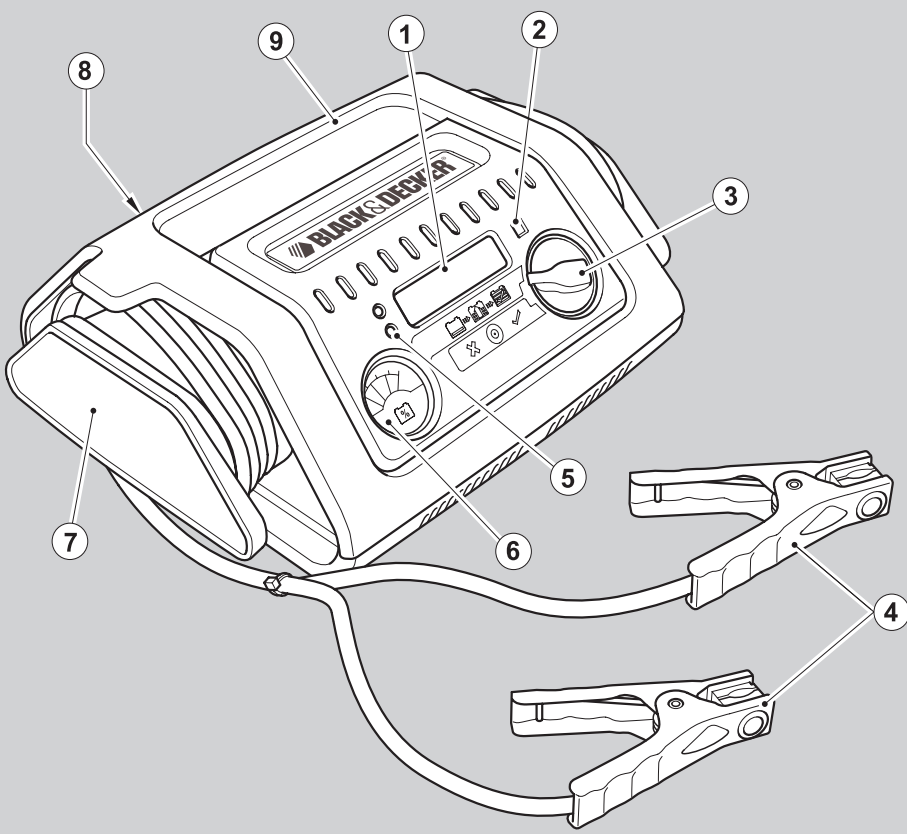


BLACK & DECKER®

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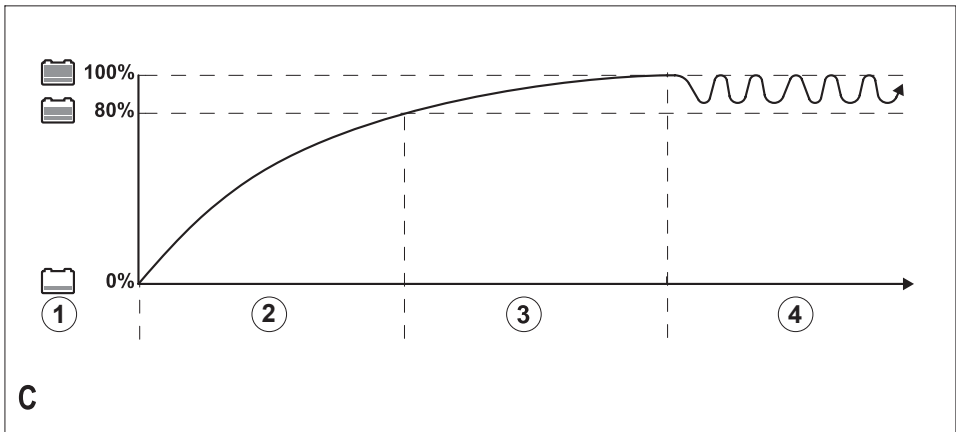
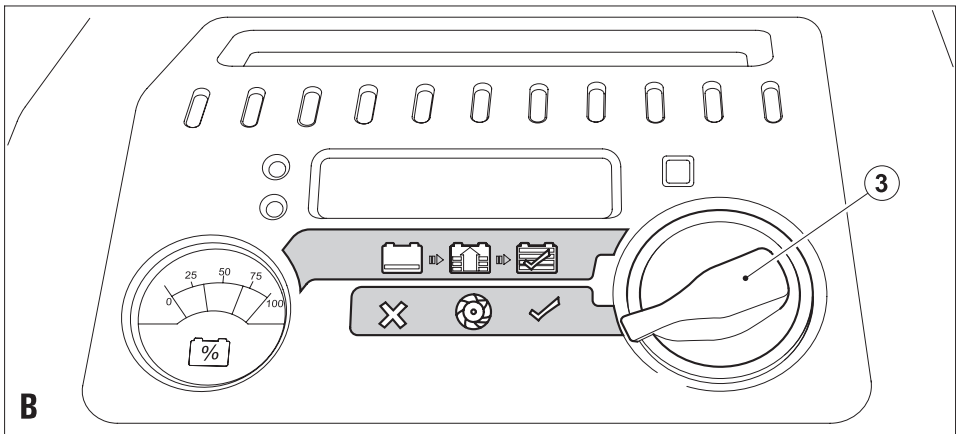
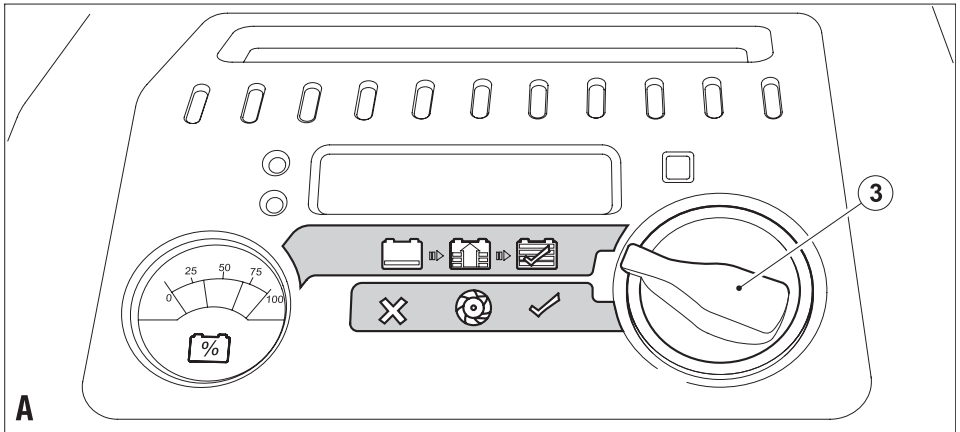


UK

Ireland

Australia

New Zealand



Intended use

Your Black & Decker battery charger is designed to charge lead-acid batteries. This product is intended for household, consumer use only.

Safety instructions

Warning! When using mains-powered appliances, basic safety precautions, including the following, should always be followed to reduce the risk of fire, electric shock, personal injury and material damage.

- ◆ Read all of this manual carefully before using the appliance.
- ◆ The intended use is described in this manual. The use of any accessory or attachment or the performance of any operation with this appliance other than those recommended in this instruction manual may present a risk of personal injury.
- ◆ Retain this manual for future reference.

Using your appliance

Always take care when using the appliance.

- ◆ This appliance is not intended for use by young or infirm persons without supervision.
- ◆ The appliance is not to be used as a toy.
- ◆ Use in a dry location only. Do not allow the appliance to become wet.
- ◆ Do not immerse the appliance in water.
- ◆ Do not open body casing. There are no user-serviceable parts inside.
- ◆ Do not operate the appliance in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.
- ◆ To reduce the risk of damage to plugs and cords never pull the cable to remove the plug from a socket outlet.

After use

- ◆ When not in use, the appliance should be stored in a dry, well ventilated place out of the reach of children.
- ◆ Children should not have access to stored appliances.
- ◆ When the appliance is stored or transported in a vehicle it should be placed in the boot or restrained to prevent movement following sudden changes in speed or direction.

Inspection and repairs

- ◆ The appliance should be protected from direct sunlight, heat and moisture.
- ◆ Before use, check the appliance for damaged or defective parts. Check for breakage of parts, damage to switches and any other conditions that may affect its operation.

- ◆ Do not use the appliance if any part is damaged or defective.
- ◆ Have any damaged or defective parts repaired or replaced by an authorised repair agent.
- ◆ Never attempt to remove or replace any parts other than those specified in this manual.

