

# **OPERATING INSTRUCTIONS FOR GASOLINE GENERATOR SET**

G3500(3500W)

## **PREFACE**

Thank you for choosing a gasoline generator set by our Co.

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

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

All the materials and diagrams of this manual are in accordance in this manual may be a little different from the actual stares. The copyright of this manual belongs to our Co., 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 preceded 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 operation and maintenance procedures may result in injury to or death of personnel if not strictly observed.**

### **NOTE:**

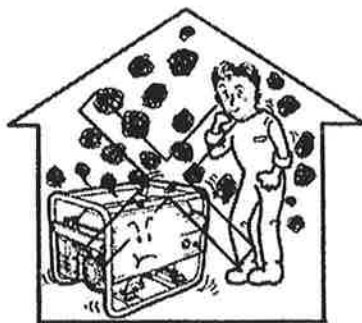
**Give helpful information.**

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

## Contents

I . GENERATOR SAFETY .....	4
II . NITRODUCTION TO PARTS AND COMPONENTS .....	6
III. PRE-OPERATING INSPECTION .....	7
IV. STARTING THE GENERATOR .....	10
V . SERVICE .....	11
VI. STOPPING THE ENGINE .....	16
VII. MAINTERNANCE .....	17
VIII. STORAGE .....	21
IX. TROUBLESHOOTING .....	24
X. WIRING DIAGRAM .....	25
XI. SPECIFICATONS .....	27

## I . GENERATOR SAFETY



1. Never operate it  
in an enclosed room.

Fig.1.1

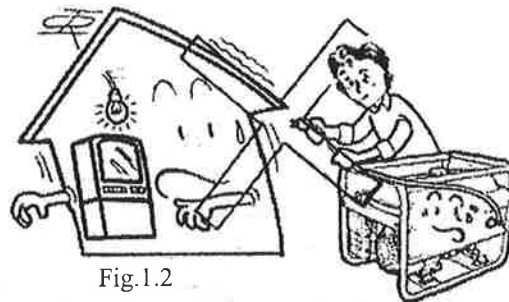


Fig.1.2

2. Never connect to home circuit.

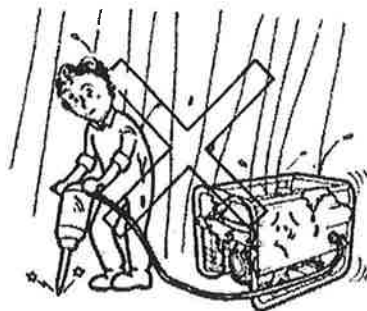


Fig.1.3

3. Do not operate it under wet circumstances.

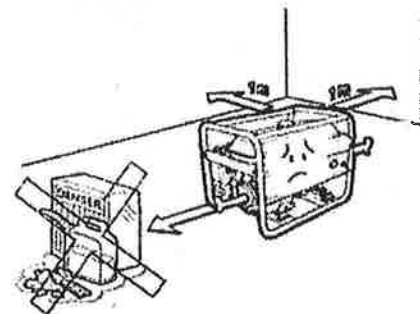


Fig.1.4

4. Place inflammables away from the unit at  
least one meter.



Fig.1.5

5. No smoking when filling fuel.



Fig.1.7

7. Do not spill out when filling fuel.



Fig.1.6

6. Always fill fuel after stopping it.

THERE IS A PERMANENT CONDUCT  
OR BETWEEN THE GENERATOR (ST  
ATOR WINDING) AND THE FRAME  
, or equivalent

## II. INTRODUCTION TO PARTS AND COMPONENTS

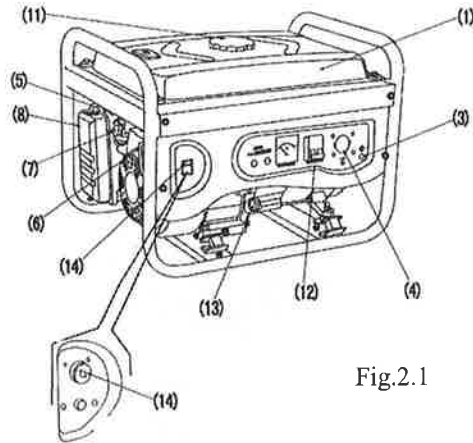


Fig.2.1

- 11. Fuel filler cap
- 12. AC breaker
- 13. Dipstick
- 14. Ignition switch

- 1. Fuel tank
- 2. Muffler
- 3. Earth terminal
- 4. AC plug socket
- 5. Carburetor choke lever
- 6. Starter handle
- 7. Fuel cock
- 8. Air cleaner
- 9. Pipe frame
- 10. Spark plug

