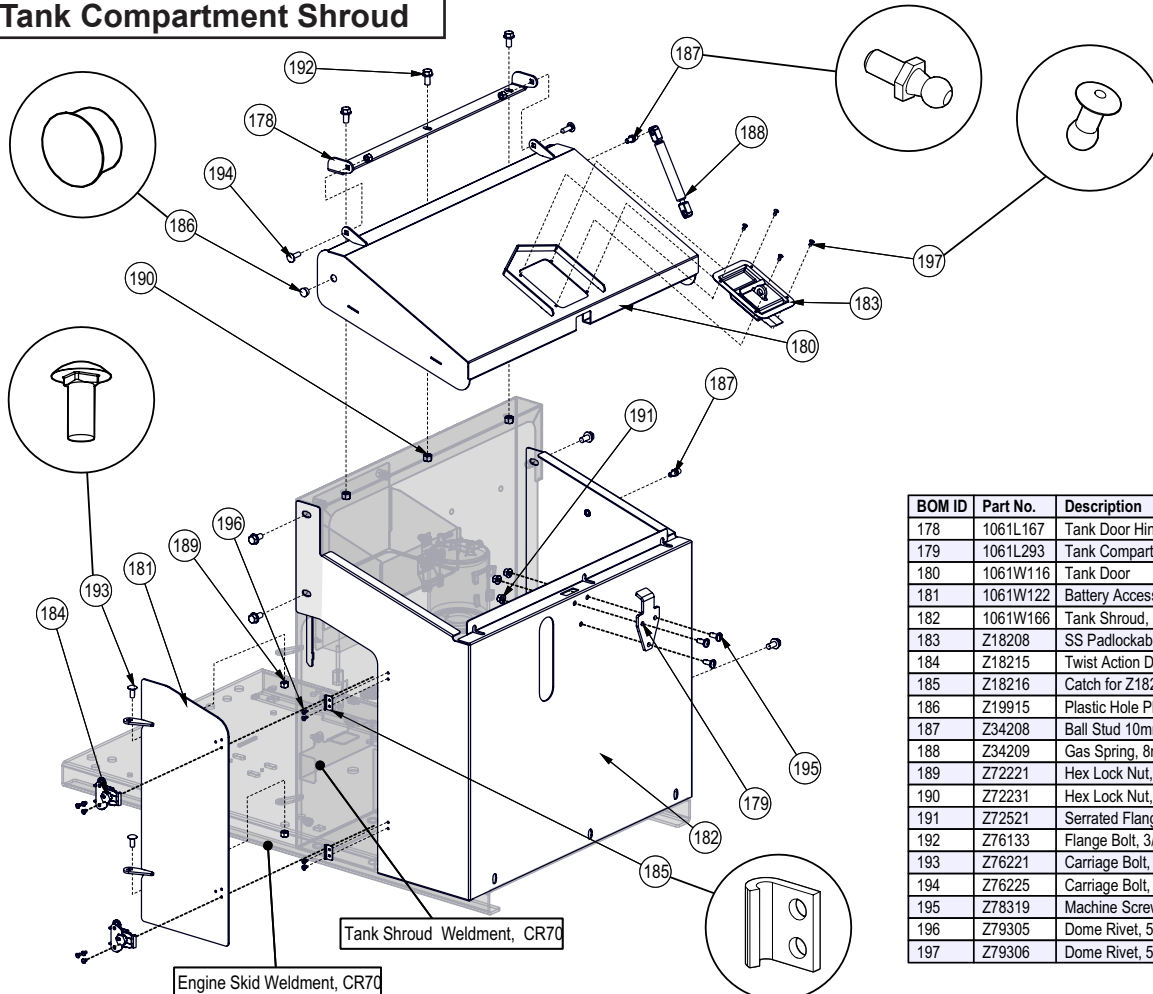
Engine Skid Weldment, CR70

**Hydraulic Tank Rear Detail**



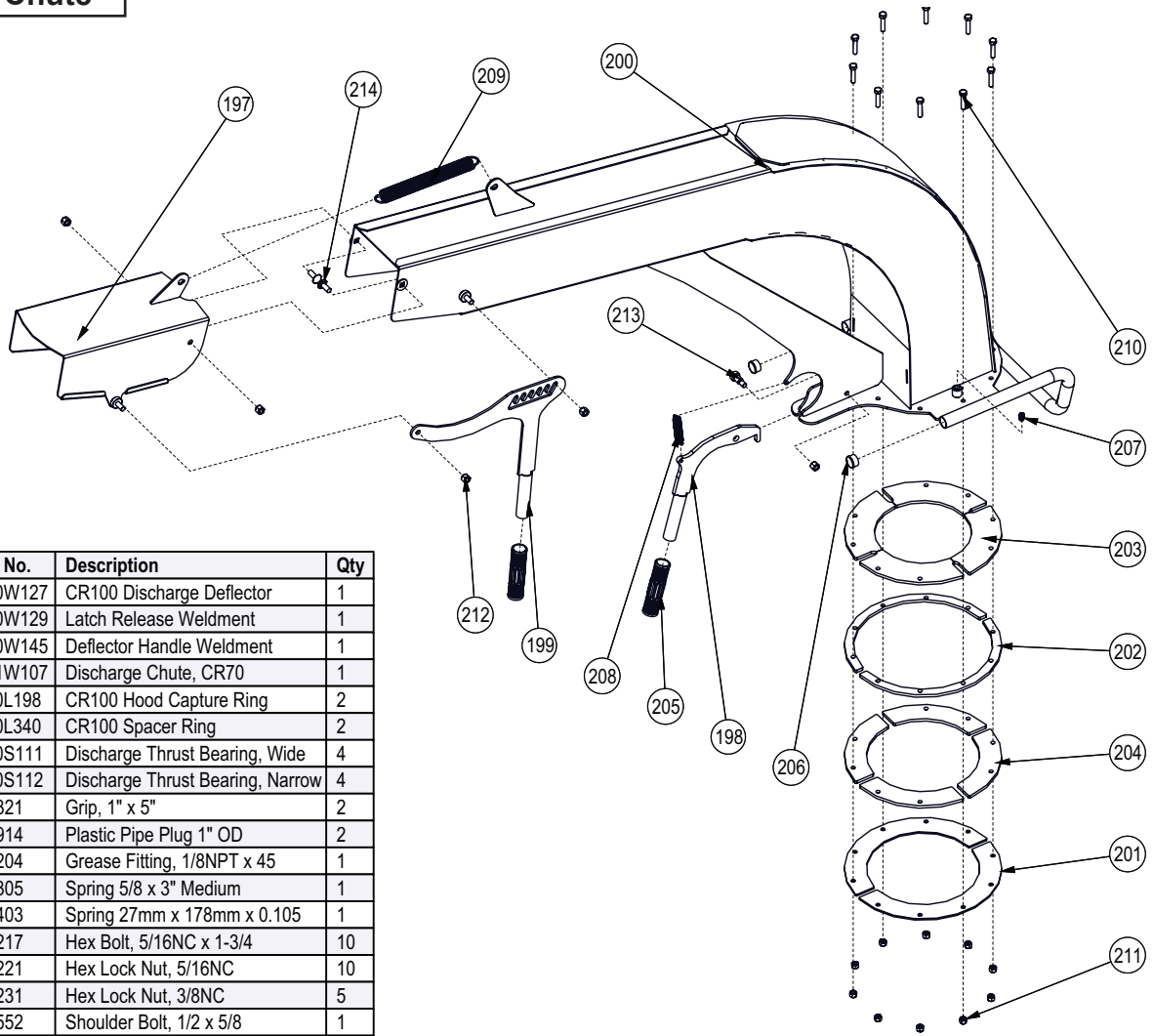
BOM ID	Description	Description	Qty
170	Z51188	Straight, HB x MP 1612	1
171	Z51453	Elbow 90 JIC x MP 0812	1
172	Z51594	Straight, HB x FJICX 1616	1
173	Z52424	Suction Hose, 1" x 19"	1
174	Z55101	Suction Strainer, 10gpm	1
175	Z55301	Oil Filter - 3/4" - Particulate	1
176	Z55302	Filter Cap, 3/4 x 3/4	1
177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

**Tank Compartment Shroud**



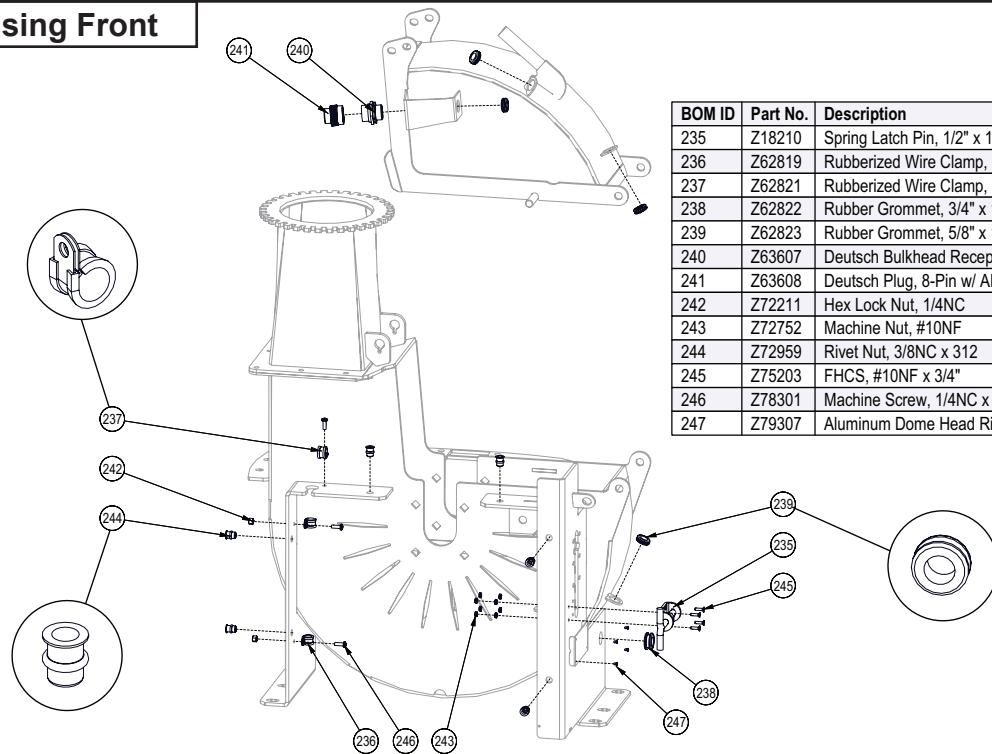
BOM ID	Part No.	Description	Qty
178	1061L167	Tank Door Hinge Rail	1
179	1061L293	Tank Compartment Strike Plate	1
180	1061W116	Tank Door	1
181	1061W122	Battery Access Door	1
182	1061W166	Tank Shroud, CR70	1
183	Z18208	SS Padlockable Paddle Latch	1
184	Z18215	Twist Action Draw Latch, 2-3/4"	2
185	Z18216	Catch for Z18215	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	Z72521	Serrated Flange Locknut, 5/16NC	3
192	Z76133	Flange Bolt, 3/8NC x 3/4	7
193	Z76221	Carriage Bolt, 5/16NC x 3/4	2
194	Z76225	Carriage Bolt, 5/16NC x 1	2
195	Z78319	Machine Screw, 5/16NC x 3/4" Locking	3
196	Z79305	Dome Rivet, 5/32" x 3/16"	8
197	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	1060L340	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	Z71217	Hex Bolt, 5/16NC x 1-3/4	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

