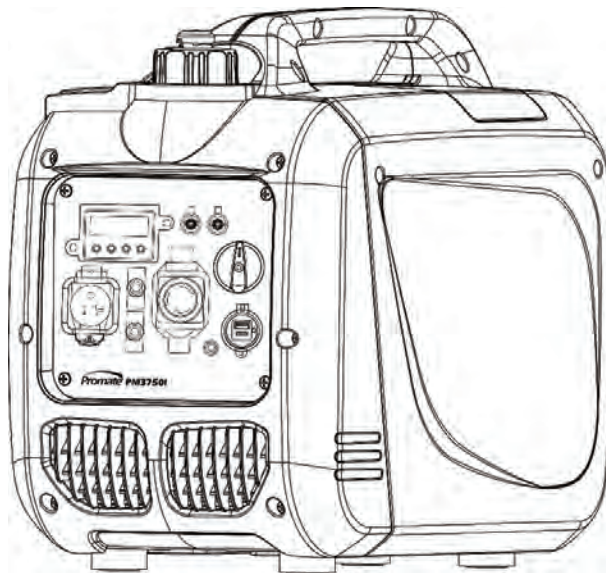


Promate[®]

PM3750i

Operator Manual



PORTABLE INVERTER GENERATOR

IMPORTANT – Please make sure everyone who will be using this equipment reads and understands these 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 PM3750i. This operator manual is for proper handling, minor checking and maintenance of the PM3750i. 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.

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1. SAFETY PRECAUTIONS

This manual provides safety information for Promate PM3750i, 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, become 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 unconsciousness 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 away carefully before starting the engine.

⚠ WARNING

WHEN CHARGING THE BATTERY

- Battery electrolyte contains sulfuric acid which is a harmful chemical. Be careful of 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 other 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 buildings or any other facilities.

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 touch with wet hands.

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

Avoid using generators on soft ground.

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

PM3750i

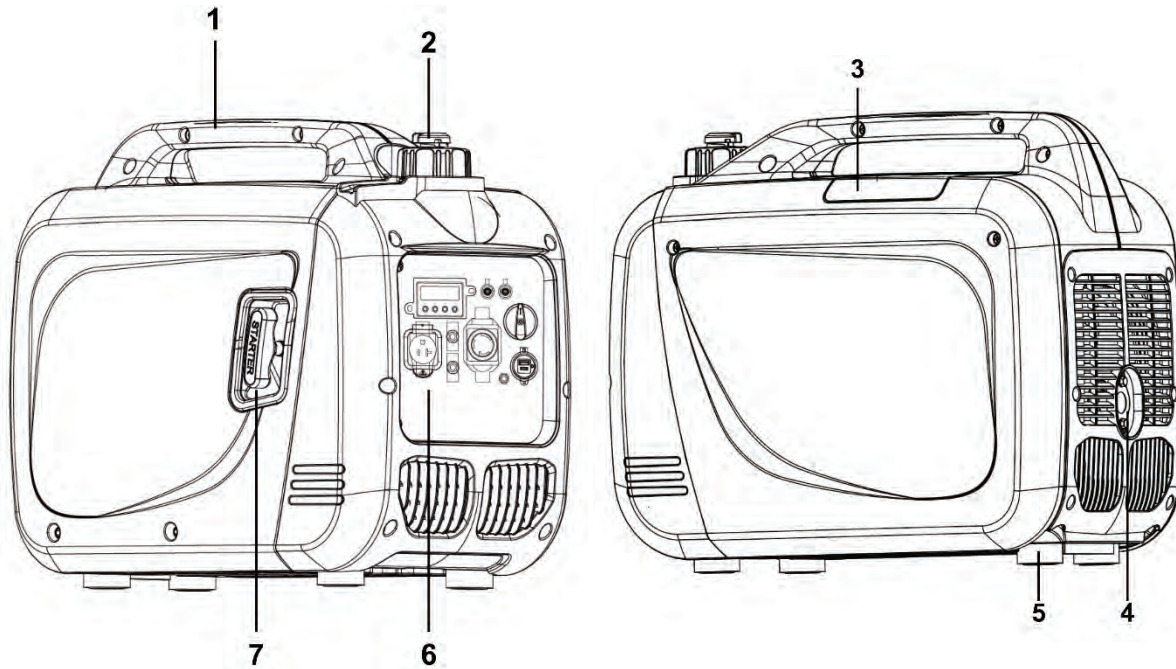
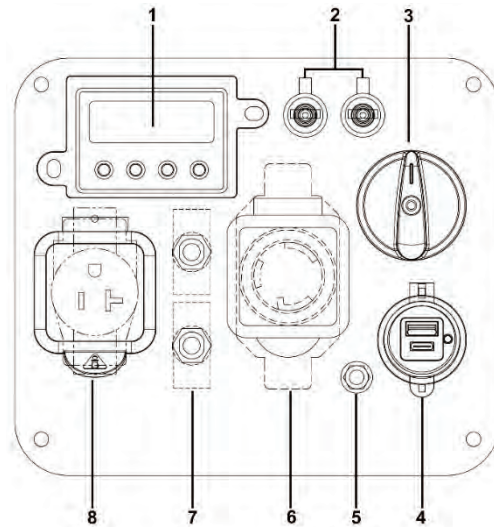


