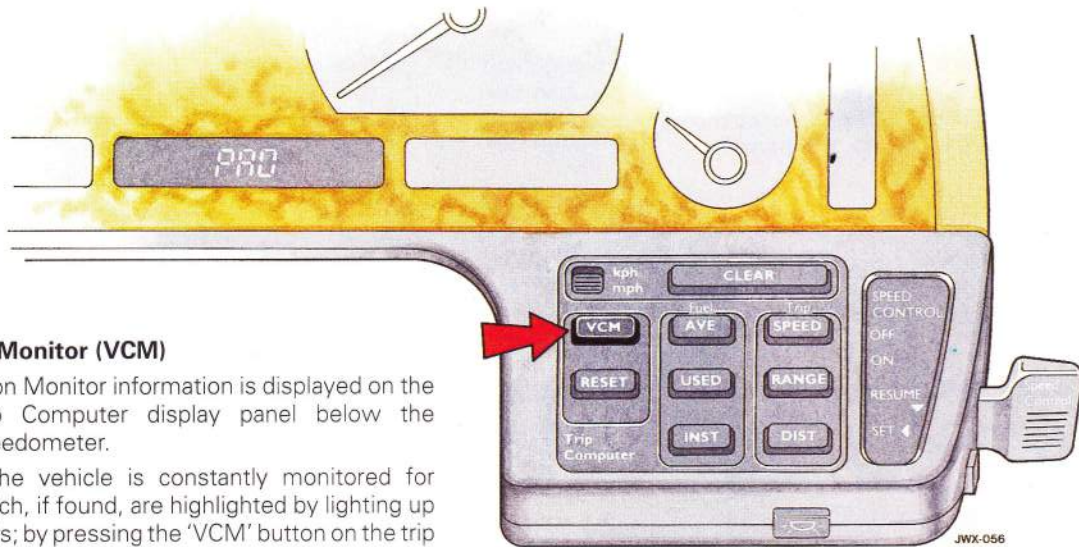


INSTRUMENTS



Vehicle Condition Monitor (VCM)

The Vehicle Condition Monitor information is displayed on the Odometer/VCM/Trip Computer display panel below the tachometer and speedometer.

The condition of the vehicle is constantly monitored for operating faults which, if found, are highlighted by lighting up certain warning lights; by pressing the 'VCM' button on the trip computer panel the relevant message will be displayed.

In the event that several faults for which messages are available have occurred, the system will cycle between messages, pausing for two seconds at each one.

To enable the trip computer information to be displayed the strip button marked 'CLEAR' provides a means of removing any VCM message present on the written display.

Pressing the VCM button when a fault exists will override any trip computer messages and display the relevant VCM fault message.

INSTRUMENTS

FAULT	DISPLAY	RECOMMENDATION
LOW BRAKE PRESSURE	Brake system fault warning light comes on and the word FAIL is displayed.	Even if the brake pedal operation and pressure are satisfactory, report the fault as soon as possible to the nearest Jaguar Dealer. Do not drive the vehicle until the braking system has been checked.
BRAKE ELECTRICAL SUPPLY FAILURE	Circuit failure warning light comes on and the word FUSE 2 is displayed. After a number of brake applications the brake warning light will come on.	The vehicle MUST NOT be driven until the fault has been rectified. Consult a Jaguar Dealer immediately .
BRAKE FLUID LOW	Brake system fault warning light comes on and the word FLUID is displayed.	Check the level of the brake fluid and top up if necessary, see the Vehicle Care Handbook. If the fluid level is very low, a leak in the hydraulic system is indicated. Do not drive the vehicle in this condition but report the fault to the nearest Jaguar Dealer immediately.
BRAKE PAD LOW	Brake system fault warning light comes on whenever the brake pedal is pressed and the word PAD is displayed.	This is a warning that the brake pads have worn low. Arrange with the nearest Jaguar Dealer for fitment of new brake pads.

