Promate®

DIESEL GENERATORS

# OPERATOR MANUAL

**IMPORTANT – Please make certain that persons who are to use this equipment thoroughly read and understand these instructions and any additional instructions provided prior to operation.**

Record the model and serial numbers of your Generator below:

**Model no.:**

**Serial No.:**

# FOREWORD

Thank you very much for purchasing our products. This operator manual is intended for proper handling, minor checking and maintenance of the generator. Before operating the generator, please read these instructions completely and carefully.

# CONTENTS

## Pay special attention to statements preceded by the following words:

**⚠ WARNING**

Indicates a strong possibility of severe personal injury, loss of life and equipment damage if instructions are not followed.

[CAUTION]

Indicates a possibility of personal injury or equipment damage if instructions are not

NOTE:
Gives helpful information.
If a problem should arise, or if you have any questions about the generator, consult a dealer selling our generator.

**⚠ WARNING**

- The generator is designed to give safe and dependable service if operated according to instructions.
- Do not operate the generator before you have read and understood the instruction. Failure to do so could result in personal injury or equipment damage.

Check the accessories coming with your generator

(1) Owner's Operarator Manual
(2) Wheel kits
(3) Servicing tools
(4) Battery

# Safety Symbols

Precautions that involve your safety

Start and run the generator outdoors.
Do not run the generator in an enclosed area, even if doors or windows are open.

To reduce the risk of serious injury, avoid attempting to touch the hot surface.

Units should not be operated or stored in wet or damp conditions or on highly conductive locations such as metal decking and steel work.

Fuel and its vapors are extremely flammable and explosive. Fire or explosion can cause severe burn or death.

Ear protection

Read carefully and understand operator manual prior to operation of this product. Follow all warnings and instructions

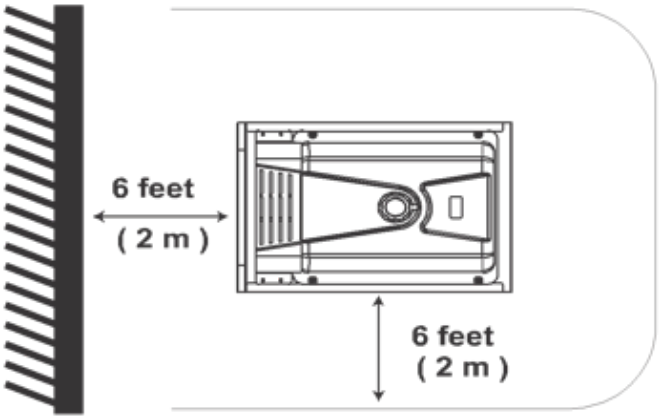
Could not be  used under the rain.

# 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 while the engine is running.
Do not smoke or use open flame near the fuel tank. Be careful not to spill fuel during filling. Wipe off spilled fuel and let dry before starting the engine.

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

⚠ Generator should be operated outdoors or on 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 2 meter (6 feet away from any structure or building during use.




⚠ Do not enclose the generator or cover it with a box.
The generator has a built-in forced air cooling system, and may become overheated if enclosed. If generator has been covered to protect it from the weather during non-use, be sure to remove it and keep it well away from the area during generator use.

⚠ Operate the generator on a level structure.
It is not necessary to prepare a special foundation for the generator. However, the generator will vibrate on an irregular surface; choose a level place without surface irregularities.

⚠ If the generator is filled 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 wirings or extension cords 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, generator burnout or electric shock hazard. Replace damaged or
worn out cords immediately.

⚠ Do not operate in rain, wet, damp conditions or with wet hands. The operator may suffer severe electric shock if the generator is wet due to rain.

⚠ If the generator gets wet, wipe and dry it well before starting. Do not pour water directly to the generator or wash it with water.

⚠ Make sure that all necessary electrical grounding procedures are followed during each and every use. Failure to do so can be fatal.

⚠ Do not connect the generator to a commercial power line. Connections to a commercial power line may short circuit the generator and ruin it or cause an electric shock hazard. Use a properly specified transfer switch when connecting to a domestic circuit.

⚠ 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. Keep open flames/sparks away when handling the battery.

⚠ Engine becomes extremely hot during operation and for some time after operation. Keep combustible materials well away from generator area. Be careful not to touch any parts
of the hot engine especially the muffler area, it may result to serious burns.

⚠ Keep children and all bystanders at a safe distance from work areas.

⚠ It is absolutely essential that you know the safe and proper use of the Power Tool or Appliance that you intend to use. All operators must read, understand and follow the Power Tool or Appliance owner's manual. Power Tool and Appliance applications and limitations must be understood. Follow all directions given on the labels and warnings. Keep all instruction manuals and literatures in a safe place for future reference.

