DTC B1325

Diagnostic Instructions

a) Perform the Diagnostic System Check – Vehicle on page 6-60 prior to using this diagnostic procedure.
b) Review Strategy Based Diagnosis on page 6-57 for an overview of the diagnostic approach.
c) Diagnostic Procedure Instructions on page 6-58 provides an overview of each diagnostic category.

DTC Descriptors

DTC B1325 03: Device Power Circuit Voltage Below Threshold
DTC B1325 07: Device Power Circuit Voltage Above Threshold
DTC B1325 4A: Device Power Circuit Checksum Error – HUD/IPC

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
B+	B1325 03, B1325 4A	B1325 03, B1325 4A	—	—
Ground	—	B1325 03, B1325 4A	—	—

Circuit/System Description

The following control modules monitor the battery voltage through the battery positive (B+) voltage circuits:

a) Head-up display (HUD)
b) Instrument panel cluster (IPC)
c) Passenger presence system (PPS)
d) Radio
e) Ultrasonic parking aid (UPA)

If any of the control modules listed detect that the battery voltage is out of range, it will set DTC B1325.

Conditions for Running the DTC

a) The ignition is ON.
b) The battery voltage supplied to the control module is in the range of 7–26 volts.

Conditions for Setting the DTC

B1325 03

The control module detects that the system voltage is less than 9 volts for 5 seconds.

B1325 07

The control module detects that the system voltage is greater than 18 volts for 5 seconds.

B1325 4A

The HUD or IPC failed the power on checksum test, either due to low voltage or corrupted memory.

Action Taken When the DTC Sets

a) The control module immediately disables all outputs when an out of range voltage condition has been detected, with the exception of serial data, which is disabled after a 3 minute delay.
b) The setting of other DTCs is inhibited.

Conditions for Clearing the DTC

The DTC passes when the malfunction is no longer present.

Diagnostic Aids

a) A high or low voltage value in multiple modules indicates a concern in the charging system.
b) Overcharging with a battery charger or jump starting can cause this DTC to set.

Circuit/System Testing

1) Engine running, accessories OFF, measure and record the battery voltage at the battery terminals. The voltage should be between 12.6

and 15.0 volts.

If not within the specified range, refer to Charging System Test (Acadia or Enclave) on page 9-39 or Charging System Test (OUTLOOK) on page 9-40.

2) Ignition OFF, disconnect the harness connectors at the appropriate module.
3) Ignition OFF and scan tool disconnected, open and close the driver door, and wait 1 minute. Test for less than 5 ohms between the ground circuits listed below and ground.
   a) Terminal 2 (IPC)
   b) Terminal 4 (HUD)
   c) Terminal D (PPS)
   d) Terminal 5 X1 (Radio UQG)
   e) Terminal 8 X1 (Radio U42/UQF/UQA/UQS)
   f) Terminal 7 X1 (UPA)

   If greater than the specified range, test the ground circuit for an open/high resistance.
4) Verify that a test lamp illuminates between the B+ circuit terminals listed below and ground.
   a) Terminal 1 (IPC)
   b) Terminal 6 (HUD)
   c) Terminal A (PPS)
   d) Terminal 1 X1 (UPA, Radio U42/UQF/UQG)
   e) Terminal 4 X1 (Radio UQA/UQS)

   If the test lamp does not illuminate, test the B+ circuit for a short to ground or an open/high resistance.
5) If all circuits test normal, replace the appropriate control module.