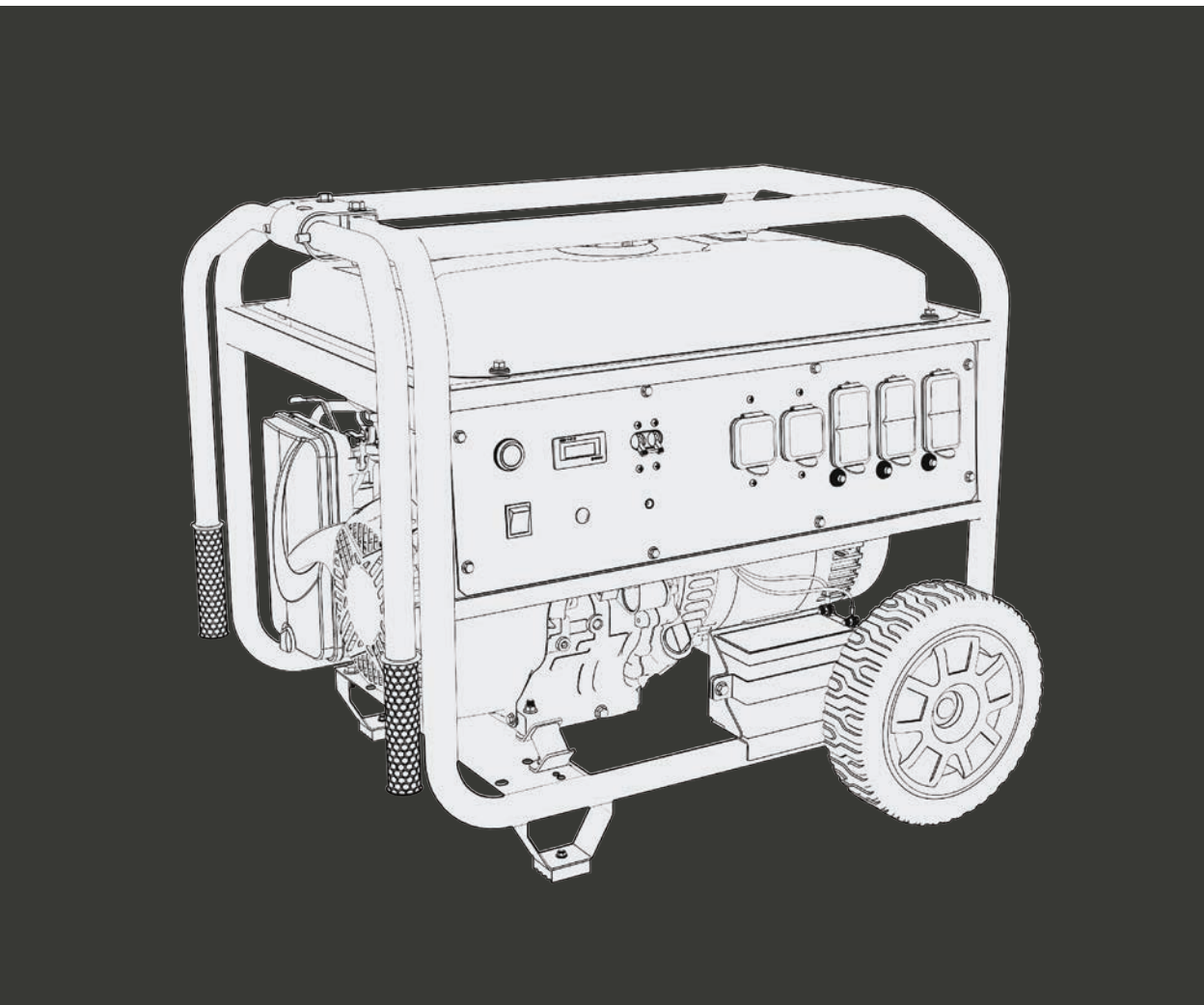
HYUNDAI

HG SERIES

User Manual



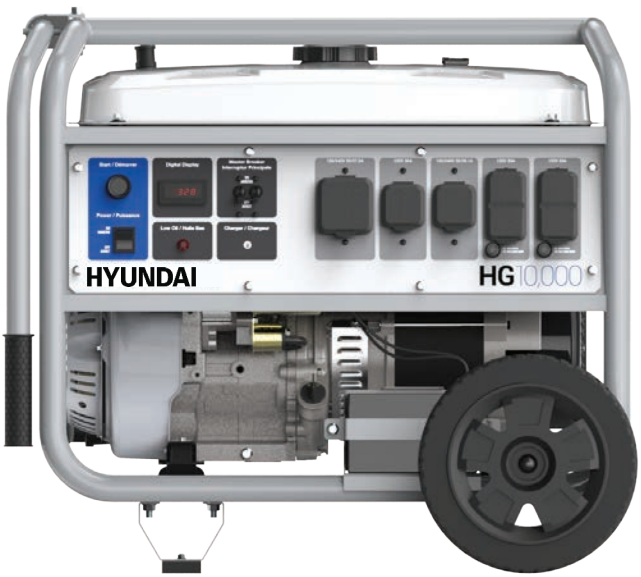
HYUNDAI

The engine exhaust from this product contains chemicals known to cause cancer, birth defects or other reproductive harm.

HG_UG_EN_2019-04-09

Thanks for choosing the HG Series!

You're excited to power up, so we'll keep this brief. Let's get started!



MASTER CONTRACT: 230179 REPORT: 70057567 PROJECT: 70108715

THIS PRODUCT MEETS ALL CERTIFICATION REQUIREMENTS FROM:

WE'VE GOT YOU COVERED!

Contact us by phone at 1-877-528-3772, email us at support@hyundaipower.ca, or visit us online at www.hyundaipower.ca if you have any questions

SAVE THESE INSTRUCTIONS

This user guide contains important instructions for your product, that should be followed during installation and maintenance of the generator.

This user guide covers the safety, operation and maintenance procedures for the HG1500, HG4050, HG6850, HG8750, and HG10,000.

All information in this publication is based on the latest product information available at the time of print.

Visit www.hyundaipower.ca for user guide updates and operation notices.

WARRANTY INFORMATION

YOU CAN REGISTER EASILY USING OUR ONLINE FORM:
www.hyundaipower.ca/warranty.php

See ‘Limited Warranty’ for more information.

Product registration will allow you to request warranty support in the future. Product registration is required for all product support and warranty coverage.

Warranty support, operation assistance and product support is provided by Midland Power Inc., a licensed manufacturer of Hyundai Power Equipment. Please contact us directly for any warranty service questions.

1-877-528-3772
support@hyundaipower.ca
www.hyundaipower.ca

HYUNDAI

TABLE OF CONTENTS

1. SAFETY

DANGER!

USING A GENERATOR INDOORS CAN KILL YOU IN MINUTES.

THE ENGINE EXHAUST FROM THIS PRODUCT CONTAINS CHEMICALS KNOWN TO CAUSE CANCER, BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

1.1 OPERATOR SAFETY

WARNING!

- Always perform an oil, fuel and air filter check before starting the engine.
- Properly clean and maintain the equipment.
- Operate the generator according to instructions for safe and dependable service.
- Before operating the generator, read the user guide carefully. Otherwise, it may result in personal injuries or equipment damage.
- Never run the generator in an enclosed area to avoid harm from exhaust emissions of a poisonous carbon monoxide gas.
- Be careful not to touch the exhaust system, compressor pump or discharge tubing during operation due to risk of burns.
- Pay attention to the warning labels. The engine exhaust system will become heated during operation and remain hot immediately after the engine is stopped.
- Gasoline is a highly flammable and explosive liquid. Refuel in a well ventilated area with the engine stopped.
- Use of gasoline with an ethanol content greater than 10% can damage the engine and fuel system and will void the manufacturer's warranty.
- When refueling the generator, keep it away from cigarettes, open flames, smoke and/or sparks.
- Place the generator at least 3 feet away from buildings or other equipment during operation.
- Run the generator on a level surface. Tilting the generator may result in fuel spills.
- Know how to stop the generator quickly and understand operation of all the controls. Never permit anyone to operate the generator without proper instructions.
- Keep children, pets and machinery with rotating parts away during operation.
- Do not operate the generator in rain or snow.

- Do not allow any moisture to come in contact with the generator.
- Do not touch the spark plug while the engine is operating or shortly after the engine has been shut down.

1.2 AC SAFETY

WARNING!

Before connecting the generator to an electrical device or power cord:

- Make sure that everything is in proper working order. Faulty devices or power cords can lead to an electrical shock.
- Turn off the generator immediately if the device begins to operate abnormally. Then disconnect the device and investigate the problem.
- Make sure that the electrical rating of the device does not exceed that of the generator. If the power level of the device is between the maximum output power and the running power of the generator, the generator should not be used for more than 30 minutes.
- Connections for standby power to a building's electrical system must be done by a qualified electrician and must comply with all applicable laws and electrical codes. Improper connections may cause serious injuries to electrical workers during a power outage, and when the utility power is restored, the generator may explode or cause fires. The generator shall be connected through transfer equipment that switches all conductors other than the equipment grounding conductor. The frame of the generator shall be connected to an approved grounding electrode.
- For power outages, permanently installed stationary generators are better suited for providing backup power to the home. Even a properly connected portable generator can become overloaded. This may result in overheating or stressing the generator components, possibly leading to a generator failure.

1.3 MAINTENANCE SAFETY

WARNING!

- After any maintenance is performed, wash immediately using soap and clean water because repeated exposure to lubricant may cause skin irritation.
- Do not clean the filter element with flammable liquids like gasoline because an explosion may occur.
- Turn off the engine before performing any maintenance. Otherwise it can

cause severe personal injury or death.

- Allow the generator set to cool down before performing any maintenance.
- Always wear safety glasses when cleaning the generator set with air.
- Do not clean the generator set with a pressure washer because it can cause damage to the generator set.
- When working with batteries, ventilate the area, use safety glasses, do not smoke. Always disconnect the negative first and reconnect it last.
- Use rubber gloves when coming into contact with engine oil.
- Always stop the generator set before removing the oil filler cap.
- Only qualified maintenance personnel with knowledge of fuels, electricity, and machinery hazards should perform maintenance procedures.
- Lubricate all exposed metal parts regularly. See 'Maintenance Schedule' for the recommended maintenance schedule.

1.4 OTHER SAFETY TIPS

WARNING!

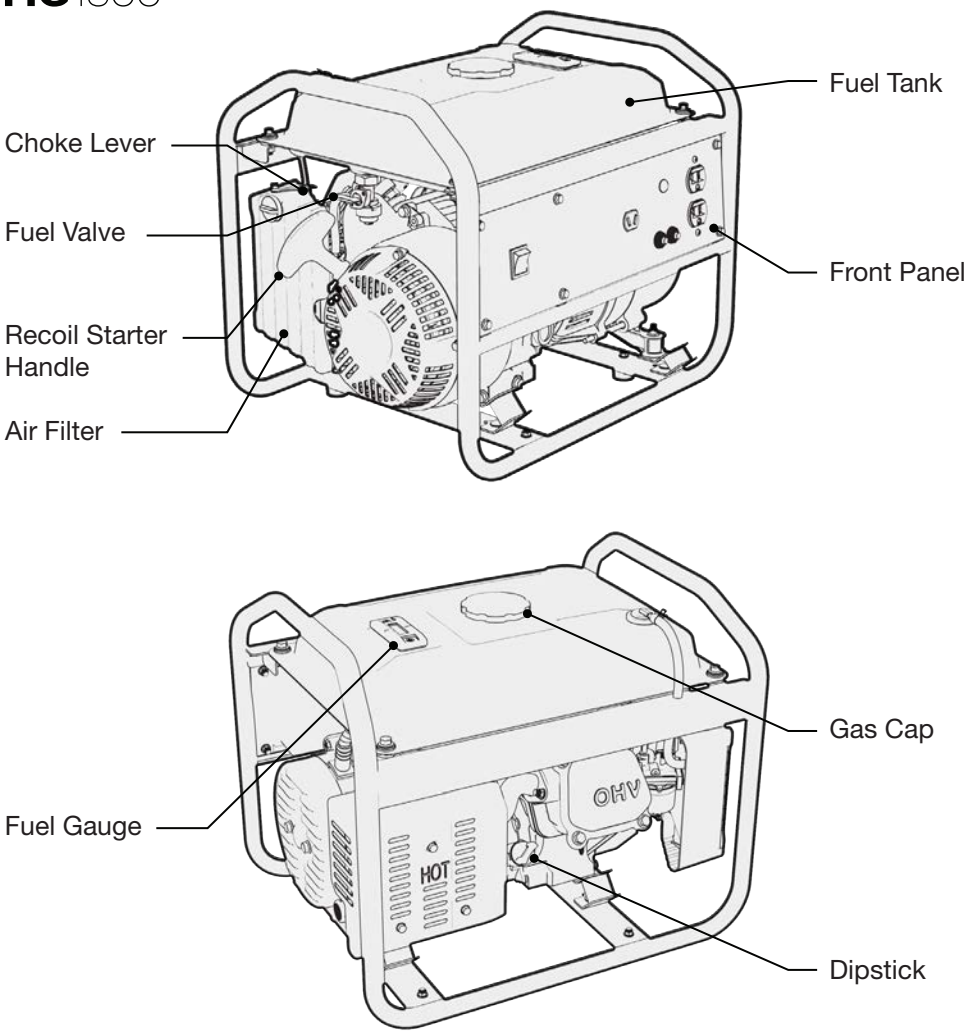
- To avoid breathing in poisonous carbon monoxide from the exhaust gases, adequate ventilation should be provided if the generator set is running in a partially enclosed space.
- If the generator set is stored outdoors, check all the electrical components on the control panel before each use. Moisture can damage the generator and can lead to an electric shock.
- Generators vibrate in normal use. During and after the use of the generator, inspect the generator as well as extension cords and power supply cords connected to it for damage resulting from vibration. Have damaged items repaired or replaced as necessary. Do not use plugs or cords that show signs of damage such as broken or cracked insulation or damaged blades.
- If you start to feel sick, dizzy, or weak after the generator has been running, move to fresh air RIGHT AWAY. See a doctor. You could have carbon monoxide poisoning.

2. LEARN ABOUT YOUR GENERATOR

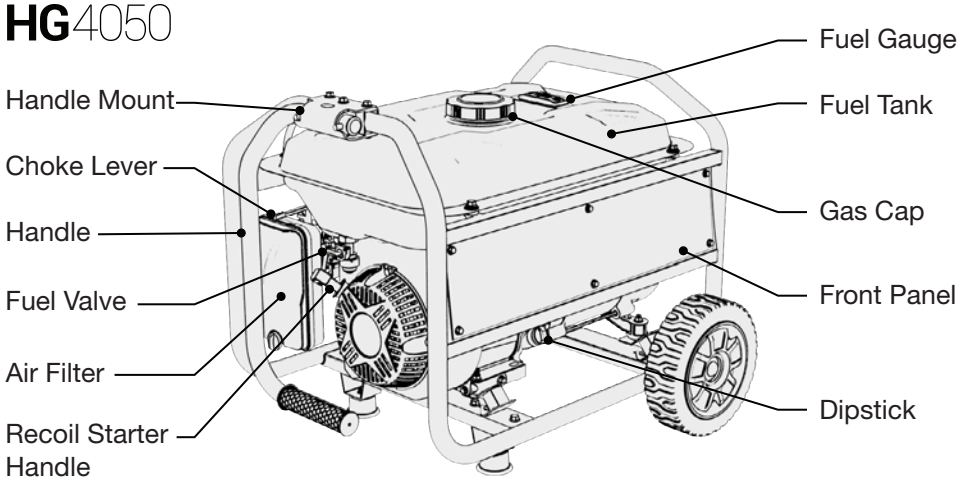
This section will show you how to identify key parts of your generator. Going over the terminology below will make sure we're on the same page.

