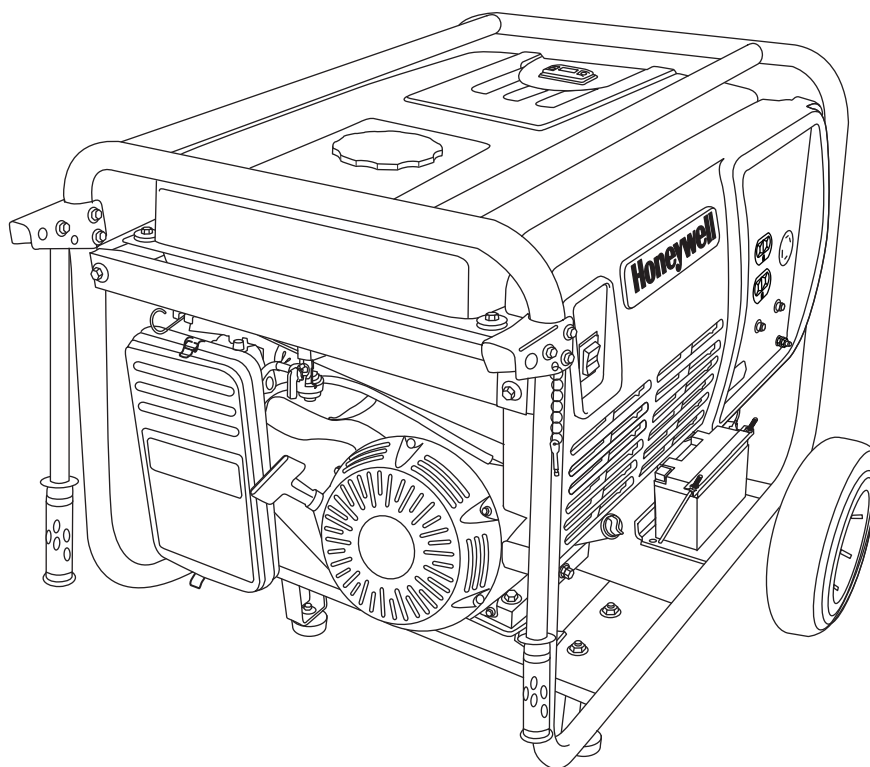


Honeywell

POWERED by **HONDA**™

Portable Electrical Generator Service Manual



HW7000EH

For technical support and parts, contact your Regional Master Parts Distributor toll-free at 1-877-HWTECHS (498-3247) or visit www.honeywellgenerators.com.

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SAVE THESE INSTRUCTIONS

1: IMPORTANT SAFETY INSTRUCTIONS

 WARNING	
	ANYONE using or servicing this generator must read, understand, and follow all safety and operation instructions provided in the product manual. Failure to closely follow these instructions can result in circumstances leading to death, serious injury, and property damage.

NOTE:

Since there are many variations in the circumstances surrounding the installation, operation, service, and maintenance of this generator, we cannot possibly anticipate or provide advice or safety messages to cover every situation.

1.1 SAFETY MESSAGES

Signal Words

Safety messages are provided throughout this manual to help prevent personal injury and equipment damage. All safety messages are introduced by a signal word indicating the hazard level.

	Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury to the operator or to bystanders.
	Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury to the operator or to bystanders.
	Indicates a potentially hazardous situation which, if not avoided, may result in moderate or minor injury to the operator or to bystanders.
	Indicates a situation which, if not avoided, may result in damage to the generator components.

Hazard Symbols and Meanings

In addition to the signal words, the following symbols may be used to draw your attention to specific types of hazards.

 <i>Explosion</i>	 <i>Toxic fumes</i>	 <i>Fire</i>
 <i>Chemical burn</i>	 <i>Electrical shock</i>	 <i>Hot surface</i>

 DANGER	
Using a generator indoors CAN KILL YOU IN MINUTES. Generator exhaust contains carbon monoxide. This is a poison you cannot see or smell.	
 NEVER use inside a home or garage, EVEN IF doors and windows are open.	 Only use OUTSIDE and far away from windows, doors, and vents.

SAFETY PRECAUTIONS

- Wear appropriate protective safety equipment, such as safety shoes and safety glasses.
- Comply with the warnings in this manual and take special precautions when working around electrical equipment.
- Never wear loose or damp clothing that might get caught in equipment or conduct electricity.
- Keep service area organized and free of unnecessary clutter to reduce hazard potential.
- Keep guards and shields in place on machinery and maintain equipment in good working condition.
- Store flammable liquids in approved containers and away from fire, flame, spark, pilot light, switches, arc-producing equipment and other ignition sources.
- Use the correct tool for the job and check its condition before starting.
- Keep fire extinguishers and safety equipment nearby.

SAFETY MESSAGES

Electric Shock Hazards

 WARNING	
	Generators produce powerful voltage that can cause death or great physical harm. • NEVER touch bare wires or receptacles. • NEVER use generator with electrical cords that are worn, frayed, bare, or otherwise damaged. • NEVER operate generator in rain or snow, or when the generator is set on wet surface. • Exposed terminals, even on disconnected batteries, can cause electric shock. • NEVER touch both battery terminals with bare hands at the same time. • Remove rings, watches or any other object containing metal when working with battery. If metal comes into contact with battery terminals, electric shock and serious burns can result. • Only use insulated/non-conducting tools when working with or near battery. • NEVER lay tools or other metal objects on top of battery.

Fire and Burn Hazards

 WARNING	
	Fuel and its vapors are extremely flammable and explosive under certain conditions.
	• Refuel generator only outdoors, in a well-ventilated area. • NEVER enclose the generator in any structure. • Keep generator at least 6 feet (2 meters) away from buildings, other equipment, and combustible materials during operation. • NEVER fill fuel tank while the engine is running. Turn generator OFF and allow to cool before filling with fuel. • NEVER smoke or allow flames or sparks near the generator or where gasoline is stored. • NEVER overfill the fuel tank (there should be no fuel in the filler neck). After refueling, make sure the tank cap is closed properly and securely. • Be careful not to spill fuel when refueling. Spilled fuel or fuel vapor may ignite. If any fuel is spilled, be sure the area is dry before starting the engine. • Avoid repeated or prolonged contact with skin or breathing of vapor.

 WARNING	
	The muffler becomes very hot during operation and remains hot for a while after stopping the engine. • NEVER touch hot surfaces and avoid hot gases. • Let engine cool before storing the generator indoors.

 WARNING	
	Battery gases are explosive. • NEVER allow open flames, lit cigarettes, sparks, or spark-producing equipment near the battery.
	Battery electrolyte fluid is comprised of sulfuric acid, which can be very dangerous and cause severe burns. • NEVER allow battery fluid to contact eyes, skin, or clothing. If contact or spillage occurs, immediately flush the area with water.

Medical and Life Support Uses

 WARNING	
	• In case of emergency, call 911 immediately. • NEVER use this product to power life support devices or life support appliances. • NEVER use this product to power medical devices or medical appliances. • Inform your electricity provider immediately if you or anyone in your household depends on electrical equipment to live. • Inform your electrical provider immediately if a loss of power would cause you or anyone in your household to experience a medical emergency.

Generator Damage Hazards

NOTICE	
	Improper treatment or misuse of generator can cause permanent damage. • NEVER modify generator in any way. • NEVER tamper with governed speed. Generator supplies correct rated frequency and voltage when running at governed speed. • Damage to generator caused by misuse or modification is not covered under warranty.

2: WARRANTIES

NORTHSHORE POWER SYSTEMS CONSUMER LIMITED WARRANTY

Honeywell Portable Generator

Effective March 1, 2009

LIMITED WARRANTY

Northshore Power Systems, LLC, will repair or replace, free of charge, to the original retail customer, in North America, any parts of the portable generator found by Northshore Power Systems or an authorized service center to be defective in material or workmanship. This limited warranty covers the cost of the replacement parts and labor for defects. Transportation charges are the responsibility of the customer. This limited warranty has time period conditions, operating conditions and disclaimers, limitations of remedies & exclusions as stated below. For warranty service, customer should locate an authorized Honeywell Generator Dealer from www.honeywellgenerators.com or by calling 1-888-HWHELP1 (494-3571).

LIMITED WARRANTY PERIODS

Consumer Use: 3 Years Limited. 1st year, parts and labor. 2nd & 3rd years, parts only.

Commercial Use: 1 Year Limited. No warranty for rental use.

Commencement and Definitions. The limited warranty period begins on the date of retail purchase by the original purchaser. The limited warranty is not transferable. "Consumer use" is personal use by a retail customer. "Commercial use" is any usage for income producing, business related use.

No Extension of Warranty. Repair or replacement pursuant to this limited warranty shall not renew or extend the original warranty period, and any repaired product shall be warranted for the remaining original warranty period only.

DISCLAIMERS, LIMITATIONS OF REMEDIES & EXCLUSIONS

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

MEDICAL AND LIFE SUPPORT USES. This warranty excludes any use of this product intended to power life support devices, life support appliances, medical devices, or medical appliances.

DISCLAIMER OF OTHER WARRANTIES. TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, THIS LIMITED WARRANTY IS EXCLUSIVE AND EXPRESSLY IN LIEU OF ANY AND ALL OTHER WARRANTIES, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER IMPLIED WARRANTIES THAT MAY ARISE FROM A COURSE OF DEALING OR USAGE OF TRADE. NORTHSHORE POWER SYSTEMS HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES. To the extent that Northshore Power Systems's products are consumer products under applicable federal or state law with respect to any customer, the duration of any implied warranties (including, but not limited to, implied warranties of merchantability or fitness for a particular purpose) are limited to the shortest duration permitted by applicable law or the limited warranty period provided herein, whichever is longer.

