

# **OPERATOR'S MANUAL** MODEL #93001i-DF-UK 3000W DUAL FUEL INVERTER GENERATOR





# **Original Instructions**







#### or visit www.championpowerequipment.co.uk

**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.

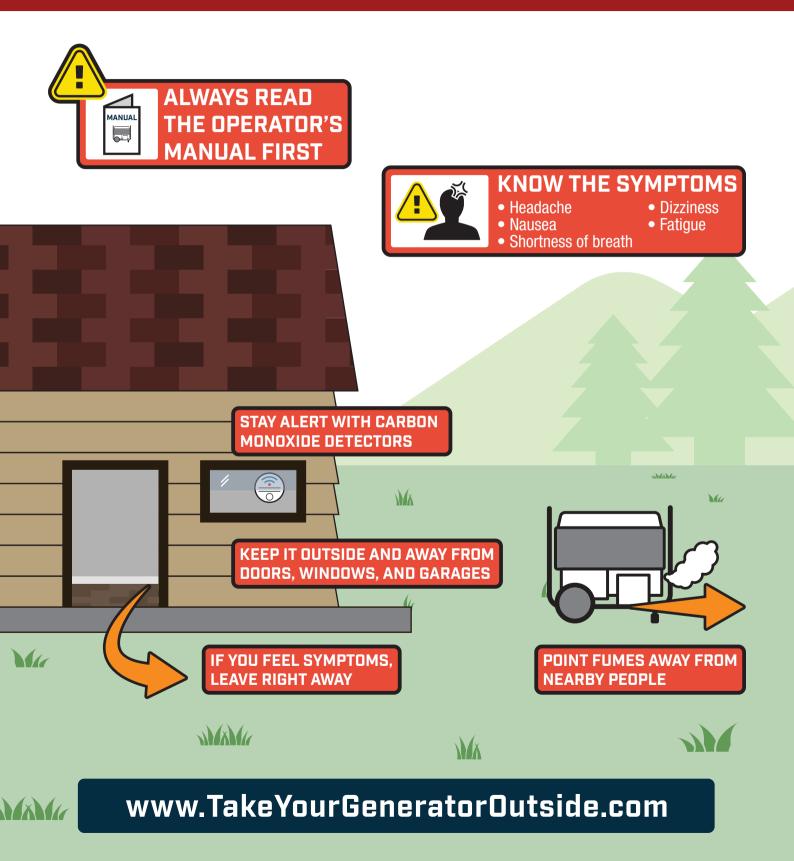
This product meets the requirements of the PGMA (Portable Generator Manufacturers' Association) standard ANSI/PGMA G300-2018 (Safety and Performance of Portable Generators).

Covered by one or more of the following U.S. Patent Numbers: 10,641,187, 10,862,414 and other U.S. and foreign patents pending.



# CARBON MONOXIDE SAFETY: THE BIG PICTURE

As the only safe way to use a portable generator, taking your generator outside is absolutely mandatory to keep your family safe from carbon monoxide. But there's even more you can do. By educating yourself about all carbon monoxide risks, you'll be better prepared to protect your family from this colorless, oderless threat.



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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
+44(0)-1942-715-407
MODEL NUMBER
93001i-DF-UK
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.

## **WARNING**

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

## **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 DANGER**

Generator exhaust contains carbon monoxide, a colourless, 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 building, including garages, basements, crawlspaces, sheds or enclosure or compartment, vehicles and(or) 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.

## 

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 or any out buildings, **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.

### **WARNING**

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

#### \land 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.

### \land DANGER

Generator produces powerful voltage.

DO NOT touch bare wires or live sockets.

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 including rain or snow.

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 100A 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.

#### **WARNING**

Do not use generator for medical and life support uses.

In case of emergency, call emergency services 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.

#### **IMPORTANT SAFETY INSTRUCTIONS**

#### **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.

## **WARNING**

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

DO NOT touch hot surfaces including exhaust/muffler and engine, always allow to cool.

Avoid contact with hot exhaust gases.

Allow equipment to cool min 30 mins before touching or handling.

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.

### **WARNING**

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

### **CAUTION**

When starting the engine, pull the recoil cord slowly until resistance is felt, release cord back and use one strong rapid pull to start, this avoids any kickback or damage to the recoil assembly. Rigorously pulling will result in damage to the recoil assembly and void any warranty.

#### **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.

D0 N0T modify the generator in any way.

DO NOT install or modify the exhaust/muffler with any xtension or extraction, by doing so will void any warranty offered.

## 

Start the generator and allow the engine to stabilize before connecting electrical loads.

Connect electrical equipment in the off position, and then turn them on for operation.

Turn electrical equipment off and disconnect before stopping the generator.

## **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 Flat 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

## **Fuel Safety**

#### **A DANGER**

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

Fire or explosion can cause severe burns or death.

#### Petrol and petrol vapors:

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

#### LPG:

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

#### When adding or removing petrol:

DO NOT light or smoke cigarettes.

Turn the generator off and let cool for at least two minutes before removing the fuel cap. Always loosen the cap slowly to relieve pressure in the tank.

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

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

DO NOT overfill the fuel tank.

Always keep petrol 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 check that the petrol cap, air filter, spark plug, fuel lines and exhaust system are properly in place.

Always allow spilled petrol to evaporate fully before attempting to start the engine.

Always be certain that the generator is resting firmly on level ground.

#### When operating the generator:

DO NOT move or tip the generator during operation, when refueling or adding oil.

#### When transporting or servicing the generator:

Always check that the fuel valve is in the OFF position and the fuel tank is empty.

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

Disconnect the spark plug wire.

#### When storing the generator:

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

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

#### **A DANGER**

NEVER place a petrol container, fuel tank, LPG cylinder or any combustible material in the path of the exhaust stream during operation of the engine.

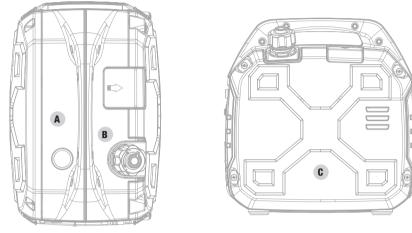
#### **MARNING**

Never use a petrol container, fuel tank, LPG connector hose, LPG cylinder or any other fuel item that is broken, cut, torn or damaged.

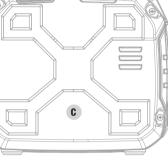
## **Safety and Dataplate Labels**

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





Side

Muffler

	LABEL	DESCRIPTION	
A	Image: Shield with the shield shi	Safety Symbols/ CO Danger CO Shield® Action – automatic shutoff *See CO Shield® section	
В	B UNLEADED FUEL ONLY. Minimum octane rating of 85. Maximum 10% ethanol. NUR BLEIFREIES BENZIN. Mindest- Oktanzahl 85. Maximul 10% Ethanol. ESSENCE SANS PLOMB SEULEMENT. Indice od'octane minimal de 85. Maximum 10 % 'éthanol.		
C	CHAMPION POWER EQUIPMENT, INC.      12039 SMITH AVENUE      SANTA FE SPRINSS, CA S0670      USA/16-U.      MADE IN CHINA      Low Power Generating Set      MODEL    93001i-DF-UK      SERIAL NO.    XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	Dataplate	
D	Aumanus      Aumanus        For Tricutal ender and regime componenties cance berrars cance berrars      Operation that the support and the support and function that audion that and the support operation. A sport are near the support operation that support are then regime manual that the support are then regime operation that support are then regime operation that the support are then regime operation that support are the regime operation that support are the regime operation that support are then regime operation that support are the regime operation th	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
	Caution.
	<b>Read The Operator's Instruction Manual Before Use.</b> To reduce the risk of injury, user must read and understand operator's manual before using this product.
X	Not For General Waste Disposal.
	The generating set must not be connected to other power sources, such as the power company supply mains.
	<b>Electric Hazard.</b> 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.
	<b>Fire Hazard.</b> Fuel and its vapors are extremely flammable and explosive. Fire or explosion can cause severe burns or death. Keep generator at least 5 feet (1.5m) from all objects to prevent combustion.
	<b>Risk Of Being Burnt.</b> To reduce the risk of injury or damage, avoid contact with any hot surface.
	Carbon Monoxide(co) Danger.
	Wet Conditions Alert. Do not expose to rain or use in damp locations except as follows:
	If you must operate in rain or damp locations, DO NOT operate without proper protection of the electrical components.
	Use of a safety canopy that is fire retardant and will provide proper air ventilation for the engines exhaust stream can be used. Keep all objects a minimum of 5 feet (1.5m) away from the generator at all times. Heat from the muffler surface and exhaust stream can ignite combustible materials.

## **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
Ő	Propane Hose Inlet
	Engine Run: Propane
•	Engine Run: Petrol
	Choke
×	Stop or Off
EGD	Economy Mode Button
Ť	Low Oil
	Overload Reset Button

SYMBOL	MEANING
<b>P</b>	Circuit Breaker Reset: Push
	Ground Terminal
N→ <u>∔</u>	<b>Neutral Floating.</b> Neutral circuit <b>IS</b> <b>NOT</b> electrically connected to the frame/ ground of the generator.
☑⊷⊉⊷☑	Parallel Connection(s)
<u>12 V</u>	12V Direct Current
	<b>High CO Warning.</b> Move generator to an open, outdoor area. Move to fresh air and get medical help if sick, dizzy or weak.
	<b>CO Shield System Fault.</b> Electrical issue, end of life.

## **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. Add fuel. Check petrol level. When adding petrol, use a minimum octane rating of 85 and an ethanol content of 10% or less by volume.(E5 or E10)
- 3. Turn the fuel vent lever to the "ON" position.
- 4. Move the EZ Start dial to the "CHOKE" position.
- 5. Pull the recoil cord.
- 6. Turn EZ Start dial to petrol icon for petrol "RUN".
- 7. Plug in desired device.

#### **Stopping the Engine**

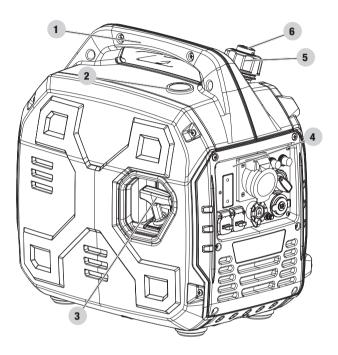
- 1. Turn off and unplug all connected electrical loads.
- 2. Turn the fuel vent lever to the "OFF" position.
- 3. Turn the EZ Start dial to the "STOP" position.

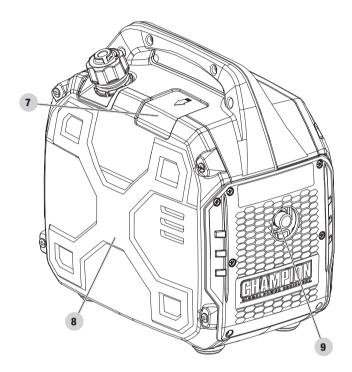
For adding fuel and starting the engine with LPG see *Add Fuel: Propane (LPG)* in *Assembly* section and *Starting the Engine: Propane (LPG)* in the *Operation* section.

