

Rod locking

for the product families

Slimdrive SL

Slimdrive SLT

Slimdrive SC

EN Additional installation instructions

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1 Introduction

1.1 Symbols and illustrations

Warning notices



In these instructions, warning notices are used to warn against material damage and injuries.

- ▶ Always read and observe these warning notices.
- ▶ Observe all measures marked with the warning symbol and warning word.


Warning symbol	Warning word	Meaning
	DANGER	Danger to persons. Non-compliance will result in death or serious injuries.
	WARNING	Danger to persons. Non-compliance can result in death or serious injuries.
	CAUTION	Danger to persons. Non-compliance can result in minor injuries.

Further symbols and illustrations

Important information and technical notes are highlighted to explain correct operation.

Symbol	Meaning
	means "important note". Information to prevent property damage, to understand or optimise the operation sequences.
	means "additional Information"
▶	Symbol for an action: This means you have to do something. ▶ If there are several actions to be taken, keep to the given order.

2 Intended use

 GEZE GmbH is referred to as GEZE below.

The respective intended use for the sliding door system applies.

Any other use is considered non-intended and will lead to the exclusion of all liability and warranty claims to GEZE.

3 Overview

3.1 Diagrams

Drawing no.	Type	Name
70484-0-031	Drive drawing	Slimdrive SL, SL-FR/RWS/LL/DUO 2-leaf with rod locking
70487-0-010	Drive drawing	Slimdrive SLT-FR 2M, 4-leaf with rod locking
70484-ep40	Installation diagram	Slimdrive SL(T)/SL(T)-FR-2M, insulating glass doors with rod locking
70484-ep46	Installation diagram	Slimdrive SL-RC2 / SL-FR-RC2, 2-leaf.
70484-ep47	Installation diagram	Slimdrive SL-RC2 / SL-FR-RC2, 1-leaf.
70715-9-9836	Installation drawing	ISO leaf with rod locking

3.2 Tools and aids

Tool	Closer size
Tape measure	
Marking pen	
Torque spanner	
Allen key	1.5 mm–6 mm
Open-ended spanner	8 mm, 10 mm, 13 mm, 15 mm
Side-cutting pliers	
Plumb-bob	
Crimping pliers for cables	
Wire stripper	
Multimeter	

4 Assembly of Slimdrive SL and Slimdrive SLT product families (without RC2 variants)



WARNING!

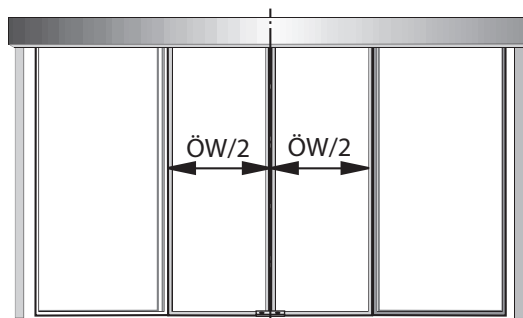
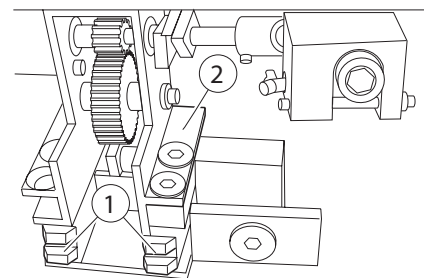
Risk of crushing!

The door leaves are still unsecured and move easily.

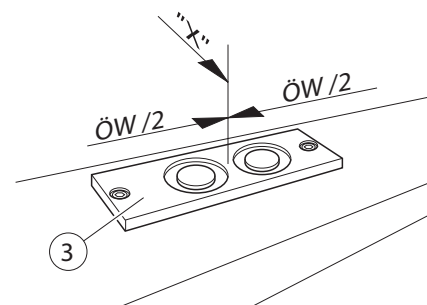
- ▶ Make sure that the door leaves are not moved accidentally or by unauthorised persons.

4.1 Pre-conditions

- Drive is set up completely
- Cover is removed
- Door leaves are hung in the drive and aligned in all directions
- Hanger bolts are not fixed tight
- Door leaves are separated from the toothed belt
- Door leaves are in the open position
- Track is milled out
- Locking device (2) is in the unlocked position (dead bolt (1) is retracted into the housing)
- Manual locking device (3) is mounted in the floor



ÖW = opening width

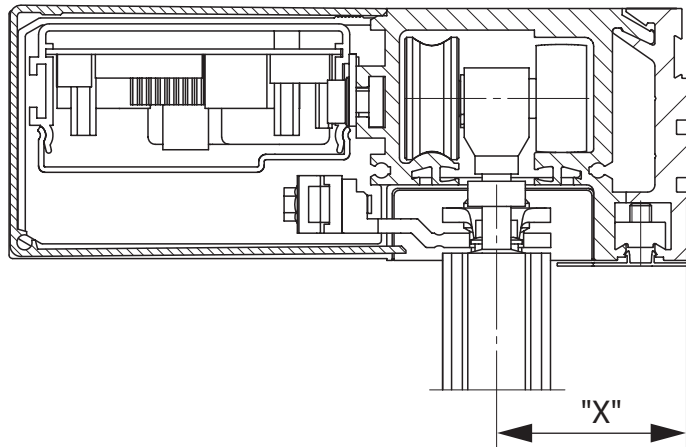


There are three versions of the manual locking device:

- Standard
- Convenience
- Continuous

Dimension "X":

- Slimdrive SL product family:
X = 53 mm (shown)
- Slimdrive SLT product family:
X = 105.5 mm

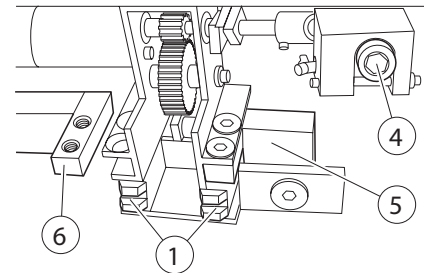


4.2 Mounting the locking device

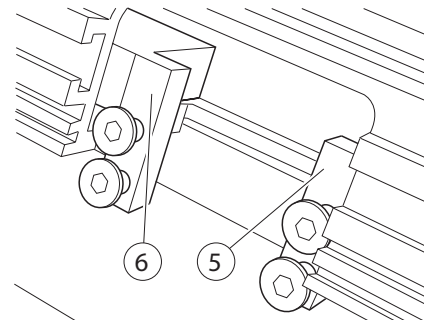


The position of the dead bolt (1) can be changed by turning the manual unlocking (4) with an Allen key (6 mm) (see Emergency operation, Chapter 11).

