



BN Products-USA, LLC

3450 Sabin Brown Road • Wickenburg, Arizona 85390
(800) 992-3833 • (928) 684-2813 • www.bnproducts.com

BNCE-20 **The Cutting Edge Saw™**

Operation & Instruction Manual



Model BNCE-20 SN# _____
120Volt Corded Saw

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



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Instruction Manual

Please read this manual before operating this tool.

Operation and Instruction Manual

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Purpose of this manual - This manual is intended to provide users with correct knowledge and the procedures for operation, maintenance and inspection of the tool, a multipurpose flush cutting saw for cutting reinforcing bar, coil rod, all-threaded rod, pipe, tubing, and conduit. Improper use of the tool may possibly lead to a serious accident. Therefore, always read this instruction manual before using the tool to familiarize yourself with its correct usage, operating method, warnings, etc.



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Safety Instruction - General Safety Rules



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

- 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.
- 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.
- Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
- 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. Replace damaged cords.
- 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.
- If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply. Use of an RCD reduces the risk of electric shock.

NOTE The term "residual current device (RCD)" may be replaced by the term "ground fault circuit interrupter (GFCI)" or "earth leakage circuit breaker (ELCB)".

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. A moment of inattention while operating power tools may result in serious personal injury.
- 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.
- 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.
- 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.
- Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
- 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

- 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.
- 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.
- 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



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tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.

- 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 un-trained users.**
- 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.
- 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 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.

Service

- Have your power tool serviced only by a qualified repair person using only identical replacement parts. This will ensure that the safety of the power tool 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:

120 Volt Corded Cutting Edge Saw Package

1. BNCE-20 Corded Cutting Edge Saw with blade mounted : 1 unit
2. Removable Side Handle and chip collector attachment: 1 unit
3. Allen Wrenches for Blade Removal and Installation: 1 unit
4. Additional Saw Blade: 1 unit
5. Operation Manual: 1 copy
6. Extra set of electrical brushes

If anything is missing or damaged please do not return this packaged unit to the distributor, please call the Benner-Nawman customer service department: 800-992-3833 or 928-684-2813

Functions and Applications

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 the construction industry.

Application of the Tool - Actual areas of application the Cutting Edge Saw is used for are as follows:

3/8" to 3/4" or 10 mm to 19 mm grade 60 rebar (reinforcing bars), up to 1/2" I.D pipe, 3/4" O.D. copper water pipe, 3/4" O.D. tubing, 1/2" conduit, 3/4" square steel tubing & bar, and up to 7/8" O.D. all-threaded or coil rod.

Rules of Use and Storage - To use the tool to its fullest performance, the user is required to be fully familiar with the saw itself, the cutting blades, and storage procedures upon completion of work.

Specification

The power tool is a multipurpose saw with an enclosed guard and flush cutting capabilities. The specifications of the main unit are as follows.

Standard Blade: (Best for Ferrous Metals)

Supplied with (2) each 110 mm Blade diameter × 1.6mm thickness, 24 teeth with laser welded flange for mounting to Cutting Edge saw spindle. The maximum blade RPM is 2000.

Operation

Checking and Preparation of Working Environment: Check the following before using the Cutting Edge Saw. Always observe the instructions and prohibited items. Checking of weather conditions, do not use in the rain or snow:



!DANGER: The Cutting Edge is not a waterproof power tool. If it becomes wet, the power source system may become faulty or the operator may get an electric shock. Therefore, when it is raining or snowing, never operate this saw outdoors, on top of buildings or under roofs

where rain or snow enters freely. Do not use where water accumulates or where water splashes.



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Operation Instructions

Adjust the rear handle position to comfortably grip the tool. (The rear handle changes position with the button located on the top of the handle.) Locate the front handle in the mounting hole that provides the best grip. To operate the trigger, depress the trigger lock button (on the side of the tool) and then pull the trigger to start the saw. Start the saw before cutting and then apply a light pressure moving forward through the cut.



! 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 and humidity or extremely cold temperature conditions. The tool is designed for use under an allowable environmental temperature of 0 to 100°F. Operation at higher temperature may cause the tool's main unit to overheat. Operation at high temperature with high humidity may cause the tool to fail due to condensation.