# **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

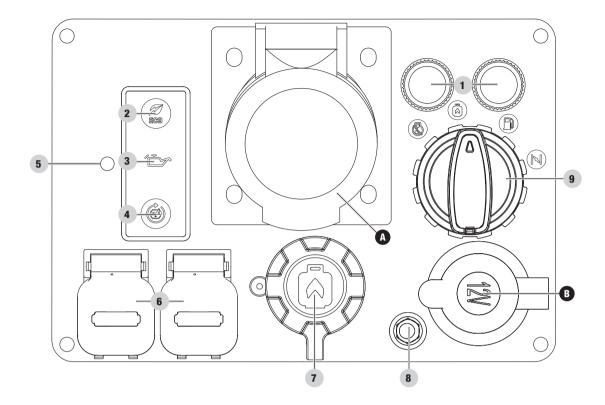




- 1. **Carrying Handle** Used to lift or carry the unit.
- 2. Fuel Gauge
- 3. **Recoil Starter** Used to manually start the engine.
- 4. Control Panel See Control Panel section.
- 5. Fuel Cap Remove to add fuel.

- Fuel Lever Vent Turn this valve to the "ON" position to supply air to the tank.
- 7. Spark Plug Access Cover
- 8. Maintenance Cover
- 9. Muffler

## **Control Panel**



- 1. **Circuit Breakers (Push Reset)** Protects the generator against electrical overloads.
- Economy Mode Button Enables/disables automatic idle control.
- 3. Low Oil Warning Indicator Light When ON, engine will shut down and not run. Check oil level.
- 4. **AC Overload Reset Button** Used to re-energize receptacles after overload fault.
- CO Shield<sup>®</sup> LED The CO Shield<sup>®</sup> technology monitors for accumulation of poisonous carbon monoxide (CO) gas produced by engine exhaust when the generator is running. If CO Shield<sup>®</sup> detects elevated levels of CO gas, it automatically shuts off the engine.
- 6. **Parallel Outlets** Used to parallel two inverters together for increased power output. (parallel kit sold separately).
- 7. LPG Inlet Used to connect LPG fuel source to generator.
- 8. **Ground Terminal** Consult an electrician for local grounding regulations.
- 9. **EZ Start Dial** Used to turn on petrol or propane (LPG) fuel source, operate the choke plate, and stop the engine

	RECEPTACLES		
A	•	<b>240V AC, 16A</b> May be used to supply electrical power for operation of 240 Volt AC, 16 Amp, single phase, 50 Hz electrical loads.	
В		<b>12V DC, 8A (Automotive)</b> May be used to supply electrical power for operation of 12 Volt DC, 8 Amp electrical loads.	

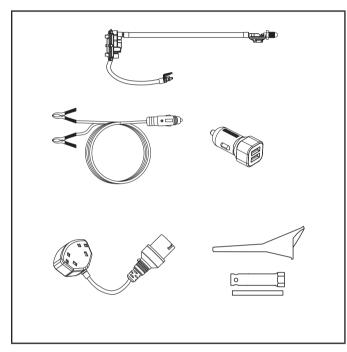
### **WARNING**

When charging a device, do not place on the exhaust side of the generator. Extreme heat caused by exhaust can damage the device and cause a potential fire hazard. Prolonged exposure to engine exhaust can cause serious injury or death.

## **Parts Included**

#### Accessories

LPG Hose with Regulator 1
12V DC Battery Charging Cable
12V DC USB Adapter 1
16A Plug- Dual 13A Sockets Adpater
Oil Funnel 1
Spark Plug Socket



# 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 +44(0)-1942-715-407. 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.
- Using the carrying handles of the unit, carefully remove the generator from the box (two people lifting is recommended).

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 failing to follow these instructions will void your warranty.

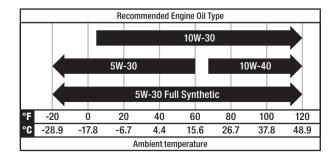
## **NOTICE**

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

## **NOTICE**

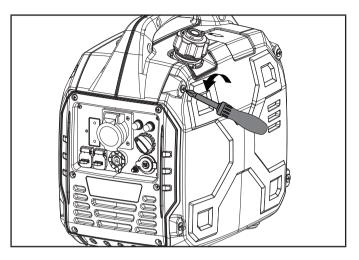
The recommended oil type for typical use is **10W-30 automotive oil**. However, using the listed conventional oils shown in the "Recommended Engine Oil Type" chart may be used for typical use including the first 5 hours of the break-in run time period of the engine.

If running generator in extreme temperatures, refer to the "Recommended Engine Oil Type" chart.

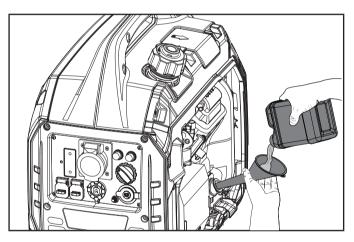


1. Place the generator on a flat, level surface.

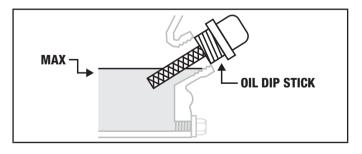
2. Loosen the four cover screws and remove the maintenance cover.



- 3. Remove oil fill cap/dipstick to add oil.
- Using a funnel, add up to 16.9 fl. oz. (500 ml) of oil and replace oil fill cap/dipstick and secure maintenance cover. DO NOT OVERFILL.



5. Check engine oil level before each use and add as needed.



## **P**NOTICE

Once oil has been added, on flat level surface as a general rule

oil should be visible about 1-2 threads from top of the oil port hole. If using the dipstick to check oil level, DO NOT screw in the dipstick while checking simply rest it against the top of the port and take reading.

#### **NOTICE**

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

#### **<u>A</u> 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.

#### NOTICE

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

## NOTICE

Synthetic oil may be used after the 5 hour initial break-in period. Using synthetic oil does not decrease 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: Petrol**

#### \land DANGER

Petrol vapors are highly flammable and extremely explosive.

DO NOT light or smoke cigarettes. Fire or explosion can cause severe burns or death.

Only fill or drain fuel outdoors in a well-ventilated area. DO NOT pump petrol directly into the generator. Use an approved container to transfer the fuel to the generator.

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

DO NOT overfill the fuel tank. Always keep fuel away from sparks, open flames, pilot lights, heat and other sources of ignition.

Use clean, fresh, regular unleaded petrol with a minimum octane rating of 85 and an ethanol content of 10% or less by volume.

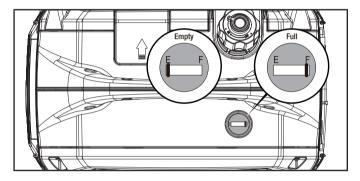
DO NOT mix oil with petrol.

- 1. Remove the fuel cap.
- Slowly add petrol to the tank. DO NOT OVERFILL. Petrol can expand after filling. A minimum of ¼ in. (6.4 mm) of space left in the tank is required for petrol expansion, although more

than ¼ in. (6.4 mm) is recommended. Petrol 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. The approximate fuel level is shown on the fuel gauge on top of the fuel tank.



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

#### **<u>A</u> CAUTION**

Use unleaded petrol 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 petrol.

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

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

DO NOT fill fuel tank indoors, in garages, in sheds or in any out building.

DO NOT fill fuel tank when the engine is running or hot, always allow min 30 mins cooling.

#### **WARNING**

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

#### **P**NOTICE

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

- Ethanol-petrol blends can absorb more water than petrol alone.
- These ethanol blends can eventually separate, leaving water or a watery goo in the tank, fuel valve and carburetor. The compromised petrol can be drawn into the carburetor and cause damage to the engine and/or create potential hazards.
- If a fuel stabilizer is used, confirm that it is formulated to work with ethanol-petrol blends.
- Any damages or hazards caused by using ethanol blended petrol higher than 10% by volume, improperly stored petrol, and/or improperly formulated stabilizers, are not covered by manufacturer's warranty.

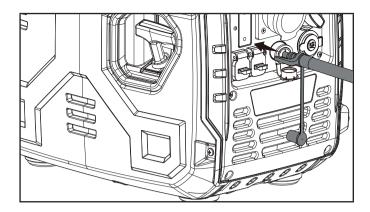
It is advisable to always shut off the petrol supply and run the engine to starvation after each use. See Storage instructions for extended non-use.

## Add Fuel: Propane (LPG)

#### \land DANGER

NEVER place a petrol container, fuel tank, LPG cylinder or any combustible material in the path of the exhaust stream during operation of the engine.

- 1. Confirm the dial is in the OFF position.
- 2. If using a new propane cylinder, remove the plastic cap from the cylinder valve.
- 3. Attach the LPG hose assembly (included) to the propane cylinder valve and hand tighten until snug. DO NOT OVER TIGHTEN.
- 4. Remove the rubber boot covering the propane connection port on the inverter.
- 5. Align the plastic finger on the male hose fitting on the LPG hose assembly with the slot next to the female quick connect coupling on the inverter.
- Insert the hose fitting into the quick connect coupling and push in until you hear a "click" and the outside collar of the quick connect coupling moves forward.



7. Check all connections for leaks by wetting the fittings with a solution of soap and water. Bubbles which appear or bubbles which grow indicate that a leak exists. If a leak exists at a fitting then turn off the valve on the cylinder and tighten the fitting. Turn the valve back on and recheck the fitting with the soap and water solution. If the leak continues or if the leak is not at a fitting then do not use the generator and contact customer service.

#### **P**NOTICE

- The LPG hose included with this unit works with standard 20 and 30 pound LPG tanks.
- Verify the requalification date on the cylinder has not expired.
- All new cylinders must be purged of air and moisture prior to filling. Used cylinders that have not been plugged or kept closed must also be purged.
- The purging process should be done by an LPG supplier. (cylinders from an exchange supplier should have been purged and filled properly already).
- Always position the cylinder so the connection between the cylinder valve and generator inlet won't cause sharp bends or kinks in the LPG hose.

### **CAUTION**

Do not allow children to tamper or play with the LPG cylinder or hose connections.

#### **<u>A</u> CAUTION**

Use approved LPG cylinders equipped with an OPD (overfilling prevention device) valve. Always keep the cylinder in a vertical position with the valve on top and installed at ground level on a flat surface. Cylinders must not be installed near any heat source and should not be exposed to sun, rain, and dust. When transporting and storing, turn off the cylinder valve and generator LPG valve, and disconnect the cylinder. Plug the outlet, usually by a plastic protective cap, if one is available. Keep cylinders away from heat and ventilated when in a vehicle.

#### **WARNING**

If there is a strong smell of LPG: Close valve on the cylinder. Check all connections for leaks by wetting the fittings with a solution of soap and water. Bubbles which appear or bubbles which grow indicate that a leak exists. Do not smoke or light a cigarette, or check for leaks using a match, open flame source or lighter. Contact a qualified technician to inspect and repair an LPG system if a leak is found, before using the generator.

## Grounding

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

#### 

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

A ground terminal connected to the panel of the generator has been provided (see Controls and Features for terminal location). 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.

#### Neutral Floating\*(This generator)

- 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 crossmember below the alternator. The system ground is connected to the AC neutral wire.

\*See your Specifications section for specified type of grounding.

