



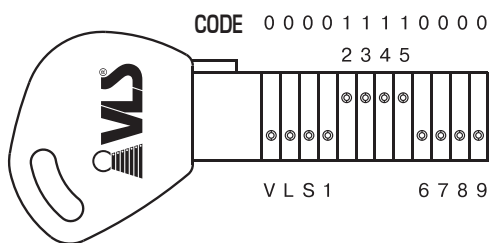
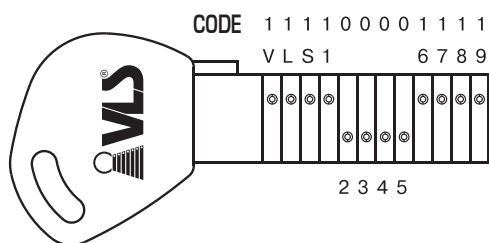
# ELECTRONICALLY CODED DOOR LOCK

**Model 3B 9P-9-3**

## **OPERATING MANUAL**

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## IMPORTANT!

Please read this Operating Manual carefully and keep it for further use!

### *Dear User!*

The VLS electronically coded door lock ("the Lock") is a fundamentally new locking solution. The universal reconfigurable key allows to enter the access code quickly and easily as well as to operate any functions of the lock. By turning individual segments of the key round the axis, you can set necessary code combinations.

The lock has more than 16 million possible combinations of access code.

If you lose the key, you do not have any troubles since nobody can open the lock by the key unless he or she knows the code.

One cannot reprogram the lock without the master code which is known only to the owner. The codes (including the master code) are entered by the owner, who can reprogram the lock easily and quickly without any special knowledge or skills.

You can program up to 10 different codes simultaneously (each and every user will be assigned a unique access code), delete or block any of the codes.

Locking and unlocking of the lock from the internal side of the door is performed by turning the handle without participation of the electronics.

There are high-strength hardened steel inserts installed in the cross-bars to prevent sawing.

The VLS electronically coded door lock is the best protection for your home and office.

## General Information

Purchasing the lock, please make sure its set is complete (see "Complete Set") and check its capacity for work (see "Performance Check of the Lock at Purchasing").

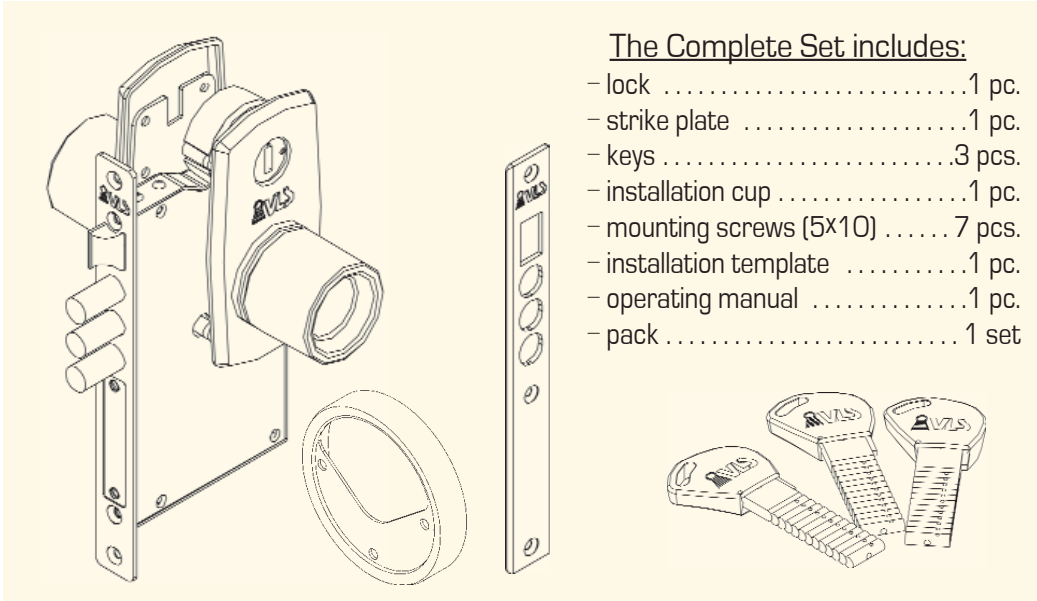
Make sure that the warranty card and tear-off coupon attached to the present Operating Manual contain the following information: manufacturer's No., manufacture date, sale date, manufacturer's QA approval, retail sale price, shop assistant's signature or stamp, shop's seal.

Please make sure that numbered labels on the lock body and keyhole unit are intact. Please keep in mind that damaged label means the loss of the warranty.

The electronic lock may be repaired by authorized personnel only.

To prevent misunderstanding, please study this Operating Manual carefully and keep it for further use as a handbook when using the lock.

### Complete Set



#### The Complete Set includes:

- lock .....1 pc.
- strike plate .....1 pc.
- keys .....3 pcs.
- installation cup .....1 pc.
- mounting screws (5x10) ..... 7 pcs.
- installation template .....1 pc.
- operating manual .....1 pc.
- pack ..... 1 set

### Design and Basic Technical Data

The lock is shown in [Fig. 1](#).

The lock may be installed on timber or metal doors, left- or right-hand locking. The door thickness range must be 40 to 60 mm. The clearance between the lock front plate and strike plate (counterpart) must be within 1 to 2.5 mm. The installation instructions are given in the "Installation Instructions" of this Manual.

The electromechanical lock is manufactured in two modifications: with or without traction rod for connection of the additional locking control gear. The lock with traction rod allows to connect the control gear and provide both top and bottom additional locking of the door. The control gear may be purchased as an option. The instructions on installation of the control gear are given in the "Control Gear Operating Manual".

#### The lock consists of the following basic parts:

- electromechanical lock;
- handles with scutcheon for inner side of the door;
- handles with scutcheon for outer side of the door with keyhole unit and emergency power supply contactor;
- identifier ("the Key") ([Fig. 2](#)).

#### The electromechanical lock includes:

- mechanical part with cross-bars and catch;
- timer electronic coding system consisting of control card for identifying (recognizing) the running key code;
- battery compartment incorporating the power supply which consists of four AAA-type batteries (LRO3).

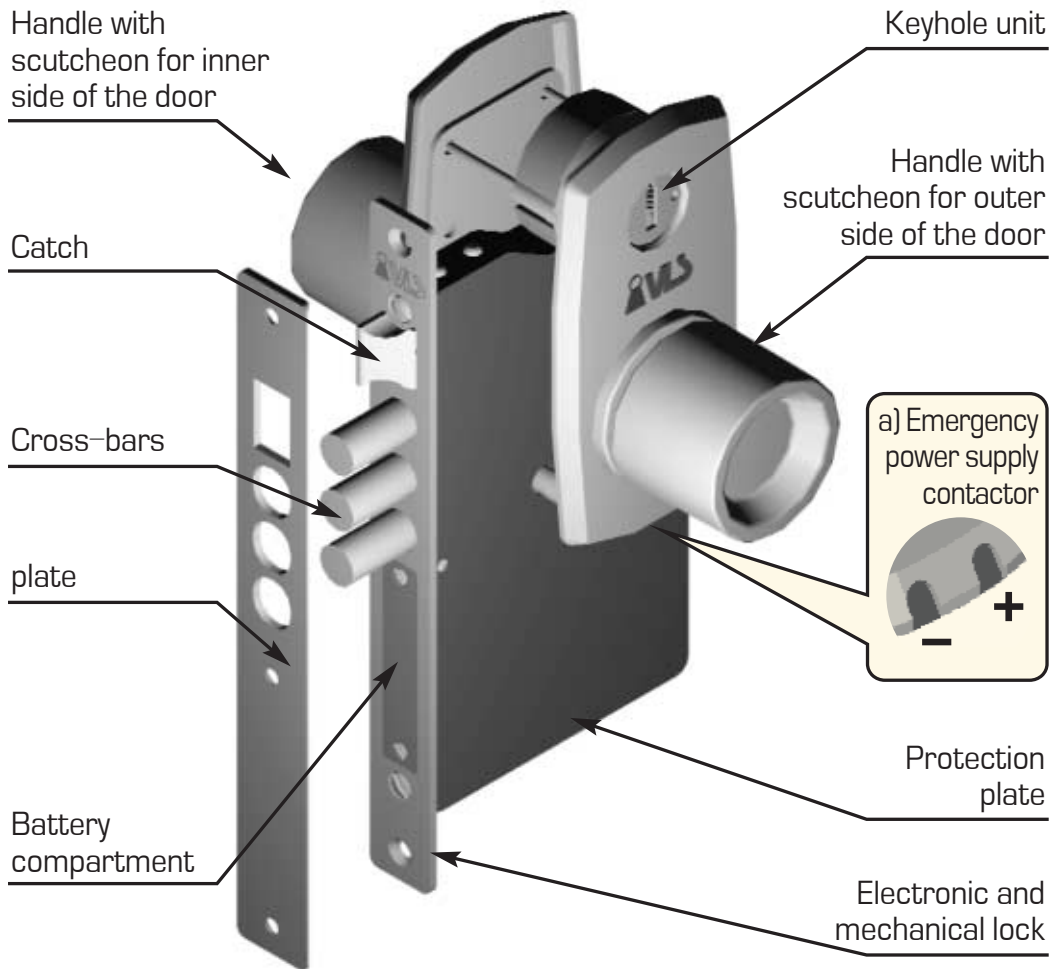


Figure 1 – The Lock

The key (fig. 2) is a device that allows the owner to enter the secret code easily and to open the lock. The code is entered by simply turning the key segments. All the locks share the same key design. If the key is broken or lost, it is enough just to purchase a new key.

The upper hole position of the key rotary segment corresponds to code "1", the lower hole position of the key rotary segment corresponds to code "0", and the key pin must be facing upwards.

The keyhole is a unit for inserting the key. It also reads the key code information. It includes the sound and light alarm device.



Figure 2 – The Key

If the power supply fails (for instance, while replacing the batteries) the timer electronic coding system ensures the safety of all the pre-programmed codes (FLASH memory is available). In addition, the timer electronic coding system performs additional help functions: it gives sound and light signal indicating proper (improper) operation, monitors discharge level of the power supply source, initiates self-locking of the lock if the key with a wrong code is inserted several times.

### UNLOCKING THE LOCK FROM THE OUTSIDE

The door may be unlocked from the outside by two successive entries of the chosen code.

