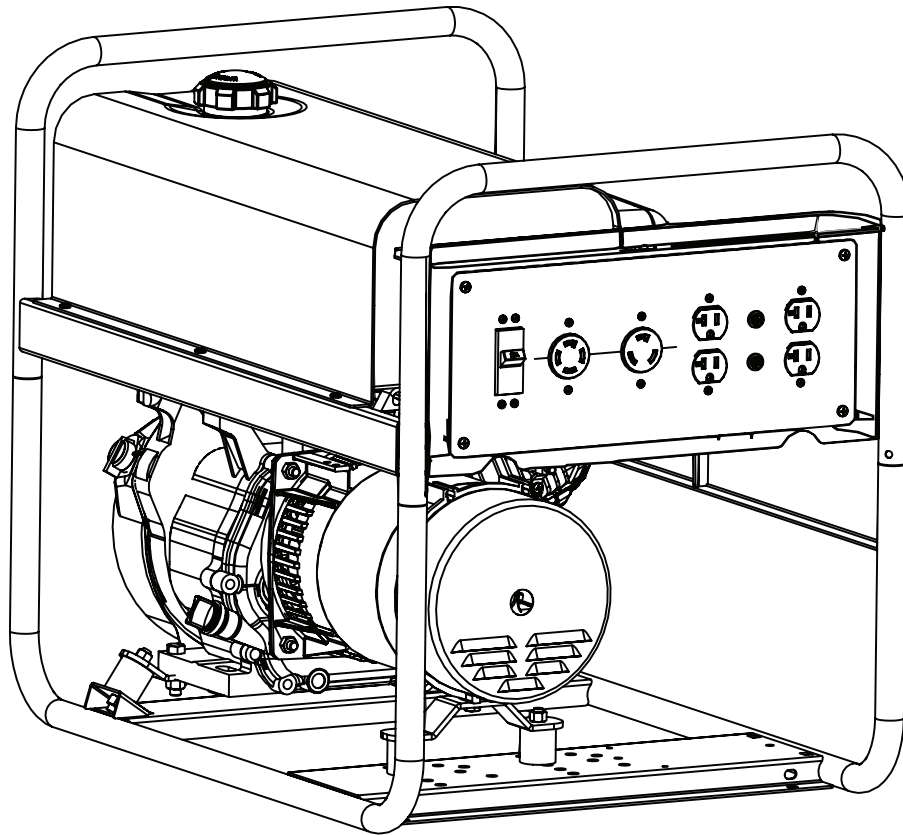




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# GF6000A/ GF6000EA/ GF7200EA Generator Parts Manual



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 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.

