

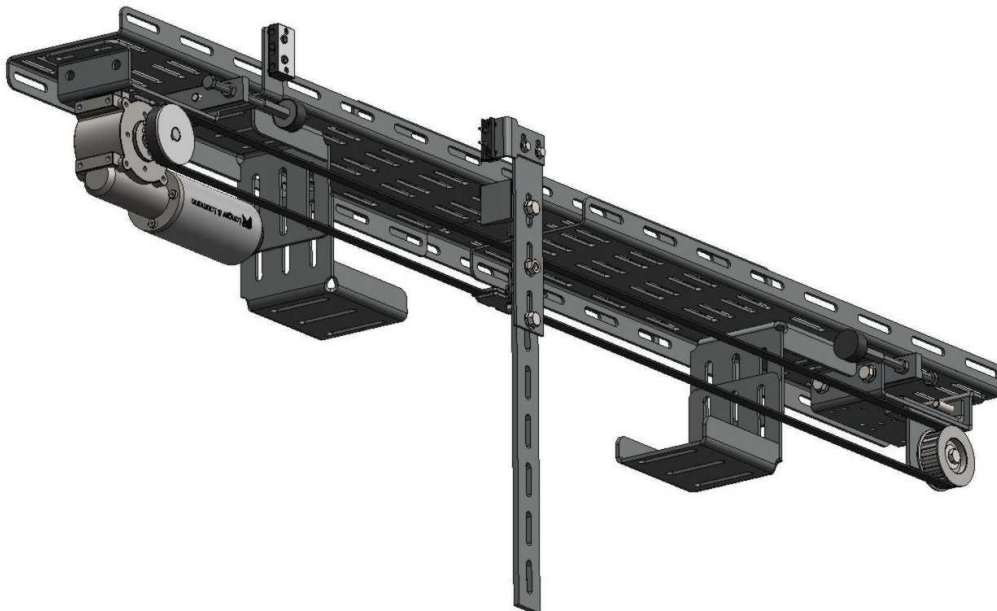
Conversion instructions

L&L Vario

with the device series

Door control unit

TSG



Documentation history

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1 Basic information

1.1 Importance of the assembly instructions

Installation instructions for the product are included by the manufacturer or supplier in order to provide the customer or fitter with the essential knowledge required for proper and safe installation. These brief assembly instructions serve to illustrate the basic mechanical assembly steps. Electrical connection, commissioning and setting of the TSG are expressly not part of these instructions.

1.2 Copyright

We reserve all rights to this document. Without our prior consent is not permitted to copy it, make it available to third parties or otherwise use it without authorisation. Changes require our express prior and written consent.

1.3 Notes in the assembly manual

All notes in the assembly instructions must be observed.

1.4 Informal measures by the installer

The installer of the system must ensure that he himself attends a training course. He must immediately inform the manufacturer/supplier of missing or defective parts.

1.5 Requirements for installation personnel



Persons responsible for installation and maintenance should be informed about the generally applicable safety and occupational hygiene regulations. They should be familiar with Langer&Laumann products. The installation tools should be functional and the measuring instruments should be checked continuously.

2 Action

Replacement of a door machine with a  **Langer & Laumann Ing. Büro GmbH TSG door drive.**

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

3 Advantages

- Very reasonably priced package.
- Simple and quick replacement with a TSG from  **Langer & Laumann Ing. Büro GmbH.**
- **Few** mechanical attachments required.
- All required parts are included.
- The conversion can be carried out **very quickly** and **easily**.
- The electrical wiring can also be carried out by **less experienced fitters**.
- **No hand-held terminal** required for inputting parameters; all parameters can be easily set in the unit.
- **Calibration is very easy.**
- The conversion kit is kept in stock at  **Langer & Laumann Ing. Büro GmbH.**

4 Required tools

Metal drill 6, 9, 11mm
Open-end spanner SW 8, 10, 13, 17
Allen key set
Screwdriver
Side cutters

5 Conversion instructions



NOTE:

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

1. Dismantle the existing drive motor.
2. Mount the base plates on the cabin (possibly with the help of the height-adjustable mounting brackets).
3. Mount the TSG drive on the combination angle hat.
4. Mount the TSG counter pulley with tensioning station on the combination angle hat.
5. Attach the end stops or buffers.
6. Mount the door leaf driver.
7. Mount the TSG drive unit and the pulley unit on the base plate. The TSG drive unit can be mounted on the left or right side of the door machine (independent of the opening direction of the door machine).
8. Fit the TSG toothed belt. The toothed belt lock must be at the same height as the toothed belt or toothed wheels (aligned). Tension the toothed belt using the tensioning station.
9. Check the travel path. The door leaf driver must be able to reach the end stops when the door is completely closed or open.
10. Install the safety circuit contact.
11. In the case of a centrally opening door, a second safety circuit contact must be installed so that both door leaves are scanned.
12. For electrical commissioning, see TSG operating instructions.



