

2004 ACCESSORIES/SAFETY EQUIPMENT**Toyota - Air Bag Restraint Systems****DESCRIPTION & OPERATION**

WARNING: Accidental air bag deployment is possible. Personal injury may result. Read and follow all **WARNINGS** and **AIR BAG SAFETY PRECAUTIONS** before working on air bag system or related components.

Supplemental Restraint System (SRS), also known as air bag system, is designed to provide increased accident protection for driver and passenger by deploying air bag modules and seat belt pretensioners in a front impact collision. In the event a side impact occurs, curtain and side air bag modules will deploy on side of collision. The air bag system is designed to be used in conjunction with 3-point safety belts.

The air bag system includes the following components: dual-stage driver-side air bag module (steering wheel pad), dual-stage passenger-side air bag module, spiral cable, right and left side air bag modules, right and left side curtain air bag modules, right and left side air bag sensor, right and left rear air bag sensors, right and left front air bag sensors, driver seat position sensor, right and left front seat belt pretensioners, AIR BAG warning light, air bag sensor assembly and associated wiring harnesses.

COMPONENT LOCATIONS

Refer to illustration for component locations. See **Fig. 1** & **Fig. 2** .

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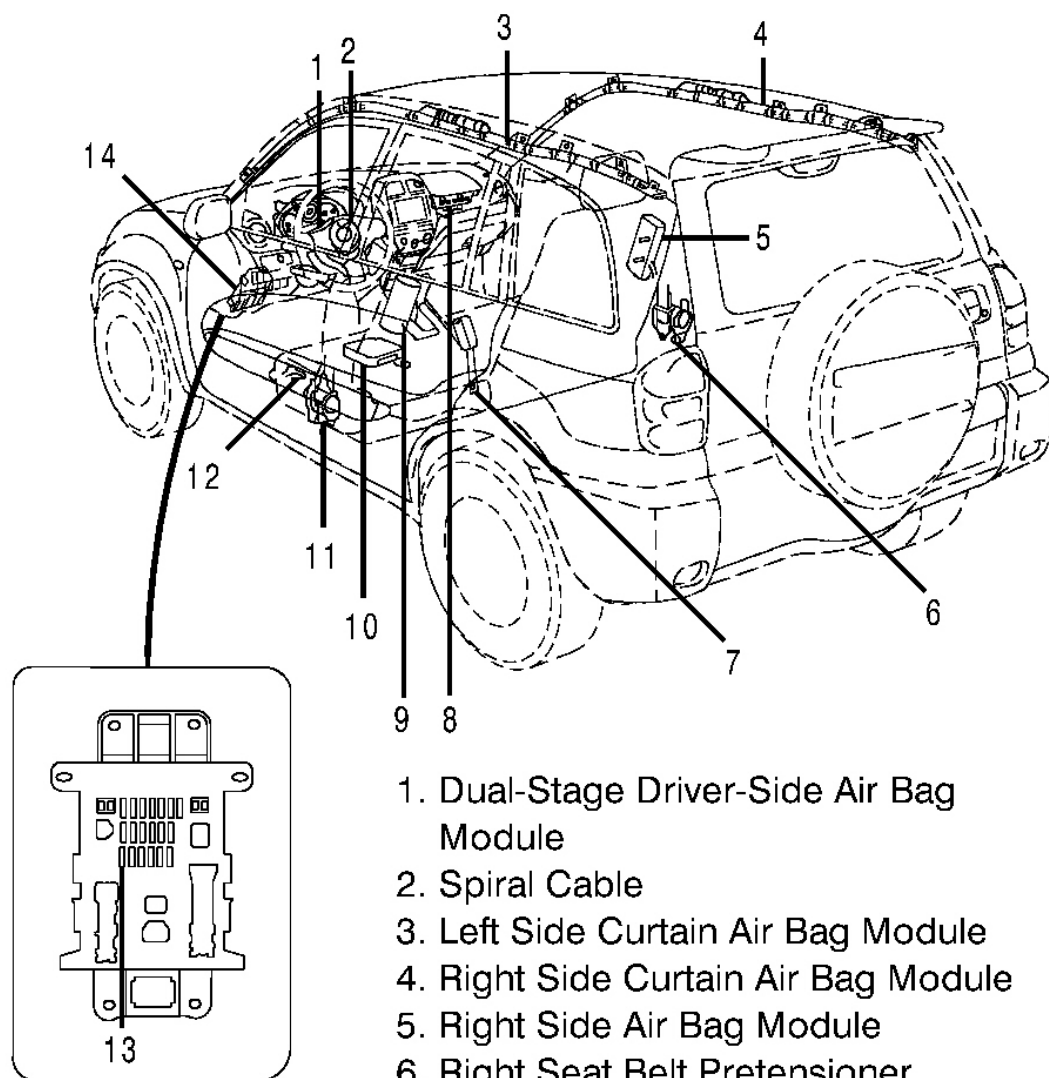
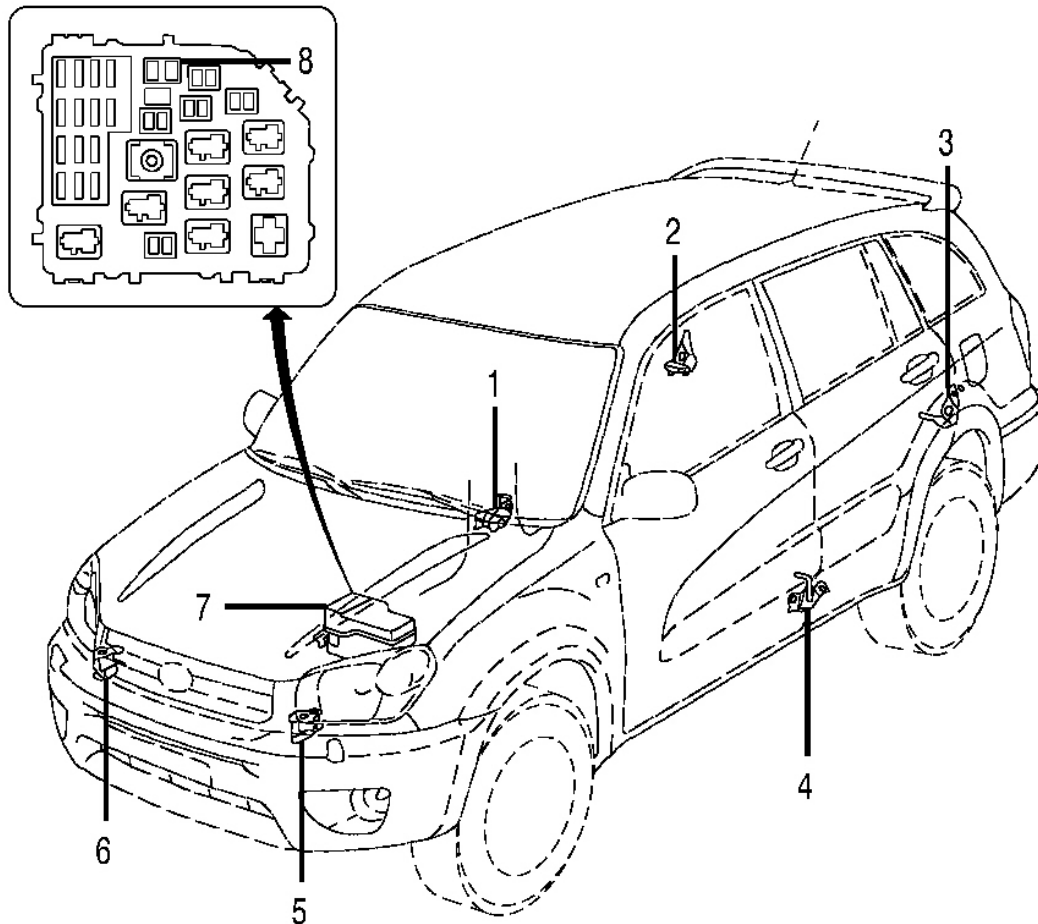


Fig. 1: Locating Restraint System Components (1 Of 2)

Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.



1. Right Side Air Bag Sensor
2. Right Rear Air Bag Sensor
3. Left Rear Air Bag Sensor
4. Left Side Air Bag Sensor
5. Left Front Air Bag Sensor
6. Right Front Air Bag Sensor
7. Engine Compartment Junction Box
8. Fuse AM 2

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Fig. 2: Locating Restraint System Components (2 Of 2)

Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

SYSTEM OPERATION CHECK

Turn ignition switch to ON position. AIR BAG warning light should come on for about 6 seconds and then go out. If AIR BAG warning light does not operate as specified, see **DIAGNOSTICS** .

AIR BAG SAFETY PRECAUTIONS

Observe these precautions when servicing the air bag system:

- Disable air bag system before servicing any air bag system or steering column component. Failure to do this could result in accidental air bag deployment and possible personal injury. See **DISABLING & ACTIVATING AIR BAG SYSTEM** .
- When diagnosing air bag system, always check for diagnostic codes before disconnecting battery.
- After turning ignition switch to LOCK position and disconnecting negative battery cable, wait at least 90 seconds before working on air bag system. Air bag system is equipped with a back-up power source that may allow air bag to deploy until 90 seconds after disconnecting negative battery cable.
- If vehicle was in a minor collision but air bags did not deploy, inspect all system components for any sign of damage, and replace as necessary.
- Never use air bag system components from another vehicle. Replace air bag system components with new parts.
- Remove air bag sensor assembly if repairing the vehicle requires impacting (shocking) the vehicle.
- Air bag sensor assembly contains mercury. After replacement, DO NOT destroy old part. When scrapping vehicle or replacing air bag sensor assembly, remove air bag sensor assembly and dispose of it as toxic waste.
- Never disassemble and repair air bag sensor assembly, front air bag sensors, passenger-side or driver-side air bag modules or seat belt pretensioners.
- Replace dropped, cracked, dented or otherwise damaged components.
- DO NOT expose air bag sensor assembly, front air bag sensors or air bag modules directly to heat or flame.
- When diagnosing electrical circuits, use a volt/ohm meter with high impedance (10,000 ohms minimum).
- Information labels are attached to air bag components. Follow all notices on labels.
- After work on air bag system is complete, check AIR BAG warning light to ensure system is functioning properly. See **SYSTEM OPERATION CHECK** .
- Always wear safety glasses when servicing or handling an air bag.
- When placing a live air bag on a bench or other surface, always face air bag and trim cover up and away from surface. This will reduce motion of module if it is accidentally deployed.
- After deployment, air bag surface may contain deposits of sodium hydroxide, which irritates skin. Always wear safety glasses, rubber gloves, and long-sleeved shirt during clean-up. After clean-up, wash hands using mild soap and water.
- Carry a live air bag module with trim cover (air bag) pointed away from your body to minimize injury in case accidental deployment.
- If air bag system is not fully functional for any reason, vehicle should not be driven until system is

repaired and again becomes operational. DO NOT remove bulbs, modules, sensors or other components, or in any way disable system from operating normally. If air bag system is not functional, park vehicle until it is repaired and functions properly.

DISABLING & ACTIVATING AIR BAG SYSTEM

WARNING: Unintentional air bag module deployment is possible. Personal injury may result. Never use memory savers when working on air bag system. Back-up power supply maintains air bag system voltage for about 90 seconds after battery is disconnected. After disabling air bag system, wait at least 90 seconds before servicing air bag system.

DISABLING SYSTEM

For Component Replacement

Turn ignition switch to LOCK position. Disconnect and shield negative battery cable. Wait at least 90 seconds before starting any work on vehicle.

For Diagnostics

1. Turn ignition switch to LOCK position. Disconnect and shield negative battery cable. Wait at least 90 seconds. Disconnect air bag sensor assembly connectors. See **AIR BAG SENSOR ASSEMBLY** under REMOVAL & INSTALLATION. Remove driver-side air bag module. See **DRIVER-SIDE AIR BAG MODULE** under REMOVAL & INSTALLATION. Disconnect passenger-side air bag module connector, accessible by removal of glove box assembly. See **Fig. 3**.
2. Disconnect right and left side air bag module connectors. See **SIDE AIR BAG MODULE** under REMOVAL & INSTALLATION. Disconnect right and left side curtain air bag module connectors. See **SIDE CURTAIN AIR BAG MODULE** under REMOVAL & INSTALLATION. Disconnect right and left front seat belt pretensioner connectors. See **SEAT BELT PRETENSIONER** under REMOVAL & INSTALLATION.

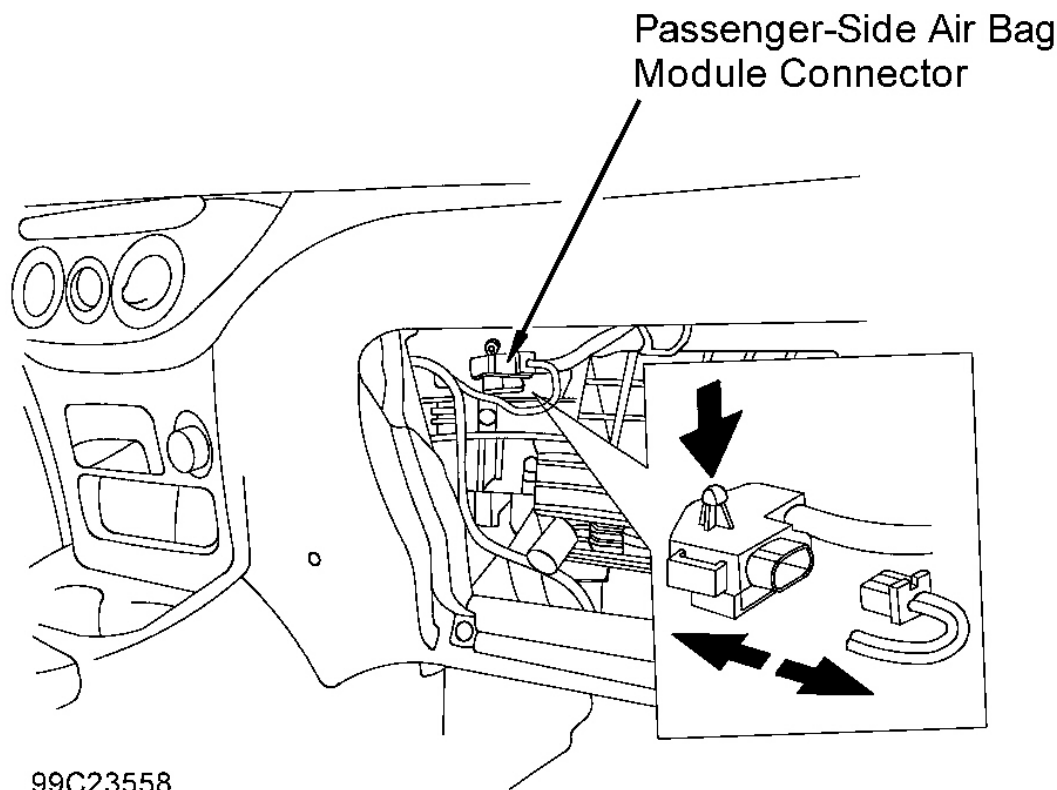


Fig. 3: Disconnecting Passenger-side Air Bag Module Connector
Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

ACTIVATING SYSTEM

For Component Replacement

Ensure ignition switch is in LOCK position. Reconnect negative battery cable. Perform **SYSTEM OPERATION CHECK** .

For Diagnostics

Turn ignition switch to LOCK position. Disconnect and shield negative battery cable. Wait at least 90 seconds. Reconnect right and left seat belt pretensioner connectors. Reconnect right and left side curtain air bag module connectors. Reconnect right and left side air bag module connectors. Reconnect passenger-side air bag connector. Install driver-side air bag module. Reconnect air bag sensor assembly connectors. Reconnect negative battery cable. Perform **SYSTEM OPERATION CHECK** .

DISPOSAL PROCEDURES

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WARNING: Undeployed air bags contain substances that can cause illness or injury if improperly handled. Disposing of an undeployed air bag may violate federal, state and/or local laws. If scrapping vehicle, air bag must be deployed while still mounted in vehicle. Air bags should not be deployed inside vehicle unless vehicle is to be scrapped. If not scrapping vehicle, use off-vehicle deployment procedures. See OFF-VEHICLE DEPLOYMENT . Wear gloves and safety glasses when handling air bag. Wrap deployed air bag in a sturdy plastic bag and dispose of it like any other part.

TESTING DEPLOYMENT TOOL

WARNING: Malfunctioning deployment tool may cause accidental air bag deployment. Personal injury may result. If deployment light illuminates without pressing deployment button, deployment tool is malfunctioning and should not be used.

Connect Red clip of Deployment Tool (09082-00700) to positive battery terminal of 12 volt battery. Connect Black clip of deployment tool to negative terminal of battery. Press deployment tool activation switch and ensure deployment light illuminates on deployment tool. Disconnect deployment tool Red and Black clips from battery.

