

Champion®

POWER



GENERATOR

MODEL NO: FG2500

PART NO: 8857727

OPERATION & MAINTENANCE INSTRUCTIONS



LS0114

INTRODUCTION

Thank you for purchasing this CLARKE Generator.

Before attempting to use this product, please read this manual thoroughly and follow the instructions carefully. In doing so you will ensure the safety of yourself and that of others around you, and you can look forward to your purchase giving you long and satisfactory service.

GUARANTEE

This product is guaranteed against faulty manufacture for a period of 12 months from the date of purchase. Please keep your receipt which will be required as proof of purchase.

This guarantee is invalid if the product is found to have been abused or tampered with in any way, or not used for the purpose for which it was intended.

Faulty goods should be returned to their place of purchase, no product can be returned to us without prior permission.

This guarantee does not effect your statutory rights.

ENVIRONMENTAL RECYCLING POLICY



Through purchase of this product, the customer is taking on the obligation to deal with the WEEE in accordance with the WEEE regulations in relation to the treatment, recycling & recovery and environmentally sound disposal of the WEEE.

In effect, this means that this product must not be disposed of with general household waste. It must be disposed of according to the laws governing Waste Electrical and Electronic Equipment (WEEE) at a recognised disposal facility.

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GENERAL SAFETY RULES



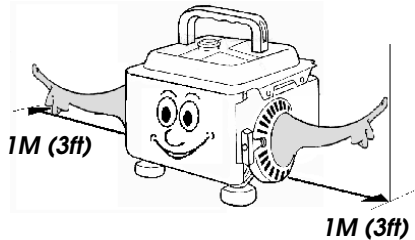
WARNING: EXHAUST FUMES CAN BE EXTREMELY DANGEROUS IF INHALED

WORK AREA

- *Always use in a well ventilated area.*
- *Always position the exhaust outlet away from people.*
- *Never use in a confined space.*
- **Read these safety instructions before using the equipment.**
- **Keep children away from the generator**

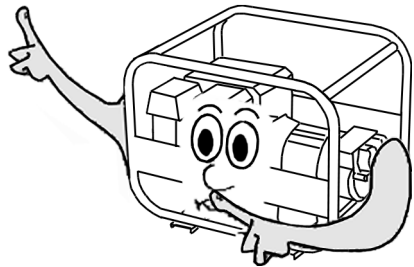
POSITIONING THE GENERATOR

1. **Always** leave a least a 1M gap between the generator and any surrounding building or structures.
2. **Always** ensure the generator is on a solid, flat surface.
3. **Always** ensure the surrounding area is free from any material that could burn or be damaged by heat.
4. **Never** move or tilt the generator whilst it is switched on.



FIRE PREVENTION

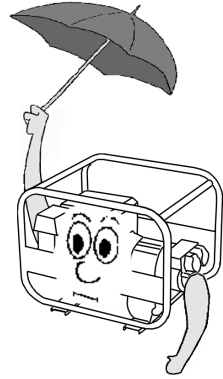
1. **Always** switch the engine OFF when refuelling.
2. **Always** refuel away from any source of heat.
3. **Always** refuel in a well ventilated area.
4. **Never** overfill the tank, fill to the level specified (See "Checking the fuel level" on page 12.).
5. **Never** smoke whilst refuelling and avoid smoking or using a naked flame near the generator.



6. **Never** start the engine if there is spilled fuel. Any spillage must be wiped clean and the generator allowed to dry before attempting to start the engine.

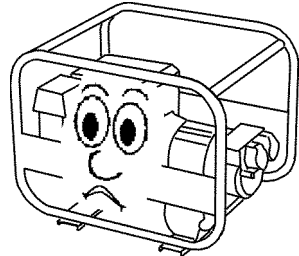
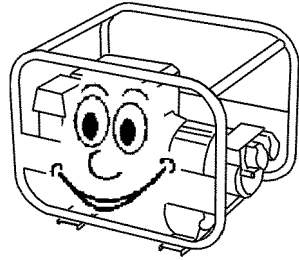
PREVENTION OF ELECTRIC SHOCK

1. **NEVER** use the generator in wet conditions unless it is well protected/ covered. Under these conditions, adequate ventilation **MUST** be provided.
2. **NEVER** operate the generator with wet hands.
3. **NEVER** use water or any other liquids to clean the generator.
4. **NEVER** allow the generator air vents to become blocked.



ADDITIONAL SAFETY RULES FOR GENERATORS

1. **Always** ensure the applied load does not exceed the generator rating. Overloading the generator is dangerous and could cause serious damage.
2. **Always** disconnect the generator when carrying out any maintenance.
3. **Always** ensure the generator reaches operating speed before connecting a load.
4. **Never** allow the generator to run out of fuel when a load is connected.
5. **Never** transport the generator with fuel in the tank.
6. **Do Not** connect to a commercial or residential power supply; e.g. ring main.



