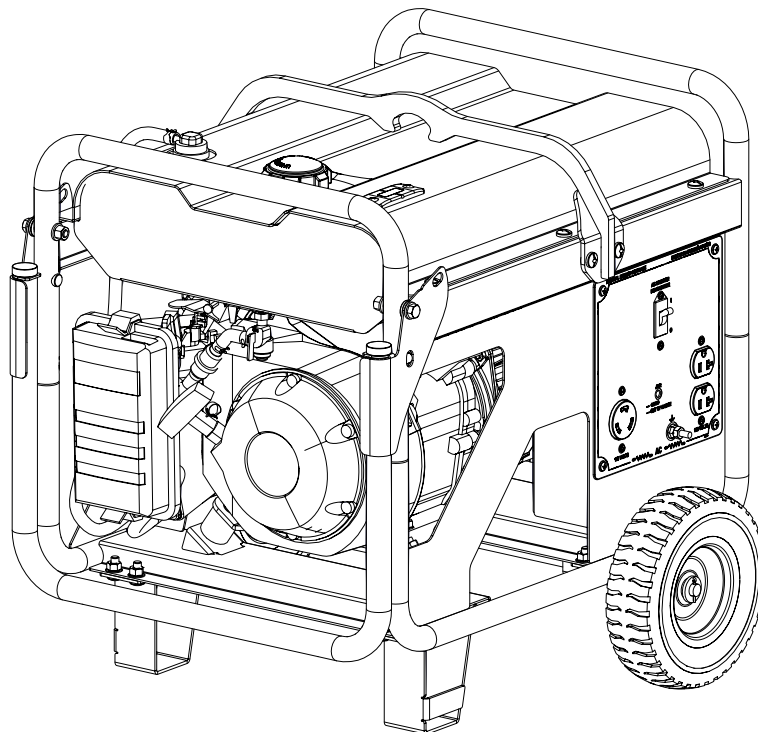


WALLENSTEIN

EMB Manufacturing Inc.
4144 Boomer Line · St. Clements, On · N0B 2M0 · Canada
Ph: (519) 699-9283 · Fax: (519) 699-4146
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WHS3000 / WHS3000R Generator Parts Manual

Starting with S/N's
WHS3000 - 30000
WHS3000R - 50000



Refer to the operators
manual for safe
operation and
maintenance

WHS3000 Series Parts Manual.220216
Rev A 270616

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. S15W-85 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	0390302217	
2	Fan	0391700138	
3	Rear Bearing 6203-2ZC3	0390302530	
4	Diode	9910356205	
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.



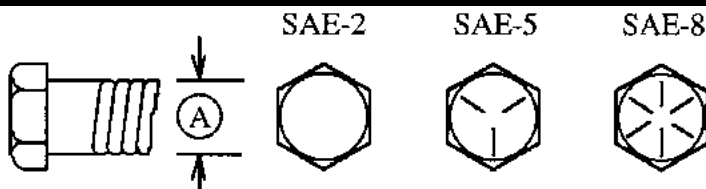
Exercise extreme caution when working with exposed wiring of the alternator, be aware that high voltage discharge of the capacitor is a danger.

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.

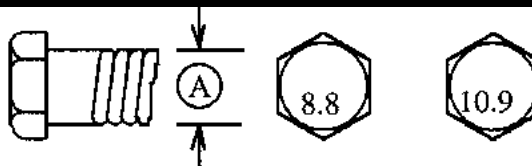
ENGLISH TORQUE SPECIFICATIONS						
Bolt Diameter "A"	Bolt Torque*					
	SAE 2 (N.m) (lb-ft)		SAE 5 (N.m) (lb-ft)		SAE 8 (N.m) (lb-ft)	
1/4"	8	6	12	9	17	12
5/16"	13	10	25	19	36	27
3/8"	27	20	45	33	63	45
7/16"	41	30	72	53	100	75
1/2"	61	45	110	80	155	115
9/16"	95	60	155	115	220	165
5/8"	128	95	215	160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



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%.

