

ozito

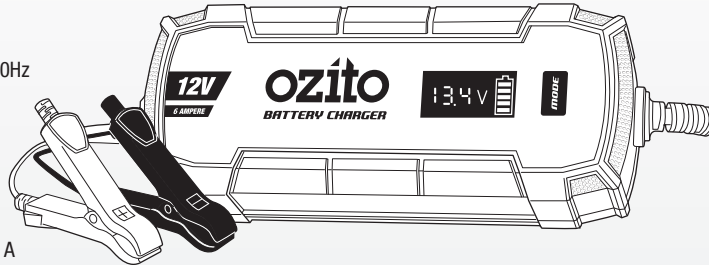
BATTERY CHARGER

12V 6A

INSTRUCTION MANUAL

SPECIFICATIONS

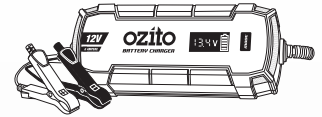
Input:	220–240V ~ 50Hz
Max. Power Rating:	100W
Max. Nominal Output:	12V DC, 6A
Battery Capacity (STD mode):	20 – 150 Ah
(12V M mode):	2 – 32 Ah
SUPPLY Function Output max.:	5 A
RECOND charging Program:	15.3V DC / 1.5 A
Ambient Temp.:	-20°C – 40°C
IP Rating:	IP65
Tool Weight:	0.7kg



ozito.com.au

3 YEAR
REPLACEMENT
WARRANTY*

STANDARD EQUIPMENT



Battery Charger

OCBC-600

WARRANTY

IN ORDER TO MAKE A CLAIM UNDER THIS WARRANTY YOU MUST RETURN THE PRODUCT TO YOUR NEAREST BUNNINGS WAREHOUSE WITH YOUR BUNNINGS REGISTER RECEIPT. PRIOR TO RETURNING YOUR PRODUCT FOR WARRANTY PLEASE TELEPHONE OUR CUSTOMER SERVICE HELPLINE:

Australia: 1800 069 486
New Zealand: 0508 069 486

TO ENSURE A SPEEDY RESPONSE PLEASE HAVE THE MODEL NUMBER AND DATE OF PURCHASE AVAILABLE. A CUSTOMER SERVICE REPRESENTATIVE WILL TAKE YOUR CALL AND ANSWER ANY QUESTIONS YOU MAY HAVE RELATING TO THE WARRANTY POLICY OR PROCEDURE.

The benefits provided under this warranty are in addition to other rights and remedies which are available to you at law.

Our goods come with guarantees that cannot be excluded at law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

Generally you will be responsible for all costs associated with a claim under this warranty, however, where you have suffered any additional direct loss as a result of a defective product you may be able to claim such expenses by contacting our customer service helpline above.

3 YEAR REPLACEMENT WARRANTY*

Your product is guaranteed for a period of **36 months from the original date of purchase**. If a product is defective it will be replaced in accordance with the terms of this warranty. Warranty excludes consumable parts, for example: .

*This product is intended for DIY use only and replacement warranty covers domestic use.

WARNING

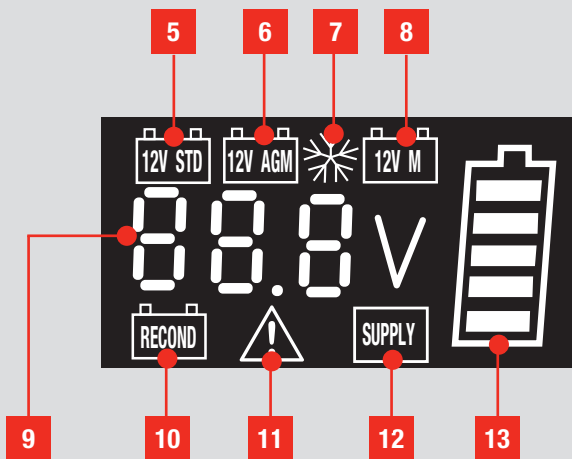
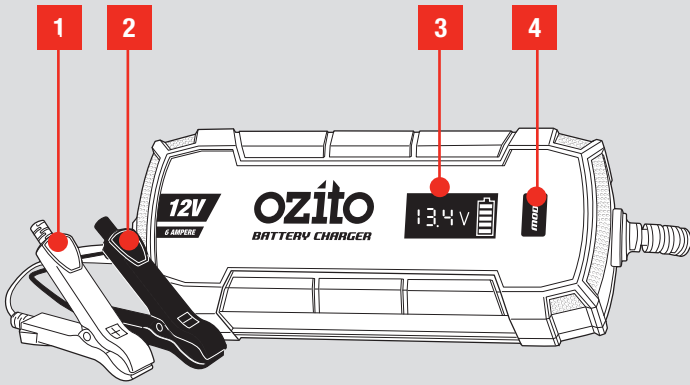
The following actions will result in the warranty being void.