LIMITATIONS OF REMEDIES. NORTHSHORE POWER SYSTEMS SHALL NOT BE LIABLE TO CUSTOMER, OR TO ANYONE CLAIMING UNDER CUSTOMER, FOR ANY OTHER OBLIGATIONS OR LIABILITIES, INCLUDING, BUT NOT LIMITED TO, OBLIGATIONS OR LIABILITIES ARISING OUT OF BREACH OF CONTRACT OR WARRANTY, NEGLIGENCE OR OTHER TORT OR ANY THEORY OF STRICT LIABILITY, WITH RESPECT TO THE GENERATOR OR NORTHSHORE POWER SYSTEMS'S ACTS OR OMISSIONS OR OTHERWISE. TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, NORTHSHORE POWER SYSTEMS SHALL NOT, IN ANY EVENT, BE LIABLE FOR INCIDENTAL, COMPENSATORY, PUNITIVE, CONSEQUENTIAL, INDIRECT, SPECIAL OR OTHER DAMAGES, INCLUDING BUT NOT LIMITED TO LOSS OF USE, LOSS OF INCOME, LOSS OF TIME, LOSS OF SALES, INJURY TO PERSONAL PROPERTY, OR LIABILITY CUSTOMER INCURS WITH RESPECT TO ANY OTHER PERSON, OR ANY OTHER TYPE OR FORM OF CONSEQUENTIAL DAMAGE OR ECONOMIC LOSS.

EXCLUSIONS. In addition to the foregoing disclaimers, limitations and terms, this limited warranty shall not apply to and does not cover accessories, nor does it cover products that are in any way subjected to: (i) improper setup, installation or storage; (ii) lack of proper maintenance and service; (iii) accident, damage, abuse or misuse; (iv) abnormal operating conditions or applications; (v) repair or modification by customer or any third party without prior written consent of Northshore Power Systems; (vi) use under operating conditions or in applications not made known to or contemplated by Northshore Power Systems; or (viii) acts of God. The application of these exclusions will be determined at Northshore Power Systems's sole discretion.

This generator is equipped with an engine that is covered exclusively by a separate warranty from the engine manufacturer. Please refer to the engine documentation included with the generator for warranty information related to the engine.

REGISTRATION

Warranty registration with the Company is required on all products. You may send in the enclosed Product Registration, or register your product on-line at www.honeywellgenerators.com.

Warranty is also available by keeping and showing your original receipt from date of purchase to an authorized Honeywell Generator Dealer.

GENERATOR SERVICE

Do not return your generator to place of purchase for service. For all customer service inquiries, call 1-888-HWHELP1 (494-3571) or visit www.honeywellgenerators.com.

Warranty inquiries can be addressed to:

Northshore Power Systems, LLC
Attention: Service and Warranty Dept.
4425 N Port Washington Road
Suite 105
Milwaukee, WI 53212-1082

WARRANTIES

NORTHSHORE POWER SYSTEMS EVAPORATIVE EMISSIONS CONTROL WARRANTY

Honeywell Portable Generator

WARRANTY STATEMENT

The California Air Resources Board and Northshore Power Systems, LLC. are pleased to explain the evaporative emission control system (EECS) warranty on your 2009 portable generator. In California, new portable generators must be designed, built and equipped to meet the State's stringent anti-smog standards. Northshore Power Systems must warrant the EECS on your portable generator for the period of time listed below provided there has been no abuse, neglect or improper maintenance of your portable generator. Your EECS may include parts such as the carburetor, fuel lines, fuel caps, valves, canisters, filters, vapor hoses, clamps, and other associated emission-related components. Where a warrantable condition exists, Northshore Power Systems will repair your portable generator at no cost to you including diagnosis, parts and labor.

MANUFACTURER'S WARRANTY COVERAGE

This evaporative emission control system is warranted for two years. If any evaporative emission-related part on your equipment is defective, the part will be repaired or replaced by Northshore Power Systems.

OWNER'S WARRANTY RESPONSIBILITIES

As the portable generator owner, you are responsible for performance of the required maintenance listed in your owner's manual. Northshore Power Systems recommends that you retain all receipts covering maintenance on your portable generator, but Northshore Power Systems cannot deny warranty solely for the lack of receipts. As the portable generator owner, you should however be aware that Northshore Power Systems may deny you warranty coverage if your portable generator or a part has failed due to abuse, neglect, or improper maintenance or unapproved modifications. You are responsible for presenting your portable generator to Northshore Power Systems's distribution center or service center as soon as the problem exists. The warranty repairs should be completed in a reasonable amount of time, not to exceed 30 days. If you have a question regarding your warranty coverage, you should contact www.honeywellgenerators.com or by calling 1-888-HWHELP1 (494-3571).

GENERAL EVAPORATIVE EMISSIONS WARRANTY COVERAGE

Northshore Power Systems warrants to the ultimate purchaser and each subsequent purchaser that the portable generator is: Designed, built and equipped so as to conform with all applicable regulations; and free from defects in materials and workmanship that cause the failure of a warranted part to be identical in all material respects to that part as described in the application for certification. The warranty period begins on the date the portable generator is delivered to an ultimate purchaser or first placed into service. The warranty period is two years. Subject to certain conditions and exclusions as stated below, the warranty on emission-related parts is as follows:

1. Any warranted part that is not scheduled for replacement as required maintenance in the written instructions supplied, is warranted for the warranty period stated above. If the part fails during the period of warranty coverage, the part will be repaired or replaced by Northshore Power Systems according to subsection (4) below. Any such part repaired or replaced under warranty will be warranted for the remainder of the period.
2. Any warranted part that is scheduled only for regular inspection in the written instructions supplied is warranted for the warranty period stated above. Any such part repaired or replaced under warranty will be warranted for the remaining warranty period.
3. Any warranted part that is scheduled for replacement as required maintenance in the written instructions supplied is warranted for the period of time before the first scheduled replacement date for that part. If the part fails before the first scheduled replacement, the part will be repaired or replaced by Northshore Power Systems according to subsection (4) below. Any such part repaired or replaced under warranty will be warranted for the remainder of the period prior to the first scheduled replacement point for the part.
4. Repair or replacement of any warranted part under the warranty provisions herein must be performed at an authorized Honeywell Service Center.
5. Notwithstanding the provisions herein, warranty services or repairs will be provided at an authorized Honeywell Service Center at no charge to the owner.
6. The portable generator owner will not be charged for diagnostic labor that is directly associated with diagnosis of a defective, emission-related warranted part, provided that such diagnostic work is performed at a warranty station.
7. Northshore Power Systems is liable for damages to other engine or equipment components proximately caused by a failure under warranty of any warranted part.
8. Throughout the portable generator warranty period stated above, Northshore Power Systems will maintain a supply of warranted parts sufficient to meet the expected demand for such parts.
9. Any replacement part may be used in the performance of any warranty maintenance or repairs and must be provided without charge to the owner. Such use will not reduce the warranty obligations of Northshore Power Systems.
10. Add-on or modified parts that are not exempted by the Air Resources Board may not be used. The use of any non-exempted add-on or modified parts by the ultimate purchaser will be grounds for disallowing a warranty claims. Northshore Power Systems will not be liable to warrant failures of warranted parts caused by the use of a non-exempted add-on or modified part.

WARRANTED PARTS

The repair or replacement of any warranted part otherwise eligible for warranty coverage may be excluded from such warranty coverage if Northshore Power Systems demonstrates that the portable generator has been abused, neglected, or improperly maintained, and that such abuse, neglect, or improper maintenance was the direct cause of the need for repair or replacement of the part. That notwithstanding, any adjustment of a component that has a factory installed, and properly operating, adjustment limiting device is still eligible for warranty coverage. The following emission warranty parts are covered:

- A.** Fuel Tank
- B.** Fuel Cap
- C.** Fuel Line
- D.** Fuel Line Fittings
- E.** Clamps
- F.** Vapor Hoses
- G.** Carbon Canister
- H.** Canister Mounting Brackets
- I.** Carburetor Purge Port Connector

QUESTIONS

If you have questions regarding your emissions warranty rights and responsibilities, you should contact the Service and Warranty Department at Northshore Power Systems.

By phone: 1-414-332-2375

Via web: www.honeywellgenerators.com

By US mail:

Northshore Power Systems, LLC
Attention: Service and Warranty Dept.
4425 N Port Washington Road
Suite 105
Milwaukee, WI 53212-1082

WARRANTIES

NORTHSHORE POWER SYSTEMS REPLACEMENT PARTS LIMITED WARRANTY

Honeywell Portable Generator

For a period of 90 days from the date of sale or installation of a Northshore Power Systems, LLC supplied part, Northshore Power Systems will, at its option and sole discretion, repair or replace the part if it is found to be defective in material or workmanship after inspection by Northshore Power Systems.

Any parts which the buyer claims to be defective must be examined by the nearest Authorized Northshore Power Systems Warranty Service Facility. All shipping costs under this limited warranty are to be borne and prepaid by the buyer.

DISCLAIMERS, LIMITATIONS OF REMEDIES & EXCLUSIONS

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

DISCLAIMER OF OTHER WARRANTIES. TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, THIS LIMITED WARRANTY IS EXCLUSIVE AND EXPRESSLY IN LIEU OF ANY AND ALL OTHER WARRANTIES, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER IMPLIED WARRANTIES THAT MAY ARISE FROM A COURSE OF DEALING OR USAGE OF TRADE. NORTHSHORE POWER SYSTEMS HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES.

To the extent that Northshore Power Systems's products are consumer products under applicable federal or state law with respect to any customer, the duration of any implied warranties (including, but not limited to, implied warranties of merchantability or fitness for a particular purpose) are limited to the shortest duration permitted by applicable law or the limited warranty period provided herein, whichever is longer.

