Swift
Swift Plus

Operating manual

Original instructions

D448213XA

vers. 1.0

INDEX

GUIDE TO THE MANUAL

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

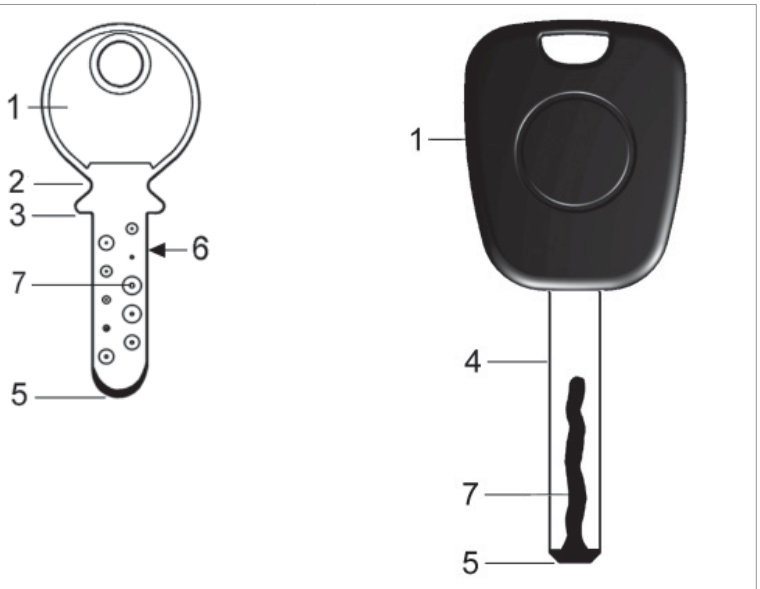
Consultation

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
- Proper use of machine Ch. 5-6-7
- Maintenance Ch. 8-9-10

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.



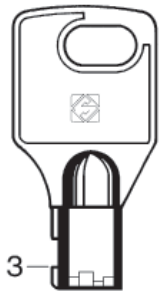
DIMPLE KEYS

Keys with holes of different dimensions, depths, positions and shapes

LASER (SIDEWINDER) TYPE KEYS

LASER is the name given to the special sidewinder milled keys

Fig. 1



TUBULAR KEYS

Fig. 2

1) Head
2) Rim
3) Shoulder Stop
4) Stem
5) Tip
6) Edge
7) Cuts

GENERAL INTRODUCTION

From the design stage risks for the operator have been eliminated in all areas: transport, key-cutting, calibration 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 SWIFT must be installed and used as specified 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 the Company. 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 OBLIGATORY to read the manual carefully before using the machine.

Further Risks

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

Protection and safety precautions for the operator

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 SWIFT key-cutting machine is designed with features which make it completely safe in all of its parts and operation.

- **Power supply**

The key-cutting machine is powered by electricity supplied through a separate grounded plug.

- **Start-up**

The machine is turned on by means of the master switch located on the right-hand side. The switch has a safety function that prevents untimely start-up when voltage returns after a power outage.

- **Operation**

The machine is started up by means of a motor switch located on the right-hand side.

- **Illumination (Swift PLUS version)**

The work area is illuminated by a lamp which operates when the machine is switched on with the master switch.

- **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 SWIFT key-cutting machine is provided with an identification label which shows the serial number (Fig. 3).

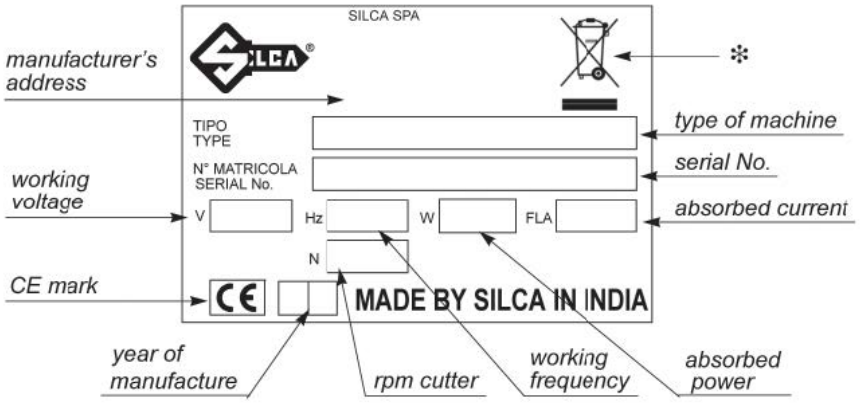


Fig. 3

(*) see chap.9 DISPOSAL.

1 TRANSPORT

The SWIFT key-cutting machine is easily transported and is not dangerous to handle. The packed machine can be carried by two persons.

1.1 PACKING

The packing used for the SWIFT guarantees that the machine will travel safely without danger of damage to it or its components.

The packing comprises two shells, lower and upper in expanded plastic in the machine is wrapped.

A strong outer cardboard box, the measurements of which can be seen in Fig. 4 and the plastic wrapping protect the machine even over a long period of storage.

Note: keep the packing and use it every time the machine must be transported.

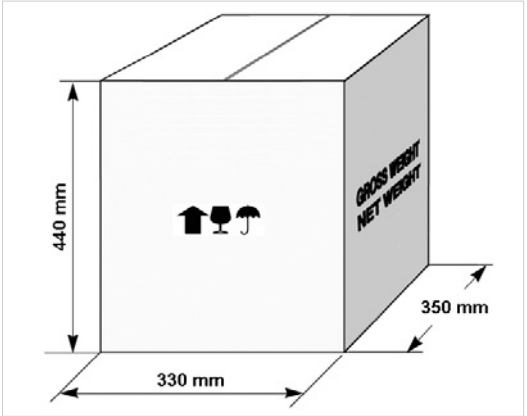


Fig. 4

Keep dry

Handle with care

Up

1.2 TRANSPORT

Symbols are printed on the outside of the cardboard box to give instructions and warnings for transportation.

Use of the packing box whenever the machine is transported will avoid knocks or bumps which could cause damage.

1.3 UNPACKING

To remove the machine from the packing box:

1) Cut the straps with scissors and remove.
2) Open the box without damaging it so that it may be used again (e.g. shipping to the manufacturer for repairs or servicing).
3) Check the contents of the box, which should comprise:
   1 SWIFT key-cutting machine packed in a protective shell
   1 set of documents, including: operating manual, spare parts list and guarantee
   1 accessory container
   1 separate grounded plug wire
4) Remove the key-cutting machine from the protective shell.

1.4 HANDLING THE MACHINE

When the SWIFT has been unpacked, place it directly on its workbench. This operation can be carried out by one person.

ATTENZIONE: hold the base, and no other part, to lift and carry the machine.

1.5 SAFETY

- **Protective shield**

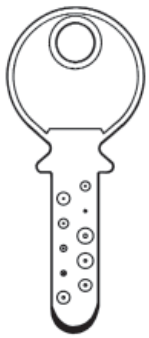
A special transparent plastic shield prevents chippings from flying into the air.

2 MACHINE DESCRIPTION

The SWIFT is an excellent quality, high precision key-cutting machine. It features great versatility in cutting keys of different types and in some cases the need of adapters.
SWIFT cuts the following types of keys:

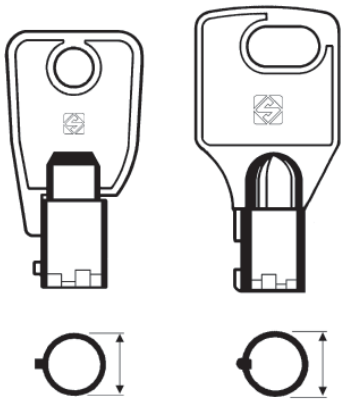
- **DIMPLE KEYS (not inclined cuts)**
- **LASER (SIDEWINDER) type keys**
- **TUBULAR KEYS**

DIMPLE KEYS



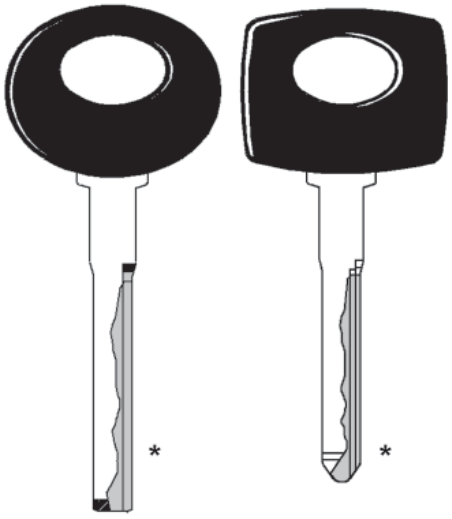
LASER (SIDEWINDER) TYPE KEYS

TUBULAR KEYS



Ø min. 4 mm
Ø max.12 mm

LASER (SIDEWINDER) NARROW-BLADE TYPE KEYS



(*) with Optional

Fig. 5

High precision work is guarantee by the combination of the functional features on the SWIFT and all its components, such as:

- **MOVEMENTS**

The two axes move on ball guides which provide smooth running and easy sliding without play.

- **TRACER POINT SPRING SYSTEM**

This system guides and facilitates self-centering of the cuts on dimple keys.

- **PROTECTIVE SHIELD**

A special transparent plastic shield minimizes exposure to the cutter and chips.

- **LAMP (Swift PLUS version)**

Placed directly on the machine, it illuminates the work area.

- **TRACER POINT ADJUSTING RING NUT**

Ensures perfect depth alignment of the tools and makes it possible to adjust for defects on worn keys.

- **LEVERS AND KNOBS**

Each lever and knob has been designed with dimensions, materials and positions which render grip and movement extremely simple.
Materials and finish have been chosen according to the use of each part, especially:

- lever (J) for vertical carriage (Z axis)
- lever (C) X-Y axes

Note: the letters in brackets refer to Fig. 7, page 7.
The lever which guides movement along the X-Y axes is ergonomic and allows for precise, sensitive movements.

