

Clarke®

POWER



720W PORTABLE GENERATOR

MODEL NO: G720

PART NO: 8857800

OPERATION & MAINTENANCE INSTRUCTIONS



LS1011

INTRODUCTION

Thank you for purchasing this CLARKE 720W Portable 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.

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

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GENERAL SAFETY RULES



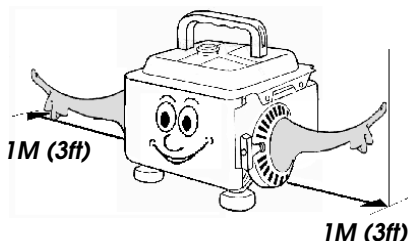
WARNING: EXHAUST FUMES CAN BE EXTREMELY DANGEROUS IF INHALED

WORK AREA

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

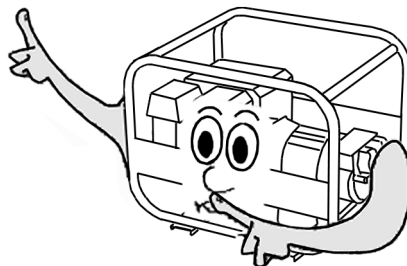
POSITIONING THE GENERATOR

1. **Always** keep the generator at least 1 m (3 ft) from walls or other equipment, or the engine may overheat.
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

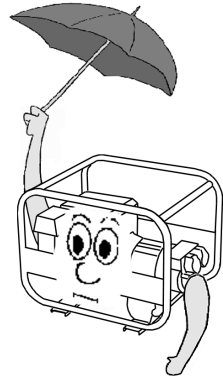
1. **Always** switch the engine OFF when refuelling.
2. **Always** refuel in a well ventilated area.
3. **Never** refuel while smoking or in the vicinity of an open flame.
4. **Never** overfill the tank, fill to the level specified (See "Adding the fuel/oil mixture" on page 9).



5. **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.

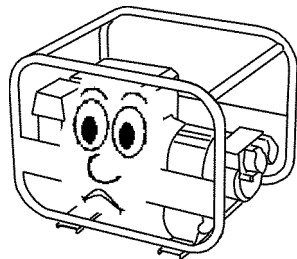
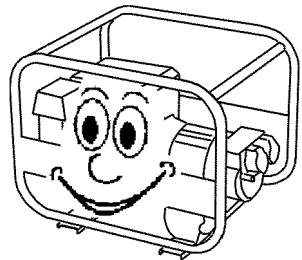
PREVENTION OF ELECTRIC SHOCK

1. **Never** use the generator in wet conditions unless it is well protected/ under cover. 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. Make sure you ground (earth) the generator.



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.
7. **Never** allow the generator air vents to become blocked.



