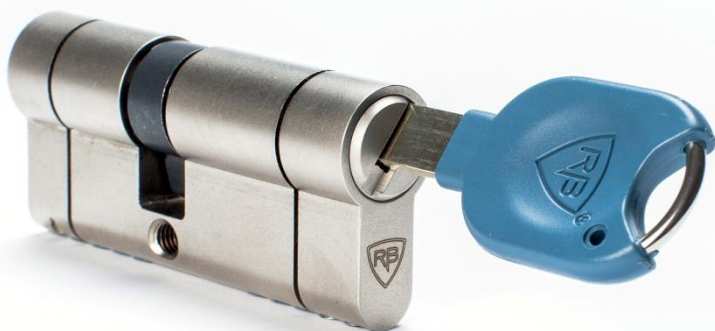


# REB

## Locksmith Handbook



**RB-LOCKS**







**RB-LOCKS**

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# Table of contents

Master keying		25
Introduction	-----	25
Design methods	-----	26-27
Master Design™ Software	-----	28-30
Locxis™ Master disks and solid pins	-----	31-34
Keylocx™ Master disks	-----	35

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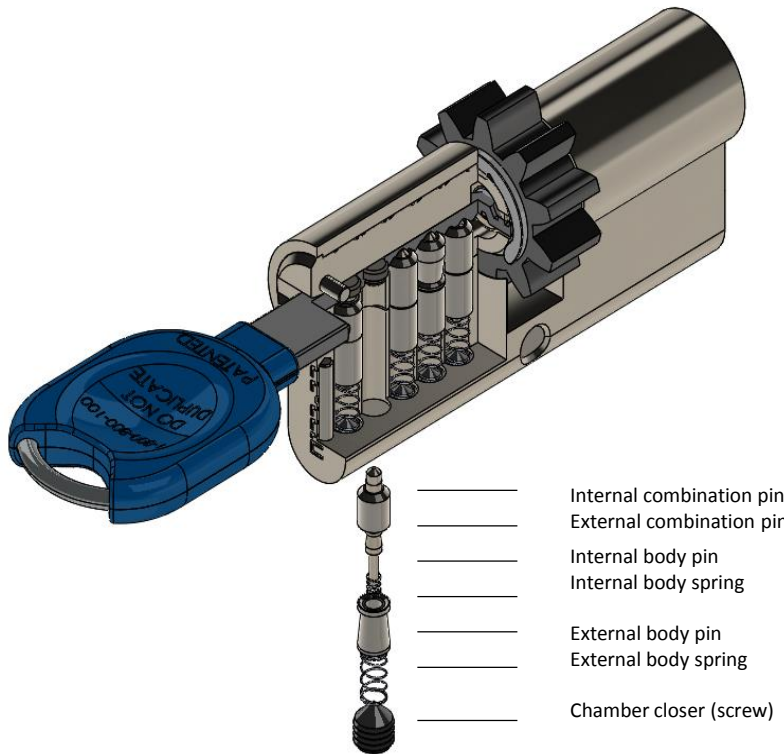
# Key Systems - Locxis™

## Cylinder construction overview and terminology

Rav-Bariach® Locxis® platform standard product contains five chambers for combination and body pins. The pins are telescopic and consist of internal and external pins, providing a high number of combinations and a high security against picking.

Patented spring loaded pins inside the key blank provide superior combination complexity as the combination forms above key level and not on the key surface and only when the key is inserted into the corresponding cylinder body.

For additional personal security, Locxis® keys should be duplicated using their unique duplicating card on a custom duplicating machine provided by Rav-Bariach® to certified and approved locksmiths.



Duplicating card



Locxis key pins

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## Cylinder Construction Overview and Terminology

Locxis patented technology is one of the most advanced

High cylinder platforms in the world, based on a combination of different types of unique combination of key and cylinder, pin configurations designed for the highest level of security.

Locxis key pins, external pins, internal pins, springs and stainless steel balls designed to obtain the optimal and most advanced security level.

To enable key rotation, the inner and outer pins simultaneously must be along combinations formed from the share line. This occurs when a suitable key inserted into the plug and the plug pins fits in the key dimples and the Locxis key pins accordingly and creates a uniform tangent line that allows the rotation of the plug.

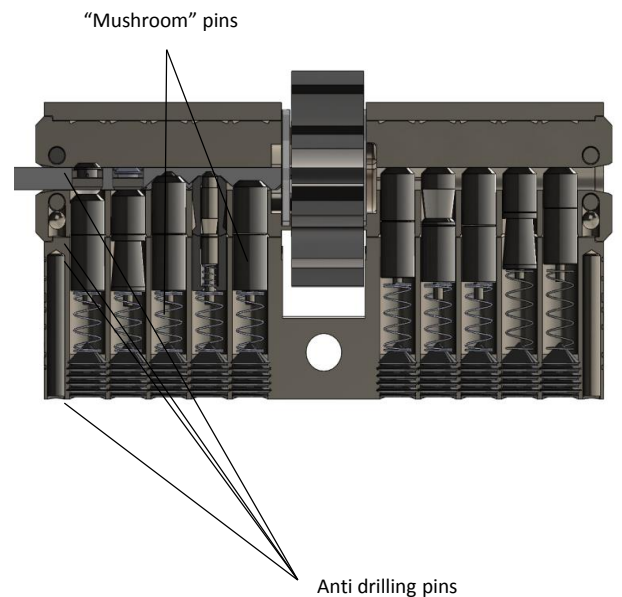
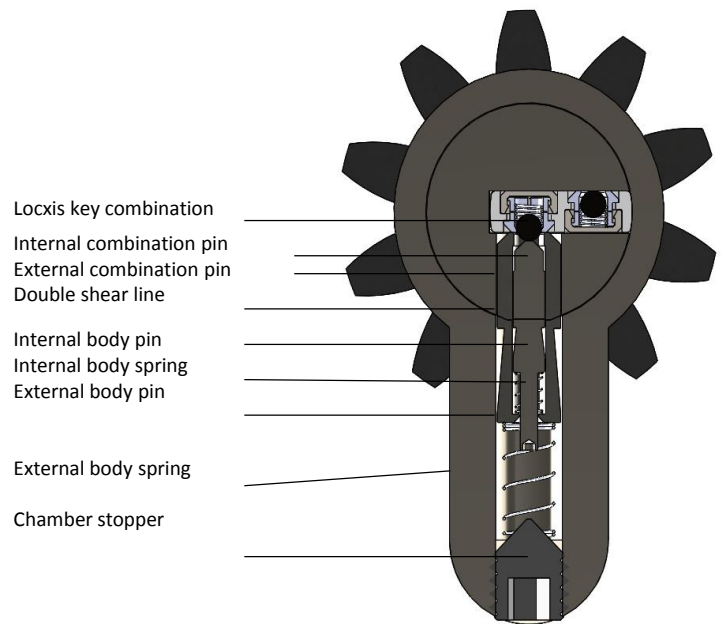
Locxis plug pins made from stainless steel and produced by accurate machining process permits assembly of complex master systems.

Locxis cylinder includes anti drill pins to increase the resistance against drilling and burglary.

Each combination chamber sealed with metric screw, providing flexibility in combination replacement and master systems build. Optionally, the chambers may be locked by balls diameter 4.3 mm.

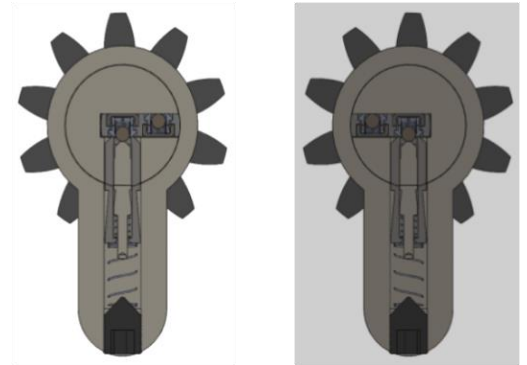
Locxis key blank duplication control based on unique code printed on the duplication card and can be duplicate only by presenting the card to a professional authorized locksmith .

The Locxis technology can be applied on European profile cylinders, Oval Profiles cylinders ,RIM, Mortise etc.



**Rav-Bariach® key system orientation**

Rav-Bariach® keys can be divided according to their profiles. A key profile is a combination of keyway and orientation. The keyway is a unique geometric design to which only the corresponding keys can fit. The orientation of the key can be left or right to accommodate preferences mainly for master keying . To differentiate between left and right orientation, hold the key by the head, with the blade pointing up. If the keyway is on the right half of the blade then you hold a right hand key.

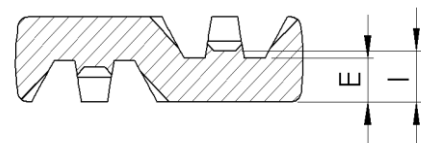


Right hand key

Left hand key

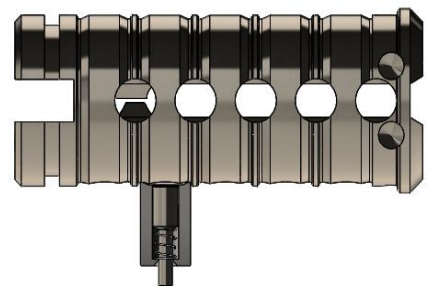
**Rav-Bariach® key Depth**

Rav-Bariach® key depths are measured from the bottom of the cut to the opposite base of the key.



**Three dimensional shear line**

When Rav-Bariach® plug pins and body pins are aligned , a 3D shear line is formed and allows the plug to rotate.



# Rav-Bariach® - Locxis™ pins specification

## Plug Pins

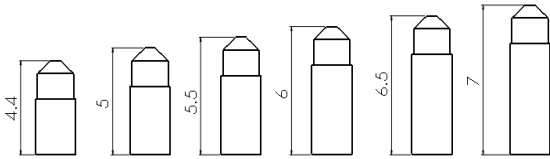
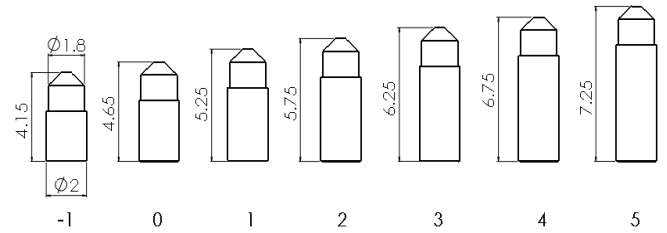
Material: Stainless Steel.

Diameter: 4mm for external pins;  
2mm for internal pins.

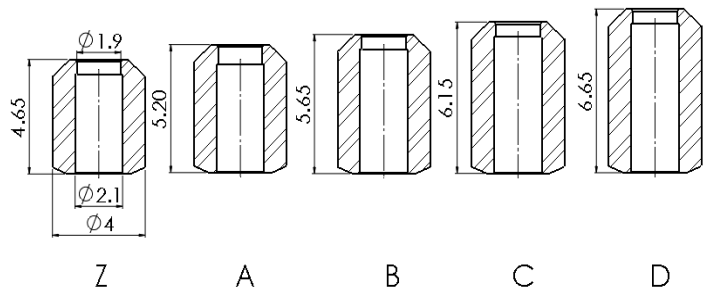
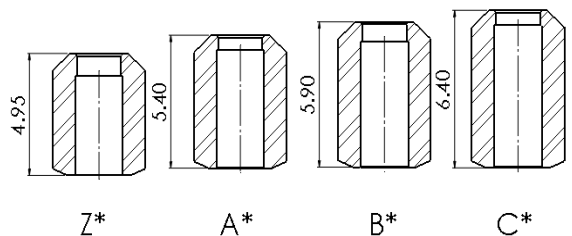
Lengths:

Internal pins: 4.15, 4.4, 4.65, 5, 5.25, 5.5, 5.75, 6,  
6.25, 6.5, 6.75, 7, 7.25 mm

External pins: 4.65, 4.95, 5.2, 5.4, 5.65, 5.9, 6.15,  
6.4, 6.65 mm



-1 0 1 2 3 4 5  
-1\* 0\* 1\* 2\* 3\* 4\*



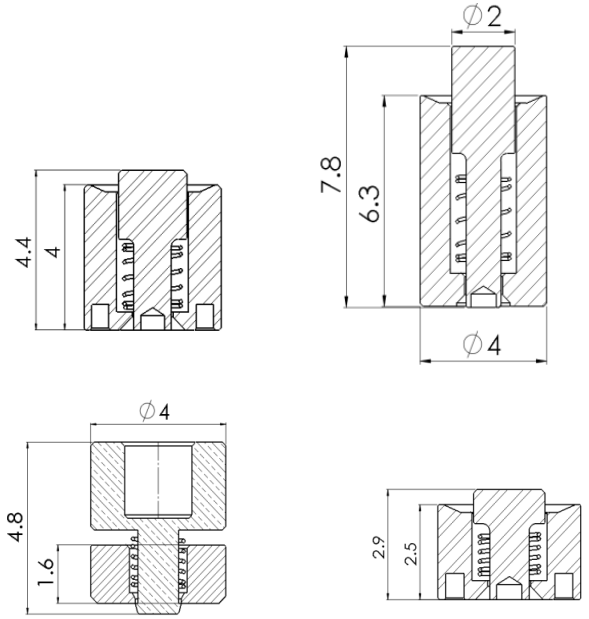
## Body Pins

Material: Stainless Steel.

