

Fastbit II

Fastbit II W

Operating Manual
Translation of original instructions

CE

D443997XA

vers. 5.0

EN



© 2014 SILCA S.p.A - Vittorio Veneto

This manual has been drawn up by SILCA S.p.A.

All rights reserved. No part of this publication may be reproduced or used in any form or by any means (photocopying, microfilm or other) without the written permission of SILCA S.p.A.

Edition: June 2021

Printed in India

by MINDA SILCA Engineering Ltd.

Plot no.37, Toy City, GREATER NOIDA (U.P.) - 201308

The Manufacturer declines any responsibility for possible inaccuracies in this document due to printing or transcription errors.

The Manufacturer reserves the right to alter the information without prior notice, except when they affect safety. This document or any of its parts cannot be copied, altered or reproduced without written authorization from the Manufacturer. Keep the manual and look after it for the entire life cycle of the machine.

The information has been drawn up by the manufacturer in his own language (Italian) to provide users with the necessary indications to use the key-cutting machine independently, economically and safely.

IMPORTANT NOTE: in compliance with current regulations relating to industrial property, we hereby state that the trade-marks or trade names mentioned in our documentation are the exclusive property of authorized manufacturers of locks and users.

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.

INDEX

USE OF THE MANUAL	1
GENERAL WARNINGS.....	3
1 MACHINE DESCRIPTION.....	4
1.1 Main working parts.....	6
1.2 Technical Data	7
1.3 Electric circuit.....	7
1.4 Accessories provided.....	8
2 TRANSPORT	9
2.1 Packing	9
2.2 Unpacking.....	9
2.3 Handling the machine	9
3 MACHINE INSTALLATION AND PREPARATION	10
3.1 Checking for damage.....	10
3.2 Environmental conditions.....	10
3.3 Positioning	10
3.4 Description of work station	10
3.5 Separate parts	11
3.5.1 Carriage lever handle	11
3.5.2 Power cable.....	11
3.5.3 Fixing bracket	12
3.6 Connection to the mains	12
4 MACHINE REGULATION AND UTILIZATION.....	13
4.1 Micrometric tracer point	13
4.2 Tracer point spring.....	13
4.3 Checking and calibration.....	13
4.4 Calibration.....	13
5 CUTTING OPERATIONS	16
5.1 Key cutting	16
5.1.1 Clamp rotation	16
5.1.2 Tilting clamps for key rounded cuts	16
5.2 Positioning bit and double bit keys, pump keys, mail box and special keys.....	17
5.3 Cutting bit and double bit keys.....	20
5.4 Cutting keys with central stop	21
5.5 Cutting mail box keys.....	22
5.6 Cutting pump keys	23
5.7 Cutting special keys such as Abloy®, Abus®, Luma®, Ava Chubb® (Silca ref.5ACH4).....	24
6 MAINTENANCE.....	27
6.1 Replacing the brush.....	27
6.2 Replacing the cutting tool.....	28
6.3 Replacing the tracer point.....	29
6.4 Replacing the fuses	29
6.5 Access to the lower compartment.....	30
6.6 Replacing the main switch	30
6.7 Replacing the motor.....	31
6.8 Replacing and/or adjusting tension on the belt.....	32
6.9 Replacing the motor on switch.....	33
6.10 Replacing the condenser	33
7 DISPOSAL.....	34
8 ASSISTANCE	35
8.1 How to request service	35

USE OF THE MANUAL

This manual has been drawn up by the Manufacturer and is an integral part of the machine literature. The manual gives information it is obligatory for the operator to know and which makes it possible to use the machine safely.

User's Manual

This user's manual is provided because it is essential for proper use and maintenance of the machine. The manual must be kept carefully throughout the life of the machine, including the decommissioning stage. Keep in a dry place close to the machine where it is always to hand for the operator.



ATTENTION: IT IS OBLIGATORY to read the manual carefully before using the machine.

Readers' characteristics

This manual must be read and its contents acquired by those who will use it.

Manufacturer's ID

FASTBIT II has an ID plate located on the right side of the machine, showing the serial number.

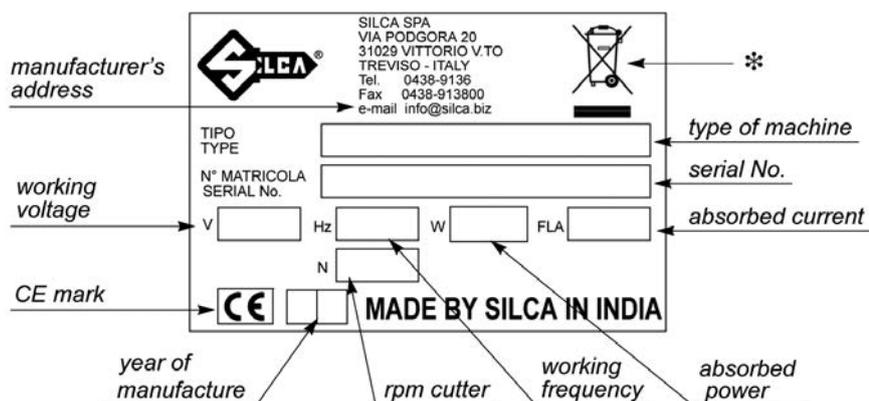


Fig. 1

(*) see chap. 7 DISPOSAL.

How to apply for after-sales service

Silca provides purchasers of FASTBIT II with After-Sales Service. For the total safety of the operator and machine, any operation not described in the manual must be carried out by the manufacturer or in the special Service Centres recommended by Silca.

At the end of the manual there is a list of manufacturers' and authorized Service Centre addresses; if the manual was downloaded is necessary visit the website to see the contacts (www.silca.biz).

The warranty card attached to the machine covers free repairs or replacement of faulty parts for 24 months from the date of purchase*.

All operations must be agreed by the user with Silca or the Service Centre.

* Damage caused by negligence or wrong use of the machine by the user will null the warranty.

TERMINOLOGY

For those inexperienced in the subject of keys and key cutting, below is an illustration of the most frequently used terms:

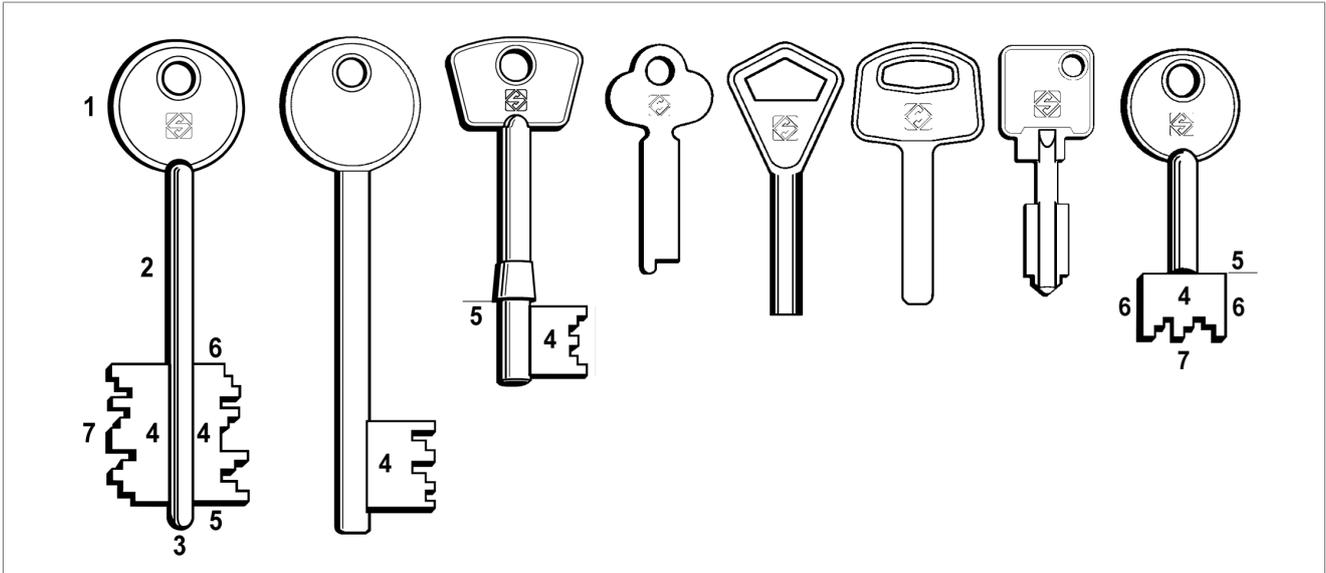


Fig. 2

1) Head	3) Tip	5) Stop	7) Cuts
2) Stem	4) Bit	6) Side	

GRAPHICS IN THE USER'S MANUAL

Pay attention	Obligation to read the manual

GRAPHICS ON THE FASTBIT II MACHINE

Obligatory use of safety goggles	Read instructions before use	WARNING! cutting tool in motion
WARNING! presence of electric power	Earth connection	Cutter rotation direction

GENERAL WARNINGS

FASTBIT II is designed to the principles of European Standards (CE). Right from the design stage solutions have been adopted to eliminate hazards for the operator in all the stages of use: handling, regulation, use and maintenance. The materials used in manufacture and the components employed in using FASTBIT II are not dangerous and ensure that the machine complies to current standards.

Silca S.p.A. has also experimented and applied numerous technical solutions that allow the key-cutting machine to optimize the quality of the cut keys.

To guarantee maintaining these results over time, please follow the instructions below:

- **Observe the procedures described in this manual;**
- **Always use Original Silca Tools as they are designed to make the best of FASTBIT II and provide quality key-cutting;**
- **Use Silca key blanks, made with top quality materials;**
- **Have the key-cutting machine checked periodically by an authorized Silca After-Sales Service Centre;**
- **Always use Silca Original Spare Parts. Beware of imitations!**

NORMAL USE

FASTBIT II is a key-cutting machine and must be installed and used according to the rules and specifications established by the manufacturer.

The key-cutting machine must be used only by skilled personnel (professional use).

The FASTBIT II key-cutting machine is designed for use on business or industrial premises (e.g. hardware shops, key cutting centers, etc...).

Any other use different from that indicated in this manual will cause the forfeiture of all customers' rights to make claims on Silca S.p.A. and may be an unknown source of hazard for the operator or third parties.



ATTENTION: negligent use or failure by the operator to observe the instructions in this manual are not covered by the warranty and the manufacturer declines any responsibility in such cases.

SAFETY

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

- **Cutter motor protection**



ATTENTION: the cutter motor is protected from overheating by a device (inside the motor) that stops it when it reaches a dangerous temperature.

This condition can occur when the machine motor is left on continuously, with high ambient temperatures or in severe working conditions. If the cutter motor overheats it cuts out automatically. In such cases proceed as follows:

- a) turn off the master switch (H).
- b) let the motor cool for at least 2 hours then use the machine normally.

RESIDUAL RISKS

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

SAFETY REGULATIONS

- **Always disconnect the machine when it is not in use or when performing maintenance operations.**
- **Check the electrical wiring periodically; replace any wires that show signs of wear.**
- **Always work with dry hands free of grease or oil.**
- **Never pull hard on the power lead and make sure it does not come into contact with oil, sharp objects or heat. Never remove the earth wire from the plug. Make sure the earth wire connection is sound.**
- **Do not use the machine in dangerous environments (wet or damp).**
- **All visitors, especially children, must stay at a safe distance from the machine and must never come into contact with the electric wiring. This equipment should not be used where children may be present.**

1 MACHINE DESCRIPTION

FASTBIT II is a professional key-cutting machine for bit, double bit, pump keys, mail box keys and special keys.

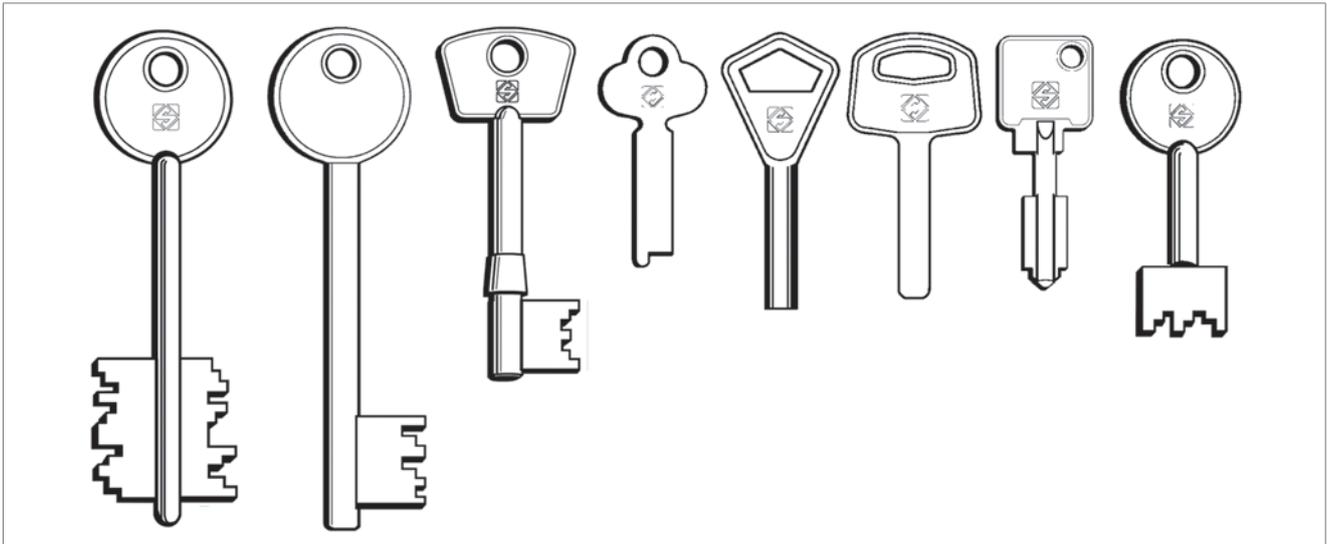


Fig. 3

The main parts of the machine are described below:

• Main switch

The key-cutting machine is connected to a power socket provided with a differential switch; when the machine is turned on by means of the switch (H) located on its right-hand side, the warning light (H1) comes on to show that the machine is live.



ATTENTION: switch (H) 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 by means of the plug.

• Motor start-up switch

On the left-hand side of the motor there is the motor start switch (K).



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

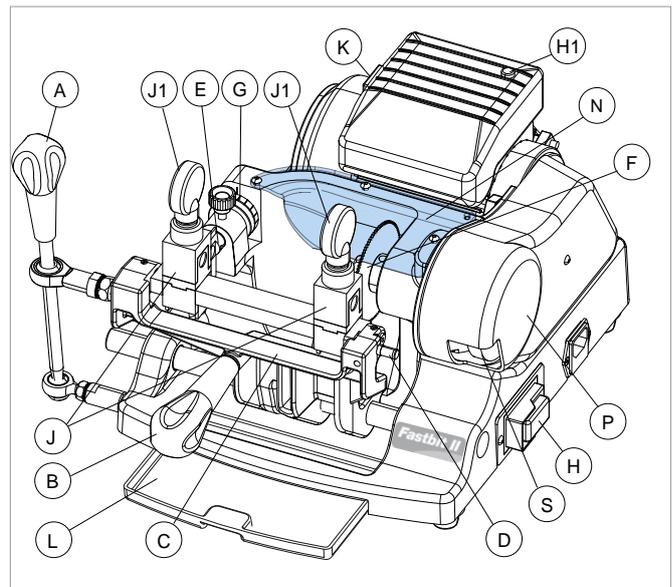


Fig. 4

• Motor and transmission unit

Motor transmission takes place by belt. On the right-hand side of the motor there is the transmission shaft which moves the cutting tool (F) and the brush (S). These components are protected by:

- cutting tool cover (N)
- brush cover (P)

• Clamp carriages

The horizontal carriage (C) controlled by lever (A) has a handle (B) for front movement and holds 2 clamps (J). The carriage is so designed as to avoid accumulation of dust or cutting swarf.

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

- **Cutting unit**

The cutting unit contains the actual working parts of the FASTBIT II key-cutting machine, which operate together to cut and finish keys “read” from the originals. The working parts are described below.

- **Cutting Tool**

The cutting tool (F) is the part of the FASTBIT II used for cutting key blanks. The cutting tool is protected by a special cover (N) to ensure safe operation.

- **Micrometric tracer point**

The tracer point (E) dedicated to reading the cuts on keys to be copied is housed on the left-hand side of the machine. Depth is easily regulated by means of the relevant centesimal ring nut (G).

- **Clamp knobs**

The clamps are locked by two anatomical knobs (J1), which ensure perfect grip on the keys with only slight locking pressure.

- **Brush**

The brush (S) is used to eliminate burrs from the cuts and is made of non-abrasive material. Press the motor start switch (K) to activate the brush.

- **Clamps**

The clamps (J) rotate and have 2/3 sides, to give perfect grip on bit keys, mail box keys and special keys (Abloy®, Abus®, Luma® and Ava Chubb® ref.5ACH4) (chap. 5.2, page 17).

The clamp can be prepared in 4 different ways, according to requirements. They can be described as follows:

- A) Upper jaws (both flat)
- B) Upper jaws (flat and inclined - positioned in front of the cutter)
- C) Upper jaws (flat and inclined - to the left and parallel to the cutter)
- D) Lower jaws

CLAMP CONFIGURATION AND TYPE OF KEY TO BE CUT

Upper jaws (flat side) (A):

Mail box keys (flat keys) (chap.5.5, page 22)

Upper jaws (inclined side - in front of cutter) (B):

Bit keys - Double bit - with rim (chap.5.3, page 20)

Upper jaws (right-hand inclined side - parallel with cutter) (C):

Pump keys (chap.5.6, page 23)

Lower jaws (D)

Special keys: ABLOY® - ABUS® - LUMA® - AVA CHUBB® (Silca ref. 5ACH4)

For Abloy®, Abus® and Luma® the keys position the keys in the clamps according to the existing cuts (right or left) with the head in the right or left hand side of the clamp (chap.5.7, page 24).

