

Operating Manual

We Appreciate Your Business.

Thank you and congratulations on choosing PRAMAC.

This Operating Manual has been designed to instruct you on the correct use and operation of your PRAMAC product. Your satisfaction with this product and its safe operation is our ultimate concern. Therefore please take the time to read the entire manual, especially the Safety Precautions. They will help you to avoid potential hazards that may exist when working with this product.

A WARNING

READ AND UNDERSTAND ALL SAFETY PRECAUTIONS IN THIS MANUAL BEFORE OPERATING. FAILURE TO COMPLY WITH INSTRUCTIONS IN THIS MANUAL COULD RESULT IN PERSONAL INJURY, PROPERTY DAMAGE, ANDIOR VOIDING OF YOUR WARRANTY. PRAMAC WILL NOT BE UABLE FOR ANY DAMAGE BECAUSE OF FAILURE TO FOLLOW THESE INSTRUCT/ONS.

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1 SAFETY INSTRUCTIONS AND WARNINGS



THE ENGINE EXHAUST FROM THIS PRODUCT CONTAINS CHEMICALS TO CAUSE CANCER, BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

NOTE

Read this manual carefully before operating this machine. This manual should stay with this machine if it is sold.

INTRODUCTION

This Operating Manual has been designed to instruct you on the correct operation of your PRAMAC product. Your satisfaction with this product and its safe operation is our ultimate concern. Therefore please take the time to read the entire manual, especially the Safety Precautions. They will help you to avoid potential hazards that may exist when working with this product.

IMPORTANT MANUAL INFORMATION

Particulary important information is distinguished in this manual by the following notes.

Symbol Usage

This manual contains important information that you need to know and understand in order to assure YOUR SAFETY and PROPER OPERATION OF EQUIPMENT. The following symbols help you recognize this information. Please read the manual and pay attention to these sections.



WARNING INDICATE A CERTAINTY OR STRONG POSSIBILITY OF PERSONAL INJURY OR DEATH IF INSTRUCTIONS ARE NOT FOLLOWED.

NOTICE

CAUTIONS INDICATE A POSSIBILITY ARE NOT FOLLOWED PROPERLY.

TIPS

TIPS GIVE HELPFUL INFORMATION

A WARNING

PLEASE READ AND UNDERSTAND THIS MANUAL COMPLETELY BEFORE OPERATING THE MACHINE.

TIP

Continually seeks advancements in product design and quality. Therefore, wherein this manual contains the most current product information available at the time of printing, there may be minor discrepancies between your engine and this manual. If there is any question cancerning this manual, please consult a PRAMAC dealer.

This manual should be considered a permanent part of this engine and should remain with this engine when resod.

Product and specifications are subject to change without notice.

SAFETY INFORMATION

FUEL IS HIGHLY FLAMMABLE AND POISONOUS

- Always turn off the engine when refueling.
- Never refuel while smoking or in the vicinity of an open flame.
- Take care not to spill any fuel on the engine or muffler when refueling.
- If you swallow any fuel, inhale fuel vapor, or allow
- Any to get in your eye(s), see your doctor immediately. If any fuel spills on your skin or clothing, immediately wash with soap and water and change your clothes.
- When operating or transporting the machine, be sure it is kept upright. If it tilts, fuel may leak from the carburetor or fuel tank.

EXHAUST FUMES ARE POISONOUS

 Never operate the engine in a closed area or it may cause unconsciousness and death within a short time. Operate the engine in a well ventilated area.

ENGINE AND MUFFLER MAY BE HOT

- Place the machine in a place where pedestrians or children are not likely to touch the machine.
- Avoid placing any flammable materials near the exhaust outlet during operation.

- Keep the machine at least 1m (3 ft) from buildings or other equipment, or the engine may overheat @ 1 m (3 ft).
- Do not operate the engine with a dust cover, or other objects covering it.
- When covering the generator, be sure to do so only after the engine and muffler have completely cooled down.
- Be sure to carry the generator only by its carrying handles.

• Do not place any obstacles on the generator.

ELECTRIC SHOCK PREVENTION

- Never operate the engine in rain or snow.
- Never touch the machine with wet hands or electrical shock will occur.

 Connect the ground lead of the machine to the ground terminal 1 to ground the generator to earth (where needed) and connect the end to the ground electrode buried in the ground.



CONNECTION NOTES

Avoid connecting the generator to commercial power outlet.

CONNECTION



Before the generator can be connected to a building's electrical system, a licensed electrician must install an isolation (transfer) switch in the building's main fuse box. The switch is the connection point for generator power and allows selection of generator or main line power to the building. This will prevent the generator from charging the main power line (back feeding) when the main power supply has failed or has been turned off for line repair. Back feeding can electrocute or injure line maintenance personnel. Also, generator and building electrical system damage can occur when normal operating power returns if unit is used without an isolation switch.

