

PORTABLE GENERATOR

Owner's Manual



SAVE THIS MANUAL FOR FUTURE REFERENCE

IMPORTANT SAFETY INSTRUCTIONS ARE INCLUDED IN THIS MANUAL

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SERVICE CLIENTELE

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SECTION 2 —GENERAL INFORMATION

2.1 UNPACKING

- Set the carton on a rigid, flat surface.
- Remove everything from carton except generator.
- Open carton completely by cutting each corner from top to bottom.
- Leave generator on carton to install wheel kit.

2.1.1 PACKING CONTENTS

- 1-Owner's Manual
- 2-Wheels (For 2.5kW and up)
- 2-Wheel Axle (For 2.5kW and up)
- 1-Hardware Bag

(Including 1-Spark Plug Socket; 1-Extension)

2.2 ASSEMBLY

The generator requires some assembly prior to using it.

2.2.1 ASSEMBLING THE ACCESSORY KIT

The wheels are designed to greatly improve the portability of the generator.

The wheels are Not intended for NOTE over-the-road use.

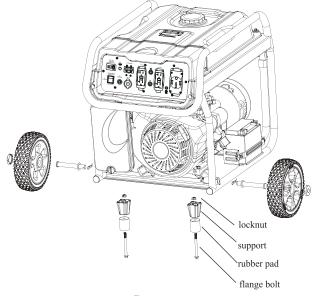
Refer to Figure to install the leg supports as shown.

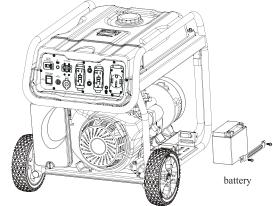
• Unscrew nut on leg support, install bolt through the generator frame, secure the bolt tightly with wrench(not included).

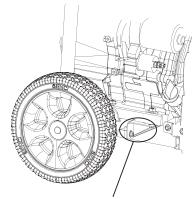
Refer to Figure to install wheels as shown.

- Slide the axle through the wheel hub, then insert the flat washer.
- Slide the axle through the frame brackets.
- Bend the cotter pin tabs outward to lock the pin in place.

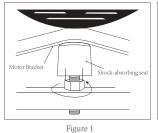
IMPORTANT: Before operating the generator the shock-absorbing seat (cushion) must be adjusted for proper clearance (figure 1). Loosen the lock nut and adjust the shock-absorbing seat so there is a 3mm gap between the top of the seat and the bottom of the motor bracket (figure 2). Re-tighten the lock nut.







REMOVE Red Support Brackets(2 pieces total) Before Use! (They are packing material, will damage engine without removing them.)



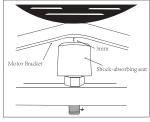
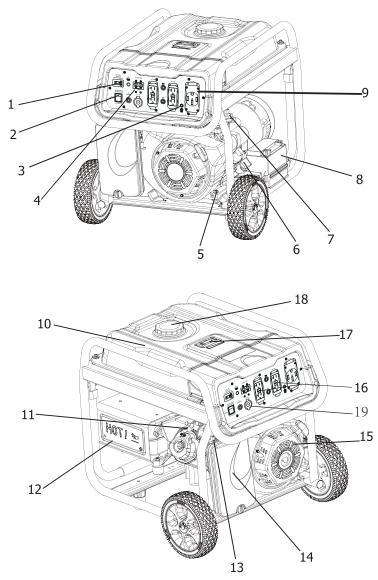


Figure 2

SECTION 3 —FEATURES AND CONTROLS



Read this Owner's Manual and safety rules before operating your generator. Compare the illustrations with your generator, to familiarize yourself with the locations of various controls and adjustments. Save this manual for future reference.



1	TIME METER	10	FUEL TANK
2	ENGINE SWITCH	11	SPARK PLUG
3	GROUND TERMINAL	12	MUFFLER
4	AC CIRCUIT BREAKER	13	CHOKE LEVER
5	OIL DRAIN PLUG	14	AIR FILTER
6	OIL FILL CAP/DIPSTICK	15	RECOIL STARTER
7	FUEL VALVE	16	GFCI OUTLET
8	BATTERY	17	FUEL GAUGE
9	COVER	18	FUEL TANK CAP
		19	CIGARETTE PLUG

NOTE

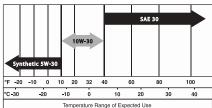
Pictures and drawings used in this manual are for reference only and do not represent any specific model.

