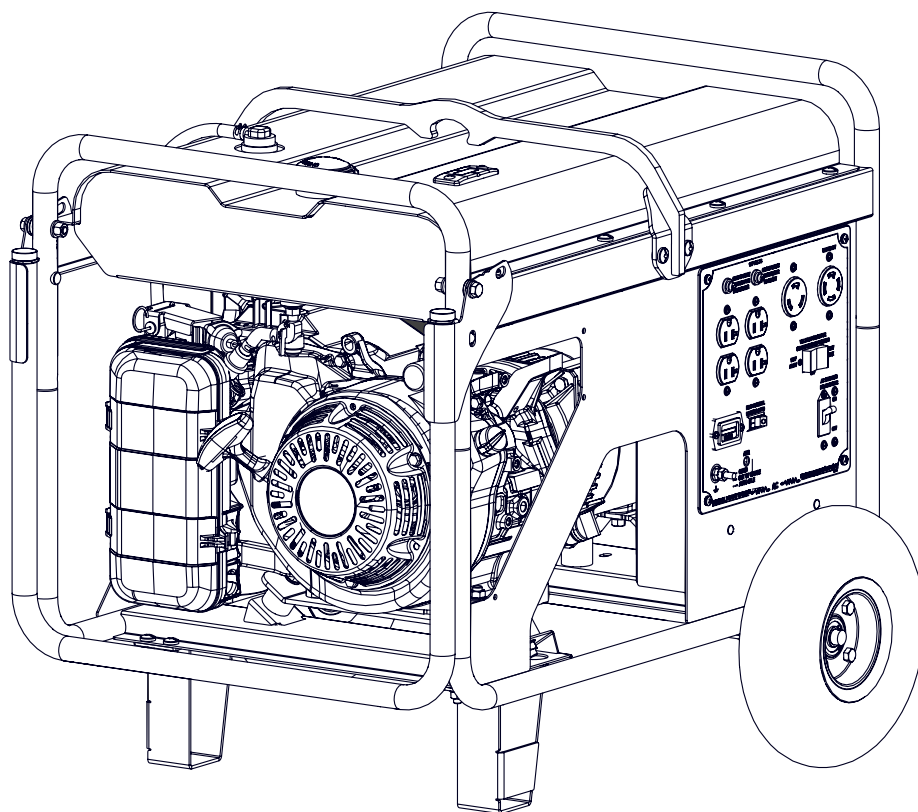




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WHS5000 / WHS5000R Generator Parts Manual

Starting with S/N's
WHS5000 - 59000
WHS5000R - 60000



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.

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

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. S16W-105/A 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	Non Drive End Bracket	390302209	
2	Fan	392000015	
3	Rear Bearing 6203-2ZC3	390302521	
4	Diode	9910356050	
5	Varistor	9910384005	
6	Capacitor # :see chart below		
Find the value of the capacitor in your alternator, and match it to the list shown here for the correct order part number.		GECAP14MF	14 MF CAPACITOR
		GECAP16MF	16 MF Capacitor
		GECAP18MF	Capacitor, 18 MFZ
		GECAP20MF	Capacitor 20MFZ
		GECAP25MF	Capacitor 25MFZ
		GECAP31MF	Capacitor, 31.5 MFZ
		GECAP35MF	35 MF CAPACITOR
		GECAP40MF	40 MF CAPACITOR

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.

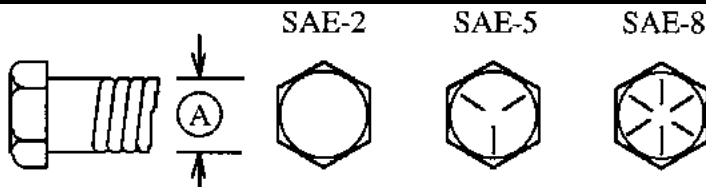
Bolt Torque

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.