2.1 COMPONENT IDENTIFICATION

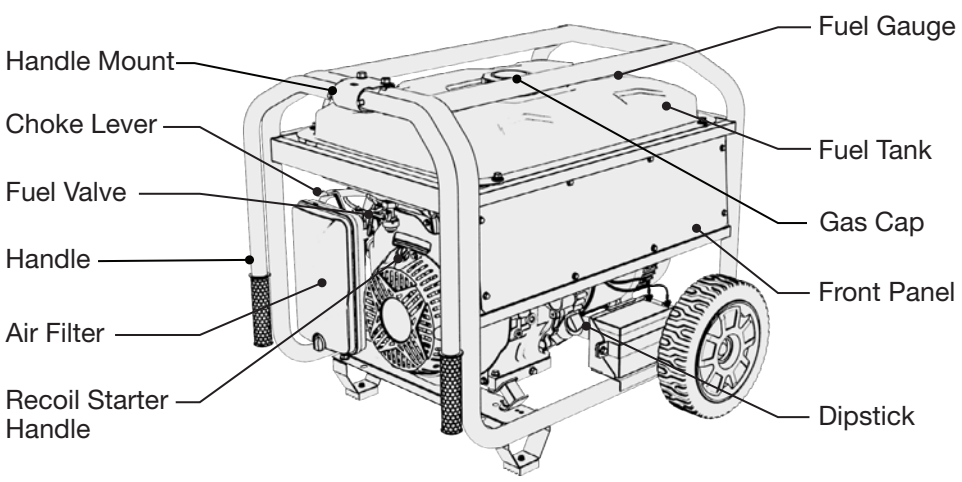
HG1500



HG4050

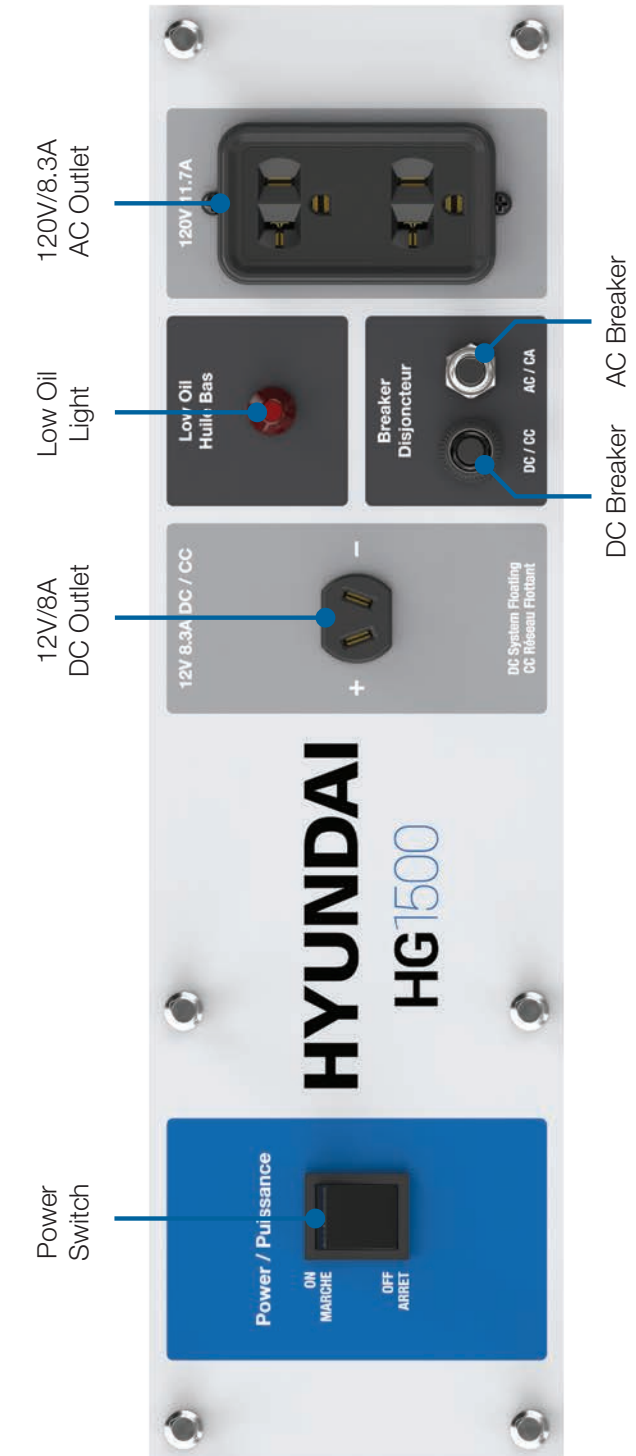


HG6850 | HG8750 | HG10,000

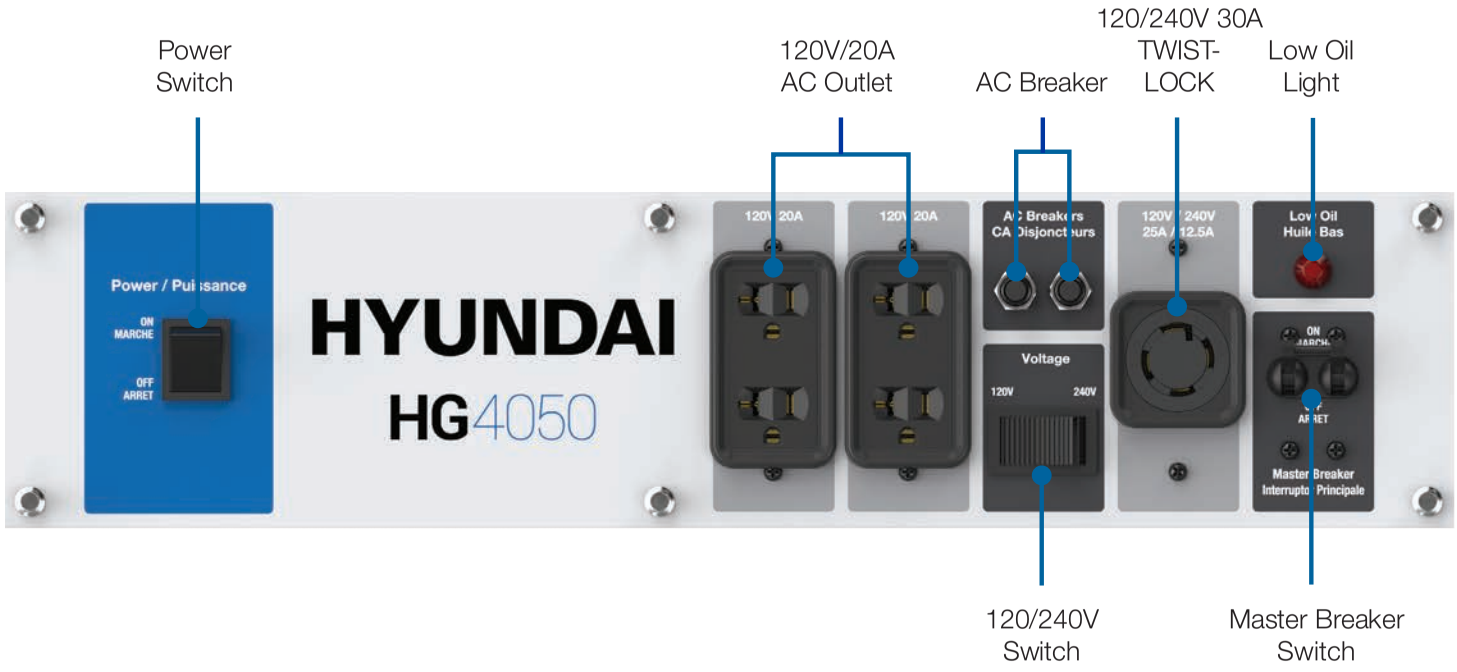


2.2 CONTROL PANEL

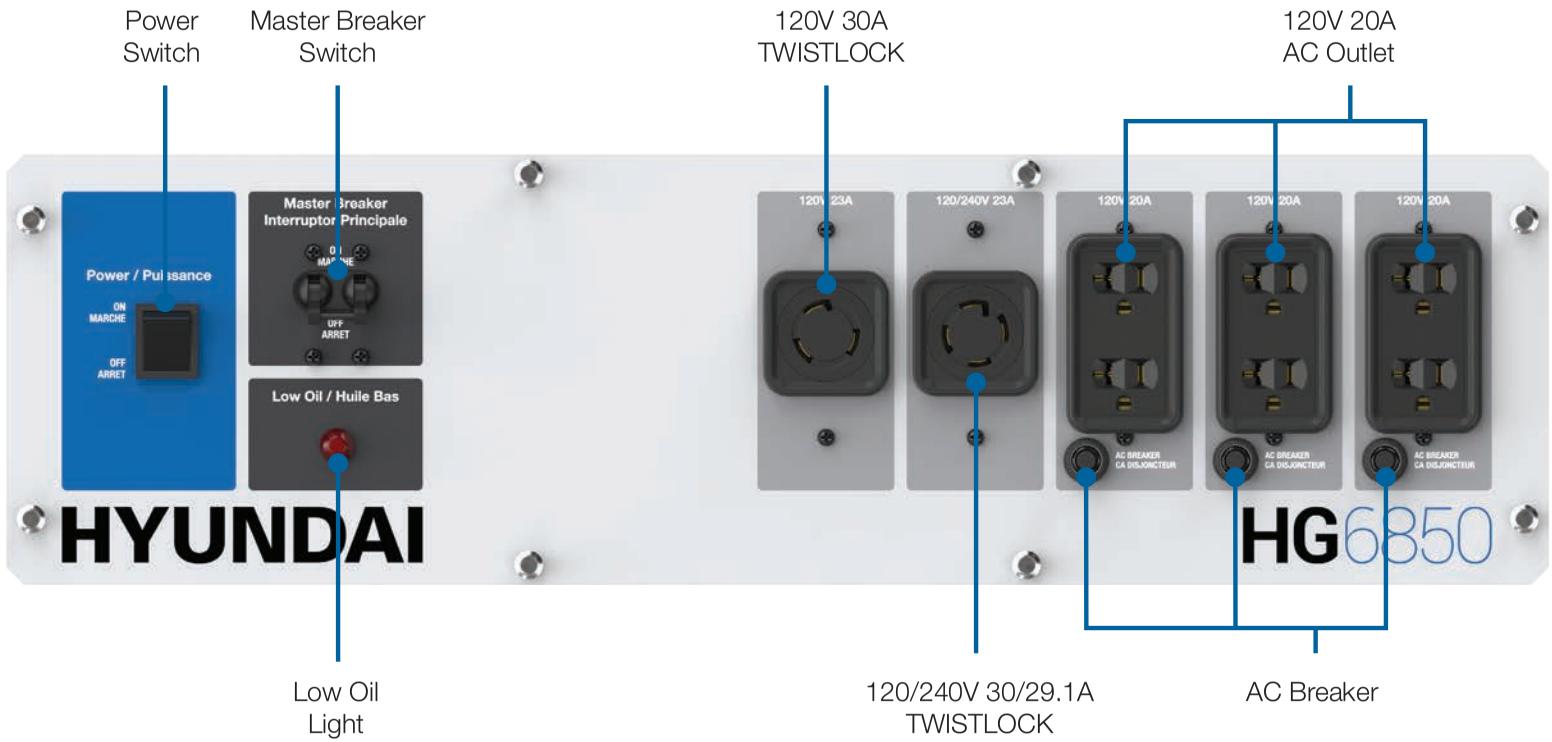
HG 1500 Control Panel



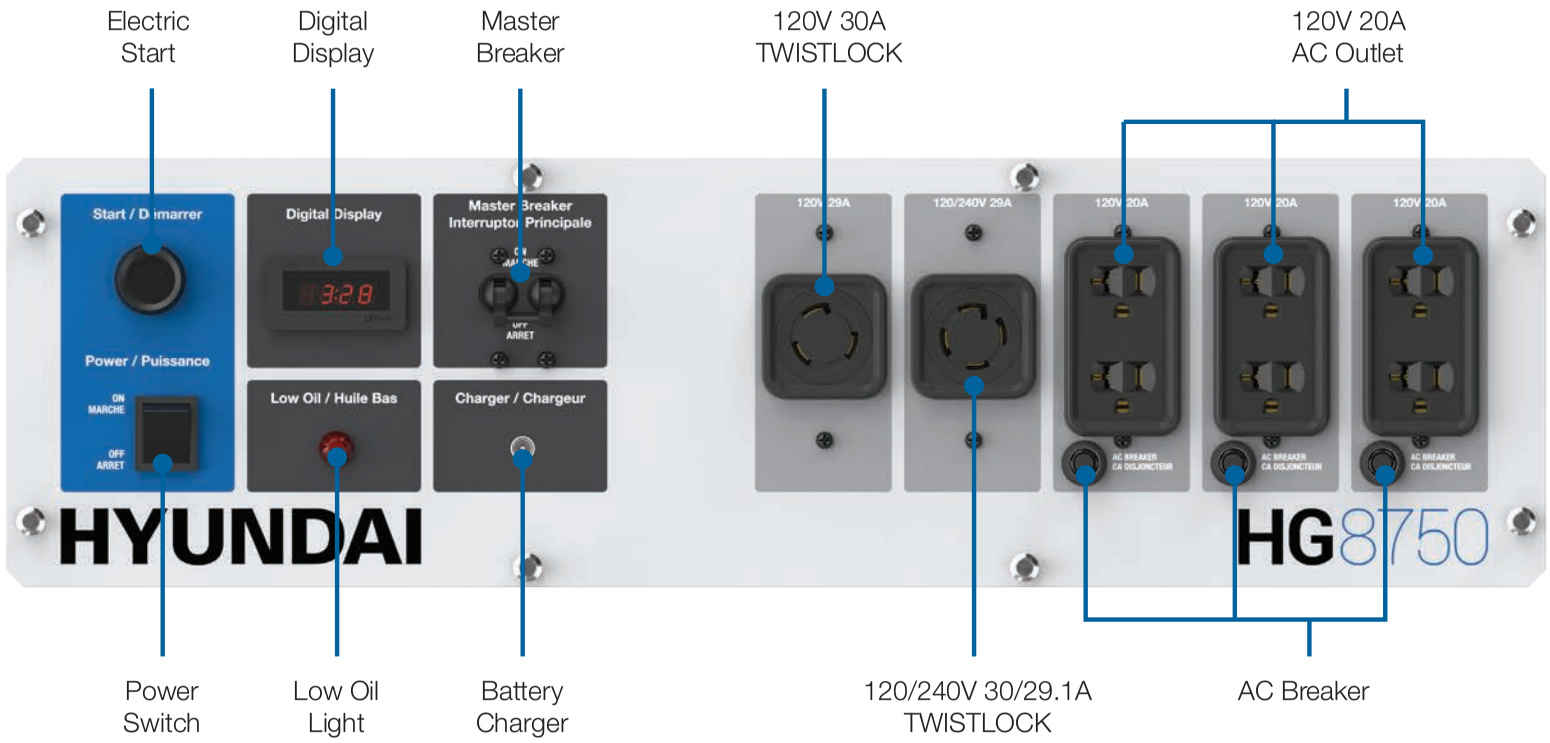
HG 4050 Control Panel



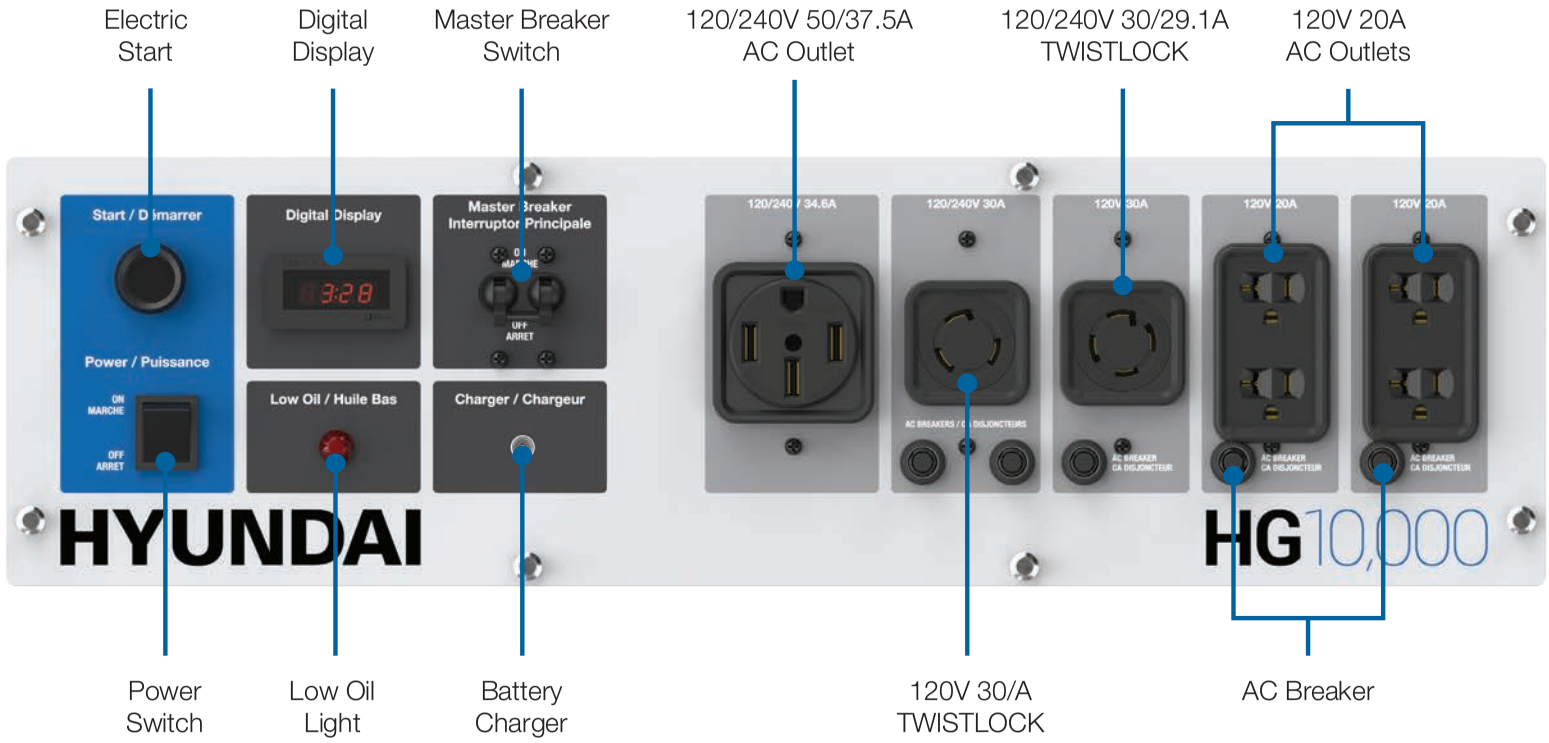
HG 6850 Control Panel



HG 8750 Control Panel



HG 10,000 Control Panel



CONTROL FUNCTIONS

AC Circuit Breakers

- While the generator is running, the breakers should be in the ON position.
- If the current has exceeded its limits the breaker will automatically pop out to the OFF position. Reduce the electrical load on the generator and push the button back to the ON position.

Low Oil Indicator Light

- The oil alert system is designed to prevent engine damage caused by an insufficient amount of oil in the crankcase. Before the oil level in the crankcase reaches an unsafe limit, the oil alert system will automatically shut down the engine (the power switch remains in the ON position).
- If the oil alert system shuts down the engine, the low oil indicator light (red) will turn on. Check the engine oil level.

Digital Multi-Display (HG8750, HG10,000)

- Digital display shows the voltage, frequency, session run time, and total run time. Perform maintenance at the proper intervals according to the 'Maintenance Schedule' section of this manual using the total life run time.

Battery Charging Port (HG8750, HG10,000)

- When the generator will be stored for an extended period of time plug the battery charger into a 120V outlet every two months to top up the battery and prolong its life.

Voltage Selector (HG4050)

- When the switch is set to 240V, the generator will produce both 120 and 240 volt output but only half the power will be available for any 120 volt receptacle. Full power is available from the 240 volt receptacle in this position.
- When the voltage selector is set to 120V, full power is available from any 120 volt receptacle.
- Always leave the switch in the 120V position when you don't require 240 volts. Select the voltage before turning on the generator.

2.4 MAKE SURE YOU HAVE EVERYTHING

Make sure your generator has everything listed in the table below.

