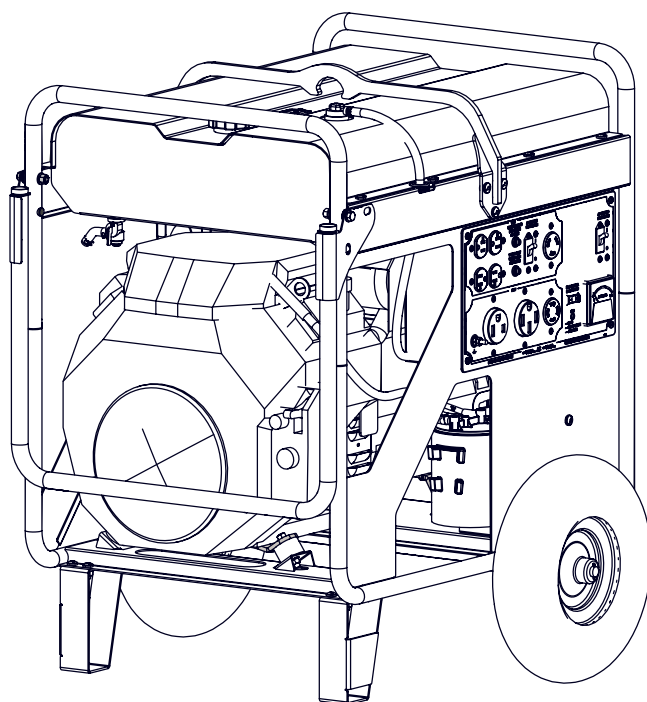




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WHS14000 / WHS14000R Generator Parts Manual

S/N's
WHS14000 - 140000 - 140007
WHS14000R - 146003 - 146004



Refer to the operators
manual for safe
operation and
maintenance

Foreword

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

Proper and regular service and replacing old, worn or broken parts with the correct 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: <http://www.embmfg.com> and click on "FIND A DEALER NEAR YOU" for information on a local dealer.

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Alternator: Mecc Alte Inc. S20F-P200 Below are alternator parts available from Wallenstein. For other parts and maintenance or repair information please refer to the Mecc Alte alternator manual that shipped with the generator.			
1	Drive End Bracket	0391700143	
2	Fan	0392000033	
3	Rear Bearing 6205-2RS	0390302511	
4	Diode D2/125 25A	9910356050	
5	Varistor	9910384005	
6	Capacitor # :see list below		
Find the value of the capacitor in your alternator, and match it to the list shown.		GECAP31MF	Capacitor, 31.5 MFZ
		GECAP40MF	40 MF CAPACITOR
		GECAP14MF	Capacitor, 14 MFZ
		GECAP20MF	Capacitor, 20uF

Alternator maintenance should be performed by trained personnel only.



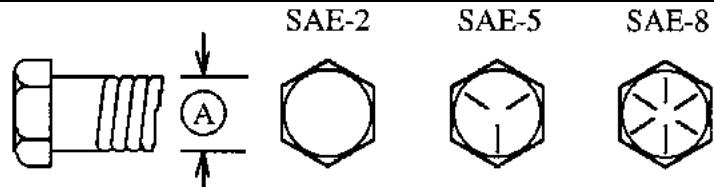
Exercise extreme caution when working with exposed wiring of the alternator, be aware that high voltage discharge of the capacitor is a danger.

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.

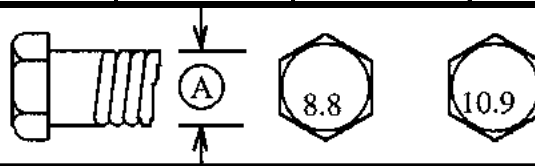
ENGLISH TORQUE SPECIFICATIONS						
Bolt Diameter "A"	Bolt Torque*					
	SAE 2 (N.m) (lb-ft)		SAE 5 (N.m) (lb-ft)		SAE 8 (N.m) (lb-ft)	
1/4"	8	6	12	9	17	12
5/16"	13	10	25	19	36	27
3/8"	27	20	45	33	63	45
7/16"	41	30	72	53	100	75
1/2"	61	45	110	80	155	115
9/16"	95	60	155	115	220	165
5/8"	128	95	215	160	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



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%.

