

SEALEY

FOUR BANK 6V/12V 4 X 2AMP AUTO MAINTENANCE CHARGER

MODEL NO: **MBC420**

Thank you for purchasing a Sealey product. Manufactured to a high standard, this product will, if used according to these instructions, and properly maintained, give you years of trouble free performance.

IMPORTANT: PLEASE READ THESE INSTRUCTIONS CAREFULLY. NOTE THE SAFE OPERATIONAL REQUIREMENTS, WARNINGS & CAUTIONS. USE THE PRODUCT CORRECTLY AND WITH CARE FOR THE PURPOSE FOR WHICH IT IS INTENDED. FAILURE TO DO SO MAY CAUSE DAMAGE AND/OR PERSONAL INJURY AND WILL INVALIDATE THE WARRANTY. KEEP THESE INSTRUCTIONS SAFE FOR FUTURE USE.



Refer to instruction manual



Wear eye protection



Wear protective gloves



Warning! electricity



Protect from rain



Use in well ventilated areas



Keep away from sources of ignition: battery could explode



Warning! explosive material



Warning! corrosive substance

1. SAFETY

1.1. ELECTRICAL SAFETY

- **WARNING!** It is the user's responsibility to check the following:

Check all electrical equipment and appliances to ensure that they are safe before using. Inspect power supply leads, plugs and all electrical connections for wear and damage. Sealey recommend that an RCD (Residual Current Device) is used with all electrical products. You may obtain an RCD by contacting your local Sealey stockist.

If the product is used in the course of business duties, it must be maintained in a safe condition and routinely PAT (Portable Appliance Test) tested.

Electrical safety information. It is important that the following information is read and understood.

- 1.1.1. Ensure that the insulation on all cables and on the appliance is safe before connecting it to the power supply.
- 1.1.2. Regularly inspect power supply cables and plugs for wear or damage and check all connections to ensure that they are secure.
- 1.1.3. **Important:** Ensure that the voltage rating on the appliance suits the power supply to be used and that the plug is fitted with the correct fuse - see fuse rating in these instructions.

- * **DO NOT** pull or carry the appliance by the power cable.
- * **DO NOT** pull the plug from the socket by the cable. Remove the plug from the socket by maintaining a firm grip on the plug.
- * **DO NOT** use worn or damaged cables, plugs or connectors. Ensure that any faulty item is repaired or replaced immediately by a qualified electrician.

- 1.1.4. This product is fitted with a BS1363/A 13 Amp 3 pin plug.

If the cable or plug is damaged during use, switch off the electricity supply and remove from use.

Replace a damaged plug with a BS1363/A 13 Amp 3 pin plug. If in doubt contact a qualified electrician.

Class II products are wired with live (brown) and neutral (blue) only are marked with the Class II symbol;

A) Connect the BROWN live wire to the live terminal 'L'.

B) Connect the BLUE neutral wire to the neutral terminal 'N'.

C) After wiring, check that there are no bare wires and ensure that all wires have been correctly connected.

Ensure that the cable outer sheath extends inside the cable restraint and that the restraint is tight.

- * **DO NOT** connect either wire to the earth terminal.

Sealey recommend that repairs are carried out by a qualified electrician.

1.2. GENERAL SAFETY

- ▲ **DANGER! BE AWARE, LEAD-ACID BATTERIES GENERATE EXPLOSIVE GASES DURING NORMAL BATTERY OPERATION. FOR THIS REASON, IT VERY IMPORTANT TO READ AND FOLLOW THESE INSTRUCTIONS CAREFULLY, EACH TIME YOU USE THE CHARGING EQUIPMENT.**

- ✓ Follow these instructions and those published by the battery and vehicle manufacturers, and the maker of any equipment you intend to use in the vicinity of the battery. Remember to review warning marks on all products and on engines.

- **WARNING!** Modern vehicles contain extensive electronic systems.

You are required to check with the vehicle manufacturer, for any specific instructions regarding the use of this type of equipment on each vehicle.