SAFETY SYMBOLS



Caution - The user should be aware of a general hazard



Dangerous Voltage



Flammable



Hot Surface - Do not touch

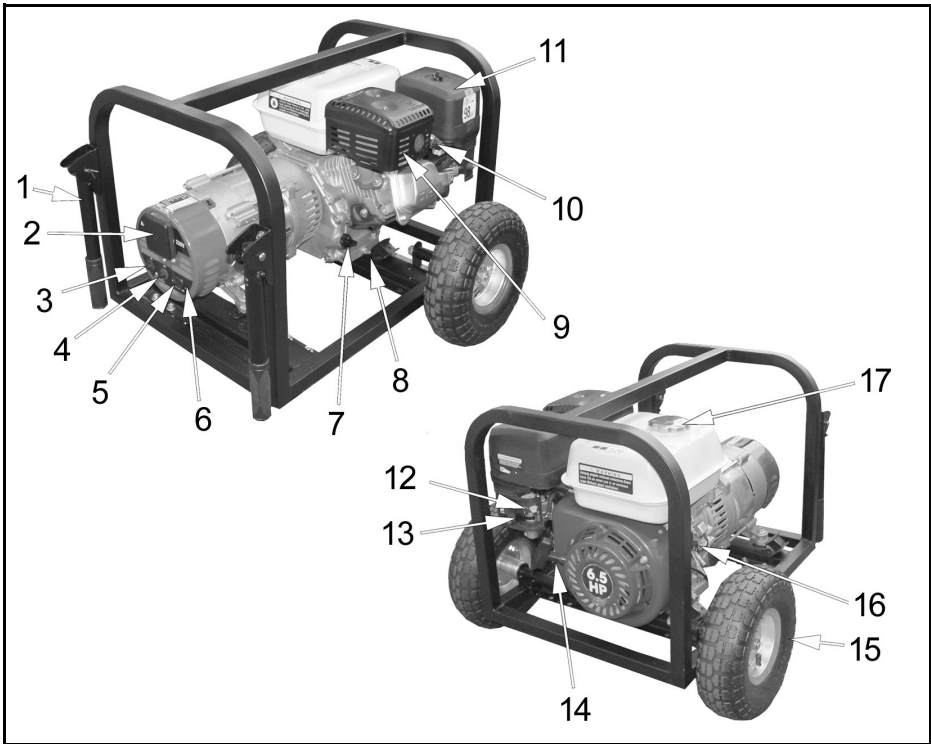


Poisonous fumes - Do not use the generator in an enclosed space.



Read Instruction manual before use.

GENERATOR OVERVIEW

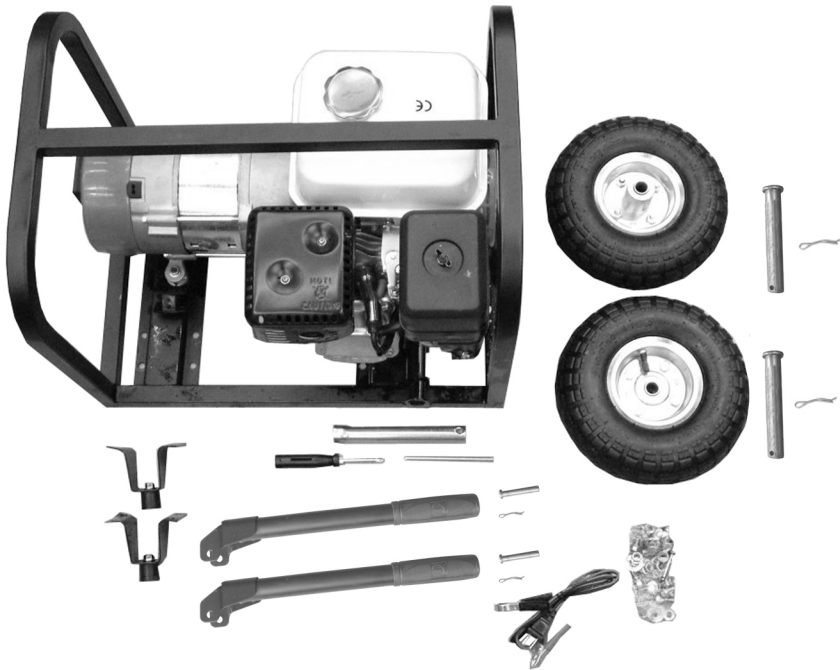


NO	DESCRIPTION	NO	DESCRIPTION
1	Handle	10	Spark Plug
2	AC Plug Socket (230V)	11	Air Filter
3	AC Overload Reset Button	12	Choke
4	DC Overload Reset Button	13	Fuel Valve
5	DC 12V Outlet	14	Starting Handle
6	Earth Terminal	15	Wheel
7	Oil Filler Cap/Dipstick	16	Engine Switch
8	Drain Plug	17	Fuel Tank Cap
9	Muffler		

UNPACKING AND ASSEMBLY

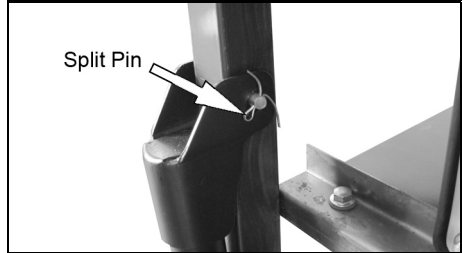
Unpack your generator and check to ensure the following items are present. Should there be any missing or damaged caused during transit contact your Clarke dealer immediately.