1. The pre-programmed code is set on the key.

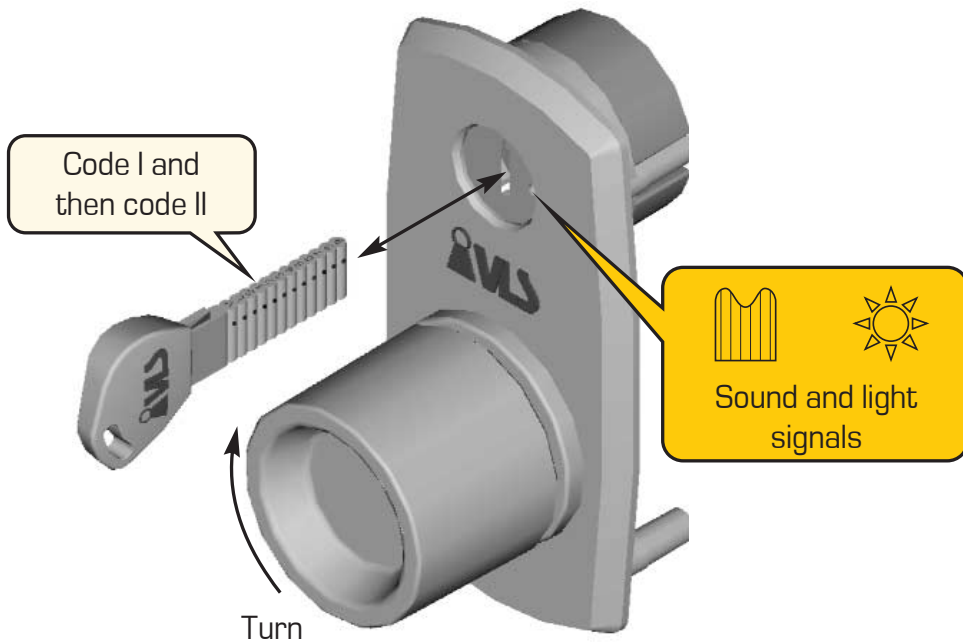


Figure 3 – Unlocking the lock from the outside

2. The key is inserted and then withdrawn from the keyhole, the lock will give a sound and light signal indicating proper (improper) operation.

**Note:** The codes are read while the key is withdrawn.

3. Another pre-programmed code is set on the key.

**Note:** The codes may be different or same at the owner's discretion.

4. The key is inserted and then withdrawn from the keyhole, the lock will give a sound and light signal indicating proper (improper) operation.


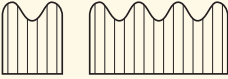



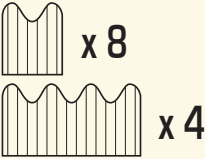
5. Now you may unlock the door by turning the handle.

**Note:** The interval between the first and second code entry must not exceed 120 sec.

### THE DOOR IS LOCKED AND UNLOCKED FROM THE INSIDE BY TURNING THE HANDLE WITHOUT THE KEY

During operation, the lock gives sound and light signals described in [Table 1](#).

Table 1. List of sound and light signals of the lock during operation

Symbols	Signal description	Signal meaning
1. "Accepted" 	One short signal	The command is correctly accepted by the timer system
2. "O.K." 	One short signal and one long signal	Correct completion of the programmed operation
3. "Error" 	Four short signals	Improper operation, wrong code is entered. User's mistake.
4. "Not locked" 	A sequence of 16 short signals	The handle is not turned fully. Cross-bars are not fully moved forward.
5. "Power supply" 	A sequence of 8 long signals	Battery is discharged. The batteries should be replaced.
6. "Failure" 	A sequence of 8 short signals and a sequence of 4 long signals	Malfunction of the lock. It should be repaired.

The lock power is supplied from 4 AAA-type elements (LR03). Alkaline batteries are recommended. The set of Alkaline batteries ensures proper operation for at least one year.

**Note:** The proper operation during one year is possible under the following conditions:

- set of Alkaline Duracell Ultra batteries;
- 25 unlocking operations daily;
- one "wrong code entry" alarm daily;
- one "door is not closed" alarm daily;
- one lock reprogramming monthly

It is possible to connect the emergency power supply source via contactor located at the bottom of outer scutcheon ([fig. 1a](#)); power supply source is 9 V battery of 6F22 type ("Krona").

The lock ensures proper performance if the ambient temperature range is  $-20^{\circ}\text{C}$  to  $+45^{\circ}\text{C}$ .

The lock dimensions are shown on [fig. 4](#).

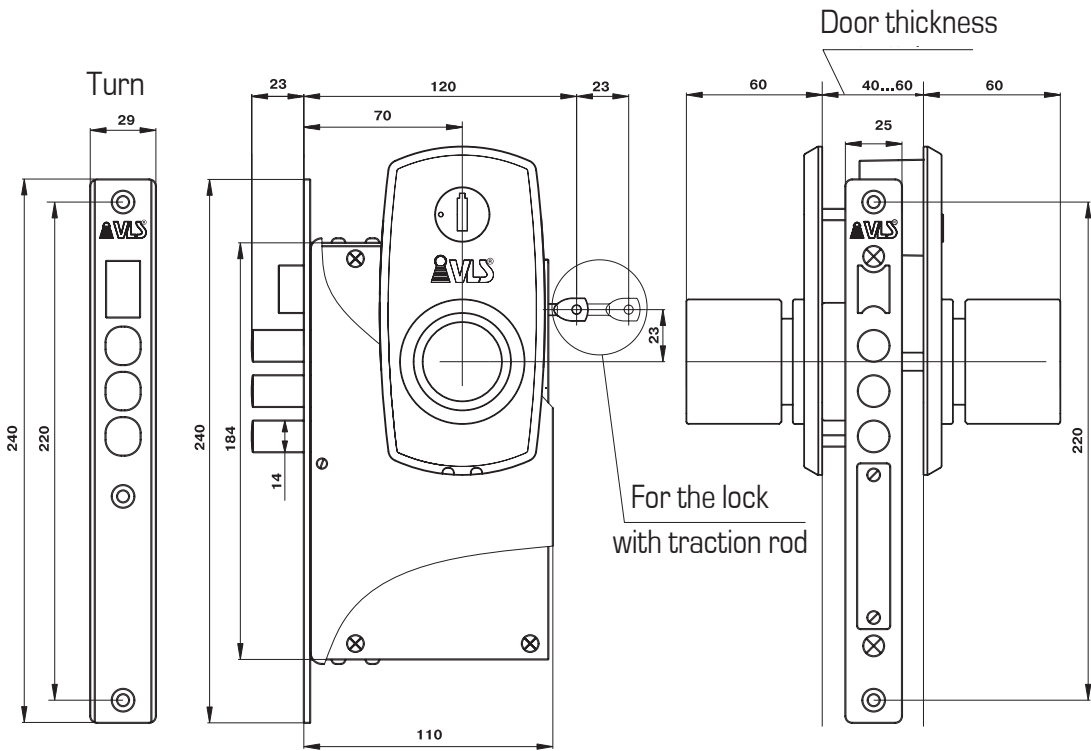


Figure 4

The installation dimensions are given in the "Installation Instructions" of this Manual.

The weight of the lock as a unit is not more than 2.5 kg.

Information on location of parts or assembly units that contain precious or non-ferrous metals may be sent upon request from repair service.

## Safety Measures

Operation of the lock does not involve factors of negative impact on the user's health.

Disposal of the lock after termination of the operation period does not involve factors of negative impact on the environment.



## Checking the Lock at Purchasing

When you purchase the lock, the shop assistant shall demonstrate its proper functioning. The following steps should be made.

1. Take the lock out of its package and check its completeness according to the "Complete Set" of this Manual.

2. Using a screwdriver, unscrew the two fixing screws from the battery compartment cover on the lock end surface (fig. 5).

3. Holding those two screws, remove the cover and take out the battery compartment from the lock body (fig. 5).

4. Insert 4 AAA-type batteries into the battery compartment, observing polarity. On installing the last battery, the "O.K." signal will be heard.

**Note:** The "O.K." signal will not sound if batteries are re-installed.

5. Insert the battery compartment into the lock body. Close the cover and fix the screws.

6. By turning the key segments, enter the code 0000 1111 0000, the key pin must be in the upper direction (fig. 6).

**Note:** The "Code" means a pre-set position of key segments "VLS 123456789". The beginning of the code (from left to right) corresponds to "V" segment, while the end of the code corresponds to "9" segment. The segment hole upper position (towards the pin) corresponds to code "1", the segment hole lower position corresponds to code "0".

7. Turn the lock handle (fig. 6) to lock the door.

8. Insert the key, prepared according to paragraph 6, into the keyhole up to the stop, the key pin must be in the upper direction. The "Accepted" signal will be heard.

9. Take out the key fully from the keyhole, the "Accepted" signal will be heard.

10. By turning the key segments, enter the code 1111 0000 1111.

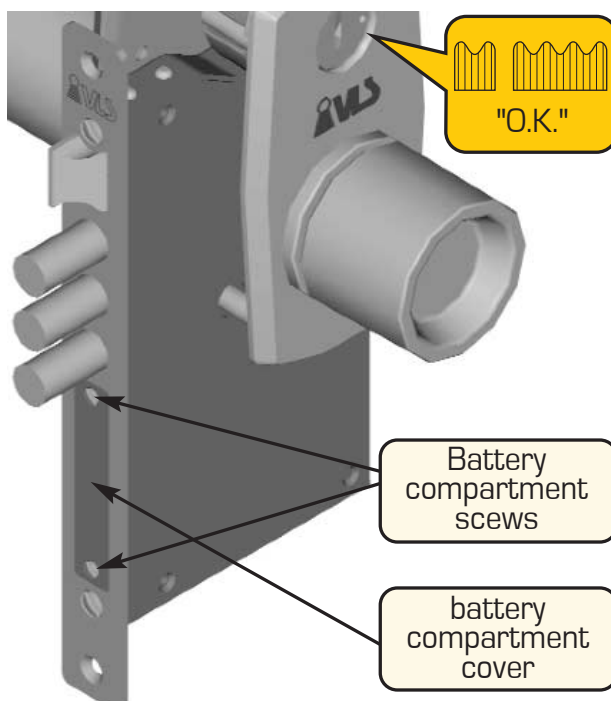


Figure 5 – Installation of Batteries

# Checking the Lock at Purchasing

**11.** Insert the key, prepared according to paragraph 10, into the keyhole up to the stop, the "Accepted" signal will be heard.

