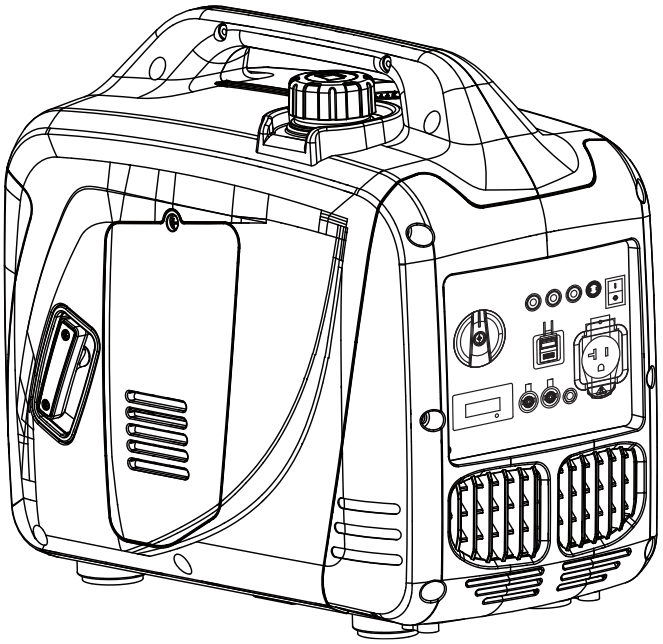
Promate®
PM2000i
Operator Manual



PORTABLE INVERTER GENERATOR

IMPORTANT – Make sure everyone who uses this equipment reads and understands the instructions as well as any additional instructions provided before using it.

Record the model and serial numbers of your Generator below:

Model No._____ Serial No._____

FOREWORD

Thank you for purchasing Promate PM2000i. This operator manual is for proper handling, minor checking and maintenance of the PM2000i. Before using your generator: Please read these instructions completely and carefully in order to operate it safely and make the best use of it. Due to constant efforts to improve our products, certain procedures and specifications are subject to change without notice, if you have any questions, please contact Promate Service.

Contents

1. SAFETY PRECAUTIONS

This manual provides safety information for Promate PM2000i, including preparation, operation, and maintenance instructions. Before running this generator, please read and observe all warnings and instructions that are provided both on the generator labels and in this instruction manual. Failure to follow the guidelines below may cause personal injury.

The terms **DANGER**, **WARNING**, **CAUTION**, and **NOTICE** are used throughout this manual to highlight important information. Make sure that everyone who operates, maintains, or is around the generator understands the meaning of this safety information.

This safety alert symbol appears with most safety statements. It means attention, be aware, alert, your safety is involved! Please read and abide by the message that follows the safety alerts symbol.

⚠WARNING

EXHAUST PRECAUTIONS

- Never inhale exhaust gasses. They contain carbon monoxide, a colorless, odorless and extremely dangerous gas which can cause loss of consciousness or death.
- Never operate the generator indoor or in a poorly ventilated area, such as tunnel, cave, etc. Practice extreme care when operating the generator near people or animals. Keep the exhaust pipe free of unwanted objects.

⚠WARNING

REFUELING PRECAUTIONS

- Refueling should be done outside or in a well-ventilated area. Before refilling, turn off the generator. DO NOT overfill the tank. If fuel is spilled, wipe it off before starting the engine.

⚠WARNING

WHEN CHARGING THE BATTERY

- Battery electrolyte contains sulfuric acid which is a harmful chemical. Be careful with your eyes, skin and clothing. In case of any contact especially in the eyes, wash thoroughly with water and get prompt medical attention.
- Charge the battery in a fully ventilated area.
- Check the polarity of the battery

OTHER SAFETY PRECAUTIONS

Be careful of hot parts.

The muffler and the engine parts become very hot while the engine is running or just after use. Operate the engine in a safe area and keep children away while the engine is in use.

Where to use the generator

DO NOT use near flammables. Use it at least 1 meter away from building structures or any fire hazards.

When using the generator

DO NOT tip or move.

DO NOT cover it with a box or fence it off.

DO NOT unscrew the dipstick; oil splatter can cause scalding. Avoid touching the generator in the rain or with wet hands.

To prevent electric shock, ground the generator from the grounding terminal.

Avoid using generators on soft ground/sand/gravel.

Never connect the generator to the wiring of your provider.

2. CONTROLS AND FEATURES

Read this owner's manual before operating your generator. Familiarize yourself with the location and function of the controls and features. Save this manual for future reference.

Generator

PM2000i

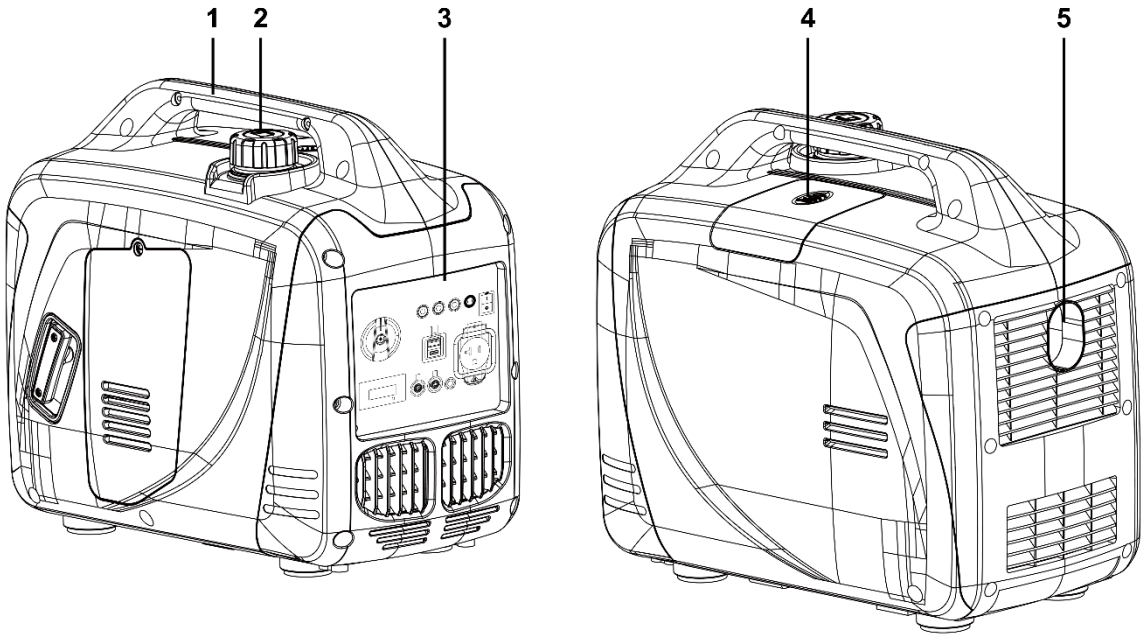
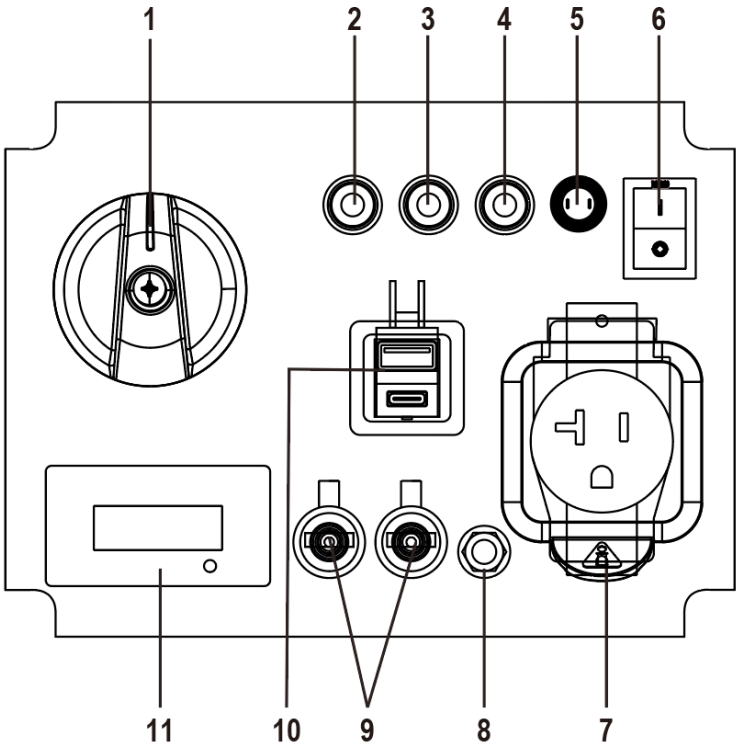


