

# **Petrol Generator**



Owner's Manual

### **PREFACE**

Thank you for choosing the petrol generator by our company.

Based on the latest technology at home and abroad, our company has successfully developed the petrol generator sets. The unit is characterized by advanced design, compact structure, reliable performance, convenient service, low fuel consumption and noise as well as fashionable shape. With general petrol engine as power, it is widely used in many fields such as living, open working, shop, bank, fishing and so on.

The manual gives information on operation and maintenance of the petrol generator set. Please be sure to read it carefully before operating. If any trouble occurs, call your dealer who will provide you with the best after service.

All the materials and diagrams in this manual are in accordance with the newest products at the publishing time. Due to revision and other change, the information descried in this manual may be a little different from the actual status. The copyright of this manual belongs to our company. Any group or individual is forbidden to reprint or copy any it. The manual is subject to change without notice.

### **IMPORTANT NOTICES**

Please pay special attention to statements by the following words:

### WARNING

A warning is used to alert the user to fact that hazardous operating and maintenance procedures may result in injury to or death of personnel if not strictly observed.

### CAUTION

A caution is used to alert the user to fact that hazardous operating and maintenance procedures may result in damage to or destruction of equipment if not strictly observed.

# **NOTE**

A note is used to give helpful information.

This manual should be considered as a permanent part of the unit and should remain with the unit when resold.

"The installation and major repair work shall be carried out only by specially trained personnel."

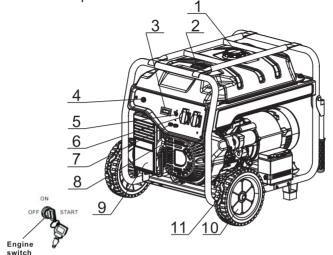
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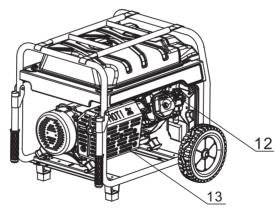
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# NAME-PLATE

Main components of the unit are located as follows.



Electric start



1 Fuelsensor 5 ACbreaker

9 Aircleaner

13 Muffler

2Fuelfillercap

6ACplugsocket

10 Dipstick

3 Voltmeter

4 Lgnitionswitch 7Groundterminal 8 Startinghandle

11 Wheel

12 Sparkplug

### **SAFETY**

### SAFETY LABEL LOCATIONS

These labels warn you of potential hazards that can cause serious injury. Read them carefully.

### SAFETY INFORMATION

Generator sets are designed to give safe and dependable service if operated according to instructions. Read and understand this owner's manual before operating your generator. You can help Prevent accidents by being familiar with your generator's controls, and by observing safe operating procedures.

# **Operator Responsibility**

- ·Know how to stop the generator quickly in case of emergency.
- Understand the use of all generator controls, output receptacles, and connections.
- ·Be sure that anyone who operates the generator receives proper

instruction. Do not let children operate the generator without parental supervision.

### **Carbon Monoxide Hazards**

- Exhaust contains poisonous carbon monoxide, a colorless and odorless gas. Breathing exhaust can cause loss of consciousness and may lead to death.
- ·If you run the generator in an areas that is confined, or even partially enclosed, the air you breathe could contain a dangerous amount of exhaust gas. To keep exhaust gas from accumulating, provide adequate ventilation.

### **Electric Shock Hazards**

- •The generator produces enough electric power to cause a serious shock or electrocution if misused.
- 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. Keep the generator dry.
  - If the generator is stored outdoors, unprotected from the weather, check all electrical components on the control panel, before each use. Moisture or ice can cause a malfunction or short circuit in electrical components which could result in electrocution.

- •Do not connect to a building electrical system unless an isolation switch has been installed by a qualified electrician.
- •Do not spill out when filling fuel.
- ·Always fill fuel after stopping.
- No smoking when filling fuel.

# **NOTICE**

When you operate the generator set, please put on protections such as gloves to protect your hands from high temperature.

### **CONTROLS**

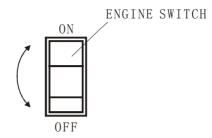
### **GENERATOR SWITCH**

To start and stop the Generator.