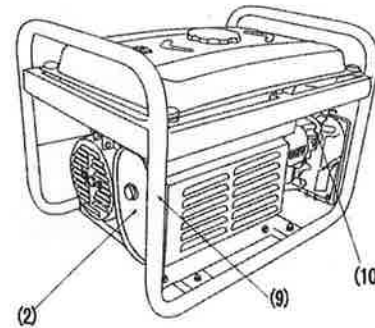


Fig.2.2

### III. PRE-OPERATING INSPECTION

#### 1. ENGINE-OIL LEVEL

NOTE: always check the generator in the case of stopping the generator on a level ground.

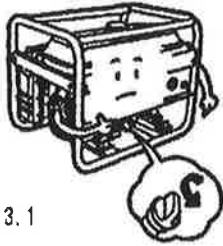


Fig. 3.1

1. Turn out the oil filler cap and clean the dipstick with a clear cloth.



Fig. 3.3

3. In the case that the oil level is below the lower level mark of the dipstick, fill oil to the upper level mark of the dipstick.

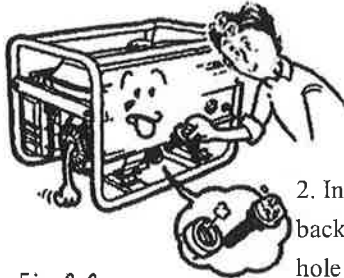


Fig. 3.2

2. Insert the dipstick back into the oil filler hole without turning it in.

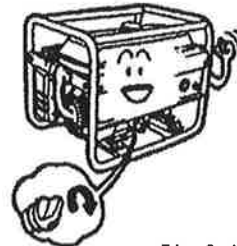


Fig. 3.4

4. Reinstall the oil filler cap well.



## 2. FUEL LEVER



Fig. 3. 5

5. Open the fuel filler cap.



Fig. 3. 7

7. Fill fuel to the shoulder of the filter.



Fig. 3. 6

6. Check the fuel level, and fill fuel if necessary.

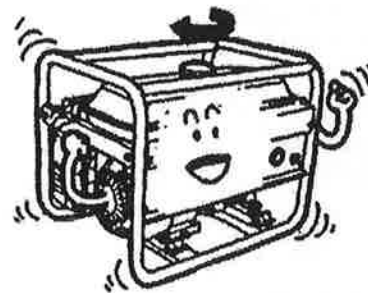


Fig. 3. 8

8. Reinstall the fuel filler cap well.

### 3. BATTERY (only for Electric)

Check and make sure that the electrolyte level of each battery cell is between upper and lower level marks (Fig.20).

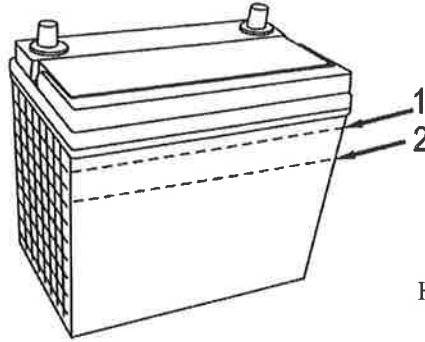


Fig.3.9

1. upper level mark

2. lower level mark

#### 4. AIR CLEANER

1. Remove the clip and dismantle the air housing or turn off the wing nuts and air cleaner cover

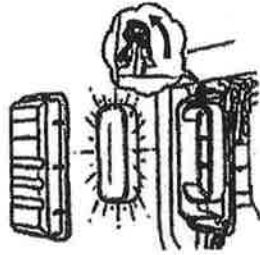


Fig.3.10

2. Dismantle the filter element.



Fig.3.11

- 3.

