



GASOLINE GENERGOR

PROFESSIONAL POWER EQUIPMENT

OPERATION **MANUAL**

MODEL: T19000LXU
Gas Powered Genggor

OPERATION INSTRUCTION AND PARTS LIST MANUAL



This manual contains:

IMPORTANT WARNINGS and INSTRUCTIONS READ AND RETAIN FOR REFERENCE



WARNING: To reduce the risk of injury, the user must read and understand the operators manual before using this product.

SAVE THIS MANUAL FOR FUTURE REFERENCE

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1. Safety Point for Attention



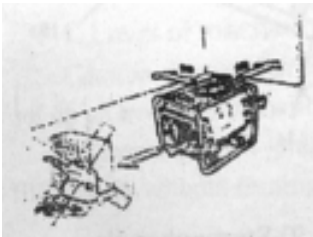
1) Do not use it indoors



2) Do not open it in wet Environment



3) Do not connect it to the line for house appliance



4) keep flammables 1m Min. away from it

5) Do not overfill to cause overflowing while fueling

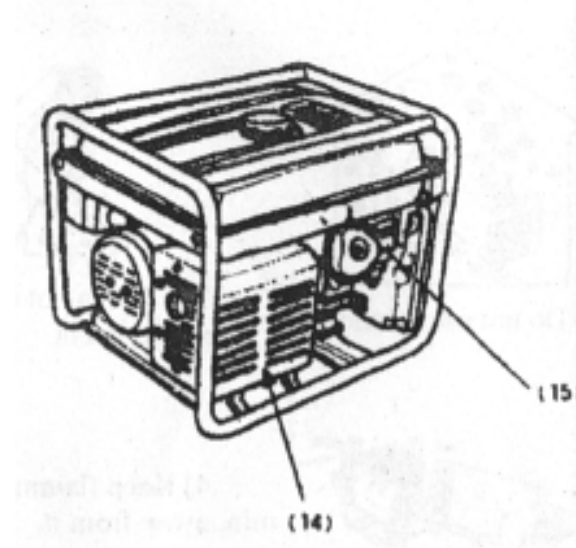
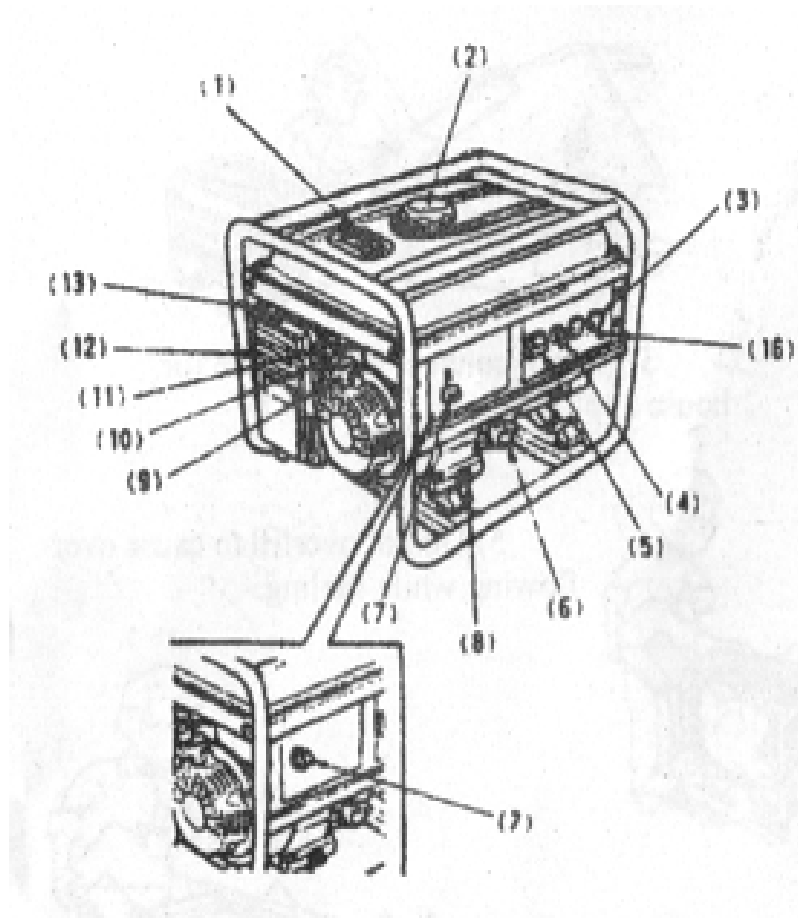


6) Do not smoke while fueling

7) Stop the engine on fueling



2. Parts & Subassemblies



- 1) Fuel indicator
- 2) Fuel tank up
- 3) AC socket
- 4) AC breaker
- 5) Voltmeter
- 6) Machine oil plug gap
- 7) Engine switch
- 8) Discharging bolt

- 9) Starting handle
- 10) Fuel filter cup
- 11) Fuel valve
- 12) Air filter
- 13) Choke handle
- 14) Exhaust silencer
- 15) Spark plug
- 16) Grounding terminal

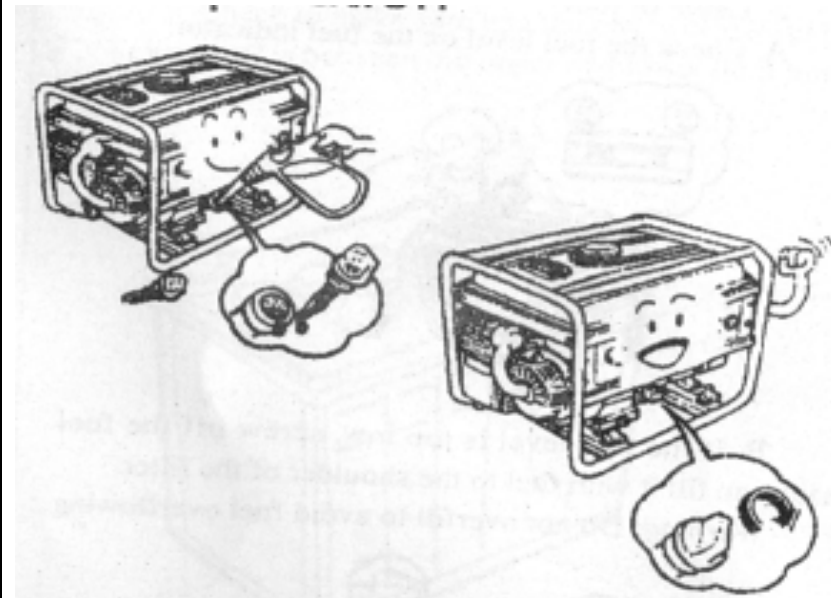
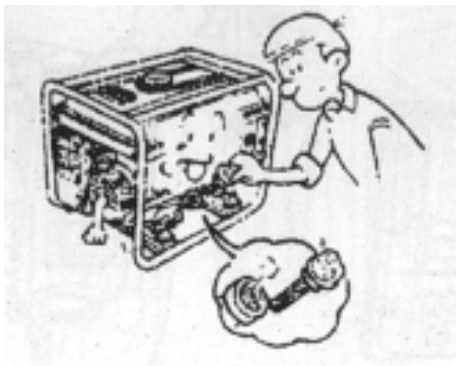
3. Check-ups before Operation

- Scope of temperature the generator set is applicable for -15°C to 40°C .
- Scope of humidity the generator is applicable For Not over 95%.
- The generator will output the rated power when Running in areas within 1000m above the sea level but Lower power than that in areas higher than 1000m above The sea level.

1. Level of machine oil

Caution: Remember that check-ups must be carried Out on an even ground with the engine stopped.

A. Insert the oil plug gage into the machine oil filling Hole without turning and check the oil level.



B. When the oil level is too lower, refill the machine with machine

Oil but not over the upper limit mark.