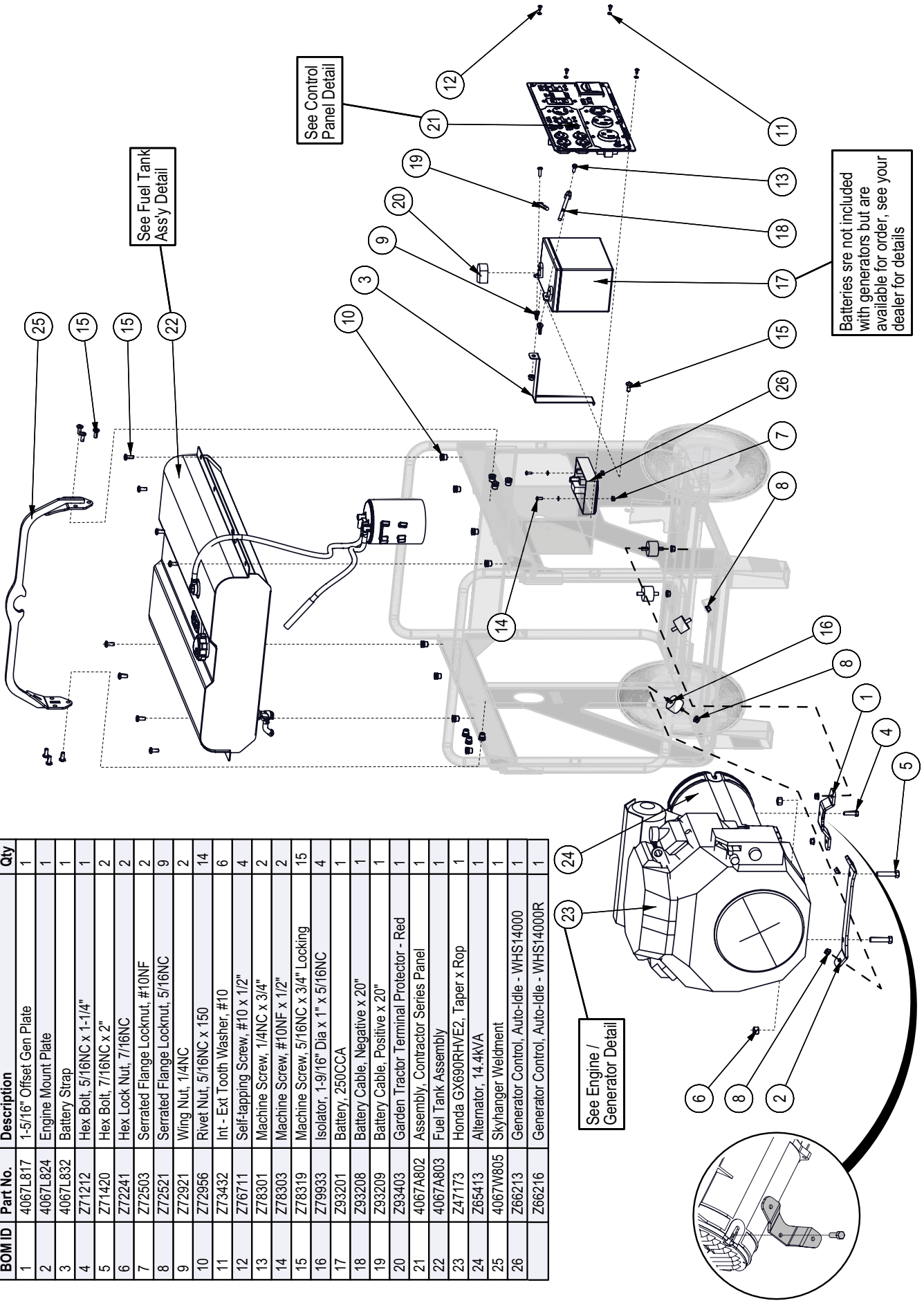
* Torque value for bolts and capscrews are identified by their head markings.

METRIC TORQUE SPECIFICATIONS				
Bolt Diameter "A"	Bolt Torque*			
	8.8 (N.m) (lb-ft)		10.9 (N.m) (lb-ft)	
M3	0.5	0.4	1.8	1.3
M4	3	2.2	4.5	3.3
M5	6	4	9	7
M6	10	7	15	11
M8	25	18	35	26
M10	50	37	70	52
M12	90	66	125	92
M14	140	103	200	148
M16	225	166	310	229
M20	435	321	610	450
M24	750	553	1050	774
M30	1495	1103	2100	1550
M36	2600	1917	3675	2710



