Pro-Tech TOOLS

CDR-530 Starter Trolley



Instruction manual

Translation of the original manual

Dear Customer!!!

Thank you for purchasing our product; we hope you will be satisfied with its use.

You have now become the owner of a charging unit. This product is characterised by maximum safety and ease of use. It is a reliable and high-performance device that is quick to install and ready for use.

Although it is simple to operate, it must be used in accordance with the requirements set out in this manual and the safety regulations applicable in the area where it is used.

FIRST AID GUIDELINES

People who have been electrocuted – disconnect them from the power source or isolate them using a dry insulator; the person who has been electrocuted must be moved away from the power cable.

Take care not to touch the victim with your bare hands until they are out of reach of the power line.

You must immediately call for help from qualified and trained personnel.

USE

All 12 V and 24 V lead-acid batteries can be charged using the CDR-530 unit, including sealed lead-acid batteries. The charger is protected by a thermal switch which disconnects the system if the transformer overheats and reconnects it once it has cooled down.

It can charge batteries that have been removed from a vehicle as well as those that have not been removed. The chargers are intended for use in car repair workshops, vehicle inspection centres, petrol stations and car dealerships.

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TECHNICAL SPECIFICATIONS:

Model	**CDR-530**
Supply voltage	230 V
Frequency	50 Hz
Rated power	540/1080 W
Charging voltage	12/24 V
Rated current	45/80 A
Starting current	300/500 A
Suitable battery capacity	30 – 800 Ah
Protection rating	IP21S
Insulation class	H

Dimensions	670 x 363 x 300 mm
Weight	24.5 kg

SAFETY RULES:

Failure to observe the following warnings and tampering with the design of the equipment relieves the manufacturer of liability
for any damage to persons, animals or property caused by its operation or by the equipment itself, and will invalidate the warranty.

a) The charger is intended for indoor use only in a well-ventilated area. Never use the charger in the rain or store it in a damp room.

b) No smoking – smoking and the use of open flames are prohibited whilst using the charger. Prevent sparks from occurring in the immediate vicinity of the battery.
The charger contains components such as switches and relays which may produce sparks.
The charger must be positioned so that any sparks do not pose a hazard (the recommended distance from the battery is at least 1 m).

c) Electrical safety precautions **– there is high voltage inside the charger.**
For this reason, the device may only be opened by qualified and authorised electricians.

d) The user must not exceed the maximum parameters for which the device was designed.

e) Before switching on, ensure that the power cable and other parts of the device are in good condition.

f) Take care when handling the electrolyte; wear gloves and safety goggles, and protective clothing is also recommended.

g) If the charger is incomplete, do not attempt to repair it or dismantle any parts.

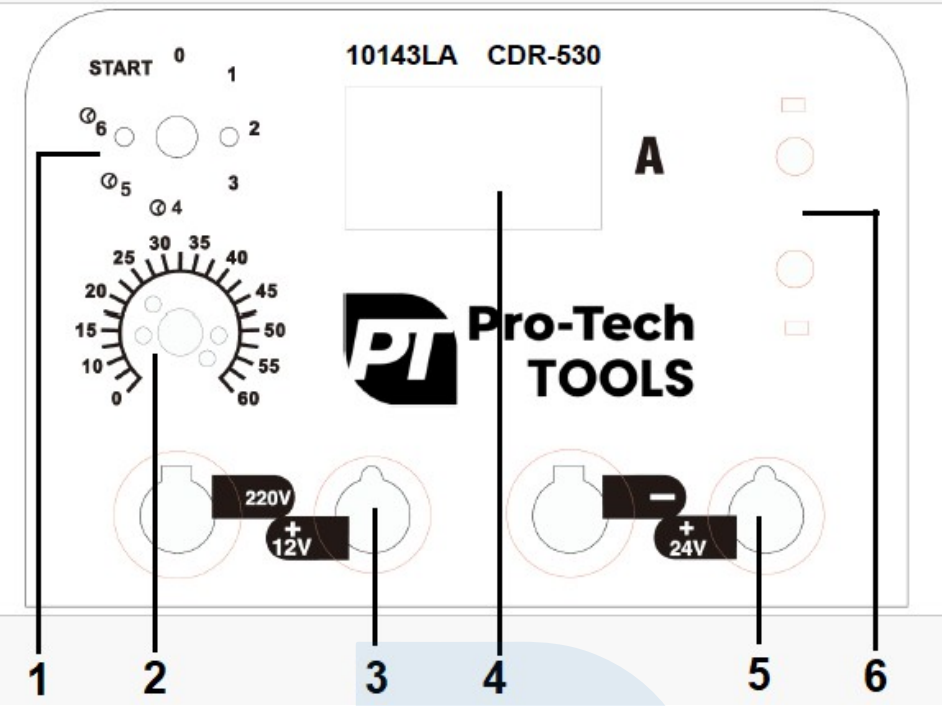
h) Keep the power cable and switches at a safe distance from splashing water or other liquids, and protect them from rain.