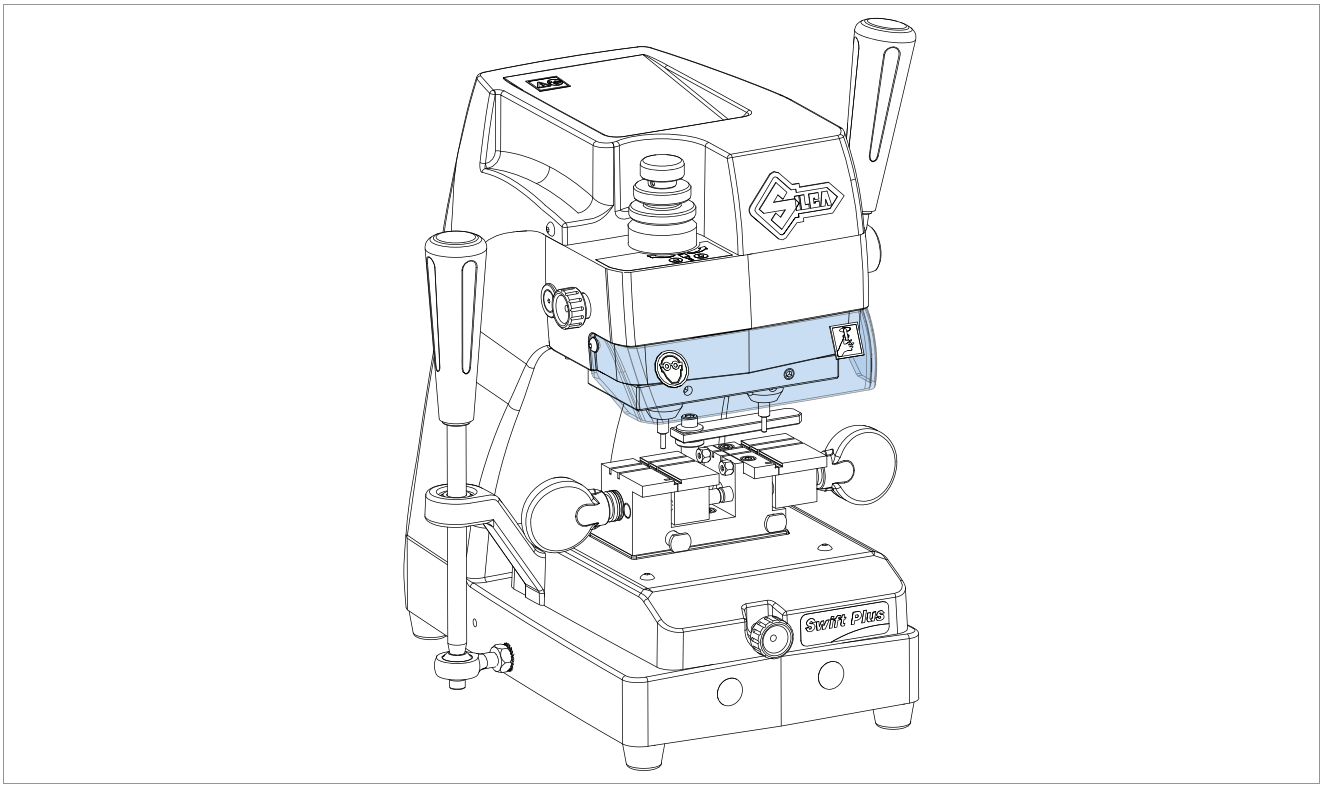


Fig. 6

3 WORKING PARTS

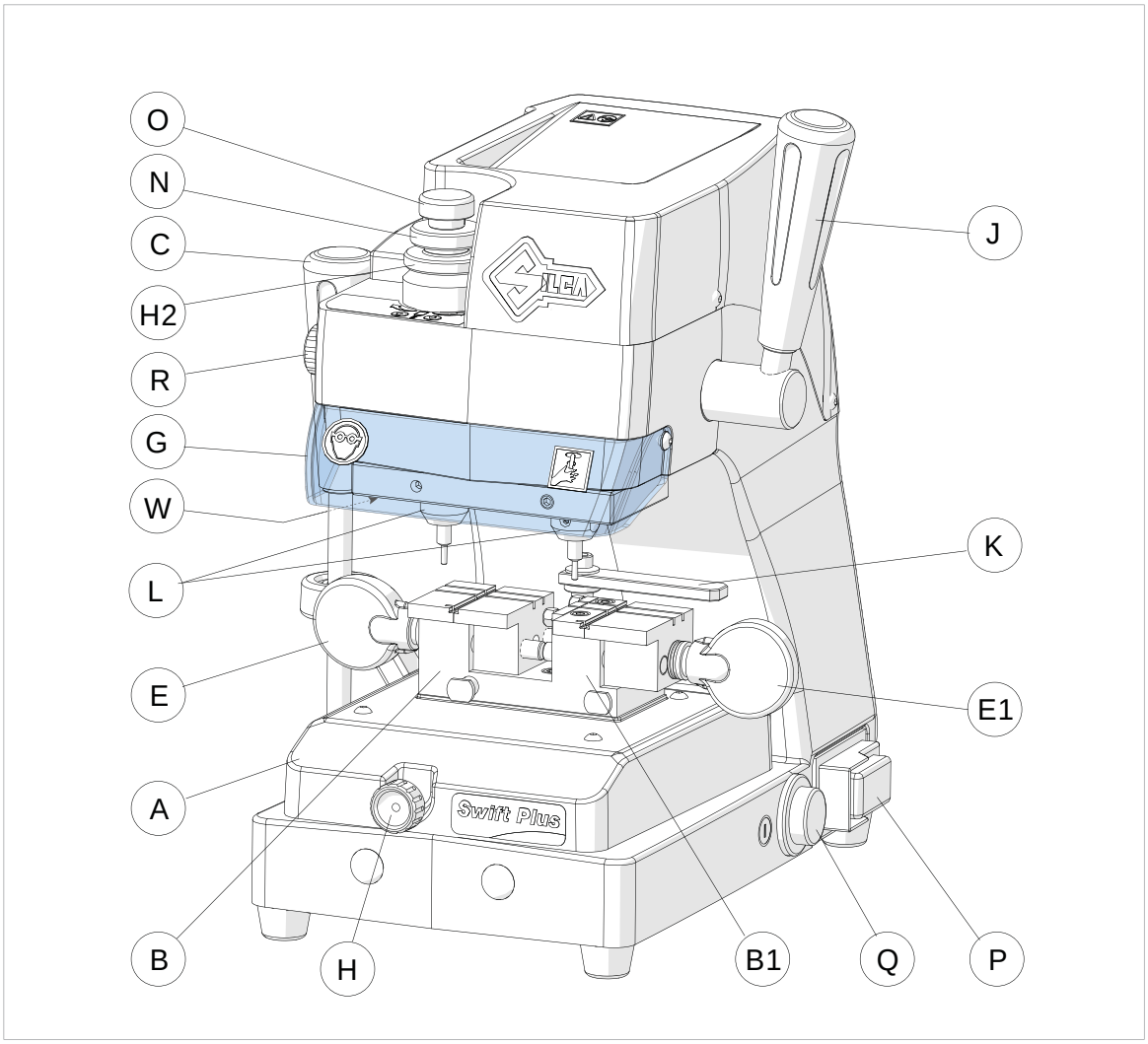


Fig. 7

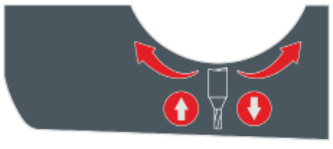
A - clamp carriage (X-Y axes)
B - left-hand jaw
B1- right-hand jaw
C - clamp carriage lever (X-Y axes)
E - left-hand jaw knob
E1- right-hand jaw knob
G - protective shield
H - clamp carriage locking knob
H2- tracer point adjustment locking nut
J - vertical carriage lever (Z axis)
K - tubular key alignment bar
L - sleeves (cutting tool and tracer point holder
N - ring nut for tracer point adjusting
O - spring regulation ring nut
P - master switch
Q - motor start switch
R - “Z” axis locking knob
W- lamp (on Swift Plus version)

3.1 TECHNICAL DATA

Electricity supply:	230V/50-60Hz 120V/50-60Hz
Maximum absorbed power:	230V: 1 Amp 210 Watt 120V: 1.7 Amp 204 Watt
Motor:	One-speed single phase
Cutting tools:	Super rapid steel HSS - Coated
Tool speed:	50Hz: 6000 rpm (+/- 10%) - 60Hz: 6000 rpm (+/- 10%)
Movements:	on 3 axes through rods and bushings
Clamps:	fixed
Runs:	X axis (lower): 24 mm - Y axis (upper): 50 mm - Z axis (vertical): 22 mm
Dimensions :	width: 260 mm depth: 285 mm height: 315 mm
Weight:	12 Kg.
Sound pressure:	58 dB(A)

GRAPHICS ON THE SWIFT MACHINE

		
THE USE OF PROTECTIVE GOGGLES IS REQUIRED	READ INSTRUCTIONS BEFORE USE	WARNING! TOOL IN ROTATION
		
WARNING! PRESENCE OF ELECTRIC POWER	GROUND CONNECTION	CUTTER ROTATION DIRECTION



TRACER POINT ADJUSTMENT

3.2 ELECTRIC CIRCUIT

The main parts of the electrical and electronic circuit on the SWIFT machines are listed below:

SWIFT

1) Machine plug
2) Fuses 4 Amp rapid (230V) - 8 Amp rapid (120V)
3) Master switch
4) Motor switch (illuminated)
5) AC to DC rectifier
6) Electric motor: 230/50-60 (120/50-60)

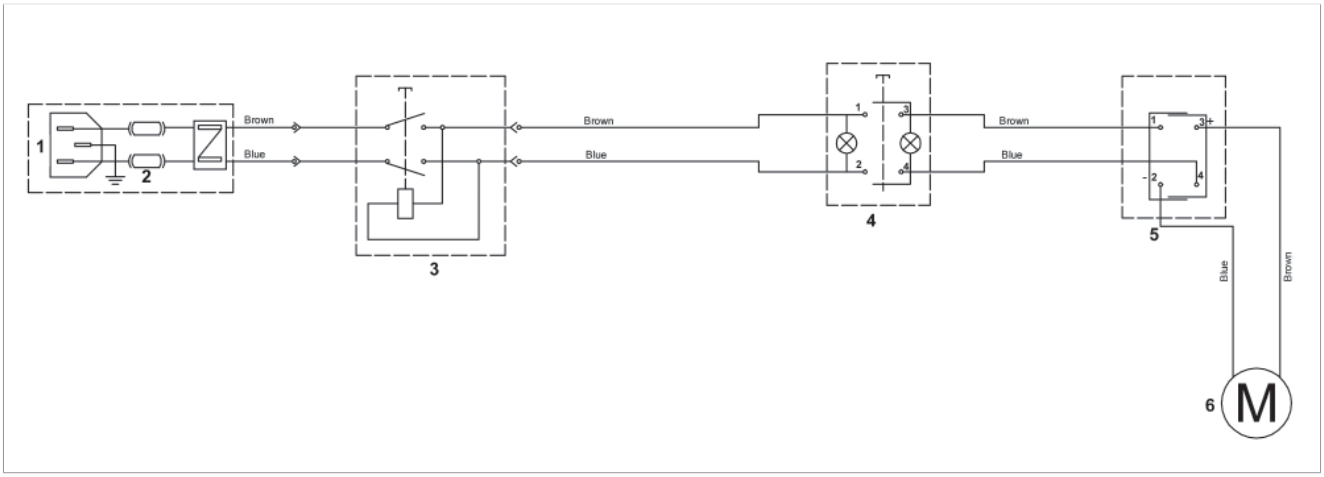


Fig. 8

SWIFT PLUS

1) Machine plug
2) Fuses 4 Amp rapid (230V) - 8 Amp rapid (120V)
3) Master switch
4) Lamp
5) Motor switch (illuminated)
6) AC to DC rectifier
7) Electric motor with collector 230/50 (120/50-60)