Switch position:

**OFF:** To Stop the engine.

**ON:** To run the engine.

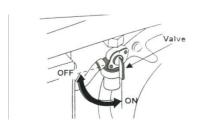


# NOTICE

Do not allow the starter grip to snap back against the Generator. Return it gently to prevent damage to the starter.

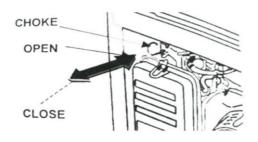
# **FUEL VALVE LEVER**

The fuel valve is located on the carburetor. When the valve lever is in the ON position, fuel is allowed to flow from the fuel tank to the carburetor. Be sure to return the fuel valve lever to the OFF position after stopping the Generator.



# **CHOKE LEVER**

The choke is used to provide proper staring mixture when the engine is cold. It can be opened and closed by operating the choke lever manually. Move the lever to the CLOSED position to enrich the mixture for cold starting.



# **GROUND TERMINAL**

The generator ground terminal is connected to the frame of the generator, the metal non-current carrying parts of the generator, and ground terminals of each receptacle.

Before using the ground terminal, consult a qualified electrical inspector or local agency having jurisdiction for local codes or ordinances that apply to the intended use of the generator.

### **AC APPLICATIONS**

Before connecting an appliance or power cord to the generator.

- ·Make sure that it is in good working order. Faulty appliances or power cords can create a potential for electrical shock.
- ·If an appliance begins to operate abnormally, becomes sluggish or stops suddenly, turn it off immediately. Disconnect the appliance, and determine whether the problem is the appliance, or if the rated load capacity of the generator has been exceeded.
- -Make sure that the electrical rating of the tool or appliance does not exceed that of the generator. Never exceed the maximum power rating of the generator. Power levels between rated and maximum may be used for no more than 30 minutes.

### **AC OPERATION**

- Start the Generator
- 2. Plug in the appliance.

# NOTICE

·Should the petrol generator set need to be connected with the household power supply, only electrically professional technicians

shall perform the connection. Any improper connection may result in fire hazard or damages to the petrol generator set while the generator is connected to the equipment.

•Overload protector will be automatically tripped when the circuit gets overloaded.

Always do as the following so as to keep the generator in a sound condition.

- Always connect the generator to the earth to prevent misusing misusing.
- 2.If the generator is to supply tow or above loads with power supply, be sure to connect them one with higher start current fist.
- 3. The following table gives reference information for connecting the electric appliances to the generator.

# Power Management

	Electric equip	Rated power(W)	Starting power(W)		
	Flat panel television 27"		500	800	
	Energy saving lamp		5~50	5~50	
	Electric cooker	1	1000	1000	
	Computer	9	800	800	
	DVD	TANKE W MINISTER AND COM	100	100	
Household Appliances	Refrigerator	ier .	800	1600	
	Washing machine		300	600	
	Electric fan		50	100	
	Air-conditioner 2HP		1500	3000	
	Electric welder	A A I	2500	5000	
Tools	Electric hammer		1000	1500	
	Water pump		800	1200	

The starting wattage of some appliances are can be higher than the operating watts. Please read the labels of the electric equipment for reference. The total power of the loads should not exceed the rated power of the generator.

### PRE-OPERATION CHECK

### **ENGINE OIL**

# NOTICE

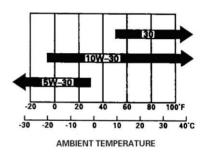
range.

Engine oil is a major factor affecting engine performance and service life. Non-detergent and 2-stroke engine oils will damage the engine and are not recommended

Check the oil level BEFORE EACH USE with the Generator on a level surface and the engine stopped.

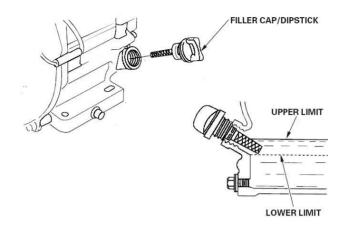
SAE10W-30 is recommended for general, all-temperature use.

Other viscosities shown in the chart may be used when the average temperature in your area is within the indicated



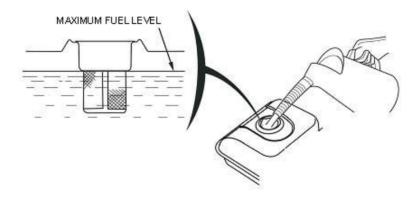
- 1. Remove the oil filler cap and wipe the dipstick clean.
- Check the oil level by inserting the dipstick into the filler neck without screwing it in.
- 3. If the level is low, fill to the top of the oil filler neck with the recommended oil.

