



OPTIKA

LIGHT

Operating manual
Original Instructions

D440013XA
vers.1.0

CE

EN

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

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GUIDE TO CONSULTATION

This manual has been produced to serve as a guide for users of the OPTIKA LIGHT device. 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	1
Machine description and safety	2-3-4
Proper use	5-6
Maintenance	7

Technical terms

Common technical terms are used in this manual. To assist those with little experience of keys, below is an illustration of the terms most frequently used:

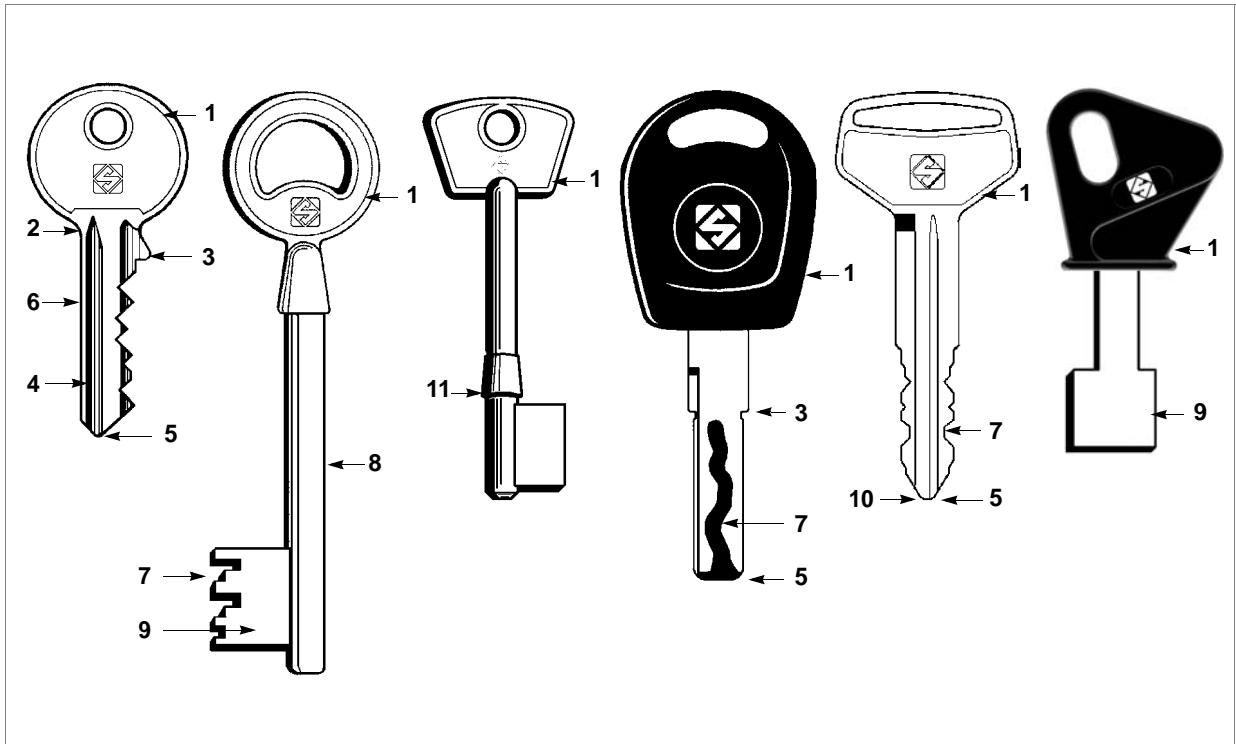


Fig. 1

- 1) Head
- 2) Neck
- 3) Shoulder
- 4) Blade
- 5) Tip
- 6) Back
- 7) Cutting
- 8) Stem
- 9) Bit
- 10) Tip stop
- 11) Shoulder stop

GENERAL

The OPTIKA LIGHT device has been designed according to the specifications of the Electromagnetic Compatibility Directives.

The material used in the manufacture of this device and components employed during its use are not dangerous and render OPTIKA LIGHT compliant with directives.

Use

Instructions for installation and use of the OPTIKA LIGHT device are those laid down by the manufacturer. If the device is used differently or for purposes different from those described in this manual, the customer will forego any rights he may have over Silca S.p.A. Furthermore, unforeseen danger to the operator or any third parties may arise from incorrect use of the machine.

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

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

Instructions manual

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

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

Further risks

There are no further risks arising from the use of the OPTIKA LIGHT device.

Protection and safety precautions for the operator

The OPTIKA LIGHT device is built entirely to the Machine Directive. The operations for which it has been designed are easily carried out at no risk to the operator.

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

The OPTIKA LIGHT device is designed with features which make it completely safe in all its parts.

• Power supply

The device is powered by electricity through a 15 Vdc universal power supply unit, provided.

Attention: as the device has no master switch, it remains live when connected.

ATTENTION: if the power supply must be cut off, wait at least 10 seconds before re-connecting OPTIKA LIGHT to the mains.

• 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 replaced wrongly or unsafely.

• Software Update

The machine can be updated by USB PEN (provided with the machine) using the Silca Remote Service program (ch. 6.3.8, page 36).

• Machine identification

The OPTIKA LIGHT device is provided with an identification label that shows the serial number (fig. 2).

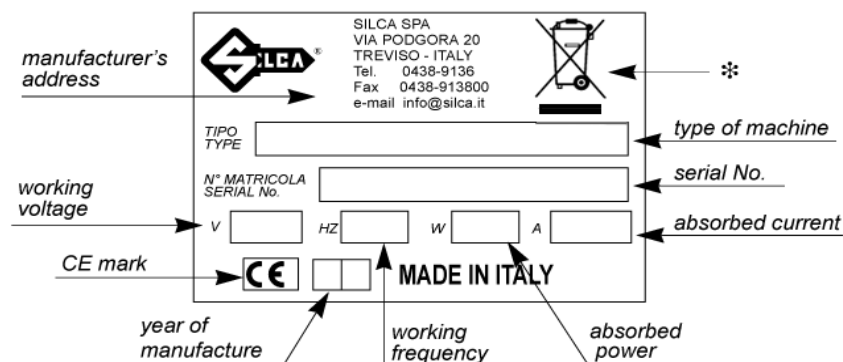


Fig. 2

(*) see ch.8 DISPOSING OF MACHINE, page 40.

1 TRANSPORT

The OPTIKA LIGHT device is easily transported and is not dangerous to handle. The device can be carried by one person, even when packed.

1.1 Packing

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

Inside the packing box the device is fully protected by expanded polyethylene shells.

The shells and cardboard box ensure safe transportation and protect the machine and all its parts.

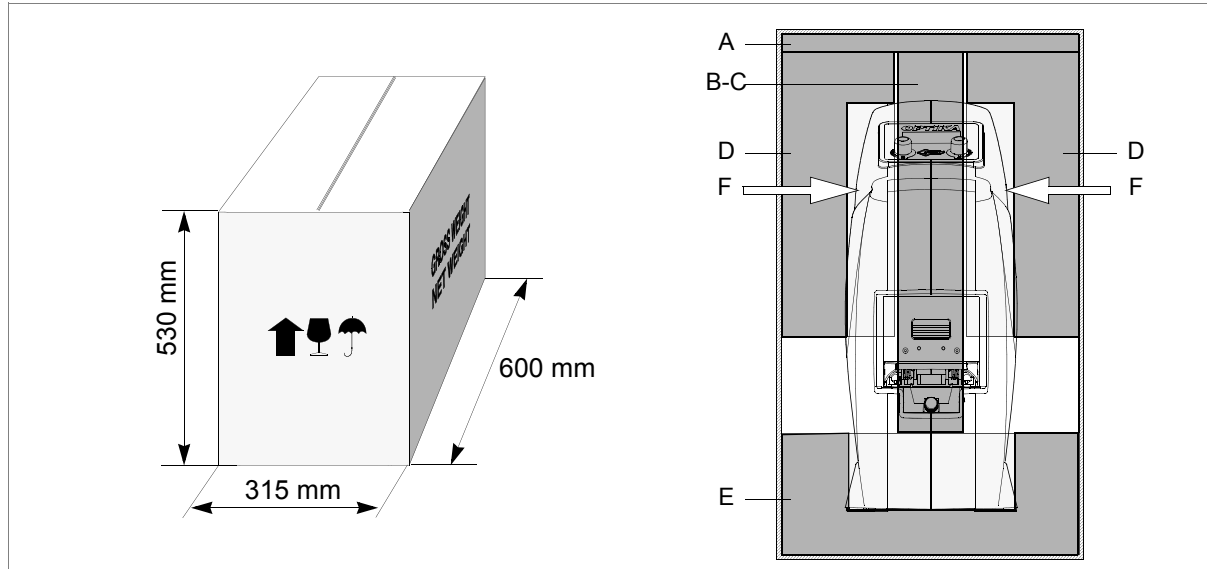


Fig. 3

1.2 Transport

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

1.3 Unpacking the machine

ATTENTION: if the device comes from a cold environment, to prevent the effect of condensation on the devices lenses it is necessary to wait a few hours before use (unpacking).

To remove the machine from the packing box:

- 1) Open the box without damaging it so that it may be used again (removals, dispatch to manufacturers for repairs or servicing).
- 2) Remove the upper protective panel (A) and the two blocks (B) and (C).
- 3) check the contents of the box, which should comprise:
 - 1 OPTIKA LIGHT device enclosed in protective shells
 - 1 power supply unit
 - 1 accessories kit
 - 1 set of documents, including: operating manual, spare parts list and guarantee
- 4) Take out the 2 side protection shells (D) by pulling them upwards.
- 5) Grip the two top cavities (F) and lift the machine.

1.4 Handling the machine

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

This operation can be carried out by one person, firmly holding the device gripping the two top cavities (F) or the base.




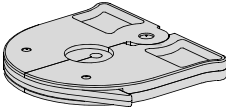
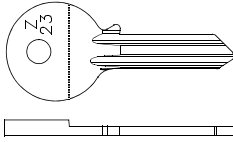
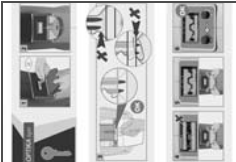
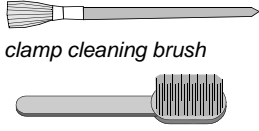
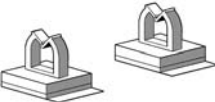
ATTENTION: never lift the device by holding the clamp opening lever (B) (fig. 7, page 7).

1.5 Checking for damage

OPTIKA LIGHT 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.

2 ACCESSORIES PROVIDED

The tools provided by Silca are those necessary and sufficient for carrying out the operations involved.

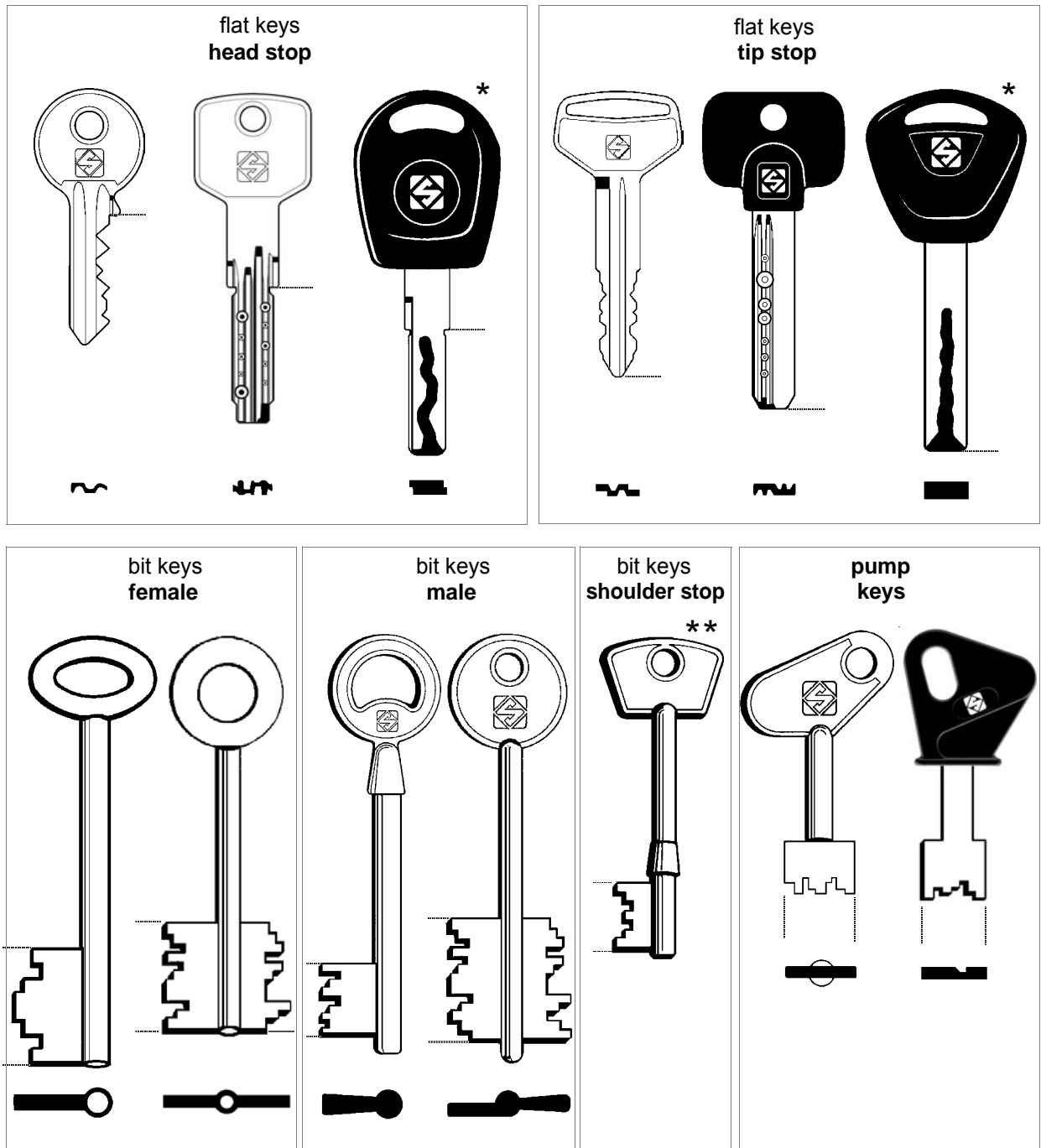
 <p>Power supply unit</p>	 <p>USB PEN * For use with Optika Light applications only</p>
 <p>Power cable</p>	 <p>Light shade device for bit and pump keys</p>
 <p>Setting template Z23</p>	 <p>Quick Guide to apply to the device (ch.4.1)</p>
 <p><i>clamp cleaning brush</i> <i>key cleaning brush</i></p> <p>Cleaning tools</p>	 <p>Adhesive hooks for Quick Guide</p>

