


**Operator Manual
Manuel de l'opérateur
Manual del operador**

**PM0135500
ELECTRIC GENERATOR
GROUPE ELECTROGENE
GENERADOR ELECTRICO**



<p>⚠ DANGER Using a generator indoors CAN KILL YOU IN MINUTES. Generator exhaust contains carbon monoxide. This is a poison you cannot see or smell.</p> <p> NEVER use inside a home or garage, EVEN IF doors and windows are open.</p> <p>Only use OUTSIDE and far away from windows, doors and vents.</p> <p>Avoid other generator hazards. READ MANUAL BEFORE USE.</p>	<p>⚠ DANGER L'utilisation d'un générateur à l'intérieur PUET VOUS TUER EN QUELQUES MINUTES. L'émission d'un générateur contient du monoxyde de carbone. Cela est un délétere invisible et inodore.</p> <p>Ne l'utilisez jamais à l'intérieur d'une maison ou d'un garage et ce, MÊME SI les portes et fenêtres sont ouvertes.</p> <p>Utilisez-le uniquement à l'EXTÉRIEUR et loin des fenêtres, des portes et des conduits de ventilation.</p> <p>Évitez les autres risques associés à générateur. LISEZ LE MANUEL AVANT USAGE.</p>	<p>⚠ PELIGRO La utilización de un generador en un lugar interior PUEDA MATARLO A USTED EN MINUTOS. Los gases de escape del generador contienen monóxido de carbono. Este es un venenoso que usted no puede ver ni oler.</p> <p>No use nunca el generador dentro de una casa o un garaje, INCLUSO SI las puertas y las ventanas están abiertas.</p> <p>Use el generador solamente en el EXTERIOR y alejada de las ventanas, las puertas y los respiraderos.</p> <p>Evite otros peligros del generador. LEA EL MANUAL DEL USUARIO ANTES DE USARLO.</p>
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IMPORTANT – Please make certain that persons who are to use this equipment thoroughly read and understand these instructions and any additional instructions provided prior to operation.

IMPORTANT - Prière de vous assurer que les personnes destinées à utiliser cet appareil ont pris soin d'en lire et d'en comprendre le mode d'emploi ou les directives avant de le mettre en marche.

IMPORTANTE - Asegúrese que las personas que utilizarán este equipo lean y entiendan completamente estas instrucciones y cualquier instrucción adicional proporcionada antes del funcionamiento.

Record the serial number as indicated on your Generator's nameplate:

Enregistrer le numéro de série figurant sur la plaque signalétique du groupe électrogène:

Registre de serie como se indica en la placa del nombre de su generador:

Serial No. _____

N° de série _____

No. de serie _____



DO NOT RETURN TO STORE!



**CALL US FIRST!
CUSTOMER HOTLINE
1-800-445-1805**

FOR QUESTIONS OR SERVICE INFORMATION



NE PAS RETOURNER AU MAGASIN!



**APPELEZ-NOUS D'ABORD!
ASSISTANCE TELEPHONIQUE
A LA CLIENTELE
1-800-445-1805**

POUR L'INFORMATION DE QUESTIONS OU SERVICE



NO LO DEVUELVA A LA TIENDA!



**¡PRIMERO LLÁMENOS!
LÍNEA DIRECTA DE ATENCIÓN
AL CLIENTE
1-800-445-1805**

PARA la INFORMACION de PREGUNTAS O SERVICIO

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SAFETY INFORMATION



DANGER

DANGER indicates a potentially hazardous situation which, if not avoided, WILL result in death or serious injury.



WARNING









WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.



CAUTION

CAUTION indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate personal injury, or property damage.

SAFETY SYMBOL GUIDE

 Safety alert symbol; To alert you to potential personal injury hazards.	 Hazardous materials, toxic or very toxic materials.
 Risk of electrocution or shock.	 Rotating parts - entanglement hazard.
 Flammable materials.	 Hot surface, do not touch the surface.
 Explosion hazard.	 Corrosive materials.

SAFETY AND OPERATION RULES



WARNING - Failure to follow these instructions and warnings may result in death, personal injury, or property damage.

1. Read carefully and understand operator manual prior to operation of this product. Follow all warnings and instructions.
2. Know your equipment. Consider the applications, limitations, and the potential hazards specific to your unit.
3. Equipment must be placed on a firm, supporting surface.
4. Load must be kept within rating stated on generator nameplate. Overloading will damage the unit or shorten its life.
5. Engine must not be run at excessive speeds. Operating an engine at excessive speeds increases the hazard of personal injury.
Do not tamper with parts which may increase or decrease the governed speed.



6. To prevent accidental starting, always remove the spark plug or cable from the spark plug before maintaining the generator or engine.
7. Units with broken or missing parts, or without protective housing or covers, should never be operated. Contact your service center for replacement parts.
8. Units should not be operated or stored in wet or damp conditions or on highly conductive locations such as metal decking and steel work.
9. Keep the generator clean and free of oil, mud and other foreign matter.
10. Extension cords, power cords, and all electrical equipment must be in good condition. Never operate electrical equipment with damaged or defective cords.

11. Fire and Explosion Hazards:

- a. LP Gas is potentially hazardous and highly EXPLOSIVE.
- b. LP Gas under pressure is highly flammable and can cause a fire or explosion if ignited.
- c. LP gas is heavier than air and can accumulate in confined spaces and low places in the event of a leak.
- d. An odorant is added to LP Gas to help minimize risk in the event of a leak.
- e. In the event of an LP Gas fire, flames should not be extinguished unless doing so allows the fuel supply valve to be turned OFF.
- f. If a fire is extinguished and the fuel supply is not turned OFF, an explosion hazard could be created that is greater than the fire hazard.
- g. When exchanging LP Gas tanks, make sure the tank fuel valve is the same type.
- h. Store the generator in a well ventilated area with the LP Gas tank valve closed. Extra LP Gas tanks should not be stored near the generator.
- i. Always keep a fire extinguisher near the generator.



12. Your generator should never be operated under these conditions:
 - a. Uncontrolled change in engine speed.
 - b. Electrical output loss.
 - c. Overheating in connected equipment.
 - d. Sparking.
 - e. Damaged receptacles.
 - f. Engine misfire.
 - g. Excessive vibration.
 - h. Flame or smoke.
 - i. Enclosed compartment.
 - j. Rain, snow or inclement weather. Do not let the unit get wet when operating.**
13. Check the fuel system periodically for leaks or signs of deterioration such as chafed or spongy hose, loose or damaged connections, or rusted or damaged tank. All defects should be corrected before operation.
14. The generator should be operated, serviced, and refueled only under the following conditions:
 - a. Start and run the generator outdoors. Do not run the generator in an enclosed area, even if doors or windows are open; avoid areas where vapors may be trapped, such as pits, garages, cellars, excavations and boat bilges. DANGER - CARBON MONOXIDE HAZARD: The engine exhaust contains carbon monoxide, a poisonous, odorless, invisible gas which, if breathed, may cause death or serious personal injury. If you start to feel sick, dizzy or weak while using the generator, shut it off and get to fresh air right away; you may have carbon monoxide**



poisoning.

- b. Good ventilation for cooling. Air flow and temperatures are important for air cooled units. Temperatures should not exceed 104° F ambient (40° C).**
 - c. Connect or disconnect the LP Gas tank only in a well lighted area. Allow engine to cool for two minutes prior to replacing the LP Gas tank.
 - d. Do not install or replace the LP Gas tank near open flames, pilot lights, or sparking electrical equipment such as power tools, welders, and grinders.
 - e. The muffler and air cleaner must be installed and in good condition at all times as they function as flame arresters if backfiring occurs.
 - f. Do not smoke near the generator.
15. Ensure that generator is properly grounded. (See “Grounding the generator” section in this manual.)



