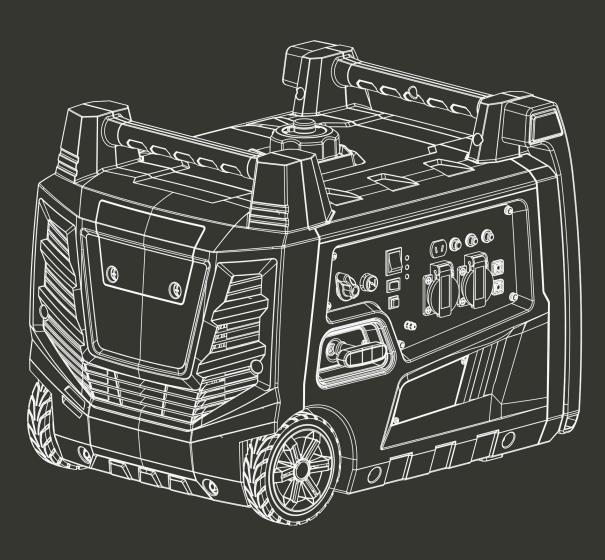


# GASOLINE LOW POWER GENERATING SET

**HG4000I-A1** 

## ORIGINAL INSTRUCTIONS





WARNING: Read thoroughly the instruction manual before using.



Please fully read and understand this instruction manual before operating the device.

#### 1. SAFETY INSTRUCTION



## Warning:

- 1. Attention! Exhaust gases are toxic. Do not operate the generator in a room without ventilation system!
- 2. Children should be protected by keeping them at a safe distance from the generator set!
- 3. Refilling of the generating sets are not allowed during the operation!
- **4.** If the generator will be mounted in a closed room, relevant safety regulations against fire and explosion should be followed!
- 5. Do not connect to household circuit!
- 6. Do not use in wet condition!
- 7. Keep in flammable away!
- 8. When refuelling:
  - a) stop engine;
  - **b)** no smoking;
  - **c)** do not spill.



## **General security instructions**

- The operator must know the principles of functioning and the structure of the generator and the motor. He must know how to stop the motor in case of urgency and how to manipulate the controls.
- Never let children use this device.
- Never let people who do not know these instructions use this device. Local regulations may impose restrictions on the age of the user.
- Please do not use this device when people, especially children, or pets are nearby. Direct them away from the working area.
- The operator or the user are responsible for possible accidents or damage to other persons or to their property.
- Do not wear loose clothing or jewellery as this can get caught in the machinery as it runs.
- Use safety equipment. Wear protective gear such as an anti-dust mask, non-slip safety shoes, a helmet or hearing protection.
- Stay vigilant, watch what you are doing and show good sense when you use the generator. Do not use if you are tired or under the influence of drugs, alcohol or medicines.
- Install the generator in a place that is well ventilated and make sure that there is at least 1.5 metres between the generator and the walls of the building or other equipment. Do not place flammable liquids or gases near the generator.
- Do not run the generator in an enclosed or badly-ventilated space. The exhaust gas from the motor contains carbon monoxide which is toxic and may lead to a loss of consciousness or death.

- Run the generator in respect of the power indicated in the user's manual. Do not run the generator with an overload or at excessive speed.
- The silencer of the generator becomes extremely hot when the motor runs or even for a time after it has stopped. Do not touch it as it will burn you.
- Do not transport or move the generator until it has cooled down.
- Perform periodic maintenance and resolve problems that appear immediately. Do not run the generator before correcting any fault detected.
- The generator uses a system of air-cooling, and it is necessary to clean its components regularly, including the grilles, the cover of the fan and the fan itself so as to ensure cooling.
- Keep the fuel filter clean, and change the oil of the motor regularly.
- Periodically check the installation of the connections and the tightness of the fixations, re-tightening them if necessary.
- Clean the components of the air filter periodically, and replace the air filter when necessary.
- Remove any electrical equipment that is plugged in before starting or stopping the generator.
- Before transporting the generator, you must empty the fuel tank.
- Maintenance and repair of the generator must be carried out by a qualified technician from an authorised after-sales service centre.

Warning: when you start the generator with the cord, watch out for sudden changes in the rotation of the motor!!! Risk of wounding!!! Never cover the generator when it is running. The cut-out mounted on the generator has the aime of reducing the risk of electric shock. If it needs to be replaced with another cut-out, the latter must correspond to the technical specifications of the generator. Due to important mechanical constraints, it is necessary to use a flexible sheathed cable with a strong rubber protective layer (conforming to IEC 245-4) or a similar cable. If using an electrical extension cable, the total length of the extension must not exceed 60m when the section of the wire is 1.5mm² and must not exceed 100m when the section of the wire is 2.5mm².

#### Additional requirements for low-power generating sets for use by laymen

- Protect children by keeping them at a safe distance from the generating set.
- Fuel is combustible and easily ignited. Do not refuel during operation. Do not refuel while smoking or near naked flames. Do not spill fuel.
- Some parts of the internal combustion engine are hot and may cause burns. Pay attention to the warnings on the generating set.
- Engine exhaust gases are toxic. Do not operate the generating set in unventilated rooms. When
  installed in ventilated rooms, additional requirements for fire and explosion protection shall be
  observed.

- Before use, the generating set and its electrical equipment (including lines and plug connections)
   should be checked to ensure that they are not defective.
- Protection against electrical shock depends on circuit breakers specially matched to the generating set.
   If the circuit breakers require replacement, they should be replaced with a circuit breaker having identical ratings and performances characteristics.
- Due to high mechanical stresses, only tough rubber-sheathed flexible cable (in accordance with IEC 60245-4) or the equivalent should be used.
- The user shall conform to regulations of electrical safety applicable to the place where the generating sets are used.
- The user must respect the requirements and precautions in the case of resupply by generating sets of an installation, depending on existing protective measures in this installation and applicable regulations.
- Generating sets should only be loaded up to their rated power under the rated ambient conditions.
- Prior to commencing maintenance work it shall be ensured that untimely start-up is not possible.

