FD: Brake Pedal Inputs



FD1 CHECK FOR DIAGNOSTIC TROUBLE CODES (DTC)

Are DTCs P0504, P0572, P0573, P0703, P1572, or P1703 present?

| Yes | No |
|--|---|
| For KOEO or continuous memory DTCs P0504, P0572, P0573, P0703, P1703 and continuous memory DTC P1572, GO to FD3. | For all others, GO to Section 4, <u>Diagnostic</u> <u>Trouble Code (DTC) Charts and Descriptions</u> . |
| For KOER DTCs P0703, or P1703, GO to FD2. | |

FD2 KOER DTCS P0703 AND P1703: VERIFY THE BRAKE PEDAL WAS APPLIED

Was the brake pedal applied and released during the KOER self-test?

| Yes | No |
|--------------------|--|
| GO to <u>FD3</u> . | REPEAT the KOER self-test. APPLY and RELEASE the brake pedal during the KOER test. |
| | CLEAR the DTCs. REPEAT the self-test. |

FD3 DTCS P0572, P0573, P0703, P1572 AND P1703: CHECK THE OPERATION OF THE STOPLAMPS

- Ignition ON, engine OFF.
- Apply and release the brake pedal and check the stop lamp operation.

Do the stoplamps operate correctly?

| Yes | No |
|------------------------------------|--|
| For Crown Victoria, | |
| Flex, | |
| Grand Marquis, | |
| MKS, | REFER to the Workshop Manual Section 417-01, |
| Sable, | Exterior Lighting, to DIAGNOSE the inoperative stoplamps. REPAIR as necessary. CLEAR the |
| Taurus, | DTCs. REPEAT the self-test. |
| Taurus X, and | |
| Town Car, GO to <u>FD4</u> . | |
| For all others, GO to <u>FD5</u> . | |

FD4 CHECK THE BRAKE SWITCH OPERATION

- Ignition ON, engine OFF.
- Access the PCM and monitor the BOO PID.
- Apply and release the brake pedal while monitoring the brake position PID.

Does the PID cycle ON and OFF?

| Yes | No |
|--------------------|---|
| GO to <u>FD6</u> . | REFER to the Workshop Manual Section 418-00, Module Communications Network, to DIAGNOSE the powertrain control module (PCM) not responding to the scan tool. REPAIR as necessary. CLEAR the DTCs. REPEAT the self- test. |

FD5 CHECK FOR BPP CIRCUIT CYCLING

- Ignition OFF.
- PCM connector disconnected.
- Ignition ON, engine OFF.
- Apply and release the brake pedal while monitoring the voltage.
- Measure the voltage between:

| (+) PCM Connector, Harness Side | (-) |
|---------------------------------|--------|
| BPP | Ground |

Is voltage less than 1 volt with the brake pedal released and greater than 10 volts with the brake pedal fully applied?

| Yes | No |
|------------------------------------|--|
| For Ranger, GO to <u>FD7</u> . | REPAIR the open circuit. CLEAR the DTCs. |
| For all others, GO to <u>FD6</u> . | REPEAT the self-test. |

FD6 CHECK FOR BRAKE PRESSURE SWITCH CIRCUIT CYCLING

- Ignition OFF.
- PCM connector disconnected.
- Ignition ON, engine OFF.
- Apply and release the brake pedal while monitoring the voltage.
- Measure the voltage between:

| (+) PCM Connector, Harness Side | (-) |
|---------------------------------|--------|
| BPS | Ground |

Is voltage greater than 10 volts with the brake pedal released and less than 1 volt with the brake pedal fully applied?

| Yes | No |
|--------------------|--|
| GO to <u>FD7</u> . | REFER to the Workshop Manual Section 310-03, Speed Control. CARRY OUT the diagnostic steps for DTC P1703 to continue diagnose. |

FD7 CHECK FOR CORRECT PCM OPERATION

- Disconnect all the PCM connectors.
- Visually inspect for:
 - pushed out pins
 - corrosion
- Connect all the PCM connectors and make sure they seat correctly.
- Carry out the PCM self-test and verify the concern is still present.

Is the concern still present?

| Yes | No |
|--|--|
| INSTALL a new PCM. REFER to Section 2, <u>Flash</u> <u>Electrically Erasable Programmable Read Only</u> <u>Memory (EEPROM)</u> , Programming the VID Block for a Replacement PCM. | The system is operating correctly at this time. The concern may have been caused by a loose or corroded connector. |