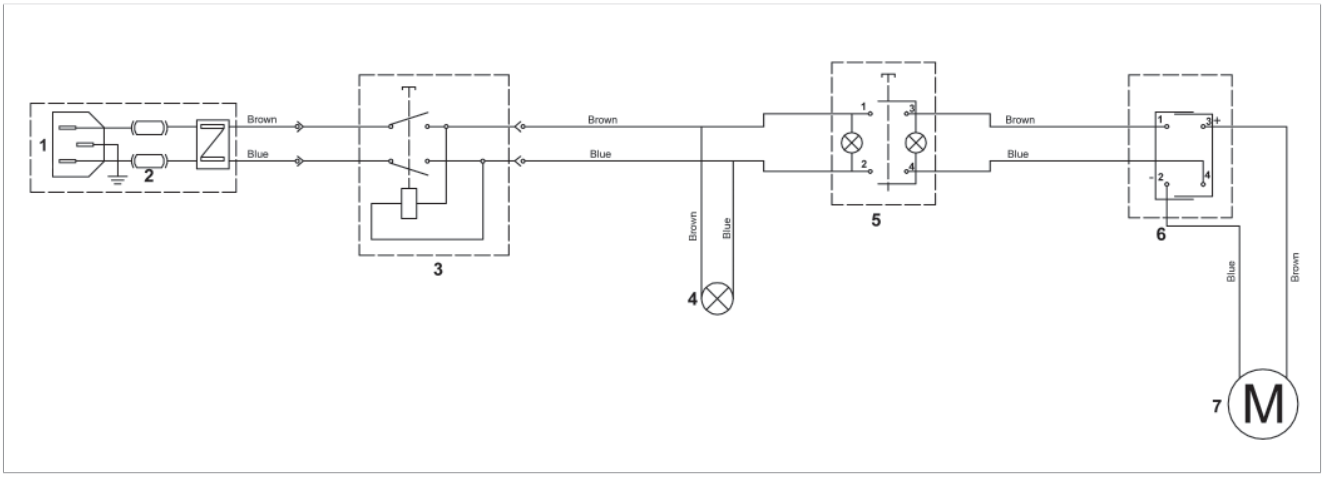
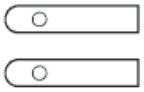
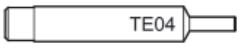
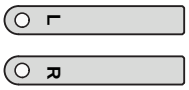
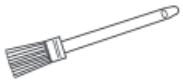


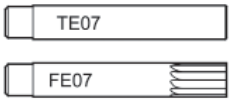
Fig. 9

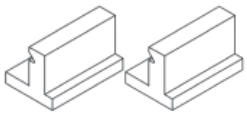
4 ACCESSORIES PROVIDED

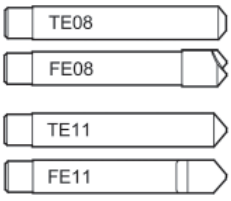
A set of accessories is supplied for use with the machine or for servicing (tools, Allen keys and adapters).
The accessories provided are:

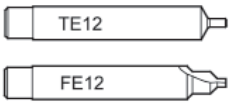
SWIFT - SWIFT PLUS (all versions)			
	**CUTTING TOOL FE01 for dimple keys**		**2,5 mm ALLEN KEY**
	**TRACER POINT TE01 for dimple keys**		**3 mm ALLEN KEY**
	**CUTTING TOOL FE04 for Laser (sidewinder) keys**		**TIP STOP BARS 2 pcs.**
	**TRACER POINT TE04 for Laser (sidewinder) keys**		**CALIBRATION BARS (marked “L” and “R”) 2 pcs.**
	**FUSES (2 pcs) 4 Amp - rapid (230V) 8 Amp - rapid (120V)**		**BRUSH**

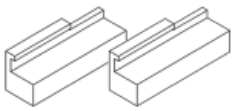
Some versions of cutting machines (indicated by the machine code) come with the following accessories:

D849518ZB - D849522ZB - D849524ZB - D849780ZB	
	**TUBULAR Kit** **Tracer point TE07** **Cutting tool FE07**

D849470ZB - D849780ZB - D849781ZB	
	**MERCEDES Kit** **D749777ZB Adapters**

D849524ZB - D849780ZB	
	**MUL-T-LOCK Kit** **Tracer point TE08** **Cutting tool FE08** **Tracer point TE11** **Cutting tool FE11**

D849518ZB - D849524ZB	
	**Tracer point TE12** **Cutting tool FE12**

D849518ZB - D849522ZB	
	**VOLKSWAGEN - SAAB Kit** **D749778ZB Adapters**

5 MACHINE INSTALLATION AND PREPARATION

The key-cutting machine can be installed by the purchaser and does not require any special skills.
The machine is supplied ready for use and does not need to be set up, except when changing to different tools. However, some checks and preparation for use need to be carried out by the operator.

5.1 CHECKING FOR DAMAGE

The SWIFT 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 SWIFT key-cutting machine, certain parameters must be borne in mind:

- damp, badly ventilated sites should be avoided.
- the ideal conditions for the machine are:
  between 10 and 40°C; relative humidity: approximately 60%

5.3 POSITIONING

Place the key-cutting machine on a horizontal surface, solid enough to take the weight.
The height of the workbench must allow good vision and comfortable access to the operative parts.
It is important to leave clearance of at least 12” (30 cm) behind the machine and on each side to ensure proper ventilation.

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

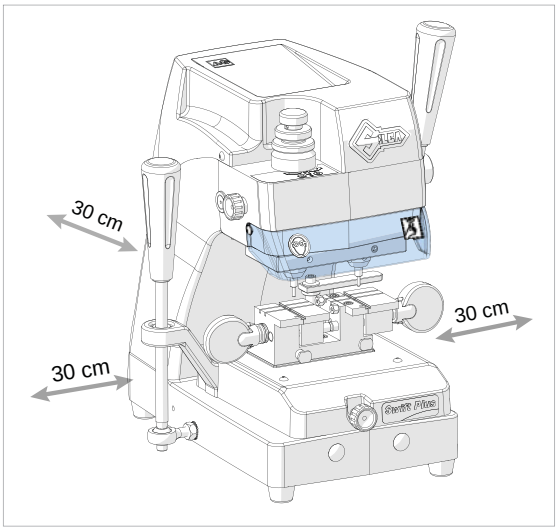


Fig. 10

5.4 DESCRIPTION OF WORK STATION

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

- **master switch (P)**
- **motor start switch (Q)**
- **levers:**
  - lever (C) to move the clamp carriage
  - lever (J) to move the vertical carriage

Note: the letters in brackets refer to Fig. 7, page 7.

6 MACHINE REGULATION AND UTILIZATION

Before carrying out cutting operations:

- **insert the proper cutter and tracer**
- **activate the spring system (if cutting dimple keys) (ch.7.4).**

6.1 FITTING AND REGULATING THE TOOLS

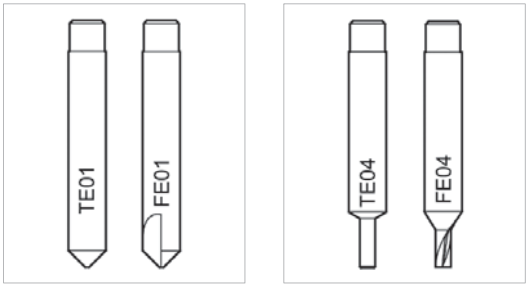


Fig. 11

ATTENTION: turn power off on machine.

To fit the tracer point and cutting tool into the sleeves:

1) Place the tracer point all the way into the left-hand sleeve and secure by tightening the grub screw (M) (Fig. 12).
2) Place the cutting tool all the way into the right-hand sleeve and secure by tightening the grub screw (M1).

Releasing the tools

Unscrew the grub screw (M) and (M1) to remove the tracer point and cutting tool from the sleeves.

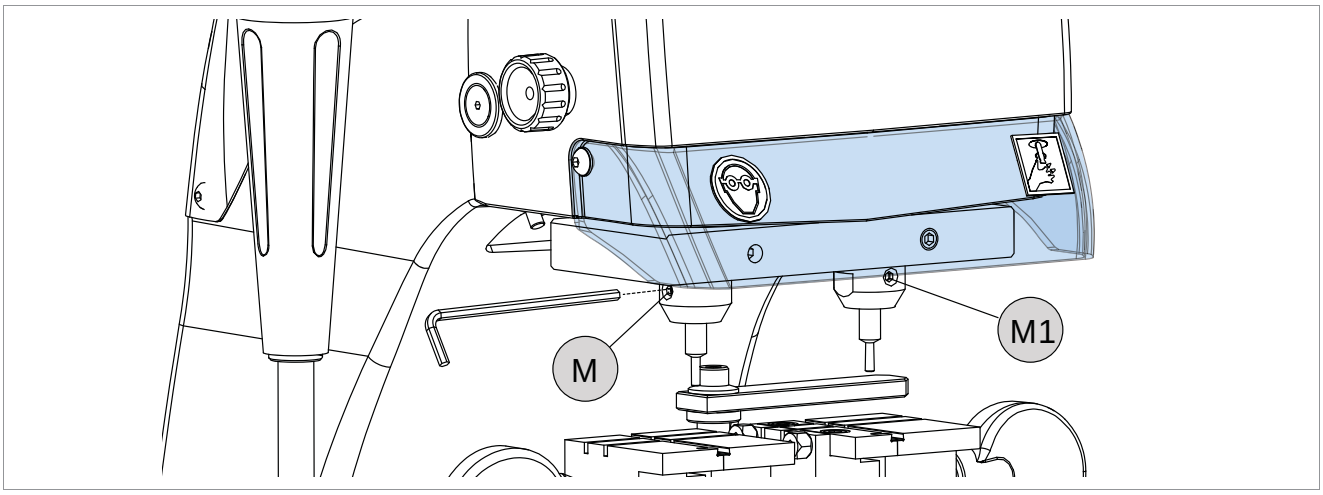


Fig. 12

6.2 CALIBRATION OF CUTTER AND TRACER

Note: the SWIFT key-cutting machine is equipped with a spring mechanism which allows precise duplication of dimple keys. The spring system is to be used only for dimple keys (ch.7.4) and is activated by rotating the ring nut (O).