(*) **USB PEN** contains:

- **Silca Remote Service"** program with which to download the updates for the Optika Light program directly from the Silca web site (ch. 6.3.8, page 36).
- **Silca key database** sub-divided into geographical macro areas.
- **CUSTOM key database** created by user, if applicable.
- **Recovery program for Optika Light.** (ch. 6.3.8, page 36)

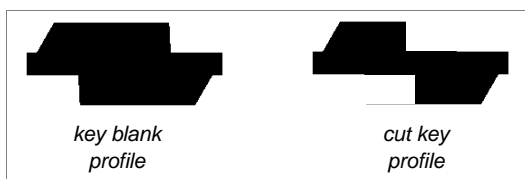
3 DESCRIPTION OF DEVICE

OPTIKA LIGHT is a key-reading device that incorporates high quality performance and precision. OPTIKA LIGHT reads the profile and recognises most flat, bit and double bit keys if they are included in the selected database.



(*) With a cut key the profile is read properly and recognized only if the cuts have not touched or altered the part used for recognition. Example (fig. 4):

Fig. 4



(**) keys with a centre stop are run in COPY KEY only and require an optional adapter (ch. 6.2.3, page 28).

3.1 Main characteristics

- **KEY CLAMP**

The standard clamp is universal and takes all keys provided by Silca.

The clamp is opened and closed by means of a lever (B) (fig. 7, page 7).

The clamp has a rotation system that facilitates alignment of the keys. To rotate the key simply move the lever to one side (B).

The clamp is easily removed to facilitate cleaning and maintenance operations) (ch. 7.1, page 38).

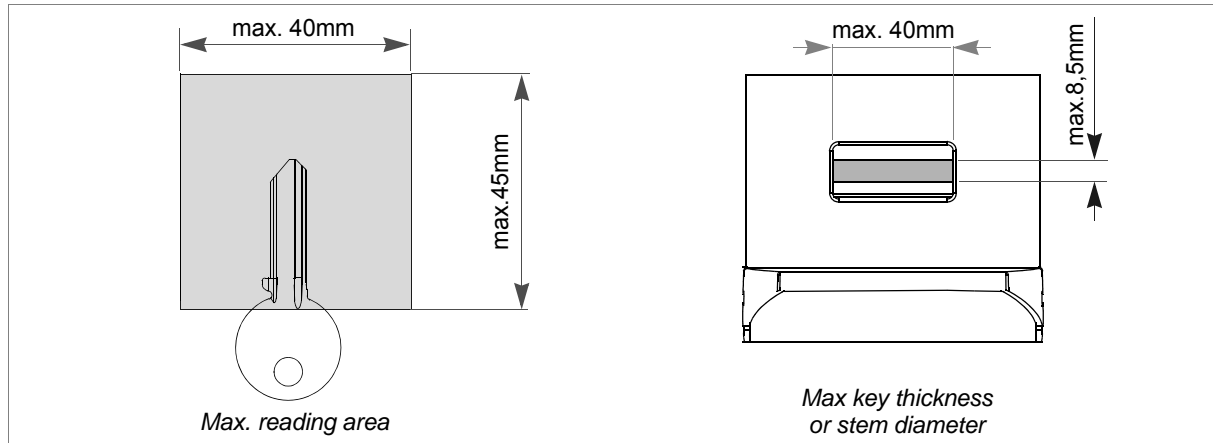


Fig. 5

- **DISPLAY**

The display located on the top of the device comprises 5 lines of 20 characters each.

- **CONTROLS**

The pointer is moved by rotating the two knobs clockwise or anticlockwise.

- Press ENTER to confirm your choice or the operation in progress.
- Press ESC to go back or abandon the operation in progress.

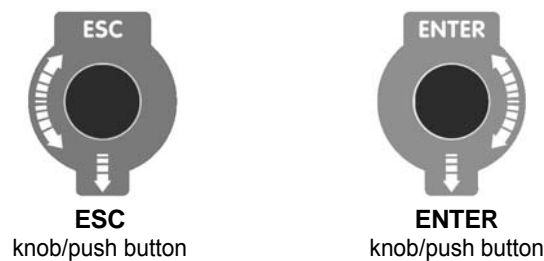


Fig. 6

- **STAND BY**

When the device is connected and switched on it remains on, as it does not have a master switch. If it is not used within approximately **5 minutes** of switching on, it automatically goes onto stand by, the display goes black and key illumination goes off. This also happens when the device is left in order to carry out a search for a key. In any case, just press or rotate one of the 2 knobs to reinstate normal operation.

Nota bene: the Stand By function has been adopted to safeguard duration of the display.

Nota bene: 16 hours after start the machine turns itself off automatically.

3.2 Technical Data

DIMENSIONS: width: 190 mm - depth: 480 mm - height: 400 mm

NET WEIGHT: 9Kg.

3.3 Main operating parts



Fig. 7

OPTIKA LIGHT device

- A - Key clamp
- B - Clamp-opening lever
- C - Display
- D - ENTER Knob/push button
- E - ESC Knob/push button
- F - Illuminators
- G - Power supply socket
- H - Serial receptacle
- I - USB receptacle (slave)
- L - Double USB receptacle (master)
- M - Power supply unit
- Q - Quick Guide
- Q1 - Adhesive hooks for Quick Guide

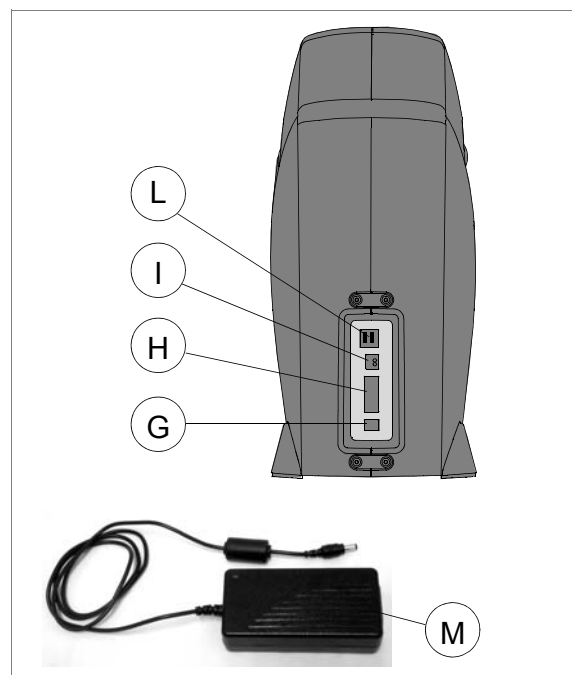


Fig. 8

4 DEVICE INSTALLATION AND PREPARATION

The device can be installed by the purchaser and does not require any special skills. However, some checks and preparation for use have to be carried out by the operator.

4.1 Separate Parts

- Power supply cable and power supply unit**
 Connect OPTIKA LIGHT to the power supply unit (M) and connect to the power source by means of the power supply cable (fig. 9).

- USB PEN**
 Install the USB PEN in one of the 2 ports provided on the back of the device (fig. 9).

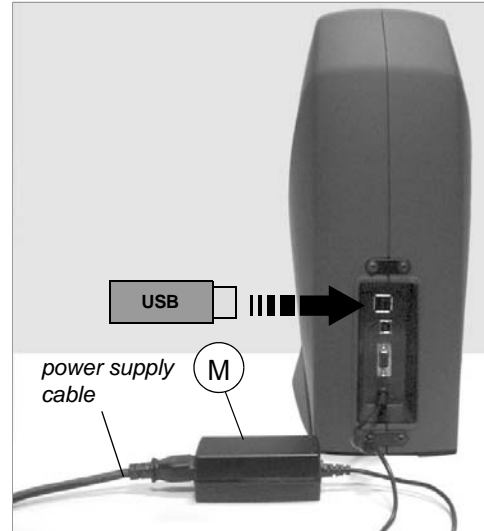


Fig. 9

- Quick Guide**

Apply the 2 adhesive hooks provided to the right or left-hand side of the Optika Light device, whichever is the most convenient for the operator.

Attention: the distance between the 2 hooks should be the same as the distance between the 2 holes on the Quick Guide sheet (fig. 10).

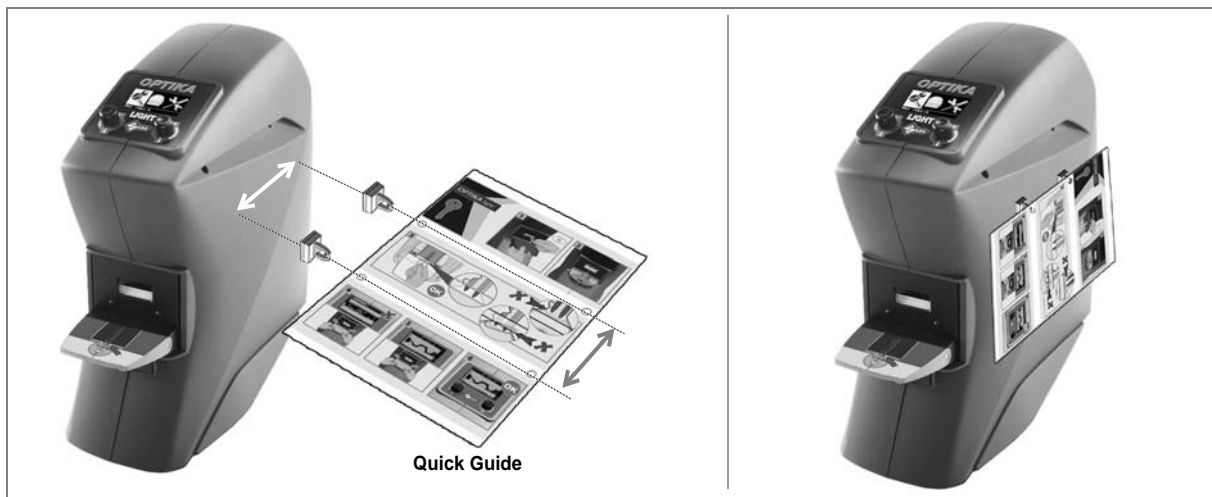


Fig. 10

4.2 Connection to external supply points

For the protection of the device and the operator's safety it is extremely important to ensure that it is connected to the power mains with the right voltage and by means of a properly **earthed differential switch**.

4.3 Environmental conditions

The OPTIKA LIGHT device uses a series of instruments whose operation could be significantly affected by the environment in which they work. The most suitable conditions for the device are:

- Temperature between +10° C e +40° C
- Relative humidity 60% (Max) (without condensation)
- It is in any case advisable to avoid excessively damp or badly ventilated areas.

Nota bene: like any device using lenses for reading images, whenever the temperature goes suddenly from low (0°C or lower) to high (20-25°C), the lenses may cloud and condensation form. In such cases the device must be placed in an area with constant temperature of 20°C if possible, until the condensation on the lenses evaporates and the device can operate in normal conditions.

4.4 Positioning

Place the OPTIKA LIGHT device on the mat provided, on a solid horizontal worktop suitable for the weight of the machine (9 Kg).

ATTENTION: position OPTIKA LIGHT device away from sources of light (spotlights, lamps, etc....).

ATTENTION: it is advisable to place the device in a clean dust-free environment.

To facilitate use and maintenance, leave a clearance of at least 200 mm round the device (fig. 11).

Check that the machine is firmly placed and steady; its horizontal position avoids obstacles during reading.

ATTENTION: make sure the device (power supply unit) voltage is suitable for your power supply, which should be earthed and provided with a differential switch.



Fig. 11

4.5 Description of work station

The device needs only one operator, who has the following controls at his/her disposal (fig. 7, page 7):

- display (C);
- knob/push buttons (D) (E);
- clamp (A).

5 USING OPTIKA LIGHT

Nota bene: the OPTIKA LIGHT device can be used in Stand Alone mode only.

5.1 Interface flow on the machine

OPTIKA LIGHT comes with:

- a graphics display of 5 lines and 20 characters
- 2 knobs/push buttons that move the display pointer up/down, right/left; functions are confirmed by pressing the knobs.