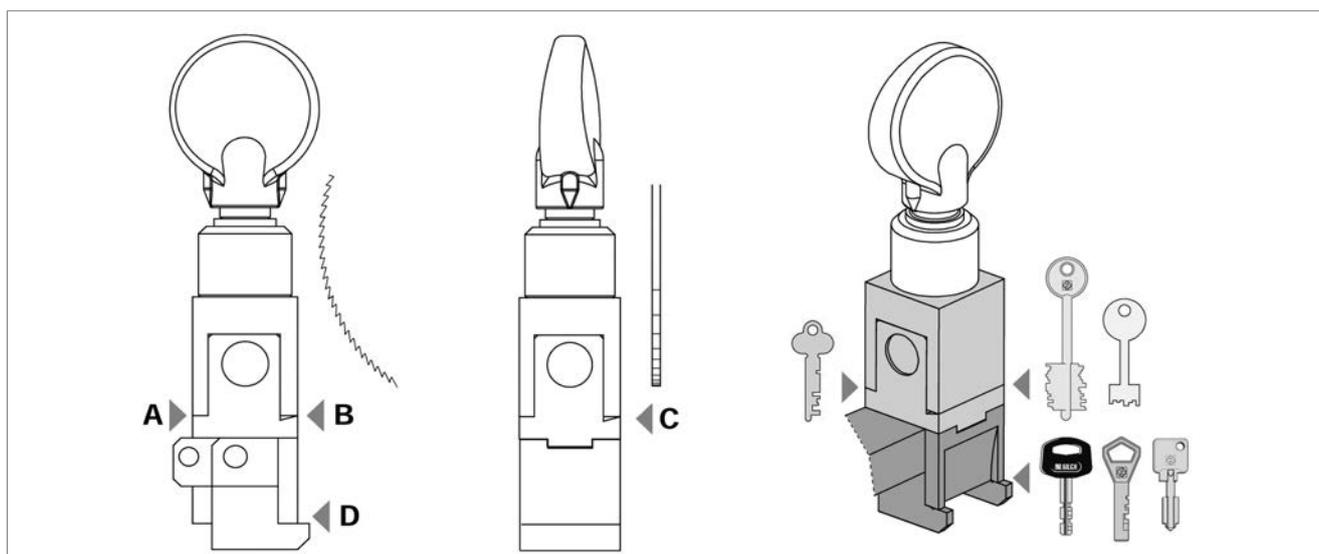


Fig. 5

1.1 Main working parts

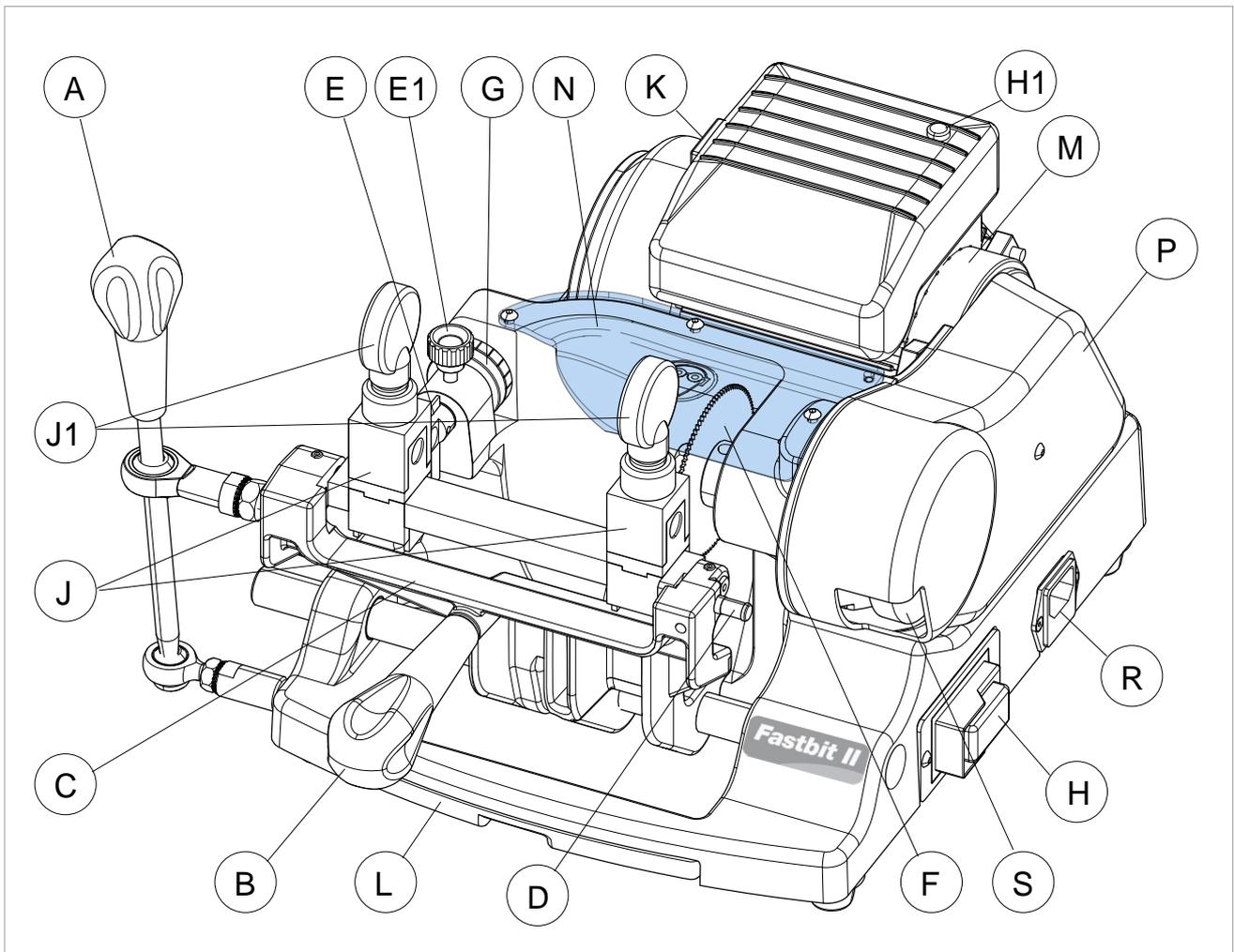


Fig. 6

- | | |
|-------------------------------|-------------------------|
| A - carriage movement lever | J - clamp |
| B - carriage handle lever | J1 - clamp knob |
| C - clamp carriage | K - motor start switch |
| D - tilting locking pin | L - swarf tray |
| E - tracer point | M - motor |
| E1 - tracer point spring knob | N - cutting tool cover |
| F - cutting tool | P - brush/belt cover |
| G - tracer point ring nut | R - power supply socket |
| H - main switch | S - brush |
| H1 - warning light (power) | |

1.2 Technical Data

Power supply:	230V - 50/60Hz
Maximum absorbed power:	230V: 2,2 Amp. 250 Watt
Cutter motor:	single phase and speed
Movements:	by ball joint on rectified carriage
Cutter:	Fastbit II: HSS Super Rapid Steel Fastbit II W: carbide
Tool speed:	Fastbit II: 50Hz: 600 rpm - 60Hz: 720 rpm Fastbit II W: 50Hz: 950 rpm - 60Hz: 1140 rpm
Runs (maximum length of cuts):	42 mm
Dimensions:	width: 400 mm - depth: 460 mm - height: 300 mm
Mass:	Kg. 14.5
Noise level:	sound pressure Lp(A) = less than 70 dB(A)

1.3 Electric circuit

The main parts of the electric circuit on the key-cutting machine are listed below:

- 1) Power supply socket
- 2) Fuses 4 Amp rapid (230V)
- 3) Master switch
- 4) LED
- 5) Motor start switch
- 6) Motor with collector: 230V-50/60Hz
- 7) Condenser

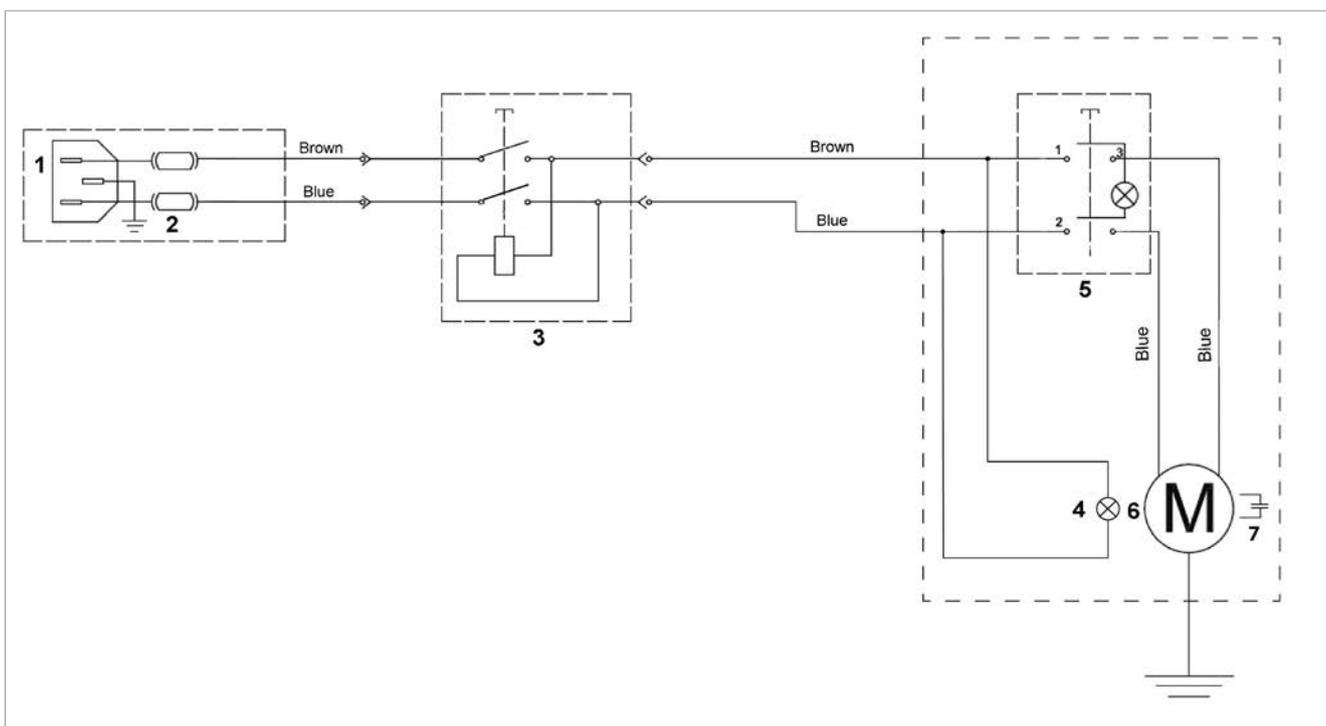
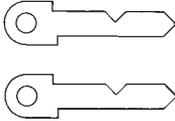
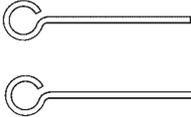
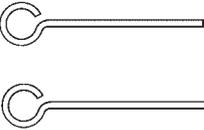
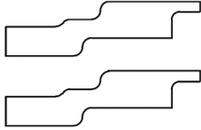


Fig. 7

1.4 Accessories provided

FASTBIT II comes with a set of accessories for its operation and maintenance (tools, hex wrenches, fuses) supplied in a special tool kit comprising:

<p>allen key 2,5 mm</p> 	<p>adjusting keys (2 pcs)</p> 
<p>allen key 3 mm</p> 	<p>steel pin Ø 1,20 mm</p> 
<p>allen key 4 mm</p> 	<p>steel pin Ø 1,70 mm</p> 
<p>spanner 19 mm</p> 	<p>steel bars (2 pcs)</p> 
<p>Cutter release rod</p> 	<p>fuse 4 Amp rapid (230V)</p> 
<p>Separately: fixing bracket</p> 	

2 TRANSPORT

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

2.1 Packing

The FASTBIT II is packed in a strong cardboard box, the dimensions of which are shown in , 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.

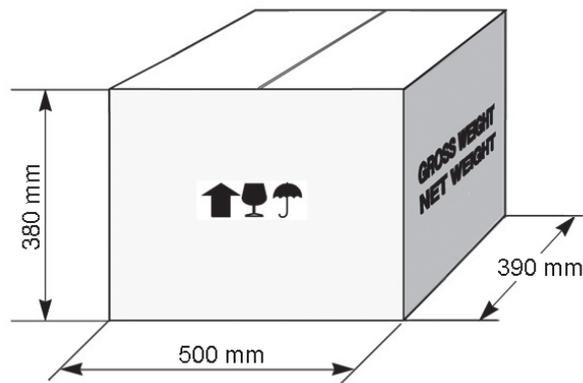


Fig. 8



Keep dry



Handle with care



This side up

NOTE: to avoid damaging the key-cutting machine it must always be transported in its packing case. This will prevent sudden movements or rough handling from damaging the machine, persons or things.

2.2 Unpacking

To remove the machine from the packing box:

- 1) Cut the straps with scissors and remove,
- 2) Open the box without damaging it as it may be used again (e.g. removals, dispatch to the manufacturers for repairs or servicing),
- 3) Check the contents of the box, which should comprise:
 - 1 FASTBIT II key-cutting machine packed in a protective shell;
 - 1 set of documents, including: operating manual, spare parts list and guarantee;
 - 1 carriage handle;
 - 1 power cable
 - 1 tool set;
- 4) Remove the key-cutting machine from the protective shell.

2.3 Handling the machine

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

This operation can be carried out by one person.



ATTENTION: firmly holding the base, and no other part, to lift and carry the machine.

3 MACHINE INSTALLATION AND PREPARATION

The FASTBIT II 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.

3.1 Checking for damage

The FASTBIT II 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.

3.2 Environmental conditions

To ensure that the best use is made of the FASTBIT II 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: between 10°C and 40°C;
- relative humidity: 60% circa;
- room illumination: approximately 500 Lux.

3.3 Positioning

- 1) Place the key-cutting machine on a horizontal surface, solid enough to take the weight (14.5 Kg).
 - to work with ease, we suggest that the workbench be approximately the height of the operator's hip.
 - it is important to leave clearance of at least 30 cm behind the machine and on each side to ensure proper ventilation (Fig. 9).
- 2) Ensure that the machine's voltage is the same as that of the mains power supply, which must be properly earthed and provided with a differential switch.
- 3) Connect the power supply cable to the power supply socket.

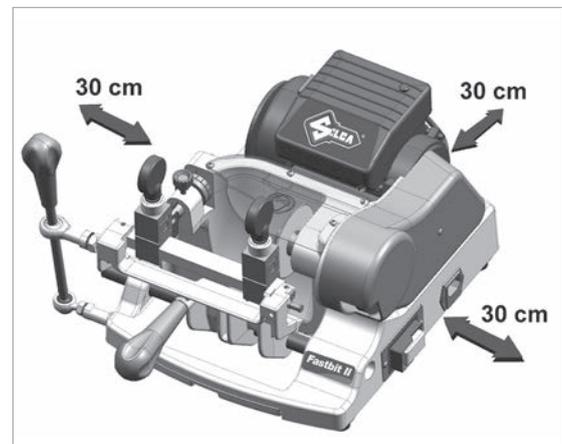


Fig. 9

3.4 Description of work station

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

- Main switch (H)
- Motor start switch (K)
- Carriage movement lever (A)
- Carriage handle (B)
- Clamps (J)
- Clamps knobs (J1)
- Tilting locking pin (D)

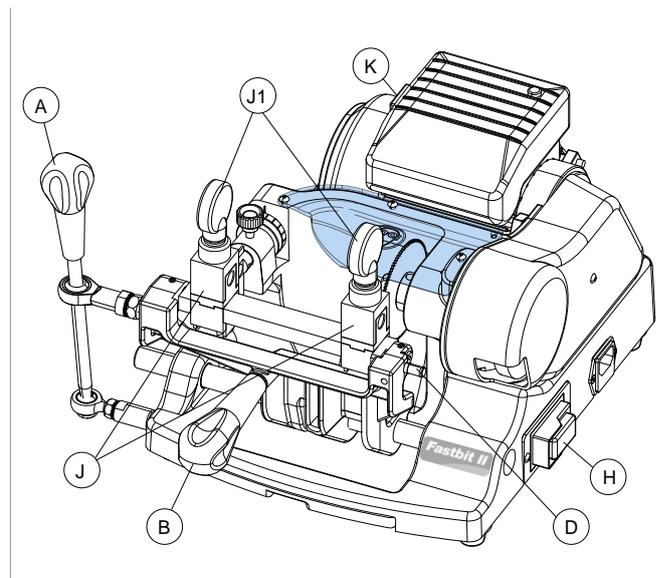


Fig. 10

3.5 Separate parts

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

3.5.1 Carriage lever handle

Screw the handle (B) onto the carriage lever (Fig. 11).

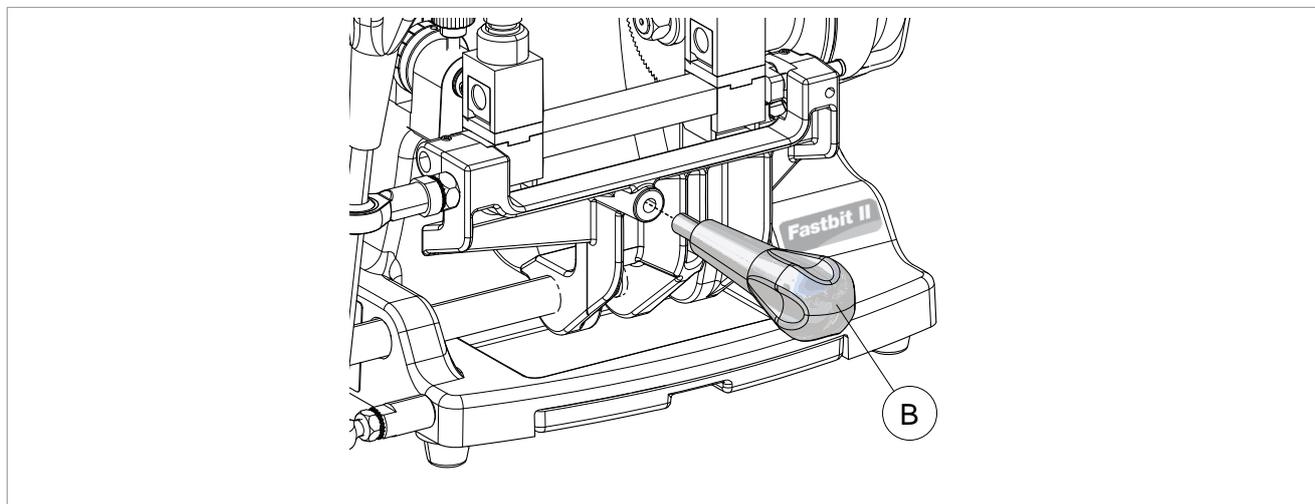


Fig. 11

3.5.2 Power cable

Connect the key-cutting machine power cable to the electricity mains (Fig. 12).

