OPERATOR'S MANUAL

MODEL #100576 3550W WIRELESS START PORTABLE GENERATOR













or visit championpowerequipment.com

SAVE THESE INSTRUCTIONS. 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 ANSI/PGMA G300 (Safety and 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.

CPE highly values how our products are designed, manufactured, operated, and serviced as well as providing safety to the operator and those around the generator. Therefore, it is IMPORTANT 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

CPE TECHNICAL SUPPORT TEAM
1-877-338-0999
MODEL NUMBER
100576
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 WARNING

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

A CAUTION

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

NOTICE

NOTICE indicates information considered important, but not hazard-related (e.g., messages relating to property damage).

IMPORTANT SAFETY INSTRUCTIONS

A WARNING

Cancer and Reproductive Harm – www.P65Warnings.ca.gov

A DANGER

Generator exhaust contains carbon monoxide, a colorless, odorless, poisonous 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 <u>OUTDOORS</u> ONLY IN A WELL VENTILATED AREA AND POINT EXHAUST AWAY.

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.

A DANGER

Using a generator indoors **CAN KILL YOU IN MINUTES**. Generator exhaust contains carbon monoxide. This is a poison you cannot see or smell.

NEVER use inside a home or garage, **EVEN IF** doors and windows are open.

ONLY use **OUTSIDE** and far away from windows, doors, and vents.



Install battery-operated carbon monoxide alarms or plug-in carbon monoxide alarms with battery back-up according to the manufacturer's instructions.

A WARNING

Although the generator contains a spark arrester, maintain a minimum distance of 5 ft. (1.5 m) from dry vegetation to prevent fires.

A DANGER

Operate equipment with guards in place.

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.

DO NOT wear loose-fitting clothing, dangling drawstrings or items that could become caught.

A DANGER

Generator produces powerful voltage.

D0 N0T touch bare wires or receptacles.

DO NOT use electrical cords that are worn, damaged or frayed. Use only Champion electrical cords for proper application.

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.

Connection to your home's electrical system requires a listed 30A transfer switch installed by a licensed electrician and approved by the local authority having jurisdiction. The connection must isolate the generator from the utility power and must comply with all applicable laws and electrical codes.

A WARNING

Do not use generator for 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

Spark from removed spark plug wire 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 or any other metal object.

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 and turned on.

A CAUTION

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

- DO NOT overload 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 or void the 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

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 AND GASOLINE VAPORS ARE HIGHLY FLAMMABLE AND EXPLOSIVE.

Fire or explosion can cause severe burns or death.

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.
- Gasoline expands or contracts with ambient temperatures. Never fill the gasoline tank to full capacity, as gasoline needs room to expand when temperatures rise.
- In the case of any petroleum gasoline fire, flames should never be extinguished unless the fuel supply valve can be turned OFF. By not doing so, if a fire is extinguished and the supply of fuel is not turned OFF, an explosion hazard could be created.

When adding or removing gasoline:

DO NOT light or smoke cigarettes.

Always turn the generator off and let cool for a minimum of two minutes before removing the gasoline cap. Afterwards, loosen gasoline cap to relieve pressure from the gasoline tank.

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

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

When starting the generator:

DO NOT attempt to start a damaged generator.

Always make certain that the gasoline cap, air filter, spark plug, fuel lines and exhaust system are properly secured, connected and in place.

Always 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 and the gasoline 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.

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

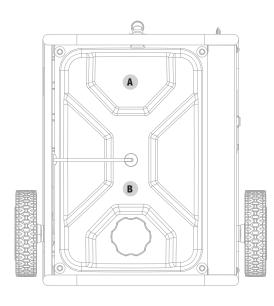
A WARNING

Never use a gasoline container, gasoline tank, or any other fuel item that is broken, cut, torn or damaged.

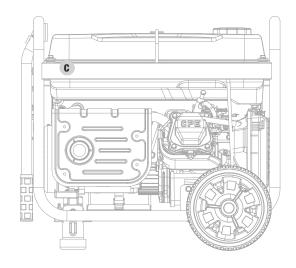
Safety Labels

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 Technical Support Team for possible replacement.



Тор



Back

	LABEL	DESCRIPTION
A	Image: Note of the constraint of	Safety Symbols/ CO Danger
В	UNLEADED FUEL ONLY. Minimum octane rating of 85. Maximum 10% ethanol. GASOLINA REGULAR SOLAMENTE. 85 octanos como minimo. Máximo de ratinol de 10%. ESSENCE SANS PLOMB SEULEMENT. Indice d'octane minimal de 85. Maximum 10% d'éthanol.	Fuel
C	A WARNING A OVERTISSEMENT Point of the regiments of the regiment system by costs sparks by costs s	Hot Surface

Safety Symbols

Some of the following symbols may be used on this product. Please study them and learn their meaning. Proper interpretation of these symbols will allow you to more safely operate the product.

SYMBOL	MEANING
	Read Operator's Manual. To reduce the risk of injury, user must read and understand operator's manual before using this product.
t → ↓ 5ft/1.5m	Clearance. Keep all objects at least 5 feet from generator. Heat from the muffler and exhaust gas can ignite combustible objects.
	Ground. Consult with local electrician to determine grounding requirements before operation.
<u>A</u>	Electric Shock. Failure to use in dry conditions and to observe safe practices can result in electric shock. Improper connections to a building can allow current to backfeed into utility lines, creating an electrocution hazard. A transfer switch must be used when connecting to a building.
	Fire/Explosion. Fuel and its vapors are extremely flammable and explosive. Fire or explosion can cause severe burns or death. Keep generator at least 5 ft (1.5m) from all objects to prevent combustion.
	Hot Surface. To reduce the risk of injury or damage, avoid contact with any hot surface.
	Open Flame Alert. Fuel and its vapors are extremely flammable and explosive. Keep fuel away from smoking, open flames, sparks, pilot lights, heat, and other ignition sources.
	Wet Conditions Alert. Do not expose to rain or use in damp locations.

Operation Symbols

Some of the following symbols may be used on this product. Please study them and learn their meaning. Proper interpretation of these symbols will allow you to more safely operate the product.

SYMBOL	MEANING
	START
8	ON
Ś	STOP or OFF
Ēŧ	Battery ON
	Battery OFF
N⁺±	Neutral Floating. Neutral circuit IS NOT electrically connected to the frame/ ground of the generator.
P	Circuit Breaker Reset: Push
	Locking Receptacle
	RV Ready Receptacle

SYMBOL		MEANING			
		Choke			
+		Run			
	Ŵ	Fuel/Gasoline Valve ON/OFF			
e		Ground Terminal			
-~-		Hertz. Shown on Intelligauge as "F##.#"			
٧ ۲		Volts. Shown on Intelligauge as "U###"			
ſ		Runtime. Shown on Intelligauge as "###.#"			

Quickstart Label Symbols

Some of the following symbols may be used on this product. Please study them and learn their meaning. Proper interpretation of these symbols will allow you to more safely operate the product.



