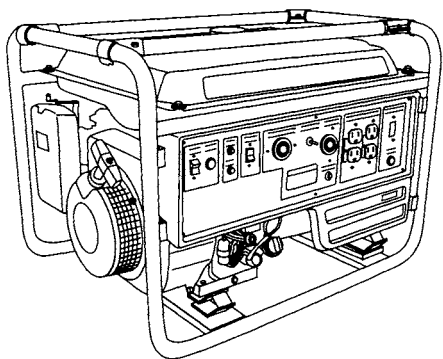


# **MITSUBISHI GENERATOR**

## **MODEL SERIES** **MGE4000Z/MGE4800Z** **MGE5800Z/MGE6700Z**



**OWNER'S MANUAL**

**ENGLISH**

**MANUAL D'UTILISATION**

**FRANÇAIS**

**MANUAL DEL PROPIETARIO**

**ESPAÑOL**

**使用说明书**

**CHINESE**



**Before starting this generator,  
read and understand this Owner's Manual.**

**Veillez lire et bien comprendre le manuel de  
l'utilisateur avant de démarrer le générateur.**

**Antes arrancar este generador, lea y entienda  
este Manual del propietario.**

**启动发电机之前，必须阅读和掌握该用户使用手册**



## **CAUTIONARY NOTICE**

The customer must know that the generator has potential danger.

MHI is not liable for any damage or injury arising from an individual's failure to follow instructions contained in this manual, or his failure to exercise due care and caution in the installation, operation, inspection, and service of the generator.

(California, U.S.A.-Proposition 65 warning statement)



## **WARNING**

The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

# LIMITED WARRANTY

MHI, at its option, will repair or replace any parts returned intact to MHI, transportation charges prepaid, which MHI, upon inspection, will determine to be defective in material and/or workmanship.

The foregoing shall constitute the sole remedy for any breach of MHI's warranty.

**MHI makes no warranties, either express or implied, except as provided herein, including without limitation thereof, warranties as to marketability, merchantability, for a particular purpose or use, or against infringement of any patent.**

**MHI will not be responsible for any damages or consequential damages, including without limitation thereof damages or other costs resulting from any abuse, misuse, misapplication of the generator and equipment supplied by MHI.**

**MHI will not be responsible for any damages or consequential damages resulting from any modification, without MHI's written authorization, of the generator.**

**ENGLISH**

# IMPORTANT INFORMATION

- Today's new materials, processes and high-speed equipment require greater attention to safety.
- To maintain use and to avoid potential injury, accident prevention must be integrated with the function of the operation.
- Accident prevention is an activity which must be planned, systematic, continual and adapted to individual needs. Everyone should actively participate, recognize one's role and organize oneself and one's work for a safe environment.
- The foremost safety objective is to prevent accidents which could result in injury or death, disrupt production or damage facilities, equipments or property.
- Legislation from the federal, state or local level dictates many of the minimal requirements to reduce personal injury.
- Extreme caution must be exercised while servicing the generator. The only safe policy to follow when servicing the generator is to shut off engine.
- MHI cannot anticipate every possible circumstance that might involve a potential hazard. The warnings in this manual and on the generator are therefore not all inclusive.
- It is assumed that this equipment will be operated and serviced by English speaking personnel. If this is not the case, the customer should add safety, caution, and operating signs in the native language of the operator.
- The information contained in this manual was based on machines in production at the time of publication.
- This manual is copyrighted and all rights are reserved. The technical reference, including this manual, may not, in whole or part, be copied, photocopied, translated, or reduced to any electronic medium or machine readable form without prior written consent from MHI.
- This manual also includes the operating instructions for optional equipment.
- Your generator may differ from the photographs and figures in this manual. Guards and covers may have been removed for illustrative purposes.
- If you have any suggestion or questions, contact the Mitsubishi distributor service department.

# Meanings of Notices

This manual contains DANGER, WARNING, CAUTION, and NOTE callouts which must be followed to reduce the possibility of personal injury, damage to the equipment, or improper service.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.



**DANGER** indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury or equipment damage.



**WARNING** indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury or equipment damage.



**CAUTION** indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury or equipment damage.

## **NOTE:**

Contains additional information important to a procedure.

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## 1. FOREWORD

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This manual provides information and procedures to safely operate and maintain the Mitsubishi generator. For your own safety and protection from injury, carefully read, understand and observe the safety instructions described in this manual.

Keep this manual with the machine. If you lose this manual or need an additional one, please contact the Mitsubishi distributor service department.

## 2. EQUIPMENT DESCRIPTION

---

The generators are an engine-driven, revolving field, alternating current (AC) generator. It was designed to supply electrical power for operating compatible electrical lighting, appliances, tools and motor loads. The generator's revolving field is driven at about 3,600 rpm by a single-cylinder engine.

### 3. SAFETY PRECAUTIONS

---

○ Do not operate the generator near gasoline or gaseous fuel because of the potential danger of explosion or fire.  
Do not fill the fuel tank with fuel while the engine is running. Do not smoke or use open flame near the fuel tank. Be careful not to spill fuel during refueling. If fuel is spilt, wipe it off and let dry before starting the engine.

○ Do not place flammables near the generator.  
Be careful not to place fuel, matches, gunpowder, oily cloths, straw, trash, or any other inflammables near the generator.

○ Do not operate the generator inside a room, cave, tunnel, or other insufficiently ventilated area. Always operate it in a well-ventilated area, otherwise the engine may become overheated, and the poisonous carbon monoxide gas contained in the exhaust gases will endanger human lives. Keep the generator at least 1 meter (3 feet) away from any structure or building during use.  
If the generator must be used indoors, the area must be well-ventilated and extreme caution must be taken regarding the discharge of exhaust gases.

○ Do not enclose the generator nor cover it with a box.  
The generator has a built-in forced air cooling system, and may become overheated if it is enclosed.

○ Operate the generator on a level surface.  
It is not necessary to prepare a special foundation for the generator. However,

the generator will vibrate on an irregular surface, so choose a level place without surface irregularities. If the generator is tilted or moved during operation, fuel may spill and/or the generator may tip over, causing a hazardous situation.

Proper lubrication cannot be expected if the generator is operated on a steep incline or slope. In such a case, piston seizure may occur even if the oil is above the upper level.

○ Pay attention to the wiring from the generator to the connected device. If the wire is under the generator or in contact with a vibrating part, it may break and possibly cause a fire or generator burnout.

○ Do not operate in rain or with wet hands.  
The operator may suffer severe electric shock if the generator is wet due to rain or snow.  
If wet, wipe and dry it well before starting.  
Do not pour water directly over the generator, not wash it with water.

○ Do not contact the generator to a commercial power line. Connection to a commercial power line may short circuit the generator and run it.  
Use the transfer switch for connecting to domestic circuits.

○ No smoking while handling the battery.  
The battery emits flammable hydrogen gas, which can explode if exposed to electric arcing or open flame.  
Keep the area well-ventilated and keep open flames/sparks away when handling the battery.

