

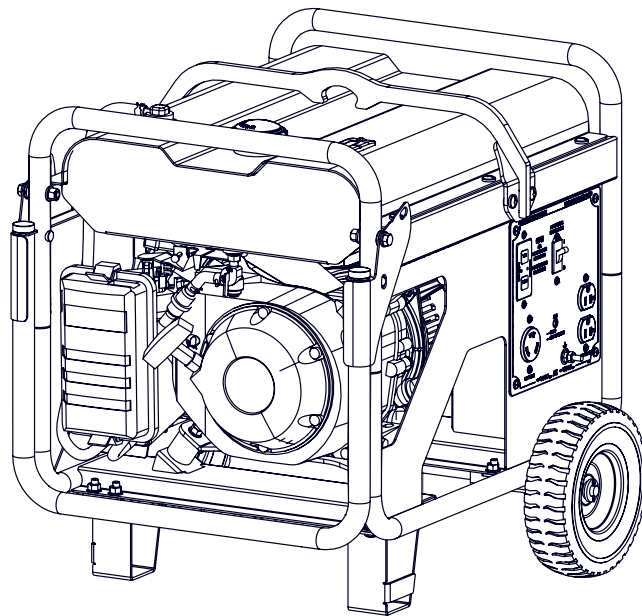
WALLENSTEIN

BY EMB MFG INC.

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WCS3000 / WCS3000R Generator Parts Manual

Starting with S/N's
WCS3000 - 41000
WCS3000R - 31000



Refer to the operators
manual for safe
operation and
maintenance

WCS3000 Series Parts Manual.220216
Rev A 200616

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.

Table of Contents

Bolt Torque..... 4
WCS3000 / WCS3000R Main Assembly..... 5
Engine / Generator Assembly..... 6
Frame Assembly 7
Electrical Panel Assembly 8
Fuel Tank Assembly & Fuel Lines..... 9
Wiring Diagram..... 10
Label Layout..... 11
Accessories..... 12

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

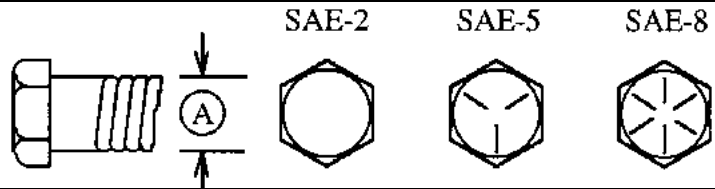
The tables shown below give correct torque values for various bolts and capscrews. Tighten all bolts to the torques specified in chart unless otherwise noted. Check tightness of bolts periodically, using bolt torque chart as a guide. Replace hardware with the same strength bolt.

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.