Recommended machine oil:

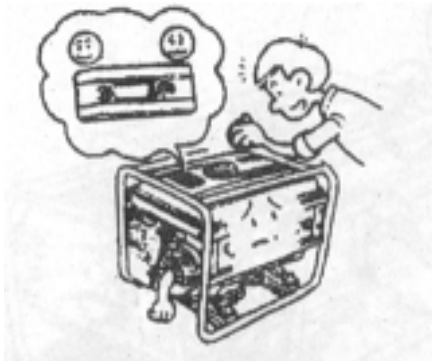
Machine oil Class SE or SF of API of SAE10W-30

Corresponding to Class SG

C. Remount the machine oil plug gage securely.

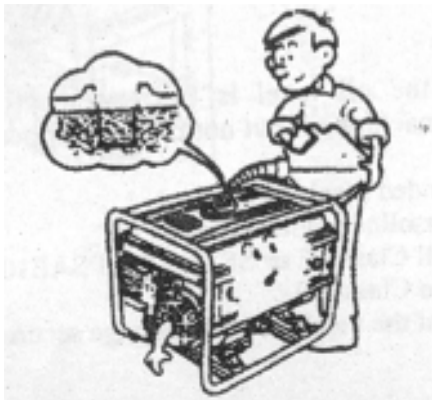
2. Level of fuel

A. Check the fuel level on the fuel indicator

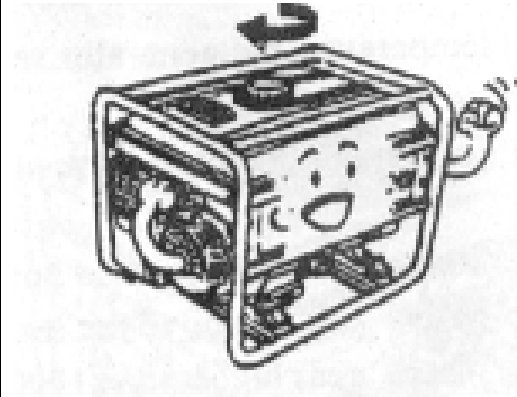


B. If the fuel level is too low,serew off the fuel tank cap fill it with Fuel to the shoulder of the filter.

Waring: Do not overfill to avoid fuel overflowing.



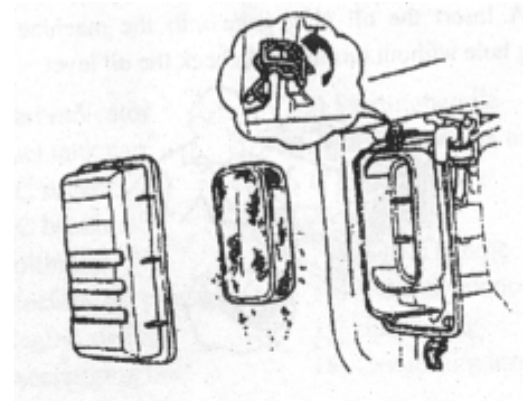
C. Remount the cap



3. Air filter

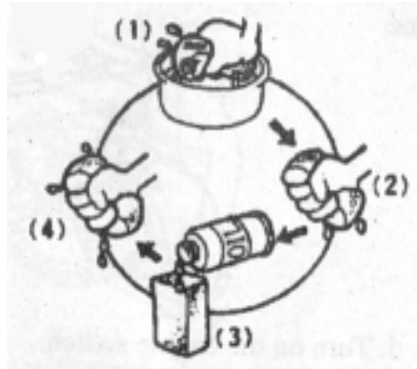
A. Remove the filter cover.

B. Check the filter elemebt to make sure it is clean and intact.

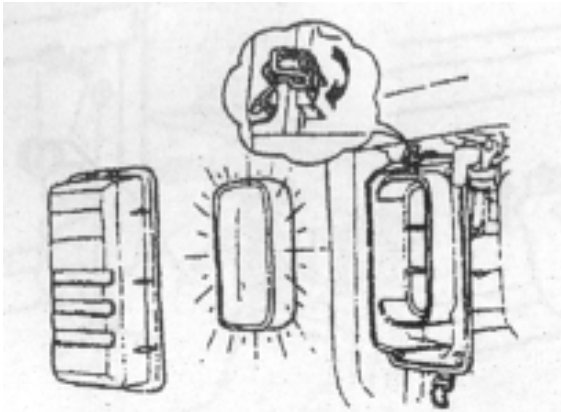


C. It is dirty ,take out the element for cleaning

- Wash it in solvent
- Squeeze dry
- Drop some drips of machine oil into it.
- Squeeze it dry again.

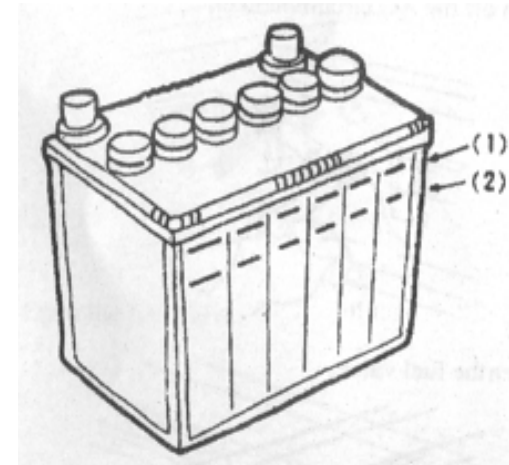


D. Remount the filter element and put it on filter cover.



4.Battery

Check to make sure that the electrolyte levelin every call is Between the upper and lower limit lines.

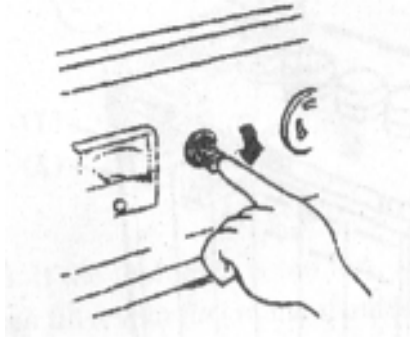


- 1) Upper limit line
- 2) Lower limit line

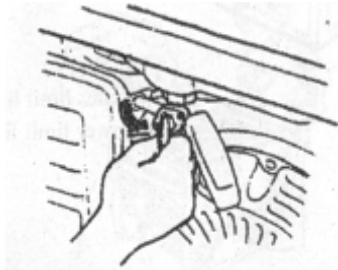
4. Starting of generator

Starting with kick starter

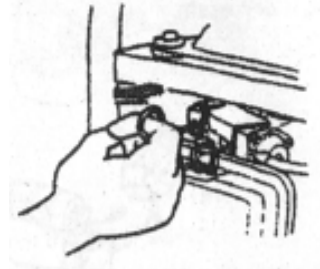
1. Remove all loads from the AC output terminal.
2. Turn off the AC circuit breaker.



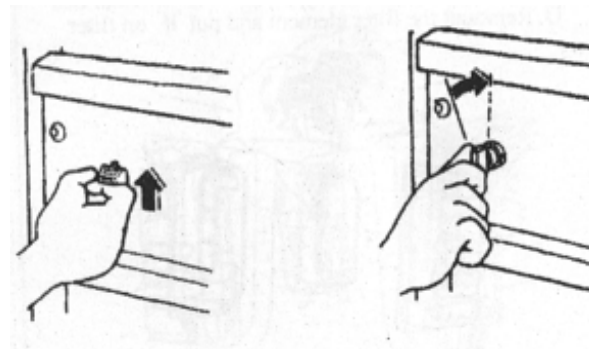
3. Open the fuel valve



4. Turn the choke handle to "CLOSE" position
Caution: DO not close the choke when starting a hot engine.

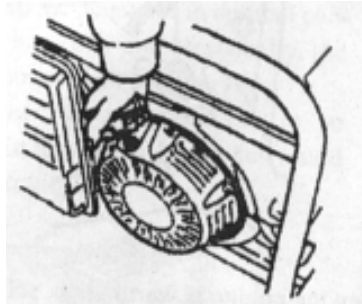


5. Turn on the engine switch.

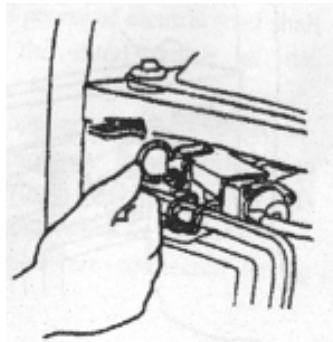


6. Gently hold the starting pull handle till some resistance is felt and then
Pull it abruptly.

Waring: Never let the starting pull handle retract suddenly but return it gently.