## 4. SPECIFICATIONS

| MODEL             |                                   | MGE4000Z  | MGE4800Z                                     |        |
|-------------------|-----------------------------------|---|--|--------|
| ALTERNATOR        | Type                              | Revolving Field, Self-exciting, 2-poles, Single phase |  |        |
|                   | AC Voltage                        | 50Hz  | 110V, 220V, 230V, 240V, 110V/220V            |        |
|                   |                                   | 60Hz  | 110V, 120V, 220V, 240V, 110V/220V, 120V/240V |        |
|                   | Max. Output                       | 50Hz  | 3,500W                                       | 4,000W |
|                   |                                   | 60Hz  | 4,000W                                       | 4,800W |
|                   | Rated Output                      | 50Hz  | 2,800W                                       | 3,300W |
|                   |                                   | 60Hz  | 3,300W                                       | 4,100W |
| Voltage Regulator |                                   | Condenser Type, ATR Type (Option)                     |  |        |
| Power Factor      |                                   | 1.0   |  |        |
| ENGINE            | Model                             | GM291PN   | GM301PN                                      |        |
|                   | Type                              | Air-cooled, 4 cycle, OHV, Gasoline Engine             |  |        |
|                   | Displacement                      | 296cm <sup>3</sup> (18.0 cu-in)                       | 296cm <sup>3</sup> (18.0 cu-in)              |        |
|                   | Fuel                              | Non leaded Automobile Gasoline                        |  |        |
|                   | Fuel Tank Capacity (Full)         | 21 L (5.5 US-gal)                                     |  |        |
|                   | Rated Continuous Operation        | 50Hz  | 10 h   | 9.5 h  |
|                   |                                   | 60Hz  | 8.5 h  | 8 h    |
|                   | Lubricating Oil                   |   | Engine Oil SE Class or Higher                |        |
|                   | Lubricating Oil Capacity          |   | 1.0 L (0.9 US-qt)                            |        |
|                   | Starting System                   |   | Recoil Starter, Electric Starter (Option)    |        |
| DIMENSION         | Length x Width x Height           | 628 x 495 x 495 mm (24.7 x 19.5 x 19.5 in)            |  |        |
|                   | Dry Weight (Recoil)<br>(Electric) | 72 kg (159 lbs)<br>75 kg (165 lbs)                    | 75 kg (165 lbs)<br>78 kg (172 lbs)           |        |

Specifications are subject to change without notice



| MODEL             |                                   | MGE5800Z                                    | MGE6700Z                                     |                                    |
|-------------------|-----------------------------------|---|--|------------------------------------|
| ALTERNATOR        | Type                              | Field, Self-exciting, 2-poles, Single phase |  |                                    |
|                   | AC Voltage                        | 50Hz  | 110V, 220V, 230V, 240V, 110V/220V            |                                    |
|                   |                                   | 60Hz  | 110V, 120V, 220V, 240V, 110V/220V, 120V/240V |                                    |
|                   | Max. Output                       | 50Hz  | 5,000W                                       | 5,700W                             |
|                   |                                   | 60Hz  | 5,800W                                       | 6,700W                             |
|                   | Rated Output                      | 50Hz  | 4,200W                                       | 5,100W                             |
|                   |                                   | 60Hz  | 5,000W                                       | 5,800W                             |
| Voltage Regulator |                                   | Condenser Type, AVR Type (Option)           |  |                                    |
| Power Factor      |                                   | 1.0   |  |                                    |
| ENGINE            | Model                             |   | GM401PN                                      |                                    |
|                   | Type                              |   | Air-cooled, 4 cycle, OHV, Gasoline Engine    |                                    |
|                   | Displacement                      |   | 391cm <sup>3</sup> (23.9 cu-in)              |                                    |
|                   | Fuel                              |   | Non leaded Automobile Gasoline               |                                    |
|                   | Fuel Tank Capacity (Full)         |   | 21 L (5.5 US-gal)                            |                                    |
|                   | Rated Continuous Operation        | 50Hz  | 8.0 h  | 7.0 h                              |
|                   |                                   | 60Hz  | 7.0 h  | 6.5 h                              |
|                   | Lubricating Oil                   |   | Engine Oil SE Class or Higher                |                                    |
|                   | Lubricating Oil Capacity          |   | 1.0 L (0.9 US-qt)                            |                                    |
| Starting System   |                                   | Recoil Starter, Electric Starter (Option)   |  |                                    |
| DIMENSION         | Length x Width x Height           |   | 685 x 500 x 500 mm (27.0 x 19.7 x 19.7 in)   |                                    |
|                   | Dry Weight (Recoil)<br>(Electric) |   | 81 kg (179 lbs)<br>86 kg (190 lbs)           | 83 kg (183 lbs)<br>88 kg (194 lbs) |



Specifications are subject to change without notice.



# 5. LABELS



For safe operation of the generator, read through the labels affixed on the main body.

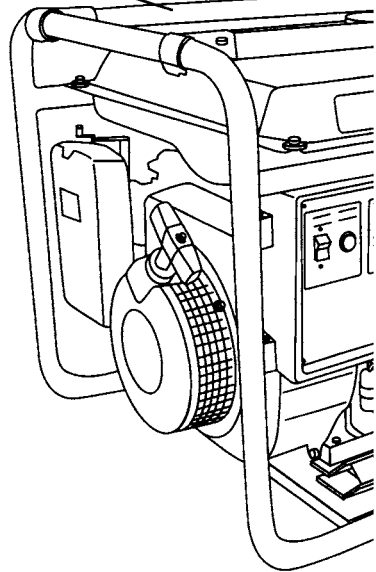
**NOTE:**

Keep the labels clean. If any label is stained or peeled off, contact the dealer and replace it with new one.

|  |   |
|--|---|
|  <b>WARNING</b> |   |
|                 | <b>Electric shock.</b> <ul style="list-style-type: none"><li>• Electric shock can cause severe personal injury, or equipment damage.</li><li>• Test for GFCI before each use.</li></ul> |

|  |  |
|--|--|
|  <b>WARNING</b> |  |
|                 | KYT020002600   |
|  | <b>Hot</b> <ul style="list-style-type: none"><li>• The operator may suffer burns</li><li>• Do not touch muffler.</li></ul> |

|  |  |
|--|--|
|  <b>WARNING</b> |  |
|                  | KYT020002590   |
|  | <b>High voltage</b> <ul style="list-style-type: none"><li>• The operator may suffer severe electric shock.</li><li>• Do not touch spark plugs.</li></ul> |



Go to text for GFCI

KYT020002610

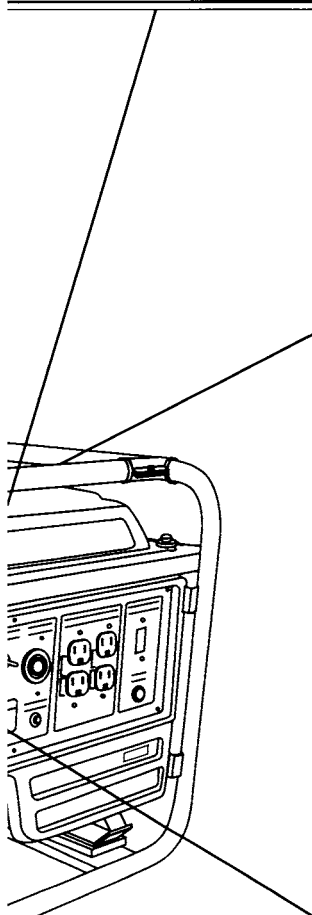
Start the engine with GFCI and IDLE SW off. (if equipped)









Turn On GFCI, and push TEST button.



If GFCI turn OFF, turn ON it and use generator.

