

Installation instructions

KONE ADF

with device series

door operator

TSG

Documentation history

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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 unauthorized 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

Replacement of the KONE door drive with a  Langer & Laumann Ing. Büro GmbH TSG door drive.

The purpose of the conversion is to replace the existing KONE drive with a TSG drive.

3 Advantages

- Very economical package.
- Quick and easy replacement of the existing door drive with a TSG from  Langer & Laumann Ing. Büro GmbH
- *Just a few* mechanical attachments are required.
- All necessary parts are included with delivery.
- The conversion is *very quick* and *easy* to perform.
- The electrical wiring can also be performed by *less experienced fitters*.
- *No hand-held* terminal is required for setting parameters. All parameters can easily be adjusted on the device.
- *Measurements are very easy* to perform.
- The conversion kit is available from  Langer & Laumann Ing. Büro GmbH as *warehouse inventory*.

4 Tools required

Metal drill bits 6, 9, and 11 mm
Fork wrenches size 8, 10, 13, 17
Screwdriver
Side cutter

5 Conversion instructions

**NOTE:**

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

1. Disassembly of the existing drive.
2. Assembly of the TSG drive on the TSG combination bracket, "hat" design (see Fig. 2: KONE ADF overview / page 8).
3. Assembly of the TSG counter roller with clamping station on hat-design combination bracket.
4. Assembly of TSG door panel carriers on the fast door panels.
5. Placing the assembly plates on the door machine
6. Assembly of the TSG drive unit and deflection roller unit on the assembly plate (see Fig. 3: Kone ADF exploded drawing / page 9). The TSG drive can be mounted on the left or right side of the door machine (regardless of the opening direction of the door machine).
7. Set the TSG toothed belt in place. The TSG toothed belt lock must be positioned at the height of the toothed belt or toothed wheels (must line up). Use the clamping station to tension the toothed belt.
8. Assembly of the TSG toothed belt locks on the TSG door panel carrier.
9. Position the end stops or buffer stops. The TSG door panel carrier must be able to reach the end stops when the door is completely closed or open.
10. Check the travel path.
11. A second safety circuit contact must be installed for a door that opens centrally so that both door panels can be queried.
12. Measure the TSG electronics unit. Make certain there is a fixed stop in both the open and closed positions. For the remainder of commissioning and electrical connection process, please refer to the TSG manual.

**NOTE:**

Often it is helpful before assembling the individual components or modules to check the exact position of the toothed belt and stop buffer.

13. Assembly of the TSG Sinus Drive (see Fig. 5: TSG Sinus Drive with lever for skate operation ADF - assembly (here: TL) / page 10).

The TSG Sinus Drive performs a linear movement that can be used to activate an expander blade on an elevator car. The TSG electronics unit is responsible for activation.

14. Simply install the TSG Sinus Drive under the existing blade.

15. Then remove the old tilting lever and attach the new push rod.

16. The cable included with delivery provides the electrical drive (see Fig. 7: TSG electronics with extension board for TSG Sinus Drive / page **Fehler! Textmarke nicht definiert.**).