- 1 x Generator
- 2 x Wheels
- 2 x Axles and split pins
- 2 x Foot Assemblies
- 1 x Fixings Pack
- 1 x Double-ended Screwdriver
- 1 x Long-reach Spark Plug Box Spanner
- 1 x Tommy Bar
- 1 x 12 Volt Charging Lead c/w Battery Clips
- 2 x Handles c/w pins and split pins



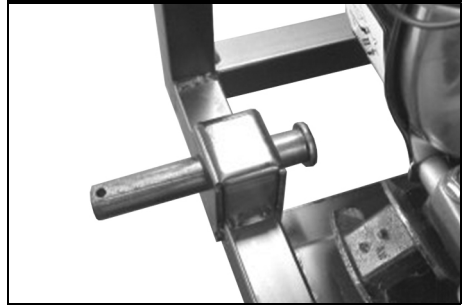
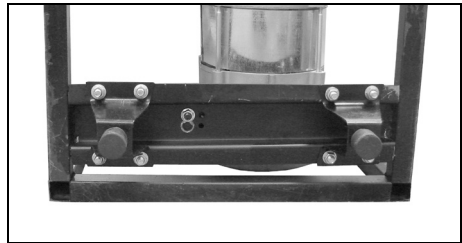
FITTING THE HANDLES

1. With the handle in position insert the pin as shown.
2. Secure the pin using the split pin provided as shown.



FITTING THE FEET/WHEEL KIT

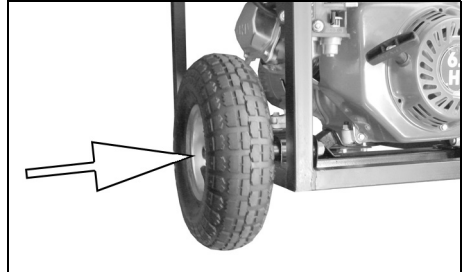
1. Lay the generator on its front end and attach the 2 feet as shown.
2. Fix each foot to the frame using 4 x Short Bolts & 4 x 12mm nuts.
3. Fix the axles to the frame as shown .



4. Slide both wheels on to the axles.

NOTE: Make sure that the valve on each wheel is on the outside.

5. Secure the wheel to the axle using the split pin provided
6. Carefully place the generator onto its wheels/feet.



BEFORE USING THE GENERATOR

IMPORTANT: Generators should ALWAYS be earthed.

Attach a suitable earth lead to a good earth - water pipe, ground spike etc., whenever you use this generator.

Before using your generator check that:

- The generator is in good condition and free from any damage.
- The generator is clean and free from fuel or oil spillage.
- The generator is correctly located for use (See page 4).
- The fuel system and connectors are intact and there is no leakage.

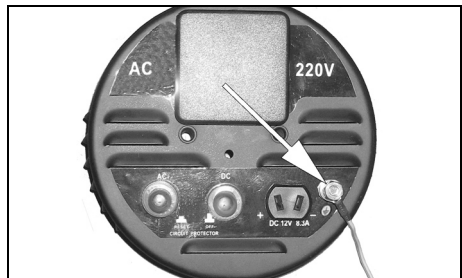
NOTE: Always use a funnel to fill the fuel tank so as to avoid accidental spillage of fuel. If fuel is spilled it must be cleaned up before attempting to start the engine.



WARNING: ENSURE THERE IS ADEQUATE FUEL IN THE TANK WHEN USING THE GENERATOR. RUNNING OUT OF FUEL OR STOPPING THE ENGINE SUDDENLY WITH A LOAD CONNECTED COULD CAUSE SERIOUS DAMAGE.

EARTH POINT

Always connect the generator to an earth point. The earth terminal is shown on the right.



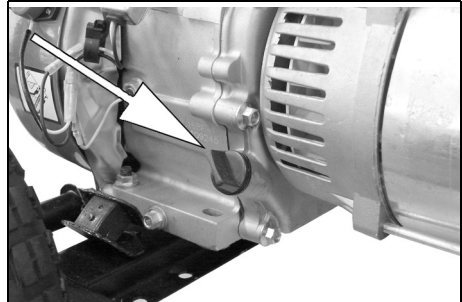
CHECKING THE ENGINE OIL LEVEL



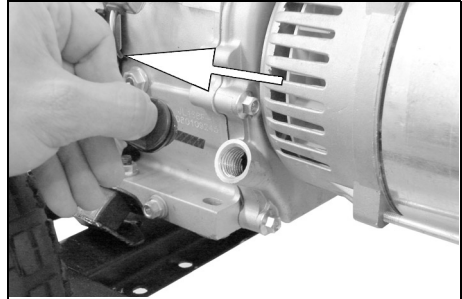
WARNING: TO CARRY OUT THIS CHECK, PLACE THE GENERATOR ON LEVEL GROUND WITH THE ENGINE SWITCHED OFF.

