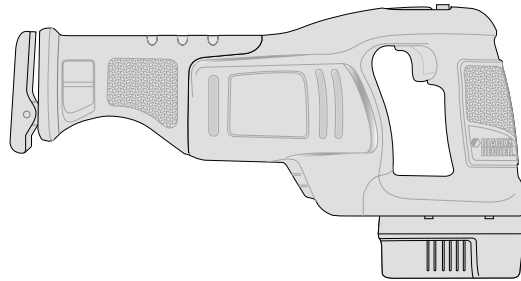




18 Volt Cordless Reciprocating Saw

INSTRUCTION MANUAL



CATALOG NUMBER
CRS180B

BEFORE RETURNING THIS PRODUCT
FOR ANY REASON PLEASE CALL

1-800-54-HOW-TO (544-6986)

IF YOU SHOULD EXPERIENCE A PROBLEM WITH YOUR **BLACK & DECKER** PURCHASE, CALL **1-800-54-HOW-TO (1-800-544-6986)**. IN MOST CASES, A **BLACK & DECKER** REPRESENTATIVE CAN RESOLVE YOUR PROBLEM OVER THE PHONE. IF YOU HAVE A SUGGESTION OR COMMENT, GIVE US A CALL. YOUR FEEDBACK IS VITAL TO THE SUCCESS OF **BLACK & DECKER'S** QUALITY IMPROVEMENT PROGRAM.

KEY INFORMATION YOU SHOULD KNOW:

- Keep shoe firmly against work surface.
- Charge battery for 9 hours before first use. For more information see "CHARGING THE POWER PACK".

SAVE THIS MANUAL FOR FUTURE REFERENCE.

VEA EL ESPAÑOL EN LA CONTRAPORTADA.

INSTRUCTIVO DE OPERACIÓN, CENTROS DE SERVICIO Y PÓLIZA DE GARANTÍA. ADVERTENCIA: LÉASE ESTE INSTRUCTIVO ANTES DE USAR EL PRODUCTO.

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⚠ GENERAL SAFETY RULES - FOR ALL BATTERY OPERATED TOOLS

⚠ WARNING! READ AND UNDERSTAND ALL INSTRUCTIONS.

Failure to follow all instructions listed below, may result in electric shock, fire and/or serious personal injury.

SAVE THESE INSTRUCTIONS

Work Area

- **Keep your work area clean and well lit.** Cluttered benches and 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 bystanders, children, and visitors away while operating a power tool.** Distractions can cause you to lose control.

Electrical Safety

- **Do not abuse the cord. Never use the cord to carry the tool. Keep cord away from heat, oil, sharp edges or moving parts. Replace damaged cords immediately.** Damaged cords may create a fire.
- **A battery operated tool with integral batteries or a separate battery pack must be recharged only with the specified charger for the battery.** A charger that may be suitable for one type of battery may create a risk of fire when used with another battery.
- **Use battery operated tool only with specifically designated battery pack.** Use of any other batteries may create a risk of fire.

Personal Safety

- **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use tool while tired or under the influence of drugs, alcohol, or medication.** A moment of inattention while operating power tools may result in serious personal injury.
- **Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving parts.** Loose clothes, jewelry, or long hair can be caught in moving parts.
- **Avoid accidental starting. Be sure switch is in the locked or off position before inserting battery pack.** Carrying tools with your finger on the switch or inserting the battery pack into a tool with the switch on invites accidents.
- **Remove adjusting keys or wrenches before turning the tool on.** A wrench or a key that is left attached to a rotating part of the tool may result in personal injury.
- **Do not overreach. Keep proper footing and balance at all times.** Proper footing and balance enable better control of the tool in unexpected situations.
- **Use safety equipment. Always wear eye protection.** Dust mask, non-skid safety shoes, hard hat, or hearing protection must be used for appropriate conditions.