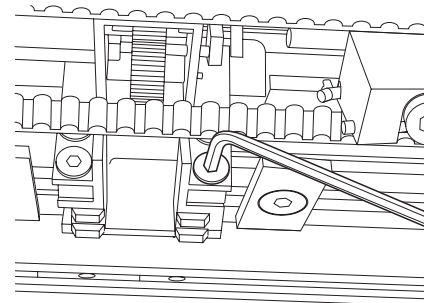
- ▶ Loosen the housing fasteners (5) and (6) of the locking device.



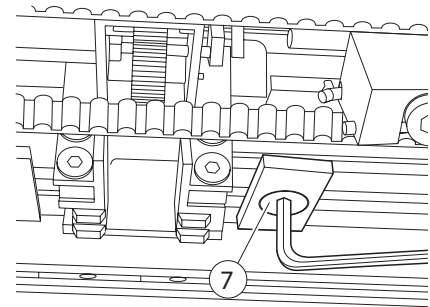
- ▶ Slide the housing fasteners (5) and (6) on the right and left into the rebate of the track.



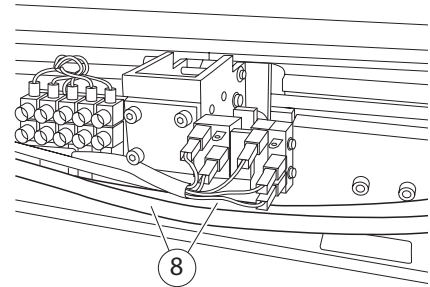
- ▶ Slide the locking device from the front into the rebate of the track and screw onto the housing fasteners (7 Nm ± 0.5 Nm).



- ▶ Tighten the fixing screws (7) of the housing fasteners so that the locking device can be moved in the track with as little play as possible.
- ▶ Connect the locking device and control unit with the rod locking cable in accordance with the wiring diagram.



- ▶ Lay the cables (8) so that its cannot be damaged by the rod locking during locking and unlocking.

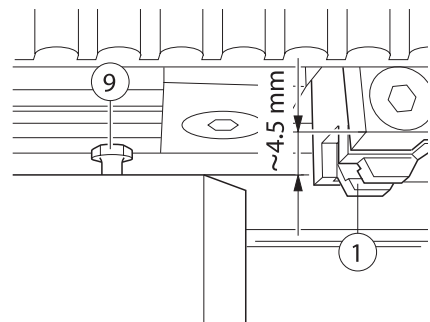


4.3 Aligning the locking device

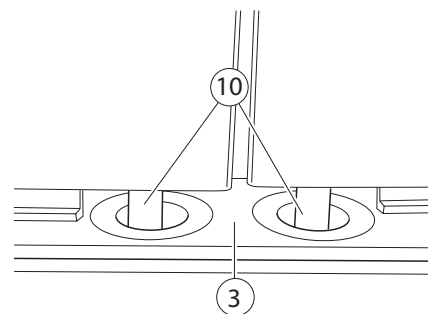
- ▶ Close one door leaf carefully.
- ▶ Align the locking device and the door leaf to each other so that the head part of the locking bolt (9) moves centred into the T-groove of the dead bolt (1) (distance between upper edge of door rail and lower edge of housing profile ~4.5 mm).

It must be possible to close the door leaf without noise. If a noise can be heard when the vertical rod moves into the dead bolt, the vertical rod has to be adjusted (see Chapter 7).

- ▶ Fasten the locking device with the fixing screws (7) of the housing fasteners to the track (7 Nm ± 0.5 Nm).



- ▶ Open the door leaf and carry out the steps as described above at the other door leaf.
- ▶ Check whether the locking bolts (10) engage in the manual locking device (3) in the closed position of the door leaves.
- ▶ If not, correct the position of the door leaves in the closed position so that the locking bolts engage in the manual locking device
- ▶ Repeat the aligning work as described above.
- ▶ Tighten the suspension bolts.



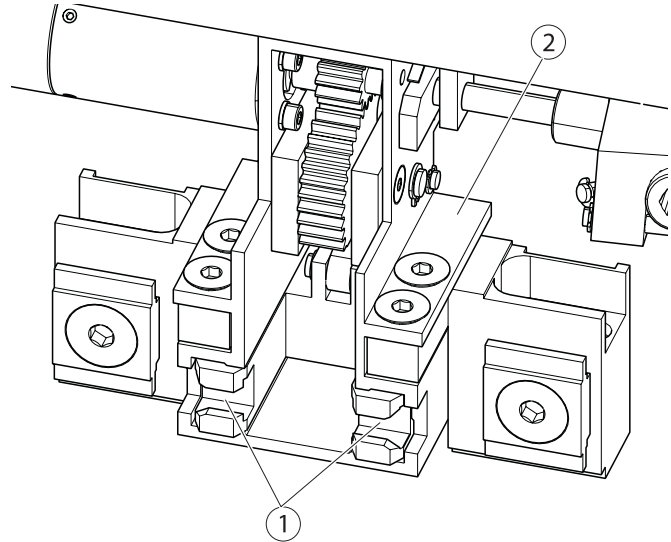
5 Assembly of RC2 variants of the Slimdrive SL product family



The 1-leaf right hand slide to open variant is assembled as the mirror image to the 1-leaf left hand slide to open variant.

5.1 Pre-conditions

- Drive is set up completely
- Cover is removed
- Locking device (2) is in the unlocked position (dead bolt (1) is retracted into the housing)



5.2 Fitting the door leaf

5.2.1 Fitting the door leaves



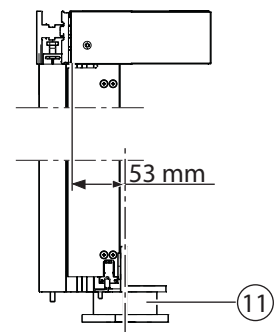
WARNING!

Risk of injury due to glass breakage.

