

# CHAMPION

GLOBAL POWER EQUIPMENT TM-MC

OWNER'S MANUAL & OPERATING INSTRUCTIONS



11,250 Starting Watts / 9,000 Running Watts  
Electric Start

## PORTABLE GENERATOR



MODEL NUMBER  
**100203**

**SAVE THESE INSTRUCTIONS**  
Important safety instructions  
are included in this manual.

MADE IN CHINA  
REV 100203-20190107

12039 Smith Ave.  
Santa Fe Springs CA 90670  
USA / 1-877-338-0999  
[www.championpowerequipment.com](http://www.championpowerequipment.com)

**AN 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 necessary, your product may be operated at temperatures ranging from -15°C (5°F) to 50°C (122°F) for short periods. If the product is 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 other vents.

**Have questions or need assistance?**

Do not return this product to the store!

**WE ARE HERE TO HELP!**

Visit our website:

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

for more info:

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

– or –

Call our Customer Care Team Toll-Free at:

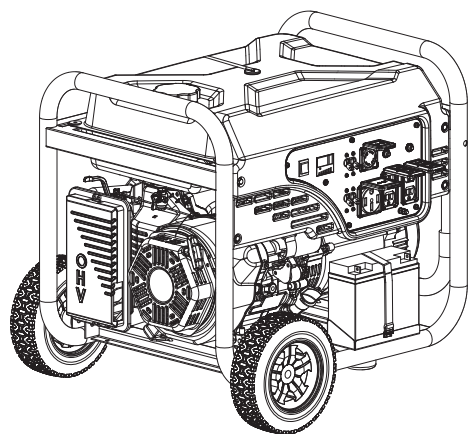
**1-877-338-0999**

**Parts Ordering:**

Mon – Fri 8:30 AM – 5:00 PM (PST/PDT)

Toll Free: 1-877-338-0999

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



11,250 Starting Watts / 9,000 Running Watts  
Electric Start

# PORTABLE GENERATOR

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# INTRODUCTION

## Introduction

Congratulations on your purchase of a Champion Power Equipment product. Champion Power Equipment and Champion Engine Technology 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, and we reserve the right to change, alter and/or improve the product and this document at any time without prior notice.

Since CPE/CET highly value how our products are designed, manufactured, operated and 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/CET product for years to come.

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

<b>Champion Power Equipment Support</b>
<b>1-877-338-0999</b>
Model Number
<b>100203</b>
Serial Number
Date of Purchase
Purchase Location
For <b>Oil Type</b> see 'Add Engine Oil' section. For <b>Fuel Type</b> see 'Add Fuel' section.



This manual uses the following symbols to help differentiate between different kinds of information. The safety symbol is used with a key word to alert you to potential hazards in operating and owning power equipment.

Follow all safety messages to avoid or reduce the risk of serious injury or death.

 **DANGER**

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

 **WARNING**

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

 **CAUTION**

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

**CAUTION**

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

 **NOTE**

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

# SAFETY RULES

## WARNING

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

## DANGER

Generator exhaust contains carbon monoxide, a colourless, odourless 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, or any enclosure or compartment, including the generator compartment of a recreational vehicle.

DO NOT allow exhaust fumes to enter a confined area through windows, doors, vents or other openings.

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

## DANGER

Rotating parts can entangle hands, feet, hair, clothing and/or accessories.  
Traumatic amputation or severe laceration can result.

Keep hands and feet away from rotating parts.  
Tie up long hair and remove jewellery.  
Operate equipment with guards in place.  
DO NOT wear loose-fitting clothing, dangling drawstrings or items that could become caught.

## 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.

## 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 generator (GFCI) in damp areas and areas containing conductive material such as metal decking.  
Use approved transfer equipment to isolate generator from your electric utility and notify your utility company before connecting your generator to your power system.

## WARNING

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 91.4 cm (3 ft.) of clearance on all sides to ensure adequate cooling.  
Maintain at least 1.5 m (5 ft.) of clearance from combustible materials.

## WARNING

Medical and Life Support Uses.

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

**⚠ DANGER**

Fuel and fuel vapours are highly flammable and extremely explosive.  
Fire or explosion can cause severe burns or death.  
Unintentional startup can result in entanglement, traumatic amputation or laceration.

**When adding or removing fuel:**

Turn the generator off and let it cool for at least two minutes before removing the fuel cap. Loosen the cap slowly to relieve pressure in the tank.  
Only fill or drain fuel outdoors in a well-ventilated area. DO NOT pump gas directly into the generator at the gas station. Use an approved container to transfer the fuel to the generator.  
DO NOT overfill the fuel tank.  
Always keep fuel away from sparks, open flames, pilot lights, heat and other sources of ignition.  
DO NOT light or smoke cigarettes.

**When starting the generator:**

DO NOT attempt to start a damaged generator.  
Make certain that the gas cap, air filter, spark plug, fuel lines and exhaust system are properly in place.  
Allow spilled fuel to evaporate fully before attempting to start the engine.  
Make certain that the generator is resting firmly on level ground.

**When operating the generator:**

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

**When transporting or servicing the generator:**

Make certain that the fuel shutoff valve is in the off position and the fuel tank is empty.  
Disconnect the spark plug wire.

**When storing the generator:**

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

**⚠ WARNING**

Operation of this equipment may create sparks that can start fires around dry vegetation.

A spark arrestor may be required. The operator should contact local fire agencies for laws or regulations relating to fire prevention requirements.

**⚠ WARNING**

Rapid retraction of the starter cord will pull hand and arm towards the engine faster than you can let go.  
Unintentional startup can result in entanglement, traumatic amputation or laceration.  
Broken bones, fractures, bruises or sprains could result.

When starting engine, pull the starter cord slowly until resistance is felt and then pull rapidly to avoid kickback.  
DO NOT start or stop the engine with electrical devices plugged in.

**⚠ CAUTION**

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

DO NOT overload the generator.  
Start the generator and allow the engine to stabilize before connecting electrical loads.  
Connect electrical equipment in the off position, and then turn them on for operation.  
Turn electrical equipment off before stopping the generator.  
DO NOT tamper with the governed speed.  
DO NOT modify the generator in any way.

**⚠ CAUTION**

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

Use the generator only for intended uses.  
Operate only on level surfaces.  
DO NOT expose generator to excessive moisture, dust, or dirt.  
DO NOT allow any material to block the cooling slots.  
If connected devices overheat, turn them off and disconnect them from the generator.  
DO NOT use the generator if:

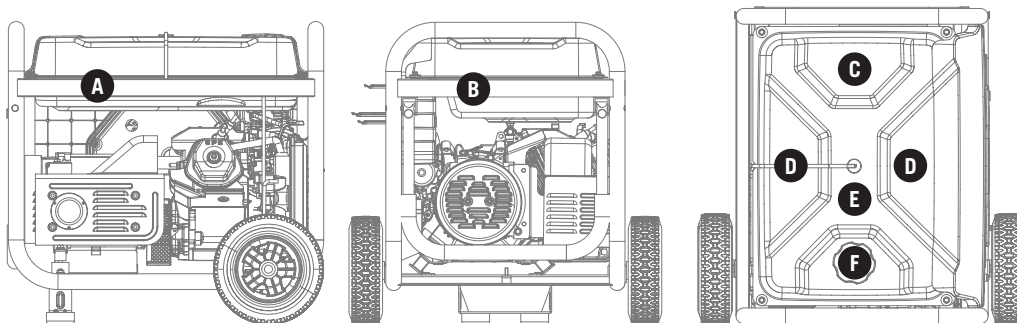
- Electrical output is lost
- Equipment sparks, smokes or emits flames
- Equipment vibrates excessively

# SAFETY RULES

## Safety Label Locations

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.



<b>A</b>		<b>⚠ WARNING</b>	<b>⚠ ADVERTENCIA</b>	<b>⚠ AVERTISSEMENT</b>	
	<b>DO NOT TOUCH!</b> Exhaust gases, muffler and engine components are extremely HOT and cause burns.	Operation of this equipment may create sparks that can start fires around dry vegetation. A spark arrester may be required. The operator should contact local fire agencies for laws and regulations relating to fire prevention requirements. If installed, clean every 100 hours or every season.	<b>¡NO TOCAR!</b> Los gases de escape, el silenciador y los componentes del motor están extremadamente CALIENTES y causan quemaduras.	La operación de este equipo puede producir chispas que pueden provocar incendios alrededor de la vegetación seca. Un supresor de chispas puede que sea necesario. El operador debe comunicarse con las agencias locales de bomberos para las leyes y reglamentos relativos a los requisitos de prevención de incendios. Si está instalado, limpiar cada 100 horas o cada temporada.	<b>NE PAS TOUCHER!</b> Les gaz d'échappement, le silencieux et les pièces du moteur sont extrêmement CHAUDS et peuvent causer des brûlures.

