Training documentation - winch speed sensor (LSB)

Produced by: LWE-Juh1 / Edition: 15.12.03

Exchanging the external EEPROMs in the winch speed sensor:

Addition to the technical description **„LSB winch speed sensor“** from TSL-HS

Contents

Notes for replacing the LSB winch speed sensor

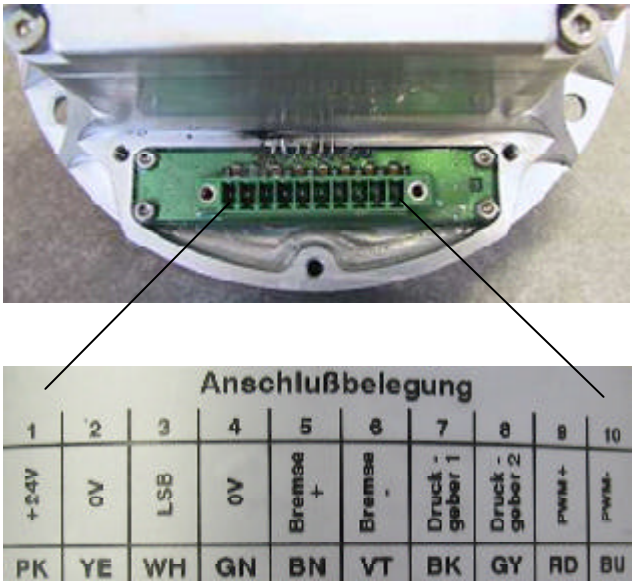
- The procedure for replacing the winch speed sensor is described in the Technical Description **„LSB winch speed sensor“** .

- In order to maintain the match between the Liccon parameters and the parameters in the external EEPROM of the winch speed sensor relating to the crane number, the external EEPROM should be transferred from the defective winch speed sensor to the new sensor.

Important:
Transfer the external EEPROM from the old (defective) winch speed sensor to the new one. - see instructions, pages 2 and 3.

Please note:
This replacement must only be done by authorised Liebherr Service personnel.

LSB winch speed sensor with connecting block



Exchanging the external EEPROMs in the winch speed sensor:

Addition to the technical description **„LSB winch speed sensor“** from TSL-HS

Procedure for changing the external EEPROMs in the LSB winch speed sensor (after setting Fa. FSG)

1. Preparations

For this work the fitter must be earthed, in order to avoid damage to components from static electricity (ESD). Earthing can be achieved for example by an anti-static band which on one side is attached to a person’s wrist, and on the other side to a leak resistor (e.g. 1 Mohm) connected to 0V
or to protective earth.

2. Removing the sensor cover

The winch speed sensor this must be disconnected from the supply voltage, and the **five** mounting screws on the cover must be removed (see Fig. 1). For this, .
a screwdriver with a 3.0 mm hexagon socket is needed.
Once the cover is removed, care must be taken to ensure that no **foreign bodies** enter the device.
This also applies to **dust** . Otherwise there may be functional impairment. For that reason, the cover should only be off for as short a time as possible.

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3. Removing the EEPROMs

Fig. 2 gives a top view of the electronics. The EEPROM is marked.
The external EEPROM is plugged in like a conventional IC in an 8-pole IC socket.
It can only be lifted out from the socket using an IC extractor tool, or with a small (flat-blade) screwdriver carefully applied to both sides of the IC.
Store the IC in safe anti-static packaging (e.g. conductive PE foam)

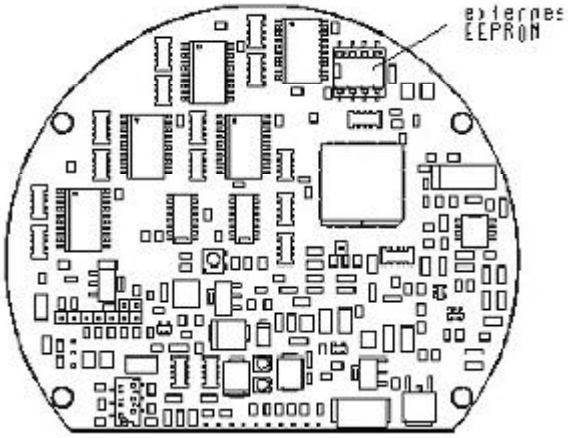

Fig. 2) Top view of the winch speed sensor electronics

4. Inserting the EEPROMs

Inserting the EEPROMs is done by simple insertion into the socket.
Make sure it is pointing in the right direction:
Pin 1 is marked on the IC (identified in fig. 3 by “X”) and is at the bottom left.
The marking can be read by looking at fig. 3.

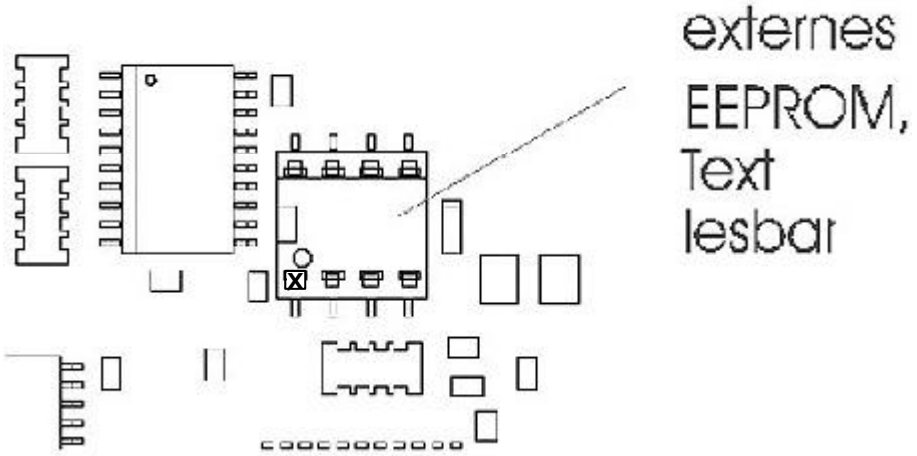

Fig. 3) Detailed view of the position of the EEPROMs on the circuit board

5. Closing the cover

The cover can now be closed again by screwing back the five fastening screws.