ITEMS INCLUDED (HG1500)	QUANTITY
English user guide	**1**
French user guide	**1**
Engine oil	**1**
Oil funnel	**1**
Spark plug wrench	**1**
Metal bar for turning spark plug wrench	**1**

ITEMS INCLUDED (HG4050 - HG6850 - HG8750 - HG10,000)	QUANTITY
English user guide	**1**
French user guide	**1**
Engine oil	**1**
Oil funnel	**1**
Spark plug wrench	**1**
Metal bar for turning spark plug wrench	**1**
Wheel axle	**2**
Wheels	**2**
Cotter Pin	**2**
Foot	**2**
Foot mounting bracket	**2**
Foot mounting nut	**4**
Foot bolt	**2**
Foot locking nut	**2**
Handle and rubber grip	**1**
Handle mounting bracket	**1**
Handle mounting bracket interior (top)	**1**
Handle mounting bracket interior (bottom)	**1**
Handle locking pin and chain	**1**
Handle mounting bolts	**2**
Handle mounting nut	**2**

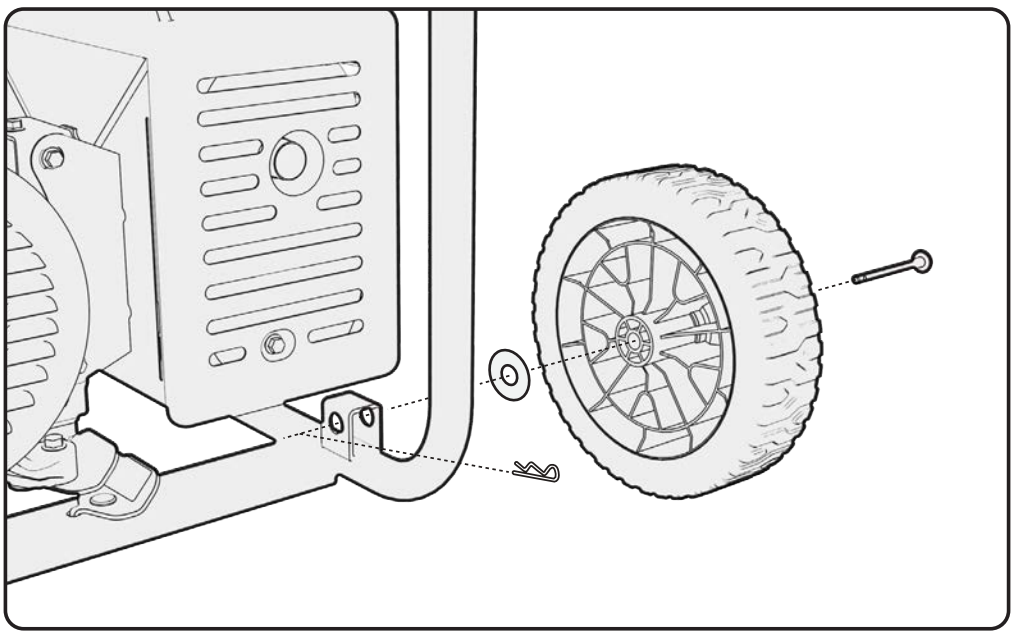
2.5 ASSEMBLY INSTRUCTIONS

Setup of your HG generator is designed to get you up and running as quickly as possible. If equipped with your generator, install the wheel, handle, and feet kits, then continue on to chapter 3.

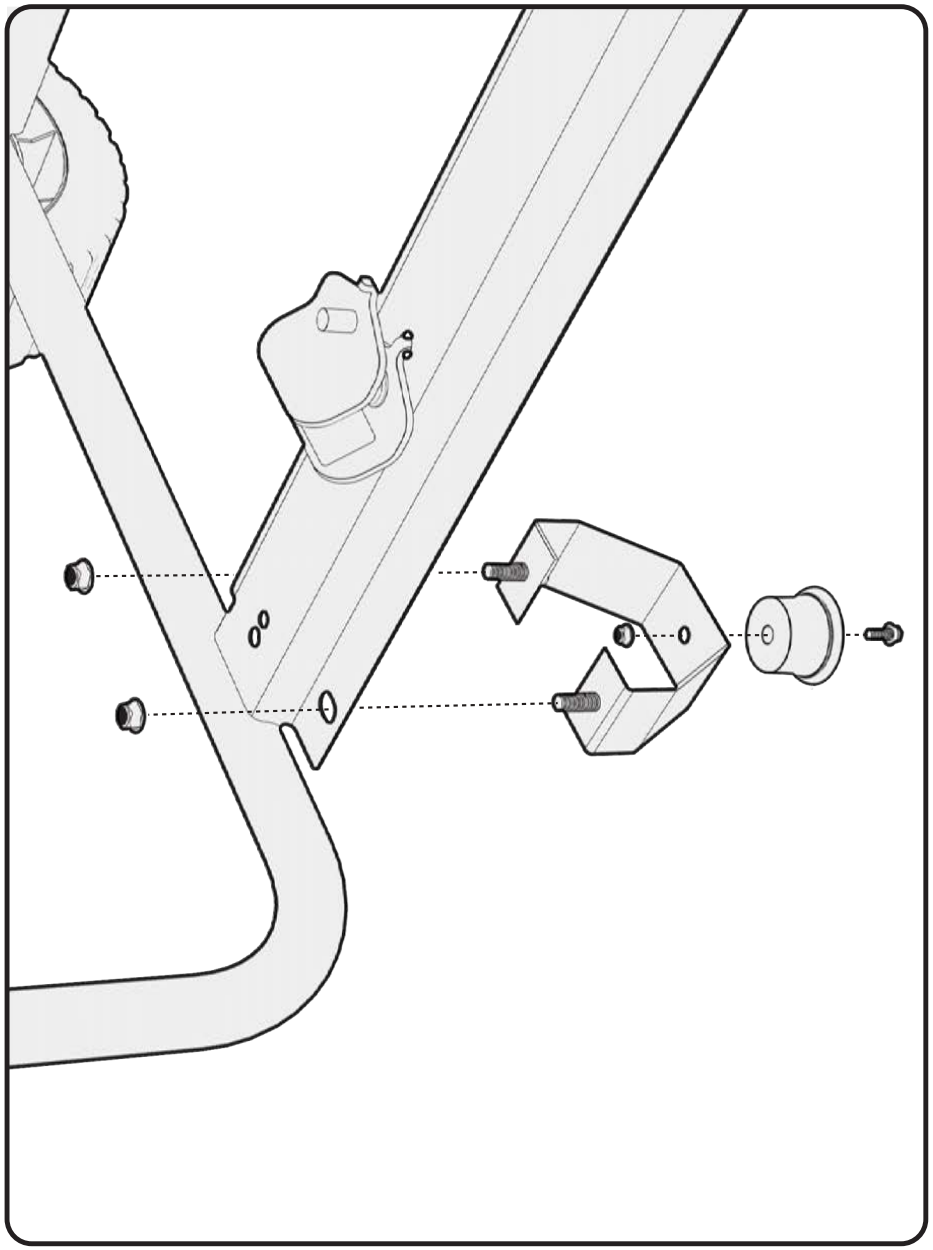
1. Install the wheel kit and feet as shown below.
2. Install the handle kit by attaching the handle bar to the middle of the generator frame as shown on following pages.

NOTE

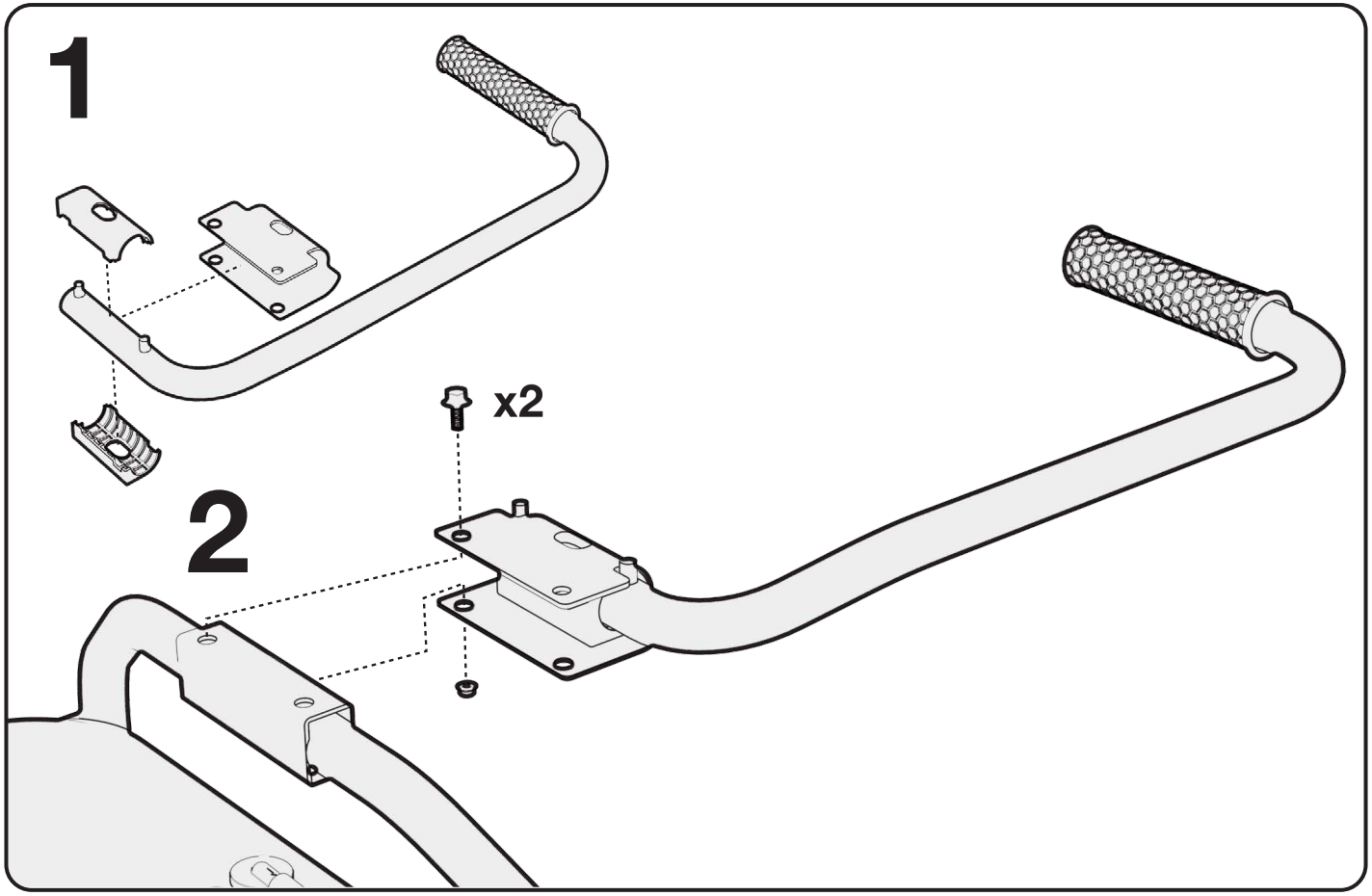
3. **Add engine oil before use.**



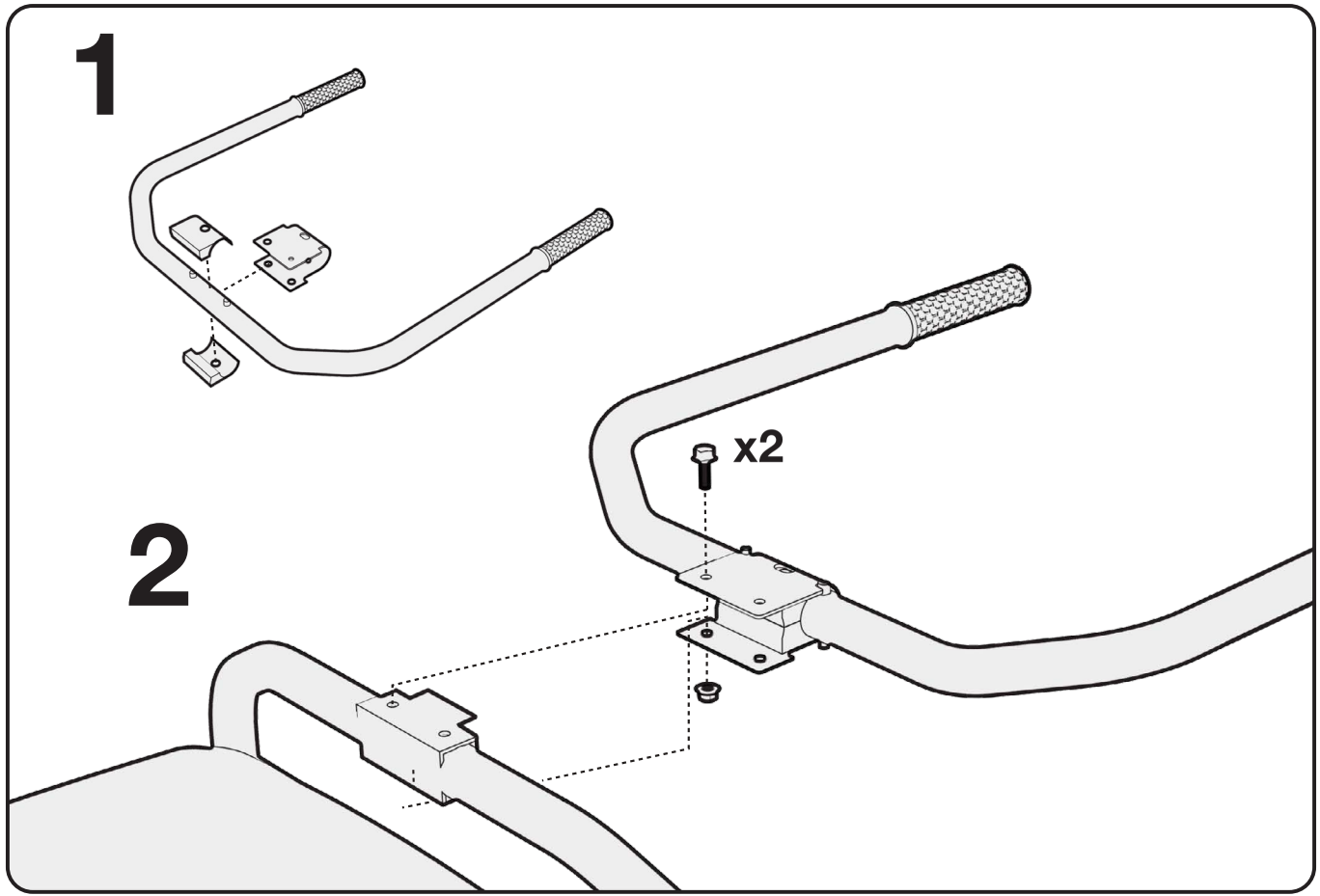
Install Wheel Kit (HG4050 - HG6850 - HG8750 - HG10,000)



Install Feet Kit (HG4050 - HG6850 - HG8750 - HG10,000)



Install Handle Kit (HG4050)



Install Handle Kit (HG6850 - HG8750 - HG10,000)

3. PRE-OPERATION CHECK

These quick checks should be done each time the generator is started to ensure you get the most out of your generator.

Set the generator on a level surface and the power switch to OFF.

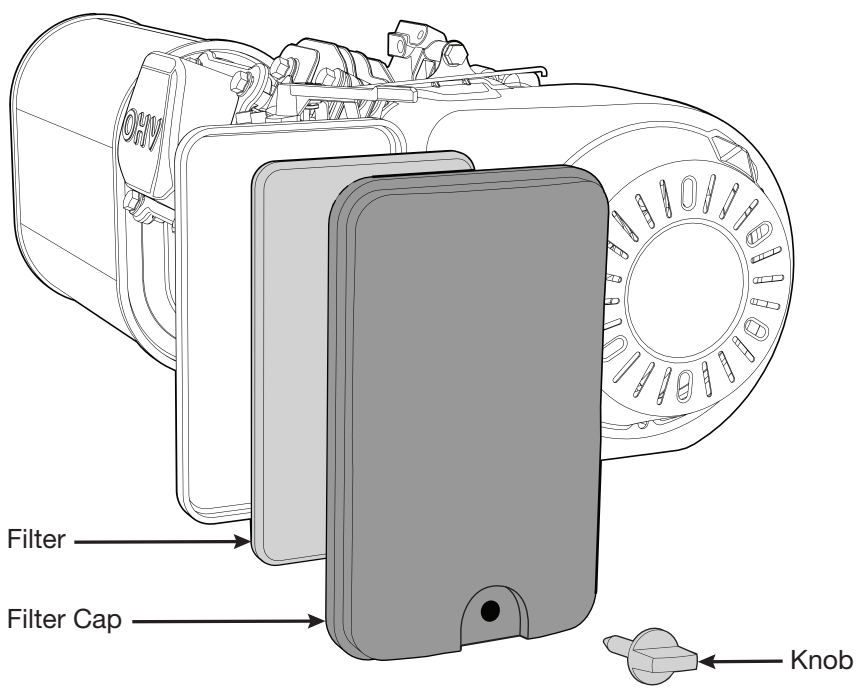
WARNING!

EXHAUST GAS CONTAINS POISONOUS CARBON MONOXIDE. NEVER RUN THE GENERATOR IN AN ENCLOSED AREA. BE SURE TO PROVIDE ADEQUATE VENTILATION. OPERATE THE GENERATOR ON A LEVEL SURFACE. IF THE GENERATOR IS TILTED, FUEL SPILLAGE MAY RESULT. KEEP AWAY FROM ROTATING PARTS WHILE THE GENERATOR IS RUNNING. THE GENERATOR IS AIR-COOLED AND MAY BE DAMAGED IF VENTILATION IS INADEQUATE.

3.1 PREPARE THE AIR FILTER

Clean and oil the air filter before your first use. Check the maintenance schedule for a complete cleaning guide.

1. Loosen the knob and remove the air filter cover. Remove the air filter element and inspect for cleanliness.
2. Clean the air filter with soap and water or solvent and squeeze dry.
3. Soak in clean engine oil.
4. Squeeze out all excess oil and reinstall. Replace the filter if it is damaged.

