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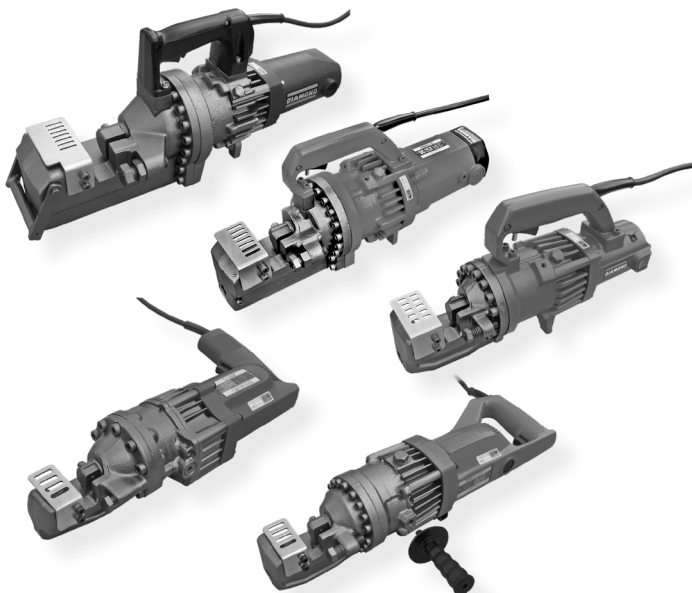
WWW.BNPRODUCTS.COM

DC Series
Electric - Hydraulic
Rebar Cutters

3450 Sabin Brown Road • Wickenburg, AZ 85390
(800) 992-3833 • mail@bnproducts.com

Rebar Cutter Operations Manual DC SERIES PORTABLE REBAR CUTTERS

- DC-32WH • DC-25X • DC-20WH •
- DC-16W • DC-16LZ •



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

Service Note

Have your power tool serviced by a qualified repair person using only OEM replacement parts. This will ensure that the safety of the power tool is maintained. For a Service Repair Center nearest you, please call (800) 992-3833 or go visit us online: www.bnproducts.com

GENERAL SAFETY PRECAUTIONS

Use our rebar cutters on maximum Grade 60 steel reinforcing bars only. You should not use these tools for cutting other kinds of metal or materials. Also, do not cut ungraded rebar.

IMPORTANT:

Do not attempt to cut rebar by locking the off/on switch to the on position. This locking procedure is used only to warm the tool in cold climates or with our hands-free electrical box and foot-operated control. Any other use could be a safety issue and may cause damage to your rebar cutter. Always pull the on/off switch by hand for each individual cut. A foot-operated switch and special electrical box are available if you use these cutters as production tools. Contact your local distributor or BN Products

RESTRICT USE TO DESIGNATED MATERIALS

There is always a chance that a short-end cut end could shoot out, especially if less than 30cm (1 foot) in length. Exceeding designated material specifications dramatically increase this risk and will also damage the tool. Do not attempt to cut rebars harder, thicker, or thinner than specified.

USE EYE PROTECTION

Wear safety goggles, safety glasses with side shields, or a face shield when using any power tool.

PROVIDE SAFETY BARRIERS

Erect safety screens to protect coworkers from possible flying ends. For example, 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 over-reach. When working in high places, please secure the tool to scaffolding with a safety rope. Check that the power cord is not fouled and keep the line away from sharp edges and heat. Check that all adjusting wrenches and other tools have been removed before using the cutter.

GUARD AGAINST ELECTRIC SHOCK

Do not handle cutter with wet hands or use cutter in the rain or damp places to avoid possible shock. Be aware of all power lines, electric circuits, and other hazards that may be near, especially those that are below the surface or otherwise hidden from view. Never attempt to pick the tool up by the use of the electric cord. Disconnect cutter from outlet when not in use and before cleaning, adjusting, or servicing. Do not disconnect the plug from the outlet by pulling the cord. Always check that the switch lock is OFF before plugging in.

MAINTAIN CUTTER WITH CARE

Inspect cutter before each use. Faulty or loose cutter blocks could result in personal injury. Keep handle dry, clean, and free from oil and 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 the 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 YOUR PORTABLE REBAR CUTTER

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 the tool with low or no oil. For best results, please follow these directions:

1. If the 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 just before it returns and stop.
3. Remove the oil plug and top it off with oil.
4. Make a seal with your thumb over the oil plug opening.
5. Run the tool so that it makes a complete cycle.
6. When the piston is completely retracted (in the open position), gently roll your thumb to escape the unwanted air.
7. Repeat steps #5 and #6 at least three times.
8. Add oil only when the piston is at least halfway out.
9. If you have to add additional oil, please repeat #5 and #6.
10. Replace the oil plug and tighten it.
11. Make three or four cuts with rebar. The machine should now be working correctly. Make sure that you observe precisely at what point the rebar is breaking.
12. Pinch a piece of rebar, stopping just before it breaks.
13. Remove the oil plug again and top off the reserve one more time.
14. Replace the oil plug and tighten
15. 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). As a reminder, hydraulic oil can also be ordered in quart containers from your Diamond Tool Distributor.

