

## Pinpoint Test DTC 32: Driver Side Air Bag Circuit High Resistance or Open

### Normal Operation

**NOTE:** The connectors for the air bag diagnostic monitor and the air bag sliding contact have metal spring clips that act as shorting bars. These shorting bars are built into the plastic hardshell connectors. The shorting bars are designed to short Circuits 614 and 615 together when the connectors are not mated. Do not attempt to remove the air bag shorting bar and measure the resistance of the driver side air bag module.

The air bag diagnostic monitor measures the resistance across Pin 10 (Circuit 615, GY/W) and Pin 11 (Circuit 614, GY/O) every time the ignition switch is turned to the RUN position. Normal resistance across these circuits is between 1.5 and 2.0 ohms. This resistance comes from the driver side air bag module (approximately 1.0 ohms) and windings of the air bag sliding contact (approximately 0.25 to 0.5 ohms per winding, two windings in all). If the resistance across these two circuits exceeds 4.0 ohms, this indicates a high resistance and the air bag diagnostic monitor will flash Code 32.

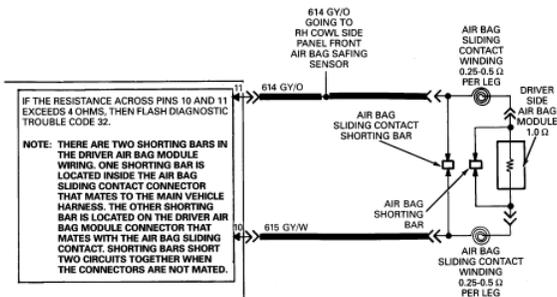
The shorting bar of the air bag sliding contact may be removed to measure the resistance of the air bag sliding contact. Use extreme care when reinstalling the shorting bar to make sure it is installed correctly.

### Possible Causes

Excessive resistance across Pins 10 and 11 can be caused by:

30. A poor connection where the air bag sliding contact connects into the main wiring. The air bag sliding contact connector at the base of the steering column may have excessive resistance between the male and female terminals in the connector.
31. An open circuit or high resistance in the windings inside the air bag sliding contact.
32. An open circuit or high resistance in the wiring harness in either Circuit 614 (GY/O) or Circuit 615 (GY/W).
33. An open circuit or high resistance in the driver side air bag module. DO NOT attempt a direct resistance measurement of the driver side air bag module. Follow the diagnostic procedures to determine if the resistance in the driver side air bag module is higher than normal.

### Electrical Schematic, Driver Side Air Bag Circuit High Resistance or Open



R9462-C

### 32-1 CHECK FOR DTC 32

- Turn ignition switch lock cylinder to ON.
- Count diagnostic trouble code (if any).
- Is Code 32 flashing?

→ Yes

GO to [32-2](#).

→ No

READ the normal operation description for this diagnostic trouble code. EXAMINE the diagnostic trouble code schematic and LOOK for areas where intermittent problems would occur (connectors, splices, crimps, etc.) DO NOT PROCEED with pinpoint test until the code is flashing. Failure to do so will result in needless replacement of the air bag diagnostic monitor and repeat service.

### 32-2 CHECK CIRCUIT RESISTANCE

- Deactivate system.
- Disconnect air bag diagnostic monitor.
- Install Air Bag Simulator Rotunda Tool 105-00010 or equivalent. Set ohmmeter on lowest scale possible (200 ohms for most meters).
- "Zero" the ohmmeter by touching the leads together and record the resistance reading.
- Remove the plastic locking wedge from the black harness connector.

- Measure the resistance across Pin 11 — Circuit 614 (GY/O) and Pin 10 — Circuit 615 (GY/W). Record the measurement. Subtract this reading from the reading made when zeroing the ohmmeter.
- **Is the result less than 2.5 ohms?**

→ **Yes**

Make sure the locking wedge has been removed from the black harness connector. Make sure to use the 2 ohm air bag simulator and not a jumper wire. GO to [32-3](#).

→ **No**

GO to [32-3](#).

### 32-3 CIRCUIT RESISTANCE RESULTS

- **Is the result greater than 3.0 ohm?**

→ **Yes**

GO to [32-5](#).

→ **No**

GO to [32-4](#).

### 32-4 CHECK CONNECTOR

- Reconnect the air bag diagnostic monitor .
- Turn the ignition switch lock cylinder OFF, then ON.
- **Is Code 32 still flashing?**

→ **Yes**

REPLACE the air bag diagnostic monitor . RECONNECT system. VERIFY system. REACTIVATE system.

→ **No**

INSPECT air bag diagnostic monitor harness connector for improperly retained Pins 10 and 11. If OK, REPLACE driver side air bag module . RECONNECT system. VERIFY system. REACTIVATE system.

### 32-5 CHECK AIR BAG SLIDING CONTACT

- Disconnect the air bag sliding contact at the base of the steering column.
- Install the air bag simulator on the main wiring harness at the base of the steering column. Measure the resistance across Pin 10 — Circuit 615 (GY/W) and Pin 11 — Circuit 614 (GY/O) on the air bag diagnostic monitor harness connector. Subtract this reading from the reading made when zeroing the ohmmeter.
- **Is the result equal to 2.0 ohm ± 0.2 ohm?**

→ **Yes**

REPLACE air bag sliding contact. RECONNECT system. VERIFY system. REACTIVATE system.

→ **No**

LOCATE and SERVICE the open in Circuit 614 or 615. RECONNECT system. VERIFY system. REACTIVATE system.