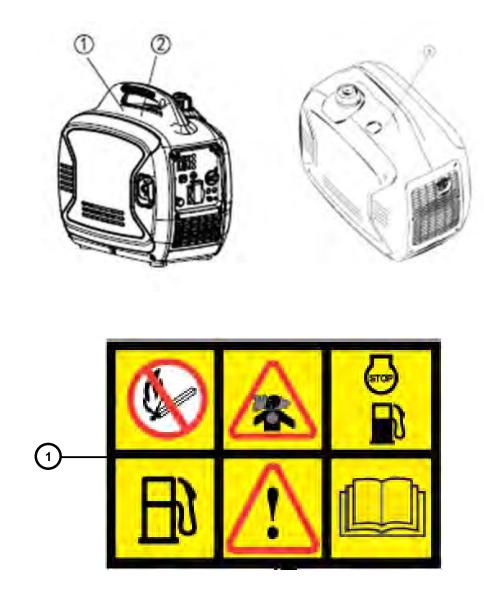
EXTENSION CORD NOTES

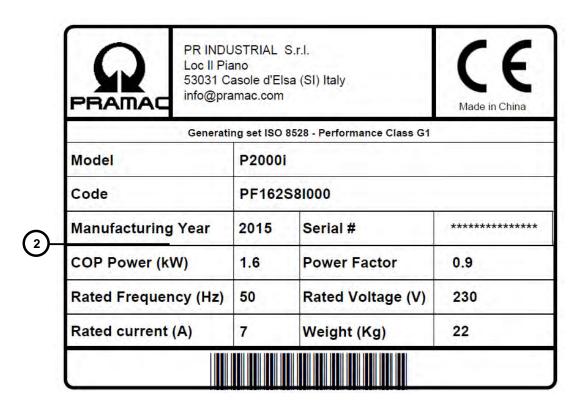
Extension cords should be protected by a tough flexible rubber sheath (I E C 245) or the equivalent to withstand mechanical stress.

LOCATION OF IMPORTANT LABELS

Please read the following labels carefully before operating this machine.

TIP Maintain or replace safety and instruction labels, as necessary.

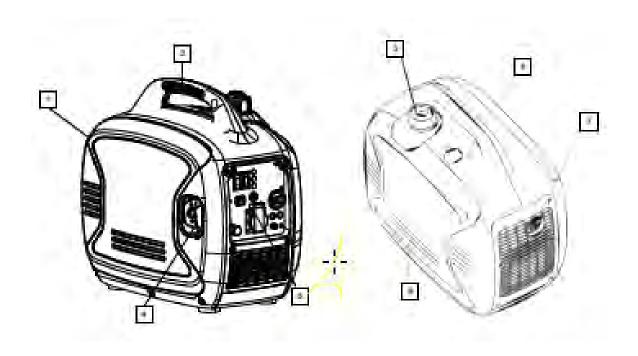






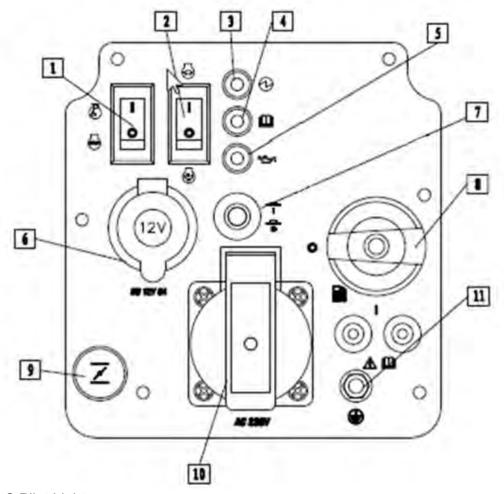
2 CONTROLS AND FEATURES

2.1 Generator



- 1. Muffler
- 2. Carrying handle
- 3. Vented Gas Cap
- 4. Recoil Starter
- 5. Control Panel
- 6. Fuel Gauge
- 7. Exhaust and Spark Arrestor
- 8. Oil filter cap

2.2 Control Panel



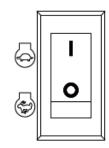
AC Pilot Light

- 1. Engine Switch
- 2. Economy Throttle (Black)
- 3. AC Pilot Light
- 4. Overload Indicator Light
- 5. Oil Warning Light
- 6. 12V DC Output
- 7. 8A DC Circuit Breaker
- 8. Fuel Petcock
- 9. Choke
- 10. 220/230/240V AC Outlets

This socket is only corresponding to a client, the different laws and regulations according to the sales area changes corresponding to the socket.

11. Ground Terminal

2.3 Control Functions



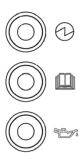
ECONOMY THROTTLE

Throttle

When the Throttle switch is in the "I" position the throttle controls the engine speed according to the connected electrical load. The results are better fuel consumption and less noise. When the switch is in the "O" position the engine runs at 4,500 rpm regardless of the electrical load.

NOTE

The Throttle must be "O" when using electrical devices that require a large starting current, such as a compressor, pump, or refrigenator.



Led Indicators

The LED Indicators assist in communicating proper and improper functions of the unit.

Output Indicator (Green)

The Output Indicator comes on when the engine starts and produces power.

Overload Alarm (Red)

The Overload Alarm comes on when a connected device requires more power than the generator is able to produce, the inverter control unit overheats, or the AC output voltage rises above rated values. The Output Indicator (Green) will go off and the Overload Alarm (Red) will stay on, but the engine will continue to run.

