SBB

Operating manual

D431625XA

vers.**1.0**

SILCA ®

INDEX

GENERAL

The device is designed to the principles of European CE Directives.
The materials used in its manufacture are not dangerous and their use complies with directives. Its design features make the machine and all its components completely safe to use.

FURTHER RISKS

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

PROTECTION AND SAFETY PRECAUTIONS FOR THE OPERATOR

The operations for which the machine has been designed are easily carried out at no risk to the operator.

SAFETY REGULATIONS

To operate under conditions of maximum safety do not use the device without reading and understanding clearly the contents of this operating manual.

• Check the electrical wiring periodically; if the wires are worn they should be repaired or replaced.

• Never work with wet, greasy or oily hands.

• Disconnect the device from the mains when it is not in use or in order to carry out maintenance work.

• Never tug at the power supply wire; make sure it does not come into contact with oil, sharp edges or heat.

• It is dangerous to use the device in areas at risk (damp or wet).

• Always work in a well lighted area.

• Keep the work area clean and remove all tools before turning on the machine.

• All visitors, children in particular, must keep at a safe distance and not touch the machine or electrical wiring.

• Do not use the device for purposes different from those described in the Operating Manual.

POWER SUPPLY

The machine is supplied with electricity at 12 Vdc provided by the vehicle battery, or as an alternative can be powered from a 15 Vdc universal feeder supplied with the machine.

TURNS ON

The machine turns on automatically when the connection (OBD II or Optional) is connected to the diagnostics socket or one of the feeder wires supplied with the machine is used.

IDENTIFICATION OF THE SBB DEVICE

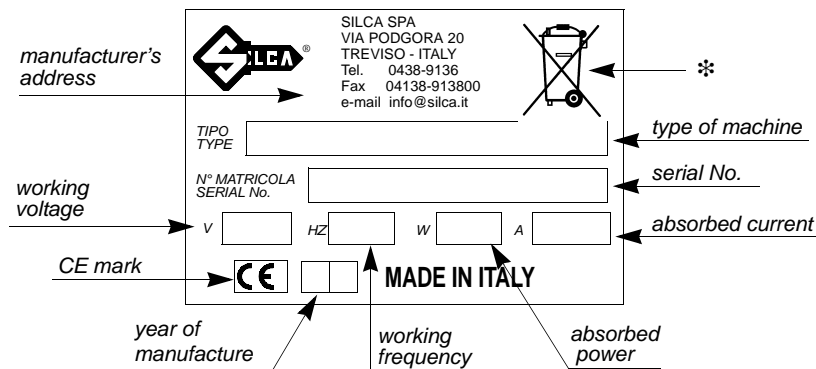The device has an identification plate showing its serial number (fig. 1).

Fig. 1

(*) see chap. 10 "WASTE DISPOSAL", page 32.

1 MACHINE DESCRIPTION

The machine is used to easily programme keys with transponders in the centralized immobilizer units of a number of car models.

In particular, it can:

- memorize all the keys in the centralized immobilizer unit;
- erase keys already in the memory;
- read the immobilizer ID code – IMMO ID (if applicable);
- read the mechanical code for the key (if applicable);
- add one or more keys;
- read the number of keys in the memory (if applicable);
- read any errors/anomalies in the centralized immobilizer unit;
- erase/zero any errors found;
- provide help.

The machine is provided with a password to prevent unauthorized use. Users have at their disposal a functions menu to meet all possible requirements during operation.

NOTE: Once the machine is connected to the power mains it's automatically switched on. To turn it off exit from function and unplug the machine from the mains.

1.1 MAIN CHARACTERISTICS

OPERATING METHODS

- Adds or deletes keys from the immobilizer control unit by connecting SBB to the vehicle diagnostics input.

SPECIAL FUNCTIONS

- Storage in the User Data Archive of all operations carried out;
- Multi-language program;
- Machine test;
- Help (operational help for: type and position of connectors, procedures, keys, types of transponders, etc...).

PASSWORD

A principle password is needed to enable SBB (required every time the program is turned on), issued by the supplier/distributor by means of a special "USE AGREEMENT FORM".

SBB - FULL LOADED CONFIGURATION

Basic software (all makes included at the time of purchase)
- All makes are enabled for use.

Software update (new makes released)
- To use the new makes loaded with the SW update (after purchase) you may proceed in two different ways:

ENABLING BY PASSWORD	ENABLING BY TOKEN
Apply for a password for each of the makes required with the special "USE AGREEMENT FORM" included in the software updating kit.	Use a credit that is reduced every time key programming/deletion is carried out.
Enter the password received in order to enable the device permanently for use on the specific make (see chapter "Enabling").	Credits can be purchased and loaded onto SBB by means of a smart card (see chapter "Enabling").

SBB - PAY PER USE CONFIGURATION

Basic software (all makes included at the time of purchase).

- This configuration the device needs a TOKEN, that is to say a credit that is reduced every time key programming/deletion is carried out. Credits can be purchased and loaded onto SBB by means of a smart card (see chapter 6.7.1 "ENABLING").

Software update (new makes released)

- To use the new makes loaded with the SW update (after purchase) there is only the following way to proceed:

ENABLING BY TOKEN
Use a credit that is reduced every time key programming/deletion is carried out.   Credits can be purchased and loaded onto SBB by means of a smart card (see chapter "Enabling").

SOFTWARE UPDATE

The machine can be updated through an RS232 serial line connection with a personal computer.

POWER SUPPLY

- From the car through an OBD II connector;
- From the car through the cigarette lighter plug;
- From the mains through a universal feeder and special cable.

1.2   TECHNICAL DATA

POWER SUPPLY

- 8-45 Volt (typically 12Volt from the vehicle diagnostic inlet or cigarette lighter plug).
- Universal feeder:

	INPUT	**OUTPUT**
Tension	90-264 Vac	15 Vdc
Current	1.0Arms @ 90V	1 A
Frequency	47-63 Hz	
Power		15 W

DIMENSIONS

Lenght: 220 mm
Width: 165 mm
Height: 50 mm
Weight: 300 g.