# **OPERATION**

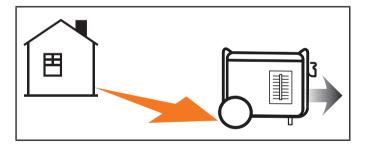
# CO Shield $\ensuremath{^\circ}$ - Carbon Monoxide (CO) Detection and Auto-shutoff System

CO Shield<sup>®</sup> technology monitors the accumulation of carbon monoxide (CO), a poisonous gas produced by engine exhaust when the generator is running. If CO Shield<sup>®</sup> detects unsafe elevated levels of CO gas, it automatically shuts off the engine.

# CO SHIELD® IS NOT A SUBSTITUTE FOR AN INDOOR CARBON MONOXIDE ALARM OR FOR INDOOR OPERATION.

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

Generators must ALWAYS be used outdoors, far away from occupied buildings with engine exhaust pointed away from people and buildings.



If misused and operated in an unapproved and unsafe location that results in the accumulation of poisonous CO gas inside an enclosed or partially enclosed space, for example a house, garage or a garage with the door partially open, CO Shield<sup>®</sup> will automatically shut off the generator and then will illuminate a blinking red LED light. **Read the action label for next steps.** 



In the event of an engine shut off, when you approach the generator to investigate, a blinking **red** LED light in the CO Shield<sup>®</sup>

area provides notification that the generator shut off due to an accumulating CO hazard. The red LED light will blink for at least five (5) minutes after an engine shut off event.



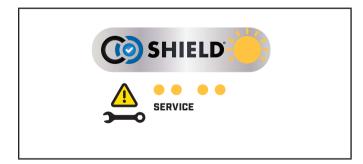
Move the generator far away to an open, outdoor area and point the exhaust away from people and buildings. Once relocated to a safe area, the generator can be restarted, and the proper electrical connections made. Introduce fresh air and ventilate the location where the generator shut off.

When restarting, the red and yellow LED will blink ten (10) times simultaneously to indicate the LED is working.

#### **NOTICE**

This blinking LED light does not indicate CO ShieldR is working,CO ShieldR is on and active at all times when the generator is running.LED light will not blink (10) times if the generator was restarted within 1 minute after it was turned off. This LED blinking indication does not occur if the generator is shut down from a high CO event.

If CO ShieldR system experiences a fault and no longer provides protection, the generator will shutoff automatically and the yellow LED light will blink for at least five (5) minutes to notify you of the fault



Call our Technical Support Team at +44(0)-1942-715-407 for repair. The generator can be restarted, but will continue to shutoff.

#### **P**NOTICE

CO ShieldR will detect an accumulation of carbon monoxide (CO) from other fuel burning sources such as engine powered equipment, and(or) heaters used in the area of its operation. If another generator is used and the exhaust stream is pointed in the direction of the CO ShieldR equipped generator, the CO ShieldR will initiate a shutoff due to rising carbon monoxide (CO) levels. This is not a fault, It simply means high levels of Poisonous carbon monoxide (CO) has been detected.You must take action to move and direct the generator exhaust or heaters stream to better disperse carbon monoxide (CO) far away from people or buildings as possible..

#### \land DANGER

Tampering with the CO Shield<sup>®</sup> system will result in a hazardous condition and will void your warranty.

Removing the CO ShieldR module is not allowed and will result in the generator not being able to start, by doing so this will void any warranty.

### **Generator Location**

#### **MARNING**

NEVER operate the generator inside any building, garage, basement, crawlspace, shed, enclosure or compartment, including a generator compartment of a recreational vehicle.

NEVER operate or start the generator in the back of an SUV, camper, trailer, truck bed (regular sides, flat or other configuration), under staircases, stairwells, next to walls or buildings or in any other location that will not allow for adequate cooling of the generator or for the proper exit of the exhaust flow from the muffler system.

DO NOT operate or store the generator in wet weather conditions such as rain or snow. Using a generator in wet conditions could result in serious injury or death due to electrocution.

In some state's generators may be required to be registered with the local utility company when used at construction sites and may be subject to additional rules and regulations, consult your local municipal authority.

Generators should always be operated on a flat, level surface at all times (even when not in operation).

Generators must have a minimum of 5 feet (1.5 m) of clearance from all combustible material.

Generators must also have a minimum of 3 feet (91.4 cm) of air flow clearance on all sides to allow for adequate performance cooling, maintenance and servicing.

Always place the generator in a well-ventilated area. NEVER place the generator near air intake vents or where exhaust fumes could be drawn into occupied or confined spaces.

Always carefully consider wind and air currents when positioning generator.

Always allow generators to properly cool before transport or for storage purposes.

Failure to follow proper safety precautions may result in personal injury, damage to the generator and void the manufacturer's warranty.

#### **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.

### **CAUTION**

Do not modify or try to install a exhaust/muffler extension otherwise you will cause degraded engine performance and may damage the engine resulting in voiding any warranty.

#### **MARNING**

Do not expose to rain or use in damp locations.

Keep all objects a minimum of 5 feet (1.5m) away from the generator at all times. Heat from the muffler surface and exhaust gas stream can ignite combustible materials.

#### **WARNING**

If you must operate in rain or damp locations, DO NOT operate without proper protection of the electrical components.

Use of a safety canopy that is fire retardant and will provide proper air ventilation for the engine exhaust gas stream may be used.

Visit championpowerequipment.com or call to find your Storm Shield cover.

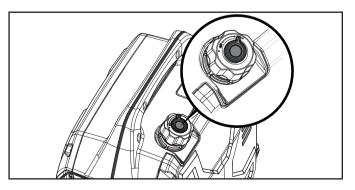
## **Surge Protection**

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.

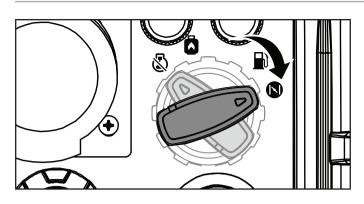
 Install UL1449, CSA-listed, plug-in surge suppressors on the outlets feeding your sensitive equipment.
 Surge suppressors come in single- or multi-outlet styles.
 They're designed to protect against virtually all short-duration voltage fluctuations.

## **Starting the Engine: Petrol**

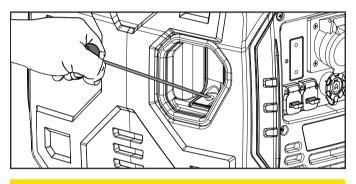
- 1. Make certain the generator is on a flat, level surface.
- Disconnect all electrical loads from the generator. Never start or stop the generator with electrical devices plugged in or turned on.
- 3. Turn the fuel vent lever to the "ON" position.



4. Move the EZ Start dial to the "CHOKE" position.



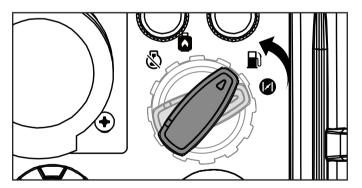
5. When starting the engine, pull the recoil cord slowly until resistance is felt, release cord back and use one strong rapid pull to start, this avoids any kickback or damage to the recoil assembly. Rigorously pulling will result in damage to the recoil assembly and void any warranty.



#### **<u>A</u> CAUTION**

Rigorously or aggressively pulling the recoil cord will result in damage to the recoil assembly and void any warranty.

6. As the engine warms up, turn the EZ Start dial to the petrol "RUN" position.



## **P**NOTICE

For petrol restarts with hot engine in hot ambient temperature >86°F (30°C): Rotate the EZ Start dial to the "CHOKE" position for only one pull of the recoil cord. If generator does not start after first pull, rotate the dial to the "RUN" position for the next three pulls. Too much choke leads to spark plug fouling and engine flooding. This will cause the engine not to start.

### **P**NOTICE

For petrol starting in standard ambient temperature >59°F (15°C): Keep EZ Start dial in "CHOKE" position for three pulls of the recoil cord. If generator does not start after three pulls, rotate the EZ Start dial to the "RUN" position for the next three pulls. Too much choke leads to spark plug fouling and engine flooding. This will cause the engine not to start.

## **NOTICE**

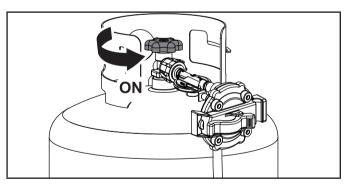
For petrol starting in cold ambient temperature < 59°F (15°C): Keep the EZ Start dial in the "CHOKE" position until engine starts. As soon as the engine starts and runs smoothly turn the EZ Start dial to the "RUN" position. In extreme cold temperatures, this may take several seconds.

### **P**NOTICE

If the engine starts but does not continue to 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.

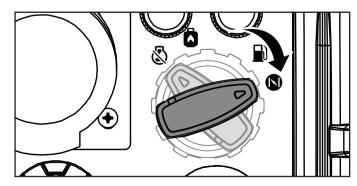
## **Starting the Engine: Propane (LPG)**

- 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. Open the fuel valve on the propane cylinder.

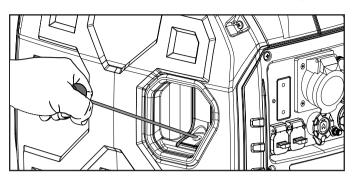


### **Cold Engine Start**

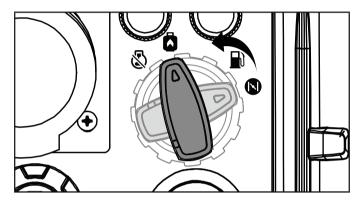
4. Move the EZ Start dial to the "CHOKE" position.



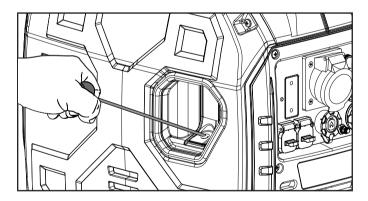
5. Slowly pull the starter cord 3-5 times to prime the engine.



6. Turn the EZ Start dial to the propane "RUN" position.

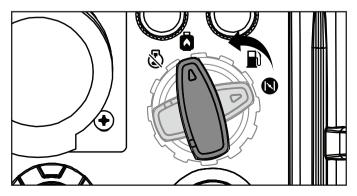


7. When starting the engine, pull the recoil cord slowly until resistance is felt, release cord back and use one strong rapid pull to start, this avoids any kickback or damage to the recoil assembly. Rigorously pulling will result in damage to the recoil assembly and void any warranty.

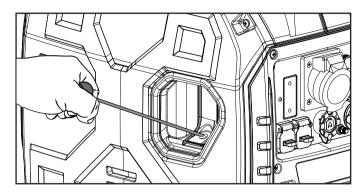


#### Warm Engine Start

4. Turn the EZ Start dial to the propane "RUN" position.



5. When starting the engine, pull the recoil cord slowly until resistance is felt, release cord back and use one strong rapid pull to start, this avoids any kickback or damage to the recoil assembly. Rigorously pulling will result in damage to the recoil assembly and void any warranty.



### **<u>A</u>CAUTION**

Rigorously or aggressively pulling the recoil cord will result in damage to the recoil assembly and void any warranty.

### **P**NOTICE

Accumulation of frost on LPG cylinder and regulators is common during operation and normally is not an indication of a problem. As LPG vaporizes and travels from the cylinder to the generator engine it expands. The amount of frost that forms can be affected by the size of the cylinder, the amount of LPG being used, the humidity of the air and other operating conditions.