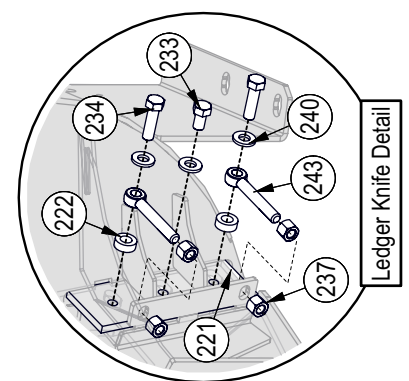
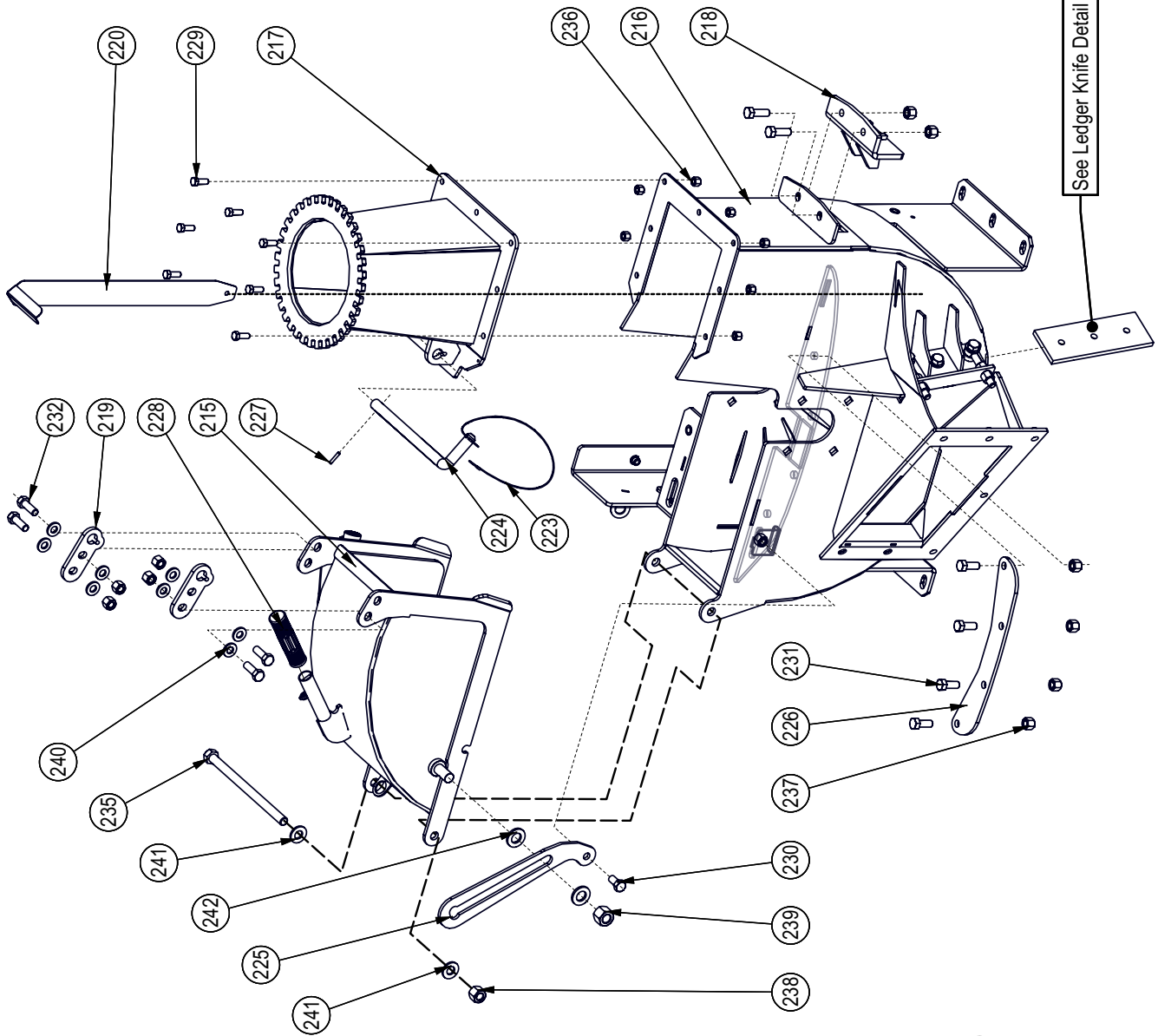
**Rotor Housing Front**



BOM ID	Part No.	Description	Qty
235	Z18210	Spring Latch 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, 5/8" x 1/8"	4
240	Z63607	Deutsch Bulkhead Receptacle, 8-Pin w/ Aluminum Body	1
241	Z63608	Deutsch Plug, 8-Pin w/ Aluminum Body	1
242	Z72211	Hex Lock Nut, 1/4NC	2
243	Z72752	Machine Nut, #10NF	8
244	Z72959	Rivet Nut, 3/8NC x 312	6
245	Z75203	FHCS, #10NF x 3/4"	4
246	Z78301	Machine Screw, 1/4NC x 3/4"	3
247	Z79307	Aluminum Dome Head Rivet, 1/8" x 125	4

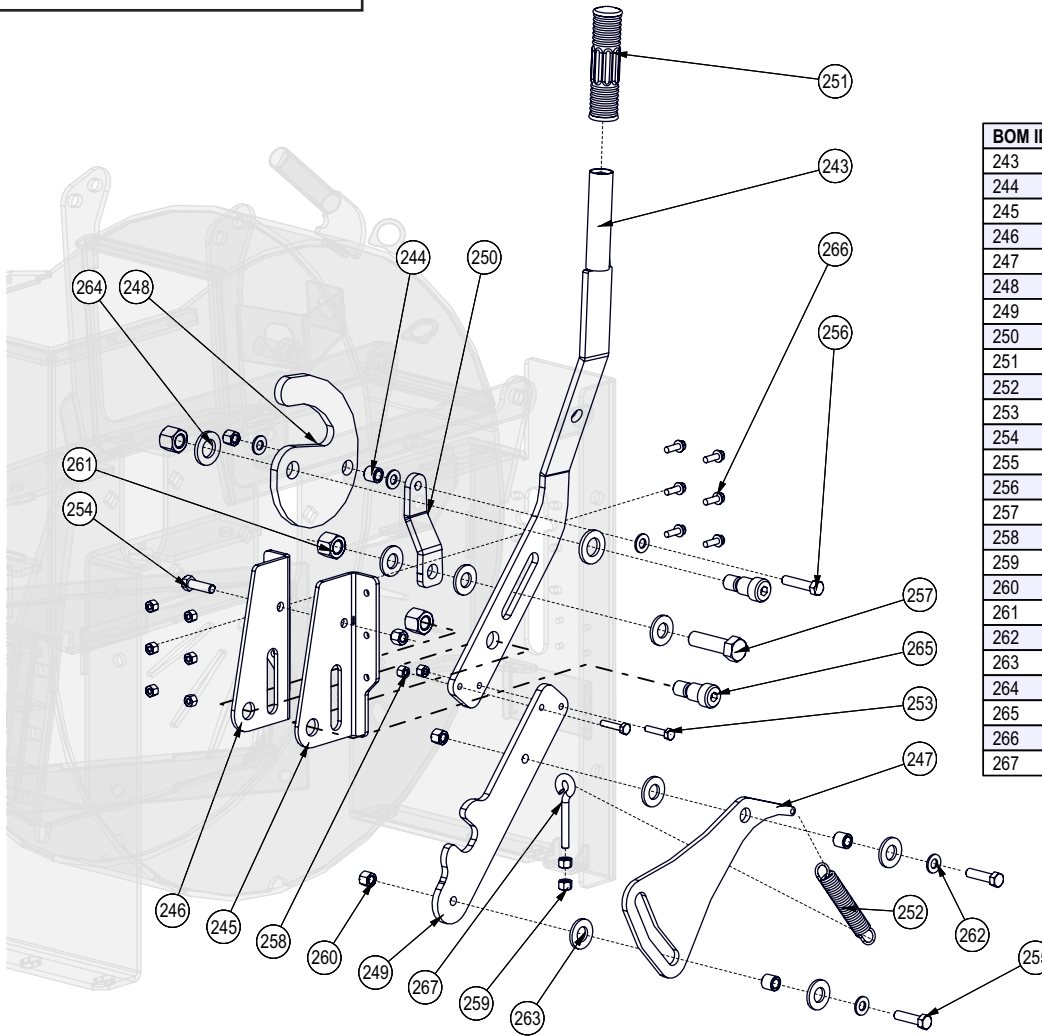
**Rotor Housing Rear**

BOM ID	Part No.	Description	Qty
215	1061W108	CR70 Upper Housing	1
216	1061W106	Lower Housing Weldment, CR70	1
217	1061W140	Square to Round Weldment, CR70	1
218	1060W103	Twig Breaker, CR100	1
219	1060L284	Hood Closure Interface	2
220	1012L269	Gauge, Ledger Setting	1
221	1012M204	Knife, BX62 Ledger	1
222	1023L150	Ledger Washer	2
223	1060F001	Safety Cable, 1/16" x 18"	1
224	1060S113	Hood Lock Pin	1
225	1061L142	Rotation Stop, CR70	1
226	1061L197	Rotor Tie Plate, CR70	1
227	Z14153	Roll Pin, 3/16" x 1"	1
228	Z19321	Handle Grip, 1"	1
229	Z71310	Hex Bolt, 3/8NC x 1"	7
230	Z71510	Hex Bolt, 1/2NC x 1"	1
231	Z71512	Hex Bolt, 1/2NC x 1-1/4"	4
232	Z71515	Hex Bolt, 1/2NC x 1-1/2"	6
233	Z71572G8	Hex Bolt, 1/2NF x 7/8" G8	1
234	Z71579G8	Hex Bolt, 1/2NF x 1-3/4" G8	2
235	Z71662	Hex Bolt, 5/8NC x 10"	1
236	Z72231	Hex Lock Nut, 3/8NC	7
237	Z72251	Hex Lock Nut, 1/2NC	15
238	Z72261	Hex Lock Nut, 5/8NC	1
239	Z72271	Hex Lock Nut, 3/4NC	1
240	Z73151	SAE Washer, 1/2"	11
241	Z73161	SAE Washer, 5/8"	2
242	Z73171	SAE Washer, 3/4"	2
243	Z76553	Rod End, 1/2NC x 3-1/2" Full Threads	2



