

# **OPERATOR'S MANUAL**

# MODEL #100423 WIRELESS REMOTE START GENERATOR











or visit championpowerequipment.com

**READ AND SAVE THIS MANUAL.** This manual contains important safety precautions which should be read and understood before operating the product. Failure to do so could result in serious injury. This manual should remain with the product.

Specifications, descriptions and illustrations in this manual are as accurate as known at the time of publication, but are subject to change without notice. This product is rated in accordance with PGMA (Portable Generator Manufacturers' Association) standard PGMA G300 (Standard for Testing and Validating Performance of Portable Generators).

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### INTRODUCTION

Congratulations on your purchase of a Champion Power Equipment (CPE) product. CPE designs, builds, and supports all of our products to strict specifications and guidelines. With proper product knowledge, safe use, and regular maintenance, this product should bring years of satisfying service.

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

Since CPE highly values how our products are designed, manufactured, operated and are serviced, and also highly value your safety and the safety of others, we would like you to take the time to review this product manual and other product materials thoroughly and be fully aware and knowledgeable of the assembly, operation, dangers and maintenance of the product before use. Fully familiarize yourself, and make sure others who plan on operating the product fully familiarize themselves too, with the proper safety and operation procedures before each use. Please always exercise common sense and always err on the side of caution when operating the product to ensure no accident, property damage, or injury occurs. We want you to continue to use and be satisfied with your CPE product for years to come.

When contacting CPE about parts and/or service, you will need to supply the complete model and serial numbers of your product. Transcribe the information found on your product's nameplate label to the table below

# CHAMPION POWER EQUIPMENT SUPPORT 1-877-338-0999 MODEL NUMBER 100423 SERIAL NUMBER DATE OF PURCHASE PURCHASE LOCATION

### **SAFETY DEFINITIONS**

The purpose of safety symbols is to attract your attention to possible dangers. The safety symbols, and their explanations, deserve your careful attention and understanding. The safety warnings do not by themselves eliminate any danger. The instructions or warnings they give are not substitutes for proper accident prevention measures.

### **A** DANGER

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

### **A** CAUTION

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

### **A WARNING**

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

### NOTICE

NOTICE is used to address practices not related to physical injury.

# **IMPORTANT SAFETY INSTRUCTIONS**

### **A WARNING**

**California Proposition 65:** This product contains chemicals and produces exhaust known to the State of California to cause cancer, birth defects and other reproductive harm.

### **A** 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.** 

### **A** DANGER

Rotating parts can entangle hands, feet, hair, clothing and/

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.

### **A 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.

### **A** 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.

### **A 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.

### **A 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 3 ft. (91.4 cm) of clearance on all sides to ensure adequate cooling.

Maintain at least 5 ft. (1.5 m) of clearance from combustible materials.

### **A** 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.

### **A** 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.

### **A** 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

### **A 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.

### **A WARNING**

This product contains a button battery. If swallowed, it could cause severe injury or death in just 2 hours. Seek medical attention immediately.

# **Fuel Safety**

### **A** DANGER

GASOLINE, GASOLINE VAPORS AND PROPANE (LPG) ARE HIGHLY FLAMMABLE AND EXPLOSIVE.

Fire or explosion can cause severe burns or death.
Unintentional startup can result in entanglement, traumatic amputation or laceration.

### Gasoline and gasoline vapors:

- Gasoline is highly flammable and explosive.
- Gasoline can cause a fire or explosion if ignited.
- Gasoline is a liquid fuel but it's vapors can ignite.
- Gasoline is a skin irritant and needs to be cleaned up immediately if spilled on skin or clothes.
- Gasoline has a distinctive odor, this will help detect potential leaks quickly.
- In any gas fire, flames should not be extinguished unless by doing so the fuel supply valve can be turned OFF. This is because if a fire is extinguished and a supply of fuel is not turned OFF, then an explosion hazard could be created.
- Gasoline expands or contracts with ambient temperatures.
   Never fill the gasoline tank to full capacity, as gasoline needs room to expand if temperatures rise.

### LPG:

LPG is highly flammable and explosive.

- Flammable gas under pressure can cause a fire or explosion if ignited.
- LPG is heavier than air and can settle in low places while dissipating.
- LPG ane has a distinctive odor added to help detect potential leaks quickly.
- In any petroleum gas fire, flames should not be extinguished unless the fuel supply valve is turned OFF. This is because if a fire is extinguished and a supply of fuel is not turned OFF, then an explosion hazard could be created.
- When exchanging LPG cylinders, be sure the cylinder valve is of the same type.
- Always keep the LPG cylinder in an upright position.
- LPG will burn skin if it comes in contact with it. Keep any and all LPG away from skin at all times.

### When adding or removing gasoline:

Turn the generator off and let it cool for at least two minutes before removing the gasoline cap. Loosen the cap slowly to relieve pressure in the tank.

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

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

DO NOT overfill the gasoline tank.

Always keep gasoline 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 gasoline cap, air filter, spark plug, fuel lines and exhaust system are properly in place.

Allow spilled gasoline 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 valve is in the OFF position, the gasoline tank is empty.

For LPG compatible models, be sure that the LPG cylinder is disconnected and stored securely away from the generator.

Disconnect the spark plug wire.

### When storing the generator:

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

Do not store generator, gasoline or LPG cylinders near furnances, water heaters, or any other appliances that produce heat or have automatic ignitions.

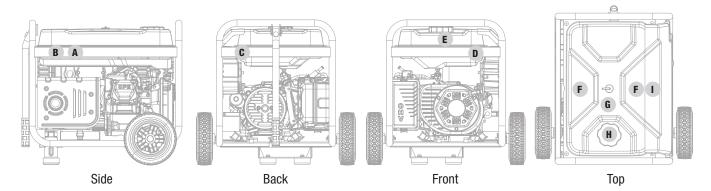
### **A WARNING**

Never use a gasoline container, gasoline tank, LPG connector hose, LPG cylinder or any other fuel item that is damaged or appears damaged.

# **Safety Labels**

These labels warn you of potential hazards that can cause serious injury. Read them carefully.

If a label comes off or becomes hard to read, contact Champion Power Equipment's customer service department for possible replacement.

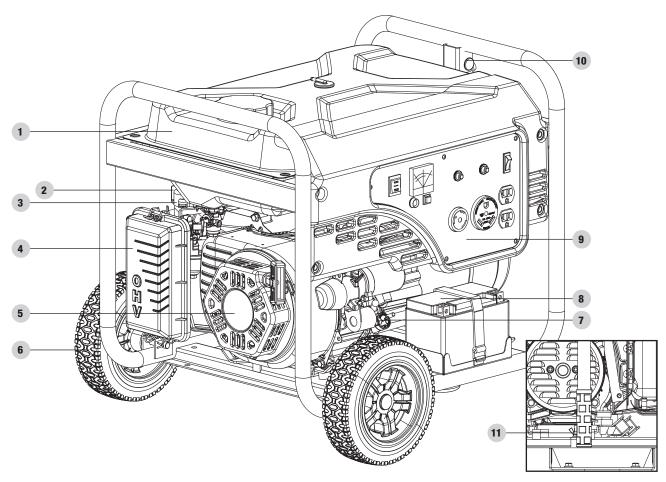


Location	Label	Description
A	MARNING  D NOT TOUCHE E-maist, gases, muffler and engine components are extremely HOT and cause burns.  M D Touch II Loc gases de escape, gases, muffler and engine components are extremely HOT and cause burns.  M D Touch III Loc gases de escape, gases, muffler and engine components are extremely end enforce state extremadament of enforce state extremadament of CALIENTES y causan guernaduras.  CHALIENTES y causan guernaduras.  CHALIENTES y causan guernaduras.	Hot surface
В	To prevent engine damage, the spark arrester should be cleaned EVERY 100 MOURS. For mainteance schedule see owner's manual.  Para evitar daños al motor, el para-chicnelles devrait être parachispas debe de limpiares CADA 100 HORAS. Para un plan de mantenientento, evea el manual del propietario.  Para un plan de mantenientento, evea el manual del propietario.	Spark arrestor
С	A transfer switch MMST be used when connecting generator to a building's electrical system. See Owner's Manual.  See Owner's Manual.	Transfer switch
D	The segies what then they prefet cottains chemical somes to the State of California to cause caused with the State of california to cause and their deleted and earlier reproduction than the caused with the State of a california to cause and their deleted and earlier reproduction than the caused and their caused caused and earlier production cannot cause and caused and cau	California Prop 65: Engine Exhaust
E	FOR RESIDENTS OF CALIFORNIA: PARA LOS RESIDENTES DE CALIFORNIA: POUR LES RÉSIDENTS DE LA CALIFORNIE: WARNIG This product contains chemicals innove to the State of California to cause cancer and birth defects and other reproductive harm.  ADVERTIGNAL Este production contains exchances qualmacs accordains par et l'action de California como causette de câncer y defects de nacioniente y datos datos reproductives.  AURITISSIANTE () product contain de pout chiencier estemante par Est de California como causette donc et de california destinations completable et d'autres annountes en maitine de reproduction.	California Prop 65
F	A DANGER  FOR URL 3 LIANUE - PROTECTIO AREA DULY.  BO NOT IESPECE IN LIANUE - PROTECTIO AREA DULY.  WINES STORME CASCULIF, PROPAGE (LPG) on COMMAND ALLANCERE CASCULIF, COMMAND ALLANCERE CASCULIFICATION, COMMAND ALLANCERE CASCU	Generator safety
G		Minimum space
н	UNLARCE PICT, ONLY, Numer scatter critical of the CASTAIN REGULAR SOLARITY. SO SCHOOL ROOM, BALLING SOLARITY COMPANY SOLARITY	Fuel
I	A DANGER  A PELIGIO  A DANGER  A PELIGIO  A DANGER  A PELIGIO  A DANGER  A D	Carbon monoxide