Fig. 12

5.2 Initial operations

When the device is turned on, the display will show the following message:

```

OPTIKA
Ver.Sw: 1.00.001 LIGHT
Ver.DB: 1.00
  
```

Nota bene: only on initial start, the display will show the following message:

```

Italian
*English
French
German
Spanish
  
```

- 1) Turn the ENTER knob clockwise or anticlockwise to scroll and select the required language.
- 2) Press the ENTER knob to confirm the language selected (*).

Nota bene: the display shows the following message only on initial start:

Select Area
AFRICA-M. EAST
AMERICA
ASIA-OCEANIA
EUROPE
ITALY
CUSTOM
- >

You are required to choose the GEOGRAPHICAL AREA (Database/Market) to load for the search.

ATTENTION: operation possible only with the USB PEN inserted.

The list comprises groups of key blanks referring to several GEOGRAPHICAL AREAS and a group that can be defined by the USER (CUSTOM).

Use the Key Reader Program to create a group of CUSTOM key blanks.

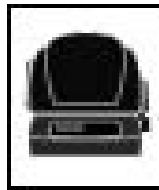
- 1) turn the ENTER knob clockwise or anticlockwise to scroll and select the database to use.
- 2) press the ENTER knob to confirm the database selected.

After the message that appears during data download, the display shows the symbols for the functions involved:

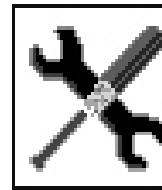
Key search



Key copy



Options



The display shows the first function of 'Key search' already selected.

- To enter one of the 3 functions in the menu simply turn the ENTER button/knob, select the function (illuminated symbol) and press **ENTER**.
- Press the **ESC** push button to leave the function.

5.3 Fitting or removing the key into or from the clamp

WARNINGS

To read the key and use the machine properly remember that:

- To avoid condensations on the devices lenses, it is recommended to not move the device from a cold environment to a warm environment. If this is the case, it is recommended to wait a few hours before use of the device.
- The key must be carefully cleaned. Any residue on the profile, such as grease, deposits, filaments, dust or whatever, may cause errors (use the brush provided).
- The key must be of the required type (see ch.3).
- The key must not be all black (plastic or surface treatment).
- For bit, double bit and pump keys the light shade adapter must be fitted.
- The key must be intact. If it is broken it must have a regular profile.
- The key must not be bent or twisted and the part to be read must be free of dents (especially bumps in the material on the tip, or burrs).
- The key must be fitted into the centre of the clamp and not sloping (fig. 18). Make sure it is not facing too far to the right or left (fig. 19).
- If the key is one of a bunch, it can still be read, as long as the clamp functions and the key position are not affected.
- Only keys can be fitted into the OPTIKA LIGHT device clamp (for maximum dimensions see fig. 5, page 6).

Fitting

Nota bene: make sure the clamp (which can be opened and rotated) is well centred and not turned fully left or right (fig. 13).



Fig. 13

5.3.1 KEY INSERTION

- 1) Take hold of the key head with one hand and with the other lower the clamp opening lever (fig. 14).
- 2) With the clamp open fit the key, taking care that:
 - the key is well centred on the clamp (not too far to the right or left) (fig. 19).
 - it is aligned as well as possible (not turned right or left) (fig. 17).
- 3) For bit keys make sure the key head is aligned horizontally.



Fig. 14

5.3.2 BIT KEY INSERTION WITH LIGHT SHADE DEVICE

Opening the light shade device:

Hold the side of the adapter and lift the closing tab.

Closing the light shade device:

Insert the key to be dimmed and close the adapter by lowering the lever until it clicks into place.



Fig. 15 - light shade device

5.3.3 KEY REMOVAL

Nota bene: the key must be removed only when the clamp is open. Removing it with the clamp closed will damage the illuminators and the key plate (glass).

- 1) Take hold of the key head with one hand and with the other lower the clamp opening lever (fig. 16).
- 2) With the clamp open, lift the key in it so that the glass plate is not scratched and remove the key.
- 3) Release the clamp opening lever.



Fig. 16

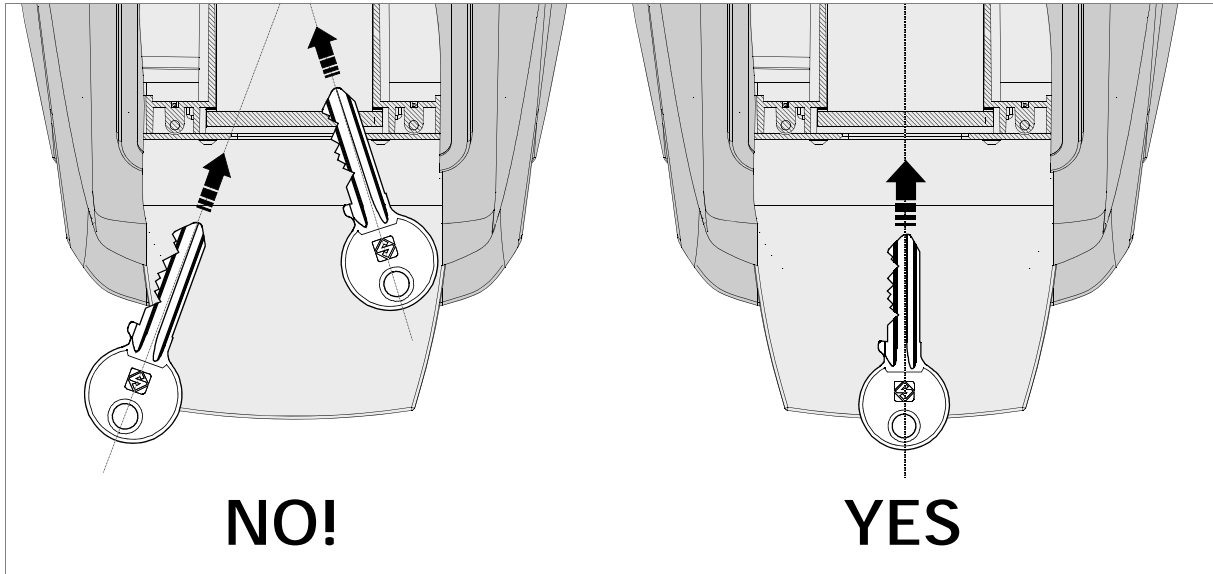


Fig. 17

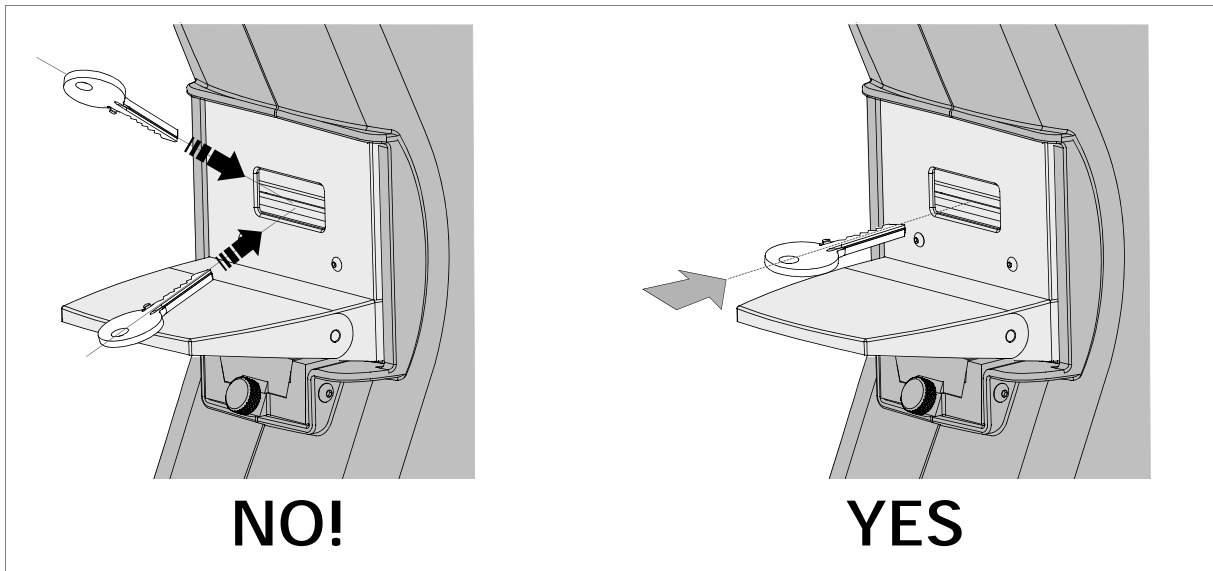


Fig. 18

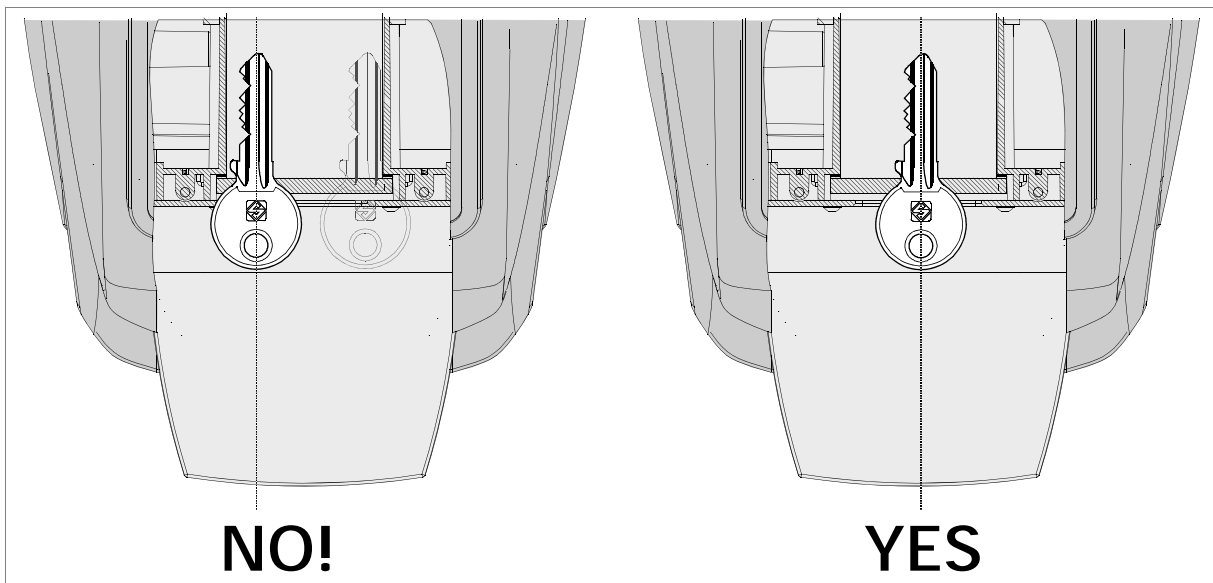


Fig. 19

6 INSTRUCTIONS FOR USE

The main functions that can be carried out on the OPTIKA LIGHT device are:

- **Key Search**
- **Key Copy**
- **Options**

6.1 Key search

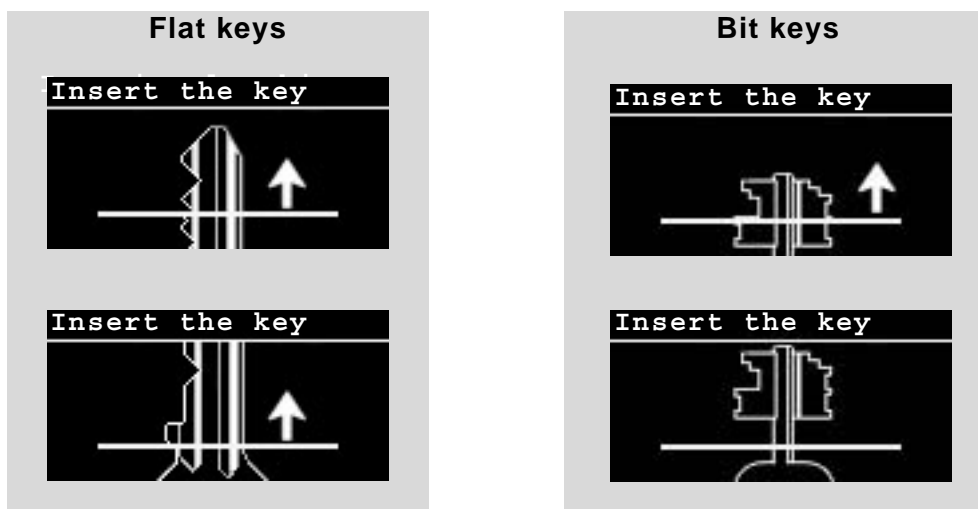


- This function is used to read/check the profile of an original key and find the corresponding references if they are included in the database involved.
- This function is used to detect the profile of a spare key (not Silca) when the Silca comparatives are not known, by finding the corresponding reference (if included in the database).

Press ENTER; the display will show:

```
Select key type:
Flat - Shoulder stop
Flat - Tip stop
Bit male
Bit female
Pump
Special bit female
```

- Turn the ENTER knob to select the type of key to be searched for (the description will be highlighted by a yellow strip over black characters).
- Press the ENTER button and the display will show the message (the same for all types of keys):



- Insert the key according to the instructions below.

6.1.1 KEY POSITIONING

ATTENTION: the key must be carefully cleaned. Any residue on the profile, such as grease, deposits, filaments, dust or whatever, may cause errors (use the brush provided).