Diagram 1. Generator Parts

1	Handle
2	Fuel Cap
3	Control Panel
4	Spark Plug
5	Muffler/ Spark Arrester
6	Recoil Starter
7	Maintenance Cover
8	Support Leg

2.1 Control Panel Features



1 Multi-Function Rotary Button

2 Output Indicator

3 Overload Indicator

4 Oil Warning Indicator (RED)

5 Reset Button

6 Eco Mode Button

7 AC 230V- 20A

8 Grounding Terminal

9 Parallel Operation Outlet

10 5V USB/ Type C

11 3 in 1 LCD Multi-meter

Diagram 2. Control Panel Features

2.2 3 in 1 LCD Multi-meter Function

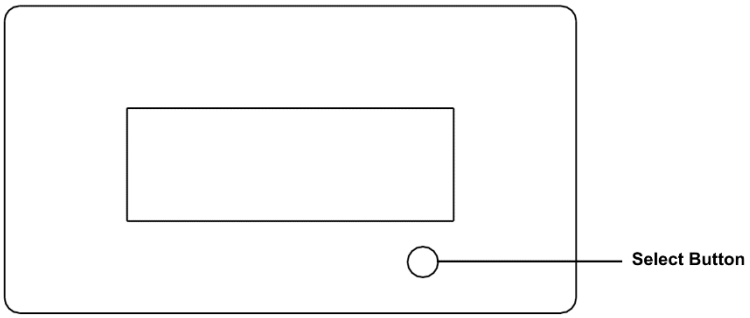


Diagram 3. Display Function

Push the SELECT button to display the **Hertz Icon, Volts Icon,** and **Running Time**

3. SPECIFICATIONS

Table 1. General Specifications

Model	PM2000i
Surge Power	2000W
Rated Power	1600W
Rated AC Voltage	230V
Rated DC Voltage	5V (USB & TYPE-C)
Rated Frequency	60Hz
Phase	Single
Grounding System (AC)	Neutral Floating
Engine Type	Single Cylinder, 4-Stroke OHV Air Cooled
Engine Displacement	80cc
Starting System	Recoil
Low Oil Shutdown	Yes
Oil Type	10W-30
Oil Capacity	0.35L
Spark Plug OEM Type	LG-A5RTC
Valve Exhaust Clearance	0.028~0.031inch (0.7~0.8mm)
Voltage Regulation System	Inverter
Total Harmonic Distortion (THD)	<3 %
Fuel Tank Capacity	3.0L
Fuel Type	Gasoline
Maximum Ambient Temperature	104°F (40°C)
Box Dimensions	510*335*495 mm
Net Weight	15.5 kg

⚠NOTICE

The Promate PM2000i is designed and rated for continuous operation at ambient temperatures of up to 40°C. If needed, this product can be operated at temperatures ranging from 15°C - 50°C for short periods. If the product is exposed to temperatures outside of this range during storage, it should be brought back within this range before operation. Promate PM2000i must always be operated outdoors, in a well-ventilated area, and far away from open doors, windows, and other vents.

Fuel BTU content, ambient temperature, altitude, engine conditions, and other factors have an impact on the maximum wattage and current levels. Maximum power drops by around 3.5% for every 1,000 feet above sea level, as well as 1% for every 6°C above 16°C ambient temperature.

4. BEFORE STARTING

4.1 Adding Engine Oil

PM2000i is equipped with low oil warning preventing the generator from starting in case of low oil level. However, it is recommended to check the oil level before each use.

We recommend using SAE 10W-30 APISJ oil for best performance. Other high-quality detergent oils (APISJ or higher) are acceptable. DO NOT use special additives. Ambient temperature determines the proper oil viscosity for this engine. Use the chart to select the proper oil for the outdoor temperature range expected.

⚠NOTICE

Do not try to crank or start the engine unless it has been correctly filled with the recommended type and amount of oil. Damage caused by operating without oil will void your warranty.

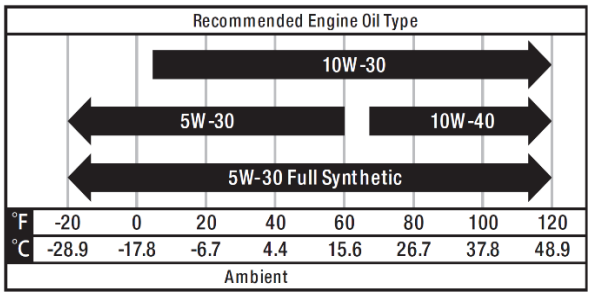


Diagram 4. Recommended Engine Oil Type

4.2 Adding Oil Procedure

1. Place the generator on a flat, level surface.
2. Loosen the bolts and remove the maintenance cover (**Diagram 5**).

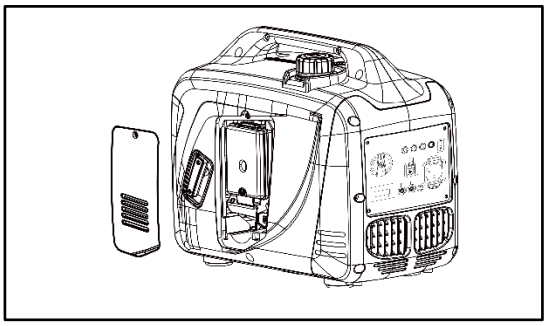


Diagram 5. Removing the Maintenance Cover

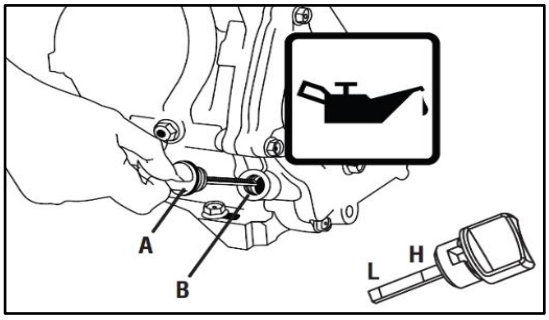


Diagram 6. Adding Oil Procedure

Promate PM2000i is equipped with low oil shut-off and will stop when the oil level in the crankcase falls below the threshold level.

3. Wipe the area around the oil fill and remove the yellow oil fill cap/dipstick (**A**).
4. Clean the dipstick.
5. Using the oil funnel, slowly pour oil into the oil filler neck (**B**) up to the "**H**" mark on dipstick. Be careful not to overfill. Overfilling the oil tank may cause the engine to start slowly.
6. Fully tighten the oil fill cap/dipstick (**A**).
7. Oil level should be checked prior to each use or at least every 8 hours of operation. Keep the oil level maintained.

⚠NOTICE

We consider the first 5 hours of runtime to be the unit's break-in period. During the break-in period, keep the load at or below 50% of the running watt rating and change it occasionally to allow the stator windings to heat and cool. Adjusting the load will also cause the engine speed to change, allowing piston rings to seat more effectively.

4.3 Adding Fuel

⚠DANGER

The fuel and its vapor are extremely flammable and explosive. Add fuel in a well-ventilated area. Keep sparks, open flames and other ignition sources away. Failure to do so will result in death and serious injury.

⚠DANGER

Do not overfill tank. Allow space for fuel expansion. If fuel spills wait until it evaporates before starting engine. Failure to do so will result in death and serious injury.

Fuel must meet these requirements:

- Clean, fresh, unleaded gasoline.
- Use regular UNLEADED gasoline with a minimum rating of 85 octane.
- **DO NOT** mix oil with gasoline.
- **DO NOT** change the engine to run on other fuels.

⚠NOTICE

During storage, it is important to prevent gum deposits in the fuel system components such as the carburetor, fuel hose, or tank. Alcohol-blended fuels (gasohol, ethanol, or methanol) can attract moisture, causing the separation and development of acids. Acidic gas can damage an engine's fuel system while it is stored. To avoid engine problems, drain the gasoline system before storing it for 30 days or more. See the "Long-Term Storage" section. Never use engine or carburetor cleaner in the fuel tank as it may cause permanent damage.

4.4 Grounding

⚠WARNING

Shock hazard. Failure to properly ground the generator may result in electric shock.

The generator should be connected properly to an appropriate ground to help prevent electric shock.

The generator has a system ground that connects its frame components to the ground terminals on the AC output outlets. There may be federal or state regulations, municipal statutes, or ordinances governing the generator's intended usage. Consult a qualified electrician, an electrical inspector, or the municipal authority with jurisdiction.