1.3   WORKING PARTS

Fig. 2

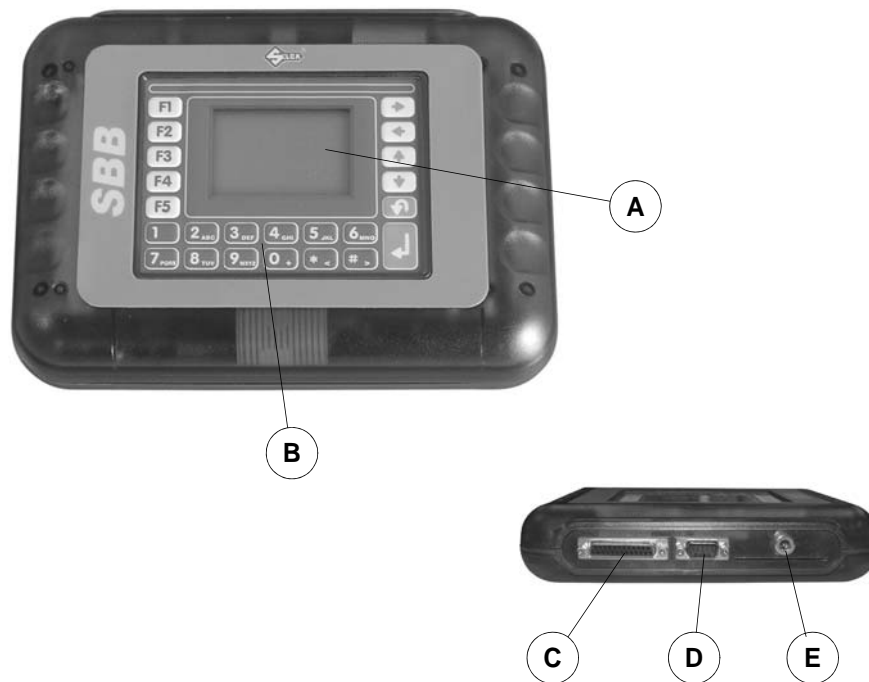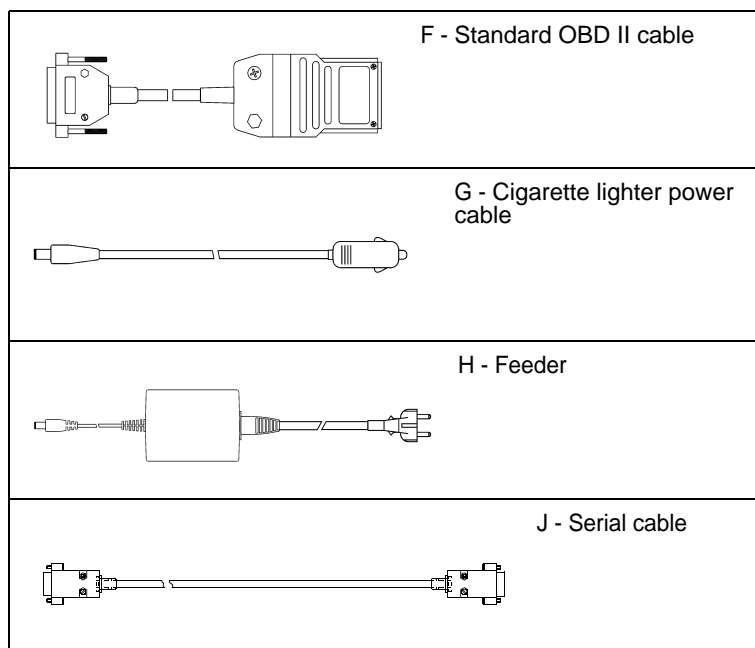A - Retro illuminated LCD graphic display
B - 23-key keypad (numerical, functions, arrows, ESC, ENTER)
C - Parallel Port (25 Poles) to communicate with the vehicle
D - Serial Port RS232 (9 Poles) use only for Serial cable
E - Socket for cigarette lighter power cable or feeder

	F - Standard OBD II cable
	G - Cigarette lighter power cable
	H - Feeder
	J - Serial cable

MAIN FEATURES

KEYPAD

The machine keypad allows the user to interact with it rapidly and easily. At any given time only the keys involved in the cycle in progress are enabled.

F1 F2 F3 F4 F5	HELP function keys
← →	Left-Right arrow keys, move the cursor to the left or to the right
↑ ↓	Up-Down arrow keys, move the cursor up or down
↵	(ENTER) key confirms data entered or selection made
↺	(ESC) key quits or returns to the previous screen/status
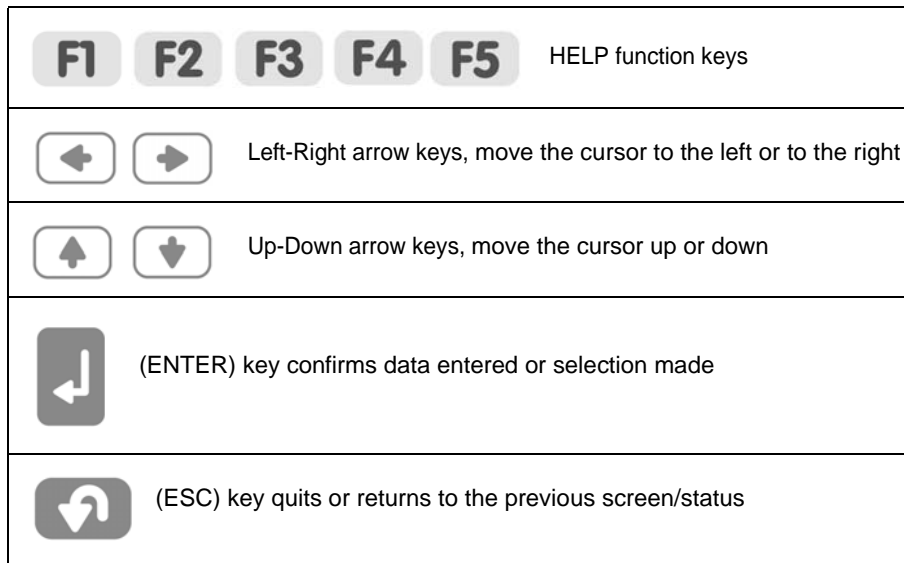
Fig. 3

LIQUID CRYSTAL DISPLAY

Retro illuminated LCD graphic display (128x64 pixel or 21x8 characters).

1.4   SYMBOLS

The box shows the machine screen and relative displays, as shown below:

```
        - MAIN MENU -
  1 - IMMOBILIZER
  2 - REMOTE CONTROLS
  3 - PIN CODE READING
> 4 - 7-4 PIN CONV.
  5 - SET UP
  6 - DATA BASE
  7 - TEST
                   ⇧⇩⇦⇨ ⏏ ⏎
```
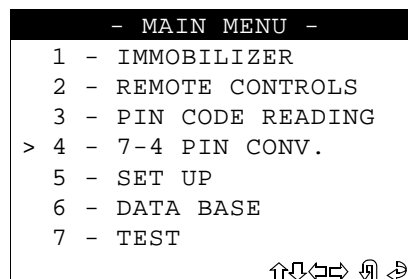
Methods for selecting a specific function:

- Use the arrow Left/Right keys, the point where the cursor ">"shows the item required, then press **ENTER**;
- Digit a number (xx) from the keypad to access the item required directly from the menu.

```
          - TEST -
  1 - KEYBOARD
  2 - TEXT
> 3 - GRAPHICAL
  4 - UPDATE SWICH CAN


                   ⇧⇩⇦⇨ ⏏ ⏎
```
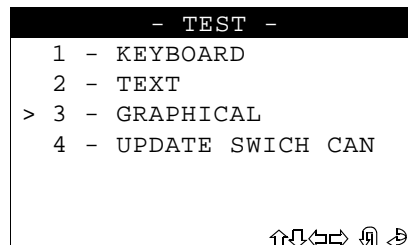
Example:
to access the **GRAPHICS TEST** menu **(73)** either use the arrows to select first the **TEST** menu **(7)**, press **ENTER**, then the **GRAPHICS** menu **(3)** and press **ENTER**, or digit **(73)** which corresponds to the **GRAPHICS TEST (73)**.

2   TRANSPORT

The machine and its components are easily transported by one person and its handling does not incur any hazards.

2.1   PACKING

The packing ensures safe transport for the machine and protects all its parts.
To avoid knocks damaging the machine, we recommend using the original carrying case and packing every time it is transported.

Fig. 4

2.2   UNPACKING

To remove the machine from its packing:

1) take care not to damage the box when opening as it can be used again (transfers, dispatch to the manufacturer for repairs or maintenance).

2) check the contents of the packing case, which comprise:
- 1 carrying case;
- 1 machine;
- 1 universal feeder;
- 1 centralized unit connecting cable (universal), OBDII – 00 connector;
- 1 serial cable;
- 1 power supply cable with cigarette lighter plug;
- 1 set of documents: user's manual, guarantee form and user's agreement;
- 1 CD program

2.3   HANDLING

Always replace the machine in its carrying case after use.

3 ACCESSORIES PROVIDED

The device comes complete with:
- universal feeder;
- centralized unit connection cable (OBD II-00 connector);
- serial cable;
- power supply cable with cigarette lighter plug;
- CD program (to be used in the event of loss of the program on the machine).

4 INSTALLATION AND PREPARATION

Installation can be carried out by the purchaser and does not require special skills. The machine is supplied ready for use – however, some checks and preparation are necessary before use.

4.1 PREPARATION FOR USE - INITIAL OPERATIONS

- power the machine by means of the supply socket (E);
- check that the serial number stamped on the device is the same as the one shown on the display; enter the password (to enable use) (see chap. 6.2 "PASSWORD", page 8);
- select the language;

4.2 CHECKING FOR DAMAGE

The device 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.
Should faulty operation arise that is not connected with the above-mentioned conditions, please contact After-Sales Service.

