

German manufacturer

# Installation, setting and maintenance instruction

# Mechanical cabin door interlock Marathon 200 for one-sided and central opening doors

Please read the instruction before the installation and activation. Please keep this instruction in file and share if necessary. This instruction is far your own security and helps to avoid damages on the elevator.

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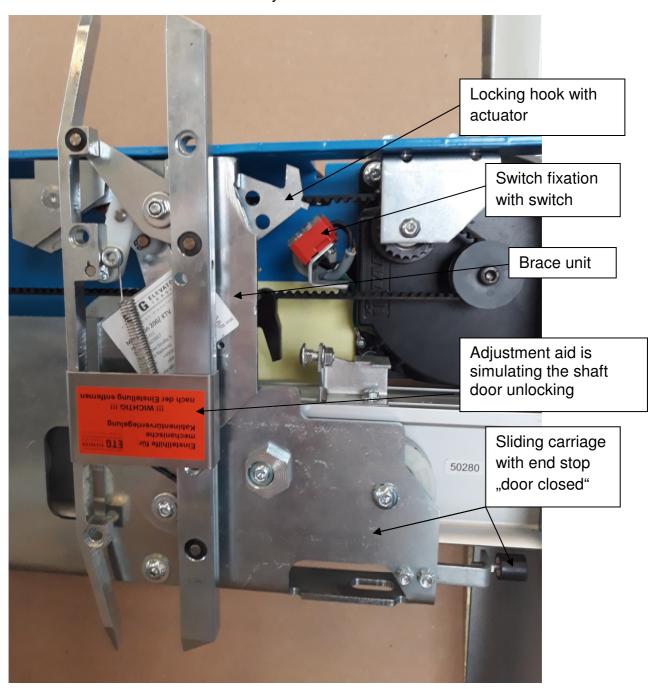
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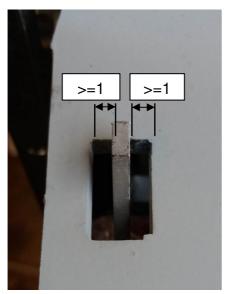
### 1. Mount the brace unit

The brace unit should be mounted with 2 pcs of oval flange screw M8x12 and a protection element. Additional spacer plates are necessary to make sure that the hook is positioned correctly in the middle in longitudinal direction (Pic. 2). The brace unit has to be installed vertically!



Pic. 1: Mounted brace unit with adjustment aid (shown for left opening door)

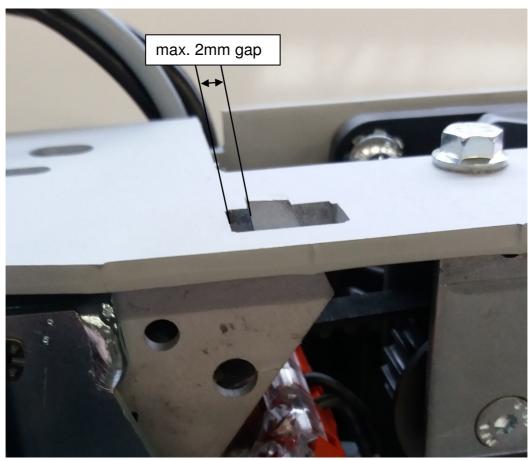




Pic.2: Control the position of locking hook in the cut

# 2. Adjusting the sliding carriage

The hook should be adjusted with a gap of max. 2mm to the cut-out (Pic 3). You can adjust this setting by moving the rubber stop "door close" at the sliding carriage. To prevent the setting from changing, the screw has to be locked with a nut.



