

MAINTENANCE

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.

12Volts output socket

A built-in reset device will shut off the power when the jumpstart overloads. This device will reset after a few minutes and the jumpstart will resume normal service condition again.

Replaceable fuse

The fuse will be blown out in the case of overloading. Unscrew the fuse cap (in position of item 4) and replace with a new 2A fuse, the Jumpstart will then resume to work.

NOTE: DISCONNECT APPLIANCE BEFORE YOU CARRYING OUT ANY MAINTENANCE

WARNING:

- Do not use the output socket and jumpstart at the same time.
- The output can be as high as 13 volts after the jumpstart has been fully charged, consult your appliance handbook to ensure it is safe to operate.
- Do not allow the battery to be completely discharged as the charger can not recover a deeply discharged battery.

*If faults cannot be remedied, contact the **Helpline** on **020 83916767** or helpline@hilka.co.uk*

GUARANTEE

This product is guaranteed for domestic use for a period of 12 months against faulty manufacture or materials. This guarantee does not affect the statutory rights of the consumer. If in the event of any problem occurring please contact our Helpline at the number above for advice. This product is not guaranteed for HIRE purpose.

CHALLENGE TOOLS

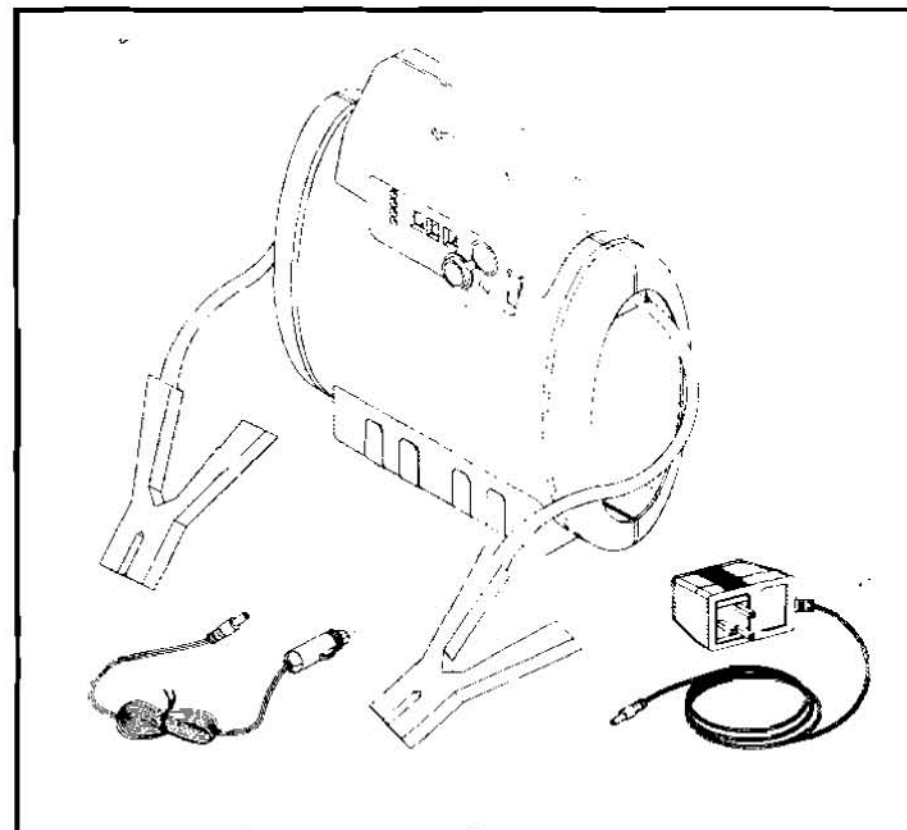
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Issue: 05/2003



Jump Start

JR5979



SAFETY INSTRUCTIONS

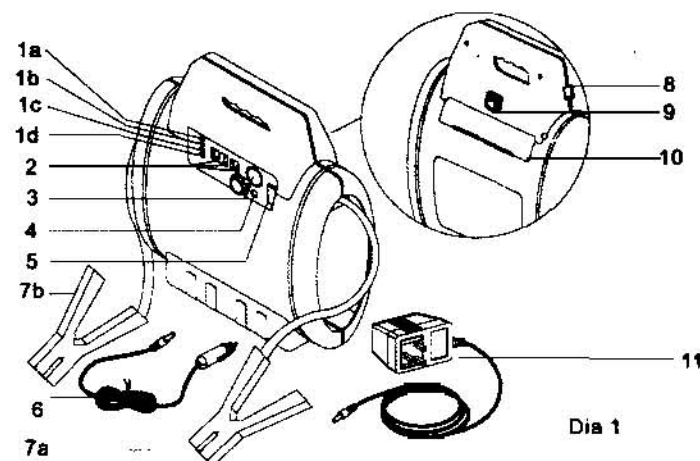
Follow basic safety principles to reduce risk of personal injury, electric shock and fire. Please read the following instructions prior to operating this product and keep for future use.



