

FUTURA PRO
FUTURA PRO NA
FUTURA PRO JAPAN
FUTURA PRO Auto

Operating Manual
Original Instructions

CE

D446440XA
vers. 1.0

EN



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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.

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CE DECLARATION

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 that 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.



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

FUTURA PRO has an ID plate located on the back of the machine, showing the serial number.

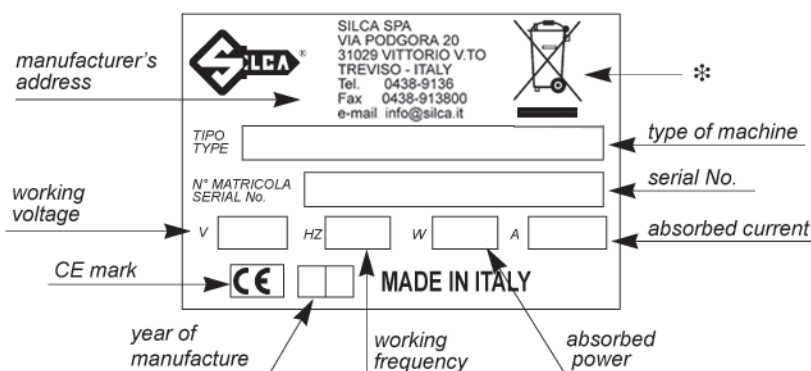


Fig. 1

(*) see chap. 8 DISPOSAL.

How to apply for after-sales service

Silca provides purchasers of FUTURA PRO 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 Centers 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 Center.

* 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:

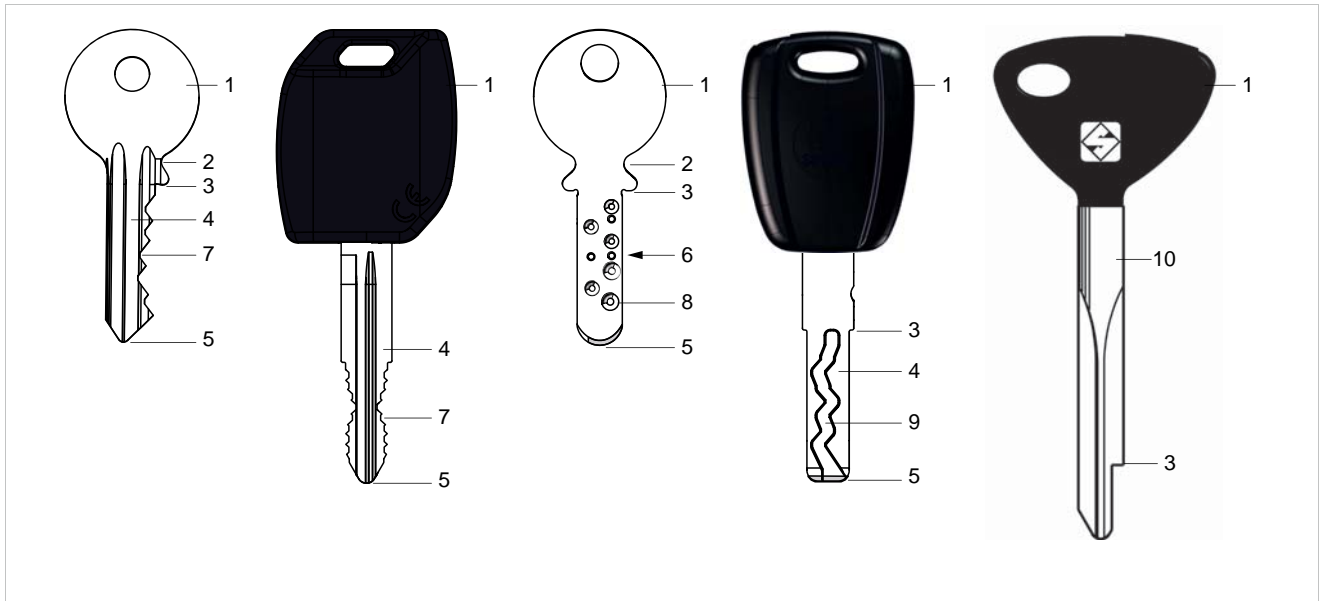




Fig. 2




1) Head	4) Blade (stem)	7) STANDARD cutting	10) Stem
2) Neck	5) Tip	8) DIMPLE cutting	
3) Shoulder stop	6) Back	9) TRACK cutting	

ATTENTION: anodised aluminium dimple/laser keys, plastic keys or any other key without electrical conductivity **CANNOT BE** decoded! For these types of keys digit the cuts directly or enter the indirect code if the SSN in use allows it.

GRAPHICS IN THE MANUAL

	
<p>Pay attention</p>	<p>Obligation to read the manual</p>

GRAPHICS ON THE FUTURA PRO KEY-CUTTING MACHINE

		
<p>Do not clean with compressed air</p>	<p>Obligation to read the manual</p>	<p>Adhesive label Mass - RPM</p>

 
<p>Laser warning labels</p>

GENERAL WARNINGS

FUTURA PRO 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 FUTURA PRO 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 FUTURA PRO and provide quality key-cutting;**
- **Use Silca/Ilco key blanks, made with top quality materials;**
- **Have the key-cutting machine checked periodically by an authorized Silca After-Sales Service Center (list at the end of this manual);**
- **Always use Silca Original Spare Parts. Beware of imitations!**

NORMAL USE

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

The FUTURA PRO 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.

ATTENTION: Anodised aluminium keys, plastic keys or any other key without electrical conductivity CANNOT BE decoded!

RESIDUAL RISKS

No further risks will arise when properly using the FUTURA PRO 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 tug on the electricity supply lead and make sure it is not in contact with oil or other liquids, sharp objects or heat. Never remove the grounding pin from the plug. Check that the ground wire is connected properly.**
- **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.**

1 MACHINE DESCRIPTION

FUTURA PRO is an electronic machine operating on 3 axes with controlled movement. Accurately studied, it adds a high degree of cutting precision to operating speed and ease of use.

FUTURA PRO operates only when connected to a TABLET containing a Silca program.

It uses a laser reader to read and/or codify flat keys with standard cuts.

It uses a tracer to decode keys with dimple and/or track cuts.

It can cut keys (in ferrous materials in general, brass, silver nickel, etc.) having:

- Standard cuts
- Dimple cuts
- Track cuts
- Special cuts (e.g. Ford Tibbe - with optional accessory)
- Cuts on tubular keys (with optional accessory)

FUTURA PRO is used to cut the following types of keys:

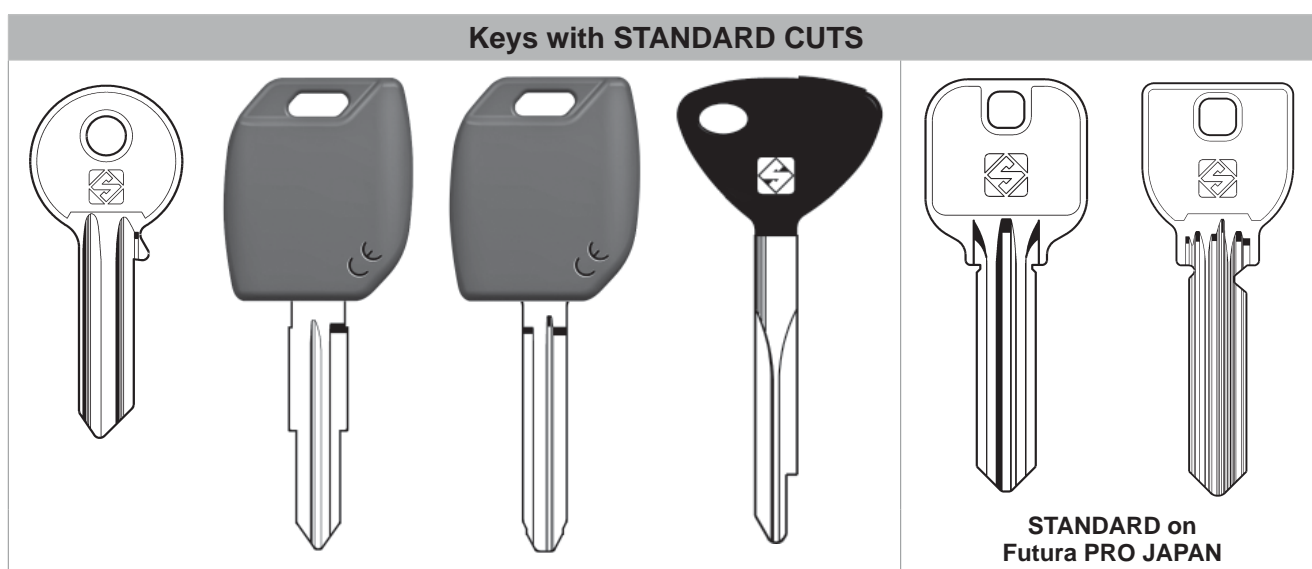


Fig. 3

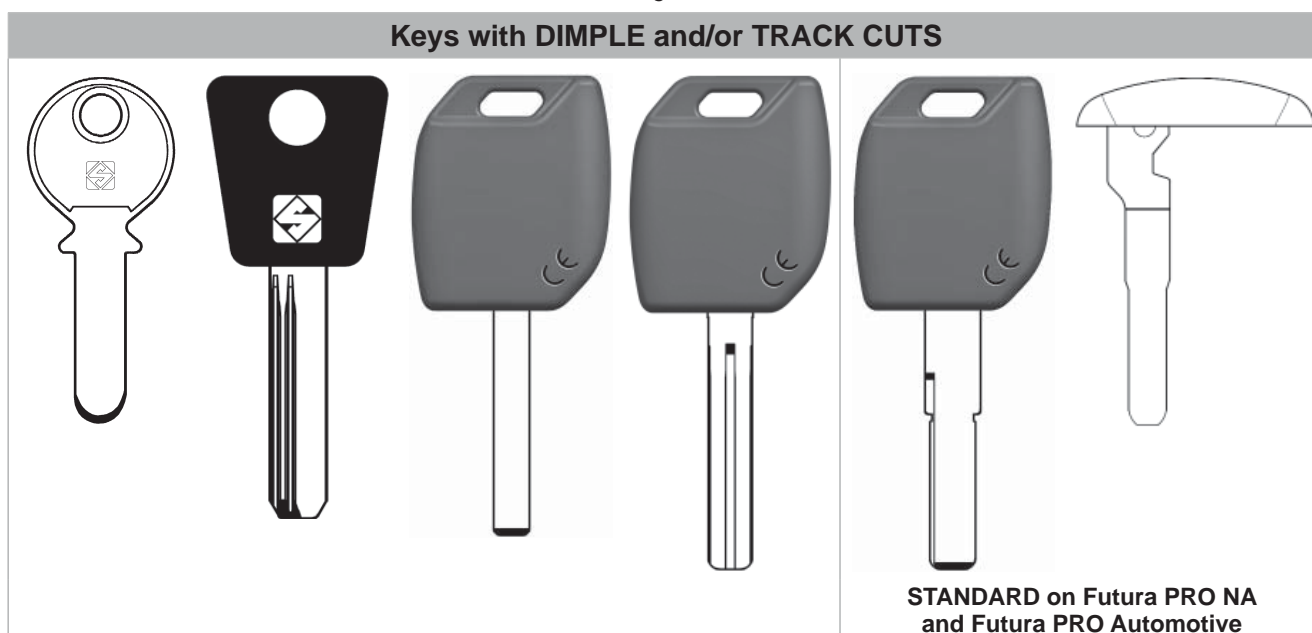


Fig. 4

ATTENTION: Anodised aluminium keys, plastic keys or any other key without electrical conductivity CANNOT BE decoded!

1.1 MAIN OPERATING PARTS

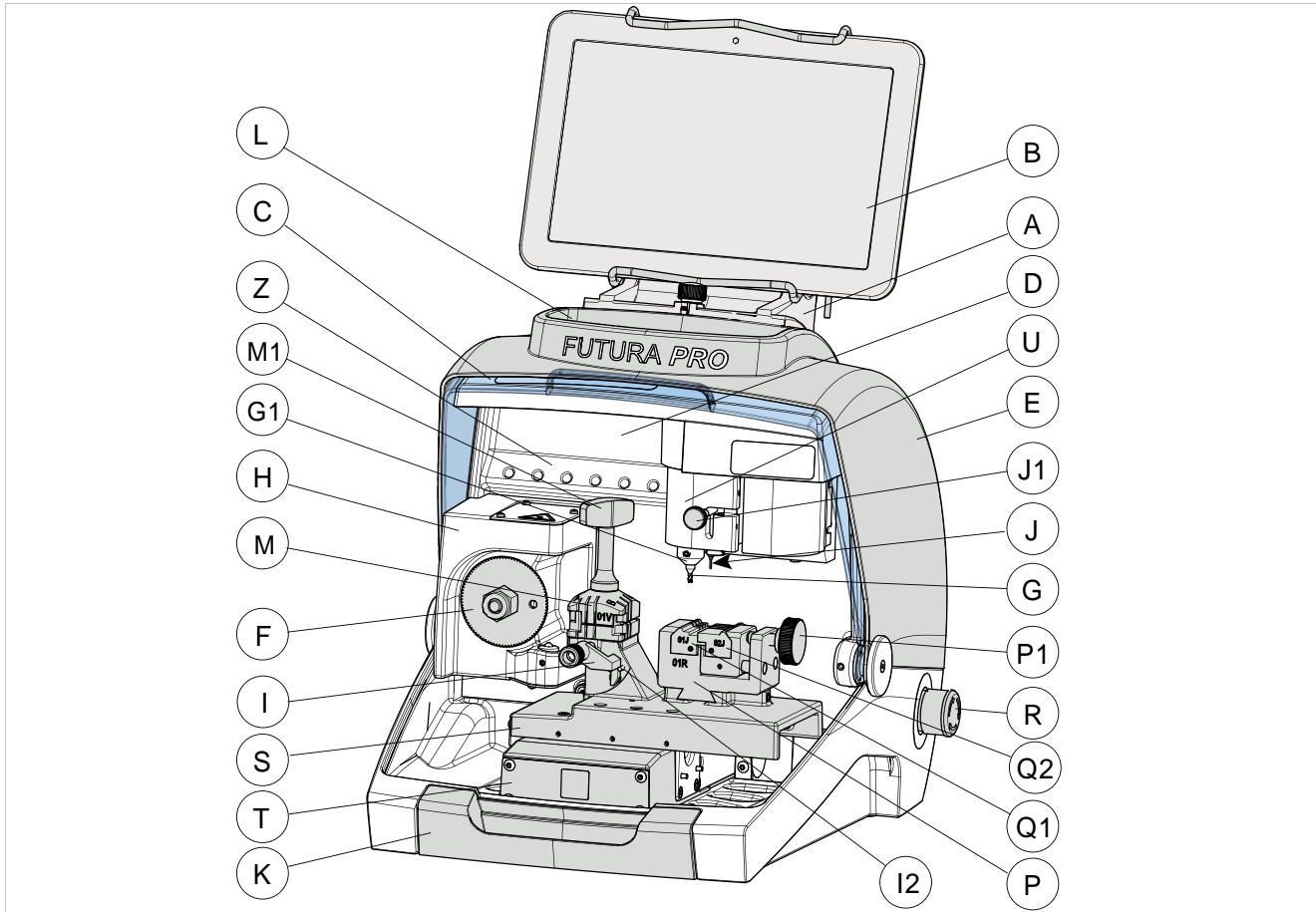


Fig. 5

- A - Tablet stand
- B - Tablet
- C - Safety shield
- D - Lamp
- E - Cover
- F - Prismatic cutter (Standard cuts)
- G - Cutter (Dimple/Track cuts)
- G1 - Cutter shaft (Dimple/Track cuts)
- H - Optic reader
- I - Gauge
- I2 - Gauge sensor
- J - Tracer 01T
- J1 - Tracer movement lever
- L - Tool compartment
- K - Swarf collection tray
- M - Clamp 01V (Standard cuts) - Clamp 01J (Futura PRO JAPAN version)
- M1 - Clamp knob (01V)
- P - Clamp 01R (Dimple/Track cuts)
- P1 - Clamp knob (01R)
- Q1 - Left-hand jaw
- Q2 - Right-hand jaw
- R - ON/Emergency push button
- S - X axis carriage
- T - Y axis carriage
- U - Z axis carriage
- V - Ethernet port
- W - Power pack
- W1 - Power pack connector
- Y - USB port for Tablet charge
- Y1 - USB port standard
- Z - Tool holder

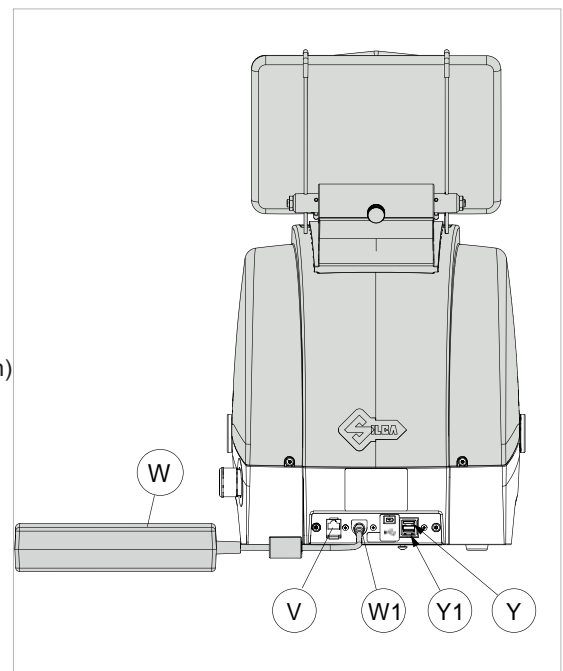


Fig. 6

1.2 SAFETY

FUTURA PRO is entirely built in compliance to the Machine Directives. The operations for which it has been designed are easily carried out with no risk to the operator.

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

FUTURA PRO is designed with features which make it completely safe.

- **Safety shield**

The protective shield is designed to cover the working parts as completely as possible, ensuring operator safety.

The shield (C) must be raised in order to fit keys for cutting or carry out other operations (Fig. 7).

Raising the shield by means of a microswitch will deactivate the operating and movement functions, including the cutter, and failed shield closing will be notified with a special message on the tablet.

To re-activate the work cycle, lower the shield and follow the instructions on the tablet.

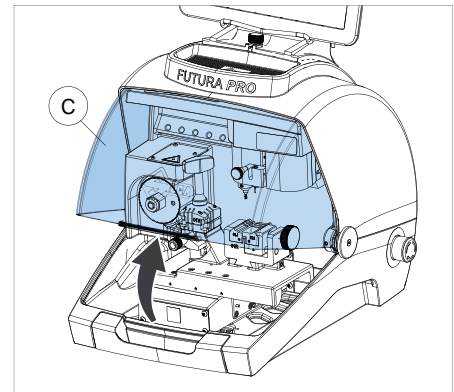


Fig. 7

- **Emergency stop**

Use the red emergency button (R) (Fig. 5), located on the right-hand side of the machine to stop the machine immediately in the event of serious malfunctioning or a hazard for the operator.

When the cause of the emergency has been eliminated, turn the button 45° clockwise to deactivate it.

NOTE: the operator is responsible for keeping the area around the button clear so that it can be reached as quickly as possible.

