

**DTC P2647: ROCKER ARM OIL PRESSURE SWITCH (VTEC OIL PRESSURE SWITCH) CIRCUIT HIGH VOLTAGE**

**NOTE:** Before you troubleshoot, record all freeze data and any on-board snapshot, and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

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 .
  - Rocker Arm Oil Pressure Switch (VTEC Oil Pressure Switch) Failure
  - Rocker Arm Oil Pressure Switch (VTEC Oil Pressure Switch) Open
  - Rocker Arm Oil Pressure Switch (VTEC Oil Pressure Switch) SIG Line Open
  - Rocker Arm Oil Pressure Switch (VTEC Oil Pressure Switch) GND Line Open

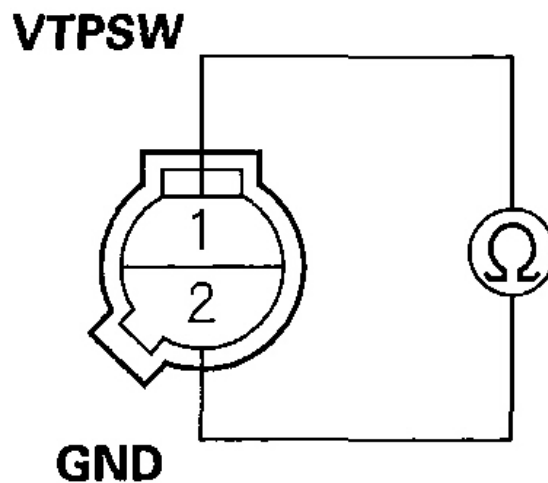
*Is the test result any of the above?*

**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 step CMP SENSOR A REPLACEMENT ), then go to 14 .

6. Turn the ignition switch OFF.
7. Disconnect the rocker arm oil pressure switch (VTEC oil pressure switch) 2P connector.
8. 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

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**Fig. 16: Checking Continuity Between Rocker Arm Oil Pressure Switch 2P Connector Terminals**  
Courtesy of AMERICAN HONDA MOTOR CO., INC.

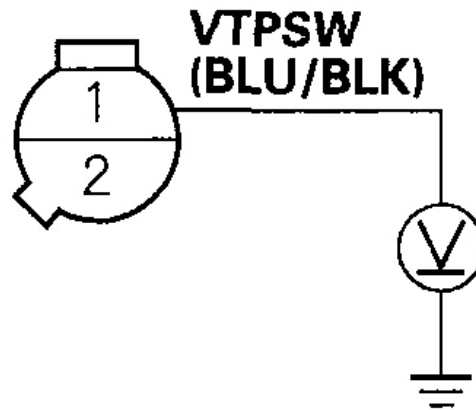
*Is there continuity?*

**YES-** Go to step 9 .

**NO-** Replace the rocker arm oil pressure switch (VTEC oil pressure switch) (see **ROCKER ARM OIL PRESSURE SWITCH (VTEC OIL PRESSURE SWITCH) REMOVAL/INSTALLATION** ), 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

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**Fig. 17: Measuring Voltage Between Rocker Arm Oil Pressure Switch 2P Connector Terminal And Body Ground**

Courtesy of AMERICAN HONDA MOTOR CO., INC.

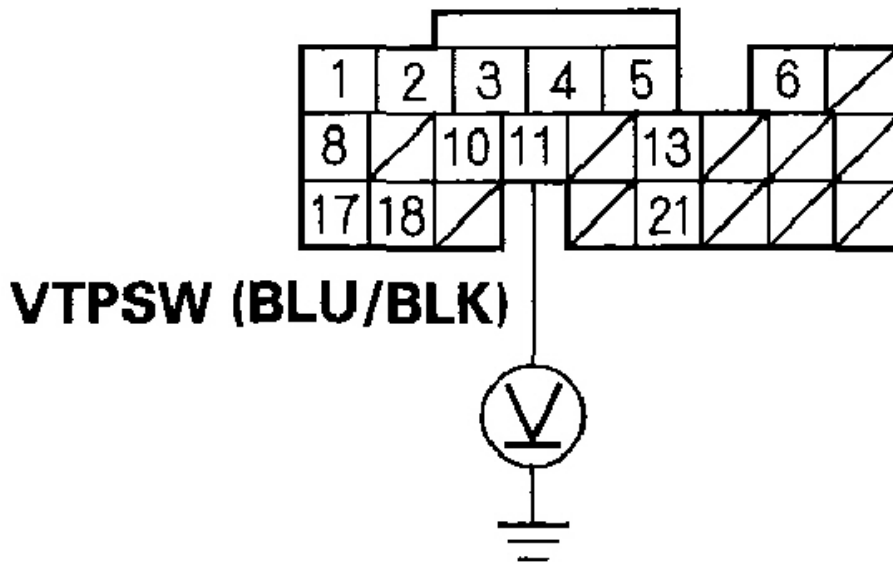
*Is there battery voltage?*

**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.

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

## ECM/PCM CONNECTOR B (24P)



### Wire side of female terminals

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**Fig. 18: Measuring Voltage Between ECM/PCM Connector Terminal B11 And Body Ground**  
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

*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 **ECM/PCM IDLE LEARN PROCEDURE** ).
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, go to step 1 and recheck. If the screen indicates NOT COMPLETED, go to 16 , and recheck.

19. Update the ECM/PCM if it does not have the latest software, or substitute a known-good ECM/PCM (see **ECM/PCM UPDATING AND SUBSTITUTION FOR TESTING** ).
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 **ECM/PCM REPLACEMENT** ).