

13. Juli 2004

Mercedes Benz Vito (Type 638) with engine 611.980

Fault code P 1403 is set

If the above-mentioned fault is found, a faulty hot-film mass airflow meter [*German abbreviation: HFM*] in connection with a faulty function in the exhaust gas recirculation system (fault code 1403 exhaust gas recirculation/deviation) could be the cause. This fault is caused by the exhaust gas recirculation rate being too low, e.g. the EGR valve does not open.

In this case proceed as follows:

• Check the measuring accuracy of the HFM. With the EGR switched off, the following values must be achieved when idling:

Intake air temp. 10° mass airflow 600+/- 25 mg/stroke Intake air temp. 20° mass airflow 580+/- 25 mg/stroke Intake air temp. 30° mass airflow 560+/- 25 mg/stroke

- If the value is 0 mg/stroke or if soiling can be seen on the grid of the HFM, the HFM has been damaged or soiled by non-filtered air or particles.
- Check the air filter box for leaks, and check the air filter for possible destruction.
- Check the vacuum supply at the pressure converter. Values must be between 700 - 900 mbar when idling.
- Check air-tightness and function of the EGR vacuum capsules and the intake air throttling.