ON-VEHICLE DEPLOYMENT (SCRAPPED VEHICLES ONLY)

Driver-side AIR Bag Module

1. Before proceeding, see AIR BAG SAFETY PRECAUTIONS . Ensure steering wheel and driver-side air bag module are not loose. If components are loose, deploy air bag(s) using OFF-VEHICLE DEPLOYMENT procedure. Test Deployment Tool (09082-00700). See TESTING DEPLOYMENT TOOL .
2. Remove lower steering column cover. Disconnect spiral cable connector. Connect Deployment Tools (09082-00700 and 09082-00760 single inflator] or 09082-00780 double inflator]) to air bag module connector. Position deployment tool at least 33 feet (10 m) from front of vehicle.
3. Close all doors and windows of vehicle. Connect deployment tool Red clip to positive battery terminal and Black clip to negative battery terminal. Ensure no one is inside or within 33 feet (10 m) of vehicle. Connect deployment tool Red clip to positive battery terminal and Black clip to negative battery terminal. Press activation switch to deploy air bag. Because of heat, DO NOT touch air bag for at least 30 minutes after deployment.

Passenger-side AIR Bag Module

1. Before proceeding, see AIR BAG SAFETY PRECAUTIONS . Ensure passenger-side air bag module is not loose. If air bag is loose, deploy air bag using OFF-VEHICLE DEPLOYMENT procedure. Test Deployment Tool (09082-00700). See TESTING DEPLOYMENT TOOL .
2. Remove glove box. Disconnect passenger-side air bag connector. See Fig. 3 . Connect Deployment Tools (09082-00700 and 09082-00760 single inflator] or 09082-00780 double inflator]) to air bag module

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connector. Position deployment tool at least 33 feet (10 m) from front of vehicle.

3. Close all doors and windows of vehicle. Connect deployment tool Red clip to positive battery terminal and Black clip to negative battery terminal. Ensure no one is inside or within 33 feet (10 m) of vehicle. Connect deployment tool Red clip to positive battery terminal and Black clip to negative battery terminal. Press activation switch to deploy air bag. Because of heat, DO NOT touch air bag for at least 30 minutes after deployment.

Side AIR Bag Module

1. Before proceeding, see **AIR BAG SAFETY PRECAUTIONS** . Disable air bag system. See **DISABLING SYSTEM** under DISABLING & ACTIVATING AIR BAG SYSTEM. Ensure seat back is not loose. If components are loose, remove and deploy air bag(s) using **OFF-VEHICLE DEPLOYMENT** procedure. Test Deployment Tool (09082-00700). See **TESTING DEPLOYMENT TOOL** . Disconnect appropriate side air bag connector, located under seat.
2. Connect Deployment Tool (09082-00700) and adapter (09082-00750) to side air bag connector, located under appropriate front seat cushion. Position deployment tool at least 33 feet (10 m) from front of vehicle. Close all doors and windows of vehicle. Connect deployment tool Red clip to positive battery terminal and Black clip to negative battery terminal.
3. Ensure no one is inside vehicle or within 33 feet (10 m) of vehicle. Press activation switch to deploy air bag. Because of heat, DO NOT touch air bag for at least 30 minutes after deployment. Scrap vehicle with air bag(s) still installed.

Side Curtain AIR Bag Module

1. Before proceeding, see **AIR BAG SAFETY PRECAUTIONS** . Disable air bag system. See **DISABLING SYSTEM** under DISABLING & ACTIVATING AIR BAG SYSTEM. Ensure there are no loose components in vehicle. If components are loose, remove and deploy air bag(s) using **OFF-VEHICLE DEPLOYMENT** procedure. Test Deployment Tool (09082-00700). See **TESTING DEPLOYMENT TOOL** .
2. Disconnect side curtain air bag module harness connector. See **SIDE CURTAIN AIR BAG MODULE** under REMOVAL & INSTALLATION. Connect Deployment Tool (09082-00700) and Adapter (09082-00802) to side curtain air bag module connector. Position deployment tool at least 33 feet (10 m) from front of vehicle. Close all doors and windows of vehicle. Connect deployment tool Red clip to positive battery terminal and Black clip to negative battery terminal.
3. Ensure no one is inside vehicle or within 33 feet (10 m) of vehicle. Press activation switch to deploy air bag. Because of heat, DO NOT touch air bag for at least 30 minutes after deployment. Scrap vehicle with air bag(s) still installed.

Seat Belt Pretensioner

1. Before proceeding, see **AIR BAG SAFETY PRECAUTIONS** . Ensure seat belt pretensioner is not loose. If components are loose, remove seat belt pretensioner and deploy using **OFF-VEHICLE DEPLOYMENT** procedure. Test Deployment Tool (09082-00700). See **TESTING DEPLOYMENT TOOL** . Access and disconnect appropriate seat belt pretensioner connector. See **SEAT BELT PRETENSIONER** under REMOVAL & INSTALLATION.
2. Connect Deployment Tools (09082-00700 and 09082-00770) to appropriate seat belt pretensioner

connector. Position deployment tool at least 33 feet (10 m) from front of vehicle. Close all doors and windows of vehicle. Connect deployment tool Red clip to positive battery terminal and Black clip to negative battery terminal.

3. Ensure no one is inside vehicle or within 33 feet (10 m) of vehicle. Connect deployment tool Red clip to positive battery terminal and Black clip to negative battery terminal. Press activation switch to deploy air bag. Because of heat, DO NOT touch pretensioner for at least 30 minutes after deployment. Scrap vehicle with pretensioner(s) still installed.

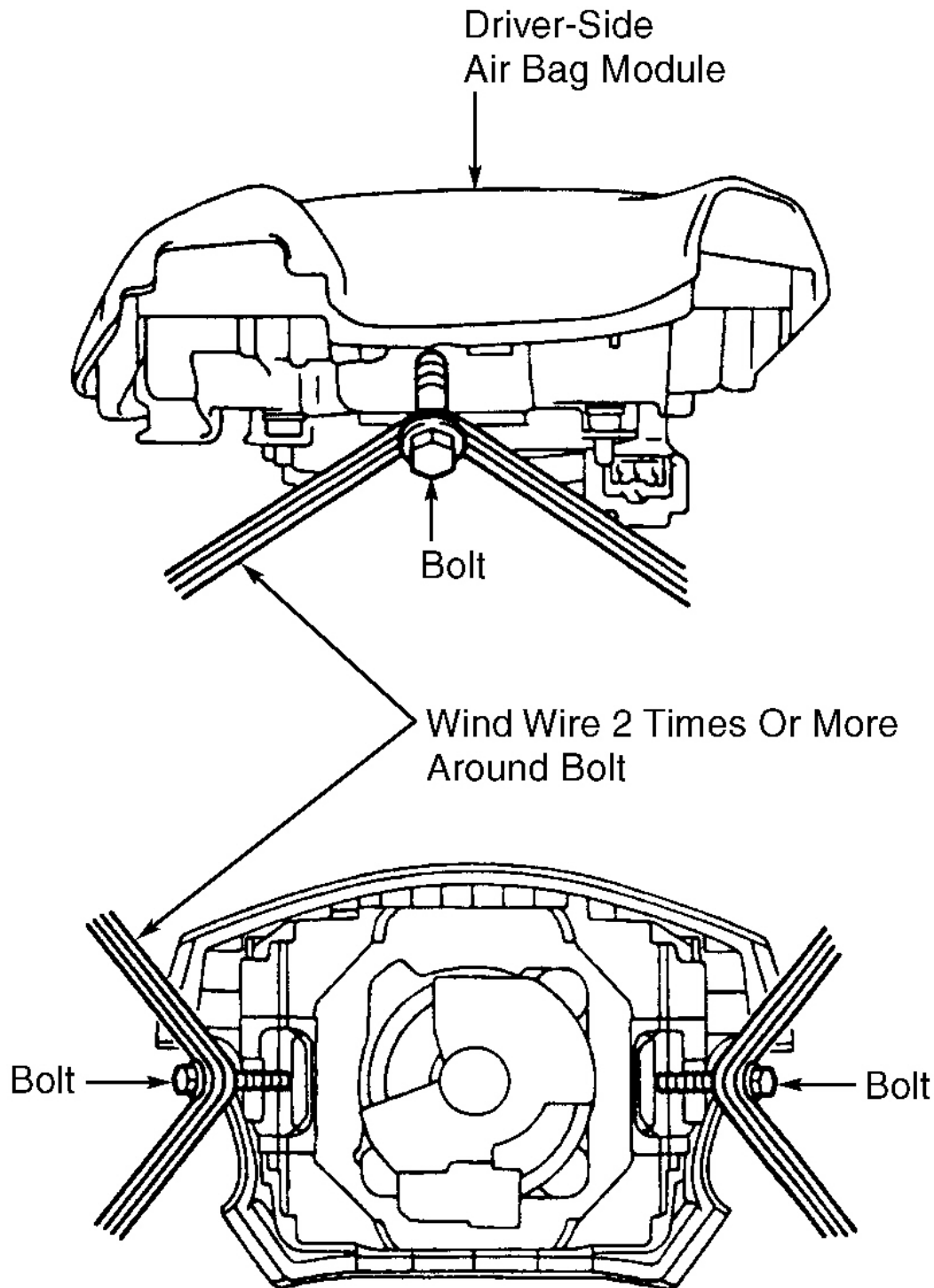
OFF-VEHICLE DEPLOYMENT

Driver-side AIR Bag Module

1. Before proceeding, see **AIR BAG SAFETY PRECAUTIONS** . Disable air bag system. See **DISABLING SYSTEM** under DISABLING & ACTIVATING AIR BAG SYSTEM. Test Deployment Tool (09082-00700). See **TESTING DEPLOYMENT TOOL** . Remove driver-side air bag module. See **DRIVER-SIDE AIR BAG MODULE** under REMOVAL & INSTALLATION.
2. Install 2 bolts (6 mm X 35 mm) with washers into holes located in rear of driver-side air bag module. Tighten bolts by hand. DO NOT overtighten bolts. Wrap strong wire at least twice around each bolt. See **Fig. 4** . Ensure no slack is present in wire. If slack is present, or wire is not strong enough, driver-side air bag module may become loose due to shock when air bag is deployed.
3. Position driver-side air bag module on rim of a scrap wheel and tire assembly with pad side facing upward. See **Fig. 5** . Securely tie driver-side air bag module to wheel rim through lug nut holes. Place a large cardboard box (weighted at sides) or 3 scrap tires on top of driver-side air bag module.
4. Connect Deployment Tools (09082-00700 and 09082-00802) to driver-side air bag module connector. Position deployment tool at least 33 feet (10 m) away from driver-side air bag module. Connect deployment tool Red clip to positive battery terminal and Black clip to negative battery terminal. Press activation switch to deploy driver-side air bag module. Because of heat, wait 30 minutes before handling driver-side air bag module. Seal deployed air bag module in vinyl bag and dispose of in usual manner.

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Fig. 4: Securing Wire To Driver-side Air Bag Module
Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

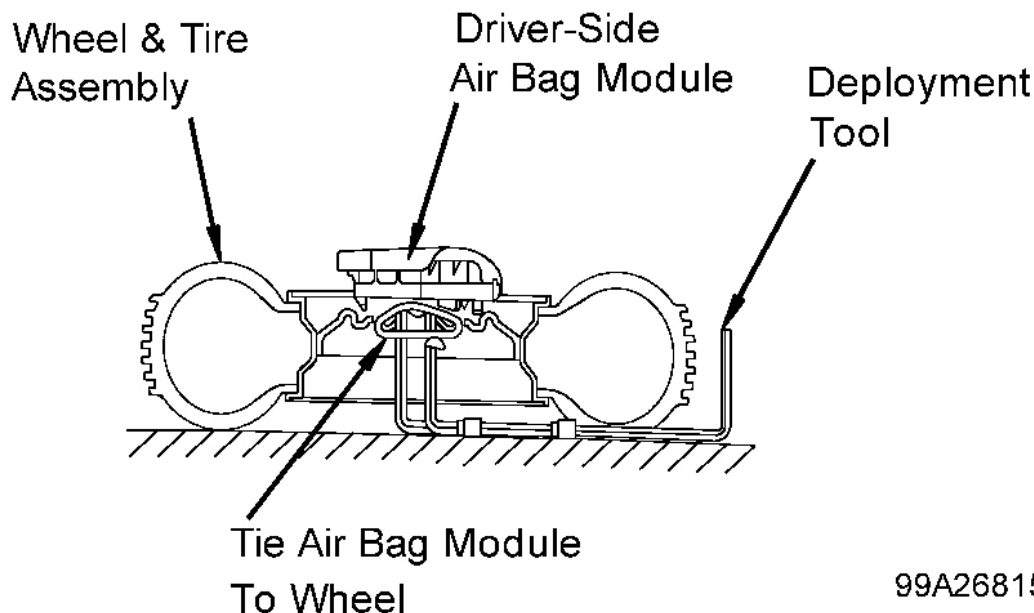
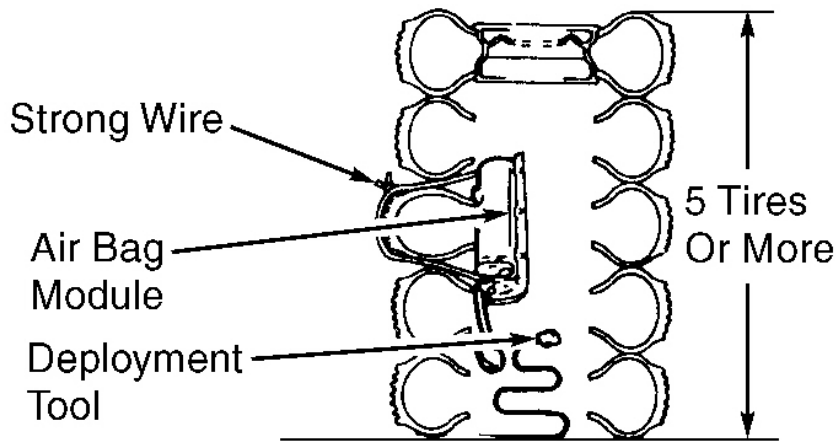


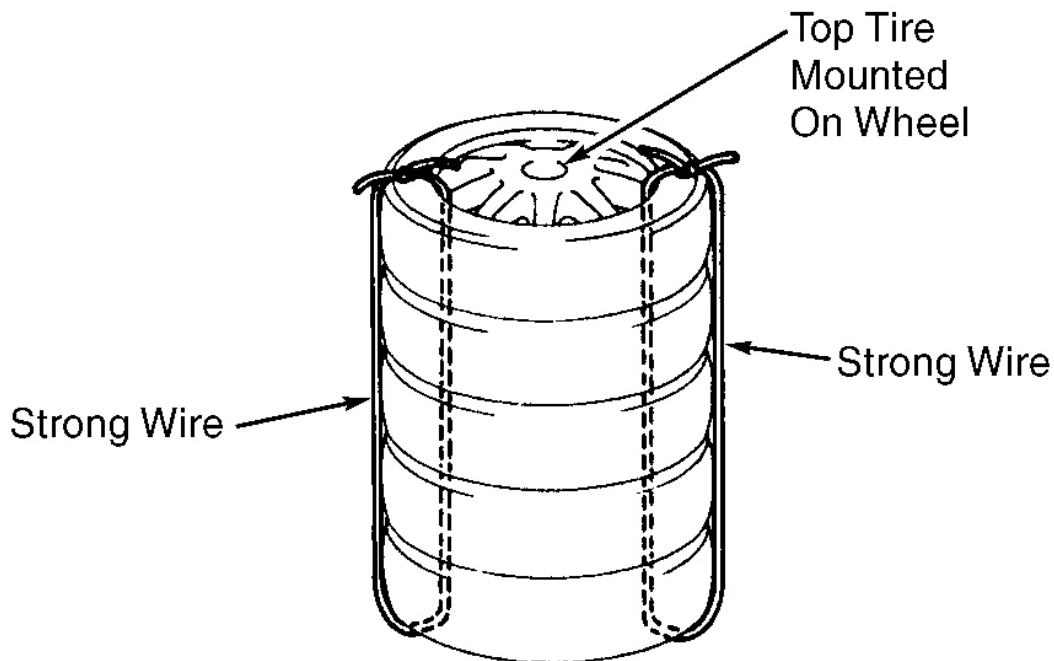
Fig. 5: Securing Driver-side Air Bag Module To Wheel
Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

Passenger-side AIR Bag Module

1. Before proceeding, see **AIR BAG SAFETY PRECAUTIONS** . Disable air bag system. See **DISABLING SYSTEM** under DISABLING & ACTIVATING AIR BAG SYSTEM. Test Deployment Tool (09082-00700). See **TESTING DEPLOYMENT TOOL** . Remove passenger-side air bag module. See **PASSENGER-SIDE AIR BAG MODULE** under REMOVAL & INSTALLATION.
2. Position passenger-side air bag module inside a scrap tire with air bag trim cover facing inside. See **Fig. 6** . Secure passenger-side air bag module to tire with wire. Place this tire between 4 other tires (top tire should have wheel installed). Securely tie all tires together with wire.
3. Connect Deployment Tools (09082-00700 and 09082-00802) to passenger-side air bag connector. Position deployment tool at least 33 feet (10 m) away from passenger-side air bag. Connect deployment tool Red clip to positive battery terminal and Black clip to negative battery terminal. Press activation switch to deploy passenger-side air bag. Because of heat, wait 30 minutes before handling passenger-side air bag module. Seal deployed air bag module in vinyl bag and dispose of in usual manner.