4.3 ENVIRONMENTAL CONDITIONS

To ensure that the best use is made of the machine and that the keys with transponders produced work properly, it is important to bear in mind operating conditions and temperature.
Given the characteristics of the transponders on the keys, in order to memorize them, THE TEMPERATURE MUST BE ABOVE 5° C.
Ideal working conditions for the machine are therefore:
- temperature: from 5° to 40° C.

4.4 SOFTWARE UPDATING

The machine software can be updated by connection to a personal computer.
ATTENTION:the RS232 socket for connection to the PC is located on the front, near the display.
Use the RS232 serial cable provided and follow the instructions for updating.

5 REGULATION AND GAUGING

The machine is designed not to require any gauging or regulation.

6   USING THE MACHINE

This chapter describes all the operations required to memorize, erase, or add keys to the centralized immobilizer unit by connecting SBB to the vehicle diagnostics input.

6.1   START-UP

When the machine is turned on the display shows the logo:
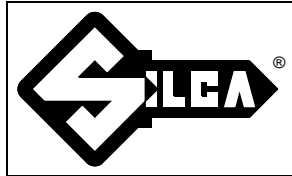
After a few seconds the following message appears:

```
        -  SBB  -

Update. : XXXXXXX

S.N.  : XXXXXXXXXXXXX


            (F1) to continue
```

The words **"Update: XXXXXXX"** give the level of updating for the program and database.
The words **"S.N.: XXXXXXXXXXXXX"** give the machine serial number.
Check that the serial number shown on the display is the same as that on the document "USER'S AGREEMENT" and on the label attached to the back of the machine.
Press **F1** to continue**.**

6.2   PASSWORD

When selection has been made, the following message appears:

```
        INSERT PASSWORD:
            XXXXXXXX
```

To use the machine enter the password issued by the supplier/dealer, comprising **8 numerical characters**.

- enter the password and press **ENTER**.

CORRECT PASSWORD
If the password is correct, the message below appears:

```
            RIGHT PASSWORD
```

After a few seconds the program enters the main menu.

WRONG PASSWORD

If a wrong password has been entered, a beep advises the user and the display shows:

```
       WRONG PASSWORD
      INSERT PASSWORD:
          XXXXXXXX


                         ⏎
```
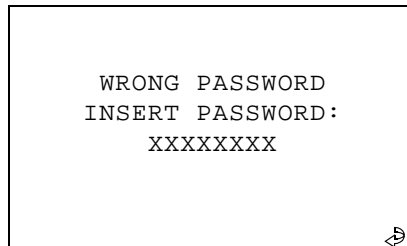
- Repeat the operation and press **ENTER**.

6.2.1   PASSWORD (MEMORIZED)

If the password has already been memorized on the machine (chap. 6.7.6 "MEMORIZE PASSWORD", page 18), when **F1** is selected the following message appears:

```



        PASSWORD SAVED



```
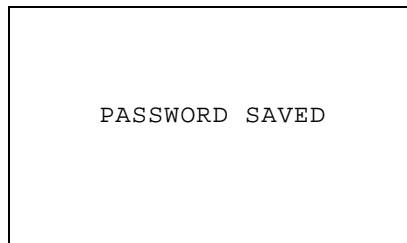
Wait a few seconds for the display to show the main menu.

6.3   MAIN MENU

There are two ways to choose the menu:

```
        - MAIN MENU -
  1 - IMMOBILIZER
  2 - REMOTE CONTROLS
  3 - PIN CODE READING
> 4 - 7-4 PIN CONV.
  5 - SET UP
  6 - DATA BASE
  7 - TEST
                  ⇧⇩⇦⇨ 𝄢 ⏎
```
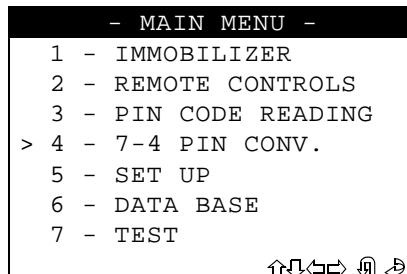
- Use the ⇧⇩ , arrow keys for selection then press **ENTER**, or **digit the number** corresponding to the function.

6.4   IMMOBILIZER MENU / REMOTE CONTROLS

This function contains the database of vehicle **makes / models / years** for which the device is enabled and can carry out the specific functions involved.

- Select **"IMMOBILIZER/REMOTE CONTROLS"**; from the MAIN MENU to view a list of car makes on the display.

```
   - MENU IMMOBILIZER -
   AUDI
   SEAT
   SKODA
>  VOLKSWAGEN
   OPEL
   FORD
                  ⇧⇩⇦⇨ 𝄢 ⏎
```
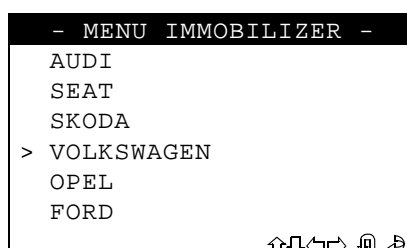
SELECTING THE CAR MAKE

- Use the ⇧⇩ arrow keys to select the make, then press **ENTER**.
- Press **ESC** to quit.

After selecting the make the display will show the list of car models.

```
       - VOLKSWAGEN -
   BORA (98- )
   CADDY (95-99)
   CADDY (00- )
 > GOLF (95-99)
   GOLF (00- )
   GOLF CABRIO (95-99)
                    ⇧⇩⇦⇨ 🔄 ⤶
```
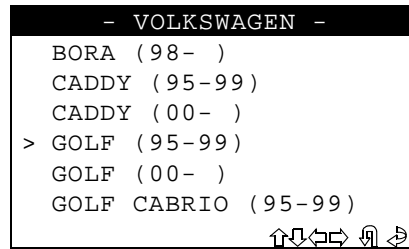
FUNCTION F1

Press the **"F1"** key to show information relating to the **make/model** selected (type and position of connectors, procedures, keys, types of transponder, etc.) (see chap. 8 "HELP MENU", page 29).

6.4.1 SELECTING THE CAR MAKE

SBB is not always able to automatically recognize all the immobilizer central units and is therefore unable to automatically choose the communication procedure to launch. It is therefore **NECESSARY** to select the right MAKE ⇨ MODEL ⇨ ANY OTHER CHARACTERISTICS (Petrol, Diesel, red key system, etc.) to which the specific communication procedure is associated.
For more information about the car model see the Functions Menu of the specific make.

6.4.2 CAR MODEL NOT ENABLE

If a car model that is not enabled is selected, a beep is heard and the display shows:

```
       - VOLKSWAGEN -
    Device not enabled
     for this model.
   Insert password from
    menu ENABLE FLAGS
          (51)


                        🔄
```
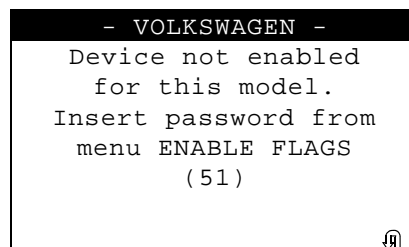
6.4.3 CAR MODEL ENABLED

If a car model that is enabled has been selected, the display shows:

```
       Insert the key
         and turn on
         the console



                      🔄 ⤶
```
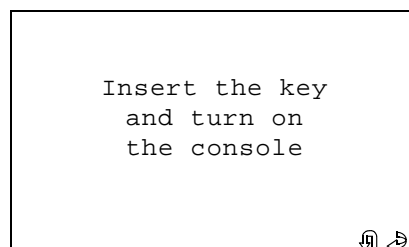
- Press **ESC** to quit.
- Press **ENTER** to continue.

6.4.4   COMMUNICATION PROCEDURE WITH THE IMMOBILIZER

The following message appears:

```
            Please wait
          connecting...