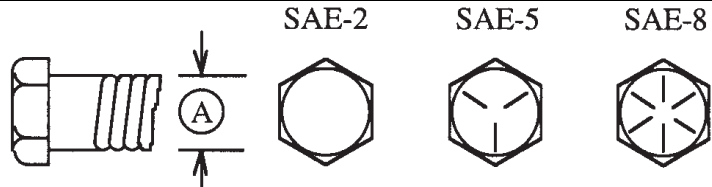
**Bolt Torque**

**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.

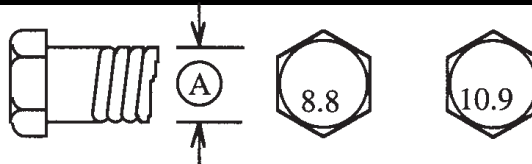
**ENGLISH TORQUE SPECIFICATIONS**

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



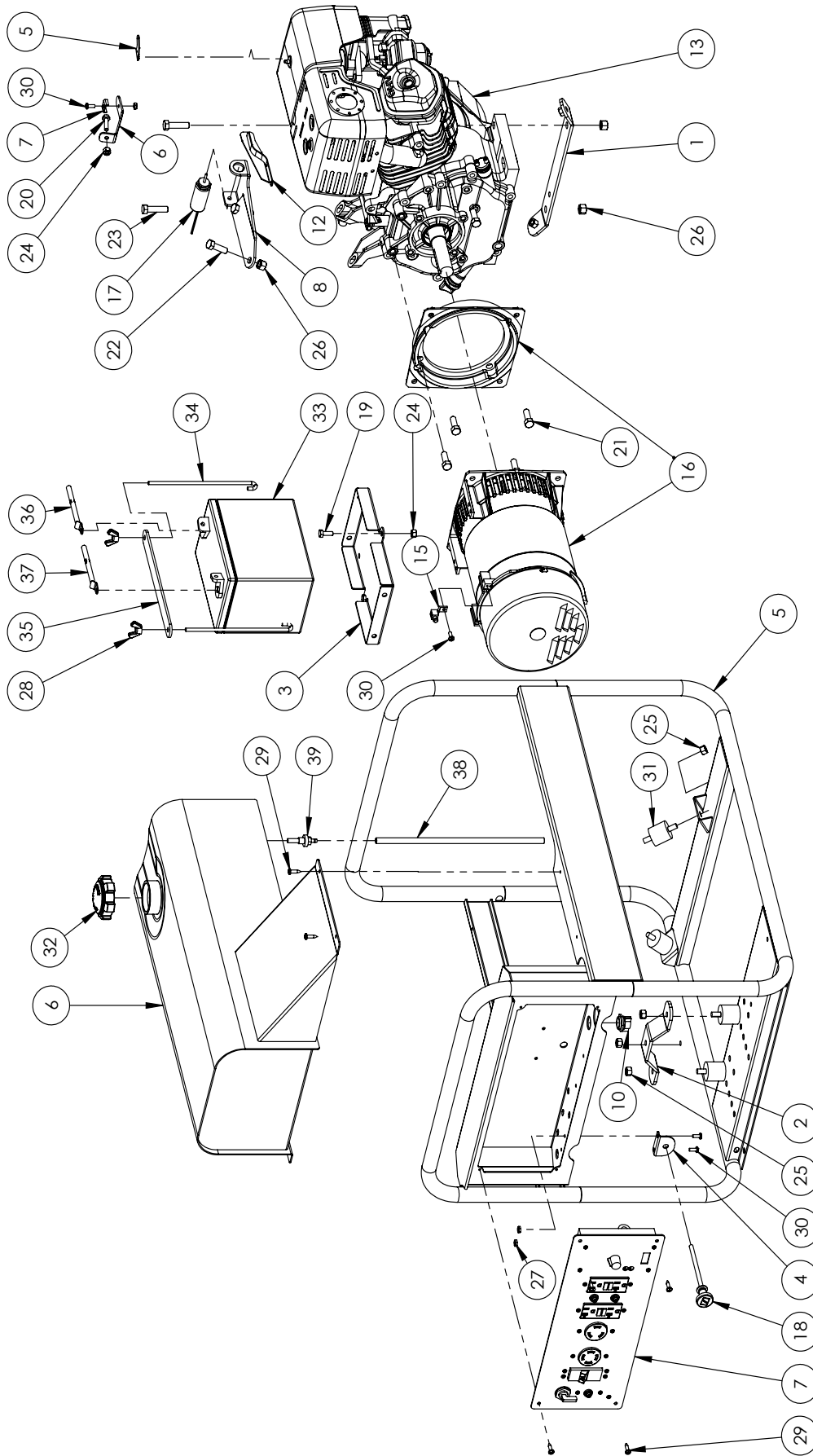
**METRIC TORQUE SPECIFICATIONS**

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.