If GFCI do not turn OFF, contact your nearest MITSUBISHI generator dealer.

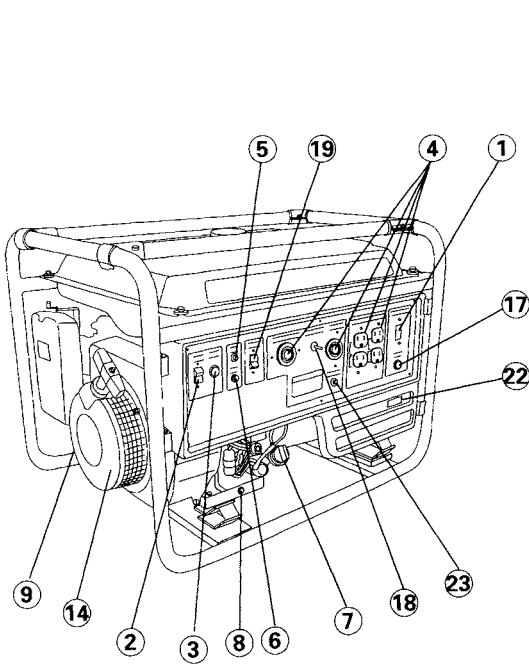
GFCI  
protect  
all  
receptacles



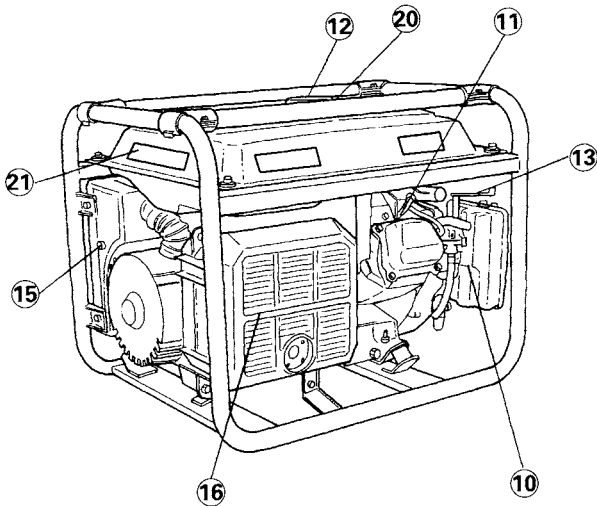
|  <b>DANGER</b>              |  |
|--|--|
|                             | <b>Exhaust gas</b> <ul style="list-style-type: none"><li>• Exhaust gas contains poisonous carbon monoxide.</li><li>• Do not use in poorly ventilated area.</li></ul>         |
|                             | <b>Electric shock</b> <ul style="list-style-type: none"><li>• The operator may suffer severe electric shock.</li><li>• Do not touch with wet hands.</li></ul>                |
|  <b>WARNING</b>             |  |
|                             | <b>No fire</b> <ul style="list-style-type: none"><li>• Potential danger of explosion or fire.</li><li>• Stop engine during fuel supply.</li></ul>                            |
|                             | <b>Do not operate in rain or snow</b> <ul style="list-style-type: none"><li>• Keep flammable things away.</li><li>• Be careful not to spill fuel during refueling.</li></ul> |
|                            | <b>Do not connect to a household circuit</b>   |
|  <b>Nonleaded gasoline</b> |  |
| KYT020002580   |  |

|  <b>CAUTION</b> |   |
|--|---|
|                 | <b>Electric shock</b> KYT020002620 <ul style="list-style-type: none"><li>• Electric shock can cause severe personal injury, or equipment damage.</li><li>• Do not turn FULL POWER SW while using appliance.</li></ul> |

# 6. COMPONENTS



- ① GFCI
- ② ENGINE SWITCH
- ③ START BUTTON (OPTION)
- ④ RECEPTACLE
- ⑤ PILOT LAMP
- ⑥ OIL WARNING LAMP (OPTION)
- ⑦ OIL FILLER CAP
- ⑧ OIL DRAIN PLUG
- ⑨ FUEL COCK
- ⑩ AIR CLEANER
- ⑪ SPARK PLUG
- ⑫ FUEL TANK CAP
- ⑬ CHOKE LEVER
- ⑭ RECOIL STARTER
- ⑮ GROUND TERMINAL
- ⑯ MUFFLER
- ⑰ TEST BUTTON
- ⑱ FULL POWER SWITCH (OPTION)
- ⑲ IDLE CONTROL SWITCH (OPTION)
- ⑳ FUEL GAUGE
- ㉑ FUEL TANK
- ㉒ HOUR METER
- ㉓ CIRCUIT PROTECTOR

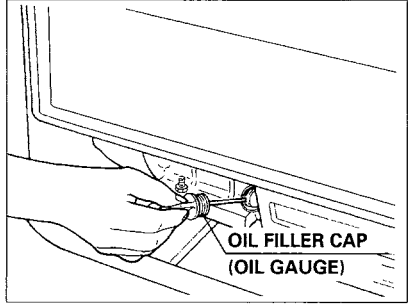


# 7. PRE-OPERATION CHECKS

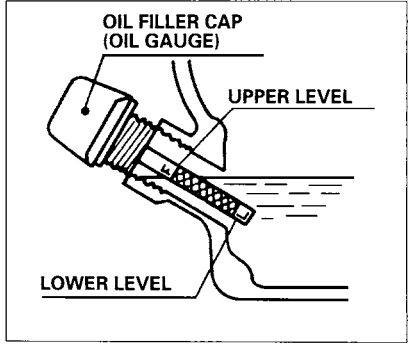
## I. CHECK ENGINE OIL

Before checking or refilling oil, be sure the generator is put on a stable and level surface with engine stopped.

- Remove oil filter cap and check the engine oil level.



- If oil level is below the lower level line, refill with suitable oil (see table below) to upper level line. Do not screw in the oil filler cap when checking oil level.



- Change oil if contaminated. (See "How-To" Maintenance.)

- Oil capacity

|             |               |
|-------------|---------------|
| Model ..... | Upper level   |
| MGE4000     | } ..... 1.0 L |
| MGE4800     |               |
| MGE5800     |               |
| MGE6700     |               |

- Recommended engine oil:

Use class SE (API classification) oil or a higher grade oil according to the table below. SAE 10W-30 or 10W-40 is recommended for general, all temperature use. If you prefer to use single grade oil, select the appropriate viscosity grade for the average temperature in your area.

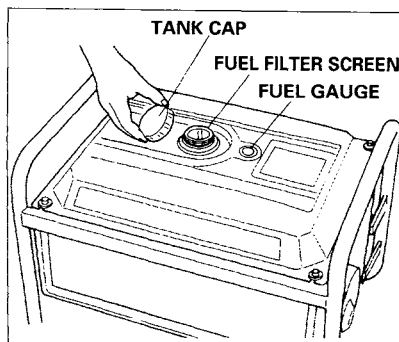
|                     |     |        |        |      |     |      |       |
|---------------------|-----|--------|--------|------|-----|------|-------|
| Single grade        | 5W  | 10W    | 20W    | # 20 | #30 | # 40 |       |
|                     |     | 10W-30 | 10W-40 |      |     |      |       |
| Multigrade          |     |        |        |      |     |      |       |
| Ambient temperature | -20 | -10    | 0      | 10   | 20  | 30   | 40°C  |
|                     | -4  | 14     | 32     | 50   | 68  | 86   | 104°F |

## 2. CHECK ENGINE FUEL.

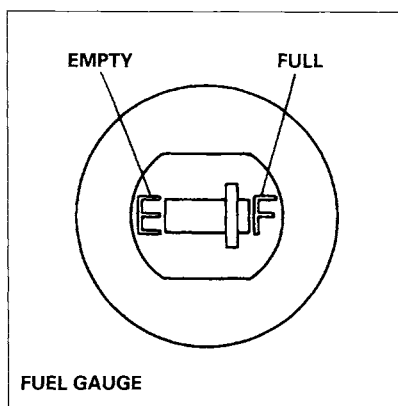
### **⚠ WARNING**

Be careful not to admit dust, dirt, water or other foreign objects into fuel.