Also, do not operate the Cutting Edge Saw in very cold places or inside refrigerators where the temperature is freezing or below.

Check The State of Your Work Site.

Before using the tool, check whether the state of the work site is as follows. Is the worksite free of foreign objects, debris, water, ice, snow, powered electrical cables, and excessive dust? Is the floor free of obstructions? Is their adequate ventilation? Is the worker properly insulated from the ground. Follow the operation instructions and avoid prohibited items.

Remove Hazardous Substances.

Since the tool is an electric tool, it may spark and cause an explosion or a fire if operated near gas cylinders, thinner, or explosive and other hazardous substances or in a place filled with flammable gas, etc. Therefore, do not use the tool in places where such hazardous substances are present.



! DANGER May cause an explosion or a fire. Ignoring this warning may cause death or serious injury. Never use the tool in places filled with flammable gas or near hazardous substances of high flammability.

Maintenance of the Main Unit

Always unplug the saw from the electric outlet before attempting any maintenance. Clean the entire unit occasionally by removing dust, debris and oils. Occasionally remove the flush cutting bottom plate; then remove any cutting chips that remain lodged in the area the cutting blade rotated.

It is also recommended that the cutting blade be removed and inspect for any materials that did not exit out the chip exhaust area. This should be done after 4-8 hours of use. Most material cutting chips would normally exit out 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 cut material.

RB-BNCE-KNH Blade

The Blade for the BNCE-20 Cutting Edge Saw™ should be replaced when the blade is dull or chipped and a noticeable increase in cutting time has occurred.

To change the Blade, remove the screws that hold the Blade Cover to the Body (4). Remove the cover and unscrew the (4) bolts holding the blade to the Hub. The replacement blades that you purchase have new screws to be used when installing the new blade. Make sure that when you remove the blade you clean out the head of any metal debris that has not escaped the tool.

An optional Steel Mesh blade is available to improve the cutting capability of the BNCE-20 when cutting the following materials. Please see your distributor or call BN Products-USA, LLC (www.bnproducts.com) for more information.