4.5 Connecting to a Building's Electrical System

Connections to your home's electrical system must use an appropriate transfer switch installed by an accredited electrician. The connection must separate the generator power from the utility electricity while complying with all applicable regulations and electrical principles.

5. OPERATION

Generator Location

⚠WARNING

Review each warning to prevent fire hazard.

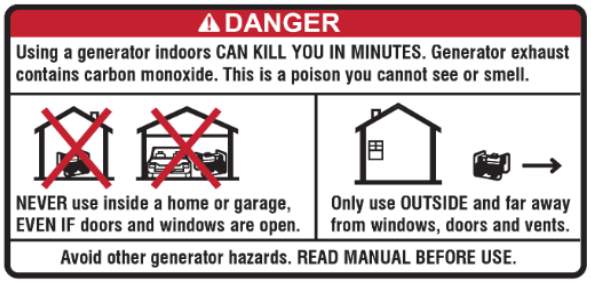


Diagram. 7 Outside Operation

⚠DANGER

Never use the generator in wet or damp locations. Never expose generator to rain, snow, water spray or standing water while in use. Protect generator from all hazardous weather conditions. Moisture, or ice can cause a short circuit or other malfunction in the electric circuit. Water contact with a power source, if not avoided, will result in death or serious injury.

- Remove any flammables or other hazardous materials.
- Choose a dry, well-ventilated, weather-protected area.
- Keep exhaust pipe clear of foreign objects.

- Keep the generator away from open flame.
- Keep the generator on a stable and leveled surface.
- DO NOT block the air vents with paper or other material.

Surge Protection

Electronic devices, such as computers and many programmable appliances, rely on components that are designed to work within a specific voltage range and are susceptible to brief voltage changes. While there is no way to avoid voltage fluctuations, you can take precautions to protect sensitive electronics.

5.1 Starting the Generator

1. Before starting the generator, check for any loose or missing parts, as well as any damage that happened during shipping and handling
2. Check the oil and fuel level and turn ON the fuel cap vent switch (**Diagram 8**).

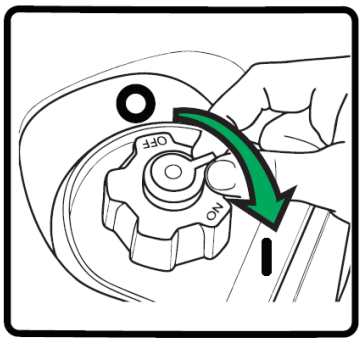


Diagram 8. Fuel Cap Vent "ON" Position

3. Disconnect all electrical loads from the generator. Never start or stop the generator with electrical devices plugged in or turned on (**Diagram 9**).

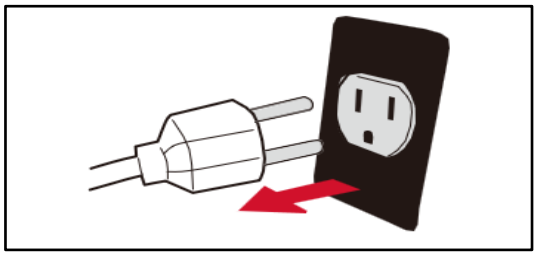


Diagram 9. Disconnecting Electrical Loads

4. Turn the Multifunction Rotary Button to "START" position (**Diagram 10**).

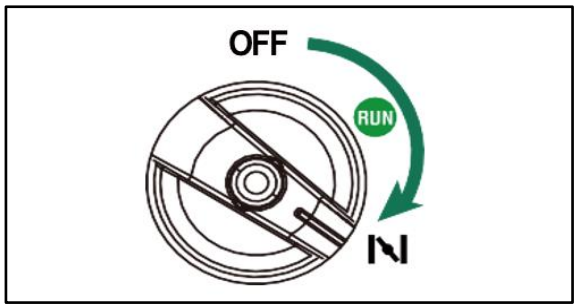


Diagram 10. Start Position

5. Pull recoil starter slowly until resistance is felt, then pull rapidly (**Diagram 11).**

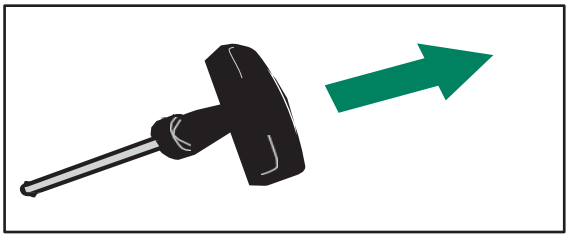


Diagram 11. Recoil Starter

6. As soon as engine starts and warm up, turn the Starting Dial Switch to the "RUN" position (**Diagram 12**).

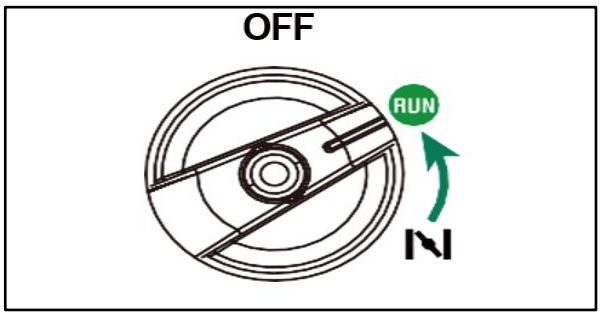


Diagram 12. Run Position

7. Allow the generator to operate at zero load for a few minutes after each initial start-up to allow the engine and generator to stabilize.

⚠NOTICE

Promate PM2000i is equipped with LOW IDLE/ECO MODE Button (**Diagram 2, No.11**). Engaging this switch allows the system to regulate the engine speed and automatically adjust its fuel consumption to match the required load. When the electrical load changes, the generator engine will automatically speed up and slow down as needed.

This reduces fuel consumption and noise levels, while extending the runtime and engine's lifespan.

⚠WARNING

Starter cord kickback (rapid retraction) will drag your hand and arm toward the engine faster than you can let go, causing broken bones, fractures, bruising, or sprains that can lead to serious injury.

When starting the engine, pull the cord slowly until resistance is felt and then pull rapidly to avoid kickback, let go after it starts and let it naturally return to the original position.

TIP:

Keep the choke lever in a "START" position for only one pull of the recoil starter. After the first pull, move the choke lever to "RUN" for the next three pulls of the recoil starter if needed. Too much choke causes spark plugs clogging and engine flooding due to a lack of air coming in. This will cause the engine to fail to start.

If the engine starts after three pulls but fails to run, or if the unit shuts down while in operation, ensure that it is on a leveled surface and check for the proper oil level. This unit may be equipped with a low oil protection device. If this is the case, the engine must have the right oil level to start.

5.2 Connecting Electrical Loads

The Promate PM2000i has undergone pre-testing and adjustment to handle its full capacity. Before starting the generator, unplug all loads. Apply load only after the generator has started. Voltage is regulated by the engine speed, which is set in the factory for proper output.

Re-adjusting will void warranty.

TIP:

When applying load, do not exceed the maximum wattage rating of the generator especially when using one or more receptacles. Also, do not exceed the amperage rating of any one receptacle.

Do not apply heavy electrical load during the break-in period (the first five hours of operations).

1. Let the engine stabilize and warm up for few minutes after starting.
2. Ensure that the circuit breaker on the control panel is turned on.
3. Plug in and turn on the desired 230V AC, single phase, 60Hz electrical loads. It is better to plug the item with the largest load first.

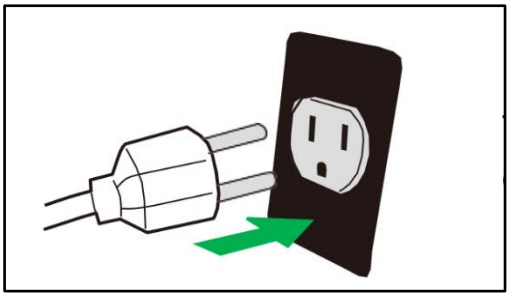


Diagram 13. Connecting Electrical Loads

5.3 Stopping the Generator

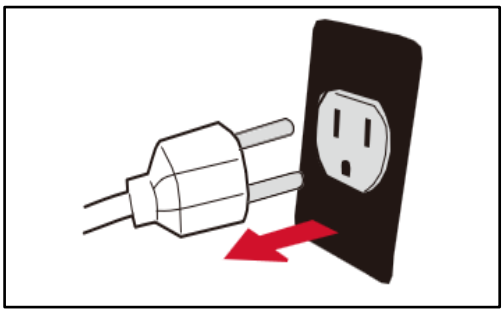


Diagram 14. Removing Electrical Loads

1. Turn off and remove any electrical loads. Never start or stop the generator while any electrical equipment is connected or turned on (**Diagram 14**).
2. Let the generator run at no-load for two minutes to stabilize the internal temperatures of both the engine and the generator.
3. Turn the multifunction switch to the stop position (**Diagram 15**).
4. Turn the fuel cap vent switch to the "**OFF**" position (**Diagram 16**).

