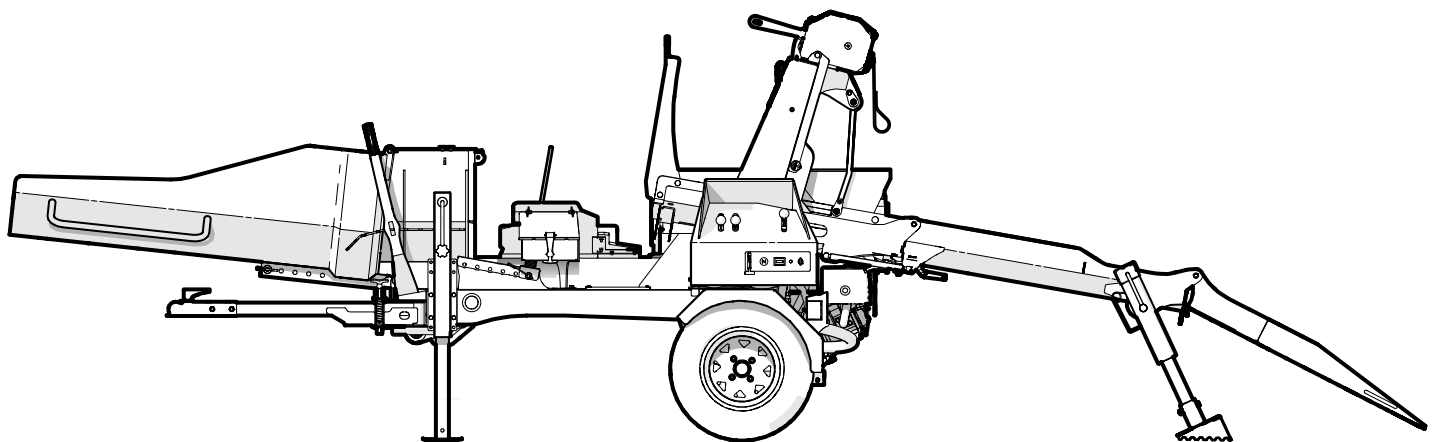


PARTS MANUAL

Serial Number 22E9US1119HS840001 & up

WP840 FIREWOOD PROCESSOR



Foreword

This Wallenstein parts manual is prepared to assist customers in ordering quality OEM replacement parts.

Regular maintenance combined with replacing old, worn or broken parts with the correct OEM parts is essential in prolonging the life of your Wallenstein product. 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. Wallenstein reserves the right to change product specifications at any time without notice.

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

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WARNING!

Refer to the operators manual for safe operation and maintenance.

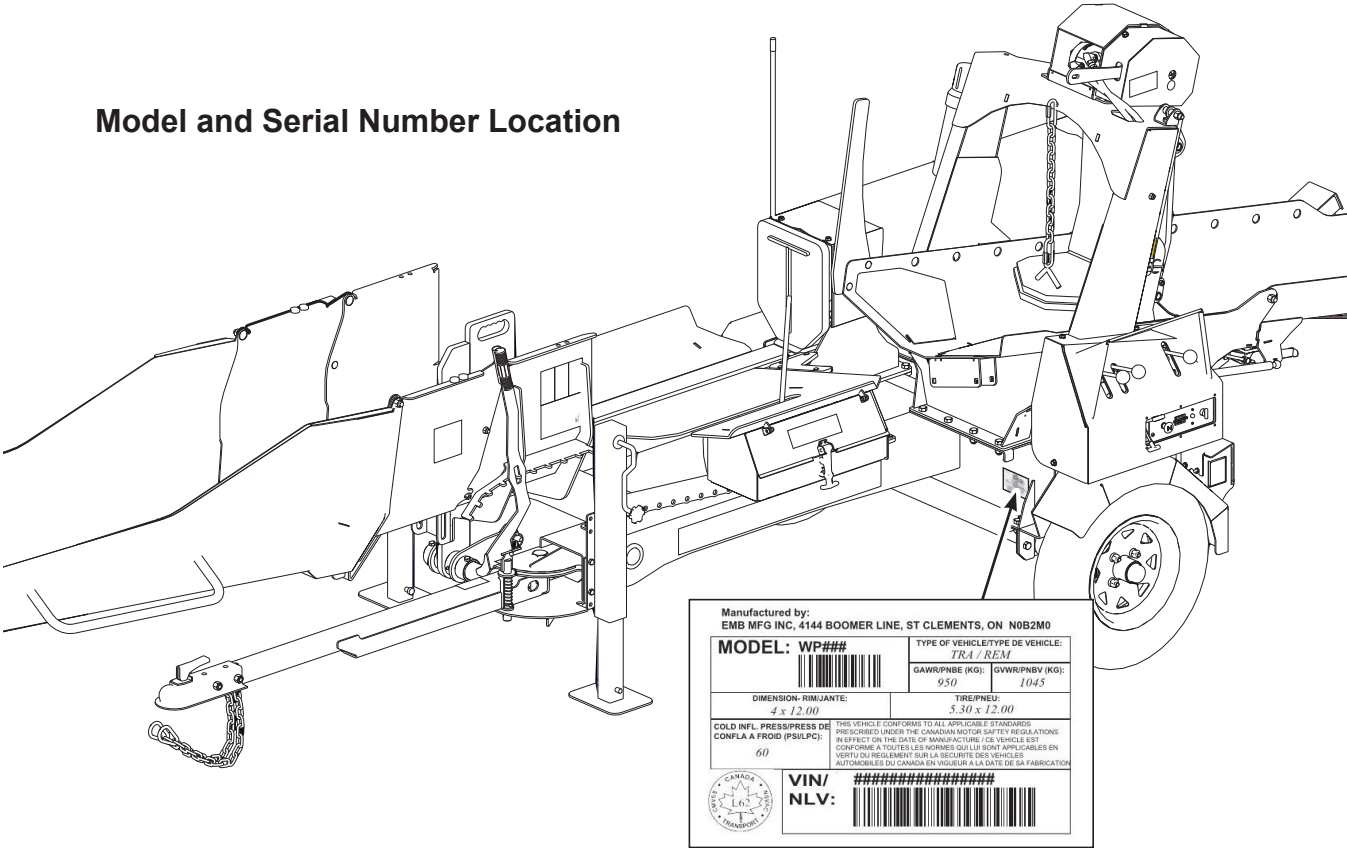
Maintenance should be performed by trained personnel only.

Serial Number Location

Always provide the model and serial number of your Wallenstein product when ordering parts or requesting service or other information. This information is found on the product information plate as shown below.

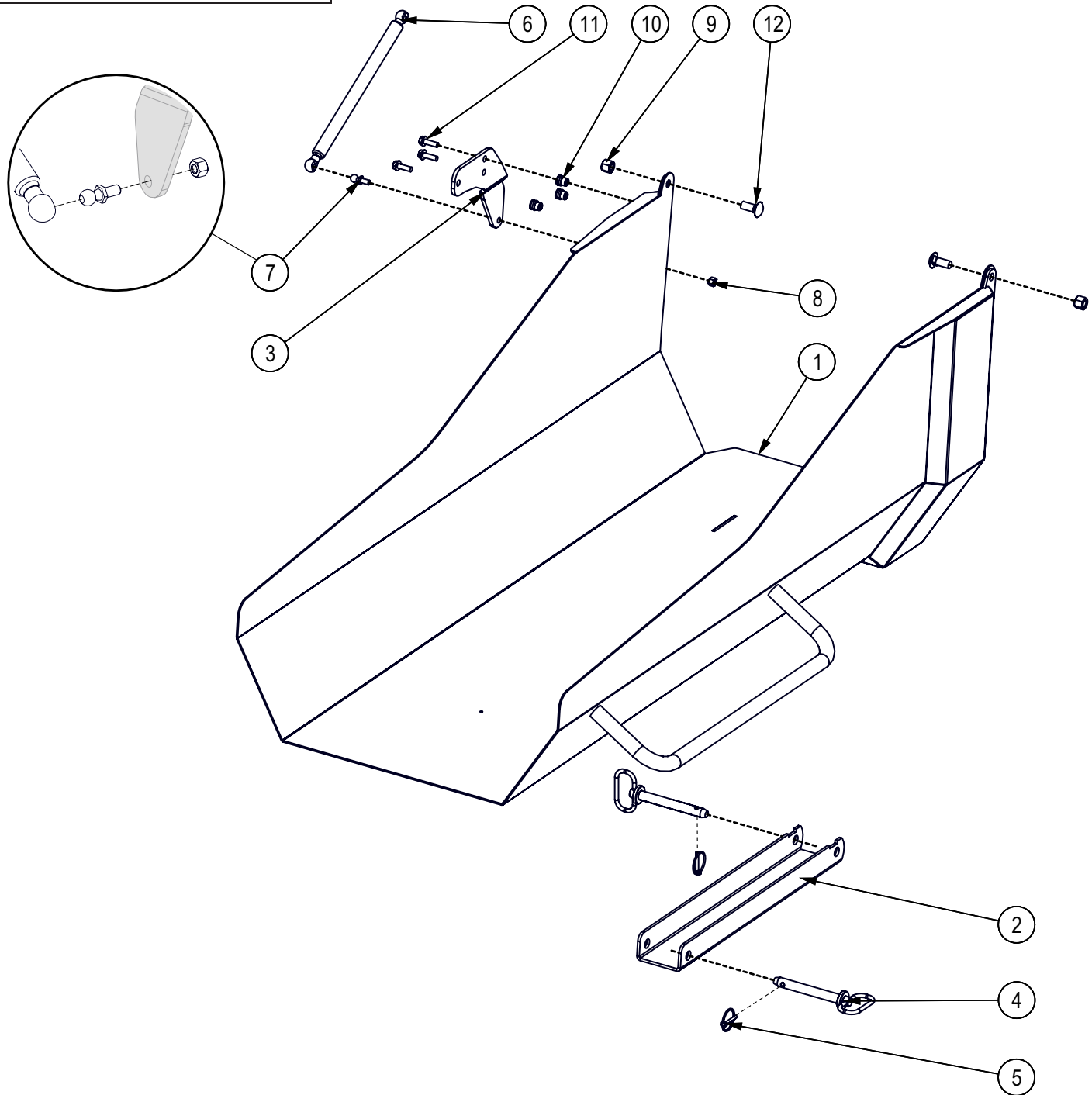
Record product information for future reference.

Model and Serial Number Location



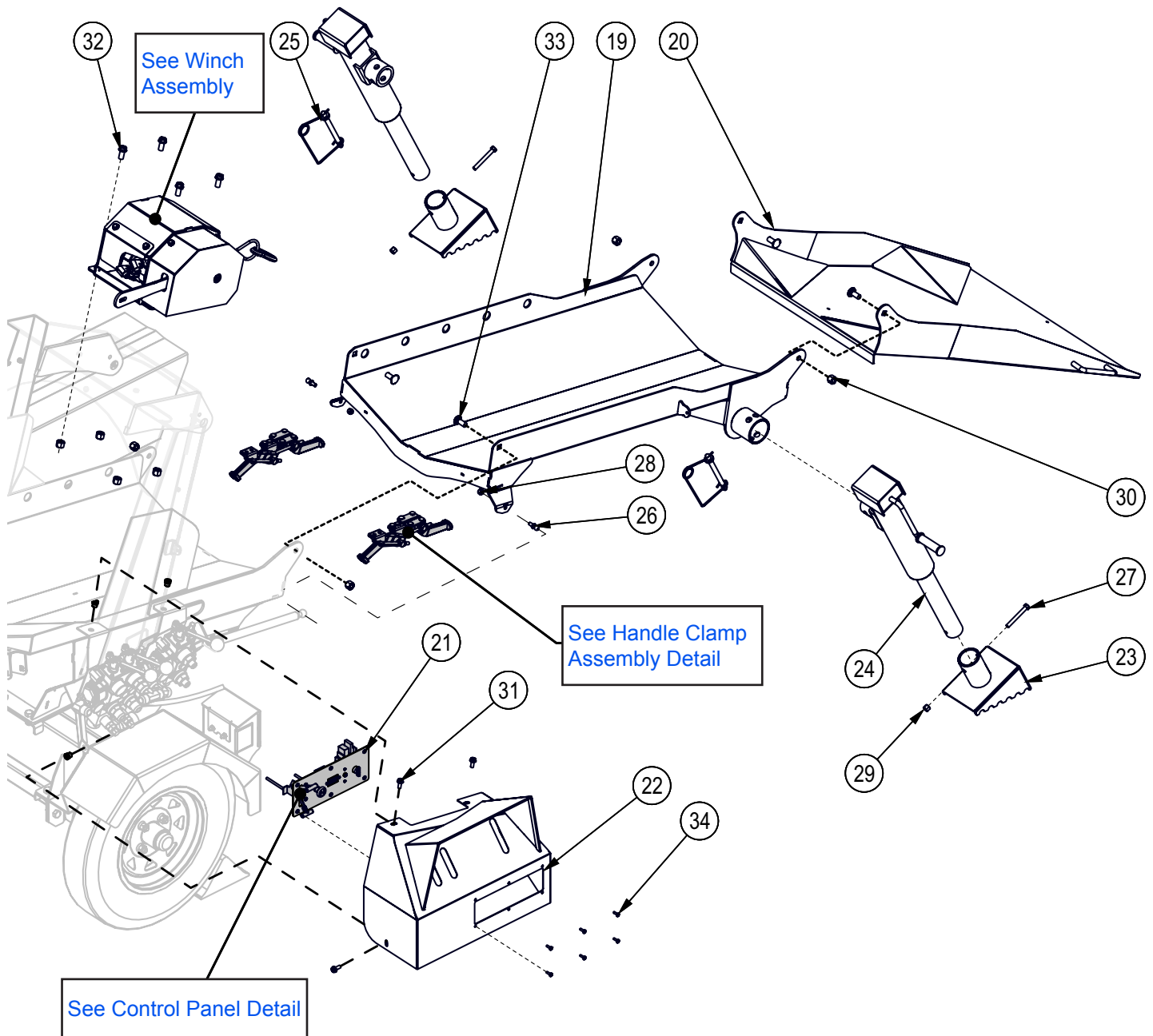
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Splitter Chute Assembly