16. Do not wear loose clothing, jewelry, or anything that may be caught in the starter or other rotating parts.
17. Unit must reach operating speed before electrical loads are connected. Disconnect loads before turning off engine.
18. To prevent surging that may possibly damage equipment, do not allow engine to run out of fuel when electrical loads are applied.
19. When powering solid state equipment, a Power Line Conditioner should be used to avoid possible damage to equipment.
20. Do not stick anything through ventilating slots, even when the generator is not operating. This can damage the generator or cause personal injury.
21. Before transporting the generator in a vehicle, keep LP Gas tank secured in an upright position with the fuel valve closed and the outlet plugged with a protective cap. Keep LP Gas tank away from heat and ventilated.
22. Use proper lifting techniques when transporting the generator from site to site. Improper lifting techniques may result in personal injury.
23. To avoid burns, do not touch engine muffler or other engine or generator surfaces which became hot during operation.



CALIFORNIA PROPOSITION 65 WARNING

The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.

SPARK ARRESTER

YOUR PRODUCT MAY NOT BE EQUIPPED WITH A SPARK ARRESTING MUFFLER. If the product will be used around flammable materials, such as agricultural crops, forests, brush, grass, or other similar items, then an approved spark arrester should be installed and is legally required in the State of California. The California statutes requiring a spark arrester are Sections 13005(b), 4442 and 4443. Spark Arresters are also required on some U.S. Forest Service land and may also be legally required under other statutes and ordinances. For more information, contact Pramac America, LLC, P.O. Box 6001, Kearney, Nebraska 68847. 1-800-445-1805

DETERMINING TOTAL WATTAGE

In order to prevent overloading and possible damage to your generator it is necessary to know the total wattage of the connected load. To determine which tools and/or appliances your generator will run follow these steps:

1. Determine if you want to run one item or multiple items simultaneously.
2. Check wattage requirements for the items you will be running by referring to the load's nameplate or by calculating it (multiply amps x volts = watts).
3. Total the watts for each item. If the nameplate only gives volts and amps, multiply volts x amps = watts.
1 KW = 1,000 watts.
4. Motorized appliances or tools require more than their rated wattage for start up.
NOTE: Allow 2 1/2 to 4 times the listed wattage for starting equipment powered by electric motors.
5. The generator's rated watts should match or exceed the total number of watts required for the equipment you want to run.
6. Always connect the heaviest load to the generator first, then add other items one at a time.

OPERATING VOLTAGE



CAUTION

CAUTION: Operating voltage and frequency requirement of all electronic equipment should be checked prior to plugging them into this generator. Damage may result if the equipment is not designed to operate within a +/- 10% voltage variation, and +/- 3 hz frequency variation from the generator name plate ratings. To avoid damage, always have an additional load plugged into the generator if solid state equipment (such as a television set) is used. A power line conditioner is recommended for some solid state applications.

A power line conditioner should be used when running one or more of the following solid state items:

- Garage door openers
- Kitchen appliances with digital displays
- Televisions
- Stereos
- Personal computers
- Quartz clocks
- Copy machines
- Telephone equipment

Other solid state equipment may require a power line conditioner. For more information, contact our Customer Service Department at 1-800-445-1805.

INSTALLATION



WARNING



To avoid possible personal injury or equipment damage, a registered electrician or an authorized service representative should perform installation and all service. Under no circumstances should an unqualified person attempt to wire into a utility circuit.

To avoid backfeeding into utility systems, isolation of the residence electrical system is required.

Before temporary connection of the generator to the residence electrical system, turn off the main service/disconnect.

If your generator is to be used as a stand-by power source in case of utility power failure, it should be installed by a registered electrician and in compliance with all applicable local electrical codes.

Proper use requires that a double throw transfer switch be installed by a licensed qualified electrician so that the building's electrical circuits may be safely switched between utility power and the generator's output, thereby preventing backfeed into the power utility's electrical system.

Always follow local codes and regulations that apply to the installation of any item that concerns this product.

1. **NFPA 70 - National Electrical Code** available from www.nfpa.org.
2. **NFPA 37 - Standard for Installation and Use of Stationary Combustible Engines** available from www.nfpa.org.
3. **NFPA 5000 - Building Construction and Safety Code** available from www.nfpa.org.
4. **Agricultural Wiring Handbook** available from www.rerc.org.



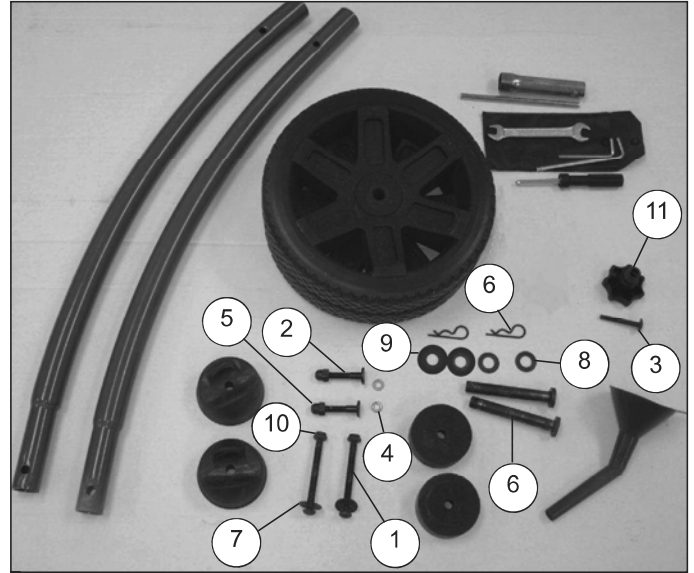
WARNING



To avoid backfeeding into utility systems, isolation of the residence electrical system is required. Before temporary connection of a generator to the residence electrical system turn off the main switch. Before making permanent connections a double throw transfer switch must be installed. To avoid electrocution or property damage, only a trained electrician should connect generator to residence electrical system. California law requires isolation of the residence electrical system before connecting a generator to residence electrical systems. Temporary connection not recommended due to backfeeding.

UNPACKAGING YOUR GENERATOR

1. Open carton and remove packaging materials.



2. Remove all accessories, hardware bags and literature from carton. If any items are missing or damaged, contact our Product Service Department at 1-800-445-1805.

- 1 - Operator Manual
- 1 - 1.0L Oil SAE 10-W30
- 2 - Handle Uprights
- 2 - 12" Flat Free Wheels
- 1 - Hardware Bag containing:
 - 1 - Oil Funnel
 - 2 - Rubber Feet
 - 2 - Foot Spacers
 - 2 - M8x80 Bolts
 - 2 - M8 Nyloc Nuts
 - 2 - M8 Flat Washers
 - 2 - Axle Pins
 - 2 - M12 Flat Washers
 - 2 - Wheel Spacers
 - 2 - Hairpins
 - 1 - M6x45 Screw
 - 2 - M8x40 Handle Bolts
 - 2 - M8 Acorn Nuts
 - 2 - Handle Bushings
 - 1 - Tank Clamping Knob
- 1 - Tool Kit containing:
 - 1 - Two Sided Screw Driver
 - 1 - Spark Plug Wrench W/Rod
 - 1 - Double Open Wrench 10x13 mm
 - 1 - 5 mm hex key
 - 1 - 4 mm hex key

3. Remove generator from carton.



4. Your generator is supplied with the following accessory parts. Before use, install these parts to your new Propane Generator.