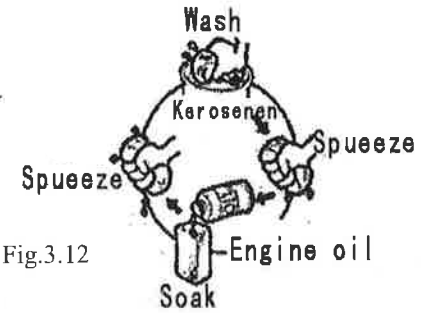


Fig.3.12

4. Put the filter element into original position, install the cover and secure it well

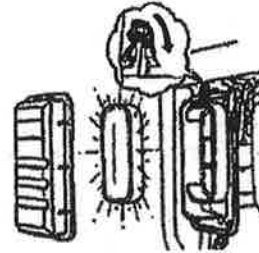


Fig.3.13

#### IV. STARTING THE GENERATOR

1. Remove all loads from AC socket and switch off the AC breaker. Remove all loads from AC socket.

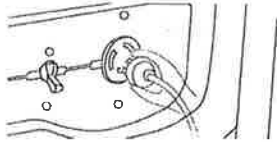


Fig.4.1

2. Set the fuel cock to “ON”

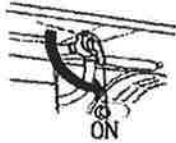


Fig.4.2

3. Push the choke lever to “OFF”

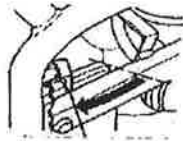


Fig.4.3

4. Turn the generator ignition switch to “ON”

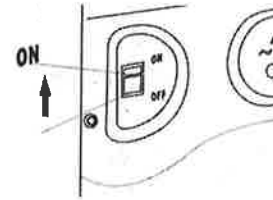
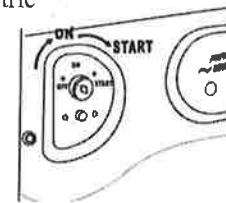


Fig.4.4

Electric



5. Pull the start handle gently until feeling an anti-action, and then pull it up strongly.

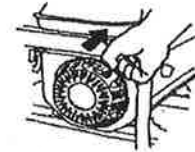
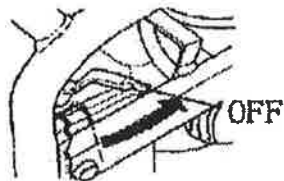


Fig.4.5

6. Once the generator starts, set the choke lever to “OFF”

Fig.4.6



**NOTE:** Don't close the choke when starting the engine in hot condition.

## V. SERVICE

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

### **WARNING**

1. Always connect the generator to the earth to prevent misusing.

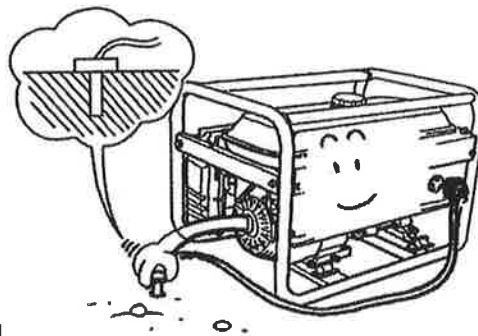










Fig.5.1

2. The following table gives reference information for connection the electric appliances to generator.

Description	Wattage		Typified	Example		
	Start	Rating		Electric device	Start	Rating
<ul style="list-style-type: none"> <li>● Incandescent lamp</li> <li>● Heating device</li> </ul>		×1	Incandescent lamp  TV 	Incandescent lamp 100W 	100VA (W)	100VA (W)
<ul style="list-style-type: none"> <li>● Fluorescent lamp</li> </ul>	×2	×1.5	Fluorescent lamp 	Fluorescent lamp  40W	80VA (W)	60VA (W)
<ul style="list-style-type: none"> <li>● Motor device drive</li> </ul>	×3~5	×2	Refrigerator  Electric fan 	Refrigerator  150W	450~750VA (W)	300VA (W)

3. If the generator is to supply two or above loads with power supply, be sure to connect them one by one with higher start current first.

