

Clarke®

POWER



CE

© 0600

Generator

Model G700

Part Number 8010010

Operating & Maintenance Instructions

Clarke[™]

INTERNATIONAL

Parts and Service

For Spare Parts and Servicing, please contact your local dealer, or
Clarke International on one of the following Numbers:

Parts and Service Tel: 0208 988 7400

Parts and Service Fax: 0208 558 3622

or email as follows:

Parts: Parts@clarkeinternational.com

Service: Service@clarkeinternational.com

**If you have any problems using or setting up your Generator
call the Clarke Helpline on,**

0208 988 7400

Press 1 for Parts : 2 for Technical Assistance

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Thank you for purchasing this Clarke Power Generator. Before use please read these instructions. This is for your own safety and that of others around you, and also to ensure the Generator provides you with long and trouble free service.

Guarantee

This product is guaranteed against faults in manufacture for 12 months from purchase date. Keep your receipt as proof of purchase. This guarantee is invalid if the product has been abused or tampered with in any way, or not used for the purpose for which it is intended. The reason for return must be clearly stated. This guarantee does not affect your statutory rights.

Features and Use

This portable generator is designed to provide an output of 3.2 Amps at 230 Volts and 10 Amps at 12 Volts. A battery charging lead is supplied for connection to the 12 Volt output which is designed for BATTERY CHARGING ONLY.

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For Your Own Safety

WARNING:

Exhaust fumes can be extremely dangerous if inhaled

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

Fire Prevention

Always switch the engine OFF when refuelling.

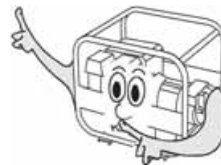
Always refuel away from any source of heat.

Always refuel in a well ventilated area.

Never overfill the tank, fill to the level specified (see page 6).

Never smoke whilst refuelling and avoid smoking or using a naked flame near the generator.

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

Always store the generator undercover when not in use away from damp or wet conditions.

Never use the generator when it is raining or snowing or in wet or damp conditions.

Never operate the generator with wet hands.

Never use water or any other liquids to clean the generator.



Positioning the Generator for use

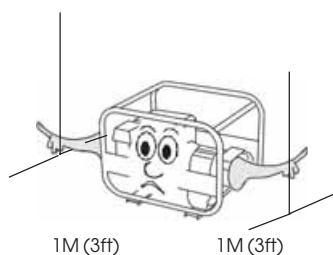
Always leave a least a 1M gap between the generator and any surrounding building or structures.

Always ensure the generator is on a solid, flat surface.

Always ensure the surrounding area is free from any material that could burn or be damaged by heat.

Never move or tilt the generator whilst it is switched on.

Never cover the generator or enclose it while it is in use.



Exhaust Gas Precautions Regarding Generators

Always ensure there is adequate ventilation when using the generator.

Always position the generator so that the exhaust is pointed away from people or animals.

Never use the generator indoors or in an enclosed area. (i.e. in a warehouse, tunnel, well, hold.)

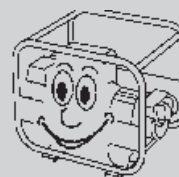


General Safety Precautions for Generators

Always ensure the applied load does not exceed the generator rating. Overloading the generator is dangerous and could cause serious damage.

Always disconnect the generator when carrying out any maintenance.

Always ensure the generator reaches operating speed before connecting a load.



Never allow the generator to run out of fuel when a load is connected.

