



DBC-16H
PORTABLE ELECTRIC #5 (16MM) COMBINATION
REBAR BENDER AND REBAR CUTTER



Please note: ***This tool is rated for #5 (16mm) Grade 60 Rebar Only.*** Do not try to bend or cut material larger in size or rebar harder than grade 60 or you will cause tool damage or machine failure.

(DECEMBER 2007)

***IMPORTANT: READ THESE INSTRUCTIONS
CAREFULLY BEFORE ATTEMPTING
TO USE YOUR TOOL!***



GENERAL SAFETY RULES	3	INSPECTION	6
WORK AREA SAFETY	3	BLEEDING INSTRUCTIONS	6
ELECTRICAL SAFETY	3	GENERAL OPERATING INSTRUCTIONS	6
PERSONAL SAFETY	3	PRE-USE CHECKS	6
POWER TOOL USE AND CARE	3	WARM-UP	6
SERVICE	3	STOPPER BOLT ADJUSTMENT	7
BASIC BENDING INSTRUCTIONS	4	CUTTING	7
CUTTING REBAR	4	BENDING	7
BASIC CUTTING INSTRUCTIONS	4	POINTS OF ATTENTION	7
BENDING REBAR	4	GENERAL MAINTENANCE	7
BENDER ROLLER CHART	4	CUTTER BLOCK MAINTENANCE	7
BENDING/ CUTTING	5	CLEANING	7
REBAR IN-PLACE	5	OIL-LEVEL CHECK	7
SAFETY PRECAUTIONS AND OPERATING TIPS	5	OIL-CHANGE	8
GENERAL SAFETY	5	BOLT TIGHTNESS	8
CUTTING SHORT PIECES	5	CARBON BRUSHES	8
DESIGNATED MATERIALS	5	OVERHAUL	8
USE EYE PROTECTION	5	TOOL SPECIFICATIONS	9
PROVIDE SAFETY BARRIERS	5	PARTS DRAWING	10
EXERCISE PROPER CONTROL	5	PARTS LIST	11
GUARD AGAINST ELECTRIC SHOCK	5	MANUFACTURER REPRESENTATIVES	12
UNPLUG TOOL	5		

Ignorance of proper operating procedures can lead to accidents. If you have any questions about any procedures, contact the nearest authorized distributor/agent or call Benner-Nawman, Inc.

Benner-Nawman, Inc.
3450 Sabin Brown Road
Wickenburg, Arizona 85390
(800) 992-3833 or (928) 684-2813
Fax: (928) 684-7041
www.bnrebartools.com

GENERAL SAFETY RULES

WARNING: Read all instructions. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury. The term “power tool” in all of the warnings listed below refers to your main-operated (corded) power tool or battery-operated (cordless) power tool.

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.
- When operating a power tool outdoors, use an extension cord suitable to outdoor use. Use a cord suitable for outdoor use reduces the risk of electric shock.

PERSONAL SAFETY

- 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 safety equipment. Always wear eye protection. Safety equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- Avoid accidental starting. Ensure the switch is in the off-position before plugging in. Carrying power tools with your finger on the switch or plugging in 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 these devices 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 tools. Such preventative 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 tools or these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.
- Maintain power tools. Check for misalignment or binding or moving parts, breakage of parts and any other condition that may affect the power tools 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 and in the manner intended for the particular type of power tool, 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 by a qualified repair person using only identical replacement parts. This will ensure that the safety of the power tool is maintained. For service questions and information please call (800) 992-3833 or (928) 684-2813.

email us:

mail@bnproducts.com



BASIC BENDING INSTRUCTIONS

Important: Always read, understand and obey the safety instructions included with your new DBC-16H #5 Combination Rebar Cutter and Bender before operating this tool or any other power tool.



CUTTING REBAR

(maximum #5, 16 mm, 5/8" grade 60 capacity):

~Step #1~

Place the rebar between the cutting blocks where you want to make your cut, make sure you always adjust the stopper bolt to keep the rebar at a right angle to the cutting blocks.

~Step #2~

Make sure the unit is plugged into the proper outlet 115V 50/60 Hz, pull the trigger switch which advances the piston forward to cut the rebar. Be careful to watch when cutting small pieces of rebar, always wear safety glasses and proper clothing during use.