Tool Use and Care

- **Use clamps or other practical way to secure and support the workpiece to a stable platform.** Holding the work by hand or against your body is unstable and may lead to loss of control.
- **Do not force tool. Use the correct tool for your application.** The correct tool will do the job better and safer at the rate for which it is designed.
- **Do not use tool if switch does not turn it on or off.** A tool that cannot be controlled with the switch is dangerous and must be repaired.
- **Disconnect battery pack from tool or place the switch in the locked or off position before making any adjustments, changing accessories, or storing the tool.** Such preventive safety measures reduce the risk of starting the tool accidentally.
- **Store idle tools out of reach of children and other untrained persons.** Tools are dangerous in the hands of untrained users.
- **When battery pack is not in use, keep it away from other metal objects like: paper**

clips, coins, keys, nails, screws or other small metal objects that can make a connection from one terminal to another. Shorting the battery terminals together may cause sparks, burns, or a fire.

- **Maintain tools with care. Keep cutting tools sharp and clean.** Properly maintained tools, with sharp cutting edge are less likely to bind and are easier to control.
- **Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tool's operation. If damaged, have the tool serviced before using.** Many accidents are caused by poorly maintained tools.
- **Use only accessories that are recommended by the manufacturer for your model.** Accessories that may be suitable for one tool may create a risk of injury when used on another tool.

Service

- **Tool service must be performed only by qualified repair personnel.** Service or maintenance performed by unqualified personnel may result in a risk of injury.
- **When servicing a tool, use only identical replacement parts. Follow instructions in the Maintenance section of this manual.** Use of unauthorized parts or failure to follow Maintenance Instructions may create a risk of shock or injury.

SPECIFIC SAFETY RULES

- **Hold tool by insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring or its own cord.** Contact with a "live" wire will make exposed metal parts of the tool "live" and shock the operator.
- **Use extra caution when cutting overhead and pay particular attention to overhead wires which may be hidden from view. Anticipate the path of falling branches and debris ahead of time.**
- **KEEP HANDS AWAY** from cutting area. Never reach underneath the material for any reason. Hold front of saw by grasping the contoured gripping area. Do not insert fingers or thumb into the vicinity of the reciprocating blade and blade clamp. Do not stabilize the saw by gripping the shoe.
- **KEEP BLADES SHARP.** Dull blades may cause the saw to swerve or stall under pressure.

⚠ **WARNING:** Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- lead from lead-based paints,
- crystalline silica from bricks and cement and other masonry products, and
- arsenic and chromium from chemically-treated lumber. (CCA)

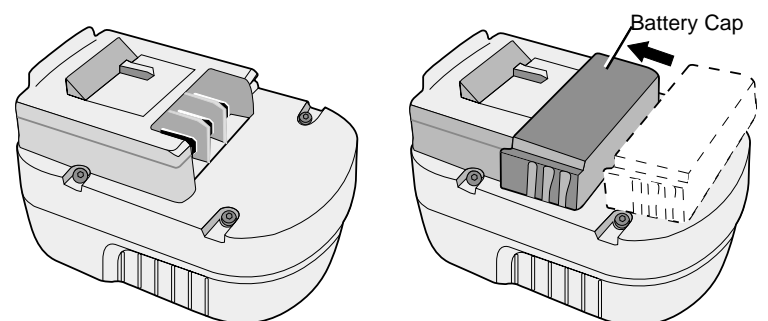
Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

The label on your tool may include the following symbols.

V	volts	A	amperes
Hz	hertz	W	watts
min	minutes	~	alternating current
====	direct current	n ₀	no load speed
□	Class II Construction	⊕	earthing terminal
⚠	safety alert symbol	.../min	revolutions or reciprocations per minute
🔒	lock-on symbol	🔓	lock-off symbol
🔑	Quick Release lock-on symbol		

BATTERY CAP INFORMATION

Battery storage and carrying caps are provided for use whenever the battery is out of the tool or charger. Remove cap before placing battery in charger or tool.



⚠ **WARNING!** Do not store or carry battery so that metal objects can contact exposed battery terminals. For example, do not place battery in aprons, pockets, tool boxes, product kit boxes, drawers, etc. with loose nails, screws, keys, etc. without battery cap. Without cap in place, battery could short circuit causing fire or burns or damage to battery.