Starting the Engine

A DANGER

Move generator outside and far away from windows, doors and intake ventilation covers.

- 1. Check oil level. Recommended oil is 10W-30.
- 2. Check gasoline level. When adding gasoline, use a minimum octane rating of 85 and an ethanol content of 10% or less by volume.
- 3. Turn the fuel valve to "ON" position.
- 4. Press ignition switch to the "ON" position.
- 5. Move choke lever to "CHOKE" position.
- 6. Pull the recoil starter.
- 7. Move the choke lever to "RUN" position.
- 8. Plug in desired device.

Stopping the Engine

- 1. Turn off and unplug all connected electrical loads.
- 2. Press the ignition switch to the "OFF" position.
- 3. Turn the fuel valve to the "OFF" position.

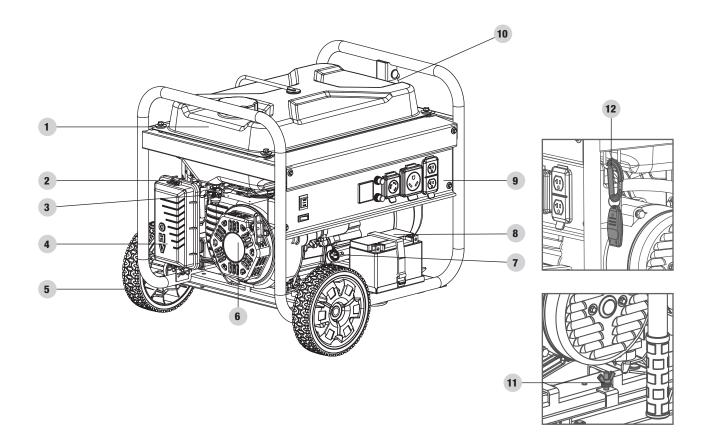
Wireless and Electric Start

See page 20 in "Operation" section.

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.

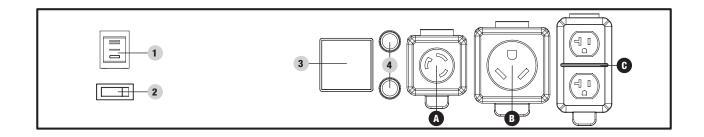
Generator



- 1. Gasoline Tank 4 gal. (15.1 L)
- 2. **Choke** Used to start the engine.
- 3. Fuel Valve Used to turn fuel supply on and off to engine.
- 4. **Air Filter** Protects the engine by filtering dust and debris from the intake air.
- 5. Never Flat Wheels 8 in. (20.3 cm)
- 6. **Recoil Starter** Used to manually start the engine.
- 7. Oil Fill Cap/Dipstick Used to check and fill oil level.

- 8. Battery Provides 12V DC power the starting system.
- 9. Control Panel See "Control Panel" section.
- 10. Folding Handle Used to move unit by lifting and rolling on wheels. Do not use to lift or carry the unit.
- 11. **Ground Terminal** Consult an electrician for local grounding regulations.
- 12. Key Fob Hook

Control Panel



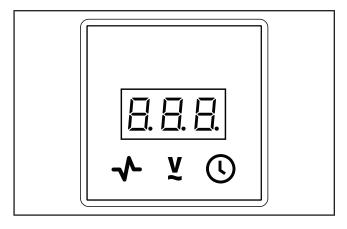
- 1. **Engine Switch** Used to put in START mode or STOP the generator.
- 2. Battery Switch Enables/disables starting electrically.
- 3. **Intelligauge** Three mode digital meter for displaying voltage, frequency (hertz), and total run time.
- 4. **Circuit Breakers (Push Reset)** Protects the generator against electrical overloads.

	RECEPTACLES				
A A A A A A A A A A A A A A A A A A A					
B	9	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.			
C		(2×) 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.			

Intelligauge

Three mode digital meter for displaying voltage, frequency (hertz), and total run time.

The LCD displays each mode for several seconds and then automatically cycles through.



MODE	DESCRIPTION				
	Output voltage of the generator.				
Voltage (V)	Example: 120 volts				
	Output frequ	ency in hertz.			
Frequency (H)	Example: 60.0 hertz				
	Total Run time of the gen	erator since first operation			
Total Run Time	Example: 2 hours	□□2. ★¥©			

Wireless Remote Control

This generator is equipped with a wireless remote control system for starting and stopping. The system consists of (5) main components:

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

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 wirelessly, press the "START" button on the Remote Control 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 wirelessly, press the "STOP" button on the Remote Control 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.

Control Panel Load Management

When the generator initially starts wirelessly, no voltage is supplied to the Control 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 wirelessly, the voltage to the Control Panel is immediately turned off. Then the engine stops approximately 5 seconds after the "STOP" button on the Remote Control is pressed. Turning the Control 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 push-button electric start or recoil start method is used.

When the push-button 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.

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:
 - 1a. This device may not cause harmful interference.
 - This device must accept any interference received, including interference that may cause undesired operation.
- Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

A NOTICE

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 dealer or an experienced radio/TV technician for help.

Parts Included

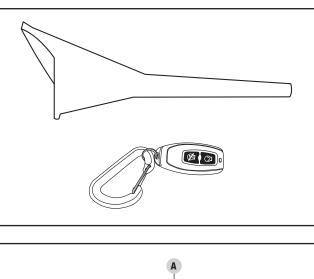
Accessories

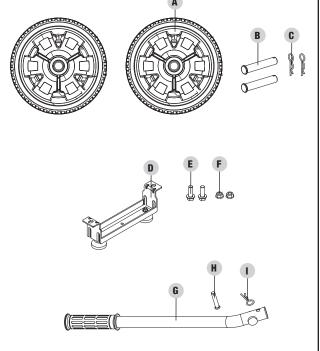
Oil Funn	el	 	 	 	 1
Remote	Key Fob	 	 	 	 1
Assembl	y Parts				
Wheels					
	(00.0	 	 		~

8 in. (20.3 cm) Never Flat Wheel (A)	2
Roll Pin (B)	2
Large R-clip (C)	2
Engine Vibration Mounts	
Support Leg with Vibration Mounts (D)	1
Flange Bolt (M8×16) (E)	2
Flange Lock Nut (M8) (F)	2
Folding Handle	
Handle (G)	1
Short Pin (H)	1
Small R-clip (I)	1

Tools Needed

- Metric wrench or socket set
- Pliers





ASSEMBLY

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

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

Unpacking

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

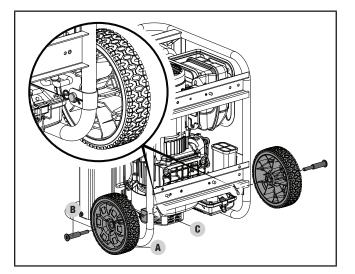
Install the Wheel Kit

A CAUTION

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

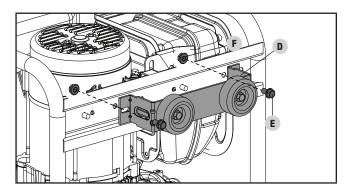
Install the Wheels

- 1. Before adding fuel and oil, tip the generator onto it's recoil end.
- 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.