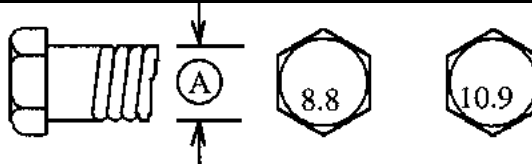
ENGLISH TORQUE SPECIFICATIONS

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



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

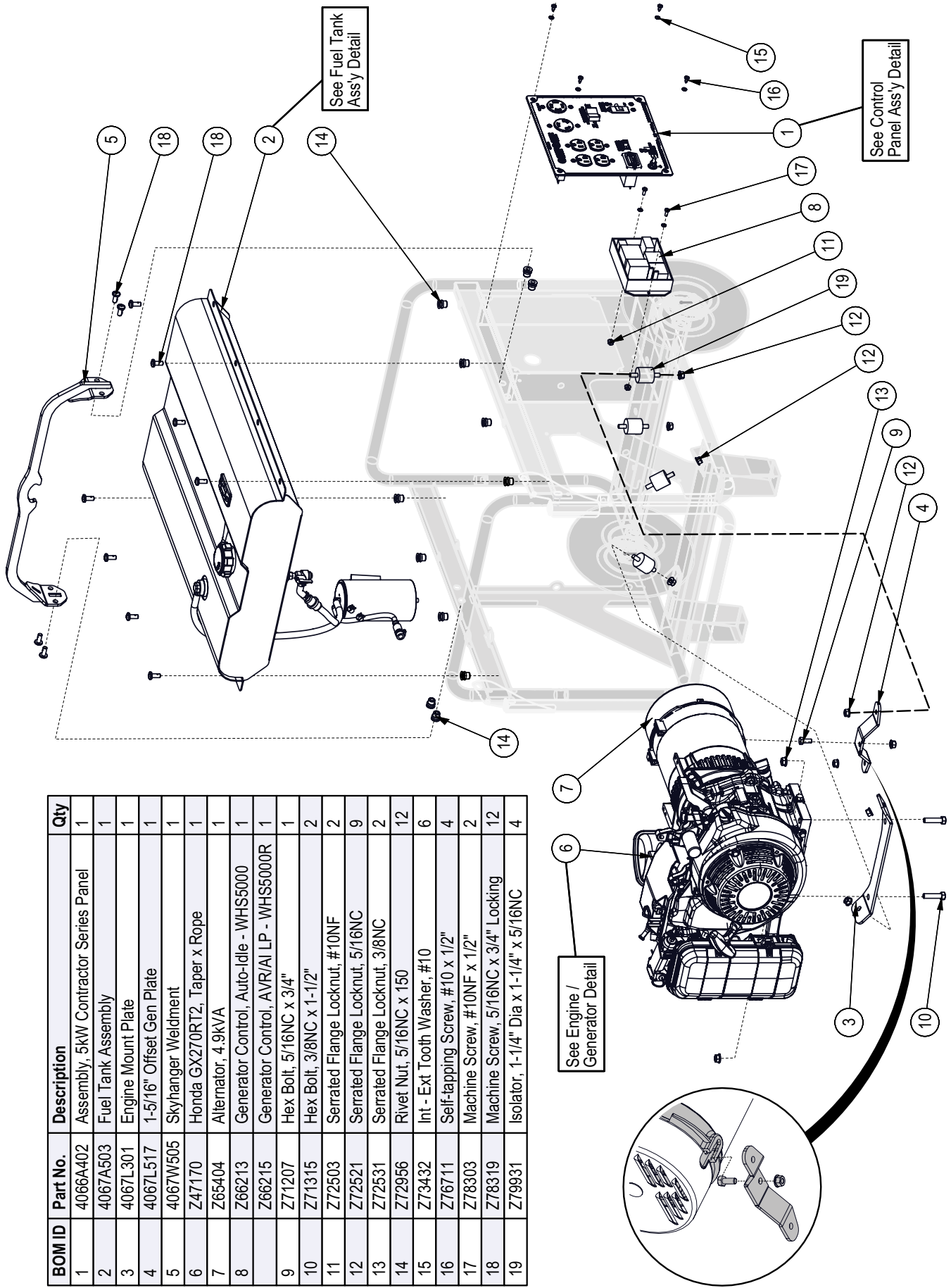


Torque figures indicated above are valid for non-greased or non-oiled threads and heads unless otherwise specified. Therefore, do not grease or oil bolts or capscrews unless otherwise specified in this manual. When using locking elements, increase torque values by 5%.