General Operating Cautions

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

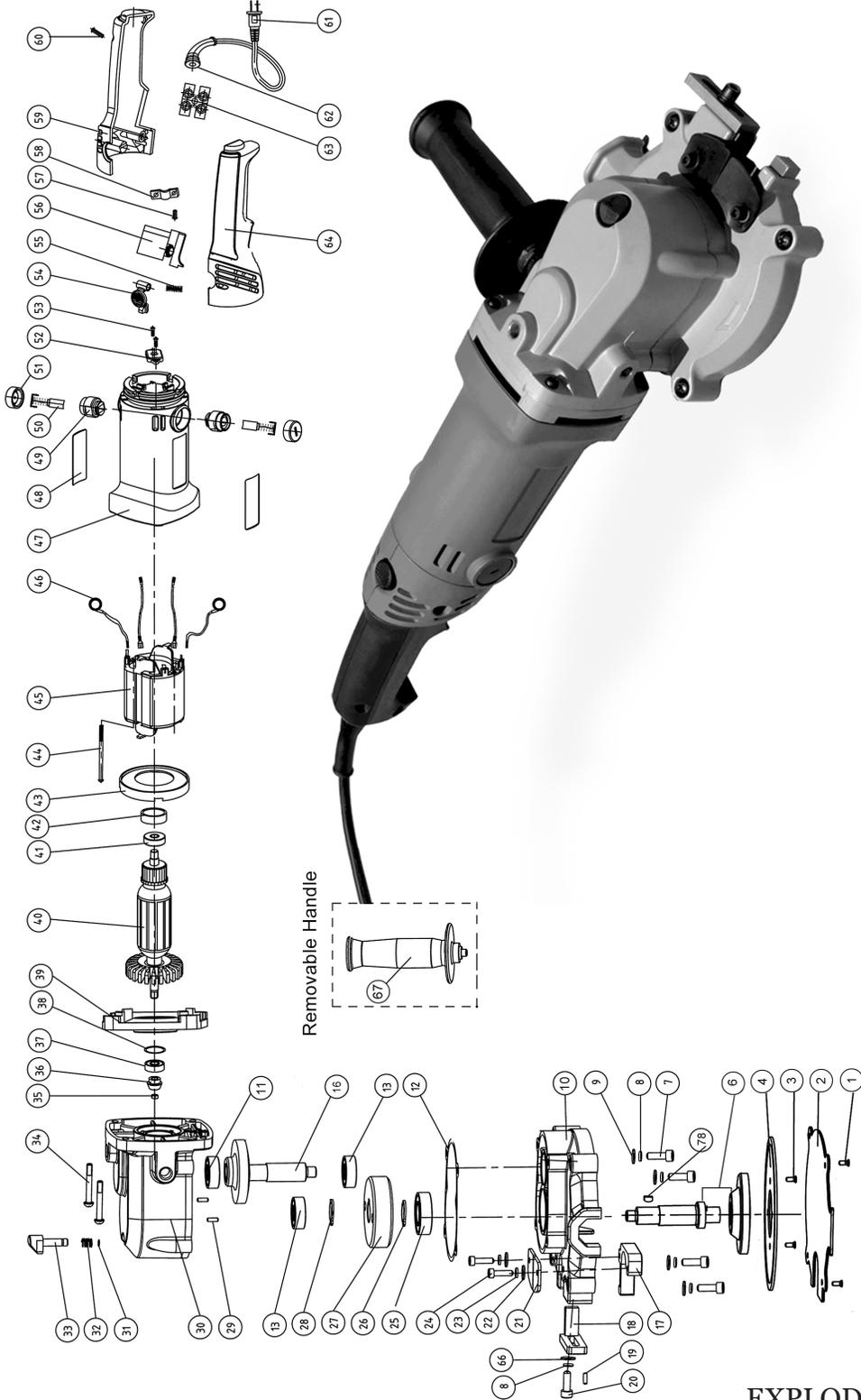
- Do not press the operation switch if the tool is pointed towards anyone. Operating the tool by holding it toward anyone may cause injury from contact with the blade.
- Do not apply the Cutting Edge Saw for purposes it is not intended.
- Do not use the tool for lifting or hammering etc. instead, only use this tool for cutting. Otherwise, the main unit may be broken or damaged, causing injury.



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BNCE-20 Corded Parts Drawing (Updated 2017)



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PARTS LIST

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NO.	Description	Qty	Part #
36	Bevel Pinion	1	BNCEP-36-A
37	Ball Bearing 6002-2Z	1	BNCEP-37
38	O-Ring 25X2	1	BNCEP-38
39	Center Housing Plate	1	BNCEP-39
40	Armature, 120V	1	BNCEP-40-A
41	Ball Bearing 607-2RS	1	BNCEP-41
42	Bearing Bushing	1	BNCEP-42
43	Fan Guide	1	BNCEP-43
44	Phillips Head Tapping Screw ST4.2X70	2	BNCEP-44
45	Stator Coil, 120V	1	BNCEP-45
46	Electrical Connector	2	BNCEP-46
47	Motor Housing	1	BNCEP-47
49	Brush Holder	2	BNCEP-49
50	Carbon Brush Set	2	BNCEP-50
51	Brush Cap	2	BNCEP-51
52	Plate for Inner Wire	1	BNCEP-52
53	Phillips Pan Head Tapping Screw ST2.9X9.5	2	BNCEP-53
54	Rotation Button for Handle	1	BNCEP-54
55	Spring for Rotation Button	1	BNCEP-55
56	Trigger Switch, 120V	1	BNCEP-56
57	Phillips Pan Head Tapping Screw ST4.2X13	2	BNCEP-57
58	Cord Retaining Clamp	1	BNCEP-58
59	Right Handle	1	BNCEP-59
60	Phillips Pan Head Tapping Screw ST4.2X16	4	BNCEP-60
61	Power Cord - 120V	1	BNCEP-61
62	Cord Armor	1	BNCEP-62
63	Terminal	1	BNCEP-63
64	Left Handle	1	BNCEP-64
66	Washer 5mm	1	BNCEP-66
67	Three Position Side Handle	1	BNCEP-67
68	Particle Collection Bag	1	BNCEP-68
78	Key for Blade Spindle	1	BNCEP1-78

