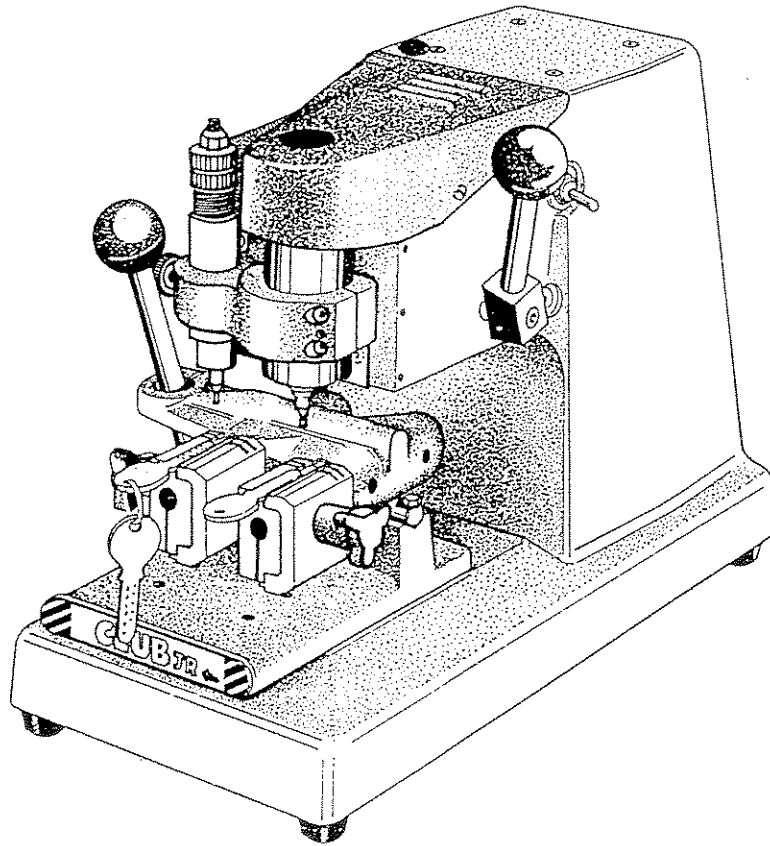


CLUB JR.



OPERATION AND MAINTENANCE HANDBOOK



Thank you for choosing one of Silca's key cutting machines. This machine has been designed, tested and produced in our factory, using the most modern technology, to provide you with many years of precision key duplicating. Before using the machine, please read the information presented in this manual, thoroughly.

The proper care and maintenance that your machine requires is also detailed in this handbook.

By following these instructions explicitly, you will ensure a long and trouble free life for your machine. If anything is at all unclear, please don't hesitate to contact your supplier, who directly or through Silca's Technical Service Department will provide you with any service or assistance that you require.