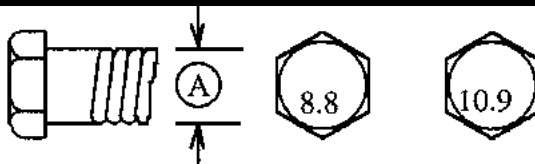
ENGLISH TORQUE SPECIFICATIONS

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



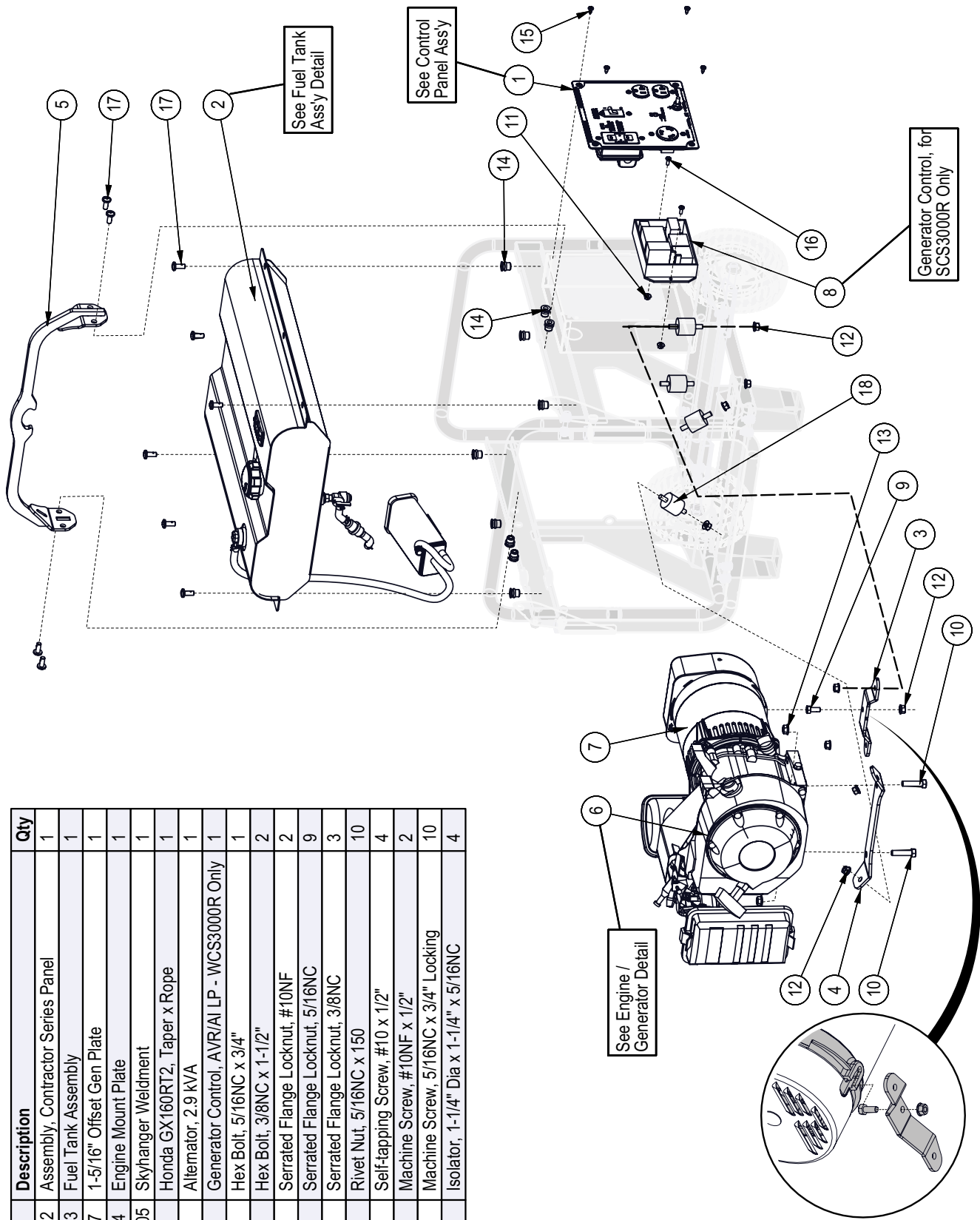
METRIC TORQUE SPECIFICATIONS

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



WCS3000 Main Assembly

BOM ID	Part No.	Description	Qty
1	4067A202	Assembly, Contractor Series Panel	1
2	4067A203	Fuel Tank Assembly	1
3	4067L217	1-5/16" Offset Gen Plate	1
4	4067L224	Engine Mount Plate	1
5	4067W205	Skyhanger Weldment	1
6	Z47172	Honda GX160RT2, Taper x Rope	1
7	Z65401	Alternator, 2.9 kVA	1
8	Z66215	Generator Control, AVR/ALP - WCS3000R Only	1
9	Z71207	Hex Bolt, 5/16NC x 3/4"	1
10	Z71315	Hex Bolt, 3/8NC x 1-1/2"	2
11	Z72503	Serrated Flange Locknut, #10NF	2
12	Z72521	Serrated Flange Locknut, 5/16NC	9
13	Z72531	Serrated Flange Locknut, 3/8NC	3
14	Z72956	Rivet Nut, 5/16NC x 150	10
15	Z76711	Self-tapping Screw, #10 x 1/2"	4
16	Z78303	Machine Screw, #10NF x 1/2"	2
17	Z78319	Machine Screw, 5/16NC x 3/4" Locking	10
18	Z79931	Isolator, 1-1/4" Dia x 1-1/4" x 5/16NC	4