```
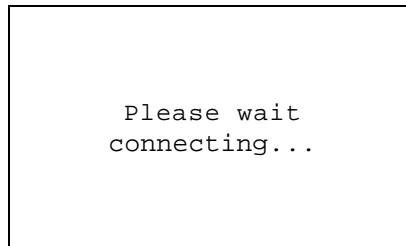
The communication procedure with the immobilizer starts; if the car model selected is correct and the immobilizer is detected, the **Functions menu by make appears**, otherwise an error message is shown (see chap. 7 "WARNING/ERROR MESSAGES", page 22).

6.5   PIN CODE READING

This function can read (only for certain VAG models) the vehicle PIN CODE directly from the OBD-II socket.
Select "PIN CODE READING" from the MAIN MENU and press ENTER.

6.5.1   DISABLED VEHICLE MODEL

If the function is not enabled a beep is heard and a message appears:

```
  - PIN CODE READING -
    Device not enabled
      for this model.
   Insert password from
    menu ENABLE FLAGS
           (51)

```
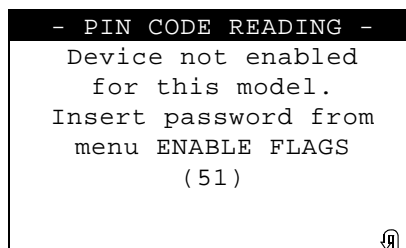
6.5.2   ENABLED VEHICLE MODEL

If the function is enabled the following message appears:

```
      Turn the ignition on!



                  Press any key...
```
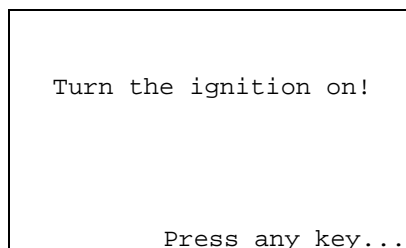
6.5.3   COMMUNICATION PROCEDURE FOR PIN CODE READING

The display shows:

```
            Please wait
          connecting...


```
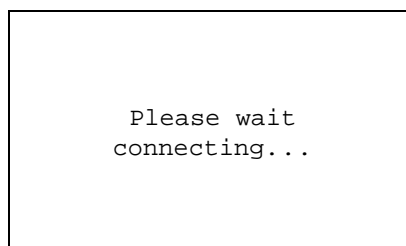
The communication procedure starts with the vehicle control panel memory. Different screens may appear, according to the type of control panel on the vehicle.

6.6   7-4 PIN CONV.

This function is used to convert a 7-digit pin code (issued by the dealer) to a 4-digit pin code for use on VOLKSWAGEN®, AUDI®, SEAT® and SKODA® vehicles.

- To activate the function, select "7-4 PIN CONV." and press **ENTER**.

```
     - VAG CONVERTER -
  PIN 7
  DEALER
  IMPORTER
> PIN 4
  DATE (XX/XX/XXXX)


                    ⇧⇩⇦⇨ 🔡 ↵
```
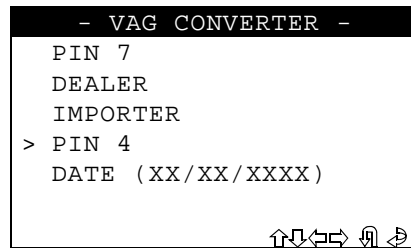
- To activate the function, select **ENTER**.
- Press **ESC** to exit.

6.6.1   PIN 7

This is a 7-digit code issued by the dealer.

How to apply for the code:
- Use the function "READ IMMO ID" in SBB to read the series number of the central unit.
- Provide the authorized dealer with the following data:
- Central unit series number
- Chassis number
- Copy of log book
- ID document for applicant

6.6.2   DEALER

This is the ID code for the authorized dealer (different from dealer to dealer) who issues the 7-digit code. The code is included in the rubber stamp used by the dealer to validate work on the vehicle.
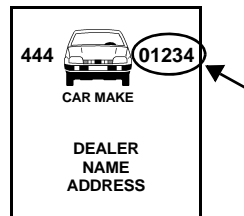
The stamp shown above is often found in the vehicle maintenance booklet.
- To activate the function, select "**DEALER**" and press **ENTER**.

6.6.3   IMPORTER

This is the ID code for the country in which the 7-digit code is applied for (different from country to country). The code is included in the rubber stamp used by the dealer to validate work on the vehicle.
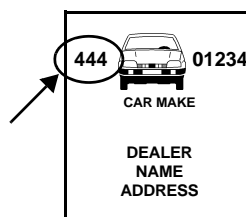
Table of currently known Importer Codes.
COUNTRYIMPORTER CODE
ITALIA - 264
ENGLAND - 210
ISRAEL - 730
USA - 444
CANADA - 999
SPAIN - 572
PORTUGAL - 261
RIUNION ISLAND - 387

- To activate the function, select "**IMPORTER**" and press **ENTER**.

6.6.4   PIN 4

This is the 4-digit code to enter as PIN CODE on the SBB during the "PROG.NEW KEYS" or "No. KEYS MEM." stages.
It is calculated by the device when the other codes are known: Code7, Dealer Code, Importer Code and date of issue.

CALCULATION OF PIN 4

 calculate the PIN 4 proceed as follows:
- Insert the day, month and year of issue of CODE 7
- To activate the function, select "**DATE**" and press **ENTER**.
- Insert the PIN 7, DEALER and importer CODE.
- o activate the function, select the figure to insert and press **ENTER**.

An asterisk will confirm that the figure has been entered.

```
    - VAG CONVERTER -
  PIN 7 *
  DEALER
  IMPORTER
> PIN 4
  DATE (XX/XX/XXXX)
  EXIT
                    ⇧⇩⇦⇨ ⬚⤶
```
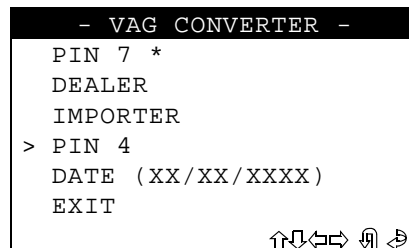
- The PIN 4 will appear automatically once all the data have been entered (DATA, PIN 7, DEALER, IMPORTER).

ADVANCED OPTIONS

The function can also be used for inverse calculation.

Example:
If you have the **correct data** for:
- The **date of issued** of CODE;
- 3 of the 4 codes required;
The missing CODE can be found. Just insert the 3 items of known data and the missing figure will appear automatically.

6.7   SETUP

his section contains the various setting menus for the machine.
Select **"SETUP"** from the main menu and press **ENTER**.

```
            - SETUP -
> 1 - ENABLE FLAGS
  2 - LANGUAGE
  3 - SERIAL NUMBER
  4 - CALENDAR/CLOCK
  5 - RELEASE
  6 - STORE PASSWORD
  7 - KEYS REFERENCES
                  ⇧⇩⇦⇨ ⬚ ↵
```
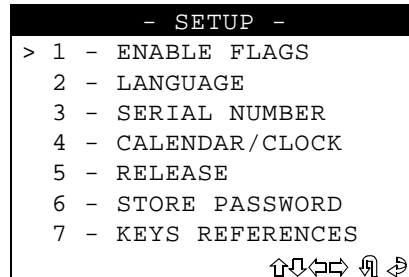
- Select and press **ENTER**.

6.7.1   ENABLING

After selection the display will show:

```
          - ENABLING -
> 1 - IMMOBILIZER
  2 - REMOTE CONTROLS
  3 - TOKEN (X)



                  ⇧⇩⇦⇨ ⬚ ↵
```
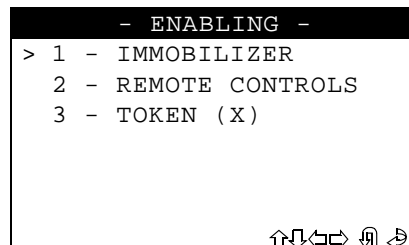
- Select IMMOBILIZER to view the vehicle makes available for entering enabling in the "Immobilizer" function;
- Select REMOTE CONTROLS to view the vehicle makes available for entering enabling in the "Remote Controls" function;
- Select TOKEN to view the tokens available; further tokens can be loaded.
- Select and press **ENTER**.