7. When the engine is warmed up, set the choke handle to
“Open” position

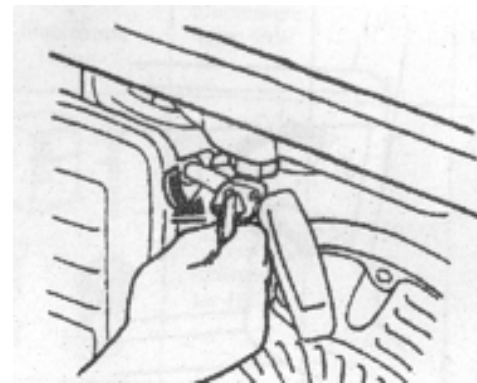


Electric start

1. Remove all loads from the output terminal
2. Turn of the AC breaker.

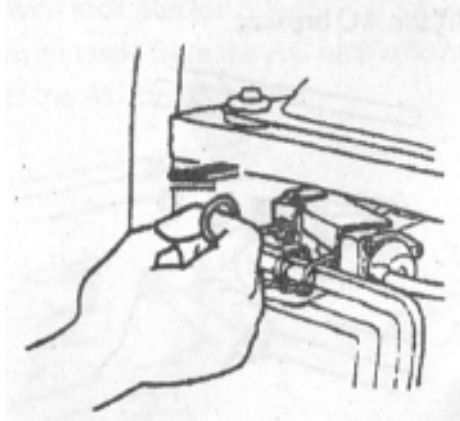


3. Open the fuel valve.

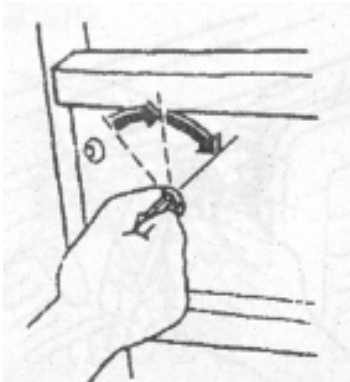


4. Set the choke handle to “Close” position

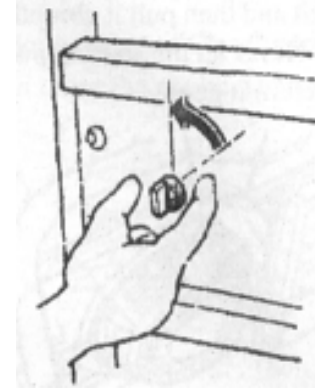
Caution: Do not close the choke when starting a hot engine



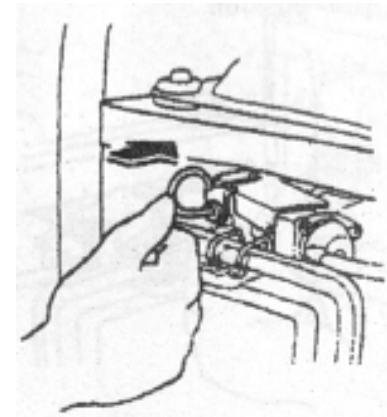
5: Turn on the electronic start switch.



6. Release the electric start.



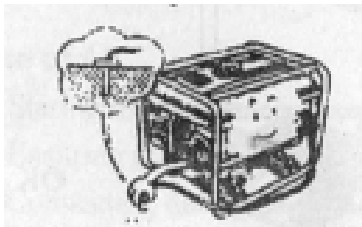
7: When the engine is warmed up, set the choke handle to “Open” position



5. Usage of Generator

To keep the generator in optimal condition mechanically and electrically the following points shall be observed.









Warning: The generator has to be Ground for fear that any mistake would be made electrically.



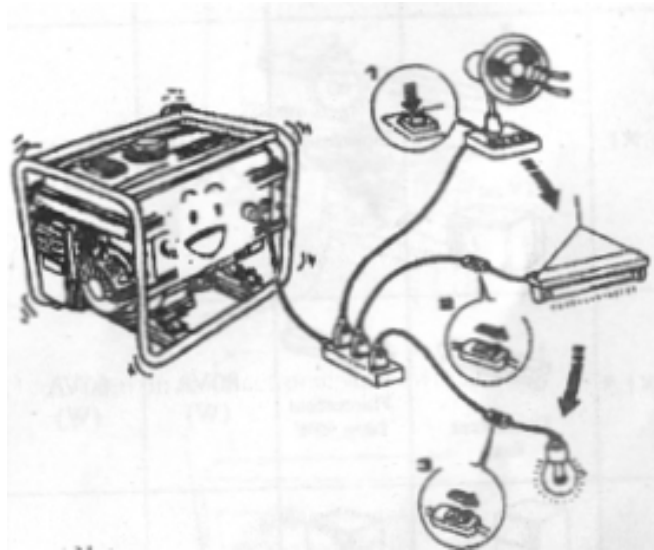
The total power of electric load shall not exceed the rated power of the generator.

Electric appliances: motor driven devices esp. produce large current on starting. The following table is for reference to be made when the devices.

Listed below are connected to the generator.

Devices	Watt Value		Typical Device	Example		
	Start	Rated		Device	Start	Rated
<ul style="list-style-type: none"> ● Incandescent lamp ● Heating device 	×1	×1	 	 Incandescent lamp 100w	100VA (W)	100VA (W)
<ul style="list-style-type: none"> ● Fluorescent lamp 	×2	×1.5	 Fluorescent lamp	 Fluorescent lamp 40W	80VA (W)	60VA (W)
<ul style="list-style-type: none"> ● Motor driven device 	×3~5	×2	 Refrigerator  Electric fan	 Refrigerator 150W	450-750VA (W)	300VA (W)

When two or more loads are to be connected to the generator, they shall be connected from the one requiring larger current to that requiring a small one.



· Generator can't work over load. It should be no more than 80%

Of rated power with load for long run.

· For 3-phase model, each load should be equal, even the difference

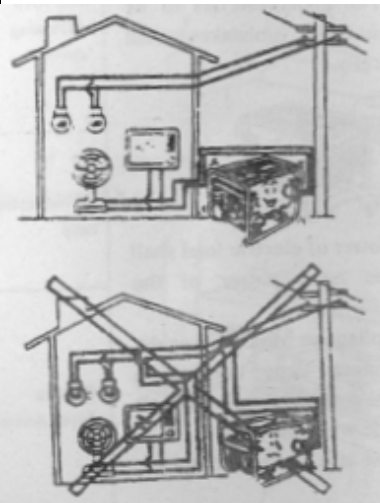
Can not be over 30%, otherwise, the generator will be broken easily.

· Cable connected generator and load should conform to national Standard (4A/mm²)

Note:

· If the generator is to be wired for house power supply, wiring shall be carried out by an electrician.

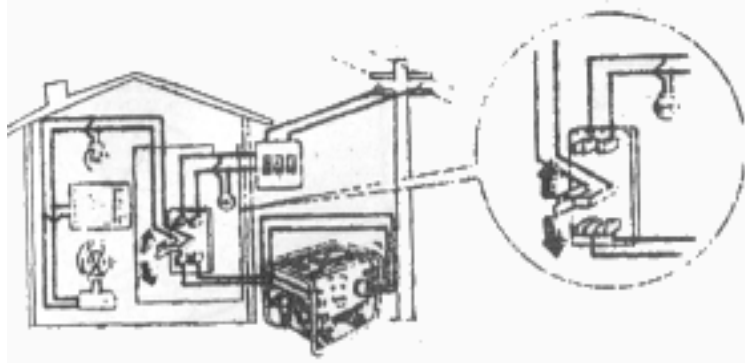
· Check to make sure that the wiring is correct. A wrong wiring will cause damage to the generator and even a fire.



OK

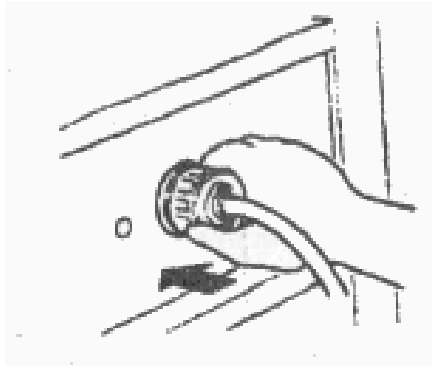
Forbidden

OK



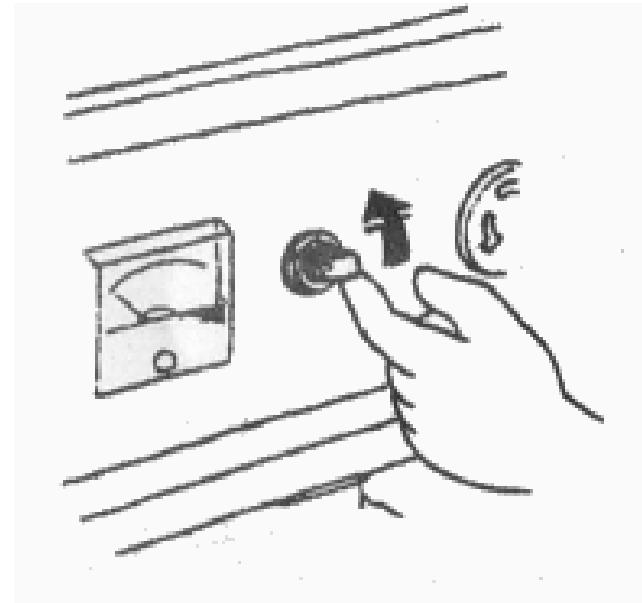
Use of AC

1. Starting the engine.
2. Ensuring that the voltmeter indicates voltage.
3. Connecting devices.



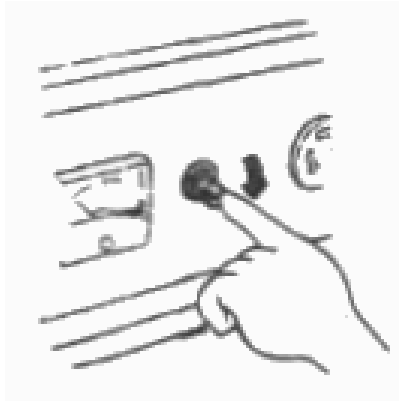
4: Connecting the AC breaker

Note: Over current will automatically turn off the AC breaker. When that is turned off, the generator shall be restarted with load reduced a few minutes thereafter.

