

atac

ATAC Solutions Ltd is a leading environmental engineering company based in Maidstone, United Kingdom.

ATAC Solutions is known for its state-of-the-art liquid collection fleet and its expertise in providing bespoke turnkey wastewater process solutions.

With a focus on sustainability and accreditation in ISO 9001 & ISO 14001, the company serves domestic and industrial clients across the South-East and London.

ATAC Solutions Ltd,
Unit A9, Loc 8 Business Park, Ashford Road,
Hollingbourne, Maidstone, England, ME17 1WR

 [atacsolutions.com](https://www.atacsolutions.com)
 01622 882400

Axiom Water companies

HYUNDAI

INVERTER GENERATOR
INVERTER SERIES

HY1000Si

HY2000Si

HY3000Si

- USER MANUAL
- MANUAL DE USUARIO
- MANUEL D'UTILISATEUR



GREENPOWER
SERIES INVERTER

- REVIEW MANUAL CAREFULLY TO AVOID PERSONAL INJURY
- LEA DETENIDAMENTE ESTE MANUAL DE INSTRUCCIONES PARA EVITAR ACCIDENTES
- RÉVISEZ CE MANUEL SOIGNEUSEMENT POUR ÉVITER LES BLESSURES PERSONNELLES

WARNING Carbon Monoxide Poisoning!

DO NOT use in an enclosed area or a moving vehicle.

⚠ DANGER!

BREATHING IN CARBON MONOXIDE FUMES CAN KILL YOU!

To help protect against CO poisoning install a Carbon Monoxide detector.














NEVER use Petrol/Diesel powered equipment inside, especially a home, garage, tent, camper-van, caravan, motorhome or boat.

EVEN if doors, windows, vents and hatches are open. Only use **OUTDOORS** and as far away from doors, windows, vents and open hatches as possible to prevent inhaling fumes.

READING MANUAL BEFORE USE WILL HELP AVOID OTHER MACHINE HAZARDS.

Carbon monoxide is colourless and odourless, inhaling this gas can cause death as well as serious long term health problems such as brain damage.

The symptoms of carbon monoxide poisoning can include the following; Headaches, Dizziness, Nausea, Breathlessness, Collapsing or Loss of Consciousness. Carbon monoxide symptoms are similar to flu, food poisoning, viral infections and simply tiredness. That's why it's quite common for people to mistake this very dangerous poisoning for something else.

To avoid carbon monoxide poisoning **DO NOT** use Petrol/Diesel powered equipment inside a home or garage even if doors and windows are open. If you think you or someone around you has been affected by carbon monoxide poisoning; Get fresh air immediately.

Open doors and windows, turn off machine and leave the affected area. See your doctor immediately or go to hospital - let them know that you suspect carbon monoxide poisoning. Only use Petrol/Diesel powered equipment outside in a well-ventilated area.

PREFACE

Thank you for purchasing a Hyundai Portable Generator. Please register your product in order for us to ensure your continuous satisfaction with our product.

This manual covers the safety, operation and maintenance procedures for the HY1000SI and HY2000SI and HY3000SI models.

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

No part of this publication may be reproduced without written permission.

If a problem should arise, please contact us by using the contact information at the end of this manual.

It is important that this manual be read and fully understood before operating the generator set. Failure to do so may cause serious injuries or equipment damage.

TABLE OF CONTENTS

1. Safety Precautions	
1.1: Safety labels.....	6
1.2: Operations Safety.....	6
1.3: AC safety guidelines.....	7
1.4: Maintenance safety.....	7
1.5: Other safety hazards.....	8
2. Identification of Components.....	9
3. Pre-Operation Inspection.....	14
4. Operation	
4.1: Starting the generator set.....	17
4.2: Using the generator set.....	20
4.3: Stopping the generator set.....	26
5. Maintenance	
5.1: Importance of maintenance.....	28
5.2: Maintenance schedule.....	28
5.3: Air filter service.....	30
5.4: Changing engine oil.....	31
5.5: Spark plug service.....	32
5.6: Transportation & storage.....	35
6. Troubleshooting.....	37
7. Specifications & Data.....	39
8. Wiring Diagram.....	41
9. Warranty.....	43
10. Glossary.....	46

1. SAFETY PRECAUTIONS

1.1: SAFETY LABELS



DANGER



This symbol warns of hazards which can result in severe or lethal personal injury.



WARNING

This symbol refers to a hazardous or unsafe practice which has the potential to result in personal injury or product property damage.

CAUTION

This symbol warns of immediate hazards which will result in severe or lethal personal injury.

1.2: OPERATIONS SAFETY

- Operate the generator according to instructions for safe and dependable service.
- Always perform a pre-operation check before starting the engine.
- Properly clean and maintain the equipment.
- Read the user manual carefully before operation. Otherwise, it may result in personal injuries or equipment damage.
- Never run the generator in an enclosed area, since the exhaust emits poisonous carbon monoxide gas.
- Gasoline is a highly flammable and explosive liquid. Refuel in a well ventilated area with the engine stopped.
- Be careful not to touch the exhaust system during operation because it can cause burns.
- Pay attention to the warning labels because the engine exhaust system will become heated during operation and remain hot immediately after the engine is stopped.
- When refueling the generator, keep it away from the ciga-

- rettes, open flames, smoke and/or sparks.
- 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 power outage, and when the utility power is restored, the generator may explode or cause fires.
- Place the generator at least 3ft away from buildings or other equipment during operation.
- Run the generator on a level surface. If the generator tilts, fuel spillage may result.
- 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 rotating parts away from the generator 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 generator is operating and shortly after the generator has been shut down

1.3: AC SAFETY GUIDELINES

- Before connecting the generator to an electrical device or power cord:
- Make sure that everything is in right 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.
- The connections from the generator to the household power supply should be done by professional electrical technicians. Improper connections may lead to a fire hazard or damages to the generator set.

1.4: MAINTENANCE SAFETY

- After any maintenance is performed, wash your body immediately using soap and clean water because repeated exposure to lubricant may cause skin irritation.
- Do not clean the filter sponge with flammable fluids like

- gasoline because explosion may occur.
- Turn off the generator set 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.
- Before working with batteries, ventilate the area, wear safety glasses, do not smoke, and always disconnect the negative cable 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.

1.5: OTHER SAFETY HAZARDS



DANGER

Petrol is a dangerous substance; it is a highly flammable liquid and can give off vapour which can easily be set on fire, and when not handled safely has the potential to cause a serious fire and/or explosion.

This means there is always a risk of a fire and/or an explosion if there is a source of ignition nearby, for example a naked flame, an electrical spark or similar. Because of these risks storing petrol safely is covered by legislation; and this applies to you if you store petrol.

All containers must be clearly and correctly labelled so people are aware of their contents and hazards. All containers must be marked or labelled in a legible and indelible form with:

- the words 'PETROL' and 'HIGHLY FLAMMABLE';
- an appropriate hazard warning sign, for example:
- plastic containers up to 10 litres.
- metal containers up to 20 litres.



Suitable storage place is defined and covered by Petroleum (Consolidation) Regulations 2014

NO MORE than 30 litres of petrol can be stored without licence kept in no more than two suitable portable containers in any motor vehicle, motor boat, hovercraft, aircraft, home, garage, tent, caravan and boat.

Common storage requirements are;

Petrol is NOT to be stored in living accommodation;

Petrol is not dispensed* at the storage place;

If the storage place is not in the open air, it has a direct exit to the open air and is ventilated to it.

All reasonable precautions are taken in the storage place to prevent any sources of ignition or heat that would be liable to ignite petrol or its vapour;

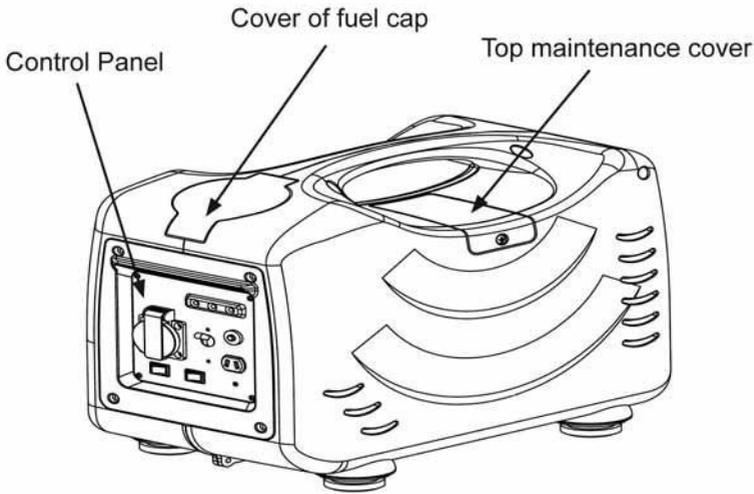
Petrol is not used in the storage place other than:

- in the fuel tank of any internal combustion engine;
- in quantities (not exceeding 150 millilitres at any one time), for cleaning or as a solvent for repair purposes.

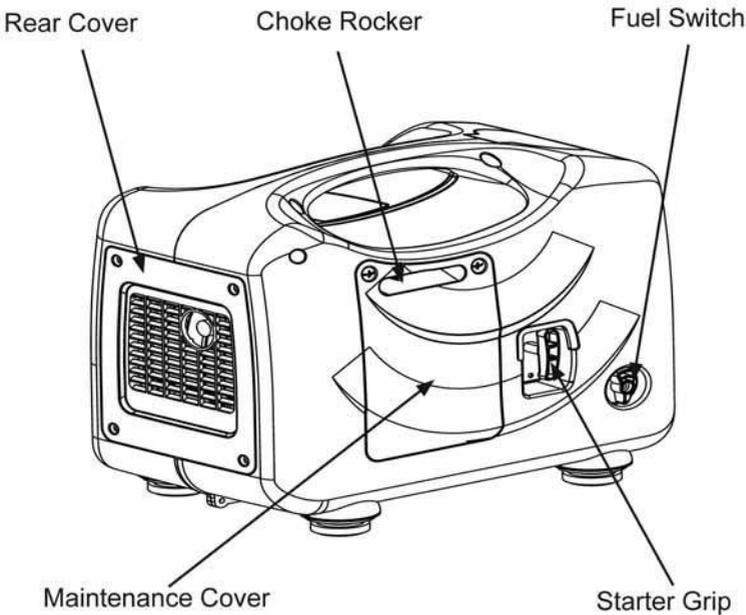
* Dispensing means manual or electrical pumping of petrol from a storage tank.