WHS14000 Main Assembly

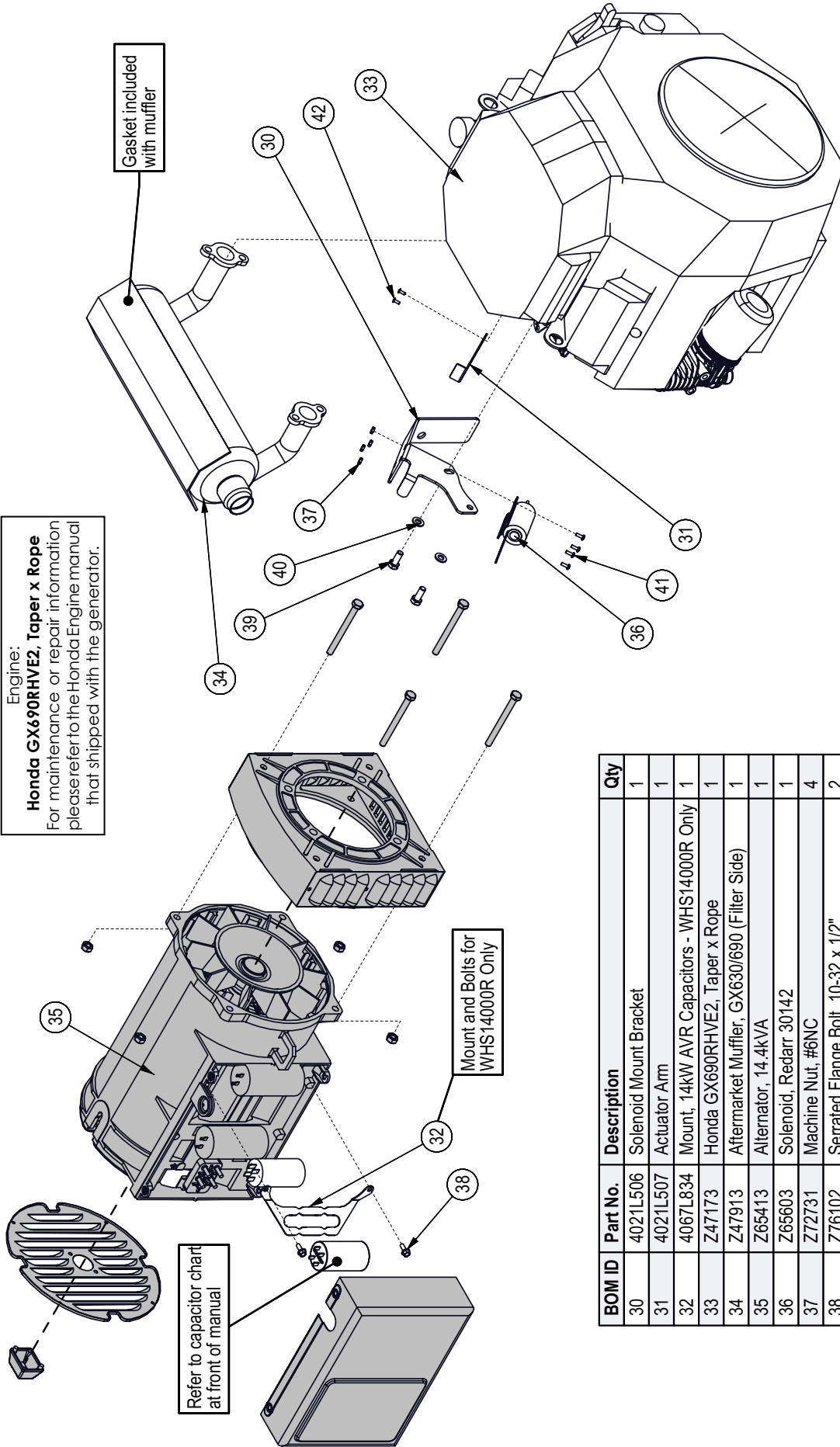
BOM ID	Part No.	Description	Qty
1	4067L817	1-5/16" Offset Gen Plate	1
2	4067L824	Engine Mount Plate	1
3	4067L832	Battery Strap	1
4	Z71212	Hex Bolt, 5/16NC x 1-1/4"	1
5	Z71420	Hex Bolt, 7/16NC x 2"	2
6	Z72241	Hex Lock Nut, 7/16NC	2
7	Z72503	Serrated Flange Locknut, #10NF	2
8	Z72521	Serrated Flange Locknut, 5/16NC	9
9	Z72921	Wing Nut, 1/4NC	2
10	Z72956	Rivet Nut, 5/16NC x 150	14
11	Z73432	Int - Ext Tooth Washer, #10	6
12	Z76711	Self-tapping Screw, #10 x 1/2"	4
13	Z78301	Machine Screw, 1/4NC x 3/4"	2
14	Z78303	Machine Screw, #10NF x 1/2"	2
15	Z78319	Machine Screw, 5/16NC x 3/4" Locking	15
16	Z79933	Isolator, 1-9/16" Dia x 1" x 5/16NC	4
17	Z93201	Battery, 250CCA	1
18	Z93208	Battery Cable, Negative x 20"	1
19	Z93209	Battery Cable, Positive x 20"	1
20	Z93403	Garden Tractor Terminal Protector - Red	1
21	4067A802	Assembly, Contractor Series Panel	1
22	4067A803	Fuel Tank Assembly	1
23	Z47173	Honda GX690RHE2, Taper x Rop	1
24	Z65413	Alternator, 14.4kVA	1
25	4067W805	Skyhanger Weldment	1
26	Z66213	Generator Control, Auto-Idle - WHS14000	1
	Z66216	Generator Control, Auto-Idle - WHS14000R	1



Engine / Alternator Assembly

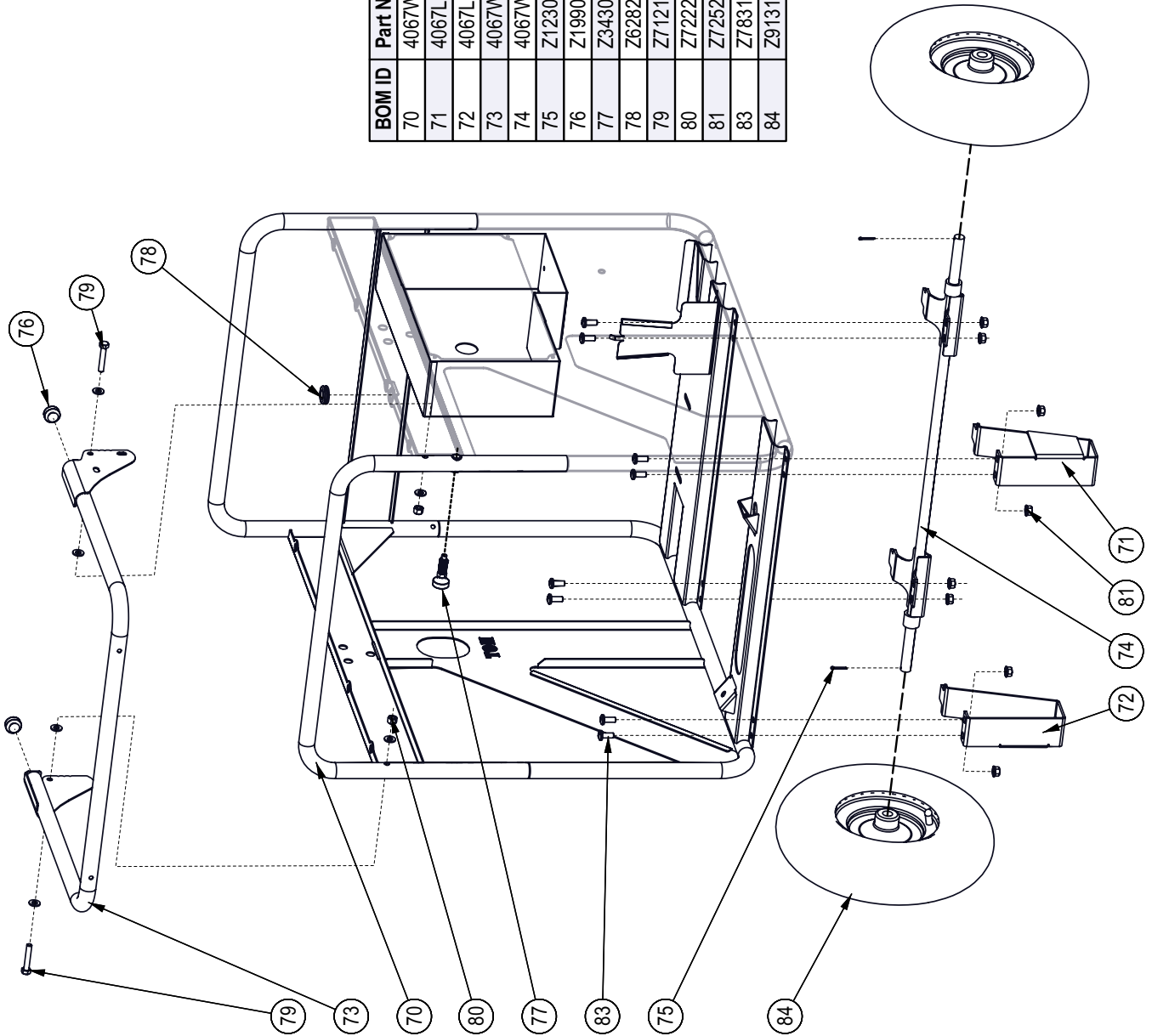
Alternator:
Mecc Alte Inc. S20W-160/A
See parts chart page 3
 For maintenance or repair information please refer to the Mecc Alte alternator manual that shipped with the generator.