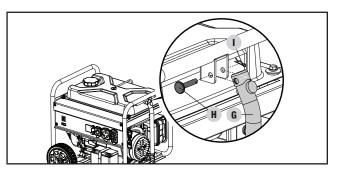
Install the Support Leg

- 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.



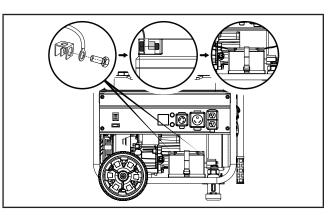
Install the Handle

- 1. Place the handle (G) inside the mounting channel on the frame.
- 2. Secure the handle to the frame using an short pin (H).
- 3. Place an R-clip (I) 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 bolt and secure with the nut.
- 3. Repeat for 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 failing to follow these instructions will void your warranty.

NOTICE

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

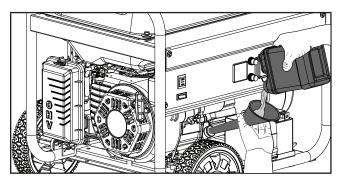
PNOTICE

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

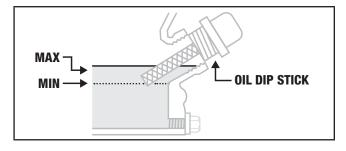
If running generator in extreme temperatures, refer to the following chart for recommended oil type.

Recommended Oil Type							
	10W-30						
51	N-30				1	0W-40	
			5W-30 S	ynthetic			
°F -20	0	20	40	60	80	100	120
° C -28.9	-17.8	-6.7	4.4	15.6	26.7	37.8	48.9
	Ambient temperature						

- 1. Place the generator on a flat, level surface.
- 2. Remove oil fill cap/dipstick to add oil.
- Using a funnel, add up to 20.3 fl. oz. (0.6 qt.) of oil (not included) and replace oil fill cap/dipstick. DO NOT OVERFILL.



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



NOTICE

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

When using the dipstick to check oil level, D0 N0T screw in the dipstick while checking.

NOTICE

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

A CAUTION

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

PNOTICE

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

PNOTICE

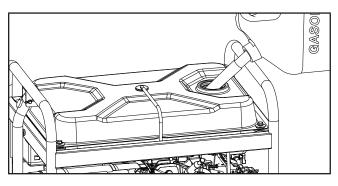
Synthetic oil may be used after the 5 hour initial break-in period. Using synthetic oil does not increase the recommended oil change interval. Full synthetic 5W-30 oil will aid in starting in cold ambient $< 41^{\circ}$ F (5° C) temperatures.

Add Fuel

Use clean, fresh, regular unleaded gasoline with a minimum octane rating of 85 and an ethanol content of 10% or less by volume. ${f I\!I\!I}$

DO NOT mix oil with gasoline.

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



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

A CAUTION

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

DO NOT light cigarettes or smoke when filling the tank.

DO NOT mix oil and gasoline.

DO NOT overfill the tank. Fill tank to approximately 1/4 in. (6.4 mm) below the top of the tank to allow for gasoline expansion.

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

DO NOT fill tank indoors.

D0 N0T fill tank when the engine is running or hot.

A WARNING

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

NOTICE

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

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

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

Grounding

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

A WARNING

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

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

Neutral Floating*

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

Neutral Bonded to Frame*

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

*See your Specifications section for specified type of grounding.

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 will become hot. If adequate cooling and breathing space are not supplied, or if the generator is blocked or enclosed, temperatures can become extremely heated and may lead to fire.

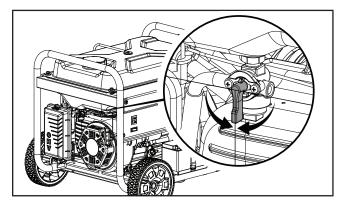
Surge Protection

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.
- 2. Turn the gasoline fuel valve to the "ON" position.

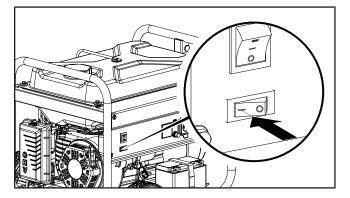


Wireless Remote Start

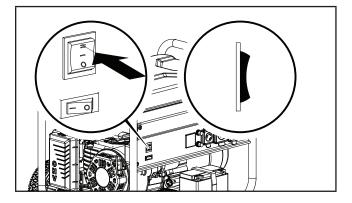
Wireless remote starting is only possible within 80 feet of the generator.

DO NOT attempt to adjust the choke. The remote system will automatically close and open the choke.

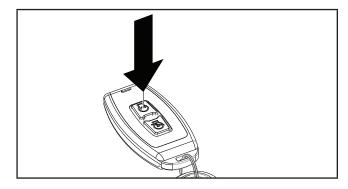
1. Push the battery switch to the "ON" position.



2. Push the ignition switch to the "ON" position.



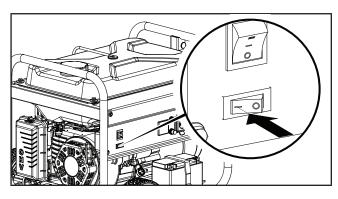
 Press and release the "START" button on the remote control. DO NOT hold the button down, only press the button once. The engine will attempt to start six times.



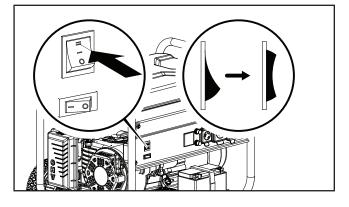
Electric Start

DO NOT attempt to adjust the choke. The remote system will automatically close and open the choke.

1. Push the battery 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.

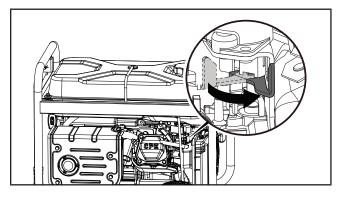


A CAUTION

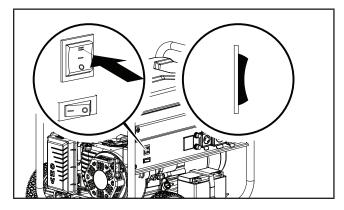
If the ignition switch is held down in the "START" position longer than 5 seconds it could damage the starter.

Manual Start

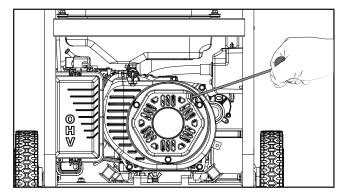
- Disconnect all electrical loads from the generator. Never start or stop the generator manually with electrical devices plugged in or turned on.
- 2. Move the choke to the "CHOKE" position.



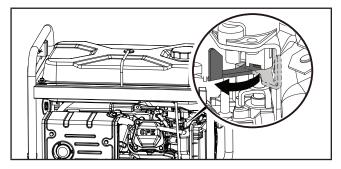
- 3. For restarting a warm engine, move the choke to 75% of the "CHOKE" position.
- 4. Push the ignition switch to the "ON" position.



