

Barrier type: MIB 20 / 30 / 40
Controller: MLC100

Failure Corrective Action

Error message: Sensor adjustment

All barriers of the new generation MIB 20 / 30 / 40 are fitted with the control unit MLC 10 / 11. The former required limit switches become unnecessary because of the boom angle sensor directly mounted at the driven shaft.



Boom angle sensor

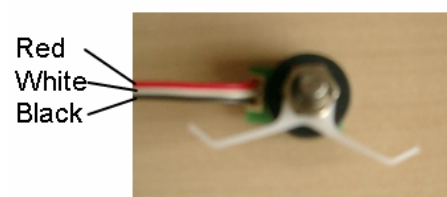
The boom angle sensor transmits at any time the exact boom position to the controller. The MLC controller calculates the boom speed as well as the exact position from the input data. Based on these data the electronic brake is activated by the controller at the optimal point of time. The turn-off position of the safety device is met precisely to the degrees. In order to adjust the sensor properly the barrier type must be set as per to the operating manual when starting the MLC controller the first time.

Furthermore the swing angle sensor is to memorize in accordance to the operating manual (annex 8.1).

In the event of the barrier stops in open position showing "adjust sensor" at the display one of the following errors may be responsible:

1. The sensor value of the open barrier is exceeding the tolerance that is between 555 and 565. (ref. operating manual annex 8.1)
2. The descending motor lever is has slipped through due to external force influence or vandalism. For this reason the sensor data cannot be in accordance with the must value.
3. Defect sensor
4. Defect controller

Cable connections



How to find out the responsible error

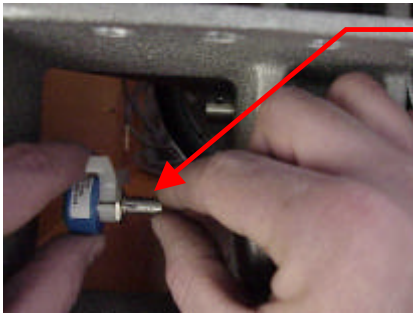
Please proceed according to the pictures

Error 1

Check the actual sensor data at the open barrier as per to the operating manual annex 8.1. In case of the actual value is differing just a little from the must data the swing angle sensor can be re-adjusted (see operating manual annex 8.1)



Release the allen screw in open boom position and pull out the sensor



Adjust the optimal sensor value 560 in open boom position. Put in the sensor and fix it with the allen screw. Check the value after fixing.

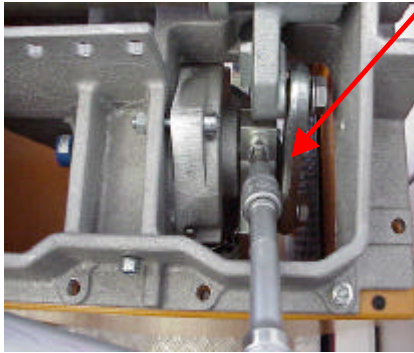
Error 2

In the event of the value differs considerable from the must value or the error message shows once again "adjust sensor" after you have re-adjusted the sensor just short time ago in all probability, the error is caused by a slipping lever.

If so, the driven shaft and the lever must be cleaned with spirit. Before you can do so you have to detach the lever.



- switch off power
- open barrier
- detach barrier boom
- remove the tension springs
- put the lever in good position (as shown at the picture beside)



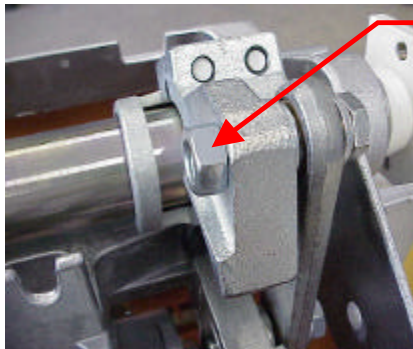
Release the M10/M12 allen screw as shown at the beside fig.

Attention:

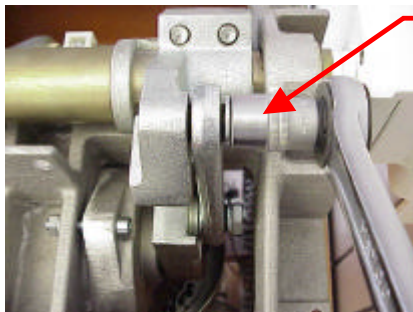
When fixing the screw please observe the following torque

M10 72 Nm and if necessary

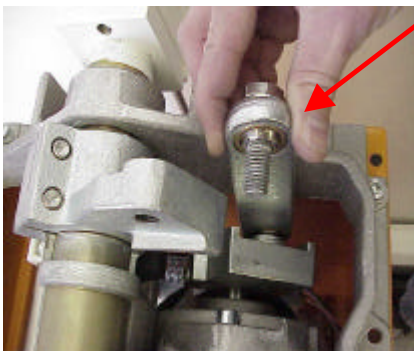
M12 125 Nm



Bring the lever in the upper end position, release and remove the lock nut (if existant).

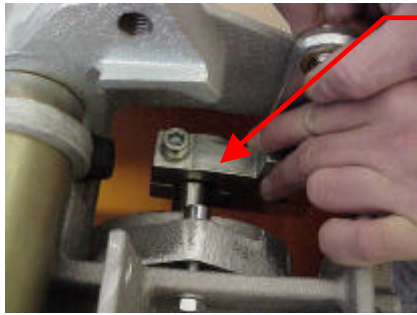


Now remove the upper screw.

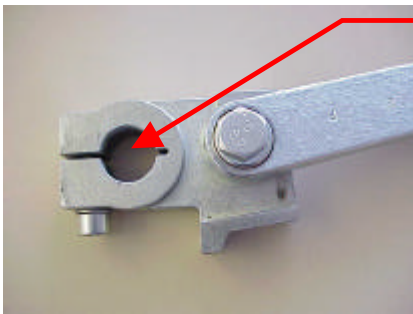


Attention:

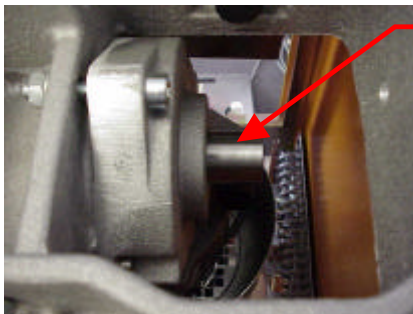
When remounting, please fix the srew with loctite 270 and tighten it with 80 Nm



To enable you to detach the motor lever you first have to put it in the position shown at the beside picture
Now, pull the lever



Clean the drilling of the motor lever with spirit.



Clean the driven shaft properly with spirit. It must be free from any fat traces.

After cleaning of all surfaces remounting is to be made in reverse order.
Please make sure that the screws are tightened in accordance to the indicated torque moments.

After mounting the sensor are to adjust as per the mounting instructions annex 8.1.

Error 3

In case of the value does not change in mode „adjust sensor“ despite turning the sensor shank it is to assume that the sensor or the connection is defective.
The sensor can be measured like a potentiometer by a ohmmeter (5 k Ohm linear).

Error 4

In case of all measurements will not help, the control unit MLC might be broken and should be replaced.