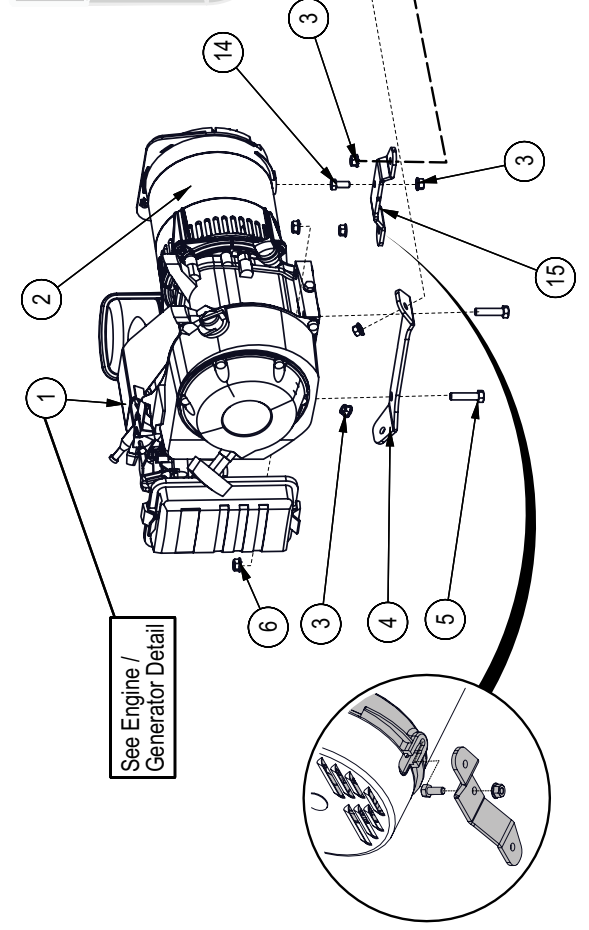
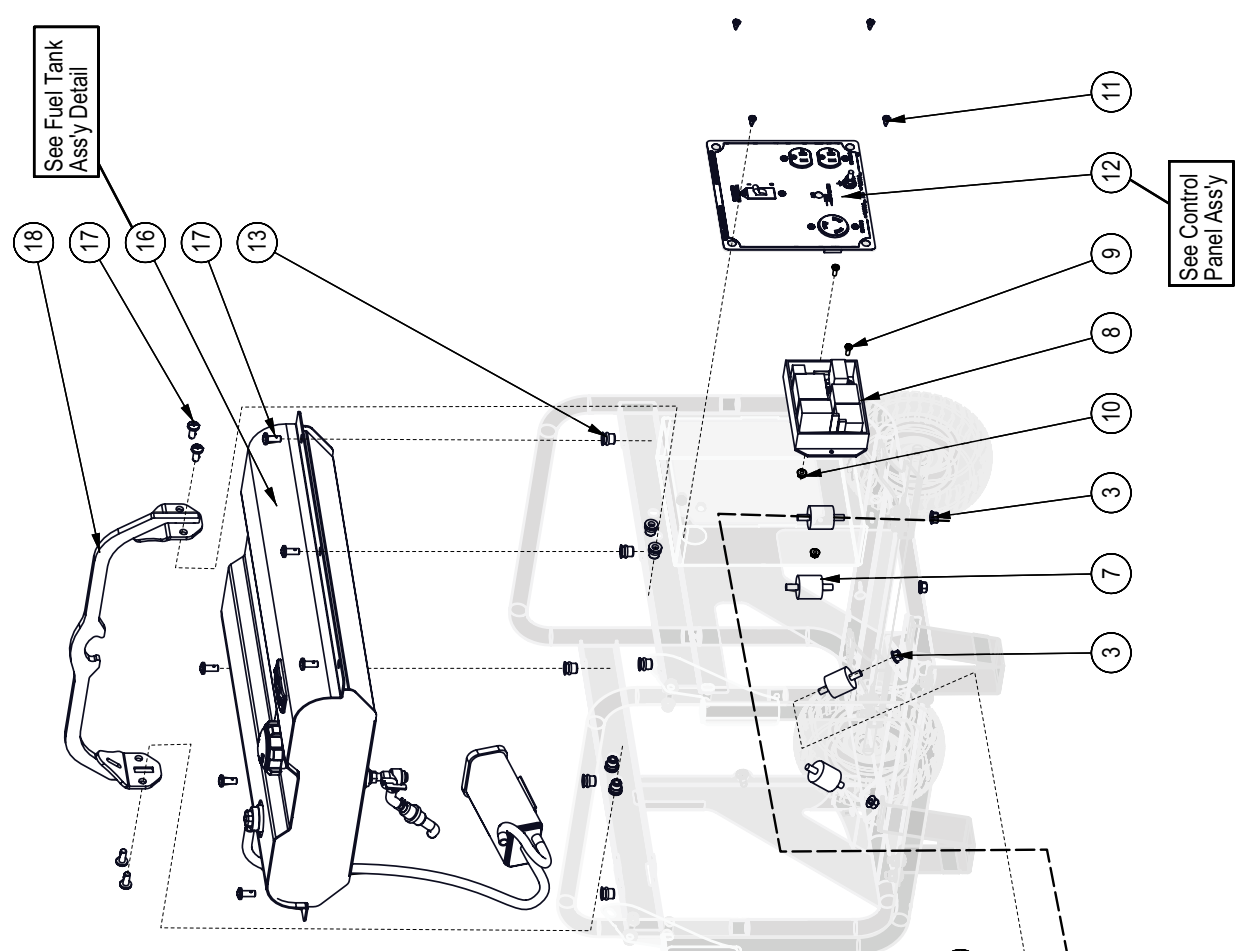
* Torque value for bolts and capscrews are identified by their head markings.