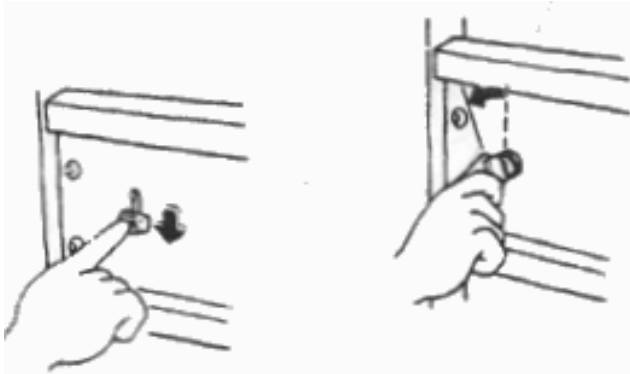


6. Stopping of generator

1. Turn off the AC breaker.

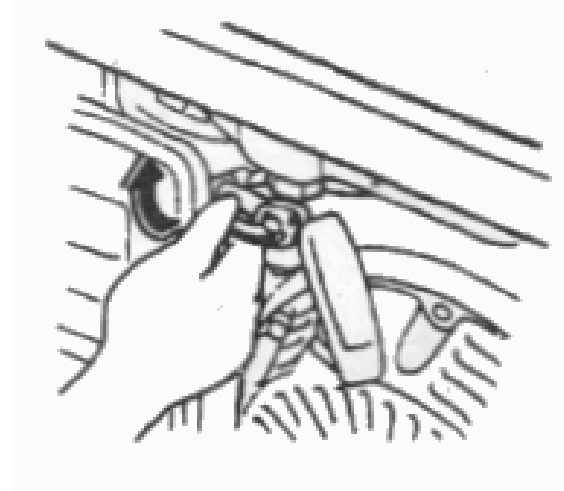


2. Turn off the engine switch



3. Remove all loads.

4. Close the fuel valve.



Note: When an emergent stop of the engine is needed, turn the generator switch to "OFF" position.

7.

Maintenance

7. Maintenance



Check-up



Replacement



Cleaning



Check & readjustment

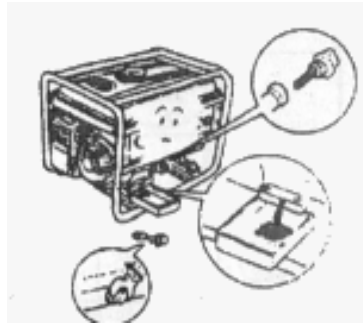
Note:

"*": Items will be maintained with the help of dealers unless you are specially trained and is well equipped with tools.

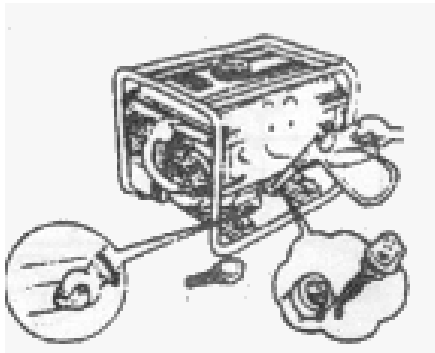
			Or in the 1st month of operation	Or at an interval of 3 months	Or at an interval of 6 months	Or at an interval of 1 months	Refer To Page
Check-up of machine oil							P.6
Replacing machine oil							P.14
Check-up of air filter							P.4
Washing air filter							P.5
Fuel filtering cup							P.15
Electrolyte level of battery							P.5
Spark plug							P.14
Air valve gap							—
Washing cylinder head							—
Washing fuel tank			Replacing once 3 years				—

1. Replacing machine oil

1. Open the filling hole.
2. Remove the oil discharging bolt and drain off the used oil

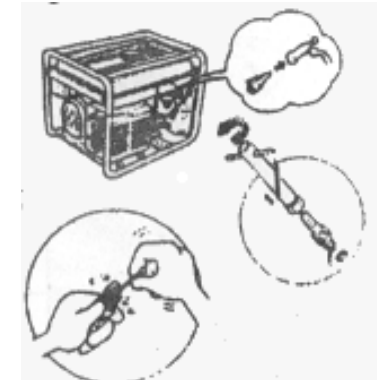


3. Remount the oil discharging bolt tightly.
4. Fill the machine with fresh oil and check the oil level. Its machine oil capacity is 1.1L
5. Remount the oil plug gage.



2. Spark plug

1. Remove the spark plug cap.
2. Remove the spark plug.

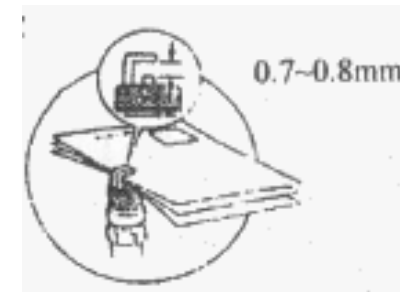


3. Remove carbon deposit.

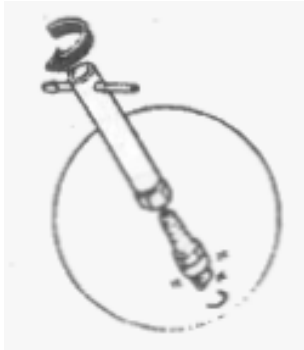
4. Check the spark plug gap

Model of standard spark plug:

BP5ES, BPR5ES (NGK), W16ERP-U, W16ERP-U
(DENSO) F7RTC

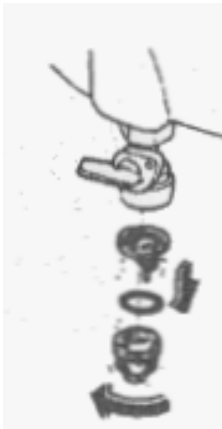


5. Remount the spark plug and its cap



3. Fuel filtering cup

- 1. Close the fuel valve**
- 2. Remove the setting cup and straining screen.**



3. Clean the cup and screen.

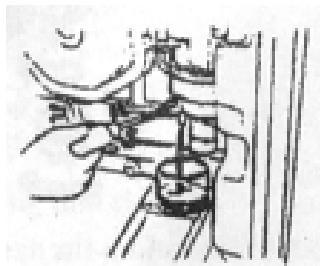
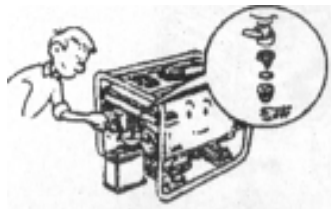
4. Remount the cup and screen



8. Storage

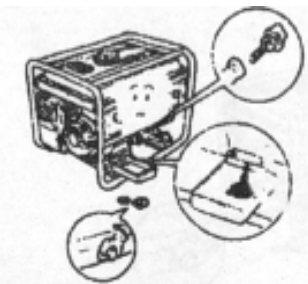
1. Drain off fuel from the fuel tank.

2. Clean and then remount the straining screen and setting Cup.



3. Drain of fuel from The carburetor.

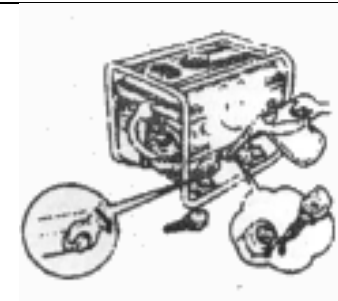
4. Screw off the machine oil plug gage&discharging bolt and then drain off oil.