When the Overload Alarm Light comes on and power generation stops, proceed as follows:

- 1. Turn off any connected electric devices and stop the engine.
- 2. Reduce the total wattage of connected electric devices within the rated output.
- 3. Check for blockages in the cooling air inlet and around the control unit. If any blockages are found remove them.
- 4. After checking, restart the engine.

NOTE

The Overload Alarm may come on for a few seconds when first using electrical devices that require a large starting current, such as a compressor, pump, or refrigerator. This is normal behavior it is not a malfunction.

Low Oil Alarm (Red)

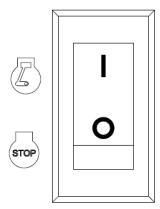
When the engine oil falls below the required level the Low Oil Alarm will come on and the engine will stop automatically. The engine will not restart until oil is added to the unit to bring it up to the appropriate level.

NOTE

When starting the unit, if the Low Oil Alarm light flickers and the engine will not start, you will need to add engine oil before attempting to restart the engine.

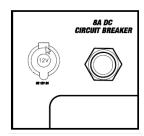
NOTE

Generator should only be operated on a level surface. DO NOT operate the generator on loose ground or obvious inclines. The low oil shutdown feature may be prematurely activated in these cases causing the engine to not start.



Engine Switch

The Engine Switch controls the ignition switch. The switch must be in the "I" position to start the generator. Switching to the "O" position stops the engine and will not allow the engine to be restarted.

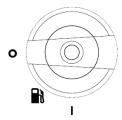


12V 8A DC Outlet

The 12V 8A DC Outlet is for provided for battery charging. Follow instructions in the owner's manual for the battery for charging procedures.

8A DC Circuit Breaker

The 8A DC Circuit Breaker turns off automatically if the current exceeds 8A. If the circuit breaker turns "O" you will need to push it "in" to turn it "I" again.

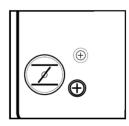


Fuel Petcock

The fuel Petcock controls the flow of gasoline from the fuel tank to the carburetor. The Petcock knob should be in the "I" position when starting and operating the generator. The Petcock knob should be in the "O" position when the engine is not running and when storing or transporting the unit.

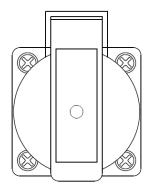
NOTE

The Fuel Petcock knob helps to prevent stale fuel from remaining in the carburetor while storing or transporting the unit. Run the fuel out by turning the knob to the "O" position and letting the engine run until it stops.



Choke

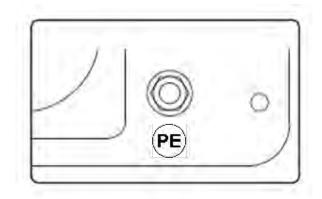
The Choke is used when starting the engine "cold" (the engine is not hot). Pull out fully on the choke when starting the engine. Once the engine has warmed and a steady idle is achieved, push in on the choke. When restarting a warm engine the choke is not necessary.



220/230/240V AC Outlets

The Outlets are used to power 220/230/240V Single Phase 50Hz loads requiring up to 1600W continuous power.

This socket is only corresponding to a client, the different laws and regulations according to the sales area changes corresponding to the socket.



Ground Terminal

The Ground (Earth) terminal is used to ground the generator when grounded electrical devices are being used. Consult an electrician for local grounding regulations.

3 GETTING STARTED

3.1 Unpack the Generator

Remove the generator from its packaging.



Packaging is flammable! Do not attempt to add fuel to this unit before removing it from packaging.

Inspect the generator to ensure that no damage has occurred in shipping or handling. If the unit appears to be damaged, DO NOT add fuel or attempt to start the generator. Please call PRAMAC costumer service.

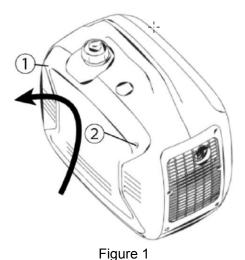
Check to ensure that you received the following items:

- P 2000i 2000W Generator
- Parallel Cables
- Oil Funnel

If you did not receive any of the above items, please contact PRAMAC costumer service.

3.2 Adding engine Oil

The generator has been shipped without engine oil. DO NOT add fuel or start the engine before adding engine oil.



NOTE

In order to add motor oil you will need to remove the side panel from the unit.

Using a #2 Phillips-head screwdriver remove screws 1 and 2 (seen in figure 1) and lift up and away to remove the side panel.

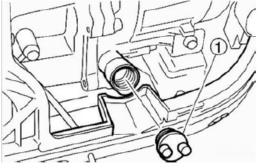


Figure 2

Place the generator on a level surface. DO NOT tilt the generator while adding oil. It can cause you to overfill the oil and/or cause the oil to leak into areas in which it is not intended.

Remove the oil filler cap 1 (seen in figure 2).

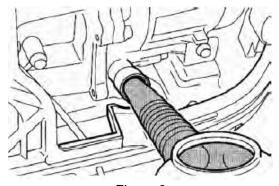


Figure 3

Using the funnel (provided) fill with 0.4 L of SAE 10W-30 or 10W-40 (provided) (see figure 3). See figure 4 for proper oil level 1.

