

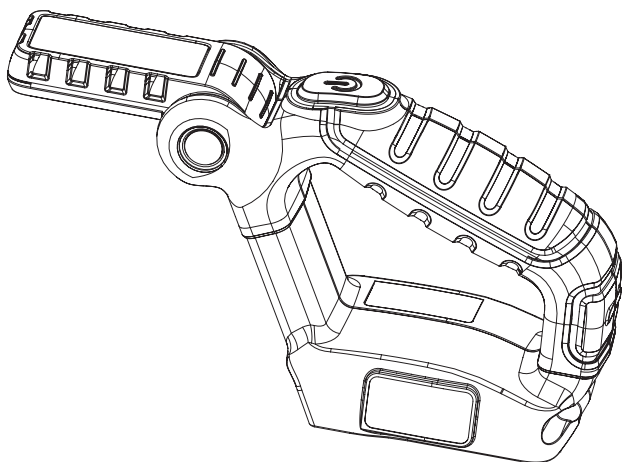
BLACK+ DECKER™

20V MAX* LED FLASHLIGHT

INSTRUCTION MANUAL

CATALOG NUMBER

BDCF20



Thank you for choosing BLACK+DECKER!

PLEASE READ BEFORE RETURNING THIS PRODUCT FOR ANY REASON.

If you have a question or experience a problem with your BLACK+DECKER purchase, go to <http://www.blackanddecker.com/instantanswers>
If you can't find the answer or do not have access to the Internet, call 1-800-544-6986 from 8 a.m. to 5 p.m. EST Mon. - Fri. to speak with an agent.
Please have the catalog number available when you call.
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.

*Maximum initial battery pack voltage (measured without a workload) is 20 volts. Measured under a workload, nominal voltage is 18.

To register your new product, call 1-800-544-6986
or visit www.BlackandDecker.com/NewOwner

SAFETY GUIDELINES - DEFINITIONS

It is important for you to read and understand this manual. The information it contains relates to protecting YOUR SAFETY and PREVENTING PROBLEMS. The symbols below are used to help you recognize this information.

⚠ DANGER: Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

⚠ WARNING: Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

⚠ CAUTION: Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

NOTICE: Used without the safety alert symbol indicates potentially hazardous situation which, if not avoided, may result in property damage.

⚠ 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

- a) **Keep work area clean and well lit.**
Cluttered or dark areas invite accidents.
- b) **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.*
- c) **Keep children and bystanders away while operating a power tool.**
Distractions can cause you to lose control.

2) ELECTRICAL SAFETY

- a) **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.*
- b) **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.
- c) **Do not expose power tools to rain or wet conditions.** *Water entering a power tool will increase the risk of electric shock.*
- d) **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.*
- e) **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.*

f) **If operating a power tool in a damp location is unavoidable, use a ground fault circuit interrupter (GFCI) protected supply.** *Use of a GFCI reduces the risk of electric shock.*

3) PERSONAL SAFETY

- a) **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.*
- b) **Use personal protective equipment. Always wear eye protection.** *Protective equipment such as dust mask, nonskid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.*
- c) **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 energizing power tools that have the switch on invites accidents.*
- d) **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.*
- e) **Do not overreach. Keep proper footing and balance at all times.** *This enables better control of the power tool in unexpected situations.*
- f) **Dress properly. Do not wear loose clothing or jewelry. Keep your hair, clothing and gloves away from moving parts.** *Loose clothes, jewelry or long hair can be caught in moving parts.*
- g) **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.*

4) POWER TOOL USE AND CARE

- a) **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.*

- b) **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.*
- c) **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.*
- d) **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.*
- e) **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.*
- f) **Keep cutting tools sharp and clean.** *Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.*
- g) **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.*

5) BATTERY TOOL USE AND CARE

- a) **Recharge only with the charger specified by the manufacturer.** *A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.*
- b) **Use power tools only with specifically designated battery packs.** *Use of any other battery packs may create a risk of injury and fire.*
- c) **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 burns or a fire.*
- d) **Under abusive conditions, liquid may be ejected from the battery, avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help.** *Liquid ejected from the battery may*

cause irritation or burns.