### Security measures when filling the fuel tank

- The fuel is extremely flammable and poisonous.
- This generator only uses petrol (gasoline); any other kind of fuel will damage the motor.
- Do not overfill the tank with petrol to avoid spilling. If you notice a spill, it must be wiped up completely with a dry cloth before starting the motor.
- If you swallow fuel by mistake, if you inhale fuel vapours or if you get drops of fuel in your eyes, see a doctor immediately. If a certain quantity of fuel is spilt on your skin or clothing, wash or change your clothes.
- Always stop the motor of the generator when filling it with fuel.
- Never fill the fuel tank while smoking or near a naked flame.
- Make sure you don't spill fuel on the motor and the exhaust grille of the generator during filling with fuel.
- Keep the fuel in an appropriate recipient and sheltered from any sources of fire.
- Carry out filling in a safe place, and slowly open the fuel cap to release the pressure which has built up inside the tank. Wipe up any drops of petrol that have spilled before starting the motor.
- To prevent fire, move the generator at least 4 metres away from the area for filling with fuel.
- Make sure that the fuel cap is tightly closed before starting.
- Do not keep petrol in the tank for a long time.

While using or transporting the generator, make sure you keep the generator upright,
 otherwise the fuel may escape from the carburettor or the fuel tank.



## **Electrical safety**

Before each use ensure that the load to be connected does not exceed the power of the current produced by the generator.

### To avoid electric shock, you must follow the following instructions:

- Do not touch the generator with wet hands.
- Do not run the generator under rain or snow.
- Do not run the generator near water.
- Connect the generator to earth. Use a sufficiently thick conductor for the earth wire.
- Do not operate the generator in parallel with another generator.
- If using electrical extensions, make sure that they are sufficiently thick to transport the current and hat they are used correctly.

The connection of a generator used for auxiliary power to the electrical installation of a building must be performed by a qualified electrician, and in conformity to the provisions of the applicable laws and norms in the field of electricity. Incorrect connections will cause leakage of the current from the generator into the lines of the public electricity company. Such leakage could electrocute the workers of the public electricity company working on the network or other persons in contact with the line during a power cut. Also, when the public power supply is re-established, the generator can explode, catch fire or generate fires in the building's electrical installation.

Before connecting electrical devices to the generator, make sure that their voltage specifications and frequency of functioning correspond to the technical characteristics of the generator. There may be damage if the device connected is not designed to function with a voltage tolerance of +/- 10% or a frequency tolerance of +/- 3 % compared with those of the generator.

#### Protection of the environment

- You must periodically check the silencer (Before doing this, switch off the generator and let it cool completely). A damaged silencer increases noise.
- Do not throw motor oil into the drains but deposit it at a collection point set up for that purpose.
- The fuel for this machine is combustible and explosive. After stopping the machine, you must handle the remaining fuel correctly and meet local environmental requirements.
- To dispose of residual fluids, proceed as follows:
  - Close the fuel tap
  - Drain fuel from the fuel tank
  - Empty carburettor fuel

### 2. SYMBOLS

The following symbols are used in this manual to allow differentiating different types of information. The safety symbol is used as a keyword to warn you of potential hazards in operating and owning power equipment.

Observe all safety instructions to avoid or limit the risk of serious injury or even death.



This is the safety alert symbol. It is used to warn you of a risk of injury and material damage. Observe all safety messages following this symbol to avoid possible injury or death or material damage.



In order to reduce the risk of injury and material damage, the user should read and understand this manual before using this product.



Running the electric generator in a closed room is forbidden, as the exhaust gas emissions may lead men or animals to coma and death.



This symbol indicates that the surface is very hot and should not be touched. Be careful not to touch the crankcase and exhaust muffler of the engine.



The engine and exhaust grid become hot after a certain amount of time the engine is running. When servicing or repairing prior to complete cooling, be sure to avoid contact of your skin or clothes with the engine and exhaust grid.



No open flames.



Do not connect to the electricity system.



Do not dispose of old appliances with household waste.



This equipment complies with the European standards and directives.



Guaranteed noise emission level.



This symbol indicates the surface is very hot and not touching



Exhaust emissions are harmful to health of body



No naked fire near the machine!



Danger! Electrical shock!

## **WARNING**

## **A** AVERTISSEMENT

**DO NOT TOUCH!** Exhaust gases, muffler, and engine components are extremely **HOT** and can cause burns.



NE PAS TOUCHER! Les gaz d'échappement, le silencieux et les éléments du moteur sont extrêmement CHAUDS et peuvent causer de brûlures.



TO PREVENT ENGINE DAMAGE THE SPARK ARRESTER SHOULD BE CLEANED EVERY 100 HOURS

POUR PRÉVENIR LES DOMMAGES AU MOTEUR, LE PARE-ÉTINCELLES DEVRAIT ÊTRE NETTOYÉ A TOUTES LES <u>100 HEURES</u>

#### **A** DANGER

#### FOR USE IN A WEATHER PROTECTED AREA ONLY

WHEN STORING GASOLINE OR EQUIPMENT WITH FUEL IN TANK: Store away from furnaces, stoves, water heaters or other appliances that have a pilot light or other ignition source because they can ignite gasoline vapors.

## **AWARNING**



Read and follow operating instructions before running engine. Gasoline flammable. Check for spilled fuel or fuel leaks. Stop engine and allow to cool at least 2 minutes before refueling.

Operation of this equipment may create sparks that can start fires around dry vegetation. A spark arrester may be required. The operator should contact local fire agencies for laws or regulations relating to fire prevention requirements.

### ▲ DANGER

#### EMPLOYEZ UNIQUEMENT DANS UN EMPLACEMENT A L'ABRI DES INTEMPRERIÈS

CONCERNANT LE STOCKAGE D'ESSENCE OU DE MATÉRIEL EN PRÉSENCE DE CARBURANT DANS LE RÉSERVOIR: Stocker à distance des appareils de chauffage, poêles, chauffe-eau ou autres appareils électriques équipés d'une vailleuse ou de toute autre source d'allumage our ne pas risquer d'enflammer les vapeurs d'essence.

## **A** AVERTISSEMENT



Lire et suivre les instructions avant de faire fonctionner le moteur.

L'essence est inflammable. Vérifier qu'il n'y a pas derenversement ni de fuite d'essence. Arrêter le moteuret le laisser refroidir pendant au moins 2 minutes avant de faire le plein.

Le fonctionnement de ce équipement peut générer de étincelles pouvant amorcer un incendie près de la végétation sèche. Un para-étincelles pourrait être requis. L'opérateur devrait communiquer avec les services d'incendie locaux pour connaître la réglementation concernant les normes de prévention contre les incendies.

