screen indicates NOT COMPLETED, go to step 23.

DTC P0976: SHORT IN SHIFT SOLENOID VALVE B CIRCUIT

NOTE:

- Before you troubleshoot, record all freeze data and any on-board snapshot, and review General Troubleshooting Information (see GENERAL TROUBLESHOOTING INFORMATION).
- This code is caused by an electrical circuit problem and cannot be caused by a mechanical problem in the transmission.
- 1. Turn the ignition switch to ON (II).
- 2. Clear the DTC with the HDS.
- 3. Start the engine in P, and wait for at least 1 second.
- 4. Check for DTCs with the HDS.

Is DTC P0976 indicated?

YES -Go to step 8.

NO -Go to step 5.

5. Select Shift Solenoid B in the Miscellaneous Test Menu, and test shift solenoid valve B with the HDS.

Is a clicking sound heard?

YES -Go to step 6.

NO -Go to step 8.

- 6. Start the engine in P, and wait for at least 1 second.
- 7. Monitor the OBD STATUS for P0976 in the DTCs MENU with the HDS.

Does the screen indicate FAILED?

YES -Go to step 8.

NO -If the screen indicates PASSED, intermittent failure, the system is OK at this time. Check for intermittent short to body ground in the wire between shift solenoid valve B and the PCM. If the screen indicates NOT COMPLETED, go to step 5.

- 8. Turn the ignition switch to LOCK (0).
- 9. Jump the SCS line with the HDS.
- 10. Disconnect PCM connectors A (31P) and C (22P).
- 11. Measure the resistance between PCM connector terminals C8 and A3.

PCM CONNECTORS



Wire side of female terminals

Fig. 170: Measuring Resistance Between PCM Connector Terminals C8 And A3 Courtesy of AMERICAN HONDA MOTOR CO., INC.

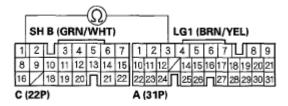
Is there less than 12 ohms?

YES -Go to step 12.

NO -Go to step 24.

- 12. Disconnect the shift solenoid harness connector at the transmission housing.
- 13. Check for continuity between PCM connector terminals C8 and A3.

PCM CONNECTORS



Wire side of female terminals

Fig. 171: Checking Continuity Between PCM Connector Terminals C8 And A3 Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Repair short to body ground in the wire between PCM connector terminal C8 and the shift solenoid harness connector, then go to step 17.

NO -Go to step 14.

14. Inspect shift solenoid valve B and the shift solenoid harness (see **SHIFT SOLENOID VALVE TEST/REPLACEMENT**).

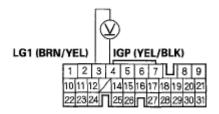
Are shift solenoid valve B and the harness OK?

YES -Go to step 15.

NO -Replace shift solenoid valve B or the shift solenoid harness (see **SHIFT SOLENOID VALVE TEST/REPLACEMENT**), then go to step 17.

- 15. Turn the ignition switch to ON (II).
- 16. Measure the voltage between PCM connector terminals A4 and A3.

PCM CONNECTOR A (31P)



Wire side of female terminals

Fig. 172: Measuring Voltage Between PCM Connector Terminals A4 And A3 Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES -Go to step 24.

NO -Check for a blown No. 8 fuse in the under-hood fuse/relay box, and check PGM-FI main relay 1. If the fuse and the relay are OK, repair open in the wire between PCM connector terminal A4 and the under-hood fuse/relay box, then go to step 17.

- 17. Reconnect all connectors.
- 18. Turn the ignition switch to ON (II).
- 19. Clear the DTC with the HDS.
- 20. Start the engine in P, and wait for at least 1 second.
- 21. Test-drive the vehicle so that it shifts from 1st gear to 4th gear in D, then run the vehicle in 3rd or 4th gear for at least 1 second.
- 22. Check for DTCs with the HDS.

Is DTC P0976 indicated?

YES -Check for intermittent short to body ground in the wire between shift solenoid valve B and the PCM, then go to step 1.

NO -Go to step 23.

23. Monitor the OBD STATUS for P0976 in the DTCs MENU with the HDS.

Does the screen indicate PASSED?

YES -Troubleshooting is complete. If any other DTCs were indicated in step 22, go to the **INDICATED DTCS TROUBLESHOOTING**.

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NO -If the screen indicates FAILED, check for intermittent short to body ground in the wire between shift solenoid valve B and the PCM, then go to step 1. If the screen indicates NOT COMPLETED, go to step 20.