6) SERVICE

- a) **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.*

SPECIFIC SAFETY RULES

⚠ WARNING: WHEN USING ELECTRIC APPLIANCES, BASIC PRECAUTIONS SHOULD ALWAYS BE FOLLOWED, INCLUDING THE FOLLOWING:

- **READ ALL THE INSTRUCTIONS BEFORE USING THE APPLIANCE.**
- To reduce the risk of injury, close supervision is necessary when an appliance is used near children.
- Only use attachments recommended or sold by the manufacturer.
- To reduce the risk of electrical shock, do not put light in water or other liquid. Do not place or store appliance where it can fall or be pulled into a tub or sink.
- Use only the charger supplied by the manufacturer to recharge.
- During or immediately after use, don't lay light flat on lens surface.
- Replace broken bulb in a well ventilated area.
- Don't touch lens surface when bulb is lit or immediately after use.
- Handle light with care around any flammable surface.
- Do not expose light or charger to wet or damp areas. Do not expose light or charger to rain or snow.
- Do not wash light or charger with water or allow water to get inside light or charger.
- While light is in use, do not cover with cloth or other flammable materials due to increased risk of fire.
- Do not operate without lens cover assembly attached.
- For household use only.

⚠ WARNING: Burn hazard. *Do not operate flashlight or charger near flammable liquids or in gaseous or explosive atmospheres. Internal sparks may ignite fumes causing personal injury.*

⚠ WARNING: The lens gets very hot during use. *To reduce the risk of burns, do not touch hot lens. To reduce the risk of fire, keep away from combustible materials while in operation.*

⚠ CAUTION: When not in use, place tool on its side on a stable surface where it will not cause a tripping or falling hazard. *Some tools with large battery packs will stand upright on the battery pack but may be easily knocked over.*

SYMBOLS

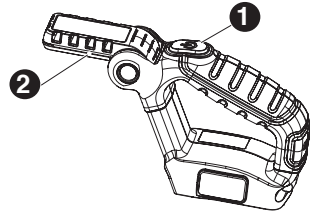
The label on your tool may include the following symbols. The symbols and their definitions are as follows:

- V..... volts
- A..... amperes
- Hz..... hertz
- W..... watts
- min minutes
- ~ or AC..... alternating current
- or DC... direct current
- n_o no load speed
- Ⓛ..... Class I Construction

- (grounded)
- Ⓛ..... earthing terminal
- ⚠..... safety alert symbol
- Ⓛ..... Class II Construction (double insulated)
- .../min or rpm... revolutions or reciprocation per minute
- 👤..... Read instruction manual before use
- 👤..... Use proper respiratory protection
- 👁..... Use proper eye protection
- 👂..... Use proper hearing protection

FUNCTIONAL DESCRIPTION

1. On/Off button
2. Pivoting 12 LED light housing



These products use the batteries and chargers listed in the chart below.

Description	Catalog #
20v Max* Lithium-Ion Battery:	LBXR20
20v Max* Type 1 22wh Lithium-Ion Battery:	LB20
20v Max* Lithium-Ion Battery Charger:	LCS20
Lithium 2 Amp Fast Charger:	L2AFC
Lithium 2 Amp Fast Charger:	L2AFCBST
20v Max* Lithium-Ion Battery Charger:	LCS1620

IMPORTANT SAFETY INSTRUCTIONS FOR BATTERY CHARGERS

SAVE THESE INSTRUCTIONS: This manual contains important safety instructions for battery chargers.

- Before using charger, read all instructions and cautionary markings on charger, battery pack, and product using battery pack.

⚠ **WARNING: Shock hazard.** Do not allow any liquid to get inside charger.

⚠ **CAUTION: Burn hazard.** To reduce the risk of injury, charge only designated BLACK+DECKER batteries. Other types of batteries may burst causing personal injury and damage.

⚠ **CAUTION:** Under certain conditions, with the charger plugged in to the power supply, the charger can be shorted by foreign material. Foreign materials of a conductive nature such as, but not limited to, steel wool, aluminum foil, or any buildup of metallic particles should be kept away from charger cavities. Always unplug the

charger from the power supply when there is no battery pack in the cavity. Unplug charger before attempting to clean.