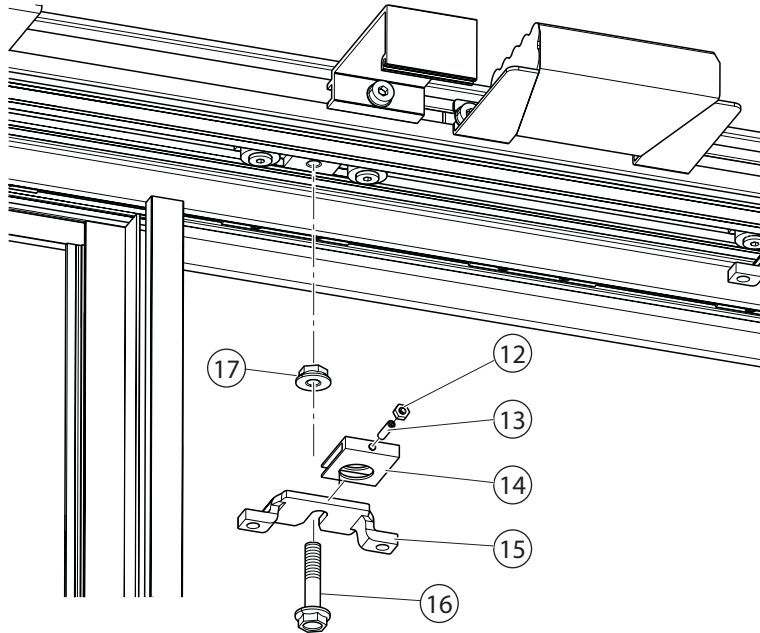
- ▶ Always mount the door leaf together with another person.



The base structures (11) are available as an option (support bracket, base plate). See the installation diagrams for the RC2 variants of Slimdrive SL and Slimdrive SLT.



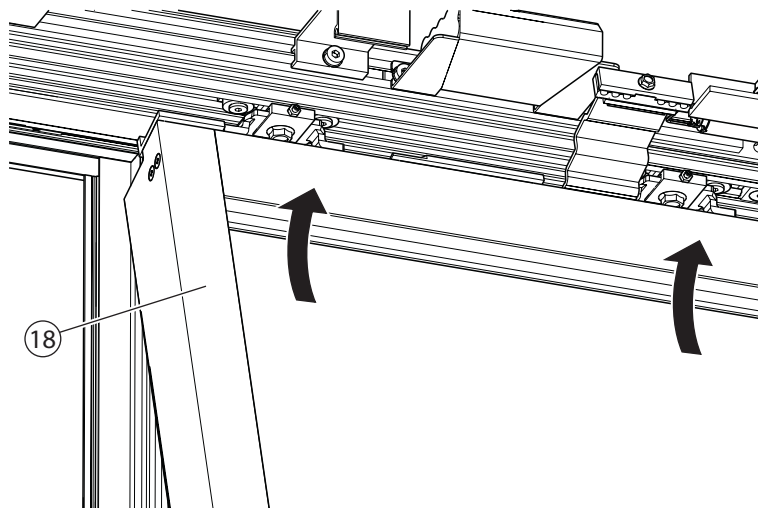
- ▶ Remove roller carriage from transport locking device.
- ▶ Unscrew the suspension bolt (16) from the roller carriage.
- ▶ Unscrew the lock nut (17) from the hanger bolt (16).
- ▶ Slide the move lock (14) onto the door suspension (15).
- ▶ Slide the suspension bolt (16) through the move lock (14).
- ▶ Screw the lock nut (17) onto the hanger bolt (16).
- ▶ Mount the door suspensions (15) with mounted move locks (14) onto the roller carriage.



CAUTION!

Possible damage to the door leaf when hanging in.

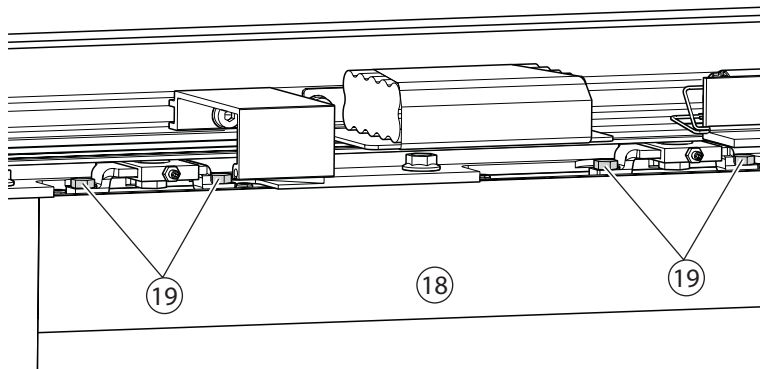
- ▶ Ensure that the door leaves are not scratched when hanging them in.
- ▶ Thread the door leaf (18) carefully in at an angle.



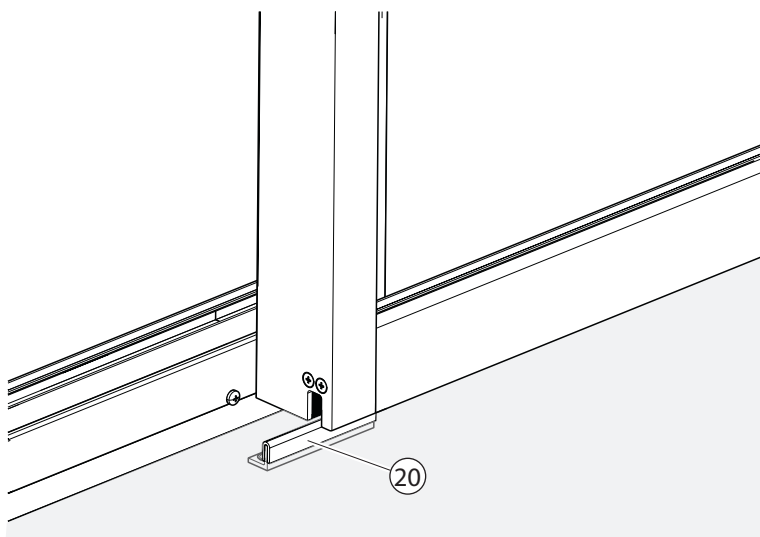
**WARNING!****Risk of crushing!****The door leaves are still unsecured and move easily.**

- ▶ Make sure that the door leaves are not moved accidentally or by unauthorised persons.

- ▶ Screw the door leaf (18) to the door suspension using 2 screws (19) each.



