

PURE POWER



PP12500T

OPERATOR'S MANUAL

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Congratulations on your purchase of a Pure Power Equipment generator. You can be confident that this generator is constructed and tested with optimum performance and quality in mind.

Reading this manual will help get you the best results for set-up, operation, maintenance and avoid personal injury or damage to your machine. By knowing how best to operate this machine, you will be better positioned to show others who may also operate the unit.

All the information in this manual is based on the latest product information available at the time of printing. Pure Power Equipment reserves the right to make changes at any time without notice or incurring any obligation.

All Pure Power Equipment Portable Generators are tested in our factory and may contain residual oil and/or fuel odour; EPA and CARB Compliant.

Owner/Operator Responsibility

The owner/operator must have a thorough understanding of the operation, maintenance and dangers associated with using this machine. It must be understood that it is ultimately up to the owner/operator to safely use this machine as outlined in this manual.

This manual is considered a part of the machine and needs to be kept in a safe location. If the machine is resold or given to someone else, this manual needs to be included.

Product Registration

Please register your product online to get the maximum benefit from your warranty. Use the QR code below or register online at: purepowerequipment.com/register-product/



It is recommended that you record the product identification numbers in this manual. These numbers are important to have on hand if you need to contact technical support (**1-866-850-6662**). The model and serial number can be found on the box and on a decal on the machine.

PRODUCT IDENTIFICATION

Model Number: _____

Serial Number: _____

Date of Purchase: _____

Dealer Name: _____

*** THE ACTUAL PRODUCT MAY VARY FROM THE IMAGES SHOWN IN THE MANUAL.**

SAVE THESE INSTRUCTIONS - SAFETY RULES

This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

The safety alert symbol (▲) is used with a signal word (**DANGER, CAUTION, WARNING**), a pictorial and a safety message to alert you to hazards.

DANGER indicates a hazard that, if not avoided, will result in death or serious injury.

WARNING indicates a hazard that, if not avoided, could result in death or serious injury.

CAUTION indicates a hazard that, if not avoided, might result in minor or moderate injury.

NOTICE indicates a situation that could result in equipment or property damage.

IMPORTANT SAFETY INSTRUCTIONS - SAVE THESE INSTRUCTIONS

WARNING – When using this product, the following precautions should always be observed and adhered to.

1. Read all instructions before using the product.
2. To reduce the risk of injury, close supervision is necessary when a product is used near children.
3. Know how to shut the product off. Be thoroughly familiar with the controls.
4. Stay alert. Watch what you are doing.
5. Do not operate the product when fatigued or under the influence of alcohol or drugs.
6. Do not overreach or stand on unstable support. Instead, keep solid footing and balance at all times.
7. Follow the maintenance instructions specified in the manual.

▲ WARNING - Generator exhaust contains carbon monoxide, a poisonous gas that can kill you.

- Use the generator outdoors, away from open windows, vents, or doors that could allow the carbon monoxide gas to come indoors. Keep the generator at least 1 meter (3 feet) away from any structure or building during use.
- **NEVER** use a generator indoors, including in homes, garages, basements, crawl spaces, and other enclosed or partially-enclosed areas, even with ventilation. Opening doors and windows or using fans will not prevent carbon monoxide build-up in the home.
- Never use a generator in enclosed or partially-enclosed spaces.

Generators can produce high levels of carbon monoxide very quickly. When you use a portable generator, remember that you cannot smell or see carbon monoxide. Even if you can't smell exhaust fumes, you may still be exposed to carbon monoxide.

- NEVER operate the generator in an explosive atmosphere, near combustible materials or where ventilation is not sufficient to carry away exhaust fumes. Exhaust fumes can cause serious injury or death.
- If you start to feel sick, dizzy, or weak while using a generator, get to fresh air RIGHT AWAY. DO NOT DELAY. The carbon monoxide from generators can rapidly lead to full incapacitation and death.
- If you experience serious symptoms, get medical attention immediately. Inform medical staff that carbon monoxide poisoning is suspected. If you experienced symptoms while indoors, have someone call the fire department to determine when it is safe to re-enter the building.

⚠ WARNING - Starter cord kickback (rapid retraction) will pull hand and arm toward engine faster than you can let go which could cause broken bones, fractures, bruises, or sprains resulting in serious injury.

- When starting the engine, pull cord slowly until resistance is felt and then pull rapidly to avoid kickback.
- NEVER start or stop engine with electrical devices plugged in and turned on.

⚠ WARNING - Fuel and its vapors are extremely flammable and explosive. Fire or explosion can cause severe burns or death.

- Observe all safety regulations for the safe handling of fuel. Handle fuel in safety containers. If the container does not have a spout, use a funnel.
- Do not overfill the fuel tank, leave room for the fuel to expand.
- Do not refill fuel tank while the engine is running. Before refueling the generator, turn it off and let it cool down. Gasoline spilled on hot engine parts could ignite.
- Fill the tank only on an area of bare ground. While fueling the tank, keep heat, sparks and open flame away. Carefully clean up any spilled fuel before starting engine.
- Always fill fuel tank in an area with plenty of ventilation to avoid inhaling dangerous fumes.
- NEVER store fuel for your generator in the home. Gasoline, propane, kerosene, and other flammable liquids should be stored outside of living areas in properly-labeled, non-glass safety containers. Do not store them near a fuel-burning appliance, such as a natural gas water heater in a garage. If the fuel is spilled or the container is not sealed properly, invisible vapors from the fuel can travel along the ground and can be ignited by the appliance's pilot light or by arcing from electric switches in the appliance.



This product has been designed with internal grounding or floating bonded neutral. If it should malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock.

⚠ DANGER - Improper grounding can result in a risk of electrocution. Check with a qualified electrician for your local requirements if you are in doubt as to whether the unit is properly grounded.

- This generator is equipped with a grounding terminal for added protection. Using the ground path from the generator to an external ground source as instructed in the section labeled "Grounding Instructions" in the Preparation section of this manual can be necessary. Please consult a qualified electrician for local regulations.
- The generator is a potential source of electrical shock if not kept dry.
- Keep the generator dry and do not use in rain or wet conditions. To protect from moisture, operate it on a dry surface under an open, canopy-like structure. Dry your hands if wet before touching the generator.
- Plug appliances directly into the generator. Or, use a heavy duty, outdoor-rated extension cord that is rated (in watts or amps) at least equal to the sum of the connected appliance loads. Check that the entire cord is free of cuts or tears and that the plug has all three prongs, especially a grounding pin.
- NEVER try to power the house wiring by plugging the generator into a wall outlet, a practice known as "back feeding". This is an extremely dangerous practice that presents an electrocution risk to utility workers and neighbors served by the same utility transformer. It also bypasses some of the built-in household circuit protection devices. If you must connect the generator to the house wiring to power appliances, have a qualified electrician install the appropriate equipment in accordance with local electrical codes.