Fit the key into the clamp (ch.5.3) and pay attention to the following instructions:

Example for FLAT KEYS (fig. 20)

- a) the stop must be inside the clamp.
- b) the end of the cutting channels on the profile must be situated in the illuminator area.

Example for BIT, PUMP, SPECIAL FEMALE KEYS (fig. 21)

- a) the bit must be entirely inside the clamp.
- b) there must be at least 10mm of the stem from the bit to the illuminators.
- c) the part of the stem outside the clamp must be enveloped by the light shade device.

Flat keys

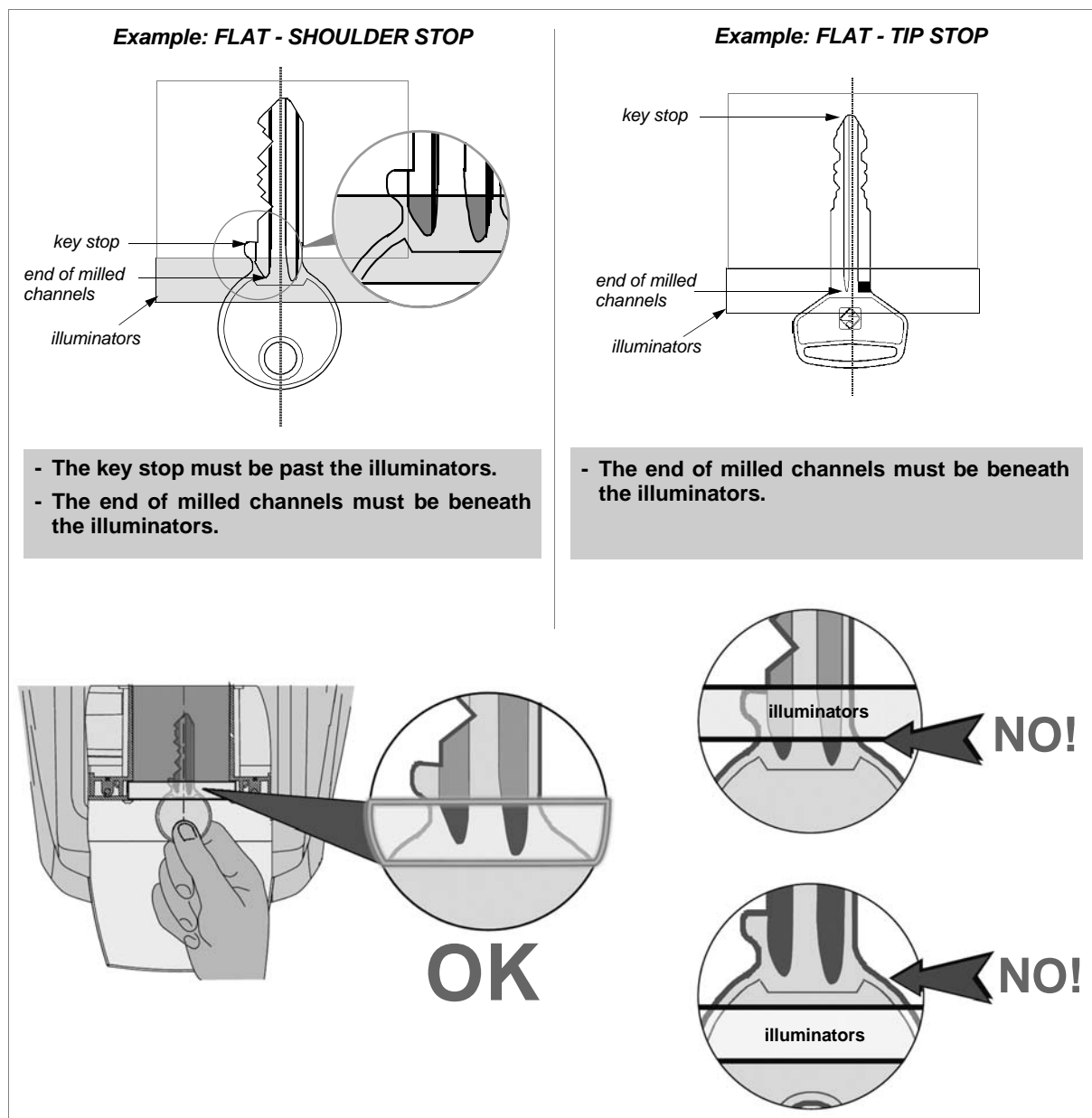


Fig. 20

Bit keys

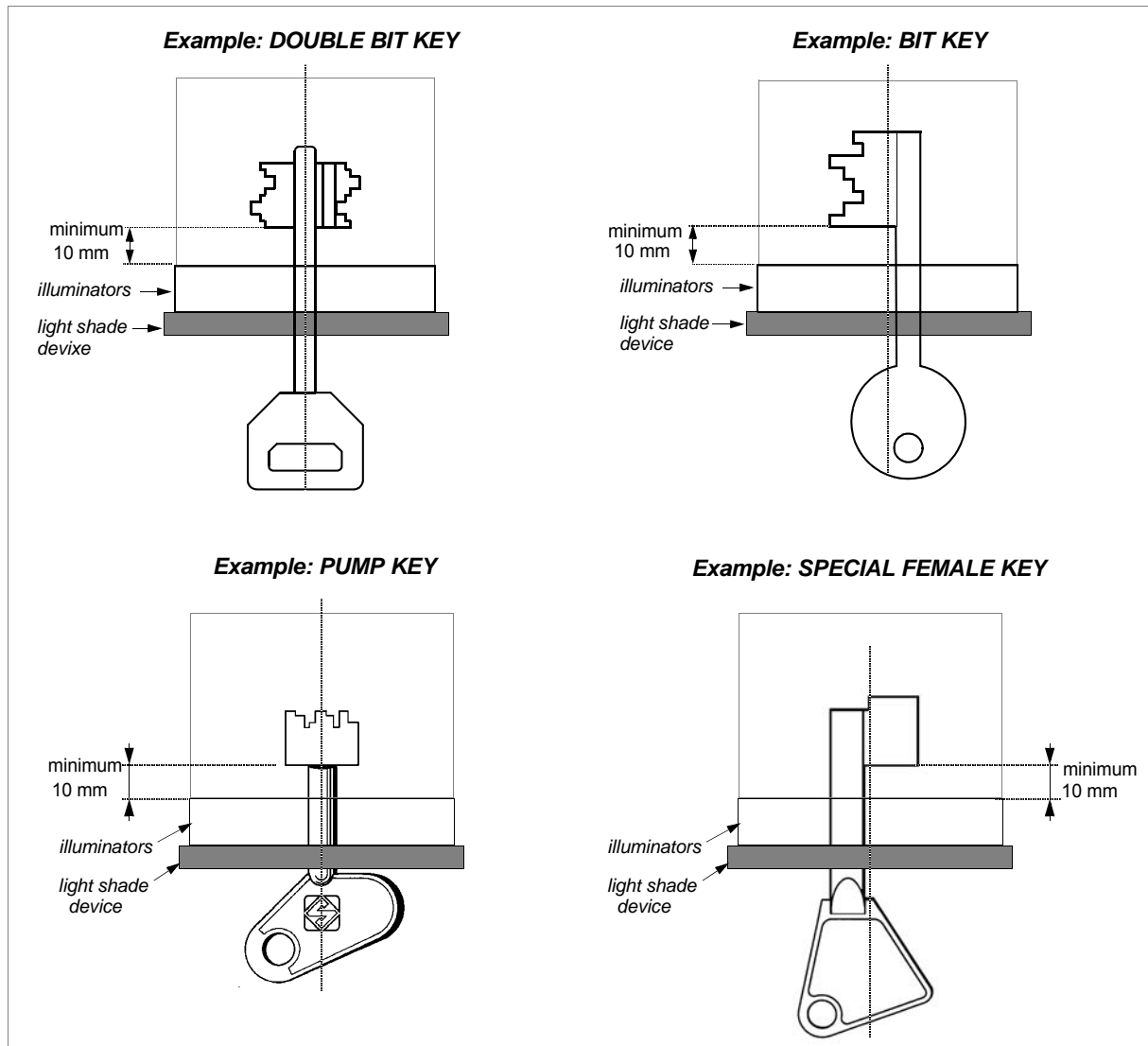



Fig. 21

- The bit must go past the illuminators.
- A minimum of 10 mm. of stem must be inserted.
- The key stem must be entirely surrounded by the light shade device.

When the key involved is inserted, the display will show the profile.

6.1.2 VIEWING THE PROFILE

CASE 1: PERFECT VIEW OF PROFILE

The profile is perfectly visible on the display, the profile luminosity bar is complete and the 3 fine lines on the alignment bar are visible. The bottom right-hand corner of the display shows a smiley  and after two seconds the search starts automatically.

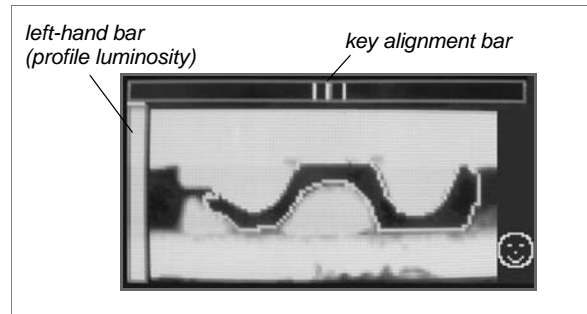


Fig. 22

CASE 2: POOR VIEW OF PROFILE

The profile is NOT clearly visible on the display; the left-hand luminosity bar is incomplete and the 3 fine lines on the alignment bar are not all visible.

Check the position of the key in the clamp:

- move the key slightly forward or back and/or turn the clamp slightly to the left or right until the display shows the conditions in case 1.

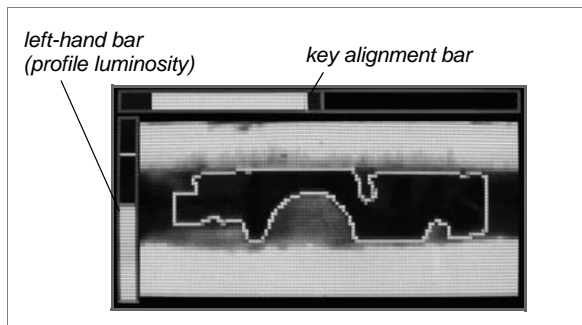


Fig. 23

NOTES:

If the left-hand bar (referred to the luminosity of the profile) on the display is not completely upwards, lightly push the key head so that it advances well into the clamp, or pull it out slightly (fig. 20).

The end of milled channels must be beneath the illuminators in any case. Sometimes the profile and the surface condition of the key do not allow it to extend completely (the left-hand bar could be half-way). With a left-hand bar below 70% of the total, key recognition is either not good and/or wrong.

If the 3 fine lines on the alignment bar are not visible on the display, turn the clamp slightly to the left or right (fig. 24) until the best conditions possible are achieved.

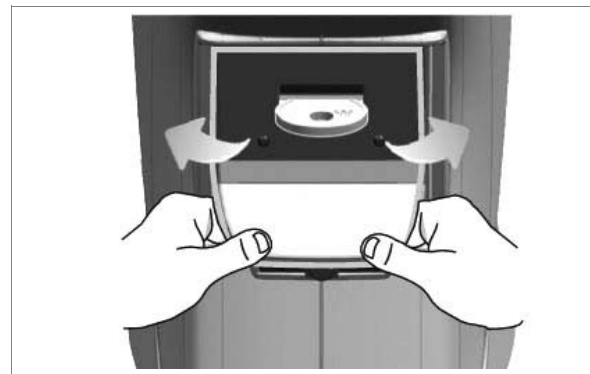


Fig. 24

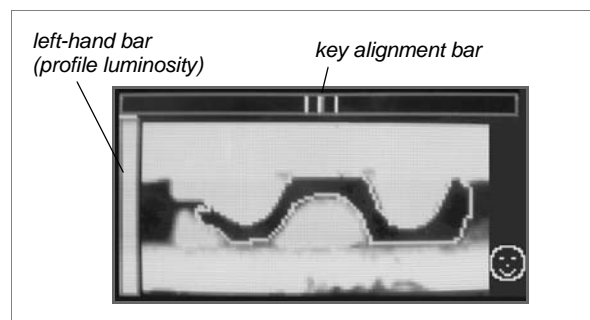


Fig. 25

CASE 3: BADLY FOCUSED VIEW OF PROFILE

The profile is not well defined even after attempting the adjustments described in case 2; the display does not show the smiley 😊, but in any case the search can be made by pressing ENTER:

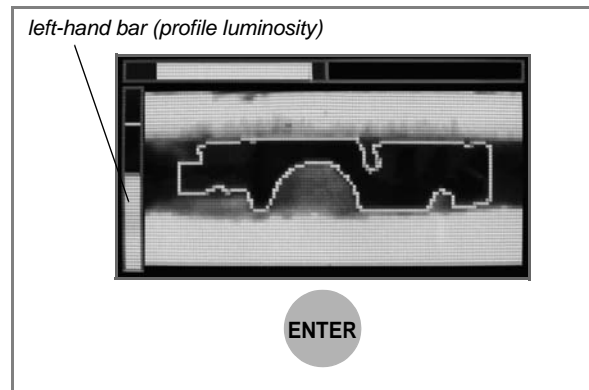
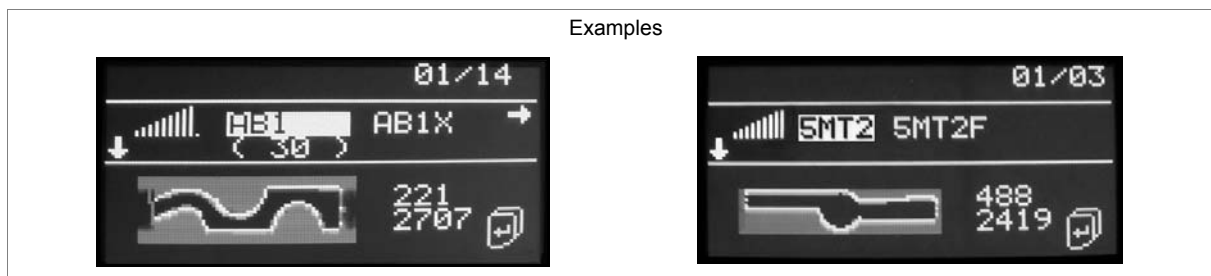


Fig. 26

The search can give 2 different results:

6.1.3 SEARCH RESULT

a) the search is successful and the display shows the result.



b) the search is imprecise. This may be caused by:

- incorrect positioning of the key,
- search parameters too strict,
- no Silca reference matches the key blank read

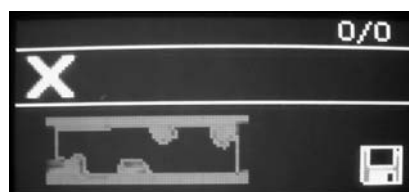
The display will show:

No key found!
Press ENTER
to start a
broader search

ENTER

At this point press ENTER to automatically start a search with temporarily extended parameters (the original parameters of the device are never changed).