Engine:
Honda GX690RHE2, Taper x Rope
 For maintenance or repair information please refer to the Honda Engine manual that shipped with the generator.



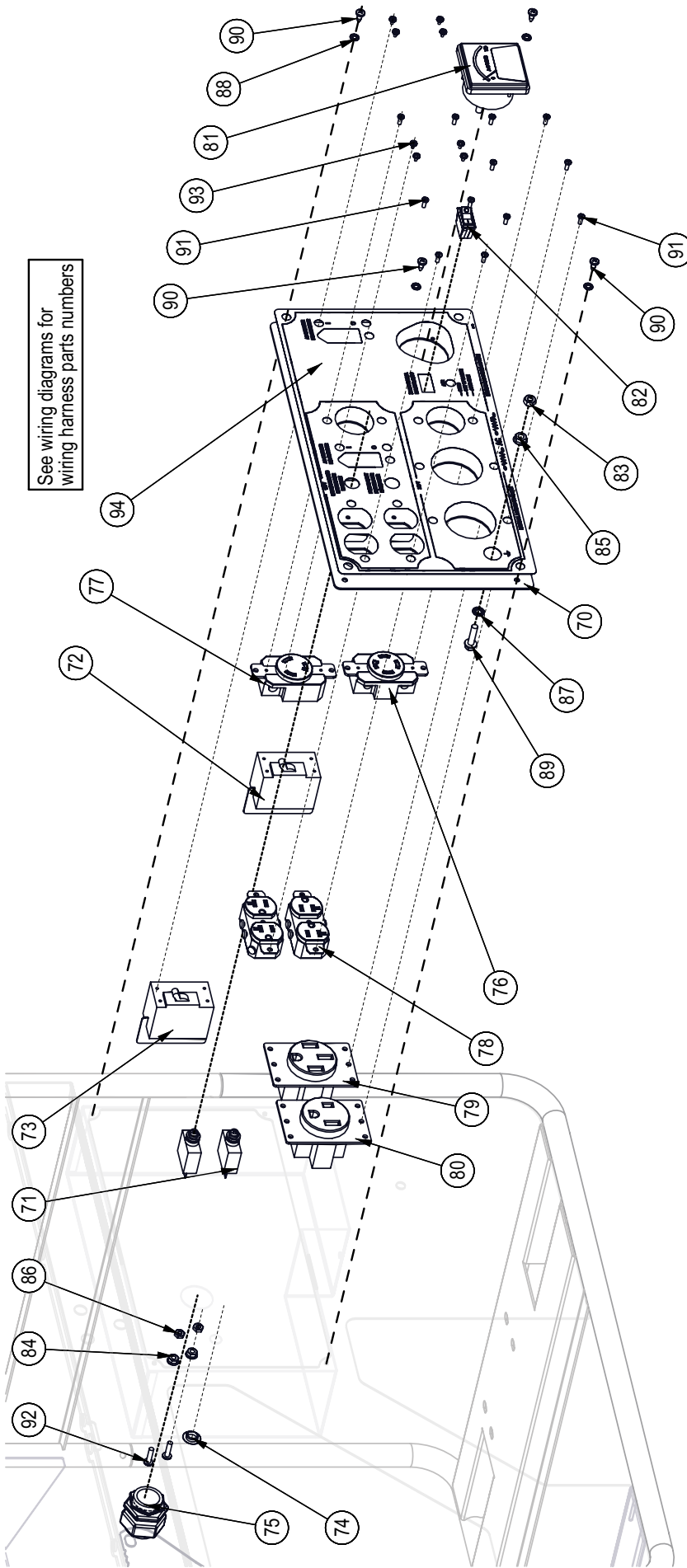
BOM ID	Part No.	Description	Qty
30	4021L506	Solenoid Mount Bracket	1
31	4021L507	Actuator Arm	1
32	4067L834	Mount, 14kW AVR Capacitors - WHS14000R Only	1
33	Z47173	Honda GX690RHE2, Taper x Rope	1
34	Z47913	Aftersmarket Muffler, GX630/690 (Filter Side)	1
35	Z65413	Alternator, 14.4kVA	1
36	Z65603	Solenoid, Redarr 30142	1
37	Z72731	Machine Nut, #6NC	4
38	Z76102	Serrated Flange Bolt, 10-32 x 1/2"	2
39	Z77150	Hex Bolt, M8x1.25 x 20mm	2
40	Z77352	DIN 125 Washer, M8	2
41	Z78304	Machine Screw, #6NC x 3/8"	4
42	Z79308	Dome Head Rivet, 1/8" x 3/125	2