<b>B</b>		<b>⚠ CAUTION</b>	<b>⚠ PRECAUCIÓN</b>	<b>⚠ MISE EN GARDE</b>
	A transfer switch MUST be used when connecting generator to a building's electrical system. See Owner's Manual.	Es OBLIGATORIO usar un interruptor de transferencia cuando se conecta el generador al sistema eléctrico de un inmueble. Vea el manual del propietario.	Le commutateur de transfert DOIT être utilisé pour connecter le générateur au système électrique d'un immeuble. Consultez le manuel du propriétaire.	

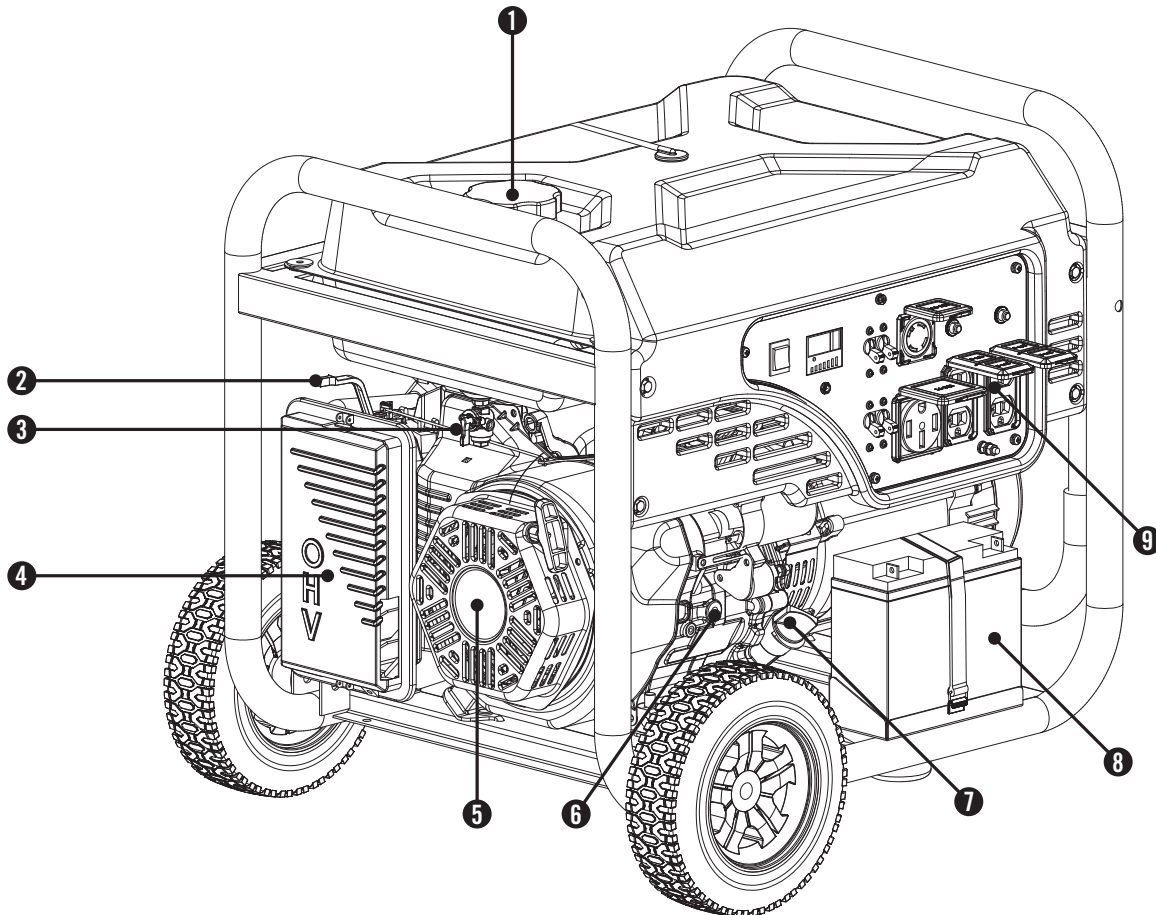
<b>C</b>		<b>⚠ DANGER</b>		<b>NEVER</b> use inside a home or garage, and far away from buildings, sheds, barns, and vents.
	Using a generator indoors CAN KILL YOU IN MINUTES. Generator exhaust contains carbon monoxide. This is a poison you cannot see or smell.	<b>⚠ PELIGRO</b> El uso de un generador en interiores PUEDE MATARLO EN MINUTOS. El escape del generador contiene monóxido de carbono. Esto es un veneno que no se puede ver ni oler.	<b>⚠ DANGER</b> Utiliser un générateur à l'intérieur PEUT VOUS TUER EN QUELQUES MINUTES. L'échappement du générateur contient du monoxyde de carbone. Il s'agit d'un poison que vous ne pouvez ni voir ni sentir.	<b>NEVER</b> use inside a home or garage, and far away from buildings, sheds, barns, and vents.
	<b>⚠ DANGER</b> Using a generator indoors CAN KILL YOU IN MINUTES. Generator exhaust contains carbon monoxide. This is a poison you cannot see or smell.	<b>⚠ PELIGRO</b> El uso de un generador en interiores PUEDE MATARLO EN MINUTOS. El escape del generador contiene monóxido de carbono. Esto es un veneno que no se puede ver ni oler.	<b>⚠ DANGER</b> Utiliser un générateur à l'intérieur PEUT VOUS TUER EN QUELQUES MINUTES. L'échappement du générateur contient du monoxyde de carbone. Il s'agit d'un poison que vous ne pouvez ni voir ni sentir.	<b>NEVER</b> use inside a home or garage, and far away from buildings, sheds, barns, and vents.

<b>D</b>	<b>⚠ DANGER</b>	<b>⚠ DANGER</b>
FOR USE IN A WEATHER-PROTECTED AREA ONLY. DO NOT EXPOSE TO RAIN.	WHEN STORING GASOLINE, PROPANE (LPG) OR EQUIPMENT WITH FUEL IN IT: Store away from furnaces, stoves, water heaters or other appliances that have a pilot light or other ignition source because they can ignite the fuel.	EMPLOYEZ UNIQUEMENT DANS UN EMPLACEMENT À L'ABRI DES INTÉMPÉRIES. NE PAS EXPOSER À LA PLUIE.
<b>⚠ WARNING</b>	Read and follow all operating instructions before running engine.	<b>⚠ AVERTISSEMENT</b>
	Gasoline and propane (LPG) are extremely flammable. Check for spilled fuel or fuel leaks. If one is found, shut off fuel supply and stop engine immediately. Allow to cool at least 2 minutes before refueling.	
	Operation of this equipment may create sparks that can start fires around dry vegetation. A spark arrester may be required. The operator should contact local fire agencies for laws or regulations relating to fire prevention requirements.	
<b>⚠ CAUTION</b>	FOR ELECTRICAL EQUIPMENT ONLY.	<b>⚠ MISE EN GARDE</b>
		POUR MATÉRIEL ÉLECTRIQUE SEULEMENT.



