

# CHAMPION

GLOBAL POWER EQUIPMENT™

OWNER'S MANUAL & OPERATING INSTRUCTIONS



## 1500 Starting Watts / 1200 Rated Watts PORTABLE GENERATOR



MODEL NUMBER

**42436**

**SAVE THESE INSTRUCTIONS**  
Important Safety Instructions  
are included in this manual.

MADE IN CHINA  
REV 42436-20121015

10006 Santa Fe Springs Road  
Santa Fe Springs CA 90670  
USA / 1-877-338-0999  
[www.championpowerequipment.com](http://www.championpowerequipment.com)

**Have questions or need assistance?**

Do not return this product to the store!

**WE ARE HERE TO HELP!**

Visit our website:

**[www.championpowerequipment.com](http://www.championpowerequipment.com)**

for more info:

- Product Info & Updates
- Frequently Asked Questions
- Tech Bulletins
- Product Registration

*– or –*

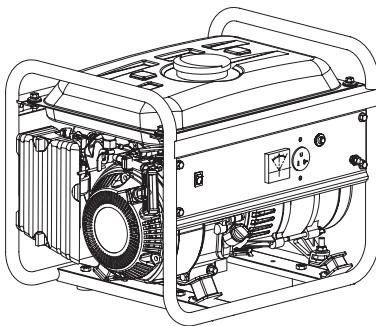
Call our Customer Care Team Toll-Free at:

**1-877-338-0999**

**WARNING:**

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

\*We are always working to improve our products. Therefore, the enclosed product may differ slightly from the image on the cover.



# 1500 Starting Watts / 1200 Rated Watts PORTABLE GENERATOR

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# INTRODUCTION

## Introduction

Congratulations on your purchase of a Champion Power Equipment generator. CPE designs and builds generators to strict specifications. With proper use and maintenance, this generator will bring years of satisfying service.

## 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.

## Accessories

Champion Power Equipment manufactures and sells accessories designed to help you get the most from your purchase. To find out more about our covers, power cables and storm kits, please visit our web site at:

→ [www.championpowerequipment.com](http://www.championpowerequipment.com)

## 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.

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.

### Champion Power Equipment Support

**1-877-338-0999**

Model Number

**42436**

Serial Number

Date of Purchase

Purchase Location

For Oil Type see 'Add Engine Oil' section. For Fuel Type see 'Add Fuel' section.

This manual uses the following symbols to help differentiate between different kinds of information. The safety symbol is used with a key word to alert you to potential hazards in operating and owning power equipment. Follow all safety messages to avoid or reduce the risk of serious injury or death.

## DANGER

DANGER indicates an imminently hazardous situation which, if not avoided, ***will*** result in death or serious injury.

## CAUTION

CAUTION used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, ***may*** result in property damage.

## WARNING

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

## NOTE

If you have questions regarding your generator, we can help. Please call our help line at **1-877-338-0999**.

## CAUTION

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

# 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

Medical and Life Support Uses.

In case of emergency, call 911 immediately.  
NEVER use this product to power life support devices or life support appliances.  
NEVER use this product to power medical devices or medical appliances.  
Inform your electricity provider immediately if you or anyone in your household depends on electrical equipment to live.  
Inform your electrical provider immediately if a loss of power would cause you or anyone in your household to experience a medical emergency.

## 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 pump gas directly into the generator at the gas station. Use an approved container to transfer the fuel to the generator. 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

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.

## 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 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.

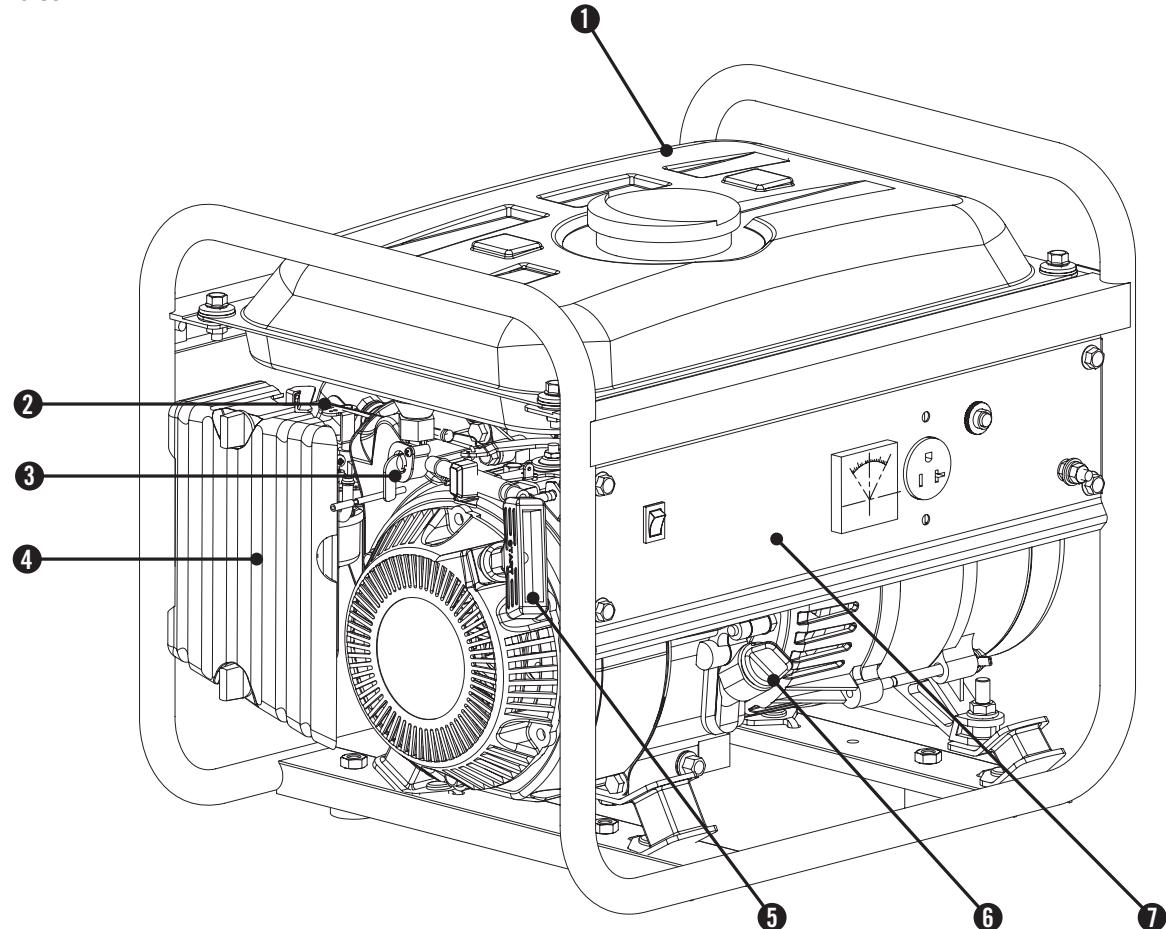
DO NOT use the generator if:

- Electrical output is lost
- Equipment sparks, smokes or emits flames
- Equipment vibrates excessively