LIMITATIONS OF REMEDIES. NORTHSHORE POWER SYSTEMS SHALL NOT BE LIABLE TO CUSTOMER, OR TO ANYONE CLAIMING UNDER CUSTOMER, FOR ANY OTHER OBLIGATIONS OR LIABILITIES, INCLUDING, BUT NOT LIMITED TO, OBLIGATIONS OR LIABILITIES ARISING OUT OF BREACH OF CONTRACT OR WARRANTY, NEGLIGENCE OR OTHER TORT OR ANY THEORY OF STRICT LIABILITY, WITH RESPECT TO THE GENERATOR OR NORTHSHORE POWER SYSTEMS'S ACTS OR OMISSIONS OR OTHERWISE. TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, NORTHSHORE POWER SYSTEMS SHALL NOT, IN ANY EVENT, BE LIABLE FOR INCIDENTAL, COMPENSATORY, PUNITIVE, CONSEQUENTIAL, INDIRECT, SPECIAL OR OTHER DAMAGES, INCLUDING BUT NOT LIMITED TO LOSS OF USE, LOSS OF INCOME, LOSS OF TIME, LOSS OF SALES, INJURY TO PERSONAL PROPERTY, OR LIABILITY CUSTOMER INCURS WITH RESPECT TO ANY OTHER PERSON, OR ANY OTHER TYPE OR FORM OF CONSEQUENTIAL DAMAGE OR ECONOMIC LOSS.

EXCLUSIONS. In addition to the foregoing disclaimers, limitations and terms, this limited warranty shall not apply to and does not cover products that are in any way subjected to: (i) improper setup, installation or storage; (ii) lack of proper maintenance and service; (iii) accident, damage, abuse or misuse; (iv) abnormal operating conditions or applications; (v) repair or modification by customer or any third party without prior written consent of Northshore Power Systems; (vi) use under operating conditions or in applications not made known to or contemplated by Northshore Power Systems; or (vii) acts of God. The application of these exclusions will be determined at Northshore Power Systems's sole discretion.

NORTHSHORE POWER SYSTEMS PARTS LIMITED WARRANTY CLAIMS PROCEDURES

DEFECTIVE NEW PARTS. Parts which are defective from new stock, or immediately upon installation must be filed under limited warranty. The defective part must be returned to Northshore Power Systems's Service and Warranty Department under the following procedure:

1. Fill out a Warranty Claim Form listing the part number and write "New Defective" in the description.
2. List invoice number that the part was purchased on and/or provide receipt.

NOTE: Freight damaged parts are not valid as warranty claims.

FAILURE WITHIN 90 DAYS. Parts which have been installed and have failed within 90 days will be handled by the Northshore Power Systems Service and Warranty Department. A Warranty Claim Form must accompany each part for which coverage under the limited warranty is sought. Claims will not be processed without the model and serial numbers of the unit and the purchase and failure dates for the part. Attach a copy of the original proof-of-purchase (for the part) to the Warranty Claim Form.

WARRANTY CLAIMS

Warranty claim forms and inquiries can be addressed to:

Northshore Power Systems, LLC
Attention: Service and Warranty Dept.
4425 N Port Washington Road
Suite 105
Milwaukee, WI 53212-1082

3: SPECIFICATIONS AND WIRING DIAGRAM

3.1 SPECIFICATIONS

GENERATOR	HW7000EH
POWER	
Rated [watts] (+/- 10% under load)	7000
Frequency [hertz] (+/- 5% under load)	60
Voltage [volts] (+/- 5% under load)	120 / 240
OPERATING TEMPERATURE	
Maximum [F / C]	104° / 40°
Minimum [F / C]	14° / -10°
ENGINE	
Speed [rpm]	3600
Type	OHV 4-Cycle
Displacement [cc]	389
Fuel Tank Capacity [gal / l]	6.5 / 24.6
Engine Oil Capacity [qt / l]	1.2 / 1.1
See Honda Owner's Manual for Additional Engine Information	

TABLE 3-2. Honeywell Portable Generator Specifications

BOLT AND FASTENER TORQUE INFORMATION

3.2 BOLT AND FASTENER TORQUE INFORMATION

Component-Specific Fastener	Fastener Size	Torque Values	
		N•m	lb. ft.
Alternator End Cover Bolts	M5 x 12	4	3
Alternator Housing Bolts	M10 x 1.25 x 80	48	35
Axle Bracket Bolts	M8 x 16	25	18
Brush Assembly Bolt	M5 x 16	2	1.5
Carbon Canister Bracket Bolts	M6 x 1.0 x 10	2	1.5
Control Panel Bolts	M6 x 1.0 x 15	4	3
Exhaust Pipe Nuts	M8 x 1.25	24	17
Fuel Tank Mounting Bolts	M6 x 1.0	10	7
Fuel Shut-off Valve Hex Fitting	M10 x 1.25	24	17
Muffler to Engine Bolts	M8 x 1.25	29	22
Spark Arrestor Bolts	M6 x 0.8 x 10	2	1.5
Support Leg to Frame Bolts	M8 x 16	25	18
Support Leg to Rubber Stopper Bolts	M8 x 25	25	18
Wheel Handle Pivot Bracket Bolts	M6 x 40	10	7
Engine Torque Values	See Honda Owner's Manual		

TABLE 3-4. Torque Values

3.3 WIRING DIAGRAM

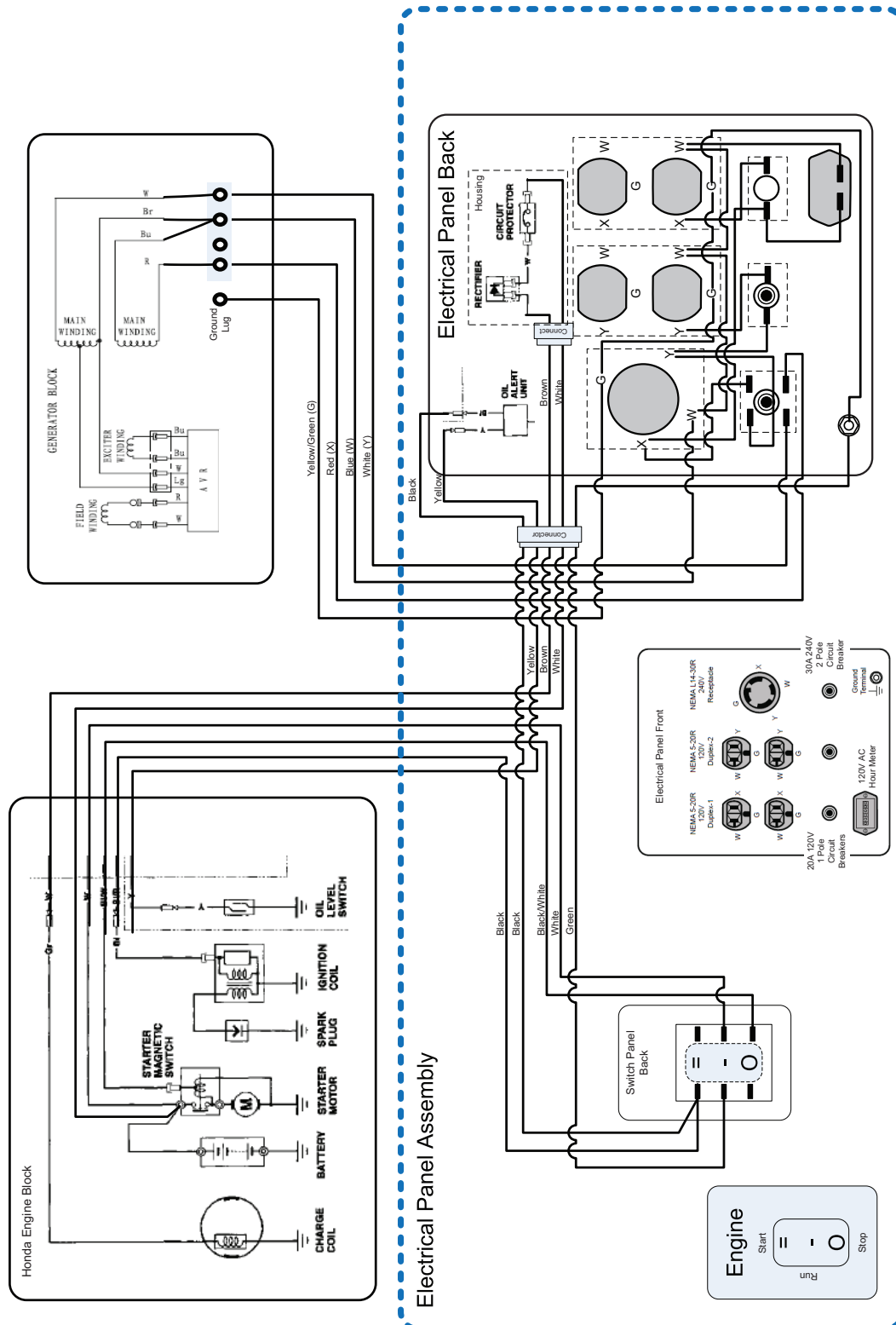


FIGURE 3-1: HW7000EH Wiring Diagram

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4: COMPONENTS

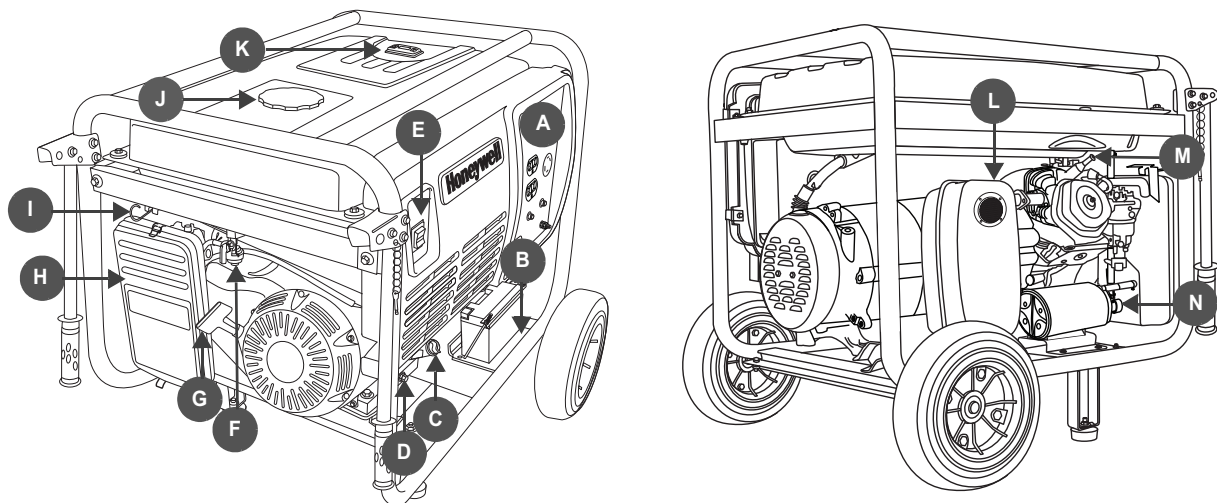


FIGURE 4-2: Honeywell Portable Electrical Generator Controls and Components

A—Power Control Center

Household Outlets

125VAC 20 Amp Duplex (NEMA 5-20R) outlets to connect 120V appliances to generator for power.

