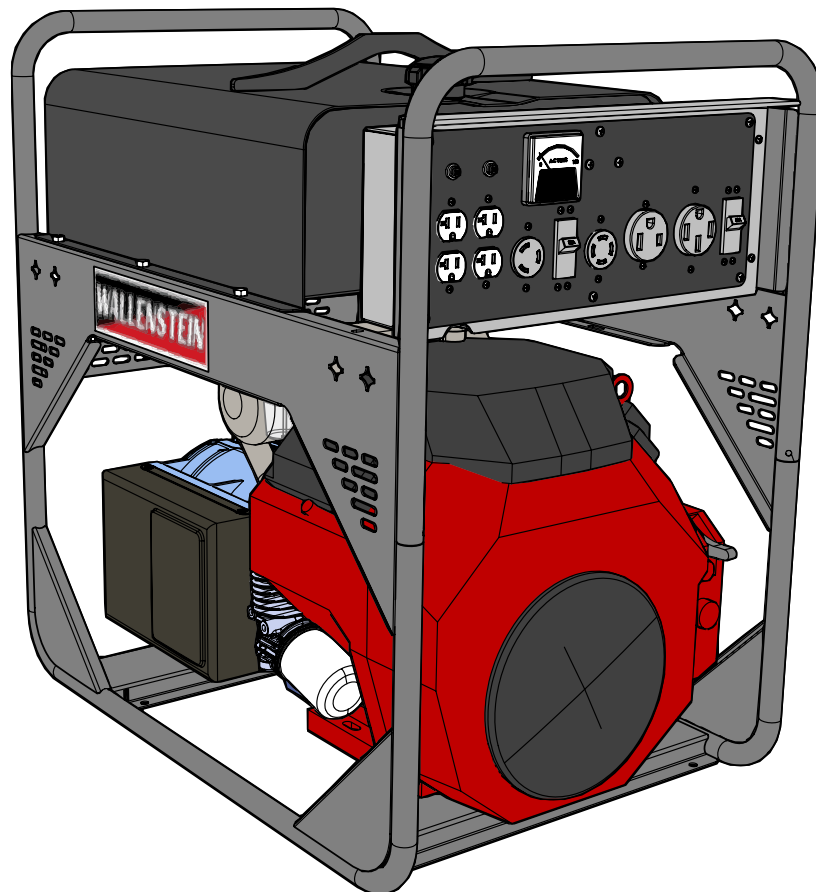




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# HUF12000E/ HUF12000EA Generator Parts Manual

Starting with S/N's  
HUF12000E: 6910199  
HUF12000EA: 7110079



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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Alternator: Mecc Alte Inc. S20#-### 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

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.

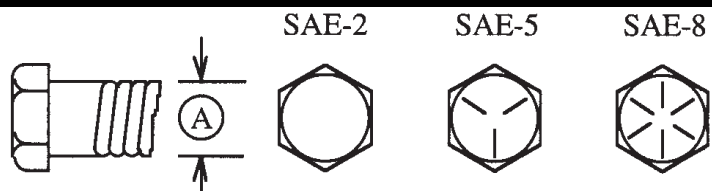
**Bolt Torque**

**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

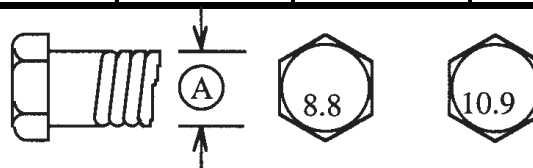


Torque figures indicated above are valid for non-greased or non-oiled threads and heads unless otherwise specified. Therefore, do not grease or oil bolts or capscrews unless otherwise specified in this manual. When using locking elements, increase torque values by 5%.