i) Do not move the charger whilst it is in operation.

WARNING: The charging current must be selected before charging; changing the settings whilst the device is in operation may lead to accelerated wear of the switches. Before connecting the terminals, ensure that the positive terminal is screwed on tightly enough to prevent an electric arc from forming.

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CONTROL PANEL



1. Rotary knob for selecting the charging level and the start function (START)
2. Charging time selector
- If you select a higher charging level indicated by the clock icon, select the charging time using the time selector.
3. 12V positive voltage terminal
4. The LCD display shows the current charging current
5. 24V positive voltage terminal
6. Fuse cover

IMPORTANT: The black earth cable is permanently connected in all types of chargers and requires no intervention, regardless of the charging voltage selected.

WARNING: If the fuse needs replacing, disconnect the 230 V power cable from the mains socket before removing the fuse cover!

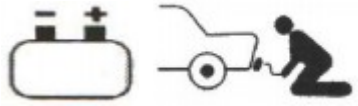
CHARGING THE BATTERY

a) Before starting to charge, clean the battery terminals, unscrew the caps, and top up the electrolyte level with distilled water to approximately 10 mm above the top surface of the plates. The caps must remain unscrewed during charging (applies to lead-acid batteries).

b) The battery must then be connected, taking care to connect to the correct terminal according to the battery's rated voltage (12 V or 24 V) and to ensure the correct polarity and sequence (in a typical installation, the earth is connected to the '-' terminal): the red '+' cable to the positive terminal of the battery, then the black '-' cable to the negative terminal. The terminals must ensure a secure connection.

c) Before connecting the power cable plug to the mains supply, ensure that the main switches on the front panel are set to the 'OFF' position. The chargers are designed for single-phase mains

voltage of 230 V, 50 Hz and are supplied with a mains cable fitted with a suitable plug, approximately 2 m in length. The plug must be connected to a socket fitted with an earth pin. If the cable is not long enough for connection, an extension cable with a cross-section at least equal to that of the fitted mains cable must be used. The cables connecting to the battery must not be extended due to increased voltage drops over longer cables.


Set the charge/start switch to the ‘charge’ position.

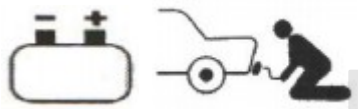
Use the switch (type: 430) or the rotary knob (type: 630) to set the appropriate current range for charging the battery in accordance with the principle set out below. The charging current should not exceed 10 per cent of the capacity of the battery being charged. The battery charging time is 10–14 hours, depending on the state of discharge. The density of the electrolyte in the battery being charged should be 1.28 g/cm³.

Once charging is complete, switch off the charger and disconnect the cables from the battery (starting with the terminal connected to the vehicle’s earth, usually the ‘-’ terminal).

STARTING

CAUTION!: Before attempting to start the vehicle, ensure that the vehicle supports starting from a transformer-type charger. There is a risk of damage to the vehicle’s electronics during starting.

a) Connect the power supply to the vehicle, taking care to connect to the correct terminal according to the battery’s rated voltage (12 V or 24 V) and to ensure the correct polarity and order (in a typical installation with the “-” terminal as ground): the red ‘+’ cable to the positive terminal of the battery, then the black ‘-’ cable to the vehicle’s earth. The clamps must ensure a secure connection.


b) Set the charge/start switch to the start position. For the 630 model, turn the rotary knob to the start position.

c) Operate the starter: a maximum of 5 cycles of 3 seconds’ operation followed by 120 seconds’ rest. If the vehicle fails to start during this time, wait 15 minutes before attempting again.

d) Disconnect the cables.

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