Item No.	Part No.	Description	Qty
1	2251W041	Splitter Chute	1
2	2071W114	Chute Adjuster	1
3	2071L188	Plate, Spring Mount	1
4	Z11232	Hitch Pin, 5/8" x 4-1/4"	2
5	Z12110	Lynch Pin, 3/16"	2
6	Z34203	Gas Spring, 10mm OD x 540mm x 215mm x 158 lbs	1
7	Z34204	Ball Stud, 13mm x 5/16NC	1
8	Z72221	Hex Lock Nut, 5/16NC	1
9	Z72251	Hex Lock Nut, 1/2NC	2
10	Z72956	Rivet Nut, 5/16NC x 150	3
11	Z76125	Flange Bolt, 5/16NC x 1"	3
12	Z76259	Carriage Bolt, 1/2NC x 1-1/4"	2

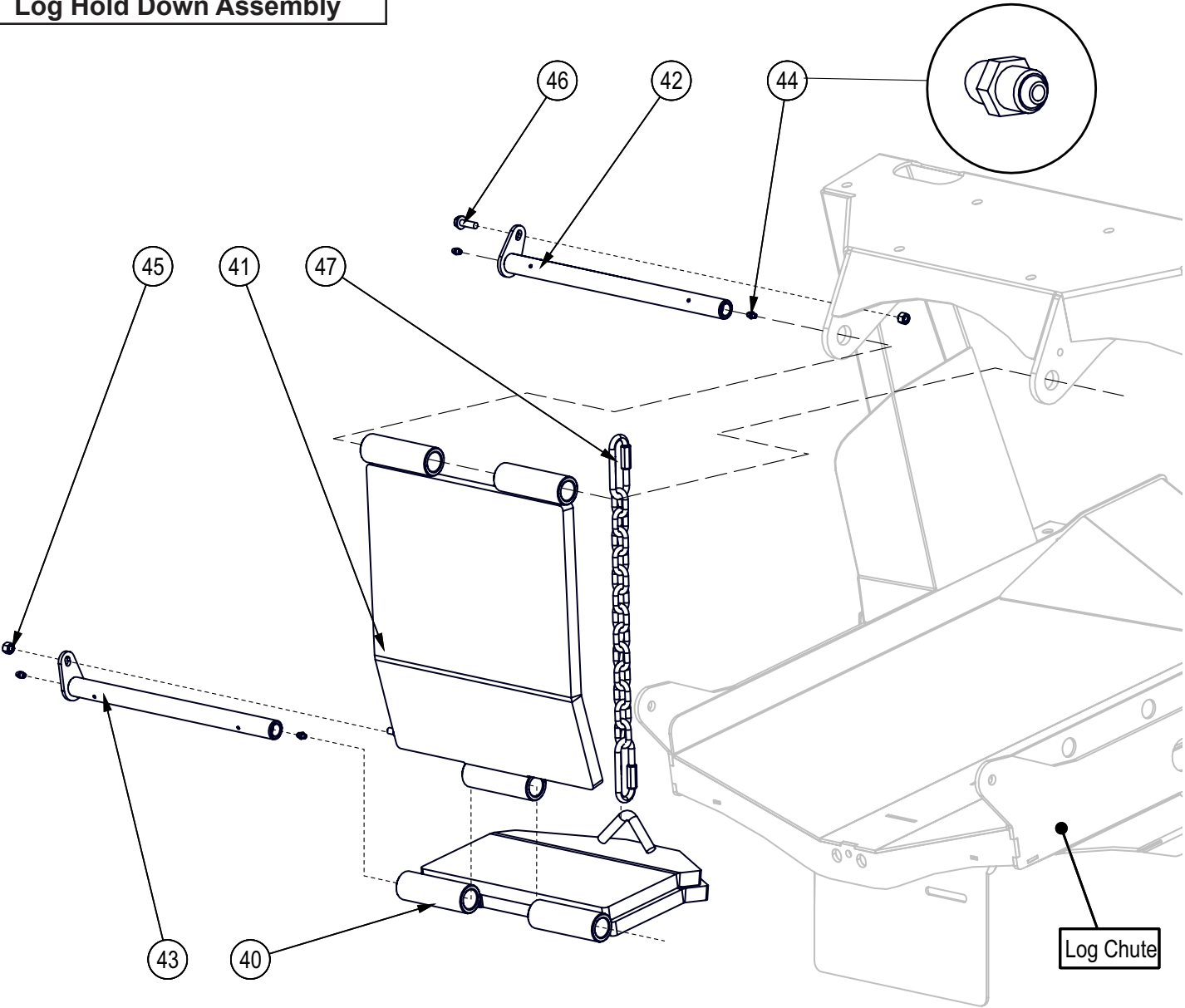
Lead In Chute Assembly



Item No.	Part No.	Description	Qty
19	2251W016	Chute, Bottom	1
20	2251W017	Chute, Lead In	1
21	2251A056	Panel Assembly, WP800 Series	1
22	2251W043	Valve Cover	1
23	2251W020	Foot, Jack	2
24	Z91515	Trailer Jack, Side Wind x 2000lbs No Foot	2
25	Z12441	Snap Lock Pin, 1/2" x 4-1/2"	2
26	Z34204	Ball Stud, 13mm x 5/16NC	2
27	Z71330	Hex Bolt, 3/8NC x 3"	2

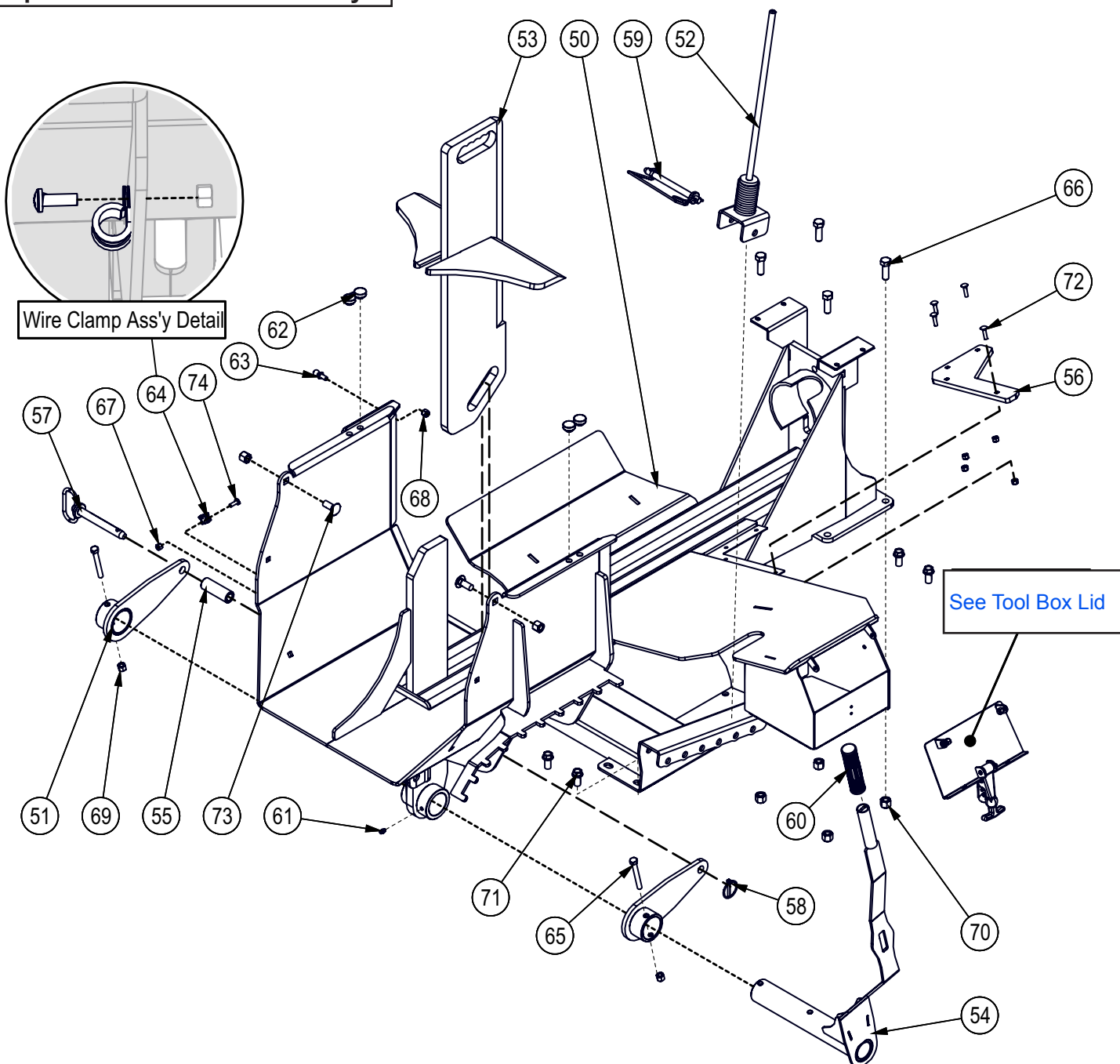
Item No.	Part No.	Description	Qty
28	Z72221	Hex Lock Nut, 5/16NC	2
29	Z72231	Hex Lock Nut, 3/8NC	2
30	Z72251	Hex Lock Nut, 1/2NC	8
31	Z76121	Flange Bolt, 5/16NC x 3/4"	3
32	Z76153	Flange Bolt, 1/2NC x 1"	4
33	Z76259	Carriage Bolt, 1/2NC x 1-1/4"	4
34	Z78312	Machine Screw, #10NC x 5/8"	6

Log Hold Down Assembly



Item No.	Part No.	Description	Qty
40	2071W102	Hold Down Bottom	1
41	2071W110	Log Hold Down Long	1
42	2071W112	Pin, Log Hold Down	1
43	2071W136	Pin, Log Hold Down	1
44	Z29202	Grease Fitting, 1/4NF	4
45	Z72221	Hex Lock Nut, 5/16NC	2
46	Z76125	Flange Bolt, 5/16NC x 1"	1
47	Z92311	Chain, 1/4" x 21" with Two Quicklinks	1