- Check fuel level at fuel gauge.
- If fuel level is low, refill with nonleaded automotive gasoline.
- Be sure to use the fuel filter screen on the fuel inlet .



- Fuel tank capacity:  
Model Full  
MGE4000 }  
MGE4800 } .....21 L  
MGE5800 }  
MGE6700 }



### **⚠ WARNING**

Make sure you review each warning in order to prevent fire hazard.

- Do not refill tank while engine is running or hot.
- Close fuel cock before refueling with fuel.
- Do not refuel while smoking or near open flame or other such potential fire hazards.
- Wipe off spilt fuel thoroughly before starting engine.

## I. CHECKING COMPONENTS

Check following items before starting engine:

- I Fuel leakage from fuel hose, etc.
- I Bolts and nuts for looseness.
- I Components for damage or breakage.

## II. CHECKING GENERATOR SURROUNDINGS.

### **⚠ DANGER**

Only operate generator in a well ventilated area in order to prevent intoxication by exhaust gas.

### **⚠ WARNING**

Make sure you review each warning in order to prevent fire hazard.

- Keep area clear of flammables or other hazardous materials.
- Keep generator at least 3 feet (1 meter) away from buildings or other structures.
- Keep generator away from open flame.
- Keep generator on a stable and level surface.

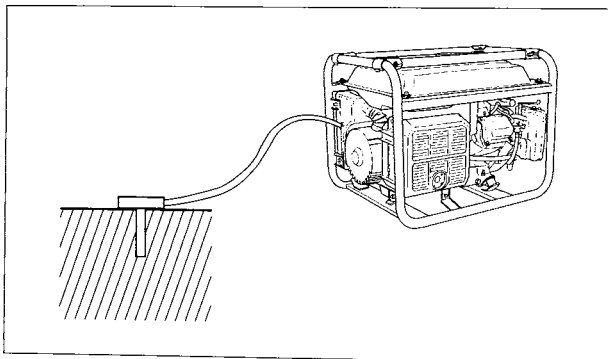
### **⚠ WARNING**

- Only operate generator in a dry area.
- Keep exhaust pipe clear of foreign objects.
- Do not block generator air vents with paper or other material.

## III. CONNECT THE GROUND TERMINAL.

### **⚠ WARNING**

- To prevent electric shock and damage of the generator, connect the ground terminal of the generator to the ground.

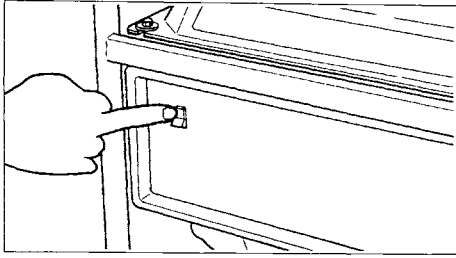


# 8. OPERATING PROCEDURES

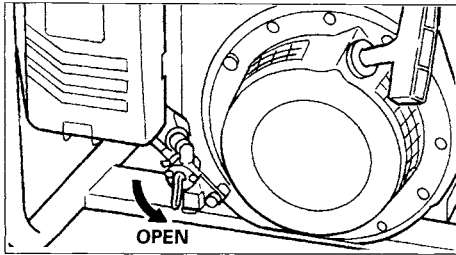
## 1. STARTING THE ENGINE

### (1) Recoil Starter

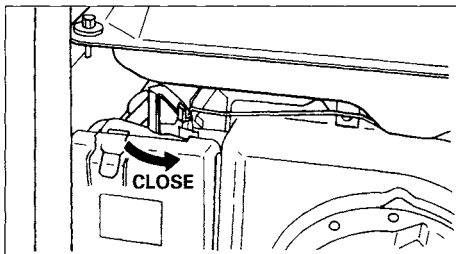
- (a) Set the engine switch to "ON" position.  
Turn the GFCI and IDLE SW off. (if equipped)



- (b) Open the fuel cock.



- (c) Set the choke lever to "CLOSE" (arrow mark). Not necessary if the engine is warm.

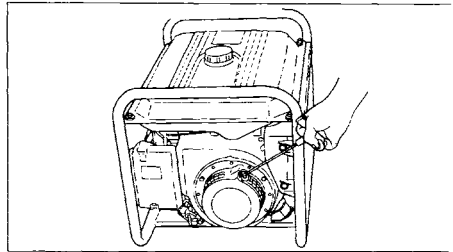


- (d) Pull the starter handle slowly until resistance is felt.  
This is the "Compression" point. Return the handle to its original position and pull swiftly.

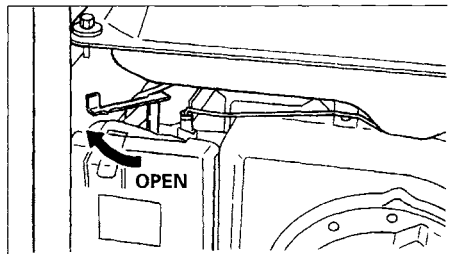
■ Do not fully pull out the rope.

■ After starting, allow the starter handle to return to its original position while still holding the handle.

■ If the engine fails to start after several attempts, repeat above procedures with choke lever returned "OPEN" position.



- (e) After the engine started, return the choke lever gradually to "open" position.

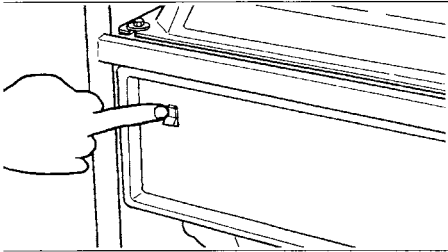


- (f) Warm up the engine without a load for a few minutes.

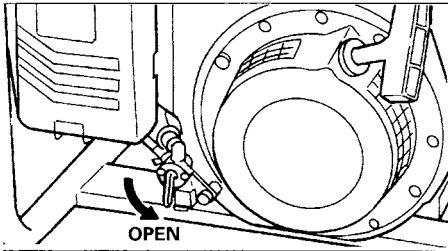


## 2) Electric starter

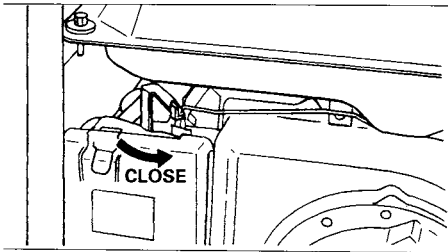
- a) Set the engine switch to "ON" position.  
Turn the GFCI and IDLE SW off. (if equipped)



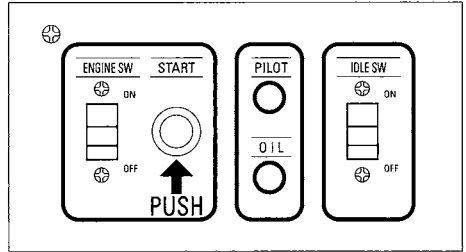
- b) Open the fuel cock.