ATTACH AIR BAG TO TIRE



SECURE TIRES TOGETHER

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Fig. 6: Preparing Passenger-side Air Bag Module For Deployment
Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

Side AIR Bag Module

1. Before proceeding, see **AIR BAG SAFETY PRECAUTIONS** . Disable air bag system. See **DISABLING SYSTEM** under DISABLING & ACTIVATING AIR BAG SYSTEM. Test Deployment Tool (09082-00700). See **TESTING DEPLOYMENT TOOL** . Remove appropriate side air bag. See **SIDE AIR BAG MODULE** under REMOVAL & INSTALLATION. Install 2 nuts on stud located on rear side of air bag module. Wrap strong wire at least twice around each stud. See **Fig. 7** . Ensure no slack is present in wire.
2. Position side air bag inside a scrap tire with deployment side facing inside of tire and secure with strong wire. Place this tire between 4 other tires (top tire should have wheel installed). Securely tie all tires together with strong wire.
3. Connect Deployment Tool (09082-00700) and Adapter (09082-00750) to side air bag connector. Position deployment tool at least 33 feet (10 m) away from side air bag. Press activation switch to deploy side air bag. Because of heat, wait 30 minutes before handling side air bag. Seal deployed air bag module in vinyl bag and dispose of in usual manner.

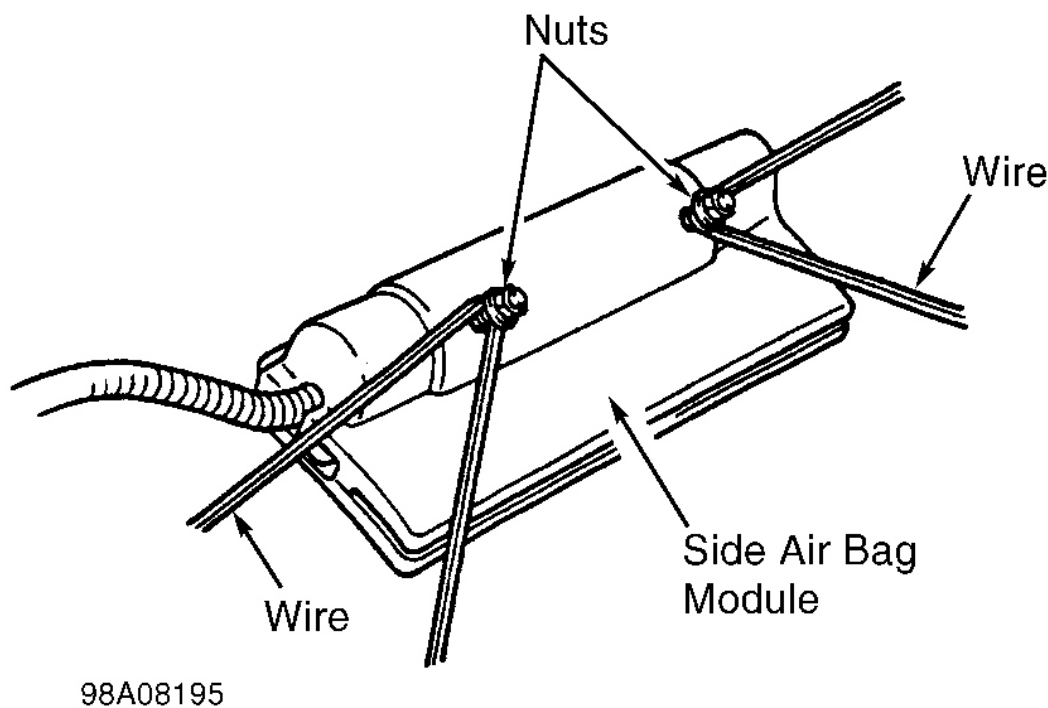


Fig. 7: Securing Wire To Side Air Bag Module
Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

Side Curtain AIR Bag Module

1. Before proceeding, see **AIR BAG SAFETY PRECAUTIONS** . Disable air bag system. See

DISABLING SYSTEM under DISABLING & ACTIVATING AIR BAG SYSTEM. Test Deployment Tool (09082-00700). See **TESTING DEPLOYMENT TOOL** . Remove appropriate side curtain air bag module. See **SIDE CURTAIN AIR BAG MODULE** under REMOVAL & INSTALLATION.

2. Cut off deployment section (air bag) from inflator. Position side curtain air bag inflator inside a scrap tire and secure with strong wire. See **Fig. 8** . Place this tire between 4 other tires (top tire should have wheel installed). Securely tie all tires together with wire.
3. Connect Deployment Tool (09082-00700) and Adapter (09082-00801) to inflator connector. Position deployment tool at least 33 feet (10 m) away from side air bag. Press activation switch to deploy side air bag. Because of heat, wait 30 minutes before handling inflator. Seal deployed inflator in vinyl bag and dispose of in usual manner.

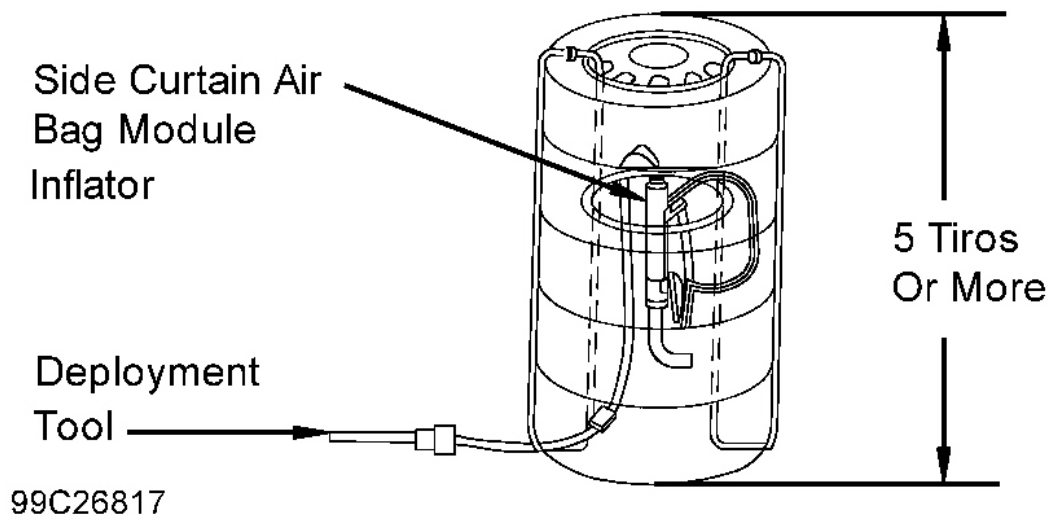
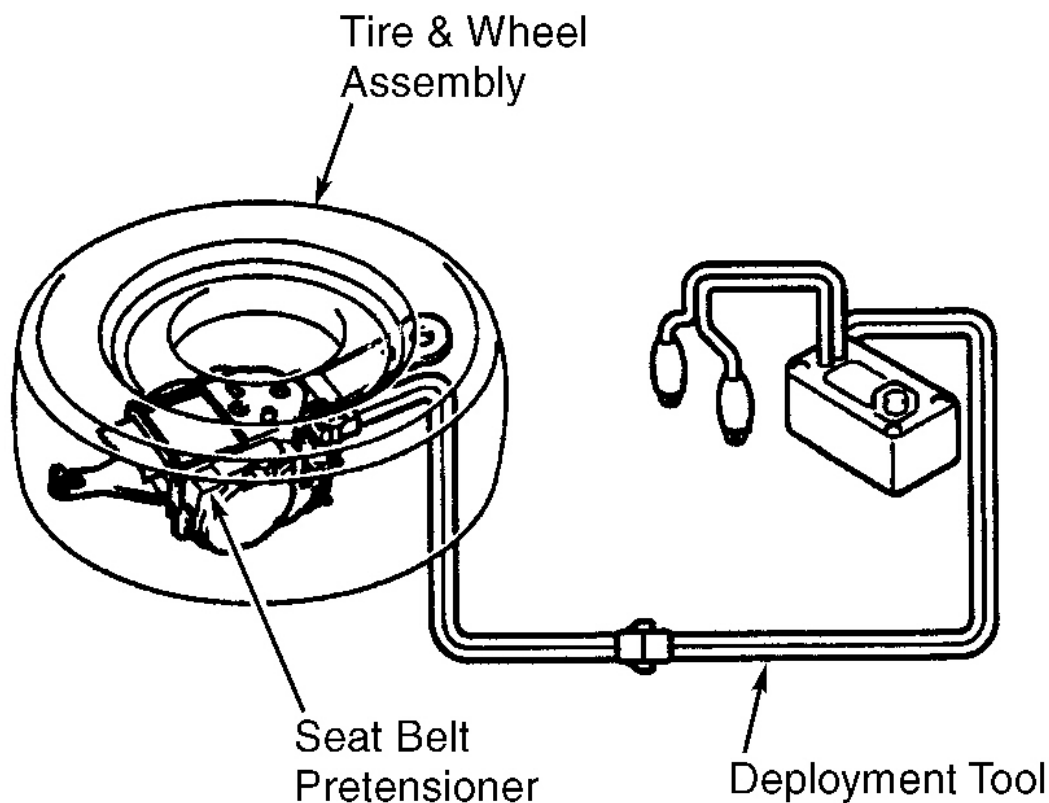


Fig. 8: Preparing Air Bag Inflator For Deployment
 Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

Seat Belt Pretensioner

1. Before proceeding, see **AIR BAG SAFETY PRECAUTIONS** . Disable air bag system. See **DISABLING SYSTEM** under DISABLING & ACTIVATING AIR BAG SYSTEM. Test Deployment Tool (09082-00700). See **TESTING DEPLOYMENT TOOL** . Remove appropriate seat belt pretensioner. See **SEAT BELT PRETENSIONER** under REMOVAL & INSTALLATION.
2. Connect Deployment Tools (09082-00700 and 09082-00770) to seat belt pretensioner connector. Position seat belt pretensioner on ground and cover with wheel and tire assembly. See **Fig. 9** . Position deployment tool at least 33 feet (10 m) away from seat belt pretensioner. Connect deployment tool Red clip to positive battery terminal and Black clip to negative battery terminal. Press activation switch to deploy seat belt pretensioner. Because of heat, wait 30 minutes before handling. Dispose of deployed pretensioner in usual manner.



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Fig. 9: Deploying Seat Belt Pretensioner

Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

POST-COLLISION INSPECTION

When a vehicle has been involved in a collision, certain components of the passive restraint system must be inspected or replaced. See **AIR BAG/SRS COMPONENT INSPECTION & REPLACEMENT TABLES** article in the GENERAL INFORMATION section.

REMOVAL & INSTALLATION

WARNING: Unintentional air bag module deployment is possible. Personal injury may result. Never use memory savers when working on air bag system. Unintentional air bag module deployment is possible. Failure to follow service precautions may result in air bag deployment and personal injury. Read and carefully follow all **WARNINGS** and **AIR BAG SAFETY PRECAUTIONS** before working on air bag system or related components.

See AIR BAG SAFETY PRECAUTIONS . After component replacement, check system operation. See SYSTEM OPERATION CHECK .

AIR BAG SENSOR ASSEMBLY

Removal & Installation

1. Before proceeding, see **AIR BAG SAFETY PRECAUTIONS** . Disable air bag system. See **DISABLING SYSTEM** under **DISABLING & ACTIVATING AIR BAG SYSTEM**.
2. Remove instrument cluster finish center panel. See **Fig. 10** . Remove upper console panel. Remove front and rear console boxes. Remove No. 1 and 2 instrument panel under covers. Remove shifter assembly. Remove 3 Torx screws retaining air bag sensor assembly. Remove air bag sensor assembly.
3. To install, reverse removal procedure. Tighten air bag sensor assembly Torx screws to specification. See **TORQUE SPECIFICATIONS** . Activate air bag system. See **ACTIVATING SYSTEM** under **DISABLING & ACTIVATING AIR BAG SYSTEM**.

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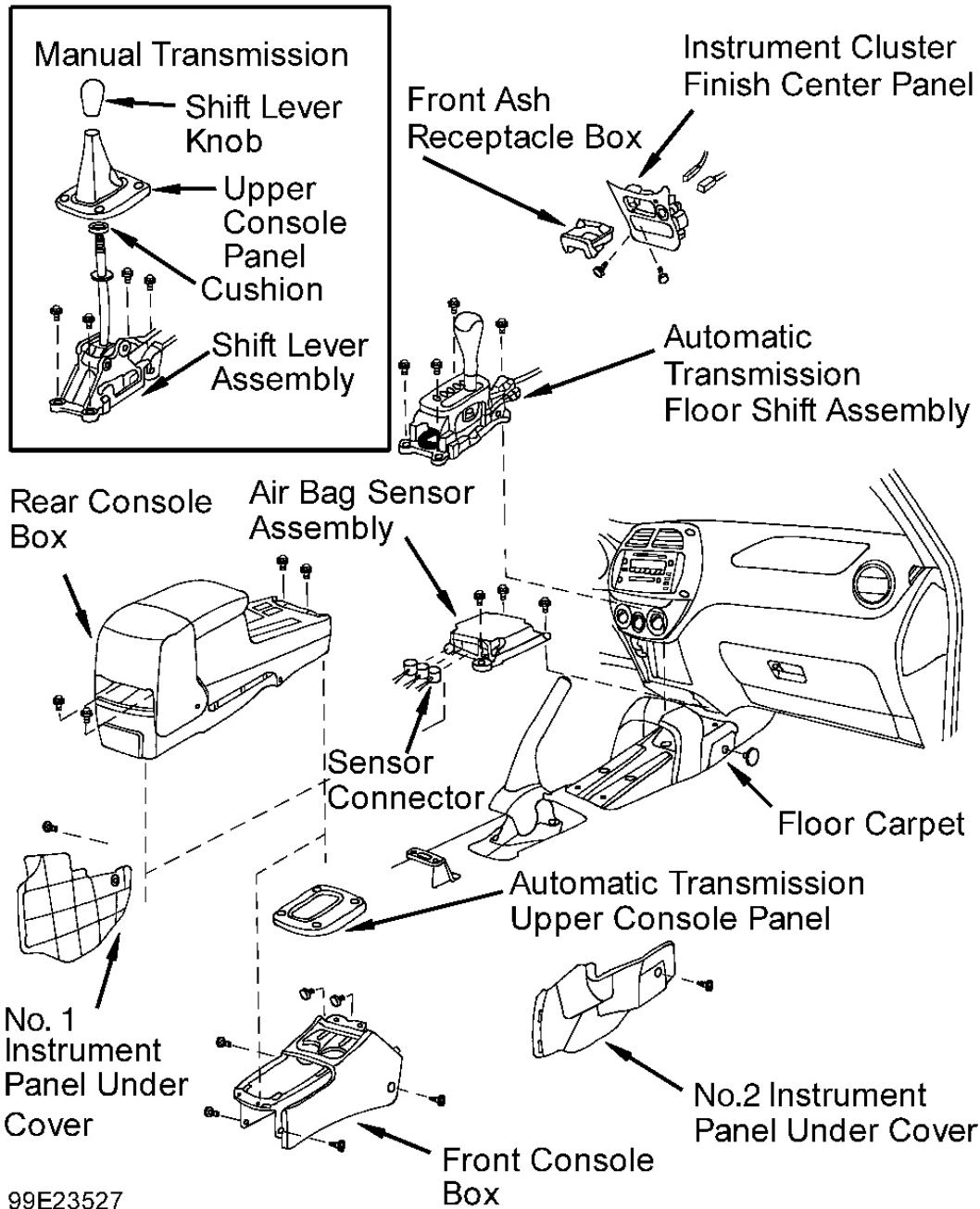


Fig. 10: Identifying Air Bag Sensor Assembly

Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

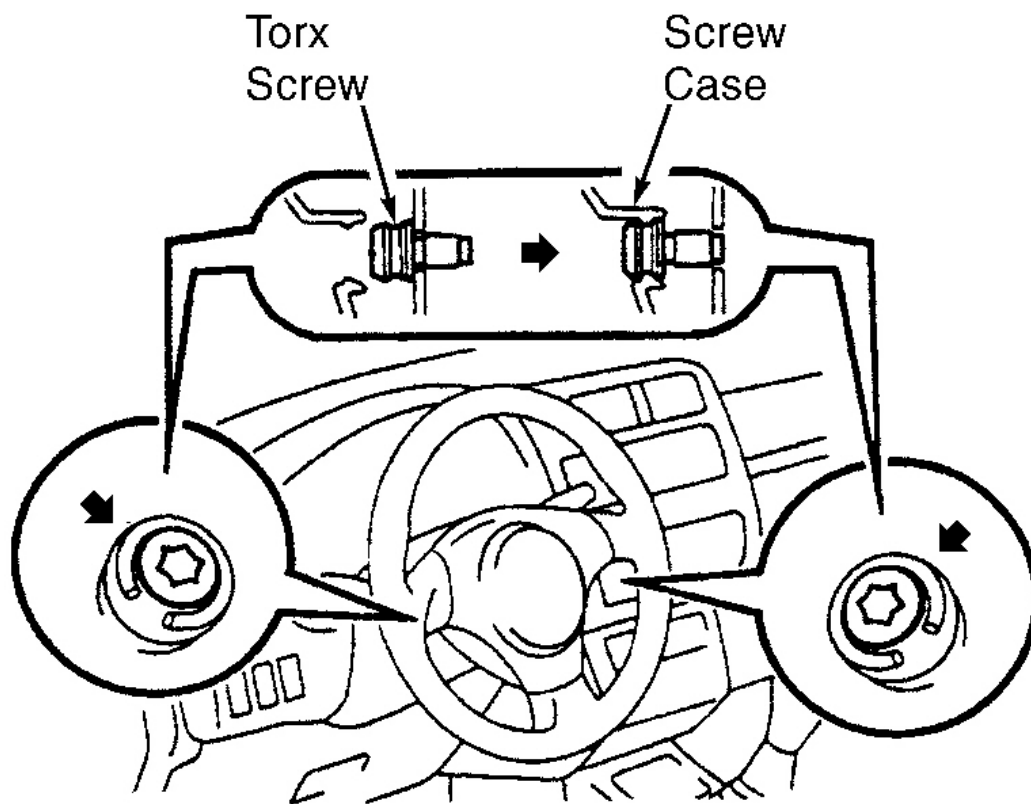
DRIVER-SIDE AIR BAG MODULE

NOTE: If steering wheel horn button contact plate is deformed, replace steering wheel

assembly.