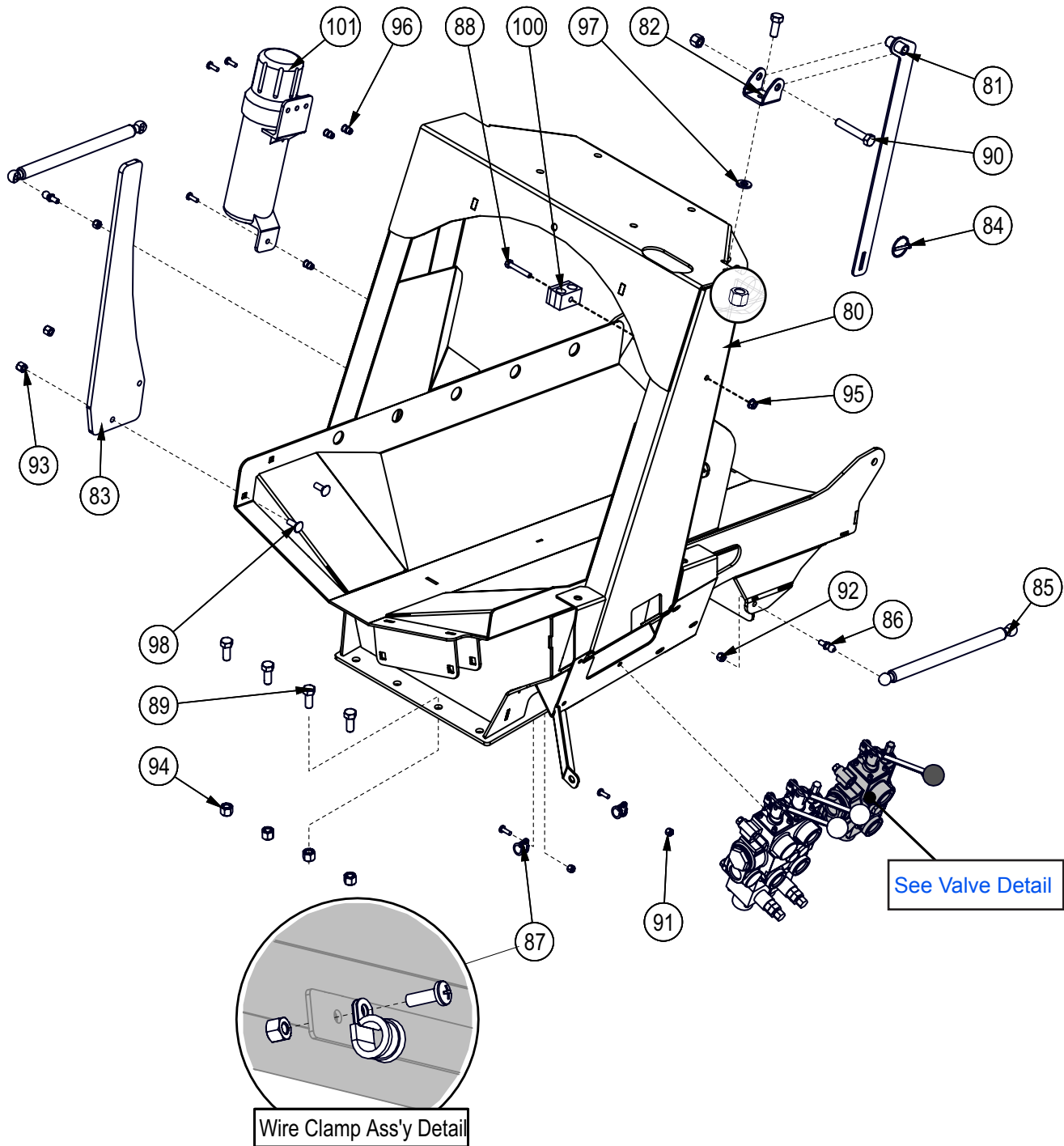
Splitter Main Frame Assembly



Item No.	Part No.	Description	Qty
50	2251W030	Main Frame	1
51	2071W111	Arm Wedge Lifter	2
52	2071W190	Log Stop Whip	1
53	2071W532	Wedge 4 Way	1
54	2071W533	Wedge Position Handle	1
55	2071M123	Roller Wedge Lift	1
56	2251S002	Edge, Log Table Long	1
57	Z11232	Hitch Pin, 5/8" x 4-1/4"	1
58	Z12110	Lynch Pin, 3/16"	1
59	Z12441	Snap Lock Pin, 1/2" x 4-1/2"	1
60	Z19321	Handle Grip, 1"	1
61	Z29202	Grease Fitting, 1/4NF	1
62	Z19909	Rubber Bumper, 7/16" x 1"	4

Item No.	Part No.	Description	Qty
63	Z34204	Ball Stud, 13mm x 5/16NC	1
64	Z62819	Rubberized Wire Clamp, 1/2"	1
65	Z71330	Hex Bolt, 3/8NC x 3"	2
66	Z71515	Hex Bolt, 1/2NC x 1-1/2"	4
67	Z72211	Hex Lock Nut, 1/4NC	5
68	Z72221	Hex Lock Nut, 5/16NC	1
69	Z72231	Hex Lock Nut, 3/8NC	2
70	Z72251	Hex Lock Nut, 1/2NC	6
71	Z76153	Flange Bolt, 1/2NC x 1"	4
72	Z76212	Carriage Bolt, 1/4NC x 1"	4
73	Z76259	Carriage Bolt, 1/2NC x 1-1/4"	2
74	Z78301	Machine Screw, 1/4NC x 3/4"	1

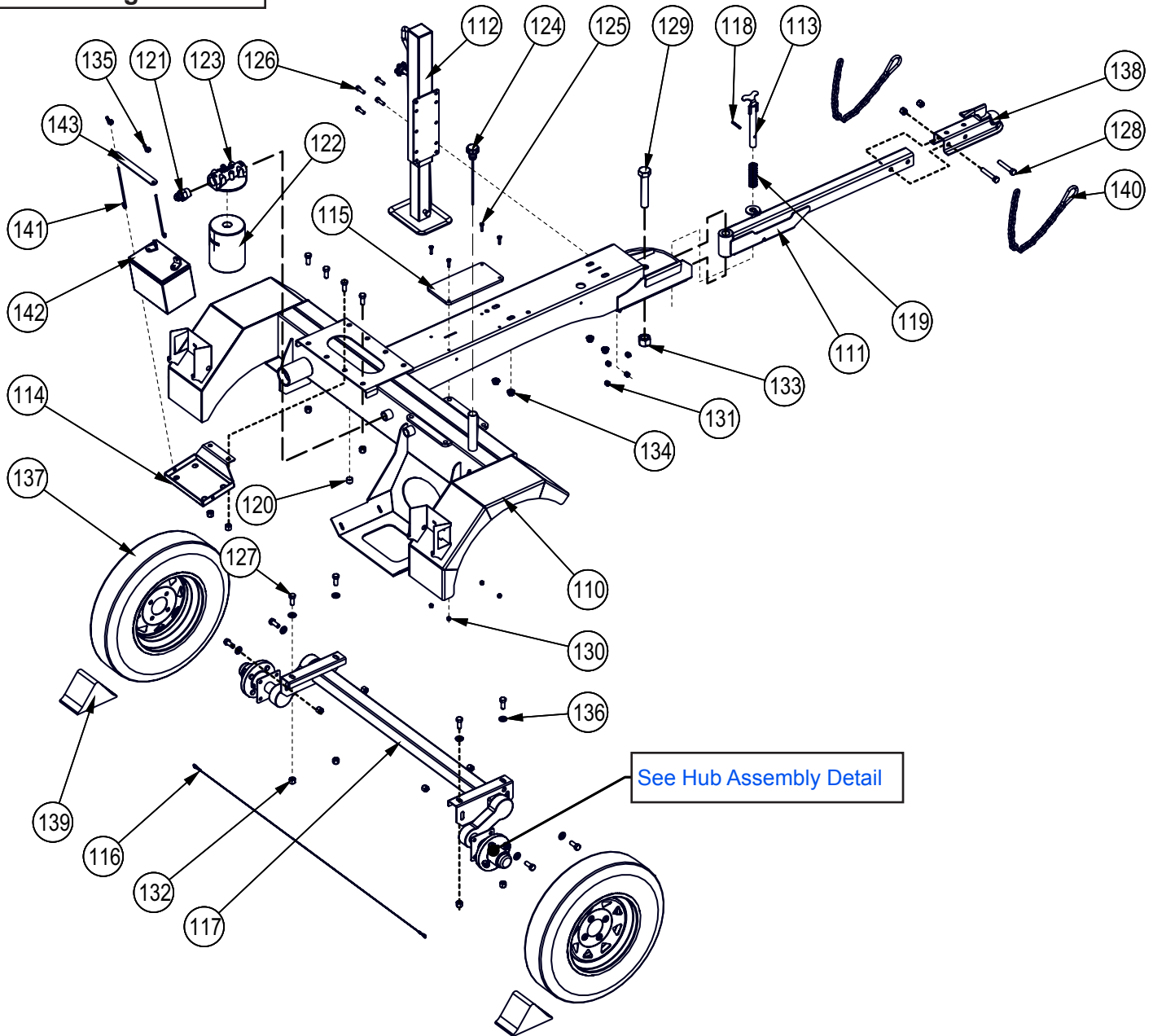
Log Chute Assembly



Item No.	Part No.	Description	Qty
80	2251W015	Chute, Log	1
81	2071W121	Arm, Log Chute Lock	1
82	2071L123	Clevis, Latch Mount	1
83	2251S003	Saw Guide	1
84	Z12110	Lynch Pin, 3/16"	1
85	Z34203	Gas Spring, 10mm ODx540x215mmx158 lbs	2
86	Z34204	Ball Stud, 13mm x 5/16NC	2
87	Z62819	Rubberized Wire Clamp, 1/2"	2
88	Z71220	Hex Bolt, 5/16NC x 2"	1
89	Z71512	Hex Bolt, 1/2NC x 1-1/4"	5
90	Z71530	Hex Bolt, 1/2NC x 3"	1

Item No.	Part No.	Description	Qty
91	Z72211	Hex Lock Nut, 1/4NC	2
92	Z72221	Hex Lock Nut, 5/16NC	2
93	Z72231	Hex Lock Nut, 3/8NC	2
94	Z72251	Hex Lock Nut, 1/2NC	6
95	Z72521	Serrated Flange Locknut, 5/16NC	1
96	Z72962	Rivet Nut, 1/4NC x 260	3
97	Z73151	SAE Washer, 1/2"	1
98	Z76231	Carriage Bolt, 3/8NC x 1"	2
100	Z79463	Double Hose Clamp, 11/16" OD	1
101	Z96503	Manual Tube, 3-1/2" Short	1

Running Gear

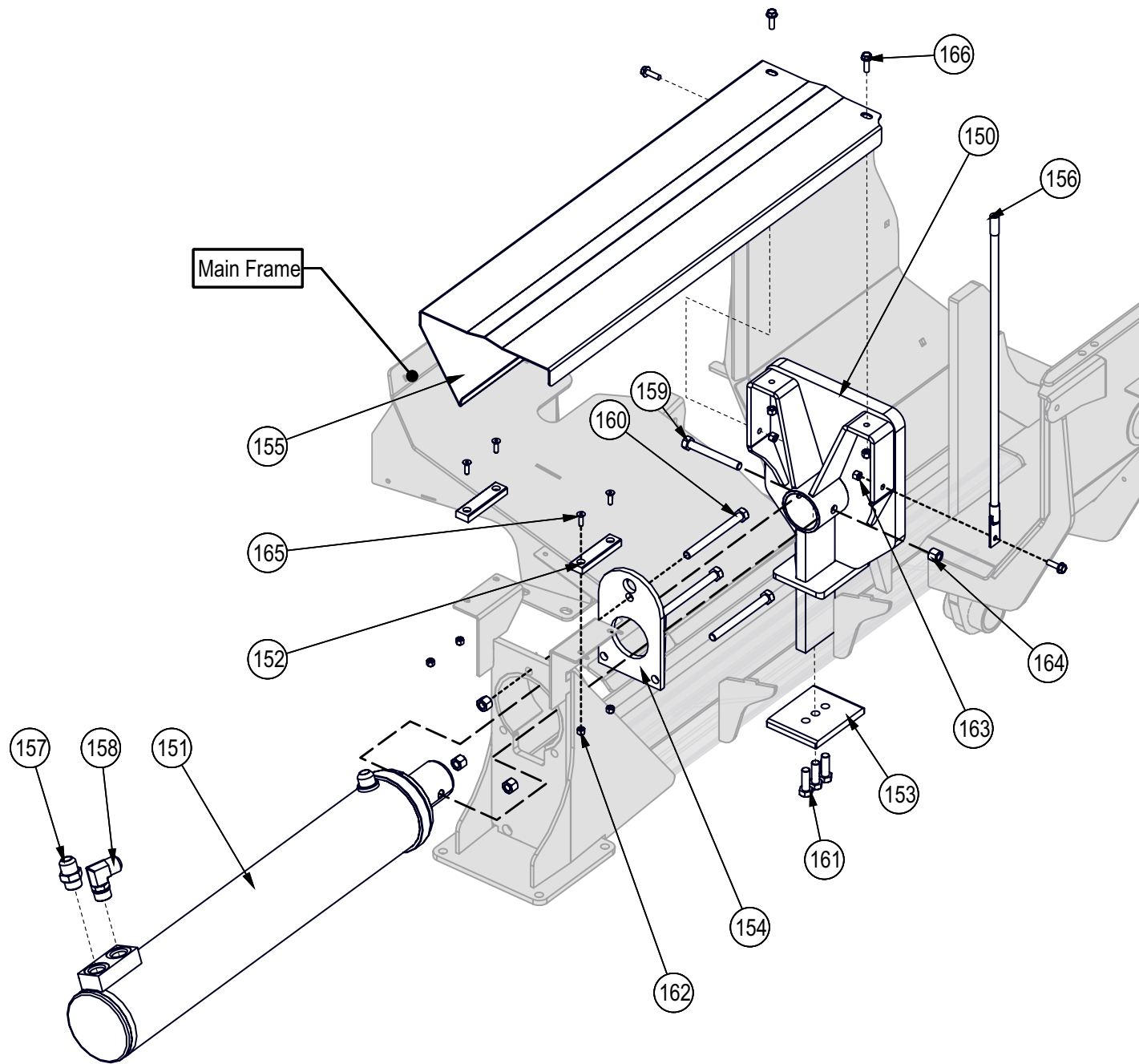


Item No.	Part No.	Description	Qty
110	2251W035	WP830 Tank Base	1
111	2251W039	Pivot Tongue	1
112	1082W503	Jack for 1082A502	1
113	2251W040	Locking Pin, Tongue	1
114	2251L021	Tray, Battery	1
115	2251S004	Chain Bumper	1
116	2251F012	Aircraft Cable, 1/16" x 55"	1
117	Z91115	#9 Full Flex Axle, 2200lbs x 54" HF	1
118	Z14172	Roll Pin, 1/4" x 1-3/4"	1
119	Z32307	Comp Spring, 1.1" OD x 3-1/2" x 0.08"	1
120	Z51192	Socket Plug, MP 08	1
121	Z514403	Straight, MJIC x MP 1216	1
122	Z55303	Particulate Filter, FP16	1
123	Z55304	Filter Cap, MP16 x FP16	1
124	Z55404	Vented Plug Dipstick x 9"	1
125	Z71110	Hex Bolt, 1/4NC x 1"	4
126	Z71312	Hex Bolt, 3/8NC x 1-1/4"	4
127	Z71512	Hex Bolt, 1/2NC x 1-1/4"	12

Item No.	Part No.	Description	Qty
128	Z71530	Hex Bolt, 1/2NC x 3"	2
129	Z719110	Hex Bolt, 1NC x 5-1/2"	1
130	Z72211	Hex Lock Nut, 1/4NC	4
131	Z72231	Hex Lock Nut, 3/8NC	4
132	Z72251	Hex Lock Nut, 1/2NC	14
133	Z72291	Hex Lock Nut, 1NC	1
134	Z72551	Serrated Flange Locknut, 1/2NC	4
135	Z72921	Wing Nut, 1/4NC	2
136	Z73151	SAE Washer, 1/2"	8
137	Z91322	5.30-12 LRC USA Trail 4on4" (E-Marked)	2
138	Z91614	Hitch Coupler, 2" Ball x 2" x 3500lbs	1
139	Z91903	Wheel Chock	2
140	Z92303	Safety Chain, 1/4" x 2ft with Snap	2
141	Z93202	J-Hook, 1/4" x 7"	2
142	Z93204	Battery, 325CCA	1
143	Z93207	Hold-Down Strap, 1" x 8-1/2"	1

Note: Axle comes complete with hubs: see Hub Assembly Detail.