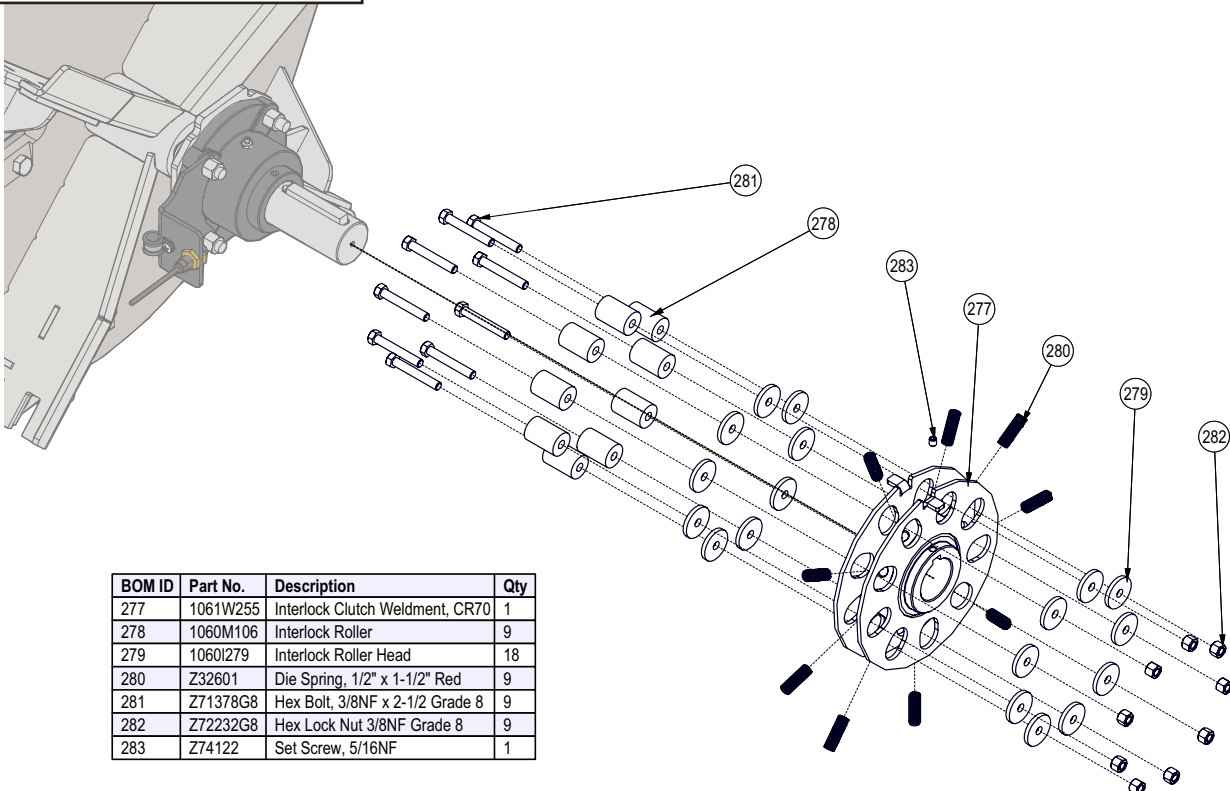


**Rotor Interlock Latch**



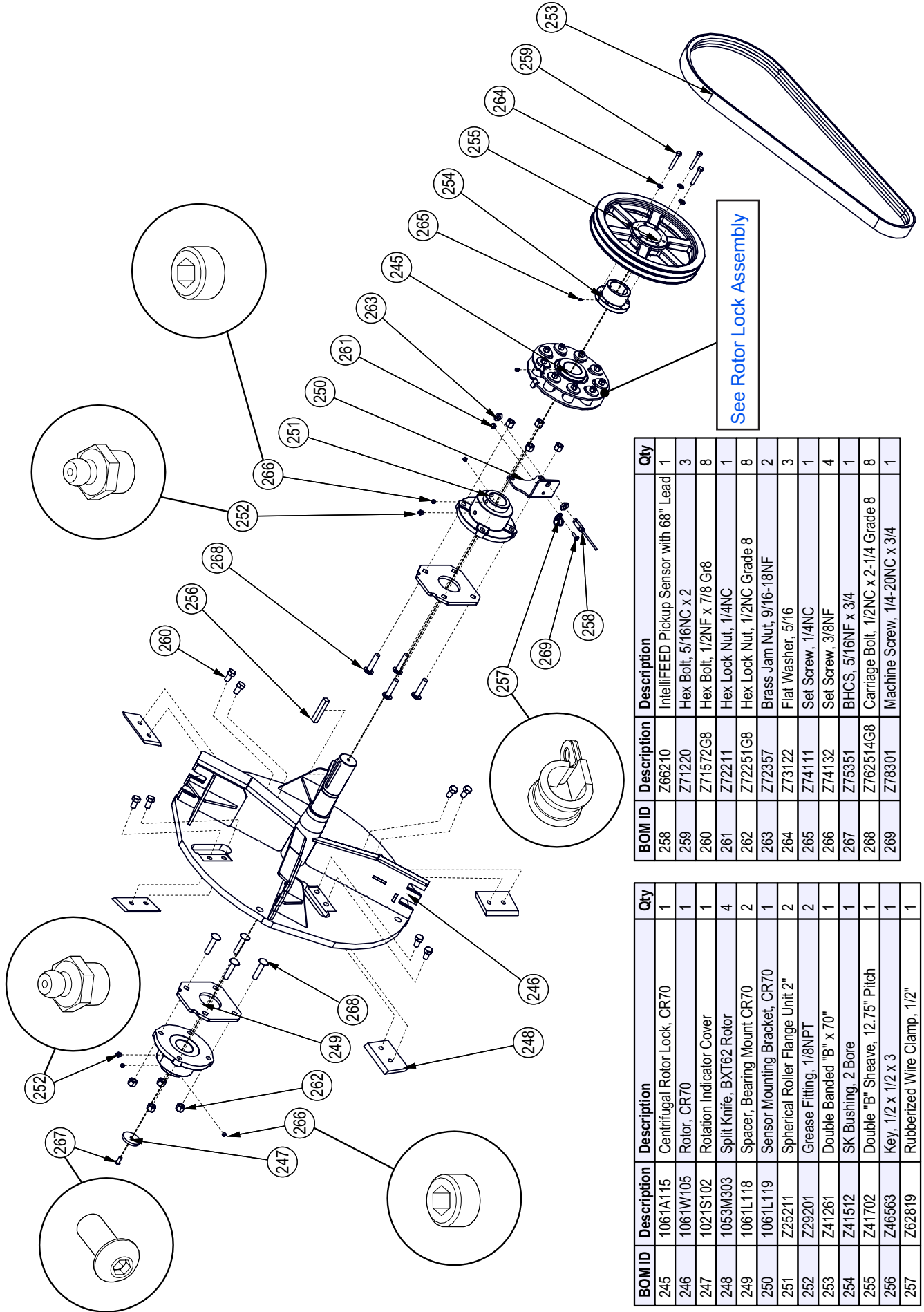
BOM ID	Part No.	Description	Qty
243	1060W256	Interlock Engage Handle	1
244	1056M115	Spacer, Shredder .580	3
245	1060L281	Interlock Handle Base LH	1
246	1060L281H	1060L281 Mirror	1
247	1060L282	Interlock Early Warning	1
248	1060L287	Rotor Hood Safety Latch	1
249	1060L328	Interlock Tip	1
250	1061L139	Linkage, CR70	1
251	Z19321	Handle Grip, 1"	1
252	Z31401	Ext Spring, 3/4" OD x 4" x 0.105"	1
253	Z71112	Hex Bolt, 1/4NC x 1-1/4"	2
254	Z71312	Hex Bolt, 3/8NC x 1-1/4"	1
255	Z71315	Hex Bolt, 3/8NC x 1-1/2"	2
256	Z71317	Hex Bolt, 3/8NC x 1-3/4"	1
257	Z71622	Hex Bolt, 5/8NC x 2-1/4"	1
258	Z72211	Hex Lock Nut, 1/4NC	8
259	Z72221	Hex Lock Nut, 5/16NC	2
260	Z72231	Hex Lock Nut, 3/8NC	4
261	Z72261	Hex Lock Nut, 5/8NC	3
262	Z73131	SAE Washer, 3/8"	5
263	Z73161	SAE Washer, 5/8"	7
264	Z73171	SAE Washer, 3/4"	2
265	Z75572	Shoulder Bolt, 3/4" x 3/4"	2
266	Z76111	Flange Bolt, 1/4NC x 3/4"	6
267	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**

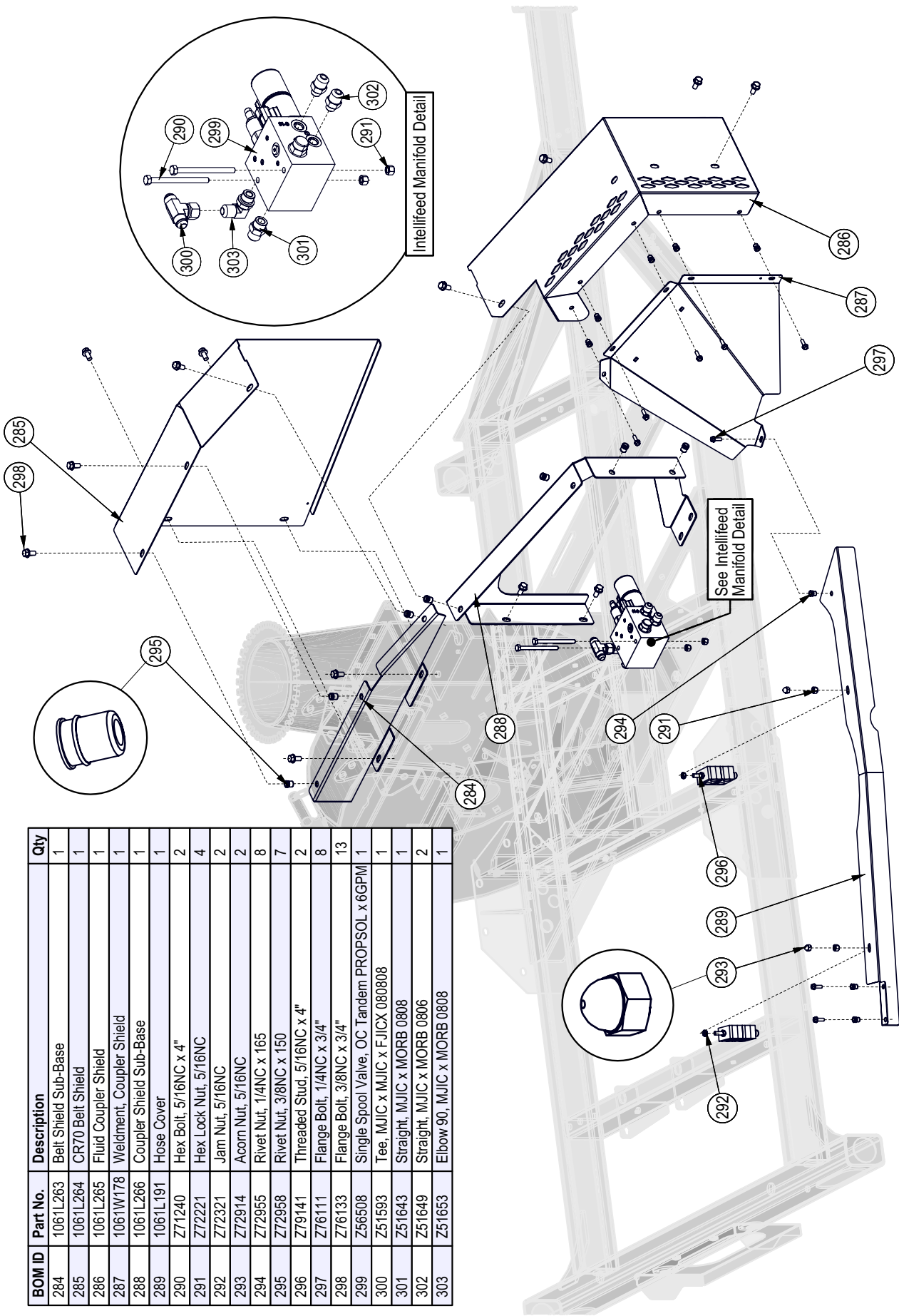


BOM ID	Description	Description	Qty
258	Z66210	IntelliFEED Pickup Sensor with 68° Lead	1
259	Z71220	Hex Bolt, 5/16NC x 2	3
260	Z71572G8	Hex Bolt, 1/2NF x 7/8 Gr8	8
261	Z72211	Hex Lock Nut, 1/4NC	1
262	Z72251G8	Hex Lock Nut, 1/2NC Grade 8	8
263	Z72357	Brass Jam Nut, 9/16-18NF	2
264	Z73122	Flat Washer, 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

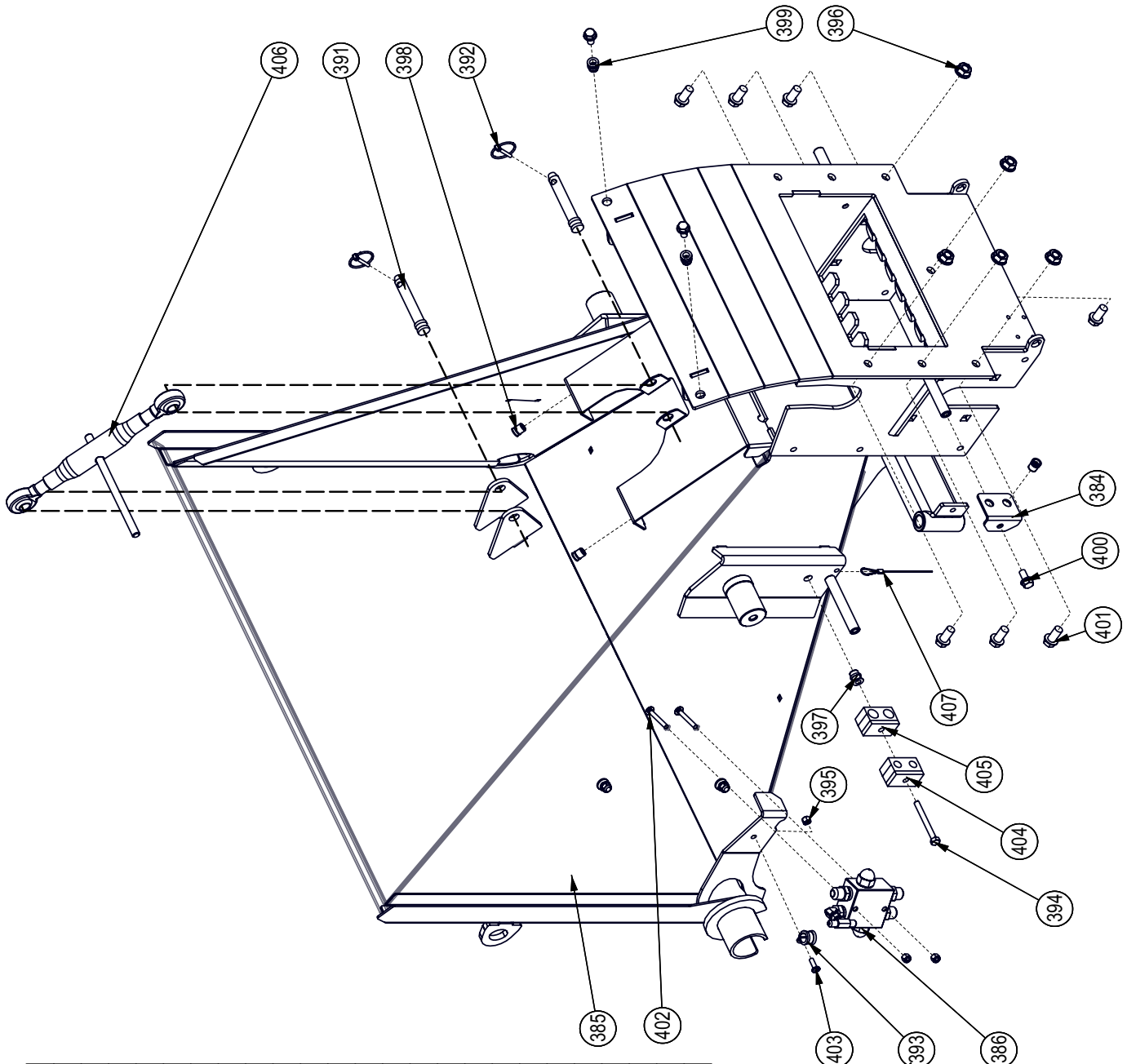
BOM ID	Description	Description	Qty
245	1061A115	Centrifugal Rotor Lock, CR70	1
246	1061W105	Rotor, CR70	1
247	1021S102	Rotation Indicator Cover	1
248	1053M303	Split Knife, BXT62 Rotor	4
249	1061L118	Spacer, Bearing Mount CR70	2
250	1061L119	Sensor Mounting Bracket, CR70	1
251	Z25211	Spherical Roller 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**

