

AIR FLOW METER

The debimeter is located on the air intake sleeve and is hot film type.

The debimeter contains an integral intake air temperature sensor. The debimeter is used in the version with EGR versions.

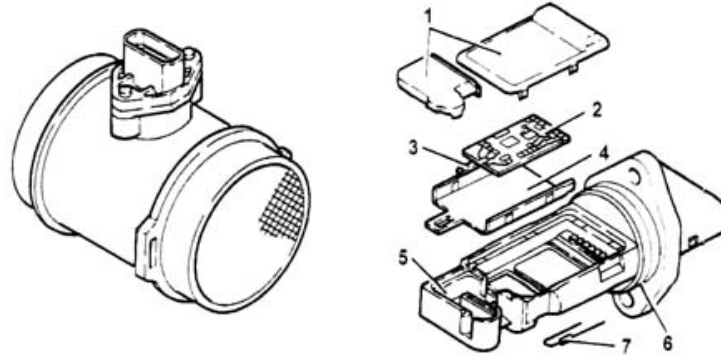
OPERATION

The principle of operation is based on a heated membrane positioned within a measurement channel that carries air into the engine.

The hot film membrane is maintained at constant temperature (about 120°C higher than the incoming air temperature) by the heating coil.

The air mass that flows through the measurement channel tends to remove heat from the membrane. Current must therefore flow through the coil to maintain the membrane at a constant temperature.

Current uptake is proportional to the air mass that flows into the engine. It is measured using a Wheatstone bridge and the resulting signal is sent to the engine control unit.



- 1 - Covers.
- 2 - Electronic card.
- 3 - Sensor.
- 4 - Mounting plate.
- 5 - Mount.
- 6 - Sealing ring.
- 7 - Temperature sensor.