



BN Products-USA™

A DIVISION OF BENNER-NAWMAN, INC.

WWW.BNPRODUCTS.COM

BNCE-45-24V Cutting Edge Saw™

Customer Service: (800) 992-3833

mail@bnproducts.com

THE CUTTING EDGE SAW™

BNCE SERIES

BNCE-45-24V

24V CORDLESS | 45MM | MULTI-MATERIAL SAW



MODEL BNCE-45-24V SN# _____

*Keep this booklet and enter your tool serial number
in the space provided above.*

BN Products-USA™

3450 N. Sabin Brown Road

Wickenburg, AZ 85390

(800) 992-3833 | www.BNProducts.com

OPERATOR & INSTRUCTION MANUAL

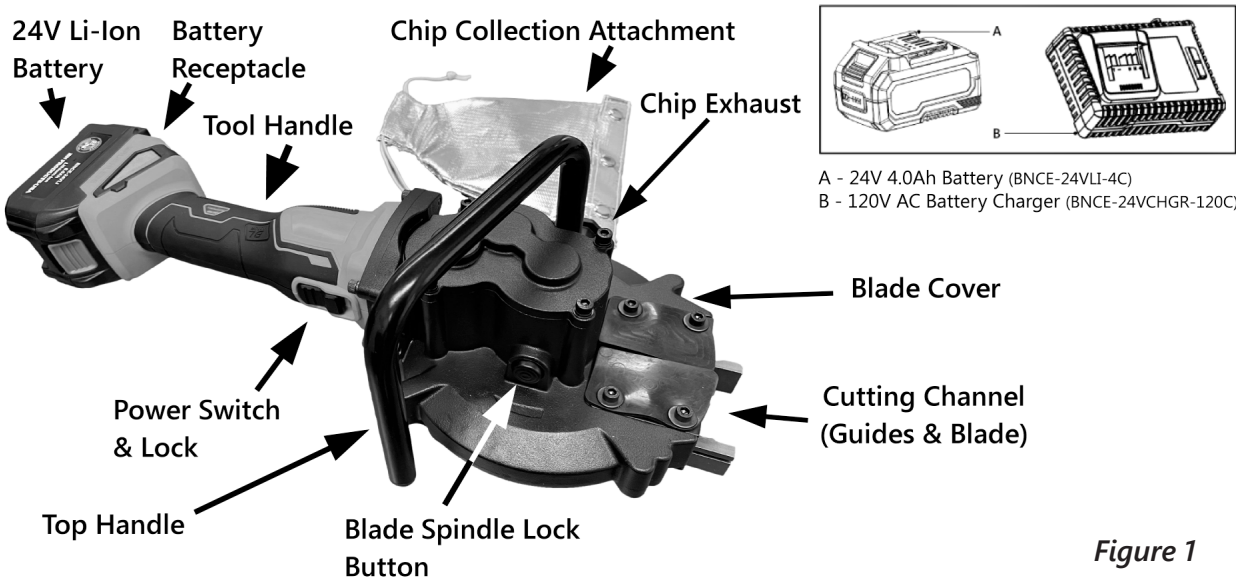
OPERATOR & INSTRUCTION MANUAL

Please read this manual before operating this tool.

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BNCE-45-24V EXTERNAL PARTS DIAGRAM



BNCE-45-24V TOOL – SPECIFICATIONS

Voltage/Amperage	24V / Brushless Motor
Watts	1100W
Blade (2 ea.)	6.5" (165 mm) Tungsten Carbide Tipped
No Load RPM	1200
Depth of Cut	1-7/8" (47.6 mm)
Length x Width x Height	19" x 8" x 7"
Net Tool Weight	10.3 lbs. (4.7 kg)
Accessories Included:	(1) Protective case
	(2) RB-BNCE-45 standard replacement blades
	(1) Chip collection attachment
	(2) 24V batteries with (1) charger

Purpose of this Manual

This manual is intended to provide users with correct knowledge and the procedures for operation, maintenance and inspection of the BNCE-45-24V Cutting Edge Saw™. This tool is used to cut rebar, strut, all-thread rod, pipe, tubing, and conduit. Improper use of the tool may lead to a serious accident. Therefore, always read this instruction manual before using the tool to familiarize yourself with its correct usage, operating method, and warnings.

Safety Instruction & General Guidelines



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

- PLEASE SAVE THESE INSTRUCTIONS -

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.