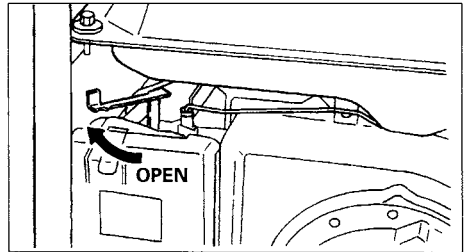
- c) Set the choke lever to "CLOSE" (arrow mark). Not necessary if the engine is warm.



- (d) Push the START button.



- (e) After the engine started, return the choke lever gradually to "open" position.

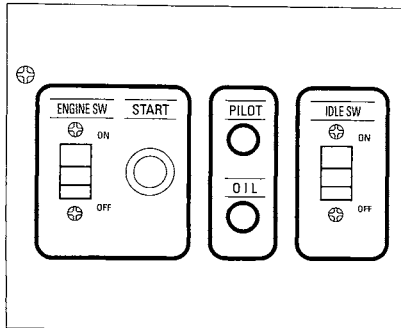


- (f) Warm up the engine without a load for a few minutes.

## 2. USING ELECTRIC POWER

|          |                            |
|----------|----------------------------|
| <b>A</b> | <b>Single Voltage Type</b> |
|----------|----------------------------|

- (a) Check to light the pilot lamp, after turn the GFCI on.
- If the GFCI is "OFF", the generator dose not produce the specified voltage.
  - This generator is tested and adjusted in the factory. If the generator does not produce the specified voltage, contact your nearest Mitsubishi Generator dealer.
- (b) Push the TEST button.
- If the GFCI turn off, go to next step.
  - If the GFCI do not turn off, contact your nearest Mitsubishi Generator dealer.
- (c) Turn off the switch(es) of the electrical appliance(s) before connecting to the generator.
- (d) Insert the plug(s) of the electrical appliance(s) into the receptacle.
- Check the amperage of the receptacles used referring to TABLE 1, and be sure not to take a current exceeding the specified amperage.
  - Be sure that the total wattage of all appliances does not exceed the rated output of the generator.






| Voltage   | Receptacl  | MGE4000                                      | MGE4800                 | MGE5800                 | MGE6700                 |
|-----------|--|--|-------------------------|-------------------------|-------------------------|
| 120V      | <br>NEMA5-20R   | Up to total 20 ampere<br>from two receptacle |                         |                         |                         |
| 120V      | <br>NEMAL5-30R  | Up to<br>27.5<br>ampere                      |                         | Up to<br>30.0<br>ampere |                         |
| 120V/240V | <br>NEMAL14-30R | Up to<br>13.8<br>ampere                      | Up to<br>17.1<br>ampere | Up to<br>20.8<br>ampere | Up to<br>24.2<br>ampere |

TABLE 1

**NOTE:**

TABLE 1 does not apply to generators equipped with special receptacles.

**NOTE:**

To take out power from TWIST LOCK receptacle, insert the plug into receptacle and turn clockwise to lock it.

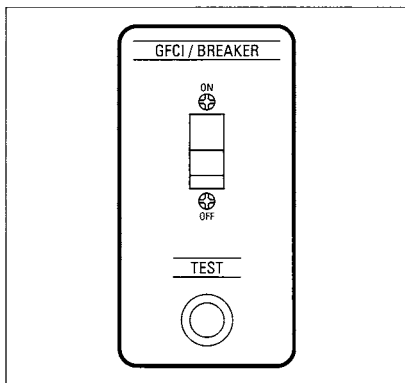
e) Turn the GFCI on.

**NOTE:**

When the GFCI or breaker turns off during operation, the generator is overloaded or the appliance is defective.

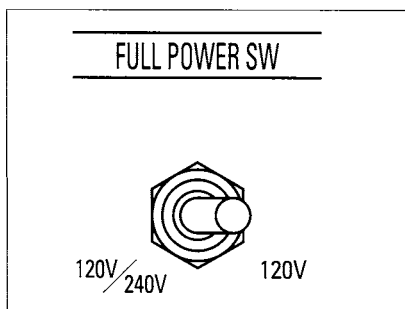
Stop the generator immediately, check the appliance and/or generator for overloading or defect and repair as necessary.

f) Check to the GFCI on, and check to light the pilot lamp



**B Dual Voltage Type**

- a) Select the voltage using the FULL POWER SWITCH in accordance with the electrical appliance. Refer to TABLE 2.
- b) Operate in the same way as step (a) through step (d) of single voltage type.

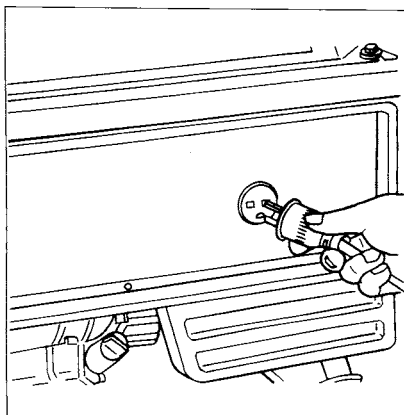


| Switch                 | Lower Voltage Receptacle          | Higher Voltage Receptacle |
|------------------------|-----------------------------------|---------------------------|
| 110V or 120V           | rated output is available         | unavailable               |
| 110V/220V or 120V/240V | half of rated output is available | rated output is available |

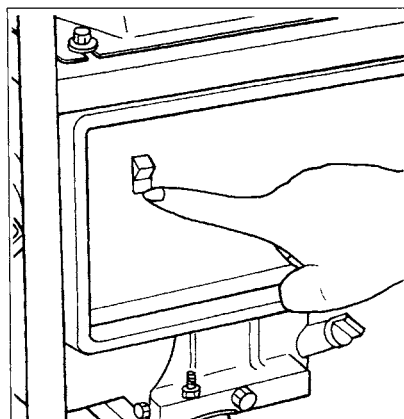
TABLE 2

### 3. STOPPING THE GENERATOR

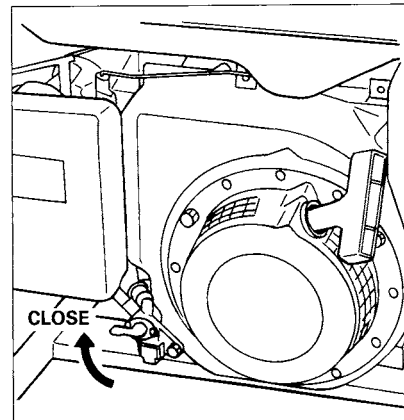
- (a) Turn off the power switch of the electric equipment or unplug the cord from receptacle of the generator.
- (b) Allow the engine about 3 minutes to cool down at no-load before stopping.



- (c) Set the engine stop switch to "OFF" position.