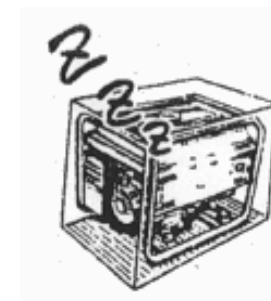
5. Remount the dis-Charging bolt tightly,fill The machine with fresh Machine oil to the upper Limit mark and then re-Mount the gage.



6. Gently pull the start pull handle till some resistance is felt.

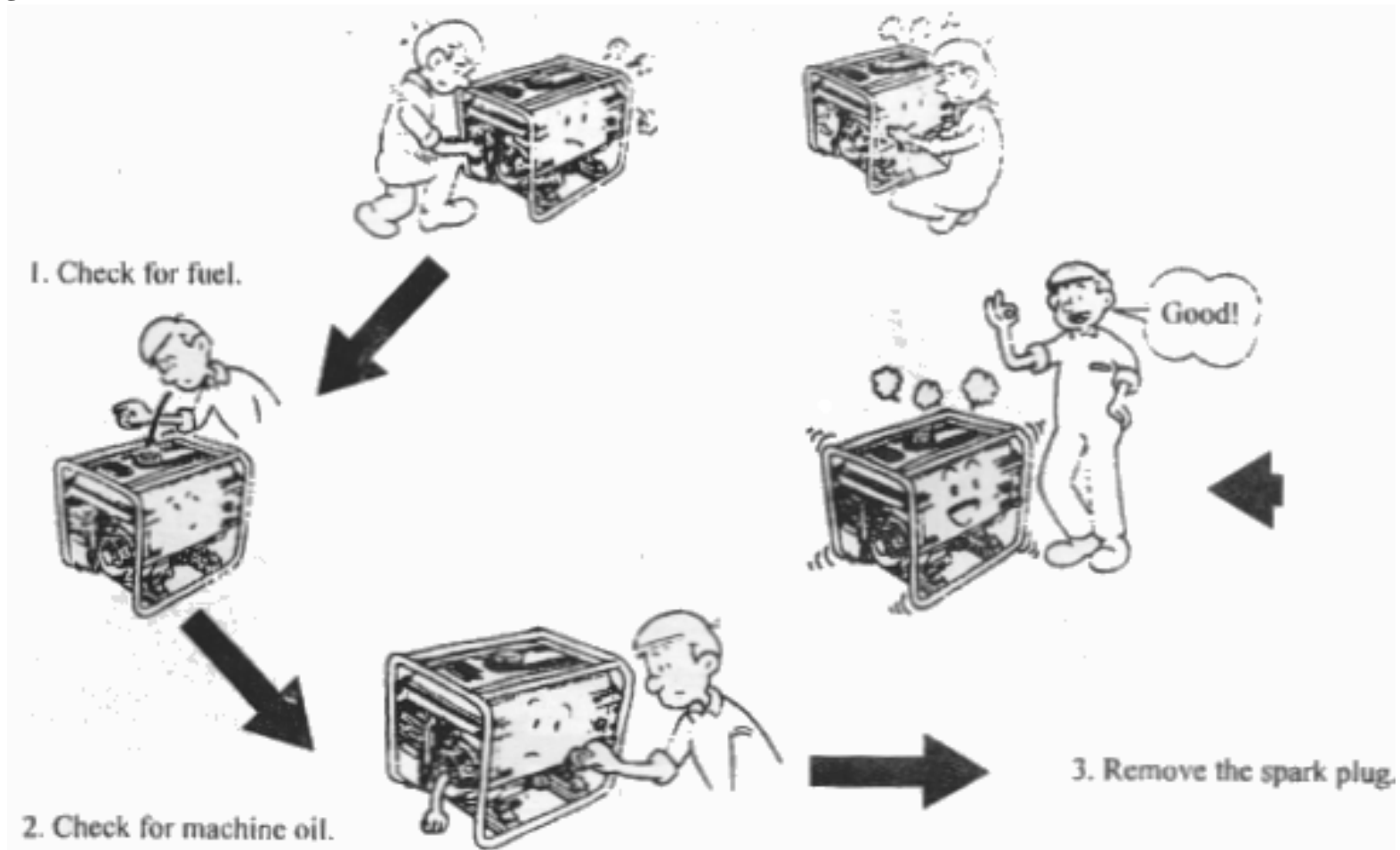


7. Place the generator in a Clean area



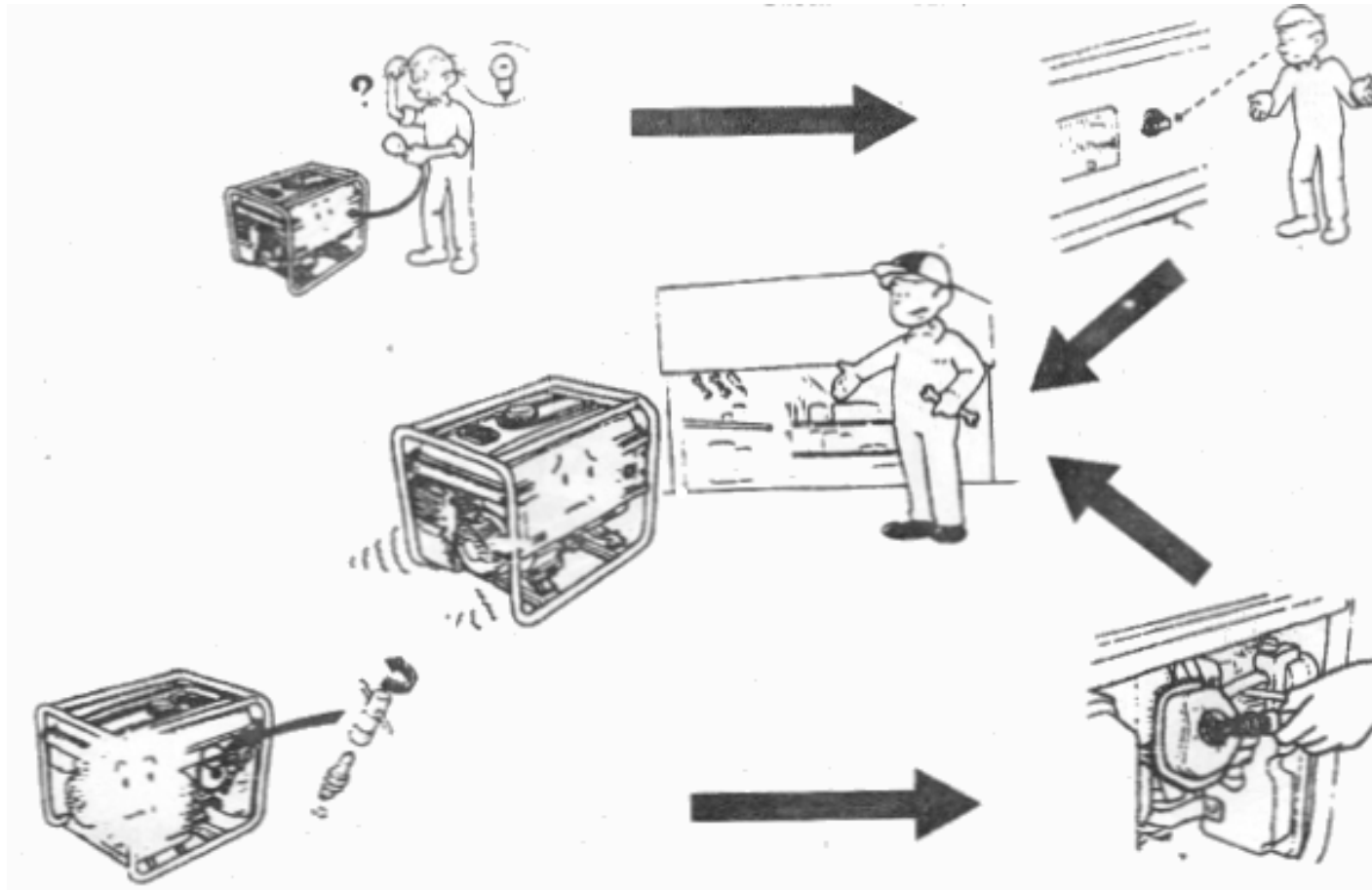
9. Troubleshooting

The engine can not start:



There is no Voltage?

Check the circuit protector.



