



Rekord

Operating manual

D433453XA vers.2.0



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Said trade-marks or trade names are nominated only for the purposes of information so that any lock for which our keys are made can be rapidly identified.

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GUIDE TO THE MANUAL

This manual has been produced to serve as a guide for users of the REKORD key-cutting machine. Read it carefully; it is essential if you wish to operate your machine safely and efficiently.

Consultation

The contents of the manual are divided into sections relating to:

- Transport and handling Ch.1
- Description of machine and safety devices Ch.2-3-4-5
- Proper use of machine Ch.6-7
- Maintenance Ch.8

Technical terms

Common technical terms are used in this manual. To assist those with little experience of key cutting, below is an illustration of the terms used for the different parts of keys:

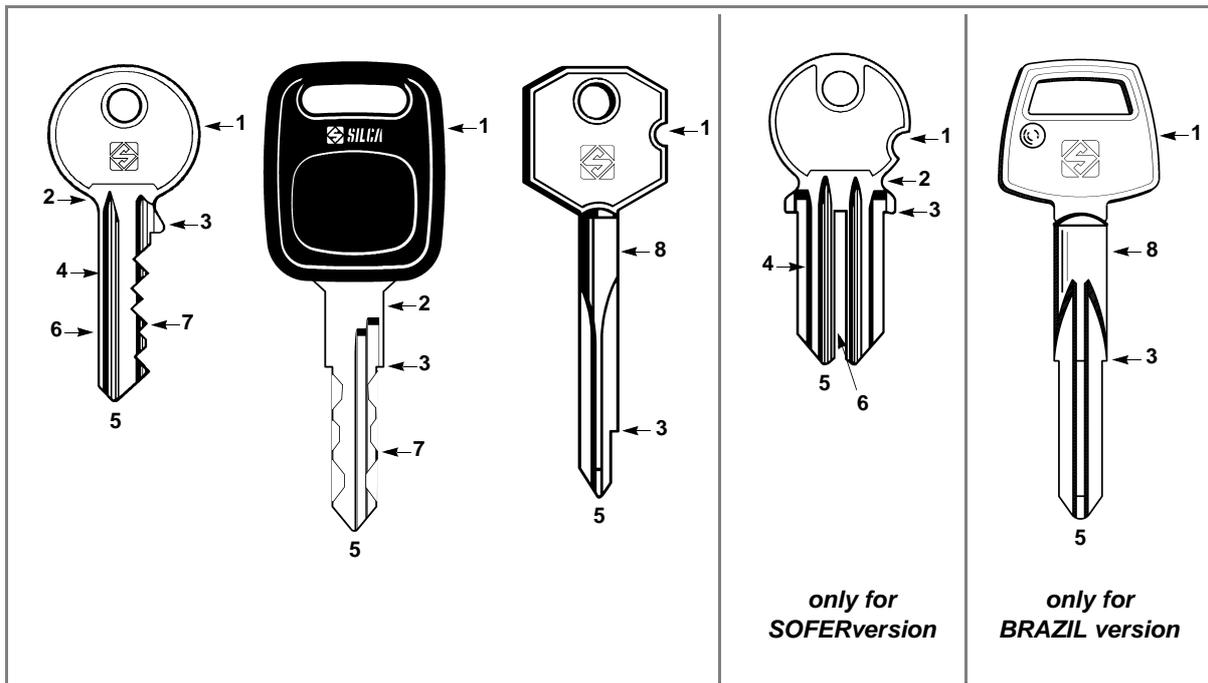


Fig. 1

- 1) Head
- 2) Rim
- 3) Stop
- 4) Stem
- 5) Tip
- 6) Back
- 7) Cuts
- 8) Stem

GENERAL INTRODUCTIONS

The REKORD key-cutting machine has been designed according to the specifications of the Machine Directives. From the design stage risks for the operator have been eliminated in all areas: transport, key-cutting, regulation and maintenance.

Other risks have been eliminated by the use of protective devices for the operator.

The protective devices used are designed not to provoke further risks and, above all, they cannot be ignored unless deliberately cut out. They do not hinder visibility of the work area.

A special adhesive label is attached to the machine warning the operator to use goggles during the cutting operations, and this is strongly recommended in this manual.

The material used in the manufacture of this machine and the components employed during use of the machine are not dangerous and their use complies with standards.

Use

The REKORD must be installed and used in the way laid down by the manufacturer.

If the key-cutting machine is used differently or for purposes different from those described in this manual, the customer will forego any rights he may have over SILCA S.p.A. Furthermore, unforeseen danger to the operator or any third parties may arise from incorrect use of the machine.

Negligence in the use of the machine or failure on the part of the operator to observe the instructions given in this manual are not covered by the guarantee and the manufacturer declines all responsibility in such cases.

It is therefore indispensable to read the operating manual carefully in order to make the best use of the REKORD and benefit from its potential.

Instructions manual

The instructions manual provided with the machine is essential to its proper use and to carry out the necessary maintenance.

We therefore recommend protecting the manual from damage in a safe sheltered place, easily to hand for quick consultation.

Further Risks

There are no further risks arising from the use of the machine.

Protection and safety precautions for the operator

The REKORD key-cutting machine is built entirely to standards. The operations for which it has been designed are easily carried out at no risk to the operator.

The adoption of general safety precautions (wearing protective goggles) and observation of the instructions provided by the manufacturer in this manual eliminate all human error, unless deliberate.

The REKORD key-cutting machine is designed with features which make it completely safe in all its parts.

• Power supply

The key-cutting machine is powered by electricity supplied through a separable earthed plug.

• Start-up

The machine is started up:

- Activating the safety main switch on the right-hand side of the machine.
- Activating the motor on switch the left-hand side.

• Maintenance

The operations to regulate, service, repair and clean the machine have been devised in the simplest and safest way possible. There is no danger of removable parts being re-placed wrongly or unsafely.

• Machine Identification

The REKORD key-cutting machine is provided with an identification label which shows the serial number (fig. 2).

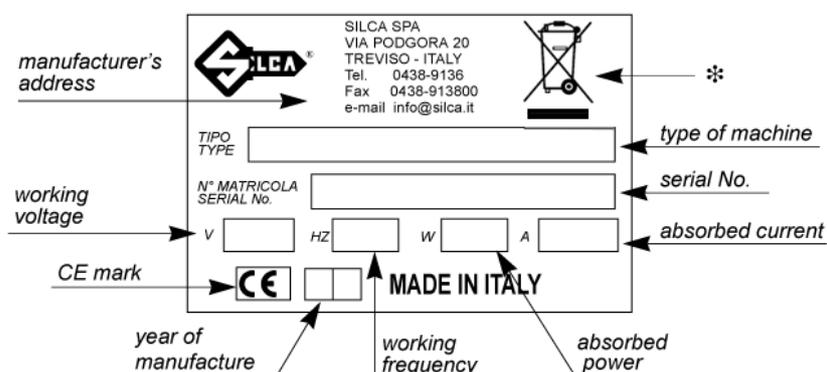


Fig. 2

(*) see chap. 9 "DISPOSING OF MACHINE", page 28.

1 TRANSPORT

The REKORD key-cutting machine is easily transported and is not dangerous to handle. The packed machine can be carried by one person.

1.1 Packing

The REKORD is packed in a strong cardboard box, the dimensions of which are shown in fig. 3, sufficiently robust to be used for storing the machine for long periods.

Inside the box the machine is enclosed in two expanded polymer shells. The shells and cardboard box ensure safe transportation and protect the machine and all its parts.

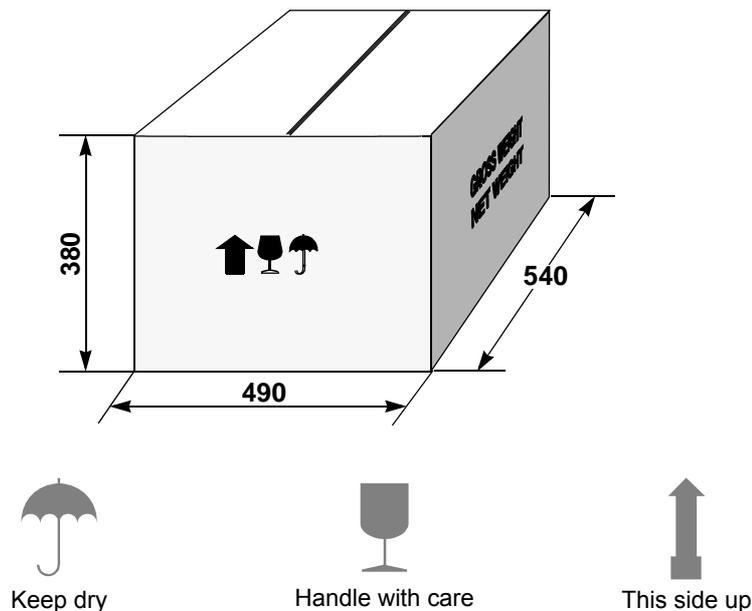


Fig. 3

1.2 Transport

To avoid damaging the REKORD it must always be transported in its packing case. This will prevent sudden movements or rough handling from damaging the machine, persons or things.

1.3 Unpacking

To remove the machine from the packing box:

- 1) cut the straps with scissors and remove.
- 2) prise off the staples.
- 3) open the box without damaging it as it may be used again (e.g. removals, dispatch to the manufacturers for repairs or servicing).
- 4) check the contents of the box, which should comprise:
 - 1 REKORD key-cutting machine packed in a protective shell.
 - 1 set of documents, including: operating manual, spare parts list and guarantee.
 - 1 connecting wire.
 - 1 tool kit.
- 5) remove the key-cutting machine from the protective shell.

1.4 Handling the machine

When the REKORD has been unpacked, place it directly on its workbench.

This operation can be carried out by one person, firmly holding the base, and no other part, to lift and carry the machine.