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

**METRIC TORQUE SPECIFICATIONS**

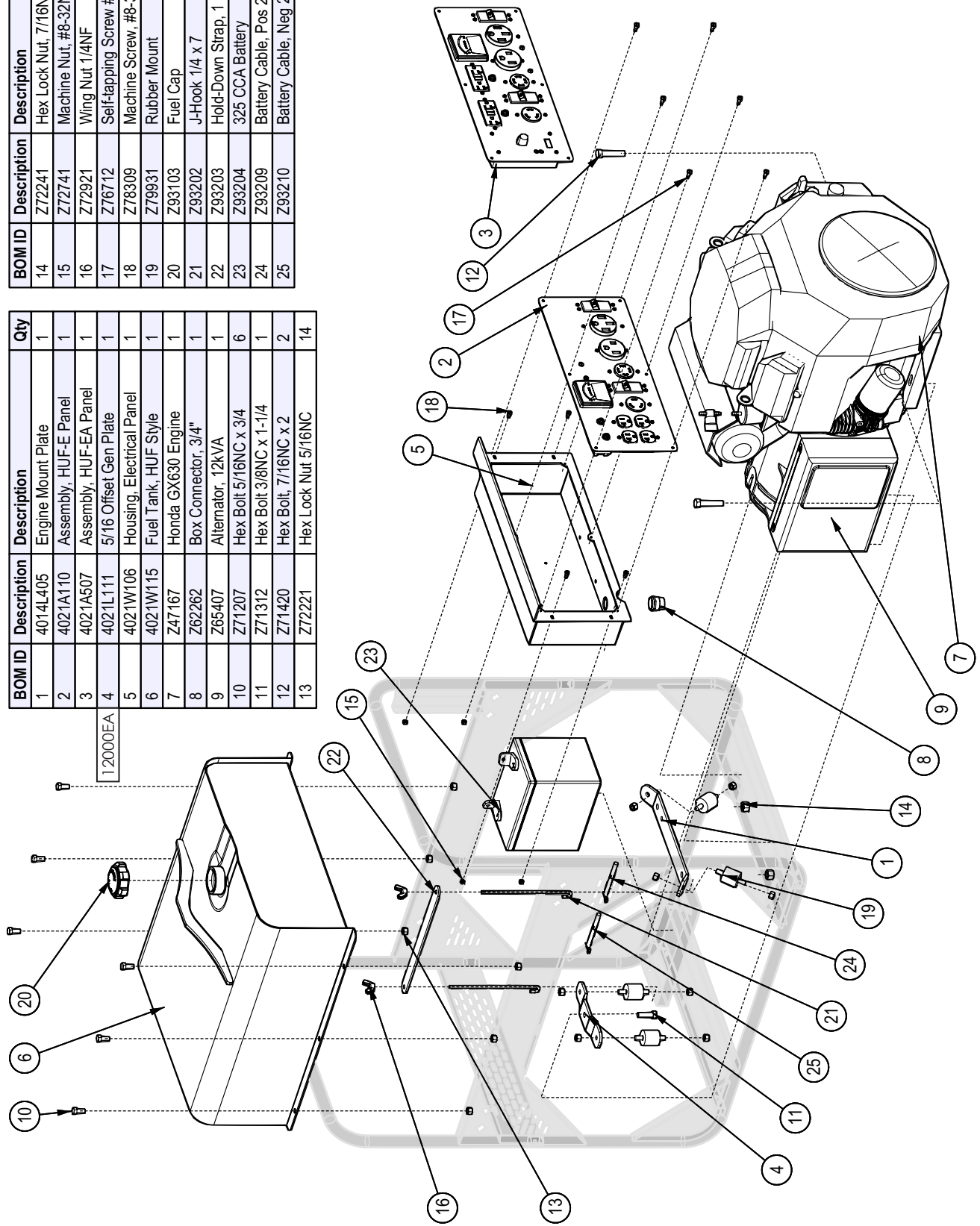
Bolt Diameter "A"	Bolt Torque*			
	8.8 (N.m) (lb-ft)		10.9 (N.m) (lb-ft)	
M3	0.5	0.4	1.8	1.3
M4	3	2.2	4.5	3.3
M5	6	4	9	7
M6	10	7	15	11
M8	25	18	35	26
M10	50	37	70	52
M12	90	66	125	92
M14	140	103	200	148
M16	225	166	310	229
M20	435	321	610	450
M24	750	553	1050	774
M30	1495	1103	2100	1550
M36	2600	1917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



