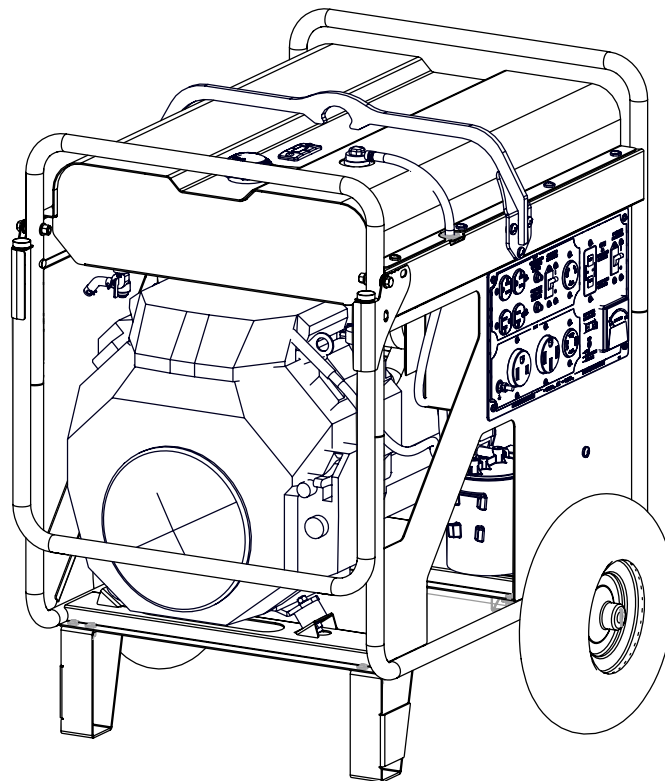




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WCS14000 / WCS14000R Generator Parts Manual

S/N's
WCS14000 - 147000 - 147002
WCS14000R - 148002 - 148004



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.wallensteinequipment.com> and click on "FIND A DEALER NEAR YOU" for information on a local dealer.

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| | | | |
|---|-----------------------------|------------|---------------------|
| Alternator: Mecc Alte Inc. S20F-P200 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 |
| | | GECAP20MF | Capacitor, 20uF |

Alternator maintenance should be performed by trained personnel only.



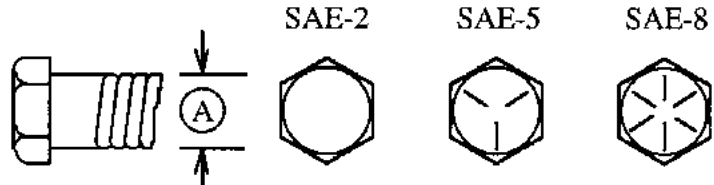
Exercise extreme caution when working with exposed wiring of the alternator, be aware that high voltage discharge of the capacitor is a danger.

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.

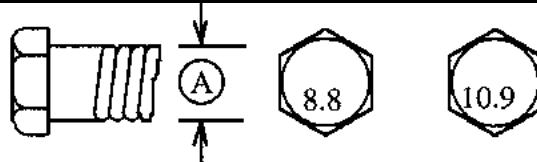
| ENGLISH TORQUE SPECIFICATIONS | | | | | | |
|-------------------------------|------------------------|-----|------------------------|-----|------------------------|-----|
| Bolt Diameter "A" | Bolt Torque* | | | | | |
| | SAE 2 (N.m) (lb-ft) | | SAE 5 (N.m) (lb-ft) | | SAE 8 (N.m) (lb-ft) | |
| 1/4" | 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%.