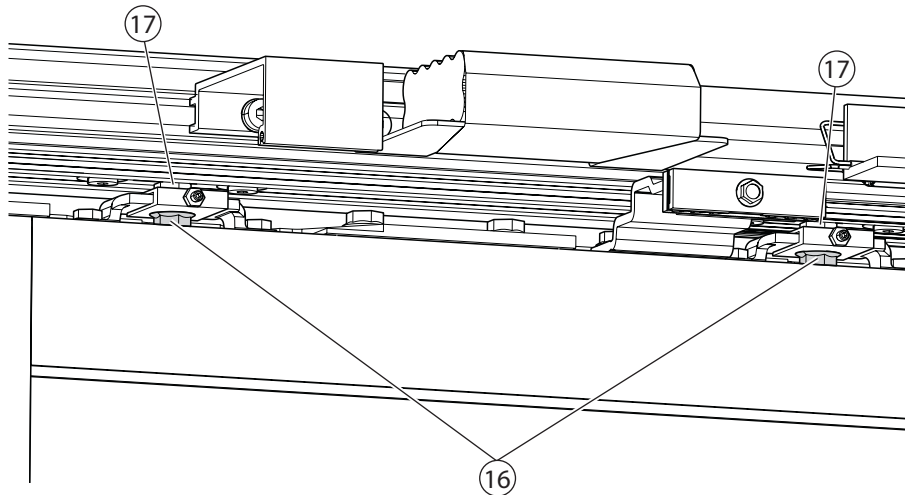
- ▶ Slide the door leaf approx. 50 mm over the open position.
- ▶ Introduce the door leaf into the angled floor guide (20).



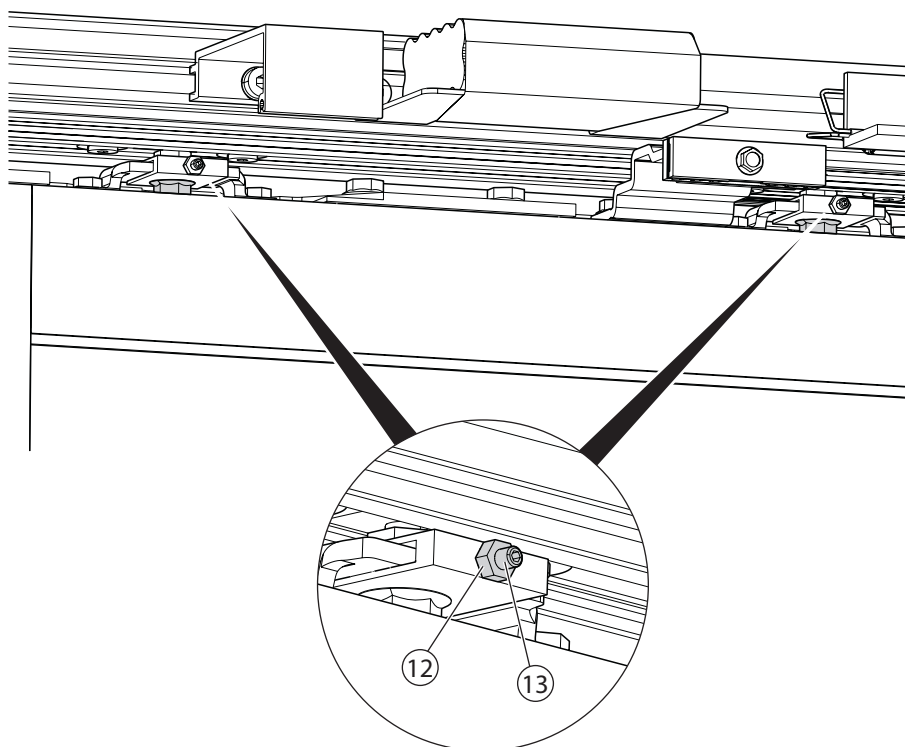
5.2.2 Adjusting the door leaves

- ▶ **!** Observe the applicable standards and guidelines on crushing, shearing and drawing-in spots.
- ▶ Align door leaves flush with each other. Ensure the same level and parallel closing edges when doing so.

- ▶ Set the height and parallel position of the door leaves at the hex of the suspension bolt (16).
- ▶ Tighten the lock nut (17).

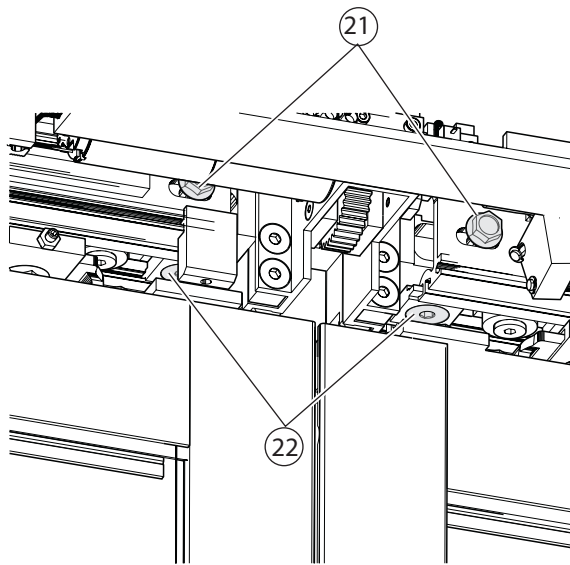


- ▶ When the position of the door leaves is correct, tighten the hexagon socket-head screws (13) **slightly** and secure with lock nuts (12).

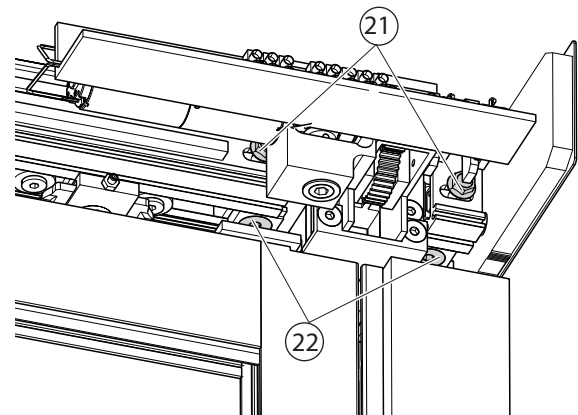


5.3 Adjusting the locking device

- ▶ Move the door leaves into the closing position.
- ▶ Loosen the screws (21) and (22).