Electrical Safety

- This power tool is a cordless battery-operated tool that requires a 24V Li-Ion battery, and a battery charger that plugs into an 120V electrical outlet. Charger plugs must match the outlet receptacle. Never modify the plug in any way. Do not use any adapter plugs with grounded power tools or products. Intended plugs and matching outlets will reduce risk of electric shock.
- Avoid body contact with 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 use the battery for any purpose that it was not intended for. Never use the cord for carrying, pulling or unplugging the charger. Keep charger away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock. Replace damaged cords.
- When operating a battery charger outdoors, use an extension cord suitable for outdoor use. Use of a cord suitable for outdoor use reduces the risk of electric shock or damage to the battery or charger
- If operating a power tool in a damp location is unavoidable, use a ground fault circuit interrupter (GFCI) protected supply for battery charging. Use of an GFCI reduces the risk of electric shock.

Personal Safety

- Always wear eye protection. Care must be taken to prevent chips from hitting other workers in the same area.
- 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.
- 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.
- Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool. Remove any adjusting key or wrench before turning the power tool on.
- Do not overreach. Keep proper footing and balance at all times. 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.

- 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.

Power Tool Use and Care

- Power tools are dangerous in the hands of untrained users.
- Do not force the saw into cutting material. Use the correct power tool for your application.
- Do not use the power tool if the switch does not turn it on and off.
- 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.
- 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.
- Maintenance: Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the saw operation prior to each use. If damaged, have the power tool repaired before use.
- 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 saw, accessories and blades, 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.

Service

Have your Cutting Edge Saw™ serviced only by a qualified repair person using only identical replacement parts. This will ensure that the safety of the the saw is maintained.

Contents of the Cutting Edge Saw Package

Upon purchasing the Cutting Edge Saw™, open the carrying case and check the contents for the following:

BNCE-45-24V Package

1. BNCE-45-24V Cordless Cutting Edge Saw™ with blade (RB-BNCE-45) mounted : 1 unit
2. Handle and chip collector attachment: 1 unit
3. Allen Wrenches for Blade Removal and Installation: 1 unit
4. Additional RB-BNCE-45 saw blade: 1 unit
5. Operation Manual: 1 copy
6. Replacement set of carbon brushes
7. Battery Charger
8. Two (2) 24V Li-Ion Batteries

If any contents are missing or damaged, please do not return this packaged unit to the distributor, please call BN Products-USA™ Customer Service department: (800) 992-3833.

Intended Use of the BNCE-45-24V Saw

This section describes the functions, applications, service environment and other aspects of the Cutting Edge Saw. The Cutting Edge Saw is a power tool developed for fast and efficient cutting of various ferrous and non-ferrous materials. This multipurpose tool can be used by a variety of contractors however the primary design was for flush cutting or free cutting reinforcing bars, coil rod and all-threaded rod used in construction.

The BNCE-45 Cutting Edge Saw™ is designed for cutting:

- Grade 60 rebar (reinforcing bars), up to #11 (1-1/2")
- 1-3/4" copper water pipe, tubing, conduit, square steel tubing and bar
- 1-3/4" All-threaded or Coil rod
- 1-5/8" Strut

Battery and Charger

The cordless Cutting Edge Saw™ includes two 24V lithium-ion batteries and a 120V AC battery charger. Review Figure A to familiarize yourself with the battery hardware and components of the battery and charger.

Each battery ships with a very small charge. It is necessary to charge the battery fully before first-time use; It is not necessary to fully discharge the 24V battery prior to charging.

Charger Preparation

- Place the battery on a dry surface, make sure the ambient temperature is not excessively cold or hot (50° to 104° F is recommended); make sure the battery is cool, if it has recently been used in a tool.
- Always examine the battery for damage. Do not charge a cracked, open, or mis-shaped battery.
- Do not charge a battery not intended for the charger; See Figure A-1 for approved battery model numbers.
- The battery pack terminals are designed to fit the receptacle on the charger. If the battery connection does not fit the charger, do not insert the battery.