⚠ WARNING - To reduce the risk of injury, read this operator's manual completely before using. When using this product, the following basic precautions should always be followed.

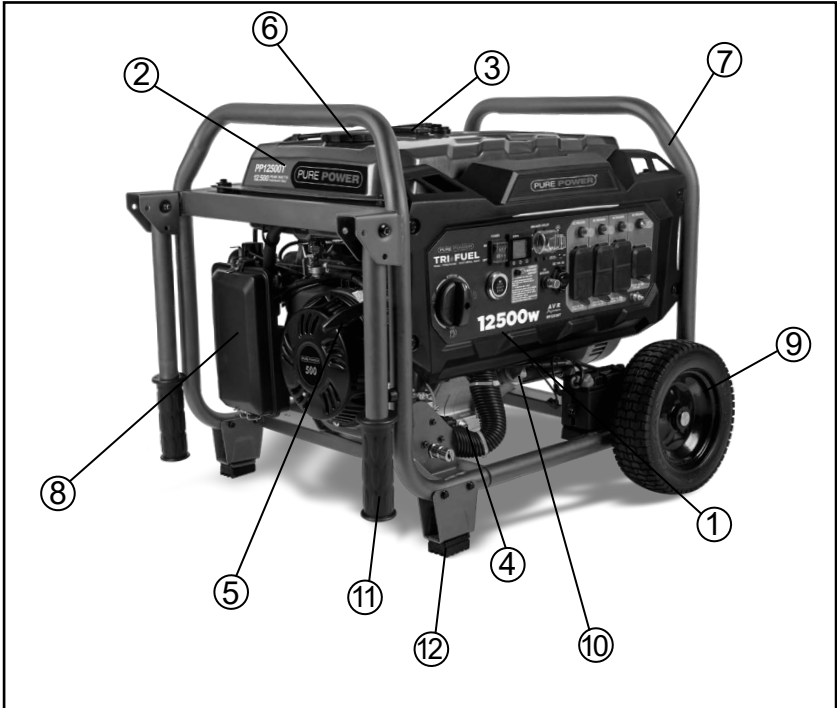
- Do not enclose the generator or cover it. The generator may become overheated if it is enclosed. If generator has been covered to protect it from the weather during non use, be sure to remove it and keep it well away from the area during generator use.
- Operate the generator on a level surface. It is not necessary to prepare a special foundation for the generator. However, the generator will vibrate on an irregular surface, so choose a level place. If the generator is tilted or moved during operation, fuel may spill and/or the generator may tip over, causing a hazardous situation. Proper lubrication cannot be expected if the generator is operated on a steep incline or slope. In such a case, piston seizure may occur even if the oil is above the upper level.
- Pay attention to the wiring or extension cords from the generator to the connected device. If the wire is under the generator or in contact with vibrating part, it may break and possibly cause a fire, generator burnout, or electric shock hazard. Replace damaged or worn cords immediately.

- Do not operate in rain, in wet or damp conditions, or with wet hands. The operator may suffer severe electric shock if the generator is wet due to rain or snow. If wet, wipe and dry it well before starting. Do not pour water directly over the generator, nor wash it with water.
- Be extremely careful that all necessary electrical grounding procedures are followed during each and every use. Failure to do so can be fatal.
- DO NOT smoke while charging a battery. The battery emits flammable hydrogen gas, which can explode if exposed to electric arcing or open flame. Keep the area well ventilated and keep open flames / sparks away when charging a battery.
- The engine becomes extremely hot during and for some time after operation. Keep combustible materials well away from generator area. Be very careful not to touch any parts of the hot engine especially the muffler area or serious burns may result
- Keep children and all bystanders at a safe distance from work area.
- It is absolutely essential that you know the safe and proper use of the power tool or appliance that you intend to use. All operators must read, understand and follow the tool / appliance owners manual. Tool and appliance applications and limitations must be understood. Follow all directions given on labels and warnings. Keep all instruction manuals and literature in a safe place for future reference.
- Use only "LISTED" extension cords. When a tool or appliance is used outdoors, use only extension cords marked "For Outdoor Use". Extension cords, when not in use should be stored in a dry and well ventilated area.
- Always switch off generator's AC circuit breaker and disconnect tools or appliances when not in use, before servicing, adjusting, or installing accessories and attachments.
- Make sure the engine is stopped before starting any maintenance, servicing or repair.

NOTE:

Ensure maintenance and repair of the generator are performed by properly trained personnel only.

SAVE THESE INSTRUCTIONS



1. Control panel	7. Frame
2. Fuel tank	8. Air cleaner
3. Fuel gauge	9. Wheel kit
4. Oil drain plug	10. Oil dipstick
5. Recoil starter	11. Handles
6. Fuel tank cap	12. Support Foot

SUPPORT FOOT INSTALLATION

1. Align the two holes on the support foot with the two holes on the bottom of the frame. Place two bolts through the support foot hole and the frame hole.



2. Fasten the nut to the bolt, tighten with a wrench.

Repeat the same process to install the other support foot.



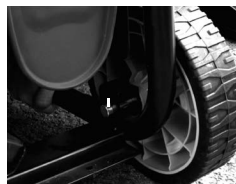
WHEEL INSTALLATION

1. Slide the wheel shaft through the wheel and the circular gasket. After, slide the wheel through the hole on the frame.



2. Insert the R pin into the hole at the end of the wheel shaft to prevent the wheel from coming off.

Repeat the same process to install the other support foot.



HANDLE INSTALLATION

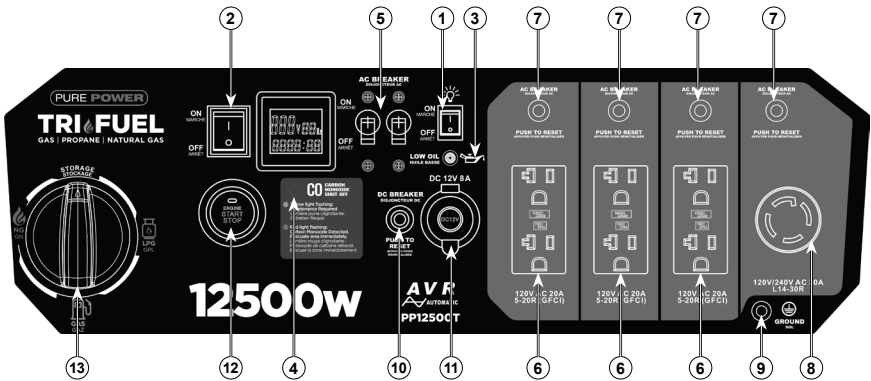
1. Place two washers into the holes on the left and right sides of the handle. Slide the bolt through the holes on the handle and through the holes on the frame.



