

# Gunson®

## Automatic Battery Charger

Part No. 77117

This battery charger is a fully automatic, microprocessor controlled unit delivering a maximum charge rate of 10 amps. It is suitable for 12 volt batteries with capacities between 2AH to 200AH.



## Instructions



# 77117

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The Gunson 77117 battery charger is a fully automatic, microprocessor controlled unit delivering a maximum charge rate of 10 amps. It is suitable for 12 volt batteries with capacities between 2AH to 200AH.

It charges in four stages: the initial pre-charge stage brings the discharged battery up to a preset voltage level to enable the second stage pulse-charging which assists with battery desulphurisation; the third (absorption) stage brings the battery up to 100% capacity. The final stage is a 'maintenance' pulse charge (float mode) which will maintain the battery in a fully charged state without overcharging. The charger will automatically select the appropriate stage of charging depending on the battery's level of charge.

It features short-circuit protection, overload current protection, over voltage protection and over temperature protection.

The 77117 is suitable for regular (sealed or unsealed) Lead Acid batteries, and AGM (absorbed glass mat) batteries used on motorcycles, cars and light commercial vehicles. It is also suitable for charging Deep Cycle batteries (e.g. certain marine applications, golf carts, etc).

### CONNECTION:

**Note:** The charger should be connected to the battery **before** connecting to the mains supply. When finished, switch off at the mains supply **before** disconnecting the charger from the battery.

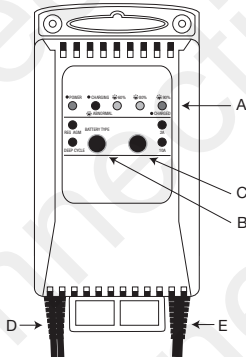
1. Identify the polarity of the battery terminals (if not clearly indicated, the positive terminal or post is normally larger than the negative).
2. Connect the positive (red) clip to the positive battery terminal **first**. Then connect the negative (black) clip to the negative battery terminal.

### OPERATION:

3. Once connections to the battery have been made (see above) plug in | switch on the AC mains supply.
4. The green (power) LED will light indicating that the charger is switched on.
5. Select the battery type by pressing the button (regular lead-acid, AGM, or switch to deep cycle). LED will light to indicate battery type.
6. Select level of charging (2A or 10A). LED will light to indicate charge level setting.

7. As the battery stabilises the red LED will light. This indicates that the battery is charging.
8. If the red LED (abnormal) starts flashing when the AC mains supply is switched on, this indicates that the polarity of the connectors has been reversed (ie, the positive (red) clip has been accidentally connected to the negative terminal | post of the battery). Switch off the AC mains supply and then reconnect the positive (red) clip to the positive battery terminal **first**. Then connect the negative (black) clip to the negative battery terminal.
9. As the battery is charging, the level of charge is indicated by the flashing amber LEDs (60% and 80%). At 90% the green LED will flash; as the battery reaches its fully charged state the charging current will drop. When battery is fully charged, the green LED will remain lit. The charger has entered float mode and will maintain the battery at between 13.2 – 13.6 volts.
10. When finished, switch off the AC mains supply, then disconnect the negative (black) clip first, followed by the positive (red) clip.

**Note:** If disconnecting main battery terminals (to remove battery from vehicle for example) check you have codes for audio, security systems, etc.



**Caption:**

**A: LEDs:**

- Power (green)
- Charging (red)
- 60% (amber)
- 80% (amber)
- 90% (green)

**B: Battery type selector**

**C: Charge rate selector**

**D: To Battery**

**E: To AC mains supply**

**WARNING:**

- Working near a lead-acid battery is dangerous — a battery generates explosive gases during normal operation. These gases increase when the battery is being charged.
- Ensure the work area is well ventilated.
- Make sure that there is no possibility of these gases being ignited. There must be no naked flames, cigarettes, flame heaters, blowtorches, etc, near the battery or work area.
- The gases can be ignited by a stray spark — disconnect the charger from the mains before disconnecting the leads from the battery.
- You **must** wear approved safety eye protection when connecting or disconnecting battery | battery charger leads.
- Avoid touching your eyes while working with batteries.

## SAFETY NOTES:

- When working with or near a lead-acid battery make sure there is another person close enough to come to your aid if necessary.
- If battery acid contacts skin or clothing, wash immediately with soap and plenty of water.
- If acid enters an eye, immediately flush eye with cool, clean water for at least 15 minutes and seek medical attention.
- When working with or near a lead-acid battery make sure to remove personal metal items such as watch straps, rings, bracelets, necklaces, etc. A short across the battery terminal from one of the above could cause severe burns.
- Never allow the charger clamps to touch each other or to contact a piece of metal that could bridge them.

### **It is the operator's responsibility to comply with the following:**

- Inspect all power supply leads, plugs and all electrical connections for wear and | or damage.
- Before use, inspect the insulation on the charger cable and check the charger and plug before connecting to the mains supply.
- Also regularly inspect power supply sockets, extension leads and connectors.
- Ensure that the mains voltage marked on the charger is the same as the electrical power supply to be used.
- Do not carry the charger by its power lead.
- Do not pull the power plug from the socket by the power lead.
- **Extension lead reels:** when a cable extension lead reel is used it should be fully unwound before connection. We recommend the cable reel has an RCD fitted. Be sure that the capacity of the cable reel is suitable for the product.

***If in any doubt about electrical safety, consult a qualified electrician.***



**Safety First. Be Protected.**

### **Guarantee**

If this product fails through faulty materials or workmanship, contact our service department direct on: **+44 (0) 1926 818186**. Normal wear and tear are excluded as are consumable items and abuse.



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