- **Laser warning**

Regulations require that warning label (supplied - chap.1.4) in the language to be used be attached to the optical reader, as shown in Fig. 8.

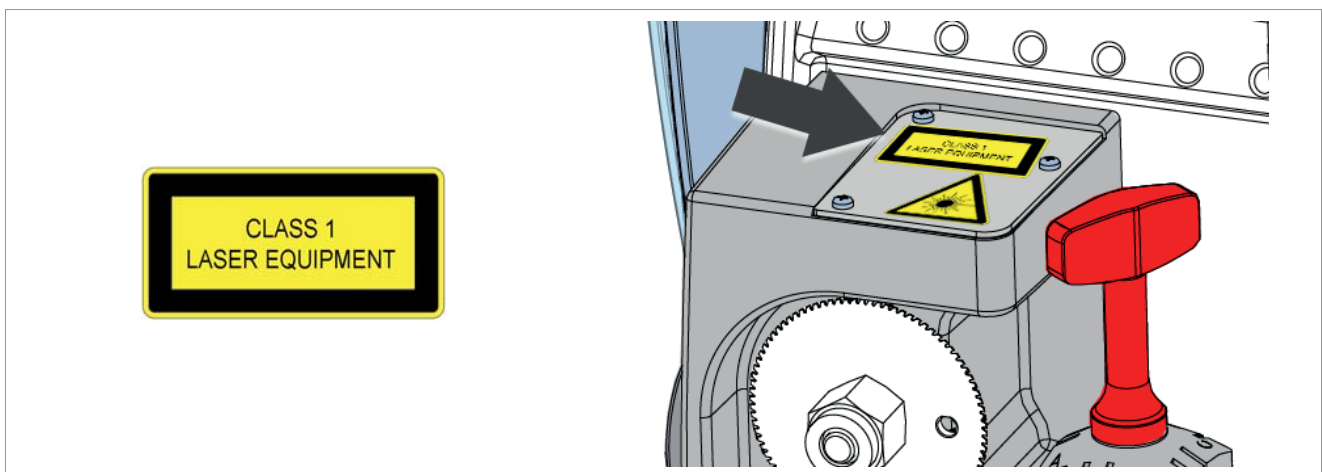


Fig. 8

1.3 TECHNICAL DATA

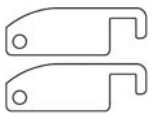
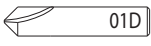


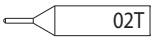
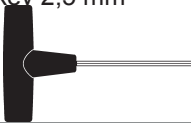


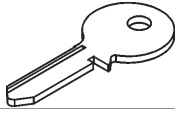

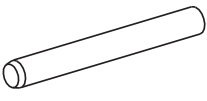

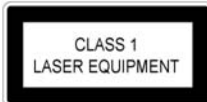
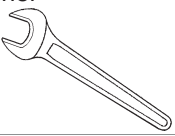

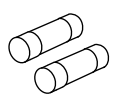


Electricity supply:	Machine: 24V d.c. - 5,5 Amp. - 130W Power pack: 90/264V a.c. - 50/60Hz - 220W - MEANWELL GS220A24-R7B
Cutter motor (Standard cuts):	24V d.c.
Cutter motor (Dimple/Track cuts):	24V d.c.
Prismatic cutter (Standard cuts):	in HSS super rapid steel, coated
Cutter (Dimple cuts):	in HSS Super Rapid steel
Cutter (Track cuts):	carbide, coated
Tool speed:	prismatic cutter (Standard cuts): 1585 rpm cutter (Dimple/Track cuts): 12100 rpm
Movement:	on 3 axes (with special bushes) driven by step motors (on rectified roller guides)
Clamp 01V : (for standard cuts)	removable, with 4 universal sides for holding flat keys, vehicle keys and cruciform keys
Clamp 01VJ (Futura PRO JAPAN)	removable, with 4 universal sides for holding flat keys, MIWA flat keys, vehicle keys and cruciform keys
Clamp 01R (for Dimple/Track cuts)	removable and provided with interchangeable jaws
Runs:	X axis: 30 mm Y axis: 50 mm Z axis: 27 mm
Dimensions:	width: 318 mm depth: 413 mm height with tablet and stand: 522 mm (340 mm without tablet and stand)
Mass:	Kg. 20
Noise level:	sound pressure Lp(A) = - brass flat keys: 72.0 dB(A) - steel flat keys: 74.5 dB(A) - brass dimple keys: 70.0 dB(A) - brass track keys: 74.0 dB(A) - steel track keys: 75.0 dB(A)

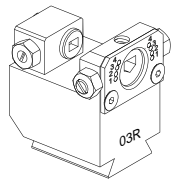
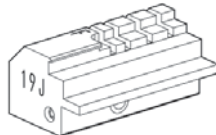
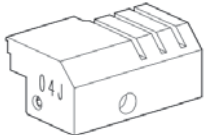
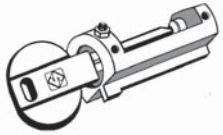
CLASS 1 LASER READER:

- Maximum radiation with safety lock excluded: 230 μ W
- Wave length: 790,6 μ m (invisible)
- Classed to: EN 60825-1 2007

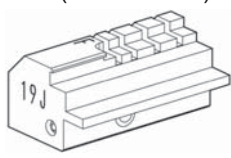
1.4 ACCESSORIES PROVIDED



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

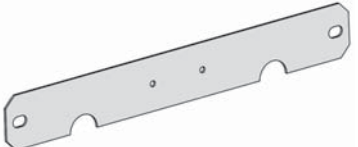
stop bar 	cutter 01D 	Allen keys set 1,5 ÷ 5 mm 
ø 1,7 mm steel pin 	tracer point 02T 	"T" allen key 2,5 mm 
ø 1,2 mm steel pin 	fresa 01LW 	template Z3 (regulating key) 
slanted brush 	cutter release rod 	universal adapter 
laser warning label 	19 mm spanner 	stylus touch pen 
fuses 4 Amp.- delayed 	tip stop (Stop 4) 	USB pen 

Futura PRO AUTOMOTIVE			
03R clamp (D743276ZB) 	19J jaw (D744023ZB) 	04J jaw (D743256ZB) 	adapter B6 (D708040ZB) 

Futura PRO AUTOMOTIVE
cutter 02LW (D747839ZB) 

Futura PRO NA
ganascia 19J (D744023ZB) 

Cutters and tracers on machine	
cutter 01F 	tracer point 01T 

Separately
fixing bracket: 

2 HANDLING

The FUTURA PRO key-cutting machine is easy to handle and there are no special hazards involved in moving it. The packed machine can be carried manually by one person.

2.1 PACKING

The packing for the FUTURA PRO key-cutting machine ensures safe handling of the machine and all its components.

Packing comprises expanded plastic material wrapped around the machine. The robust cardboard box in which it is placed and the nylon wrapping protect the machine even when stored for a long period.

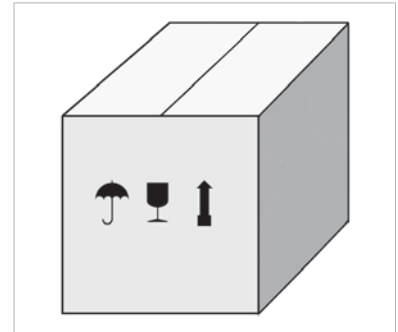


Fig. 9



Keep dry



Handle with care



Up

The symbols on the outside of the cardboard box give indications for transport.



ATTENTION: keep the complete packing for future machine transfers.

2.2 UNPACKING

To remove the machine from its packing:

- 1) Cut the strapping with scissors and remove.
- 2) Open the box carefully without damaging it.
- 3) Free the machine from the protective shells.
- 4) Check the contents of the packing, comprised of:
 - FUTURA PRO key-cutting machine
 - documentation comprising: user's manual, spare parts sheet, specialist guide and warranty
 - tablet
 - tablet stand
 - power lead
 - power pack
 - tool kit
 - fixing bracket

2.3 HANDLING THE MACHINE

Once removed from its packing place FUTURA PRO directly on the work bench; one person can easily perform this operation.



ATTENTION: lift the machine by holding onto the base. Never lift the machine by gripping the clamps, levers or other parts.

3 MACHINE INSTALLATION AND PREPARATION

Installation is the customer's task and does not require any special skills.

The key-cutting machine is supplied ready for use and does not need calibration except for the tools to be used and any additional jaws that are included with the machine; however, the operator is required to make certain checks and prepare the machine for use.

NOTE: the machine is shipped with a steel rod installed in the cutter shaft to prevent the allen screw from backing out during transit. REMOVE THE ROD AND INSTALL THE PROPER CUTTER PRIOR TO ATTEMPTING TO CUT A KEY!

3.1 CHECKING FOR DAMAGE

FUTURA PRO is a solid compact machine and will not break if handling, unpacking and installation are carried out to the instructions in this manual. However, it is good practice to check that the machine has not been damaged.

3.2 ENVIRONMENTAL CONDITIONS

To make the most of the key-cutting machine, bear in mind the following environmental parameters: it is advisable for the area to be dry with good air circulation.

The optimum environmental conditions for machine operation are:

- temperature 10° C to 40°C;
- relative humidity: approx 60%.

3.3 POSITIONING

- 1) Place the key-cutting machine on a solid horizontal work bench suitable for the weight of the machine (20 Kg). The work bench should be approximately 100-120 cm high to facilitate access to the working parts. We recommend leaving at least 30 cm clearance behind and around the machine to ensure good ventilation and facilitate handling (Fig. 10).
- 2) Make sure machine voltage is suitable for the mains supply and that the latter is earthed with a differential switch.
- 3) Connect the power lead (power pack) to the machine (chap.3.4.2).

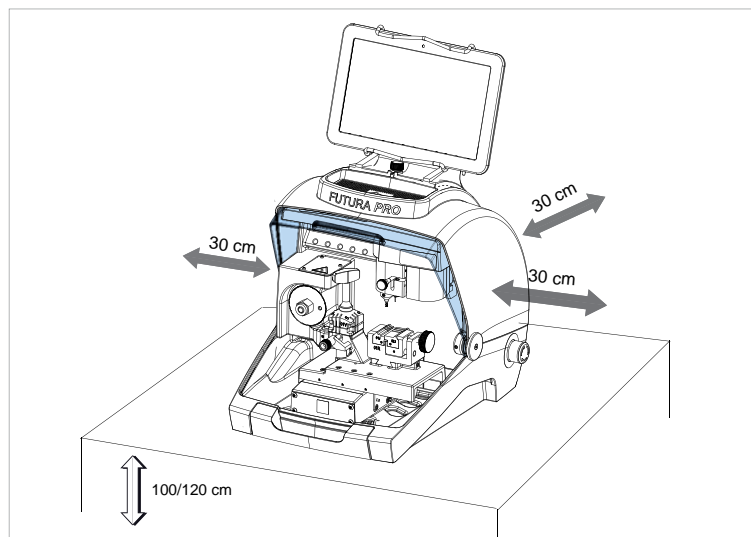


Fig. 10

3.4 SEPARATE PARTS

The machine packing also contains the following components, separately packed:

3.4.1 Tablet stand and tablet

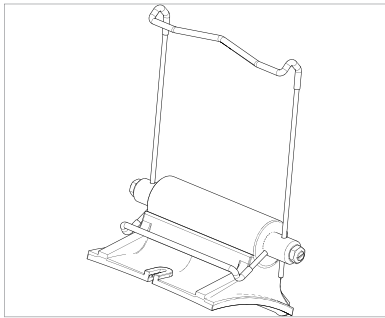


Fig. 11

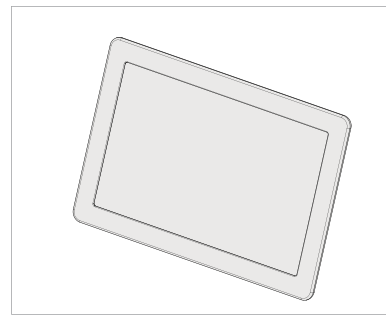


Fig. 12

These items are separate from the machine and must be unpacked and installed by the operator in the way described below:

- 1) Remove the 2 items from their packing.
- 2) Loosen the knob on top of the machine cover (Fig. 13).
- 3) Install the tablet stand so that the special profile fits into the slot on the machine cover (Fig. 14).
- 4) Screw down and tighten the knob to secure the tablet stand to the cover (Fig. 15).
- 5) Fit the tablet into its stand (Fig. 16).

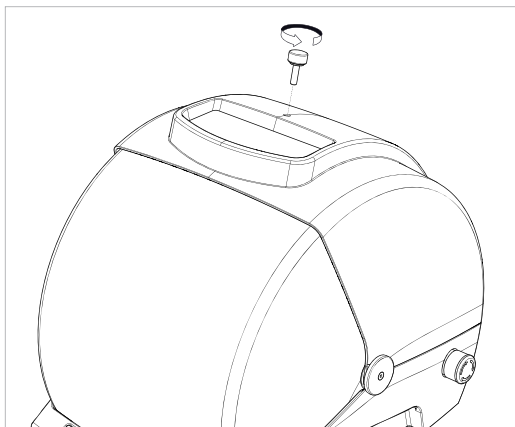


Fig. 13

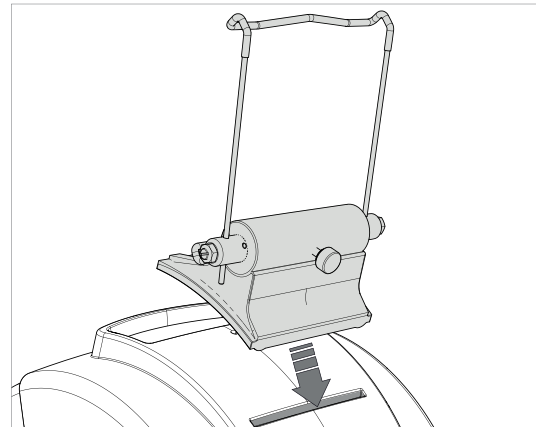


Fig. 14

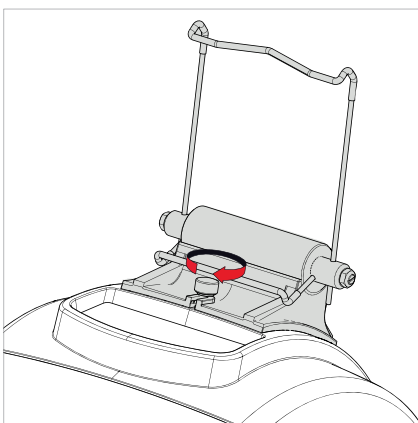


Fig. 15

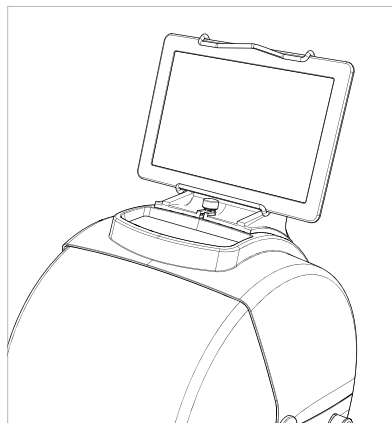


Fig. 16

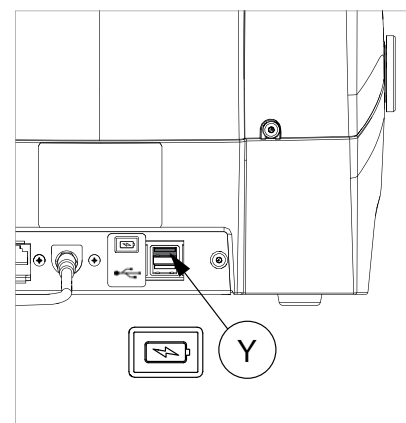


Fig. 17

- 6) Connect the tablet USB/Micro USB cable to the USB tablet port (Y) located on the back of Futura PRO.

3.4.2 Power pack and lead

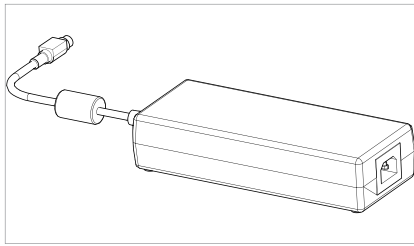


Fig. 18

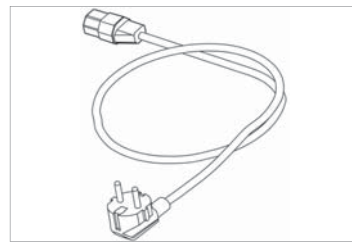


Fig. 19

Connect FUTURA PRO to the power pack (W) and connect the latter to the power supply with the power lead (W2).

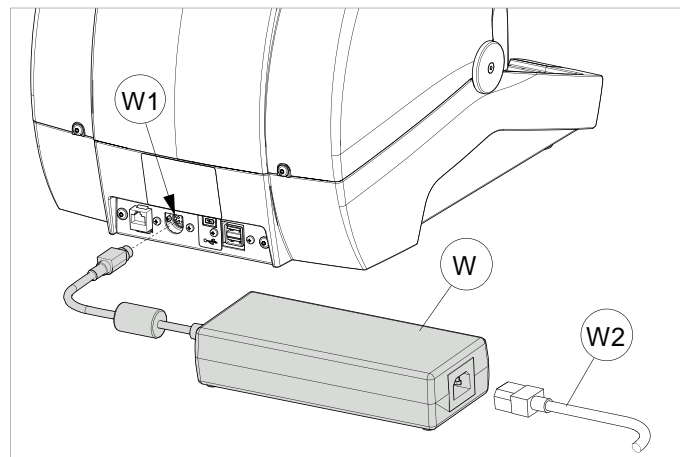


Fig. 20

3.4.3 Fixing bracket

If the key-cutting machine is transported and used on a vehicle, e.g. a van, it must be prepared as follows:

- 1) Turn off the machine and detach the power lead.
- 2) Remove the tablet holder and tablet.
- 3) Turn the key-cutting machine onto its back.
- 4) Connect the fixing bracket to the machine and secure with the 2 screws.
- 5) Return the machine to its upright position on the work top.