**HUF12000 Main Assembly**

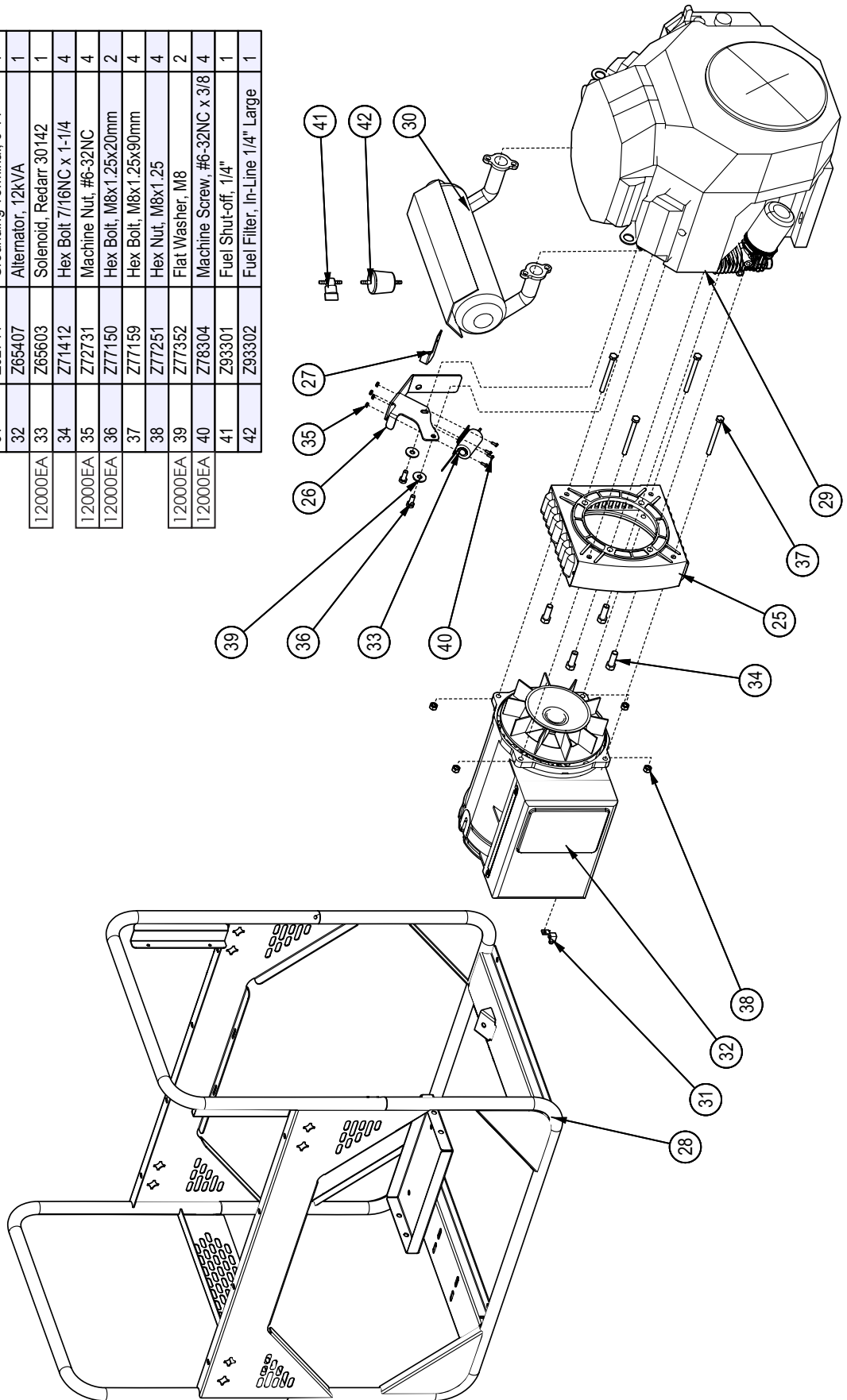
BOM ID	Description	Description	Qty
14	Z72241	Hex Lock Nut, 7/16NC	2
15	Z72741	Machine Nut, #8-32NC	4
16	Z72921	Wing Nut 1/4NF	2
17	Z76712	Self-tapping Screw #10	6
18	Z78309	Machine Screw, #8-32NC x 1/2	4
19	Z79931	Rubber Mount	4
20	Z93103	Fuel Cap	1
21	Z93202	J-Hook 1/4 x 7	2
22	Z93203	Hold-Down Strap, 1 x 10-1/2	1
23	Z93204	325 CCA Battery	1
24	Z93209	Battery Cable, Pos 20"	1
25	Z93210	Battery Cable, Neg 25"	1

BOM ID	Description	Description	Qty
1	4014L405	Engine Mount Plate	1
2	4021A110	Assembly, HUF-E Panel	1
3	4021A507	Assembly, HUF-EA Panel	1
4	4021L111	5/16 Offset Gen Plate	1
5	4021W106	Housing, Electrical Panel	1
6	4021W115	Fuel Tank, HUF Style	1
7	Z47167	Honda GX630 Engine	1
8	Z62262	Box Connector, 3/4"	1
9	Z65407	Alternator, 12kVA	1
10	Z71207	Hex Bolt 5/16NC x 3/4	6
11	Z71312	Hex Bolt 3/8NC x 1-1/4	1
12	Z71420	Hex Bolt, 7/16NC x 2	2
13	Z72221	Hex Lock Nut 5/16NC	14