# Notes on Installation

1. Always be sure to place the generator on a level surface, locking the wheel with the stopper and/or chocking the wheels.

2. Select a place which allows you to maintain and inspect the generator, without being exposed to exhaust fumes.

3. If you are planning to install the generator without its wheels attached, consider the work efficiency during an oil change.

4. In ground connection, be sure to use the designated ground terminal. ( grounding cable is not included in the set of accessories.)

5. During use, be sure not to disconnect the battery.

6. While the power is on, do not unplug the unit or disconnect cables from the terminals.

# PRE-OPERATION CHECKS

### 2.1 Check Engine Oil

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

• Remove the dipstick and wipe it clean. Fully insert the dipstick then remove it to check the oil level. If the level is near or below the lower limit mark on the dipstick, remove the oil filler cap and fill with recommended oil to the upper limit mark. Reinstall the dipstick and filler cap.

• Change oil if contaminated.

(see HOW - TO “MAINTENANCE”)

NOTE:

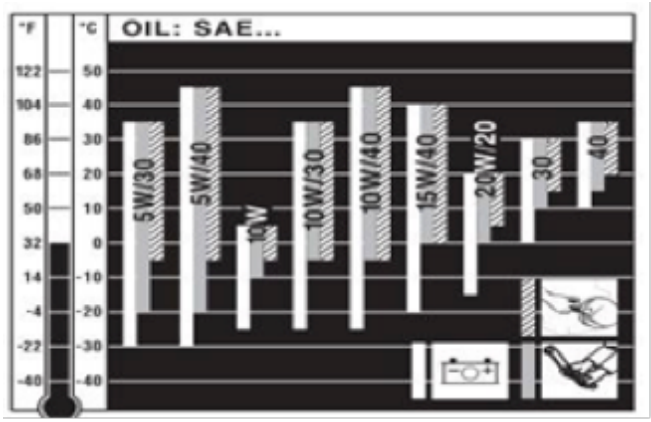
• The engine is equipped with an oil sensor unit (hydraulic pressure detection type) that will automatically stop the engine if oil in the crank case is reduced below the specified level. Should the engine automatically stops, be sure to check the level of fuel and oil.

• When the oil is reduced below the specified level, add new oil up to the upper limit. Since the oil sensor will not detect the deterioration of oil, visually check the quality or determine it by the specified time. Replace the oil if necessary.

### 2.2 Lube oil

The suitable lube oil should meet following condition.

Lube oil viscosity

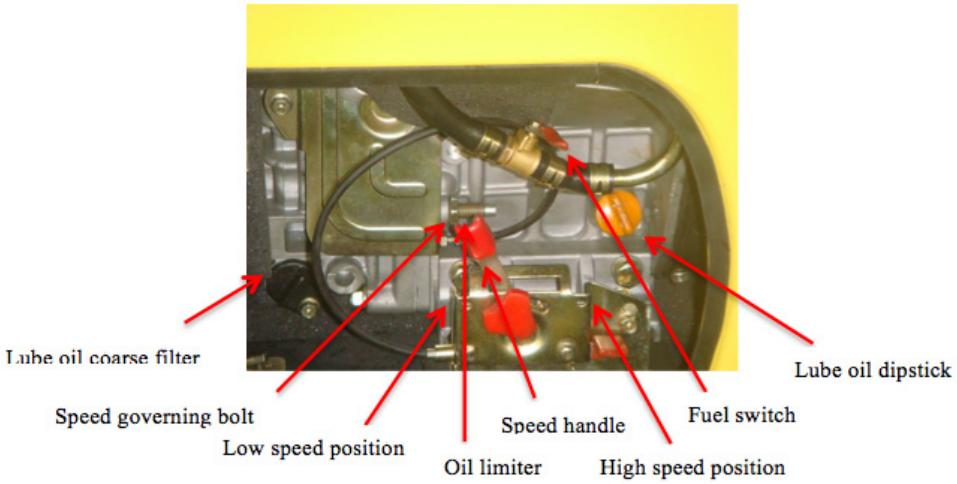



Select lube oil viscosity based on ambient temperature when starting at cold temperature. It is very important to select the applicable engine oil to keep up the performance and life of the generator. If inferior engine oil is used or engine oil is not replaced periodically, the risk of piston seizure, piston ring sticking and accelerated wear of the cylinder liner, bearing and other moving components increases significantly.

