

2001 Jaguar XJ8

2000-2003 ENGINE PERFORMANCE 'Self-Diagnostics - XJ8, XK8, XJR & XKR

MODEL IDENTIFICATION

MODEL IDENTIFICATION

| Years | Models |
|-----------|-----------|
| 2000-2003 | XJR & XJ8 |
| 2000-02 | XKR & XK8 |

INTRODUCTION

NOTE: Diagnostic testing information for all Diagnostic Trouble Codes (DTCs) is not available.

To properly diagnose and repair this vehicle, follow **TESTING PROCEDURE** under SELF-DIAGNOSTIC SYSTEM. If no Diagnostic Trouble Codes (DTC) are present and a no-start condition exists, see **BASIC DIAGNOSTIC PROCEDURES** article. If no DTCs are present and a driveability condition exists, see **TROUBLE SHOOTING - NO CODES** article for diagnosis by symptom (i.e., ROUGH IDLE, ENGINE STALLS, etc.).

SELF-DIAGNOSTIC SYSTEM

OBD-II

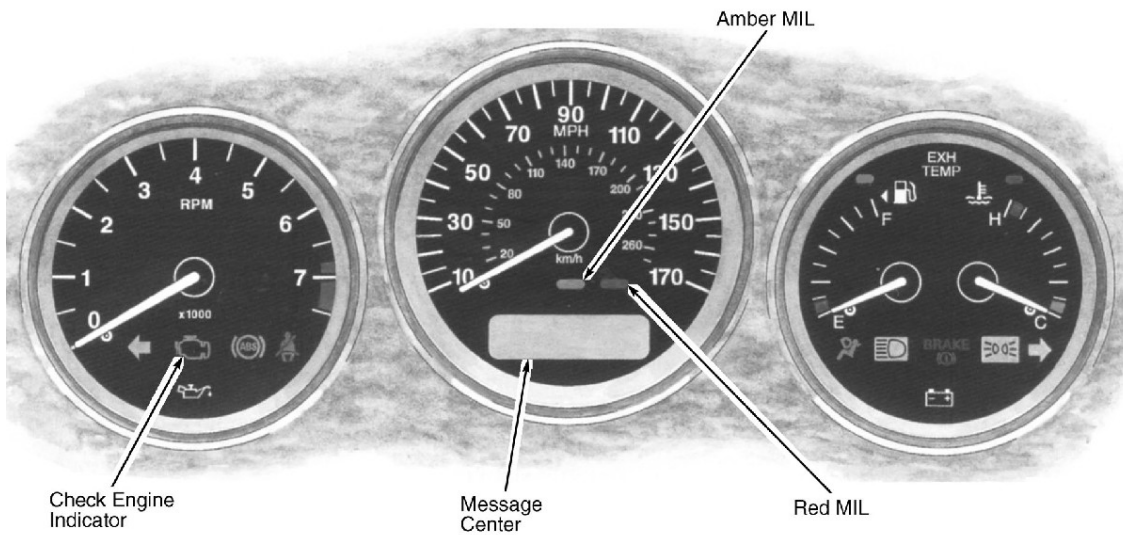
The ECM monitors system operation using inputs from various sensors and stores Diagnostic Trouble Codes (DTCs) to aid in fault diagnosis. System requires either one or two drive cycles before a DTC is stored. With the exception of catalyst efficiency, all inputs and outputs will have been checked by the end of an appropriate drive cycle. The catalyst monitoring test requires 3 drive cycles, which include a period of steady driving.

Malfunction Indicator Light (MIL)

For most DTCs, the Check Engine Indicator (located in the lower portion of the tachometer) will illuminate when a fault is detected on the second drive cycle. See **Fig. 1**. Only catalyst-damaging misfires, certain internal ECM failures and Controller Area Network (CAN) faults will illuminate the Check Engine Indicator when the fault is detected on the first drive cycle. In certain circumstances, the Message Center (located in the lower portion of the speedometer), will display fault warning information simultaneously with the Check Engine Indicator, or when a fault is detected on the first drive cycle. Also, in certain circumstances, the Amber or Red MIL (located above the Message Center) simultaneously with the Check Engine Indicator and Message center indicating the priority of the fault.

Red MIL indicates a primary warning, loss of power and driveability. Do not drive vehicle. Amber MIL indicates a secondary warning, loss of power and driveability. Vehicle may still be driven.

| | | |
|------|--|--|
| None | | |
| | | |



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Fig. 1: Identifying Check Engine, Malfunction Indicator Lights & Message Center
 Courtesy of JAGUAR CARS, INC.

Hard Failures

If any warning lights and/or messages were displayed when the fault occurred, refer to **RETRIEVING DIAGNOSTIC TROUBLE CODES** for retrieving DTC information. Some warnings will appear to clear when the ignition is cycled. This is often because the warning has flagged as a result of one of the vehicle's drive cycles having run to detect the fault. If the same drive cycle has not run when the ignition was switched on, the warning will not reflag until the drive cycle does run. See **DRIVE CYCLES** .