Engine / Alternator Assembly

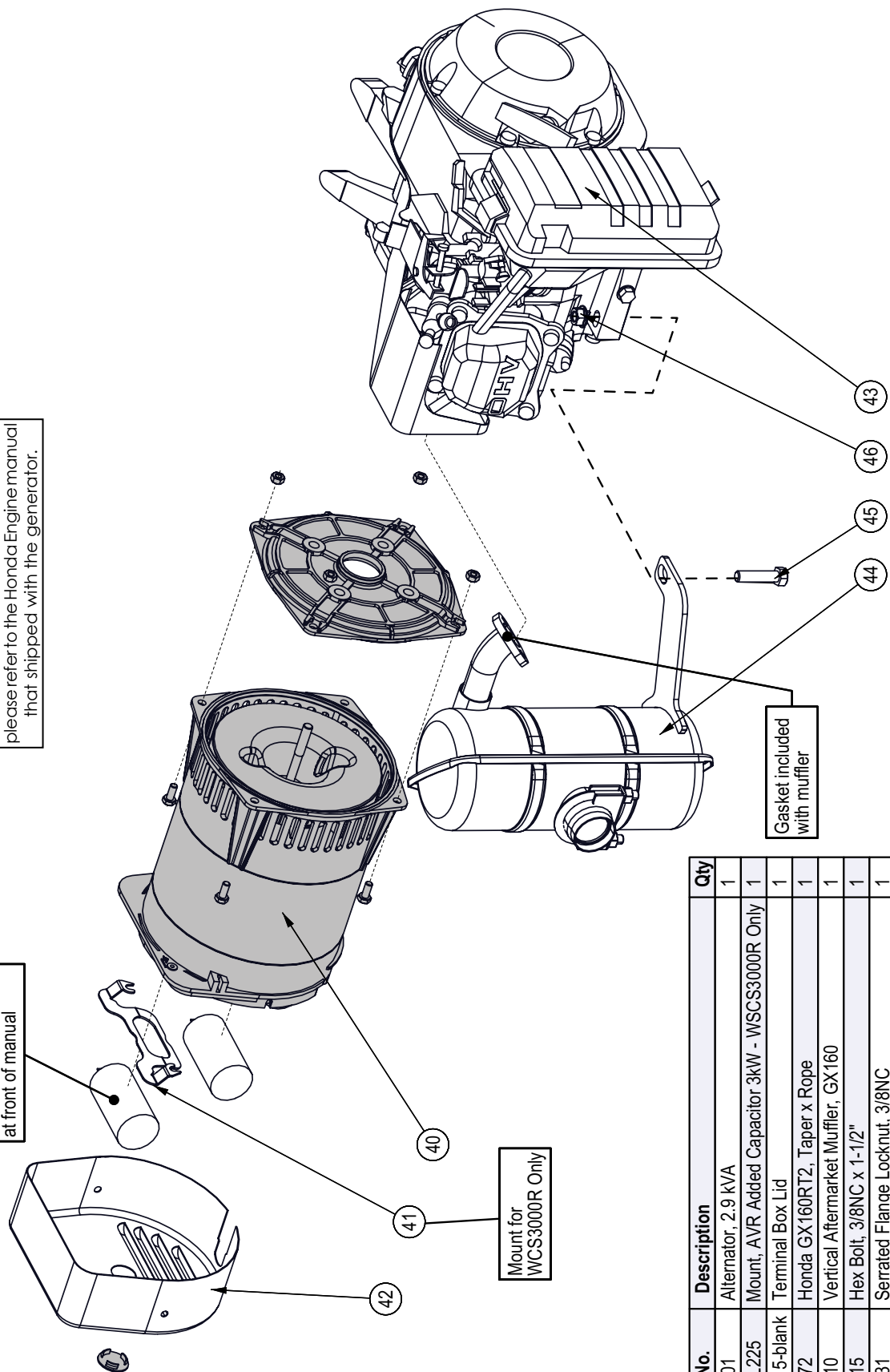
Alternator:
Mecc Alte Inc. S15W-85/A
 See parts chart page 3
 For maintenance or repair information please refer to the Mecc-Alte alternator manual that shipped with the generator.