17. For commissioning and the electrical connection process, please refer to the extension board manual.

6 Illustrations



Fig. 1: KONE ADF before conversion

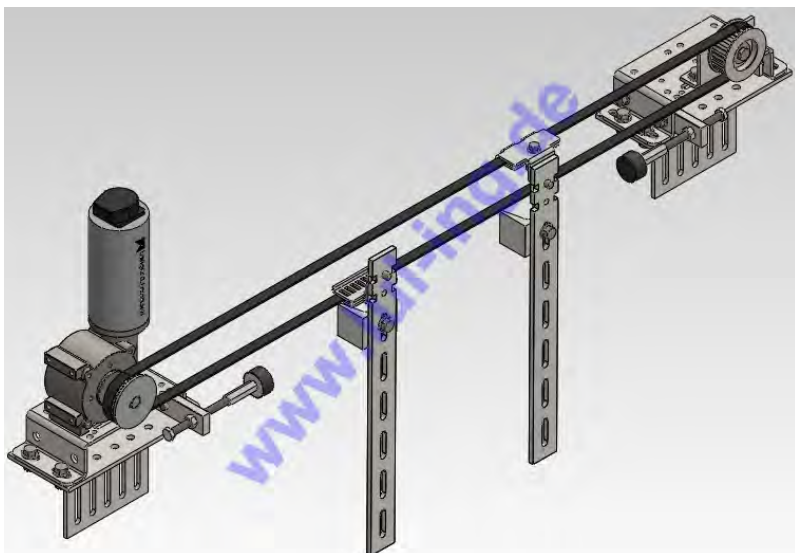


Fig. 2: KONE ADF overview

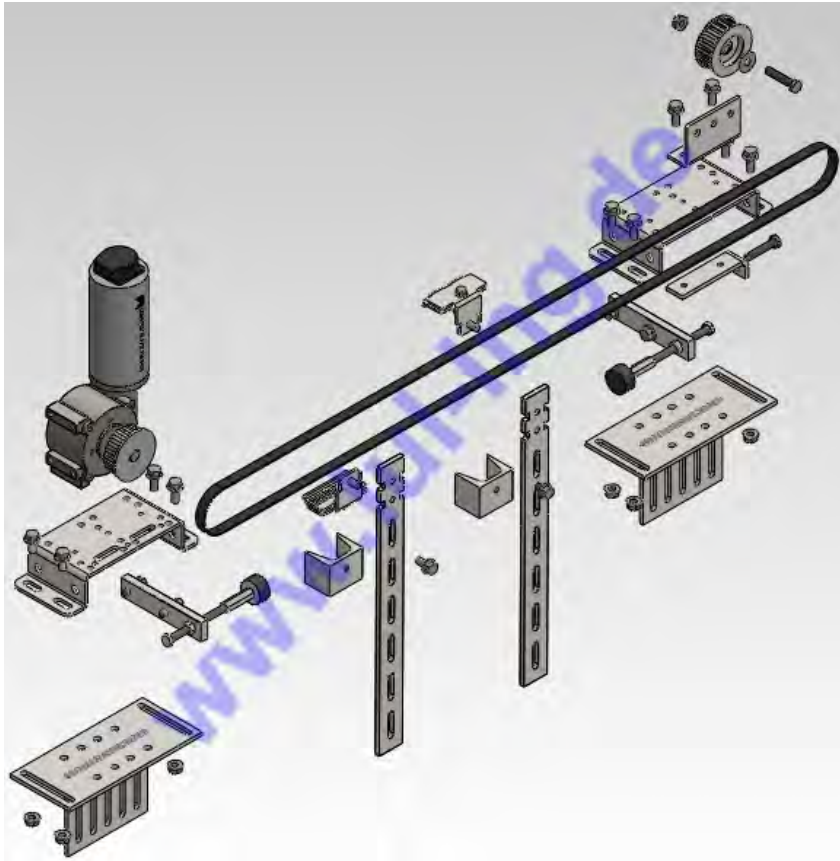


Fig. 3: Kone ADF exploded drawing

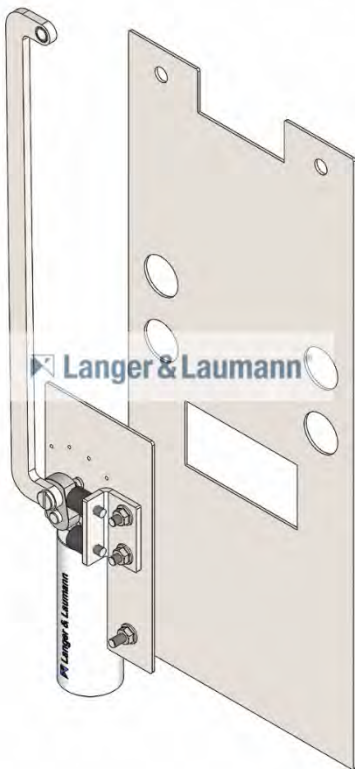


Fig. 4: TSG Sinus Drive with lever for skate operation ADF – scope of delivery (here: TL)