2. IDENTIFICATION OF COMPONENTS

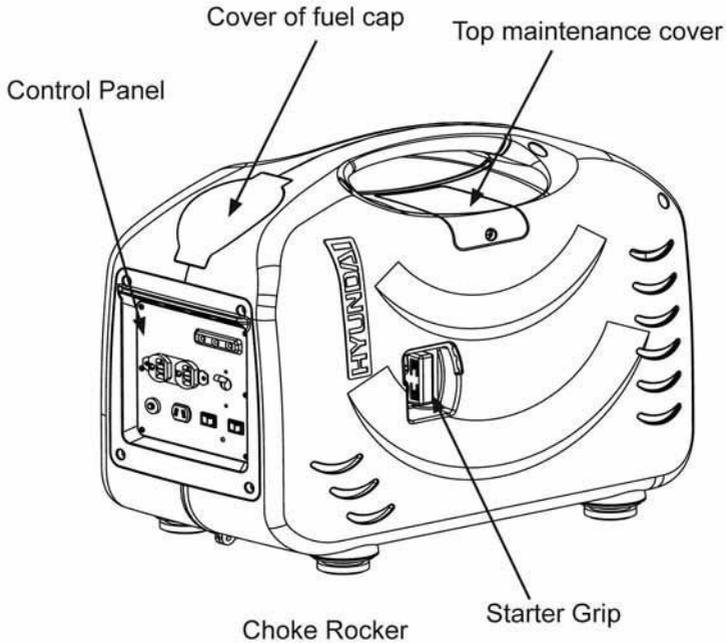
For HY1000Si



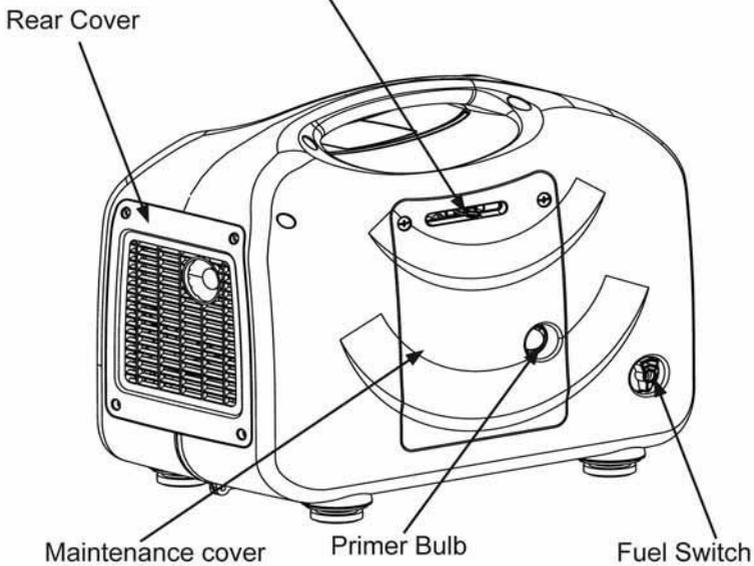
9.



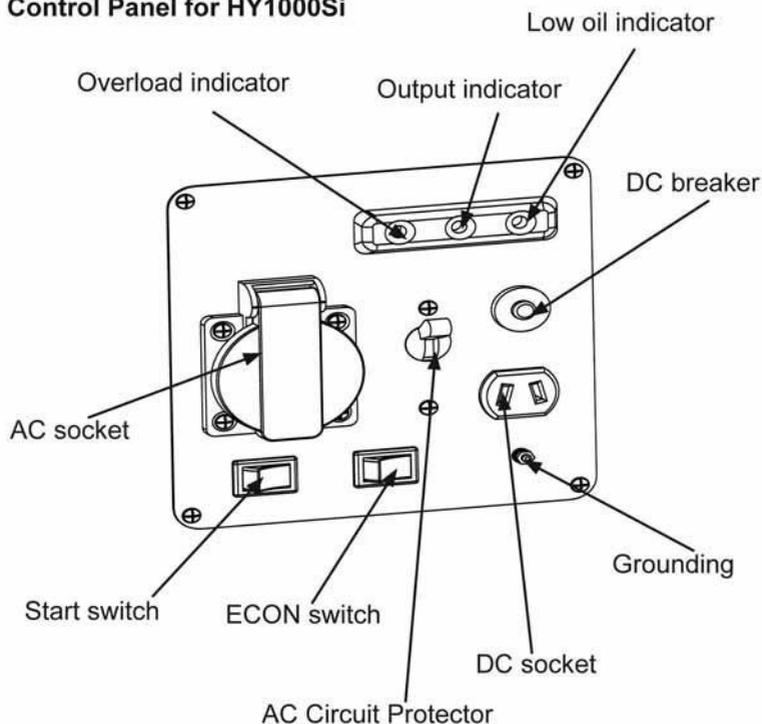
For HY2000Si HY3000Si



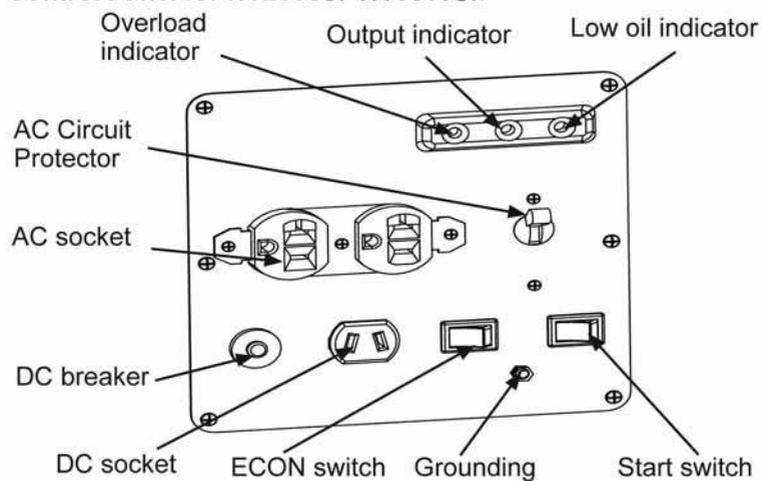
10.



Control Panel for HY1000Si



Control Panel for HY2000Si HY3000Si:



Label Placement

For HY1000Si

AC Voltage / Voltage CA	230/240V	Duration / Continuation	4.5HR@50%LOAD
DC Voltage / Voltage CC	12V	Engine RPM / TRPM du moteur	5000
Power Output / Sortie de l'énergie	900W	Fuel / Carburant	Gasoline/Gaz
Max. AC Output Power / 1000W Production maximale de voltage AC	ON / Hôte	Insulation class / Isolation classe	F
Phase / Phase	1	Frequency / Fréquence	50 Hz
Max. ambient temperature / 40° Température ambiante maximale	50 Hz	Licensed by Hyundai Corporation, Korea / Licencié par la corporation Hyundai, Corée	

FOR ELECTRICAL EQUIPMENT ONLY
POUR MATÉRIEL ÉLECTRIQUE SEULEMENT
FOR USE IN A WEATHER PROTECTED AREA ONLY
EMPLOYÉS UNCLÉMENT (DANS UN EMPACEMENT
À L'ABRI DES INTÉRIEURS)
DO NOT USE AC AND DC AT THE SAME TIME
NE PAS UTILISER CA ET CC EN MÊME TEMPS

HY1000Si Serial #
Numéro de série

**ATTENTION! / ATTENTION!**

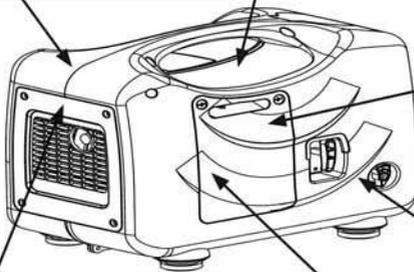
- Never add fuel when the engine is running
- Ne jamais ajouter de carburant lorsque le moteur est allumé
- Never add fuel when engine is hot
- Ne jamais ajouter de carburant lorsque le moteur est chaud
- Always add fuel in a well-ventilated area
- Toujours transférer le carburant dans un endroit bien ventilé
- Always clean up fuel spills
- Toujours ramasser les fuites de carburant

ATTENTION! / ATTENTION!

- Never fill a tank to the brim and always leave space in a security tank to allow for fuel expansion. The safety of the engine depends on the fuel tank not overflowing. Always use caution when refueling. Do not use a pump to transfer fuel. Do not use a hose to transfer fuel. Do not use a hose to transfer fuel. Do not use a hose to transfer fuel.
- N'ajoutez jamais de carburant jusqu'à la limite supérieure d'un réservoir de sécurité. La sécurité de l'appareil dépend de ce que le réservoir ne déborde pas. Utilisez toujours des précautions lors du remplissage. Ne jamais utiliser une pompe pour transférer le carburant. Ne jamais utiliser un tuyau pour transférer le carburant. Ne jamais utiliser un tuyau pour transférer le carburant.

IMPORTANT / IMPORTANT

- DO NOT RETURN THE PRODUCT TO THE STORE
NE PAS REMPLIR LE RÉSERVOIR À LA LIMITE SUPÉRIEURE
- NE PAS REMPLIR LE RÉSERVOIR À LA LIMITE SUPÉRIEURE



OFF / ACTIF CHOKE / LEVIER STRANGLER ON / INACTIF

OFF
FUEL
COVER
ON

ATTENTION! / ATTENTION!

HOT SURFACES
KEEP CLEAR OF EXHAUST!
SURFACE CHAUDES: GARDER À L'ÉCART DE L'ÉCHAPPEMENT DU MOTEUR

AIR CLEANER

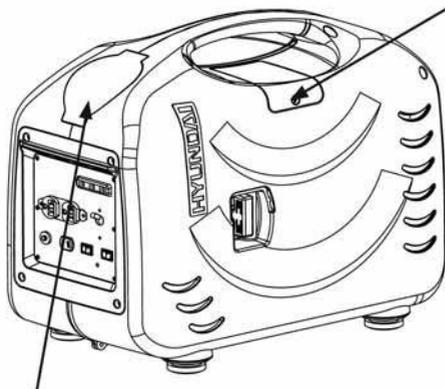
MAINTENANCE
Always use clean, dry air for the engine. Do not use compressed air. Do not use compressed air to clean the engine. Do not use compressed air to clean the engine. Do not use compressed air to clean the engine.

ENTRETIEN DU**FILTRE À AIR**

Always use clean, dry air for the engine. Do not use compressed air. Do not use compressed air to clean the engine. Do not use compressed air to clean the engine. Do not use compressed air to clean the engine.