WARNING: TAKE CARE NOT TO TOUCH ANY HOT PARTS OF THE GENERATOR WHEN CHECKING THE OIL LEVEL.

1. Turn the oil filler cap anti-clockwise and remove from the oil tank, wipe the dipstick with a clean cloth.



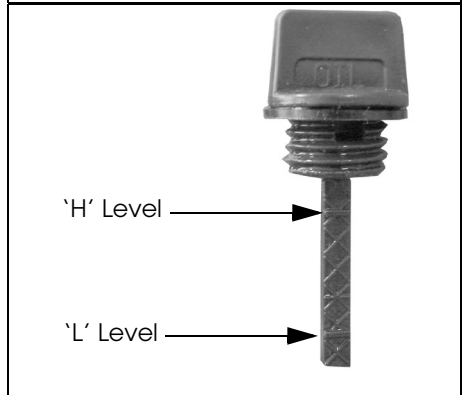
2. Insert the dipstick back into the oil filler tube and then remove it again. Do not screw in the oil filler cap/dipstick when doing this.



3. If the oil is below the 'L' level on the dipstick, fill the oil reservoir to the 'H' level on the dipstick.

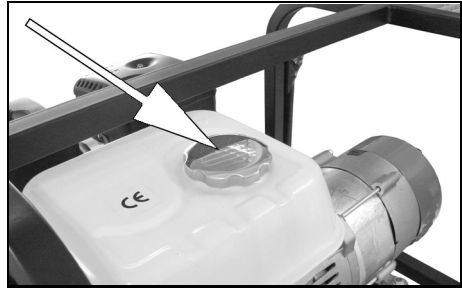
- Oil Capacity (See "Specifications" on page 23.)
- We recommend the use of SAE30 oil in this generator.

4. Replace the oil filler cap.



CHECKING THE FUEL LEVEL

1. To add fuel, open the fuel filler cap.



2. Just inside the fuel tank is a fuel tank filter, check this filter periodically and remove any contaminants which may have accumulated.
3. Slowly add fuel to the fuel tank (maximum 4.5L).



RECOMMENDED FUEL

We recommend the use of standard unleaded petrol.



WARNING: ALWAYS REFUEL IN A WELL VENTILATED AREA AWAY FROM ANY HEAT SOURCES.

WARNING: ALLOW THE UNIT TO COOL DOWN BEFORE REFUELLING.

WARNING: DO NOT LEAVE FUEL WITHIN THE REACH OF CHILDREN.

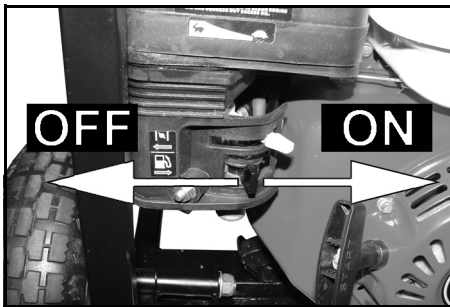
NOTE: Do not overfill the fuel tank.

4. Replace the fuel filler cap securely.

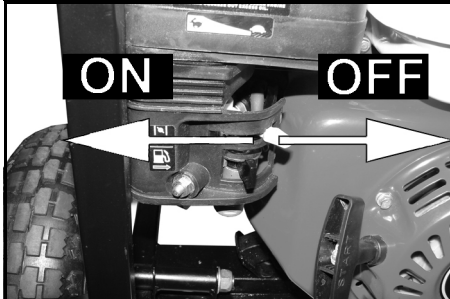
USING YOUR GENERATOR

STARTING THE ENGINE

1. Remove all connections from the sockets.
2. Set the fuel supply lever to the 'on' position.



3. If you are starting the generator 'cold' set the choke lever to the ON position. If the generator is warm skip this step.

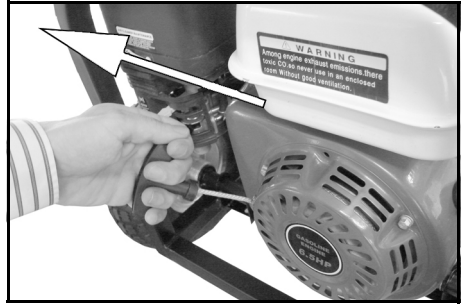


4. Set the engine switch to 'I'.



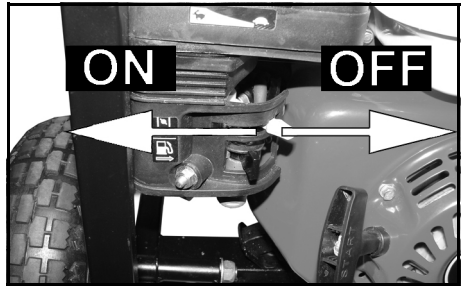
5. Pull the starting handle lightly until you start to feel resistance and then pull up sharply to start the generator.

NOTE: You may have to do this more than once.