Intermittent Failures

If the DTC flagged was not present for 2 or more consecutive drive cycles, it is classed as temporary, and will be deleted following 3 drive cycles in which no fault was present. This could result in a reported warning light/message with no stored DTCs. If a fault is present for 3 consecutive drive cycles, the DTC becomes permanent, and will remain in the module's memory for 40 drive cycles. A cycle is an ignition ON/OFF, which will occur during the owner's normal use of the vehicle. No action on the part of the technician is necessary to perform this cycle. A drive cycle is a series of conditions needed to make the on-board diagnostic routine run, and may need a specific action on the part of the technician. See **DRIVE CYCLES** .

TESTING PROCEDURE

1. Verify customer concern. Confirm which, if any, warning lights and/or messages were displayed on the instrument cluster. See **Fig. 1** .
2. Ensure battery and charging system are operating properly. Record DTCs and freeze-frame data. See **RETRIEVING CODES** .
3. Visually inspect for obvious signs of mechanical or electrical damage.
4. Perform appropriate drive cycle to confirm repair. See **DRIVE CYCLES** . Recheck for DTCs.

RETRIEVING DIAGNOSTIC TROUBLE CODES

Turn ignition off. Connect Jaguar Portable Diagnostic Unit (PDU) scan tool or generic scan tool to 16-pin Data Link Connector (DLC). See **Fig. 2** . If using PDU, see PDU User Guide for operating instructions. If using generic scan tool, follow scan tool manufacturer's operating instructions. Check for and note any DTCs. Also check for and note Freeze Frame Data. See **DIAGNOSTIC TROUBLE CODE DEFINITIONS** .

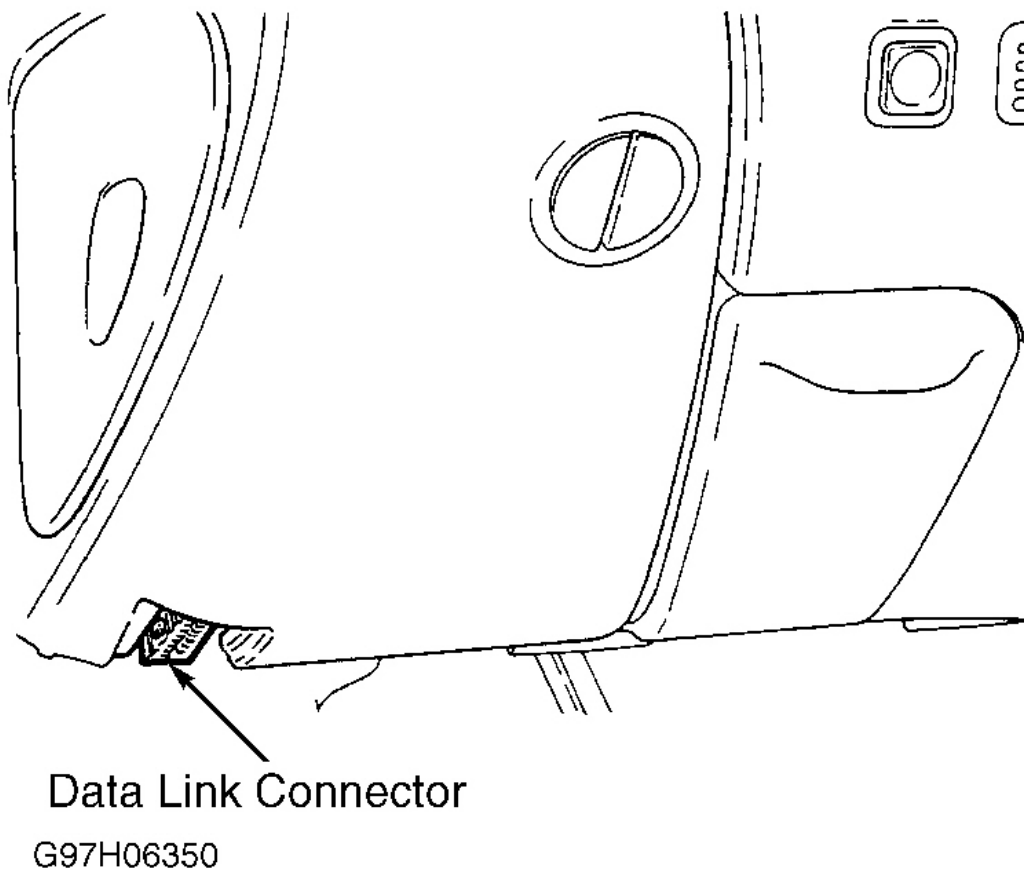


Fig. 2: Locating 16-Pin Data Link Connector (DLC)
Courtesy of JAGUAR CARS, INC.

CLEARING DIAGNOSTIC TROUBLE CODES/ECM RESET PROCEDURE

NOTE: Some models have an anti-theft code built into the radio circuit. Clearing codes by disconnecting negative battery cable cancels clock and radio settings. Make note of settings before beginning reset procedure. After Engine Control Module (ECM) reset, the radio will not function until code is entered.

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To clear codes or to reset ECM, use PDU scan tool or generic scan tool following manufacturer's instructions. Codes can also be cleared by turning ignition off and disconnecting negative battery cable for 30 seconds.

ECM LOCATION

Engine Control Module (ECM) is located in the control module enclosure at right rear of engine compartment.

None