If this extended search does not produce results, the display will show:



The search has not found any valid reference among the profiles included in the geographical area covered by the search.

If you wish to include the profile in the database as a reference for future searches, it is advisable to save it as a User Profile.

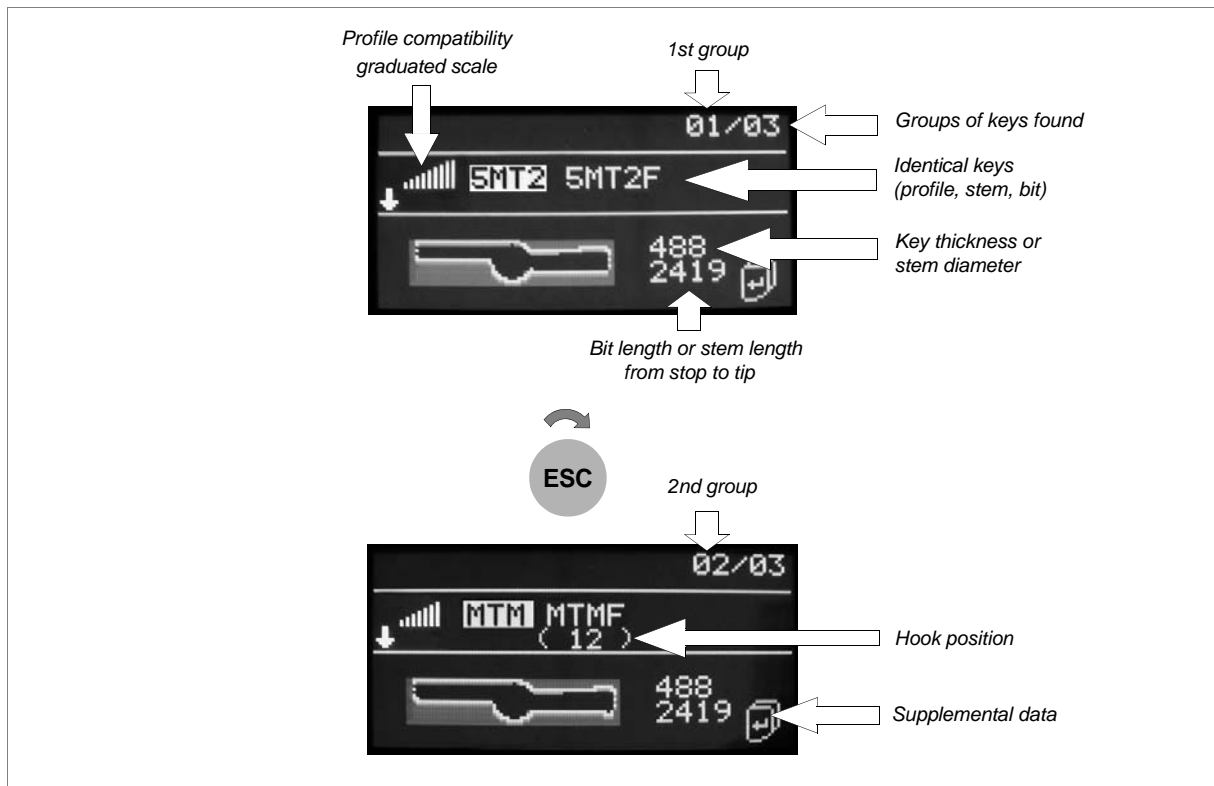


Fig. 27

- Identical keys (same profile and stem length or bit length) will be shown on the same line, separated by a space (fig. 27).
- Characters in brackets [E.g.: (A001), (A002) etc...] under the name of the key will blank show the hook number (if entered by an operator using the USB PEN and the SKP "Key Reader program" from a PC).
- 01/03 = first group of 3 found (fig. 27)
1st group = highly compatible (see graduated scale)
next groups = quite or not very compatible

▬▬▬▬▬▬ graduated scale = the more it's extended, the more compatible the profile is

Viewing groups and key blanks

- ESC knob rotation scrolls the group of keys.
- ENTER knob rotation scrolls the key blanks in the same group.

6.1.4 SPECIAL SEARCH CASES

a) SMALL FLAT KEY - HEAD STOP (WITH PLASTIC HEAD)

If the distance between the end of the plastic part and the stop is small, impeding proper viewing of the stop cursor, proceed as follows:

- 1) Lower the clamp-opening lever (B) and without exerting pressure fit the key into the clamp until the stop is visible (fig. 28-1) and the cursor is in the right position.
- 2) Align the upper bar and press ENTER; in this way the stem length reading is precise.
- 3) Pull the key out slightly (fig. 28-2), release the clamp-opening lever to keep the key in place, then with the alignment bar centred and illumination bar up, press ENTER.

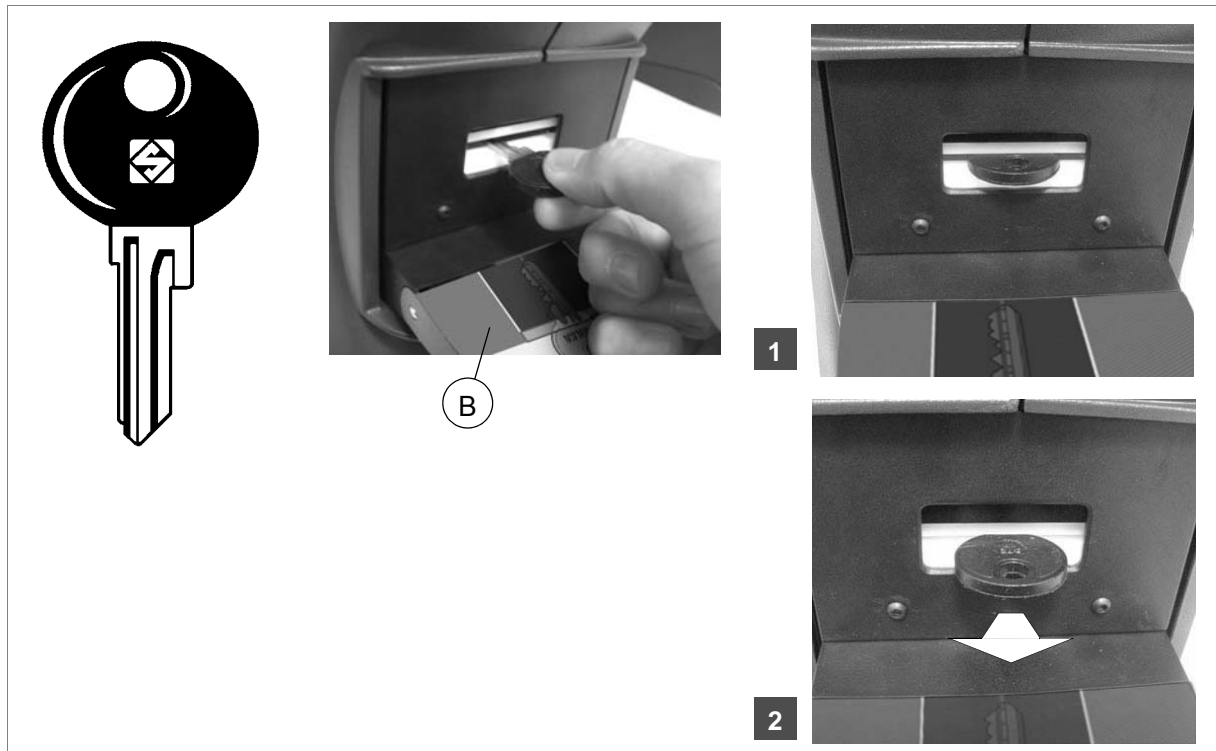


Fig. 28

b) VEHICLE KEY WITH LASER TYPE CUTS

With a cut key the profile is read properly and recognized only if the cuts have not touched or altered the part used for recognition.

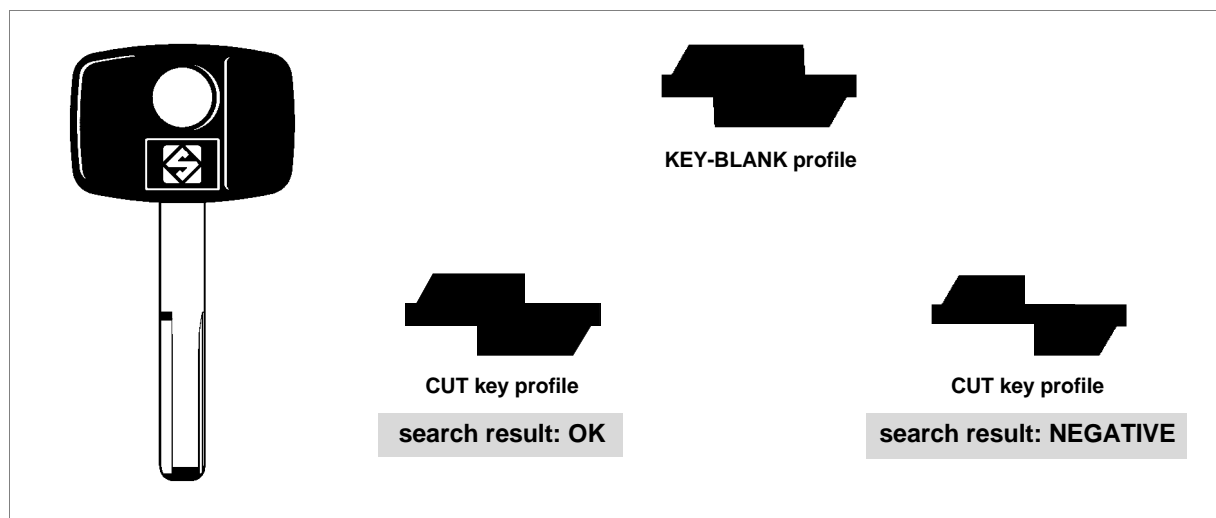


Fig. 29

c) SHORT-STEMMED MALE AND FEMALE BIT KEYS

If the distance between the end of the bit and the light shade device is small (short stem) and when reading the cuts the left-hand bar cannot face fully upwards (referred to inserted key), proceed as follows:

- 1) Set the **NO** values in "Automatic Search" (see ch. 6.3.5, page 32).
- 2) Fit the key into the clamp **with the light shade device**; the display will show the profile (fig. 30 - 1).
- 3) Press ENTER.
- 4) Pull the key out all the way and remove the light shade device.
- 5) Fit the key in again (without the light shade device) and press ENTER (fig. 30 - 2).