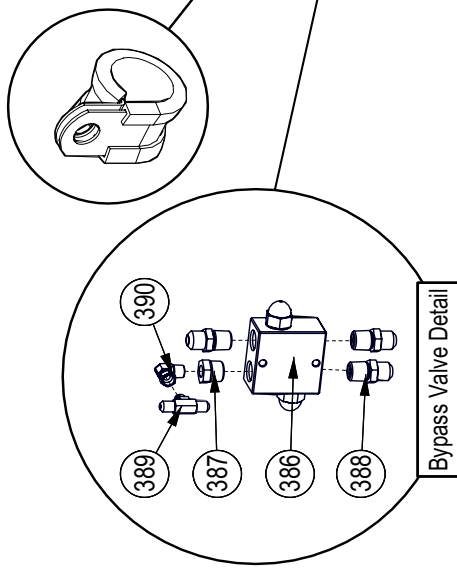
BOM ID	Part No.	Description	Qty
284	1061L263	Belt Shield Sub-Base	1
285	1061L264	CR70 Belt Shield	1
286	1061L265	Fluid Coupler Shield	1
287	1061W178	Weldment, Coupler Shield	1
288	1061L266	Coupler Shield Sub-Base	1
289	1061L191	Hose Cover	1
290	Z71240	Hex Bolt, 5/16NC x 4"	2
291	Z72221	Hex Lock Nut, 5/16NC	4
292	Z72321	Jam Nut, 5/16NC	2
293	Z72914	Acorn Nut, 5/16NC	2
294	Z72955	Rivet Nut, 1/4NC x 165	8
295	Z72968	Rivet Nut, 3/8NC x 150	7
296	Z79141	Threaded Stud, 5/16NC x 4"	2
297	Z76111	Flange Bolt, 1/4NC x 3/4"	8
298	Z76133	Flange Bolt, 3/8NC x 3/4"	13
299	Z56508	Single Spool Valve, OC Tandem PROPSOL x 6GPM	1
300	Z51593	Tee, MJIC x MJIC x FJICX 080808	1
301	Z51643	Straight, MJIC x MORB 0808	1
302	Z51649	Straight, MJIC x MORB 0806	2
303	Z51653	Elbow 90, MJIC x MORB 0808	1



Hopper Top / Back View

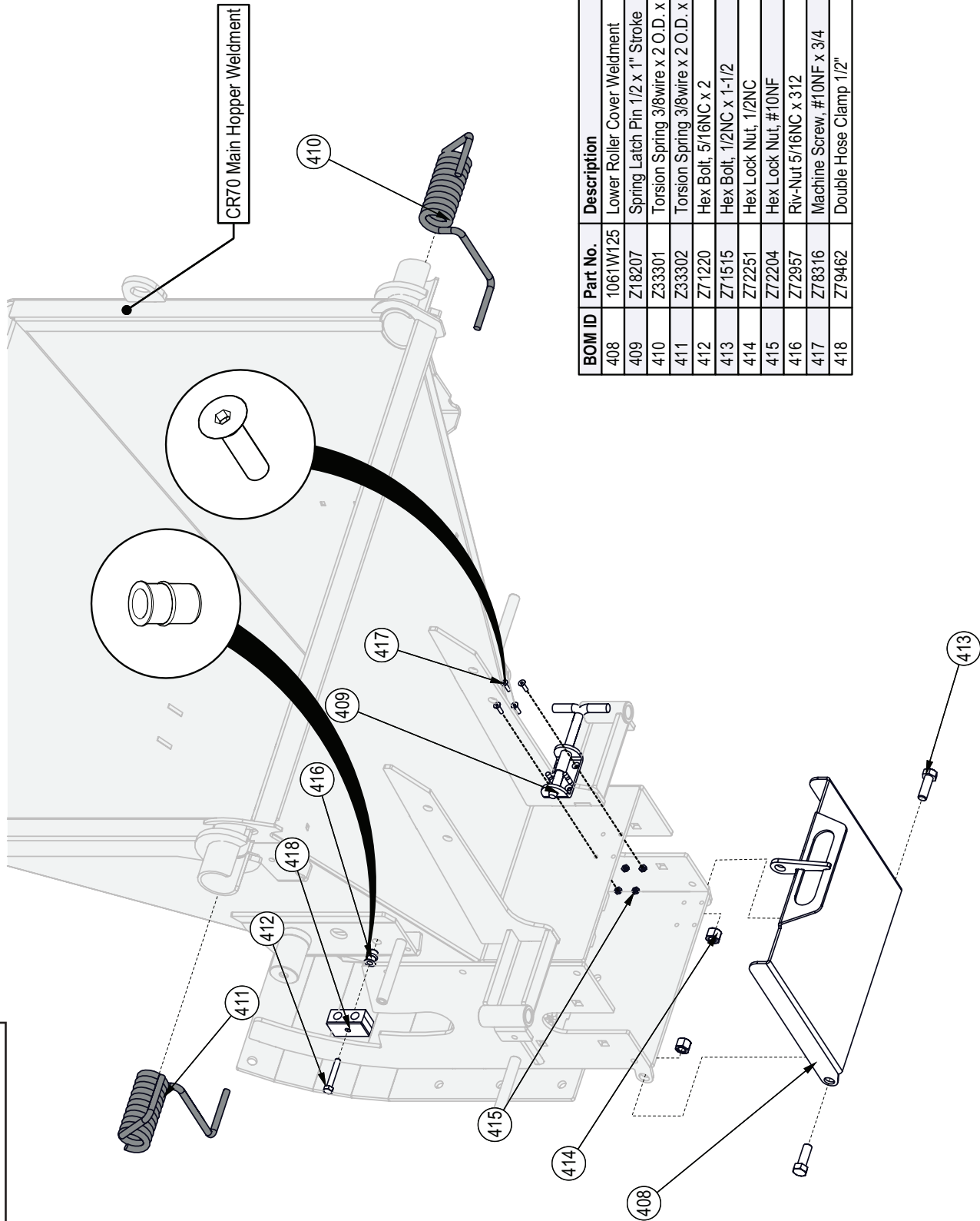


BOM ID	Part No.	Description	Qty
384	1023L300	Bridge Guard Mount	1
385	1061W102	CR70 Main Hopper Weldment	1
386	Z56401	Crossover Relief Valve x 3000PSI	1
387	Z51222	Straight, MP x FP 0804	1
388	Z51442	Straight, MJIC x MP 0808	3
389	Z51488	Tee, MJIC x MJIC x MJIC 040404	1
390	Z51522	Elbow 90, MP x FJICX 0404	1
391	Z11111	Toplink Pin, 5/8" x 2-3/4"	2
392	Z12110	Lynch Pin, 3/16"	2
393	Z62819	Rubberized Wire Clamp, 1/2"	1
394	Z71230	Hex Bolt, 5/16NC x 3"	1
395	Z72211	Hex Lock Nut, 1/4NC	3
396	Z72551	Serrated Flange Locknut, 1/2NC	5
397	Z72957	Rivet Nut, 5/16NC x 3/2	1
398	Z72958	Rivet Nut, 3/8NC x 150	3
399	Z72959	Rivet Nut, 3/8NC x 312	2
400	Z76133	Flange Bolt, 3/8NC x 3/4"	3
401	Z76153	Flange Bolt, 1/2NC x 1"	7
402	Z76213	Carnage Bolt, 1/4NC x 2"	2
403	Z78301	Machine Screw, 1/4NC x 3/4"	1
404	Z79462	Double Hose Clamp, 1/2" OD	1
405	Z79463	Double Hose Clamp, 11/16" OD	1
406	Z11501	Toplink, Cat 0 x 10-1/2" x 16"	1
407	Z92110	Aircraft Cable, 1/16" x 24"	1



Bypass Valve Detail

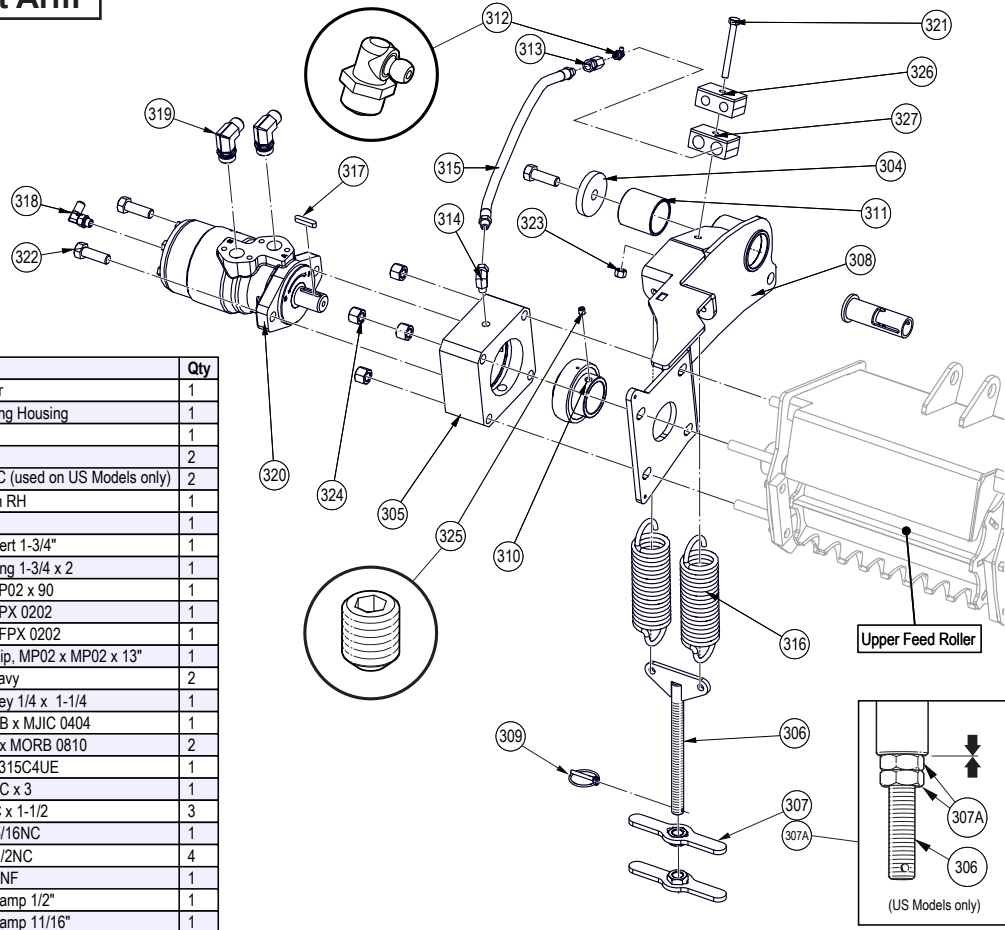
Hopper Front/ Bottom View



BOM ID	Part No.	Description	Qty
408	1061W125	Lower Roller Cover Weldment	1
409	Z18207	Spring Latch Pin 1/2 x 1" Stroke	1
410	Z33301	Torsion Spring 3/8wire x 2 O.D. x 5" RH	1
411	Z33302	Torsion Spring 3/8wire x 2 O.D. x 5" LH	1
412	Z71220	Hex Bolt, 5/16NC x 2	1
413	Z71515	Hex Bolt, 1/2NC x 1-1/2	2
414	Z72251	Hex Lock Nut, 1/2NC	2
415	Z72204	Hex Lock Nut, #10NF	4
416	Z72957	Riv-Nut 5/16NC x 312	1
417	Z78316	Machine Screw, #10NF x 3/4	4
418	Z79462	Double Hose Clamp 1/2"	1

