

Compact electronic knob cylinder CXx16x



Service manual

Imprint

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Compact electronic knob cylinder CXx16x
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1 About this document

This service manual contains important information necessary for the maintenance and repair of the product "Compact electronic knob cylinder" (CXx16x in brief). It applies to all versions of the CXx16x mentioned in the text and applies only to the technicians specially trained by Uhlmann and Zacher.

- ▶ The operating and assembly manual has to be read carefully before maintenance or service and the instructions in it have to be followed.

Uhlmann & Zacher GmbH does not assume any responsibility for disruptions or hazards such as non-access to injured persons, malfunctions, property damage or other damages resulting from non-compliance with this service manual or incorrectly configured knob cylinder.

- ▶ Prerequisite for ordering individual components is the system training for assembly.
- ▶ If there are still questions after reading this service manual, then please contact Uhlmann & Zacher GmbH directly.

1.1 Warnings

Warnings warn against hazards, which may arise when using the product. There are two levels of warnings that can be identified based on the signal word:

Signal word	Meaning
CAUTION	Indicates a hazard with a low risk that can lead to mild or moderate injury if not avoided.
ATTENTION	Indicates a hazard that results in property damage.

1.2 Symbols

The following symbols may be used in this manual:

- ▶ This symbol indicates a usage instruction that must be followed by the user.
- This symbol indicates an entry in a list.



This symbol indicates useful and important information.

2 Security

2.1 General safety instructions

Follow these basic safety instructions when using the product:

- ▶ Do not make any kind of modifications to the product, with the exception of those described in this service manual or the operating and assembly manual.
- ▶ Do not use the product in potentially explosive areas.
- ▶ Do not heat the product and battery beyond the specified storage temperature.
- ▶ Use only original spare parts and accessories from Uhlmann & Zacher to prevent malfunctions and damages.
- ▶ Always test the product after a modification to see if it is working properly before putting it back into operation.
- ▶ Variants that are suitable for installation in fire safety / emergency exit doors should never be dismantled or modified. Please send it back in the original packaging to Uhlmann & Zacher GmbH for any modification. For any modification that is not carried out by Uhlmann & Zacher, the device loses the German approval for this type of doors.

3 Replacing the electronic knob

3.1 Relates to the following variants

- ▶ CX6162/66
- ▶ CX2162/66

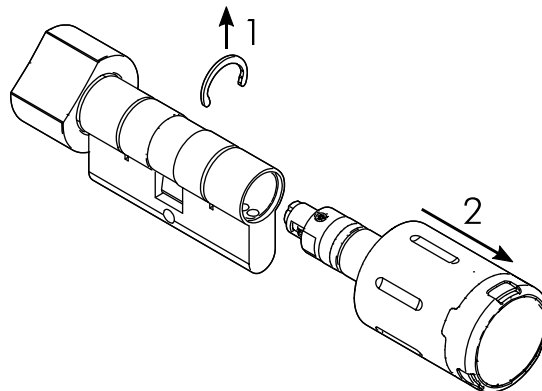
3.2 Necessity of the measure

- ▶ The electronic knob is faulty and has to be replaced.

3.3 Procedure

If the electronic knob is faulty, it can be replaced. This should only be done by trained personnel.

- ▶ Remove the snap ring between the electronic knob and locking cam and pull the electronic knob gently out of the cylinder.



CAUTION

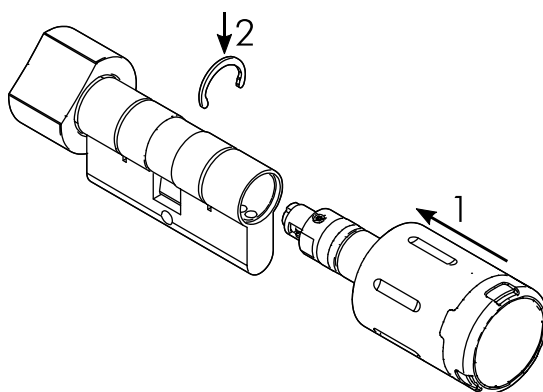
Parts falling out of the cylinder

- When pulling out the mechanical knob make sure that the parts do not fall out of the cylinder.

