

# **CHAMPION**

**GLOBAL POWER EQUIPMENT™**

OWNER'S MANUAL & OPERATING INSTRUCTIONS

# **PORTABLE GENERATOR**

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**SAVE THESE INSTRUCTIONS**  
Important Safety Instructions  
MADE IN CHINA



## **Introduction**

This Owner's Manual contains important safety instructions and information. **SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE.**

### ***Portable Power Generator***

This unit is a gasoline engine driven, alternating current (AC) generator. It is designed to supply electrical power for lighting, appliances, tools and similar equipment.

Record the model and serial numbers as well as date and place of purchase for future reference. Have this information available when ordering parts and when making technical or warranty inquiries.

### ***This Booklet***

Every effort has been made to ensure the accuracy and completeness of the information in this manual. We reserve the right to change, alter and/or improve the product and this document at any time without prior notice.

# Safety Rules

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## Safety Rules

### **WARNING**

Read this manual thoroughly before operating your generator. Failure to follow instructions could result in serious injury or death.

### **WARNING**

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

### **DANGER**

Generator exhaust contains carbon monoxide, a colorless, odorless, poison gas. Breathing carbon monoxide will cause nausea, dizziness, fainting or death. If you start to feel dizzy or weak, get to fresh air immediately

Operate generator outdoors only in a well ventilated area  
DO NOT operate the generator inside any building, including garages, basements, crawlspaces and sheds, enclosure or compartment, including the generator compartment of a recreational vehicle.  
DO NOT allow exhaust fumes to enter a confined area through windows, doors, vents or other openings.

**DANGER CARBON MONOXIDE**, using a generator indoors **CAN KILL YOU IN MINUTES.**

### **DANGER**

Rotating parts can entangle hands, feet, hair, clothing and/or accessories.

Traumatic amputation or severe laceration can result.

Keep hands and feet away from rotating parts.

Tie up long hair and remove jewelry.  
Operate equipment with guards in place.  
DO NOT wear loose-fitting clothing, dangling drawstrings or items that could become caught.

### **DANGER**

Generator produces powerful voltage.

DO NOT touch bare wires or receptacles.  
DO NOT use electrical cords that are worn, damaged or frayed.  
DO NOT operate generator in wet weather.  
DO NOT allow children or unqualified persons to operate or service the generator  
Use a ground fault circuit interrupter (GFCI) in damp areas and areas containing conductive material such as metal decking.  
Use approved transfer equipment to isolate generator from your electric utility and Notify your utility company before connecting your generator to your power system.

### **WARNING**

Sparks can result in fire or electrical shock.

#### **When servicing the generator:**

Disconnect the spark plug wire and place it where it cannot contact the plug.  
DO NOT check for spark with the plug removed.  
Use only approved spark plug testers.

### **WARNING**

Running engines produce heat.  
Severe burns can occur on contact.  
Combustible material can catch fire on contact.

DO NOT touch hot surfaces.  
Avoid contact with hot exhaust gases.  
Allow equipment to cool before touching.  
Maintain at least three feet of clearance on all sides to ensure adequate cooling.  
Maintain at least five feet of clearance from combustible materials.

## **WARNING**

Operation of This Equipment May Create Sparks That Can Start Fires Around Dry Vegetation.

A Spark Arrestor May be Required. The Operator Should Contact Local Fire Agencies For Laws or Regulations Relating to Fire Prevention Requirements.

## **DANGER**

Fuel and fuel vapors are highly flammable and extremely explosive.  
Fire or explosion can cause severe burns or death.

Unintentional startup can result in entanglement, traumatic amputation or laceration.

### **When adding or removing fuel**

Turn the generator off and let it cool for at least two minutes before removing the fuel cap.

Loosen the cap slowly to relieve pressure in the tank.

Only fill or drain fuel outdoors in a well-ventilated area.

DO NOT overfill the fuel tank.

Always keep fuel away from sparks, open flames, pilot lights, heat and other sources of ignition.

DO NOT light or smoke cigarettes.

### **When starting the generator**

DO NOT attempt to start a damaged generator.