Power cord safety

Warning! Never alter the ac power cord or plug. If it will not fit, have a proper outlet installed by a qualified electrician. Improper connection may result in an electric shock.

Specific safety instructions for battery chargers

The following symbols are marked on the appliance:



This tool is double insulated; therefore no earth wire is required. Always check that the power supply corresponds to the voltage on the rating plate.



Read all of this instruction manual carefully.



This appliance is intended for indoor use only



This is not intended for storage.

Read these instructions before use:

- ◆ If the supply cord is damaged, it must be replaced by the manufacturer or an authorised Black & Decker Service Centre in order to avoid a hazard.
- ◆ Never attempt to charge non-rechargeable batteries.
- ◆ Have defective cords replaced immediately.
- ◆ Do not expose the battery charger to water.
- ◆ Do not open the battery charger.
- ◆ Do not probe the battery charger.
- ◆ Never allow the red and black battery clamps (4) to touch each other or another common metal conductor. This could cause damage to the appliance and/or create a spark/ explosion hazard.
- ◆ Always store the battery clamps (4) in the storage provided when not in use.

Batteries

Warning! Never attempt to charge a frozen battery.

- ◆ Never attempt to open for any reason.
- ◆ Do not expose the battery to water.

Warning! Battery fluid is a diluted sulphuric acid and may cause personal injury or damage to property. In case of skin contact, immediately rinse with water. If redness, pain or irritation occurs seek medical attention. In case of eye contact, rinse immediately with clean water and seek immediate medical attention.

- ◆ When disposing of batteries, follow the instructions given in the section "Protecting the environment".
- ◆ Add distilled water in each cell until the battery acid reaches the level specified by the battery manufacturer. This helps to purge excess gas from the cells. Do not overfill. For a battery without cell caps (maintenance free), carefully follow the manufacturer's charging instructions.
- ◆ Study all the battery manufacturer's specific precautions, such as removing or not removing cell caps while charging, and the recommended charging rates.
- ◆ Make sure that the initial charging rate does not exceed the battery manufacturer's requirement.

Warning! Risk of explosive gas mixtures. Working in the vicinity of a lead-acid battery is dangerous. Batteries generate explosive gases during normal battery operation. For this reason, it is of utmost importance that each time, before using your battery charger, you read this manual and follow the instructions exactly.

- ◆ Use of an attachment not recommended or sold by Black & Decker may result in a risk of fire, electric shock, or injury to persons.
- ◆ An extension cord should not be used unless absolutely necessary. Use of an improper extension cord could result in a risk of fire and electric shock, and will void the warranty.

LCD - Liquid Crystal Display

If any liquid crystal comes in contact with your skin:

- ◆ Wash area thoroughly with plenty of water. Remove contaminated clothing. If liquid crystal gets into your eye. Flush the affected eye with clean water and then seek medical attention. If liquid crystal is swallowed: Flush your mouth thoroughly with water. Drink large quantities of water and induce vomiting. Seek medical attention.

Personal safety

Wear complete eye protection and suitable clothing to give protection from contact with battery fluid.

Avoid touching the eyes while working with a battery. Acid, acid particles or corrosion may get into the eyes.

Remove personal metal items such as rings, bracelets, necklaces and watches when working with a lead-acid battery. A lead-acid battery can produce a short circuit current high enough to cause a severe burn.

Be extra cautious to reduce the risk of dropping a metal object onto the battery. This might cause sparks or short-circuit the battery or other electrical part, which can cause an explosion.

Preparation before charging

The appliance must only be connected to a 12 V lead-acid battery. Before charging, confirm that the voltage of the battery is 12 V by referring to the label on the battery or from the information available relating to its application e.g. car user manual.

Do not use the appliance for charging dry-cell batteries that are commonly used with home appliances. These batteries may burst and cause injury to persons and damage to property.

Warning! Explosive gas may be vented from lead acid batteries when charging. Make sure that the area is well ventilated and remove any sources of ignition when conducting charging procedures.