- Then insert the new electronic knob into the cylinder as far as it goes and turn it slowly vis-a-vis the locking cam until all the parts mutually engage and the electronic knob is completely inside the cylinder. Only then can the electronic knob be fixed using the snap ring.



This procedure become easy if the product is engaged when interlocking and turning.



3.4 Check

- Check the function of the electronic locking system before installing in the door. In the unauthorised state, the locking cam has to be disengaged from the electronic knob. Once an authorised transponder is held up, the locking cam has to engaged with the electronic knob. The locking cylinder should be installed in the door only if it is working properly.

4 Rotation of the cylinder

4.1 Relates to the following variants

- ▶ CX6162
- ▶ CX2162

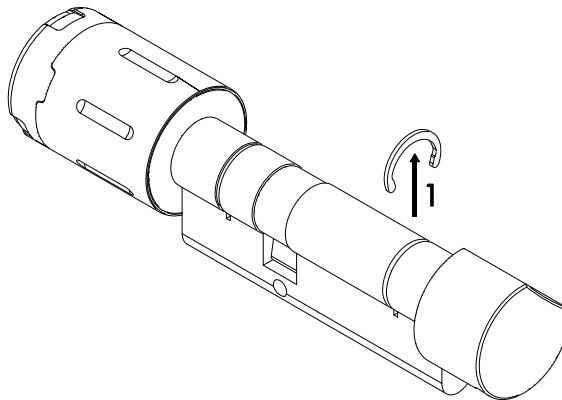
4.2 Necessity of the measure

- ▶ When ordering, the external and internal dimensions of the fixing screw were mixed up, the cylinder has to be rotated.
- ▶ The cylinder dimensions have to be changed. Other parts are required here which will be included when the cylinder is re-ordered.

4.3 Procedure

If the cylinder needs to be rotated, both the electronic knob and the mechanical knob have to be separated from the cylinder. This should only be done by trained personnel.

- ▶ Remove the snap ring between the locking cam and the mechanical knob.

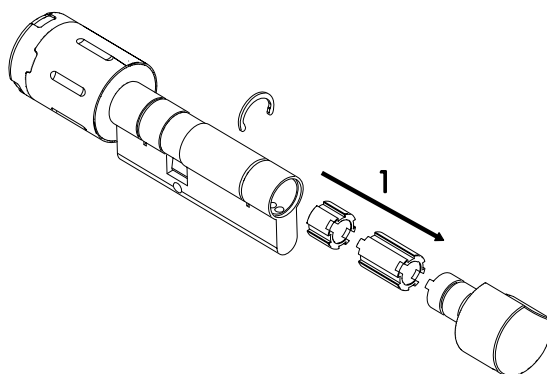


CAUTION

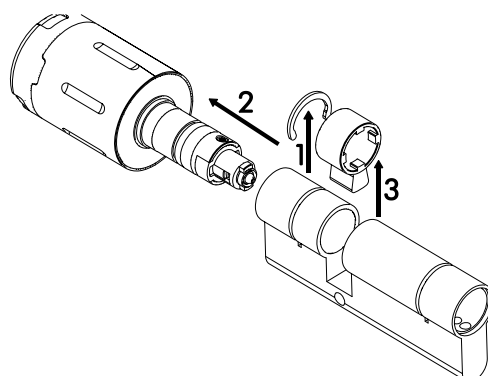
Parts falling out of the cylinder

- When pulling out the mechanical knob make sure that the parts do not fall out of the cylinder.

- Remove the parts out of the cylinder carefully. Do not change the position and sequence. Different parts are used depending on the cylinder dimensions.



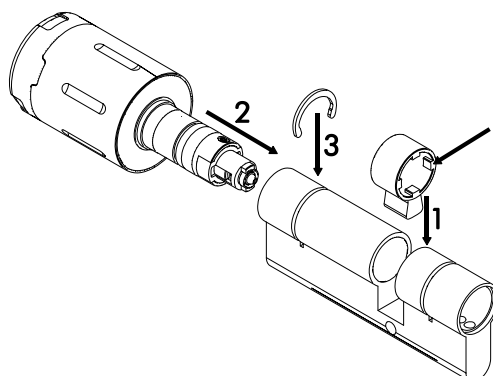
- Remove the snap ring from the electronic knob, pull it carefully out of the cylinder and remove the locking cam.