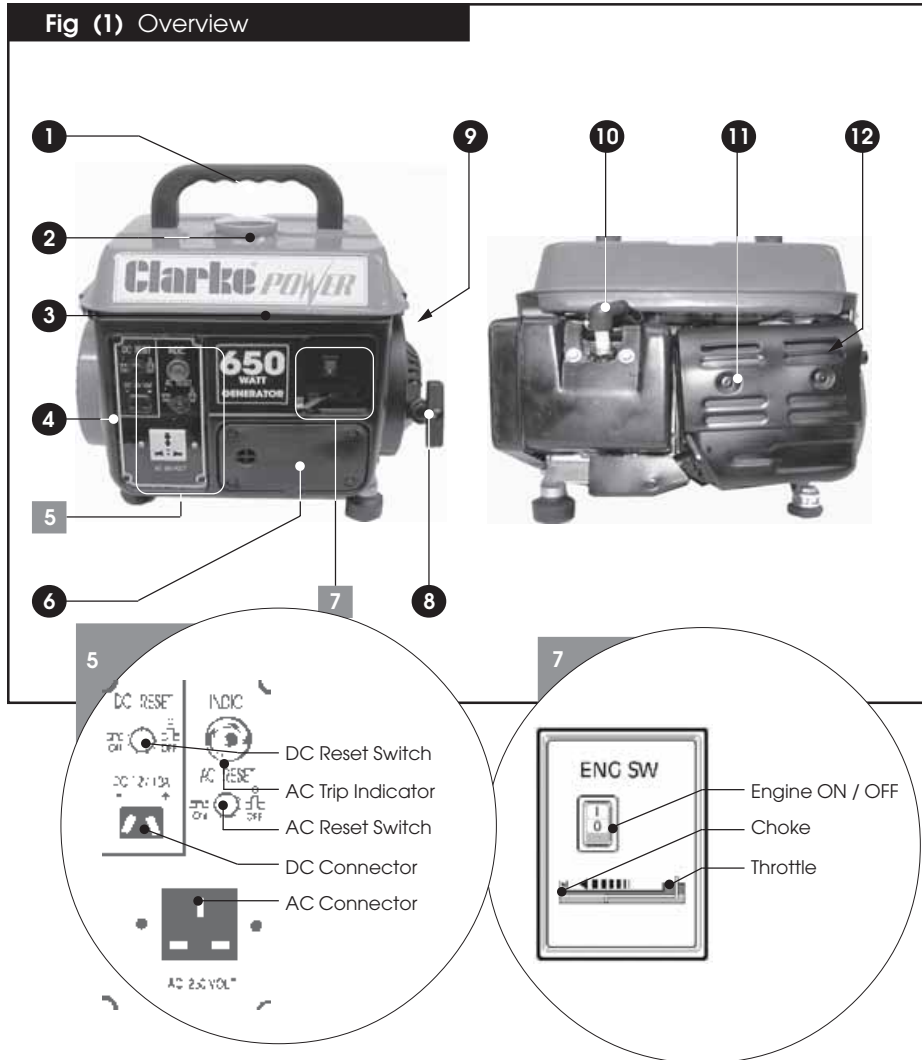
Never transport the generator with fuel in the tank.

Do Not connect to a commercial or residential power supply.

Do Not connect to any other electrical source.



Fig (1) Overview



- 1** Carrying Handle
- 2** Fuel Cap
- 3** Fuel Tank
- 4** Alternator
- 5** Control Panel
- 6** Air Inlet Cover

- 7** Engine Control
- 8** Recoil Starter
- 9** Fuel Tap
- 10** Spark Plug
- 11** Exhaust
- 12** Exhaust Outlet

Unpacking and Assembly

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

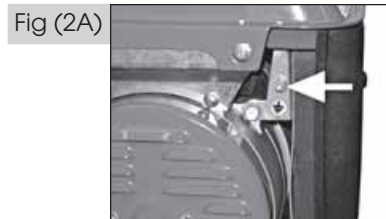
1. The Generator Unit
2. Plastic Handle (with two fastening screws)
3. 12 Volt DC Battery Attachment Leads
4. Spark Plug Wrench

Fit the plastic carrying handle to the fuel tank with the two screw provided as shown in fig (2).



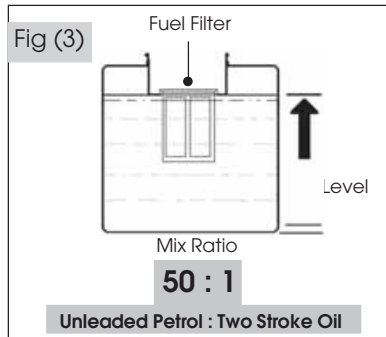
Before Using the Generator

IMPORTANT: Generators should ALWAYS be earthed. The Earthing Point for the G700 is to be found to the left of the control panel, as shown, arrowed in Fig. 2A. Attach a suitable earth lead to a good earth - water pipe, ground spike etc., whenever you use this machine.