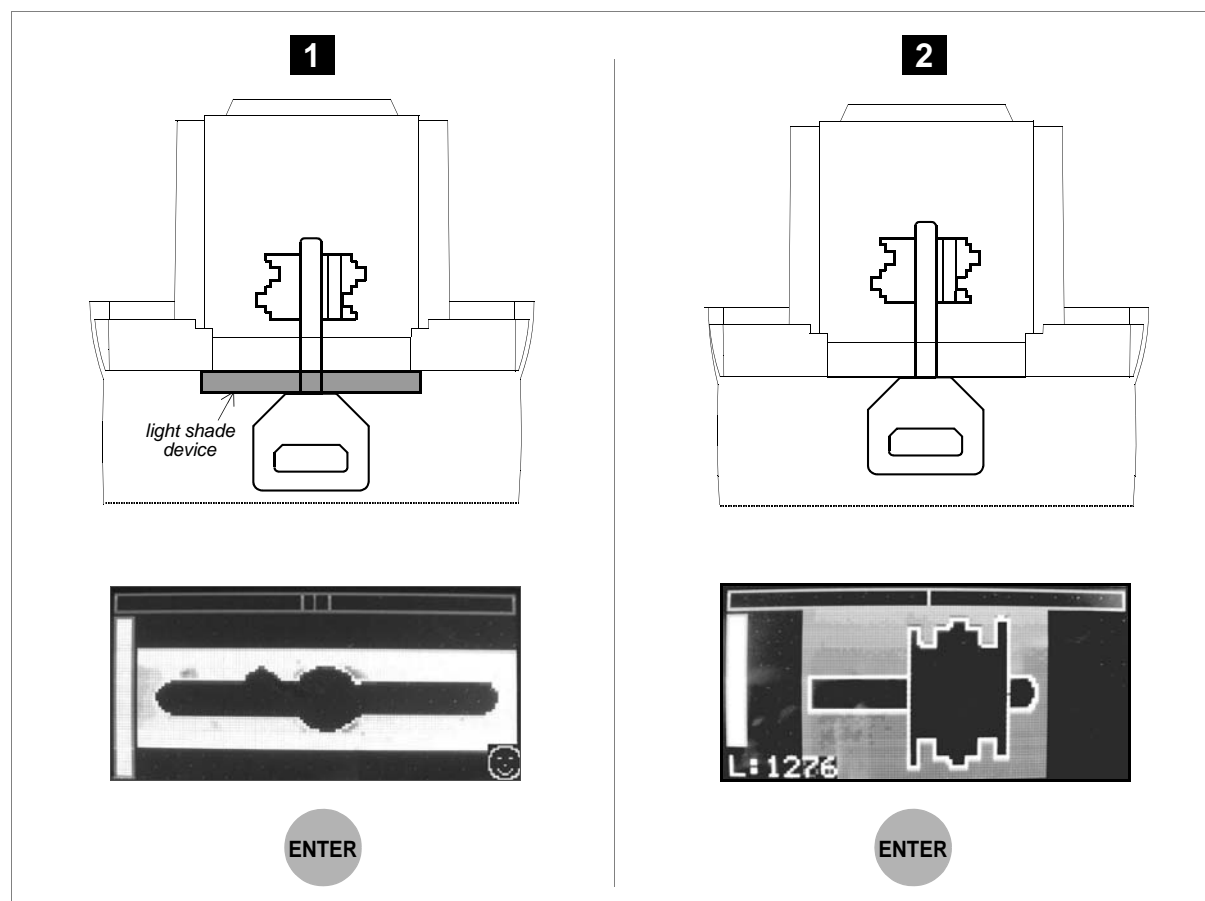


Fig. 30

d) PUMP KEY WITH EXTRA SHORT STEM

For pump keys with extra short stems we suggest using the procedure described above (c).

6.1.5 SUPPLEMENTARY SEARCH DATA



After "Key search" press ENTER, the following display will appear:

Menu selection:
Key copy
Ignore length
Profile info
Save profile
Search by key Manuf.
Search types

1 - KEY COPY

FUNCTION NOT ENABLED IN THIS MENU.

2 - IGNORE LENGTH

This function allows to repeat a search ignoring the bit or stem length.

It is particularly useful when the stem or bit length is altered.

The function is only available for shoulder stop flat keys and all types of bit, double bit and pump keys.

By pressing ENTER the following message will appear:

The search will be repeated without considering bit length

Press ENTER to start the search.

3 - PROFILE INFO

Press ENTER, a list will appear of references to spare key manufacturers different from the Silca reference blank (found by searching with OPTIKA LIGHT) and highlighted on the last line on the bottom of the display:

Comparatives
ERREBI :AU5D
BOERKEY :743L
ORION :ABS17
LOTUS :U20
AB1 : SILCA

- Turn the ENTER knob to scroll the list of comparatives.


- Press ENTER, a list will appear of alternative articles:

Alternatives
AB1X
AB1BZ
AB1Q
AB1DA
AB1 : SILCA

4 - SAVE PROFILE

The following display will appear:

Save read profile
Name :
Make :
Hook :



- 1) Turn the ENTER knob to select the field into which the data will be entered.
 - The selected field will be highlighted in yellow.
- 2) Press ENTER; the display will show a list of characters:

A	B	C	D	E	F	G
H	I	J	K	L	M	N
O	P	Q	R	S	T	U
V	W	X	Y	Z	0	1
2	3	4	5	6	7	8
9	-	%	/	&	_	#

- Turn the left-hand ESC knob to scroll the fields up and down.
- Turn the right-hand ENTER knob to scroll the fields from left to right; choose the character and press ENTER to confirm.
 - *Going on to the next character the proposed letter is the last one selected.*

- Characters permitted:

Name: 01 23456789ABCDEFGHIJKLMNQRSTUWXYZJK-%/&_
 Make: 01 23456789ABCDEFGHIJKLMNQRSTUWXYZJK-%/&_
 Hook: 01 23456789ABCDEFGHIJKLMNQRSTUWXYZJK-%/&_

- MAX limit for fields:

Name: max 14 characters
 Make: max 14 characters
 Hook: max 8 characters

• **To delete the last edited character:**

- select the "#" character, bottom right of the display and press ENTER.

• **To save a text:**

- press ESC to exit, then press ENTER to confirm.

• **To save a read profile:**

- select the "Save" symbol (disk) and highlight by turning the ENTER knob, then press the knob in.

A new key blank can be saved with an existing name, which will be overwritten by the new reading.

The key blank name is required (at least one character).

The key blank name must be unique in the database. Key blanks with the same name cannot be used.

Nota bene: if no name is given to a key blank, it will not be saved.

5 - SEARCH by KEY MANUFACTURER

Used to filter the results of a search by cylinder or lock make (manufacturer). In this way the result from possible Silca references is more selective.

To quit the function Search by Make without keeping the set make, press the ESC button repeatedly until the initial menu appears.

- open a window with the current choice highlighted.
- use the ESC knob to scroll the initials that trigger updating of the list, with the first make starting with the selected letter highlighted.
- use the ENTER knob to scroll makes in alphabetical order.
- use the ENTER knob to select the MAKE filter.

Search by key Manuf.
296
333
4TR
606
=>A

After selecting the Make filter a search is launched for the profile previously loaded with the new criterion or set filter.

If there is no result after a search by make, the possible condition is:

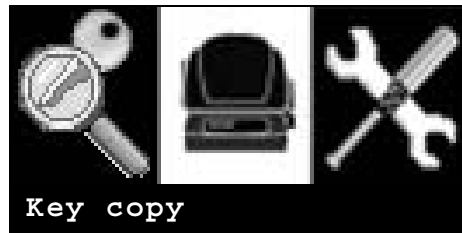
- The key is a new original one not yet produced by Silca S.p.A.
- The profile of a loaded key can be saved by associating it to its manufacturer.

6 - SEARCH TYPE

FUNCTION NOT AVAILABLE

6.2 Key copy

Transmission to the IDEA electronic key-cutting machine



The OPTIKA LIGHT device is used to read then transmit the cuts of a bit key directly to the IDEA key-cutting machine without the aid of a personal computer. OPTIKA LIGHT can be used as an alternative to the optic reader on the IDEA key-cutting machine, considerably reducing reading times.

ATTENTION:

- the cuts on a bit key read by OPTIKA LIGHT can be transmitted only to the IDEA electronic key-cutting machine
- Before transmitting the key to be cut, make sure that:
 - the key-cutting machine is live
 - the key-cutting machine is not in motion
 - OPTIKA LIGHT and the key-cutting machine are connected with a serial cable with adapter (fig. 31) found in the OPTIONAL KIT.

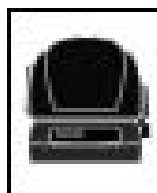


Fig. 31

The cuts for the key to be read by OPTIKA Light can be transmitted to the key-cutting machine in the following way:

6.2.1 TRANSMISSION FROM MAIN MENU

In the main menu select the "Key copy" icon:



- 1) press ENTER

Selez.tipo chiave: Flat - Shoulder stop Flat - Tip stop Bit male Bit female Pump Special bit female Shoulder stop
--

- 2) select the type of bit key to be read
- 3) continue as with an ordinary search

In the place of the results of an ordinary search the material selection and number of pieces menu will appear.

```

MATERIAL :

PIECES :

[TRANSMIT]

```

- 4) Turn the ENTER knob to select the field.
 - **the selected field will be highlighted in yellow.**
- 5) When the field "material" or "pieces" is selected, turn the ESC knob to select the type of material of the key blank to be used for the copy or to increase/decrease the number of pieces to be cut.

Default values are:

- Material = last material selected
 - Pieces = 1
- 6) When the field "[Transmit]" is selected:
 - **press ESC to return to the main menu**
 - **press ENTER to transmit the cuts to the key-cutting machine**

Nota bene: the job will be received by IDEA in the "PC queue" and any jobs already in the queue will be deleted.

6.2.2 POSSIBLE ERRORS DURING COMMUNICATION WITH THE KEY-CUTTING MACHINE

```

Key-cutting machine
in motion or unable
to receive data
from PC!

```

Appears during transmission, when the key-cutting machine is unable to receive data because it is on start-up or in motion.

```

Operation not
possible with
connected machine

```

Appears if the key cutting machine connected to OPTIKA LIGHT is not the required one.

```

Major error
during transmission

```

Appears if during transmission there is an interruption in the serial connection or an error in the transmission data.

6.2.3 SPECIAL CASE:

Use the optional adapter to copy keys with CENTRE STOPS (cod. D737017ZB)

- 1) Lower the lever (B) on the clamp and fit the adapter all the way up against the illuminators (fig. 33).
- 2) With the lever down fit the key with its stop up against the stop on the adapter (fig. 34).

ATTENTION: the bit must be facing left.

- 3) Release the lever and proceed with the operation in question.

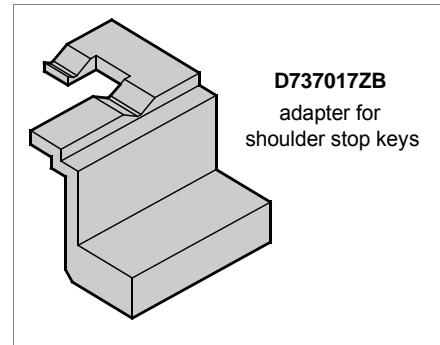


Fig. 32

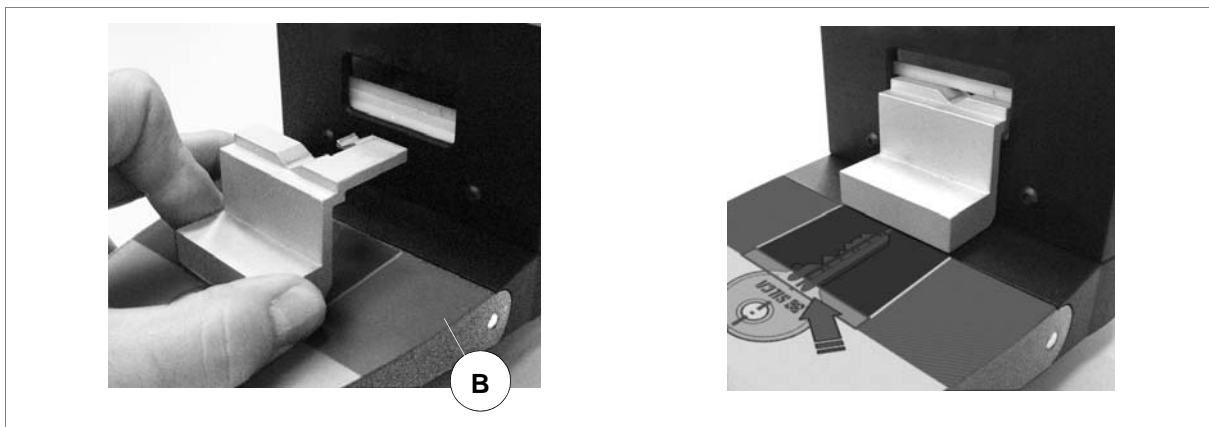


Fig. 33

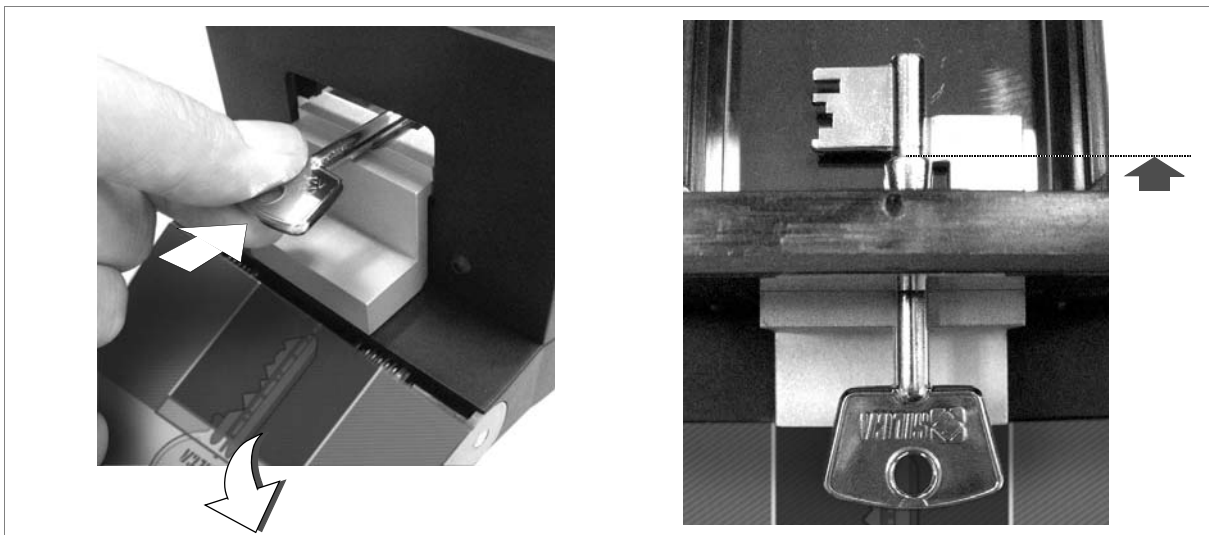


Fig. 34

6.3 Options



A series of operations, some merely consultations, by which users can familiarise with the device, customise it to their needs and check its operation.
Press ENTER; the display will show:

```

Select option:
Device data
Language
User profiles
Geographic area
Auto search
Ignore length
Hardware test
SW Upgrade
Set Password
Import hooks
Service menu
  
```

6.3.1 DEVICE DATA

After confirmation of this function the display will show:

```

Device data
Ser. 1122334455661
SW vers.:
DB vers.:
Keys read:
  
```

This is a read only display and the data shown cannot be edited.