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

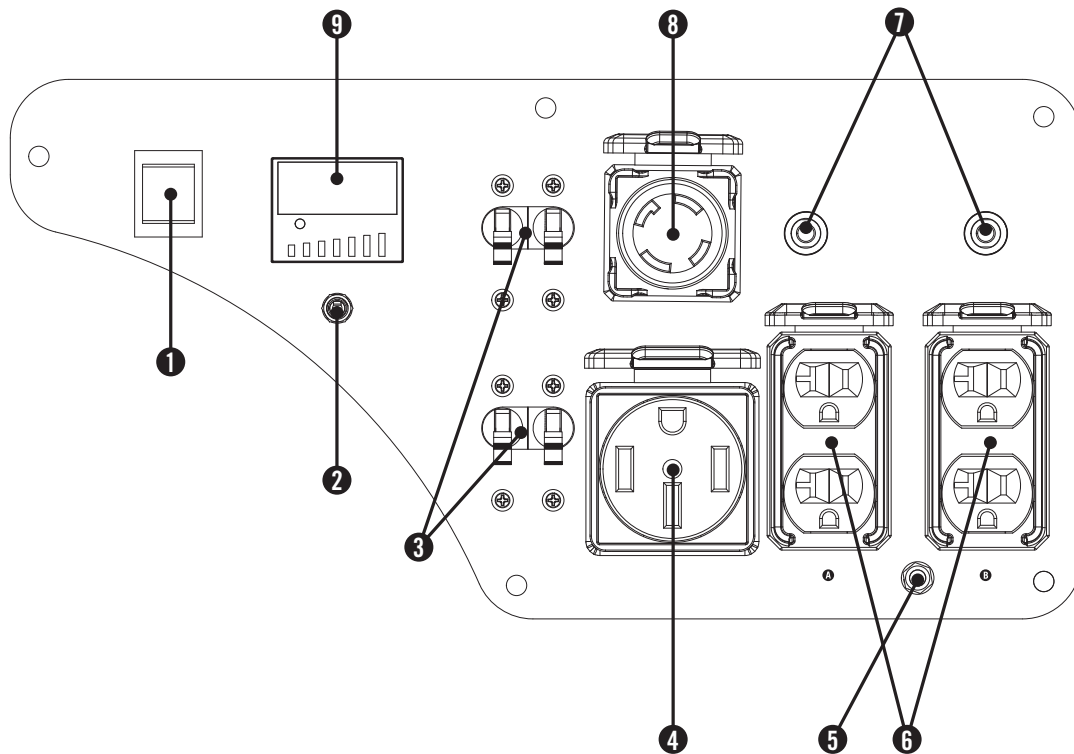
## Generator



- |  |  |
|--|--|
| <p>(1) <b>Fuel Tank</b> – 29 L (7.7 gallon) capacity fuel tank.</p> <p>(2) <b>Choke</b> – Used to start the engine.</p> <p>(3) <b>Fuel Valve</b> – Turn this valve to the “ON” position to supply fuel to the engine.</p> <p>(4) <b>Air Cleaner</b> – Protects the engine by filtering dust and debris from the intake air.</p> <p>(5) <b>Recoil Starter</b> – Used to start the engine.</p> | <p>(6) <b>Low Oil Sensor</b> – Senses the level of oil in the crankcase and shuts the engine down if the level falls too low.</p> <p>(7) <b>Oil Filler Cap</b> – Check and fill engine oil level.</p> <p>(8) <b>Battery</b> – Used to start the engine.</p> <p>(9) <b>Power Panel</b> – See “Power Panel.”</p> |
|--|--|

# CONTROLS AND FEATURES

## Power Panel



- (1) **Ignition Switch** – Flip the switch to the “START” position to start the generator, or to the “ON” position to start the generator manually. Flip to the “OFF” position to turn off the generator.
- (2) **12 V Charger Outlet**
- (3) **Circuit Breakers** – Protect the generator against electrical overload.
- (4) **120/240 Volt AC, 50A Receptacle** (NEMA 14-50R) – May be used to supply electrical power for the operation of 120 and/or 240 Volt AC, single-phase 60 Hz electrical loads.
- (5) **Ground Terminal** – Consult an electrician for local grounding regulations.
- (6) **120V, 20A Duplex (2) (NEMA 5-20R)** – May be used to supply electrical power for the operation of 120 Volt AC, single-phase 60 Hz electrical loads.
- (7) **Circuit Breakers** – Protect the generator against electrical overload.
- (8) **120/240V, 30A Twist-Lock Receptacle** (NEMA L14-30R) – May be used to supply electrical power for the operation of 120 or 240 Volt AC, single-phase 60 Hz electrical loads.
- (9) **Intelligauge with Power Meter** – Display for running hours, voltage and hertz.

## Parts Included

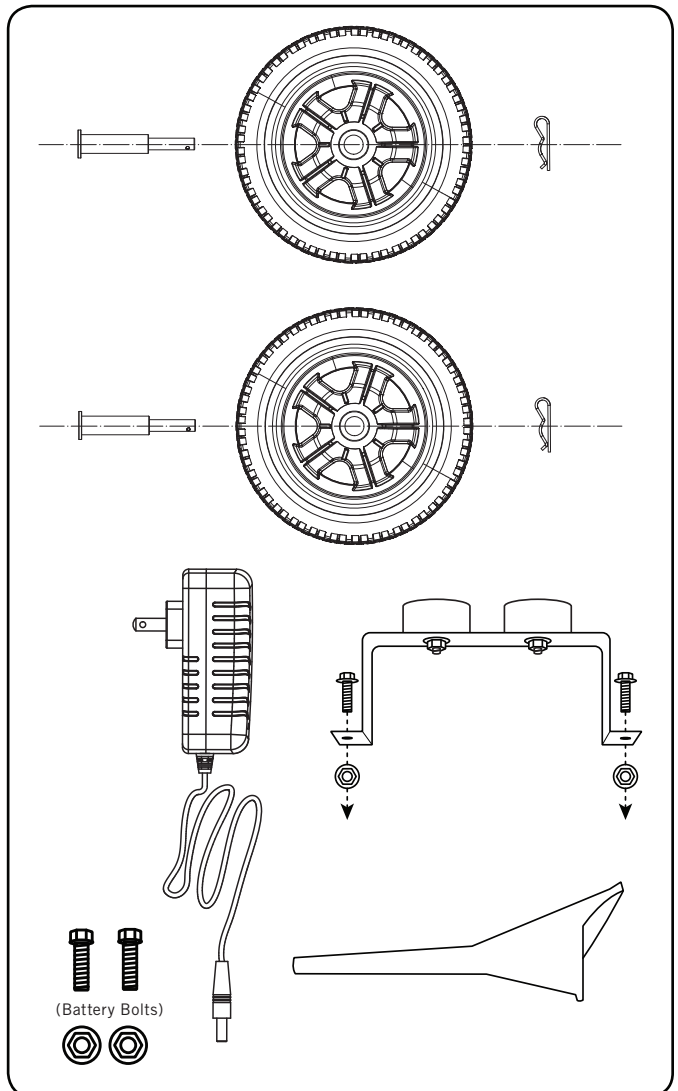
Your 100203 gasoline-powered generator ships with the following parts:

### Wheel Kit

- 24.1 cm (9.5 in.) Wheel . . . . . 2
- Pin Roll,  $\varnothing 16 \times \varnothing 10 \times 107$  (for Wheel) . . . . . 2
- "R" Shape Pin . . . . . 2
- Support Leg w/Vibration Mounts . . . . . 1
- Flange Bolt (M8x16 for Support Leg) . . . . . 2
- Flange Lock Nut (M8) . . . . . 2

### Other

- Smart Charger . . . . . 1
- Oil Funnel . . . . . 1
- Flange Bolt (M5x10 for Battery) . . . . . 2
- Flange Nut (M5) . . . . . 2





# 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.

## Remove the Generator from the Shipping Carton

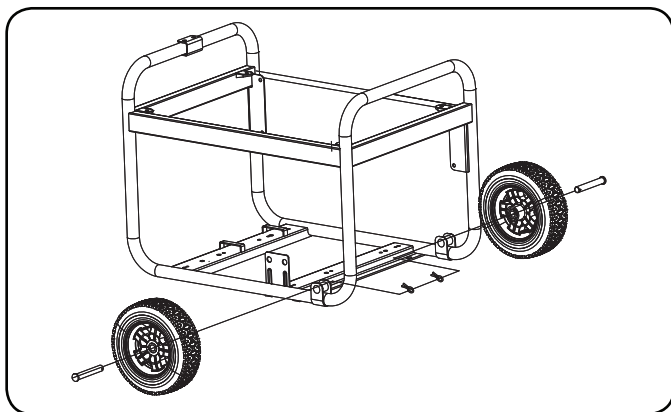
1. Set the shipping carton on a solid, flat surface.
2. Remove everything from the carton except the generator.
3. Carefully cut each corner of the box from top to bottom. Fold each side flat on the ground to provide a surface area to install the wheel kit and support leg.

## Install the Wheel Kit

### ! CAUTION

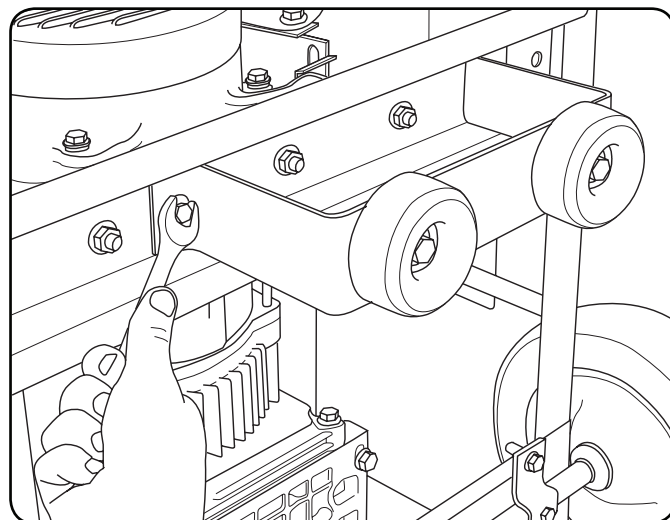
The wheel kit is not intended for over-the-road use.

1. Tip the generator slowly so that the engine side is up.
2. Slide the wheel pin roll through the wheel from the outside.
3. Slide the wheel pin roll through the mount point on the frame.
4. Secure with the "R" Shape Pin.
5. Repeat steps 2-4 to attach the second wheel.



## Install the Support Leg

1. Attach the support leg to the generator frame with flange bolts (M8x16) and flange lock nuts (M8).
2. Tip the generator slowly so that it rests on the wheels and support leg.



## Connect the Battery

1. Remove the protective cover from the red (+) lead on the battery.
2. Attach the red (+) lead to the red (+) terminal on the battery with the flange bolt (M5x10) and secure with the flange nut (M5).
3. Repeat steps 1-2 for the black (-) battery lead.