Pic. 3: Locking hook

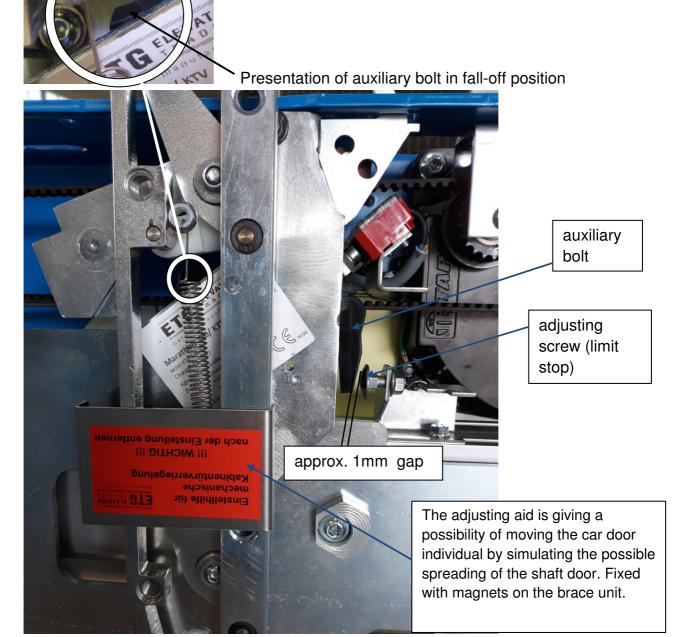


### 3. Settings of auxiliary bolt

roughly: The adjusting screw may not contact the auxiliary bolt in closed position. There should be a gap of min. 1mm!

fine tuning: The cabin door can be moved without the landing door by using the adjustment aid. In this situation the adjusting screw can be set. In the first 3 cm of the opening path, the auxiliary bolt has to move completely into the other end position. You can watch this at the back part of auxiliary bolt (see pic. below). The auxiliary bolt is in fall-off end position nearly flush with the base-plate.

Please remove the adjustment aid after fine adjusting!!



Pic 4: Setting of auxiliary bolt



### WARNING!

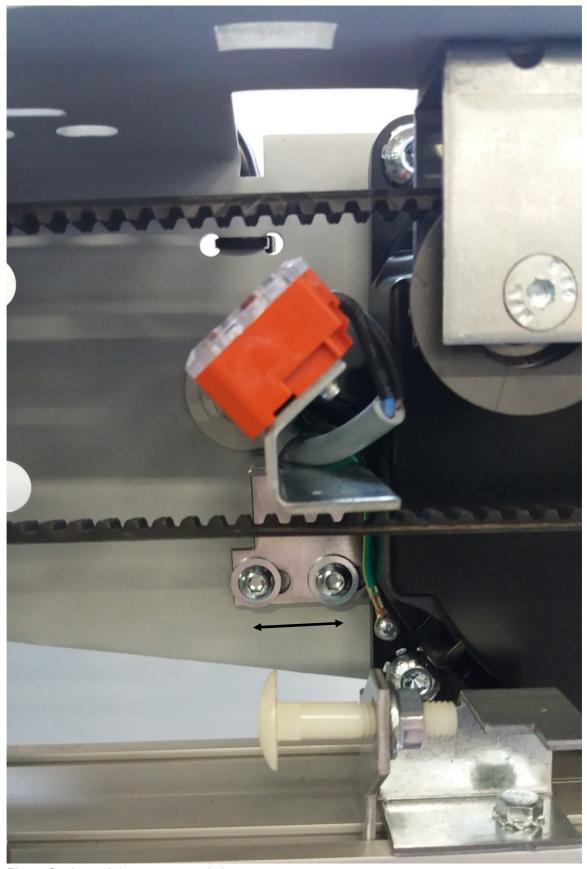
After every position change of the sliding carriage 1 (=fast door panel), you have to fine adjust again in order to ensure a smooth and error-free operation.