SAFETY SYMBOLS



Caution - The user should be aware of a general hazard



Dangerous Voltage



Flammable



Hot Surface - Do not touch

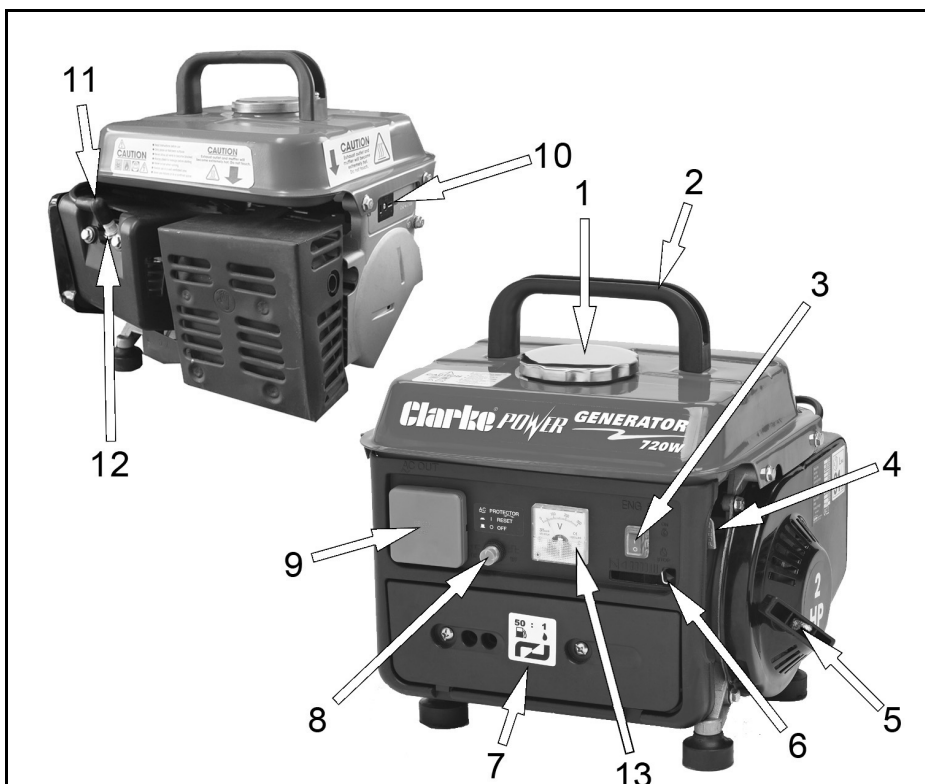


Poisonous fumes - Do not use the generator in an enclosed space.



Read Instruction manual before use.

GENERATOR OVERVIEW



NO	DESCRIPTION	NO	DESCRIPTION
1	Fuel cap	8	AC circuit breaker/reset button
2	Carry handle	9	AC socket
3	Engine switch	10	DC socket/reset button
4	Fuel valve	11	Spark plug cover
5	Starting handle	12	Spark plug
6	Choke	13	Voltmeter
7	Maintenance panel		

UNPACKING AND ASSEMBLY

Unpack your generator and make sure the following items are present.

1 x Generator	1 x Battery Charging Lead Assembly
1 x Spark Plug Box Spanner	1 x Fuel Mixing Cup (inside fuel tank cap)
1 x Tommy Bar	1 x Instruction Manual

Should there be anything missing or damaged in transit contact your Clarke dealer immediately.

BEFORE USING THE GENERATOR

IMPORTANT: *Generators should ALWAYS be earthed. Make sure you ground (earth) the 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 positioned for use (See page 4).
- The fuel system and connectors are intact and there is no leakage.

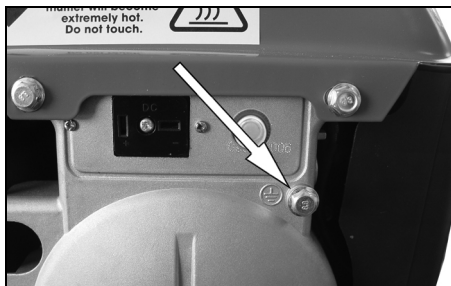
NOTE: Always use a funnel to fill the fuel tank so as to avoid accidental spillage of fuel. If fuel is spilled it must be cleaned up before attempting to start the engine.



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 CONNECTOR

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



ADDING THE FUEL/OIL MIXTURE



WARNING: FUEL IS HIGHLY FLAMMABLE AND POISONOUS.

WARNING: SEE “GENERAL SAFETY RULES” ON PAGE 4 AND READ THEM CAREFULLY BEFORE REFUELING.

WARNING: WIPE UP ANY SPILLED FUEL IMMEDIATELY.

WARNING: AFTER REFUELING, MAKE SURE THE FUEL CAP IS TIGHTENED SECURELY.

The generator requires a 50:1 mixture of fuel and oil. To mix the fuel you will need a 5L container with a screw-on lid suitable for storing petrol.

1. Pour the required amount of petrol into the container.
 - Your generator has been designed to use regular unleaded petrol with an octane rating of 86 or higher.
2. Remove the fuel cap from the generator.
3. Use the fuel cap to measure the required amount of oil.
 - Add 0.02L of oil to every litre of fuel.

IMPORTANT: Only use approved two stroke engine oil, standard engine oil is not suitable.