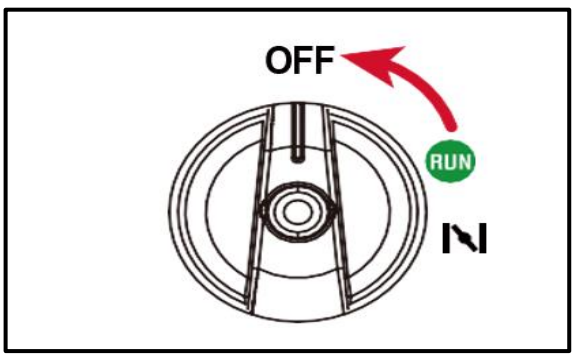


Diagram 15. Stop Position

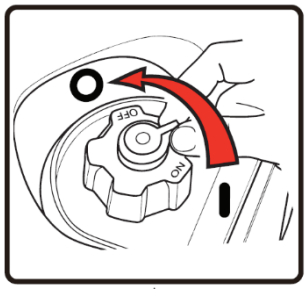


Diagram 16. Fuel Cap Vent "OFF" Position

⚠NOTICE

The fuel and its vapors are extremely flammable and explosive which could cause burns, fire or explosion resulting in death or serious injury.

DO NOT stop the engine by moving choke control to "**START**" position.

TIP:

When the engine is not in use, ensure that the fuel valve is in "OFF" position.

If the engine will not be used for a period of two weeks or longer, please see the Storage section for proper engine and fuel storage.

Low Oil Shutdown

Promate PM2000i is equipped with low oil shutdown. When the engine oil is lower than the alarm value, the generator will not start and the Oil Warning Indicator (**Diagram 2, No. 4**) will flash red if an attempt is made to start. If the oil level becomes lower than the minimum, the sensor will activate a warning device or stop the engine. If the generator shuts off and the oil level is within specifications, check to see if the unit is placed at an angle that forces oil to shift. Place it on an even surface to correct this. If the engine fails to start, there may not be enough oil to activate the low oil level switch. Make sure that the oil is filled to "H" (**Diagram 6**).

If the engine oil level drops below the threshold level, an oil switch will shut down the engine. You need to check the oil level with a dipstick.

If the oil level is between LOW and HIGH mark on dipstick but the unit shuts down (See 4.2 Adding Oil Procedure):

1. DO NOT try to restart the engine.
2. Contact Promate Service Center.
3. DO NOT operate the engine until the oil level is corrected.

If the oil level is below the LOW mark on dipstick:

1. Add the oil to bring the level to HIGH mark.
2. Restart the engine and if the engine stops again a low oil condition may still exist. DO NOT try to restart the engine.
3. Contact Promate Service.
4. DO NOT operate engine until the oil is at the right level.

⚠WARNING

DO NOT overload the generator- Overloading a generator above its rated wattage capacity may result in damage to the generator and other attached electrical devices.

TIP:

- Make sure to load your generator under the rated load.
- The load indicator is green when the load is correct.
- The load indicator flashes red and green when the generator is approaching overload. You must reduce your load immediately.
- The load indicator stays red when the generator is overloaded. You must disconnect your device and press the reset button (**Diagram 2, No. 5**) immediately.

To extend the life of your generator and connected devices, perform the following steps on adding electrical load:

1. Start the generator with no electrical load attached.
2. Allow the engine to run for several minutes to stabilize.
3. 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 item.

6. PARALLEL OPERATION

Parallel operation is a way to connect two inverter generators together in case the output needed is higher than the rated wattage of a single generator.

⚠ WARNING

Only use the parallel cables provided with the unit.

Never connect or disconnect the parallel cord leads when the generator is running. Do not parallel more than two generators. Parallelization should be limited to identical models.

⚠ NOTICE

Paralleling this generator with an incompatible one can result in low voltage output, which can harm tools and appliances powered by the generator. To avoid damaging the generator, do not connect or disconnect parallel cables while it is running. Parallel operation enables you to connect this generator to another compatible generator for combined operating and starting power output. The parallel operation cable should be disconnected while running a single generator.

⚠ NOTICE

The maximum total power of 2 units connected in parallel is 2.9kva.

TIP:
Only connect two identical (same model) generators together for parallel operation.

Set up and Operation

1. If not spaced apart, the exhaust heat from one generator discolors or melt the plastic shell of the other generator.

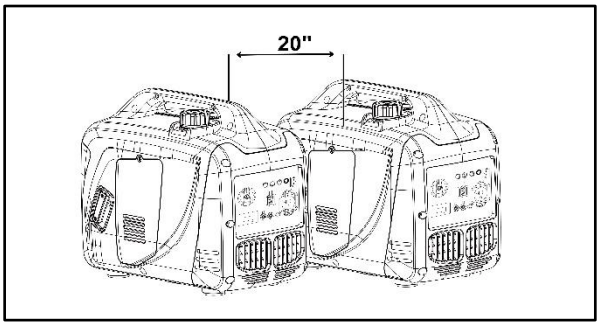


Diagram 17. Distance Guide

2. Ensure the generators are turned off and disconnected from any load before connecting the parallel wires (**Diagram 9**).

3. Put the parallel connection wires 1 and 2 into the parallel connection sockets 3 and 4 (**Diagram 18**, black to black & red to red).

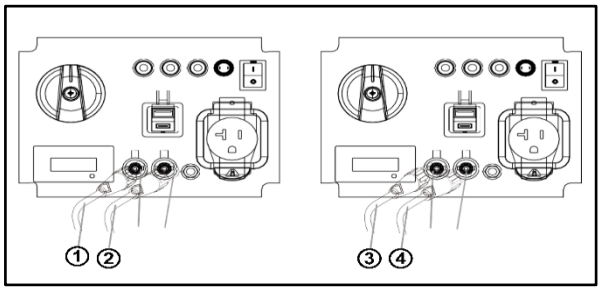


Diagram 18. Connecting Parallel Wires

⚠ NOTICE

Grounding Wire must be properly connected. See **Diagram 19** for the proper parallel connection set up.

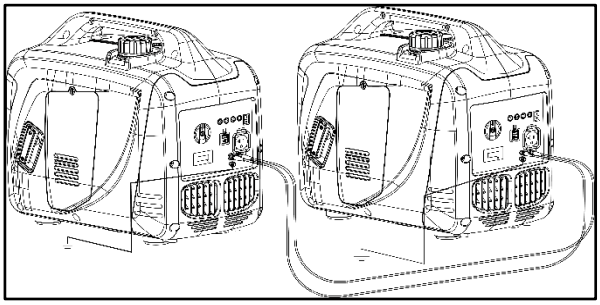


Diagram 19. Parallel Connection Set Up

4. Start 2 sets of inverter generators

⚠ NOTICE

Ensure the parallel connection wires are correctly inserted into the parallel connection sockets. Improper connection may result in damage to the inverter generator when starting.

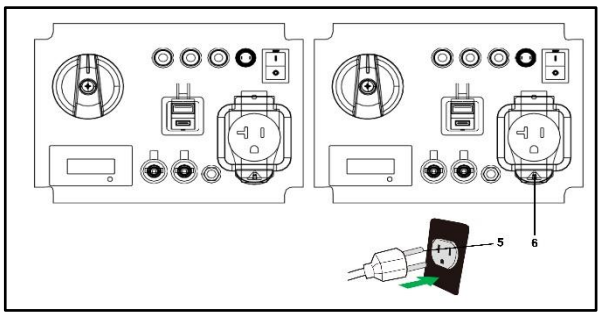


Diagram 20. Connecting Loads

5. Use only one socket (6) from one of the units. Then plug the full load into this socket (6).

TIP:

It is strongly recommended to plug in devices with the largest output first and the smallest output last to help prevent overloading the inverters.

7. MAINTENANCE AND STORAGE

Maintenance Schedule

Regular Maintenance will improve the performance and extend the life of your generator. Follow maintenance schedule intervals (whichever occurs first according to use).

TIP: Adverse conditions will require more frequent services.