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

WHS5000 Main Assembly

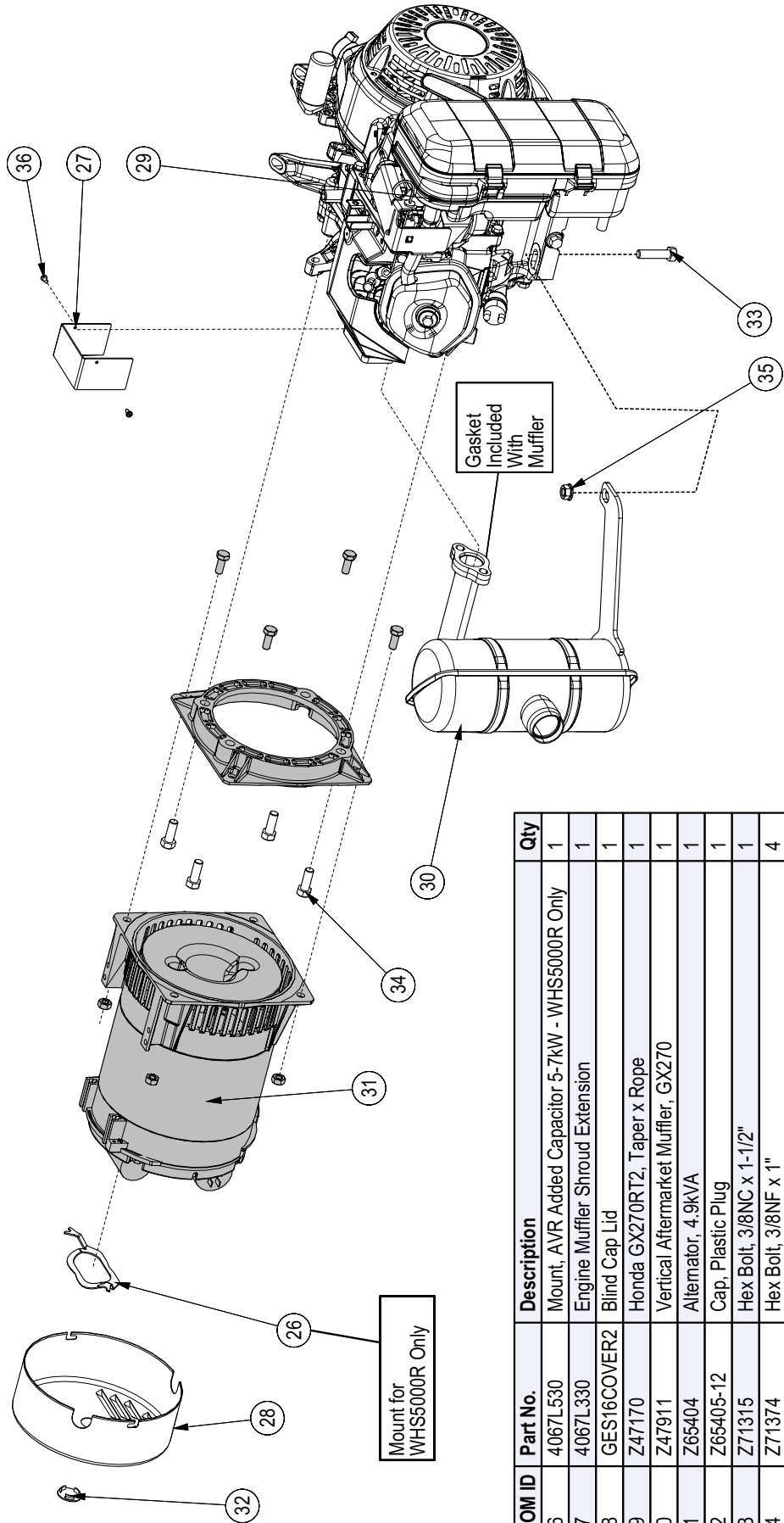
BOM ID	Part No.	Description	Qty
1	4066A402	Assembly, 5kW Contractor Series Panel	1
2	4067A503	Fuel Tank Assembly	1
3	4067L301	Engine Mount Plate	1
4	4067L517	1-5/16" Offset Gen Plate	1
5	4067W505	Skyhanger Weldment	1
6	Z47170	Honda GX270RT2, Taper x Rope	1
7	Z65404	Alternator, 4.9kVA	1
8	Z66213	Generator Control, Auto-Idle - WHS5000	1
9	Z66215	Generator Control, AVR/AI LP - WHS5000R	1
10	Z71207	Hex Bolt, 5/16NC x 3/4"	1
11	Z71315	Hex Bolt, 3/8NC x 1-1/2"	2
12	Z72503	Serrated Flange Locknut, #10NF	2
13	Z72521	Serrated Flange Locknut, 5/16NC	9
14	Z72531	Serrated Flange Locknut, 3/8NC	2
15	Z72956	Rivet Nut, 5/16NC x 150	12
16	Z73432	Int - Ext Tooth Washer, #10	6
17	Z76711	Self-tapping Screw, #10NF x 1/2"	4
18	Z78303	Machine Screw, #10NF x 1/2"	2
19	Z78319	Machine Screw, 5/16NC x 3/4" Locking	12
20	Z79931	Isolator, 1-1/4" Dia x 1-1/4" x 5/16NC	4