**Note:** The interval between the first code entry and the second code entry must not exceed 120 sec.

**12.** Take out the key fully from the keyhole, the "Accepted" signal will be heard.

**13.** Having turned the handle from the keyhole side (fig. 7), make sure that the door is unlocked.

**14.** Repeat the steps 6 to 13 several times.

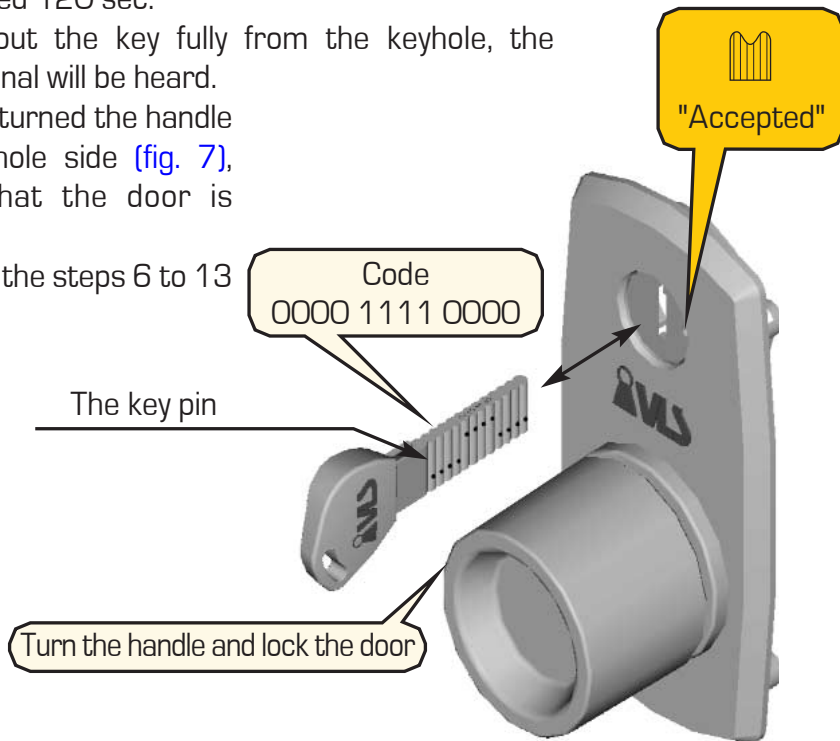


Figure 6 – Checking the lock: the first code entry

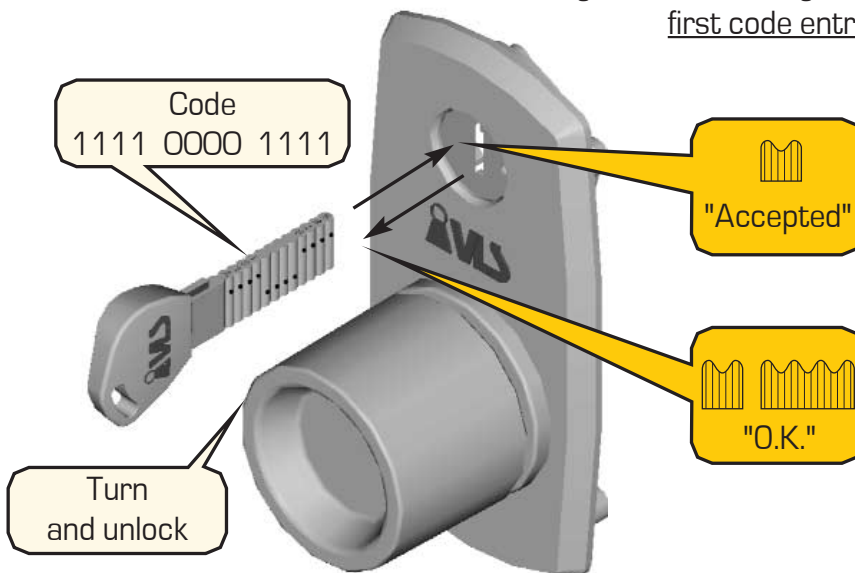


Figure 7 – Checking the lock: the second code entry

Stable locking and unlocking means the proper operation of the lock, and it may be purchased with warranty card and tear-off coupon filled in by the shop assistant.

## Installation Instructions

The lock may be installed on timber or metal doors, left-hand or right-hand, opening in the inner or outer direction. The door thickness range must be 40 to 60 mm.

1. If required, in order to set a necessary position of the lock catch, unscrew two screws (fig. 8), remove the plate and place the catch into the proper position. Replace the plate and screw it. **It is not required to remove the lock cover in order to turn the catch.**

**Note:** That removing the lock cover voids the warranty lost.

**Do not try to move the cross-bars forward while the front plate of the lock is removed.**

2. If required, install the batteries and check efficiency of the lock.

- Using a screwdriver, unscrew the two fixing screws from the battery compartment cover on the lock end surface (fig. 9).

- Holding those two screws, remove the cover and take out the battery compartment from the lock body (fig. 9).

- Insert 4 AAA-type batteries into the battery compartment, observing polarity. **Please bear in mind that wrong polarity may cause damage to the lock.**

- Insert the battery compartment into the lock body. Close the cover and fix the screws.

- Turn the lock handle (fig. 10a) and lock the door.

- By turning the key segments, enter the code 0000 1111 0000, the key pin shall be in the upper direction (fig. 10a).

- Insert the key, prepared according to paragraph 6, into the keyhole up to the stop (the key pin must be in the upper direction), the "Accepted" signal will be heard.

- Take out the key fully from the keyhole, the "Accepted" signal will also be heard.

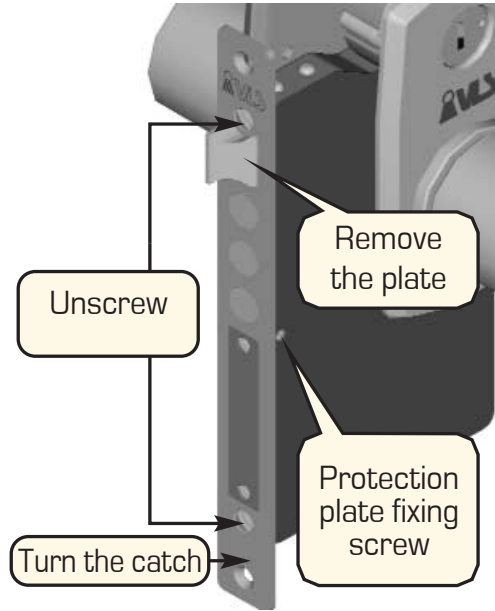


Figure 8 – Turning the catch

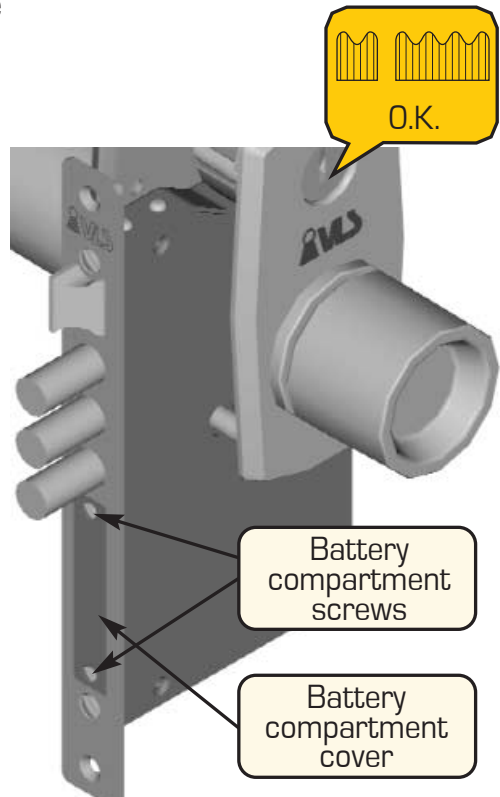


Figure 9 – Installation of the Batteries

- By turning the key segments, enter the code 1111 0000 1111 (fig. 10b).

**Note:** The interval between the first code entry and the second code entry must not exceed 120 sec.

- Insert the prepared key into the keyhole up to the stop, the "Accepted" signal will be heard.
- Take out the key fully from the keyhole, the "O.K." signal will be heard.
- Having turned the handle from the keyhole side (fig. 10b), make sure that the door is unlocked.

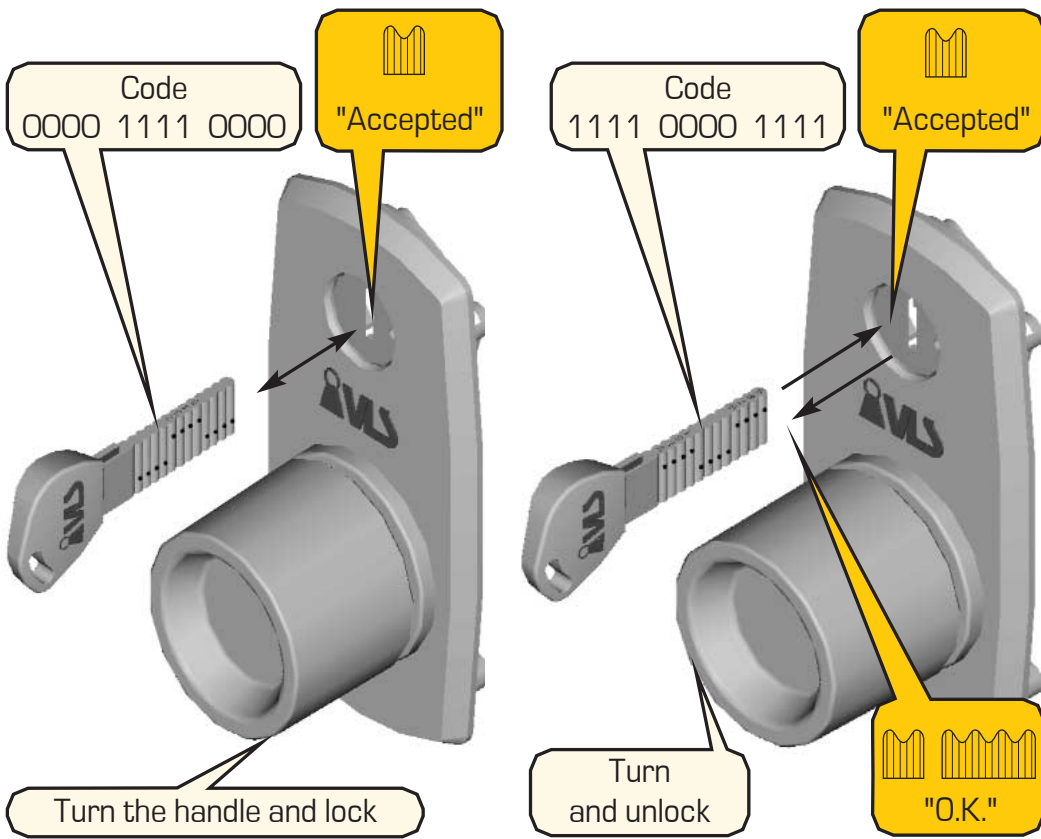


Figure 10a

Figure 10b

Figures 10a, 10b – Checking the lock performance

3. Mark the door for installing the lock according to fig. 11.

**Note:** You may use the installation template included in the complete set.

4. According to the marking of the door, make necessary holes and hollows. **Please bear in mind that smooth operation of the lock without jams depends on the precise marking and making holes in the door.**

5. Turn the nut on the scutcheon on the inner side of the door counterclockwise up to the stop (fig. 12), while holding the outer lock handle.