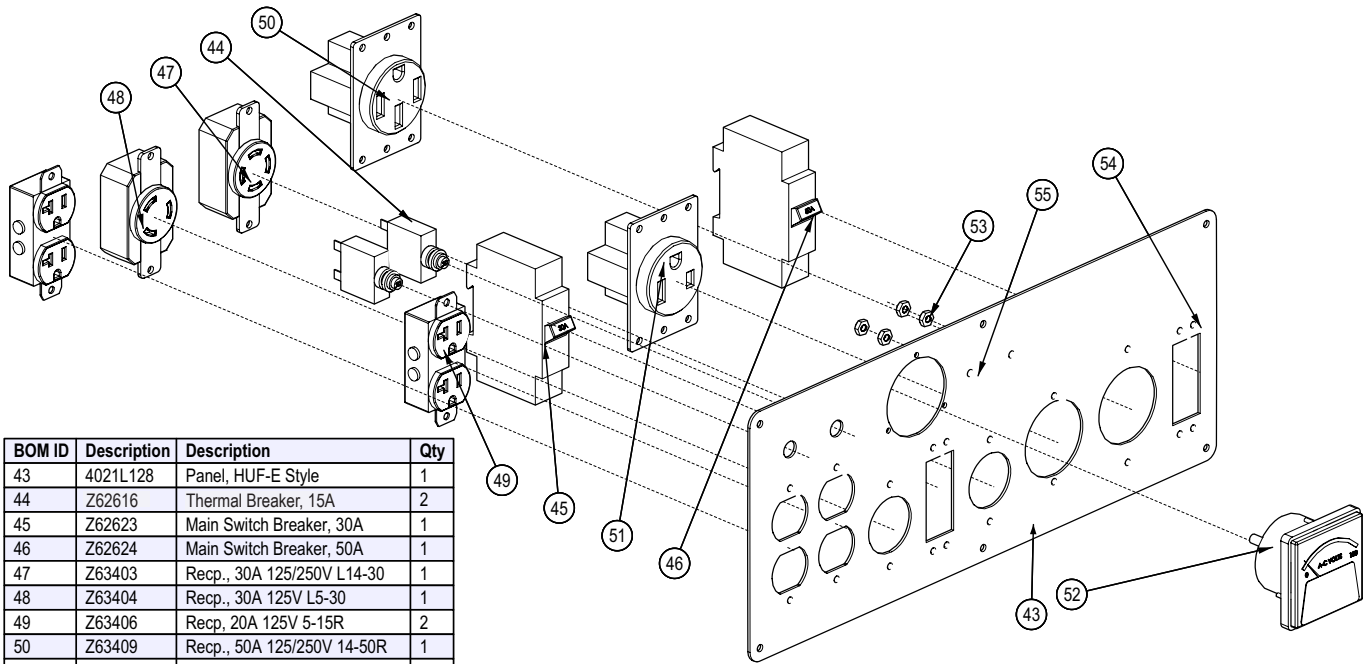


**Frame & Engine / Generator Assembly**

BOM ID	Description	Description	Qty
25	0391700143	Drive End Bracket	1
12000EA	4021L506	Solenoid Mount Bracket	1
12000EA	4021L507	Actuator Arm	1
28	4021W116	Frame, HUF Style	1
29	Z47167	Honda GX630 Engine	1
30	Z47169	GX630-690 Muffler	1
31	Z62711	Grounding Terminal, 6-14	1
32	Z65407	Alternator, 12KVA	1
12000EA	Z65603	Solenoid, Redarr 30142	1
34	Z71412	Hex Bolt 7/16NC x 1-1/4	4
12000EA	Z72731	Machine Nut, #6-32NC	4
12000EA	Z77150	Hex Bolt, M8x1.25x20mm	2
37	Z77159	Hex Bolt, M8x1.25x90mm	4
38	Z77251	Hex Nut, M8x1.25	4
12000EA	Z77352	Flat Washer, M8	2
12000EA	Z78304	Machine Screw, #6-32NC x 3/8	4
41	Z93301	Fuel Shut-off, 1/4"	1
42	Z93302	Fuel Filter, In-Line 1/4" Large	1