Engine / Alternator Assembly

Alternator:
Mecc Alte Inc. S16W-150/A
 See parts chart page 3
 For maintenance or repair information please refer to the Mecc-Alte alternator manual that shipped with the generator.

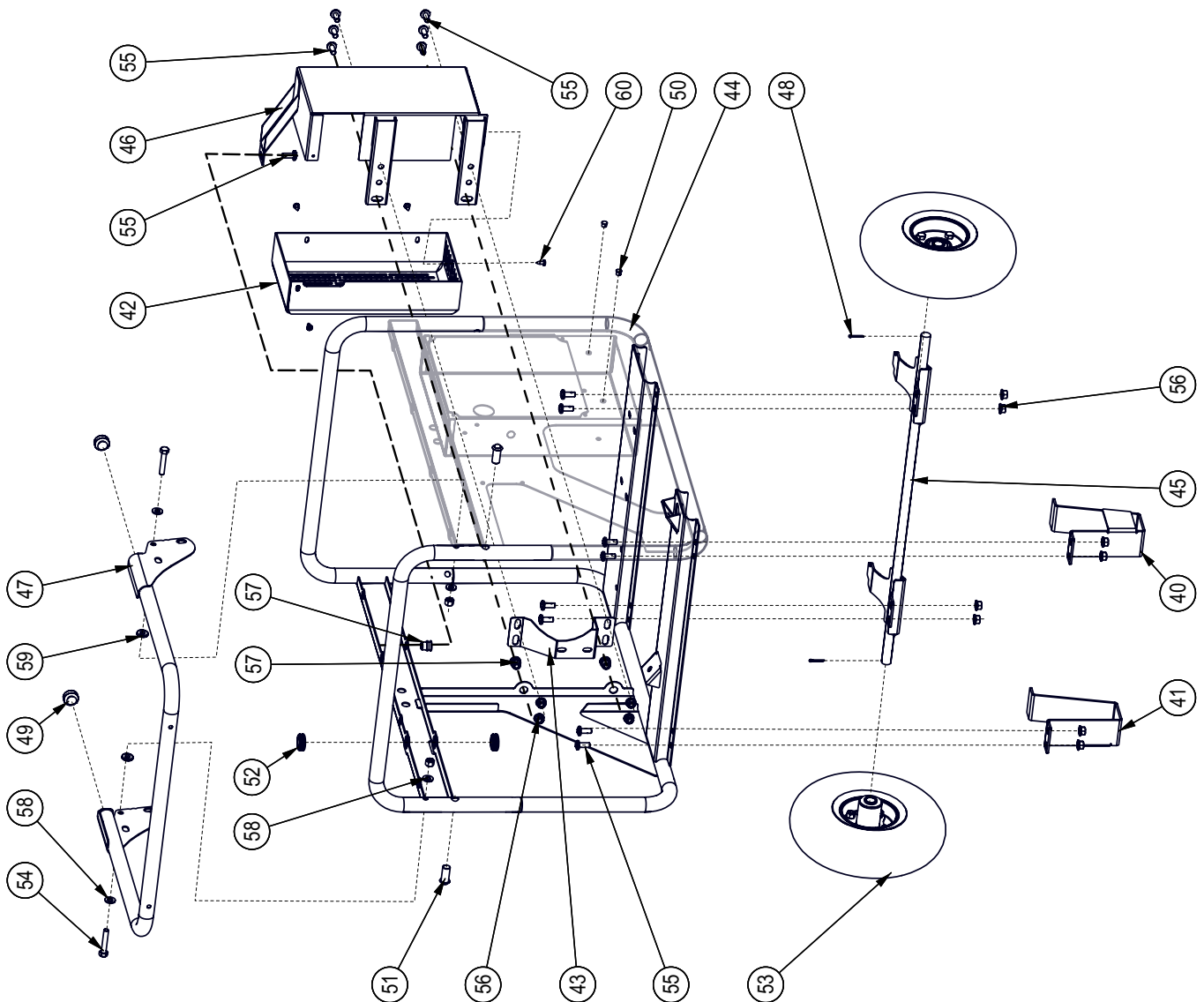
Engine:
Honda GX390RT2, Taper x Electric
 For maintenance or repair information please refer to the Honda Engine manual that shipped with the generator.