⚠ SAFETY WARNINGS AND INSTRUCTIONS: CHARGING THE SAW

1. This manual contains important safety and operating instructions.
2. Before using battery charger, read all instructions and cautionary markings on (1) battery charger, (2) battery, and (3) product using battery.
3. ⚠ **CAUTION:** To reduce the risk of injury, charge only Black & Decker Power Packs. Other types of batteries may burst causing personal injury and damage.
4. Do not expose charger to rain or snow.
5. Use of an attachment not recommended or sold by Black & Decker may result in a risk of fire, electric shock, or injury to persons.
6. To reduce risk of damage to electric plug and cord, pull by plug rather than cord when disconnecting charger.
7. Make sure cord is located so that it will not be stepped on, tripped over, or otherwise subjected to damage or stress.
8. An extension cord should not be used unless absolutely necessary. Use of improper extension cord could result in a risk of fire, electric shock or electrocution.
 - a. Two-wire cords can be used with 2-wire or 3-wire extension cords. Only round jacketed extension cords should be used, and we recommend that they be listed by Underwriters Laboratories (U.L.). If the extension is to be used outside, the cord must be suitable for outdoor use. Any cord marked for outdoor use can also be used for indoor work. The letters "W" or "WA" on the cord jacket indicate that the cord is suitable for outdoor use.
 - b. An extension cord must have adequate wire size (AWG or American Wire Gauge) for safety, and to prevent loss of power and overheating. The smaller the gauge number of the wire, the greater the capacity of the cable; that is, 16 gauge has more capacity than 18 gauge. When using more than one extension to make up the total length, be sure each extension contains at least the minimum wire size.

CHART FOR MINIMUM WIRE SIZE (AWG) OF EXTENSION CORDS NAMEPLATE RATING AMPS - 0 - 10.0

Total Extension Cord Length (ft)	25	50	75	100	125	150
Wire Gauge	18	18	16	16	14	14

9. Use only the supplied charger when charging your saw. The use of any other charger could damage the battery or create a hazardous condition.
10. Use only one charger when charging.
11. Do not attempt to open the charger or the saw. There are no customer serviceable parts inside. Return to any authorized Black & Decker service center.
12. DO NOT incinerate the saw or battery packs even if they are severely damaged or completely worn out. The batteries can explode in a fire.
13. A small leakage of liquid from the battery cells may occur under extreme usage, charging or temperature conditions. This does not indicate a failure. However, if the outer seal is broken and this leakage gets on your skin:
 - a. Wash quickly with soap and water.
 - b. Neutralize with a mild acid such as lemon juice or vinegar.
 - c. If the battery liquid gets in your eyes, flush them with clean water for a minimum of 10 minutes and seek immediate medical attention. MEDICAL NOTE: The liquid is a 25-35% solution of potassium hydroxide.

CHARGING THE POWER PACK

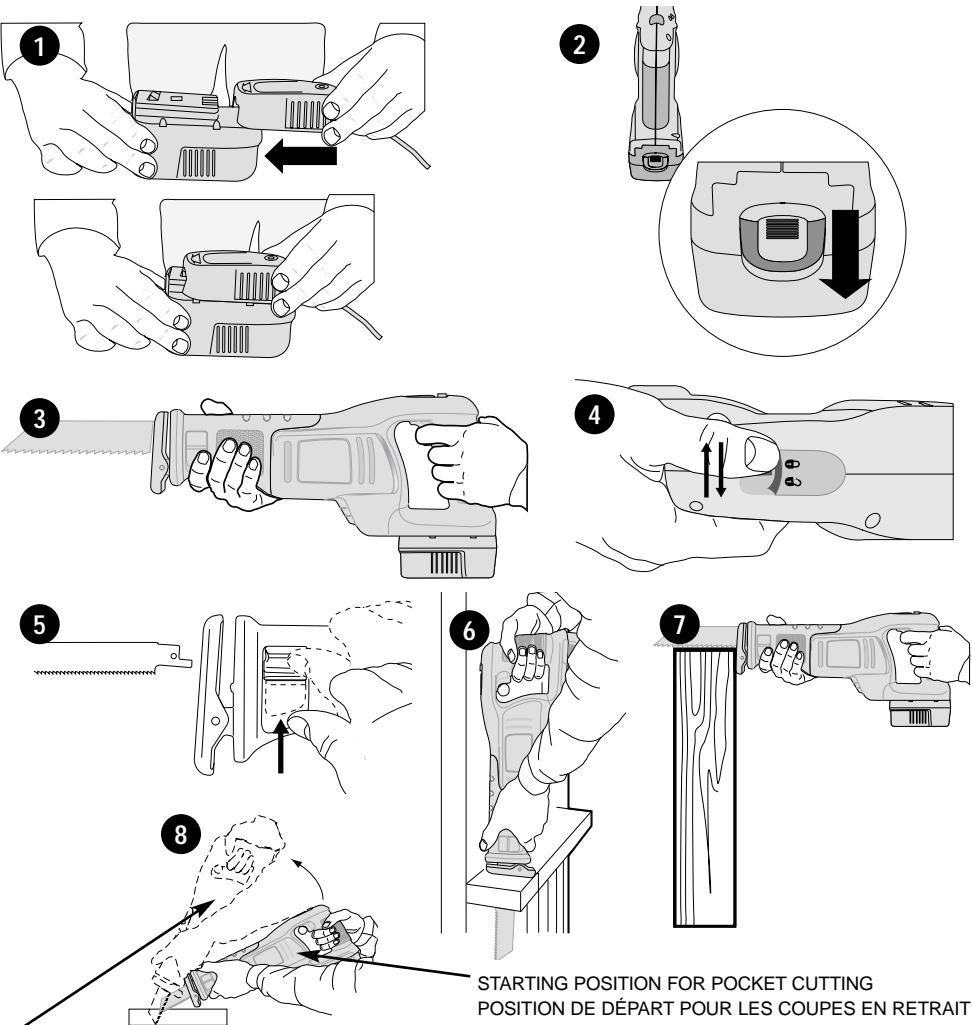
THE BATTERIES IN YOUR POWER PACK ARE NOT FULLY CHARGED AT THE FACTORY. BEFORE ATTEMPTING TO CHARGE THEM, THOROUGHLY READ ALL OF THE SAFETY INSTRUCTIONS.