3

continued

INSTRUMENTS

Vehicle Condition Monitor (continued)

FAULT	DISPLAY	RECOMMENDATION
ABS SYSTEM ELECTRICAL SUPPLY FAILURE	ABS system fault and circuit failure warning lights come on and the word FUSE 2 is displayed.	The ABS system will not operate, the brake system will continue to function without anti-lock, but with fully boosted (Assisted) braking to all road wheels.
CIRCUIT FAILURE	Circuit failure warning light comes on and the relevant fuse information is displayed, i.e. 'FUSE 2'.	Fuse 1 identified – check fuses in R.H. fuse box. Fuse 2 identified – check fuses in L.H. fuse box. Fuse 3 identified – check fuses in centre fuse box. If the fuses are satisfactory, report the fault to the nearest Jaguar Dealer. Replace a fuse that has burned out, if the cause is not known report to a Jaguar Dealer for diagnosis.

INSTRUMENTS

FAULT	DISPLAY	RECOMMENDATION
CHECK ENGINE	Check engine warning light comes on and the relevant fuel failure information can be displayed, i.e. 'FUEL 12/FAIL 12'.	<p>When a fault has been signalled the likely area responsible for the malfunction can be indicated when the vehicle is stationary. Switch off the ignition, wait at least 5 seconds then turn the ignition switch to position 'II' (do not start the engine). Press the VCM button, this action will cause the VCM/trip computer display to show the applicable fault code.</p> <p>3.2 and 4.0 litre vehicles: When the engine is restarted the VCM message is cleared from the written display and the warning light goes out. The warning light will come on should the fault be re-detected.</p> <p>6.0 litre V12 vehicles without air injection: When the engine is restarted the VCM message is cleared from the written display and the warning light goes out. The warning light will come on should the fault be re-detected.</p> <p>6.0 litre V12 vehicles using air injection: When the engine is restarted the VCM message is cleared from the written display but the warning light will stay on.</p> <p>The fuel and engine management systems are very complex and require specialized diagnostic equipment to repair. Report the fault to the nearest Jaguar Dealer.</p> <p>A 'limp home' capability is incorporated in the engine management system, therefore the vehicle may still be driven gently.</p>

3

ROADSIDE EMERGENCY

Diagnostic Checks

In the event of an engine management fault being detected by the On Board Diagnostic system (OBD), the Malfunction Indicator Lamp (MIL) will be illuminated and display 'Check Engine'. Additional information can be displayed by pressing the Vehicle Condition Monitor (VCM) button on the trip computer panel.

When a fault has been signalled the likely area responsible for the malfunction can be indicated when the vehicle is stationary. Switch off the ignition, wait at least 5 seconds then turn the ignition switch to position 'II' (do not start the engine). Press the VCM button, this action will cause the VCM/trip computer display to illuminate the applicable fault code.

3.2 litre and 4.0 litre vehicles will not have the 'MIL' latched, it will only be illuminated for the remainder of the journey during which the fault occurred.

6.0 litre V12 vehicles using air injection as part of the emission control system will have the MIL latched, i.e. the 'MIL' will be illuminated on each journey once a fault code is stored.

6.0 litre V12 vehicles without air injection will not have the 'MIL' latched, it will only be illuminated for the remainder of the journey during which the fault occurred.

Diagnostic Trouble Codes (DTC)

DTC Code	Description	Possible Fault Area
11	Mass air flow (MAF) sensor. Idle trim potentiometer circuit (3.2 litre and 4.0 litre non-catalyst specification).	Looks for idle (fuel) trim potentiometer out of normal operating range.
12	Mass air flow (MAF) sensor circuit (3.2 litre and 4.0 litre).	Looks for mass air flow sensor signal out of normal operating range.
13	Engine Fuelling Control Module Pressure Sensor (Manifold Absolute Pressure (MAP) or signal pipe (6.0 litre V12).	Looks for fluctuating vacuum signal and vacuum 'v' throttle position.