NOTE:

It is often helpful to check the exact position of the toothed belt and the stop buffers before mounting the individual components or assemblies.

6 Images



Fig. 1: Overview



Fig. 2: Motor



Fig. 3: Pulley

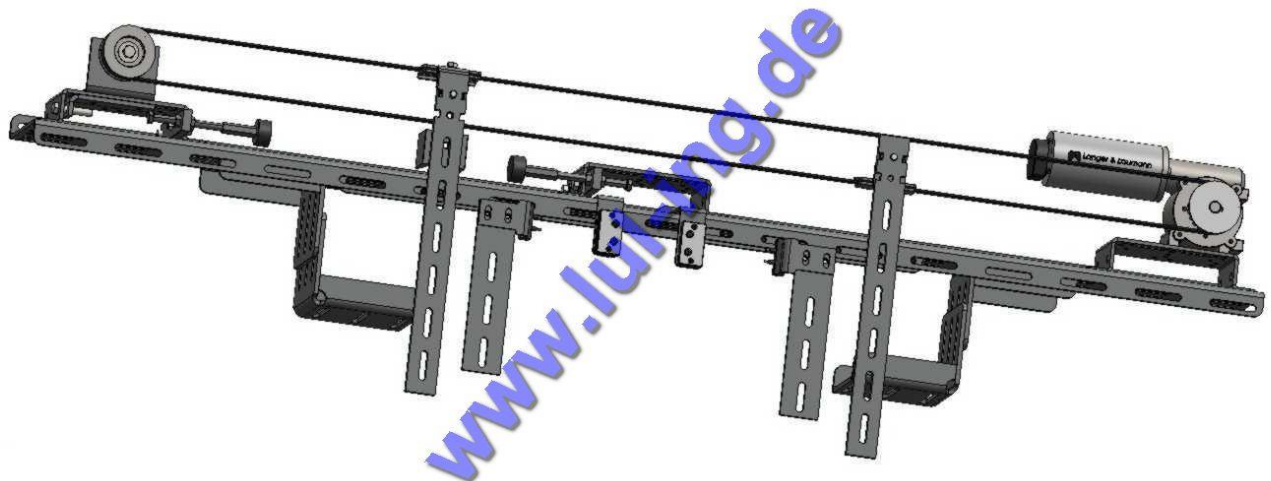


Fig. 4: TSG Vario Central



Fig. 5: TSG 400 Vario substructure variant

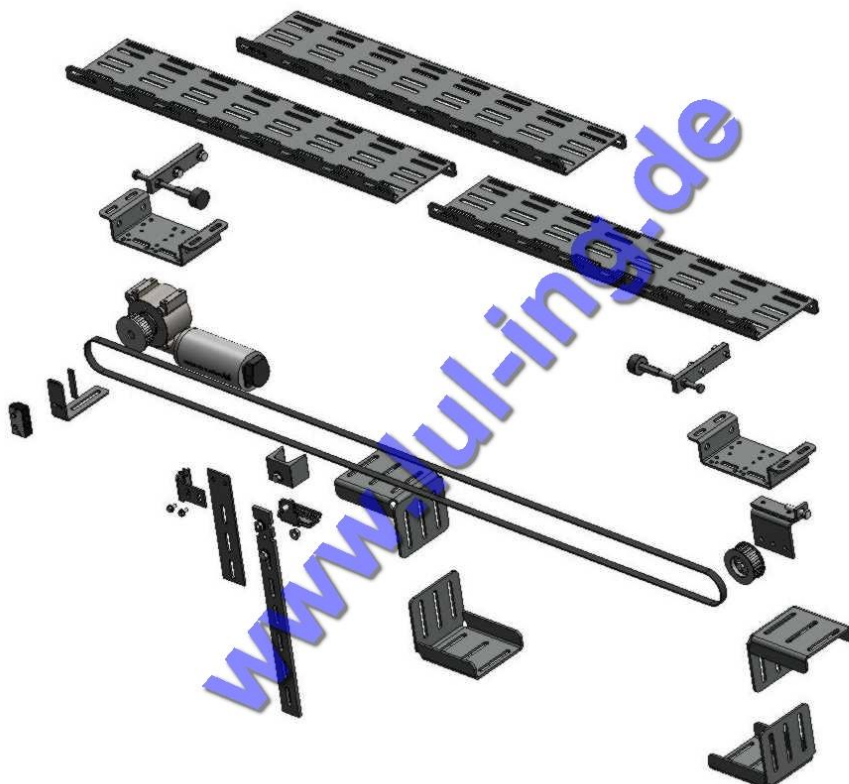


Fig. 6: TSG 400 Vario explosion of the substructure variant

7 Contact

If you have any questions or concerns, we can be reached at the following address:

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