Label Placement

For HY2000Si HY3000Si



AC Voltage/ Voltage CA	230/240V	Duration / Continuation	5.5 HRS (50%LOAD)
DC Voltage/ Voltage CC	12V	Engine RPM / TR/M du moteur	3000
Power Output / Sortie de l'énergie	2000W	Fuel / Carburant	Gasoline/Gaz
Max. AC Output Power / 2000W Production maximale de voltage AC		Oil / Huile	15W40
Phase / Phase	1	Insulation class / Isolant classe	F
Frequency / Fréquence	50 Hz	Licensed by Hyundai Corporation, Korea / Licencié par la corporation Hyundai, Corée	
Max. ambient temperature / 107° Température ambiante maximale			

FOR ELECTRICAL EQUIPMENT ONLY
POUR MATÉRIEL ÉLECTRIQUE SOULEVEMENT
FOR USE IN A WEATHER PROTECTED AREA ONLY
EMPLOYS UNiquement DANS UN EMPLACEMENT
A L'ABRI DES INTÉRIEURS

DO NOT USE AC AND DC AT THE SAME TIME
NE PAS UTILISER CA ET CC EN MÊME TEMPS

HY2000Si Serial #

Numero de série

AC Voltage/ Voltage CA	230/240V	Duration / Continuation	4.8 HRS (50%LOAD)
DC Voltage/ Voltage CC	12V	Engine RPM / TR/M du moteur	3000
Power Output / Sortie de l'énergie	2800W	Fuel / Carburant	Gasoline/Gaz
Max. AC Output Power / 2800W Production maximale de voltage AC		Oil / Huile	15W40
Phase / Phase	1	Insulation class / Isolant classe	F
Frequency / Fréquence	50 Hz	Licensed by Hyundai Corporation, Korea / Licencié par la corporation Hyundai, Corée	
Max. ambient temperature / 80° Température ambiante maximale			

FOR ELECTRICAL EQUIPMENT ONLY
POUR MATÉRIEL ÉLECTRIQUE SOULEVEMENT
FOR USE IN A WEATHER PROTECTED AREA ONLY
EMPLOYS UNiquement DANS UN EMPLACEMENT
A L'ABRI DES INTÉRIEURS

DO NOT USE AC AND DC AT THE SAME TIME
NE PAS UTILISER CA ET CC EN MÊME TEMPS

HY3000Si Serial #

Numero de série

ATTENTION! / ATTENTION!

- Never add fuel when the engine is running
- Ne jamais ajouter de carburant lorsque le moteur est actif.
- Never add fuel when engine is hot
- Né jamais ajouter de carburant lorsque le moteur est chaud.
- Always add fuel in a well-ventilated area
- Toujours verser le carburant dans un endroit bien ventilé.
- Always clean up fuel spills
- Toujours ramasser les fuites de carburant

ATTENTION! / ATTENTION!

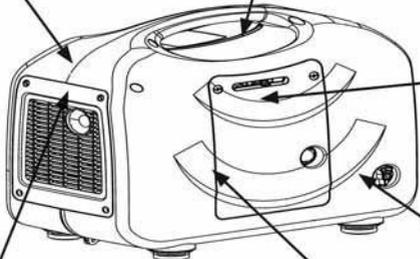
Read the user's manual and all safety instructions before operating this generator. Do not use this generator in a confined space. Always use proper ventilation when operating this generator. Always use proper ventilation when operating this generator. Always use proper ventilation when operating this generator.

Lisez le manuel de l'utilisateur et toutes les instructions de sécurité avant d'utiliser ce générateur. Ne pas utiliser ce générateur dans un espace confiné. Utilisez toujours une bonne ventilation lors de l'utilisation de ce générateur. Utilisez toujours une bonne ventilation lors de l'utilisation de ce générateur. Utilisez toujours une bonne ventilation lors de l'utilisation de ce générateur.

IMPORTANT / IMPORTANT

DO NOT RETURN THE PRODUCT TO THE STORE UNLESS THE STORE HAS BEEN ADVISED BY THE MANUFACTURER. Do not return the product to the store unless the store has been advised by the manufacturer.

NE PAS RENDRE LE PRODUIT À LA MAGASIN À MOINS QUE LE MAGASIN AIT ÉTÉ AVISÉ PAR LE FABRICANT. Ne pas rendre le produit au magasin à moins que le magasin ait été avisé par le fabricant.



ON / INACTIF CHOKE / LEVER ÉTRANGEUR OFF / ACTIF

OFF

FUEL CAP/BOUCHE

ON

ATTENTION! / ATTENTION!

HOT SURFACES
HOT SURFACES
SURFACE CHAUDE DANGER À L'ÉGARD DE L'ÉCHAUFFEMENT DU MOTEUR

AIR CLEANER MAINTENANCE

Filter with vacuuming method and do not use any solvent. Wash the filter with water every 10 hours of operation. Clean the filter every 10 hours of operation. Wash the filter with water every 10 hours of operation. Wash the filter with water every 10 hours of operation.

ENTRETIEN DU FILTRE À AIR

Purifier avec la méthode d'aspiration et ne pas utiliser de solvant. Lavez le filtre avec de l'eau toutes les 10 heures d'utilisation. Nettoyez le filtre toutes les 10 heures d'utilisation. Lavez le filtre avec de l'eau toutes les 10 heures d'utilisation. Lavez le filtre avec de l'eau toutes les 10 heures d'utilisation.

3. PRE-OPERATION INSPECTION

WARNING

Be sure to check the generator on a level surface with the engine stopped

- Ensure the generator is on a level surface
- **Engine Oil Inspection:**

WARNING

Using non-detergent oil or 2-stroke engine oil could shorten the generator's life

14.

1. Loosen the cover screws and remove the maintenance cover (Refer to Fig. 3.0 for HY1000Si and Fig. 3.1 for HY2000Si HY3000Si)
2. Remove the oil filler cap and wipe the dipstick clean (Refer to Fig. 3.2 for HY1000Si or HY2000Si HY3000Si)
Check the oil level by inserting the dipstick into the filler neck without rotating it
3. If the level is low, fill to the upper limit of the oil filler neck with the recommended oil
4. Reinstall the maintenance cover and tighten the cover screws

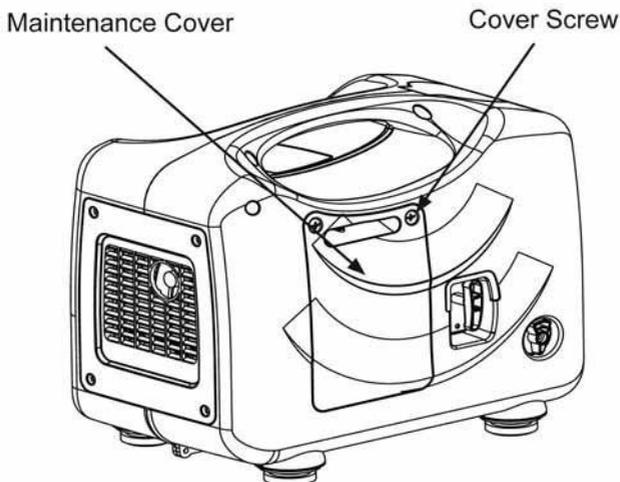


Fig. 3.0

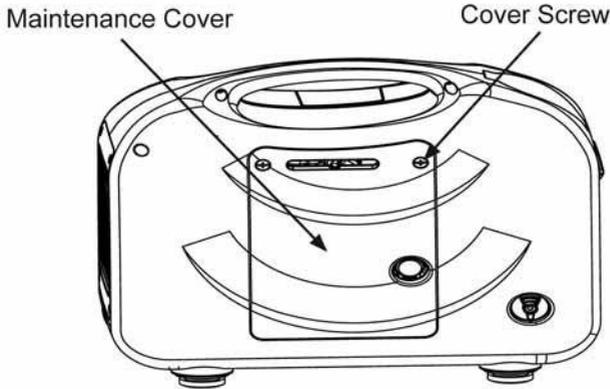
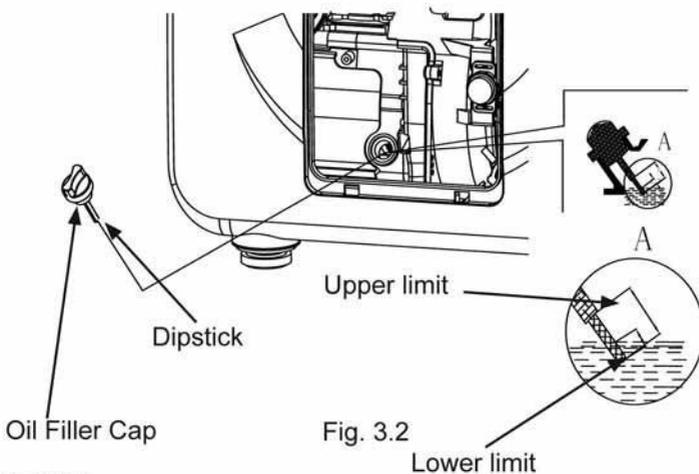


Fig. 3.1



NOTICE

The Oil Alert System will automatically shut off the engine before the oil level falls below the safe limit. However, to avoid the inconvenience of an unexpected shutdown, it is still advisable to visually inspect the oil level regularly.

Fuel level check:

1. Turn the engine start switch to STOP position
2. Open the fuel cap cover. Remove the fuel cap and check the fuel level
3. Refill the fuel tank if the level is low. Refuel carefully to avoid

spilling fuel. Do not fill above the upper limit mark (Refer to Fig. 3.3)

CAUTION

- Gasoline is highly flammable and explosive. Keep the engine away from heat, spark and open flame
- Refuel in a well-ventilated area with the engine stopped
- Handle fuel only outdoors
- Wipe up spills immediately
- Avoid getting dirt, dust or water in the fuel tank

CAUTION

- Never use an oil/gasoline mixture or dirty gasoline
- Don't use fuel containing alcohol. Fuel system damage or engine performance problems will result from the use of fuels that contain alcohol
- Avoid repeated or prolonged contact with skin or breathing of fuel vapor

16.