Before using your generator check that :

1. The Generator unit is in good condition and free from any damage.
2. The Generator Unit is clean and free from fuel or oil spillage.
3. The Generator Unit is correctly located for use (see page 4).
4. The fuel hose and connectors are intact and there is no leakage.
5. The Fuel Tank is properly filled with a fuel mix of unleaded petrol and two stroke oil at a ratio of 50 Parts Petrol to 1 Part oil. The Tank should be filled to just below the fuel filter shoulder as shown in fig (3).



Use Clarke 2 stroke oil....Part No.5060260

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 removed from the unit before attempting to start the engine.

-  **WARNING ! observe all safety precautions when handling fuel. Always refuel in a well ventilated area away from any heat sources.**
-  **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.**
-  **WARNING ! allow the unit to cool down before refuelling.**

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Using your Generator

(a) Starting the Engine

⚠ **IMPORTANT !** Ensure the generator is not connected to any electrical equipment when starting the engine.

1. Turn the Fuel ON as shown in fig (4).

Note : The Fuel Tap has three positions : ON, OFF, and RES (reserve). If the fuel runs low the tap can be switched to 'Reserve' to allow a short period of further operation. When the fuel gets this low it is recommended that you refuel (see page 6).

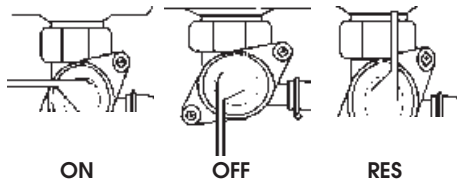
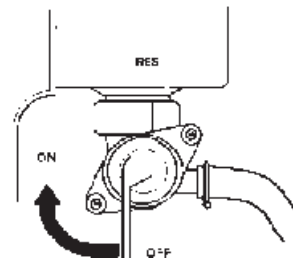


Fig (4)

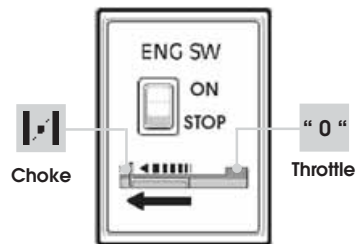


2. Set the choke by moving the throttle lever in the direction of the arrow shown in fig (5).

Note : The choke position is indicated by the "I" symbol.

3. Switch the Ignition ON by pushing the rocker switch, shown in fig. 5, so that the "I" is depressed. To turn the engine OFF, push the switch so that the "O" is depressed.

Fig (5)



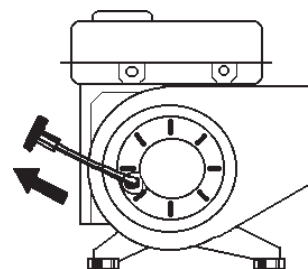
4. Pull the Recoil Starter as shown in fig (6).

Note : To start the engine, pull the recoil Starter slowly until you feel full resistance, then pull briskly to turn the engine over. (The engine should start after no more than three or four pulls. If the engine does not start see Troubleshooting)

5. Return Throttle lever to "0" as shown in fig (5).

Note : When the engine has started the throttle should be returned to position "0" to allow the engine to run at its set operating level.

Fig (6)



(b) Connecting Electrical devices

⚠ IMPORTANT ! Ensure that the power rating of the connected load does not exceed the rating for the generator (650 Watts (3.2 Amps AC) / 15 Amps at 12VDC)

⚠ Connecting to 230 Volts AC.