Generator Cord

125/250VAC 30 Amp Twist-Lock (NEMA L14-30R) outlet can be used to:

- Power 120V appliances using 4-in-1 power cord (not included).
- Power 240V appliances using appropriate (NEMA L14-30P) power cord (not included).

Breakers

Protects circuits from damage caused by overload or short-circuit by stopping the flow of electricity from the generator to the appliance. Master circuit breaker controls power to all outlets. If there is no power at outlets, see TROUBLESHOOTING.

Hour Meter

Shows the total unit run time for maintenance purposes.

Ground Terminal

Connects generator to ground wire for grounding protection.

CAUTION



Generator must be grounded to prevent electrical shock from faulty appliances.

B—Battery Tray and Battery

Provides power for electric start feature.

C—Oil Fill Dipstick

Seals off engine oil fill hole and provides indicator for engine oil level.

D—Oil Drain Screw

Allows engine oil to drain from generator.

E—Engine Control Switch

Control used to start and stop the engine ignition system.

- **START**—Starts generator engine
- **RUN**—Prepares engine to start (manual start); Indicates engine is currently running (electric start)
- **STOP**—Stops generator engine by inhibiting ignition

F—Fuel Shut-off Valve

Controls flow of fuel from fuel tank to carburetor.

G—Recoil Starter Grip Handle

Provides means to manually start engine, if needed.

H—Air Cleaner Assembly

Removes dust from engine intake air.

I—Choke Control

Controls choke valve. Choke control must be moved to ON position when starting a cold engine.

J—Fuel Tank Cap

Provides a secure seal on fuel tank.

K—Fuel Gage

Indicates level of fuel currently in fuel tank.

L—Muffler Equipped with Spark Arrester

Provides outlet for engine exhaust. Prevents sparks and other combustible materials from escaping generator.

WARNING



Muffler reaches temperatures that can cause serious burns if touched. NEVER touch hot surfaces.

M—Spark Plug Cap (Wire)

Delivers voltage to spark plug. When spark plug needs service, cap must be removed.

N—Carbon Canister

Reduces hydrocarbon emissions.

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5: PREPARING FOR SERVICE

WARNING

ANYONE using or servicing this generator must read, understand, and follow all safety and operation instructions provided in this manual. Failure to closely follow these instructions can result in circumstances leading to death, serious injury, and property damage.

5.1 REQUIRED TOOLS

A complete set of standard and metric shop tools are required to service the generator. Also needed are:

- Hammer
- Torque wrench
- Volt-ohm meter
- Frequency meter
- Resistive load - such as a load bank, heaters, light bulbs, etc.
- Wood block (for rotor support)

5.2 TRANSPORTING GENERATOR

WARNING



Hot engine or exhaust system can cause serious burns or fires. Cool generator completely before transporting or storing.

When transporting the generator:

- Press engine control switch to STOP position.
- Turn fuel shut-off valve to OFF position.
- Keep generator level to prevent fuel spillage.

NOTICE

NEVER drop, strike, or place heavy objects on generator when transporting.

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6: SERVICE REPAIR TIME ANALYSIS & FLAT RATE SCHEDULE

Operation	HW7000EH (min.)
ELECTRICAL	
Alternator Complete	120
Battery	30
Brush Assembly	45
Charging Coil Assembly	45
Flash the Field	45
Front Panel Assembly	60
Ignition Coil	50
Meters / Circuit Breakers	45
Oil Shutdown Switch	40
Oil Alert Sender	40
Receptacles / Ports	50
Recoil Assembly	30
Spark Plug	30
Electric Starter	45
Starter Solenoid	35
Voltage Regulator	60
ENGINE	
Refer to the Honda Shop Manual	
FUEL & EXHAUST	
Carbon Canister (with bracket)	45
Carbon Canister Tube	30
Fuel Gauge	30
Fuel Line	30
Fuel Tank	60
Fuel Shut-off Valve	40
Muffler	60
Muffler Gasket	60
MISC	
Frame	120
Handle Assembly	30
Leg Assembly	30
Wheel Assembly	30

NOTE:

Repair times represent generally accepted intervals for conducting a repair. Service centers are always advised to provide feedback during the warranty claim process if additional time may be needed due to unforeseen circumstances.

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7: MAINTENANCE

7.1 CONSUMER MAINTENANCE SCHEDULE

Periodic maintenance and adjustment are necessary to keep the generator in good operating condition. Perform service and inspection at intervals shown in the *Generator Maintenance Schedule* (Table 7-1).

⚠ DANGER

Using a generator indoors CAN KILL YOU IN MINUTES. Generator exhaust contains carbon monoxide. This is a poison you cannot see or smell.



NEVER use inside a home or garage, EVEN IF doors and windows are open.



Only use OUTSIDE and far away from windows, doors, and vents.

- Shut off the engine before performing any maintenance. If the engine must be run, be sure the area is well ventilated.

NOTICE

Maintenance, replacement, or repair of the emission control devices and systems may be performed by any non-road engine repair establishment or individual.

⚠ WARNING

Accidental starting of generator can cause severe injury or death. Before performing maintenance, disconnect spark plug cap from spark plug. Also disconnect both starting battery cables. Remove the negative (-) cable first to reduce the risk of arcing.

⚠ WARNING

Improper maintenance, or failure to correct a problem before operation, can cause a malfunction in which you can be seriously hurt or killed. Always follow inspection and maintenance recommendations and schedules in this manual.

NOTICE

The maintenance schedule applies to normal operating conditions. If you operate generator under severe conditions, such as sustained high-load or high-temperature, or use it in unusually wet or dusty conditions, consult your servicing dealer for recommendations applicable to your individual needs and use.

MAINTENANCE TASK	FREQUENCY*				
	Before each use	First month or 20 hours of use	Every 3 months or 50 hours of use	Every 6 months or 100 hours of use	Every year or 300 hours of use
Inspect for/clean debris	X				
Check engine oil level	X				
Change engine oil		X		X	
Check air filter	X				
Clean air filter			X†		
Replace air filter					X
Run engine			X‡		
Check/adjust spark plug				X	
Replace spark plug					X
Clean fuel sediment cup				X	
Clean spark arrestor				X	
Clean cylinder cooling fins					X**
Check/adjust idle speed					X**
Check/adjust valve clearance					X**
Clean fuel tank and filter				X	
Clean combustion chamber	Every 500 hours**				
Check fuel tube	Every 2 years (replace if necessary)**				

TABLE 7-1. Generator Maintenance Schedule

* Perform at every indicated month or operating hour interval, whichever comes first.

† Clean more often when using generator in dusty areas.

‡ It is recommended that the generator is run for 30-60 minutes every three months to ensure the battery remains charged.

If the unit is stored for more than a year without running, a battery charger may be required to recharge the generator battery.

** These items should be serviced by a Honda service dealer, unless you have the proper tools and are mechanically proficient. Refer to the Honda shop manual for service procedures.

CONSUMER MAINTENANCE SCHEDULE

FUEL RECOMMENDATIONS

 DANGER	
	Fuel and fuel vapors are extremely flammable and explosive under certain conditions.
	
• Refuel generator only outdoors, in a well-ventilated area. • NEVER fill fuel tank while engine is running. Turn generator OFF and allow to cool before filling with fuel. • NEVER smoke or allow flames or sparks near generator or where gasoline is stored. • NEVER overfill fuel tank (no fuel should be in filler neck). After refueling, be sure fuel tank cap is closed properly and securely. • Be careful not to spill fuel when refueling. Spilled fuel or fuel vapor may ignite. If any fuel is spilled, be sure area is dry before starting engine. • Avoid repeated or prolonged contact with skin or breathing of vapor.	

NOTICE
To avoid damage to the engine, never use stale or contaminated gasoline or oil/gasoline mixture. Avoid getting dirt or water in the fuel tank.
Use fresh gasoline with a pump octane rating of 86 or higher.

ENGINE OIL RECOMMENDATIONS

NOTICE
It is very important to maintain proper level of engine oil to keep engine in good running condition.
• Check engine oil level prior to each use. Refill engine oil if oil level is too low.

See the Honda Owner's Manual for instructions on how to properly maintain the engine.

Contact an authorized Honda service dealer for engine maintenance and repairs. In some locations, authorized Honeywell service dealers are also Honda service dealers. Contact your local dealer before transporting your generator for service.

 WARNING	
	ALWAYS stop engine before removing oil fill dipstick. Crankcase pressure can cause hot engine oil to spray out of engine fill hole. Hot engine oil can cause severe burns.

 WARNING	
	Gasoline and flammable solvents can cause fire or explosion. NEVER use gasoline or flammable solvent to clean air filter element.
	
• Use only household soap and water to clean air filter element.	

 CAUTION	
Frequent or prolonged contact with engine oil may cause skin cancer.	
• Thoroughly wash hands and any areas of skin exposed to used oil with soap and water.	