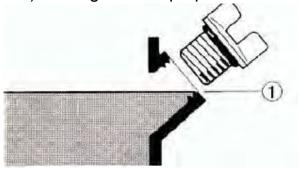


Figure 4

Replace oil filler cap and secure side panel with screws.

Recommended engine oil:

- A. YAMALUBE4(10W-40) SAE10W-30or10W-40
- B. SAE #30

- C. SAE#20
- D. SAE#10W

Recommended engine oil grade: API Service SE type or higher Engine oil quantity:

0.4L

3.3 Adding Fuel

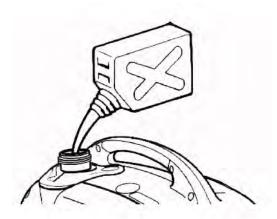
The fuel tank capacty 4.1 Liter.

DO NOT overfill the tank, otherwise it may overflow when the fuel warms up and expands.

NOTE

For safety reasons, once fuel has been added to this unit it cannot be returned to the place of purchase.

- 1. Use clean, fresh, regular unleaded fuel with a minimum octane rating of 85.
- 2. DO NOT mix oil with fuel.
- 3. Clean area around the fuel cap.
- 4. Remove the fuel cap.
- 5. Be sure that the fuel strainer is in place.
- 6. Slowly add fuel to the tank.
- 7. Do not exceed the red marker position of the fuel filter.
- 8. Screw on the fuel cap and wipe away and spilled fuel.



NOTE

Use only unleaded gasoline.

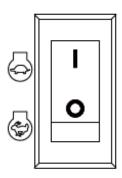
The use of leaded gasoline will cause severe damage to internal engine parts.

After filling with fuel, make sure the fuel tank cap is tightened securely.

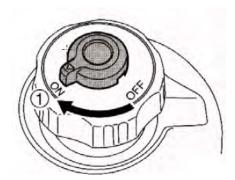
3.4 Starting the Engine

OPERATE THE ENGINE IN A WELL VENTILATED AREA.

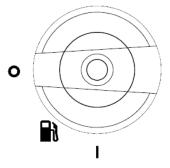
DO NOT connect any electrical devices to the outlets on the generator before starting the engine.



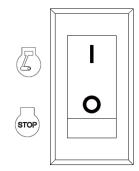
1. Turn the Economy Throttle switch "O"
You may turn the Economy Throttle switch to "I" once the engine is started and a s teady idle is achieved, (below 0°(32°F)/5mins, below 5°C(41°F)/3mins.).



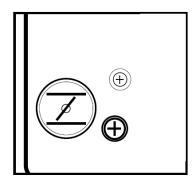
2. While holding the fuel tank cap so that it will not move, turn the air vent knob to "ON".



3. Turn the Fuel Petcock knob to the "I" position.



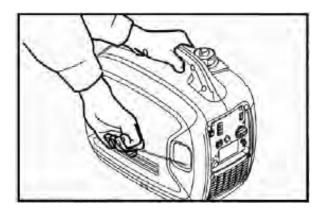
4 Turn the Engine Switch (Red) "I"



5. Pull the Choke Knob fully out.

NOTE

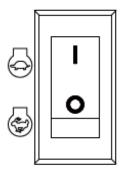
The Choke is not needed to start a warm engine. Push the knob in to the original position when starting the engine warm.



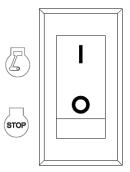
- 6. Grasp the carrying handle firmly to prevent the generator from falling over when pulling the recoil starter.
- 7. Pull slowly on the recoil starter until it is engaged and then pull it briskly.
- 8. After the engine starts, warm up the engine until the engine does not stop when the choke knob is returned the original position.

3.5 Stopping the Engine

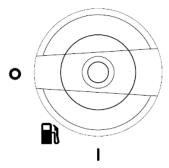
Before stopping the engine turn off and disconnect any electronic devices attached to the generator.



Turn the Throttle switch "O".



Turn the Engine switch to "O".



Turn the Fuel Petcock to "O".

4 ELECTRICAL CONNECTION

4.1 Capacity

Follow these simple steps to calculate the running and starting watts necessary for your purposes.

See Section 4.5 for Wattage Reference Guide.

- 1. Select the electrical devices you plan on running at the same time.
- 2. Total the running watts of these items. This is the amount of power you need to keep your items running.
- 3. Identify the highest starting wattage of all devices identified in step
 - a. Add this number to the number calculated in step
 - b. Surge wattage is the extra burst of power needed to start some electric driven equipment. Following the steps listed under "Power Management" will guarantee that only one device will be starting at a time.

4.2 Power Management

Use the following formula to convert voltage and amperage to watts: Volts x Amps = Watts

To prolong the life of your generator and attached devices, follow these steps to add electrical load:

- 1. Start the generator with no electrical load attached.
- 2. Allow the engine to run for several minutes to stabilize.
- Plug in and turn on the first item. It is best to attach the item with the largest load first.
- 4. Allow the engine to stabilize.
- 5. Plug in and turn on the next item.
- 6. Allow the engine to stabilize.
- 7. Repeat steps 5-6 for each additional.