# CONTROLS AND FEATURES

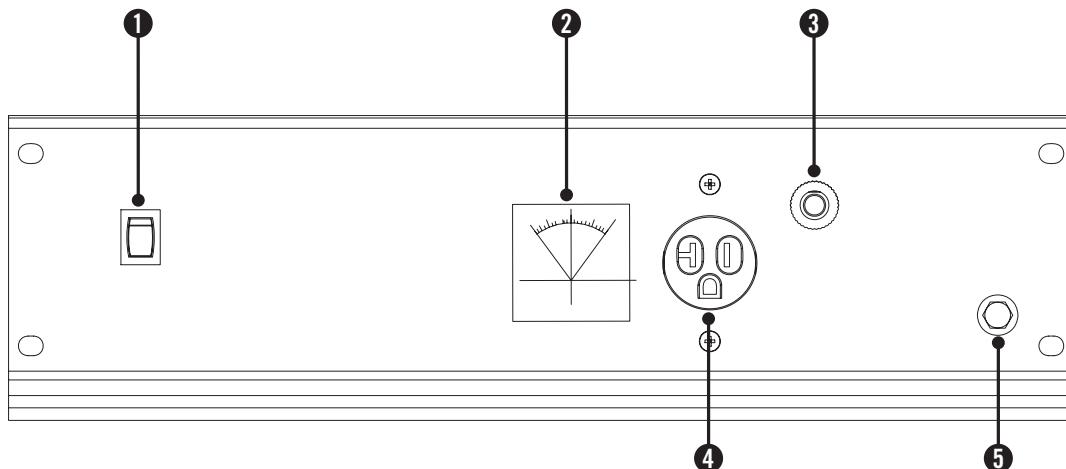
Read this owner's manual before operating your generator. Familiarize yourself with the location and function of the controls and features. Save this manual for future reference.

## Generator



(1) <b>Fuel Tank</b> – 1.45 gal. (5.5 L) capacity fuel tank.	(5) <b>Recoil Starter</b> – Used to manually start the engine.
(2) <b>Choke</b> – Used to start the engine.	(6) <b>Oil Filler Cap</b> – Check and fill engine oil level.
(3) <b>Fuel Valve</b> – Turn this valve to the “ON” position to supply fuel to the engine.	(7) <b>Power Panel</b> – See “Power Panel” section.
(4) <b>Air Cleaner</b> – Protects the engine by filtering dust and debris from the intake air.	

## Power Panel



(1) **Engine Switch** – Used to turn the generator on and off.

(2) **Voltmeter** – Used to display alternator output voltage.

(3) **Circuit Breaker** – Protects the generator against electrical overloads. Push to reset breaker.

(4) **120 Volt AC, 20 Amp Receptacle (NEMA 5-20R)**  
– May be used to supply electrical power for the operation of 120 Volt AC, 10 Amp, single phase 60 Hz electrical loads.

(5) **Ground Terminal** – Consult an electrician for local grounding regulations.

# CONTROLS AND FEATURES

## Parts Included

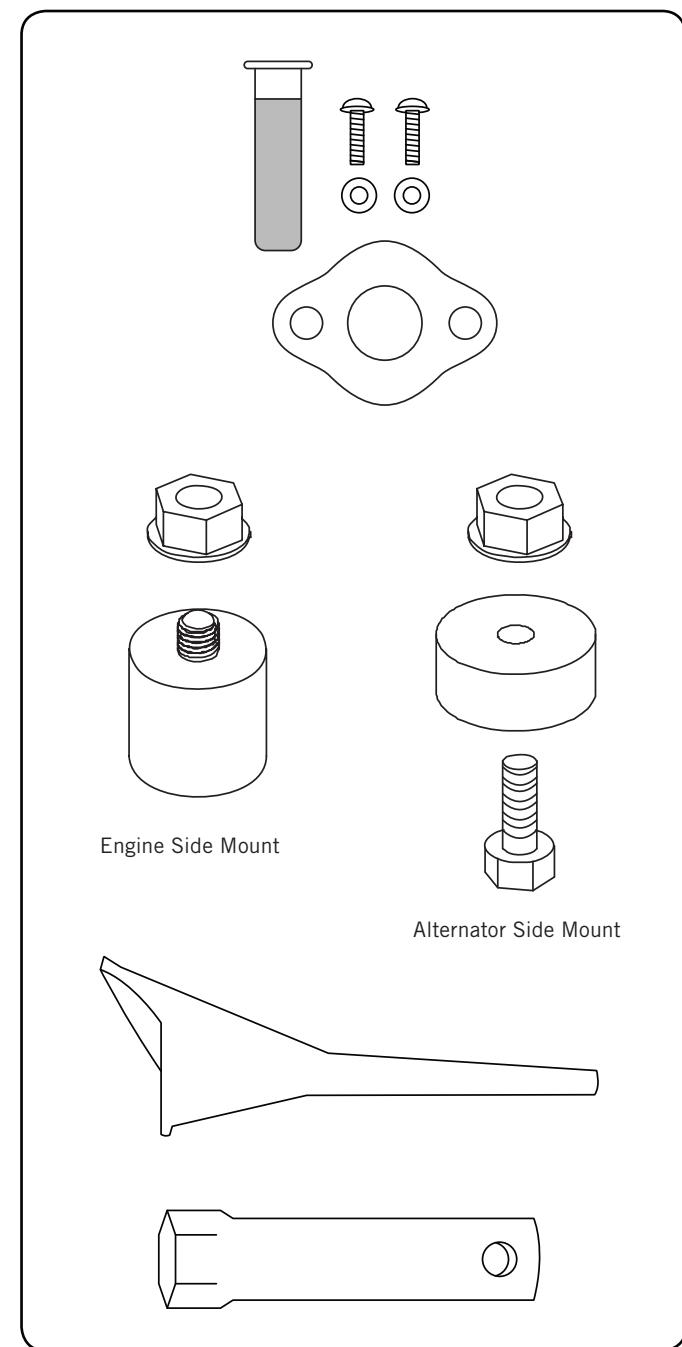
Your 42436 Gasoline Powered Generator ships with the following parts:

### Spark Arrestor Kit

– Spark Arrestor	1
– Cover Plate	1
– Screw with Lock Washer	2

### Other

– Vibration Mount (Engine Side)	2
– Vibration Mount (Alternator Side)	2
– Nut (M8)	4
– Flange Bolt M8x20	2
– Oil Funnel	1
– Spark Plug Socket	1



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

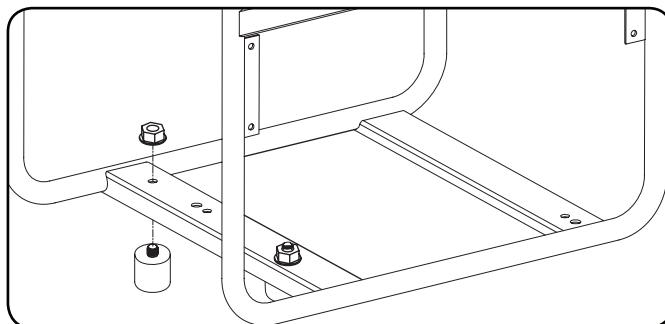
If you have any questions regarding the assembly of your generator, call our help line at 1-877-338-0999. Please have your serial number and model number available.