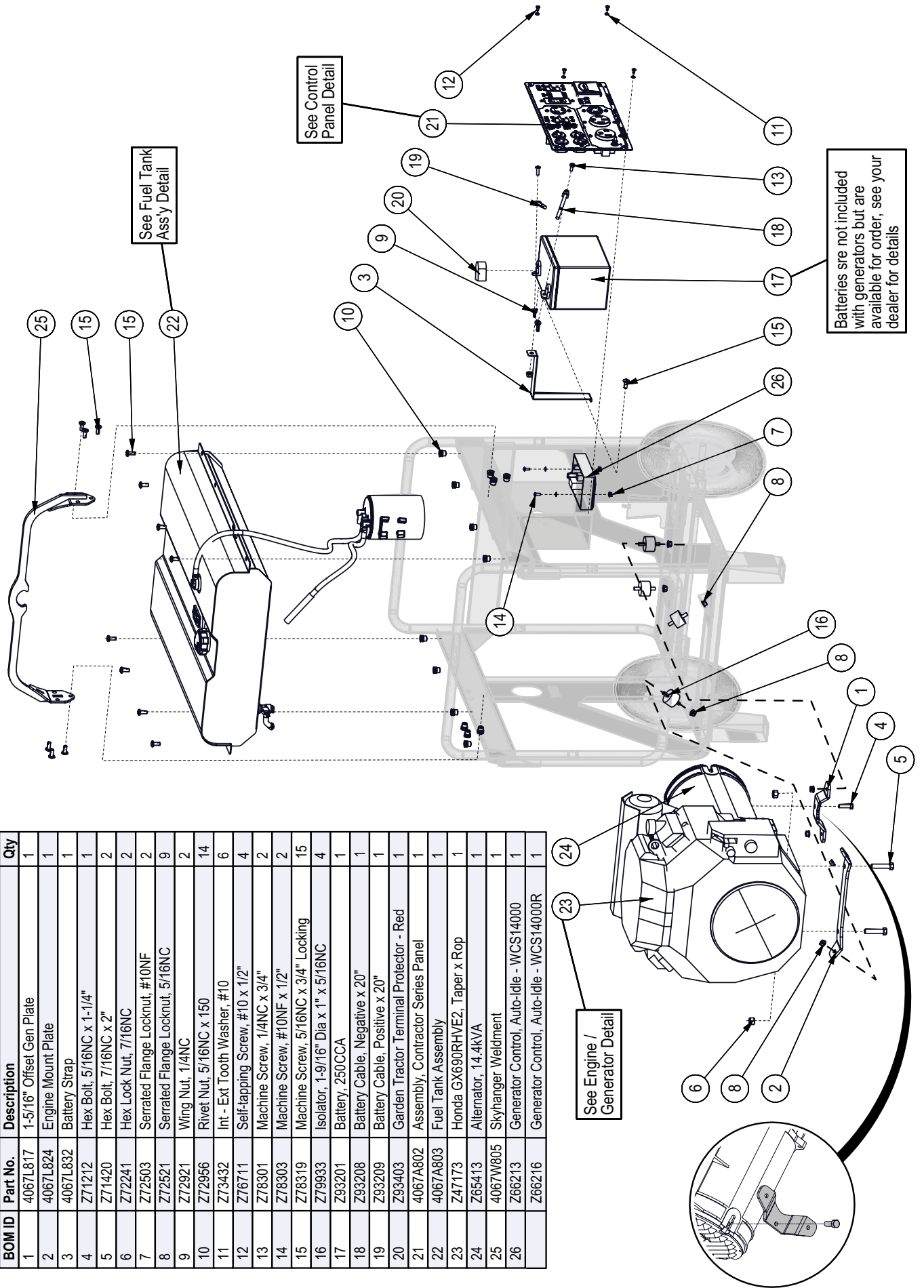
* Torque value for bolts and capscrews are identified by their head markings.