- ✓ No liability will be accepted for damage / injury, where this product is not used in accordance with all instructions.

1.3. PERSONAL PRECAUTIONS

- ✓ Ensure there is another person within hearing range of your voice and close enough to come to your aid, should a problem arise when working near a lead-acid battery.

- ✓ Wear safety eye protection and protective clothing. Avoid touching eyes while working near battery.

- ✓ Have fresh water and soap nearby in case battery acid contacts skin, clothing or eyes.

- ✓ Wash immediately with soap and water if battery acid contacts skin or clothing. If acid enters eye, flush eye immediately with cool, clean running water for at least 15 minutes and seek immediate medical attention.

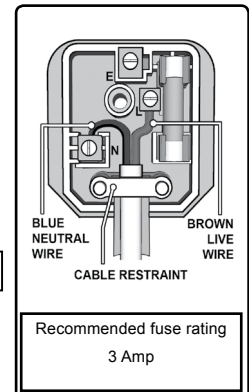
- ✓ Remove personal metallic items such as rings, bracelets, necklaces and watches. A lead-acid battery can produce a short-circuit current which is high enough to weld a ring or the like to metal, which would cause severe burns.

- ✓ Ensure hands, clothing (especially belts) are clear of fan blades and other moving or hot parts of engine, remove ties and contain long hair.

- * **DO NOT** smoke or allow a spark or flame in the vicinity of battery or engine.

1.4. CHARGING SAFETY INSTRUCTIONS

- ✓ Familiarise yourself with the application and limitations of the charger as well as the potential hazards.



Also refer to the vehicle manufacturer's hand book. IF IN ANY DOUBT CONSULT A QUALIFIED ELECTRICIAN.

- ✓ Ensure the charger is in good order and condition before use. If in any doubt **DO NOT** use the unit, contact your Sealey stockist.
- ✓ Use the starter/charger in the upright position only and ensure it is placed on a stable surface which will adequately support its weight.
- ✓ Ensure the charger is disconnected from the mains supply before attaching/detaching the power clamps to/from the battery.
- ✓ Keep tools and other items away from the engine and ensure you can see the battery and working parts of engine clearly.
- ✓ Ensure the output of the charger is the same voltage as the battery.
- ✓ If battery has caps to access the battery fluid, remove the caps and check the fluid level before connecting the power clamps.
- ✓ If necessary top-up the battery with distilled water by referring to the battery manufacturer's instructions (Apply the personal safety precautions described in part 1.3).
- ✓ If the charger receives a sharp knock or blow the unit must be checked by a qualified service agent before using.
- ✓ If the battery terminals are corroded or dirty clean them before attaching the power clamps.
- ✓ Keep children and unauthorised persons away from the working area.
- ✗ **DO NOT** dis-assemble the charger for any reason. The charger must only be checked by qualified service personnel.
- ✗ **DO NOT** try to charge a non-rechargeable battery.
- ✗ **DO NOT** try to charge battery if battery fluid is frozen.
- ☐ **WARNING!** To prevent the risk of sparking, short circuit and possible explosion **DO NOT** drop metal tools in the battery area, or allow them to touch the battery terminals.
- ✗ **DO NOT** allow power clamps to touch each other or to make contact with any metallic part of the vehicle.
- ✗ **DO NOT** cross connect power leads from charger to battery. Ensure positive (+/RED) is to positive and negative (-/BLACK) is to negative.
- ✗ **DO NOT** pull the cables or clamps from the battery terminals.
- ✗ **DO NOT** use the charger outdoors, or in damp, or wet locations and **DO NOT** operate within the vicinity of flammable liquids or gases.
- ✗ **DO NOT** use charger inside vehicle or inside engine compartment.
- ✓ Ensure there is effective ventilation to prevent a build-up of explosive gases, and **DO NOT** cover or obstruct charger ventilation louvres.
- ✗ **DO NOT** use the charger for a task for which it is not designed.
- ☐ **WARNING! DO NOT** simultaneously charge batteries of different capacities or discharge levels.
- ☐ **WARNING!** If a fuse blows, ensure it is replaced with an identical fuse type and rating. Use only Sealey genuine parts.
- ✓ When not in use, store the charger carefully in a safe, dry, childproof location.