Removal & Installation

1. Before proceeding, see **AIR BAG SAFETY PRECAUTIONS** . Disable air bag system. See **DISABLING SYSTEM** under DISABLING & ACTIVATING AIR BAG SYSTEM. Working from back of steering wheel, loosen air bag module Torx screws until groove around screw circumference catches on screw case. See **Fig. 11** .
2. Pull driver-side air bag module from steering wheel and disconnect driver-side air bag module connector. Place driver-side air bag module on a flat surface with pad side facing up.
3. To install, reverse removal procedure. Ensure front wheels are in straight-ahead position and spiral cable is properly aligned. See **SPIRAL CABLE** under ADJUSTMENTS. Tighten driver-side air bag module Torx screws to specification. See **TORQUE SPECIFICATIONS** . Activate air bag system. See **ACTIVATING SYSTEM** under DISABLING & ACTIVATING AIR BAG SYSTEM.



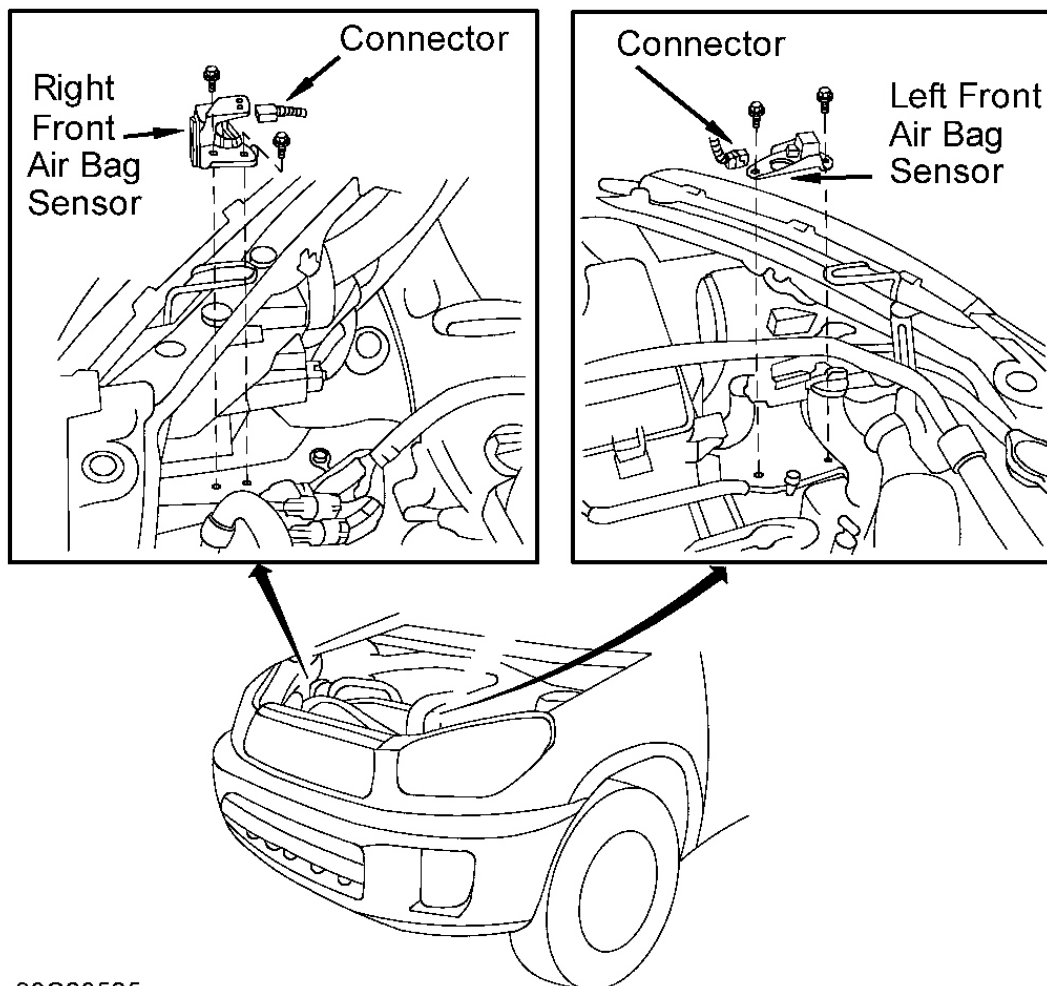
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Fig. 11: Identifying Driver-side Air Bag Module Torx Screws
Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

FRONT AIR BAG SENSOR

Removal & Installation

1. Before proceeding, see **AIR BAG SAFETY PRECAUTIONS** . Disable air bag system. See **DISABLING SYSTEM** under DISABLING & ACTIVATING AIR BAG SYSTEM.
2. Disconnect appropriate front air bag sensor connector with sensor installed. See **Fig. 12** . Remove 2 mounting bolts and remove front air bag sensor.
3. To install, reverse removal procedure. Tighten front air bag sensor mounting bolts to specification. See **TORQUE SPECIFICATIONS** . Activate air bag system. See **ACTIVATING SYSTEM** under DISABLING & ACTIVATING AIR BAG SYSTEM.



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Fig. 12: Identifying Front Air Bag Sensors
Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

FRONT SEAT

Removal & Installation

1. Before proceeding, see **AIR BAG SAFETY PRECAUTIONS** . Disable air bag system. See **DISABLING SYSTEM** under DISABLING & ACTIVATING AIR BAG SYSTEM. Remove seat belt anchor bolt and anchor. Remove front seat anchor bolts. Disconnect electrical connectors, under front seat. Remove front seat.
2. To install, reverse removal procedure. Tighten front seat and seat belt anchor bolts to specification. See **TORQUE SPECIFICATIONS** . Activate air bag system. See **ACTIVATING SYSTEM** under DISABLING & ACTIVATING AIR BAG SYSTEM.

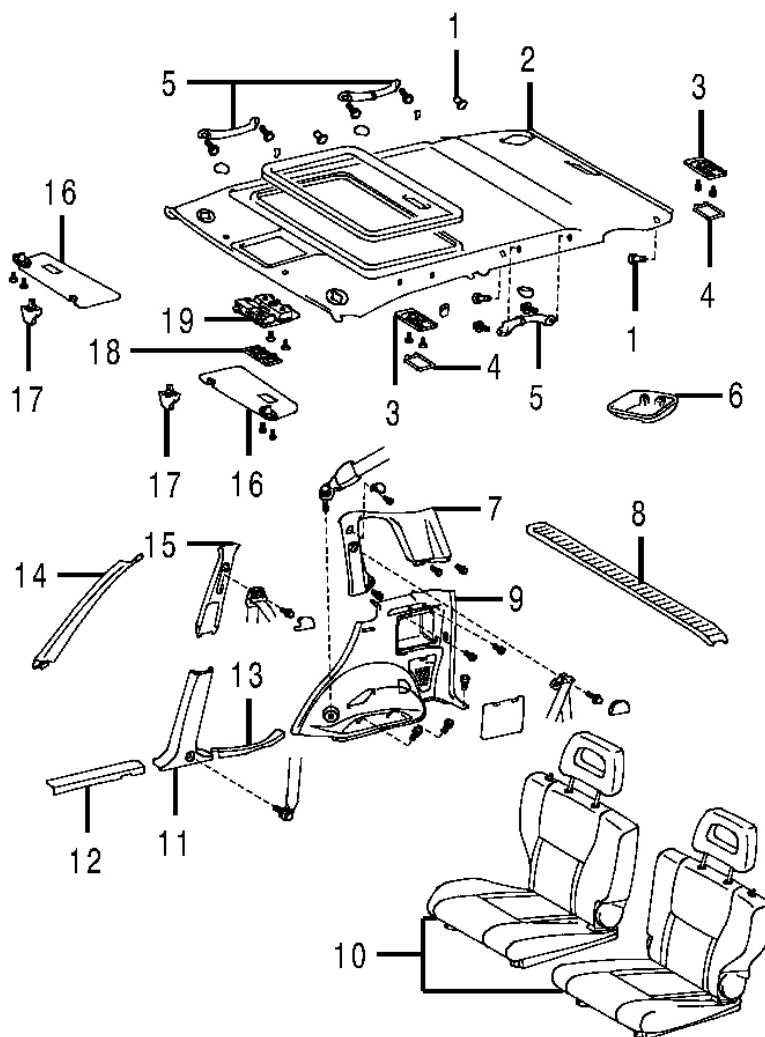
HEADLINER

Removal & Installation

1. Before proceeding, see **AIR BAG SAFETY PRECAUTIONS** . Disable air bag system. See **DISABLING SYSTEM** under DISABLING & ACTIVATING AIR BAG SYSTEM.
2. Remove rear seats. See **REAR SEAT** . Using screwdriver, disengage clips and remove rear floor finish plate. See **Fig. 13** . Disengage claws and remove rear door scuff plates. Using screwdriver, pry out room light cover. Remove screws, disconnect connector and remove room light. Remove assist grips and covers. Disengage claws and remove front door scuff plates.
3. Remove screws from right and left sun visors. Using screwdriver, pry out roof console cover. Remove screws from roof console box, disconnect connector and remove roof console box. Remove bolt and left rear seat belt floor anchor. Remove screws, and using screwdriver, pry out left deck side trim, disconnect connector and remove left deck side trim. Repeat procedure to remove right deck side trim.
4. Remove bolt and rear seat belt shoulder anchor. Remove clips, bolt and using screwdriver, disengage clips and remove left roof side inner garnish. Repeat procedure to remove right roof side inner garnish. Remove bolt and left front seat outer belt floor anchor. Pull garnish upward and remove left center pillar lower garnish. Repeat procedure to remove right center pillar lower garnish.
5. Remove bolt and left front seat outer belt shoulder anchor. Using screwdriver, pry out and remove center pillar upper garnish. Repeat procedure to remove right center pillar upper garnish.
6. Using screwdriver, disengage clips on left front pillar garnish. Pull pillar garnish and rotate 90 degrees and remove pillar garnish. Using cloth or nylon, 27.56" (700 mm) X 4.72" (120 mm), cover exposed portion of curtain air bag module. Secure cover material with tape. Repeat procedure for right front pillar garnish and curtain air bag module.
7. Using screwdriver, remove roof headliner trim garnish. Remove sun visor holders and room partition net hooks. Remove clips and roof headliner.
8. To install, reverse removal procedure. Activate air bag system. See **ACTIVATING SYSTEM** under DISABLING & ACTIVATING AIR BAG SYSTEM.

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|----------------------------------|--|
| 1. Room Partition Net Hooks | 11. Right Center Pillar
Lower Garnish |
| 2. Headliner | 12. Front Door Scuff Plate |
| 3. Room Light | 13. Rear Door Scuff Plate |
| 4. Room Light Cover | 14. Right Front Pillar Garnish |
| 5. Assist Grips | 15. Right Center Pillar
Upper Garnish |
| 6. Roof Headliner Trim Garnish | 16. Sun Visors |
| 7. Right Roof Side Inner Garnish | 17. Sun Visor Holders |
| 8. Rear Floor Finish Plate | 18. Roof Console Box Cover |
| 9. Right Deck Side Trim | 19. Roof Console Box |
| 10. Rear Seats | |

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Fig. 13: Identifying Headliner

Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

PASSENGER-SIDE AIR BAG MODULE

NOTE: If instrument panel or instrument panel reinforcement is deformed, replace with new part.

Removal & Installation

1. Before proceeding, see **AIR BAG SAFETY PRECAUTIONS** . Disable air bag system. See **DISABLING SYSTEM** under DISABLING & ACTIVATING AIR BAG SYSTEM.
2. Remove glove box door. Disconnect passenger-side air bag module connector. See **Fig. 3** . Remove 2 nuts, one bolt and passenger-side air bag module.
3. To install, reverse removal procedure. Tighten passenger-side air bag module bolt to specification. See **TORQUE SPECIFICATIONS** . There should be no interference between passenger-side air bag door and instrument panel and clearance should be uniform. Activate air bag system. See **ACTIVATING SYSTEM** under DISABLING & ACTIVATING AIR BAG SYSTEM.

REAR AIR BAG SENSOR**Removal & Installation**

1. Before proceeding, see **AIR BAG SAFETY PRECAUTIONS** . Disable air bag system. See **DISABLING SYSTEM** under DISABLING & ACTIVATING AIR BAG SYSTEM.
2. Remove appropriate rear seat. See **REAR SEAT** . Remove rear door scuff plate, door opening trim and rear quarter trim. Disconnect connector, remove bolts, and rear air bag sensor.
3. To install, reverse removal procedure. Tighten bolts to specification. See **TORQUE SPECIFICATIONS** . Activate air bag system. See **ACTIVATING SYSTEM** under DISABLING & ACTIVATING AIR BAG SYSTEM.

REAR SEAT**Removal & Installation**

Rear seat removal and installation procedure is not available.

SEAT BELT BUCKLE SWITCH**Removal & Installation**

1. Before proceeding, see **AIR BAG SAFETY PRECAUTIONS** . Disable air bag system. See **DISABLING SYSTEM** under DISABLING & ACTIVATING AIR BAG SYSTEM. Seat belt buckle switch is integrated with front seat belt buckle. Remove appropriate front seat. Remove bolt and seat belt buckle with switch.
2. To install, reverse removal procedure. Tighten seat belt buckle bolt to specification. See **TORQUE**

SPECIFICATIONS . Activate air bag system. See **ACTIVATING SYSTEM** under DISABLING & ACTIVATING AIR BAG SYSTEM.

SEAT BELT PRETENSIONER

Removal & Installation

1. Before proceeding, see **AIR BAG SAFETY PRECAUTIONS** . Disable air bag system. See **DISABLING SYSTEM** under DISABLING & ACTIVATING AIR BAG SYSTEM.
2. Remove appropriate front and rear door scuff plates. Remove front seat belt floor anchor bolt and floor anchor. Pulling center pillar lower garnish upward to disengage, remove garnish. Remove front seat belt shoulder anchor bolt and shoulder anchor. Disconnect pretensioner connector. Remove 2 bolts and seat belt pretensioner assembly.
3. To install, reverse removal procedure. Tighten fasteners to specification. See **TORQUE SPECIFICATIONS** . Activate air bag system. See **ACTIVATING SYSTEM** under DISABLING & ACTIVATING AIR BAG SYSTEM.

SEAT POSITION SENSOR

Removal & Installation

1. Before proceeding, see **AIR BAG SAFETY PRECAUTIONS** . Disable air bag system. See **DISABLING SYSTEM** under DISABLING & ACTIVATING AIR BAG SYSTEM.
2. Remove left front seat. Remove bolt, disconnect connector and remove seat position sensor.
3. To install, reverse removal procedure. Tighten seat position sensor bolt to specification. See **TORQUE SPECIFICATIONS** . Activate air bag system. See **ACTIVATING SYSTEM** under DISABLING & ACTIVATING AIR BAG SYSTEM.

