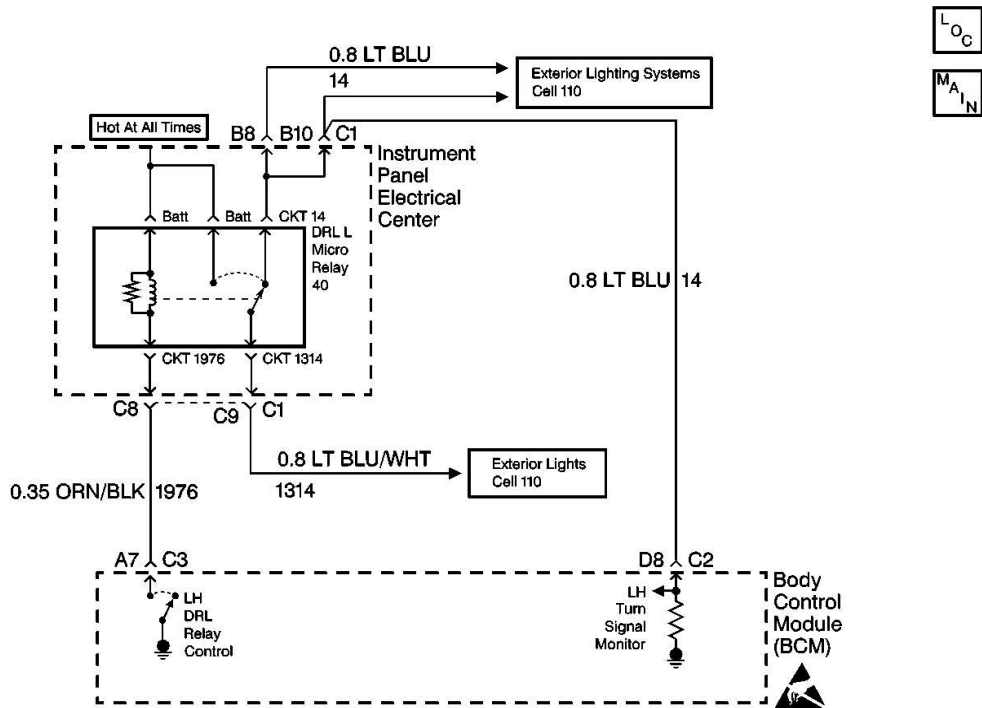


DTC B2583 Left Front Turn Signal Monitor Circuit



Circuit Description

The BCM monitors the LF turn signal circuit in order to determine the status of the turn signal switch. If the BCM detects an oscillating voltage on CKT 14, the BCM interprets this as a LF turn signal ON request from the turn signal switch. The BCM will de-energize the LH DRL relay, which will disable the LF turn signal lamp (which is ON for the DRL), thus allowing the LF turn signal to flash. If the BCM does not detect an oscillating voltage on CKT 14, the BCM interprets this as the LF turn signal being OFF. The BCM will then energize the LH DRL relay and continue normal DRL operation. The BCM monitors the LF turn signal CKT 14 and determines how long voltage is applied. If the voltage is applied for longer than expected, a malfunction is present and a DTC will set.

Conditions for Setting the DTC

- The BCM detects continuous battery voltage on the LF turn signal monitor circuit (CKT 14).
- The condition must be present for longer than 5 seconds.

Action Taken When the DTC Sets

- Stores a DTC B2583 in the BCM memory.

- No driver warning message will be displayed for this DTC.

Conditions for Clearing the DTC

- This DTC requires an ignition cycle in order to change from current to history.
- The BCM no longer detects continuous battery voltage on the LF turn signal monitor circuit (CKT 14) for longer than 5 seconds.
- A history DTC will clear after 50 consecutive ignition cycles if the condition for the malfunction is no longer present.
- Use the IPC clearing DTCs feature.
- Use a scan tool.

Diagnostic Aids

- The following conditions may cause an intermittent malfunction:
 - There is an intermittent short to voltage in CKT 14, CKT 16, or CKT 1314.
 - The turn signal switch or the hazard switch is shorted internally or is sticking.
- The BCM needs to detect voltage oscillations on CKT 14 in order to de-energize the LF DRL relay. If the BCM detects continuous voltage on CKT 14, the BCM interprets this as a short to voltage. The BCM will continue with normal DRL operation, and the LF turn signal will remain inoperative.
- If the DTC is a history DTC, the problem may be intermittent. Perform the tests shown while moving related wiring and connectors. This can often cause the malfunction to occur. Refer to [Intermittents and Poor Connections Diagnosis](#).

Test Description

The numbers below refer to the step numbers on the diagnostic table:

2. This test will check if a DTC B2578 is stored in the BCM memory.
3. This test will determine if there is a short to voltage in CKT 14.
4. This test will determine if there is a short to voltage in CKT 1314.
5. This step tests for an internal short in the DRL relay.
6. This test determines if the short to voltage is located in the hazard warning switch.
7. This test determines if the short to voltage is located in the turn signal switch.
8. This test determines if the short to voltage is located in the I/P.