Structure: Pin in Pin riveted with internal spring.

Diameter: 4mm for external pins;  
2mm for internal pins.

Lengths: 2.9, 4.4, 4.8, 7.8 mm

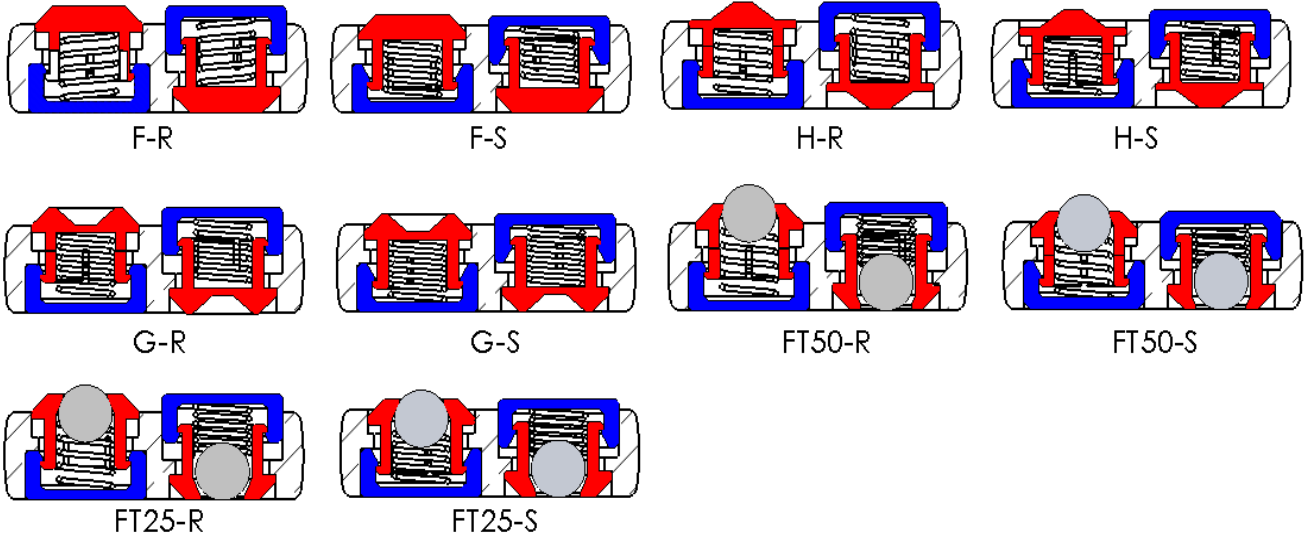



Patented

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# Key pins - Locxis™

Material: Stainless Steel



Matching plug pins to the key combination				 Pins combinations
Internal plug pins		External plug pin		
length[mm]	Code	length[mm]	Code	
4.75	0	4.65	Z	F-R
5	0*	4.9	Z*	F-S
4.75	0	5.2	A	H-R
5	0*	5.4	A*	H-S
5.25	1	4.65	Z	G-R
5.5	1*	4.9	Z*	G-S
4.25	-1	4.65	Z	FT50-R
4.5	-1*	4.9	Z*	FT50-S
4.5	-1*	4.65	Z	FT25-R
4.75	0	4.9	Z*	FT25-S



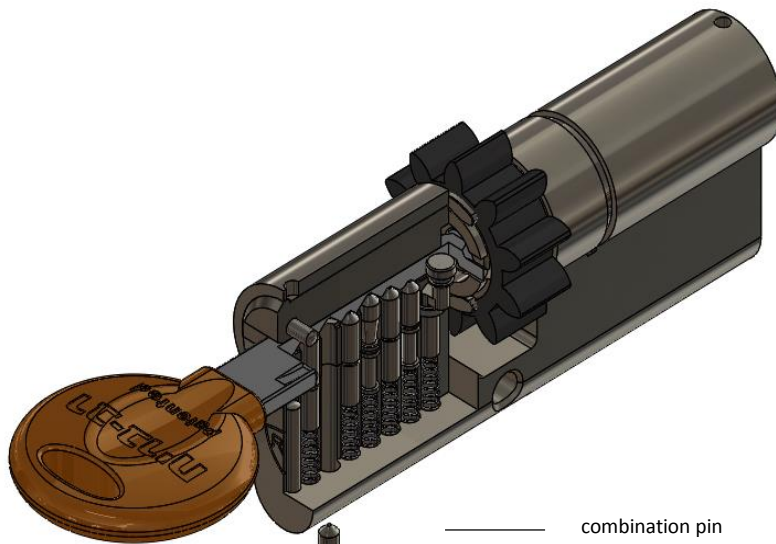
# Key Systems - Keylocx™

## Cylinder Construction Overview and Terminology

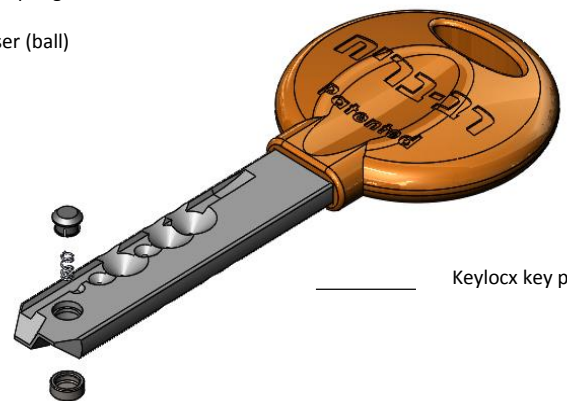
Rav-Bariach® Keylocx® platform standard product contains an increased amount of seven chambers for combination and body pins providing a high number of combinations and a high security against picking. A special shaped pin with reinforced hardened disk is used to protect against picking and bumping. This special shaped pin, can be placed in six different positions.

Patented spring loaded pins inside the key blank provide superior combination complexity as the combination forms in the air and not on the key surface and only when the key is inserted into the corresponding cylinder body.

For additional personal security , Keylocx® keys should be duplicated using their unique duplicating card on a custom duplicating machine provided by Rav-Bariach® to certified and approved locksmiths.



- \_\_\_\_\_ combination pin
- \_\_\_\_\_ body pin
- \_\_\_\_\_ External body spring
- \_\_\_\_\_ Chamber closer (ball)



Keylocx key pins









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## Cylinder Construction Overview and Terminology

Keylocx patented technology mechanism with a special shaped tumblers operated by patented, active floating pins in the key.

The pins are made of special materials – stainless steel, hardened steel and brass. The seven chambered Keylocx cylinder includes anti drill pins for high resistance against drilling and burglary.

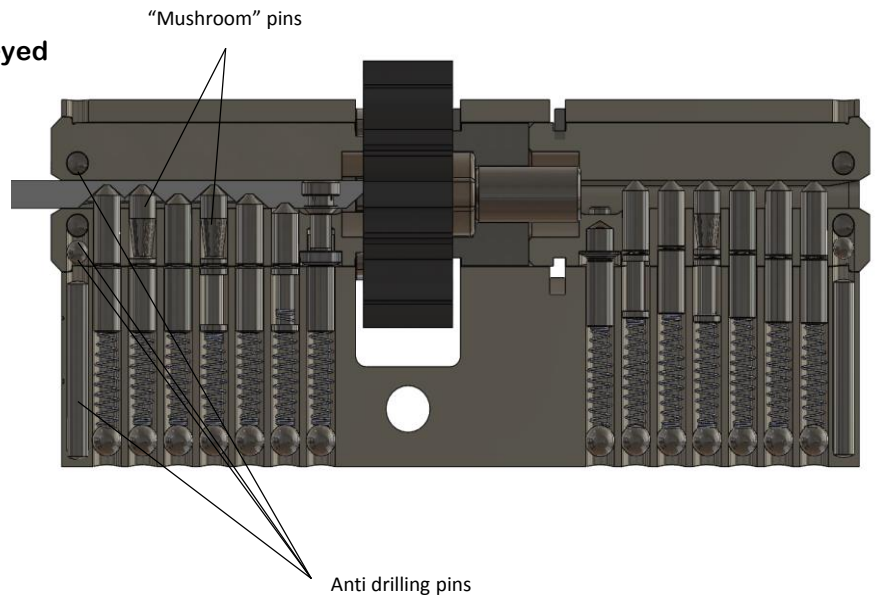
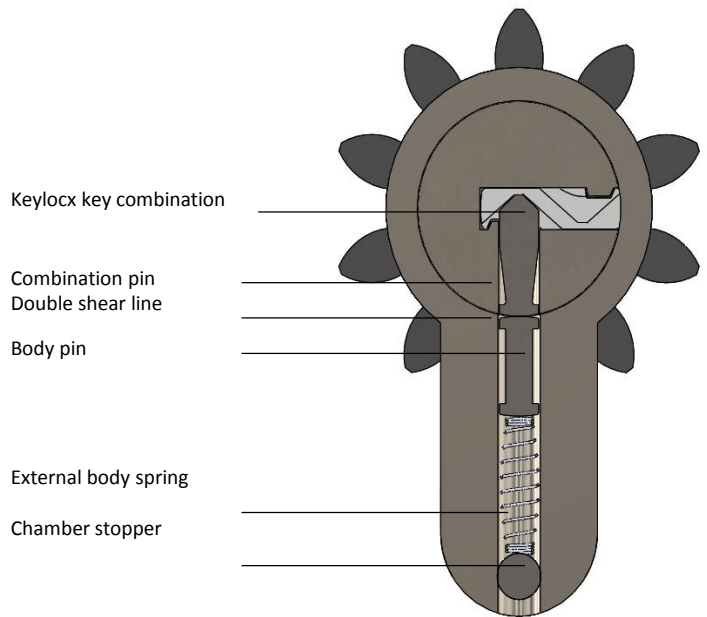
Keylocx cylinder classification according to EN1303:

							
1	6	0	0	0	C	5	2
(1)	(4-6)	(-)	(0/1)	(-)	(A/B/C/0)	(1-6)	(0-2)

Keylocx key blank duplication control based on unique code printed on the duplication card and can be duplicate only by presenting the card to a professional authorized locksmith .

The Keylocx technology can be applied on European Profile Cylinders, Padlocks Oval Profiles Cylinders ,RIM, Mortise etc.

All products can be keyed alike , keyed different or Master keyed.



# Rav-Bariach® - Keylocx™ pins specification

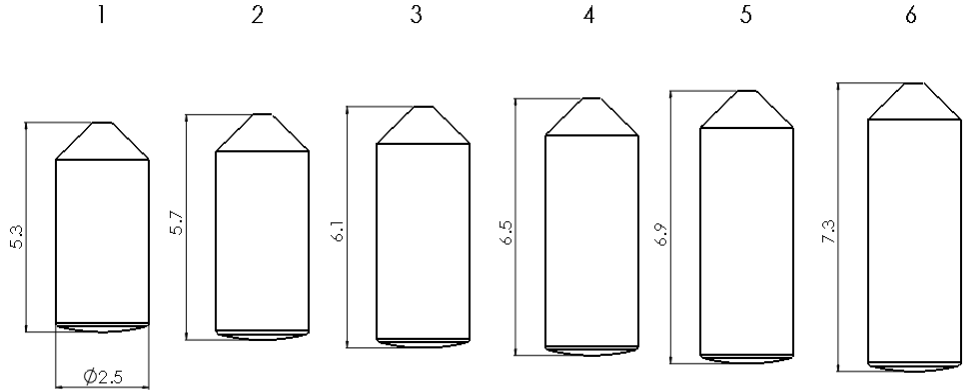
## Plug Pins

Solid pins:

Material: Stainless Steel.

Diameter: 2.5mm

Lengths: 5.3, 5.7, 6.1, 6.5, 6.9, 7.3 mm

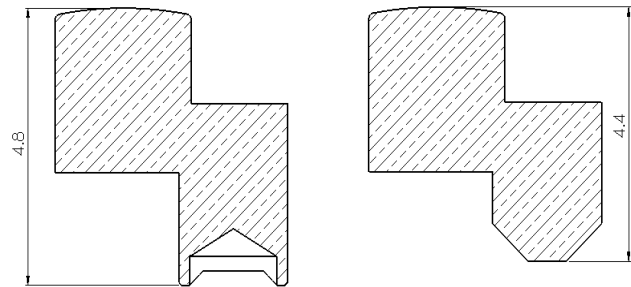


"8" pins:

Material: Stainless Steel.

Diameter: 2mm

Lengths: 4.8, 5.1mm



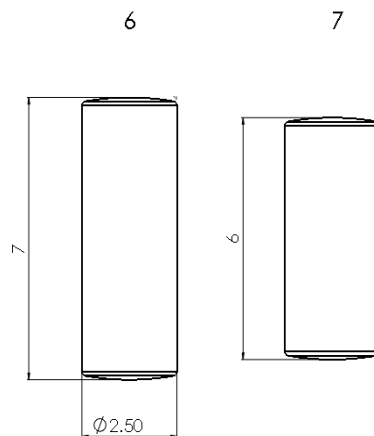
## Body Pins

Solid pins:

Material: Stainless Steel.