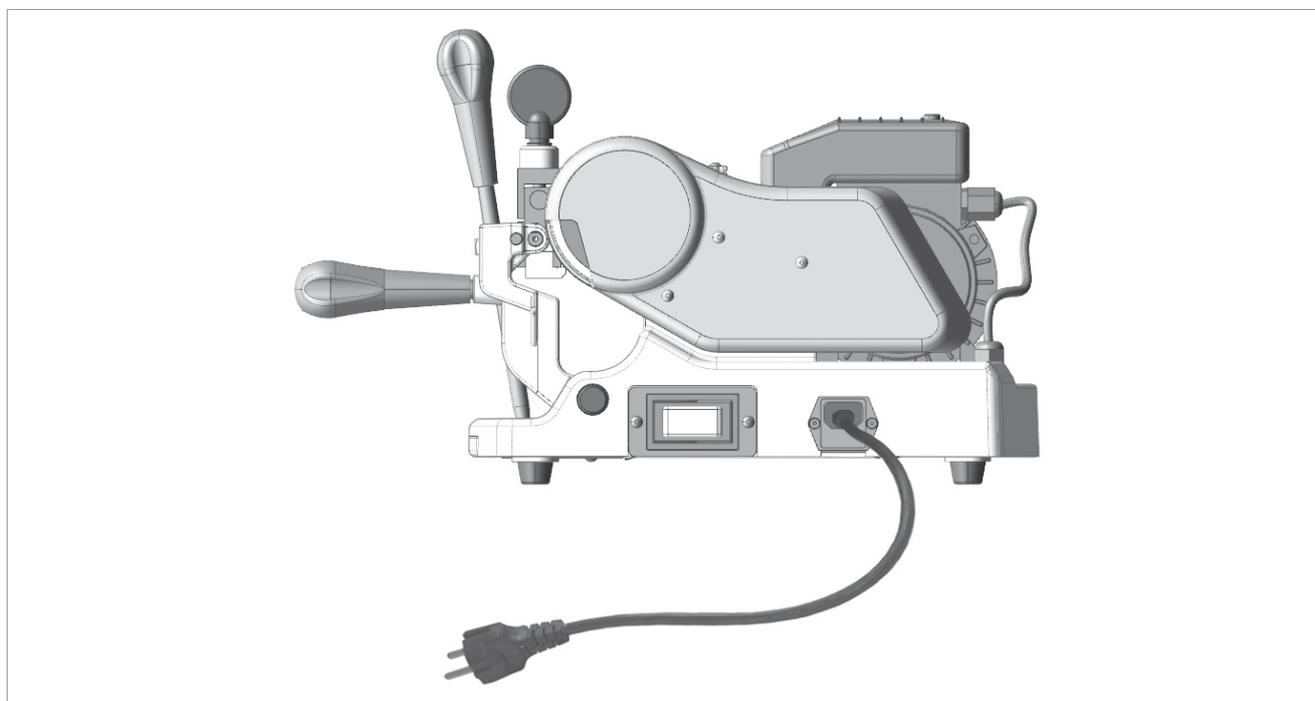


Fig. 12

3.5.3 Fixing bracket

The key-cutting machine can be fixed to the work bench with the bracket provided. Follow the instructions below:

- 1) Turn off the machine and unplug from the mains.
- 2) Remove the two front feet.
- 3) Place the bracket as indicated in Fig. 13.
- 4) Screw the two feet into the bracket.

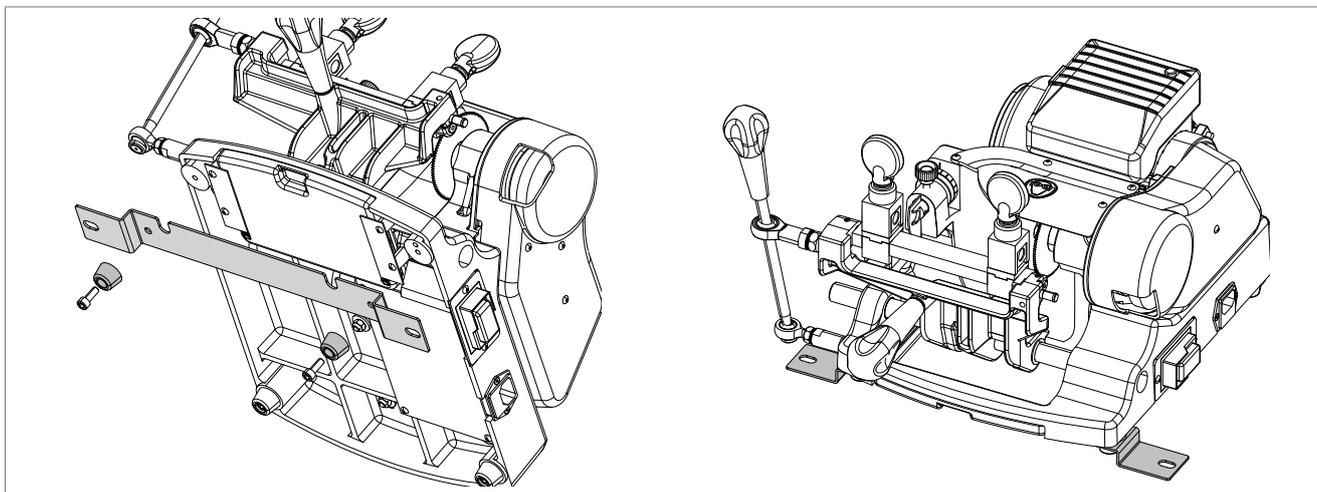


Fig. 13

3.6 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.

4 MACHINE REGULATION AND UTILIZATION

4.1 Micrometric tracer point

The use of a micrometric tracer point on a machine for cutting bit and pump keys not only provides perfect fast readings, but also rapidly resolves all those small depth variations needed when worn keys are involved.

NOTE: when the 2 ring nuts are turned together the movement for each notch equals 0.05 mm (with knob (E1) loosened).

4.2 Tracer point spring

The spring function facilitates the search for spaces with the tracer point before the cutter makes the cuts.

- **To enable the tracer point spring:**

simply loosen the knob (E1) by a few turns (Fig. 14).

- **To disable the tracer point spring:**

push the tracer point all the way until it stops, then lock with the knob (E1).

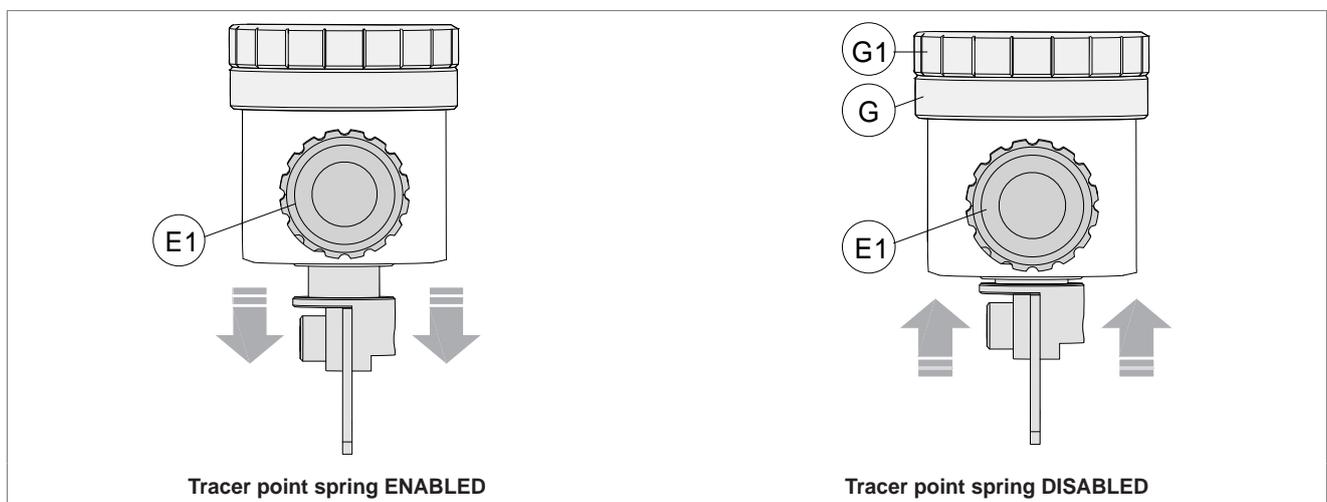


Fig. 14

4.3 Checking and calibration

The cutting tool on the machine 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.

4.4 Calibration

The FASTBIT II key-cutting machine requires two types of calibration: **axis** and **depth**.

Axis calibration:

Axis calibration is used to adjust the cutting space on the key.

The axis setting for the FASTBIT II is fixed and is established on assembly in our workshops.

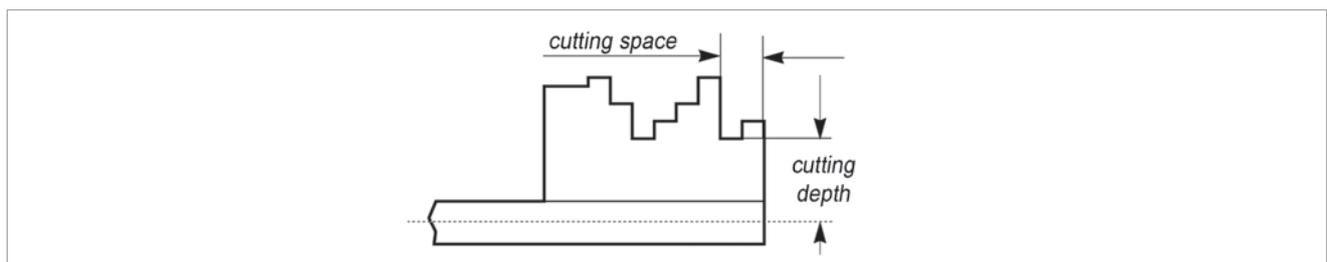


Fig. 15

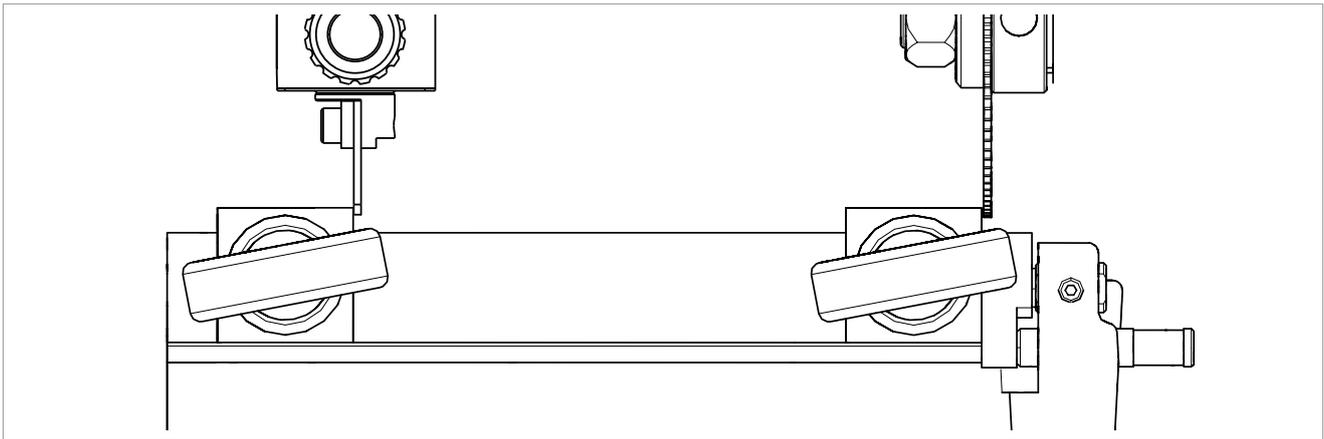


Fig. 16 - Axis calibration

Depth calibration:

Depth calibration is regulation of the cutting depth (Fig. 15).

Proceed as follows:

- 1) Turn off the machine and unplug.

NOTE: check that the clamps are locked into the fixed position (chap. 5.1.2).

- 2) Place the adjusting keys on the clamps (Fig. 17) on the 2nd side (for mail box keys) (Fig. 26);
- 3) Enable the tracer point spring with the knob (E1) (chap. 4.2).
- 4) Move the carriage and take the keys into contact with the tracer point and cutter (Fig. 17).
- 5) Turn the cutting tool manually in the opposite sense to the rotation and check that it skims the adjusting key in several places.
- 6) If necessary, regulate the cutting depth by means of the tracer point, as described:
 - turn the ring nuts (G) and (G1) clockwise to advance the tracer point (Fig. 18).
 - turn the ring nuts (G) and (G1) anticlockwise to return (Fig. 19).

NOTE: when the 2 ring nuts are turned together the movement for each notch equals 0.05 mm (with knob (E1) loosened).

- 7) Repeat these operations until the cutting tool skims the adjusting key in several points.

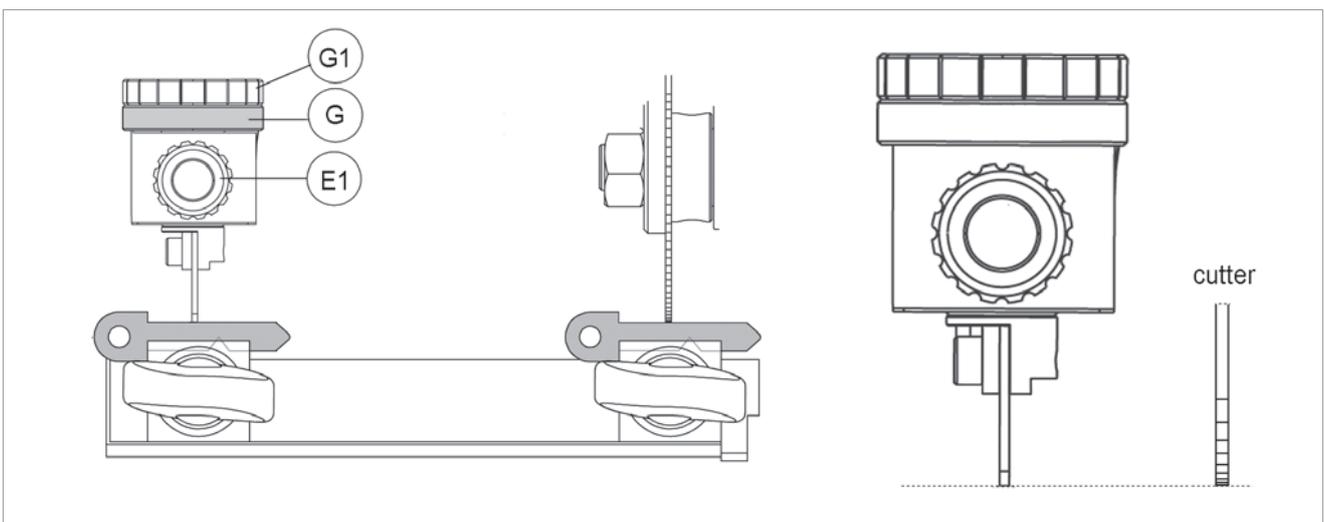


Fig. 17

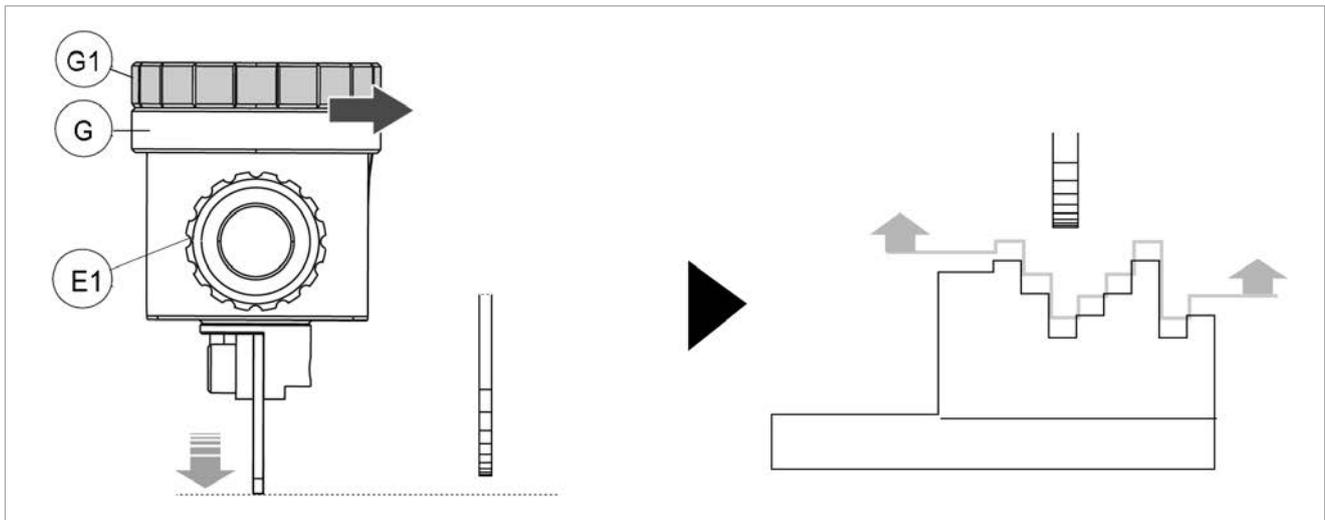


Fig. 18

Turn the nut to the RIGHT (clockwise) to take the tracer point down. Result: LESS DEEP CUTS.