ENABLING MAKES (FUNCTION AVAILABLE ONLY FOR SBB FULL LOAD DEVICES)

After selecting the menu "IMMOBILIZER or REMOTE CONTROLS" the display will show:

```
          - ENABLING -
> AUDI
  FORD
  NISSAN
  OPEL
  SEAT

                  ⇧⇩⇦⇨ ⬚ ↵
```

Select the required make to view the enabling levels available and those already enabled.

```
        - ENABLING MAKE -
  LEVEL1 (*)
  LEVEL2 (*)
> LEVEL3 (*)



                  ⇧⇩⇦⇨ ⬚ ↵
```
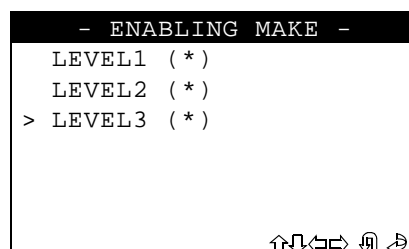
To enter the enabling password applied for with the document provided with the software update disk (software application FORM).

- Select the level of enabling and press ENTER.
- Select ESC to quit.

NOTE: the levels marked (*) are already enabled for operation.

PASSWORD ENTRY

After selecting the enabling level the display will show:

```
┌─────────────────────────────┐
│      ENABLING MAKES         │
│      Insert Password        │
│      for abilitation        │
│         LEVEL X             │
│                             │
│         XXXXXX              │
│                             │
│                        ⏎ ↵  │
└─────────────────────────────┘
```
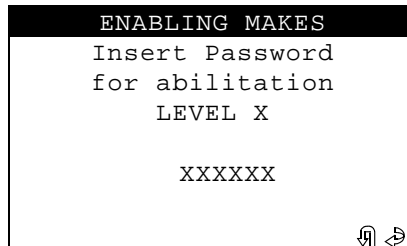
- Enter the password comprising 6 numerical characters.
- Press ENTER to continue, ESC to quit.

WRONG PASSWORD

If the Password entered is wrong the user is warned by a beep and the display will show:

```
┌─────────────────────────────┐
│                             │
│         PASSWORD            │
│      ABILITATION GROUP      │
│         CAR BRAND           │
│           WRONG             │
│                             │
│                        ⏎ ↵  │
└─────────────────────────────┘
```
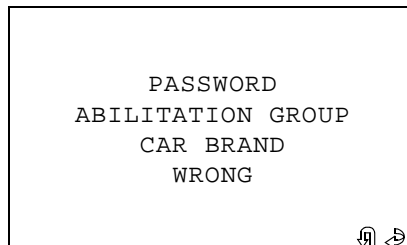
- Repeat the operation.

ATTENTION:only 3 attempts are allowed, after which the device is blocked. To release disconnect the device from the power supply, then re-connect.

RIGHT PASSWORD

If the Password entered is right, the display will show:

```
┌─────────────────────────────┐
│                             │
│      ABILITATION GROUP      │
│         CAR BRAND           │
│          ENABLED            │
│                             │
│                             │
│                             │
└─────────────────────────────┘
```
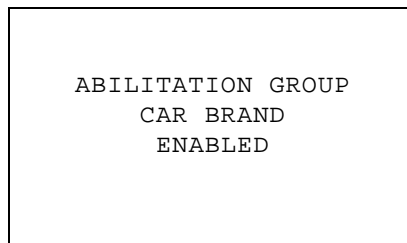
From this moment the device is enabled to operate at the enabling level selected.

ENABLING TOKEN

After selecting the "TOKEN" menu the display will show:

```
┌─────────────────────────────┐
│     - ENABLING TOKEN -      │
│      TOKEN AVAILABLE        │
│            XX               │
│     Date of last loading    │
│         YY/YY/YYYY          │
│                             │
│                             │
└─────────────────────────────┘
```

XX = Tokens still available
YY/YY/YYYY = Date of last loading of tokens
F5 = Function key for unloading tokens from the smart card

LOADING TOKENS

To load new tokens onto the machine, purchase a Smart Card with credits on it.   Insert the Smart card into SBB before ignition, as illustrated.

Fig. 5

Press the **F5** function key
If credits have been transferred from the smart card to SBB successfully, the display will show:

```
- TOKEN FROM SMARTCARD -

      OPERATION
     SUCCESSFULLY
      COMPLETED!


        Press any key...
```

Press any key to return to the previous menu.
If credits have not been transferred from the smart card to SBB, the display will show:

```



        ERROR


```

- Press any key to return to the previous menu.
- Check that the smart card has been inserted properly and repeat the procedure

6.7.2   LANGUAGE

This function is used to select the language for the device.
- Select the item "**LANGUAGE**" from the "Setup" menu, the display will show:

```
            - LANGUAGE -
> 1 - ITALIANO
  2 - DEUTSCH
  3 - FRANCAIS
  4 - ENGLISH
  5 - ESPANOL
  6 - GREEK
  7 - PORTUGUÊS
                         ⇧⇩⇦⇨ ⌦ ⏎
```

- Select the language and press **ENTER**

6.7.3   SERIAL NUMBER

This function is used to view the serial number of the machine.
- Select the item **"SERIAL NUMBER"** from the "Setup" menu; the display will show:

```
             SBB
        SERIAL NUMBER
        XXXXXXXXXXXXX
```
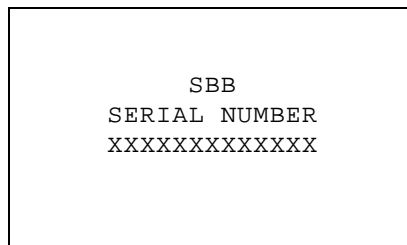
6.7.4   CLOCK

This function is used to read the machine's internal clock.
- Select the item **"CLOCK"** the "Setup" menu; the display will show:

```
        - CALENDAR/CLOCK -

            TIME:
           XX:XX:XX
            DATE:
          XX/XX/XXXX

                         ⇧⇩⇦⇨ ⌦ ⏎
```

- Press **ESC** to quit.
- Select **ENTER** to continue.
- Follow the instructions given by the device.
- The user is not enabled to the TIME/DATE changing functions of the clock.

6.7.5   VERSION

This function is used to view the FIRMWARE / SW / DATABASE version on the device.
- Select the item "**VERSION**" from the "Setup" menu:

```
            - SBB -

Ver. (SW): XXX.XX.XXX
Ver. (DB): XX.XX
Release : XXXXXXX

                         ⇧⇩⇦⇨ ⌦ ⏎
```
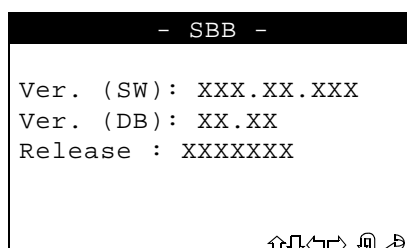
- Ver. (SW): version of the **internal program**
- Ver. (DB): version of the **car makes-models database**
- Update: **database update** level given by the manufacturer's code.

6.7.6   MEMORIZE PASSWORD

This option can be used to bypass the password, which is required every time the machine is turned on.
- Select the item **"MEMORIZE PASSWORD"** from the "Setup" menu, the display will show:

```
┌────────────────────────────┐
│  - MEMORIZE PASSWORD -      │
│                            │
│                            │
│          >YES              │
│           NO               │
│                            │
│                            │
│                ⇧⇩⇦⇨ ⏚ ↵    │
└────────────────────────────┘
```

- Select and press **ENTER**.
- Select **ESC** to quit.