# **CONTROLS AND FEATURES**

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

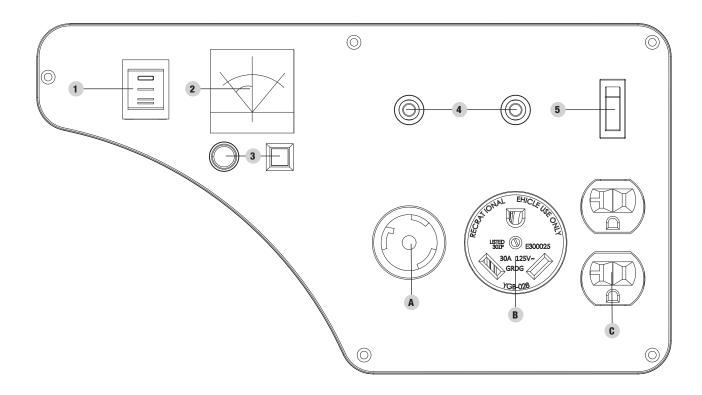
### **Generator**



- 1. **Gasoline Tank** 4 gal. (15.1 L)
- 2. **Choke Lever** Used to start the engine.
- 3. **Auto-Choke** Used to start the engine (for wireless start and electric start).
- 4. **Air Filter** Protects the engine by filtering dust and debris from the intake air
- 5. **Recoil Starter** Used to manually start the engine
- 6. Never Flat Wheels -8 in. (20.3 cm)

- 7. **Oil Dipstick** Used to check and fill oil level.
- 8. **Battery** Used to start the engine. Provides 12V DC to the electric starter and receiver control module.
- 9. **Generator Panel** See "Generator Panel" section
- 10. **Handle** Do not use to lift or carry the unit.
- 11. **Ground Terminal** Consult an electrician for local grounding regulations

# **Generator Panel**



- 1. **Ignition Switch** Used to START or STOP the generator.
- 2. Voltmeter Used to display voltage output.
- 3. Wireless Reset
- 4. **Circuit Breakers (Push Reset)** Protects the generator against electrical overloads.
- 5. **Battery Switch** Enables/disables starting electrically.

Receptacles		
A		120V AC, 30A Locking (NEMA L5-30R) May be used to supply electrical power for operation of 120 Volt AC, 30 Amp, single phase, 60 Hz electrical loads.
В	•	120V AC, 30A RV (NEMA TT-30R) May be used to supply electrical power for operation of 120 Volt AC, 30 Amp, single phase, 60 Hz electrical loads.
С	•	120V AC, 20A (NEMA 5-20R) May be used to supply electrical power for operation of 120 Volt AC, 20 Amp, single phase, 60 Hz electrical loads.

# **Generator Panel Symbols**

The below symbols are located on the generator power panel. Familiarize yourself with these symbols for quick reference of the components and their function.

Symbol	Meaning
<b>②</b>	ON
<b>②</b>	START
	STOP or OFF
×	OFF
	Battery Switch
4	Ingition Switch
40	Voltmeter
3	Circuit Breaker Reset: Push
	RV Ready Receptacle
<b>(P</b> )	Locking Receptacle
<b>(3)</b>	Wirless Reset

### **Wireless Remote Control**

This generator is equipped with a wireless remote control system for starting and stopping. The system consists of (4) main components:

- 1. Receiver Control Module (RCM)
- 2. Wireless Remote
- 3. Battery Switch
- 4. Ignition Switch

The Remote Control functions are enabled when:

1. The Ignition Switch is in the "ON" position, AND

2. The Battery Switch is in the "ON" position.

The Remote Control functions are disabled if either of the above conditions is not met.

To start the generator by Remote Control, press the "START" button on the Remote one time. The engine will attempt to start (6) times. The RCM controls the Auto Choke during each attempt to start. If the generator does not start, call Champion Customer Care team for assistance at 1-877-338-0999.

To stop the generator by Remote Control, press the "STOP" button on the Remote one time.

### **Remote Control Power Consumption**

While the Ignition Switch is in the "ON: position, the RCM is active and waiting for a remote signal. This function requires electrical current from the battery. If the Ignition Switch is left in the "ON" position for extended periods (several weeks), the battery can be completely drained.

Moving the Ignition Switch to the "OFF" position disables the Remote functions, but the RCM still consumes approximately 2 mA from the battery.

To prevent battery drain, press the Battery Switch to the "OFF" position. This disconnects power to the RCM so there is no current draw on the battery.

### **Generator Panel Load Management**

When the generator initially starts by the Remote, no voltage is supplied to the Generator Panel for approximately 15 seconds. This allows the engine to reach full speed before electrical loads are applied to the generator.

When the generator is stopped by the Remote, the voltage to the Generator Panel is immediately turned off. Then the engine stops approximately 5 seconds after the "STOP" button on the Remote is pressed. Turning the Generator Panel voltage off before the engine shutdown protects connected appliances from being damaged by non-60 Hz voltage while the generator coasts to a stop.

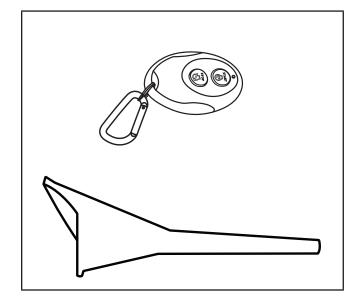
The on/off voltage delay at startup and shut down only happen when the Remote Control is used. There is no voltage delay when the pushbutton electric start or recoil start method is used.

When the pushbutton electric start or recoil start method is used, the operator must be sure all electrical loads (appliances) are turned OFF during startup and shutdown. Damage to the generator or the attached appliances can be caused by starting or stopping the generator while appliances are plugged in and turned ON.

### **Parts Included**

### **Accessories**

Remote Key Fob	1
Oil Funnel	1



### **Loose Parts**

8 in. (20.3 cm) Never Flat Wheel (A)	2
Roll Pin (B)	2
R-clip (Ø2 x 33) (C)	2
Support Leg with Vibration Mounts (D)	1
Flange Bolt (M8x16) (E)	2
Flange Lock Nut (M8) (F)	2
Handle (G)	1
R-clip (H)	1
Short Pin (I)	1

### **FCC Statement for Remote Control Device**

- 1. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference.(2) This device must accept any interference received, including interference that may cause undesired operation.
- 2. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

# **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 help line at 1-877-338-0999. Please have your serial number and model number available.

### **Unpacking**

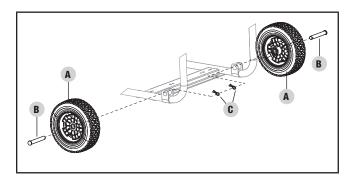
- 1. Set the shipping carton on a solid, flat surface.
- 2. Remove everything from the carton except the generator.
- Carefully cut each corner of the box from top to bottom.Fold each side flat on the ground to provide a surface area to install the wheel kit and support leg.

### **Install the Wheel Kit**

### **A** CAUTION

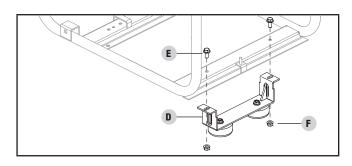
The wheel kit is not intended for over-the-road use.

- 1. Before adding fuel and oil, tip the generator on it's side.
- 2. Slide the Roll Pin (B) through the Wheel (A) from the outside.
- 3. Slide the Roll Pin through the mount point on the frame.
- 4. Secure with the R-clip (C).
- 5. Repeat to attach the second Wheel.



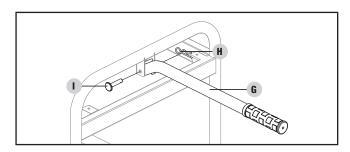
### **Install the Support Leg**

- 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.



### **Install the Handle**

- 1. Place the Handle (G) inside the mounting channel on the frame.
- 2. Secure the Handle to the frame using an Short Pin (I).
- 3. Place an R-clip (H) on the end of the Short Pin and fasten securely.



