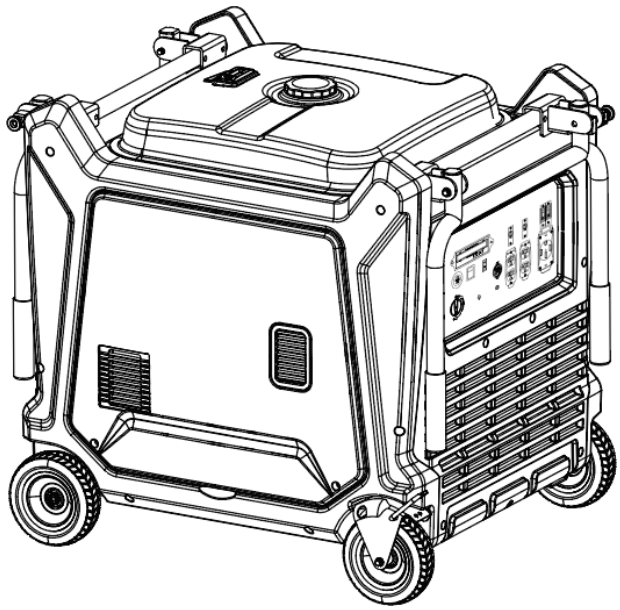
Promate®

PM15000i

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 PM15000i. This operator manual is for proper handling, minor checking, and maintenance of the PM15000i. Before using your generator: Please read these instructions completely and carefully 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 PM15000i, 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 that can cause unconsciousness or death.
- Never operate the generator indoors or in a poorly ventilated area, such as a 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.

When using the generator set, DO NOT unscrew the dipstick; oil splatter can cause scalding. Avoid touching the generator in the rain or touch it 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.