~Step #3~

The release valve retracts the piston at anytime during the cutting or bending operation. (Do not push the trigger switch and release valve at the same time.) When doing repeated cuts, only retract the piston as far back as needed to place another piece of rebar between the cutting blocks. This will save you time because the piston does not have to fully retract in order to do repeated cuts.

NOTE: CAUTION

The bending roller rotates 180 degrees during the cutting operation. Do not try to bend and cut rebar at the same time.

BASIC CUTTING INSTRUCTIONS

Important: Always read, understand and obey the safety instructions included with your new DBC-16H #5 Combination Rebar Cutter and Bender before operating this tool or any other power tool.



BENDING REBAR

(maximum #5, 16 mm, 5/8" grade 60 capacity):

~Step #1~

Place the rebar between the bending rollers (small moving roller and larger fixed bending roller) where you want to make your bend, make sure you always adjust the stopper bolt to keep the rebar at a right angle to bending rollers.

~Step #2~

Make sure the cutting cover is closed while bending the rebar. (Do not attempt to bend and cut rebar at the same time.)

~Step #3~

Markings on the center roller indicate approximate bending angles. When the marking is pointing towards the user the angle of the bend will be approximately the angle indicated on the center roller.

~Step #4~

After bend is complete, push the release valve in the direction of the arrow in order to bring the rollers back to the start position. (Do not push trigger at the same time as using the release valve.)

BENDER ROLLER CHART

Rebar Diameter Size	Fixed Center Roller	Fixed Moving Roller	# of Grade 60 Rebar Bent
# 3 (3/8") (10mm)	2.44" (62 mm)	1.30" (33 mm)	2 pieces at one time
# 4 (1/2") (13 mm)	2.44" (62 mm)	1.30" (33 mm)	1 piece at one time
# 5 (5/8") (16 mm)	2.44" (62 mm)	1.30" (33 mm)	1 piece at one time

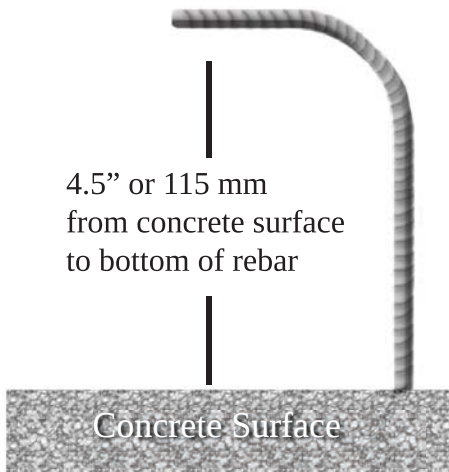
Notes: Be cautious on projects that strictly require meeting CRSI bending specifications.

Benner-Nawman offers other rebar benders that can meet current CRSI specifications.

Current CRSI specifications are for standard bends up to 180 degrees, they should be bent around a center roller 6 times (6D) the diameter of the rebar. And for stirrup hooks or seismic stirrup hook or ties should be bent around a roller 4 times (4D) the diameter of the rebar. More information can be found on their website: www.crsi.org

BENDING/ CUTTING REBAR IN-PLACE

The DBC-16H can be used for bending rebar in-place, protruding from a wall, floor or column. The closest bend to the surface would be a minimum of 4.5" or 115 mm, see drawing below. Please make sure there is adequate space for the bending and cutting unit to complete the bend.



SAFETY PRECAUTIONS AND OPERATING TIPS

It is extremely important to adjust the stopper bolts to keep the rebar parallel to with the bending rollers or at a right angle to the cutting blocks. Replace damaged stopper bolts.

When positioning the rebar between the rollers, make sure that the rebar lies flat on the unit's surface. If the rebar is not flat on the surface, the action of the rollers may cause the rebar to fly out or may cause damage to the stopper bolt.

Do not try to bend or cut materials harder than grade 60 rebar as they will either cause the cutting blocks to crack or bring about machine failure. Benner-Nawman offers other rebar cutters with special cutting blocks for grade 75 rebar.

Place this unit on plywood or an elevated surface when operating. Do not operate this unit directly on a dirty, dusty or sandy surface. This will allow the cooling fan on the armature to intake dirt, sand and or dust into the electrical system causing premature wear and ultimately machine failure. Keep your unit clean; remove rebar debris with a soft brush after operating machine.