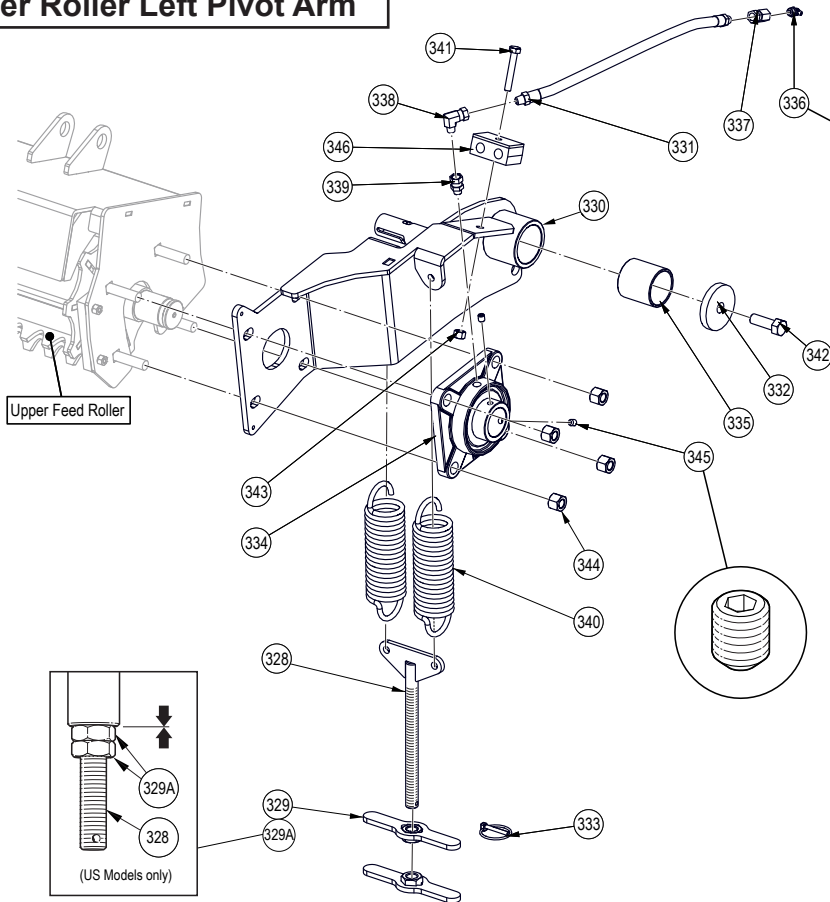
**Upper Roller Right Pivot Arm**

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



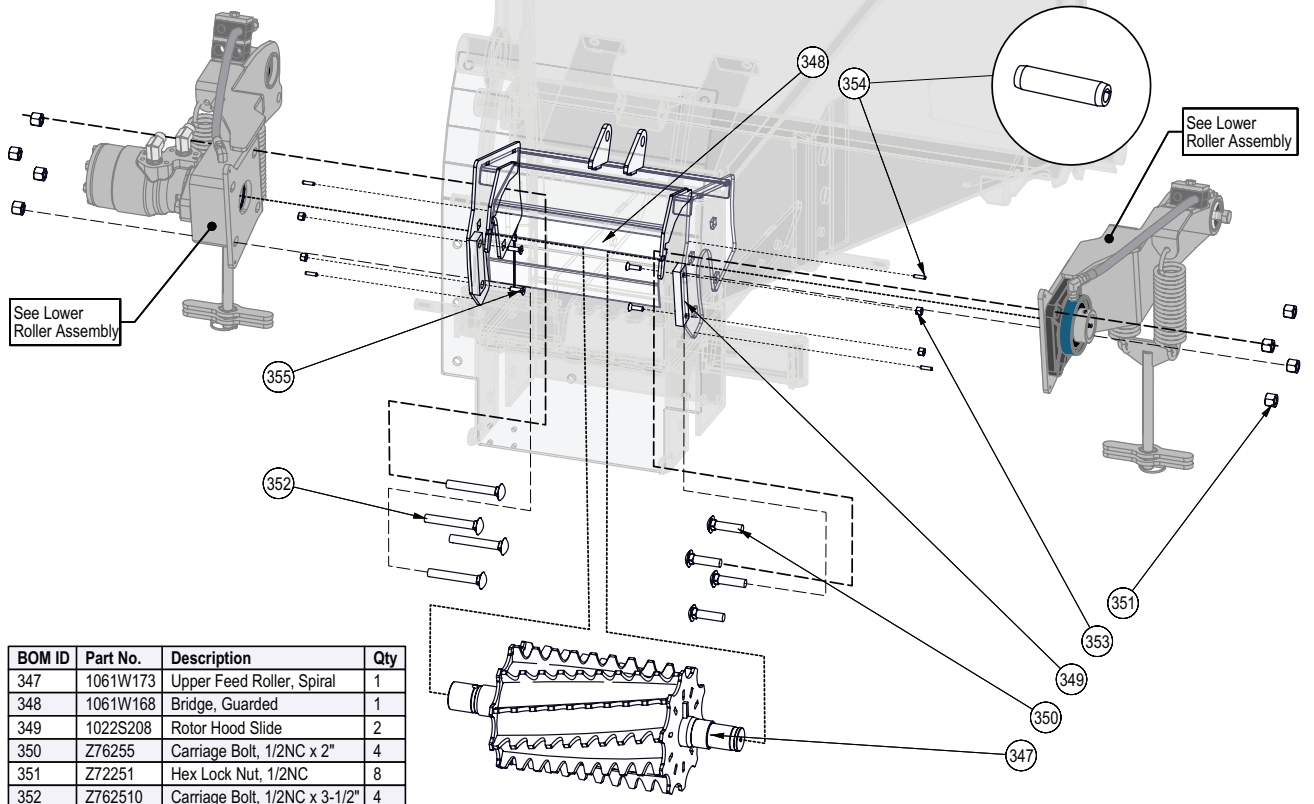
Item	Part No.	Description	Qty
304	1015L618	Capture Washer	1
305	1022M218	UC Motor Bearing Housing	1
306	1022W206	Spring Yoke	1
307	1022W220	Nut Handle	2
307A	Z72361	Jam Nut 5/8" NC (used on US Models only)	2
308	1061W103H	Roller Pivot Arm RH	1
309	Z12110	Latch Pin, 3/16	1
310	Z21903	Ball Bearing Insert 1-3/4"	1
311	Z27101	Fibreglide Bearing 1-3/4 x 2	1
312	Z29207	Grease Zerk, MP02 x 90	1
313	Z29302	Straight, FP x FPX 0202	1
314	Z29307	Elbow 90 MP x FPX 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**



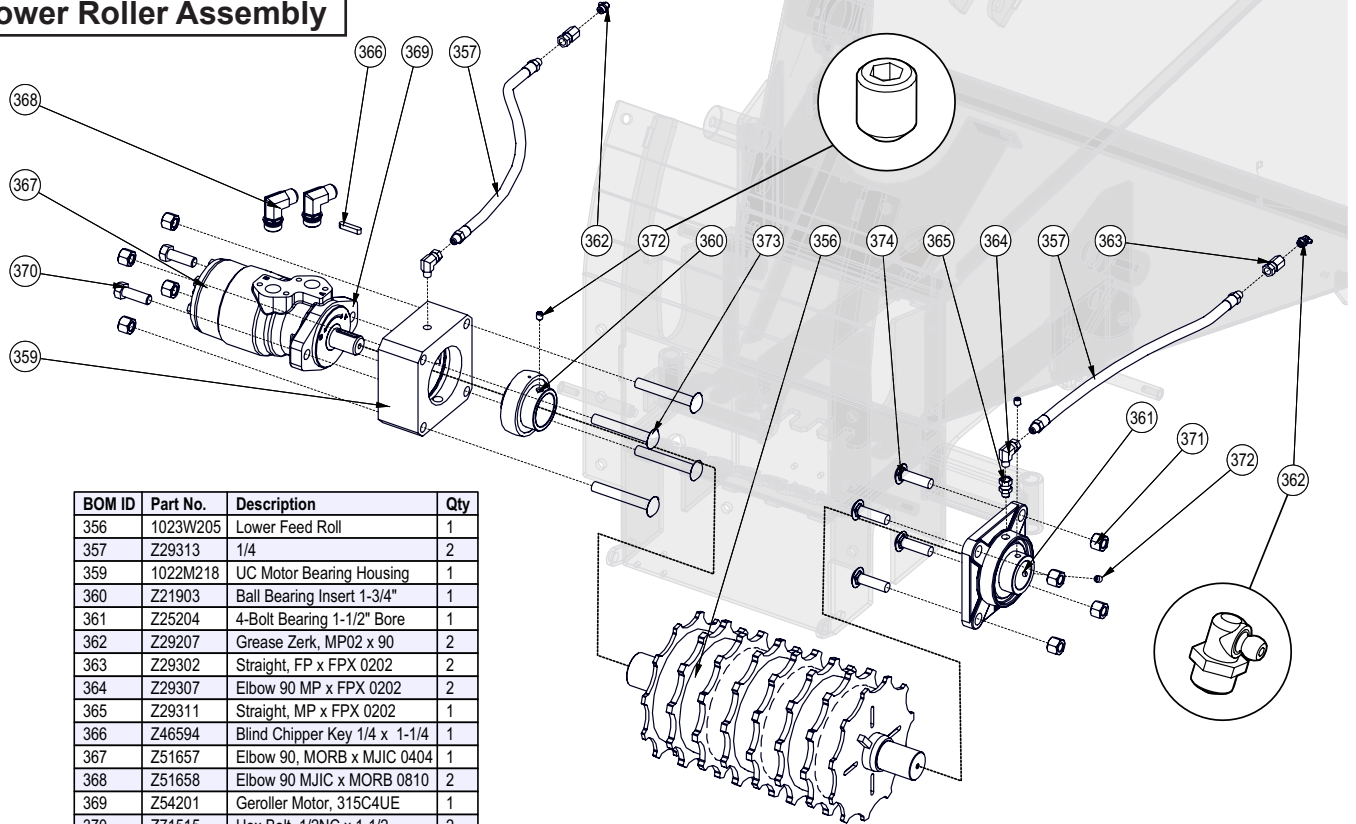
Item	Part No.	Description	Qty
328	1022W206	Spring Yoke	1
329	1022W220	Nut Handle	2
329A	Z72361	Jam Nut 5/8" NC (US Models only)	2
330	1061W103	Roller Pivot Arm LH	1
331	Z29312	1/4" Grease Whip, MP02 x MP02 x 13"	1
332	1015L618	Capture Washer	1
333	Z12110	Latch Pin, 3/16	1
334	Z25204	4-Bolt Bearing 1-1/2" Bore	1
335	Z27101	Fibreglide Bearing 1-3/4 x 2	1
336	Z29207	Grease Zerk, MP02 x 90	1
337	Z29302	Straight, FP x FPX 0202	1
338	Z29307	Elbow 90 MP x FPX 0202	1
339	Z29311	Straight, MP x FPX 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**



BOM ID	Part No.	Description	Qty
347	1061W173	Upper Feed Roller, Spiral	1
348	1061W168	Bridge, Guarded	1
349	1022S208	Rotor Hood Slide	2
350	Z76255	Carriage Bolt, 1/2NC x 2"	4
351	Z72251	Hex Lock Nut, 1/2NC	8
352	Z762510	Carriage Bolt, 1/2NC x 3-1/2"	4
353	Z72211	Hex Lock Nut, 1/4NC	4
354	Z14152	Roll Pin, 3/16" x 3/4"	4
355	Z75211	FHCS, 1/4NC x 7/8"	4