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



WHS3000 Main Assembly

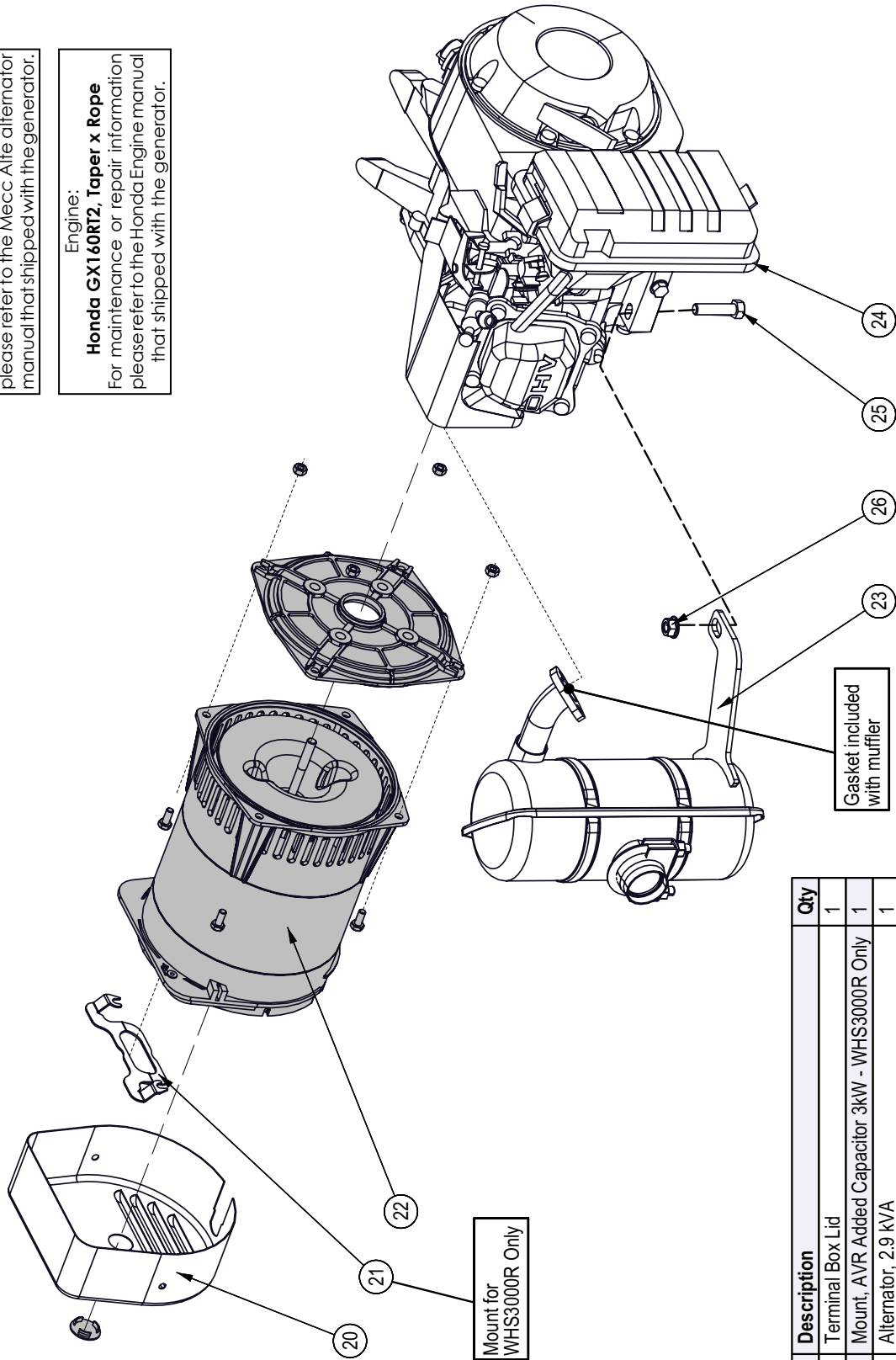
BOM ID	Part No.	Description	Qty
1	Z47172	Honda GX160RT2, Taper x Rope	1
2	Z65401	Alternator, 2.9 kVA	1
3	Z72521	Serrated Flange Locknut, 5/16NC	9
4	4067L224	Engine Mount Plate	1
5	Z71315	Hex Bolt, 3/8NC x 1-1/2"	2
6	Z72531	Serrated Flange Locknut, 3/8NC	2
7	Z79931	Isolator, 1-1/4" Dia x 1-1/4" x 5/16NC	4
8	Z66215	Generator Control, AVR/ALP - WHS3000R Only	1
9	Z78303	Machine Screw, #10NF x 1/2"	2
10	Z72503	Serrated Flange Locknut, #10NF	2
11	Z76711	Self-tapping Screw, #10 x 1/2"	4
12	4066A302	Assembly, Contractor Series Panel	1
13	Z72956	Rivet Nut, 5/16NC x 150	10
14	Z71207	Hex Bolt, 5/16NC x 3/4"	1
15	4067L217	1-5/16" Offset Gen Plate	1
16	4067W202	Fuel Tank Weldment	1
17	Z78319	Machine Screw, 5/16NC x 3/4" Locking	10
18	4067W205	Skyhanger Weldment	1



Engine / Alternator Assembly

Alternator:
Mecc Alte Inc. S15W-85
 See parts chart page 3
 For maintenance or repair information please refer to the Mecc Alte alternator manual that shipped with the generator.