Frame Assembly



BOM ID	Part No.	Description	Qty
70	4067W801	Generator Standard Lg-Frame	1
71	4067L807	Leg, Lg Frame RH	1
72	4067L807H	Leg, Lg Frame LH	1
73	4067W807	Weldment, Handle Lg.	1
74	4067W803	Axle Weldment	1
75	Z12301	Cotter Pin, 3/32" x 3/4"	2
76	Z19909	Rubber Bumper, 7/16" x 1"	2
77	Z34304	Spring Plunger, 1/2NC x 1" x 0.25" Retract Nose	1
78	Z62823	Rubber Grommet, 5/8" x 1/8"	1
79	Z71217	Hex Bolt, 5/16NC x 1-3/4"	2
80	Z72221	Hex Lock Nut, 5/16NC	2
81	Z72521	Serrated Flange Locknut, 5/16NC	8
83	Z78319	Machine Screw, 5/16NC x 3/4" Locking	8
84	Z91315	4.00-6 NHS 2PR	2

Electrical Panel Assembly



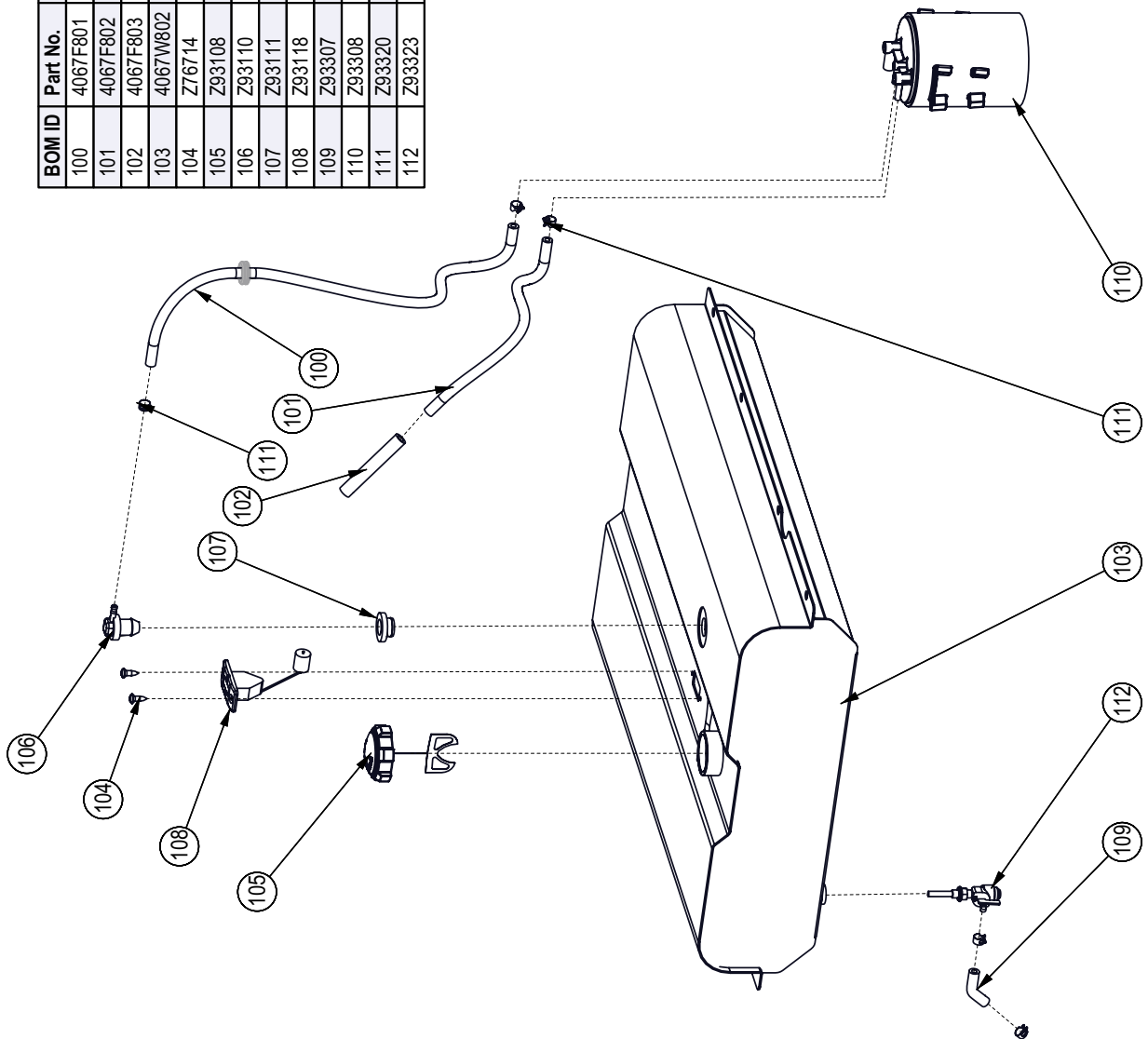
See wiring diagrams for wiring harness parts numbers