BOM ID	Part No.	Description	Qty
26	4067L530	Mount, AVR Added Capacitor 5-7kW - WHS5000R Only	1
27	4067L330	Engine Muffler Shroud Extension	1
28	GES16COVER2	Blind Cap Lid	1
29	Z47170	Honda GX270RT2, Taper x Rope	1
30	Z47911	Vertical Aftermarket Muffler, GX270	1
31	Z65404	Alternator, 4.9kVA	1
32	Z65405-12	Cap, Plastic Plug	1
33	Z71315	Hex Bolt, 3/8NC x 1-1/2"	1
34	Z71374	Hex Bolt, 3/8NF x 1"	4
35	Z72531	Serrated Flange Locknut, 3/8NC	1
36	Z76715	Self-tapping Screw, #6 x 3/8"	2

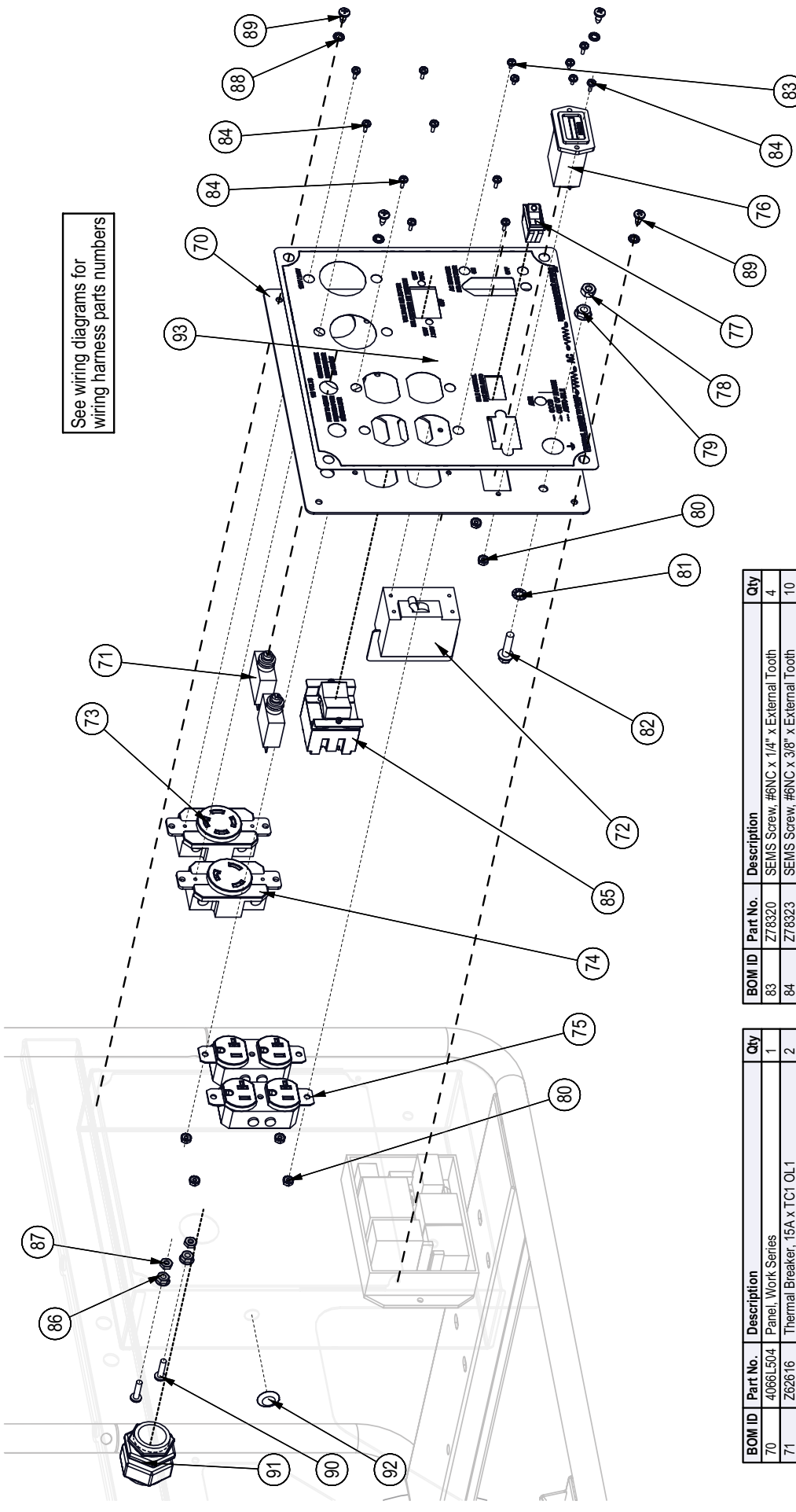
BOM ID	Part No.	Description	Qty
40	4067L507	Leg, Med Frame RH	1
41	4067L507H	Leg, Med Frame LH	1
42	4067L515	Muffler Cover	1
43	4067L518	Mount, Carbon Canister	1
44	4067W501	Generator Standard Mid-Frame	1
45	4067W503	Axle Weldment	1
46	4067W504	Muffler Backing Weldment	1
47	4067W506	Weldment, Handle	1
48	Z12301	Cotter Pin, 3/32" x 3/4"	2
49	Z19909	Rubber Bumper, 7/16" x 1"	2
50	Z19916	Plastic Hole Plug, 5/16" ID	2
51	Z34303	Spring Plunger, 1/2" Press x 1.1" x 18 lbs	2
52	Z62823	Rubber Grommet, 5/8" x 1/8"	2
53	Z91307-2	Tire	2
54	Z71217	Hex Bolt, 5/16NC x 1-3/4"	2
55	Z78319	Machine Screw, 5/16NC x 3/4" Locking	15
56	Z72521	Serrated Flange Locknut, 5/16NC	12
57	Z72956	Rivet Nut, 5/16NC x 150	3
58	Z73122	SAE Washer, 5/16"	4
59	Z73223	Thick Washer, 5/16 x 0.125"	2
60	Z76711	Self-tapping Screw, #10 x 1/2"	4