Diagram 1. Generator Parts

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

2.1 Control Panel Features



- 1 LCD Multi-meter
- 2 Parallel Operation Outlet
- 3 Multi-Function Rotary Button
- 4 5V USB/ Type C
- 5 Grounding Terminal
- 6 AC 230V- 30A Twistlock
- 7 AC Circuit Protector
- 8 AC 230V- 20A

Diagram 2. Control Panel Features

2.2 LCD Multi-meter Function

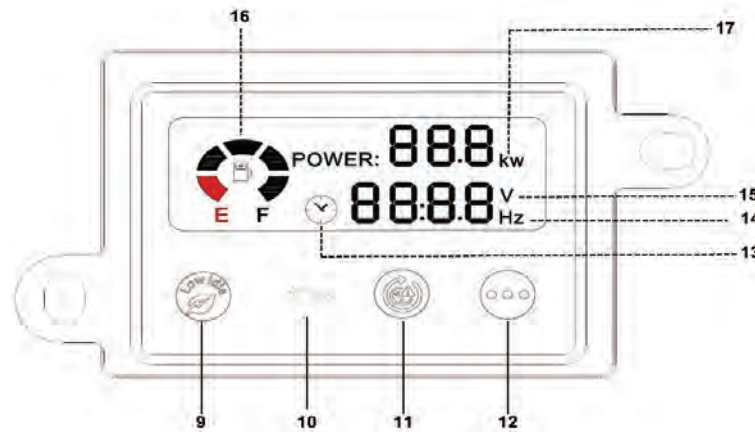


Diagram 3. Display Function

9 Low Idle/Eco mode Button

When the generator is in energy-saving mode, this button lights up. When you turn off the energy-saving mode, the light will turn off.

10 Oil warning indicator (RED)

When the engine oil level is lower than the alarm value, the generator will not start and the alarm light will flash if an attempt is made to start.

If the generator runs low on oil, the indicator will blink red.

11 Overload Indicator and Reset Button

When the load exceeds the generator's overload value, this button flashes, and the output is automatically turned off. This button stays lit in a constant red.

When the generator is overloaded, the output is turned off. You must press this button to lower the output.

12 Displays the Toggle Button

Press this button to display the following information in sequence:



13 Running Time

This icon shows running time.

14 Hertz Icon **HZ**

This icon shows frequency.

15 Volts Icon **V**

This icon shows voltage.

Fuel Gauge

16 This icon indicates the amount of fuel in the fuel tank.

17 Power **kw**

This icon shows the current output load.

3. SPECIFICATIONS

Table 1. General Specifications

Model	PM3750i
Surge Power	3750W
Rated Power	3000W
Rated AC Voltage	230V
Rated DC Voltage	5V
Rated Frequency	60Hz
Phase	Single
Grounding System (AC)	Neutral Floating
Engine Type	Single Cylinder, 4-Stroke OHV Air Cooled
Engine Displacement	149cc
Starting System	Recoil
Low Oil Shutdown	Yes
Oil Type	10W-30
Oil Capacity	0.48L
Spark Plug OEM Type	LG-A5RTC
Valve Exhaust Clearance	0.006~0.008inch (0.15~0.2mm)
Voltage Regulation System	AVR
Alternator Excitement System	Brushed
Total Harmonic Distortion (THD)	Standard
Fuel Tank Capacity	4.2L
Fuel Type	Gasoline
Maximum Ambient Temperature	104°F (40°C)
Battery Spec	NA
Box Dimensions	560*365*495 mm
Net Weight	23 kg

⚠ NOTICE

The Promate PM3750i 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 PM3750i must always be operated outdoors, in a well-ventilated area, and far away from 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

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.