6.3.2 LANGUAGE

After confirmation of this function the display will show a list of all the languages available on the device:

```

Italian
*English
French
German
Spanish
  
```

- Turn the ENTER knob (clockwise or anticlockwise) to select a language (field illuminated).
- Press the ENTER knob to view the selection asterisk.

Press ESC to go back to the previous menu; the language remains the one already in use.

Nota bene: to make the chosen language operative, disconnect the device and wait 10 seconds before starting up again.

6.3.3 USER PROFILES

The choices are:

Select function:
Modify profile
Delete profile
Keys in memory
Restore
Backup

- Turn the ENTER knob (clockwise or anticlockwise) to select the required function (field illuminated). Press ENTER to confirm:

- **Modify profile (user key):**

After confirmation of this operation the display will show a list of the keys loaded into the database:

Select profile:
AAA
BBB
CCC
=>A

The left-hand side of the display will show a list of loaded keys and the right-hand side will show the initial letter for the key to be searched for.

- Turn the ESC knob clockwise to change the initial letter for the search. On the display a list of the keys loaded into the database will scroll.
- Turn the ENTER knob to scroll and select the key data to be edited.

After selecting a key press the ENTER knob and the display will show the following message:

Modify data:
Name: CCC
Manu: A
Hook: A

The same window will appear for entering data in the save profile function.

- **Delete profile (user keys):**

After confirmation of this function the display will show a list of the keys loaded into the database.

After selecting the profile, press the ENTER knob and the display will show the following message:

Select profile
AAA
BBB
CCC
=>A

- Turn the ENTER knob to scroll and select the profile (the article is highlighted). Press the ENTER knob to confirm.

Delete profile?	
<AAA>	
No	Yes

- Press the ESC knob to return to the previous menu without confirming deletion.

- **To delete profile:**

- turn the ENTER knob to select "Yes".
- press the ENTER knob to confirm deletion.

- **Keys in memory (user data):**

After confirmation of this function the display will show:

User key memory	
Max profiles:	300
Used	: 1
Free	: 299

This is a read only display, the data shown cannot be edited.

- Press the ESC knob to exit.

- **Backup**

Function used to save on the USB PEN all User profiles in the device database.

It is advisable to carry out this operation in order to have User Data available to reset the device if required.

User profiles saved in USB PEN will be replaced. Continue?
--

- **Restore**

Function used to download onto Optika Light the list of User Profiles saved as backup on the USB PEN.

User profiles saved in Optika will be replaced. Continue?

6.3.4 GEOGRAPHIC AREA

Function used to select the database for the searches.

Nota bene: the result of a search for a key blank depends on whether or not the key blank is in the database selected.

When the USB PEN is installed, select the function and wait for the geographical areas available to appear:

Select Area
AFRICA-M. EAST
AMERICA
ASIA-OCEANIA
EUROPE
ITALY
CUSTOM
-> EUROPE

The list comprises a group of key blanks relating to several geographical areas and a group that can be defined by the User (CUSTOM).


Use the Key Reader Program to create a group of CUSTOM key blanks.

- 1) Turn the ENTER knob to select and download the database.
- 2) Press ENTER to confirm.

Nota bene: the last line on the bottom indicates the database currently selected and in use on the device.

6.3.5 AUTO SEARCH

Function used to start a search automatically (value YES).
Optika Light comes with the following settings.


Auto search	
Profile	[YES]
Stop	[YES]
	

Nota bene: if the NO value/parameter is set press the ENTER button during the key search.

- 1) Press ENTER, the display will show activation status (YES or NO) which can be selected by turning the left-hand ESC knob.
- 2) Turn the right-hand ENTER knob so that the disk symbol (bottom right of the display) illuminates, then press ENTER.

6.3.6 IGNORE LENGTH

Function used to extend the key search: same profile with different lengths.
Optika Light comes with the following settings (value NO).

Ignore length	
Ignore	[NO]
	

- 1) Press ENTER, the display will show activation status (YES or NO) which can be selected by turning the left-hand ESC knob.
- 2) Turn the right-hand ENTER knob so that the disk symbol (bottom right of the display) illuminates, then press ENTER.

6.3.7 HARDWARE TEST

This paragraph presents all the tests necessary to check the optics and/or electronics of the device.
After confirmation of this function the display will show a list of all the tests available:

Select test:
Check adjustment
Check profile area
Check cuts area
Chack grass cleaning
Display
Keyboard
Camera & led

If there are problems the display will show the type of fault.

6.3.7.1 CHECK ADJUSTMENT

Nota bene: we recommend that you perform this procedure at least once a year.

This function is used to check machine gauging.

Check adjustment
Insert template Z23

- 1) Fit the Z23 template as if it were a flat key, making sure that the special stop is facing downwards and butting against the illuminator (fig. 35).



Fig. 35

- 2) Standard key alignment procedure.
- 3) After confirmation the following display will appear (examples with purely indicative values):

Example 1:

Detected values:
dL: 0.030001
dL: 0.050000
dT: 0.015000

Example 2:

Detected values:
dL: 0.030001
*dL: -8.350000
*dT: -2.150000

Example 1: satisfactory gauging

Example 2: the asterisk shows that gauging is not satisfactory (values out of range). Contact Silca's Technical Assistance Dept.

6.3.7.2 CHECK PROFILE AREA

Nota bene: this operation is necessary when the image is out of focus or faulty and must be carried out only on the advice of SILCA after-sales staff.

The operation is used to detect/gauge the area into which the profile could extend. The display will show:

Check profile area
Attention before proceeding see instruction manual ENTER to continue

Check profile area
If this operation is not performed correctly it will cause a malfunction of the machine

Check profile area
Make sure there are no keys or templates in the clamp ENTER to continue

Check profile area
Open and close the clamp

- Flashing illuminators.
- Use lever (B) (fig. 7, page 7) to open and close the clamp when the white led is flashing; every flash should correspond to one position. The positions must vary from maximum opening to closed, including the intermediate positions.

Nota bene: It is important that the clamp is on one position every time the led flashes, and is re-positioned before the next flash.

The procedure can be repeated a number of times if you are not sure it has been carried out properly.

- When the illuminators stop flashing the display will show:

Check profile area
Open and close the clamp
Check completed

Press ESC to go back to the previous menus.

6.3.7.3 CHECK CUTS AREA

Nota bene: this operation is necessary when the image is out of focus or faulty and must be carried out only on the advice of SILCA after-sales staff.

The operation is used to gauge the clamp illumination area (position of key).

The display will show:

Check cuts area
Turn the clamp right and left

- Turn the clamp (A) (fig. 7, page 7) right and left during flashing, making sure that every flash of the red led corresponds to one position. The positions must vary from the far right to the far left, including the intermediate positions.

ATTENTION: do not open the clamp during rotation.

Nota bene: It is important that the clamp is on one position every time the led flashes, and is re-positioned before the next flash.

The procedure can be repeated a number of times if you are not sure it has been carried out properly.

Check cuts area
Turn the clamp right and left
Check completed

Press ESC to go back to the previous menus.

6.3.7.4 CHECK GLASS CLEANING

FUNCTION NOT AVAILABLE

6.3.7.5 DISPLAY

This function is used to check luminosity of the display.

- Press ENTER, the display will show a sequence of luminous columns with intensity increasing to the right. If this does not occur contact the Silca After-Sales Service.

6.3.7.6 KEYPAD

FUNCTION NOT AVAILABLE

6.3.7.7 CAMERA & LED

FUNCTION NOT AVAILABLE

6.3.8 UPDATING OPTIKA LIGHT INTERNAL PROGRAM

Updating the OPTIKA Light on-board program is possible through a USB PEN to prepare with the aid of **Silca Remote Service**. As the Silca Remote Service program downloads the update directly from the Silca web site, you need an internet connection.

6.3.8.1 INSTALLING THE SILCA REMOTE SERVICE PROGRAM ON YOUR PC

The Silca Remote Service program is on the USB PEN provided with the machine.

Installation procedure:

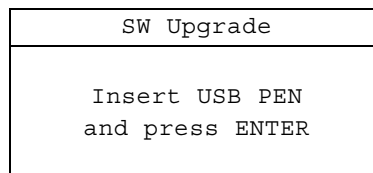
- connect the USB PEN to a USB port on your PC;
- use Windows Explorer to select the driver corresponding to the USB PEN involved;
- open the "Silca Remote Service" folder;
- double click on "RemoteService.exe";
- follow the instructions on the screen until installation is successful.

Program start

- press the Start button;
- enter the Programs menu;
- select the Silca Software folder;
- select the Wintransfer folder;
- click on the Silca Remote Service icon.

6.3.8.2 UPDATING/DOWNLOADING THE OPTIKA LIGHT ON-BOARD PROGRAM WITH A USB PEN

- insert the Silca USB PEN in a port on your PC;
- open the Silca Remote Service program;
- select the OPTIKA Light device and follow the instructions on the screen;
- when the USB PEN has been prepared, select the item "SW update" in the "Options" menu of the Optika Light device;
- press Enter and wait about 5 minutes.



6.3.8.3 RECOVERING THE OPTIKA LIGHT ON-BOARD PROGRAM AFTER A RECOVERY CONDITION

When OPTIKA Light shows the following message after start:...

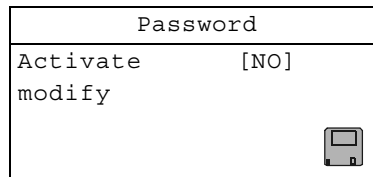


or if it stops during the start procedure the on-board program can be reset by:

- installing the Silca Remote Service program on a PC.
- connecting Optika Light to the PC by a port and serial cable.
- using the "Recovery" function available in the Silca Remote Service program and following the instructions on the screen.

6.3.9 SET PASSWORD

Function used to block the OPTIONS menu functions so that they can be used only by someone in possession of the password.



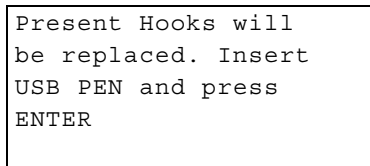
- 1) Press ENTER, the display will show activation status (YES or NO) which can be selected by turning the left-hand ESC knob.
- 2) Turn the right-hand ENTER knob and select the "Edit" field. Press ENTER and the display will show the map of characters that can be selected to set the password.
 - turn the ENTER knob to scroll the characters on the row.
 - turn the ESC knob to scroll the characters in the column.
- 3) Press ENTER to confirm the chosen character (visible in the last bottom row).
- 4) When the password has been chosen, press STOP and save the settings by turning the right-hand ENTER knob so that the disk symbol (bottom right of the display) illuminates, then press ENTER.

6.3.10 IMPORT HOOKS

Function used to import a list of hooks through a USB PEN. The list can be taken from the USB PEN by the Key Reader Program.

Nota bene: the imported list will replace any existing hook positions (except for self-acquired key hooks).

- 1) Press ENTER. You see:



- 2) Insert a USB PEN in one of the USB ports on the device and press ENTER.

6.3.11 SERVICE MENU

Function protected by password.

Access is granted to Silca personnel only or to centres authorized by Silca to carry out work on this type of device.

7 MAINTENANCE

Nota bene: all internal tests and repairs on this device should be performed only at Silca or Authorised Centres.

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 OPTIKA LIGHT device does not require special maintenance.

Replacement is simple and can be carried out by the operator.

CLEANING: your OPTIKA LIGHT device should be kept in a relatively dust-free area; clean the surface periodically with a vacuum cleaner.

ATTENTION: DO NOT USE COMPRESSED AIR!

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

- Never carry out maintenance operations when the machine is on;
- Always disconnect the mains power supply;
- Before replacing parts read carefully all the instructions given.
- Use only original spare parts;
- Check that screws and nuts removed in order to replace parts are properly tightened.
- Work in an environment with temperature of 10° to 40° C and relative humidity of approx. 60%.
- The work bench should be: clean, free from anything not strictly necessary, and covered with shock-proof material.
- Do not work with wet or greasy hands.

7.1 Clamp replacement

ATTENTION: we recommend carrying out this operation in a clean, dust-free environment.

- 1) Disconnect the machine power cable.
- 2) Completely unscrew the clamp fixing knob (P) (fig. 36).
- 3) Exert pressure with both hands on the clamp opening lever, remove the clamp from its seat and place on a clean surface.

ATTENTION: do not leave the device "open" (without the clamp) for too long (eventually cover the device).

- 4) Fit the new clamp, taking care to push it all the way in.
- 5) Block the clamp against its limit switch and firmly tighten the knob (P).