Make certain that the gas cap, air filter, spark plug, fuel lines and exhaust system are properly in place.

Allow spilled fuel to evaporate fully before attempting to start the engine.

Make certain that the generator is resting firmly on level ground.

### **When operating the generator:**

DO NOT move or tip the generator during operation.

DO NOT tip the generator or allow fuel or oil to spill.

### **When transporting or servicing the generator:**

Make certain that the fuel shutoff valve is in the off position and the fuel tank is empty.

Disconnect the spark plug wire.

### **When storing the generator:**

Store away from sparks, open flames, pilot lights, heat and other sources of ignition.

## **WARNING**

Rapid retraction of the starter cord will pull hand and arm towards the engine faster than you can let go.

Unintentional startup can result in entanglement, traumatic amputation or laceration.

Broken bones, fractures, bruises or sprains could result.

When starting engine, pull the starter cord slowly until resistance is felt and then pull rapidly to avoid kickback.

DO NOT start or stop the engine with electrical devices plugged in.

## **CAUTION**

Exceeding the generator's running capacity can damage the generator and/or electrical devices connected to it

DO NOT overload the generator.

Start the generator and allow the engine to stabilize before connecting electrical loads. Connect electrical equipment in the off position, and then turn them on for operation.

Turn electrical equipment off and disconnect before stopping the generator.

DO NOT tamper with the governed speed.

DO NOT modify the generator in any way.

## **CAUTION**

Improper treatment or use of the generator can damage it, shorten its life and void your warranty.

Use the generator only for intended uses.

Operate only on level surfaces.

DO NOT expose generator to excessive moisture, dust, or dirt.

DO NOT allow any material to block the cooling slots.

If connected devices overheat, turn them off and disconnect them from the generator.

DO NOT use the generator if:

Electrical output is lost

Equipment sparks, smokes or emits flames

Equipment vibrates excessively

# Assembly

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## 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.

### Remove the Generator from the Shipping Carton

1. Set the shipping carton on a solid, flat surface.
2. Remove everything from the carton except the generator.
3. Carefully cut each corner of the box from top to bottom. Fold each side flat on the ground to provide a surface area to install the wheel kit and support leg.

### Install the Wheel Kit (Option)



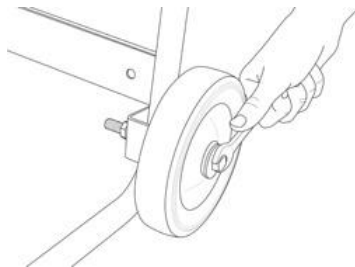
#### **CAUTION**

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

You will need the following tools to install the wheel kit:

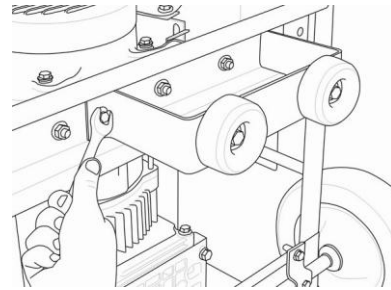
Suitable wrench OR adjustable wrench (not included)  
Socket wrench with a 16 mm socket  
Pliers (not included)

1. Before adding fuel and oil, tip the generator on its side.
2. Slide the wheel bolt through the washer, sleeve and wheel.
3. Slide the bolt through the mount point on the frame.
4. Fasten securely with the nut.
5. Repeat steps 2-4 to attach the second wheel.



### Install the Support Leg

1. Attach the rubber vibration mount to the support leg with a cap screw and lock nut.
2. Attach the support leg to the generator frame with cap screws and lock nuts.
3. Tip the generator slowly so that it rests on the wheels and support leg.



### Connect the Battery

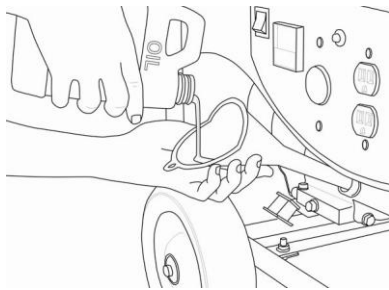
1. Remove the protective cover from the red battery lead.
2. Attach the red lead to the red terminal on the battery with the cap screw and secure with the lock washer.
3. Repeat step 2 for the black battery lead.

