

# LION BATTERY CHARGER

## INSTRUCTION MANUAL

MODELS: LA070A AND LA070C      MANUAL  
          LA070F AND LA070H      AUTOMATIC

This LION battery charger will charge 12 Volt Lead –acid batteries. The charger is protected by a thermal overload switch which will cut off the current in the event of a short circuit , overload or incorrect connection to battery. It is important to read the warnings and instructions fully before use.

### Warning

#### Read instructions first before charging batteries.

Always charge batteries in well ventilated area away from inflammable liquids and fumes. Never smoke or use a naked flame near a charging battery.

Do not expose charger to water or rain, only use indoor.

Make sure that tools or watchbands do not come in contact with battery terminals as sparks may cause serious burns to user or ignite fumes.

When working around batteries it is advisable to wear protective eye glasses.

Lead acid batteries contain Sulphuric Acid. If acid contacts the skin or clothing immediately rinse with water.

In case of accidental eye contact with battery acid, flush eyes for at least five minutes with clean running water. The eyes should be submerged under water and kept open. See a doctor immediately.

Do not use eye drops or medication unless instructed by a doctor.

### Charging indicators

Lion chargers have two types of charging indicators, an LED display (models LA070H and LA070F automatic) and a dial display (models LA070A and LA070C manual.) The 4 LED display indicates power ON, charged, charging and low. The battery will be fully charged when the CHARGED indicator comes on.

The dial indicator shows the charge rate when first turned on, then slowly moves towards the 100% mark when battery is fully charged.

### Charging your battery

The charger is fitted with insulated **red positive(+)** and **black negative(-)** battery terminal clips for easy identification.

Ensure that power point is off before connecting or disconnecting charger to battery.

It is safer to remove battery from vehicle, but if this is not possible you must always disconnect both battery leads ensuring they do not come in contact with each other.

Remove filler caps and check liquid level of each cell, liquid must be 6mm above top of plates.

Do not replace caps until battery is fully charged.

Connect the charger's red and black clips to their correct polarity, **Red (+)** and **Black (-)**. Battery low LED will come ON or NEEDLE on dial will move if connection is correct. If indicators do not come ON, check that clips are securely connected and in correct polarity.

Plug battery charger into a 240v power point and switch ON. If you have an LED indicator model the **POWER OR CHARGING LED** will come on, or in the case of the DIAL model the **NEEDLE** will move to show the charge rate.

If your battery is completely flat it may have damaged cells, extreme care should be taken when charging this battery, refer to **OVERLOAD** section.

During charging the liquid in battery will bubble emitting gases that are inflammable, do not smoke or use a naked flame near battery.

When the battery is fully charged the **LED CHARGED indicator** will come on, or in the case of the dial model the **needle** will have moved to the **100% mark**. Switch off the 240v power before removing charger clips from battery.

## **Charging Times**

If your battery is in reasonable condition it should be sufficiently charged to start your vehicle when indicators show full charge.

The recommended charging rate for most batteries is 10% of the rated capacity of your battery. E.g. a 25 amp hour battery if charged at 2.5 amps for approximately 10 hours should be fully charged, do not charge your battery for more than 24 hours as cell deterioration may occur.

Motorcycle batteries may only require a 4-6 hour charge.

## **Overloading**

Long periods of charging flat or damaged batteries may cause the thermal overload switch to come continually, on switching the charger **on** and **off** automatically, this cycling will only cause damage if allowed to continue for several hours. At this stage the battery should be checked by an auto electrician. When the liquid in the battery is bubbling freely the battery is well charged.

## **Low maintenance batteries**

Low maintenance batteries should not be overcharged, it is advisable to disconnect charger as soon as indicators come on. Low maintenance batteries do not have removable filler caps.

Automatic model chargers can be left on **slow charge** without fear of battery or charger damage.

## **Important Information**

The Lion range of chargers are designed to charge 6V and 12V lead acid batteries from 18AH to 120AH. It is important to select the correct charger for your battery size. Check battery charger specification information.

Charger must not be used by young children or infirm persons without supervision.  
Do not allow young children to play with charger as serious injury or burns may result.

Battery should be disconnected from vehicle before charging, but if this is not possible ensure the battery terminal not connected to the chassis is connected first to the charger, then connect the other clip to the chassis keeping away from battery and fuel lines.  
Only after connection is made turn on 240v mains supply.

## **Guarantee**

Lion guarantees this product against defects of materials and workmanship for a period of 12 months from date of purchase, provided the charger is used as per instruction manual and within the voltage and current range specified. Lion will replace the faulty product provided no alterations, modifications or repairs have been made to the faulty product, unless authorized by Lion. Should the purchaser wish to make a claim under the guarantee, the faulty product should be returned to the place of purchase freight pre-paid, along with proof of purchase receipt.

## **Your receipt**

Your receipt should be kept in a safe place as this is your proof of purchase and will need to be produced when making a warranty claim. Receipt must be 12 months or less from date of purchase.

### **LION Battery charger specifications**

#### **Model LA070A**

**Input: 240V AC, 50Hz, 50W**

**Output: 12V DC, 3,000mA**

#### **Model LA070C**

**Input: 240V AC, 50Hz, 80W**

**Output: 12V DC, 5,000mA**

#### **Model LA070F**

**Input: 240V AC, 50Hz, 65W**

**Output: 12V DC, 2,000mA/  
4,000mA**

#### **Model LA070H**

**Input: 240V AC, 50Hz, 160W**

**Output: 12V DC, 4,000mA/  
8,000mA**