ITEM	DESCRIPTION	QTY
1	M8 X 80 BOLT	2
2	M8 X 40 HANDLE BOLT	2
3	M6 X 45 SCREW	1
4	HANDLE BUSHING	2
5	M8 ACORN NUT	2
6	AXLE PIN	2
7	M8 FLAT WASHER	2
8	M12 FLAT WASHER	2
9	WHEEL SPACER	2
10	M8 NYLOC NUT	2
11	CLAMPING KNOB	1

PORTABILITY KIT INSTALLATION

PORTABILITY KIT PART NUMBER: 0071002

TOOLS REQUIRED: 10x13 mm wrench, screw driver, 4 mm and 5 mm hex keys (provided in tool kit), block(s) of wood (2" x 4" minimum), and rubber mallet. Refer to the parts list on pages 64 and 65.

After removing the generator from the carton, the proper handle and wheel configuration can be installed by using the tools included in the tool kit. Just follow the Steps listed below.

Your generator is shipped from the factory with the top foam C-shaped handle temporarily installed to the generator frame. This handle must be removed and the appropriate handle extensions installed.



1. Remove the Fascia panel with the 4mm Allen head wrench and the 10mm wrench provide in the tool kit to access the supporting handle bolts and nuts. These fasteners will be re-used.



2. Remove the two curved head screws using the 13mm wrench, being careful not to lose the silver bushings as shown. These fasteners will be re-used.



3. Remove the cross handle by pulling up on the handle. Tap with a rubber mallet, if required, to loosen and remove the handle.



4. Install the handle uprights (item 32) into the frame and install with the same hardware (items 47, 51 and 57) which had been removed when the cross handle was removed. Be sure that the silver crush bushings are in place. Do not tighten until the tubes are completely installed to the cross handle.

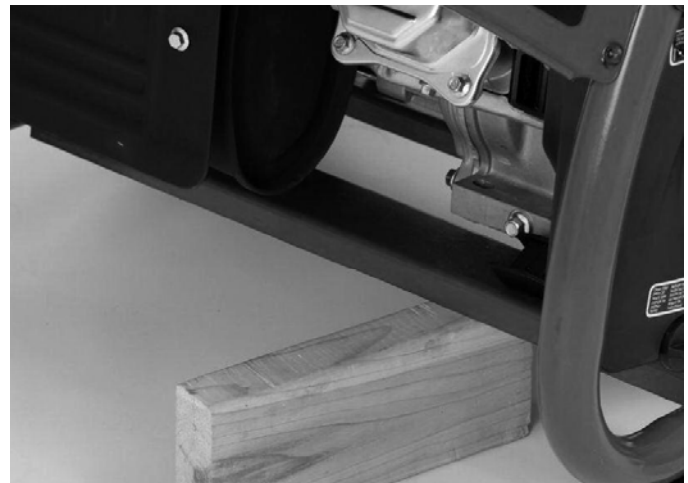
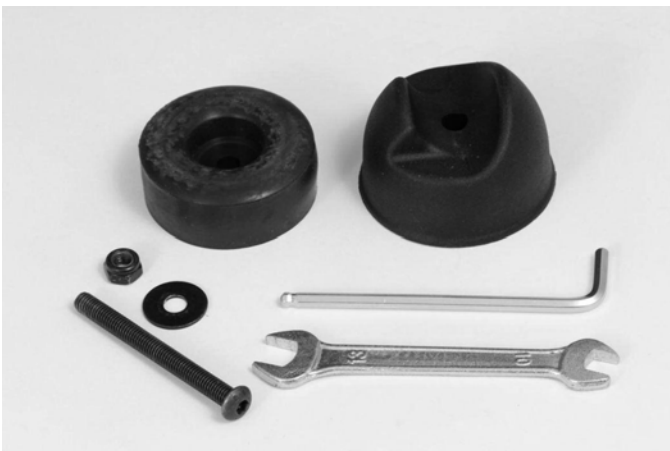


5. Install the cross handle (items 31 and 37) onto the two support tubes. Install the two curved head screws (item 51) from the accessory bolt bag and 13mm cap nuts (item 56).

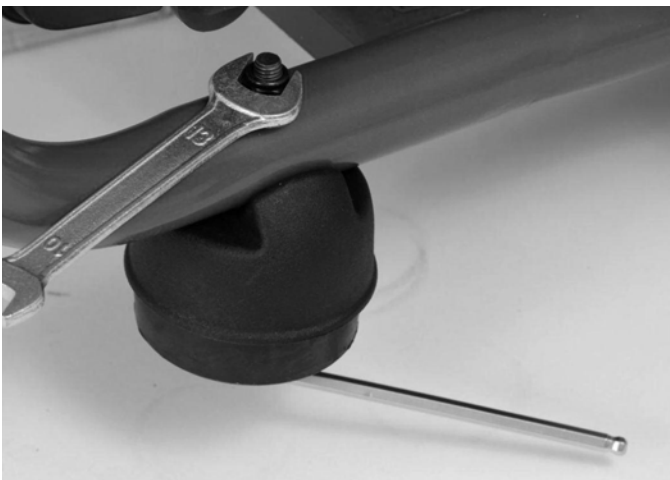


6. Tighten all the hardware with the tools supplied and reinstall the Fascia panel using the M8 flange bolt and serrated locking nut.

Install the mounting feet and wheels.



7. The mounting feet (items 39, 40, 42, 59, and 64) are supplied in the accessory bag. Locate these parts and install according to the following instructions and exploded view. Block up the generator by using a 2 x 4 or similar device.



Install the feet with the 5MM Allen head wrench and 13MM wrench provided.

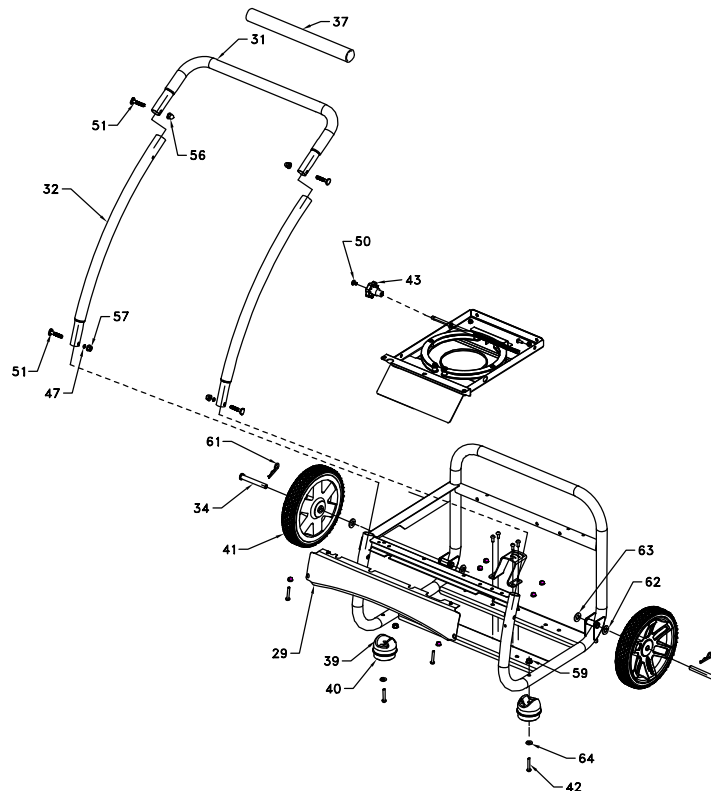


8. Install the wheels to the frame using the axle pins, hairpins, and washers provided (items 34, 61, 62, and 63).



9. Install the Clamp knob (item 43) to the clamping bolt. It is important to install the knob properly due to the shape of the inside knob and mounting bolt. Install the Handle locking bolt (item 50) using the provided Phillips screw driver.