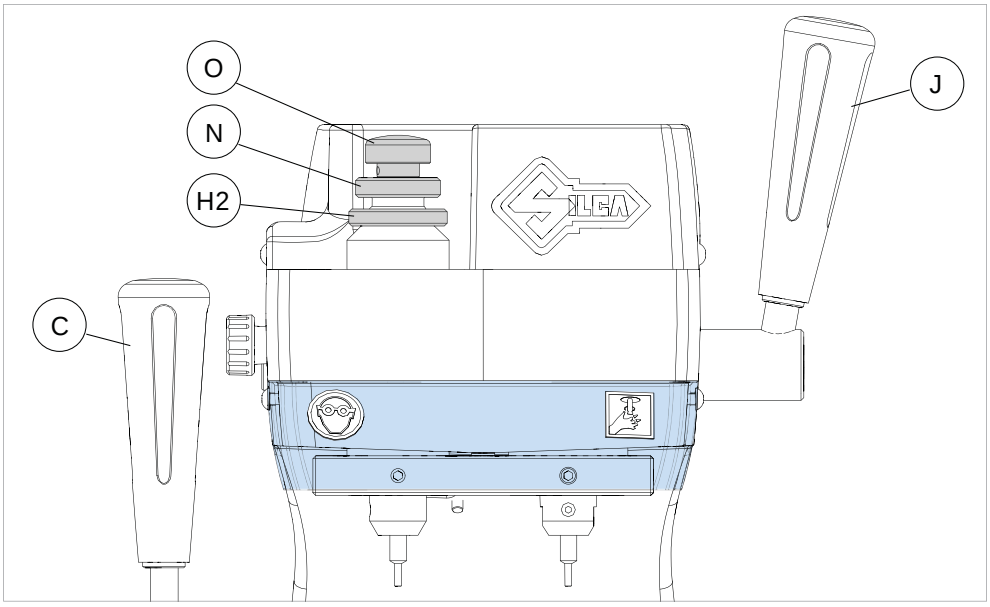


Fig. 13

To calibrate, insert the cutter and tracer into their spindles and proceed as follows:

QUICK CALIBRATION

Note: for this type of calibration use the "L" and "R" bars provided.

1) Turn off the motor with switch (Q).
2) Fit the "L" calibration bar into the left-hand clamp (tracer side) and lock with knob (E) (Fig. 14).
3) Fit the "R" calibration bar into the right-hand clamp (cutter side) and lock with knob (E1).
4) Lock nuts (H2) and (O).
5) Slightly loosen the grub screw (M) locking the tracer. Pull down the tracer point approx. 4 mm.
6) Use lever (J) to lower the vertical carriage and take the tracer and cutter into contact with the two bars.
7) Tighten the tracer grub screw (M).

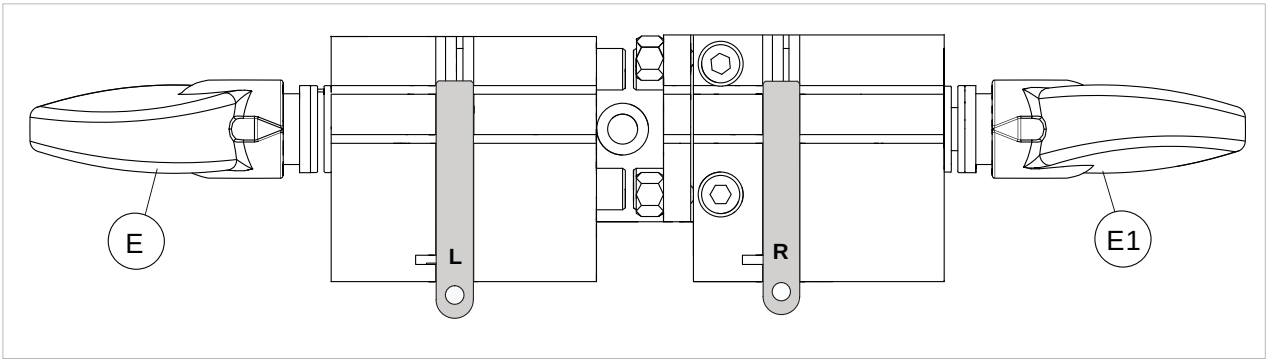


Fig. 14

CALIBRATION

Note: for this type of calibration use two identical key blanks.

1) Turn off the motor with switch (Q).
2) Fit the key blanks into the clamps.
3) Loosen the top nut (O).
4) Loosen the large nut (H2).
5) Turn the nut (N) a few turns clockwise to lower the tracer.
6) Turn on the motor with switch (Q).
7) Use the lever (J) to lower the vertical carriage until the tracer touches the key in the left-hand clamp (Fig. 15).
8) Hold the lever (J) tight, turn the central nut (N) anticlockwise until the cutter skims the key in the right-hand clamp (Fig. 16). Release the lever (J) and turn off the motor.
9) Hold nut (N) still and lock the bottom nut (H2).

Note: to cut laser type keys lock the nut (O) to deactivate the tracer spring.

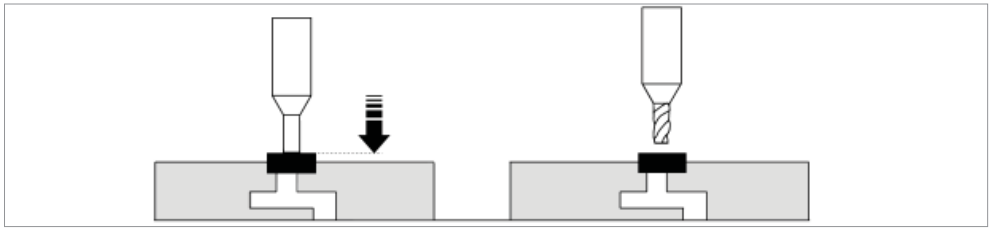


Fig. 15

Fig. 16

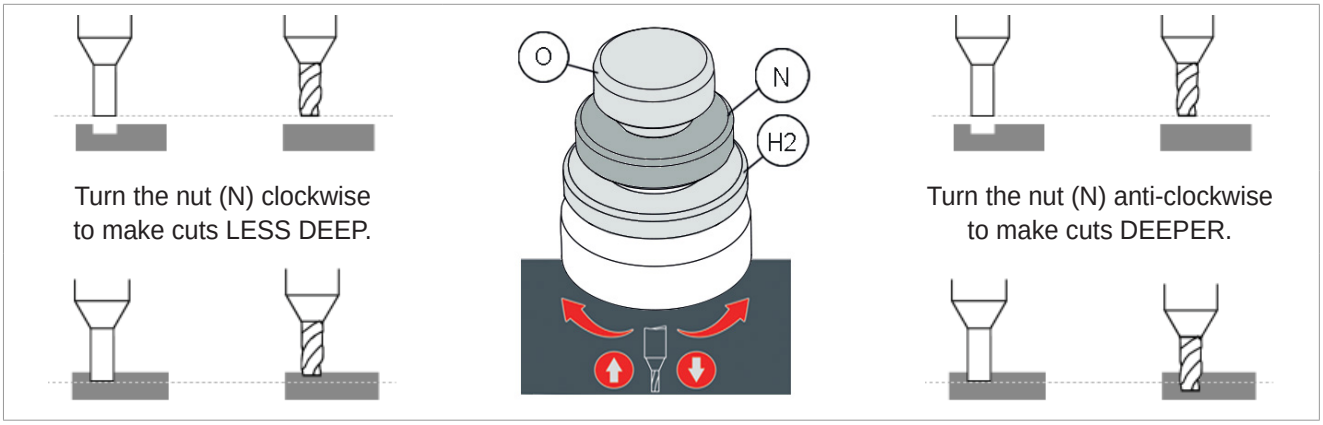


Fig. 17

7 CUTTING OPERATIONS

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

- **Always work with dry hands.**
- **Ensure that the machine is properly grounded.**
- **Wear protective goggles even if the machine is provided with a safety shield.**
- **Keep hands away from the cutting tool in motion.**
- **Before starting the motor (switch Q), carry out the following operations:**
  a) place the original and blank keys into the clamps.
  b) rotation of key to be cut.
  c) install and calibrate the cutter and tracer (ch.6.2).
  d) check that the tubular key alignment bar (K) is in the idle position (Fig. 19 and Fig. 20).