# 4. Reinstall the oil dipstick again



# **FUEL RECOMMENDATION**

- 1. Remove the fuel tank cap and check oil level.
- 2. Refill the fuel when oil level is low. Don't exceed the shoulder of the strainer.



# WARNING

- Petrol is extremely flammable and is explosive under certain conditions.
- Refuel in a well-ventilated area with the engine stopped. Do not smoke or allow flames or sparks in the area where the engine is refueled or where petrol is stored.
- •Do not overfill the fuel tank (there should be no fuel in the filler neck). After refueling, make sure the tank cap is closed properly and securely.
- ·Be careful not to spill fuel when refueling. Spilled fuel or fuel vapor may ignite. If any fuel is spilled, make sure the area is dry before starting the engine.
- Avoid repeated or prolonged contact with skin or breathing of vapor.

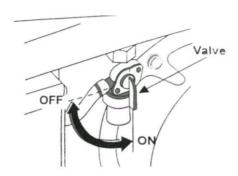
# NOTICE

Running the engine with persistent spark knock or pinging can cause engine damage.

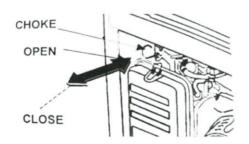
Running the engine with persistent spark knock or pinging is misuse, and the Distributor's Limited Warranty does not cover parts damaged by misuse.

# STARTING THE GENERATOR/STOPPING THE GENERATOR Starting the GENERATOR:

1. Turn the fuel valve lever to the ON position.



2. Turn the choke lever to the CLOSED position.



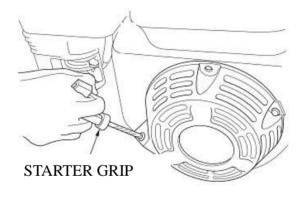
# **NOTICE**

Don't use the choke for hot generator set or high temperature.

3. Turn the Generator switch to the ON position.



 Pull the starter grip lightly until resistance is felt, then pull briskly.



# **NOTICE**

Do not allow the starter grip to snap back against the engine.

Return it gently to prevent damage to the starter or housing.

As the engine warms up, slowly turn the choke lever to the OPEN position.

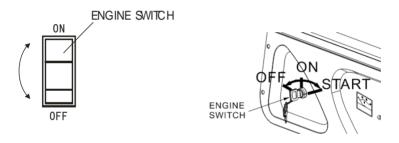
# **Stopping the Generator**

# In an emergency:

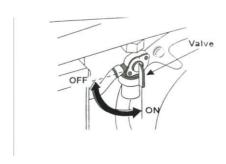
To stop the generator in an emergency, turn the engine switch to the OFF position.

# In normal use:

1. Turn the engine switch to the OFF position.



2. Turn the fuel valve lever to the OFF position.



### **EMISSION CONTROL SYSTEM**

Combustion may generate such pollutants as CO, Nitrogen oxides, Hydrocarbon, which may contaminate the environment if large amount of them are emitted into the air. Among them CO is a kind of colorless, flavorless and toxic gas. Excessive inhalation of it may make people poisoned or even dead. It is of great importance to control them in turn.

To ensure the emission of your petrol engine meet the standard on emission, the following items should come to your attention:

#### 1.Maintenance

Proper maintenance is the responsibility of the Owner.

Please refer to the Maintenance Schedule for the specific maintenance. Please keep it in mind that this Schedule is made under the common conditions where the petrol engine is used. If it continuously used under heavy load or under high temperature with improper humidity or within dusty environment, it should be maintained more frequently.

# 2. Replacement of spare parts

It is recommended to only use the new and genuine spare

parts or their equivalent while replacing the spare parts.

Replacement with other parts of inferior quality may adversely affect the performance of emission control system.

