

DRAPER®

INSTRUCTIONS FOR 230V 1A/2A Battery Charger/Maintainer

Stock No.38253

Part No.MC1

IMPORTANT: PLEASE READ THESE INSTRUCTIONS CAREFULLY TO ENSURE THE SAFE AND EFFECTIVE USE OF THIS PRODUCT.



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DRAPER®

GENERAL INFORMATION

These instructions accompanying the product are the original instructions. This document is part of the product, keep it for the life of the product passing it on to any subsequent holder of the product. Read all these instructions before assembling, operating or maintaining this product.

This manual has been compiled by Draper Tools describing the purpose for which the product has been designed, and contains all the necessary information to ensure its correct and safe use. By following all the general safety instructions contained in this manual, it will ensure both product and operator safety, together with longer life of the product itself. All photographs and drawings in this manual are supplied by Draper Tools to help illustrate the operation of the product. Whilst every effort has been made to ensure the accuracy of information contained in this manual, the Draper Tools policy of continuous improvement determines the right to make modifications without prior warning.

1. TITLE PAGE

1.1 INTRODUCTION:

USER MANUAL FOR:

230V 1A/2A BATTERY CHARGER/MAINTAINER

Stock no. 38253

Part no. MC1

1.2 REVISIONS:

Date first published January 2014.

As our user manuals are continually updated, users should make sure that they use the very latest version.

Downloads are available from: <http://www.drapertools.com/b2c/b2cmanuals.pgm>

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1.3 UNDERSTANDING THIS MANUALS SAFETY CONTENT:

WARNING! Information that draws attention to the risk of injury or death.

CAUTION! Information that draws attention to the risk of damage to the product or surroundings.

NOTE! Important information.

1.4 COPYRIGHT © NOTICE:

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In all cases this copyright notice must remain intact.

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2.1 CONTENTS

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3. GUARANTEE

3.1 GUARANTEE

Draper tools have been carefully tested and inspected before shipment and are guaranteed to be free from defective materials and workmanship.

Should the tool develop a fault, please return the complete tool to your nearest distributor or contact Draper Tools Limited, Chandler's Ford, Eastleigh, Hampshire, SO53 1YF. England.

Telephone Sales Desk: (023) 8049 4333 or Product Helpline (023) 8049 4344.

A proof of purchase must be provided with the tool.

If upon inspection it is found that the fault occurring is due to defective materials or workmanship, repairs will be carried out free of charge. This guarantee period covering parts/labour is 12 months from the date of purchase except where tools are hired out when the guarantee period is ninety days from the date of purchase. The guarantee is extended to 24 months for parts only. This guarantee does not apply to normal wear and tear, nor does it cover any damage caused by misuse, careless or unsafe handling, alterations, accidents, or repairs attempted or made by any personnel other than the authorised Draper warranty repair agent.

Note: If the tool is found not to be within the terms of warranty, repairs and carriage charges will be quoted and made accordingly.

This guarantee applies in lieu of any other guarantee expressed or implied and variations of its terms are not authorised.

Your Draper guarantee is not effective unless you can produce upon request a dated receipt or invoice to verify your proof of purchase within the guarantee period.

Please note that this guarantee is an additional benefit and does not affect your statutory rights.

Draper Tools Limited.

4. INTRODUCTION

4.1 SCOPE

This charger is designed to charge and/or maintain a rechargeable battery.

4.2 SPECIFICATION

Stock no	38253
Part no	MC1
Rated input.....	230V~50Hz
Output voltage.....	12V
Output current	1A/2A Selectable
Suitable for charging batteries	3-40Ah
Suitable for maintaining batteries.....	all 12V (lead acid, AGM, Gel)
Weight	1kg
Charge control method	Microprocessor controlled
Suitable for battery types.....	Lead acid, AGM, Gel, maintenance-free batteries)
Features	Overcharge protection, short circuit protection
.....	high frequency charge

4.3 HANDLING & STORAGE

This product should only be carried by its purpose designed carry handle. Never carry the product by it's output leads or power supply cable, to do so could cause damage to the product that would not be covered under warranty.

When the product is to be stored it should first be cleaned with a dry cloth. Then inspect the product, looking for any wear or damage. If damage is found, have it rectified at your nearest authorised Draper service centre. Once the product has been cleaned and checked for any damage it should be returned to it's carton and stored in a clean and dry environment away from dust and moisture.