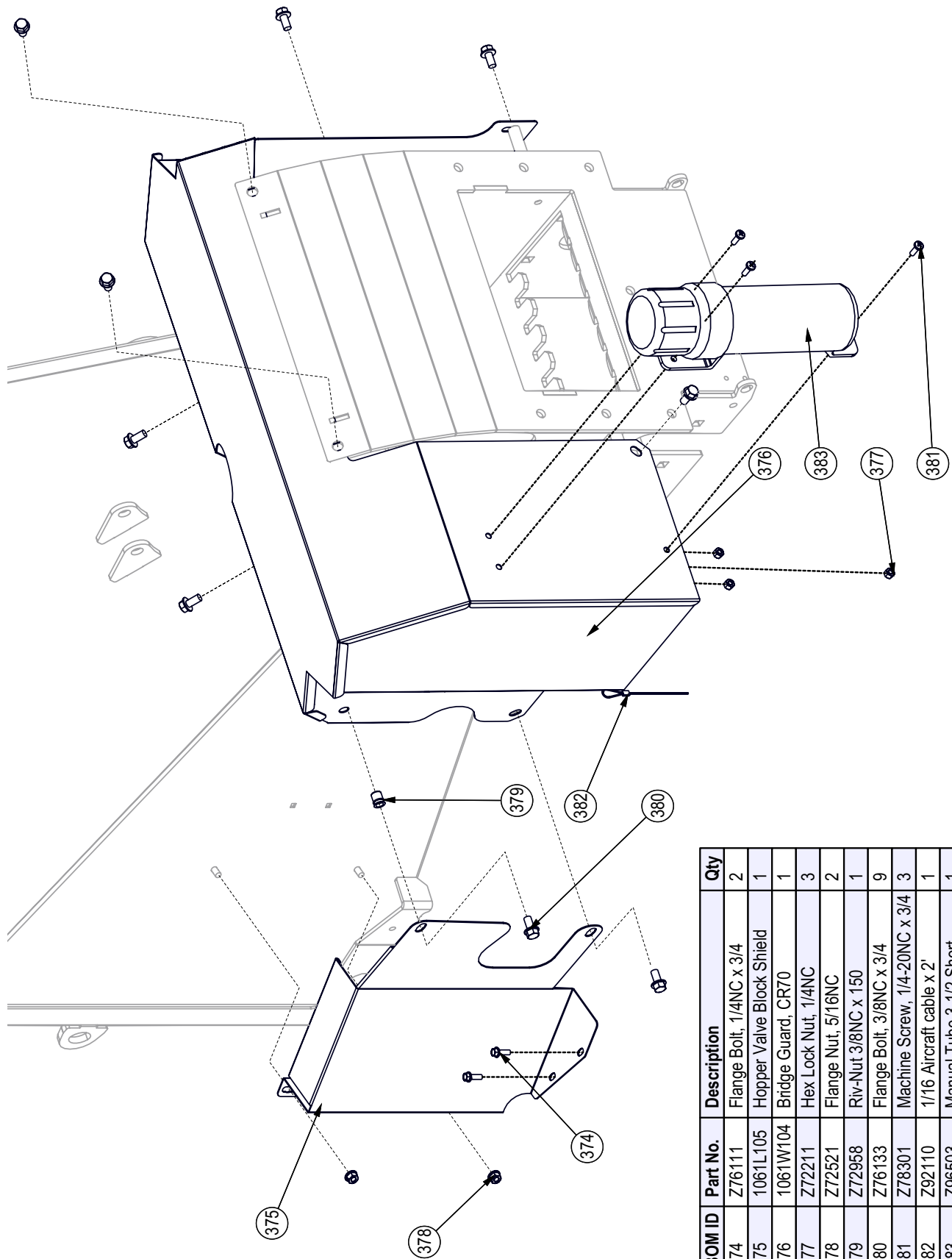
**Lower Roller Assembly**



BOM ID	Part No.	Description	Qty
356	1023W205	Lower Feed Roll	1
357	Z29313	1/4	2
359	1022M218	UC Motor Bearing Housing	1
360	Z21903	Ball Bearing Insert 1-3/4"	1
361	Z25204	4-Bolt Bearing 1-1/2" Bore	1
362	Z29207	Grease Zerk, MP02 x 90	2
363	Z29302	Straight, FP x FPX 0202	2
364	Z29307	Elbow 90 MP x FPX 0202	2
365	Z29311	Straight, MP x FPX 0202	1
366	Z46594	Blind Chipper Key 1/4 x 1-1/4	1
367	Z51657	Elbow 90, MORB x MJIC 0404	1
368	Z51658	Elbow 90 MJIC x MORB 0810	2
369	Z54201	Geroller Motor, 315C4UE	1
370	Z71515	Hex Bolt, 1/2NC x 1-1/2	2
371	Z72251	Hex Lock Nut, 1/2NC	8
372	Z74122	Set Screw, 5/16NF	3
373	Z762510	Carriage Bolt, 1/2NC x 3-1/2	4
374	Z76258	Carriage Bolt, 1/2NC x 1-3/4	4

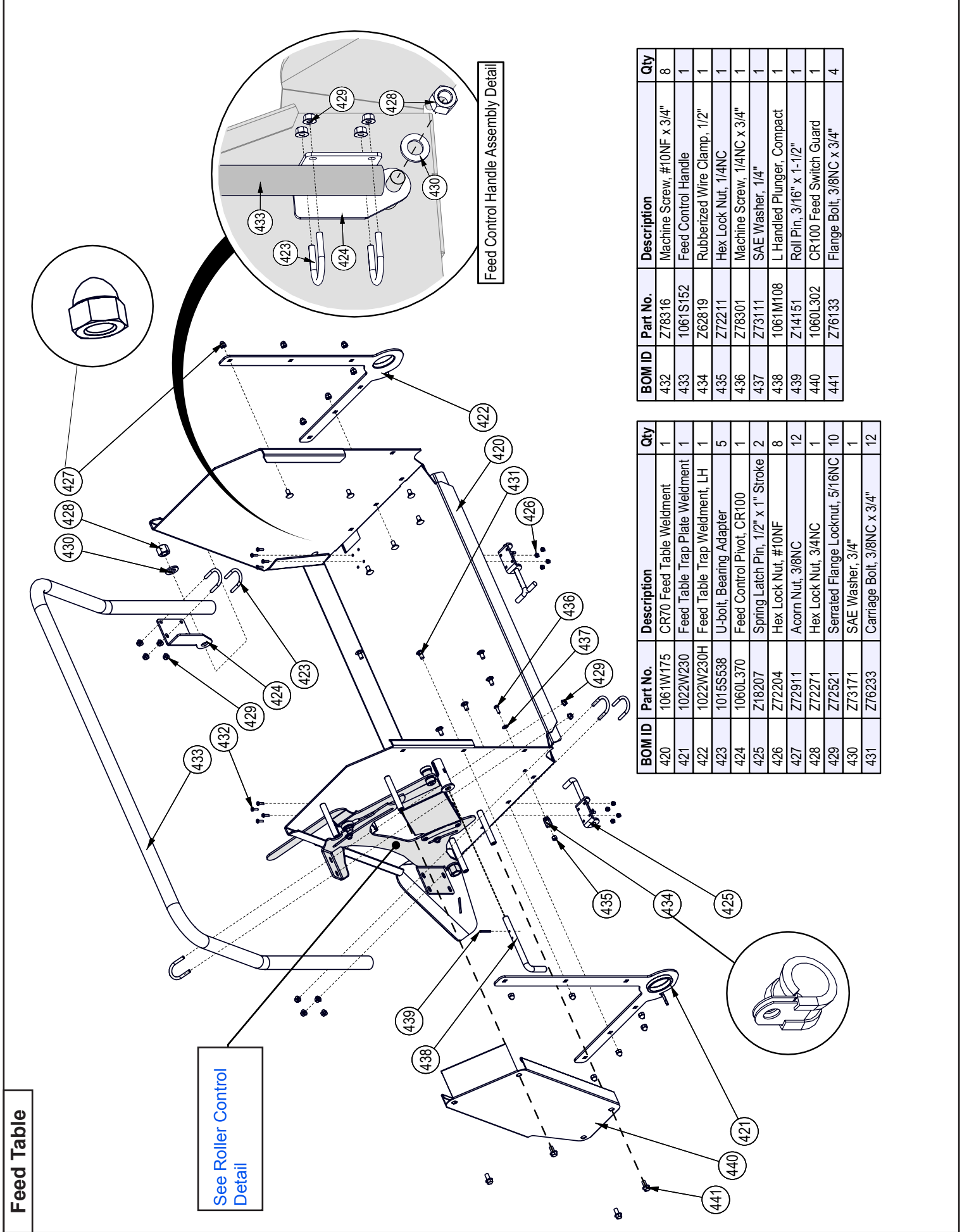
**Seal Kit for  
#Z54201 Geroller Motor, 315C4UE  
SK MLHR-U/D,E**

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**

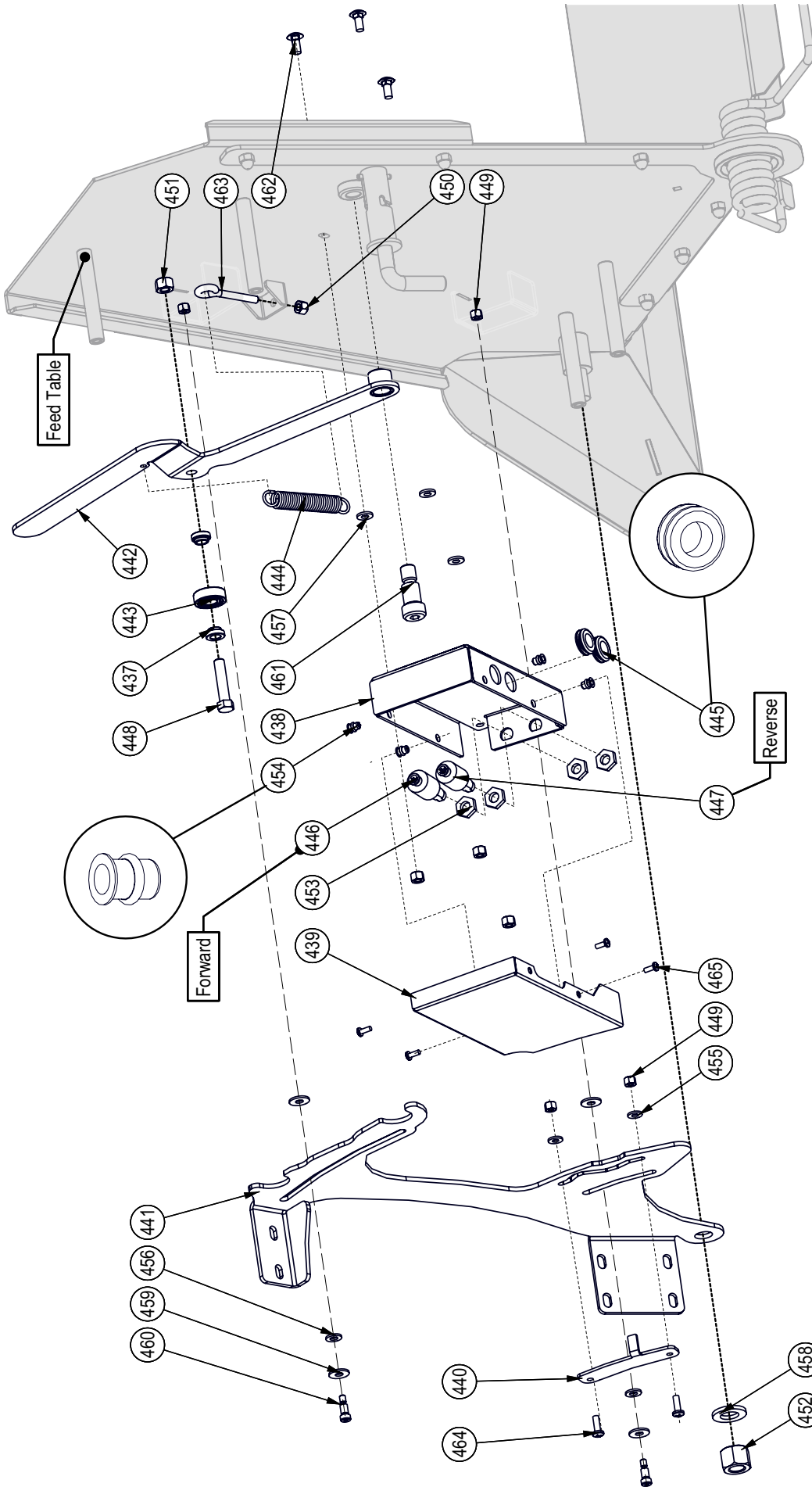
See Roller Control Detail

Feed Control Handle Assembly Detail

BOM ID	Part No.	Description	Qty
432	Z78316	Machine Screw, #10NF x 3/4"	8
433	1061S152	Feed Control Handle	1
434	Z62819	Rubberized Wire Clamp, 1/2"	1
435	Z72211	Hex Lock Nut, 1/4NC	1
436	Z78301	Machine Screw, 1/4NC x 3/4"	1
437	Z73111	SAE Washer, 1/4"	1
438	1061M108	L Handled Plunger, Compact	1
439	Z14151	Roll Pin, 3/16" x 1-1/2"	1
440	1060L302	CR100 Feed Switch Guard	1
441	Z76133	Flange Bolt, 3/8NC x 3/4"	4