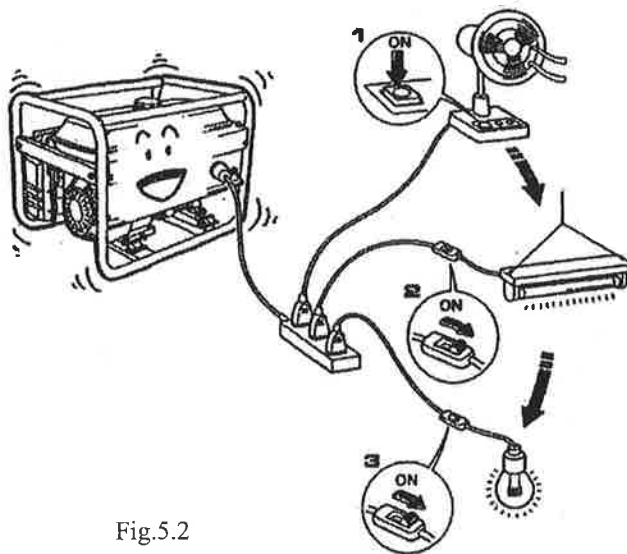


Fig.5.2



**WARNING**

Do not use AC and DC at the same time.

**⚠ WARNING**

When connect the generator to home power supply, be sure that a skilled electrician does this job.  
Improper connecting between the generator and loads may cause damage to the generator, even a fire.