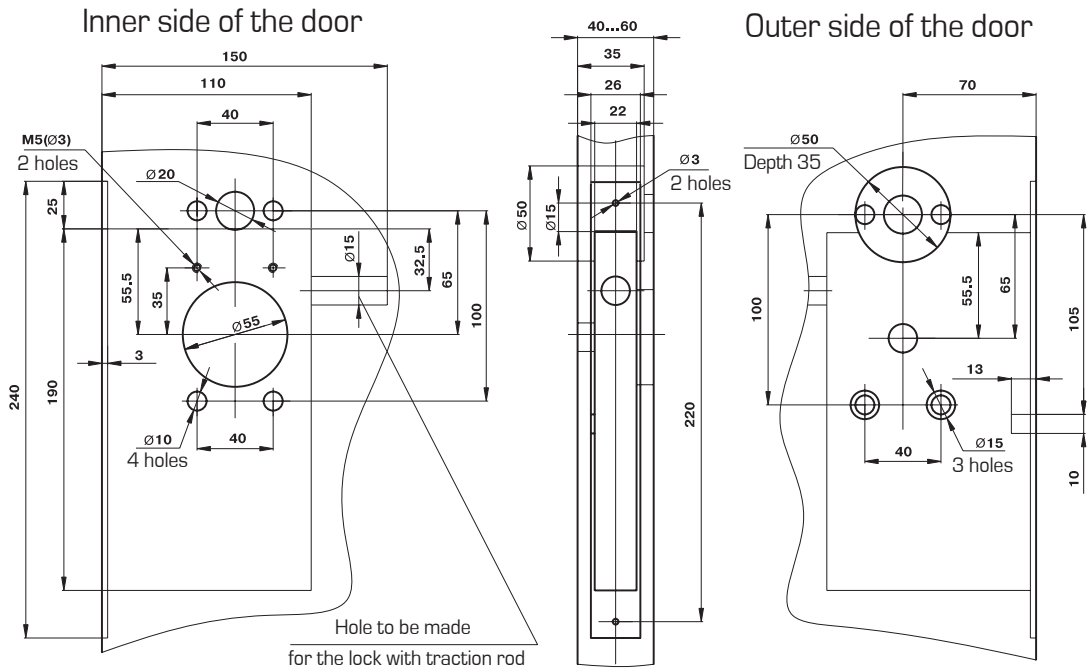


Figure 11 – Marking for installation of the lock on the left-hand door

6. Turn the scutcheon on the inner side so that you can see four fixing screws.
7. Unscrew the four fixing screws.
8. Remove the inner handle with the scutcheon.
9. Pull the plug to disconnect it from the keyhole.
10. Remove the outer handle with the scutcheon from the rod

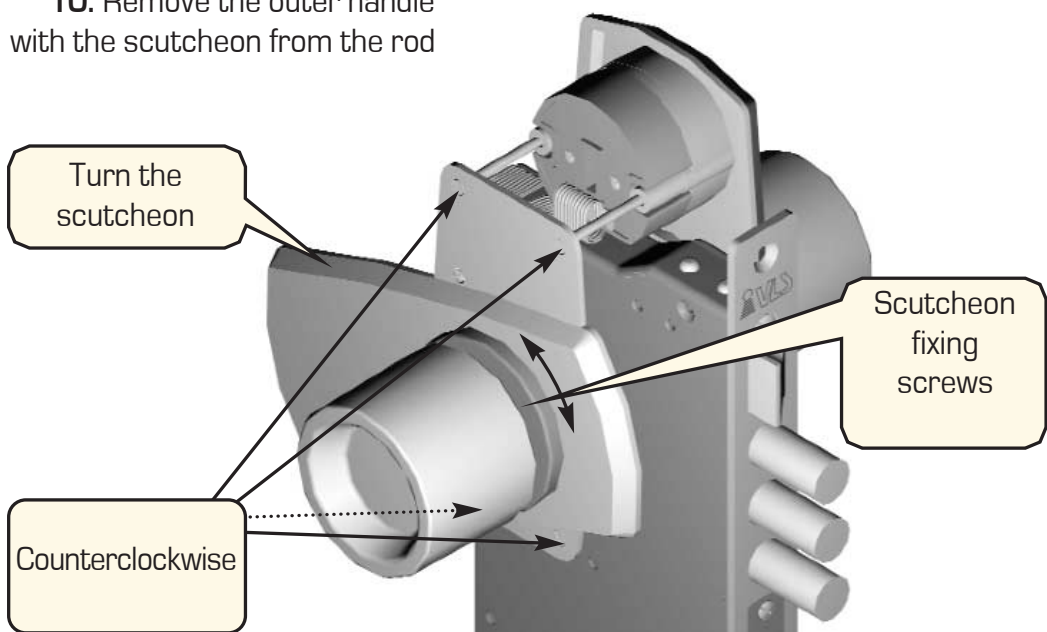


Figure 12 – Removal of the inner handle with scutcheon

**11.** Unscrew the three fixing screws that hold the cup in its place, and remove the cup (fig. 13).

**12.** Using a screwdriver or pincers, remove the locking washer from the rod (fig. 13).

**13.** Remove the outer handle rotation rod from the seat.

**14.** If necessary, change the position of the protection plate fixed on the lock body by the fixing screw. The protection plate must be located on the outer handle side.

**15.** Install the lock into the prepared seat in the door, lead out the plug through upper hole towards the outer handle (fig. 14).

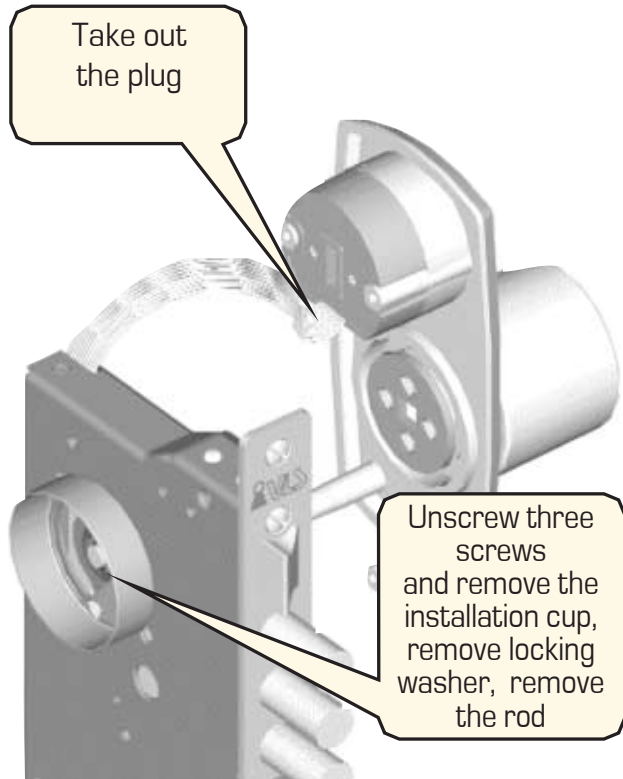


Figure 13 – Removal of outer handle with scutcheon and installation cup

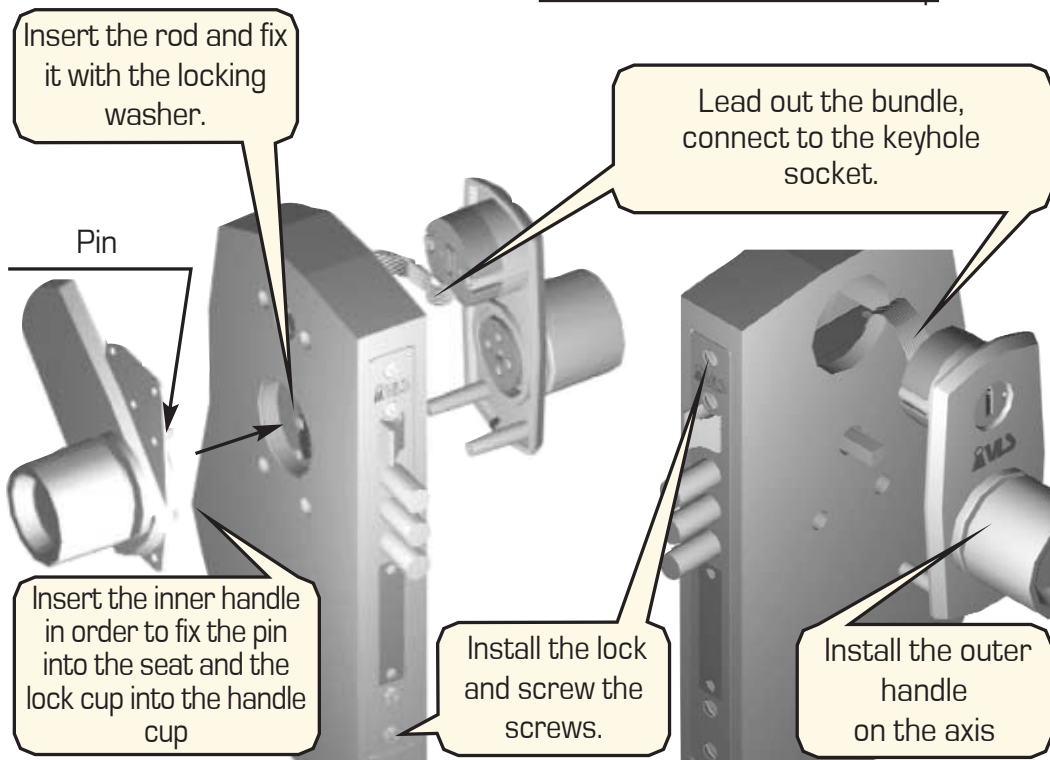


Figure 14 – Installation of the lock on the door

**16.** Screw up the fixing screws (screw nails) from the lock end face.

**Note:** The screw nails are not included in the complete set.

**17.** Install the outer handle rotation rod to its seat.

**18.** From the inner side, put on the locking washer on the rotation rod.

**19.** Through the hole in the door, from the inner handle side, install the cup on the lock body. If the door thickness is 50 to 60 mm, install the cup removed from the lock during its disassembly as given in paragraph 11. If the door thickness is 40 to 50 mm, install the cup included in the complete set. Make sure that the spring washers are set under the fixing screws.

**20.** Connect the lock plug to the socket on the keyhole.

**Make sure that the plug is inserted up to the stop, evenly and straight.**

**21.** Install the outer handle with scutcheon, the rod shall pass through the square-shaped hole of the handle.

**Make sure that the bundle is laid orderly without excessive bending. It must not be in the area of the fixing screws or keyhole.**

**22.** Install the inner handle with scutcheon and plate from the inner side of the door, the inner handle pin must get into the nest of the lock moving part, while the scutcheon plate must rest firmly upon the lock cup. Make sure that scutcheon plate rests tightly on the door. If the scutcheon meets the cup end face, use the shallow cup included in the complete set.

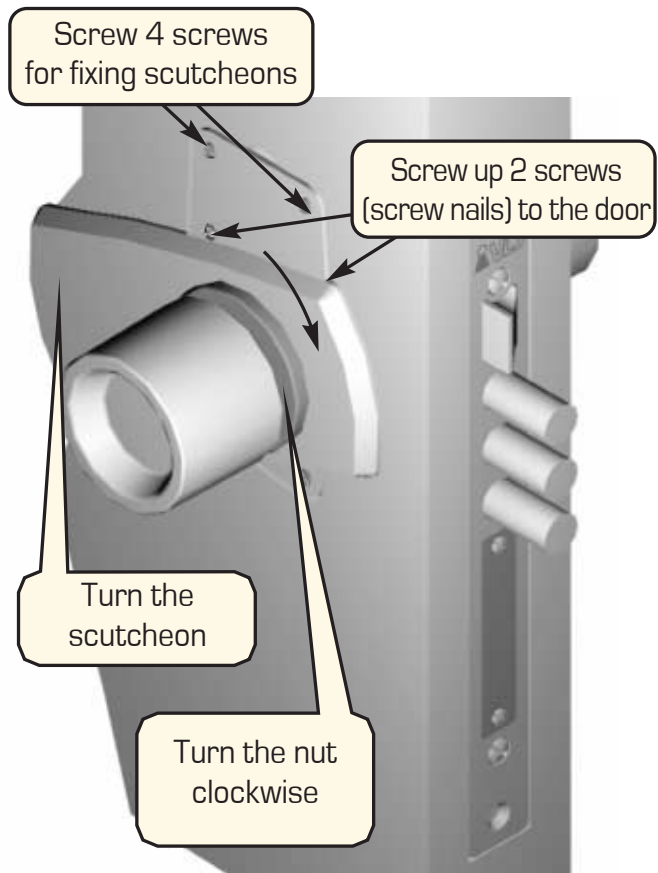


Figure 15 – Installation of the inner handle with scutcheon



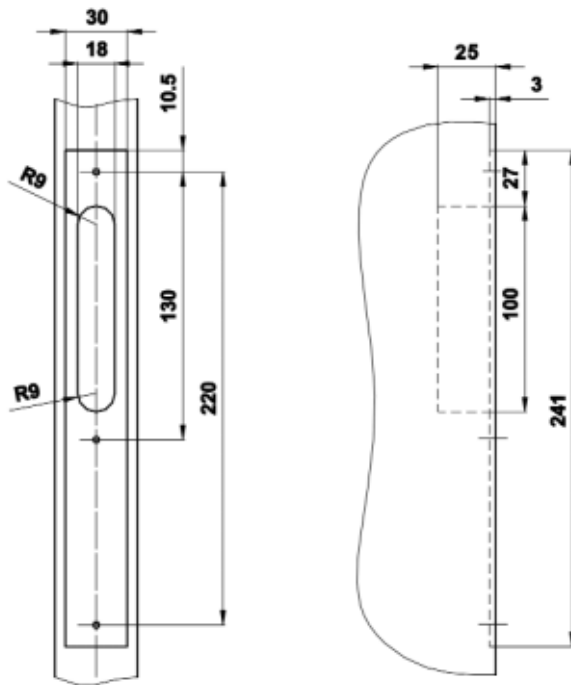


Figure 16 – Marking the door frame to the counterpart plate.