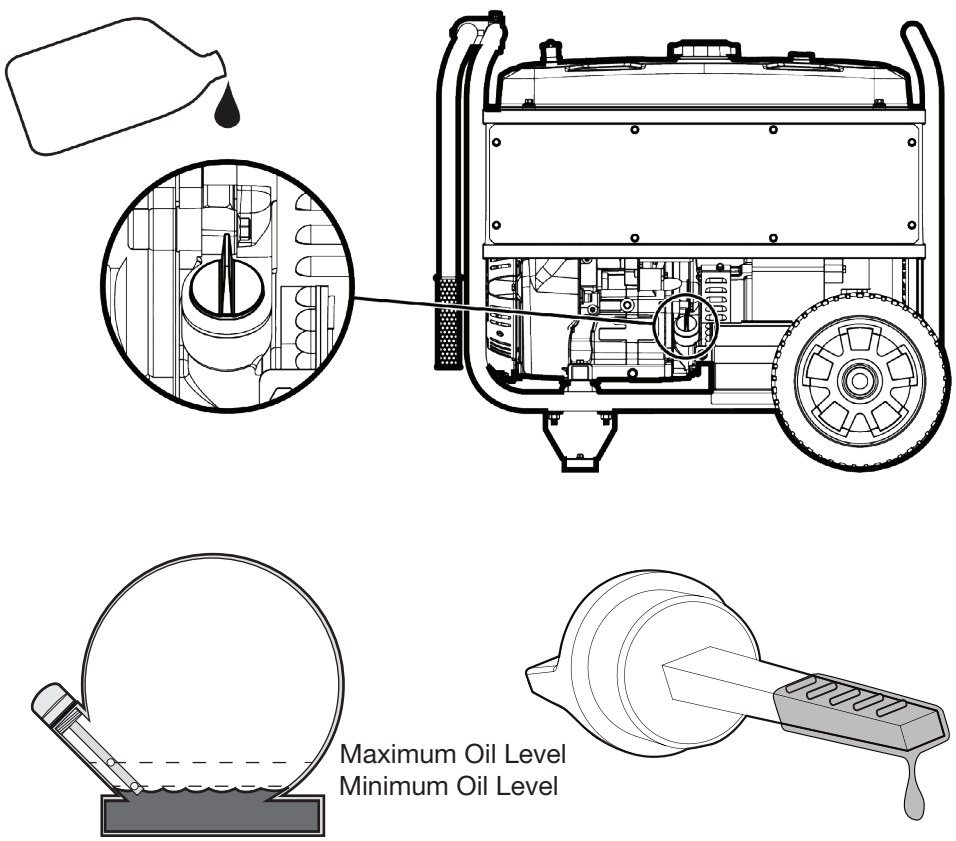


NOTE

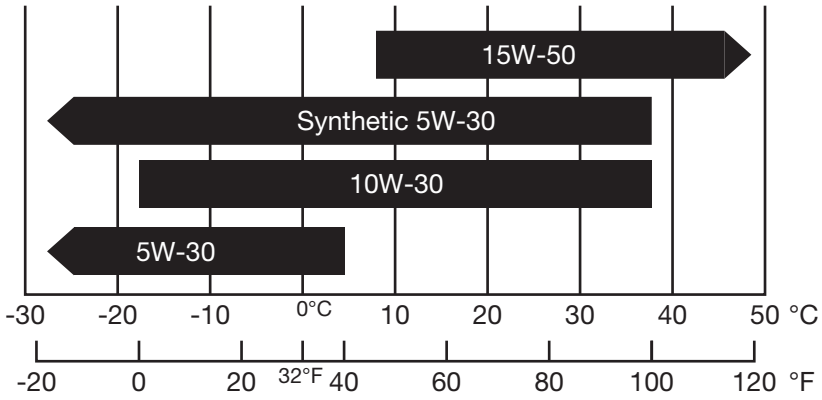
- Running the engine without the air filter will quickly degrade the engine
- Always inspect air filter before using the generator. Check and clean the air filter according to the maintenance schedule.

3.2 CHECK THE OIL LEVEL

1. Ensure the generator is on a level surface.
2. Unscrew the oil cap and clean the dipstick.
3. Check the oil level by reinserting the oil cap without screwing it back in. Remove the cap and examine the oil level on the dipstick. If the level is at or below the minimum oil level marked on the dipstick, refill to the maximum oil level mark.
4. Reinsert the oil cap and tighten securely.



Effective Viscosity Range of Engine Oils



NOTE

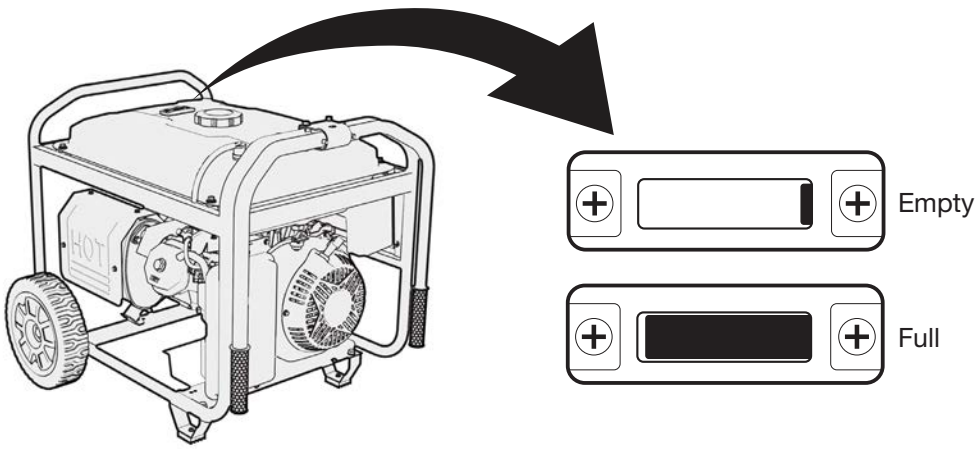
- Do not tilt the generator when adding engine oil. This could result in overfilling and damage to the engine.
- Using non-detergent or 2-stroke oil could shorten the engine's working life.
- Use high quality engine oil with strong detergents.
- Handle and store the engine oil with care, avoid getting dirt or dust into the engine oil.
- Do not mix different engine oils.
- Before the engine oil falls below the safety margin, the low oil alert system will automatically shut off the engine. The low oil light will turn on.
- To avoid the inconvenience of unexpected engine shutoff, check the engine oil level as often as possible.
- Use 4-stroke engine oil, certified to meet or exceed API standard SG, SF, SAE ratings.

3.3 CHECK THE FUEL LEVEL

WARNING!

GASOLINE IS HIGHLY FLAMMABLE AND EXPLOSIVE UNDER CERTAIN CONDITIONS. REFUEL IN A WELL-VENTILATED AREA WITH THE ENGINE STOPPED. DO NOT SMOKE OR ALLOW OPEN FLAMES OR SPARKS IN THE AREA WHERE THE GENERATOR IS BEING REFUELED OR WHERE GASOLINE IS STORED. DO NOT OVERFILL THE TANK. BE CAREFUL NOT TO SPILL FUEL WHEN REFUELING. WIPE UP ANY SPILLED GASOLINE AND LET THE AREA DRY BEFORE STARTING THE ENGINE.

GASOLINE SUBSTITUTES SUCH AS GASOHOL ARE NOT RECOMMENDED. THEY MAY BE HARMFUL TO THE FUEL SYSTEM COMPONENTS.



1. Check the fuel level by reading the gauge or removing the fuel tank cap to visually check the level.
2. Add fuel if level is too low. Tighten the fuel cap securely after refilling.

NOTE

- Only use unleaded gasoline (Pump Octane 87 or higher).
- Never use stale or contaminated gasoline, or an oil/gasoline mixture.
- Avoid getting dirt or water into the fuel tank.
- Do not use a mixture of gasoline containing methanol. This will cause serious damage to the engine.
- Use of gasoline with an ethanol content greater than 10% can damage the engine and fuel system and will void the manufacturer's warranty.

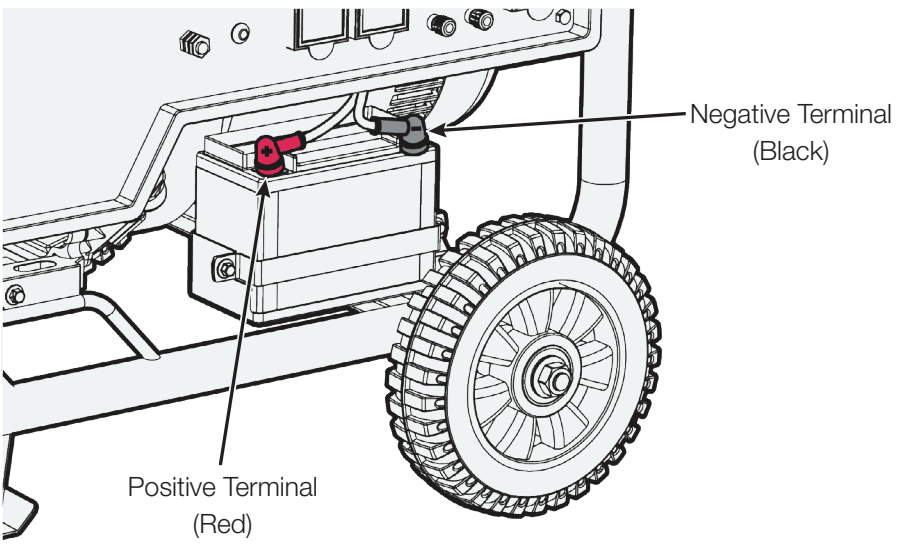
3.4 ELECTRIC START BATTERY CONNECTION (HG8750 AND HG10,000)

WARNING!

BATTERIES PRODUCE EXPLOSIVE GASES. KEEP SPARKS, FLAMES AND CIGARETTES AWAY FROM THE BATTERY AT ALL TIMES. TO PREVENT THE POSSIBILITY OF CREATING A SPARK WHILE USING THE BATTERY, CONNECT CHARGING CABLES TO BATTERY TERMINALS FIRST, THEN TO THE GENERATOR. WHEN DISCONNECTING, DISCONNECT THE CABLES AT THE GENERATOR FIRST.

1. Connect the red cable to the positive terminal of the battery. Ensure the connection is secured by using the fastener at the battery terminal.
2. Connect the black cable with the negative terminal of the battery. Ensure the connection is secured by using the fastener at the battery terminal.

BE SURE TO CONNECT THE ELECTRIC START BATTERY TO THE GENERATOR SET BEFORE OPERATION. FAILURE TO DO SO WILL CAUSE THE OUTPUT DISPLAY TO FUNCTION IMPROPERLY. DO NOT REVERSE THE POLARITY OF THE TERMINALS WHEN CHARGING THE BATTERY. SERIOUS DAMAGE TO THE GENERATOR AND/OR BATTERY MAY OCCUR. DO NOT ATTEMPT TO CONNECT THE BATTERY WHILE THE GENERATOR ENGINE IS RUNNING. DISCONNECT THE CABLES FROM THE BATTERY WHILE THE GENERATOR IS IN STORAGE.



4. USING YOUR GENERATOR

DANGER! CARBON MONOXIDE

USING A GENERATOR INDOORS WILL KILL YOU IN MINUTES.

GENERATOR EXHAUST CONTAINS HIGH LEVELS OF CARBON MONOXIDE (CO), A POISONOUS GAS YOU CANNOT SEE OR SMELL. IF YOU CAN SMELL THE GENERATOR EXHAUST YOU ARE BREATHING CO. EVEN IF YOU CANNOT SMELL THE EXHAUST, YOU COULD BE BREATHING CO.

NEVER USE A GENERATOR INSIDE A HOME, GARAGE, CRAWLSPACE, OR OTHER PARTLY ENCLOSED AREA, DEADLY LEVELS OF CARBON MONOXIDE CAN BUILD UP IN THESE AREAS. USING A FAN OR OPENING WINDOWS AND DOORS WILL NOT SUPPLY ENOUGH FRESH AIR.

ONLY USE A GENERATOR OUTDOORS AND FAR AWAY FROM OPEN WINDOWS, DOORS, AND VENTS. THESE OPENINGS CAN PULL IN GENERATOR EXHAUST. EVEN WHEN YOU USE A GENERATOR CORRECTLY, CO MAY LEAK INTO THE HOME. ALWAYS USE A CO ALARM IN YOUR HOME.

IF YOU START TO FEEL SICK, DIZZY, OR WEAK AFTER THE GENERATOR HAS BEEN RUNNING, MOVE TO FRESH AIR RIGHT AWAY AND SEEK MEDICAL ATTENTION. YOU COULD HAVE CARBON MONOXIDE POISONING. NEVER RUN THE GENERATOR IN AN ENCLOSED OR EVEN PARTIALLY ENCLOSED AREA WHERE PEOPLE MAY BE PRESENT.

Carburetor Modification for High Altitude Operation

- At high altitudes, the standard carburetor air-fuel mixture will be too rich. Fuel consumption will increase and performance will decrease. A very rich mixture will also foul the spark plug and cause hard starting.
- If using the generator at high altitudes, change the main-nozzle or adjust the idling-screw of the carburetor. If always operating the generator at altitudes above 1,000 meters, contact an authorized service center to have the carburetor modified.
- Conversely, if the carburetor has been modified for high altitude operation, the air-fuel mixture will be too lean for low altitude use. Operation at low altitude my cause the engine to overheat and result in serious engine damage. In this case the carburetor needs to be returned to its original specifications.
- Generator output power should be modified according to the altitude and ambient temperature. See more details on the correction factors in Chapter 11 - Appendix.

4.1 STARTING YOUR GENERATOR

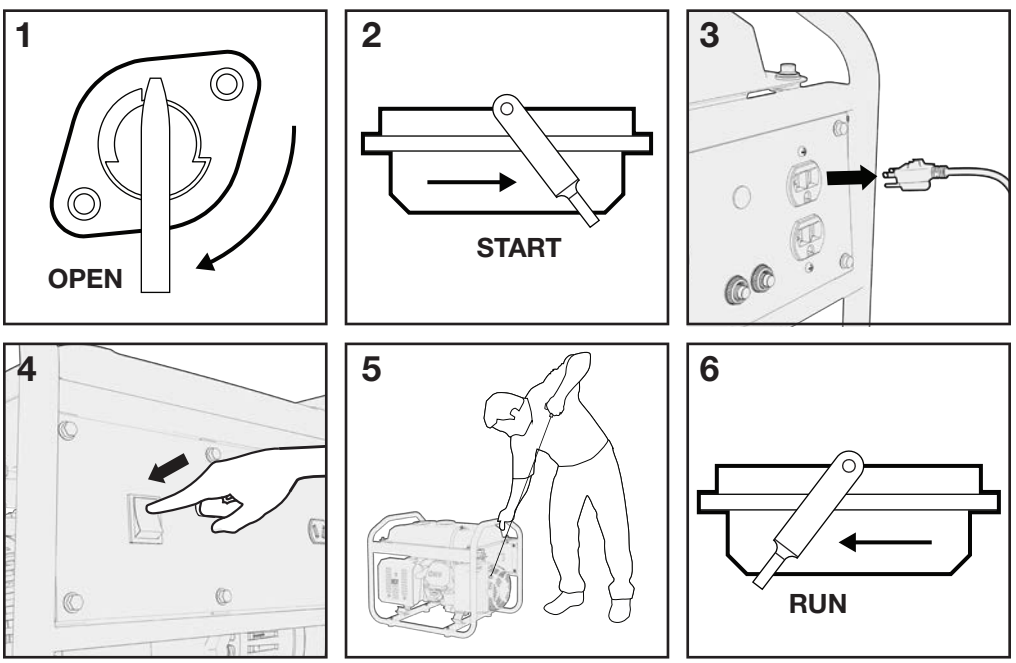
WARNING!

BEFORE USING THE GENERATOR, A GROUND WIRE MUST BE CONNECTED TO THE GROUND TERMINAL. THE TERMINAL IS LOCATED ON THE FRONT PANEL. BEFORE USING THE GROUND TERMINAL CONSULT A QUALIFIED ELECTRICIAN.

NOTE

- Before starting the engine, disconnect all devices from the outlets on the front panel.
- Return the starter grip slowly by hand, do not let it snap back.
- Do not push the choke knob to the START/CLOSED position when the engine is hot or ambient air temperature is high.

4.1.1 MANUAL RECOIL START (HG1500)

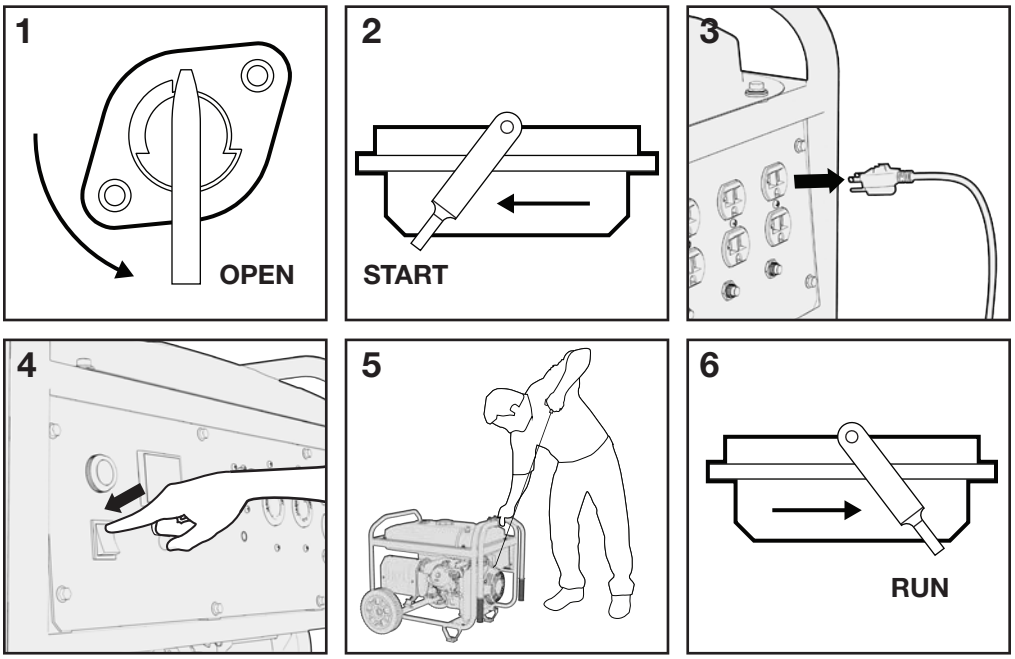


1. Rotate the fuel valve to the OPEN position.
2. If the engine is cold push the choke lever to the START/CLOSED position. The choke is used to provide the proper air-fuel mixture when the engine is cold. You can find the choke beside the air filter on the left side.
3. Disconnect all devices from the front panel.
4. Turn the power switch to the ON position.
5. Pull the starter slowly until it engages then pull quickly. Repeat until the

generator starts.