### **▲ WARNING/AVERTISSEMENT**

To prevent vapor lock in the fuel tank, **DO NOT** turn fuel vent to OFF position until engine has cooled for at least **15 minutes.** 

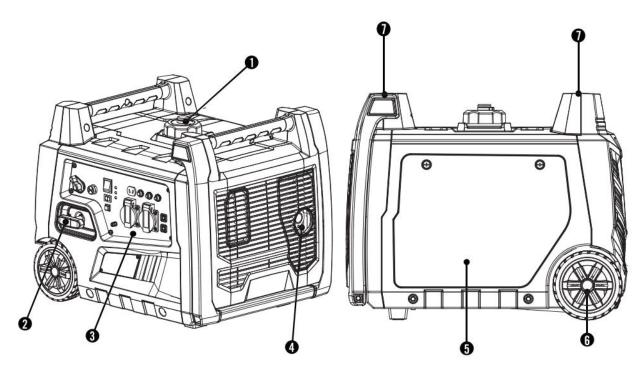
Pour prévenir un blocage de vapeur dans le réservoir à carburant NE PAS tourner la mise à l'air libre carburant en position ARRÊT avant que le moteur ait refroidi durant au moins 15 minutes.



#### 3. CONTROLS AN FEATURES

Read this owner's manual before operating your generator. Familiarize yourself with the location and function of the controls and features. Save this manual for future reference.

#### Inverter



(1) Fuel Cap – Remove to add fuel.

(5) Maintenance Cover

- (2) Recoil Starter Used to start the engine.
- (3) Power Panel
- (4) Muffler

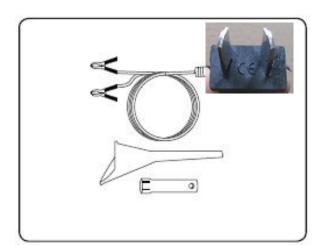
## **Parts Included**

Your Gasoline Powered Generator is shipped with the following parts:

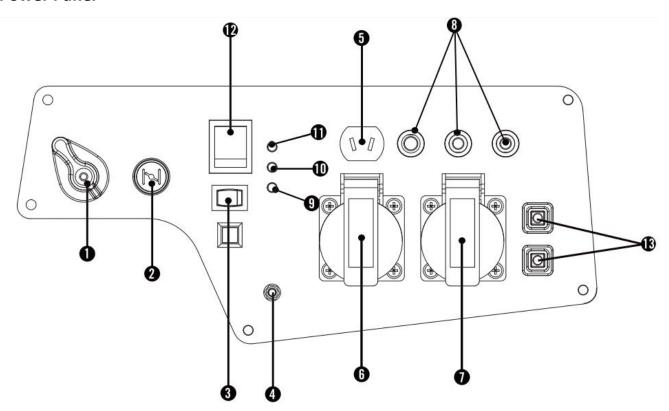
- Oil funnel		•••••	1
- Spark plug soc	ket		1

- Automotive style battery charge cables......1

- (6) Never Flat Wheels
- (7) Carrying Handle



## **Power Panel**



- (1) Fuel Valve Knob
- (2) Choke
- (3) Economy Control Switch

- (9) Oil Warning Light Check oil level when this light turns on. Engine will not run when indicator is lit.
- (10) Overload Indicator Light This light turns ON

- (4) Ground Terminal Consult an electrician for local grounding regulations.
- (5) 12 V DC Automotive Outlet\*.
- (6) FR Socket 230 V, AC 50 Hz, single-phase loads.
- (7) FR Socket 230 V, AC 50 Hz, single-phase loads.
- (8) Circuit Breaker (Push button) Protects the generator against electrical overload.

- when the generator is overloaded and will cut power to the receptacles.
- **(11) Output Light** Remains ON during normal operating conditions. Shuts OFF when generator is overloaded.
- (12) Engine Switch
- (13) Parallel socket Use this socket with the parallel kit to connect two HG4000i-A1.

\*Warning: Do not operate a device while it is plugged into the 12 V DC outlet. Prolonged exposure to engine exhaust can cause serious injury or death. While charging a device do no place on the exhaust side of the generator. Extreme heat caused by exhaust can damage the device, and cause a potential fire hazard.

#### 4. ASSEMBLY

Your generator requires some assembly. This unit ships from our factory without oil. It must be properly serviced with fuel and oil before operation.

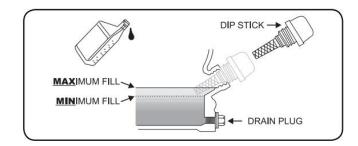
## Remove the Generator from the Shipping Carton

- 1. Set the shipping carton on a solid, flat surface.
- 2. Remove everything from the carton except the generator.
- 3. Using the handle of the unit, carefully remove the generator from the box.

#### Add Engine Oil (continued)



Once oil has been added, a visual check should show oil about 1-2 threads from running out of the fill hole. If using the dipstick to check oil level, DO NOT screw in the dipstick while checking.



### **Add Engine Oil**

## (!) CAUTION

DO NOT attempt to crank or start the engine before it has been properly filled with the recommended type and amount of oil. Damage to the generator as a result of failure to follow these instructions will void your warranty.



## ⇔NOTE

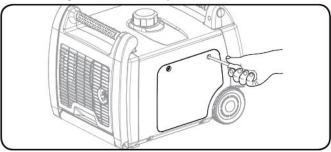
The generator rotor has a sealed, pre-lubricated ball bearing that requires no additional lubrication for the life of the bearing.



## **♥ NOTE**

The recommended oil type is 10W-30 automotive oil.

- 1. Place the generator on a flat, level surface.
- 2. Loosen the cover screw and remove the cover for maintenance.
- 3. Remove oil fill cap / dipstick to add oil.
- 4. Add up to 0.6 qt. (0.6 L) of oil and replace oil fill cap / dipstick. DO NOT OVERFILL.
- 5. Check engine oil level daily and add as needed.



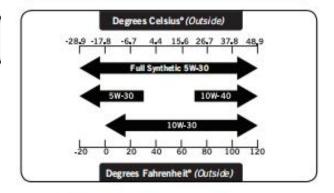
## CAUTION

The engine is equipped with a low oil shut-off and will stop when the oil level in the crankcase falls below the threshold level.