PARTS

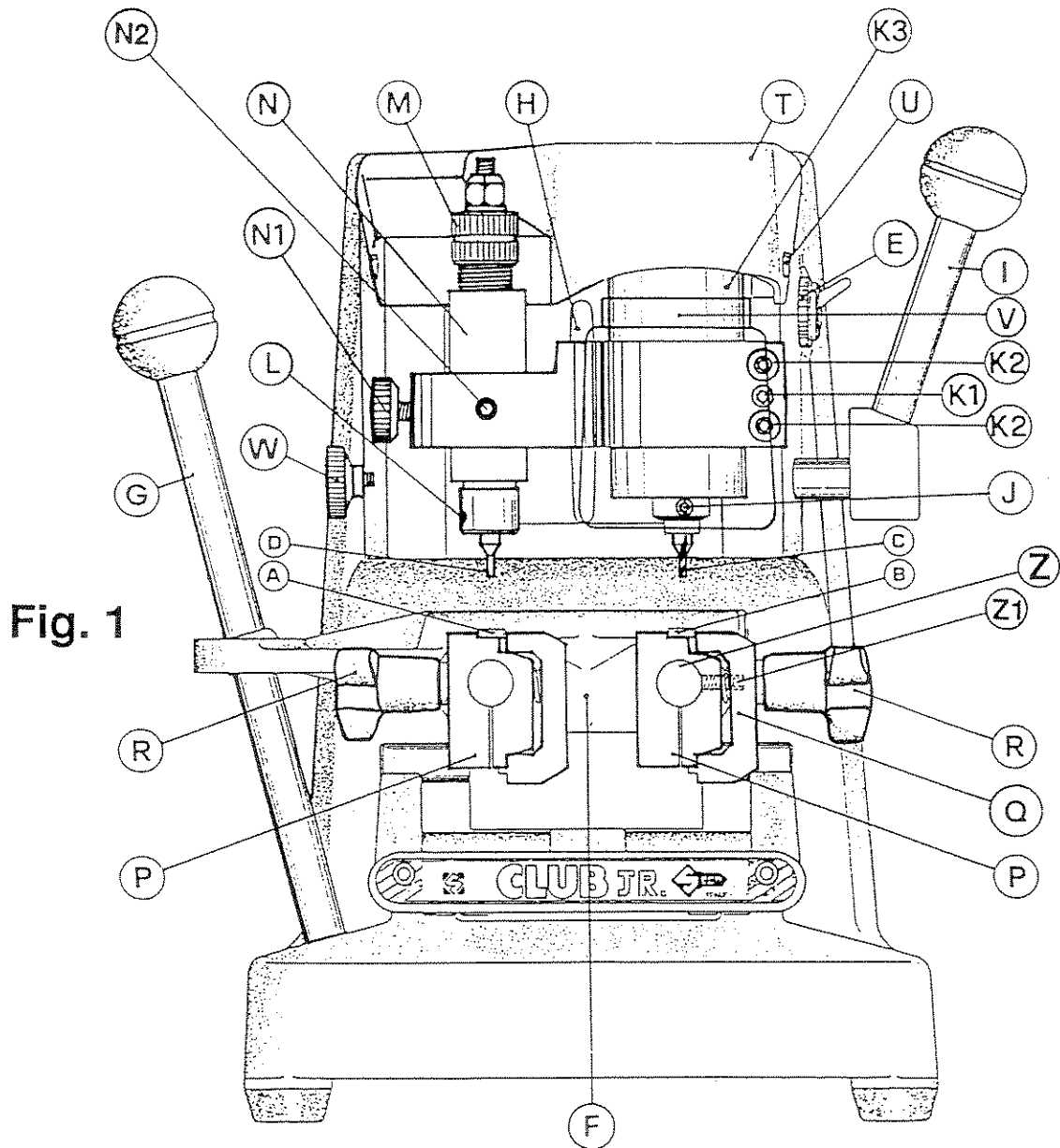


Fig. 1

- | | | | |
|-----|----------------------------|-----|----------------------------------|
| A) | Original key | M) | Adjustment screw for tracer p. |
| B) | Keyblank | N) | Tracer point assembly |
| C) | Cutter | N1) | Tracer point locking screw |
| D) | Tracer point | N2) | Tracer point ass.bly lock. screw |
| E) | Motor ON/OFF switch | P) | Inner jaw |
| F) | Lower carriage | Q) | Outer jaw |
| G) | Lower carriage lever | R) | Jaw handle |
| H) | Upper carriage | T) | Plastic cover |
| I) | Upper carriage lever | U) | Plastic cover screws |
| J) | Cutter locking screw | V) | Safety guard |
| K1) | Central grub screw | W) | Upper carriage locking knob |
| K2) | Outer screws | Z) | Jaw shaft |
| K3) | Cutter collet assembly | Z1) | Jaw shaft screw |
| L) | Tracer point locking screw | | |

DESCRIPTION AND TECHNICAL DATA

The CLUB JR. is a highly reliable key cutting machine that is extremely simple to operate. It cuts high security flat keys requiring lateral cuts (sidewinder) or vertical cuts (dimple). By mean of extra adapters it can also duplicate keys with angled cuts (see special section on page 9).

MOTOR : Single phase high speed type, 110 V - 60 Hz

CUTTER : HSS (High Speed Steel) milling type 2.5 mm (.098") diameter.
(For other optional cutters see special section at page 9).

TRANSMISSION : Pulleys with elastic belt drive.

MOVEMENT : On hardened ground roller type rail tracks.


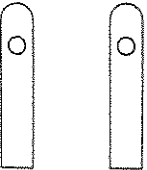
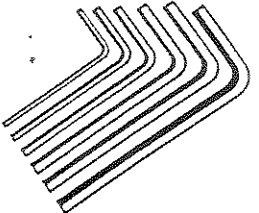
JAWS : Reversible to cut MERCEDES two track keys (SILCA ref. HU41P - HU41AP - HU44AP - HU55P -HU61P - HU61AP).

DIMENSIONS : 8" x 14" x 11.5" High

WEIGHT : 31 lbs.

SAFETY GUARD : Plastic protection screen.
IMPORTANT! The guard must always be used while cutting.

ACCESSORIES AND TOOLS PROVIDED

<p>T22 + F22 (Code D705486ZB)</p> <p>T22 (Code D405487RA) - TRACER</p> <p>F22 (Code D405488RA) - CUTTER</p>	<p>Pair of Testing Pins (Code D601003ZC)</p> 
<p>Pair of Steel Bars (Code D601002ZC)</p> <p>Single Bar (Code D402301BA)</p> 	<p>Set of Allen Keys (6 pcs) (Code D601161ZC)</p> 

INSTRUCTIONS FOR USE AND MAINTENANCE

INSTALLATION

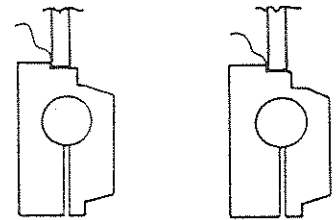
The machine is set and tested before leaving the Silca workshop. However, before operating for the first time, it is advisable to carry out the following checks :

- Place the machine on a bench, where it can be easily operated.
- Make sure that the machine is free of all packing materials.
- Ensure that the voltage is compatible with that of the motor.
- Ensure that the machine is properly grounded. If not from the plug, then with the brass grounding screw at the rear of the machine.

TO CHECK THE CALIBRATION (as and when necessary).

Insert the two testing pins (Code D601003ZC) in place of tracer point and cutter. To lock the testing pins in place in the tracer point and cutter holders, tighten the allen screws L and J. With the jaws opened, check that both testing pins touch the inside faces of the inner jaws. To carry out this procedure correctly, it is necessary to hold a very thin piece of paper (with a thickness of less than 0.001", cigarette paper is practical and ideal to use) between the pin and inside jaw face. The paper should stick when slight pressure is applied to the pin against the jaw. This test must of course be carried out on both the jaws. If the paper is not snugly held, loosen the two screws K2 and turn the cutter collet assembly K3 , which is internally eccentric , until the pins are aligned. If however, the cutter collet assembly will not more when these screws are loosened, the central grub screw K1 can be used to slightly open the carriage, thus allowing the assembly to turn.

Fig. 2



Remember to unscrew this and retighten the outer screws after aligning the testing pins. After that, another control is required in order to see if the spaces front to back are aligned on the jaws. To do this ,bring the two testing pins in contact with the front of the jaws (shoulder stop for the keys) ; repeat the same test as for side to side alignment described above with the paper. Any eventual difference can be adjusted by unscrewing the two screws Z1 that retain the shaft Z of the right jaw. This can be moved backward or forward until the two testing pins touch both the front of the jaws. Retighten the screws Z1 being careful not to rotate the jaw on the right while moving it

NOTE : This calibration for setting the spaces side to side is extremely delicate ; unless carried out carefully, correct key-cutting will not be possible.

TO SET THE CUTTING DEPTH.