5. Pull the starter cord slowly until resistance is felt and then pull rapidly



6. Do not over-choke. As soon as engine starts, move the choke to the "RUN" position over a 2-5 second duration.



NOTICE

Keep choke in "CHOKE" position for only 1 pull of the recoil starter. After first pull, move choke to "RUN" position for up to 3 pulls of the recoil starter. Too much choke leads to spark plug fouling/engine flooding due to lack of incoming air. This will cause the engine not to start.

PNOTICE

For gasoline restarts with hot engine in hot ambient temperature > 86°F (30°C), keep choke in 75% of the "CHOKE" position for only 1 pull of the recoil starter. After first pull, move choke to "RUN" position for up to 3 pulls of the recoil starter. Too much choke leads to spark plug fouling/engine flooding due to lack of incoming air. This will cause the engine not to start.

NOTICE

For gas starting in cold ambient temperature < 59°F (15°C), the choke must be in 100% of "CHOKE" 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.

PNOTICE

For Wireless and Electric Start only: 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.

NOTICE

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

Battery

PNOTICE

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 battery does re-charge while the engine is running and the battery switch is turned ON, but it is also recommended that the battery be fully charged at least once per month or maintained with a trickle charger or battery maintainer (not included).

Connecting Electrical Loads

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

Plug in and turn on the desired 120 or 240 (if applicable) Volt AC single phase, 60 Hz electrical loads.

- DO NOT connect 3-phase 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:

- 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.
- Identify the highest starting wattage of all devices identified in step 1. Add this number to the number calculated in step 2. Starting wattage is the surge 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 × 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 get up to temperature.
- 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.

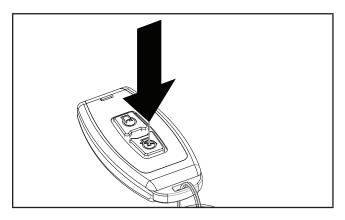
NOTICE

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

Stopping the Engine

Remote Stop

- 1. Turn off all electrical connected loads. Never start or stop the generator with electrical devices turned on.
- 2. Let the generator run at no-load for several minutes to stabilize internal temperatures of the engine and generator.
- 3. Press the "STOP" button on the remote.



PNOTICE

Engine will shut off but the battery switch, ignition switch, and fuel valve will remain in the "ON" position waiting for the next start instruction.

To completely shut down the generator, make sure the ignition switch, battery switch, and fuel valve are in the "OFF" position when the generator will not be used for an extended period of time.

NOTICE

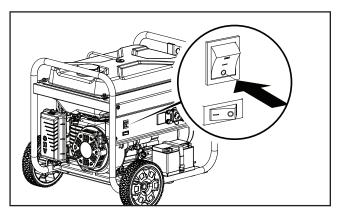
Battery power is drawn while the generator is in standby mode (battery switch ON).

Do not leave generator in standby mode for an extended period of time or the battery will be completely drained and the wireless remote and electric start feature will no longer function.

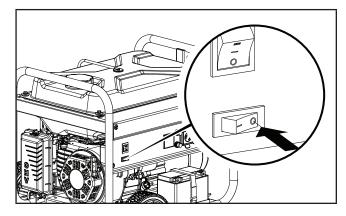
Manual Stop

- 1. Turn off and unplug all electrical connected 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.

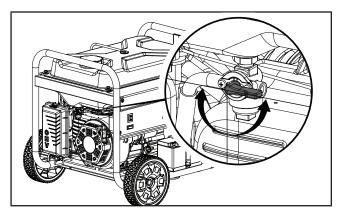
3. Press the ignition switch to the "OFF" position.



4. *If generator was started electrically,* press the battery switch to the "OFF" position.



5. Turn the fuel valve to the "OFF" position.



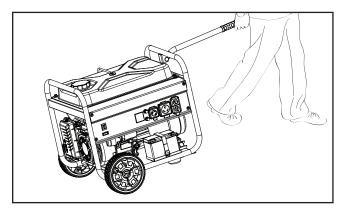
Important: Always ensure that the fuel valve, the ignition switch, and the battery switch are in the "OFF" position when the generator will not be used for an extended period of time.

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.

Moving the Generator

- NEVER lift or carry the generator using the folding handle.
- ALWAYS place the generator on its wheels in the upright position.
- ALWAYS turn the generator off and ensure the fuel valve is closed.
- ALWAYS make sure engine and muffler are cooled down before the generator can be handled safely (typically 15-30 minutes).
- 1. Begin by raising the folding handle, found on opposite side of wheels.
- 2. Using the handle, tilt the end of the generator slightly off the ground until balanced on the wheels.
- 3. While maintaining balance, roll the generator to the desired location.



- NEVER tilt sideways while moving the generator.
- Failure to follow these instructions could result in personal injury or damage to the generator.

Operation at High Altitude

The density of air at high altitudes 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. 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, CPE can provide a high altitude carburetor main jet. The alternative main jet and installation instructions can be obtained by contacting our Technical Support Team. Installation instructions are also available in the Technical Bulletin area of the CPE website.

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

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 high altitude jet part number corresponding to the carburetor code found on your particular carburetor.

Carb. Code High Alt. Jet Part Number		Min. Altitude	
Р22-3-Н	I 27 131017 01 01 H	3,500 ft. (1,067 m)	

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 originally supplied 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.

A WARNING

Never operate a damaged or defective generator.

A WARNING

Improper maintenance will void your warranty.

NOTICE

For Emission control devices and systems, read and understand your responsibilities for service as stated in the Emission Control Warranty Statement of this manual.

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 Technical Support Team at 1-877-338-0999.

Cleaning the Generator

A CAUTION

DO NOT spray generator directly with water.

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

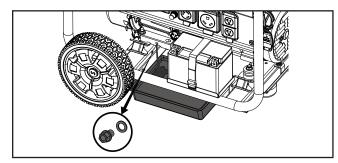
- 1. Use a damp cloth to clean exterior surfaces of the generator.
- 2. Use a soft bristle brush to remove dirt and oil.
- 3. Use an air compressor (25 PSI) to clear dirt and debris from the generator.
- 4. Inspect all air vents and cooling slots to ensure that they are clean and unobstructed.

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 (not included) and extension.
- 2. Allow the oil to drain completely into an appropriate container.



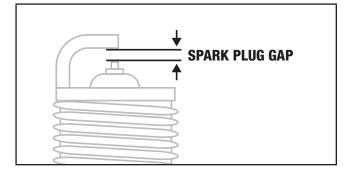
- 3. Replace the oil drain plug.
- 4. Remove the oil fill cap/dipstick to add oil.
- Add oil according to "Add Engine Oil" in Assembly section. DO NOT OVERFILL. Oil not included for routine maintenance.
- 6. Dispose of used oil at an approved waste management facility.