2-leaf



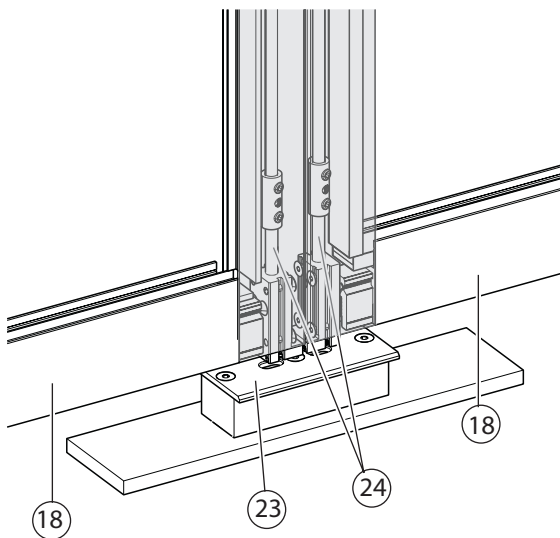
1-leaf, left hand slide to open

- ▶ Position the locking device over the door leaves so that the dead bolt can travel into the main closing edge profiles in a non-contact manner.
- ▶ Tighten the screws (22).
- ▶ Tighten the screws (21) only **slightly** ($7 \text{ Nm} \pm 0.5 \text{ Nm}$) and secure with screw locker (medium strength).

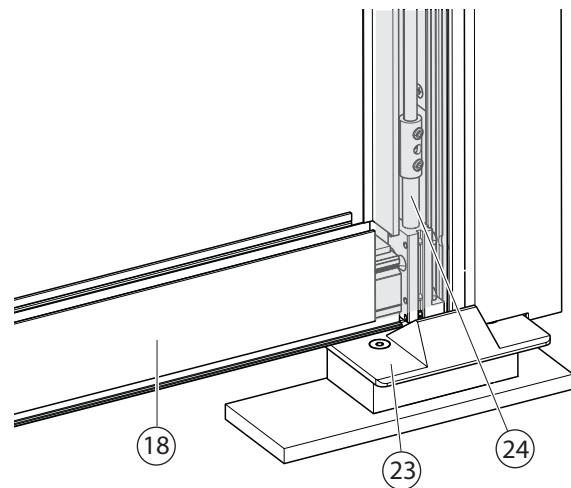
5.4 Setting up the bottom plate

The rod locking should have the same play in the bottom plate in the direction of actuation and the cross direction of the door leaf.

- ▶ Close the door leaf (18) and place the bottom plate (23).
- ▶ Lock the door leaf (18) and align the bottom plate (23).
- ▶ Check whether the bolts (24) of the locking device can travel into the bottom plate (23) in a non-contact manner.
- ▶ Open the door leaf (18) and marking the drilling positions.

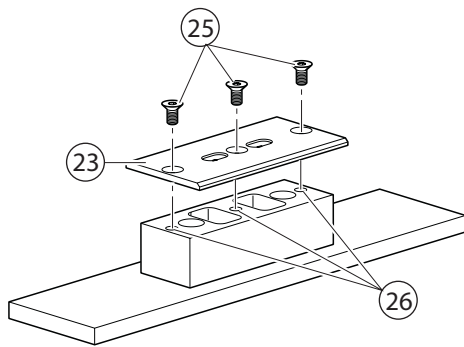


2-leaf

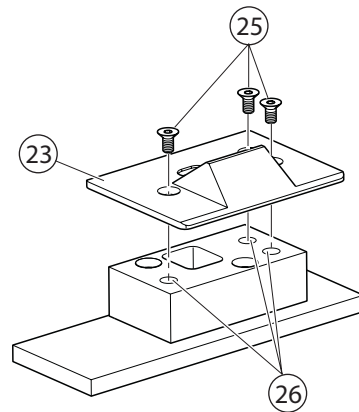


1-leaf, left hand slide to open

5.5 Mounting the bottom plate



2-leaf



1-leaf, left hand slide to open

- ▶ Drill 3 threaded holes (26) at the marked positions.
- ▶ Screw the bottom plate (23) to the substructure using 3 countersunk screws (25) (7 Nm± 0.5 Nm).

5.6 Installing and adjusting reinforcement brackets

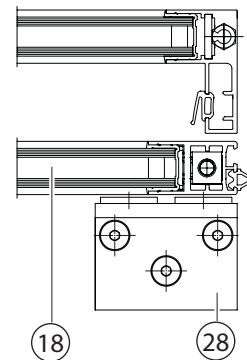
5.6.1 Mounting the reinforcement brackets



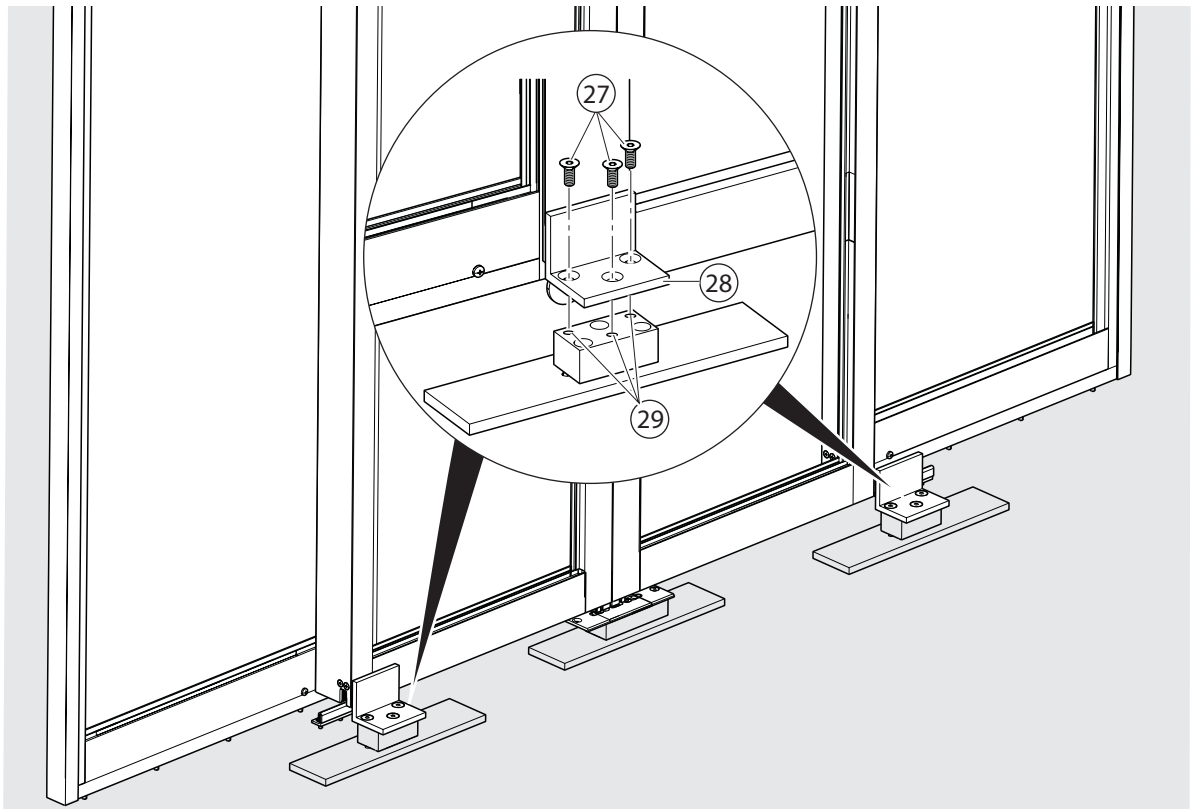
CAUTION!