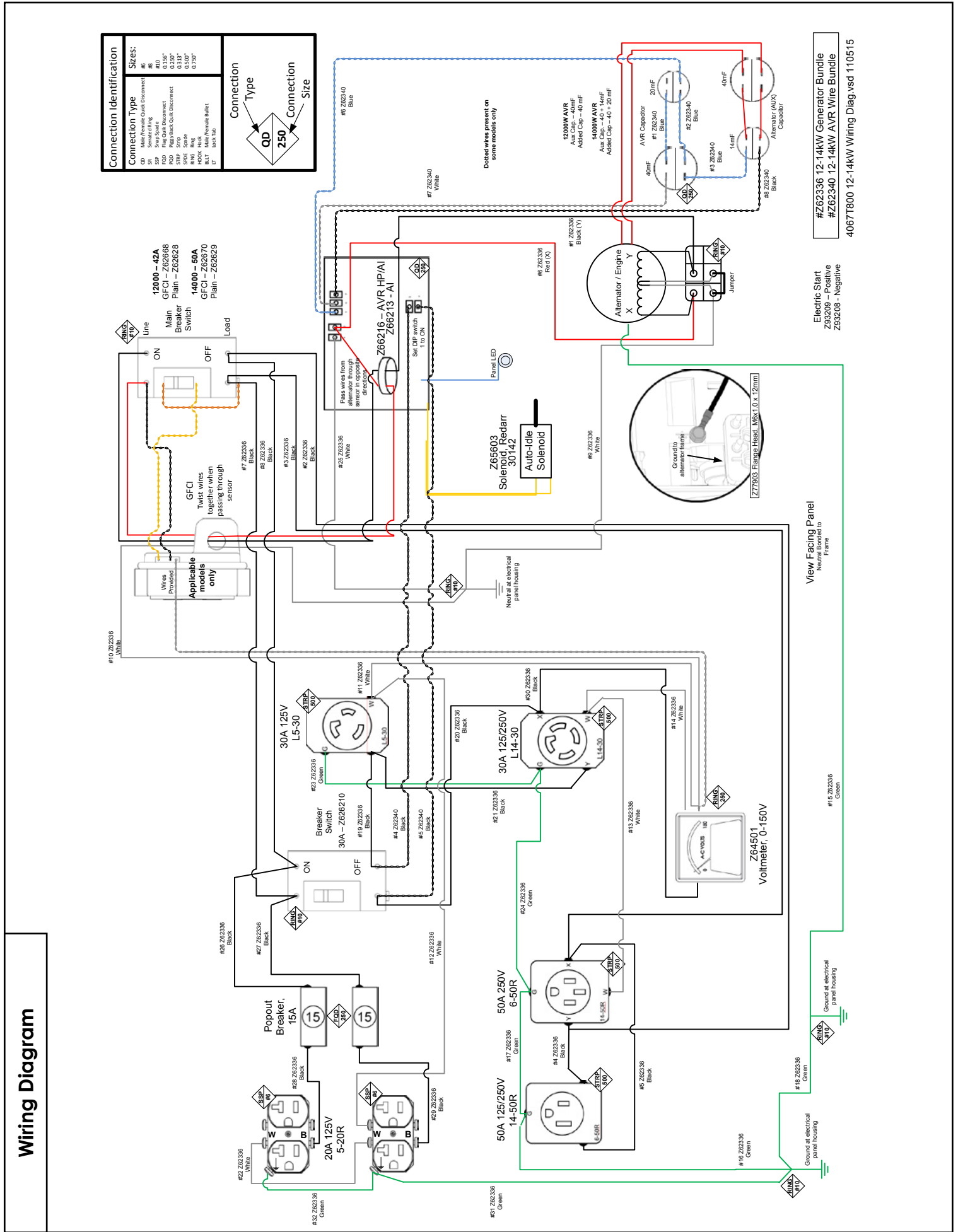
BOM ID	Part No.	Description	Qty
83	Z72111	Hex Nut, 1/4NC	1
84	Z72502	Serrated Flange Locknut, #10NC	2
85	Z72511	Serrated Flange Locknut, 1/4NC	1
86	Z72751	Machine Nut, #10NC	2
87	Z73431	Int - Ext Tooth Washer, 1/4"	1
88	Z73432	Int - Ext Tooth Washer, #10	4
89	Z76114	Flange Bolt, 1/4NC x 1"	1
90	Z76711	Self-tapping Screw, #10 x 1/2"	4
91	Z78304	Machine Screw, #6NC x 3/8"	12
92	Z78305	Machine Screw, #10NC x 3/4"	2
93	Z78320	SEMS Screw, #6NC x 1/4" x External Tooth	8
94	Z94814	12-14kW Control Panel Decal - WHS14000	1
	Z94823	12-14kW AVR Control Panel Decal - WHS14000R	1

BOM ID	Part No.	Description	Qty
70	4066L804	Panel, Home Series	1
71	Z62616	Thermal Breaker, 15A x TC1 O/L1	2
72	Z626210	30A - Double Breaker	1
73	Z62629	50A - Double Breaker	1
74	Z62813	Plug, #18	1
75	Z62827	Cable Gland, 18-25mm	1
76	Z63403	Receptacle, L14-30 x 30A x 125/250V	1
77	Z63404	Receptacle, L5-30 x 30A x 125V	1
78	Z63406	Receptacle, 5-20R x 20A x 125V	2
79	Z63409	Receptacle, 14-50R x 50A x 125/250V	1
80	Z63410	Receptacle, 6-50R x 50A x 125/250V	1
81	Z64501	Voltmeter, 0-150V	1
82	Z66112	Rocker Switch, 20A SPST	1