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

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



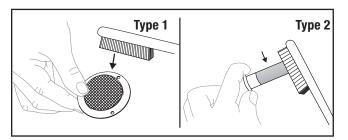
- 5. Refer to the spark plug types in <u>Specifications</u> when replacing the plug.
- 6. Firmly re-install the plug.
- 7. Attach the spark plug cable to the spark plug.

Cleaning the Air Filter

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

Cleaning the Spark Arrestor

- 1. Allow the engine to cool completely before servicing the spark arrestor.
- Remove the two or three screws (varies by model) holding the cover plate which retains 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.



*See your model's parts list for specified type of spark arrestor.

- 5. Replace the spark arrestor if it is damaged.
- 6. Position the spark arrestor on the muffler and attach with the screws removed in step 2.

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. Contact our Technical Support Team at 1-877-338-0999 for all other service and/or adjustment needs.

Generator Battery

Your generator is equipped with an automatic battery charging circuit that charges the battery while 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 (not included) 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 (–) battery lead.
- 2. Disconnect the black (–) lead from the black (–) terminal on the battery and store the cap screw and nut.
- 3. Repeat steps 1-2 for the red (+) 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. A trickle charger or battery maintainer should be used to charge the battery while the generator is in storage. Maximum charging rate should not exceed 1.5 amps. Follow the instructions included with the trickle charger or battery maintainer. The battery should be fully charged at least once per month.

Remote Control Battery

NOTICE

- Always purchase the correct size and grade of battery most suitable for the intended use.
- Clean the battery contacts and also those of the device prior to battery installation.
- Remove batteries from equipment which is not to be used for an extended period of time.
- Remove batteries if consumed or if product is to be left unused for a long time.

Maintenance Schedule

Follow the service intervals indicated in the following maintenance schedule.

Service your generator more frequently when operating in adverse conditions.

Contact our Technical Support Team at 1-877-338-0999 to locate the nearest CPE certified service dealer for your generator or engine maintenance needs.

EVERY 8 HOURS OR PRIOR TO EACH USE

- Check oil level
- Clean around air intake and muffler

FIRST 5 HOURS (BREAK IN)

□ Change oil

EVERY 50 HOURS OR ANNUALLY

- Clean air filter
- □ Change oil if operating under heavy load or in hot environments

EVERY 100 HOURS OR ANNUALLY

- □ Change oil
- Clean/adjust spark plug
- Clean spark arrestor
- Clean fuel valve filter*

EVERY 250 HOURS

- Clean combustion chamber*
- Check/adjust valve clearance*

EVERY 3 YEARS

Replace fuel line*

*To be performed by knowledgeable, experienced owners or CPE certified service centers.

STORAGE

A DANGER

Gasoline vapors 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 gasoline container, gasoline tank, or any other fuel item that is damaged or appears damaged. DO NOT overfill the gasoline 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 30 days)

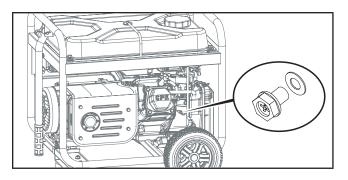
Gasoline may gum up and clog the carburetor if the generator is not run or carburetor drained within 4 weeks.

- 1. Be sure all appliances are disconnected from the generator.
- Start the generator as instructed in "Starting the Engine" section.
- 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. Move the ignition switch to the "OFF" position.

Mid Term Storage (30 days - 1 year)

Gasoline in the tank has a maximum shelf life of up to 1 year with the addition of a properly formulated fuel stabilizer and stored in a cool, dry place.

- 1. Be sure all appliances are disconnected from the generator.
- 2. Add a properly formulated fuel stabilizer to the gasoline tank.
- 3. Turn the fuel valve to the "ON" position.
- 4. Start and run the generator for 10 minutes so the treated gasoline cycles through the fuel system.
- 5. Option 1: Drain Gasoline from Carburetor
 - 5a. Turn ignition switch to the "OFF" position and allow generator to cool completely before continuing.
 - 5b. Turn the fuel valve to the "OFF".
 - 5c. 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.



5d. 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.

6. Option 2: Run Dry

- 6a. 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.
- 6b. Turn ignition switch to the "OFF" position and allow generator to cool completely before continuing.
- 7. Remove the spark plug cap and spark plug and pour about a tablespoon of oil into the cylinder.
- 8. Pull the recoil slowly to crank the engine to distribute the oil and lubricate the cylinder.
- 9. Install the spark plug and spark plug cap.
- 10. Clean the generator according to <u>Cleaning the Generator</u>.
- 11. Store the generator in a cool, dry place out of direct sunlight.

Long Term Storage (over 1 year)

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

- 1. Follow steps 1-4 according to Mid Term Storage.
 - 1a. Turn ignition switch to the "OFF" position and allow generator to cool completely before continuing.
- 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.
- 3. 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.
- 5. Follow steps 8-11 according to Mid Term Storage.

Removing from Storage

If the generator has been improperly stored for a long period of time with gasoline in the gasoline 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 Team at 1-877-338-0999.

If the gasoline tank and carburetor were properly emptied of all gasoline prior to the generator being stored, follow the below steps when removing from storage.

- 1. Be sure the ignition switch is in the "OFF" position.
- 2. Add gasoline to the generator according to <u>Add Fuel:</u> <u>Gasoline</u>.
- 3. Turn the fuel valve to the "ON" position.
- 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.
- 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. Start the generator according to <u>Starting the Engine</u>.

SPECIFICATIONS

Generator Specifications

Generator Model	
Start Type Wireless, Electric, Manual	
Watts (Starting/Running) 4450/3550	
AC Volts	
AC Amps @ 120V	
Frequency	
Phase Single	
Grounding Type Floating Neutral	
Weight	
Length	
Width	
Height	

Engine Specifications

Model	YF172FD-211
Displacement	
Туре	4-Stroke OHV
Spark Plug	

ОЕМ Туре	NHSP F6RTC
Replacement Type	NGK BPR6ES or equivalent
Gap	0.028-0.031 in. (0.7-0.8 mm)
Valve	
Intake Clearance	0.005-0.007 in. (0.13-0.17 mm)
Exhaust Clearance	0.007-0.009 in. (0.18-0.22 mm)

PNOTICE

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

Oil Specifications

DO NOT OVERFILL.

Type*See chart below
Capacity

Recommended Oil Type							
				10W-3	0		
51	V-30				1	0W-40	
			5W-30 S	ynthetic			
°F -20	0	20	40	60	80	100	120
°C -28.9	-17.8	-6.7	4.4	15.6	26.7	37.8	48.9
			Ambient te	mperature			

NOTICE

Temperature will affect engine oil and engine performance. Change the type of engine oil used based on the temperature to suit the engine needs.

Fuel Specifications

Use unleaded gasoline with a minimum octane rating of 85 and an ethanol content of 10% or less by volume. D0 NOT USE E15 or E85. D0 NOT OVERFILL.