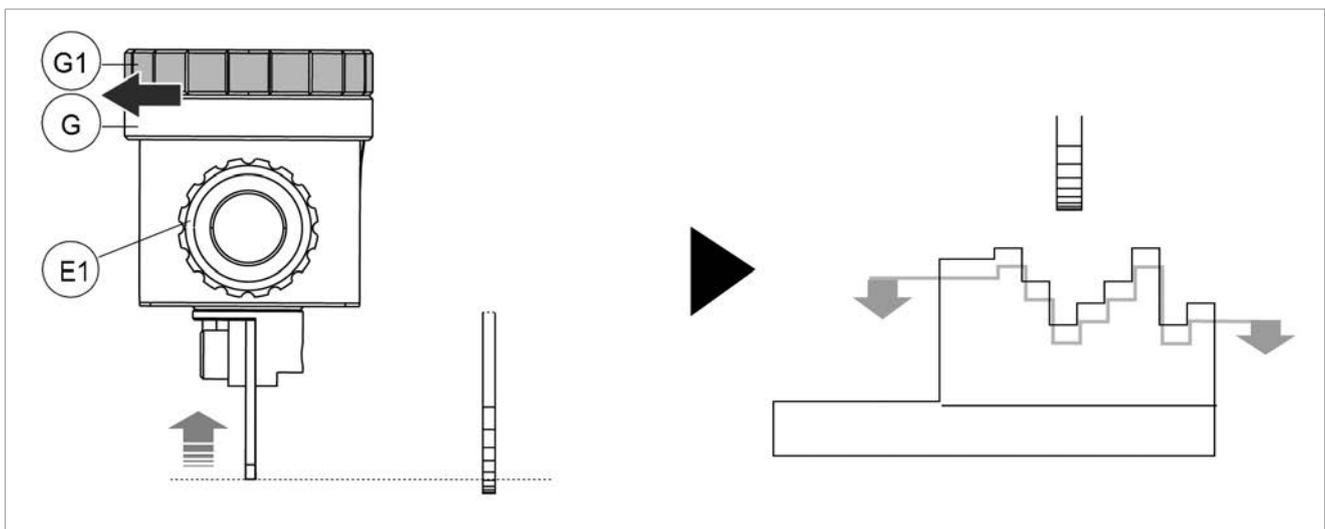


Fig. 19

- Turn the nut to the LEFT (anticlockwise) to take the tracer point up. Result: DEEPER CUTS.

5 CUTTING OPERATIONS

! **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 K) only after completing the operations on the carriage (securing the keys, etc..).
- Keep hands away from the cutting tool in motion.

5.1 Key cutting

Prepare the clamps with the required side facing the cutter and tracer point (Fig. 20).

5.1.1 Clamp rotation

- 1) Loosen the clamp closing knob by a few turns.
- 2) With one hand hold the lower part of the clamp still and with the other raise the 2 upper jaws and turn the clamp so that the side you require is facing the tracer point and cutter.

NOTE: carry out the operation on both clamps.

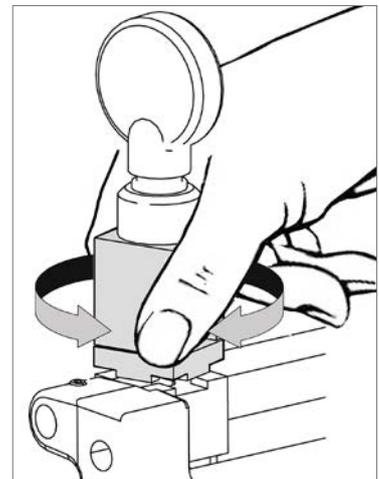


Fig. 20

5.1.2 Tilting clamps for key rounded cuts

Tilting clamps

The clamps may tilt to achieve rounded cuts.

- To activate the tilting mechanism: remove the pin (D) and manually move knob (J1) to round off the cuts.
- To deactivate the tilting mechanism: insert the pin (D) so that the clamps are locked in a fixed horizontal position.

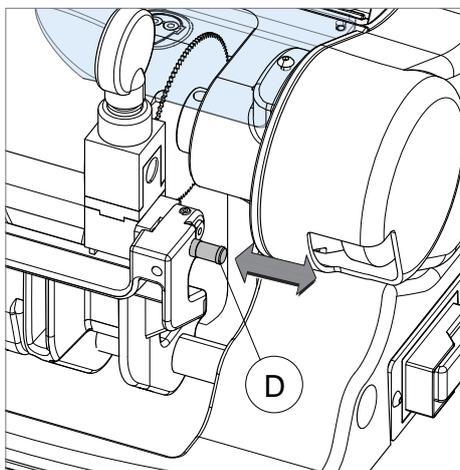


Fig. 21

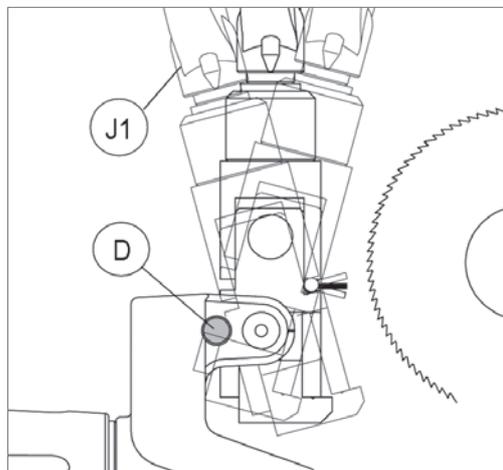


Fig. 22

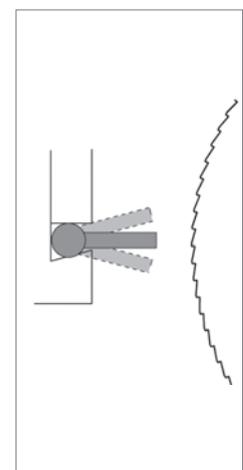


Fig. 23

5.2 Positioning bit and double bit keys, pump keys, mail box and special keys

- 1) Turn the clamps to find the appropriate side for securing the key (Fig. 20).
- 2) Loosen the knobs (J1) by a couple of turns.
- 3) Raise the lower part of the clamps and turn to the required position:
 - Clamp side for bit, double bit keys and bit keys with central stop (position B) (Fig. 26)
 - Clamp side for pump keys (position C - turned 90°) (Fig. 27)
 - Clamp side for mail box keys (position A) (Fig. 26)
 - Clamp side for special keys such as ABLOY®, ABUS®, LUMA®, AVA CHUBB® (Silca ref. 5ACH4) (position D) (Fig. 28).
- 4) Use knob (J1) to lock the key.

