If faults cannot be remedied, contact the ***Helpline*** on ***020 8391 6767***
helpline@hilka.co.uk
Manufactured under license by Hilka Pro Imports

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
1 ROEBUCK PLACE, ROEBUCK ROAD, CHESSINGTON, SURREY KT9 1EU

RAC-HP026 issue 1 R.W. 23052006

Battery Charger

RAC-HP026



SAFETY INSTRUCTIONS

To ensure safe operation when using your battery charger, make sure you follow basic safety principles to reduce risk of personal injury, electric shock, and fire. Please read the following instruction prior to operating this product and keep for future use.

⚠ WARNING

1 **Beware Children**
Do not let children handle the charger. All onlookers should be away from your work area.

2 **Guard Against Electric Shock**
Do not work on or near "live" equipment or services.

3 **Work Environment**
Do not use the charger in damp or wet areas. Moisture will damage the transformer.
Work in an area that is not cluttered and has good light.
Do not expose the charger to direct sunlight, heat, snow or rain.
Do not use near flammable gases or liquids. Keep work area clean.

4 **Clothing**
Avoid wearing loose clothing or jewellery to prevent these from touching the battery or charger.

5 **Look after the charger**
When not in use store in a dry, high place or keep locked up out of children's reach.
Use the charger only for its intended purposes.

6 **Protect the Cable**
Do not carry the charger by the cable or pull the cable to remove the plug from the mains socket. Protect the cable from sharp object, heat and oil.

7 **Check Before Use**
Always ensue that the charger and cable are not damaged.

8 **Maintain tools with care**
Inspect charger cord and extension leads periodically for damage, if damaged have repair carried out by an authorised dealer. Keep handles dry and clean.

9 **Disconnect charger**
When not in use disconnect from mains supply.

10 **Do not use the charger when tired**

11 **Check that Charger is not damaged.**
Before use check there is no damage to charger, if in doubt have it checked.

12 **Repairs**
Always have repairs carried out by a qualified person for your safety.

IMPORTANT NOTES

- There are no user serviceable parts inside the charger. Do not open the charger. If the cord or wires to the crocodile clips become damaged have them replaced prior to operation.
- Do not leave the charger unattended for long periods of time.
- **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 the risk of explosive gas, only connect and disconnect the battery leads when the mains supply is disconnected.
- **Types of Battery**
  The charger is only suitable for Lead-Acid batteries and should not be used to recharge NICAD or any other type of battery.

DANGER

AVOID GETTING ELECTROLYTE ON YOUR SKIN OR CLOTHES IT IS ACIDIC AND CAN BURN. IF THIS HAPPENS IMMEDIATELY RINSE THE AFFECTED AREA WITH WATER.

PARTS LIST

① Carry handle

② Analogue meter / Charging Status Indicator

③ Mains indicator

④ Reverse connection indicator

⑤ Charging Status LED

⑥ Charging rate selection switch

⑦ Red crocodile clip: positive (+)

⑧ Black crocodile clip: negative (-)

⑨ Overload fuse (15 A)





FEATURES

FEATURES

- **Analogue meter**

  Built-in meter displays charging rate and battery charge level on colour-coded and easy to read display. The analogue meter is intended to show how the charging process is proceeding, For accurate checking, we recommend using a hydrometer or voltmeter.

- **Reverse-polarity protection**

  This unit offers reverse-polarity protection, the red 'Reverse Connection' LED will illuminate and the charging process will not start.

  If this happens, unplug immediately from mains, connect the red crocodile clip to positive (+) battery post, and black crocodile clip to negative (-) post, then plug into the mains power and the charging process will start.

- **Short-circuit protection**

  Should you accidentally touch the crocodile clips together whilst the mains power is on, the unit will not charge and the analogue meter will not move from the zero point.

  Unplug from mains, disconnect and start the process again being careful not to touch the clips together.

- **12V Fast Charge with Automatic float Mode.**
- **12V Trickle Charge.**
- **6V Trickle Charge**
- **Wide Range of lead acid Battery capacity**
- **Suitable for most Petrol/Diesel engines.**
- **Mains Indicator**

  Indicating Mains power is connected, if this green LED is not illuminated after connecting to the mains, please check the Plug fuse.
  Note: Mains fuse rating is 3 amps.