PARTS DRAWING - PORTABILITY KIT



GENERATOR FEATURES

A. Control Panel

NOTE: Total power drawn from all receptacles must not exceed the nameplate ratings.

B. 120 V, 20 Ampere Receptacle

20 amps of current may be drawn from the receptacle, provided it is not limited by the circuit protector size. Total power drawn must be kept within nameplate ratings.



C. 120/240 V, 30 Ampere Twistlock Receptacle

Maximum full load current may be drawn from the 120/240 volt receptacle, provided it is the only receptacle used. Total current must be limited to the nameplate rating. If the 120/240 volt receptacle is used along with the 120 volt receptacle, the total load drawn must not exceed the nameplate ratings.



D. Receptacle Covers

E. Circuit Protectors

The receptacles are protected by an AC circuit protector. If the generator is overloaded or an external short circuit occurs, the circuit protector will trip. If this occurs, disconnect all electrical loads and try to determine the cause of the problem before attempting to use the generator again. If overloading causes the circuit protector to trip, reduce the load. **NOTE: Continuous tripping of the circuit protector may cause damage to generator or equipment.** The circuit protector may be reset by pushing the button of the protector.

F. Ground Terminal

G. Engine On/Off/Start Switch

H. Tank Clamping Knob

I. 420 CC OHV Engine

J. Recoil Starter

K. Engine Choke Lever

L. Oil Filler Cap

M. Oil Drain Plug

N. Air Filter

O. Fuel Tank

Standard 20 or 30 pound capacity DOT LP Gas tank with Type 1, right hand Acme threads (not supplied with generator).

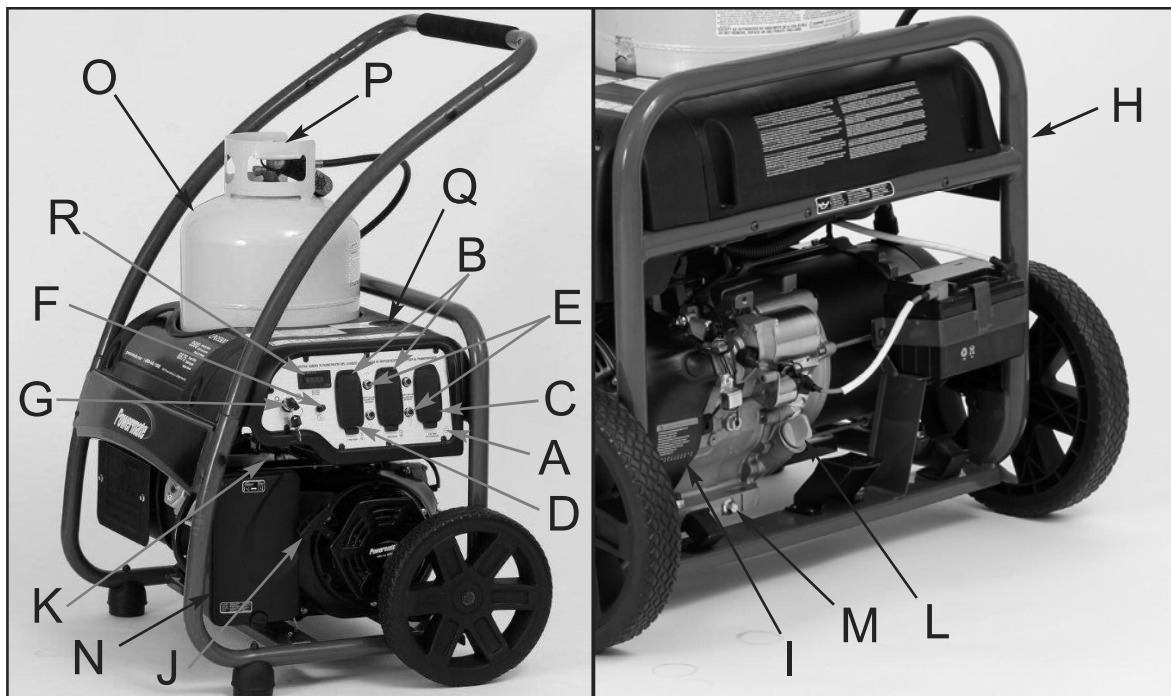
P. Fuel Shut-Off Valve

Valve is on the fuel tank (not supplied with generator).

Q. Fuel Regulator (under shroud)

R. Multimeter

- When the generator is started, the voltage value is shown first.
- Press and release the mode button to toggle between **Voltage, Frequency, Total Hour Meter** and **Run/Maintenance Timer**.
- **Voltage (V)** displays the operating voltage of the generator.
- **Frequency (F)** displays the frequency in hertz at which the generator is running.
- The **Run/Maintenance Timer** displays the time in hours and minutes each time the generator is ran. The run timer resets to 00:00 when the generator is shut off. Built into this run timer is a maintenance reminder. When the new generator is ran for 25 hours, the meter will display P25. This is to remind you to change the oil after the initial 25 hours of run time.
- When the **Run/Maintenance Timer** displays P50, it is reminding you to clean the air filter and change the oil.
- When the **Run/Maintenance Timer** displays P100, it is reminding you to change the fuel filter, clean the air filter, and change the oil.



BEFORE OPERATION

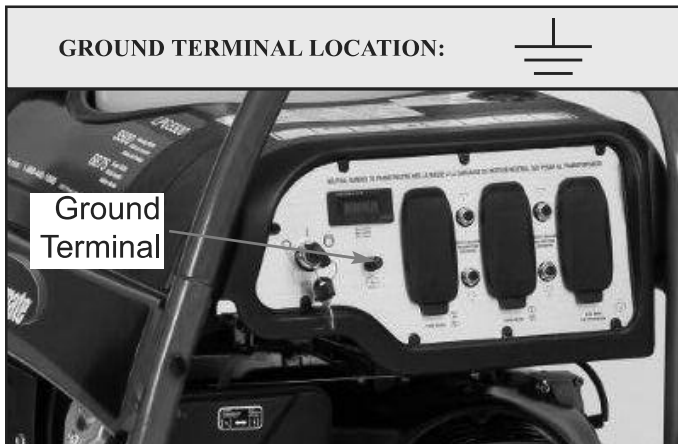
GROUND FAULT CIRCUIT INTERRUPTER (GFCI) PROTECTION

Some jobsites and local codes may require GFCI protection for personnel before operation of your generator. If your generator is not already equipped with a GFCI receptacle, GFCI In-line cord sets may be purchased from your local electrical supply store or home builder appliance store.

These cord sets are available in various plug and amperage configurations. **(Make sure your generator is properly Grounded.)**

GROUNDING THE GENERATOR

The National Electric Code requires that this product be properly connected to an appropriate earth ground to help prevent electric shock. A ground terminal connected to the frame of the generator has been provided for this purpose. Connecting a length of heavy gauge (12 AWG min.) copper wire between the generator Ground Terminal and a copper rod driven into the ground should provide a suitable ground connection. However, consult with a local electrician to insure that local codes are being adhered to.



WARNING



Do not use a pipe carrying combustible material as the ground source.

LUBRICATION

DO NOT attempt to start this engine without filling the crank case with the proper amount and type of oil. Your generator has been shipped from the factory **without oil** in the crankcase. Operating the unit without oil can damage the engine.

Fill the engine with oil according to the operator manual. For units with a dipstick, fill oil to the proper level. Units without a dipstick should be filled to the top of the opening of the oil fill.

