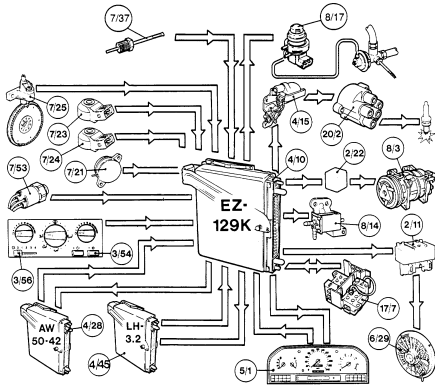


## EZ-129K DI system – overview

### Input signals



The ICM is supplied with signals by the following sensors and components:

- \* RPM sensor (7/25)
- \* Camshaft position (CMP) sensor (7/21)
- \* Knock sensors (KS) (7/23 and 7/24)
- \* A/C high-pressure switch (7/53)
- \* Climate control A/C and fan switches (3/54 and 3/56 respectively)
- \* AW 50-42 TCM (4/28) indicating the reduction in torque required when changing gear
- \* MFI module (4/45), indicating throttle position, load and coolant temperature
- \* Speedometer in combined instrument (5/1)
- \* EGR temperature sensor (7/37) (certain markets only)

### Output signals

The ICM controls the following components:

- \* Power stage and ignition coil (4/15)
- \* A/C relay (2/22), for temporary switch-out of A/C compressor (8/3)
- \* Engine cooling fan (6/29), by means of fan relay (2/11)
- \* MIL on combined instrument (5/1), in common with MFI module
- \* EGR controller (8/17) which, in turn, operates the EGR valve (certain markets only)
- \* Control module box cooling fan (certain markets only)

### Control functions

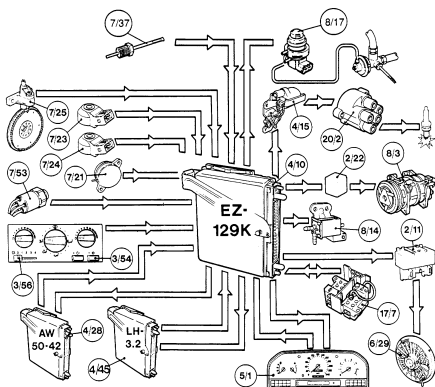
The ICM supplies information to:

- \* DLC A (17/7), when fault tracing;
- \* speedometer in combined instrument (5/1);
- \* MFI module, indicating engine speed and operation of engine cooling fan;
- \* AW 50-42 TCM (4/28), when torque reduction signal is received by ICM.

If certain signals are faulty or absent, the ICM will adopt fixed 'limp-home' values to enable the car to be driven.

Substitute values may be adopted for the following signals:

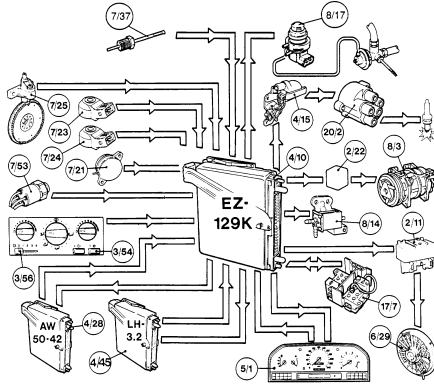
- ECT sensor signal from MFI module
- TP potentiometer signal from MFI module
- load signal from MFI module



## Diagnostic function

The ICM incorporates a diagnostic function which records any faults which occur and stores them in the memory for subsequent display by means of the DLC, either manually or with the aid of the ST. The MIL on the combined instrument lights if the fault affects exhaust emission levels.

### The main features which distinguish EZ-129K DI from EZ-116K DI are:



- an ICM with a different type of connector (due to the location of the module in a special box in the engine compartment);
- a CMP sensor (7/21) which supplies the control module with the information required to compute the timing correctly;
- KS (7/23 and 7/24);
- a combined power stage and ignition coil (4/15);
- an A/C compressor switch-out function using the A/C relay (2/22). The A/C switch on the control panel (3/54) indicates if the system is on or off.
- a circuit which operates the engine cooling fan (6/29) through the fan relay (2/11). For this purpose, the ICM is connected to a high-pressure switch (7/53) on models with air conditioning;
- a circuit which controls the V-VIS system by means of a solenoid valve (8/14).
- a more comprehensive diagnostic system in the form of test mode 3, which enables the operation of components such as the engine cooling fan and V-VIS solenoid valve to be checked.
- on automatics, communication with the AW 50-42 TCM (4/28), to permit timing retardation when changing gear.