## Add Engine Oil

### 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 failure to follow these instructions will void your warranty.

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



3. Add oil and replace oil fill cap/dipstick. See “Specifications” for oil recommendations based on operating conditions.
4. Check engine oil level daily and add as needed.

### CAUTION

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

### NOTE

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

### NOTE

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

## Add Fuel

1. Use clean, fresh, regular unleaded fuel with a minimum octane rating of 85.
2. DO NOT mix oil with fuel.
3. Clean the area around the fuel cap.
4. Remove the fuel cap
5. Slowly add fuel to the tank. DO NOT overfill. Allow approximately 1/4 inch of space for fuel expansion.



6. Screw on the fuel cap and wipe away any spilled fuel.

# Assembly

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## CAUTION

Use regular unleaded gasoline with a minimum octane rating of 85.

Do not mix oil and gasoline.  
Fill tank to approximately 1/4" below the top of the tank to allow for fuel expansion.  
DO NOT fill fuel tank indoors.  
DO NOT fill fuel tank when the engine is running or hot.  
DO NOT overfill the fuel tank.  
DO NOT light cigarettes or smoke when filling the fuel tank.

## 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 on the power panel. For remote grounding, connect 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.

## ***Grounding***

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



## Operation

### ***Surge Protection***

#### **CAUTION**

Voltage fluctuation may impair the proper functioning of sensitive electronic equipment.

Electronic devices, including computers and many programmable appliances use components that are designed to operate within a narrow voltage range and may be affected by momentary voltage fluctuations. While there is no way to prevent voltage fluctuations, you can take steps to protect sensitive electronic equipment.

1. **Install UL1449 , CSA -listed, plug-in surge suppressors on the outlets feeding your sensitive equipment.**  
Surge suppressors come in single- or multi-outlet styles. They're designed to protect against virtually all short-duration voltage fluctuations.
2. **Obtain an Uninterruptible Power Supply (UPS) device.**  
Most UPS devices come with a rechargeable battery between the electronic equipment and power supply source. The device buffers the voltage and protects against virtually all short-duration voltage fluctuations.

### ***Starting the Engine***

1. Make certain the generator is on a flat, level surface.
2. Disconnect all electrical loads from the generator. Never start or stop the generator with electrical devices plugged in or turned on.
3. Turn the fuel valve to the "On" position.
4. Move the choke lever to the "Choke" position.
5. **ELECTRIC START:** Press the switch to the "START" position. Release as the engine begins to roll over.
6. **RECOIL START:** Pull the starter cord slowly until resistance is felt and then pull rapidly.
7. As engine warms up, move the choke lever to "Run".

# Operation

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## Stopping the Engine

1. Turn off and unplug all electrical loads. Never start or stop the generator with electrical devices plugged in or turned on.
2. Let the generator run at no-load for several minutes to stabilize internal temperatures of the engine and generator.
3. Turn the ignition switch to the “Off” position.
4. Turn the fuel valve to the “Off” position.

6. Allow the engine to stabilize.
7. Repeat steps 5-6 for each additional item.



### **NOTE**

Never exceed the generator capacity when adding loads.

## Do Not Overload Generator

### Capacity

Follow these simple steps to calculate the running and starting watts necessary for your purposes.

1. Select the electrical devices you plan on running at the same time.
2. Total the running watts of these items. This is the amount of power you need to keep your items running.
3. Identify the highest starting wattage of all devices identified in step 1. Add this number to the number calculated in step 2. Surge wattage is the extra burst of power needed to start some electric driven equipment. Following the steps listed under “Power Management” will guarantee that only one device will be starting at a time.