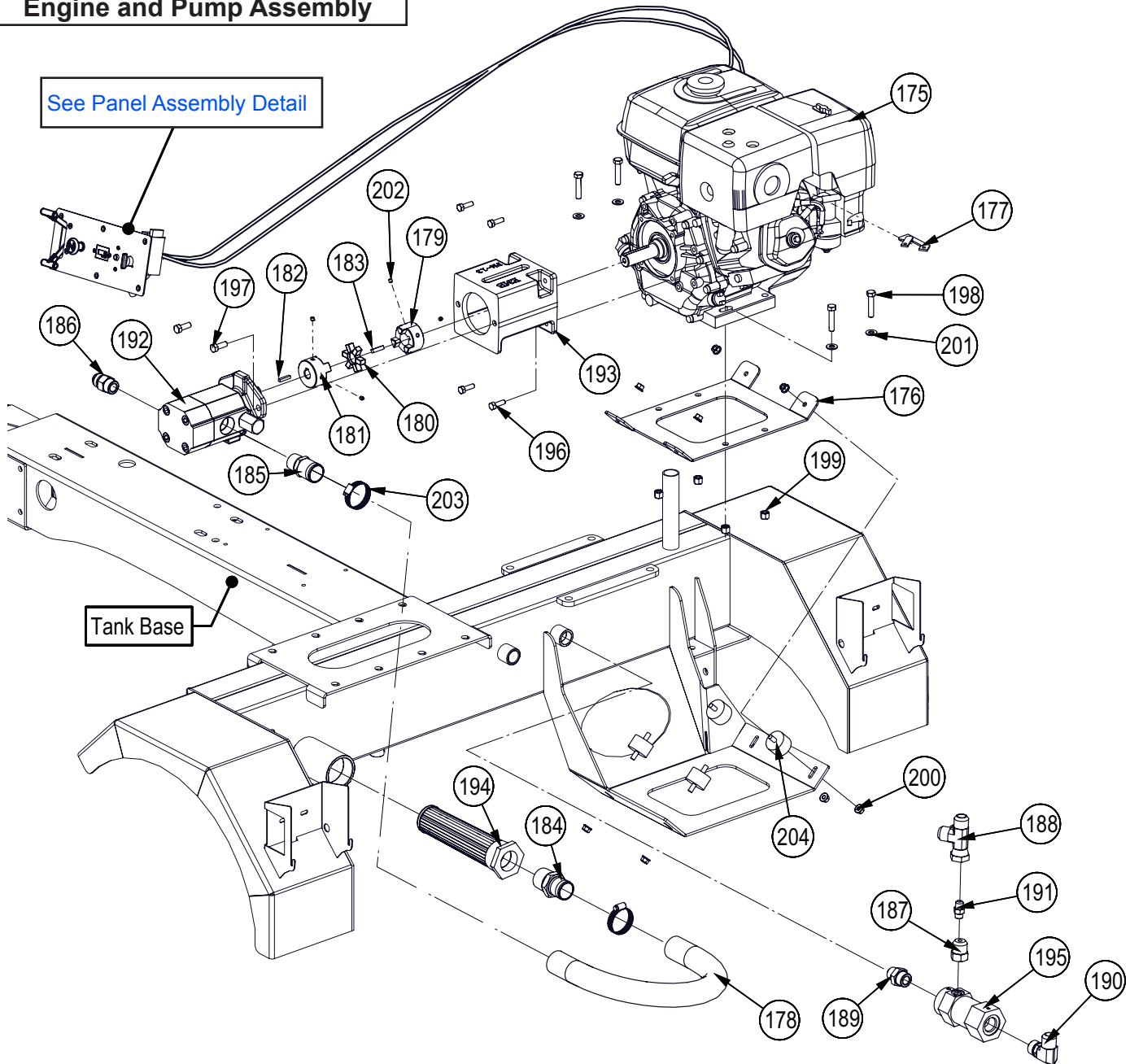
Hydraulic Splitter Assembly



Item No.	Part No.	Description	Qty
150	2251W038	Hvy Push Block	1
151	2251C001	Cylinder, 4-1/2 x 24 x 2-1/2	1
152	1022S208	Rotor Hood Slide	2
153	2055S517	Cap, Push Block	1
154	2071L215	Plate, Cylinder Retaining	1
155	2251L009	Cover, Sliding	1
156	Z19908	Blade Guide, 1/2" x 24"	1
157	Z516414	Straight, MJIC x MORB 1212	1
158	Z516501	Elbow 90, MJIC x MORB 1212	1

Item No.	Part No.	Description	Qty
159	Z71540	Hex Bolt, 1/2NC x 4"	1
160	Z71555	Hex Bolt, 1/2NC x 5-1/2"	3
161	Z71576G8	Hex Bolt, 1/2NF x 1-1/2" G8	3
162	Z72211	Hex Lock Nut, 1/4NC	4
163	Z72221	Hex Lock Nut, 5/16NC	4
164	Z72251	Hex Lock Nut, 1/2NC	4
165	Z75211	FHCS, 1/4NC x 7/8"	4
166	Z76125	Flange Bolt, 5/16NC x 1"	4

Engine and Pump Assembly



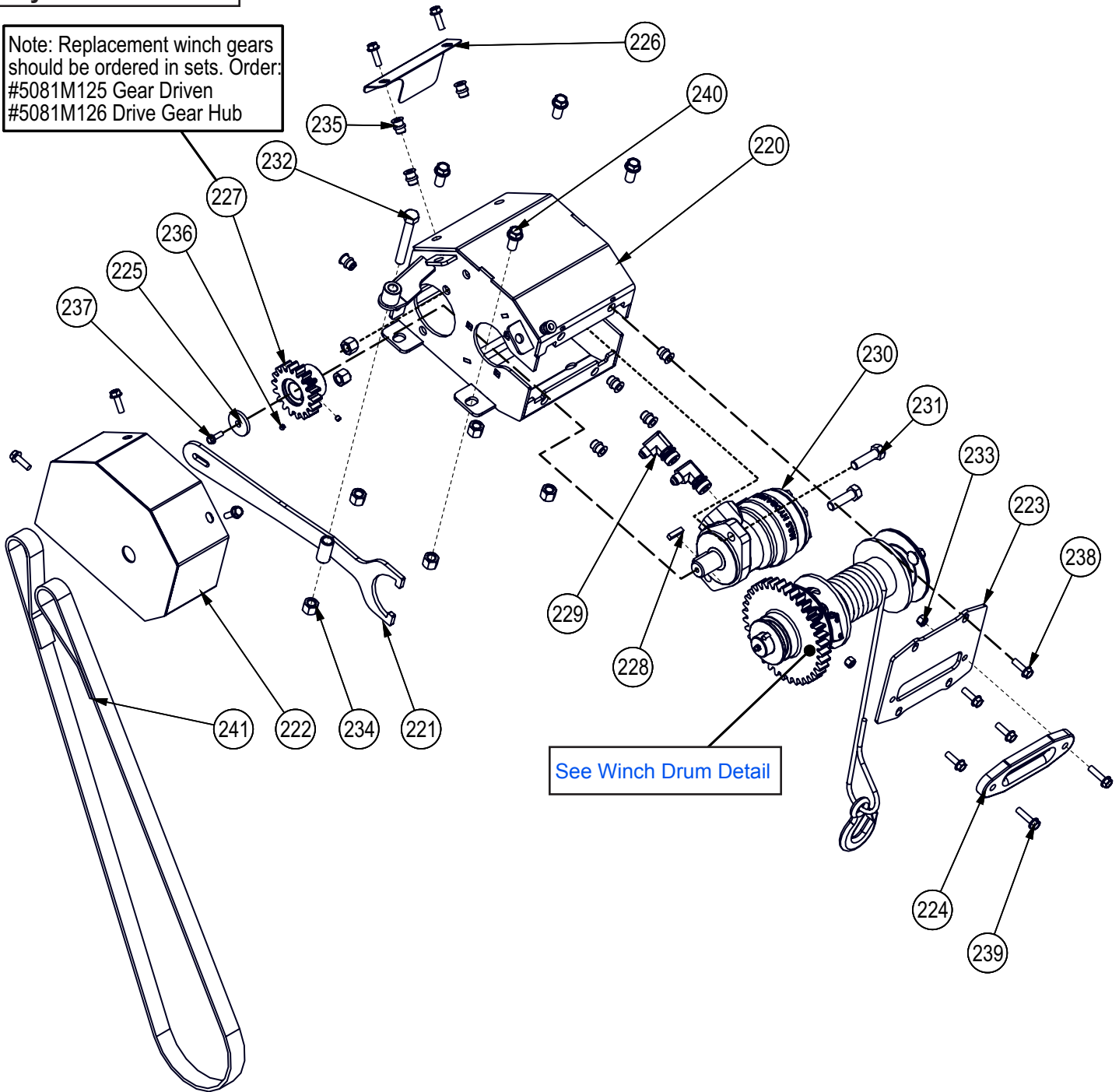
Item No.	Part No.	Description	Qty
175	Z47147	Honda GX390UQXE6, Electric	1
176	2251L019	Plate, Engine Mount	1
177	Z47914	Kit, Remote Choke	1
178	2251F004	Suction Hose, 1-1/4" x 30"	1
179	Z46404	Shaft Coupling, L095 x 1"	1
180	Z46405	Spider, L095	1
181	Z46419	Shaft Coupling, L095 x 5/8"	1
182	Z46522	Key, 3/16" x 3/16" x 1"	1
183	Z46533	Key, 1/4" x 1/4" x 1"	1
184	Z51185	Straight, MHB x MP 2020	1
185	Z51186	Straight, MHB x MP 2016	1
186	Z514401	Straight, MJIC x MP 1212	1
187	Z514905	Straight, FJIC x MJIC 0612	1
188	Z51597	Tee, MJIC x FJIC x MJIC 121212	1
189	Z51613	Straight, MORB x MP 1212	1
190	Z516501	Elbow 90, MJIC x MORB 1212	1

Item No.	Part No.	Description	Qty
191	Z51929	Straight, MJIC x MORB 0606 x 0.047	1
192	Z53206	Two-Stage Pump, 22GPM	1
193	Z53808	Pump Mount, PM-13	1
194	Z55102	Suction Strainer, MP32	1
195	Z56408	Dump Valve	1
196	Z71274	Hex Bolt, 5/16NF x 1"	4
197	Z71310	Hex Bolt, 3/8NC x 1"	2
198	Z71317	Hex Bolt, 3/8NC x 1-3/4"	4
199	Z72231	Hex Lock Nut, 3/8NC	4
200	Z72521	Serrated Flange Locknut, 5/16NC	8
201	Z73131	SAE Washer, 3/8"	4
202	Z74111	Set Screw, 1/4NC x 1/4"	4
203	Z79404	Hose Clamp, SAE #24 (2")	2
204	Z79933	Isolator, 1-9/16" Dia x 1" x 5/16NC	4

