

## DIAGNOSIS AND TESTING

### Diagnosing Customer Concerns Without Hard Diagnostic Trouble Codes

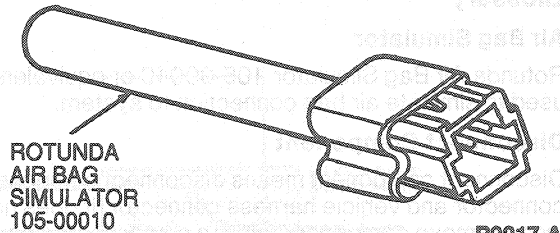
If a diagnostic trouble code is reported by the customer but is not present when the car comes in for service, pinpoint diagnostics cannot be used. Following the pinpoint tests or fault tree diagnosis when the code is not flashing will result in needless replacement of the air bag system components and repeat service. The diagnostic monitor does not contain any memory of the diagnostic trouble code after the key is turned off. If the diagnostic trouble code is unknown, instruct the customer on how to count a code. Demonstrate a diagnostic trouble code by disconnecting a primary crash sensor, turn the key to the ON position, and allow customer to count diagnostic trouble code. Reconnect the primary crash sensor and instruct customer to return when the code is known. Once the code is known, read the "Normal Operation" section for the diagnostic trouble code involved. Study the circuit diagram and determine the location of components that are involved in creating that diagnostic trouble code. Do a thorough visual inspection of components, connectors, splices and wiring harnesses, looking for pinched wires, worn insulation on conductors, opens, shorts, or loosely mounted sensors. The section "Possible Causes" lists the common concerns that relate to each diagnostic trouble code. Concerns are listed in the order that they are most likely to occur.

### Diagnosing Customer Concerns With Hard Diagnostic Trouble Codes

Most air bag system diagnostic procedures will require the use of the System Deactivation and System Reactivation Procedures outlined below. These procedures allow the removal of the air bags from the vehicle thereby removing the risk of air bag deployment while diagnostics are performed.

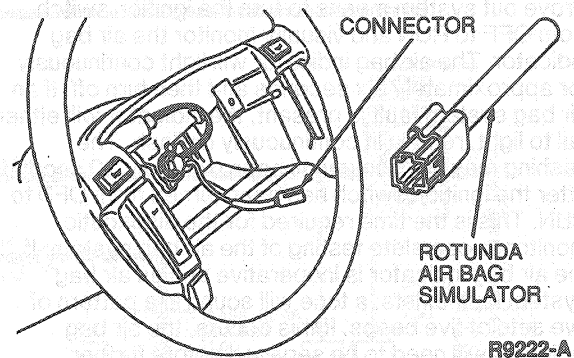
Rotunda Air Bag Simulator 105-00010 or equivalent is required to perform diagnosis and testing of the air bag system. The air bag simulator is a 2 ohm resistor used to simulate an air bag connection to the system. It is not acceptable to jump out the air bag connection with a zero ohm jumper wire. If a zero ohm jumper wire is used to jumper out the air bag connection, a system fault may be displayed (Diagnostic Trouble Code 34 or 35) according to the priority scheme.

**NOTE:** The air bag simulator 105-00010 for 1993 vehicles has a different connector than previous simulators. The new simulator will only mate with 1993 vehicles and beyond. Likewise, the old simulator 105-00008 will only mate with 1992 and previous model year vehicles.



### Deactivation Procedure

1. Disconnect battery positive cable.
2. Remove four nut and washer assemblies retaining driver air bag to steering wheel.



3. Disconnect driver air bag connector.
4. Attach Rotunda Air Bag Simulator 105-00010 or equivalent on clockspring to simulate the air bag.
5. If the vehicle is equipped with a passenger side air bag, remove the passenger side air bag as outlined. After disconnecting the air bag connector, connect Rotunda Air Bag Simulator 105-00010 to the wiring harness.
6. Connect positive battery cable.

### To Reactivate System:

**WARNING: THE AIR BAG SIMULATOR(S) MUST BE REMOVED AND THE AIR BAG(S) RECONNECTED WHEN THE SYSTEM IS REACTIVATED.**

1. Disconnect battery positive cable.
2. Remove Rotunda Air Bag Simulator 105-00010 or equivalent from air bag terminals on clockspring assembly, if connected.
3. Reconnect driver air bag module connector.
4. Position driver air bag module on steering wheel and secure with four nut and washer assemblies (10mm). Tighten nut and washer assemblies to 4-5.6 N·m (36-49 lb-in).
5. If vehicle is equipped with a passenger side air bag, remove Rotunda Air Bag Simulator 105-00010 from the wiring harness, reconnect passenger side air bag and install.
6. Connect battery positive cable.
7. Verify air bag indicator.