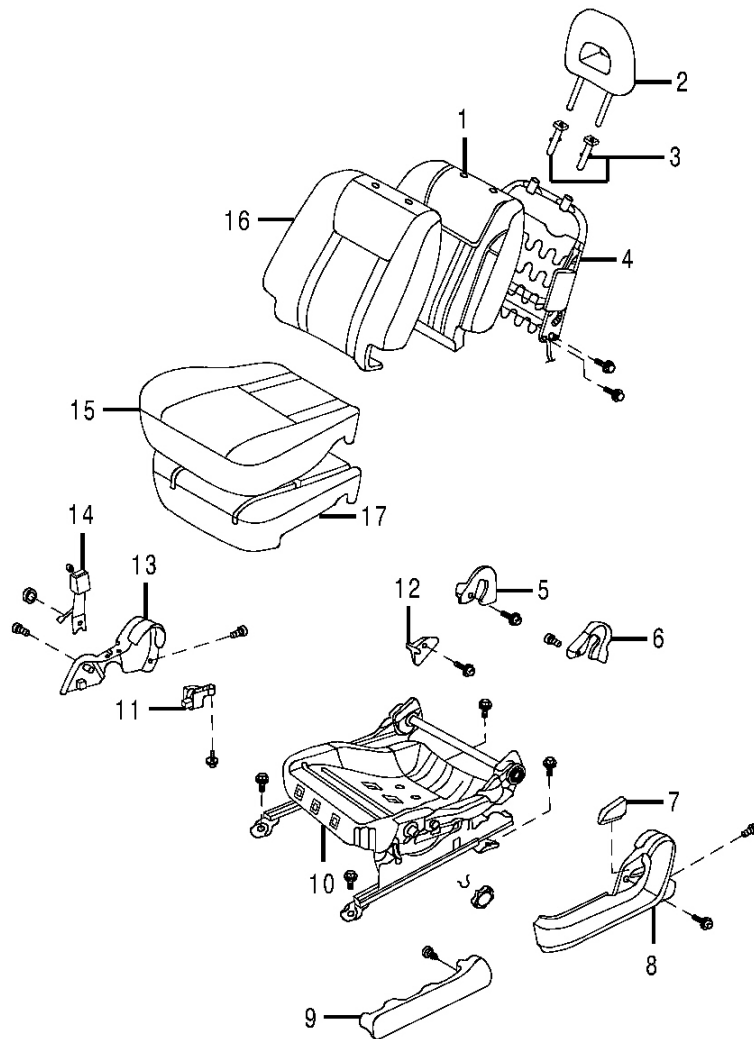
SIDE AIR BAG MODULE

Removal & Installation

1. Before proceeding, see **AIR BAG SAFETY PRECAUTIONS** . Disable air bag system. See **DISABLING SYSTEM** under DISABLING & ACTIVATING AIR BAG SYSTEM.
2. Remove appropriate front seat. See **FRONT SEAT** . Remove power seat knobs. See **Fig. 14** . Remove seat cushion shield and seat cushion inner shield. Remove front seat back board and seat back. Remove headrest and headrest supports. Remove seat back cover, bolts and seat back frame.
3. To install, reverse removal procedure. Tighten bolts to specification. See **TORQUE SPECIFICATIONS** . Activate air bag system. See **ACTIVATING SYSTEM** under DISABLING & ACTIVATING AIR BAG SYSTEM.

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- | | |
|---|------------------------------------|
| 1. Seat Back Pad | 9. Seat Cushion Outer Lower Shield |
| 2. Headrest | 10. Seat Adjuster |
| 3. Headrest Supports | 11. Driver Seat Position Sensor |
| 4. Seat Back Frame | 12. Seat Cushion Lower Shield |
| 5. Left Reclining Adjuster Inside Shield | 13. Seat Cushion Inner Shield |
| 6. Right Reclining Adjuster Inside Shield | 14. Seat Belt Buckle |
| 7. Reclining Release Handle | 15. Seat Cushion Cover |
| 8. Seat Cushion Outer Shield | 16. Seat Back Cover |

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Fig. 14: Identifying Front Seat Components

Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

SIDE AIR BAG SENSOR

Removal & Installation

1. Before proceeding, see **AIR BAG SAFETY PRECAUTIONS** . Disable air bag system. See **DISABLING SYSTEM** under DISABLING & ACTIVATING AIR BAG SYSTEM.
2. Remove appropriate front and rear door scuff plates. See **Fig. 15** . Remove seat belt anchor bolt and anchor. Remove center pillar lower garnish. Disconnect electrical connector, remove bolt, and position front seat belt retractor (pretensioner) aside. Disconnect electrical connector, remove bolts and remove side air bag sensor.
3. To install, reverse removal procedure. Tighten bolts to specification. See **TORQUE SPECIFICATIONS** . Activate air bag system. See **ACTIVATING SYSTEM** under DISABLING & ACTIVATING AIR BAG SYSTEM.

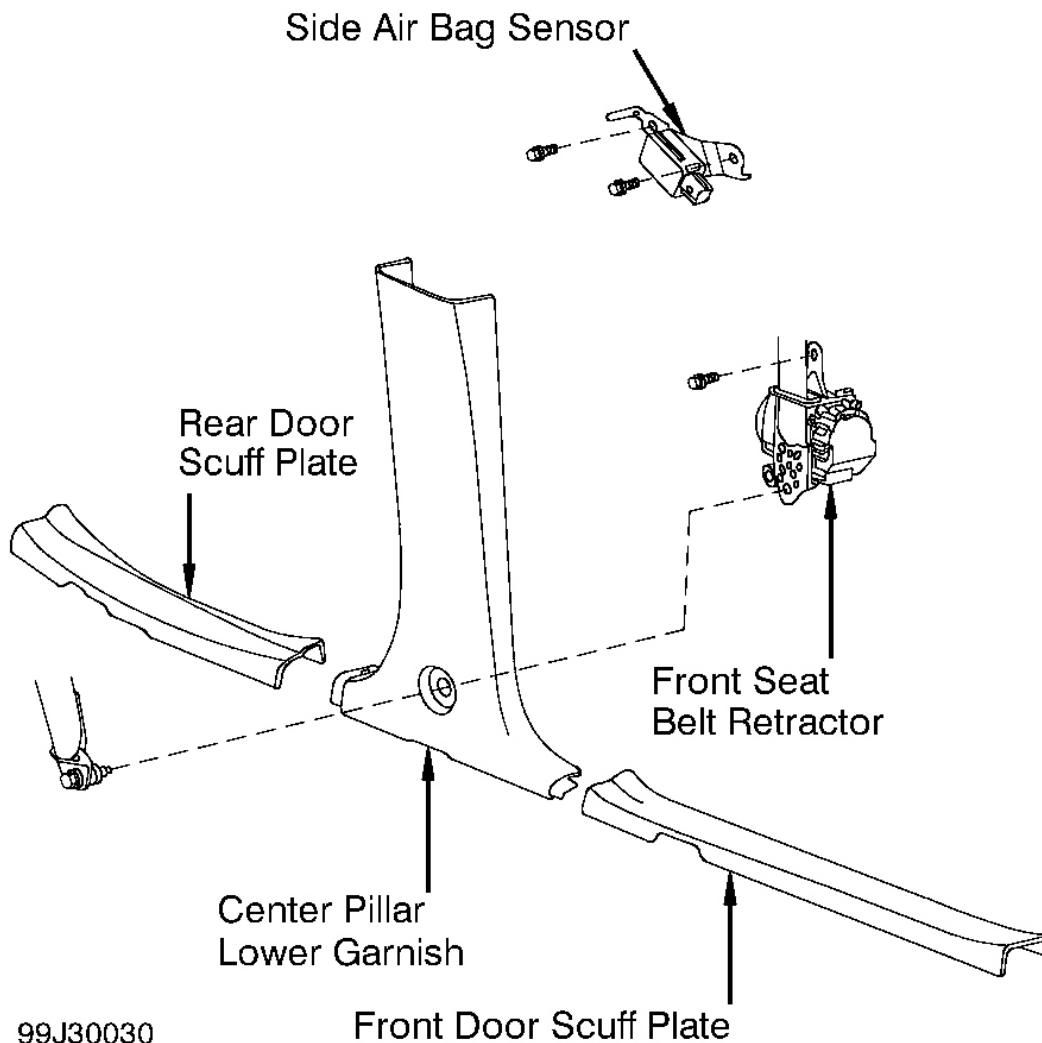


Fig. 15: Identifying Side Air Bag Sensor

Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

SIDE CURTAIN AIR BAG MODULE

Removal & Installation

1. Before proceeding, see **AIR BAG SAFETY PRECAUTIONS** . Disable air bag system. See **DISABLING SYSTEM** under DISABLING & ACTIVATING AIR BAG SYSTEM.
2. Remove headliner. See **HEADLINER** . Remove bolts "A". See **Fig. 16** . Bind front and rear sections of curtain air bag to center section. Remove bolts "B" and curtain air bag module. Remove bolt and curtain air bag module bracket. Place air bag module in plastic bag and store in safe place, if reusing air bag module.
3. To install, reverse removal procedure. Ensure deployment section of air bag is not twisted during installation. Tighten bolts to specification. See **TORQUE SPECIFICATIONS** . Activate air bag system. See **ACTIVATING SYSTEM** under DISABLING & ACTIVATING AIR BAG SYSTEM.

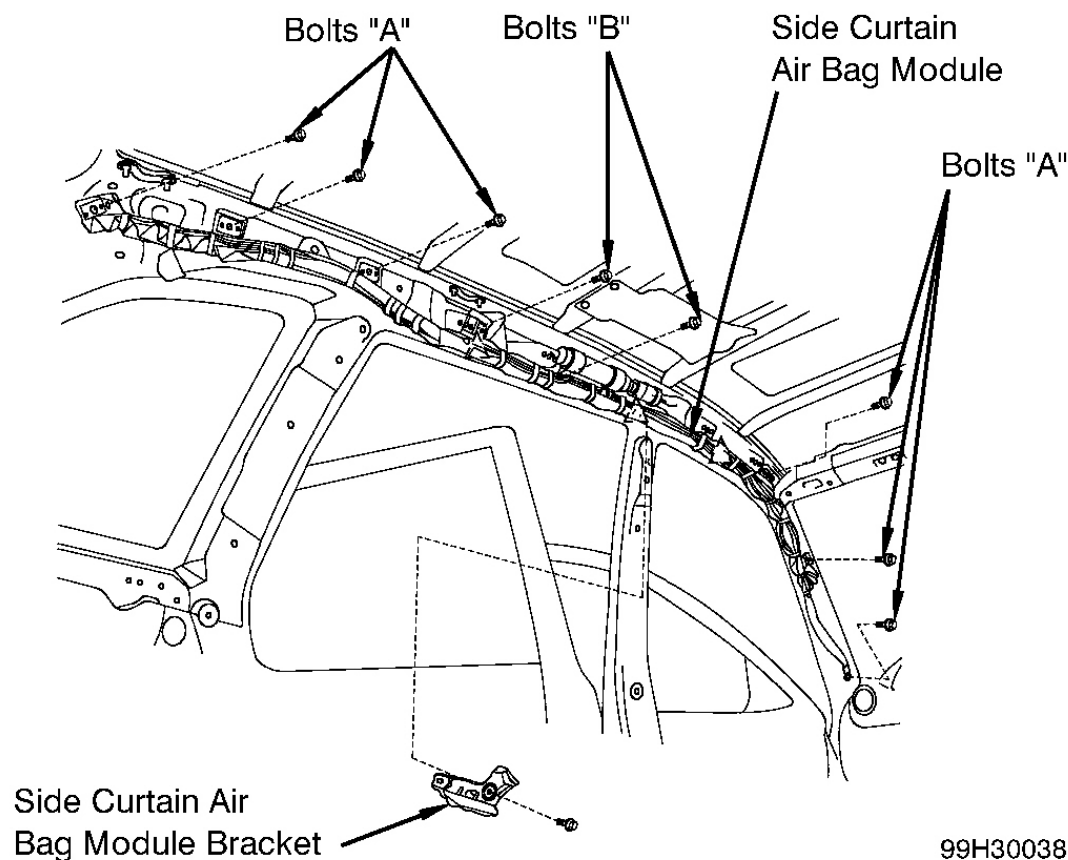


Fig. 16: Identifying Side Curtain Air Bag Module
Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

SPIRAL CABLE

Removal & Installation

1. Before proceeding, see **AIR BAG SAFETY PRECAUTIONS** . Disable air bag system. See **DISABLING SYSTEM** under DISABLING & ACTIVATING AIR BAG SYSTEM.
2. Remove driver-side air bag module. See **DRIVER-SIDE AIR BAG MODULE** . Remove steering wheel. See **STEERING WHEEL** . Remove 3 screws and lower steering column cover. Disengage upper steering column cover from steering column tube. Disconnect electrical connectors from spiral cable. Disengage spiral cable attaching claws and remove spiral cable.
3. To install, reverse removal procedure. Before installing spiral cable, ensure front wheels are in straight-ahead position and spiral cable is properly aligned. See **SPIRAL CABLE** under ADJUSTMENTS. Tighten steering wheel nut and driver-side air bag module Torx screws to specification. See **TORQUE SPECIFICATIONS** . Activate air bag system. See **ACTIVATING SYSTEM** under DISABLING & ACTIVATING AIR BAG SYSTEM.

STEERING WHEEL

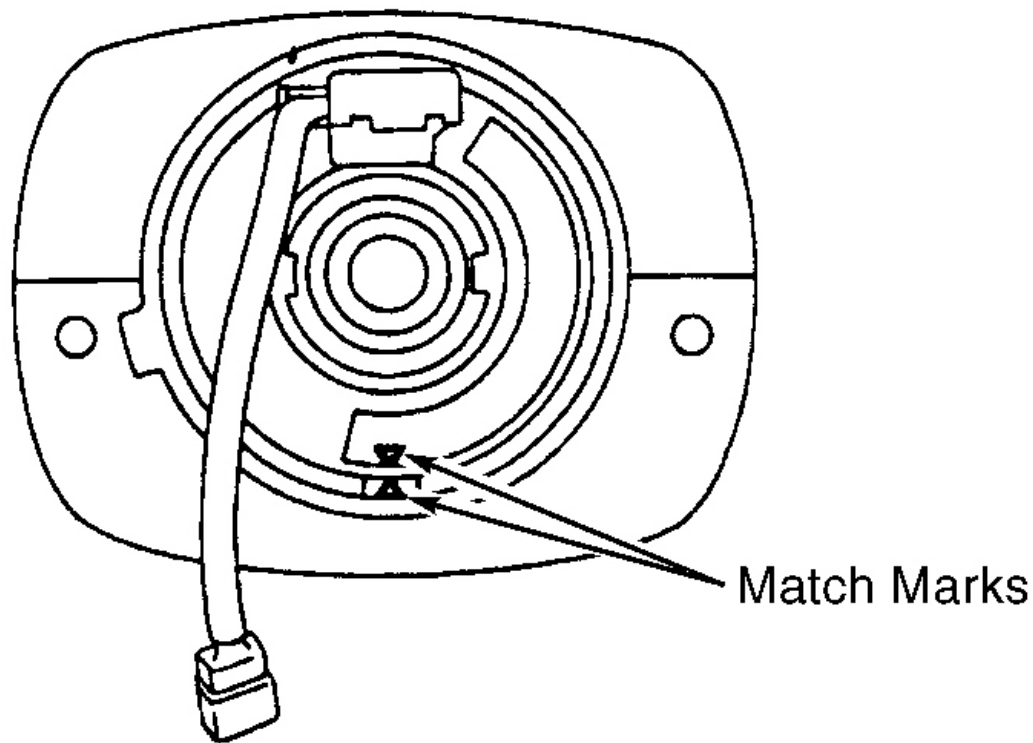
Removal & Installation

1. Before proceeding, see **AIR BAG SAFETY PRECAUTIONS** . Disable air bag system. See **DISABLING SYSTEM** under DISABLING & ACTIVATING AIR BAG SYSTEM.
2. Remove driver-side air bag module. See **DRIVER-SIDE AIR BAG MODULE** . Remove steering wheel nut. Match mark steering wheel and steering shaft for reassembly reference. Using appropriate puller, remove steering wheel.
3. To install, reverse removal procedure. Ensure front wheels are in straight-ahead position and spiral cable is properly aligned. See **SPIRAL CABLE** under ADJUSTMENTS. Tighten steering wheel nut and driver-side air bag module Torx screws to specification. See **TORQUE SPECIFICATIONS** . Activate air bag system. See **ACTIVATING SYSTEM** under DISABLING & ACTIVATING AIR BAG SYSTEM.

ADJUSTMENTS

SPIRAL CABLE

Ensure front wheels are in straight-ahead position. Turn spiral cable counterclockwise until it becomes difficult to turn. Turn spiral cable clockwise about 2 1/2 turns to align match marks. See **Fig. 17** . Install steering wheel.



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Fig. 17: Adjusting Spiral Cable

Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

WIRE REPAIR

DO NOT attempt wiring harness repairs. Replace entire wiring harness.

TORQUE SPECIFICATIONS

TORQUE SPECIFICATIONS

Application	Ft. Lbs. (N.m)
Front seat anchor bolts	27 (37)
Front seat back bolts	32 (44)
Passenger-side air bag module bolt	15 (20)
Rear air bag sensor bolts	15 (20)
Seat belt buckle bolt	32 (43)

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Seat belt floor anchor bolt	32 (43)
Seat belt shoulder anchor bolt	32 (43)
Side air bag sensor bolts	15 (20)
Steering wheel nut	25 (34)
INCH Lbs. (N.m)	
Air bag sensor assembly Torx screws	133 (15)
Driver-side air bag module Torx screws	78 (8.8)
Front air bag sensor mounting bolts	71 (8.0)
Seat position sensor	71 (8.0)
Seat belt pretensioner upper bolt	75 (8.5)
Side curtain air bag module bolts "A" & "B"	87 (9.8)

DIAGNOSTICS

WARNING: Unintentional air bag module deployment is possible. Personal injury may result. Never use memory savers when working on air bag system.

AIR BAG WARNING LIGHT CHECK

Turn ignition switch to ON position. If AIR BAG warning light comes on for about 6 seconds and then goes off, system is functioning properly. If AIR BAG warning light comes on and stays on (or flashes), Diagnostic Trouble Code (DTC) is stored in air bag sensor assembly. Go to **RETRIEVING CODES**. If AIR BAG warning light responds in any other way, go to **DIAGNOSTIC TESTS**.

RETRIEVING CODES

CAUTION: Air bag system damage is possible. System may be damaged if jumper wire is incorrectly connected across terminals of Data Link Connector 3 (DLC 3). Use Diagnosis Check Wire (09843-18020) when connecting terminals of DLC 3.