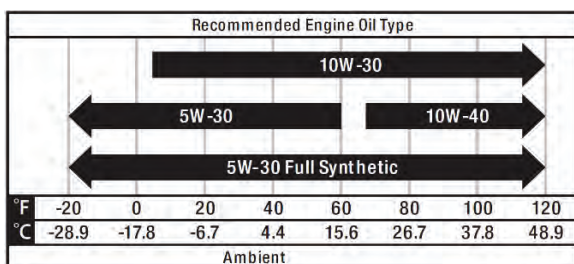


Diagram 4. Recommended Engine Oil Type

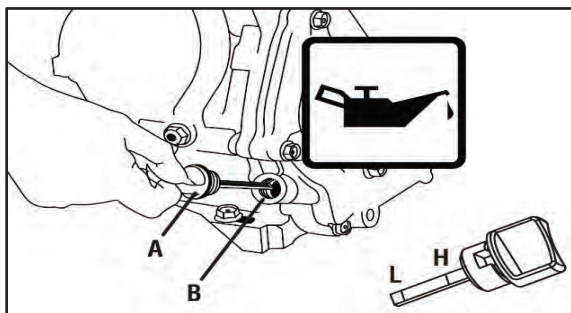


Diagram 5. Adding Oil Procedure

Promate PM3750i is equipped with low oil shut-off and will stop when the oil level in the crankcase falls below the threshold level.

4.2 Adding Oil Procedure (Diagram 5)

1. Place the generator on a flat, level surface.
2. Wipe the area around the oil fill and remove the yellow oil fill cap/dipstick (**A**).
3. Clean the dipstick.
4. 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.
5. Fully tighten the oil fill cap/dipstick (**A**).
6. 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 87 octane / 87 AKI (91 RON). **DO NOT** use E85 or E15.
- For high altitude use, see "Operation at High Altitude".
- **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 Operation at High Altitude

At altitudes over 5,000 feet (1524 meters), a minimum of 85 octane gasoline is acceptable. Engine power and generator output drops at approximately 3.5% for every 1000 feet (305 m) of elevation above sea level. High altitude can lead to problems starting, increased consumption of fuel, and spark plug blockage. To operate at high altitudes, a high-altitude carburetor main jet is required. Contact Promate Service to acquire the alternate main jet and installation instructions.

⚠ NOTICE

Using an alternative main jet at elevations below the specified minimum altitude can cause engine damage. To operate at lower elevations, the supplied standard main jet must be utilized.

Operating the engine with the wrong main jet may result in increased exhaust emissions, fuel consumption, and reduced performance.

4.5 Grounding

⚠ WARNING

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

The national electrical requires the generator to 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.

4.6 Connecting to a Building's Electrical System

Connections to your home's electrical system must use an authorized 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. 6 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.

Install UL1449, CSA-listed, plug-in surge suppressors on the outlets feeding your sensitive equipment.

Surge suppressors come with a single or multiple outlet configuration. They are intended to defend against almost all short-term voltage changes.

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 damage.
2. Check the oil level and turn ON the fuel cap vent switch.
3. Disconnect all electrical loads from the generator. Never start or stop the generator with electrical devices plugged in or turned on (Diagram 7).

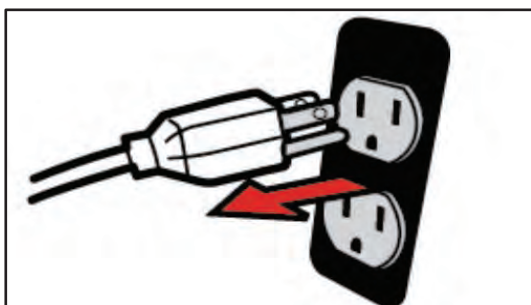


Diagram 7. Disconnecting Electrical Loads

4. Turn the Starting Dial Switch to the “START” position (Diagram 8).

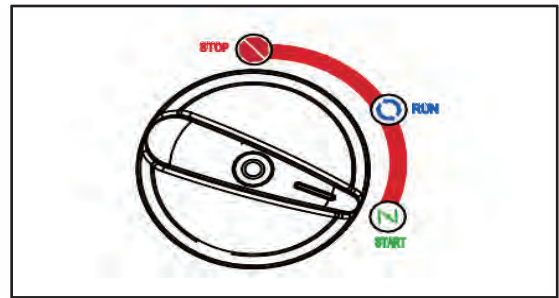


Diagram 8. Start Position

5. Pull recoil starter slowly until resistance is felt, then pull rapidly (Diagram 9).

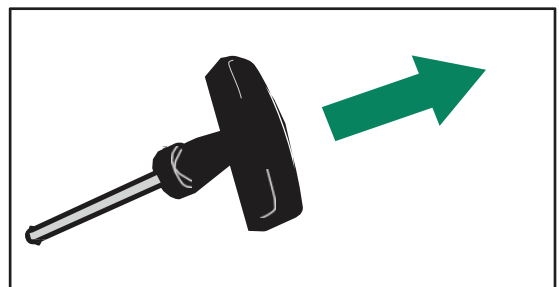


Diagram 9. Recoil Starter

6. As soon as engine starts and warm up, turn the Starting Dial Switch to the “RUN” position (Diagram 10).

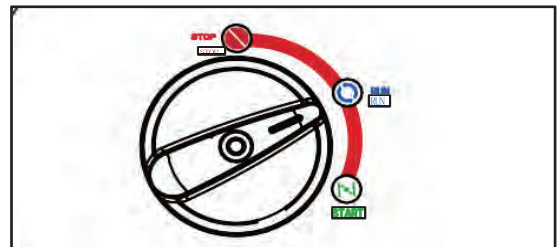


Diagram 10. Run Position

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.