Amount of Fuel	Add this much Oil
1L	0.02L
2L	0.04L
3L	0.06L
4L	0.08L

Replace the lid on the container holding the petrol/oil mixture and shake the container to mix the contents.

4. Slowly pour the mixture into the fuel tank (maximum 4.2L)
 - Do not overfill the fuel tank.
5. Replace the fuel cap securely.

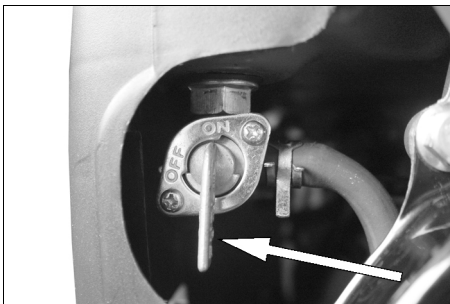


USING YOUR GENERATOR

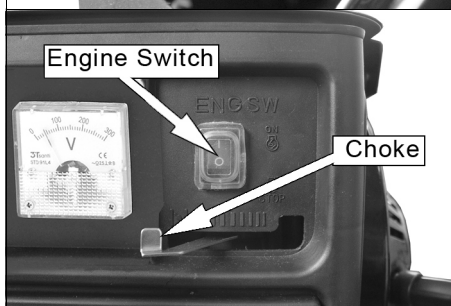
Make sure there is sufficient fuel in the tank before using the generator.

STARTING THE ENGINE

1. Remove all connections from the AC sockets.
2. Turn fuel valve to the ON position.



3. Set the choke lever to the "I" position (all the way to the left).
4. Set the engine switch to the "I" (ON) position.



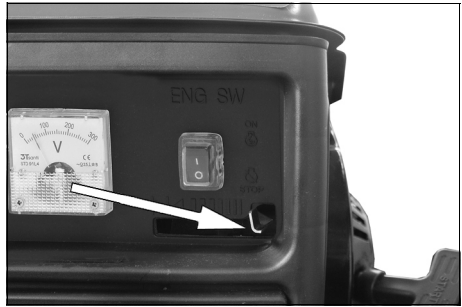
5. Hold the generator handle firmly and pull the starting handle lightly until you start to feel resistance and then pull up sharply to start the engine.

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.

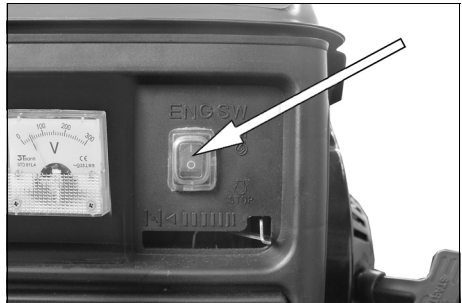
6. Once the engine has warmed up, return the choke lever to the run position (all the way to the right).



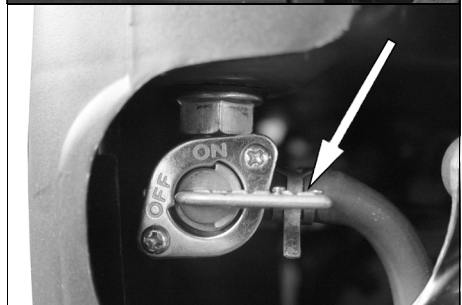
SHUTTING DOWN THE GENERATOR

To stop the generator in an emergency simply set the engine switch to '0' (OFF) position.

1. Turn off and disconnect any electric devices.
2. Set the engine switch to the "0" (OFF) position.



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



CONNECTING ELECTRICAL DEVICES



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 WHICH CONTAINS AN INDUCTIVE LOAD E.G. DEVICES THAT CONTAIN A MOTOR MAY REQUIRE MORE CURRENT ON STARTUP.

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

AC POWER

1. Start the engine. See page 10.
2. Make sure the appliance is turned off before connecting it to the generator.
3. Connect the appliance to the generator.



VOLTMETER

The voltmeter will display the output voltage of the generator during use.