Retrieving AIR Bag System Dtc's Using Diagnosis Check Wire

1. Turn ignition switch to ON position. Wait about 20 seconds. Using Diagnosis Check Wiring (09843-18020), connect terminals Tc and CG of Data Link Connector 3 (DLC 3), located under lower left side of instrument panel. See [Fig. 18](#).
2. If AIR BAG warning light flashes 2 times per second, system is normal (normal code). If AIR BAG warning light does not flash Diagnostic Trouble Codes (DTCs) or flashes DTCs without DLC 3 connection, proceed to **DIAGNOSTIC TROUBLE CODES (DTCs) CANNOT BE DISPLAYED, OR DTCs ARE DISPLAYED WITHOUT DATA LINK CONNECTOR 3 (DLC 3) CONNECTION**. If AIR BAG warning light is on continuously and DTC is normal (flashes 2 times per second), source voltage is low. See **SOURCE VOLTAGE DROP** under DIAGNOSTIC TESTS.
3. If AIR BAG warning light flashes, count number of flashes to determine DTCs that are set. For example,

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DTC 12 is: FLASH, 1.5-second pause, FLASH, FLASH. If more than one DTC is displayed, a 2.5-second pause will occur between each DTC. Lowest numbered DTC will be displayed first, followed by next higher number DTC until all DTCs have been displayed.

4. After all DTCs are displayed, a 4-second pause will occur, and DTC display will be repeated. See appropriate DTC under **DIAGNOSTIC TESTS** . After repairing, clear DTCs. See **CLEARING CODES** .

NOTE: If DTCs other than those listed under **DIAGNOSTIC TESTS** are displayed, replace air bag sensor assembly. If AIR BAG warning light does not function as described, proceed to appropriate test under **DIAGNOSTIC TESTS** .

Retrieving AIR Bag System Dtc's Using Toyota Hand-held Tester

Install Toyota hand-held tester to Data Link Connector 3 (DLC 3), located under left lower side of instrument panel. See **Fig. 18** . Read DTC by following prompts on tester. See tester operator's manual for instructions.

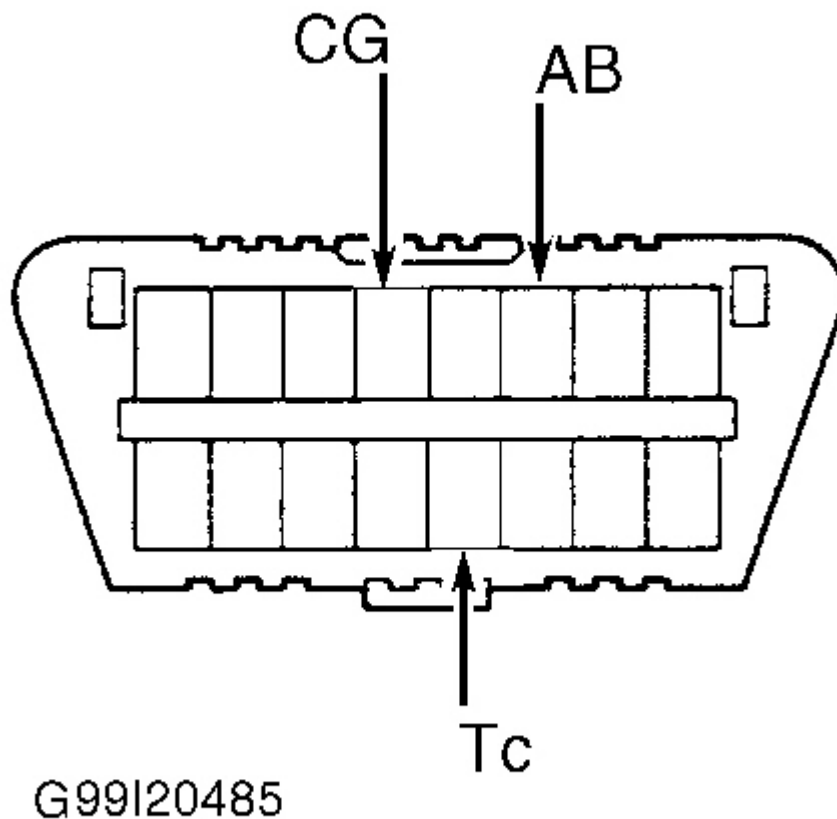


Fig. 18: Identifying Data Link Connector 3 (DLC 3) Terminals
Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

CLEARING CODES

Clearing AIR Bag System Dtc's Using Jumper Wire

1. Using one jumper wire, connect one end of jumper wire to DLC 3 terminal Tc. See **Fig. 18** . Connect other end of jumper wire to ground. Turn ignition switch to ON position. Wait 3-10 seconds for DTC to begin to be output.
2. After DTC has begun to be output, release jumper wire from ground. Wait 2-4 seconds for AIR BAG warning light to illuminate. Reconnect jumper to ground within 1-5 seconds after AIR BAG warning light has illuminated. Wait 2-4 seconds for AIR BAG warning light to turn off. Release jumper from ground within 1-5 seconds after AIR BAG warning light has turned off. Wait 2-4 seconds for AIR BAG warning light to illuminate. Reconnect jumper to ground within 1-5 seconds after AIR BAG warning light has illuminated. Wait 2-4 seconds for AIR BAG warning light to turn off. Wait one second for AIR BAG

warning light to output normal code (2 flashes per second). If AIR BAG warning light does not output normal code, repeat procedure until codes are cleared.

Clearing AIR Bag System Dtc's Using Toyota Hand-held Tester

Connect Toyota hand-held tester to DLC 3. Clear DTCs by following prompts on tester. See tester operator's manual for instructions.

CHECK MODE PROCEDURE

1. Check mode using Toyota hand-held tester

Connect Toyota hand-held tester to DLC 3. Turn ignition switch to ON position. Select "TEST MODE", and proceed checking with hand-held tester.

RELEASING SHORT SPRING

CAUTION: Damage to air bag electrical connector terminal is possible. If paper thicker than male terminal is used, connector terminal could be damaged. Damaged connector terminal could result in system fault. Always use paper that is same thickness as male terminal.

NOTE: Perform this procedure only if you were sent here from **DIAGNOSTIC TESTS**.

1. Air bag squib circuit consists of circuit between air bag sensor assembly and air bag. If voltage is accidentally applied across squib circuit (as when testing, for example), air bag will deploy.
2. To prevent accidental deployment, squib circuit connectors contain a spring-loaded shorting bar short spring. When squib circuit connector is disconnected, short spring automatically shorts squib circuit positive and negative circuits together. This prevents air bag deployment if voltage is accidentally applied across squib circuit.
3. When connector halves are attached, shorting bar is in released position (no continuity exists between terminals). When connector is disconnected, shorting bar is engaged (continuity exists between terminals).
4. Some testing procedures require short spring to be in released position with connector disconnected (this is opposite of its normal position). To hold short spring in released position, obtain a piece of paper that is same thickness as male terminal blade that slides under short spring when connector is connected. See **Fig. 19**.
5. With squib circuit connector disconnected, insert paper into female terminal, sliding it under short spring. This lifts spring, breaking circuit and allowing test procedure to be performed.

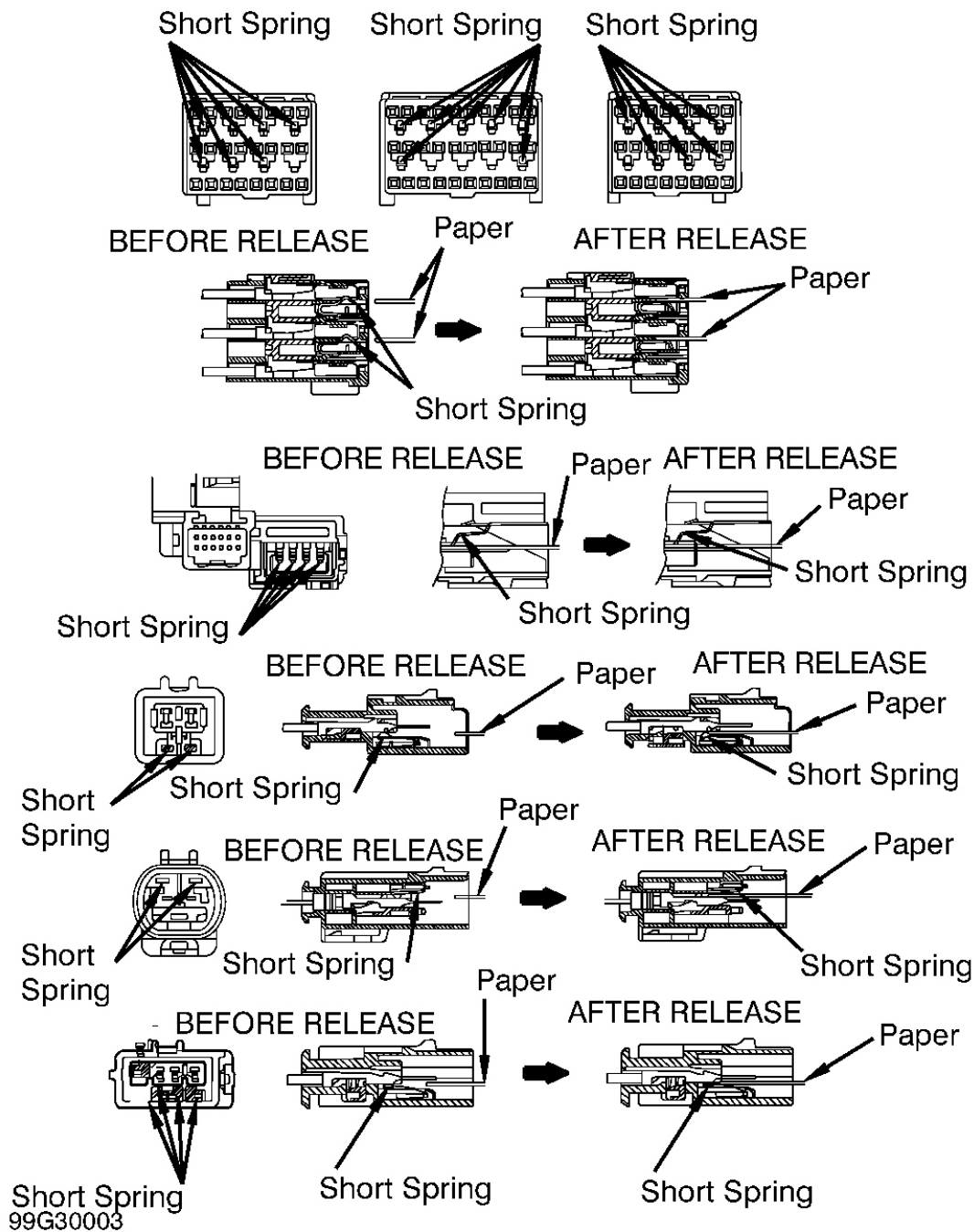


Fig. 19: Releasing Short Spring

Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

DIAGNOSTIC TESTS

WARNING: Accidental air bag deployment is possible. Personal injury may result. Read and follow all **WARNINGS** and **AIR BAG SAFETY PRECAUTIONS** before working on air bag system or related components

CAUTION: Air bag center sensor may be damaged. Improper system operation possible. Ensure ignition switch is in **LOCK** position before disconnecting or connecting negative battery cable. Connector terminal damage is possible. Improper system operation possible. Avoid probing terminal ends. Instead, backprobe terminals (probe terminal where wire enters harness connector).

NOTE: In the following tests, the term squib and module may be used interchangeably.

AIR BAG WARNING LIGHT IS ALWAYS ILLUMINATED WHEN DIAGNOSTIC TROUBLE CODE (DTC) IS NOT OUTPUT

Diagnostic Procedure

1. Measure battery voltage. If battery voltage is 11-14 volts, go to next step. If battery voltage is not 11-14 volts, replace battery.
2. Disconnect negative battery cable. Wait at least 90 seconds. Inspect air bag sensor assembly and ensure harness connectors are properly connected. See **AIR BAG SENSOR ASSEMBLY** under REMOVAL & INSTALLATION. If air bag sensor assembly harness connectors are properly connected, go to next step. If air bag sensor assembly harness connectors are not properly connected, reconnect connectors.
3. Access instrument cluster and disconnect harness connectors. Measure resistance between harness side of air bag sensor assembly connector C7, terminal No. 14 (Black/Yellow wire, circuit LA) and harness side of instrument cluster connector C13, terminal No. 7 (White wire, circuit LA). See **Fig. 20** & **Fig. 21** . Resistance should be less than one ohm. Measure resistance between ground and harness side of air bag sensor assembly connector C7, terminal No. 14. Resistance should be more than one megohm. Ensure ignition switch is in ON position. Measure voltage between ground and harness side of air bag sensor assembly connector C7, terminal No. 14. Voltage should be less than one volt. If voltage and resistance readings are normal, go to next step. If voltage and resistance readings are not normal, replace wire harness between instrument cluster and air bag sensor assembly.
4. Connect instrument cluster harness connectors. Ensure negative battery cable is connected and ignition switch is in ON position. Measure voltage between ground and harness side of instrument cluster connector C7, terminal No. 40 (White wire). If voltage is 8-14 volts, replace air bag sensor assembly. If voltage is not 8-14 volts, replace instrument cluster.

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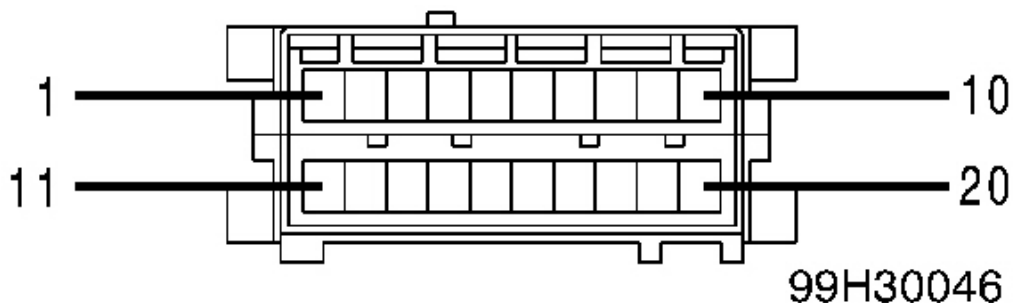


Fig. 20: Identifying Instrument Cluster Connector C13
Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

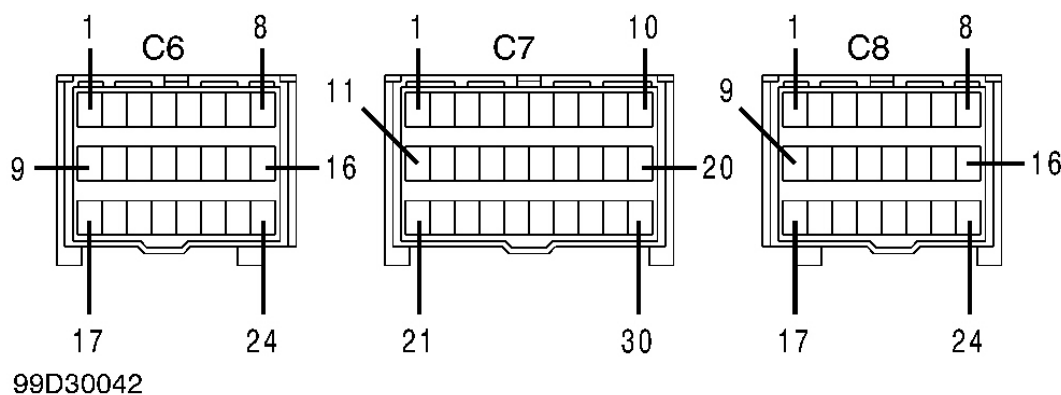


Fig. 21: Identifying Air Bag Sensor Assembly Connectors
Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

AIR BAG WARNING LIGHT DOES NOT ILLUMINATE

Diagnostic Procedure

1. Turn ignition switch to LOCK position. Disable air bag system. See **DISABLING SYSTEM** under DISABLING & ACTIVATING AIR BAG SYSTEM. Measure battery voltage. If battery voltage is 11-14 volts, go to next step. If battery voltage is not 11-14 volts, replace battery.
2. Connect negative battery cable and wait at least 2 seconds. Turn ignition switch to ON position and observe AIR BAG warning light. If AIR BAG warning light illuminates, replace instrument cluster. If AIR BAG warning light does not illuminate, go to next step.

3. Turn ignition switch to LOCK position. Disconnect negative battery cable. Wait at least 90 seconds. Disconnect instrument cluster harness connectors. Measure voltage between ground and harness side of air bag sensor assembly connector C7, terminal No. 14 (Black/Yellow wire, circuit LA). See **Fig. 21** . If voltage is less than one volt, replace air bag sensor assembly. If voltage is more than one volt, replace wire harness between instrument cluster and air bag sensor assembly.