2. Fasten the nut to the bolt and tight with a wrench.

Repeat the same process to install the other handle.





- 1: Light Switch** - Press once to turn the LED light on. Press again to turn the light off.
- 2: Engine Switch** - Press ON to start the engine, press OFF to turn the engine off.
- 3: Low Oil Indicator** - If this light glows red, it means the engine is low on oil.
- 4: Carbon Monoxide Alarm** - A **flashing red light** indicates a dangerous build up of carbon monoxide gas has been detected in the area the generator is located. Vacate this area immediately until it has been aired out. A **flashing yellow light** indicates a malfunction in the carbon monoxide sensor and it needs to be serviced.
- 5: Main Breaker** - A circuit breaker interrupts the current when the circuit has been overloaded.
- 6: 120V AC 20A 5-20R Outlet** - The outlet is capable of carrying a maximum of 20 amps.
- 7: AC Protector** - If an outlet is overloaded, the AC protector will trip and block current.
- 8: 120/240V AC 30A L14-30R Outlet** - The outlet is capable of carrying a maximum of 30 amps.
- 9: Ground Terminal** - The ground terminal is used to externally ground the generator.
- 10: DC Protector** - If the DC outlet is overloaded the DC protector will trip to block current
- 11: 12V DC Outlet** - 12 volt DC 8 amp outlet.
- 12: One Touch Start** - Pressing this button will start the generator without having to pull the recoil.
- 13: Fuel Source Switch** - Allows the user to swap between fuel types.

REFUELING:

⚠ DANGER - GASOLINE IS HIGHLY FLAMMABLE AND TOXIC. DO NOT OVERFILL THE FUEL TANK. TIGHTEN FUEL CAP ONCE YOU HAVE REFILLED THE MACHINE.

1. Remove the fuel tank cap and add at least 87 octane gasoline.

⚠ ATTENTION - IF YOU SPILL FUEL WHILE REFILLING THE UNIT, BE SURE TO WIPE UP AND EXCESS FUEL THAT MAY HAVE SPILLED. ONLY USE UNLEADED GASOLINE TO FILL THIS UNIT. USING LEADED GASOLINE WILL SERIOUSLY DAMAGE THE INTERNALS OF THE ENGINE.

OIL:

THIS GENERATOR IS SHIPPED WITHOUT OIL IN THE ENGINE. FILL YOUR UNIT WITH THE PROVIDED OIL PRIOR TO FIRST USE.

1. Ensure your unit is placed on a flat surface.
2. Unscrew the dipstick and add the provided bottle of **SAE 10W-30** oil to the engine.
3. Put your dipstick back into place and tighten it.

NOTE: If you plan on using this unit in colder climates, it is recommended to use SAE-0W30 oil.

PRE-OPERATION INSPECTION:

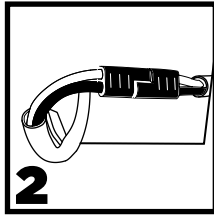
Prior to each use of your unit, ensure you perform these checks to prevent any potential failures.

COMPONENT	CHECK	SOLUTIONS
Fuel	Ensure your unit has fuel in it.	Fill your unit with fuel if necessary.
Oil	Check your oil levels.	Add oil if necessary.
	Check for any oil leaks.	Contact a service center for help.
Abnormal conditions during operation.	Check operating condition of the generator.	Contact a service center for help.
Battery	Check if the battery is charged.	See the "battery charging" page.

START-UP PROCEDURE



FILL UNIT WITH OIL OR CHECK OIL LEVELS AS NEEDED.

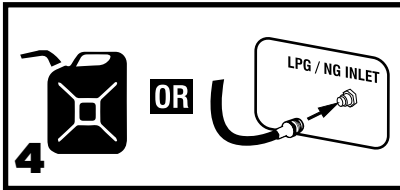


CONNECT THE BATTERY BY ATTACHING THE CLIPS.

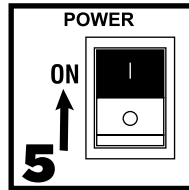


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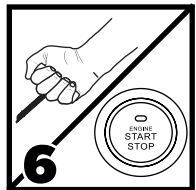
CHOOSE YOUR DESIRED FUEL TYPE



FILL GAS TANK WITH 87 OCTANE FUEL OR CONNECT EITHER LPG OR NG LINE

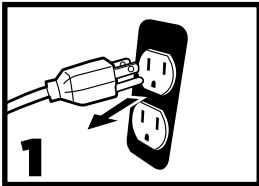


FLIP THE POWER SWITCH TO THE "ON" POSITION.

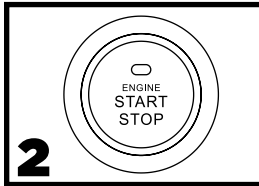


PULL THE RECOIL HANDLE OR PRESS START BUTTON.

SHUTDOWN PROCEDURE



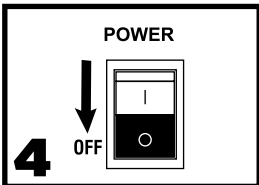
UNPLUG ALL POWER CORDS FROM THE UNIT.



PRESS STOP BUTTON TO TURN UNIT OFF.



FLIP THE SWITCH TO "STORAGE"



FLIP THE POWER SWITCH TO "OFF" POSITION.

FUEL TYPE

Turn the Fuel Selector Switch on the Control Panel to the desired fuel setting.

NOTE: The engine is equipped with a safety solenoid valve - the battery must be connected and charged to allow operation with LPG or NG fuel.

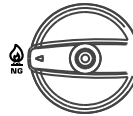
1. To operate the generator on gasoline, turn the fuel selector switch to the GAS and fill the unit with at least 87 octane gasoline.



2. To operate the generator on LPG, turn the fuel selector switch to the PROPANE setting, connect the LPG hose to your propane tank, and push back the quick connector sleeve of the LPG hose and insert the hose into the inlet on the unit.



3. To operate the generator on natural gas, turn the fuel selector switch to the NG setting, attach the gas pipe adapter to your natural gas outlet. Push back the quick connector sleeve of the NG hose and insert the hose into the inlet on the unit.