WARNING: ONCE THE GENERATOR HAS STARTED, RELEASE THE STARTING HANDLE SLOWLY TO AVOID INJURY/DAMAGE AS IT WHIPS BACK.

6. Once the engine has warmed up, set the choke lever to the 'OFF' position.

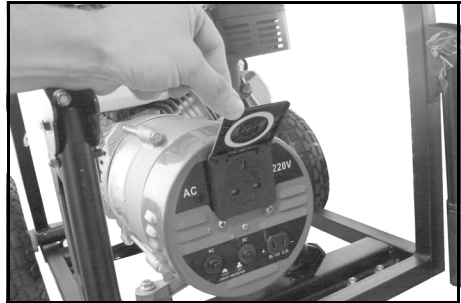


CONNECTING ELECTRICAL DEVICES

The generator can supply both 230V AC and 12V DC.

AC POWER

1. Start the engine. See page 13.
2. Make sure the appliance is turned off before connecting it to the generator.
3. If the AC overload protector activates, wait for a few minutes and then press the reset button shown on the right.



CAUTION: MAKE SURE THAT THE APPLIANCE BEING CONNECTED IS IN GOOD WORKING ORDER, IF IT BEGINS TO ACT ABNORMALLY OR STOPS SUDDENLY, DISCONNECT IT FROM THE GENERATOR.

CAUTION: MAKE SURE THE APPLIANCE DOES NOT EXCEED THE MAXIMUM RATED LOAD FOR THE GENERATOR.

CAUTION: ANY DEVICE WITH CONTAINS AN INDUCTIVE LOAD E.G. DEVICES THAT CONTAIN A MOTOR MAY REQUIRED MORE CURRENT ON STARTUP.

DC POWER (FOR CHARGING CAR BATTERIES ONLY)



WARNING: FOR YOUR SAFETY PERFORM THE FOLLOWING INSTRUCTIONS IN THE ORDER SHOWN.

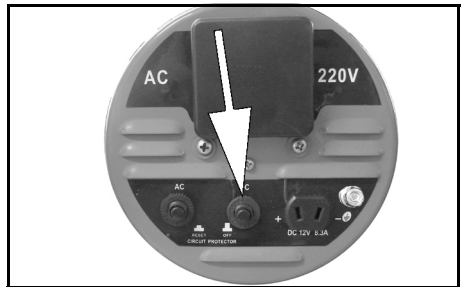
1. Start the generator. See page 13.
2. Connect the battery charging leads to the battery.
 - Make sure you clamp the red wire to the positive (+) terminal and the black wire to the negative (-) terminal of the battery.
3. Connect the battery charging leads to the generator.
 - The battery will begin to charge
4. Monitor the voltage across the battery regularly during charging and disconnect the battery when the voltage reaches 14.4 volts.



CAUTION: WHEN DISCONNECTING THE BATTERY, ALWAYS DISCONNECT THE NEGATIVE LEAD FIRST.

DC OVER LOAD PROTECTOR

If the DC overload protector activates, wait for a few minutes and then press the reset button shown on the right.



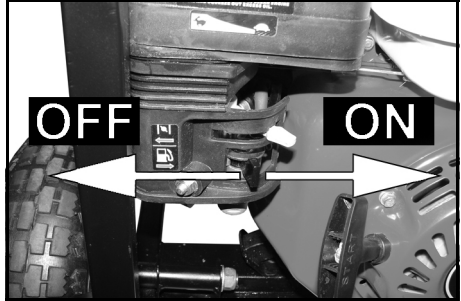
SHUTTING DOWN THE GENERATOR

1. Disconnect all appliances connected to the generator.
2. Set the engine switch to '0'.



3. Set the fuel supply lever to 'OFF'.

NOTE: To stop the generator in an emergency simply set the engine switch to 'OFF'



MAINTENANCE

CHANGING THE ENGINE OIL

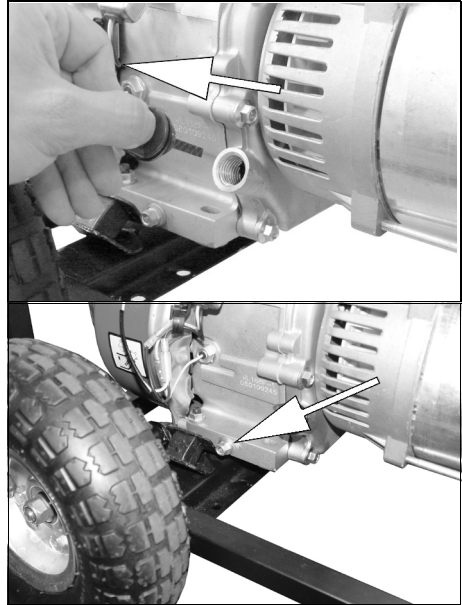


CAUTION: PROLONGED EXPOSURE TO USED ENGINE OIL IS DANGEROUS, ALWAYS WASH YOUR HANDS THOROUGHLY AFTER HANDLING USED ENGINE OIL.