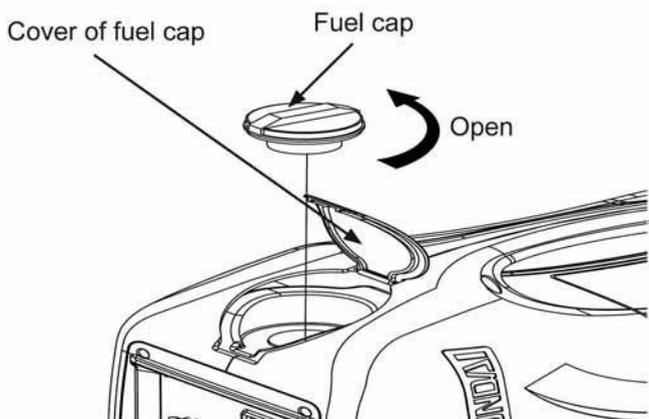


Fig. 3.3

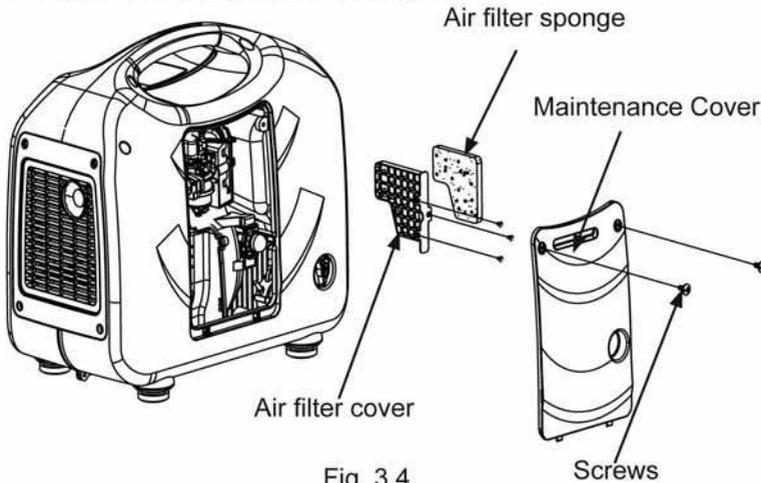
Check the air filter:



WARNING

Never run the engine without the air filter. Rapid engine wear will result from contaminants, such as dust and dirt, being drawn through the carburetor, into the engine.

1. Loosen the cover screws, nuts and remove the maintenance cover. Remove the air filter cover and the air filter sponge (Refer to Fig. 3.4)
2. Observe the sponge for cleanliness
3. Clean sponge with soap and water or solvent. Squeeze dry and then soak in clean engine oil. Squeeze out all excess oil and reinstall.
4. Replace the sponge if it is damaged



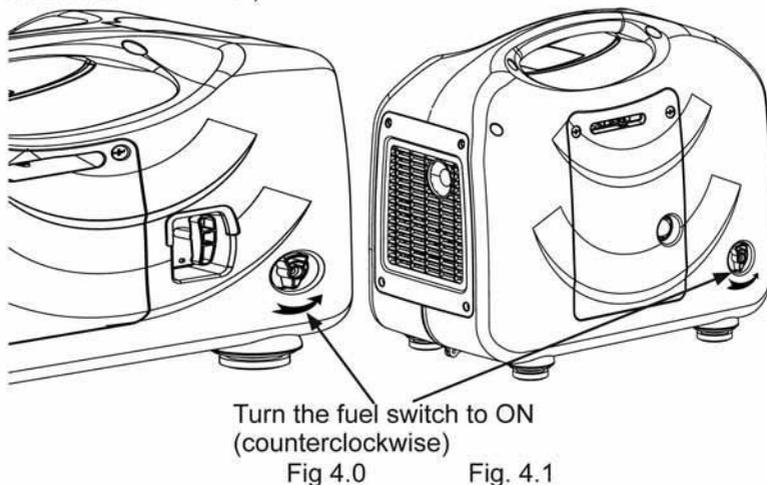
4. OPERATION

4.1: STARTING THE GENERATING SET

NOTICE

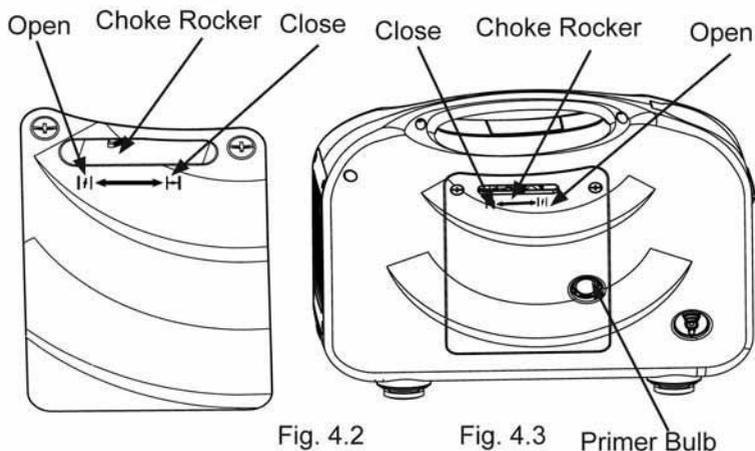
- A hot engine will not start if there is too much gasoline in the cylinder. If this happens, wait for 5 to 10 minutes for the engine to cool down before starting
- The engine will stop automatically when it is out of gasoline

1. Rotate the fuel switch to the ON position according to the arrow direction. (Refer to Fig. 4.0 for HY1000Si and Fig. 4.1 for HY2000Si HY3000Si)



18.

2. If the engine is cold, move the choke rocker to the CLOSE position. Refer to Fig. 4.2 for HY1000Si and Fig. 4.3 for HY2000Si HY3000Si



3. Press the start switch to the RUN position (Refer Fig. 4.4 for HY1000Si and Fig. 4.5 for HY2000Si HY3000Si)

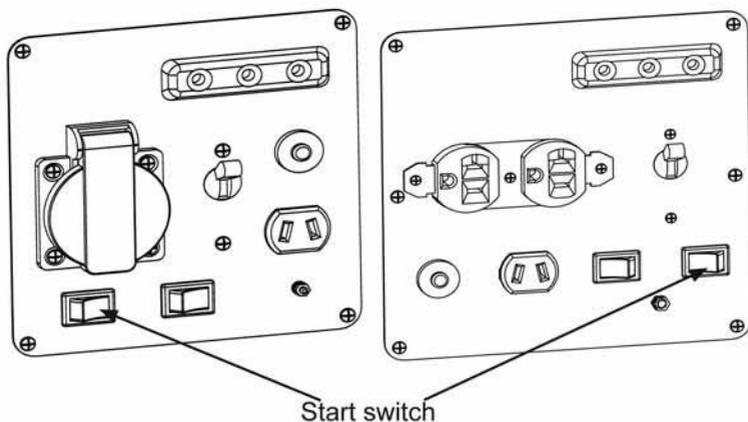


Fig. 4.4

Fig. 4.5

4. Pull slightly on the starter grip until you feel resistance and then pull briskly. (Refer to Fig. 4.6 for HY1000Si and Fig. 4.7 for HY2000Si HY3000Si)

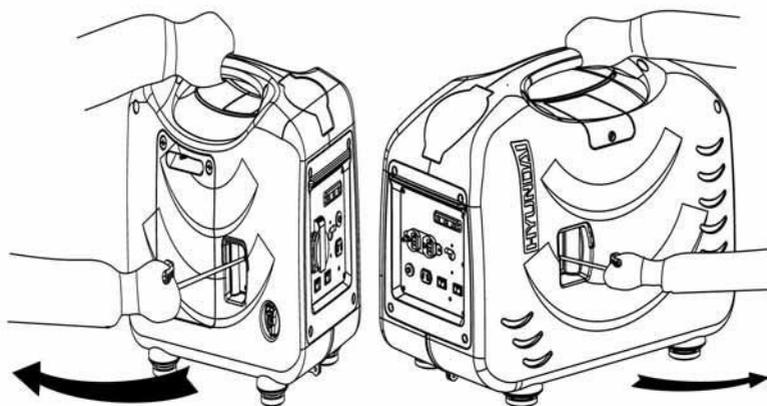


Fig. 4.6

Fig. 4.7

5. After the engine warms up (above 50°F), slowly turn the choke rocker to the OPEN position.

 **WARNING**

- Do not allow the starter grip to snap back. Return it slowly by hand
- Grasp the carrying handle firmly to prevent the generator from falling over when pulling the starting grip

NOTICE

- If the engine stops and will not restart, check the engine oil level before troubleshooting other areas
- Make sure the ECON switch is OFF before turning on the connected device

Primer Bulb (For HY2000Si HY3000Si only)

The primer bulb is used for bringing small amounts of gasoline to the throat opening of the carburetor. The problem is that sometimes generator cannot start because the fuel cannot reach the carburetor (Refer to Fig. 4.3)

Procedure for using the primer bulb

- Set the choke rocker in the OPEN position
- Push the primer bulb 15 to 20 times
- Move the choke rocker to the CLOSE position and start the engine

4.2: USING THE GENERATOR SET **WARNING**

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 power outage, and when the utility power is restored, the generator may explode or cause fires.

 **WARNING**

- To prevent electrical shock from faulty appliances, the generator should be grounded
- Limit operation requiring maximum power to 30 minutes
- Do not exceed the current limit specified for any one receptacle
- Do not connect the generator to a household circuit

 **WARNING**

- Do not modify or use the generator for other purpose than it is intended for.
- When an extension cable is required, be sure to use a rubber sheathed flexible cable
- Limit length of extension cables: 60 m for cables of 1.5mm² and 100 m for cables of 2.5 mm²

 **WARNING**

- Keep the generator away from other electric cables or wires such as distribution network
- The DC receptacle can be used while the AC power is in use. If you use both at the same time, be sure not to exceed the total power for AC and DC

 **WARNING**

- Before connecting a device to the generator, make sure the electrical rating of the device does not exceed the electrical rating of the generator
- Be sure the device is turned off before plugging in the power cord

 **WARNING**

- When the output indicator light (green) is OFF and the overload indicator light (red) is ON, press the start switch to the STOP position, stop the engine at once and then start the engine again.

22.

NOTICE

-When the device requires a large starting power, the overload indicator light (red) and the output indicator light (green) may be ON together for a short period, but this is no abnormality. After the device starts, the overload indicator light (red) will go out and the output indicator light (green) will stay ON.

GROUND TERMINAL

Before using generator, a ground wire must be connected to the ground terminal.