Walk-Around Inspection

Before starting the engine, perform a visual inspection of the unit. Check for:

- Proper engine oil level
- Proper fuel level
- Fluid leaks
- Loose clamps and bolts
- Cracked fuel line
- Loose or frayed wiring
- Built up debris

Table 2. Preventive Maintenance Schedule

Before Each Use
Check engine oil level Walk-around inspection
First 5 Hours (Break-In)
Change engine oil
First 25 Hours or First Month
Change engine oil
Every 100 Hours or 6 Months
Change engine oil Clean Air Filter Inspect/Adjust/Replace Spark plug Inspect/Clean/Replace Spark Arrester
Every 200 Hours or 12 Months
Replace Air filter Replace Spark Plug Inspect/Adjust Valve Clearance*

** To be performed by Promate Service.*

TIP:

Maintenance should be performed more frequently when generator is used in dusty areas.

When the generator has exceeded the maximum values provided in the table, maintenance should still be performed at the same interval specified herein.

Recommendations

Regular maintenance improves the generator's performance and extends its life.

The warranty does not cover operator misuse or negligence. To fully utilize the warranty, the user must adhere by the instructions in this handbook.

To keep your generator in good working order, practice a preventive maintenance schedule. All maintenance and adjustments should be performed at least once each season. Follow the instructions on the Maintenance Schedule chart (**Table 2**).

Engine Maintenance

Before doing any service, remove and ground the spark plug wire to prevent the generator from starting accidentally.

7.1 Spark Plug Maintenance

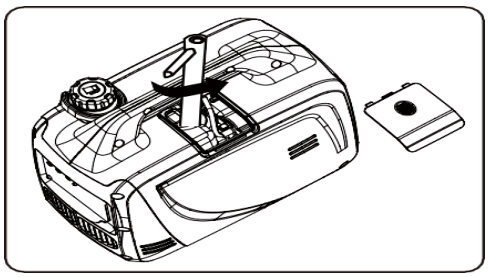


Diagram 21. Spark Plug Maintenance

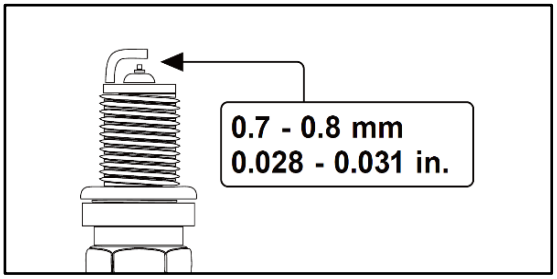


Diagram 22. Correct Spark Plug Gap

The spark plug must be properly gapped and free of deposits in order to ensure proper engine operation. To check:

1. Remove the spark plug cap.
2. Clean any dirt around the base of the spark plug.
3. Remove spark plug using the provided wrench.
4. Inspect the spark plug for any damage, and clean with a wire brush before reinstalling. If the insulator is cracked or chipped, spark plug should be replaced.
5. Measure the plug gap. The correct gap is 0.028-0.031 in. (0.7-0.8 mm). To widen the gap, carefully bend the ground (top) electrode (only if necessary). To lessen gap, gently tap the ground electrode on a hard surface (**Diagram 22**).
6. Place the spark plug in position; thread by hand to prevent cross-threading.
7. Tighten with wrench to compress the washer. If the spark plug is new, use 1/2 turn to compress the washer to the appropriate amount. If you are reusing an old spark plug, use 1/8 to 1/4 turn for proper washer compression.

⚠NOTICE

An improperly tightened spark plug will become very hot and could damage the engine.

8. Reinstall the spark plug cap.

7.2 Engine Oil Level Check

⚠CAUTION

Avoid skin contact with engine oil. Wear protective clothing and equipment. Wash any exposed skin with soap and water.

⚠NOTICE

Always use the specified engine oil. Failure to use the specified engine oil can shorten the life of the engine.

When using the generator under extreme, dirty, dusty conditions or in excessively hot weather, the oil should be changed more frequently.

The ambient temperature has an impact on the performance of engine oil. Change the type of engine oil used depending on the weather.

1. Loosen the bolts and remove the maintenance cover (**Diagram 5**).
2. Remove the oil filler cap.
3. Screw the oil funnel onto the filling neck to avoid spills.
4. Tilt the generator on its side and allow the oil to drain completely.
5. Fill the engine with oil until it reaches the HIGH (**H**) level on the oil filler cap. DO NOT OVERFILL (**Diagram 6**).
6. Reinstall the maintenance cover and tighten the cover screws.
7. Properly dispose used oil.

⚠WARNING

Risk of burns

Allow the engine to cool before draining the oil or the coolant. Failure to do so could result in death or serious injury.

7.3 Air Filter Maintenance

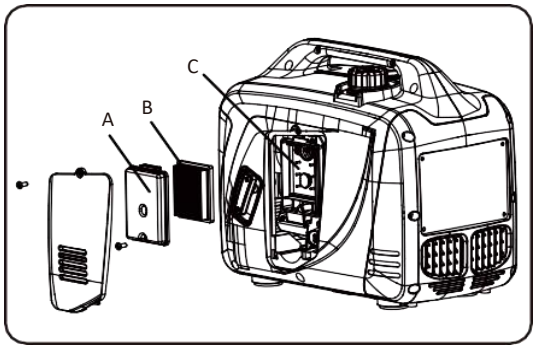


Diagram 23. Air Filter Maintenance

To ensure proper performance and longevity, keep the air filter clean:

1. Remove one bolt and take off the left cover.
2. Remove the cross bolt and take off lid (**A**).
3. Remove the filter element (**B**).
4. If the filter element is dirty, clean it with warm, soapy water. Rinse and let dry.
5. Apply a light coat of engine lubricant to the element, then squeeze it out.
6. Reinstall the element (**B**) in the air filter unit.
7. Reinstall the air filter cover (**A**).

7.4 Spark Arrestor Maintenance

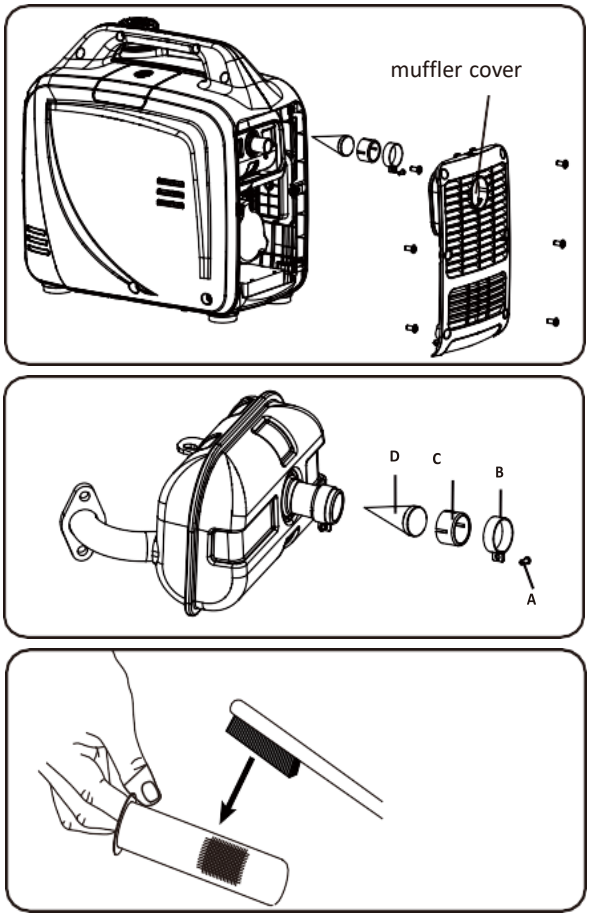


Diagram 24. Spark Arrestor Maintenance

1. Allow the engine to cool completely before servicing the spark arrestor.
2. Remove the six bolts to take off the muffler cover assembly.
3. Unscrew screw (**A**) to remove the hoop (**B**) and spark cap (**C**).
4. Remove the spark eliminator (**D**).
5. Carefully clean the carbon deposits from the spark arrestor screen using a wire brush.
6. Replace the spark arrestor if it is damaged.
7. Position the spark arrestor on the muffler and reinstall the muffler cover using the screws removed in step 2.

⚠NOTICE

Contact Promate Service to purchase replacements for your consumable parts.