Risk of damage to the door leaves.

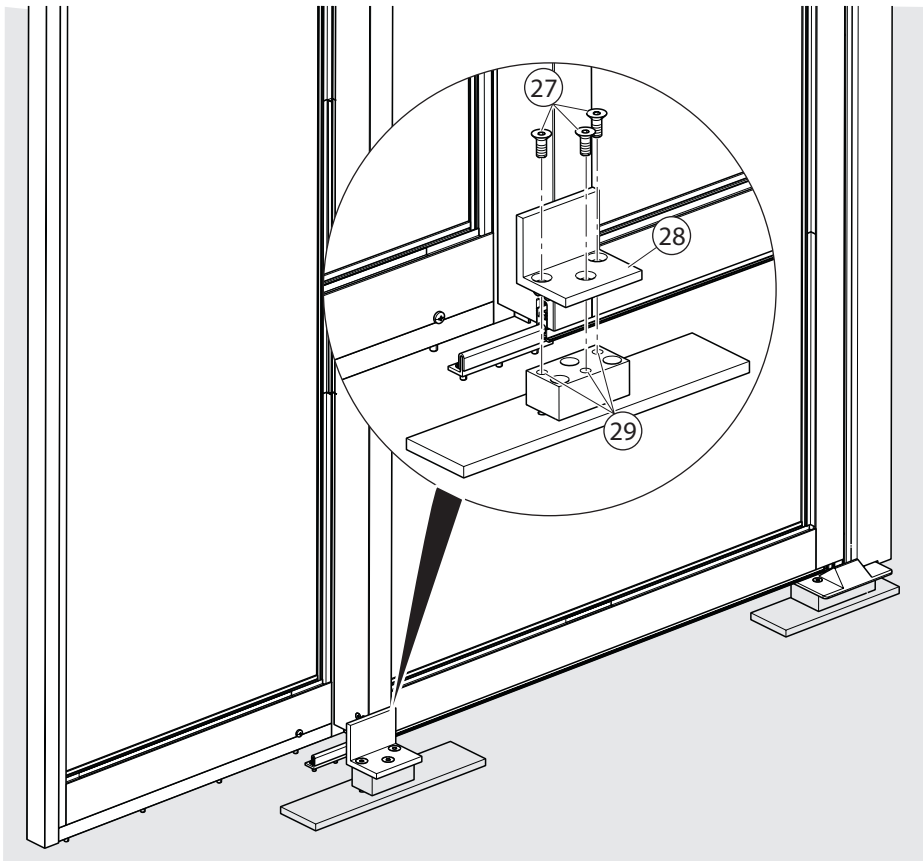
- ▶ Mount the reinforcement brackets so that the insides of the door leaves (18) are not contacted in the screwed-on state.
- ▶ Mount the reinforcement bracket (28) so that the insides of the reinforcement bracket lie flush with the main closing edge profiles of the door leaf in the open position.



- ▶ Drill 3 threaded holes (29) for the reinforcement bracket (28) at the left- and right-hand side secondary closing edge in the substructure (optional).
- ▶ Screw the reinforcement bracket (28) to the substructure (optional) using 3 countersunk screws (27) (7 Nm \pm 0.5 Nm).



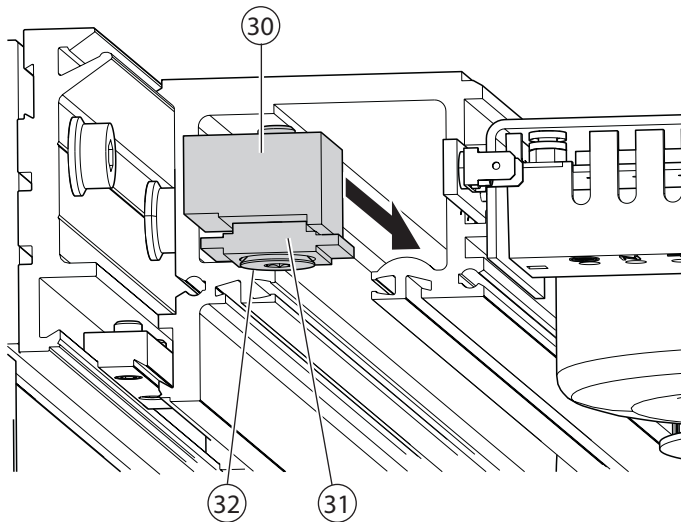
2-leaf



1-leaf, left hand slide to open

5.7 Installing stop buffers

- ▶ Move the door leaves into the open position.
- ▶ Loosen the screw (32) sufficiently so that the stop buffer (30) with the clamping plate (31) can be introduced into the track.
- ▶ Push the stop buffer (30) on the track from the right and left.



- ▶ Ensure that the rubber surfaces of the stop buffers point to the track middle.

- ▶ Slide the stop buffers against the outer roller carriages of the door leaves.
- ▶ Tighten the screw (32) (10 Nm \pm 0.5 Nm).