# **Connect the Battery**

- 1. Remove the protective cover from the red (+) lead on the battery.
- 2. Attach the red (+) lead to the red (+) terminal on the battery with the Flange Bolt and secure with the Flange Lock Nut.
- 3. Repeat the black (-) battery lead.

# **Add Engine Oil**

### **A** CAUTION

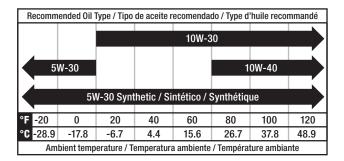
DO NOT attempt to crank or start the engine before it has been properly filled with the recommended type and amount of oil. Damage to the generator as a result of failure to follow these instructions will void your warranty.

### NOTICE

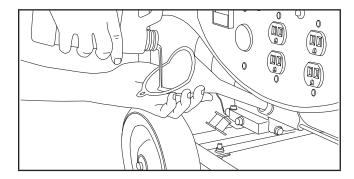
The generator rotor has a sealed, pre-lubricated ball bearing that requires no additional lubrication for the life of the bearing.

### NOTICE

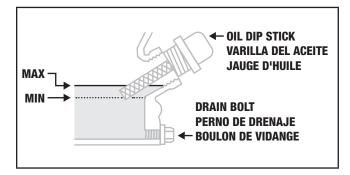
The recommended oil type is 10W-30 automotive oil.



- Place the generator on a flat, level surface.
- 2. Remove oil fill cap/dipstick to add oil.
- 3. Using a funnel, add up to 0.6 qt. (0.6 L) of oil (not included) and replace oil fill cap/dipstick. DO NOT OVERFILL.



4. Check engine oil level daily 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.

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

### NOTICE

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

### **A** CAUTION

The 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 and help seat piston rings. After the 5 hour break-in period, change the oil.

### NOTICE

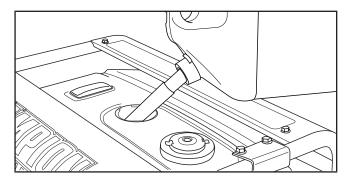
Weather will affect engine oil and engine performance. Change the type of engine oil used based on weather conditions to suit the engine needs.

### NOTICE

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

# Add Fuel: Gasoline 💷 🕬 🕬

- Use clean, fresh, regular unleaded gasoline with a minimum octane rating of 85 and an ethanol content of less than 10% by volume.
- 2. DO NOT mix oil with gasoline.
- 3. Remove the gasoline cap.
- 4. Slowly add gasoline to the tank. 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.



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

### **A** CAUTION

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

Do not mix oil and gasoline.

Fill tank to approximately ¼ 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.

DO NOT overfill the tank.

DO NOT light cigarettes or smoke when filling the tank.

### **A WARNING**

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

### NOTICE

Our engines work 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.
- With gravity-fed supplies, the compromised gasoline 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-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, run the engine to starvation and drain the tank when the equipment is not in use for more than 30 days.

### 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 has been provided on the lower frame crossmember below the alternator. 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.

### **OPERATION**

### **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 5 ft. (1.5 m) of clearance from all combustible material. In addition to clearance from all combustible material, generators must also have at least 3 ft. (91.4 cm) 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.

### **A 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.

### **A 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: Neutral Floating\***

The generator system ground is located on the lower frame crossmember below the alternator.

- 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.
- \*See your model's generator panel for specified type of grounding.

# **Grounding: Neutral Bonded to Frame\***

The generator system ground connects lower frame crossmember below the alternator. The system ground is connected to the AC neutral wire.

\*See your model's generator panel for specified type of grounding.

# **Surge Protection**

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.

 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 shortduration voltage fluctuations.

# **Starting the Engine**

- 1. Make certain the generator is on a flat, level surface.
- Disconnect all electrical loads from the generator. Never start or stop the generator with electrical devices plugged in or turned on.
- 3. Turn the gasoline fuel valve to the "ON" position.
- 4. Move the choke lever to the "100% CHOKE" detent position (NO manual choke needed for Wireless Start and Electric Start).
- 5. For restarting a warm engine, move the choke lever to the "75% CHOKE" detent position (NO manual choke needed for Wireless Start and Electric Start).

### **Wireless Remote Start:**

Wireless remote starting is only possible within 80 feet of the generator.

Do not attempt to adjust the carburetor choke. The remote system will automatically close and open the choke.

- 1. Push the battery switch to the "ON" position.
- 2. Push the ignition switch to the "ON" position.
- Press and release the "START" button on the handheld Remote Control device. DO NOT hold the button down, only press the button once. The engine will attempt to start six times.

A safety feature is provided which delays the electrical power availability during starting mode. The delay lasts for approximately 15 seconds. The delay is provided to prevent damage to the generator if electrical loads are inadvertently turned on during engine startup.

### **Electric Start:**

- 1. Push the battery switch to the "ON" position.
- 2. Push the ignition switch to the "ON" position.
- Press and hold the ignition switch to the "START" position.
  Release as the engine begins to start. If the engine fails
  to start within five seconds, release the switch and wait
  at least ten seconds before attempting to start the engine
  again.

### **Manual Start:**

- 1. Flip the ignition switch to the "ON" position.
- 2. Pull the starter cord slowly until resistance is felt and then pull rapidly.
- Do not over-choke. As soon as engine starts, move the choke lever to the "RUN" position over a 2-5 second duration.

### NOTICE

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 spark plug fouling/engine flooding due to the lack of incoming air. This will cause the engine not to start.

### NOTICE

For gasoline restarts with hot engine in hot ambient  $> 30^{\circ}\text{C}$  (86°F) Keep choke lever in "75% CHOKE" detent 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 spark plug fouling/engine flooding due to the lack of incoming air. This will cause the engine not to start.

### NOTICE

For gas starting in in cold ambient  $<15^{\circ}\text{C}$  (59°F) the choke must be in the "100% CHOKE" detent position for recoil start procedures. Do not over-choke. As soon as engine starts, gradually move the choke lever to the "RUN" position over a 2-5 second duration.

### NOTICE

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.

### **A** CAUTION

If the ignition switch is held down in the "Start" position longer than 5 seconds it could damage the starter.

### **Battery**

### NOTICE

When the battery switch is in the "ON" position, the switch will light up if the battery is sending out a charge. If the switch does not light up while in the "ON" position, check that the battery connection is still good.

### NOTICE

The supplied 12V 9AH battery does re-charge while the engine is running, but it is also recommended that the battery be fully charged at least once per month.

### **Connecting Electrical Loads**

Let the engine stabilize and warm up for a few minutes after starting.

Plug in and turn on the desired 120 Volt AC single phase, 60 Hz electrical loads.

- D0 N0T connect 3-phase loads to the generator.
- D0 N0T connect 50 Hz loads to the generator.
- DO NOT overload the generator.

### **A WARNING**

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.

### **Do Not Overload Generator**

### Capacity

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

- 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.
- 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:

### **Volts x Amps = 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.
- 6. Allow the engine to stabilize.
- 7. Repeat steps 5-6 for each additional item.

### NOTICE

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

### **Stopping the Engine**

- Turn off and unplug all electrical loads. Never start or stop the generator with electrical devices plugged in or turned on.
- Let the generator run at no-load for several minutes to stabilize internal temperatures of the engine and generator.
- Turn the fuel valve to the "OFF" position if operating by gasoline.
- 4. Let the engine run until fuel starvation has stopped the engine. This usually takes a few minutes.
- 5. Press the engine/ignition switch to the "OFF" position.

**Important:** Always ensure that the fuel valve and the ignition switch are in the "OFF" position when the engine is not in use.

### NOTICE

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.

# **Operation at High Altitude**

The density of air at high altitude is lower than at sea level. Engine power is reduced as the air mass and air-fuel ratio decrease. Engine power and generator output will be reduced approximately 3½% for every 1000 ft. of elevation above sea level. This is a natural trend and cannot be changed by adjusting the engine. At high altitudes increased exhaust emissions can also result due to the increased enrichment of the air fuel ratio. Other high altitude issues can include hard starting, increased fuel consumption and spark plug fouling.

To alleviate high altitude issues other than the natural power loss, Champion Power Equipment can provide a high altitude carburetor main jet. The alternative main jet and installation instructions can be obtained by contacting Customer Support. Installation instructions are also available in the Technical Bulletin area of the Champion Power Equipment internet site.

The part number and recommended minimum altitude for the application of the high altitude carburetor main jet is listed in the table below.

In order to select the correct high altitude main jet it is necessary to identify the carburetor model. For this purpose, a code is stamped on the side of the carburetor. Select the correct main jet part number corresponding to the carburetor code found on your particular carburetor.

Carburetor Code	Main Jet	Part Number	Altitude
P22-3-H P22-3-Z	Standard	27.131017.01.H	
	Altitude	27.131017.01.01.H	
	Standard	27.131017.01.Z	3,500 ft.
	Altitude	27.131017.01.01.Z	(1,067 m)
P22-3-Y	Standard	27.131017.01.Y	
	Altitude	27.131017.01.01.Y	

### **A** WARNING

Operation using the alternative main jet at elevations lower than the recommended minimum altitude can damage the engine. For operation at lower elevations, the standard main jet must be used. Operating the engine with the wrong engine configuration at a given altitude may increase its emissions and decrease fuel efficiency and performance.