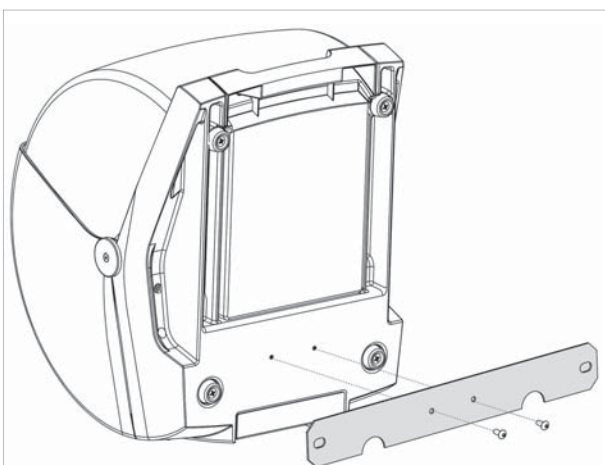


Fig. 21

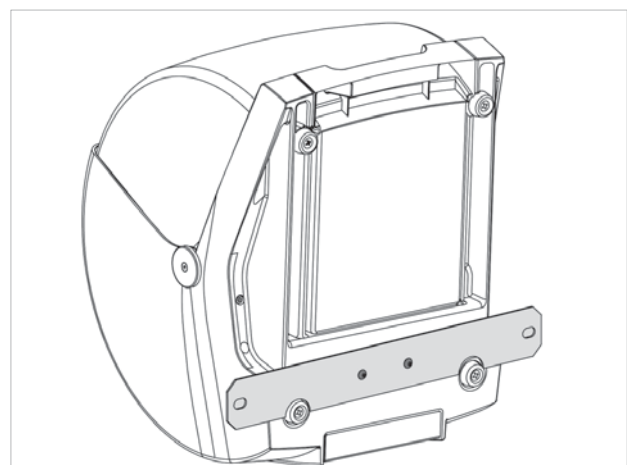


Fig. 22

3.5 WORK STATION DESCRIPTION

One operator is enough to operate the machine, which has the following operating parts:

- **General ON/OFF/emergency button (R) located on the right-hand side of the machine**
- **Key holding clamps (M) (P)**
- **Tablet (B)**
- **Tablet ON button (B1)**
- **Safety shield (C)**
- **Cutters (F) (G)**

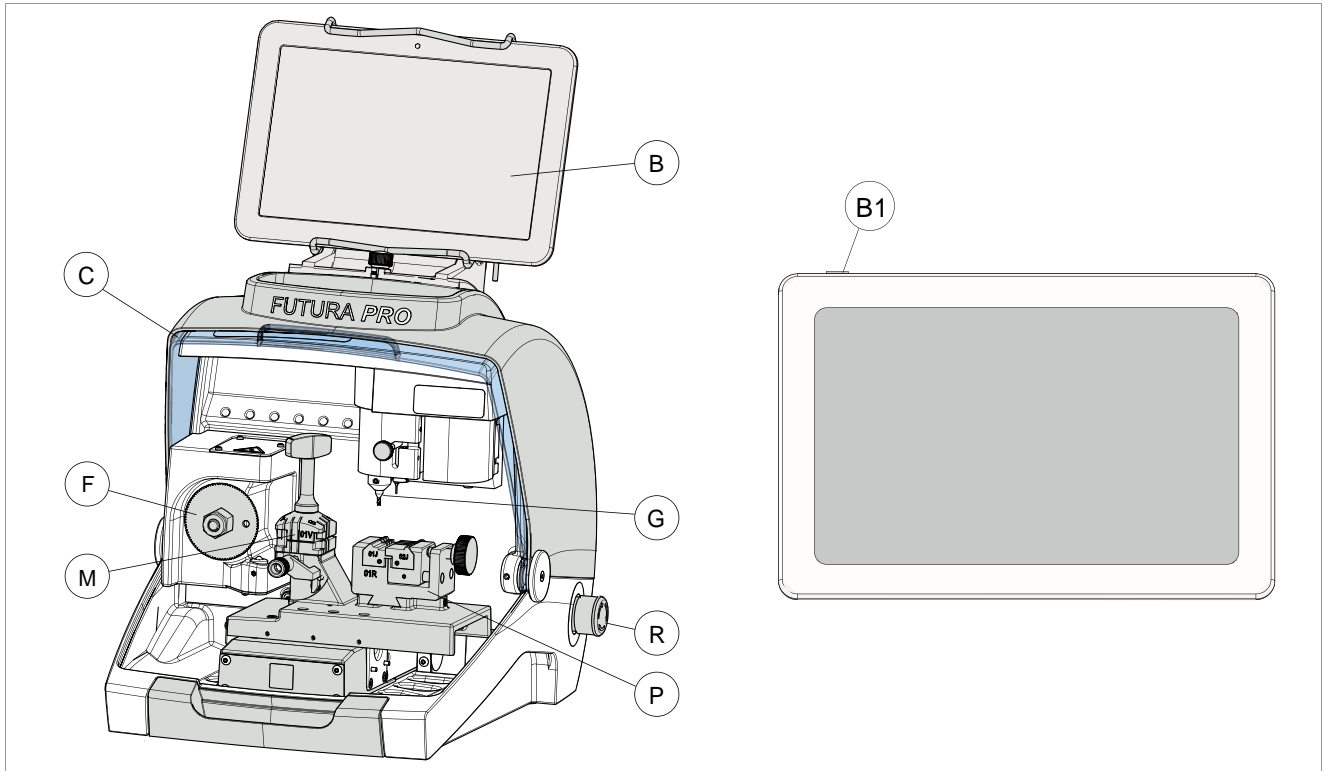


Fig. 23

4 TABLET REGULATION AND USE

- 1) Connect the tablet to a power source by means of its power pack in order to charge it (3 hours for the first charge). Plugging the tablet into the USB port on the back of the Futura PRO machine will not provide enough power to fully charge the tablet. The USB port will provide a trickle charge and may extend the battery life while the tablet is used. The tablet should be plugged into a main power supply to fully re-charge the battery daily.
- 2) Turn on the tablet by holding down the push button (B1) (Fig. 23) holding it down for a few seconds.

REGULATING TABLET INCLINATION

- 1) Loosen the knob (B2).
- 2) Incline the stand as required.
- 3) Tighten the knob (B2).

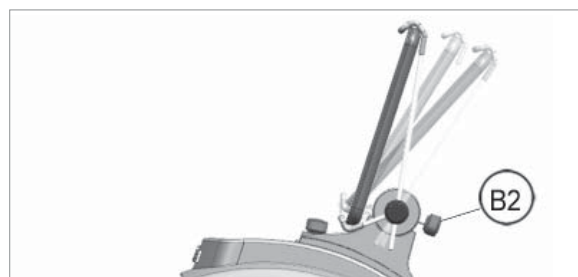
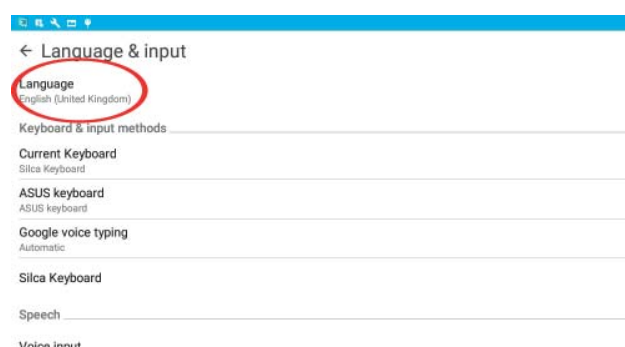
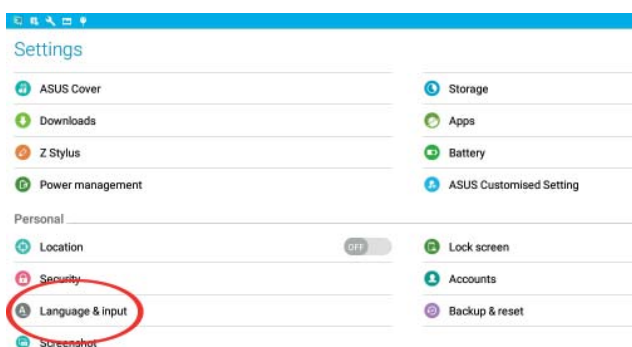



Fig. 24

4.1 CHOICE OF LANGUAGE



- 1) Select "Settings" .



- 2) Scroll up with your finger.
- 3) Select Language & Input and then Language.
- 4) Scroll and select the desired language.
- 5) Select Silca Keyboard (if desired)
- 6) Select Display > Sleep > Never. This will prevent the application from timing out and closing the session.
- 7) To quit: 

- For all software functionalities on board the Silca key-cutting machine, see the **SOFTWARE OPERATING GUIDE on your tablet (Ch.10)**.
- Further instructions are given in the quick guide for the tablet.

5 CLAMPS

5.1 CLAMPS FOR FLAT KEYS WITH STANDARD CUTS

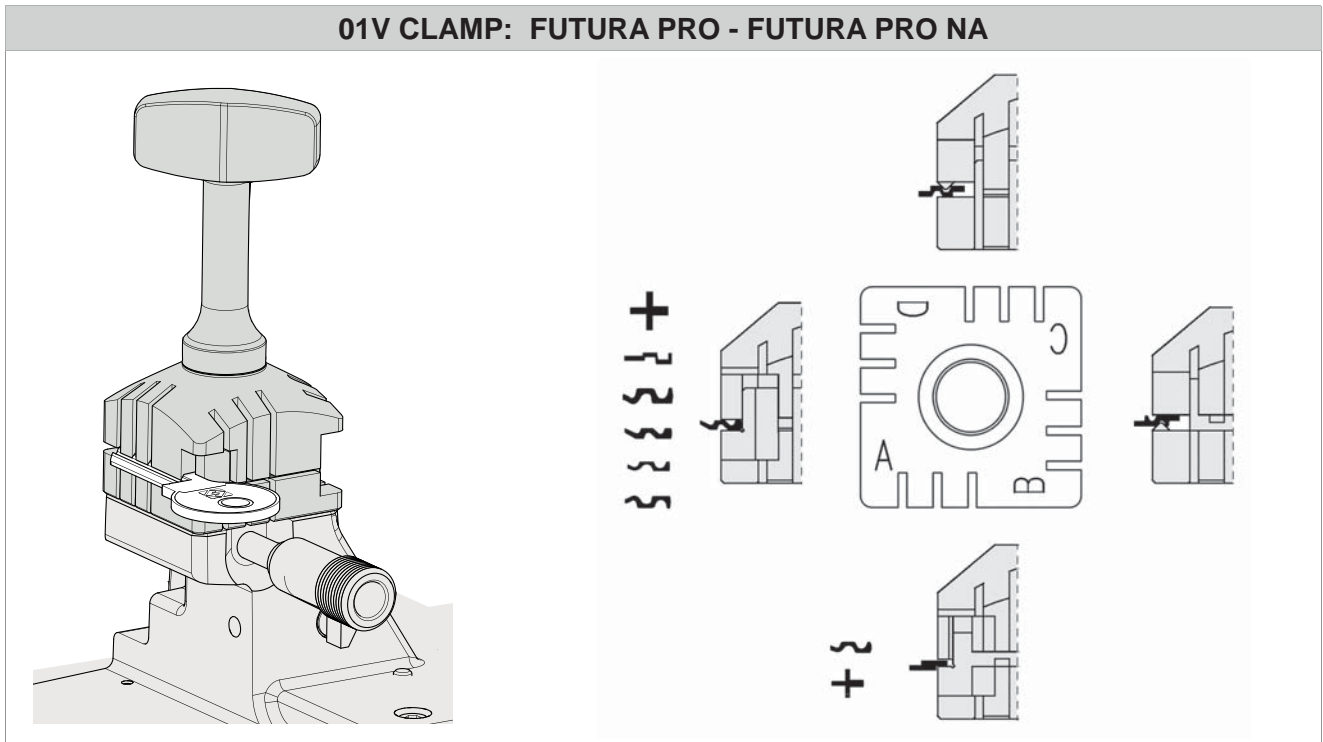


Fig. 25 - 01V clamp

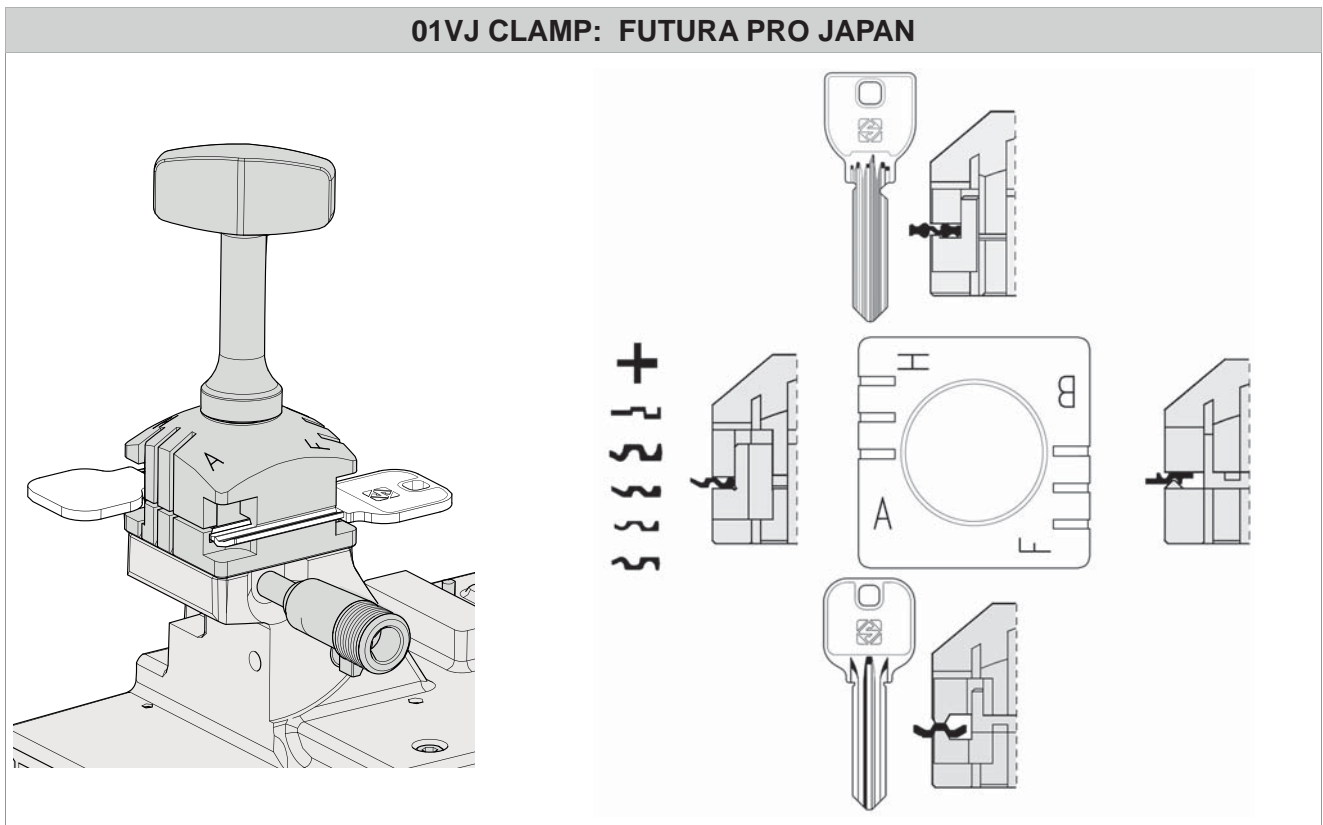


Fig. 26 - 01VJ clamp

The use of one of the clamp sides is required, according to the type of key to be decoded and/or cut by copying or by code (Fig. 25 and Fig. 26). Positioning the correct side to be used is quick and easy. With the clamp jaws slightly open, turn the clamp by hand to position it as required, facilitated by a new special alignment system (Fig. 27).

The 4-sided clamp is used to secure keys firmly up against the back and on the profile.

- To copy keys (these can be locked on any of the clamp sides A, B, C or D), the user will decide which side is the most suitable.
- To decode a key you **MUST** use the clamp designated by the software.
- For code key-cutting the choice of clamp to use is established by the software.

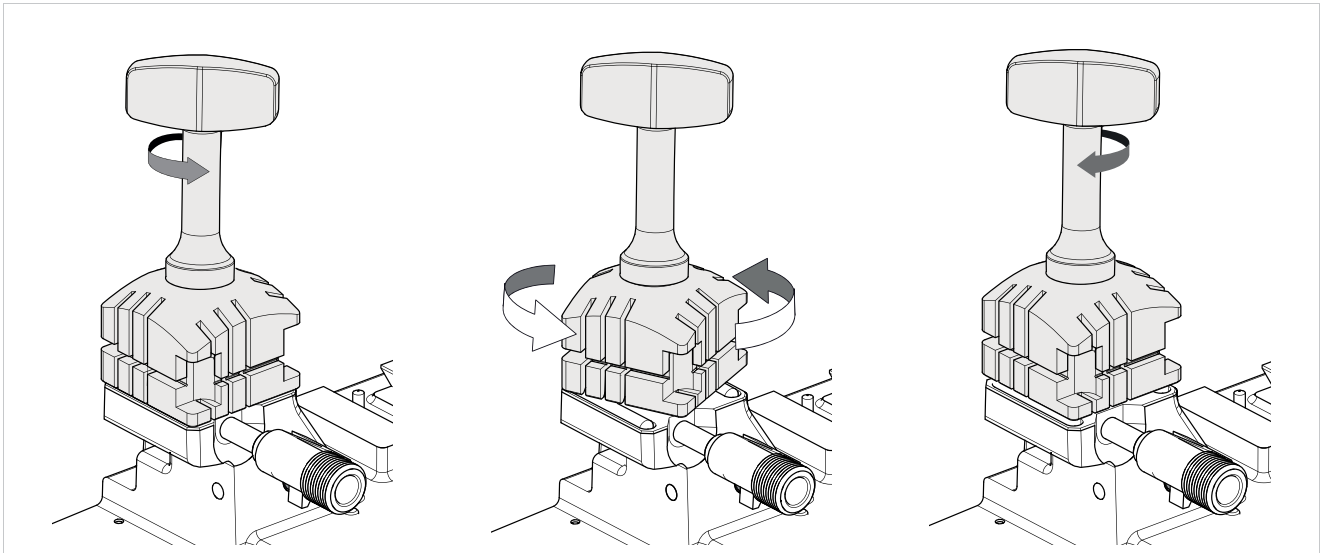


Fig. 27 - CLAMP ROTATION

5.1.1 Use of the shoulder gauge

The gauge is used to position flat cylinder or vehicle keys that call for Stop 0 (Fig. 34).