# 4. Settings of door contact



Pic. 5: Adjusting of stud in the middle of the switch

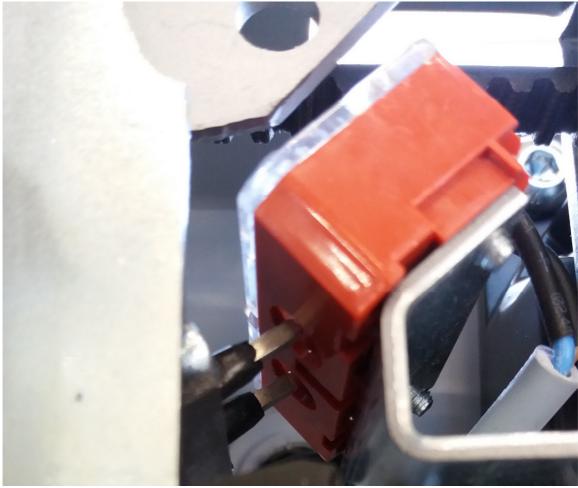




Pic. 6: Settings of door contact switch

When adjusting the switch bracket (Pic. 6), please ensure that the angle is not tilted in the oblong hole - the cable can counteract.





Pic. 7: Switch actuator

The contact bridge/stud has to engage centrally in the switch (Pic 7).



## **WARNING:**

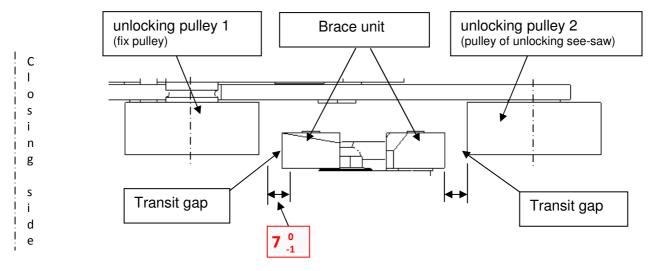
Before the car door will be driven by the motor you have to ensure manually that the door can reach all positions without grinding.

Pic 8: Stud/contact bridge at the unlocking device



### 5. Interaction of car and shaft door

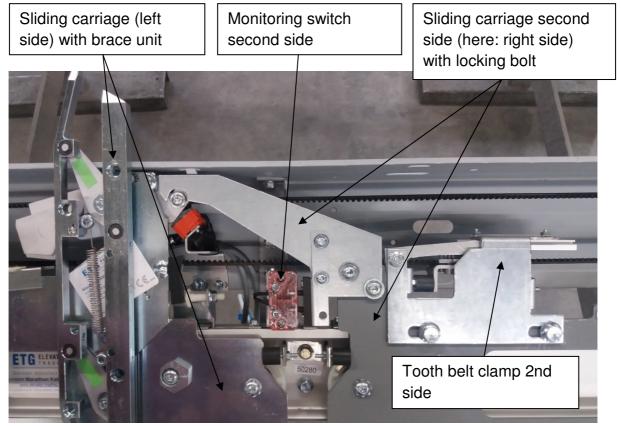
The brace unit of the car door has to drive centrally through the unlocking pulleys of the shaft door locking device. You can adjust the position of the pulley at the locking device. These adjustment works have to be made at every single landing door.



Pic. 9: Adjustment of unlocking pulleys towards the brace unit

## 6. Locking of 2nd side at central opening doors

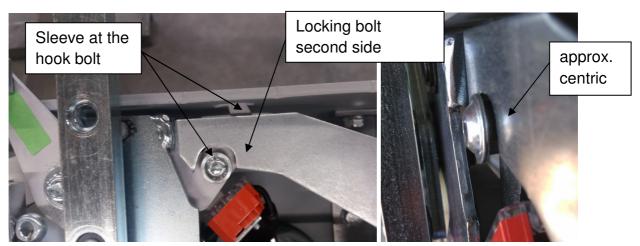
The mounting of the brace unit at central opening doors will be made according to articles 1-5.