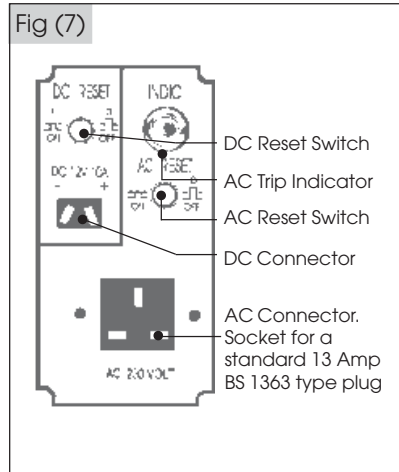
Insert the three pin plug into the AC connector ensuring that the power rating of the device is below 650 Watts.

Note : If the AC circuit is overloaded the circuit protection switch will trip and the indicator will illuminate. To reset the circuit press the AC reset switch.

⚠ Connecting to a 12 Volt Battery.

Insert the supplied two pin battery lead into the DC connector. The red conductor must connect to the Positive or "+" terminal and the black wire to the Negative or "-" terminal.

Note : If the DC circuit is overloaded the circuit protection switch will be tripped . To reset the circuit press the DC reset switch.



(c) Shutting down the Generator

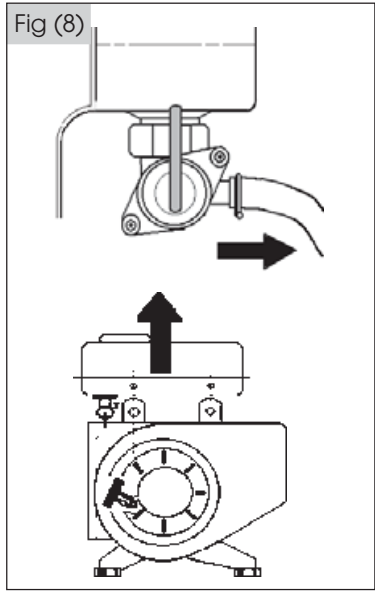
⚠ IMPORTANT ! Never switch off the engine whilst an electrical device is connected.

- 1. Switch off the electrical device.**
- 2. Unplug the device from the generator.**
- 3. Switch the Engine OFF (see page 7).**
- 4. Turn the Fuel OFF (see page 7).**

Maintenance

If the generator is not going to be used for some time then the fuel tank must be drained and any remaining fuel run through as follows :

- 1. Turn the Fuel OFF (see page 7)**
- 2. Unclip the fuel hose (see fig (8)).**
- 3. Unbolt the tank from the unit (see fig (8)).**
- 4. Empty contents of the tank into a suitable container.**
- 5. Refit the tank, start up engine and let it run until all the fuel has been used.**



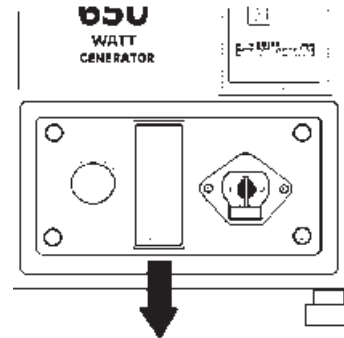
Maintenance Ref: Fig. 1

(a) Air Inlet Filter

Check after **50 Hours** Normal use

If the air filter has become soiled, clean as stated below. If the filter is damaged or still appears to be soiled after cleaning, replace.

1. Remove the air inlet cover (6).
2. Remove the foam filter and wash thoroughly with soapy water.
3. Rinse the Filter and allow it to dry thoroughly so that no unwanted liquids enter the carburettor.
4. Replace the filter and the air inlet cover (6).

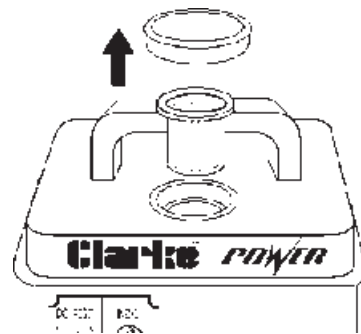


(b) Fuel Tank Filter

Check after **50 Hours** Normal use

If the filter has become soiled, clean as stated below. If the filter is damaged or has become clogged, replace.