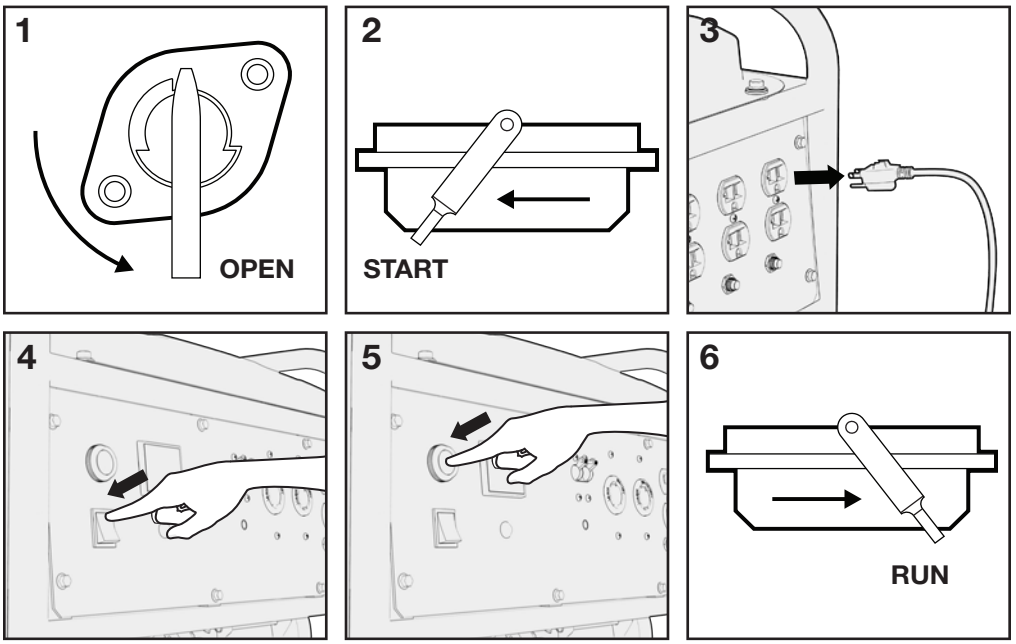
6. When the engine warms up push the choke to the RUN/OPEN position.

4.1.2 MANUAL RECOIL START (HG4050 - HG6850 - HG8750- HG10,000)



1. Rotate the fuel valve to the OPEN position.
2. If the engine is cold push the choke lever to the START/CLOSED position. The choke is used to provide the proper air-fuel mixture when the engine is cold. You can find the choke above the air filter on the left side of your generator.
3. Disconnect all devices from the front panel.
4. Turn the power switch to the ON position.
5. Pull the starter slowly until you feel it engage then pull quickly. Repeat until the generator starts.
6. When the engine warms up push the choke to the RUN/OPEN position.

4.1.2 ELECTRIC START (HG8750 & HG10,000)



1. Rotate the fuel valve to the OPEN position.
2. If the engine is cold push the choke lever to the START/CLOSED position. The choke is used to provide the proper air-fuel mixture when the engine is cold. You can find the choke above the air filter on the left side of your generator.
3. Disconnect all devices from the front panel.
4. Turn the power switch to the ON position.
5. Press and hold the START button for 1 second, or until the generator fires, then release it.
6. When the engine warms up push the choke to the RUN/OPEN position.

4.2 USING THE HG SERIES WITH YOUR APPLIANCES

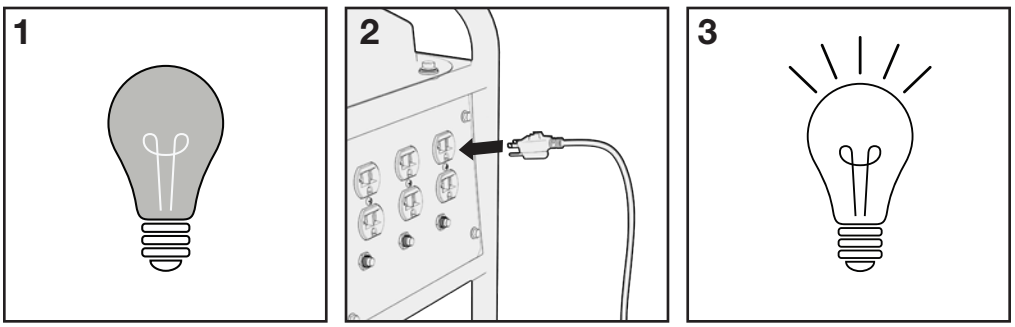
After starting the HG Series you can connect your devices to it. Before starting make sure you know what you can power with your generator.

Here's how you can decide:

Add the watt ratings of all the loads that the generator set will be powering at the same time. Make sure that total wattage will not exceed the generator's rating.

EXAMPLE:

A generator set rated at 5000W can power two 1500W heaters, a 900W circular saw, a 500W drill and a 100W light at the same time (4500W combined). However, to operate a second 900W saw, it will be necessary to disconnect one of the 1500 W heaters.



NOTE

- To stop the engine in an emergency, turn the engine switch OFF. Always connect the generator to the ground terminal to prevent electrical shock.

1. Turn off devices before connecting them to your generator.
2. Insert the plug into your generator.
3. You can now turn your devices on and use them.

4.3 CHARGING AUTOMOTIVE BATTERIES (HG1500 ONLY)

WARNING!

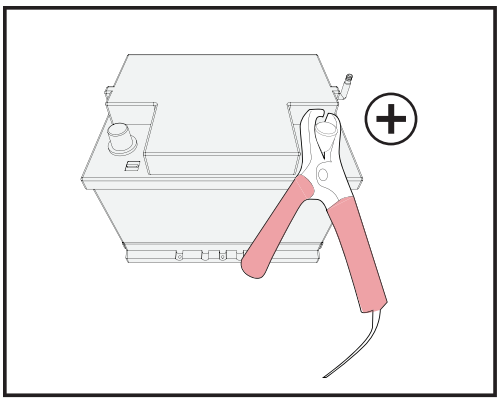
OVER-CHARGING A BATTERY MAY CAUSE EXPLOSION AND INJURY.

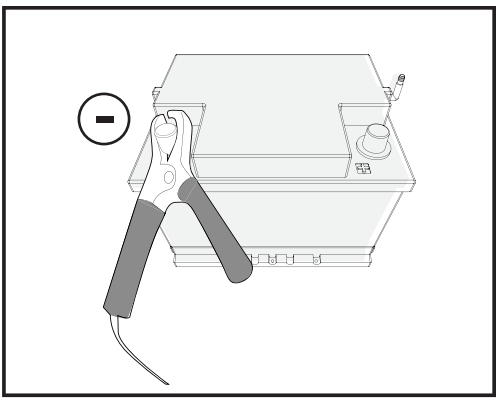
AN EXPLOSIVE HYDROGEN GAS IS DISCHARGED THROUGH VENT HOLES IN THE BATTERY DURING CHARGING. DO NOT ALLOW SPARKS OR OPEN FLAMES AROUND THE GENERATOR OR BATTERY DURING THE CHARGING PROCESS.

ELECTROLYTE FLUID CAN BURN EYES AND CLOTHING. BE EXTREMELY CAREFUL TO AVOID ANY CONTACT. IF INJURED, WASH THE AFFECTED AREA IMMEDIATELY WITH LARGE AMOUNTS OF WATER AND SEEK MEDICAL ATTENTION IMMEDIATELY.

WHEN CHARGING A LARGE CAPACITY BATTERY OR TOTALLY DISCHARGED BATTERY, EXCESSIVE CURRENT MAY FORCE THE DC BREAKER TO TURN OFF. IN THIS CASE, USE A BATTERY CHARGER.

You can use the 12V 8.3A DC output to charge automotive batteries.





Connecting the Battery Charging Cable

1. If connecting to a vehicle battery, disconnect the vehicle battery ground cable from the negative (-) battery terminals.
2. Connect the DC outlet to the battery terminals using the charging cable. Connect the red lead to positive (+) battery terminal and black lead to negative (-) battery terminal. Do not reverse the polarity of these connections.
3. Start the generator.

NOTE

- Do not start the vehicle engine when the generator is still connected to the battery, this will damage the generator.
- System floating for DC output.

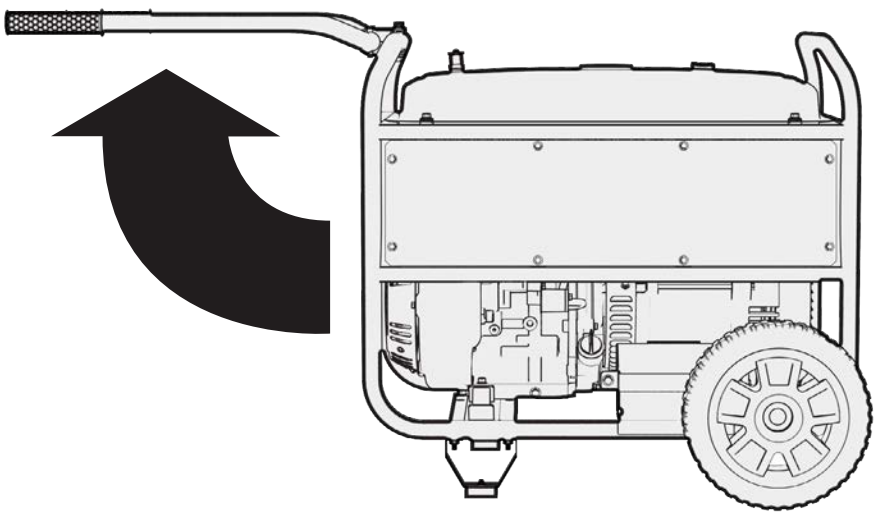
Disconnecting the Battery Charging Cable

4. Stop the engine.
5. Disconnect the black lead from the negative (-) battery terminal, and the red lead from the positive (+) battery terminal.
6. Reconnect the vehicle battery ground cable.

4.4 FOLDING THE HANDLE

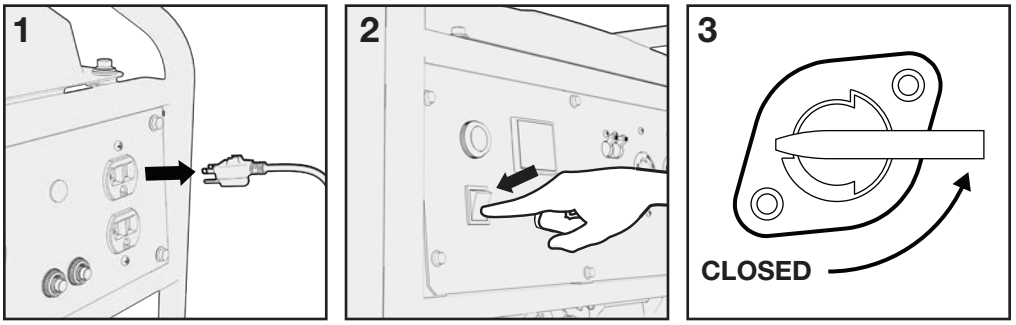
The handle folds down for compact storage and locks into position for easy maneuvering.

1. Pull up the handle into the upright position.
2. Insert the locking pin.

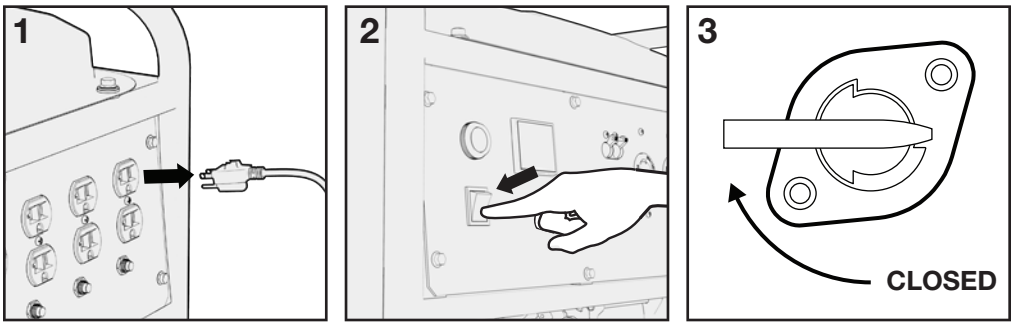


5. STOPPING THE ENGINE

Normal Operation (HG1500)



1. Switch off the connected electrical appliances, and disconnect them from the generator.
2. Turn the power switch to the OFF position.
3. Turn the fuel valve to the CLOSED position.



Normal Operation (HG4050 - HG6850 - HG8750 - HG10,000)

1. Switch off the connected electrical appliances, and disconnect them from the generator.
2. Turn the power switch to the OFF position.
3. Turn the fuel valve to the CLOSED position.

Emergency (All Models)

1. To stop the engine in an emergency, turn the power switch OFF immediately.

NOTE

- Make sure the fuel valve and engine switch are in the OFF position when stopping, transporting, and storing the generator.

6. MAINTENANCE

Proper maintenance keeps your generator in the best operating condition by ensuring safe, economical and trouble-free operation. Only use genuine parts and recommended fluids to replace the worn components. Improper maintenance may cause the generator to malfunction and can lead to serious injury. Contact customer support if you have any maintenance questions.

General Inspection Tips

- Look for fuel leaks around the fuel tank, fuel hose, and fuel valve. Close the fuel valve and repair leaks immediately.
- Look and listen for exhaust leaks while the engine is running. Have all the leaks repaired before continuing operation.
- Check for dirt and debris and clean as necessary .
- Check the engine oil level and add oil as necessary.

6.1 MAINTENANCE SCHEDULE

Maintain the generator according to the maintenance schedule in this section.

NOTE

- Service more frequently when used in dusty areas.
- These items should be serviced by an authorized service center, unless you have the proper tools and are mechanically proficient. Refer to manual for service procedures.

Item	Task	Each Use	First 10 Hours	Every 50 Hours	Every 100 Hours	Every 300 Hours
Generator	General Inspection	•				
Engine Lubricants	Inspect Oil Level	•				
	Replace		•*		•**	
Air Filter	Inspection	•				
	Cleaning			•		
Sediment Cup	Cleaning			•		
Spark Plug	Inspection & Cleaning				•	
	Replacement					•
Valve Clearance	Inspection & Adjusting					•
Combustion Chamber	Inspection & Adjusting					•
Fuel Tank and Strainer	Cleaning					•
Fuel Line	Cleaning	Every two months (replace if necessary)				
Exposed Metal Parts	Lubricate with oil	After every use and especially before storage				

* For first use of the generator.

** Every 100 hours or every year, whichever comes first.

6.2 EMISSION CONTROL SYSTEM

Emission Source

Exhaust gas contains carbon monoxide, nitrogen oxides (NOx) and hydrocarbons. It is very important to control the emissions of NOx and hydrocarbons as they are a major contributor to air pollution. Carbon monoxide is a poisonous gas. The emission of fuel vapors is a source of pollution as well. The generator engine utilizes a precise air-fuel ratio and emission control system to reduce the emissions of carbon monoxide, NOx, hydrocarbons and evaporative fuel emissions.

Regulation

Your engine has been designed to meet current Environmental Protection Agency (EPA) clean air standards. The regulations dictate that the manufacturer provides operation and maintenance standards regarding the emission control systems. Tune up specifications are provided in the Specifications section and a description of the emission control system may be found in the appendix to this manual. Adherence to the following instruction will ensure your engine meets the emission control standards.

Modification

Modification of the emission control system may lead to increased emissions. Modification is defined as the following:

- Disassembling or modifying the function or parts of the intake, fuel or exhaust system.
- Modifying or destroying the speed governing function of the generator.

Engine faults that may affect emission

Any of the following faults must be repaired immediately. Consult with your authorized service centre for diagnosis and repair:

- Hard starting or shut down after starting.
- Unstable idle speed.
- Shut down or backfire after applying an electrical load.
- Backfire or after fire.
- Black smoke and/or excessive fuel consumption.

Replacement parts and accessories

The parts making up the emission control system in your product's engine have been specifically approved and certified by the regulatory agencies. You can trust that the replacement parts supplied by customer service have been manufactured to the same production standard as the original parts. The use of replacement parts or accessories which are not designed by – may negatively affect the engine emission performance. Therefore only use replacements parts and accessories from a qualified service centre to guarantee that the replacement products will not adversely affect emission performance.

Replacement parts other than those from an authorized service centre will void the warranty.

6.3 CHANGING THE OIL

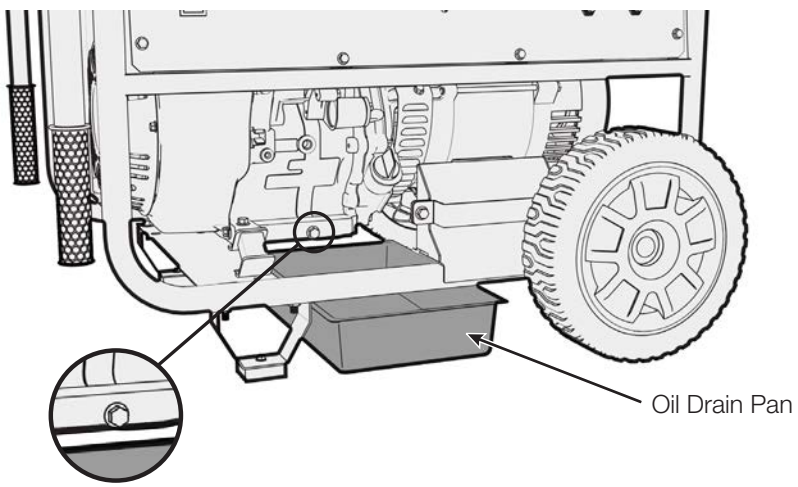
WARNING!

USED MOTOR OIL CAN CAUSE SKIN IRRITATIONS IF LEFT IN LONG-TERM CONTACT WITH SKIN. THOROUGHLY WASH OFF USED OIL AS SOON AS POSSIBLE WITH SOAP AND WATER.

DO NOT DISPOSE OF USED OIL IN DRAINS OR ON SOIL. LOCAL SERVICE SHOPS PROVIDE ENVIRONMENTALLY-FRIENDLY DISPOSAL METHODS.

Drain the oil rapidly and completely on a level surface while the engine is still warm.

