



## **BMW** **3 series (E46)** **All vehicles with Xenon lights**

### **Failure of the headlight range adjustment**

If the headlights are moved to the lowest adjusting position, there is usually a fault in the headlight range adjustment system. Moving down the headlights signals the fault, since there is no warning light in the cockpit. In such a case proceed as follows:

1. Read out the fault code with an appropriate diagnostic tester. For this purpose, select the "Lichtschaltzentrum" (light switching centre) menu item after selecting the vehicle (see Fig. 1).
2. In this case, a faulty power supply on the front vehicle level sensor will be detected (see Fig. 2).
3. Now check the actual values of the sensor under the "Messwerte und Parameter" (measured values and parameters) menu item. The value for the front sensor (load sensor) will be 0.2 volts, which is much too low. Also, the value will not change by simulating a change in the vehicle level.
4. Raise the vehicle and check the connector and wiring of the sensor for damage and corrosion. If no problems can be found, an internal fault in the sensor must be assumed.
5. Replace the vehicle level sensor. **Recommendation:**

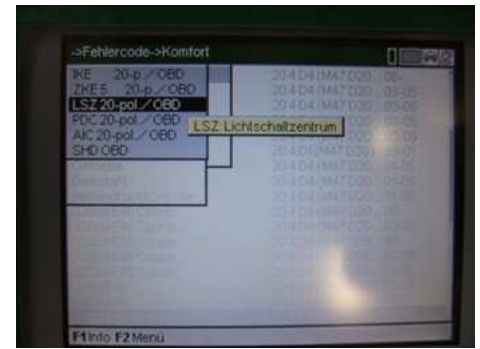


Fig. 1



We recommend to use the Hella special spray when installing the connector. It protects and insulates all electronic and electromechanical components permanently against leakage currents, short circuits and corrosion caused by splashes and condensation, flooding or high humidity. Furthermore, rubber seals remain supple and do not brittle. Hella part No.: 9XH 184 965-802

6. After replacing the front sensor, its value will be 2.2 volts, which is in the nominal range (see Fig. 3).
7. Tune the vehicle's suspension and adjust the headlights according to the manufacturer's instructions.

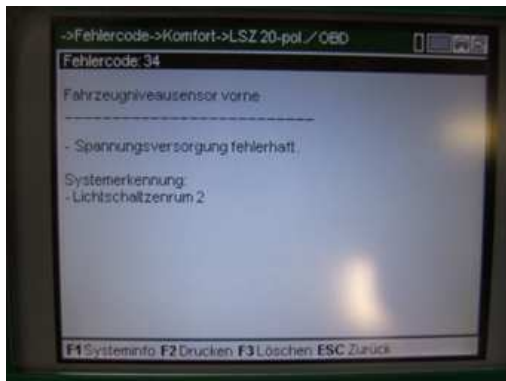


Fig. 2

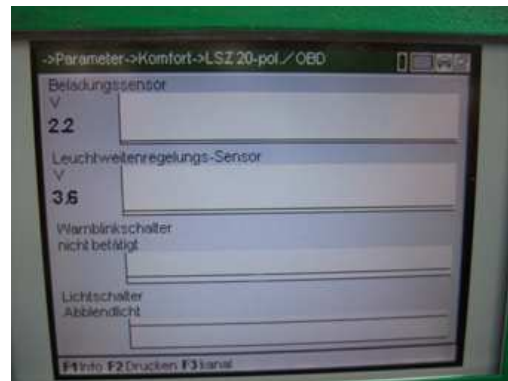


Fig. 3