Figure 17 – Installation of the strike plate

**23.** Screw the four screws for fixing the scutcheons from the inner side of the door, and additionally fix the inner scutcheon plate with two screws to the door.

**Note:** The screw nails are not included in the complete set. 5x10 mm screws are recommended.

**24.** Turn the inner handle scutcheon and fix it against further turning by inserting protrusions from the inner side of the scutcheon into the plate holes.

**25.** By turning the round nut from the inner side of the lock clockwise up to the stop, fix the scutcheon (fig. 15).

**26.** Mark and install strike plate using screws or screw nails, on the door frame.

**Note:** The screw nails are not included in the complete set. 5x25 mm screws are recommended.

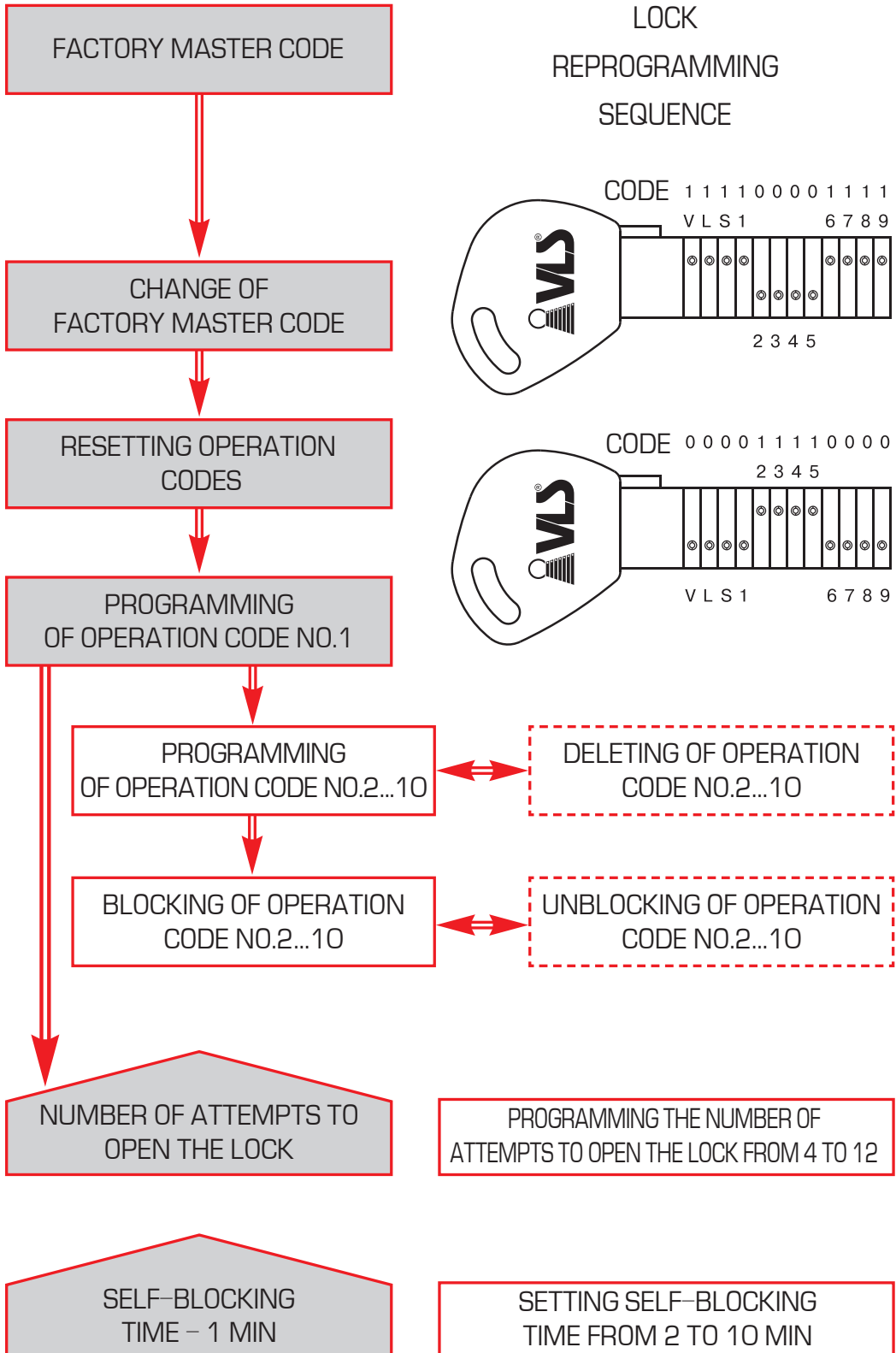
**27.** Turn the handles and make sure that locking gear functions smoothly and without jams.

The installation of the lock is now completed.

**28.** Check the efficiency of the lock according to paragraph 2 of this section. If the lock performs properly, you may start programming the lock.



## Lock Programming



### General

Any and all locks are shipped with the following default settings:

**a)** factory master code:

- code 1111 0000 1111 – for the first key insertion (fig. 18a)
- code 0000 1111 0000 – for the second key insertion (fig. 18b)

**b)** operation code No. 1:

- code 1111 0000 1111 – for the first key insertion (fig. 19a)
- code 0000 1111 0000 – for the second key insertion (fig. 19b)

**c)** three wrong attempts to unlock

**d)** self-locking time after three wrong attempts to unlock – 1 minute

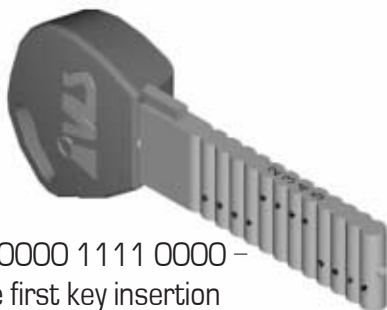


a) code 1111 0000 1111 –  
– for the first key insertion



б) code 0000 1111 0000 –  
for the second key insertion

Figure 18 – Factory master code



a) code 0000 1111 0000 –  
– for the first key insertion



б) code 1111 0000 1111 –  
for the second key insertion

Figure 19 – Factory operation code No. 1

In order to ensure secrecy of use, the user must reprogram the lock.

Lock reprogramming includes the following operations:

- change of the master code – secret ("master") code reprogramming, which allows further lock programming;
- resetting the operation codes
- programming the operation codes (total of 10)
- blocking the operation codes
- unblocking the operation codes
- programming of the number of attempts to open the lock
- setting self-blocking time

**Note:** Any and all reprogramming operations shall be performed when the cross-bars are in the unlocked position.

## Change of the Master Code

1. In order to enter the programming mode, enter the factory master code. For this purpose:

- set the first combination of the factory master code 1111 0000 1111 (fig. 18a);
- insert the key into the keyhole up to the stop, the "Accepted" signal shall be heard;
- remove the key from the keyhole, the "Accepted" signal shall also be heard;
- set the second combination of the factory master code 1111 0000 1111 (fig. 18b);

**Note:** The interval between the first code entry and the second code entry must not exceed 120 sec.

- insert the key into the keyhole up to the stop, and then remove it. When you insert the key, the "Accepted" signal shall be heard, and when you remove it the "O.K." signal shall be heard (fig. 20).

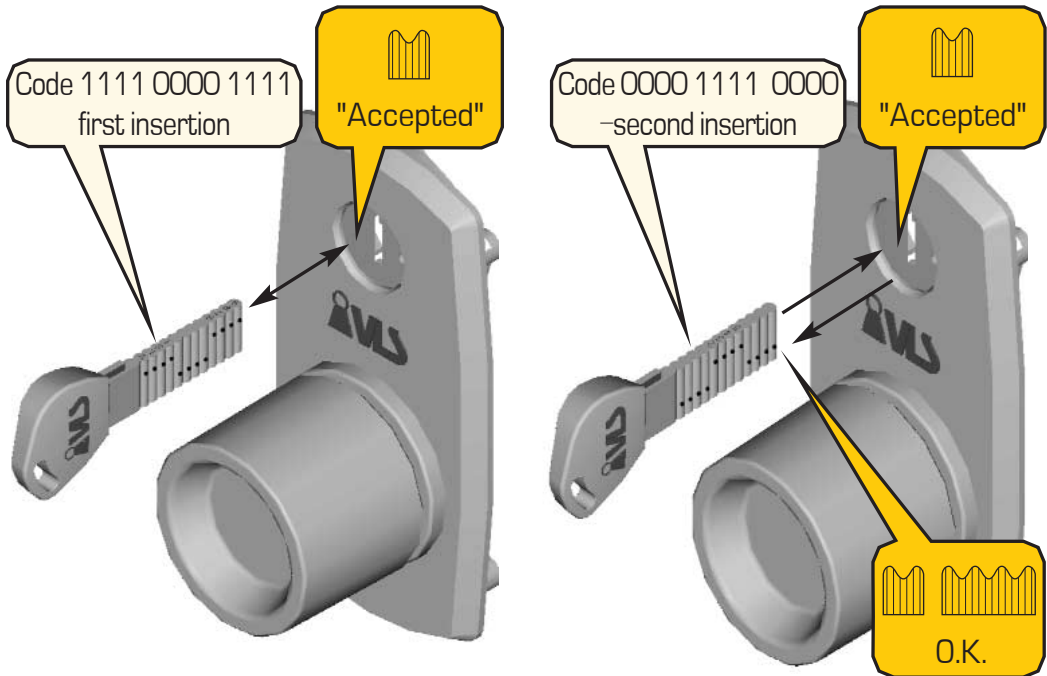


Figure 20 – Entering the programming mode, entering the factory master code"

2. Enter the number of the "change of the master code" operation (0001 1111 1111) on the key (fig. 21).

3. Insert the key into the keyhole up to the stop, and then remove it, the "Accepted" signal shall be heard. These operations prepare the lock electronic memory for reception of your secret master code. With this code, you may program different functions of the lock.

4. Create any two code combinations (any code, except for all "1" or all "0") and write this code down so that it can be found easily. Further, in the text of this Manual, such code combinations will be referred to as "the master code".

**Note:** If you do not know the master codes, you will be unable to perform any further programming.

5. Set the first master code combination according to p. 4. Insert the key into the keyhole up to the stop, and then remove it. When you insert the key, the "Accepted" signal shall be heard, and when you remove it the "Accepted" signal shall be heard (fig. 22).