## Add Engine Oil

### CAUTION

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

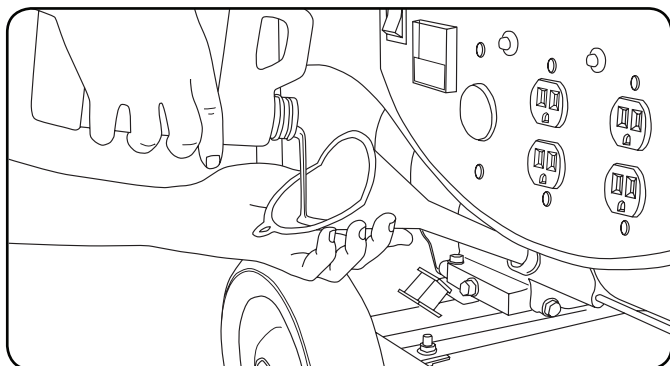
### NOTE

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

### NOTE

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

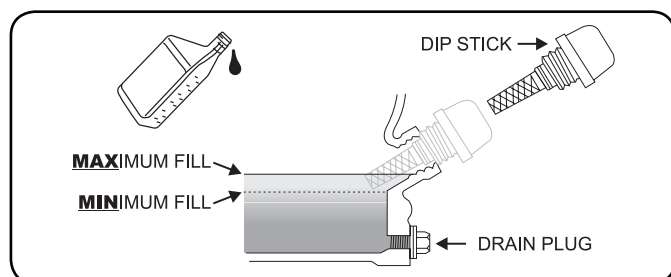
1. Place the generator on a flat, level surface.



2. Remove oil fill cap/dipstick to add oil.
3. Add up to 1.1 L (1.2 qt.) of oil (not included) and replace oil fill cap/dipstick. DO NOT OVERFILL.
4. Check engine oil level daily and add as needed.

### NOTE

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



## Add Engine Oil Cont'd.

### NOTE

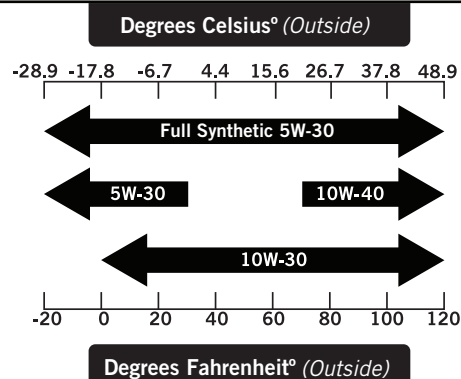
Check oil often during the break-in period. Refer to the Maintenance section for recommended service intervals.

### 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.

### NOTE

We consider the first 5 hours of run time to be 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.



### NOTE

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

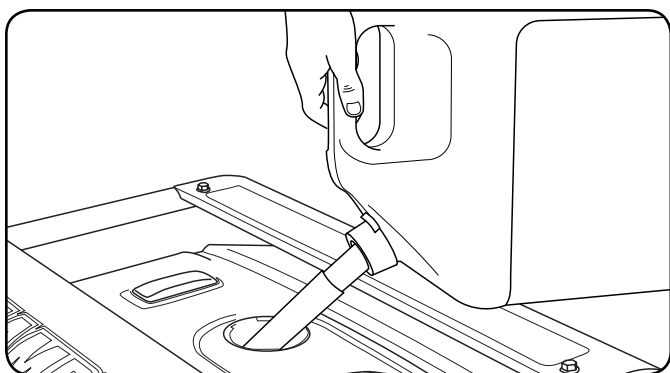
### NOTE

Synthetic oil may be used after the 5-hour initial break-in period. Using synthetic oil does not increase the recommended oil change interval.

# ASSEMBLY

## Add Fuel

1. Use clean, fresh, regular unleaded fuel with a minimum octane rating of 85 and an ethanol content of less than 10% by volume.
2. DO NOT mix oil with fuel.
3. Clean the area around the fuel cap.
4. Remove the fuel cap.
5. Slowly add fuel to the tank. DO NOT OVERFILL. Fuel can expand after filling. A minimum of 6.4 mm (¼ in.) of space left in the tank is required for fuel expansion; more than 6.4 mm (¼ in.) is recommended. Fuel can be forced out of the tank as a result of expansion if it is overfilled, and can affect the stable running condition of the product. When filling the tank, it is recommended to leave enough space for the fuel to expand.



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

### ⚠ CAUTION

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

Do not mix oil and gasoline.  
 Fill tank to approximately 6.4 mm (¼ in.) below the top of the tank to allow for fuel expansion.  
 DO NOT pump gas directly into the generator at the gas station. Use an approved container to transfer the fuel to the generator.  
 DO NOT fill fuel tank indoors.  
 DO NOT fill fuel tank when the engine is running or hot.  
 DO NOT overfill the fuel tank.  
 DO NOT light cigarettes or smoke when filling the fuel tank.

### ⚠ WARNING

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

## Add Fuel Cont'd.

### NOTE

Our engines work well with 10% or less ethanol blend fuels. When using blended fuels there are some issues worth noting:

- Ethanol-gasoline blends can absorb more water than gasoline alone.
- These blends can eventually separate, leaving water or a watery goo in the tank, fuel valve and carburetor.
- With gravity-fed fuel supplies, this compromised fuel can be drawn into the carburetor and cause damage to the engine and/or potential hazards.
- There are only a few suppliers of fuel stabilizer that is formulated to work with ethanol blend fuels.
- Any damages or hazards caused by using improper fuel, improperly stored fuel, and/or improperly formulated stabilizers, are not covered by manufacturer's warranty.

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

## Grounding

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

### ⚠ WARNING

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

A ground terminal connected to the frame of the generator has been provided on the power panel. For remote grounding, connect 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.

## Generator Location

NEVER operate the generator inside any building, including garages, basements, crawlspaces and sheds, or any 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 when not in operation). Generators must have at least 1.5 m (5 ft.) of clearance from all combustible material. In addition to clearance from all combustible material, generators must also have at least 91.4 cm (3 ft.) 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 or trailer, in the bed of a truck (regular, flat or otherwise), under staircases/stairwells, next to walls or buildings, or in any other location that will not allow for adequate cooling of the generator and/or the muffler. DO NOT contain generators during operation. Allow generators to properly cool before transport or storage.

Place the generator in a well-ventilated area. DO NOT place the generator near vents or intakes where exhaust fumes could be drawn into occupied or confined spaces. Carefully consider wind and air currents when positioning generator.

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

### WARNING

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

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

### WARNING

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

## Grounding

The generator system ground connects the frame to the ground terminals on the power panel. The system ground is connected to the AC neutral wire.

## Surge Protection

### CAUTION

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

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

1. *Install UL1449, CSA-listed, plug-in surge suppressors on the outlets feeding your sensitive equipment.*  
Surge suppressors come in single- or multi-outlet styles. They're designed to protect against virtually all short-duration voltage fluctuations.

## Starting the Engine

1. Make certain the generator is on a flat, level surface.
2. Disconnect all electrical loads from the generator.  
Never start or stop the generator with electrical devices plugged in or turned on.
3. Turn the fuel valve to the "ON" position.
4. Flip the ignition switch to the "ON" position.
5. Move the choke lever to the "CHOKE" position.
6. ELECTRIC START: Press and hold the ignition switch in the "START" position. Release as the engine starts. 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.
7. RECOIL START: Pull the starter cord slowly until resistance is felt and then pull rapidly.
8. Do not over-choke. As soon as engine starts, move the choke lever to the "RUN" position.

# OPERATION

## Starting the Engine Cont'd.

### NOTE

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

### NOTE

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

## Connecting Electrical Loads

1. Let the engine stabilize and warm up for a few minutes after starting.
2. Plug in and turn on the desired 120/240 Volt AC single-phase, 60 Hz electrical loads.
  - DO NOT connect 3-phase loads to the generator.
  - DO NOT connect 50 Hz loads to the generator.
  - DO NOT overload the generator.

### NOTE

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

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

## Stopping the Engine

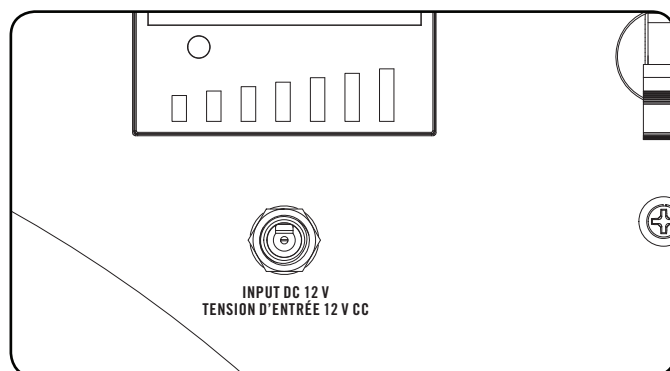
1. Turn off and unplug all electrical loads. Never start or stop the generator with electrical devices plugged in or turned on.
  2. Let the generator run at no-load for several minutes to stabilize internal temperatures of the engine and generator.
  3. Turn the fuel valve to the “OFF” position.
  4. Let the engine run until fuel starvation has stopped the engine. This usually takes a few minutes.
  5. Press the ignition switch to the “OFF” position.
- Important:** Always ensure that the fuel valve and the ignition switch are in the “OFF” position when the engine is not in use.