Frame Assembly



Electrical Panel Assembly

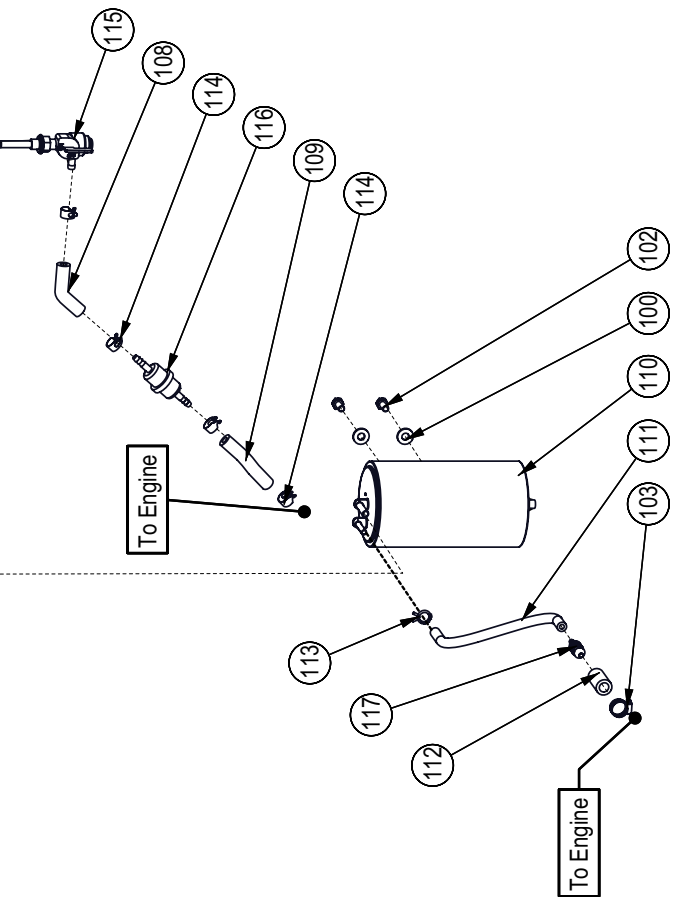
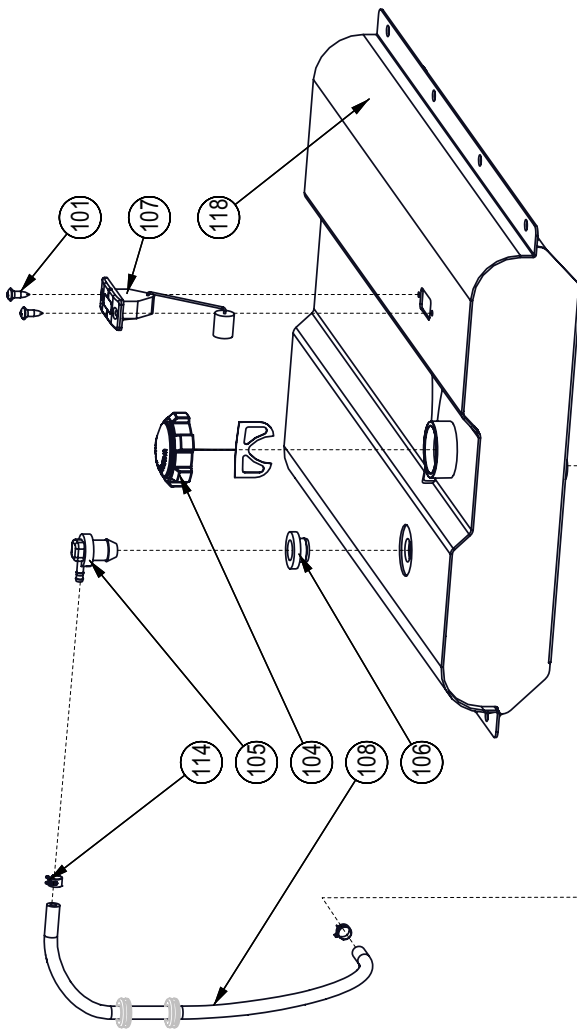
See wiring diagrams for wiring harness parts numbers



BOM ID	Part No.	Description	Qty
83	Z78320	SEMS Screw, #6NC x 1/4" x External Tooth	4
84	Z78323	SEMS Screw, #6NC x 3/8" x External Tooth	10
85	Z66113	Rocker Switch, 3PDT	1
86	Z72502	Serrated Flange Locknut, #10NC	2
87	Z72751	Machine Nut, #10NC	2
88	Z73432	Int - Ext Tooth Washer, #10	4
89	Z716711	Self-tapping Screw, #70 x 1/2"	4
90	Z78305	Machine Screw, #10NC x 3/4"	2
91	Z62827	Cable Gland, 18-25mm	1
92	Z62813	Plug, #18	1
93	Z94813	5-7 Control Panel Decal - WHS5000	1
	Z94821	5-7 AVR Control Panel Decal - WHS5000R	1