### **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.

### **▲** WARNING

Never operate a damaged or defective generator.

### **A WARNING**

Improper maintenance will void your warranty.

### NOTICE

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

The owner/operator is responsible for all periodic maintenance.

Complete all scheduled maintenance in a timely manner.

Correct any issue before operating the generator.

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

### **Cleaning the Generator**

### **A** CAUTION

DO NOT spray engine with water.

Water can enter the generator through the cooling slots and damage the generator windings. It can also contaminate the fuel system.

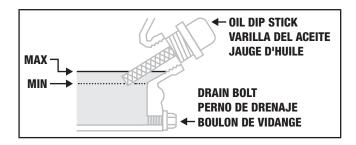
- Use a damp cloth to clean exterior surfaces of the generator.
- 2. Use a soft bristle brush to remove dirt and oil.
- 3. Use an air compressor (25 PSI) to clear dirt and debris from the generator.
- 4. Inspect all air vents and cooling slots to ensure that they are clean and unobstructed.

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

# **Changing the Engine Oil**

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

- 1. Remove the oil drain plug with a 12 mm socket and extension (not included).
- Allow the oil to drain completely into an appropriate container.
- 3. Replace the oil drain plug.
- 4. Remove the oil fill cap/dipstick to add oil.



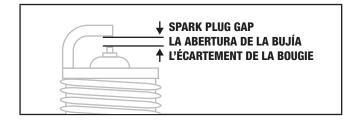
- 5. Using a funnel, add up to 0.6 qt. (0.6 L) of oil (not included) and replace oil fill cap/dipstick. DO NOT OVERFILL.
- 6. Dispose of used oil at an approved waste management facility.

### NOTICE

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.

# Cleaning and Adjusting the Spark Plug(s)

- 1. Remove the spark plug cable from the spark plug.
- 2. Use a spark plug socket tool (not included), or a 13/16 in. (21 mm) (not included) socket 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 0.028-0.031 in. (0.7-0.8 mm).



- 5. Refer to the spark plug types in <u>Specifications</u> when replacing the plug.
- 6. Carefully thread the spark plug into the engine.
- 7. Use a spark plug socket tool (not included) or socket (not included) to firmly install the plug.
- 8. Attach the spark plug wire to the plug.

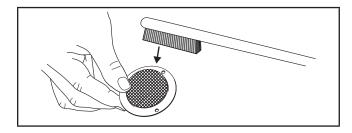
# Cleaning the Air Filter

- Remove the snap-on cover holding the air filter to the assembly.
- 2. Remove the foam element.

- Wash in liquid detergent and water. Squeeze thoroughly dry in a clean cloth.
- 4. Saturate in clean engine oil.
- 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 the Spark Arrestor**

- Allow the engine to cool completely before servicing the spark arrestor.
- 2. Remove the three screws holding the cover plate which retains the end of the spark arrestor to the muffler.
- 3. Remove the spark arrestor screen.
- 4. Carefully remove the carbon deposits from the spark arrestor screen with a wire brush.



- 5. Replace the spark arrestor if it is damaged.
- 6. Position the spark arrestor in the muffler and attach with the three screws.

### **A** CAUTION

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

### NOTICE

Federal and local laws and administrative requirements indicate when and where spark arrestors are required. When ordered, spark arrestors 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 arrestor.

### **Adjusting the Governor**

### **A** WARNING

Tampering with the factory set governor will void your warranty.

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.

### **Generator Battery**

If your generator includes a battery, it is equipped with an automatic battery charging circuit. The battery will receive charging voltage when the engine is running. The battery will maintain a proper charge if the unit is used on a regular basis (about once every two weeks). If it is used less frequently, the battery should be connected to a trickle charger or battery maintainer to keep the battery properly charged. Maximum charging rate should not exceed 1.5 amps. Follow the instructions included with the battery charger. The battery should be fully charged at least once per month. If the battery is not able to start the engine, it can be started by manually pulling the engine recoil cord. If the battery voltage is extremely low, the charging circuit may not be able to re-charge the battery. In this case, the battery must be connected to a standard automotive style battery charger for re-charging before it can be used.

### **Disconnect the Battery**

- 1. Remove the protective cover from the black/negative battery lead.
- 2. Disconnect the black/negative lead from the black/negative terminal on the battery and store the cap screw and nut.
- 3. Repeat steps 1-2 for the red/positive battery lead.
- 4. Store the battery in a cool, dry place.

### **Charge the Battery**

For a generator equipped with batteries for electric starting, proper battery maintenance and storage should be followed. An automatic battery charger (not included) with automatic trickle charging capability should be used to charge the battery. Maximum charging rate should not exceed 1.5 amps. Follow the instructions included with the battery charger. The battery should be fully charged at least once per month.

### NOTICE

A trickle or float charger will maintain the battery condition over long storage periods.

### **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
<ul><li>□ Check oil level</li><li>□ Clean around air intake and muffler</li></ul>
FIRST 5 HOURS
☐ Change oil
EVERY 50 HOURS OR EVERY SEASON
<ul> <li>□ Clean air filter</li> <li>□ Change oil if operating under heavy load or in hot environments</li> </ul>
EVERY 100 HOURS OR EVERY SEASON
Change oil
Clean/adjust spark plug
<ul><li>☐ Check/adjust valve clearance*</li><li>☐ Clean spark arrestor</li></ul>
☐ Clean fuel tank and filter*
EVERY 250 HOURS
☐ Clean combustion chamber*
EVERY 3 YEARS
☐ Replace fuel line*

# **STORAGE**

### **A** DANGER

Gasoline, gasoline vapors and propane (LPG) are highly flammable and extremely explosive.

Fire or explosion can cause severe burns or death. Only fill or drain fuel outdoors in a well-ventilated area. Do not pump gasoline directly into the generator. Use an approved container to transfer the fuel to the generator. Never use a fuel container, hose, cylinder or any other fuel related item that is damaged or appears damaged. 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.

# **Short Term Storage (up to 1 year)**

Gasoline in the gasoline tank has a maximum shelf life of up to 1 year with the addition of properly formulated fuel stabilizers and if stored in a cool, dry place. Gasoline in the carburetor, however, may gum up and clog the carburetor if it isn't used or drained within 2-4 weeks.

- 1. Be sure all appliances are disconnected from the generator.
- 2. Add a properly formulated fuel stabilizer to the gasoline tank.
- Turn the fuel valve to the "ON" position or, for Dual Fuel models only, set the fuel selector switch for operation on gasoline.
- 4. Start and run the generator for 10 minutes so the treated gasoline cycles through the fuel system and carburetor.
- 5. Turn engine switch to the "OFF" position and allow generator to cool completely before continuing.

### 6. Option 1: Drain Gasoline (all models)

- 6a. Turn the fuel valve to the "OFF" position or, for Dual Fuel models ONLY, set the fuel selector switch for operation on propane (LPG) and be sure any propane (LPG) fuel source is turned off and disconnected from the generator.
- 6b. Use the drain bolt on the carburetor to empty any excess gasoline from the carburetor into an appropriate container. Use a funnel (and appropriate hose if necessary) under the carburetor drain bolt to avoid spillage.
- 6c. When gasoline stops flowing from the carburetor, replace and tighten the carburetor drain bolt and be sure to properly dispose of the drained gasoline according to local regulations or guidelines.

### 7. Option 2: Run Dry (gasoline type models ONLY):

- 7a. Turn engine switch to the "ON" position and start the generator.
- 7b. With the generator running, turn the fuel valve to the "OFF" position and allow the generator to run until the engine stops from complete fuel starvation. This may take a few minutes.
- 7c. Turn engine switch to the "OFF" position and allow generator to cool completely before continuing.
- 8. Remove the spark plug cap and spark plug and pour about a tablespoon of oil into the cylinder.
- 9. Pull the recoil slowly to crank the engine to distribute the oil and lubricate the cylinder.
- 10. Reattach the spark plug and spark plug cap.
- 11. If the generator includes a battery, disconnect and charge according to <u>Generator Battery</u>.

<sup>\*</sup>To be performed by knowledgeable, experienced owners or Champion Power Equipment certified dealers.

- 12. Clean the generator according to Cleaning the Generator.
- 13. Store the generator in a cool, dry place out of direct sunlight.

### **Long Term Storage (over 1 year)**

For storage over 1 year, the fuel tank and carburetor must be completely drained of gasoline.