WARNING

- Do not let children handle the jumpstart, all onlookers should be away from your work area. Work in an area that is not cluttered.
- Jumpstart may be used outdoors. Do not leave it exposed to the elements. Do not use jumpstart in damp or wet areas.
- Protect the jumpstart from direct sun light. Do not use jumpstart near flammable gases or liquids. Check cables before operation. Battery may explode due to over-heating.
- Do not carry the jumpstart by the cable or pull the cable to remove the plug from the mains socket. Protect the cable from sharp objects, heat and oil. Have it replaced if damaged.
- Always ensure the jumpstart is not damaged. Do not operate if in the case of any of the cables is damaged. Consult a qualified person for repair.
- Do not attempt to repair or open the jumpstart (which contains no user serviceable parts).
- Do not allow the battery, at any time, to become completely discharged. The product should be kept fully charged when not in use. If it will be kept in storage, then it must be recharged every 3 months.
- The internal battery is a sealed lead acid battery. It is classified as non-spillable and has unique sealing techniques to guarantee that no electrolyte leakage will occur. If it is necessary to replace the battery, then it should be done by a qualified technician only and must be of the same specification as the original.
- Jumpstart is designed for use with 12V systems only. Do not use jumpstart for any purpose other than that is designed. For best performance do not use more than one output at a time.
- When using the 12V DC output socket, ensure that the plug of the item you are to power has the positive lead to the centre pin of the plug.
- Jumpstart is not designed to be used as a replacement of a vehicle battery.
- Never allow the NEGATIVE and POSITIVE leads on this unit to touch or to touch the same metal object.
- Ensure the posts and clamps of the vehicle battery are perfectly clean before use.
- When connecting the jumpstart leads to a battery, always connect the RED (positive, +) clamp to the unearthed battery terminal first, then connect the BLACK (negative, -) clamp 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 lump starting.
- When jumpstarting ensure the area is well ventilated.
- Do not attempt to boost charge the jumpstart's sealed battery.

PARTS LIST



Components	Use
1. Indicating LED a. Full charge indicator (Green) b. Charging indicator (Red) c. Top-up charge indicator (Yellow) d. Switch-on indicator (Green)	To indicate the status of the internal battery being recharged or the on/off status of the multiple voltage output
2. DC 3V, 6V, 9V Output Jack	To allow insertion of the plug of any DC 3V, 6V, 9V appliance with corresponding rated current. This has over current protection.
3. 12V Output Socket	To allow insertion of the cigarette lighter plug of any DC 12V appliance. This has over load protection.
4. Replaceable Fuse	This is an overload protection for the multiple voltage output (3V, 6V & 9V).
5. Switch for Multiple Voltage Output and AC or DC Charging	To switch on DC 3V, 6V, 9V and 12V output or to charge the internal battery
6. 12 Volt Cigarette Lighter Lead a. Adaptor b. Adaptor lead	To charge the internal battery from a 12V DC supply or allows output connection from the cigarette socket, item 3
7. Booster Cable and Crocodile Clamp a. Negative (-) (Black) b. Positive (+) (Red)	To connect to negative '-' battery terminal To connect to positive '+' battery terminal
8. Charging Socket	For 12V cigarette lighter lead or AC charger to charge the internal battery
9. Fluorescent Light On/Off Switch	To switch the fluorescent light ON or OFF
10. Fluorescent Light	To provide light for road side repairs and emergency situation
11. AC Charger	To charge the internal battery via AC 230V mains source

SPECIFICATIONS & FEATURES

Specifications

Battery Type	Sealed Lead Acid Battery
	Rechargeable
	Maintenance Free
	12V DC 17 AH
Voltage Output	3, 6, 9, 12Volts DC
Fluorescent Tube	4Watts

FEATURES

Jumpstart is a product equipped with a rechargeable DC 12V battery as a power supply. The sealed maintenance free heavy duty battery is safe to use and transport and allows the product to be stored in any position without risk of leakage. It provides upto 50 hours of DC power depending upon application for input volts of appliance. And it can be used in remote sites application or for emergency application as listed below.

1. Emergency booster power

The power battery can provide upto 400Amp (Peak 900AMP) cranking power to start your car if the car battery is dead.

2. DC 12V power source

The unit is equipped with a cigarette output socket, item 3, allows most auto accessories / appliances such as car vacuum, car fan, electric, mini tire inflator / deflator etc. drawing up to 8 amps to be powered. In the case of over loading a built in reset device will shut off the power and reset after a few minutes. The power lead, item 6, can be used as an output lead to supply 12V via the jack plug on the lead.