In unusual situations this frost may eventually restrict the flow of LPG to the generator resulting in deteriorating performance. For example, if the cylinder temperature is reduced to a very low level then the rate at which the LPG vaporizes is also reduced and may not provide sufficient flow to the engine. This is not an indication of a problem with the generator but only a problem with the flow of LPG from the cylinder. If generator performance seems to be deteriorating at the same time that ice formation is observed on tank valve, hose or regulator then some actions may be taken to eliminate this symptom.

In these rare situations it can be helpful to reduce or eliminate the cold fuel system effects by doing one of the following:

- Exchanging fuel cylinders to allow the first cylinder to warm up, repeating as necessary.
- Placing the cylinder at the end of the generator near the handle, where engine fan air flows out from the generator. This air is slightly heated by flowing over the engine. The cylinder should not be placed in the path of the muffler outlet.
- The cylinder can be temporarily warmed by pouring warm water over the top of the cylinder.

## **Connecting Electrical Loads**

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

Plug in and turn on the desired 220 Volt AC single phase, 50 Hz electrical loads.

- DO NOT connect 3-phase loads to the generator.
- DO NOT overload the generator.

#### **WARNING**

Always remember to plug your appliances directly into the generator and do not plug the generator power cord into any electrical outlet or connect to the circuit breaker panel in your home. Connecting a generator to your home's electric utility company's power lines, or to another power source, called 'backfeeding' is a dangerous practice that is illegal in many states and municipalities.

This action if done incorrectly could damage your generator, appliances and could cause serious injury or death to you or a utility worker when attempting to restore power during an outage occurrence in the neighborhood who may then unexpectedly encounter high voltage on the utility line and suffer a fatal shock.

Whether injuries occur or not, if installed incorrectly and not to applicable laws and codes, you may be subject to fines or the utility company may disconnect your home power should this practice be found in your home.

If the generator will be connected to a building electrical system, those connections must isolate the generator power from the utility power. You are responsible for ensuring your generator's electricity does not backfeed into the electric utility power lines. These connections must comply with all applicable laws and codes – Consult your local utility company or a qualified electrician to properly install this connection.

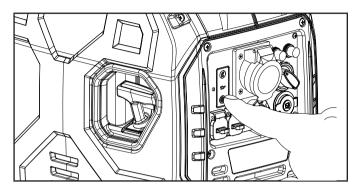
## **Do Not Overload Generator**

#### 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.

4. If the generator power output is cut off due to an overload condition indicated by the AC overload blinking light, lower the load by unplugging one or more items, then press the AC overload reset button before restarting the generator for continued normal operation.



#### **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. Make sure all circuit breakers are set to the run position.
- 4. Plug in and turn on the first item. It is best to attach the item with the largest load first.
- 5. Allow the engine to stabilize.
- 6. Plug in and turn on the next item.
- 7. Allow the engine to stabilize.
- 8. Repeat steps 5-6 for each additional item.

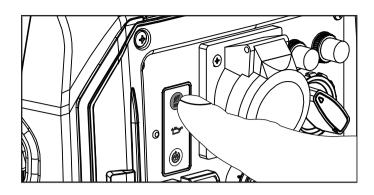
### **P**NOTICE

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

## Eco (Economy) Mode

The Eco Mode button can be activated to turn on economy control in order to minimize fuel consumption and noise while operating the unit during times of reduced electrical output. Eco Mode allows the engine speed to idle during periods of non-use.

The engine speed returns to normal when an electrical load is connected. When the economy switch is off, the engine runs at normal speed continuously.



#### **<u>A</u> CAUTION**

For periods of high electrical load or momentary fluctuations, the Eco Mode should be off.

## **Parallel Operation**

The Champion model 93001i-DF-UK is parallel ready and can be operated in parallel with another Champion unit to increase the total available electrical power. A Champion parallel kit (optional equipment) is required for parallel operation. Model 755001i-WL-UK is the recommended model for this unit. For a list of compatible models or to order a parallel kit, please call customer service at +44(0)-1942-715-407 or visit www.championpowerequipment. co.uk

Detailed instructions for parallel kit installation and operation of the connected generators are provided in the parallel kit operator's manual.

### **A** CAUTION

Do Not use both 230v AC and 12v DC at the same time otherwise you could damage the generator or equipment resulting in voiding your warranty.

### **12V DC Regulated Automotive Style Outlet**

The 12V DC outlet(s) can be used with supplied accessories and other commercially available 12V DC automotive style plugs. Confirm the input voltage range of your item is at least 12-24V DC.

#### A WARNING

When charging a device, do not place on the exhaust side of the generator. Extreme heat caused by exhaust can damage the device and cause a potential fire hazard. Prolonged exposure to engine exhaust can cause serious injury or death.

#### **Battery Charging**

1. Before connecting the battery charging cable to a battery that is installed in a vehicle, disconnect the vehicle battery ground cable from the negative (–) battery terminal.

- Plug the battery charging cable into the 12V DC receptacle of the generator.
- 3. Connect the red (+) battery charger lead to the red (+) battery terminal.
- 4. Connect the black (–) battery charger lead to the black (–) battery terminal.
- 5. Start the generator.

**Important:** The 12V DC outlet is ONLY to be used with supplied accessories and other commercially available 12V DC automotive style plugs. Be sure all electric devices including the lines and plug connections are in good condition before connection to the generator.

#### **A** WARNING

Do not start the vehicle while the battery charging cable is connected and the generator is running. It will not give the battery a boost of power. The vehicle or the generator may be damaged. Charge only vented wet lead acid batteries. Other types of batteries may burst, causing personal injury or damage.

#### **NOTICE**

Be sure all electric devices including the lines and plug connections are in good condition before connection to the generator.

## **Parallel Operation**

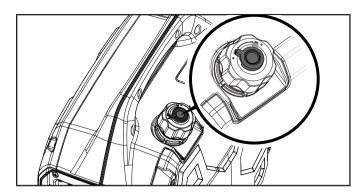
The Champion model 93001i-DF-UK is parallel ready and can be operated in parallel with another Champion unit to increase the total available electrical power. A Champion parallel kit (optional equipment) is required for parallel operation. Model 500740-WL-EU is the recommended model for this unit. For a list of compatible models or to order a parallel kit, please call customer service at +44(0)-1942-715-407 or visit www.championpowerequipment. co.uk

Detailed instructions for parallel kit installation and operation of the connected generators are provided in the parallel kit operator's manual.

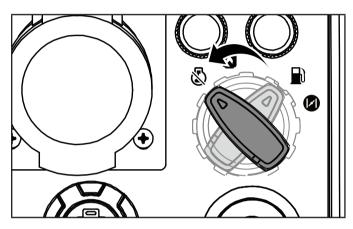
### **Stopping the Engine**

#### Petrol

- 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 vent lever to the "OFF" position.



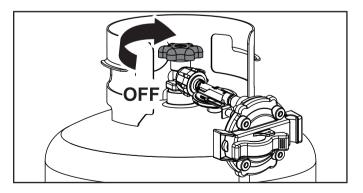
4. Turn the EZ Start dial counterclockwise to the "STOP" position.



**Important:** Always ensure that the dial and fuel vent on the fuel cap are in the "OFF" position when the generator is not in use.

#### Propane

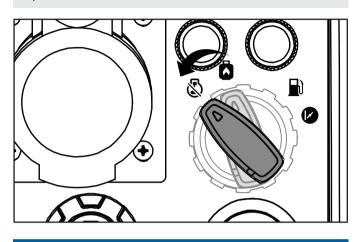
- 1. Turn off and unplug all electrical loads. Never start or stop the generator with electrical devices plugged in or turned on.
- 2. Let the generator run at no-load for several minutes to stabilize internal temperatures of the engine and generator.
- 3. Close the fuel valve on the propane cylinder.



4. Turn the EZ Start dial counterclockwise to the "STOP" position.

## **A** CAUTION

When running on propane the EZ dial will be disabled for safety, the only way to stop generator is to close of the cylinder tap.



### **NOTICE**

If the generator 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**

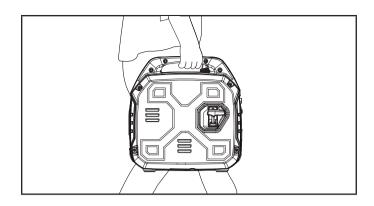
### **<u>A</u>CAUTION**

- 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).
- Do not drop or strike unit or place under heavy objects.

## **WARNING**

Failure to follow these instructions could result in personal injury or damage to the generator resulting voiding any warranty.

Lift unit up by the carrying handle and move to the desired location.



## **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
	100005759	3281-6562ft.
100733457		(1000-2000m)
100733457		6562-9843ft.
	100005736	

### **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.

#### **WARNING**

Never operate a damaged or defective generator.

## **WARNING**

Your generator needs regular servicing and maintenance, failure to regularly maintain and service your generator will result in voiding any warranty. For clear guidance read and understand this section.

#### **P**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 +44(0)-1942-715-407.

## **Cleaning the Generator**

## **CAUTION**

DO NOT spray, jet, power wash 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.

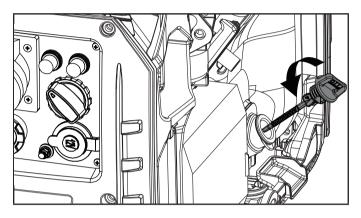
- 1. Use a damp cloth to clean exterior surfaces of the generator.
- 2. Use a soft bristle brush to remove dirt and oil.
- 3. Use an air compressor (25 PSI) to clear dirt and debris from the generator.
- 4. Inspect all air vents and cooling slots to ensure that they are clean and unobstructed.

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

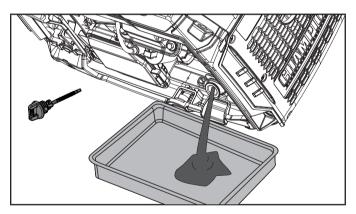


Recommended every 100 hours or annually Change oil when the engine is warm. Refer to the oil specification to select the proper grade for your operating environment.

- 1. Set the generator on top of a work bench or table.
- 2. Loosen the fasteners and remove the maintenance cover.
- 3. Remove oil fill cap/dipstick.



4. Tilt the generator on its side and allow the oil to drain completely.



- Add oil according to *Add Engine Oil* in *Assembly* section. DO NOT OVERFILL. Oil not included for routine maintenance.
- 6. Replace oil fill cap/dipstick and secure maintenance cover.
- 7. Dispose of used oil at an approved waste management facility.

### **NOTICE**

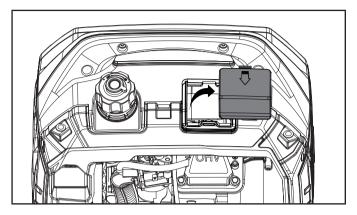
Once oil has been added, on flat level surface as a general rule

oil should be visible about 1-2 threads from top of the oil port

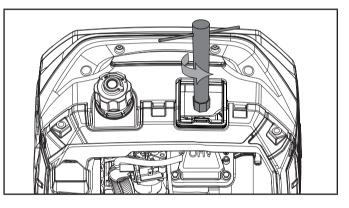
hole. If using the dipstick to check oil level, DO NOT screw in the dipstick while checking simply rest it against the top of the port and take reading.

## **Cleaning and Adjusting the Spark Plug**

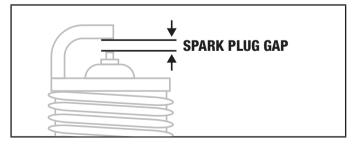
1. Recommended every 50 hours use or annually. Remove the maintenance cover.