| 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 |

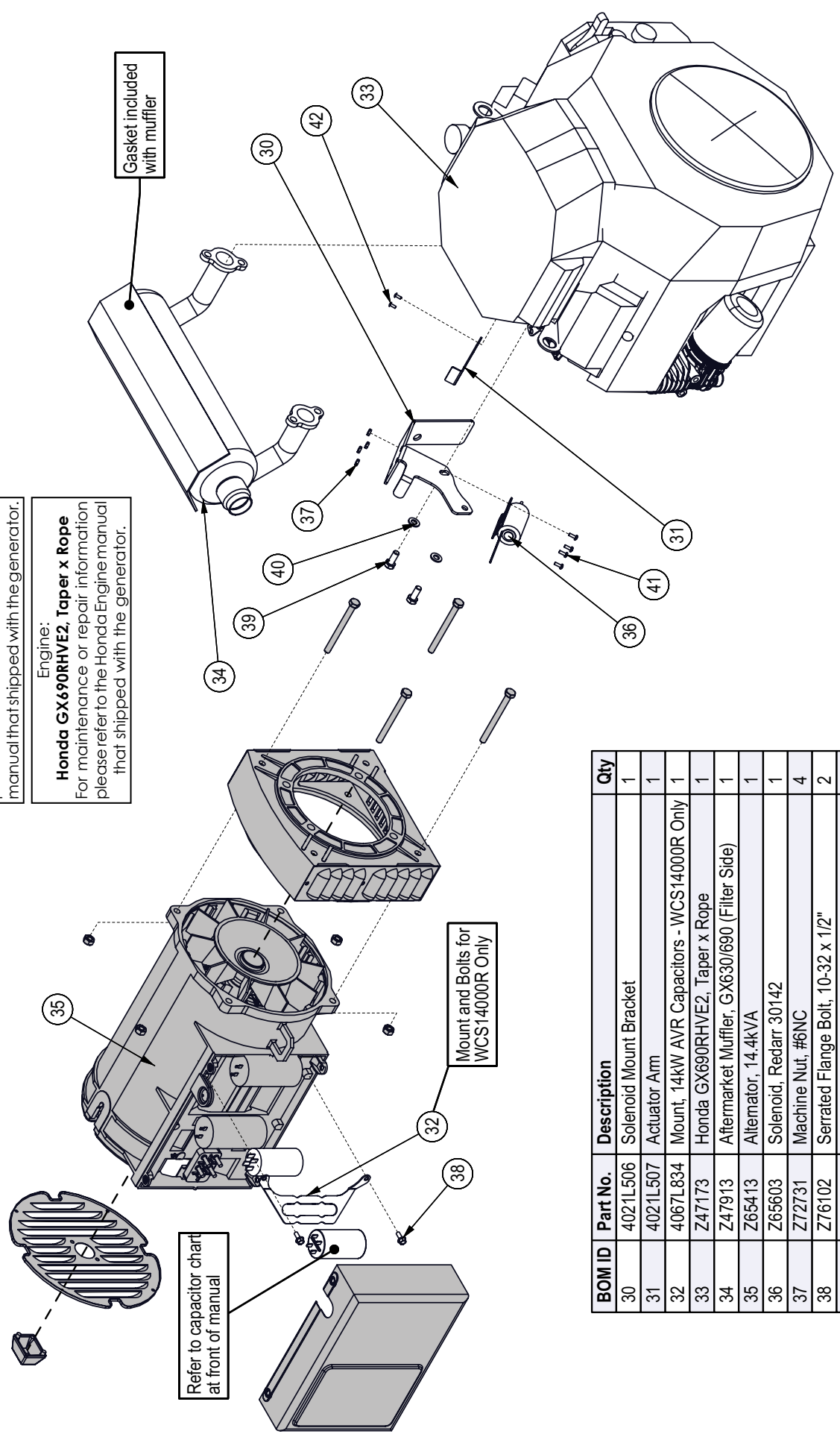


WCS14000 Main Assembly

| BOM ID | Part No. | Description | Qty |
|--------|----------|--|-----|
| 1 | 4067L817 | 1-5/16" Offset Gen Plate | 1 |
| 2 | 4067L824 | Engine Mount Plate | 1 |
| 3 | 4067L832 | Battery Strap | 1 |
| 4 | Z71212 | Hex Bolt, 5/16NC x 1-1/4" | 1 |
| 5 | Z71420 | Hex Bolt, 7/16NC x 2" | 2 |
| 6 | Z72241 | Hex Lock Nut, 7/16NC | 2 |
| 7 | Z72503 | Serrated Flange Locknut, #10NF | 2 |
| 8 | Z72521 | Serrated Flange Locknut, 5/16NC | 9 |
| 9 | Z72921 | Wing Nut, 1/4NC | 2 |
| 10 | Z72956 | Rivet Nut, 5/16NC x 150 | 14 |
| 11 | Z73432 | Int - Ext Tooth Washer, #10 | 6 |
| 12 | Z76711 | Self-tapping Screw, #10 x 1/2" | 4 |
| 13 | Z78301 | Machine Screw, 1/4NC x 3/4" | 2 |
| 14 | Z78303 | Machine Screw, #10NF x 1/2" | 2 |
| 15 | Z78319 | Machine Screw, 5/16NC x 3/4" Locking | 15 |
| 16 | Z79933 | Isolator, 1-9/16" Dia x 1" x 5/16NC | 4 |
| 17 | Z93201 | Battery, 250CCA | 1 |
| 18 | Z93208 | Battery Cable, Negative x 20" | 1 |
| 19 | Z93209 | Battery Cable, Positive x 20" | 1 |
| 20 | Z93403 | Garden Tractor Terminal Protector - Red | 1 |
| 21 | 4067A802 | Assembly, Contractor Series Panel | 1 |
| 22 | 4067A803 | Fuel Tank Assembly | 1 |
| 23 | Z47173 | Honda GX690RHVE2, Taper x Prop | 1 |
| 24 | Z65413 | Alternator, 14.4kVA | 1 |
| 25 | 4067W805 | Skyhanger Weldment | 1 |
| 26 | Z66213 | Generator Control, Auto-Idle - WCS14000 | 1 |
| | Z66216 | Generator Control, Auto-Idle - WCS14000R | 1 |