### 3.Unauthorized modification

Unauthorized modification or changes to the emission control system may cause the emission higher than the legal specifications. The authorized modification or changes include:

- Removal or change of any spare part in the inlet or outlet system.
- 2) Modification or removal of the connections for speed governing system or speed governing system, which causes the petrol engine run beyond the parameter settings.
- 4. The emission may be adversely affected if
  - 1) It is hard to start-up the engine or hard to stop the engine after stating up;
  - 2) The idle speed is not stable;
  - 3) Black smoke is emitted or the fuel consumption is abnormal:

- 4) Bad ignition or backfire is occurred while the engine is loaded; or
- 5) The ignition is earlier than normal.

# **MAINTENANCE**

Periodical inspection and adjustment may maintain a good performance of the petrol engine. Routine maintenance allows extended service life. Intervals and items of maintenance are shown in the following table.

Maintenance schedule⊷							
Mai Item ₽	ntenance period+	Each using time↵	1st month or 20 hours₽	Each quart er or 50 hours <i>₽</i>	Every 6 month s or 100 hours <i>↔</i>	Every year or 300 hours#	
Lubricants of	Inspection of oil level₽	Δ₽	٩	₽	ę.	ته	
gasoline engine↵	ب Replacement⊷	٩	Δ₽	₽	Δ₽	٩	
0:	Inspection₽	A₽	÷.	đ	4	٠	
Air cleaner-₽	Cleaning₽	₽	₽	ΔΦ₽	4	₽	
Sediment bowl₽	Cleaning₽	4	4	ΔΦ₽	Δ₽	4	
Spark plug <i>e</i>	Inspection & cleaningಳ	₽	4	4	Δ₽	4	
	Replacement₽	₽	₽	4	ė.	∆₽	
Valve clearance₽	Inspection & adjusting√	₽	₽	₽	42	Δ⋧₽	
Combustio n chamber₽	Inspection & adjusting∂	₽	₽	4	4	∆దించి	
Fuel tank and strainer⊷	Cleaning⊷	₽	₽	ą.	٦	△⋧↩	
Fuel line₽	Fuel line라 Cleaning라 Every two months(if necessary, please replace it) 옳다						

# NOTICE

1 Increase maintenance frequency in the case of exposure to dusts.

2 All these maintenance items shall be done by our authorized distributors, except you have proper tools and maintenance capacity.

### WARNING

Extended and repeated exposure to lubricant of petrol generator set may cause skin canner. Thoroughly clean and rinse your body immediately after exposure using soap and clean water.

# AIR CLEANER SERVICE

A dirty air cleaner may hinder air entry into the carburetor. Always perform periodical maintenance to air cleaner.

Frequent maintenance is required where the petrol generator set is exposed to heavy dusts.

# WARNING

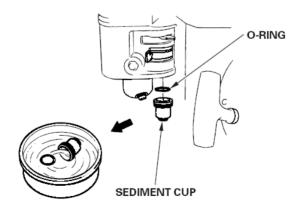
Don't clean the filter element using petrol or cleaning agent of low fire point. Otherwise explosion may occur.

Don't run the engine without air cleaner. Otherwise dirty air may enter the engine to cause tear and wear.

- Remove two M5 nuts and cover of air cleaner. Take out filter element.
- 2) Clean the filter element using flameproof or high-fire-point solvent. Make it fully dry.
- Soak the filter element in the clean petrol then squeeze out all the excessive petrol.
- 4) Re-mount the filter element and put on the cover.

# SEDIMENT CUP CLEANING

Turn off the fuel cock, remove sediment cup and O ring, and clean the sediment cup using nonflammable or high-fire-point solvent. Remount such parts after fully dry. Open the fuel cock to check for leakage.



# CAUTION

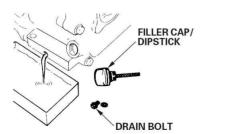
- Petrol is highly inflammable and explosive. Prohibit any smoke and fire and keep good ventilation.
- •Check remounted sediment bowl for leakage. Place the machine in dry and clean environment.

### **ENGINE OIL CHANGE**

To ensure quick and full drainage of lubricant in the petrol generator set, replace lubricant when the engine remains warm.

- 1) Remove the dipstick and drain plug to drain the lubricant.
- 2) Remount and tighten drain plug.
- 3) Refill the crankcase with the recommended lubricant and check the level.
- 4) Reinstall the dipstick.

Lubricant capacity of generator set:1.1 L





Wash your hands with soap and water after handing used oil.

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 or recycling center for reclamation. Do not throw it in the trash, pour it on the ground, or down a drain.