4. When the generator is not in use, turn the fuel selector switch to the OFF/STORAGE position to turn off the fuel flow to the engine

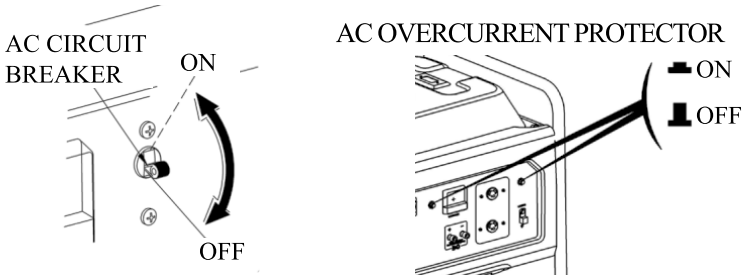
OIL WARNING LIGHT (RED)

When the oil level falls below the lower level, the oil warning light comes on and the engine stops automatically. Unless you refill with oil, the engine will not start again.

TIP: If the engine stalls or does not start, turn the engine switch to "ON" and then pull the recoil starter. If the oil warning light flickers for a few seconds, the engine oil is insufficient. Add oil and restart.

AC BREAKER (EXACT LAYOUT MAY VARY BETWEEN MODELS)

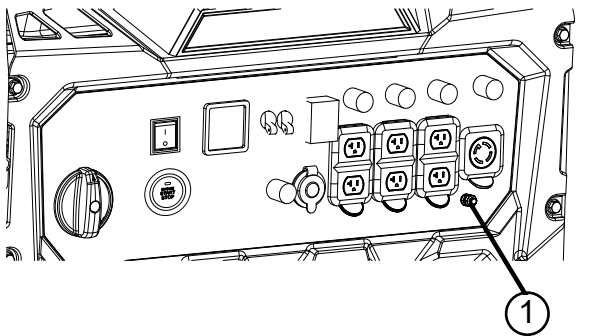
The AC breakers (2) pop out to “OFF” automatically when the electric device being connected to the generator is operating at a current above the rated flows. To use the generator again, unplug all equipment, then turn on AC protector by pressing its button to “ON”.





If multiple breakers trip simultaneously, due to an overload on multiple sockets at once, the main AC Breaker (3) will trip. You must unplug any equipment and re-engage the main breaker by flipping the switches back up to ON in order to use the generator again.

GROUND TERMINAL

Ground Terminal (1) connects the grounding wire to the ground source to reduce the risk of electric shock. If the electrical device is grounded (has 3 prongs on the plug), always ground the generator.



GROUNDING INSTRUCTIONS

 DANGER	
	Improper connection of the equipment grounding conductor can result in a risk of electrocution.
Check with a qualified electrician if you are in doubt as to whether the unit is properly grounded for your local regulations.	

The ground terminal on the frame can be used to connect the generator to a suitable ground source. The ground path should be made with #8 size wire. Connect the grounding wire securely to the ground terminal. Connect the other end of the wire securely to a suitable ground source.

A metal underground water pipe in direct contact with the earth for at least 10 feet can be used as a grounding source. If a pipe is unavailable, an 8 foot length of pipe or rod may be used as the ground source. The pipe should be 3/4" diameter or larger and the outer surface must be noncorrosive. If a steel or iron rod is used it should be at least 5/8" diameter and if a nonferrous rod is used it should be at least 1/2" diameter and be listed as material for grounding. Drive the rod or pipe to a depth of 8'. If a rock bottom is encountered less than 4 feet down, bury the rod or pipe in a trench. All electrical tools and appliances operated from this generator, must be properly grounded by use of a third wire or be "Double Insulated".

It is recommended to:

1. Use electrical devices with 3 prong power cords.
2. Use an extension cord with a 3 hole receptacle and a 3 prong plug at the opposite ends to ensure continuity of the ground protection from the generator to appliance.


We strongly recommend that all applicable regulations relating to grounding specifications be checked and followed.

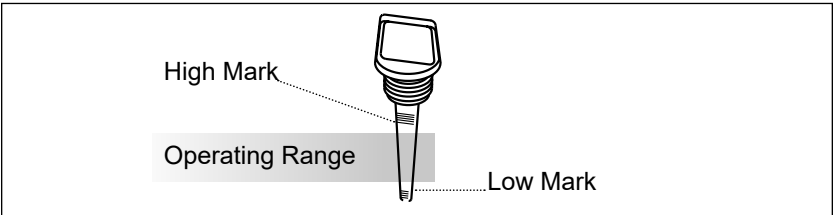
ENGINE OIL

Before checking or refilling oil, be sure generator is located on stable and level surface with engine stopped.


This generator uses SAE 10W30 oil.

1. Remove oil dipstick and check the engine oil level.
2. If oil level is below the lower level line, refill with suitable oil to upper level line. Do not screw in the oil dipstick when checking oil level.
3. Change oil if contaminated.

⚠ WARNING	
	Always check the level of the engine oil prior to starting the generator.
Failure to do so could cause the engine to seize if the oil is low or empty.	



FUELING

⚠ WARNING	
	Explosive Fuel! Gasoline is extremely flammable and its vapors can explode if ignited.
<ul style="list-style-type: none"> • DO NOT refuel while smoking or near open flame or other such potential fire hazards. • Store gasoline only in approved containers, in well-ventilated, unoccupied buildings and away from sparks or flames. • DO NOT fill the tank while the engine is hot or running, since spilled fuel could ignite if it comes in contact with hot parts or sparks from ignition. • DO NOT start the engine near spilled fuel. • NEVER use gasoline as a cleaning agent. 	

⚠ WARNING

DO NOT overfill the tank, leave room for the fuel to expand.

1. If fuel level is low, refill with unleaded automotive gasoline.
2. Check fuel gauge while filling.

GENERAL RECOMMENDATIONS

- Purchase gasoline in small quantities and store in clean, approved containers.
- To minimize gum deposits in your fuel system and to insure easy starting, do not use gasoline left over from the previous season.
- Do not add oil to the gasoline.
- Consider adding fuel stabilizer before running or starting the generator.

GASOLINE FUEL TYPE

- For best results use only clean, fresh, unleaded gasoline with an octane rating of 87 or higher.

Gasoline/Alcohol Blends

Gasohol (up to 10% ethyl alcohol) is approved, as a fuel. Other gasoline/alcohol blends are not approved.

Gasoline/Ether Blends

Methyl Tertiary Butyl Ether (MTBE) and unleaded gasoline blends (up to a maximum of 15% MTBE by volume) are approved as a fuel. Other gasoline/ether blends are not approved.

Check Component Parts

Check following items before starting engine:

1. Fuel leakage from fuel hose, etc.
2. Bolts and nuts for looseness.
3. Components for damage or breakage.
4. Generator not resting on or against any adjacent wiring.