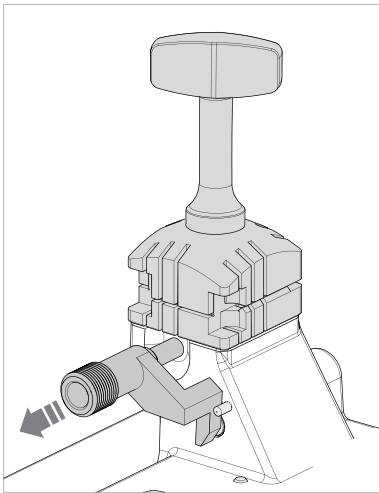


Fig. 28

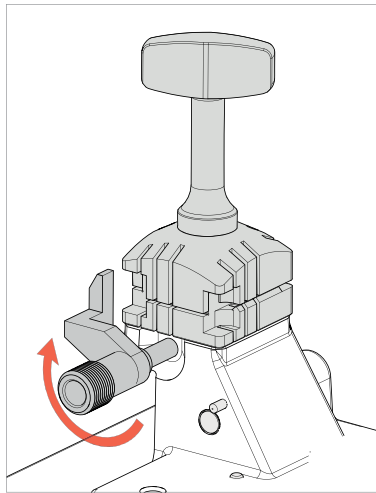


Fig. 29

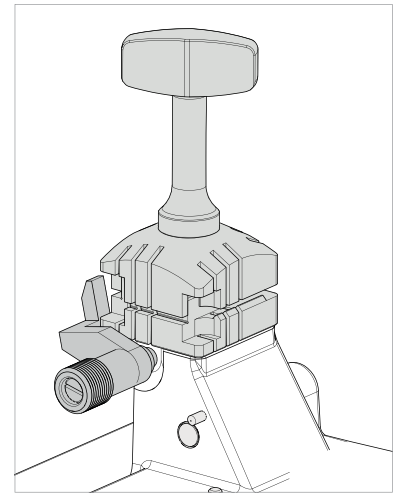


Fig. 30

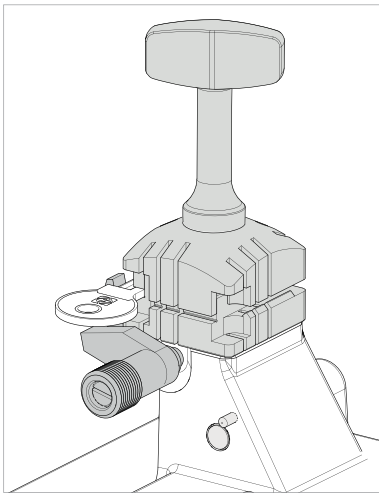


Fig. 31

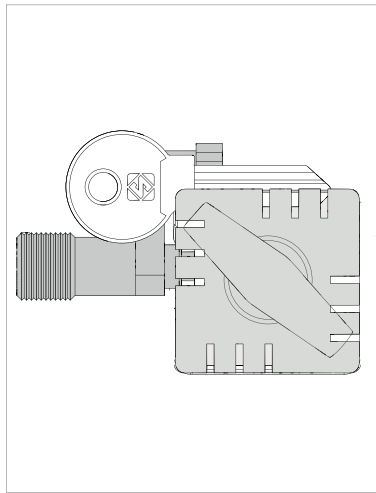


Fig. 32

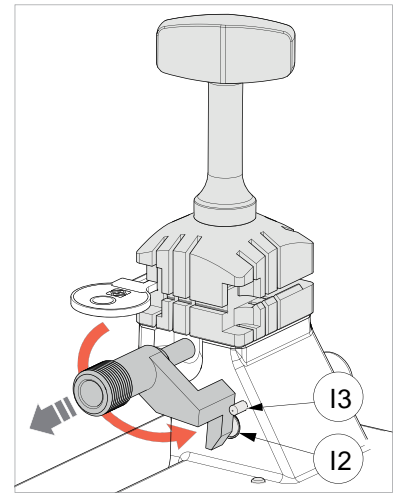


Fig. 33

Pull the gauge gently towards the operator, turn clockwise by about 180° and release against the clamp.
 Fit the sample key into the clamp with the stop up against the gauge.
 Use the bar or tip stop (provided) for keys without stops that measure from the tip (cap.5.1.2).
 The choice of position 1-2-3-4 depends on the length of the cut.

NOTE: take the gauge back by hand to its original position before starting to read or cut the key (Fig. 33).

For all reading/decoding and cutting operations the gauge (I) must be taken back manually to its original position (Fig. 33 - in this position it covers the sensor (I2) which detects it).

To take the gauge to its original position (with the gauge up against the key stop) proceed as follows:

- 1) Turn counter-clockwise;
- 2) Pull towards the operator and continue to rotate counter-clockwise until it comes up against the stop pin (I3);
- 3) Release the gauge.

5.1.2 Stop positions (key stop)

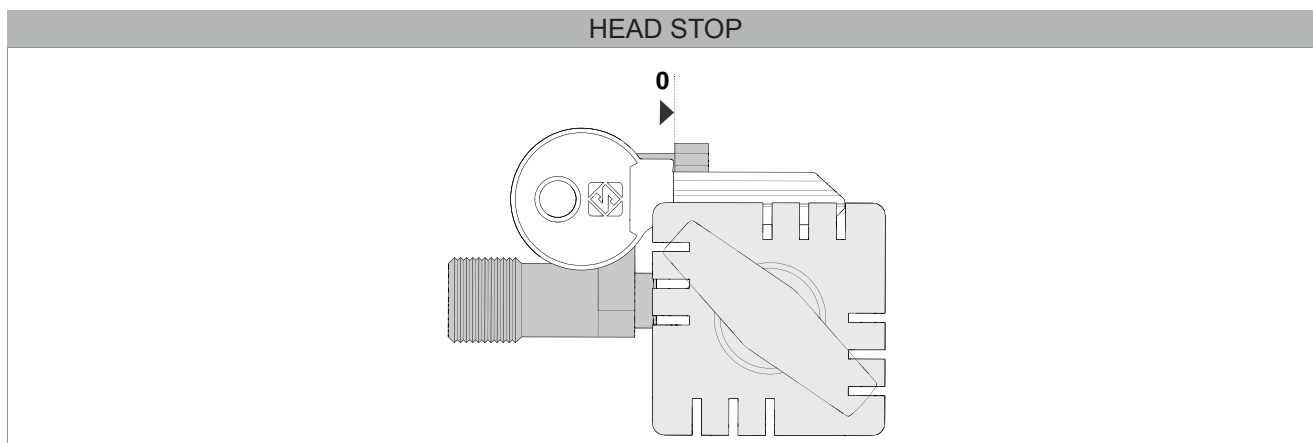


Fig. 34 - Stop 0

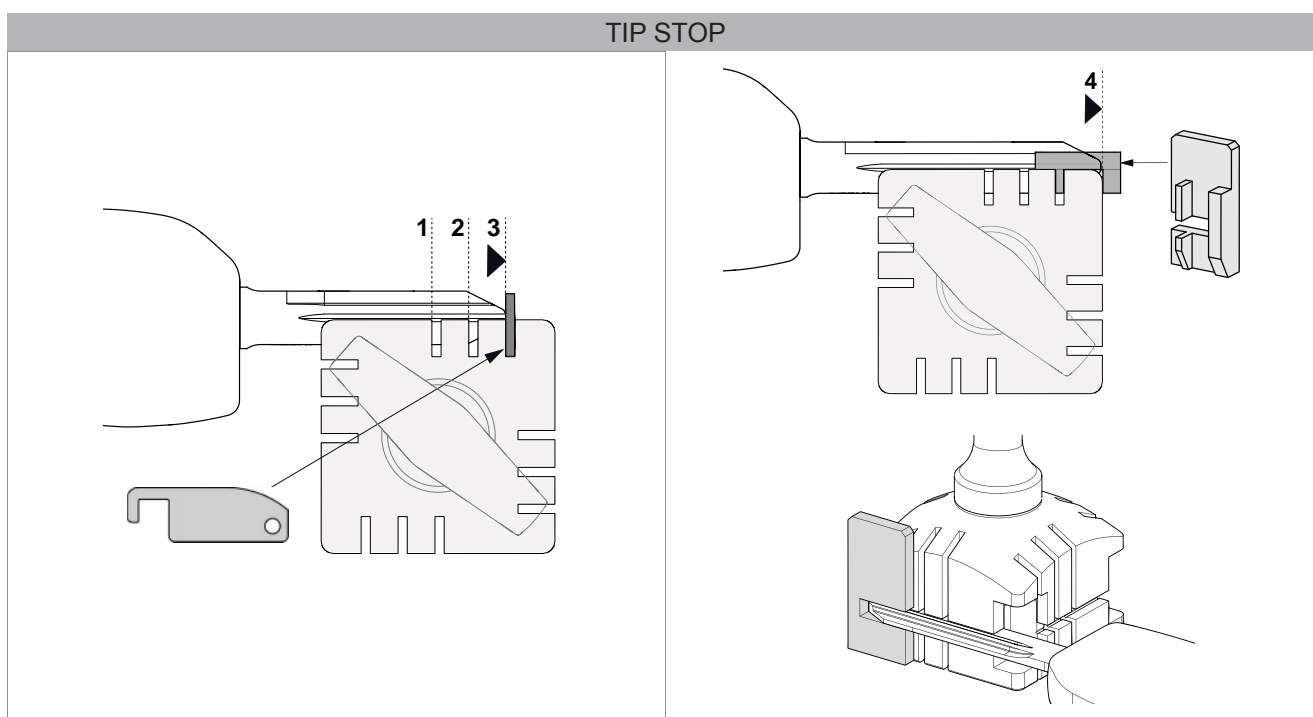


Fig. 35: Stop 1 - 2 - 3

Fig. 36: Stop 4

According to the length of the stem the following accessories are provided to install keys with tip stops (chap.1.4):

- **Stop bar (Fig. 35)**

For keys that need Stop 1, 2 or 3. Insert the bar into the grooves provided.

- **Tip Stop 4 (Fig. 36)**

For long keys that need Stop 4. Install as per Fig. 36.



ATTENTION: stop bar and tip stop must be removed before decoding or cutting operations.



ATTENTION: it is not necessary to apply force to close the clamp properly.

5.1.3 Use of pins - CLAMP 01V / 01VJ

For keys with narrow stems the pins must be placed between the bottom of the clamp and the back of the key so that the key protrudes sufficiently out of the clamp and therefore can be properly read and cut.

If the key has a narrow stem and is also very thin, 2 pins must be used (Fig. 37).

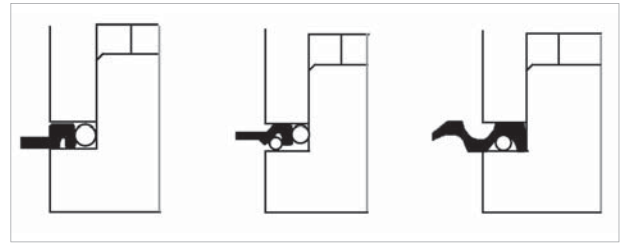


Fig. 37

If the original key is broken, place a suitable sized pin in the groove of the keys stem so that it is properly held in place and therefore can be copied (Fig. 38).

NOTE: use a pin with the same diameter for both decoding and cutting.

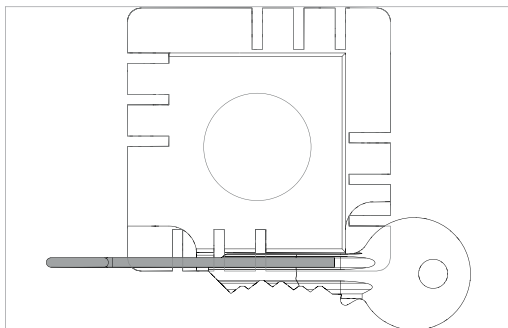


Fig. 38

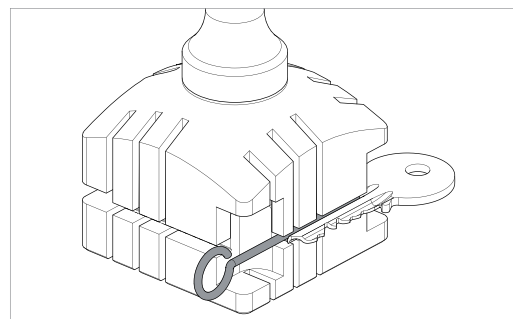


Fig. 39

5.1.4 Cutting cruciform keys (with 3 fins)

The standard 4-sided clamp can be used to cut almost all cruciform keys (except for Y and T shaped ones).

- 1) Leave the gauge in its original position.
- 2) Fit the key into the clamp:
 - Insert the grooved bar into the notch on the clamp according to the key stop (as shown in Fig. 40 - Key stop towards the inner part of the clamp, Fig. 41 - Key stop DOWN and Fig. 42 - Key stop UP).
 - Butt the key stop up against the bar.
- 3) Tighten the knob (M1) to secure the key.
- 4) Remove the bar.

ATTENTION: the cuts on each fin are different.

POSITION OF KEY AND BAR

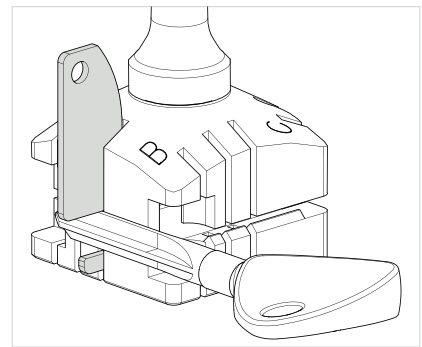
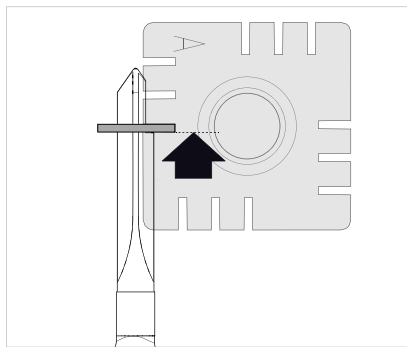
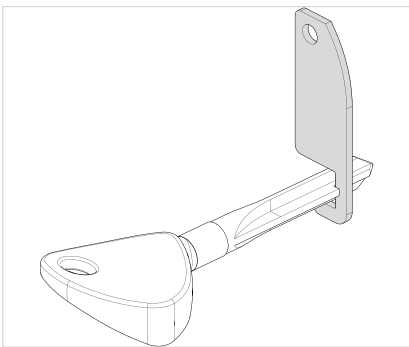


Fig. 40 - Key stop towards the INNER PART of the clamp

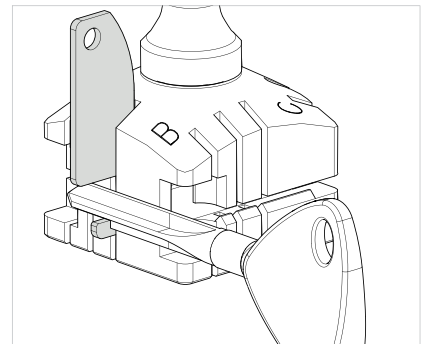
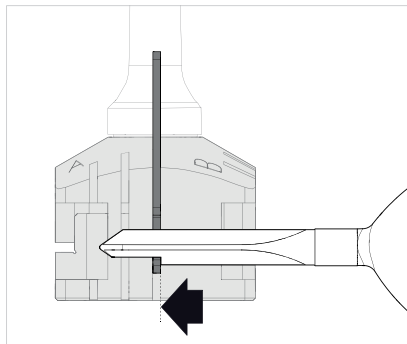
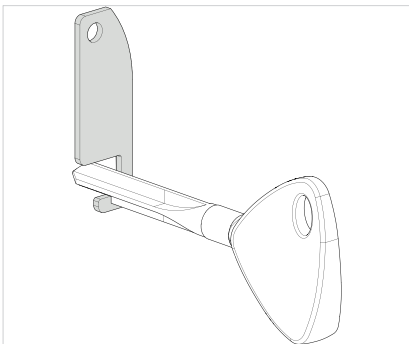


Fig. 41 - Key stop DOWN

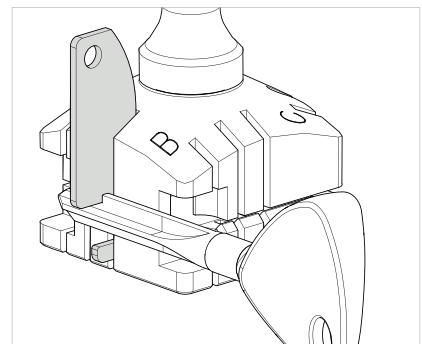
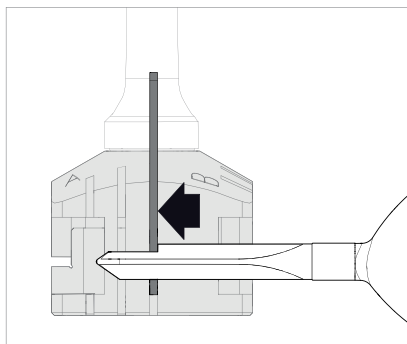
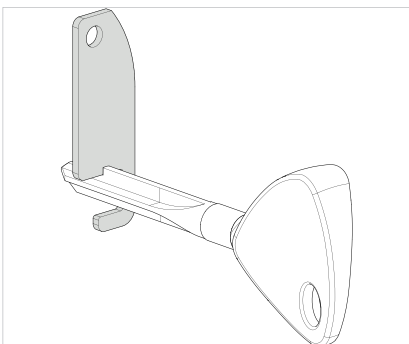


Fig. 42 - Key stop UP

5.1.5 Removing/fitting the clamp 01V / 01VJ

- 1) Raise the safety shield.
- 2) Unscrew the knob (M1) and remove together with the washer set (Fig. 43).
- 3) Pull the clamp upwards (Fig. 44).
- 4) Carefully clean the seat of the clamp support.
- 5) Clean the clamp before fitting into the support.
- 6) Tighten the knob (M1) with the washer set.

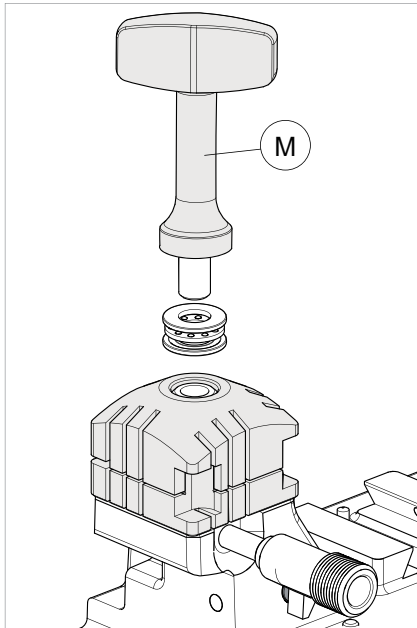


Fig. 43

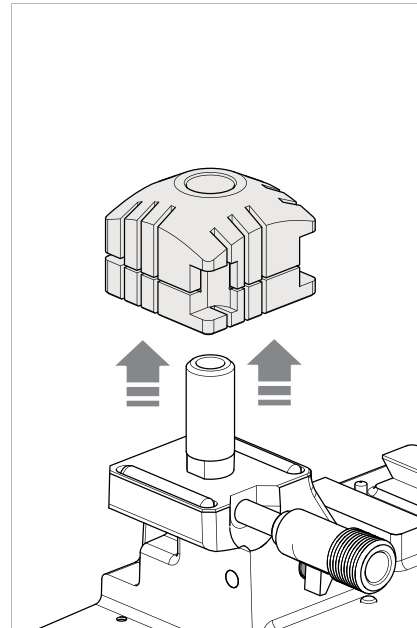


Fig. 44

5.2 LAMP FOR DIMPLE AND TRACK KEYS - 01R

According to the type of key to be decoded and/or cut, follow the instructions in the Silca tablet program regarding:

- clamp
- use of jaws (Q1) and (Q2)
- clamp stop (Fig. 46 and Fig. 47)

FITTING THE KEY

The clamp is designed to house high security keys with shoulder stop or tip reference.

For shoulder stop keys, place the shoulder of the key against the jaws (stop "0") (Fig. 46) and the others (tip stop) must be placed against one of the grooves (1-2-3-4), as indicated in the Silca tablet program. For this operation use the bar provided (Fig. 47).

NOTE: the stop bar must be removed before decoding or cutting operations.

- 1) Fit the key to be cut into its seat and ensure it is resting firmly on the clamp plate.
- 2) Tighten the knob (M) to secure the key.