- ◆ Position the battery charger as far away from the battery as the leads will allow. The battery charger contains switches that may create a spark.
- ◆ Do not place the battery charger above or stand the battery charger on top of the battery.
- ◆ Explosive gases may collect near the ground. Locate the battery charger as high as possible above ground level.
- ◆ Do not use power tools in the charging area.
- ◆ Do not smoke or have naked flames in the charging area.
- ◆ Follow the instructions for connecting and disconnecting the battery charger leads or battery terminals.

Warning! A marine (boat) battery must be removed and charged on shore. To charge it on board requires equipment specially designed for marine use. This appliance is NOT designed for such use.

Vehicles may have electrical and electronic systems (e.g. engine management systems, mobile phones) that may be damaged if subjected to high starting voltages and voltage peaks. Before connecting the appliance to the vehicle, read the vehicle's owner's manual to confirm that external charging is allowed.

- ◆ Follow these instructions and those published by the battery manufacturer and vehicle manufacturer.
- ◆ Only connect and disconnect the dc output clamps after removing the supply cord from the electric outlet. Never allow clamps to touch each other.
- ◆ Check the polarity of the vehicle battery terminals before connecting the appliance. Always disconnect the negative (black) cable first: followed by the positive (red) cable.

When charging a battery installed in the circuit follow the manufacturers instructions for accessing the battery and the following:

- ◆ Do not charge the battery while the engine is operating.

- ◆ Be aware that engine components e.g. the coolant fan may start automatically. Keep hands and body away from engine components and position the battery charger and cables to prevent contact.
- ◆ Make sure that the battery charger and the cables are located to prevent damage from closure of doors and engine compartment covers.
- ◆ Make sure that the connections can be made without touching the metal body or components adjacent to the battery.
- ◆ When using this appliance in proximity to the vehicle's battery and engine, stand the appliance on a flat, stable surface and be sure to keep all clamps, cords, clothing and body parts away from moving parts of the vehicle.
- ◆ If it is necessary to remove the battery from the vehicle to charge or to clean the terminals, make sure that all accessories in the vehicle are switched off, so as not to cause a spark.
- ◆ To reduce the risk of electric shock, disconnect the appliance from any power source before attempting maintenance or cleaning. Turning off controls without disconnecting the appliance will not reduce this risk.

Connecting the battery charger

When all the preparations for charging and personal safety have been completed, proceed as follows:

- ◆ For most automotive and similar applications the battery charger may be connected to the battery while it is connected to the dc circuit. If this is acceptable follow the instructions given in "Charging a battery installed in the circuit".
- ◆ If the battery must be disconnected from the circuit before charging, follow the instructions given in "Charging a battery disconnected from the circuit".

Charging a battery installed in the circuit

Warning! An incorrect connection, a battery short circuit, location of the battery and the location of the battery charger may create a hazard. Make sure that adequate preparation has been made before proceeding.

Warning! If the battery posts cannot be accessed or the battery charger clamps will contact the bodywork or components adjacent to the battery, the battery must be removed before charging. Follow the manufacturer's instructions to remove the battery.

- ◆ Check the polarity of the battery posts. A positive (POS,P, +) battery post usually has a larger diameter than the negative (NEG, N, -) battery post.
- ◆ Follow the manufacturers' instructions to remove any insulating covers from the battery posts.
- ◆ Connect the positive (red) clamp from the battery charger to the positive (POS, P, +) post of the battery.

- ◆ Connect the negative (-) black clamp to the chassis or a solid non-moving metal vehicle component or body part. Never clamp directly to the negative battery terminal or a moving part. Refer to the automobiles owner's manual.

When disconnecting the battery charger from the battery, always:

- ◆ Switch off and unplug the battery charger from the mains supply.
- ◆ Remove the negative clamp first.
- ◆ Remove the positive clamp last.
- ◆ Refit any insulating covers to the battery posts.

Charging a battery disconnected from the circuit.

Warning! An incorrect connection, a battery short circuit, location of the battery and the location of the battery charger may create a hazard. Make sure that adequate preparation has been made before proceeding.

If the battery is not already removed from the circuit, follow the manufacturers' instructions to remove the battery before charging.

- ◆ Check the polarity of the battery posts. A positive (POS,P, +) battery post usually has a larger diameter than the negative (NEG, N, -) battery post.
- ◆ Connect the positive (red) clamp from the battery charger to the positive (POS, P, +) post of the battery.
- ◆ Connect the negative (black) clamp from the battery charger to the negative (NEG, N, -) post of the battery.

