888-9033, (384-8310)

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: 020 8988 7400

Parts and Service Fax: 020 8558 3622

or e-mail as follows:

Parts: Parts@clarkeinternational.com

Service: Service@clarkeinternational.com

If you have any problems using your Jumpstart, call the on,

Press 1 for Parts : 2 for Technical Assistance

Spare Parts (Ref. Fig.1, page 2)

	Positive Battery Connection Lead	HT90001
	Lamp Bezel	HT90003
	Lamp Lens	HT90004
	230V Battery Charger	HT90006
	Negative Battery Connection Lead	HT90002
	Battery 12V 17AH	HT90005

Thank you for purchasing this Clarke Jumpstart. Before using please read these instructions. This is for your own safety and that of others around you, and to help you achieve long and trouble free service from the Jumpstart unit.

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

The Jumpstart 900 is a rechargeable 12 Volt power supply which can be used to start a car in the event of a flat battery. The unit can also be used to power such things as Mobile Phones, Radios, Electric Coolers etc., via a cigar lighter type socket and the adapter supplied. The unit also incorporates a built in lamp and may be used as a stand alone light source.

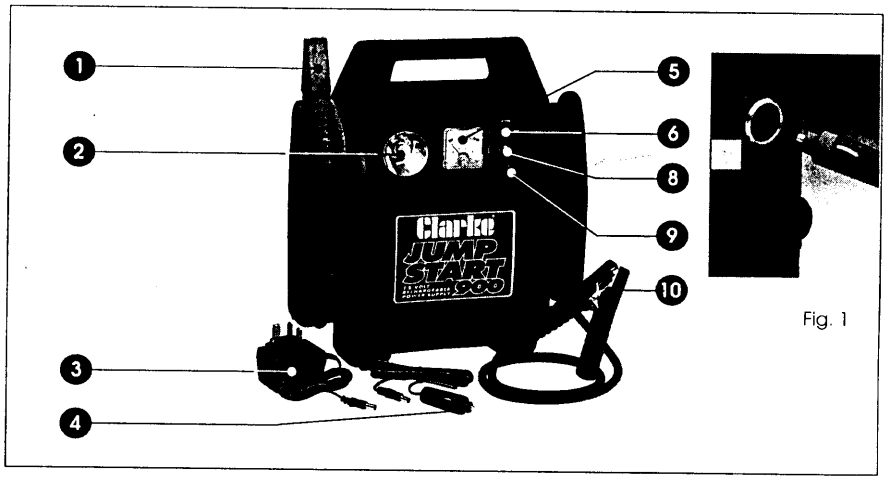


Fig. 1

1. **Positive Battery Connection Lead** to connect to positive the battery terminal
2. **Lamp** to provide light for roadside repairs or emergency situations
3. **230 Volt Charger** to charge the internal battery pack
4. **Cigar Lighter Adaptor** complete with 5 Amp fuse.
5. **Voltage Meter** to indicate the voltage level of the units battery
6. **Lamp ON/OFF Switch** switches the lamp ON or OFF

   Cigar Lighter Socket for use with the cigar lighter adapter provided (Item 4)
8. **Voltage Test Switch** press to indicate the internal batteries power level
9. **12 DC Socket** connects the 230 Volt charger to allow mains charging
10. **Negative Battery Connection Lead** to connect to the negative battery terminal

Specifications

Model Number	Jumpstart 900
Part Number	6240010
Battery Type	Sealed, Lead Acid,
	Rechargeable,
	Maintenance Free
	12V DC
	17 AH
Voltage Output	12 Volts DC
Bulb Type	12V, 3Amp, Screw type