- If the tool has been operated on a supply voltage other than that specified on the tool.
- If the tool shows signs of damage or defects caused by or resulting from abuse, accidents or alterations.
- Failure to perform maintenance as set out within the instruction manual.
- If the tool is disassembled or tampered with in any way.
- Professional, industrial or high frequency use.

KNOW YOUR PRODUCT

BATTERY CHARGER

1. Red Positive Terminal Clamp (+)
2. Black Negative Terminal Clamp (-)
3. LCD
4. Mode Button



LCD SYMBOLS

- | | |
|-------------------|-------------------|
| 5. 12V STD | 10. RECOND |
| 6. 12V AGM | 11. Warning |
| 7. Winter | 12. SUPPLY |
| 8. 12V M | 13. Charge Status |
| 9. Charging Volts | |

ONLINE MANUAL

Scan this QR Code with your mobile device to take you to the online manual.



3 YEAR REPLACEMENT WARRANTY*

SETUP & PREPARATION

1. AUTOMATIC CHARGING



WARNING! READ AND UNDERSTAND THE WARNINGS BEFORE SETUP AND CHARGING.



WARNING! DO NOT USE FOR CHARGING LITHIUM ION PHOSPHATE RECHARGEABLE BATTERIES (E.G. LiFePO4) OR OTHER LITHIUM RECHARGEABLE BATTERIES.

The battery charger is a microprocessor controlled automatic charger, it is suitable in particular for charging maintenance-free batteries and for the long-term charging and maintenance-charging of batteries which are not in constant use, e.g. for classic cars, recreational vehicles, lawn tractors and alike. The integrated microprocessor enables charging in several steps. The final charging step, maintenance charging, maintains the battery capacity at 95–100% and therefore keeps the battery fully charged at all times. The charging operation does not need to be monitored. However, do not leave the battery unattended if you charge it over an extended period of time, so that you can disconnect it from the mains power supply in the event of a fault in the charger.

The battery charger is designed for mobile use only and not for installation in caravans, mobile homes or similar vehicles. Do not expose the charger to rain or snow.

Calculating the Charging Time

The charging time depends on the charge status of the battery. If the battery is fully discharged, the approximate charging time up to approx. 80% charged can be calculated using the following formula:

Ah	80%
12	2 h
30	5 h
60	10 h
120	20 h

$$\text{Charging time/hours} = \frac{\text{Battery capacity in Ah}}{\text{Amperes (charging current)}}$$

Note: The charging current should be 1/10 to 1/6 of the battery capacity.

Overload Cut-Out

The charger has electronic protection against overloading, short-circuits and swapped poles when the 12V STD, 12V AGM, 12V Winter and 12V M programs are used. One or more fine fuses are also fitted. If the fuse suffers a defect it must be replaced by a new fuse with the same amp value. If necessary, please contact Ozito customer service.

2. LCD SYMBOLS

12V STD: Charging a 12V battery (lead acid battery and GEL battery).

12V AGM: Charging a 12V AGM battery.

Winter: Charging a 12V battery (lead acid battery, AGM battery and GEL battery) in winter mode with an ambient temperature of -20°C to +5°C.



WARNING! DO NOT CHARGE ANY FROZEN BATTERIES.

12V M - Maintenance Mode: Charging a 12V battery (lead acid battery, AGM battery and GEL battery) in charge maintenance mode.

Charging Volts: Charging voltage in volts, faulty battery (BAT) / fully charged (FUL) / connected with reverse polarity or short-circuit at the clamps (Err).

RECOND - Restoration Charging: Restoration of the charging capability of discharged lead acid batteries with higher charging voltage.