1 - Battery Docking Bay

2 - Charger Terminals

3 - Air Vents

BNCE-24VCHGR-120C
Battery Charger

4 - Release Button (Battery)

5 - Battery Terminals

6 - Charger Gauge Button

7 - Charge Gauge

8 - LED Charge Indicators
(Charger)

BNCE-24VLI Series
24V Battery Pack

Figure A

The BNCE-24VCHGR-120C Battery Charger is designed to charge the following BN Products-USA™ batteries:

BNCE-24VLI

BNCE-24VLI-4C

BNCE-24VLI-4

Figure A-1

Battery Charger Operation

- Plug the charger into a grounded, 120V AC, 60 Hz outlet.
- Slide the battery pack onto the the charger, fitting the battery terminal contact into the charger terminal receptacle.
- The charge includes in-progress charging indicators on the charger unit (*See Figure B, page 6*)
- The red LED will light continually on the charger; the green LED will flash on the charger when the battery is charging; when fully charged, the battery LED indicators will display as follows:
 - The red LED will turn off
 - The green LED will light continually (without flashing)
- When fully charged, unplug the battery charger, then press the Release button on the battery to remove it from charging terminal on the charger.
- Allow the battery pack to cool before inserting and using the battery with a power tool.

Notes: Battery Charger Operation

-If the battery pack is hot or cold before charging, the charge indicators may both flash, indicating that the charger is waiting for temperature to normalize before charging. Charging will start automatically once the battery reaches an appropriate temperature for safe charging.

-While charging, the battery and charger may become warm to the touch. This is considered normal, and does not indicate a problem with the battery or charger.

Charging Indicators: BNCE-24VCHGR-120C Battery Charger





	CHARGING Red Constant ————— Green Flashing — — — — —
	CHARGED Red Off ————— Green Constant —————
	HOT/COLD DELAY Red Flashing — — — — — Green Flashing — — — — —
	PROBLEM PACK OR CHARGER Red Flashing — — — — — Green Off —————

Figure B



IMPORTANT!

The Battery Charger included in this product is intended only for charging the accompanying Battery product.

The Charger should never be used to charge battery products or devices from another manufacturer.

Do not attempt to charge a battery that is hot to the touch from being exposed to the sun or from use for an extended period. Allow time for the battery to cool prior to charging.

If a battery has been exposed to very cold or freezing temperatures, allow for the battery to warm to within operating range and is free of condensation or moisture prior to charging.

Installation of Battery for the Cutting Edge Saw™

Make sure that the battery guides are free of debris or packaging materials before attempting to install the battery.

- To install the battery tool, align the tabs on the battery with the guides on the bottom of the tool (Figure C)
- Slide the the battery unit into place in the direction of arrow as shown in Figure C, until the battery clicks into place.

– Inserting battery

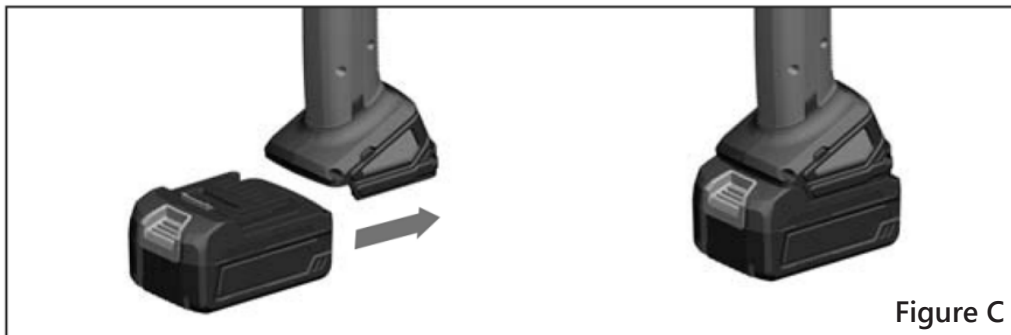


Figure C

– Removing battery

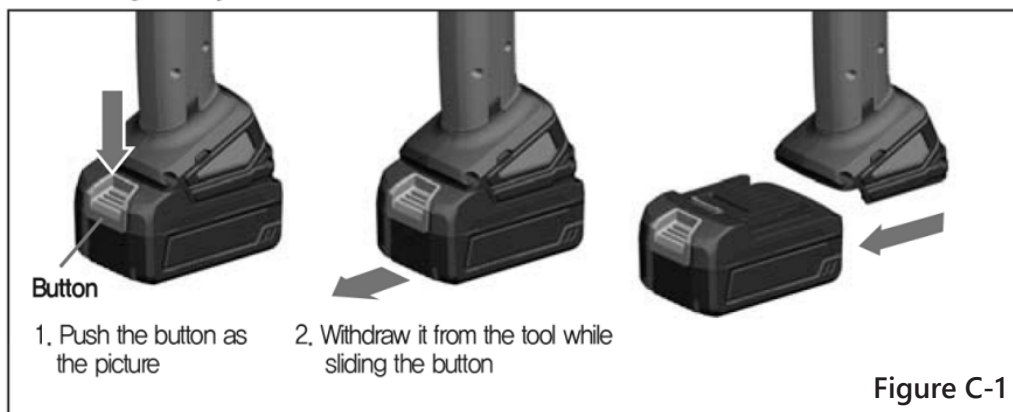


Figure C-1

Battery Removal from the Cutting Edge Saw™

- Press Battery Release Button (See Figure C-1)
- While holding the button in, slide the battery in the direction of the arrow in Figure C-1
- Fully remove the battery from the battery receptacle on the tool

