

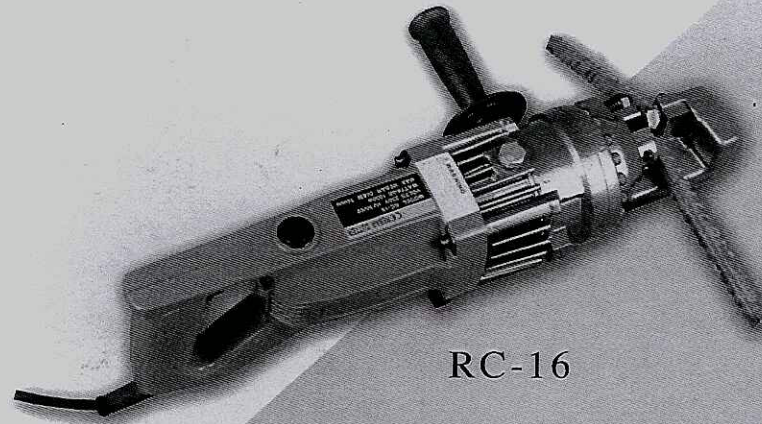
M-688

06341

Reo Bar Cutter 16mm 240 volt

## ELECTRIC REBAR CUTTER

HANDLING INSTRUCTIONS



RC-16

READ THESE INSTRUCTIONS CAREFULLY BEFORE ATTEMPTING TO USE CUTTERS. Ignorance of proper operating procedures can lead to accidents. If in doubt about any procedure, contact your nearest authorized agent.

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## GENERAL SAFETY PRECAUTIONS

### USAGE

Use RC-16 cutters on concrete re-inforcing bars only.

### RESRICT USE TO DESIGNATED MATERIALS

There is always a chance that the cut end may shoot out, especially if less than 30cm(1 foot) 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 (see page 5).

### 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 co-workers from possible flying ends. Place safety screen under the rebar when working in high places.

### EXERCIE PROPER CONTROL

Hold cutter firmly and maintain proper footing and balance. Do not over-reach. 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 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.

### 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.

### BEWARE OF ENVIRONMENT

Do not use cutter in the presence of flammable materials(e.g. paint, thinner, petroleum products, adhesives).

Do not use cutter in a possibly explosive environment (e.g. an area containing fumes, gas or dust) or poorly ventilated areas.

### KEEP WORK AREA TIDY AND WELL LIT

Make sure that work area is properly lighted and clear of obstructions. Operator should at all times have an unobstructed view of the cutter, rebar and surrounding Area.

## WEAR PROPER APPAREL

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 VISITORS AWAY

Keep all visitors at a safe distance from the work area for their own protection and to prevent distraction of the operator.

## MAINTAIN CUTTER WITH CARE

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 instructions for maintenance. Inspect switch, cord, plug and any extension cable at regular intervals.

## STORE CAREFULLY

When not in use, store cutter and accessories in a dry place where they can't be Accessed by unauthorized persons.

## PARTS AND SPECIFICATIONS

- ①. Housing
- ②. Cutter blocks
- ③. Adjustable stopper
- ④. Side handle (detachable)
- ⑤. Cylinder
- ⑥. Pump case
- ⑦. Oil-plug
- ⑧. Motor
- ⑨. Switch
- ⑩. Carbon-brush caps

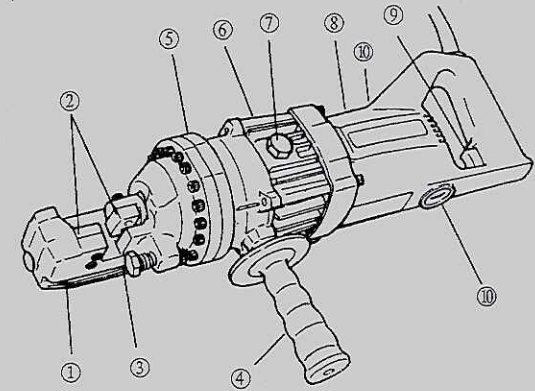


Illustration shows RC-16

### Main Parameters

Model	RC-16
Voltage + 5%	110V <input type="checkbox"/> 230V <input type="checkbox"/> AC only
Wattage	760 W <input type="checkbox"/> 690W <input type="checkbox"/>
Dimensions	460*270*115 mm
Weight	8.0Kg
Max.rebar diameter	16mm
Min.rebar diameter	4mm
Max.rebar hardness	Tensile strength 650N/mm <sup>2</sup>
Cutting speed	2.5~3 secretary.

