



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

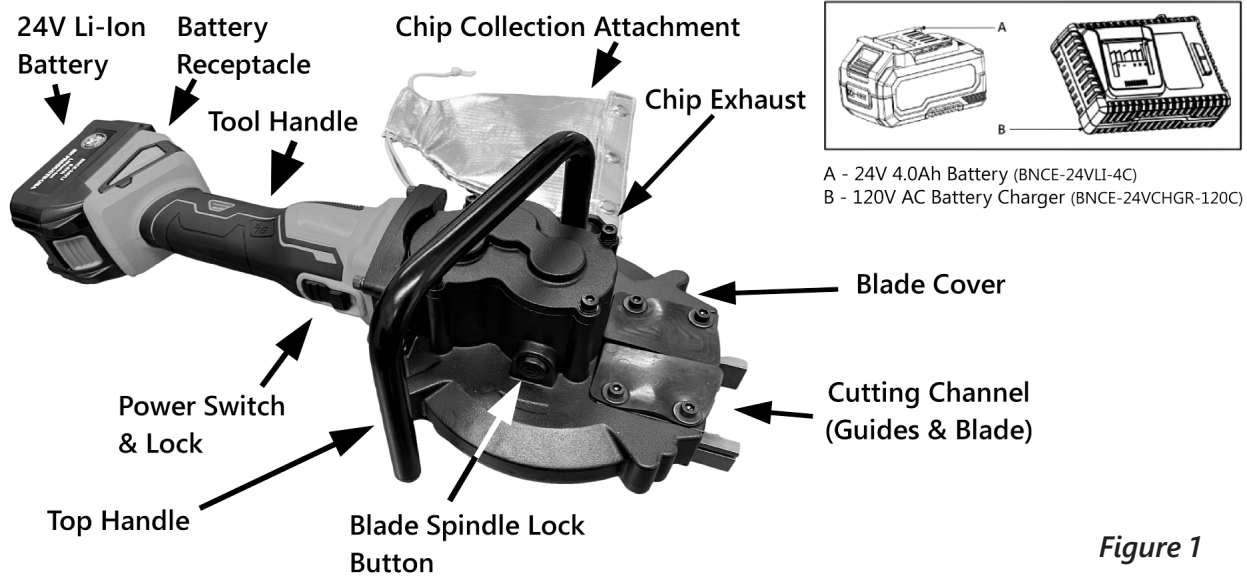


Figure 1

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 Charging

- The battery ships with only a very small charge. It is necessary to charge the battery fully before first-time use.
- Plug the battery charger into a proper AC voltage source. The charging light will start blinking green.
- Insert the battery cartridge into charger.
- When the battery cartridge is inserted, the red charging light will light up to indicate that the battery is actively charging.
- When the battery is charged, the charging light will change from red to green.
- After charging, remove the battery cartridge from charger, and unplug the charger. Store the charger in a cool, dry place away from moisture.

Battery Charge Indicators

- Use the table on Page 6 (Figure B) to determine the battery charging status while inserted into the charger.
- If the battery is not charging (Red/Green lights flashing), and the battery unit is within operating temperature (cf. Figure 5), check the connection of the power cord to the outlet, and make sure that the terminals and connection to the battery are clean (Figure A, below).
- If necessary, contact Customer Service if basic troubleshooting fails to correct problems charging the battery.
- The battery is equipped with the ability to indicate its current charge level. Press the Charge Gauge Button on the front of the battery housing (hold for 1 second; see Figure A, #6, below).
- The LED gauge to the right of the button will display the current charge level of the battery.