The charger is designed to use standard household 120 volt 60 Hz power.

1. Plug the charger into any standard 120 Volt 60 Hz electrical outlet.
2. Slide the charger onto the battery pack as shown in Figure 1 and let it charge initially for **9 hours**. After the initial charge, under normal usage, your power pack should be fully charged in **3 to 6 hours**.
3. Remove pack from the charger and place in tool. **NOTE:** To remove the battery from the saw, press down on the release button on the back of the battery (Figure 2) and pull out.

IMPORTANT CHARGING NOTES

1. After normal usage, your power pack should be fully charged in 3 to 6 hours. If the power pack is run-down completely, it may take up to 6 hours to become fully charged. Your power pack was sent from the factory in an uncharged condition. Before attempting to use it, it must be charged for at least 9 hours.
2. **DO NOT** charge the power pack in an air temperature below 40°F or above 105°F. This is important and will prevent serious damage to the power pack. Longest life and best performance can be obtained if power pack is charged when air temperature is about 75°F.
3. While charging, the charger may hum and become warm to touch. This is a normal condition and does not indicate a problem.
4. If the power pack does not charge properly—(1) Check current at receptacle by plugging in a lamp or other appliance. (2) Check to see if receptacle is connected to a light switch which turns power off when you turn out the lights. (3) Move charger and power pack to a surrounding air temperature of 40°F to 105°F. (4) If the receptacle and temperature are OK, and you do not get proper charging, take or send the power pack and charger to your local Black & Decker service center. See Tools Electric in yellow pages.
5. The power pack should be recharged when it fails to produce sufficient power on jobs which were easily done previously. **DO NOT CONTINUE** using saw with its power pack in a depleted condition.
6. To prolong power pack life, avoid leaving the power pack on charge for extended periods of time (over 30 days without use). Although overcharging is not a safety concern, it can significantly reduce overall power pack life.
7. When the battery is inserted into the charger, the red "Charging Indicator" light will come on indicating that there is contact between the battery and charger. The light will stay on as long as the battery is in the charger and the charger is plugged into a working outlet. It **WILL NOT** flash, go out or change to a different color when the charging cycle is complete.
8. The power pack will reach optimum performance after being cycled 5 times during normal usage. There is no need to run the batteries down completely before recharging. Normal usage is the best method of discharging and recharging the batteries.



STARTING POSITION FOR POCKET CUTTING
POSITION DE DÉPART POUR LES COUPES EN RETRAIT
POSICION DE INICIO PARA EL CORTE DE BOLSILLO

ROCK TOOL UP TO NORMAL CUTTING POSITION AFTER BLADE HAS CUT THROUGH MATERIAL
BERCER L'OUTIL EN POSITION NORMALE DE COUPE APRES AVOIR TRAVERSE MATÉRIAU AVEC LA LAME.