Safety Precautions

- **NEVER** allow the negative and positive leads, on this unit, to touch or to touch the same metal object.
- Although the Jumpstart is water resistant and may be used outdoors, DO NOT leave it exposed to the elements. Avoid direct sunlight, direct heat, rain/moisture etc.
- The Jumpstart is designed for use with 12V systems ONLY.
- Do not operate the Jumpstart if any of the cables are damaged. Consult your Clarke dealer for repair or replacement of the parts.
- Do not operate the Jumpstart if the case is damaged. Consult your Clarke dealer or a qualified person for inspection and repair.
- Ensure the vehicle battery posts and battery clamps are perfectly clean before use.
- When connecting the Jumpstart leads to a battery, **ALWAYS** connect the RED, (positive, +ve) output conductor to the **UNEARTHED** battery terminal **FIRST**, then connect the BLACK, (negative, -ve) conductor to the chassis or suitable engine bolt, well away from the battery and fuel line.
- To prevent battery overheating and consequent damage, do not exceed our recommendations for jump starting.
- When jumpstarting ensure the area is well ventilated.
- ALWAYS wear suitable protective clothing and eye protection when working with lead acid batteries.
- The Jumpstart is NOT designed to be used as a replacement for a vehicle battery.
- DO NOT attempt to BOOST CHARGE the Jumpstarts' sealed battery.
- DO NOT allow the battery, at any time, to become completely discharged.

WARNING! It is possible that some electronic equipment could be damaged by jump starting. ALWAYS check with the manufacturers handbook to determine whether or not precautions should be taken.

Battery Charging

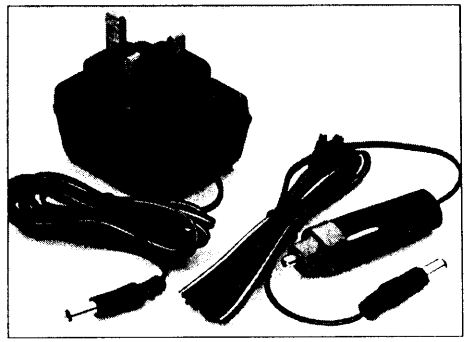
IMPORTANT!

1. **Charge your Jumpstart battery before using for the first time. (See 'A' below).**
2. **Recharge the battery after every use.**
3. **Recharge the battery every 3 months**
4. **NEVER leave your Jumpstart 900 battery in a state of discharge.**

Follow the above rules to ensure maximum working life from your Jumpstart battery

Two means of charging the battery are provided.

Fig. 2



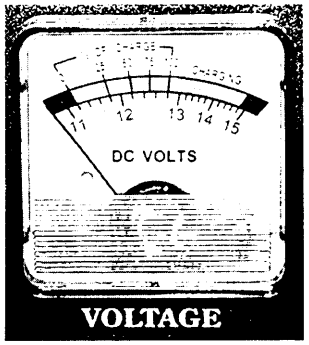
1. Via a 230V supply, using the 230V charger with cable and DC plug provided, shown in fig.2.
2. Via a 12V vehicle supply using the cigar lighter adapter with cable and plug provided, shown in fig.2.

   A 5Amp fuse is fitted into the cigar lighter plug adapter, accessed by unscrewing the end cap of the adapter. Take care not to loose the spring when unscrewing the cap.

   NOTE : Using a 12V vehicle supply, the battery will not charge to its maximum, but only to approx. 75% of its capacity.

A. Charging using the 230 Volt Charger

Fig. 3



1. Plug the cable into the socket at the front of the unit, then the charger in to the mains supply and switch ON. The red LED will illuminate to denote charging is in progress.
2. Pressing the 'TEST' switch will indicate the level of charge - a built-in safety device prevents overcharging.
3. Continue to charge until the charging light goes OUT, or the voltmeter registers **14V or more** when the TEST switch is pressed.

   IMPORTANT! DO NOT stop charging before the meter registers 14V.

   At this point, once the charger is disconnected, the voltage will slowly settle back to read 100%. This is quite normal and indicates that the battery is at full capacity

NOTE:
When the LED goes OUT, charging will automatically stop, indicating that the battery is at maximum capacity, and the voltage will then slowly drop back to read 100%, as above.

To fully charge a battery could take up to 72 hours, depending upon the state of discharge.

