



8amp RMS Battery Charger

83-5000-08

Suitable for Petrol Engines



Part No: 36357

Components and Operation



Component List

- | | |
|---------------------------|------------------------|
| 1. Voltage Switch(6V/12V) | 2. Trickle/Fast Charge |
| 3. Handle | 4. Cable Brackets |
| 5. Crocodile clips | 6. LED Indicating |
| 7. Replaceable Fuse | |

Operation

Do not charge 12v batteries smaller than 20Ah. The largest capacity lead acid battery that should be charged is 70Ah.

1. Charging your battery

It is essential to disconnect the battery from the car. This will avoid possible damage to the alternator.

2. Preparation of the battery

Firstly remove the caps from each cell and check that the level of liquid is sufficient in each cell. If it is below the recommended level top up with de-ionized, or distilled water.

Note: Under no circumstances should tap water be used.

The cell caps should not be replaced until charging is complete. This allows any gases

Operation

formed during charging to escape. It is inevitable that some minor escape of acid will occur during charging.

If your battery is permanently sealed it is, of course, not necessary to carry out these checks.

IMPORTANT: If your battery is the AUTOFIL type, manufactured by Dagenite or Exide, the glass balls and the long filler cap must be left in place for the duration of the charging.

3. Connection

Connect the crocodile clips to the battery in the following order.

A) Connect the positive charging lead(RED) to the positive terminal post of the battery (marked P or +)

B) Connect the negative lead(Black) to the negative post of the battery(Marked N or -).

It is important to ensure that both crocodile clips are making good contact with their respective terminal posts.

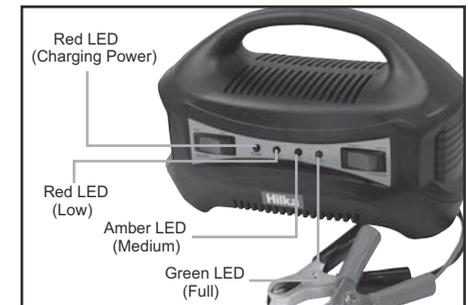
4. Selection of current(Trickle charge/Fast charge)

If you are using your product you must select which current output you wish to use. If you are charging a small lead acid battery, or you only require a slow charge, then you should put the switch to Trickle Charge. If, however, you are charging a large battery, or you require a quick boost charge then you should put the switch to Fast charge.

5. Charging

Insert the 13amp plug into the mains supply, switch on power LED lights. The charging LEDs on the front panel will tell you the charge state of your battery. If the battery is flat then only the charging light will be on. As the battery charges, the other lights will come on showing the battery to be low, medium and finally fully charged. If your battery is not completely flat when you switch on, some LEDs will light to show you the level of charge present in your battery.

Note: If the Green LED light up, your battery is now fully charged.



6. Electrolyte for non-permanently sealed types

Regularly check the specific gravity of the liquid, using a hydrometer, until a reading of Full Charged, or 1.250, is reached. A charging time of more than 10 hours is recommended for batteries of 34-45 ampere hour's capacity.

7. When the charging is complete

Switch off the mains supply, unplug the charger, and disconnect the leads from the battery posts. Inspect the liquid levels in each cell and top up, If necessary, using the correct fluid. Now replace the caps. Any surplus fluid around the cell tops should be wiped off(this should be done with extreme care as it may be acidic). (Where appropriate)If the battery has been removed for charging, replace it and reconnect the cables.

Maintenance and Environmental Protection

Maintenance

It is essential to keep your battery regularly charged throughout the year, especially during the winter months.

In the winter the effectiveness of your car battery is reduced by the cold. Oil is thick. Engines are difficult to start and the heater, windscreen wipers and lights are all draining power. It is at this time that batteries have to be at peak power. If your battery is not regularly maintained and kept fully charged, it can cause problems and a possible breakdown.

Listed are some helpful hints on how to keep your battery healthy in conjunction with your Battery Charger.

Faulty cells

Batteries are usually made with six cells. One of these cells can deteriorate or get damaged. If, after several hours charging your battery is still flat, you should test the battery. Take hydrometer readings from each cell in the battery. If one reading is lower than the others, this could indicate a faulty cell. If necessary, get an Auto-Electrician to check your battery. One faulty cell is enough to ruin your battery. It is pointless to continue using it and you would be better getting a new one.

Care

Sometimes the battery may appear flat, but this could simply be dirty or loose connections on your battery terminals. It is important to maintain the leads on a regular basis. Do this by removing the leads from the battery, leaning the inside of each connector and the terminal posts on the battery. Smear the terminal posts connectors and tighten firmly.

It is essential to keep the electrolyte level above the plates.