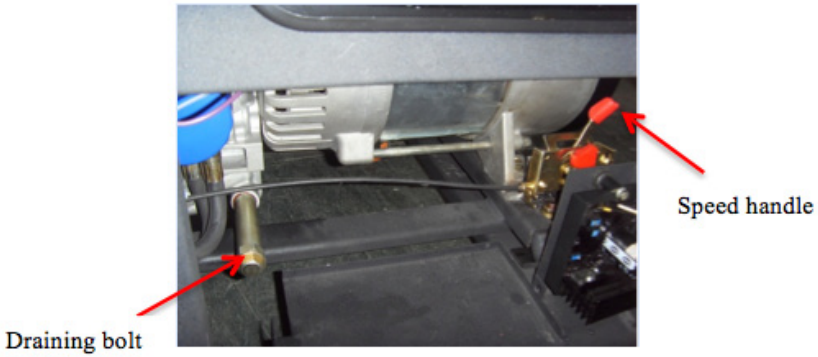
**Choose the applicable viscosity oil according to the local ambient temperature.**
**Interval for changing lube oil**

| 20 HOURS AT FIRST | EVERY 100 HOURS FOR NEXT THREE TIMES | EVERY 200 HOURS |
|---|---|---|

**Using inadequate viscosity level will lead to more frequent oil change.**
**Inferior engine oil, interval for changing lube oil will be shortened to every 150 hours running.**




**OPEN FRAME TYPE**



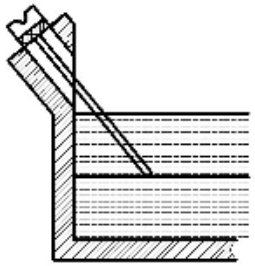
## 2.3 Lube oil level of engine

Filling in lube oil

Fill in lube oil through the opening of oil dipstick.

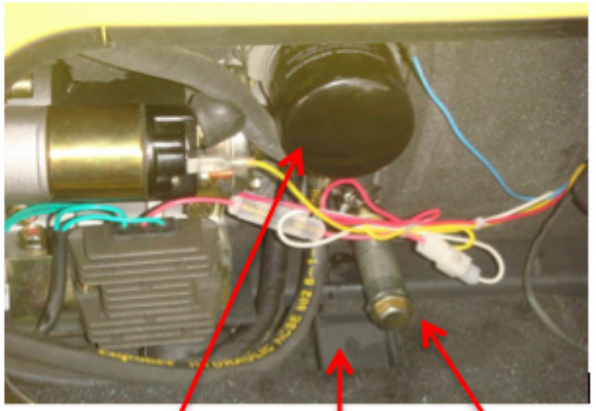
When checking oil level, screw the dipstick into the opening.

Ensure that oil level is between upper and lower limit in oil dipstick.



Upper level limit (H)

Lower level limit (L)

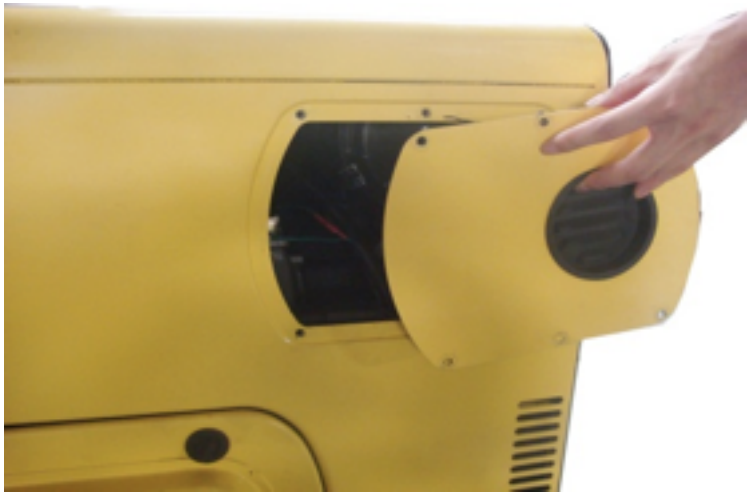



When starting the generator, check oil level. If the oil is insufficient, add lube oil to the stipulated level. Draining off lube oil can be immediately done after engine stopped. It is difficult to drain off the oil thoroughly when the engine is in its cold state.

The engine may be damaged if operated with insufficient lube oil. It is also dangerous to supply too much lube oil to the engine because a sudden increase in engine rpm could be caused by its combustion. Always check the lube oil level before starting the engine and refill if necessary.

## 2.4 Check Air Cleaner

Checking  the air cleaner of Silent Type Diesel Generator.