- 1. Follow steps 1-5 according to **Short Term Storage**.
- Use the drain bolt on the carburetor to empty any excess gasoline from the gasoline tank and carburetor into an appropriate container. Use a funnel (and appropriate hose if necessary) under the carburetor drain bolt to avoid spillage.
- When gasoline stops flowing from the carburetor, replace and tighten the carburetor drain bolt and be sure to properly dispose of the drained gasoline according to local regulations or guidelines.
- 4. Turn the fuel valve to the "OFF" position *or, for Dual Fuel models ONLY,* set the fuel selector switch for operation on propane (LPG) and be sure any propane (LPG) fuel source is turned off and disconnected from the generator.
- 5. Follow steps 8-13 according to Short Term Storage.

# **Removing from Storage**

If the generator has been improperly stored for a long period of time with gasoline in the fuel tank and/or carburetor, all fuel must be drained and the carburetor must be thoroughly cleaned. This process involves technically advanced tasks. For assistance please call our Technical Support line at 1-877-338-0999. If the fuel tank and carburetor were properly emptied of all fuel prior to the generator being stored, follow the below steps when removing from storage.

- Add gasoline to the generator according to <u>Add Fuel:</u> Gasoline.
- 2. Be sure the engine switch is in the "OFF" position.
- 3. Turn the fuel valve to the "ON" position *or, for Dual Fuel models ONLY,* set the fuel selector switch for operation on gasoline.
- 4. After 5 minutes check the carburetor and air filter areas for any leaking gasoline. If any leaks are found, the carburetor will need to be disassembled and cleaned or replaced. If no gasoline leaks are found, turn the fuel valve to the "OFF" position *or, for Dual Fuel models ONLY,* set the fuel selector switch for operation on propane (LPG).
- Check engine oil level and add clean, fresh oil if needed.See <u>Oil Specifications</u> for proper oil type.
- Check and clear air filter of any obstructions such as bugs or cobwebs. If necessary, clean air filter according to <u>Cleaning the Air Filter</u>.

- 7. If the generator includes a battery, connect according to Connect the Battery.
- 8. Start the generator according to Starting the Engine.

### NOTICE

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 manufacture's warranty.

### **A** 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 make sure the engine switch and fuel valve are set to the "OFF" position.
- If your generator includes a battery, disconnect according to <u>Generator Battery</u>.

# **SPECIFICATIONS**

# **Generator Specifications**

Congretor Model	100422
Generator Model	100423
Start Type	Remote, Electric, and Manual
Watts (Starting/Running)	4375/3500
AC Volts	120
AC Amps @ 120 (Starting/Runni	ng) 36.5/29.2
Frequency	60 Hz
Phase	Single
Gross Weight	126.8-132.5 lb. (57.5-60.1 kg)
Net Weight	117.1 lb. (53.1 kg)
Length	24.4 in. (61.9 cm)
Width	24.2 in. (61.4 cm)
Height	22 in. (56 cm)

<sup>\* \*</sup>Product carton styles may vary.

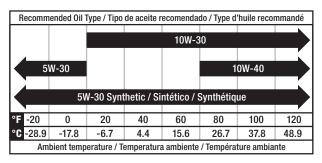
# **Engine Specifications**

Model	YF172FD-210
Displacement	224 cc
Type	4-Stroke OHV

# **Oil Specifications**

DO NOT OVERFILL.

Type	*See chart below
Capacity	0.6 qt. (0.6 L)



### NOTICE

Weather will affect engine oil and engine performance. Change the type of engine oil used based on weather conditions to suit the engine needs.

### **Fuel Specifications**

Use regular unleaded gasoline with a minimum octane rating of 85 and an ethanol content of less than 10% by volume. DO NOT USE E15 or E85. DO NOT OVERFILL.

Gasoline Capacity	4	nal	(15.1	L)
adodino dapadity		yuı.	(10.1	<u>-,</u>

# **Spark Plug Specifications**

OEM Type	NHSP F6RTC
Replacement Type	NGK BPR6ES or equivalent
Gap	. 0.028-0.031 in. (0.7-0.8 mm)

### **Valve Specifications**

Intake Clearance	0.005-0.007 in. (0.13-0.17 mr
Exhaust Clearance	0.007-0.009 in. (0.18-0.22 mr

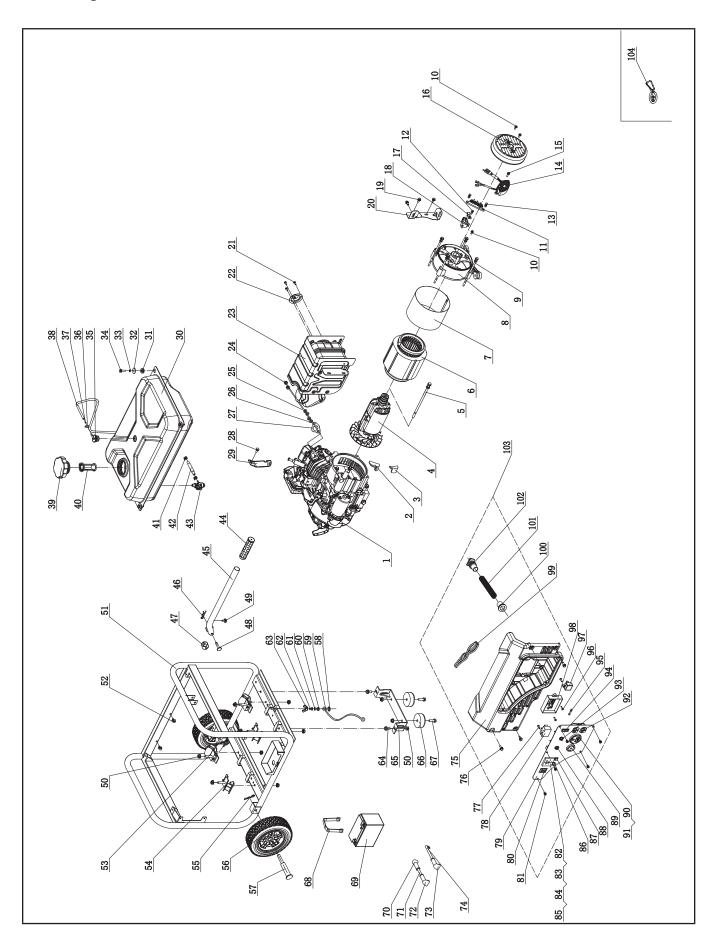
### NOTICE

A technical bulletin regarding valve adjustment procedures is available at www.championpowerequipment.com.

### **Important Message About Temperature**

Your Champion Power Equipment product is designed and rated for continuous operation at ambient temperatures up to 40°C (104°F). When your product is needed it may be operated at temperatures ranging from 5°F (-15°C) to 122°F (50°C) for short periods of time. If exposed to temperatures outside this range during storage, it should be brought back within this range before operation. In any event, the product must always be operated outdoors, in a well-ventilated area and away from doors, windows and vents.