1. Stop the engine and remove oil filler cap.
2. Place a pan under the engine.

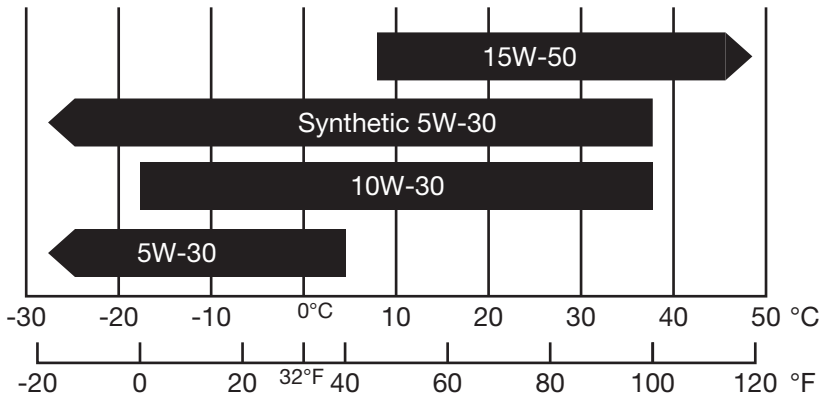


3. Remove the oil drain screw and allow the oil to completely drain into the pan.
4. Reinstall drain screw before filling the engine with fresh oil up to the maximum mark on the dipstick. Do not overfill oil reservoir. Use a funnel to prevent spillage.
5. Reinstall the oil filler cap and tightly fasten.

NOTE

- SAE10W-30 oil is recommended for general use.
- DO NOT OVERFILL.

Effective Viscosity Range of Engine Oils



NOTE

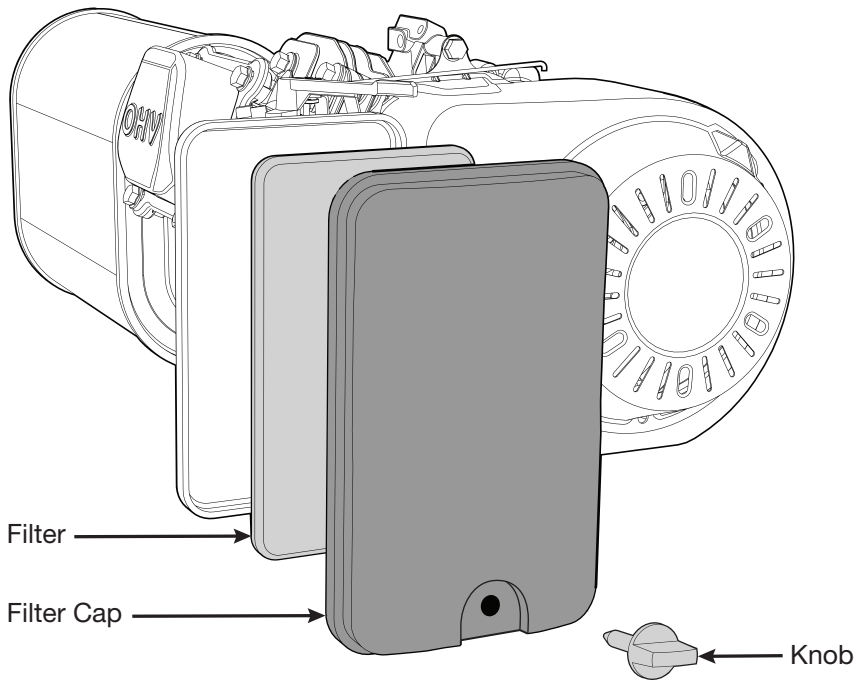
- Do not tilt the generator when adding engine oil. This could result in overfilling and damage to the engine.
- Use high quality engine oil with strong detergents. Using non-detergent or 2-stroke oil could shorten the engine's working life.
- Handle and store engine oil with care, avoid getting dirt or dust into the oil.
- Do not mix different engine oils.
- Before the engine oil falls below a safe level, the low oil alert system will automatically shut off the engine. The low oil light will turn on.
- To avoid the inconvenience of unexpected engine shutoff, check the engine oil level as often as possible.
- Use 4-stroke engine oil, certified to meet or exceed API standard SG, SF, SAE ratings.

6.4 CLEANING THE AIR-FILTER

WARNING!

USING GASOLINE OR OTHER FLAMMABLE SOLVENTS CAN CAUSE A FIRE OR EXPLOSION. DO NOT OPERATE THIS PRODUCT WITHOUT AN AIR FILTER.

A dirty air filter will restrict air flow into the carburetor. Clean and maintain the air filter regularly, especially in dusty areas.



NOTE

NEVER RUN THE GENERATOR WITHOUT AN AIR FILTER, DOING SO WILL QUICKLY DEGRADE THE ENGINE.

1. Rotate the knob counterclockwise to release.
2. Lift the filter cap to remove from the filter.
3. Remove the foam filter.
4. If the foam element is dirty, clean it in warm soapy water, rinse, and allow it to dry thoroughly, or clean in non-flammable solvent and allow to dry.
5. Dip the foam element in clean engine oil, then squeeze out all excess oil. The engine will smoke when started if too much oil is left in the filter.
6. Wipe dirt from the air filter assembly and reinstall into the unit.

6.5 SPARK PLUG SERVICE

NOTE

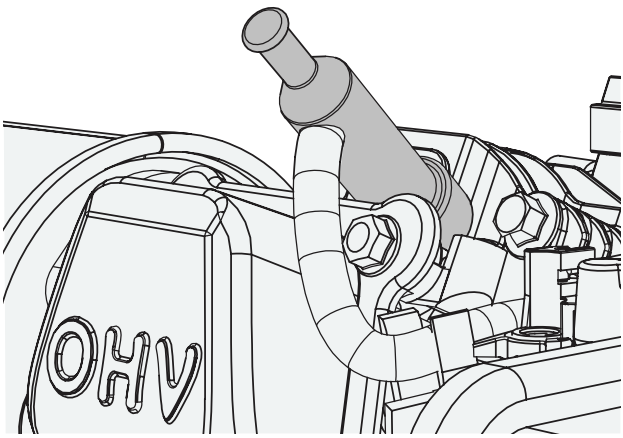
DO NOT RINSE SPARK PLUG IN WATER. FOLLOW GUIDELINES AND BE CAREFUL NOT TO OVERTIGHTEN THE SPARK PLUG.

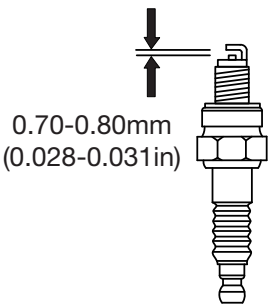
Recommended spark plug: **F7TC**

Check the spark plug gap and clean the carbon deposits at the bottom of the spark plug.

TIGHTEN 1/2 TURN WHEN INSTALLING A NEW SPARK PLUG.

TIGHTEN 1/8 TO 1/4 TURN WHEN RE-INSTALLING AN OLD SPARK PLUG.



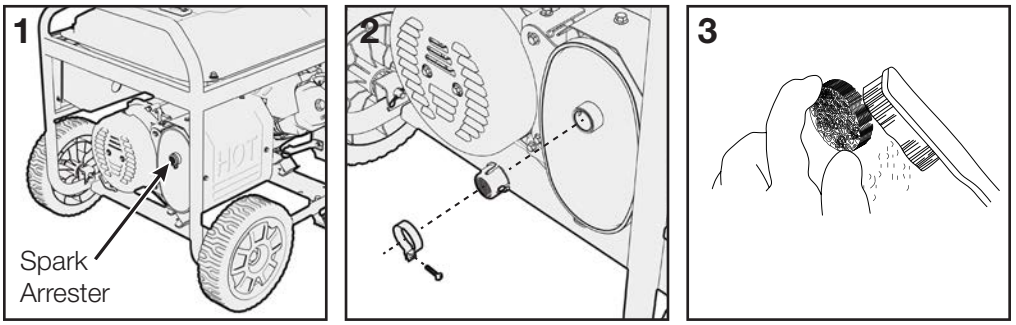


1. Remove the spark plug cap.
2. Remove the spark plug with the spark plug spanner.
3. Visually inspect the spark plug. Replace with a new plug if the insulation is cracked or chipped. Clean with a wire brush if the spark plug is reused.
4. Measure the spark plug gap with a feeler gauge. The normal value is: 0.7-0.8mm (0.028- 0.031in). Adjust the gap by carefully bending the electrode.
5. Carefully reinstall the spark plug by hand, to avoid cross-threading. A new spark plug should be tightened 1/2 turn with a spanner. A used spark plug should be tightened 1/8 to 1/4 turn with spanner.
6. Reinstall the spark plug cap.

NOTE

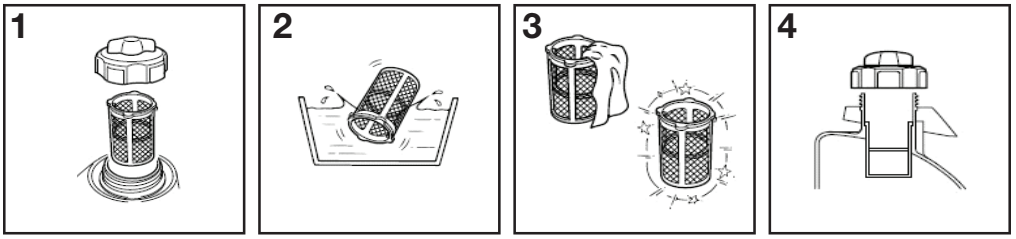
- The spark plug must be securely tightened or it could cause the spark plug to heat up, enough to damage the engine.
- Never use a spark plug with an improper heat range.

6.6 SPARK ARRESTER MAINTENANCE



1. After the engine has cooled down remove the spark arrester from the muffler by loosening the screw.
2. Use a brush to remove carbon deposits from the spark arrester. If the spark arrester is worn down, replace it.
3. Reinstall the spark arrester.

6.7 FUEL FILTER MAINTENANCE

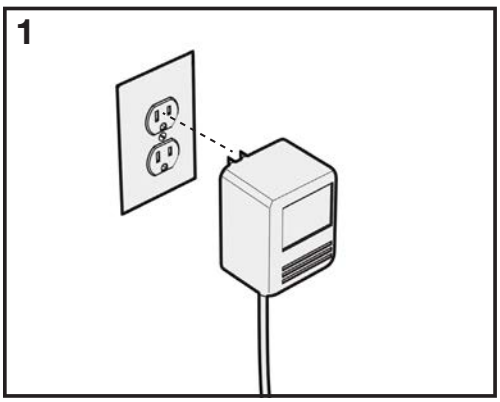


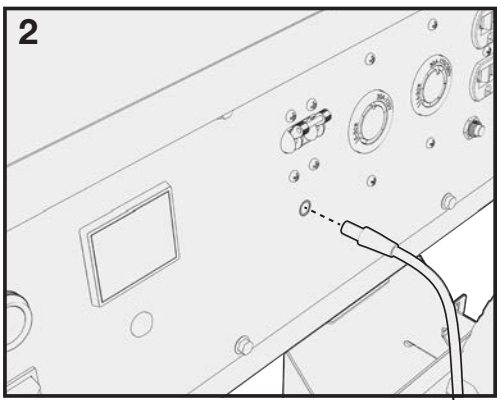
1. Remove the fuel cap and filter.
2. Clean the filter with solvent.
3. Wipe the filter.
4. Reinsert the filter.

6.8 BATTERY CHARGER (HG8750 & HG10,000)

If your HG series is equipped with an electric start it also features a battery charging port. When storing your generator for an extended period of time the battery will self-discharge, which could cause permanent damage or even complete failure of the battery.

To prolong the battery life, it should be kept above 12.4 Volts (75%) charged while in storage. A fully charged battery will read 12.6-12.7 Volts. To top up, plug the charger into a 120V wall outlet and the charging port on your HG series for no longer than 10 hours at a time. This will slowly recharge the battery and prolong its life.





1. Plug the charging cord into a 120V wall outlet.
2. Plug the other end into the charging port of the generator.

NOTE

- Do not charge for more than 10 hours at a time.
- Check the voltage with a digital voltmeter and top up the battery every two months while in storage. 12V batteries typically lose 5-15% per month when not in use.

Note on Automatic Voltage Regulation (AVR)

Your generator is equipped with an Automatic Voltage Regulator which ensures a constant voltage and present a waveform similar to what you get from the city power grid. They are an improvement over basic generators but not as effective at safely running sensitive electronics as our inverter generators, which can produce almost perfect sine waveforms.

Therefore powering sensitive electronics with this generator is not recommended because there is a risk damage will occur to electrical components.

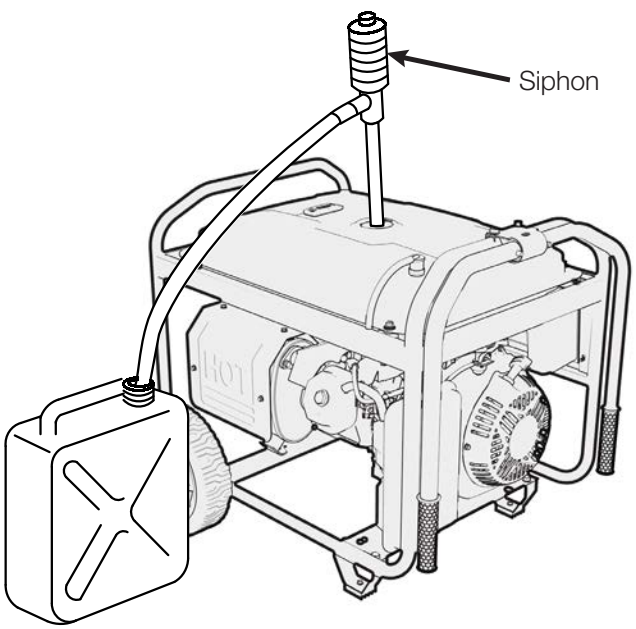
7. TRANSPORTATION & STORAGE

Transporting the Generator

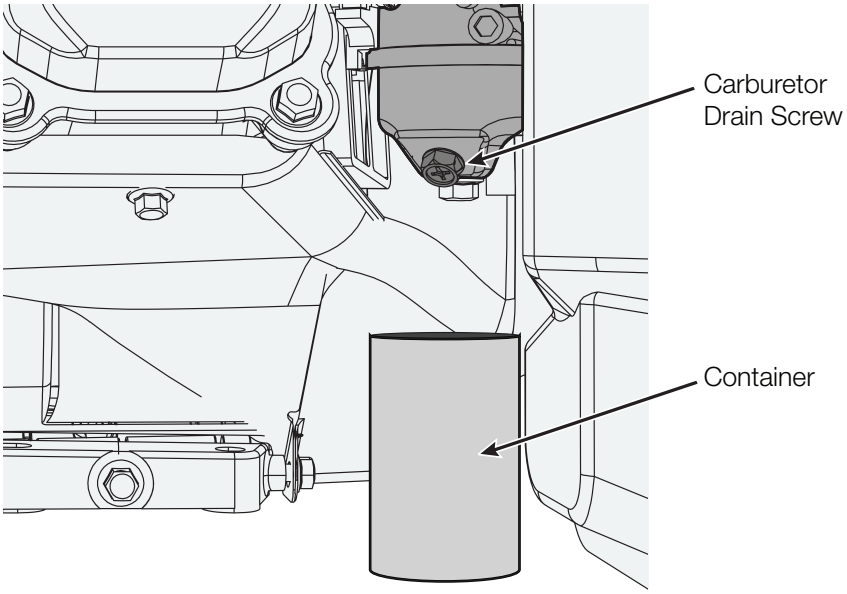
1. Do not overfill the fuel tank (No residual fuel on the neck of tank).
2. Do not use the generator in the vehicle. The generator should ONLY be used while in a well ventilated area.
3. Avoid exposing the generator to prolonged direct sunlight while in an enclosed vehicle. The high temperature inside the vehicle could cause fuel to vaporize resulting in a possible explosion.
4. Drain the generator of fuel and oil before being transported on rough roads.

Draining the Fuel Tank

1. Turn OFF the engine. Remove the fuel cap and the debris screen underneath the fuel cap.
2. Empty the fuel tank using a siphon and an approved gasoline container.



Draining the Carburetor



1. Turn OFF the engine and allow it to cool. Turn the fuel valve to OPEN.
2. Position a container under the carburetor drain screw. Loosen the drain screw.
3. Allow fuel to completely drain and re-tighten the drain screw.
4. Turn the fuel valve to CLOSED.

Long Term Storage

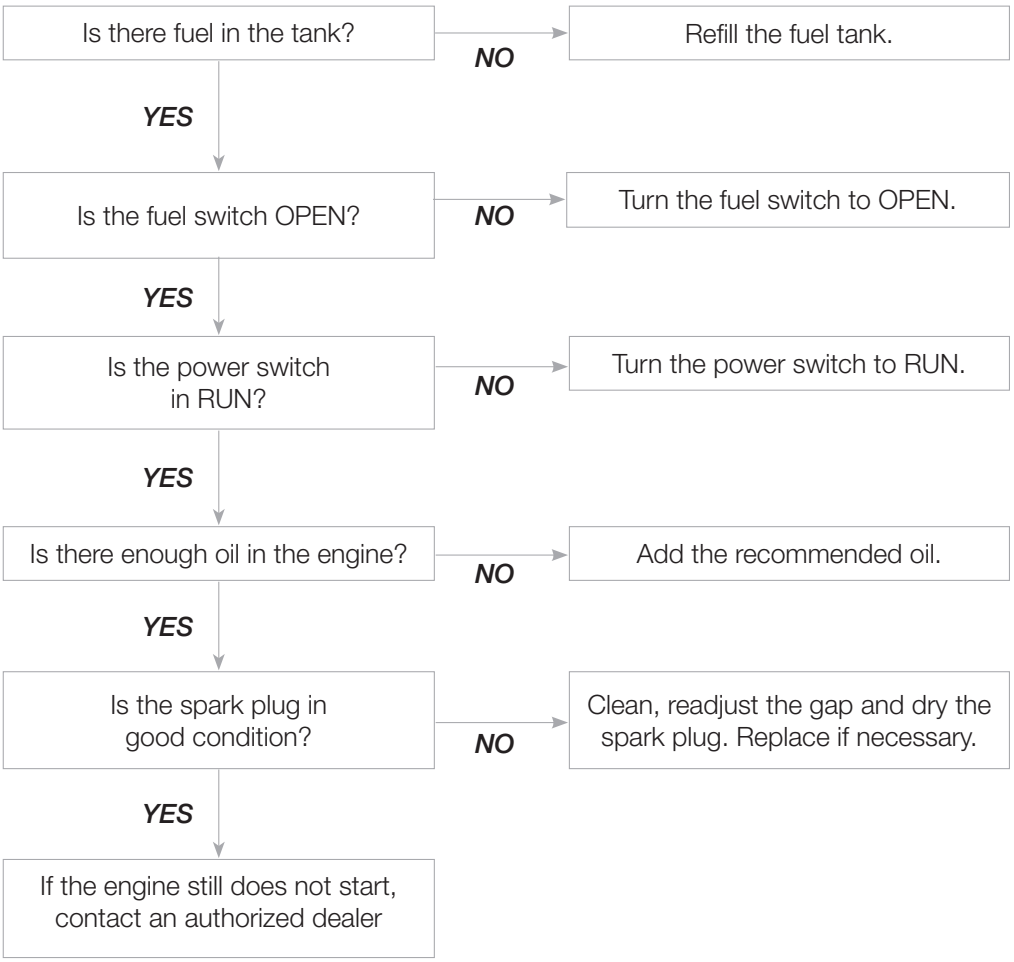
Before storing the generator set for an extended period:

- Ensure that the storage area is free of excess humidity and dust.
- Drain the fuel tank and the carburetor.
- To prevent corrosion, coat screws and exposed metal with anti-rust oil at least twice per year.