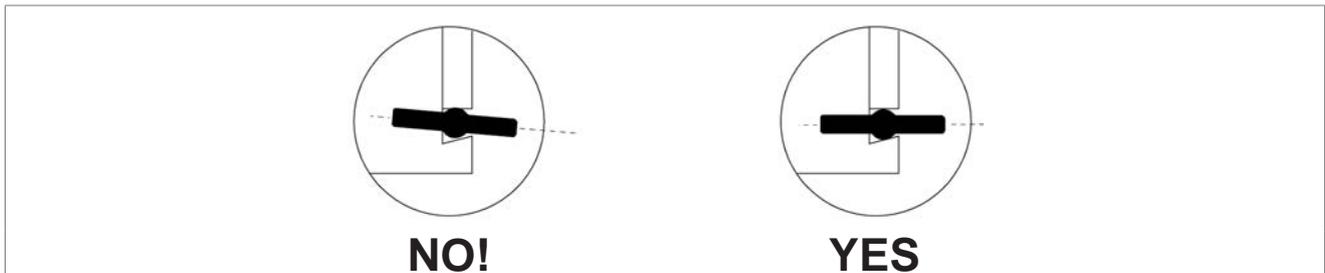


Fig. 24

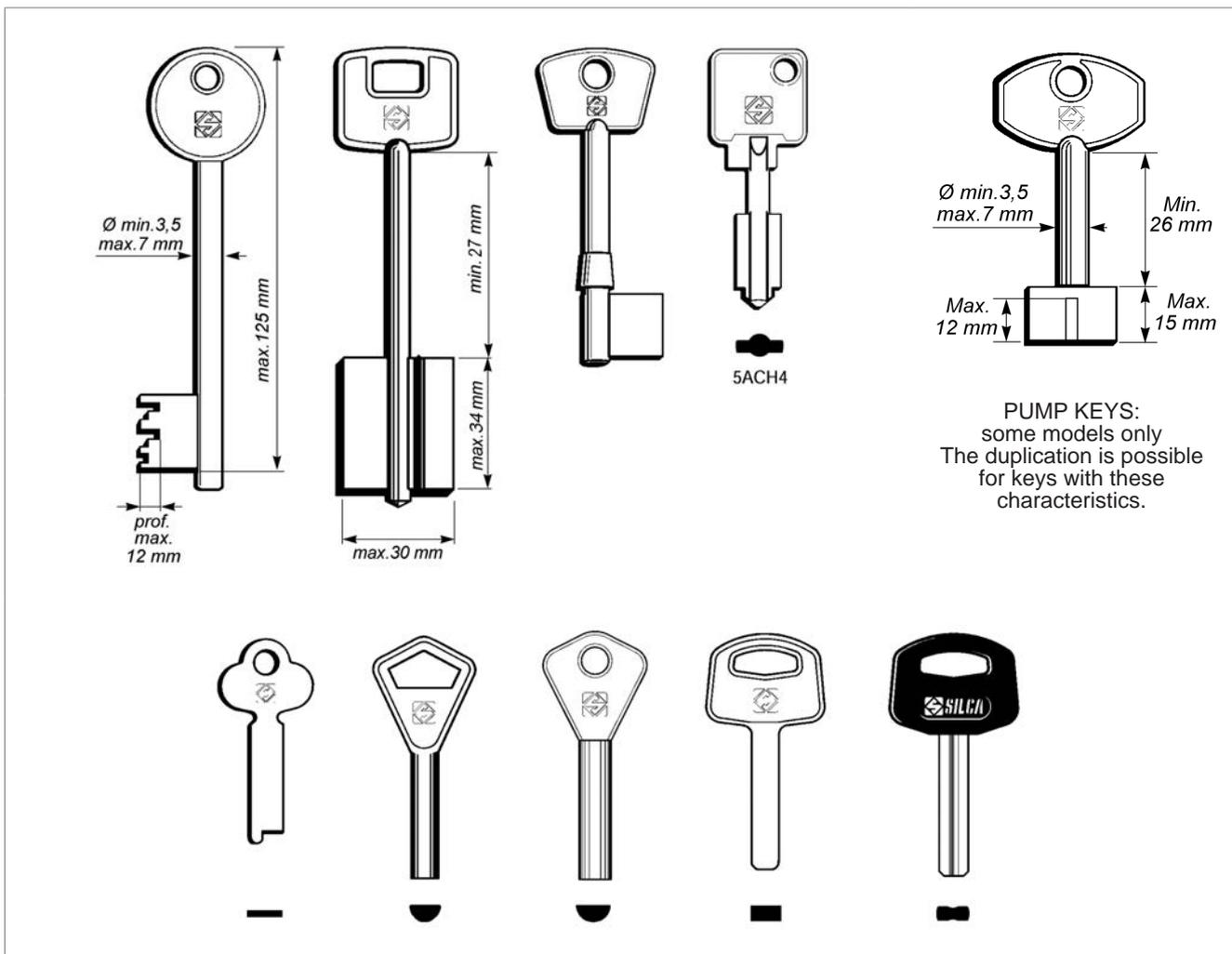


Fig. 25

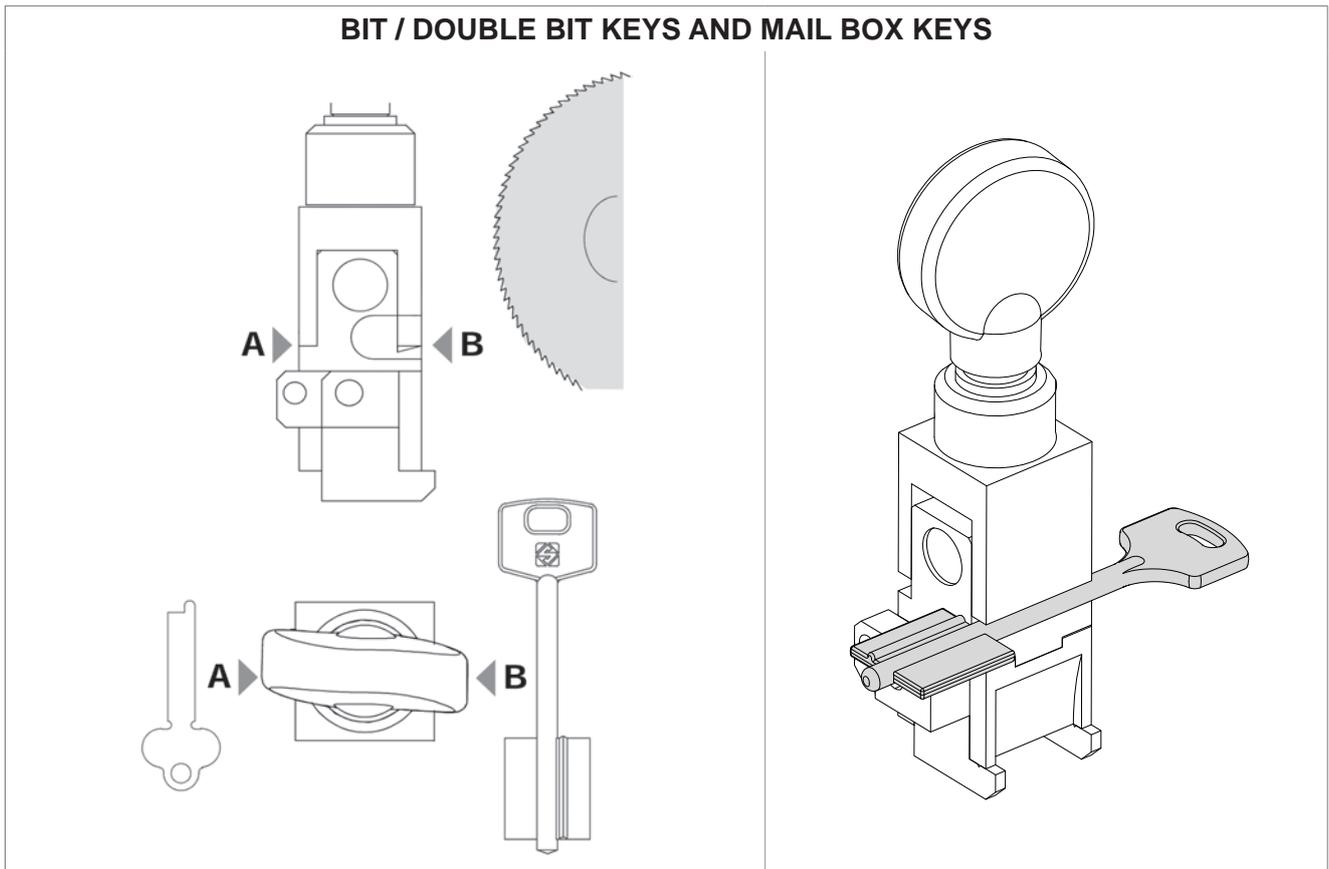


Fig. 26

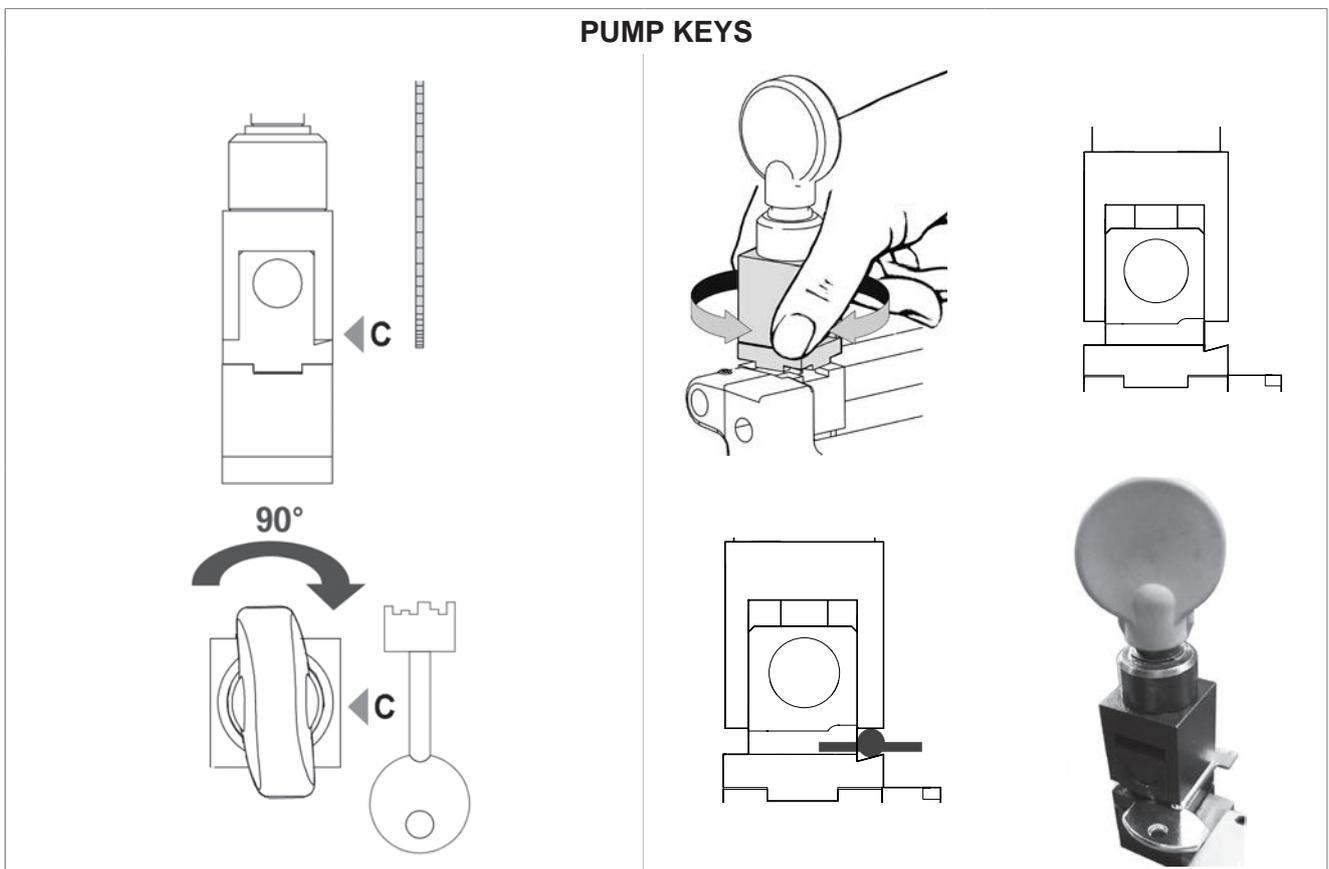


Fig. 27

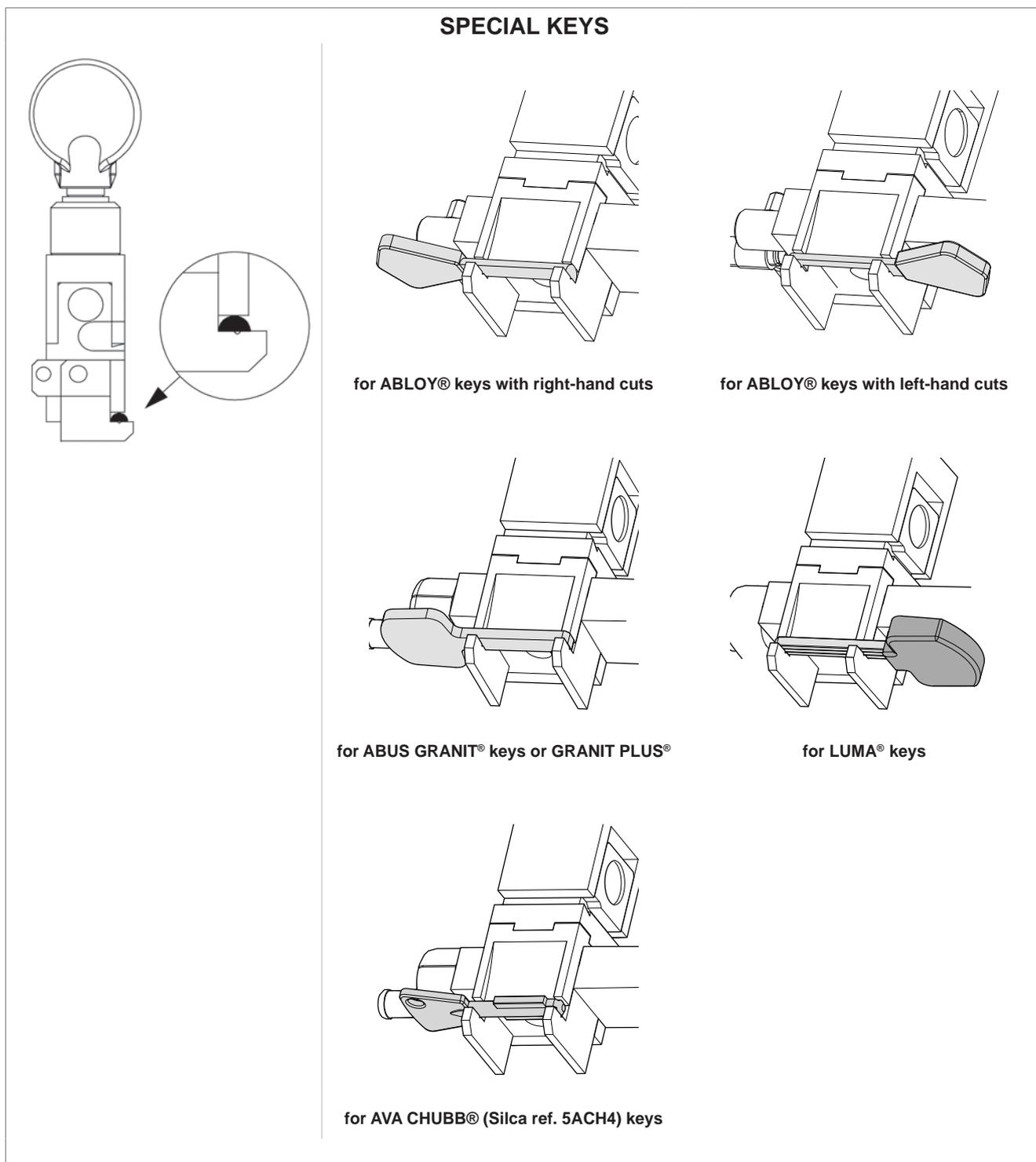


Fig. 28

5.3 Cutting bit and double bit keys

NOTE: check that the clamps are locked into the fixed position (chap. 5.1.2).

- 1) Prepare the clamps with the required side facing the cutter and tracer point (Fig. 26).
- 2) Place the original key in the left-hand clamp and lock.

Note: leave clearance at least 2 mm between the bit and clamp.

- 3) Place the key to be cut in the right-hand clamp, without locking.
- 4) Move the carriage and place the bit of the original key up against the tracer point (Fig. 29); check that the bit of the key to be cut is up against the cutter so that both keys are perfectly aligned.
- 5) Lock the key to be cut in place.
- 6) Cut the key (Fig. 30); if necessary, round off the cuts using the clamp tilting mechanism (chap. 5.1.2).
- 7) Move the carriage with lever (A) to take the original key cuts into contact with the tracer point.
- 8) Pull the carriage back and go on to another cutting point, then continue as for point 7.
- 9) When cutting is finished, turn off the switch (K) and remove the keys.

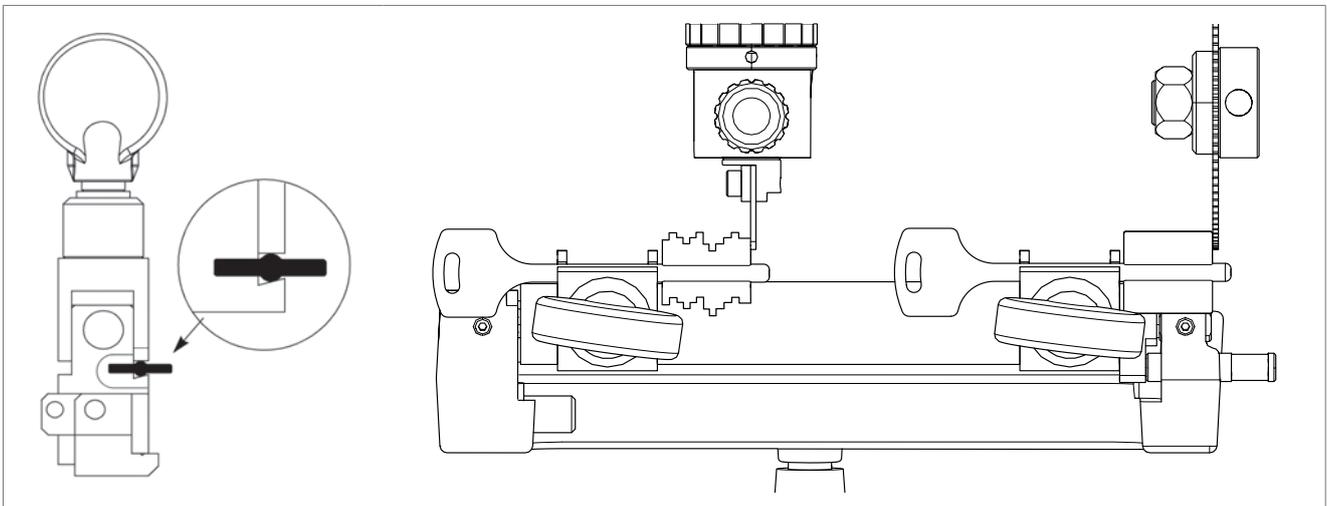
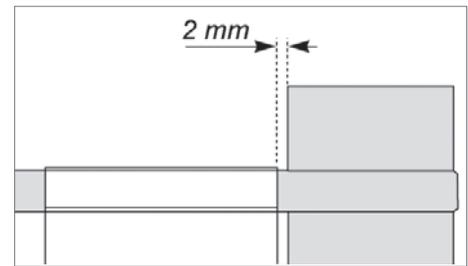


Fig. 29

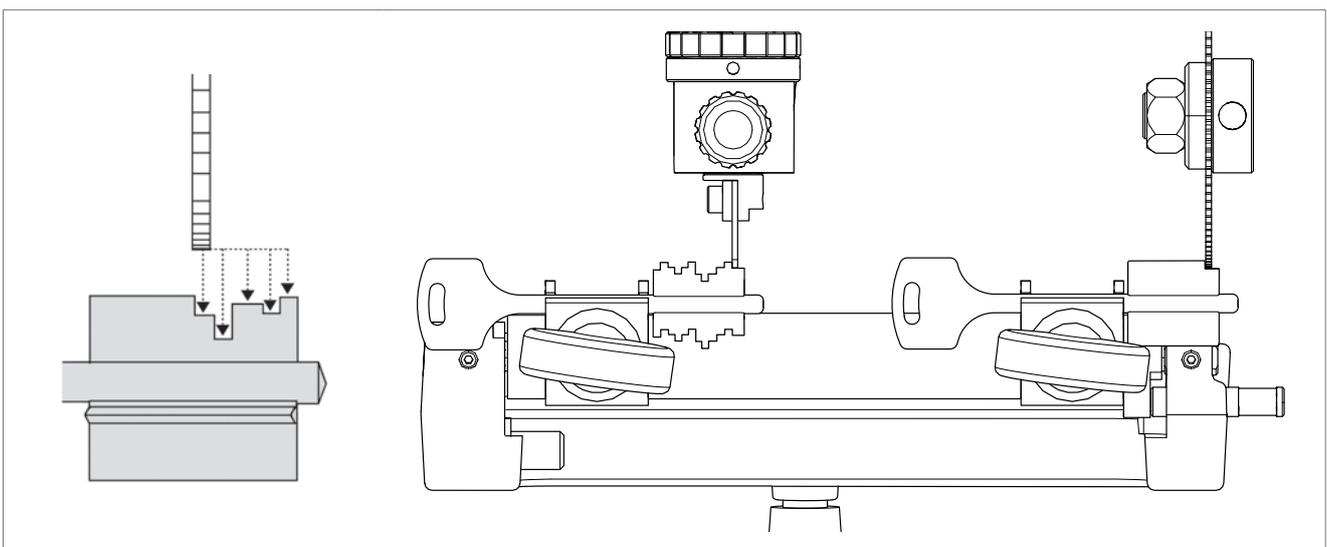


Fig. 30

5.4 Cutting keys with central stop

NOTE: check that the clamps are locked into the fixed position (chap. 5.1.2).

- 1) Prepare the clamps with the required side facing the cutter and tracer point..
- 2) Loosen the clamp knobs slightly to allow the keys to enter.
- 3) Insert the original key into the left-hand clamp with the central stop up against the clamp (left-hand side) and the bit parallel to the clamp (Fig. 24); tighten the knob (J1) to secure the key.
- 4) Insert the key to be cut into the right-hand clamp with the central stop up against the clamp (left-hand side) and the bit parallel to the clamp (Fig. 24); tighten the knob (J1) to secure the key.
- 5) Start the machine with switch (K) and proceed with cutting.
- 6) Move the carriage with lever (A) to take the original key cuts into contact with the tracer point.
- 7) Pull the carriage back and go on to another cutting point, then continue as for point 5.
- 8) When cutting is finished, turn off the switch (K) and remove the keys.

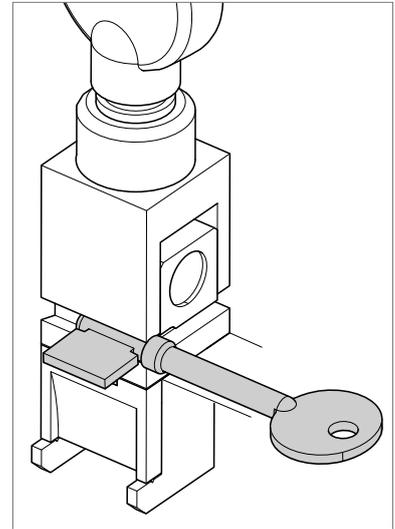


Fig. 31

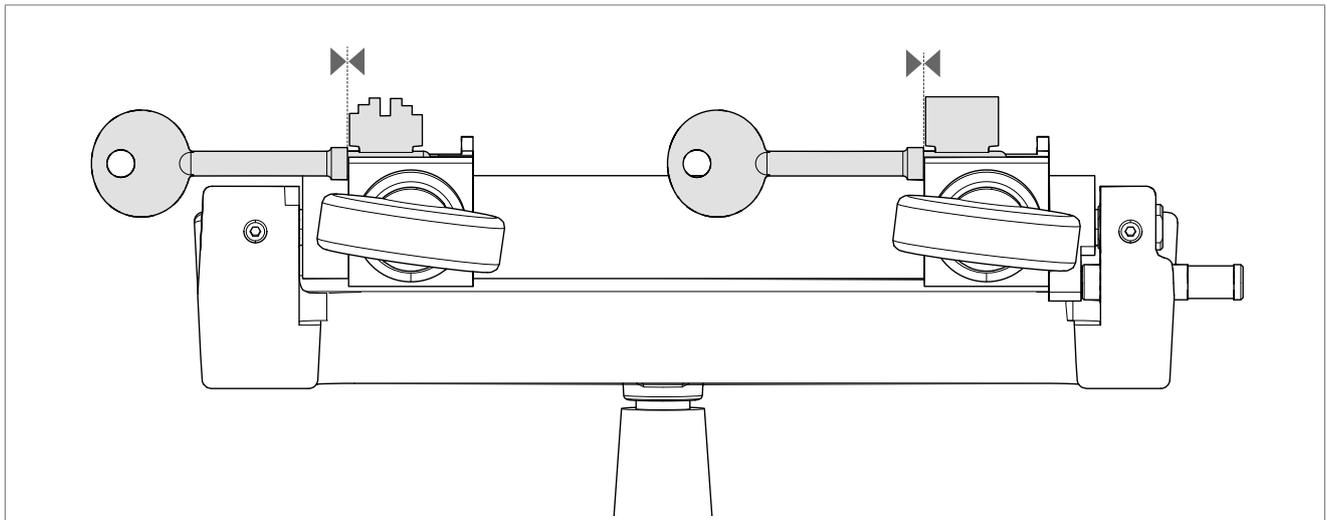


Fig. 32

5.5 Cutting mail box keys

NOTE: check that the clamps are locked into the fixed position (chap. 5.1.2).

- 1) Prepare the clamps with the required side facing the cutter and tracer point.
- 2) Loosen the clamp knobs slightly to allow the keys to enter.
- 3) Place the original key in the left-hand clamp and lock.
- 4) Place the key to be cut in the right-hand clamp, without locking.
- 5) Move the carriage and place the bit of the original key up against the tracer point (Fig. 34); check that the bit of the key to be cut is up against the cutter so that both keys are perfectly aligned.
- 6) Lock the key to be cut in place.
- 7) Start the machine with switch (K) and proceed with cutting.
- 8) Move the carriage with lever (A) to take the original key cuts into contact with the tracer point.
- 9) Take the carriage back with lever (A), go on to the next cutting position and continue from point 7.
- 10) When cutting is finished, turn off the switch (K) and remove the keys.

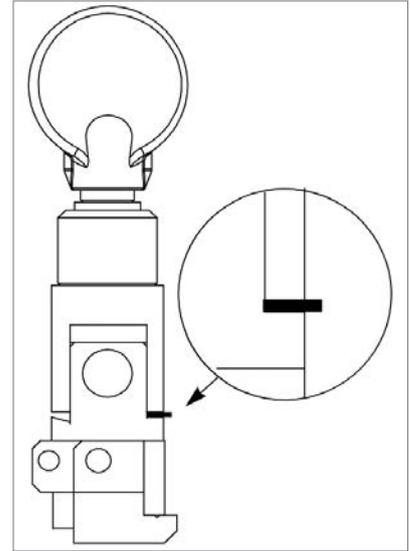


Fig. 33

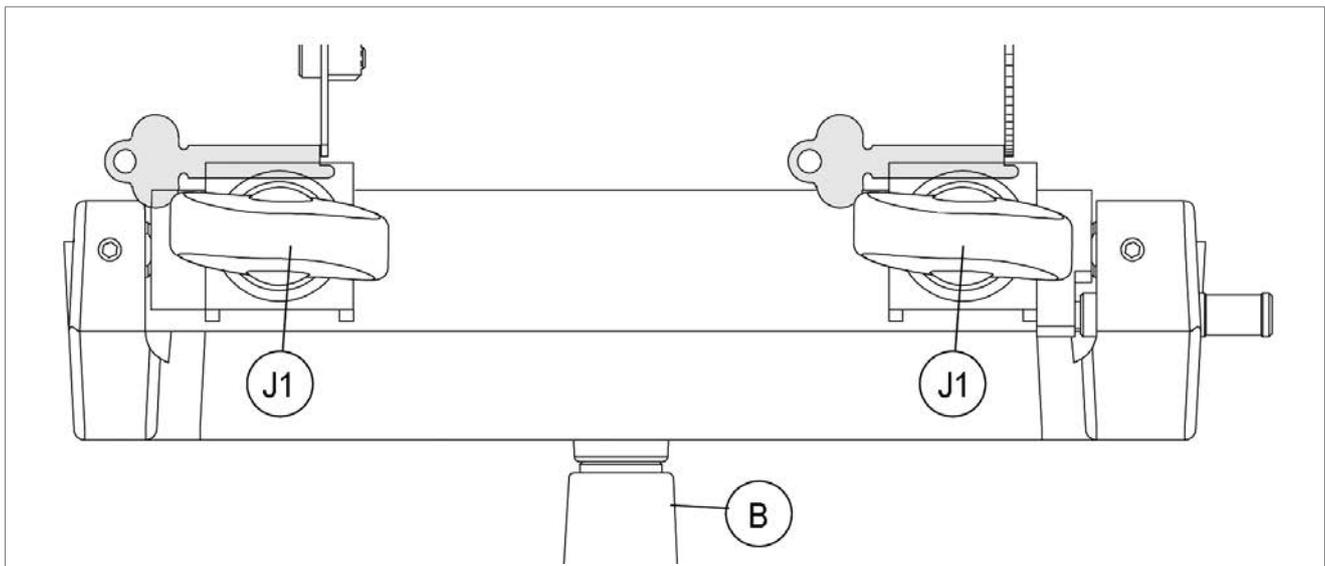


Fig. 34

5.6 Cutting pump keys



ATTENTION: some models only (see Fig. 36).