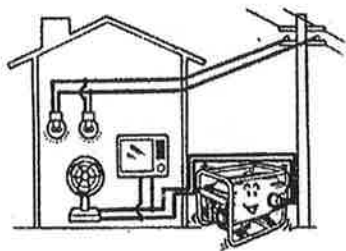


Fig.5.3 Correct

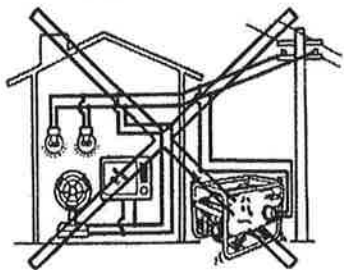


Fig.5.4 Forbidden

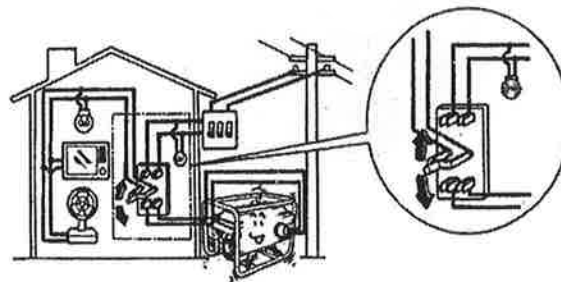


Fig.5.5 Correct



#### 4. USE INSTRUCTION WHEN PROVIDING ALTERNATIVE CURRENT SUPPLY

1. Start the generator

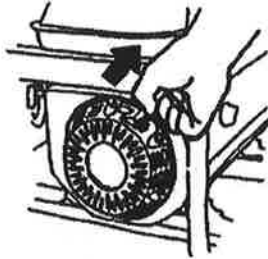


Fig.5.6

2. Connect devices

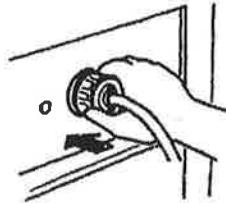


Fig.5.7

3. Switch on the AC breaker,

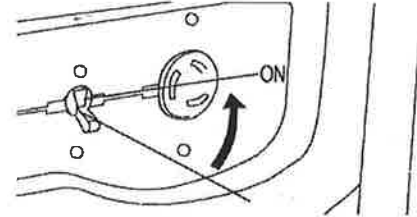


Fig.5.8

## VI. STOPPING THE ENGINE

1. Switch off the AC breaker.

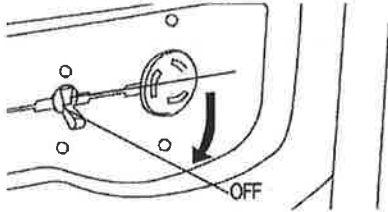


Fig.6.1

2. Turn the ignition switch to "OFF"

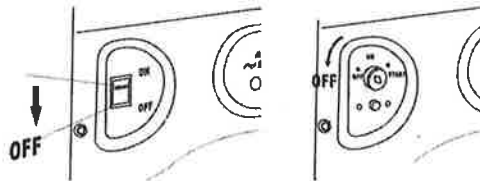


Fig.6.2

Electric

3. Set the fuel cock to "OFF"

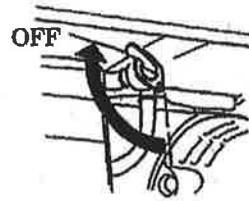

















Fig.6.3

**NOTE: To stop the generator in an emergency, turn the ignition switch to "OFF"**

## VII. MAINTENANCE

User should service the unit according to the Maintenance Schedule as follows:

PERIOD				 Or first month	 Or every 3 months	 Or every 6 months	 Or every one Year	Ref. page
Engine oil check		Check						P.9
Replace engine oil			Replace			Replace		P.20
Air cleaner check		Check						P.11
Air cleaner wash				Clean				P.11
Oil filter cup						Clean		P.22
Oil filter cup filter						Clean		P.22
Spark plug						Clean		P.21
Valve clearance							Check, readjust	-
Cylinder cover wash							Clean	-
Fuel tank wash		Replace every 3-year						-

## 1. REPLACEMENT OF ENGINE OIL

1. Turn and then take out the dipstick.

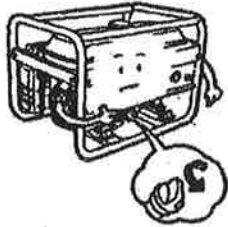


Fig.7.1

2. Turn off the drain plug, and empty the engine oil from the crankcase.

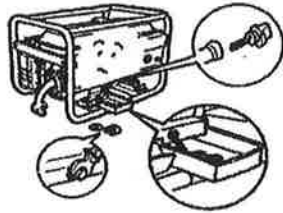


Fig.7.2

3. Screw on the drain plug.

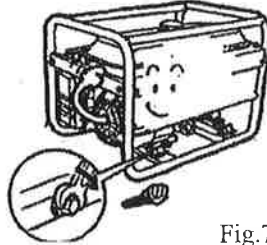


Fig.7.3

4. Fill engine oil to the upper level mark of the dipstick.



Fig.7.4

5. Reinstall the dipstick.

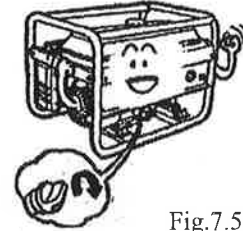


Fig.7.5

Engine oil: 4-stroke gasoline engine oil engine oil Class SE, SE from API Service Classification or SAE10W-30 engine oil equivalent to Class SG.

Low air temperature (below 10°C)

Engine oil recommended: SAE10W-30

Frigid air temperature (below -15°C)

Engine oil recommended:

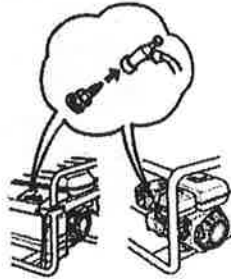
Class SE, SF from API Service Classification or SAE10W-30 engine oil equivalent to Class SG.

## 2. MAINTENANCE OF AIR CLEANER (SEE ABOVE-MENTIONED)

### 3. SPARK PLUG

1. Withdraw the spark plug cap front the spark plug.

Fig.7.6



2. Dismantle the spark plug by means of a special tool.

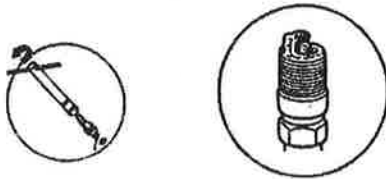


Fig.7.7

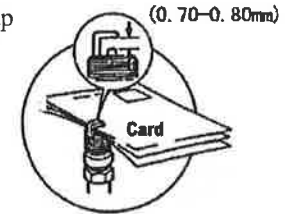
3. Clear away carbon fouling around the spark plug.