BALANCEE LA HERRAMIENTA HASTA LA POSICION DE CORTE NORMAL DESPUES DE HACER EL CORTE A TRAVES DEL MATERIAL

OPERATION

CAUTION: Always wear eye protection while operating this power tool.

NOTE: Before cutting any type of material, be sure it is firmly anchored or clamped to prevent slipping.

- Place blade and shoe lightly against work to be cut.
- Switch on saw motor and allow it to obtain maximum speed before applying pressure.
- Always hold saw firmly with both hands while cutting as shown in Figure 3. Whenever possible, the saw shoe must be held firmly against the material being cut. This will prevent the saw from jumping or vibrating and minimize blade breakage.

TRIGGER SWITCH (FIGURE 4)

Release lock-off by switching to the unlocked position shown in Fig. 4 from either side of the saw. Pull the trigger switch to turn the motor ON. Releasing the trigger turns the motor OFF.

NOTE: This tool has no provision to lock the switch in the ON position, and should never be locked in the ON position by any other means.

BLADE CLAMP RELEASE LEVER (FIGURE 5)

CAUTION: TURN OFF AND REMOVE BATTERY FROM TOOL.

To install blade into saw:

1. Open blade clamp release lever to its full open position as shown in Figure 5.
2. Insert blade shank from the front.
3. Close blade clamp release lever.

To remove blade from saw:

1. Open blade clamp release lever to its full open position.
2. Remove blade.

FLUSH CUTTING (FIGURE 6)

- The compact design of the reciprocating saw motor housing and pivoting shoe permit close cutting to floors, corners and other difficult areas.

- To maximize flush cutting capabilities, insert the blade shaft into the blade clamp with the teeth of the blade facing up.
- Turn the saw upside down so you are as close to the work surface as possible.

WOOD CUTTING (FIGURE 7)

- Before cutting any type of wood, be sure the work piece is firmly anchored or clamped to prevent slipping.
- Place blade and shoe lightly against work to be cut.
- Switch on saw motor before applying pressure.
- Always hold saw firmly with both hands while cutting. Whenever possible, the shoe must be held firmly against the material being cut. This will prevent the saw from jumping or vibrating and minimize blade breakage.

METAL CUTTING

- Use a finer blade for ferrous metals and a coarse blade for non-ferrous materials.
 - In thin gauge sheet metals it is best to clamp wood to both sides of sheet. This will ensure a clean cut without excess vibration or tearing of metal.
 - Avoid forcing cutting blade as this reduces blade life and causes costly blade breakage.
- NOTE:** You should spread a thin film of oil or other coolant along the line ahead of the saw cut for easier operation and longer blade life. For cutting aluminum, kerosene is preferred.

POCKET CUTTING - WOOD ONLY (FIGURE 8)

- Measure the surface area to be cut and mark clearly with a pencil, chalk or scribe.
- Insert pocket cutting blade in blade clamp and tighten blade clamp securely.
- Tip the saw backward until the back edge of the shoe is resting on the work surface.
- Switch motor on, permitting blade to attain maximum speed.
- Grip handle steadily and begin a slow, deliberate upward swing with the handle of the saw.
- The blade will begin to feed into material. Always be sure blade is completely through material before continuing with pocket cut.

NOTE: In areas where blade visibility is limited, use the edge of the shoe as a guide.

PROJECT TIPS

- Cut only with sharp blades; they cut cleaner, faster and put less strain on the motor while cutting.
- When cutting, always ensure that the shoe is resting against the workpiece. This will improve operator control and minimize vibration.
- For longer blade life, use bi-metal blades. These utilize a carbon steel back welded to high speed steel teeth making the blade more flexible and less prone to breaking.

MAINTENANCE

REMOVE BATTERY FROM SAW WHEN PERFORMING ANY CLEANING OR OTHER MAINTENANCE. WHEN SERVICING USE ONLY IDENTICAL REPLACEMENT PARTS.