Check the appliance handbook to ensure it is safe to use with a 12V battery. Special adaptor may be required.

3. Multiple voltage output for auto electronic appliance

Jumpstart also provides 3 more voltage output jacks (3V, 6V & 9V), item 2, for most common auto electrical or electronic products such as mini power tools, radio, cassette, CD player etc. A replaceable fuse, item 4, is applied to protect the output circuit and the connected device.

Check the appliance handbook to ensure it is safe to use with a 12V battery. Special adaptor may be required.

4. Work light

It is a built-in fluorescent tube and is protected by a clear guide. It can be used as a stand-alone light source by an individual ON/OFF switch. Fluorescent tube can be replaced easily once there is malfunction.

CHARGING THE INTERNAL BATTERY

WHEN TO CHARGE:

- A top up charge of 30 hours is recommended when you first purchase the jumpstart.
- The jumpstart MUST be recharged once the Yellow LED, item 1c, comes on when setting the main switch, item 5 at "ON" position.
- The battery should be charged after each use to maintain maximum power. Dependent on the amount the unit was used a top up charge of 5 or 6 hours may be enough, you do not have to wait for the green full charge LED to come on.
- For maximum power a top up charge of 5 to 6 hours is recommended before use.
- If the unit is in storage, have it fully recharged every 3 months.

HOW TO CHARGE

The internal battery should only be charged using the accessories supplied. Two means of charging the internal battery are available:

A. Via 230v supply using the AC charger, item 11

Place jack plug of the AC charger into the charging socket, item 8, on side of the jumpstart.

Plug AC charger into a suitable 230v 50Hz mains socket.

Press the switch, item 5 on position "CHA".

The Red charging LED, item 1b, will come on indicating that charging is taking place.

The Green LED, item 1a, will come on once the battery is fully charged.

The unit can be used before the full charge LED (Green) comes on, i.e., the battery is not full for less operating time.

Disconnect the charger.

B. Via 12v supply using the cigarette lighter adaptor, item 6

NOTE: Ensure that the supply vehicle has a 12 volt negative earth system.

The engine of the supply vehicle needs running to ensure charging process.

The recommended method of charging is via the AC charger.

Place jack plug of the cigarette lighter adaptor into the charging socket, item 8, on side of the jumpstart.

Plug DC lead into the 12v cigarette socket on your car.

Start the car.

The Red charging LED, item 1b, will come on indicating that charging is taking place.

This method of charging only achieves 75% of the maximum charge; i.e. the full charge LED (Green) will not come on.

NOTE:

If the Red LED does not come on during the charging process, check the replaceable fuse (item 4) and ensure the power connection is secure. Have the blown-out fuse replaced with a new one in the same rating if necessary.

CHARGING TIME:

- This will vary considerably depending on several factors, the weather conditions, how often the unit is used and the amount of discharge of the unit etc.

OPERATING INSTRUCTIONS

- From the DC15Volts 400mA adaptor, item 11, it takes around 30 hours for the full charge LED (Green) to come on if the jumpstart has been deeply discharged.
- From a DC12 volts power supply it takes approximately 72 hours for the full charge LED (Green) to come on.

Note: The unit can be used before the full charge LED (Green) comes on if the jumpstart has already been charged for 5-6 hours or more.

HOW TO JUMPSTART A CAR

The JUMPSTART provides a current up to 400 Amp (Peak 900Amp) to assist with the starting of a car when the car battery is flat.

Check to ensure the following before connecting the booster cable clamps to the car battery:

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

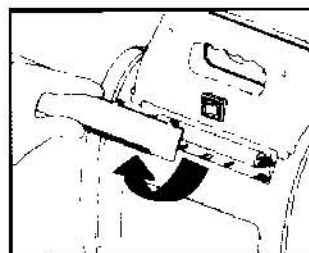
Follow the steps below to jumpstart your car:

1. Connect the red clamp, item 7b, to the "+" terminal of the car battery.
2. Connect the black clamp, item 7a, to the chassis or engine component well away from the fuel lines or any moving parts, ensure the connections are secure.
3. 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).
4. 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.
5. Once the engine starts running, disconnect the earthed clamp (black) first and return it to its storage position, then disconnect the unearthed clamp (red) from the battery terminal and restore it to its storage position.

OPERATING INSTRUCTIONS

CHANGING THE FLUORESCENT LIGHT

- Take off the translucent cover as shown in dia 2.
- Rotate the fluorescent tube and identify the terminal at both ends of tube do not block by the U-shape terminal inside holder then retract it out, see dia 3.
- Replace with a new fluorescent tube that can be purchased from store.
- Make sure the new fluorescent tube is rotated at the right position and the terminal at both ends has a good contact with the U-shape terminal inside the holder before you fix the translucent cover.



Dia 2



Dia 3