7.5 Fuel Filter Maintenance

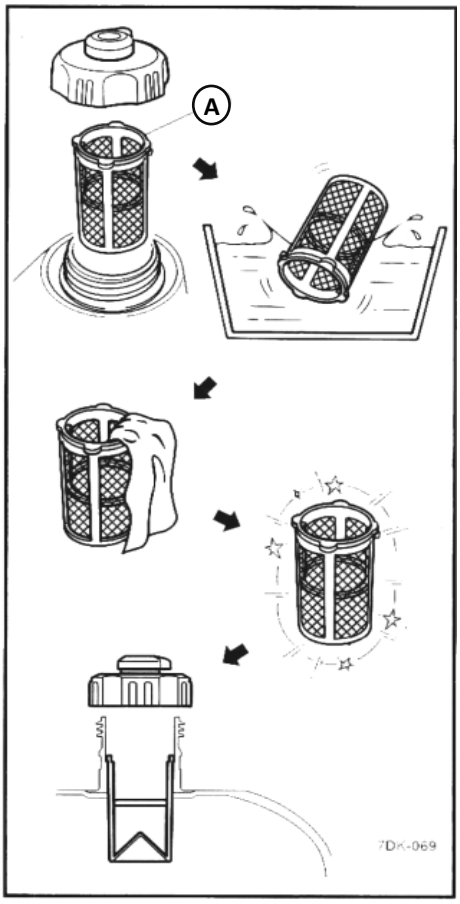


Diagram 25. Fuel Filter Maintenance

1. Remove the fuel tank cap and filter (**A**).
2. Clean the filter with gasoline.
3. If damaged, replace it.
4. Wipe the filter and install it.
5. Install the fuel tank cap.

8. CLEANING UP YOUR GENERATOR

Make sure that the generator is kept clean and stored properly. Operate the unit on a flat, level surface in a clean and dry environment.

TIP:

DO NOT use a garden hose to clean the generator. Water can enter the generator through the cooling slots which might damage the generator windings.

Use a damp cloth to clean the exterior surfaces of the generator.

Use a soft bristle brush to remove dirt and oil.

Use an air compressor with 25 PSI (172 kPa) to clean dirt and debris.

Inspect all air vents and cooling slots to ensure that they are clean and unobstructed.

8.1 STORAGE

It is recommended that you start and run the generator for 30 minutes every 30 days (See Table 2: PMS). If this is not possible, look to the following short-term and long-term storage options.

Short Term Storage

1. Clean the generator and store in a cool, dry and well-ventilated area out of direct sunlight. Shut off the fuel valve.
2. Close the valve to prevent flooding to carburetor.

Long Term Storage (over one year)

For long term storage, the gasoline must be drained from the gasoline tank and carburetor.

1. After the engine has cooled, remove all gasoline from the fuel tank with a non-conductive siphon (plastic/rubber).
2. To remove the residual gasoline in the fuel system: a) Keep the fuel valve open and run the engine until it stops due to a lack of fuel, or b) Keep the fuel valve open and drain the carburetor float bowl.
3. Change the engine oil.
4. Remove the spark plug.
5. Pour a tablespoon (5-10cc) of clean engine oil into cylinder.

Draining the Float Bowl

1. Turn the fuel tank valve to OFF position.
2. Locate the drain screw at the bottom of the carburetor float bowl.
3. Place an appropriate gasoline container under the drain screw to catch the drained fuel.
4. Loosen the float bowl drain screw and allow the fuel to drain.
5. Tighten the float bowl drain screw (not too tight to avoid damaging the screw thread).

Pull the starter recoil several times to distribute the oil into the cylinder.

1. Install the spark plug.
2. Pull the recoil slowly until resistance is felt. This close the valves so moisture cannot enter the engine cylinder. Gently release the recoil.
3. Clean the generator and store in a cool, dry and well-ventilated area out of direct sunlight.

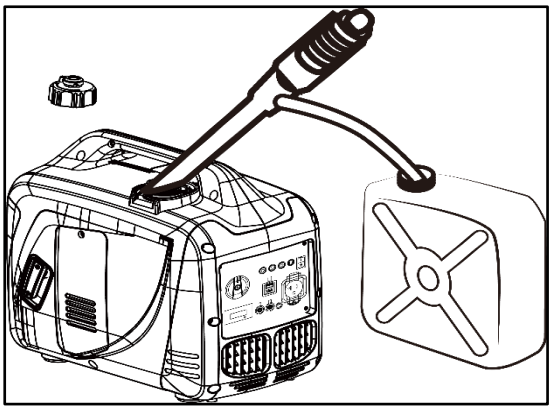


Diagram 26. Long Term Storage

⚠WARNING

Risk of fire and Explosion

Fuel and vapors are extremely flammable and explosive. Store fuel in a well-ventilated area. Keep fire and spark away. Failure to do so will result in death or serious injury.

Verify if the machine has properly cooled before covering or storing the machine. Hot surfaces could result in fire.

9. TROUBLESHOOTING

Table 3. Troubleshooting your Generator

PROBLEM	POSSIBLE CAUSE	SOLUTION
Engine is running, but no AC output is available.	1. The AC Circuit breaker is open.	1. Check the AC load and reset the circuit breaker.
	2. Fault in generator	2. Contact Promate Service
	3. Poor connection or defective cord set.	3. Check and repair
	4. The connected device is bad.	4. Connect another device that is in good condition.
	5. GFCI outlet is open (if equipped).	5. Correct ground fault and press then reset button on GFCI outlet.
Engine runs well at no-load, but "bogs down" when loads are connected.	1. Short circuit in a connected load.	1. Disconnect the shorted electrical load
	2. The engine speed is too slow.	2. Contact Promate Service.
	3. The generator is overloaded.	3. Reduce load.
	4. There is a shorted generator circuit.	4. Contact Promate Service.
	5. Clogged or dirty fuel filter.	5. Clean or replace fuel filter.
	6. The connected device is not good.	6. Connect another device that is in good condition.
Engine will not start; starts and runs rough or shuts down when running.	1. Engine switch set to OFF (O) position.	1. Set engine switch to ON (I) position.
	2. Fuel valve is in OFF (O) position.	2. Move fuel valve to ON (I) position.
	3. Low oil level	3. Fill crankcase to proper level or place generator on level surface.
	4. Dirty air filter	4. Clean or replace air cleaner.
	5. Out of fuel	5. Fill fuel tank.
	6. Stale fuel	6. Drain fuel tank and carburetor; fill with fresh fuel.
	7. Spark plug wire not connected to spark plug.	7. Connect wire to spark plug.
	8. Bad spark plug	8. Replace spark plug.
	9. Water in fuel	9. Drain gas tank and carburetor; fill with fresh fuel.
	10. Flooded	10. Wait 5 minutes and re-crank engine.
	11. Excessively rich fuel mixture.	11. Contact Promate Service.
	12. Intake valve stuck open or closed.	12. Contact Promate Service.
	13. Engine has lost compression.	13. Contact Promate Service.
	14. Clogged or dirty fuel filter.	14. Replace fuel filter.
	15. Shut off due to a system fault & blinking yellow indicator light	15. Contact Promate Service.
	16. Clogged or dirty spark arrester screen.	16. Clean or replace spark arrester screen.
Engine lacks power.	1. Load is too high.	1. Reduce load.
	2. Dirty air filter.	2. Replace air filter.
	3. Clogged or dirty fuel filter.	3. Clean or replace fuel filter.
	4. Clogged or dirty spark arrester screen.	4. Clean or replace spark arrester screen.
	5. Engine needs to be serviced.	5. Contact Promate Service.
	6. Bad fuel.	6. Drain gas tank and carburetor; fill with fresh fuel.
Engine "hunts" or falters.	1. Carburetor is running too rich or too lean.	1. Contact Promate Service.
	2. Clogged or dirty fuel filter.	2. Replace the fuel filter.
	3. Choke is opened too soon.	3. Set choke to halfway position until engine runs smoothly.
Engine shuts down when running.	1. Out of fuel.	1. Fill fuel tank.
	2. Dirty air cleaner.	2. Clean or replace air cleaner.
	3. Low oil level.	3. Fill the crankcase to proper level or place the generator on level surface.
	4. Shut off due to a system fault & blinking yellow indicator light	4. Contact Promate Service.

10. SERVICE INFORMATION

HOW TO ORDER REPLACEMENT PARTS

Even quality-built equipment such as the generator you have purchased will need occasional replacement parts to maintain its good condition over the years.

To order replacement parts and consumable parts, please contact Promate Service and be ready with the following information:

1. Model No., Serial No. and all specifications that are shown on the Model No./Serial No. plate.
2. Part number or numbers as shown in the Parts List section (**Pages 17 & 18**).
3. A brief description of the trouble with the generator.

LIMITED WARRANTY

Warranty Coverage:

Powertech Asia Pacific Inc., (the Company) warrants to the original retail customer that it will repair or replace, free of charge, any parts found by the Company or its authorized service representative to be defective in material or workmanship. This warranty covers the cost of replacement parts and labor for defects in material or workmanship.

