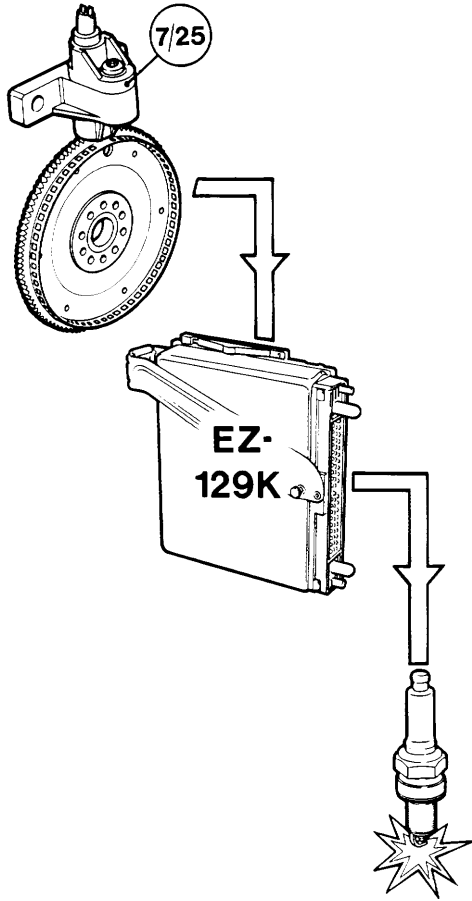


Engine speed (RPM) sensor

Control functions



The inductive-type RPM sensor supplies the ICM with engine speed and crankshaft position signals by detecting the passage of a series of holes in the periphery of the flywheel.

Components

- Housing (1)
- Permanent magnet (2)
- Coil (3)

Principle of operation

In a manual model, the periphery of the flywheel is provided with 58 holes (in automatics, the carrier plate is provided with 57 holes). The spacing between two of the holes is greater at the point corresponding to 90° before TDC in cylinder No. 1.

A voltage is induced in the coil as each hole passes the RPM sensor and the resultant signals are used by the ICM to compute the speed and position of the crankshaft.

The signals are interrupted when the longer space corresponding to 90° before TDC passes the RPM sensor, enabling the ICM to compute the crankshaft position (TDC). The engine will stop and will fail to restart if the RPM sensor signals to the ICM are lost.