PM15000i

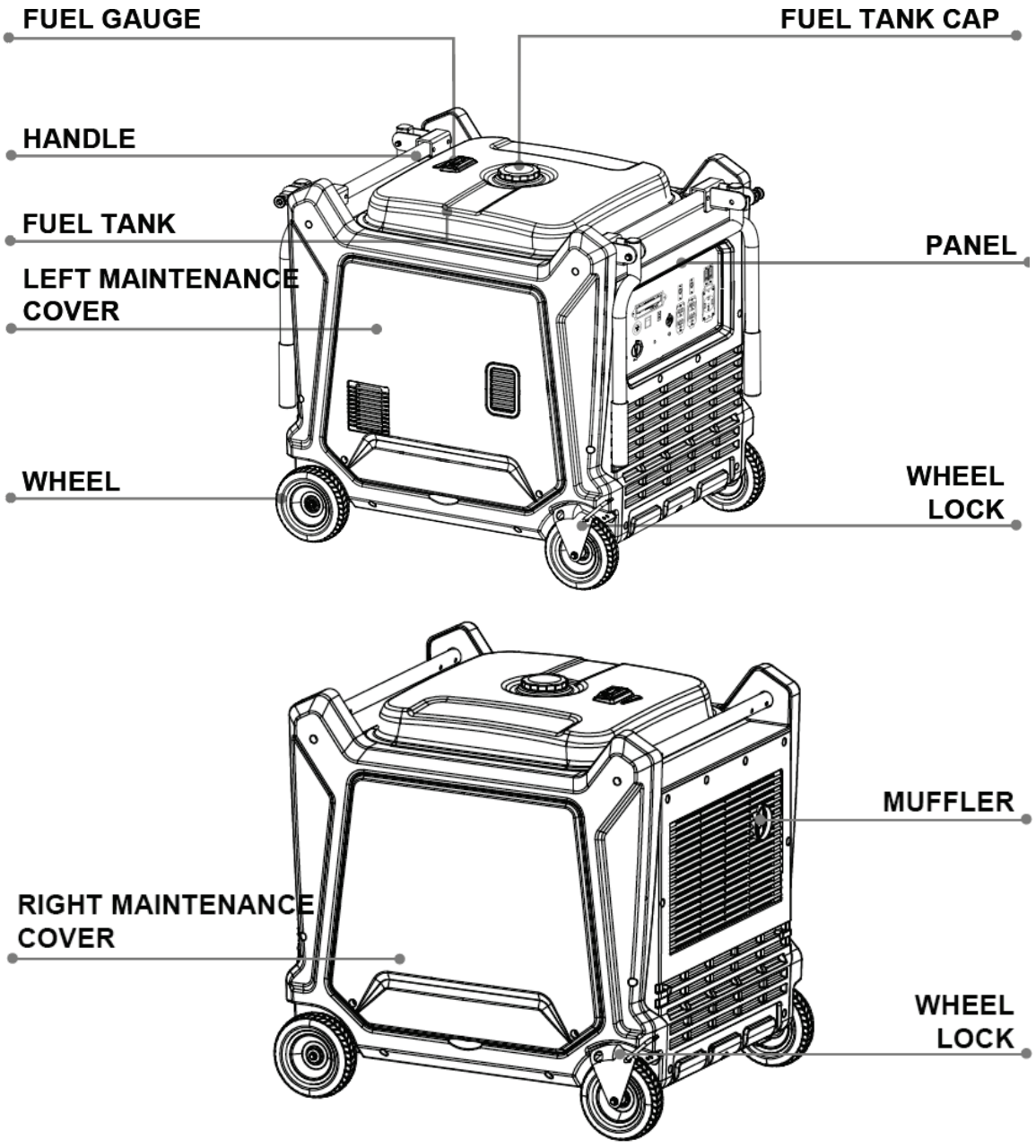


Diagram 1. Generator Parts

2.1 Control Panel 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.

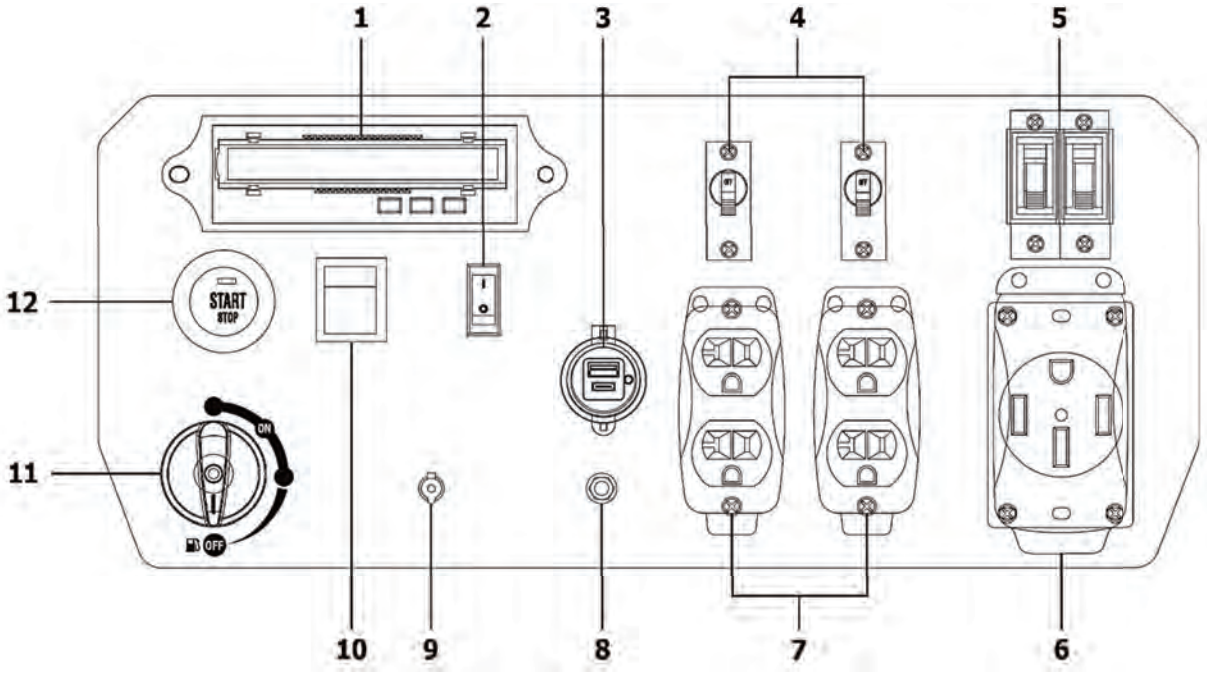


Diagram 2. Control Panel Features

1	LCD Multi-Meter	**7**	AC 230V – 20A
2	Eco Mode Switch	**8**	Grounding Terminal
3	5V USB/Type A/C	**9**	Battery Charge Port
4	Circuit Breaker 20A	**10**	Engine Switch
5	Circuit Breaker 50A	**11**	Multi Switch
6	AC 115/230V – 50A	**12**	Engine Start/Stop Button

2.2 LCD Multi-Meter Functions

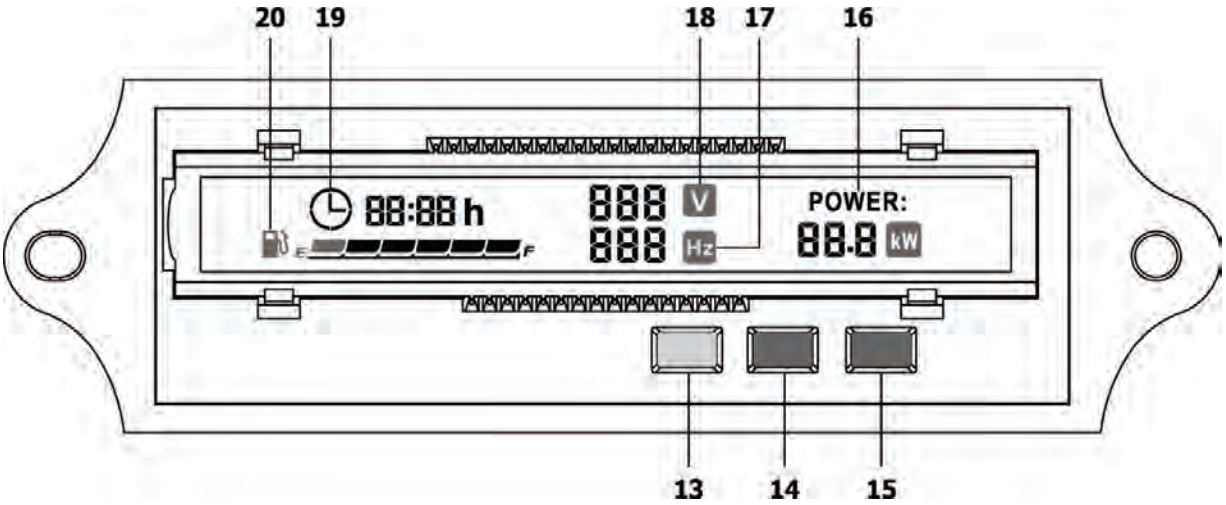


Diagram 3. LCD Multi-Meter Functions

13 Output Indicator (Green)

The green light indicates that the generator is turned on.

14 Overload Alarm (Red)

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.

15 Low Oil Alert (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.

16 Power (Load)

This icon shows the current output load.

17 Frequency (Hertz)

This icon shows frequency.

18 Voltage

This icon shows the voltage.

19 Running Time (Hours)

This icon shows the running time.