## 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.

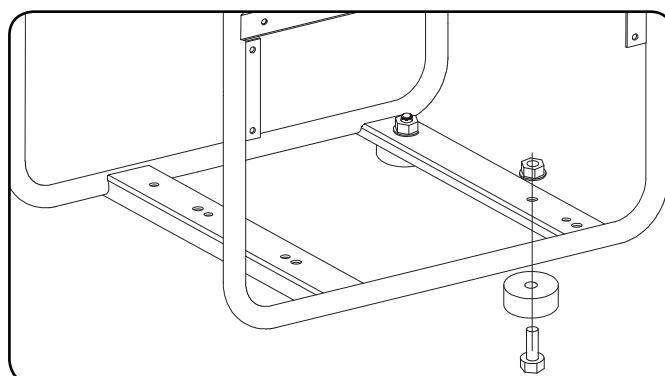
## Attaching the Engine Vibration Mounts

1. Thread the vibration mount bolt through the frame (engine side).
2. Firmly secure the bolt to the frame with the M8 nut. Tighten. DO NOT over tighten.
3. Repeat steps 1-2 for the remaining mount (2 total).



## Attaching the Alternator Vibration Mounts

1. Thread the flange bolt (M8x20) through the vibration mount and then through the frame (alternator side).
2. Firmly secure the bolt to the frame with the M8 nut. Tighten. DO NOT over tighten.
3. Repeat steps 1-2 for the remaining mount (2 total).



## Add Engine Oil

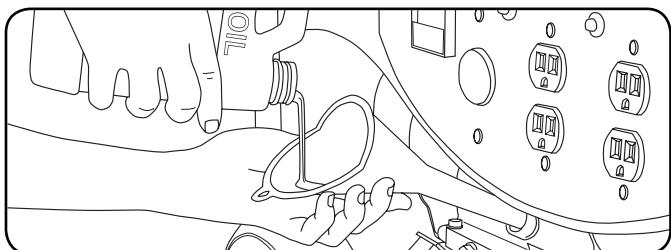
### ! CAUTION

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.

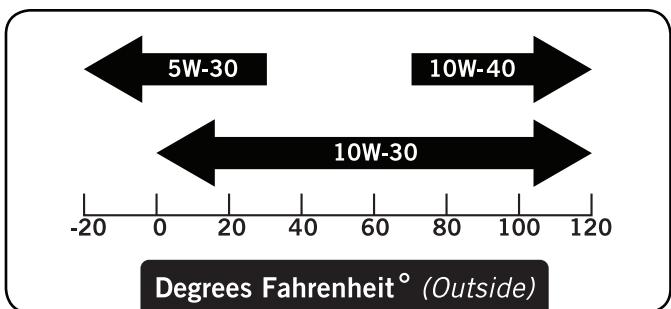
### NOTE

The recommended oil type is 10W-30 automotive oil.

1. Place the generator on a flat, level surface.



2. Remove oil fill cap/dipstick to add oil.
3. Add 0.42 qt. (0.4 L) of oil and replace oil fill cap/dipstick. Once oil has been added, a visual check should show oil about 1-2 threads from running out of the fill hole.



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.

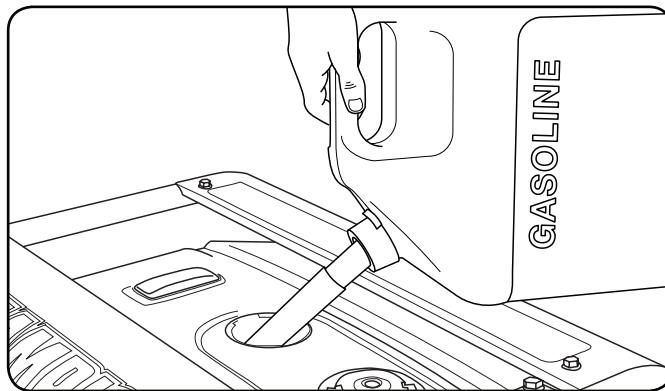
### NOTE

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

# ASSEMBLY

## Add Fuel

1. Use clean, fresh, regular unleaded fuel with a minimum octane rating of 85 and an ethanol content of less than 10% by volume.
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  $\frac{1}{4}$  inch of space for fuel expansion.



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

### ! CAUTION

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

Do not mix oil and gasoline.  
 Fill tank to approximately  $\frac{1}{4}$ " below the top of the tank to allow for fuel expansion.  
 DO NOT pump gas directly into the generator at the gas station. Use an approved container to transfer the fuel to the generator.  
 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

Pouring fuel too fast through the fuel screen may result in blow back of fuel at the operator while filling.

## Grounding

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

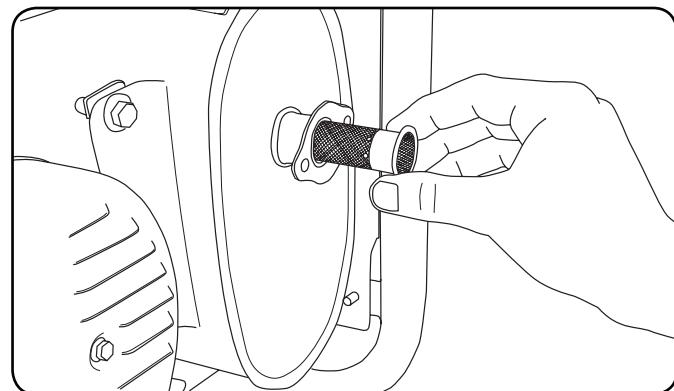
### ! WARNING

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 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.

## Installing the Spark Arrester

Insert the spark arrester screen into the muffler outlet. Secure the spark arrester by placing the cover plate over the end of the screen, with the lettering facing outward.



Secure the cover plate with the two screws and lock washers provided with the spark arrester kit.

### ! NOTE

Federal and local laws and administrative requirements indicate when and where spark arresters are required. When ordered, spark arresters are required for operation of this generator in National Forest lands. In California, this generator must not be used on any forest- covered land, brush-covered land, or grass- covered land unless the engine is equipped with a spark arrester.

### ! CAUTION

Failure to install the spark arrester may result in an increased risk of fire.

## Generator Location

NEVER operate the generator inside any building, including garages, basements, crawlspaces and sheds, enclosure or compartment, including the generator compartment of a recreational vehicle. Please consult your local authority. In some areas, generators must be registered with the local utility. Generators used at construction sites may be subject to additional rules and regulations. Generators should be on a flat, level surface at all times. (Even while not in operation) Generators must have at least five feet of clearance from all combustible material. In addition to clearance from all combustible material, generators must also have at least three feet of clearance on all sides to allow for adequate cooling, maintenance and servicing. Generators should never be started or operated in the back of a SUV, camper, trailer, in the bed of a truck (regular, flat or otherwise), under staircases/stairwells, next to walls or buildings, or in any other location that will not allow for adequate cooling of the generator and/or the muffler. DO NOT contain generators during operation. Allow generators to properly cool before transport or storage. Place the generator in a well-ventilated area. DO NOT place the generator near vents or intakes where exhaust fumes could be drawn into occupied or confined spaces. Carefully consider wind and air currents when positioning generator.

**Failure to follow proper safety precautions may void manufacturer's warranty.**

### WARNING

Do not operate or store the generator in rain, snow, or wet weather.

Using a generator or electrical appliance in wet conditions, such as rain or snow, or near a pool or sprinkler system, or when your hands are wet, could result in electrocution.

### WARNING

During operation the muffler and exhaust fumes produced will become hot. If adequate cooling and breathing space are not supplied, or if the generator is blocked or contained, temperatures can become extremely heated and may lead to fire.

## Grounding

The generator system ground connects the frame to the ground terminals on the power panel.