Charging using the 12 Volt Adaptor

1. Plug the cable into the socket at the front of the unit, then into the cigarette lighter receptacle on the vehicle and start the engine. The red LED will illuminate to denote charging is in progress.

2. Continue to charge until the voltmeter registers approx. 75% when the TEST switch is pressed, with the charging current disconnected. i.e. disconnect the cigarette lighter adapter from the receptacle on the vehicle before pressing the TEST switch.

NOTE: We recommend that you use this system only when necessary, as prolonged use will reduce the life expectancy of the battery, due to the fact that this method can only charge the battery to approx. 75% of its capacity.

For maximum battery life, we strongly recommend that you maintain the battery in a fully charged state at all times.

If charging does not take place, check the 5 Amp fuse within the cigar lighter adapter plug. Ensure all connections are clean and free of grease etc.

Jump Starting

ALWAYS carry out the following preliminary checks before connecting the Jumpstart to the battery:

- Ensure the vehicle ignition and ALL ancillary equipment - lighting, radio etc., is switched OFF.
- Ensure the vehicle battery is rated at 12V and is not damaged in any way.
- Ensure the battery terminals are perfectly clean and the clamps are firm and perfectly secure.
- Remove vehicle battery filler plugs and check electrolyte level. If necessary, top up with distilled water.

When completely satisfied, proceed as follows:

1. Connect the red clamp to the unearthed battery terminal first, (on most vehicles, this is usually the positive (+ve) terminal and painted RED), then the black clamp to the chassis or engine bolt, well away from the fuel lines or moving parts, ensuring the connections are firm and secure.

2. Switch the vehicle ignition ON, and leave in this condition **FOR APPROX TWO MINUTES.** (This will provide the vehicle battery with a short 'boost' charge to allow for easier starting).

3. Switch the ignition to 'start', for NO MORE than 6 seconds.

If the engine does not start, within this time, SWITCH OFF the ignition and wait for at least 3 minutes before trying again.

4. Once the engine is running, disconnect the earthed clamp FIRST i.e. that connected to the chassis or engine bolt etc., and return it to its storage position, then disconnect the unearthed clamp, from the battery terminal, and restore to its storage position.

As soon as possible after use, recharge the Jumpstart battery. If the battery is allowed to remain in a discharged state, its life may be shortened.

Using as a 12Volt Power Supply

The unit has a Cigarette lighter type socket located on the side of the casing (see Fig. 1, 7). and comes supplied with an adaptor that allows connection via a standard DC connector to other DC electrical equipment.

⚠ ***WARNING: Be Aware that a fully charged 12V battery can have an output of approx. 13.5V. Consult the appliance handbook to ensure it is safe to operate from a 12V battery.***

The table below indicates the approx. operating time from a fully charged battery.

Estimated Use	Electrical Appliance
	Cell Phones
	Radios, Fans
	Camcorder, VCR, Spotlight
	Electric Tools, Bilge Pump

Maintenance

***Always* inspect the Jumpstart before use to ensure the cables are in good condition, and the clamps are clean and free from corrosion. Have them replaced if any damage is apparent.**

Keep clean by wiping with a dry cloth. DO NOT use solvents as a cleaning agent.

Changing the Battery

1. Unscrew and remove the 8 self tapping screws securing the back cover. Lift off the cover to expose the battery and other components.

2. Lift out the battery from the battery compartment, and detach the heavy duty, and other cables, from the battery terminals.

3. Taking great care not to short across the battery terminals, connect the RED heavy duty cable, and other cable with red sheath, to the battery terminal painted RED, and the black cables to the other battery terminal.

4. Gently slide the new battery into position in its compartment, taking care not to damage the printed circuit board

Replace the back cover and secure with the 8 self tapping screws.

Changing the Light Bulb

1. Unscrew and remove the 8 screws securing the back cover. Lift off the cover.
2. Gently squeeze the sides of the lens bezel together to disengage the clips at either side, and push the lens and bezel out.
3. Unscrew and remove the burned out bulb and screw in a replacement.
4. Snap the lens and bezel back into place and replace the back cover.