

**Knock Sensor (KS) (DTC: P0325)**

The knock sensor is attached to the cylinder block. It senses engine knocking using a piezoelectric element. A knocking vibration from the cylinder block is sensed as vibrational pressure. This pressure is converted into a voltage signal and sent to the ECM.

**\* In case of knock sensor, the freeze frame data will not be stored in ECM.  
The knock sensor does not have the two trip detection logic, and will not light up the MIL.**

Diagnostic Trouble Code No.	Malfunction is detected when ....	Check items (Possible cause)
34 P0325	<ul style="list-style-type: none"> <li>● An excessively low or high voltage from the knock sensor is entered to ECM.</li> </ul>	<ul style="list-style-type: none"> <li>● Harness or connectors (The knock sensor circuit is open or shorted.)</li> <li>● Knock sensor</li> </ul>

**DIAGNOSTIC TROUBLE CODE DETECTING CONDITION**



- 1) Turn ignition switch "ON" and select "DATA MONITOR" mode with CONSULT.
- 2) Start engine and run it for at least 5 seconds at idle speed.

OR



- 1) Start engine and run it for at least 5 seconds at idle speed.
- 2) Select "MODE 3" with GST.

OR



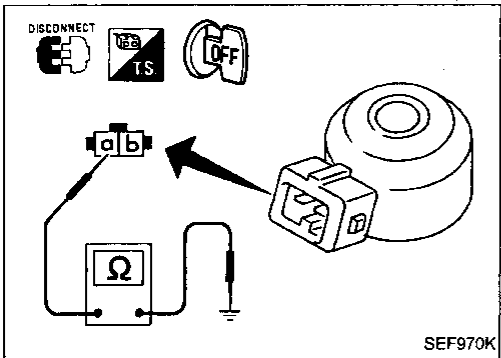
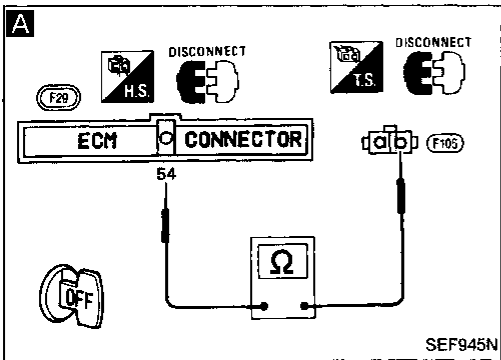
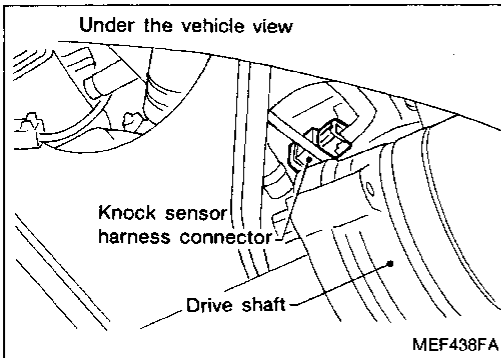
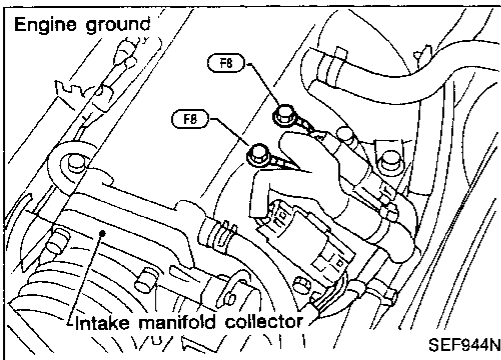
- 1) Start engine and run it for at least 5 seconds at idle speed.
- 2) Turn ignition switch "OFF", wait for at least 3 seconds and then "ON".
- 3) Perform "Diagnostic Test Mode II (Self-diagnostic results)" with ECM.



# TROUBLE DIAGNOSIS FOR DTC 34

## Knock Sensor (KS) (DTC: P0325) (Cont'd)

### DIAGNOSTIC PROCEDURE



INSPECTION START

Loosen and retighten engine ground screws.

**A**  
**CHECK INPUT SIGNAL CIRCUIT.**  
 1) Turn ignition switch "OFF".  
 2) Disconnect ECM harness connector and knock sensor harness connector.  
 3) Check harness continuity between terminal ① and ECM terminal ⑤4 .  
**Continuity should exist.**

NG  
 Check the following.  
 ● Harness connectors, (F33), (F100)  
 ● Harness continuity between ECM and knock sensor  
 If NG, repair harness or connectors.

OK  
**CHECK COMPONENT**  
 (Knock sensor).  
 Refer to "COMPONENT INSPECTION".  
 (See page EC-132.)

NG  
 Replace knock sensor.

OK  
 Disconnect and reconnect harness connectors in the circuit, and retest.

Trouble is not fixed.  
 Check ECM pin terminals for damage or the connection of ECM harness connector. Reconnect ECM harness connector and retest.

INSPECTION END

### COMPONENT INSPECTION

#### Knock sensor

1. Disconnect knock sensor harness connector.
2. Check continuity between terminal ③ and ground.

**Continuity should exist.**

- It is necessary to use an ohmmeter which can measure more than 10 MΩ.

#### CAUTION:

Discard any knock sensor which has been dropped or undergone shocks; use a new one.