### Power Management

Use the following formula to convert voltage and amperage to watts:

$$\text{Volts} \times \text{Amps} = \text{Watts}$$

To prolong the life of your generator and attached devices, follow these steps to add electrical load:

1. Start the generator with no electrical load attached.
2. Allow the engine to run for several minutes to stabilize.
3. Plug in and turn on the first item. It is best to attach the item with the largest load first.
4. Allow the engine to stabilize.
5. Plug in and turn on the next item.

## Wattage Reference Chart

Use the chart to determine approximate wattage requirements for your equipment.

### NOTE

Starting watts can exceed three times the running watts. The values in the following table are approximate. Refer to your tool or appliance for actual wattage consumption.

Item	Running Watts	Starting Watts
<b>Essentials</b>		
Light Bulb 100W	100	
Refrigerator/Freezer	1200	2400
Freezer	500	500
Sump Pump	600	1800
Well Pump 1 HP	2000	4000
Water Heater	4000	
Security System	180	
AM/FM Radio	300	
Garage Door Opener 1/2 HP	500	600
Battery Charger 12V DC	110	
<b>Heating/Cooling</b>		
Air Conditioner 12000 BTU	1700	2500
Fan	300	600
Furnace Fan 1/3 HP	1200	2000
<b>Home Appliances</b>		
Microwave 1000W	1000	
Electric Range - One Element	1500	
Electric Skillet	1250	
Coffee Maker	1500	
Clothes Washer	1200	
<b>Entertainment</b>		
CD/DVD Player	100	
VCR	100	
Stereo Receiver	450	
Television 27"	500	
PC with 15" Monitor	800	
<b>Job Site</b>		
Belt Sander 3"	1000	1500
Bench Grinder 6"	700	1500
Circular Saw	1500	1500
Compressor 1 1/2 HP	2500	2500
Edge Trimmer	500	500
Hand Drill 1/2"	1000	1000
Lawn Mower	1200	1800
Paint Sprayer	600	1200
Table Saw	2000	2000

# Maintenance

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## Maintenance

The owner/operator is responsible for all periodic maintenance.

### **WARNING**

Never operate a damaged or defective generator.

Complete all scheduled maintenance in a timely manner. Correct any issue before operating the generator.

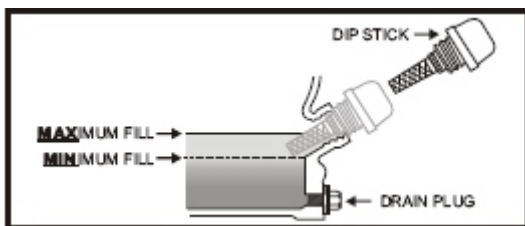
## Engine Maintenance

To prevent accidental starting, remove and ground spark plug wire before performing any service.

### Oil

Change oil when the engine is warm. Refer to the oil specification to select the proper grade of oil for your operating environment.

1. Remove the oil drain plug with a 15 mm socket and extension.
2. Allow the oil to drain completely.
3. Replace the drain plug.
4. Remove oil fill cap/dipstick to add oil.
5. Add oil and replace oil fill cap/dipstick.
6. Dispose of used oil at an approved waste management facility.



### Spark Plugs


1. Remove the spark plug cable from the spark plug.
2. Remove the spark plug.
3. Inspect the electrode on the plug. It must be clean and not worn to produce the spark required for ignition.

4. Make certain the spark plug gap is 0.7 - 0.8mm (0.028 - 0.031 in.).
5. Refer to the spark plug recommendation chart when replacing the plug.
6. Carefully thread the plug into the engine.
7. Use the spark plug tool to firmly install the plug.
8. Attach the spark plug wire to the plug.

### Air Filter

1. Remove the snap-on cover holding the air filter to the assembly.
2. Remove the foam element.
3. Wash in liquid detergent and water. Squeeze thoroughly dry in a clean cloth.
4. Saturate in clean engine oil.
5. Squeeze in a clean, absorbent cloth to remove all excess oil.
6. Place the filter in the assembly.
7. Reattach the air filter cover and snap in place.

## Cleaning

 <b>CAUTION</b>
<b>DO NOT</b> spray engine with water.
Water can contaminate the fuel system.