When disconnecting the battery charger from the battery, always:

- ◆ Switch off and unplug the battery charger from the mains supply.
- ◆ Remove the negative clamp first.
- ◆ Remove the positive clamp last.
- ◆ Refit any insulating covers to the battery posts.

Features

1. Digital display, scrolling message
2. Language selection button
3. Function control knob
4. Battery clamps
5. LED status indicator
6. Charging gauge
7. Cable storage
8. Clamp storage
9. Carry handle

Language selection

The smart charger can display error message and information in your chosen language. To alter the initial language (default English), proceed as instructed below:

- ◆ Plug the unit into an ac source and during the initialisation sequence, press the language button (2) once; pressing the language button repeatedly allows you to choose your language.
- ◆ Once a language has been selected, the smart charger will display all messages and information in this language.

The language button does not need to be pressed each time the unit is switched on; the smart charger remembers the previous selection and defaults to this language.

General use instructions

- ◆ Set up the unit as described in the "Connecting the battery charger" section.
- ◆ Turn the function control knob (3) to the desired function position.
- ◆ Plug the charger into a 230 Vac outlet.
- ◆ Connect the charger clamps to the battery.
- ◆ The digital display (1) will show ANALYSING BATTERY, indicating that the unit is set up correctly and ready to use.
- ◆ CHECK BATTERY CONNECTIONS will be displayed when the unit is plugged in and there is no battery connected to the charger or the clamps are not connected properly.
- ◆ When the unit has completed analysing the battery, it will begin the recharging process if the function control knob (3) has been set to smart charge. The battery voltage will then be displayed (for example; CHARGING/12.5 VOLTS). As the battery charges, the arrow on the charging gauge (6) will move indicating the current percent of charge in the battery, from the red zone (0 to 25% charged) toward the green zone (90-100% charged).
- ◆ When the unit is fully charged, BATTERY IS FULLY CHARGED will be displayed and the green status LED light (5) will light.
- ◆ To turn the battery charger off, first disconnect the mains cord, then disconnect the clamps (4). Observe the "Safety Instructions" at the front of this manual when disconnecting.

Use

The Black & Decker battery charger has a fast charge rate of 10A. It is designed for charging 12V lead-acid batteries only, i.e. conventional automotive, maintenance-free, marine, deep cycle and gel batteries as used in cars, trucks, farm equipment, boats, lawn mowers, garden tractors, motorcycles and various other applications.

Autoselect technology

Select the application and the charger will do the rest.

4-Stage charging technology (fig. C)

The battery charger features 4-stage high-efficiency charging technology using built-in microprocessor control which ensures fast, safe and complete charging of serviceable batteries.

Stage 1 - battery status

To make sure the battery can accept a charge, a connection check prevents damage caused by reversed polarity.

Stage 2 - bulk charge

Charges fast by delivering pure DC current up to 80% of the battery capacity.

Stage 3 - absorption

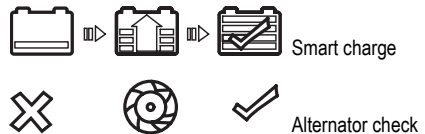
Avoids overcharging by slowly charging up to 100% of the battery capacity.

Stage 4 - float mode

Maintains the battery fully charged indefinitely so it is always ready for use.

Control panel

The following symbols are shown on the control panel:



Smart charge

Alternator check

Smart charge (fig. A)

Automatically analyses the battery and selects the best charging rate for the battery type, size and discharge level.

Approximate charging times

The battery charger will automatically adjust the charge rate as the battery becomes charged and stop charging when the battery is fully charged. Deep cycle batteries may require longer charging times.

Alternator check (fig. B)

A faulty alternator can be the hidden cause of a discharged battery.

Warning! Check only 12 Vdc systems.

Part 1 (no load)

- ◆ Make sure that there is no load on the alternator by turning off all the vehicles accessories.
- ◆ The battery must be fully charged before testing the alternator.
- ◆ Run the engine for 3 minutes to achieve normal idle speed and verify that there is a no-load voltage.
- ◆ Using the function control knob (3), select alternator check (fig. C) before connecting the clamps to the battery, ANALYSING ALTERNATOR will be displayed after the clamps are connected.
- ◆ When the unit has completed checking, ALTERNATOR GOOD will be displayed and the green LED will light to indicate that the alternator is good or ALTERNATOR BAD or ENGINE NOT RUNNING and the red LED will light to indicate that the alternator is out of typical voltage range.