Engine / Alternator Assembly

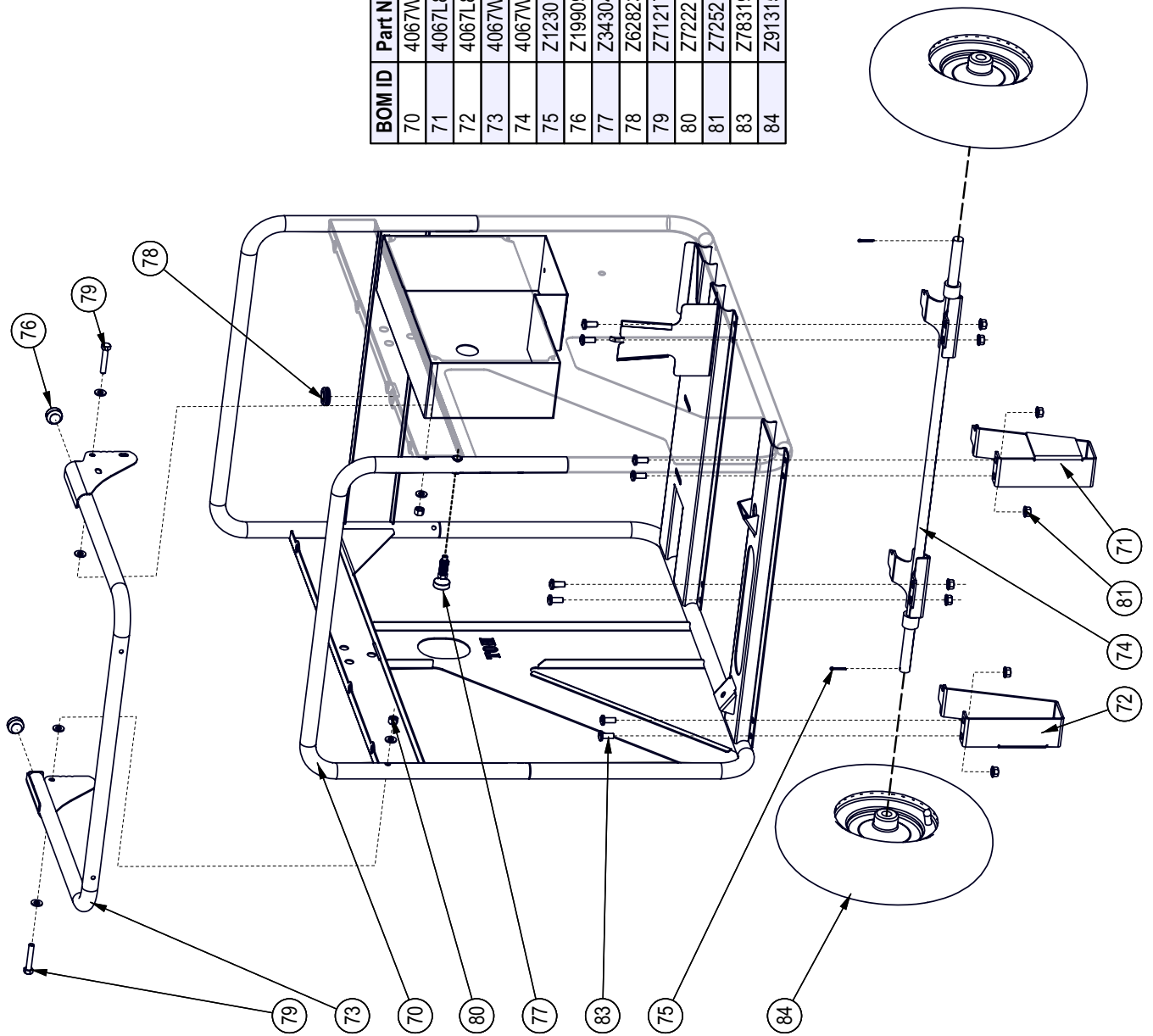


Alternator:
Mecc Alte Inc. S20W-160/A
 See parts chart page 3
 For maintenance or repair information please refer to the Mecc-Alte alternator manual that shipped with the generator.

Engine:
Honda GX690RHE2, Taper x Rope
 For maintenance or repair information please refer to the Honda Engine manual that shipped with the generator.

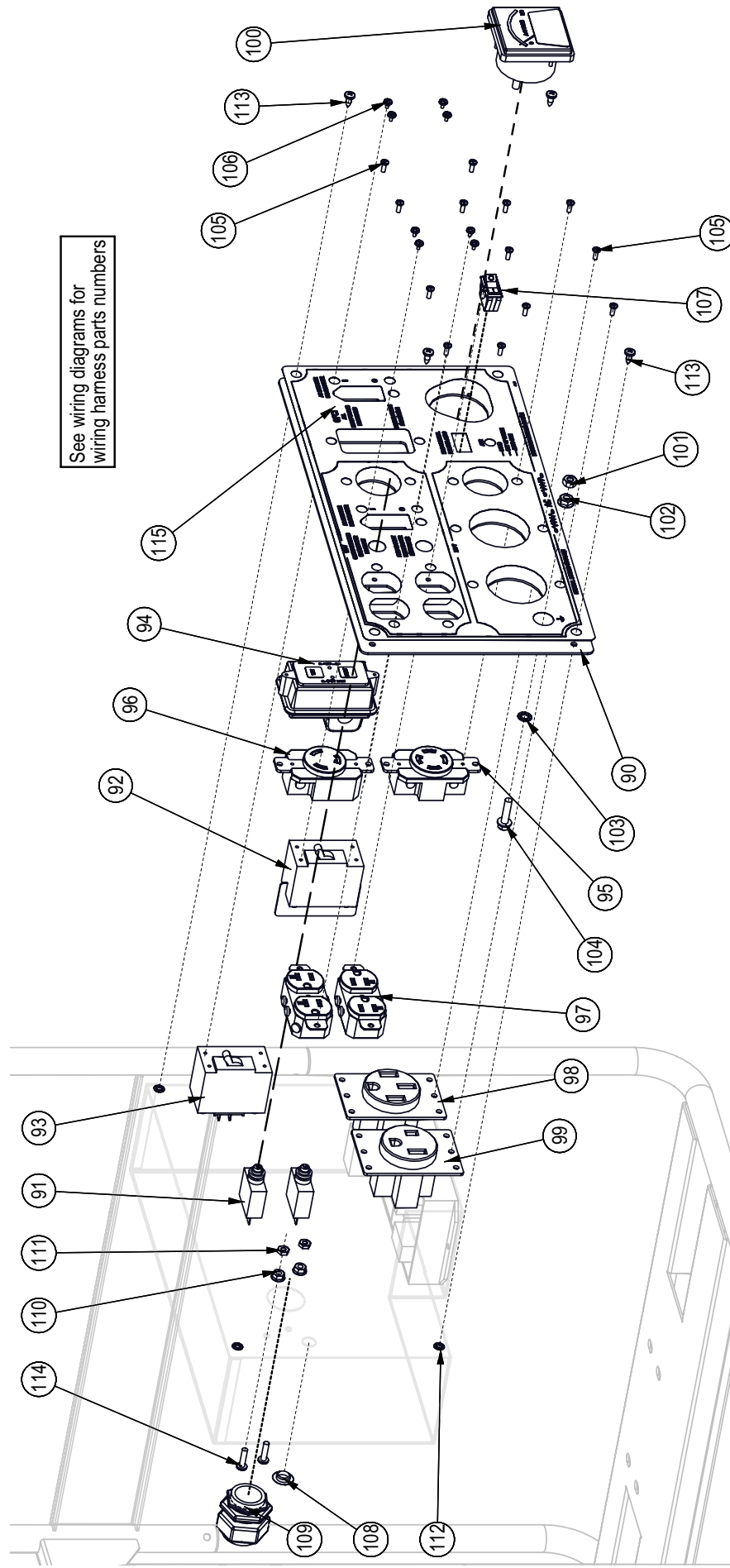
| BOM ID | Part No. | Description | Qty |
|--------|----------|--|-----|
| 30 | 4021L506 | Solenoid Mount Bracket | 1 |
| 31 | 4021L507 | Actuator Arm | 1 |
| 32 | 4067L834 | Mount, 14kW AVR Capacitors - WCS14000R Only | 1 |
| 33 | Z47173 | Honda GX690RHE2, Taper x Rope | 1 |
| 34 | Z47913 | Aftermarket Muffler, GX630/690 (Filter Side) | 1 |
| 35 | Z65413 | Alternator, 14.4kVA | 1 |
| 36 | Z65603 | Solenoid, Redarr 30142 | 1 |
| 37 | Z72731 | Machine Nut, #6NC | 4 |
| 38 | Z76102 | Serrated Flange Bolt, 10-32 x 1/2" | 2 |
| 39 | Z77150 | Hex Bolt, M8x1.25 x 20mm | 2 |
| 40 | Z77352 | DIN 125 Washer, M8 | 2 |
| 41 | Z78304 | Machine Screw, #6NC x 3/8" | 4 |
| 42 | Z79308 | Dome Head Rivet, 1/8" x 3/125 | 2 |