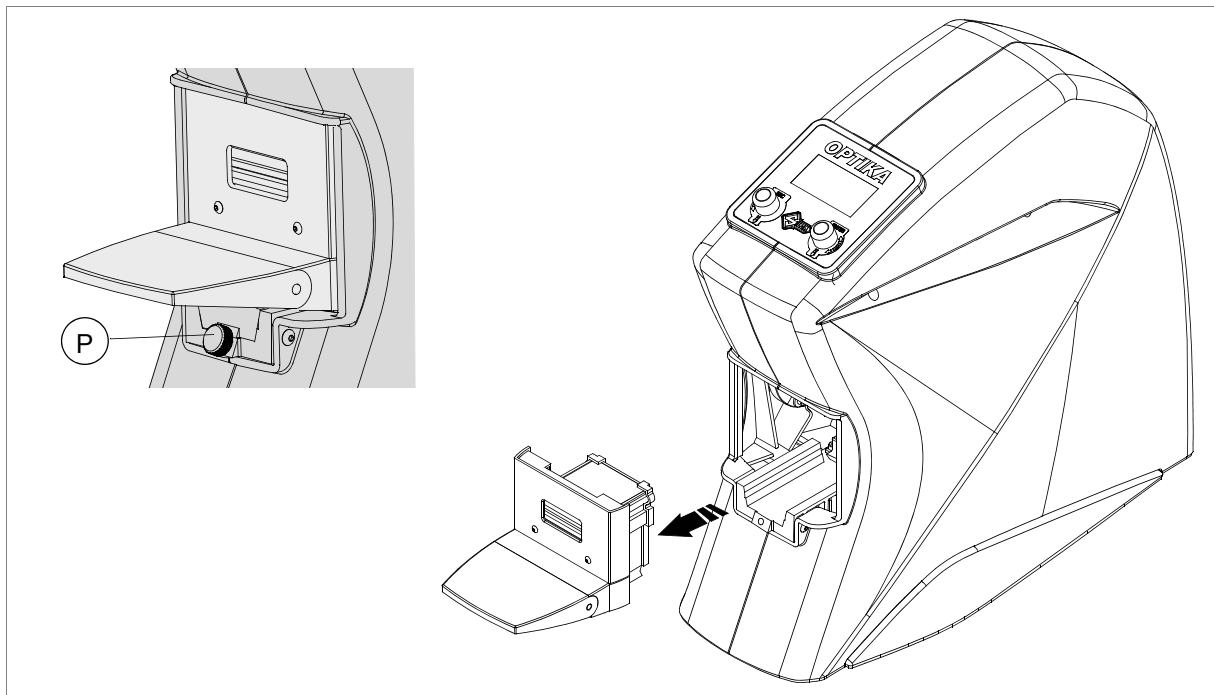


Fig. 36

7.2 Clamp cleaning

- 1) Disconnect the machine power cable.
- 2) Remove the clamp (see ch. 7.1, page 38).
- 3) Clean the key plate using the brush provided (see ch. 2, page 4). To simplify this operation turn the clamp upside-down.

7.3 Check machine gauging

With device connected, fit the (Z23) template into the clamp (see ch.6.3.7.1, ch.6.3.7.2, and ch.6.3.7.3).

7.4 Knob replacement (ESC/ENTER)

- 1) Unplug the power supply unit
- 2) Pull the knob upwards (simply pressed in).
- 3) Fit the new knob, paying attention to the shaped part of the pin.

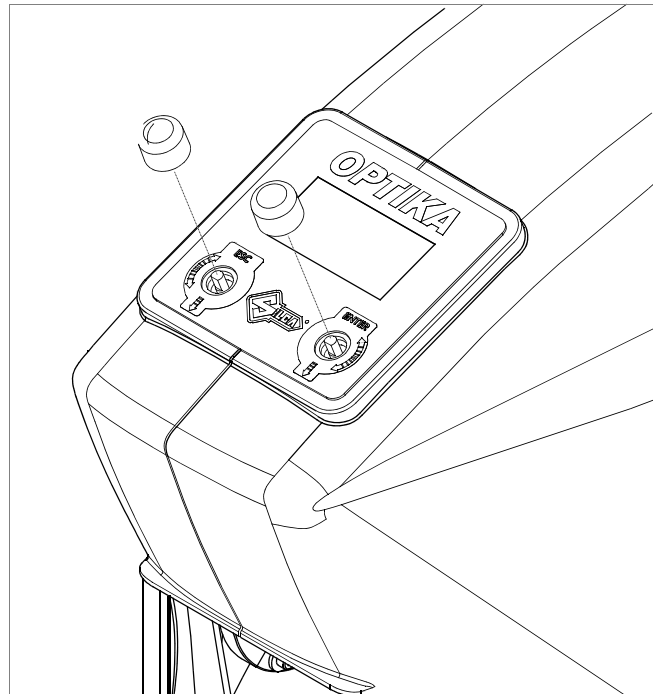


Fig. 37

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;

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.

9 AFTER-SALES SERVICE

Silca provides full service to purchasers of the OPTIKA LIGHT device.

To ensure complete safety for the operator and machine, any job not specified in this manual should be carried out by the manufacturer or in a Silca authorized Service Centre.

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

9.1 How to request service

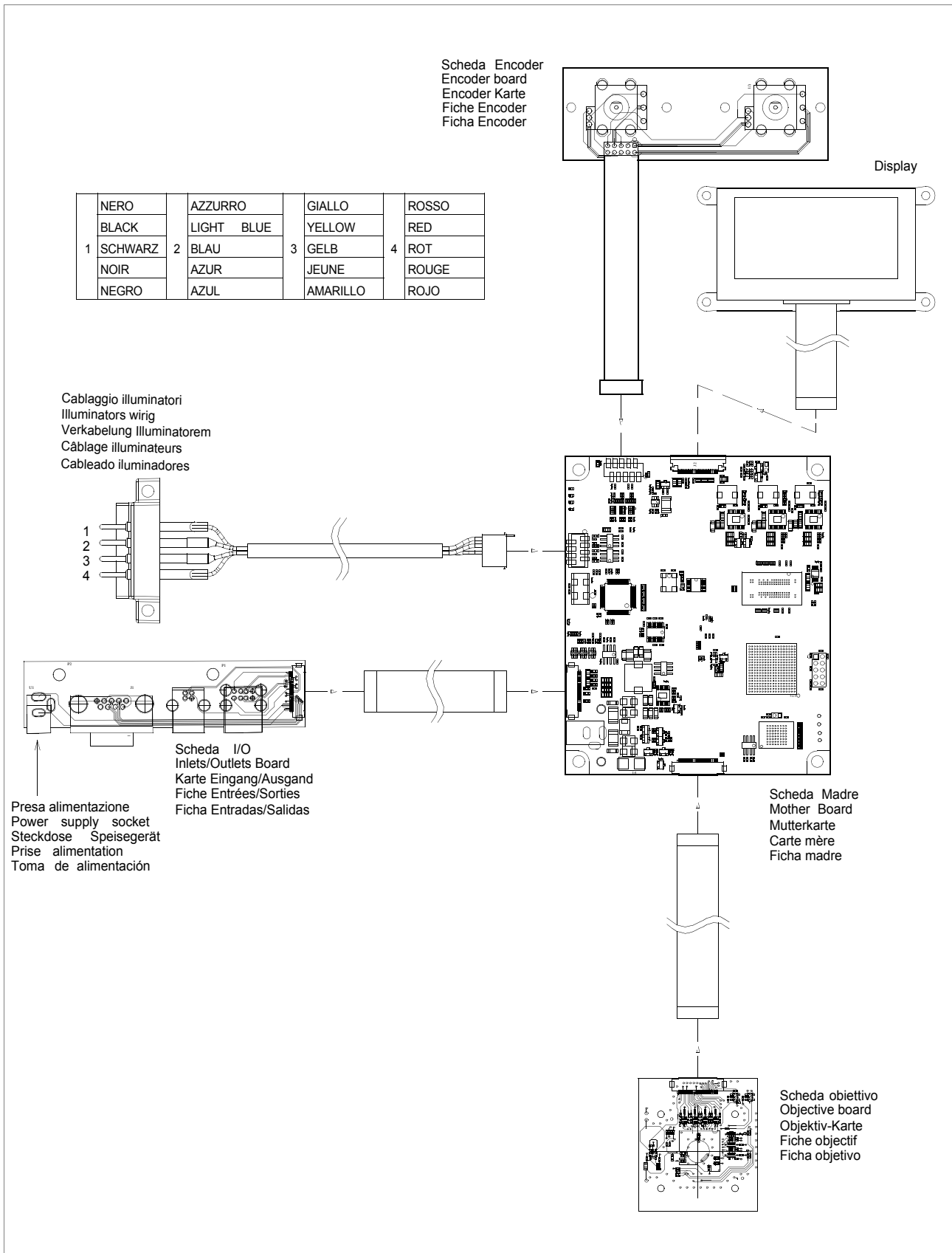
The guarantee attached to the OPTIKA LIGHT device ensures free repairs or replacements of faulty parts within 24 months of purchase. All other service calls must be arranged by the customer with Silca or with a Silca authorized Service Centre.

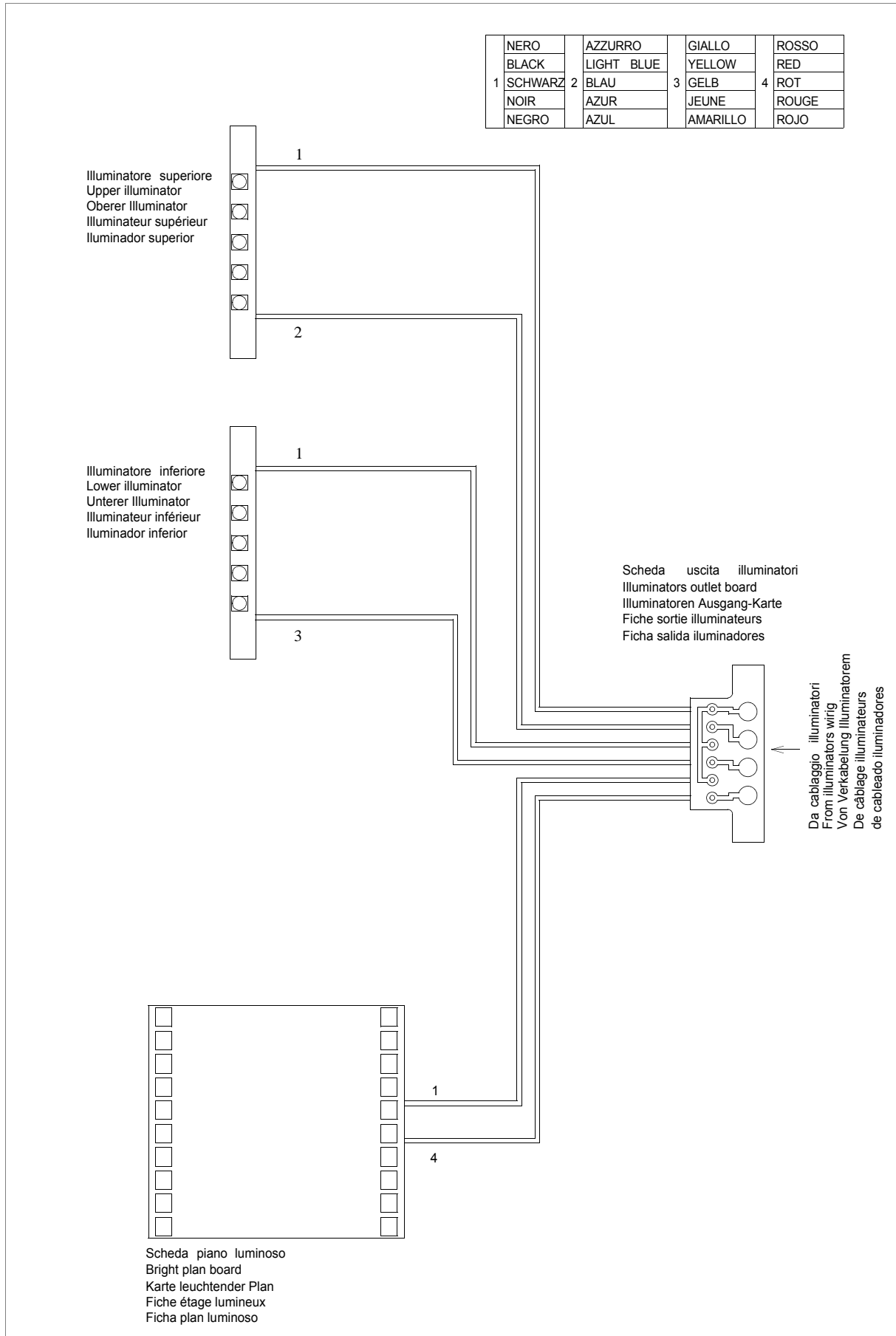
Appendix 1 - ELECTRICAL DIAGRAMS

The following pages contain the electrical diagrams for the OPTIKA LIGHT device described in this manual.

OPTIKA LIGHT

ELECTRICAL DIAGRAMS







VITTORIO VENETO 04/01/2010

CE DECLARATION OF MACHINE COMPLIANCE

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

Declares under its own responsibility that the **Reader** model

OPTIKA

complies with the requirements of the following European Directives:

European Union **DIRECTIVE 2004/108/CE** (Electromagnetic Compatibility)
and with the EN 55022 - EN 55024
EN 61000-3-2 - EN 61000-3-3 Standards

General Manager Basic Production Center

Stefano Setti

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





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