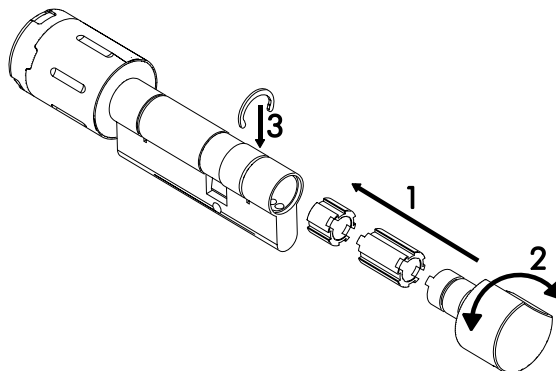
- Rotate the cylinder and hold the locking cam in the cylinder opening, such that the four inner tappets point towards the mechanical knob. Then insert the electronic knob into the appropriate side of the locking cylinder and secure it with the snap ring.



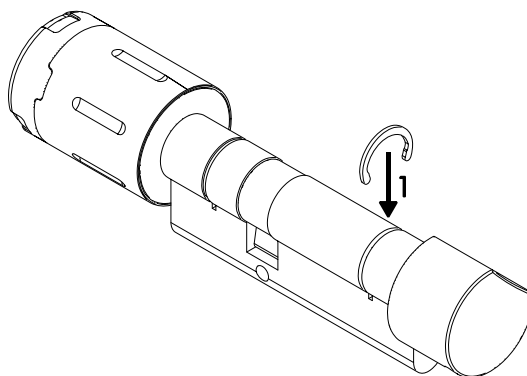
From a cylinder dimension of 45/xx onwards, the locking cam can be inserted in the cylinder opening even after mounting the electronic knob.



- Insert the parts into the cylinder in the same position and sequence in which they were removed.



- Then insert the mechanical knob into the cylinder as far as it goes and turn it slowly vis-a-vis the locking cam until all the parts mutually engage and the mechanical knob is completely inside the cylinder. Hold the locking cam centrally in the cylinder opening so that the parts can slide through to the electronic knob. The grub screw of the mechanical knob should now point downwards. If it is pointing upwards, then the mechanical knob has to be pulled slightly out of the locking cylinder, rotated by 180° and reinserted. Only then can the mechanical knob be fixed using the snap ring.



4.4 Check

- Check the function of the electronic locking system before installing in the door. In the unauthorised state, the locking cam has to be disengaged from the electronic knob. Once an authorised transponder is held up, the locking cam has to engage with the electronic knob. When turning the mechanical knob, it should always take the locking cam with it. The locking cylinder should be installed in the door only if it is working properly.

5 Replacing the cylinder for different dimensions

5.1 Relates to the following variants

- ▶ CX6162/66
- ▶ CX2162/66

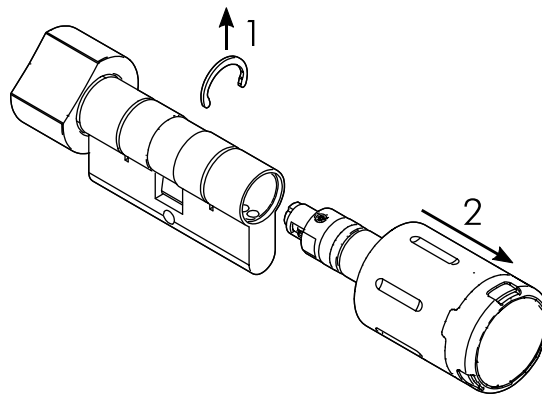
5.2 Necessity of the measure

- ▶ The cylinder dimensions have to be changed.

5.3 Procedure

The locking cylinder can be replaced for changing the cylinder dimensions. This should only be done by trained personnel.

- ▶ Remove the snap ring between the electronic knob and locking cam and pull the electronic knob gently out of the cylinder.