CLEANING FUEL SEDIMENT CUP

7.2 CLEANING FUEL SEDIMENT CUP

The sediment cup prevents any dirt or water that may be in the fuel tank from entering the carburetor.

Clean fuel sediment cup at the intervals specified in Table 7-1.

To clean fuel sediment cup, you will need:

- ☐ 10 mm box wrench
- ☐ 22 mm open end wrench
- ☐ Household soap and water
- ☐ Clean, dry cloth

To clean fuel sediment cup:

1. Stop the engine if it is running. Allow to completely cool.
2. Place generator on a flat, level surface.
3. Turn the fuel shut-off valve to the OFF position.
4. While holding the fitting above the fuel shut-off valve with a 22 mm open end wrench, remove the fuel sediment cup assembly (sediment cup, o-ring, and fuel screen) using a 10 mm box wrench.

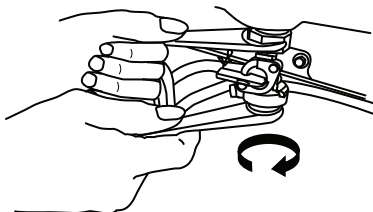


FIGURE 7-1: Fuel Sediment Cup Assembly Removal

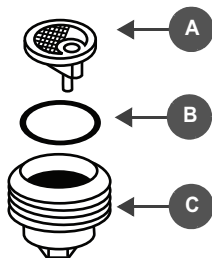


FIGURE 7-2: Fuel Sediment Cup Assembly

5. Clean the fuel screen (A), o-ring (B), and sediment cup (C), with soap and water.
6. Rinse parts thoroughly with water.
7. Wipe the pieces clean with a clean, dry cloth.
8. Reinstall the sediment cup, o-ring, and fuel screen.
9. Turn the fuel shut-off valve to the ON position.
10. Start generator and check for leaks.

7.3 CLEANING SPARK ARRESTOR SCREEN

WARNING



Muffler reaches temperatures that can cause serious burns if touched. NEVER touch hot surfaces.

Generator muffler is equipped with spark arrestor screen, which must be cleaned according to maintenance schedule (Table 7-1).

To clean spark arrestor screen, you will need:

- ☐ #2 Phillips screwdriver
- ☐ Wire brush

1. Stop generator if engine is running. Allow to completely cool.
2. Place generator on a flat, level surface.
3. Use a Phillips screwdriver to remove the spark arrestor screws and washers.
4. Remove the spark arrestor.

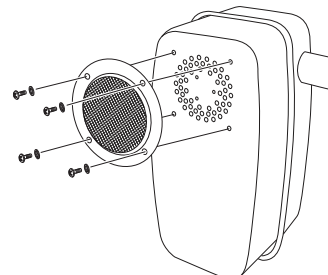


FIGURE 8: Spark Arrestor Assembly

5. Inspect the spark arrestor screen.
 - If the screen is damaged or excessively worn, replace the spark arrestor.
 - If the screen is in good condition, clean using a wire brush.

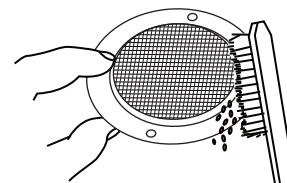


FIGURE 9: Clean Screen

6. Reinstall spark arrestor carefully aligning screw holes.

BATTERY SERVICE

7.4 BATTERY SERVICE

To ensure the battery remains charged, it is recommended that the generator is started every three months. If the unit is stored for more than a year without running, a battery charger may be required to recharge the generator battery.

Recommended Battery Replacement:

Xtreme	XTAX14AHL-BS
Yuasa	12N14-3A

TABLE 8. Replacement Batteries

To replace battery:

1. Loosen and remove nuts on retaining plate; slide retaining plate off support rods.

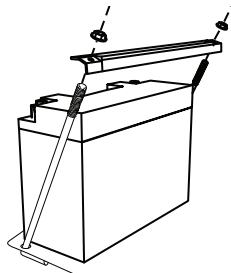


FIGURE 10: Electric Start Battery—Remove Retaining Plate

2. Tip battery slightly forward.
3. Disconnect the black negative (-) battery lead removing the boot, bolt, and nut.

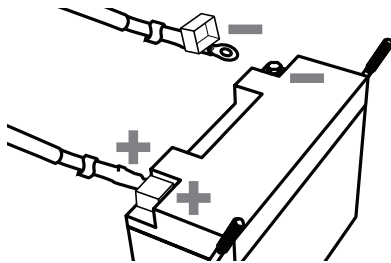


FIGURE 12: Electric Start Battery—Lead Connection

4. Disconnect the red positive (+) battery lead removing the boot, bolt, and nut.
5. Remove the battery.

NOTE:

Dispose of used battery according to guidelines established by your local or state government.

6. Place the new battery in the generator frame.
7. Connect the red positive (+) battery lead to the positive (+) post on the battery; install bolt, nut, and boot.
8. Connect the black negative (-) battery lead to the negative (-) post on the battery; install bolt, nut, and boot.
9. Reinstall retaining plate; tighten bolts and nuts.

8: TROUBLESHOOTING

WARNING



NOTE:

ANYONE using or servicing this generator must read, understand, and follow all safety and operation instructions provided in the product manual. Failure to closely follow these instructions can result in circumstances leading to death, serious injury, and property damage.

DANGER

Using a generator indoors CAN KILL YOU IN MINUTES. Generator exhaust contains carbon monoxide. This is a poison you cannot see or smell.



NEVER use inside a home or garage, EVEN IF doors and windows are open.

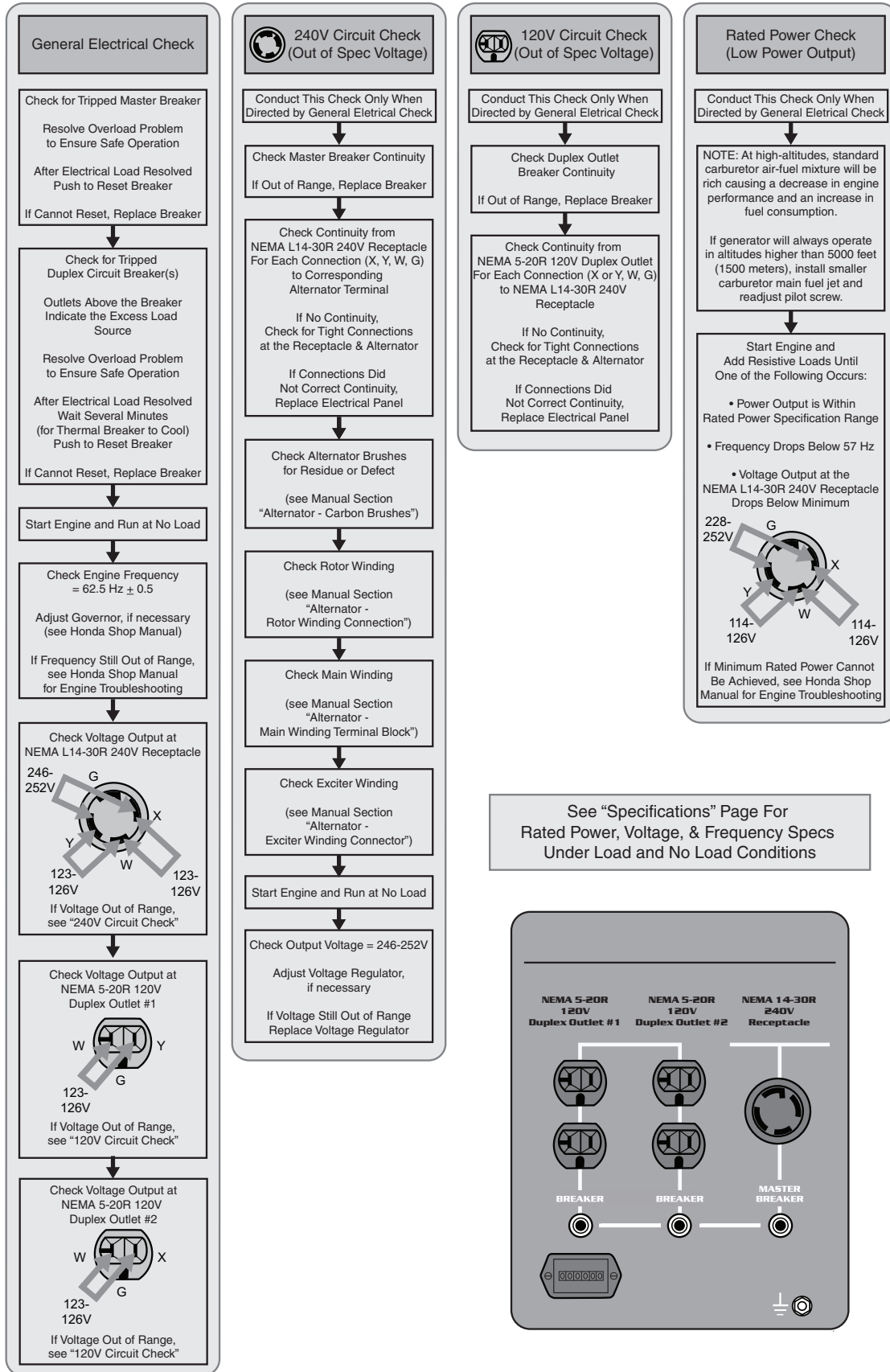


Only use OUTSIDE and far away from windows, doors, and vents.

NOTE:

For all dealer service inquiries, call 1-877-HWTECHS (498-3247) or visit www.honeywellgenerators.com.

8.1 ELECTRICAL DIAGNOSTICS



9: SERVICE AND DISASSEMBLY

9.1 FUEL TANK SYSTEM

⚠ WARNING



Fuel and its vapors are extremely flammable and explosive under certain conditions.



