

## DTC Troubleshooting

### DTC P0010: VTC Oil Control Solenoid Valve Malfunction

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Start the engine. Hold the engine speed at 3,000 rpm without load (in Park or neutral) until the radiator fan comes on, then let it idle.
4. Do the VTC TEST in the INSPECTION MENU with the HDS.
5. Check for Temporary DTCs or DTCs with the HDS.

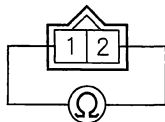
*Is DTC P0010 indicated?*

**YES**—Go to step 6.

**NO**—Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the VTC oil control solenoid valve and the ECM/PCM. ■

6. Turn the ignition switch OFF.
7. Disconnect the VTC oil control solenoid valve 2P connector.
8. Measure resistance between VTC oil control solenoid valve 2P connector terminals No. 1 and No. 2.

#### VTC OIL CONTROL SOLENOID VALVE 2P CONNECTOR



Terminal side of male terminals

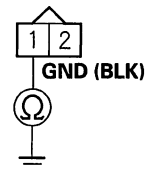
*Is there 6.75–8.25  $\Omega$  at room temperature?*

**YES**—Go to step 9.

**NO**—Go to step 15.

9. Check for continuity between VTC oil control solenoid valve 2P connector terminal No. 1 and body ground.

#### VTC OIL CONTROL SOLENOID VALVE 2P CONNECTOR



Wire side of female terminals

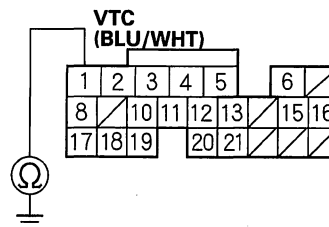
*Is there continuity?*

**YES**—Go to step 10.

**NO**—Repair open in the wire between the VTC oil control solenoid valve and G101, then go to step 16.

10. Jump the SCS line with the HDS.
11. Disconnect ECM/PCM connector B (24P).
12. Check for continuity between ECM/PCM connector terminal B1 and body ground.

#### ECM/PCM CONNECTOR B (24P)



Wire side of female terminals

*Is there continuity?*

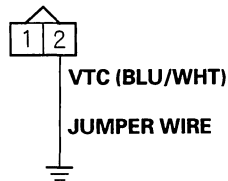
**YES**—Repair short in the wire between the ECM/PCM (B1) and the VTC oil control solenoid valve, then go to step 16.

**NO**—Go to step 13.



- Connect VTC oil control solenoid valve 2P connector terminal No. 2 to body ground with a jumper wire.

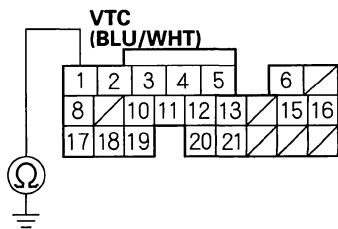
**VTC OIL CONTROL SOLENOID VALVE 2P CONNECTOR**



Wire side of female terminals

- Check for continuity between ECM/PCM connector terminal B1 and body ground.

**ECM/PCM CONNECTOR B (24P)**



Wire side of female terminals

*Is there continuity?*

**YES**—Go to step 23.

**NO**—Repair open in the wire between the ECM/PCM (B1) and the VTC oil control solenoid valve, then go to step 16.

- Replace the VTC oil control solenoid valve (see page 11-295).

- Reconnect all connectors.

- Turn the ignition switch ON (II).

- Reset the ECM/PCM with the HDS.

- Do the ECM/PCM idle learn procedure (see page 11-316).

- Do the VTC TEST in the INSPECTION MENU with the HDS.

- Check for Temporary DTCs or DTCs with the HDS.

*Are any Temporary DTCs or DTCs indicated?*

**YES**—If DTC P0010 is indicated, check for poor connections or loose terminals at the VTC oil control solenoid valve and the ECM/PCM, then go to step 1. If any other Temporary DTCs or DTCs are indicated, go to the indicated DTC's troubleshooting.

**NO**—Go to step 22.

(cont'd)