6.7.7   KEYS REFERENCES
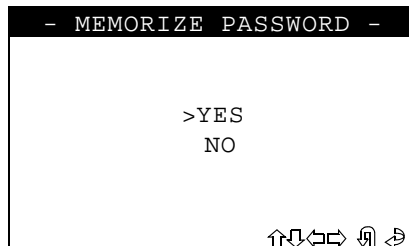
This option can be used to view the Silca or Ilco keys references on HELP F1 menu.
- Select the item **"KEYS REFERENCES"** from the "Setup" menu; the display will show:

```
┌────────────────────────────┐
│   - KEYS REFERENCES -       │
│       Select the           │
│        reference           │
│       to display           │
│         >SILCA             │
│          ILCO              │
│                            │
│                ⇧⇩⇦⇨ ⏚ ↵    │
└────────────────────────────┘
```

- Select and press **ENTER**.
- Select **ESC** to quit.

6.8   ARCHIVE

This section contains all the controls for searching, printing, or deleting user data stored in the device memory.
Select **"ARCHIVE"** from the MAIN MENU and press **ENTER**; the display will show:

```
┌────────────────────────────┐
│       - DATA BASE -         │
│  1 - SEARCH                 │
│  2 - PRINT DATA             │
│  3 - ARCHIVE RESET          │
│                            │
│                            │
│                ⇧⇩⇦⇨ ⏚ ↵    │
└────────────────────────────┘
```
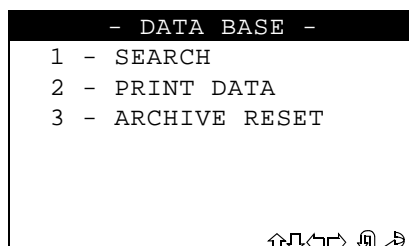
6.8.1   SEARCH

This control is used to make a search for:
- POS.: Position in which the operation carried out was saved
- DATE: date on which the operation was memorized
- MAKE: car make
- MODEL: car model
- SURNAME: customer's surname
- NUMBER PLATE: car number plate

Select **"SEARCH"** from the **"ARCHIVE"**; menu; the display will show:

```
        - SEARCH -
   POS.:     XX
   DATE:     XXXXXXXX
 > BRAND:    XXXXXXXXXX
   MODEL:    XXXXXXXXXX
   SURNAME:  XXXXXXXXXX
   REG.NO.:  XXXXXXXXXX
                      ⇧⇩⇦⇨ 🖑 ⏎
```

- Use the ⇧⇩, , arrow keys to place the cursor in the required field and press ⇨.
- Enter the characters to be searched for.
- Press **ENTER** to proceed the search.

SEARCH METHOD

(POS.) (DATE)
- Digit a number or the date and press **ENTER**: the display will show the corresponding record.
- Use the ⇦ key to view the previous record, the ⇨ key to view the next record.

(MAKE) (MODEL) (SURNAME) (NUMBER PLATE)
- Digit the initial or part of the text to be searched for and press ENTER: the display will show the first record available in order of position (POS.)
- Use the ⇦ key to view the previous record, the ⇨ key to view the next record.

If none of the search criteria are met or there are no data in the archive, the display will show:

```
       NO INFORMATION
          RECOVERED
```

- Press any key and repeat the search.

USER DATA
User data that meet the criteria are shown as follows:

```
       USER DATA (0)
  DATE:      20/03/2001
  BRAND:     AUDI
  MODEL:     A4
  YEAR:      (95-98)
  SURNAME:   ROSSI
  NAME:      MARIO
                    ⇧⇩ 🖑 ⏎
  REG.NO.:   TV9988776
  KEYS:      3
  PIN:       4567
  IMMO ID:   (F1)
```

Use the ⇦⇨ keys to view the user data in sequence (depending on the search selected).
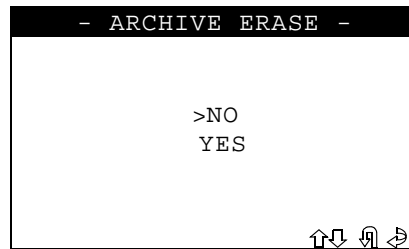- Press key F1 to view the IMMO ID.

6.8.2 PRINTOUT

At present this function is not active.

6.8.3   ARCHIVE ERASE
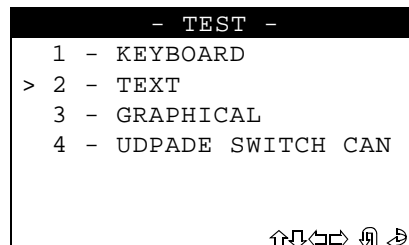
This function is used to erase all user data in the archive.
- Select "ERASE ARCHIVE" from the **"ARCHIVE"** menu; the display will show:

```
┌─────────────────────────────┐
│      -  ARCHIVE ERASE  -     │
│                             │
│                             │
│            >NO              │
│             YES             │
│                             │
│                             │
│                   ⇧⇩ 📖 ⤵   │
└─────────────────────────────┘
```

- Select and press **ENTER**.
- Select **ESC** to quit.

6.9   TEST

This section contains all the controls with which to carry out a rapid operational test on the machine. Select **"TEST"** from the main menu.The display will show:

```
┌─────────────────────────────┐
│         -  TEST  -           │
│   1 - KEYBOARD              │
│ > 2 - TEXT                  │
│   3 - GRAPHICAL             │
│   4 - UDPADE SWITCH CAN     │
│                             │
│                             │
│               ⇧⇩⇦⇨ 📖 ⤵    │
└─────────────────────────────┘
```

6.9.1   KEYBOARD

This function is used to test the operation of all the keys on the device keypad.
- Select **"KEYPAD"** from the "TEST" menu.
- To carry out the test press all the keys on the device, one after the other; to quit press any key three times.
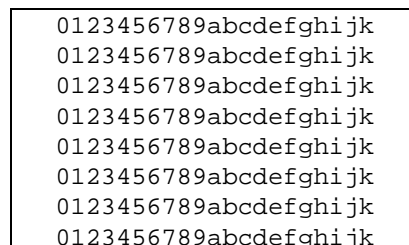
TEST RESULT:
- TEST PASSED (all the keys are working properly)
- TEST FAILED (not all the keys has been pressed) possible causes:
- One or more keys not working properly
- The same key has been pressed for three times in a row.

6.9.2   TEXT

This function is used to test the operation of the display in the Text mode.
- Select **"TEXT"** from the "TEST" menu.

```
┌─────────────────────────────┐
│  0123456789abcdefghijk      │
│  0123456789abcdefghijk      │
│  0123456789abcdefghijk      │
│  0123456789abcdefghijk      │
│  0123456789abcdefghijk      │
│  0123456789abcdefghijk      │
│  0123456789abcdefghijk      │
│  0123456789abcdefghijk      │
└─────────────────────────────┘
```

- Check that the characters on the display correspond.
- Press a key to quit.

6.9.3   GRAPHICS

This function is used to test operation of the display in the GRAPHICS mode.
- Select **"GRAPHICS"** from the "TEST" menu and check that all the pixel on the display are illuminated.
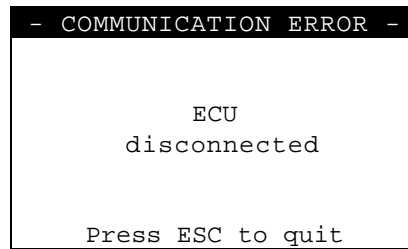- Press a key to quit.

6.9.4   UPDATE SWITCH CAN

This function is used for manual updating of the internal software for the CAN BUS SWITCH.
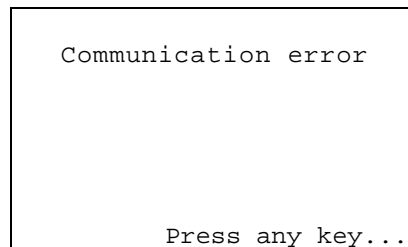- Select **"UPDATE CAN BUS SWITCH"** from the "TEST" menu.
- The display will show:

```
        OPTIMIZATION IN
           PROGRESS



```
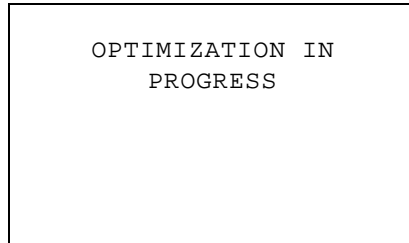
Updating of the SWITCH CAN BUS start now.
When updating is complete the SBB re-starts automatically.

