Component Procedures: Hazard Warning Lamps

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Hazard Lamps Malfunction (Article 10351)

Diagnostic Instructions
- Perform the Diagnostic System Check - Vehicle prior to using this diagnostic procedure.
- Review Strategy Based Diagnosis for an overview of the diagnostic approach.
- Diagnostic Procedure Instructions provides an overview of each diagnostic category.

Diagnostic Fault Information

Circuit Short to Ground Open/High Resistance Short to Voltage Signal Performance
Hazard Warning Switch Signal 1 1 1 B3596 00
Hazard Warning Switch Ground — 1 — —

1. Hazard Lamps Malfunction

Circuit/System Description

The hazard flashers may be activated in any power mode. The hazard warning switch signal circuit is momentarily grounded when the hazard warning switch is pressed. The body control module (BCM) responds to the hazard warning switch signal input by supplying battery voltage to all four turn signal lamps in an ON and OFF duty cycle. When the hazard warning switch is activated, the BCM sends a serial data message to the instrument cluster requesting both turn signal indicators to be cycled ON and OFF.

Reference Information

Schematic Reference
Exterior Lights Schematics
Connector End View Reference
Component Connector End Views
Description and Operation
Exterior Lighting Systems Description and Operation
Electrical Information Reference
- Circuit Testing
- Connector Repairs
- Testing for Intermittent Conditions and Poor Connections
- Wiring Repairs

Scan Tool Reference
Control Module References for scan tool information

Circuit/System Verification
- Ignition ON.
- Verify the scan tool Hazard Lamps Switch parameter changes between Active and Inactive while commanding the hazard lamps ON and OFF with the hazard warning switch.
- If the parameter does not change Refer to Circuit/System Testing.
- If the parameter changes
- Verify all left and right turn signal lamp s turn ON and OFF while commanding the hazard lamps ON and OFF with the hazard warning switch.
- If all turn signal lamps do not turn ON and OFF Refer to Turn Signal Lamps and/or Indicators Malfunction
- If all turn signal lamps turn ON and OFF
- All OK.

Circuit/System Testing
- Ignition OFF, scan tool disconnected, all doors closed, all accessories OFF, disconnect the harness connector at the A20 radio/HVAC controls. It may take up to 2 minutes for all vehicle systems to power down.
- Test for less than 5 Ω between the ground circuit terminal 17 and ground.
- If 5 Ω or greater
- Ignition OFF.
- Test for less than 2 Ω in the ground circuit end to end.
- If 2 Ω or greater, repair the open/high resistance in the circuit.
- If less than 2 Ω, repair the open/high resistance in the ground connection.
- If less than 5 Ω
- Verify the scan tool Hazard Lamps Switch parameter is Inactive.
- If not Inactive
- Ignition OFF, disconnect the X2 harness connector at the K9 body control module.
- Test for infinite resistance between the signal circuit terminal 16 and ground.
- If less than infinite resistance, repair the short to ground on the circuit.
- If infinite resistance, replace the K9 body control module.
- If Inactive

- Install a 3 A fused jumper wire between the signal circuit terminal 16 and ground.
- Verify the scan tool Hazard Lamps Switch parameter is Active.
- If not Active
- Ignition OFF, disconnect the X2 harness connector at the K9 body control module, ignition ON.
- Test for less than 1 V between the signal circuit terminal and ground.
- If 1 V or greater, repair the short to voltage on the circuit.
- If less than 1 V
- Test for less than 2 Ω in the signal circuit end to end.
- If less than 2 Ω, replace the K9 body control module.
- If Active
- Test or replace the A20 radio/HVAC controls.

Repair Instructions

Perform the Diagnostic Repair Verification after completing the repair.

- Radio Control Assembly Replacement
- Control Module References for BCM replacement, programming, and setup