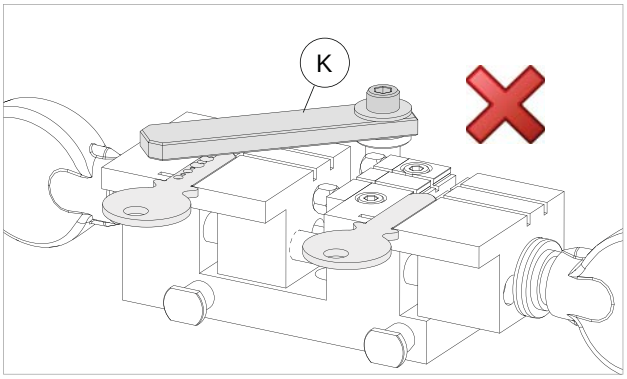


Fig. 18

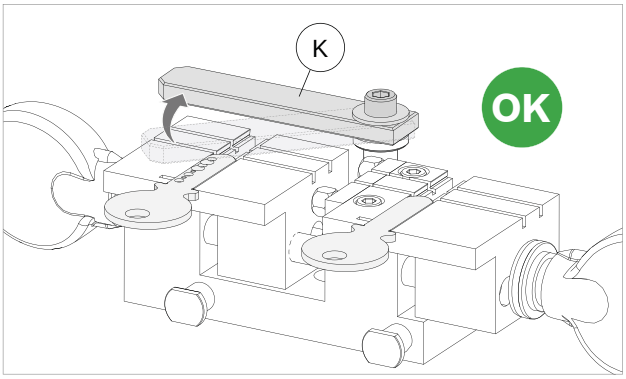


Fig. 19

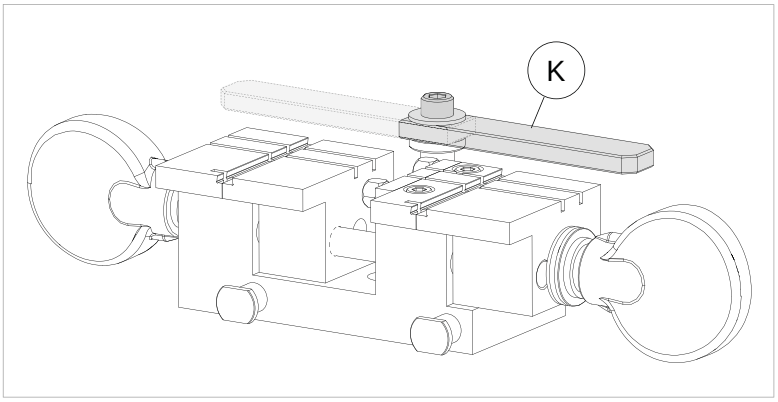


Fig. 20 - idle positions

7.1 KEY CUTTING

1) Turn on the machine using switch (P).
2) Once the keys have been loaded and gauged properly, press the switch (Q) to turn on the cutter.
3) Grip lever (C) and take the clamp unit towards the tracer and cutter.
4) Use lever (J) to lower the vertical carriage until the tracer enters the dimple/cut on the original key. Exert the necessary pressure on lever (J) for the cutter to shave the cut.
5) Repeat this operation for each dimple.
6) After cutting the first side, turn off the motor with switch (Q).
7) Turn the key to be cut by 180°.
8) Start the motor and cut the second side of the key.
9) When all the cuts have been made, turn off the motor with switch (Q) and remove the keys from the clamps.

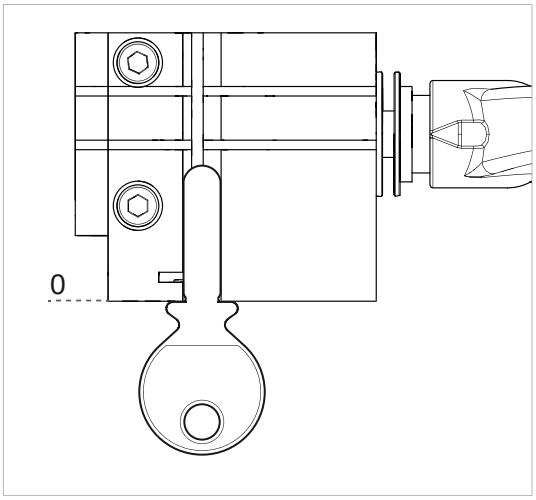


Fig. 21

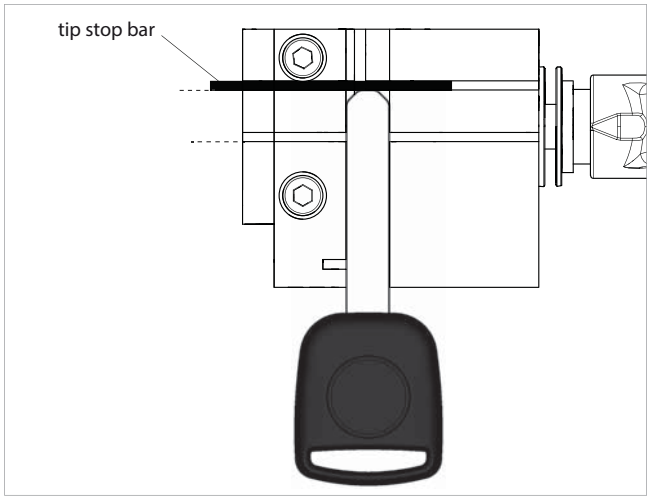


Fig. 22

7.2 CUTTING KEYS WITH KEY STOPS

1) Place the original key into the left-hand clamp of the machine making sure that the key stop is pressedagainst the clamp (Fig. 21) and lock it.
2) Place the key to be cut into the right-hand clamp of the machine making sure that the key stop is pressed against the clamp and lock it.
3) Calibrate the machine (ch. 6.2). Every time cutter or tracer point are changed, check machine calibration.
4) Cut the key according to chap.7.1.

7.3 CUTTING KEYS WITHOUT KEY STOPS

1) Insert the tip stop bar (provided) into the appropriate slots on the clamp according to the key to be cut.
2) Place the original key into the left-hand clamp of the machine making sure that the key tip is pressed against the stop bar (Fig. 22) and lock it.
3) Place the key to be cut into the right-hand clamp of the machine making sure that the key tip is pressed against the stop bar and lock it.

ATTENTION: remove the stop bar.

4) Calibrate the machine (ch. 6.2). Every time cutter or tracer point are changed, check machine calibration.
5) Cut the key according to paragraph 7.1.

Cutting the edge

If cuts are to be made on the edge, place the key in a vertical position and lock it.

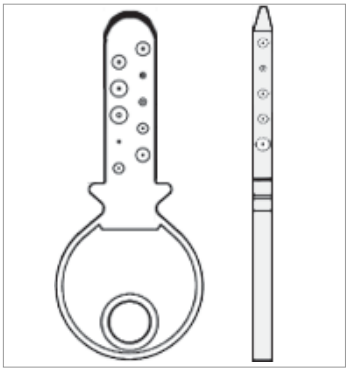


Fig. 23

7.4 INSERTING THE TRACER POINT SPRING SYSTEM

The SWIFT key-cutting machine is equipped with a spring mechanism which allows precise duplication of dimple keys. Using this system, it is possible to position the tracer into the groove of the sample first and then proceed with cutting the key.

The spring system is to be used only for dimple keys (Fig. 1) and is activated by loosening the ring nut (O).

Note: for laser type keys (Fig. 1) deactivate this function.

7.5 CUTTING LASER (SIDEWINDER) TYPE KEYS

ATTENTION: before starting to cut laser (sidewinder) type keys, deactivate the spring system by ring nut (O) (ch.7.4).

1) Load the original key into the left side jaw.
2) Use lever (J) to lower the vertical carriage, without exerting too much pressure, until the tracer rests in the bottom of the cut on the original key (Fig. 24) and secure the spindle at this height by means of knob (R).
3) Without raising the vertical carriage, pull the clamp carriage towards the operator and load the key blank to be cut in the right side jaw.
4) Start the cutting operation by activating switch (Q).
5) Carry out cuts using only the left-hand lever (C) as shown in Fig. 26 below.

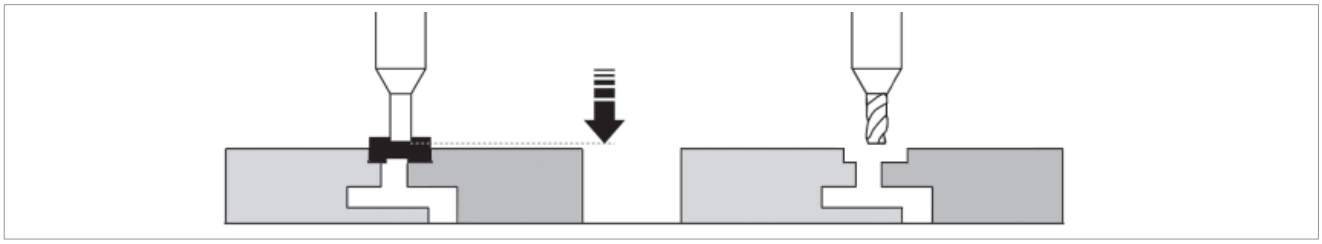


Fig. 24

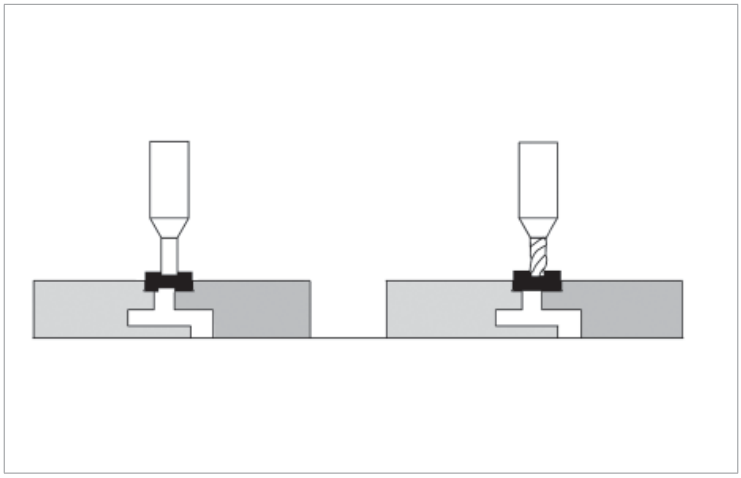


Fig. 25

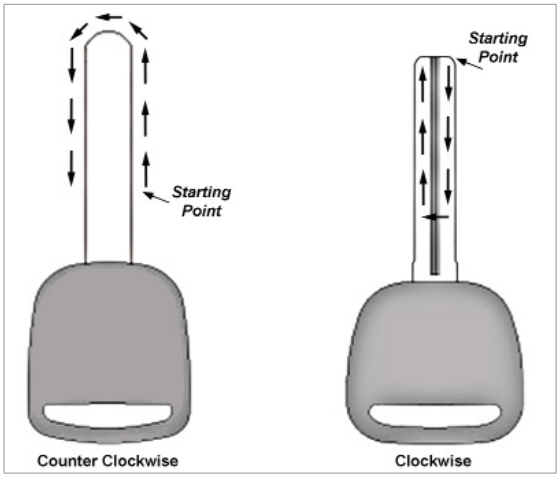


Fig. 26

7.6 CUTTING NARROW-BLADE LASER (SIDEWINDER) TYPE KEYS (ART.HU41P-HU55P-HU64P...)

Optional adapters can be applied for cutting laser type keys with thin stems.