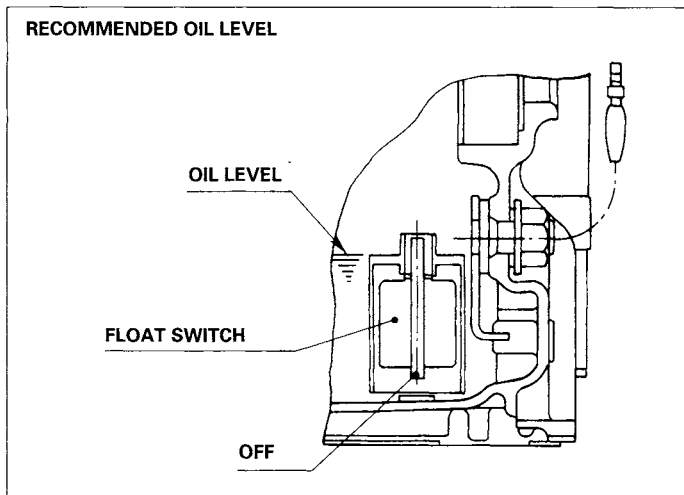


- (d) Close (stop) the fuel cock.

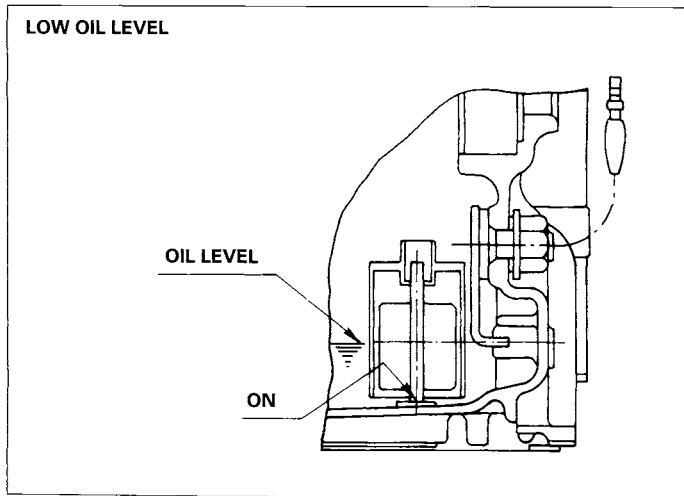


## 4. OIL SENSOR

- The oil sensor detects the fall in oil in the crankcase and automatically stops the engine when the oil level falls down below the safety limit.
- When engine has stopped automatically, check the oil level.
- If the engine does not start by usual starting procedures, check the oil level.
- Run



- Stop



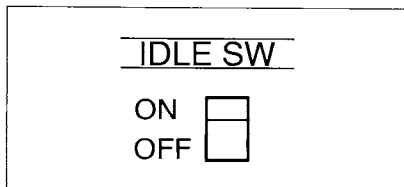
## 5. IDLE CONTROL (option)

IDLE CONTROL automatically reduces engine speed when load is OFF, and automatically increases engine speed up to rated r.p.m. when load is ON.

IDLE CONTROL provides fuel economy and low noise operation at no-load running.

### (1) HOW TO USE IDLE CONTROL

- Start the engine with IDLE SWITCH off.
- Warm up the engine without a load for a few minutes.
- Turn IDLE SWITCH on.



### (2) CHECKING THE OPERATION

When IDLE CONTROL does not operate normally, please check followings:

- Overloaded?

Please make it sure that the generator is not overload.

#### **NOTE:**

Most induction loads such as electric motor require three to five times large wattage of their ratings at starting.

This starting wattage should not exceed the rated output of the generator.

- Turn the IDLE SWITCH off when the IDLE CONTROL does not work normally under the rated output.

### (3) STOPPING THE ENGINE

- Turn off the switch of load or disconnect the load.

- Turn the IDLE SWITCH off.


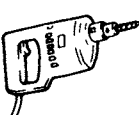
- Set the engine stop switch to "STOP" position.

#### **NOTE:**

Allow the engine about 3 minutes to cool down at no-load before stopping.

## 3. SCOPE OF APPLICABILITY

It is recommended to use AC and DC power sources within the following scope.

| Applicable instruments   | Model   | Scope of applicability |              | Remarks   |
|--|---------|------------------------|--------------|---|
|  |         | 50Hz                   | 60Hz         |   |
| Light, Electric Heater<br>  | MGE4000 | Up to 2,800W           | Up to 3,300W | ● The instruments which require much starting current and some kinds of motors may be unable to be used even if they are within the applicable scope. |
|  | MGE4800 | Up to 3,300W           | Up to 4,100W |   |
|  | MGE5800 | Up to 4,200W           | Up to 5,000W |   |
|  | MGE6700 | Up to 5,100W           | Up to 5,800W |   |
| Motors with single phase<br> | MGE4000 | Up to 900W             | Up to 1,100W | ● The circuit breaker turns OFF when the current exceeding the applicable scope is used or when the applied instrument is defective.                  |
|  | MGE4800 | Up to 1,100W           | Up to 1,300W |   |
|  | MGE5800 | Up to 1,400W           | Up to 1,700W |   |
|  | MGE6700 | Up to 1,700W           | Up to 1,900W |   |

# 10. MAINTENANCE SCHEDULE

|                   |  |
|-------------------|--|
| Daily             | <ul style="list-style-type: none"> <li>● Check the air cleaner</li> <li>● Check oil level and refill to the upper level before starting the engine.</li> <li>● Check all the points indicated in "PRE-OPERATION CHECKS".</li> </ul>  |
| 50 hours (Weekly) | <ul style="list-style-type: none"> <li>● Clean and wash air-cleaner element.<br/>More often if used in dirty or dusty environments.</li> <li>● Check spark plug, and clean and adjust if necessary.</li> <li>● Check and clean the fuel shut-off valve.</li> </ul>   |
| 100 hours         | <ul style="list-style-type: none"> <li>● Change engine oil.<br/>(The initial oil change must be conducted after the first 20 hours operation.)</li> <li>● Replace spark plug.</li> <li>● Replace air-cleaner element.</li> <li>○ Decarbonize cylinder head, valves and piston.</li> <li>○ Check and replace carbon brushes.</li> </ul> |
| 3 years           | <ul style="list-style-type: none"> <li>○ Inspect control panel components.</li> <li>○ Check rotor and stator.</li> <li>○ Replace engine mount rubber.</li> <li>○ Overhaul engine.</li> <li>● Change fuel lines.</li> </ul>   |

**NOTE:**

Initial oil change should performed after first 20 hours of use. Thereafter change oil every 50 hours. Before changing oil, check for a suitable way to dispose of the old oil. Do not pour it down into sewage drains, onto garden soil or into open streams. Your local zoning environmental regulations will give you more detailed instructions on proper disposal.

Items marked with a ○ required advanced skill and tools, so they should be done by the distributor.



# 11. "HOW-TO" MAINTENANCE

## I. ENGINE OIL CHANGE

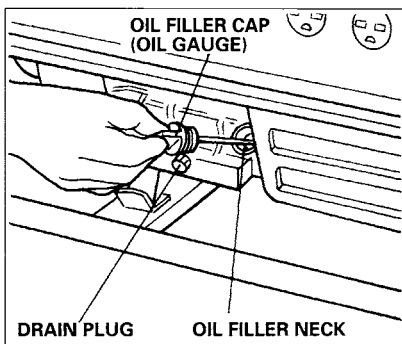
Change engine oil every 100 hours.

(for a new engine, change oil after 20 hours.)