Pic. 10: Mechanical cabin door interlock at a central opening door (shown left driving)



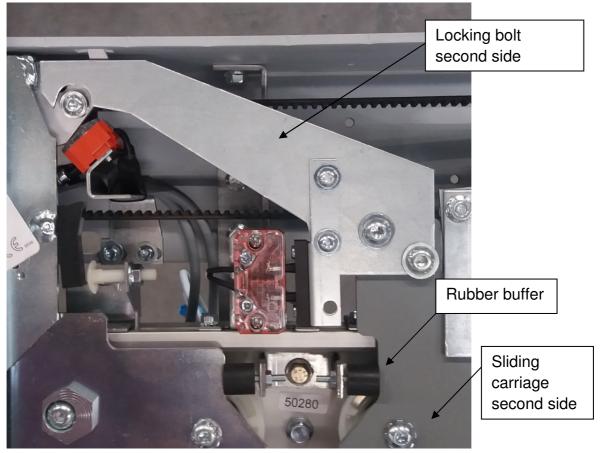
Because of the fact, that the second side has to be monitored and locked as well, you will find an additional locking bolt at the not driven side (Pic 10 shown at the right sliding carriage). Because of the intervention of the sleeve of the hook bolt into the locking bar of the 2<sup>nd</sup> side (approx. centrally), this piece will be blocked in the closing position (Pic. 11).



Pic. 11: Locking device second side

blocked closing position

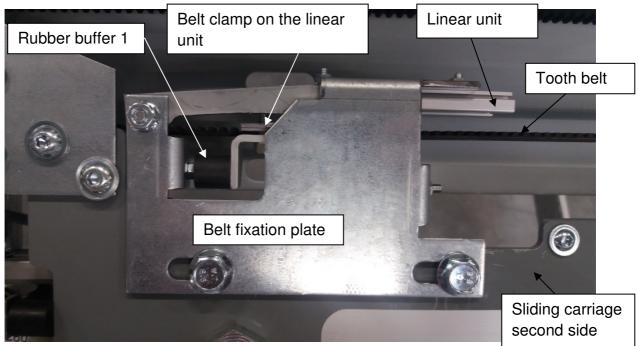
The locking bolt has a fixed position on the sliding carriage 2. You can realize the fine tuning of the locking bolt by adjusting the rubber buffer with the sliding carriage (Pic 12).



Pic. 12: Fine tuning of locking bolt second side



### 7. Belt clamp on sliding carriage second side



Pic. 13: Belt fixation unit second side, shown in the "door closed" position

The position of the belt fixation unit on the sliding carriage second side depends on the position of the locking device on sliding carriage 1 (brace unit). The linear unit of belt fixation unit compensates the travel way of the tooth belt, which will be needed in order to fold the brace unit at the brace unit side. These approx. 56mm travel way will be adjusted with help of the both rubber buffers (pic 14). For adjusting the position of the belt fixation plate you have to close the brace unit completely (door close position). At the 2<sup>nd</sup> side the sliding carriage has to get in the "door closed position" as well. Now you have to move the loose belt fixation plate as long as the rubber buffer 1 is in contact with the linear unit (pic 13). In this position the belt unit should be fixed on the sliding carriage by using a tooth locking screw M8x12. If the adjustment of the oblong hole is not sufficient, you have to move the belt clamp around one or two teeth of the tooth belt.



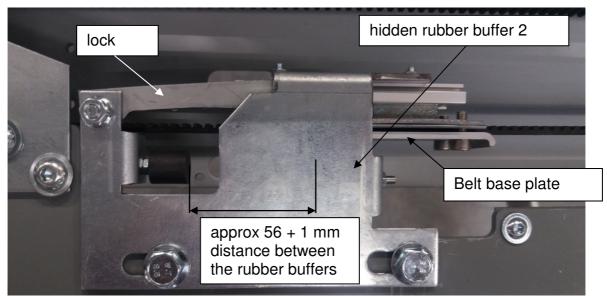
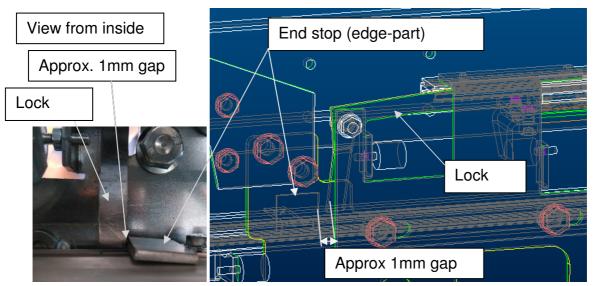