1. Turn the Fuel Tap (9) OFF.
2. Undo the fuel cap (2) and remove the filter.
3. Wash thoroughly with soapy water.
4. Rinse the Filter and allow it to dry thoroughly so that no unwanted liquids enter the tank. Replace the Filter and the fuel cap(2).

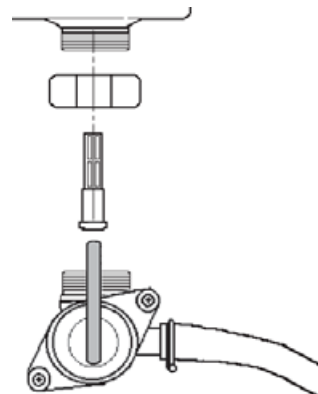


(c) Fuel Tap Filter

Check after **100 Hours** Normal use

If the filter has become soiled, clean as stated below. If the filter is damaged or has become clogged, replace.

1. Empty the fuel (3) tank described on page 8.
2. Unbolt the fuel tap (9) from the tank and unscrew the shouldered bolt from the tap to remove the filter.
3. Wash thoroughly with soapy water, rinse thoroughly and allow to dry completely before reassembling.
4. Replace fuel tap (9) and refit tank (3).

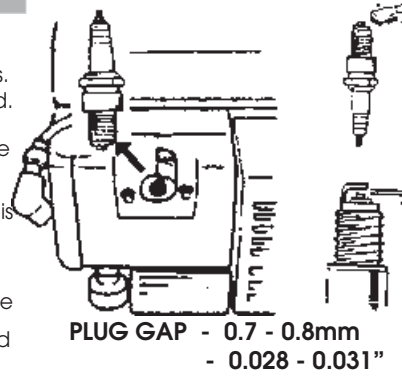


(b) **Spark Plug**

Check after **50 Hours** Normal use

Check the spark plug(10) for build up of carbon and the gap between electrodes. Take the corrective action below if needed.

1. Unplug the spark plug lead (10) and remove the plug using the supplied wrench.
2. Clean the electrode with a wire brush until it is restored to its original metal colour.
3. Check the gap between electrodes is 0.7- 0.8mm (0.028-0.031 ") with a suitable gauge
4. Return the spark plug (10) to the engine and refit lead.



Troubleshooting : The Engine

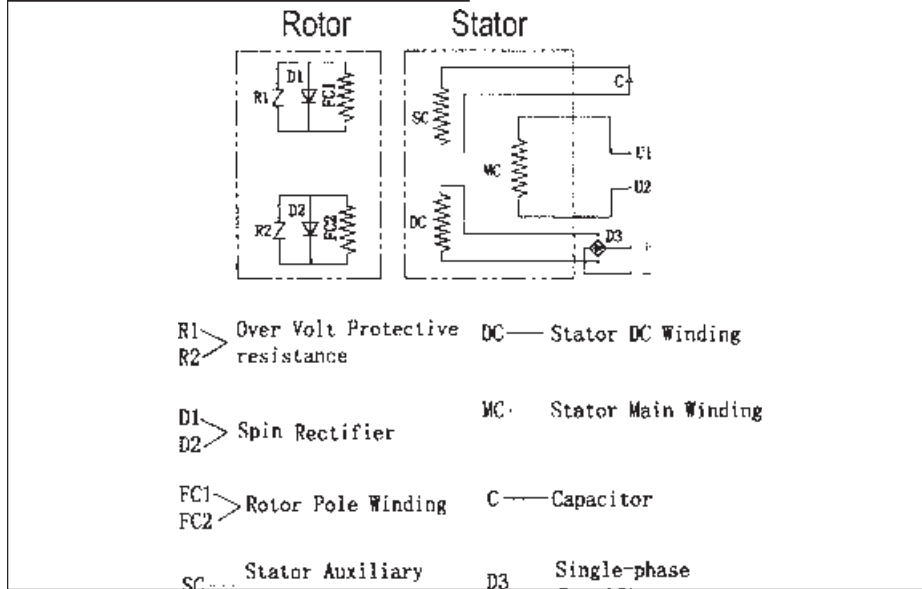
Problem	Probable Cause	Remedy
Will not Start	Loose spark plug Loose cylinder head bolt Damaged head gasket Insufficient starting pull	1. Tighten spark plug 2. Tighten cyl. head bolt 3. Replace gasket 4. Pull recoil starter harply
Will not start or Low output	Dirt in fuel tank Clogged fuel line No fuel Fuel tap closed Tarnished spark plug Damaged spark plug Faulty magneto or carburettor settings	5. Clean fuel tank 6. Clean fuel line 7. Fill fuel tank 8. Open fuel tap 9. Clean spark plug 10. Replace spark plug 11. Contact Clarke Service Department
Erratic performance	Improper fuel Overheating	12. Check fuel 13. Contact Clarke Service Department