Insert the cutter into the cutter collet assembly K3. Secure by tightening the locking screw J. Insert the tracer point into the tracer point assembly, tighten the screw L slightly, enabling the tracer point to slide freely in the housing. Position the tracer point lower than the cutter. Open the jaws by loosening the handles R; insert two identical keyblanks. Ensuring that they

are correctly positioned, tighten securely. Using the upper carriage lever I, lower it until the tracer point rests lightly on the blank. Apply slightly more pressure, giving further movement, causing the tracer point to retract into the holder; the cutter will lower to the point. At this position the tracer point should be locked, using the locking screw L. Turn on the motor with the switch E and while lowering the upper carriage with the handle I, check that when the tracer point touches the left-hand key, the cutter should just skim the right-hand key to leave a slight groove. If this groove appears too deep, loosen the tracer point locking knob N1, turn the adjustment screw M clockwise and re-lock the knob N1. This will lower the tracer point (Fig. 3B). However, if no contact is made between the cutter and the key, counter-clockwise turning of the screw M will adjust correctly (Fig. 3A).

When duplicating sidewinder type keys that are worn we suggest keeping the tracer point slightly deeper than the cutter in order to prevent damage by the cutter to the right jaw.

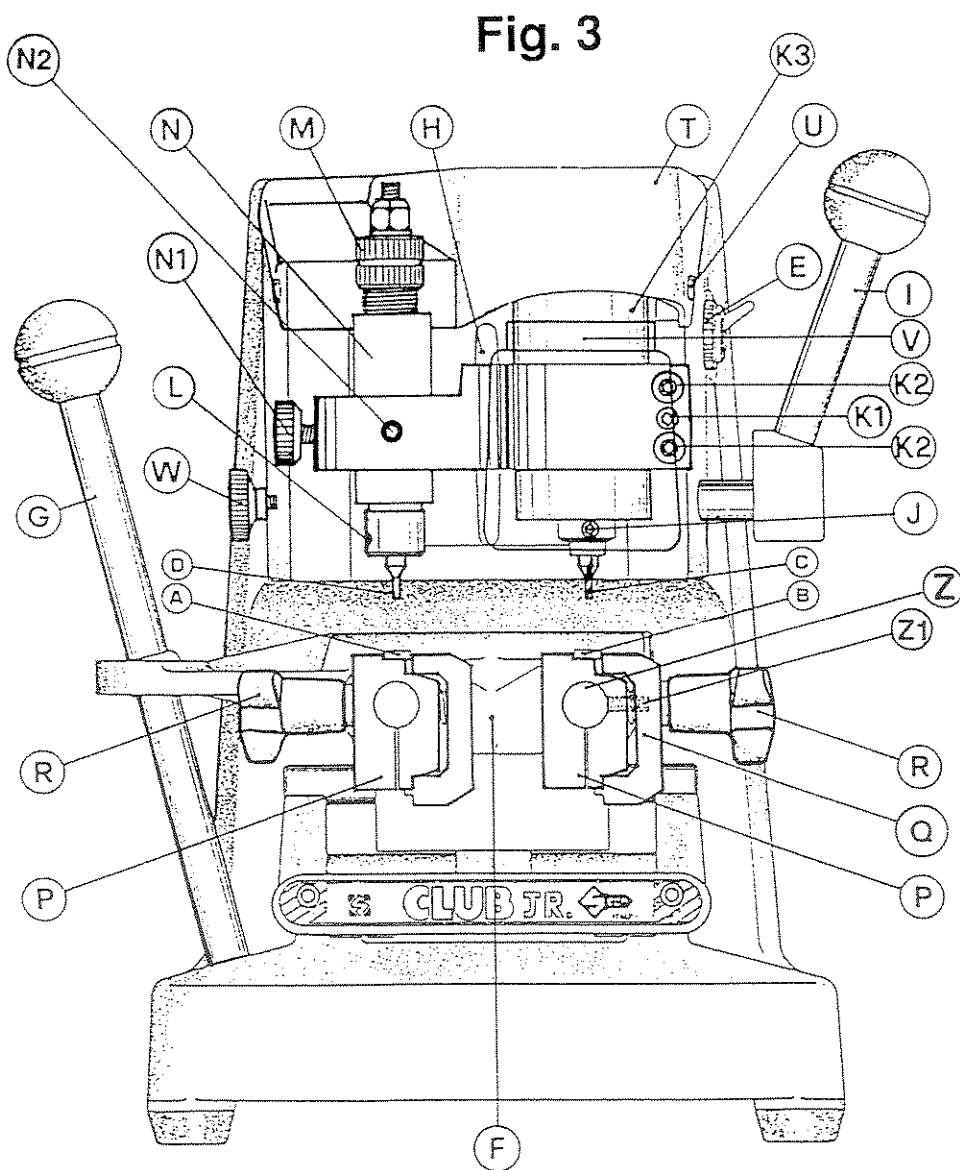


Fig. 3A

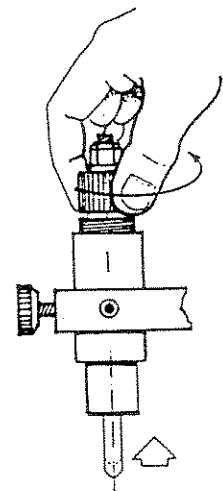
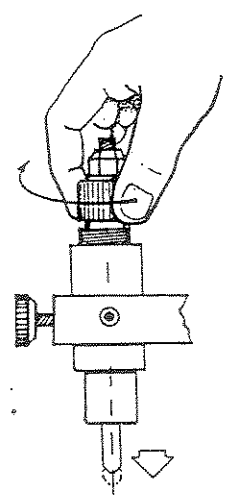


Fig. 3B



CUTTING A KEY

When the depth setting has been satisfactorily made, you may operate the machine as follows:

- 1) Start on the motor with the switch E.
- 2) Grip the vertical lever I with the right hand and move the vertical carriage H towards the jaws P.
- 3) With the left hand, operate the carriage lever G, move the tracer point D into the grooves of the original key A, taking care to exert sufficient pressure on the lever I to bring the cutter down fully onto the keyblank B. Trace all the necessary movements with the lower carriage lever G to copy all of the cuts in the original key.
- 4) To cut the opposite side of the key, simply loosen the jaw handles R and turn both keys over. (For reversible keys with both sides identical it is necessary to turn the keyblank only).