Diameter: 2.5mm

Lengths: 6, 7 mm



For "8" pin:

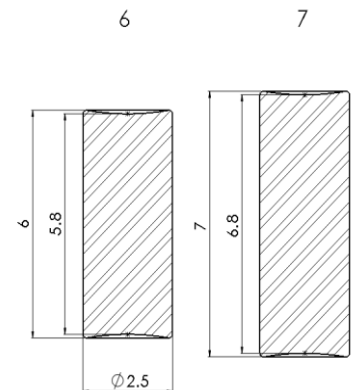
Material: Stainless Steel.

Diameter: 2.5mm

Lengths:

External : 6, 7 mm

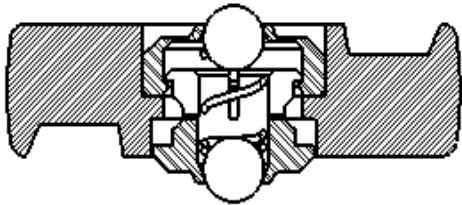
Internal: 5.8, 6.8 mm



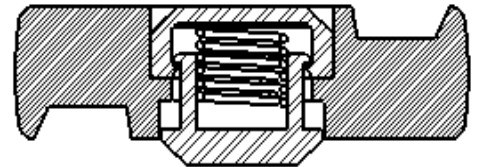
# Key pins - Keylocx™

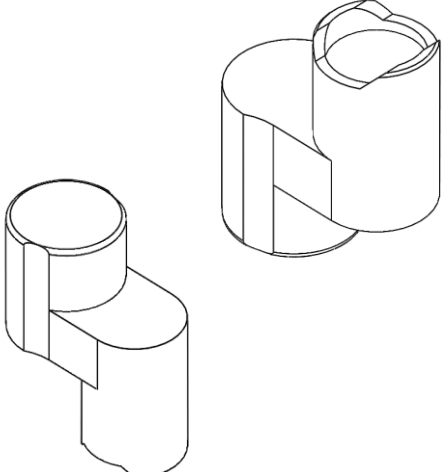
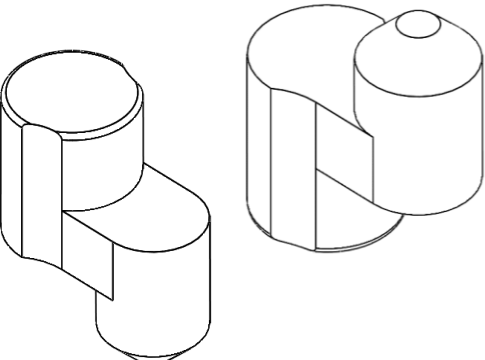
Material: Stainless Steel

RT35



F-R



	<p><b>FR</b></p>	<p>Flat "8" pin</p>
	<p><b>RT35</b></p>	<p>Conic "8" pin</p>



RB-LOCKS

LOCXIS

# “RAV-KOD”-Cylinder (PAT.PEND.)

### Changeable combination key system (or “RAV-KOD”):

Convenient solution for replacing the cylinder combination; the solution allows replacing a combination without replacing the cylinder lock.

Using a new key with a new combination obliterates the previous key combination.



### Changeable combination key set:

The key set is formed from 3 different combination key types, with different key head colors.

The predetermined order of the keys allows changing the cylinder combination so that the old key will not open the cylinder, after the new one was used first time.

Each key has its own particular combination.

“RAV-KOD” Cylinder includes a unique duplication card with three combinations.

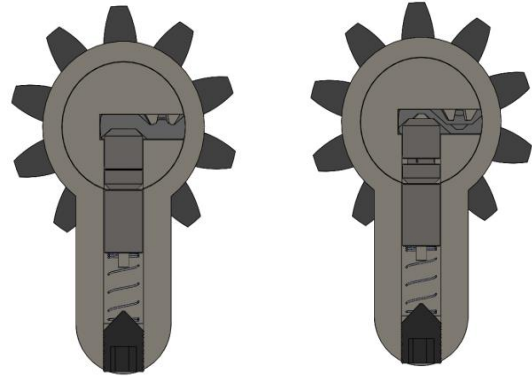
“RAV-KOD” is available on variety of cylinder types.



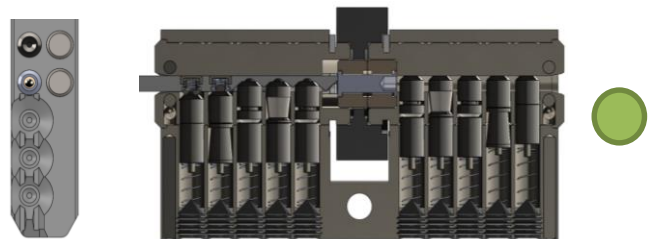
1<sup>st</sup> key    2<sup>nd</sup> key    3<sup>rd</sup> key

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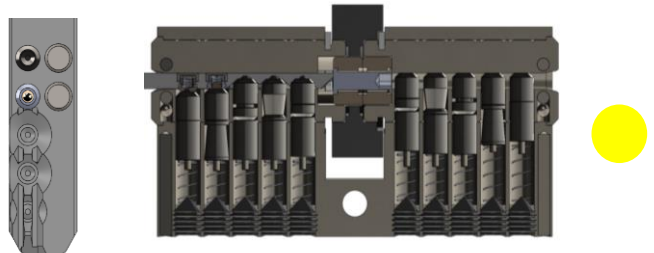
To change the cylinder combination, insert the new key into the cylinder and rotate until hearing a “click”.



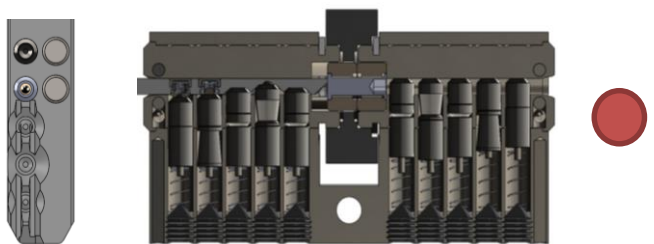
Rav-Kod cylinder with the Green key (default).



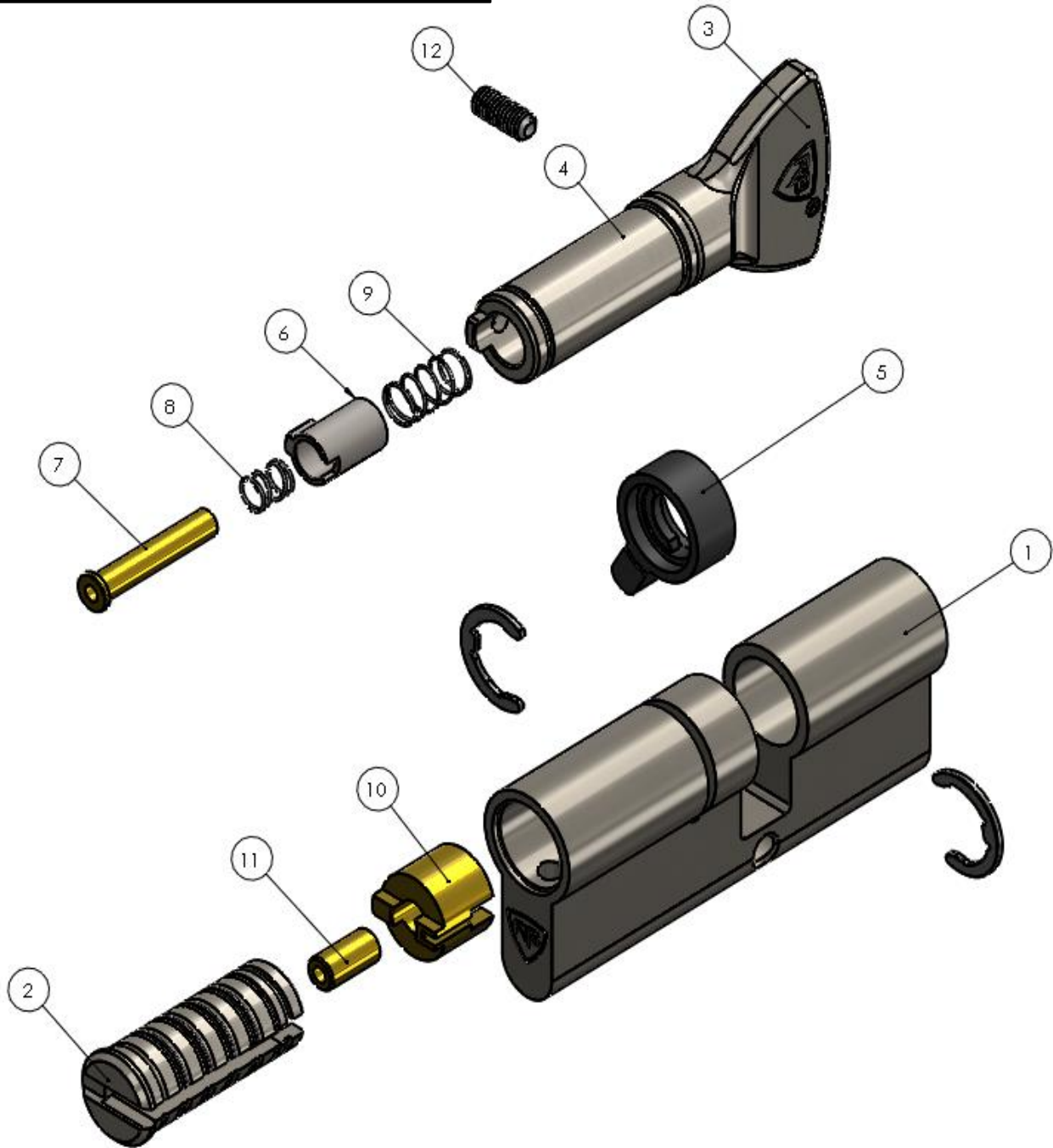
Using the Yellow key inables further use of the Green key.



Using the Red key inables further use of both Green and Orange keys



# Locxis™ - Thumbturn



No.	Part	No.	Part	No.	Part
1	Cylinder body	5	Cam/Cogwheel	9	Spring
2	Plug	6	Activator	10	Outer spacer
3	Thumbturn	7	Key stopper	11	Inner spacer
4	Conveyor	8	Activator spring	12	Screw

# Assembly Instructions

**1**  
To replace the decorative knob (A,B),  
one has to remove the Allen screw (12)

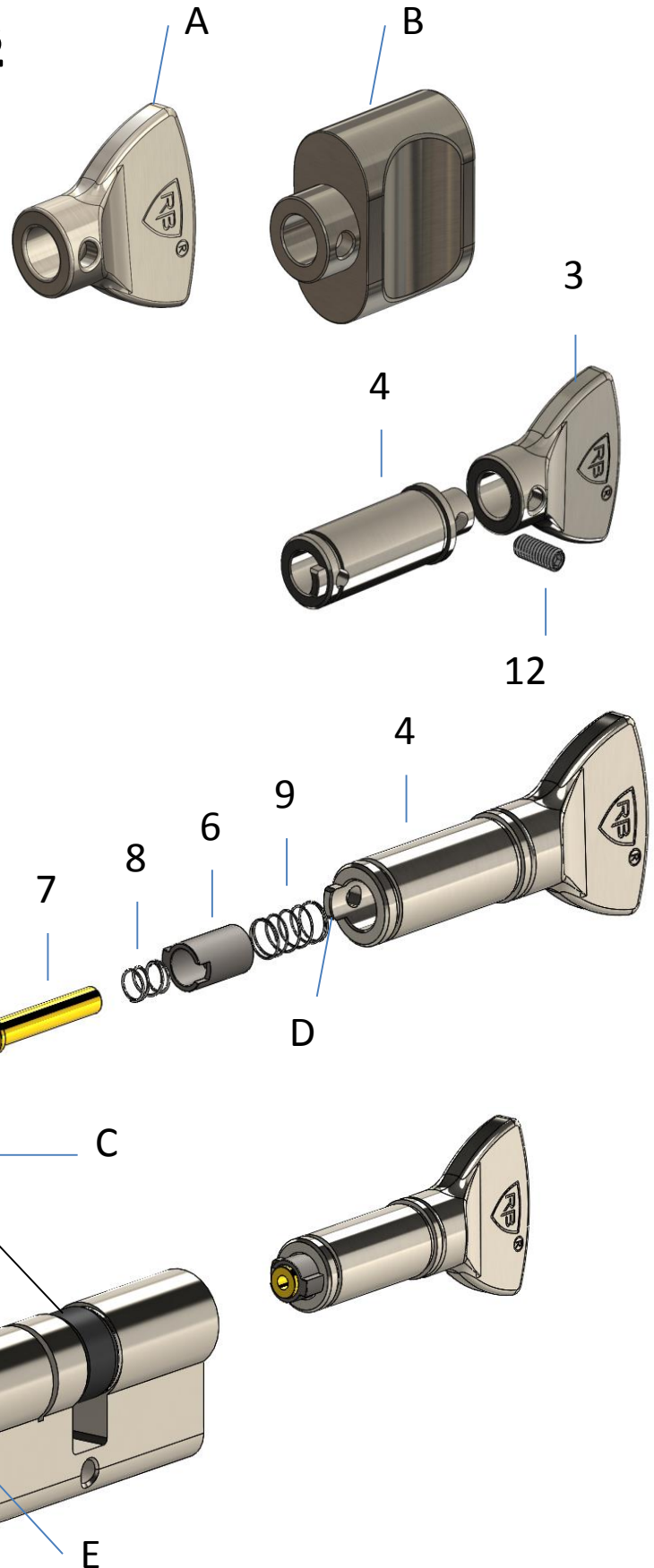
**2**  
Insert parts (6,7,8,9) into  
the conveyor (4) .