Check the spark plug

10. Technical data

Item	Model	TI9000LXU / TI9000LXT
rotareneG	Rated Voltage (V)	120V / 240
	Rated output (KW)	6.5
	Max. output (KW)	7.0
	Rated Frequency (Hz)	60
	Power factor	1.0
	Voltage regulate	Self-excited constant voltage
enigneE	Engine model	190FD
	Bore × stroke (mm)	90 × 66
	Compression ratio	8.0 : 1
	Starting system	Electric / Recoil
	Ignition system	Induction ignition
	Fuel tank capacity (L)	50
	Oil capacity (L)	1.1
	Engine type	OHV25° Tilt single cylinder, forced air cooling, 4 - stroke
noisemiD	N.W (kg)	110
	Package dimension (mm)	740 × 600 × 670
	Standard features	Automatic voltage regulator, engine oil warming system, large muffler, fuel oil indication, meter, air switch, remote control

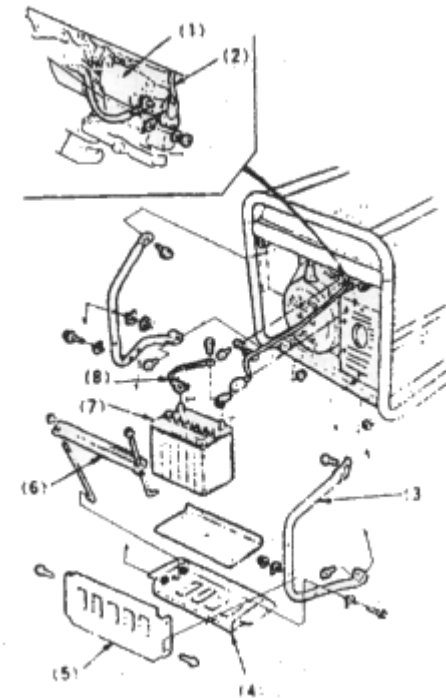
11. Battery Unit (Electric)

1. Mount the battery unit reliably in position with bolts, nuts and washers.
2. Get the electric start cable through under the tank and connect it to the solenoid.
3. Connect the grounding wire to the rear end of the generator.
4. Connect the electric start cable to the positive pole first and then to the negative one.

To disconnect them, first remove the negative and then the positive pole.

- 1). Starting solenoid switch
- 2). Electric start cable
- 3). Battery protective barrier
- 4). Battery holder
- 5). Battery protective plate
- 6). Battery hold-down device
- 7). Battery (to be of 12 – 35 Amp hr min.)
- 8). Cable

※ Notes: Be subject to practicality.



Instruction of Using / Maintaining Generator Maintenance – free Battery

Respected Customers:

Kindly read the instruction carefully before using the maintenance – free battery, which is composed of three parts. Part one: how to use the battery; part two: how to change the battery; part three: how to maintain the battery.

Part one: how to use the battery

- 1. Open the carton, take out the generator to a bright place first; then, fill the designated oil into the crankcase; and then connect positive and negative poles of the battery respectively on the generator. Kindly remind you of connecting positive first and then negative pole.**
 - ★ No reverse connecting, or the electrical equipment will be damaged. ★**
 - ★ Do not use the Battery upside down. ★**
- 2. Open the oil switch, and put it at the “start” position. Start the engine for 2 to 3 times intervally. Successful starting means enough electric charge in the battery. Failure means charge in the battery is not enough. The reason for insufficient charge is that the battery discharge itself during the transportation and storage period. Now you need to test the voltage differences between the two poles first. If the terminal voltage is over 12.7V, use it directly. If not, charge it first. In this case, you can start the generator by using recoil start. The generator can charge the battery by self-charging system without interfering other appliance’s working.**
- 3. Remove the battery and charge it before using if the generator has not been used for a long time. In addition, the battery need to be charged periodically during long time storage.**

★ Forbidden: not charge the battery in a long time. ★

4. Charge the battery within the restricted voltage (13.8V ~ 14.4V), or there will be serious result.

Part two: how to charge the battery

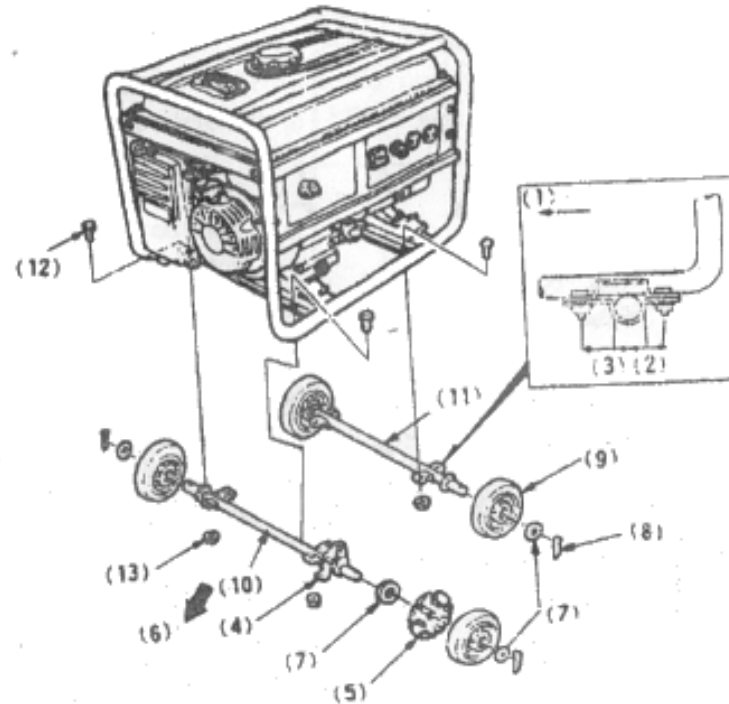
- 1. Start the generator by recoil starter when the electric charge in the battery is not enough. Then the generator can charge the battery by self-charging system.**
- 2. Charge the battery by charger with invariable current if there is a serious shortage for the charge capacity in the battery. Halve the charging current and charge the battery for 4 to 6 hours more when the charging current is between 0.06 – 0.08A and the terminal voltage reaches 14.7V. You can also charge the battery by the generator charging system even if the charge in the battery is seriously insufficient, but it need a very long time.**

Part three: how to maintain the battery

- 1. No overdischarge for the battery when using. Charge the battery immediately after discharging.**
 - 2. Fully charge the battery first, remove the negative pole of the battery or the whole battery from the generator when the generator need to stand idle for a long time. Check the charge in the battery periodically. Charge the battery at once if the electric charge is not enough.**
- ★ No connect the two poles by a conductor directly to check the charge in the battery ★**
- 3. Check the electrodes connection of the battery and the surface of the terminals at regular time when using.**
 - 4. Keep the surface of the battery clean and prevent the exhaust vent from being blocked.**
 - 5. No put metal or conductors near the battery terminal, or the battery would be damaged.**
 - 6. Charge the battery at the temperatures lower than 45°C, or you need to lower the temperature by water cooling or reducing the charging current. Check the charging current two hours before charging to avoid current bias.**

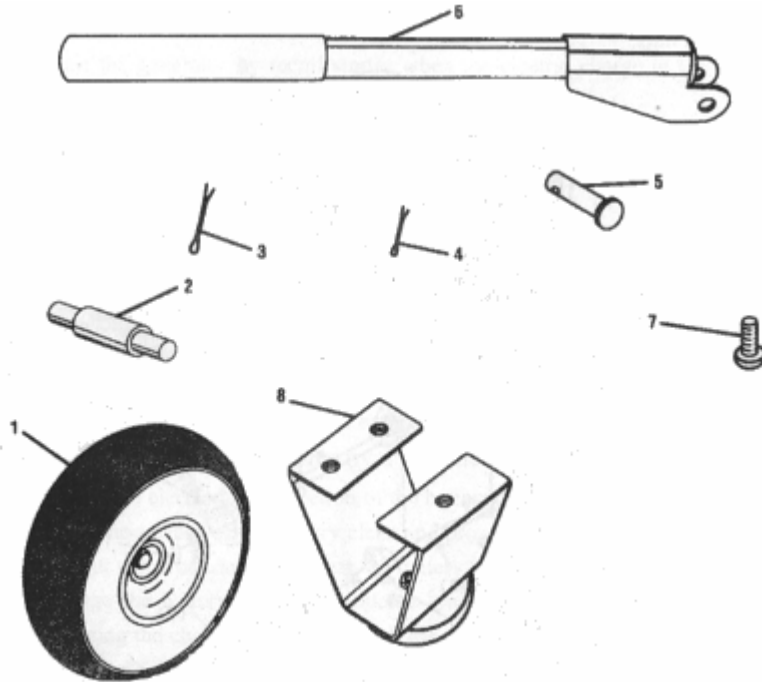
12. Wheel Unit (Pick out and buy)

1. Fix the four wheels to the axle by washers and pins.
2. Fix the wheel axle to the generator by bolts and nuts.
 - 1) Internal side
 - 2) Shorter side
 - 3) Longer side
 - 4) Wheel lock pin
 - 5) Lock disc
 - 6) Engine side
 - 7) Washer
 - 8) Pin
 - 9) Wheel
 - 10) Axle (on engine side)
 - 11) Axle (on generator side)
 - 12) Bolt
 - 13) Nut



LOOSE PARTS LIST

The following items are included with the generator:



Key

No.	Description	Qty
1	Wheel	2
2	Wheel Axle	2
3	Large Cotter Pin	2
4	Small Cotter Pin	4
5	Clevis Pin	2
6	Handle	2
7	Bolt	6
8	Frame Support with Foot	2

UNPACKING

This product requires assembly.