# **Parts Diagram**



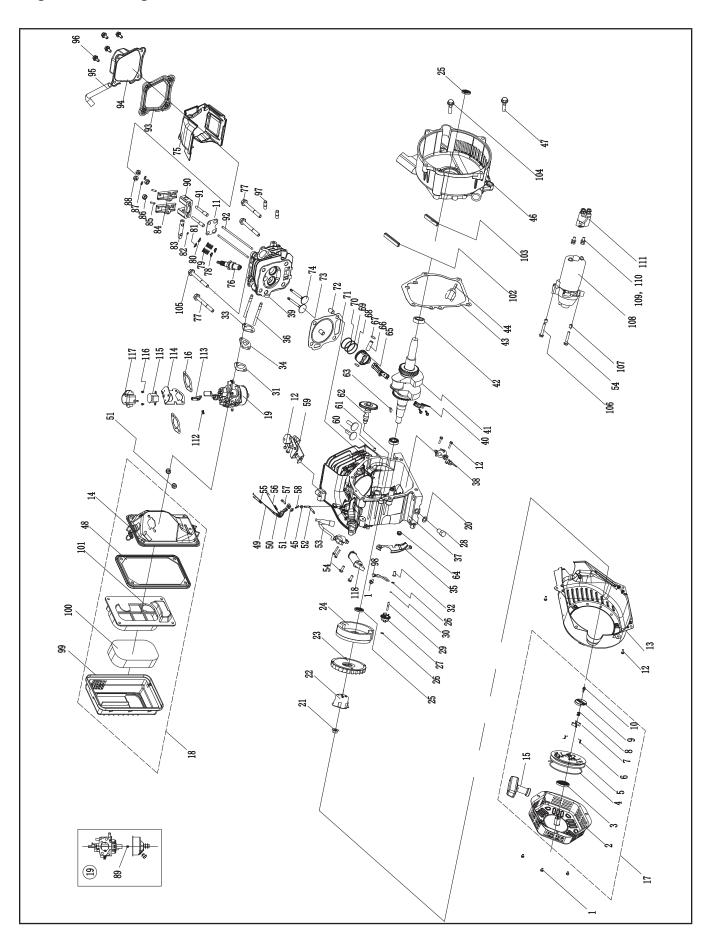
# **Parts List**

#	Part Number	Description	Qty.
1	27.601.35	Engine	1
2	122.190005.00	Rubber, Fore-Cover, B	1
3	122.190005.01	Rubber, Fore-Cover, A	1
		Rotor Assembly, Al,	<u> </u>
4	124.191100.02	Ø160 x 130 mm, CSA	1
_	0.00.100	Flange Bolt/Washer	4
5	2.08.109	Assembly M8 x 252	1
6	124.191200.02	Stator Assembly, AI,	1
		Ø160 x 130 mm, CSA	ı .
7	124.191002.01	Stator Cover	1
8	122.190002.00	End Housing	1
9	2.08.032	Flange Bolt/Washer	4
40	110071 0510 0	Assembly M6 x 179	
10	1.16674.0512.2	Flange Bolt M5 x 12	3
11	122.190400.00	Terminal Block	1
12	1.9074.15.0520	Screw/Washer Assembly M5 x 20	1
		Screw/Washer	
13	1.9074.17.0516	Assembly M5 x 16	2
14	122.190200.05	AVR	1
15	1.16674.0516	Flange Bolt M5 x 16	2
40	100 100000 00 05	Generator End Cover,	
16	122.190003.00.35	Blue	1
17	122.190004.01	Pinch, Carbon Brush	1
18	122.190300.00	Carbon Brush	1
		Assembly	ı.
19	1.5789.0615	Flange Bolt M6 x 15	3
20	27.100100.01	Bracket, Muffler	1
21	1.823.0406	Screw M4 x 6	3
22	27.101300.00	Spark Arrester	1
23	27.101000.01.2	Assembly  Muffler Assembly	1
24	1.6175.08	Nut M8	2
25	1.93.08	Lock Washer Ø8	2
26	1.848.08	Washer Ø8	2
27	26.100001.00	Gasket, Exhaust	1
28	1.5789.0608	Flange Bolt M6 x 8	1
29	23.090006.21	Holder, Air Cleaner	1
30	122.071000.48.57	Fuel Tank, Red	1
		Mount Vibration, Fuel	
31	122.070015.01	Tank	4
20	2.02.0044	Flat Washer, Ø24 x	1
32	2.03.004.1	Ø6.5 x 1.5, Black	4
	1.93.06	Lock Washer Ø6	4

#	Part Number	Description	Qty.
0.4		Flange Bolt M6 x 20,	
34	1.5789.0620.1	Black	4
35	24.070800.00	Reversal Valve	1
36	2.06.006	Clamp Ø7 x Ø1	1
37	24.070030.00	Hole, Breather Tube	1
38	122.070014.02	Pipe, Reversal Valve, 670 mm	1
39	122.070100.07	Fuel Tank Cap	1
40	122.070300.03	Fuel Filter	1
41	2.06.007	Clamp Ø8 x b6	2
42	23.070011.04	Fuel Pipe, 155 mm	1
43	122.070400.05	Fuel Valve	1
44	152.200702.00	Cover, Handle	1
45	122.200701.11	Handle	1
46	11.110008.00	"R" Shape	1
47	122.201001.00	Hard Rubber	1
48	122.200703.11	Short Pin, Handle	1
49	122.201400.03	Rubber	1
50	1.6177.1.08	Lock Nut M8, Flange	12
51	62343.09.16.2	Frame	1
52	2.05.001	Clamp Ø8 x 6.5	2
53	122.201200.07	Motor Mount 2	
54	122.201200.06	Motor Mount 1	2
55	2.16.001	Pin Ø2 x 33, "R" Shape	2
56	122.201701.07.2	8 in. Wheel, PU, Black	2
57	122.201501.23	Pin Roll, Wheel, Ø16 x Ø10 x 97	2
58	1.862.06	Lock Washer Ø6, Toothed	1
59	5.1900.026	Grounding Line 150 mm	1
60	1.6177.1.06	Lock Nut M6, Flange	1
61	1.97.1.06	Washer Ø6	2
62	1.93.06	Lock Washer Ø6	1
63	1.62.06	Butterfly Type Nut M6	1
64	1.5789.0816	Flange Bolt M8 x 16	2
65	152.200002.00.2	Support Leg 60 mm	1
66	152.201400.00	Rubber, Support	2
67	1.5789.0825	Flange Bolt M8 x 25	2
68	122.200904.00	Pinch, Rubber	1
69	9.1000.090	Battery 12V9AH	1
70	152.200013.01.3	Jacket, Wire, Red	1

#	Part Number	Description	Qty.
		Red Wire, 190 mm,	
71	5.1900.010	Battery	1
		Jacket, 9AH Battery,	
72	122.200013.01.3	Red	1
70	100 000010 011	Jacket, 9AH Battery,	_
73	122.200013.01.1	Black	1
74	5.1900.011	Black Wire, 190 mm,	1
	3.1900.011	Battery	_ ' _
75	122.210002.26	Control Box	1
76	1.5789.0615.1	Bolt M6 x 15, Black	4
77	1.818.0514.2	Screw M5 x 14	2
78	5.1810.001	Over Voltage Protector	1
79	122.209.16.2	Control Panel, Black	1
80	5.1000.001.3	Ignition Switch, Red	1
		Screw/Washer	
81	1.9074.4.0514.1	Assembly M5 x 14,	5
		Black	
82	5.1400.003	Voltage Meter	1
83	1.848.03.2	Washer Ø3	4
84	1.859.03.2	Lock Washer Ø3	4
85	1.6175.03.2	Nut M3	4
86	5.1460.003	Pilot Lamp	1
87	5.1040.004	Remote Excercise	1
		Button	
88	5.1210.930	30Amp Circuit Breaker,	1
00	F 1100 000	Push Button, CSA	4
89	5.1120.008	Receptacle L5-30R	1
90	1.6177.1.04.1	Lock Nut M4, Flange	6
91	5.1120.034	Receptacle TT-30R	1
92	5.1120.010	Receptacle 5-20R, Duplex	1
		20Amp Circuit Breaker,	
93	5.1210.920	Push Button, CSA	1
94	5.1000.000.3	Switch, Battery	1
95	5.1280.003	Fuse 10A	1
96	1.845.4213	Screw ST4.2 x 13	2
97	5.1820.000	Charger	1
98	5.1830.000	Remote Control	1
99	100423.21.10	Wire Assembly	1
		Wire Jacket, Control	
100	100   122.210003.01   Wile Jacket, Collifor		1
101	5.1330.001	Sheath, Wire	1
102	122.210003.03	Plug, End Cover	1
100	100400.01	Control Panel	
103	100423.21	Assembly	1
104	9.2600.000	Remote	1

# **Engine Parts Diagram**



# **Engine Parts List**

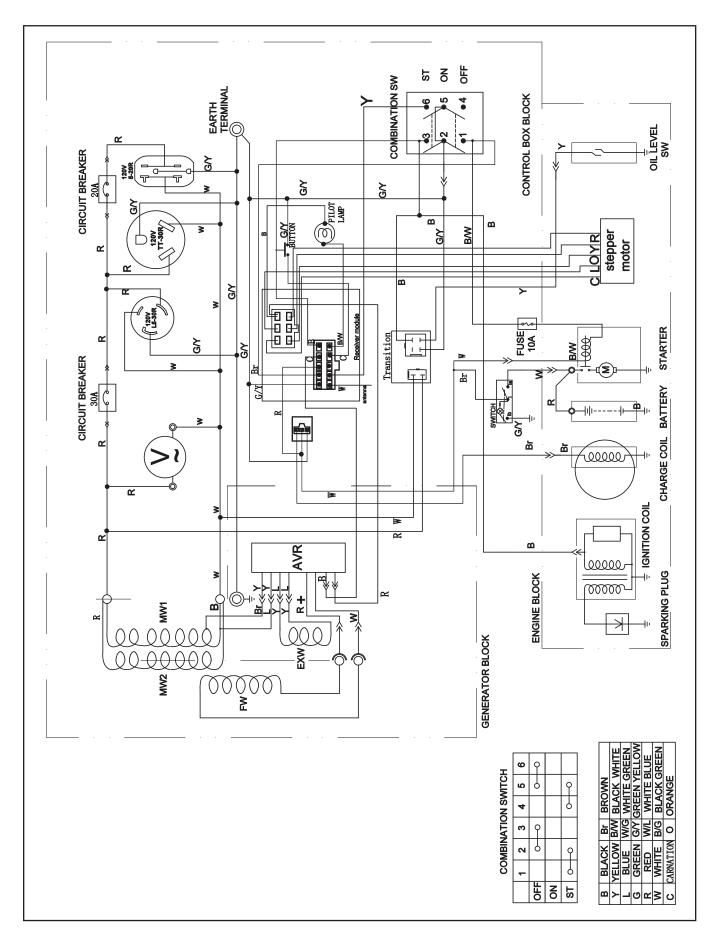
#	Part Number	Description	Qty.
1	1.5789.0608	Flange Bolt M6 x 8	4
-		Cover, Recoil Starter,	<u> </u>
2	22.061100.00.2	Black	1
3	21.061005.00	Spring, Recoil Starter	1
4	2.10.003	Rope Ø5 x 1550	1
5	21.061001.01	Reel, Recoil Starter	1
6	45.060003.00	Spring, Ratchet	2
7	45.060002.00	Starter Ratchet, Steel	2
8	45.060009.00	Spring, Ratchet Guide	1
9	45.060007.00	Ratchet Guide	1
10	45.060008.00	Screw, Ratchet Guide	1
11	24.040004.00	Guide Plate, Push Rod	1
12	1.5789.0612	Flange Bolt M6 x 12	8
13	27.080100.04.35	Fan Cover, Blue	1
14	24.091100.21	Base, Air Cleaner	1
15	21.061300.00	Handle, Recoil, Soft	1
16	24.130004.20	Gasket, Air Cleaner	2
17	22.061000.00	Recoil Assembly	1
18	27.091000.02	Air Cleaner Assembly	1
19	27.131000.03	Corburator	1
19	27.131000.07	Carburetor	'
20	2.03.016	Washer Ø10 x Ø16 x	1
20	2.00.010	1.5, Drain Bolt	<u> </u>
21	2.02.006	Nut M14 x 1.5	
22	83.060001.01	Pulley, Starter	1
23	27.080001.00	Cooling Fan	1
24	24.120100.07	Flywheel	1
25	2.11.001	Oil Seal	2
		Ø25 x Ø41.3 x 6	
26	2.03.020.1	Washer Ø6.2 x Ø15 x	2
07	01 110100 00	0.5, Black	4
27	21.110100.00	Gear, Governor	1
28	2.08.037	Drain Bolt M10 x 25 x 1.25	1
29	21.110013.00	Shaft, Governor Gear	1
30	21.110011.00	Clip, Governor Gear	1
31	22.130003.00	Gasket, Carburetor	1
32	21.110012.01	Bushing, Govornor	1
		Gear, Steel	<u> </u>
33	24.130002.00	Gasket, Insulator	1
34	27.130001.00	Insulator, Carburetor	1
35	27.080600.01	Air Guide, Right Side	1
36	2.01.003	Stud Bolt M6 x 90	2
37	27.030100.01	Crankcase	1