1. Unscrew and remove the oil filler cap/dipstick.
2. Place a oil collection tray under the drain plug.
3. Unscrew the drain plug, and allow the used engine oil to drain from the crankcase into the oil collection tray.

NOTE: Drain the engine oil when the engine is warm, this will ensure the oil flows out quicker.

4. Replace the drain plug and its ring seal.
5. Fill the crankcase with engine oil to the 'H' mark on the dipstick. See page 11.
6. Replace the oil filler cap/dipstick.



ENVIRONMENTAL PROTECTION

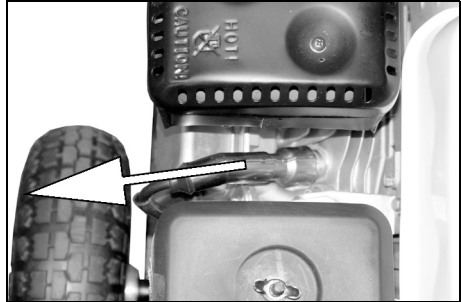
One of the most damaging sources of pollution is oil, Do not throw away used engine oil in with your domestic trash or down drains and sinks. Place it in a leak proof container and take it to your local waste disposal site.

CHANGING THE SPARK PLUGS

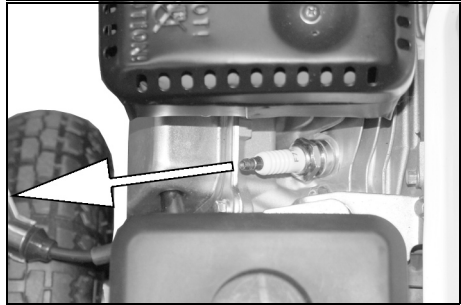


CAUTION: ALLOW THE ENGINE TO COOL BEFORE REMOVING THE SPARK PLUG.

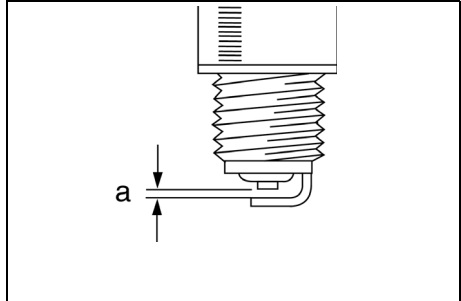
1. Remove the spark plug cap from the spark plug.



2. Use the supplied spark plug spanner to remove the spark plug.
3. Remove any carbon that has accumulated around the spark plug.



4. Check the spark plug gap (a), it should be between 0.7 and 0.8 mm, adjust if necessary.
5. Check the overall condition of the spark plug and replace if necessary.
6. Reinstall the spark plug and replace the spark plug cap.

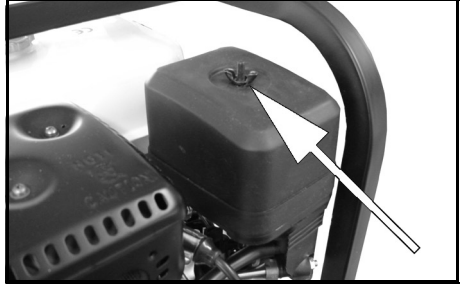


CHECKING THE AIR FILTER

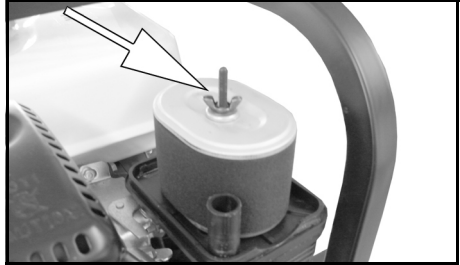


CAUTION: DO NOT USE THE GENERATOR WITHOUT THE AIR FILTER FITTED, THIS CAN DAMAGE THE GENERATOR.

1. Remove the wingnut and remove the air filter cover.



2. Remove the wingnut shown.



3. Remove the air filter element.

4. Make sure that the air filter is clean and not damaged.

- If the air filter is damaged contact clarke spare parts department for a replacement See page 25.
- If the filter is dirty, wash the filter in a solution of warm water and mild detergent and rinse thoroughly. Leave the filter to dry completely, once it is dry immerse the filter in clean engine oil and squeeze the filter to remove excess oil.

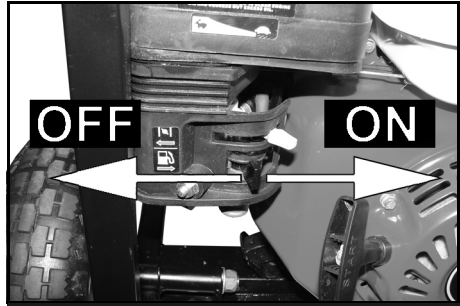


WARNING: DO NOT USE INFLAMMABLE SOLVENTS OR PETROL TO CLEAN THE AIR FILTER.