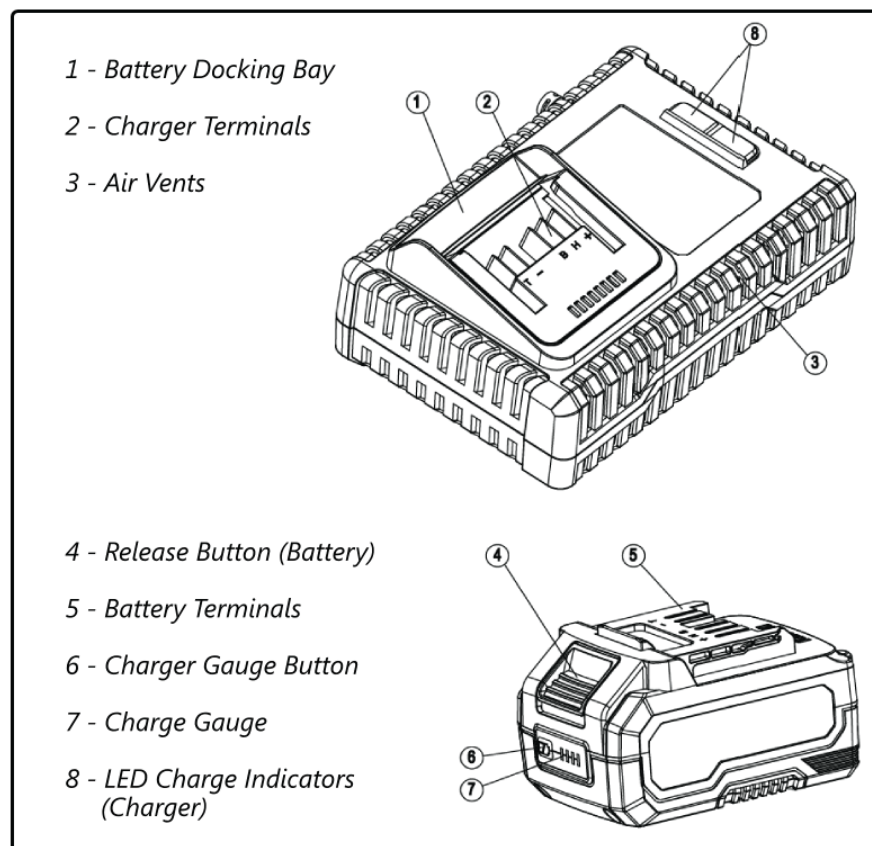


Figure A

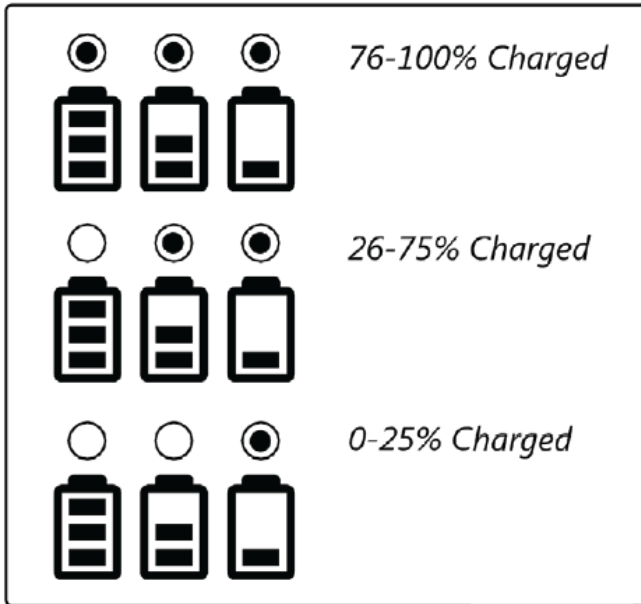


Figure B



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.

Indicators		Meaning	
Standby	▶ Green LED Flashing	▶ Battery Charger is ready	
Charging	▶ Red LED - On	▶ Battery is actively charging	
Finish	▶ Green LED - On	▶ Battery is fully charged	
Battery High Temperature	▶ Red AND Green LED - flashing continually	▶ Battery temperature is outside of operating range (32°F - 113°F / 0°C - 40°C). Charge will automatically start when temperature reaches an acceptable level.	
Battery low voltage		▶ Battery cannot be charged due to low voltage condition, damage to battery, or terminals are dirty (preventing terminal connection)	

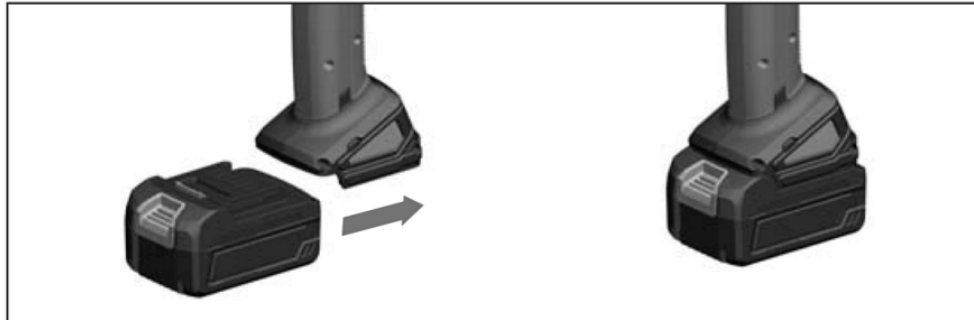
Figure C

Installation and Removal of Battery from 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 into the tool, align the tabs on the battery with the guides on the bottom of the saw (Figure D), and slide the the battery unit into place in the direction of arrow as shown in Figure D, until the battery clicks into place.