Note: However, that you should not overfill it, as the electrolyte is strongly acidic. When topping up do not use tap water. Always use distilled or de-ionized water. It is important to keep the acid level up. If necessary have it checked by your garage.

Checking the condition of your battery

Using a hydrometer, which can be purchased from most motor accessory stores, you can check the specific gravity of the electrolyte in each cell. The hydrometer sucks up a quantity of fluid from the cell. The weighted float inside the hydrometer will register the condition of that cell. Put the fluid back into the cell after testing, taking care not to splash the fluid about.

Note:

Always wash out the hydrometer after use.

Environmental protection



Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your local authority or retailer for recycling advice.

Safety Instructions

1. Gases

When the battery is being charged you may notice bubbling in the fluid caused by the release of gas. As the gas is flammable no naked lights should be used around the battery, and the area should be kept well ventilated.

Because of this risk of explosive gas only connect and disconnect the battery leads when the mains supply is disconnected.

2. Reverse polarity protection

In order to protect the charger FROM ANYONE INCORRECTLY CONNECTING THE POSITIVE LEAD TO THE NEGATIVE TERMINAL, OR VICE VERSA, A PROTECTIVE FUSE IS FITTED. If the fuse blows, it should be replaced by a fuse of the same size and rating. The fuse is situated in a slot on the underneath of the charger, Note: It may be necessary to use a pair of grips to assist its removal.

It is an automotive blade type fuse which can be purchased at most car accessory shops and petrol stations.

The fuse rating is as follows:

I	Fuse	Colour
	10Amps	Red

3. Type of batteries

This charger is only suitable for Lead Acid batteries and should not be used to recharge NICAD or any other type of battery.

4. Points of note

When not in use, keep the charger in a dry area to avoid moisture damaging the transformer.

Your Battery Charger is meant for INDOOR USE ONLY. Keep away from liquids at all times.

The mains supply cord of this appliance can not be replaced; if the cord is damaged, the appliance should be discarded.

5. Storing of the mains cable.

Included with the Challenge Battery Charger are two U shaped brackets. These should be inserted into the holes in the rear of the charger. The mains lead can be stored by winding it round these brackets.

6. The Battery Charger should not be opened. Any attempt at modification or repair by the user will entail the loss of your guarantee.

7. Danger

AVOID GETTING ELECTROLYTE ON YOUR SKIN OR CLOTHES. IT IS ACIDIC AND CAN CAUSE BURNS. IF THIS OCCURS YOU SHOULD RINSE THE AFFECTED AREA WITH WATER IMMEDIATELY. IF IT GET INTO YOUR EYES - WASH THOROUGHLY AND SEEK MEDICAL ATTENTION IMMEDIATELY.

Troubleshooting and Plug fitting

Troubleshooting

- A. If the panel lamps fail to light:
1. Switch mains off immediately.
 2. Check that the fuse in the charger has not blown(The correct fuse rating shown on page 2)
 3. After switching off the mains supply, ensure that the crocodile clips have good contact with the terminal posts. Switch mains supply on and check again.
 4. Ensure that the leads are not damaged.
- B. If the panel lights flicker and go out:
1. Switch off immediately at mains.
 2. Check that the fuse in the charger has not blown.
 3. Ensure that the output leads are not touching.
 4. Check to see that the positive and negative leads are connected to the correct terminals.

Plug fitting

Your Battery Charger is supplied with a fitted plug, however if you should need to fit a new plug follow the instruction below.

IMPORTANT

The wires in the mains lead are coloured in accordance with the following code:

Blue - Neutral Brown - Live

As the colours of the wires in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

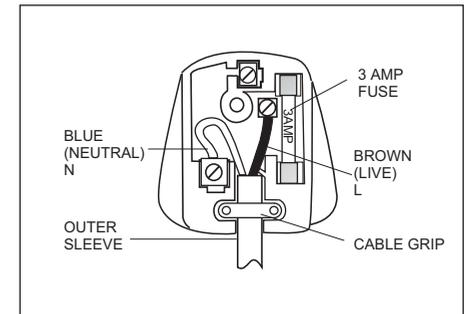
The wire which is coloured blue must be connected to the terminal which is marked with N or coloured black.

The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

No connection is to be made to the earth terminal of the plug.

If a 13 AMP (BS 1363) Plug is used, a 3 AMP

Fuse must be fitted, or if any other type of plug is used a 3 AMP Fuse must be fitted, either in the Plug or Adaptor, or on the Distribution Board.



Note If a moulded plug is fitted and has to be removed take great care in disposing of the plug and severed cable, it must be destroyed to prevent engaging into a socket.

*If faults cannot be remedied, contact the **Helpline** on **020 83916767**
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 purposes

HILKA TOOLS

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