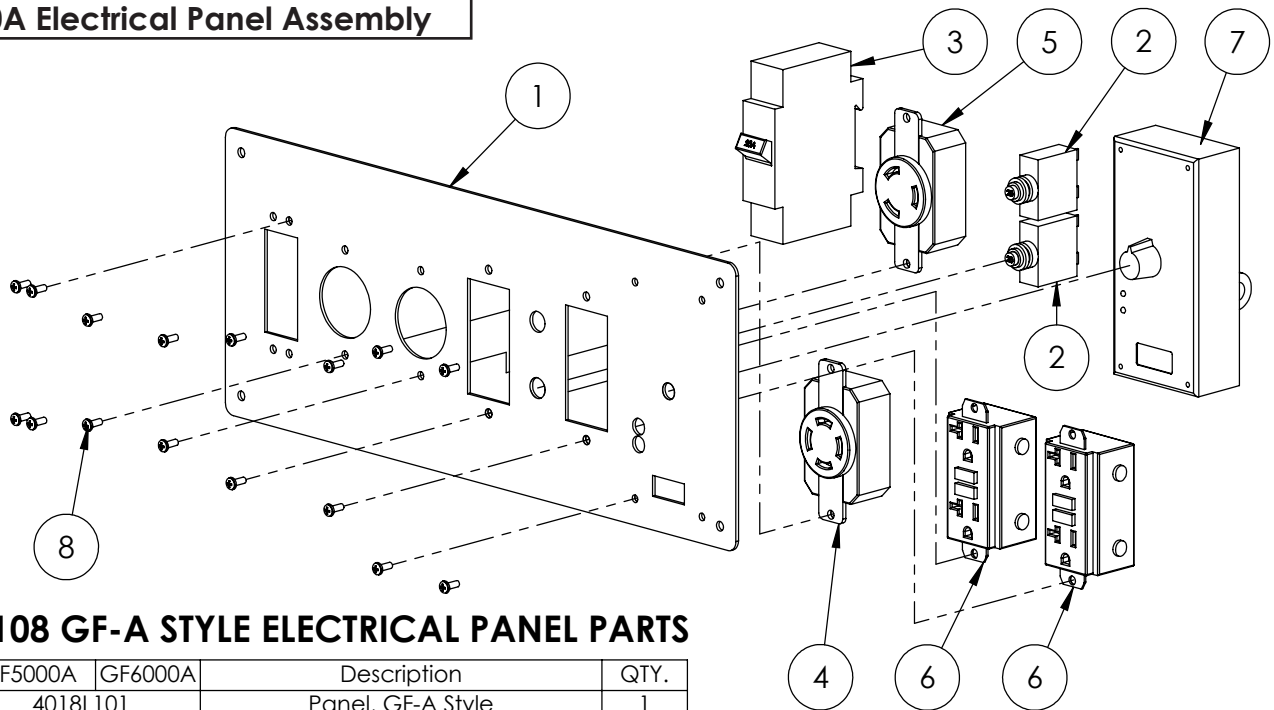


**GF6000 Main Assembly**

### GF SERIES GENERATOR PARTS BREAKDOWN

ITEM	GF5000EA	GF6000EA	GF7200EA	GF5000A	GF6000A	DESCRIPTION	QTY.
1			4014L405			Engine Mount Plate	1
2			4014L406			1-3/16" Offset Gen Plate	1
3		4015L504		-		Tray, Battery	1
4		4015L517		-		Bracket, Choke Cable	1
5		4015L555		-		Bracket, Choke Lever	1
6		4015L556		-		Bracket, Cable Mount	1
7		4015L557		-		Clamp, Choke Cable	1
5			4015W501			Main Frame, EU/GF Style	1
6			4015W505			Fuel Tank, EU / GF Style	1
7		4018A508		4018A108		Assembly, Electrical Panel	1
8			4018L502			Solenoid Bracket	1
12	4018L503	-	-	4018L503	-	Solenoid Push Plate, 9hp	1
	-		4019L101	-	4019L101	Solenoid Push Plate, 11-13hp	
13	Z47138	-	-	Z47138	-	Honda 9hp Engine	1
	-	Z47143	-	-	Z47142	Honda 11hp Engine	
	-	-	Z47148	-	-	Honda 13hp Engine	
10			Z62261			Box Connector, 3/8	1
15			Z62711			Grounding Terminal, 6-14	1
16	Z65404	-	-	Z65404	-	Alternator, 4.9 kVA	1
	-	Z65405	-	-	Z65405	Alternator, 6.0 kVA	
	-	-	Z65406	-	-	Alternator, 6.8 kVA	
17			Z65601			Solenoid, Auto-Idle	1
18		Z66801		-		Choke Cable	1
19		Z71107		-		Hex Bolt 1/4NC x 3/4	2
20			Z71110			Hex Bolt 1/4NC x 1	1
21			Z71310			Hex Bolt 3/8NC x 1	5
22			Z71312			Hex Bolt 3/8NC x 1-1/4	2
23	Z71315	-	-	Z71315	-	Hex Bolt 3/8NC x 1-1/2	2
	-		Z71317	-	Z71317	Hex Bolt, 3/8NC x 1-3/4	
24		Z72111		-		Hex Lock Nut 1/4NC	3
25			Z72221			Hex Lock Nut 5/16NC	9
26			Z72231			Hex Lock Nut 3/8NC	4
27			Z72752			Machine Nut, #10NF	3
28		Z72921		-		Wing Nut 1/4NF	2
29			Z76712			Self-tapping Screw #10	9
30			Z78303			Machine Screw #10NF x 1/2	4
31			Z79931			Rubber Mount	4
32			Z93103			Fuel Cap	1
33		Z93201		-		250 CCA Battery	1
34		Z93202		-		J-Hook 1/4 x 7	2
35		Z93207		-		Hold-Down Strap, 1 x 8-1/2	1
36		Z93208		-		Battery Cable, Neg 20"	1
37		Z93211		-		Battery Cable, Pos 32"	1
38		Z93304		-		Fuel Line, 1/4" x 12"	1
39		Z93305		-		In-Line Filter, 1/4	1