7   WARNING/ERROR MESSAGES

ERROR MESSAGE 1

```
- COMMUNICATION ERROR -


        ECU
     disconnected


    Press ESC to quit
```

ERROR MESSAGE N° 2

```
   Communication error




                Press any key...
```

- These error messages may appear during communication with the immobilizer if the connection is cut off, or in the case of physical disconnection between the device and immobilizer: disconnect the device from the socket and repeat the operation.

ERROR MESSAGE 3

```
     Not recognized
        protocol




                Press any key...
```
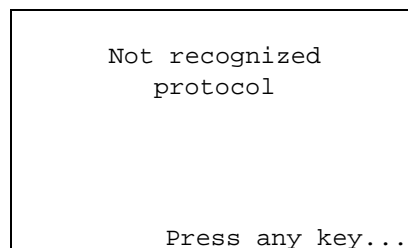
- This message appears when a car model is selected but none of the queries from the different protocols used receive a coherent reply from the immobilizer. Check that you have selected the right makemodel.

ERROR MESSAGE 4

```
      NOT VALID
         PIN



```
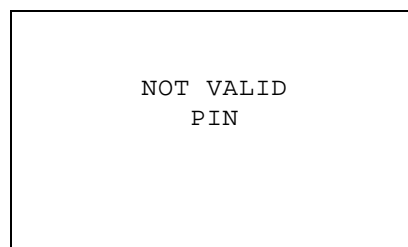
- This message appears when the PIN CODE entered is not properly composed or is not recognized by the immobilizer.

ERROR MESSAGE 5

```
┌─────────────────────────────────┐
│                                 │
│        Key not programmed       │
│         Repeat procedure        │
│                                 │
│                                 │
│                                 │
│              Press any key...   │
└─────────────────────────────────┘
```

This message appears when key programming is not successful. Repeat the procedure.

ERROR MESSAGE 6

```
┌─────────────────────────────────┐
│                                 │
│         REMOTE CONTROL          │
│          not programmed         │
│         Repeat procedure        │
│                                 │
│                                 │
│              Press any key...   │
└─────────────────────────────────┘
```

This message appears when remote control programming is not successful. Repeat the procedure.

ERROR MESSAGE 7

```
┌─────────────────────────────────┐
│       -  PROG.NEW KEYS  -       │
│                                 │
│              KEY i              │
│        Acquisition failed       │
│           Key faulty            │
│         Repeat procedure        │
│                                 │
│              Press any key...   │
└─────────────────────────────────┘
```

- The key to be programmed is faulty, replace with a new key and repeat programming.
- Press any key to continue.

```
┌─────────────────────────────────┐
│       -  PROG.NEW KEYS  -       │
│                                 │
│      Procedure interrupted      │
│      Keys memorized before      │
│      procedure started are      │
│             enabled             │
│                                 │
│              Press any key...   │
└─────────────────────────────────┘
```

- All the keys memorized before programming started are still enabled for operation.
- Press any key to continue.

ERROR MESSAGE 8

```
- PROG. NEW KEYS -

        KEY i
   Acquisition failed
      Key faulty
   Repeat procedure


       Press any key...
```

- The key to be programmed is a wrong key, replace with the right key and repeat programming.
- Press any key to continue.

```
- PROG. NEW KEYS -

Procedure interrupted
Keys memorized before
procedure started are
        enabled.

       Press any key...
```

- All the keys memorized before programming started are still enabled for operation.
- Press any key to continue.

ERROR MESSAGE 9

```
- PROG. NEW KEYS -

        KEY i
   Acquisition failed
      Disabled key
   Repeat procedure

       Press any key...
```

- The key to be programmed has been erased and cannot be re-programmed. Replace with a new key and repeat programming.
- Press any key to continue

```
- PROG. NEW KEYS -

Procedure interrupted
Keys memorized before
procedure started are
        enabled.

       Press any key...
```

- All keys memorized before programming started are still enabled for operation.
- Press any key to continue

ERROR MESSAGE 10

```
- PROG. NEW KEYS -

        KEY i
   Acquisition failed
  Key already acquired
    Repeat procedure

           Press any key...
```

- The key to be programmed has already been programmed; repeat programming.
- Press any key to continue.

```
- PROG. NEW KEYS -

  Procedure interrupted
  Keys memorized before
  procedure started are
        enabled
            .
           Press any key...
```

- All keys memorized before programming started are still enabled for operation.
- Press any key to continue.

ERROR MESSAGE 11

```
- PROG. NEW KEYS -

        KEY i
   Acquisition failed
   Key not present or
   without transponder
    Repeat procedure
           Press any key...
```

- The key to be programmed is without a transponder. Replace with a new key with transponder and repeat programming.
- Press any key to continue.

```
- PROG. NEW KEYS -

  Procedure interrupted
  Keys memorized before
  procedure started are
        enabled.

           Press any key...
```

- All keys memorized before programming started are still enabled for operation.
- Press any key to continue.

ERROR MESSAGE 12

```
- PROG. NEW KEYS -

Key memorization failed

  EEPROM memory error


            Press any key...
```

- There is an internal anomaly in the immobilizer.
- Press any key to continue.

ERROR MESSAGE 13

```
- PROG. NEW KEYS -

    Body Computer
     not properly
      programmed


            Press any key...
```

- There is an internal anomaly in the body computer.
- Press any key to continue

ERROR MESSAGE 14

```
- RKE PROGRAM -

   Procedure failed




            Press any key...
```

- The remote control to be programmed is not the right one, or is broken, or errors have occurred during programming. Make sure the remote control is the right one and efficient, then repeat programming.
- Press any key to continue

ERROR MESSAGE 15

```
- PROG. NEW KEYS -
 Error found:
        XXXX
   Eliminate the error
 before programming keys
 and/or remote controls

            Press any key...
```

- If errors are found in the immobilizer, programming cannot take place.
- Delete the errors using the "DELETE ERRORS" function, then repeat programming.
- Press any key to continue

ERROR MESSAGE 16

```
- PROG. NEW KEYS -

     Body Computer
       not properly
       programmed


              Press any key...
```

- The Body computer (main control unit) is not properly programmed; programming operations cannot be carried out.
- Have the body computer properly programmed by an authorized dealer, then proceed with programming.
- Press any key to continue.

ERROR MESSAGE 17

```
- RKE PROGRAM -

  REMOTE CONTROL N° XX
       Learning failed
  Detective rem.control
   Repeat the procedure


              Press any key...
```

The remote control to be programmed is not the right one or is faulty.
- Repeat programming, making sure that the remote control is the right one and operational.
- Press any key to continue.

ERROR MESSAGE 18

```
- RKE PROGRAM -

  REMOTE CONTROL N° XX
       Learning failed
      Run-down battery
   Repeat the procedure


              Press any key...
```

The battery in the remote control to be programmed is flat.
- Replace the remote control battery with a new one and repeat programming.
- Press any key to continue.

ERROR MESSAGE 19

```
- RKE PROGRAM -

  REMOTE CONTROL N° XX
       Learning failed
   Rem.ctrl alr. acquired
    Repeat the procedure


              Press any key...
```

The remote control to be programmed is already in the memory and operational.
- Use a remote control not yet programmed and repeat programming.
- Press any key to continue.

ERROR MESSAGE 20

```
   - RKE PROGRAM -

 REMOTE CONTROL N° XX
    Learning failed

 Repeat the procedure

          Press any key...
```

Some errors have occurred during programming.
Repeat programming, making sure that the remote control to be programmed is the right one and operational,
and that the immobilizer system has no operational anomalies (use the reading errors function).
Press any key to continue.