HOW TO REPLACE THE CUTTER

Return the lower carriage towards the back of the machine. Loosen the allen screw J and remove the old cutter.

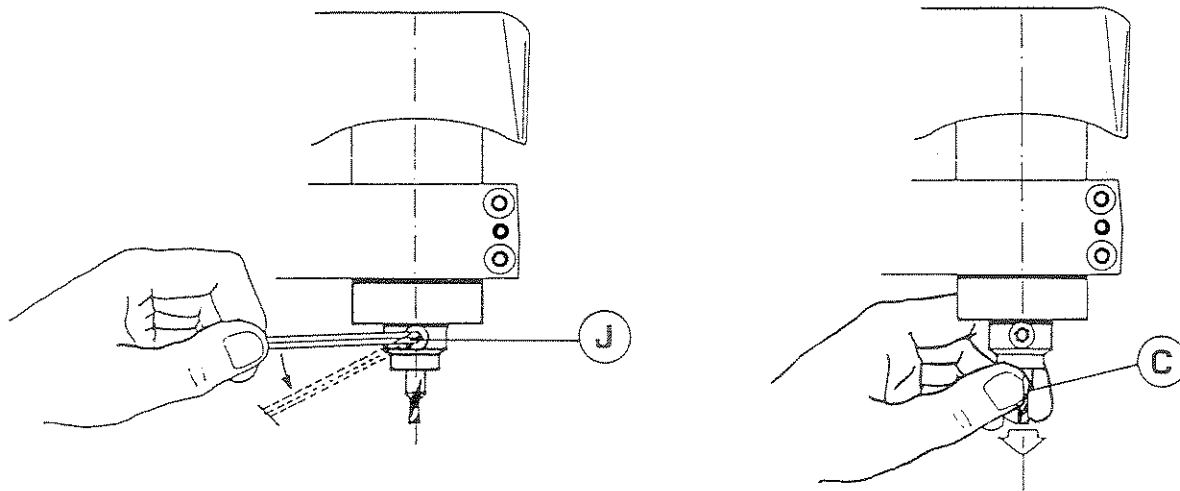


Fig. 4

HELPFUL TIP :

It is suggested that you obtain optional "STOP RINGS" (Code D704795ZB : = 1 pair) for mounting different type of tracer points and cutters, allowing them to be removed and replaced without checking the depth setting every time.

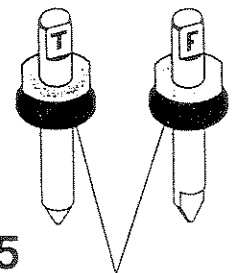
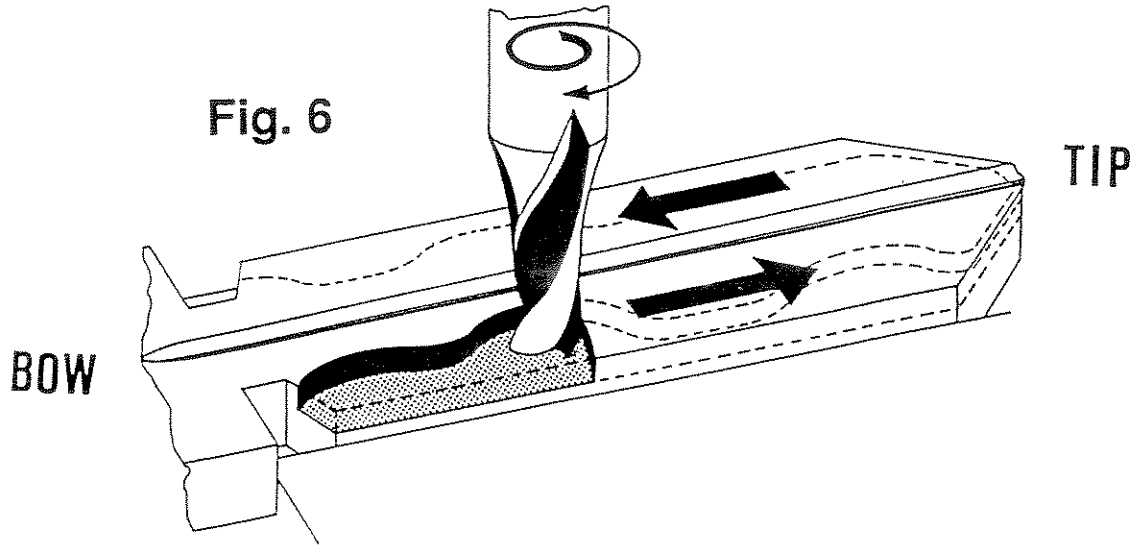