Battery Specifications

Туре	Rechargeable, Non-Spillable Lead Acid
Volts	
Capacity	

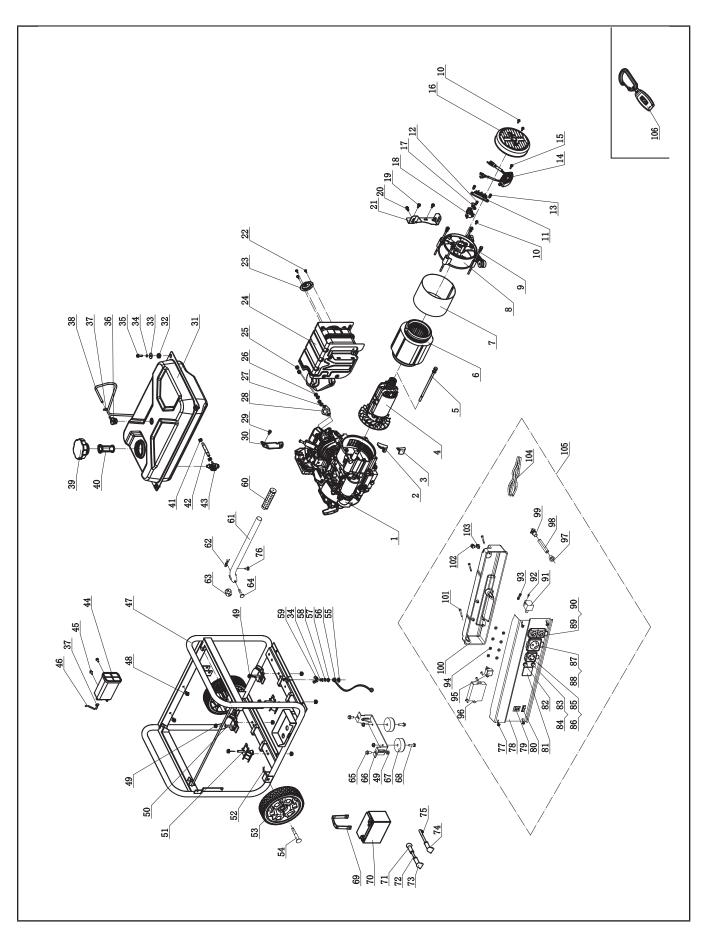
Temperature Specifications

Starting Temperature Range (°F/°C)	5 to 104/-15 to 40
Remote Starting Temperature	
Range (°F/°C)	23 to 104/-5 to 40

NOTICE

An important message about temperature: Your product is designed and rated for continuous operation at ambient temperatures up to 104°F (40°C). When 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	27.603	Engine, 224cc	1
2	122.190005.00	Rubber, Fore-Cover, B	1
3	122.190005.01	Rubber, Fore-Cover, A	1
4	124.191100.02	Rotor Assembly, Al, $\emptyset 160 \times 130$ mm, CSA	1
5	2.08.109	Flange Bolt/Washer Assembly M8 × 252	1
6	124.191200.02	Stator Assembly, Al, Ø160 × 130 mm, CSA	1
7	124.191002.01	Stator Cover	1
8	122.190002.00	End Housing	1
9	2.08.032	Flange Bolt/Washer Assembly M6 × 179	4
10	1.16674.0512.2	Flange Bolt M5 \times 12	3
11	122.190400.00	Terminal Block	1
12	1.9074.15.0520	Screw/Washer Assembly M5 × 20	1
13	1.9074.17.0516	Screw/Washer Assembly M5 × 16	2
14	122.190200.05	AVR	1
15	1.16674.0516	Flange Bolt M5 × 16	2
16	122.190003.00.48	Generator End Cover, Yellow	1
17	122.190004.01	Pinch, Carbon Brush	1
18	122.190300.00	Carbon Brush Assembly	1
19	1.5789.0620	Flange Bolt M6 × 20	2
20	1.5789.0615	Flange Bolt M6 × 15	1
21	27.100100.01	Bracket, Muffler	1
22	1.823.0406	Screw M4 × 6	3
23	27.101300.00	Spark Arrester Assembly	1
24	27.101000.01.2	Muffler Assembly	1
25	1.6175.08	Nut M8	2
26	1.93.08	Lock Washer Ø8	2
27	1.848.08	Washer Ø8	2
28	26.100001.00	Gasket, Exhaust	1
29	1.5789.0608	Flange Bolt M6 \times 8	1
30	23.090006.21	Holder, Air Cleaner	1
31	122.071000.48.48	Fuel Tank, 15.1L, Yellow	1
32	122.070015.01	Mount Vibration, Fuel Tank	4
33	2.03.004.1	Flat Washer, Ø24 × Ø6.5 × 1.5, Black	4

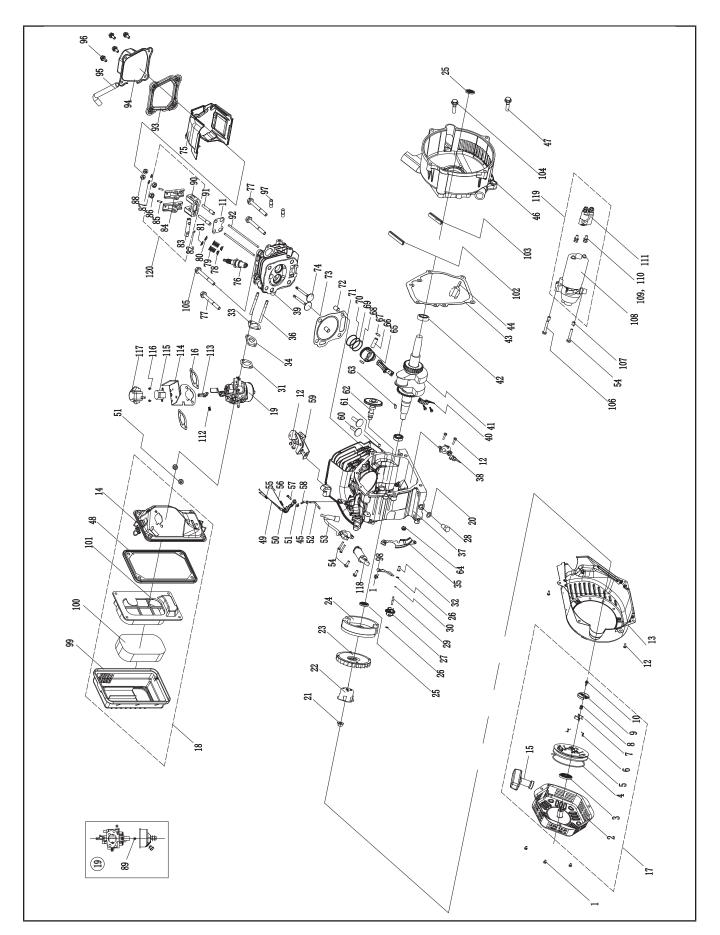
#	Part Number	Description	Qty.
" 34	1.93.06	Lock Washer Ø6	u ty. 5
34	1.93.00	Flange Bolt M6 \times 20,	5
35	1.5789.0620.1	Black	4
36	24.070800.00	Reversal Valve	1
37	2.06.006	Clamp Ø7 \times Ø1	3
38	122.070014.01	Pipe, Reversal Valve, 740+30 mm	1
39	122.070100.07	Fuel Tank Cap	1
40	122.070300.03	Fuel Filter	1
41	2.06.007	Clamp Ø8 × b6	2
42	23.070011.04	Fuel Pipe, 155 mm	1
43	122.070400.05	Fuel Valve	1
44	122.070700.00	Carbon Canister, 320cc	1
45	1.5789.0612	Flange Bolt M6 \times 12	2
46	122.070013.00	Pipe, Air Cleaner, 85+30+30mm	1
47	62372.09.16.2	Frame, 590 × 466 × 492mm	1
48	2.05.001	Clamp Ø8 × 6.5	2
49	1.6177.1.08	Lock Nut M8, Flange	12
50	122.201200.07	Motor Mount 2	2
51	122.201200.06	Motor Mount 1	2
52	2.16.001.1	Pin Ø2 × 33, "R" Shape, Black	2
53	122.201701.10.48	8in Wheel, Yellow	2
54	122.201501.27.1	Pin Roll, Wheel, Ø16 × Ø10 × 92, Black	2
55	1.862.06	Lock Washer Ø6, Toothed	1
56	5.1900.026	Grounding Line 150 mm	1
57	1.6177.1.06	Lock Nut M6, Flange	1
58	1.97.1.06	Washer Ø6	2
59	1.62.06	Butterfly Type Nut M6	1
60	152.200702.00	Cover, Handle	1
61	122.200701.11	Handle	1
62	11.110008.00	"R" Shape	1
63	122.201001.00	Hard Rubber	1
64	122.200703.11	Short Pin, Handle	1
65	1.5789.0816	Flange Bolt M8 × 16	2
66	152.200002.00.2	Support Leg 60 mm	1
67	152.201400.00	Rubber, Support	2
68 60	1.5789.0825	Flange Bolt M8 × 25	2
69	122.200904.00	Pinch, Rubber	1