Frame Assembly



| BOM ID | Part No. | Description | Qty |
|--------|-----------|---|-----|
| 70 | 4067W801 | Generator Standard Lg-Frame | 1 |
| 71 | 4067L807 | Leg, Lg Frame RH | 1 |
| 72 | 4067L807H | Leg, Lg Frame LH | 1 |
| 73 | 4067W807 | Weldment, Handle Lg. | 1 |
| 74 | 4067W803 | Axle Weldment | 1 |
| 75 | Z12301 | Cotter Pin, 3/32" x 3/4" | 2 |
| 76 | Z19909 | Rubber Bumper, 7/16" x 1" | 2 |
| 77 | Z34304 | Spring Plunger, 1/2NC x 1" x 0.25" Retract Nose | 1 |
| 78 | Z62823 | Rubber Grommet, 5/8" x 1/8" | 1 |
| 79 | Z71217 | Hex Bolt, 5/16NC x 1-3/4" | 2 |
| 80 | Z72221 | Hex Lock Nut, 5/16NC | 2 |
| 81 | Z72521 | Serrated Flange Locknut, 5/16NC | 8 |
| 83 | Z78319 | Machine Screw, 5/16NC x 3/4" Locking | 8 |
| 84 | Z91315 | 4.00-6 NHS 2PR | 2 |