Warning - Fault Indicator:

- If the voltage of the battery is less than 3.5V or more than 15V. The battery is either unsuitable for charging or is defective. It is also possible that other battery errors or faults can mean that the battery cannot be charged.
- If the terminal clamps are connected to the battery terminals with the wrong polarity. The protection against swapped poles ensures that the battery and charger do not get damaged. Remove the charger from the battery and start the charging process from the beginning again.
- If there is a short-circuit between the two terminal clamps (the metal parts of the clamps come into contact with each other). The protection against short-circuits ensures that the battery and charger do not get damaged.

SUPPLY: Power supply - when charging a battery. Enables the battery charger to be used as a buffer power supply as well, e.g. while changing a battery or for the operation of 12V d.c. devices (function output max. 5A).

Charge Status: Charge status of the battery in percent (1 increment = 25%) and charging process (increment lit = the battery has reached the charge level shown; increment in the battery symbol flashes = the battery is being charged to the next charge level; all increments are lit = the battery is fully charged).

3. CHARGING PROGRAMS

Standard Charging Programs

• 12V STD:

Charging program for lead acid batteries (wet, Ca/Ca, EFB batteries) and gel batteries. When the charger is used for the first time, 12V STD will appear in the display.

• 12V AGM:

Charging program for AGM batteries Press the "Mode" button → switch from the 12V STD to the 12V AGM charging program.

Special Charging Programs

• Winter:

The recommended charging program for cold weather conditions (ambient temperature of -20°C to +5°C) for normal lead acid batteries (wet / Ca/Ca batteries) Press the "Mode" button → switch from the 12V AGM to the "Winter" charging program.

• 12V M - Maintenance Mode:

Charging program for batteries with a low capacity (max. 1A) 2 - 32Ah and for trickle charging of all batteries. Press the "Mode" button → switch from the "Winter" to the "12 M" charging program.

• RECOND - Restoration Charging:

Charging program with higher end-of-charge voltage and constant current charging, used only for restoring the charging capability of lead acid batteries (not for AGM or GEL) which have undergone exhaustive discharge. Only use this program for a short time and under supervision.

The RECOND process must be checked every half an hour and must never exceed a time of 4 hours. Refer to the instructions supplied by the battery manufacturer.

Only use the RECOND program for lead acid batteries and only as described below. Take care to avoid spilling any battery acid. Battery acid is aggressive. Read and observe the safety information.

Never use for a battery which is of sealed design (VRLA battery such as, e.g. AGM or GEL battery). Refer to the instructions supplied by the battery manufacturer.

Only use for batteries which are free-standing and have been taken out of the car, not while installed in your car with a connection to the car's electrical system. The higher charging voltage could damage the electrical system.

Note: To go to this program, the "Mode" button must be pressed for 5 seconds.

OPERATION

Additional Functions

• SUPPLY:

Enables the battery charger to be used as a buffer power supply as well, e.g. while changing a battery or for the operation of 12V d.c. device (observe the max. power consumption) output max. 5A.

Press the "Mode" button → switch from the RECOND to the SUPPLY function.

WARNING! PROTECTION AGAINST SWAPPED POLES WILL NOT BE AVAILABLE. IF THE POLES ARE SWAPPED THERE IS A RISK OF DAMAGING THE CHARGER AND THE BATTERY/ ON-BOARD VEHICLE POWER SUPPLY OR A CONNECTED DEVICE. IT IS IMPERATIVE THAT YOU MAKE SURE THE POLARITY IS CORRECT WHEN YOU CONNECT UP. OBSERVE THE MAXIMUM POWER CONSUMPTION (3A) OF THE BATTERY CHARGER AND DEVICE.

If there is a short-circuit between the charging terminals while the SUPPLY function is on, the message "Lo V" will appear in the LCD. The "Warning" symbol will flash.

Note: The direct voltage which is provided (shown in the display) is load-dependent and without load it is approx. 14.5 V.

This function can be used for devices which are operated from a vehicle's cigarette lighter. Refer to and observe the operating manual for your 12 V device.

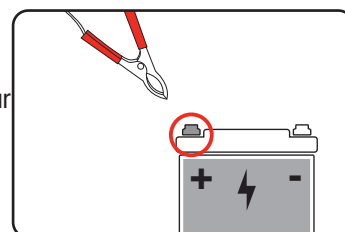
4. BATTERY CONNECTION & CHARGING

Connecting to a Vehicle Battery

Before charging make sure the battery terminals are really clean as grease and dust could lead to poor connection. The battery MUST be disconnected prior to cleaning. Check the battery and connections for any cracks or damage before proceeding with cleaning and charging. To help ensure a good connection of the battery charger terminal clamps, clean the battery terminals with a solution of baking soda and water, and wipe the battery terminals with a cloth to remove any dirt and grease.