LOW OIL SENSOR

The unit is equipped with a low oil sensor. If the oil level becomes lower than required, the sensor will activate a warning device or stop the engine.

If generator shuts off and the oil level is within specifications, check to see if generator is sitting at an angle that forces oil to shift. Place on an even surface to correct this. If engine fails to start, the oil level may not be sufficient to deactivate low oil level switch. Make sure the sump is completely full of oil.

LP GAS TANK



DANGER



- **Do not use or store LP Gas tank in a building, garage or enclosed area except as authorized by NFPA 58 or CSA B149.2 (Canada).**
- **Do not check for leaks with a match or flame.**
- **The LP Gas tank valve should be OFF (closed) when the generator is not in use.**

- **Regulator inlet pressure range:** 30 to 100 psi from LP Gas tank.
- **LP Gas tank:** Standard 20 or 30 pound capacity with Type 1 right hand Acme threads. Do not use tanks that are rusted or damaged. Verify that the re-qualification dated on the tank is not expired. Use only DOT cylinders conforming to 4BA, 4BW, and 4E.
- **Purging LP Gas tanks:** The purging process should be done by your LP Gas supplier. New tanks must be purged of air and moisture before filling. Used cylinders must also be purged if they have not been plugged or kept closed.
- Remove the safety plug or cap from the tank fuel valve.
- Never allow children to tamper or play with the fuel tank or generator.



CAUTION

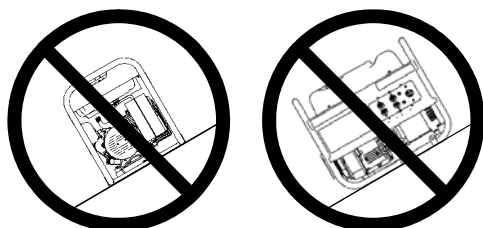


Contact with the liquid contents of the LP Gas tank will cause freeze burns to the skin.

POSITIONING

- Place the generator set on a flat and solid surface to prevent it from sinking.
- Keep fuel, oil or other explosives at a safe distance from the generator set.
- Select a site that is well ventilated and protected from the weather.
- Place the generator set safely away from people and animals.

 **CAUTION: TILTING CAN CAUSE FUEL SPILLAGE**



HIGH ALTITUDE OPERATION

At high altitude, the standard carburetor air-fuel mixture will be too rich. Performance will decrease and fuel consumption will increase. A very rich mixture will also foul the spark plug and cause hard starting. Operation at an altitude that differs from that at which this engine was certified, for extended periods of time, may increase emissions.

High altitude performance can be improved by specific modifications to the carburetor. If you always operate your engine at altitudes above 914 meters (3,000 feet), have your authorized service center perform a carburetor modification. HIGH ALTITUDE KIT PART NUMBER: 0070988

Even with a carburetor modification, engine horsepower will decrease about 3.5% for each 300 meter (1,000 foot) increase in altitude. The effect of altitude on horsepower will be greater if no carburetor modification is made. A decrease in engine horsepower will decrease the power output of the generator.

NOTICE: Warranty is Void if the necessary adjustments for high altitude use are not made.



CAUTION



When the carburetor has been modified for high altitude operation, the air-fuel mixture will be too lean for low altitude use. If the generator is used at low altitudes after a carburetor modification, the carburetor may cause the engine to overheat and result in serious engine damage. For use at low altitudes, have your authorized service center return the carburetor to original factory specifications.

ELECTRIC START

This generator model is provided with both electric start and recoil start capabilities. The charger is a low amperage maintenance type charger. It will charge your battery as your generator runs. Avoid prolonged cranking, as it can damage the engine.

WARNING



Storage batteries give off **EXPLOSIVE** hydrogen gas while charging. Do not allow smoking, open flames, sparks, or spark producing equipment in the area while charging.

The battery provided is a nominal 12 volt sealed rechargeable lead-acid battery and can be operated in any position without leakage. It's convenient size offers a reduction over conventional batteries. Length = 5.94 inches, Width = 3.43 inches, Height = 4.13 inches
11AH Rating

WARNING



Battery electrolyte fluid is comprised of sulfuric acid that can be very dangerous and cause severe burns. Do not allow this fluid to contact eyes, skin, clothing, etc. If contact or spillage does occur, flush the area with water immediately.

Battery Kit Parts List:

Refer to the parts list on pages 64 and 65.

Note: Brand New Generators are shipped with the Battery Connections disconnected. The Positive and Negative Terminals must be connected to the Battery before the Electric Start Feature will work.

Initial Battery Connection - Refer to the Installation Instructions Below.

Battery Removal & Installation:

Removal: Remove the nut and bolt from the negative and positive post, being careful not to short across the terminals. (Shorting the terminals together can cause sparks, damage to the battery or generator or even burns or explosions.) Always abide by the safety warnings provided with the battery. Remove the battery and re-cycle and dispose of properly.



CAUTION



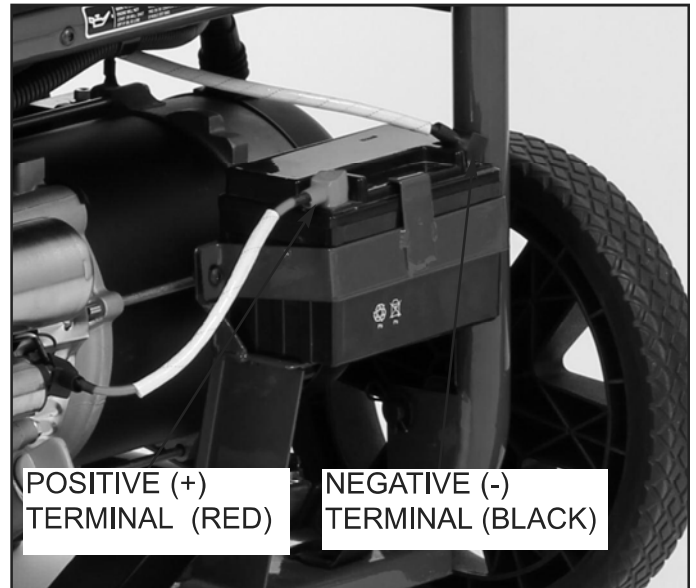
- Do not short-circuit the battery terminals.
- Do not charge in a sealed container.
- Keep sparks, flame away.

Installation:

1. Place the battery in the position provided.
2. Place the Hold-Down bracket on the battery.
3. Tighten down the Hold-Down bracket with the bolts provided.

Hook up the new battery, or re-install the new battery, as follows: Remove vinyl caps from red and black wire terminals. Connect the Red wire to the positive (+) terminal and the Black wire to the negative (-) terminal with the bolt, nut, and washer provided. Make sure all connections are tight. Your battery is now connected and ready for use. Turn the key switch to crank the engine.

Note: Be sure Oil has been added to the engine as specified in the Owner's Manual.



TANK INSTALLATION, GENERATOR STARTING & STOPPING

PRE-START PREPARATION

Before starting the generator, check for loose or missing parts and for any damage which may have occurred during shipment.



DANGER



This generator must not be operated without all factory installed heat shields in place. Failure to comply may cause the fuel tank to overheat and result in personal injury from fire or explosion.

TANK INSTALLATION

1. Install the Clamp Tightening Knob as shown in the illustration.



2. Make sure the Clamp tightening knob is turned out counter clockwise far enough to accept the metal ring on the bottom of Propane fuel cylinder.

3. Insert the LPG cylinder carefully into the intended opening in the top tank shroud. Make sure the high pressure hose is in the intended slot location and will connect to the propane cylinder valve easily without bending or kinking.



