



| Subject: | Avoiding damages to electric motors | | |
|---------------|-------------------------------------|--------|-------------------------|
| Subject area: | Electric components | Phone: | +49 (0)40/ 739 606 – 42 |
| Version: | 1/2012 | Date: | 04.01.2012 |

According to the capacity of the tail-lift, the electric motor of the power unit has a power input from 0,8 to 3 KW.

At full operating voltage of 24 Volts, the current can climb up to 250 Ampere, If the operating voltage drops to 12 volts, the current doubles to 500 Ampère

At full operating voltage of 12 Volts, the current can climb up to 150 Ampere, If the operating voltage drops to 9 volts, the current doubles to 300 Ampère

The consequence of such a high current with low voltage is overheating of the copper coil. The protective coating melts and the motor is in short circuit. It then burns out.

Possible causes for low voltage are:

- 1. Empty batteries
- 2. Bad mass connection or bad connection to the electric motor
- 3. Power relais is defect as a consequence of operating the tail-lift with low voltage

More technical information and news can be found under

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This is how you prevent these problems:

You will avoid damages to the electric motor by never operating the tail-lift with low voltage. If you should see that the tail-lift has trouble lifting a load which is normally lifted without any problem, stop the lifting process immediately and charge the batteries.

If, in your opinion, the batteries get empty too fast, let a specialist meter the batteries and the connecting cables. Maybe the cables, the mass connection or he batteries have to be repaired or changed.

Please make sure that the power switch on the dashboard or on the control box of the trailer is in OFF position when the tail-lift is closed. Only then it is ensured that the tail-lift can not be operated accidentally with the foot control by the load while driving or while loading the truck. In this respect, we point out that the truck driver has the obligation to secure the tail-lift against unwanted operation. This is only possible if the tail-lift is switched off.

Please make sure that the loading time of the batteries is sufficient between the different loading and unloading operations.

Please make sure that the loading cables for trailers and semi-trailers are connected

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