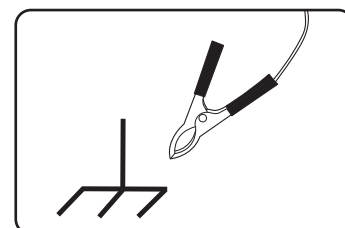
If the battery is still fitted to a motor vehicle, make sure that all the electronics are turned OFF, and that the ignition is turned OFF.

1. With the vehicle engine not running, connect the red positive terminal clamp to the positive (+) pole on your vehicle 12V battery.



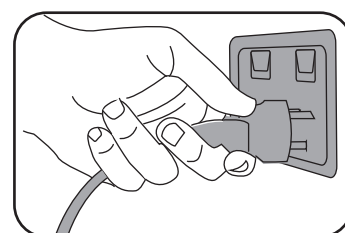
Note: The charger draws a very small amount of electricity from the battery and the LCD display comes on briefly. This is not a fault.

2. Connect the black negative terminal clamp to an unpainted piece of metal on the bodywork away from the battery.



WARNING! UNDER NORMAL CIRCUMSTANCES THE NEGATIVE BATTERY POLE IS CONNECTED TO THE BODYWORK AND YOU PROCEED AS DESCRIBED ABOVE. IN EXCEPTIONAL CASES IT IS POSSIBLE THAT THE POSITIVE BATTERY POLE IS CONNECTED TO THE BODYWORK (POSITIVE EARTHING). IN THIS CASE, CONNECT THE BLACK CHARGER CABLE TO THE NEGATIVE POLE ON THE BATTERY. THEN CONNECT THE RED CHARGER CABLE TO THE BODYWORK AT A POINT AWAY FROM THE BATTERY.

3. Connect the charger to a mains power socket.



4. Press the mode button to set the charging programs. The symbol for the applicable will appear in the LCD.



WARNING! CHARGING MAY CREATE DANGEROUS EXPLOSIVE GAS AND THEREFORE YOU SHOULD AVOID SPARK FORMATION AND NAKED FLAMES WHILST THE BATTERY IS CHARGING. THERE IS A RISK OF EXPLOSION! IT IS ESSENTIAL THAT YOU VENTILATE THE ROOMS WELL.

Setting the Charging Programs

Press the “Mode” button to switch to the various programs. The symbol for the applicable program will appear in the display. The batteries will be charged using the program which is displayed.

- **Fully Charged:** When “FUL” appears in the LCD (and all increments Charge Status are lit), charging has been completed. The charger holds the battery at 95% – 100% available battery capacity using pulsed charging. If the charger shows this after just a few minutes, this indicates that the battery capacity is low. The battery needs replacing.

- **RECOND:** To go to the RECOND program, press the “Mode” button for 5 seconds.

Check the charging process every half hour. After 4 hours at the latest or as soon as the battery starts audibly gassing (bubbling), remove the charger as described in **Disconnecting from a Vehicle Battery** section.

WARNING! GASSING GENERATES EXPLOSIVE GAS – RISK OF EXPLOSION! ENSURE THAT THERE IS GOOD VENTILATION.

If possible, check the acid level and, if possible, top up the battery cells, if necessary just with distilled water. The acid level should ideally be between the marked max. and min. level and should be identical for all the cells. Screw the battery stoppers, if there are any, tightly in place.

- **12V STD:** To get back to the 12V STD program from the RECOND program or the SUPPLY function, also press the “Mode” button for 5 seconds.

If the voltage of the battery is less than 3.5V or more than 15V, the battery is either not suitable for charging or it is faulty. The message “BAT” will appear in the LCD. The “Warning” symbol will flash. It is also possible that other battery errors or faults can mean that the battery cannot be charged.

5. BATTERY DISCONNECTION

Disconnecting from a Vehicle Battery (Finished Charging the Battery)

1. Remove battery charger from mains power socket.
2. Remove the black negative terminal clamp from the bodywork.
3. Remove the red positive terminal clamp from the positive (+) pole of the vehicle battery.

