

# Installation instructions

of

# TSG in Schmitt&Sohn

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# **1 Essential information**

## ***1.1 Value of assembly instructions***

The product assembly instructions are provided by the manufacturer or supplier to provide the information required by the customer or fitter to ensure proper, safe and reliable assembly. These brief assembly instructions serve to clarify the basic steps of mechanical assembly. The electrical connection, commissioning and settings of the TSG are explicitly not part of these instructions.

## ***1.2 Copyright protection***

We reserve all rights for this technical documentation. It may not be duplicated, made accessible to third parties or otherwise used in an unauthorised manner without our prior consent. Any changes require our explicit and prior written consent.

## ***1.3 Instructions in the assembly manual***

All instructions in the assembly manual must be followed without exception.

## ***1.4 Informal activities performed by the fitter***

The system fitter is personally responsible for participating in a training course. He or she must inform the manufacturer/supplier without delay of any missing or defective parts in the delivery.

## ***1.5 Requirements for assembly personnel***

Persons responsible for installation and maintenance must be instructed regarding generally applicable safety and labour health requirements. They must be familiar with Langer&Laumann products. Installation tools must be fully functional and measuring instruments must be subject to continuous monitoring.

## 2 Activity performed

Conversion of a Schmitt & Sohn door operator to TSG door control device.

## 3 Advantages

- Very **economical** package
- **Just a few** mechanical attachments are required
- All materials required are included with the conversion package
- The conversion is **very quick** and **easy** to perform.
- The conversion kit is generally available as **warehouse inventory**

## 4 Installation instructions



**NOTE:**

The order of assembly listed here is simply a recommendation. There is no claim of completeness.

The conversion instructions essentially show the conversion of a telescoping right-opening door. The conversion of a telescoping left-opening door is simply mirror inverted.

1. Remove the existing drive including the drive motor, V-belt, limit switch and electronics.
2. The 2:1 transmission ratio from the fast door panel to the slow one must be retained.
3. Screw the TSG counter roller with clamping station onto the narrow combination bracket
4. Fasten the combination bracket onto the door machine.
5. Fasten the TSG drive onto the door machine.
6. Make certain the TSG drive and counter roller are aligned to each other.
7. Fasten the TSG door panel carrier on the door panel.
8. Set the TSG toothed belt in place, screw it together with the toothed belt lock on the door panel carrier and clamp it.
9. Make certain that the fixed stops are present. If necessary remove existing dampers.
10. Check to ensure that the expander blade is closed when the door panel moves in the closing direction.
11. Mount the TSG electronics unit in a closed housing on the car roof.

## 5 Illustrations



**Fig. 1: Schmitt & Sohn door drive before conversion**



**Fig. 2: Door machine with TSG after conversion is complete**



**Fig. 3: Door machine with TSG after conversion is complete - closing side**



**Fig. 4: Door machine with TSG after conversion is complete - closing side**





**Fig. 5: Door machine with TSG after conversion is complete**



**Fig. 6: Door machine with TSG after conversion is complete - opening side**

## **5.1 Safety equipment**

All safety requirements listed in EN81 must still be observed after conversion with the new door operator.

If the elevator door is telescoping, make certain the door panels have a door lock.

Excerpt from EN81-1:

Section 8.10 Elevator car sliding doors with multiple door panels connected to each other mechanically

8.10.1 For elevator car sliding doors with multiple door panels mechanically connected directly to each other it is permissible

- a) for the device described in 8.9.2
  - 1. to be positioned either on one door panel only (on the fastest one for telescoping doors)
  - 2. or on the door drive if the connection between the drive section and the door panels are form fitted and
- b) if the case and conditions of 11.2.1 c determine that only one door panel will lock, if the one lock interferes with opening the other door panels (for telescoping doors) because the mechanisms engage in each other in the closed position

When positioning and commissioning the door operator in or on an elevator car, make certain the total permissible weight of the elevator car is not exceeded at maximum nominal load.

If the elevator undergoes an Emergency Stop or Off, it must be ensured that the TSG door control device will not cause any unintentional, dangerous or uncontrolled door movements.

The simulated limit switches for "Door Open", "Door Closed" and "Door Blocked" of the door and blade drive controller must not be used as safety-relevant limit switches.

## **6 Assembly instructions for electrical section**

### **6.1 *Measuring the door***

After the mechanical components are installed on the car and the car doors are mounted, the door must be measured once. The following conditions must be observed without exception:

- If a shaft closing weight is present, it must not skip.
- The car and shaft doors must be easy moving.
- The toothed belts must be tensioned (it should be possible to depress the belt to a depth of about 2 fingers in the middle).
- Connector bar X1 (inputs) and X2 (outputs) must be temporarily disconnected for measuring.

After the measurement is complete, reconnect connector bars X1 and X2.

(For more information about measuring the door, please refer to the enclosed operating instruction for the TSG door control unit).

## 7 Contact

If you have questions or are not certain about something, we can be reached at the following address:

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