4.3 Connecting Electrical Loads

1. Let the engine stabilize and warm up a few minutes after starting.

- 2. Prior to powering tools and equipment, make sure the generator's rated voltage, and amperage capacity (220/230V AC @ 7 AMPs, 12V DC @ 8 AMPs) is adequate to supply all electrical loads that the unit will power. If powering exceeds the generator's capacity, it may be necessary to group one or more of the tools and/or equipment for connection to a separate generator.
- Once the generator is running, simply connect the power cords of 220/230 volt AC powered tools and equipment into the 220/230 volt AC dual outlets and/or the power cord of a 12V DC powered tool to the DC terminals.
- 4. DO NOT connect 3-phase loads to the generator.
- 5. DO NOT connect 60Hz loads to the generator.
- 6. DO NOT overload the generator.

NOTE

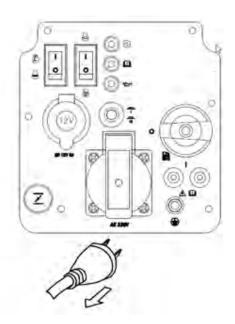
The DC terminals may be used for charging 12 volt type batteries only.

4.4 Parellel Connection within 2 generator

Performance: increase output through the parallel connection way within 2 sets of P2000i inverter generators.

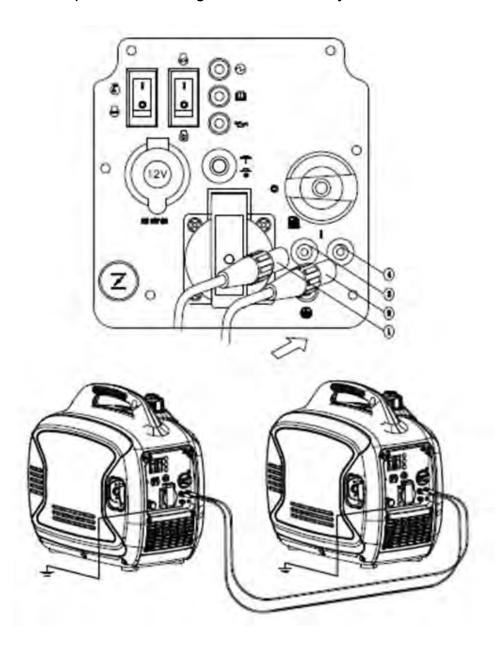
Operation Guide:

1. 2 sets of P2000i inverter generators needed Attention: generators are power off, without any loading equipments and cable sockets.

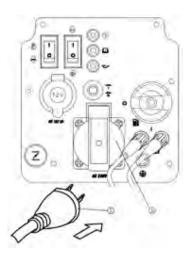


2. Put the parallel connection wire 1 and 2 into the parallel connection sockets 3 and 4.

Attention: Grounding Wire must be properly installed and worked if needed. Keep each inverter generator in steady.



- 3. Start 2 sets of inverter generators. The starting operation is as the same as normal process (refer on manual book starting parts).
 - **Attention:** Please make sure the parallel connection wires have been put into the parallel connection sockets properly. If no connecting, starting inverter generators could be damaged and no power.
- 4. Put the equipment plug 5 into socket 6, turn on the equipmentpower.



Warning:

Only 2 sets of P2000i inverter generator can be parallel connected.

More than 2 sets and above inverter generators parallel connection are not permitted.

Only use P2000i specialized parallel connecting wire.

When use parallel connecting way for P2000i inverter generators, put the plug into sockets safety.

Make use put the right plug into sockets for parallel connecting wire.

When working on parallel connecting way, don't put off the parallel connecting wire. Before starting, parallel connecting wire need to be connected firstly. Only put off the wire after inverter generator power off.

When working on parallel connecting way, No currents output when turning off one of the inverter generators.

When only operation on one inverter generator, make sure to put off the parallel connecting wire.

When two sets of inverter generators working independently, don't connect the parallel connecting wire.

Read P2000i manual book carefully before operation.

4.5 Battery Charging

Start the engine first and allow it to reach idle before connecting the generator to the battery. Battery Charging is performed using the 12V DC outlet only.

- 1. Be sure the Throttle switch is turned "O" while charging batteries.
- 2. Be sure to connect the red battery charger lead to the positive (+) battery terminal, and connect the black lead to the negative (-) battery terminal. DO NOT reverse these positions.
- 3. Connect the battery charger leads to the battery terminals securely so that they are not disconnected due do engine vibration or other disturbances.
- 4. Charge the battery by following the instructions in the owner's manual for the battery.
- 5. The DC Circuit Breaker will turn "O" automatically if the current exceeds rated output.
- 6. To restart charging the battery, turn the DC protector on by pressing its button to "I"
- 7. Refer to the owner's manual for the battery to determine charging times.

NOTE

Never start or stop the generator with electrical devices plugged in or turned on.