- **DO NOT attempt to charge the battery pack with any chargers other than the ones in this manual. The charger and battery pack are specifically designed to work together.**
- **These chargers are not intended for any uses other than charging designated BLACK+DECKER rechargeable batteries. Any other uses may result in risk of fire, electric shock or electrocution.**
- **Do not expose charger to rain or snow.**
- **Pull by plug rather than cord when disconnecting charger. This will reduce risk of damage to electric plug and cord.**
- Make sure that cord is located so that it will not be stepped on, tripped over, or otherwise subjected to damage or stress.
- Do not use an extension cord unless it is absolutely necessary. Use of improper extension cord could result in risk of fire, electric shock, or electrocution.
- An extension cord must have adequate wire size (AWG or American Wire Gauge) for safety. 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 individual extension contains at least the minimum wire size.

Minimum Gauge for Cord Sets				
Volts	Total Length of Cord in Feet			
120V	0-25 (0-7,6m)	26-50 (7,6-15,2m)	51-100 (15,2-30,4m)	101-150 (30,4-45,7m)
Ampere Rating				
American Wire Gauge				
More Than 6	Not Than 10	more Than 18	16	14 12

- Do not place any object on top of charger or place the charger on a soft surface that might block the ventilation slots and result in excessive internal heat. Place the charger in a position away from any heat source. *The charger is ventilated through slots in the top and the bottom of the housing.*
- Do not mount charger on wall or permanently affix charger to any surface. *The charger is intended to use on a flat, stable surface (i.e., table top, bench top).*
- Do not operate charger with damaged cord or plug — have them replaced immediately.
- Do not operate charger if it has received a sharp blow, been dropped, or otherwise damaged in any way. *Take it to an authorized service center.*
- Do not disassemble charger; take it to an authorized service center when service or repair is required. *Incorrect reassembly may result in a risk of electric shock, electrocution or fire.*
- Disconnect the charger from the outlet before attempting any cleaning. *This will reduce the risk of electric shock. Removing the battery pack will not reduce this risk.*
- NEVER attempt to connect 2 chargers together.
- The charger is designed to operate on standard household electrical power (120 Volts). Do not attempt to use it on any other voltage.

SAVE THESE INSTRUCTIONS

IMPORTANT SAFETY INSTRUCTION FOR BATTERY PACKS

⚠ WARNING: For safe operation, read this manual and manuals originally supplied with tool before using the charger.

The battery pack is not fully charged out of the carton. Before using the battery pack and charger, read the safety instructions below. Then follow charging procedures outlined.

READ ALL INSTRUCTIONS

- Do not incinerate the battery pack even if it is severely damaged or is completely worn out. *The battery pack can explode in a fire. Toxic fumes and materials are created when battery packs are burned.*
- Do not charge or use battery in explosive atmospheres, such as in the presence

- of flammable liquids, gases or dust. *Inserting or removing the battery from the charger may ignite the dust or fumes.*
- If battery contents come into contact with the skin, immediately wash area with mild soap and water. *If battery liquid gets into the eye, rinse water over the open eye for 15 minutes or until irritation ceases. If medical attention is needed, the battery electrolyte for Lithium-Ion batteries is composed of a mixture of liquid organic carbonates and lithium salts.*
- Contents of opened battery cells may cause respiratory irritation. *Provide fresh air. If symptoms persist, seek medical attention.*

⚠ WARNING: Burn hazard. Battery liquid may be flammable if exposed to spark or flame.

- Charge the battery packs only in **BLACK+DECKER** chargers.
- DO NOT splash or immerse in water or other liquids. *This may cause premature cell failure.*
- Do not store or use the tool and battery pack in locations where the temperature may reach or exceed 105°F (40°C) (such as outside sheds or metal buildings in summer).

⚠ WARNING: Never attempt to open the battery pack for any reason. If battery pack case is cracked or damaged, do not insert into charger. Do not crush, drop or damage battery pack. Do not use a battery pack or charger that has received a sharp blow, been dropped, run over or damaged in any way (i.e., pierced with a nail, hit with a hammer, stepped on). Damaged battery packs should be returned to service center for recycling.