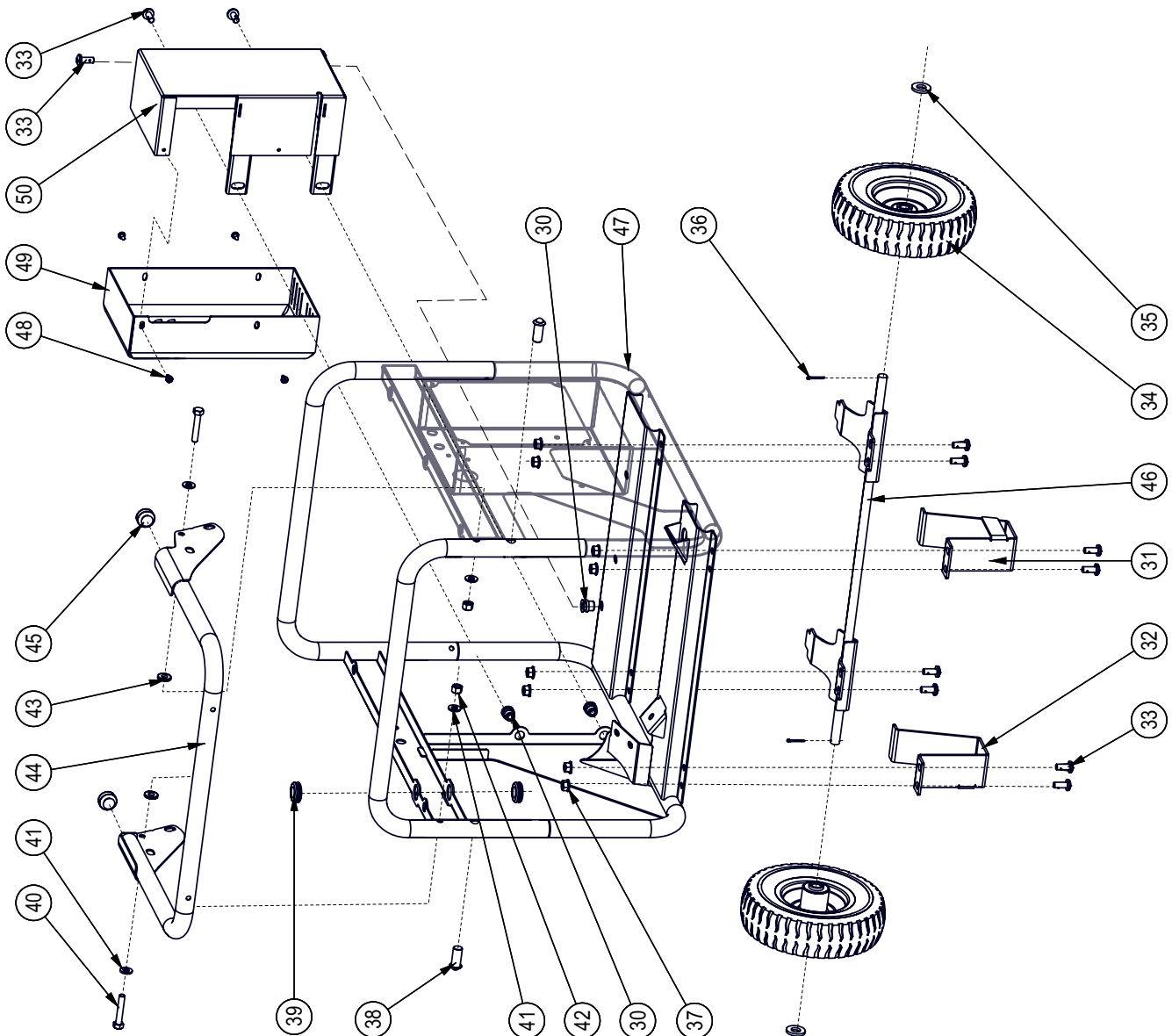
Engine:
Honda GX160RT2, Taper x Rope
 For maintenance or repair information please refer to the Honda Engine manual that shipped with the generator.