Note: When the charger is disconnected from the socket outlet, the last charging program to have been set will be saved (apart from RECOND and SUPPLY) and will be the default program the next time the charger is used.

WARNING! IN CASE OF POSITIVE EARTHING, FIRST DISCONNECT THE RED POSITIVE TERMINAL CLAMP FROM THE BODYWORK AND THEN THE BLACK NEGATIVE TERMINAL CLAMP FROM THE NEGATIVE (–) POLE OF THE VEHICLE BATTERY.

WARNING! IF THE BATTERY CHARGERS MAINS PLUG IS PULLED OUT BUT THE CHARGER CABLES ARE STILL CONNECTED TO THE BATTERY, THE CHARGER WILL DRAW OFF A SMALL AMOUNT OF ELECTRICITY FROM THE BATTERY. WE THEREFORE RECOMMEND THAT YOU ALWAYS COMPLETELY REMOVE THE CHARGER FROM THE BATTERY WHEN NOT IN USE.

MAINTENANCE

Care of the Battery

- Ensure that your battery is always fitted securely.
- A perfect connection to the cable network of the electrical system must be ensured at all times.
- Keep the battery clean and dry. Apply a thin coating of grease to the connection terminals using an acid-free, acid-resistant grease (Vaseline).
- Check the level of the acid in batteries that are not maintenance-free versions approximately every 4 weeks and top up with distilled water if necessary



WARNING! BEFORE CLEANING THE APPLIANCE MAKE SURE THAT IT IS DISCONNECTED FROM THE MAINS POWER SUPPLY.

Cleaning

- We recommend that you clean the device immediately each time you have finished using it.
- Clean the appliance regularly with a damp cloth and some soft soap. Do not use cleaning agents or solvents; these may be aggressive to the plastic parts in the appliance. Ensure that no water can get into the interior of the appliance.

Storage

- The battery charger should be placed in a dry room for storage. Any corrosion must be cleaned off the charging terminals.

Supply Cords

If replacement of the supply cord is necessary, this has to be done by a certified electrician in order to avoid a safety hazard.

Note: Ozito Industries will not be responsible for any damage or injuries caused by the repair of the tool by an unauthorised person or by mishandling of the tool.

DESCRIPTION OF SYMBOLS

V	Volts	Hz	Hertz
~	Alternating Current	W	Watts
A	Amperes	mAh	Milliampere Hours
Ah	Amp Hour		Warning
	Regulatory Compliance Mark (RCM)		Double Insulated
IP65	Ingress protection from dust & water		Fuse value on PCB
	Indoor Use Only		Chassis or Frame Ground
	Read Instruction Manual		

CARING FOR THE ENVIRONMENT



Power tools that are no longer usable should not be disposed of with household waste but in an environmentally friendly way. Please recycle where facilities exist. Check with your local council authority for recycling advice.



Recycling packaging reduces the need for landfill and raw materials. Reuse of recycled material decreases pollution in the environment. Please recycle packaging where facilities exist. Check with your local council authority for recycling advice.

SPARE PARTS

Spare parts can be ordered from the Special Orders Desk at your local Bunnings Warehouse.

For further information visit

www.ozito.com.au or contact Ozito Customer Service:

Australia 1800 069 486

New Zealand 0508 069 486

E-mail: enquiries@ozito.com.au



ELECTRICAL SAFETY



WARNING! When using mains-powered tools, basic safety precautions, including the following, should always be followed to reduce risk of fire, electric shock, personal injury and material damage.
Read the whole manual carefully and make sure you know how to switch the tool off in an emergency, before operating the tool.

Save these instructions and other documents supplied with this tool for future reference.

This tool has been designed for 230V and 240V only. Always check that the power supply corresponds to the voltage on the rating plate.

Note: The supply of 230V and 240V on Ozito tools are interchangeable for Australia and New Zealand.



This tool is double insulated; therefore no earth wire is required.

Note: Double insulation does not take the place of normal safety precautions when operating this tool. The insulation system is for added protection against injury resulting from a possible electrical insulation failure within the tool.

Using an Extension Lead

Always use an approved extension lead suitable for the power input of this tool. Before use, inspect the extension lead for signs of damage, wear and ageing. Replace the extension lead if damaged or defective.

When using an extension lead on a reel, always unwind the lead completely. Use of an extension lead not suitable for the power input of the tool or which is damaged or defective may result in a risk of fire and electric shock.