- Avoid using solvents when cleaning plastic parts. Most plastics are susceptible to various types of commercial solvents and may be damaged by their use. Use clean cloths to remove dirt, carbon dust etc.
- When electric tools are used on fiberglass boats, sports cars, drywall etc., they are subject to accelerated wear and possible premature failure, as the fiberglass chips and grindings and drywall dust are highly abrasive to bearings, brushes, commutator, etc. During any use on fiberglass or drywall it is extremely important that the tool be cleaned frequently by blowing with an air jet.

LUBRICATION

Your tool was properly lubricated before leaving the factory. Once every year take or send your tool to a Black & Decker service center, or authorized service station, for a complete cleaning, inspection and lubrication. Tools "out of service" for long periods should be relubricated before being put back to work.

IMPORTANT: To assure product SAFETY and RELIABILITY, repairs, maintenance and adjustment should be performed by authorized service centers or other qualified service organizations, always using identical replacement parts

ACCESSORIES

The CRS144 FIRESTORM™ reciprocating saw will accept up to a 12 inch long blade. Always use the shortest blade suitable for your project. Longer blades are more likely to be bent or damaged during use. During operation some longer blades may vibrate or shake if the saw is not kept in contact with the workpiece.

Recommended accessories for use with your tool are available from your local dealer or authorized service center. If you need assistance regarding accessories, please call:

1-800-54-HOW-TO. (800-544-6986)

WARNING: The use of any accessory not recommended for use with this tool could be hazardous.

THE RBRC™ SEAL

The RBRC™ (Rechargeable Battery Recycling Corporation) Seal on the nickel-cadmium battery (or battery pack) indicates that the costs to recycle the battery (or battery pack) at the end of its useful life have already been paid by Black & Decker. In some areas, it is illegal to place spent nickel-cadmium batteries in the trash or municipal solid waste stream and the RBRC program provides an environmentally conscious alternative.

RBRC in cooperation with Black & Decker and other battery users, has established programs in the United States and Canada to facilitate the collection of spent nickel-cadmium batteries. Help protect our environment and conserve natural resources by returning the spent nickel-cadmium battery to an authorized Black & Decker service center or to your local retailer for recycling. You may also contact your local recycling center for information on where to drop off the spent battery, or call **1-800-8-BATTERY**.



SERVICE INFORMATION

Black & Decker offers a full network of company-owned and authorized service locations throughout North America. All Black & Decker Service Centers are staffed with trained personnel to provide customers with efficient and reliable power tool service.

Whether you need technical advice, repair, or genuine factory replacement parts, contact the Black & Decker location nearest you. To find your local service location, refer to the yellow page directory under "Tools—Electric" or call: **1-800-54-HOW TO (544-6986)**.

SPECIAL WARRANTY NOTE TO CONTRACTORS:

FIRESTORM™ branded products are offered as high end consumer home use tools and carry a **HOME USE WARRANTY**. These tools are designed, manufactured and tested to meet or exceed the needs of the do-it-yourselfer in the execution of projects and repairs in and around the home. With proper use they will provide the home owner with step up power and performance well beyond their two year warranty. However, if you use tools for a living and use FIRESTORM™ branded products or any of Black & Decker's other Consumer Home Use tools **ON THE JOBSITE** you should know that they **CANNOT BE COVERED UNDER OUR WARRANTY**.

FULL TWO-YEAR HOME USE WARRANTY

Black & Decker (U.S.) Inc. warrants this product for two years against any defects in material or workmanship. The defective product will be replaced or repaired at no charge in either of two ways.

The first, which will result in exchanges only, is to return the product to the retailer from whom it was purchased (provided that the store is a participating retailer). Returns should be made within the time period of the retailer's policy for exchanges (usually 30 to 90 days after the sale). Proof of purchase may be required. Please check with the retailer for their specific return policy regarding returns that are beyond the time set for exchanges.

The second option is to take or send the product (prepaid) to a Black & Decker owned or authorized Service Center for repair or replacement at our option. Proof of purchase may be required. Black & Decker owned and authorized Service Centers are listed under "Tools-Electric" in the yellow pages of the phone directory.

This warranty does not apply to accessories. This warranty gives you specific legal rights and you may have other rights which vary from state to state. Should you have any questions, contact the manager of your nearest Black & Decker Service Center.

Imported by
Black & Decker (U.S.) Inc.,
701 E. Joppa Rd.
Towson, MD 21286 U.S.A.



See 'Tools-Electric'
- Yellow Pages -
for Service & Sales