20 Gasoline Fuel Meter

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

3. SPECIFICATIONS

Table 1. General Specifications

Model	PM15000i
Surge Power	15000W
Rated Power	12000W
Rated AC Voltage	115/230V
Rated AC Current	104.34A/52.2A
Rated Frequency	60Hz
Phase	Single
Engine Type	Twin Cylinder, 4-stroke OHV with Air-cooling System
Engine Displacement	744 CC OHV
Starting System	Electric
Low Oil Shutdown	Yes
Oil Type	SAE 10W-30
Oil Capacity	1.5L
Spark Plug OEM Type	F7TC
Valve Exhaust Clearance	0.006~0.008inch (0.15~0.2mm)
Voltage Regulation System	Pure Sinewave Inverter
Fuel Tank Capacity	40L
Fuel Type	Unleaded Gasoline
Maximum Ambient Temperature	104°F (40°C)
Unit Dimensions (LxWxH)	972 x 783 x 873 mm
Packaging Dimensions (LxWxH)	1000 x 810 x 890 mm
Net Weight	170kg
Gross Weight	210kg

⚠NOTICE

The Promate PM15000i 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 PM15000i 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 Add / Check the Oil
Maximum Oil Capacity: 1.5L

We recommend using SAE 10W-30 APISJ oil for the 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.

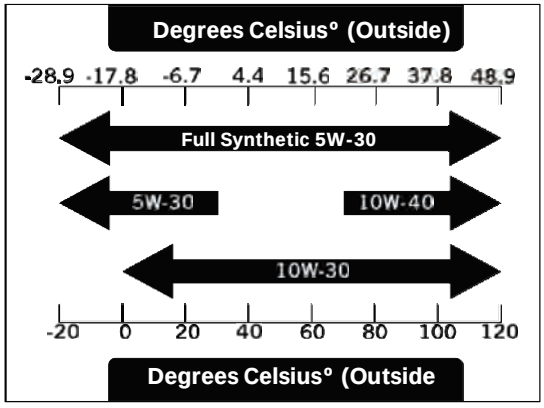


Diagram 4. Recommended Engine Oil Type

Promate PM15000i is equipped with low oil shut-off and will stop when the oil level in the crankcase falls below the threshold level.

1. Place the generator on a level surface. Make sure the engine is OFF before adding or checking oil.

Diagram 5. Removing the Left Maintenance Cover

2. Unscrew the sides of the left maintenance cover and set aside. (Diagram 5)

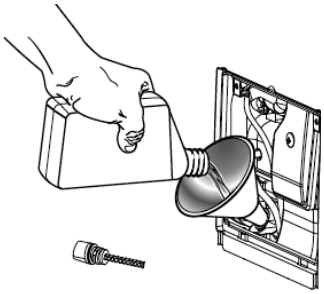


Diagram 6. Pouring the Oil

3. Using the oil funnel, slowly pour the oil into the oil fill, DO NOT overfill the unit. Fill the crankcase to the upper fill line, allowing you to see the oil halfway up the oil fill threads. (Diagram 6)
4. Reinstall the oil dipstick and firmly tighten it. Wipe and clean any spilled oil.
5. Reinstall the left maintenance cover and tighten its screw at the side to secure it.

How to check the oil level (before every subsequent start)

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

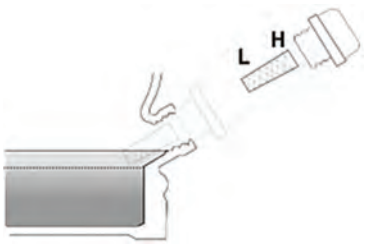


Diagram 7. Oil Limit Guide

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. (Diagram 7)
7. Replace the oil dipstick and hand tighten.

TIP: Used engine oil should be disposed of at an approved disposal site.

⚠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.

4.2 Add/Check the Fuel
Maximum Fuel Capacity: 40L

⚠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.

TIP: DO NOT fill the fuel tank to the very top. If you do, gasoline will expand and spill while in use, even with the fuel lid on.

⚠DANGER

Do not overfill the tank. Allow space for fuel expansion. If fuel spills wait until it evaporates before starting the 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 of 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

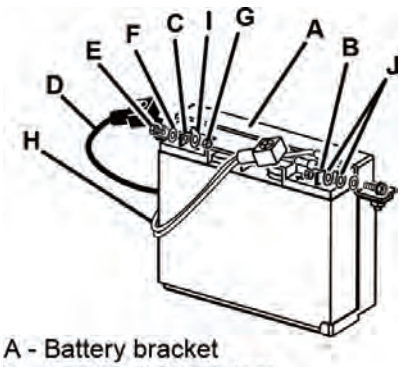
During storage, it is important to prevent gum deposits in the fuel system components such as the carburetor, fuel hose, or tank. Alcohol-blended fuels (gasohol, ethanol, or methanol) can attract moisture, causing the separation and development of acids. Acidic gas can damage an engine's fuel system 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.

Diagram 8. Fuel Cap Location

1. Make sure the generator is turned OFF and on a flat surface.
2. Unscrew the fuel cap and set it aside.
3. Slowly add unleaded gasoline to the fuel tank. (Diagram 8)
4. Reinstall the fuel cap and clean up any spilled gasoline with a dry cloth.

During operation, the fuel level is displayed on the panel's LCD Multi-Meter, or you can check the fuel gauge. If the fuel level is low, refill the tank before restarting the generator.

4.3 Connect the Battery



A - Battery bracket
B - Positive (+) terminal
C - Negative (–) terminal
D - Black wire (–)
E - Screw
F - Washer
G - Nut
H - Red wires (+)
I - Negative terminal connection
J - Positive terminal connections

Diagram 9. Battery Parts Guide

⚠WARNING

BATTERY GIVES OFF EXPLOSIVE HYDROGEN GAS.