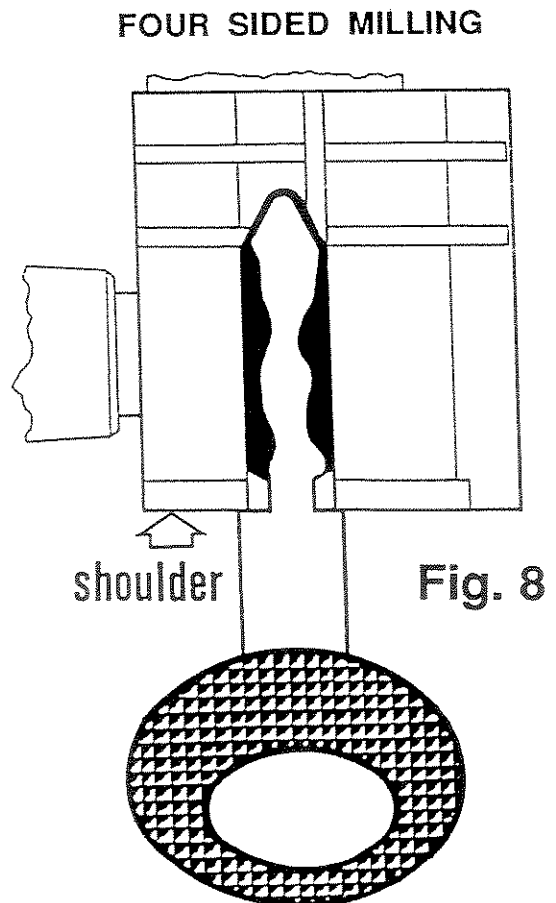
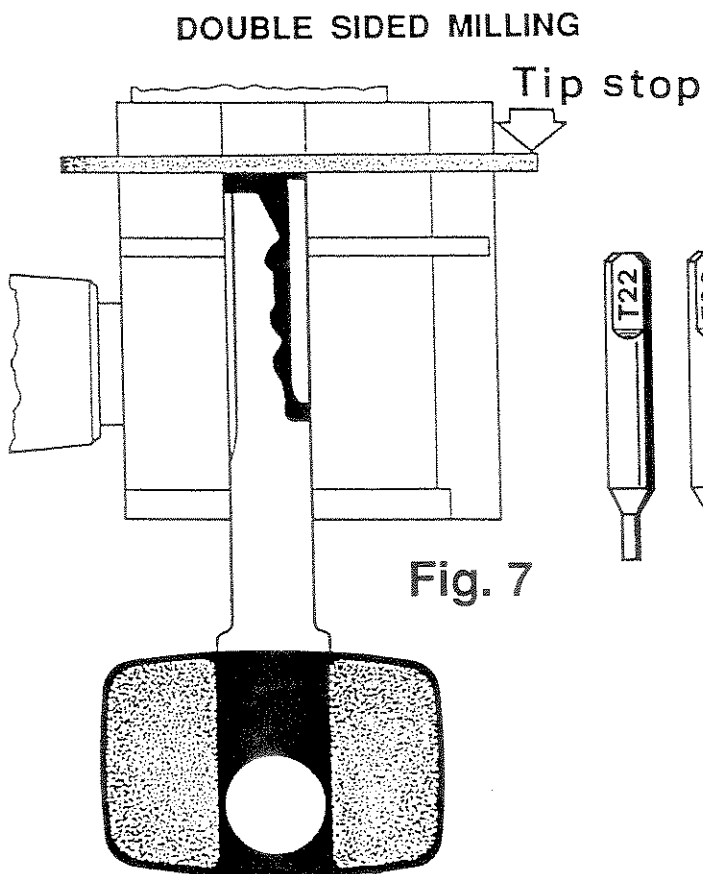
Fig. 5

CUTTING MILLED KEYS (SIDEWINDER)

When cutting these types of keys, it is necessary to cut in a bow to tip direction on the right-hand side of the blank, and from tip to bow when cutting on the left-hand side. This process is shown in the diagram (Fig.6) below. The tracer point (T22) and cutter (F22) provided with the machine cut all the sidewinder type keys in the U.S.A. market.



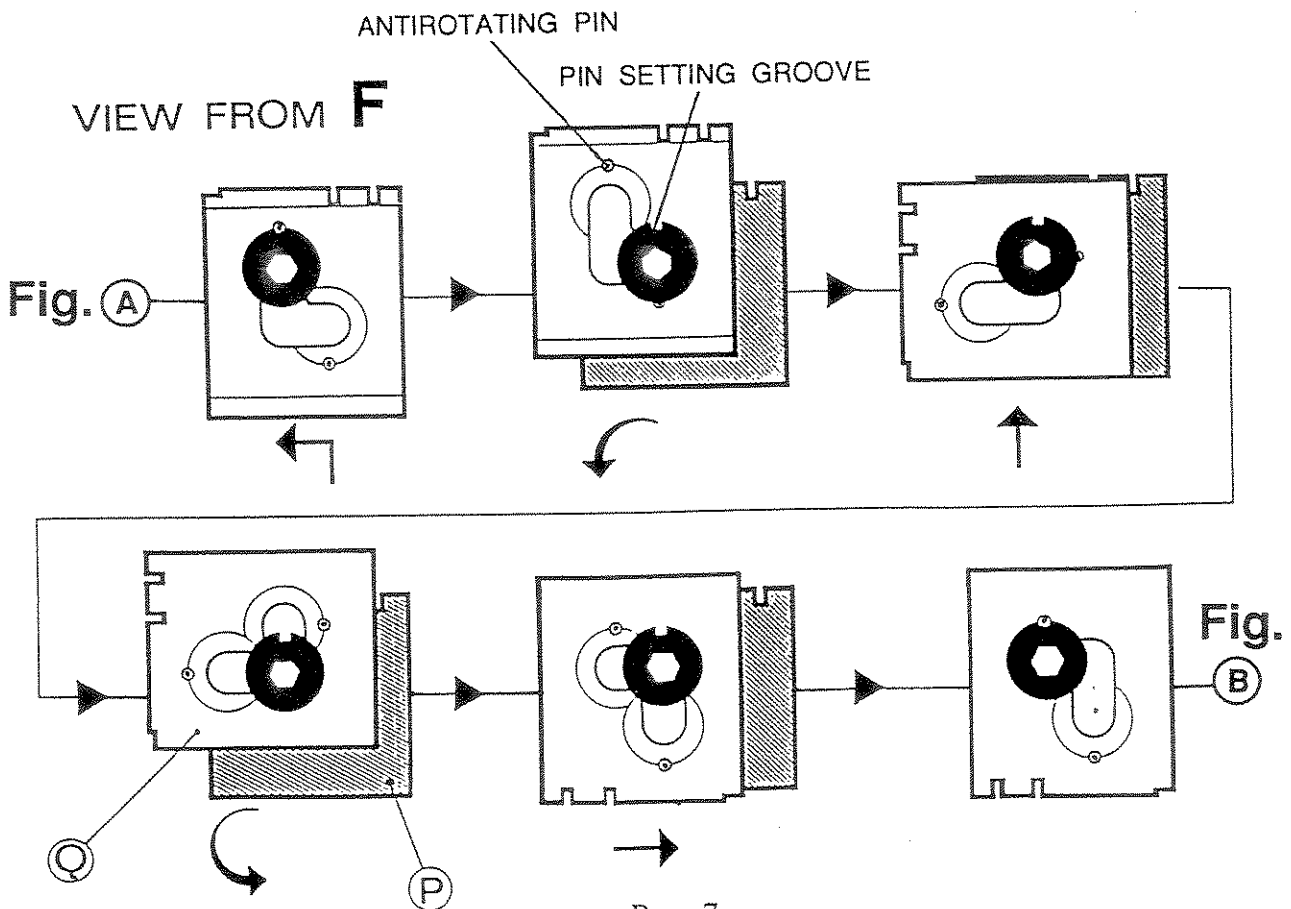
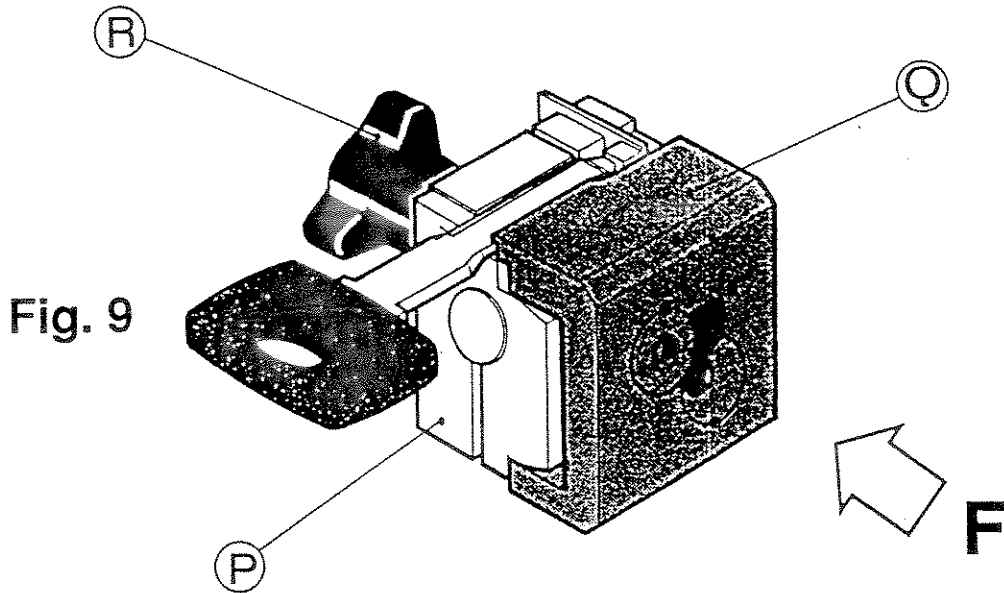
POSITIONS OF THE KEYS IN THE JAWS