Troubleshooting : Electrical Fault finding

Problem	Possible Cause	Remedy
AC Indicator Light on : No AC Output	Tripped Circuit Breaker Poor connection or faulty lead Broken AC connector Faulty Circuit Breaker	1. Reset AC safety trip 2. Check connection and (or) replace lead 3. Contact Clarke Servicing 4. Contact Clarke Servicing
No DC Output	Tripped Circuit Breaker Poor connection or faulty lead Broken DC connector Faulty Circuit Breaker	1. Reset DC safety trip 2. Check connection and (or) replace lead 3. Contact Clarke Servicing 4. Contact Clarke Servicing
Erratic Supply	Incorrect engine RPM Internal Generator problem	1. Set Engine RPM * 2. Contact Clarke Servicing

* Engine RPM (No Load): 50 Hz = 3150 RPM

Figure (9) Electrical Diagram



Specifications

Model No G700
Part No 8010010

Dimensions 375(H) x 380(L) x 300(W) MM
Gross Weight 21KG

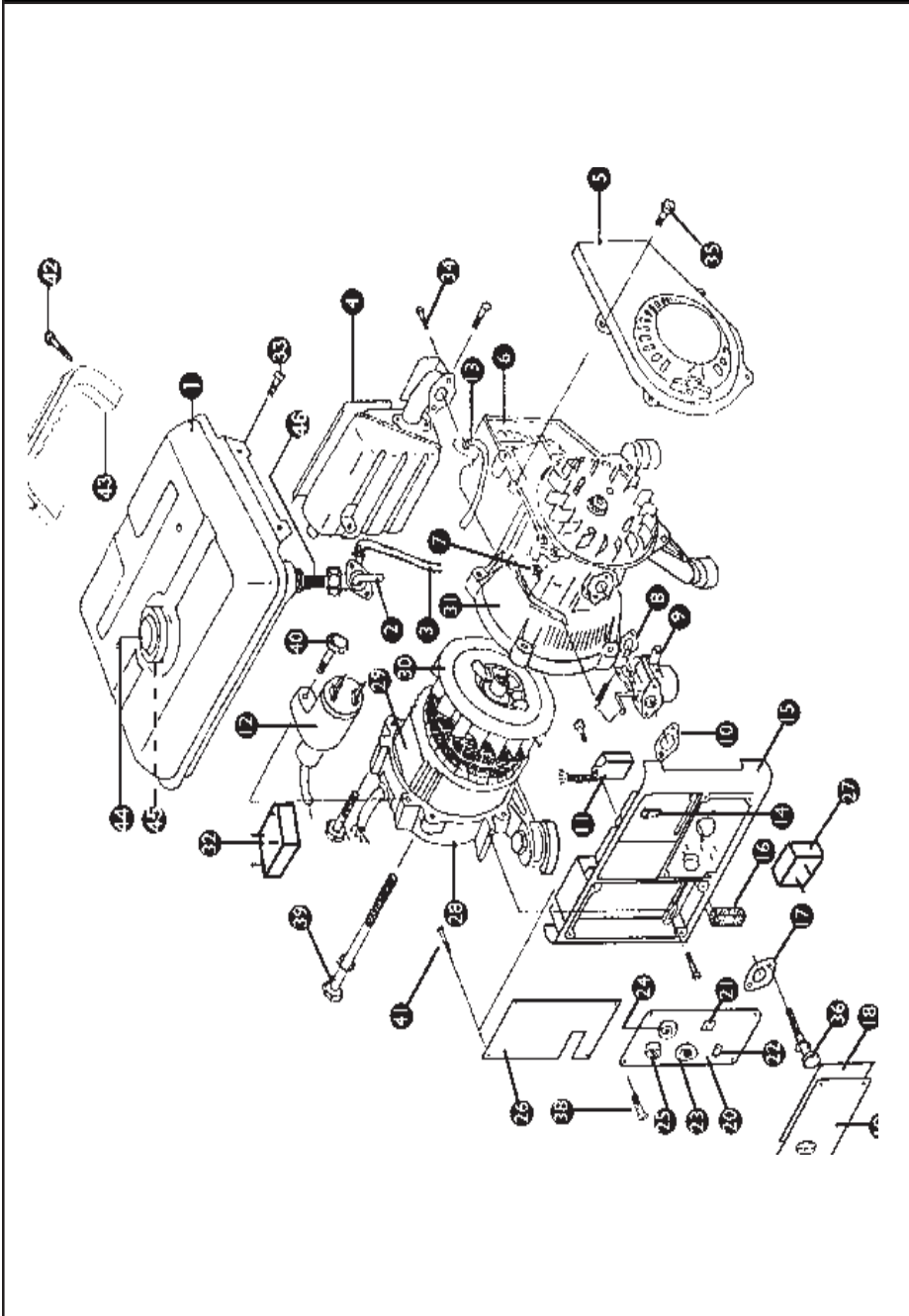
Engine

Type 2 Stroke Single Cylinder
Displacement 64cc
Fuel Capacity 4 Litres
Running Time on Full Tank 4hrs 30min (approx.)
Cooling System Forced Air Cooling
Stroke/Bore 45x40mm
Carburettor Type HG63
Air Cleaner Sponge Element
Fuel / Oil Mix Ratio 50 : 1
Compression Ratio 6 : 1

Generator

Type Brushless Single Phase