GENERAL SAFETY

Use rebar cutters on maximum Grade 60 steel reinforcing bars only. These tools are not to be used in cutting other kinds of metal or materials. Do not cut ungraded rebar.

CUTTING SHORT PIECES

There is always a chance that the cut end may shoot out, especially if less than 30cm (1 foot) in length.

DESIGNATED MATERIALS

Exceeding designated material specifications greatly increases this risk and will also damage the tool. Do not attempt to cut rebars harder, thicker or thinner than those specified).

USE EYE PROTECTION

Wear safety goggles, safety glasses with side shields or a face shield when using cutter.

PROVIDE SAFETY BARRIERS

Erect safety screens to protect coworkers from possible flying ends. Place a safety screen under the rebar when working in high places.

EXERCISE PROPER CONTROL

Hold cutter firmly and maintain proper footing and balance. Do not overreach. When working in a high place, secure cutter to scaffolding with a safety rope. Check that power cord is not fouled and keep cord away from sharp edges and heat. Check that all adjusting wrenches have been removed before using cutter.

GUARD AGAINST ELECTRIC SHOCK

To avoid possible shock, do not handle cutter with wet hands or use cutter in the rain or damp places. Be aware of all power lines, electric circuits and other hazards that may be contacted, especially those that are below the surface or otherwise hidden from view. Never attempt to pick the tool up by use of the electric cord.

UNPLUG TOOL

Disconnect cutter from outlet when not in use and before cleaning, adjusting or servicing. Do not disconnect plug from outlet by pulling the cord. Always check that the switch lock is OFF before plugging in.

DO NOT CUT UNGRADED REBAR

INSPECTION

Inspect cutter before each application. Faulty or loose cutter blocks could result in personal injury. Keep handle dry, clean and free from oil and/or grease. Keep housing and piston free of dirt and iron filings. Check that no screws or bolts are loose or missing. Follow instructions for maintenance. Inspect switch, cord, plug and any extension cable at regular intervals. It is a good idea to inspect the housing for any cracks before operating.

DO NOT EXCEED MAXIMUM CUTTING PRESSURE BY ADDING TO OR MODIFYING THE HYDRAULIC PUMP.

BLEEDING INSTRUCTIONS

You may have to bleed the hydraulics on your cutter if the tool runs unusually slow or doesn't have the pressure to cut normally. Do not run tool with low or no oil. For best results please follow these directions:

1. If piston is still moving, run the tool for 2 minutes to warm the oil inside. If the piston is not moving, add oil before warming up for 2 minutes.
2. When the oil is warm, run the piston out to full extension
3. Remove the oil plug and top it off with oil.
4. Make a seal with your thumb over the oil plug opening.
5. Push the release valve to return piston.
6. When the piston is completely retracted in the open position, gently roll your thumb to let the unwanted air escape.
7. Repeat step #5 and #6 at least three times.
8. Add oil only when the piston is fully extended.
9. If you have to add additional oil, repeat #5 and #6.
10. Replace the oil plug and tighten it.
11. The operation is now complete.

We recommend the following 20-weight Non-Detergent Hydraulic Oils for use with our tools (anti-foam anti-abrasion): Tellus 68 (Shell), Rando HD 68 (Texaco) or Chevron AW 68 (Chevron). Hydraulic oil can also be ordered in quart containers from your Diamond Tool Distributor.

GENERAL OPERATING INSTRUCTIONS

CAUTION: Indicates hazard that could result in minor personal injury and/or product damage.

CARE: Indicates hazard that will result in product damage.

PRE-USE CHECKS

1. Check oil level. (See Maintenance)
2. Check condition of cutter blocks and tightness of cutter block bolts. (See Maintenance) - CHECK FOR CRACKS IN HOUSING

CAUTION: Using loose or cracked cutter blocks may result in injury to operator as well as damage to the tool.

3. Check that the power source is appropriate to the cutter.

CARE: If voltage is too high, the motor will burn out. If voltage is too low, insufficient power will be generated. Never use DC current.

4. Check that power supply is properly grounded.

CAUTION: Failure to ground power supply may result in electric shock to operator (DC-16LZ, DC-16W, DBD-16H and DC-32WH have double-insulated motors and do not require grounding.)