- 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 may not function properly.

## 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.

## 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. Flip the engine switch to the “ON” position.
5. Move the choke lever to the “CHOKE” position.
6. Pull the starter cord slowly until resistance is felt and then pull rapidly
7. Do not over-choke. As soon as engine starts, move the choke lever to the “RUN” position.

### NOTE

Keep choke lever in “Choke” position for only 1 pull of the recoil starter. After first pull, move choke lever to the “Run” position for up to the next 3 pulls of the recoil starter. Too much choke leads to sparkplug fouling/engine flooding due to the lack of incoming air. This will cause the engine not to start.

### NOTE

If the engine starts but does not run make certain that the generator is on a flat, level surface. The engine is equipped with a low oil sensor that will prevent the engine from running when the oil level falls below a critical threshold.

# OPERATION

## Connecting Electrical Loads

1. Let the engine stabilize and warm up for a few minutes after starting
2. Plug in and turn on the desired 120 Volt AC single phase, 60 Hz electrical loads.
- DO NOT connect 3-phase loads to the generator.
- DO NOT connect 50 Hz loads to the generator.
- DO NOT overload the generator.

### NOTE

Connecting a generator to your electric utility company's power lines or to another power source may be against the law. In addition this action, if done incorrectly, could damage your generator and appliances and could cause serious injury or even death to you or a utility worker who may be working on nearby power lines. If you plan to run a portable electric generator during an outage, please notify your electric utility company immediately and remember to plug your appliances directly into the generator. Do not plug the generator into any electric outlet in your home. Doing so could create a connection to the utility company power lines. You are responsible for ensuring that your generator's electricity does not feed back into the electric utility power lines.

If the generator will be connected to a building electrical system, consult your local utility company or a qualified electrician. Connections must isolate generator power from utility power and must comply with all applicable laws and codes.

## 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 Fuel Valve to the "OFF" position.
4. Let the engine run until fuel starvation has stopped the engine. This usually takes a few minutes.
5. Press the ignition switch to the "OFF" position.

**Important:** Always ensure that the Fuel Valve and the Engine Switch are in the "OFF" position when the engine is not in use.

### NOTE

If the engine will not be used for a period of two (2) weeks or longer, please see the Storage section for proper engine and fuel storage.

## 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.
2. Allow the engine to run for several minutes to stabilize.
3. Plug in and turn on the first item. It is best to turn on the item with the largest load first.
4. Allow the engine to stabilize.
5. Turn on the next item.
6. Allow the engine to stabilize.
7. Repeat steps 5-6 for each additional item.

### NOTE

Never exceed the specified capacity when adding loads to the generator.

The owner/operator is responsible for all periodic maintenance.

### ⚠ WARNING

Never operate a damaged or defective generator.

### ⚠ WARNING

Tampering with the factory set governor will void your warranty.

### ⚠ WARNING

Improper maintenance will void your warranty.

### NOTE

Maintenance, replacement, or repair of emission control devices and systems may be performed by any non-road engine repair establishment or individual.

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

### NOTE

For service or parts assistance, contact our help line at **1-877-338-0999**

## Engine Maintenance

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

### Oil

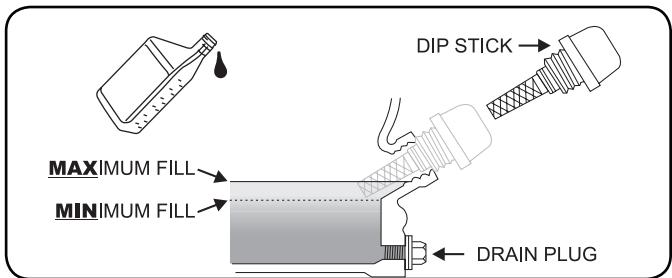
Change oil when the engine is warm. Refer to the oil specification to select the proper grade of oil for your operating environment.

1. Remove the oil drain plug with a 12 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 0.42 qt. (0.4 L) of oil and replace oil fill cap/dipstick.
6. Dispose of used oil at an approved waste management facility.

### NOTE

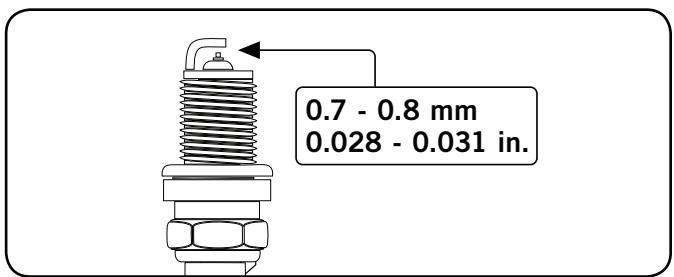
Once oil has been added, a visual check should show oil about 1-2 threads from running out of the fill hole. If using the dipstick to check oil level, DO NOT screw in the dipstick while checking.

### Oil Cont'd.



### Spark Plugs

1. Remove the spark plug cable from the spark plug.
2. Use the spark plug tool that shipped with your generator to remove the 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 or (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.

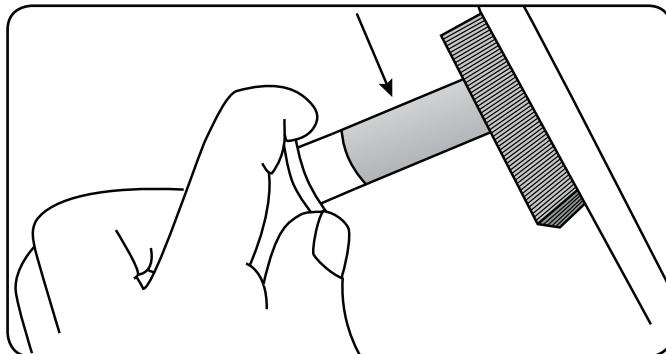
### Air Filter

1. Using your fingers, unscrew the thumb screws of the top and bottom holes of the air filter cover.
2. Remove the plastic outer casing.
3. Remove the foam element.
4. Wash in liquid detergent and water. Squeeze thoroughly dry in a clean cloth.
5. Saturate in clean engine oil.
6. Squeeze in a clean, absorbent cloth to remove all excess oil.
7. Place the filter in the assembly.
8. Reattach the air filter cover and using your fingers, insert the thumb screws into the top and bottom holes of the air filter cover. Screw until tight. Be sure not to over tighten.

# MAINTENANCE AND STORAGE

## Spark Arrester

1. Allow the engine to cool completely before servicing the spark arrester.
2. Remove the two screws holding the cover plate which retains the end of the spark arrester to the muffler.
3. Remove the spark arrester screen.
4. Carefully remove the carbon deposits from the spark arrester screen with a wire brush.
5. Replace the spark arrester if it is damaged.
6. Position the spark arrester in the muffler and attach with the two screws.



### ! CAUTION

Failure to clean the spark arrester will result in degraded engine performance.

## Cleaning

### ! CAUTION

DO NOT 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 and will void your warranty. CPE recommends that you contact our service line at **1-877-338-0999** for all other service and/or adjustment needs.

## Maintenance Schedule

Follow the service intervals indicated in the following maintenance schedule.

Service your generator more frequently when operating in adverse conditions.

Contact our helpline at **1-877-338-0999** to locate the nearest Champion Power Equipment certified service dealer for your generator or engine maintenance needs.