Battery and Tool Charge (Battery Life) Indicators (Figure D)

- Batteries included with the tool include a battery life LED indicator on the battery unit, located directly below the release button on the rear of the battery. You may view the estimated charge remaining by depressing the button to the left of four (4) LED lights on the battery housing. The LED indicator will light for several seconds as shown, based on the current charge - See Figure D-1.
- The cordless Cutting Edge Saw™ also includes a battery life sensor on the battery receptacle on the tool, just above the location of the battery connection. This indicator is slightly different than the LED display on the battery unit. See Figure D-2 to view the scale of the battery life indicator on the Cutting Edge Saw™.

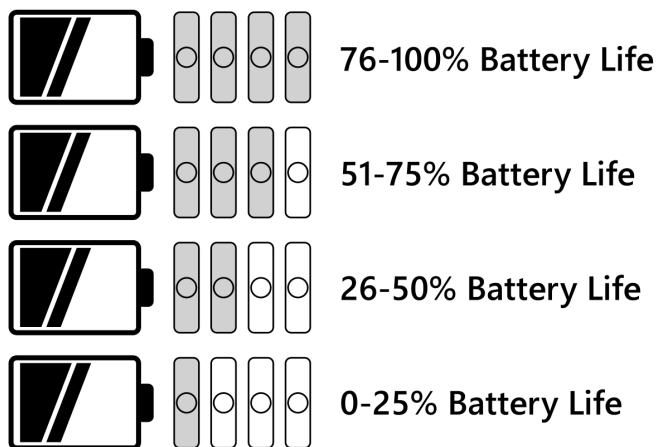


Figure D-1: BNCE-24VLI-4C battery life indicator

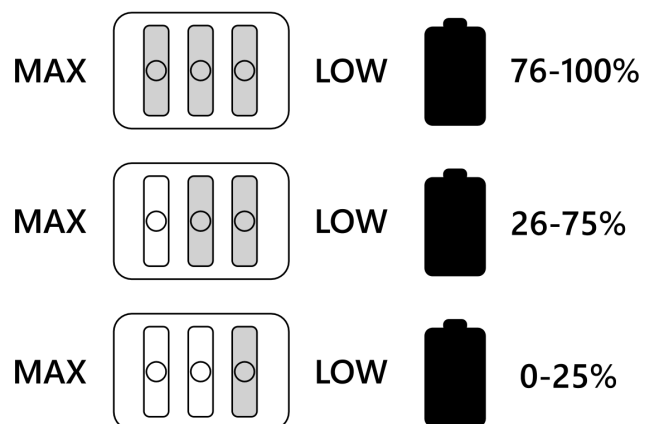


Figure D-2: Cutting Edge Saw™ battery life indicator

Figure D - Battery and Tool Charge Indicators

Battery and Battery Charger Maintenance and Servicing

- Always inspect the battery charger and batteries prior to charging or installation in a power tool; this should include loose hardware, misalignment of parts or connections, cracked or broken parts, exposed wiring, or any condition that may affect safe operation of the battery charger, battery, or connected power tools.
- After each use, wipe external surfaces of the charger and battery with a clean, dry cloth
- Lithium-Ion batteries must be recycled or disposed of properly when they are no longer operable. Never short, incinerate, or open a battery housing.
- When not in use, disconnect batteries from the charger and any power tool. Store batteries, chargers, and tools in a dry, indoor place that is not subjected to extreme heat or cold conditions. Always store chargers and batteries away from metal or conductive objects to prevent the possibility of short circuit damage.
- Do not open the battery charger or attempt to service internal parts. Contact BN Products-USA™ customer service for assistance for troubleshooting battery or charger problems.
- Keep out of the reach of children at all times.

Using the BNCE-45-24V Cutting Edge Saw™

To use the tool to its fullest performance, the Cutting Edge Saw™ should be clean and stored in its proper case and free of excessive heat or cold.