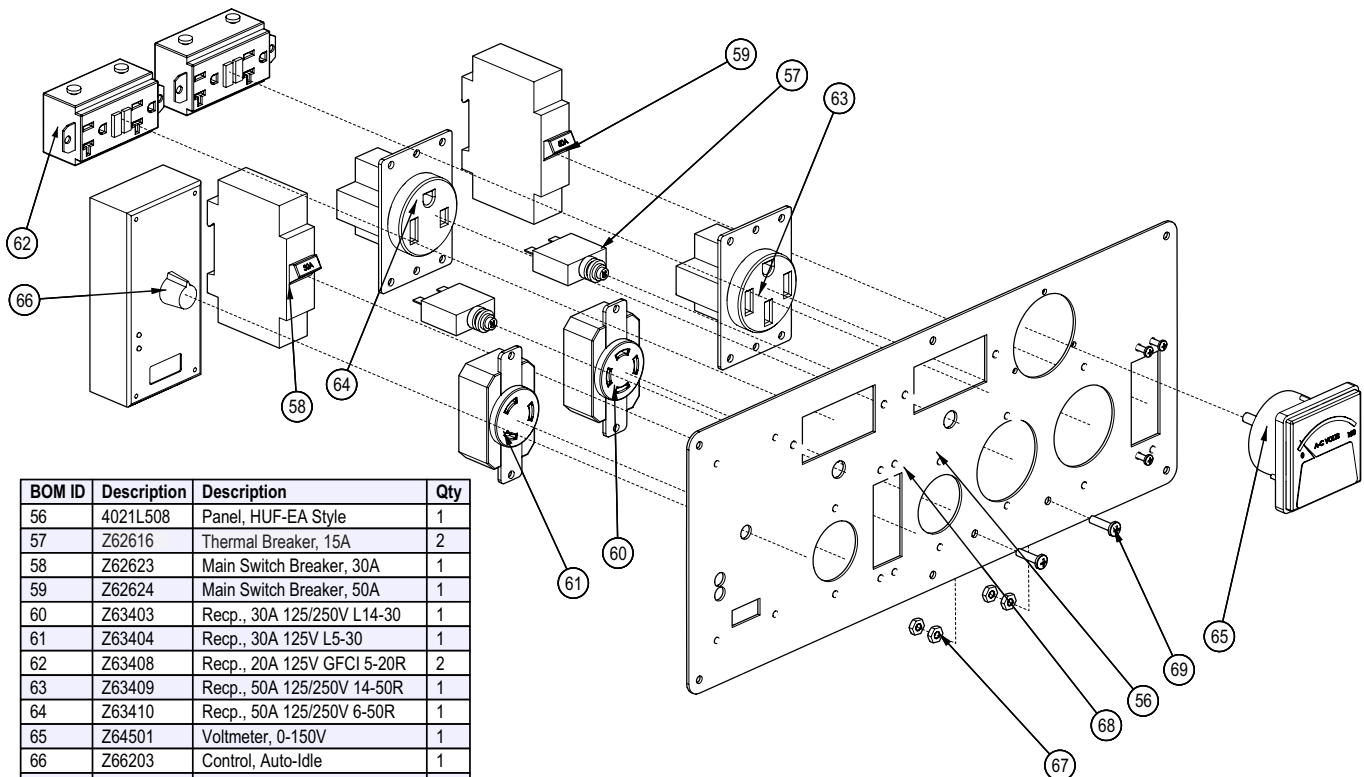


### HUF12000E Electrical Panel Assembly



BOM ID	Description	Description	Qty
43	4021L128	Panel, HUF-E Style	1
44	Z62616	Thermal Breaker, 15A	2
45	Z62623	Main Switch Breaker, 30A	1
46	Z62624	Main Switch Breaker, 50A	1
47	Z63403	Recp., 30A 125/250V L14-30	1
48	Z63404	Recp., 30A 125V L5-30	1
49	Z63406	Recp., 20A 125V 5-15R	2
50	Z63409	Recp., 50A 125/250V 14-50R	1
51	Z63410	Recp., 50A 125/250V 6-50R	1
52	Z64501	Voltmeter, 0-150V	1
53	Z72752	Machine Nut, #10-32NF	4
54	Z78304	Machine Screw, #6-32NC x 3/8	20
55	Z78316	Machine Screw, #10-32NF x 3/4	2