- **Overload protection**

  A 15 amp automotive blade type fuse is fitted inside the fuse holder at the back of the unit, it will blow if charging current exceeds rated current and the charging process will then automatically stop.

  Unplug from mains, disconnect the battery, remove blown fuse and replace with a new fuse of the same size and rating, which can be purchased at most car accessory shops or service stations.

  Note: If you are charging a deeply discharged battery, set the charger to trickle charge for 1–2 hours to stop the charger from exceeding its rated current, then change to fast charge.

OPERATION INSTRUCTION

Product Specifications:

Model number	HP026	
Rated voltage	230VAC 50Hz	
Input power	180 Watts	
Output	6 V DC ⎓ 1.5A	Trickle Charge
	12 V DC ⎓ 2.0A	Trickle Charge
	12 V DC ⎓ 8.0A	Fast Charge
Equipment Type	Class 1	
Minimum Battery capacity 7 Ah at 2A charging current		
Maximum Battery capacity 180 Ah at 8.0A charging current		

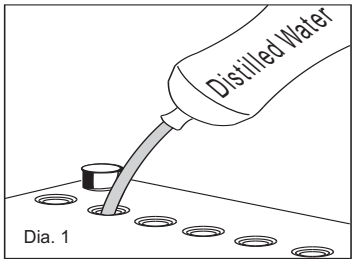
INSTRUCTIONS FOR USE

1. Charging your battery

It is essential to disconnect the battery from the car. This will avoid possible damage to the alternator. To avoid damage to the bodywork, from possible spillage, remove the battery from the vehicle. We recommend the use of disposable gloves to do this as there is a high possibility of corrosive acid being on the outside of the battery.

2. Preparing the battery

If you have maintenance free battery/ permanently sealed battery, It is not necessary to carry out the following checks. First remove the caps from each cell and check the level of the liquid, if below the level as marked on the side of the battery, top up with de-ionized or distilled water under no circumstances should tap water be used. The cell caps should not be replaced until charging is completed. This allows any gases formed during charging to escape, However, some minor escape of acid will occur during charging.



Dia. 1

IMPORTANT

If your battery is the **AUTOFIL** type, manufactured be Dagenite or Exide, the glass balls and the long filler cap must be left in place during charging.

3. Connection

BEFORE PLUGGING THE UNIT INTO THE MAINS SUPPLY FOLLOW THESE INSTRUCTIONS FIRST.

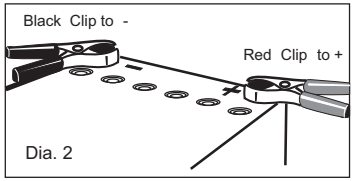
Connect the positive charging lead (red) to the positive terminal post of the battery (marked **P** or **+**). Connect the negative charging lead (black) to the negative terminal post of the battery (marked **N** or **-**).

Important

Make sure both crocodile clips are making good contact with their respective terminal posts.

Note:

Terminal post may be cleaned with a clean cloth



Dia. 2

INSTRUCTION

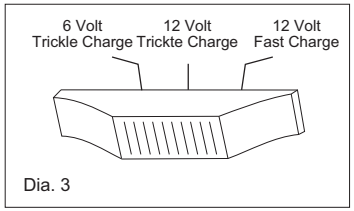
4. Charging

The charging rate selection switch (item 6) on the front panel of the charger offers three charge rates for charging various types of batteries. Select the correct switch position **BEFORE** connecting the charger to a battery or AC power source.