NOTE: The output voltage may drop if you place a heavy or highly resistive load on the generator.



CAUTION: Care should be taken when connecting sensitive devices such as laptop computer and televisions to the generator. A surge protection device is recommended when connecting these types of device.

AC OVER LOAD PROTECTOR

If the AC overload protector activates:

1. Disconnect the appliance
 - Wait for 2-3 minutes.
2. Press the AC circuit breaker/reset button shown on the right.

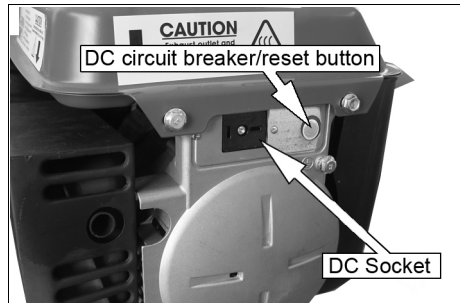


DC POWER (FOR CHARGING CAR BATTERIES ONLY)



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

1. Start the engine, See page 10.
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 DC Socket.
 - 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:

1. Disconnect the battery charging leads and wait for 2-3 minutes.
2. Press the DC circuit breaker/reset button to reset the generator.

MAINTENANCE

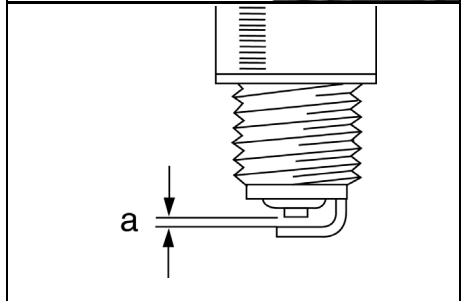
THE SPARK PLUGS (EVERY 50 HOURS OF USE)



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

1. Remove the spark plug cap from the spark plug.
2. Use a spark plug spanner (supplied) to remove the spark plug.
3. Check for discoloration and use a wire brush to remove any carbon build up.
4. Check the spark plug gap (a) with a feeler gauge, it should be between 0.6 and 0.7 mm.
 - Adjust if necessary.
5. Check the overall condition of the spark plug and replace if damaged.

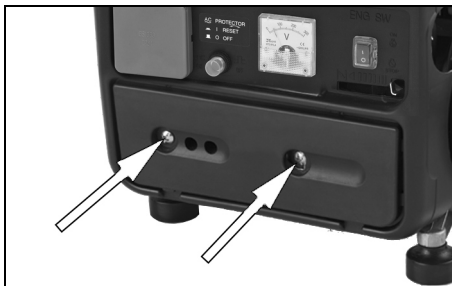
NOTE: Spark plugs are available from Clarke Spare Parts department 020 8988 7400.



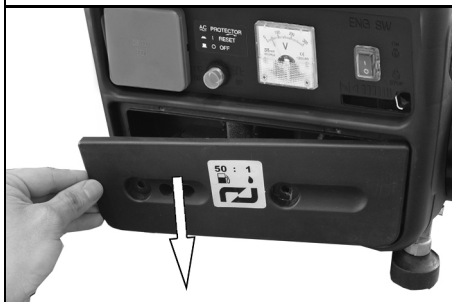
6. Reinstall the spark plug and replace the spark plug cap.

THE AIR FILTER (EVERY 150 HOURS OF USE)

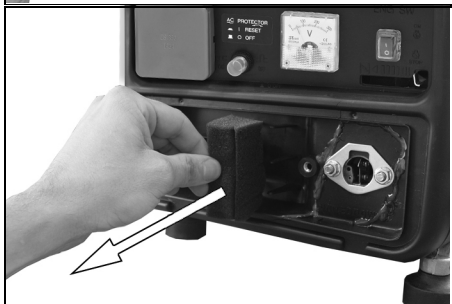
1. Remove the maintenance panel screws.



2. Remove the maintenance panel.



3. Remove the air filter element.
 4. Wash it in a solution of warm water and mild detergent.
 5. Rinse thoroughly and leave it to dry, once it is completely dry immerse the filter in clean engine oil and squeeze the filter to remove excess oil.
- If the air filter is damaged contact Clarke spare parts department for a replacement.