JAW REVERSING INSTRUCTIONS

To give a secure grip on Z-profile MERCEDES keys (SILCA blanks: HU41P - HU41AP - HU44AP - HU55P - HU61P)

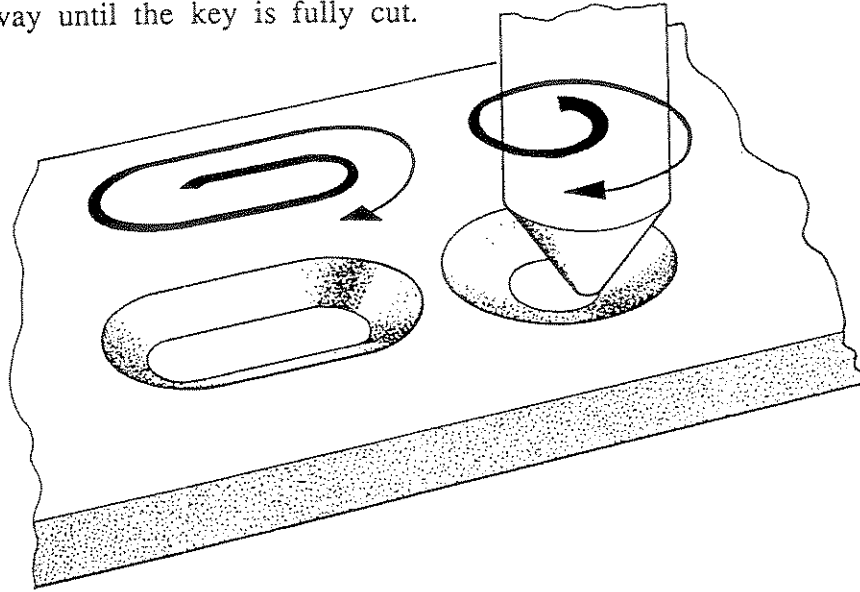
- 1) Unscrew the handles (R) to allow free movement of the moveable jaws Q.
- 2) Turn the jaws, as detailed in the figures from A to B - illustrated below.
- 3) To reset the jaws to the original position, reverse this procedure (i.e. from B to A).



CUTTING DIMPLE KEYS (FLAT CUTS)

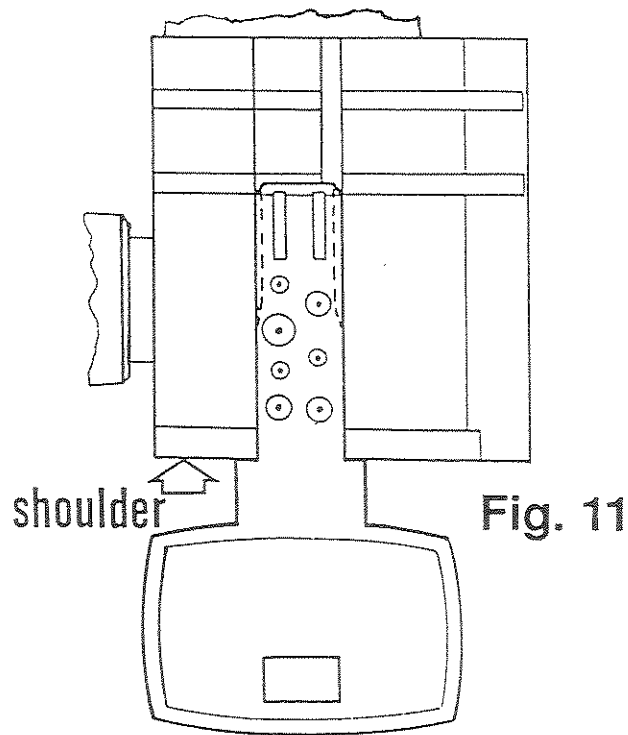
Place the key to be copied in the left-hand jaw, with the shoulder resting against the jaw face. If the original key has no shoulder, the key should be inserted using the tip stop (D60100ZC). The keyblank is inserted into the right-hand jaw in a similar manner. After setting the cutting depth (previously described), switch on the motor. Lower the tracer point and cutter carriage using the lever I. When the cutter has followed the tracer point into the cut move the lower carriage with lever G to track the outline of the cut as shown in Fig. 10. Continue in this way until the key is fully cut.