### NOTE

We consider the first 5 hours of run time to be the breakin period for the unit. During the break in period stay at or below 50% of the running watt rating and vary the load occasionally to allow stator windings to heat and cool. Adjusting the load will also cause engine vary and help seat piston rings. After the 5 hour period, change the oil.





## $\bigcirc$ Note

Weather will affect engine oil and engine performance. Change the type of engine oil used based on weather conditions to suit the engine needs.

## NOTE

Synthetic oil may be used after the 5 hour initial breakin period. Using synthetic oil does not increase the recommended oil change interval.

#### **Add Fuel**

- 1. Use clean, fresh, regular unleaded fuel with a minimum octane rating of 85 and an ethanol content of less than 10% by volume.
- 2. DO NOT mix oil with fuel.
- 3. Clean the area around the fuel cap.
- 4. Remove the fuel cap.
- 5. Slowly add fuel to the tank. DO NOT OVERFILL. Fuel can expand after filling. A minimum of 6.4 mm (¼ in.) of space left in the tank is required for fuel expansion, more than 6.4 mm (¼ in.) is recommended. Fuel can be forced out of the tank as a result of expansion if it is overfilled, and can affect the stable running condition of the product. When filling the tank, it is recommended to leave enough space for the fuel to expand.

#### Add Fuel (continued)

6. Screw on the fuel cap and wipe away any spilled fuel.



Use regular unleaded gasoline with a minimum octane rating of 85.

Do not mix oil and gasoline.

Fill tank to approximately 6.4 mm (¼ in.) below the top of the tank to allow for fuel expansion.

DO NOT pump gas directly into the generator at the gas station. Use an approved container to transfer the fuel to the generator.

DO NOT fill fuel tank indoors.

DO NOT fill fuel tank when the engine is running or hot.

DO NOT overfill the fuel tank.

DO NOT light cigarettes or smoke when filling the fuel tank.



Pouring fuel too fast through the fuel screen may result in blow back of fuel at the operator while filling.

## **♥NOTE**

Our engines work well with 10% or less ethanol blend fuels. When using blended fuels there are some issues worth noting:

- Ethanol-gasoline blends can absorb more water than gasoline alone.
- These blends can eventually separate, leaving water or a watery goo in the tank, fuel valve and carburetor.
- With gravity-fed fuel supplies, this compromised fuel can be drawn into the carburetor and cause damage to the engine and/or potential hazards.
- There are only a few suppliers of fuel stabilizer that are formulated to work with ethanol blend fuels.
- Any damages or hazards caused by using improper fuel, improperly stored fuel, and/ or improperly formulated stabilizers, are not covered by manufacture's warranty.

It is advisable to always shut off the fuel supply, run the engine to fuel starvation and drain the tank when the equipment is not in use for more than 30 days.

#### Grounding

Your generator must be properly connected to an appropriate ground to help prevent electric shock.



Failure to properly ground the generator can result in electric shock.

A ground terminal connected to the frame of the generator has been provided on the power panel. For remote grounding, connect of a length of heavy gauge (12 AWG minimum) copper wire between the generator ground terminal and a copper rod driven into the ground. We strongly recommend that you consult with a qualified electrician to ensure compliance with local electrical codes.

#### 5. OPERATION

#### **Generator Location**

NEVER operate the generator inside any building, including garages, basements, crawlspaces and sheds, enclosure or compartment, including the generator compartment of a recreational vehicle. Please consult your local authority. In some areas, generators must be registered with the local utility. Generators used at

construction sites may be subject to additional rules and regulations. Generators should be on a flat, level surface at all times (even while not in operation). Generators must have at least 5 ft. (1.5 m) of clearance from all combustible material. In addition to clearance from all combustible material, generators must also have at least 3 ft. (91.4 cm) of clearance on all sides to allow for adequate cooling, maintenance and servicing. Generators should never be started or operated in the back of a SUV, camper, trailer, in the bed of a truck (regular, flat or otherwise), under staircases / stairwells, next to walls or buildings, or in any other location that will not allow for adequate cooling of the generator and/or the muffler. DO NOT contain generators during operation. Allow generators to properly cool before transport or storage. Place the generator in a well-ventilated area. DO NOT place the generator near vents or intakes where exhaust fumes could be drawn into occupied or confined spaces. Carefully consider wind and air currents when positioning generator. Failure to follow proper safety precautions may void manufacturer's warranty.

## **WARNING**

Do not operate or store the generator in rain, snow, or wet weather.

Using a generator or electrical appliance in wet conditions, such as rain or snow, or near a pool or sprinkler system, or when your hands are wet, could result in electrocution.

## **WARNING**

During operation the muffler and exhaust fumes produced will become hot. If adequate cooling and breathing space are not supplied, or if the generator is blocked or contained, temperatures can become extremely heated and may lead to fire.

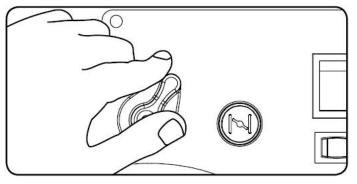
#### Grounding

The generator system ground connects the frame to the ground terminals on the power panel.

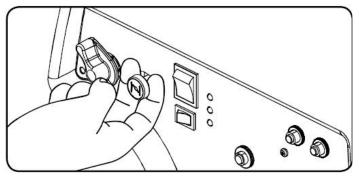
- The generator (stator winding) is isolated from the frame and from the AC receptacle ground pin.
- Electrical devices that require a grounded receptacle pin connection will not function if the receptacle ground pin is not functional.

#### **Engine Start**

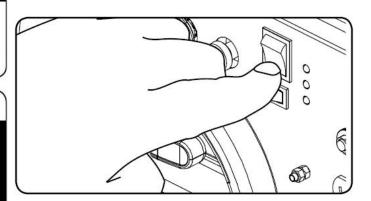
- 1. Make certain the generator is on a flat, level surface.
- 2. Disconnect all electrical loads from the generator. Never start or stop the generator with electrical devices plugged in or turned on.
- 3. Turn the fuel valve to the "On" position.



4. Pull choke lever out to the "Choke" position.



5. Turn the engine switch to the "On" position.



#### **Engine Start (continued)**

- 6. Pull the starter cord slowly until resistance is felt and then pull rapidly.
- 7. As engine warms up, push the choke lever in to the "Run" position.