**3**  
Position the cam with the  
wide groove (C) in keyway  
side (E).

Insert the thumbturn conveyor  
into the body.

The thumbturn protuberance (D)  
will be positioned into groove (C)  
of the cam.

Check free work of the cylinder  
thumbturn and cam without a key.  
Fix the plug with an E-clip.



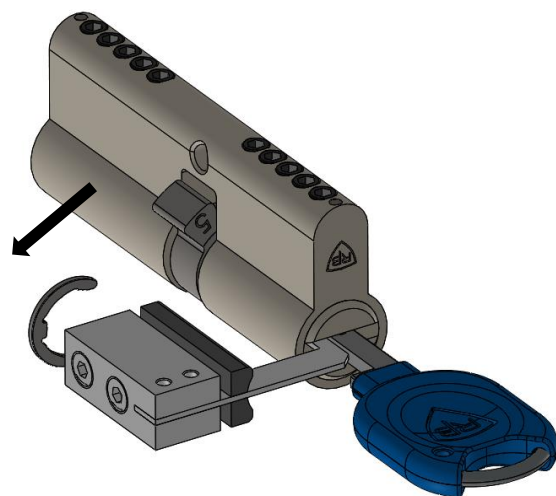


# Cylinders - Service

## Using a Filed Key and a "Fork" Tool

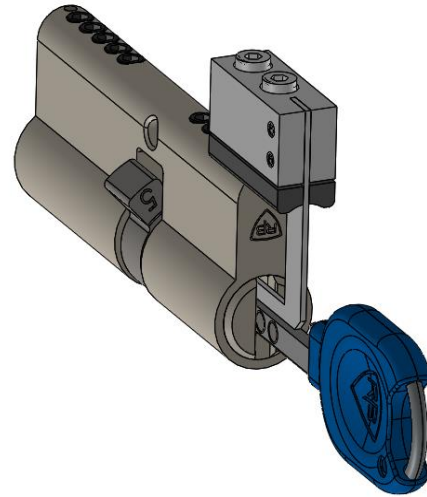
Service method for double cylinders, one side at a time.

- 1**  
Attach the "fork" blank with a cut in the length of the blade to the key as in the picture.
- 2**  
Insert the service key and the "fork" into the cylinder.  
Push the "fork" into the Cylinder body.
- 3**  
Remove the E-clip, which holds the plug in place.



**4**

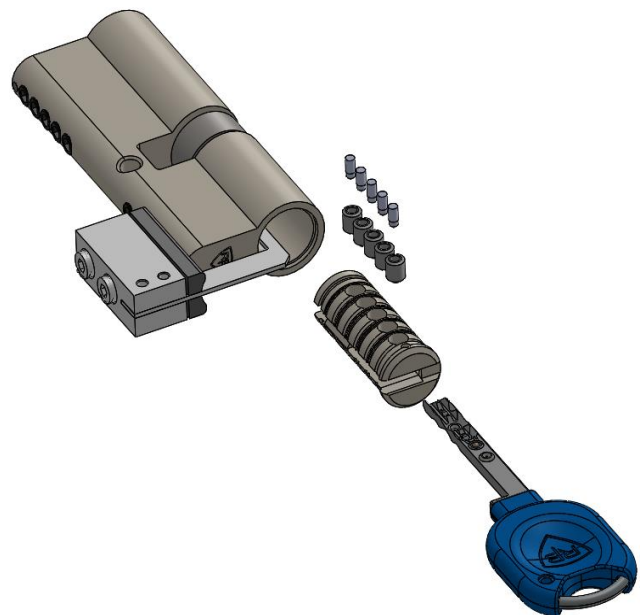
Turn the “fork” clockwise until the cylinder body catch the spring loaded part of the “fork” in place.



**5**

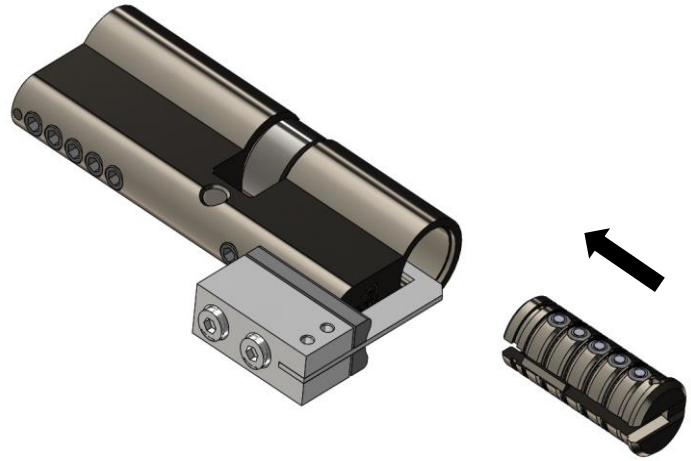
Remove the plug and the service key from the cylinder body, making sure that the “fork” is held in place.

Remove all pins and the service key from the plug. Insert the new key into the plug and re-insert the pins to align with the new key combination cuts.



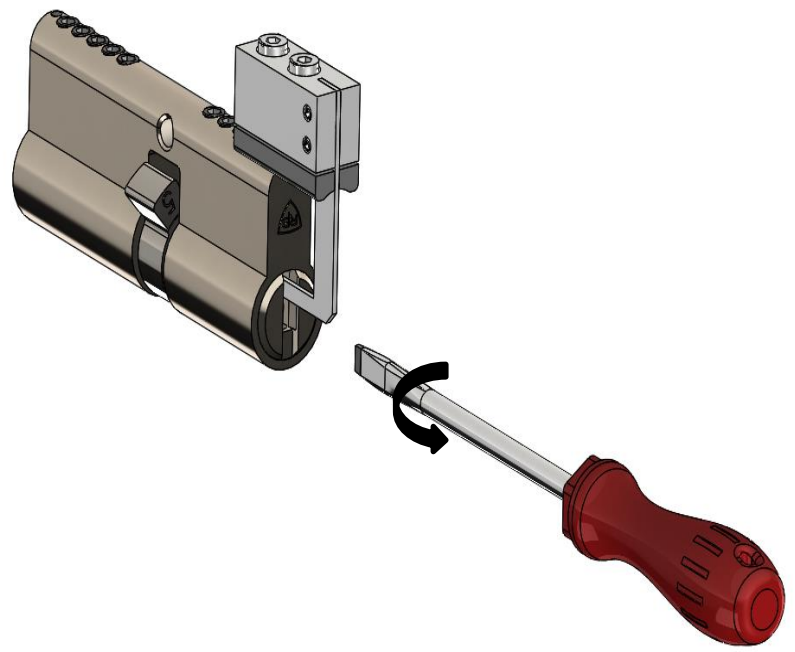
**6**

Remove new the key from the plug.  
Insert the plug into the cylinder body.



**7**

Remove the “fork”.  
Turn the plug using a screwdriver till the driving pins penetrate the plug holes.  
Check proper operation of the cylinder.  
Assemble the E-clip.

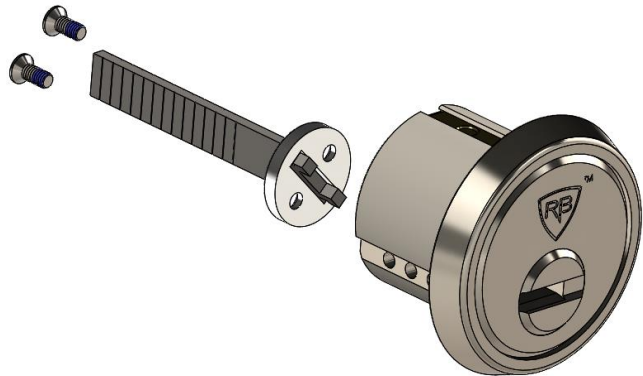


## Single Cylinder using a Follower

The method applies to any kind of single cylinder.  
The example is based on mortise cylinder.

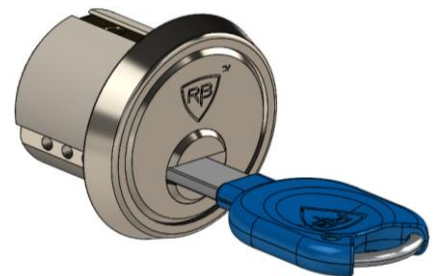
**1**

Disassemble the screws and remove the cam or the tail.



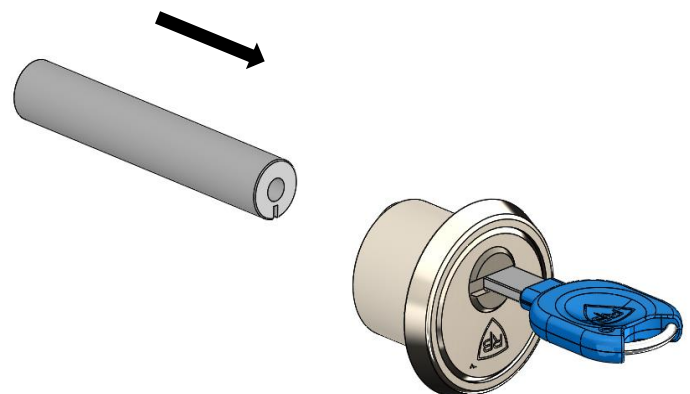
**2**

Using the operating key, turn the plug 180°.



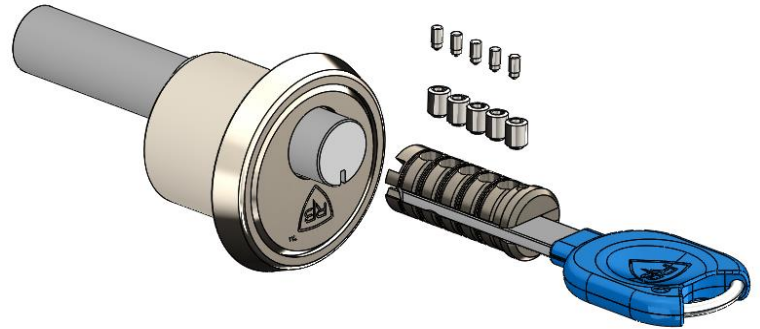
**3**

Using the follower, push the plug out of the cylinder.  
Rekey the plug according to the new key combination.



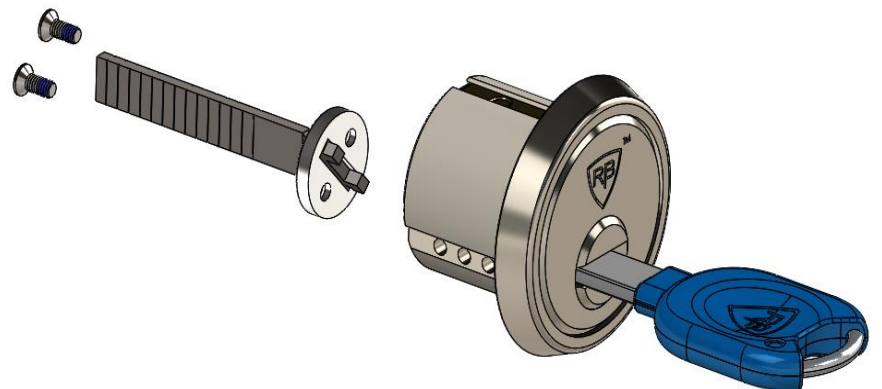
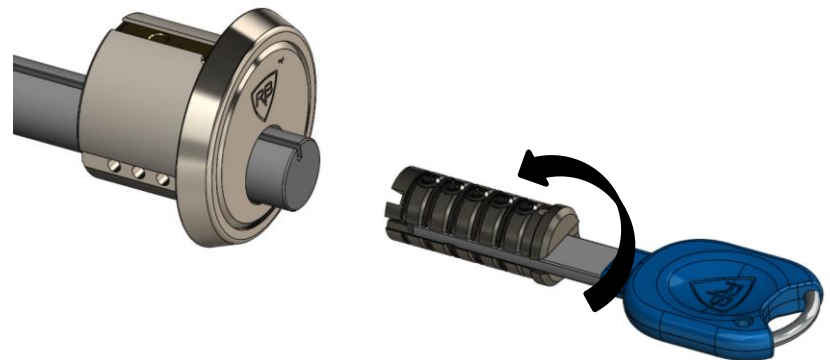
**4**

Push the plug back, against the follower, into the cylinder body and remove the follower. Using the key, turn the plug until it is fixed in the proper position.