Not Covered:

a. Shipping/Handling charges for sending the product to the Company or its authorized service representative for warranty service. Shipping/Handling repaired or replaced products back to the customer; these charges must be borne by the customer.
b. If a separate operator's manual and engine warranty from the engine manufacturer is included with this product, only that warranty will apply to the engine.
c. Damage caused by abuse, accident, the effects of corrosion, erosion and normal wear and tear.
d. Warranty is void if the customer fails to install, maintain and operate the product in accordance with the instructions and recommendations of the Company set forth in the owner's manual, or if the product is used as rental equipment.
e. The Company will not pay for repairs or adjustments to the product, or for any costs of labor performed without the Company's prior authorization.
f. Consumable parts such as battery, spark plugs, and air cleaner

Warranty Period: One (1) year from the date of purchase on products 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.

EXCLUSIONS AND LIMITATIONS: THE COMPANY MAKES NO OTHER WARRANTY OF ANY KIND, EXPRESS OR IMPLIED. IMPLIED WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY AND OF FITNESS FOR A PARTICULAR PURPOSE, ARE HEREBY DISCLAIMED. THE WARRANTY SERVICE DESCRIBED ABOVE IS THE EXCLUSIVE REMEDY UNDER THIS WARRANTY; LIABILITY FOR INCIDENTAL AND CONSEQUENTIAL DAMAGES IS EXCLUDED TO THE EXTENT PERMITTED BY LAW.

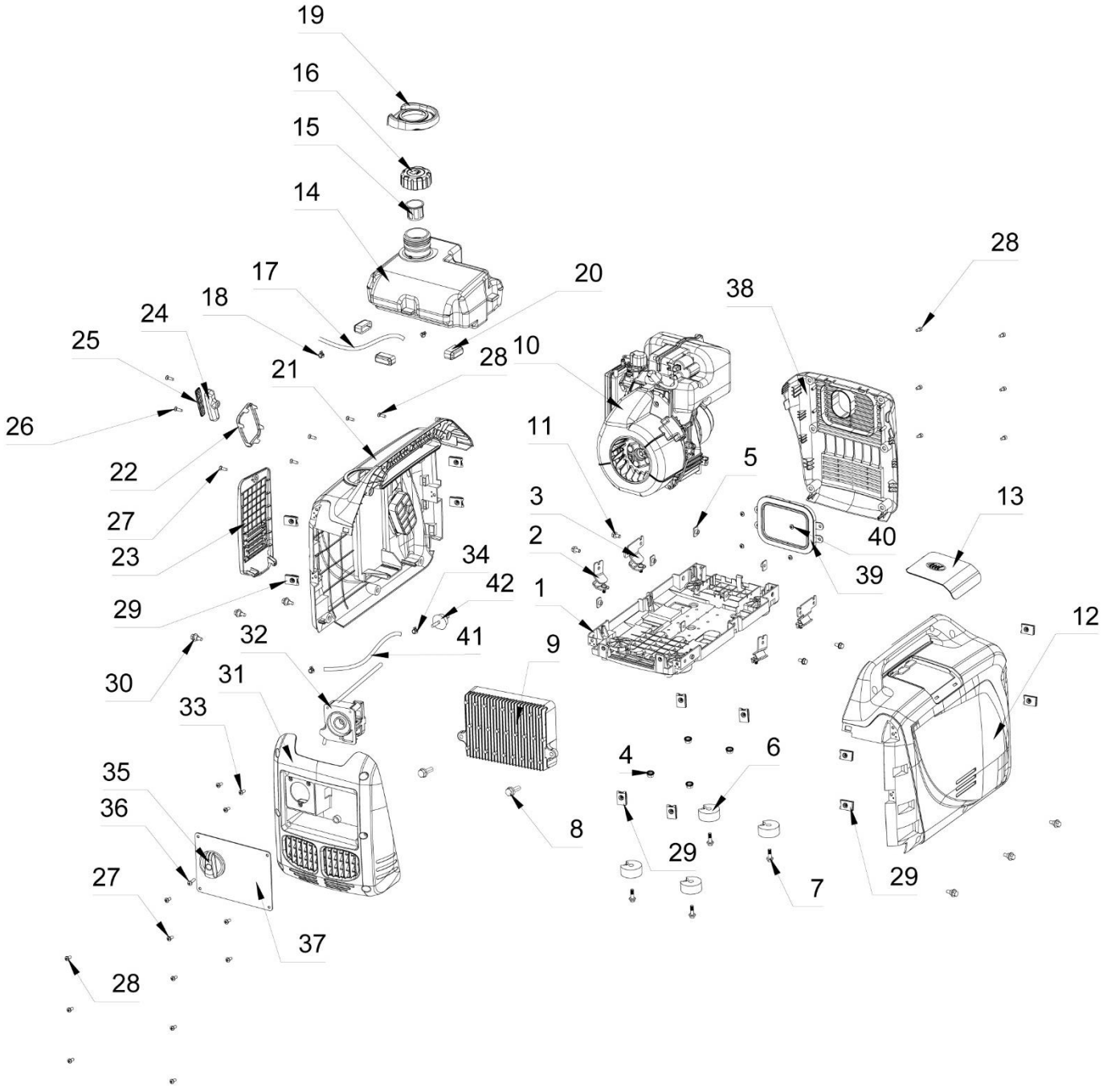
This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Some states do not allow a disclaimer of implied warranties or the exclusion or limitation of incidental and consequential damages, so the above disclaimers and exclusions may not apply

CONTACT THE POWERTECH Asia Pacific Inc.,
PRODUCT SERVICE DEPARTMENT AT (02) 8 984 2620 | (+63) 9338373922
service@powertechasiapacific.com www.facebook.com/PromateServicePH/

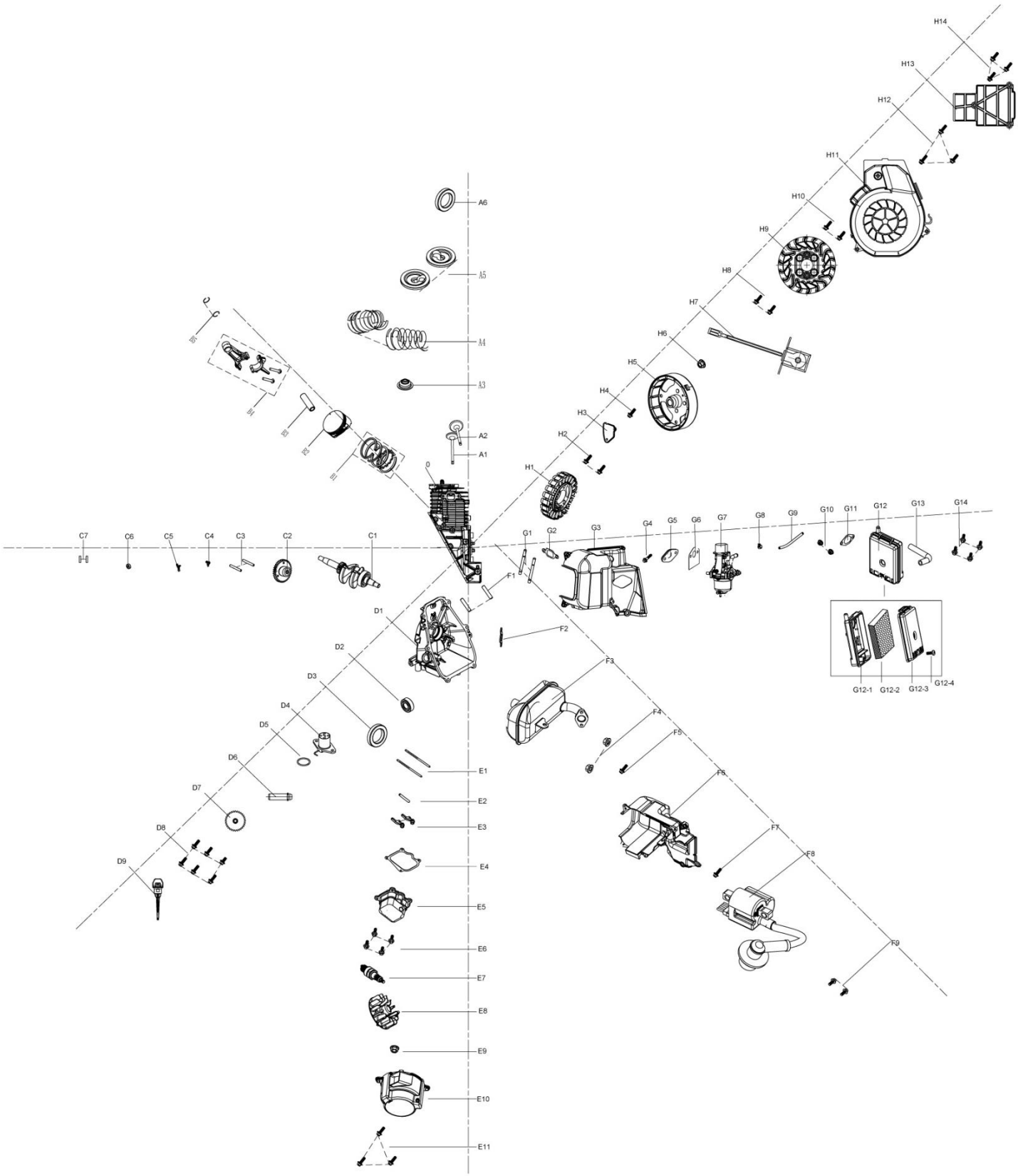
(MAIN) #420 Diamond Warehouse Compound, F Legaspi St., Maybunga Pasig City 1607
(DAVAO) Space 10 & 11 Jin-Long Complex R. Castillo St.Agdao District, Davao City 800