- 24. Update the PCM if it does not have the latest software (see <u>UPDATING THE PCM</u>), or substitute a known-good PCM (see <u>SUBSTITUTING THE PCM</u>).
- 25. Start the engine in P, and wait for at least 1 second.
- 26. Test-drive the vehicle so that it shifts from 1st gear to 4th gear in D, then run the vehicle in 3rd or 4th gear for at least 1 second.
- 27. Check for DTCs with the HDS.

Is DTC P0976 indicated?

YES -Check for intermittent short to body ground in the wire between shift solenoid valve B and the PCM. If the PCM was updated, substitute a known-good PCM (see **SUBSTITUTING THE PCM**), then go to step 25. If the PCM was substituted, go to step 1.

NO -Go to step 28.

28. Monitor the OBD STATUS for P0976 in the DTCs MENU with the HDS.

Does the screen indicate PASSED?

YES -If the PCM was updated, troubleshooting is complete. If the PCM was substituted, replace the original PCM (see <u>ECM/PCM REPLACEMENT</u>). If any other DTCs were indicated in step 27, go to the <u>INDICATED DTC'S TROUBLESHOOTING</u>.

NO -If the screen indicates FAILED, check for intermittent short to body ground in the wire between shift solenoid valve B and the PCM. If the PCM was updated, substitute a known-good PCM (see **SUBSTITUTING THE PCM**), then go to step 25. If the PCM was substituted, go to step 1. If the screen indicates NOT COMPLETED, go to step 25.

DTC P0977: OPEN IN SHIFT SOLENOID VALVE B CIRCUIT

NOTE:

- Before you troubleshoot, record all freeze data and any on-board snapshot, and review General Troubleshooting Information (see GENERAL TROUBLESHOOTING INFORMATION).
- This code is caused by an electrical circuit problem and cannot be caused by a mechanical problem in the transmission.
- 1. Turn the ignition switch to ON (II).
- 2. Clear the DTC with the HDS.
- 3. Test-drive the vehicle so that it shifts from 1st gear to 4th gear in D, then run the vehicle in 3rd or 4th gear for at least 1 second.
- 4. Check for DTCs with the HDS.

YES -Go to step 8.

NO -Go to step 5.

5. Select Shift Solenoid B in the Miscellaneous Test Menu, and test shift solenoid valve B with the HDS.

Is a clicking sound heard?

YES -Go to step 6.

NO -Go to step 8.

- 6. Test-drive the vehicle so that it shifts from 1st gear to 4th gear in D, then run the vehicle in 3rd or 4th gear for at least 1 second.
- 7. Monitor the OBD STATUS for P0977 in the DTCs MENU with the HDS.

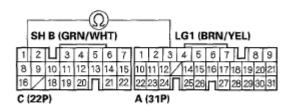
Does the screen indicate FAILED?

YES -Go to step 8.

NO -If the screen indicates PASSED, intermittent failure, the system is OK at this time. Check for poor connections or loose terminals between shift solenoid valve B and the PCM. If the screen indicates NOT COMPLETED, go to step $\underline{5}$.

- 8. Turn the ignition switch to LOCK (0).
- 9. Jump the SCS line with the HDS.
- 10. Disconnect PCM connectors A (31P) and C (22P).
- 11. Measure the resistance between PCM connector terminals C8 and A3.

PCM CONNECTORS



Wire side of female terminals

<u>Fig. 173: Measuring Resistance Between PCM Connector Terminals C8 And A3 Courtesy of AMERICAN HONDA MOTOR CO., INC.</u>

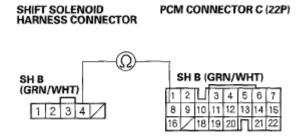
Is there 12-25 ohms?

YES -Go to step 23.

NO -Go to step 12.

12. Disconnect the shift solenoid harness connector at the transmission housing.

13. Check for continuity between PCM connector terminal C8 and shift solenoid harness connector terminal No. 4.



Wire side of female terminals

Fig. 174: Checking Continuity Between PCM Connector Terminal C8 And Shift Solenoid Harness Connector Terminal No. 4
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Go to step 14.

- **NO** -Repair open in the wire between PCM connector terminal C8 and the shift solenoid harness connector, then go to step 16.
- 14. Remove the shift solenoid harness connector (see **SHIFT SOLENOID VALVE TEST/REPLACEMENT**).
- 15. Check for continuity between shift solenoid harness connector terminal No. 4 and the shift solenoid valve B connector terminal.