### NOTE

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

## Smart Charger

The smart charger (included) is a device that is used to charge the generator battery. The smart charger plugs into the generator, into the DC input on the front panel, and then into a household outlet power source. There is a light on the charger. If the battery is in need of a charge or charging, then the red light will light up. If the battery is good and not in need of charging or has completed charging, then the green light will light up. The smart charger is programmed not to charge or to stop charging when the light is green. This is a safety feature that will help prevent damage to the battery and generator.



## Do Not Overload Generator

### Capacity

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

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

### Power Management

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

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

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

1. Start the generator with no electrical load attached.
2. Allow the engine to run for several minutes to stabilize.
3. Plug in and turn on the first item. It is best to attach the item with the largest load first.
4. Allow the engine to stabilize.
5. Plug in and turn on the next item.
6. Allow the engine to stabilize.
7. Repeat steps 5-6 for each additional item.

### NOTE

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

## 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 304.8 m (1,000 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
P29-2-H	Standard	48.131017.01.H	1,676 Metres (5,500 Feet)
	Altitude	48.131017.01.01.H	
P29-2-T	Standard	48.131017.01.T	
	Altitude	48.131017.01.01.T	
P29-2-F	Standard	48.131017.01.F	
	Altitude	48.131017.01.01.F	

### 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 AND STORAGE

The owner/operator is responsible for all periodic maintenance.

### **WARNING**

Never operate a damaged or defective generator.

### **WARNING**

Tampering with the factory-set governor will void your warranty.

### **WARNING**

Improper maintenance will void your warranty.

### **NOTE**

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

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

### **NOTE**

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

## Engine Maintenance

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

### Oil

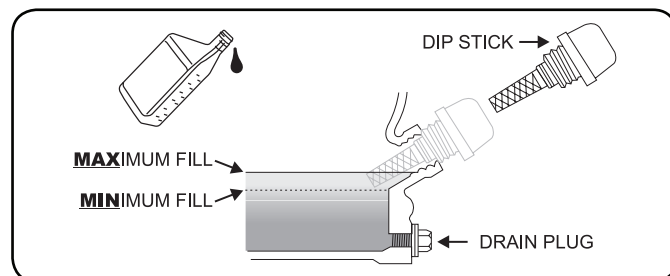
Change oil when the engine is warm. Refer to the oil specification to select the proper grade of oil for your operating environment.

1. Remove the oil drain plug with a 15 mm socket and extension (not included).
2. Allow the oil to drain completely.
3. Replace the drain plug.
4. Remove oil fill cap/dipstick to add oil.
5. Add up to 1.1 L (1.2 qt.) of oil and replace oil fill cap/dipstick. **DO NOT OVERFILL.**
6. Dispose of used oil at an approved waste management facility.

### Oil Cont'd.

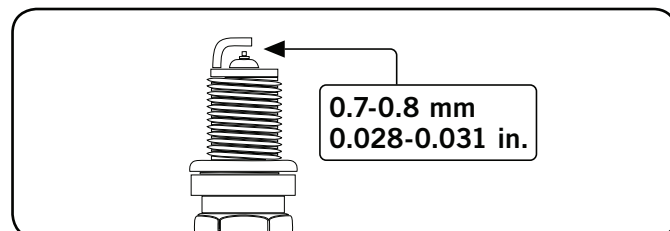
#### **NOTE**

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



### Spark Plugs

1. Remove the spark plug cable from the spark plug.
2. Use the spark plug tool (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 0.7 - 0.8 mm (0.028 - 0.031 in.).



5. Refer to the spark plug recommendation in the Specifications section when replacing the plug.
6. Carefully thread the plug into the engine.
7. Use the spark plug tool (not included) to firmly install the plug.
8. Attach the spark plug wire to the plug.

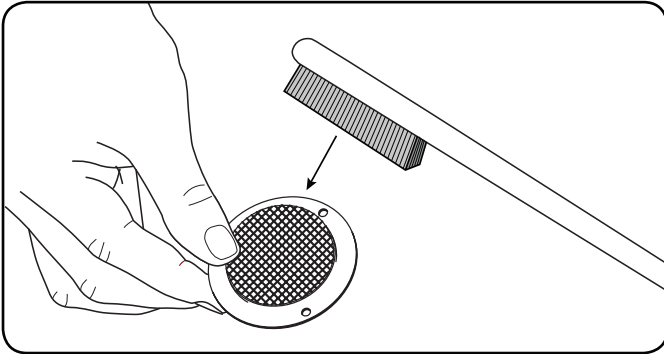
### Air Filter

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



## Spark Arrester

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



### ! CAUTION

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

## Cleaning

### ! CAUTION

DO NOT spray engine with water.

Water can contaminate the fuel system.

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

## Adjustments

The air-fuel mixture is not adjustable. Tampering with the governor can damage your generator and your electrical devices and will void your warranty. CPE recommends that you contact our service line at **1-877-338-0999** for all other service and/or adjustment needs.

## Maintenance Schedule

Follow the service intervals indicated in the following maintenance schedule.

Service your generator more frequently when operating in adverse conditions.

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

Every 8 hours or daily	
	Check oil level
	Clean around air intake and muffler
First 5 hours	
	Change oil
Every 50 hours or every season	
	Clean air filter
	Change oil if operating under heavy load or in hot environments
Every 100 hours or every season	
	Change oil
	Clean/adjust spark plug
	Check/adjust valve clearance*
	Clean spark arrester
	Clean fuel tank and filter*
Every 250 hours	
	Clean combustion chamber*
Every 3 years	
	Replace fuel line

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

## Generator Maintenance

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

### ! CAUTION

DO NOT use a garden hose to clean the generator.

Water can enter the generator through the cooling slots and damage the generator windings.

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

# MAINTENANCE AND STORAGE

## Storage

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

### Generator Storage

1. Add a properly formulated fuel stabilizer to the tank.
2. Be sure all appliances are disconnected from the generator.
3. Run the generator for a few minutes so the treated fuel cycles through the fuel system and carburetor.
4. Turn the fuel valve to the "Off" position.
5. Let the generator run until fuel starvation has stopped the engine. This usually takes a few minutes.
6. The generator needs to cool completely before cleaning and storage.
7. Clean the generator according to the maintenance section.
8. Change the oil.
9. Remove the spark plug and pour about 14.8 mL (1/2 ounce) of oil into the cylinder. Crank the engine slowly to distribute the oil and lubricate the cylinder.
10. Reattach the spark plug.
11. Store the unit in a clean, dry place out of direct sunlight.

### DANGER

Generator exhaust contains odourless and colourless carbon monoxide gas.

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

- When **storing the generator for short periods of time**, make sure that the Ignition Switch and the Fuel Valve are switched to the **OFF** position.
- When **storing the generator for extended periods of time**, make sure that the Ignition Switch and the Fuel Valve are switched to the **OFF** position and the battery leads have been **disconnected** from the battery.

## Generator Battery

This product 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 (not included) or battery maintainer (not included) to keep the battery properly charged. 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 (M5x10) and nut (M5).
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 (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.

### NOTE

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

**Engine Specifications**

- Model . . . . . YF192FD-110
- Displacement . . . . . 459cc
- Type . . . . . 4-stroke OHV
- Start Type . . . . . Electric Start

**Generator Specifications**

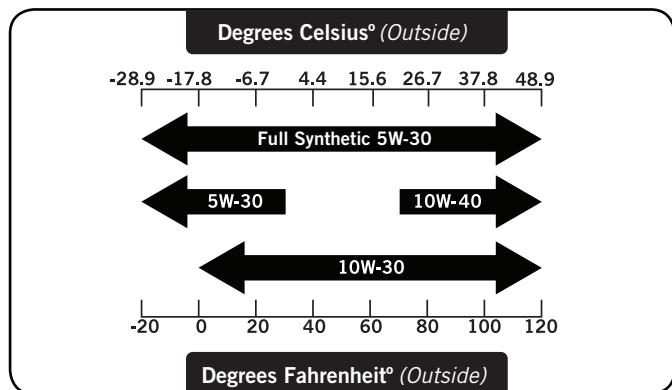
- Running Watts . . . . . 9,000 Watts
- Starting Watts . . . . . 11,250 Watts
- AC Voltage . . . . . 120/240 V
- Phase . . . . . Single
- Frequency . . . . . 60 Hz
- Fuel Capacity . . . . . 29 L (7.7 gallons)
- Gross Weight . . . . . 101.3 kg (223.3 lb.)
- Net Weight . . . . . 95.8 kg (211.2 lb.)
- Height . . . . . 67.6 cm (26.6 in.)
- Width . . . . . 70 cm (27.6 in.)
- Length . . . . . 70.4 cm (27.7 in.)

**Fuel**

Fuel capacity is 29 L (7.7 gallons). Use regular unleaded gasoline with a minimum octane rating of 85 and an ethanol content of less than 10% by volume.