BOM ID	Part No.	Description	Qty
420	1061W175	CR70 Feed Table Weldment	1
421	1022W230	Feed Table Trap Plate Weldment	1
422	1022W230H	Feed Table Trap Weldment, LH	1
423	1015S538	U-bolt, Bearing Adapter	5
424	1060L370	Feed Control Pivot, CR100	1
425	Z18207	Spring Latch Pin, 1/2" x 1" Stroke	2
426	Z72204	Hex Lock Nut, #10NF	8
427	Z72911	Acorn Nut, 3/8NC	12
428	Z72271	Hex Lock Nut, 3/4NC	1
429	Z72521	Serrated Flange Locknut, 5/16NC	10
430	Z73171	SAE Washer, 3/4"	1
431	Z76233	Carriage Bolt, 3/8NC x 3/4"	12

Feed Roller Control Detail

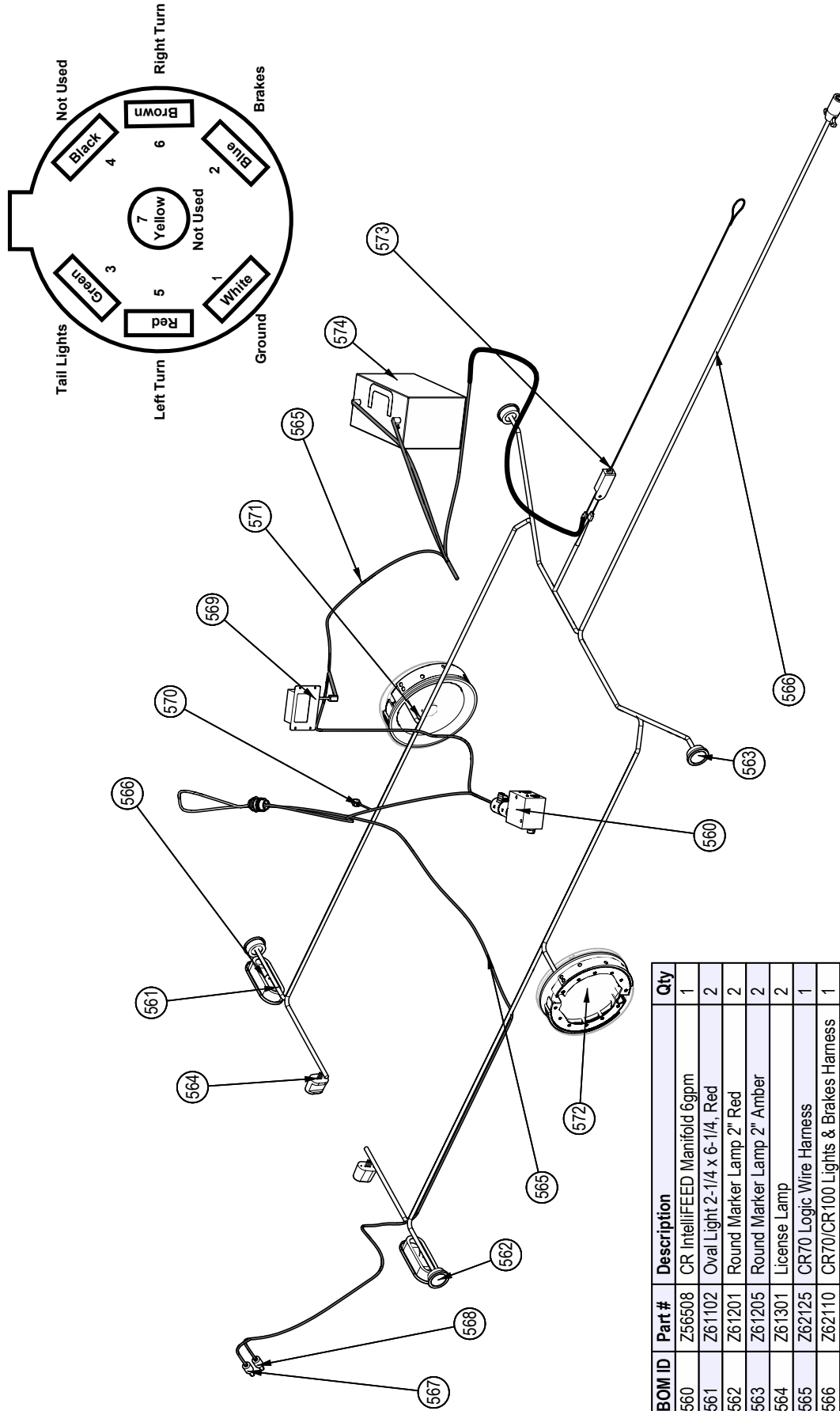


BOM ID	Part No.	Description	Qty
457	Z73123	Rubber Washer, 5/16" x 0.093"	3
458	Z73171	SAE Washer, 3/4"	1
459	Z73222	PTFE Washer, 5/16 x 0.080"	4
460	Z75522	Shoulder Bolt, 5/16" x 1/2"	2
461	Z75574	Shoulder Bolt, 3/4" x 1"	1
462	Z76221	Carriage Bolt, 5/16NC x 3/4"	3
463	Z76522	Eye Bolt, 5/16NC x 2"	1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

BOM ID	Part No.	Description	Qty
447	Z64405	Proximity Switch, 5A x NO x Sinking	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, 9/16NF	4
454	Z72954	Rivet Nut, #10NC x 130	4
455	Z73111	SAE Washer, 1/4"	2
456	Z73122	SAE Washer, 5/16"	2

BOM ID	Part No.	Description	Qty
437	1015M537	Bushing, Bearing	2
438	1060L301	Switch Mount Plate, CR100	1
439	1060L303	Sensor Box Lid, CR100	1
440	1060L304	Feed Pickup Trigger, CR100	1
441	1060L369	CR100 Control Base Pivot Link	1
442	1060W302	Detent Reset Weldment, CR100	1
443	Z21203	Ball Bearing, 6202-2RS	1
444	Z31401	Ext Spring, 3/4" OD x 4" x 0.105"	1
445	Z62823	Rubber Grommet, 5/8" x 1/8"	2
446	Z64403	Proximity Switch, 5A x NO x Sourcing	1

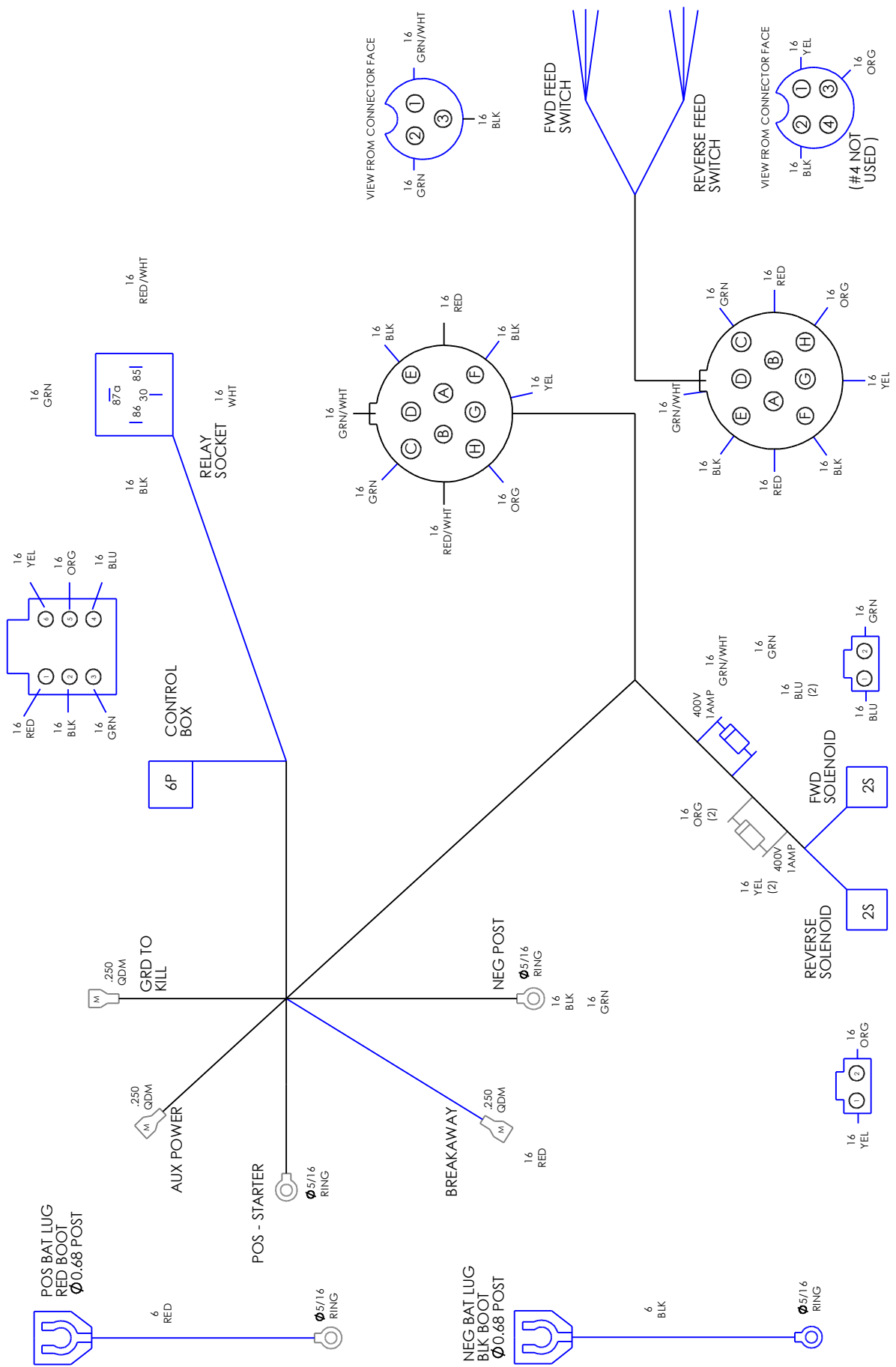
**IntelliFEED, Lights and Brakes Wiring Harness**



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

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

NOTE: HARNESS IS BRAIDED



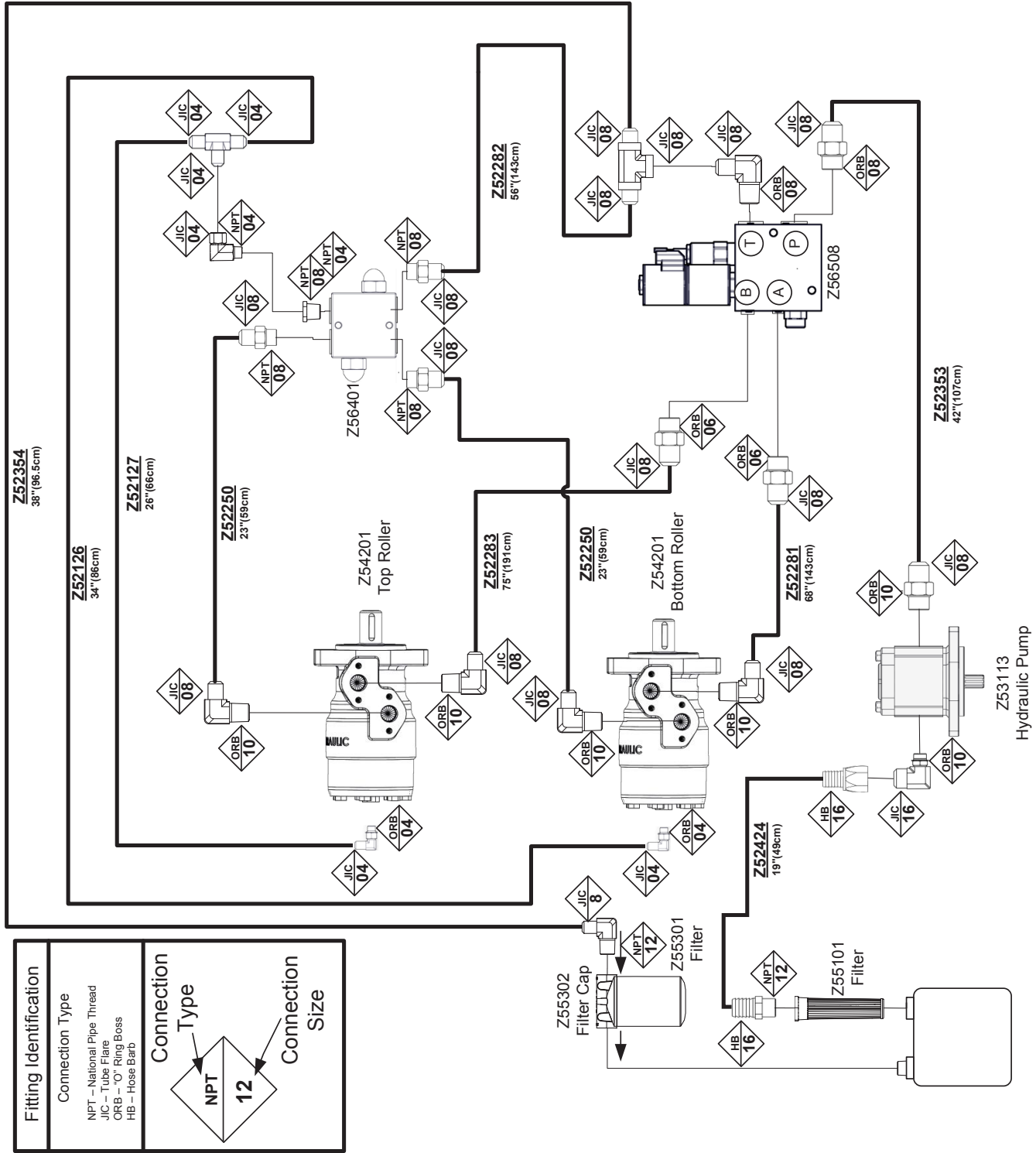
IntelliFEED Wiring Diagram

**Hydraulic Hose Parts List**

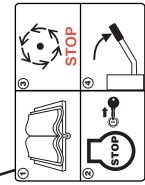
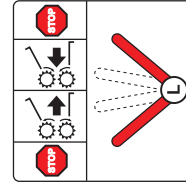
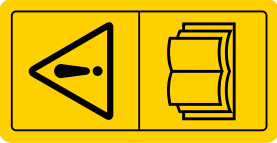
The Chart below is a complete list of hydraulic hoses for the CR70. For information on your model and its hose connections please review the hydraulic schematics on the following pages.

