Bäumr-AG®

Hydraulic Rebar Cutter

User Manual

RETAIN THIS MANUAL FOR FUTURE REFERENCE

PLEASE READ THIS MANUAL CAREFULLY BEFORE USE

TABLE OF CONTENTS

SAFETY INSTRUCTIONS

- Use RC-16 cutters on concrete re-forcing bars only.
- There is always a chance that the cut end may shoot out, especially if less than 30cm in length. 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.
- Wear safety goggles, safety glassed with side shields or a face shield when using cutter.
- Build safety screens to protect co-workers from possible flying ends. Place safety screen under the rebar when working in high places.
- Hold cutter firmly and maintain proper footing and balance. Do not over-reach when working in 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.
- To avoid possible electric 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.
- 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 if OFF before plugging in.
- Do not use cutter in the presence of flammable materials (e.g. Paint, thinner, petroleum products, adhesives).
- Do not use cutter in a possibly lighted and clear of obstructions. Operator should at all times have an unobstructed view of the cutter, rebar and surrounding area.
- Do not wear loose clothes, dangling objects or jewellery. Restrain long hair. The use of a safety-helmet and rubber soled boots is recommended. If safety gloves are worn, be especially careful that gloves does not get caught in moving parts.
- Keep all visitors at a safe distance from the work area for their own protection and to prevent distraction of the operator.
- 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. Following instruction for maintenance. Inspect switch, cord, plug and any extension cable at regular intervals.
- When not in use, store cutter and accessories in dry place where they can't be accessed by unauthorized person.

OPERATION

- **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.
2. Check condition of cutter blocks and tightness of cutter block bolts.

Caution: Using loose or cracked cutter blocks may result in injury to operators as well as damage to unit.

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

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

4. Check that power supply is properly earthed.

Caution: Failure to earth power supply may result in electric shock to operator.

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.

If an extension cable is to be used, make sure that it is undamaged and that it is the proper thickness for the length.

WARM-UP

In cold weather, warm up 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 ADJUSTMENT

The adjustable stopper function to maintain the rebar in the correct position during cutting and must be properly set for each size of rebar before making a cut.

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 stopper.
3. Keeping rebar at right angels (90°) 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 re-set for a different size rebar.

Caution: Failure to correctly set the stopper will result in excessive wear of cutter block and may cause cut end to fly out.

CUTTING

1. Insert rebar between stopper and front cutter block, making sure that it is properly seated in U-shaped support.
2. Pull trigger -switch and keep depressed while piston advances and rebar is cut. (If switch is released at an intermediate point, piston will stop.)
3. When cut is completed, release switch. Piston retracts automatically. (Note that switch can't be re-activated until piston has fully retracted.)

Points of attention

1. Be especially careful when cutting off short lengths (30cm 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.

Care: If events are covered, motor will overheat and may burn out.

3. If hydraulic oil exceeds 70 °C (158 F) in temperature, power will drop.

Allow until to cool before resuming operation. (Be particularly careful in summer, when the aluminium pump case heats up quicker.)

4. If a drop in power is observed and motor is unusually hot, check carbon brush.
5. If piston should ever fail to retract completely, push rear cutter block backwards to manually retract piton.

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

Once piston has been retracted, pull trigger-switch long enough to partially advance piston. Unplug unit. And check piston and housing for accumulated dust iron filings that may be jamming the piston. After cleaning, piston still does not automatically retract when fully extended, the piston itself may be damaged. Return the unit to an authorized agent for repair.

Maintenance

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 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 block.

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

Cleaning

Cleaning cutter after use.

Caution: Wear gloves to protect hands from metal splinters. Do not use an air-gun, blasting with air can cause metal filing and/or dust to get into eyes and respiratory system.

1. Disconnect unit.
2. 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.

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 diarrhoea 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 deliberately 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, turn unit over so that oil-plug is uppermost. (If unit is hot, allow to cool 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 46, mobil oil DTE-25 OR Esso uni power SQ46.)
7. After topping up, extract air from system. Gently tilt cutter lengthwise and return it to a level position. Top up again and tilt in the opposite direction. Repeat this process until all air has been extracted.

Care: Cutter can't function properly if oil contains air bubbles.

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

Oil change

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

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 up oil level and replace plug.
3. Finally follow procedure for oil level check.

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

BOLT TIGHTNESS

Once a week or after every 500 cuts, check the tightness of all bolts, especially those securing the housing to the cylinder. Loose bolts will result in a loss of power.

CARBON BRUSHES

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

Care: Worn brushes will result in power loss and will cause the motor to run hot and irreparably damage the armature's commutator.

1. Disconnect unit
2. Unscrew both brush caps and pull out carbon brushes.
3. Replace brushes if less than 6 cm in length.

TECHNICAL SPECIFICATIONS

MAIN PARAMETERS	
Model	RC-16
Voltage ± 5%	110V/230V AC only
Wattage	900 W/850W
Net weight	8 KGS
Gross weight	13KGS
Cutting speed	2.5--3.0 s
Max rebar diameter	¢16mm
Min rebar diameter	¢4mm
Machine size	460*270*115mm
Packing size	510*230*150mm

Some experts believe the incorrect or prolonged use of almost any product could cause serious injury or death. For information that may reduce your risk of serious injury or death consult the points below and additionally, the information available at www.datastreamserver.com/safety

- Consult all documentation, packaging and product labelling before use. Note that some products feature online documentation which should be printed and kept with the product.
- Check product for loose / broken / damaged / missing parts, wear or leaks (if applicable) before each use. Never use a product with loose / broken / damaged / missing parts, wear or leaks (if applicable).
- Products must be inspected and serviced (if applicable) by a qualified specialist every 6 months assuming average residential use by a person of average weight and strength, above average technical aptitude, on a property matching average metropolitan specification. Intended use outside these guidelines could indicate the product is not suitable for intended use or may require more regular inspection or servicing.
- Ensure all possible users of the product have completed an industry recognised training course before being given access to the product.
- The product has been supplied by a general merchandise retailer that may not be familiar with your specific application or your description of the application. Be sure to attain third party approval for your application from a qualified specialist before use regardless of prior assurances by the retailer or its representatives.
- This product is not intended for use where fail-safe operation is required. As with any product (take an automobile, aircraft, computer or ball point pen for example) there is always a small chance of a technical issue that needs to be repaired or may require replacement of the product or a part. If the possibility of such failure and the associated time it takes to rectify could in any situation inconvenience the user, business or employee or could financially affect the user, business or employee then the product is not suitable for your requirements. This product is not for use where incorrect operation or a failure of any kind, including but not limited to a condition requiring product return, replacement, service by a technician or replacement of parts could cause a financial loss, loss of employee time or an inconvenience requiring compensation.
- If this item has been purchased in error considering the points above simply contact the retailer directly for details of their returns policies if required.

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