CAUTION

Parts falling out of the cylinder

- When pulling out the mechanical knob make sure that the parts do not fall out of the cylinder.

- When cylinders are ordered separately, the internal components of the cylinder may fall out when removing the transport protection, as these are held securely in the cylinder only after the electronic knob is inserted. Note the following when inserting the internal components:
1. The knob shaft (2) need not be removed for the assembly.
 2. The locking cam (8) is positioned in the cylinder opening when assembling the internal parts. The carrier knobs inside the locking cam have to point in the direction of the knob shaft (2).
 3. The number and length of the filler parts (5) depends on the cylinder length. They are inserted into the cylinder such that the two carrier lugs point towards the electronic knob (7).
 4. The coupling carrier (6) has two slots for the two carrier lugs of the filler parts (5) or the knob shaft (2). It has to point towards the knob shaft (2). The side of the coupling carrier (6), which points in the direction of the electronic knob (7) has four smaller slots.

Illustration Standard cylinder

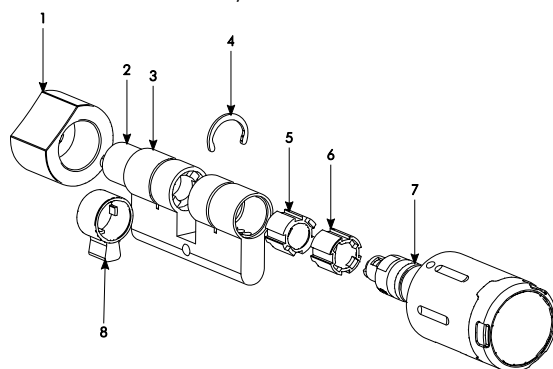
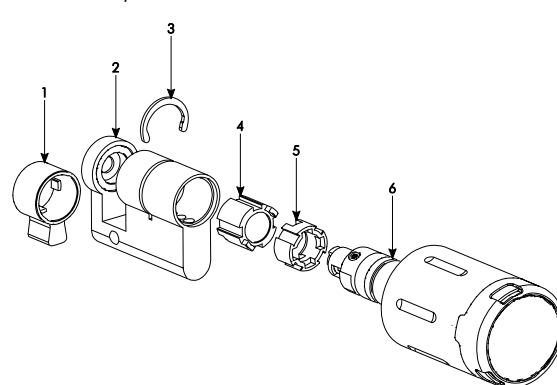


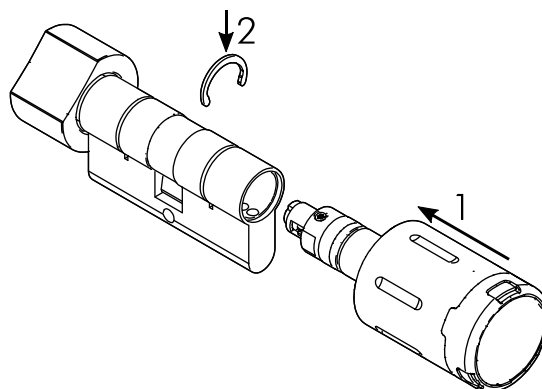
Illustration Half-cylinder



- Then insert the new electronic knob into the cylinder as far as it goes and turn it slowly vis-a-vis the locking cam until all the parts mutually engage and the electronic knob is completely inside the cylinder. Only then can the electronic knob be fixed using the snap ring.



This procedure becomes easy if the product is engaged when interlocking and turning.



5.4 Check

- Check the function of the electronic locking system before installing in the door. In the unauthorised state, the locking cam has to be disengaged from the electronic knob. Once an authorised transponder is held up, the locking cam has to engage with the electronic knob. The locking cylinder should be installed in the door only if it is working properly.

6 Glossary

Definition	Description
Knob shaft	Transmits the rotational movement of the knob on the mechanical side via the internal components of the locking cylinder to the locking cam.
Locking cam	Part of locking cylinder which rotates inside the lock during the locking operation and actuates the lock.
Filler parts	Transmits the rotational movement to the locking cam. They compensate for the different lengths of the locking cylinder.
Coupling carrier	During coupling of the electronic knob, it engages with the coupling carrier and thus transmits the rotational movement to the locking cam.