Fig. 10

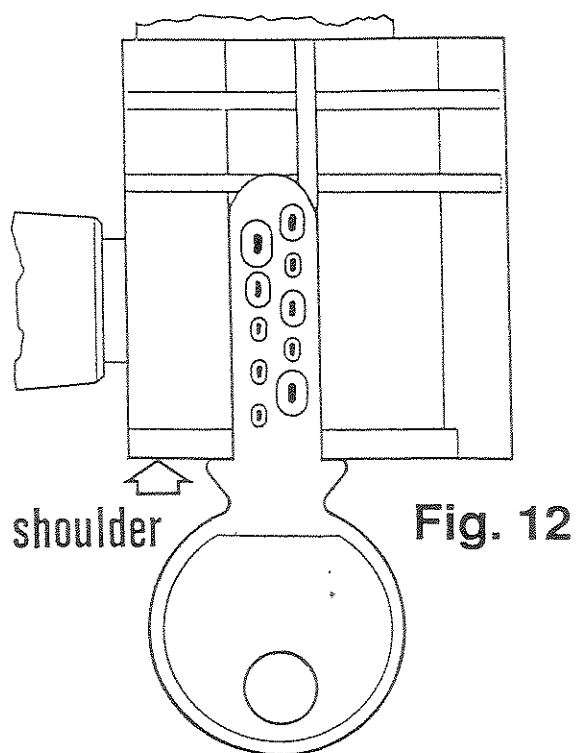


POSITIONS OF THE KEYS IN THE JAWS

DIMPLE



SLOT DIMPLE



CUTTING DIMPLE KEYS with INCLINED CUTS and QUADRANGULAR SHAPED PROFILES

Optional adapters and cutters are required to cut keys with various angles. The following adapters are always supplied in pairs so that both original and blank keys can be positioned on the adapters which will be gripped to the jaws with the base underneath.

**OPTIONAL
TRACER P. (T.)
& CUTTERS (F.)
for DIMPLE KEYS**

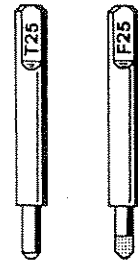


for all
types of
keys



T20 (Code D401155RA)
F20 (Code D401156RA)

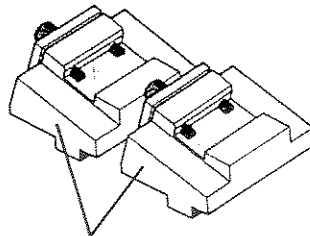
for keys
angled
45° only



T25 (Code D401157RA)
F25 (Code D401158RA)

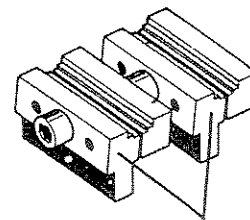
**ADAPTERS
for VARIOUS
ANGLED
KEYS**

15°



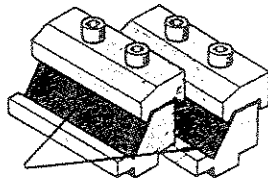
(Code D701472ZB)

5° (blade)



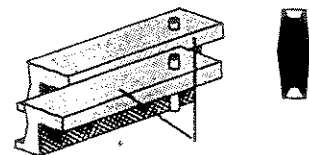
(Code D701470ZB)

45°



(Code D701471ZB)

5° (edge)



(Code D601068ZC)

REPLACING THE BELT

The elastic belt on the CLUB JR. does not require regulating or adjusting the tension. Removal of the belt can be done simply by hand after the plastic cover T has been detached (see Fig. 13 below). Insert the new belt onto the two pulleys.

NOTE : Always unplug the machine before removing the plastic cover.

WARNING : Never operate the machine without the protective plastic cover securely attached.