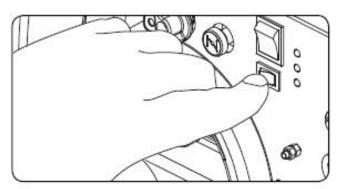
Keep choke lever in "Choke" position for only 1 pull of the recoil starter. After first pull, move choke lever to the "Run" position for up to the next 3 pulls of the recoil starter. Too much choke leads to sparkplug fouling/engine flooding due to the lack of incoming air. This will cause the engine not to start.



If the engine starts but does not run make certain that the generator is on a flat, level surface. The engine is equipped with a low oil sensor that will prevent the engine from running when the oil level falls below a critical threshold.

#### **Economy Control Switch**

The Economy Control switch can be activated in order to minimize fuel consumption and noise while operating the unit during times of **reduced electrical output**, allowing the engine speed to idle during periods of non-use. The engine speed returns to normal when an electrical load is connected. When the economy switch is off, the engine runs at normal speed continuously.



## **WARNING**

For periods of high electrical load or momentary fluctuations, the Economy Control Switch should be turned OFF.

#### **Connecting Electrical Loads**

- 1. Let the engine stabilize and warm up for a few minutes after starting
- 2. Plug in and turn on the desired 230 Volt AC single phase, 50 Hz electrical loads.
- DO NOT connect 3-phase loads to the generator.
- DO NOT connect 60 Hz loads to the generator.
- DO NOT overload the generator.

## NOTE

Connecting a generator to your electric utility company's power lines or to another power source may be against the law. In addition this action, if done incorrectly, could damage your generator and appliances and could cause serious injury or even death to you or a utility worker who may be working on nearby power lines. If you plan to run a portable electric generator during an outage, please notify your electric utility company immediately and remember to plug your appliances directly into the generator. Do not plug the generator into any electric outlet in your home. Doing so could create a connection to the utility company power lines. You are responsible for ensuring that your generator's electricity does not feed back into the electric utility power lines.

If the generator will be connected to a building electrical system, consult your local utility company or a qualified electrician. Connections must isolate generator power from utility power and must comply with all applicable laws and codes.

## **MARNING**

Do not operate a device while it is plugged in to the 12V DC outlet.

Prolonged exposure to engine exhaust can cause serious injury or death.

## **AWARNING**

While charging a device do no place on the exhaust side of the generator. Extreme heat caused by exhaust can damage the device, and cause a potential fire hazard.

#### 12 V DC Outlet

The 12 V DC outlet can be used with the supplied charge cable and USB charger and other commercially available 12 V DC automotive style plugs. The DC output is unregulated and can damage some

or stop the generator with electrical devices plugged in or turned on.

2. Let the generator run at no-load for several minutes to stabilize internal temperatures of the engine and generator.

products. Confirm your accessory input voltage range is at least 12-21 V DC. When using the DC outlet turn the Economy mode switch to the "OFF" position.



## (!) CAUTION

Do not start the vehicle while the battery charging cable is connected and the generator is running. It will not give the battery a boost of power. The vehicle or the generator may be damaged. Charge only vented wet lead acid batteries. Other types of batteries may burst, causing personal injury or damage.



## ♥NOTE

Be sure all electric devices including the lines and plug connections are in good condition before connection to the generator.

#### 12 V DC Outlet – Battery Charging

- 1. Before connecting the battery charging cable to a battery that is installed in a vehicle, disconnect the vehicle battery ground cable from the negative (-) battery terminal.
- 2. Plug the battery charging cable into the 12 V DC receptacle of the generator.
- 3. Connect the red (+) battery charger lead to the red (+) battery terminal.
- 4. Connect the black (-) battery charger lead to the black (–) battery terminal.
- 5. Start the generator.

**Important:** The 12 V DC outlet is ONLY to be used with the supplied 12 V DC battery charging cable. The 12 V DC output is unregulated and will damage other 12 V DC products. When using the 12 V DC outlet, turn the

Economy mode switch to the "OFF" position. Be sure all electric devices including the lines and plug connections are in good condition before connection to the generator.



#### NOTE

If the engine will not be used for a period of two (2) weeks or longer, please see the storage section for proper engine and fuel storage.

#### **Engine Stop**

1. Turn off and unplug all electrical loads. Never start

- 3. Turn the Fuel Valve to the "OFF" position.
- 4. Let the engine run until fuel starvation has stopped the engine. This usually takes a few minutes.
- 5. Turn the engine switch to the "Off" position.
- 6. Turn the fuel cap lever vent to the "Off" position after the generator has cooled down completely.

**Important:** Always ensure that the Fuel Valve and the Engine Switch are in the "OFF" position when the engine is not in use.

## Do Not Overload Generator Capacity

Follow these simple steps to calculate the running and starting watts necessary for your purposes.

- 1. Select the electrical devices you plan on running at the same time.
- 2. Total the running watts of these items. This is the amount of power you need to keep your items running.
- 3. Identify the highest starting wattage of all devices identified in step 1. Add this number to the number calculated in step 2. Surge wattage is the extra burst of power needed to start some electric driven equipment. Following the steps listed under "Power Management" will guarantee that only one device will be starting at a time.

#### **Power Management**

Use the following formula to convert voltage and amperage to watts: Volts x Amps = Watts

To prolong the life of your generator and attached devices, follow these steps to add electrical load:

- 1. Start the generator with no electrical load attached.
- 2. Allow the engine to run for several minutes to stabilize.
- 3. Plug in and turn on the first item. It is best to attach the item with the largest load first.
- 4. Allow the engine to stabilize.
- 5. Plug in and turn on the next item.
- 6. Allow the engine to stabilize.
- 7. Repeat steps 5-6 for each additional item.



#### NOTE

Never exceed the specified capacity when adding loads to the generator.

### 6. MAINTENANCE AND STORAGE

#### **Overload Operation**

The overload indicator light will turn on when the rated load is exceeded. When the maximum load is reached, the LED will blink and cut power to the receptacles. To recover the power, shut down the engine, wait until the light turns off and restart the generator. The owner / operator is responsible for all periodic maintenance.



Never operate a damaged or defective generator.

## **MARNING**

Tampering with the factory set governor will void your warranty.

## **WARNING**

Improper maintenance will void your warranty.