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

Refer to capacitor chart at front of manual

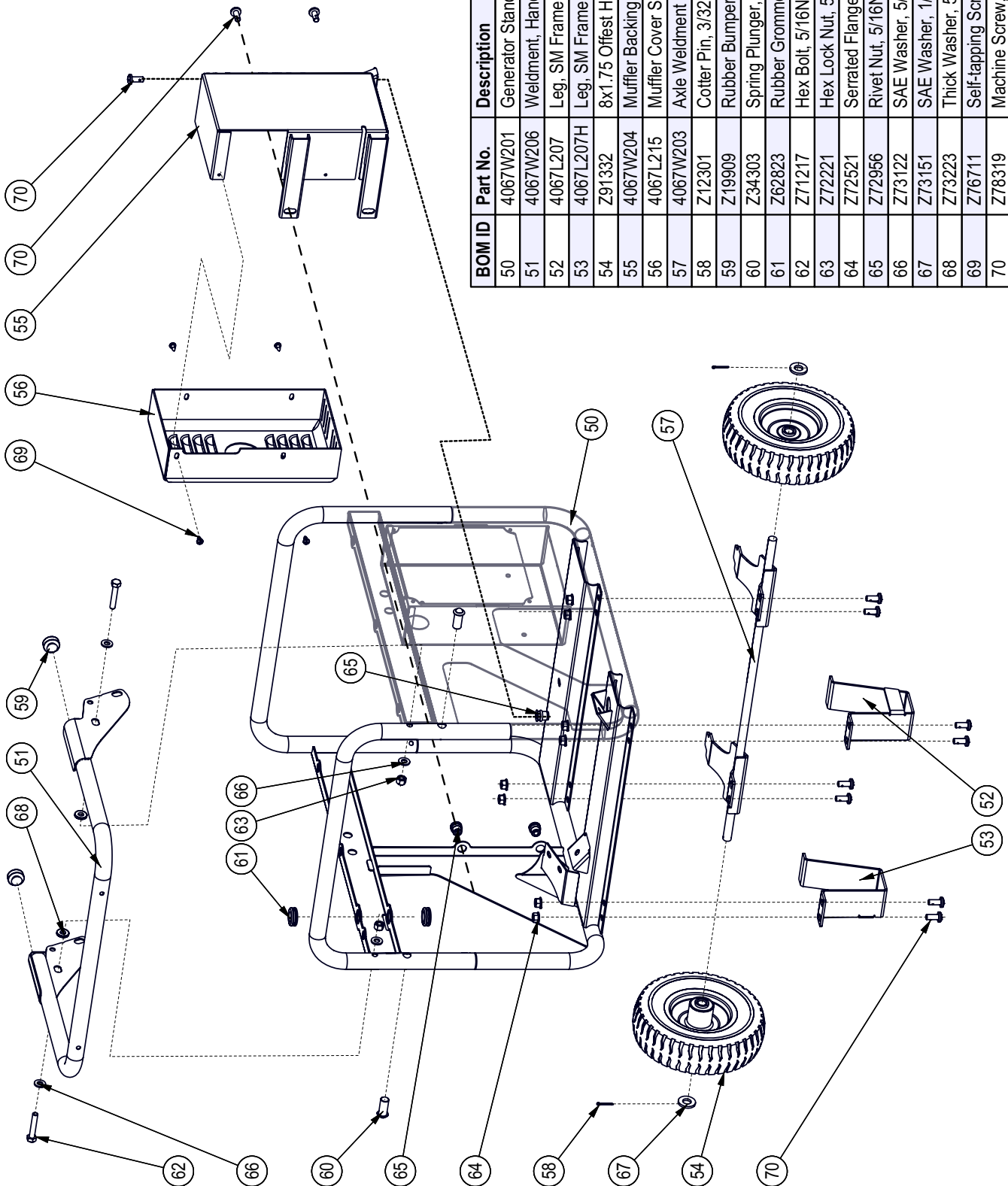
Mount for WCS3000R Only

Gasket included with muffler



BOM ID	Part No.	Description	Qty
40	Z65401	Alternator, 2.9 kVA	1
41	4067L225	Mount, AVR Added Capacitor 3kW - WCS3000R Only	1
42	GES15-blank	Terminal Box Lid	1
43	Z47172	Honda GX160RT2, Taper x Rope	1
44	Z47910	Vertical Aftermarket Muffler, GX160	1
45	Z71315	Hex Bolt, 3/8NC x 1-1/2"	1
46	Z72531	Serrated Flange Locknut, 3/8NC	1