Promate PM3750i is equipped with LOW IDLE/ECO MODE Button (Diagram 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

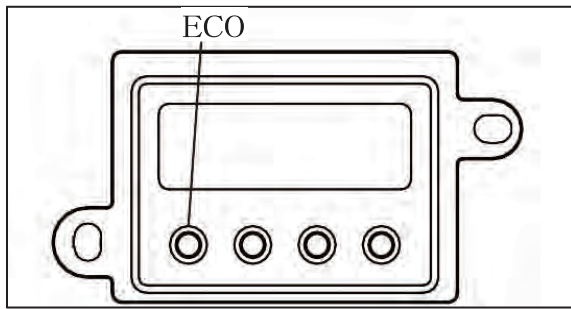


Diagram 11. Low Idle/Eco mode Button

⚠ 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 naturally returns 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. 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 PM3750i 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 at 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 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 control panel is in on position.
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.

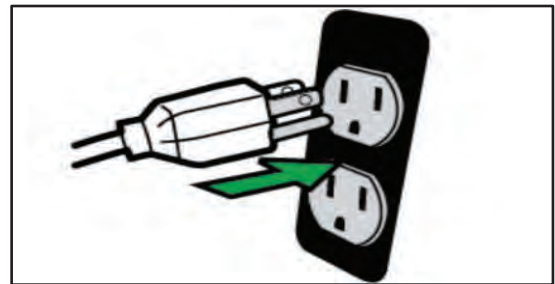
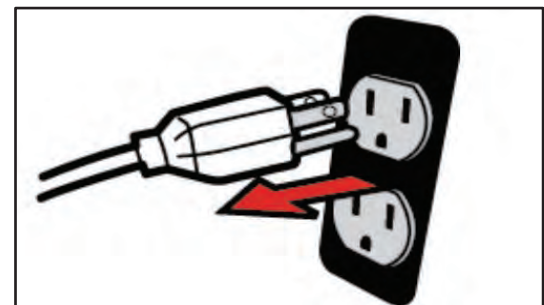


Diagram 12. Connecting Electrical Loads

5.3 Stopping the Generator



1. Turn off and remove any electrical loads. Never start or stop the generator while any electrical equipment is connected or turned on.
2. Let the generator run at no-load for two minutes to stabilize the internal temperatures of both the engine and the generator (Diagram 8).
3. Turn the multifunction switch to the "stop" position.

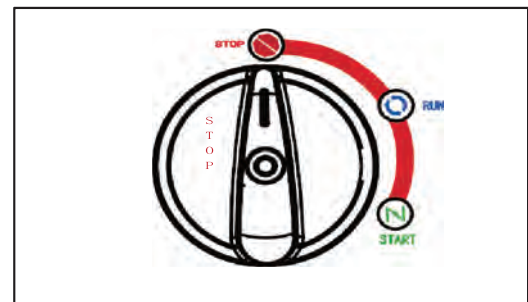


Diagram 13. Stop Position

⚠ WARNING

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 PM3750i is equipped with low oil shutdown. 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 the sump is completely filled with oil.

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:

1. DO NOT try to restart the engine.
2. Contact an Authorized 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.

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:

Monitor your load display on power "kw" (diagram 3. No.17).

- 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 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

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

⚠ WARNING

Only use the parallel cables provided with the unit.

Fire and electrocution hazard

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 a 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 must be disconnected while running a single generator.

⚠ NOTICE

The maximum total power of the 2 units connected in parallel is 5.7kw.

TIP:

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

Set up and Operation

- Align the two inverters on a firm, flat and level surface at a minimum 20 inch apart (Diagram 14).

⚠ WARNING

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

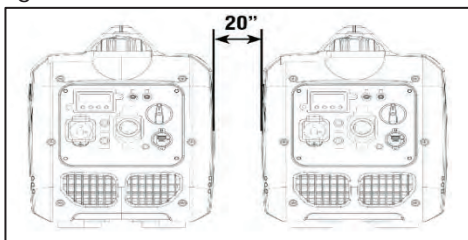


Diagram 14. Distance Guide

- Before paralleling operation, turn off both generators and disconnect all electrical loads (Diagram 8 and 13).
- The parallel operation outlets allow you to connect two generators, increasing the total available electrical power.
 - Connect the red cable to the red parallel port of both units.
 - Connect the black cable to the black parallel port of both units.