**Unscrew the bolt and remove side plate**

**(A)**

- To get the filter element, loosen the clip and remove the cover.
- Do not clean the air cleaner element with detergent because it is a wet type element.
- When exhaust fume is black change the filter element.
- Do not start the generator without the air cleaner, otherwise it will cause the generator deteriorate easily.
- After installing the filter element, fit the cover of air cleaner and retighten the clipper firmly.

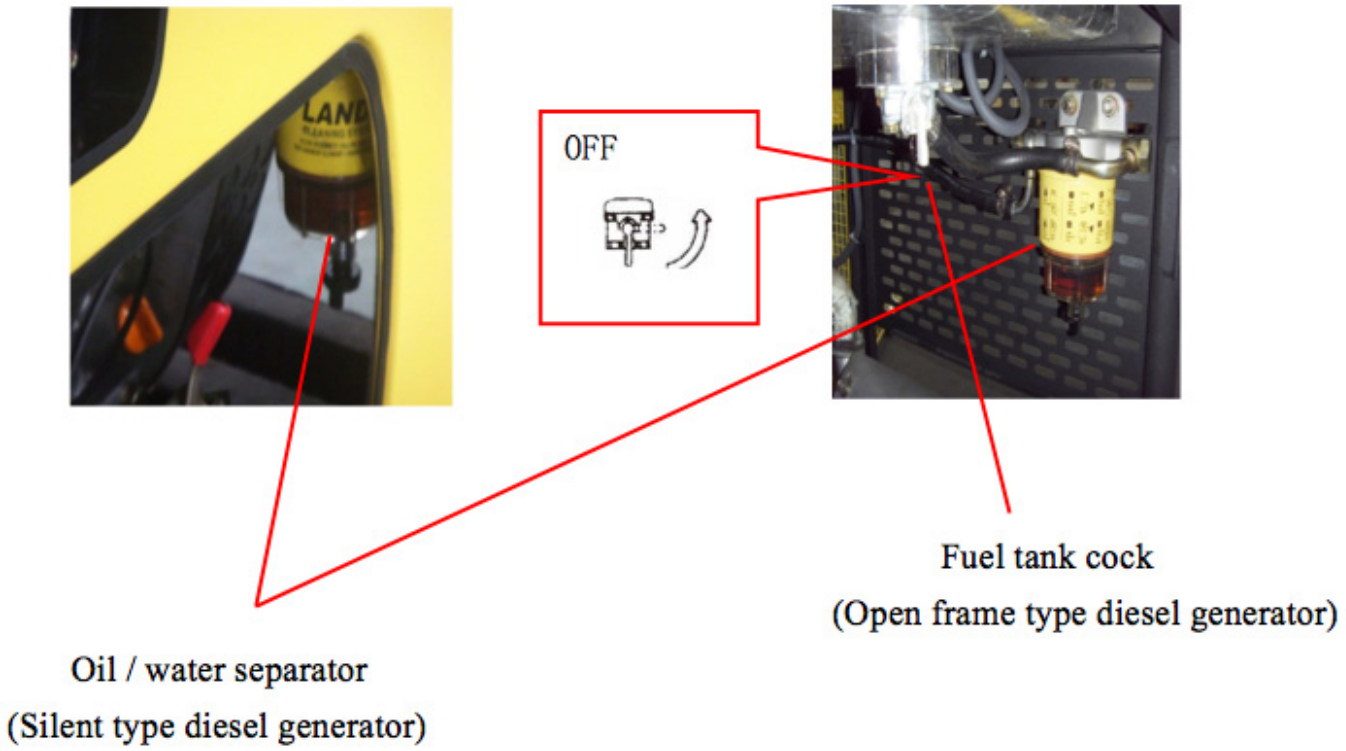
**(B)**

# Checking the air cleaner of Open frame Diesel Generator

- Unscrew the bolt and take out side plate.
- Do not clean the air cleaner element with detergent because it is a wet type element.
- When exhaust gas is turned black change the element.
- Do not start the generator without air cleaner, otherwise it will cause the generator to deteriorate easily.
- After installing the element, fit the cover of air cleaner and retighten the clipper firmly.

## 2.5 Instruction for oil and water separator

The Diesel Generator is fitted with oil/water separator. When oil is mixed with water, unscrew the tap of the separator towards the left direction to drain off the water.




Oil / water separator
(Silent type diesel generator)

Fuel tank cock
(Open frame type diesel generator)

After the water is drained off, screw the tap to the right direction to avoid the fuel leak.

## 2.6 Check Fuel

Do not refuel while smoking, near open flame or other such potential fire hazards. Otherwise fire accident may occur.

