



DTC P2646: Rocker Arm Oil Pressure Switch (VTEC Oil Pressure Switch) Circuit Low Voltage

Special Tools Required

- Pressure gauge adapter 07NAJ-P07010A
- A/T low pressure gauge w/panel 07406-0070300
- A/T pressure hose 07406-0020201
- A/T pressure hose, 2,210 mm 07MAJ-PY4011A
- A/T pressure adapter 07MAJ-PY40120
- Oil pressure hose 07ZAJ-S5A0200

1. Check the engine oil level.

Is the level OK?

YES—Go to step 2.

NO—Adjust the engine oil to the proper level, then go to step 19.

2. Turn the ignition switch ON (II).
3. Clear the DTC with the HDS.
4. Do the VTEC TEST in the INSPECTION MENU with the HDS.

Is the result OK?

YES—Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the rocker arm oil pressure switch (VTEC oil pressure switch), the rocker arm oil control solenoid (VTEC solenoid valve), and the ECM/PCM. ■

NO—Go to step 5.

5. Turn the ignition switch OFF.
6. Disconnect the rocker arm oil pressure switch (VTEC oil pressure switch) 2P connector.
7. Turn the ignition switch ON (II).
8. Check the VTEC PRES SW in the DATA LIST with the HDS.

Is SWITCH ON indicated?

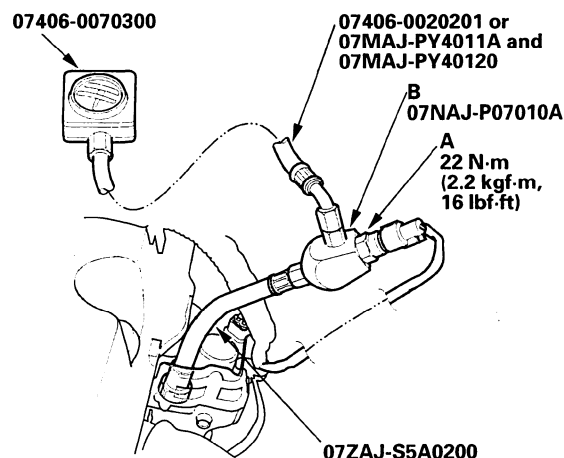
YES—Go to step 14.

NO—Go to step 9.

9. Turn the ignition switch OFF.

10. Remove the rocker arm oil pressure switch (VTEC oil pressure switch) (A) and install the special tools as shown, then install the rocker arm oil pressure switch (VTEC oil pressure switch) to the oil pressure gauge adapter (B).

NOTE: Install the switch in the reverse order of removal with a new O-ring.



11. Start the engine.
12. Do the VTEC TEST in the INSPECTION MENU with the HDS.
13. Check the oil pressure.

Does the oil pressure increase to at least 392 kPa (56.9 psi, 4.0 kgf/cm²)?

YES—Replace the rocker arm oil pressure switch (VTEC oil pressure switch) (see page 11-298), then go to step 18.

NO—Inspect the VTEC system. If it is OK, replace the rocker arm oil control solenoid (VTEC solenoid valve) (see page 11-297), then go to step 18.
14. Turn the ignition switch OFF.
15. Jump the SCS line with the HDS.
16. Disconnect ECM/PCM connector B (24P).

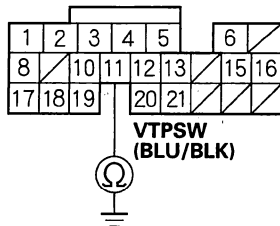
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VTEC/VTC

DTC Troubleshooting (cont'd)

17. Check for continuity between ECM/PCM connector terminal B11 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 (B11) and the rocker arm oil pressure switch (VTEC oil pressure switch), then go to step 18.

NO—Go to step 25.

18. Reconnect all connectors.
19. Turn the ignition switch ON (II).
20. Reset the ECM/PCM with the HDS.
21. Do the ECM/PCM idle learn procedure (see page 11-316).
22. Do the VTEC TEST in the INSPECTION MENU with the HDS.

23. Check for Temporary DTCs or DTCs with the HDS.

Are any Temporary DTCs or DTCs indicated?

YES—If DTC P2646 is indicated, check for poor connections or loose terminals at the rocker arm oil pressure switch (VTEC oil pressure switch), the rocker arm oil control solenoid (VTEC 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 24.

24. Monitor the OBD STATUS for DTC P2646 in the DTCs MENU with the HDS.

Does the screen indicate PASSED?

YES—Troubleshooting is complete. ■

NO—If the screen indicates FAILED, go to step 1 and recheck. If the screen indicates NOT COMPLETED, go to step 22 and recheck.

25. Update the ECM/PCM if it does not have the latest software, or substitute a known-good ECM/PCM (see page 11-6).
26. Do the VTEC TEST in the INSPECTION MENU with the HDS.
27. Check for Temporary DTCs or DTCs with the HDS.

Are any Temporary DTCs or DTCs indicated?