## 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 p.8.)

2. Check condition of cutter blocks and tightness of cutter block bolts. (see Maintenance p.8.)

△ 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 to 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.

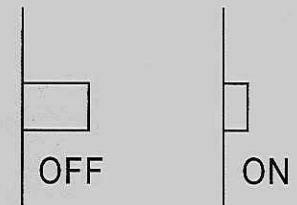
△ CAUTION: Cut or abraded covering could result in a short and electric shock to operator.

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

Cable length	110/115V	230V
	Cable size (AWG)	Nominal diameter
Up to 10m (33ft)	16	1.0mm <sup>2</sup>
Up to 15m (50ft)	14	1.25mm <sup>2</sup>
Up to 30m (100ft)	10	1.5mm <sup>2</sup>

6. Before plugging in, make sure that the switch lock is OFF.

CAUTION: If switch lock is ON, cutter will start as soon as it is plugged in. To disengage lock, pull trigger-switch and press lock-button, which will pop out.



### 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.

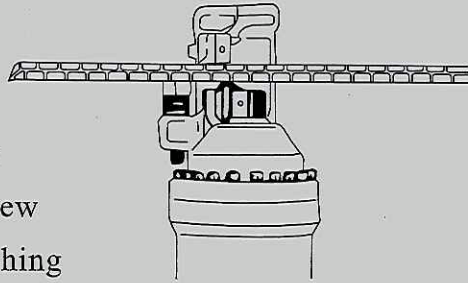
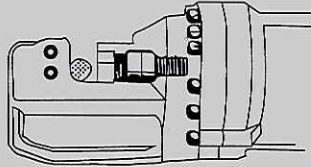
## STOPPER ADJUSTMENT

The adjustable stopper functions 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 support.

3. Keeping rebar at right-angles (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 rebars 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 blocks 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 cannot 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 unit 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-brushes. (See Maintenance p.10.)

5.If piston should ever fail to retract completely, push rear cutter block backwards to manually retract piston.

**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. Check piston and housing for accumulated dirt and iron filings that may be jamming the piston. (See Maintenance p.8.) If, 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.

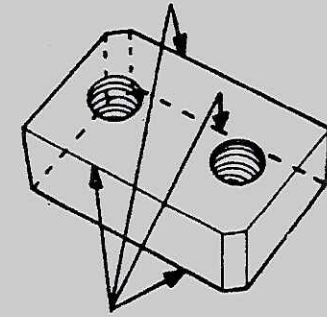
## MAINTENANCE

### 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 blocks.



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

### CLEARING

Cleaning cutter 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.

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 cannot function properly if oil contains air bubbles.

8. Replace seal washer (packing) and 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.

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. (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 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.