Fig.7.8



4. Check the spark plug gap and adjust if necessary.

Fig.7.9



5. Reinstall the spark plug and cap well.

Fig.7.10



#### 4. MAINTENANCE OF FUEL FILTER

1. Set the fuel cock to “OFF”, and dismantle the fuel filter cup.

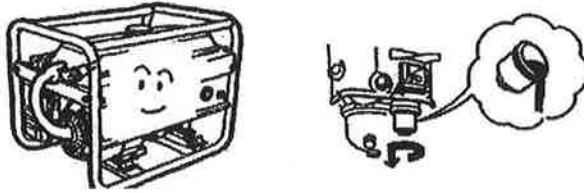


Fig.7.11

2. Clean the fuel filter cup thoroughly by blowing off in the reverse direction of the arrowhead.

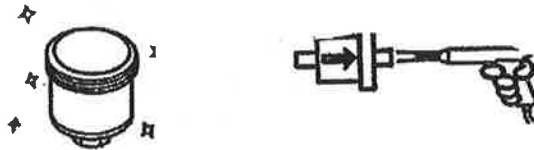


Fig.7.12

3. Fit a new rubber ring to position and mount the filter cup securely.



Fig.7.13

## VIII. STORAGE

During long-term storage of the unit which are not kept in use, carry out procedures as follows;

1. Set the fuel cock to “OFF” , turn off the filter cap and empty the fuel inside.

Fig.8.1



2. Set the fuel cock to “ON” , and empty the fuel from the fuel tank.

Fig.8.2



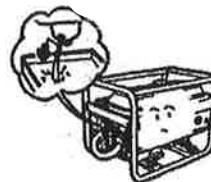
3. Replace the rubber ring with a new one and than turn right the filter cup.

Fig.8.3



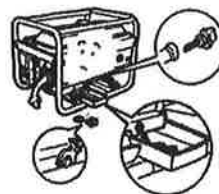
4. Screw off the fuel drain plug, and empty the fuel from the carburetor.

Fig.8.4



5. Turn off the oil filler plug and oil drain plug, and discharge the engine oil from the crankcase.

Fig.8.5

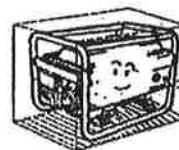


6. Reinstall the oil drain plug, and then fill engine oil to the upper level mark of the dipstick.

Fig.8.6

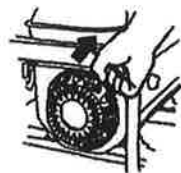


Fig.8.8



7. Pull up the handle gently until feeling an anti-action.

Fig.8.7





## IX. TROUBLESHOOTING

(1) TROUBLE: the generator fails to start.

1. Check to see if the generator switch is at "ON"

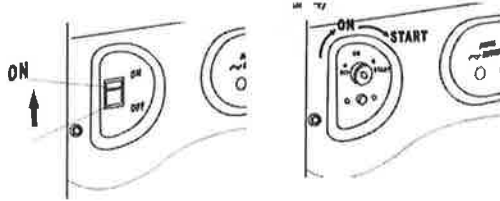


Fig.9.1

2. Check engine oil level.



Fig.9.2

3. Check the fuel inside tank..



Fig.9.3

4. Remove the spark plug, and check it for proper sparks.

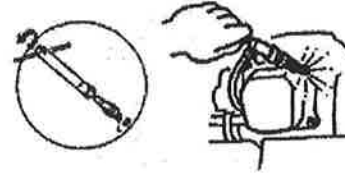


Fig.9.4

5. If the generator set is still out of work, see your dealer for help.

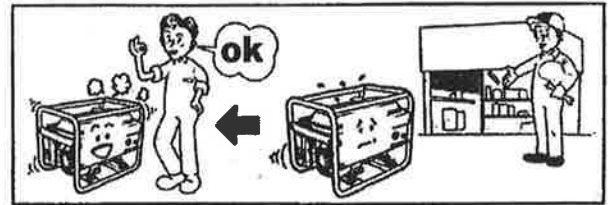


Fig.9.5

(2) TROUBLE: The unit fails to generator electricity.