- 2. Remove the spark plug cable from the spark plug.
- 3. Use a spark plug socket tool ), or a 13/16 in. (21 mm) socket to remove the plug.



- 4. Inspect the electrode on the plug. It must be clean and not worn to produce the spark required for ignition.
- 5. Make certain the spark plug gap is 0.024-0.031 in. (0.6-0.8 mm).

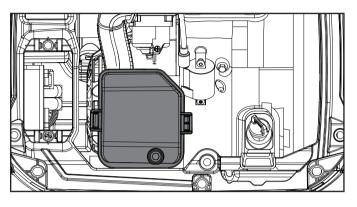


- 6. Refer to the spark plug types in Specifications when replacing the plug.
- 7. Firmly re-install the plug.
- 8. Attach the spark plug cable to the spark plug.
- 9. Reinstall the spark plug access cover.

#### MAINTENANCE

## **Cleaning the Air Filter**

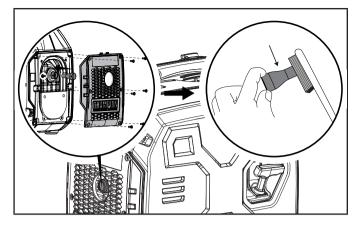
- 1. Recommended every 100 hours use or 1 month. Allow the engine to cool completely before touching or servicing the spark arrestor.
- 2. Locate the air filter plastic cover and remove by pinching the clips together and pulling the cover off.



- 3. Remove the foam element.
- 4. Wash in liquid detergent and water. Squeeze thoroughly dry in a clean cloth.
- 5. Saturate in clean engine oil.
- 6. Squeeze in a clean, absorbent cloth to remove all excess oil.
- 7. Place the filter in the assembly.
- 8. Reattach the air filter cover.
- 9. Reinstall the maintenance cover and tighten the cover screw securely.

## **Cleaning the Spark Arrestor**

- 1. Recommended every 100 hours use or monthly.
- 2. Allow the engine to cool completely before servicing the spark arrestor.
- 3. Remove the 6 screws holding the cover plate on the muffler side of the generator.
- 4. Remove the screw which retains the spark arrestor to the muffler.
- 5. Remove the spark arrestor.
- 6. Carefully remove the carbon deposits from the spark arrestor with a wire brush.



- 7. Replace the spark arrestor if it is damaged.
- 8. Position the spark arrestor on the muffler and attach by reversing the steps from above.

### 

Failure to clean the spark arrestor regularly will result in degraded engine performance and may damage engine resulting is voiding any warranty.

## **P**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**

#### **MARNING**

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 +44(0)-1942-715-407 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 Technical Support Team at +44(0)-1942-715-407 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
- Check propane (LPG) hose for leaks

#### 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\*
- Replace LPG hose

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

## **STORAGE**

### \land WARNING

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

 When storing the generator make sure the EZ Start dial is set to the "OFF" position.

#### **P**NOTICE

The following storage instructions are only necessary if using petrol. As long as there is no petrol in the fuel tank, system lines, or carburetor, LPG will not gum up or clog the carburetor. However, ensure the LPG hose is disconnected from the generator and LPG tank is shut off and properly stored. If storing for an extended period, inspect fuel system and LPG hose lines and fittings for leaks upon removal from storage.

## Short Term Storage (up to 30 days)

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

If using the generator within 2 weeks, follow the steps according to *Stopping the Engine* section.

- 1. If not using the generator for 2-4 weeks, begin by making sure all appliances are disconnected from the generator.
- 2. Start the generator as instructed in *Starting the Engine: Petrol* section.
- 3. Let the engine run on petrol until fuel starvation has stopped the engine.
- 4. After the engine stops, turn the EZ Start dial counterclockwise to the "STOP" position.

## Mid Term Storage (30 days - 1 year)

Petrol 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.

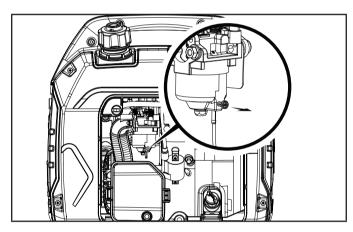
- 1. Be sure all appliances are disconnected from the generator.
- 2. Add a properly formulated fuel stabilizer to the fuel tank.
- 3. Start engine by following directions in the *Starting the Engine: Petrol* section.
- 4. Run the generator for 10 minutes so the treated petrol cycles through the fuel system and carburetor.
- 5. Let the engine run until fuel starvation has stopped the engine.
- 6. After the engine stops, turn the EZ Start dial counterclockwise to the "STOP" position.
- After fuel has run out and the engine has stopped, allow the engine to cool.
- 8. Remove maintenance cover.
- Remove the spark plug and pour about a tablespoon of oil into the cylinder.
- 10. SLOWLY pull the recoil to rotate the engine to distribute and lubricate the cylinder.

- 11. Re-install the spark plug and spark plug wire.
- 12. Re-install the maintenance cover.
- 13. Clean the generator according to *Cleaning the Generator*.
- 14. Store the generator in a cool, dry place out of direct sunlight.

## Long Term Storage (more than 1 year)

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

- 1. Be sure all appliances are disconnected from generator.
- Place inverter on blocks to allow appropriate petrol container or pan to slide under inverter.
- 3. Remove the maintenance cover.
- 4. Turn the EZ Start dial to the petrol "RUN" position.
- Using a Phillips screwdriver, rotate drain screw counterclockwise (3) full turns. Petrol will drain through clear tubing out underneath the inverter. Make sure draining petrol empties into an appropriate container.



- 6. When petrol stops flowing from the clear tube, rotate drain screw clockwise until tight. Properly dispose of the drained petrol according to local regulations or guidelines.
- 7. Turn the fuel EZ Start dial to the "STOP" position.
- 8. Follow steps 8-12 according to Short Term Storage.

## **Removing from Storage**

### **P** NOTICE

If the generator has been improperly stored or ran using LPG only for a period longer than 30 days with ethanol blended petrol in the fuel tank and/or carburetor, all fuel must be drained and the carburetor must be thoroughly cleaned of ethanol build up. This process involves technically advanced tasks. For assistance please call our Technical Support Team at +44(0)-1942-715-407.

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

- 1. Be sure the EZ Start dial is in the "STOP" position.
- 2. Add petrol to the generator according to Add Fuel.
- 3. Turn the EZ Start dial to the petrol "RUN" position.
- 4. After 5 minutes check the carburetor and air filter areas for any leaking petrol. If any leaks are found, the carburetor will need to be disassembled and cleaned or replaced. If no petrol leaks are found, turn the EZ Start dial to the "STOP" position.
- 5. Check engine oil level and add clean, fresh oil if needed. See Oil Specifications for proper oil type.
- Check and clear air filter of any obstructions such as bugs or cobwebs. If necessary, clean air filter according to Cleaning the Air Filter.
- 7. Start the generator according to Starting the Engine.

#### A DANGER

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

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

 When storing the generator make sure the fuel dial is set to the "STOP" position.

#### **WARNING**

If there is a strong smell of LPG: Close valve on the cylinder. Check all connections for leaks by wetting the fittings with a solution of soap and water. Bubbles which appear or bubbles which grow indicate that a leak exists. Do not smoke or light a cigarette, or check for leaks using a match, open flame source or lighter. Contact a qualified technician to inspect and repair an LPG system if a leak is found, before using the generator.

# **SPECIFICATIONS**

## **Generator Specifications**

Generator Model	
Start Type	Manual
Watts (Max/Running)	
Watts (LPG) (Max/Running)	
Volts AC	
AC Amps	11.7
Volts DC	12
DC Amps	
Frequency	
Phase	Single
Grounding Type	Neutral Floating
Weight	47.4 lb. (21.5 kg)
Length	18.5 in. (46.9 cm)
Width	12 in. (30.4 cm)
Height	17.7 in. (45 cm)
Max site altitude of installation	1000m
Measured sound pressure level (7m)	60 dB(A)
Measured sound pressure level (4m)	74 dB(A)
Noise measurement uncertainty	≤1.5 dB(A)
Guaranteed sound power level	

## **Engine Specifications**

Model	165F-B/165FS-B
Displacement	
Туре	4-Stroke OHV
Spark Plug	
ОЕМ Туре	
Replacement Type	NGK BPR5HS or equivalent
Gap	0.024-0.031 in. (0.6-0.8 mm)
Valve	
Intake Clearance	0.004-0.006 in. (0.10-0.15 mm)
Exhaust Clearance	0.004-0.006 in. (0.10-0.15 mm)

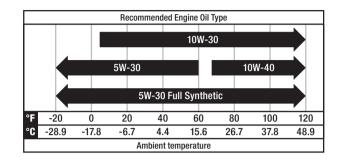
### **NOTICE**

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

#### **Oil Specifications**

DO NOT OVERFILL.

Туре	*See following chart
Capacity	16.9 fl. oz. (500 ml)



### **P**NOTICE

Temperature will affect engine oil and engine performance. Change the type of engine oil used based on temperature shown in the *"Recommended Engine Oil Type"* table.

## Fuel Specifications®®

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

Fuel Capacity	1.2 gal. (4.5 L)
---------------	------------------

#### Propane (LPG)

 Use only an approved LPG cylinder equipped with an OPD (overfilling prevention device) valve.

## **Temperature Specifications**

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

#### **P**NOTICE

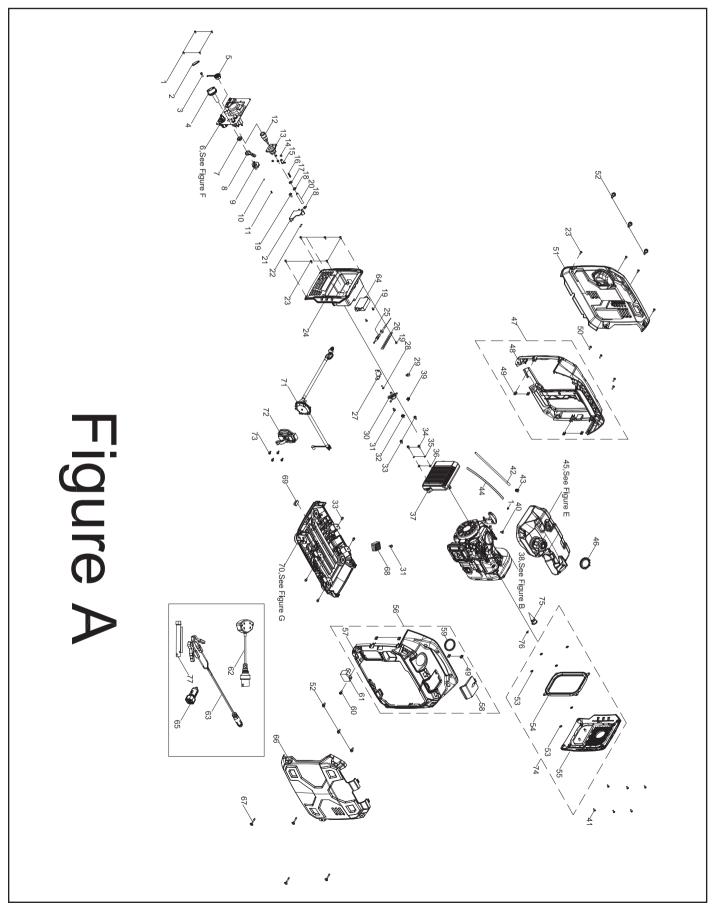
An important message about temperature: Your product is designed and rated for continuous operation at ambient temperatures up to 104°F (40°C). When needed, it may be operated at temperatures ranging from 5°F (-15°C) to 122°F (50°C) for short periods of time. If exposed to temperatures outside this range 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.