2 WORKING PARTS

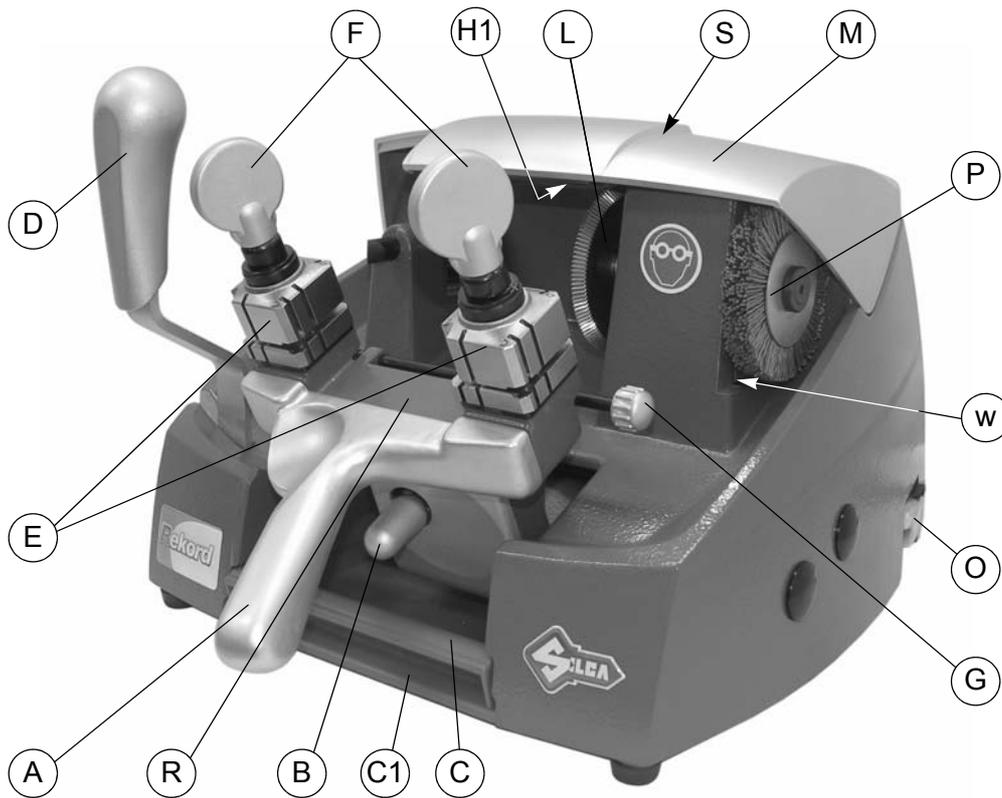
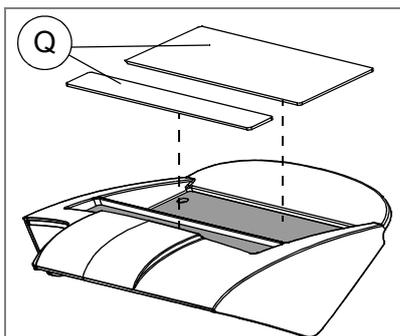
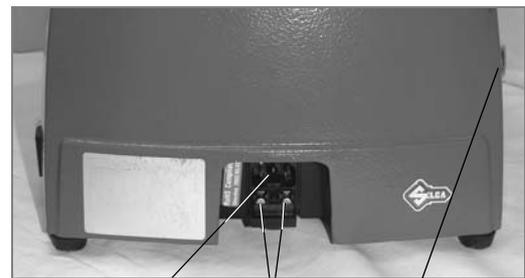


Fig. 4

- A - carriage handle lever
- B - carriage release lever
- C - chippings tray
- C1 - tool tray
- D - carriage movement lever
- E - clamps
- F - clamp knobs
- G - gauge knobs
- H - gauge tabs
- H1 - lamp
- I - tracer point
- J - tracer point locking grub screw
- K - centesimal ring
- L - cutting tool
- M - top cover
- N - motor on switch
- O - main switch
- P - brush
- Q - protective pad
- R - clamp carriage
- S - motor
- U - fuses
- V - supply socket
- W - protective belt cover



3 MACHINE DESCRIPTION

REKORD is a professional cutting machine for flat keys used with cylinder, car locks and cruciform keys. The main parts of the machine are described below:

Main switch

The key-cutting machine is connected to a power supply socket provided with a differential switch. Pressing the switch (O) powers the machine and illuminates the warning light (H1) to indicate that current is on.

ATTENTION: Switch (O) is electromagnetic, in the event of a power failure it goes out automatically. When electricity is restored it must be reset manually to power the machine again.

Motor on switch

The motor on switch (N) is placed on the left-hand side of the REKORD key-cutting machine.

ATTENTION: the illuminated switch remains on to indicate that the key-cutting machine has been started (cutter in motion).

Motor and transmission unit

The motor has belt transmission. The transmission unit is placed on the left of the motor and activates the brush (P) and cutting tool (L). These components are protected by two covers:

- protective belt cover (W),
- top cover (M).

Clamp carriage

The clamp carriage (R) consisting of two clamps, is fitted to the horizontal movement carriage, controlled by lever (D) and is provided with a handle (A) under which can be found the carriage release button (B). The carriage movement by means of gears, allows high precision movements which greatly facilitate all cutting operations.

The carriage is fully protected by a special panel designed to prevent the accumulation of dust and chippings from the work process.

The machine is designed with a ramp along which chippings can fall into the special chippings tray (C), placed under the carriage and easily removable for emptying and cleaning.

Cutting unit

The cutting unit contains the actual working parts of the REKORD key-cutting machine, which operate together to cut and finish keys "read" from the originals.

The working parts are described below:

- **Brush**

The brush (P) is used to eliminate burrs from the cuts and is made of non-abrasive material.

- **Cutting Tool**

The cutting tool (L) is the part of the REKORD used for cutting key blanks. The cutting tool is in HSS super rapid steel and is protected by a special cover (M) to ensure safe operation.

- **Tracer point**

The tracer point (I), used for reading the profile of the key to be copied, is housed on the left-hand side of the machine base. A centesimal ring (K) ensures regulation of the depth.

- **Clamps**

The clamps (E) have four sides which rotate to allow the key to be perfectly secured on its back or in profile (fig. 12-B).

- **Clamp knobs**

The clamps are locked by two anatomical knobs (F) which ensure perfect grip on the keys with only slight locking pressure.

- **Calibration tabs**

The clamps have two gauge tabs (H) with which to adjust key alignment.

3.1 Technical Data

ELECTRICAL PROPERTIES:

- 230V-50Hz 370W 1,9A
- 120V-60Hz 560W 4,6A

CUTTING TOOL: HSS Super Rapid Steel

MOTOR: One-speed single phase

- 230V-50Hz; 1350 rpm 0,18 Kw
- 120V-60Hz; 1620 giri/min. 0,18 Kw

MOVEMENTS: by gear on rectified carriage

CLAMP: rotating with four sides, high precision

MAXIMUM LENGTH OF CUTS: 43 mm (carriage run)

DIMENSIONS: width: 330mm (with max. lever encumbrance 510mm) depth: 430mm height: 270mm

SONOROUS PRESSURE: Leq. = 82.5 dB (brass keys)

SONOROUS PRESSURE: Leq. = 87.5 dB (iron keys)

Note: the equivalent sonorous pressure for the iron keys during the normal use (around 50 keys a day) it is inferior to 85 dB.

WEIGHT: 19 kg.

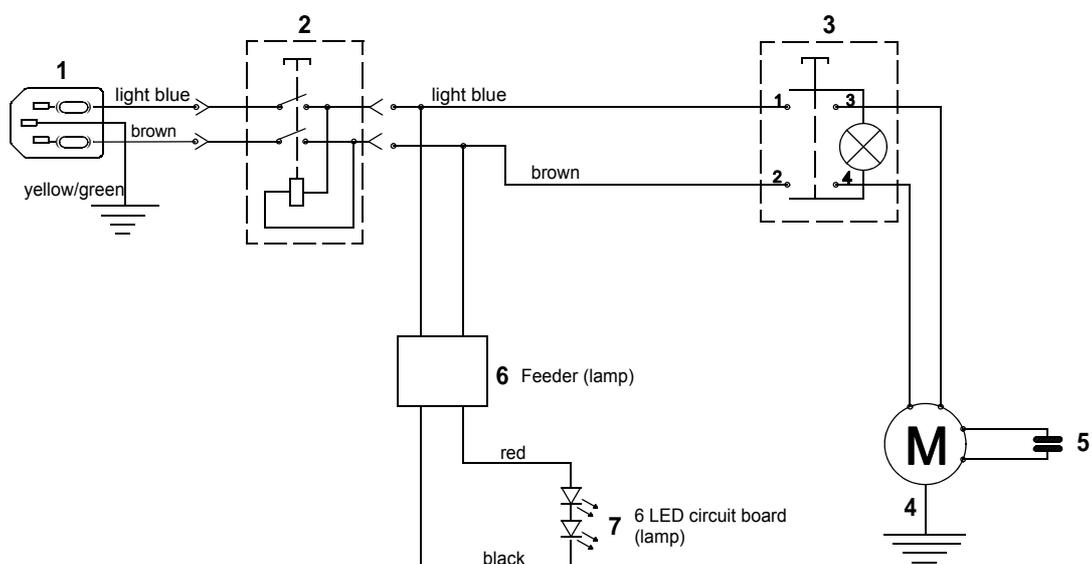
3.2 Electric circuit

The REKORD key-cutting machine is provided with a single phase one-speed motor;

- 1350 rpm, consumes approximately 0.18 Kw, absorption 1,5A (230V/50Hz)
- 1620 rpm, consumes approximately 0.18 kw, absorption 4,6A (120V/60Hz)

The main parts of the electric circuit on the REKORD are listed below:

- 1) Main plug with fuses
- 2) Safety main switch
- 3) Illuminated switch
- 4) Motor: 230V a.c. 50Hz - (120V a.c. 60Hz)
- 5) Condenser
- 6) Feeder
- 7) 6 LED circuit board (lamp)



4 ACCESSORIES PROVIDED

To ensure trouble-free working with the REKORD, it is advisable to always have certain spare parts on hand. It is advisable to always have a tool box containing: tools, cutting tools, brushes, belts and small replacement parts.

REKORD is supplied with a full range of accessories.

The accessories provided by Silca are all that is necessary to carry out the operations for which the machine is designed.