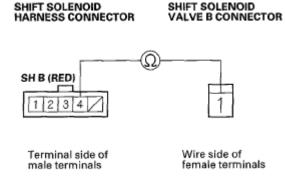


Fig. 175: Checking Continuity Between Shift Solenoid Harness Connector Terminal No. 4 And Shift Solenoid Valve B Connector Terminal Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Replace shift solenoid valve B (see **SHIFT SOLENOID VALVE TEST/REPLACEMENT**), then go to step 16.

NO -Replace the shift solenoid harness (see **SHIFT SOLENOID VALVE**

TEST/REPLACEMENT), then go to step 16.

- 16. Reconnect all connectors.
- 17. Turn the ignition switch to ON (II).
- 18. Clear the DTC with the HDS.
- 19. Start the engine in P, and wait for at least 1 second.
- 20. Test-drive the vehicle so that it shifts from 1st gear to 4th gear in D, then run the vehicle in 3rd or 4th gear for at least 1 second.
- 21. Check for DTCs with the HDS.

Is DTC P0977 indicated?

YES -Check for poor connections or loose terminals between shift solenoid valve B and the PCM, then go to step 1.

NO -Go to step 22.

22. Monitor the OBD STATUS for P0977 in the DTCs MENU with the HDS.

Does the screen indicate PASSED?

YES -Troubleshooting is complete. If any other DTCs were indicated in step 21, go to the **INDICATED DTCS TROUBLESHOOTING**.

- **NO** -If the screen indicates FAILED, check for poor connections or loose terminals between shift solenoid valve B and the PCM, then go to step 1. If the screen indicates NOT COMPLETED, go to step 19.
- 23. Update the PCM if it does not have the latest software (see <u>UPDATING THE PCM</u>), or substitute a known-good PCM (see <u>SUBSTITUTING THE PCM</u>).
- 24. Start the engine in P, and wait for at least 1 second.
- 25. Test-drive the vehicle so that it shifts from 1st gear to 4th gear in D, then run the vehicle in 3rd or 4th gear for at least 1 second.
- 26. Check for DTCs with the HDS.

Is DTC P0977 indicated?

YES -Check for poor connections or loose terminals between shift solenoid valve B and the PCM. If the PCM was updated, substitute a known-good PCM (see **SUBSTITUTING THE PCM**), then go to step 24. If the PCM was substituted, go to step 1.

NO -Go to step 27.

27. Monitor the OBD STATUS for P0977 in the DTCs MENU with the HDS.

Does the screen indicate PASSED?

YES -If the PCM was updated, troubleshooting is complete. If the PCM was substituted, replace the

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original PCM (see <u>ECM/PCM REPLACEMENT</u>). If any other DTCs were indicated in step 26, go to the <u>INDICATED DTCS TROUBLESHOOTING</u>.

NO -If the screen indicates FAILED, check for poor connections or loose terminals between shift solenoid valve B and the PCM. If the PCM was updated, substitute a known-good PCM (see **SUBSTITUTING THE PCM**), then go to step 24. If the PCM was substituted, go to step 1. If the screen indicates NOT COMPLETED, go to step 24.

DTC P0979: SHORT IN SHIFT SOLENOID VALVE C CIRCUIT

NOTE:

- Before you troubleshoot, record all freeze data and any on-board snapshot, and review General Troubleshooting Information (see GENERAL TROUBLESHOOTING INFORMATION).
- This code is caused by an electrical circuit problem and cannot be caused by a mechanical problem in the transmission.
- 1. Turn the ignition switch to ON (II).
- 2. Clear the DTC with the HDS.
- 3. Test-drive the vehicle in 1st gear in D for at least 1 second.
- 4. Check for DTCs with the HDS.

Is DTC P0979 indicated?

YES -Go to step 8.

NO -Go to step 5.

5. Select Shift Solenoid C in the Miscellaneous Test Menu, and test shift solenoid valve C with the HDS.

Is a clicking sound heard?

YES -Go to step 6.

NO -Go to step 8.

- 6. Test-drive the vehicle in 1st gear in D for at least 1 second.
- 7. Monitor the OBD STATUS for P0979 in the DTCs MENU with the HDS.

Does the screen indicate FAILED?

YES -Go to step 8.

NO -If the screen indicates PASSED, intermittent failure, the system is OK at this time. Check for intermittent short to body ground in the wire between shift solenoid valve C and the PCM. If the screen indicates NOT COMPLETED, go to step 5.

- 8. Turn the ignition switch to LOCK (0).
- 9. Jump the SCS line with the HDS.