## NOTE

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

Complete all scheduled maintenance in a timely manner. Correct any issue before operating the generator.



For any assistance regarding after-sales service or spare parts.

#### **Engine Maintenance**

To prevent accidental starting, remove and ground spark plug wire before performing any service.

#### Oil

Change oil when the engine is warm. Refer to the oil specification to select the proper grade of oil for your operating environment.

1. Set the generator on top of a work bench or table.

#### Air filter

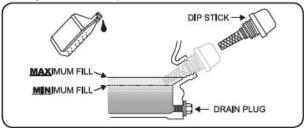
1. Remove the maintenance cover.

- 2. Loosen the cover screws and remove the maintenance cover.
- 3. Pop up the rubber maintenance plug, from below the drain bolt.
- 4. Remove the 12 mm drain bolt.
- 5. Tilt the generator on its side and allow the oil to drain completely.
- 6. Add 0.6 qt. (0.6 L) of oil and replace oil fill cap / dipstick. DO NOT OVERFILL.

## **NOTE**

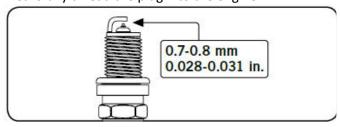
Once oil has been added, a visual check should show oil about 1-2 threads from running out of the fill hole. If using the dipstick to check oil level, DO NOT screw in the dipstick while checking.

- 7. Reinstall the maintenance cover and tighten the cover screws.
- 8. Dispose of used oil at an approved waste management facility.



#### **Spark Plugs**

- 1. Remove the maintenance cover.
- 2. Remove the spark plug cable from the spark plug.
- 3. Use the spark plug tool that shipped with your generator to remove the plug.
- 4. Remove the spark plug.
- 5. Inspect the electrode on the plug. It must be clean and not worn to produce the spark required for ignition.
- 6. Make certain the spark plug gap is 0.7 0.8 mm (0.028 0.031 in.).
- 7. Carefully thread the plug into the engine.



- 8. Use the spark plug tool to firmly install the plug.
- 9. Attach the spark plug cap to the plug.
- 10. Reinstall the spark plug access cap, and maintenance cover.

### **Spark Arrester (continued)**

- 2. Locate the air filter plastic cover.
- 3. Unsnap the locking hinge on the cover.
- 4. Remove the old filter.
- 5. Place the new filter in the assembly.
- 6. Re-snap the hinge on the air filter cover.
- 7. Reinstall the maintenance cover and tighten the cover screw securely.

#### Cleaning



DO NOT spray engine with water.

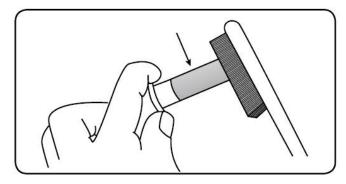
Water can contaminate the fuel system.

Use a damp cloth to clean exterior surfaces of the engine. Use a soft bristle brush to remove dirt and oil

Use an air compressor (25 PSI) to clear dirt and debris from the engine.

#### **Spark Arrester**

- 1. Allow the engine to cool completely before servicing the spark arrester.
- 2. Remove the two screws holding the cover plate which retains the end of the spark arrester to the muffler.
- 3. Remove the spark arrester screen.
- 4. Carefully remove the carbon deposits from the spark arrester screen with a wire brush.
- 5. Replace the spark arrester if it is damaged.
- 6. Position the spark arrester in the muffler and attach with the two screws.



## **① CAUTION**

Failure to clean the spark arrester will result in degraded engine performance.

#### **Adjustments**

The air-fuel mixture is not adjustable. Tampering with the governor can damage your generator and your electrical devices and will void your warranty.

#### **Maintenance Schedule**

Follow the service intervals indicated in the following maintenance schedule.

Service your generator more frequently when operating in adverse conditions.

Every 8 hours or daily			
	Check oil level		
	Clean around air intake and muffler		
First 5 hours			
	Change oil		
Every 50 hours or every season			
	Clean air filter		
	Change oil if operating under heavy load		
	or in hot environments		
Every 100 hours or every season			
	Change oil		
	Clean/adjust spark plug		
	Check/adjust valve clearance*		
	Clean spark arrester		
	Clean fuel tank and filter*		
Every 250 hours			
	Clean combustion chamber*		
Every 3 years			
	Replace fuel line		

<sup>\*</sup>To be performed by knowledgeable, experienced owners or HYUNDAI Power Equipment certified dealers.

#### **Generator Maintenance**

Make certain that the generator is kept clean and stored properly. Only operate the unit on a flat, level surface in a clean, dry operating environment. DO NOT expose the unit to extreme conditions, excessive dust, dirt, moisture or corrosive vapours.



DO NOT use a garden hose to clean the generator.

Water can enter the generator through the cooling slots and damage the generator windings.

Use a damp cloth to clean exterior surfaces of the generator. Use a soft bristle brush to remove dirt and oil.

Use an air compressor (1724 hPa/25 psi) to clear dirt and debris from the generator.

Inspect all air vents and cooling slots to ensure that they are clean and unobstructed.

#### Storage

The generator should be started at least once every 14 days and allowed to run for at least 20 minutes. For longer term storage, please follow these guidelines.

#### **Generator Storage**

- 1. Add a properly formulated fuel stabilizer to the tank.
- 2. Be sure all appliances are disconnected from the generator.
- 3. Run the generator for a few minutes so the treated fuel cycles through the fuel system and carburetor.
- 4. Turn the fuel valve to the "Off" position.
- Let the generator run until fuel starvation has stopped the engine. This usually takes a few minutes.
- 6. The generator needs to cool completely before cleaning and storage.
- 7. Remove the spark plug cap, then pull the recoil grip 3 times to drain the gasoline from the carburetor jets.
- 8. Change the engine oil.
- Remove the spark plug and pour about a tablespoon of oil into the cylinder. Crank the engine slowly to distribute the oil and lubricate the cylinder.
- 10. Reattach the spark plug.
- 11. Store the unit in a clean, dry place out of direct sunlight.



Generator exhaust contains odourless and colourless carbon monoxide gas.

To avoid accidental or unintended ignition of your generator during periods of storage, the following precautions should be followed:

 When storing the generator for short or extended periods of time make sure that the Engine Switch and the Fuel Valve are set in the OFF position.