- Refuel the generator only outdoors, in a well-ventilated area.
- NEVER enclose the generator in any structure.
- Keep generator at least 6 feet (2 meters) away from buildings, other equipment, and combustible materials during operation.
- NEVER fill the fuel tank while the engine is running. Turn the generator OFF and allow it to cool before filling with fuel.
- NEVER smoke or allow flames or sparks near the generator or where gasoline is stored.
- NEVER overfill the fuel tank (there should be no fuel in the filler neck). After refueling, make sure the tank cap is closed properly and securely.
- Be careful not to spill fuel when refueling. Spilled fuel or fuel vapor may ignite. If any fuel is spilled, be sure the area is dry before starting the engine.
- Avoid repeated or prolonged contact with skin or breathing of vapor.

A—FUEL GAGE

After reassembly, check float for proper operation.

B—FUEL CAP

Be sure air vent hole is clean and free of obstruction. Blow with compressed air if necessary.

C—FUEL STRAINER

Before reassembly, be sure fuel strainer is clean and undamaged.

D—FUEL TANK MOUNTING HARDWARE

10 N•m (7 lb. ft.)

E—FUEL TANK

Before reassembly, clean fuel tank to remove any sediment and dry thoroughly.

F—FUEL SCREEN

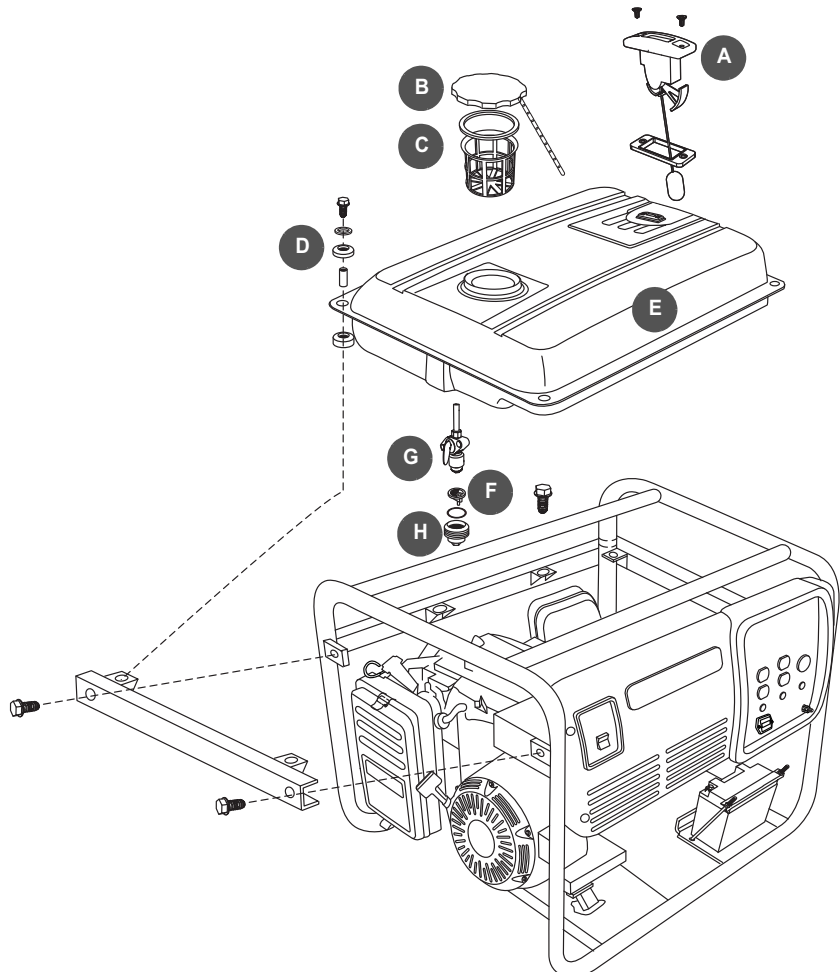
See CLEANING FUEL SEDIMENT CUP, page 7-3.

G—FUEL SHUT-OFF VALVE

Clear passages if clogged.
After reinstalling, check for fuel leakage.
Hex fitting - 24 N•m (17 lb. ft.)

H—FUEL SEDIMENT CUP

See CLEANING FUEL SEDIMENT CUP, page 7-3.



EMISSIONS CONTROL SYSTEM

9.2 EMISSIONS CONTROL SYSTEM

A—CARBON CANISTER

B—CARBON CANISTER TUBE

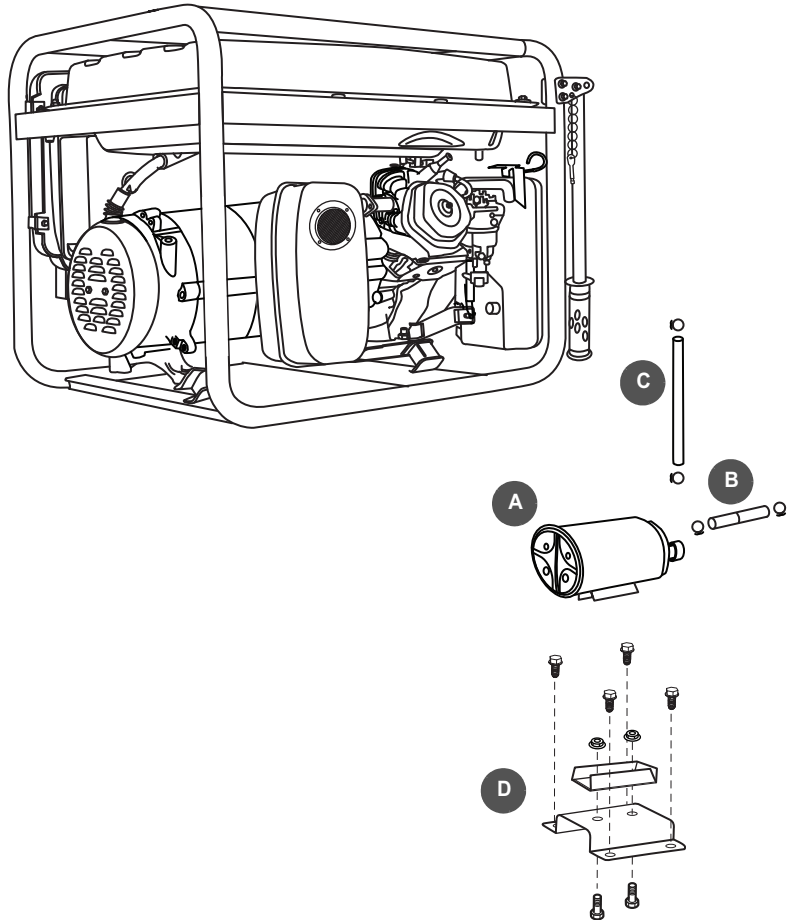
Secure with hose clamps.

C—VAPOR LINE

Secure with hose clamps.

D—CARBON CANISTER BRACKET

2 N•m (1.5 lb. ft.)



9.3 MUFFLER

⚠ WARNING



The muffler becomes very hot during operation and remains hot for a while after stopping the engine.

- NEVER touch hot surfaces and avoid hot gases.
- Let engine cool before storing the generator indoors.

A—EXHAUST PIPE

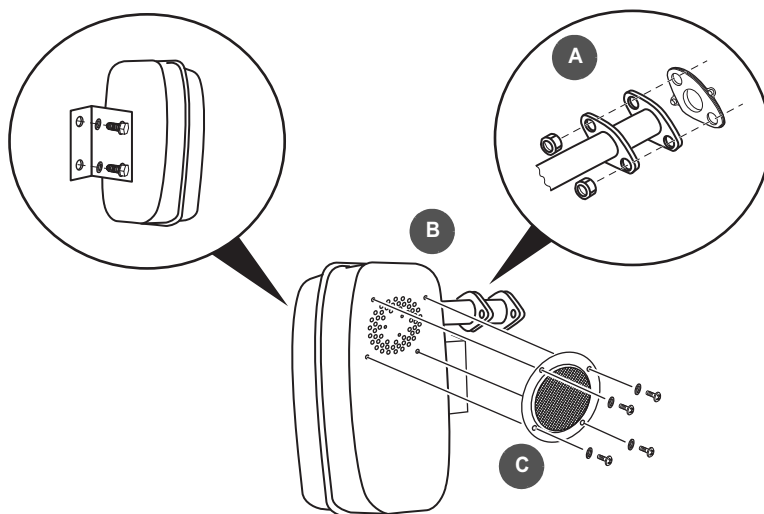
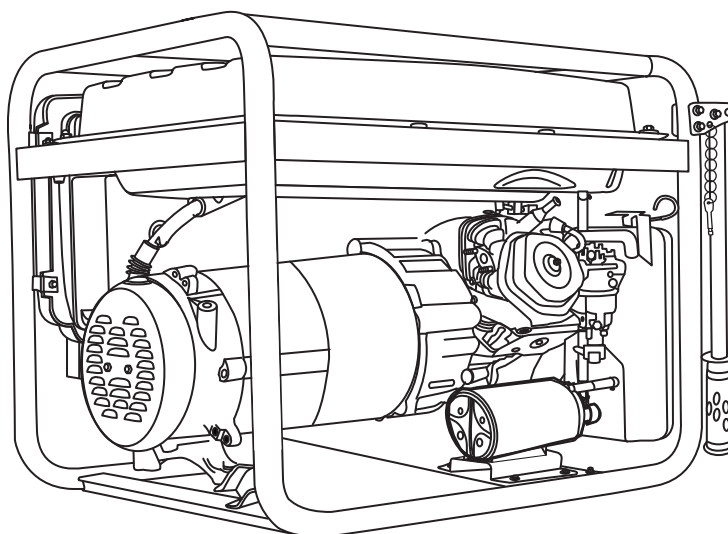
Exhaust pipe nuts:
24 N•m (17 lb. ft.)