Before using this product, it is extremely important to be fully familiar with the tool and it's controls, the cutting blades, and storage procedures upon completion of work.

This power tool is a multipurpose saw with an enclosed guard.

Standard Blade (Best for Ferrous Metals)

The BNCE-45 is supplied with two (2) 6.5" (165 mm) diameter blades (32 teeth, mounts to Cutting Edge Saw spindle). The no-load blade RPM is 1200 RPM.

Operating Conditions

Working Environment:

Before using the Cutting Edge Saw, be aware of weather conditions.

Do not use in the rain or snow.



! DANGER: The Cutting Edge Saw is not a waterproof power tool. If it becomes wet, the power source system may become faulty or the operator is at risk for electric shock.

When it is raining or snowing, never operate this saw outdoors, on top of buildings or under roofs with rain or snow exposure. Do not use where water accumulates or is prone to splashing.



! DANGER: Electric Shock Hazard. Ignoring this warning may lead to death or serious injury. When raining or snowing, do not operate outdoors or indoors where rain or snow enters freely or in extreme temperatures.

Do not use under high temperature, humidity or extremely cold temperature conditions.

This tool is designed for use under an ambient

temperature of 100°F (37° C). Operation at higher temperature may cause the tool motor to overheat. Operation in extreme temperature or high humidity may cause the tool to fail due to condensation buildup inside the tool housing.

Do not operate the Cutting Edge Saw in temperatures below freezing (32° F / 0° C).

Inspect the State of Your Work Site

Before using the tool, always determine that:

- The worksite is free of foreign objects, debris, water, ice, snow, powered electrical cables, and excessive dust
- The floor is free of obstructions
- There is adequate ventilation for the immediate area
- The worker is equipped with proper PPE and clothing, including but not limited to PPE, enclosed footwear, and gloves.

Always follow the operation instructions; avoid hazardous conditions and scenarios.

Remove Hazardous Substances

This tool is an electric/power tool. A spark can cause an explosion or a fire if operated near gas cylinders, paint thinner, or flammable materials, including flammable gasses. Do not use near or expose the tool to hazardous or flammable materials.



! DANGER May cause an explosion or a fire. Ignoring this warning may cause death or serious injury. Never use the tool near flammable gas or flammable materials or liquids.

Operating Instructions

- Comfortably grip the tool using the top-side and rear handles.
- Locate power switch on the right side of the saw
- To operate the trigger, depress the trigger lock button on the lower side of the power switch. While holding the lower end of the switch down, slide the switch toward the blade to power the saw on.
- Start the saw before cutting and then apply a light pressure moving forward through the cut.

Cutting Edge Saw™ Routine Maintenance

- Always disconnect the 24V battery from the saw before attempting any maintenance.
- Clean the entire unit occasionally by removing dust, debris and oils.
- Occasionally remove the bottom plate; remove any cutting chips that remain lodged in the area where the cutting blade rotates.
- Remove and inspect the cutting blade for material residue. This should be done after 4-6 hours of use.
- Most material cutting debris will be expelled through the chip exhaust area and into the Cutting Chip Catch Bag. It is recommended that the Cutting Chip Catch bag be emptied when it becomes 2/3 full of cutting debris and materials.

Blade Replacement

The standard blade (RB-BNCE-45) for the BNCE-45 and BNCE-45-24V Cutting Edge Saw™ should be replaced when the blade is dull or visibly worn, or when there is a noticeable decrease in cutting efficiency.

To change the Blade:

- **Unplug the saw before performing any work on the tool blade.**
- Using the smaller Allen key tool, remove the four (4) screws that hold the Blade Cover to the body of the saw. *See Figure 2*
- Remove the cover, being careful to set the four mounting screws and the accompanying locking nuts aside in a safe place.
- Press the blade/spindle lock button to secure the blade spindle (*See Figure 1*). You may need to manually rotate the blade so that the lock button engages and is secured in a locked position.
- When the blade is locked, use the larger Allen key to remove the blade mounting screw and blade locking head at the center of the blade (*Figure 3*). Note: With the blade spindle locked, you will need to rotate the screw in a counter-clockwise direction.
- Make sure that when the blade is removed, that the blade head is free of any metal debris that has not escaped the tool. As needed, clean the

tool to remove any metal chips or particles from the blade head area.