**5**

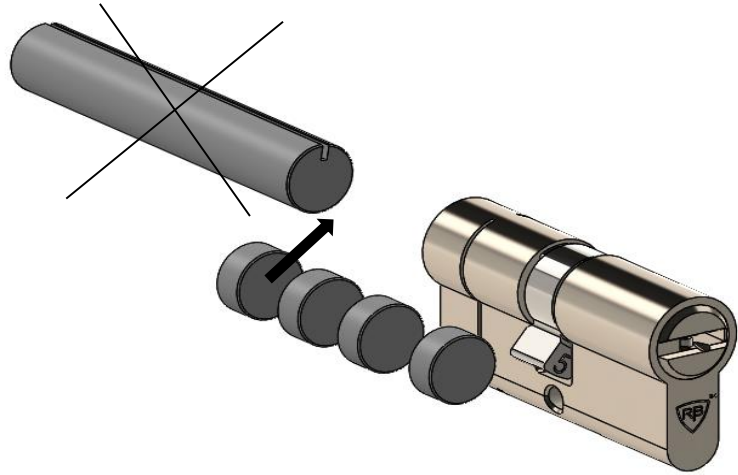
Remove the key pressing the plug in place with the thumb. Reassemble the cam or tail.



## Double Cylinder using Multiple Disc Followers

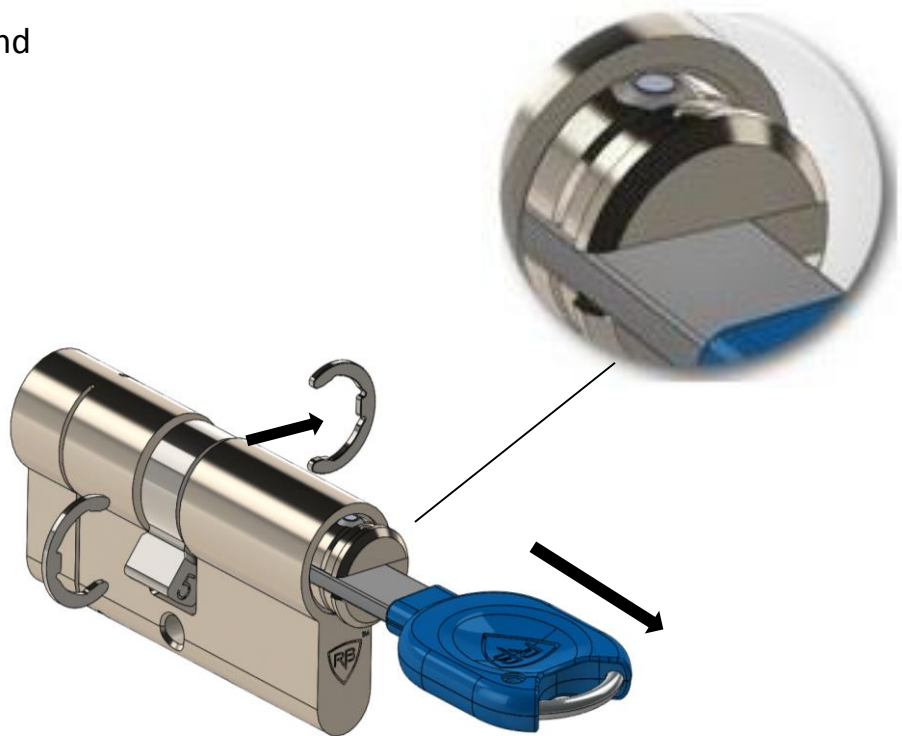
**1**

One piece follower cannot be used for double cylinder, it will be replaced by multiple disc followers.



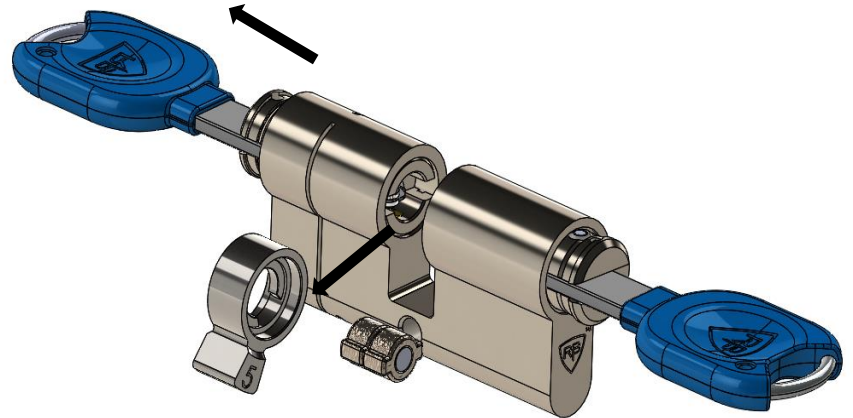
**2**

For this operation two operating keys are needed!  
Remove the E-clips.  
Insert key from one side and rotate 180°.  
Pull plug out till the first chamber is seen.



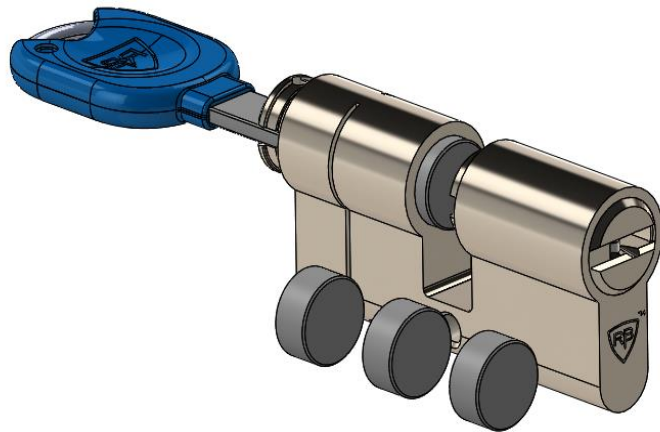
**3**

Do the same for the second side, and then take out the cam along with the coupling bridge.



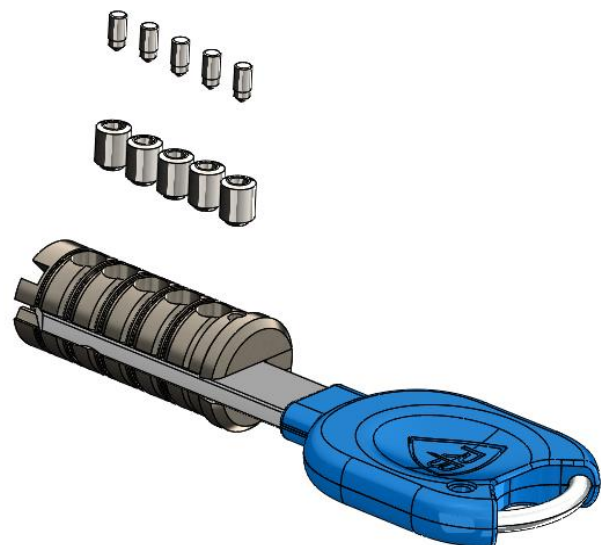
**4**

Insert the plug from one side into place and remove the key. Remove the other plug by pushing the disc followers one by one through the cam opening.



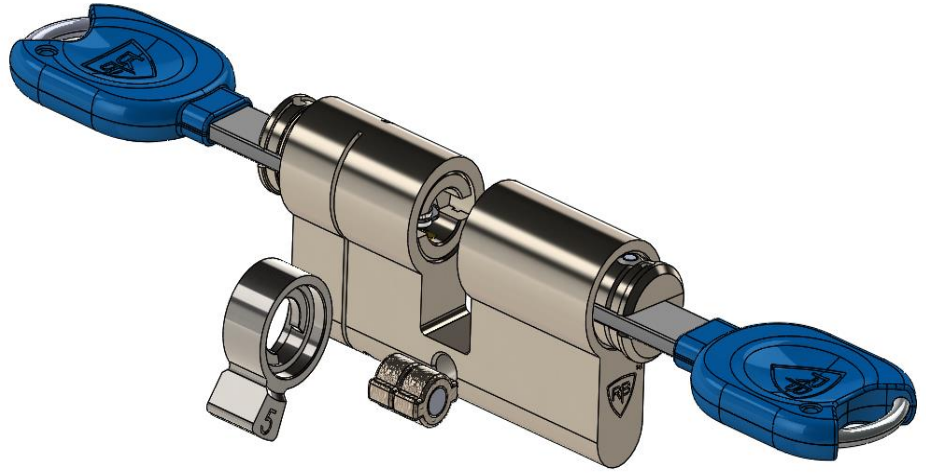
**5**

Remove the pins and the key from the plug. Assemble the proper combination pins accordingly, into the plug. Insert the plug back into the cylinder body. Repeat steps 4 and 5 for the other side.



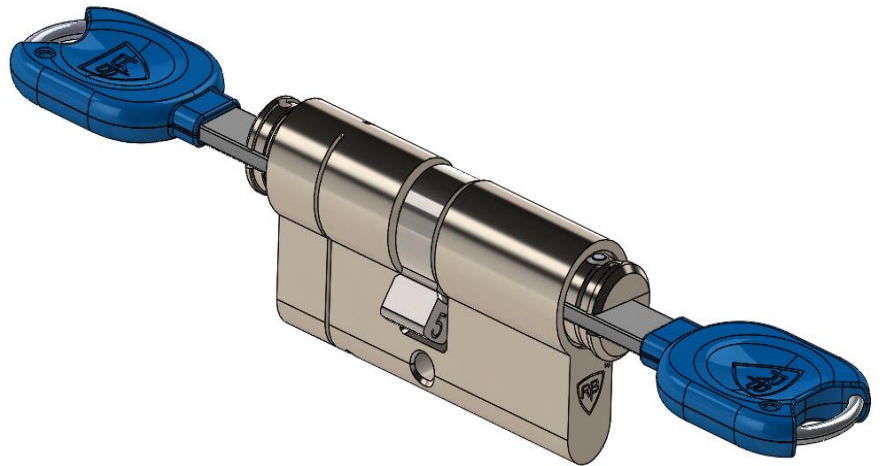
**6**

Assemble the cam and the coupling bridge by removing the plugs as described in the 3<sup>rd</sup> step.



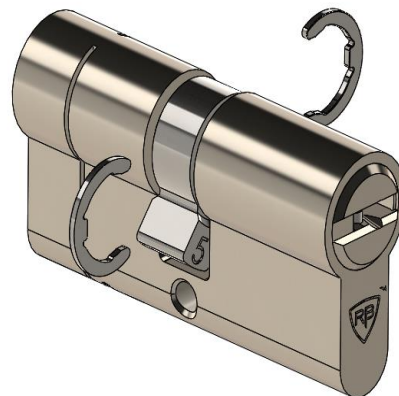
**7**

Rotate the cam while applying pressure, with the fingers, on both plugs heads. When one plug snaps into place, rotate the key to zero position and take it out. When removing the key, apply pressure on the plug head to prevent it from removal. Repeat the same for other side.



**8**

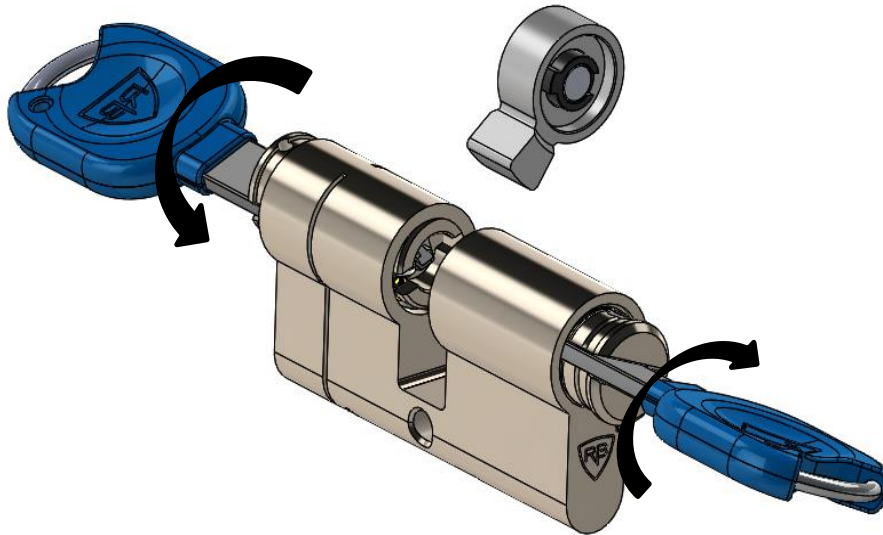
Assemble the E-clips.