11.EXPLODED DIAGRAM AND PART LIST

Model: PM2000i



Engine Exploded Diagram



PART LIST

Table 5. Generator Part List

No.	Part Number	Description	Qty.
1	33089-00512-00	ENGINE BASE BOARD	1
2	34030-00230-00	SHOCK ABSORBING MOUT	2
3	34030-00231-00	SHOCK ABSORBING MOUT	2
4	30125-00002-02	HEX NUT	4
5	30132-00005-00	T-TYPE NUT	6
6	33275-00122-01	SHELL RUBBER PAD	4
7	30101-00042-01	HEX BOLT	4
8	30101-00070-00	HEX BOLT	2
9	20136-00668-02	INVERTER	1
10	20260-05552-04	ENGINE	1
11	30101-00400-00	HEX BOLT	4
12	33013-00617-00	RIGHT SHELL	1
13	33013-00619-03	SPARK PLUG COVER	1
14	20130-00642-00	FUEL TANK	1
15	34037-00001-02	FUEL STRAINER	1
16	20131-00065-00	FUEL TANK CAP	1
17	34023-00514-00	FUEL PIPE	1
18	34024-00062-00	CLIP	2
19	33015-00208-00	FUEL TANK RUBBER SLEEVE	1
20	33015-00023-00	FUEL TANK RUBBER SLEEVE	3
21	33013-00616-00	LEFT SHELL	1
22	33014-01685-00	PROTECTING RING	1
23	33013-00618-03	AIR FILTER COVER	1
24	20184-00043-00	RECOIL HANDLE	1
25	20184-00044-00	RECOIL HANDLE COVER	1
26	30117-00052-00	CROSS SCREW	2
27	30111-00008-01	CROSS SCREW	4
28	30111-00088-01	CROSS SCREW	16
29	34024-00105-00	CLIP NUT	12
30	30101-00341-02	HEX BOLT	6
31	33013-00620-00	INVERTER AIR INTAKE COVER	1
32	31026-00393-02	FUEL SWITCH ASSY	1
33	30116-00044-00	CROSS SCREW	3
34	34024-00003-00	CLIP	2
35	31026-00392-01	FUEL KNOB	1
36	30111-00044-00	CROSS SCREW	1
37	20114-09167-00	CONTROL PANEL	1
38	33013-00621-00	MUFFLER COVER	1
39	33015-00209-00	MUFFLER RUBBER SLEEVE	1
40	30150-00026-00	RETAINING RING	4
41	34023-00513-00	FUEL PIPE	1
42	34037-00275-00	FUEL FILTER	1

Table 6. Engine Part List

No.	Part No.	Description	Qty.
	20260-05552-04	ENGINE	
0	34011-00179-01	CRANKSHAFT CASE	1
A1	34013-00129-00	AIR INTAKE VALVE	1
A2	34013-00130-00	AIR EXHAUST VALVE	1
A3	34018-00019-00	INTAKE COVER	1
A4	34015-00119-00	VALVE SPRING	2
A5	34016-00112-00	VALVE SPRING MOUNT	2
A6	34007-00115-00	VALVE OIL SEAL	1
B1	20084-00086-00	PISTON RING SET	1
B2	34004-00113-00	PISTON	1
B3	34006-00148-00	PISTON PIN	1
B4	20008-00059-00	CONNECTING ROD	1
B5	30150-00117-00	PISTON PIN CLIP	2
C1	20011-00313-01	CRANKSHAFT	1
C2	20012-00055-00	CAMSHAFT	1
C3	30134-00023-00	LOWER ROCKER ARM SHAFT	2
C4	34019-00052-00	EXHAUST VALVE ROCKER ARM	1
C5	34019-00051-00	INTAKE VALVE ROCKER ARM	1
C6	34032-00117-00	LOWER ROCKER ARM BUSH	1
C7	34006-00204-00	CYLINDRICAL PIN	2
D1	33129-00099-01	CRANKCASE COVER	1
D2	30141-00112-00	DEEP GROOVE BALL BEARING	1
D3	34007-00116-00	OIL SEAL	1
D4	33247-00024-02	OIL SENSOR	1
D5	33048-00584-00	O RING	1
D6	30134-00038-00	GEAR SHAFT	1
D7	20013-00027-00	GEAR	1
D8	30101-00830-00	HEX BOLT	6
D9	20026-00064-00	DIPSTICK	1
E1	34020-00044-00	VALVE PUSH ROD	2
E2	30134-00024-00	UPPER ROCKER ARM SHAFT	1
E3	34019-00053-01	UPPER ROCKER ARM	2

No.	Part No.	Description	Qty.
E4	33048-00495-00	CYLINDER COVER GASKET	1
E5	20021-00072-00	CYLINDER COVER	1
E6	30101-00066-00	HEX BOLT	4
E7	20027-00023-00	SPARK PLUG	1
E8	33155-00161-00	FAN	1
E9	30125-00009-00	HEX NUT	1
E10	20010-00415-01	RECOIL STARTER	1
E11	30101-00068-00	HEX BOLT	3
F1	30110-00024-00	EXHAUST STUD	2
F2	33048-00706-00	EXHAUST GASKET	1
F3	20202-01082-00	MUFFLER	1
F4	30121-00038-00	HEX NUT	2
F5	30101-00401-00	HEX BOLT	1
F6	34021-00312-00	EXHAUST WIND SHIELD	1
F7	30101-00066-00	HEX BOLT	1
F8	31013-00140-01	IGNITION COIL	1
F9	30101-00342-00	HEX BOLT	2
G1	30110-00187-00	INTAKE STUD	2
G2	33048-00496-00	INTAKE GASKET	1
G3	34021-00311-00	INTAKE WIND SHIELD	1
G4	30101-00066-00	HEX BOLT	1
G5	34012-00051-00	CARBURETOR CONNECTING PAD	1
G6	33048-00497-00	CARBURETOR WASHER	1
G7	20024-00519-02	CARBURETOR	1
G8	34024-00002-00	CLIP	2
G9	34023-00004-00	FUEL PIPE	0.15
G10	30125-00002-00	HEX NUT	2
G11	33048-00042-00	AIR FILTER GASKET	1
G12	20025-00223-00	AIR FILTER ASSY	1
G12-1	70010-03748-00	AIR FILTER MOUNT	1
G12-2	70002-06561-00	AIR FILTER ELEMENT	1
G12-3	70010-03749-00	AIR FILTER COVER	1
G12-4	70010-03750-00	AIR FILTER COVER SCREW	1
G13	34023-00016-00	EXHAUST PIPE	1
G14	30117-00001-00	CROSS SCREW	4

No.	Part No.	Description	Qty.
H1	20005-00396-00	STATOR	1
H2	30101-00530-00	HEX BOLT	2
H3	33593-00421-00	WIRE BOARD	1
H4	30101-00066-00	HEX BOLT	1
H5	20006-00175-00	ROTOR	1
H6	30125-00009-00	HEX NUT	1
H7	20028-00137-00	TRIGGER	1
H8	30101-00070-00	HEX BOLT	2
H9	33099-00251-00	IMPELLER	1
H10	30101-00070-00	HEX BOLT	2
H11	34021-00310-00	WIND SHIELD	1
H12	30101-00068-00	HEX BOLT	3
H13	34021-00319-00	LOWER WIND SHIELD	1
H14	30101-00070-00	HEX BOLT	3