### HUF12000EA Electrical Panel Assembly



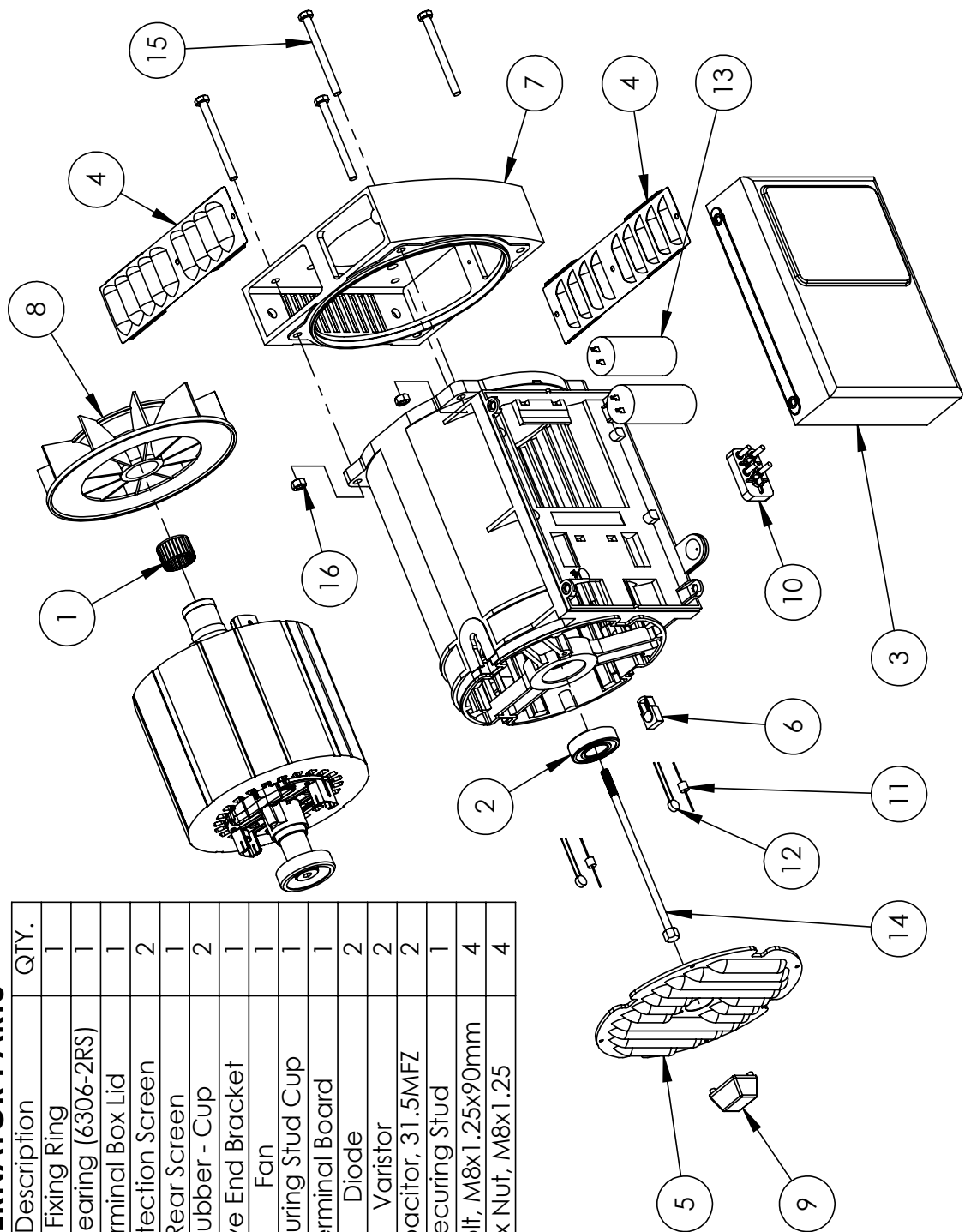
BOM ID	Description	Description	Qty
56	4021L508	Panel, HUF-EA Style	1
57	Z62616	Thermal Breaker, 15A	2
58	Z62623	Main Switch Breaker, 30A	1
59	Z62624	Main Switch Breaker, 50A	1
60	Z63403	Recp., 30A 125/250V L14-30	1
61	Z63404	Recp., 30A 125V L5-30	1
62	Z63408	Recp., 20A 125V GFCI 5-20R	2
63	Z63409	Recp., 50A 125/250V 14-50R	1
64	Z63410	Recp., 50A 125/250V 6-50R	1
65	Z64501	Voltmeter, 0-150V	1
66	Z66203	Control, Auto-Idle	1
67	Z72752	Machine Nut, #10-32NF	4
68	Z78304	Machine Screw, #6-32NC x 3/8	24
69	Z78316	Machine Screw, #10-32NF x 3/4	2