SECTION 4 — PREPARATION BEFORE OPERATION

4.1 ADDING ENGINE OIL

All oil should meet minimum American Petroleum Institute (API) Service Class SJ, SL or better. Use no special additives. Select the oil's Viscosity grade according to the expected operating temperature (also see chart).

Above 40°F, use SAE 30 Between 40 °F to 10 °F, use 10W-30 Below 10 °F, use synthetic 5W-30



NOTE Improper treatment of generator could damage it and shorten its life. DO NOT attempt to crank or start the engine before it has been properly serviced with the recommended oil. This could result in an engine failure.

- Place generator on a flat, level surface.
- Clean area around oil fill and remove oil fill cap and dipstick. Wipe dipstick clean.
- Slowly fill engine with oil through the oil filter open until it reaches the full mark on the dipstick. Stop filling occasionally to check oil level. Be careful do not over fill.
- Install oil fill cap and finger tighten securely.
- Check engine oil level before starting each time thereafter.

4.2 ADDING FUEL

A DANGER Never fill tank indoors. Never fill fuel tank when engine is running or hot. Turn generator engine

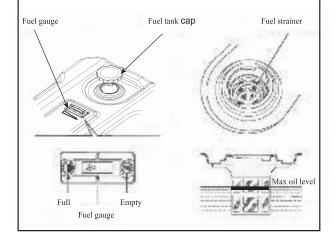
OFF and allow engine to cool entirely before filling fuel tank. Avoid spilling gasoline on HOT engine. Keep fuel away from sparks, open flames, pilot lights, heat, and other ignition sources. DO NOT light a cigarette or smoke when filling the fuel tank. Fuel is highly FEAMMABLE and its vapors are EXPLOSIVE.

- Use regular UNLEAD gasoline with the generator engine. Do not use any fuel with more than 10% added ethanol, and never use E85 fuel.
- Do not mix oil with gasoline.
- Install fuel cap and wipe up any spilled gasoline.



Do not overfill the fuel tank. Allow space for fuel expansion. IF the fuel tank is overfilled, fuel

can overflow onto a HOT engine and cause FIRE or EXPLOSION. If fuel spills, wait until it evaporates before starting engine. Check fuel lines, tank, cap and fittings frequently for cracks or leaks. Replace if necessary.



IMPORTANT: It is important to prevent gum deposits from forming in fuel system parts such as the carburetor, fuel hose or tank during storage. Alcohol-blended fuels (called gasohol), ethanol or methanol) can attract moisture, which leads to separation and formation of acids during storage. Acidic gas can damage the fuel system. So the fuel should be emptied before storage of 30 days or longer. See the "Storage" section. Never use engine or carburetor cleaner products in the fuel tank as permanent damage may occur.

4.3 GROUNDING THE GENERATOR

The national Electrical Code requires that the frame and external electrically conductive part of this generator be properly connected to an approved earth ground.

Local electrical codes may also require proper grounding of the unit. For that purpose, connecting a No. 10 AWG (American Wire Gauge) stranded copper wire to the grounding lug and to an earth-driven copper or brass grounding rod (electrode) provides adequate protection against electrical shock. However, local codes may vary widely. Consult with a local electrician for grounding requirement in the area.

Proper grounding of the generator will help prevent electrical shock in the event of ground fault condition in the generator or in connected electrical devices. Proper grounding also helps dissipate static electricity, which often builds up in ungrounded devices.

WATTAGE REFERENCE GUIDE

Wattage Reference Guide					
Tool or Appliance	Running* (Rated) Watts	Additional Starting (Surge) Watts			
Essentials					
Light Bulb - 75 watt	75	_			
Furnace Fan Blower - 1/2 HP	800	2350			
Sump Pump - 1/3 HP	800	1300			
Refrigerator/Freezer	700	2200			
Water Well Pump - 1/2 HP	1000	2100			
Heating/Cooling					
Window AC - 10,000 BTU	1200	3600			
Humidifier - 13 Gal	175	_			
Central AC - 24,000 BTU	3800	11400			
Kitchen					
Microwave Oven - 1000 Watt	1000	_			
Coffee Maker	1000	_			
Electric Stove - 8" Element	2100	_			
Toaster	850	_			
Family Room					
DVD/CD Player	100	_			
VCR	100	_			
Stereo Receiver	450	_			
Color Television - 27 in	500	_			
Personal Computer w/17 in monitor	800	_			
Other					
Security System	500	_			
AM/FM Clock Radio	100	_			
Garage Door Opener - 1/2 HP	875	2350			
Electric Water Heater	4700	11700			
DIY/Job Site					
Quartz Halogen Work Light	1000	_			
Airless Sprayer - 1/3 HP	600	1200			
Reciprocating Saw	960	_			
Electric Drill - 1/2 HP, 5.4 Amps	600	900			
Circular Saw - 7-1/4 in	1400	2300			
Miter Saw - 10 in	1800	1800			
Table Planer - 6 in	1800	1800			
Table Saw/Radial Arm Saw - 10 in	2000	2000			
Air Compressor - 1 HP	1600	4500			