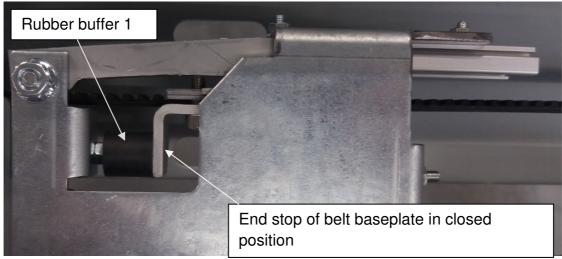
Bild 14: thooth belt fixation unit 2nd side, linear unit into opening direction



Pic 15: limit stop for the lock

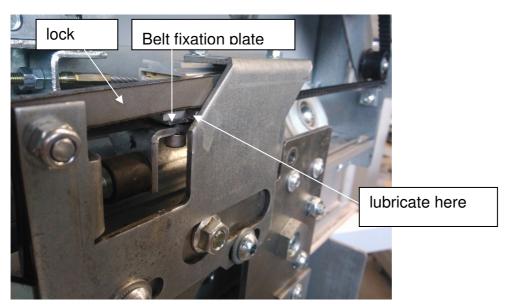
A lock on the 2nd side prevents unregulated moving of door panel in the 56 mm area. This lock falls down to the linear unit when opening moving due to its self-weight and holds the linear unit in the rearmost position. The lock has to release again the linear unit when closing. This happens by initiating of the lock to the end stop shortly before the "door close" position. The stopper plate can be moved on the guide rail. It has to be adjusted in that way, that there's still approx. 1mm gap between the lock and the end stop in the "door close" position. In the end position of the belt, the door panel will be held in "door close" position through the rubber buffer 2 and sliding carriage.





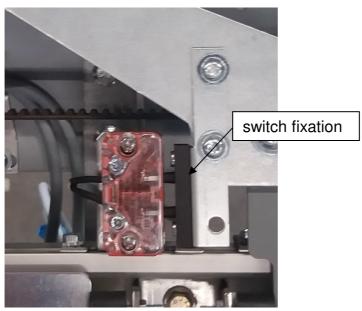
Pic 16: position belt baseplate in closed locked position

In order to ensure, that the release of the linear unit will work long-termed without attrition, you should lubricate the contact point of lock and baseplate with graphite grease or similar lubricants.



Pic 17: lock and belt fixation unit





Pic 18: adjusting of the switch

As a last step the switch has to be adjusted. You can adjust the position of the switch by moving the switch fixation vertically and horizontally on the guide rail. Settings of the height can be made by the fixation of contact bridge (pic 18).

# 8. Emergency release



Pic 19: unlocking of the mechanical cabin door interlock

Please guide the unlocking rope in the door panel with help of glue pads.





Pic 20: Unlocking of the mechanical cabin door interlock at slim sliding carriages

Specialty at 4 panel central opening (4PCO) doors with door widths = 800-1300mm, 3 panel side opening (3PSO) doors with door widths = 600-900mm, 6PCO doors with door widths 1200-1800mm (slim sliding carriages)

The unlocking rope will be fixed at the brace unit directly. Please guide the unlocking rope downwards with stick pads through the door panel.

### Remark:

If the tooth belt is fastened too tight it can happen that the mechanism works too stiff. A functional test of the emergency rescue in case of power breakdown has to be made after a tooth belt tensioning.