NOTE: check that the clamps are locked into the fixed position (chap. 5.1.2).

- 1) Prepare the clamps with the bit key jaw turned 90° (Fig. 27 and Fig. 36).
- 2) Place the original key in the left-hand clamp with the bit up against the clamp.
- 3) Lock the key to be cut in the right-hand clamp.
- 4) Enable the tracer point spring (chap. 4.2).
- 5) Start the machine with switch (K) and proceed with cutting.
- 6) Move the carriage with the lever (A) and take the cut key into contact with the tracer point and push the carriage all the way.
- 7) Take the carriage back with the lever (A), go on to the next cutting position and continue from point 6.
- 8) When cutting is finished, turn off the switch (K) and remove the keys.

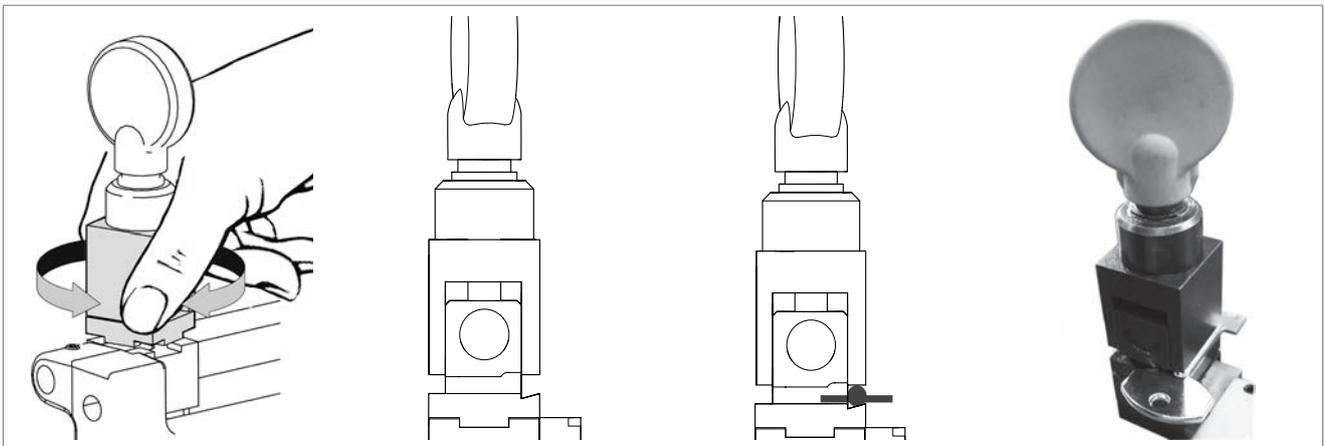


Fig. 35

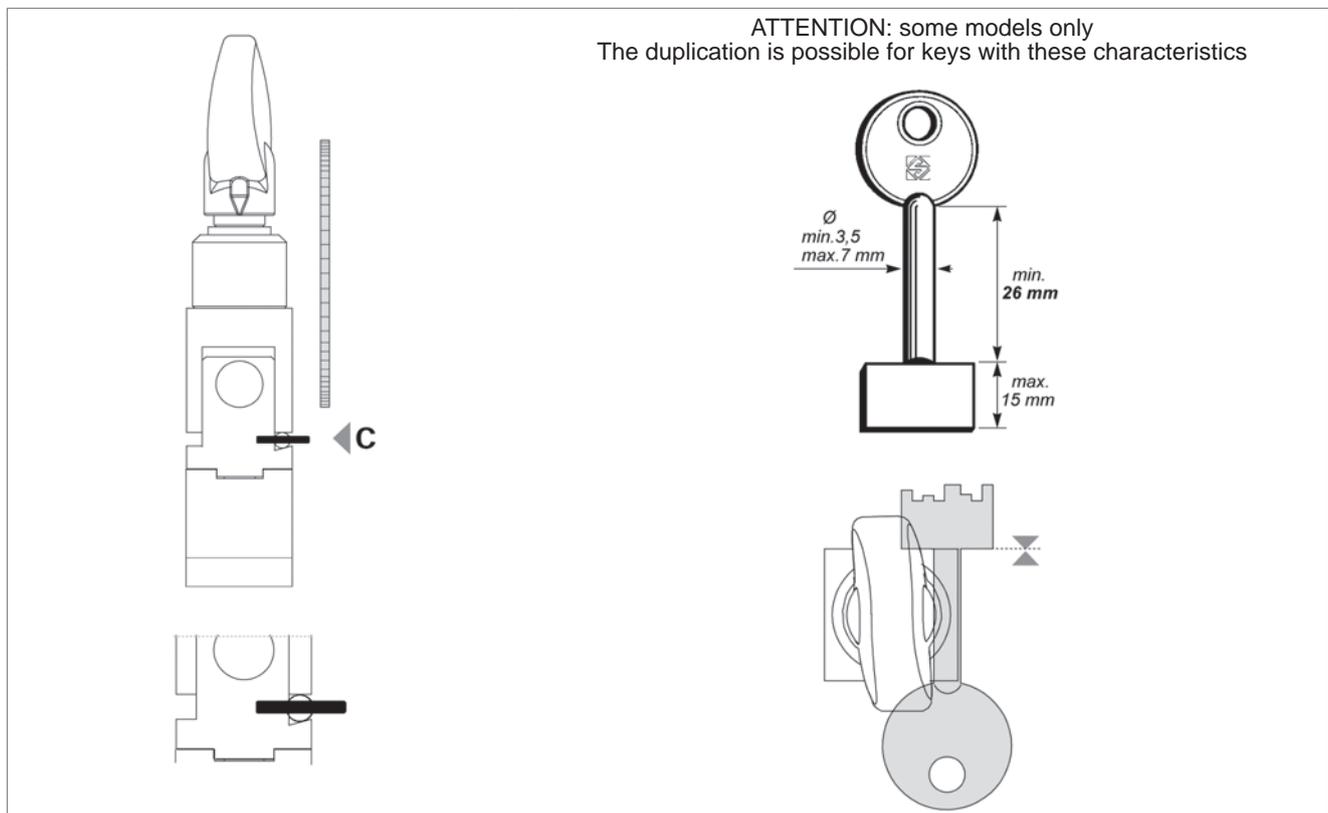


Fig. 36

5.7 Cutting special keys such as Abloy®, Abus®, Luma®, Ava Chubb® (Silca ref.5ACH4)

NOTE: activate the clamp tilting mechanism (chap. 5.1.2)

- 1) After positioning the keys as described, go on to making the cuts, using the clamp tilting mechanism to round them off (chap. 5.1.2).
- 2) Move the carriage with the lever (A) to take the original key cuts into contact with the tracer point.
- 3) Move the carriage back, go on to another cutting point and continue cutting.
- 4) When the key has been cut turn off the machine with switch (K) and remove the keys.

ABLOY® keys (diameter 7,5 or 6 mm)

Loosen the knob (J1) in order to raise the lower jaw manually and fit the key (Fig. 28 and Fig. 37).

Place the flat part of the key on the bottom plate and fit the back part all the way in.

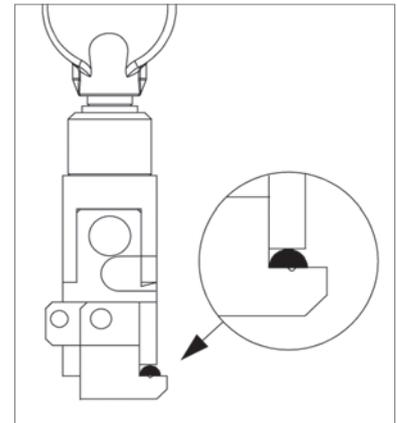


Fig. 37

- **ABLOY® key with right-hand cuts**

- key head on the right of the clamp (Fig. 28 and Fig. 38).
- the flat part of the key downwards.
- the reference for the key relates to the tip, up against the tracer point (original key) and up against the cutter (key blank), or use the stop bar up against the external left-hand side of the clamp (Fig. 38).

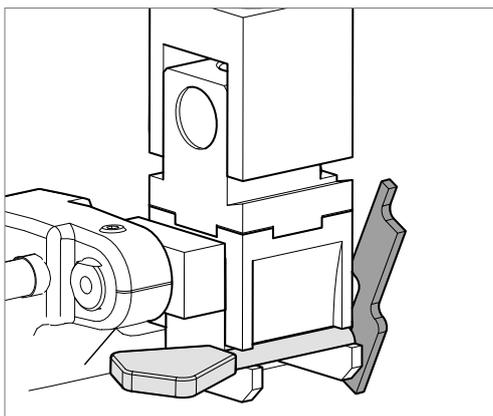
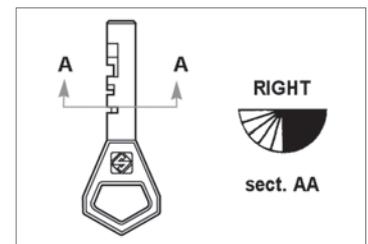


Fig. 38

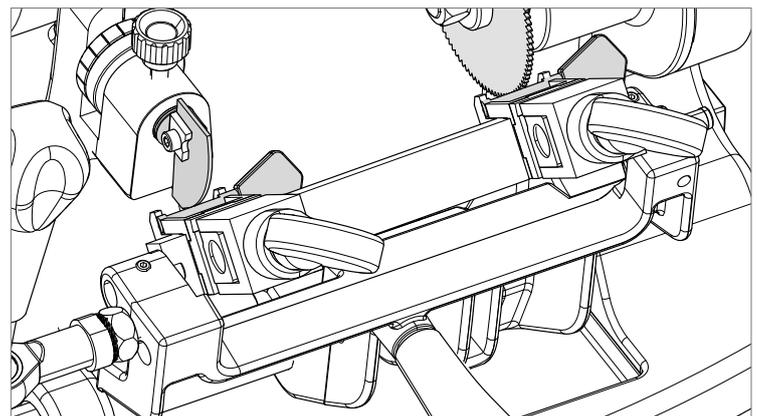
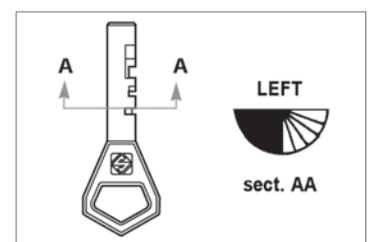


Fig. 39

- **ABLOY® key with left-hand cuts**

- key head on the left of the clamp (Fig. 28).
- the flat part of the key downwards.
- the reference for the key relates to the tip, up against the tracer point (original key) and up against the cutter (key blank), or use the stop bar up against the external right-hand side of the clamp.



ABUS® keys (Granit or Granit Plus)

Loosen the knob (J1) in order to raise the lower jaw manually and place the key in position as follows:

- key head on the right of the clamp.
- the key stem on the bottom surface.
- key back up against the rear part.
- the reference for the key relates to the tip, up against the tracer point (original key) and up against the cutter (key blank) or use the stop bar up against the external left-hand side of the clamp (Fig. 41).

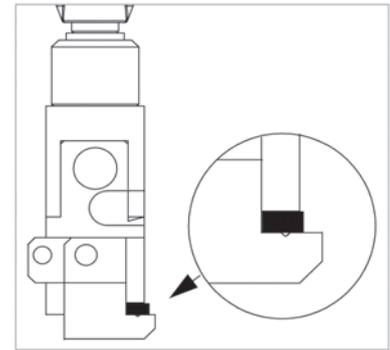


Fig. 40

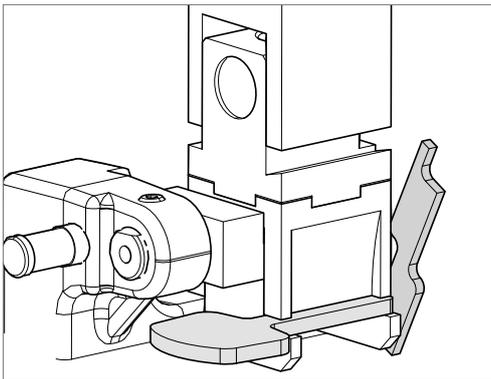


Fig. 41

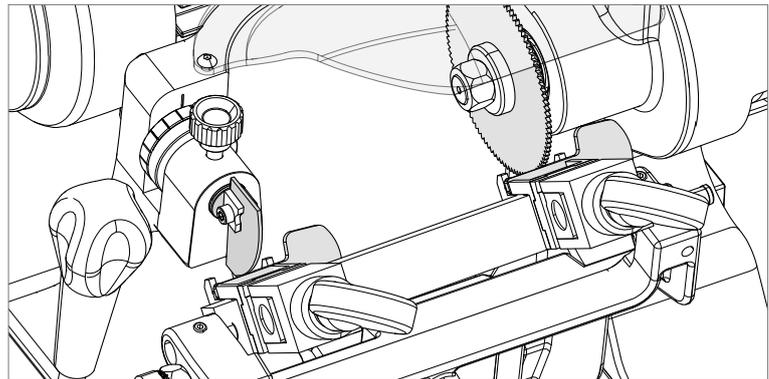


Fig. 42

LUMA® keys

Loosen the knob (J1) in order to raise the lower jaw manually and place the key in position as follows:

- the key head on the left of the clamp.
- the key stem on the bottom surface.
- key back up against the rear part.
- tracer point (original key) and up against the cutter (key blank), or use the stop bar up against the external right-hand side of the clamp (Fig. 44).

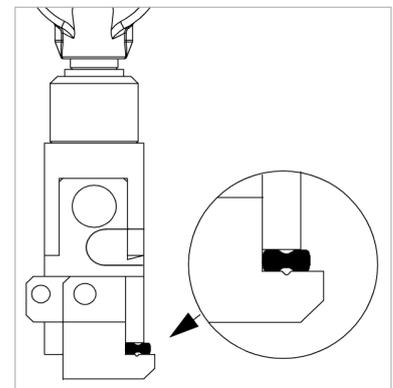


Fig. 43

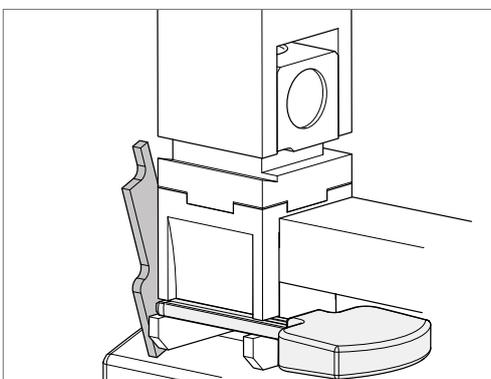


Fig. 44

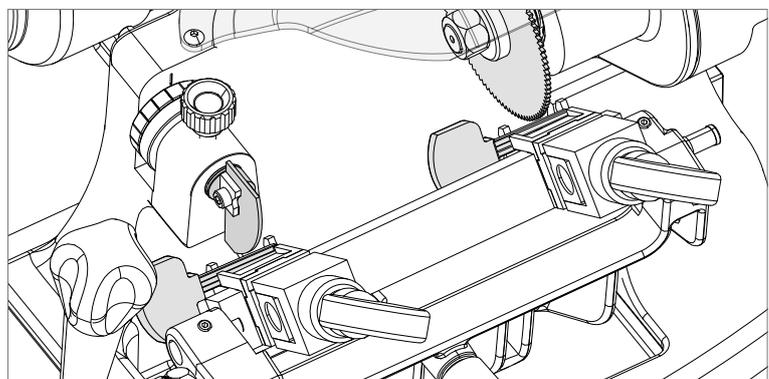


Fig. 45

AVA CHUBB® keys (Silca ref. 5ACH4)

Loosen the knob (J1) in order to raise the lower jaw manually and place the key in position as follows:

- the key head on the right of the clamp.
- the key stem must be centred in the small “V” seat of the lower plan (Fig. 46).
- take care that the key bits are aligned and in parallel position (Fig. 24, page 17).
- the reference for the key relates to the tip, up against the tracer point (original key) and up against the cutter (key blank), or use the stop bar up against the external left-hand side of the clamp (Fig. 47).