SPECIFICATIONS

#	Part Number	Description	Qty.
70	9.1000.090	Battery 12V9AH	1
71	152.200013.01.3	Jacket, Wire, Red	1
72	5.1900.010	Red Wire, 190 mm, Battery	1
73	122.200013.01.3	Jacket, 9AH Battery, Red	1
74	122.200013.01.1	Jacket, 9AH Battery, Black	1
75	5.1900.011	Black Wire, 190 mm, Battery	1
76	122.201400.03	Rubber	1
77	2.08.068.1	Flange Bolt M5 × 13, Black	4
78	122.019.123.2	Control Panel, Black	1
79	5.1000.004.3	Ignition Switch, Red	1
80	5.1000.000.3	Switch, Battery	1
81	5.1430.008	Intelligauge, VFT-2	1
82	5.1210.920	20Amp Circuit Breaker, Push Button, CSA	1
83	5.1210.930	30Amp Circuit Breaker, Push Button, CSA	1
84	5.1870.014	Circuit Breaker Cover, Push Button	2
85	5.1120.008	Receptacle L5-30R	1
86	5.1870.006	Receptacle Cover, L5-30R	1
87	5.1120.036	Receptacle TT-30R	1
88	5.1870.004	Receptacle Cover, TT-30R	1
89	5.1120.010	Receptacle 5-20R, Duplex	1
90	5.1870.008	Receptacle Cover, Receptacle 5-20R, Duplex	1
91	5.1810.001	Over Voltage Protector	1
92	1.818.0514.2	Screw M5 × 14	4
93	5.1280.003	Fuse 10A	1
94	1.6177.1.04.1	Lock Nut M4, Flange	8
95	5.1820.000	Charger	1
96	5.1830.000	Remote Control	1
97	122.210003.01	Wire Jacket, Control Box	1
98	5.1330.001	Sheath, Wire	1
99	122.210003.03	Plug, End Cover	1
100	122.210002.38	Control Box	1
101	1.9074.1.0538.2	Bolt/Washer Assembly M5 × 38	3

#	Part Number	Description	Qty.
102	5.1460.004	Pilot Lamp	1
103	5.1040.004	Remote Exercise Button	1
104	100576.21.10	Wire Assembly	1
105	100576.21	Control Panel Assembly	1
106	9.2600.002	Remote	1

Engine Parts Diagram



Engine Parts List

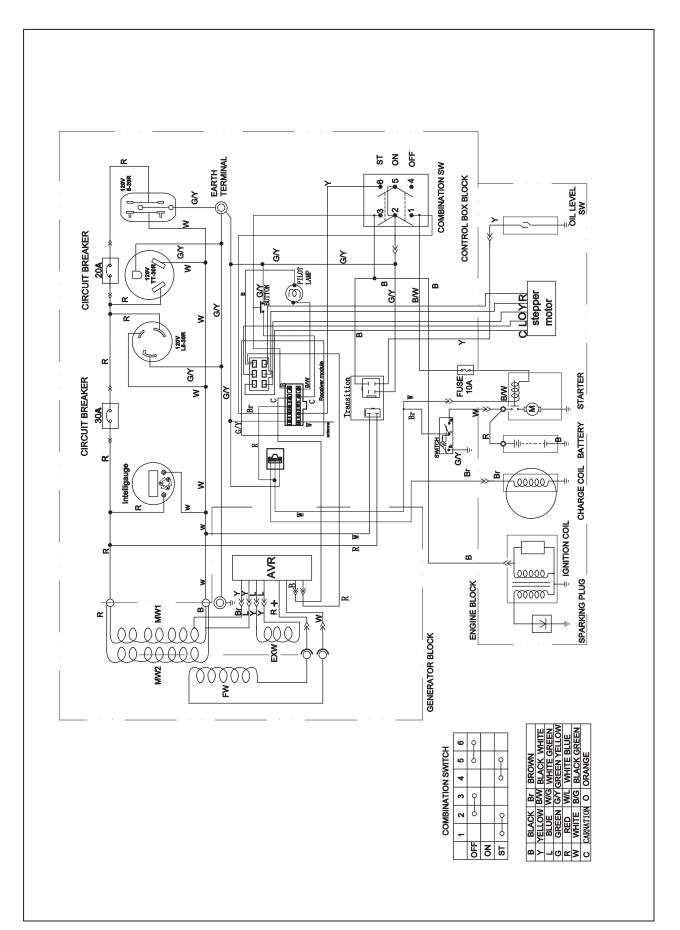
#	Part Number	Description	Qty.
1	1.5789.0608	Flange Bolt M6 × 8	4
		Cover, Recoil Starter,	
2	22.061100.00.2	Black	1
3	21.061005.00	Spring, Recoil Starter	1
4	2.10.003.1	Rope Ø4 × 1550, Black	
5	21.061001.01	Reel, Recoil Starter	1
6	45.060003.00	Spring, Ratchet	2
7	45.060002.00	Starter Ratchet, Steel	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 \times 12	8
13	27.080100.04.48	Fan Cover, Yellow	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	Carburetor	1
15	27.131000.07		
20	2.03.016	Washer Ø10 × Ø16 × 1.5, Drain Bolt	1
21	2.02.006	Nut M14 × 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	0il Seal Ø25 × Ø41.3 × 6	2
26	2.03.020.1	Washer Ø6.2 × Ø15 × 0.5, Black	2
27	21.110100.00	Gear, Governor	1
28	2.08.037	Drain Bolt M10 × 25 × 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, Governor Gear, Steel	1
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 \times 90	2