Every 8 hours or daily	
	Check oil level
	Clean around air intake and muffler
First 5 Hours	
	Change oil
Every 50 hours or every season	
	Clean air filter
	Change oil if operating under heavy load or in hot environments
Every 100 hours or every season	
	Change oil
	Clean/Adjust spark plug
	Check/Adjust valve clearance *
	Clean spark arrester
	Clean fuel tank and filter *
Every 3 years	
	Replace fuel line

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

### CAUTION

DO NOT 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

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.

### Generator Storage

1. Add a properly formulated fuel stabilizer to the tank.
2. Be sure all appliances are disconnected from the generator.
3. Run the generator for a few minutes so the treated fuel cycles through the fuel system and carburetor.
4. Turn the fuel valve to the "Off" position.
5. Let the generator run until fuel starvation has stopped the engine. This usually takes a few minutes.
6. The generator needs to cool completely before cleaning and storage.
7. Clean the generator according to the maintenance section.
8. Change the oil.
9. Remove the spark plug and pour about 1/2 ounce of oil into the cylinder. Crank the engine slowly to distribute the oil and lubricate the cylinder.
10. Reattach the spark plug.
11. Store the unit in a clean, dry place out of direct sunlight.

## Generator Storage Cont'd.

### NOTE

Our engines work well with 10% or less ethanol blend fuels. When using blended fuels 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.
- With gravity-fed fuel supplies, this compromised fuel can be drawn into the carburetor and cause damage to the engine and/or potential hazards.
- There are only a few suppliers of fuel stabilizer that are formulated to work with ethanol blend fuels.
- Any damages or hazards caused by using improper fuel, improperly stored fuel, and/or improperly formulated stabilizers, are not covered by manufacturer's warranty.

It is advisable to always shut off the fuel supply, run the engine to fuel starvation and drain the tank when the equipment is not in use for more than 30 days.

### DANGER

Generator exhaust contains odorless and colorless carbon monoxide gas.

To avoid accidental or unintended ignition of your generator during periods of storage, the following precautions should be followed:

- When **storing the generator for short or extended periods of time** make sure that the Engine Switch and the Fuel Valve are set in the **OFF** position.

# SPECIFICATIONS

## Engine Specifications

– Model . . . . .	62422
– Displacement . . . . .	80cc
– Type . . . . .	4-Stroke OHV
– Start Type . . . . .	Recoil

## Generator Specifications

– Model . . . . .	42436
– Running Wattage . . . . .	1200 Watts
– Starting Wattage . . . . .	1500 Watts
– AC Load . . . . .	120 V
– Phase . . . . .	Single
– Frequency . . . . .	60 Hz
– Fuel Capacity . . . . .	1.45 gal. (5.5 L)
– Gross Weight . . . . .	61.73 lbs (28 kg)
– Net Weight . . . . .	56.22 lbs (25.5 kg)
– Height . . . . .	14.76 inches (37.5 cm)
– Width . . . . .	13.98 inches (35.5 cm)
– Length . . . . .	17.72 inches (45 cm)

## Fuel

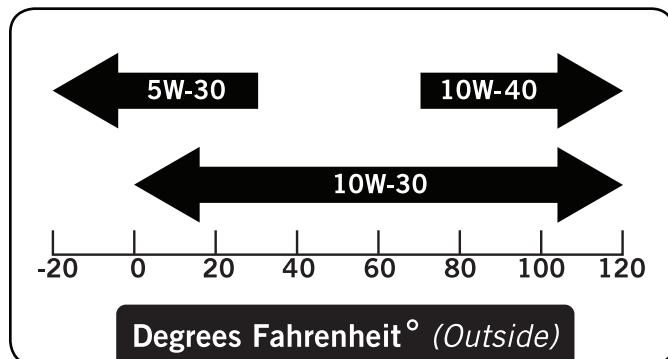
Fuel capacity is 1.45 gal. (5.5 L). Use regular unleaded gasoline with a minimum octane rating of 85 and an ethanol content of less than 10% by volume.

## Oil

Use 10W-30 automotive oil.

Oil capacity is 0.42 qt. (0.4 L).

Please reference the following chart for recommended oil types for use in the generator.



## Spark Plugs

**OEM spark plug:** NHSP E6RTC

**Replacement spark plug:** NGK BPR6HS or equivalent

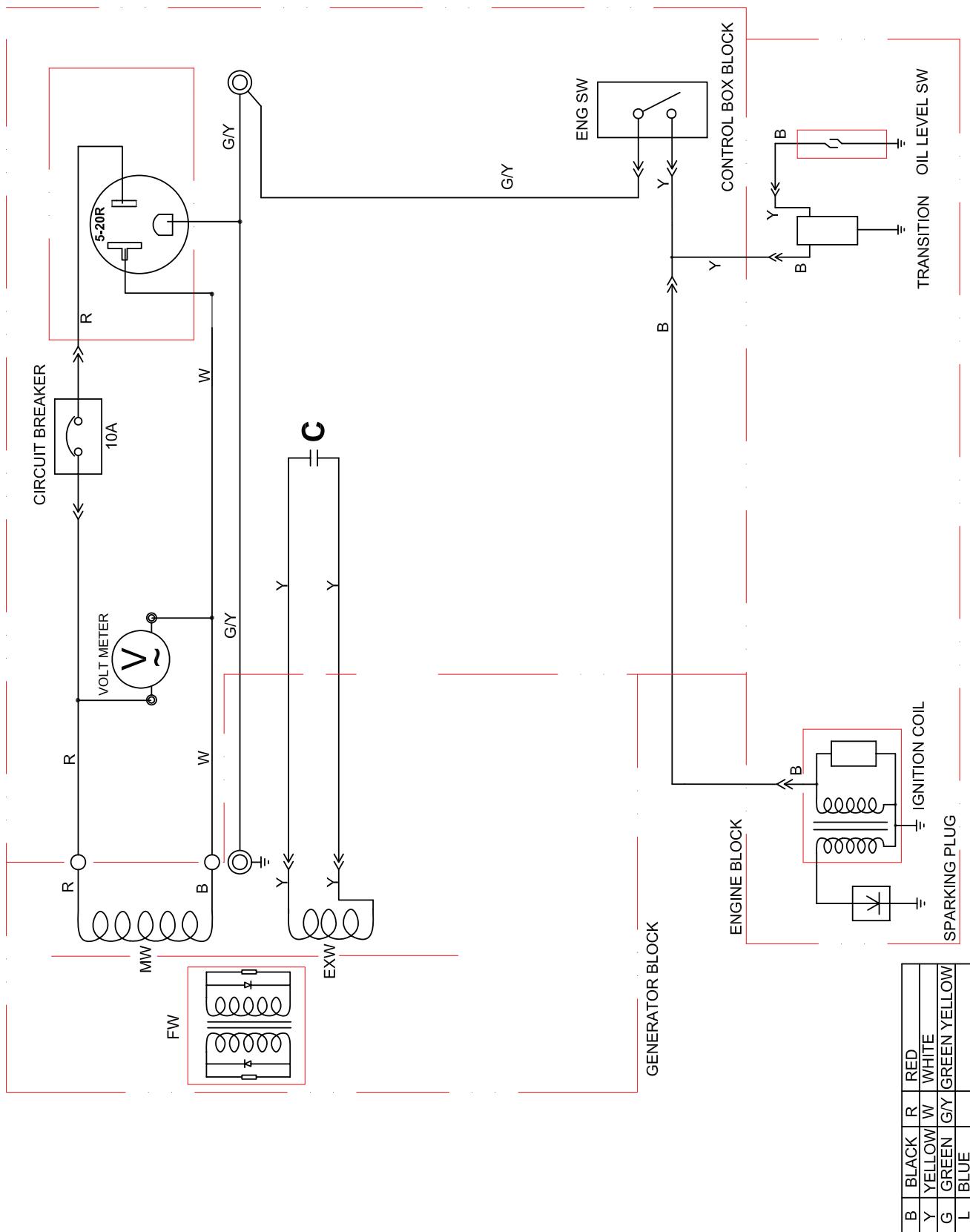
Make certain the spark plug gap is 0.7 - 0.8 mm or (0.028 - 0.031 in.).