⚠ WARNING: Fire hazard. 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. Transporting batteries can possibly cause fires if the battery terminals inadvertently come in contact with conductive materials such as keys, coins, hand tools and the like. The US Department of Transportation Hazardous Material Regulations (HMR) actually prohibit transporting batteries in commerce or on airplanes (i.e., packed in suitcases and carry-on luggage) UNLESS they are properly protected from short circuits. So when transporting individual batteries, make sure that the battery terminals are protected and well insulated from materials that could contact them and cause a short circuit. NOTE: Lithium-Ion batteries should not be put in checked baggage.

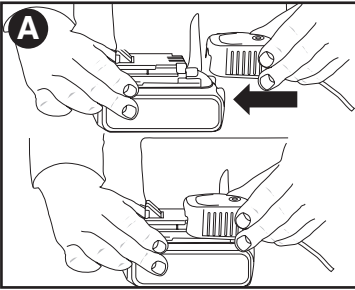
STORAGE RECOMMENDATIONS

1. The best storage place is one that is cool and dry away from direct sunlight and excess heat or cold.
2. Long storage will not harm the battery pack or charger.

CHARGING PROCEDURE

BLACK+DECKER chargers are designed to charge BLACK+DECKER battery packs in 3-4 hours depending on the pack being charged.

1. Plug the charger into an appropriate outlet before inserting the battery pack.
2. Insert the battery pack into the charger as shown in **figure A**.
3. The green LED will flash indicating that the battery is being charged.
4. The completion of charge is indicated by the green LED remaining on continuously. The pack is fully charged and may be used at this time or left on the charger.



LEAVING THE BATTERY IN THE CHARGER

The charger and battery pack can be left connected with the green LED glowing indefinitely. The charger will keep the battery pack fresh and fully charged.

IMPORTANT CHARGING NOTES

1. Longest life and best performance can be obtained if the battery pack is charged when the air temperature is between 65°F and 75°F (18°- 24°C). DO NOT charge the battery pack in an air temperature below 40°F (4.5°C), or above 105°F (40.5°C). This is important and will prevent serious damage to the battery pack.
2. The charger and battery pack may become warm to touch while charging. This is a normal condition, and does not indicate a problem. To facilitate the cooling of the battery pack after use, avoid placing the charger or battery pack in a warm environment such as in a metal shed, or an uninsulated trailer.
3. If the battery pack does not charge properly:
 - a. Check current at receptacle by plugging in a lamp or other appliance
 - b. Check to see if receptacle is connected to a light switch which turns power off when you turn out the lights.
 - c. Move charger and battery pack to a

location where the surrounding air temperature is approximately 65°F - 75°F (18°- 24°C).

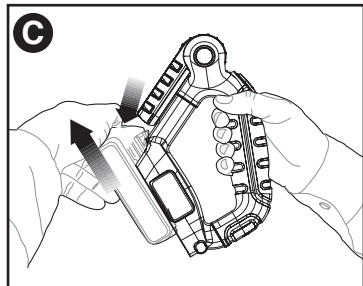
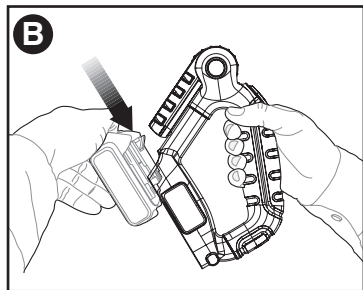
- d. If charging problems persist, take the tool, battery pack and charger to your local service center.
4. The battery pack should be recharged when it fails to produce sufficient power on jobs which were easily done previously. **DO NOT CONTINUE** to use under these conditions. Follow the charging procedure. You may also charge a partially used pack whenever you desire with no adverse affect on the battery pack.
 5. Foreign materials of a conductive nature such as, but not limited to, steel wool, aluminum foil, or any buildup of metallic particles should be kept away from charger cavities. Always unplug the charger from the power supply when there is no battery pack in the cavity. Unplug charger before attempting to clean.
 6. Do not freeze or immerse charger in water or any other liquid.