6. Set the second master code combination according to p. 4. Insert the key into the keyhole up to the stop, and then remove it. When you insert the key, the "Accepted" signal shall be heard, and when you remove it the "Accepted" signal shall be heard (fig. 23).

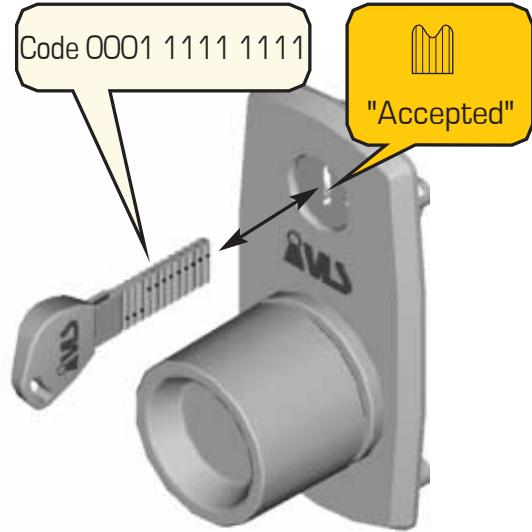


Figure 21 – Change of the master code

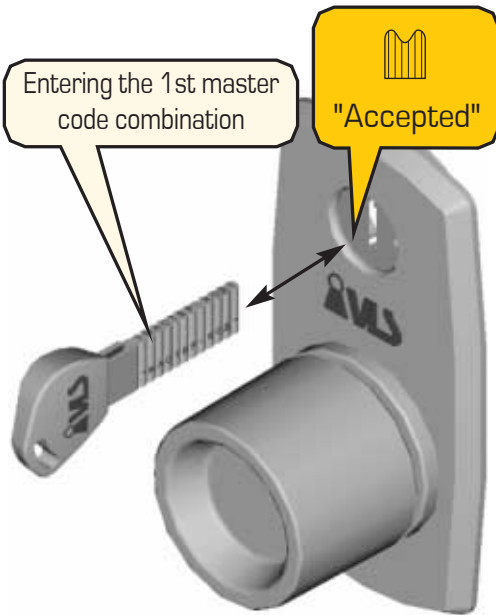


Figure 22 – Entering the 1st master code combination

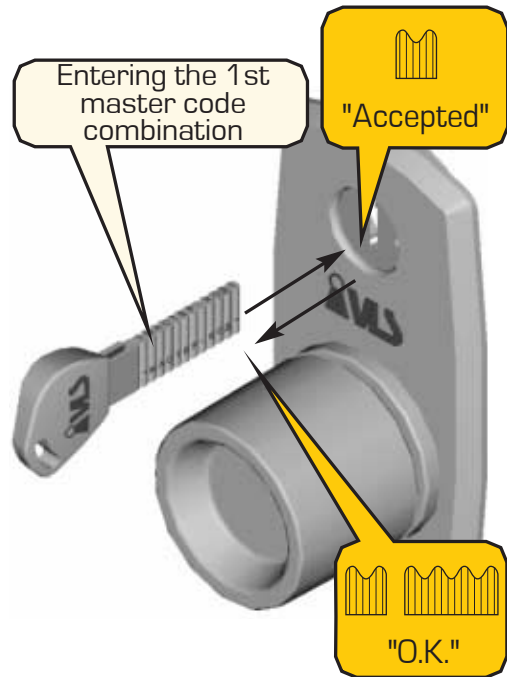


Figure 23 – Entering the 2nd master code combination

7. Confirm the entered master code. For this purpose, repeat operations specified in paragraphs 5 and 6. After successful operation, the "O.K." signal must be heard. The entered master code is stored in the lock electronic memory.

In case of error made while entering the master code ("Error" signal was heard), repeat all the operations in paragraphs 1 to 6.

## Resetting Operation Codes

Resetting to zero (deleting) of all the operation codes, except for the operation code No. 1, is required to delete all the default codes from the lock memory.

The first operation code remains in the memory in case of resetting, therefore the operation code programming shall start with the operation code No. 1 (see "Operation codes programming").

Operation codes may be reset while the lock is unlocked in the following order.

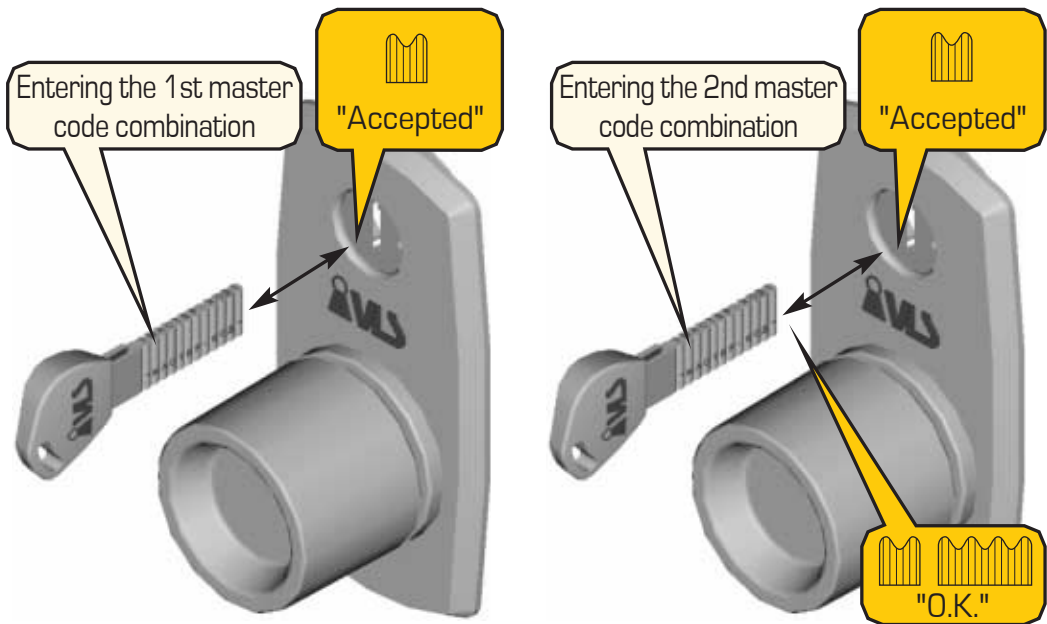


Figure 24 – Initiating programming mode – entering the master code

1. In order to initiate the programming mode, enter your master code (fig. 24). For this purpose:

- set the first combination of the master code;
- insert the key into the keyhole up to the stop, the "Accepted" signal shall be heard;
- remove the key from the keyhole, the "Accepted" signal shall also be heard;
- set the second combination of the master code.

Insert the key into the keyhole up to the stop, and then remove it. When you insert the key, the "Accepted" signal shall be heard, and when you remove it the "O.K." signal shall be heard.

2. Set the "Resetting Operation Codes" operation code 0110 0000 0000 on the key (fig. 25).

3. Insert the key into the keyhole up to the stop, the "Accepted" signal shall be heard.

4. Remove the key from the keyhole, the "O.K." signal shall also be heard.

5. The resetting operation is now completed.

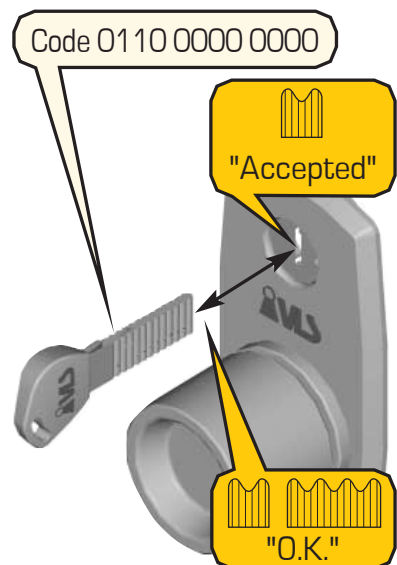


Figure 25 – Resetting memory cells

### Operation Code Programming

The lock allows you to program up to 10 different secret operation codes for unlocking the door. One code is two insertions of the key into the keyhole. Codes may be identical or different (except all "1" or "0").

The operation codes may be programmed while the cross-bars are unlocked, in the following order.

**1.** In order to initiate the programming mode, please enter your master code (figure 24). For this purpose:

- set the first combination of the master code;
- insert the key into the keyhole up to the stop, the "Accepted" signal shall be heard;
- remove the key from the keyhole, the "Accepted" signal shall also be heard; set the second combination of the master code.
- Insert the key into the keyhole up to the stop, and then remove it. When you insert the key, the "Accepted" signal shall be heard, and when you remove it the "O.K." signal shall be heard.

**2.** In order to program the operation code No. 1, set the code 1000 0000 0000 on the key (fig. 26).

**3.** Insert the key into the keyhole up to the stop, the "Accepted" signal shall be heard.

**4.** Remove the key from the keyhole, the "O.K." signal shall be heard.

**5.** Create any two code combinations (any code, except for all "1" or all "0"). write this code down so that it can be found easily.

**6.** Set the first code combination according to p. 5.

**7.** Insert the key into the keyhole up to the stop, and then remove it. When you insert the key, the "Accepted" signal shall be heard, and when you remove it the "Accepted" signal shall also be heard (figure 27).

**8.** Set the second code combination according to p. 5.

**9.** Insert the key into the keyhole up to the stop, and then remove it. When you insert the key, the "Accepted" signal shall be heard, and when you remove it the "Accepted" signal shall also be heard (figure 27).

**10.** Confirm the entered operation code. For this purpose, repeat operations of paragraphs 6 to 9. After successful operation, the "O.K." signal shall be heard. The entered operation code is stored in the lock electronic memory.

**The first operation code is now entered into the first memory cell of the lock.**

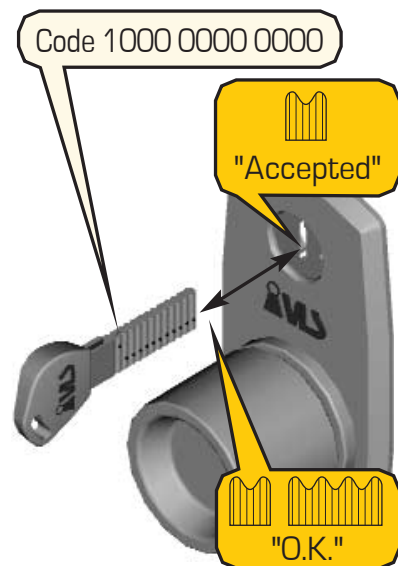


Figure 26 – Programming of working code No. 1

11. Keeping the door open, please turn the lock handle and lock the door.

12. Check the efficiency of the lock within your operation code No.1. For this purpose:

- set the first combination of the operation code;
- insert the key into the keyhole up to the stop, the "Accepted" signal shall be heard;
- remove the key from the keyhole, the "Accepted" signal shall also be heard;
- set the second combination of the operation code.
- Insert the key into the keyhole up to the stop, and then remove it. When you insert the key, the "Accepted" signal shall be heard, and when you remove it the "O.K." signal shall be heard.
- having turned the handle, make sure that the door may be unlocked and the sound and light signals are as specified.

Operation codes from 2 to 10 may be programmed according to the above procedures. The programming codes shall be entered in accordance with [Table 2](#).