### 7. TECHNICAL SPECIFICATIONS

### **Engine Specifications**

- Type: Four-stroke engine with overhead valve

- Start Type: recoil start

- Rating power 4.2kW,3800/min

Max power: 4.4 kW,
 Displacement: 192 cm<sup>3</sup>
 Fuel capacity: 6 L
 Engine oil capacity: 0.6 L

-Sound power level guatanteed: 96dB(A)

-Sound power level measured at 4 m:

 $L_{pA} = 75.97 dB (A)$   $L_{wA} = 96 dB (A)$ K = 0.283 dB (A)

-Noise level (measured at 7 m): 58 dB (A)

## **Generator Specifications**

AC Voltage: 230 V~Frequency: 50 Hz

Nominal power: (COP) 3.1 kWMaximum power: 3.3 kW (S2:5 min)

AC nominal current: 13.5 ADC output power: 12 V/6.5 A

Power factor: 1.0
Protection class: IP23M
Altitude max.: 1000m
Net weight: 38 kg
Height: 46.4 cm
Width: 44 cm
Length: 57 cm

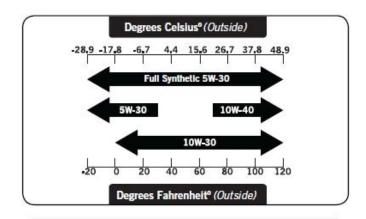
#### **Fuel**

Fuel capacity is 6 L (1.6 gal.). Use regular unleaded gasoline with a minimum octane rating of 85 and an ethanol content of less than 10% by volume.

#### Oil

Use 10W-30 automotive oil. Oil capacity is 0.6 qt. (0.6 L). DO NOT OVERFILL.

Please reference the following chart for recommended oil types for use in the generator.





Weather will affect engine oil and engine performance. Change the type of engine oil used based on weather conditions to suit the engine needs.

### **Spark Plugs**

**OEM spark plug: NHSP F6RTC** 

**Replacement spark plug:** NGK BPR6ES or equivalent Make certain the spark plug gap is 0.7 - 0.8 mm or (0.028 - 0.031 in.).

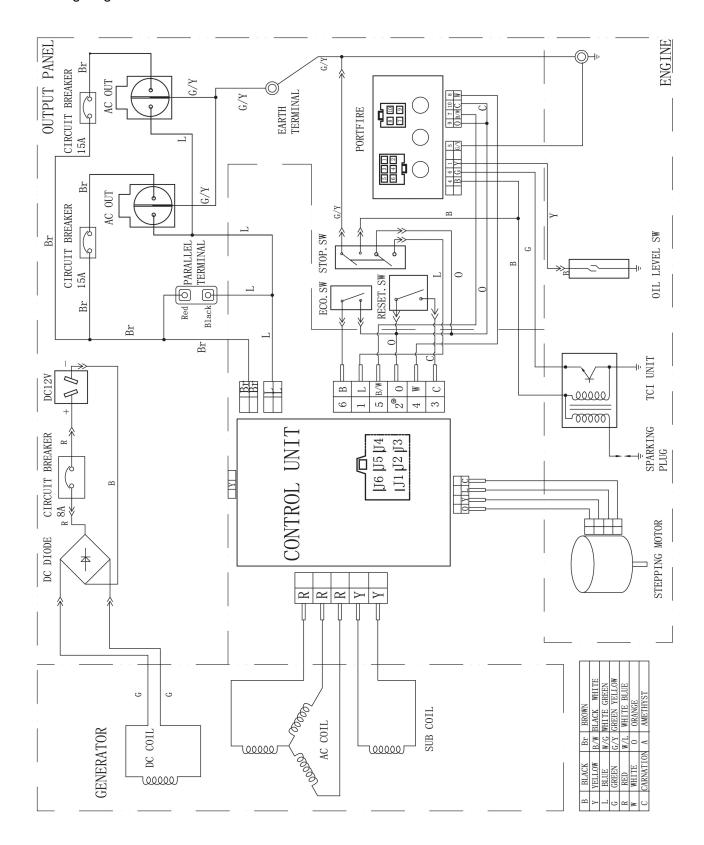
#### **Maintenance Valve Clearance**

Intake: 0.06 - 0.12 mm (0.002 - 0.005 in.)Exhaust: 0.08 - 0.14 mm (0.003 - 0.006 in.)

### **An Important Message About Temperature**

Your HYUNDAI Power Equipment product is designed and rated for continuous operation at ambient temperatures up to 40°C (104°F). When your product is needed your product may be operated at temperatures ranging from -15°C (5°F) to 50°C (122°F) for short periods. If the product is exposed to temperatures outside this range during storage, it should be brought back within this range before operation. In any event, the product must always be operated outdoors, in a well-ventilated area and away from doors, windows and other vents.

## Wiring diagram



## 8. TROUBLESHOOTING

Problem	Cause	Solution	
Generator will not start	No fuel	Add fuel	
	Faulty spark plug	Replace spark plug	
	Unit loaded during start up	Remove load from unit	
Generator starts but runs	Low oil level	Fill crankcase to the proper level	
roughly		Place generator on a flat, level surface	
	Choke in the wrong position	Adjust choke	
	Spark plug wire loose	Attach wire to spark plug	
Generator shuts down during	Out of fuel	Fill fuel tank	
operation	Low oil level	Fill crankcase to the proper level. Place	
		generator on a flat, level surface	
Generator cannot supply	Generator is overloaded	Review load and adjust. See "Power	
enough power or overheating		Management"	
	Insufficient ventilation	Check for air restriction. Move to a well	
		ventilated area	
No AC output	Cable not properly connected	Check all connections	
	Connected device is defective	Replace defective device	
	Circuit breaker is open	Reset circuit breaker	
	Loose wiring	Inspect and tighten wiring connections	
	Other	Contact the help line	
Repeated circuit breaker	Overload	Review load and adjust. See "Power	
tripping		Management"	
	Faulty cords or device	Check for damaged, bare or frayed wires.	
		Replace defective device	

## 9. EC Declaration of conformity





32, rue Aristide Bergès - ZI 31270 Cugnaux – France

Phone: +33 (0)5.34.502.502 Fax: +33 (0)5.34.502.503

declares that the machine designation:

# GASOLINE INVERTER GENERATOR HG4000I-A1

Serial number: 20241218960-20241219159

Is in conformity with the European Directives: Machine Directive 2006/42/EC

This product is in conformity with the following European standards:

Directive 2000/14/EC and 2005/88/EC

EMC Directive 2014/30/EU

This product is also in conformity with the following standards:

EN ISO 8528-13:2016 EN 60204-1:2006 + A1:2009 EN 55012:2007 + A1:2009

Name and address of the noise measuring laboratory:

## ISET S.r.I. Unipersonale

Sede Legale e Uffici

Via Donatori di sangue, 9 - 46024 Moglia (MN)

Tel. e fax +39 (0)376 598963

www.iset-italia.eu iset@iset-italia.com

Signed in Cugnaux, on 28/11/2024

Philippe MARIE / PDG

# **HYUNDAI**

## WARRANTY

The manufacturer guarantees the product against defects in material and workmanship for a period of 2 years from the date of the original purchase. The warranty only applies if the product is for household use. The warranty does not cover breakdowns due to normal wear and tear.

The manufacturer agrees to replace parts identified as defective by the designated distributor. The manufacturer does not accept responsibility for the replacement of the machine, in whole or in part, and/or ensuing damage.

#### The warranty does not cover breakdowns due to:

- · insufficient maintenance.
- abnormal assembly, adjustment or operations of the product.
- parts subject to normal wear and tear.

#### The warranty does not extend to:

- · shipping and packaging costs.
- using the tool for a purpose other than that for which it was designed.
- the use and maintenance of the machine done in a manner not described in the user manual.

Due to our policy of continuous product improvement, we reserve the right to alter or change specifications without notice. Consequently, the product may be different from the information contained therein, but a modification will be undertaken without notice if it is recognized as an improvement of the preceding characteristic.

#### READ THE MANUAL CAREFULLY BEFORE USING THE MACHINE.

When ordering spare parts, please indicate the part number or code, you can find this in the spare parts list in this manual. Keep the purchase receipt; without it, the warranty is invalid. To help you with your product, we invite you to contact us by phone or via our website:

- · +33 (0)9.70.75.30.30
- https://services.swap-europe.com/contact

You must create a "ticket" via the web platform.

- Register or create your account.
- Indicate the reference of the tool.
- · Choose the subject of your request.
- Describe your problem.
- Attach these files: invoice or sales receipt, photo
  of the identification plate (serial number), photo
  of the part you need (for example: pins on the
  transformer plug which are broken).



## **PRODUCT FAILURE**

## WHAT TO DO IF MY MACHINE BREAKS DOWN?

### If you bought your product in a store:

- a) Empty the fuel tank.
- b) Make sure that your machine is complete with all accessories supplied, and clean! If this is not the case, the repairer will refuse the machine.

Go to the store with the complete machine and with the receipt or invoice.

#### If you bought your product on a website:

- a) Empty the fuel tank.
- b) Make sure that your machine is complete with all accessories supplied, and clean! If this is not the case, the repairer will refuse the machine.
- c) Create a SWAP-Europe service ticket on the site: https://services.swap-europe.com When making the request on SWAP-Europe, you must attach the invoice and the photo of the nameplate (serial number).
- d) Contact the repair station to make sure it is available before dropping off the machine.

Go to the repair station with the complete machine packed, accompanied by the purchase invoice and the station support sheet downloadable after the service request is completed on the SWAP-Europe site

For machines with engine failure from manufacturers BRIGGS & STRATTON, HONDA and RATO, please refer to the following instructions.

Repairs will be done by approved engine manufacturers of these manufacturers, see their site:

- http://www.briggsandstratton.com/eu/fr
- http://www.honda-engines-eu.com/fr/service-network-page;jsessionid=5EE8456CF39CD572AA2AEEDFD 290CDAE
- https://www.rato-europe.com/it/service-network

Please keep your original packaging to allow for after-sales service returns or pack your machine with a similar cardboard box of the same dimensions.

For any question concerning our after-sales service you can make a request on our website https://services.swap-europe.com

Our hotline remains available at +33 (9) 70 75 30 30.



## **WARRANTY EXCLUSIONS**

## THE WARRANTY DOES NOT COVER:

- Start-up and setting up of the product.
- Damage resulting from normal wear and tear of the product.
- · Damage resulting from improper use of the product.
- Damage resulting from assembly or start-up not in accordance with the user manual.
- Breakdowns related to carburetion beyond 90 days and fouling of carburetors.
- Periodic and standard maintenance events.
- Actions of modification and dismantling that directly void the warranty.
- Products whose original authentication marking (brand, serial number) has been degraded, altered or withdrawn.
- · Replacement of consumables.
- The use of non-original parts.
- · Breakage of parts following impacts or projections.
- Accessories breakdowns.
- Defects and their consequences linked to any external cause.
- · Loss of components and loss due to insufficient screwing.
- Cutting components and any damage related to the loosening of parts.
- Overload or overheating.
- Poor power supply quality: faulty voltage, voltage error, etc.
- Damages resulting from the deprivation of enjoyment of the product during the time necessary for repairs and more generally the costs related to the immobilization of the product.
- The costs of a second opinion established by a third party following an estimate by a SWAP-Europe repair station
- The use of a product which would show a defect or a breakage which was not the subject of an immediate report and/or repair with the services of SWAP-Europe.
- Deterioration linked to transport and storage\*.
- · Launchers beyond 90 days.
- Oil, petrol, grease.
- Damages related to the use of non-compliant fuels or lubricants.
- \* In accordance with transport legislation, damage related to transport must be declared to carriers within 48 hours maximum after observation by registered letter with acknowledgement of receipt.

This document is a supplement to your notice, a non-exhaustive list.

**Attention:** all orders must be checked in the presence of the delivery person. In case of refusal by the delivery person, it you must simply refuse the delivery and notify your refusal.

**Reminder:** the reserves do not exclude the notification by registered letter with acknowledgement within 72 hours.

#### Information:

Thermal devices must be wintered each season (service available on the SWAP-Europe site). Batteries must be charged before being stored.





## For inquiries, please contact:

**BUILDER SAS** 

32 rue Aristide Bergès - Z.I. du Casque - 31270 Cugnaux - France

Tél.: +33(0)5.34.502.502 Fax.: +33(0)5.34.502.503

http://www.hyundaipower-fr.com/

Fabriqué en République Populaire de Chine(PRC)