OPTIMAL ENVIRONMENT

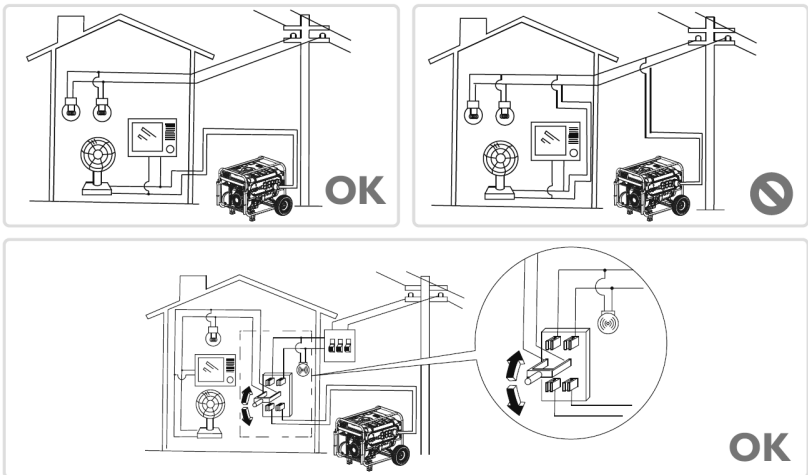
AMBIENT TEMPERATURE	-20°C to 40°C
OPTIMAL HUMIDITY	Below 95%
OPTIMAL ALTITUDE	Below 1,500m (At regions above 1,000m the unit will generate less power)

In certain environments, total output power can be affected.

- Every 5°C increase in ambient temperature above optimal will reduce your units output by ~2%.
- Every 30% increase in relative humidity will reduce the total output of your generator by ~1.5%

GENERATOR WIRING

- If you decide to connect your generator to your household power as a backup power supply, ensure the task is done by a professional electrician.
- Always check any device, cable or other accessory that you plug into the generator is safe and reliable. A damaged connection may cause damage to the generator and is a potential fire hazard.
- Avoid connecting this generator directly to any commercial power outlet.
- When using extension cables, ensure the cable is suited for the load you will be applying to it. Always make sure your extension cable is not damaged.



⚠ WARNING



Keep area clear of flammables or other hazardous materials.

- Keep generator at least 3ft (1m) away from buildings or other structures.
- Only operate generators in a dry, well ventilated area.
- Keep exhaust pipe clear of foreign objects.
- Keep generator away from open flame. No Smoking!
- Keep generator on a stable and level surface.
- Do not block generator air vents with paper or other material.

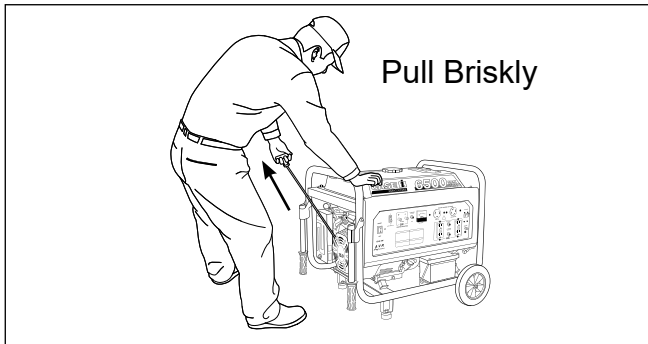
STARTING YOUR GENERATOR

Recoil Start

⚠ CAUTION

When starting the engine with the recoil start, set the toggle switch in the "ON" position before pulling the starter handle.

1. Make sure all appliances are disconnected from the generator.
2. Turn fuel valve to ON
3. Move engine choke switch to the START (ON) position. (When the engine is warm or temperature is high, start engine with the switch in the OFF position).



⚠ CAUTION

Do not connect appliances with defective power cords and/or plugs.

Be sure appliances are not connected to generator when starting up. Starting the generator with an appliance connected could result in damage to the generator and/or appliances and personal injury.

4. Pull the recoil starter handle slowly until passing the compression point (resistance will be felt), then return the handle to its original position and pull briskly.
5. After starting, allow the recoil starter handle to return to its original position with the handle still in your hand.

NOTE: *If the engine fails to start after several attempts, repeat the starting procedures mentioned above with the engine choke switch placed in the OFF position.*

6. After 20 to 30 seconds of warm-up is completed, turn the engine choke switch to "OFF" position.
7. Loads can now be applied to unit.

USING ELECTRIC POWER

⚠ WARNING



Risk of electrocution.
Make sure that the appliance is switched off before connecting it to the generator.

- **DO NOT** move the generator while it is running.

AC APPLICATION

1. Make sure the voltage indicated on the voltmeter is at the normal level (approx. 120V).

NOTICE

This generator is thoroughly tested and adjusted in the factory. If the generator does not produce the specified voltage, consult your nearest authorized service provider.

2. Turn off the switch(es) of the electrical appliance(s) before connecting to the generator.
3. Insert the plug(s) of the electrical appliance(s) into the receptacle.
 - Be sure that the total wattage of all connected appliances does not exceed the rated output of the generator.
4. Turn on the switch of the appliance.

CARBON MONOXIDE SHUTOFF

DO NOT USE THE GENERATOR INDOORS OR IN ANY ENCLOSED SPACE OR IN ANY OTHER AREA OR SITUATION THAT WILL ALLOW CARBON MONOXIDE TO ACCUMULATE

- **RED LIGHT FLASHING:**
Dangerous levels of carbon monoxide gas have built up. leave immediately until the area has aired out, Move the generator to well-ventilated area before operation.
- **YELLOW LIGHT FLASHING**
Carbon monoxide sensor malfunction, the sensor needs service, call our service department at 1-866-850-6662 as soon as possible and do not use the generator until the sensor is working properly.

NOTE: The yellow sensor light flashes once after starting to indicate passing self-check and is functioning normally.

The carbon monoxide sensor must be serviced by a qualified technician to restore it to original settings. **DO NOT** modify or tamper with the carbon monoxide sensor.

STOPPING THE GENERATOR

1. Unplug all power cords from the unit
2. Press stop button to turn of the unit
3. Flip the switch to STORAGE
4. Flip the power switch to OFF position

OIL SENSOR

The oil sensor detects a drop in oil level in the crankcase and automatically stops the engine when the oil level drops below a predetermined level.

When the engine has stopped automatically, turn off the generator, and check the oil level. Refill engine oil to the upper level as instructed (on page 29) and restart the engine.

CAUTION

DO NOT remove oil sensor probe when refilling with oil.
Remove oil filler cap on the opposite side of carburetor.

WATTAGE INFORMATION

Some appliances need a “surge” of energy when starting. This means that the amount of electrical power needed to start the appliance may exceed the amount needed to maintain its use.

Electrical appliances and tools normally come with a label indicating voltage, cycles / Hz, amperage (amps) and electrical power needed to run the appliance or tool.