Table 2. Codes for Programming Operation Codes

Operation code number	Programming code	Operation code number	Programming code
1	1000 0000 0000	6	1001 1111 0000
2	1001 0000 0000	7	1001 1111 1000
3	1001 1000 0000	8	1001 1111 1100
4	1001 1100 0000	9	1001 1111 1110
5	1001 1110 0000	10	1001 1111 1111

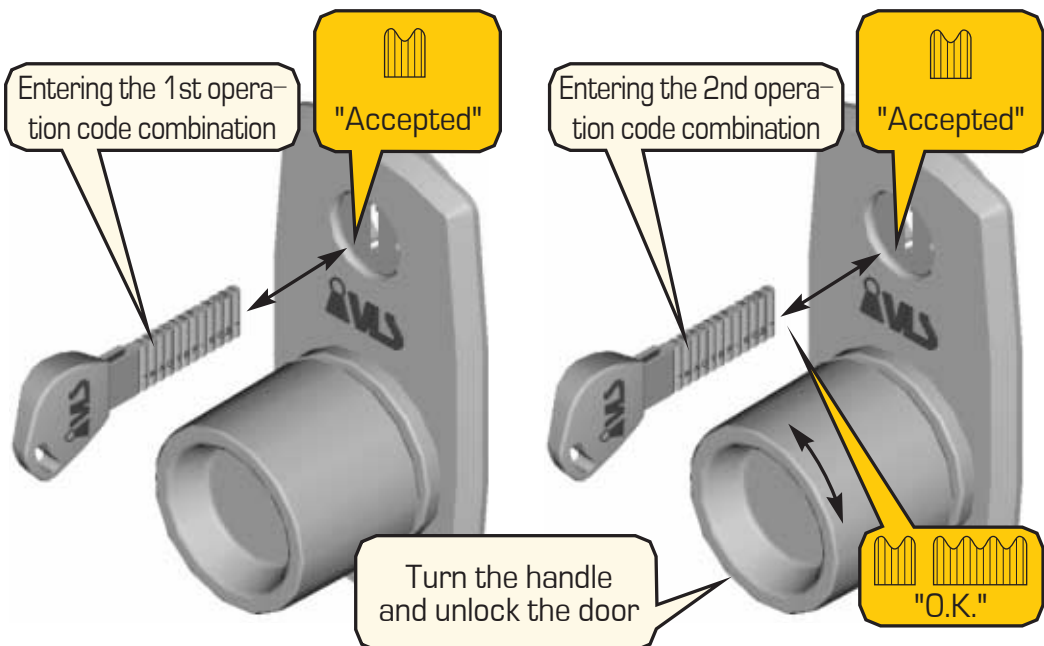


Figure 27 – Operation Code Programming

### Deleting Operation Codes

The user may delete all the pre-programmed operation codes from the memory, excepting operation code No. 1 which may be only re-programmed).

The operation codes may be deleted while the cross-bars are unlocked, in the following order.

**1.** In order to initiate the programming mode, please enter your master code (fig. 24). For this purpose:

- set the first combination of the master code;
- insert the key into the keyhole up to the stop, the "Accepted" signal shall be heard;

- remove the key from the keyhole, the "Accepted" signal shall be heard; set the second combination of the master code.

- insert the key into the keyhole up to the stop, and then remove it. When you insert the key, the "Accepted" signal shall be heard, and when you remove it the "O.K." signal shall be heard.

**2.** In order to delete the operation code No. 2, set the deleting code 0111 0000 0000 on the key (fig. 28).

**3.** Insert the key into the keyhole, the "Accepted" signal shall be heard. Remove the key from the keyhole, the "O.K." signal shall be heard.

**4.** Set the code combinations on the key, which were earlier assigned to the operation code No. 2. Make sure that this key code combination does not unlock the door. Following the steps specified in paragraphs 1 to 4, you may delete the operation code No. 2 from the lock memory.

**5.** The operation codes 3 to 10 may be deleted according to the above procedures (steps 1 to 4). The deleting codes shall be entered in accordance with Table 3.

Table 3. Codes for Deleting the Operation Codes

Operation code number	Deleting code
2	0111 0000 0000
3	0111 1000 0000
4	0111 1100 0000
5	0111 1110 0000
6	0111 1111 0000
7	0111 1111 1000
8	0111 1111 1100
9	0111 1111 1110
10	0111 1111 1111

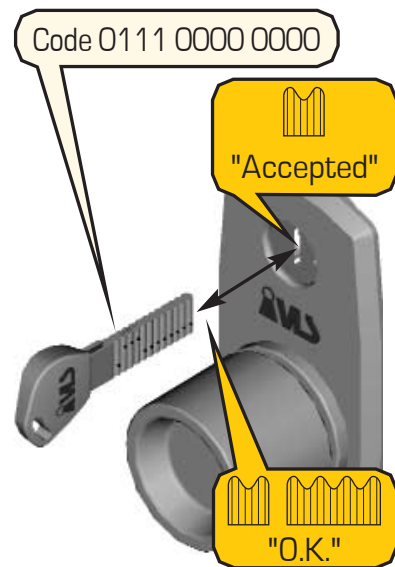


Figure 28 – Programming  
Deletion of the Operation Code  
No. 2



## Blocking Operation Codes

The user may disable (block) or enable (unblock) the use of a certain operation code, except operation code No. 1. The operation codes may be blocked while the cross-bars are unlocked, in the following order.

**1.** In order to enter the programming mode, enter your master code (figure 24). For this purpose:

- set the first combination of the master code;
- insert the key into the keyhole up to the stop, the "Accepted" signal shall be heard;
- remove the key from the keyhole, the "Accepted" signal shall also be heard; set the second combination of the master code.
- insert the key into the keyhole up to the stop, and then remove it. When you insert the key, the "Accepted" signal shall be heard, and when you remove it the "O.K." signal shall be heard.

**2.** In order to block the operation code No. 2, set the blocking code 1101 0000 0000 on the key (fig. 29).

**3.** Insert the key into the keyhole, the "Accepted" signal shall be heard. Remove the key from the keyhole, the "O.K." signal shall be heard.

**4.** Set the code combinations on the key, which were earlier assigned to the operation code No. 2. Make sure that this lock code combination does not unlock the door. Following the steps specified in paragraphs 1 to 4, you may block the operation code No. 2 from the lock memory.

**5.** The operation codes 3 to 10 may be blocked according to the above procedures (steps 1 to 4). The blocking codes shall be entered in accordance with Table 4.

Table 4. Codes for Blocking of the Operation Codes

Operation code number	Blocking code
2	1101 0000 0000
3	1101 1000 0000
4	1101 1100 0000
5	1101 1110 0000
6	1101 1111 0000
7	1101 1111 1000
8	1101 1111 1100
9	1101 1111 1110
10	1101 1111 1111

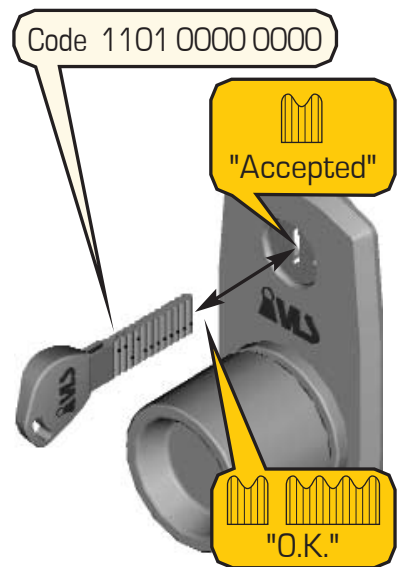


Figure 29 – Blocking Operation Code No. 2

### Unlocking Operation Codes

The user may unlock operation codes, which were blocked previously, excepting operation code No. 1. The operation codes may be unlocked while the cross-bars are unlocked, in the following order.

**1.** In order to enter the programming mode, please enter your master code (fig. 24). For this purpose:

- set the first combination of the master code;
  - insert the key into the keyhole up to the stop, the "Accepted" signal shall be heard;
  - remove the key from the keyhole, the "Accepted" signal shall also be heard;
- set the second combination of the master code.
- insert the key into the keyhole up to the stop, and then remove it. When you insert the key, the "Accepted" signal shall be heard, and when you remove it the "O.K." signal shall be heard.

**2.** In order to unblock the operation code No. 2, set the unblocking code 1011 0000 0000 on the key (fig. 30).

**3.** Insert the key into the keyhole, the "Accepted" signal shall be heard. Remove the key from the keyhole, the "O.K." signal shall be heard.

**4.** Set on the key the code combinations, which were earlier assigned to the operation code No.2. Make sure that this lock code combination unlocks the lock. Following the steps specified in paragraphs 1 to 4, you may unblock the operation code No. 2 from the lock memory.

**5.** The operation codes 3 to 10 may be unlocked according to the above procedures (steps 1 to 4). The unblocking codes shall be entered in accordance with [Table 5](#).

Table 5. Codes for Unlocking the Operation Codes

Operation code number	Unlocking code
2	1011 0000 0000
3	1011 1000 0000
4	1011 1100 0000
5	1011 1110 0000
6	1011 1111 0000
7	1011 1111 1000
8	1011 1111 1100
9	1011 1111 1110
10	1011 1111 1111

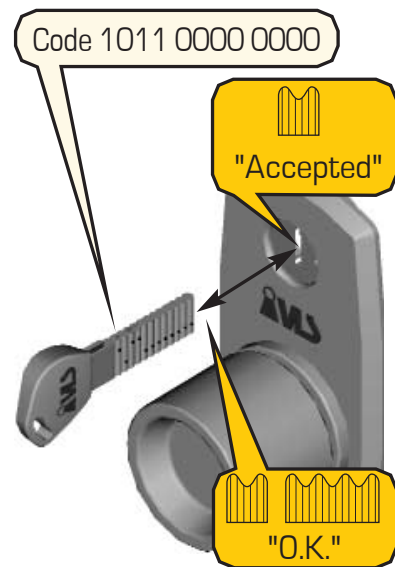


Figure 30 –  
Unlocking operation  
code No. 2

## Programming the Number of Attempts to Open the Lock

The user may program the number of 3 to 12 attempts to open the lock (if the operation codes are wrong).

**Note:** The manufacturer supplies the lock with the pre-programmed 3 attempts to open the lock.

After the use of the pre-programmed number of attempts to open the lock, the lock will transfer to the self-blocking mode for a pre-programmed time (1 to 10 minutes) making unlocking impossible, and the lock will not respond to insertion/removal of the key.

The number of attempts to open the lock may be programmed (if the operation codes are wrong) while the cross-bars are unlocked, in the following order.

**1.** In order to enter the programming mode, please enter your master code (fig. 24). For this purpose:

- set the first combination of the master code;
- insert the key into the keyhole up to the stop, the "Accepted" signal shall be heard;
- remove the key from the keyhole, the "Accepted" signal shall also be heard; set the second combination of the master code.

- Insert the key into the keyhole up to the stop, and then remove it. When you insert the key, the "Accepted" signal shall be heard, and when you remove it the "O.K." signal shall be heard.

**2.** In order to program 4 attempts to open the lock, set the code 0101 0000 0000 of the number of attempts on the key (fig.e 31).