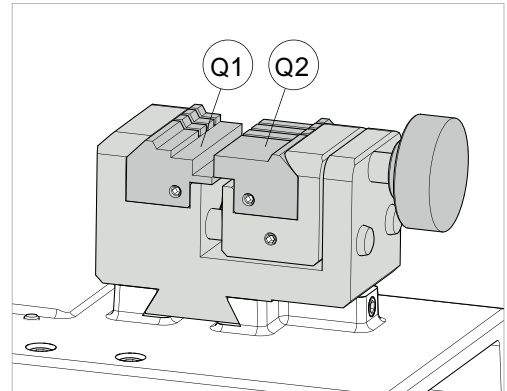


Fig. 45

5.2.1 DIMPLE keys

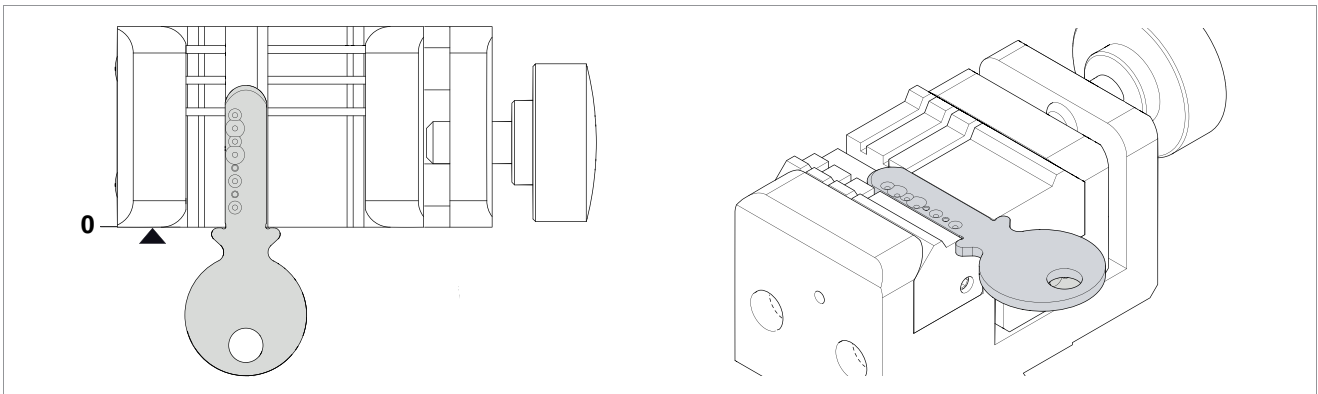


Fig. 46 - SHOULDER STOP

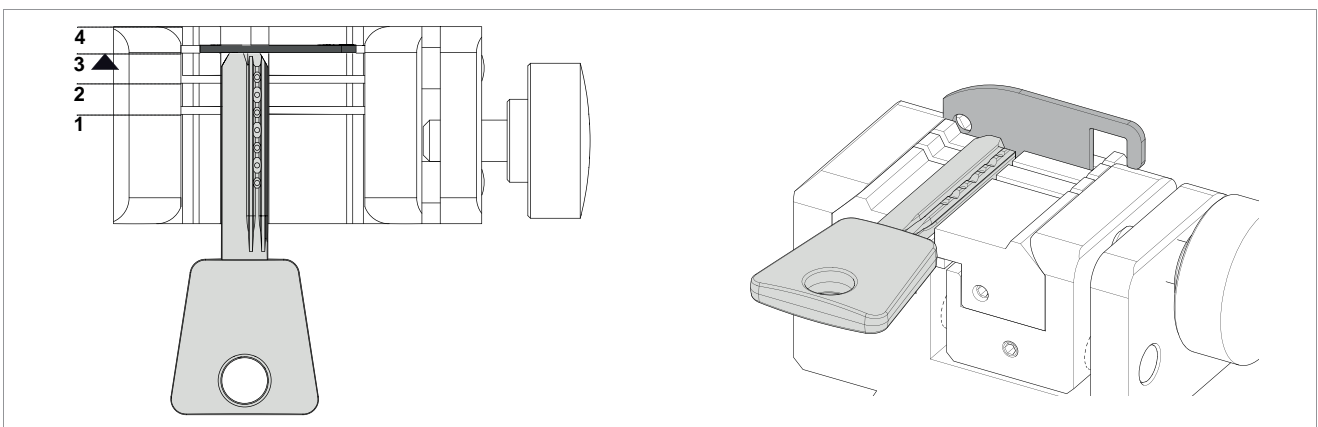


Fig. 47 - TIP STOP

5.2.2 TRACK type keys

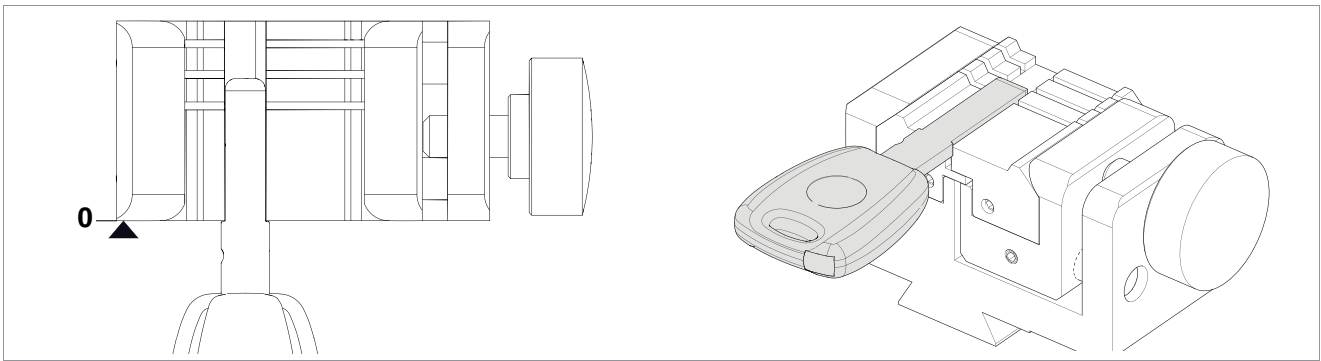


Fig. 48 - SHOULDER STOP

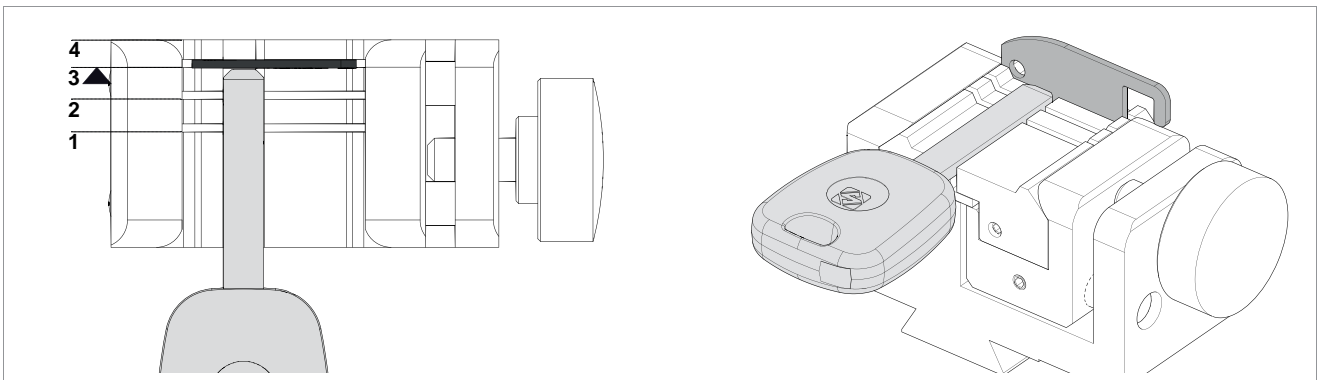


Fig. 49 - TIP STOP

5.2.3 TRACK type keys (Futura PRO NA - Futura PRO Automotive)

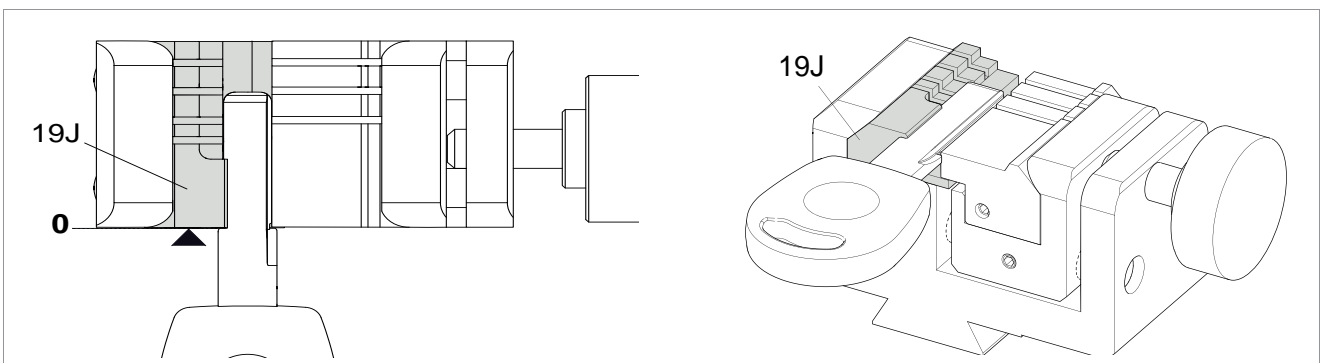


Fig. 50 - HU66 on Futura PRO NA and Futura Automotive

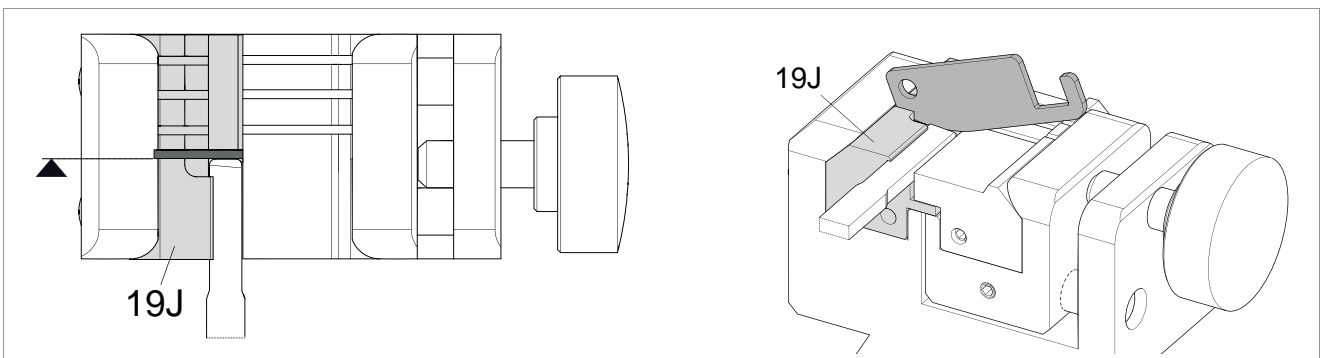


Fig. 51 - Ford Escape key on Futura PRO NA and Futura PRO Automotive

5.3 REMOVING / FITTING CLAMP 01R

- 1) Raise the safety shield.
- 2) Loosen the grub screw (P2) and remove the clamp by pulling it towards the operator.
- 3) Carefully clean the clamp support seat.
- 4) Clean the clamp before fitting into the support.
- 5) Fit the clamp (with knob on the right) into the special dovetail and take up against the stop pin.
- 6) Tighten the grub screw (P2) to secure the clamp.

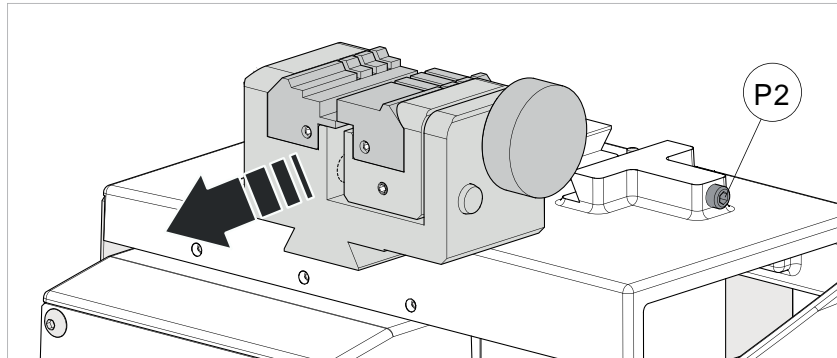


Fig. 52

5.4 REMOVING/FITTING THE JAWS ON CLAMP 01R

- 1) Raise the safety shield.
- 2) Loosen the knob (P1) by a couple of turns (Fig. 53).
- 3) Use your fingers to pull the jaw to be removed out towards the operator (Fig. 54).
- 4) Carefully clean the seat of the jaw on the clamp.
- 5) Clean the jaw before fitting into the clamp.
- 6) Fit the jaw up against the stop pin.

NOTE: there is only one way to fit the jaw into the clamp.

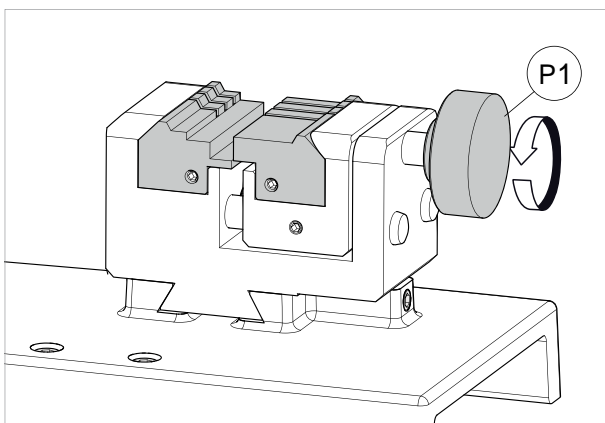


Fig. 53

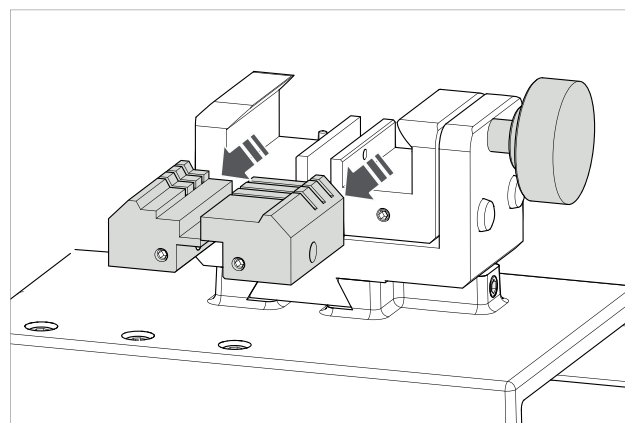


Fig. 54

5.5 USING TRACER 01T

The tracer 01T is used to read/decode both dimple and track keys. This tracer may or may not be required according to the type of key to be decoded and the dimensions involved.

ATTENTION: Anodised aluminium keys, plastic keys or any other key without electrical conductivity CANNOT BE decoded!

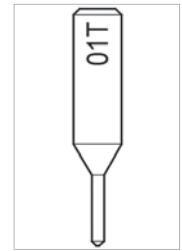


Fig. 55

- **ACTIVATING THE TRACER 01T (Fig. 56)**
 - To use the tracer: move the lever (J1) to the left and lower the tracer.
 - When the tracer is lowered, turn the lever knob clockwise.
- **EXCLUDING THE TRACER 01T (Fig. 57)**
 - Turn the lever knob anticlockwise.
 - Take the tracer to the idle position: raise the lever (J1) and move to the right.

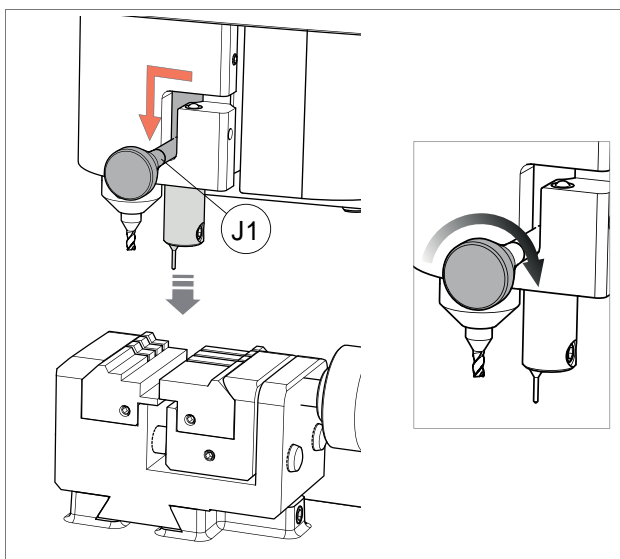


Fig. 56

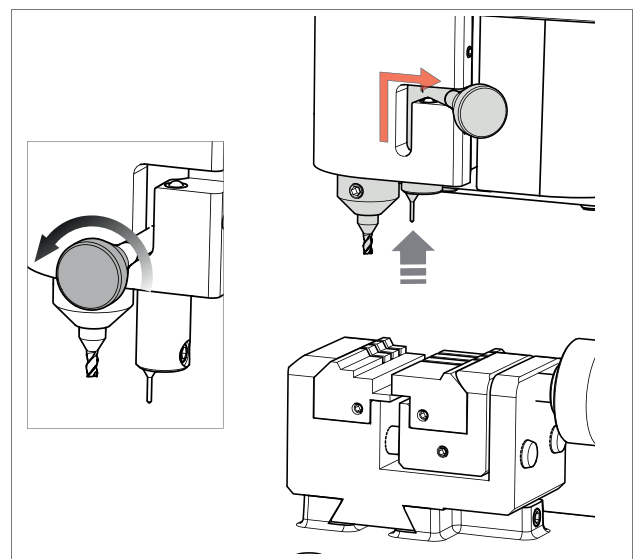


Fig. 57

5.6 TRACER 02T

Some applications may require the use of the 02T tracer. The 02T tracer (when required) should be placed into the cutter shaft (replacing the cutter) (Fig. 59).

Note: fit the new tracer pushing all the way upwards.

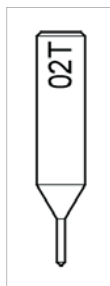


Fig. 58

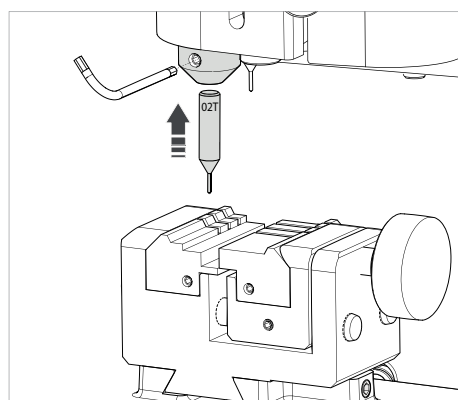


Fig. 59

NOTE: for cutting and/or decoding operations with the tracer point 02T, the tracer 01T must be in the idle position (Fig. 57). REPLACE THE 02T TRACER WITH THE REQUIRED CUTTER PRIOR TO ATTEMPTING TO CUT A KEY.

6 CLEANING

- **Keep the operational parts of the machine as clean as possible by brushing away the chippings in areas where they accumulate during cutting operations.**
- **Under no circumstances should compressed air be used to clear the work zone of chippings as this will blow them onto the moving parts.**
- **Never use oily products or thinners for cleaning painted surfaces, clamps, electrical or electronic connections.**
- **Make sure the key to be decoded is clean.**

7 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.

The FUTURA PRO key-cutting machine does not need special maintenance, but it is good practice to check and if necessary replace parts subject to wear: cutter, tracer point, belt.

Replacement operations are simple and can be performed by the operator.



ATTENTION: DO NOT USE COMPRESSED AIR!



ATTENTION: to maintain machine efficiency we recommend using protective oil such as WD40 or similar to apply to the burnished mechanical parts. Make sure the oil does not come into contact with the electronic parts.

Before performing any type of maintenance (checks or replacements) read the warnings below:

- Do not perform any maintenance operations with the machine on.
- Always disconnect the power lead.
- Follow the instructions in the manual carefully.
- Use original spare parts (see provided spare parts sheet).