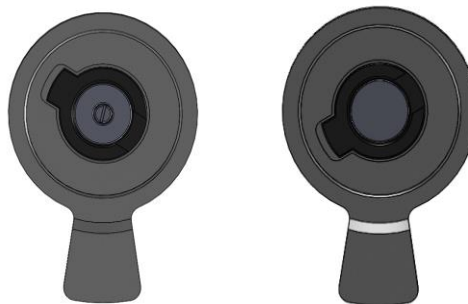
# Emergency cylinder

## Emergency Cam Mechanism Assembly Instructions



1  
Rotate and withdraw 2 plugs before the insertion of emergency cam

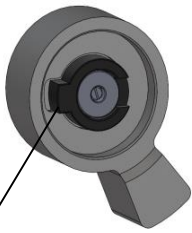
2  
Place the bridge in the cam's slot, on both sides





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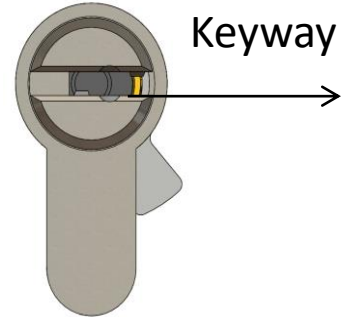
LOCXIS



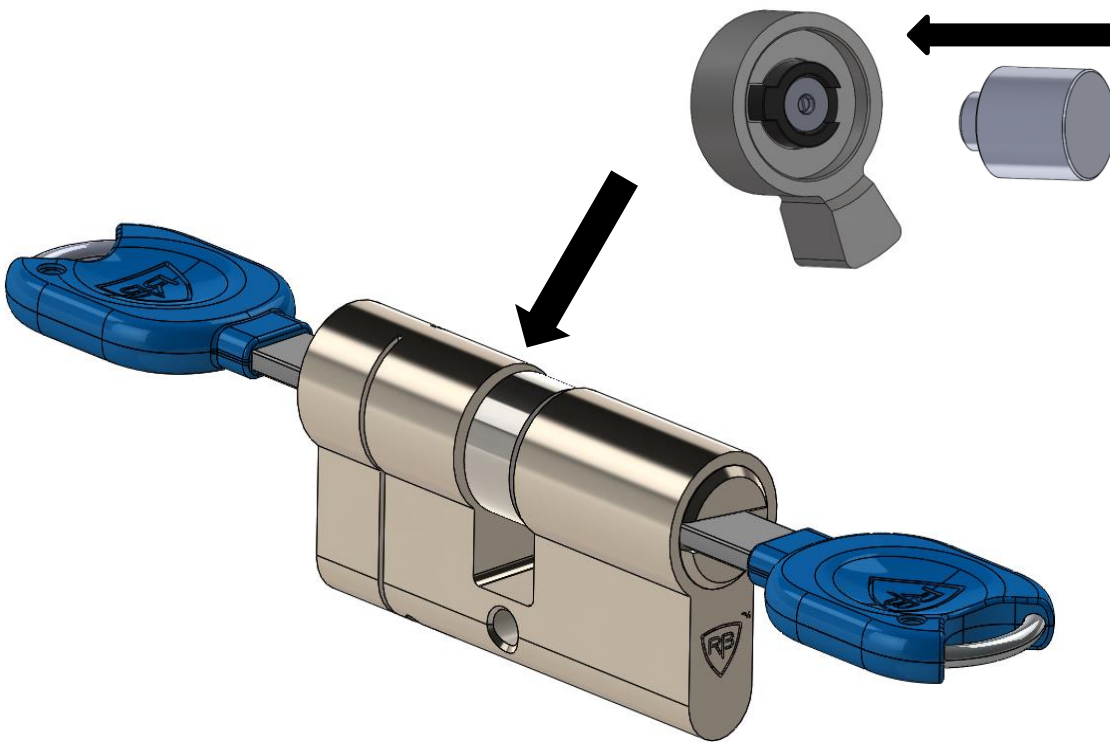
The full part of the bridge points to the opposite direction of the keyway.



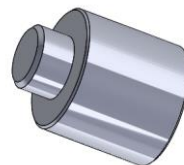
The slot points to the keyway direction.



Keyway direction



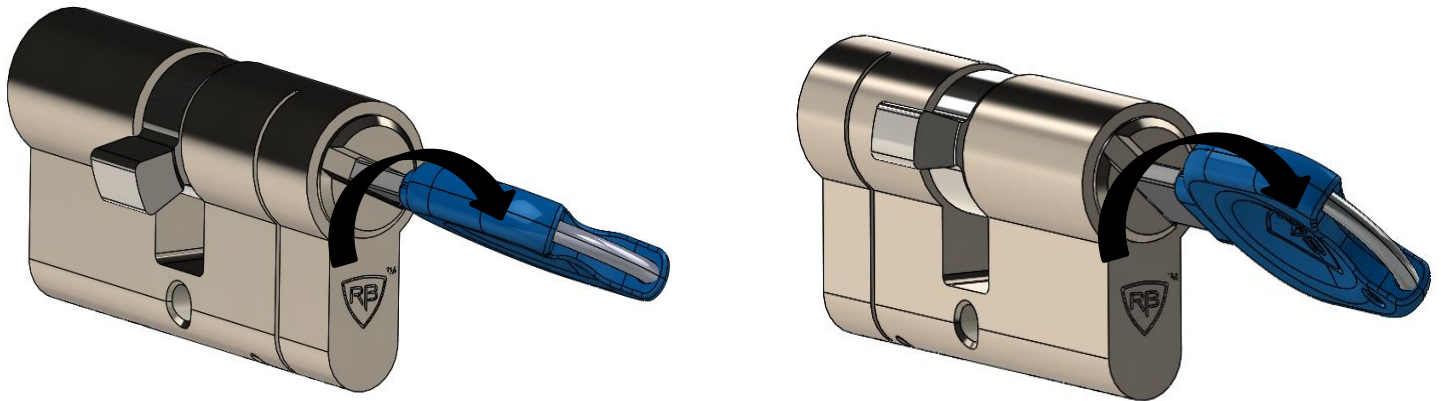
Use stepped spacer for plugs longer than 33mm, the narrow part pointed to the cam.



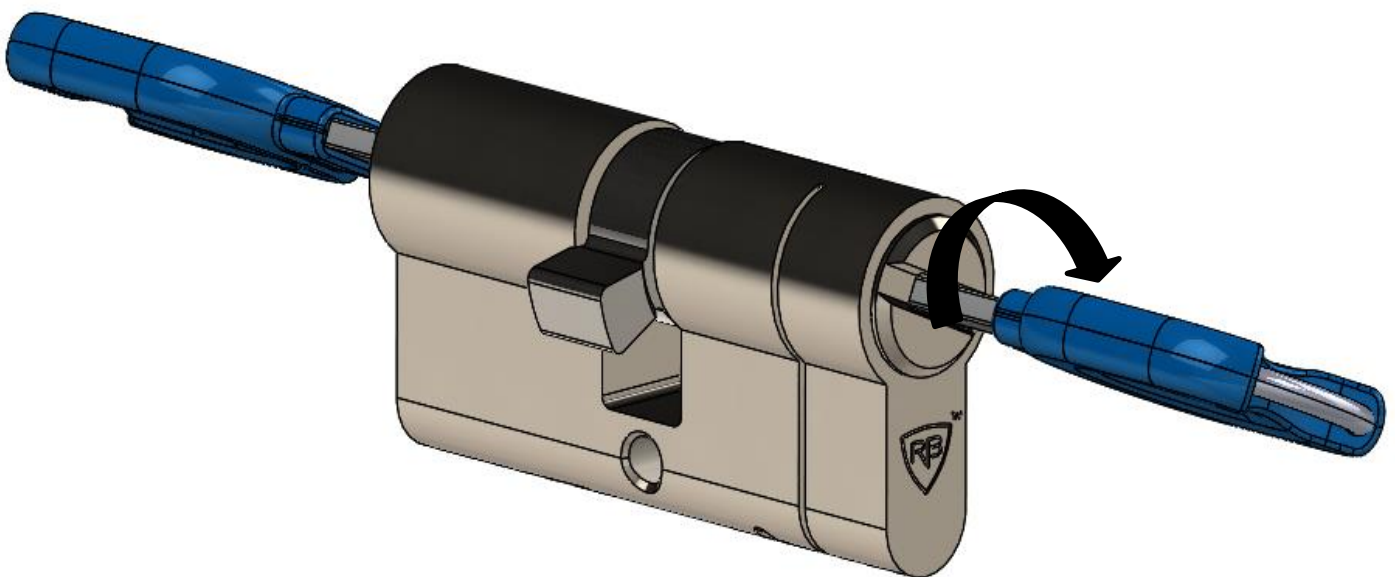
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After pushing back the plugs and fixing them with E-clips:

1. Check cylinder's operation with a key in each side of the cylinder:



2. Check operation with 2 keys inserted simultaneously into the keyway in both sides of the cylinder



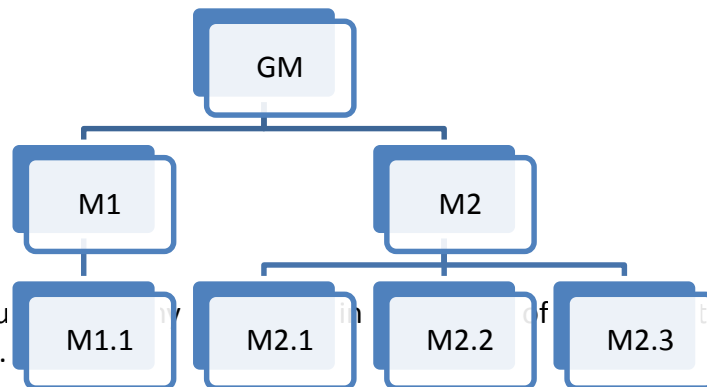
# Master Keying

The upcoming sections below provides an overview of RB-Locks® master keying process, and a brief overview of the new Master Design™ software.

Each system can be solved in several ways, there will be several solutions of a certain required system – therefore there is no one right solution for a master system; The Master Design™ software provides the professional and most efficient solution for the locksmith.

Master Design™ can generate two different system types :

- Hierarchical systems are used in organizations with several levels of access permission; higher level is authorized to open lower level entrances.



- Matrix type system is suitable for large number of doors and an access scheme can be defined.

Cylinders

	Cylinders									
nr.	1	2	3	4	5	6	7	8	9	10
1	X	X	X	X	X	X	X	X	X	X
2		X								
3			X							
4				X						
5					X	x	x	x	x	x
6						X				
7							x			
8								x		
9									x	
10										x

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## Design Methods

Hierarchical structure systems:

(As known with it's commonly used names "tree" or "flow chart")

In the Hierarchical structure, every node represents a key and cylinder.

This structure example below shows 3 levels of access authorization;

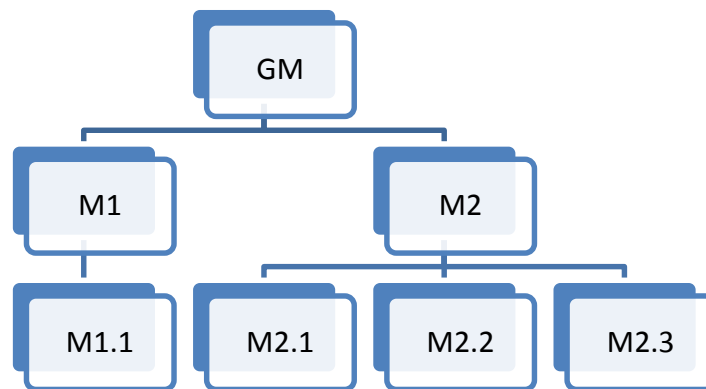
The highest level is related to the Grand Master key (GM) which can open every cylinders in the system, Lowest levels (E.g M1.1, M2.1, M2.2, M2.3) are related to keys that may open only a single cylinder.

Higher levels are authorized to open only related lower levels

M1 open M1.1 ; M2 open M2.1, M2.2 and M2.3.

There is no access authorization in the same level (E.g. door M2.1 will not open by key M1 )

It is highly recommended to initially expand the required systems to ensure future flexibility to expand the system.



A schematic of a Hierarchic key system

## Design Methods

Matrix structure systems representation:

Using a Matrix chart, each column represents a cylinder and each row represents a Key.

Every **X** marks an opening of the cylinder that each key is permitted to open.

The matrix structure support cross keying and flexible design , but future changes once a system already installed may involved rekeying;

Similar to the “tree” structure , it is highly recommended to initially expand the required systems to ensure future flexibility to expand the system.