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

- Electrical loads such as incandescent lamps and hot plates require the same wattage to start as is needed to maintain use.
- Loads such as fluorescent lamps require 1.2 to 2 times the indicated wattage during start-up.
- Loads for mercury lamps require 2 to 3 times the indicated wattage during start-up.
- Electrical motors require a large starting current. Power requirements depend on the type of motor and its use. Once enough “surge” is attained to start the motor, the appliance will require only 30% to 50% of the wattage to continue running.
- Most electrical tools require 1.2 to 3 times their wattage for running under load during use. For example, a 5000 watt generator can power a 1800 to 4000 watt electrical tool.
- Loads such as submersible pumps and air compressors require a very large force to start. They need 3 to 5 times the normal running wattage in order to start. For example, a 5000 watt generator would only be able to drive a 1000 to 7000 watt pump.

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

 CAUTION

If an electric motor fails to start or reach running speed, turn off the appliance or tool immediately to avoid equipment damage. Always check the requirements of the tool or appliance being used compared to the rated output of the generator.

DAILY INSPECTION

Before running the generator, check the following service items:

- Safe surroundings.
- Leakage of gasoline and engine oil.
- Clean engine oil.
- AC receptacle and DC terminal for damage.
- Enough gasoline.
- Excessive vibration, noise.
- Loose or broken bolts, nuts or shields.
- Clean air element.

PERIODIC MAINTENANCE

Periodic maintenance is vital to safe and efficient operation of your generator.

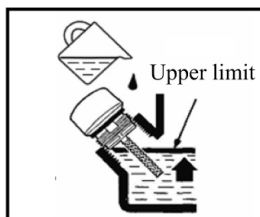
The emission control system consists of the following parts:

- Carburetor and internal parts
- Cold start enrichment system, if applicable
- Intake manifold, if applicable
- Air cleaner element
- Spark plug
- Magneto or electronic ignition system
- Exhaust manifold
- Hoses, connectors, and assemblies

CHANGING ENGINE OIL

Change oil after the first 20 hours of operation. Thereafter it should be changed every 100 hours. **This generator uses SAE 10W30 oil.**

1. Drain oil by removing the drain plug and the oil filler cap while the engine is warm.
2. Reinstall the drain plug and fill the engine with oil until it reaches the upper level on the oil filler cap.
3. Dispose of used oil according to local zoning or environmental regulations.



CARBURETOR ADJUSTMENT

The carburetor is an important component of the engine. If the carburetor needs to be serviced, contact your service center to have a professional ensure that necessary adjustments are done correctly.

OIL REPLACEMENT

▲ WARNING: DO NOT DRAIN OIL IMMEDIATELY AFTER OPERATING YOUR UNIT. THE OIL WILL BE VERY HOT AND SHOULD BE LEFT TO COOL DOWN IN ORDER TO PREVENT INJURY OR BURNS.

1. Place the generator on a flat surface.
2. Unscrew the drain bolt.
3. Place a container underneath the drain hole and tilt the machine to allow the oil to drain. Once drained, tighten the drain bolt back into place.
4. Refill oil to the correct level and tighten the dipstick.

RECOMMENDED OIL	SAE-10W30
OIL GRADE	API STANDARD MODEL SJ OR HIGHER
CAPACITY	1.2L

AIR FILTER CLEANING

The air filter can get dirty after prolonged use and needs to be cleaned or replaced regularly. If frequently operating in dusty environments, maintenance must be done more often.

1. Open the air filter cover.
2. Clean foam filter element with cleaning solvent and allow it to air dry. Place a few drops of oil on the filter.

ATTENTION: THE AIR FILTER IS DELICATE. DO NOT FORCIBLY TWIST THE FILTER TO PREVENT DAMAGE.

3. Put the foam air filter back into place.

TIP: MAKE SURE THAT THE SURFACE OF THE FILTER IS IN CLOSE CONTACT WITH THE INTAKE. MAKE SURE THERE ARE NO GAPS

DO NOT START THE ENGINE WITHOUT THE AIR FILTER IN PLACE.

4. Reinstall the cover for the air cleaner.

FUEL FILTER CLEANING

1. Remove the fuel tank cap and fuel filter screen.
2. Clean the filter screen with gasoline.
3. Wipe the filter screen dry and place back into tank.
4. Reassemble the fuel tank cap.

BATTERY CHARGING

The lifespan of a battery in storage is about 6 months. If your generator isn't used for a long time, the battery will lose charge. If the battery loses charge, you can attempt to recharge it. If charging the battery does not work, you must replace the battery.

CHARGING METHODS

Starting the Generator: Use the recoil starter to start the generator. This will allow the unit to charge the battery.

External Charger: Connect the charger to the battery on the generator and then connect the mains to charge the battery.

⚠ WARNING: DO NOT START THE GENERATOR WHILE CHARGING WITH AN EXTERNAL POWER SUPPLY. KEEP BATTERIES AWAY FROM FIRE SOURCES. KEEP THE BATTERY IN A COOL AND DRY PLACE, AWAY FROM DIRECT SUNLIGHT. KEEP BATTERIES OUT OF REACH OF CHILDREN.

Charge your battery properly:

- Keeping lithium-ion batteries properly charged and discharged can prolong battery life. Maintaining a power level of 10% - 90% in lithium-ion batteries is beneficial for battery protection.

Charge your battery at the right temperature:

- Never charge your battery if the temperature is not within 5°C to 45°C.

Avoid overcharging:

- Overcharging lithium-ion batteries should be avoided at all costs. Overcharging a lithium-ion battery will lead to serious degradation of battery performance, damage to the battery itself, or in some cases can cause an explosion.



NOTE: The engine is equipped with an auto-choke system which requires the battery to be charged to operate. If the battery is dead, use the mechanical choke override located above the carburetor to manually choke and unchoke the engine and start the engine manually.

Following the maintenance schedule is the best way to ensure safe, economical, and zero-failure operation. In order to maintain good condition, you must inspect your unit regularly.