ROADSIDE EMERGENCY

Diagnostic Trouble Codes (DTC) (continued)

DTC Code	Description	Possible Fault Area
14	Engine Coolant Temperature Sensor (ECTS) or associated wiring.	Looks for ECTS resistance out of range or static during engine warm-up.
16	Intake Air Temperature Sensor (IATS) or associated wiring.	Looks for IATS resistance out of range.
17	Throttle Position Sensor (TPS) or associated wiring.	Looks for TPS resistance out of range.
18	Throttle Position Sensor (TPS) /Mass Air Flow Sensor calibration (3.2 litre and 4.0 litre).	Looks for high TPS signal at low load.
	Throttle Position Sensor (TPS) /Manifold Absolute Pressure (MAP) calibration (6.0 litre V12).	Looks for high TPS signal at low load.
19	Throttle Position Sensor (TPS) /Mass Air Flow Sensor calibration (3.2 litre and 4.0 litre).	Looks for low TPS signal at high load.
	Throttle Position Sensor (TPS) /Manifold Absolute Pressure (MAP) calibration (6.0 litre V12).	Looks for low TPS signal at high load.
22	Fuel pump drive (3.2 litre and 4.0 litre).	Looks for ECM output to fuel pump relay..
23	Fuel Supply.	Looks for poor feedback control in rich direction.

ROADSIDE EMERGENCY

Diagnostic Trouble Codes (DTC) (continued)

DTC Code	Description	Possible Fault Area
24	Ignition drive (3.2 litre and 4.0 litre).	Looks for ECM output to ignition power module.
26	Air leak (3.2 litre and 4.0 litre).	Looks for poor feedback control in lean direction.
29	ECU self check	Checks microprocessor function.
33	Fuel injector (FI) drive circuit (3.2 litre and 4.0 litre).	Checks for ECM output to injectors.
34	Fuel injectors (FI) (3.2 litre and 4.0 litre). Fuel Injectors (FI), right-hand 'A' cylinder bank (6.0 litre V12).	Looks for uneven heated oxygen sensor signal due to fuel injectors flow or wiring problem.
36	Fuel Injectors (FI), left-hand 'B' cylinder bank (6.0 litre V12).	Looks for uneven heated oxygen sensor signal due to fuel injectors flow or wiring problem.
44	Heated Oxygen Sensor (HO2S) (3.2 litre and 4.0 litre). Heated Oxygen Sensor (HO2S), right-hand 'A' cylinder bank (6.0 litre V12).	Looks for incorrect heated oxygen sensor output.
45	Heated Oxygen Sensor (HO2S), left-hand 'B' cylinder bank (6.0 litre V12).	Looks for incorrect heated oxygen sensor output.
46	Idle air control circuit (3.2 litre and 4.0 litre).	Looks for ECM output to idle air control stepper motor.
47	Idle air control circuit (3.2 litre and 4.0 litre).	Looks for ECM output to idle air control stepper motor.

ROADSIDE EMERGENCY

Diagnostic Trouble Codes (DTC) (continued)

DTC Code	Description	Possible Fault Area
48	Idle air control valve (3.2 litre and 4.0 litre).	Looks for stepper motor being wildly out of position with either a hot or a cold (below 30° C/86° F) engine..
49	Ballast Resistor (6.0 litre V12).	Looks for incorrect ballast resistor operation.
67	Secondary Air Injection System (AIR) (6.0 litre V12).	Looks for AIR to be detected by the heated oxygen sensor.
68	Vehicle speed sensor circuit (3.2 litre and 4.0 litre).	Looks for vehicle speed indicating less than 5 km/h (3 mph) at high engine air flow.
69	Neutral/drive switch circuit (3.2 litre and 4.0 litre).	Looks for cranking in 'D' (drive) or high air flow in 'N' (neutral).
77	Speed Signal (6.0 litre V12).	Looks for engine speed signal from Engine Ignition Control Module
89	Charcoal canister purge valve circuit (3.2 litre and 4.0 litre).	Looks for ECM output to purge valve.