**Alternator**

**Z65407 12kVA ALTERNATOR PARTS**

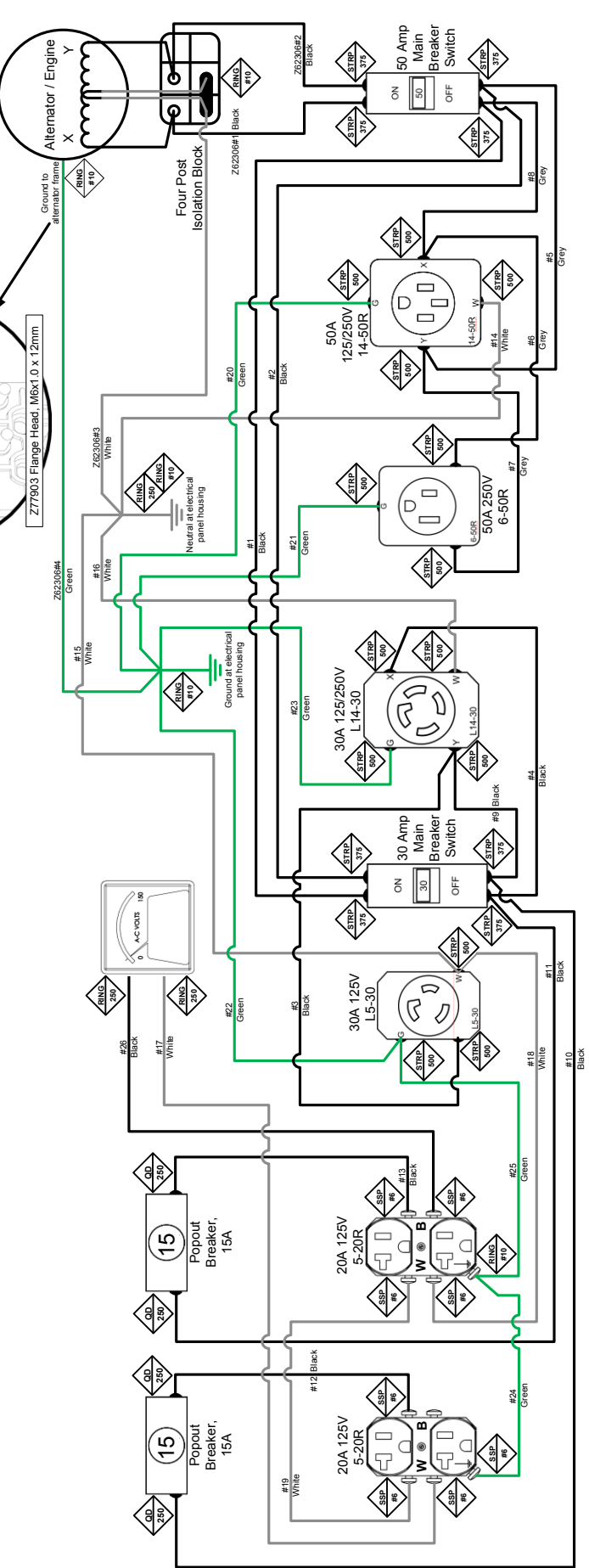
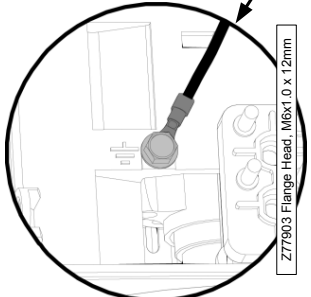
ITEM	PART NO.	Description	QTY.
1	0390100211	Fixing Ring	1
2	0390302511	Rear Bearing (6306-2RS)	1
3	0390501015	Terminal Box Lid	1
4	0390700009	Protection Screen	2
5	0390700011	Rear Screen	1
6	0390700306	Rubber - Cup	2
7	0391700143	Drive End Bracket	1
8	0392000033	Fan	1
9	9909505006	Securing Stud Cup	1
10	9909915060	Terminal Board	1
11	9910356050	Diode	2
12	9910384005	Varistor	2
13	GECAP31MF	Capacitor, 31.5MFZ	2
14	GESS262MM	Securing Stud	1
15	Z77159	Hex Bolt, M8x1.25x90mm	4
16	Z77251	Hex Nut, M8x1.25	4





**HUF12000E Wiring Diagram**

Connection Identification	
Connection Type	Sizes:
QD Male/Female Quick Disconnect	#6
SR Serrated Ring	#10
SR Serrated Ring	0.156"
SR Serrated Ring	0.250"
SR Serrated Ring	0.312"
SR Serrated Ring	0.375"
SR Serrated Ring	0.437"
SR Serrated Ring	0.500"
SR Serrated Ring	0.562"
SR Serrated Ring	0.625"
SR Serrated Ring	0.687"
SR Serrated Ring	0.750"



Z62307 HUF-E Series Bundle  
Z62306 Alternator Connection Harness (For HUF -E)