B—MUFFLER

29 N•m (22 lb. ft.)

C—SPARK ARRESTOR SCREEN

2 N•m (1.5 lb. ft.)



ENGINE AND ALTERNATOR

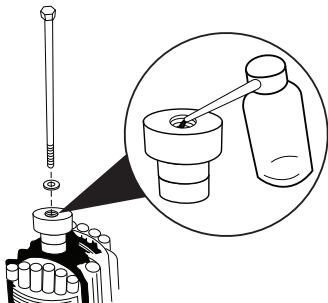
9.4 ENGINE AND ALTERNATOR

A—END COVER

4 N•m (3 lb. ft.)

B—ROTOR BOLT

Use oil before replacing the rotor bolt.



C—ALTERNATOR HOUSING BOLTS

48 N•m (35 lb. ft.)

D—ALTERNATOR REAR HOUSING AND STATOR

See ALTERNATOR, page 9-5.

E—ROTOR

See ROTOR, page 9-4.

F—ENGINE

Contact an authorized Honda service dealer for engine maintenance and repairs.

G—VIBRATION ISOLATOR

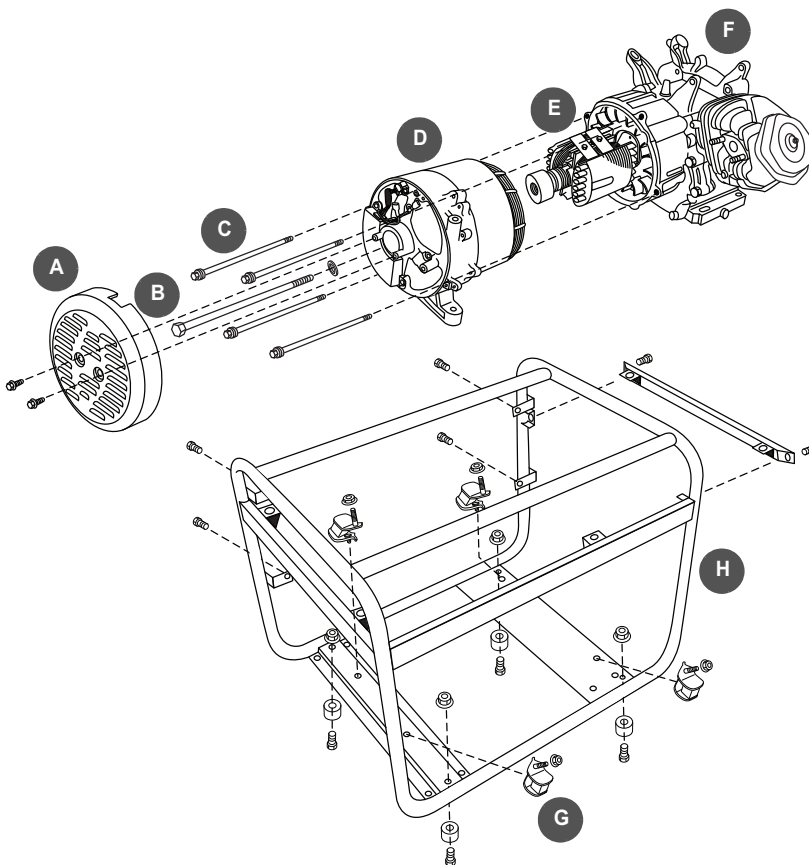
Insert tabs into holes.

Be sure rubber is not chipped, hardened, or worn.

Refer to illustration for proper positioning.

H—FRAME

See WHEEL, LEG, & HANDLE ASSEMBLY, page 9-9.



9.5 ALTERNATOR

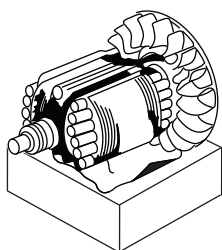
A—ALTERNATOR ENGINE ADAPTER

B—ROTOR

Use appropriate tool to remove rotor.

NOTICE

Rotor can become damaged if not properly supported. Place wooden block and rag underneath rotor for support.



C—STATOR

D—MAIN WINDING TERMINAL BLOCK

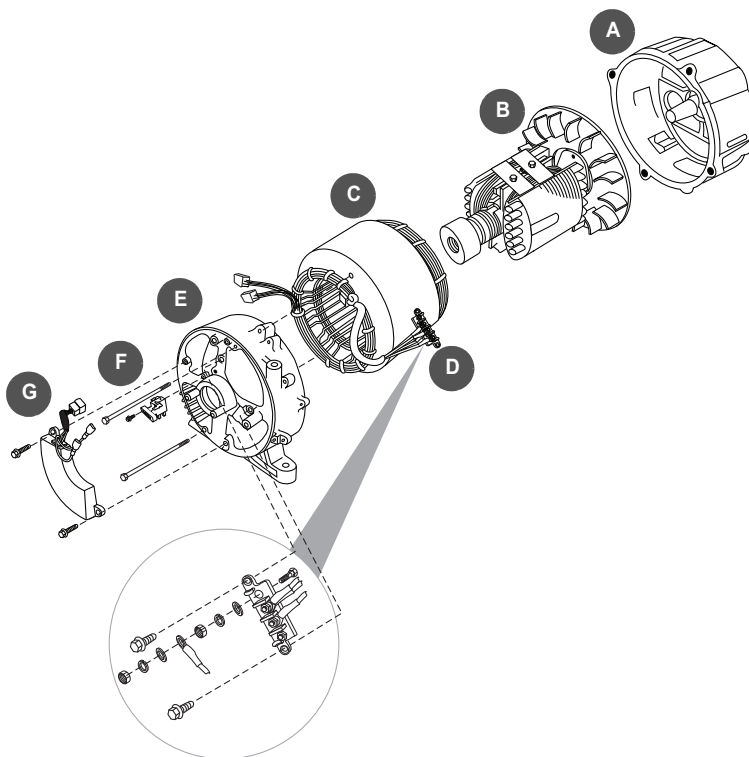
E—ALTERNATOR REAR HOUSING

F—BRUSH ASSEMBLY

Before removing rotor and stator, remove brush assembly.

2 N•m (1.5 lb. ft.)

G—VOLTAGE REGULATOR



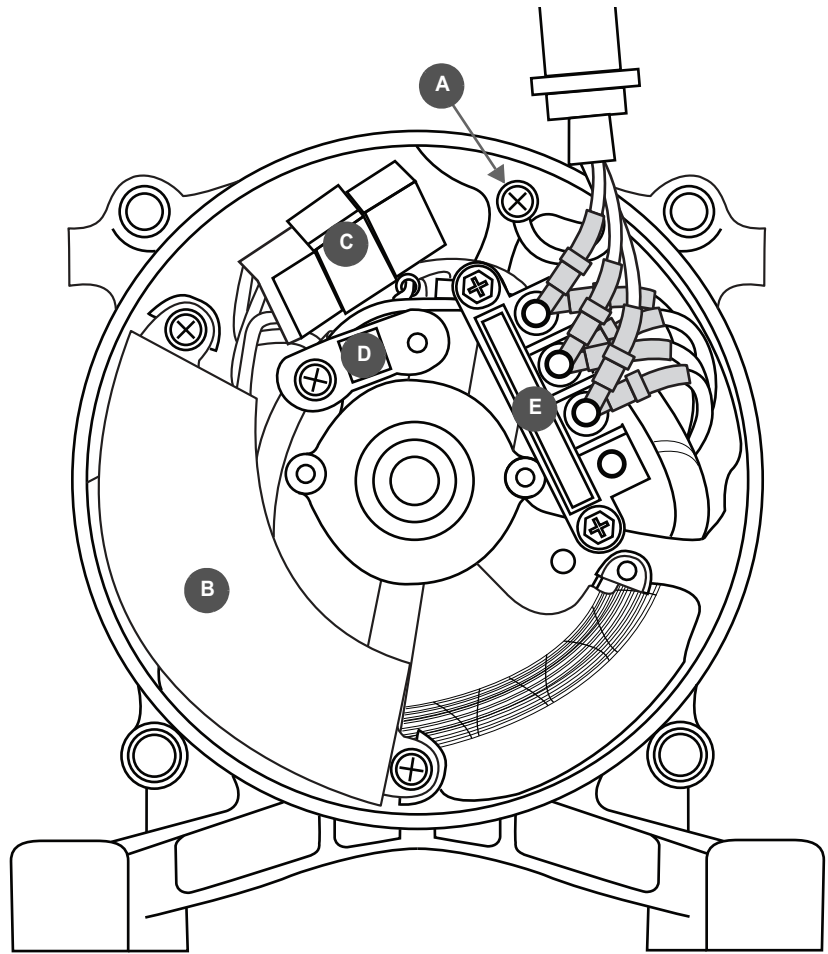
ALTERNATOR

A—GROUND CABLE

B—VOLTAGE REGULATOR

Voltage can be adjusted via potentiometer on rear of voltage regulator (120/240 volts $\pm 5\%$).

Replace voltage regulator if adjustment does not correct the problem.



C—EXCITER WINDING CONNECTOR

Resistance Specifications*: 1.0-1.5 Ω

Using an ohmmeter, measure resistance between the two blue wires. If specified resistance is not obtained, replace alternator.

* The alternator must be at room temperature when resistance is measured.

Blue	Green
Blue	White

D—ROTOR WIRING

BRUSH ASSEMBLY

Remove carbon brushes from brush assembly. Inspect brushes for excessive wear or any other defect. Replace if length is less than 5 mm (.2 in.).

Using an ohmmeter, verify resistance is less than 0.1Ω between the tip of each brush and the terminal. If resistance is out of range, replace brushes.

NOTICE

Take care not to damage brushes when removing and installing the brush holder.

SLIP RINGS

Inspect slip rings for dust, rust, or other damage. If rings are dirty, wipe with clean, lint-free cloth. If rings are rusted or appear damaged, remove rotor and wipe with fine emory cloth.