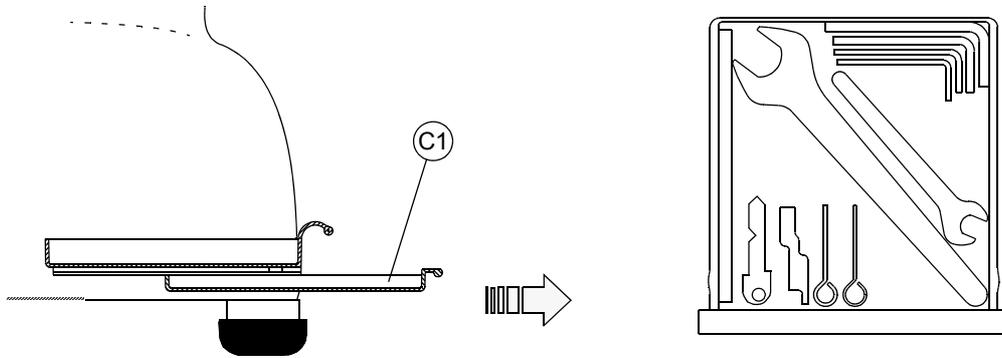
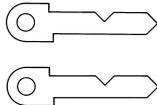
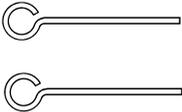
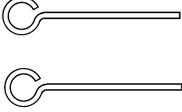
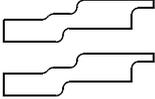


Fig. 5

 <p>2,5 mm ALLEN KEY</p>	 <p>CUTTING TOOL UNCLAMPING PIN</p>
 <p>3 mm ALLEN KEY</p>	 <p>ADJUSTING BAR 2 pcs</p>
 <p>4 mm ALLEN KEY</p>	 <p>STEEL PIN Ø 1,20 2 pcs</p>
 <p>5 mm ALLEN KEY</p>	 <p>STEEL PIN Ø 1,70 2 pcs</p>
 <p>19 mm SPANNER</p>	 <p>STEEL BAR 2 pcs</p>
 <p>10 mm SPANNER</p>	 <p>5X20 FUSES (2 pcs) 4 Amps rapid (230V) 8 Amps rapid (120V)</p>
<div style="border: 1px solid black; padding: 5px; display: inline-block;"> <p>ATTENTION DANGEROUS MOBILE PARTS</p> </div> <p>ADHESIVE LABEL "DANGEROUS MOBILE PARTS"</p>	

5 MACHINE INSTALLATION AND PREPARATION

The REKORD key-cutting machine can be installed by the purchaser and does not require any special skills.

However, some checks and preparation for use need to be carried out by the operator.

5.1 Checking for damage

The REKORD key-cutting machine is solid and compact and will not normally damage if transport, unpacking and installation have all been carried out according to the instructions in this manual. However, it is always advisable to check that the machine has not suffered any damage.

5.2 Environmental conditions

To ensure that the best use is made of the REKORD key-cutting machine, certain parameters must be borne in mind:

- damp, badly ventilated sites should be avoided.
- The ideal conditions for the machine are:
 - temperature: da 0 a 40°C
 - relative humidity: 60% circa

5.3 Positioning

Place the key-cutting machine on a horizontal surface, solid enough to take the weight (19 Kg).

To facilitate operation and maintenance, install the machine with a space of at least 200 mm on all sides (fig. 6).

Ensure that the machine stands perfectly balanced on the four feet. Vibration is avoided when the machine is properly set on the horizontal plane.

ATTENTION: ensure that the machine voltage is the same as that of the mains, which must be properly earthed and provided with a differential switch.

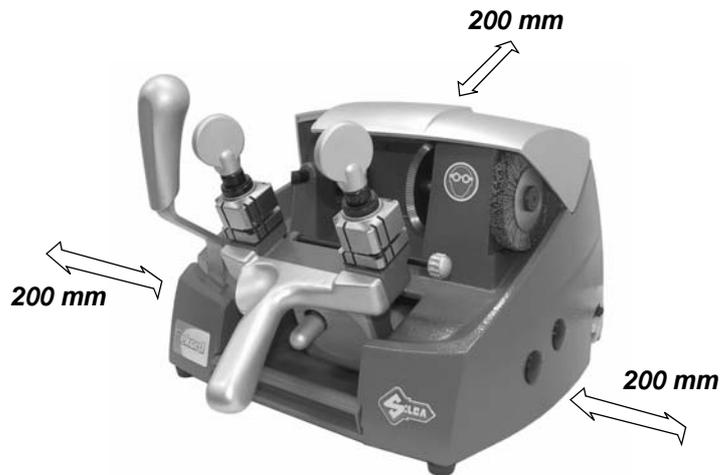


Fig. 6

5.4 Description of work station

The key-cutting machine needs only one operator, who has the following controls at his/her disposal:

- Switch on the lamp by activating the main switch (O) located on the right-hand side of the machine.
- The motor on switch (N), located on the left-hand side of the machine has a warning light to show that the key-cutting machine is live.
- Carriage movement lever (D)
- Carriage handle lever (A)
- Carriage release lever (B)
- Gauge knob (G).

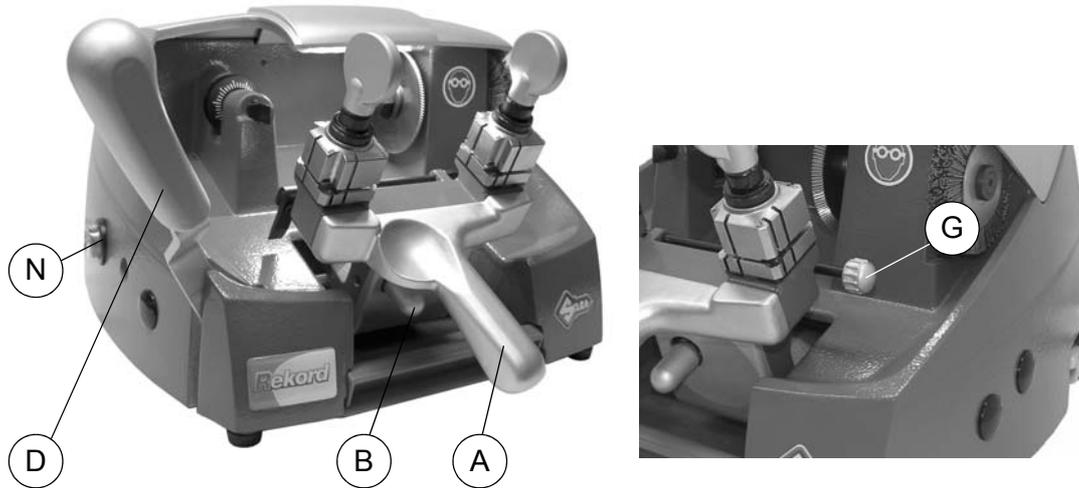


Fig. 7

5.5 Separate parts

The separately packed parts must be installed on the REKORD key-cutting machine by the purchaser, as follows:

Connection wire

Connect the key-cutting machine power cable to the electricity mains (fig. 8).

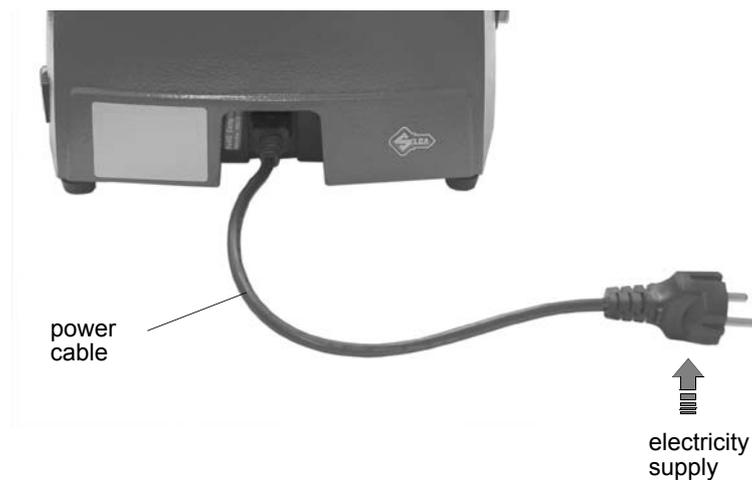


Fig. 8

5.6 Removing the blocks

Remove the protective cardboard panel between the carriage and the machine body (fig. 9).

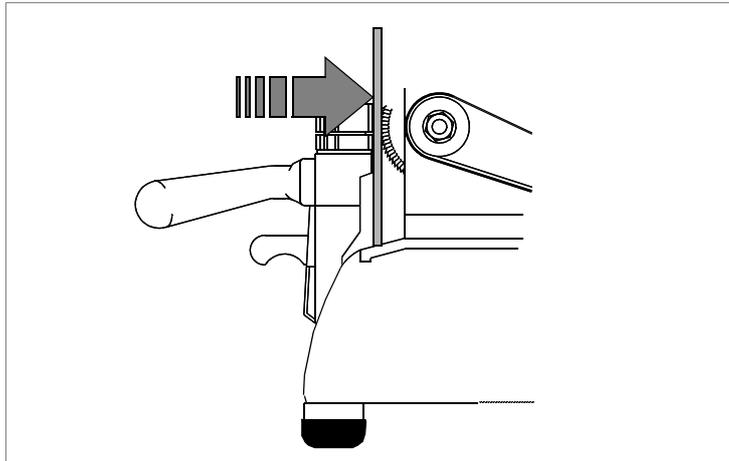
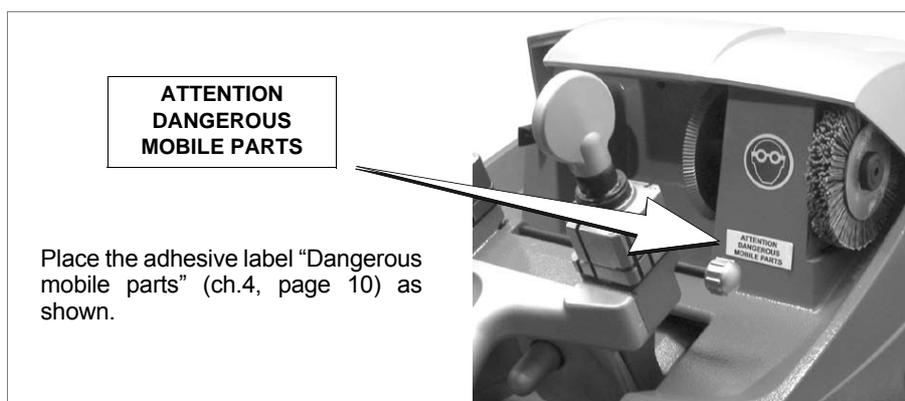


Fig. 9

5.7 Connection to the mains

For the safety of the operator and the machine it is important to ensure that the machine is connected to the proper mains voltage by means of an earthed differential switch.

5.8 Graphics



6 MACHINE REGULATION AND UTILIZATION

6.1 Checking and setting

The cutting tool on the REKORD is the part used to cut the key blanks and should be periodically checked and replaced, if necessary.

Every time the cutting tool is changed, and during periodical operational tests, check calibration.

6.2 Calibration

The REKORD key-cutting machine requires two types of calibration: axis and depth.

Axis calibration:

Axis calibration is regulation of the space between the stop and the cuts (fig. 10).