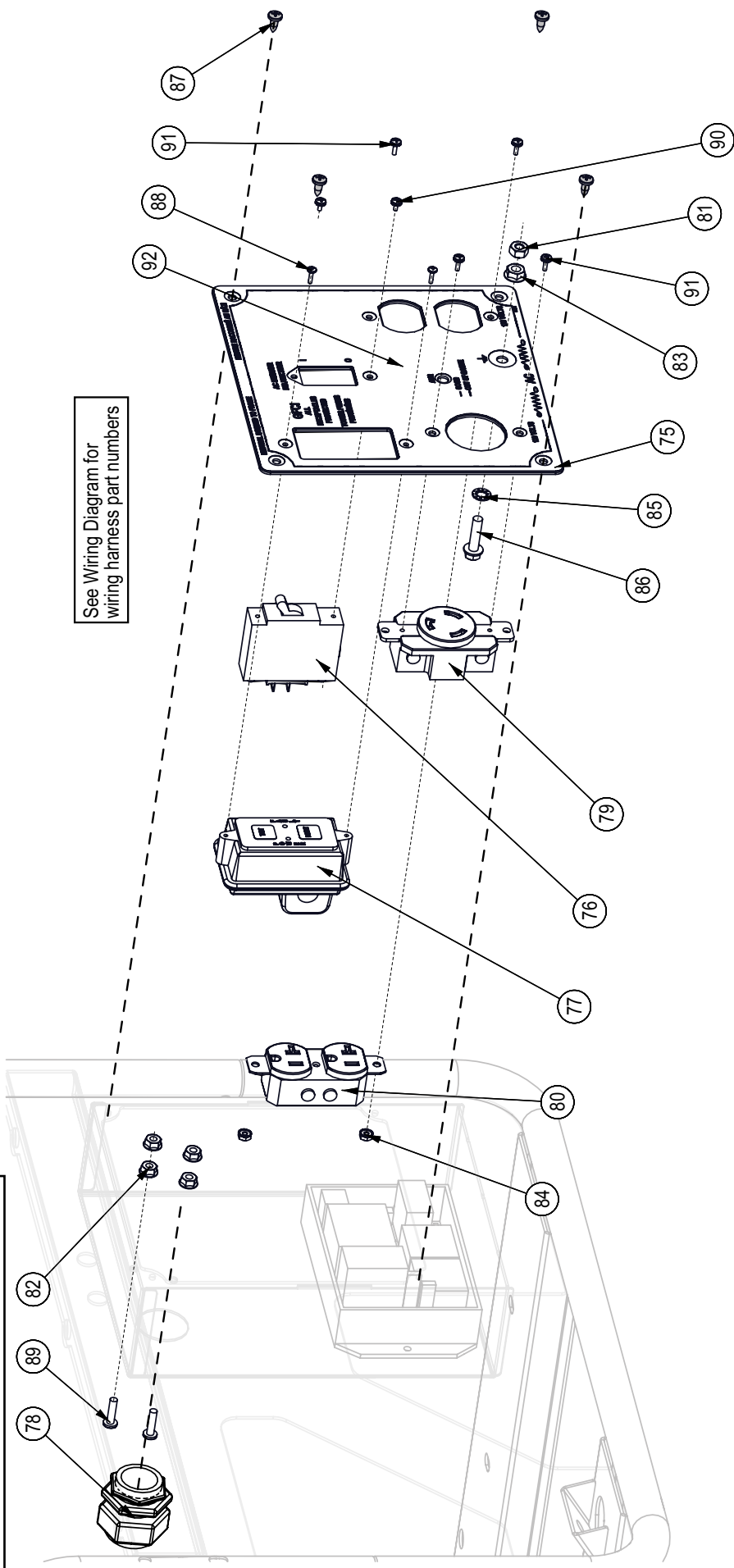
Frame Assembly



BOM ID	Part No.	Description	Qty
50	4067W201	Generator Standard Small-Frame	1
51	4067W206	Weldment, Handle	1
52	4067L207	Leg, SM Frame	1
53	4067L207H	Leg, SM Frame RH	1
54	Z91332	8x1.75 Offset Hub Diamond 225 lbs	2
55	4067W204	Muffer Backing Weldment	1
56	4067L215	Muffer Cover Small	1
57	4067W203	Axle Weldment	1
58	Z12301	Cotter Pin, 3/32" x 3/4"	2
59	Z19909	Rubber Bumper, 7/16" x 1"	2
60	Z34303	Spring Plunger, 1/2" Press x 1.1" x 18 lbs	2
61	Z62823	Rubber Grommet, 5/8" x 1/8"	2
62	Z71217	Hex Bolt, 5/16NC x 1-3/4"	2
63	Z72221	Hex Lock Nut, 5/16NC	2
64	Z72521	Serrated Flange Locknut, 5/16NC	8
65	Z72956	Rivet Nut, 5/16NC x 150	3
66	Z73122	SAE Washer, 5/16"	4
67	Z73151	SAE Washer, 1/2"	2
68	Z73223	Thick Washer, 5/16 x 0.125"	2
69	Z76711	Self-tapping Screw, #10 x 1/2"	4
70	Z78319	Machine Screw, 5/16NC x 3/4" Locking	11