⚠ WARNING: Shock hazard. Do not allow any liquid to get inside charger. *Never attempt to open the battery pack for any reason. If the plastic housing of the battery pack breaks or cracks, return to a service center for recycling.*

INSTALLATION AND REMOVAL OF THE BATTERY PACK

TO INSTALL BATTERY PACK: Insert battery pack into the flashlight until an audible click is heard (**Figure B**). Make sure battery pack is fully seated and fully latched into position.

TO REMOVE BATTERY PACK: Depress the battery release button as shown in **Figure C** and pull battery pack out of the flashlight.

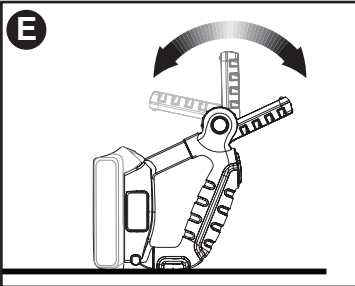
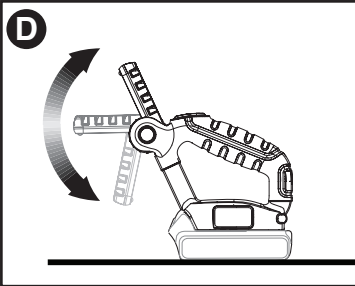


OPERATING INSTRUCTIONS ON/OFF BUTTON

1. TO TURN THE LIGHT ON, press the on/off button (1).
2. TO TURN IT OFF, press the button again.

PIVOTING THE LIGHT HOUSING (FIGURE D)

1. The LED light housing (4) can be pivoted by lifting it to different positions within the 180 degree pivot range.
2. The LED flashlight can also be positioned on the handle and battery ends to provide a greater range of light coverage as shown in **FIGURE E**.



MAINTENANCE

Use only mild soap and damp cloth to clean the tool. Never let any liquid get inside the tool; never immerse any part of the tool into a liquid.

IMPORTANT: To assure product SAFETY and RELIABILITY, repairs, maintenance and adjustment (other than those listed in this manual) should be performed by authorized service centers or other qualified service personnel, always using identical replacement parts.

ACCESSORIES

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

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: 1-800-544-6986.

THE RBRC™ SEAL

The RBRC™ (Rechargeable Battery Recycling Corporation) Seal on the lithium-ion 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 lithium-ion 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 lithium-ion batteries. Help protect our environment and conserve natural resources by returning the tool to an authorized BLACK+DECKER service center 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**.

This Class B digital apparatus complies with Canadian ICES-003. This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

SERVICE INFORMATION

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, call: **1-800-544-6986** or visit www.blackanddecker.com

LIMITED 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.

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 or province to province. Should you have any questions, contact the manager of your nearest BLACK+DECKER Service Center. This product is not intended for commercial use.

FREE WARNING LABEL REPLACEMENT: If your warning labels become illegible or are missing, call **1-800-544-6986** for a free replacement.

LATIN AMERICA: This warranty does not apply to products sold in Latin America. For products sold in Latin America, check country specific warranty information contained in the packaging, call the local company or see the website for warranty information.

TROUBLESHOOTING

<u>PROBLEM</u>	<u>POSSIBLE CAUSE</u>	<u>POSSIBLE SOLUTION</u>
• Light will not illuminate	• Battery pack not installed properly.	• Check battery pack installation.
	• Battery pack not charged.	• Check battery pack charging requirements.
• Battery pack will not charge.	• Battery pack not inserted into charger.	• Insert battery pack into charger until LED illuminates.
	• Charger not plugged in.	• Plug charger into a working outlet. Refer to "Important Charging Notes" for more details.
	• Surrounding air temperature too hot or too cold.	• Move charger and battery pack to a surrounding air temperature of above 40 degrees F (4,5°C) or below 105 degrees F (+40,5°C).
• Unit shuts off abruptly.	• Battery pack has reached its maximum thermal limit.	• Allow battery pack to cool down.
	• Out of charge. (To maximize the life of the battery pack it is designed to shutoff abruptly when the charge is depleted.)	• Place on charger and allow to charge.

For assistance with your product, visit our website www.blackanddecker.com for the location of the service center nearest you or call the BLACK+DECKER help line at **1-800-544-6986**.

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