Before using the ground terminal, consult a qualified electrician. (Refer to 4.8 for HY1000Si and Fig. 4.9 for HY2000Si HY3000Si)

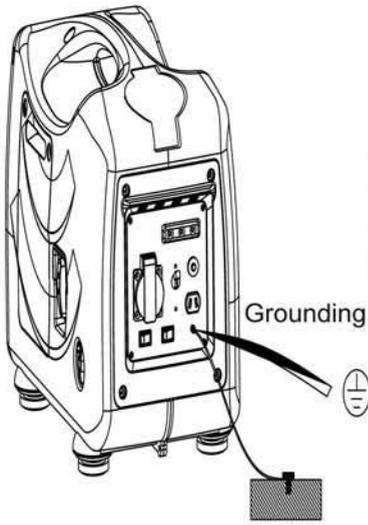


Fig. 4.8

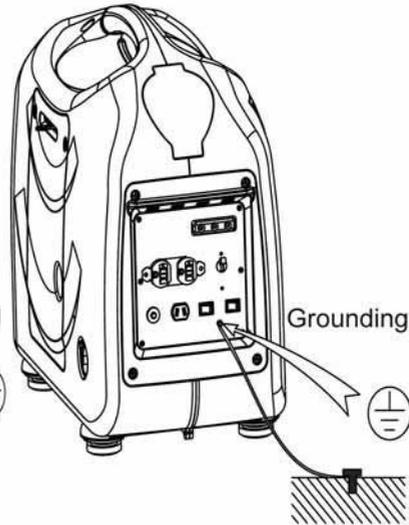


Fig. 4.9

For AC Operation

1. Turn off the switches of the device before connecting to the generator
2. Start the generator and make sure the output indicator lights (green) come on. (Refer to Fig. 4.10 for HY1000Si and Fig. 4.11 for HY2000Si HY3000Si)

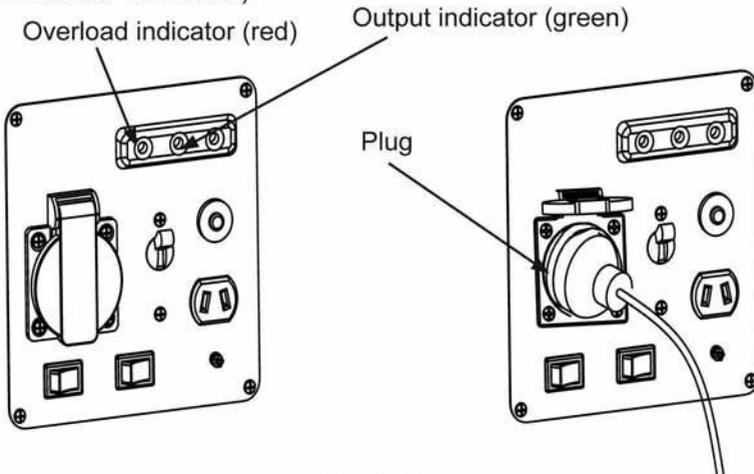


Fig. 4.10

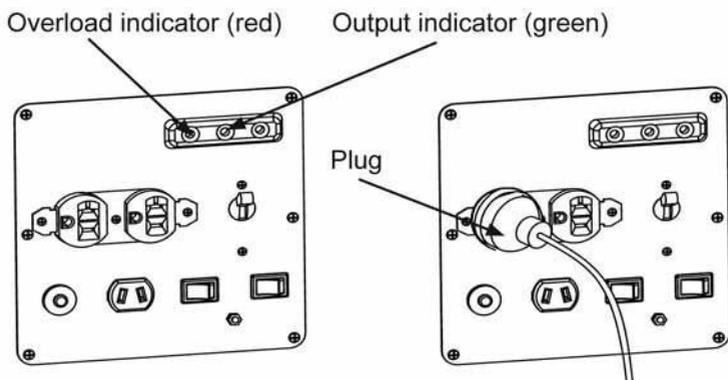


Fig. 4.11

NOTICE:

- Under normal operating conditions, the output indicator light (green) will be ON
- If the generator is overloaded (in excess 100W), or if there is a short circuit in a connected device, the overload indicator light (red) will go ON.
- If the oil level falls below a safe limit, the low oil indicator light (red) comes on and the engine will be automatically stopped. If the engine stops or the low oil indicator light comes on when you pull the starter grip, check the engine oil level before troubleshooting in other areas. (Refer to 4.12 for HY1000Si and Fig. 4.13 for HY2000Si HY3000Si)

24.

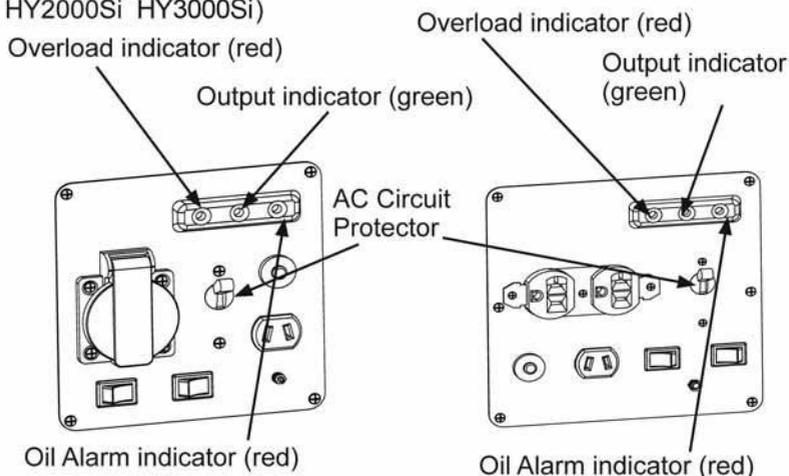


Fig. 4.12

Fig. 4.13

3. Plug the power cord of the device into the AC socket, turn on the AC circuit protector, and turn on the device. (Refer to Fig. 4.10 for HY1000Si and Fig. 4.11 for HY2000Si HY3000Si)

For DC Operation

NOTICE:

- The DC socket is only used for charging a 12V battery. (Refer to Fig. 4.14 for HY1000Si and Fig. 4.15 for HY2000Si HY3000Si)
- When using the DC socket, turn the ECON switch to the OFF position. (Refer to Fig. 4.14 for HY1000Si and Fig. 4.15 for HY2000Si HY3000Si)

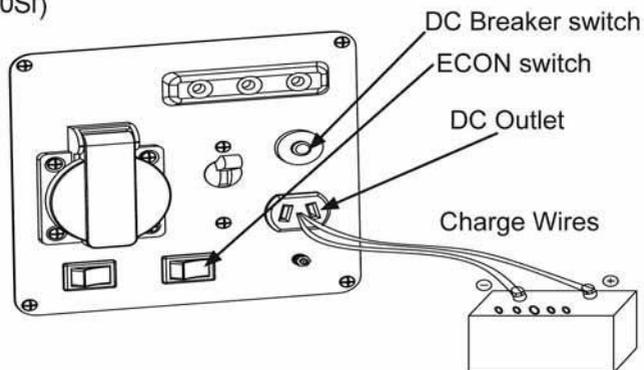


Fig. 4.14

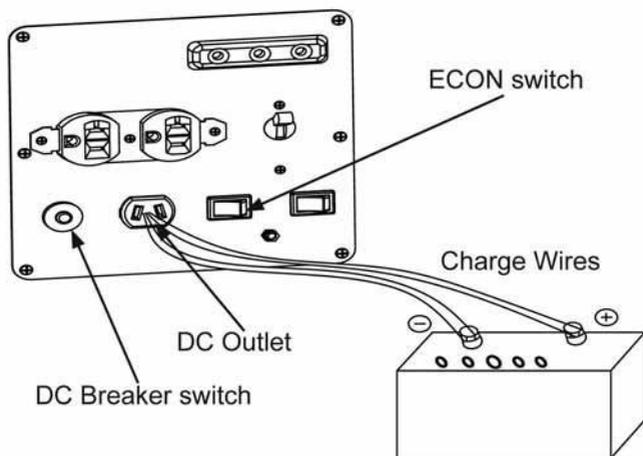


Fig. 4.15

1. Press the ECON switch to the OFF position
2. Connecting the battery charging cable
 - a) Connect the battery charging cable to the battery
 - b) Plug the charging wires into the DC outlet of the generator.

 **WARNING**

-The battery gives off explosive gases; keep sparks, flames and cigarettes away. Provide adequate ventilation when charging or using batteries
 -Battery posts, terminals, and related accessories contain lead components. Wash hands after handling

26.

- c) Connect the positive (red) terminal of the charging wire to the positive (+) battery terminal and negative (black) terminal of the charging wire to the negative (-) battery terminal
3. Press the start switch to RUN position
 4. Press the DC breaker switch to ON position (Refer to Fig. 4.12 for HY1000Si and Fig. 4.13 for HY2000Si HY3000Si)
 5. Start the generator

4.3: STOPPING THE GENERATOR SET

For HY1000Si/HY2000Si HY3000Si (AC Operation)

1. Turn off the device and unplug devices from the generator receptacles
2. Press the start switch to the STOP position
3. Rotate the fuel switch to the OFF position (in the clockwise direction)

NOTICE

Be sure the fuel SWITCH is in the OFF position and the start switch is in the STOP position when stopping, transporting and/or storing the generator

For HY1000Si/HY2000Si HY3000Si (DC Operation only)**NOTICE**

An overloaded DC circuit, excessive current draw by the battery, or a wiring problem will automatically trip (turn off) the DC breaker switch. If this happens, wait a few minutes before pressing the breaker switch to the ON position to resume operation. If the breaker switch continues to go OFF, discontinue charging and contact your authorized dealer.

Disconnecting the charging wire

1. Stop the engine
2. Disconnect the negative (black) terminal of charging wire from the negative (-) battery terminal
3. Disconnect the positive (red) terminal of the charging wire from the positive (+) battery terminal
4. Disconnect the charging wire from the DC Receptacle of the generator

5. MAINTENANCE

5.1: Importance of Maintenance

Proper maintenance is important because it will ensure safe, economical and trouble-free operation. It will also reduce air pollution. Improper maintenance may cause the generator to malfunction and can lead to serious injuries or death.

5.2: Maintenance Schedule

WARNING

-Shut off the engine before performing any maintenance. When the engine is running, make sure the area is well ventilated. The exhaust contains poisonous carbon monoxide gas.

WARNING

-Use authorized parts or their equivalent. The use of replacement parts which are not equivalent quality may damage the generator

NOTE: Some of these maintenance techniques can be dangerous and should be performed by a qualified technician

For HY1000Si/HY2000Si HY3000Si:

In order to maintain good performance and extend the service life of the generator, period inspection and adjustments should be done based on the following maintenance schedule:

Item	Maintenance	Each using time	1st month or 20 hours	Each quarter or 50 hours	Every 6 months or 100 hours	Every year or 200 hours
En-gine Oil	Check level	•				
	Change		•		•	
Air Filter	Check	•				
	Clean			•(refer to notice 1)		
Spark Plug	Check-adjust				•	
	Replace					•
Valve clearance	Check-readjust					•(refer to notice 2)
Combustion chamber	Clean	After every 300 hrs (refer to notice 2)				
Fuel tank and Filter	Clean				•(refer to notice 2)	
Fuel line	Cleaning	Every 2 years (Replace if necessary) (Refer to notice 2)				

NOTICE:

1. Service more frequently when used in dusty areas
2. Should be serviced by an authorized dealer

5.3: Air Filter Service

1. Loosen the cover screws nuts and remove the maintenance cover
2. Remove the air filter cover
3. Remove the air filter sponge (refer to Fig. 5.0)
4. Check the filter sponge to make sure that it is clean and in good condition. If the sponge is dirty, clean it as described in Fig. 5.1. Replace the sponge if it is damaged

To clean the sponge:

1. Clean the sponge in warm soapy water or nonflammable solvent, rinse, and allow to dry thoroughly
2. Dip the sponge in clean engine oil and squeeze out all excess oil. The engine will smoke when started if too much oil is left in the filter.
3. Wipe dirt from the air filter cover using a moist rag.