This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.

2. INTRODUCTION

Compact 6/12V quad bank battery charger perfect for automobile, motorcycle and marine workshops. Suitable for charging a variety of batteries, charger reacts continuously to battery condition and delivers whatever charge rate is required. Four bank charger outputting 4 x 2A depending on the condition and the charge rate of each battery. constantly regulated voltage patterns allow the battery to be recharged fully and safely without fear of overcharging. Compatible with all AGM, Gel and VRLA flooded batteries commonly found in everything from automotive and farm equipment to motorcycles, ATV's, golf buggies and personal watercraft.

3. SPECIFICATION

MODEL NO.	MBC420
INPUT	200-240V AC, 50Hz
OUTPUT VOLTAGE	6V & 12V
CHARGE CURRENT	2A
BATTERY TYPES	6V & 12V lead acid batteries (WET, MF, AGM and GEL)
CHARGING VOLTAGE	14.4V ± 0.25V (for 12V battery) or 7.2V ± 0.20V (for 6V battery)
AMBIENT TEMPERATURE	-10°C to +40°C
HOUSING PROTECTION	IP65

4. OPERATION

4.1. PREPARATION

It is important to correctly prepare for charging, ensuring that you follow Section 1 safety regulations carefully. Check that the capacity of the battery is compatible with the charger output.

- 4.1.1. Follow any vehicle manufacturer's instructions regarding battery charging. Note special instructions for in-vehicle charging.
- 4.1.2. Check polarity of battery posts. A positive (pos, p, +) battery post may have a larger diameter than a negative (neg, n, -) post. Connect the battery lead plastic plug to the charger / maintainer plastic plug, see fig.1.

4.2. BATTERY CHARGING

- 4.2.1. Follow the battery manufacturer's recommendations for battery cell caps during charging. Loosen cell caps if applicable.
- 4.2.2. Open all battery compartments and ventilate for at least 15 minutes before plugging into the mains supply.
- 4.2.3. Connect the battery lead terminal rings or alligator clips directly to the corresponding battery posts.
- 4.2.4. Position the RED terminal ring or alligator clip on the POSITIVE post connector.
- 4.2.5. Position the BLACK terminal ring or alligator clip on the NEGATIVE post connector. Make sure all battery connections are tight and clean.
- 4.2.6. Plug into the mains supply, using a suitably rated heavy duty extension cord.
- 4.2.7. **Short Circuit/Reverse Polarity Protection**
If the charger leads are wrongly connected the POWER ON light will flash, see fig.2.
- 4.2.8. The POWER ON indicator will turn off.

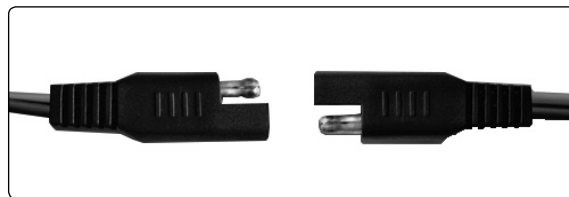
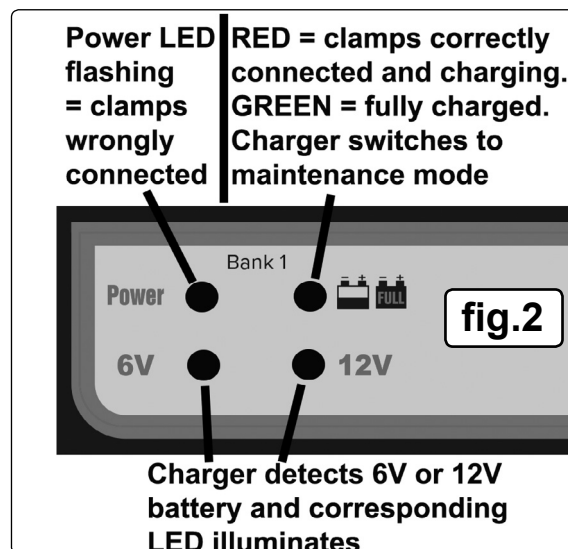