4. Tighten the Clamp Knob by turning the knob clockwise until it fits snugly around the metal ring. The tank should not lift out or move.
5. Install the plastic coupling (ACME type 1 nut) on the end of the high pressure hose onto the propane cylinder valve connection (similar to many BBQ grills). Screw the nut onto the tank valve until tight.

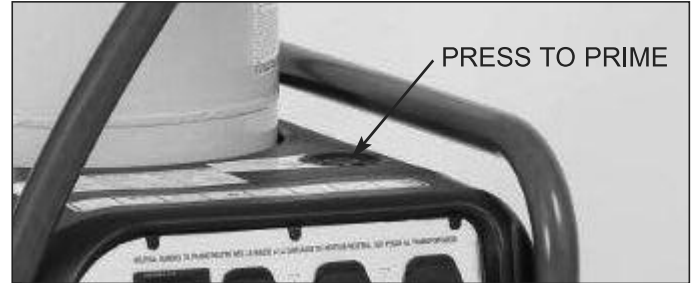


6. To check for leaks, spray soapy water on the valve and regulator connections. Slowly open the tank valve. A leak exists if bubbles appear or grow larger in size or number.
7. If a leak exists, the condition must be corrected immediately. DO NOT OPERATE UNIT. Contact an authorized service center for assistance.

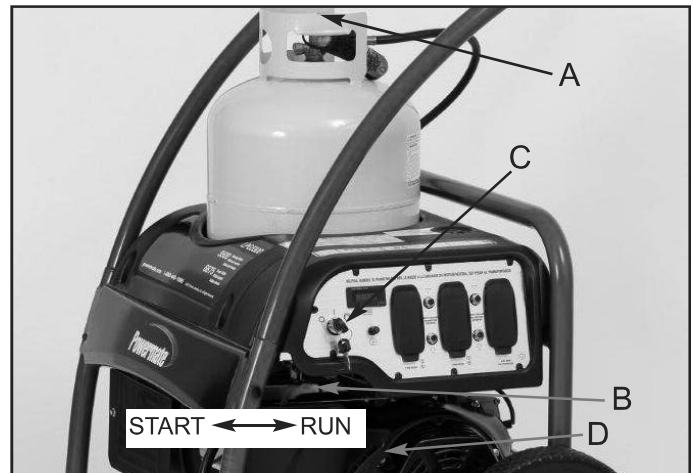
STARTING THE ENGINE

Disconnect all electrical loads from the unit.

1. Check oil level and fuel connections.
2. Open the cylinder fuel valve (A) **SLOWLY** to allow fuel to flow to the generator.
3. Adjust choke (B) as necessary.
NOTE: For cold engine starting only, slide the choke lever to the full choke position.
4. Set the key switch (C) to the "ON" position.
5. Press down on the "Press to Prime" button for 2 seconds to allow gas to flow.



6. Pull the recoil (D) slowly until resistance is felt, then rapidly crank twice for gas to fill carburetor.
7. Set the choke lever to the RUN position.
8. **MANUAL START:** Start the engine by pulling the recoil (D) slowly until resistance is felt, then pull rapidly to crank the engine. Repeat if necessary.
9. **ELECTRIC START:** Turn the key switch (C) to "START". Release key switch after the engine starts.
NOTE: If the engine fails to start, press the Primer button again and repeat the starting instructions.
10. Plug in electrical loads.





CAUTION



Allow generator to run at no load for two minutes upon each initial start-up to permit engine and generator to stabilize.



CAUTION



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



DANGER



- Provide adequate ventilation for toxic exhaust gases and cooling air flow.
- Do not start or run the generator in an enclosed area, even if door or windows are open.
- Engines give off carbon monoxide, an odorless, colorless, poison gas.
- Breathing carbon monoxide can cause nausea, fainting or death.

STOPPING THE GENERATOR

1. Before stopping the engine, make sure all electrical loads are unplugged from the panel.
2. Let the engine run for two minutes without load.
3. Move the key switch to the “OFF” position.
4. Do not leave the generator until it has completely stopped.
5. Turn off the Propane cylinder fuel valve.
6. If a cover is used, do not install until unit has cooled.
7. If the generator will not be used again for an extended time period, refer to the **SERVICE AND STORAGE** section of this manual.

APPLYING LOAD

This unit has been pretested and adjusted to handle its full capacity. Before starting the generator, disconnect all load. Apply load only after generator is running. Voltage is regulated via the engine speed adjusted at the factory for correct output. Readjusting will void warranty.



CAUTION



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

PERIODIC MAINTENANCE

ITEM	NOTES	Daily (Before operation)	Initial 20 hours	Every 50 hours	Every 100 hours
Spark Plug	Check condition. Adjust gap and clean. Replace if necessary.				✓
Engine Oil	Check oil level.	✓			
	Replace.		✓		✓
Air Filter	Clean, replace if necessary.			✓	
Fuel Line	Check fuel hose for cracks or other damage. Replace if necessary.	✓			
Exhaust System	Check for leakage. Retighten or replace gasket if necessary.	✓			
	Check spark arrester screen. Clean/replace if necessary.				✓
Carburetor	Check choke operation.	✓			
Starting System	Check recoil starter operation.	✓			
Fittings/Fasteners	Check. Replace if necessary.				✓

MAINTENANCE

SPARK PLUG

Remove fascia panel. Remove the spark plug and clean the electrodes section with a wire brush or sandpaper. Next, set the gap at .028/.031 inches (0.7-0.8 mm) by adjusting the negative electrode. Replace the spark plug with correct torque: 14 ft-lb (20 N.m)



CAUTION

Replace with only the same type of spark plug which was removed. An improper spark plug can cause the engine to overheat, emit smoke, or otherwise perform poorly.

OIL TYPE

Use new good quality oil, SJ or later service category. The oil to be used depends upon the temperature at which the engine is operated:

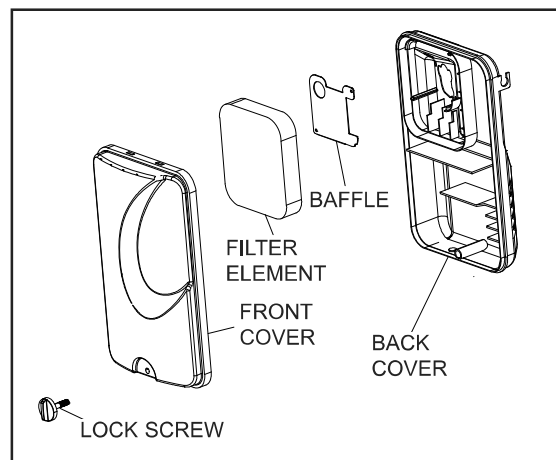
Below 32° F (0° C)SAE 5W-30, or 10W-30
 32 to 85° F (0 to 29° C)SAE 10W-30, or 30W
 Above 85° F (29° C)SAE 30W

OIL REPLACEMENT

1. Change oil while engine is warm.
2. Place the generator unit on a level surface.
3. Remove the oil filler cap.
4. Open the oil drain plug and let oil drain completely into a pan placed under the engine.
5. Check gaskets. Replace if required.
6. Reinstall the oil drain plug and refill engine with clean oil.
7. Replace the oil filler cap.

AIR FILTER CLEANING

1. Unscrew the air filter cover.
2. Remove filter element and wash well in solvent.
3. Pour a small amount of oil onto the filter element and gently squeeze out any excess oil.
4. Replace the filter element and air filter cover.
5. Be sure the filter cover seals properly all around.