- **Check fuel level at fuel gauge.**
- **If fuel level is low, refill with diesel.**
- **Be sure to use the fuel filter screen on the fuel filter neck.**

# ⚠ 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.
- Be careful not to admit dust, dirt, water or other foreign objects into the fuel tank.
- Wipe off spilled fuel thoroughly before starting engine.

## 2.7 Battery

Check the level of the fluid in the battery every month. When the level has dropped to the lower marker replenish with

- **The engine may not start if the battery fluid is low. Always keep the fluid level between the upper and lower limits.**
- **If too much battery fluid is supplied, the fluid may spill and corrode the surrounding parts.**

During the operation, the generators automatically charge the battery. If the generator is used for stand-by application, the battery power output should be checked regularly.

### 2.8 Checking Components

Check the following items before starting the engine

- **Fuel leakage from fuel hose, etc.**
- **Loose bolts and nuts.**
- **Damaged components.**
- **Generator not resting on or against any adjacent wiring.**

### 2.9 Checking Generator Surroundings

## ⚠ WARNING

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

- **Keep area clear of inflammables or other hazardous materials.**
- **Keep generator at least 6 feet (2 meter) away from buildings or other structures.**
- **Operate generator in a dry, well-ventilated area only.**
- **Keep exhaust pipe clear of foreign objects.**
- **Keep generator away from open flame.**
- **Keep generator on a stable and level surface.**
- **Do not block generator air vents with paper or other materials.**

# 3. OPERATING PROCEDURES

## 3.1 Recoil Starting

(1) Set the fuel cock at the “ON” position.
(2) Set the engine speed lever to “RUN” position.
(3) Pull out the recoil starting handle.

a. Pull out the handle to the point where you feel strong resistance and then return it to the initial position.
b. Push down the decompression lever. It will return automatically when the recoil starter is pulled.
c. Pull the recoil starting handle briskly with both hands.

### ⚠ WARNING

Never use any volatile liquid or gas such as gasoline to cold start the engine. It will severely damage the engine.

### ⚠ CAUTION

Keep the oil screw plug in the bonnet except when adding oil. Rain, dirt and other contaminants may enter the engine if the plug is not in place. It will cause accelerated wearout (abrasion) of internal parts.

## 3.2 Electric Starting

(1) Starting

a. Open the fuel cock
b. Set the engine speed lever to “RUN” position.
c. Turn the starting key clockwise to “START” position.
d. Remove your hand from the key as soon as the engine starts.
e. If the engine does not start after 10 seconds wait a while for about 15 seconds before attempting to start again.

You might have to keep the starter running for at least 3 to 5 seconds, since the engine incorporates the mechanism where the ignition circuit is activated by the increase of hydraulic pressure.

In the following occasion, two to three tries may be required for starting the engine:

(1) The very first starting of a new generator.
(2) After the refueling of the engine which has been stopped due to fuel shortage.
(3) Starting after the oil filter change.

Warm up the engine without load for a few minutes. Longer time would be needed in cold weather.

If the starting motor is working for too long, the battery will go flat and motor seize up will occur. Always leave the starting key turned on at the “ON” position, while the engine is running.

# 4. OPERATING THE GENERATOR

1. Warm up the engine without load for 3 minutes.
2. This generator is equipped with low oil warning system. The engine will stop automatically in case of low oil pressure or lubrication oil shortage. The engine will not start without lubrication oil refill. Check the oil level and refill.
3. For a single cylinder generator, do not loosen or readjust either the engine speed limiting bolt or fuel injection limiting bolt (They are already well adjusted before leaving factory), otherwise performance may be affected.
4. For v-twin engine generator, set up speed handle to high speed after warm up.

Things to check during operation:

1. Any abnormal sounds or vibration.
2. The engine misfiring or running rough.
3. What about the color of the exhaust gas?

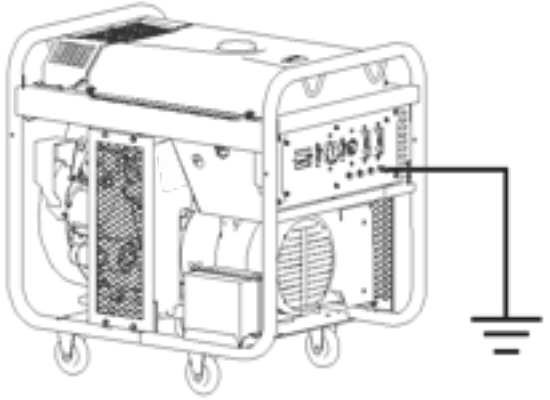
(Is it black or too white?). If you notice any situation mentioned above, Please Contact our service center.