5. HEALTH & SAFETY INFORMATION

5.1 GENERAL SAFETY INSTRUCTIONS FOR BATTERY CHARGERS

WARNING! Explosive gases. When a battery is charged it can produce hydrogen gas which is explosive. Charging should be carried out in a well ventilated area and away from sources of heat flames and sparks.

Indoor use only. This charger must not be used outside in rain or snow conditions.

Disconnect the mains cable. Before making or breaking the connection to the battery terminals, remove the plug from the power supply.

Connect the charger carefully. Make sure the red clamp is attached to the battery positive terminal. The black clamp attaches to the negative. Do not reverse the clamps or allow them to touch each other.

Refer to the vehicle manufacturers information. Follow these instructions fully to make sure no damage occurs to the vehicle or it's equipment.

Do not cover the charger. Allow air to circulate around the charger to prevent over heating. The charger is equipped with a time-lag fuse inside. Over-heating will trip the fuse to prevent damage and will not reset until sufficiently cooled.

Do not use the charger within the vehicle. Stand it on a level firm surface to prevent damage to the charger or vehicle.

Do not tamper with this product. Repairs and maintenance must be carried out by an authorized service agent. Only use genuine Draper spare parts. Do not modify this product in any way.

Wear approved safety goggles (not safety glasses) and latex/nitrile gloves. Before charging a maintenance type battery the electrolyte (battery acid) must be filled to the maximum marked levels. Never use tap water. Distilled water or electrolyte must be used.

Never attempt to charge non-rechargeable batteries. Only charge lead acid batteries within the voltage and amp hour capacities of the charger.

Never attempt to charge a frozen battery.

Never attempt to charge a damaged or distorted battery.

Keep out of the reach of children.

5. HEALTH & SAFETY INFORMATION

Wear personal protective equipment (PPE).

Batteries can contain hazardous materials so it is important to ensure that adequate hand and eye protection is worn when charging batteries.

5.2 CONNECTION TO THE POWER SUPPLY

Make sure the power supply information on the machine's rating plate are compatible with the power supply you intend to connect it to.

This charger comes supplied with a UK standard 3 pin plug fitted. It is designed for connection to a domestic power supply rated at 230V AC.

This product is a Class II device, this means that it is double insulated. This is to prevent electrocution in the event of a failure.

Apart from replacing the fuse in the plug, no other electrical work is recommended on this product.

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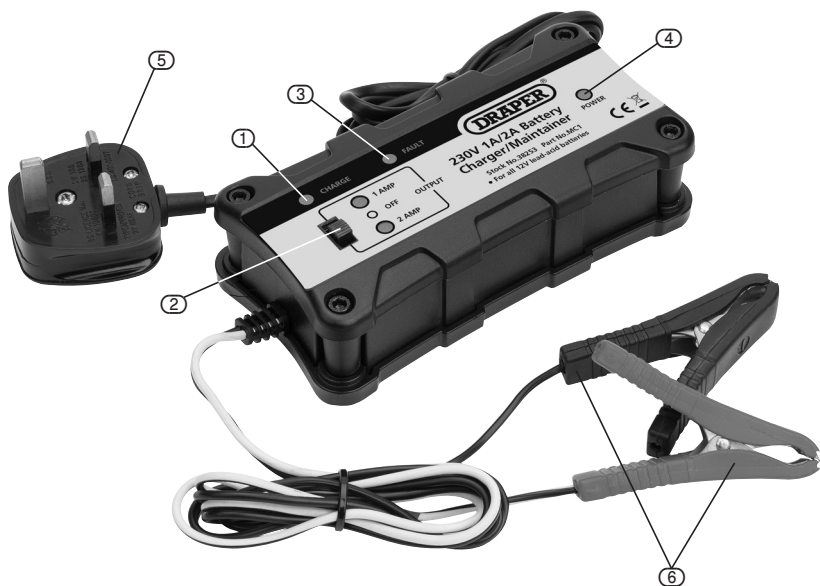
6. TECHNICAL DESCRIPTION

6.2 MAIN COMPONENT DESCRIPTIONS

1. Charging indication, lights when battery is charging.
2. Selector switch. Used to select 1A or 2A charging mode or to turn the charger off.
3. Fault indicator, will light if a fault is detected.
4. Mains power indicator, will light when machine is turned on.
5. Plug.
6. Battery terminal connection clamps used to connect the charger to the battery.