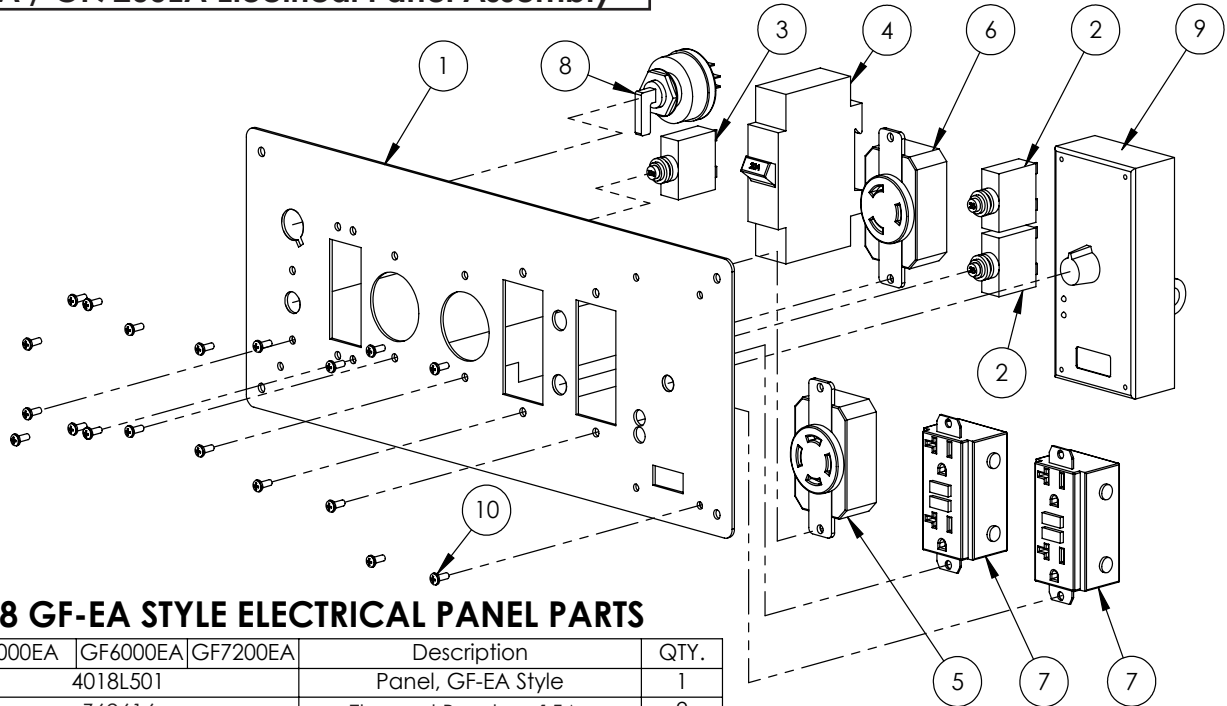
**GF6000A Electrical Panel Assembly**



**4018A108 GF-A STYLE ELECTRICAL PANEL PARTS**

ITEM	GF5000A	GF6000A	Description	QTY.
1		4018L101	Panel, GF-A Style	1
2		Z62612	Popout Breaker, 20A	2
3	Z62621	Z62622	Breaker, 20A / 25A	1
4		Z63403	Recp., 30A 125/250V L14-30	1
5		Z63404	Recp., 30A 125V L5-30	1
6		Z63408	Recp., 20A 125V GFCI 5-20R	2
7		Z66203	Control, Auto-Idle	1
8		Z78304	Machine Screw, #6NC x 3/8	16

**GF6000EA / GF7200EA Electrical Panel Assembly**



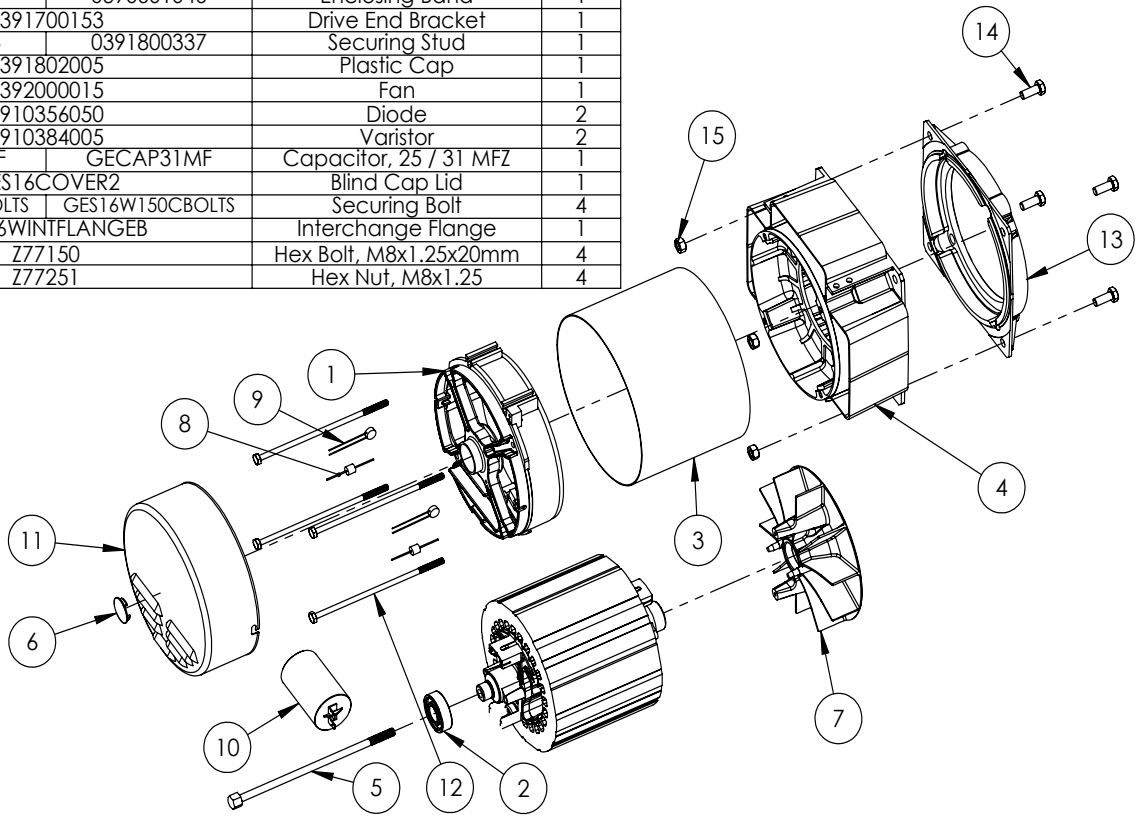
**4018A508 GF-EA STYLE ELECTRICAL PANEL PARTS**