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

6. Replace the filter into its original position and replace and secure the maintenance panel.

THE FUEL FILTER (EVERY 150 HOURS OF USE)

Just inside the fuel tank is a fuel filter, check this filter periodically and remove any contaminants which may have accumulated.

1. Remove the fuel cap from the generator.



2. Lift out the fuel filter.
3. Clean the filter with solvent.
 - If the filter is damaged contact Clarke spare parts department for a replacement.
4. Replace the filter and fuel cap.



TROUBLESHOOTING

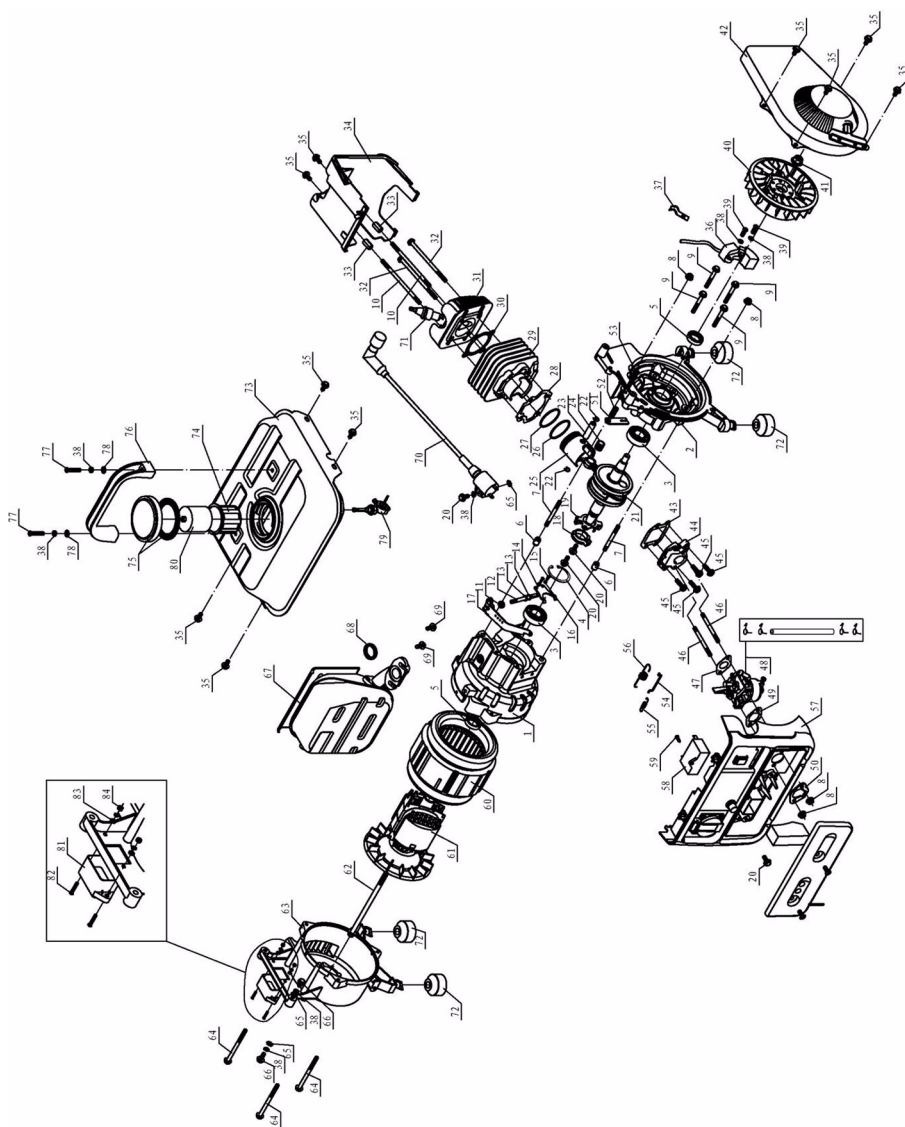
PROBLEM	CAUSE	SOLUTION
The generator fails to start	Engine switch is off.	Set the engine switch to 'on'.
	No fuel.	Add more fuel, see page 9.
	Spark plug not working correctly.	Change the spark plug. see page 14.
The generator fails to generate electricity	The device you are trying to power is faulty.	Make sure the device you want to power is working properly.
	(AC supply only) The AC Circuit Breaker has activated.	Remove the appliance immediately, wait for a 2-3 minutes and press the AC Circuit Breaker/ reset button. Do not connect any appliance that requires more than 720W.