5. Replace the filter back into its original position and replace the air filter cover.

CLEANING THE FUEL VALVE FILTER / DRAINING THE FUEL TANK

1. Set the fuel supply valve to OFF.



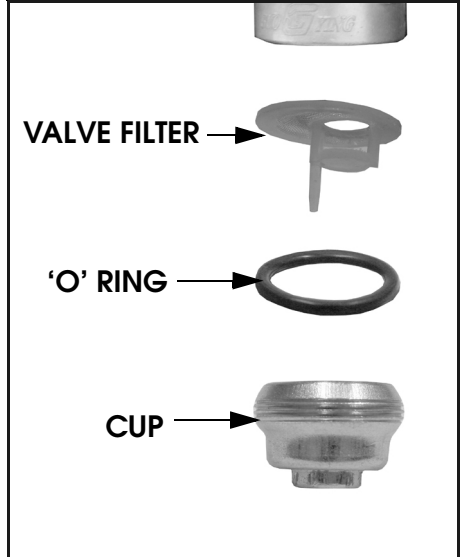
2. Unscrew and remove the cup, then remove the valve filter and 'O' ring.

3. Wash these parts in a non-flammable solvent. Make sure that the valve filter is not damaged.

4. Place an approved petrol storage container under the fuel valve and set the fuel supply valve to 'ON'.

- The fuel in the tank will drain into the container.

5. Replace the 'O' ring and valve filter and tighten the cup as far as possible.



TROUBLESHOOTING

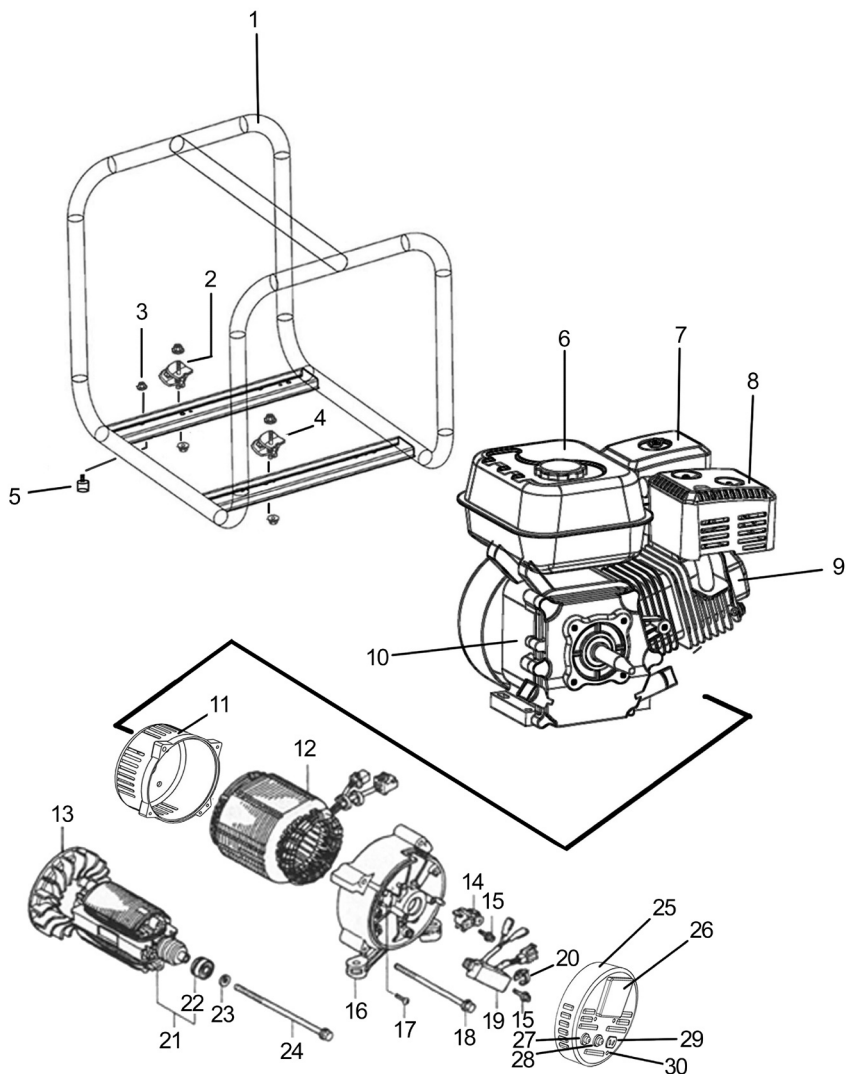
PROBLEM	CAUSE	SOLUTION
The generator fails to start	Ignition switch is off	Set the ignition switch to 'on'
	Not enough oil in the generator	Add more oil, See page 11
	No fuel	Add more fuel, See page 12
	Spark plugs not working correctly	Change the spark plugs, See page 19
The generator fails to generate electricity	The device you are trying to power is faulty	Make sure the device you want to power is working properly
	The AC breaker has activated	Press the AC overload reset button
The generator is difficult to start	The air filter is dirty	Clean the air filter, See page 20
	The fuel filter is dirty	Clean the fuel filter, See page 21

If this does not solve your problem, please contact the Clarke service department. See page 25