ITEM	GF5000EA	GF6000EA	GF7200EA	Description	QTY.
1			4018L501	Panel, GF-EA Style	1
2			Z62616	Thermal Breaker, 15A	2
3			Z62615	Popout Breaker, 12V	1
4	Z62621	Z62622	Z62623	Breaker, 20A / 25A / 30A	1
5			Z63403	Recp., 30A 125/250V L14-30	1
6			Z63404	Recp., 30A 125V L5-30	1
7			Z63408	Recp., 20A 125V GFCI 5-20R	2
8			Z66105	Honda Starter, Key Switch	1
9			Z66203	Control, Auto-Idle	1
10			Z78304	Machine Screw, #6NC x 3/8	19

**Alternator**

**Z65405 6 kVA / Z65406 6.8 kVA ALTERNATOR PARTS BREAKDOWN**

ITEM	Z65405	Z65406	Description	QTY.
1	0390302209		Non Drive End Bracket	1
2	0390302521		Rear Bearing	1
3	0390601043	0390601046	Enclosing Band	1
4	0391700153		Drive End Bracket	1
5	0391800323	0391800337	Securing Stud	1
6	0391802005		Plastic Cap	1
7	0392000015		Fan	1
8	9910356050		Diode	2
9	9910384005		Varistor	2
10	GECAP25MF	GECAP31MF	Capacitor, 25 / 31 MFZ	1
11	GES16COVER2		Blind Cap Lid	1
12	GES16W130CBOLTS	GES16W150CBOLTS	Securing Bolt	4
13	GES16WINTFLANGEB		Interchange Flange	1
14	Z77150		Hex Bolt, M8x1.25x20mm	4
15	Z77251		Hex Nut, M8x1.25	4



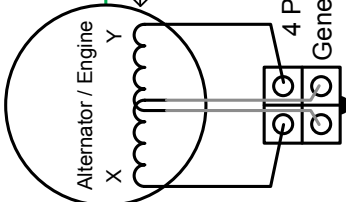
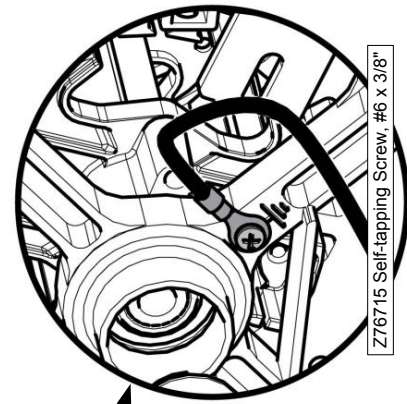


# GF6000A Wiring Diagram

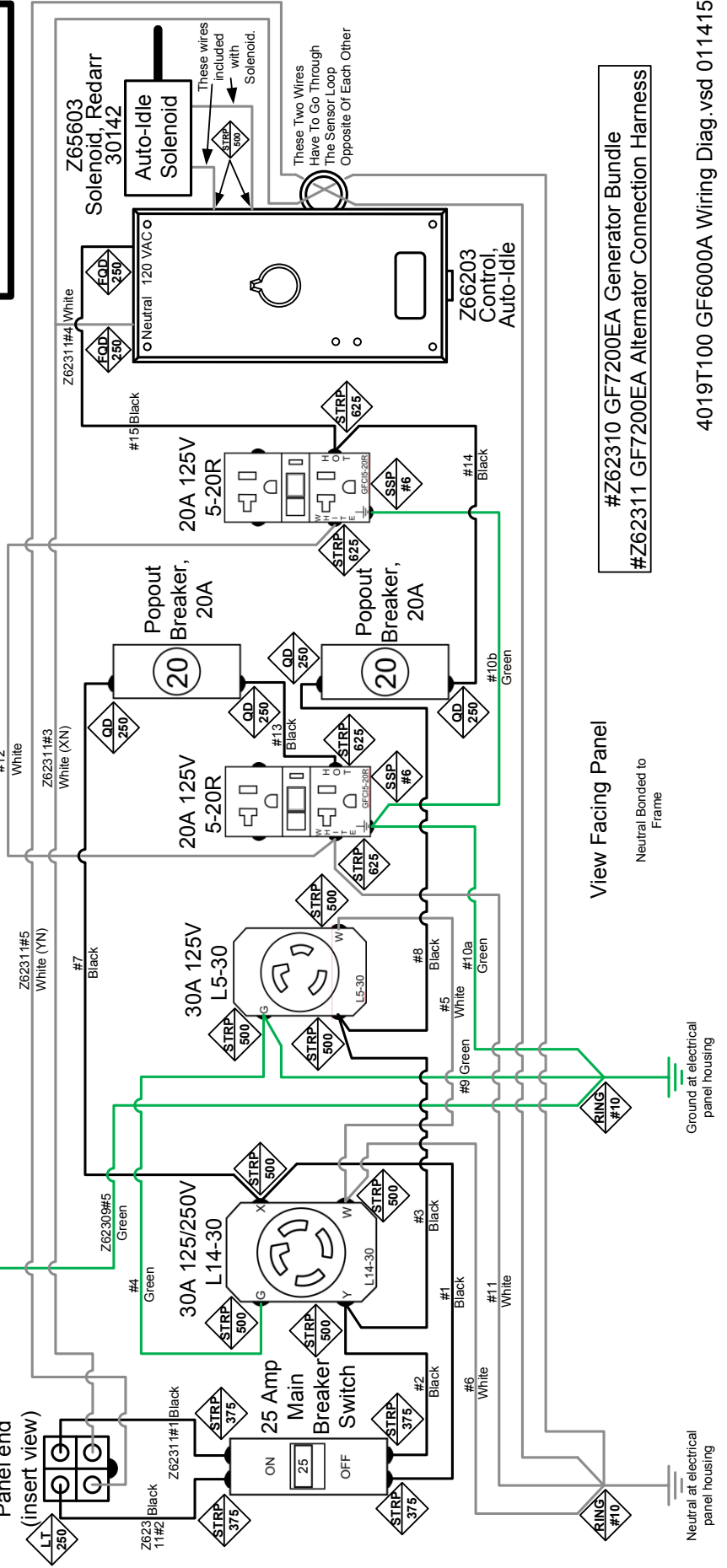
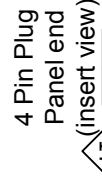
Connection Identification	
<b>Connection Type</b>	<b>Sizes:</b>
QD Male/Female Quick Disconnect	#6
SR Serrated Ring	#8
SSP Snap Spade	#10
FQD Flag Quick Disconnect	0.156"
PQD Piggy Back Quick Disconnect	0.250"
STRP Strip	0.313"
SPDE Spade	0.500"
RING Ring	0.750"
HOOK Hook	
BLLT Male/Female Bullet	
LT Lock Tab	

