ASSEMBLY

Your generator requires some assembly. This unit ships from our factory without oil. It must be properly serviced with fuel and oil before operation.

If you have any questions regarding the assembly of your generator, call our Technical Support Team at 1-877-338-0999. Please have your serial number and model number available.

Unpacking

- 1. Set the shipping carton on a solid, flat surface.
- 2. Remove everything from the carton except the generator.
- Carefully cut each corner of the box from top to bottom.Fold each side flat on the ground to provide a surface area to work with the generator.

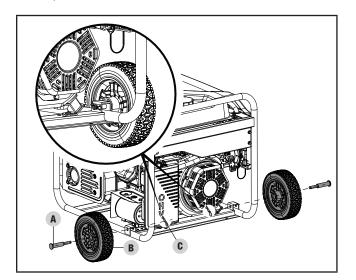
Install the Wheel Kit

A CAUTION

The wheel kit is not intended for over-the-road use.

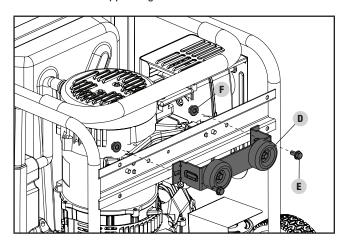
Install the Wheels

- 1. Slide the roll pin (A) through the wheel (B) from the outside.
- 2. Slide the roll pin through the mount point on the frame.
- 3. Secure with the R-clip (C).
- 4. Repeat to attach the second wheel.



Install the Support Leg

- 1. Attach the support leg (D) to the generator frame with flange bolts (E) and flange lock nuts (F).
- 2. Slowly tip the generator back down so that it rests on the wheels and support leg.



Add Engine Oil

A CAUTION

DO NOT attempt to crank or start the engine before it has been properly filled with the recommended type and amount of oil. Damage to the generator as a result of failing to follow these instructions will void your warranty.

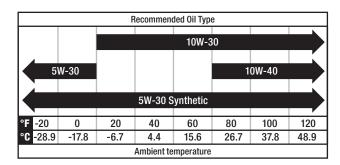
NOTICE

The generator rotor has a sealed, pre-lubricated ball bearing that requires no additional lubrication for the life of the bearing.

NOTICE

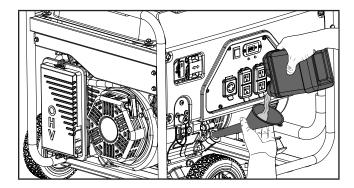
The recommended oil type for typical use is **10W-30** automotive oil.

If running generator in extreme temperatures, refer to the following chart for recommended oil type.

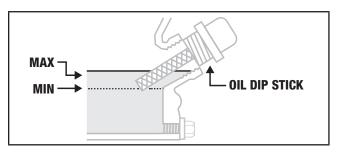


- 1. Place the generator on a flat, level surface.
- 2. Remove oil fill cap/dipstick to add oil.

 Using a funnel, add up to 37.2 fl. oz. (1.2 qt.) of oil (not included) and replace oil fill cap/dipstick.
DO NOT OVERFILL.



4. Check engine oil level at every use and add as needed.



NOTICE

Once oil has been added, a visual check should show oil about 1-2 threads from running out of the fill hole.

When using the dipstick to check oil level, DO NOT screw in the dipstick while checking.

NOTICE

Check oil level often during the break-in period. Refer to the Maintenance section for recommended service intervals.

A CAUTION

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

NOTICE

The first 5 hours of run time are the break-in period for the unit. During the break in period stay at or below 50% of the running watt rating and vary the load occasionally to allow stator windings to heat and cool. Adjusting the load will also cause engine speed to vary slightly and help seat piston rings. After the 5 hour break-in period, change the oil.

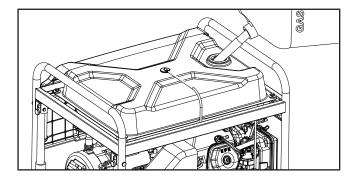
NOTICE

Synthetic oil may be used after the 5 hour initial break-in period. Using synthetic oil does not increase the recommended oil change interval. Full synthetic 5W-30 oil will aid in starting in cold ambient < 41° F (5° C) temperatures.

Add Fuel: Gasoline

DO NOT mix oil with gasoline.

- 1. Remove the gasoline cap.
- 2. Slowly add gasoline to the tank. Tank is full when gasoline reaches red circle on screen. DO NOT OVERFILL. Gasoline can expand after filling. A minimum of ¼ in. (6.4 mm) of space left in the tank is required for gasoline expansion, although more than ¼ in. (6.4 mm) is recommended. Gasoline can be forced out of the tank as a result of expansion if overfilled, and can affect the stable running condition of the generator.



3. Screw on the gasoline cap and wipe away any spilled fuel.

A CAUTION

Use unleaded gasoline with a minimum octane rating of 85 and an ethanol content of 10% or less by volume.

DO NOT light cigarettes or smoke when filling the tank.

DO NOT mix oil and gasoline.

DO NOT overfill the tank. Fill tank to approximately $\frac{1}{4}$ in. (6.4 mm) below the top of the tank to allow for gasoline expansion.

DO NOT pump gasoline directly into the generator at the pump. Use an approved container to transfer the gasoline to the generator.

DO NOT fill tank indoors.

DO NOT fill tank when the engine is running or hot.

A WARNING

Pouring gasoline too fast through the fuel screen may result in gasoline splashing over the generator and operator while filling.