4.6 Wattage Reference Guide

Item	Running Watts	Starting Watts	
Essentials			
Light Bulb	100	100	
Refrigerator/Freezer	1200	2400	
Sump Pump	600	1800	
Well Pump 1HP	2000	4000	
Water Heater	4000		
Security System	180		
AM/FM Radio	300		
Garage Door Opener 1/2 HP	500	600	
Battery Charger 12V	110		
Heating	and Cooling		
Air Conditioner 12000 BTU	1700	2500	
Fan	300	600	
Furnace Fan 1/3 Hp	1200	2000	
Home	Appliances		
Microwave	1000		
Electric Range – One Element	1500		
Electric Skillet	1250		
Coffee Maker	1500		
Clothes Washer	1200		
Ente	ertainment		
CD/DVD Player	100		
Stereo Receiver	450		
Television 27"	500		
PC with 15" Monitor	800		
J	ob Site		
Belt Sander 3"	1000	1500	
Bench Grinder 6"	700	1500	
Circular Saw	1500	1500	
Compressor 1 1/2 HP	1000	1000	
Edge Trimmer	500	500	
Hand Drill 1/2"	1000	1000	
Paint Sprayer	600	1200	
Table Saw	2000	2000	

These are estimates only. Check your tool or appliance for exact wattage requirements. The wattages listed are based on estimated wattage requirements.

For exact wattages, check the data plate or owner's manual on the item you wish to power using the generator.

Operating voltage and frequency requirement of all electronic equipment should be checked prior to plugging to plugging them into this generator. Damage may result if the equipment is not designed to operate within a +/- 10% voltage variation, and +/- 3 Hz frequency variation from the generator specification ratings.

Your Power Needs

Tool or Appliance	Running Watts	Starting Watts
1.		
2.		
3.		
4.		
5.		
Total Running Watts		
	Highest Starting Watts	

Total running Watts	
+ Highest Starting Watts	

5 MAINTENANCE

5.1 Periodic Maintenance

Periodic inspection, adjustment and lubrication will keep your generator in the safest and most efficient condition possible.

			Every	
Item	Routine	Prior to use	6mos.or 100hrs.	12mos. or 300hrs.
Spark Plug	Check conditionClean and replace if necessary		•	
Fuel	 Check fuel level and leakage. 	•		
Fuel hose	 Check fuel hose for cracks or damage Replace if necessary. 	•		
Engine oil	 Check oil level in engine. 	•		
J	• Replace*		•*	
Air Filter Element	Check conditionClean		•	
Muffler Screen	Check ConditionClean or replace if necessary		•	
Spark Arrestor	Check ConditionClean or replace if necessary		•	
Fuel Filter	Check ConditionClean or replace if necessary			•

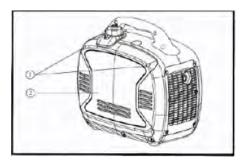
^{*} Initial replacement of the engine oil is after one month or 20 hours of operation.

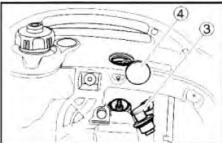
5.2 Spark Plug Maintenance

Spark plug inspection

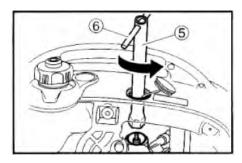
The spark plug is an important engine component and should be checked periodically.

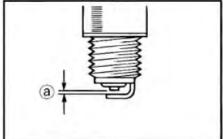
- 1. Remove the screws 1 and then remove the cover 2.
- 2. Remove the spark plug cap 3 and access cap 4.





- 3. Insert the tool **5** through the hole in the outside of the cover.
- 4. Insert the handlebar **6** into the tool **5** and turn it counterclockwise to remove the spark plug.





- 5. Check for discoloration. The carbon porcelain insulator around the center electrode of spark plug should be a Medium-to-light tan color.
- 6. Check the spark plug type and gap. The spark plug gap should be measured with a wire thickness gauge and, if necessary, adjusted to specification.

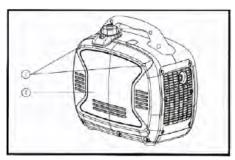
Spark Plug Type: BPR6HS (NGK)	Spark Plug Gap: 0.6-0.7 mm (0.024-0.028 in)	Spark Plug Torque: 20.0 N-m (2.0kgf m,14.8 lbf ft)
		IL <i>)</i>

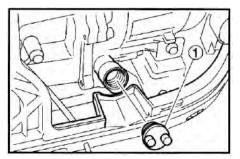
7. Install spark plug, spark plug cap, cover and screws.

5.3 Engine Oil Replacement

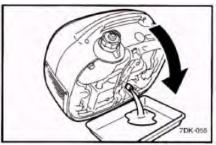
Initial replacement of the engine oil is after one month or 20 hours of operation.

- Place the generator on a level surface and warm up the engine for several minutes. Then stop the engine and turn the Fuel Petcock knob to "O" and the Fuel Tank Cap Air Vent knob to "OFF".
- 2. Remove the screws 1 and then remove the cover 2.





- 3. Remove the oil filler cap.
- 4. Place an oil pan under the engine. Tilt the generator to drain the oil completely.

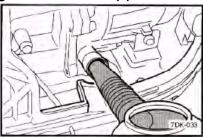


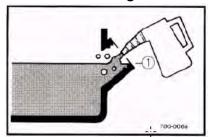
5. Return the generator to a level surface.