Problem	Cause	Solution
	Engine governor defective.	Contact the help line.
Engine hunte er feltere	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 EZ Start Dial to the RUN position.
	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 Toll Free +44(0)-1942-715-407 support@championpowerequipment.co.uk

## **Figure A Parts Diagram**

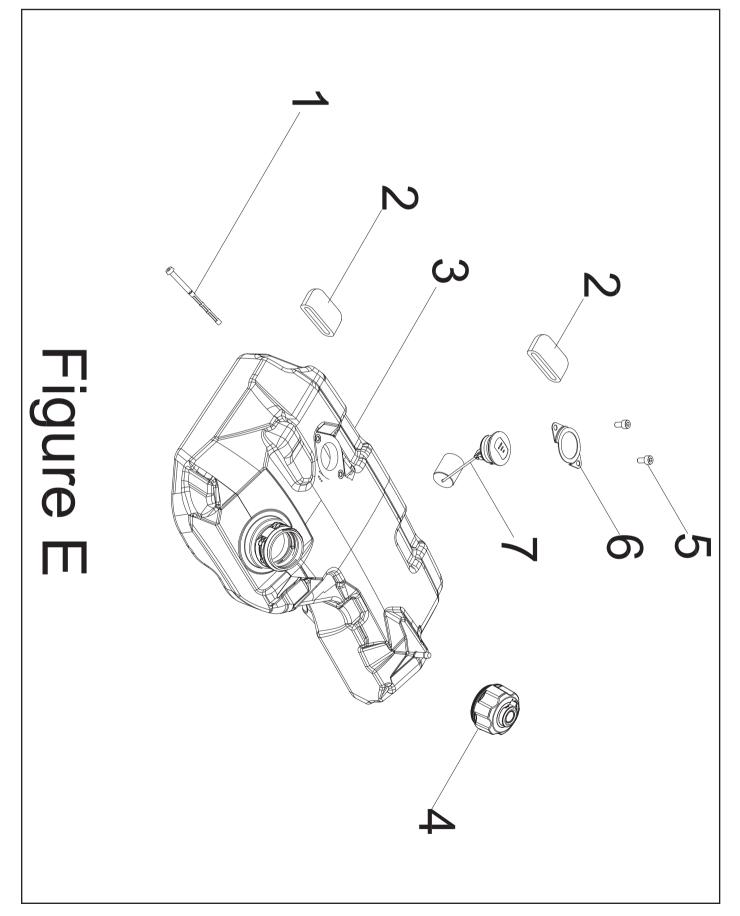


# **Figure A Part List**

#	Part Number	Description	Qty.
1	100010946-0001	Screw M4 x 10	5
2	100715786-0002	Cover, Fuel Switch Handle	1
3	100137684-0003	Bolt M4 x 16	1
4	100715787-0001	Fuel Valve Lever	1
5	100158478-0001	Protector Cover, Quick Connector	1
6	100765662-0001	Panel Assembly, See Figure F	1
7	100714542	Block, Swing Arm	1
8	100714543	Swing Arm	1
9	100712960	Switch Block	1
10	100099173	Steel Ball	1
11	100098271	Switch Spring	1
12	100157219-0001	Self-locking Quick Connector, Female	1
13	100157218-0001	Mounting Seat, Self-locking Quick Connector	1
14	100011065-0005	Nut M4	4
15	100157217-0001	Sliding Block, Mounting Seat	1
16	100157221-0001	Spring, Mounting Seat	1
17	100160807-0001	Nut M12	1
18	100759576	Clamp, Fuel Hose	2
19	100011001-0005	Self-tapping Screw ST4.2 x 10	2
20	100778868-0001	Gas Hose	1
21	100714558	Wire Stop Block	1
22	100091757	Circlip, Bearing Holder, Ø1.8 x Ø6	2
23	100081995-0001	Step Bolt	10
24	100775685-0001	Front Panel, Yellow	1
25	100714541	Cable	1
26	100000656	Clip	1
27	100714544	Mounting Plate, Recoil Cord	1
28	100032967-0004	Self-tapping Screw ST4.2 x 16	1
29	100000671	Clip Ø13	1
30	100766031	Fuel Valve, Angle 180°	1
31	100011571-0002	Big Flange Bolt M6 x 14	2
32	100005149	Clamp 1, Ø7.5	1
33	100011570-0008	Big Flange Bolt M6 x 12	6
34	100011249-0004	Flange Bolt M5 x 12	2
35	100010885-0004	Spring Washer Ø5	2
36	100010919-0002	Flat Washer Ø5	2
37	100765367-0001	Inverter, 230V 50Hz	1
38	1ZC7DFB25	Engine	1
39	100005130	Clamp Ø9 x 8	1
40	100011570-0008	Big Flange Bolt M6 x 12	1

#	Part Number	Description	Qty.
41	100098636-0001	Bolt	6
42	100769795	Fuel Tube, L=295mm	1
43	100005135	Clamp 2, Ø11.5 x 10	1
44	100131884	Tube Sheath, Silicon Resin	1
45	100773243	Fuel Tank Assembly, See Figure E	1
46	100008887	Lock Nut	1
47	100769796-0002	Housing Assembly, Left Handle, Yellow	1
48	100723548-0002	Housing, Left Handle, Yellow	1
49	100050562	Threaded Clamp	8
50	100033079-0005	Screw M5 x 16	4
51	100760570-0009	Side Cover Plate, Left, Black	1
52	100081994-0001	Shaft Locating Bolt	6
53	100087972	Retainer Ring	6
54	100158130	0-ring Seal	1
55	100765680-0001	Rear Panel, Muffler, Black	1
56	100760674-0002	Housing Assembly, Right Handle,Yellow	1
57	100139138-0003	Housing, Right Handle, Yellow	1
58	100092444-0010	Spark Plug Maintenance Plate, Yellow	1
59	100073150	Rubber Washer	1
60	100011264-0008	Flange Bolt M6 x 16	1
61	100715460-0001	Fuel Solenoid Valve Controller	1
62	100771326	Rubber Damper	1
63	100155004-0001	12VDC Battery Charging Cable	1
64	5.1830.022	CO Shutdown Module	1
65	100155005-0001	5VDC USB Adapter	1
66	100713140-0009	Housing Assembly, Right, Black	1
67	100163606-0001	Bolt	4
68	100765371-0001	Rectifier Bridge, Capacitance	1
69	100072710-0001	Rubber Damper	1
70	100773242	Switch Box Base Kit, See Figure G	1
71	100774951-0002	LPG Hose with Regulator	1
72	100715007	Mounting Cover, Gas Pressure Valve	1
73	100011570-0009	Big Flange Bolt M6 x 12, GB16674	4
74	100777648-0001	Service Window	1
75	100085794	Spark Arrester	1
76	100011000-0002	Self-tappling Screw, ST4.2×9.5	1
77	100000121-0003	Spark Plug Socket	1

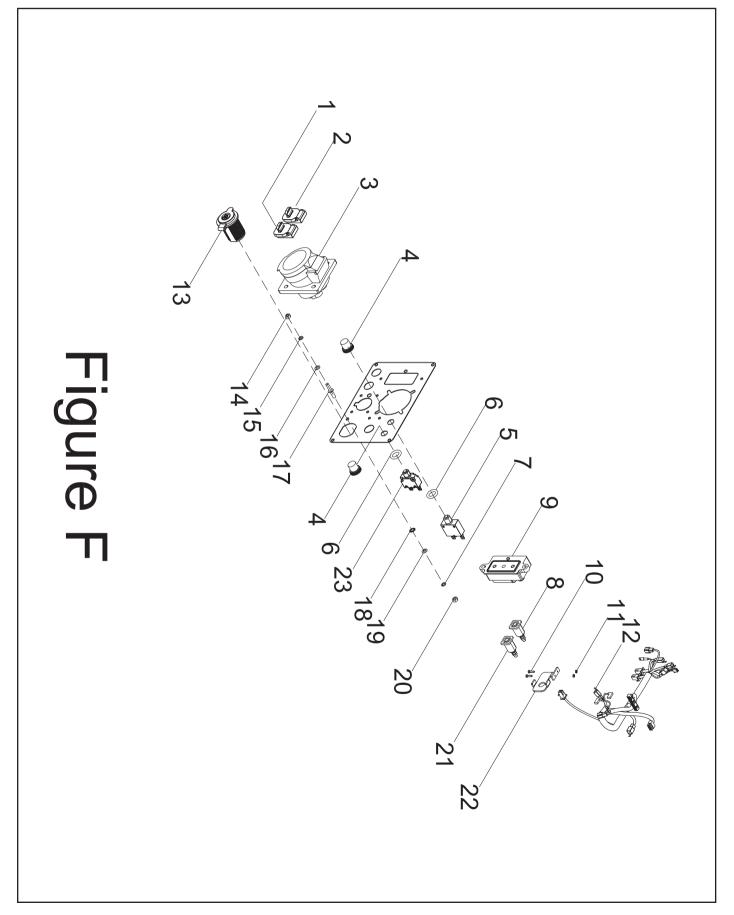
# Figure E Parts Diagram



# Figure E Part List

#	Part Number	Description	Qty.
1	100009020	Fuel Strainer	1
2	100072727-0001	Rubber Pad	2
3	100731679	Fuel Tank, 4.5 L	1
4	100072726-0005	Fuel Tank Cap	1
5	100010831-0001	Flange Bolt M5 x 10	2
6	100714562-0001	Fixed Clamp	1
7	100728784	Fuel Indicator	1