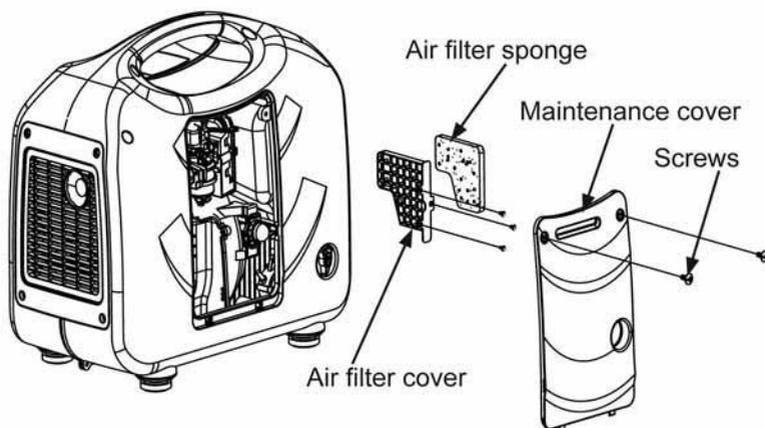


Fig. 5.0



Fig. 5.1

4. Reinstall the sponge and the air filter cover

5. Close the maintenance cover with screws

5.4: Changing Engine Oil

WARNING

-Make sure the start switch is in the STOP position before draining
-Please dispose of used motor oil in a manner that is compatible with the environment. We suggest you take it in a sealed container to your local service station for reclamation. Do not throw it in the trash or pour it on the ground.

WARNING

-Do not use gasoline for cleaning since it is flammable and explosive under certain conditions.

1. Press the start switch to the STOP position and make sure the fuel cap is fully closed.
2. Loosen the cover screws and remove the maintenance cover
3. Place a container next to the engine to catch the used oil (Refer to Fig. 5.2 for HY1000Si and Fig. 5.3 for HY2000Si HY3000Si)
4. Remove the oil filler cap/dipstick and drain the oil into the container by tilting the generator

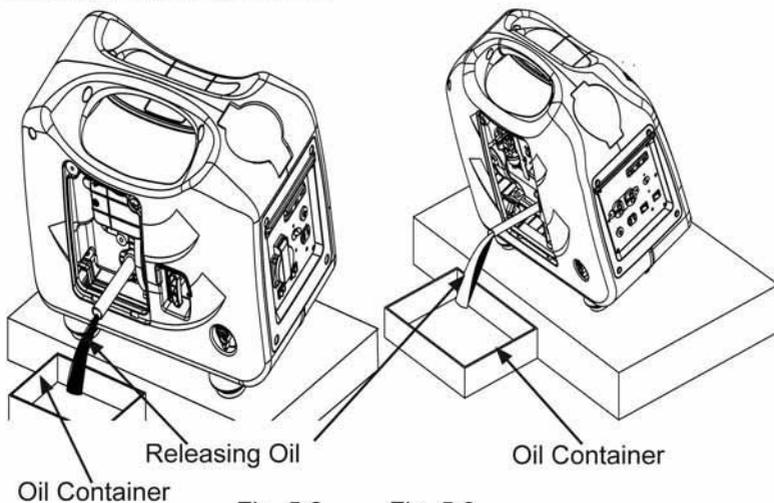


Fig. 5.2

Fig. 5.3

5. With the engine in a level position, add oil to the upper level mark (Refer to Fig. 5.4)

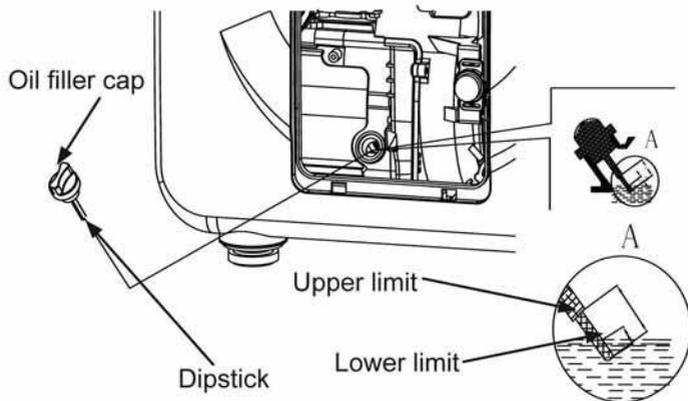


Fig. 5.4

32.

6. Reinstall the oil filler cap/dipstick securely.
7. Reinstall the maintenance cover and tighten the cover screws securely.

5.5: Spark Plug Service

1. Remove the top screw and the top maintenance cover (Refer to Fig. 5.5 for HY1000Si and Fig. 5.6 for HY2000Si HY3000Si)

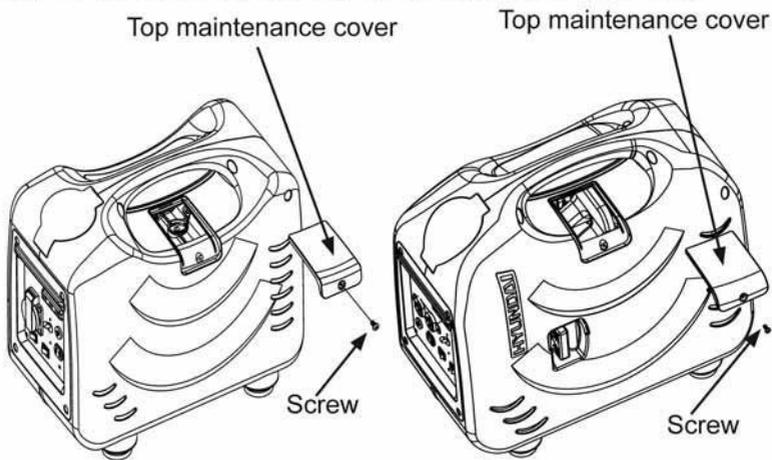


Fig. 5.5

Fig. 5.6

2. Remove the ignition coil (Refer to Fig. 5.7 for HY1000Si and Fig. 5.8 for HY2000Si HY3000Si)

5.8 for HY2000Si HY3000Si)

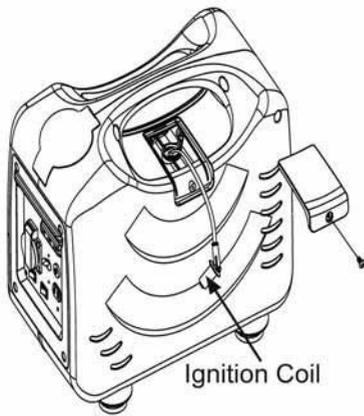


Fig. 5.7



Fig. 5.8

3. Clean any dirt and debris around the spark plug base
4. Use a wrench to remove the spark plug (Refer to Fig. 5.9 and Fig. 5.11 for HY1000Si, Fig. 5.10 and Fig. 5.12 for HY2000Si HY3000Si)

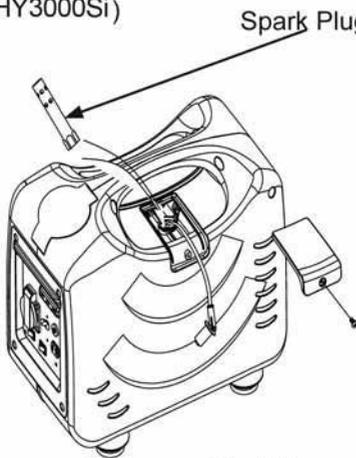


Fig. 5.9

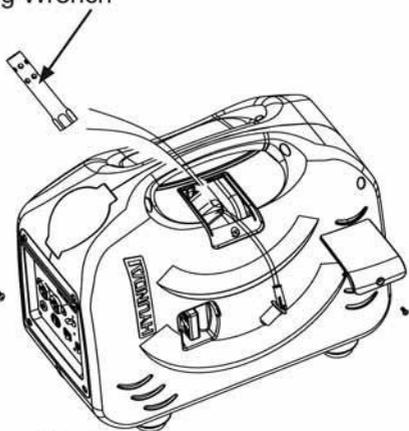


Fig. 5.10

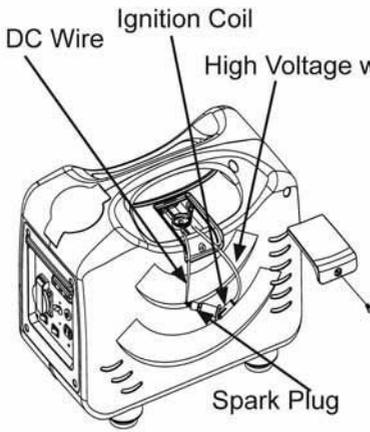


Fig. 5.11

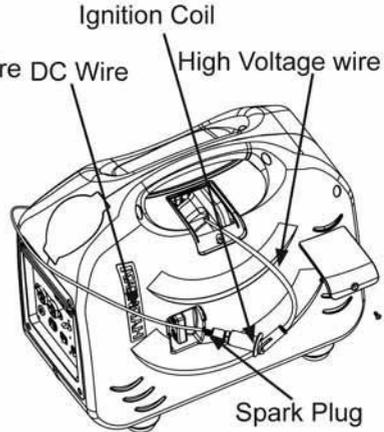


Fig. 5.12

5. Visually inspect the spark plug. Clean the spark plug with a brush if it is to be reused.
6. Measure the plug gap with a feeler gauge. The gap should be 0.7 to 0.8 mm (0.028 to 0.031 inch). Correct as necessary by carefully bending the side electrode (Refer to Fig. 5.13)

34.