NOTE

DO NOT tilt the generator when adding engine oil. This could result in overfilling and damage to the engine.

6. Add engine oil to the upper level as seen in the diagram 1.





Recommended engine oil: YAMALUBE 4 (10W-40), SAE 10W-30 or MOW-40, SAE#30, SAE#20, SAE10W.

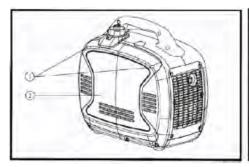
Recommended engine oil grade: API Service SE type or higher Engine oil quantity: 0.4L (0.42US qt, 0.035 lmp qt)

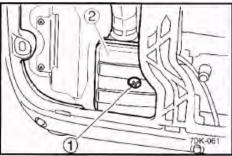
7. Install oil filler cap, cover, and screws.

5.4 Air Filter Maintenance

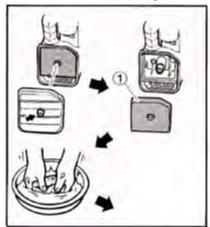
Should be performed every 6 months or 100 hours. The air filter may need to be cleaned more frequently when using in unusually wet or dusty areas.

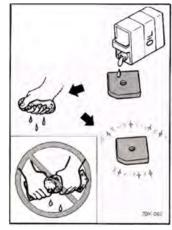
- 1. Remove the screws 1 and then remove the cover 2.
- 2. Remove the screws 2 and then remove the air filter case cover 2.





- 3. Remove the foam element ©.
- 4. Wash the foam element in solvent and dry it.
- 5. Oil the foam element and squeeze out excess oil. The foam element should be wet but not dripping.





NOTE

Do not wring out the foam element when squeezing it. This could cause it to tear.

6. Insert the foam element into the air filter case. Be sure the foam element sealing surface matches the air filter so there is no air leak.

NOTE

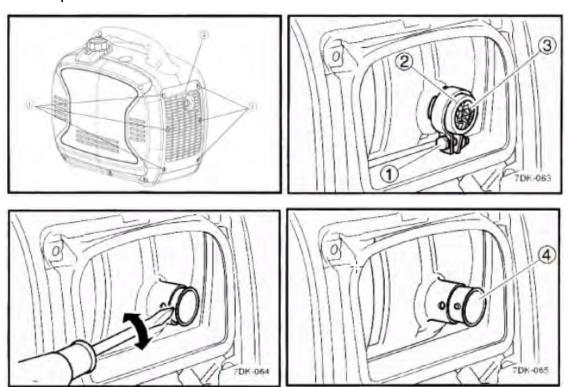
The engine should never run without the foam element.

7. Install air filter case cover, cover, and screws.

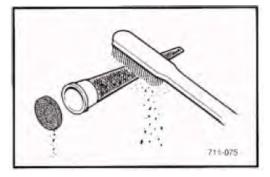
5.5 Muffler Screen and Spark Arrestor Maintenance

Should be performed every 6 months or 100 hours. The air filter may need to be cleaned more frequently when using in unusually wet or dusty areas.

- 1. Remove the screws 1 and then remove the cover 2.
- 2. Loosen the bolt 1 and the remove the muffler cap 2, the muffler screen 3 and spark arrester 4.



3. Remove the carbon deposits on the muffler screen and spark arrester using a wire brush. Use wire brush lightly to avoid damaging the muffler screen or spark arrestor.

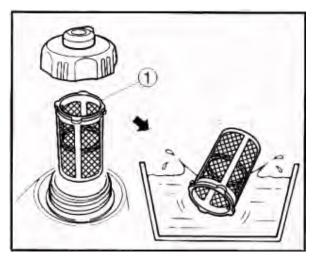


- 4. Check the muffler screen and spark arrester replace them if damaged.
- 5. Install the spark arrester.
- 6. Install the muffler cap.
- 7. Install the cover and tighten the screws.

5.6 Fuel Filter Maintenance

Should be performed every 12 months or 300 hours.

- 1. Remove the fuel tank cap and filter 1.
- 2. Clean the filter with gasoline.



- 3. If damaged, replace it.
- 4. Wipe the filter and install it.
- 5. Install the fuel tank cap.



A WARNING

GASOLINE IS FLAMMABLE. DO NOT perform this maintenance while smoking or near an open flame.

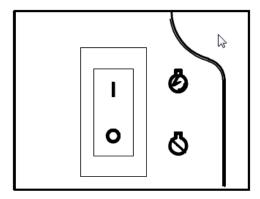
6 STORAGE

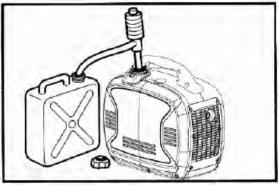
6.1 Long Term Storage

Long term storage of your machine will require some preventive procedures to guard against deterioration.

Drain the fuel

- 1. Turn the Engine switch to "O" 1.
- 2. Remove the fuel tank cap. Extract the fuel tank into an approved gasoline container using a commercially available hand siphon. Then, install the fuel tank cap.