Load

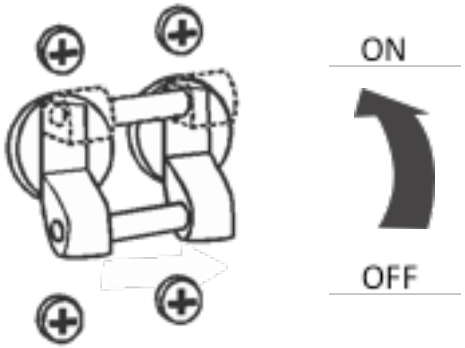
To add load according to specified parameter.

## 4.1 AC Application

A. Ground the generator, using the ground terminal located at the panel.



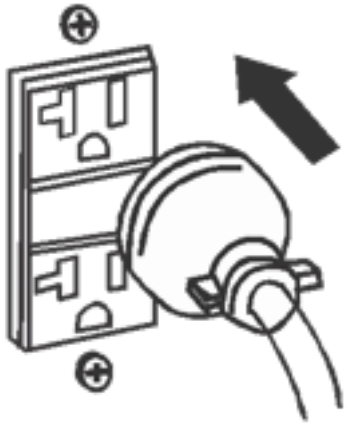
B. Before starting the engine, check that the no-fuse breakers of the generators are turned off.




C. Start the engine and check voltage on voltmeter.

- This generator is thoroughly tested and adjusted in the factory. If the generator does not produce the specified voltage, consult your nearest dealer selling our generators.

D. Connect the plugs of the appliances to the receptacles after starting the engine. If you wish to operate for a long period of time, connecting to the output terminal is recommended.





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## 4.2 Stopping the Generator

In an emergency:

To stop the engine in an emergency, turn the engine switch to the ‘’STOP” position.

In normal use:

a. Turn off the power switch of the electric equipment.
b. Turn the AC breaker to “OFF” position.
c. Unplug the cord of the electric appliance from the receptacle.
d. Adjust the engine speed lever to low speed and run the engine for about 3 minutes with no load to cool down before stopping.
e. Return the engine speed lever to the “STOP” position.
f. In electric-start models, return the starter key to the “OFF” position
g. Set the fuel cock lever to “S” (closed) position.
h. Slowly pull out the recoil handle until pressure is felt (to the point in the compression stroke where the intake and exhaust valves are closed) and leave the handle in this position. This prevents rust from forming while the engine is not in use.

Most equipment and appliances need a surge of power to start up. This surge can be estimated between 1 up to 6 times the rated power of appliances. To make sure you choose the right generator, go through these steps:

- **Identify the items you want to run.**
- **Calculate the total surge watts required for all items.**
- **Check if compatible with your generator.**

| GENERATOR SELECTION CHART | | |
|---|---|---|
| **Equipment** | **Operating Load (Watts)** | **Starting Load** |
| Air Conditioner | 3250 | 7200 |
| Coffee Maker | 800-1500 | N/A |
| Deep Fryer | 500 | 1000 |
| Electric Fan | 200 | 600 |
| Fluorescent Light | As stated | N/A |
| Hair dyer | 300-1200 | N/A |
| Iron | 1200 | N/A |
| Light Bulb – standard | As stated | N/A |
| Microwave Oven | 700 | 3500 |
| PC Plus Printer | 300 | 600 |
| Radio | 50-200 | N/A |
| Record / CD Player | 30 | N/A |
| Refrigerator (small) | 600 | 800-2000 |
| Rice Cooker | 200 | N/A |
| Tape Deck / Recorder | 30 | N/A |
| Television | 300 | N/A |
| Toaster | 1000-1600 | N/A |
| Vacuum Cleaner | 600-1500 | 750-1800 |
| VCR | 50 | N/A |
| Video Games | 20 | N/A |
| Washing Machine | 1150 | 3400 |
| Water Heater | 3000-4500 | N/A |
| Water Pump | 500-1000 | 2500-5000 |

These figures are for reference only and may vary depending on the appliance design. Consult a professional for exact figures of your appliance.

The wattage ratings shown are averages for continuous operating of single element. Be sure to verify wattage or horse power requirement for starting and running. Start one motor at a time beginning with the largest and ending with the smallest.

