U0126-LOST COMMUNICATION WITH STEERING ANGLE SENSOR

For a complete wiring diagram Refer to the Wiring Information.

- **When Monitored:**
- **Set Condition:**

If the Anti-Lock Brakes Module fails to receive bus messages from the Steering Angle Sensor for approximately 500 ms.
Possible Causes

DTCs RELATED TO BATTERY VOLTAGE, IGNITION, OR VIN MESSAGES
WIRING HARNESS, TERMINAL, CONNECTOR DAMAGE
(A913) FUSED B(+) CIRCUIT OPEN
(Z910) GROUND CIRCUIT OPEN
CAN C BUS CIRCUITS OPEN OR SHORTED
STEERING ANGLE SENSOR POWER AND GROUND
STEERING ANGLE SENSOR
FRONT CONTROL MODULE

1. **VERIFY DTC IS ACTIVE**

   **NOTE:** Ensure the IOD fuse is installed and battery voltage is between 10 and 16 volts before proceeding.

   1. Turn the ignition on.
   2. With the scan tool, read and record ABS DTCs.
   3. With the scan tool, read and record Environmental Data (EV Data).
   4. With the scan tool, erase ABS DTCs.
   5. Cycle the ignition switch.
   6. With the scan tool, read ABS DTCs.

   **Does this DTC reset?**

   **Yes**
   - Go To 2

   **No**
   - The condition that caused the symptom is currently not present. Inspect the related wiring for a possible intermittent condition. Look for any chafed, pierced, pinched, or partially broken wires.
   - Refer to the ABS-INTERMITTENT CONDITION TEST. (Refer to 28 - DTC-Based Diagnostics/MODULE, Antilock Brake (ABS) - Standard Procedure)

2. **CHECK FOR ANY ACTIVE STEERING ANGLE SENSOR DTCs**

   1. With the scan tool, read all active DTCs.

   **Does the scan tool display any active Steering Angle Sensor DTCs?**

   **Yes**
   - Diagnose and repair the DTC(s). Refer to the Table of Contents in the applicable Section.
   - Perform BODY VERIFICATION TEST (Refer to 28 - DTC-Based Diagnostics/MODULE, Front Control (FCM) - Standard Procedure).

   **No**
   - Go To 3

3. **VERIFY THAT THE STEERING ANGLE SENSOR IS ACTIVE ON THE BUS**

   1. With the scan tool, select ECU View.
   2. Verify that the Steering Angle Sensor is active on the bus.
Is the Steering Angle Sensor active on the bus?

Yes  • Replace the Anti-Lock Brakes Module in accordance with the service information.
      • Perform ABS VERIFICATION TEST. (Refer to 28 - DTC-Based Diagnostics/MODULE, Antilock Brake (ABS) - Standard Procedure).

No   • Go To 4

4. CHECK THE WIRING HARNESS, TERMINALS, AND CONNECTORS

1. Check the Steering Angle Sensor installation.
2. Visually inspect the related wiring harness. Look for any bruised, chafed, pierced, or partially broken wires.
3. Visually inspect the related wiring harness connectors. Look for broken, bent, pushed out, or corroded terminals.

Were any problems found?

Yes  • Repair as necessary.
      • Perform ABS VERIFICATION TEST. (Refer to 28 - DTC-Based Diagnostics/MODULE, Antilock Brake (ABS) - Standard Procedure)

No   • Go To 5

5. CHECK THE VOLTAGE OF THE STEERING CONTROL MODULE (A913) FUSED B(+) CIRCUIT

1. Turn the ignition off.
2. Disconnect the Steering Control Module harness connector.
3. Turn the ignition on.
4. Measure the voltage of the (A913) Fused B(+) circuit.

Is the voltage above 10 volts?

Yes  • Go To 6

No   • Repair the (A913) Fused B(+) circuit for an open.
      • Perform ABS VERIFICATION TEST. (Refer to 28 - DTC-Based Diagnostics/MODULE, Antilock Brake (ABS) - Standard Procedure)
6. CHECK THE RESISTANCE OF THE STEERING CONTROL MODULE (Z910) GROUND CIRCUIT

1. Turn the ignition off.
2. Disconnect the Steering Control Module harness connector.
3. Measure resistance between the (Z910) Ground circuit and ground.

**Is the resistance below 5.0 ohms?**

**Yes**
- Replace the Steering Control Module in accordance with the Service Information.
- Perform ABS VERIFICATION TEST. (Refer to 28 - DTC-Based Diagnostics/MODULE, Antilock Brake (ABS) - Standard Procedure)

**No**
- Repair the (Z910) Ground circuit for an open.
- Perform ABS VERIFICATION TEST. (Refer to 28 - DTC-Based Diagnostics/MODULE, Antilock Brake (ABS) - Standard Procedure)