- Remove one end of the box and carefully slide out the generator and any accessories.

NOTE: The generator is heavy. If you must lift the unit out of the box, get another person to help you and lift with your legs, not your back.

- Inspect the unit carefully to make sure no damage occurred during shipping.
- Do not discard the packing material until you have carefully inspected and satisfactorily operated the product.

INSTALLING THE WHEELS

See Figure 1.

Wheels are provided to assist in moving the generator to the desired location and should be installed on the side opposite the recoil starter.

NOTE: Install the wheels before installing the handle. Do not put fuel or oil in the generator before installing the wheels.

- Locate the following items:
2 wheel axles 2 wheels

2 small cotter pins 2 large cotter pins

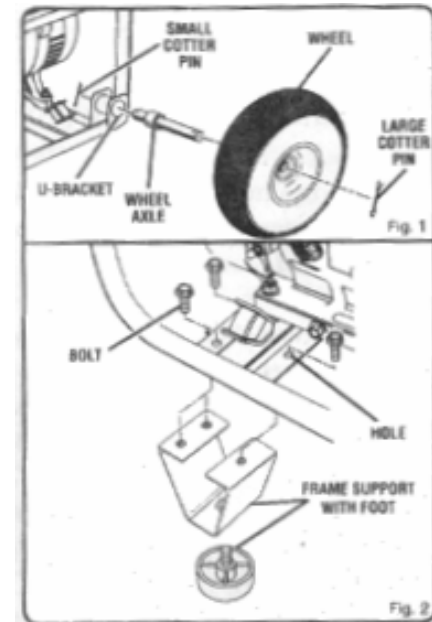
- Raise the end of the generator opposite the recoil starter high enough to gain access to the frame bottom; securely position props underneath to support.

- Locate the U-bracket on one side of the frame bottom. Slide a wheel axle through the bracket so that an end extends from both sides of the bracket.

- On the end that extends inside the generator frame, insert a small cotter pin through the hole in the axle to secure.

Bend the ends of the cotter pin to prevent the pin from slipping out.

- Place a wheel over the other end of the axle.



- Insert a large cotter pin through the hole in the axle. Bend the ends of the pin to secure.
- Repeat the process on the other side.

INSTALLING THE FRAME SUPPORTS

See Figure 2.

Install the two frame supports provided on the bottom side of the generator frame opposite the wheels.

- Locate the following items:
2 frame supports 6 bolts
- Raise the end of the generator where the recoil starter is located high enough to gain access to the frame bottom; securely position props underneath to support.
- Tighten bolt to secure.
- Repeat with the two remaining screws
- Repeat on other side to install second frame support.

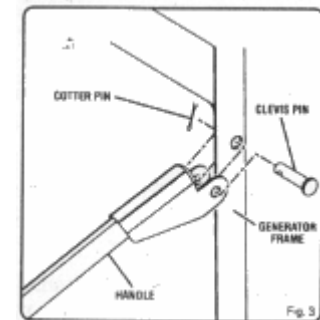
INSTALLING THE HANDLES

See Figure 3.

- Locate the following item:
2 handles 2 clevis pins
2 small cotter pins
- With the generator in normal operating position, find the holes on the frame above the recoil starter.
- Align the holes in one of the handle brackets with the holes in one side of the generator frame.
- Insert a clevis pin through the handle bracket and frame. The head of the pin should be on the outside of the clevis pin. Bend the ends of the pin to secure.
- Repeat the above steps to install the second handle.

APPLICATIONS

This generator is designed to supply electrical power for operating compatible electrical lighting, appliances, tools, and motor loads.

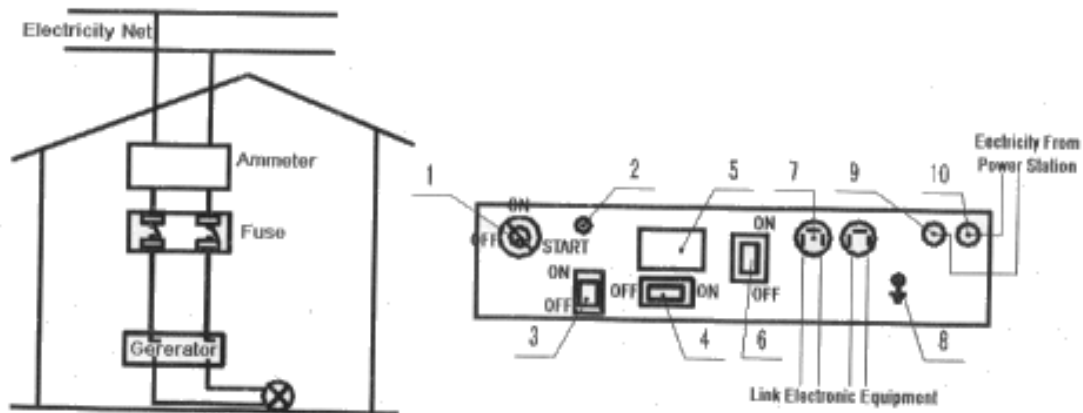


13. Automatically Gasoline Generator Manual

I . Introduction

Automatically Gasoline Generator is the intelligent generator without the operation by Man. It will be automatically started and stopped when power cut and come. It could also automatically adjust the choke to fit the different temperature environment to let the generator reliably start during the range of the pointed temperature.

II . Sketch Map



1. Key Switch 2. Pilot Lamp 3. Control Switch 4. Time – lapse Switch 5. Volt Meter 6. Circuit breaker
7. Socket 8. Landed wire 9. intake wire (N) 10. intake wire (L)

III. The operating procedure of automatically control generator

1. Inspection and connection before use the generator

A. lock switch: place to “OFF”

B. control switch: place to “OFF”

C. connecting AC220V and install L, N and E respectively by qualified electrician.

D. connecting to 12V battery (if the L and N is misinstalled, the control system would not work well. AC is forbidden to connected on this)

2. The condition of automatically control

A. Stand-by condition:

Put lock switch, control switch and circuit protector to “ON” and put the choke fully opened, then the work indicating light would be open, generator enter into the automatically controlled condition. The outlet power is available.

B. Automatically controlled condition

If the power network is power off, the work indicating light would be off, the choke would be automatically controlled and output according to surrounding temperature.

If the power network is power on, the work indicating light would be on, generator enter into the automatically controlled condition. The outlet power is available.

C. Alarming control condition:

If the power network is power off, generator would be stop startup by 3-5 times of failure startup. If the work indicating light is alarming, please check motor oil, gasoline, battery and the choke switch. After the clearing problem, put control switch to “OFF” 2 minutes later, put it to “ON” re-entering into the condition of automatically control.

3. Maintenances Notice

A. Control switch must be put to “OFF” and disassemble the 220V power inlet before manual operating, manual/electrical starting or maintaining or changing the battery.

B. Longtime No use of generator: put lock switch and control switch “OFF” disassemble 12V battery power and 22V inlet power.