5. Check that cord is undamaged and that plug is not loose.

CAUTION: Cut or abraded covering could result in a short and Electric shock to operator.

6. If an extensions cable is to be used, make sure that it is undamaged and that it is the proper wire gauge thickness for the length. See table below.

Length	110/115 50/60 Hz Cable Size (AWG)
Up to 15mm (50 ft.)	14
Up to 30mm (100 ft.)	12
Up to 45mm (150 ft.)	10

WARM-UP

In cold weather you should warm up the tool unit for 30-60 seconds so that the hydraulic oil reaches the proper viscosity. Pull trigger-switch to extend piston and release when it has reached its full stroke. Repeat 15-20 times.

STOPPER BOLT ADJUSTMENT

THE STOPPER BOLT IS PROBABLY THE MOST IMPORTANT PART OF YOUR PORTABLE CUTTER...

CUTTING

The adjustable stopper functions to maintain the rebar in the correct position during cutting and must be properly set for each size of rebar before use.

1. Screw in stopper to provide sufficient clearance for rebar.
2. Insert rebar fully into U-shaped support. Make sure that rebar is resting on the base of the support.
3. Keeping rebar at right angles (90 degrees) to front cutter block, screw out stopper until it is just touching the rebar. Once set, the stopper needs no further adjustment while cutting rebar of the same diameter, but must be reset for a different size rebar.

CAUTION: *Failure to correctly set the stopper bolt will result in excessive wear of cutter blocks and may cause cut end to fly out. This will also lead to piston and cylinder damage.*

BENDING

1. Screw in stopper bolt to provide sufficient clearance for rebar.
2. Place rebar between the bending rollers (small moving roller and the larger fixed roller.)
3. Adjust the stopper bolt to keep the rebar at a right angle (90 degrees) to bending rollers.

POINTS OF ATTENTION

1. Be especially careful when cutting off short lengths (30cm/12" or less) as the cut end tends to fly out.

CAUTION: *Flying ends are a hazard to all personnel in the vicinity. Erect safety screens.*

2. Do not cover air vents or operate the tool on dirt – use a plywood base under the rebar cutter to keep armature and fan clean

CARE: *If the vents are covered, the motor will overheat and may burn out.*

3. If hydraulic oil exceeds 70 degrees C (158 degrees F) in temperature, power will drop. Allow unit to cool before resuming operation. (Be particularly careful in summer, when the aluminum pump case heats up quicker.)

4. If a drop in power is observed and motor is unusually hot, check carbon-brushes. (See maintenance)

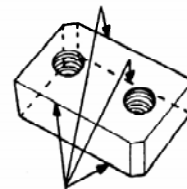
5. If piston should ever fail to retract completely, push rear cutter block backwards to manually retract piston or check under piston to remove debris keeping the piston from retracting.

CAUTION: *Use a rebar or flat metal bar for this purpose. Never push cutter block with any part of the hand, even if gloved.*

GENERAL MAINTENANCE

CUTTER BLOCK MAINTENANCE

Before using, always check that the two bolts on each cutter block are properly tightened. Using a loose block will result in damage to block and housing. Also check condition of cutter blocks. If either cutting edge is dull or chipped, remove retaining bolts and rotate both blocks so that two new edges come into use. Replace and tighten bolts. (Each block has four cutting edges.) When all four cutting edges have been used or if either block is cracked or otherwise damaged, replace both blocks.



CAUTION: *A loose or cracked block may result in injury to operator.*

CLEANING

Clean your tool every day, preferably immediately after use.

CAUTION: *Wear gloves to protect hands from metal splinters.*

Do not use an air gun: blasting with air can cause metal filings and/or dust to get into eyes and respiratory system.

Disconnect the unit. Wipe or brush away all dirt and metal filings. Pay particular attention to the lower half of the piston, where dirt is more easily accumulated.

NEVER USE YOUR CUTTER TO CUT REBAR IN WET CONCRETE.

OIL-LEVEL CHECK

As the cutters are hydraulically operated, the oil-level must be checked at frequent intervals, preferably every day. Failure to maintain the oil at the proper level results in a drop in pressure and loss of cutting power.