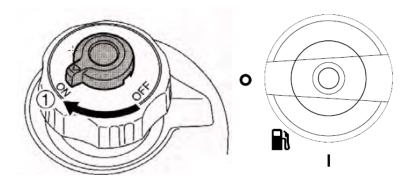
A WARNING

GASOLINE IS FLAMMABLE. DO NOT perform this maintenance while smoking or near an open flame.

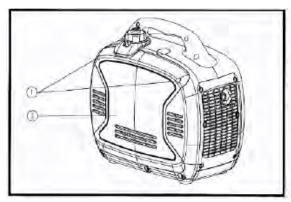
A WARNING

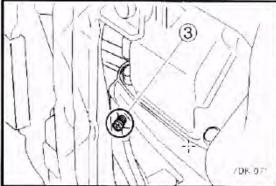
Immediately wipe off spilled fuel with a clean, dry, soft cloth, since fuel may deteriorate painted surfaces or plastic parts..

- 3. Turn the Engine switch to "I".
- Turn the fuel tank cap air vent knob to "ON" and Fuel Petcock knob to "I"
 1.
- 5. Start the engine and let it run until it stops. Duration of the running engine depends on the amount of the fuel left in the tank.



- 6. Remove the screws 1, and then remove the cover 2.
- 7. Drain the fuel from the carburetor by loosening the drain screw **3** on the carburetor float chamber.





- 8. Turn the Engine switch to "O"
- 9. Turn the fuel cock knob to "O"
- 10. Tighten the drain screw.
- 11. Install the cover and tighten the screws.
- 12. Turn the fuel tank cap air vent knob to "OFF"
- 13. Store the generator in a dry, well-ventilated place, with the cover placed over it.

Engine

Perform the following steps to protect the cylinder, piston ring, etc. from corrosion.

- Remove the spark plug, pour about one table-spoon of SAE 10W-30 or 20W-40 motor oil into the spark plug hole and reinstall the speak plug. Recoil start the engine by turning over several times (with ignition off) to coat the cylinder walls with oil.
- 2. Pull the recoil starter until you feel compression. Then stop pulling, (this prevents the cylinder and valves from rusting).
- 3. Clean exterior of the generator and apply a rust inhibitor.
- 4. Store the generator in a dry, well-ventilated place, with the cover placed over it.
- 5. The generator must remain in a vertical position when stored, carried, or operated.

E Check engine oil level

G Level low

Add engine oil

F OK

Consult a dealer

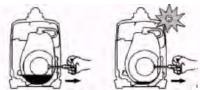
7 TROUBLESHOOTING AND SPECIFICATIONS

7.1 Troubleshooting Diagram

A ENGINE DOES NOT START



B Turn the engine switch to "ON", then pull the recoil starter and c heck if the oil warning light flickers



C Does not flicker

D Flicker



H Pull the recoil starter and check the spark plug for spark strength. (See "WARNING")



A WARNING

- To Prevent FIRE HAZARDS be sure fuel is not present in the spark plug area.
- To prevent FIRE HAZARDS be sure to place the spark plug as far way as possible from ste spark plug hole and carburetor area.
- To prevent ELECTRIC SHOCK do not hold spark plug lead with hand while testing.

I OK

J Dose not spark



SEE K to the next page



SEE N to the next page

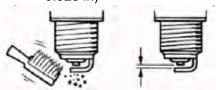


K Check the spark plug.

Type: BPR6HS

Gap: 0.6-0.7 mm (0.024-

0.028 in)



L Incorrect

Replace

adjust Gap.

M OK or Clean the spark plug.

N Check the following

Fuel line clogging

Air cleaner element clogging. Clogged

OK

0



Q Clean or Replace; Consult a

dealer.

R Consult a dealer.

7.2 **Fuel Filter Maintenance**

Use this section to troubleshoot common errors.

Engine won't start

Fuel systems: No fuel supplied to combustion chamber

- No fuel in tank supply fuel.
- Fuel in tank Fuel tank cap air vent knob to "ON" and fuel cock knob to "I".
- Clogged fuel line...clean fuel line.
- Clogged carburetor...clean carburetor.

Engine oil system insufficient

• Oil level is low...add engine oil.

Electrical systems

- Engine switch to "I" and pull the recoil starter. Poor spark
- Spark plug dirty with carbon or wet... Remove carbon or wipe spark plug dry.
- Faulty ignition system...Consult a service center.

Generator won't produce power

• Safely device (DC protector) to "O" ...press the DC protector to "I"

7.3 Specifications

Engine Type	4-Stroke OHV Air Cooled Single Cylinder EPA Certified
Engine Displacement (cc)	79cc
Running Watts	1600w
Starting Watts	2000w
Rated Frequency	50Hz
Rated Voltage	230V
Rated Current	7A
Run Time	10.5hrsat1/4load
Receptacles (qty.)	(1) 230V AC; (1) 12V 8A DC
Net Weight	21 KG
Noise Level (dB)	51dB@ 1/4 Load
Fuel Type	Unleaded gasoline
Fuel Capacity (liters)	4.3
Oil Type	SAE10W-40
Start Type	Recoil
Dimensions L x W x H (in.)	530x315x490mm