## Maintenance Valve Clearance

- Intake: 0.13 – 0.17 mm (0.005 – 0.007 in.)
- Exhaust: 0.18 – 0.22 mm (0.007 – 0.009 in.)

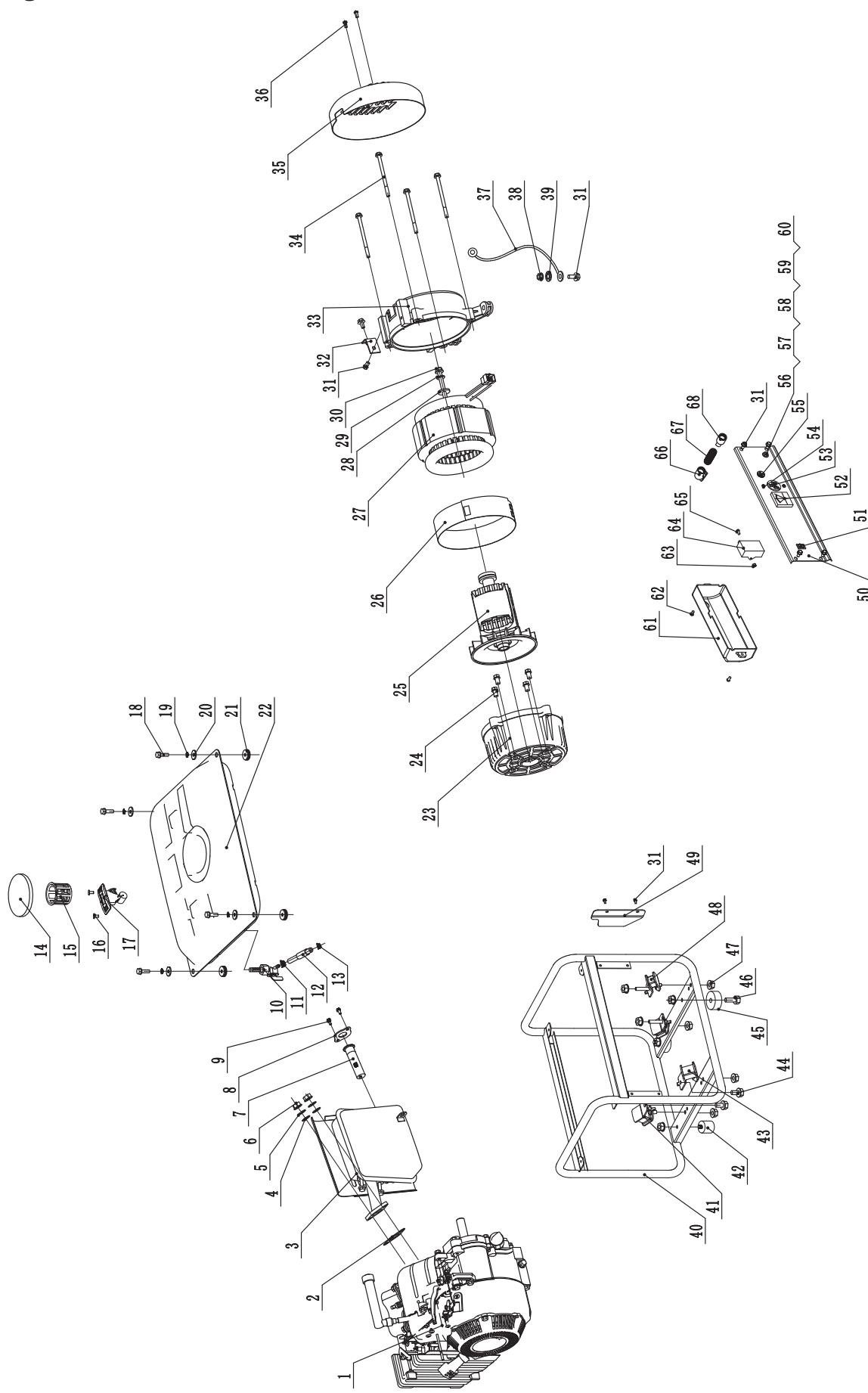
Note: Tech bulletin regarding the valve adjustment procedure is on [www.championpowerequipment.com](http://www.championpowerequipment.com).