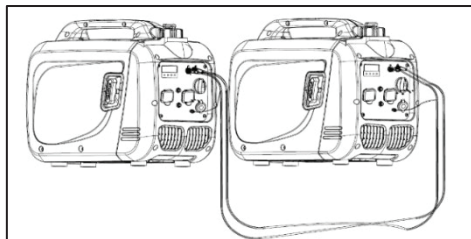


Diagram 15. Parallel Operation

- Start one of the generators and wait until the **OUTPUT READY INDICATOR LED** lights up.
- Start the second generator and wait until the **OUTPUT READY INDICATOR LED** lights up before connecting a load.
- Plug your load only in the twistlock 30A receptacle in one of the units (Diagram 2 no. 2). The actual output is the total from the two kW power information (Diagram 3 no. 18) from each generator.
- When finished:
 - Disconnect your load first.
 - Turn off both generator and remove the parallel cable from both units (Diagram 13).
 - Remove the parallel cables once both of the unit has stopped completely.

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 (Diagram 12).

7. MAINTENANCE AND STORAGE

7.1 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 intervals of time or hours specified herein.

Recommendations

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

The warranty does not cover operator abuse 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).

7.2 Engine Maintenance

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

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 (Diagram 4).

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.

Check the engine oil level before each use or every 8 hours of operation.

To check (Diagram 16):

1. Place the generator on a level surface and let the engine cool for a few minutes.
2. Unscrew the bolts and remove the left cover.
3. Use a damp rag to clean around the oil dipstick.
4. Remove the oil dipstick.
5. Wipe the dipstick clean, then insert it into the filler neck. Remove the dipstick and check that the oil level is within a safe operating range.
6. If the level is low, add the necessary engine oil and retest until the dipstick reading is between the L and H marks. Do not overfill. If the oil level exceeds the full mark on the dipstick, drain it to bring it back to the full mark.
7. Replace the oil dipstick and hand tighten.

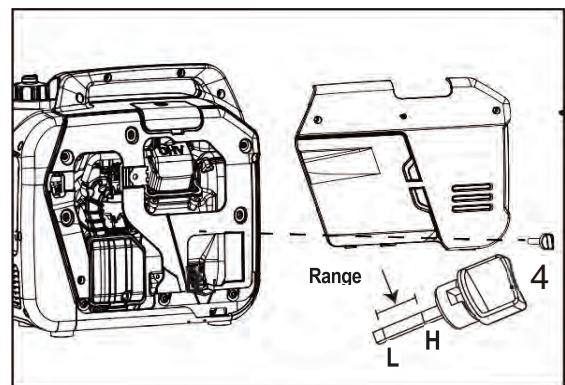


Diagram 16. Checking the Engine Oil Level

Change the Engine Oil

Change the engine oil according to preventive maintenance schedule (Table 2).

If you use your generator in extremely dirty or dusty conditions, or in excessively hot weather, change the oil more frequently.

⚠ WARNING

Risk of burns

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

⚠ CAUTION

Avoid prolonged or repeated skin contact with used engine oil. (Diagram 5, Page 5).

1. Remove and clean the oil cap (A) and wipe the dipstick.
2. While draining, place a container underneath the oil drain plug to collect used lubricant.
3. Unscrew the oil drain plug (B) set aside.
4. Allow lubricant to drain completely.

TIP:

Drain the lubricant while the engine is still warm but not hot. Warm lubricant drains quickly and more completely.

5. Screw in the oil drain plug (B) and tighten it securely.
6. Fill the engine with oil until it reaches the HIGH(H) level on the dipstick (A).
7. Reinstall the oil cap.

Avoid using contaminated or deteriorated oil because it may lead to engine damage and reduced engine life.

Maximum oil capacity: 0.45 L

7.3 Spark Plug Maintenance (Diagram 17)

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 (B).
2. Clean any dirt around the base of the spark plug.

3. Remove spark plug (A) 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 18).
6. Place the spark plug in position; thread in 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.

TIP:

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

8. Reinstall the spark plug cap (B).

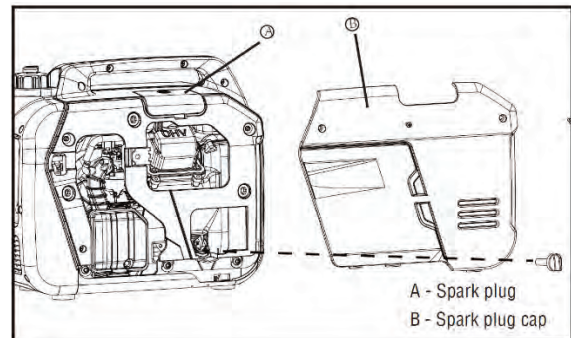


Diagram 17. Spark Plug Maintenance

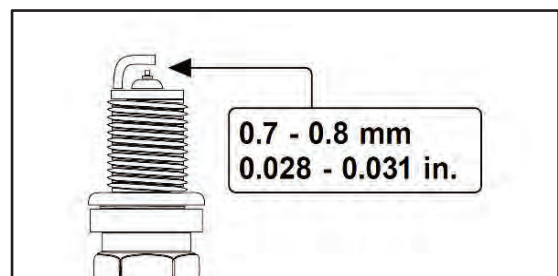


Diagram 18. Correct Spark Plug Gap

7.4 Air Filter Maintenance

Check every 50 hours of operation on preventive maintenance schedule. (Table 2).