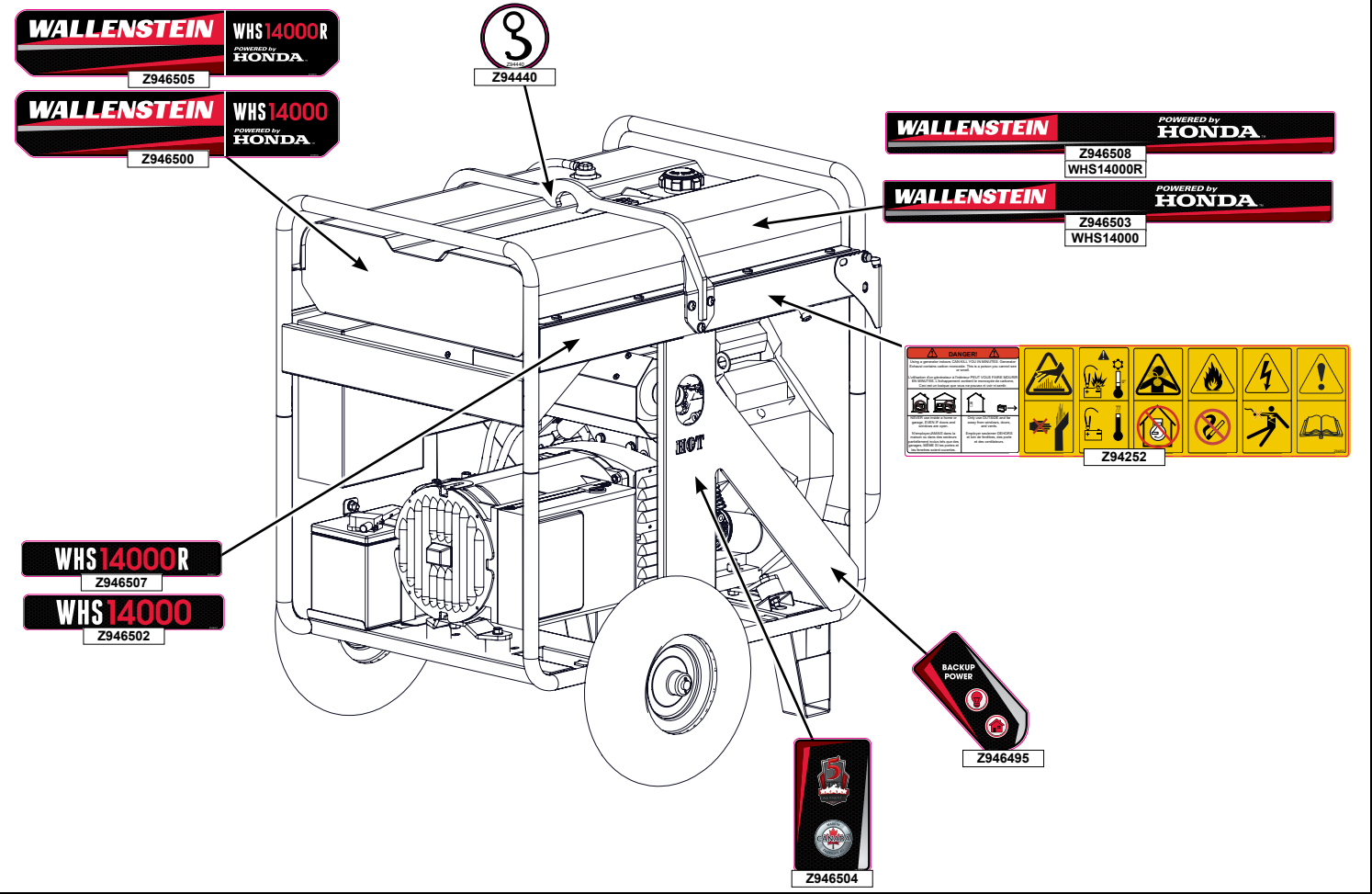
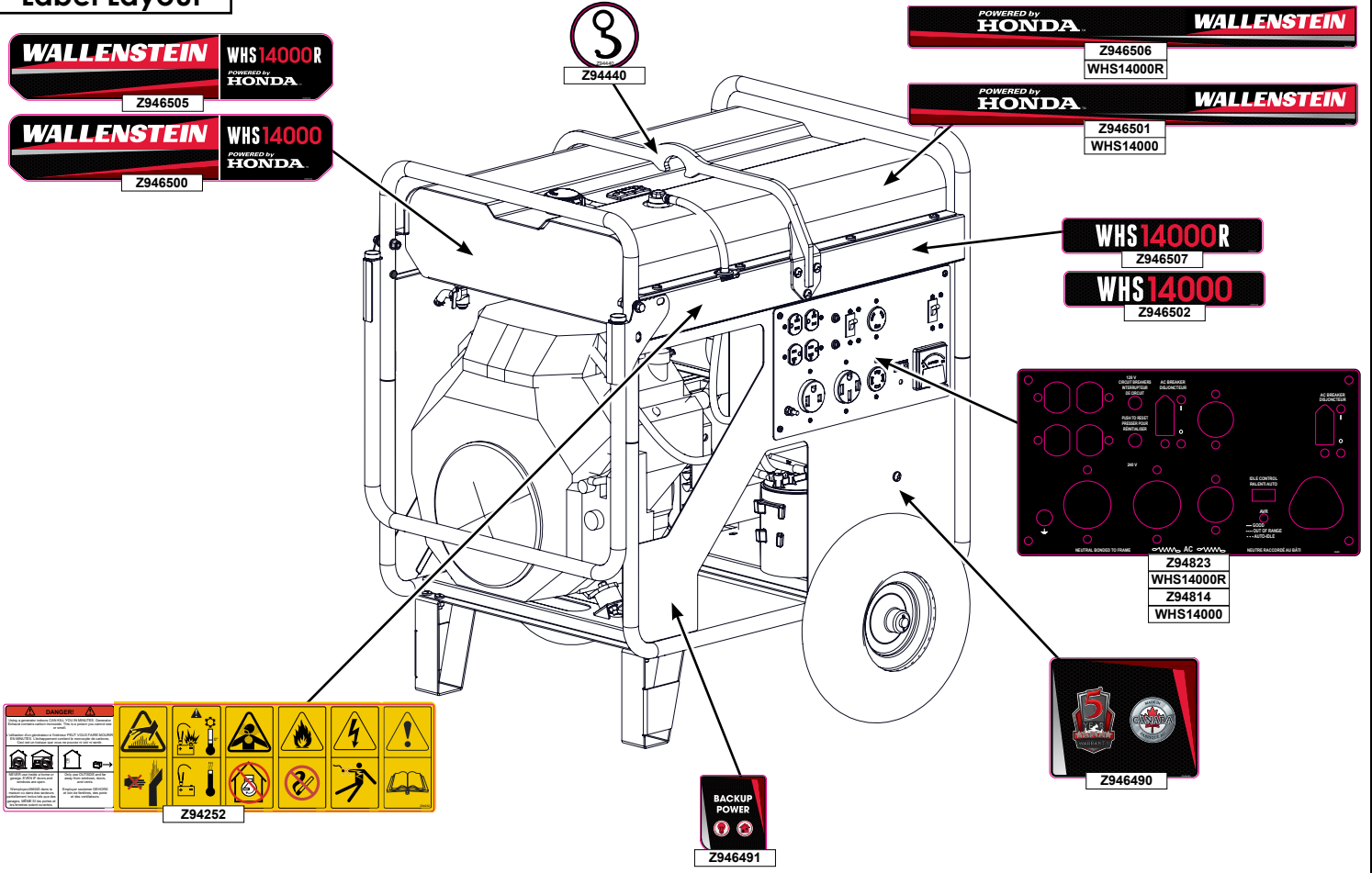
Fuel Tank Assembly & Fuel Lines