CAUTION: *Hydraulic oil is highly flammable. Keep away from sparks and naked flame. Do not smoke.*

CAUTION: *Hydraulic oil may cause inflammation of the eyes and skin. If ingested, it will cause diarrhea and vomiting. In case of eye contact, rinse in clean water for at least 15 minutes and consult a physician. In case of skin contact, wash thoroughly with soap and water. In case of ingestion, consult a physician immediately. Do not induce vomiting.*

1. Oil should be warm but not hot. Warm up unit if cold.
2. Adjust stopper and make three or four cuts, noting exactly at what point the rebar is actually breaking.
3. Pinch a short piece of rebar, stopping just before it breaks off. Unplug unit from power source.
4. With partially severed rebar in place, oil-plug should be straight up. (If unit is hot, allow cooling down.)
5. Remove oil-plug and seal-washer (packing).

CAUTION: *Never remove oil-plug when unit is hot or oil will spurt out.*

6. Check that oil is level with bottom of plug hole (i.e. that pump case is full to the brim).

If oil level is too low, top up with 20-weight hydraulic oil with anti-foam and anti-abrasion properties (ISO viscosity grade VG46, e.g. Shell oil Tellus 68, Mobil oil DTE-25 or Esso Uni power SQ46).

7. After topping off, extract air from system. Gently tilt cutter lengthwise and return it to a level position. Top off again and tilt in the opposite direction. Repeat this process until all air has been extracted.

CARE: *Cutter cannot function properly if oil contains air bubbles.*

8. Replace seal washer (packing) and oil plug. Connect cutter to power source and completely sever rebar.

OIL-CHANGE

The hydraulic oil should be changed at least once a year, sooner if it appears dirty.

NOTE: *Hydraulic oil should be warm before draining*

1. Unplug unit from power source. Remove oil-plug and packing. Turn cutter over and drain oil into a suitable receptacle. When oil ceases to drain out, tilt unit to rear so that oil trapped in the piston housing can run out. When housing is empty, tilt unit in the opposite direction to empty the residue in the pump case.
2. With drain-hole uppermost, slowly fill the unit with fresh oil. Replace plug and lightly tighten. Connect unit to power source and advance piston two or three times. Unplug unit and remove oil-plug. Top off oil-level and replace plug.

3. Finally, follow procedure for oil-level check. (Steps 2-8).

NOTE: *Dispose of hydraulic oil in accordance with local regulations. Do not pour into the sea, a river, a lake or drains.*

BOLT TIGHTNESS

Once a week, or after every 500 cuts, check the tightness of all bolts; especially those bolts securing the housing to the cylinder. Loose bolts will result in a loss of power. Make sure that the bolts holding both cutter blocks are also tight

CARBON BRUSHES

Inspect the two carbon brushes at least once every two months. (Nominal brush life is 200 hours).

CARE: *Worn brushes will result in power loss, cause the motor to run hot and irreparably damage the armature.*

1. Disconnect unit.
2. Unscrew both brush caps and pull out carbon brushes.
3. Replace brushes if less than 6mm or 1/4" in length.