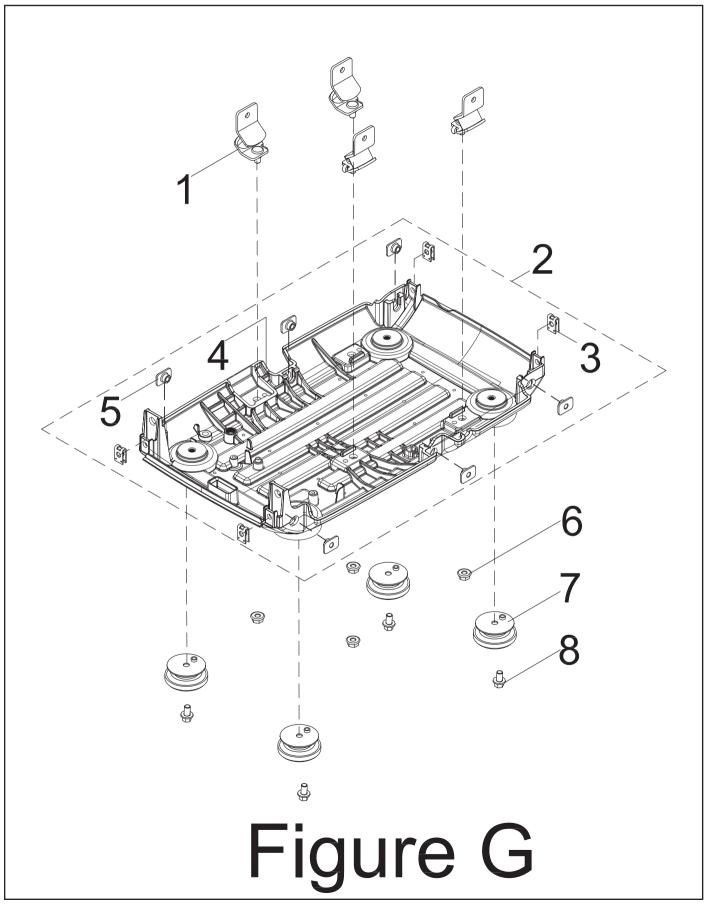
# Figure F Parts Diagram



# Figure F Part List

#	Part Number	Description	Qty.	
1	100765674-0002	Parallel Port Cover, Square, Black	1	
2	100765674-0001	Parallel Port Cover, Square, Red	1	
3	100019997	Receptacle	1	
4	100120180	Cover, Circuit Breaker	2	
5	100019758-0002	16Amp Circuit Breaker, Push Button		
6	100031552	0-Ring	2	
7	100010885-0003	Spring Washer Ø5	1	
8	100746006-0001	Parallel Port, Square, Red	1	
9	100773345	LED Display Module	1	
10	100719040-0001	Screw M2.5 x 18	2	
11	100096063-0001	Flange Nut M2.5	2	
12	100771601	Wire Harness Assembly	1	
13	100019782	Receptacle, 12 VDC	1	
14	100011421-0003	Flange Nut M6	1	
15	100010886-0004	Spring Washer Ø6	1	
16	100010910-0003	Flat Washer Ø6	1	
17	100092320	Ground Stud	1	
18	100128826-0001	Lock Washer Ø6, Toothed 1		
19	100010919-0002	Flat Washer Ø5 1		
20	100011419-0001	Nut M5	1	
21	100746006-0002	Parallel Port, Square, Black	1	
22	100157215	Mounting Plate	1	
23	10057719-0001	8Amp Circuit Breaker, Push Button	1	

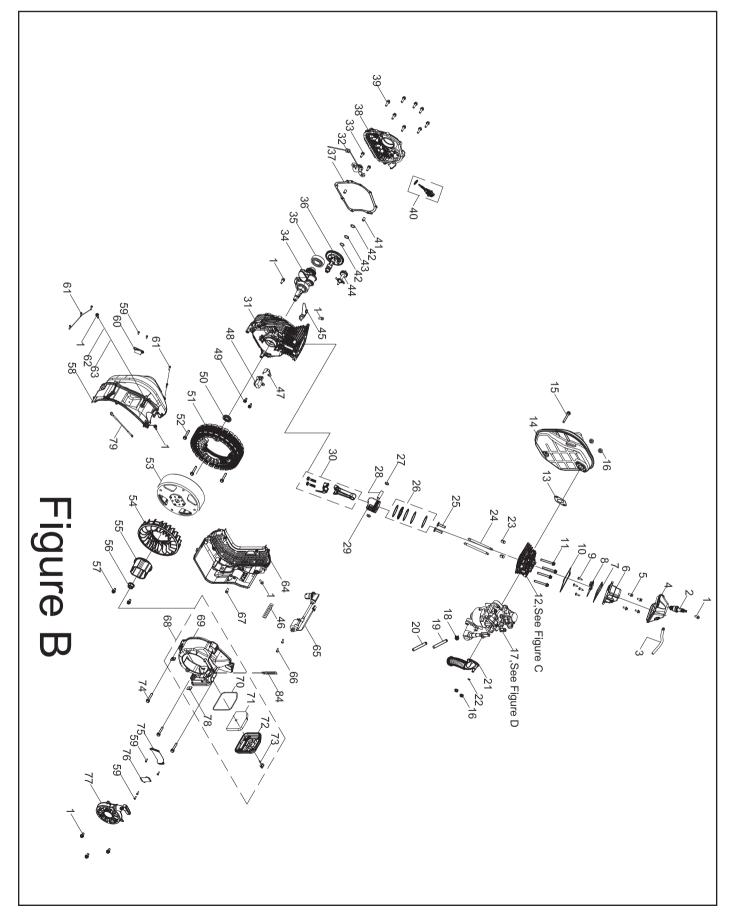
#### **Figure G Parts Diagram**



# **Figure G Part List**

#	Part Number	Description	Qty.
1	100072715-0001	Vibration Mount, Support	
2	100088546	Housing Assembly, Bottom, Black	1
3	100050562	562 Threaded Clamp	
4	100072711	Housing, Bottom, Black	
5	100072994 Step Nut M6		6
6	100011452-0010	Nut M6	
7	100072712	Foot, Bottom Housing	4
8	100011570-0008	Big Flange Bolt M6 x 12	4

# Figure B Engine Parts Diagram

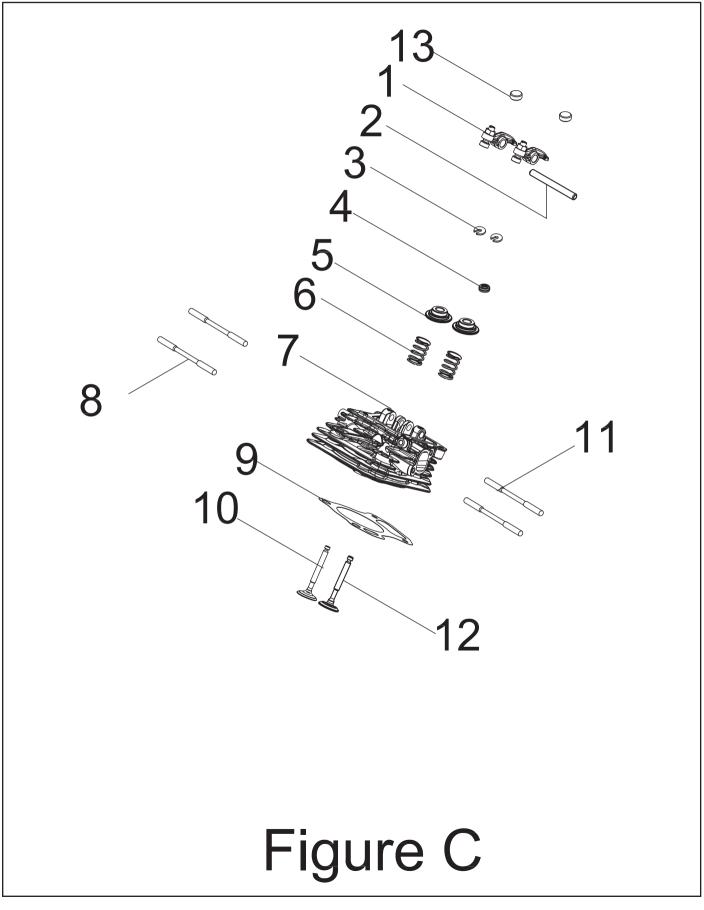


# Figure B Engine Part List

#	Part Number	Description	Qty.
1	100011570-0008	Big Flange Bolt M6 x 12	9
2	100097810	Spark Plug(E6RTC)	1
3	100088413-0001	Breather Tube	1
4	100158098	Cylinder Head Cover Gasket	1
5	100031968-0003	Big Flange Bolt M6 x 20	4
6	100157081	Cylinder Head Cover	1
7	100158111	Assembly Gasket, Cylinder Cover	1
8	100158112	Inner Cover, Valve Cover	1
9	100005133-0001	Cross Screw M3 x 6	4
10	100158122	Gasket, Cylinder Head Cover	4
11	100002464-0002	Flange Bolt M8 x 60	4
12	100774886	Cylinder Head Assembly - See Figure C	1
13	100751828	Gasket, Muffler	1
13	100751828	Exhaust Muffler Assembly	1
14	100130113	Flange Bolt M6 x 75,	1
15	100011280-0003	GB5789	1
16	100011452-0010	Lock Nut M6, Flange	4
17	100773527	Carburetor kit	1
18	100090871	Clamp 1, Ø9.7 x 8	1
19	100774885-0001	Fuel Tube	1
20	100098589-0001	Fuel Hose Jacket	1
21	100158121	Air Filter Hose	1
22	100005150	Clamp 2	1
23	100010558	Dowel Pin Ø10 x 16	2
24	100760593	Push Rod	2
25	100004262	Lifter, Valve	2
26	100725589	Piston Ring Set	1
27	100003220	Circlip	2
28	100722061	Wrist Pin	1
29	100717667	Piston	1
30	100731257	Connecting Rod	1
31	100157087	Crankcase	1
32	100719270-0002	Oil Level Sensor	1
33	100031967-0008	Big Flange Bolt M6 x 16	2
34	100158116	Crankshaft	1
35	100072204	Bearing, 6205E	1
36	100158125	Camshaft	1
37	100158110	Gasket, Crankcase Cover	1
38	100157091	Cover, Crankcase	1
39	100033100-0008	Big Flange Bolt M6 x 25	8
40	100084322-0006	Oil Dipstick Assembly, Black	1

#	Part Number	Description	Qty.
41	100010549	Dowel Pin Ø8 x 12	2
42	100158680	Washer Ø14.2 x 0.5 x Ø21	2
43	100162210	Washer, Ø14.2ר21×2	1
44	100724647	Oil Thrower Gear	
45	100720769	Shroud 1	
46	100000656	Wire Clip C	2
47	100720770	Shroud 2	
48	100765358-0001	Trigger	1
49	100055591-0007	Big Flange Bolt M6 x 12	2
50	100017644	0il Seal Ø25 x Ø41.25 x 6	1
51	100765368-0001	Stator Assembly	1
52	100076844-0002	Big Flange Bolt M6 x 38	3
53	100765369-0001	Rotor Assembly, Permanent Magneto	1
54	100158114	Cooling Fan	1
55	100157090	Pulley, Starter	1
56	100011462-0002	Flange Nut M14 x 1.5	1
57	100011571-0002	Big Flange Bolt M6 x 14	2
58	100158103	Rear Air Guide	1
59	100032967-0003	Cross Screw M4.2 x 16	6
60	100158099	Idle Spring	1
61	100011004-0003	Cross Screw M4.2 x 25	5
62	100010886-0004	Spring Washer Ø6	1
63	100010920-0002	Washer Ø6	1
64	100158107	Front Air Guide	1
65	100765357	Ignition Coil	1
66	100093250-0005	Cross Screw M4.8 x 20	2
67	100715178-0002	Big Flange Bolt M6 x 45	1
68	100767171	Fan Cover Assembly	1
69	100767172	Fan Cover, Black	1
70	100158177	Gasket, Air Filter	1
71	100158179	Air Filter Element	
72	100158178	Air Filter Cover	1
73	100158176	Bolt 1	
74	100011274-0005	Flange Bolt M6 x 45, GB5789 3	
75	100158097	Clip Base 1	1
76	100158096	Clip Base 2	
77	100717807-0002	Recoil Starter Assembly, Black	1
78	100000672	Clip	1
79	100771388-0001	Earth Wire	1