Note: the adapters are optional or provided with certain key-cutting machines (see chap. 4 ACCESSORIES PROVIDED).

Proceed as follows:

1) Open the clamps by loosening knobs (E) and (E1).
2) Insert the adapters into the clamps.
3) Place the tip stop bar into the groove of the left side jaw.
4) Insert the original key into the left side adapter so that it butts against the bar.
5) Secure adapter and key by tightening knob (E).
6) Remove the bar.
7) Use lever (J) to lower the vertical carriage, without exerting too much pressure, until the tracer rests in the bottom of the cut on the original key (Fig. 27) and secure the spindle at this height by means of knob (R).
8) Without raising the vertical carriage, pull the clamp carriage towards the operator.
9) Place the tip stop bar into the groove of the right side jaw, load the key blank to be cut in the right side adapter so that it butts against the bar.
10) Secure adapter and key by tightening knob (E1) and remove the bar.
11) Start the cutting operation by activating switch (Q).
12) Carry out cuts using only the left-hand lever (C) as shown in Fig. 29 below.

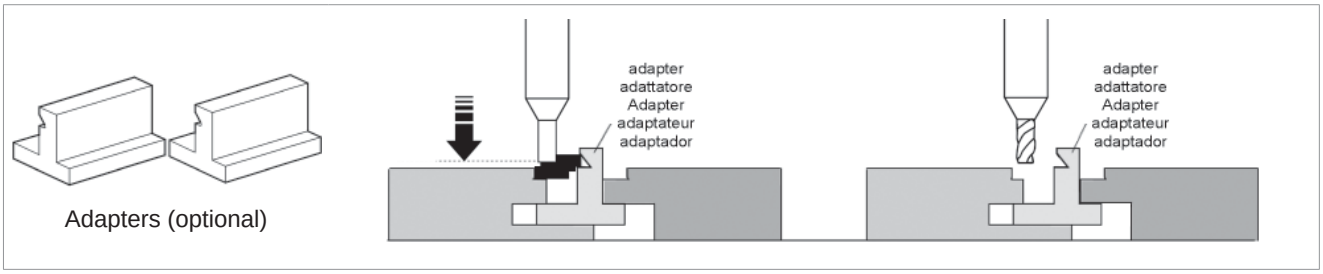


Fig. 27

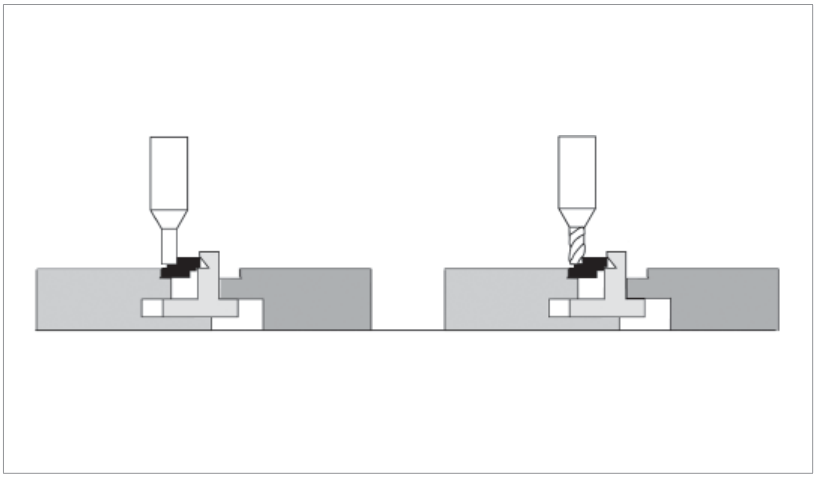


Fig. 28

Fig. 29

7.7 CUTTING TUBULAR KEYS

Check that the motor start switch (Q) is OFF.

1) Insert the tools into their spindles.
2) Fit the keys into their seats on the clamps (original key in the left-hand clamp and key blank in the right-hand clamp) as folows:
   - align the key stop with the jaw notch (D) (Fig. 30).
   - maintain alignment by holding the key head up against the positioning device (F) (Fig. 31).
   - use the knob (E) or (E1) to lightly secure the key.
   - take the aligning bar (K) over the key (Fig. 32). Raise the key until it is up against the bar (Fig. 33).
   - secure the key with the knob (E) or (E1).
3) When both keys are in position, take the bar (K) to the idle position (Fig. 30).
4) Calibrate the tools.
5) Enable the tracer point spring function loosing nut (O).
6) Turn on the machine with the master switch (P).
7) Grip the levers (C) and (J) and turn on switch (Q) to start the motor.
8) Hold the carriage with the left-hand lever (C), lower the vertical carriage with the right-hand lever (J) until the tracer point centres on one of the cuts in the key and continue to lower (using the tracer point spring function) to reach cutting depth.
9) Move the lever (C) slightly to complete each single cut.
10) Repeat this operation for each cut on the key.

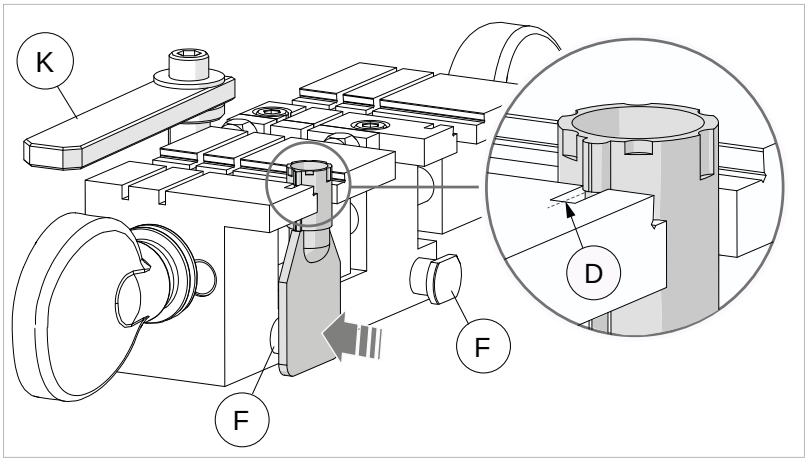


Fig. 30

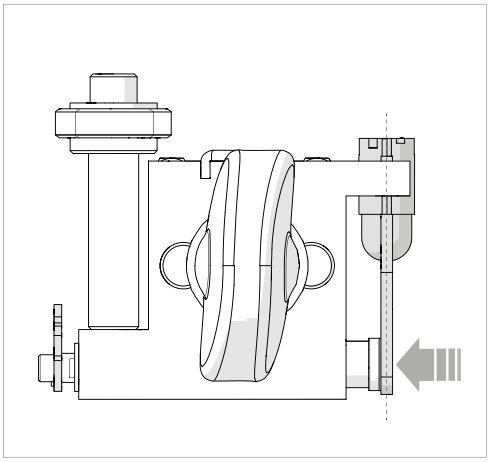


Fig. 31

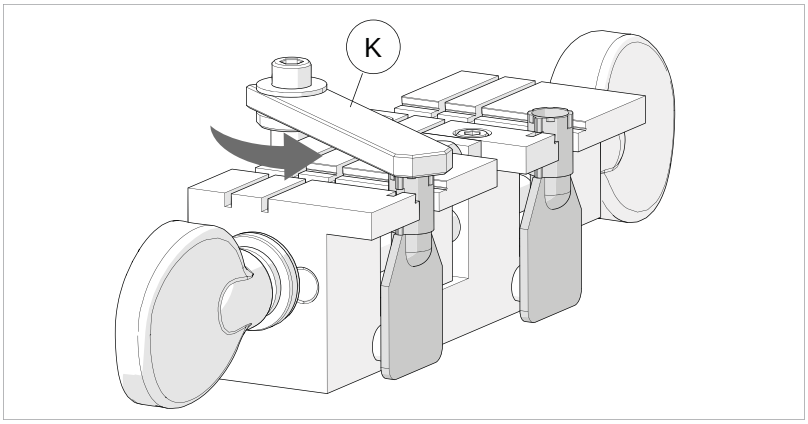


Fig. 32

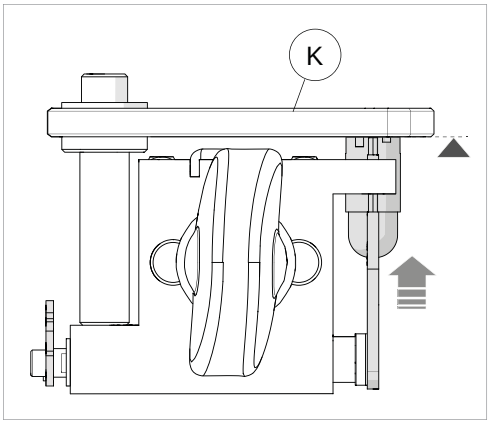


Fig. 33

Note: on the Swift PLUS key-cutting machine the head aligning device for tubular keys can be excluded. Push the 2 devices and lock them with the respective levers on the back of the clamp.

SWIFT PLUS version

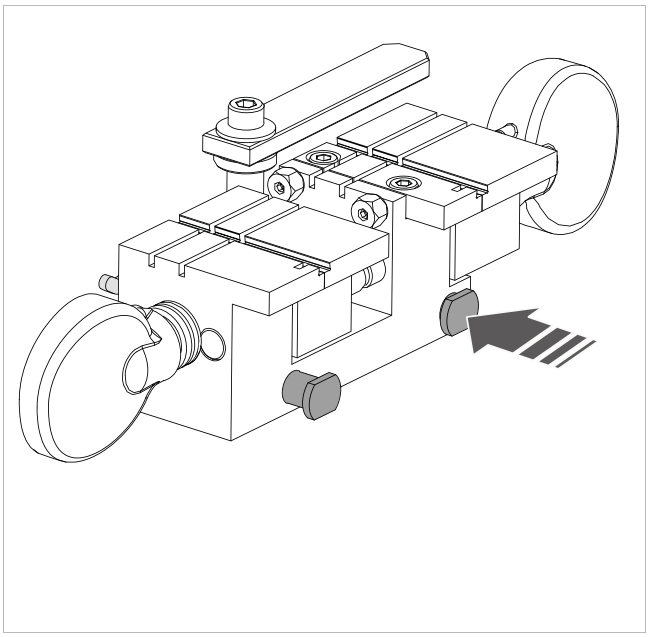


Fig. 34

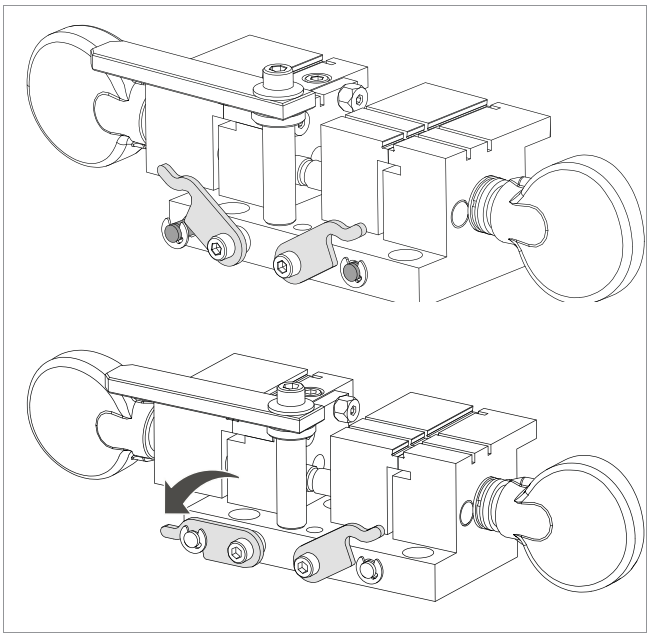


Fig. 35

8 MAINTENANCE

Although the SWIFT 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 (Chap.8.1) and the lamp (Chap.8.2). 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...).