OVERHAUL

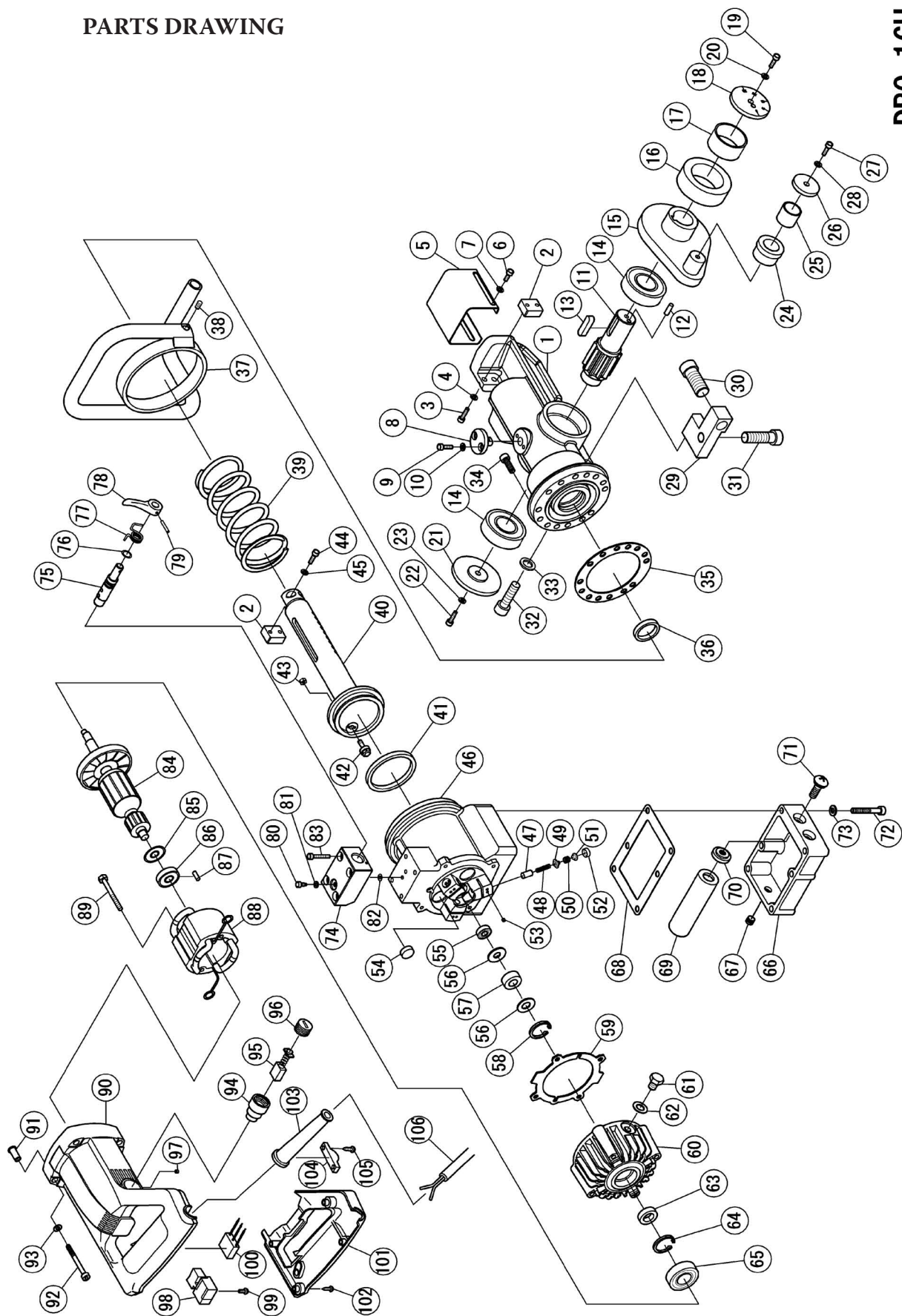
Return the unit to an authorized agent for overhaul at least once every two years, sooner if subjected to heavy use. Call (800) 992-3833



TOOL SPECIFICATIONS

Model No.	DBC-16H Cutting Mode	DBC-16H Bending Mode
Cut / Bend Speed	3 seconds	180 degree bend in 7 seconds
Center Roller	Not Applicable	2.42" (62 mm) Diameter (R 31)
Clearance (In-place)	1-3/4" (44.5 mm) from Surface	4.5" (115 mm) from Surface
Rebar Capacity	Grade 60 / Up to #5 (16mm)	Grade 60 / Up to #5 (16mm)
Power Supply	Electric motor 115v, 50/60 Hz –10 amps, 1,050 Watt	
Total Weight (kg)	40 lbs. (18.2) Tool Weight , 62lbs. (28.2) Shipping Weight	
Tool Dimensions	25-1/8" L x 6-3/8" W x 8-5/8" H including lifting handles (cutter up)	
Carton Size	27-3/4" L x 10-1/2" W x 10-1/2" H or 3,060 cubic inches	

