Courtesy Lamp: Testing and Inspection

Test B: The Interior Lamps Stay On Continuously

PINPOINT TEST B: THE INTERIOR LAMPS STAY ON CONTINUOUSLY

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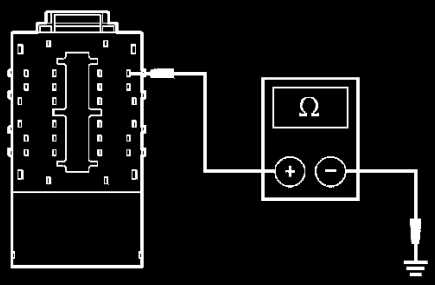
Test Step		Result / Action to Take
B1	**CHECK THE SJB DTCs FROM BOTH CONTINUOUS AND ON-DEMAND SELF-TESTS**	
	• Verify all the interior lamp switches are in the DOOR position. • Use the recorded results from the SJB continuous and on-demand self-test. • **Are any DTCs recorded?**	**Yes** For DTCs B1319, B1327, B1335, B1571, B2077 or B2902, GO to **B4**. For DTC B1374, GO to **B3**. For all other DTCs, REFER to the Smart Junction Box (SJB) Diagnostic Trouble Code (DTC) Index. **No** GO to **B2**.
B2	**CHECK THE DOOR AJAR PIDs**	
	• Key in ON position. • Enter the following diagnostic mode on the diagnostic tool: Diagnostic PID Data Monitor. • Check the door ajar PIDs while opening and closing all the doors, liftgate and liftgate glass. • **Do all the door ajar and liftgate ajar PID values agree with the door and liftgate positions?**	**Yes** GO to **B3**. **No** GO to **B4**.
B3	**CHECK CIRCUIT 401 (PK) FOR A SHORT TO GROUND**	
	• Key in OFF position. • Disconnect: SJB C2280c. • Measure the resistance between the SJB C2280c-28, circuit 401 (PK), harness side and ground.  A0087625 • **Is the resistance greater than 10,000 ohms?**	**Yes** GO to **B8**. **No** REPAIR the circuit. RUN the on-demand self-test (required to clear certain DTCs). CORRECT any unresolved DTCs. CLEAR all DTCs. TEST the system for normal operation.
B4	**CHECK CIRCUIT 570 (BK/WH) FOR AN OPEN**	
	• Key in OFF position. • Disconnect the suspect door ajar switch. • Measure the resistance between the suspect door ajar switch connector, circuit 570 (BK/WH), harness side and ground as follows:	

(Continued)

PINPOINT TEST B: THE INTERIOR LAMPS STAY ON CONTINUOUSLY (Continued)

<table>
<tr><th colspan="2">Test Step</th><th>Result / Action to Take</th></tr>
<tr><td>B4</td><td>CHECK CIRCUIT 570 (BK/WH) FOR AN OPEN (Continued)</td><td rowspan="2">Yes
GO to B5.
No
REPAIR the circuit in question. CLEAR the DTCs. REPEAT the self-test.</td></tr>
<tr><td colspan="2">
<table>
<tr><th>Location</th><th>Connector-Pin</th></tr>
<tr><td>LH front door ajar switch</td><td>C525-6</td></tr>
<tr><td>RH front door ajar switch</td><td>C609-6</td></tr>
<tr><td>LH rear door ajar switch</td><td>C704-6</td></tr>
<tr><td>RH rear door ajar switch</td><td>C804-6</td></tr>
<tr><td>Liftgate ajar switch</td><td>C478-2</td></tr>
</table>
• Is the resistance less than 5 ohms?
</td></tr>
<tr><td>B5</td><td>CHECK THE DOOR AJAR SWITCH OPERATION</td><td rowspan="2">Yes
GO to B6.
No
INSTALL a new door latch in question. CLEAR the DTCs. REPEAT the self-test.</td></tr>
<tr><td colspan="2">
• Measure the resistance between the suspect door ajar switch connector pins, component side, while toggling the switch open and closed as follows:
<table>
<tr><th>Location</th><th>Connector-Pin</th><th>Connector-Pin</th></tr>
<tr><td>LH front door ajar switch</td><td>C525-8</td><td>C525-6</td></tr>
<tr><td>RH front door ajar switch</td><td>C609-8</td><td>C609-6</td></tr>
<tr><td>LH rear door ajar switch</td><td>C704-8</td><td>C704-6</td></tr>
<tr><td>RH rear door ajar switch</td><td>C804-8</td><td>C804-6</td></tr>
<tr><td>Liftgate ajar switch</td><td>C478-1</td><td>C478-2</td></tr>
<tr><td>Liftgate glass ajar switch</td><td>C479-1</td><td>C479-2</td></tr>
</table>
• Is the resistance less than 5 ohms when the switch is closed and greater than 10,000 ohms when the switch is open?
</td></tr>
<tr><td>B6</td><td>CHECK THE DOOR AJAR SWITCH CIRCUITS</td><td></td></tr>
<tr><td colspan="3">
• Disconnect: SJB C2280d.
• Measure the resistance between the suspect door ajar switch connector, harness side and the SJB connector, harness side as follows:
</td></tr>
</table>