– Inserting battery



– Removing battery



Figure D



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.

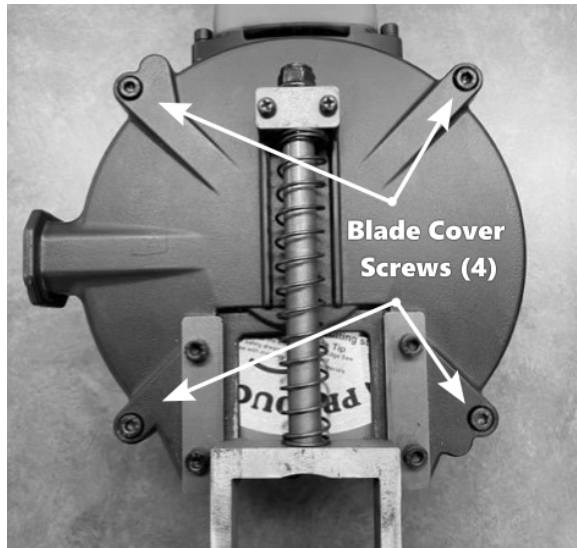


Figure 2 - Blade Cover Fasteners

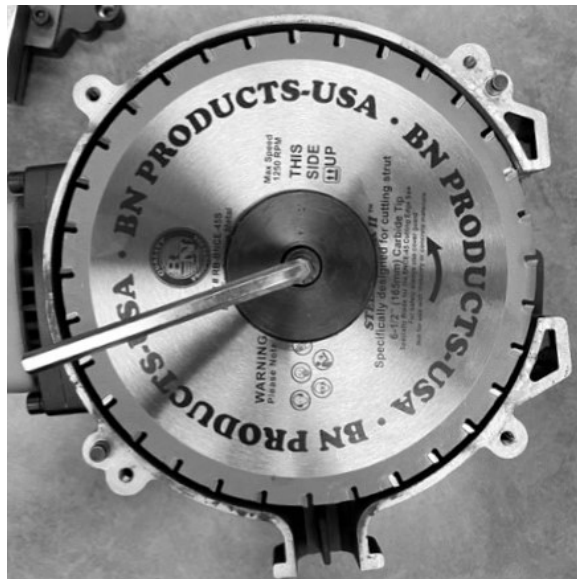


Figure 3 - Blade Spindle / Allen Wrench



Figure 4 - Blade Directional Arrow



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General Precautions

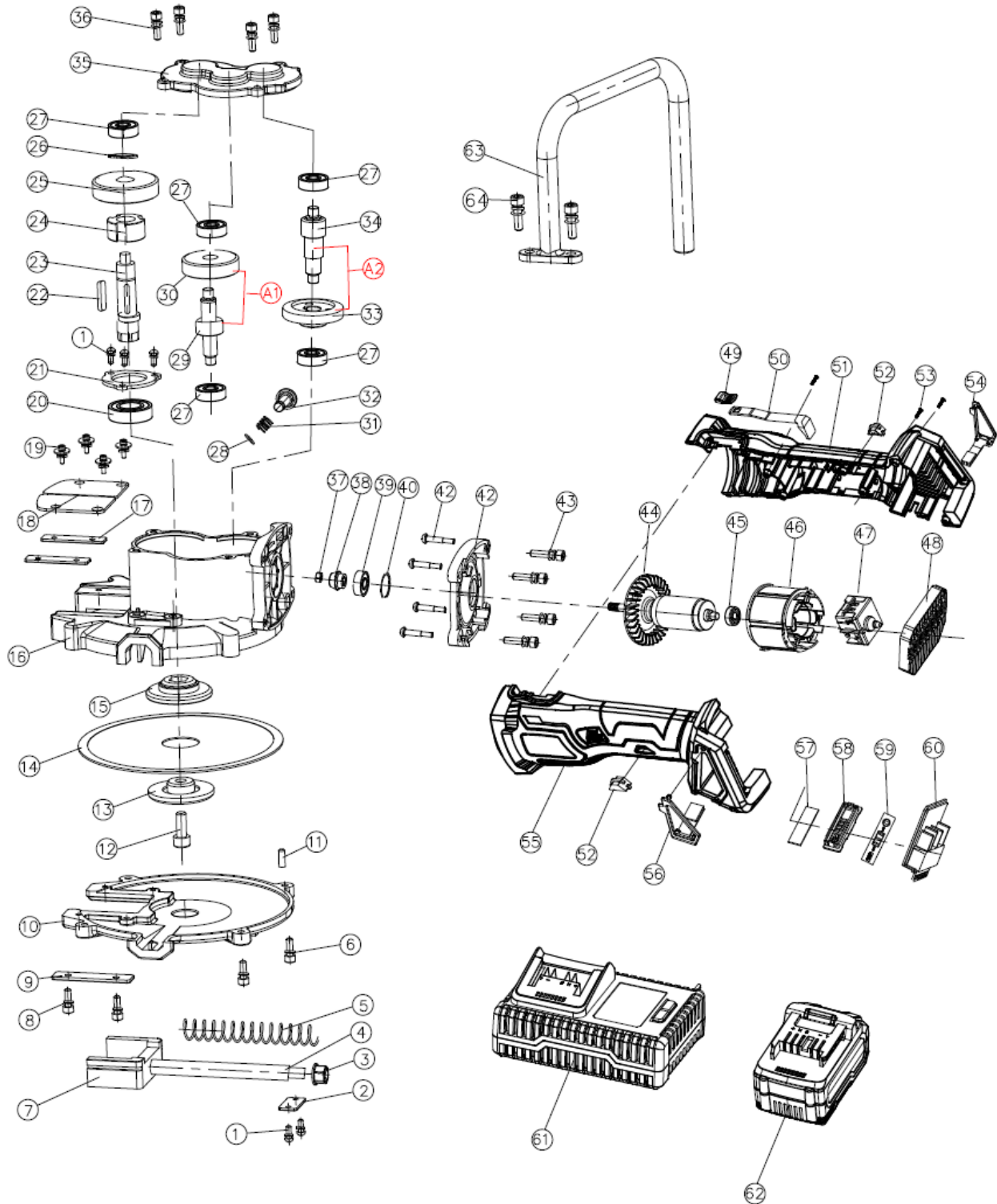
The following describe the general cautions on operating tool. Always observe the cautions stated in each item.

- 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.



Parts Guide

*BNCE-45-24V Exploded View
(Parts Drawing)*



*BNCE-45-24V Cutting Edge Saw™
Parts List*

#	Part #	Description	QTY
1	102560	Screw With Spring Washer M4*12	5
2	102561	Guide Post Plate	1
3	102562	Stop Nut M8	1
4	102563	Guide Post	1
5	102564	Guide Post Spring	1
6	102565	Bolt With Spring Washer M5X16	4
7	102566	Sliding Block	1
8	102567	Bolt With Spring Washer M5X12	4
9	102568	Guide Plate	2
10	102569	Lower Cover Of Gear Box	1
11	102570	Pin A6X16	2
12	102571	Bolt M8x29 (class 12.9)	1
13	102572	Outer Blade Flange	1
14	RB-BNCE-45	Blade	2
15	102573	Inner Blade Flange	1
16	102574	Gear Box	1
17	102575	Stiffener Plate	2
18	102576	Left and Right Rubber Plate	2
19	102577	Bolt With Spring Washer& Big Flat Washer M5X16	4
20	102580	Ball Bearing 6003-2RS	1
21	102581	Bearing plate	1
22	102582	Flat Key-5x5x25	1
23	102583	Spindle	1
24	102584	Stop Sleeve	1
25	102585	No.3 Gear	1
26	102586	Circlips For Shaft -15	1
27	102587	Ball Bearing 628-2Z	5
28	102588	Circlips 6	1
A1	102590	No.2 Gear Assembly	1
31	102591	Spring for Lock Button	1
32	102592	Locking Button	1
A2	102593	No.1 Big Gear	1