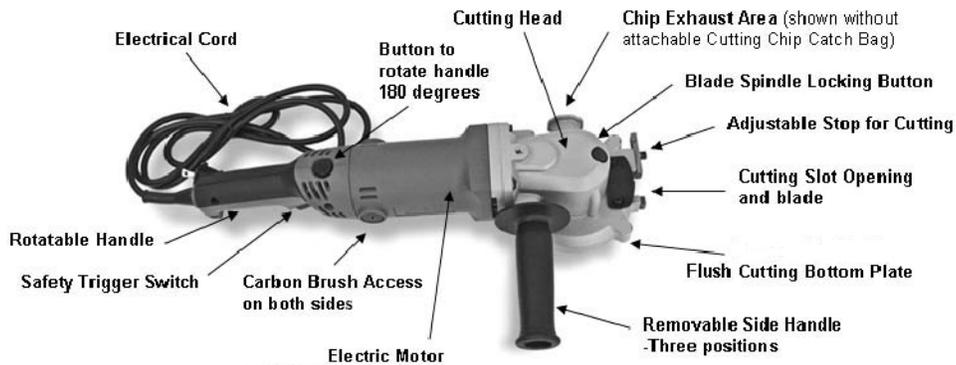
Parts List for three BNCE-20 Cutting Edge Saw™			
NO.	Description	Qty	Part #
1	Hexagon Socket Screw (M5X15)	4	BNCEP1-71
2	Bottom Plate Guard (New)	1	BNCEP1-72
3	Hexagon Socket Screw (M5X8)	4	BNCEP1-73
4	Blade - WO/Hub	1	RB-BNCE-KNH
6	Blade Flange and Spindle	1	BNCEP1-75
7	Hexagon Socket Head Cap head Screw M5X30	4	BNCEP-07
8	Lockwasher	9	1C1311W
9	Washer 5mm	8	BNCEP-09
10	Aluminum Housing	1	BNCEP1-77
12	Gear Housing Gasket	1	BNCEP-12
13	Ball Bearing 628-2Z	3	BNCEP-13
16	Bevel Gear Assy W/Shaft	1	BNCEP-16
17	Fixed Cutting Guide	1	BNCEP-17
18	Movable Cutting Guide	1	BNCEP-18
19	Pin A5X10	1	BNCEP-19
20	Hexagon Socket Head Cap head Screw M5X15	1	BNCEP-20
21	Left and Right Rubber Guard	1	BNCEP-21
22	Washer 5mm	2	BNCEP-22
23	Lock Washer 4mm	2	BNCEP-23
24	Hexagon Socket Head Cap Screw M4-20	2	BNCEP-24
25	Ball Bearing 6002-2RS	1	BNCEP-25
26	Spacer	1	BNCEP-26
27	Big Gear	1	BNCEP-27
28	Shaft Clip 15	1	BNCEP-28
29	Pin A5X16	2	BNCEP-29
30	Aluminum Gear Housing	1	BNCEP-30
31	Steel Ring 6mm	1	BNCEP-31
32	Spring for Blade Lock	1	BNCEP-32
33	Lock Button for Blade	1	BNCEP-33
34	Phillips Pan Head Tapping Screw ST4.2X32	4	BNCEP-34
35	Hex Nut M6	1	BNCEP-35



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BNCE-20 The Cutting Edge Saw™



Model # BNCE-20 Corded Cutting Edge Saw

Model No.	BNCE-20
Power Supply	120 Volt -60 Hz, 9 Amp, Single phase
Electric Motor Type	1100 Watt Double Insulated
No-Load Blade Speed	2,000 RPM
Max Cutting Capacity	3/4" (20mm)
Max Blade Diameter	110 mm (4.38")

- **Safe** - Virtually no sparks or burrs
- **Versatile** - Flush cutting capability up to 7/8" diameter steel rod
- **Economical** - Up to 500 cuts on #5 - 60 grade rebar
- **Durable** - One-year warranty includes a carrying case, extra set of brushes and two cutting blades