The power supply for this product should be protected by a residual current device (rated at 30mA or less). A residual current device reduces the risk of electric shock.



GENERAL POWER TOOL SAFETY WARNINGS



WARNING! Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.
Save all warnings and instructions for future reference. The term "power tool" in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

1. Work area safety

- Keep work area clean and well lit.** Cluttered or dark areas invite accidents.
 - Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.** Power tools create sparks which may ignite the dust or fumes.
 - Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.
- ## 2. Electrical safety
- Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools.** Unmodified plugs and matching outlets will reduce risk of electric shock.
 - Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electric shock if your body is earthed or grounded.
 - Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
 - Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.** Damaged or entangled cords increase the risk of electric shock.
 - When operating a power tool outdoors, use an extension cord suitable for outdoor use.** Use of a cord suitable for outdoor use reduces the risk of electric shock.

3. Personal safety

- Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication.** A moment of inattention while operating power tools may result in serious personal injury.
- Use personal protective equipment. Always wear eye protection.** Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool.** Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.
- Remove any adjusting key or wrench before turning the power tool on.** A wrench or a key left attached to a rotating part of the power tool may result in personal injury.

- Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.

- Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts.** Loose clothes, jewellery or long hair can be caught in moving parts.

- If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** Use of dust collection can reduce dust-related hazards.

- Do not let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles.** A careless action can cause severe injury within a fraction of a second.

4. Power tool use and care

- Do not force the power tool. Use the correct power tool for your application.** The correct power tool will do the job better and safer at the rate for which it was designed.
 - Do not use the power tool if the switch does not turn it on and off.** Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
 - Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools.** Such preventive safety measures reduce the risk of starting the power tool accidentally.
 - Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.** Power tools are dangerous in the hands of untrained users.
 - Maintain power tools.** Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.
 - Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
 - Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed.** Use of the power tool for operations different from those intended could result in a hazardous situation.
 - Keep handles and grasping surfaces dry, clean and free from oil and grease.** Slippery handles and grasping surfaces do not allow for safe handling and control of the tool in unexpected situations.
- ## 5. Service
- Have your power tool serviced by a qualified repair person using only identical replacement parts.** This will ensure that the safety of the power tool is maintained.



CAR BATTERY CHARGER SAFETY WARNINGS



The item is not to be used by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction.

Young children should be supervised to ensure that they do not play with the appliance.

- Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury. Save all warnings and instructions for future reference.
- This charger is not intended for any uses other than charging 12V lead acid and for lead gel and AGM batteries which are used in motor vehicles. Do not attempt to use on other voltages and types of batteries.
- Danger!** Do not charge any frozen batteries.
- Please ensure that the vehicle is turned off completely before charging the battery.
- Do not pull the cord when disconnecting charger.
- Never attempt to disassemble the battery charger.
- To charge the battery outside the vehicle, make sure it is in a safe stable location with adequate ventilation.
- Do not place the battery charger on top of the battery when charging.

Risk of Fire & Deflagration

- Do not use chargers in environments where explosions may occur, such as in environments with ignition sources, flammable vapours, gases, dust or similar.
- Do not use chargers with damaged cord or plug.
- Route the terminal clamps so that they cannot be caught by rotating parts in the engine compartment.
- Do not short circuit the chargers.
- Do not shorten or extend the chargers.
- Do not wear clothing made of synthetic materials during charging. They could generate sparks due to electrostatic charge.

Risk of Explosion & Chemical Burns

- Do not charge a battery if it is cracked or damaged.
- Do not lean over the battery. The electrolyte from the discharged battery is also liquid at low temperatures.
- Wear protective gloves and safety glasses when working on the battery.
- Do not allow battery acid to make bodily contact. In the event of contact with battery acid immediately flush the applicable areas with plenty of clean water and consult a doctor.
- Car batteries discharge hydrogen gas, which may ignite from flying sparks. Ensure that the clamps are connected in the correct order to reduce the risk of sparks.
- Only charge the battery in a well-ventilated area to ensure toxic exhaust gas does not build up.
- Remove any vent caps on non-maintenance free batteries – be very careful as battery acid is highly corrosive.
- Do not connect black terminal clamps to dead/flat battery.
- Never smoke, use an open flame or create sparks near the battery charger whilst charging as gases may cause an explosion.
- Remove all metal jewellery, including watches and rings. Use insulated tools to avoid shorting the battery.