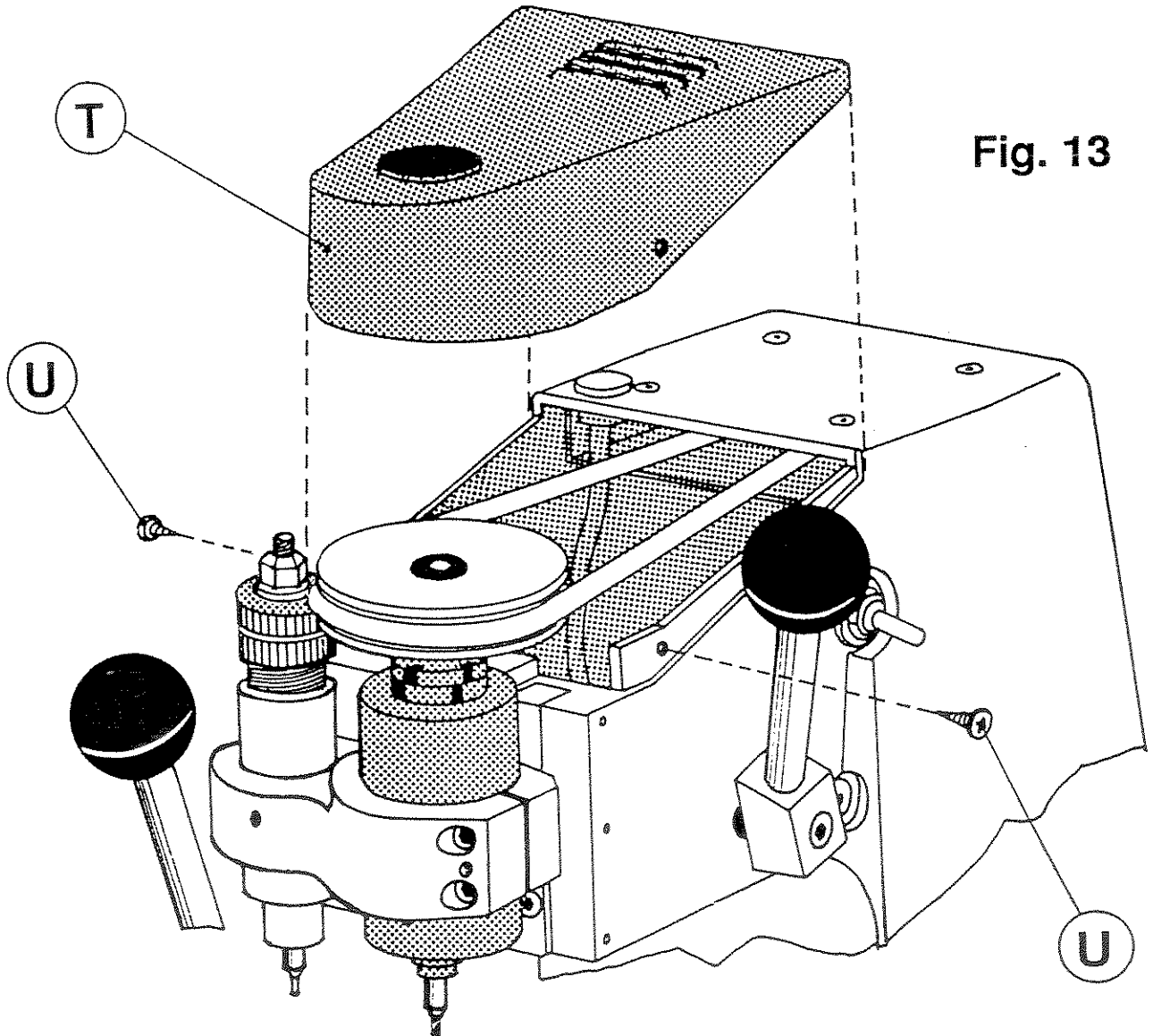


Fig. 13

ELECTRICAL DIAGRAM

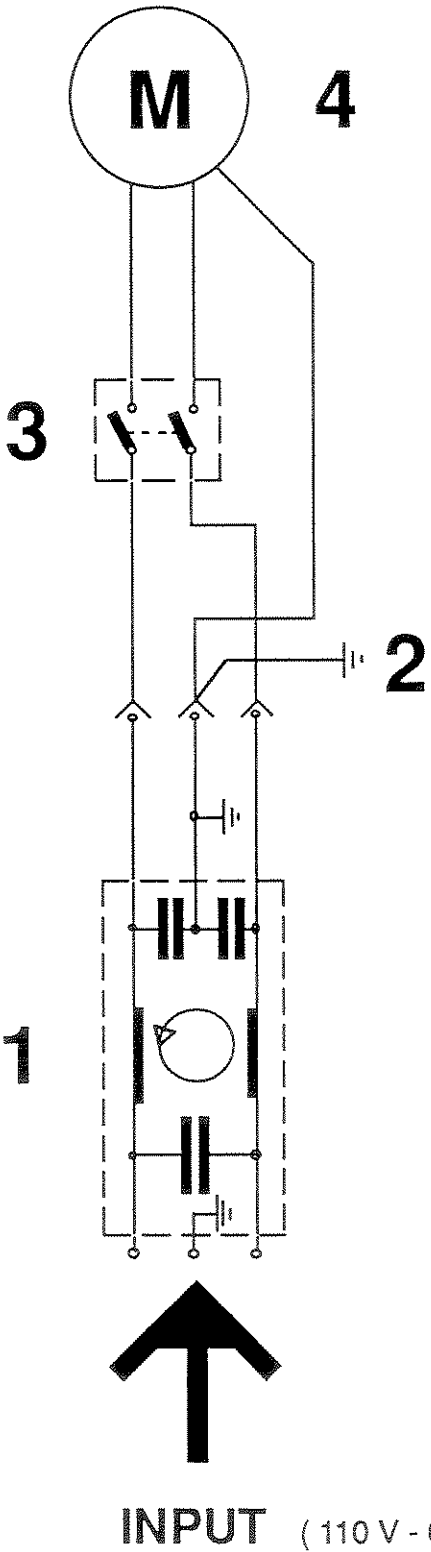


Fig. 14

- 1) Power socket with noise filter
- 2) Grounding screw
- 3) Motor ON / OFF switch
- 4) Motor

MAINTENANCE

Special maintenance is not necessary, however it is advisable to clean the machine regularly. **(IMPORTANT : do NOT clean with compressed air)**.

The vertical tracer point and cutter carriage H should be kept lightly oiled. (This is accessible by removing the protective plastic cover T. Lubrication of the lateral movement carriage rod (which carries the bushings) is also recommended.

GUARANTEE

The machine is guaranteed under the terms of the warranty as detailed. No claims will be recognized if the machine has been subjected to mishandling or if the machine is not properly grounded.

The manufacturer reserves the right to alter specifications and prices without prior notice.

INDEX

- Parts _____	Page	1
- Description and technical data _____	"	2
- Accessories provided _____	"	2
- Instructions for general use and maintenance _____	"	3-5
- Cutting milled keys _____	"	6
- Jaw reversing instructions _____	"	7
- Cutting dimple keys _____	"	8
- Cutting keys with inclined cuts and quadrangular shaped profile _____	"	9
- Replacing the belt _____	"	10
- Electrical diagram _____	"	11
- Maintenance and guarantee _____	"	12