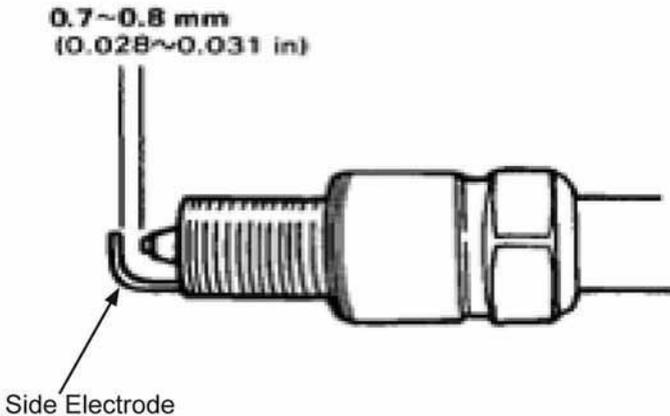


Fig. 5.13

7. Install the correctly gapped spark plug back into the original position.
8. Reinstall the ignition coil securely
9. Close the top maintenance cover and tighten the screw

⚠ WARNING

The spark plug must be securely tightened. An improperly tightened plug can become very hot and possibly damage the generator

⚠ WARNING

-Never use a spark plug with an improper heat range
-Never use a spark plug without damping resistance, or it will cause no AC output.

5.6: Transportation & Storage**⚠ WARNING**

-Gasoline is extremely flammable and explosive under certain conditions
-Do not smoke or allow flames or sparks in the area

35.

When transporting the generator:

- Do not overfill the tank
- If the generator has been used, allow it to cool for at least 15 minutes before loading it on the transport vehicle
- To prevent fuel spillage, the generator should be secured upright in its normal operating condition, with the start switch in the STOP position.
- Do not drop or strike the generator when transporting.
- Do not place heavy objects on the generator.

Storage Procedure

1. Drain the gasoline. Unscrew the fuel tank cap, remove the debris screen under the cap, and empty the fuel tank into an approved gasoline pot. Rotate the fuel switch to the ON position (Refer to Fig. 4.0 for HY1000Si and Fig. 4.1 for HY2000Si HY3000Si).
2. Start the generator and operate it in the idle position until all remaining fuel is gone and the engine stops automatically. (Refer to

Fig. 5.14 for HY1000Si and Fig. 5.15 for HY2000Si HY3000Si)

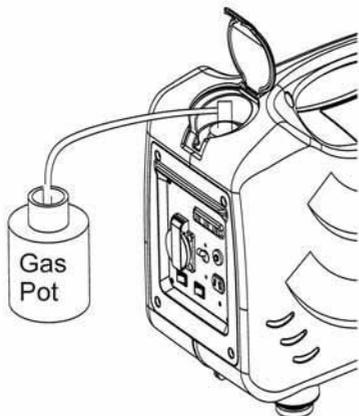


Fig. 5.14

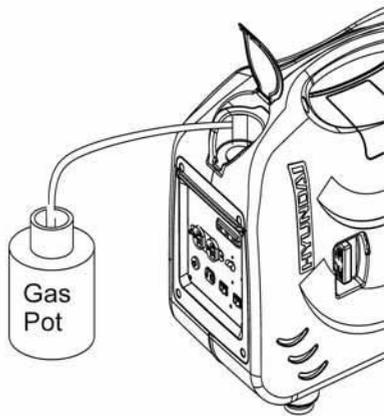


Fig. 5.15

3. Discharge Oil

- a) Press the start switch to the STOP position and make sure the fuel cap is fully closed.
- b) Loosen the cover screws and remove the maintenance cover
- c) Place a container next to the engine to catch the used oil
- d) Remove the oil filler cap/dipstick and drain the oil into the container by tilting the generator
- e) Remove the screw, top maintenance cover and the spark plug.
- f) Fill the spark plug orifice with 2 cc's (about a tablespoon) of fresh oil. Pull the start motor 3-4 times to distribute the oil.
- g) Reinstall the spark plug, top maintenance cover and screw securely
- h) Pull the starter grip slowly until you feel resistance, then return the starter grip gently. This closes the valves so moisture cannot enter.

6. TROUBLESHOOTING

 **WARNING**

-Many troubleshooting procedures present hazards which can result in severe personal injury or death. Only trained and experienced service personnel with knowledge of fuels, electricity, and machinery hazards should perform service procedures. Review Safety Precautions.

 **WARNING**

-A hot generator can cause severe burns. Always allow the generator set to cool before performing any maintenance service.

37.

If the engine doesn't start:

- Make sure there is no spilled fuel around the spark plug
- If the engine still doesn't start, have the generator repaired by a licensed repair person

Problem	Recommended Action
Not Enough Fuel	Add fuel
Start switch and fuel valve not ON	Turn them to the ON position
Not enough lubricating oil	Add more oil
No fuel in the carburator	Start a few times to ensure fuel enters the carburator
Spark plug not working	Replace spark plug
	Send generator to authorized dealer

If the device that connects the generator doesn't start:

Problem	Recommended Action
Both the Output indicator light and the Overload indicator are no ON	Send the generator to an authorized dealer
If the Output indicator light is ON, but device doesn't work after plugging in directly	Restart if the overload indicator is off. If it doesn't work, send the generator to an authorized dealer
Both the Output indicator light and the Overload indicator light are ON, but device has no defects	Send the generator to an authorized dealer
Both the Output indicator light and the Overload indicator light are ON, but device has no defects	Send the generator to an authorized dealer

38.

If there is no power in the direct current electric outlet:

Problem	Recommended Action
Electric circuit breaker is not intact	Replace the electric circuit breaker
Electric circuit breaker is intact	Send the generator to an authorized dealer

Deficient AC Output:

Problem	Recommended Action
Dirty air filter	Clean or replace air filter sponge
Improper gasoline	Replace gasoline
	Send generator to authorized dealer

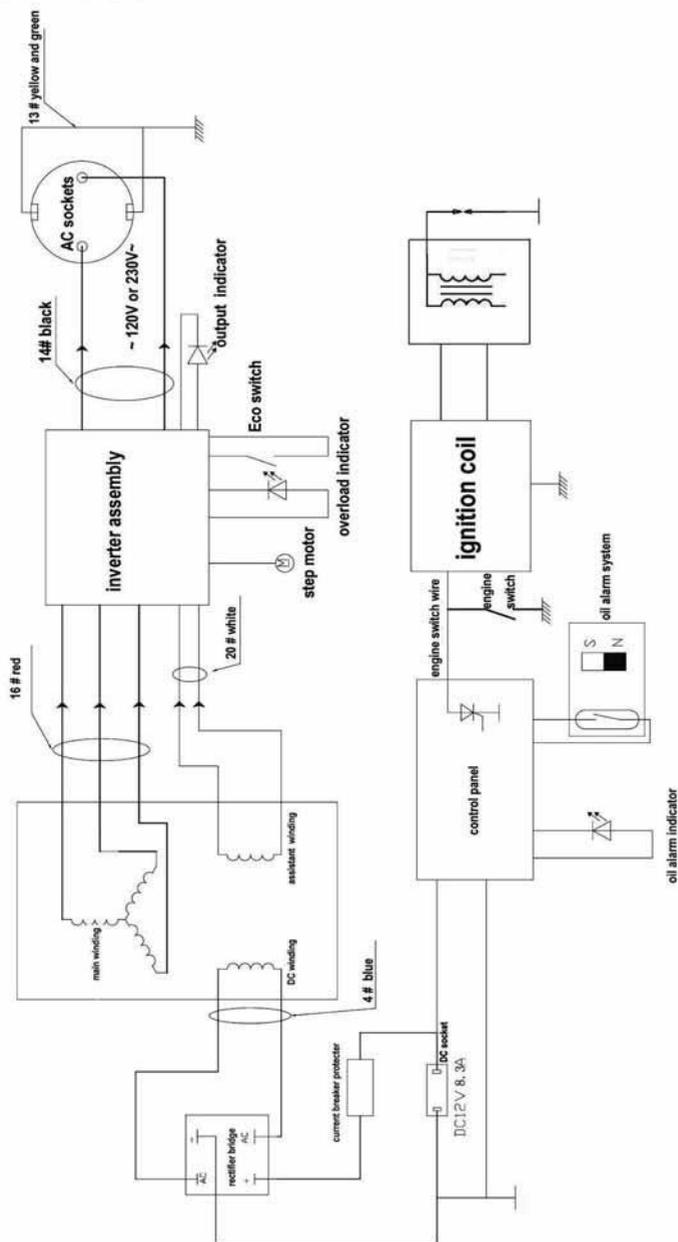
7. SPECIFICATIONS & DATA

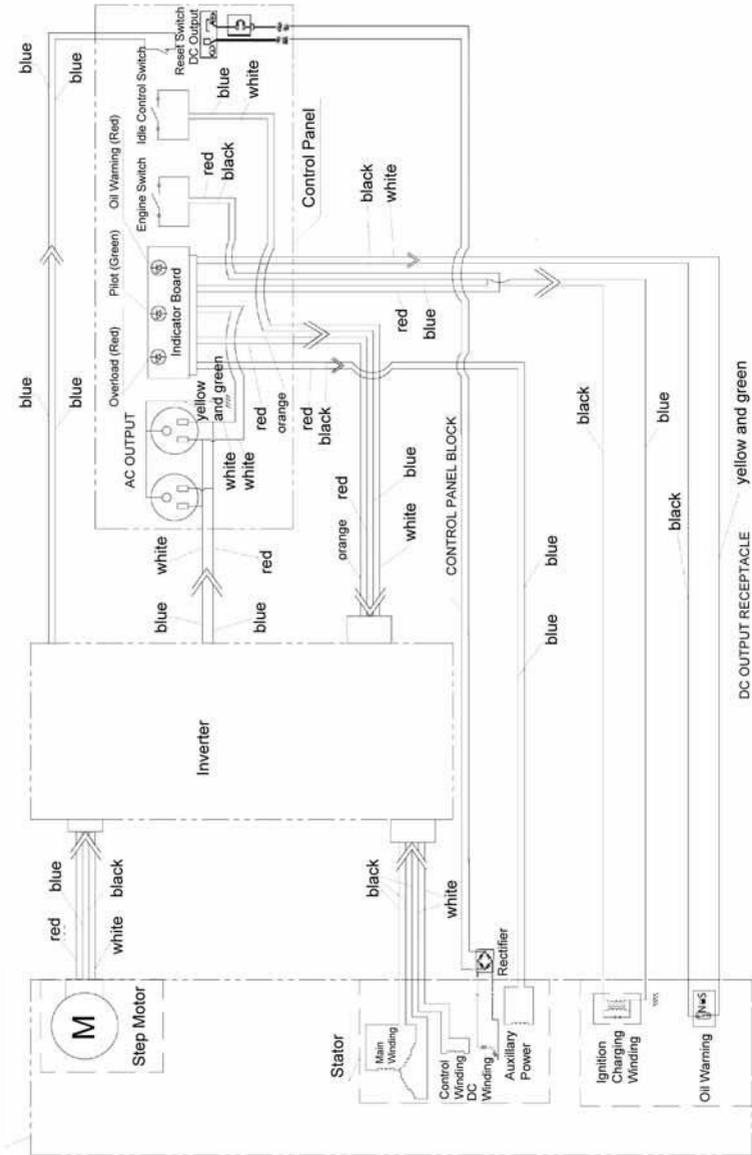
HY1000i		
GENERATOR	Type	Digital Inverter / Sine Wave
	Frequency	50Hz/60HZ
	Rated AC Output Power (kW)	0.9
	Max AC Output Power (kW)	1.0
	Voltage	230V/240V
ENGINE	Model	HX53 (XG-144F)
	Type	Over head Valve/Forced-Air Cooling/ single Cylinder/4 stroke Gasoline engine
	Bore x Stroke (mm x mm)	43.5×35.8
	Displacement (cc)	53CC
	Rated Power (kw)	1.2/5500RPM
	Ignition mode	T.D.I
	Recommended fuel	Unleaded Gasoline
	Fuel tank capacity (L)	2.7
	Fuel consumption (h)	400g/kw.h
	Engine oil capacity (L)	0.25
	Starting system	Pulling recoil starting
	Continuous work time (hours)	4.5
	Noise level (7m)	63 (7m)
STANDARD FEATURES	Indicator light	O
	AC Overload Protector	O
	AC Socket	O
OPTIONAL FEATURES	DC Socket (12v/8.3A)	"T" or "V" Type
	DC Protector	O
DIMENSIONS	Packing dimensions (mm)	490 x 300 x 410mm
	N.W (kg)	14
	G.W (kg)	16