Routine maintenance of the air filter helps maintain proper air flow to the carburetor. Regularly check that the air cleaner is free of

excessive dirt.

To inspect and clean the air filter:

1. Unscrew the maintenance cover knob, and remove the cover from the side panel.
2. Take the cover off of the air cleaner. Remove the sponge-like air filter element from the casing. Wipe the excessive oil and dirt inside the air filter casing.
3. Check the air filter. If the air filter element is dirty, clean it with warm, soapy water. Dry it up with clean cloth (do not twist). Apply a light coat of engine lubricant to the element.

If the air filter element has been damaged, replace it with a new one.

4. Reinstall the air filter element, air filter cover and the maintenance cover.

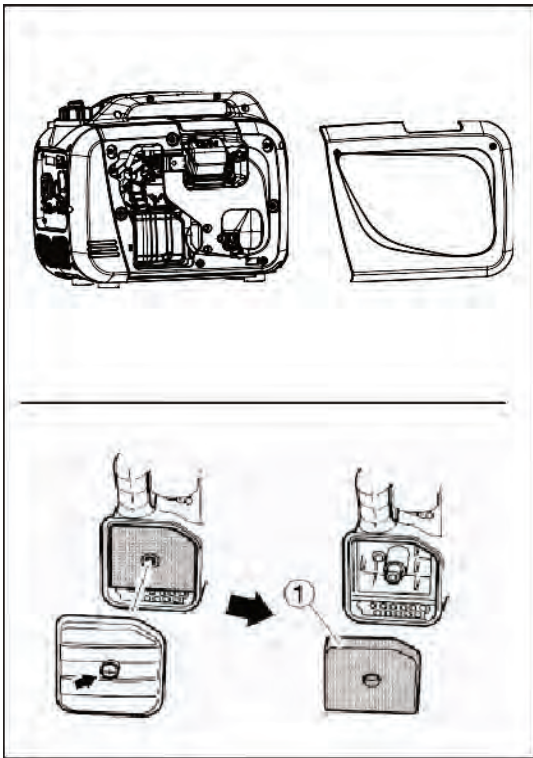


Diagram 19. Air Filter Maintenance

⚠ WARNING

Operating the engine with a dirty, damaged, or missing air filter element may endanger the operator and eventually wear out the engine.

7.5 Cleaning the Spark Arrestor (Diagram 20)

1. Allow the engine to cool completely before cleaning the spark arrestor.

2. Loosen the screw (A) to remove the Pressing block (B).
3. Remove the spark arrestor and the screen (C).
4. With a wire brush, carefully remove the carbon deposits from the spark arrestor screen (Diagram 21).
5. If the spark arrestor is damaged, replace it.
6. Position the spark arrestor and screen (C) on the muffler and attach with the screws removed in step 2.

TIP:

Promate PM3750i is equipped with a spark arrestor that has been evaluated by the fire prevention regulations. Check with appropriate authorities. Contact Promate Service to purchase a replacement spark arrestor.

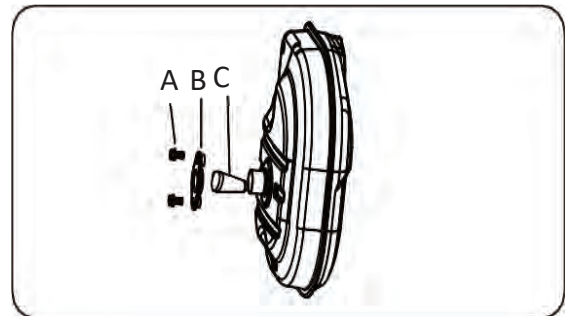


Diagram 20. Cleaning the Spark Arrestor

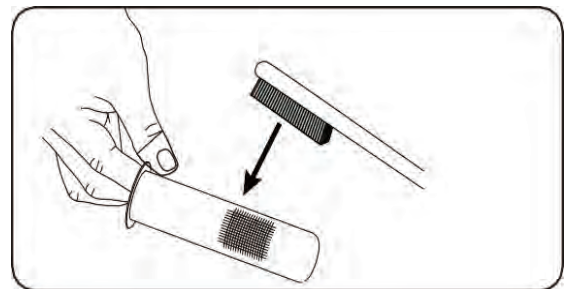


Diagram 21. Spark Arrestor Wire Brush

7.6 Valve Clearance

Important: Please contact Promate Service for assistance. Proper valve clearance is essential in prolonging the life of the engine. Check the valve clearance per maintenance schedule.