OPERATING INSTRUCTIONS

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

PRE-USE CHECKS

- Check oil level. (See Maintenance)
- Check the condition of cutter blocks and the tightness of cutter block bolts. (See Maintenance) - CHECK FOR CRACKS IN HOUSING
- **CAUTION:** Using loose or cracked cutter blocks may result in injury to the operator and damage to the tool.
- Check that the power source is proper voltage to the cutter.
- **CARE:** If the voltage is too high, the motor will burn out. If voltage is too low, insufficient power will be generated, and the tool will not work. Never use DC Power.
- Check that the power supply is properly grounded.
- **CAUTION:** Failure to ground the power supply may result in an electric shock to the operator (DC-16LZ, DC-16W, and DC-32WH have double-insulated motors and do not require grounding.)
- 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 the operator.
- If an extension cable is used, make sure that it is undamaged and the proper wire gauge thickness for the length. See the table below.
- Before plugging in the tool, make sure that the switch lock is OFF.
- **CAUTION:** If the switch lock is ON, the cutter will start as soon as it is plugged in. To disengage the lock, pull the trigger switch, and the lock button will pop out.

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. Then, 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.

The adjustable stopper bolt functions to keep the rebar in the correct position during cutting. It must be set appropriately for each size of rebar before use.

Screw-in stopper to provide sufficient clearance for rebar. Insert rebar fully into U-shaped support. Make sure that the rebar is resting on the base of the support. Keep rebar at right angles (90 degrees) in front of the cutter block. Adjust the stopper until it is just touching the rebar. Once set, the stopper bolt needs no further adjustment while cutting rebar of the same diameter. The bolt 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 the cut end to fly out. This could also lead to piston and cylinder damage.

CUTTING

Insert rebar between the stopper and front cutter block, ensuring that it is correctly seated in U-shaped support. Pull trigger-switch and keep depressed while piston advances and the rebar is cut. (If the switch is released at an intermediate point, the piston will stop.) When the cut is complete, release the switch. Piston retracts automatically (Note that the switch cannot be reactivated until the piston has fully retracted.)

POINTS OF ATTENTION

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

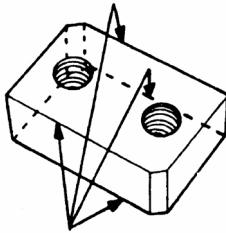
- If the piston should ever fail to retract completely, push the rear cutter block backward to manually retract the piston or check under the piston to remove any debris keeping the piston from retracting.
- CAUTION: Use a short piece of rebar or flat metal bar for this purpose. Never push cutter block with any part of the hand, even if gloved.

NOTE: Rebar cutters manufactured after 2007 have a safety release valve for retracting the piston if it doesn't return to the start position. This is usually caused by cutting improperly seated rebar that becomes jammed between the cutting blocks. Simply rotate the Allen set screw relief valve a quarter turn to retract the piston on these newer models. On the DC-20WH, see parts breakdown part #64 for the location of this relief valve.

Once the piston has been retracted, pull the trigger switch long enough to advance the piston partially. Unplug unit. Check piston and housing for accumulated dirt and iron filings that may be jamming the piston. (See Maintenance) If, after cleaning, the piston still does not automatically retract when fully extended, the piston itself may be damaged. Return the unit to an authorized repair center or BN Products for repair.

MAINTENANCE ON CUTTER BLOCKS

Before using, always check that the two bolts on each cutter block are properly tightened. Using a loose block will result in damage to the block and housing. Also, check the condition of cutter blocks. If either cutting edge is dull or chipped, remove retaining bolts and rotate both blocks to use two new edges. Replace and tighten bolts. (Each block has four cutting edges - SEE ILLUSTRATION BELOW). 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 the operator.

CLEANING

Clean your tool every day, preferably immediately after use.

CAUTION: Wear gloves to protect your hands from metal fragments.

Do not use an air gun: blasting with air can cause metal filings and dust to get into the 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 and debris are 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 will result in a drop in pressure and cutting power loss.

CAUTION: Hydraulic oil is highly flammable. Keep away from sparks and open 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.