#	Part Number	Description	Qty.	
37	27.030100.01	Crankcase	1	
38	21.127000.02	Oil Level Sensor		
39	26.010100.01			
40	27.050200.00	Connecting Rod		
41	27.050100.00	Connecting Rod 1 Crankshaft 1		
42	1.276.6205	Bearing 6205		
43	24.030008.00	Gasket, Crankcase Cover	1	
44	22.031000.00.48	Oil Dipstick Assembly, Yellow	1	
45	2.03.021.1	Washer Ø6.4 × Ø13 × 1, Black	1	
46	27.030007.01	Cover, Crankcase	1	
47	1.5789.0832	Flange Bolt M8 × 32	5	
48	23.091002.21	Seal, Air Cleaner	1	
49	23.110006.00	Rod, Governor	1	
50	27.110003.00	Arm, Governor		
51	1.6177.06	Flange Nut M6		
52	21.110001.00	Shaft, Governor Arm		
53	22.123000.02	Ignition Coil, Shield		
54	1.5789.0625	Flange Bolt M6 \times 25	5	
55	23.110005.01	Spring, Throttle Return	1	
56	23.110007.00	Spring, Governor		
57	2.08.040	Bolt M6 \times 21,	1	
		Governor Arm		
58	21.110008.00	Pin, Shaft	1	
59	27.111000.20	Control Assembly	1	
60	25.040013.00	Lifter, Valve	2	
61	2.04.001	Dowel Pin Ø9 × 14	2	
62 63	27.041000.00 2.14.012	Camshaft Woodruff Key 4 × 7.5 × 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 × Ø1		
68	27.050303.00	Ring, Oil		
69	27.050302.00			
70	27.050301.00	Ring, First Piston	1	
71	27.030009.01	Gasket, Cylinder Head		
72	2.04.003	Dowel Pin $Ø10 \times 14$	2	
73	23.040002.02	Valve, Intake	1	
74	23.040006.02	Valve, Exhaust	1	
75	27.080200.00	Air Shroud, Cylinder	1	
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#	Part Number	Description	Qty.
76	2.15.002(F6RTC)	Spark Plug F6RTC	1
77	1.5789.0865	Flange Bolt M8 × 65	3
78	23.040017.00	Oil Seal, Valve, Iron	
79	21.040003.00	Spring, Valve	
80	21.040007.00	Retainer, Exhaust Valve Spring	
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 × 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
09	27.131017.01.01	Altitude Main Jet	/
90	24.040201.00	Retainer, Rocker Arm	
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	1
95	23.020001.02	Breather Tube, 112 + 35	
96	1.5789.0615	Flange Bolt M6 × 15	4
97	2.01.010	Stud Bolt M8 × 35	2
98	23.030006.00	Plate, Coil	1
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	1.5789.0840	Flange Bolt M8 × 401	
105	2.08.121	Flange Bolt M10 × 65 1	
106	1.5789.0629	Flange Bolt M6 \times 29	1
107	2.04.005	Dowel Pin Ø8 × 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 × 16	2

#	Part Number	Description	Qty.
111	23.125200.01	Relay, Starter, Remote Control	1
112	81.130010.00	Spring, Connector	1
113	26.130015.24	Connector, 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 × 8	2
117	81.132001.00	Cover, Stepper Motor	1
118	45.121000.00	Coil, Charging	1
119	27.125000.02	Starter Motor Assembly	1
120	24.040200.00	Rocker Arm Assembly	1

Wiring Diagram



TROUBLESHOOTING

Problem	Cause	Solution
	No fuel.	Add fuel.
	Faulty spark plug.	Clean and adjust spark plug or replace.
		Fill crankcase to the proper level.
	Low oil level.	Place generator on a flat, level surface.
Engine will not start.	Spark plug wire loose.	Attach wire to spark plug.
	Fuel valve is closed.	Open fuel valve.
	Ignition switch OFF.	Press Ignition switch ON.
	Old fuel or water in fuel.	Drain fuel and replace with fresh fuel.
	Flooded with fuel.	Let unit stand for 10 mins.
	Choke in the wrong position.	Move choke until it stops under RUN position or push in completely.
Engine starts but runs roughly.	Dirty air filter.	Clean or replace air filter.
	Dirty fuel valve.	Clean the fuel valve.
	Clogged spark arrestor.	Clean spark arrestor.
	Remote control battery is dead.	Replace remote control battery.
	Generator battery is dead.	Recharge generator battery.
Engine will not start wirelessly.	Battery switch is in the OFF position.	Turn battery switch to ON position.
Lingine will not start wirelessiy.	Generator out of range of remote signal.	Remote must be with 80 feet of generator.
	Obstructions in between generator and	Clear line of site between generator and
	remote.	remote.
Engine will not start electrically.	Generator battery is dead.	Recharge generator battery.
	Battery switch is in the OFF position.	Turn battery switch to ON position.
	Out of fuel.	Fill fuel tank.
Engine shuts down during operation.	Low oil level.	Fill crankcase to the proper level. Place generator on a flat, level surface.
	Clogged spark arrestor.	Clean spark arrestor.
Conceptor conceptor and a second	Generator is overloaded.	Review load and adjust. See "Connecting Electrical Loads."
Generator cannot supply enough power or overheating.	Dirty air filter.	Clean or replace air filter.
or overneating.	Choke in wrong position.	Move choke until it stops under RUN position or push in completely.
	Poor cord connection.	Check all connections.
	Circuit breaker is open.	Reset circuit breaker.
Engine is supping but as AC sutput	Faulty brush assembly.	Replace brush assembly (Service Center).
Engine is running but no AC output.	Faulty AVR (auto voltage regulator).	Replace AVR (Service Center).
	Loose wiring.	Inspect and tighten wiring connections.
	Other.	Contact the help line.
	Engine governor defective.	Contact the help line.
	Dirty fuel valve.	Clean the fuel valve.
Engine hunts or falters.	Carburetor is dirty and running lean.	Contact the help line.
	Choke in wrong position.	Move choke until it stops under RUN position or push in completely.

Problem	Cause	Solution
	Overload.	Review load and adjust. See "Connecting Electrical Loads."
Repeated circuit breaker tripping.	Faulty power cords or device.	Check for damaged, bare or frayed wires. Replace defective device.
	Circuit breaker still too hot.	Let unit sit for 5 mins.

For other issues and technical support:

Technical Support Team Mon-Fri 8:30 AM-5:00 PM (PST/PDT) Toll Free 1-877-338-0999 support@championpowerequipment.com