When no wattage ratio is list, it can be approximated by using the formula:

Watts=Volts x Amperes, As a rule of thumb, electric motors require 2 to 3 times their nameplate amperage or wattage to start them.

| TYPICAL MULTIPLYING FACTORS BETWEEN RATE & SURGE WATTS | |
|---|---|
| Lights, heater, TV, radio, hair dryer, soldering gun | 1 |
| Tools (drill, electric saw, paint sprayer, orbital sander) | 1.2 |
| Halogen Lights | 1.5 |
| Fan | 3 |
| Pump | 3.5 - 5 |
| Capacitor Motors | 4 |
| High Pressure Cleaner | 4.5 |
| Microwave Oven | 5 |
| Air Conditioner, Freezer | 6 |

- These Figures are for reference only and may vary depending on the appliance design. Consult a professional for exact figures of your appliance.
- Simple rule allow 2.5 to 4 times the listed power for starting equipment powered by electric motors.

# 6. Wattage Information

**Single Phase**

**Some appliances need a “surge” of energy when starting. This means that the amount of electrical power needed to start the appliance may exceed the amount needed to maintain its use. Electrical appliances and tools normally come with a label indicating voltage, cycles/Hz, amperage (amps) and electrical power needed to run the appliance or tool.**

**Check with your nearest dealer or service center with questions regarding power surge of certain appliances or power tools.**

**Electrical loads such as incandescent lamps and hot plates require the same wattage to start as is needed to maintain use.**

**Loads such as fluorescent lamps require 1.2 to 2 times the indicated wattage during start-up.**

**Loads for mercury lamps require 2 to 3 times the indicated wattage during start-up.**

**Electrical motors require a large starting current. Power requirements depend on the type of motor and its use. Once enough ”surge” is attained to start the motor, the appliance will require only 50% to 30% of the wattage to continue running.**

**Most electrical tools require 1.2 to 3 times their wattage for running under load during use. (for example, a 9,000 watt generator can power a 3,200 to 7,000 watt electrical tool.)**

**Loads such as submersible pumps, air conditioners and air compressors require a very large force to start. They need 3 to 5 times the normal running wattage in order to start.**

**If the power consumption of electrical appliances exceeds the operating range or if there is short circuit or other problems in the appliances, the AC breaker * could trip “OFF” or the rotation of the generator could be abnormally reduced. In this case, stop the generator to see if the power consumption of the appliances is too large and if there is a problem in the appliances.**

**The frequency (the number of the generators rotation) was adjusted before the time of shipment. Changing the frequency could result in the generators breakdown.**

**Note: Each Promate Generator model has its own specified and rated circuit breaker.**

To determine the total wattage required to run a particular electrical appliance or tool, multiply the voltage figure of the appliance / tool by the amperage (amps) figure of same. The voltage and amperage (amps) information can be found on rating label which is normally attached to electrical appliances and tools.

**Voltage drop in electric extension cords**

When a long electric extension cord is used to connect an appliance or tool with the generator, a certain amount of voltage drop occurs in the extension cord. This will decrease the effective voltage available for the appliance or tool.

The chart below has been prepared to illustrate the approximate voltage loss when an extension cord of 300 feet (approx.. 100 meters) is used to connect an appliance or tool to the generator.

| Nominal cross section | A.W.G Gauge no. | Allowable current | No. of strands/strands dia. | Resistance | Current Amp | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| mm | No. | A | No. / mm | 100m | 1A | 3A | 5A | 8A | 10A | 12A | 15A |
| 0.75 | 18 | 7 | 30/0.18 | 2.477 | 2.5V | 8V | 12.5V | -- | -- | -- | -- |
| 1.27 | 16 | 12 | 50/0.16 | 1.486 | 1.5V | 5V | 7.5V | 12V | 15V | 18V | |
| 2.0 | 14 | 17 | 37/0.26 | 0.952 | 1V | 3V | 5V | 8V | 10V | 12V | 15V |
| 3.5 | 12 | 23 | 45/0.32 | 0.517 | -- | 1.5V | 2.5V | 4V | 5V | 6.5V | 7.5V |
| 5.5 | 10 | 35 | 70/0.32 | 0.332 | -- | 1V | 2V | 2.5V | 3.5V | 4V | 5V |
| 8.0 | 8 | 50 | 100/0.32 | 0.228 | -- | 0.6V | 1V | 2V | 2.3V | 2.6V | 3.4V |

# 7. Maintainance

| Operation Hours / Item | Daily | First month or 20 hours | Every 3 months or 100 hours | Every 6 months or 300 hours | Every year or 1000 hours |
|---|---|---|---|---|---|
| Check the fuel | ○ | | | | |
| Clean fuel tank | | | ○ | | |
| Check oil leakage | ○ | | | | |
| Check each fastening | | | | ● | |
| | | | | retighten cylinder head bolt | |
| Change engine oil | | ○ first time | ○ next three times | | |
| Clean the element of air cleaner | ○ shorten the interval in more dust condition | | | ○ change | |
| Clean fuel filter | | | ○ | ○ change | ○ change |
| Check fuel pump | | | | ● | |
| Check the injector | | | | ● | |
| Check fuel pipe | | | | ● Replace if necessary | |
| Adjust intake/exhaust valve clearance | | ● first time | | | |
| Grind intake/exhaust valve | | | | | ● |
| Change piston ring | | | | | ● |
| Check battery liquid | Monthly | | | | |

REMARK: The mark “●”indicates special spanner  to be used.