ECN0405

Hydraulic Winch

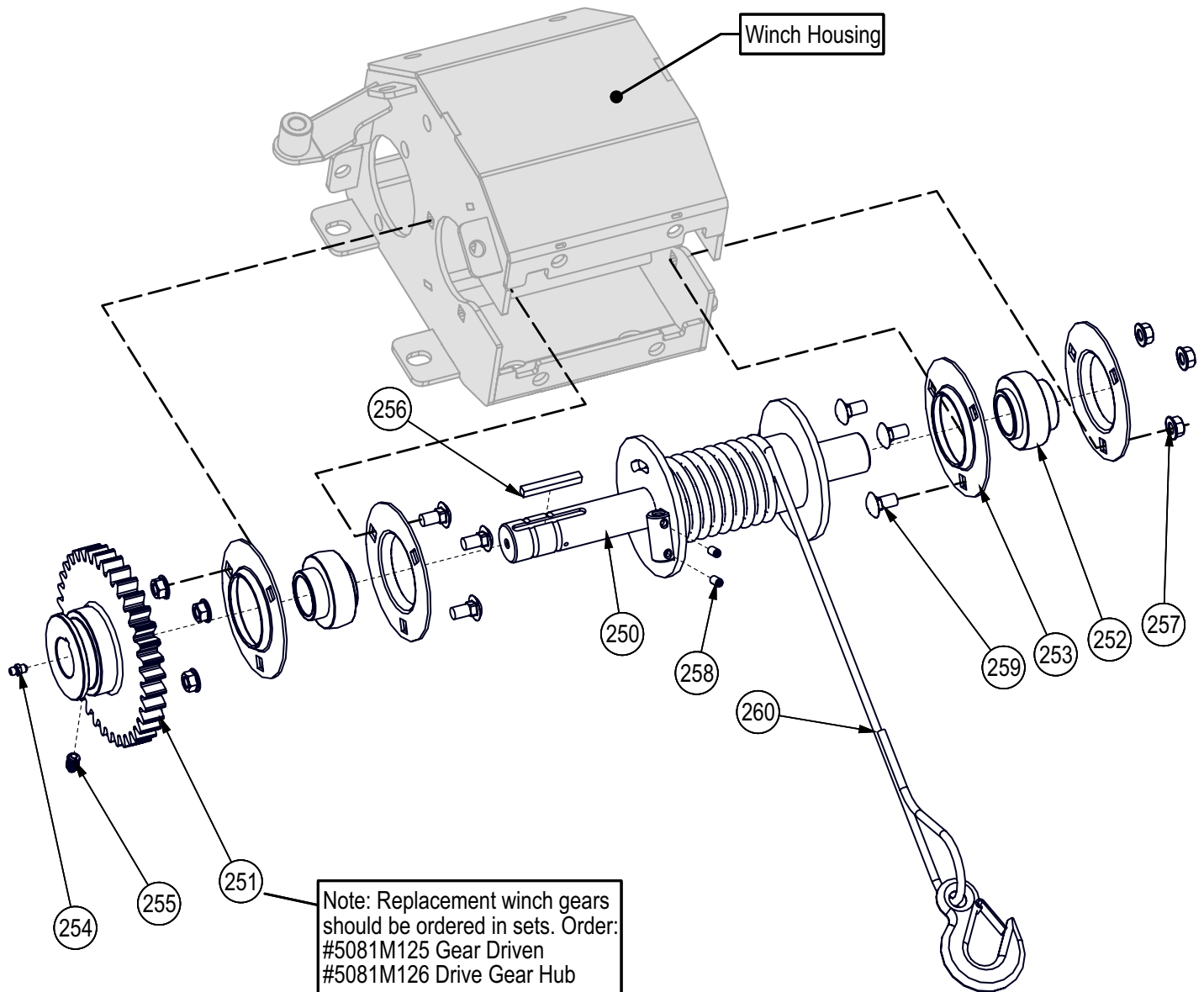
Note: Replacement winch gears should be ordered in sets. Order:
#5081M125 Gear Driven
#5081M126 Drive Gear Hub



Item No.	Part No.	Description	Qty
220	2251W018	Housing, Winch	1
221	5081W122	Handle, Winch Clutch	1
222	5081W111	Shield	1
223	2251L071	Mount, Hawse Fairlead	1
224	2251M003	Synthetic Fairlead	1
225	5081L114	Washer, Motor Shaft	1
226	5081L138	Guard	1
227	5081M126	Drive Gear Hub	1
228	Z46533	Key, 1/4" x 1/4" x 1"	1
229	Z51656	Elbow 90, MJIC x MORB 0610	2
230	Z54109	Hydraulic Motor, 100CCR	1
231	Z71517	Hex Bolt, 1/2NC x 1-3/4"	2

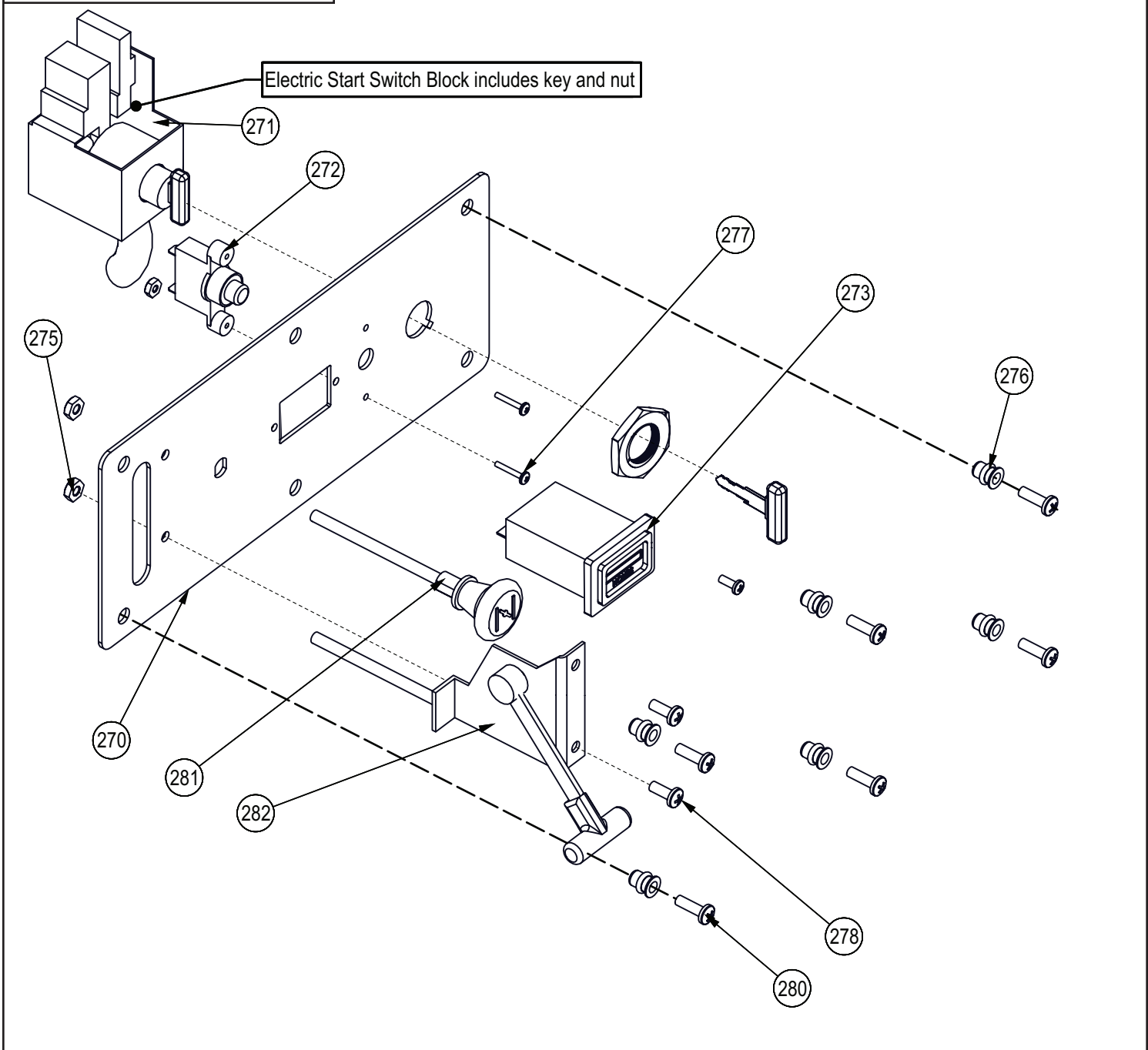
Item No.	Part No.	Description	Qty
232	Z71535	Hex Bolt, 1/2NC x 3-1/2"	1
233	Z72221	Hex Lock Nut, 5/16NC	2
234	Z72251	Hex Lock Nut, 1/2NC	7
235	Z72957	Rivet Nut, 5/16NC x 312	9
236	Z74111	Set Screw, 1/4NC x 1/4"	2
237	Z76111	Flange Bolt, 1/4NC x 3/4"	1
238	Z76125	Flange Bolt, 5/16NC x 1"	9
239	Z76128	Flange Bolt, 5/16NC x 1-1/4"	2
240	Z76153	Flange Bolt, 1/2NC x 1"	4
241	Z92405	Winching Strap, 1" x 5ft	1

Winch Drum Detail



Item No.	Part No.	Description	Qty
250	2251W019	Drum, Main Cable	1
251	5081M125	Gear, Driven	1
252	Z25207	Bearing Insert, UC206-20	2
253	Z25301	3-Bolt Flange Bearing, PF206 x Flange Only	4
254	Z29202	Grease Fitting, 1/4NF	1
255	Z34302	Spring Plunger, 3/8NC x 5/8" x 21 lbs	1
256	Z46531	Key, 1/4" x 1/4" x 2"	1
257	Z72531	Serrated Flange Locknut, 3/8NC	6
258	Z74113	Set Screw, 1/4NC x 1/2"	2
259	Z76233	Carriage Bolt, 3/8NC x 3/4"	6
260	Z92112	Synthetic Winch Rope, 1/4 x 50ft with Grab Hook	1