- Keep the battery away from sparks, cigarettes, or other sources of flame.
- Do not connect or disconnect the battery while the generator is running.
- Service or use battery only in well-ventilated areas.

⚠WARNING

- Battery contains sulfuric acid which is a poisonous chemical. Tilting the generator with the battery installed can cause the battery acid to spill.
- Wear protective clothing and eyewear when servicing the battery.
- Keep out of reach of children.
- If the battery acid gets on your skin and eyes, wash it with water and call a doctor immediately.
- If battery acid is swallowed, call a doctor immediately. Drink a large amount of water or milk (milk of magnesia or vegetable oil).

The Promate PM15000i is shipped with the battery's negative (-) terminal disconnected to maximize safety. To start the generator using an electric start, the battery must be connected.

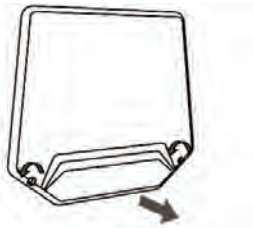


Diagram 10. Removing the Right Maintenance Cover

1. Unscrew the sides of the right maintenance cover and set aside. (Diagram 10)

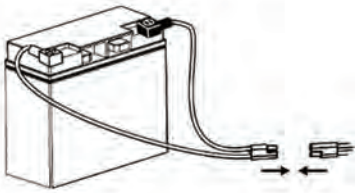


Diagram 11. Connecting the Battery

2. Connect the red wires (**H**) to the positive (+) terminal first, then connect the black wire (**D**) to the negative (-) terminal. Make sure all connections are tight. (Diagram 11)
3. Cover the terminals with the rubber covers.

⚠NOTICE

If you do not plan to use the generator for a long period, we recommend DISCONNECTING the negative battery cable from the battery to protect the battery from losing charge. After disconnecting the cable, cover the free end with an insulator such as electrical tape. You may also choose to use a trickle charger (not included) to maintain battery charge.

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 Ground the Generator

Diagram 12. Grounding Nut

⚠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. (Diagram 12)

4.6 Connect 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 hazards.

Diagram 13. Outside Operation Guide

⚠DANGER

Never use the generator in wet or damp locations. Never expose the generator to rain, snow, water spray, or standing water while in use. Protect the 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. (Diagram 13)

- Remove any flammables or other hazardous materials.
- Choose a dry, well-ventilated, weather-protected area.
- Keep the 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. Start 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 if there is a sufficient level of oil in the crankcase and fuel in the fuel tank.

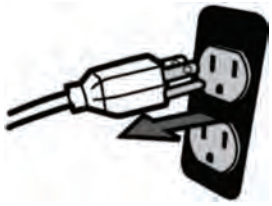


Diagram 14. Disconnecting Electrical Loads

3. Disconnect all electrical loads from the generator. Never start or stop the generator with electrical devices plugged in or turned on. (Diagram 14)

Diagram 15. Eco Mode Turned OFF

4. Turn OFF the ECO MODE switch. (Diagram 15)

Diagram 16. Multi Switch Turned ON

5. Turn the Multi Switch to the “ON” position. (Diagram 16)

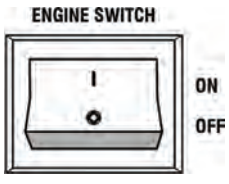


Diagram 17. Engine Switch Turned ON

6. Press the Engine Switch to the ON position. (Diagram 17)

Diagram 18. Engine Start / Stop Button

7. Press the Engine Start/Stop Button for 5 seconds to START. (Diagram 18)

Promate PM15000i is equipped with an ECO MODE Button (Diagram 15). 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 naturally returns to the original position.

5.2 Connect The Electrical Loads

The Promate PM15000i 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. (Diagram 19)

Re-adjusting will void the 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 a few minutes after starting.
2. Ensure that the circuit breaker on the control panel is in position.

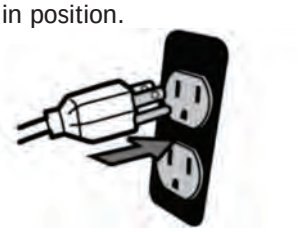


Diagram 19. Connecting Electrical Loads

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 19)

5.3 Stop 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.

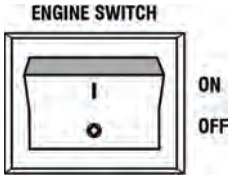


Diagram 20. Engine Switch Turned OFF

3. Press the Engine Switch to the OFF position. (Diagram 20)

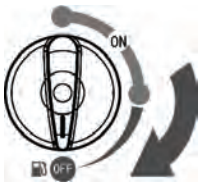


Diagram 21. Multi Switch on OFF

4. Turn the Multi Switch to the “OFF” position. (Diagram 21)
5. Press the Engine Start/Stop Button for 2 seconds to STOP. (Diagram 18)

⚠WARNING

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

TIP:

When the engine is not in use, ensure that the fuel valve is in the “OFF” position.
If the engine will not be used for two weeks or longer, please see the Storage section for proper engine and fuel storage.

Low Oil Shutdown

Promate PM15000i 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 the low and high mark on the 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 the dipstick:

1. Add the oil to bring the level to a 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 the 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.

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.

Repeat steps 5-6 for each additional item.

6. GENERATOR MAINTENANCE

Table 2. Generator Maintenance Schedule

Recommended Maintenance On:	Before each use	After 1st month or 20 hours	Every 3 months or 50 hours	Every 6 months or 100 hours	Every year or after 300 hours
Engine Oil	Check	Change		Change	
Air Filter	Check		Clean		
Air Filter					Change
Spark Plug				Check/Adjust	
Spark Plug					Replace
Idle Speed					Check/Adjust
Fuel Tank				Clean	
Fuel Hose	Check				
Fuel Filter	Inspect			Clean	Replace
Valve Clearance					Check/Adjust
Spark Arrester				Clean	

**Clean/change more often under dusty conditions or operating under heavy loads.*

6.1 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 and fuel level
- Fluid leaks
- Loose clamps and bolts
- Cracked fuel line
- Loose or frayed wiring & built-up debris

TIP: Maintenance should be performed more frequently when the 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 to 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).