Electrical Panel Assembly

See Wiring Diagram for wiring harness part numbers

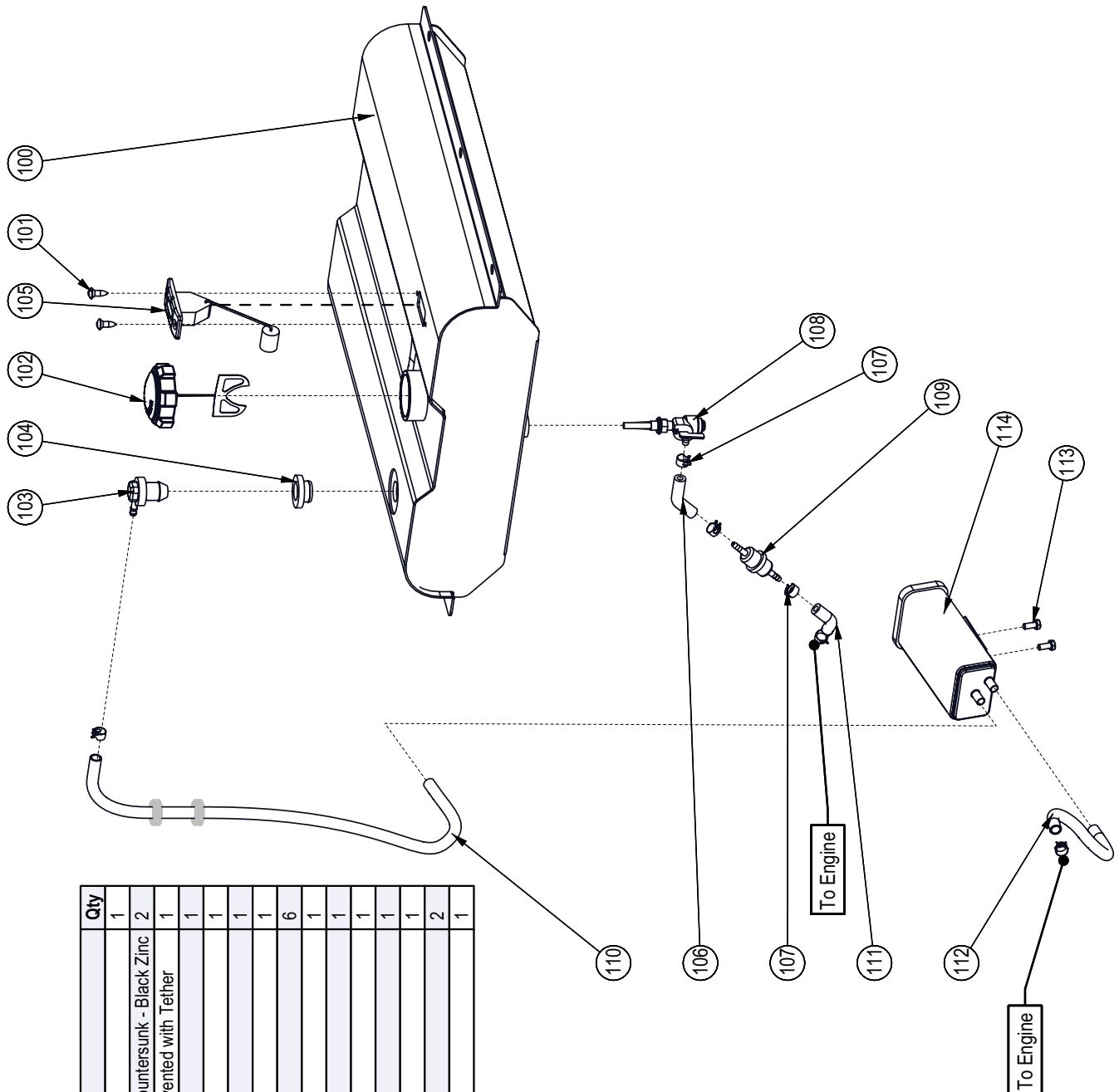


BOM ID	Part No.	Description	Qty
85	Z73431	Int - Ext Tooth Washer, 1/4"	1
86	Z76114	Flange Bolt, 1/4NC x 1"	1
87	Z76711	Self-tapping Screw, #10 x 1/2"	4
88	Z77815	Machine Screw, M3x0.5 x 10mm	2
89	Z78305	Machine Screw, #10NC x 3/4"	2
90	Z78320	SEMS Screw, #6NC x 1/4" x External Tooth	2
91	Z78323	SEMS Screw, #6NC x 3/8" x External Tooth	4
92	Z94806	3kW GFI Control Panel Decal - WCS3000 Only	1
	Z94812	3kW GFI/AVR Control Panel Decal - WCS3000R Only	1

BOM ID	Part No.	Description	Qty
75	4067L204	Panel, Work Series	1
76	Z62662	15A - Single Breaker - Aux	1
77	Z62671	GFCI Module - PGFM	1
78	Z62827	Cable Gland, 18-25mm	1
79	Z63404	Receptacle, L5-30 x 30A x 125V	1
80	Z63406	Receptacle, 5-20R x 20A x 125V	1
81	Z72111	Hex Nut, 1/4NC	1
82	Z72502	Serrated Flange Locknut, #10NC	4