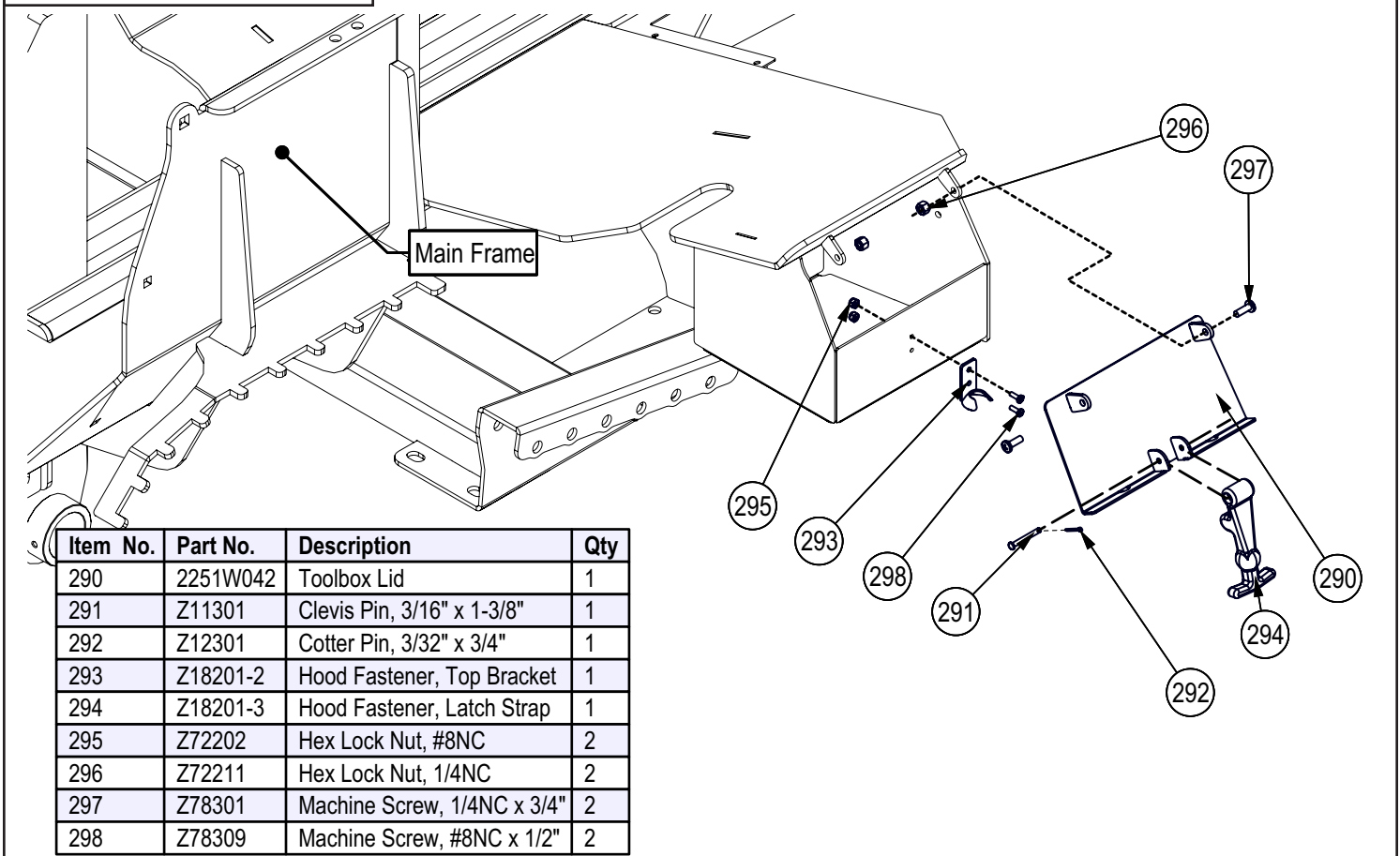
Panel Assembly Detail



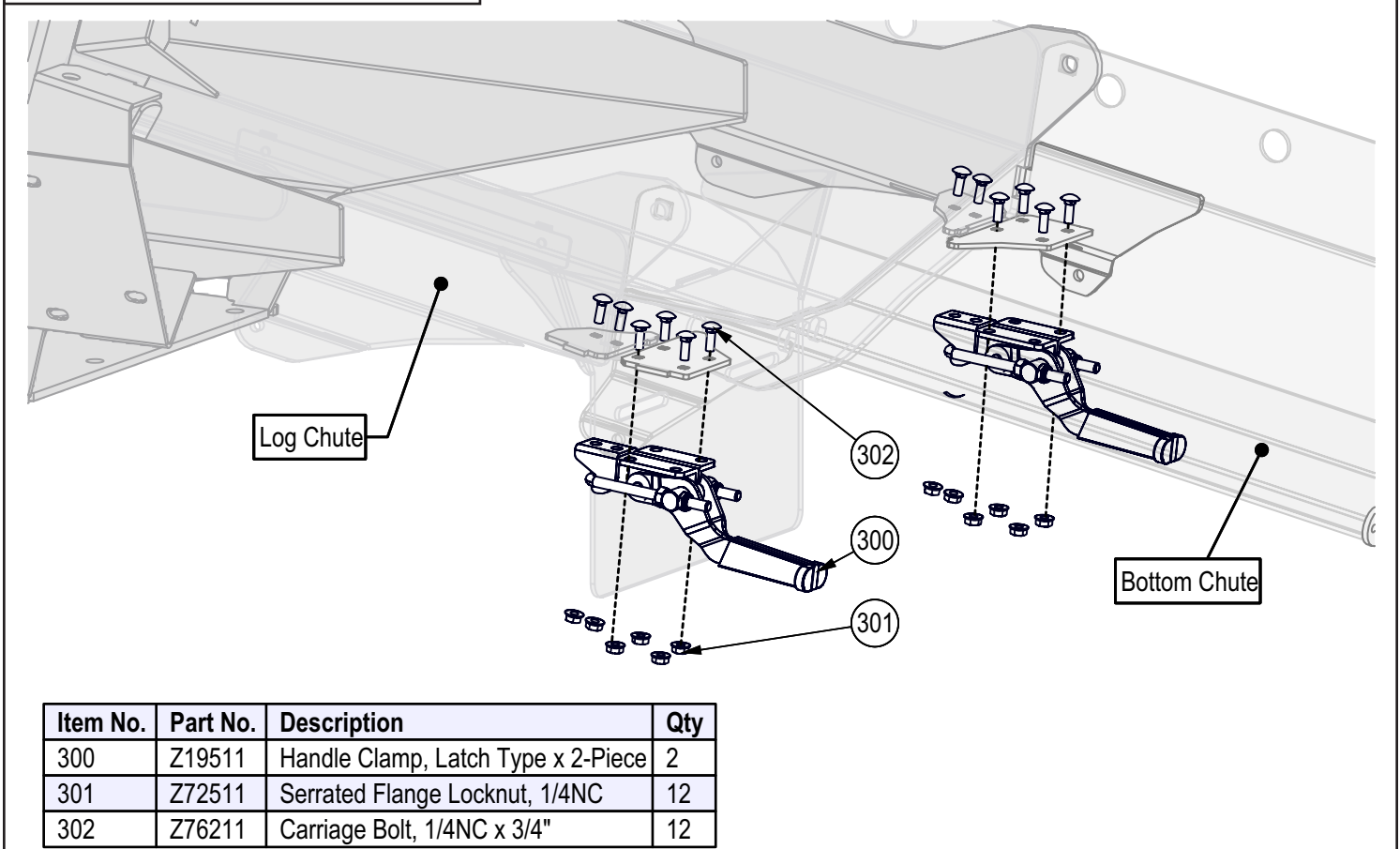
Item No.	Part No.	Description	Qty
270	2251W021	Control Panel	1
271	Z47171-2	Electric Start, Switch Block	1
272	Z47171-3	Electric Start, Honda 12V Breaker	1
273	Z64612	Tach/Hour Meter, Snap Mount	1
275	Z72752	Machine Nut, #10NF	2
276	Z72953	Rivet Nut, #10NC x 130	6
277	Z77816	Machine Screw, M3x0.5 x 16mm	2
278	Z78303	Machine Screw, #10NF x 1/2"	2
280	Z78312	Machine Screw, #10NC x 5/8"	6
281	Z92115	Remote Choke Cable, 68"	1
282	Z92116	Remote Throttle Cable, 66"	1

ECN0414

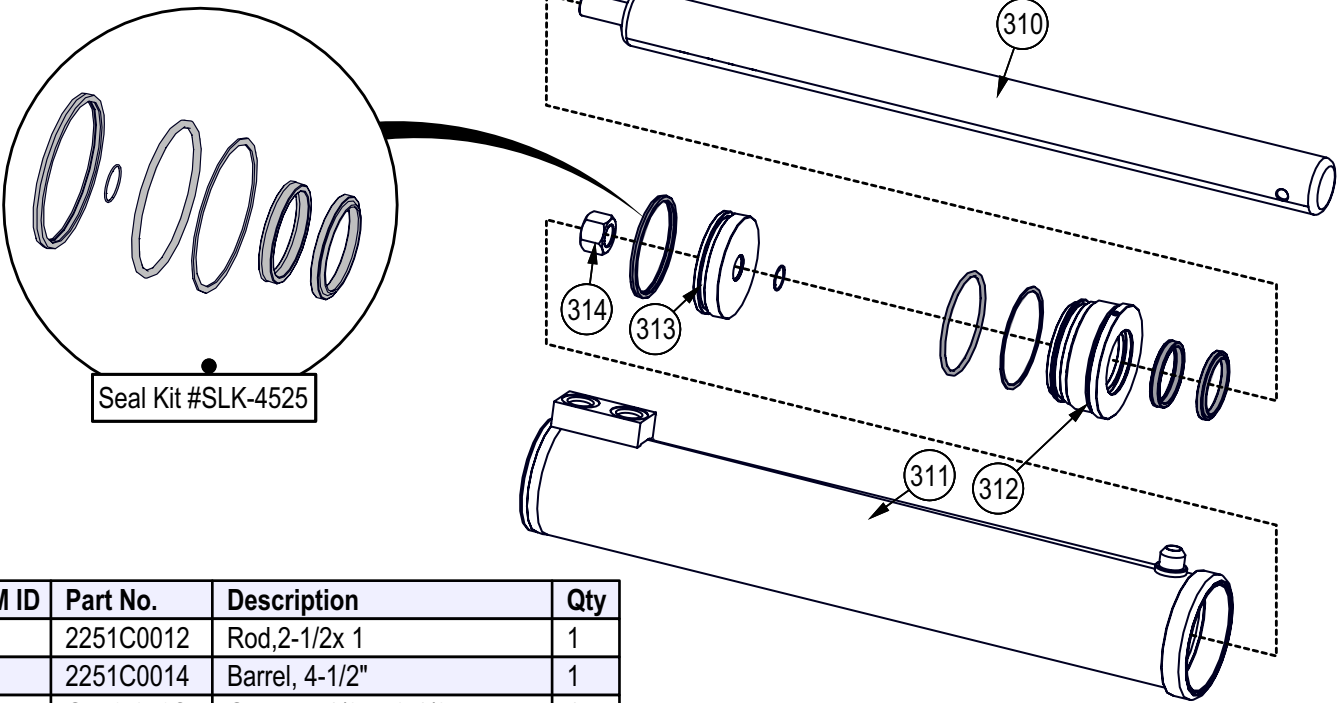
Tool Box Lid Detail



Handle Clamp Assembly Detail

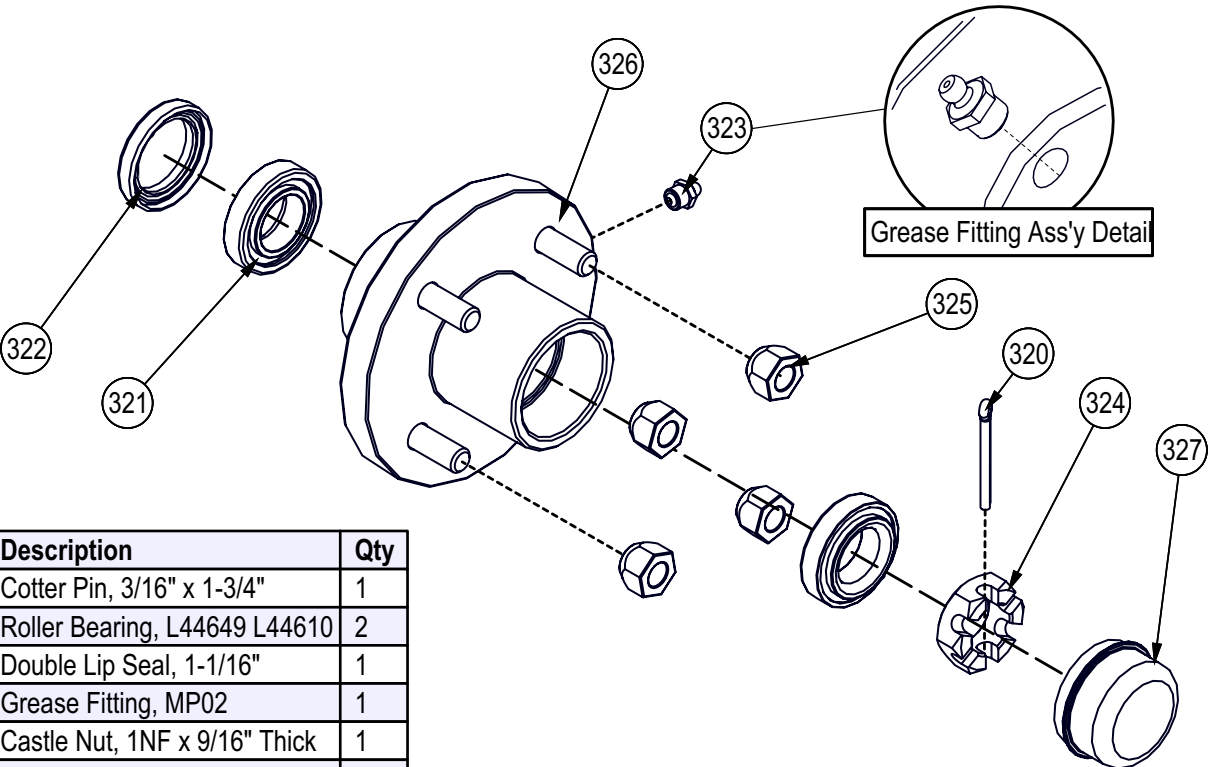


Cylinder Detail



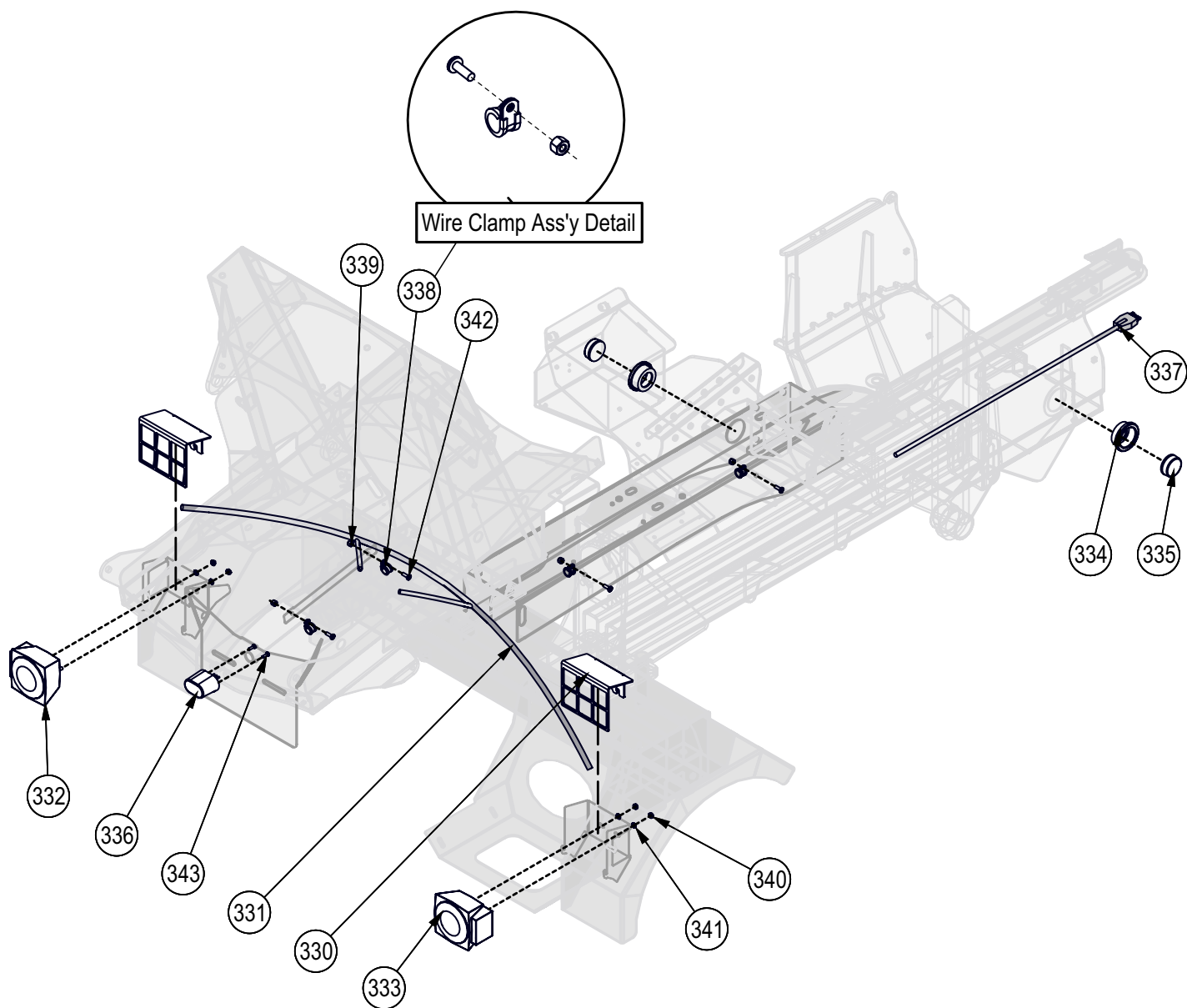
BOM ID	Part No.	Description	Qty
310	2251C0012	Rod, 2-1/2x 1	1
311	2251C0014	Barrel, 4-1/2"	1
312	G450-250S	Gland, 4-1/2" x 2-1/2"	1
313	P100-450SP	Piston, 4-1/2" Bore	1
314	Z722909G8	Hex Top-lock Nut, 1-14NF G8	1