NOTICE

The generator engine works well with 10% or less ethanol blend gasoline. When using ethanol-gasoline blends there are some issues worth noting:

- Ethanol-gasoline blends can absorb more water than gasoline alone.
- These blends can eventually separate, leaving water or a watery goo in the tank, fuel valve and carburetor. The compromised gasoline can be drawn into the carburetor and cause damage to the engine and/or potential hazards.
- If a fuel stabilizer is used, confirm that it is formulated to work with ethanol-gasoline blends.
- Any damages or hazards caused by using improper gasoline, improperly stored gasoline, and/or improperly formulated stabilizers, are not covered by manufacturer's warranty.

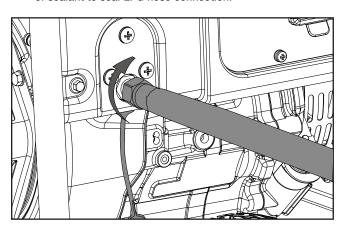
It is advisable to always shut off the gasoline supply and run the engine to starvation after each use. See Storage instructions for extended non-use.

Add Fuel: Propane (LPG)

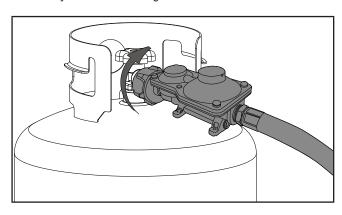
Connecting an LPG cylinder

- Make sure the LPG valve on the generator is in the "OFF" position.
- 2. Attach the LPG hose (included) to the LPG inlet on the generator and tighten with a 19 mm or adjustable wrench to torque specified on hose label.

Important: DO NOT use thread seal tape or any other type of sealant to seal LPG hose connection.



- 3. Remove the safety plug or cap from the cylinder valve.
- 4. Attach the other end of the hose to the LPG connector on the cylinder and hand tighten.



5. Check all connections for leaks by wetting the fittings with a solution of soap and water. Bubbles which appear or bubbles which grow indicate that a leak exists. If a leak exists at a fitting then turn off the valve on the cylinder and tighten the fitting. Turn the valve back on and recheck the fitting with the soap and water solution. If the leak continues or if the leak is not at a fitting then do not use the generator and contact customer service.

NOTICE

- The LPG hose included with this unit connects to 20, 30, and 40 pound LPG cylinders.
- Verify the requalification date on the cylinder has not expired.
- All new cylinders must be purged of air and moisture prior to filling. Used cylinders that have not been plugged or kept closed must also be purged.
- The purging process should be done by an LPG supplier (cylinders from an exchange supplier should have been purged and filled properly already).
- Always position the cylinder so the connection between the cylinder valve and generator inlet won't cause sharp bends or kinks in the LPG hose.

A CAUTION

Do not allow children to tamper or play with the LPG cylinder or hose connections.

A CAUTION

Use approved LPG cylinders equipped with an OPD (overfilling prevention device) valve. Always keep the cylinder in a vertical position with the valve on top and installed at ground level on a flat surface. Cylinders must not be installed near any heat source and should not be exposed to sun, rain, and dust. When transporting and storing, turn off the cylinder valve and generator LPG valve, and disconnect the cylinder. Plug the outlet, usually by a plastic protective cap, if one is available. Keep cylinders away from heat and ventilated when in a vehicle.

A WARNING

If there is a strong smell of LPG: Close valve on the cylinder. Check all connections for leaks by wetting the fittings with a solution of soap and water. Bubbles which appear or bubbles which grow indicate that a leak exists. Do not smoke or light a cigarette, or check for leaks using a match, open flame source or lighter. Contact a qualified technician to inspect and repair an LPG system if a leak is found, before using the generator.

Grounding

Your generator must be properly connected to an appropriate ground to help prevent electric shock.

A WARNING

Failure to properly ground the generator can result in electric shock.

A ground terminal connected to the frame of the generator has been provided (see <u>Controls and Features</u> for terminal location). For remote grounding, connect of a length of heavy gauge (12 AWG minimum) copper wire between the generator ground terminal and a copper rod driven into the ground. We strongly recommend that you consult with a qualified electrician to ensure compliance with local electrical codes.

Neutral Floating*

- Neutral circuit IS NOT electrically connected to the frame/ ground of the generator.
- The generator (stator winding) is isolated from the frame and from the AC receptacle ground pin.
- Electrical devices that require a grounded receptacle pin connection will not function if the receptacle ground pin is not functional.

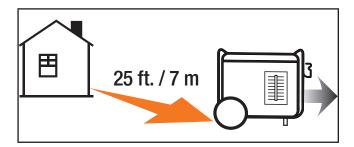
Neutral Bonded to Frame*

- Neutral circuit IS electrically connected to the frame/ground of the generator.
- The generator system ground connects lower frame cross-member below the alternator. The system ground is connected to the AC neutral wire.

OPERATION

CO Shield™ - Carbon Monoxide (CO) Detection and Auto-shutoff System

The CO Shield™ technology monitors the accumulation of poisonous CO gas produced by engine exhaust when the generator is running. If CO Shield detects elevated levels of CO gas, it automatically shuts off the engine. Generators are intended to be used outdoors, far away from occupied buildings and exhaust pointed away from people and buildings.



If misused and operated in a location that results in the accumulation of CO inside an enclosed or partially enclosed space, for example a house, garage or a garage with the door partially open, CO Shield will automatically shut off the generator and then illuminate a red LED. Read the action label for what steps to take. **CO Shield is not a substitute for an indoor carbon monoxide alarm.**



When you approach the generator to investigate a shut off, a blinking **red** LED light in the CO Shield area provides notification that the generator shut off due to an accumulating CO hazard. The red LED light will blink for at least five (5) minutes after a shutoff event.

^{*}See your Specifications section for specified type of grounding.