Use a damp cloth to clean exterior surfaces of the engine.  
 Use a soft bristle brush to remove dirt and oil.  
 Use an air compressor (25 PSI) to clear dirt and debris from the engine.

## Adjustments

The air-fuel mixture is not adjustable. Tampering with the governor can damage your generator and your electrical devices.

## Maintenance Schedule

Follow the service intervals indicated in the schedule below.  
 Service your generator more frequently when operating in adverse conditions. Contact our help line locate the nearest Champion Power Equipment certified service dealer for your generator or engine maintenance needs.


<b>Every 8 hours or daily</b>
Check oil level
Clean around air intake and muffler
<b>First 5 Hours</b>
Change oil
<b>Every 50 hours or every season</b>
Clean air filter

Change oil if operating under heavy load or in hot environments
<b>Every 100 hours or every season</b>
Change oil
Clean/Adjust spark plug
Check/Adjust valve clearance *
Clean spark arrester
Clean fuel tank and filter *
<b>Every 3 years</b>
Replace fuel line

\* To be performed by knowledgeable, experienced owners or Champion Power Equipment certified service dealers

## Generator Maintenance

Make certain that the generator is kept clean and stored properly. Only operate the unit on a flat, level surface in a clean, dry operating environment. **DO NOT** expose the unit to extreme conditions, excessive dust, dirt, moisture or corrosive vapors.

 <b>CAUTION</b>
<b>DO NOT</b> use a garden hose to clean the generator.
Water can enter the generator through the cooling slots and damage the generator windings.

Use a damp cloth to clean exterior surfaces of the generator.  
 Use a soft bristle brush to remove dirt and oil.  
 Use an air compressor (25 PSI) to clear dirt and debris from the generator.  
 Inspect all air vents and cooling slots to ensure that they are clean and unobstructed.

# Storage

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## Storage

The generator should be started at least once every 14 days and allowed to run for at least 20 minutes. For longer term storage, please follow these guidelines.

### *Engine Storage*

1. Allow the engine to cool completely before storage.
2. Clean the engine according to the instructions in the Maintenance section.
3. Drain all fuel completely from the fuel line and carburetor to prevent gum from forming.
4. Add a fuel stabilizer into the fuel tank.
5. Change the oil.
6. Remove the spark plug and pour about ½ ounce of oil into the cylinder. Crank the engine slowly to distribute the oil and lubricate the cylinder.
7. Reattach the spark plug.

### *Generator Storage*

1. Allow the generator to cool completely before storage.
2. Turn off the fuel supply at the fuel valve.
3. Clean the generator according to the instructions in the Maintenance section.
4. Store the unit in a clean, dry area.
5. Store in a clean, dry place out of direct sunlight.

# Troubleshooting

## Troubleshooting

Problem	Cause	Solution
Generator will not start	No fuel	Add fuel
	Faulty spark plug	Replace spark plug
	Unit loaded during start up	Remove load from unit
Generator will not start; Generator starts but runs roughly	Low oil level	Fill crankcase to the proper level Place generator on a flat, level surface
	Choke in the wrong position	Adjust choke
	Spark plug wire loose	Attach wire to spark plug
Generator shuts down during operation	Out of fuel	Fill fuel tank
	Low oil level	Fill crankcase to the proper level. Place generator on a flat, level surface
Generator cannot supply enough power or overheating	Generator is overloaded	Review load and adjust. See "Power Management"
	Insufficient ventilation	Check for air restriction. Move to a well ventilated area
No AC output	Cable not properly connected	Check all connections
	Connected device is defective	Replace defective device
	Circuit breaker is open	Reset circuit breaker
	Faulty brush assembly	Replace brush assembly (Service Center)
	Faulty AVR (auto voltage regulator)	Replace AVR (Service Center)
	Loose wiring	Inspect and tighten wiring connections
	Other	Contact the help line
Generator gallops	Engine governor defective	Contact the help line
Repeated circuit breaker tripping	Overload	Review load and adjust. See "Power Management"
	Faulty cords or device	Check for damaged, bare or frayed wires. Replace defective device

Notes

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Notes