- a) Drain oil by removing the drain plug and the oil filler cap while the engine is warm.
- b) Reinstall the drain plug and fill the engine with oil until it reaches the upper level on the oil filler cap.

Use fresh and high quality lubricating oil to the specified quantity.

If contaminated or deteriorated oil is used or the quantity of the engine oil is not sufficient, the engine damage will result and its life will be greatly shortened.

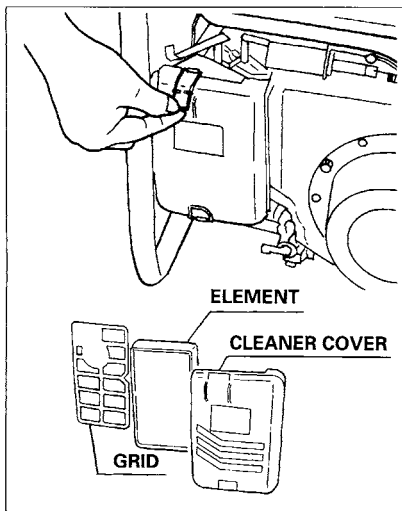
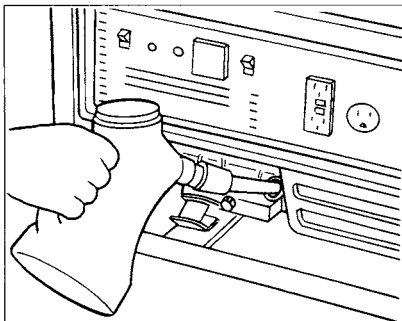


## II. SERVICING THE AIR CLEANER

Maintaining an air cleaner in proper condition is very important. Dirt induced through improperly installed, improperly serviced, or inadequate elements damages and wears out engines.

Keep the element always clean.

- a) Take out the air cleaner, clean it well in kerosene and dry it.
- b) After wetting the element by clean engine oil, squeeze it tight by hand.
- c) Lastly, put the element in the case and install it securely.



### 3. CLEANING AND ADJUSTING SPARK PLUG

- (a) If the plug is contaminated with carbon, remove it using a plug cleaner and wire brush.
- (b) Adjust the electrode gap to 0.7 to 0.8 mm (0.028" to 0.031").

#### SPARK PLUG

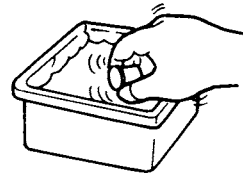
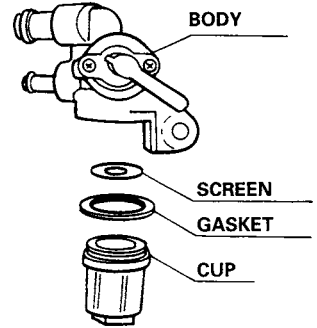
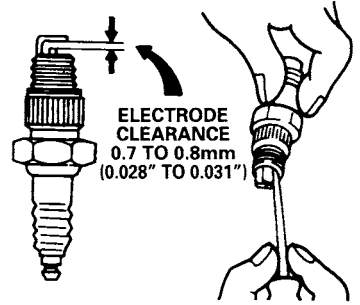
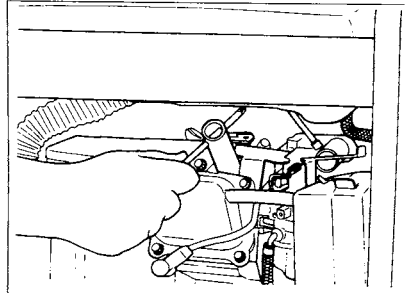
MGE4000, 4800, 5800, 6700

: NGK BPR5ES

### 4. CLEANING FUEL STRAINER

Dirt and water in the fuel are removed by the fuel strainer.

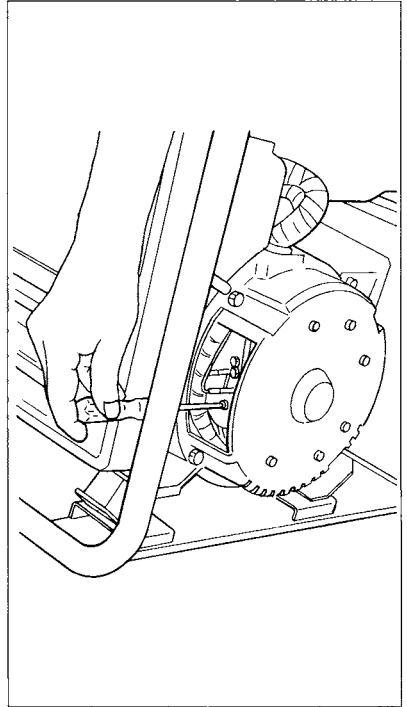
- (a) Remove the strainer cup and throw away water and dirt.
- (b) Clean the screen and strainer cup with gasoline.
- (c) Tightly fasten the cup to main body, making sure to avoid fuel leak.



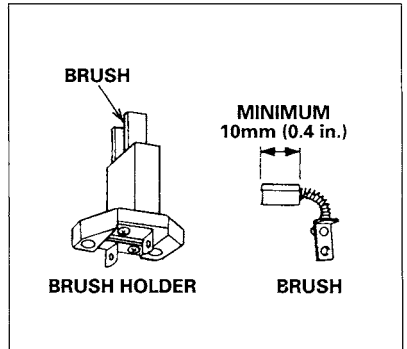
## . CHECKING CARBON BRUSH (Option)

Check the carbon brushes every 100 hours of operation.

- 1) Remove the brush cover from the generator.
- 2) Disconnect the wires from the brushes.
- 3) Loosen the two screws and remove the brush holder.
- 4) Remove the carbon brushes from the brush holder.



- 5) Check the length of the brushes. If the length is shorter than minimum 10 mm (0.4 in.), replace the brush with a new one.



## 12. PREPARATION FOR STORAGE

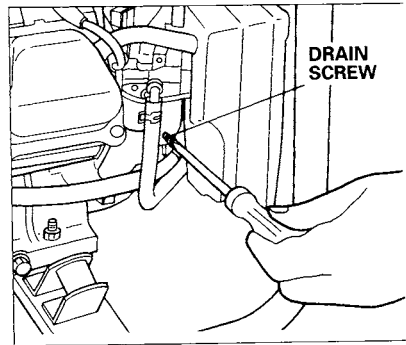
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The following procedures should be followed prior to storage of your generator for periods of 3 months or longer.

- Drain fuel from fuel tank carefully. Gasoline left in the fuel tank will eventually deteriorate making engine-starting difficult.
- Loosen the drain screw on the bottom of the carburetor float chamber, and drain the fuel completely.
- Change engine oil.
- Check for loose bolts and screws, tighten them if necessary.
- Clean generator thoroughly with oiled cloth. Spray with preservative if available.

**NEVER USE WATER TO CLEAN GENERATOR!**

- Pull starter handle until resistance is felt, leaving handle in that position.
- Store generator in a well ventilated, low humidity area.



# 13. TROUBLE SHOOTING

When generator engine fails to start after several attempts, or if no electricity is available at the output socket, check the following chart.

If your generator still fails to start or generate electricity, contact your nearest Mitsubishi Generator dealer for further information or corrective procedures.