**3.** Insert the key into the keyhole up to the stop, and then remove it, the "Accepted" signal shall be heard.

**4.** Remove the key from the keyhole, the "O.K." signal shall be heard.

**The programming of the number of attempts to open the lock is now completed.**

**5.** In order to program another number of attempts to open the lock, the codes of the number of attempts shall be entered in accordance with Table 6.

Table 6. Codes for Programming the Number of Attempts to Open the Lock

Number of attempts to open the lock	Codes of the number of attempts to open the lock
3	0100 0000 0000
4	0101 0000 0000
5	0101 1000 0000
6	0101 1100 0000
7	0101 1110 0000
8	0101 1111 0000
9	0101 1111 1000
10	0101 1111 1100
11	0101 1111 1110
12	0101 1111 1111

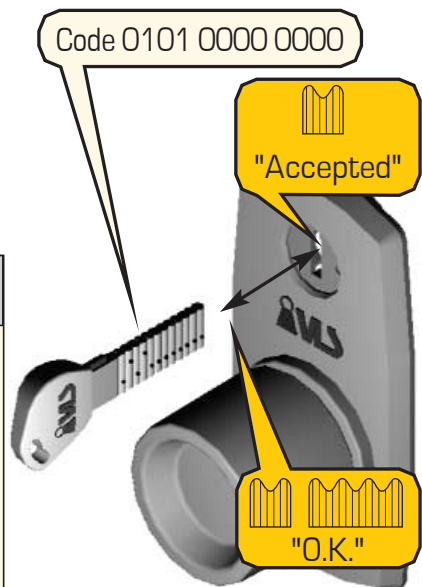


Figure 31 – Programming 4 Attempts to Open the Lock

## Setting the Self-Locking Time

After the use of the pre-programmed number of attempts to open the lock, the lock will transfer to the self-blocking mode for a pre-programmed time (1 to 10 minutes) making the unlocking impossible, and the lock will not respond to insertion/removal of the key.

**Notes:**

- the manufacturer supplies the lock with the pre-programmed self-blocking time of 1 minute.
- unlocking the door from the inside and subsequent locking of the door, the self-blocking mode is released.

The self-blocking time may be programmed while the cross-bars are unlocked, in the following order.

1. In order to enter the programming mode, please enter your master code (fig. 24). For this purpose:

- set the first combination of the master code;
- insert the key into the keyhole up to the stop, the "Accepted" signal shall be heard;
- remove the key from the keyhole, the "Accepted" signal shall also be heard;
- set the second combination of the master code.

• Insert the key into the keyhole up to the stop, and then remove it. When you insert the key, the "Accepted" signal shall be heard, and when you remove it the "O.K." signal shall be heard.

2. In order to program the self-blocking time for 2 minutes, set the code 0011 0000 0000 on the key (fig. 32).

3. Insert the key into the keyhole up to the stop, the "Accepted" signal shall be heard. Remove the key from the keyhole, the "O.K." signal shall be heard.

**Programming of the self-blocking time for 2 minutes is now completed.**

4. In order to program a different self-blocking time, the self-blocking time codes shall be entered in accordance with Table 7.

Table 7. Codes of Self-Blocking Time

Self-blocking time, minutes	Self-blocking time codes
1	0010 0000 0000
2	0011 0000 0000
3	0011 1000 0000
4	0011 1100 0000
5	0011 1110 0000
6	0011 1111 0000
7	0011 1111 1000
8	0011 1111 1100
9	0011 1111 1110
10	0011 1111 1111

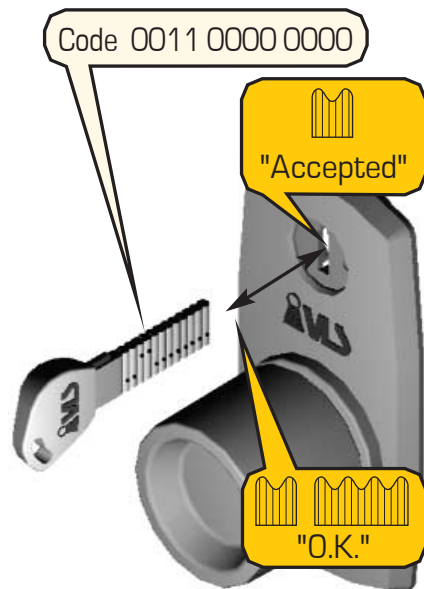


Figure 32 – Programming the self-blocking time for 2 minutes

## Checking the Efficiency of the Lock

Depending on the pre-programmed number of attempts to open the lock (if the operation codes are wrong) and self-blocking time, you may check the performance of the specified conditions by attempting to unlock the door using the key with wrong codes.

Removing the wrong coded key from the keyhole, the "Error" signal shall be heard (fig. 33).

Check the efficiency of the lock with the pre-programmed operation codes. If the lock performs properly according to the entered operation codes, it is ready for use.

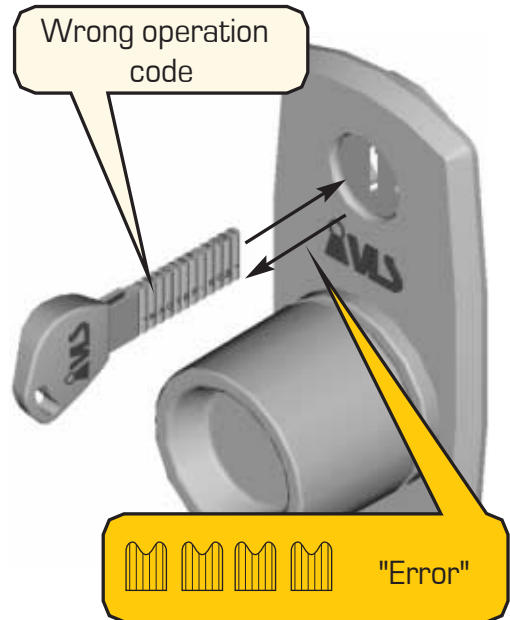


Figure 33 – Checking the Lock in the Self-Blocking Mode

## Replacing Integrated Power Supply

The integrated power supply (batteries) should be replaced at least once a year or in the case of the "Power" signal (see Table 1 of the this Manual).

1. Using a screwdriver, unscrew the two fixing screws from the battery compartment cover on the lock end surface (fig. 34).

2. Holding those crews, remove the cover and take out the battery compartment from the lock body (fig. 34).

3. Insert 4 AAA-type batteries into the battery compartment, observing polarity. **Please bear in mind that wrong polarity may cause damage to the lock.**

4. Insert the battery compartment into the lock body. Close the cover and screw it.

**Notes:**

- do not use batteries of different types together
- do not use new and old batteries together
- when you replace batteries, all codes stored in the memory remain

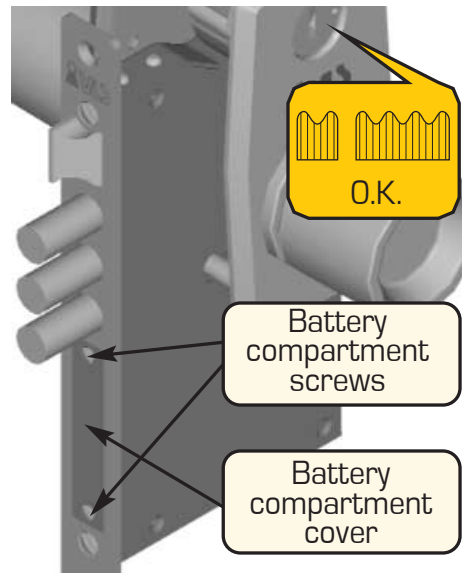


Figure 34 – Replacing Batteries

## Connecting Emergency Power Supply

If, for any reason, the power supply elements are out of order, in order to unlock the door you may connect the emergency power supply via the contactor located at the bottom of outer scutcheon (fig. 1a). For this purpose, you should connect the contacts of a 9 V battery of 6F22 type ("Krona") to the contacts located at the bottom of outer scutcheon (fig. 1a), observing polarity. Then the lock may be unlocked as usually.

**Note.** If the emergency power supply source polarity is wrong, the lock may be blocked for up to 15 minutes.

## Troubleshooting

If the code is correct but the "Error" signal is heard, you should check the holes in the key segments. Clean them, if required.

If the "Failure" signal is heard (Table 1 of this Manual), repeat the previous operations sequentially. If the "Failure" signal is not heard again, you may proceed with operating the lock. If the "Failure" signal is heard again or is heard several times, the lock operation shall be stopped. You must approach the service agent, irrespective of apparently good operation of the lock.

If no sound or light signals appear when unlocking, discharged batteries or lost contact may be a possible reason. In such a case, the external (emergency) power supply, i.e. the 9 V battery of 6F22 type ("Krona") should be used.

In case of negative results, you should approach the service agent. The service agent's address is indicated on the warranty card.

## Warranty

The manufacturer guarantees the conformity of the lock to the specifications TY Y 30221044.001-2001, on condition that the user follows the instructions of this Operating Manual.

The warranty period is 12 months from the date of retail sale. If the warranty card contains no sale date, the warranty period starts from the date of manufacture.

The guaranteed shelf life is 24 months from the date of manufacture.

The service period of the lock is not less than 10 years from the date of manufacture.

If the lock is supplied to a wholesale company as a component, the warranty shall be specified in more details in the contract.

During the warranty period, the user shall be entitled to have the lock repaired free of charge upon presentation of the warranty card.

If the warranty card and tear-off coupon do not include the date of sale, the user shall be entitled to have the lock repaired free of charge. In such a case, the warranty period starts from the date of manufacture.

The repair agency shall withdraw the tear-off coupon after warranty repair is completed.

No claims are accepted and no repair is performed if the warranty card and tear-off coupon are not submitted.

The user has no right for warranty repair if:

- operation instructions are not observed;
- any corrections in the warranty card are made;
- the numbered labels on the lock body or keyhole unit are damaged;
- the lock is mechanically damaged;
- if internal damage is caused by extraneous agents, substances, liquids, insects;
- if damage is caused by acts of God or fire.

The seller shall indicate the addresses of repair agencies.

The relations between the buyer, seller and manufacturer are subject to current legislation.

The present warranty does not cover the power supply elements (batteries).

Valid if filled-in

Warranty Card

to be filled in by the manufacturer

Model: **3B9P-9-3**

Manufacturer's N° .....

Date of manufacture .....

Manufacturer's QA mark .....

Address for submitting claims on the lock operation quality::

.....

(zip code, address, name of the manufacturer)

---

to be filled in by the sellerDate of sale.....  
(day, month in words, year)Retail price.....  
(amount in words)Seller (shop assistant).....  
(signature or stamp)

Shop's stamp



Valid if filled-in

**TEAR-OFF WARRANTY COUPON**  
to be filled in by the manufacturer

**TEAR-OFF WARRANTY COUPON**  
to be filled in by the manufacturer

Lock 3B 9P-9-Э      Manufacturer's No. ....

Installed factory master code      №1 1111 0000 1111

№2 0000 1111 0000

Date of manufacture .....

Quality Assurance .....  
stamp

Address for returning the coupon to the manufacturer:

.....  
(zip code, address, name of the manufacturer)

---

to be filled in by the seller

Date of sale .....  
(day, month in words, year)

Seller (shop assistant) .....  
(signature or stamp)

Shop's stamp

COUNTERFOIL OF THE WARRANTY TEAR-OFF COUPON

TAKEN AWAY ON « \_\_\_\_ » 200 \_\_\_\_ EXECUTED BY \_\_\_\_\_

name, signature