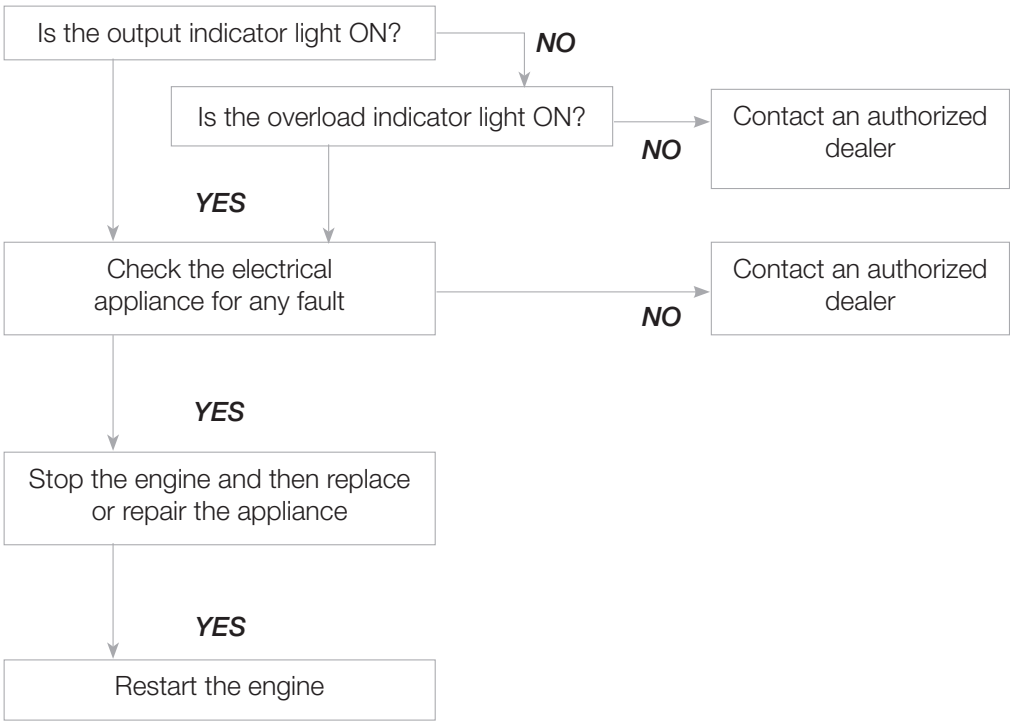
Storage Duration	Preparation Required
Less than 1 Month	■ No storage preparation required, simply store as is.
1 Month to 1 Year	■ Drain the old gas and completely fill the tank with fresh gas before storage. Add fuel stabilizer according to the manufacturer's directions. Adding a quality fuel stabilizer can keep gas fresh for up to a year.
1 Year or More	■ Drain off the gasoline from the fuel tank, and store in a suitable container. This will help prevent deposits from forming in the fuel system. ■ Turn the fuel switch to OPEN and loosen the carburetor drain bolt. Take off the spark plug cap and revolve the engine 3 or 4 times, by pulling the recoil handle, to fully discharge the gasoline from the fuel lines. ■ Turn the fuel switch to CLOSED and tighten the drain bolt of the carburetor. ■ Change oil while engine is still warm from operation. ■ Remove the spark plug, and pour a tablespoon of clean engine oil (10~20ml) into the cylinder. Revolve the engine several times by pulling on the recoil start to distribute the oil. Reinstall the spark plug. Pull the starter grip slowly until you feel resistance. At this point, the piston is coming up on its compression stroke and both the intake and exhaust valves are closed. This position helps to protect the engine from internal corrosion.

8. TROUBLESHOOTING

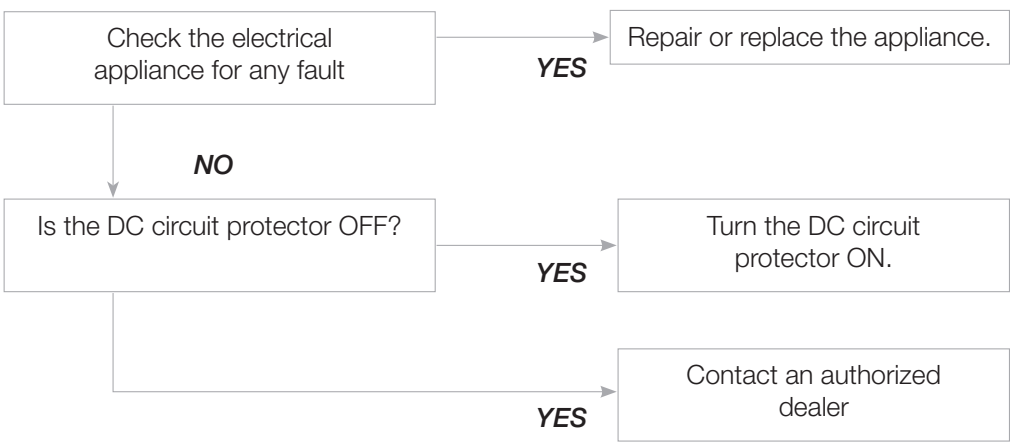
If the engine does not start:



If appliances do not operate:



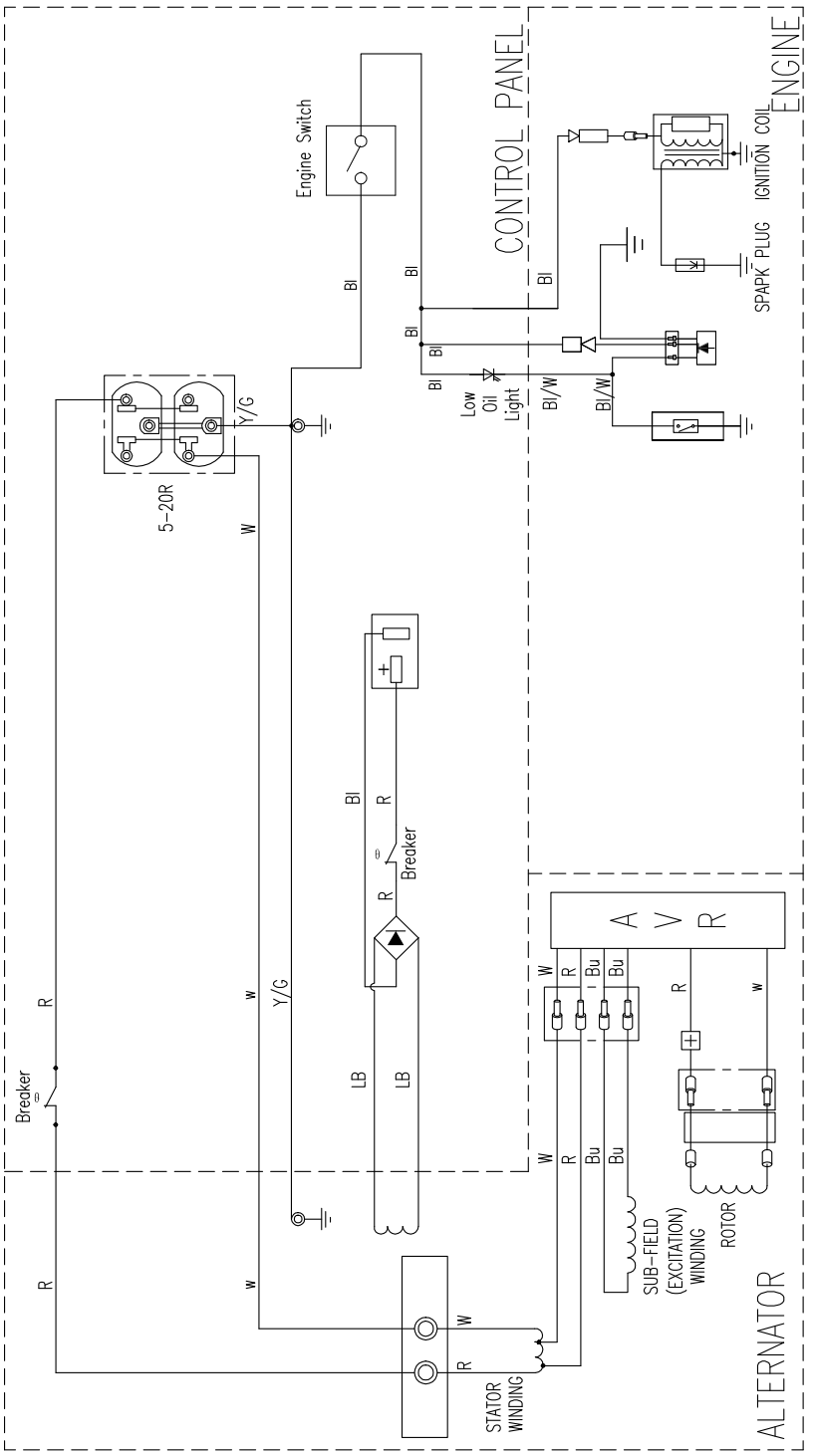
DC receptacle without any electricity:



9. TECHNICAL SPECIFICATIONS

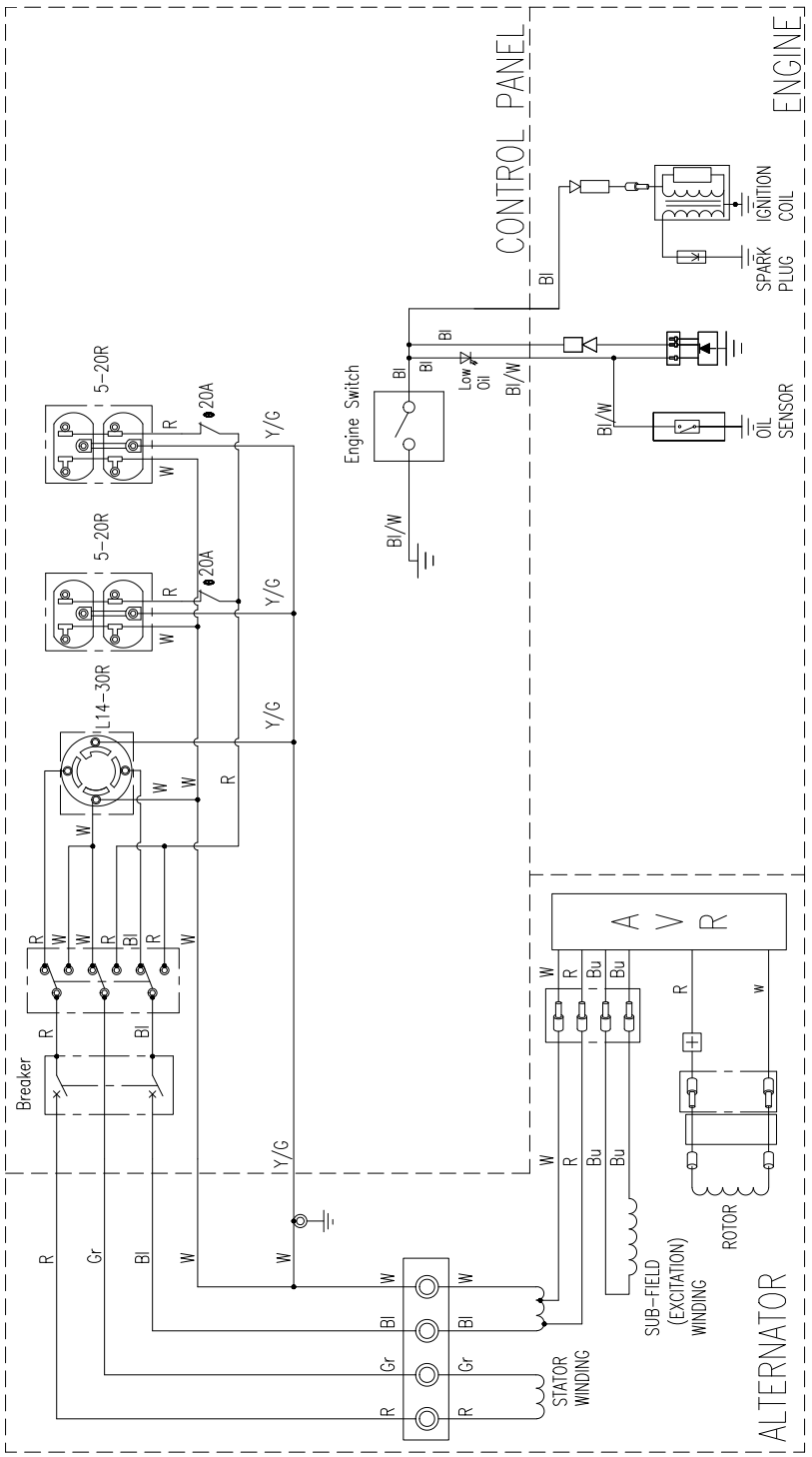
		HG1500	HG4050	HG6850	HG8750	HG10,000
GENERATOR	Rated frequency (Hz)	60HZ	60Hz	60Hz	60Hz	60Hz
	Rated AC Output Power (W)	1400W	3000W	5500W	7000W	9000W
	Max AC Output Power (W)	1750W	4050W	6850W	8750W	10,000W
	1-Phase Rated AC Voltage (V)	120	120/240V	120/240V	120/240V	120/240V
	Power Factor	1.0	1.0	1.0	1.0	1.0
ENGINE	Type	3.5 HP, Single Cylinder, forced air cooling, 4-stroke, OHV	7.5 HP, Single Cylinder, forced air cooling, 4-stroke, OHV	15 HP, Single Cylinder, forced air cooling, 4-stroke, OHV	15 HP, Single Cylinder, forced air cooling, 4-stroke, OHV	17.5 HP, Single Cylinder, forced air cooling, 4-stroke, OHV
	Displacement (cm^3)	98cc	212cc	420cc	420cc	457cc
	Ignition mode	Transistor Controlled Ignition	Transistor Controlled Ignition	Transistor Controlled Ignition	Transistor Controlled Ignition	Transistor Controlled Ignition
	Starting mode	Recoil Start	Recoil Start	Recoil Start	Recoil Start, Electric Start	Recoil Start, Electric Start
	Max. Output (rpm)	3600	3600	3600	3600	3600
	Fuel tank capacity (Gal)	6L / 1.6 Gal	15L / 4.0 Gal	25L / 6.6 Gal	25L / 6.6 Gal	25L / 6.6 Gal
	Oil capacity	350mL (10W30)	600mL (10W30)	1.1L (10W30)	1.1L (10W30)	1.2L (10W30)
	Fuel Type	Unleaded gasoline 87+ Octane	Unleaded gasoline 87+ Octane	Unleaded gasoline 87+ Octane	Unleaded gasoline 87+ Octane	Unleaded gasoline 87+ Octane
	Run Time @ 100% Load	3.5 hrs	6.9 hrs	6.0 hrs	5.7 hrs	5.0 hrs
	Run Time @ 50% Load	10.0 hrs	10.6 hrs	10.0 hrs	9.6 hrs	8.5 hrs
BOX	L x W x H	475x370x410	635x470x500mm	785x550x600mm	785x550x600mm	785x550x600mm
	Gross Weight	27kg	55kg	78kg	88kg	102kg
BAT.	Battery Size	N/A	N/A	N/A	12V 9Ah	12V 14Ah

10. WIRING DIAGRAM HG1500



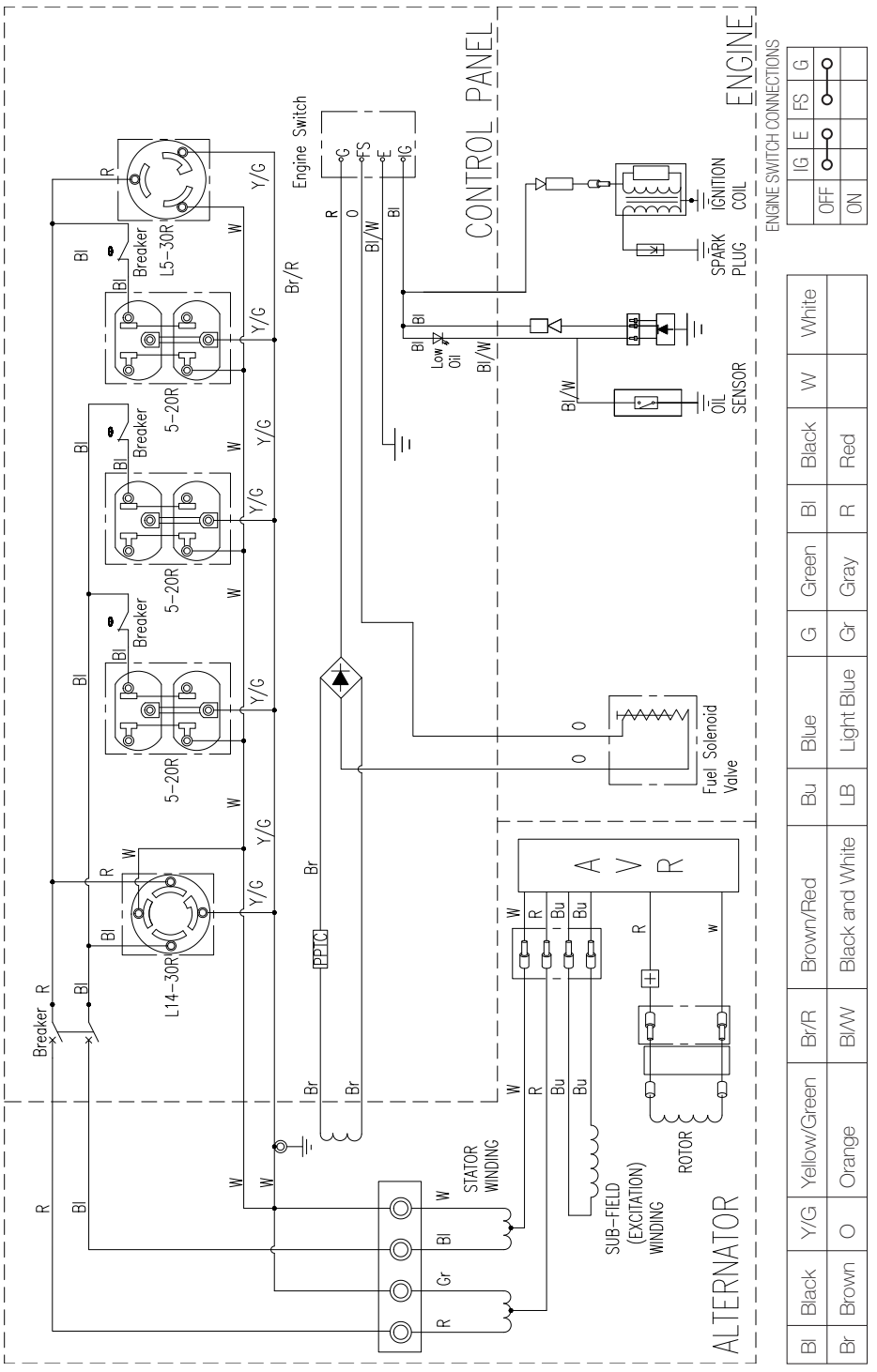
Bl	Black	Y/G	Yellow/Green	Br/R	Brown/Red	Bu	Blue	G	Green	Bl	Black	W	White		
Br	Brown	O	Orange	Bl/W	Black and White	LB	Light Blue	Gr	Gray	R	Red				

