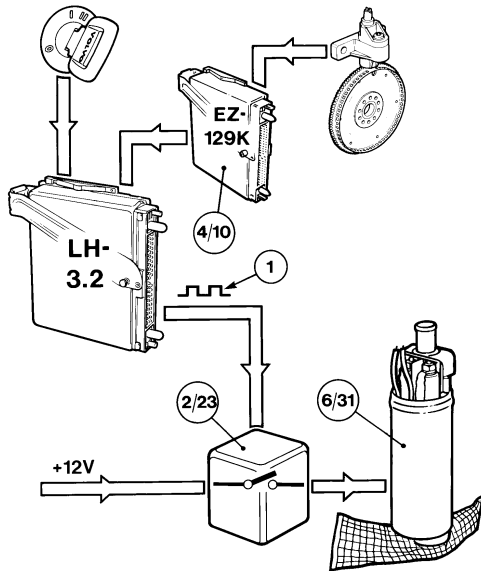


## Fuel relay and fuel pump

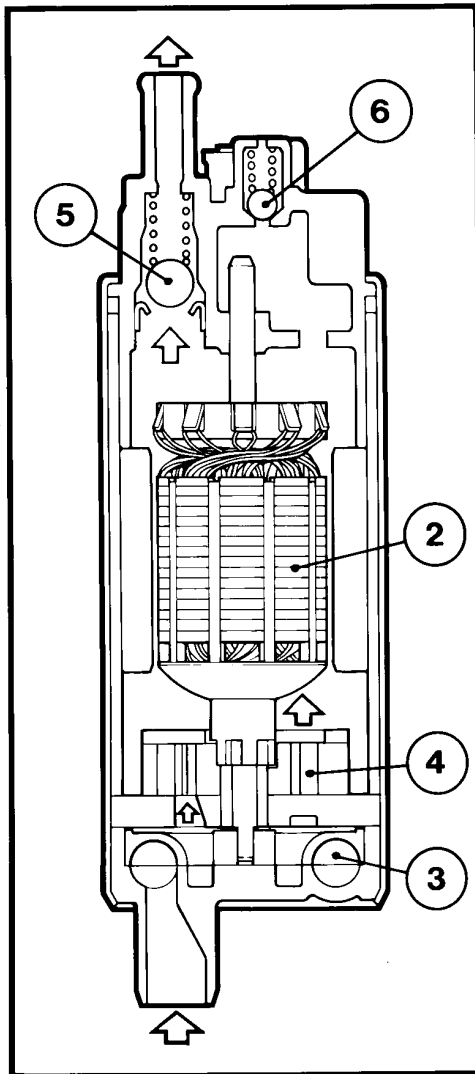
### Control functions



The MFI module uses a digital signal (1) to control the fuel pump (6/31) as follows, via the fuel pump relay (2/23):

- \* When the ignition key is turned to position II, the module operates the relay for about one second, developing fuel pressure and enabling the car to be started.
- \* The maintenance of a power supply to the pump by the MFI module is dependent on the receipt of speed signals from the ICM (4/10). The relay remains energised as long as speed signals are present; however, the MFI module interrupts the relay signal, stopping the pump, as soon as the speed signals are lost.

### Fuel pump – design



The MFI system employs a single, high-capacity fuel pump installed in the fuel tank. The pump motor (2) drives two individual pump stages, the first of consisting of an impeller (3) which draws fuel from the tank and removes vapour bubbles. The second stage consists of an internal gear pump (4) in which the fuel is admitted at the centre and discharged under pressure at the side. In common with other fuel pumps, the motor windings are cooled and lubricated by fuel, which is then discharged through a non-return valve (5). Should the pressure become excessive, fuel is discharged through a relief valve (6).

### Fuel relay – design

The fuel relay incorporates an electronic unit

designed to sense the special square-wave pulses from the MFI module, and a power stage which energises and deenergises a relay coil. When energised, the relay supplies power to the fuel pump.