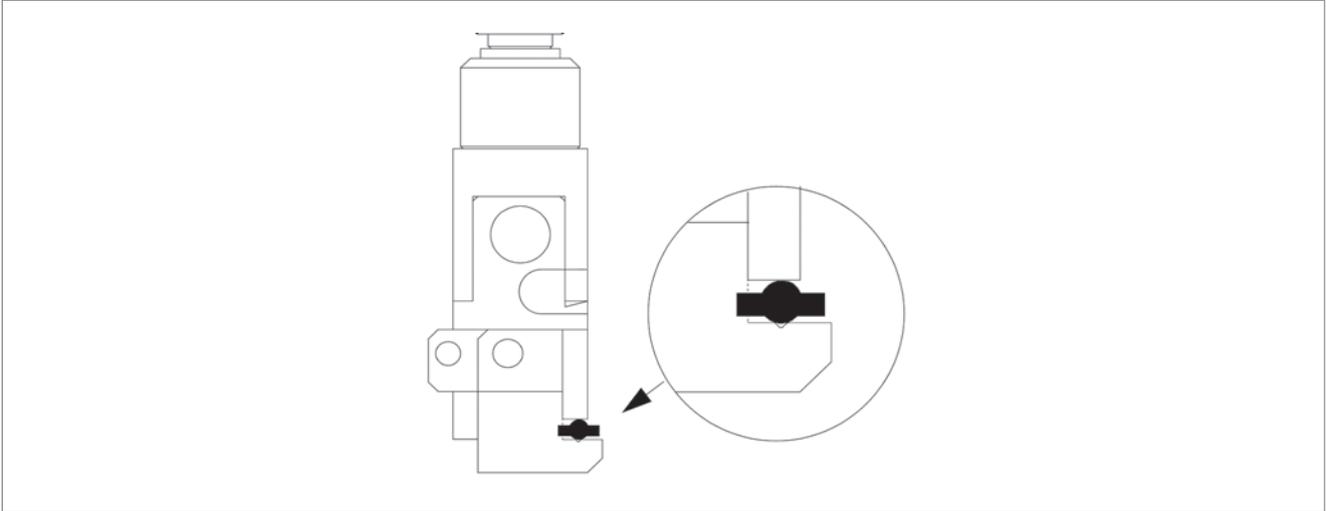


Fig. 46

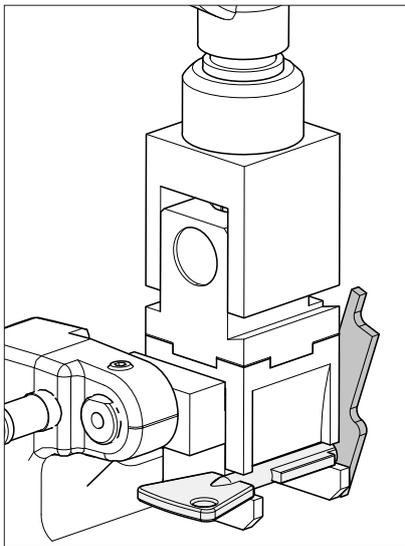


Fig. 47

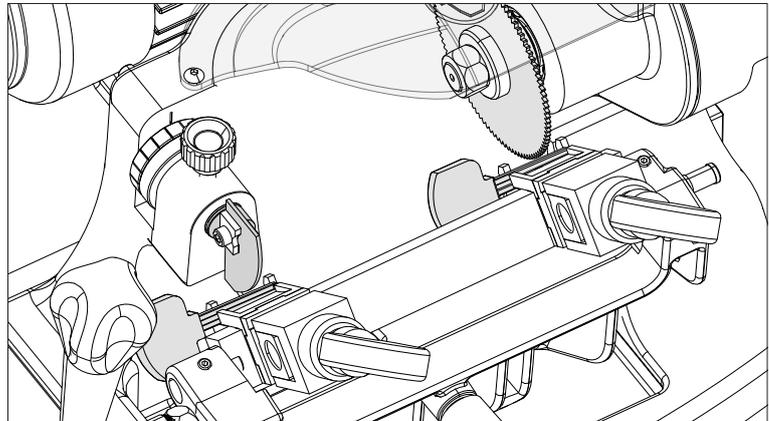


Fig. 48

6 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 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...).

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.

6.1 Replacing the brush

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

⚠ ATTENTION: remove the mains plug.

- 1) Remove the cover (P) by loosening the screws (P1) (Fig. 49).
- 2) Slot the locking rod (provided) into the hole (F1) of the cutting tool shaft (Fig. 50).
- 3) Use the Allen wrench to loosen the screw holding the brush in place (Fig. 50).
- 4) Replace the brush and tighten the screw with the Allen key.
- 5) Remove the locking rod from the cutting tool shaft.
- 6) Place the cover (P) and tighten the screws (P1).

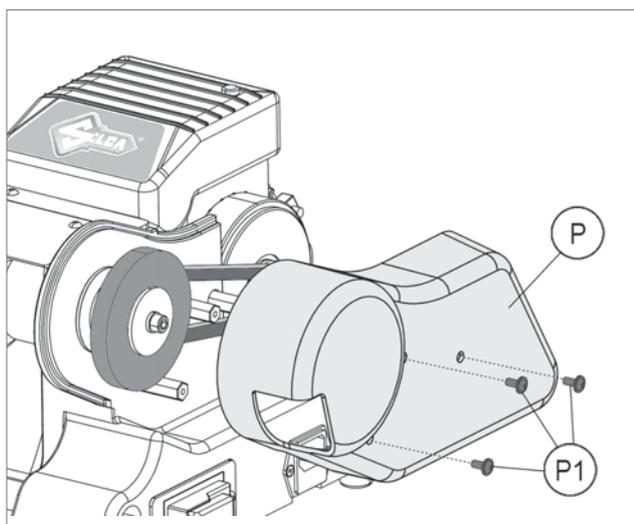


Fig. 49

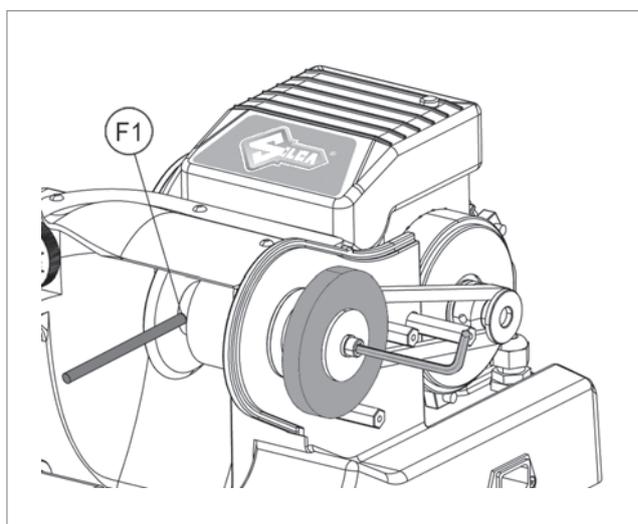


Fig. 50

6.2 Replacing the cutting tool

In order to substitute the cutting tool you need to remove the cutting tool protective shield. To replace a worn cutting tool, proceed as follows:

! **ATTENTION: remove the mains plug.**

- 1) Remove the cutter locking screw (N1) and remove the cutter protective shield (N) (Fig. 51).
- 2) Slot the locking rod (provided) into the hole (F1) of the cutting tool shaft (Fig. 51 and Fig. 52).
- 3) Use the spanner provided to loosen the cutting tool locking nut.

! **ATTENTION: the thread is left-handed.**

- 1) Remove the worn cutting tool.
- 2) Carefully clean the new cutting tool and its seat.
- 3) Install the new cutting tool (pay attention to the rotation direction) and tighten the nut.
- 4) Remove the locking rod.
- 5) Re-place the protective shield (N).
- 6) Check calibration (see chap. 4.3).

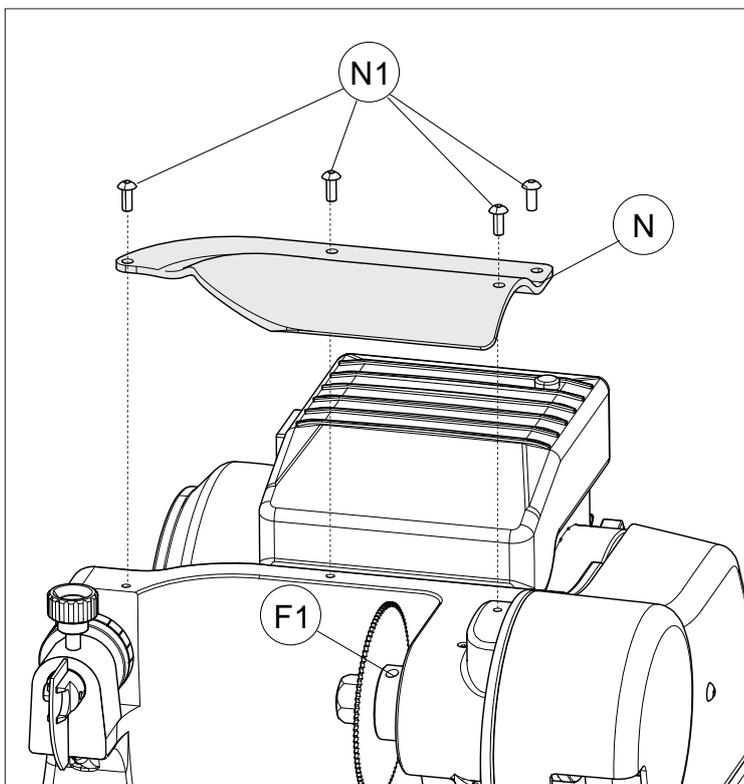


Fig. 51

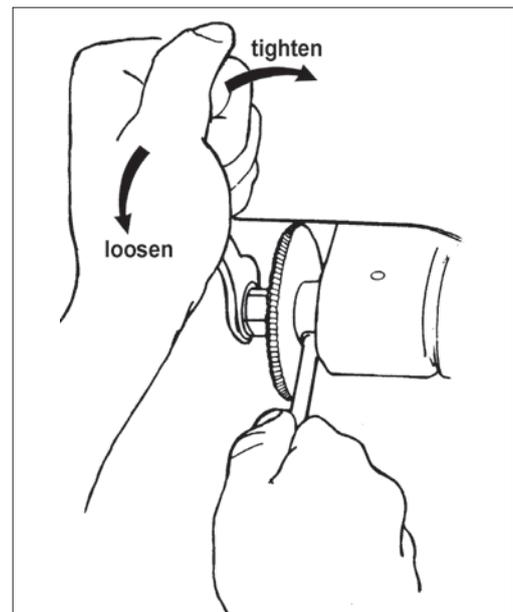


Fig. 52

6.3 Replacing the tracer point

! **ATTENTION:** remove the mains plug.

- 1) Loosen and remove screw (E2), plate and worn tracer point.
- 2) Fit the new tracer point with the plate and push all the way in.
- 3) Tighten the screw (E2).
- 4) Re-calibrate the machine, following the procedure described in chap. 4.4.

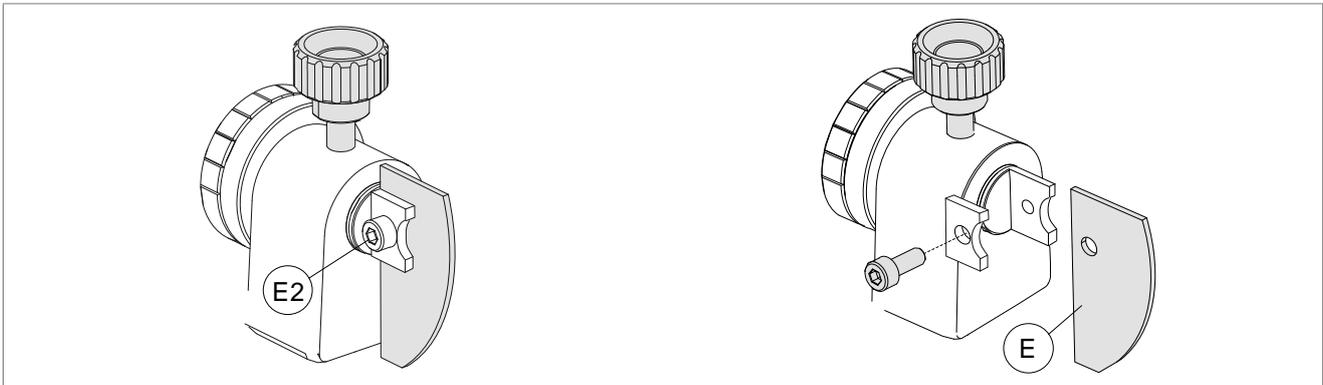


Fig. 53

6.4 Replacing the fuses

! **ATTENTION:** disconnect the power lead from the mains and machine.

- 1) Remove the fuses box from the key-cutting machine socket (R) ().
- 2) Replace the fuses (R1).
- 3) Close the fuses box and connect the power cable.

ATTENTION: fuses must always be replaced with others of the same type and with the same Amps (4 Amp rapid).

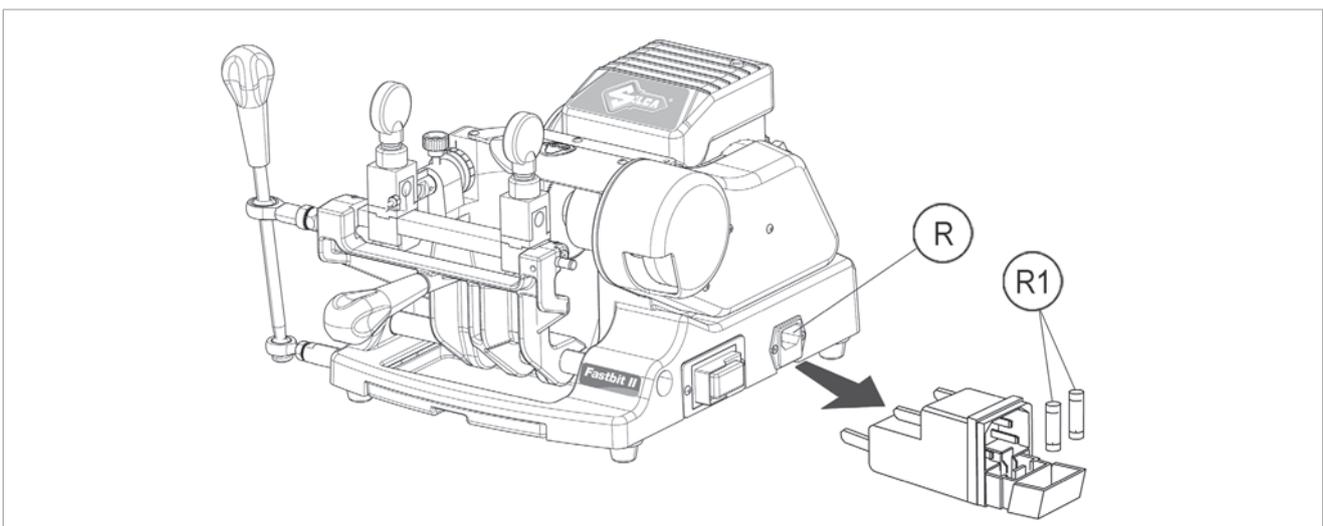


Fig. 54

6.5 Access to the lower compartment

! **ATTENTION:** remove the mains plug.

- 1) Detach the wire from the key-cutting machine socket.
- 2) Remove the swarf tray (L) (Fig. 55).
- 3) Paying attention turn the machine slowly onto its back.
- 4) Loosen the 3 screws (W1) and remove the plate (W) (Fig. 56).

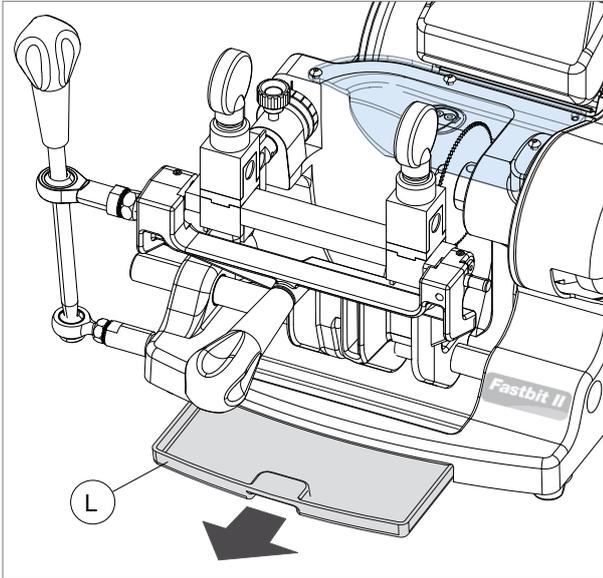


Fig. 55

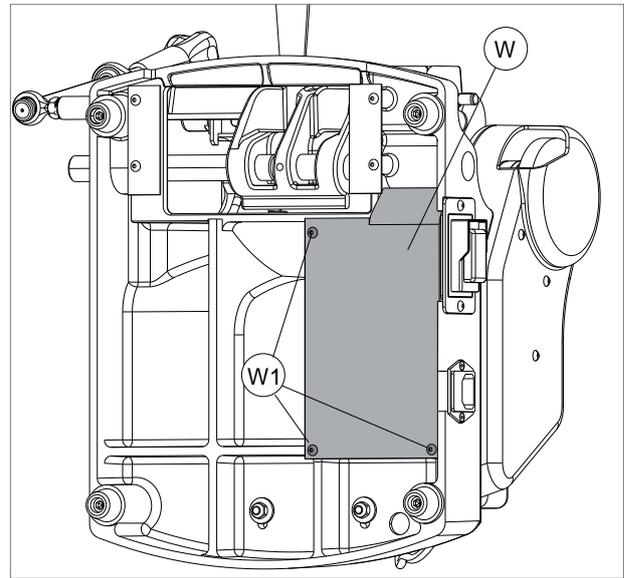


Fig. 56

6.6 Replacing the main switch

! **ATTENTION:** remove the mains plug.

- 1) Access the lower compartment (see chap. 6.5).
- 2) Detach the 4 connectors (H2) and (H3) paying special attention to their position (Fig. 57).
- 3) Remove the switch making pressure on the tabs with a screwdriver (Fig. 58).
- 4) Fit the new main switch.
- 5) Reconnect the 4 connectors (H2) and (H3).

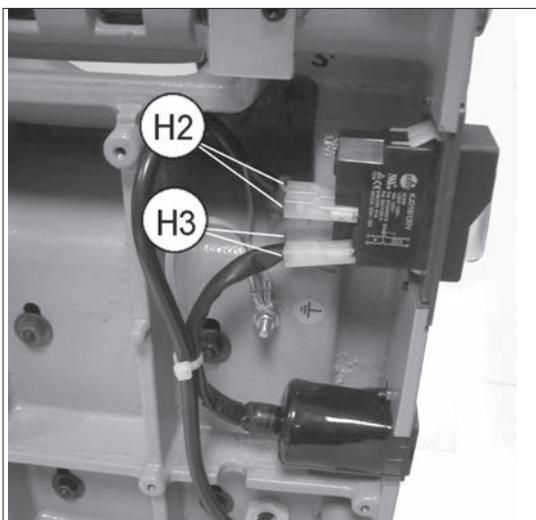


Fig. 57

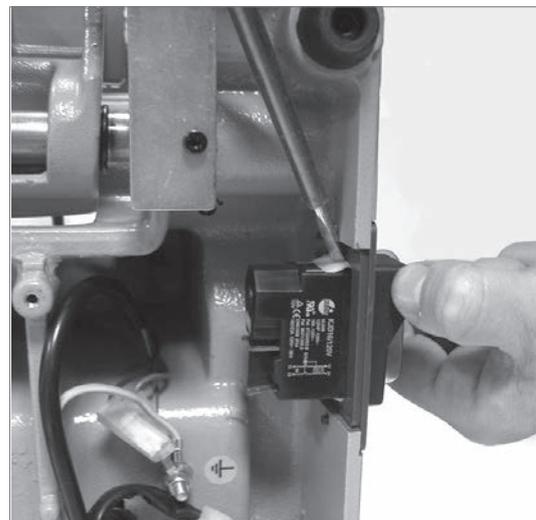


Fig. 58

6.7 Replacing the motor

⚠ ATTENTION: remove the mains plug.