6 Assembly of RC2 variants of the Slimdrive SC product family

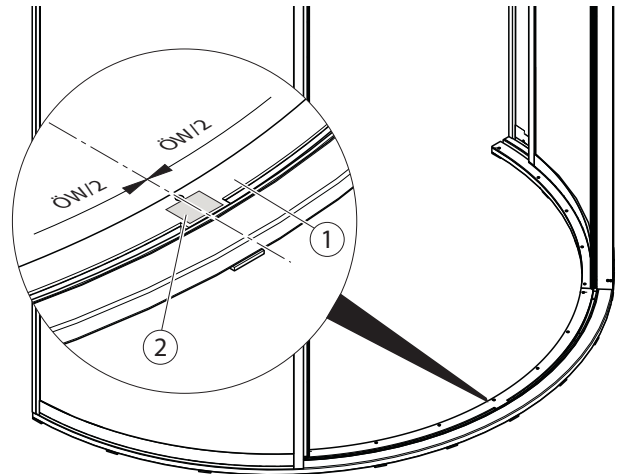
6.1 Pre-conditions

- Slimdrive is set up completely
- Door leaves are hung in and are oriented parallel to each other
- In the closed position the leaf main closing edges are oriented perpendicular to the floor sickle plate and to the locking device
- Locking device is in the unlocked position (dead bolt is retracted into the housing)

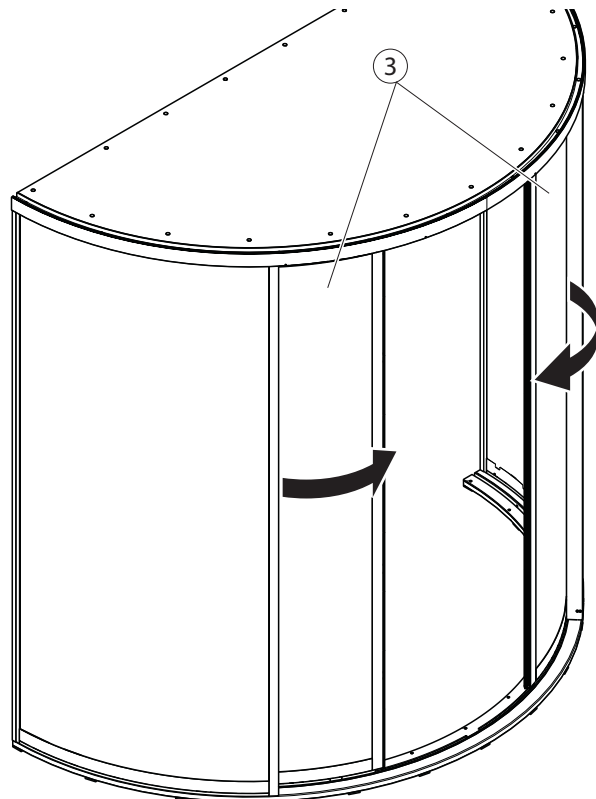
6.2 Determining the position of the vertical rods at the floor guide

- ▶ Mark the anticipated entry section of the vertical rods at the floor sickle plate (1), e.g. with tape (2).

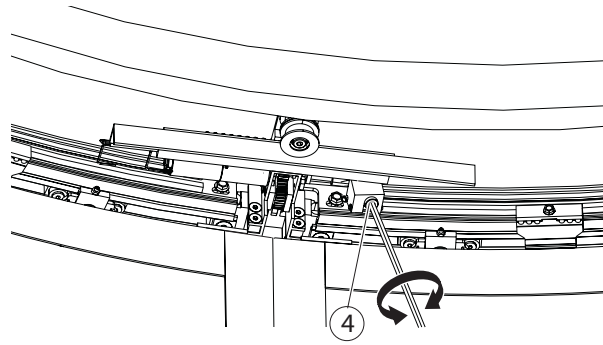
ÖW = opening width



- ▶ Close the moving leaves (3).

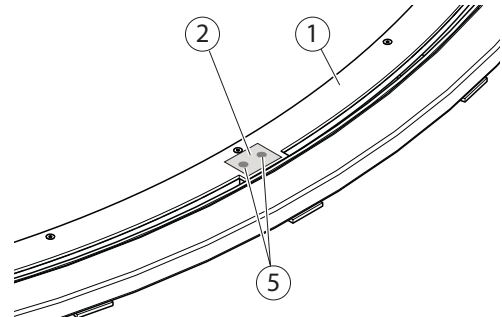


- ▶ In the closed position of the moving leaves use the manual unlocking (4) to move the rod locking downwards so that the impressions of the locking bolts can be seen on the tape (2).

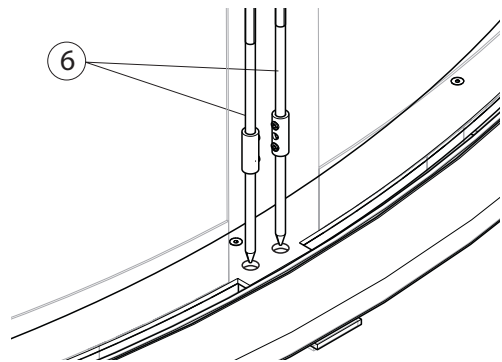


6.3 Making the holes for the locking bolts

- ▶ Turn the manual unlocking back again and slide the door leaves to the open position.
- ▶ Check the impressions (5) on the tape (2). If necessary, apply the marking for the drill entry.
- ▶ Drill through the floor sickle plate (1) at the impressions with a 11-mm drill bit. The locking bolts have to be flush with the drill holes in the floor sickle plate.
- ▶ Remove the tape (2).
- ▶ Chamfer the drill holes.



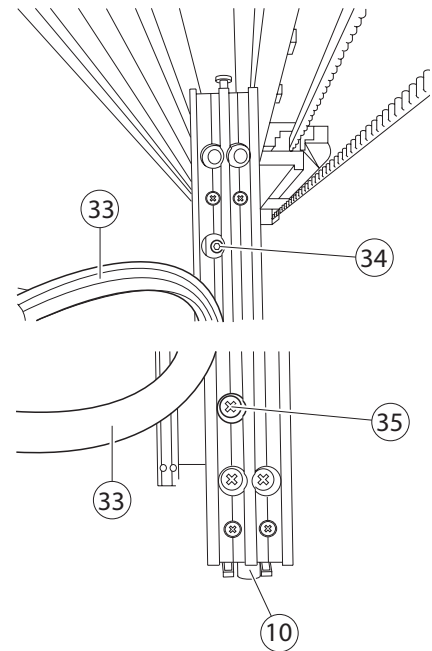
- ▶ Check whether the locking bolts (6) travel into the floor sickle plate in a non-contact manner. If the locking bolts touch the drill hole reveal:
- ▶ Enlarge the drill hole and chamfer it if necessary.



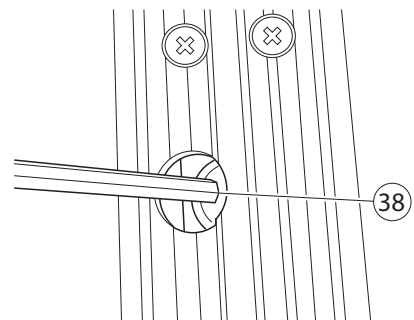
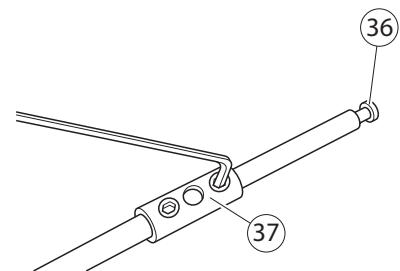
7 Aligning the height of the top and bottom parts of the locking bolt

Requirement

- Door leaves not connected with the toothed belt!
- ▶ Pull the rubber door sealing profile (33) at the top and bottom out of the side strip until the outer lower (35) or upper hole (34) can be accessed.