fig.1

- 4.2.9. If the battery voltage is more than 7.5V, the charger will charge the batteries according to 12V mode, the 12V LED LIGHT will turn RED. If the battery voltage is less than 7.5V, the charger will charge the batteries according to 6V mode, the 6V LED LIGHT will turn RED, see fig.2.
- 4.2.10. The charger begins charging with 0.8A low current to recover the batteries automatically if the batteries are not full.
- 4.2.11. LED LIGHTS:
When the red light is on it indicates that the battery is correctly connected and the charger is charging it. The charger will deliver its full rated current until this light turns from red to green (charged).
When the battery is fully charged, the LED will turn to green and the charger will switch to a storage/maintenance charge mode, see fig.2.
The charger will automatically monitor and maintain the battery with 0.8A charging current.
- 4.2.12. When you are ready to use your vehicle, unplug from the mains supply, followed by unplugging your battery terminal lead from the charger.
- 4.2.13. The battery lead with terminals may be left attached to the battery.
Use care to safely stow the battery lead away from heat sources, sharp edges and avoid pinching or crushing. The battery lead with alligator clips should be removed before installing or using the battery.
IMPORTANT -- If the battery is totally dead (below 4 volts) the Bank charger will not start. This is due to its internal safety circuit. The charger safety circuit must sense more than 4 volts before it will allow the charger to turn on. If the battery voltage is below 4 volts, the charger will not operate and the lights will not turn on. Have the battery checked by a dealer if the battery voltage is very low.
Most 12 volt lead acid batteries are likely to be defective if their voltage is below 9 volts



5. MAINTENANCE

- 5.1. Cleaning and user maintenance should be carried out by competent persons.
- 5.2. After use and before performing maintenance, unplug and disconnect the battery charger.
- 5.3. Use a dry cloth to wipe all battery corrosion and other dirt or oil from the battery connectors, cords, and the charger case.
- 5.4. Ensure that all of the charger components are in place and in good working condition, for example, the plastic boots on the battery clips.
- 5.5. Servicing does not require opening the unit, as there are no serviceable parts.
- 5.6. All other servicing should be performed by qualified service personnel.
- 5.7. If the mains cable is damaged, do not use until repaired.
- 5.8. Store the charger unplugged, in an upright position. The cord will still conduct electricity until it is unplugged from the mains.
- 5.9. Store inside, in a cool, dry place.
- * **DO NOT** store the connectors clipped together, on or around metal, or clipped to cables. If the charger is moved around the shop or transported to another location, take care to avoid/prevent damage to the cables, connectors and charger. Failure to do so could result in personal injury or property damage.

Parts support is available for this product. Please email sales@sealey.co.uk or telephone 01284 757500



ENVIRONMENT PROTECTION

Recycle unwanted materials instead of disposing of them as waste. All tools, accessories and packaging should be sorted, taken to a recycling centre and disposed of in a manner which is compatible with the environment. When the product becomes completely unserviceable and requires disposal, drain any fluids (if applicable) into approved containers and dispose of the product and fluids according to local regulations.



WEEE REGULATIONS

Dispose of this product at the end of its working life in compliance with the EU Directive on Waste Electrical and Electronic Equipment (WEEE). When the product is no longer required, it must be disposed of in an environmentally protective way. Contact your local solid waste authority for recycling information.

Note: It is our policy to continually improve products and as such we reserve the right to alter data, specifications and component parts without prior notice.

Important: No Liability is accepted for incorrect use of this product.

Warranty: Guarantee is 12 months from purchase date, proof of which is required for any claim.

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