Hub Assembly Detail



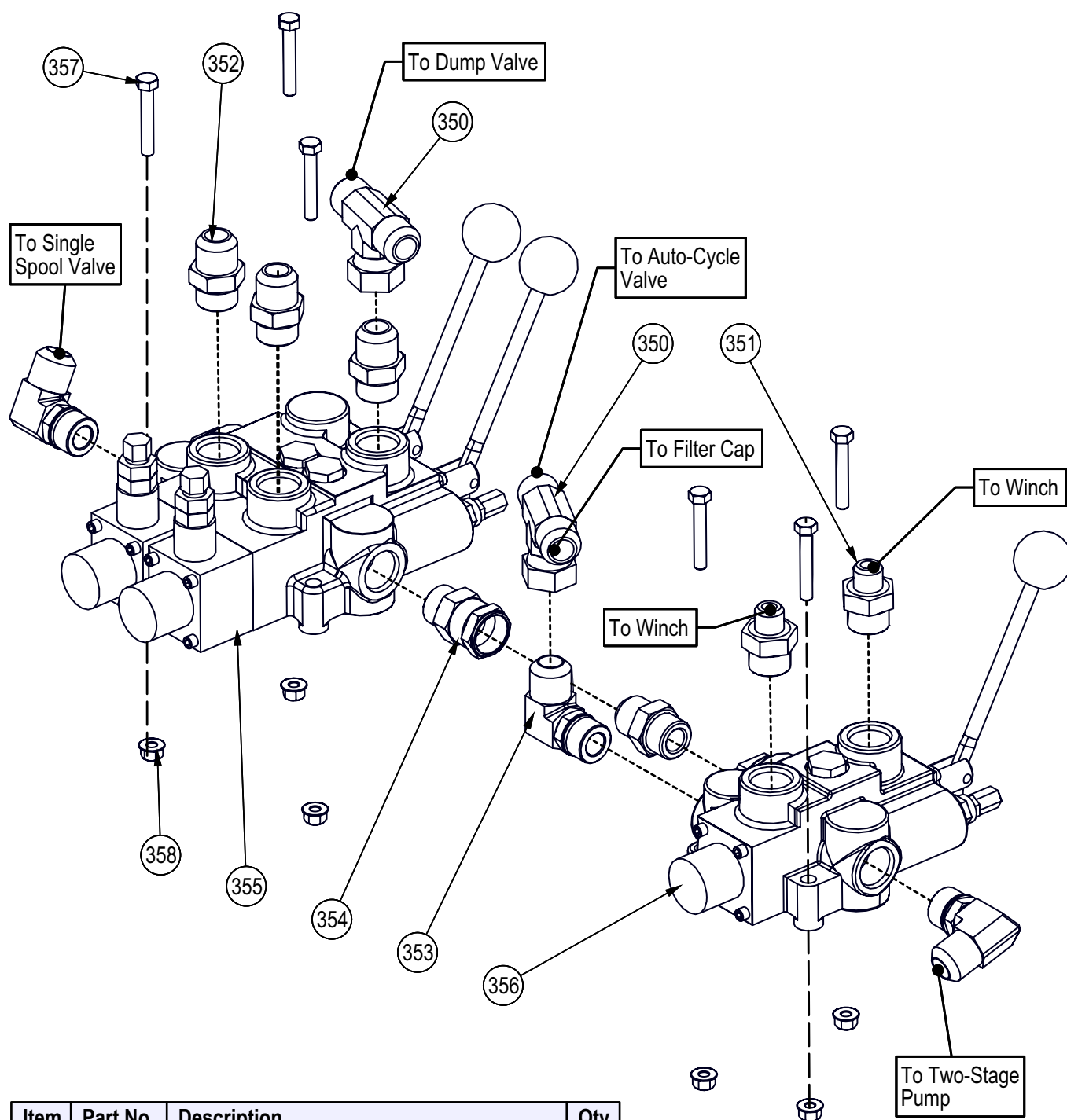
Item	Part No.	Description	Qty
320	Z12321	Cotter Pin, 3/16" x 1-3/4"	1
321	Z23202	Roller Bearing, L44649 L44610	2
322	Z28302	Double Lip Seal, 1-1/16"	1
323	Z29201	Grease Fitting, MP02	1
324	Z72691	Castle Nut, 1NF x 9/16" Thick	1
325	Z72931	Lug Nut, 1/2NF	4
326	Z91201	Hub, 1000lbs x 4on4	1
327	Z91801	Dust Cap, 1.98 Bore	1

Lights and Harness Detail



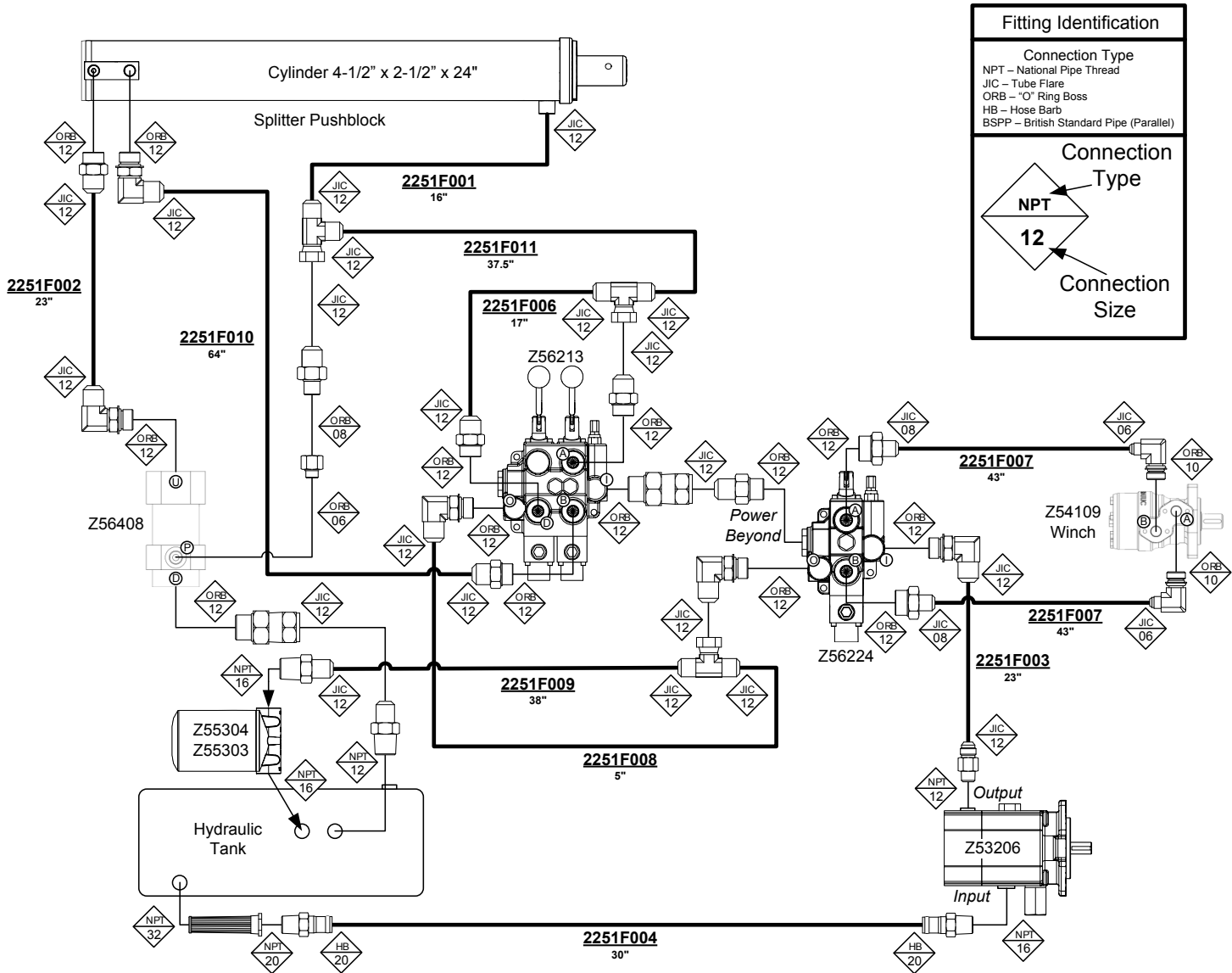
BOM ID	Part No.	Description	Qty
330	2089L351	Light Guard	2
331	2251F015	Harness, WP840 Series Engine Control	1
332	Z61106	STTL Lamp, Square LH	1
333	Z61107	STT Lamp, Square RH	1
334	Z61202	Grommet, Round x Open Back	2
335	Z61205	Marker Lamp, Round x Amber	2
336	Z61301	License Lamp, White	1
337	Z62126	Harness, WP800 Series Lights	1
338	Z62819	Rubberized Wire Clamp, 1/2"	4
339	Z72211	Hex Lock Nut, 1/4NC	4
340	Z72311	Jam Nut, 1/4NC	4
341	Z73431	Int - Ext Tooth Washer, 1/4"	4
342	Z78301	Machine Screw, 1/4NC x 3/4"	4
343	Z78312	Machine Screw, #10NC x 5/8"	2

Valve Assembly Detail



Item	Part No.	Description	Qty
350	Z51596	Tee, MJIC x MJIC x FJICX 121212	2
351	Z516412	Straight, MJIC x MORB 0812	2
352	Z516414	Straight, MJIC x MORB 1212	4
353	Z516501	Elbow 90, MJIC x MORB 1212	3
354	Z51764	Straight, MORB x FJICX 1212	1
355	Z56213	Auto-Cycle Valve, OC x 25GPM	1
356	Z56224	Single Spool Valve, PB Tandem SC x 30GPM	1
357	Z71220	Hex Bolt, 5/16NC x 2"	6
358	Z72521	Serrated Flange Locknut, 5/16NC	6