ITEM		MAINTENANCE CYCLE	EACH USE	EACH MONTH OR 20 HOURS	EVERY 3 MONTHS OR 50 HOURS	EACH YEAR OR 100 HOURS
ENGINE OIL	CHECK/FILL		✓			
	REPLACE			✓	✓	
AIR CLEANER	INSPECTION		✓			
	CLEAN			✓		
	REPLACE				✓	
SPARK PLUG	CLEAN/ADJUST					✓*
SPARK ARRESTOR	CLEAN				✓	
IDLE SPEED	CHECK/ADJUST					✓
VALVE CLEARANCE	CHECK/ADJUST					✓**
FUEL TANK AND FUEL FILTER	CLEAN					✓
FUEL LINE	INSPECTION	EVERY 2 YEARS (REPLACE IF NECESSARY)				
CYLINDER HEAD, PISTON	REMOVE CARBON DEPOSIT**	IF THE ENGINE IS LESS THAN 225CC, EVERY 125 HOURS. IF THE ENGINE IS MORE THAN 225CC, EVERY 250 HOURS.				
* REPLACE IF NECESSARY ** MUST BE SERVICED BY AN AUTHORIZED SERVICE CENTER						

TRANSPORTING

When transporting the generator, make sure that the fuel (gasoline) is drained from the tank.

⚠ WARNING	
	To prevent fuel spillage due to the vibration and impact, never transport the generator with fuel (gasoline) in the tank. Secure the tank cap.
	To avoid the risk of the gasoline flammability, never leave the generator in an area exposed to direct sunlight or high temperatures for a long period time.
Keep the fuel in an approved storage tank when transporting.	

1. Turn the engine switch to the STOP position.
2. Drain fuel from fuel tank carefully by disconnecting the fuel line.
3. Tighten the tank cap.

⚠ CAUTION
DO NOT place any heavy objects on the generator. Select and place the generator in the proper position of the transport vehicle so that the generator will not move or fall down. Secure the generator if necessary.

PREPARATION FOR STORAGE

The following procedures should be followed prior to storage of your generator for periods of 6 months or longer.

1. Drain fuel from fuel tank carefully by disconnecting the fuel line.
Gasoline left in the fuel tank will eventually deteriorate making engine starting difficult. Add fuel stabilizer to fuel tank.
2. Remove the drain screw of the carburetor to drain fuel.
3. Change engine oil.
4. Check for loose bolts and screws, tighten them if necessary.
5. Clean generator thoroughly with clean cloth.

NEVER USE WATER TO CLEAN GENERATOR.

6. Pull recoil starter handle until resistance is felt, leaving handle in that position.
7. Store generator in a well ventilated, low humidity area.

ITEM	PP12500T
Rated Power (W)	8,300(GAS) / 7,500(LPG) / 6,600 (NG)
Max Power (W)	12,500(GAS) / 8,300(LPG) / 7,400(NG)
Engine Type	4-stroke
Displacement (Cc)	500
Gas Distribution Mode	OHV
Cooling Mode	Air Cooled
Starting Method	Recoil Start / Electric Start
Fuel Tank Volume (L)	27
Fuel Type And Grade	Use unleaded gasoline (87 octane or higher)
Oil Type	SAE 10W-30
Oil Capacity (L)	1.2
Db @ 7m (25% Load)	77
Rated Voltage (V)	120/240
Rated Frequency (Hz)	60
Rated Power Factor	1
Phase Number	Single Phase
Run Time @25% (Hour)	Up to 11 Hrs
Low oil shutdown	Yes
CO shutdown	Yes
Floodlight	Yes
Cold weather start	Yes (-15 Celsius)
Bonded Neutral	Yes
Automatic voltage regulators(AVR)	Yes
Certifications	ETL, PGMA
Unit Dimension (in.)	27.44×22.91×22.72
Net Weight (lb.)	220

PROBLEM	POSSIBLE CAUSE	SOLUTION
<p>ENGINE WILL NOT START</p>	<p>FUEL RELATED:</p> <ol style="list-style-type: none"> No fuel in tank or fuel valve closed. Choke not in START position/cold engine Gasoline with more than 10% ethanol was used. Low quality or old gasoline. Dirty fuel passageways. Carburetor needle stuck. Fuel can be smelled in the air. Too much fuel in chamber. Clogged fuel filter. 	<p>FUEL RELATED:</p> <ol style="list-style-type: none"> Fill fuel tank with fresh 87+ octane gasoline and open the fuel valve. Do not use gasoline with more than 10% ethanol (E15,E20,E85 etc.) Move choke to START position. Clean out ethanol rich gasoline from fuel system. Replace components damaged by ethanol. Fill fuel tank with fresh 87+ octane gasoline and open the fuel valve. Do not use gasoline with more than 10% ethanol (E15,E20,E85 etc.) Fill fuel tank with fresh 87+ octane gasoline and open the fuel valve. Do not use gasoline with more than 10% ethanol (E15,E20,E85 etc.) Clean out passageways using fuel additive. Heavy deposits may require further cleaning. Gentle tap side of carburetor flat chamber with screwdriver handle. Turn choke to RUN position. Remove spark plug and pull the recoil handle several times to air out the chamber. Reinstall spark plug and set the choke to START. Replace fuel filter.
	<p>IGNITION (SPARK RELATED):</p> <ol style="list-style-type: none"> Power switch in OFF position. Spark plug cap not connected securely. Spark plug electrode wet or dirty. Incorrect spark plug gap. Spark plug cap broken. Circuit breaker tripped. Incorrect spark timing or faulty ignition system. 	<p>IGNITION (SPARK RELATED):</p> <ol style="list-style-type: none"> Turn power switch ON Reconnect spark plug cap Clean spark plug Correct the spark plug cap. Replace the spark plug cap. Reset circuit breaker. Check wiring and start motor if breaker continues to trip. Have qualified repair technician diagnose/repair ignition system.
	<p>COMPRESSION RELATED:</p> <ol style="list-style-type: none"> Cylinder not lubricated. Can happen after long storage periods. Loose or broken spark plug. (hissing noise when trying to start.) Loose cylinder head or damaged head gasket. (hissing noise when trying to start.) Engine valves or or tappets misaligned or stuck. 	<p>COMPRESSION RELATED:</p> <ol style="list-style-type: none"> Pour tablespoon of oil into sparkplug hole. Crank engine a few times and try to start. Tighten spark plug. If that does not work, replace spark plug. Tighten head, if that doesn't work, replace the head gasket. Have qualified repair technician adjust/repair valves and tappets.
	<p>ENGINE OIL RELATED:</p> <ol style="list-style-type: none"> Low engine oil Unit on slope, triggering the low oil shutdown. 	<p>ENGINE OIL RELATED:</p> <ol style="list-style-type: none"> Fill engine oil to proper level. Check engine oil before EVERY use. Operate unit on a level surface. Check engine oil level.
	<p>SPARK ARRESTOR:</p> <ol style="list-style-type: none"> Plugged spark arrestor. 	<p>SPARK ARRESTOR:</p> <ol style="list-style-type: none"> Clean and replace spark arrestor.