- Oil should be warm but not hot. Warm-up unit if cold.
- Adjust stopper and make three or four cuts, noting precisely at what point the rebar is breaking.
- Pinch a short piece of rebar, stopping just before it breaks off. Then, unplug the unit from the power source.
- With a partially severed rebar in place, the oil plug should be straight up. (If the unit is hot, allow cooling down.)
- Remove oil-plug and seal-washer (packing).
- **CAUTION:** Never remove the oil plug when the unit is hot, or oil will spurt out.

- Check that oil is level with the bottom of the plug hole (i.e., that pump case is full to the brim) if the 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).
- After topping off, extract air from the system. Gently tilt the 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 the oil contains air bubbles.
- Replace seal washer (packing) and oil plug. Connect cutter to a 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.

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

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.

Disconnect unit. Unscrew both brush caps and pull out carbon brushes. 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

GENERAL SAFETY RULES

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

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 that may ignite 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 the risk of electric shock. Avoid body contact with any grounded surface such as pipes, radiators, ranges, and refrigerators. There is an increased risk of electric shock if your body is grounded.

Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.

Protect your electrical 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 for 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 masks, non-skid safety shoes, hard hats, 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.

POWER TOOL USE AND CARE

Do not use the tool to cut larger material than specified. Instead, use the correct power tool for your application. The correct power tool will do the job better and be safer at the rate for which it was designed.

Do not use the power tool if the switch does not turn 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 of 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. Poorly maintained power tools cause many accidents.

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, and any accessories, following these instructions and in the manner intended for the particular type of power tool, considering the working conditions and the work to be performed.

NOTE: Use of the power tool for operations different from those intended could result in a hazardous situation.

Type	DC-16LZ	DC-16W
Cutting ability	#5 5/8" (16mm) Grade 60 or less	#5 5/8" (16mm) Grade 60 or less
Minimum cutting diameter	.157" (4mm)	
Cutting Speed	2 seconds	2.5 seconds
Electric Source	Single phase AC 120V 60Hz	
Electric Flow	10.2A Double Insulated	11A Double Insulated
External dimensions	(L) 15.4" (390mm) x (W) 7.1" (180mm) x (H) 4.1" (105mm)	(L) 18.1" (460mm) x (W) 5.9" (150mm) x (H) 4.5" (115mm)
Weight	15 lbs. (6.8 kg)	17.6 lbs. (8.0 kg)
Standard accessory tool set	Hex wrench 4, 5, 6 mm Hex wrench 4.5 mm Oil Pot (hydraulic oil 70cc) Plastic Storage Case	Wrench 17 x 19 mm Hex wrench 4, 5, 6 mm Oil Pot (hydraulic oil 70cc) Steel Storage Case

Type	DC-20WH	DC-25X
Cutting ability	#6, 3/4" (20mm) Grade 60 or less	#8, 1" (16mm) Grade 60 or less
Minimum cutting diameter	.157" (4mm)	
Cutting Speed	3 seconds	5 seconds
Electric Source	Single phase AC 120V 60Hz	
Electric Flow	11A Double Insulated	14A Double Insulated
External dimensions	(L) 16.2" (410mm) x (W) 4.4" (110mm) x (H) 8.3" (210mm)	(L) 20.1" (510mm) x (W) 5.7" (145mm) x (H) 9.8" (250mm)
Weight	25.5 lbs. (11.5 kg)	49.6 lbs. (22.5 kg)
Standard accessory tool set	Wrench 17 x 19 mm Hex wrench 4.5 mm Oil Pot (hydraulic oil 70cc) Plastic Storage Case	Wrench 17 x 19 mm, 24mm Hex wrench 4, 5, 6 mm Oil Pot (hydraulic oil 70cc) Steel Storage Case

Type	DC-32WH
Cutting ability	#10, 1-1/4" (32mm) Grade 60 or less
Minimum cutting diameter	.157" (4mm)
Cutting Speed	12 seconds
Electric Source	Single phase AC 120V 60Hz
Electric Flow	14A Double Insulated
External dimensions	(L) 23.3" (590mm) x (W) 7.1" (180mm) x (H) 10.6" (270mm)
Weight	80.5 lbs. (36.5 kg)
Standard accessory tool set	Wrench 17 x 19 mm, 30mm Hex wrench 4, 5, 6 mm Oil Pot (hydraulic oil 70cc) Wooden Storage Case

PLEASE NOTE:
FOR INDIVIDUAL PARTS DIAGRAMS AND LISTS
GO TO WWW.BNPRODUCTS.COM
OR CONTACT CUSTOMER SERVICE:
(800) 992-3833 • mail@bnproducts.com