1. Check the light bulb.



Fig.9.6

2. Check to see if the AC breaker is at "ON"

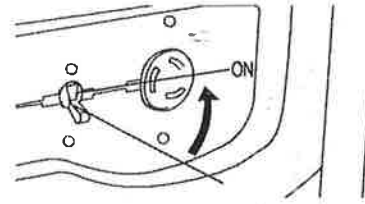


Fig.9.7

3. If such check is still unsatisfactory, see your dealer for help.

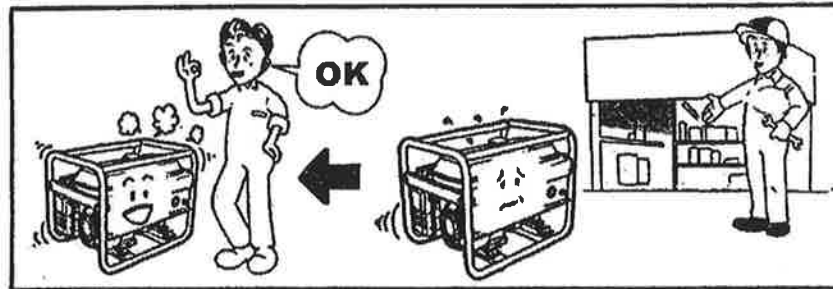
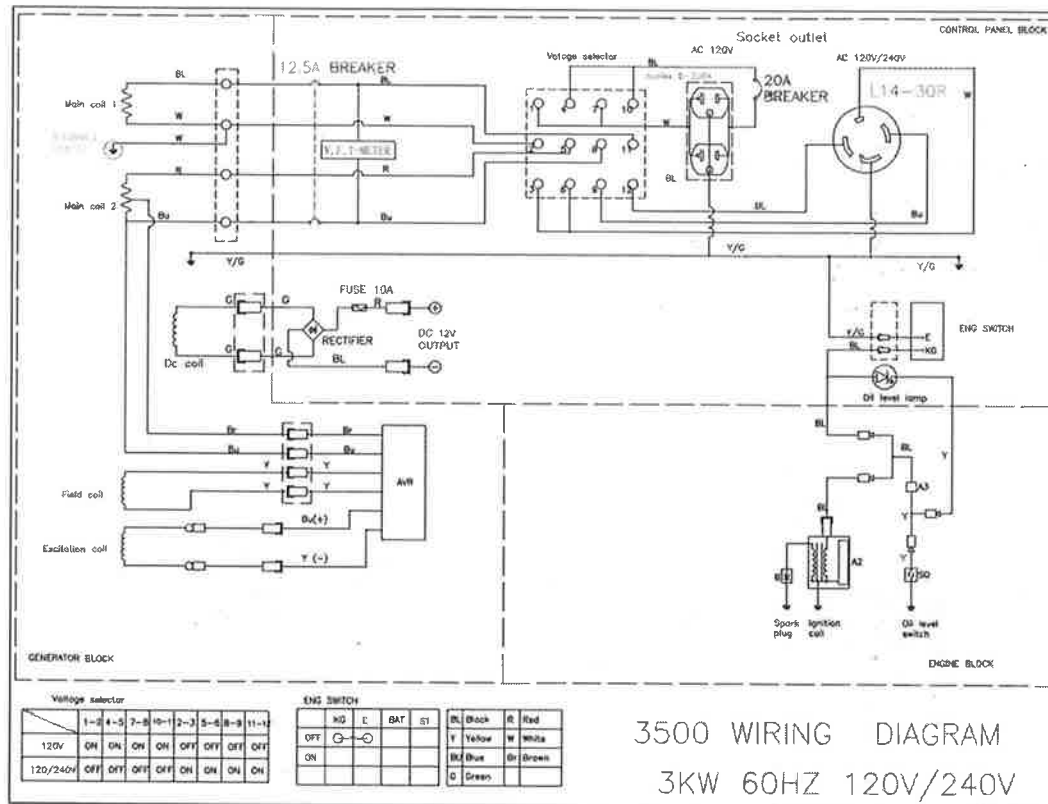
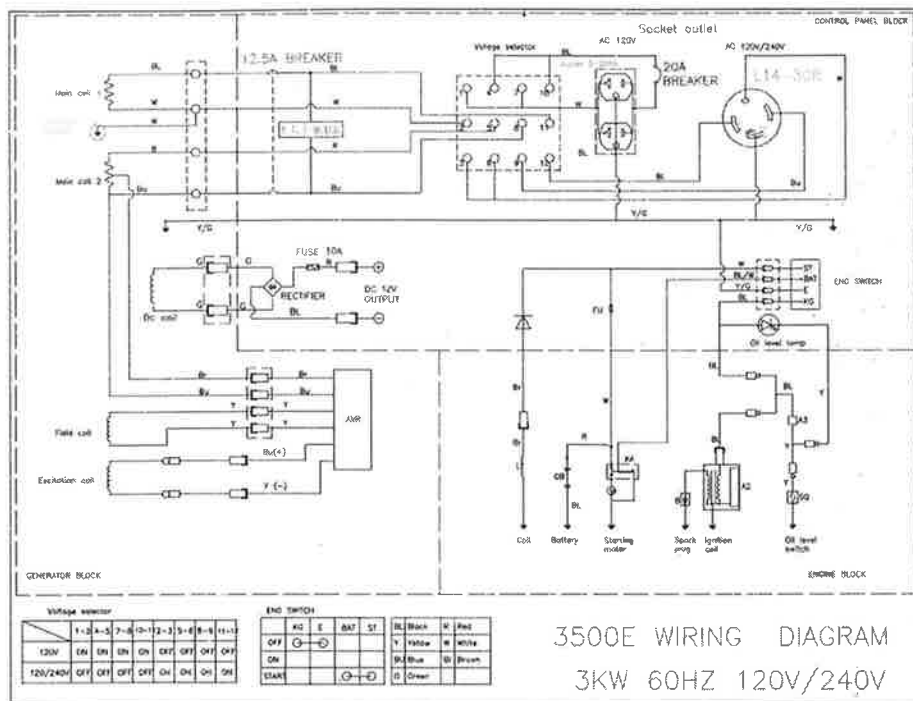


