# engine management

# ENGINE

### SAFETY

In the event of a vehicle impact, the inertia switch will switch off all ignition fed circuits by interrupting current flow to the ignition "on" relay.

**VCM 1** signal indicates an Engine Management System fault on the Vehicle Condition Monitor. This indicates a system fault, but does not identify the specific fault.

#### **VCM 2** is a dual purpose signal. It provides precise fuelling information for the trip computer fuel calculations when the engine is running. It also identifies individual Engine Management System faults by code. Fault codes are displayed by turning the ignition switch to position II. Cranking the engine erases the stored code.

# VCM OUTPUTS

The ECU supplies two output signals to the VCM (Vehicle Condition Monitor) located in the instrument panel. These are identified as VCM 1 and VCM 2 and are used for FUEL and FAULT MONITORING.





# VCM Fault Code Identification:

- 1. Cranking signal failure.
- 2. Air mass meter failure (open circuit/short circuit to ground).
- 3. Coolant temperature sensor failure.
- 4. Feedback circuit failure.
- 5. Air mass meter failure (low throttle potentiometer Voltage with high air mass meter Voltage).
- Air mass meter failure (high throttle potentiometer Voltage with low air mass meter Voltage).
- 7. Idle fuel potentiometer (in air mass meter) failure.
- 8. Intake manifold air temperature sensor failure (open circuit/short circuit to ground).

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