83	Z72511	Serrated Flange Locknut, 1/4NC	1
84	Z72942	Serrated Washer Nut, #6NC	2

Fuel Tank Assembly & Fuel Lines

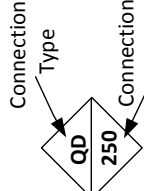
BOM ID	Part No.	Description	Qty
100	4067W202	Fuel Tank Weldment	1
101	Z76714	Self-tapping Screw, #10 x 1/2" Oval Head Countersunk - Black Zinc	2
102	Z93108	EPA Ratchet Fuel Cap, Unleaded Fuel x Unvented with Tether	1
103	Z93110	EPA Remote Vent, HB04	1
104	Z93111	Vent Grommet For Z93110	1
105	Z93118	Fuel Gauge, Generator	1
106	Z93307	EPA Fuel Line, 1/4" x 3"	1
107	Z93320	Fuel Line Clip, 1/2" OD Hose	6
108	Z93323	Fuel Shut-Off Valve, 1/4" Generator	1
109	Z93324	Fuel Filter, In-Line 1/4" Small	1
110	4067F201	EPA fuel line 1/4" ID x 18.5"	1
111	4067F202	EPA Fuel Line 1/4" ID x 3"	1
112	4067F203	EPA fuel line 1/4" ID x 7"	1
113	Z77130	Hex Bolt, M6x1.0 x 14mm	2
114	Z93322	EPA Carbon Cannister, 382cc	1