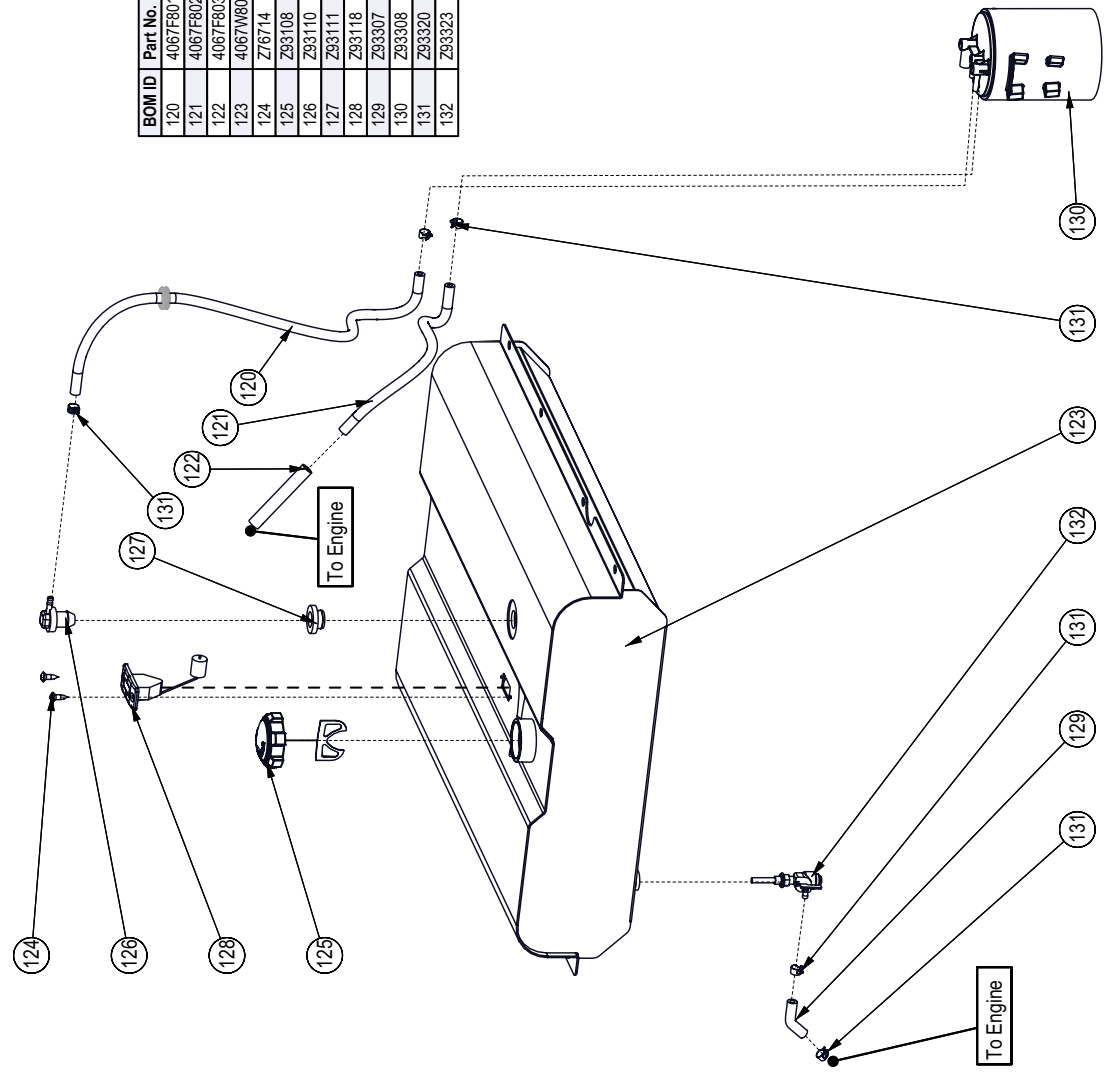
Electrical Panel Assembly



| BOM ID | Part No. | Description | Qty |
|--------|----------|---|-----|
| 104 | Z76114 | Flange Bolt, 1/4NC x 1" | 1 |
| 105 | Z78304 | Machine Screw, #6NC x 3/8" | 14 |
| 106 | Z78320 | SEMS Screw, #6NC x 1/4" x External Tooth | 8 |
| 107 | Z66112 | Rocker Switch, 20A SPST | 1 |
| 108 | Z62813 | Plug, #18 | 1 |
| 109 | Z62827 | Cable Gland, 18-25mm | 1 |
| 110 | Z72502 | Serrated Flange Locknut, #10NC | 2 |
| 111 | Z72751 | Machine Nut, #10NC | 2 |
| 112 | Z73432 | Int. - Ext Tooth Washer, #10 | 4 |
| 113 | Z76711 | Self-tapping Screw, #10 x 1/2" | 4 |
| 114 | Z78305 | Machine Screw, #10NC x 3/4" | 2 |
| 115 | Z94807 | 12-14kW GFI Control Panel Decal - WCS1400R Only | 1 |
| | Z94822 | 12-14kW GFI AVR Control Panel Decal - WCS1400R Only | 1 |