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 unplug the machine prior to servicing.**
- **Follow all the instructions in the manual to the letter.**
- **Use original spare parts.**

8.1 REPLACING THE BELT AND ADJUSTING TENSION

If the upper part of the machine vibrates, check the tension on the belt, as described below:

1) Turn off the master switch and unplug the machine.

2) Loosen the four screws (Y1) and remove the upper casing (Y) (Fig. 36).

3) Loosen (but do not remove) the four socket head screws (Y2) securing the motor.

a) tension:

- increase belt tension by pushing the motor towards the back of the machine.

b) replacement:

- loosen the belt by pushing the motor slightly towards the tracer point and cutting tool.
- remove the belt and replace.
- tighten the tension by pushing the motor towards the back of the machine.

4) Secure the motor by tightening the four socket head screws (Y2).

5) Replace the upper casing (Y) and secure with the four screws (Y1).

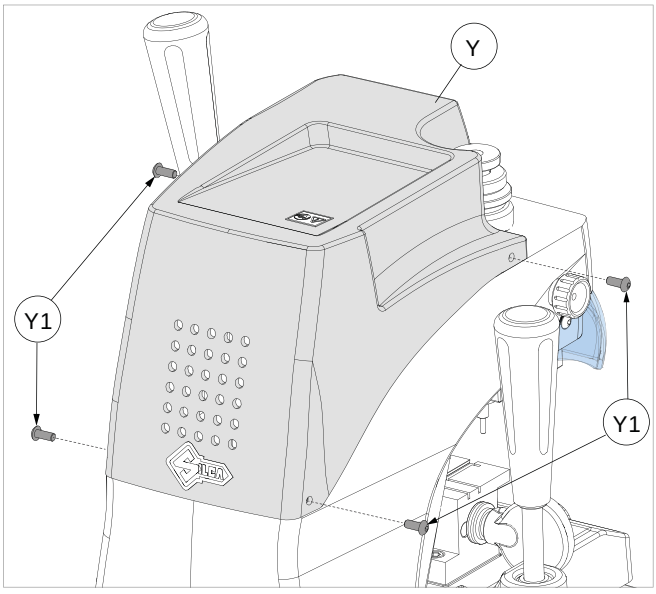


Fig. 36

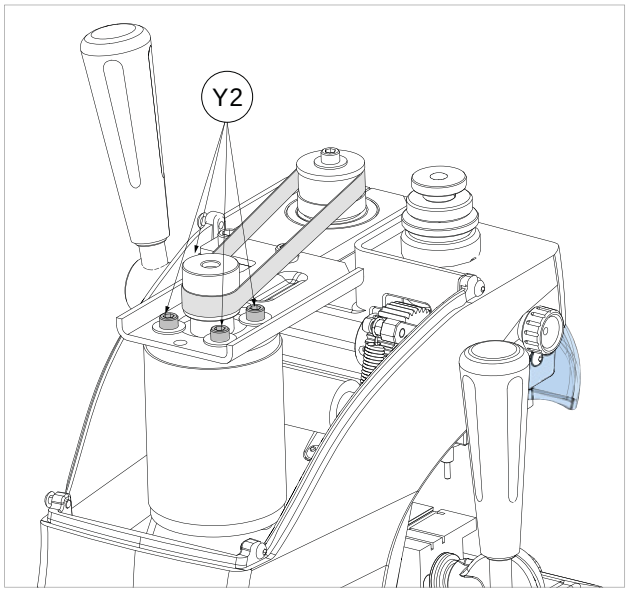


Fig. 37

8.2 REPLACING THE LAMP (ONLY ON SWIFT PLUS VERSION)

To replace the lamp:

1) Turn off the master switch (P) and unplug the machine.

2) Loosen the four screws (Y1) and remove the upper casing (Y) (Fig. 36).

3) Carefully loosen the two screws (W1) and remove the lamp holder (W) (Fig. 38 - Fig. 39).

4) Unscrew and replace the light bulb.

5) Fit the lamp holder (W) and secure it with the two screws (W1).

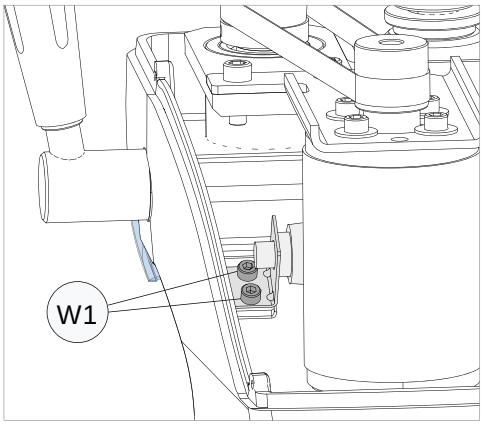


Fig. 38

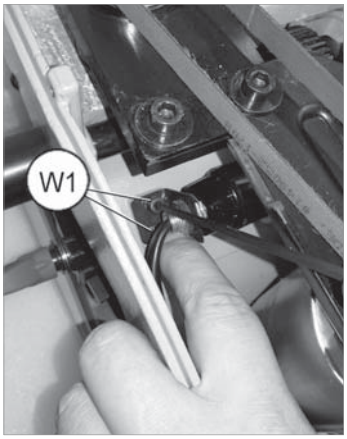


Fig. 39

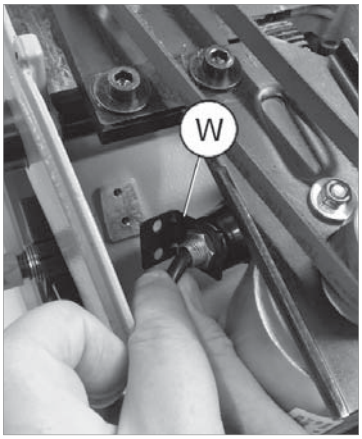


Fig. 40

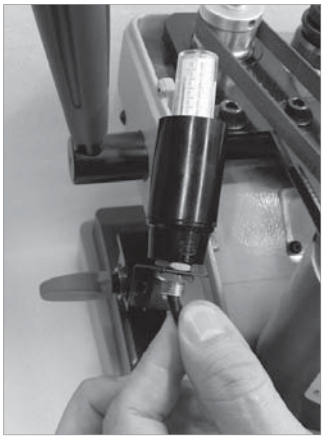


Fig. 41

8.3 CHECKING AND REPLACING THE FUSES

The fuses should always be checked with a continuity measuring instrument (tester, ohmeter, multimeter etc.) as a visible check may not reveal an electrical fault. Fuses must always be replaced with others of the same type and with the same Amps, as shown in the manual. The SWIFT key-cutting machine has two fuses:

4 Amps rapid for 230 Volt machines

8 Amps rapid for 120 Volt machines

placed in the inlet socket (R), to protect the key-cutting machine from sudden changes in voltage or short circuits. It is advisable to check the fuses if the machine is not activated by turning on the master switch. Proceed as follows:

1) Turn off the master switch (P) and unplug the machine.

2) Open the fuse box and remove the fuses (R1).

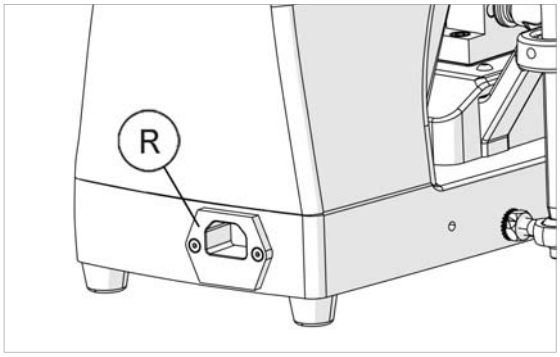


Fig. 42

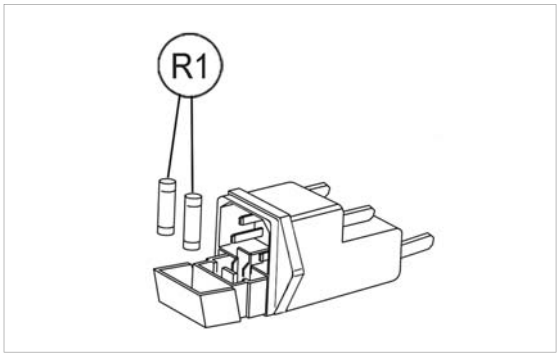


Fig. 43

8.4 ACCESS TO THE LOWER COMPARTMENT

Turn off the master switch (P) and unplug the machine.

1) Take care to turn the machine over onto its front very slowly.
2) Loosen the 2 feet (X1), 2 screws (X2), and remove the bottom plate (X) (Fig. 44).