The axis setting for the REKORD is fixed and is established on assembly in our workshops

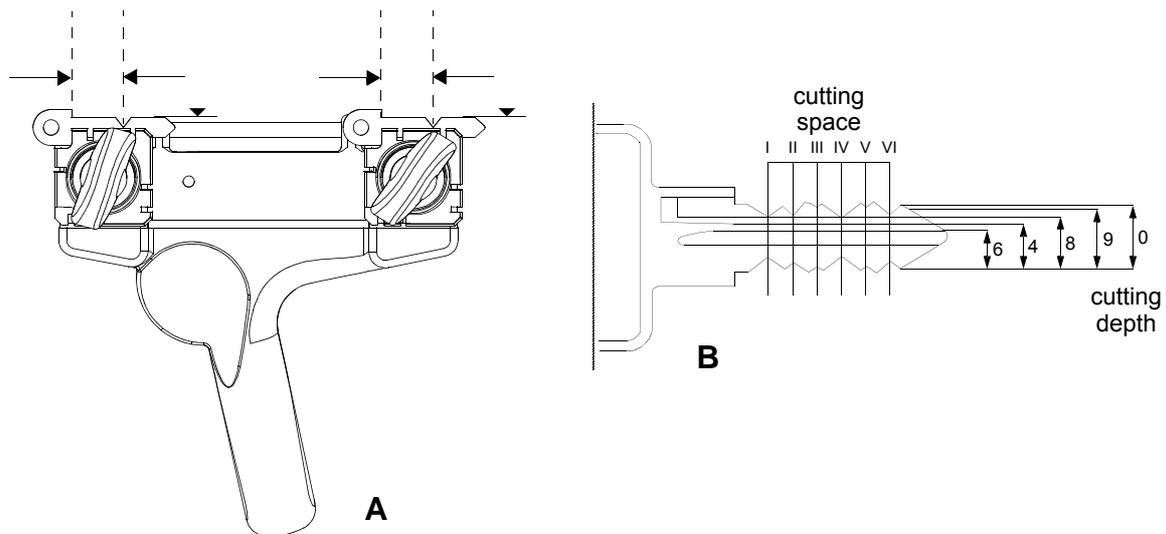


Fig. 10

Depth calibration:

Depth calibration is regulation of the cutting depth (fig. 10-A).

Proceed as follows:

- 1) Ensure that the key-cutting machine is off by unplugging the power cable.
- 2) Place the adjusting keys (provided) on the clamps (fig. 11-B).
- 3) Check that the adjusting keys adhere properly to the clamps (fig. 11-B).
- 4) Turn the gauge rod (G) towards the operator so that the gauges come into contact with the adjusting keys (fig. 11-B). Lower the gauge rod (G).
- 5) Release the carriage by raising the release lever (B) (fig. 4).
- 6) Raise the carriage and take up to the cutting tool.
- 7) Take the keys into contact with the cutting tool and tracer point.
- 8) Turn the cutting tool anticlockwise manually and check that it skims the adjusting keys in several places.
- 9) If necessary, regulate the depth of the cut with the micrometric tracer point, as follows:
 - a) loosen the screw holding the tracer point (J).
 - b) turn the grub screw (K) clockwise to advance the tracer point.
 - c) turn the grub screw (K) anticlockwise to return.

ATTENTION: each notch on the centesimal ring corresponds to 0,025 mm (fig. 11-A).

- 10) Repeat these operations until regulation is complete, then tighten the tracer point locking grub screw (J).

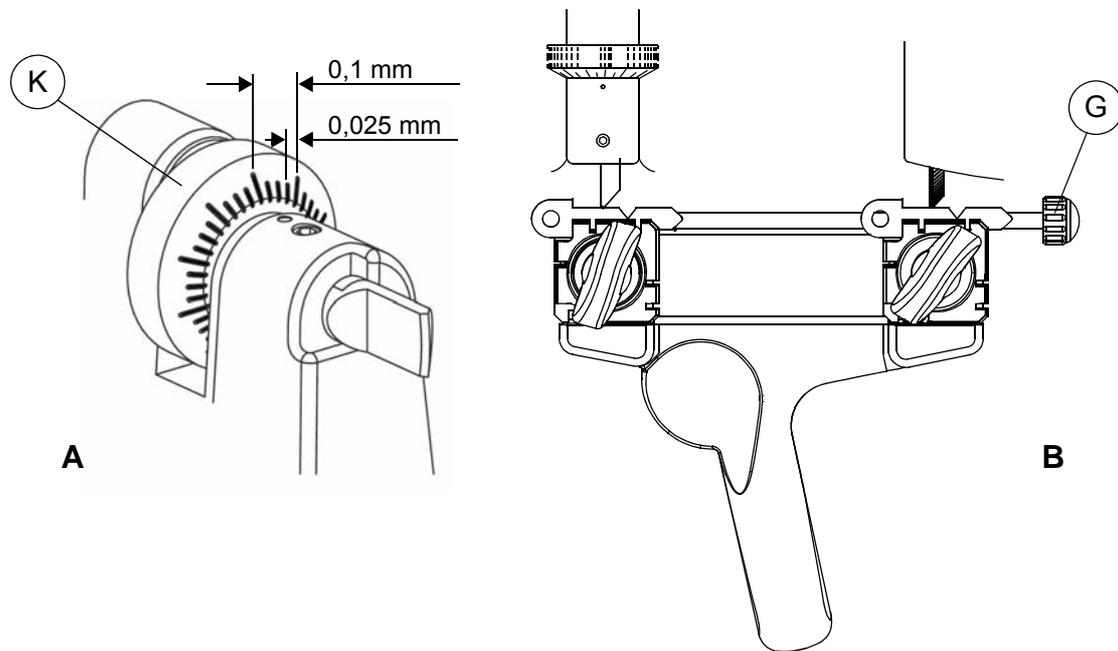


Fig. 11

7 KEY CUTTING

ATTENTION: for complete safety during the cutting operations, take the following precautions:

- Always work with dry hands.
- Check that the machine is properly earthed.
- Wear protective goggles even if the machine has a protective shield over the cutting tool.
- Start the motor (switch N) only after completing the operations on the carriage (securing the keys, etc.).
- Keep hands away from the cutting tool in motion.

7.1 Key cutting

- 1) Turn the clamps to find the appropriate side for securing the key (fig. -B).
- 2) Loosen the knobs (F) by a couple of turns (fig. -A).
- 3) Raise the lower part of the clamps and turn to the required position:
 - **Side A of the clamp:** for keys to be fitted on their backs (fig. -B)
 - **Side B of the clamp:** for keys placed on their backs and having cuts with a depth of less than 3,9 mm (fig. -B))
 - **Side C and D of the clamp:** for keys to be cut on both sides and locked on the groove (fig. -B)

Securing the keys in the jaws

- 1) Position the original key (left-hand jaw) and key blank (right-hand jaw), ensuring that:
 - a) the keys are positioned and secured in the clamp;
 - b) the key stop is resting against the calibration tabs (H);
- 2) secure the keys by closing the clamps with the knobs (F).

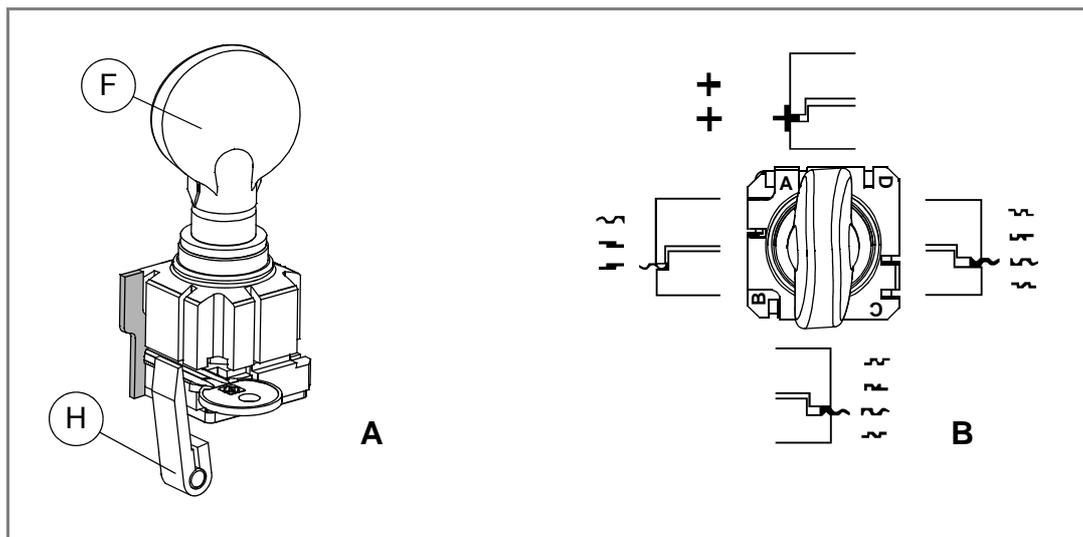
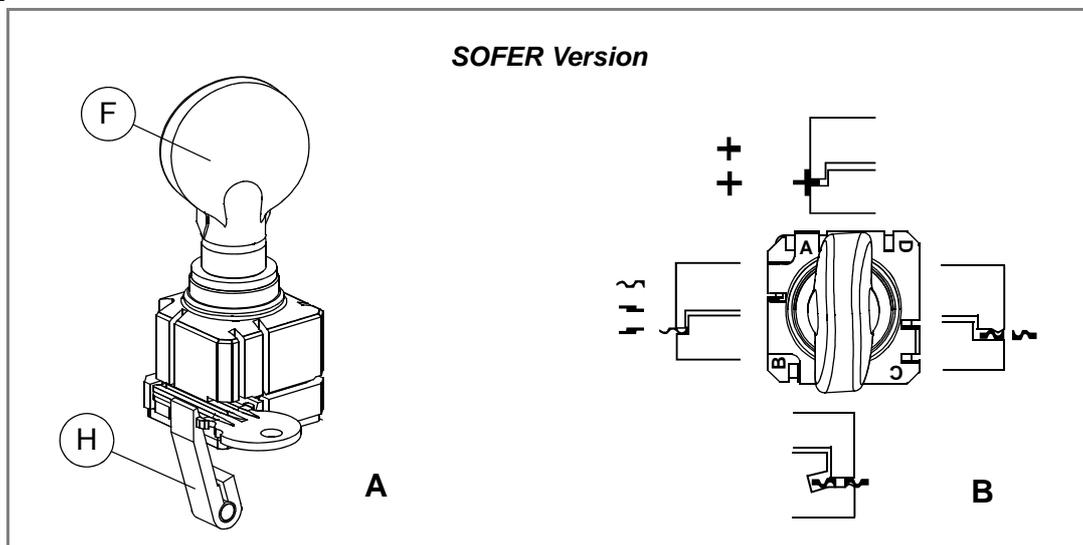
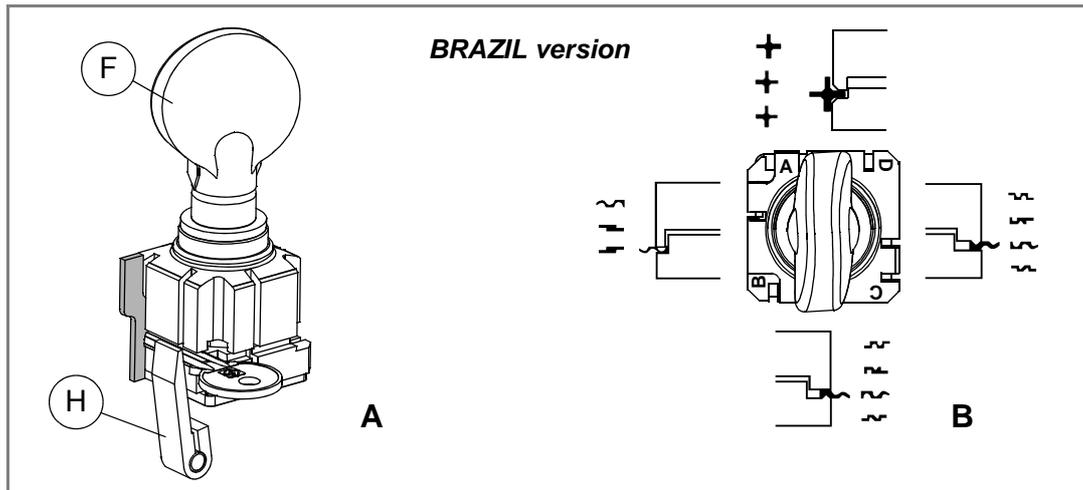