Table 3. Valve Clearance Maintenance Schedule

Valve Clearance	Intake Valve	Exhaust Valve
	0.004~0.006 inch 0.1~0.15 mm	0.006~0.008 inch 0.15~0.2 mm
Torque	10-12 N·M	10-12 N·M

*Checking and adjusting valve clearance must be done when the engine is cold.

8. GENERATOR MAINTENANCE

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

Use an air compressor with 25 PSI (172 kPa) to clean the 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. If this is not possible, look to the following short-term and long-term storage options.

Short Term Storage

Fill the tank with fresh gasoline and add the gasoline stabilizer. Drain the carburetor float bowl.

1. If the tank does not already have a correctly formulated FUEL STABILIZER, add one.
2. Run the engine for 10-15 minutes to circulate the stabilizer throughout the fuel system.
3. Allow the generator to cool for a minimum of 30 minutes and then drain the fuel tank.
4. Clean the generator and store in a cool, dry

and well-ventilated area out of direct sunlight. Shut off the fuel valve.

Long Term Storage (over one year)

For long term storage, the gasoline must be drained from the gasoline tank and carburetor (Diagram 22).

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.

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.

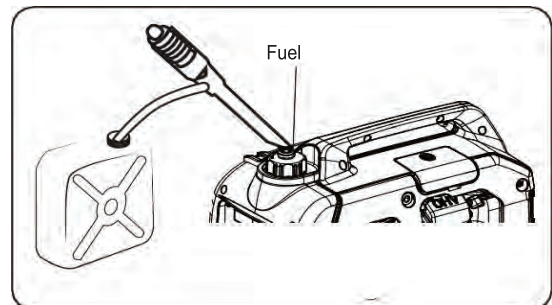


Diagram 22. Long Term Storage

Draining the Float Bowl (Diagram 23)

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).

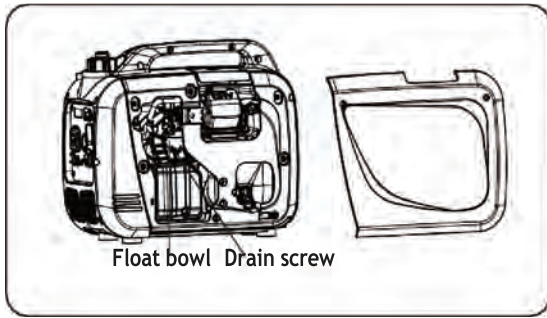


Diagram 23. Draining the Float Bowl

⚠ 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 4. 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 ().
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