8   HELP MENU

This function is enabled after the selection of car make and model.
The following help functions are available:

F1

Press the function key **"F1"** to read information relating to the MAKE/MODEL selected:
- MAKE
- MODEL
- YEAR
- REFERENCE (SILCA)
- ORIGINAL TRANSPONDER
- MEMORIZATION PROCEDURE
- MAX. NUMBER OF KEYS THAT CAN BE MEMORIZED
- CONNECTOR TO USE
- ADAPTER TO USE
- CONNECTOR POSITION

Example:

```
        - CAR MAKE -
A2:          (95-96)
CONNECT:     00
Pos.Con.:    (F3-F4)
KEY REF:     HU66AT6
Orig.Tr:     MEG/CR
RW2/RW3 ID:  48
F2-F3-F4     ⇦⇨⇧⇩ ⇔
N.KEY:       8
Self P.:     (F2)
```

- Connect: type of cable to use to connect with the immobilizer (see ID label on the cable);
- Pos.Con: position on the vehicle of the diagnostics socket to which the device can be connected; press F3 – F4 to access the information.
- Key Ref.: Silca key to use for the car model selected
- Orig.Tr.: type of transponder used on the original key
- RW2/RW3 ID: ID code for transponder used by RW2/RW3.
- No. Key: max. number of keys that can be memorized on the vehicle (when the maximum number of keys is reached, a key must be erased from the memory in order to memorize a new one).
- Self P.: description of the direct programming procedure.

NOTE: correspondence of the original transponder to the Silca key to be used should be checked with the RW2/RW3 for the type of transponder.
The F2-F3-F4 help menus are now available (see last bottom line).

F2

Direct programming is a memorization/deletion method for new keys on the vehicle which does not require diagnostics. The procedure is active on certain models only, as its use depends on the policy of the car manufacturer.

Press the **"F2"** function key; the display will show the direct programming procedure:

```
        - CAR MAKE -
   ON BOARD PROGRAM A
   1 - Programming new
   keys without use of
     programmed keys


                  ⇧⇩⇦⇨
```

F3-F4

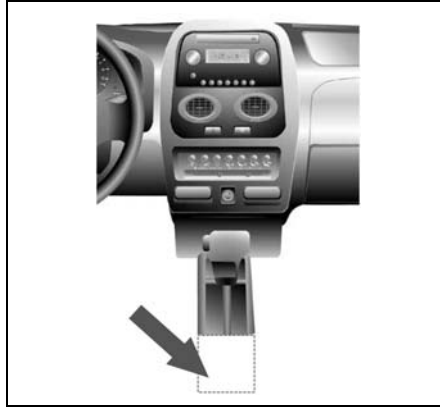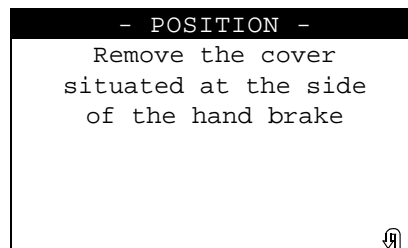Press the **"F3"** function key, the display will show the position of the connector (Graphic Image)

Fig. 6

- Select **ESC** to quit.

Press the **"F4"** function key, the display will show a description of the position of the connector:

```
     - POSITION -
    Remove the cover
  situated at the side
   of the hand brake


                     ⌂
```

- Select **ESC** to quit.

9   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 machine does not require special maintenance.

ATTENTION:do not open the machine for any reason whatsoever)

Before starting any type of maintenance (checks or replacement of parts) read the following instructions:
- Do not carry out any maintenance operations with the machine turned on;
- Always disconnect from the mains;
- Follow the instructions in the manual;
- Use original spare parts.

FAULT	PROBABLE CAUSE
DISPLAY: - DISPLAY IS BLANK WITH MACHINE ON	A) CHECK POWER SUPPLY CONFIGURATION B) CHECK CONNECTION WIRING - REPLACE DISPLAY (AFTER-SALES SERVICE) - REPLACE ELECTRONIC CONTROL BOARD (AFTER-SALES SERVICE)
KEYPAD: - NOT RESPONDING TO CONTROLS	A) CHECK CONNECTION WIRING - REPLACE KEYPAD (AFTER-SALES SERVICE)
NO COMMUNICATION WITH THE CENTRALIZED UNIT	A) CHECK THAT THE RIGHT CAR MODEL HAS BEEN SELECTED B) CHECK THE WIRING

The instructions above relating to the probable causes of the faults described should be considered indicative and not a complete list of the possible causes of malfunctions.
Contact the After-Sales Service in the event of any other problems arising.

9.1   CHECKING WIRING

If it is necessary to check the machine's internal wiring, proceed as follows:
- Disconnect the supply wire;
- Detach any other wires connected to the machine;
- Remove the 4 screws located on the back of the machine;
- Remove the cover carefully, paying attention to the wiring;
- Check that all the connectors are properly in place.

10   WASTE DISPOSAL

EU regulations establish special arrangements for the disposal of waste (*).

WASTE DERIVING FROM THE MACHINE
The machine produces no waste during its use.

MACHINE
The machine is made of re-usable materials. Re-cycling is recommended ecological practice.

PACKING
The machine is consigned in a cardboard packing box which can be re-used if undamaged. When it is to be thrown away it is classified as solid urban waste and it should be placed in the special paper collecting bins.

(*) Waste is any substance or object deriving from human activity or natural cycles, thrown away or to be thrown away.

DISPOSING OF THE BATTERY

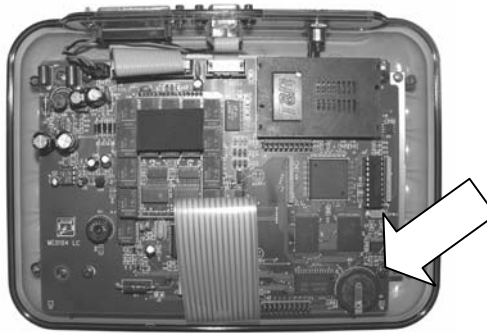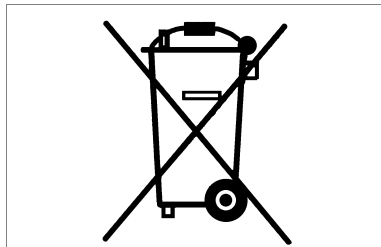The battery (fig. 7) must be disposed of according to current regulations.

Fig. 7

INFORMATION FOR USERS

as per art. 10 of Directive 2002/96/CE of 27/01/2003
regarding waste from electric and electronic appliances (RAEE),

• The symbol illustrated above, also found on the machine, indicates that it has been placed on the market and must be included in separate rubbish collection when the user wishes to dispose of it (including all components, sub-assemblies and consumables that are integrated in the product).

• For information about the collection system for such appliances please contact SILCA S.p.A. or another subject registered in the various National Rolls for other countries in the European Union. Household waste (or of similar origin) can be included in the separate collection system for urban waste.

• On purchasing a new appliance of equivalent type, the old one can be consigned to the dealer.   The dealer will then contact whoever is responsible for collecting the appliance.

• Suitable separate collection of the unused appliance and its dispatch for treatment, recovery and environmentally compatible disposal, makes it possible to avoid potential negative effects on the environment and human health, and aids recycling and the recovery of the materials used.

• Unauthorised disposal of the product by users involves the application of the sanctions provided for in received Directives 91/156/CE and 91/689/CE.

11   ASSISTANCE

Silca provides full assistance to purchasers of the 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.
On the back cover of this manual there is a list of the Service Centres and relative addresses.

11.1   HOW TO REQUEST SERVICE

The guarantee attached to the machine ensures free repairs or replacements of faulty parts within 12 months of purchase. All other service calls must be arranged by the customer with Silca or with a Silca service centre.

VITTORIO VENETO 21/06/2006

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 **Universal Diagnostic Device** model
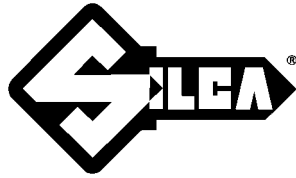
SBB

complies with the requirements of the following European Directives:

European Union **DIRECTIVE 2004/108/CE** (Electromagnetic Compatibility)

and with the   EN 61326-1 Standards

General Manager Basic Production Center

Corrado Fischer