

Conversion instructions

Thyssen M2 T/Z G1, W1, D1

with device series

Door Operator

TSG

Documentation history

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Content

1	Essential information	4
1.1	Value of assembly instructions	4
1.2	Copyright protection	4
1.3	Instructions in the assembly manual	4
1.4	Informal activities performed by the fitter	4
1.5	Requirements for assembly personnel	4
2	Activity performed	5
3	Advantages	5
4	Tools required	5
5	Conversion instructions	6
6	Parts list	7
7	Illustrations	8
8	Contact	14

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

Replacement of Thyssen M2T D4 drive by a  **Langer & Laumann Ing. Büro GmbH TSG door operator.**

3 Advantages

- Very economical package.
- A faulty control device and motor can be quickly and easily replaced 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 can be performed very easily.**
- The conversion kit is available from  **Langer & Laumann Ing. Büro GmbH** as **warehouse inventory**.

4 Tools required

Drilling machine
Extractor
Metal drill bits, 9 and 11 mm
Fork wrenches size 13, 17, 19
Screwdriver
Side cutter

5 Conversion instructions

1. Please remove all packaging and check against the parts list for completeness.
2. The old door drive must be completely removed. Switches TSU, TSO, TCU and TVO are not needed. The front toothed belt system on the door panel remains in place. Only the door drive is replaced.
3. The existing magnet for lifting the skate remains and continues to be controlled by the lift controller.
4. The base plate of the old door drive is reused. The rubber-bonded metal pieces **must** be replaced by the spacing sleeves and screws included with delivery. The plate **must not** rest on an oscillating bearing. If it does, settings cannot be made without difficulties.
5. The V-belt pulley must be replaced by the large toothed belt disk included with delivery.
6. The TSG motor can be screwed onto the base plate with the combination brackets included with delivery. The combination brackets **must both** be used to be able to tension the toothed belt using the long threaded screws (see also Fig. 8: TSG motor mounted on universal bracket / page 12).
7. The included small toothed pulley is pushed onto the axis of the TSG motor and secured with the screw and washer (see also Fig. 11: mounting the pulley on the axis of the TSG motor / page 13).
8. A number of endless belts in different lengths are included with delivery. Mount the endless belt with the matching length.
9. The connection must be made according to the circuit diagram included with delivery for the old door controller, for example circuit diagram E 01.9-K 154. All required lines are included in the conversion kit. The old terminals FT 5, 6, 9, 10 as well as TS 4, MT 13, 14, and MT 15 are not used for the conversion. The old supply line to the door control unit can be reused for the 230-V connection.
10. For information on the remaining setting process and connecting the TSG, see the accompanying operating instructions for the TSG.

6 Parts list

Item	Article number	Name	Quantity
1	1.20.60050	universal bracket, reinforced design	2
2	1.20.60102	endless toothed belt for special drive, size 1	1
3	1.20.60104	endless toothed belt for special drive, size 2	1
4	1.20.60107	endless toothed belt for special drive, size 3	1
6	8.20.40002.K1	motor, large right and gearbox, without pinion	1
7	1.20.60112	toothed belt disk small, mounted on motor shaft	1
8	1.20.60122	toothed belt disk large for M2	1
9	1.20.60220	spacing ring for large toothed belt disk	1
10		fastening materials for TSG drive	1
11		screws and sleeves for base plate	1
12		cable kit with decoupling relay, prewired	1
13	8.20.00101.04	TSG electronic extern, 230VAC	1
14	1.20.92550	documentation for conversion of Thyssen M2ZT G1, W1, D1 to TSG400	1
15	1.20.91000	TSG manual	1