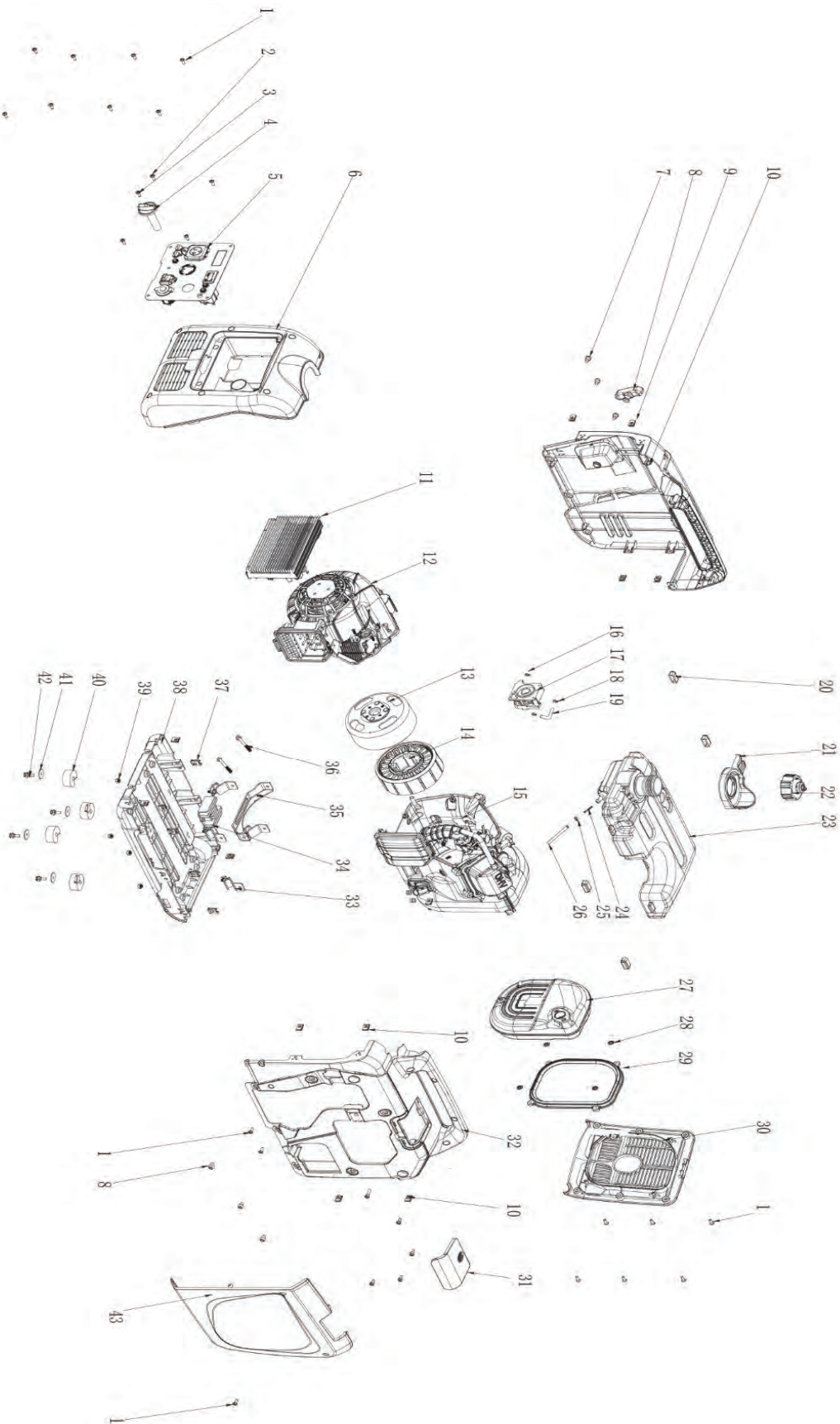
CONTACT THE POWERTECH Asia Pacific Inc.,
PRODUCT SERVICE DEPARTMENT AT (02) 8 984 2620 | (+63) 9338373922
service@powertechasiapacific.com www.facebook.com/PromateServicePH/

(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: PM3750i



PART LIST

Table 5. Generator Part List

NO.	Part Number	Description	Qty.
1	30111-00088-00	Cross bolt M5*14	22
2	30111-00008-00	Cross bolt M5*10	5
3	30111-00070-00	Cross bolt M4*12	1
4	31026-00388-00	Switch knob	1
5	20114-07472-00	Panel	1
6	33013-00686-00	Intake cover	1
7	30114-00033-00	Hexagonal disc head bolt M6	6
8	20184-00047-00	Cable handle	1
9	34024-00105-00	M5 clip nut	14
10	33013-00976-01	Left cover assembly	1
11	20136-00584-01	Inverter assembly	1
12	20010-00372-00	recoil starter assembly	1
13	20006-00199-00	Motor rotor	1
14	20005-00347-00	Motor stator	1
15	20260-05598-02	Engine assembly	1
16	34024-00002-00	Clamp B8	1
17	31026-00390-00	3 in 1 switch assembly	1
18	34024-00024-00	Clamp B9.5	2
19	34023-00361-00	Fuel pipe	1
20	33015-00023-00	Tank sleeve	4
21	33015-00228-00	Oil spill sleeve	1
22	20131-00006-00	Fuel tank cover	1

NO.	Part Number	Description	Qty.
23	20130-00661-01	Fuel tank assembly	1
24	34037-00003-00	Filter	1
25	34024-00031-00	Clamp B10.5	1
26	34023-00360-00	Fuel Pipe	1
27	20202-01044-00	Muffler assembly	1
28	30150-00026-00	Steel Retaining Ring for Hole	4
29	33015-00205-00	Outlet rubber sleeve	1
30	33013-00979-00	Outlet cover assembly	1
31	33013-00977-01	Spark plug repair cover assembly	1
32	33013-00975-01	Right cover assembly	1
33	34030-00026-00	Shock absorbing supports	4
34	31023-00032-00	DC regulator module	1
35	33004-01223-00	Engine mounting bracket	1
36	30101-00349-00	Hex flange face bolt M6*40	2
37	34024-00085-00	M6 clip nut	6
38	33089-00558-00	Engine baseplate	1
39	30125-00002-00	M6 hex nut	6
40	33275-00122-00	Shock absorber pads	4
41	30136-00113-00	Flat washer / $\Phi 6.5 \times \Phi 18$	4
42	30101-00042-00	Hex flange surface bolt M6*20	4
43	33013-00798-01	Oil maintenance cover	1