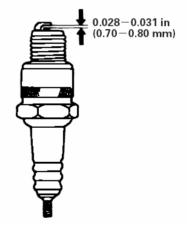
### SPARK PLUG SERVICE

Recommended spark plug: F7RC F7RTC

Don't use spark plug beyond allowable thermal range. To

ensure normal operation of the machine, spark plug gap shall be properly spaced and free of sediment.

- Remove or replace spark plug using special spanner.
- Visual check the spark plug.
   Discard any spark plug



obviously worn or with cracked/defected insulator. Clean with wire brush in the case of reuse.

# **WARNING**

Don't touch spark plug shortly after the machine shuts down,

for the spark plug is extremely hot.

- 3) Measure the gap using feeler gauge. Pull the electrode if necessary to adjust. 0.7—0.8mm is the proper range of gap.
- 4) Check the spark plug gasket for good condition.
- 5) Screw the spark plug until it cannot be further screwed manually. Then tighten using box spanner.

Hold down the gasket proerply.

# NOTICE

When mounting new spark plug, overscrew for 1/2 circle after gasket is properly held down. When mounting used spark plug, overscrew for 1/8-1/4 circle after gasket is properly held down.

# **WARNING**

- •The spark plug shall be properly tightened. Otherwise it will get extremely hot and cause damage to the machine.
- ·Use recommended spark plug as possible. Otherwise the machine may be damaged.

# HANDLING&STORAGE

When transporting the generator, turn the engine switch and the fuel valve OFF. Keep the generator level to prevent fuel

spillage. Fuel vapor or spilled fuel may ignite.

# 1) Handling

Don't handle the petrol generator set until fuel cock turns off and engine cools down.

# NOTICE

Don't tilt the petrol generator set. Otherwise fire may occur due to fuel spillage or volatilization.

# 2) Storage

Check for the following conditions in the case of long storage of petrol generator set:

- ① The storage place is free of high moisture or heavy dusts.
- ② Fuel is drained up.

# **WARNING**

To prevent petrol combustion and explosion, fire and smoke is strictly prohibited.

- a) Position the fuel cock at OFF, remove and empty the sediment bowl'
- b) Open the fuel cock, drain the fuel tank to an appropriate empty container.

- c) Re-mount the sediment bowl, tighten and fix it properly.
- d) Turn loose the discharge screw of carburetor, drain fuel from the carburetor to an appropriate empty container.
  - ③ Replace lubricant for petrol generator set.
  - ④ Remove the spark plug. Fill a spoon of clean lubricant into the cylinder. Turn the petrol generator set to have lubricant evenly distributed. Re-mount the spark plug.
  - ⑤ Pull the recoil starter rope until resistance is felt. Then turn off the valve to prevent rustiness and dust entry.

Cover the petrol generator set to isolate dusts.

# **SPECIFICATIONS**

	Model	RGH1150	RGH2500(D)	RGH3150(D)	RGH3500(D)	RGH6250/T(D)	RGH7500/T(D)	RGH9000/T(D)	RGH10000/T(D)	
	Engine model	RGH100	RGH200(D)	RGH200(D)	RGH210(D)	RGH390(D)	RGH420(D)	RGH460(D)	RGH460(D)	
	Туре		4-storke OHV single-cylinder petrol engine with forced air-cooled							
	Displacement (ml)	98	196	196	212	389	420	458	460	
Engine	Rated power output (kW/rpm)	1.8/3600	4.0/3600	4.0/3600	4.3/3600	7.8/3600	9.0/3600	10.0/3600	10.0/3600	
	Start system		Hand-operated & electric							
	Fuel tank capacity (L)	6	3.6	3.6	3.6	25	25	25	25	
	Engine oil capacity (L)	0.35	0.6	0.6	0.6	1.1	1.1	1.1	1.1	
	Rated voltage (V)	230				230/400	230/400	230/400	230/400	
Generator	Rated frequency (Hz)	50								
	Rated power (kW)	0.9	2.0	2.5	2.8	5.0	6.0	7.2	8.0	
	Max. power (kW)	1.0	2.2	2.8	3.0	5.5	6.5	7.7	8.5	
Generater set	Net weight(kg)	29	43	43	47	82	82	89	92	