View Facing Panel  
Neutral Bonded to Frame

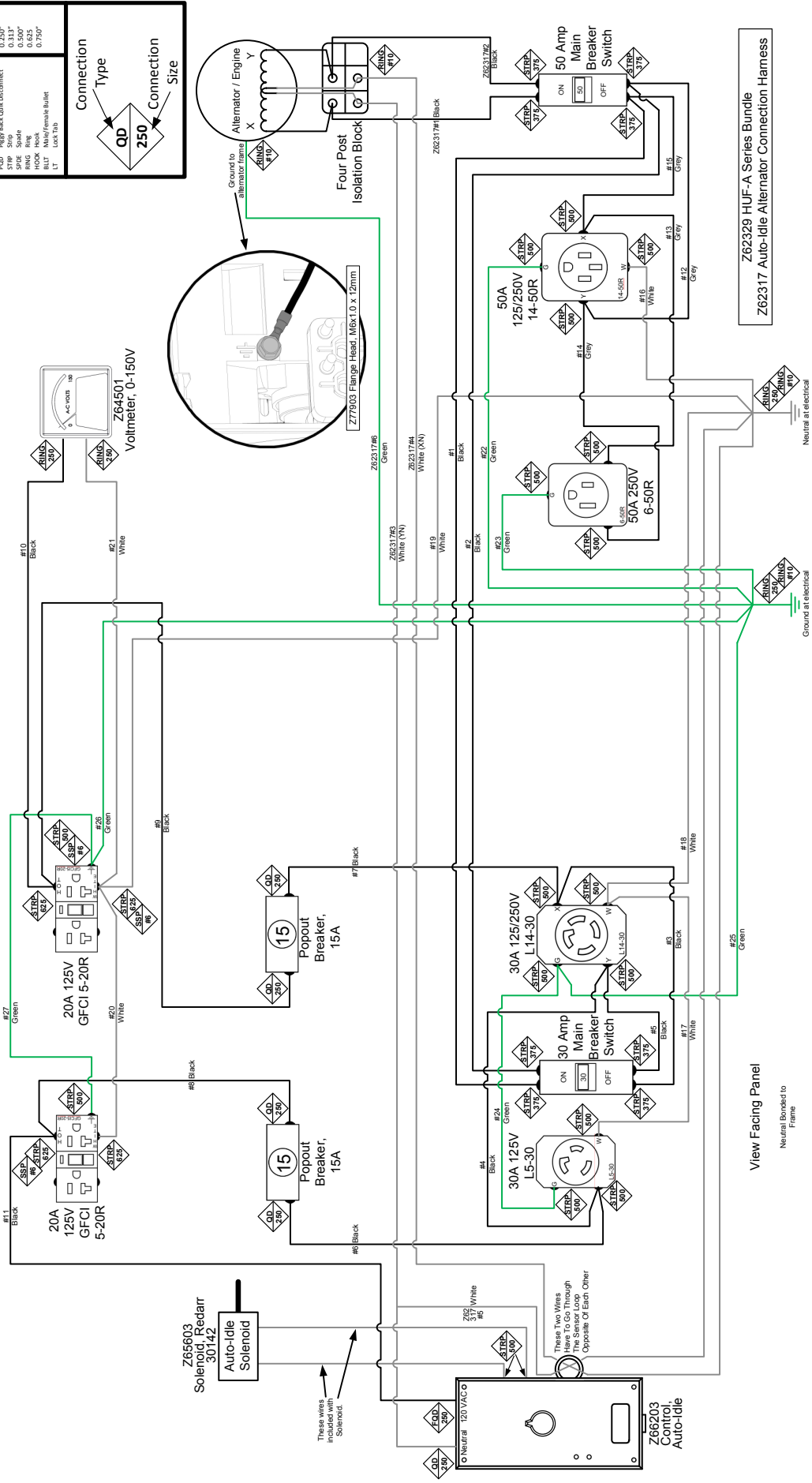
4021T100 HUF-12000E Wiring Diag.vsd 052115

**HUF12000EA Wiring Diagram**

Connection Identification	
Connection Type	Sizes:
QD Male/Female Quick Disconnect	#6
SR Serrated Ring	#8
SR Flag Quick Disconnect	0.156"
FQD Flag Quick Disconnect	0.250"
SR Flag Quick Disconnect	0.313"
SR Flag Quick Disconnect	0.375"
RNG Ring	0.625
HOCK Hook	0.750"
LT Lock Tab	

Connection Type	Connection Size
QD	250

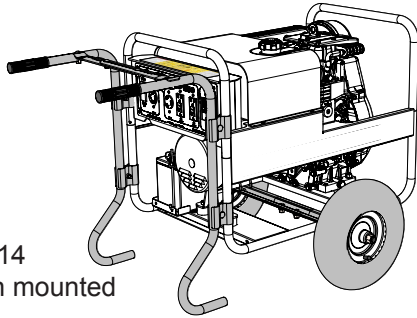


Z62329 HUF-A Series Bundle  
Z62317 Auto-Idle Alternator Connection Harness

4021T500 HUF12000EA Wiring Diag.vsd 052115

**Accessories**

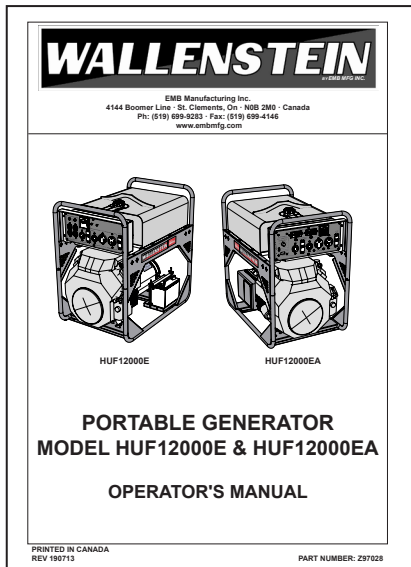
Call your dealer for pricing and availability



#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.



**#Z97028  
PORTABLE GENERATOR  
OPERATOR'S MANUAL**

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