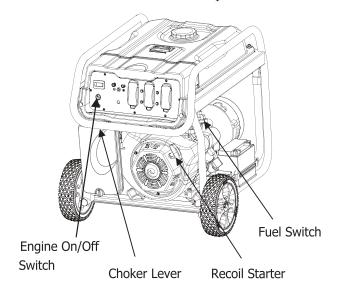
SECTION 5 — OPERATION

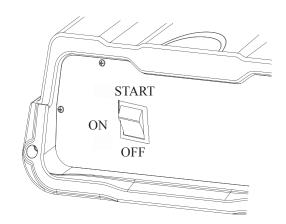
5.1 STARTING THE ENGINE

A WARNING Never start or stop engine with electrical devices plugged into the receptacles AND devices turned on.

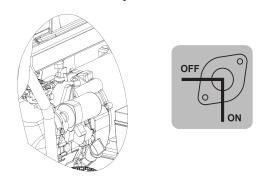
Unplug all electrical loads from the unit's receptacles before starting the engine.

Make sure the unit is in a level position.

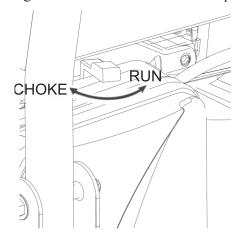




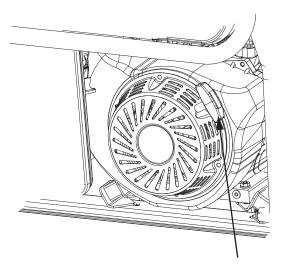
Turn Fuel switch to ON position.



Move engine choke lever to the CHOKE position.

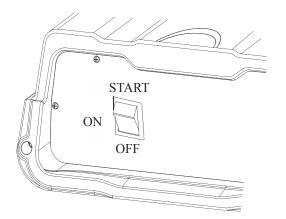


For Recoil start, firmly grasp the recoil handle and pull slowly until increased resistance is felt. Pull rapidly up and away.



Recoil Starter

For electric start, push switch to START position and push switch until engine starts. To prolong the life of the electric start motor, do not hold the start switch for more than 15 seconds at a time. Pause for 1 minute between starting attempts.



When engine starts, move choke lever to 1/2-CHOKE position until engine runs smoothly and then fully into RUN position. If engine falters, move choke back out to 1/2-CHOKE position until engine runs smoothly and then fully into RUN position.

NOTE If battery is discharged, use manual starting instructions.

NOTE If engine fires, but does not continue to run, move choke lever to the CHOKE position and repeat starting instructions.

A 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 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.

NOTE If engine fails to start after 3 pulls, or if unit shut down during operation, make sure unit is on a level surface and check for proper oil level in crankcase. This unit may be equipped with a low oil protection device. If so, oil must be checked at proper level for engine to start and run.

ignite combustible, structures or damage fuel tank causing a fire, resulting in death, serious injury and/or property damage. Contact with muffler area could cause burn resulting in serious injury.

DO NOT touch hot part and AVOID hot exhaust gases.

Allow equipment to cool before touching. Keep at least 5 feet (152 cm) of clearance on all sides of generator including overhead. Contact the original equipment manufacturer, retailer, or dealer to obtain a spark arrester designed for the exhaust system installed on this engine.

Replacement parts must be the same and installed in the same position as the original parts.

6.4 VALVE CLEARANCE

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

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

SECTION 7 — STORAGE

7.1 GENERAL

The generator should be started at least once every seven days and be allowed to run at least 30 minutes. If this cannot be done and the unit must be stored for more than 30 days, use the following information as a guide to prepare it for storage.

A DANGER NEVER store engine with fuel in tank indoors or in enclosed, poorly ventilated areas where fumes may reach an open flame, spark or pilot light as on a furnace, water heater, clothes dryer or other gas appliance.