⚠CAUTION

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

6.2 Change the Oil

TIP: To avoid possible oil spills from the carburetor bowl, drain the carburetor before draining the oil. (See pg. 15, **6.8 Drain the Carburetor**)

Change the engine oil according to the Preventive Maintenance Schedule (Table 2).

If you use your generator in extremely dirty or dusty conditions or 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 or serious injury.

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

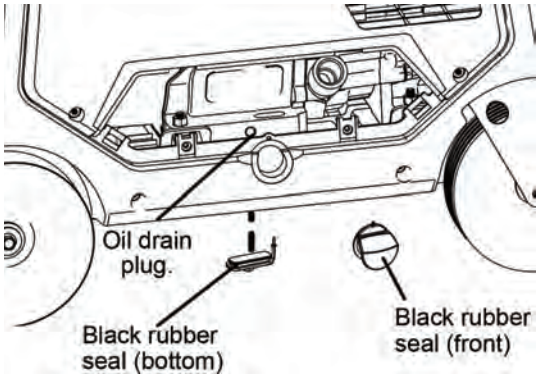


Diagram 22. Draining the Oil Procedure

1. Reach under the generator and remove the black rubber seal located below the oil drain plug. (Diagram 22)
2. Place a suitable container underneath the generator to catch the used oil.
3. Remove the oil fill cap/dipstick.
4. Remove the other black rubber seal located in the front of the oil drain plug.
5. Use a wrench through the hole to remove the oil drain plug and allow the oil to drain completely.
6. Reinstall the oil drain plug. Tighten the plug securely.
7. Reinstall the two black rubber seals (the front one and the bottom one).
8. Proceed with pg. 6, **4.1 Add/Check the Oil**.
9. Reinstall the oil cap/dipstick securely.
10. Reinstall the left maintenance cover.
11. Tighten screws to secure.

6.3 Check/Clean the Air Filter

Check every 50 hours of operation on the Preventive Maintenance Schedule. (Table 2).

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

To inspect and clean the air filter: (Diagram 27)

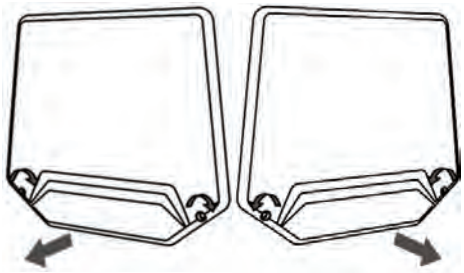


Diagram 23. Removing Both Maintenance Covers

1. Loosen the screws on the sides of both maintenance covers and set aside. (Diagram 23)
2. Unsnap the air filter cover clip, pull the cover down and off the unit, remove the air filter cover, and set it aside.

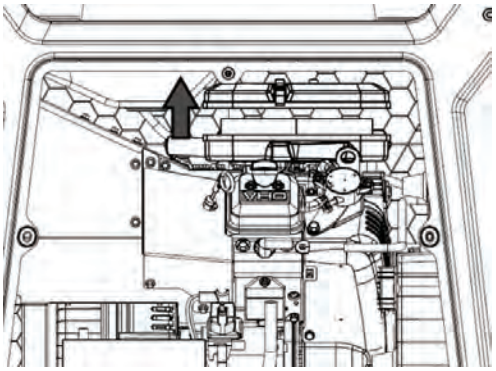


Diagram 24. Air Filter Location

3. Remove the air filter. (Diagram 24)
4. Wash the air filters with warm, soapy water. Rinse and squeeze to dry.
5. Reinstall the air filters.
6. Reinstall the air filter cover.
7. Reinstall the right maintenance cover. Tighten screws to secure.

TIP: Make sure the filters are seated properly inside the generator. Installing the filters incorrectly will allow dirt to enter the engine, causing rapid engine wear.

⚠WARNING

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

6.4 Check / Replace the Spark Plug

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

1. Loosen the screws at the side of the right maintenance cover and set aside.

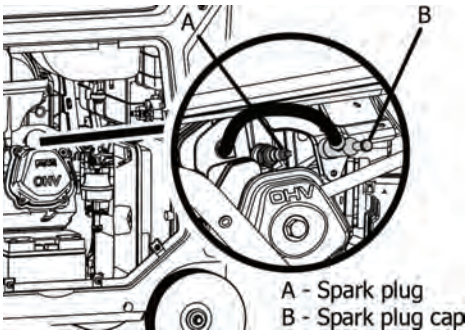


Diagram 25. Spark Plug Location

2. Remove the spark plug cap. (Diagram 25)
3. Clean any dirt from around the base of the spark plug and remove it using a spark plug wrench.
4. Inspect the spark plug. Replace it if the electrode is worn or fouled, or if the insulator is cracked or chipped.

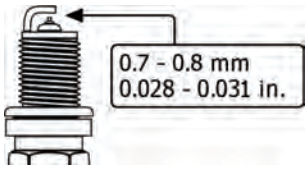


Diagram 26. Spark Plug Gap Guide

5. Measure the spark plug electrode gap with a wire-type feeler gauge. Correct the gap, if necessary, by carefully bending the side electrode. The gap should be: **0.028-0.031 in (0.7-0.8mm)** (Diagram 26)
6. Place the spark plug in position; thread it in by hand to prevent cross-threading.
7. Attach the spark plug cap and close the right maintenance cover.