#	Part Number	Description	Qty.
38	21.127000.02	Oil Level Sensor	1
39	26.010100.01	Cylinder Head, 224cc	1
40	27.050200.00	Connecting Rod	1
41	27.050100.00	Crankshaft	1
42	1.276.6205		
		Gasket, Crankcase	2
43	24.030008.00	Cover	1
44	22.031000.00	Oil Dipstick Assembly	1
45	2.03.021.1	Washer Ø6.4 x Ø13 x 1, Black	1
46	27.030007.01	Cover, Crankcase	1
47	1.5789.0832.0.8	Flange Bolt M8 x 32	5
48	23.091002.21	Seal, Air Cleaner	1
49	23.110006.00	Rod, Governor	1
50	27.110003.00	Arm, Governor	1
51	1.6177.06	Flange Nut M6	3
52	21.110001.00	Shaft, Governor Arm	1
53	22.123000.02	Ignition Coil, Shield	1
54	1.5789.0625	Flange Bolt M6 x 25	5
55	23.110005.01	Spring, Throttle Return	1
56	23.110007.00	Spring, Governor	1
57	2.08.040	Bolt M6 x 21, Governor Arm	1
58	21.110008.00	Pin, Shaft	
59	27.111000.20	Control Assembly	1
60	25.040013.00	Lifter, Valve	2
61	2.04.001	Dowel Pin Ø9 x 14	2
62	27.041000.00	Camshaft	1
63	2.14.012	Woodruff Key 4 x 7.5 x 19	1
64	152.070031.01	Sheath, Wire	1
65	27.050005.00	Piston	1
66	23.050003.00	Pin, Piston	1
67	2.09.001	Circlip Ø18 x Ø1	2
68	27.050303.00	Ring, Oil	1
69	27.050302.00	Ring, Second Piston	1
70	27.050301.00	Ring, First Piston	1
71	27.030009.01	Gasket, Cylinder Head	1
72	2.04.003	Dowel Pin Ø10 x 14	2
73	23.040002.02	Valve, Intake	1
74	23.040006.02	Valve, Exhaust	1
75	27.080200.00	Air Shroud, Cylinder	1
76	2.15.002(F6RTC)	Spark Plug F6RTC	1
77	1.5789.0865	Flange Bolt M8 x 65	3

#	Part Number	Description	Qty.	
78	23.040017.00	Oil Seal, Valve, Iron	2	
79	21.040003.00	Spring, Valve	2	
80	21.040007.00	Retainer, Exhaust Valve Spring	1	
81	21.040001.00	Retainer, Intake Valve Spring	1	
82	21.040008.00	Rotator, Exhaust Valve	1	
83	24.040202.00	Shaft, Rocker Arm	1	
84	22.040009.00	Rocker Arm, Intake Valve	2	
85	22.040012.00	Screw, Valve Adjustment	2	
86	21.040021.00	Nut M6 x 0.5, Lock	2	
87	1.97.1.06	Washer Ø6	2	
88	1.6177.1.06	Flange Nut M6	2	
89	27.131017.01	Standard Main Jet	1	
	27.131017.01.01	Altitude Main Jet	/	
90	24.040201.00	Retainer, Rocker Arm	1	
91	23.040010.00	Bolt, Rocker Arm	2	
92	27.040005.00	Push Rod	2	
93	21.020002.01	Gasket, Cylinder Head Cover	1	
94	24.021000.00	Cover, Cylinder Head		
95	23.020001.02	Breather Tube, 112 + 35	1	
96	1.5789.0615	Flange Bolt M6 x 15	4	
97	2.01.010	Stud Bolt M8 x 35		
98	23.030006.00	Plate, Coil		
99	27.091200.01	Cover, Air Cleaner, Black	1	
100	23.091003.21	Element, Air Cleaner	1	
101	23.091001.21	Separator, Air Cleaner	1	
102	27.030013.00	Seal Strip, Crankcase Cover, Long	1	
103	27.030013.01	Seal Strip, Crankcase Cover, Short	1	
104	2.08.123	Flange Bolt M8 x 40	1	
105	2.08.121	Flange Bolt M10 x 65	1	
106	1.5789.0629	Flange Bolt M6 x 29	1	
107	2.04.005	Dowel Pin Ø8 x 10	2	
108	27.125100.00	Starter Motor Assembly	1	
109	1.93.05	Lock Washer Ø5	2	
110	1.16674.0516	Flange Bolt M5 x 16	2	
111	23.125200.01	Relay, Starter, Remote Control	1	
112	81.130010.00	Spring, Connecter	1	

#	Part Number	Description	Qty.
113	26.130015.24	Connecter, Choke Valve Axis	1
114	26.130005.24	Support, Stepper Motor	1
115	45.132200.01	Stepper Motor	1
116	1.823.0408	Screw M4 x 8	2
117	81.132001.00	Cover, Stepper Motor	1
118	45.121000.00	Coil, Charging	1

# **Wiring Diagram**



# **TROUBLESHOOTING**

Problem	Cause	Solution
	No fuel.	Add fuel.
Generator will not start.	Faulty spark plug.	Replace spark plug.
	Unit loaded during start up.	Remove load from unit.
	Low oil level.	Fill crankcase to the proper level.
Generator will not start;	Low on level.	Place generator on a flat, level surface.
Generator starts but runs roughly.	Choke in the wrong position.	Adjust choke.
	Spark plug wire loose.	Attach wire to spark plug.
	Remote control battery is dead.	Replace remote control battery
Generator will not start wirelessly.	Generator battery is dead.	Recharge generator battery
	Battery switch is in the OFF position.	Turn battery switch to ON position.
Generator will not start electrically.	Generator battery is dead.	Recharge generator battery.
deficiator will flot start electrically.	Battery switch is in the OFF position.	Turn battery switch to ON position.
	Out of fuel.	Fill fuel tank.
Generator shuts down during operation.	Low oil level.	Fill crankcase to the proper level. Place generator on a flat, level surface.
Generator cannot supply enough power	Generator is overloaded.	Review load and adjust. See "Connecting Electrical Loads."
or overheating.	Insufficient ventilation.	Check for air restriction. Move to a well ventilated area.
	Cable not properly connected.	Check all connections.
	Connected device is defective.	Replace defective device.
	Circuit breaker is open.	Reset circuit breaker
No AC output.	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 "Connecting Electrical Loads."
переалей споил ргеакет ттрриту.	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

### WARRANTY\*

CHAMPION POWER EQUIPMENT
3 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 three years (parts and labor) from the original date of purchase and 270 days (parts and labor) for commercial and 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**

Products with mechanical and electrical components 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 the product is deemed to have been misused, neglected, involved in an accident, abused, loaded beyond the product's limits, modified, installed improperly or connected incorrectly to any electrical component. Normal maintenance is not covered by this warranty and is not required to be performed at a facility or by a person authorized by CPE.