**Oil**

Use 10W-30 automotive oil.  
 Oil capacity is up to 1.1 L (1.2 qt.).  
**DO NOT OVERFILL.**  
 Please reference the following chart for recommended oil types for use in the generator.



**Spark Plugs**

**OEM spark plug:** NHSP F6RTC  
**Replacement spark plug:** NGK BPR6ES or equivalent  
 Make certain the spark plug gap is 0.7 - 0.8 mm or (0.028 - 0.031 in.).

**Maintenance Valve Clearance**

- Intake: 0.13 – 0.17 mm (0.005 – 0.007 in.)
  - Exhaust: 0.18 – 0.22 mm (0.007 – 0.009 in.)
- Note: Tech bulletin regarding the valve adjustment procedure is on [www.championpowerequipment.com](http://www.championpowerequipment.com).

**An Important Message About Temperature**

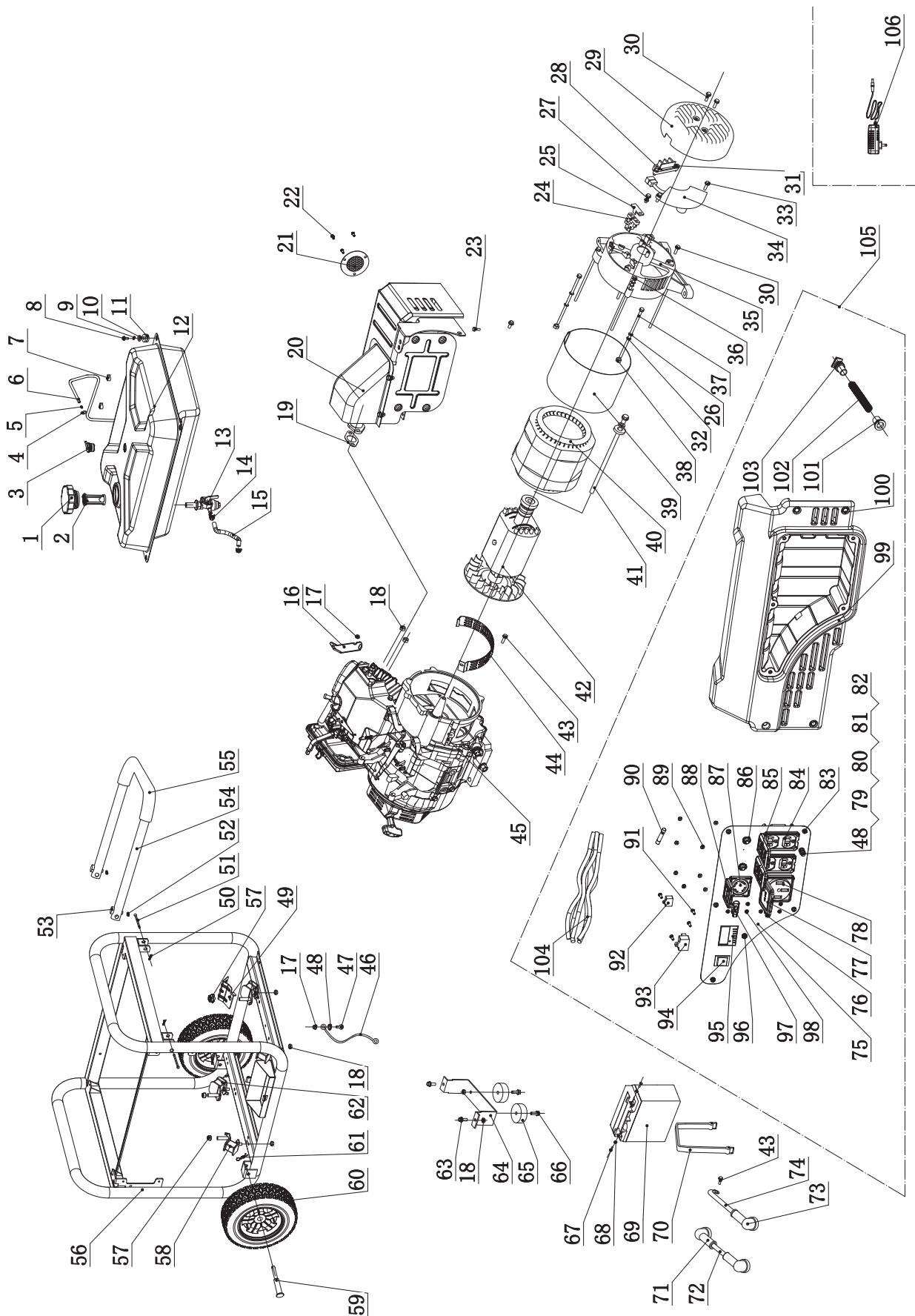
Your Champion Power Equipment product is designed and rated for continuous operation at ambient temperatures up to 40°C (104°F). When necessary, your product may be operated at temperatures ranging from -15°C (5°F) to 50°C (122°F) for short periods. If the product is exposed to temperatures outside this 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 other vents.