HY2000Si HY3000Si		
GENERATOR	Type	Digital Inverter / Sine Wave
	Frequency	50Hz/60HZ
	Rated AC Output Power (kW)(HY2000Si/HY3000Si)	2.0/2.6
	Max AC Output Power (kW)(HY2000Si/HY3000Si)	2.2/2.8
	Voltage (V)	230V/240V
ENGINE	Model (HY2000Si/HY3000Si)	HX125 (XG-152F)/HX149 (XG-157F)
	Type	Over head Valve/Forced-Air Cooling/ single Cylinder/4 stroke Gasoline engine
	Bore x Stroke (mm x mm) (HY2000Si/HY3000Si)	52.4×57.8/57.4×57.8
	Displacement (cc) (HY2000Si/HY3000Si)	125 / 149
	Rated Power (kw) (HY2000Si/HY3000Si)	3.1/5000RPM/3.5/5000RPM
	Ignition mode	T.D.I
	Recommended fuel	Unleaded Gasoline
	Fuel tank capacity (L)	4.5
	Fuel consumption (h)	360g/kw.h
	Engine oil capacity (L)	0.45
	Starting system	Pulling recoil starting
	Continuous work time (hours)	5.5/ 4.5
	Noise level (7m)	65 (7m)
STANDARD FEATURES	Indicator light	O
	AC Overload Protector	O
	AC Socket	O
OPTIONAL FEATURES	DC Socket (12v/8.3A)	"T" or "V" Type
	DC Protector	O
DIMENSIONS	Packing dimensions (mm)	575x330x507 mm
	N.W (kg)	30
	G.W (kg)	32

8. WIRE DIAGRAMS

For HY100Si





9. WARRANTY

Warranty Terms and Conditions

This product is warranted to be free of defects in material and workmanship for two 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/residential use: 2 years limited. 1st year, parts and labor. 2nd year parts only.

Commercial use: 6 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 two (2) 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 Hyundai Generators "Operation Manual. 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.

43.

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 MERCHANTABIL-

ITY, 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.

44.

Exclusions

Not Covered by this Limited Warranty:

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

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.

Product Registration

Product registration is required for product support and warranty coverage.

You can register online at;

www.hyundaipowerequipment.co.uk/support/warranty-registration/

You should keep your receipt for proof of purchase.

Warranty Claim Procedure:

Warranty service must be performed by one of our authorised service dealers. If you feel your generator is malfunctioning due to a defect or misuse, simply contact our customer support centre on **01646 687 880** for technical advice, a warranty claim or general information.

45.

Declaration of Conformity

Genpower Ltd confirms that these Hyundai products conform to the following EC directives;

2006/42/EC Machinery Directive

2004/108/EC EMC Directive

97/68/EC NRMM Emissions Directive

2006/95/EC Low Voltage Directive

2000/14/EC Noise Emissions Directive

The undersigned, as authorised by: **Genpower Ltd**

Declares that the following equipment manufactured under licence by Hyundai Korea

Conforms to the Directive: -
2000/14/EC (as amended)

Of the European Parliament and of the council on the approximation of the laws of the Member States relating to the noise emission in the environment by equipment for use outdoors.

Equipment Category: **Generator**

Product Name/Model: **Petrol - HY1000Si, HY2000Si, HY3000Si
 HY1000Si-LPG, HY2000Si-LPG, HY3000Si-LPG**

Type/Serial No: **Petrol - LPG Inverter generator**

The technical documentation is kept by: **Roland Llewellyn, Genpower Ltd,
 Isaac Way, London Road, Pembroke Dock,
 SA72 4RW, United Kingdom.**

Electric power: **1.0 kW, 2.0 kW, 3.0 kW**

The conformity assessment procedure followed was in accordance with annex VI of the Directive.

Notified Body: **Intertek Testing & Certification Ltd,
 Davy Avenue, Knowhill, Milton Keynes, MK5 8NL.
 Certificate N°70700**

Measured Sound Power Level: **Petrol - 82 dB (A), 86 dB (A), 86 dB (A)
 LPG - 82 dB (A), 86 dB (A), 82 dB (A)**

Guaranteed Sound Power Level: **Petrol - 83 dB (A), 86 dB (A), 86 dB (A)
 LPG - 83 dB (A), 86 dB (A), 83 dB (A)**

A copy of this certificate has been submitted to the European Commission and to EU Member State United Kingdom.

Place of Declaration: **Pembroke Dock, SA72 4RW**

Date: **28/06/2013**

Signed by: **Roland Llewellyn**

Position in Company: **Director**

Name and address of manufacturer or Authorised representative:



**Genpower Ltd, Isaac Way, London Road,
 Pembroke Dock, SA72 4RW, United Kingdom.**

EC DECLARATION OF CONFORMITY

The undersigned, as authorised by: **Genpower Ltd**

Declares that the following equipment manufactured under licence by Hyundai Korea

Conforms to the Directive: -
2000/14/EC (as amended)

Of the European Parliament and of the council on the approximation of the laws of the Member States relating to the noise emission in the environment by equipment for use outdoors.

Equipment Category: **Generator**

Product Name/Model: **Petrol – HY2000SEi, HY3000SEi, HY3600SEi
HY2000SEi-LPG, HY3000SEi-LPG, HY3600SEi-LPG**

Type/Serial No: **Petrol - LPG Inverter generator**

The technical documentation is kept by: **Roland Llewellyn, Genpower Ltd,
Isaac Way, London Road, Pembroke Dock,
SA72 4RW, United Kingdom.**

Electric power: **2.2 kW, 2.8 kW, 3.4 kW**

The conformity assessment procedure followed was in accordance with annex VI of the Directive.

Notified Body: **Intertek Testing & Certification Ltd,
Davy Avenue, Knowhill, Milton Keynes, MK5 8NL.
Certificate N°70700**

Measured Sound Power Level: **Petrol 86 dB (A), 86 dB (A), 86 dB (A)
LPG 82 dB (A), 82 dB (A), 86 dB (A)**

Guaranteed Sound Power Level: **Petrol 86 dB (A), 86 dB (A), 86 dB (A)
LPG 83 dB (A), 83 dB (A), 86 dB (A)**

A copy of this certificate has been submitted to the European Commission and to EU Member State United Kingdom.

Place of Declaration: **Pembroke Dock, SA72 4RW**

Date: **28/06/2013**

Signed by: **Roland Llewellyn**

Position in Company: **Director**

Name and address of manufacturer or Authorised representative:



**Genpower Ltd, Isaac Way, London Road,
Pembroke Dock, SA72 4RW, United Kingdom.**

10. GLOSSARY

AC socket- The receptacle for the device plug used for AC application

Air Filter- It removes dust from engine intake air.

Carburetor- A device used to properly mix fuel and air in the correct proportions and delivering the mixture into the engine's combustion chamber.

Choke Rocker- It is used to provide proper starting mixture when the engine is cold. The choke lever must be pulled out to ON position when starting a cold engine.

DC Breaker Switch- It protects DC circuits from being damaged due to overload or short circuit by stopping the flow of electricity between the generator and device.

DC socket- the receptacle used for charging a 12 V battery
Dipstick- It seals off engine oil fill hole and is used for indicating the engine oil level.

Drain Plug- A plug that can be removed to allow the fluid contents of the engine to be drained off.

ECON Switch- It is used for automatically reducing engine speed when all loads are turned off or disconnected. If high electrical loads are connected simultaneously, turn the ECON switch to OFF position to reduce voltage changes. When using the DC output, turn the ECON switch to OFF position.
ON position: To minimize fuel consumption and further reduce noise levels when no load is applied
OFF position: The ECON system does not operate

Fuel Switch- It controls flow of fuel from fuel tank to carburetor.
Ground Terminal - It connects generator to ground wire for grounding protection.

Oil Indicator light- Before the oil level falls below a safe limit, the Oil Indicator light (red) will go ON and the Oil Alert system will automatically stop the engine.

Output Indicator Light- The output indicator light (green) is illuminated when the generator is operating normally. It indicates that the generator is producing power at the receptacles

Overload Indicator Light- If the generator is overloaded, or if there is a short circuit in a connected device, the overload indicator light (red) will go ON. It will stay ON, and after about four seconds, the device will shut off and the output indicator light (green) will go OFF.

Recoil Starter- A pull cord is attached to the engine and you pull the T-handle attached to the starter cord assembly to spin the fly-wheel and start the engine.

Spark Plug- A device screwed into the combustion chamber of a spark ignition engine. The plug supplied the spark that ignites the air/fuel mixture so that combustion can occur.

HYUNDAI

GENPOWER LTD

Isaac Way, Pembroke Dock, Pembrokeshire, UK, SA72 4RW

T: +44 (0) 1646 687 880

F: +44 (0) 1646 686 198

E: sales@genpower.co.uk

info@hyundai powerequipment.co.uk