## When Engine Fails to Start:

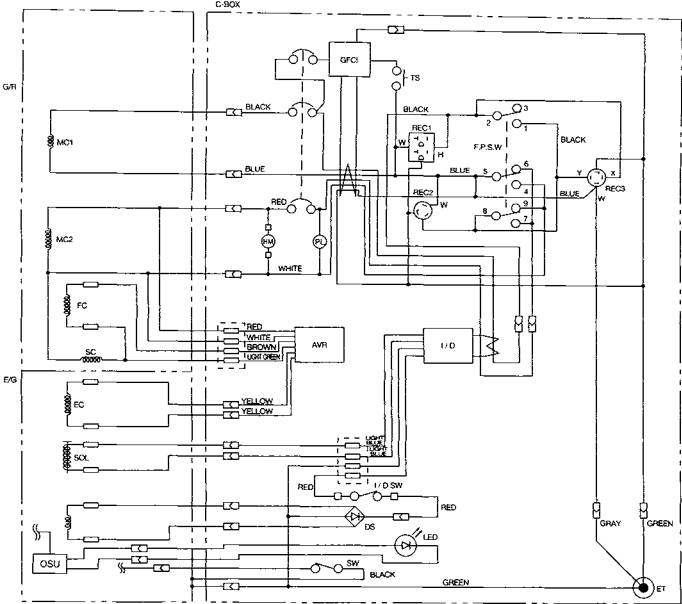
|  |   |  |
|--|---|--|
| Check if choke lever is in its proper position.                |   | Set the choke lever to "CLOSE" position.                                       |
| Check if fuel cock is open.                                    | ↔ | If closed, open fuel cock.   |
| Check fuel level.  |   | If empty, refill fuel tank making sure not to overfill.                        |
| Check to make sure generator is not connected to an appliance. | ↔ | If connected, turn off the power switch on the connected appliance and unplug. |
| Check spark plug for loose spark plug cap.                     |   | If loose, push spark plug cap back into place.                                 |
| Check spark plug for contamination.                            |   | Remove spark plug and clean electrodes.  |

## When No Electricity Is Generated at Receptacle:

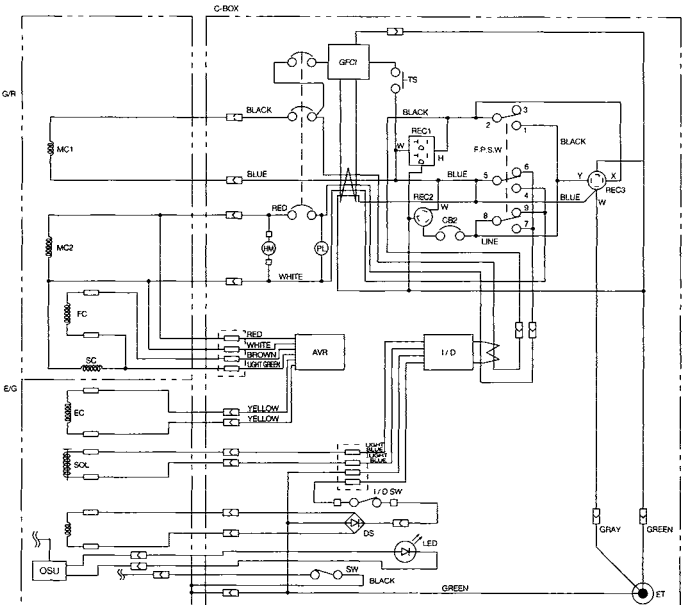
|   |   |   |
|---|---|---|
| Check to make sure no-fuse breaker is in the ON Position.                                     | ↔ | After making sure that the total wattage of the electrical appliance is within permissible limits and there are no defects in the appliance, turn the circuit breaker to the "ON" position. If breaker, continue to actuate, consult your nearest servicing dealer. |
| Check AC and DC terminals for loose connections.  |   | Secure connections if necessary.  |
| Check to see if engine starting was attempted with appliances already connected to generator. | ↔ | Turn off switch on the appliance and disconnect cable from receptacle. Reconnect after generator has been started properly.   |

# 14. WIRING DIAGRAM

## MGE4000



## MGE4800~6700



| Symbol       | Parts Name        | Symbol      | Parts Name      | Symbol    | Parts Name      |
|--------------|-------------------|-------------|-----------------|-----------|-----------------|
| <b>E/G</b>   | Engine            | <b>GFCI</b> | GFCI UNIT       | <b>CB</b> | Circuit breaker |
| <b>G/R</b>   | Generator         | <b>OSU</b>  | Oil sensor unit | <b>TS</b> | Test switch     |
| <b>C-BOX</b> | Control box       | <b>ET</b>   | Ground terminal | <b>SW</b> | Stop switch     |
| <b>MC</b>    | AC wiring         | <b>PL</b>   | Pilot lamp      |           |                 |
| <b>SC</b>    | Auxiliary winding | <b>REC</b>  | AC receptacle   |           |                 |
| <b>FC</b>    | Field winding     | <b>HM</b>   | Hourmeter       |           |                 |

#### Option

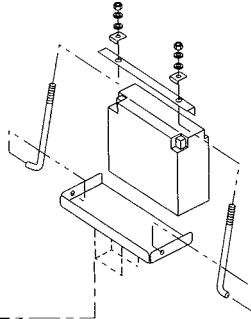
| Symbol     | Parts Name      | Symbol        | Parts Name        | Symbol     | Parts Name     |
|------------|-----------------|---------------|-------------------|------------|----------------|
| <b>EC</b>  | Exciter winding | <b>F.P.SW</b> | Full power switch | <b>SOL</b> | Solenoid valve |
| <b>LED</b> | Oil sensor lamp | <b>DS</b>     | Diode stack       |            |                |
| <b>AVR</b> | AVR unit        | <b>I/D</b>    | IDLE controler    |            |                |

# 15. OPTIONAL PARTS

## 1. HOW TO INSTALL THE BATTERY TRAY

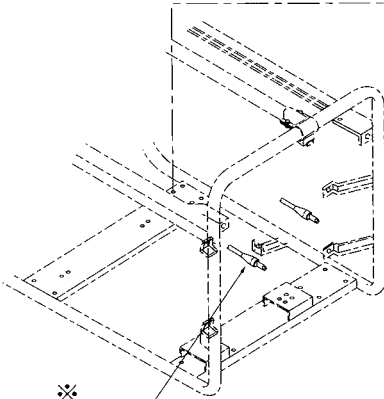
### WARNING

- The battery shall be handled in the well ventilated area avoiding fire or flammable material.
- Special attention shall be paid to the battery fluid not stuck to the eye or skin.
- Clamp the wire of red sign to the positive (+) terminal and the black wire to the negative (-) terminal to the battery. Do not reverse these positions.



### CAUTION

- The temperature of the battery fluid shall be maintained to 45°C or less, because of prevention for functional deterioration.
- Be sure the battery is installed on the battery mount tray securely.



※  
Red sign

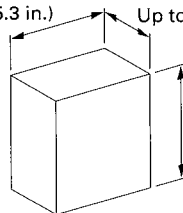
### Recommended battery:

- Capacity: 12V, 12Ah
- FURUKAWA BATTERY: 12N12A-4A-1

Up to 135 mm  
(5.3 in.)

Up to 80 mm  
(3.1 in.)

Up to 160mm  
(6.3 in.)





## 2. HOW TO INSTALL THE 4-WHEEL KIT