VALVE CLEARANCE

Intake — 0.08-0.12 mm (.003-.005 inch)

Exhaust — 0.13-0.17 mm (.005-.007 inch)

After the first 50 hours of operation, check the valve clearance in the engine and adjust if necessary.

NOTICE: If unsure about doing this procedure or the proper tools are not available, take the generator to the nearest service center to have the valve clearance adjusted. This is a very important procedure to ensure longest life for the engine.

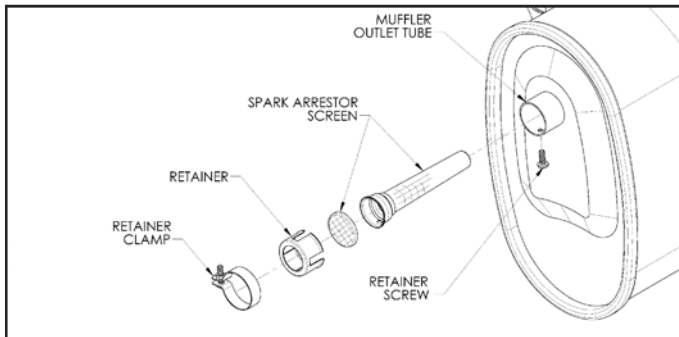
SPARK ARRESTER SCREEN

Remove screen every 50 hours for cleaning and inspection.

Replace if damaged.

Clean and inspect the spark arrester as follows:

1. Remove the screen retainer by removing the retainer clamp.
2. Remove the retainer screw from the muffler outlet tube.
3. Slide the spark arrester screen out from the muffler outlet tube.
4. Be careful not to damage the spark arresting screen. The spark arrester must be free of breaks and holes. If screen is not damaged, clean it with a commercial solvent.
5. Replace the screen and retainer and secure with retainer screw and clamp.



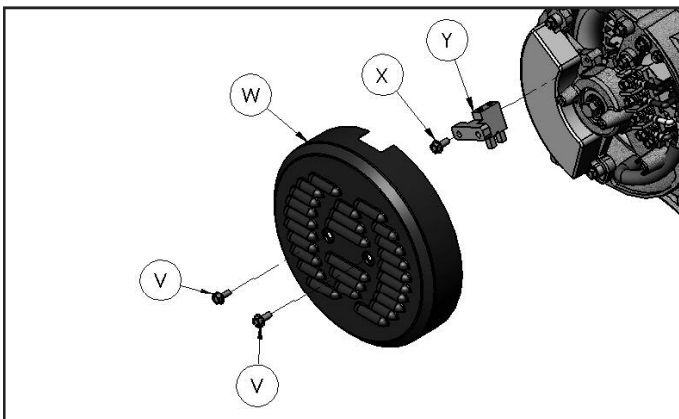
GENERATOR: Brushes

The brushes in the generator should be inspected once every year for chips and cracks. Brushes should be replaced when they are worn to 1/4 inch (7mm).

NOTE: Replace brushes in sets only, never separately. Replace only with brushes specified in parts list. Other brushes may appear to be identical but may have completely different mechanical and electrical characteristics.

INSPECTING THE BRUSHES:

1. Remove 2 screws (V) and end cover (W).
2. Remove screw (X) holding the brush module (Y).
3. Disconnect the blue (+) and yellow (-) brush wires from the tabs.
4. Replace if worn to 1/4 inch (7mm).
5. Do not over tighten screw.



HEAT SHIELD:

Inspect to ensure that all heat shields and heat deflectors are intact and in place. Do not remove any parts or modify parts. Removing or modifying parts could cause serious damage to the unit.

ENGINE: Carburetor Icing

During the winter months, rare atmospheric conditions may develop which will cause an icing condition in the carburetor. If this develops, the engine may run rough, loose power, and may stall. Call Product Service for more information.

QUICK STARTING TIPS FOR UNITS THAT HAVE BEEN SITTING FOR AWHILE:

If your unit has been sitting around for a long time period and is hard to start, try doing some of these easy steps before calling the Customer Hotline.

1. Check the oil level.
2. Check or replace the LP Gas tank.
3. Change the spark plug.
4. Check the fuel lines. Make sure the fuel shut off valve is open.
5. Check all generator parts for integrity.
6. Clean the Carburetor.

SERVICE AND STORAGE

INFREQUENT SERVICE

If the unit is used infrequently, difficult starting may result. To eliminate hard starting, follow these instructions:

1. Run the generator at least 30 minutes every month.
2. Run the generator, then close the fuel shut-off valve and allow the unit to run until the engine stops.
3. Move the engine switch to the "OFF" position.

LONG TERM STORAGE

When the generator set is not being operated or is being stored more than one month, follow these instructions:

1. Replenish engine oil to upper level.
2. Run the generator, then close the fuel shut-off valve and allow the unit to run until the engine stops.
3. Move the engine switch to the "OFF" position.
4. Pour about one teaspoon of engine oil through the spark plug hole, pull the recoil starter several times and replace the plug. Then pull the starter until you feel the piston is on its compression stroke and leave it in that position. This closes both the intake and exhaust valves to prevent the inside of the cylinder from rusting.
5. Cover the unit and store in a clean, dry place that is well ventilated away from open flame or sparks.

PERMANENT CONNECTION

In the instance that you would need to connect your generator to a large Propane Supply tank, larger than the typical 20 or 30 lb DOT cylinder, it is recommended to contact your Gas Equipment Company. Various equipment for use with LP-Gas, is required for proper conformance to all NFPA regulations. Your Gas Equipment Company can help you select and install the proper regulator, fittings and connections to meet all the Codes and manufacturer regulations. Each installation may be different and will require proper equipment. Contact your Gas Equipment Company to assure that you are meeting all NFPA 58 and 54 Codes.

NFPA 58: Liquefied Petroleum Gas Code.

NFPA 54: National Fuel Gas Code.



WARNING

IMPORTANT INFORMATION: Product must be installed and used in strict conformance with NFPA Pamphlet 58 and/or NFPA Pamphlet 54 and all other codes, regulations and manufacturer recommendations. Failure to follow these codes, regulations and recommendations could result in hazardous installation, bodily injury and/or death. Contact your Gas Equipment Company or a customer service representative for more information.