	Connection Type
	Connection Size



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



View Facing Panel  
Neutral Bonded to Frame

#Z62310 GF7200EA Generator Bundler  
 #Z62311 GF7200EA Alternator Connection Harness

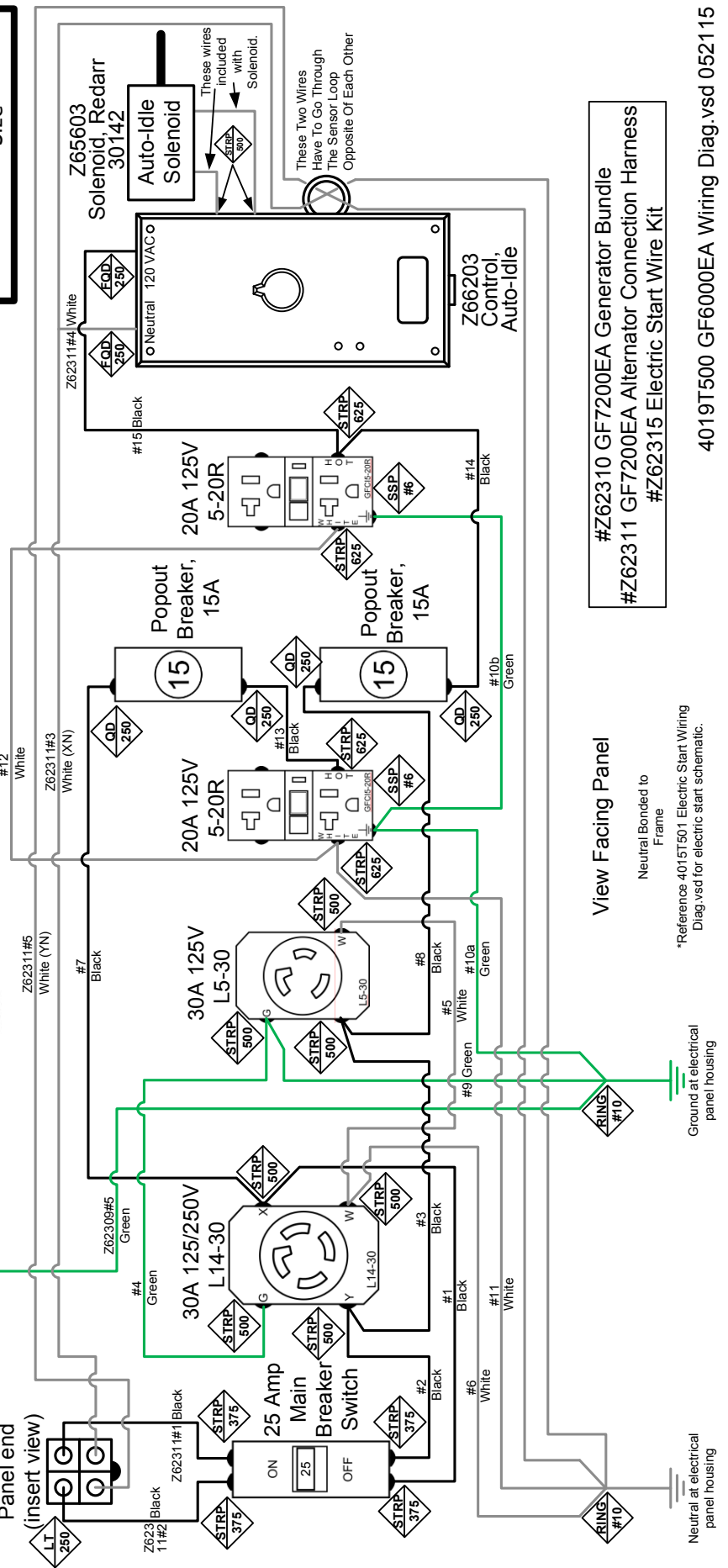
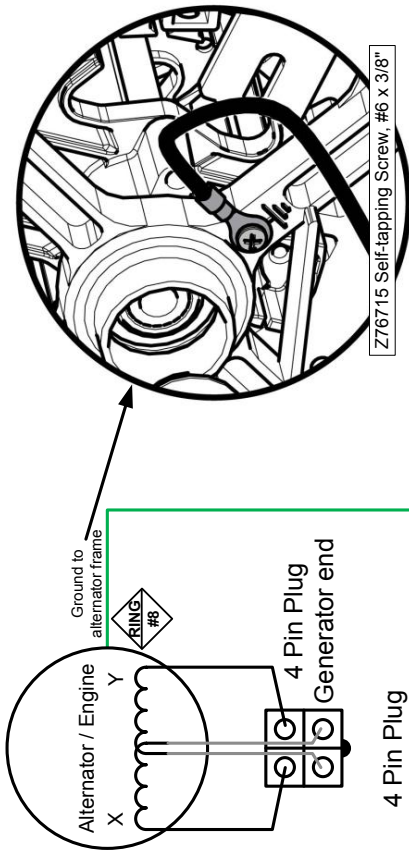
4019T100 GF6000A Wiring Diag.vsd 011415