If this does not solve your problem, please contact the Clarke service department. see page 2

SPECIFICATIONS

		G720
Engine	Type	Petrol 2-Stroke
	Displacement (cm ³)	63
	Ignition type	Recoil
	Fuel tank capacity (L)	4.2
	Maximum run time (h)	6.5 hours @ 75% Load
	Guaranteed sound power level (L _{WA} dB)	91
	Sound pressure level (L _{pA} dB)	69.5
Generator	Rated Frequency (Hz)	50
	Rated AC Voltage (V)	230
	Rated Power (W)	650
	Max. Power (W)	720
	Rated DC Voltage (V)	12
	Rated DC Current (A)	5.3
Dimensions	Length (mm)	380
	Width (mm)	312
	Height (mm)	319
	Weight (kg)	17

EXPLODED DIAGRAM & PARTS LIST



EXPLODED DIAGRAM & PARTS LIST

NO	DESCRIPTION	PART NO:
1	Left Crankcase	RKG72001
2	Right Crankcase	RKG72002
3	Bearing 6004	RKG72003
4	Hole Circlip	RKG72004
5	Oil Seal	RKG72005
6	Pin	RKG72006
7	Stub Am	RKG72007
8	Dentiform Flange Nut	RKG72008
9	Flange Bolt	RKG72009
10	Stub Am	RKG72010
11	Oil Seal	RKG72011
12	Governor Shaft	RKG72012
13	Washer	RKG72013
14	Governor Fork	RKG72014
15	Cross Head Bolt	RKG72015
16	Spring Washer	RKG72016
17	Governor Arm	RKG72017
18	Collar Bush	RKG72018
19	Weight Comp	RKG72019
20	Flange Bolt	RKG72020
21	Crankshaft Assembly	RKG72021
22	Circlip	RKG72022
23	Piston Pin	RKG72023
24	Roller Bearing	RKG72024
25	Piston	RKG72025
26	Second Piston Ring	RKG72026
27	First Piston Ring	RKG72027
28	Cylinder Gasket	RKG72028
29	Cylinder	RKG72029
30	Cylinder Cap Gasket	RKG72030
31	Cylinder Cap	RKG72031
32	Flange Bolt	RKG72032

NO	DESCRIPTION	PART NO:
33	Thick Nut	RKG72033
34	The Cover Of Cylinder Cap	RKG72034
35	Flange Bolt	RKG72035
36	Ignition Coil Assembly	RKG72036
37	Clamp	RKG72037
38	Spring Washer	RKG72038
39	Cross Head Bolt	RKG72039
40	Flywheel	RKG72040
41	Flange Nut	RKG72041
42	Recoil Starter Assembly	RKG72042
43	Intake Valve Gasket	RKG72043
44	Intake Valve Assembly	RKG72044
45	Flange Bolt	RKG72045
46	Stub Am	RKG72046
47	Intake Gasket	RKG72047
48	Carburetor	RKG72048
49	Carburetor Gasket B	RKG72049
50	Carburetor Gasket A	RKG72050
51	Supporting Plate	RKG72051
52	Compression Spring	RKG72052
53	Cross Head Bolt	RKG72053
54	Rod Link	RKG72054
55	Tension Spring	RKG72055
56	Governor Spring	RKG72056
57	Control Panel	RKG72057
58	Capacitor	RKG72058
59	Self-tapping Screw	RKG72059
60	Alternator Stator	RKG72060
61	Alternator Rotor	RKG72061