Peak Power 800Watt
Rated Power 650 Watt
Rated Rotation Speed 3000 RPM
AC Rated Voltage 230 Volts
AC Rated Frequency 50 Hz
Maximum Output 3.2 Amps
DC Rated Voltage 12Volts
(For Battery Charging ONLY)
DC Rated Current 10 Amps

Spare Parts Diagram (fig 7)



Spare Parts List

No.	Description	Part No.
1	Fuel Tank	HT70001
2	Fuel Valve	HT70002
3	Fuel Hose	HT70003
4	Exhaust	HT70004
5	Starter Cover	HT70005
6	Engine	HT70006
7	Governor Arm Spring	HT70007
8	Gasket	HT70008
9	Carburettor	HT70009
10	Gasket	HT70010
11	CDI	HT70011
12	Ignition Coil	HT70012
13	Spark Plug	HT70013
14	ON / OFF Switch	HT70014
15	Front Panel	HT70015
16	Air Filter	HT70016
17	Gasket	HT70017
18	Seal Ring	HT70018
19	Air Filter Cover	HT70019
20	Control Panel	HT70020
21	AC Socket	HT70021
22	DC Socket	HT70022
23	AC Trip Switch	HT70023
24	Indicator Lamp	HT70024
25	DC Trip Switch	HT70025
26	Cover Plate	HT70026
27	Capacitor	HT70027
28	Alternator Cover	HT70028
29	Stator	HT70029
30	Rotor	HT70030
31	Front Cap	HT70031
32	Rectifier	HT70032
33	Screw M6x12	HT70033
34	Screw M6x12	HT70034
35	Screw M6x12	HT70035
36	Screw M6x65	HT70036
37	Screw M5x20	HT70037
38	Screw M5x8	HT70038
39	Screw M8x150	HT70039
40	Screw M5x18	HT70040
41	Screw M5x8	HT70041