Schematics of a Matrix key systems:

- K1 - opens C1,C2,C3,C4 & C5
- K2 - opens C2 & C5
- K3 - opens C3 & C5
- K4 - opens C3,C4 & C5
- K5 - opens C1 & C5

		Cylinders				
		C1	C2	C3	C4	C5
Key Holder	No.	1	2	3	4	5
K1	1	X	X	X	X	X
K2	2		X			X
K3	3			X		X
K4	4			X	X	X
K5	5	X				X

		Cylinders				
		C1	C2	C3	C4	C5
Key Holder	No.	1	2	3	4	5
K1	1	X	X	X	X	X
K2	2		X			X
K3	3			X		X
K4	4			X	X	X
K5	5	X				X

All keys can open C5

		Cylinders				
		C1	C2	C3	C4	C5
Key Holder	No.	1	2	3	4	5
K1	1	X	X	X	X	X
K2	2		X			X
K3	3			X		X
K4	4			X	X	X
K5	5	X				X

K1 is a Grand Master key – opens all cylinders C1-C5

## Master Design™ Software

**Master Design** is an original and advanced software developed by RB for building master key systems:

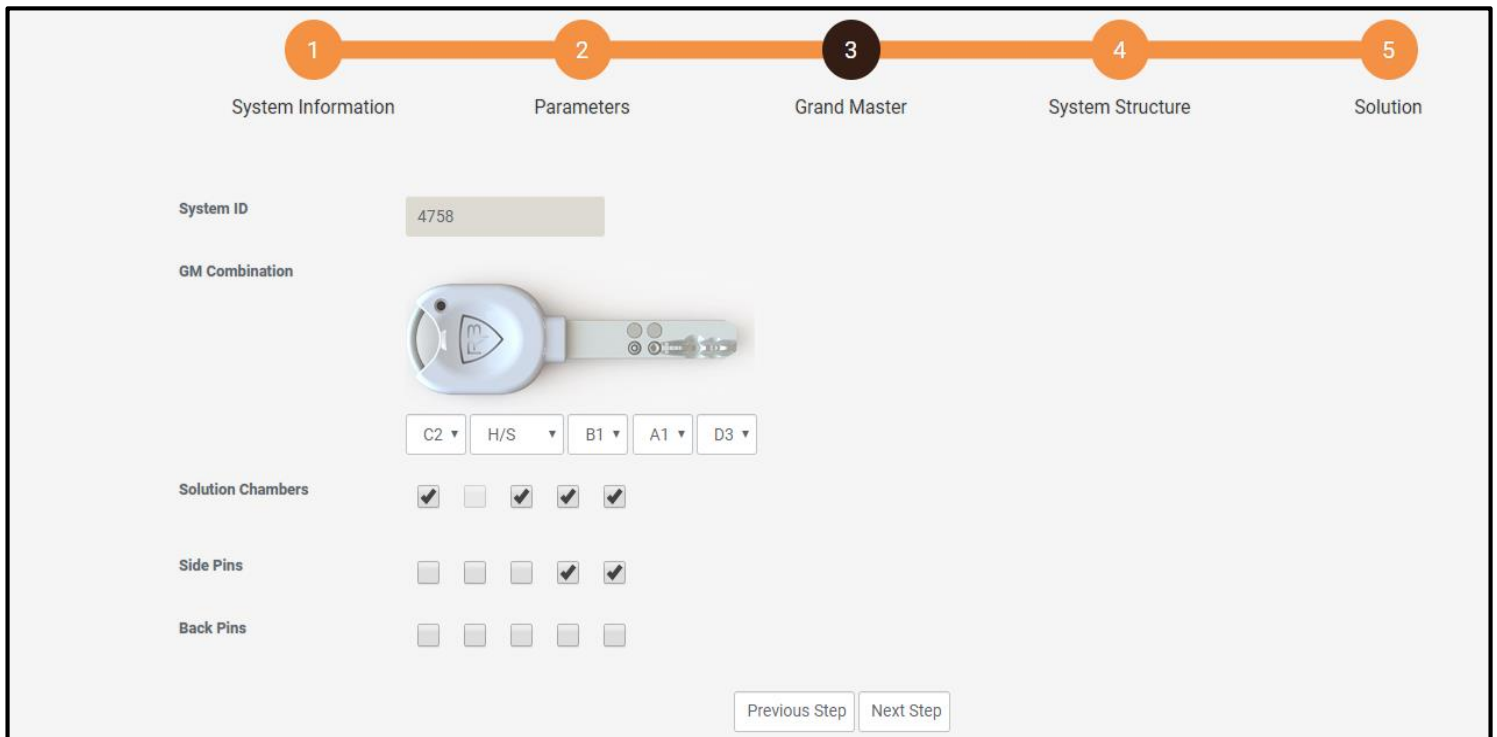
- Web based , easy accessible and easy to use for authorized users
- The access to software requires Internet connection , secured by top encryption protocols
- The access to Database is secured by Authorization Management System
- The database Server is secured by external Firewall
- Daily backups of the Server's Data
- User names and preliminary passwords are individually generated by RB IT technical support.

**Master Design** can generate two different Master Key system types :

- Hierarchical systems
- Matrix system


**Master Design** Supports 4 Platforms:

1. Lockis
2. Dynamic Plus
3. Keylock
4. D7



1 System Information      2 Parameters      3 Grand Master      4 System Structure      5 Solution

System ID: 4758

GM Combination: 

C2 ▾   H/S ▾   B1 ▾   A1 ▾   D3 ▾

Solution Chambers:

Side Pins:

Back Pins:

Previous Step   Next Step

### Grand Master Selection Page

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# Master Design™ Software

**Special features :**

- Optional Matrix display for Hierarchic Tree Input.
- Keys and cylinders details may be easily introduced in the Layout Page
- The Software supports both half and quarter millimeter combination steps.
- Pins Filters for Master Key System building
- Input changes and running iterations for refining the solution ( till the solution is saved ).

	GM	C 1	C 2	C 2.1	C 2.2	C 2.3	C 2.4	C 3	C 4	C 5	C 6	C 7
GM	X	X	X	X	X	X	X	X	X	X	X	X
M 1		X										
M 2			X	X	X	X	X					
M 2.1				X								
M 2.2					X							
M 2.3						X						
M 2.4							X					
M 3								X				
M 4									X			
M 5										X		
M 6											X	
M 7												X

**Hierarchic Layout Page**

	C 1	C 2	C 3	C 4	C 5	C 6	C 7	C 8	C 9	C 10	C 11	C 12
M 1	X	X	X	X	X	X	X	X	X	X	X	X
M 2		X										
M 3			X									
M 4			X	X	X	X	X	X	X	X	X	X
M 5				X								
M 6						X						
M 7							X					
M 8								X				
M 9									X			
M 10										X		
M 11											X	
M 12												X

**Matrix Layout Page**

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RB-LOCKS



Master Design

## Master Design™ Software

Solution **Reports** for key cuttings , cylinder pinning and pins inventory .  
The solution may be saved as PDF, Excel files or directly printed.

### Keys Report

Excel PDF Print

Show 25 entries Search:

KEY ▲	COMBINATION	SIDE PINS ⇅	BACK PINS ⇅	AMOUNT	COMMENT	MARKING ⇅	TYPE ⇅	KEYS ⇅
GM	C2 H/S B1 A1 D3	.....	.....					
M 1	C2 H/S B1 A1 D5	.....	.....					
M 2	C4 H/S B2 B1 B3	.....	.....					
M 2.1	A2 H/S B1 B3 D3	.....	.....					
M 2.2	C4 H/S B1 B3 B3	.....	.....					
M 2.3	D5 H/S B1 B3 D3	.....	.....					
M 2.4	C3 H/S B1 B3 D3	.....	.....					
M 3	C3 H/S B2 B1 D3	.....	.....					
M 4	D5 H/S B2 B1 D3	.....	.....					
M 5	A2 H/S B2 B1 D3	.....	.....					
M 6	C3 H/S A2 B1 D3	.....	.....					
M 7	A2 H/S A2 B1 D3	.....	.....					

Showing 1 to 12 of 12 entries Previous  Next

### Keys Solution Report

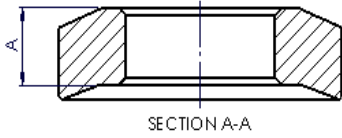
### Cylinders Report

Excel PDF Print

<b>Cylinder GM,,,,</b> · C2 · A*0* · B1 · A1 · D3 · . . . . .	<b>Cylinder M 2,,,,</b> · C2 · A*0* · B- · A1 · B+ · _2 · . . . . 1_	<b>Cylinder M 1,,,,</b> · A+ · A*0* · B1 · A1 · D- · . . . . .	<b>Cylinder M 2.1,,,,</b> · A2 · A*0* · B1 · A- · D- · 2_ · . . . . 1+
<b>Cylinder M 2.2,,,,</b> · C2 · A*0* · B1 · A- · B+ · _2 · . . . . 1+ · 2+	<b>Cylinder M 2.3,,,,</b> · C2 · A*0* · B1 · A- · D- · 13 · . . . . 1+	<b>Cylinder M 2.4,,,,</b> · C- · A*0* · B1 · A- · D- · . . . . . 1+	<b>Cylinder M 3,,,,</b> · C- · A*0* · B- · A1 · D3 · . . . . . 1_
<b>Cylinder M 4,,,,</b> · C2 · A*0* · B- · A1 · D3 · 13 · . . . . 1_	<b>Cylinder M 5,,,,</b> · A2 · A*0* · B- · A1 · D3 · 2_ · . . . . 1_	<b>Cylinder M 6,,,,</b> · C- · A*0* · AA · A1 · D3 · . . . . . 1_	<b>Cylinder M 7,,,,</b> · A2 · A*0* · AA · A1 · D3 · 2_ · . . . . 1_

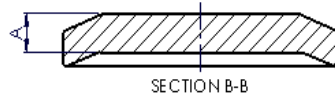
Cylinders Solution Report  
[www.rb-locks.com](http://www.rb-locks.com)

Locxis™ Master Disks and Solid Pins:



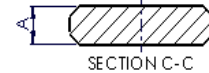
SECTION A-A

CODE	A[mm]
1-	0,5
1,5-	0,75
2-	1
2,5-	1,25
3-	1,5



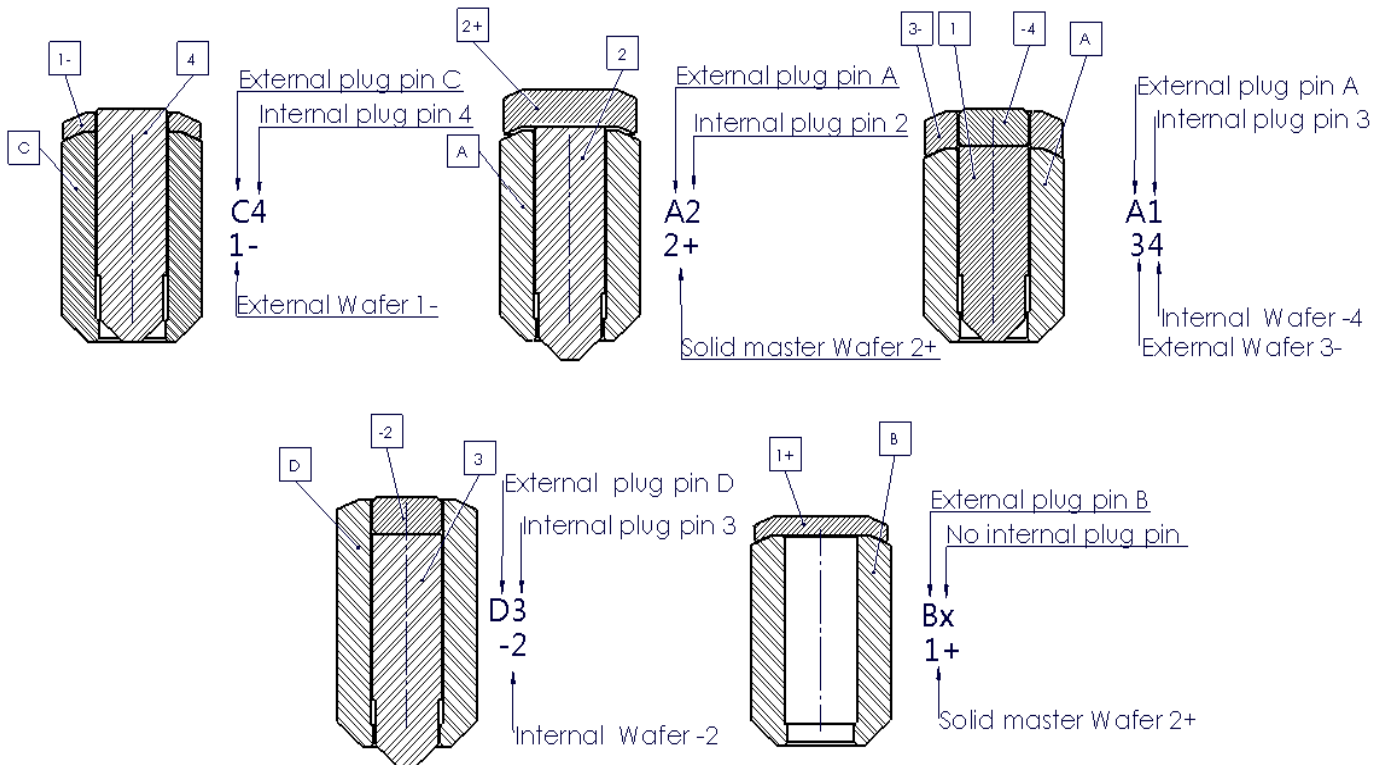
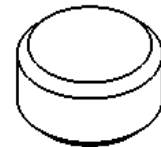
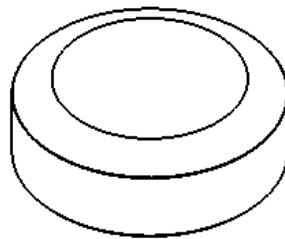
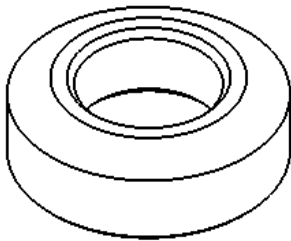
SECTION B-B

CODE	A[mm]
1+	0,5
1,5+	0,75
2+	1
2,5+	1,25
3+	1,5
3,5+	1,75
4+	2



SECTION C-C

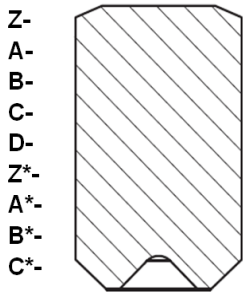
CODE	A[mm]
-2	1
-3	1,5
-4	2



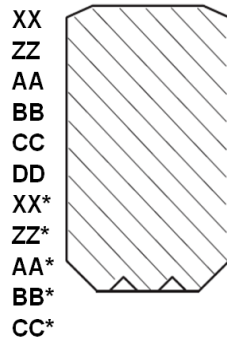
Locxis™ Master Disks and Solid Pins (continue):