6. TECHNICAL DESCRIPTION

6.1 IDENTIFICATION



- ① Charging indicator.
- ② 1A/2A/off switch.
- ③ Fault indicator.
- ④ Mains power/on indicator.
- ⑤ Plug.
- ⑥ Battery terminal connection clamps.

7. UNPACKING & CHECKING

7.1 PACKAGING

Carefully remove the charger from the packaging and examine it for any sign of damage that may have happened during shipping. If any part is damaged or missing; please contact the Draper Helpline (the telephone number appears on the Title page) and do not attempt to use the charger.

The packaging material should be retained at least during the guarantee period: in case the machine needs to be returned for repair.

Warning! Some of the packaging materials used may be harmful to children. Do not leave any of these materials in the reach of children.

If any of the packaging is to be thrown away, make sure they are disposed of correctly; according to local regulations.

8. PREPARING THE CHARGER

8.1 INSTALLATION

1. When selecting a suitable location to use this charger be sure to choose a clean, dry and tidy location.
2. Ensure that the charger can be placed in a stable position and that there is ample room next to the charger for the battery to be located.
3. Ensure that the charger is in good working condition before each use. Any damage or defects should be rectified immediately, the charger should not be used if there is any damage to the charger or it's cables.
4. Once you have carried out the inspection listed above and satisfied yourself that the charger is in good condition and safe to use, connect the battery connection clamps to the batteries terminals being careful to ensure that the correct polarity is observed (Red + Black-).
5. Plug in the charger to the mains power supply. You are now ready to set up the charger for your chosen battery.

9. CHARGING YOUR BATTERY

9.1 CHARGING YOUR BATTERY

With your charger connected to your battery and the charger plugged into the mains supply you can choose to select the 1A or the 2A charging mode. Once the selection is made, the charge process will start. Once charging is complete, the charger will enter 'float charge mode'. In float charge mode, the battery is maintained at its peak capacity ready for use.

10. CHARGING PROCESS

10.1 CHARGING PROCESS

The charging process is controlled by a microprocessor.

STAGE 1: BULK CHARGE

Initially, the charger will apply the bulk charge process to the battery. When the digital sensors detect that the batteries voltage has reached a maximum safe pre-determined level, the microprocessor will automatically move into the second stage of the charging process.

STAGE 2: ABSORPTION CHARGE

This maintains the charge at a constant, safe voltage. During this stage of the charging process, the charging voltage remains constant while the charging current is controlled by the microprocessor to allow for the maximum internal chemical energy transfer to take place.

STAGE 3: TOP OFF/FLOAT CHARGE:

During this process the charging voltage is automatically maintained to a pre-determined level while the charging current is monitored and adjusted by the microprocessor for a safe and effective 100% charge.

11. MAINTENANCE

11.1 MAINTENANCE

With only minimal maintenance, this charger will deliver years of dependable service.

Follow these simple steps to maintain the charger in optimum condition:-

- After each use clean the battery charger with a soft cloth. Be sure to remove any battery fluid present that could cause corrosions of the battery terminal clamps.
- Clean the outside of the charger with a soft cloth.
- Keep the charger leads loosely coiled during storage to prevent damage to the leads. Do not use the charger if the leads or clamps have been damaged in any way.

12. EXPLANATION OF SYMBOLS

12.1 EXPLANATION OF SYMBOLS



Do not dispose of WEEE* as unsorted municipal waste.
(General household rubbish).



For indoor use only.



Read instruction manual before use.



Positive.



Negative.



Double insulated.

*Waste Electrical & Electronic Equipment.

13. DISPOSAL

13.1 DISPOSAL

- At the end of the machine's working life, or when it can no longer be repaired, ensure that it is disposed of according to national regulations.
- Contact your local authority for details of collection schemes in your area.

In all circumstances:

- Do not dispose of power tools with domestic waste.
- Do not incinerate.
- Do not abandon in the environment.
- Do not dispose of WEEE* as unsorted municipal waste.



* Waste Electrical & Electronic Equipment.

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For aftersales servicing or warranty repairs, please contact the Draper Tools Helpline for details of an agent in your local area.

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