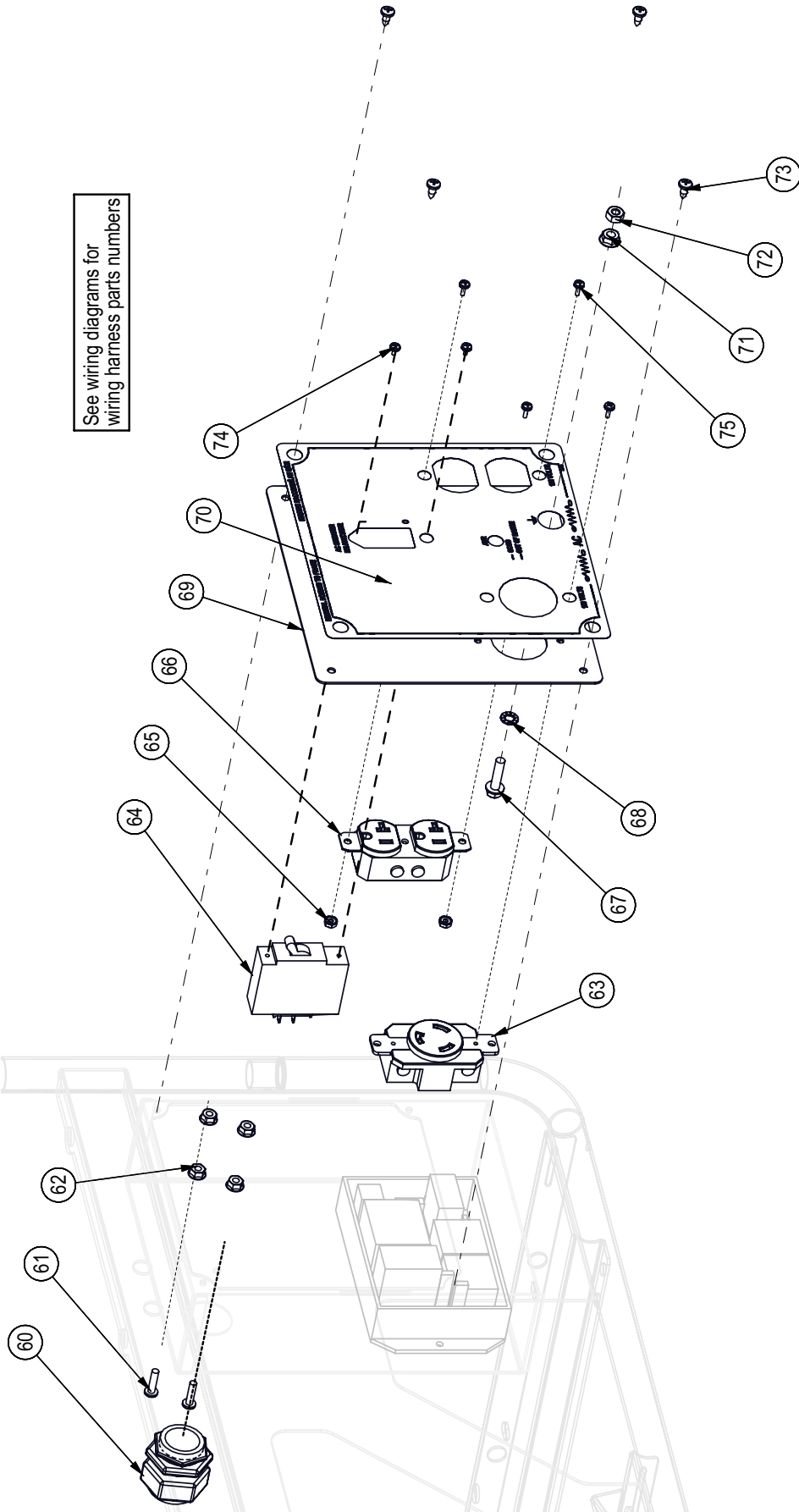
BOM ID	Part No.	Description	Qty
20	GES15-blank	Terminal Box Lid	1
21	4067L225	Mount, AVR Added Capacitor 3kW - WHS3000R Only	1
22	Z65401	Alternator, 2.9 kVA	1
23	Z47910	Vertical Aftermarket Muffler, GX160	1
24	Z47172	Honda GX160RT2, Taper x Rope	1
25	Z71315	Hex Bolt, 3/8NC x 1-1/2"	1
26	Z72531	Serrated Flange Locknut, 3/8NC	1

BOM ID	Part No.	Description	Qty
30	Z72956	Rivet Nut, 5/16NC x 150	3
31	4067L207	Leg, SM Frame	1
32	4067L207H	Leg, SM Frame RH	1
33	Z78319	Machine Screw, 5/16NC x 3/4" Locking	11
34	Z91332	8x1.75 Offset Hub Diamond 225 lbs	2
35	Z73151	SAE Washer, 1/2"	2
36	Z12301	Cotter Pin, 3/32" x 3/4"	2
37	Z72521	Serrated Flange Locknut, 5/16NC	8
38	Z34303	Spring Plunger, 1/2" Press x 1.1" x 18 lbs	2
39	Z62823	Rubber Grommet, 5/8" x 1/8"	2
40	Z71217	Hex Bolt, 5/16NC x 1-3/4"	2
41	Z73122	SAE Washer, 5/16"	4
42	Z72221	Hex Lock Nut, 5/16NC	2
43	Z73223	Thick Washer, 5/16 x 0.125"	2
44	4067W206	Weldment, Handle	1
45	Z19909	Rubber Bumper, 7/16" x 1"	2
46	4067W203	Axle Weldment	1
47	4067W201	Generator Standard Small-Frame	1
48	Z76711	Self-tapping Screw, #10 x 1/2"	4
49	4067L215	Muffler Cover Small	1
50	4067W204	Muffler Backing Weldment	1