Solid Pins:

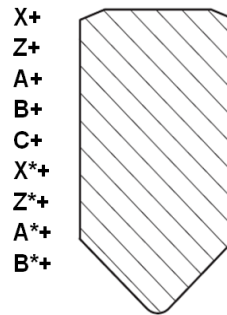
Solid pin, grooved type



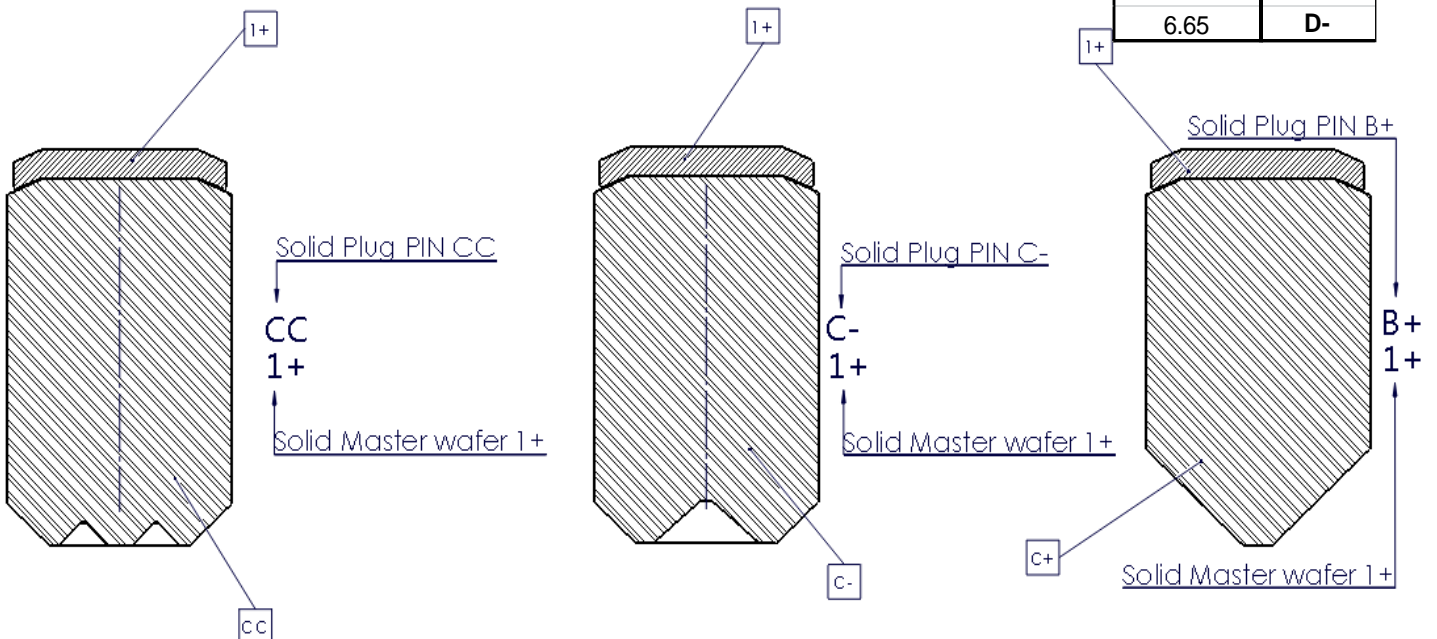
Solid pin, flat type



Solid pin, point type



Length[mm]	Code
4.65	X+
4.9	X*+
5.2	Z+
5.4	Z*+
5.65	A+
5.9	A*+
6.15	B+
6.4	B*+
6.65	C+
4.15	XX
4.4	XX*
4.65	ZZ
4.9	ZZ*
5.2	AA
5.4	AA*
5.65	BB
5.9	BB*
6.15	CC
6.4	CC*
4.65	Z-
4.9	Z*-
5.2	A-
5.4	A*-
5.65	B-
5.9	B*-
6.15	C-
6.4	C*-
6.65	D-





**RB-LOCKS**



**Master Design**

Locis™ Master Disks and Solid Pins (continue):

Opening Chart for Solid Plug Pins:

Solid Pin

MASTER PIN	Solid Pin																								
	AA	AA*	BB	BB*	CC	CC*	DD	Z-	Z*-	A-	A*-	B-	B*-	C-	C*-	D-	X+	X*+	Z+	Z*+	A+	A*+	B+	B*+	C+
A1	√									√										√					
A1*	√									√											√				
A2	√									√												√			
A*1											√									√					
A*1*		√									√										√				
A*2		√									√											√			
A*2*		√									√												√		
B1												√								√					
B1*												√									√				
B2			√									√										√			
B2*			√									√											√		
B3			√									√												√	
B*1*													√								√				
B*2													√									√			
B*2*				√									√										√		
B*3				√									√											√	
B*3*				√									√											√	
C2															√							√			
C2*															√								√		
C3					√										√									√	
C3*					√										√									√	
C4					√										√										√
C*2*																√							√		
C*3																√								√	
C*3*						√										√								√	
C*4						√										√									√
C*4*						√										√									√
D3																	√							√	
D3*																	√							√	
D4							√										√								√
D4*							√										√								√
D5							√										√								√

[www.rb-locks.com](http://www.rb-locks.com)

## Locxis™ Master Disks and Solid Pins (continue):

### Side/Back pins

The use of binary pins, side/back pins, enables to solve bigger and more complex systems.

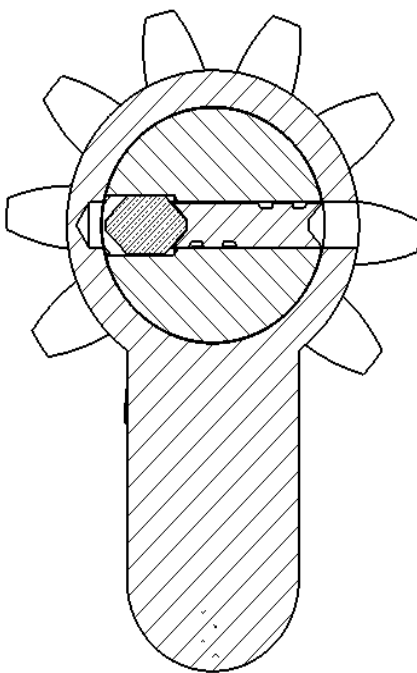
The principle of side/back pins operation: passive (unified length) pin inserts to a drilled hole inside the plug,

If the key has a drilled hole at the correct position – the key is free to rotate the plug.

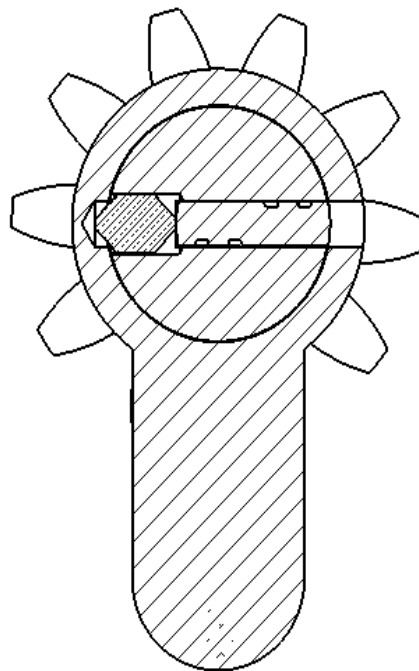
If the key has no drilled hole at the correct position – the key is blocked and cannot rotate the plug.

The number of side/back pins varies according to a plug's length (short plugs can have less than 5 side pins chambers)

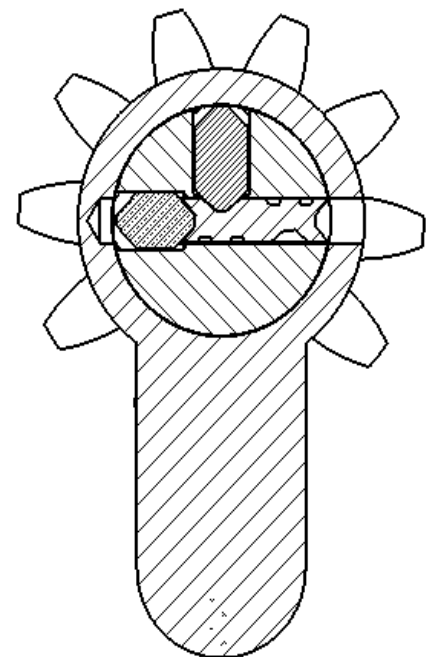
Master Design™ software solves with binary pins and the locksmith will cut the keys according to the software solution output. (\*Note: the plugs and the cylinder bodies must be pre-drilled for side pins)



the key has a drilled hole  
The plug is free to rotate

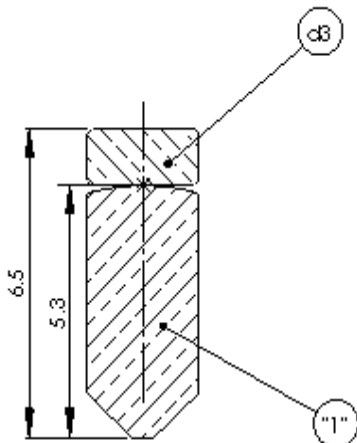
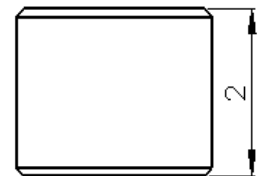
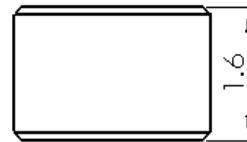
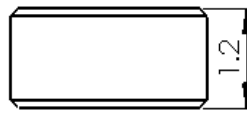
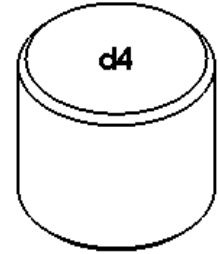
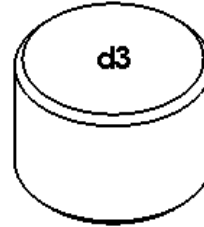
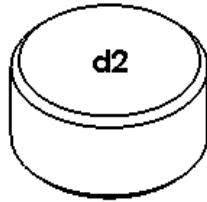
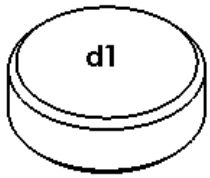


the key has no drilled hole-  
The plug is locked

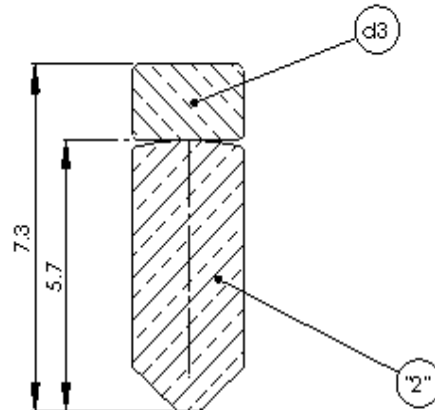


the key has drilled hole for side  
and back pins  
The plug is free to rotate

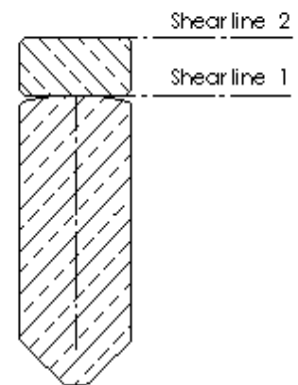
Keylocx™ Master Disks



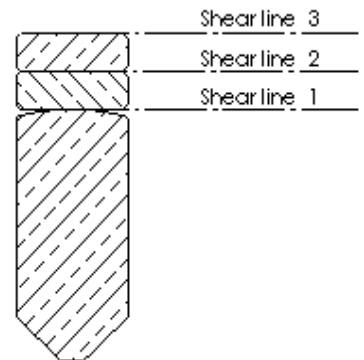
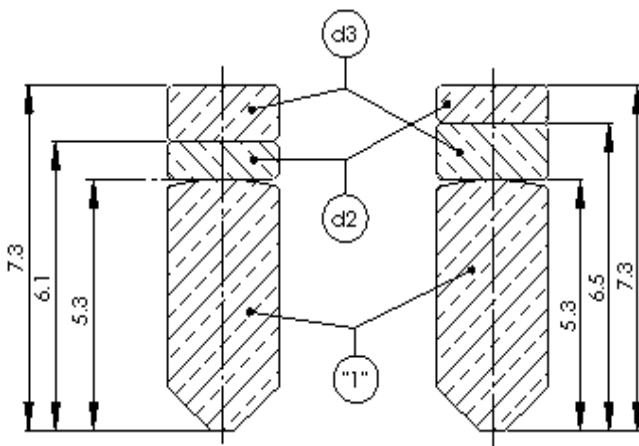
A key with the combination cuts:  
1 & 4--> open the cylinder



A key with the combination cuts:  
2 & 6--> open the cylinder



A key with the combination cuts:  
3 & 6--> open the cylinder





**RB-LOCKS**

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