## Wiring Diagram



# SPECIFICATIONS

## Parts Diagram

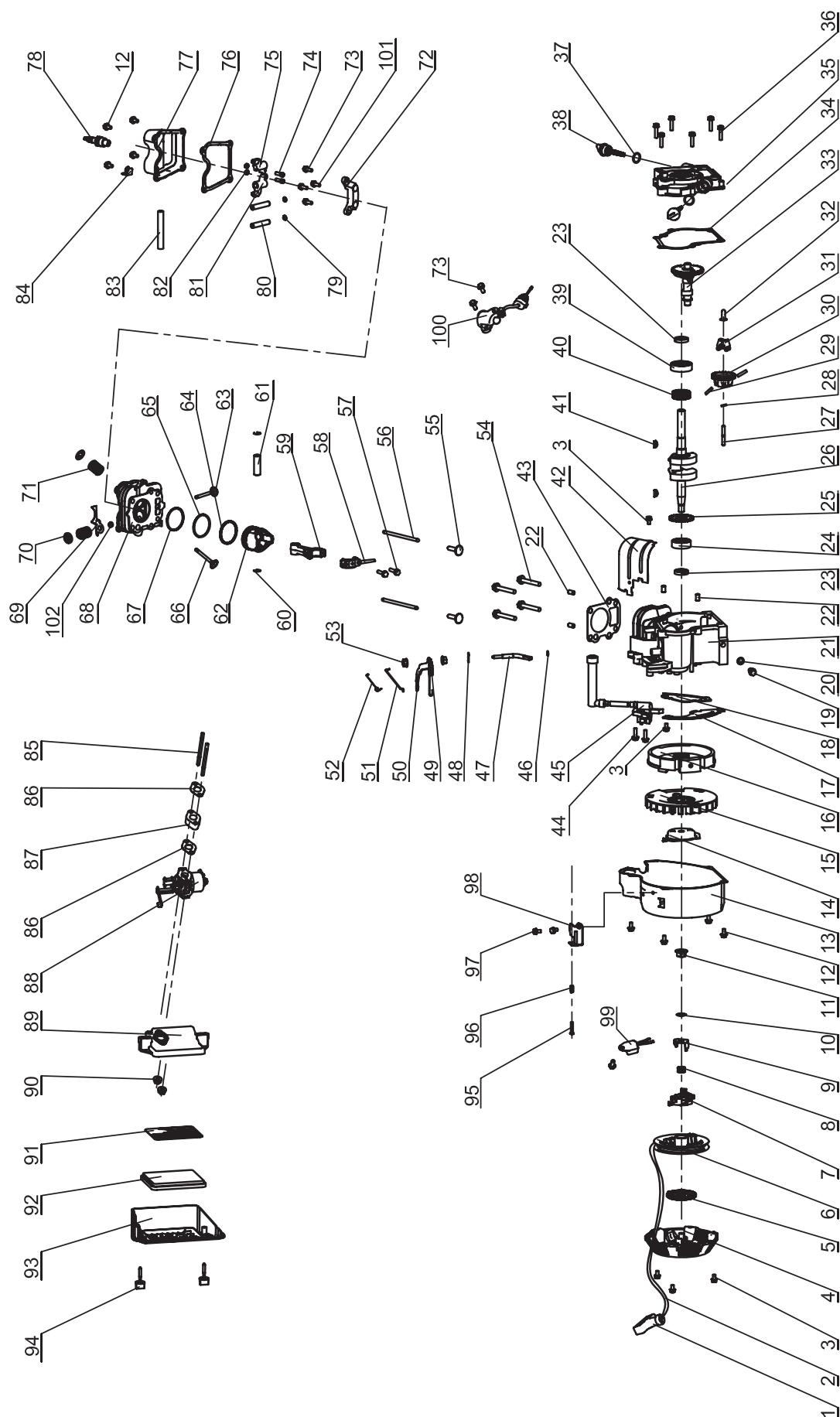


#	Part Number	Description	Qty
1	152FD-2-A1	Engine	1
2	ST154FD-1100100	Muffler Gasket	1
3	ST154FD-1110000	Muffler Assembly	1
4	GB97.1 8	Washer 8	2
5	GB93 8	Lock Washer 8	2
6	GB6175 M8	Nut M8	2
7	ST188FD-1180121	Spark Arrester	1
8	ST188FD-1100010-88	Plate,Spark Arrester	1
9	GB9074.4 M5×14	Screw Combination M5×14	2
10	ST02FD-04160000	Fuel Cock	1
11	ST152FD-1070006	Clip	1
12	ST154FD-1070002-CPE	Pipe,Fuel	1
13	st188F-1070006-A	Clip	1
14	504.070100.02	Fuel Tank Cap	1
15	ST02FD-04130000	Fuel Filter	1
16	GB819 M5×10	Screw M5×10	2
17	ST154FD-1070300	Fuel Meter Assembly	1
18	GB5789 M6×20	Flange Bolt M6×20	4
19	GB93 6	Lock Washer 6	4
20	ST02FD-04100014	Washer 6	4
21	ST02FD-04100010	Mount Vibration, Fuel Tank	4
22	ST154FD-1070100	Fuel Tank	1
23	ST154FD-3000005	Generator Cover	1
24	GB5789 M8×20	Flange Bolt M8×20	4
25	502.091100.00	Rotor Assembly	1
26	ST154FD-3002001	Stator Cover	1
27	502.091200.00	Stator Assembly	1
28	GB96 8	Washer 8	3
29	GB7244 8	Lock Washer 8	3
30	ST154FD-3000007	Flange Bolt M8×175	1
31	GB5789 M6×12	Flange Bolt M6×12	9
32	ST154FD-1100400	Holder Muffler	1
33	ST154FD-3000004	End Housing	1
34	ST154FD-3000008	Flange Bolt M6×90	4

#	Part Number	Description	Qty
35	ST02FD-02100004	Generator End Cover	1
36	GB16674 M5×12	Flange Bolt M5×12	2
37	ST02FD-02100013-14	Grounding Line	1
38	GB6177 M6	Nut M6	1
39	GB862 6	Lock Washer 6	1
40	ST-QT-097	Frame	1
41	ST154FD-2000001	Motor Mount	1
42	ST168FD-1151400	Rubber Pad	2
43	ST154FD-2000002	Motor Mount	1
44	GB5789 M8×12	Flange Bolt M8×12	2
45	WP30-03110001	Rubber Pad	2
46	GB5783 M8×20	Flange Bolt M8×20	2
47	GB6177 M8	Nut M8	14
48	ST154FD-2000003	Motor Mount	2
49	ST01FD-03051002	Defend Board,Control Panel	1
50	117(F)	Control Panel	1
51	ST01FD-05701001	Switch	1
52	ST02FD-05602010-D	Voltage Meter	1
53	ST02FD-05502024	Receptacle 5-20R	1
54	GB9074.8	Screw Combination M4×14	2
55	23.001000.01-10	Breaker	1
56	GB5783 M6×22	Bolt M6×22	1
57	GB6175 M6	Nut M6	2
58	GB93 6	Lock Washer 6	2
59	GB97.1 6	Washer 6	2
60	GB862 6	Lock Washer 6	1
61	ST01FD-05201001	Control Box	1
62	GB823 M5×12	Screw M5×12	2
63	GB6177 M4	NUT M4	1
64	ST01FD-05221001	Capacitance	1
65	GB823 M4×14	Screw M4×14	1
66	ST02FD-05212002	Plug	1
67	ST02FD-05212007	Sheath,wire	1
68	ST02FD-05212001	Plug	1

## SPECIFICATIONS

## Engine Parts Diagram



#	Part Number	Description	Qty
1	ST154F-1061005	Rope Handle	1
2	ST154F-1061007	Rope	1
3	GB5789 M6x12	Screw M6x12	5
4	ST154F-1061100	Starter Case	1
5	ST154F-1061004	Spiral Spring	1
6	ST154F-1061001	Drum Sheave	1
7	ST154F-1061002	Driving Pawl	2
8	ST154F-1061008	Spring	1
9	ST154F-1061006	Driving Pawl	1
10	ST154F-1061003	Lock Washer	1
11	GB6177.2	Flywheel Nut	1
12	GB16674 M6x12	Bolt M6x12	8
13	ST154F-1080002( R)	Fan Case	1
14	ST154F-1060001	Starter Bush	1
15	ST154F-1080001	Fan	1
16	ST154F-1120100	Flywheel	1
17	ST154F-1080004	Air Shroud	1
18	ST154F-1080005	Air Shroud	1
19	ST160F-1030003	Drain Plug	2
20	ST160F-1030004	Drain Plug Seal	2
21	ST152F-II-1030200	Crankcase	1
22	139FMD-1001001	Dowel Pin	4
23	ST152FD-1030011	Oil Seal	1
24	GB276 6203	Ball Bearing 6203	1
25	ST154F-1050008	Governing Driving Gear	1
26	ST152FD-II-1050001	Crankshaft	1
27	ST154F-1110105	Governing Gear Shaft	1
28	ST160F-1110106	Washer	1
29	ST154F-1110104	Flyweight Pin	2
30	ST154F-1110101	Governing Gear	1
31	ST154F-1110103	Flyweight	2
32	ST154F-1110102	Collar	1
33	ST154F-1040100	Camshaft Assembly	1
34	ST154F-1030008-M	Crankcase Gasket	1
35	ST154F-1030007	Crankcase Cover	1
36	GB5789 M6x25	Screw M6x25	6
37	ST154F-1030002	Oil Gauge Seal	2
38	ST154F-1030001	Oil Gauge	2
39	GB276 6303	Ball Bearing 6303	1
40	ST154F-1050002	Timing Gear	1
41	GB1099 5x16	Key 5x16	2
42	ST154F-1080003	Air Shroud	1
43	ST152F-II-1030009	Cylinder Gasket	1
44	GB16674 M6x20	Bolt M6x20	2
45	ST154F-1121000	T.C.I	1
46	GB896-86	Circlip	1
47	ST154F-1110001	Governing Shaft	1
48	ST154F-1110006	Clip	1
49	ST154F-1110005	Governing Spring	1
50	ST154F-1110004	Governing Lever	1
51	ST154F-1110002	Carburetor Connecting Rod	1