7.1 OPERATIONS

- Access to rear compartment
- Prismatic cutter replacement
- Cylindrical cutter and/or tracer point replacement
- Tracer 01T replacement
- Checking and replacing fuse
- Battery replacement

7.2 ACCESS TO REAR COMPARTMENT

- 1) Turn off the key-cutting machine and disconnect the power lead.
- 2) Remove the tablet.
- 3) Loosen the 2 screws (E1) and the 2 screws (E2).
- 4) Rotate the cover towards the front of the machine.

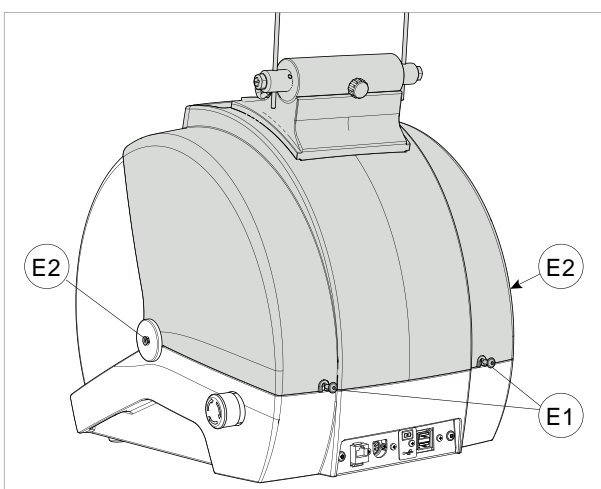


Fig. 60

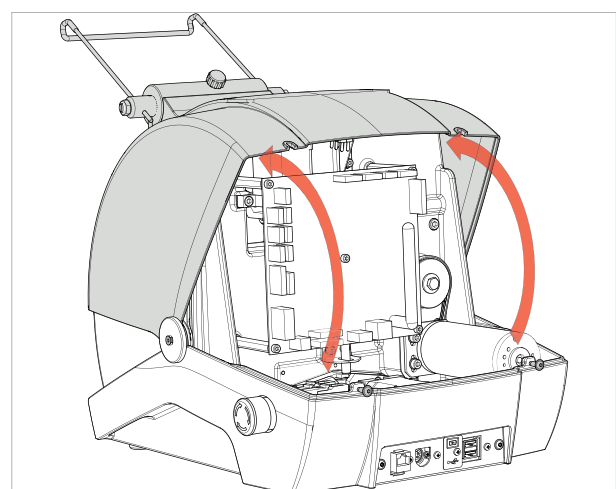


Fig. 61

7.3 PRISMATIC CUTTER REPLACEMENT

- 1) Raise the safety shield.
- 2) Rotate the cutter by hand to align the cutter slot with the rear slot (on the reader stand).
- 3) Insert the pin (F1) (provided with the machine) into the 2 slots.
- 4) Loosen the nut (F2) clockwise.



ATTENTION: the thread is to the left.

- 5) Remove the nut, pin and cutter.
- 6) Carefully clean the cutter shaft seat and the new cutter.
- 7) Fit the new cutter and align the cutter slot with the rear slot (on the reader stand).
- 8) Insert the pin (F1) (provided with the machine) into the 2 slots.
- 9) Tighten the nut (F2) counter-clockwise. **Attention: the thread is to the left.**



ATTENTION: when fitting a new cutter to replace a worn one, or when fitting a re-sharpened one, see ch.6.2 of the SOFTWARE OPERATING GUIDE (on the tablet).

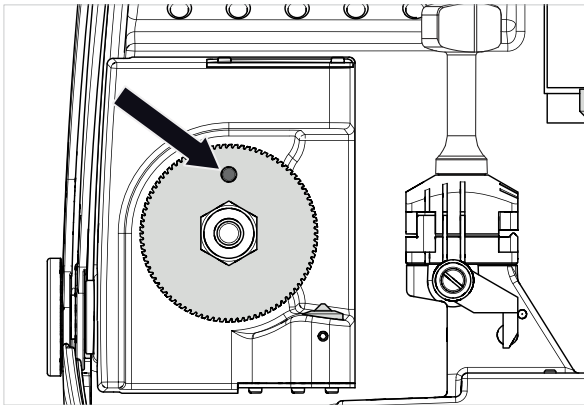


Fig. 62

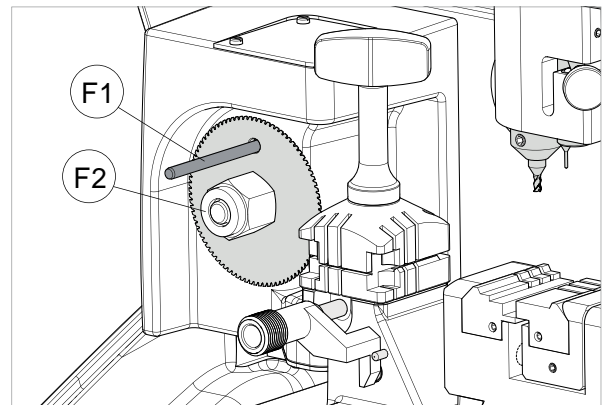


Fig. 63

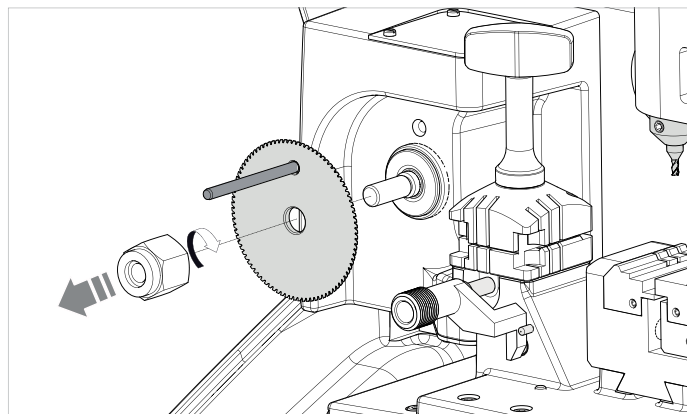


Fig. 64

7.4 CYLINDRICAL CUTTER AND/OR TRACER POINT REPLACEMENT

- 1) Raise the safety shield.
- 2) Rotate the cutter shaft (G1) by hand and take the grub screw (G2) to the front of the machine.
- 3) Use a hex key to loosen the grub screw (G2) and remove the tool.
- 4) Fit the new tool, pushing all the way upwards.
- 5) Tighten the grub screw (G2) to secure the tool.

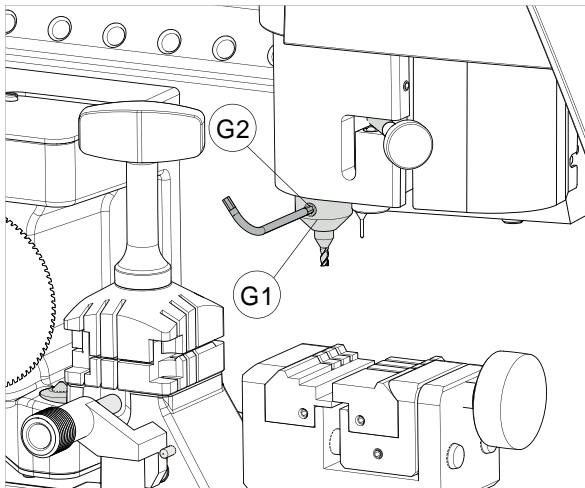


Fig. 65

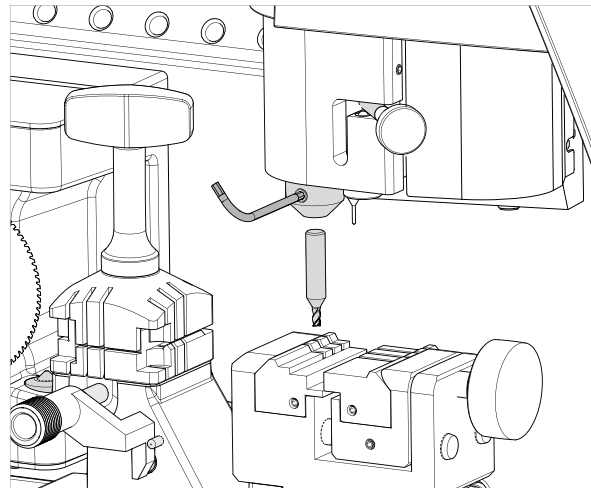


Fig. 66

NOTE: the machine is shipped with a steel rod installed in the cutter shaft to prevent the allen screw from backing out during transit. REMOVE THE ROD AND INSTALL THE PROPER CUTTER PRIOR TO ATTEMPTING TO CUT A KEY!

7.5 TRACER 01T REPLACEMENT

- 1) Raise the safety shield.
- 2) Move the lever (J1) to the left to lower the tracer.
- 3) Use a hex key to loosen the grub screw (J2) and remove the tracer.
- 4) Fit the new tracer, pushing all the way upwards.
- 5) Tighten the grub screw (J2) to secure the tracer.

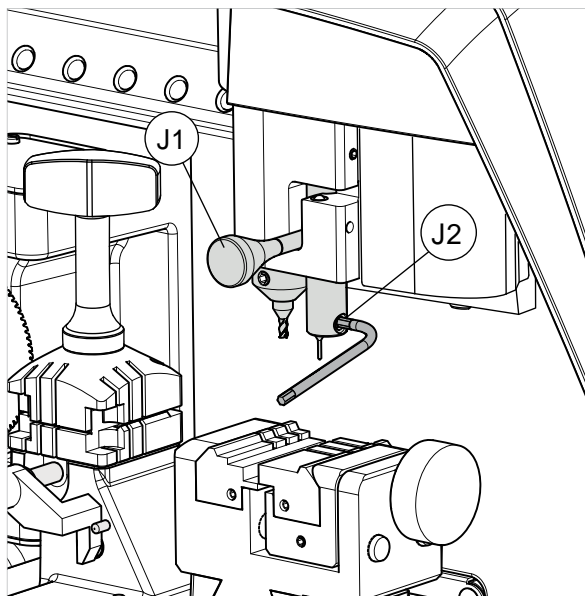


Fig. 67

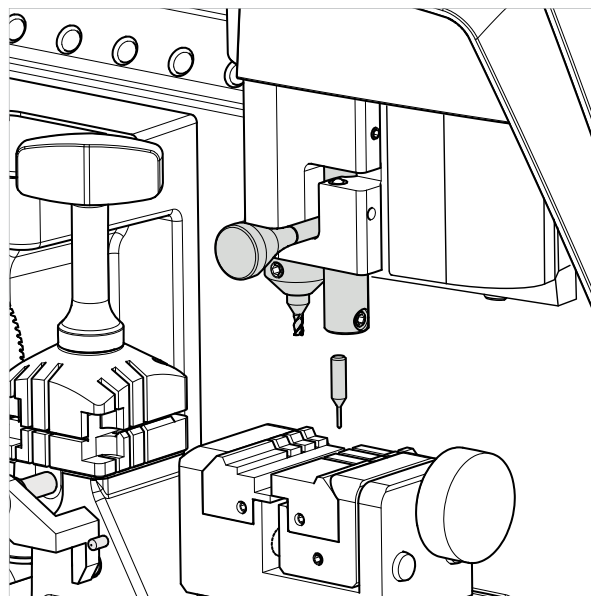


Fig. 68

7.6 CHECKING AND REPLACING FUSE

Fuses should be checked with a tester (ohmmeter, multimeter, etc.) as they may appear to be in good condition even when they are electrically faulty. Fuses must always be replaced with the same amperage and type (rapid or delayed), as indicated in this manual.

FUTURA PRO has 1 fuse:

4 Amps delayed

Protects the cutters motors and their electronic controls (230V a.c.)

Follow the instructions below to check and, if necessary, replace:

- 1) Turn off the key-cutting machine and unplug.
- 2) Access the rear compartment (Ch.7.2).
- 3) Remove the fuse from its seat (Fig. 69) and replace if necessary.

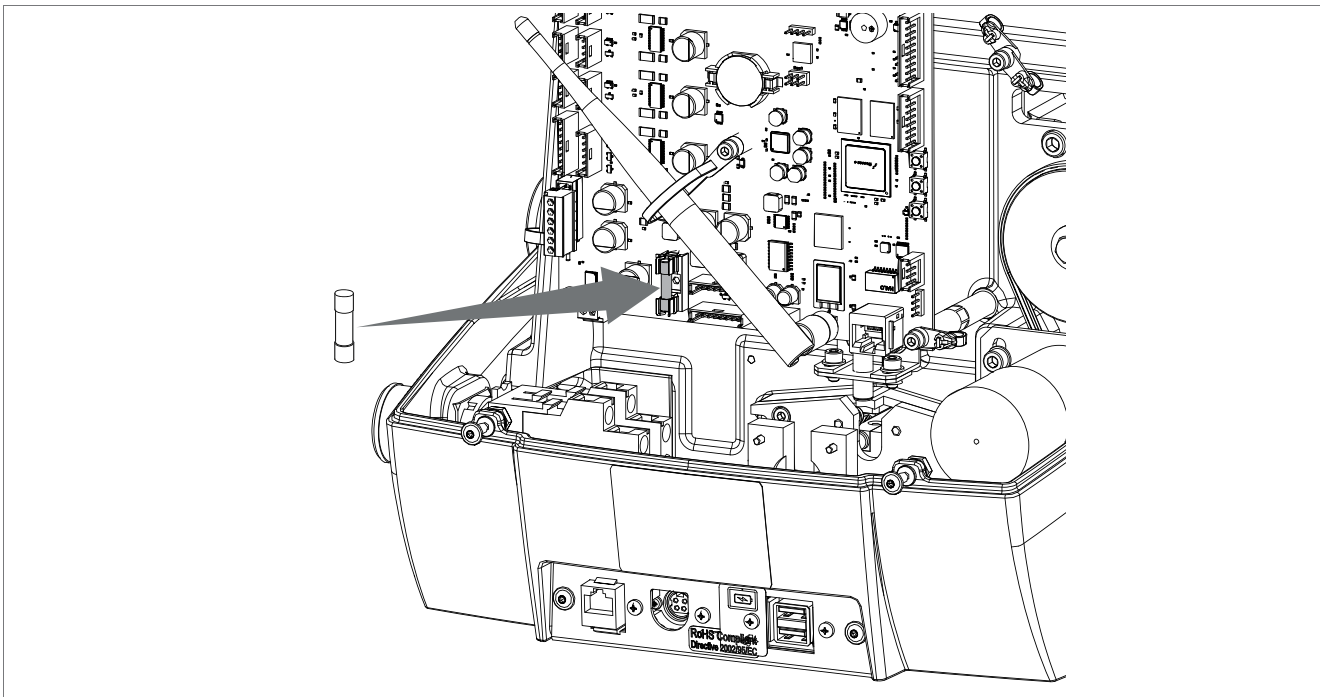


Fig. 69

7.7 BATTERY REPLACEMENT



ATTENTION: only specialised personnel can change the battery.

- 1) Turn the machine off and unplug it from its power supply cable.
- 2) Access the rear compartment (chap.7.2).
- 3) Use insulated screwdriver to remove the fl at battery.
- 4) Insert the new battery into its seat, paying attention to the poles.



ATTENTION: use the same type of lithium battery CR2032 3 Volt.

DANGER OF EXPLOSION IF THE BATTERY IS REPLACED WITH ONE OF THE WRONG TYPE.

- 5) Follow the instructions in Ch.8 DISPOSAL to dispose of spent batteries.

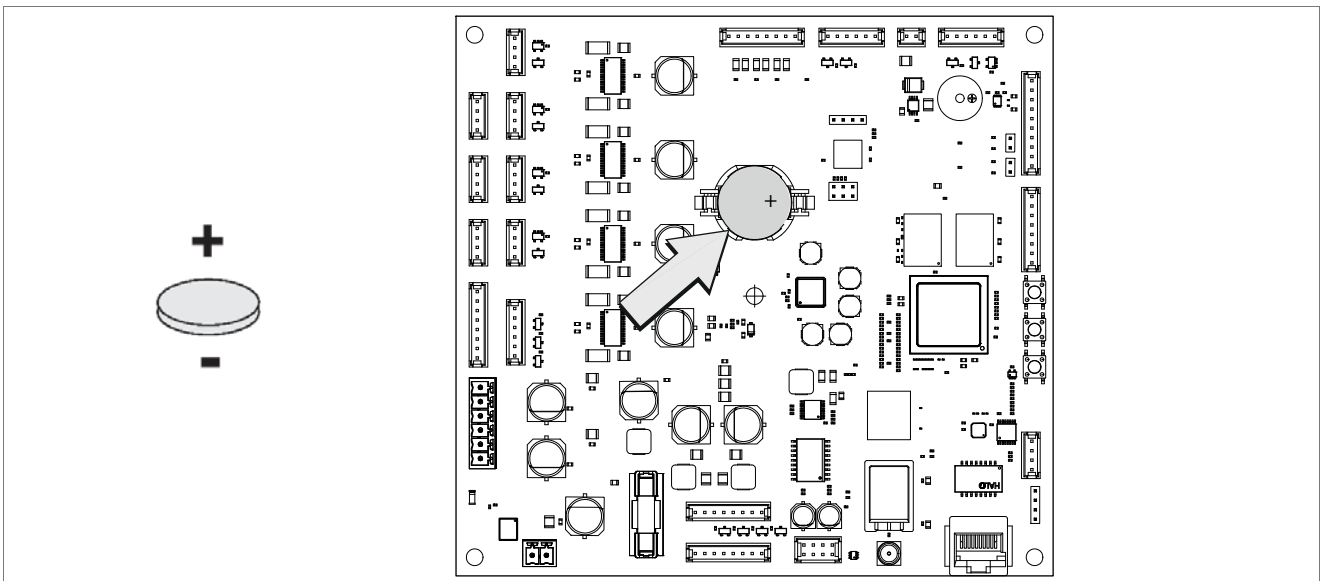


Fig. 70

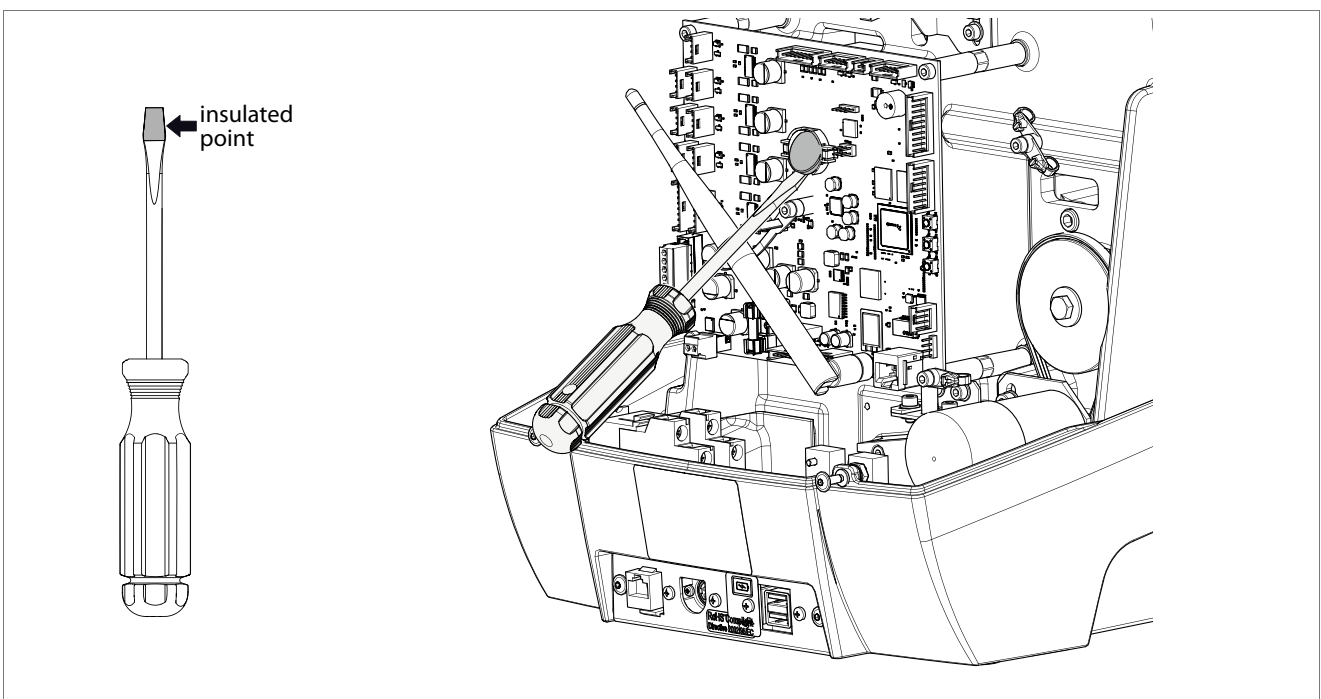


Fig. 71

8 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;

With reference to portable batteries/accumulators, when such products are no longer in use the user shall take them to suitable authorised waste treatment facilities.