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

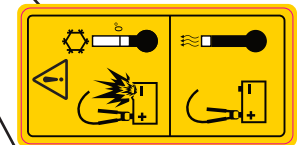
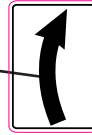
Hydraulic Plumbing Diagram

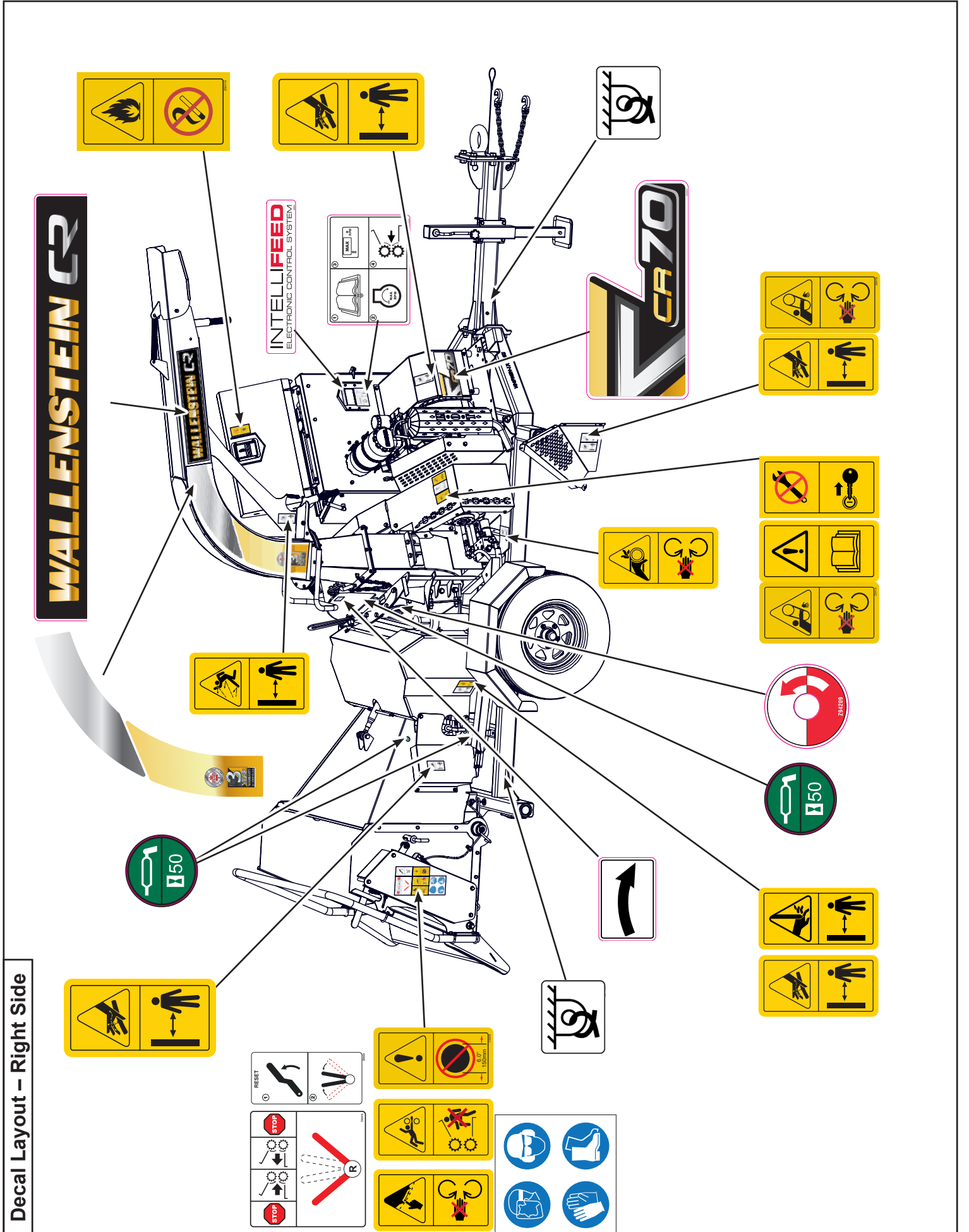


IMPORTANT! If parts are replaced that have safety signs on them, new signs must be applied. Safety signs must always be replaced if they become damaged, are removed, or become illegible. Safety signs are included in the product decal kit available from your authorized dealer. Decals are not available separately.



Decal Layout – Left Side

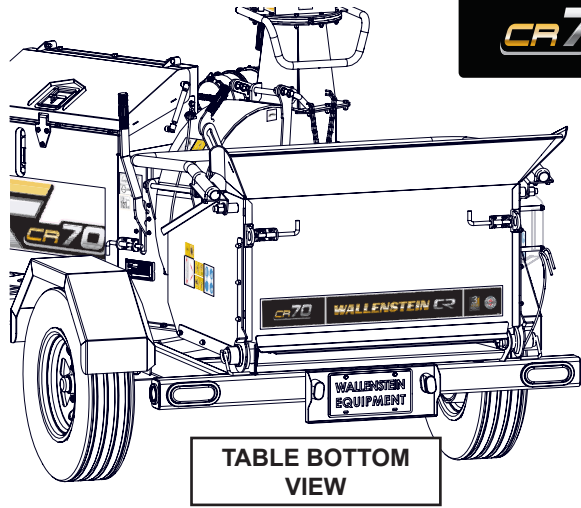




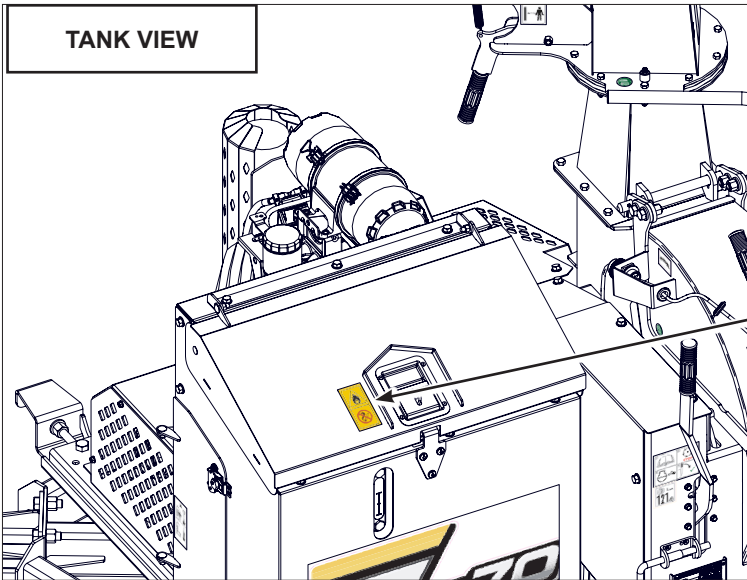
Decal Layout – Right Side



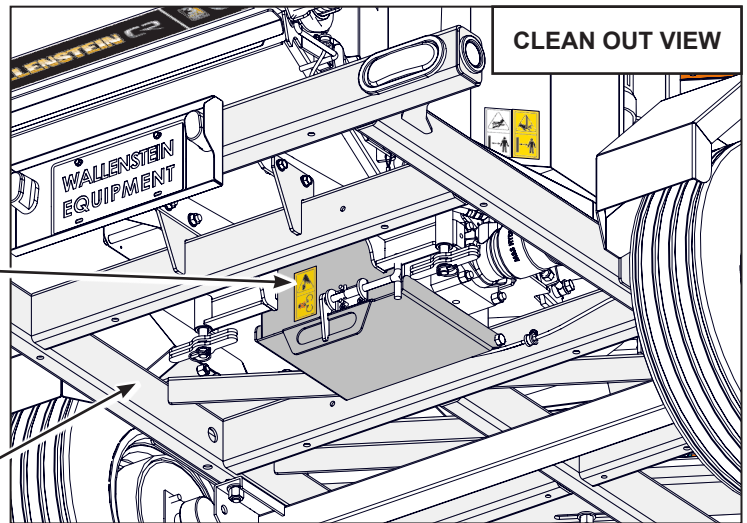
Decal Layout



CR70 – Z946215  
CR70EU – Z946201



CLEAN OUT VIEW




## Common Bolt Torque Values

### Checking Bolt Torque

The tables shown give correct torque values for various bolts and capscrews. Tighten all bolts to the torque values specified in the table, unless indicated otherwise. Check tightness of bolts periodically.

**IMPORTANT!** If replacing hardware, use fasteners of the same grade.

**IMPORTANT!** Torque figures indicated in the table are for non-greased or non-oiled threads. Do not grease or oil threads unless indicated otherwise. When using a thread locker, increase torque values by 5%.

 **NOTE:** Bolt grades are identified by their head markings.

### Imperial Bolt Torque Specifications

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



SAE Gr. 2



SAE Gr. 5



SAE Gr. 8

### Metric Bolt Torque Specifications

Bolt Diameter	Torque Value			
	Gr. 8.8		Gr. 10.9	
	lbf•ft	N•m	lbf•ft	N•m
M3	0.4	0.5	1.3	1.8
M4	2.2	3	3.3	4.5
M6	7	10	11	15
M8	18	25	26	35
M10	37	50	52	70
M12	66	90	92	125
M16	166	225	229	310
M20	321	435	450	610
M30	1,103	1 495	1,550	2 100
M36	1,917	2 600	2,700	3 675



8.8



10.9

**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. Hand-tighten swivel nut until snug.
4. To prevent twisting the tube, use two wrenches. Place one wrench on the connector body and tighten the swivel nut with the second. Torque to values shown.

If a torque wrench is not available, use the FFFT (Flats From Finger Tight) method.

Hydraulic Fitting Torque					
Tube Size OD	Hex Size Across Flats	Torque value		Flats From Finger Tight	
		lbf•ft	N•m	Flats	Turns
3/16	7/16	6	8	2	1/6
1/4	9/16	11–12	15–17	2	1/6
5/16	5/8	14–16	19–22	2	1/6
3/8	11/16	20–22	27–30	1-1/4	1/6
1/2	7/8	44–48	59–65	1	1/6
5/8	1	50–58	68–79	1	1/6
3/4	1-1/4	79–88	107–119	1	1/8
1	1-5/8	117–125	158–170	1	1/8

Values shown are for non-lubricated connections.

**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 10 miles (16 km), 25 miles (40 km), and again at 50 miles (80 km). 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.*

- 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.

Wheel Lug Nut Torque				
Wheel Size	Units	1st Stage	2nd Stage	3rd Stage
8"	lbf•ft N•m	12–20 16–26	30–35 39–45.5	45–55 58.5–71.5
12"	lbf•ft N•m	20–25 26–32.5	35–40 45.5–52	50–60 65–78
13"	lbf•ft N•m	20–25 26–32.5	35–40 45.5–52	50–60 65–78
14"	lbf•ft N•m	20–25 26–32.5	50–60 65–78	90–120 117–156
15"	lbf•ft N•m	20–25 26–32.5	50–60 65–78	90–120 117–156
16"	lbf•ft N•m	20–25 26–32.5	50–60 65–78	90–120 117–156

Wheel Lug Torque Pattern