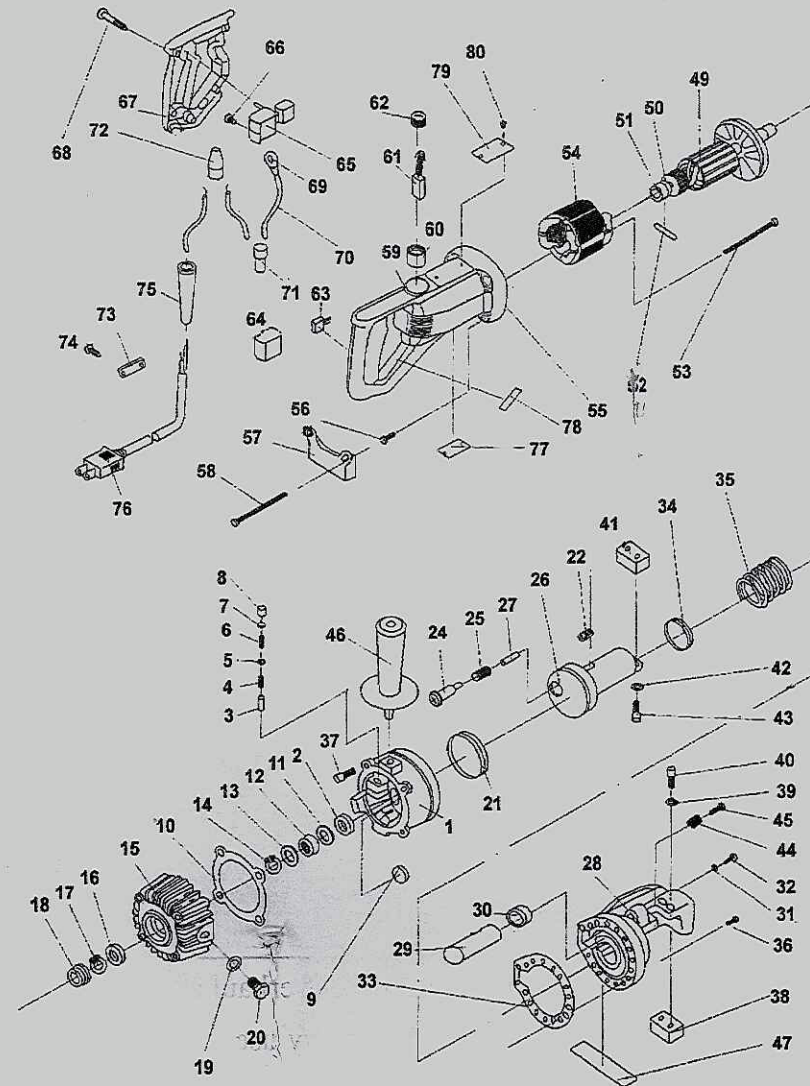
(Nominal brush life is 200 hours).

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

## OVERHAUL

Return the unit to an authorized agent for overhaul at least once every two years, sooner if subjected to heavy use.



1	Cárter	41	Cuchilla
2	Rodamiento 698	42	Arandela muelle M 5
3	Pistón de válvula	43	Tornillo M 5x15
4	Muelle válvula de retorno	44	Cierre muelle
5	Válvula de paso	45	Tornillo M 10x40
6	Muelle válvula de paso	46	Mango
7	Guía de muelle	47	Etiqueta
8	Retén válvula	48	
9	Imán	49	Inducido
10	Junta cárter	50	Guardapolvos
11	Guía rodamiento	51	Rodamiento 608V
12	Cojinete de agujas	52	Cierre rodamiento
13	Guía rodamiento	53	Tornillo roscado D 5x60
14	Anillo cierre H 27	54	Stator
15	Tapadera cárter	55	Carcasa motor
16	Retén ISD 15-25-7	56	Tornillo
17	Anillo seiger H R-26	57	Pie máquina
18	Rodamiento 6002V V	58	Tornillo M 5x80
19	Junta W -10	59	Tornillo ajuste M 4x5
20	Tapón aceite M 10x8	60	Portaescobillas
21	Junta O D I	61	Escobillas
22	Pistón	62	Tapa escobillas
23		63	Condensador
24	Válvula retorno	64	Soporte
25	Muelle válvula retorno	65	Interruptor
26	Pistón	66	Tornillo interruptor M 3.5x6
27	Muelle fin válvula	67	Cubierta interruptor
28	Cabezal	68	Tornillo roscador D 4x20
29	Boya de aceite	69	Terminal
30	Cierre boya aceite	70	Cable
31	Arandela muelle M 8	71	Conector 50091
32	Tornillo boya aceite	72	Conector 50092
33	Junta cartón	73	Prisionero cable
34	Junta SK Y 30	74	Tornillo roscador D 4x16
35	Muelle retorno	75	Blindaje cable
36	Tornillo M 6x20	76	Set del cable
37	Tornillo M 6x20	77	Etiqueta
38	Cuchilla	78	Etiqueta
39	Arandela muelle M 5	79	Placa nombre
40	Tornillo 5x18	80	Remache