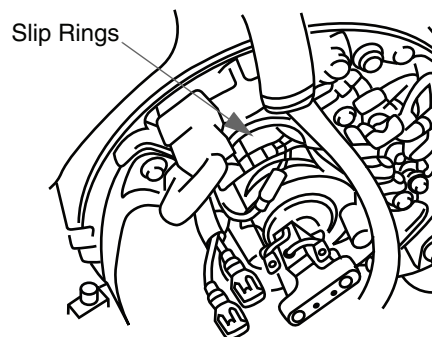
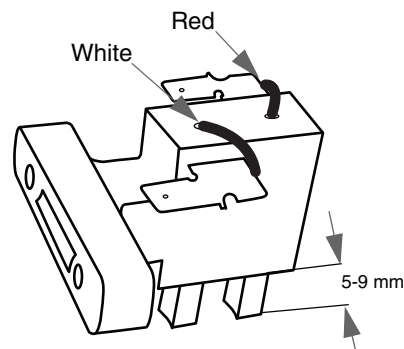
ROTOR WINDING CONNECTION

Resistance Specifications*: 45-70 Ω

Remove brushes and measure resistance between slip rings.

If specified resistance is not obtained at slip rings, replace alternator.

* The alternator must be at room temperature when resistance is measured.

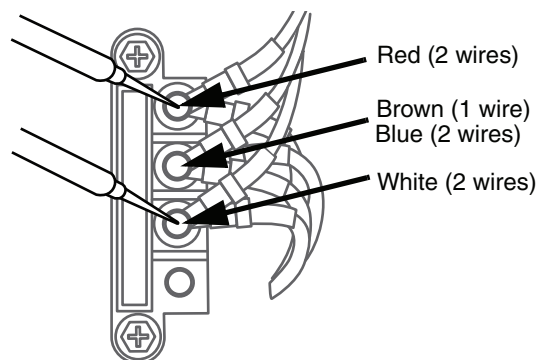


E—MAIN WINDING TERMINAL BLOCK

Resistance Specifications*: 0.3-0.5 Ω

Using an ohmmeter, measure resistance between the red and white wires. If specified resistance is not obtained, replace alternator.

* The alternator must be at room temperature when resistance is measured.



CONTROL PANEL

9.6 CONTROL PANEL

A—CONTROL PANEL ASSEMBLY (FRONT)

4 N•m (3 lb. ft.)

B—CONTROL PANEL ASSEMBLY (BACK)

C—MAIN CONTROL PANEL (FRONT)

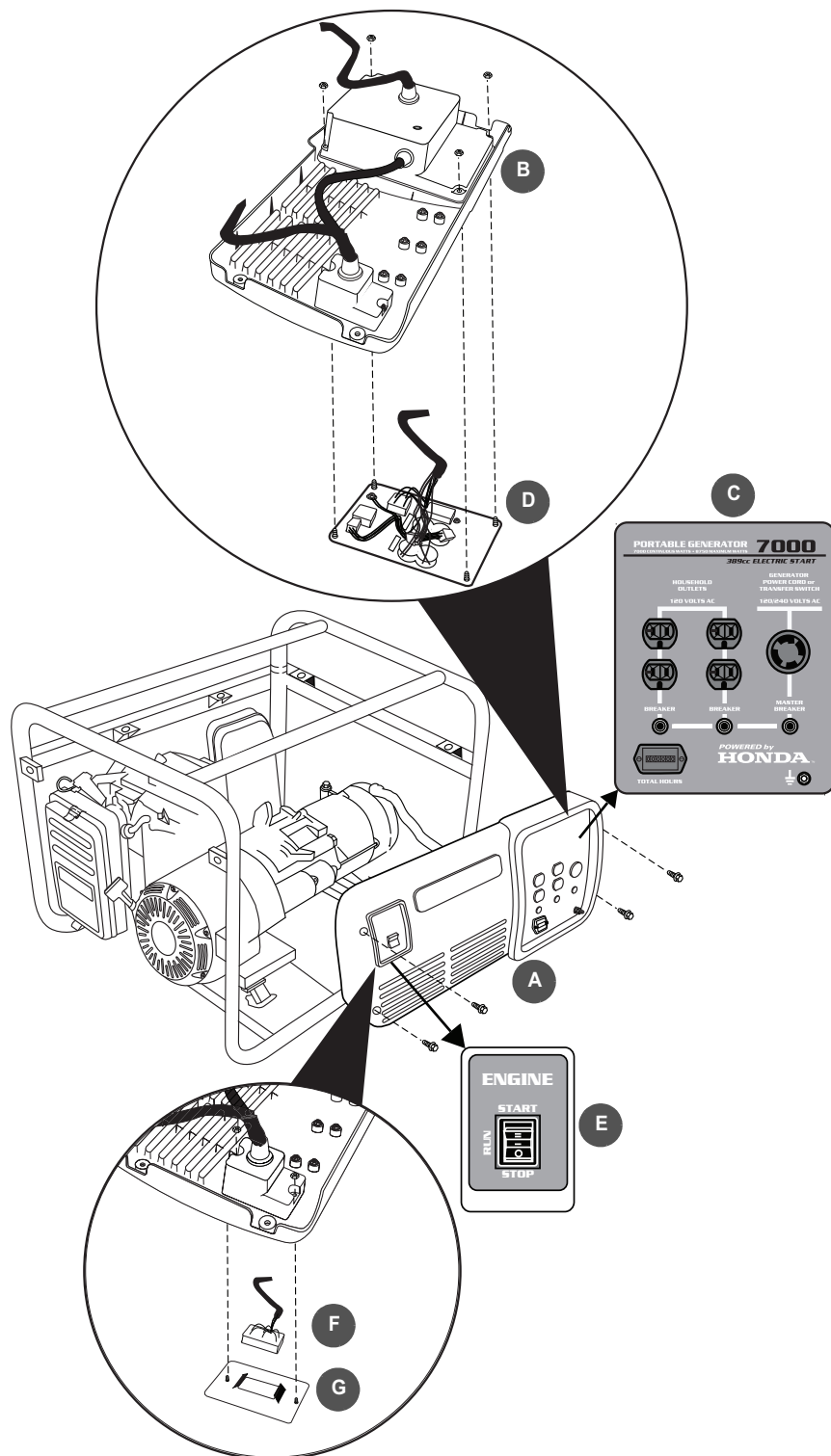
- 125VAC 20 Amp Duplex (NEMA 5-20R)
- 125/250VAC 30 Amp Twist-Lock (NEMA L14-30R)
- Master Circuit Breaker (Magnetic)
- Circuit Breaker (Thermal)
- Hour Meter

D—MAIN CONTROL PANEL (BACK)

E—SWITCH PLATE (FRONT)

F—START / STOP / RUN SWITCH

G—SWITCH PLATE (BACK)



WHEEL, LEG, & HANDLE ASSEMBLY

9.7 WHEEL, LEG, & HANDLE ASSEMBLY

A—WHEEL HANDLE PIVOT BRACKET

10 N•m (7 lb. ft.)

B—PIN AND CHAIN

C—HANDLE BAR

D—RUBBER HANDLE GRIP

E—AXLE

25 N•m (18 lb. ft.)

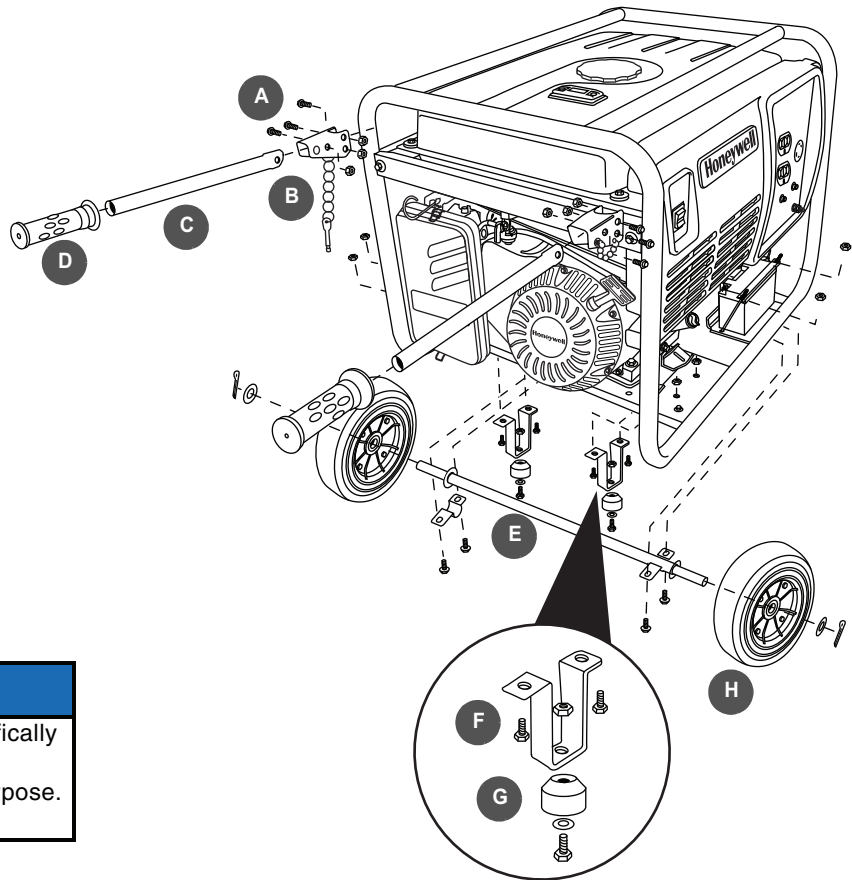
F—SUPPORT LEG

25 N•m (18 lb. ft.)

G—RUBBER STOPPER

25 N•m (18 lb. ft.)

H—WHEEL



NOTICE

- Wheel kit is intended to be used specifically with this generator.
- NEVER use wheel kit for any other purpose.
- NEVER use wheel kit on-road.

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Northshore Power Systems, LLC

4425 N. Port Washington Rd., Suite 105

Milwaukee, WI 53212-1082 USA

TEL 1-888-494-3571

www.honeywellgenerators.com

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