#	Part #	Description	QTY
35	102595	Top Cover Of Gear Box Top Cover	1
36	102596	Bolt With Spring Washer&Flat Washer M5X16	4
37	102597	Nut M6	1
38	102632	Pinion	1
39	102633	Ball Bearing 608-2RS	1
40	102634	O-Ring 22*1.6	1
41	102635	Six Flower Shaped Pan Head Tapping ScrewsST3.9X20	4
42	102636	Armature Support A1	1
43	102603	Bolt With Spring Washer&Flat Washer M5X20	4
44	102637	Armature 24V Brushless	1
45	102638	Ball Bearing-696-2RS	1
46	102639	Stator	1
47	102640	Switch	1
48	102641	Controller Board	1
49	102642	Switch Button	1
50	102643	Pole Switch	1
51	102644	Right Housing	1
52	102645	Lampshade	2
53	102646	Six Flower Shaped Pan Head Tapping ScrewsST2.9X14	6
54	102647	Dust Protection-Right	1
55	102648	Left Housing	1
56	102649	Dust Protection-Left	1
57	102650	Battery light PCB	1
58	102651	Battery light Lampshade	1
59	102652	Battery light Label	1
60	102653	Battery pin assembly	1
61	BNCE-24VLI-4C	Battery	2
62	BNCE-24CHGR-120C	Charger	1
63	102629	Front Handle	1
64	102630	Bolt With Spring Washer&Flat Washer M6X16	2



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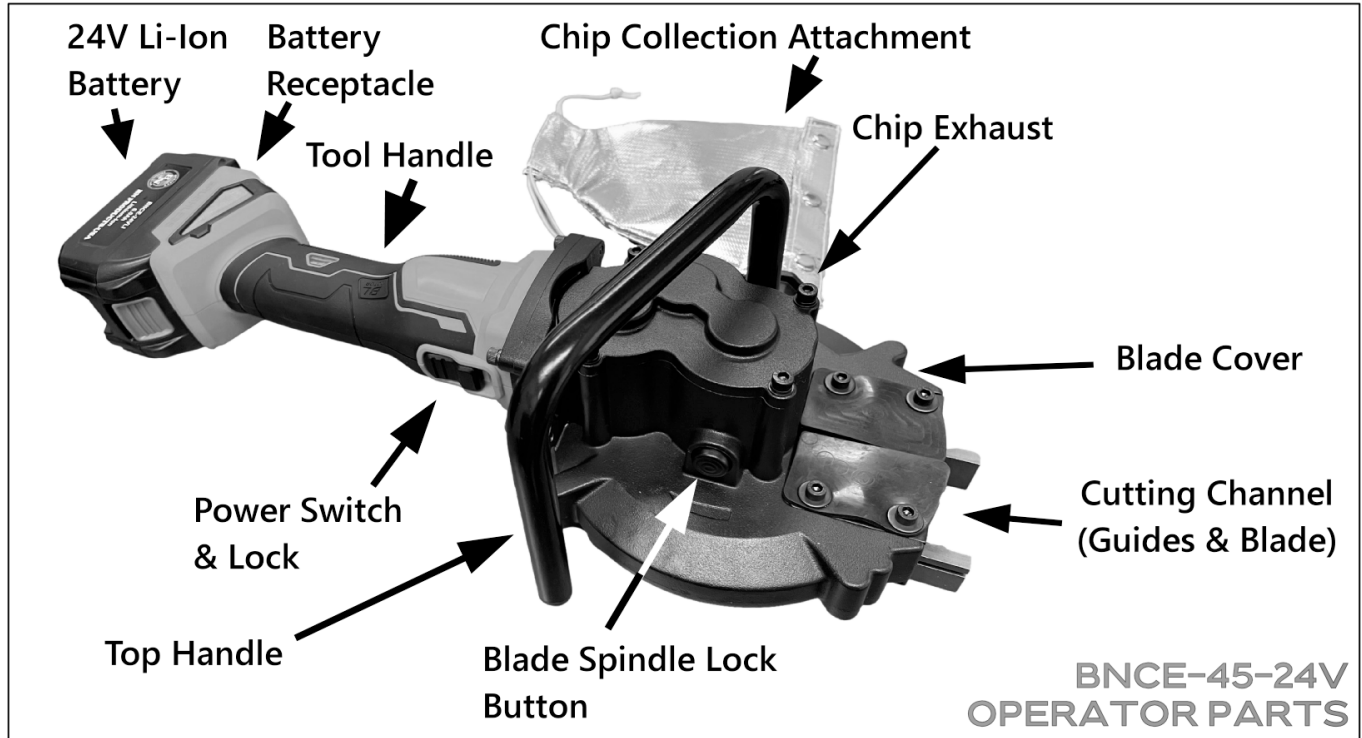
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BNCE-45-24V Cutting Edge Saw™

Customer Service: (800) 992-3833

mail@bnproducts.com

EXTERNAL PARTS DIAGRAM (Enlarged)



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.

SCAN

ONE-YEAR LIMITED WARRANTY

<https://www.bnproducts.com/one-year-product-warranty/>





REQUEST WARRANTY SERVICE ONLINE

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