Suitable separate collection for the purpose of forwarding discarded equipment and batteries/accumulators 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.

To remove batteries/accumulators, consult the manufacturer's specific instructions: (see relevant chapter in the users' manual)

The sanctions currently provided for by law shall apply to users who dispose of equipment, batteries and accumulators in unauthorised ways.

9 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).

9.1 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 center.

10 SOFTWARE OPERATING GUIDE

The FUTURA PRO SOFTWARE OPERATING GUIDE is on the Tablet.

Go to the “Options” > “Info” menu and tap on the appropriate icon (Fig. 72).

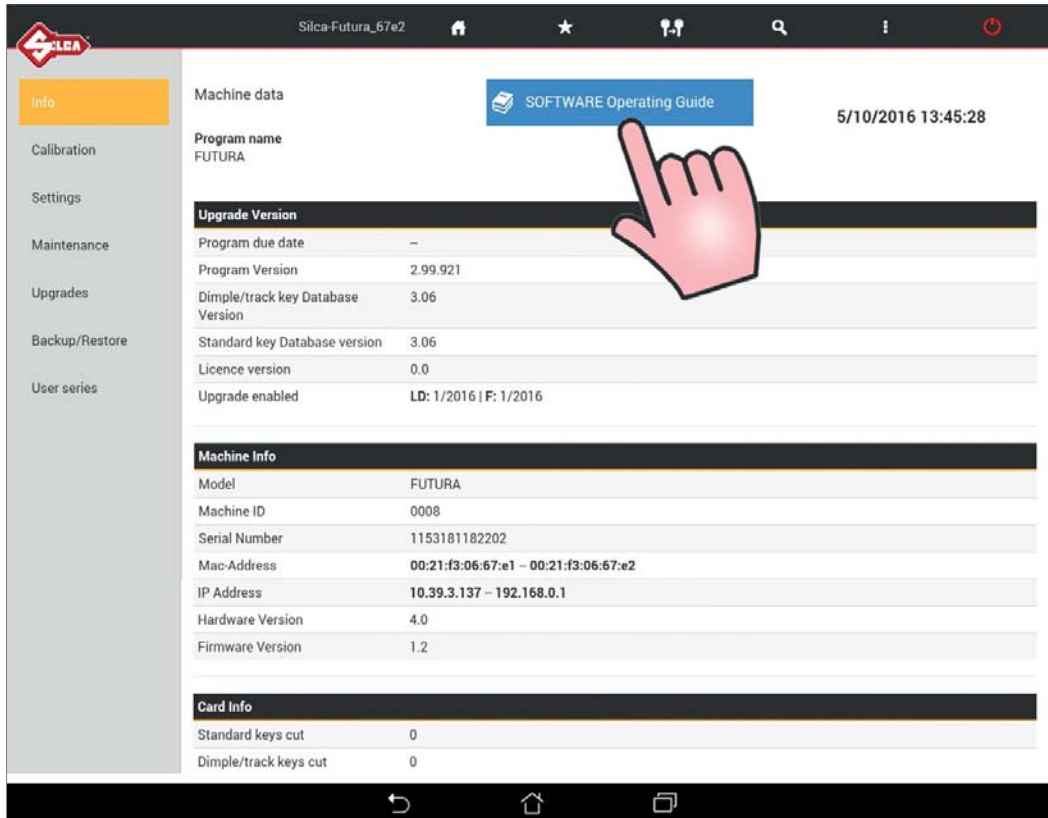
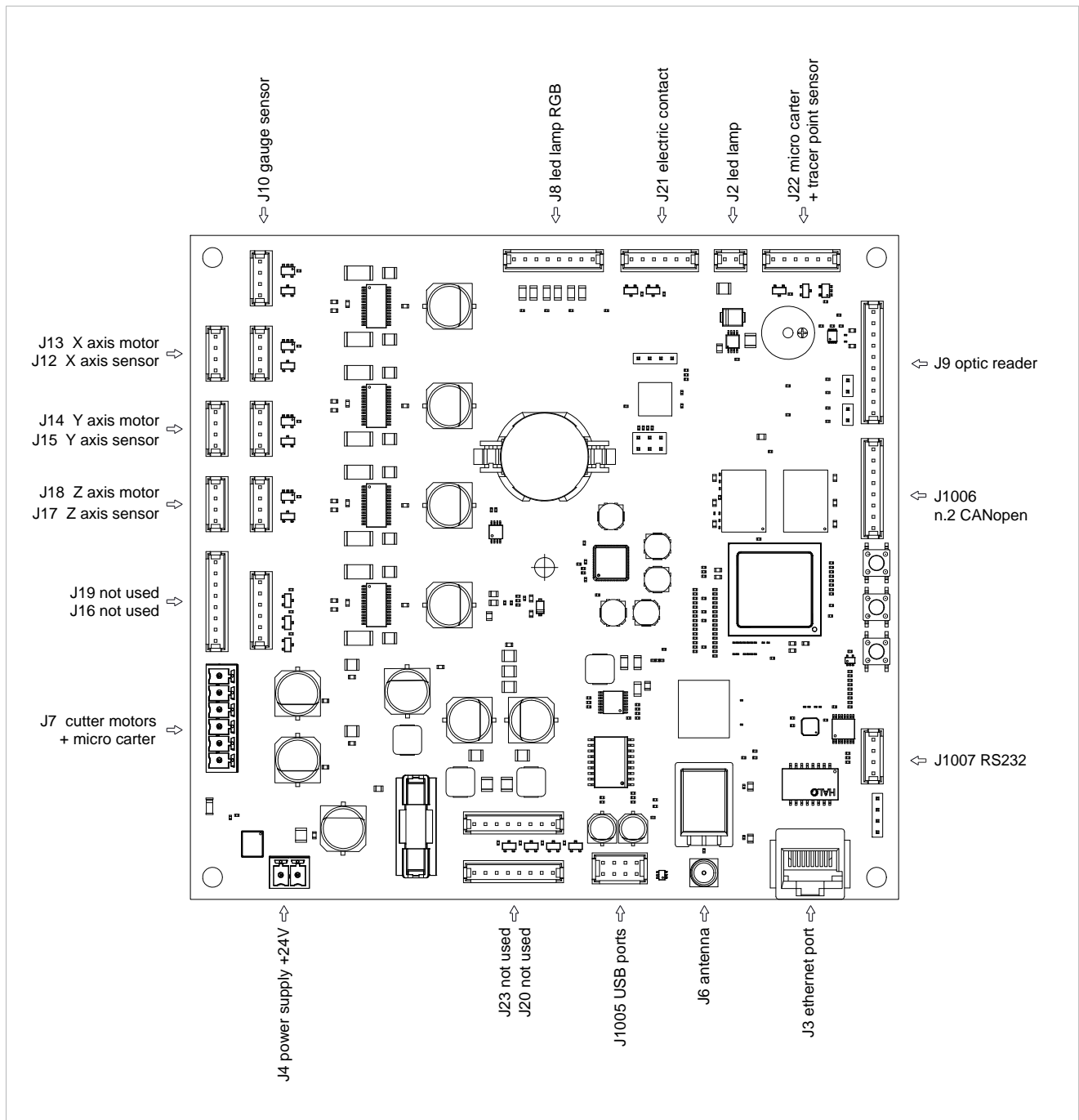
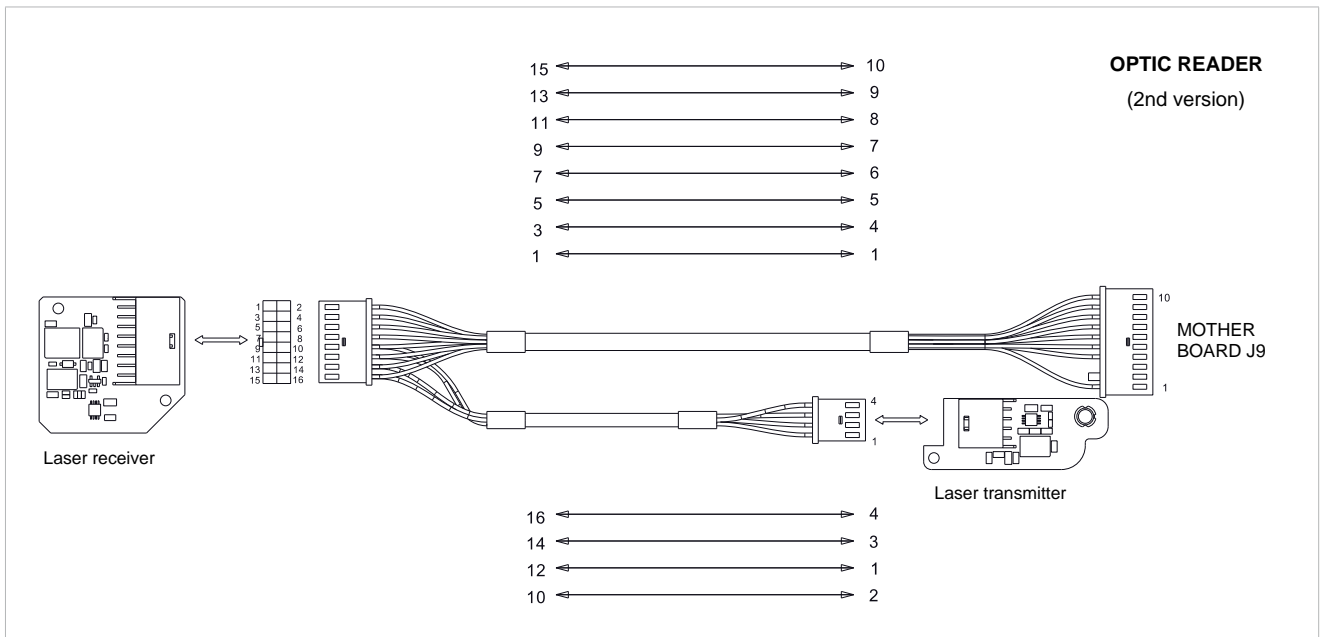
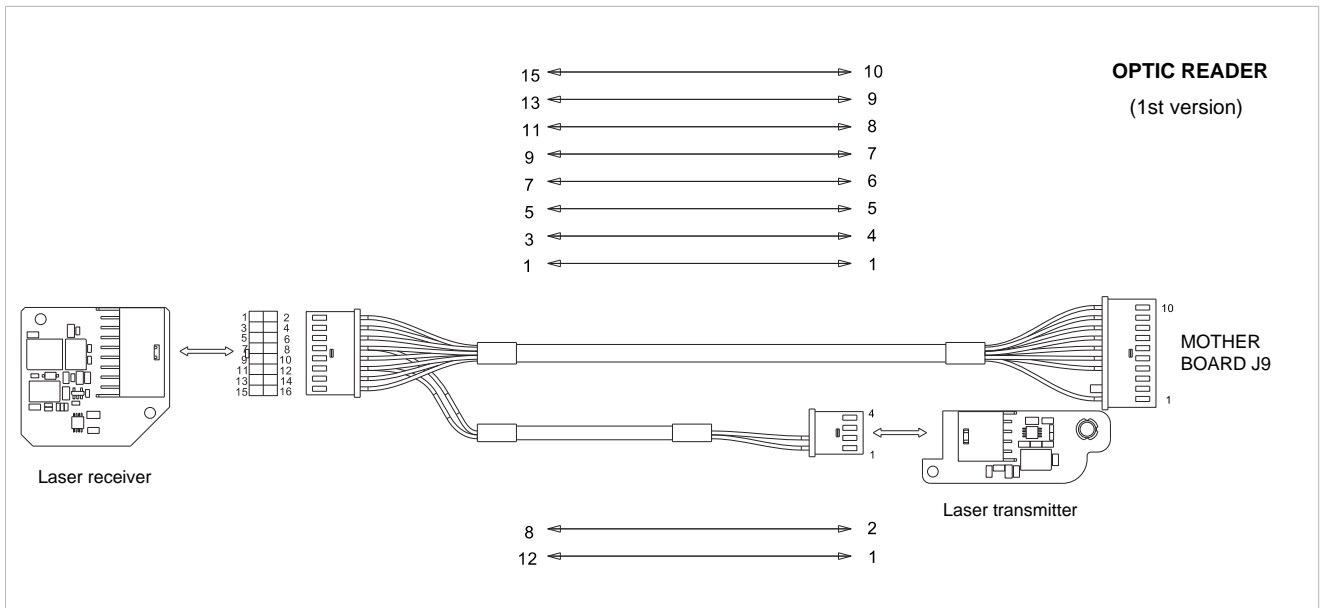
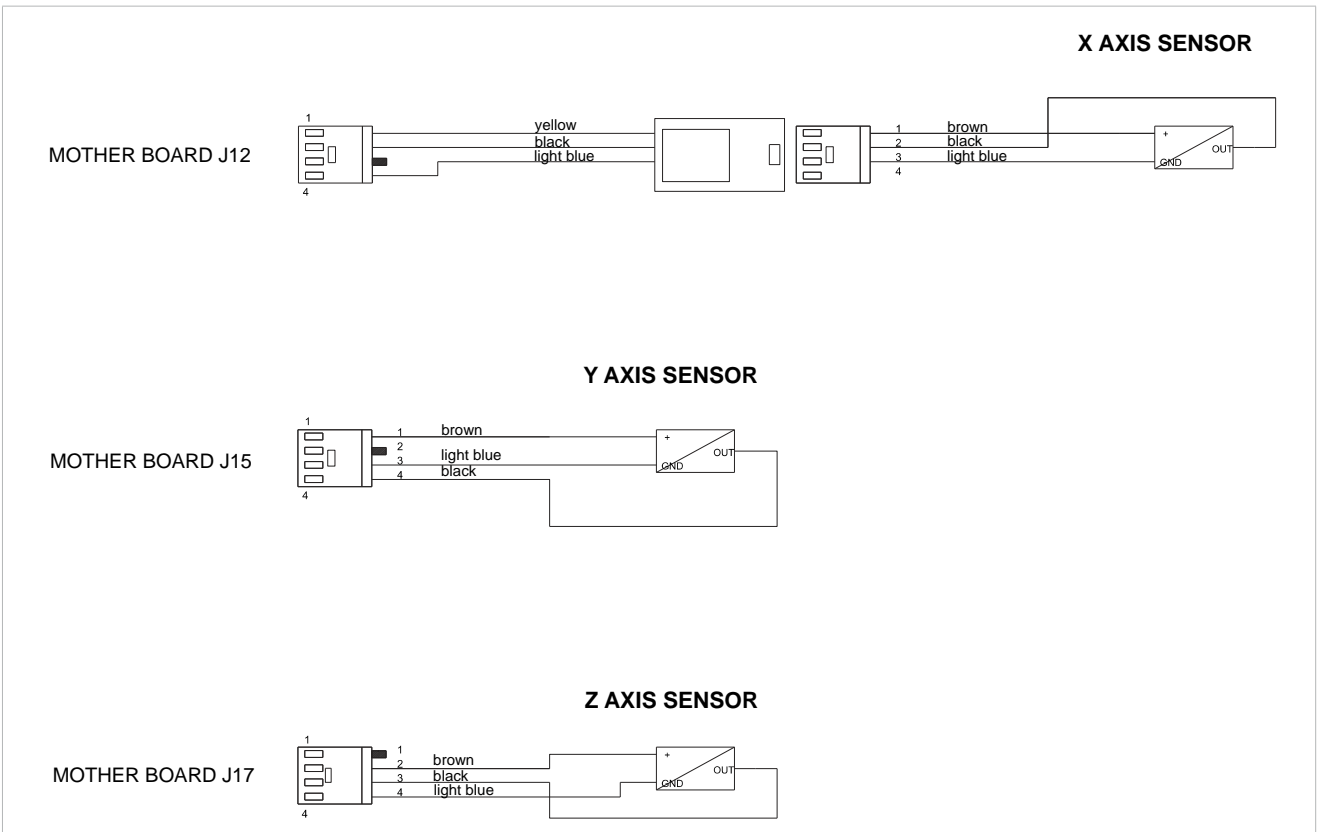
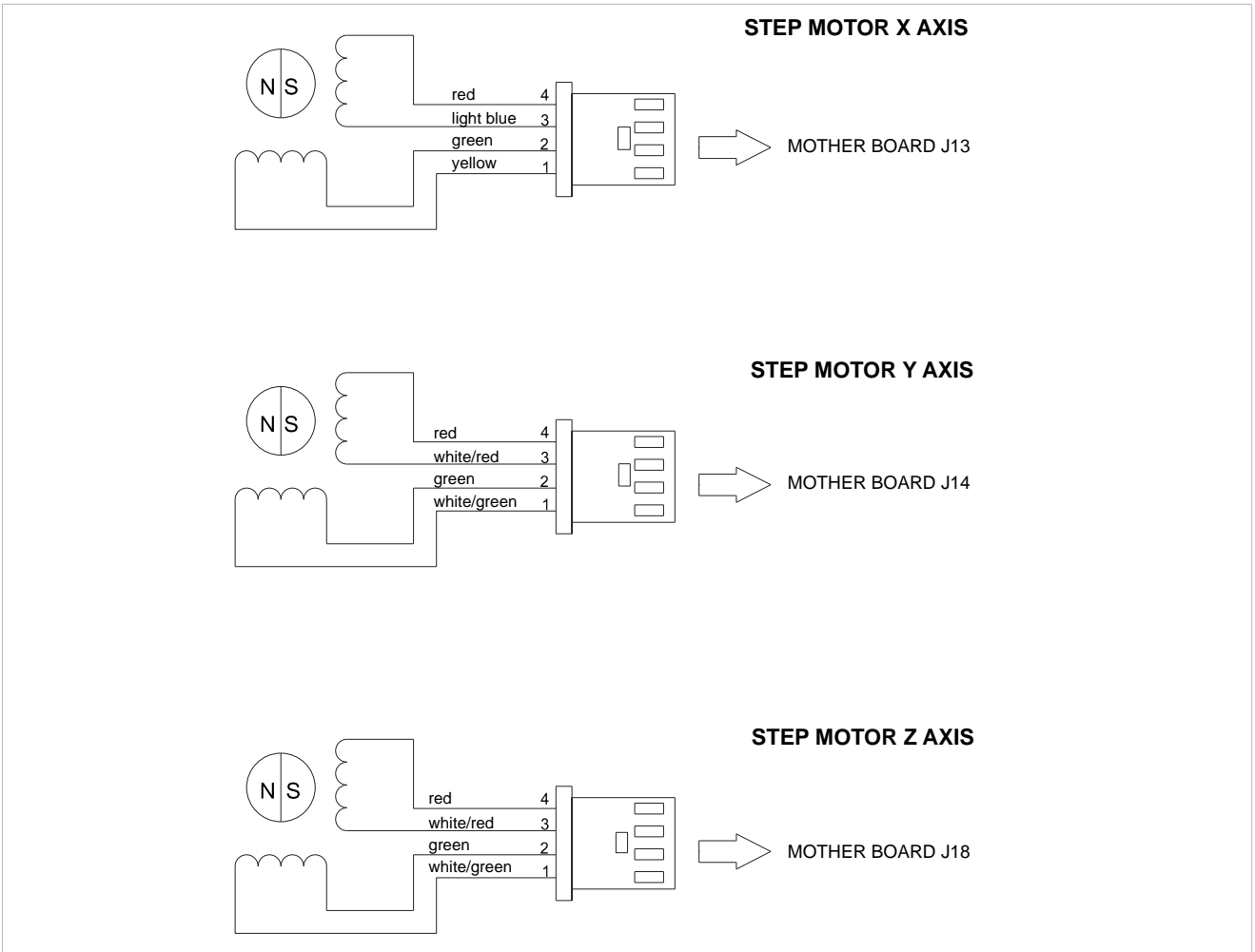