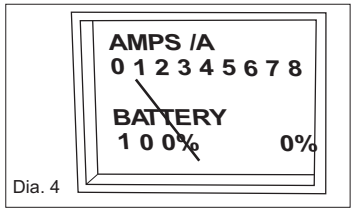
- 12V Fast Charge with Automatic Float Mode
  Slide the charging rate selection switch to the far right position for 12V Fast Charge (ref Dia 3). Connect the Battery leads to the battery terminals BLACK (-) negative, RED (+) positive. Only at this point should you plug the mains lead into the mains power supply. Use the analogue Gauge (charging status indicator) to determine the battery charge level (ref Dia 4),full charge will be achieved when the analogue gauge reads zero. On completion of the charge the unit will automatically switch to a float charge mode and the charging status LED will change from Amber to Green, the float charge remains 'ON' maintaining the battery charge level.
  Note: If a battery has a voltage of 1.5 volts or less no charging will take place, also if one or more of the cells in your battery are faulty the charging status LED may never change to green indicating full charge, however the analogue meter will indicate charge level of the battery.
- 12 V Trickle Charge
  Slide the charging rate selection switch to its center position for 12V Trickle Charge (ref Dia 3). Connect the Battery leads to the battery terminals BLACK (-) negative, RED (+) positive. Only at this point should you plug the mains lead into the mains power supply. Use the analogue Gauge (charging status indicator) to determine the battery charge level, (ref Dia 4) full charge will be achieved when the analogue gauge reads zero.
  Note: If a battery has a voltage of 1.5 volts or less no charging will take place.
- 6V Trickle Charge
  Slide the charging rate selection switch to the far left for 6V Trickle Charge (ref Dia 3). Connect the Battery leads to the battery terminals BLACK (-) negative, RED (+) positive. Only at this point should you plug the mains lead into the mains power supply. Amber charging status LED will remain 'on' during the whole of the charging cycle. Use the analogue Gauge (charging status indicator) to determine the battery charge level (ref Dia 4), full charge will be achieved when the analogue gauge reads zero.
  Note: If a battery has a voltage of 1.5 volts or less no charging will take place.

5. When 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.
Replace the caps.
Any surplus liquid should be wiped off.
(take extreme care and wear disposable rubber gloves as the liquid may be acidic).
Replace battery if it has been removed from vehicle.



Dia. 3



Dia. 4

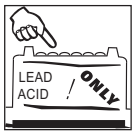
IMPORTANT



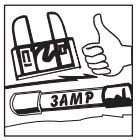
IMPORTANT!



For Indoor use only



For Lead Acid batteries only



Always

Check - Fuses



Check -Clips connected correctly

TROUBLESHOOTING

- **Very cold battery**

  If the battery to be charged is extremely cold (in termperature less than freezing (0°C/32°F) it cannot accept a high rate of charge, so the initial charge rate will be slow. The rate of charge will increase as the battery warms.
  WARNING: Do not attempt to charge a frozen battery.

- **Sulphated battery**

  When batteries are left in a discharged state for a long period of time,They become 'Sulphated'. Sulphated batteries cannot accept a high rate of chargesince the internal plates are coated with lead sulphate. To see if a battery in this condition can be 'saved', take it to a service station or battery distributer for professional evaluation and /or service.

- **Short-circuited battery**

  If the battery being charged has been short-circuited, the analogue meter will show that the battery has zero charge level, and the charger is operating at maximum output. Using a voltmeter to determine the voltage of the battery, the battery is probably beyond repair or recharging if it is under 2 volts, and will need to be replaced. WARNING: The charging process will not start if the battery voltage is below 1.5 V.

- **No Analogue Reading**

  Switch off immediately at mains.
  Unplug charger and check battery connections, ensure that there is a good connection with the battery terminal and /or vehicle chassis.
  Check that the battery is not Sulphated.
  Check that the battery has not been short circuited
  Check that the correct charging rate has been selected for the battery being charged.
  Ensure that enough charging time has been allowed for.

- Analogue meter displays a reading,

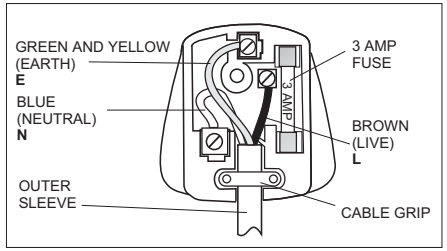
  but battery does not accept charging
  First make sure that the battery is capable of being charged, ensure that it is not sulfated or damaged.
  Ensure that enough charging time has been allowed for.

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

This appliance must be earthed.
The wires in the mains lead are coloured in accordance with the following code: Blue - Neutral Brown - Live Green and Yellow - Earth
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. The wire which is coloured green and yellow must be connected to the terminal which is marked with the letter **E** or coloured green.
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.

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.