- Install the new blade over the spindle at the center opening. BN Products-USA™ blades will be marked "This Side Up" to ensure that the blade is not installed upside-down. In addition, each blade is printed with a directional arrow (*Figure 3*). This arrow must always point in the same direction as the arrow marked on the top side of the blade cover, as shown in *Figure 4*.
- Replace the blade locking head using the blade mounting screw, using the Allen key to securely tighten the screw in a clockwise direction. **DO NOT OVERTIGHTEN.**
- Replace the blade cover using the four (4) mounting screws, making sure that the locking nuts are still inserted in the threaded hole for each mounting screw. Securely fasten each screw without overtightening.

See Figures 2, 3, and 4 on the next page.

Follow this same procedure when installing a specialty blade, such as the RB-BNCE-45S Strut Cutting Blade (sold separately). Always save the Allen key tools with the saw in a safe place for future use.

Please contact your distributor or call BN Products-USA™ Customer Service at the number above or visit us on the web www.bnproducts.com for more information or assistance with product operating instructions, or essential maintenance.

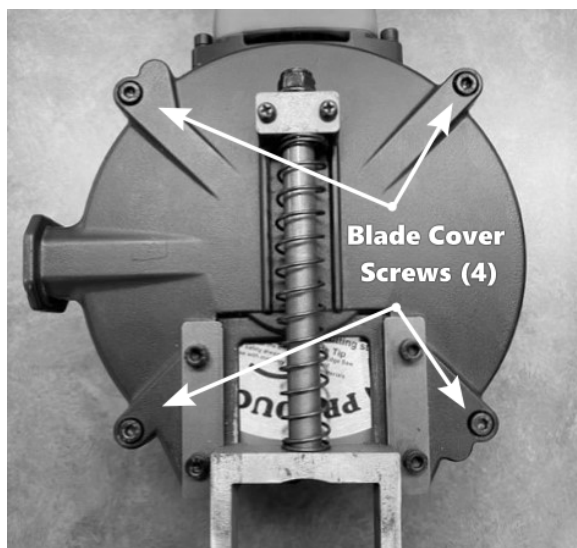


Figure 2 - Blade Cover Fasteners

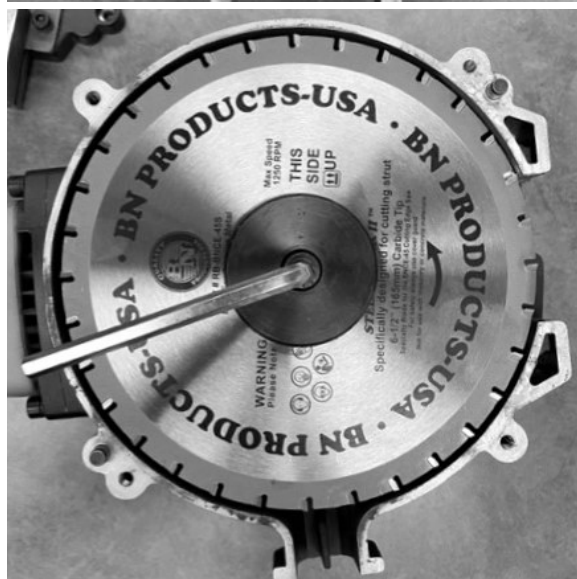


Figure 3 - Blade Spindle / Allen Wrench



Figure 4 - Blade Directional Arrow

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General Precautions

The following describe the general cautions on operating tool. Always observe the cautions stated in each item.

- Do not turn on the operating switch if the tool is pointed toward another individual. Operating the tool by holding it toward anyone may cause injury from contact with the blade.
- Do not use the Cutting Edge Saw for purposes it is not intended, or attempt to cut materials wider than recommended specifications, as doing so may lead to injury or damage to the Cutting Edge Saw™
- Use only replacement saw blades recommended by BN Products-USA™. Recommended blades are designed specifically for the tool, and have been tested for safety and effective use with the Cutting Edge Saw™
- This Product is subject to ongoing enhancement and development. Parts, part numbers, design, and specifications may be changed pertaining to this product at any time, with or without prior notification to end users, distributors, or manufacturer representatives.

ONE-YEAR LIMITED MANUFACTURER WARRANTY

BN Products-USA™ warrants each tool to the original purchaser to be free of defects in materials and workmanship under everyday and appropriate use and service for one year. Use the applicable QR code or web URL below to access our full One-Year Warranty policy and procedure, or to complete a Warranty Service Request for this product.

If you are requesting Warranty Service, it is recommended that you have your original purchase order available to upload or scan using a mobile device. Questions with regard to our One-Year Limited Manufacturer Warranty may be directed to BN Products-USA™ Customer Service at (800) 992-3833.



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