| BOM ID | Part No. | Description | Qty |
|--------|----------|-------------------------------------|-----|
| 90 | 4067L804 | Panel, Work Series | 1 |
| 91 | Z62616 | Thermal Breaker, 15A x TC1 OL1 | 2 |
| 92 | Z626210 | 30A - Double Breaker | 1 |
| 93 | Z62670 | 50A - Double Breaker - Aux | 1 |
| 94 | Z62671 | GFCI Module - PGFM | 1 |
| 95 | Z63403 | Receptacle, L14-30 x 30A x 125/250V | 1 |
| 96 | Z63404 | Receptacle, L5-30 x 30A x 125V | 1 |
| 97 | Z63406 | Receptacle, 5-20R x 20A x 125V | 2 |
| 98 | Z63409 | Receptacle, 14-50R x 50A x 125/250V | 1 |
| 99 | Z63410 | Receptacle, 6-50R x 50A x 125/250V | 1 |
| 100 | Z64501 | Voltmeter, 0-150V | 1 |
| 101 | Z72111 | Hex Nut, 1/4NC | 1 |
| 102 | Z72511 | Serrated Flange Locknut, 1/4NC | 1 |
| 103 | Z73431 | Int. - Ext Tooth Washer, 1/4" | 1 |

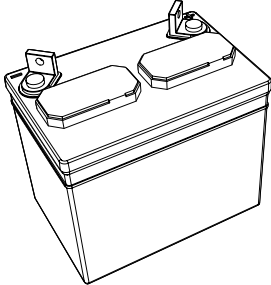
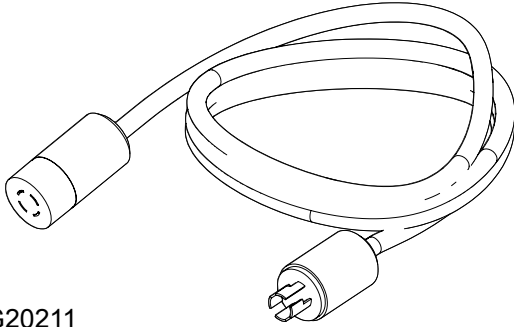

Fuel Tank Assembly & Fuel Lines



| BOM ID | Part No. | Description | Qty |
|--------|----------|---|-----|
| 120 | 4067F801 | EPA fuel line 1/4" ID x 26" | 1 |
| 121 | 4067F802 | EPA fuel line 1/4" ID x 18.5 | 1 |
| 122 | 4067F803 | EPA fuel line 3/8" ID x 6" | 1 |
| 123 | 4067W802 | Fuel Tank Weldment | 1 |
| 124 | Z16714 | Self-tapping Screw, #10 x 1/2" Oval Head Countersunk - Black Zinc | 2 |
| 125 | Z93108 | EPA Ratchet Fuel Cap, Unleaded Fuel x Unvented with Tether | 1 |
| 126 | Z93110 | EPA Remote Vent, HB04 | 1 |
| 127 | Z93111 | Vent Grommet For Z93110 | 1 |
| 128 | Z93118 | Fuel Gauge, Generator | 1 |
| 129 | Z93307 | EPA Fuel Line, 1/4" x 3" | 1 |
| 130 | Z93308 | EPA Carbon Canister, 1200cc | 1 |
| 131 | Z93320 | Fuel Line Clip, 1/2" OD Hose | 5 |
| 132 | Z93323 | Fuel Shut-Off Valve, 1/4" Generator | 1 |

Accessories

Call your dealer for pricing and availability

| | |
|---|---|
|  <p>#Z93201</p> | <p>#Z93201 U1 250CCA Lawn & Garden Battery</p> <p>The perfect battery to reliably get your generator started.</p> |
|  <p>#G20211</p> | <p>Generator Extension cord, the right length and size, to make the most of your generator.</p> <ul style="list-style-type: none"> • 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 <p>Available in three sizes.</p> <p>G20211 • 10' Power Cord G20212 • 20' Power Cord G20213 • 25' Power Cord</p> |
|  | <p>#Z97098 GENERATOR OPERATOR'S MANUAL</p> <p>Available as a download at www.wallensteinequipment.com</p> |