SOURCE VOLTAGE DROP

Diagnostic Procedure

1. Turn ignition switch to LOCK position. Disable air bag system. See **DISABLING SYSTEM** under DISABLING & ACTIVATING AIR BAG SYSTEM. Reconnect negative battery cable. Turn ignition switch to ON position. Measure voltage between ground and air bag sensor assembly connector C7, terminal No. 21 (Black/Orange wire, circuit IG2). See **Fig. 21** . If voltage is 10-14 volts, go to next step. If voltage is not 10-14 volts, repair or replace wiring harness between battery and air bag sensor assembly and/or repair charging system. See **WIRING DIAGRAMS** .
2. Turn ignition switch to LOCK position. Disconnect negative battery cable. Wait at least 90 seconds. Measure resistance between ground and air bag sensor assembly connector C7, terminal No. 25 (White/Black wire, circuit E1). Measure resistance between ground and air bag sensor assembly connector C7, terminal No. 26 (White/Black wire, circuit E2). If resistance is less than one ohm, go to next step. If resistance is more than one ohm, replace wiring harness between body ground and air bag sensor assembly.
3. Activate air bag system. See **ACTIVATING SYSTEM** under DISABLING & ACTIVATING AIR BAG SYSTEM. Turn on electrical accessories (defogger, wipers, headlights, blower motor, etc.). If AIR BAG warning light does not come on, test is complete. If AIR BAG warning light does come on, replace air bag sensor assembly. See **AIR BAG SENSOR ASSEMBLY** under REMOVAL & INSTALLATION.

DIAGNOSTIC TROUBLE CODES (DTCS) CANNOT BE DISPLAYED, OR DTCS ARE DISPLAYED WITHOUT DATA LINK CONNECTOR 3 (DLC 3) CONNECTION

Diagnostic Procedure

1. Turn ignition switch to LOCK position. Disable air bag system. See **DISABLING SYSTEM** under DISABLING & ACTIVATING AIR BAG SYSTEM. Measure resistance between DLC 3 connector terminal No. 13 and harness side of air bag sensor assembly connector C7, terminal No. 15 (Pink/Black wire, circuit TC). See **Fig. 18** & **Fig. 21** . If resistance is less than one ohm, go to next step. If resistance is more than one ohm, replace wire harness between DLC 3 and air bag sensor assembly.
2. Measure resistance between ground and DLC 3 connector terminal No. 4. If resistance is less than one ohm, go to next step. If resistance is more than one ohm, repair or replace wire harness between DLC 3 and body ground.
3. Measure resistance between ground and harness side of air bag sensor assembly connector C7, terminal No. 15. If resistance is more than one megohm, replace air bag sensor assembly. If resistance is less than one megohm, repair or replace appropriate wire harness, replace appropriate electronic control unit.

AIR BAG WARNING LIGHT INTERMITTENT

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If AIR BAG warning light comes on intermittently, perform following tests to simulate driving conditions. If problem cannot be found, replace all air bag system components including wiring harness.

- Wiggle-test wiring harness.
- Apply heat to components with a hair dryer.
- Spray water onto entire vehicle (not directly onto electrical components) to simulate humidity.

DTC 31/B1000: AIR BAG SENSOR ASSEMBLY MALFUNCTION

Possible Causes

Diagnostic Trouble Code (DTC) 31/B1000 could be caused by air bag sensor assembly malfunction.

NOTE: If a DTC other than DTCs 31/B1000 is displayed at same time as DTCs 31/B1000, repair fault indicated by DTC other than DTCs 31/B1000 before using this procedure.

Diagnostic Procedure

Turn ignition switch to LOCK position. Disconnect negative battery cable. Wait at least 90 seconds. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Clear DTCs. See **CLEARING CODES** under DIAGNOSTICS. Turn ignition switch to LOCK position. Wait at least 20 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Retrieve DTCs. See **RETRIEVING CODES** under DIAGNOSTICS. If DTC 31/B1000 is displayed, replace air bag sensor assembly. If DTC 31/B1000 is not displayed, system is functioning properly at this time. Check for intermittent fault. See **AIR BAG WARNING LIGHT INTERMITTENT**.

DTC 13/B1610: RIGHT FRONT AIR BAG SENSOR MALFUNCTION

Possible Causes

Diagnostic Trouble Code (DTC) 13/B1610 could be caused by an short to battery, short to ground or open in right front air bag sensor wiring harness, right front air bag sensor malfunction or air bag sensor assembly malfunction.

NOTE: During testing, if DTCs other than DTC 13/B1610 are displayed, disregard them.

Diagnostic Procedure

1. Turn ignition switch to LOCK position. Disable air bag system. See **DISABLING SYSTEM** under DISABLING & ACTIVATING AIR BAG SYSTEM. Reconnect air bag sensor assembly harness connectors. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Clear Diagnostic Trouble Codes (DTCs). See **CLEARING CODES** under DIAGNOSTICS. Turn ignition switch to LOCK position. Turn ignition switch to ON position. Wait at least 60 seconds. Retrieve DTCs. See **RETRIEVING CODES** under DIAGNOSTICS. If DTC 13/B1610 is displayed, go to next step. If DTC 13/B1610 is not displayed, system is functioning properly at this

time. Check for intermittent fault. See **AIR BAG WARNING LIGHT INTERMITTENT** .

2. Turn ignition switch to LOCK position. Disconnect negative battery cable and wait at least 90 seconds. Inspect air bag sensor assembly for proper connection of harness connectors. See **AIR BAG SENSOR ASSEMBLY** under REMOVAL & INSTALLATION. Access right front air bag sensor and inspect for proper connection of harness connector. See **FRONT AIR BAG SENSOR** under REMOVAL & INSTALLATION. If right front air bag sensor and air bag sensor assembly connectors are not properly connected, reconnect connectors and go to step 1 . If right front air bag sensor and air bag sensor assembly connectors are properly connected, go to next step.
3. Disconnect air bag sensor assembly harness connector C7. Disconnect right front air bag sensor connector. Connect jumper wire between Black/White wire (circuit SR+) and Brown/White wire (circuit SR-) on harness side of front air bag sensor connector. Measure resistance between harness air bag sensor assembly connector C7, terminals No. 29 (Black/White wire) and No. 27 (Brown/White wire). See **Fig. 21** . If resistance is more than one ohm, go to step 8 . If resistance is less than one ohm, go to next step.
4. Remove jumper wire. Measure resistance between harness side air bag sensor assembly connector C7, terminals No. 29 and (Black/White wire) and No. 27 (Brown/White wire). If resistance is less than one megohm, go to step 9 . If resistance is more than one megohm, go to next step.
5. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Measure voltage between ground and harness side air bag sensor assembly connector C7, terminals No. 29 (Black/White wire) and No. 27 (Brown/White wire). If voltage is more than one volt, go to step 10 . If voltage is less than one volt, go to next step.
6. Turn ignition switch to LOCK position. Disconnect negative battery cable. Wait at least 90 seconds. Measure resistance between ground and harness side of air bag sensor assembly connector C7, terminals No. 29 (Black/White wire) and No. 27 (Brown/White wire). If resistance is less than one megohm, go to step 11 . If resistance is more than one megohm, go to next step.
7. Connect air bag sensor assembly connector C7. Remove right and left front air bag sensors. Install right front air bag sensor on left side and connect to left front air bag sensor harness connector. Install left front air bag sensor on right side and connect to right front air bag sensor harness connector. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Clear DTCs. Turn ignition switch to LOCK position. Wait at least 20 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Retrieve DTCs. If DTC 13/B1610 and 14/B1615 are not displayed, system is operating normally at this time. Check for intermittent fault. If DTC 13/B1610 is displayed, replace air bag sensor assembly. If DTC 14/B1615 is displayed, replace right front air bag sensor.
8. Disconnect engine room main wire harness connector from instrument panel harness connector, located behind right kick panel. See **WIRING DIAGRAMS** . Measure resistance between Black/White wire and Brown/White wire on harness side of engine room main wire harness connector. If resistance is more than one ohm, replace engine room main wire harness. If resistance is less than one ohm, replace instrument panel harness.
9. Disconnect engine room main wire harness connector from instrument panel harness connector, located behind right kick panel. See **WIRING DIAGRAMS** . Measure resistance in Black/White wire and Brown/White wire on harness side of engine room main wire harness connector. If resistance is less than one megohm, replace engine room main wire harness. If resistance is more than one megohm, replace instrument panel harness.
10. Disconnect engine room main wire harness connector from instrument panel harness connector, located behind right kick panel. See **WIRING DIAGRAMS** . Measure voltage between Black/White wire and Brown/White wire on harness side of engine room main wire harness connector. If voltage is more than

one volt, replace instrument panel harness. If voltage is less than one volt, replace engine room main wire harness.

11. Disconnect engine room main wire harness connector from instrument panel harness connector, located behind right kick panel. See **WIRING DIAGRAMS** . Measure resistance in Black/White wire between ground and harness side of engine room main wire harness connector. Measure resistance in Brown/White wire between ground and harness side of engine room main wire harness connector. If resistance is less than one megohm, replace engine room main wire harness. If resistance is more than one megohm, replace instrument panel harness.

DTC 14/B1615: LEFT FRONT AIR BAG SENSOR MALFUNCTION

Possible Causes

Diagnostic Trouble Code (DTC) 14/B1615 could be caused by an short to battery, short to ground or open in left front air bag sensor wiring harness, left front air bag sensor malfunction or air bag sensor assembly malfunction.

NOTE: During testing, if DTCs other than DTC 14/B1615 are displayed, disregard them.

Diagnostic Procedure

1. Turn ignition switch to LOCK position. Disable air bag system. See **DISABLING SYSTEM** under DISABLING & ACTIVATING AIR BAG SYSTEM. Reconnect air bag sensor assembly harness connectors. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Clear Diagnostic Trouble Codes (DTCs). See **CLEARING CODES** under DIAGNOSTICS. Turn ignition switch to LOCK position. Turn ignition switch to ON position. Wait at least 60 seconds. Retrieve DTCs. See **RETRIEVING CODES** under DIAGNOSTICS. If DTC 14/B1615 is displayed, go to next step. If DTC 14/B1615 is not displayed, system is functioning properly at this time. Check for intermittent fault. See **AIR BAG WARNING LIGHT INTERMITTENT** .
2. Turn ignition switch to LOCK position. Disconnect negative battery cable and wait at least 90 seconds. Inspect air bag sensor assembly for proper connection of harness connectors. See **AIR BAG SENSOR ASSEMBLY** under REMOVAL & INSTALLATION. Access left front air bag sensor and inspect for proper connection of harness connector. See **FRONT AIR BAG SENSOR** under REMOVAL & INSTALLATION. If left front air bag sensor and air bag sensor assembly connectors are not properly connected, reconnect connectors and go to step 1 . If left front air bag sensor and air bag sensor assembly connectors are properly connected, go to next step.
3. Disconnect air bag sensor assembly harness connector C7. Disconnect left front air bag sensor connector. Connect jumper wire between White/Red wire (circuit SL+) and Brown wire (circuit SL-) on harness side of front air bag sensor connector. Measure resistance between harness air bag sensor assembly connector C7, terminals No. 30 (White/Red wire) and No. 28 (Brown wire). See **Fig. 21** . If resistance is more than one ohm, go to step 8 . If resistance is less than one ohm, go to next step.
4. Remove jumper wire. Measure resistance between harness side air bag sensor assembly connector C7, terminals No. 30 (White/Red wire) and No. 28 (Brown wire). If resistance is less than one megohm, go to step 9 . If resistance is more than one megohm, go to next step.
5. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Measure voltage between ground and harness side air bag sensor assembly connector C7, terminals No. 30

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(White/Red wire) and No. 28 (Brown wire). If voltage is more than one volt, go to step 10 . If voltage is less then one volt, go to next step.

6. Turn ignition switch to LOCK position. Disconnect negative battery cable. Wait at least 90 seconds. Measure resistance between ground and harness side of air bag sensor assembly connector C7, terminals No. 30 (White/Red wire) and No. 28 (Brown wire). If resistance is less then one megohm, go to step 11 . If resistance is more than one megohm, go to next step.
7. Connect air bag sensor assembly connector C7. Remove left and right front air bag sensors. Install left front air bag sensor on right side and connect to right front air bag sensor harness connector. Install right front air bag sensor on left side and connect to left front air bag sensor harness connector. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Clear DTCs. Turn ignition switch to LOCK position. Wait at least 20 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Retrieve DTCs. If DTC 14/B1615 and 13/B1610 are not displayed, system is operating normally at this time. Check for intermittent fault. If DTC 14/B1615 is displayed, replace air bag sensor assembly. If DTC 13/B1610 is displayed, replace left front air bag sensor.
8. Disconnect engine room main wire harness connector from instrument panel harness connector, located behind left kick panel. See **WIRING DIAGRAMS** . Measure resistance between White/Red wire and Brown wire on harness side of engine room main wire harness connector. If resistance is more then one ohm, replace engine room main wire harness. If resistance is less than one ohm, replace instrument panel harness.
9. Disconnect engine room main wire harness connector from instrument panel harness connector, located behind left kick panel. See **WIRING DIAGRAMS** . Measure resistance in White/Red wire and Brown wire on harness side of engine room main wire harness connector. If resistance is less then one megohm, replace engine room main wire harness. If resistance is more than one megohm, replace instrument panel harness.
10. Disconnect engine room main wire harness connector from instrument panel harness connector, located behind left kick panel. See **WIRING DIAGRAMS** . Measure voltage between White/Red wire and Brown wire on harness side of engine room main wire harness connector. If voltage is more than one volt, replace instrument panel harness. If voltage is less then one volt, replace engine room main wire harness.
11. Disconnect engine room main wire harness connector from instrument panel harness connector, located behind left kick panel. See **WIRING DIAGRAMS** . Measure resistance in White/Red wire between ground and harness side of engine room main wire harness connector. Measure resistance in Brown wire between ground and harness side of engine room main wire harness connector. If resistance is less then one megohm, replace engine room main wire harness. If resistance is more than one megohm, replace instrument panel harness.

DTC 21/B1620: LEFT SIDE AIR BAG SENSOR MALFUNCTION

Possible Causes

Diagnostic Trouble Code (DTC) 21/B1620 could be caused by short to ground, short to battery or open in left side air bag sensor wiring harness, left side air bag sensor malfunction or air bag sensor assembly malfunction.

Diagnostic Procedure

1. Turn ignition switch to LOCK position. Disable air bag system. See **DISABLING SYSTEM** under

DISABLING & ACTIVATING AIR BAG SYSTEM. Reconnect air bag sensor assembly harness connectors. Turn ignition switch to ON position. Wait at least 60 seconds. Clear DTCs. See **CLEARING CODES** under DIAGNOSTICS. Turn ignition switch to LOCK position. Wait at least 20 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Retrieve DTCs. See **RETRIEVING CODES** under DIAGNOSTICS. If DTC 21/B1620 is not displayed, system is functioning normally at this time. Check for intermittent fault. See **AIR BAG WARNING LIGHT INTERMITTENT** . If DTC 21/B1620 is displayed, go to next step.

2. Turn ignition switch to LOCK position. Disconnect negative battery cable and wait at least 90 seconds. Access air bag sensor assembly. See **AIR BAG SENSOR ASSEMBLY** under REMOVAL & INSTALLATION. Access left side air bag sensor. See **SIDE AIR BAG SENSOR** under REMOVAL & INSTALLATION. Ensure left side air bag sensor and air bag sensor assembly harness connectors are properly connected. If left side air bag sensor and air bag sensor assembly harness connectors are not properly connected, reconnect connectors. If left side air bag sensor and air bag sensor assembly harness connectors are properly connected, go to next step.
3. Disconnect left side air bag sensor harness connector. Disconnect air bag sensor assembly harness connector C6. Connect jumper wire between Pink/Blue wire (circuit VUP L) and Gray/Blue wire (circuit ESL) on harness side of left side air bag sensor harness connector. Measure resistance between air bag sensor assembly harness connector C6, terminals No. 19 and 21. See **Fig. 21** . If resistance is less than one ohm, go to next step. If resistance is more than one ohm, replace harness between left side air bag sensor and air bag sensor assembly.
4. Remove jumper wire. Measure resistance between air bag sensor assembly harness connector C6, terminals No. 19 and 21. If resistance is more than one megohm, go to next step. If resistance is less than one megohm, replace harness between left side air bag sensor and air bag sensor assembly.
5. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Measure voltage between ground and air bag sensor assembly harness connector C6, terminals No. 19 and 21. If voltage is less than one volt, go to next step. If voltage is more than one volt, replace harness between left side air bag sensor and air bag sensor assembly.
6. Measure resistance between ground and air bag sensor assembly harness connector C6, terminals No. 19 and 21. If resistance is more than one megohm, go to next step. If resistance is less than one megohm, replace harness between left side air bag sensor and air bag sensor assembly.
7. Turn ignition switch to LOCK position. Disconnect negative battery cable. Wait at least 90 seconds. Remove right and left side air bag sensors. Install right side air bag sensor on left side and connect to left side air bag sensor harness connector. Install left side air bag sensor on right side and connect to right side air bag sensor harness connector. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Clear DTCs. Turn ignition switch to LOCK position. Wait at least 20 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Retrieve DTCs. If DTC 21/B1620 and 22/B1625 are not displayed, check for intermittent fault. If DTC 21/B1620 is displayed, replace air bag sensor assembly. If DTC 22/B1625 is displayed, replace left side air bag sensor.

DTC 22/B1625: RIGHT SIDE AIR BAG SENSOR MALFUNCTION

Possible Causes

Diagnostic Trouble Code (DTC) 22/B1625 could be caused by short to ground, short to battery or open in right side air bag sensor wiring harness, right side air bag sensor malfunction or air bag sensor assembly malfunction.