7 Illustrations



Fig. 1: Thyssen M2: Closing side with magnet for skate



Fig. 2: Thyssen M2 before conversion: Drive



Fig. 3: Thyssen M2 before conversion: Version with old toothed pulley



Fig. 4: Thyssen M2 before conversion: drive



Fig. 5: Thyssen M2 before conversion: version with V-belt pulley



Fig. 6: Thyssen M2 after conversion: TSG drive



Fig. 7: Thyssen M2 after conversion: new toothed belt pulley

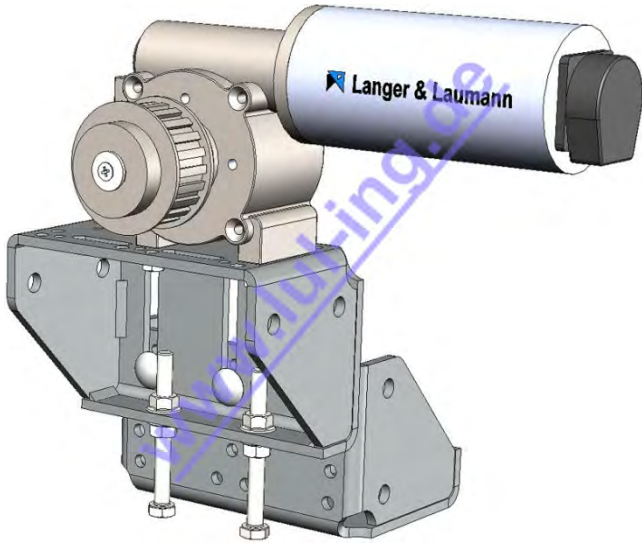


Fig. 8: TSG motor mounted on universal bracket

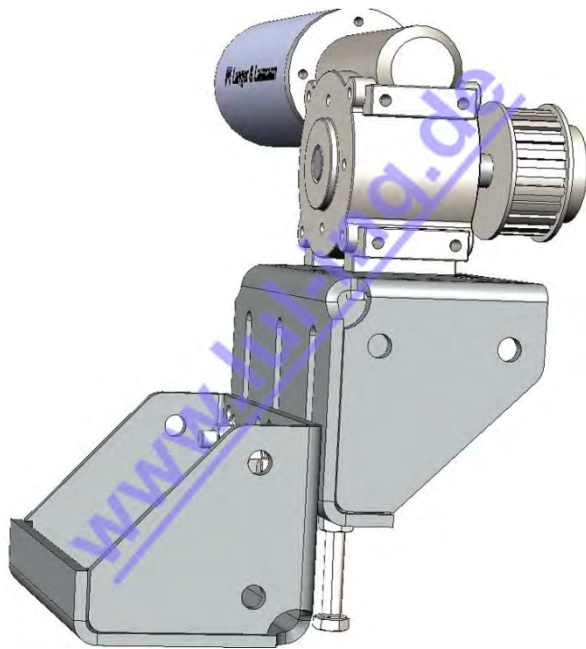


Fig. 9: TSG motor mounted on universal bracket

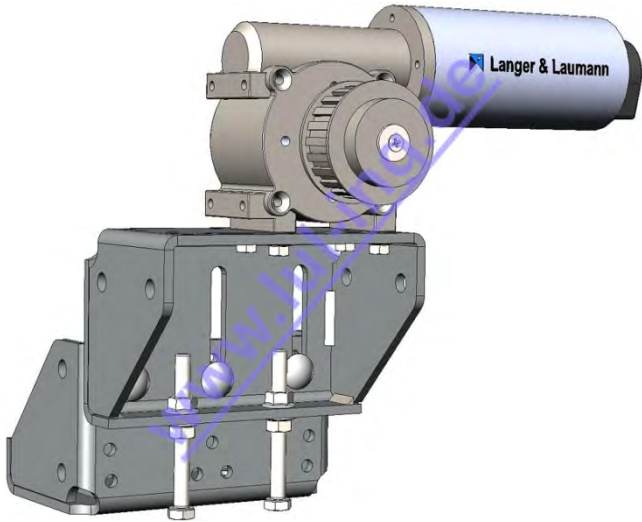


Fig. 10: TSG motor mounted on universal bracket

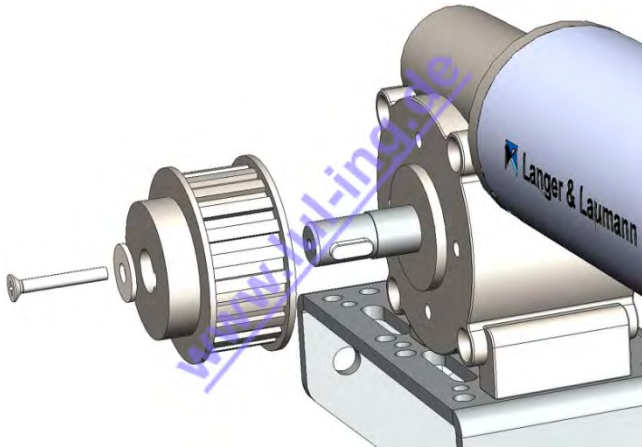


Fig. 11: mounting the pulley on the axis of the TSG motor

8 Contact

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