- 1) Access the lower compartment (see chap. 6.5).
- 2) Disconnect the 2 connectors (H2). Loosen the nut (T1) and disconnect the earthing wire (Fig. 59).
- 3) Remove the wire tie.
- 4) Loosen and remove the 4 motor fixing nuts (Fig. 60).
- 5) Re-position the machine on the workbench.
- 6) Remove the screws (P1), then the protective cover (P) (Fig. 61).
- 7) Unscrew the wire grommet (M3) (Fig. 62).
- 8) Remove the 4 motor fixing screws (M1) and pull off the belt.
- 9) Loosen the grub screw (S1) and remove the drive pulley (Fig. 63).
- 10) Pull out the motor cable and remove the motor (Fig. 64).
- 11) Fit the new motor, the 4 screws (M1) and 4 nuts (M4).
- 12) Fit the drive pulley onto the new motor and secure with the grub screw (S1).
- 13) Fit the belt and adjust tension, tighten the 4 screws (M1) and 4 motor fixing nuts (M4).

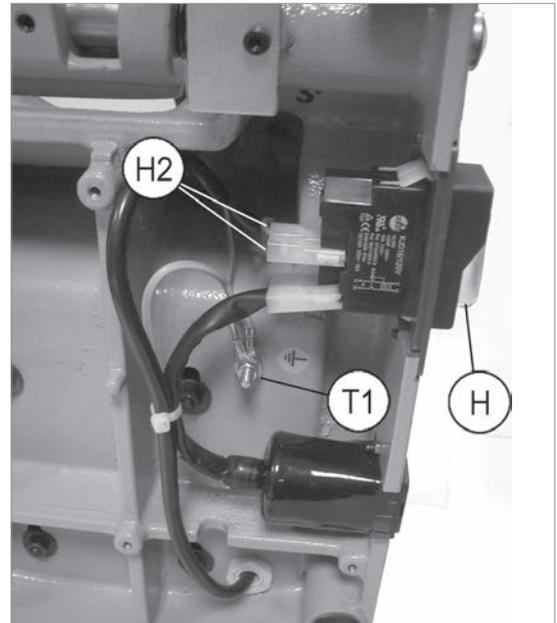


Fig. 59

- 14) Pass the motor cable through the grommet (M3).
- 15) Connect the 2 connectors (H2) to the switch (H) and secure the earthing wire to its screw with a nut (T1).
- 16) Replace and secure the metal bottom (W) (chap. 6.5).
- 17) Replace the protective cover (P) and secure with the 3 screws (P1).

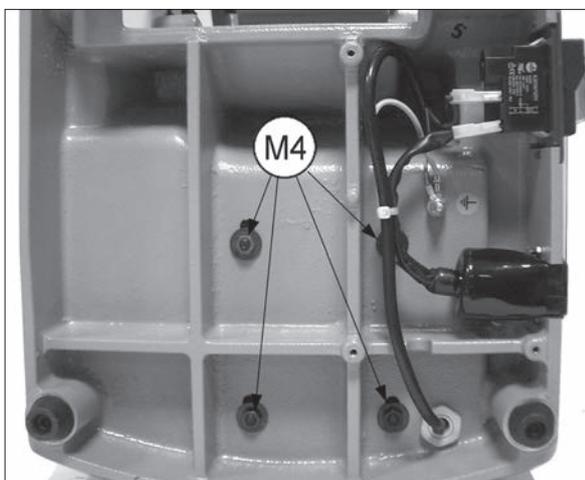


Fig. 60

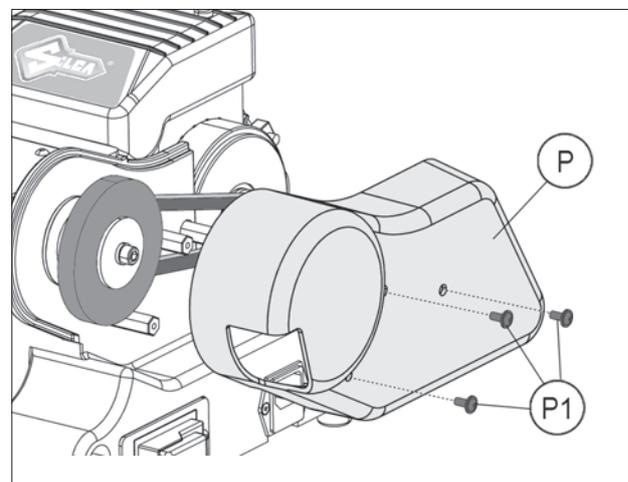


Fig. 61

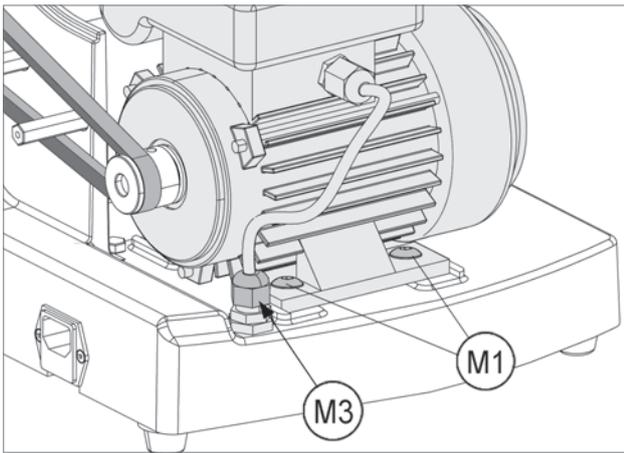


Fig. 62

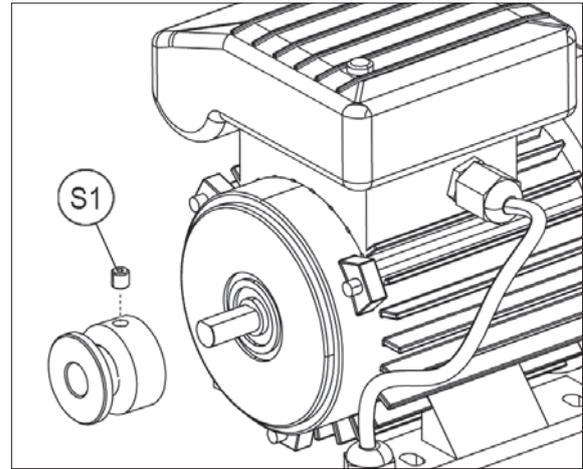


Fig. 63

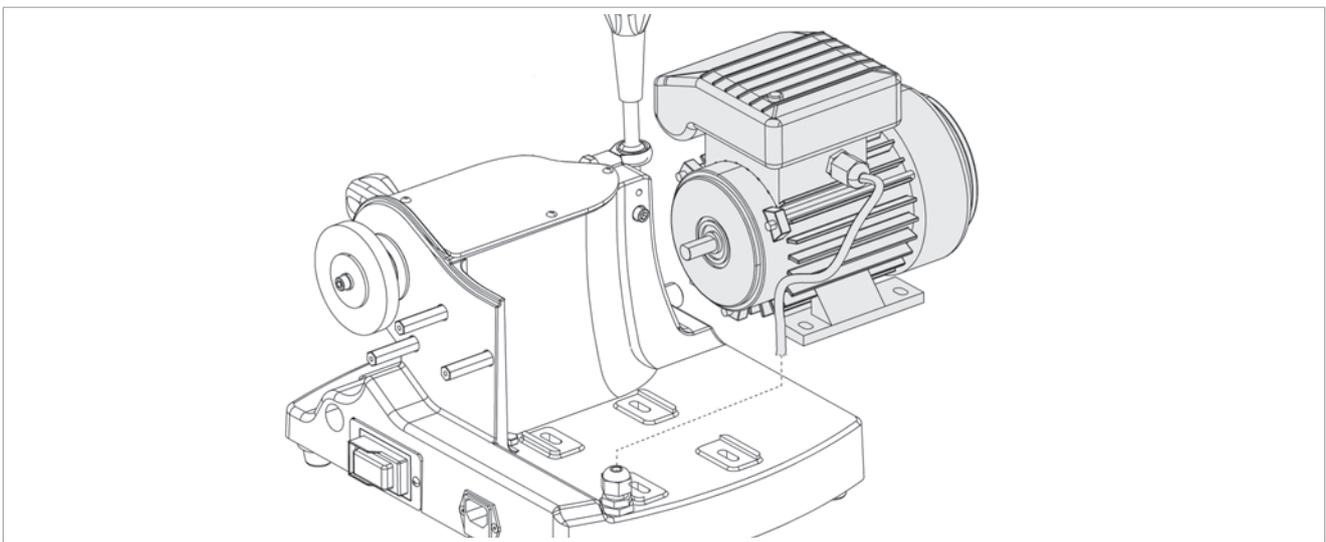


Fig. 64

6.8 Replacing and/or adjusting tension on the belt

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

⚠ ATTENTION: remove the mains plug.

- 1) Turn the machine onto its back and loosen the 4 nuts (M4) (chap. 6.7).
- 2) Re-position the machine on the workbench.
- 3) Remove the cover (P) by loosening the screws (P1) (Fig. 61).
- 4) Move the motor towards the cutter and remove the worn belt.
- 5) Fit the new belt.
- 6) Push the motor to the back until the belt has the right tension.
- 7) Tighten the four screws (M1) and the 4 nuts (M4).
- 8) Place the motor cover (P).

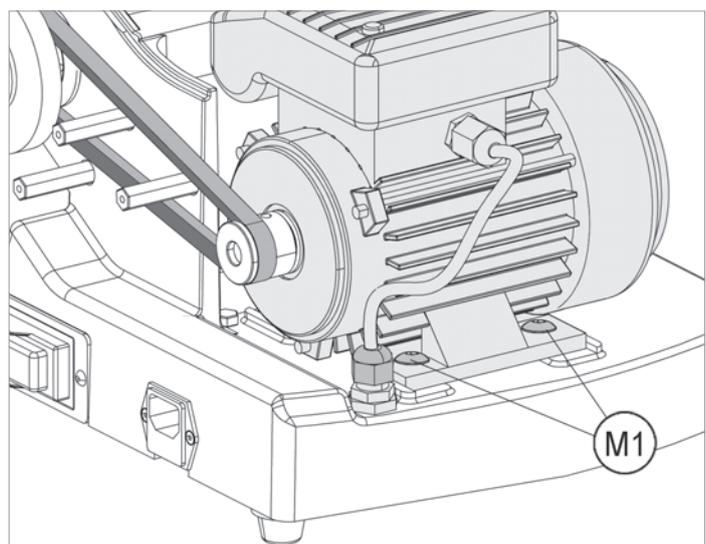


Fig. 65

6.9 Replacing the motor on switch

! **ATTENTION:** remove the mains plug.

- 1) Loosen the 2 screws (M2) and remove the motor cover (Fig. 66).
- 2) Detach the 4 connectors (K2) paying special attention to their position.
- 3) Remove the switch (K) making pressure on the tabs with a screwdriver.
- 4) Fit the new switch in its seat and reconnect the 4 connectors (K2) paying special attention to their position.
- 5) Re-place the motor cover and secure with the 2 screws (M2).

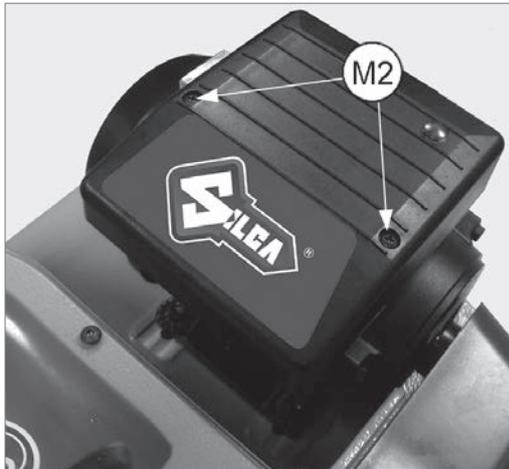


Fig. 66

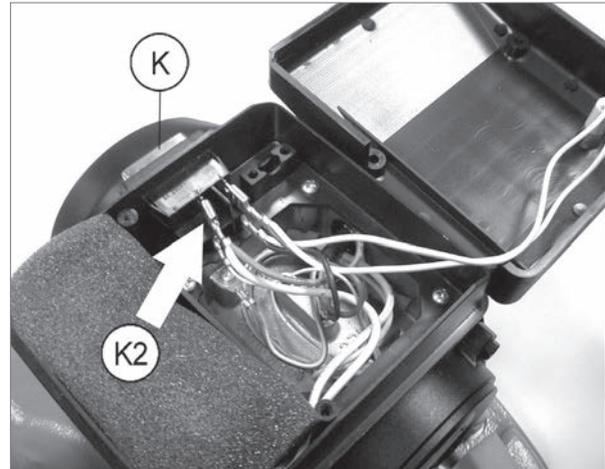


Fig. 67

6.10 Replacing the condenser

! **ATTENTION:** remove the mains plug.

- 1) Loosen the 2 screws (M2) and remove the motor cover (Fig. 66).
- 2) Detach the connectors (Z) paying special attention to their position.
- 3) Remove the condenser (Y).
- 4) Fit the new condenser.
- 5) Re-place the motor cover and secure with the 2 screws (M2).



Fig. 68

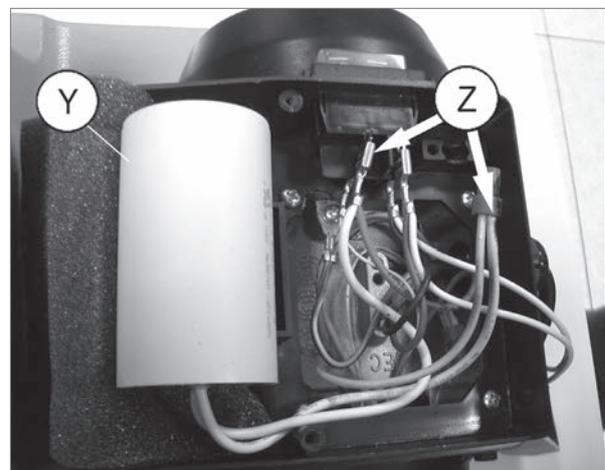


Fig. 69

7 DISPOSAL

For correct disposal please refer to current standards.

INFORMATION FOR USERS OF PROFESSIONAL EQUIPMENT



From “Actuation of Directive 2012/19/EU regarding Waste Electrical and Electronic Equipment (WEEE)”

The symbol of a crossed waste bin found on equipment or its packing indicates that at the end of the product's useful life it must be collected separately from other waste so that it can be properly treated and recycled.

In particular, separate collection of this professional equipment when no longer in use is organised and managed:

- a) directly by the user when the equipment was placed on the market before 31 December 2010 and the user personally decides to eliminate it without replacing it with new equivalent equipment designed for the same use;
- b) by the manufacturer, that is to say the subject which was the first to introduce and market new equipment that replaces previous equipment, when the user decides to eliminate equipment placed on the market before 31 December 2010 at the end of its useful life and replace it with an equivalent product designed for the same use. In this latter case the user may ask the manufacturer to collect the existing equipment;
- c) by the manufacturer, that is to say the subject which was the first to introduce and market new equipment that replaces previous equipment, if it was placed on the market after 31 December 2010;

Suitable separate collection for the purpose of forwarding discarded equipment for recycling, treatment or disposal in an environmentally friendly way helps to avoid possible negative effects on the environment and human health and encourages re-use and/or recycling of the materials making up the equipment.

The sanctions currently provided for by law shall apply to users who dispose of products in unauthorised ways.

8 ASSISTANCE

Silca provides full assistance to purchasers of the 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.

At the end of the manual there is a list of manufacturers' and authorized Service Centre addresses; if the manual was downloaded is necessary visit the website to see the contacts (www.silca.biz).

Silca undertakes to make consumables, optional items and spare parts available for the limited time defined in its product obsolescence policy.

8.1 How to request service

The guarantee attached to the key-cutting machines ensures free repairs or replacements of faulty parts within 24 months of purchase. All other service calls must be arranged by the customer with Silca or with a Silca service centre.



VITTORIO VENETO 02/09/2014

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

FASTBIT / FASTBIT II

complies with the requirements of the following European Directives:

European Union **DIRECTIVE 2006/42/CE** (Machines)
and with the ENISO 12100 : 2010 Standards

European Union **DIRECTIVE 2004/108/CE** (Electromagnetic Compatibility)
and with the IEC 61000 – 6 – 3 :2006 , IEC 61000 – 6 – 1 :2005
CISPR14 – 1 : 2009 / EN 55014 – 1 :2009
IEC/EN 61000 – 3 – 2 : 2005 , IEC/EN 61000 - 3 – 3 .2005 Standards

European Union **DIRECTIVE 2006/95/CE** (Low Voltage) | **14** |
and with the IEC/EN 60204 – 1 : 2009 Standards

Claudio Tomasella of the Silca S.p.A. Research & Development Division is authorized to create a Technical File.

General Manager Basic Production Center

Stefano Setti

SILCA S.p.A.
Via Podgora, 20 (Z.I.)
31029 Vittorio Veneto (TV) Italy

A Member of the Kaba Group

Tel. +39 0438 9136 Fax +39 0438 913800 www.silca.it info@silca.it
P. IVA C.F. e Reg. Impr. IT03286730266 REA TV 258111
Cap. Soc. € 10.000.000 i.v. Export TV 038851

Società soggetta a direzione e coordinamento di Kaba Holding AG, con sede in Rümlang (Svizzera),
Hofwisenstrasse 24, ai sensi e per gli effetti degli articoli 2497 - 2497sexies del Codice Civile.