PARTS DRAWING



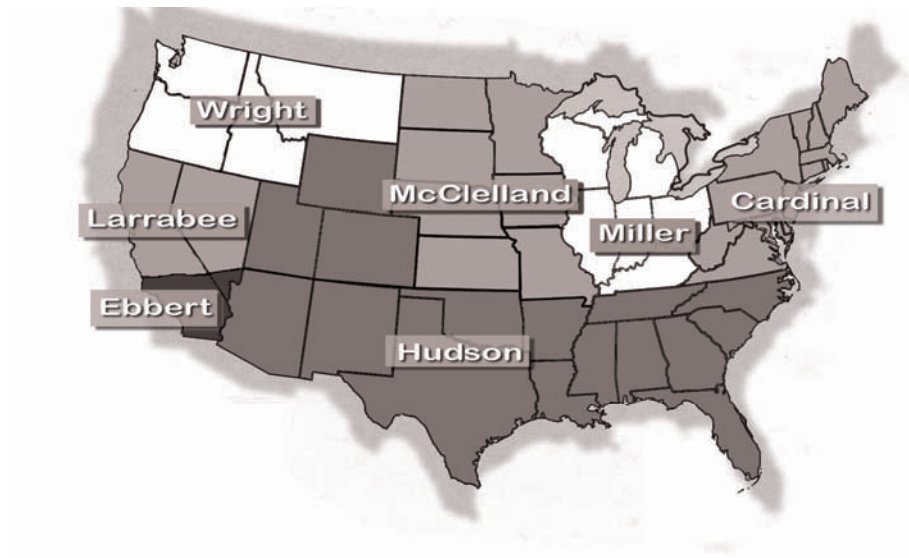
DBC-16H

No.	Part No.	Part Name	Qty.
1	1BC1025700	HOUSING	1
2	1BC4208000	CUTTER BLOCK	2
3	7CB05015	CAP BOLT M5X15	2
4	7GW005	LOCKING WASHER M5	2
5	1BC4209800	GUARD	1
6	7CB06010	CAP BOLT M6x10	2
7	7PW006	P. WASHER M6	2
8	1BC4208400	KEY	1
9	7CB05012	CAP BOLT M5x12	2
10	7GW005	LOCKING WASHER M5	2
11	1BC4208500	PINION	1
12	7SP05015	SPRING PIN 5X15	1
13	1BC4208700	KEY	1
14	762052RS	BEARING	2
15	1BC3111700	SWIVEL ARM	1
16	1BC4208800	CENTER COLLAR	1
17	7DUB3820	DU BUSH	1
18	1BC4208900	WASHER	1
19	7CB06015	CAP BOLT M6X15	1
20	7SW006	SPRING WASHER M6	1
21	1BC4208600	PINION WASHER	1
22	7CB06020	CAP BOLT M6X20	1
23	7SW006	SPRING WASHER M6	1
24	1BC4209000	BENDING ROLLER	1
25	7DUB2020	DU BUSH	1
26	1BC4209100	WASHER	1
27	7CB06015	CAP BOLT M6X15	1
28	7SW006	SPRING WASHER M6	1
29	1BC4208100	STOPPER STAY	1
30	1BC4208200	STOPPER	1
31	7CB12035	CAP BOLT M12x35	1
32	7CB08025	CAP BOLT M8X25	3
33	7GW008	LOCKING WASHER M8	3
34	7CB06022	CAP BOLT M6X22	14
35	1BC4209200	CYLINDER PACKING	1
36	1C16021	PISTON SEAL PACKING	1

37	1BC2063100	HANDLE	1
38	7SS06015	SET SCREW M6X15	3
39	1BC4208300	RETURN SPRING	3
40	1BC2063200	PISTON	1
41	1C1604	SEAL PACKING	1
42	1HB2032	RETURN VALVE	1
43	1HB4208300	Valve Nut	1
44	7CB05010	CAP BOLT M5X10	1
45	7GW005	LOCKING WASHER M5	1
46	1BC2063300	CYLINDER	1
47	1C1327	RAM	3
48	1C1330	RUM RETURN SPRING	3
49	1C13281	DELIVERY VALVE	3
50	1C1331	DELIVERY VALVE SPRING	3
51	1C13352	SPRING GUIDE	3
52	1C13292	PUMP HEAD SEAL	3
53	7SS04004	SET SCREW M4X4	6
54	3P1044	MAGNET FILTER	3
55	1CW0003	BALL BEARING 698	1
56	1C1325	BEARING GUIDE	2
57	1C13401	NEEDLE BEARING	1
58	1C1326	SNAP RING H27	1
59	1C1615	PUMP CASE PACKIONG	1
60	4V0001A	PUMP CASE	1
61	7B10015	BOLT M10X15	1
62	1C1305	SEAL WASHER	1
63	1C1342	OIL SEAL SC15-257	1
64	7SRH26	SNAP RING H26	1
65	76002VV	BEARING 6002VV	1
66	1HB207	AIR BAG COVER	1
67	7PT1/8	PLUG PT1/8	1
68	1HB208	AIR BAG COVER PACKING	1
69	1C1958	AIR BAG	2
70	1CM2027	AIR BAG NUT	2
71	1C1357	AIR BAG SET BOLT	2
72	7CB06040	CAP BOLT M6X40	4