YES—If DTC P2646 is indicated, check for poor connections or loose terminals at the rocker arm oil pressure switch (VTEC oil pressure switch), the rocker arm oil control solenoid (VTEC 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—If the ECM/PCM was updated, troubleshooting is complete. If the ECM/PCM was substituted, replace the original ECM/PCM (see page 11-227). ■



DTC P2647: Rocker Arm Oil Pressure Switch (VTEC Oil Pressure Switch) Circuit High Voltage

1. Check the engine oil level.

Is the level OK?

YES—Go to step 2.

NO—Adjust the engine oil to the proper level, then go to step 14.

2. Turn the ignition switch ON (II).
3. Clear the DTC with the HDS.
4. Do the VTEC TEST in the INSPECTION MENU with the HDS.

Is the result OK?

YES—Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the rocker arm oil pressure switch (VTEC oil pressure switch) and the ECM/PCM. ■

NO—Go to step 5.

5. Check the result of step 4.

- VTEC Switch Failure
- VTEC Switch Open
- VTEC Switch SIG Line Open
- VTEC Switch GND Line Open

Is the test result any of the above?

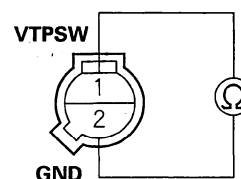
YES—Go to step 6.

NO—Check for poor connections or loose terminals at the rocker arm oil pressure switch (VTEC oil pressure switch). If it is OK, replace the rocker arm oil control solenoid (VTEC solenoid valve) (see page 11-297), then go to step 14.

6. Turn the ignition switch OFF.
7. Disconnect the rocker arm oil pressure switch (VTEC oil pressure switch) 2P connector.

8. At the rocker arm oil pressure switch (VTEC oil pressure switch), check for continuity between rocker arm oil pressure switch (VTEC oil pressure switch) 2P connector terminals No. 1 and No. 2.

ROCKER ARM OIL PRESSURE SWITCH (VTEC OIL PRESSURE SWITCH) 2P CONNECTOR



Terminal side of male terminals

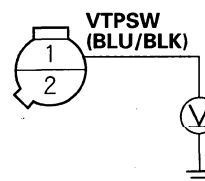
Is there continuity?

YES—Go to step 9.

NO—Replace the rocker arm oil pressure switch (VTEC oil pressure switch) (see page 11-298), then go to step 13.

9. Turn the ignition switch ON (II).
10. Measure voltage between rocker arm oil pressure switch (VTEC oil pressure switch) 2P connector terminal No. 1 and body ground.

ROCKER ARM OIL PRESSURE SWITCH (VTEC OIL PRESSURE SWITCH) 2P CONNECTOR



Wire side of female terminals

Is there battery voltage?

YES—Repair open in the wire between the rocker arm oil pressure switch (VTEC oil pressure switch) and G101, then go to step 13.

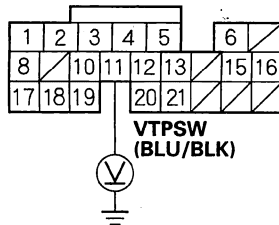
NO—Go to step 11.

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DTC Troubleshooting (cont'd)

11. Measure voltage between ECM/PCM connector terminal B11 and body ground.

ECM/PCM CONNECTOR B (24P)



Wire side of female terminals

Is there battery voltage?

YES—Repair open in the wire between the ECM/PCM (B11) and the rocker arm oil pressure switch (VTEC oil pressure switch), then go to step 12.

NO—Go to step 19.

12. Turn the ignition switch OFF.
13. Reconnect the rocker arm oil pressure switch (VTEC oil pressure switch) 2P connector.
14. Turn the ignition switch ON (II).
15. Reset the ECM/PCM with the HDS.
16. Do the ECM/PCM idle learn procedure (see page 11-316).
17. Check for Temporary DTCs or DTCs with the HDS.

Are any Temporary DTCs or DTCs indicated?

YES—If DTC P2647 is indicated, check for poor connections or loose terminals at the rocker arm oil pressure switch (VTEC oil pressure switch) 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 18.

18. Monitor the OBD STATUS for DTC P2647 in the DTCs MENU with the HDS.

Does the screen indicate PASSED?

YES—Troubleshooting is complete. ■

NO—If the screen indicates FAILED, then go to step 1 and recheck. If the screen indicates NOT COMPLETED, go to step 16 and recheck.

19. Update the ECM/PCM if it does not have the latest software, or substitute a known-good ECM/PCM (see page 11-6).
20. Check for Temporary DTCs or DTCs with the HDS.

Are any Temporary DTCs or DTCs indicated?

YES—If DTC P2647 is indicated, check for poor connections or loose terminals at the rocker arm oil pressure switch (VTEC oil pressure switch) 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—If the ECM/PCM was updated, troubleshooting is complete. If the ECM/PCM was substituted, replace the original ECM/PCM (see page 11-227). ■