Part 2 (under load)

- ◆ Load the alternator by turning on as many accessories as possible except for air-conditioning and defrost.
- ◆ Once the unit has completed checking, ALTERNATOR GOOD will be displayed and the green LED will light to indicate that the alternator is good or ALTERNATOR BAD or ENGINE NOT RUNNING and the red LED will light to indicate that the alternator is out of typical voltage range.

If the first alternator check indicates a good alternator and the second indicates the alternator is not good, the problem could be caused by any of the following:

- ◆ Loose fan belts.
- ◆ An intermittent diode failure.
- ◆ Bad connections between the battery and alternator and/or ground.

Note: ALTERNATOR BAD or ENGINE NOT RUNNING may be displayed if a number of extra accessory loads have been added to the charging system, thereby increasing current demand from the alternator. Make sure that the alternator is rated to support the application.

Troubleshooting

Display indications, common problems and possible solutions:

No Functions

- ◆ Make sure that the battery charger is plugged into a live 230 Vac outlet.
- ◆ Follow the steps outlined in the "Connecting the battery charger" at the front of this manual.
- ◆ The unit will turn on automatically after being properly connected to the battery. If it does not come on, either it is not connected properly to the terminals or the voltage of the battery to be serviced is too low (below 3.0 Volts).

Smart charge fault condition messages

CHECK BATTERY CONNECTIONS - When this message appears, the most common cause is a poor connection to the battery.

- ◆ Observing the "Safety instructions" at the front of this manual, disconnect mains cord and the battery clamps (4), clean the battery terminals and reconnect. If the situation persists, we recommend taking your battery to a certified automotive service centre for evaluation.

REPLACE OR SERVICE BATTERY - The battery being charged either has an internal open circuit, a shorted cell or is highly sulphated and cannot accept a normal charge current. We recommend taking your battery to a certified automotive service centre for evaluation.

COOL DOWN CYCLE - red LED lit -The ventilation grill that allows the air from flowing in and out of the charger may be blocked.

- ◆ Make sure there is ample ventilation before resuming operation.

REVERSE CLAMPS ON TERMINALS - The red LED lights and a continuous warning tone sounds.

The connections to the battery's positive and negative terminals are incorrect.

- ◆ Observing the "Safety instructions" at the front of this manual, disconnect the mains cord and the battery clamps (4) and reconnect the clamps as described in the section "Charging the battery".

OVERTIME CONDITION - When this message is displayed, the charging cycle has exceeded 18 hours; this condition may occur because of the following:

- ◆ The battery being charged is defective. See a service centre to service or replace the battery.
- ◆ The battery being charged has a very large capacity, greater than that specified for the charger.

Charging a very cold battery

If the battery to be charged is very cold i.e., in temperatures below freezing (0°C/32°F), it cannot accept a high rate of charge. The initial charge rate will be low. The charge rate will increase as the battery warms.

Warning! Never attempt to charge a frozen battery.

Alternator check fault condition messages

CHECK BATTERY CONNECTIONS - When this message appears, the most common cause is a poor connection to the battery.

- ◆ Observe the "Safety Instructions" at the front of this manual, disconnect the AC cord and the clamps, clean the battery terminals and reconnect.
- ◆ If the situation persists, we recommend taking your battery to a certified automotive service centre for evaluation.

REVERSE CLAMPS ON TERMINALS - The red LED lights and a continuous warning tone sounds.

The connections to the battery's positive and negative terminals are incorrect.

- ◆ Observing the "Safety instructions" at the front of this manual, disconnect the AC cord and the clamps and reconnect to the battery with the correct polarity.

Maintenance

Your Black & Decker tool has been designed to operate over a long period of time with a minimum of maintenance. Continuous satisfactory operation depends upon proper tool care and regular cleaning.

Warning! Before performing any maintenance or cleaning on the appliance, unplug the appliance.