**NOTE**

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

# SPECIFICATIONS

## Parts Diagram

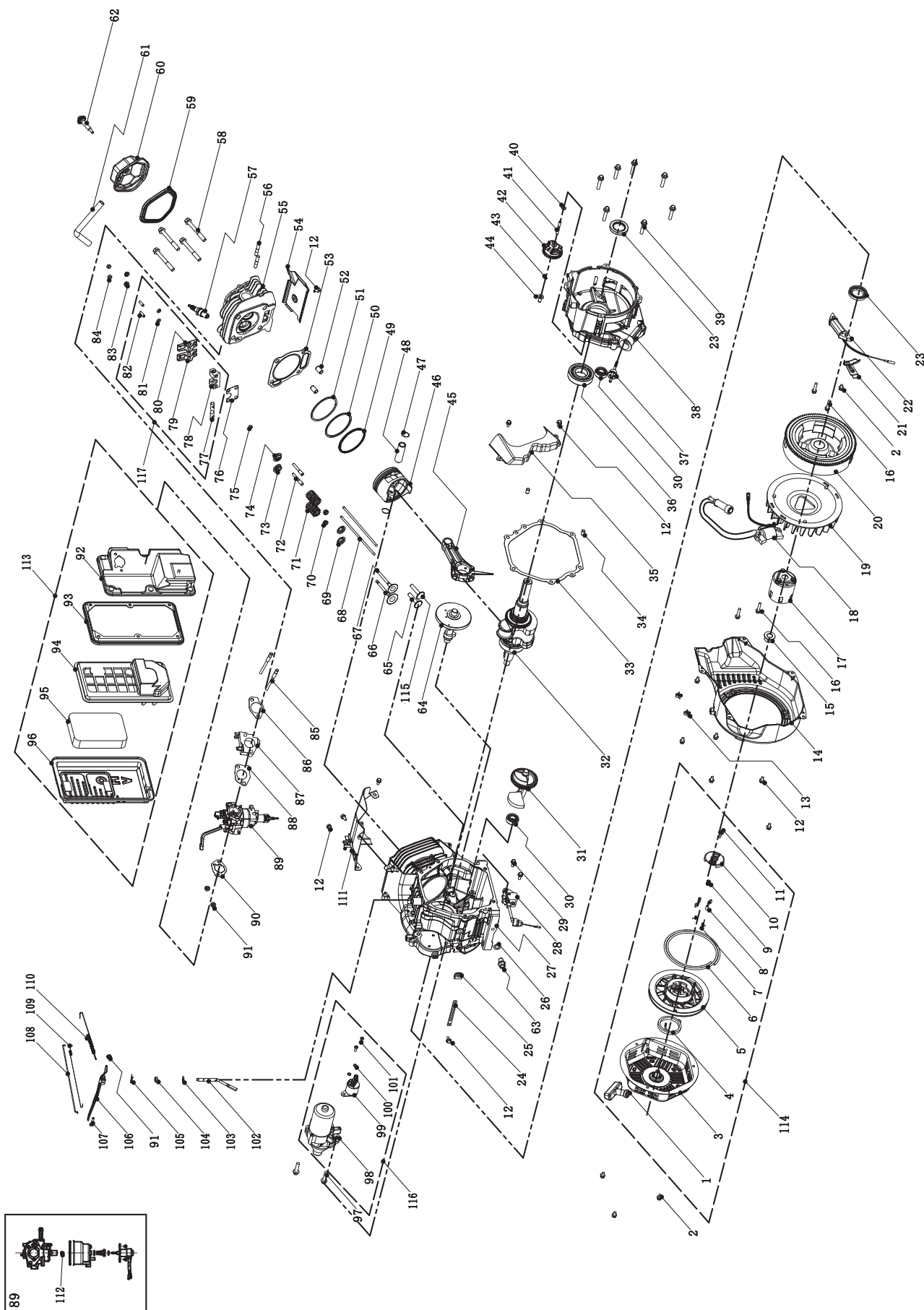


#	Part Number	Description	Qty
1	122.070100.07	Fuel Tank Cap	1
2	122.070300.03	Fuel Filter	1
3	24.070800.00	Reversal Valve	1
4	2.06.006	Clamp Ø7 x Ø1	1
5	24.070030.00	Hole, Breather Tube	1
6	152.070014.06	Pipe, Reversal Valve, 730 mm	1
7	2.05.001	Clamp Ø8 x b6.5	2
8	1.5789.0620.1	Flange Bolt M6 x 20, Black	4
9	1.93.06	Lock Waher Ø6	4
10	2.03.004.1	Flat Washer, Ø24 x Ø6.5 x 1.5, Black	4
11	122.070015.01	Mount Vibration, Fuel Tank	4
12	152.071000.40.48	Fuel Tank, 29L, Yellow	1
13	122.070400.05	Fuel Valve	1
14	2.06.007	Clamp Ø8 x b6	2
15	152.070011.07	Pipe, Fuel, 195 mm	1
16	45.090006.20	Holder, Air Cleaner	1
17	1.6177.1.06	Lock Nut M6, Flange	2
18	1.6177.1.08	Lock Nut M8, Flange	10
19	47.100001.00	Gasket, Exhaust	1
20	46.101000.01.2	Muffler Assembly	1
21	46.101300.00	Spark Arrester Assembly	1
22	1.9074.4.0510	Screw/Washer Assembly M5 x 10	3
23	1.16674.0820	Flange Bolt M8 x 20	2
24	152.190300.00	Carbon Brush Assembly	1
25	122.190004.01	Pinch, Carbon Brush	1
26	1.93.05	Lock Washer Ø5	2
27	1.9074.15.0520	Bolt/Washer Assembly M5 x 20	1
28	122.190400.00	Terminal Block	1
29	152.190003.00.48	Generator End Cover, Yellow	1
30	1.16674.0512.2	Flange Bolt M5 x 12	3
31	1.9074.17.0516	Screw/Washer Assembly M5 x 16	2
32	1.97.1.05	Washer Ø5	2
33	1.16674.0516	Flange Bolt M5 x 16	2
34	153.190200.04	AVR, CSA	1
35	152.190002.00	End Housing	1
36	2.08.069	Flange Bolt/Washer Assembly M6 x 194	4
37	2.08.071	Bolt M5 x 229	2
38	1.6175.05	Nut M5	2
39	154.191002.00	Stator Cover	1
40	155.191200.00	Stator Assembly, Cu, Ø204 x 158 mm, CSA	1
41	2.08.070	Flange Bolt/Washer Assembly M10 x 280	1
42	155.191100.00	Rotor Assembly, Cu, Ø204 x 158 mm, CSA	1
43	1.5789.0608	Flange Bolt M6 x 8	2
44	152.192300.01	Air Guide	1
45	48.603	Engine, 459cc	1
46	5.1900.029	Grounding Line 150 mm	1
47	1.5789.0612	Flange Bolt M6 x 12	1
48	1.862.06	Lock Washer Ø6, Toothed	2
49	152.100007.00	Insulation Board, Motor Mount	1
50	11.110008.00	"R" Shape	2
51	152.200703.04	Long Pin, Handle	2
52	1.894.1.08	Circlip Ø8	2
53	152.200703.02	Short Pin, Handle	2
54	152.200701.02.2	Handle, U Shape	1
55	152.200702.02	Cover, Handle	1
56	65251.0.10.2	Frame, 700 x 541 x 600	1
57	1.6177.1.10	Lock Nut M10, Flange	4
58	152.201200.03	Motor Mount 1	2

#	Part Number	Description	Qty
59	122.201501.25	Pin Roll, Wheel, Ø16 x Ø10 x 107	2
60	152.201701.09.48	9.5 in. Wheel, PU, Yellow	2
61	2.16.001	Pin Ø2 x 33, "R" Shape	2
62	152.201200.04	Motor Mount 2	2
63	1.5789.0816	Flange Bolt M8 x 16	2
64	152.200002.01.2	Support Leg 84 mm	1
65	152.201400.00	Rubber, Support	2
66	1.5789.0825	Flange Bolt M8 x 25	2
67	1.9074.3.0510	Screw/Washer Assembly M5 x 10	2
68	1.6177.1.05	Lock Nut M5, Flange	2
69	9.1000.150	Battery 12V15AH	1
70	152.200904.00	Pinch, Rubber	1
71	152.200013.02.3	Jacket, Wire, Red	2
72	5.1900.024	Red Wire, 480 mm, Battery, CSA	1
73	152.200013.02	Jacket, Wire, Black	1
74	5.1900.025	Black Wire, 320 mm, Battery, CSA	1
75	152.209.4.2	Control Panel, Black	1
76	5.1240.937	37.5Amp Circuit Breaker, Double Pole, CSA	1
77	5.1870.007	Receptacle Cover, Receptacle 14-50R	1
78	5.1120.044	Receptacle 14-50R	1
79	1.5783.0622.3	Bolt M6 x 22, Green	1
80	1.6175.06.3	Nut M6, Green	2
81	1.97.1.06.3	Washer Ø6, Green	2
82	1.93.06.3	Lock Washer Ø6, Green	2
83	1.9074.4.0514.1	Screw/Washer Assembly M5 x 14, Black	5
84	5.1120.027	Receptacle 5-20R Duplex, CSA	2
85	5.1870.008	Receptacle Cover, Receptacle 5-20R, Duplex	2
86	5.1210.920	20Amp Circuit Breaker, Push Button, CSA	2
87	5.1120.026	Receptacle L14-30R, CSA	1
88	5.1870.003	Receptacle Cover, Receptacle L14-30R	1
89	1.6177.1.04.1	Flange Lock Nut M4, Black	10
90	5.1280.003	Fuse, 10A	1
91	1.818.0514.2	Screw M5 x 14	4
92	5.1810.000	Over Voltage Protector, CSA	1
93	5.1800.000	Rectifier	1
94	5.1000.001.3	Ignition Switch, Red	1
95	5.1440.008	Intelligauge, With Power Meter	1
96	5.1110.006	Receptacle, Battery Charger	1
97	5.1240.930	30Amp Circuit Breaker, Double Pole, CSA	1
98	1.9074.4.0306.1	Screw/Washer Assembly M3 x 6, Black	8
99	152.210002.19	Control Box	1
100	1.5789.0615.1	Flange Bolt M6 x 15, Black	4
101	152.210003.01	Wire Jacket, Control Box	1
102	5.1320.24	Conduit, Plastic, 155 mm, CSA	1
103	152.210003.03	Plug, End Cover, CSA	1
104	100203.21.10	Wire Assembly	1
105	100203.21	Control Panel Assembly	1
106	5.1820.007	Smart Charger	1