Fig. 12





Key cutting

When the REKORD key-cutting machine has been turned on by means of switch (O) it is ready for cutting:

- 1) Make sure the gauge rod (G) has been lowered.
- 2) Take the carriage up to the tracer point and cutting tool by releasing the push lever (B).
- 3) To copy the key, move the carriage sideways from right to left by means of the lever (D).
- 4) Turn off the machine with main switch (O) before removing the duplicated key.
- 5) Remove the keys from the clamps.
- 6) Turn on the machine with switch (O) and smooth off the key edges by means of the brush (P).

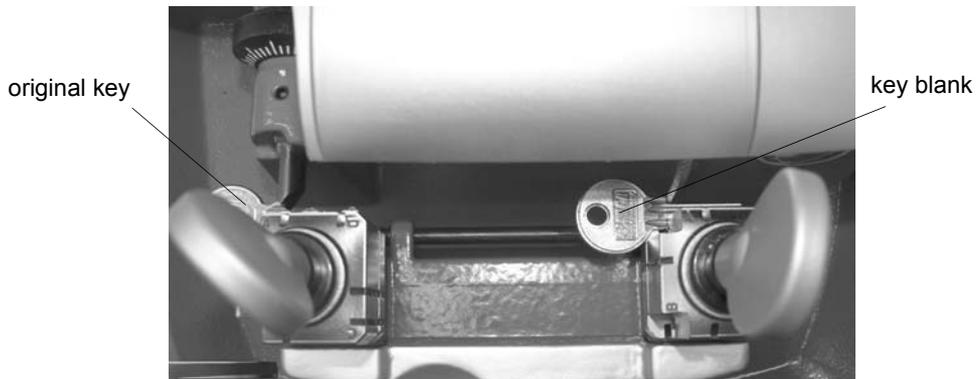


Fig. 13

Using the accessories

The accessories provided with the REKORD to assist key-cutting are:

- pins
- bars.

Using the pins

The pins must be inserted between the bottom of the jaw and the back of the key for keys with narrow stems, and their purpose is to ensure that the key protrudes sufficiently to be cut properly (fig. 14, fig. 14-C).

For keys with narrow, thin stems, two pins must be used (fig. 14-B), the second one to give a secure grip on the key. If the key thickness is too fine to guarantee a good grip in the clamps, a pin must be used (fig. 14-A).

ATTENTION: the pins provided have two different diameters: 1,20 mm and 1,70 mm. It is essential to use pins with the same diameters for locking both the original and the key blank.

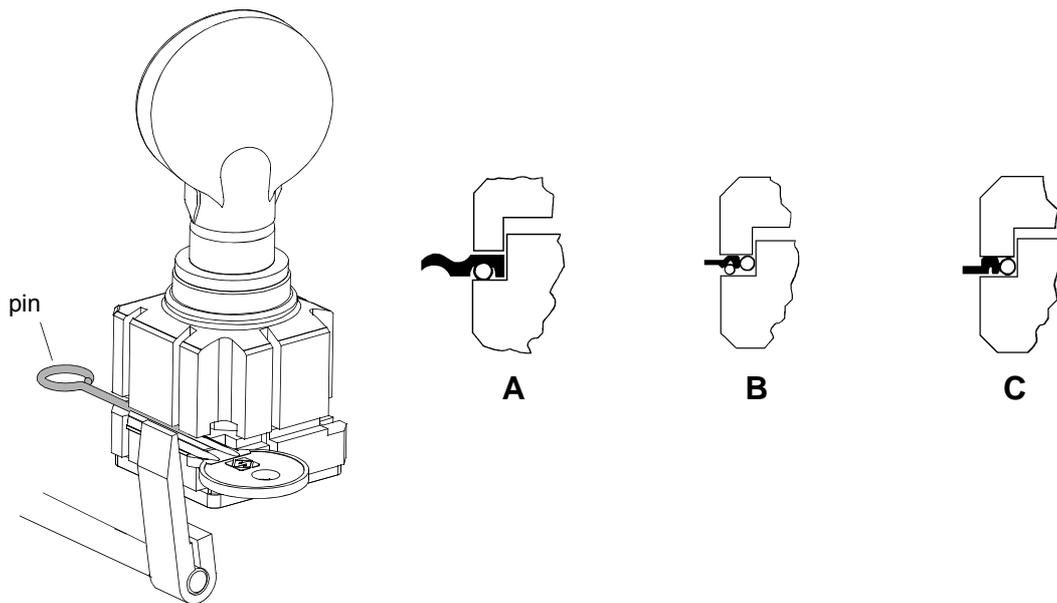


Fig. 14

Using the bars

The bars provided are used for cutting pin keys and as a tip rest for locking keys with no stop (fig. 15).

Cutting pin keys using bars

The pin keys (90°) can be cut with the REKORD clamps and the aid of the bars.

Positioning pin keys:

- 1) Leave the gauges in the idle position.
- 2) Insert the bars with neck into the slot in the clamps.
- 3) Butt the key stop against the bars (fig. 15).
- 4) Secure the keys in the clamps.
- 5) Remove the bars from the clamp grooves to prevent it being touched by the tracer point or cutting tool.
- 6) Cut the first side.
- 7) Repeat the operation, turning the keys in the same direction for the other positions.

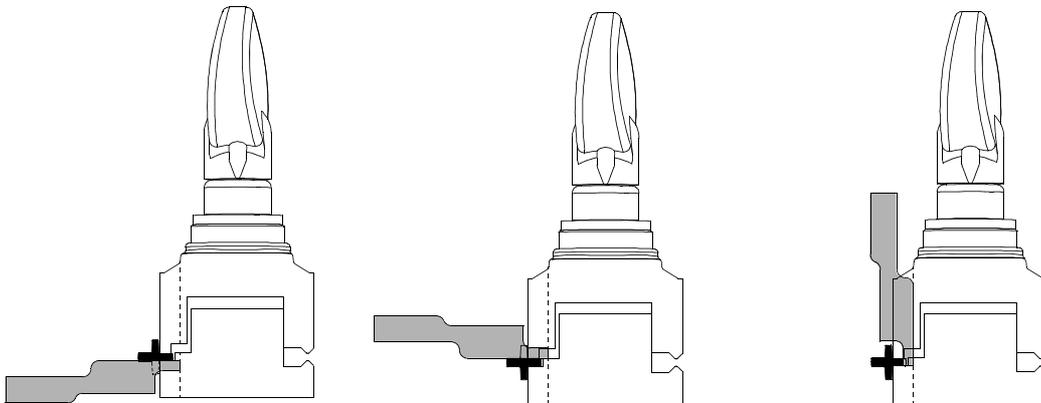


Fig. 15

Tip stop with a bar

The bars can be used with keys which have no stop (fig. 15). Proceed as follows:

- 1) Leave the gauges in the idle position.
- 2) Insert the bars into the slot in the clamps.
- 3) Rest the tip of the key against the bar.
- 4) Secure the key and remove the bar.



Fig. 16

8 MAINTENANCE

ATTENTION: for repairs or replacement of parts for maintenance, the 'CE' mark is guaranteed only if original spare parts provided by the manufacturer are used.

Although the REKORD key-cutting machine does not require special maintenance, it is advisable to check and, if necessary, replace the parts subject to wear, such as: the belt, cutting tool, brush, tracer point. Replacement is simple and can be carried out by the operator.

CLEANING

Keep the carriage and clamps free of chippings from the cutting operations by cleaning with a dry brush.

ATTENTION: do not use compressed air!

ATTENTION: to keep the machine well maintained we recommend using protective oil, e.g. WD40 or similar, applied to the burnished mechanical parts. This prevents oxidation of the parts in question (clamps, guides, carriages, etc.). Do not contaminate the electronic parts with the oil.

Before starting any type of maintenance (checks or replacements), read the instructions below:

- never carry out maintenance or servicing with the machine switched on.
- always remove the mains plug.
- follow all the instructions in the manual to the letter.
- use original spare parts.
- always check that any screws or nuts removed when replacing a piece are properly tightened.

8.1 Replacing the cutting tool

In order to substitute the cutting tool you don't need to remove the cutting tool cover. To replace a worn cutting tool, proceed as follows:

ATTENTION: remove the mains plug.

- 1) Slot the locking rod (standard) into the hole of the cutting tool shaft (fig. 17).
- 2) Use the spanner provided to loosen the cutting tool locking the nut.

ATTENTION: the thread is left-handed.

- 3) Remove the worn cutting tool.
- 4) Carefully clean the new cutting tool and its seat.
- 5) Install the new cutting tool and tighten the nut.

ATTENTION: the tool rotates clockwise.

- 6) Remove the locking pin.

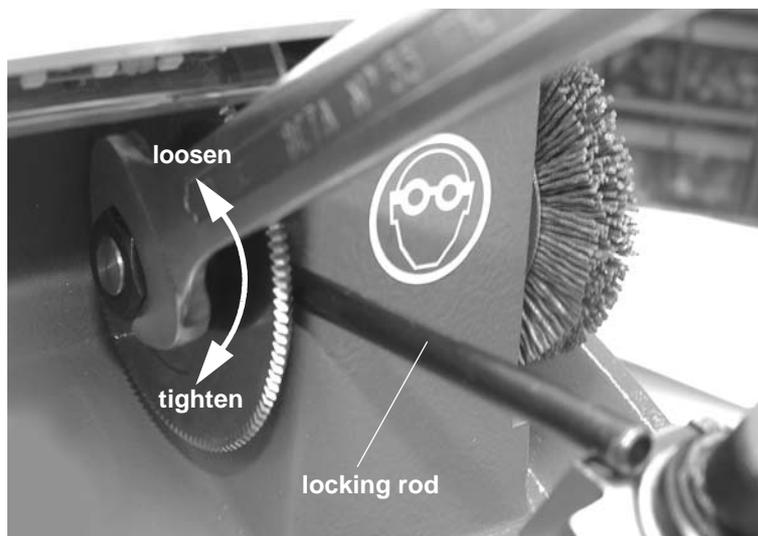


Fig. 17

8.2 Replacing the brush

When the brush no longer cleans off the burrs it must be replaced as follows:

ATTENTION: remove the mains plug.