Recommended Spark Plug:

- Stock Plug – F7TC
- Champion – RN11YC
- Bosch – WR6DC
- Torch – F6RTC

If reinstalling a used spark plug, tighten 1/8-1/4 turn after the spark plug seats.
If installing a new spark plug, tighten 1/2 turn after the spark plug seats.

⚠NOTICE

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

⚠CAUTION

Be careful not to cross-thread the spark plug. Cross-threading will seriously damage the product.

6.5 Check The Valve Clearance (Table 3)

⚠NOTICE

Please contact Promate Service for assistance. Proper valve clearance is essential in prolonging the life of the engine. Check the valve clearance per the Preventive Maintenance Schedule.

Table 3 Valve Clearance Maintenance Schedule

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

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

6.6 Clean the Spark Arrestor (Diagram 28)

1. Allow the engine to cool completely before cleaning the spark arrestor.
2. Remove the two screws, and remove the tailpipe and spark arrester.

Diagram 27. Cleaning the Spark Arrestor

3. Use a brush to remove carbon deposits from the spark arrester screen. (Diagram 27)

⚠CAUTION

Be careful to avoid damaging the screen.

⚠NOTICE

The spark arrester must be free of breaks and tears. Replace the spark arrester if it is damaged.

4. Install the spark arrester in the reverse order of removal.

TIP: Promate PM15000i is equipped with a spark arrestor that has been evaluated by the fire prevention regulations. Check with the appropriate authorities. Contact Promate Service to purchase a replacement spark arrestor.

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.

6.7 Drain the Fuel Tank

TIP: To help prevent gum deposits in the fuel system, drain the fuel from the tank and carburetor before storing.

To drain the fuel tank:

1. Remove the fuel tank cap, the fuel strainer, and empty the fuel tank into a suitable gasoline container. We recommend using a commercially available gasoline hand pump to empty the tank.

⚠CAUTION

DO NOT use an electric pump.

2. Siphon the gasoline by inserting the tip of the hand pump into the side of the pump guard.
3. Reinstall the fuel strainer and the fuel cap.

6.8 Drain the Carburetor

1. Loosen the screws at the side of the right maintenance cover and set aside.
2. Turn the Multi Switch to the RUN position.
3. Loosen the screw and place a suitable container under the carburetor drain screw to catch the fuel until it is drained completely.
4. Retighten the drain screw securely.
5. Turn the Multi Switch to the OFF position.

6.9 Storage, Transport, and Disposal Guidelines

⚠NOTICE

It is recommended that you start and run the generator for 30 minutes every 30 days.

Storing your generator

When preparing the generator for storage, allow the unit to cool for 30 minutes before following the guidelines below:

Table 4. Generator Storage Schedule

Storage Time	Recommended Actions
Less than 2 months	Drain the gasoline from the tank and dispose of in a suitable container according to state and local ordinances.
2 months to 1 year	
1 year or more	1. Remove the spark plug. 2. Drain the gasoline from the tank and dispose of in a suitable container according to state and local ordinances. 3. Put a tablespoon of engine oil into the spark plug cylinder. 4. Reinstall the spark plug. 5. Change the engine oil.

⚠NOTICE

After removing from storage, fill the tank with fresh gasoline and add the gasoline stabilizer. Drain the carburetor float bowl.

Adding a Fuel Stabilizer

If you are storing gasoline in a suitable container for later use, make sure the gasoline has been treated with a FUEL STABILIZER according to the stabilizer manufacturer's instructions.

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.

Clean the generator and store it in a cool, dry, and well-ventilated area out of direct sunlight. Shut off the fuel valve.

Transporting your generator

⚠NOTICE

Make sure the engine and exhaust of the unit is cooled down before following the steps below:

1. Turn the Multi Switch to the OFF position.
2. Place the generator in a leveled place to reduce the possibility of fuel leakage.
3. When using ropes or tie-down straps to secure the generator for transportation, be sure to only use the frame bars as attachment points. Do not fasten the ropes or straps to any portions of the generator body or the folding transport handle.

Disposing of your generator

⚠WARNING

DO NOT dispose of a used generator or its parts with your household waste. This product contains electrical or electronic components that should be recycled. Please take your generator to a local recycling facility for responsible disposal to minimize its environmental impact.

DO NOT dispose of used oil or fuel in the trash or down a drain. Please contact a local recycling center or auto garage to arrange proper oil/fuel disposal.

7. TROUBLESHOOTING

Table 5. Troubleshooting Your Generator

PROBLEM	POSSIBLE CAUSE	SOLUTION
Engine will not start	1. The battery is not charged.	1. Charge the battery.
	2. The engine switch is in the OFF position.	2. Turn ON the engine switch.
	3. No fuel.	3. Fill the fuel tank.
	4. There is stale gasoline or the gasoline is mixed with water.	4. Drain the fuel tank completely and refill with fresh fuel.
	5. The engine oil level is low.	5. The engine is equipped with a Low Oil Alert feature. If the engine oil level is low, it must be filled before starting the generator.
	6. The Multi Switch is in the OFF position.	6. Turn the Multi Switch to the RUN position.
	7. The spark plug is faulty, fouled, or improperly gapped.	7. Replace the spark plug.
	8. The engine was stored without draining the gasoline or refueled with bad gasoline.	8. Drain the fuel tank completely and refill with fresh fuel.
	9. Dirty fuel filter.	9. Replace the fuel filter or contact Promate Service.
Engine lacks power	1. Dirty air filter.	1. Check the air filter element. Clean or replace it, if necessary.
	2. The engine was stored without draining the gasoline or refueled with bad gasoline.	2. Drain the fuel tank completely and refill with fresh fuel. If the problem continues, contact Promate Service.
AC Receptacle does not work	1. The OUTPUT indicator is OFF, and the OVERLOAD indicator is ON.	1. Check the AC load. Stop and restart the engine. Check the cooling air inlet. Stop and restart the engine.
	2. AC Circuit Protector(s) tripped.	2. Check the AC load and reset the AC Circuit Protector(s).
	3. GFCI system is activated.	3. Reset the GFCI.
	4. The item plugged in is defective.	4. Try plugging in a different item. If the problem continues, contact Promate Service.