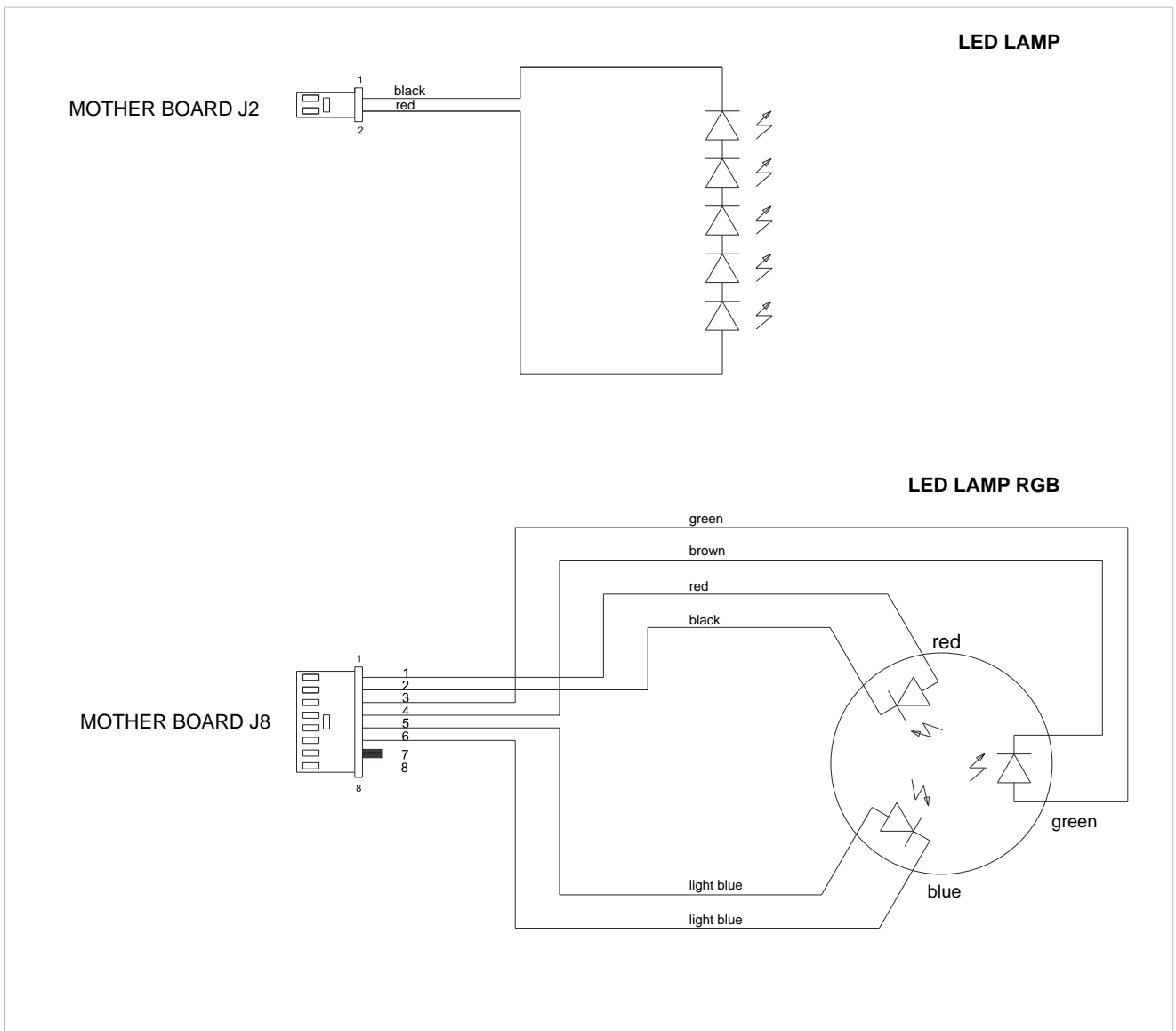
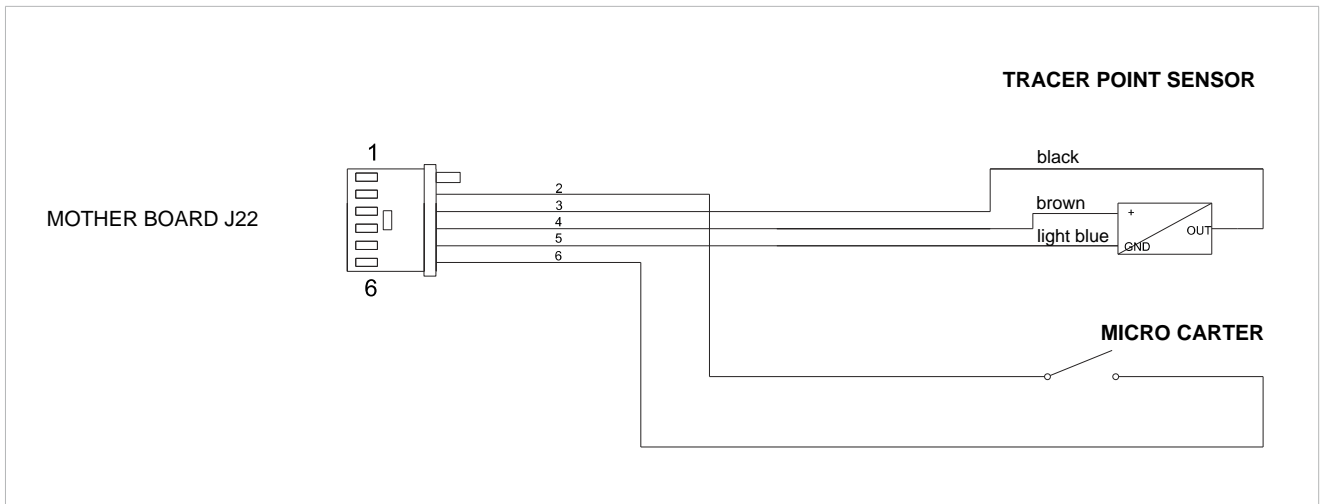
Fig. 72

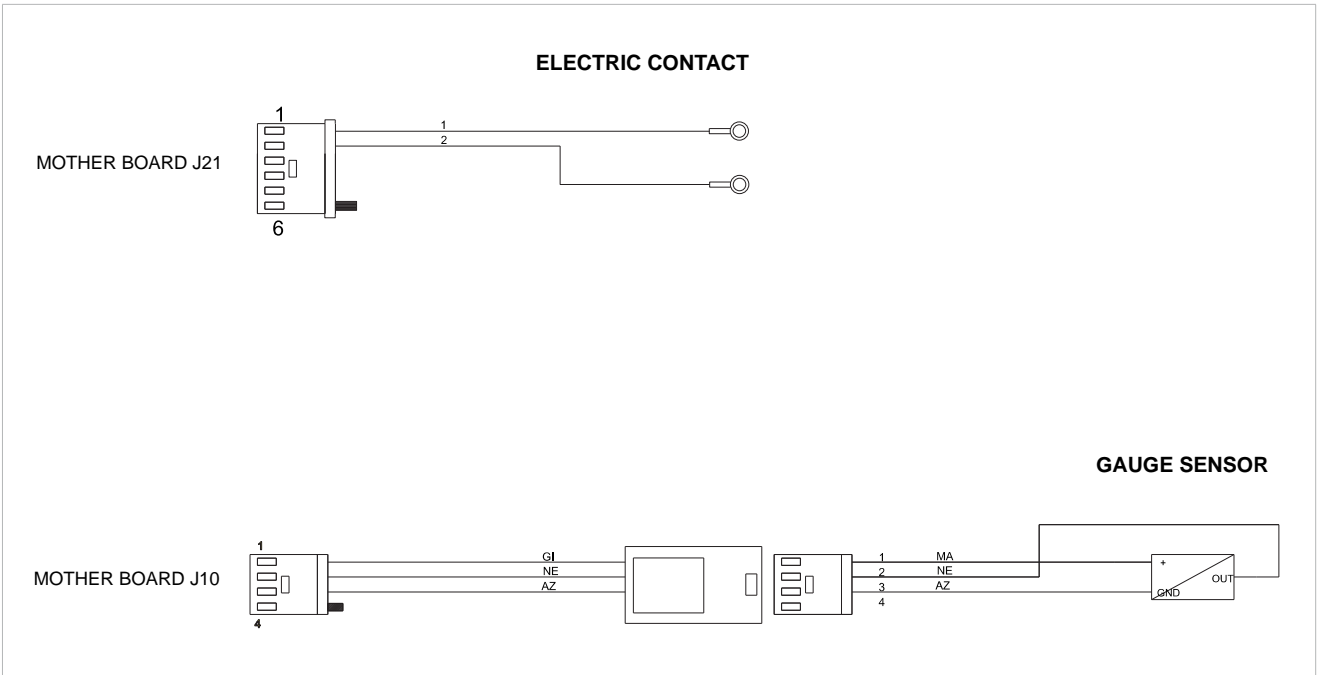
11 ELECTRICAL DIAGRAMS

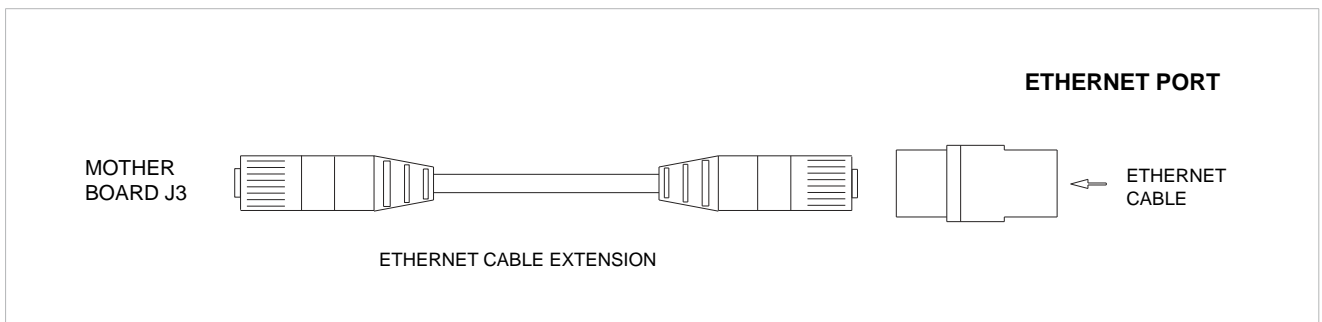
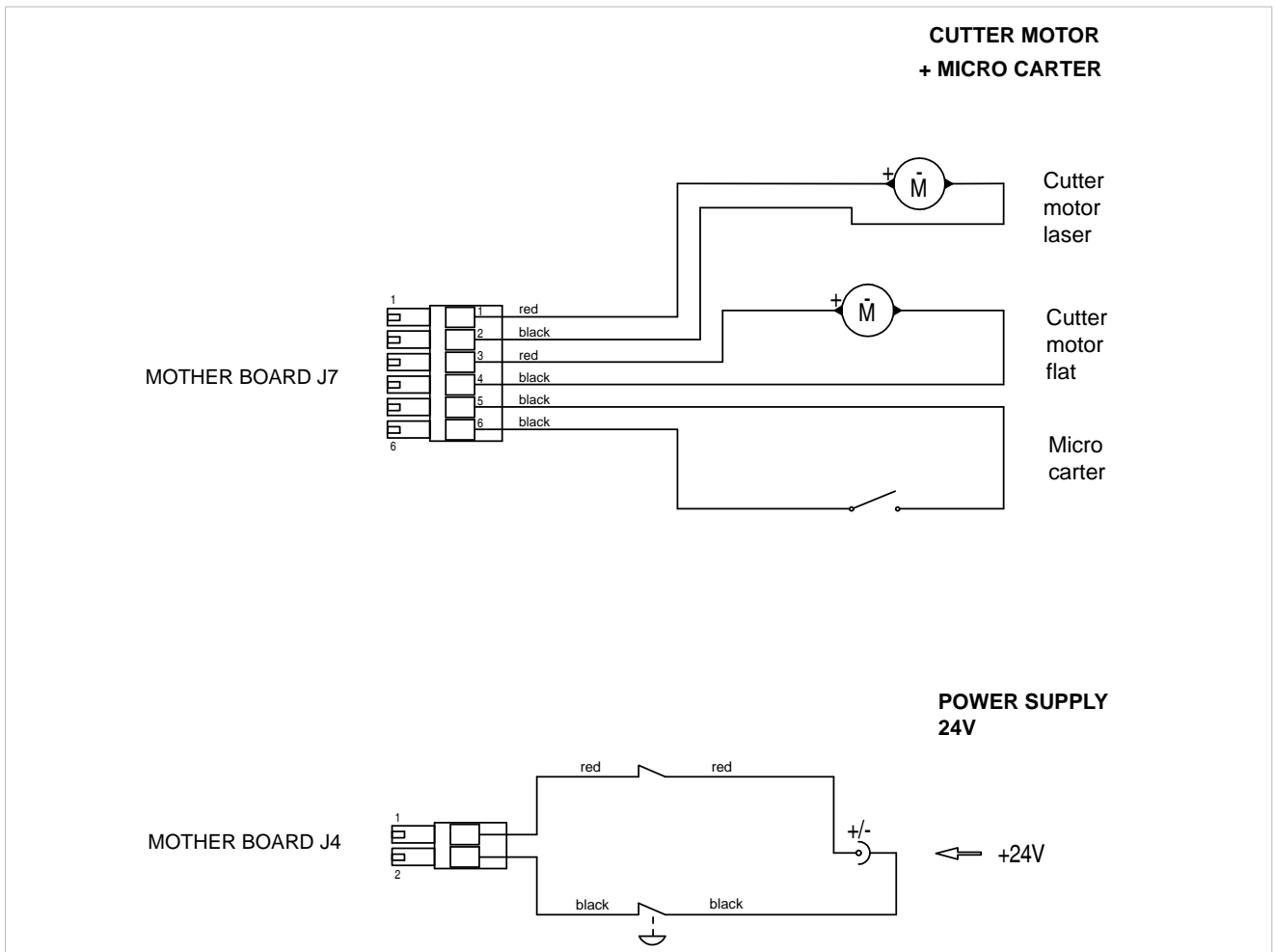












	EN	IT	DE	FR	ES	PT	NL
J2	Led lamp	lampada led	Led Lampe	Lampe Led	Lampara Led	Lâmpada Led	Led lamp
J3	Ethernet port	Porta ethernet	Ethernet-Anschluss	Port Ethernet	Puerto ethernet	Porta ethernet	Ethernetpoort
J4	Power feeder +24V	Alimentatore +24V	Speisegerat +24V	Alimentateur +24V	Alimentador +24V	Alimentador +24V	Voedingseenheid +24V
J6	Antenna	Antenna	Antenne	Antenne	Antena	Antena	Antenne
J7	Cutter motor + micro carter	Motore fresa + micro carter	Motor-Fräser + Mikro-Carter	Moteur fraise + micro carter	Motor fresa + micro carter	Motor fresa + micro carter	Freesmotor + cover micro
J8	Led lamp RGB	Lampada Led RGB	Led Lampe RGB	Lampe Led RGB	Lámpara Led RGB	Lâmpada Led RGB	Led lamp RGB
J9	Optic reader	Lettore ottico	Optischer Leser	Lecteur optique	Lector optico	Leitor optico	Optische lezer
J10	Gauge sensor	Sensore calibro	Lehre-Fühler	Senseur calibre	Detector calibre	Sensor calibre	Gauge sensor
J12	X axis sensor	Sensore asse X	Fuhler X-Achse	Senseur axe X	Detector eje X	Sensor eixo X	X-as sensor
J13	X axis motor	Motore asse X	Motor X-Achse	Moteur axe X	Motor eje X	Motor eixo X	X-as motor
J14	Y axis motor	Motore asse Y	Motor Y-Achse	Moteur axe Y	Motor eje Y	Motor eixo Y	Y-as motor
J15	Y axis sensor	Sensore asse Y	Fuhler Y-Achse	Senseur axe Y	Detector eje Y	Sensor eixo Y	Y-as sensor
J16	not used	non usato	nicht verwendet	non utilisé	no utilizado	não utilizado	niet gebruikt
J17	Z axis sensor	Sensore asse Z	Fuhler Z-Achse	Senseur axe Z	Detector eje Z	Sensor eixo Z	Z-as sensor
J18	Z axis motor	Motore asse Z	Motor Z-Achse	Moteur axe Z	Motor eje Z	Motor eixo Z	Z-as motor
J19	not used	non usato	nicht verwendet	non utilisé	no utilizado	não utilizado	niet gebruikt
J20	not used	non usato	nicht verwendet	non utilisé	no utilizado	não utilizado	niet gebruikt
J21	Electric contact	Contatto elettrico	Elektrische Kontakt	Contact électrique	Contacto eléctrico	Contato elétrico	Elektrisch contact
J22	Micro cover + tracer point sensor	Micro carter + sensore tastatore	Mikro Carter + Taster Fühler	Micro carter + senseur palpador	Micro carter + sensor palpador	Micro carter + sensor palpador	Cover micro + sensor tracer punt
J23	not used	non usato	nicht verwendet	non utilisé	no utilizado	não utilizado	niet gebruikt
J1005	USB ports	Porte USB	USB-Anschlüsse	Ports USB	Puertos USB	Portas USB	USB-poorten
J1006	n.2 CANopen	n.2 CANopen	n.2 CANopen	n.2 CANopen	n.2 CANopen	n.2 CANopen	n.2 CANopen
J1007	RS232	RS232	RS232	RS232	RS232	RS232	RS232



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