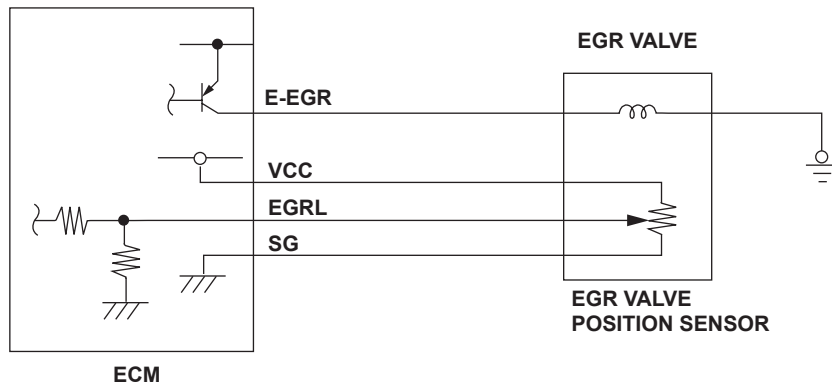


# Advanced Diagnostics

## DTC P1498: Exhaust Gas Recirculation (EGR) Valve Position Sensor Circuit High Voltage



P1491-0001

### General Description

The exhaust gas recirculation (EGR) system reduces oxides of nitrogen (NO<sub>x</sub>). NO<sub>x</sub> is generated by high combustion temperatures. The EGR system lowers peak combustion temperature by recirculating inactive exhaust gas into the air/fuel mixture, thus reducing NO<sub>x</sub> emissions. To determine the optimal amount of recirculating exhaust gas depending on driving conditions, a command value (the amount of valve lift) which is previously stored in the engine control module (ECM) is referred. The EGR valve position sensor estimates the amount of valve lift, and the ECM controls the EGR valve so that the amount of actual valve lift equals the command value by comparing the command value and the actual amount of valve lift. If EGR valve position sensor output signal voltage is not within a specified value, a malfunction is detected and a DTC is stored.

### Monitor Execution, Sequence, Duration, DTC Type

Execution	Continuous
Sequence	None
Duration	2 seconds or more
DTC Type	One drive cycle, MIL ON

### Enable Conditions

Condition	Minimum	Maximum
Engine speed	—	4,000 rpm
No active DTCs	EGR	

### Malfunction Threshold

The EGR valve position sensor outputs 4.88 V or more for at least 2 seconds.

## **Diagnosis Details**

### **Conditions for illuminating the MIL**

When a malfunction is detected, the MIL comes on and the DTC and the freeze frame data are stored in the ECM memory.

### **Conditions for clearing the MIL**

The MIL will be cleared if the malfunction does not recur during three consecutive trips in which the diagnostic runs.

The MIL, the DTC, and the freeze frame data can be cleared by using the scan tool Clear command or by disconnecting the battery.