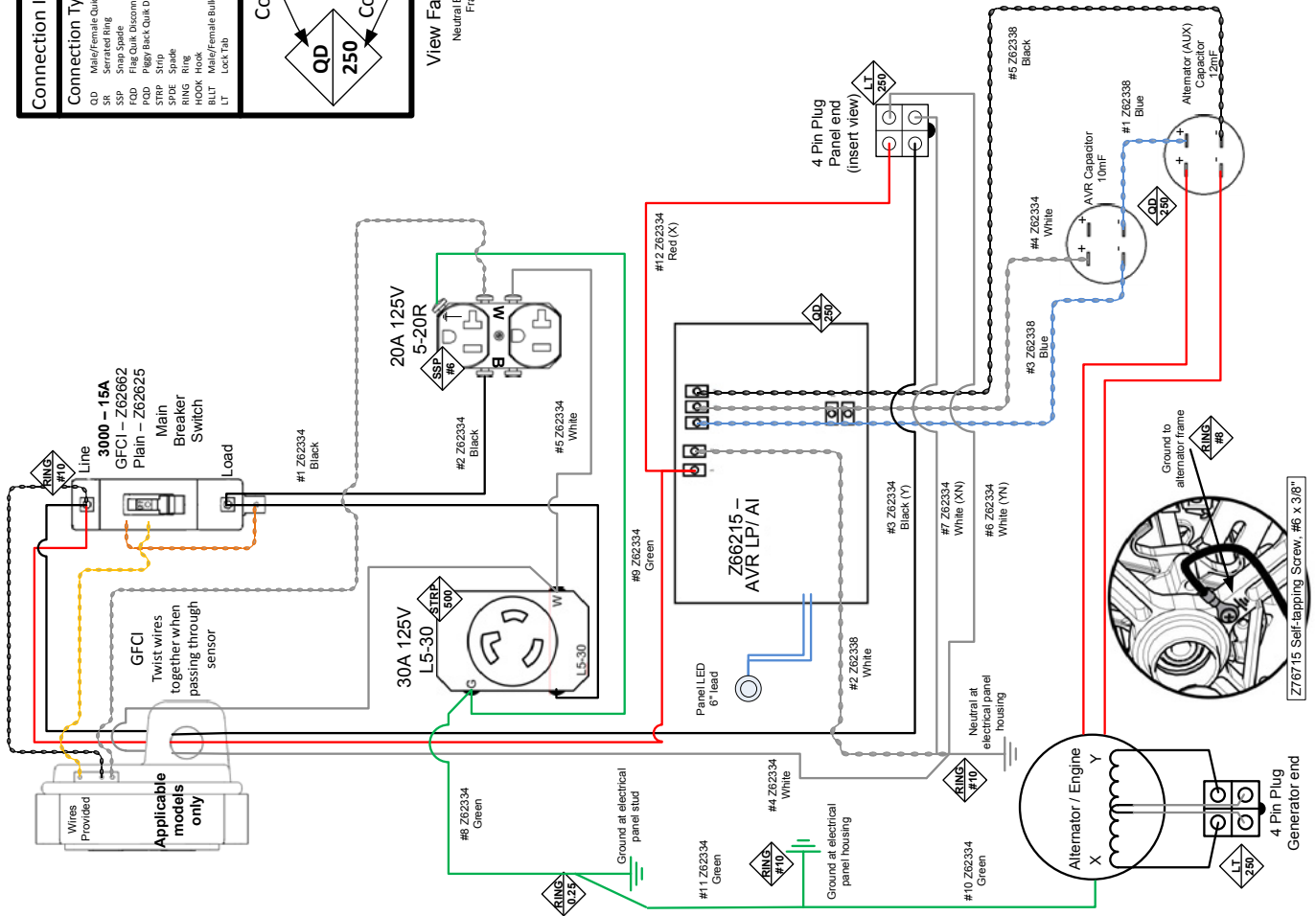
#Z62334 3kW Generator Bundle
#Z62338 AVR Controller Wiring

Wiring Diagram

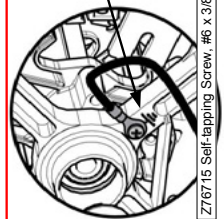
Connection Identification	
Connection Type	Sizes:
QD Male/Female Quick Disconnect	#6
SSP Snap Splicing	#10
SSP Snap Splicing	0.156"
FDD Flag Quick Disconnect	0.250"
PDD Piggy Back Quick Disconnect	0.313"
STRIP Strip	0.500"
SPIDE Spade	0.750"
RING Ring	
BUCK Buck	
BULT Male/Female Bullet	
LT Lock Tab	



View Facing Panel
Neutral Bonded to Frame



Dotted wires present on AVR models only



Z76715 Self-lapping Screw, #6 x 3/8"

Accessories

Call your dealer for pricing and availability



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**STANDARD PORTABLE
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WHS3000
WHS3000R
WCS3000



WHS5000
WHS5000R
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WHS7000
WHS7000R
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SERIE POUR CHANTIERS

**WCS3000
WCS3000R
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



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REV 020316

PART NUMBER: Z37097

**#Z97097 GENERATOR
OPERATOR'S MANUAL**

Available as a download at
www.wallensteinequipment.com