Avoid spray from spark plug holes when cranking engine.

A DANGER Drain fuel into approved container outdoors, away from open flame. Be sure engine is cool. Do not smoke.

7.2 LONG TERM SHORTAGE INSTRUCTIONS

It is important to avoid gum deposits from forming in essential fuel system parts such as the carburetor, fuel hose or tank during storage. Also, experience indicates that alcohol-blended fuels (called gasohol, ethanol or methanol) can attract moisture, which leads to separation and formation of acids storage. Acidic gas can damage the fuel system of an engine while in storage.

To avoid engine problems, the fuel system should be emptied before storage of 30 days or longer, as follows:





- Remove all gasoline from the fuel tank.
- Start and run engine until engine stops from lack of fuel.
- While engine is still warm, drain oil from crankcase. Refill with recommended grade.
- Remove spark plugs and pour about 1/2 ounce (15 ml) of engine oil into the cylinders. Cover spark plug hole with rag. Pull the recoil starter a couple times to lubricate the piston rings and cylinder bore.

7.3 OTHER STORAGE TIPS

- Do not store gasoline from one season to another.
- Replace the gasoline can if it starts to rust. Rust and/or dirt in the gasoline will cause problems with the carburetor and fuel system.
- If possible, store the unit indoors and cover it to give protection from dust and dirt. BE SURE TO EMPTY THE FUEL TANK.
- If it is not practical to empty the fuel tank and the unit is to be stored for some time, use a commercially available fuel stabilizer added to the gasoline to increase the life of the gasoline.
- Cover the unit with a suitable protective cover that does not retain moisture.

A DANGER NEVER cover the generator while engine and exhaust area are warm.

- Install and tighten spark plugs. Do not connect spark plug wires.
- Clean the generator outer surfaces. Check that cooling air slots and openings on generator are open and unobstructed.
- Store the unit in clean, dry place.

SECTION 8 — TROUBLESHOOTING

Problem	Cause	Correction		
	1.One of the circuit breakers is off.	1.Turn circuit breaker to ON.		
Engine is running, but no	2.Fault in generator.	2.contact authorized service facility.		
AC output is	3.Poor connection or defective cord set.	3.check and repair.		
available.	4.Connected device is bad.	4.Connect another device that is in good condition.		
Engine runs	1.Short circuit in a connected load.	1.Disconnect shorted electrical load.		
good without	2.Engine speed is too slow.	2.contact authorized service facility.		
loading, but "bogs down"	3.Generator is overloaded.	3.See Don't Overload Generator.		
when loads	4.Shorted generator circuit.	4.Contact authorized service facility.		
are connected.	5.Clogged or dirty fuel filter.	5.Clean or replace fuel filter.		
	1.Start switch in off position.	1.Turn key in start switch to on .		
	2.Fuel valve is in "Off" position.	2.Turn fuel valve to "On" position.		
	3.Failed battery.	3.Replace battery.		
	4.Low oil level.	4.Fill crankcase to proper level or place generator on level surface.		
	5.Dirty air cleaner.	5.Clean or replace air cleaner.		
Engine can't	6.Clogged or dirty fuel filter.	6.Clean or replace fuel filter.		
be started,	7.Out of fuel.	7.Fill fuel tank.		
or runs rough or shuts down	8.Stale fuel.	8.Drain fuel tank and carburetor; fill with fresh fuel.		
while running.	9.Spark plug wire not connected to spark plug.	9.Connect wire to spark plug.		
	10.Bad spark plug.	10.Replace spark plug.		
	11.Water in fuel.	11.Drain fuel tank and carburetor;fill with fresh fuel.		
	12.Flooded.	12.Wait 5 minutes and re-crank engine.		
	13.Excessively rich fuel mixture.	13.Contact authorized service facility.		
	14.Intake valve stuck open or closed.	14.Contact authorized service facility.		
	15.Engine has lost compression.	15.Contact authorized service facility.		
Engine Ingle	1.Load is too high.	1.See Don't Overload Generator.		
Engine lacks power.	2.Dirty air filter.	2.Replace air filter.		
power	3.Clogged or dirty fuel filter.	3.Clean or replace fuel filter.		
Engine"hunts" or falters	1.Carburetor is running too rich or too lean.	1.Contact authorized service facility.		
or railers	2.Clogged or dirty fuel filter.	2.Clean or replace fuel filter.		