- 1) Place the locking rod (provided) in position on the motor shaft.
- 2) Use the Allen wrench (provided) to loosen the screw holding the brush in place (fig. 18).
- 3) Replace the brush and tighten the screw with the Allen wrench.
- 4) Remove the spanner from the motor shaft.

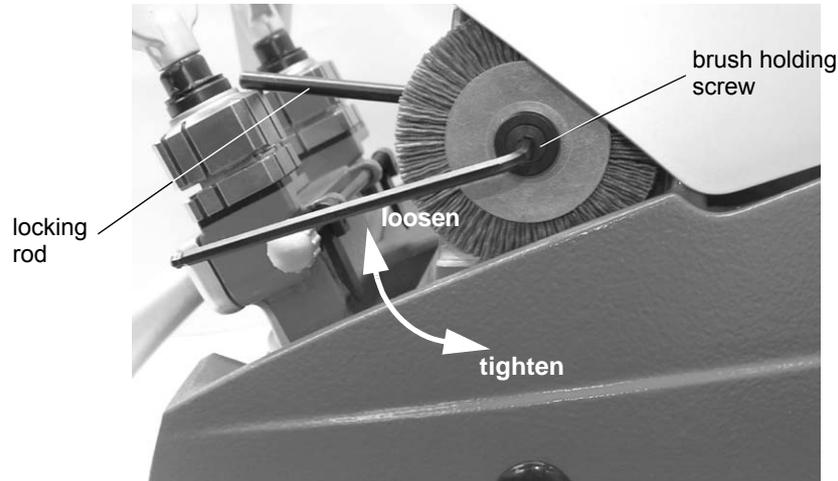


Fig. 18

8.3 Replacing and/or tightening the belt

Worn or loose belts (T) must be replaced or adjusted so as to ensure safe and proper operation of the cutting tool/ brush.

Tension:

ATTENTION: remove the mains plug.

- 1) Remove the two protective pads (Q) (fig.4, page 6).
- 2) Loosen the 3 screws (M1) and remove the top cover (M).
- 3) Loosen the 4 screws (S1) of the plate motor (fig. 21).
- 4) * Push the motor down until the proper belt tension is obtained.
- 5) Tighten the four screws.

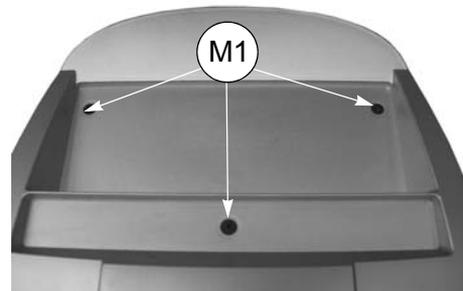


Fig. 19

Replacement:

ATTENTION: remove the mains plug.

- 1) Remove the two protective pads (Q).
- 2) Loosen the 3 screws (M1) and remove the top cover (M).
- 3) Remove the brush (fig. 18).
- 4) Remove the 3 screw (M2) (fig. 18) to remove the protective cover (fig. 21)
- 5) * Loosen the 4 screws (S1) of the plate motor (fig. 21)
- 6) Raise the motor and remove the worn belt.
- 7) Fit the new belt.
- 8) ** Replace the motor in its previous position.
- 9) Tighten the 4 screws.
- 10) Replace the belt cover
- 11) Replace the brush
- 12) Replace the top cover

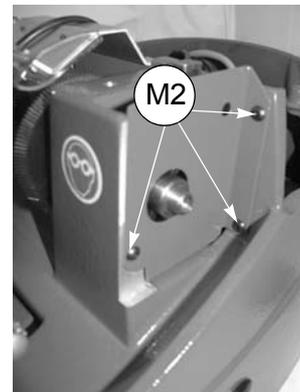


Fig. 20

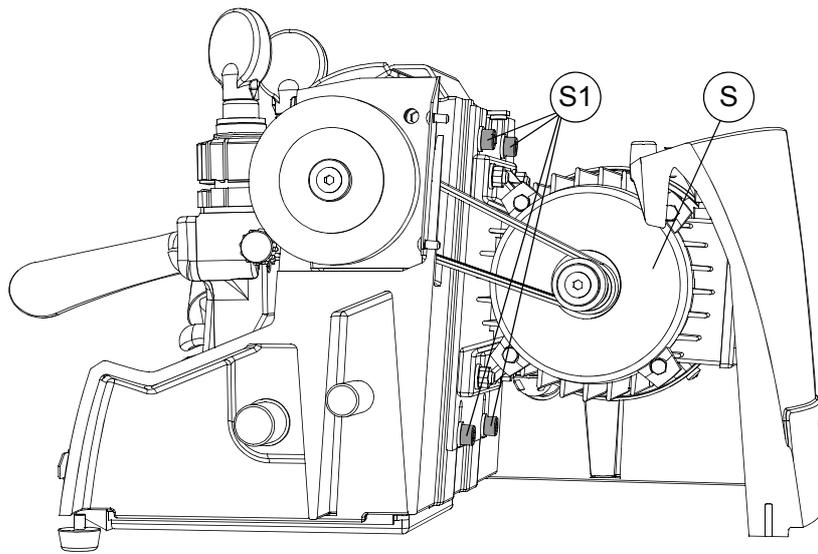


Fig. 21

*** FOR VERSIONS WITH BELT TIGHTENERS (P1) (Fig.23)**

- Loosen the screw (P2) and raise the belt tightener in order to remove the belt.
- Push the belt tightener downwards to tighten the belt.
- Secure the belt tightener with the screw (P2).

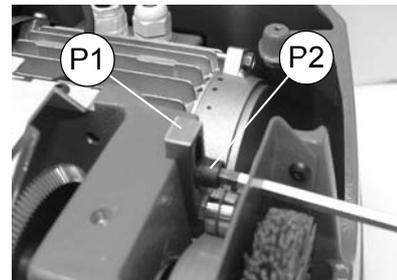


Fig. 22

**** FOR VERSIONS WITH BELT TIGHTENERS (P1) (Fig.23)**

- Push the belt tightener downwards to tighten the belt.
- Secure the belt tightener with the screw (P2).

8.4 Replacing the tracer point

To replace the tracer point (I) (fig. 24), proceed as follows:

ATTENTION: remove the mains plug.

- 1) Remove the two protective pads (Q).
- 2) Loosen the 3 screws (M1) and remove the top cover (M).
- 3) Loosen the screw (K1).
- 4) Loosen the grub screw (J).
- 5) Loosen the tracer point by turning it anticlockwise until is fully released.
- 6) Fit the new tracer point and screw down to the end of run.
- 7) Tighten the grub screw (J).
- 8) Tighten the screw (K1).
- 9) Re-set the machine as described in chap. 6, page 14.

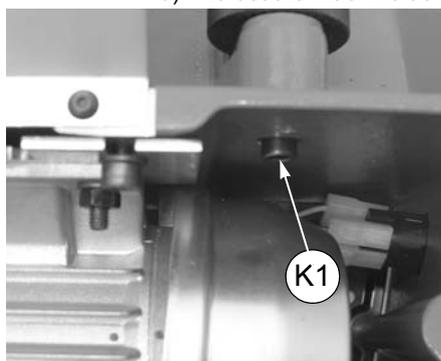


Fig. 23

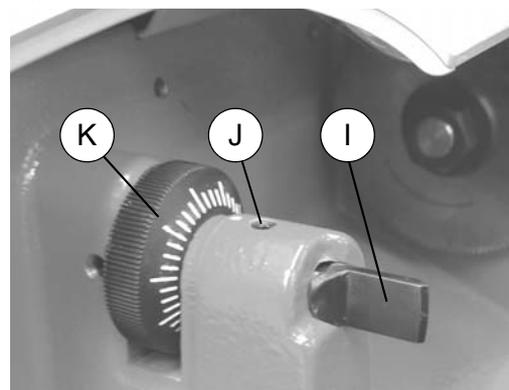


Fig. 24

8.5 Regulating carriage depth

The carriage on the REKORD can be regulated to protect the clamps from coming into contact with the tracer point or cutting tool.

ATTENTION: the play between cutting tool/tracer point and clamps must be 0.1 mm.

Should it be different from this, proceed as follows:

ATTENTION: remove the mains plug.

- 1) Release the carriage, raise against the cutting tool and take to the end of its run (fig. 25).
- 2) Remove the chippings tray (C) and tool holder (C1).
- 3) Release the nut with the spanner (fig. 25).
- 4) Use the Allen wrench to screw or unscrew the grub screw in order to move the carriage away from or towards the tracer point and cutting tool.
- 5) Tighten the nut.

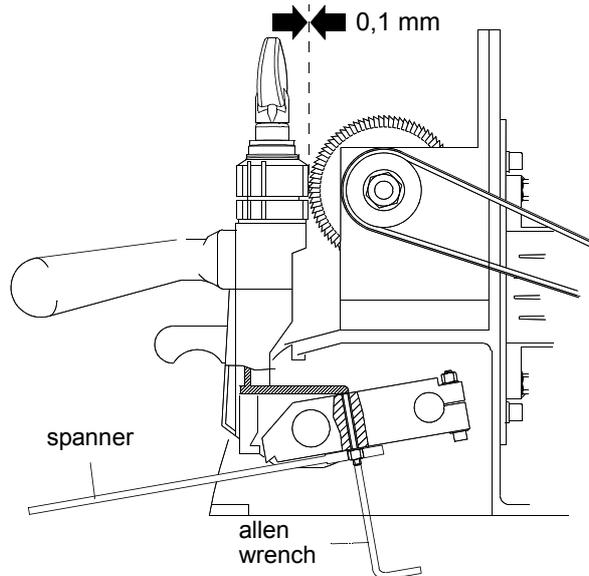


Fig. 25

8.6 Replacing the fuses

ATTENTION: remove the mains plug.

- 1) Unplug the power cable from the key-cutting machine socket.
- 2) Turn the key-cutting machine round so as to reach the fuse housing on the back.
- 3) Remove the fuses box placed below the key-cutting machine socket (V) (fig. 26).
- 4) Replace the fuses (U) (fig. 26).
- 5) Close the fuses box and connect the power cable.