Frame Assembly



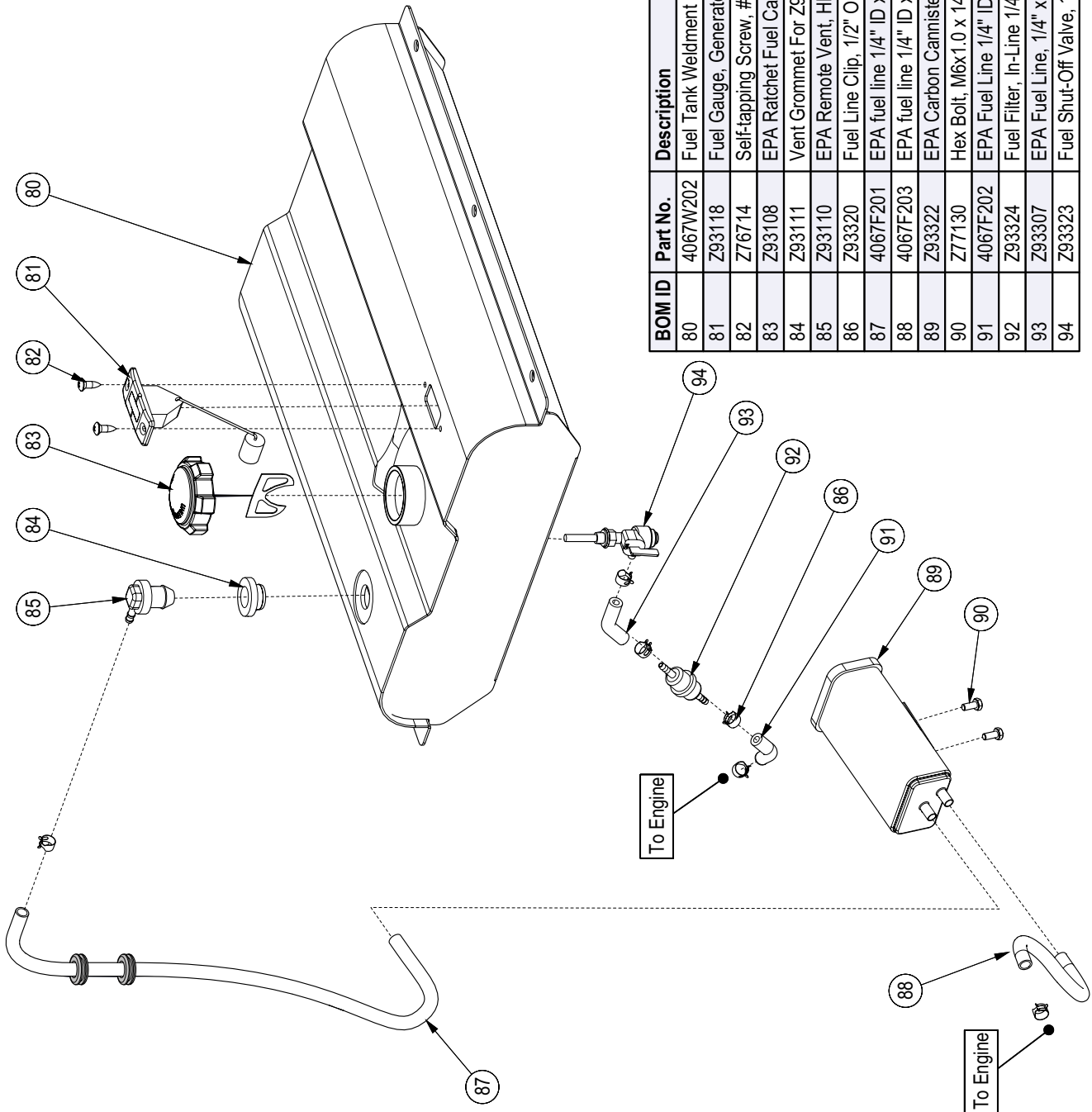
Electrical Panel Assembly



BOM ID	Part No.	Description	Qty
69	4066L304	Panel, Work Series	1
70	Z94818	3kW Control Panel Decal - WHS3000 Only	1
	Z94819	3kW AVR Control Panel Decal - WHS3000R Only	1
71	Z72511	Serrated Flange Locknut, 1/4NC	1
72	Z72111	Hex Nut, 1/4NC	1
73	Z76711	Self-tapping Screw, #10 x 1/2"	4
74	Z78320	SEMS Screw, #6NC x 1/4" x External Tooth	2
75	Z78323	SEMS Screw, #6NC x 3/8" x External Tooth	4

BOM ID	Part No.	Description	Qty
60	Z62827	Cable Gland, 18-25mm	1
61	Z78305	Machine Screw, #10NC x 3/4"	2
62	Z72502	Serrated Flange Locknut, #10N	1
63	Z63404	Receptacle, L5-30 x 30A x 125V	1
64	Z62662	15A - Single Breaker - Aux	1
65	Z72942	Serrated Washer Nut, #6N2	1
66	Z63406	Receptacle, 5-20R x 20A x 125V	1
67	Z76114	Flange Bolt, 1/4NC x 1"	1
68	Z73431	Int - Ext Tooth Washer, 1/4"	1