**GF6000EA Wiring Diagram**

Connection Identification	
<b>Connection Type</b>	<b>Sizes:</b>
QD Male/Female Quick Disconnect	#6
SR Serrated Ring	#8
SSP Snap Spade	#10
FQD Flag Quik Disconnect	0.156"
POD Piggy Back Quik Disconnect	0.250"
STRP Strip	0.313"
SPDE Spade	0.500"
RING Ring	0.750"
HOOK Hook	
BLLT Male/Female bullet	
LT Lock Tab	

Connection Type	Connection Size
QD	250



#Z62310 GF7200EA Generator Bundle  
 #Z62311 GF7200EA Alternator Connection Harness  
 #Z62315 Electric Start Wire Kit

View Facing Panel  
 Neutral Bonded to Frame

\*Reference 4015T501 Electric Start Wiring Diag vsd for electric start schematic.

Ground at electrical panel housing

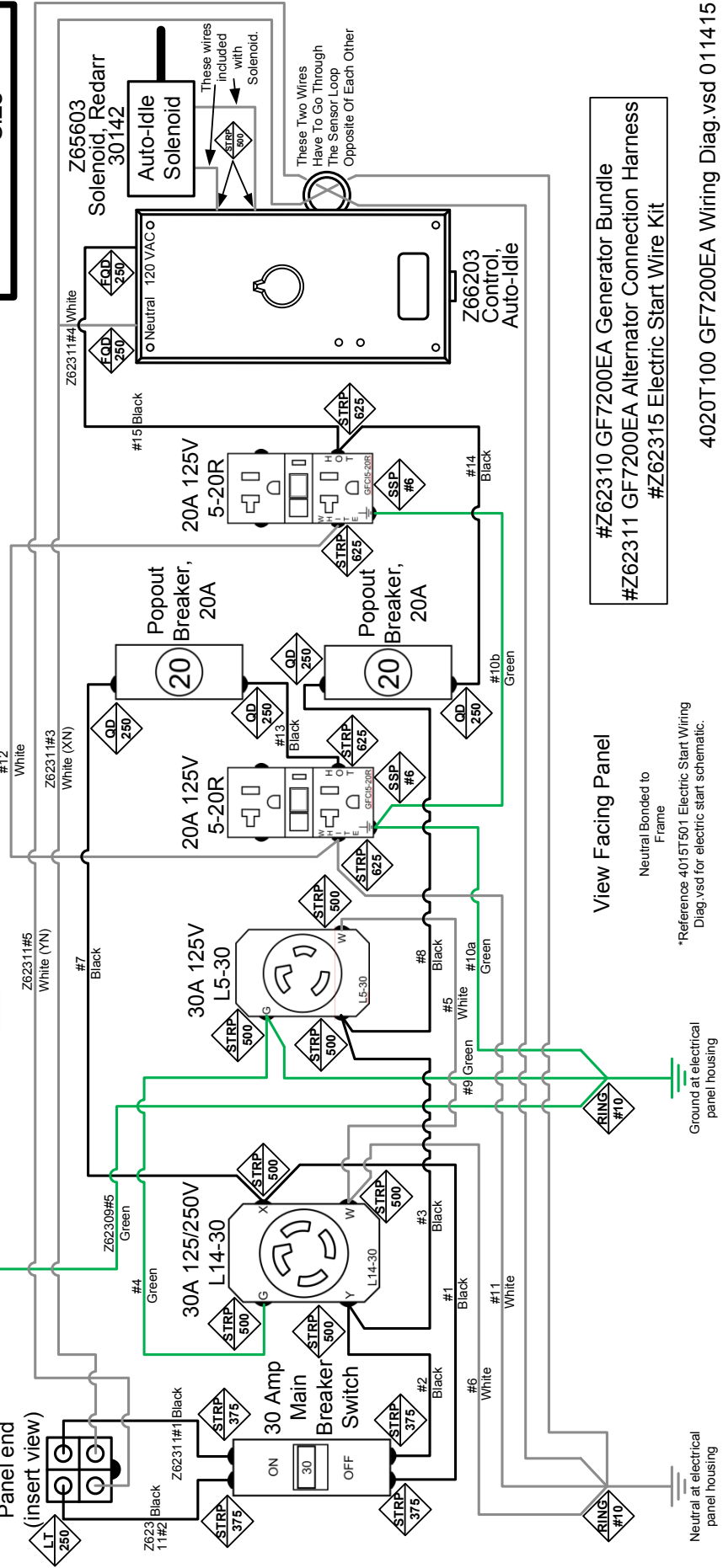
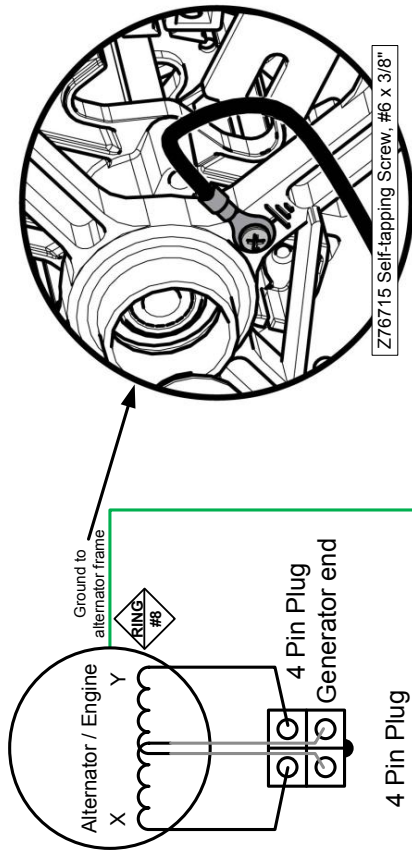
4019T500 GF6000EA Wiring Diag.vsd 052115

**GF7200EA Wiring Diagram**

Connection Identification	
<b>Connection Type</b>	<b>Sizes:</b>
QD Male/Female Quick Disconnect	#6
SR Serrated Ring	#8
SSP Snap Spade	#10
FOD Flag Quick Disconnect	0.156"
STRP Stripped Plug Quick Disconnect	0.250"
STRP Strip	0.313"
SPDE Spade	0.500"
RING Ring	0.750"