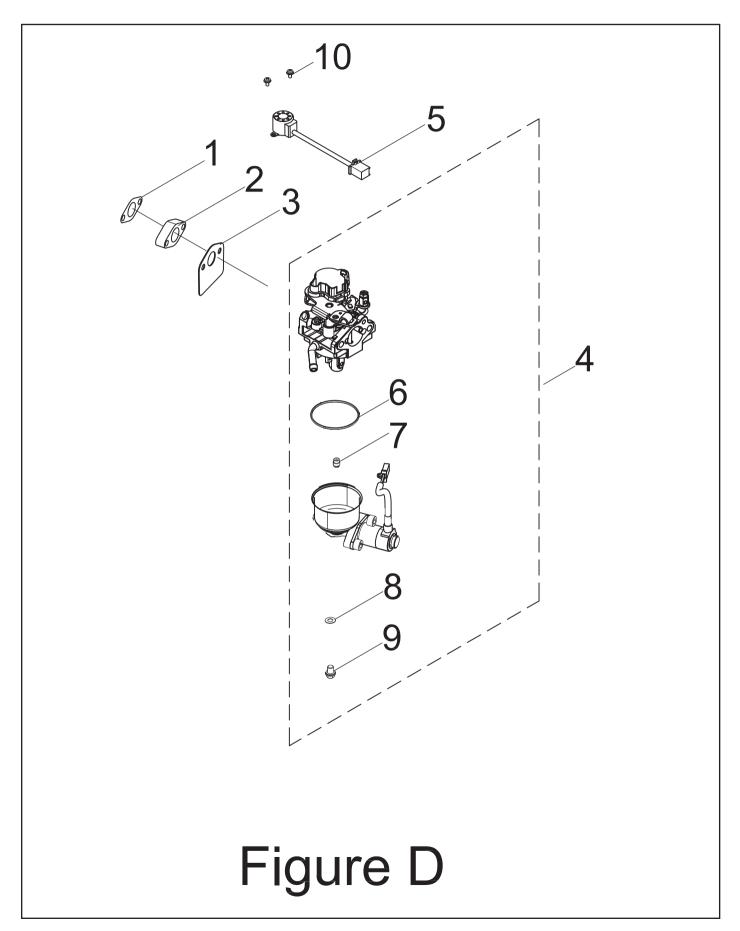
### **Figure C Parts Diagram**



# **Figure C Part List**

#	Part Number	Description	Qty.
1	100760595	Rocker Arm Assembly	2
2	100158127	Shaft, Rocker Arm	1
3	100075055	Valve Collet	2
4	100758247	Oil Drip Pan	1
5	100075056	Valve Spring Seat, 148F	
6	100159357	Spring Valve	2
7	100756934	Cylinder Head	1
8	100051258-0001	Stud Bolt M6 x 82	
9	100158124	Gasket, Cylinder Head	1
10	100760591	Valve Exhaust	1
11	100010348-0001	Stud Bolt M6 x 87	2
12	100760590	Valve Intake	1
13	100760592	Valve Adjust Cap, Exhaust	2

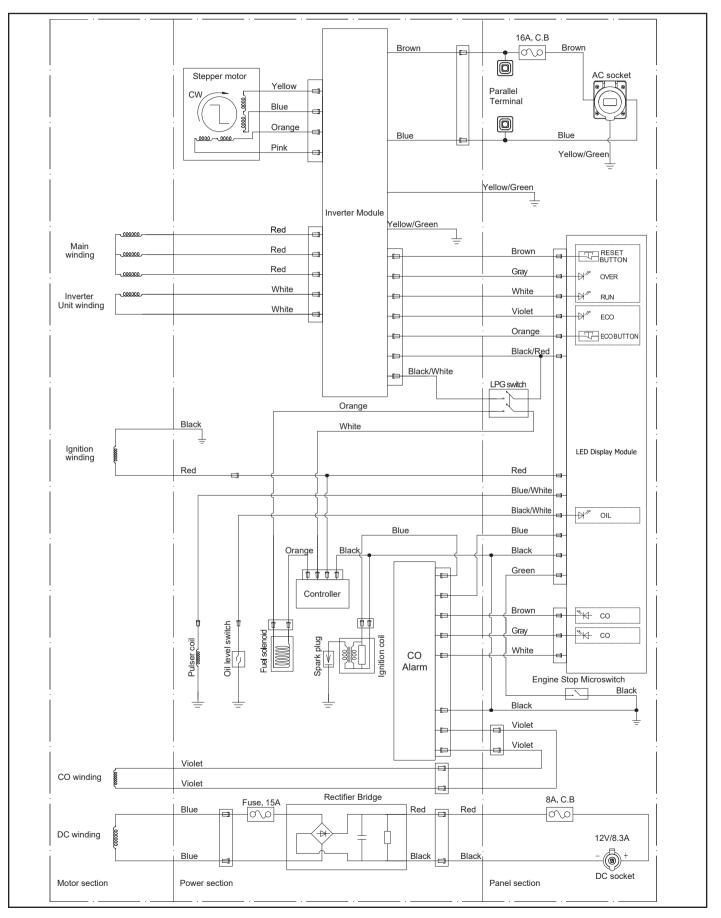
#### **Figure D Parts Diagram**



# Figure D Part List

#	Part Number	Description	Qty.
1	100158108	Gasket, Insulator	1
2	100158118	Insulator, Carburetor	
3	100158117	Gasket, Carburetor	
4	100733457	Carburetor	
5	100061512	Stepper Motor	
6	100131960	Fuel Bowl O-Ring	
7	100005759	Main Jet Standard (63)	1
<b>'</b>	100005736	Main Jet Standard (61)	/
8	100006037	Fuel Bowl Mounting Bolt Gasket	
9	100131964	Fuel Bowl Mounting Bolt	
10	100031942-0002	Big Flange Bolt M3 x 6	2

### **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.
	Spark plug wire loose.	Attach wire to spark plug.
Engine will not start.	Fuel valve is closed.	Open fuel valve.
	EZ Start dial OFF.	Turn EZ Start dial ON.
	Old fuel or water in fuel.	Drain fuel and replace with fresh fuel.
	Flooded with fuel.	Let unit stand for 10 mins.
	CO Shield <sup>®</sup> module has been removed or	
	tampered with.	Re-install module or contact technical support.
	Choke in the wrong position.	Move EZ Start Dial to the RUN position.
Engine storts but runs roughly	Dirty air filter.	Clean or replace air filter.
Engine starts but runs roughly.	Dirty fuel valve.	Clean the fuel valve.
	Clogged spark arrestor.	Clean spark arrestor.
	Out of fuel.	Fill fuel tank.
	Low oil level.	Fill crankcase to the proper level. Place generator
		on a flat, level surface.
	If equipped, when CO Shield® shutoffs occur due to accumulating carbon	Move generator to an open, outdoor area. Point exhaust away from people and buildings. Move to fresh air and get medical help if sick, dizzy, or weak.
		Make sure there are no objects creating obstructions within 5 feet of the generator. Obstructions in the vicinity of the generator may trap carbon monoxide emissions near the generator and cause the engine to shutoff.
Engine shuts down during operation.	monoxide (CO) and if the red LED light blinks on the panel.	If the generator's exhaust is facing into the wind, the exhaust may be blown back into the generator's operating area, creating an accumulation of CO emissions and triggering an engine shutoff. To avoid an engine shutoff, turn the generator 45° in either direction to allow the exhaust emissions to blow away from the generator. If engine shutoff events continue, readjust and align the exhaust with the wind direction to blow away from the generator.
	If equipped, when CO Shield® shutoffs occur due to system fault and if the yellow LED light blinks on the panel.	Start by confirming yellow LED light blinks when/ if generator shuts off. If CO Shield continues to sense the fault and shuts off, contact technical support.
	Clogged spark arrestor.	Clean spark arrestor.

Problem	Cause	Solution
		Move generator to an open, outdoor area. Point exhaust away from people and buildings. Move to fresh air and get medical help if sick, dizzy, or weak. Make sure there are no objects creating obstructions within 5 feet of the generator. Obstructions in the vicinity of the generator
Engine starts and shuts off right away.	If equipped, when CO Shield® shutoffs occur due to accumulating carbon monoxide (CO) and if the red LED light blinks on the panel.	may trap carbon monoxide emissions near the generator and cause the engine to shutoff. If the generator's exhaust is facing into the wind, the exhaust may be blown back into the generator's operating area, creating an accumulation of CO emissions and triggering an engine shutoff. To avoid an engine shutoff, turn the generator 45° in either direction to allow the exhaust emissions to blow away from the generator. If engine shutoff events continue, readjust and align the exhaust with the wind direction to blow away from the generator.
	If equipped, when CO Shield® shutoffs occur due to system fault and if the yellow LED light blinks on the panel.	Start by confirming yellow LED light blinks when/ if generator shuts off. If CO Shield® continues to sense the fault and shuts off, contact technical support.
Both CO Shield® LEDs not blinking 10 times upon start up.	Starting the generator within 1 minute after being manually shutoff, not a CO shutoff event.	Wait 1 minute before trying to restart the generator. The LEDs should then blink ten (10) times.
Generator cannot supply enough power	Generator is overloaded.	Review load and adjust. See "Connecting Electrical Loads."
or overheating.	Dirty air filter.	Clean or replace air filter.
	Choke in wrong position.	Move EZ Start Dial to the RUN position.
	Poor cord connection.	Check all connections.
	Circuit breaker is open.	Reset circuit breaker. Check all circuit breakers.
	Faulty brush assembly.	Replace brush assembly (Service Center).
Engine is running but no AC output.	Loose wiring.	Inspect and tighten wiring connections.
	AC Overload: Button illuminated red	Reduce AC load and press Overload Reset Button until illuminated green.
	Other.	Contact the help line.

# WARRANTY\*

CHAMPION POWER EQUIPMENT 3 YEAR LIMITED WARRANTY

#### **Warranty Qualifications**

To register your product for warranty and FREE lifetime call center technical support please visit:

#### https://www.championpowerequipment.co.uk

To complete registration you will need to include a copy of the purchase receipt as proof of original purchase. Proof of purchase is required for warranty service. Please register within ten (10) days from date of purchase.

### **Repair/Replacement Warranty**

CPE warrants to the original purchaser that the mechanical and electrical components will be free of defects in material and workmanship for a period of three (3) years for domestic usage and One (1) Year for commercial and industrial use. Transportation charges on product submitted for repair or replacement under this warranty are the sole responsibility of the purchaser. This warranty only applies to the original purchaser and is not transferable. For full T&C's please visit www.championpowerequipment.co.uk.

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

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

### **Warranty Exclusions**

This warranty does not cover the following repairs and equipment:

#### Normal Wear

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

#### Installation, Use and Maintenance

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

#### **Other Exclusions**

This warranty excludes:

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

When applicable, this warranty does not apply to products used for prime power in place of a utility or city power.

### Limits of Implied Warranty and Consequential Damage

Champion Power Equipment disclaims any obligation to cover any loss of time, use of this product, freight, or any incidental or consequential claim by anyone from using this product. THIS WARRANTY AND THE ATTACHED U.S. EPA and/or CARB EMISSION CONTROL SYSTEM WARRANTIES (WHEN APPLICABLE) ARE IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

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

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

### **Contact Information**

Winch Solutions Itd Unit 17-18 Bradley Trading Estate Standish WN6 0XQ / UK www.championpowerequipment.co.uk support@cpeeurope.co.uk