

DTC P1811: MAXIMUM ADAPT & LONG SHIFT

NOTE: Perform OBD system check prior to performing diagnostic procedures. For wire circuit ID, see WIRING DIAGRAMS .

Circuit Description

Transaxle pressure is modified by an adaptive modifier which controls shift execution time. This test checks time required to accomplish the shift. If shift takes longer than .65 seconds, and adaptive modifier cannot shorten this time, then counter increases by one. DTC P1811 will set if PCM detects counter reaching 2.

Conditions For Setting DTC P1811

DTC will set under the following conditions:

Condition No. 1:

- 1-2 shift is longer than .65 seconds.
- 1-2 shift adapt has reached its limit.

Condition No. 2:

- 2-3 shift is longer than .65 seconds.
- 2-3 shift adapt has reached its limit.

Condition No. 3:

- 3-4 shift is longer than .65 seconds.
- 3-4 shift adapt has reached its limit.

MIL does NOT light at first failure signal. PCM commands maximum line pressure and disables shift adapts.

Diagnostic Procedures

1. Ensure transaxle fluid level is correct. Connect scan tool to DLC. Turn ignition switch to ON position. DO NOT start engine. Using scan tool, record failure records for reference. Data will be lost when DTCs are cleared later in this test. If DTCs P0120, P0121, P0122, P0123, P0218, P0502, P0503, P0711, P0712, P1121, P1122 or P1524, are present, diagnose these DTCs first, then go to step 10). If DTCs P0120, P0121, P0122, P0123, P0218, P0502, P0503, P0711, P0712, P1121, P1122 or P1524, are not present, go to next step.
2. Use scan tool snapshot mode to record shift times. Drive vehicle in "D4" in order to obtain a 1-2, 2-3 and 3-4 upshift. Record shift times. If all shift times do not exceed .65 seconds, go to step 4). If all shift times exceeded .65 seconds, perform LINE PRESSURE TEST in the TRANSMISSION OVERHAUL - A/T (4T65-T) article. If line pressure is within specification, see DIAGNOSTIC AIDS. If line pressure is not within specifications, go to next step.
3. Inspect transaxle for following conditions: Low fluid level caused by external leaks. Clogged fluid filter.

Out of position fluid filter. Internal fluid passage leaks. Casting porosity or damage. Damaged gasket or spacer plate. Out of position gasket or spacer plate. Contaminated, damaged or stuck pressure control solenoid. Stuck or leaking pressure regulator valve. Stuck or leaking torque signal valve. Leaking or damaged oil pump. Inadequate oil pump suction. Oil pump cavitation. Repair components as needed, then go to step 10).

4. If 1-2 shift time exceeded .65 seconds, go to next step. If 1-2 shift time did not exceed .65 seconds, go to step 6).
5. Inspect transaxle for following conditions: Leaking, rolled or cut 1-2 accumulator piston seals. Leaking, rolled or cut 2nd clutch piston seals. Burned or damaged 2nd clutch plates. Broken or out of position 2nd clutch springs. Damaged 2nd clutch piston. Leaking or damaged driven sprocket support seals. Internal fluid passage leaks. Casting porosity or damage. Damaged gasket or spacer plate. Out of position gasket or spacer plate. Slipping forward clutch. Damaged sprag clutch (not holding). 2nd roller clutch damaged (not holding). Repair components as needed, then go to step 10).
6. If 2-3 shift time exceeded .65 seconds, go to next step. If 2-3 shift time did not exceed .65 seconds, go to step 8).
7. Inspect transaxle for following conditions: Leaking, rolled or cut 2-3 accumulator piston seals. Leaking, rolled or cut 3rd clutch piston seals. Burned or damaged 3rd clutch plates. Out of position or broken 3rd clutch springs. Damaged 3rd clutch piston. Leaking or damaged driven sprocket support seals. Damaged driven sprocket support. Internal fluid passage leaks. Casting porosity or damage. Damaged gasket or spacer plate. Out of position gasket or spacer plate. Damaged sprag clutch (not holding). Repair components as needed, then go to step 10).
8. If 3-4 shift time exceeded .65 seconds, go to next step. If 3-4 shift time did not exceed .65 seconds, go to step 10).
9. Inspect transaxle for following conditions: Leaking, rolled or cut 3-4 accumulator piston seals. Leaking, rolled or cut forward servo piston seals. Burned, damaged, slipping or out of position forward band. Slipping 3rd clutch. Internal fluid passage leaks. Casting porosity or damage. Damaged gasket or spacer plate. Out of position gasket or spacer plate. Damaged or seized forward servo pin. Damaged, cracked or leaking forward servo cover. Repair components as needed, then go to next step.
10. After repair is complete, select DTC on scan tool. Select "Clear Info" function. Select "Specific DTC" and enter DTC "P1811". Operate vehicle in "D4" in order to obtain 1-2, 2-3 and 3-4 upshifts. Shift times must be less than .65 seconds. If DTC P1811 is not present, repair is complete. If DTC P1811 is still present, repeat test.

Diagnostic Aids

Inspect for possible vehicle overloading, exceeding trailer towing limit, or towing in overdrive. Ensure PCM has latest update. If transaxle overhaul was performed, use scan tool to clear all adapts.