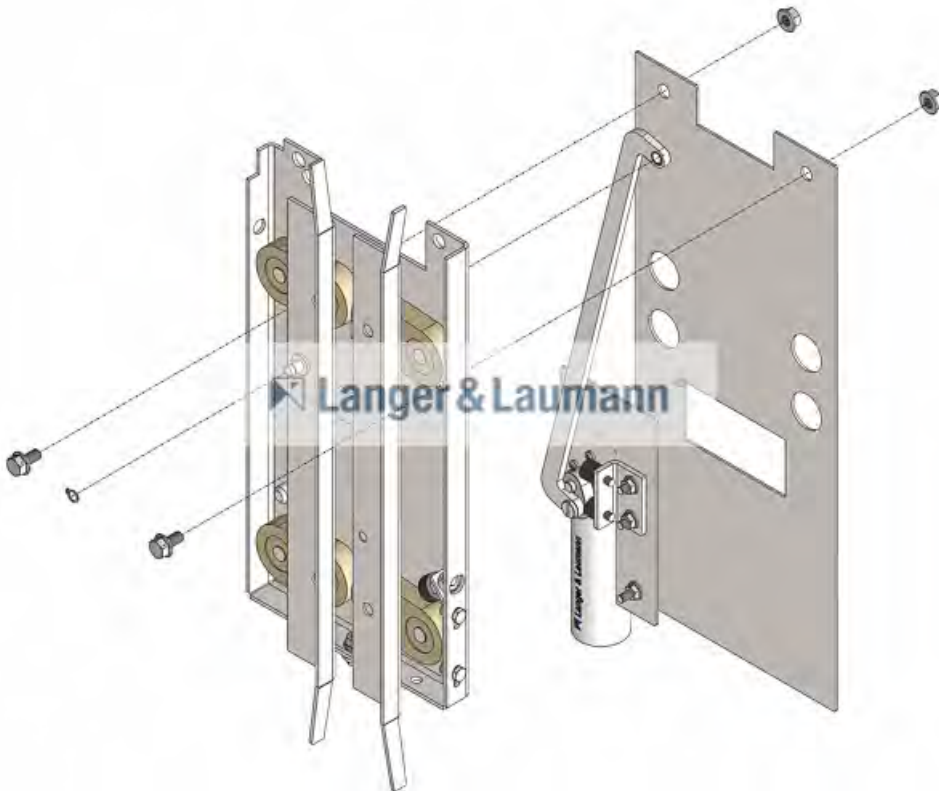


Fig. 5: TSG Sinus Drive with lever for skate operation ADF - assembly (here: TL)

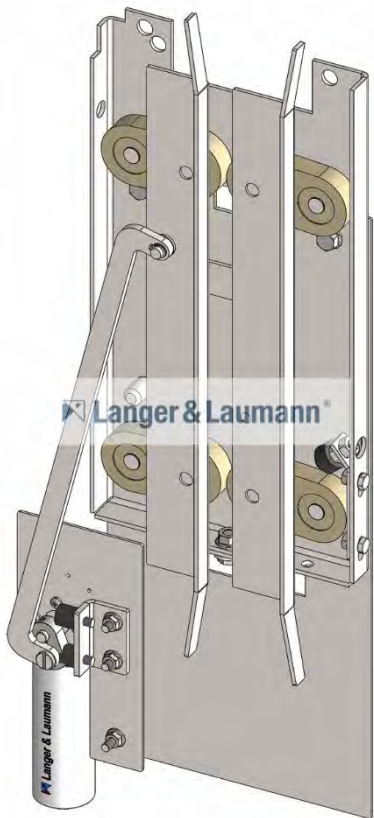


Fig. 6: TSG Sinus Drive with lever for skate operation ADF - assembled (here: TL)

7 Contact

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

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