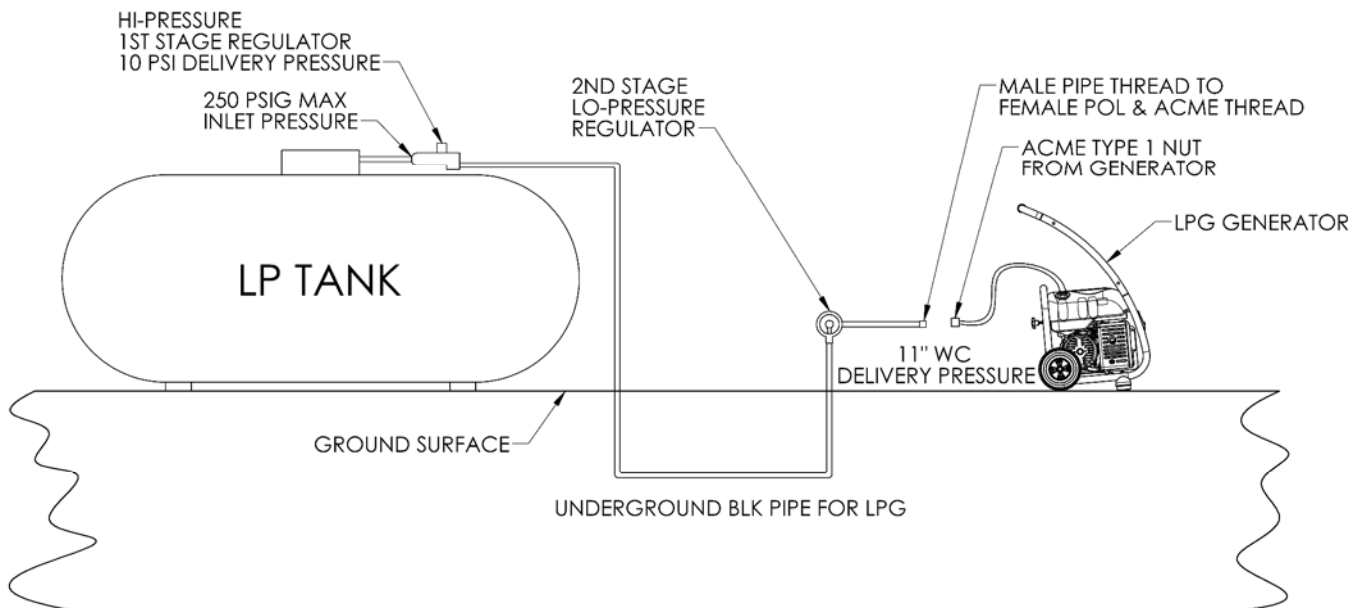


WARNING

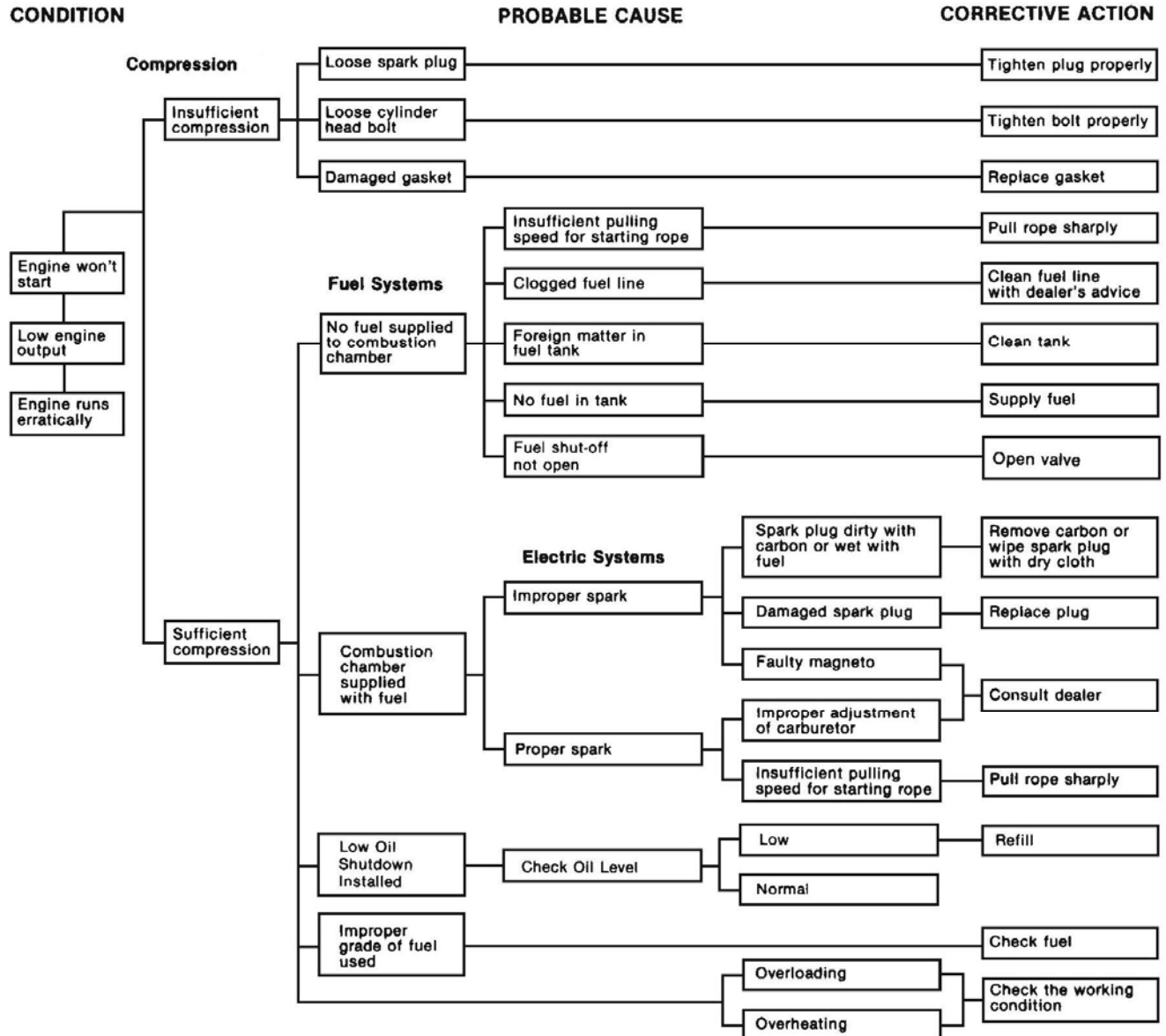


LP Gas is extremely flammable and explosive. Devices used for handling LP Gas must be installed and used in strict conformance with NFPA Pamphlet 58 and 54 and all other codes, regulations and manufacturer recommendations.

TYPICAL CONNECTION DIAGRAM



ENGINE TROUBLESHOOTING



ENGINE SPECIFICATIONS

Type4-stroke, single cylinder, LP Gas, OHV
 Displacement420 cc, 25.63 cubic inches
 Nominal RPM3600
 Starting SystemRecoil
 Oil Capacity37 oz. (1.1 L)
 Spark PlugNGK BPR7ES or equivalent
 GovernorMechanical (adjustable)
 Cooling SystemForced air cooling
 Air Cleaner TypeFoam element

SERVICE INFORMATION

**CONTACT THE
PRAMAC AMERICA
PRODUCT SERVICE
DEPARTMENT AT
1-800-445-1805
or at www.powermate.com
to obtain warranty service
information or to order
replacement parts or
accessories.**

HOW TO ORDER REPLACEMENT PARTS

Even quality built equipment such as the electric generator you have purchased might need occasional replacement parts to maintain it in good condition over the years. To order replacement parts, please give the following information:

1. Model No. and Serial No. and all specifications shown on the Model No./Serial No. plate.
2. Part number or numbers as shown in the Parts List section.
3. A brief description of the trouble with the generator.

**Pramac America, LLC
4970 Airport Road
P. O. Box 6001
Kearney, NE 68847
1-800-445-1805
www.powermate.com**

REGISTER YOUR PRODUCT

**Register your Powermate® generator
online at www.powermate.com.**



LIMITED WARRANTY

Warranty Coverage: Pramac America, LLC (the Company) warrants to the original retail customer in North America 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:

- Transportation charges for sending the product to the Company or its authorized service representative for warranty service, or for shipping repaired or replacement products back to the customer; these charges must be borne by the customer.
- 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.
- Damages caused by abuse or accident, and the effects of corrosion, erosion and normal wear and tear.
- Warranty is voided 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.
- The Company will not pay for repairs or adjustments to the product, or for any costs or labor, performed without the Company's prior authorization.
- Starting batteries, circuit breakers, fuses, or light bulbs.

Warranty Period: Two (2) years 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 one (1) year 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.

For warranty service: Call toll free 800-445-1805, or write to Pramac America, LLC, Product Services, 4970 Airport Road, P. O. Box 6001, Kearney, NE 68847.

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 to you.