#	Part Number	Description	Qty
52	ST154F-1110003	Carburetor Spring	1
53	GB6177-86	Nut M6	2
54	GB5789 M8x55	Screw M8x55	4
55	ST154F-1040007	Valve Lifter	2
56	ST154F-1040005	Push Rod	2
57	GB5787-86	Connecting Rod Screw M6x28	2
58	ST154F-1050101	Connecting Rod Cap	1
59	ST154F-1050102	Connecting Rod Body	1
60	ST154F-1050004	Piston Pin Circlip	2
61	ST152F-II-1050003	Piston Pin	1
62	ST152F-II-1050005	Poston	1
63	ST154F-1040006	Exhaust Valve	1
64	ST152F-II-1050200	Third Piston Ring	1
65	ST152F-II-1050006	Second Piston Ring	1
66	ST154F-1040002	Intake Valve	1
67	ST152F-II-1050007	First Piston Ring	1
68	ST152F-II-1020100	Cylinder Head Assembly	1
69	ST154F-1040004	Guide Plate	1
70	ST154F-1040001	Valve Retainer	2
71	ST154F-1040003	Valve Spring	2
72	ST154F-1041001	Rocker Arm Seat	1
73	GB16674 M6x16	Bolt M6x16	5
74	ST154F-1041004	Valve Clearance Adjusting screw	2
75	ST154F-1041100	Rocker Arm (B)	1
76	ST154F-1010001-A	Head Cover Gasket	1
77	ST154F-1010100-A	Cylinder Head Cover Assembly	1
78	E6RTC	Spark Plug	1
79	ST154F-1041003	Circlip	2
80	ST154F-1041002	Rocker Arm Shaft	2
81	ST154F-1041200	Rocker Arm(A)	1
82	ST154F-1041005	Valve Clearance Adjusting Nut	2
83	ST160F-1020001	Tube	1
84	ST154F-1010002	Baffle	1
85	ST154F-1020001	Intake Bolt	2
86	ST154F-1130001	Carburetor Gasket	2
87	ST154F-1130002	Carburetor Connector	1
88	ST152FD-2-1131000	Carburetor	1
89	ST154F-1090100	Air Cleaner Base	1
90	GB6177 M6	Nut M6	2
91	ST154F-1090003	Element Seat	1
92	ST154F-1090004	Air Cleaner Element	1
93	ST154F-1090002	Air Leaner Cover	1
94	ST154F-1090001	Cover Screw	2
95	GB822 M5x35	Screw M5x35	1
96	ST160F-1111006	Spring	1
97	GB5789 M6x8	Bolt M6x8	3
98	ST154FD-1111000	Governing Rack	1
99	ST160F-1126000	Diode Comp	1
100	ST154F-1030300-A	Oil Level Sensor	1
101	GB16674 M6x18	Bolt M6x18	1
102	ST154F-1040008	Oil Seal	1

# 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 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
	Loose wiring	Inspect and tighten wiring connections
	Other	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

## For further technical support:

### Technical Service

Mon – Fri 8:30 AM – 5:00 PM (PST/PDT)

Toll Free: 1-877-338-0999

[tech@championpowerequipment.com](mailto:tech@championpowerequipment.com)

## **WARRANTY**

CHAMPION POWER EQUIPMENT  
2 YEAR LIMITED WARRANTY

### **Warranty Qualifications**

Champion Power Equipment (CPE) will register this warranty upon receipt of your Warranty Registration Card and a copy of your sales receipt from one of CPE's retail locations as proof of purchase.

Please submit your warranty registration and your proof of purchase within ten (10) days of the date of purchase.

### **Repair/Replacement Warranty**

CPE warrants to the original purchaser that the mechanical and electrical components will be free of defects in material and workmanship for a period of one year (parts and labor) and two years (parts) from the original date of purchase (90 days (parts and labor) and 180 days (parts) for commercial & industrial use). Transportation charges on product submitted for repair or replacement under this warranty are the sole responsibility of the purchaser. This warranty only applies to the original purchaser and is not transferable.

### **Do Not Return The Unit To The Place Of Purchase**

Contact CPE's Technical Service and CPE will troubleshoot any issue via phone or e-mail. If the problem is not corrected by this method, CPE will, at its option, authorize evaluation, repair or replacement of the defective part or component at a CPE Service Center. CPE will provide you with a case number for warranty service. Please keep it for future reference. Repairs or replacements without prior authorization, or at an unauthorized repair facility, will not be covered by this warranty.

### **Warranty Exclusions**

This warranty does not cover the following repairs and equipment:

#### **Normal Wear**

Generators need periodic parts and service to perform well. This warranty does not cover repair when normal use has exhausted the life of a part or the equipment as a whole.

#### **Installation, Use and Maintenance**

This warranty will not apply to parts and/or labor if this generator is deemed to have been misused, neglected, involved in an accident, abused, loaded beyond the generator's limits, modified, installed improperly or connected incorrectly to any electrical component.

#### **Installation, Use and Maintenance Cont'd.**

Normal maintenance such as spark plugs, air filters, adjustments, fuel system cleaning and obstruction due to buildup is not covered by this warranty.

#### **Other Exclusions**

This warranty excludes:

- Cosmetic defects such as paint, decals, etc.
- Wear items such as filter elements, o-rings, etc.
- Accessory parts such as starting batteries, and storage covers.
- Failures due to acts of God and other force majeure events beyond the manufacturer's control.
- Problems caused by parts that are not original Champion Power Equipment parts.

This warranty does not apply to generators used for prime power in place of a utility.

#### **Limits of Implied Warranty and Consequential Damage**

Champion Power Equipment disclaims any obligation to cover any loss of time, use of this product, freight, or any incidental or consequential claim by anyone from using this generator. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

A unit provided as an exchange will be subject to the warranty of the original unit. The length of the warranty governing the exchanged unit will remain calculated by reference to the purchase date of the original unit.

This warranty gives you certain legal rights which may change from state to state. Your state may also have other rights you may be entitled to that are not listed within this warranty.

### **Contact Information**

#### **Address**

Champion Power Equipment, Inc.  
Customer Service  
10006 Santa Fe Springs Rd.  
Santa Fe Springs, CA 90670  
[www.championpowerequipment.com](http://www.championpowerequipment.com)

#### **Customer Service**

Mon – Fri 8:30 AM – 5:00 PM (PST/PDT)  
Toll Free: 1-877-338-0999  
[info@championpowerequipment.com](mailto:info@championpowerequipment.com)  
Fax no.: 1 (562) 236-9429

#### **Technical Service**

Mon – Fri 8:30 AM – 5:00 PM (PST/PDT)  
Toll Free: 1-877-338-0999  
[tech@championpowerequipment.com](mailto:tech@championpowerequipment.com)  
24/7 Tech Support: (562) 204-1188