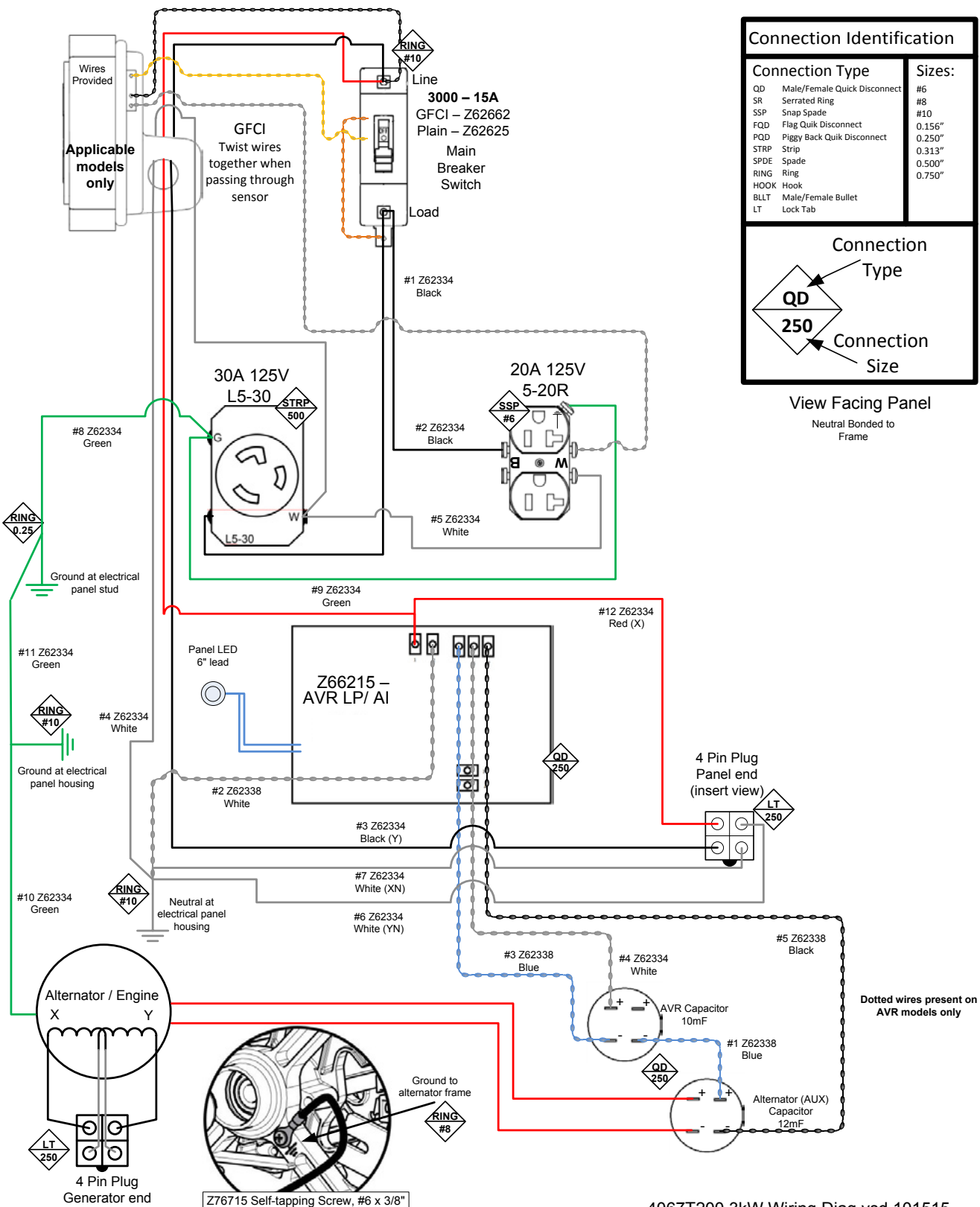
Fuel Tank Assembly & Fuel Lines



BOM ID	Part No.	Description	Qty
80	4067W202	Fuel Tank Weldment	1
81	Z93118	Fuel Gauge, Generator	1
82	Z76714	Self-tapping Screw, #10 x 1/2" Oval Head Countersunk - Black Zinc	2
83	Z93108	EPA Ratchet Fuel Cap, Unleaded Fuel x Unvented with Tether	1
84	Z93111	Vent Grommet For Z93110	1
85	Z93110	EPA Remote Vent, HB04	1
86	Z93320	Fuel Line Clip, 1/2" OD Hose	6
87	4067F201	EPA fuel line 1/4" ID x 18.5"	1
88	4067F203	EPA fuel line 1/4" ID x 7"	1
89	Z93322	EPA Carbon Cannister, 382cc	1
90	Z77130	Hex Bolt, M6x1.0 x 14mm	2
91	4067F202	EPA Fuel Line 1/4" ID x 3"	1
92	Z93324	Fuel Filter, In-Line 1/4" Small	1
93	Z93307	EPA Fuel Line, 1/4" x 3"	1
94	Z93323	Fuel Shut-Off Valve, 1/4" Generator	1