C. The wire of 220V inlet power shall be multiple copper lines with the standard of 4-6mm² in diameter.

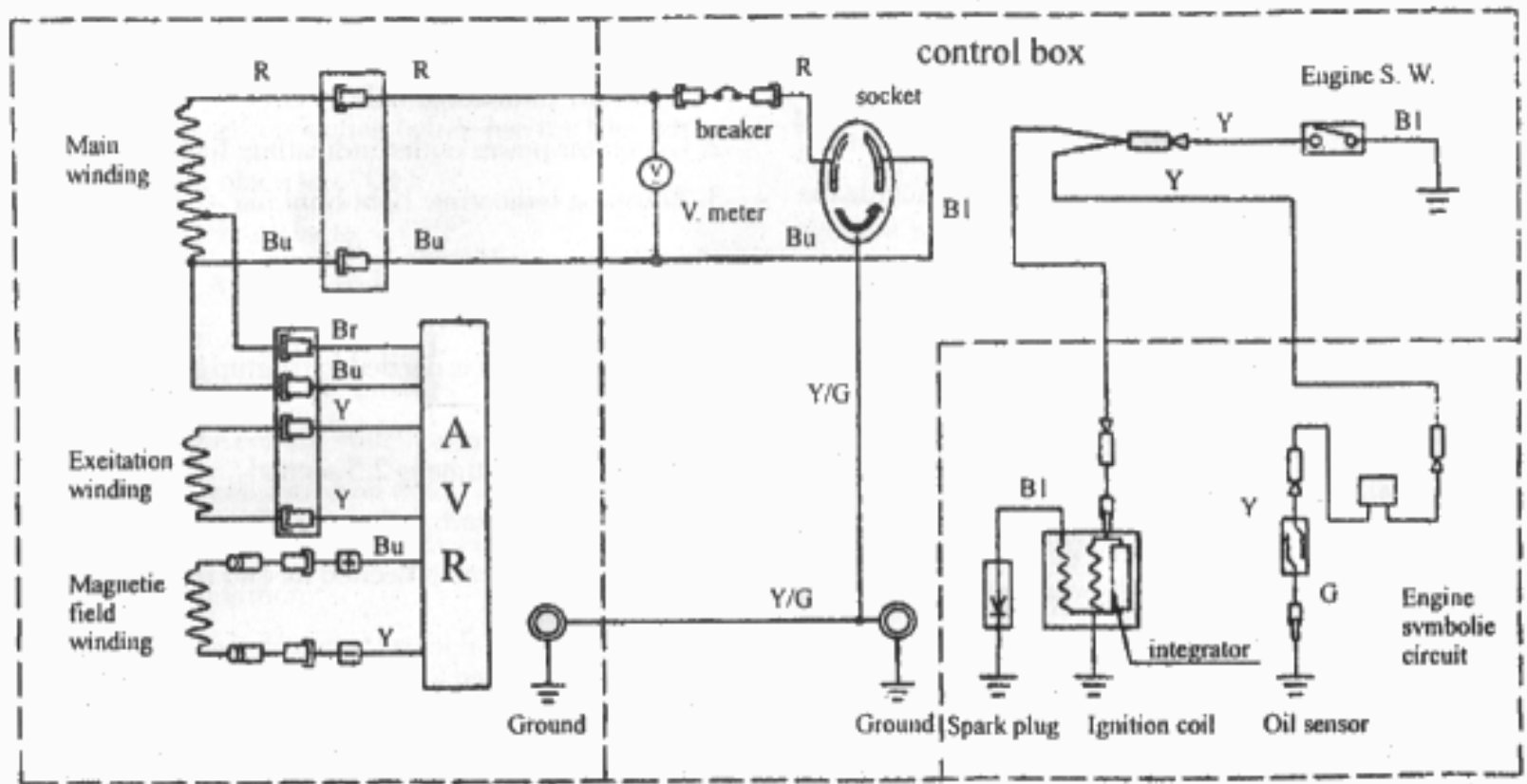
D. Non-qualified person must not disassemble the control system. We cannot be responsible for such caused matters.

IV. The indication of working condition

- 1. Stand-by indicating: light “ON”**
- 2. Generator power outlet indicating: light “OFF”**
- 3. Alarming indicating: light blinking**

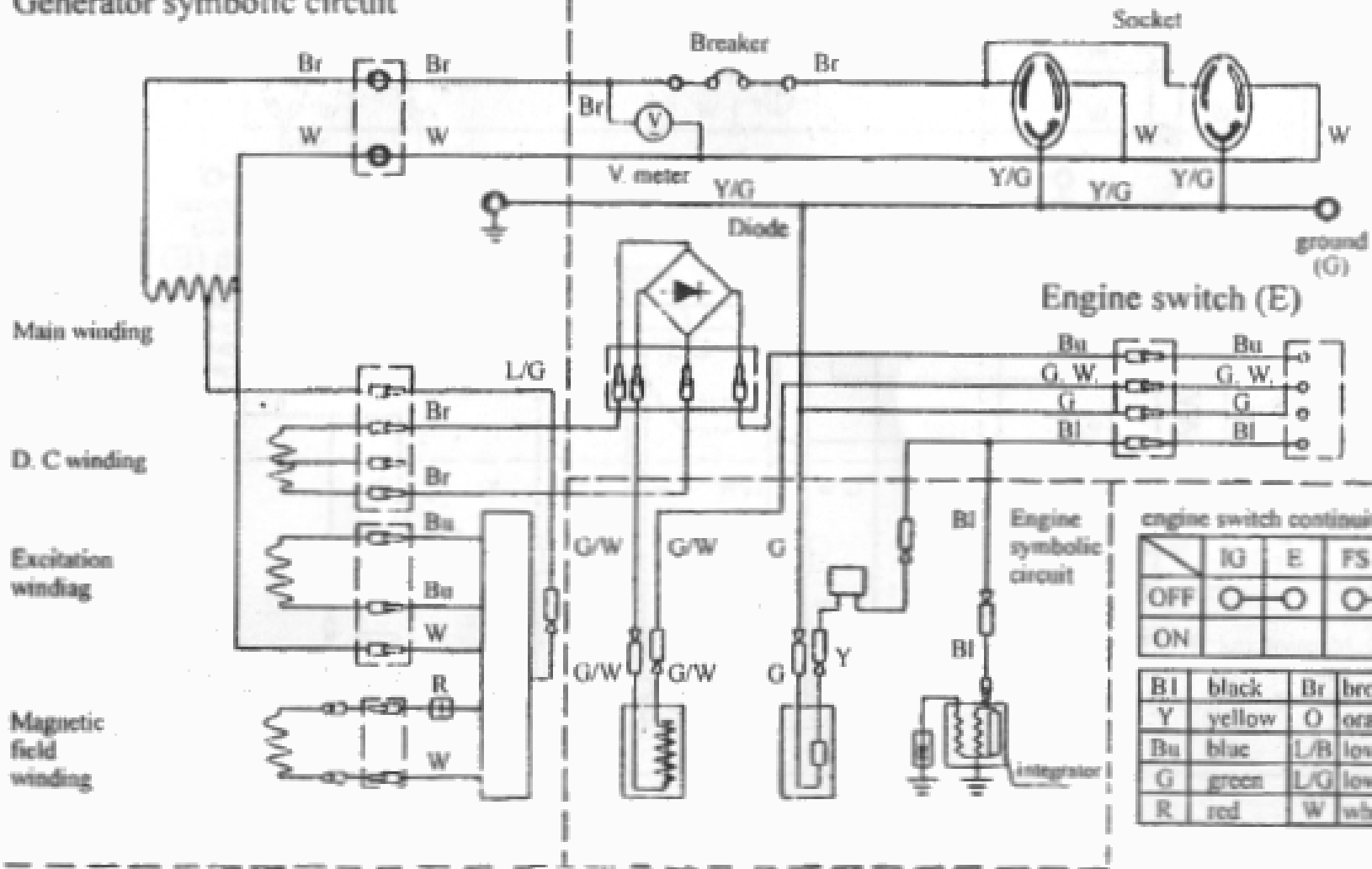
V. Technical specification:

- 1. 8 seconds interval is needed for startup after the power network shut-off.**
- 2. Ignition control time is 2.5 second**
- 3. Automatically startup times: 3-5 times (optional)**
- 4. 8 seconds interval is needed for two repeated automatically startup.**
- 5. 6 seconds is needed for automatically startup.**
- 6. shut-off times: 6 seconds**
- 7. The configuration temperature of setup: 18°C ± 2°C**
- 8. Standby current < 40mA**



B1	black	Br	brown
Y	yellow	O	orange
Bu	blue	L/B	low blue
G	green	L/G	low green
R	red	W	white

Generator symbolic circuit



engine switch continuity

	IG	E	FS	G
OFF	○	○	○	○
ON				

BI	black	Br	brown
Y	yellow	O	orange
Bu	blue	L/B	low blue
G	green	L/G	low green
R	red	W	white