- ◆ From time to time wipe the appliance with a damp cloth. Do not use any abrasive or solvent-based cleaner. Do not immerse the appliance in water.
- ◆ After each use, clean the battery clamps (4) and be sure to remove any battery fluid that will cause corrosion of the clamps (4).
- ◆ Clean the outside case of the battery charger with a soft cloth and, if necessary, mild soap solution.
- ◆ Do not allow liquid to enter the battery charger. Do not operate when the battery charger is wet.
- ◆ Keep the battery charger cords loosely coiled during storage to prevent damage to the cords.

Mains plug replacement (U.K. & Ireland only)

If a new mains plug needs to be fitted:

- ◆ Safely dispose of the old plug.
- ◆ Connect the brown lead to the live terminal in the new plug.
- ◆ Connect the blue lead to the neutral terminal.

Warning! No connection is to be made to the earth terminal. Follow the fitting instructions supplied with good quality plugs. Recommended fuse: 3 A.

Protecting the environment



Separate collection. This product must not be disposed of with normal household waste.

Should you find one day that your Black & Decker product needs replacement, or if it is of no further use to you, do not dispose of it with household waste. Make this product available for separate collection.



Separate collection of used products and packaging allows materials to be recycled and used again. Re-use of recycled materials helps prevent environmental pollution and reduces the demand for raw materials.

Local regulations may provide for separate collection of electrical products from the household, at municipal waste sites or by the retailer when you purchase a new product.

Black & Decker provides a facility for the collection and recycling of Black & Decker products once they have reached the end of their working life. To take advantage of this service please return your product to any authorised repair agent who will collect them on our behalf.

You can check the location of your nearest authorised repair agent by contacting your local Black & Decker office at the address indicated in this manual. Alternatively, a list of authorised Black & Decker repair agents and full details of our after-sales service and contacts are available on the Internet at: www.2helpU.com.



Lead acid batteries can be recharged many times. At the end of their useful life, discard batteries with due care for our environment:

- ◆ Do not dispose of the battery in fire, as this may result in an explosion.
- ◆ Lead acid (Pb) batteries are recyclable. They must not be disposed of with household waste. The battery must be removed and disposed of in accordance with local regulations.
- ◆ Do not short-circuit the battery terminals.
- ◆ Be aware that the battery is heavy.

- ◆ If possible, operate the appliance to run the battery down completely.

Place the battery in a suitable packaging to ensure that the terminals cannot be short-circuited.

Take the battery to your service agent or a local recycling station. Collected batteries will be recycled or disposed of properly.

Technical data

BDSBC10A	
Input voltage	Vac 230
Rated input	W 180
Output voltage	Vdc 12
Output current	A 10
Weight	kg 1.82

- ◆ The product has been used for trade, professional or hire purposes.
- ◆ The product has been subjected to misuse or neglect.
- ◆ The product has sustained damage through foreign objects, substances or accidents.
- ◆ Repairs have been attempted by persons other than authorised repair agents or Black & Decker service staff.

To claim on the guarantee, you will need to submit proof of purchase to the seller or an authorised repair agent. You can check the location of your nearest authorised repair agent by contacting your local Black & Decker office at the address indicated in this manual. Alternatively, a list of authorised Black & Decker repair agents and full details of our after-sales service and contacts are available on the Internet at www.2helpU.com

Please visit our website www.blackanddecker.co.uk to register your new Black & Decker product and to be kept up to date on new products and special offers. Further information on the Black & Decker brand and our range of products is available at www.blackanddecker.co.uk.

Charger	Volts	Battery capacity
10A	12	20 - 180 Ah

EC declaration of conformity

BDSBC10A TYPE1

Black & Decker declares that these products conform to:
Standards & Legislation.
EN60335, 2006/95/EC

The undersigned is responsible for compilation of the technical file and makes this declaration on behalf of
Black & Decker.



Kevin Hewitt
Director of Consumer Engineering
Spennymoor, County Durham, DL16 6JG,
United Kingdom
06-08-2008

Guarantee

Black & Decker is confident of the quality of its products and offers an outstanding guarantee. This guarantee statement is in addition to and in no way prejudices your statutory rights. The guarantee is valid within the territories of the Member States of the European Union and the European Free Trade Area.

If a Black & Decker product becomes defective due to faulty materials, workmanship or lack of conformity, within 24 months from the date of purchase, Black & Decker guarantees to replace defective parts, repair products subjected to fair wear and tear or replace such products to make sure of the minimum inconvenience to the customer unless:

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