Fig.9.8

## X. WIRING DIAGRAM





NOTE: THERE IS PERMANENT CONDUCTOR BETWEEN THE GENERATOR (STATOR WINDING) AND THE FRAME, OR EQUIVALENT;

## XI. SPECIFICATONS

Model		2200/2200E	2500/2500E	3500/3500E	4000/4000E
Engine	Engine model	168F	168F-2		170F
	Type	4-stroke, OHV, single cylinder gasoline engine with forced air-cooled			
	Displacement (cm <sup>3</sup> )	163	196		212
	Maximum power output (kW/rpm)	3.4/3600	4.8/3600		
	Ignition system	Non-contact transistor			
	Start system	Hand-operated			
	Fuel tank capacity (L)	15			
	Fuel consumption (L/hr)	0.9	1.2		1.48
	Duration of runs (h)	15	12		10
	Engine oil capacity (L)	0.6			
	Noise (7 meters away) (dB)	≤63	≤63	≤67	≤65
Generator	Rated voltage (V)	120/240			
	Rated frequency (Hz)	60			
	Rated power (kVA)	2.0	2.5	3.0	3.2
	Max. power (kVA)	2.2	2.7	3.5	3.7
Generating set	Overall length (mm)	590			
	Overall length (mm)	435			
	Overall length (mm)	435			
	Dry mass (kg)	45/47	46/48	47/49	47/49
	IP Degree	IP23			

K-1641-1