SPECIFICATIONS

		FG2500
Engine	Engine Model	UP168
	Displacement (cm ³)	196
	Max. power output (hp/rpm)	6.5 / 3000
	Start system	Recoil
	Fuel tank capacity (L)	4.5
	Fuel consumption (L/hr.)	0.8
	Duration of run (h)	5.6
	Guaranteed sound power (LWA dB)	98
Generator	Rated Frequency (Hz)	50
	Rated Voltage (V)	230
	Rated Power (kVA)	2.2
	Max. Power (kVA)	2.4
Dimensions	Length (mm)	575
	Width (mm)	435
	Height (mm)	420
	Unpacked Weight (kg)	38

EXPLODED PARTS DIAGRAM



PARTS LIST

NO	DESCRIPTION	PART NO	NO	DESCRIPTION	PART NO
1	Frame	RKFG250001	16	Housing	RKFG250016
2	Rubber Right Bottom	RKFG250002	17	Pan Screw 5x12	RKFG250017
3	Nut Flange 8mm	RKFG250003	18	Bolt Flange 6x100	RKFG250018
4	Rubber Left Bottom	RKFG250004	19	Regulator Assembly	RKFG250019
5	Cushion	RKFG250005	20	Cable Tie	RKFG250020
6	Fuel Tank	RKFG250006	21	Rotor	RKFG250021
7	Air Cleaner	RKFG250007	22	Bearing Assembly	RKFG250022
8	Muffler	RKFG250008	23	Plain Washer	RKFG250023
9	Cylinder Head	RKFG250009	24	Bolt Flange 8x180	RKFG250024
10	Crankshaft Case Assembly	RKFG250010	25	Panel	RKFG250025
11	Stator Cover	RKFG250011	26	AC Socket	RKFG250026
12	Stator Assembly	RKFG250012	27	AC Circuit Breaker	RKFG250027
13	Cooling Fan	RKFG250013	28	DC Circuit Breaker	RKFG250028
14	Brush Assembly	RKFG250014	29	DC Output	RKFG250029
15	Tapping Screw 5x14	RKFG250015	30	Earth Point	RKFG250030

PARTS AND SERVICING

For Parts & Servicing, please contact your nearest dealer, or CLARKE International, on one of the following numbers.

PARTS & SERVICE TEL: 020 8988 7400

PARTS & SERVICE FAX: 020 8558 3622

or e-mail as follows:

PARTS: Parts@clarkeinternational.com

SERVICE: Service@clarkeinternational.com

DECLARATION OF CONFORMITY



Clarke[®]
INTERNATIONAL

Hemnall Street, Epping, Essex CM16 4LG

DECLARATION OF CONFORMITY

This is an important document and should be retained.

Product Description: Open frame Generator

Model number(s): FG2500

Serial / batch Number: N/A

Date of Issue: 18/10/2011

(Noise Conformity)

Notified Body: Istituto Giordano S.P.A
ViaRossini,2
47814-Bellaria (RN)
Italy

Technical Documentation Holder: A R Pond
Clarke International
2a Shrubland Road
London E10,7RB
UK

Conformity Assessment Procedure: to 2000/14/EC Annex VI

Manufacturer: Clarke International

Noise Related Value: 1.5 kW

Measured Sound Power Level: 92 dB

Guaranteed Sound Power Level: 98 dB

DECLARATION OF CONFORMITY



Clarke[®]
INTERNATIONAL

Hemncill Street, Epping, Essex CM16 4LG

DECLARATION OF CONFORMITY

This is an important document and should be retained.

We hereby declare that this product(s) complies with the following directive(s):

- 2004/108/EC *Electromagnetic Compatibility Directive*
- 2006/42/EC *Machinery Directive.*
- 2006/95/EC *Low Voltage Equipment Directive*
- 2000/14/EC *Noise Emissions Directive (amended by 2005/88/EC).*
- 97/68/EC *Emission of Gaseous Particulates (amended by 2004/26/EC)*

The following standards have been applied to the product(s):

EN 12601:2001, EN 60204-1:2006, EN 55012:2002+A1:2005, EN ISO 3744:1995, ISO 8528-10:1998

The technical documentation required to demonstrate that the product(s) meet(s) the requirement(s) of the aforementioned directive(s) has been compiled and is available for inspection by the relevant enforcement authorities.

The CE mark was first applied in: 2004

Signed:



J.A. Clarke
Director

A SELECTION FROM THE VAST RANGE OF

Clarke®

QUALITY PRODUCTS

AIR COMPRESSORS

From DIY to industrial, Plus air tools, spray guns and accessories.

GENERATORS

Prime duty or emergency standby for business, home and leisure.

POWER WASHERS

Hot and cold, electric and engine driven - we have what you need

WELDERS

Mig, Arc, Tig and Spot. From DIY to auto/industrial.

METALWORKING

Drills, grinders and saws for DIY and professional use.

WOODWORKING

Saws, sanders, lathes, mortisers and dust extraction.

HYDRAULICS

Cranes, body repair kits, transmission jacks for all types of workshop use.

WATER PUMPS

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