# SPECIFICATIONS

## Engine Parts Diagram





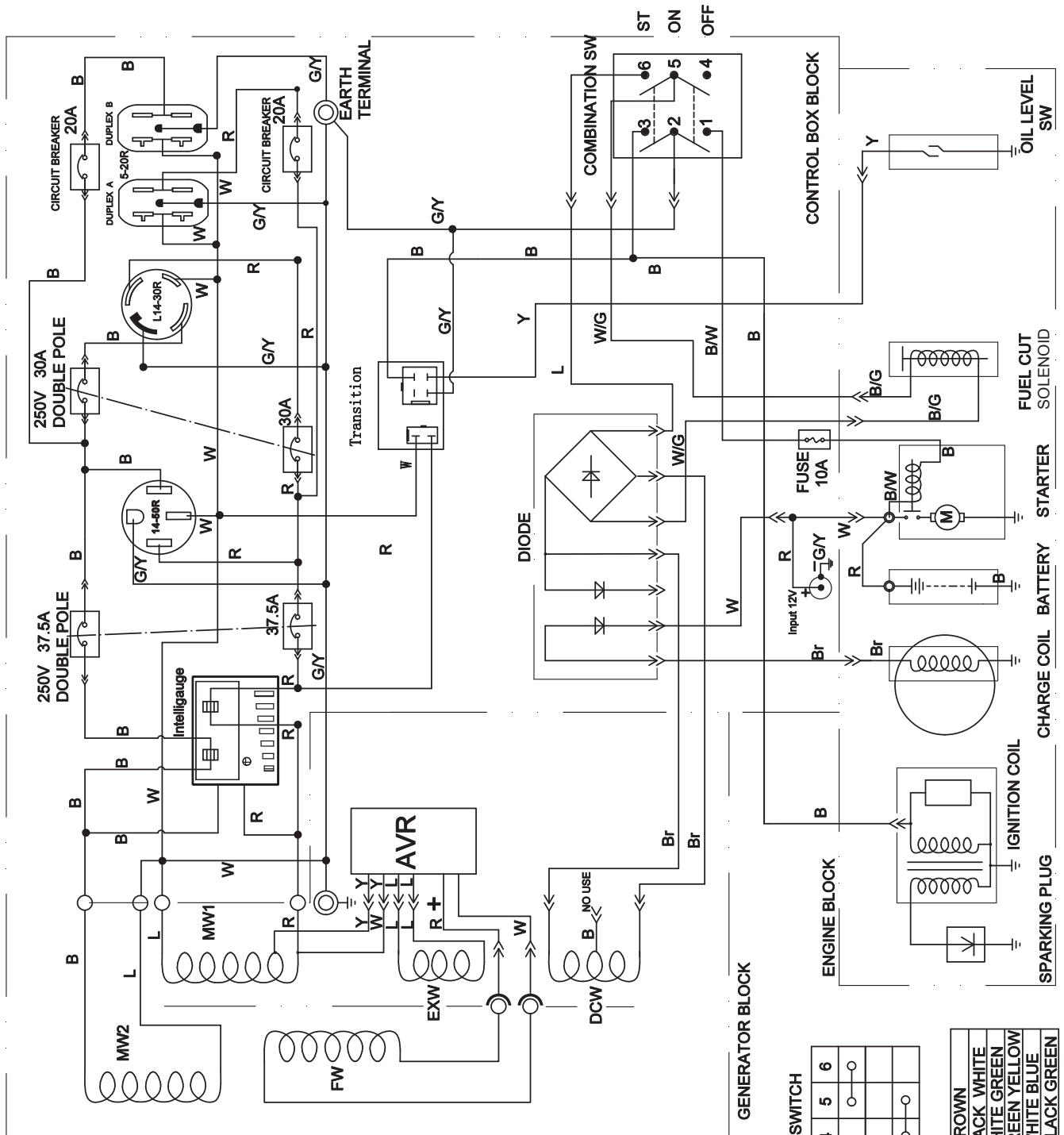
#	Part Number	Description	Qty
1	21.061300.00	Handle, Recoil, Soft	1
2	1.5789.0608	Flange Bolt M6 x 8	4
3	46.061100.00.2	Cover, Recoil Starter, Black	1
4	45.060005.00	Spring, Recoil Starter	1
5	45.061102.00	Reel, Recoil Starter	1
6	2.10.003.1	Rope Ø4 x 1550, Black	1
7	45.060003.00	Spring, Ratchet	2
8	45.060002.00	Starter Ratchet, Steel	2
9	45.060009.00	Spring, Ratchet Guide	1
10	45.060007.00	Ratchet Guide	1
11	45.060008.00	Screw, Ratchet Guide	1
12	1.5789.0612	Flange Bolt M6 x 12	12
13	2.05.005	Clamp Ø6	2
14	47.080100.01.48	Fan Cover, Yellow	1
15	2.02.007	Nut M16 x 1.5	1
16	1.5789.0629	Flange Bolt M6 x 29	4
17	45.060001.00	Pulley, Starter	1
18	46.123000.01	Ignition Coil	1
19	48.080001.00	Cooling Fan	1
20	46.120100.04	Flywheel	1
21	45.030006.00	Plate, Coil	1
22	45.121000.00	Coil, Charging	1
23	2.11.007	Oil Seal Ø35 x Ø52 x 8	2
24	2.05.050	Wire Clip 100 mm	1
25	152.070031.01	Sheath, Wire	1
26	2.03.023	Washer Ø12.5 x Ø20 x 2, Drain Bolt	1
27	48.030100.00	Crankcase	1
28	45.127000.02	Oil Level Sensor	1
29	1.5789.0615	Flange Bolt M6 x 15	2
30	1.276.6202	Bearing 6202	2
31	48.050006.00	Weight Balancer	1
32	47.050100.01	Crankshaft	1
33	46.030008.00	Gasket, Crankcase Cover	1
34	2.04.001	Dowel Pin Ø9 x 14	2
35	46.080600.00	Air Guide, Right Side	1
36	1.276.6207	Bearing 6207	1
37	46.031000.01.48	Oil Dipstick Assembly, Yellow	1
38	45.030007.00	Cover, Crankcase	1
39	1.5789.0840	Flange Bolt M8 x 40	7
40	2.03.021.1	Washer Ø6.4 x Ø13 x 1, Black	1
41	45.110013.00	Shaft, Governor Gear	1
42	45.110100.00	Gear, Governor	1
43	21.110011.00	Clip, Governor Gear	1
44	45.110012.00	Bushing, Governor Gear	1
45	47.050200.00	Connecting Rod	1
46	48.050005.00	Piston	1
47	2.09.004	Circlip Ø21 x Ø1	2
48	45.050003.00	Pin, Piston	1
49	48.050303.00	Ring, Oil	1
50	48.050302.00	Ring, Second Piston	1
51	48.050301.00	Ring, First Piston	1
52	2.04.004	Dowel Pin Ø12 x 20	2
53	48.030009.00	Gasket, Cylinder Head	1
54	46.080400.00	Air Guide, Lower	1
55	47.010100.01	Cylinder Head	1
56	2.01.010	Stud Bolt M8 x 35	2
57	2.15.002(F6RTC)	Spark Plug F6RTC	1
58	2.08.122	Flange Bolt M10 x 95	4
59	46.020002.00	Gasket, Cylinder Head Cover	1

#	Part Number	Description	Qty
60	47.021000.00	Cover, Cylinder Head	1
61	45.020001.02	Breather Tube	1
62	47.020100.00	Bolt, Cylinder Head Cover	1
63	2.08.039	Drain Bolt M12 x 1.5 x 15	1
64	48.041000.00	Camshaft	1
65	48.040013.00	Lifter, Intake Valve	1
66	47.040002.00	Valve, Intake	1
67	47.040006.00	Valve, Exhaust	1
68	46.040005.00	Push Rod	2
69	45.040015.00	Retainer, Valve Spring	2
70	45.040017.00	Oil Seal, Valve	2
71	45.040003.00	Spring, Valve	2
72	23.040010.00	Bolt, Rocker Arm	2
73	45.040001.00	Retainer, Intake Valve Spring	1
74	45.040007.00	Retainer, Exhaust Valve Spring	1
75	45.040008.00	Rotator, Exhaust Valve	1
76	46.040004.00	Guide Plate, Push Rod	1
77	46.040016.00	Shaft, Rocker Arm	1
78	46.040201.00	Retainer, Rocker Arm	1
79	46.040009.00	Rocker Arm, Intake Valve	1
80	46.040018.00	Rocker Arm, Exhaust Valve	1
81	1.97.1.06	Washer Ø6	2
82	22.040012.00	Screw, Valve Adjustment	2
83	1.6177.1.06	Flange Nut M6	2
84	21.040021.00	Nut M6 x 0.5, Lock	2
85	2.01.008	Stud Bolt M6 x M8 x 105	2
86	46.130002.20	Gasket, Insulator	1
87	45.130001.00	Insulator, Carburetor	1
88	46.130003.20	Gasket, Carburetor	1
89	48.131000.10	Carburetor	1
90	46.130004.20	Gasket, Air Cleaner	1
91	1.6177.06	Flange Nut M6	3
92	46.091100.03	Base, Air Cleaner	1
93	45.091002.20	Seal, Air Cleaner	1
94	45.091001.20	Separator, Air Cleaner	1
95	45.091003.20	Element, Air Cleaner	1
96	46.091200.04	Cover, Air Cleaner	1
97	1.5789.0835	Flange Bolt M8 x 35	2
98	45.125100.00	Starter Motor	1
99	45.125200.03	Relay, Starter, Three Gear	1
100	1.93.05	Lock Washer Ø5	2
101	1.16674.0516	Flange Bolt M5 x 16	2
102	45.110001.00	Shaft, Governor Arm	1
103	2.03.019	Washer Ø8.2 x Ø17 x 0.8	1
104	2.11.006	Oil Seal Ø7 x Ø14 x 5	1
105	45.110008.00	Pin, Shaft	1
106	45.110003.01	Arm, Governor	1
107	2.08.040	Bolt M6 x 21, Governor Arm	1
108	45.110006.00	Rod, Governor	1
109	45.110005.00	Spring, Throttle Return	1
110	45.110007.00	Spring, Governor	1
111	46.080300.20	Air Guide, Upper	1
112	48.131017.01	Standard Main Jet	1
	48.131017.01.01	Main Jet, Altitude	/
113	46.091000.03.2	Air Cleaner Assembly	1
114	46.061000.00	Recoil Assembly	1
115	45.040013.00	Lifter, Exhaust Valve	1
116	45.125000.03	Starter Motor Assembly	1
117	46.040200.00	Rocker Arm Assembly	1



# SPECIFICATIONS

## Wiring Diagram



COMBINATION SWITCH

1	2	3	4	5	6
OFF		○	○		○
ON					
ST		○			○

B	BLACK	Br	BROWN
Y	YELLOW	B/W	BLACK WHITE
L	BLUE	W/G	WHITE GREEN
G	GREEN	G/Y	GREEN YELLOW
R	RED	W/L	WHITE BLUE
W	WHITE	B/G	BLACK GREEN

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

### For further technical support:

#### Technical Service

Mon – Fri 8:30 AM – 5:00 PM (PST/PDT)

Toll Free: 1-877-338-0999

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