### 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.

When applicable, this warranty does not apply to products 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 product. THIS WARRANTY AND THE ATTACHED U.S. EPA, CARB and/or ECCC EMISSION CONTROL SYSTEM WARRANTIES (WHEN APPLICABLE) ARE 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 or province to province. Your state or province 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 12039 Smith Ave. Santa Fe Springs, CA 90670 USA www.championpowerequipment.com

### **Customer Service**

Mon - Fri 8:30 AM - 5:00 PM (PST/PDT)

Toll Free: 1-877-338-0999

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 24/7 Tech Support: 1-562-204-1188

<sup>\*</sup>Except as otherwise stipulated in any of the following enclosed Emission Control System Warranties (when applicable) for the Emission Control System: U.S. Environment Protection Agency (EPA), California Air Resources Board (CARB) and/or Environment and Climate Change Canada (ECCC). Whichever warranty applies for the longer period, either this 3 year limited warranty or the applicable Emission Control System Warranty, shall supersede the other.

# Champion Power Equipment, Inc. (CPE), United States Environment Protection Agency (U.S. EPA) Emission Control System Warranty

Your Champion Power Equipment (CPE) engine complies with U.S. EPA emission regulations.

### YOUR WARRANTY RIGHTS AND OBLIGATIONS:

The US EPA AND CPE are pleased to explain the Federal Emission Control Systems Warranty on your 2017 small off-road engine and engine powered equipment. New engines and equipment must be designed, built and equipped, at the time of sale, to meet U.S. EPA regulations for small non-road engines. CPE warrants the emission control system on your small off-road engine and equipment for the period of time listed below, provided there has been no abuse, neglect, unapproved modification, or improper maintenance of your equipment.

Your emission control system may include parts such as the carburetor, fuel-injection system, the ignition system, catalytic converter and fuel lines. Also included may be hoses, belts, connectors and other emission related assemblies. Where a warrantable condition exits, CPE will repair your small off-road engine at no cost to you including diagnosis, parts and labor.

### MANUFACTURER'S EMISSION CONTROL SYSTEM WARRANTY COVERAGE:

This emission control system is warranted for two years, subject to provisions set forth below. If, during the warranty period, emission related part on your engine is defective in materials or workmanship, the part will be repaired or replaced by CPE.

### **OWNER WARRANTY RESPONSIBILITIES:**

As the small off-road engine owner, you are responsible for the performance of the required maintenance listed in your Owner's Manual. CPE recommends that you retain all your receipts covering maintenance on your small off-road engine, but CPE cannot deny warranty solely for the lack of receipts or for your failure to ensure the performance of all scheduled maintenance.

As the small off-road engine owner, you should however be aware that CPE may deny you warranty coverage if your small, off-road engine or a part has failed due to abuse, neglect, improper maintenance or unapproved modifications.

You are responsible for presenting your small off-road engine to an Authorized CPE service outlet or alternate service outlet as described in (3)(f.) below, CPE dealer or CPE, Santa Fe Springs, Ca. as soon as a problem exists. The warranty repairs should be completed in a reasonable amount of time, not to exceed 30 days.

If you have any questions regarding your warranty rights and responsibilities, you should contact:

Champion Power Equipment, Inc.
Customer Service
12039 Smith Ave.
Santa Fe Springs, CA 90670
1-877-338-0999
tech@championpowerequipment.com

### **EMISSION CONTROL SYSTEM WARRANTY**

The following are specific provisions relative to your Emission Control System (ECS) Warranty Coverage.

**1. APPLICABILITY:** This warranty shall apply to 1997 and later model year small off-road engines. The ECS Warranty Period shall begin on the date the new engine or equipment is delivered to its original, end-use purchaser, and shall continue for 24 consecutive months thereafter.

### 2. GENERAL EMISSIONS WARRANTY COVERAGE

CPE warrants to the original, end-use purchaser of the new engine or equipment and to each subsequent purchaser that each of its small off-road engines is:

- a. Designed, built and equipped so as to conform to U.S. EPA emissions standards for spark-ignited engines at or below 19 kilowatts.
- b. Free from defects in materials and workmanship that cause the failure of a warranted part to be identical in all material respects to the part as described in the engine manufacturer's application for certification for a period of two years.

### 3. THE WARRANTY ON EMISSION-RELATED PARTS WILL BE INTERPRETED AS FOLLOWS:

- a. Any warranted part that is not scheduled for replacement as required maintenance in the Owners Manual shall be warranted for the ECS Warranty Period. If any such part fails during the ECS Warranty Period, it shall be repaired or replaced by CPE according to Subsection "d" below. Any such part repaired or replaced under the ECS Warranty shall be warranted for any remainder of the ECS Warranty Period.
- b. Any warranted, emissions-related part which is scheduled only for regular inspection as specified in the Owners Manual shall be warranted for the ECS Warranty Period. A statement in such written instructions to the effect of "repair or replace as necessary", shall not reduce the ECS Warranty Period. Any such part repaired or replaced under the ECS Warranty shall be warranted for the remainder of the ECS Warranty Period.
- c. Any warranted, emissions-related part which is scheduled for replacement as required maintenance in the Owner's Manual shall be warranted for the period of time prior to the first scheduled replacement point for that part. If the part fails prior to the first scheduled replacement, the part shall be repaired or replaced by CPE according to Subsection "d" below. Any such emissions-related part repaired or replaced under the ECS Warranty, shall be warranted for the remainder of the ECS Warranty Period prior to the first scheduled replacement point for such emissions-related part.
- d. Repair or replacement of any warranted, emissions-related part under this ECS Warranty shall be performed at no charge to the owner at a CPE Authorized Service Outlet.
- e. The owner shall not be charged for diagnostic labor which leads to the determination that a part covered by the ECS Warranty is in fact defective, provided that such diagnostic work is performed at a CPE Authorized Service Outlet.
- f. CPE shall pay for covered emissions warranty repairs at non-authorized service outlets under the following circumstances:
- i. The service is required in a population center with a population over 100,000 according to U.S. Census 2000 without a CPE Authorized Service Outlet AND
- ii. The service is required more than 100 miles from a CPE Authorized Service Outlet. The 100 mile limitation does not apply in the following states: Alaska, Arizona, Colorado, Hawaii, Idaho, Montana, Nebraska, Nevada, New Mexico, Oregon, Texas, Utah and Wyoming.
- g. CPE shall be liable for damages to other original engine components or approved modifications proximately caused by a failure under warranty of an emission-related part covered by the ECS Warranty.
- h. Throughout the ECS Warranty Period, CPE shall maintain a supply of warranted emission-related parts sufficient to meet the expected demand for such emission-related parts.
- i. Any CPE Authorized and approved emission-related replacement part may be used in the performance of any ECS Warranty maintenance or repair and will be provided without charge to the owner. Such use shall not reduce CPE's warranty obligation.
- j. Unapproved add-on or modified parts may not be used to modify or repair a CPE engine. Such use voids this ECS Warranty and shall be sufficient grounds for disallowing an ECS Warranty claim. CPE shall not be liable hereunder for failures of any warranted parts of a CPE engine caused by the use of such an unapproved add-on or modified part.

# EMISSION-RELATED PARTS INCLUDE THE FOLLOWING: (using those portions of the list applicable to the engine)

Systems covered by this warranty	Parts Description
Fuel Metering System	Fuel regulator, Carburetor and internal parts
Air Induction System	Air cleaner, Intake manifold
Ignition System	Spark plug and parts, Magneto ignition system
Exhaust System	Exhaust manifold, catalytic converter
Miscellaneous Parts	Tubing, Fittings, Seals, Gaskets, and Clamps associated with these listed systems.
Evaporative Emissions	Fuel Tank, Fuel Cap, Fuel Line, Fuel Line Fittings, Clamps, Pressure Relief Valves, Control Valves, Control Solenoids, Electronic Controls, Vacuum Control Diaphragms, Control Cables, Control Linkages, Purge Valves, Vapor Hoses, Liquid/Vapor Separator, Carbon Canister, Canister Mounting Brackets, Carburetor Purge Port Connector

### TO OBTAIN WARRANTY SERVICE:

You must take your CPE engine or the product on which it is installed, along with your warranty registration card or other proof of original purchase date, at your expense, to any Champion Power Equipment dealer who is authorized by Champion Power Equipment, Inc. to sell and service that CPE product during his normal business hours. Alternate service locations defined in Section (3)(f.) above must be approved by CPE prior to service. Claims for repair or adjustment found to be caused solely by defects in material or workmanship will not be denied because the engine was not properly maintained and used.

If you have any questions regarding your warranty rights and responsibilities, or to obtain warranty service, please write or call Customer Service at Champion Power Equipment, Inc.

Champion Power Equipment, Inc.
12039 Smith Ave.
Santa Fe Springs, CA 90670
1-877-338-0999
Attn.: Customer Service
tech@championpowerequipment.com