WIRING DIAGRAM HG4050



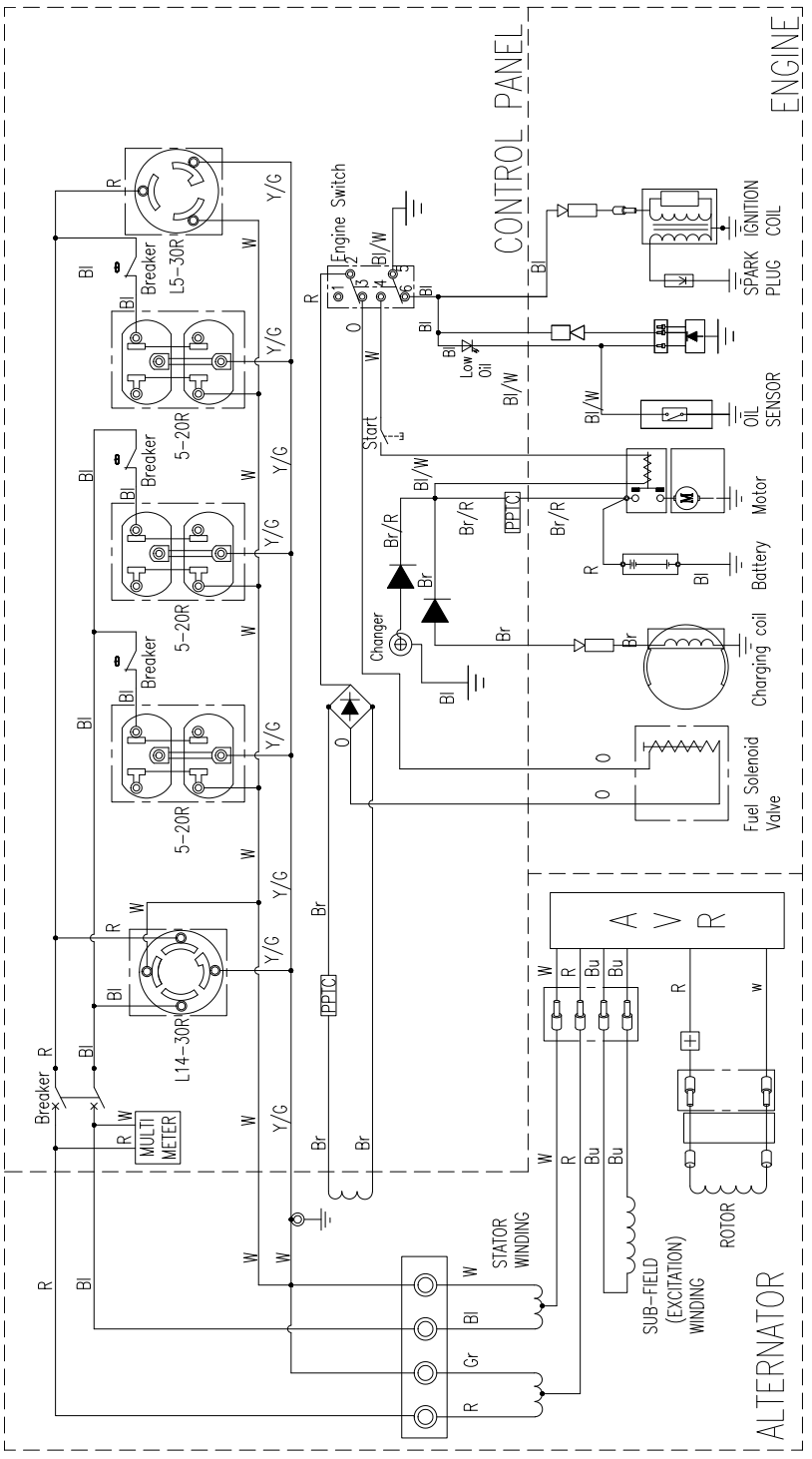
Bl	Black	Y/G	Yellow/Green	Br/R	Brown/Red	Bu	Blue	G	Green	Bl	Black	W	White
Br	Brown	O	Orange	Bl/W	Black and White	LB	Light Blue	Gr	Gray	R	Red		

WIRING DIAGRAM HG6850



Bl	Black	Y/G	Yellow/Green	Br/R	Brown/Red	Bu	Blue	G	Green	Bl	Black	W	White
Br	Brown	O	Orange	Bl/W	Black and White	LB	Light Blue	Gr	Gray	R	Red		

WIRING DIAGRAM HG8750

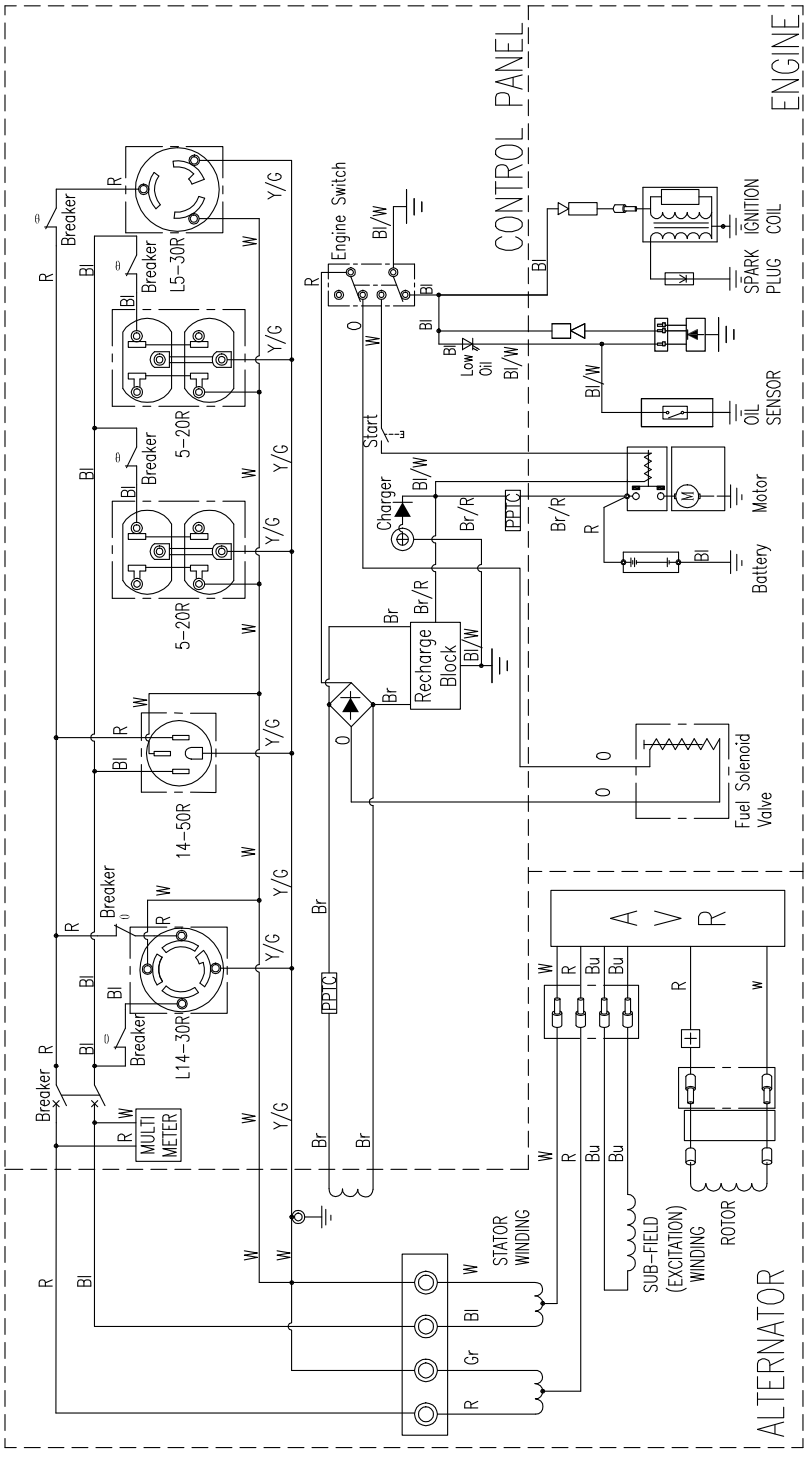


Bl	Black	Y/G	Yellow/Green	Br/R	Brown/Red	Bu	Blue	G	Green	Bl	Black	W	White
Br	Brown	O	Orange	Bl/W	Black and White	LB	Light Blue	Gr	Gray	R	Red		

ENGINE SWITCH CONNECTIONS

	1	2	3	4	5	6
OFF						
ON						

WIRING DIAGRAM HG10,000



ENGINE SWITCH CONNECTIONS

	1	2	3	4	5	6
OFF		○	○			○
ON		○	○		○	

Bl	Black	Y/G	Yellow/Green	Br/R	Brown/Red	Bu	Blue	G	Green	Bl	Black	W	White
Br	Brown	O	Orange	Bl/W	Black and White	LB	Light Blue	Gr	Gray	R	Red		

11. APPENDIX

The standard condition of rated power output:
Altitude: 0m
Ambient temperature: 25°C
Relative humidity: 30%

Factor of Environment Correction:

Altitude (m)	Ambient Temperature°C				
	25	30	35	40	45
0	1	0.98	0.96	0.93	0.90
500	0.93	0.91	0.89	0.87	0.84
1000	0.87	0.85	0.82	0.80	0.78
2000	0.75	0.73	0.71	0.69	0.66
3000	0.64	0.62	0.60	0.58	0.56
4000	0.54	0.52	0.50	0.48	0.46

NOTE:
Relative humidity 60% correction factor C-0.01
Relative humidity 80% correction factor C -0.02
Relative humidity 90% correction factor C-0.03
Relative humidity 100% correction factor C-0.04

Example:

Rated power (PN) 2.8kVA generator (Altitude: 1000m) Ambient temperature: 35°C, Relative humidity: 80%

P=Pn*(C-0.02)=2.8*(0.82-0.02)=2.24kVA

12. LIMITED WARRANTY

Toll Free: 1-877-528-3772
E-mail: support@hyundaipower.ca
Online: www.hyundaipower.ca

Hyundai Power Equipment products are distributed by:
Midland Power Inc.
376 Magnetic Drive, Toronto, ON M3J 2C4, Canada

This product is warranted to be free of defects in material and workmanship for three years from date of purchase. This warranty guarantees that any defective parts will be repaired or replaced at no cost, including diagnosis and replacement parts.

Limited Warranty Periods

Recreational and Residential use: Three Years Limited

- 1st Year: Parts and Labor
- 2nd and 3rd Year: Parts only

Commercial use: Six months limited, parts and labor

This limited warranty begins at the initial time of retail purchase and covers manufacturer's defects caused by a defect in components or workmanship during the three (3) year period. The warranty coverage is continual from the initial date of purchase and does not restart at anytime under any circumstances. This limited warranty is valid for residential or recreational applications only and only when the generator receives all necessary preventative maintenance as described in the User Guide.

The repair or replacement of a generator will take place within a reasonable period of time during normal business hours. All repair and replacement parts shall be warranted for (90) days after the initial date of installation or purchase.

Limitation of Remedies and Disclaimers

Midland International Inc. disclaims any responsibility for loss of time or use of the generator in a recreational vehicle or any vehicle in which the generator is installed, transportation, commercial loss, or any other incidental or consequential damage. Any implied warranties are limited to the duration of this written warranty.

THE FOREGOING LIMITED WARRANTY IS EXCLUSIVE OF AND IN LIEU OF ALL OTHER WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND OF ANY OTHER WARRANTY WHETHER EXPRESS OR IMPLIED.

Consumable parts, such as oil or fuel filters, fuel cut off valve, brushes, fuel injection nozzle valve, lubricant, or ignition plug, are not covered under this warranty. All expenses incurred in maintaining and replacing parts for generator shall fall on the purchaser. This warranty coverage does not include parts affected by accident and/or collision, corrosion or rust, normal wear, incorrect fuel type or fuel contamination, use in an application for which the product was not intended, unauthorized service, or any other misuse, neglect, incorporation or use of unsuitable attachments or parts. Damage to voltage regulators caused by failure to ground, shorting or overloading will not be covered under this warranty. Under this Warranty, we do not have the obligation to bear any transportation fees of any product to/from an authorized Warranty Center. Unauthorized alteration, installation or any cause other than defects in material or workmanship of the product will not be covered under the warranty.

Exclusions Not Covered by this Limited Warranty

- Normal engine/alternator wear
- Damage caused by lack of maintenance as described in the Hyundai User Guides, or negligence by using improper or impure motor oil, coolant, or fuel
- Damage caused by accidents, improper installation or storage;
- Damage caused by water ingestion, submersion, or external water damage
- Damage or non-performance caused by operation of the generator set in a marine application
- Damage caused by operation with improper fuel, or at speeds, loads, conditions, or modifications contrary to published specifications.
- Items not supplied by Hyundai, including, but not limited to, starting batteries, battery cables, external wiring, fuel lines, filters, etc;(refer to exclusions)
- Repairs made during the warranty period, without first obtaining a case number from Hyundai

Batteries

Batteries supplied with any generator product should be considered a bonus item and not covered by warranty. Batteries can be damaged by shock, shorting terminals, heat, acid spillage and a number of other factors that cannot be controlled after they have left our facility. It is the customer's responsibility to take great care when handling a battery so no spillage of acid will occur and cause corrosion; damage caused by battery acid is not covered under this warranty.

Our Warranty Rights and Obligations

California

The California Air Resources Board and Midland Power Inc. are pleased to explain the emission control system warranty on your Midland Power Inc. engine. In California, new spark-ignited small off-road equipment engines must be designed, built, and equipped to meet the State's stringent anti-smog standards.

Other States, U.S. territories, and Canada

In other areas of the United States and in Canada, your engine must be designed, built, and equipped to meet the U.S. EPA and Environment Canada emission standards for spark-ignited engines at or below 19 kilowatts.

All of the United States and Canada

Midland Power Inc. must warrant the emission control system on your power equipment engine for the period of time listed below, provided there has been no abuse, neglect, or improper maintenance of your power equipment engine. Where a warrantable condition exists, Midland Power Inc. will repair your power equipment engine at no cost to you including diagnosis, parts, and labor.

Your emission control system may include such parts as the carburetor or fuel injection system, the ignition system, and catalytic converter. Also included may be hoses, connectors, and other emission-related assemblies.

Emission Control System Warranty Parts:

This list applies to parts supplied by Midland Power Inc. and does not cover parts supplied by the equipment manufacturer. Please see the original equipment manufacturer's emissions warranty for non-Midland Power Inc. parts.

Consumable parts are covered up to a maximum of 30 days.

SYSTEMS COVERED IN WARRANTY	PARTS DESCRIPTION
Fuel Metering	Carburetor assembly (includes starting enrichment system), Engine temperature sensor, Engine control module, Fuel regulator, Intake manifold
Evaporative	Fuel Tank, Fuel Cap, Fuel Hoses, Vapor Hoses, Carbon Canister, Canister Mounting Brackets, Fuel Strainer, Fuel cock, Fuel Pump, Fuel Hose Joint, Canister Purge Hose Joint
Exhaust	Catalyst, Exhaust Manifold
Air Induction	Air filter housing, Air filter element
Ignition	Flywheel magneto, Ignition pulse generator, Crankshaft position sensor, Power coil, Ignition coil assembly, Ignition control module, Spark plug cap, Spark plug
Crankcase Emission Control	Crankcase breather tube, Oil filler cap
Miscellaneous Parts	Tubing, fittings, seals, gaskets, and clamps associated with these listed systems

Warranty Claim Procedure

Warranty service must be performed by one of our authorized service dealers. Do not return your product where purchased. If you feel your generator is malfunctioning due to a defect or misuse, simply contact our customer support center for technical advice, a warranty claim or general information. Warranty service, operation assistance and product support is provided by Midland Power Inc., contact us at the numbers below.

Product Registration Instructions

Product registration is required for product support and warranty coverage. You can register online at www.hyundaipower.ca. Once your registration is complete, your receipt will be on file and any future warranty claims will be easily created. If you wish, you can confirm your registration by calling customer service at 1-877-528-3772 or by e-mail at support@hyundaipower.ca

Proof of purchase may be required for warranty claims. Keep a copy of the original receipt, UPC code and serial number with this user guide.

You can register easily using our online form:

www.hyundaipower.ca/warranty.php

Enjoy!

Be sure to check hyundaipower.ca for updates regarding your generator.

Customer Service

1-877-528-3772
support@hyundaipower.ca
www.hyundaipower.ca

HYUNDAI

For Inquiries, Please Contact:

Midland Power Inc.
376 Magnetic Drive, Toronto, ON Canada M3J 2C4
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