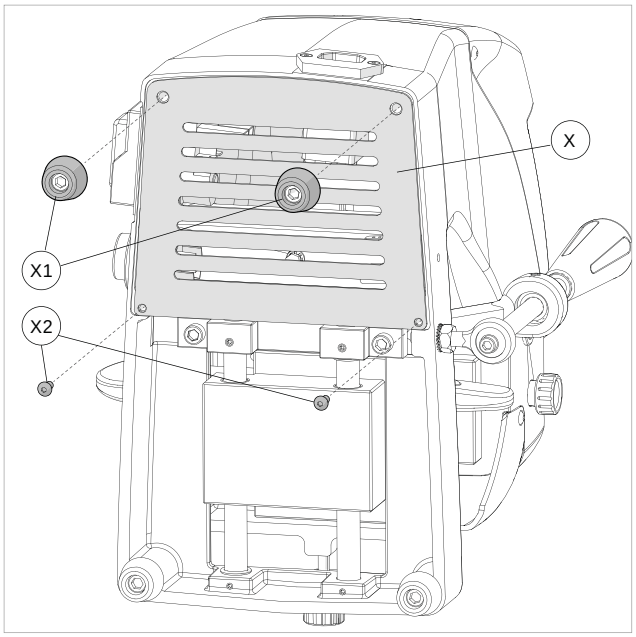


Fig. 44

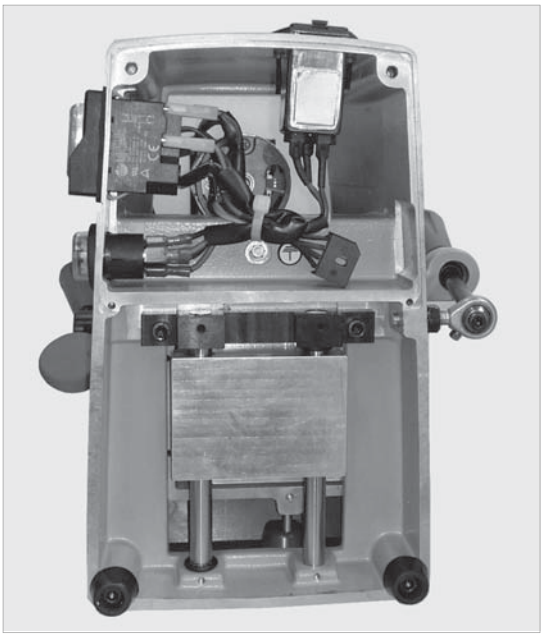


Fig. 45

8.5 REPLACING SWITCHES: MASTER AND MOTOR ON

Turn off the master switch (P) and unplug the machine.

1) Access the lower compartment (see chap.8.4).
2) Disconnect the wires from the switch to be replaced, paying attention to their position.
3) Press the fixing “tabs” on the switch so that it can be pulled out.
4) Insert the new switch into the special seat.
5) Reconnect the connectors.
6) Replace and secure the bottom plate and return the key-cutting machine to the upright position.

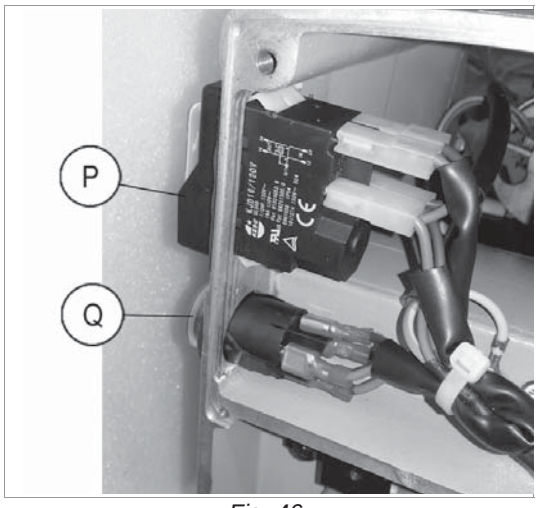


Fig. 46

8.6 REPLACING RIGHT-HAND CLAMP JAWS

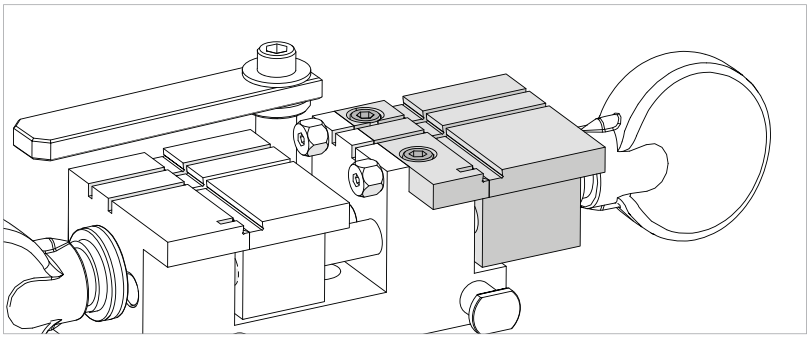


Fig. 47

Make sure the motor start switch (Q) is OFF.

8.6.1 REPLACING THE FIXED JAW

1) Unscrew the knob (E1).
2) Loosen the 2 screws (B2) and remove the jaw.
3) Fit the new jaw up against the left-hand side so that it protrudes as much as possible towards the operator.
4) Close the knob (E1) without locking it so that the mobile jaw comes into contact with the fixed jaw.
5) Fit and lock tracer TE01 and cutter FE01 into their respective spindles.
6) Use the lever (C) to take the clamp carriage towards the machine body.
7) Use the lever (J) to lower the vertical carriage completely and then lock it with the knob (R).
8) Make sure the tools are in front of the fixed jaws, use the lever (C) to move the clamp carriage towards the operator until both tools (TE01 and FE01) are in contact with the two corresponding jaws.
9) Tighten the 2 screws (B2).

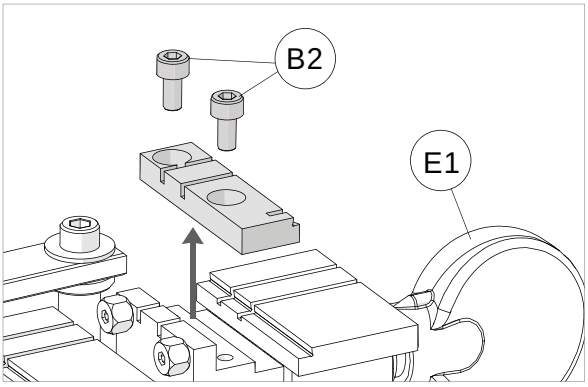


Fig. 48

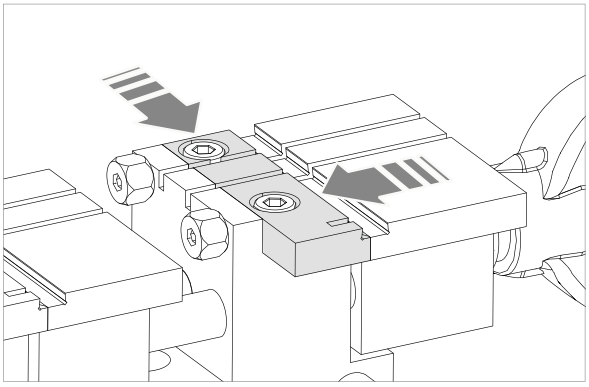


Fig. 49

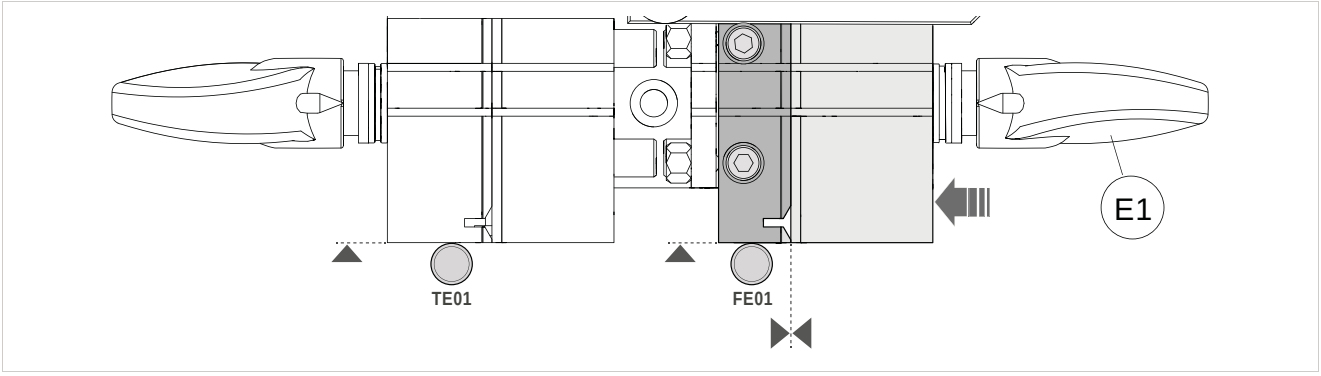


Fig. 50

8.6.2 REPLACING THE MOBILE JAW

1) Unscrew and remove knob (E1) and the thrust bearings.
2) Remove the jaw.
3) Fit the new jaw up against the right-hand side and align, also frontwise.
4) Insert the thrust bearings and screw down the knob (E1).

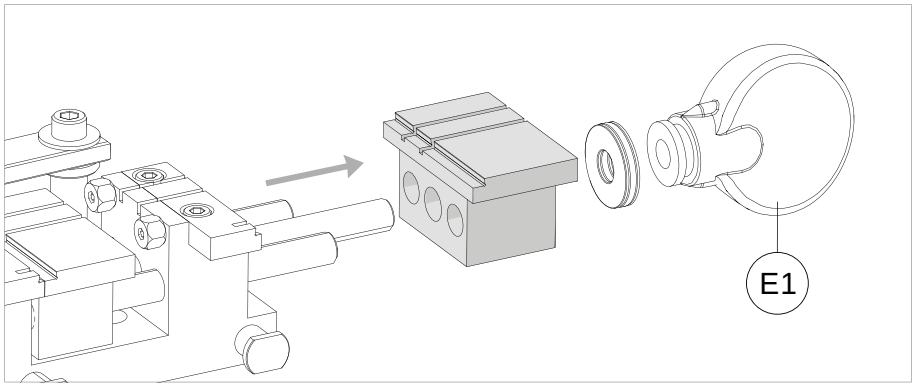


Fig. 51

9 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.

10 AFTER-SALES SERVICE

Silca provides full service to purchasers of the SWIFT key-cutting machine.
To ensure complete safety for the operator and machine, any job not specified in this manual should be carried out by the manufacturer.

10.1 HOW TO REQUEST SERVICE

The limited warranty period for the SWIFT key-cutting machine 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 its Service Centres.