BOM ID	Part No.	Description	Qty
70	4066L504	Panel, Work Series	1
71	Z62616	Thermal Breaker, 15A x TC1 OL1	2
72	Z62626	17.5A - Double Breaker	1
73	Z63403	Receptacle, L14-30 x 30A x 125/250V	1
74	Z63404	Receptacle, L5-30 x 30A x 125V	1
75	Z63406	Receptacle, 5-20R x 20A x 125V	2
76	Z64611	Hour Meter, 10-80 VDC Quartz E-Mech Rectangular	1
77	Z66112	Rocker Switch, 20A SPST	1
78	Z72111	Hex Nut, 1/4NC	1
79	Z72511	Serrated Flange Locknut, 1/4NC	1
80	Z72942	Serrated Washer Nut, #6NC	6
81	Z73431	Int - Ext Tooth Washer, 1/4"	1
82	Z76114	Flange Bolt, 1/4NC x 1"	1

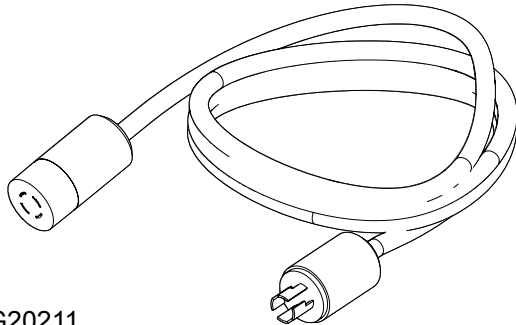
Fuel Tank Assembly & Fuel Lines



BOM ID	Part No.	Description	Qty
100	Z73111	SAE Washer, 1/4"	2
101	Z76714	Self-tapping Screw, #10 x 1/2" Oval Head Countersunk - Black Zinc	2
102	Z77130	Hex Bolt, M6x1.0 x 14mm	2
103	Z79405	Hose Clamp, SAE #4 (5/8")	1
104	Z93108	EPA Ratchet Fuel Cap, Unleaded Fuel x Unvented with Tether	1
105	Z93110	EPA Remote Vent, HB04	1
106	Z93111	Vent Grommet For Z93110	1
107	Z93118	Fuel Gauge, Generator	1
108	Z93307	EPA Fuel Line, 1/4" x	2
109	Z93307-2	EPA Fuel Line, 1/4" x 4"	1
110	Z93309	EPA Carbon Canister, 662cc	1
111	Z93310	EPA Fuel Line, 3/16" x 11"	1
112	Z93313	Fuel Line, 3/8" x 1-1/2"	1
113	Z93319	Fuel Line Clip, 3/8" OD	1
114	Z93320	Fuel Line Clip, 1/2" OD Hose	6
115	Z93323	Fuel Shut-Off Valve, 1/4" Generator	1
116	Z93324	Fuel Filter, In-Line 1/4" Small	1
117	Z93326	Plastic Reducer, HB x HB 0604	1
118	4067W502	Fuel Tank Weldment	1

Accessories

Call your dealer for pricing and availability



#G20211

Generator Extension cord, the right length and size, to make the most of your generator.

- 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

Available in three sizes.

G20211 • 10' Power Cord

G20212 • 20' Power Cord

G20213 • 25' Power Cord

WALLENSTEIN

EMB Manufacturing Inc.
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STANDARD PORTABLE GENERATORS OPERATOR'S MANUAL

WHS3000 WHS3000R WCS3000 WCS3000R
WHS5000 WHS5000R WCS5000 WCS5000R
WHS7000 WHS7000R WCS7000 WCS7000R

BACKUP POWER SERIES
SÉRIE POUX ALIMENTATION STABILISÉE

JOBSITE RATED SERIES
SÉRIE POUR CHANTIERS

WHS3000 WCS3000
WHS3000R WCS3000R
WHS5000 WCS5000
WHS5000R WCS5000R
WHS7000 WCS7000
WHS7000R WCS7000R

FIRST USE: DO NOT attempt to crank or start the engine before it has been properly filled with the recommended amount and type of oil. Damage to the generator as a result of failure to follow these instructions will void your warranty. See the engine owners manual for detailed instructions.

Thoroughly review this manual and the engine manual for safe and proper operation.

UT Lawn & Garden 250 CCA battery is not included

Keep this manual with the Generator at all times

PRINTED IN CANADA REV 020316 PART NUMBER: Z97097

#Z97097 GENERATOR OPERATOR'S MANUAL

Available as a download at www.wallensteinequipment.com