6.1 Changing engine oil

- 20 hours for first time and 100 hours for next three times and 200 hours for normal operation
- Remove the oil filter cap, remove the drain plug and drain the used oil while the engine is still warm. The plug is located on the bottom of the cylinder block. Tighten the drain plug and refill with the recommended oil.

6.2 Changing the air cleaner element

- Do not clean the air cleaner element with detergent, because this is a wet type element.
- Interval in operating hours : Every 6 months or 300 hours (earlier if dirty)

6.3 Changing and replacing the fuel filter

- Clean the fuel filter regularly to ensure maximum engine output.
- Interval in operating hours: (Clean) Every 3 months or 100 hours (Replace) Every 6 months or 300 hours.

A. Close fuel switch
B. Change the element

6.4 Long-term storage

- When the generator is not operated for more than six months, it should be:

a. Operate the diesel engine for 3 minutes.

b. Stop the engine. Drain the fuel and engine lube oil while the engine is still warm and fill with new oil.

c. Clean the crankcase and gear chamber with diesel and kerosene and then drain it after.

d. Recoil starting, push the decompression lever down (non-compression position) hold it while you pull the recoil starter 2 or 3 times. (Do not start the engine) Electric starting turn the engine for 2-3 seconds with decompression. Lever set at the non-compression

e. position and the starter key at the “START” position. (Do not start the engine)

f. Pull the decompression lever up. Pull the recoil starter slowly. Stop when it feels tight. This closes the intake and exhaust valves in compression position and helps prevent rust from forming.

e. The generator should be stored in a clean and dry place.

# 8. Trouble Shooting

| Possible Cause | | Remedy |
|---|---|---|
| No start of the engine | Insufficient fuel | Fill with fuel |
| | Fuel switch not on “OPEN” position | Put fuel switch handler to “OPEN” position. |
| | Lack of fuel flowing thru the injector | Repair and adjust the injector |
| | Speed control rod not on “RUN” position | Set control rod to “RUN” position |
| | Lack of oil | The level between upper mark “H and lower mark “L” (Add Lube oil to its lever, if it is on the lower mark) |
| | Clogged air cleaner | Make sure the air cleaner is unobstructed |
| | Low battery voltage | Charge the battery |
| No output of generator | Circuit breaker is in the “OFF” position | Make 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. |
| | Check the AC terminals for loose connections | Secure connections. |
| | Damaged alternator | Contact service center |
| Voltage too low | Low Revolution per minute (RPM) | Set the exact RPM of the engine. |
| | Damaged alternator | Contact service center |
| Automatic stop after a certain time of operation | (1) lack of the fuel<br>(2) lack of lube oil | |

# 8. Service Information

**Powertech Asia Pacific Inc.** Product Service Department (632) 628-1050 for warranty service information, order replacement parts and accessories.

**How to order Replacement Parts:**

Even quality built equipment such as the electric generator you purchased might need occasional replacement parts to maintain it in good condition over the years. To order replacement parts, please give the following information:

(1) Model number, Serial number and all specifications shown on the Model and Serial No. plate.
(2) Part number or numbers as shown in the parts list section.
(3) A brief description of the trouble with the generator.

**Limited Warranty**

*Warranty Coverage*

- Original retail customers. Free of charge, any parts found by the Company or its authorized service representatives defective in material or workmanship. This warranty covers the cost of replacement parts and labor for defects in material or workmanship.
- Not Covered
- Transportation charges for sending the product to the company or its authorized service representative for warranty service or for shipping repaired or replacement products back to the customer, these charges must be paid by the customers.
- The Company will not pay for repairs or adjustments to the product for any costs of labor performed without the company's prior authorization.
- Consumable parts such as battery, spark plug and air cleaner.

**Warranty Period**

One (1) year from the date of purchase used solely for consumer applications. If a product is used for business or commercial applications the warranty period will be limited to ninety (90) days from the date of purchase. For warranty service, the customer must provide dated proof of purchase and must notify the company within the warranty period.

Promate®

DIESEL GENERATORS

# SERVICE PARTS & SUPPORT

Tels.:(+632) 628-1050 / 641-8800

www.promate.com.ph