- ▶ Turn the locking bolt in the side strip so that the setscrew of the rod coupling (37) can be loosened through the hole (38) in the side strip (hexagon socket 3 mm).
- ▶ Move one door leaf carefully to the closed position. While doing so introduce the head (36) of the locking bolt at the top into the T-groove of the dead bolt and fixate it in this position with the setscrew.
- ▶ Adjust the height of the bottom part of the locking bolt (10) so that it has approx. 10 mm space to the manual locking device or to the continuous floor guide in the unlocked state. The rod must lock securely in the locking state.



- ▶ Check the locking and unlocking functions by using the manual unlocking.

- ▶ Press the door sealing profile at the top and bottom back into the side strip.
- ▶ Repeat the steps as specified above for the second door leaf.
- ▶ Connect both door leaves with the toothed belt.

8 Adjusting the switching points

Adjusting of the switching points is used to specify the respective end points of the locking bolts (locked/unlocked).



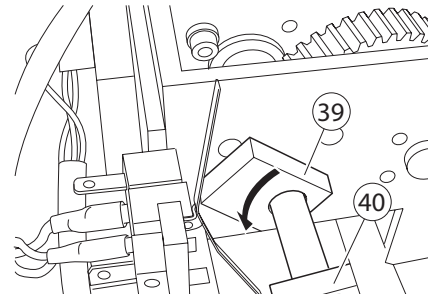
▶ In order to avoid system faults ensure that the switching points are set with great care. If set incorrectly, the switch contacts are not actuated in the end positions of the locking mechanism. The following faults can occur:

- No switch contact while locking: The locking mechanism tries to lock until Fault 16¹⁾²⁾ occurs.
- No switch contact while unlocking: The locking mechanism tries to unlock until Fault 17¹⁾ occurs.
- Lock and unlock switch contact are pressed at the same time, Fault 18¹⁾.

1) List of the fault messages, see the wiring diagram.

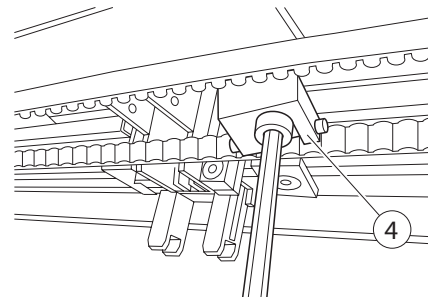
2) Fault 16 can also be triggered by soiling in the manual locking device. The manual locking device must therefore be cleaned regularly.

- ▶ Close the door leaves.
- ▶ Loosen the setscrews of the two operating cams (39 and 40) on the extended motor axis of the locking device.



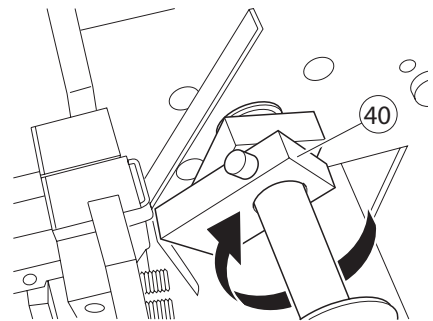
Adjusting the locked position

- ▶ Use the manual unlocking (4) to extend the dead bolt completely out of the dead bolt housing. The rods engage into the manual locking device.
- ▶ Turn the operating cam 1 (39) at the wall of the housing in the direction of rotation of the motor axis (see arrow) on the limit switch until it triggers the contact (click noise).
- ▶ Tighten the setscrew of the operating cam.





Adjusting the unlocked position

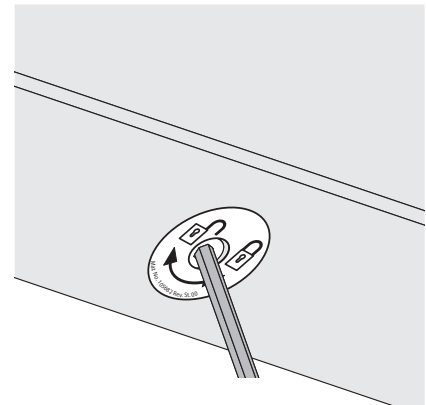
- ▶ Use the manual unlocking (4) to retract the dead bolt completely into the dead bolt housing.
- ▶ Turn operating cam 2 (40) in the direction of rotation of the motor axis (see arrow) on the limit switch until it triggers the contact (click noise).
- ▶ Tighten the setscrew of the operating cam.



9 Emergency operation

The manual unlocking can be used to lock or unlock the rod locking manually in emergencies.

- ▶ Insert the Allen key (6 mm) through the hole in the cover next to the locking mechanism.
The hole is identified by a label.
- ▶ By turning the Allen key in the specified directions the door is manually
 - locked  or
 - unlocked .



10 Maintenance

During the prescribed maintenance work at the drive the following tests of the rod locking have to be carried out by properly trained personnel:

Tested component	Action	Comments
Screws	▶ Check for tight fit	▶ Tighten the screws if necessary
Cables	▶ Check for correct fastening and damage	▶ Fasten or replace cables, if necessary
Locking mechanism	▶ Check function	▶ Realign the locking mechanism and door leaf
Manual locking device	▶ Check for jarring-free function	▶ Clean the manual locking device and, if necessary, grease it
	▶ Check the function of the compression springs (for Mat. No. 104562)	▶ Remove the manual locking device, replace the spring, if necessary replace the complete manual locking device
Manual unlocking	▶ Check for smooth movement	▶ Clean the manual unlocking, grease and readjust it, if necessary replace
	▶ Check function	▶ Tighten the setscrew, if necessary replace the manual unlocking
Locking bolts	▶ Check for smooth movement	▶ Grease the locking bolts in the area of the rod guides and the pressure spring
	▶ Check the function of the pressure spring. To do so press the locking bolt in the door leaf downwards	▶ If necessary, replace the pressure spring
Rod guides	▶ Check for tight fit	▶ Tighten the screws of the rod guides, if necessary secure with LOCTITE 222

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