(Continued)

PINPOINT TEST B: THE INTERIOR LAMPS STAY ON CONTINUOUSLY (Continued)

Test Step	Result / Action to Take
B6 CHECK THE DOOR AJAR SWITCH CIRCUITS (Continued)	

Location	SJB Connector-Pin	Circuit	Suspect Ajar Switch Connector-Pin	Circuit
LH front door ajar switch	C2280d-21	1312 (LG/BK)	C525-8	1312 (LG/BK)
RH front door ajar switch	C2280d-20	867 (DB)	C609-8	867 (DB)
LH rear door ajar switch	C2280d-19	1742 (VT/LG)	C704-8	760 (PK/LB)
RH rear door ajar switch	C2280d-18	760 (PK/LB)	C804-8	760 (PK/LB)
Liftgate glass ajar switch	C2280d-17	700 (WH/VT)	C479-1	700 (WH/VT)
Liftgate ajar switch	C479-2	701 (LB/BK)	C478-1	701 (LB/BK)

- **Is the resistance less than 5 ohms?**

Yes
GO to **B7**.
No
REPAIR the circuit in question. CLEAR the DTCs. REPEAT the self-test.

B7 CHECK THE AJAR CIRCUIT FOR A SHORT TO VOLTAGE

- Key in ON position.
- Measure the voltage between the SJB connector, harness side and ground as follows:

SJB Connector-Pin	Circuit
C2280d-21	1312 (LG/BK)
C2280d-20	867 (DB)
C2280d-19	1742 (VT/LG)
C2280d-18	760 (PK/LB)
C2280d-17	700 (WH/VT)

- **Is any voltage indicated?**

Yes
REPAIR the circuit in question. CLEAR the DTCs. REPEAT the self-test.
No
GO to **B8**.

B8 CHECK FOR CORRECT SJB OPERATION

- Disconnect all the SJB connectors.
- Check for:
  - — corrosion
  - — pushed-out pins
- Connect all the SJB connectors and make sure they seat correctly.
- Operate the system and verify the concern is still present.
- **Is the concern still present?**

Yes
INSTALL a new SJB. TEST the system for normal operation.
No
The system is operating correctly at this time. The concern may have been caused by a loose or corroded connector. CLEAR the DTCs. REPEAT the self-test.

B6-B8

Normal Operation

When any door, liftgate, or liftgate glass is opened, the ajar switch opens the circuit to the smart junction box (SJB). The SJB monitors the ajar circuits, and based on the ajar status, the SJB will supply ground to the interior lamps on circuit 401 (PK).

Possible Causes

- Circuit 401 (PK) short to ground
- Circuit 570 (BK/WH) open
- Circuit 700 (WH/PK) open or short to voltage
- Circuit 701 (LB/BK) open or short to voltage
- Circuit 760 (PK/LB) open or short to voltage
- Circuit 867 (DB) open or short to voltage
- Circuit 1312 (LG/BK) open or short to voltage

- Circuit 1742 (VT/LG) open or short to voltage
- Circuit 1758 (WH/PK) open or short to voltage
- Ajar switch(es)
- SJB