ATTENTION: fuses must always be replaced with others of the same type (rapid) and with the same Amps (4 Amps for 230V; 8 Amps for 120V).

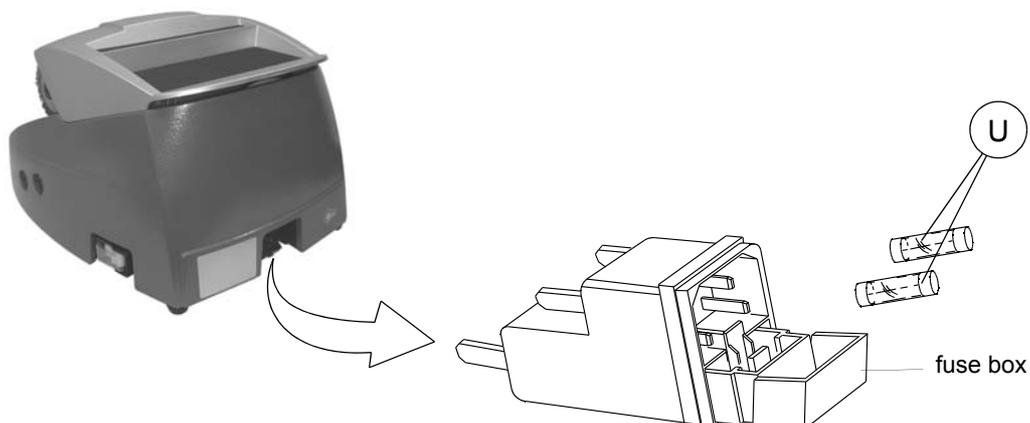


Fig. 26

8.7 Access to the lower part

ATTENTION: disconnect from the mains.

- 1) Detach the wire from the key-cutting machine socket.
- 2) Remove the double box (tool holder/swarf tray) (C) and (C1).
- 3) Turn the machine over onto its back.
- 4) Loosen the 6 screws (Y) to remove the bottom grate.

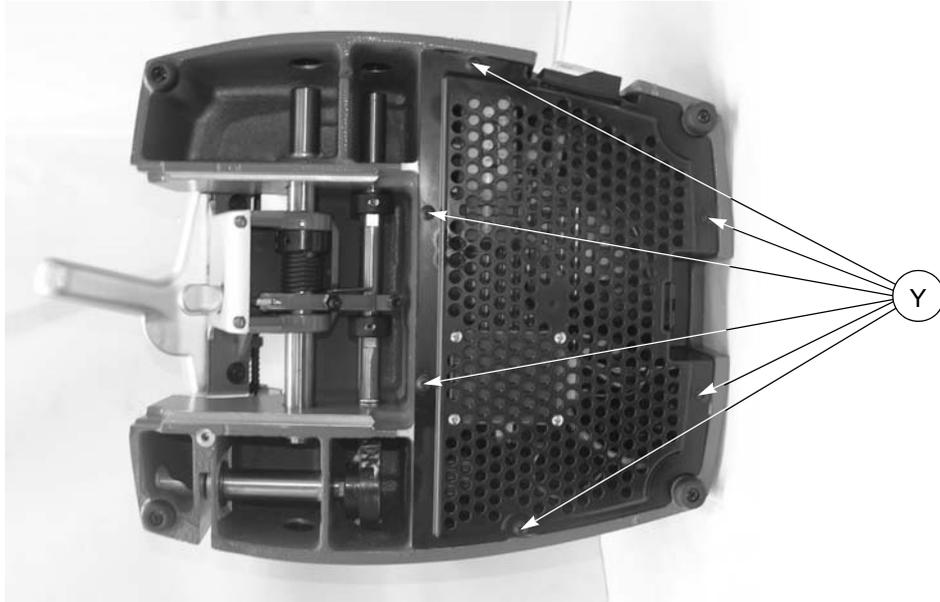


Fig. 27

8.8 Replacing main switch

- 1) Access the bottom part (see ch. 8.7).
- 2) Detach the 4 connectors (Y1) paying special attention to their position.
- 3) Use a screwdriver to lower the internal tabs fixing the switch, then pull it out.
- 4) Fit the new main switch.
- 5) Reconnect the 4 connectors (Y1).
- 6) Replace the bottom grate and secure with the screws (Y) (fig. 27).
- 7) Turn the machine back into place on the work bench.

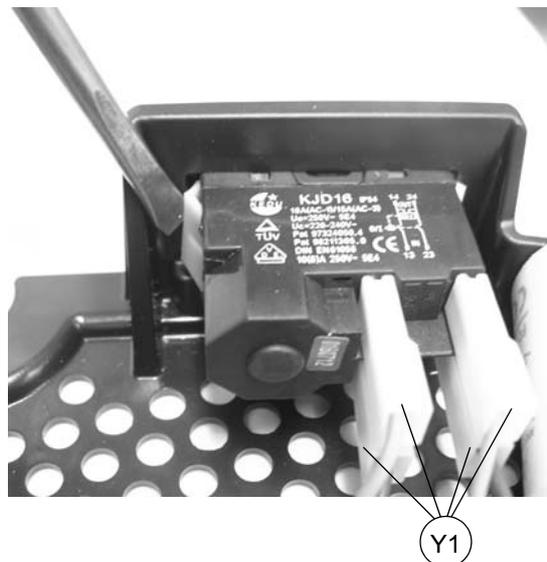


Fig. 28

8.9 Replacing motor/condenser

Motor

- 1) Remove the two protective pads (Q).
- 2) Loosen the 3 screws (M1) and remove the top cover (M).
- 3) Detach the 4 connectors (S2) from the motor on switch.
- 4) Loosen the 4 screws (S1) (fig. 21) on the motor fixing plate and remove the belt.
- 5) Loosen completely only the 2 lower screws (S1) the motor fixing plate and pull downwards.

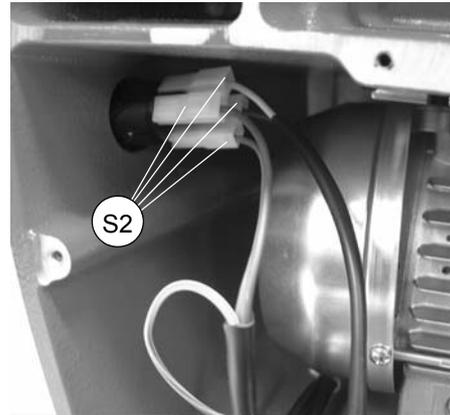


Fig. 29

Condenser

- Access the bottom part (see ch. 8.7)
- Remove the motor (see ch. 8.9 - Replacing motor)
- Loosen the nut (Z) (fig. 31) and remove together with the washer.
- Loosen the 4 screws (S4) on the motor box and remove.
- Loosen the 2 condenser connection screws (X1).
- Loosen the nut on the wire grommet (X) and remove the condenser.
- Fit the new condenser, taking the wire through the nut (X) replace the motor box and secure with the 4 screws (X1).
- Tighten the grommet nut (X), replace the motor box and secure with the 4 screws (S4).
- Replace the condenser (see points 9 to 13).
- Loosen the 4 screws (S3) on the motor fixing plate.
- Secure the new motor on the fixing plate with the screw (S3).
- Replace the motor.

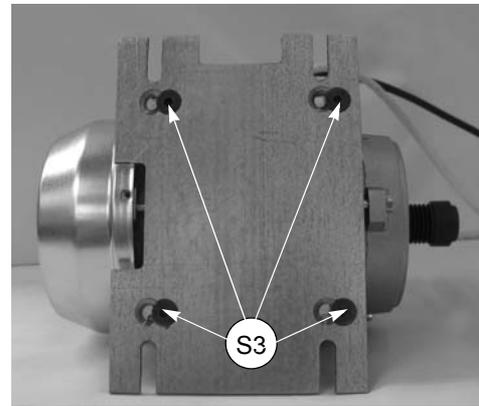


Fig. 30

- 6) Place the machine in position on the work bench.
- 7) Install the belt and tighten the 4 screws (S1) (fig. 21) of the plate motor.
- 8) Connect the 4 connectors (S2) (fig. 29) to the motor on switch and fit the earth wire to its screw with the nut (S5) (fig. 33).
- 9) Replace the condenser and secure with washer and nut.
- 10) Replace the bottom grate and secure with the screws (Y) (fig. 27).
- 11) Place the machine in position on the work bench.
- 12) Replace the top cover and secure with the 3 screws (M1).
- 13) Replace the protective pads (Q).

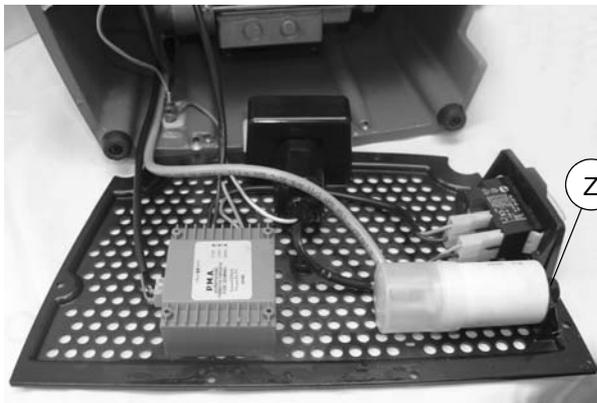


Fig. 31

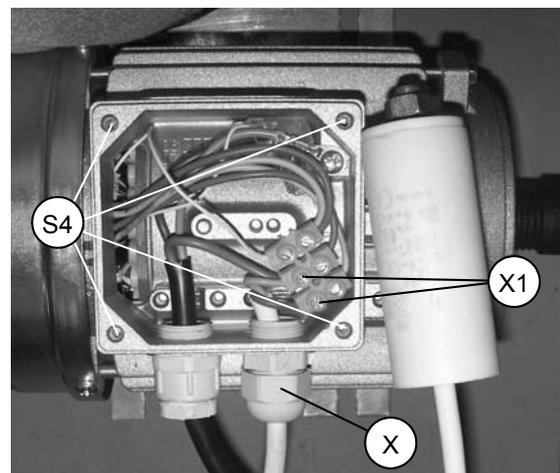


Fig. 32

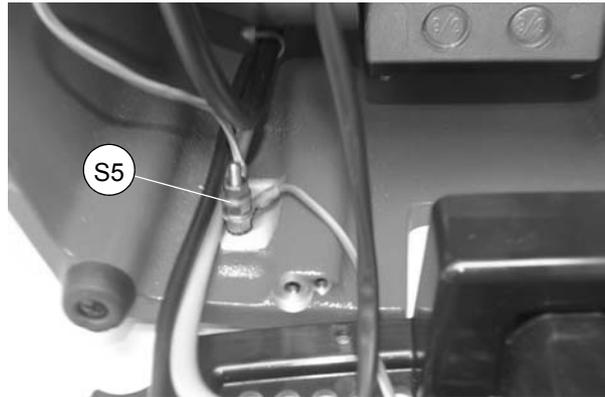


Fig. 33

8.10 Replacing lamp feed (transformer)

- 1) Access the bottom part (see ch. 8.7).
- 2) Loosen the 2 low voltage connector screws (Q1) remove and place in their seat on the new transformer, securing with the 2 screws.
- 3) Loosen the 2 mains connector screws (Q3) remove and place in their seat on the new transformer, securing with the 2 screws.
- 4) Loosen the screws (Q2) fixing the transformer to the bottom plate and remove.
- 5) Place the new transformer in position and secure with the screws (Q2).
- 6) Replace the bottom grate and secure with the screws (Y) (fig.27, page 24).
- 7) Place the machine in position on the work bench.