DTC B2583 -- LF Turn Signal Monitor Circuit Short to Voltage

Step	Action	Value(s)	Yes	No
1	Were you sent here from the BCM Diagnostic System Check?	--	Go to Step 2	Go to Diagnostic System Check - Body Control System
2	Using a scan tool, check for BCM DTC B2578.	--		

-	Is DTC B2578 stored in the BCM memory?		Go to Step 14	Go to Step 3
3	<ol style="list-style-type: none"> 1. Turn OFF the ignition switch. 2. Disconnect the LH DRL relay. 3. Turn ON the ignition switch. 4. Turn OFF the turn signals. 5. With a test light connected to ground, probe CKT 14 at the I/P electrical center LH DRL relay terminal. Refer to Power Distribution Schematics in Wiring Systems for electrical center identification. <p>Is the test light ON?</p>	--	Go to Step 6	Go to Step 4
4	<p>With a test light connected to ground, probe CKT 1314 at the I/P electrical center LH DRL relay terminal. Refer to Power Distribution Schematics in Wiring Systems for electrical center identification.</p> <p>Is the test light ON?</p>	--	Go to Step 13	Go to Step 5
5	<p>Check for continuity between the LH DRL relay terminals 4 and 5 (or 87 and 87A).</p> <p>Is there continuity?</p>	--	Go to Step 17	Go to Step 9
6	<ol style="list-style-type: none"> 1. Turn OFF the ignition switch. 2. Disconnect the hazard warning switch connector. 3. Turn ON the ignition switch. 4. With a test light connected to ground, probe CKT 14 at the I/P electrical center LH DRL relay terminal. Refer to Power Distribution Schematics in Wiring Systems for electrical center identification. <p>Is the test light ON?</p>	--	Go to Step 7	Go to Step 16
7	<ol style="list-style-type: none"> 1. Turn OFF the ignition switch. 2. Disconnect the turn signal switch connector C211. 3. Turn ON the ignition switch. 4. With a test light connected to ground, probe CKT 14 at the I/P electrical center LH DRL relay terminal. Refer to Power Distribution Schematics in Wiring Systems for electrical center identification. <p>Is the test light ON?</p>	--	Go to Step 8	Go to Step 15
8	<ol style="list-style-type: none"> 1. Turn OFF the ignition switch. 2. Disconnect the IPC connector. 3. Turn ON the ignition switch. 4. With a test light connected to ground, probe CKT 14 at the I/P electrical center LH DRL relay terminal. Refer to Power Distribution Schematics in Wiring Systems for electrical center identification. <p>Is the test light ON?</p>	--	Go to Step 11	Go to Step 12
	<p>Inspect for the following intermittent malfunctions:</p> <ul style="list-style-type: none"> • A short to voltage on CKTs 14, 16, or 1314. 			

9	<ul style="list-style-type: none"> • An internal short in the LH DRL relay. • An internal short in the turn signal switch. • An internal short in the hazard warning switch. • A short at IPC terminal A14. <p>Was a problem found and repaired?</p>	--	Go to Step 19	Go to Step 10
10	<ol style="list-style-type: none"> 1. Turn OFF the ignition switch. 2. Reconnect or install any connectors or components that were disconnected or removed. 3. Turn ON the ignition switch. 4. Clear any DTCs. Refer to Clearing DTCs . 5. Wait 5 seconds and check for DTCs. <p>Does DTC B2583 set as current?</p>	--	Go to Step 18	System OK
11	Locate and repair the short to voltage in CKT 14.	--		
12	<p>Is the circuit repair complete? Locate and repair the short to voltage at the IPC connector terminal A15.</p> <p>Is the circuit repair complete?</p>	--	Go to Step 19	--
13	<p>Locate and repair the short to voltage in CKT 1314.</p> <p>Is the circuit repair complete?</p>	--	Go to Step 19	--
14	<p>Check for a short to voltage in CKT 16.</p> <p>Was a condition found and repaired?</p>	--	Go to Step 19	Go to Step 16
15	<p>Replace the turn signal switch. Refer to Multifunction Turn Signal Lever Replacement - On Vehicle in Steering Wheel and Column.</p> <p>Is the replacement complete?</p>	--	Go to Step 19	--
16	<p>Replace the hazard warning switch. Refer to Hazard Warning Switch Replacement - On Vehicle in Lighting Systems.</p> <p>Is the repair complete?</p>	--	Go to Step 19	--
17	<p>Replace the LH DRL relay.</p> <p>Is the replacement complete?</p>	--	Go to Step 19	--
18	<ol style="list-style-type: none"> 1. Replace the BCM. Refer to Body Control Module Replacement . 2. Program the BCM. Refer to Body Control Module (BCM) Programming/RPO Configuration . <p>Is the replacement complete?</p>	--	Go to Step 19	--
19	<ol style="list-style-type: none"> 1. Turn OFF the ignition switch. 2. Reconnect or install any connectors or components that were disconnected or removed. 3. Turn ON the ignition switch. 4. Clear any DTCs. Refer to Clearing DTCs . <p>Is the repair complete?</p>	--	Go to Diagnostic System Check - Body Control System	--

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