73	7SW006	SPRING WASHER M6	4
74	1DBR2925	VALVE CASE	1
75	1DBR2921	ROTARY VALVE	1
76	1DBR2946	O RING P10A	1
77	1DBR2923	VALVE LEVER SPRING	1
78	1DBR2922	VALVE LEVER	1
79	7SP03020	SPRING PIN 3X20	1
80	1DBR5012	GUIDE BOLT M5X12	1
81	1HB1631	SEAL WASHER	1
82	1HB1630	O RING	2
83	7CB06030	CAP BOLT M6X30	4
84	4V0001B	ARMATURE	1
85	4V0001J	DUST SEAL	1
86	7608VV	ARMATURE BEARING	1
87	4V0001G	BEARING ROCK	1
88	4V0001C	STATOR	1
89	7WNS05060	TAPPING SCREW 5X60	2
90	4V0001H	MOTOR HOUSING	1
91	4V0001K	SLEEVE	1
92	7CB05080	CAP BOLT M5X80	4
93	7PW005	P WASHER M5	4
94	4V0001D	BRUSH HOLDER	2
95	4V0001F	CARBON BRUSH	2
96	4V0001E	BRUSH CAP	2
97	7SS04005	SET SCREW M4X5	2
98	4V0001N	TRIGGER SWITCH	1
99	7WB035006	WING BOLT M3.5X6	1
100	4V0001P	CONDENSER	1
101	4V0001M	MOTOR HANDLE COVER	1
102	7WNS04020	TAPPING SCREW 4X20	1
103	4V0001X	CORD ARMOR	1
104	4V0001R	CORD CRIP	1
105	7FNS04016	TAPPING SCREW D4X16	2
106	4V0001V	CORD	1

PARTS LIST



MANUFACTURER REPRESENTATIVES



W.G. WRIGHT
Territory: AK, WA, OR,
MT & ID
503-232-3480
Fax: 503-232-0401
www.wgwright.com

LARRABEE COMPANY
Territory: Northern CA,
Northern NV & HI
800-260-9430
Fax: 510-785-6483
www.larrabeeco.com

EBBERT CO.
Territory: Southern CA
& Southern NV
800-EBBERTS
Fax: 714-437-5322
Email: rle@ebbertco.com

MCCLELLAND MARKETING
Territory: ND, SD, MN, IA, NE,
KS & MO
800-444-0490
Fax: 636-376-1404
www.mmmktinc.com

LEW HUDSON SALES
Territory: AR, LA, OK, TX, WY,
UT, CO, AZ, NM, FL, GA, AL, SC,
NC, TN & MS
800-394-6443
Fax: 770-682-2997
www.lewhudson.com

M.J. MILLER
Territory: IL, IN, KY, MI, OH, WI
& WV
815-790-8437
Fax: 772-287-8356
www.mjmillerc.com

CARDINAL SALES
Territory: ME, VT, NH, MA, CT,
RI, NY, NJ, PA, MD, DE, VA &
Washington D.C.
800-222-4344
Fax: 718-745-4030
www.cardinalreps.com

BORDERLAND ENTERPRISES
Territory: Mexico, Belize,
Guatemala, El Salvador, Hon-
duras, Nicaragua, Costa Rica,
Panama, Ecuador & Peru.
623-935-3090 (USA)
Fax: 623-935-9577 (USA)
www.borderlandexport.com

JMC INTERNATIONAL
Territory: Columbia, Puerto
Rico, Dominican Republic &
The Virgin Islands
787-487-9294 (PR)
Fax: 787-785-4142 (PR)
Email: jmascs@prtc.net

.....

Benner-Nawman, Inc.
3450 Sabin Brown Road
Wickenburg, AZ 85390
(800) 992-3833
Fax: (928) 684-7041
Email: mail@bnproducts.com
www.bnrebartools.com