BOM ID	Part No.	Description	Qty
100	4067F801	EPA fuel line 1/4" ID x 26"	1
101	4067F802	EPA fuel line 1/4" ID x 18.5"	1
102	4067F803	EPA fuel line 3/8" ID x 6"	1
103	4067W802	Fuel Tank Weldment	1
104	Z76714	Self-tapping Screw, #10 x 1/2" Oval Head Countersunk - Black Zinc	2
105	Z93108	EPA Ratchet Fuel Cap, Unleaded Fuel x Unvented with Tether	1
106	Z93110	EPA Remote Vent, HB04	1
107	Z93111	Vent Grommet For Z93110	1
108	Z93118	Fuel Gauge, Generator	1
109	Z93307	EPA Fuel Line, 1/4" x 3"	1
110	Z93308	EPA Carbon Canister, 1200cc	1
111	Z93320	Fuel Line Clip, 1/2" OD Hose	5
112	Z93323	Fuel Shut-Off Valve, 1/4" Generator	1



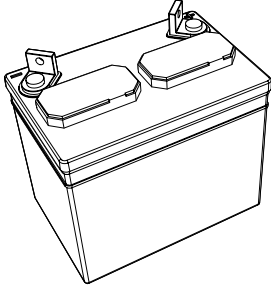
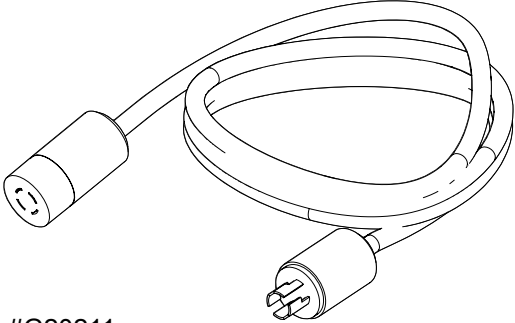
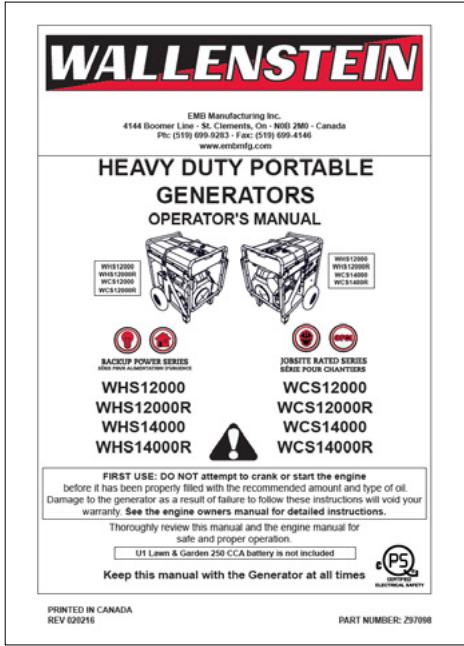


Label Layout



Accessories

Call your dealer for pricing and availability

 <p>#Z93201</p>	<p>#Z93201 U1 250CCA Lawn & Garden Battery</p> <p>The perfect battery to reliably get your generator started.</p>
 <p>#G20211</p>	<p>Generator Extension cord, the right length and size, to make the most of your generator.</p> <ul style="list-style-type: none"> • Heavy Duty SJTW Cable • -40° cold weather jacket • Nema L14-30P 30a 125/250v Plug • Nema L14-30R 30a 125/250v Connector • Water & Flame Resistant • UL, OSHA compliant <p>Availalbe in three sizes.</p> <p>G20211 • 10' Power Cord G20212 • 20' Power Cord G20213 • 25' Power Cord</p>
	<p>#Z97098 GENERATOR OPERATOR'S MANUAL</p> <p>Available as a download at www.wallensteinequipment.com</p>