⚠NOTICE

If the problem persists after trying the above solutions, contact Promate Service for assistance.

8. 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 numbers 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

9. EXPLODED VIEW AND PARTS LIST

Diagram 28. PM15000i Exploded View

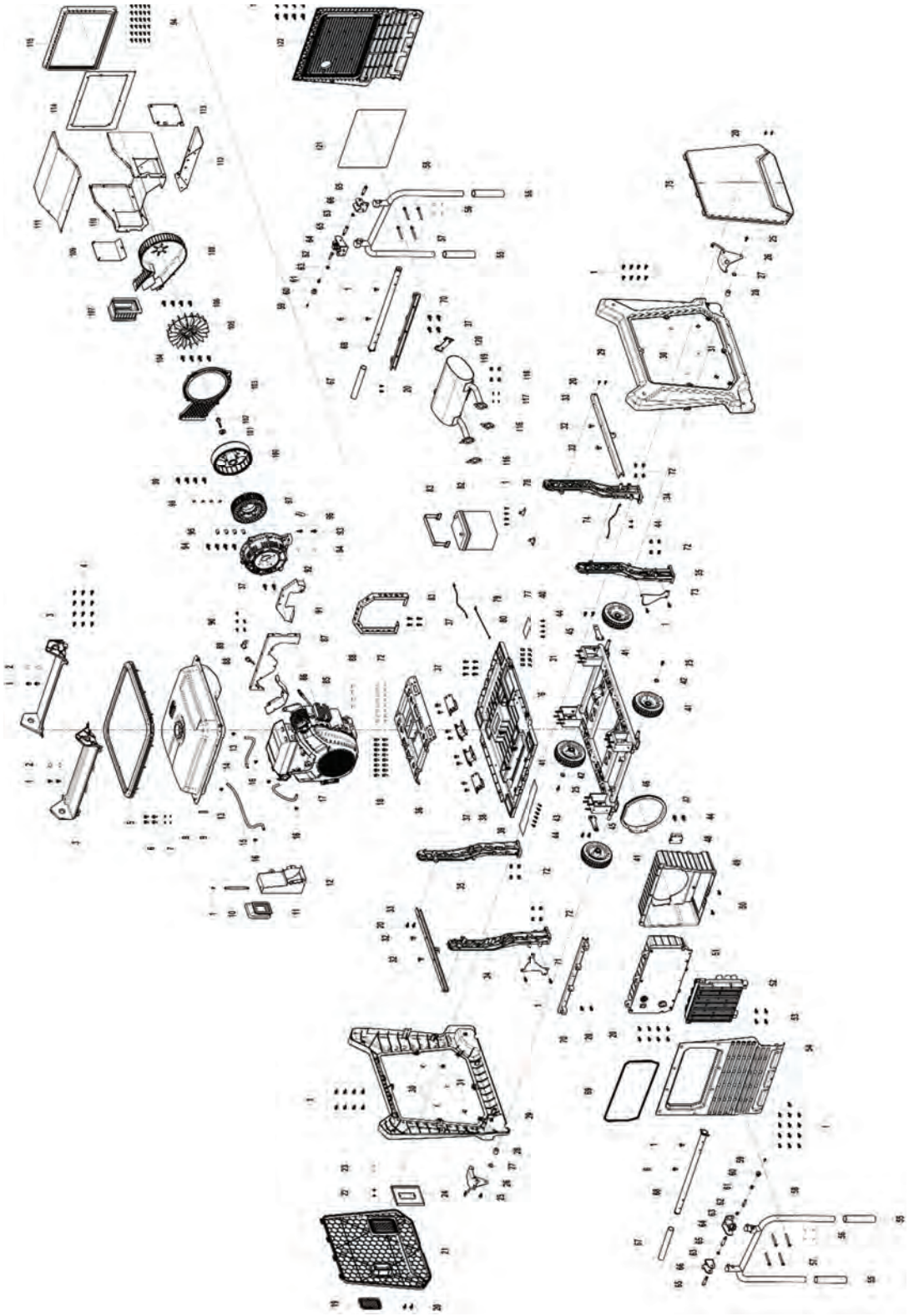


Table 6. PM15000i Parts List

NO.	PART NO.	DESCRIPTION	QUANTITY
1	30101-00341-00	Hex Bolt	55
2	33126-00022-00	Plug	4
3	33013-00555-00	Upper Cover	2
4	30111-00064-00	Cross Pan-Head Screw	12
5	33048-00581-00	Sealing Strip	1
6	30101-00407-00	Hex Bolt	4
7	30136-00112-00	Washer	4
8	20130-00654-09	Fuel Tank	1
9	34037-00003-00	Filter Net	1
10	34024-00004-00	Mental Clip	1
11	33015-00251-00	Oil Radiator Outlet Sealing Strip	1
12	33089-00605-00	Oil Radiator Wind Scooper	1
13	34024-00024-00	Clip	2
14	34023-00257-00	Air Tube	1
15	34023-00382-00	Fuel Tube	1
16	34024-00031-00	Clip	4
17	34023-00201-00	Fuel Tube	1
18	30101-00355-00	Hex Bolt	16
19	33013-00911-02	Oil Radiator Outlet Cover	1
20	30101-00405-00	Hex Bolt	20
21	33013-00971-02	Maintenance Cover, Left	1
22	30111-00083-00	Cross Pan-Head Screw	2
23	30125-00008-00	Hex Bolt	2
24	33089-00604-00	Oil Radiator Outlet Sealing Strip Board	1
25	30101-00355-00	Hex Bolt	46
26	70002-02723-00	Brake	2
27	33301-00019-00	Washer	2
28	34032-00041-01	Bush	2
29	33013-00554-00	Side Board	2
30	33015-00003-00	Rubber Sleeve	6
31	34024-00085-00	Nut	12
32	34030-00129-00	Inverter Shock Absorber	4
33	34040-00903-00	Beam	2
34	20014-01276-00	Column	2
35	20014-01277-00	Column	2
36	20249-00660-00	Frame Support	1
37	30101-00355-00	Hex Bolt	8
38	34030-00050-00	Shock Abosorber	4
39	34037-00276-00	Inlet Filter Net	1
40	30117-00063-00	Cross Pan-Head Screw	4

