

ELEKTRO PARTNER

BULLETIN

MAKE / MODEL:
Mercedes-Benz

YEAR:
2005-

ENGINE CODE:
All

SUBJECT / SYMPTOM / TROUBLE CODE:

A/C system has faults, fault codes for control motor to swirl valves in A/C system, fault codes possibly stored

D00887 - Linbus 1 has a Malfunction. The Message is Missing

905207 - The Actuator Motor for the Rear Blend Air Flap has a Malfunction. There is a Mechanical Fault

905287 - The Actuator Motor for the Rear Blend Air Flap has a Malfunction. The Message is Missing

SOLUTION:

If you experience Linbus fault codes, which have been read out in the control unit for the climate control system, it can be difficult to establish where the fault occurred.

This is caused by the fact that all stepper motors controlling the swirl valves are connected in series in the same Linbus signal wire.

The control unit gives each motor an address, after a basic setting has been carried out in the climate control system using a diagnostic tool.

If then, an electrical fault occurs somewhere in this Linbus circuit, the fault cannot be located as the Linbus signal stops at the faulty motor.

Thus, fault code D0887 is stored.

To locate the motor that reads out the fault on Linbus, you have to disconnect the connector to the stepper motor one at a time while monitoring the Linbus signal with an oscilloscope.

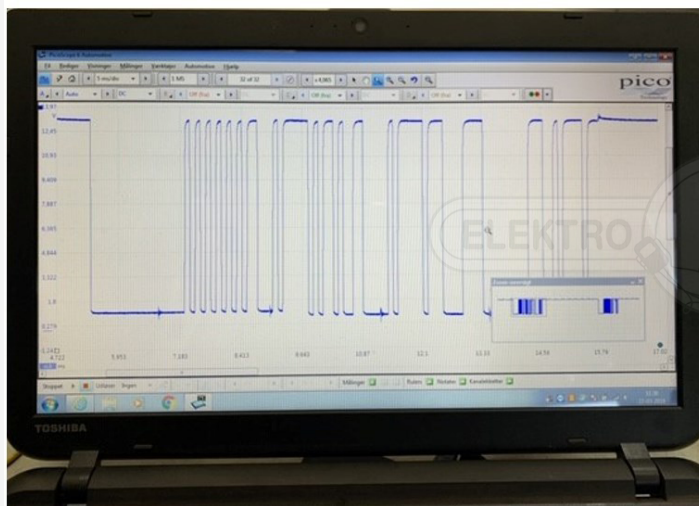
Often, Linbus works when you disconnect the connector from the faulty stepper motor.

If you connect the connector to the faulty stepper motor, the Linbus signal disappears.

In this example, the fault was in the stepper motor, which controls the air to the passengers in the rear seat.



SOLUTION CONTINUED:



In the above picture, the Linbus signal is flawless.
If necessary, see bulletin 5253 regarding general control of Linbus signal.



It is difficult to locate some of the stepper motors.
Here are some examples of the location.

SOLUTION CONTINUED:

The colours of the wires vary, but the Linbus wires are always the middle 2 wires.

Pin No.

- 1. Ground**
- 2. Linbus in**
- 3. Linbus out**
- 4. Positive 5V**



The resistance between pin 2 and 3 must be higher than 20 Kohm.

**Also measure the wires to see whether there is a short circuit to ground.
Wires may touch ground under the dashboard and thus destroy the Linbus signal.**

Also see bulletin No. 5253.