HOOK Hook	
BLLT Male/Female Bullet	
LT Lock Tab	

Connection Type	Connection Size
QD	250



#Z62310 GF7200EA Generator Bundle  
 #Z62311 GF7200EA Alternator Connection Harness  
 #Z62315 Electric Start Wire Kit

4020T100 GF7200EA Wiring Diag. vsd 011415

View Facing Panel  
 Neutral Bonded to Frame

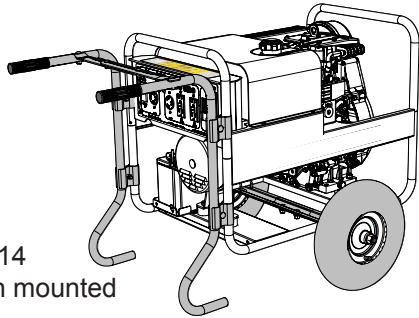
\*Reference 4015T501 Electric Start Wiring Diag.vsd for electric start schematic.

Ground at electrical panel housing

Neutral at electrical panel housing

**Accessories**

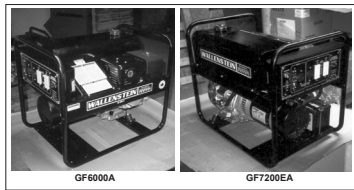
Call your dealer for pricing and availability



#WK214  
Shown mounted

#WK210 TWO WHEEL KIT WITH 10" TIRES  
#WK214 TWO WHEEL KIT WITH 14" TIRES

A must have add on kit for true portability!  
Kit consist of handles and axle with tires The kit is easy to install and simply clamps on to the existing frame.



**PORTABLE GENERATOR  
MODEL GF5000A, GF5000EA,  
GF6000A, GF6000EA & GF7200EA  
OPERATOR'S MANUAL**

**#Z97034  
GF PORTABLE GENERATOR  
OPERATOR'S MANUAL**

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