PROBLEM	POSSIBLE CAUSE	SOLUTION
ENGINE MISFIRES	<ol style="list-style-type: none"> 1. Spark plug cap is loose. 2. Incorrect spark plug gap or damaged spark plug. 3. Defective spark plug cap. 4. Old or low quality gasoline. 5. Incorrect compression. 	<ol style="list-style-type: none"> 1. Check cap and wire connections 2. Re-gap or replace spark plug. 3. Replace spark plug cap. 4. Fill fuel tank with fresh 87+ octane gasoline and open the fuel valve. Do not use gasoline with more than 10% ethanol (E15,E20,E85 etc.) 5. Diagnose and repair compression. (refer to Engine will not start: COMPRESSION RELATED section.)
ENGINE STOPS SUDDENLY	<ol style="list-style-type: none"> 1. Carbon monoxide level high. Red light on carbon monoxide sensor illuminates. 2. CO sensor alarm flashes yellow shortly after starting. 3. CO sensor alarm flashes yellow continually after longer period of operation. 4. Low oil shutdown. 5. Fuel tank empty or full of impure or low quality gasoline. 6. Defective fuel tank cap creating vacuum, preventing proper fuel flow. 7. Faulty magneto 8. Disconnected or improperly connected spark plug cap. 	<ol style="list-style-type: none"> 1. Leave area immediately and allow area to ventilate thoroughly. Only operate generator outside. 2. Carbon monoxide sensor malfunction. Sensor needs service. Do not use generator until fixed. 3. Make sure to operate generator within rated ambient temperature; maintain minimum 5ft' clearance on all sides. 4. Fill engine oil to proper level. Check engine oil before each use. 5. Fill fuel tank with fresh 87+ octane gasoline and open the fuel valve. Do not use gasoline with more than 10% ethanol (E15,E20,E85 etc.) 6. Test/replace fuel tank cap. 7. Have qualified technician service magneto. 8. Secure spark plug cap.
ENGINE STOPS WHEN UNDER HEAVY LOAD	<ol style="list-style-type: none"> 1. Dirty air filter. 2. Engine running cold. 	<ol style="list-style-type: none"> 1. Clean air filter. 2. Allow engine to warm up before operating equipment.
ENGINE KNOCKS	<ol style="list-style-type: none"> 1. Old or low quality gasoline. 2. Engine overloaded. 3. Incorrect spark timing, deposit buildup, worn engine, other mechanical issues. 	<ol style="list-style-type: none"> 1. Fill fuel tank with correct gasoline. 2. Do not exceed equipment's load rating. 3. Have a qualified technician diagnose and service the engine.
ENGINE BACKFIRES	<ol style="list-style-type: none"> 1. Old or low quality gasoline. 2. Engine too cold. 3. Intake valve stuck or engine overheated. 4. Incorrect timing. 	<ol style="list-style-type: none"> 1. Fill fuel tank with correct gasoline. 2. Use cold weather fuel and oil additives to prevent backfiring. 3. Have a qualified technician diagnose and service the engine. 4. Check engine timing.
ATTACHED DEVICE DOESN'T HAVE POWER	<ol style="list-style-type: none"> 1. Device not plugged in properly. 2. Circuit breaker tripped. 3. Product needs service. 	<ol style="list-style-type: none"> 1. Turn off and unplug the device, plug back in and turn back on. 2. Turn off and unplug device. Reset circuit breaker. Plug in device, turn it on. 3. Have product serviced.
ATTACHED DEVICE BEGINS TO OPERATE ABNORMALLY	<ol style="list-style-type: none"> 1. Device not plugged in properly. 2. Circuit breaker tripped. 	<ol style="list-style-type: none"> 1. Immediately unplug device. Have device serviced by a qualified technician. 2. Lower the number of items plugged into the generator to stay within rated capacity.

COMBINED EXHAUST AND EVAPORATIVE EMISSIONS CONTROL WARRANTY STATEMENT

YOUR WARRANTY RIGHTS AND OBLIGATIONS

The United States Environmental Protection Agency and Chongqing Rato Technology Co., Ltd. (Rato) are pleased to explain the emission control system warranty on your 2019/2020 model year small off-road engine/equipment. In the United States, new small off-road engine/equipments must be designed, built and equipped to meet stringent anti smog standards. Rato must warrant the emission control system on your small off-road engine/equipment for the periods of time listed below provided there has been no abuse, neglect or improper maintenance of your small off-road engine/equipment.

Where a warrantable condition exists, Rato will repair your small off-road engine/equipment at no cost to you including diagnosis, parts and labor.

MANUFACTURER'S WARRANTY COVERAGE:

This emissions control system is warranted for two years. If any emission-related part on your small off-road engine/equipment is defective, the part will be repaired or replaced by Rato.

OWNER'S WARRANTY RESPONSIBILITIES:

As the small off-road engine/equipment owner, you are responsible for the performance of the required maintenance listed in your owner's manual. Rato recommends that you retain all receipts covering maintenance on your small off-road engine/equipment, but Rato cannot deny warranty solely for the lack of receipts or for your failure to ensure the performance of all scheduled maintenance.

As the small off-road engine/equipment owner, you should however be aware that Rato may deny you warranty coverage if your small off-road engine/equipment or a part has failed due to abuse, neglect, improper maintenance or unapproved modifications.

If you have any questions regarding your warranty rights and responsibilities, you should contact BE POWER EQUIPMENT at 1-800-663-8331 or info@bepressure.com.

EPA WARRANTY

DEFECTS WARRANTY REQUIREMENTS:

- A. The warranty period begins on the date the engine/equipment is delivered to an ultimate purchaser.
- B. General Emissions Warranty Coverage. Rato warrants to the ultimate purchaser and each subsequent owner that the engine/equipment is:
 - 1. Designed, built, and equipped so as to conform with all applicable regulations adopted by the Environmental Protection Agency
 - 2. Free from defects in materials and workmanship that causes the failure of a warranted part for a period of two years.
- C. Warranty Parts for Exhaust Emission.
 - 1. Fuel System
 - 2. Air Induction System
 - 3. Ignition System

The following parts are also considered emission related components for exhaust emissions, if applicable

- 1. Exhaust Gas Recirculation (EGR) System
 - 2. After treatment devices.
 - 3. Crankcase ventilation valves.
 - 4. Sensors.
 - 5. Electronic control units.
- D. Warranty Parts for Evaporative Emission include fuel tank, fuel cap, fuel line and fittings, carbon canister, vapor hoses. They may also include, if applicable, liquid/vapor separator, clamps, pressure relief valves, etc.

Rato will furnish with each new engine/equipment written instructions for the maintenance and use of the engine/equipment by the owner.

PURE POWER

**If you need assistance with the
assembly or operation of your
Inverter Generator please email**

info@purepowerequipment.ca

WWW.PUREPOWEREQUIPMENT.COM