41	20134-00355-00	Wheel	**4**
42	30136-00115-00	Washer	**2**
43	30117-00063-00	Cross Pan-Head Screw	**6**
44	30101-00339-00	Hex Bolt	**9**
45	33089-00540-00	Brake Install Board	**2**
46	20249-00915-00	Support Part	**1**
47	33015-00234-00	Engine Inlet Rubber Sleeve	**1**
48	31023-00061-00	Voltage Stabilizer	**1**
49	33013-00910-00	Inverter Box	**1**
50	30101-00412-00	Hex Bolt	**2**
51	20114-08492-00	Control Panel	**1**
52	20136-01019-00	Inverter	**1**
53	30101-00361-00	Hex Bolt	**4**
54	33013-00558-00	Panel Side Board	**1**
55	33015-00142-00	Handle Rubber Sleeve	**4**
56	30128-00013-00	Nylon Nut	**8**
57	30101-00379-00	Hex Bolt	**8**
58	20135-00681-00	Handle Tube	**2**
59	30101-00326-00	Hex Bolt	**2**
60	20184-00006-00	Handle Part	**2**
61	34015-00031-00	Spring	**2**
62	33580-00017-00	Pin	**2**
63	30125-00030-00	Hex Nut	**4**
64	33593-00110-00	Handle Fixed Mount	**2**
65	33580-00064-00	Handle Fixed Pin	**4**
66	33593-00093-00	Handle Fixed Mount	**2**
67	33015-00015-00	Handle Rubber Sleeve	**4**
68	20135-00455-00	Handle Tube	**2**
69	33275-00136-00	Panel Rubber Washer	**1**
70	34040-00904-00	Beam	**2**
71	20014-00872-00	Inverter Support, Left	**1**
72	30125-00023-00	Hex Nut	**18**
73	20014-00871-00	Inverter Support, Right	**1**
74	20196-00535-00	Grounding Wire	**1**
75	33013-00972-04	Maintenance Cover, Right	**1**
76	33013-00553-00	Base Board	**1**
77	34037-00277-00	Alternator Inlet Filter Net	**1**
78	33593-00079-00	Battery Install Lug	**2**
79	20196-00226-00	Wire, Red	**1**
80	20196-00097-00	Wire, Black	**1**
81	33089-00616-00	Muffler Support Part	**1**
82	31002-00173-00	Battery	**1**
83	70002-05266-00	Battery Clip	**1**

84	30125-00026-00	Hex Nut	**6**
85	20260-06659-00	Engine	**1**
86	33089-00613-00	Muffler Box Cover	**1**
87	33089-00612-00	Muffler Fixed Board	**1**
88	33089-00623-00	Muffler Fixed Board Install Lug	**1**
89	33089-00611-00	Muffler Fixed Board Install Lug	**1**
90	30101-00066-00	Hex Bolt	**42**
91	33089-00603-00	Engine Cover	**1**
92	33191-00176-00	Alternator Cover	**1**
93	30101-00495-00	Hex Bolt	**2**
94	30101-00549-00	Hex Bolt	**4**
95	34006-00006-00	Locating Pin	**4**
96	33015-00253-00	Alternator Rubber Sleeve	**1**
97	20005-00379-00	Stator	**1**
98	30139-00045-00	Spring Washer	**4**
99	30113-00025-00	Hex Screw	**4**
100	20006-00176-00	Rotor	**1**
101	33048-00579-00	Screw Washer	**1**
102	30101-00681-00	Hex Bolt	**1**
103	34021-00321-00	Alternator Volute, Down	**1**
104	30101-00071-00	Hex Bolt	**4**
105	33155-00170-00	Alternator Fan	**1**
106	30101-00043-00	Hex Bolt	**4**
107	33015-00197-00	Alternator Volute Rubber Sleeve	**1**
108	34021-00320-00	Alternator Volute, Up	**1**
109	33089-00610-00	Muffler Box Maintenance Cover, Left	**1**
110	33089-00607-00	Muffler Box Baseboard Part	**1**
111	33089-00608-00	Muffler Box Cover Part	**1**
112	33089-00606-00	Muffler Box Baseboard Part	**1**
113	33089-00609-00	Muffler Box Maintenance Cover, Right	**1**
114	33089-00614-00	Muffler Outlet Seal Strip Install Board	**1**
115	33015-00221-00	Muffler Wind Scooper Strip	**1**
116	33048-00119-00	Muffler Washer	**4**
117	30139-00036-00	Spring Washer	**4**
118	30121-00007-00	Hex Nut	**4**
119	20202-01112-00	Muffler Assy	**1**
120	33089-00536-00	Install Board	**1**
121	33014-01734-00	Muffler Heat Insulation Board	**1**
122	33013-00559-00	Muffler Side Board	**1**