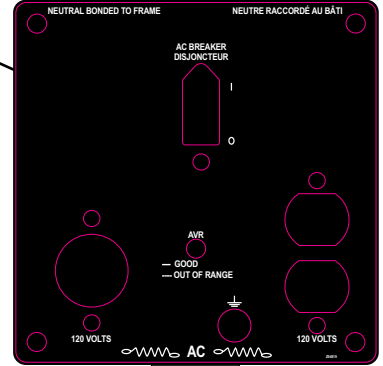
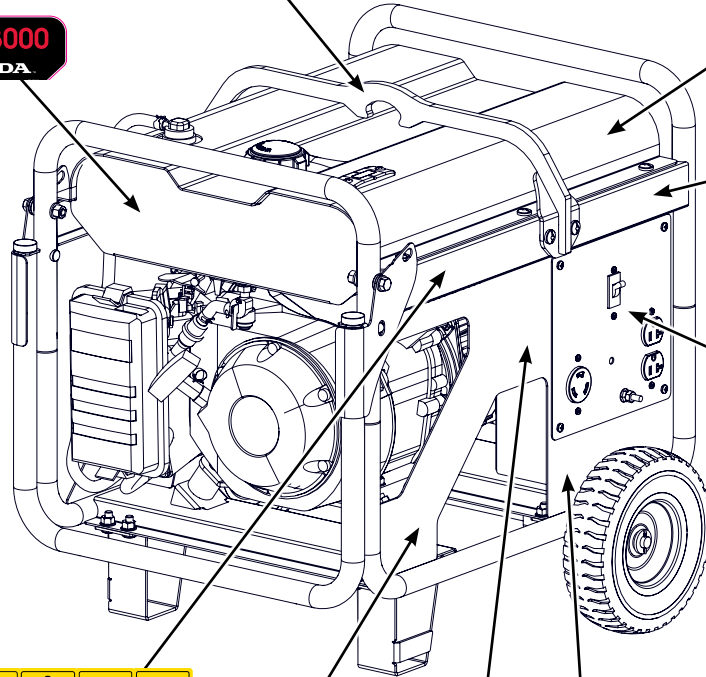
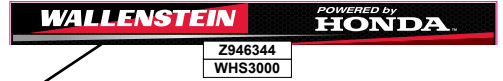
Wiring Diagram

#Z62334 3kW Generator Bundle
#Z62338 AVR Controller Wiring

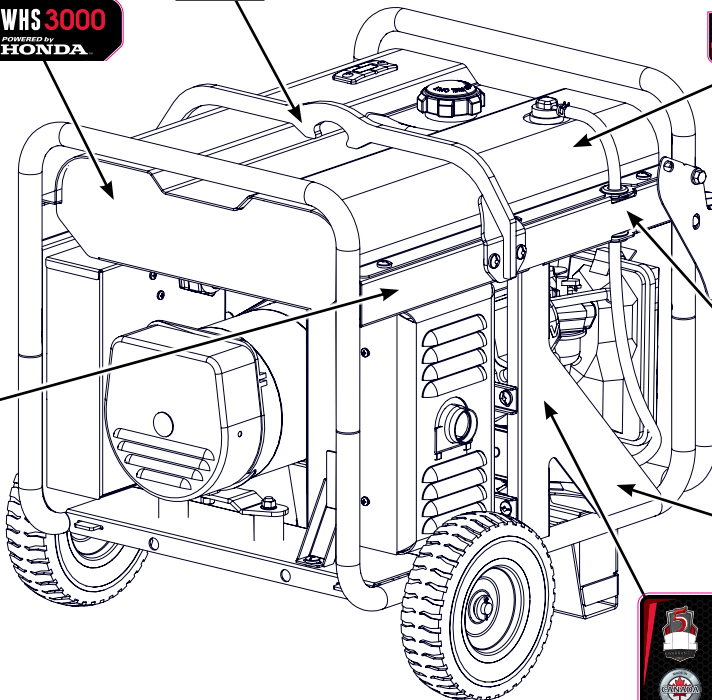
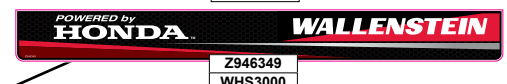
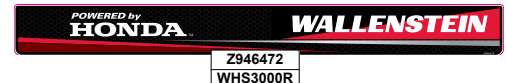
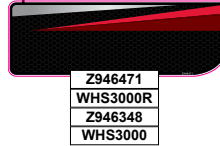


4067T200 3kW Wiring Diag.vsd 101515

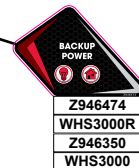
Label Layout



Z94252




Z94252



Accessories

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WHS7000
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WCS5000
WCS5000R
WCS7000
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.

U1 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

**#Z97094 GENERATOR
OPERATOR'S MANUAL**

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www.wallensteinequipment.com