NO	DESCRIPTION	PART NO:
62	Flange Bolt	RKG72062
63	Rear Cover	RKG72063
64	Flange Bolt	RKG72064
65	Dentiform Washer	RKG72065
66	Flange Bolt	RKG72066
67	Muffler	RKG72067
68	Muffler Gasket	RKG72068
69	Flange Bolt	RKG72069
70	Cdi Winding	RKG72070
71	Spark Plug	RKG72071
72	Absorber	RKG72072
73	Fuel Tank (Blue)	RKG72073
74	Strainer	RKG72074
75	Fuel Tank Cap	RKG72075
76	Handle	RKG72076
77	Cross Round Head Bolt	RKG72077
78	Washer	RKG72078
79	Fuel Switch	RKG72079
80	Fuel Cup	RKG72080
81	Dc Socket	RKG72081
82	Cross Head Bolt	RKG72082
83	Washer	RKG72083
84	Nut	RKG72084

DECLARATION OF CONFORMITY



Hemnall Street, Epping, Essex CM16 4LG

DECLARATION OF CONFORMITY

This is an important document and should be retained.

Product Description:	720W Generator
Model number(s):	G720
Serial / Batch Number:	8857800
Date of Issue:	26/10/2010
<i>(Noise Conformity)</i>	
Notified Body:	Societe Nationale De Certification ETD' Homologation S.A.R.L (SNCH) 11 Rout De Sandweiler 5230 Sandweiler Luxembourg
Technical Documentation Holder:	Alan Pond Clarke International 2a Shrubland Road London E10 7RB UK
Conformity Assessment Procedure:	to 2000/14/EC Annex III
Manufacturer:	Clarke International
Noise Related Value:	0.65 kW
Measured Sound Power Level:	89.5 dB
Guaranteed Sound Power Level:	91 dB

DECLARATION OF CONFORMITY



Clarke[®]
INTERNATIONAL

Hemnall 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 2010/26/EC).*

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

- EN 55012:2007+A1:2009, EN 61000-6-1:2007, EN 61000-6-3: 2007, EN 3744:1995, ISO 8528-10:1998
- EN 12601:2001.

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: 2006

Signed:

J.A. Clarke
Director

OTHER PRODUCTS

Other generators from our range include:

IG1000

- 1000W Maximum output
- Inverter technology for clean stable power, for computers etc.
- Eco throttle for more greater fuel efficiency
- 12V Battery charging facility
- Low oil alert and overload shutdown



IG2200

- 2200W Maximum output
- Inverter technology for clean stable power, for computers etc.
- Eco throttle for more greater fuel efficiency
- 12V Battery charging facility
- Low oil alert and overload shutdown



For further information on these or any of our products, contact your local CLARKE dealer.

Clarke®

AIR COMPRESSORS

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

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

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

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

Drills, grinders and saws for DIY and professional use.

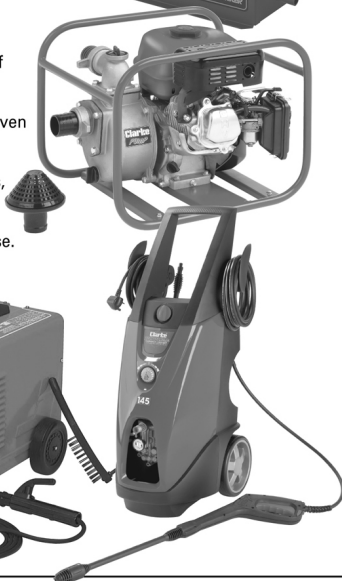
Saws, sanders, lathes, mortisers
and dust extraction.

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

Submersible, electric and engine driven
for DIY, agriculture and industry.

Angle grinders, cordless drill sets,
saws and sanders.

STARTERS/CHARGERS
All sizes for car and commercial use.



E-mail: Parts@clarkeinternational.com or Service@clarkeinternational.com

Clarke® INTERNATIONAL Hemnall Street, Epping, Essex CM16 4LG
www.clarkeinternational.com