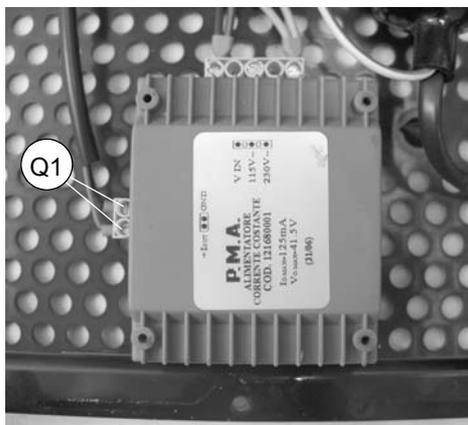


Fig. 34

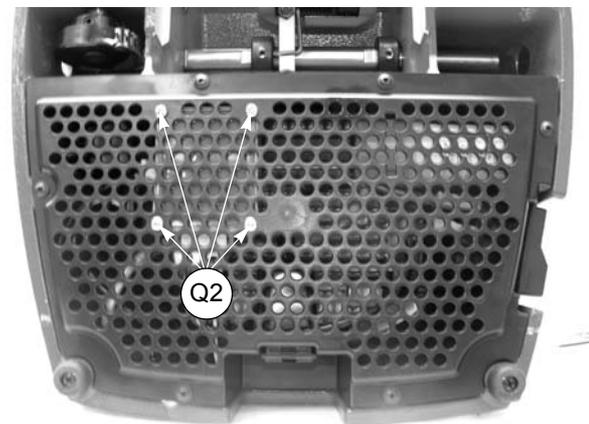


Fig. 35

8.11 Replacing lamp set/lamp protection

Lamp set

- 1) Remove the two protective pads (Q).
- 2) Loosen the 3 screws (M1) and remove the top cover (M).
- 3) Access the bottom part (see ch. 8.7).
- 4) Loosen the 2 low voltage connector screws (Q1) and remove them.
- 5) Position the machine upright again.
- 6) Loosen the 2 lamp fixing screws (L1) and remove.
- 7) Replace the top cover and secure with the 3 screws (M1).
- 8) Turn the machine over onto its back.
- 9) Connect the 2 connectors in the low voltage supply outlet seat and secure with the 2 screws (Q1).
- 10) Replace the bottom grate and secure with the screws (Y) (fig. 27).
- 11) Place the machine in position on the work bench.

Lamp protection

- 1) Remove the two protective pads (Q)
- 2) Loosen the 3 screws (M1) and remove the top cover (M).
- 3) Loosen the 2 lamp fixing screws (L1) and remove.
- 4) Loosen the 2 screws (L2) in order to remove the lamp protection (L3).
- 5) Fit the new protection and secure with the 2 screws (L2)
- 6) Replace the lamp unit and secure with the 2 screws (L1) making sure the wiring is positioned towards the bottom of the machine.
- 7) Replace the top cover and secure with the 3 screws (M1).

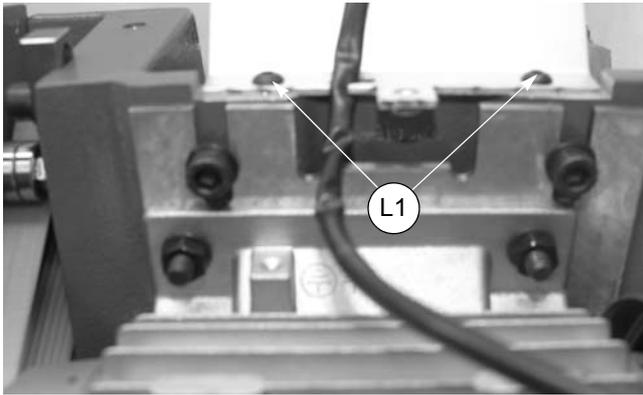


Fig. 36

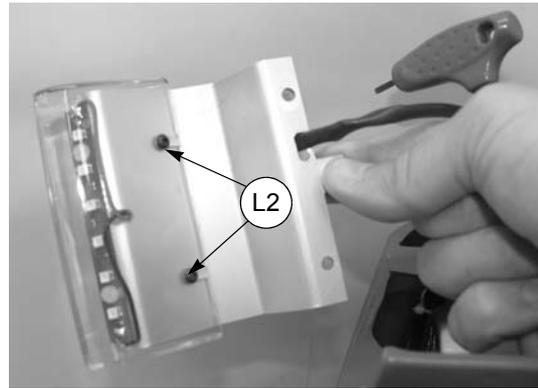


Fig. 37

8.12 Replacing motor on switch

- 1) Access the bottom part (see ch. 8.7).
- 2) Detach the 4 connectors (S2) (fig. 38) paying special attention to their position.
- 3) Use a screwdriver to turn down the internal switch fixing tabs and pull it out.
- 4) Fit the new switch in its seat and reconnect the 4 connectors (S2) paying special attention to their position.
- 5) Replace the bottom grate and secure with the screws (Y) (fig. 27).
- 6) Place the machine upright on the work bench.

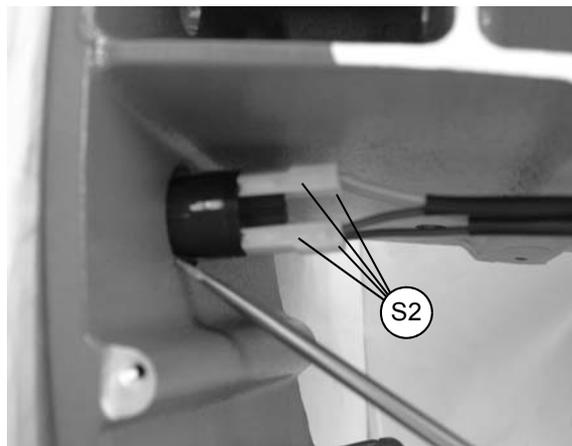


Fig. 38

9 DISPOSING OF MACHINE

EU regulations establish special arrangements for the disposal of waste (**).

Waste deriving from cutting operations

Although residue coming from the key-cutting operations is classified as special waste, it is included in solid urban waste (SUW) as metal wool.

Such waste is sorted according to its classification under current Italian and EU law and consigned to the proper disposal units.

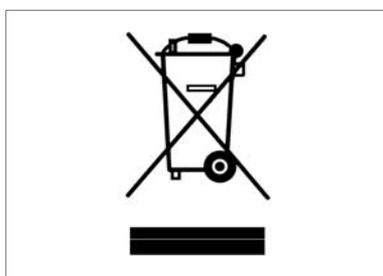
Cases where waste can be considered contaminated or containing toxic/harmful substances sufficient to transform it from SUW to toxic/harmful waste, are listed in the enclosures to current Italian and EU waste disposal regulations.

Re-cycling is a recommended ecological practice.

Packing

The REKORD is consigned in a cardboard packing box which can be re-used if undamaged. When it is to be thrown away it is classified as solid urban waste and should be placed in the special paper collecting bins.

The protective shell containing the machine is in polymer, classified as SUW, and can therefore be placed in an ordinary waste bin.



INFORMATION FOR USERS

*as per art. 10 of Directive 2002/96/CE of 27/01/2003
regarding waste from electric and electronic appliances (RAEE),*

- The symbol illustrated above, also found on the machine, indicates that it has been placed on the market and must be included in separate rubbish collection when the user wishes to dispose of it (including all components, sub-assemblies and consumables that are integrated in the product).
- For information about the collection system for such appliances please contact SILCA S.p.A. or another subject registered in the various National Rolls for other countries in the European Union. Household waste (or of similar origin) can be included in the separate collection system for urban waste.
- On purchasing a new appliance of equivalent type, the old one can be consigned to the dealer. The dealer will then contact whoever is responsible for collecting the appliance.
- Suitable separate collection of the unused appliance and its dispatch for treatment, recovery and environmentally compatible disposal, makes it possible to avoid potential negative effects on the environment and human health, and aids recycling and the recovery of the materials used.
- Unauthorised disposal of the product by users involves the application of the sanctions provided for in received Directives 91/156/CE and 91/689/CE

(**) "Waste" is any substance or object deriving from human activity or natural cycles, thrown away or to be thrown away.

10 ASSISTANCE

Silca provides full assistance to purchasers of the REKORD key-cutting machine.

To ensure complete safety for the operator, any job not specified in this manual should be carried out by the manufacturer or in the special Service Centres recommended by Silca.

On the back cover of this manual is a list of the manufacturer's addresses; listed below are the addresses of specialised Service Centres.

10.1 How to request service

The guarantee attached to REKORD key-cutting machines ensures free repairs or replacements of faulty parts within 12 months of purchase. All other service calls must be arranged by the customer with Silca or with a Silca service centre.



VITTORIO VENETO 07/11/2007

CE DECLARATION OF MACHINE COMPLIANCE

**SILCA S.p.A. - VIA PODGORA 20 (Z.I.)
31029 VITTORIO VENETO (TV) - (ITALY)
TEL. 0438 9136 - FAX. 0438 913800**

Declares under its own responsibility that the **Key-cutting machine** model

REKORD

complies with the requirements of the following European Directives:

European Union **DIRECTIVE 2006/42/CE** (Machines)
and with the EN 12100-1:2003 / EN 12100-2:2003 Standards

European Union **DIRECTIVE 2004/108/CE** (Electromagnetic Compatibility)
and with the EN 55022 : 1998 + A1 : 2000 + A2 : 2003
EN 61000 - 3 - 2 : 2000 + A2 : 2005
EN 61000 - 3 - 3 : 1995 + A1 : 2001 Standards

European Union **DIRECTIVE 2006/95/CE** (Low Voltage)
and with the EN 60950 - 1 : 2006 Standards

| 07 |

General Manager Basic Production Center

Corrado Fischer


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Hofwisenstrasse 24, ai sensi e per gli effetti degli articoli 2497 - 2497sexies del Codice Civile.





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