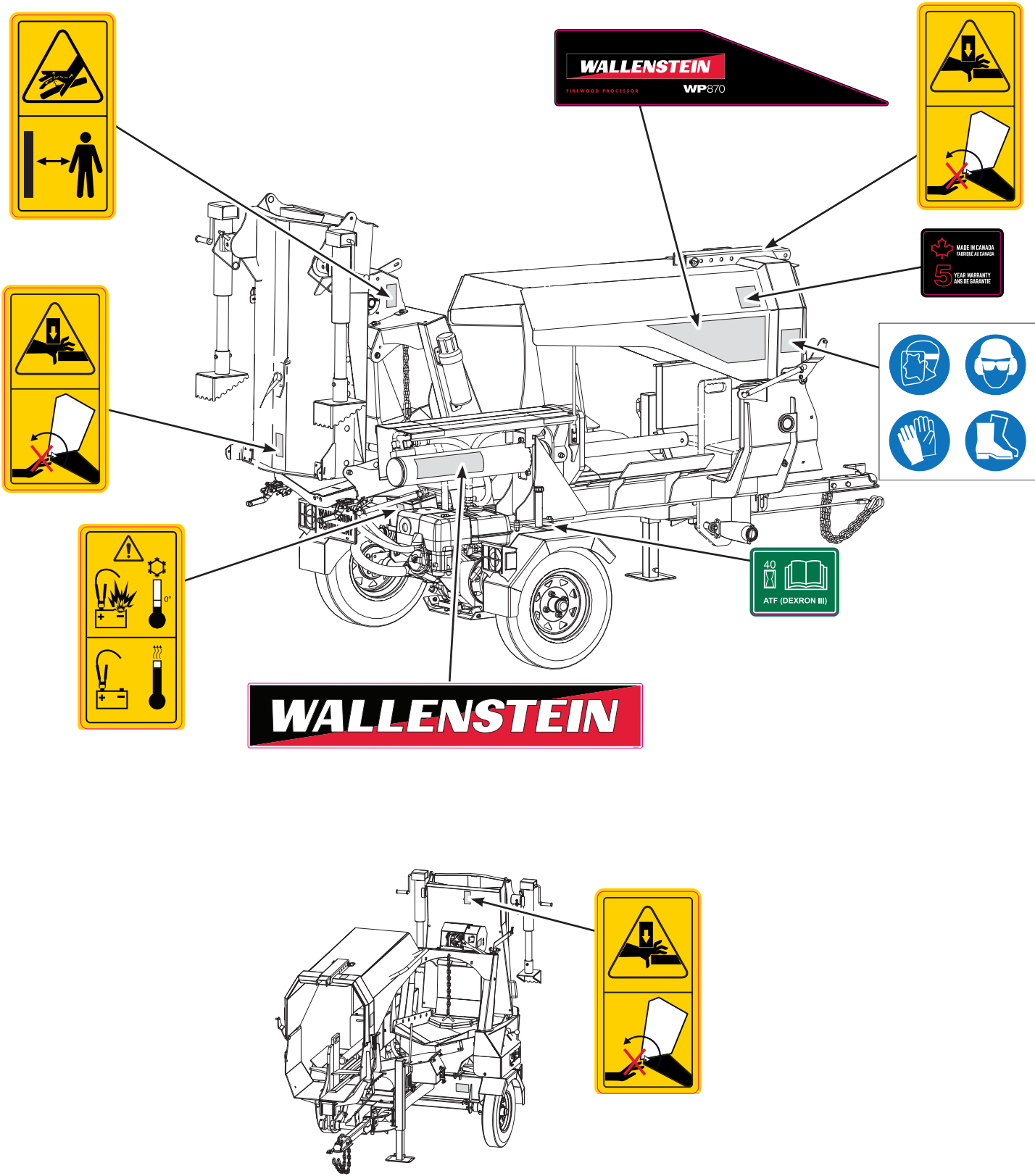
Hydraulic Plumbing Diagram



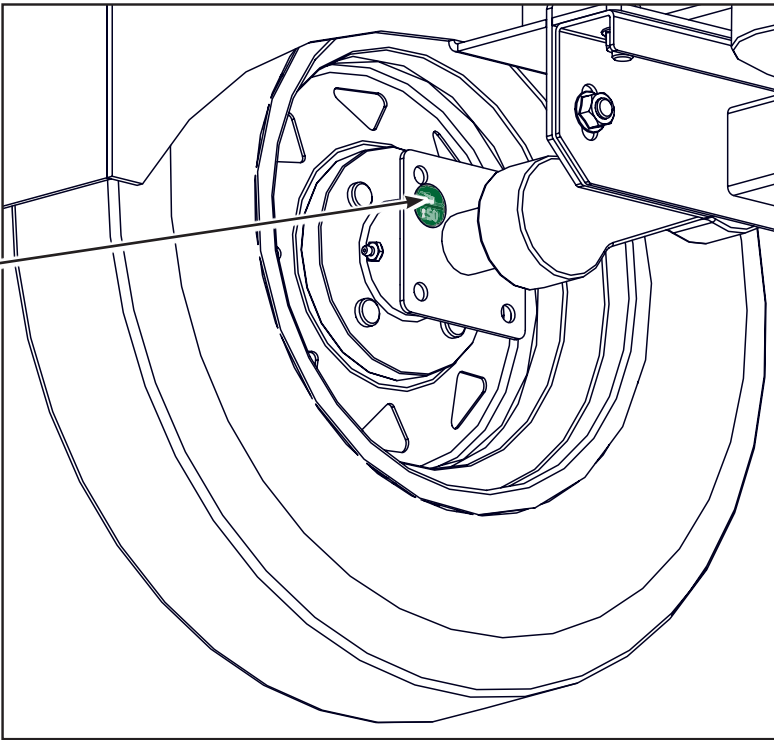
Hydraulic Hose List

Part No.	Description	Qty
2251F004	Suction Hose, 1-1/4 x 30	1
2251F001	3/4" Hose, FJIC12 x 90FJIC12 x 16	1
2251F002	3/4" Hose, FJIC12 x 90FJIC12 x 23	1
2251F003	3/4" Hose, FJIC12 x 90FJIC12 x 23	1
2251F006	3/4" Hose, FJIC12 x 90FJIC12 x 17	1
2251F007	3/8" Hose, FJIC06 x 90FJIC08 x 43	2
2251F008	3/4" Hose, FJIC12 x 90FJIC12 x 5	1
2251F009	3/4" Hose, FJIC12 x 90FJIC12 x 38	1
2251F010	3/4" Hose, FJIC12 x 90FJIC12 x 70	1
2251F011	3/4" Hose, FJIC12 x 90FJIC12 x 37.5	1

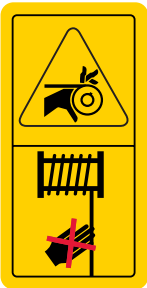
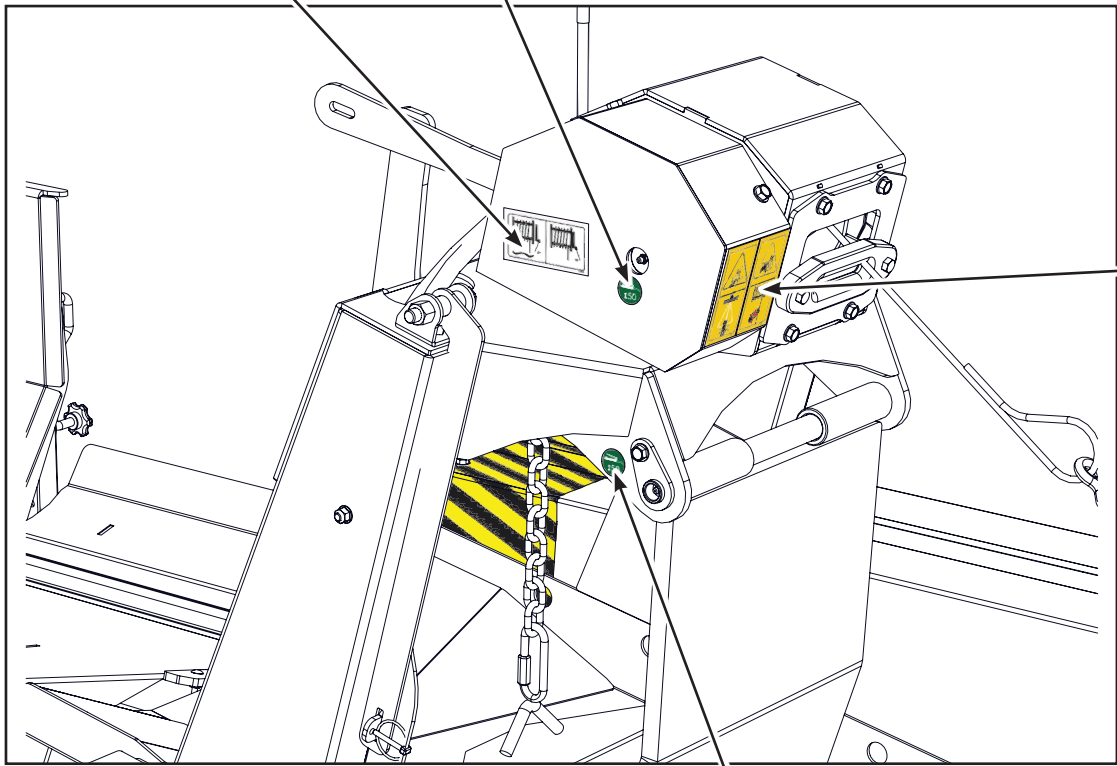
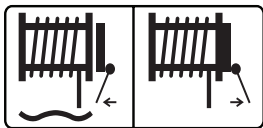
Decal Layout



Decal Layout

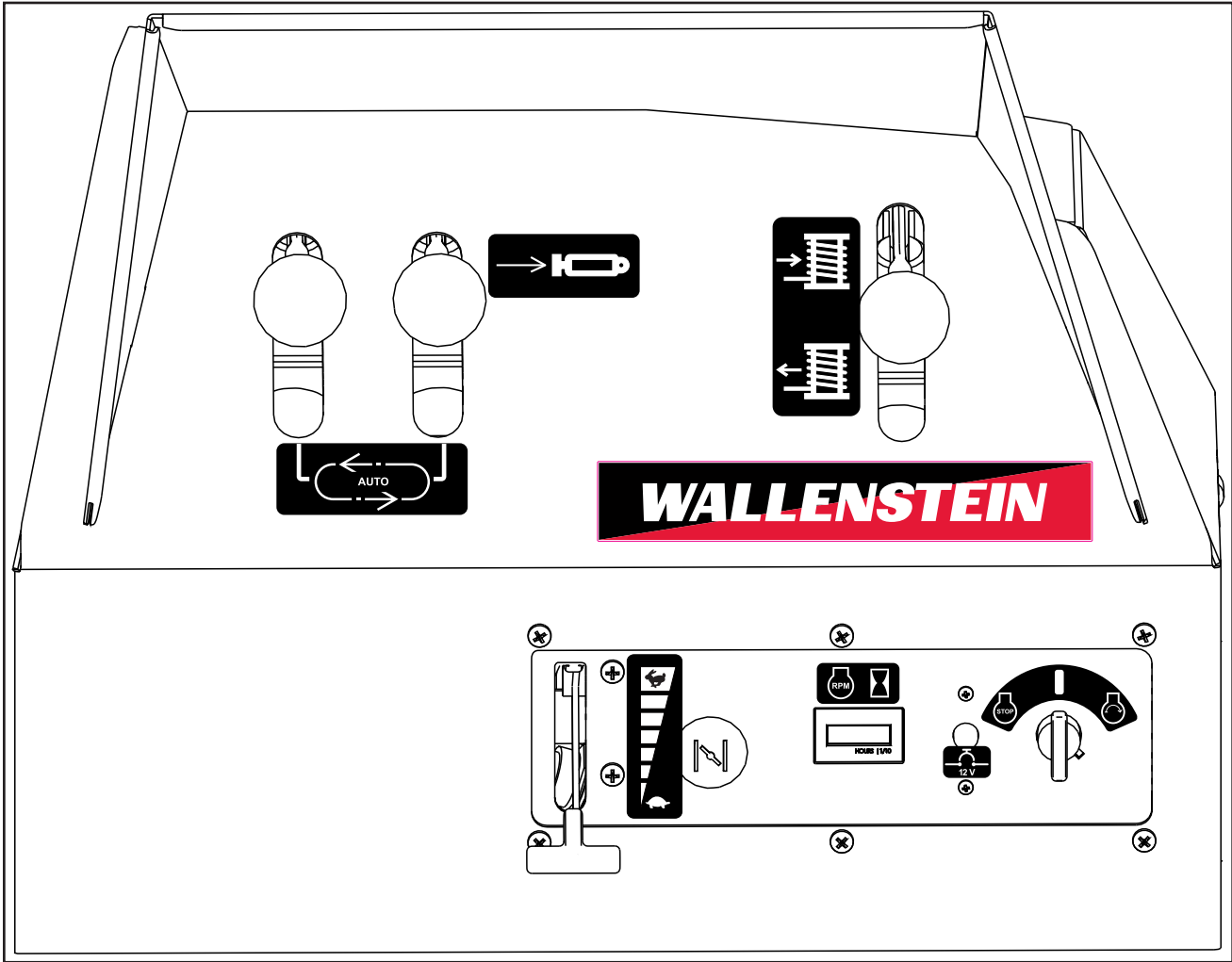


1 on each side



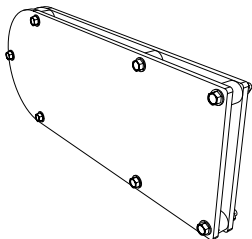
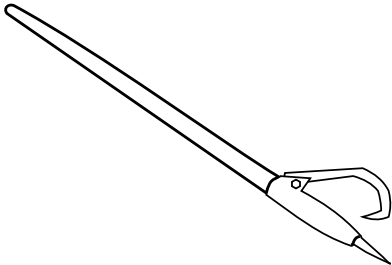
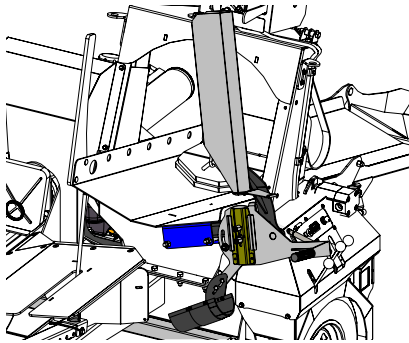
1 on each side

Control Panel Decals



Accessories

Call your dealer for pricing and availability

	NYLON CHAINSAW HOLSTER P/N 2089A570 For models: WP840EU, WP870EU easy to install, fastens to Wood Processor Nylon holder, safely holds your chainsaw keeping it off the ground and out of the way!
	6-WAY WEDGE – P/N 2089W572 Easy to install in minutes, and you're ready to go! 6 way splitting wedge, Boost your productivity and make quick work out of chunks by splitting into six pieces at once. This is an ideal way to save time
	48" LOG PEAVEY – P/N Z99001 Helps to move those heavy log timbers into position, and finish getting your last logs through the Wood Processor!
	PIVOTING CHAINSAW HOLDER P/N P201 For all WP Series Easy mounting to most chain saws, the pivoting chain saw holder securely holds your saw in place allowing for easier cutting and saving time handling your chainsaw. Available: P211 Spare Pivoting Chainsaw Adaptor Save time switching out chainsaws with a spare adaptor for your second chainsaw!

Common Bolt Torque Values

Checking Bolt Torque

The tables shown give correct torque values for various bolts and capscrews. Tighten all bolts to the torques specified in the table, unless specified 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	
Inches	Inches	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



CAUTION!

Loose wheel lug nuts can result in broken studs, risking the wheel coming off the axle hub. Keep lug nuts torqued to proper specification.

Maintaining proper wheel lug torque on your trailer axle is an extremely important safety measure. Always use a properly calibrated torque wrench.

Torque wheel lug nuts before first road use and after each wheel removal. Check and re-torque after the first 10 mi (16 km), 25 mi (40 km), and again at 50 mi (80 km). Check periodically thereafter.

- Start all lugs by hand to prevent cross threading.
- Tighten lug nuts following the Wheel Lug Torque Pattern table. Tighten each set of lug nuts in stages, as shown.

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