Diagnostic Procedure

1. Turn ignition switch to LOCK position. Disable air bag system. See **DISABLING SYSTEM** under DISABLING & ACTIVATING AIR BAG SYSTEM. Turn ignition switch to ON position. Wait at least 60 seconds. Clear DTCs. See **CLEARING CODES** under DIAGNOSTICS. Turn ignition switch to LOCK position. Wait at least 20 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Retrieve DTCs. See **RETRIEVING CODES** under DIAGNOSTICS. If DTC 22/B1625 is not displayed, system is functioning normally at this time. Check for intermittent fault. See **AIR BAG WARNING LIGHT INTERMITTENT** . If DTC 22/B1625 is displayed, go to next step.
2. Turn ignition switch to LOCK position. Disconnect negative battery cable and wait at least 90 seconds. Access air bag sensor assembly. See **AIR BAG SENSOR ASSEMBLY** under REMOVAL & INSTALLATION. Access right side air bag sensor. See **SIDE AIR BAG SENSOR** under REMOVAL & INSTALLATION. Ensure right side air bag sensor and air bag sensor assembly harness connectors are properly connected. If right side air bag sensor and air bag sensor assembly harness connectors are not properly connected, reconnect connectors and go to step 1 . If right side air bag sensor and air bag sensor assembly harness connectors are properly connected, go to next step.
3. Disconnect right side air bag sensor harness connector. Disconnect air bag sensor assembly harness connector C8. Connect jumper wire between Pink wire (circuit VUPR) and Gray wire (circuit ESR) on harness side of right side air bag sensor harness connector. Measure resistance between air bag sensor assembly harness connector C7, terminals No. 20 and 22. See **Fig. 21** . If resistance is less than one ohm, go to next step. If resistance is more than one ohm, replace harness between right side air bag sensor and air bag sensor assembly.
4. Remove jumper wire. Measure resistance between ground and air bag sensor assembly harness connector C8, terminals No. 20 and 22. If resistance is more than one megohm, go to next step. If resistance is less than one megohm, replace harness between right side air bag sensor and air bag sensor assembly.
5. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Measure voltage between ground and air bag sensor assembly harness connector C8, terminals No. 20 and 22. If voltage is less than one volt, go to next step. If voltage is more than one volt, replace harness between right side air bag sensor and air bag sensor assembly.
6. Measure resistance between ground and air bag sensor assembly harness connector C8, terminals No. 20 and 22. If resistance is more than one megohm, go to next step. If resistance is less than one megohm, replace harness between left side air bag sensor and air bag sensor assembly.
7. Connect air bag sensor assembly connector C8. Remove left and right side air bag sensors. Install left side air bag sensor on right side and connect to right side air bag sensor harness connector. Install right side air bag sensor on left side and connect to left side air bag sensor harness connector. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Clear DTCs. Turn ignition switch to LOCK position. Wait at least 20 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Retrieve DTCs. If DTC 21/B1620 and 22/B1625 are not displayed, check for intermittent fault. If DTC 22/B1625 is displayed, replace air bag sensor assembly. If DTC 21/B1620 is displayed, replace right side air bag sensor.

DTC 23/B1630: LEFT REAR AIR BAG SENSOR MALFUNCTION

Possible Causes

Diagnostic Trouble Code (DTC) 23/B1630 could be caused by short to ground, short to battery or open in left

rear air bag sensor wiring harness, left rear air bag sensor malfunction or air bag sensor assembly malfunction.

Diagnostic Procedure

1. Turn ignition switch to LOCK position. Disable air bag system. See **DISABLING SYSTEM** under DISABLING & ACTIVATING AIR BAG SYSTEM. Reconnect air bag sensor assembly harness connectors. Turn ignition switch to ON position. Wait at least 60 seconds. Clear DTCs. See **CLEARING CODES** under DIAGNOSTICS. Turn ignition switch to LOCK position. Wait at least 20 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Retrieve DTCs. See **RETRIEVING CODES** under DIAGNOSTICS. If DTC 23/B1630 is not displayed, system is functioning normally at this time. Check for intermittent fault. See **AIR BAG WARNING LIGHT INTERMITTENT**. If DTC 23/B1630 is displayed, go to next step.
2. Turn ignition switch to LOCK position. Disconnect negative battery cable and wait at least 90 seconds. Access air bag sensor assembly. See **AIR BAG SENSOR ASSEMBLY** under REMOVAL & INSTALLATION. Access left rear air bag sensor. See **REAR AIR BAG SENSOR** under REMOVAL & INSTALLATION. Ensure left rear air bag sensor and air bag sensor assembly harness connectors are properly connected. If left rear air bag sensor and air bag sensor assembly harness connectors are not properly connected, reconnect connectors. If left rear air bag sensor and air bag sensor assembly harness connectors are properly connected, go to next step.
3. Disconnect left rear air bag sensor harness connector. Disconnect air bag sensor assembly harness connector C6. Connect jumper wire between Red wire (circuit VUCL) and Green wire (circuit ESCL) on harness side of left rear air bag sensor harness connector. Measure resistance between air bag sensor assembly harness connector C6, terminals No. 20 and 22. See **Fig. 21**. If resistance is less than one ohm, go to next step. If resistance is more than one ohm, replace harness between left rear air bag sensor and air bag sensor assembly.
4. Remove jumper wire. Measure resistance between air bag sensor assembly harness connector C6, terminals No. 20 and 22. If resistance is more than one megohm, go to next step. If resistance is less than one megohm, replace harness between left rear air bag sensor and air bag sensor assembly.
5. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Measure voltage between ground and air bag sensor assembly harness connector C6, terminals No. 20 and 22. If voltage is less than one volt, go to next step. If voltage is more than one volt, replace harness between left rear air bag sensor and air bag sensor assembly.
6. Measure resistance between ground and air bag sensor assembly harness connector C6, terminals No. 20 and 22. If resistance is more than one megohm, go to next step. If resistance is less than one megohm, replace harness between left rear air bag sensor and air bag sensor assembly.
7. Turn ignition switch to LOCK position. Disconnect negative battery cable. Wait at least 90 seconds. Remove right and left rear air bag sensors. Install right side air bag sensor on left side and connect to left rear air bag sensor harness connector. Install left rear air bag sensor on right side and connect to right rear air bag sensor harness connector. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Clear DTCs. Turn ignition switch to LOCK position. Wait at least 20 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Retrieve DTCs. If DTC 23/B1630 and 24/B1635 are not displayed, check for intermittent fault. If DTC 23/B1630 is displayed, replace air bag sensor assembly. If DTC 24/B1635 is displayed, replace left rear air bag sensor.

DTC 22/B1635: RIGHT REAR AIR BAG SENSOR MALFUNCTION

Possible Causes

Diagnostic Trouble Code (DTC) 24/B1635 could be caused by short to ground, short to battery or open in right rear air bag sensor wiring harness, right rear air bag sensor malfunction or air bag sensor assembly malfunction.

Diagnostic Procedure

1. Turn ignition switch to LOCK position. Disable air bag system. See **DISABLING SYSTEM** under DISABLING & ACTIVATING AIR BAG SYSTEM. Turn ignition switch to ON position. Wait at least 60 seconds. Clear DTCs. See **CLEARING CODES** under DIAGNOSTICS. Turn ignition switch to LOCK position. Wait at least 20 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Retrieve DTCs. See **RETRIEVING CODES** under DIAGNOSTICS. If DTC 24/B1635 is not displayed, system is functioning normally at this time. Check for intermittent fault. See **AIR BAG WARNING LIGHT INTERMITTENT** . If DTC 24/B1635 is displayed, go to next step.
2. Turn ignition switch to LOCK position. Disconnect negative battery cable and wait at least 90 seconds. Access air bag sensor assembly. See **AIR BAG SENSOR ASSEMBLY** under REMOVAL & INSTALLATION. Access right rear air bag sensor. See **REAR AIR BAG SENSOR** under REMOVAL & INSTALLATION. Ensure right rear air bag sensor and air bag sensor assembly harness connectors are properly connected. If right rear air bag sensor and air bag sensor assembly harness connectors are not properly connected, reconnect connectors and go to step 1 . If right rear air bag sensor and air bag sensor assembly harness connectors are properly connected, go to next step.
3. Disconnect right rear air bag sensor harness connector. Disconnect air bag sensor assembly harness connector C8. Connect jumper wire between White/Black wire (circuit VUCR) and Black/Orange wire (circuit ESCR) on harness side of right rear air bag sensor harness connector. Measure resistance between air bag sensor assembly harness connector C8, terminals No. 19 and 21. See **Fig. 21** . If resistance is less than one ohm, go to next step. If resistance is more than one ohm, replace harness between right rear air bag sensor and air bag sensor assembly.
4. Remove jumper wire. Measure resistance between ground and air bag sensor assembly harness connector C8, terminals No. 19 and 21. If resistance is more than one megohm, go to next step. If resistance is less than one megohm, replace harness between right rear air bag sensor and air bag sensor assembly.
5. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Measure voltage between ground and air bag sensor assembly harness connector C8, terminals No. 19 and 21. If voltage is less than one volt, go to next step. If voltage is more than one volt, replace harness between right rear air bag sensor and air bag sensor assembly.
6. Measure resistance between ground and air bag sensor assembly harness connector C8, terminals No. 19 and 21. If resistance is more than one megohm, go to next step. If resistance is less than one megohm, replace harness between left side air bag sensor and air bag sensor assembly.
7. Connect air bag sensor assembly connector C8. Remove left and right rear air bag sensors. Install left side air bag sensor on right side and connect to right rear air bag sensor harness connector. Install right rear air bag sensor on left side and connect to left side air bag sensor harness connector. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Clear DTCs. Turn ignition switch to LOCK position. Wait at least 20 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Retrieve DTCs. If DTC 23/B1630 and 24/B1635 are not displayed, check for intermittent fault. If DTC 24/B1635 is displayed, replace air bag sensor assembly. If DTC 23/B1630 is displayed, replace right rear air bag sensor.

DTC 35/B1653: SEAT POSITION SENSOR MALFUNCTION**Possible Causes**

Diagnostic Trouble Code (DTC) 35/B1653 could be caused by open, short to ground or short circuit in seat position sensor wire harness, seat position sensor malfunction or air bag sensor assembly malfunction.

NOTE: During testing, if DTCs other than DTC 35/B1653 are displayed, disregard them.

Diagnostic Procedure

1. Turn ignition switch to LOCK position. Disable air bag system. See **DISABLING SYSTEM** under **DISABLING & ACTIVATING AIR BAG SYSTEM**. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Clear DTCs. Turn ignition switch to LOCK position. Turn ignition switch to ON position. Wait at least 60 seconds. Retrieve DTCs. See **RETRIEVING CODES** under **DIAGNOSTICS**. If DTC 35/B1653 is displayed, go to next step. If DTC 35/B1653 is not displayed, check for intermittent fault. See **AIR BAG WARNING LIGHT INTERMITTENT**.
2. Turn ignition switch to LOCK position. Disconnect negative battery cable. and wait at least 90 seconds. Access air bag sensor assembly. See **AIR BAG SENSOR ASSEMBLY** under **REMOVAL & INSTALLATION**. Access seat position sensor. See **SEAT POSITION SENSOR** under **REMOVAL & INSTALLATION**. Ensure harness connectors are properly connected to seat position sensor and air bag sensor assembly. If connectors are properly connected, go to next step. If connectors are not properly connected, reconnect connector and go to step 1.
3. Disconnect air bag center connector C6. Disconnect left front seat harness connector. Connect jumper wire between Green/Red wire (circuit DSP+) and Green/Black wire (circuit DSP-) on harness side of front seat connector. Measure resistance between ground and harness side of air bag sensor assembly connector C6, terminals No. 9 and 17. See **Fig. 21**. If resistance is less than one ohm, go to next step. If resistance is more than one ohm, replace wiring harness between front seat harness connector and air bag sensor assembly. See **WIRING DIAGRAMS**.
4. Remove jumper wire. Measure resistance between harness side of air bag sensor assembly connector C6, terminals No. 9 and 17. If resistance is more than one megohm, go to next step. If resistance is less than one megohm, replace wiring harness between front seat harness connector and air bag sensor assembly.
5. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Measure voltage between ground and harness side of air bag sensor assembly connector C6, terminals No. 9 and No. 17. If voltage is less than one volt, go to next step. If voltage is more than one volt, replace wiring harness between front seat harness connector and air bag sensor assembly.
6. Turn ignition switch to LOCK position. Disconnect negative battery cable. Wait at least 90 seconds. Measure resistance between ground and harness side of air bag sensor assembly connector C6, terminals No. 9 and No. 17. If resistance is more than one megohm, go to next step. If resistance is less than one megohm, replace wiring harness between front seat harness connector and air bag sensor assembly.
7. Connect air bag sensor assembly and seat position sensor connectors. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Clear DTCs. Turn ignition switch to LOCK position. Turn ignition switch to ON position. Wait at least 60 seconds. Retrieve DTCs. If DTC 35/B1653 is displayed, go to next step. If DTC 35/B1653 is not displayed, check for intermittent fault.

- Turn ignition switch to LOCK position. Disconnect negative battery cable. Wait at least 90 seconds. Replace seat position sensor. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Clear DTCs. Turn ignition switch to LOCK position. Turn ignition switch to ON position. Wait at least 60 seconds. Retrieve DTCs. If DTC 35/B1653 is displayed, air bag sensor assembly. If DTC 35/B1653 is not displayed, replace wiring harness between front seat harness connector and air bag sensor assembly.

DTC 37/B1655: LEFT SEAT BELT SWITCH MALFUNCTION

Description

The left seat belt switch circuit consists of air bag sensor assembly, left front seat belt buckle and left seat belt switch.

Possible Causes

Diagnostic Trouble Code (DTC) 37/B1655 could be caused by short to ground, short to battery or open in left seat belt buckle wire harness, left front seat belt buckle switch malfunction or air bag sensor assembly malfunction.

NOTE: During testing, if DTCs other than DTC 37/B1655 are displayed, disregard them.

Diagnostic Procedure

- Turn ignition switch to LOCK position. Disable air bag system. See **DISABLING SYSTEM** under DISABLING & ACTIVATING AIR BAG SYSTEM. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Clear DTCs. Turn ignition switch to LOCK position. Turn ignition switch to ON position. Wait at least 60 seconds. Retrieve DTCs. See **RETRIEVING CODES** under DIAGNOSTICS. If DTC 37/B1655 is displayed, go to next step. If DTC 37/B1655 is not displayed, check for intermittent fault. See **AIR BAG WARNING LIGHT INTERMITTENT**.
- Turn ignition switch to LOCK position. Disconnect negative battery cable. Wait at least 90 seconds. Turn ignition switch to ON position. Wait at least 90 seconds. Ensure harness connectors are properly connected to left seat belt switch and air bag sensor assembly. If connectors are properly connected, go to next step. If connectors are not properly connected, reconnect connector and go to step 1.
- Access air bag sensor assembly and disconnect connectors. See **AIR BAG SENSOR ASSEMBLY** under REMOVAL & INSTALLATION. Disconnect seat belt switch harness connector. Connect jumper wire between Green/Yellow wire (circuit DBE+) and Black wire (circuit DBE-) on harness side of left seat belt switch connector. Measure resistance between harness side of air bag sensor assembly connector C6, terminals No. 10 and 18. See **Fig. 21**. If resistance is less than one ohm, go to next step. If resistance is more than one ohm, replace wiring harness between left seat belt switch and air bag sensor assembly. See **WIRING DIAGRAMS**.
- Remove jumper wire. Measure resistance between ground and harness side of air bag sensor assembly connector C6, terminal No. 2 (Red wire). Measure resistance between harness side of air bag sensor assembly connector C6, terminals No. 10 and 18. If resistance is more than one megohm, go to next step. If resistance is less than one megohm, replace wiring harness between left seat belt switch and air bag

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sensor assembly.

5. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Measure voltage between ground and harness side of air bag sensor assembly connector C6, terminals No. 10 and 18. If voltage is less than one volt, go to next step. If voltage is more than one volt, replace wiring harness between left seat belt switch and air bag sensor assembly.
6. Turn ignition switch to LOCK position. Disconnect negative battery cable and wait at least 90 seconds. Measure resistance between ground and harness side of air bag sensor assembly connector C6, terminals No. 10 and 18. If resistance is more than one megohm, go to next step. If resistance is less than one megohm, replace wiring harness between left seat belt switch and air bag sensor assembly.
7. Reconnect left seat belt switch and air bag sensor assembly connectors. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Clear DTCs. Turn ignition switch to LOCK position. Turn ignition switch to ON position. Wait at least 60 seconds. Retrieve DTCs. If DTC 37/B1655 is displayed, go to next step. If DTC 37/B1655 is not displayed, system is functioning properly at this time. Check for intermittent fault.
8. Turn ignition switch to LOCK position. Disconnect negative battery cable. Wait at least 90 seconds. Replace left seat belt buckle switch. See **SEAT BELT BUCKLE SWITCH** under REMOVAL & INSTALLATION. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Clear DTCs. Turn ignition switch to LOCK position. Turn ignition switch to ON position. Wait at least 60 seconds. Retrieve DTCs. If DTC 37/B1655 is displayed, replace air bag sensor assembly. If DTC 37/B1655 is not displayed, test is complete.

DTC 51/B1800, 51/B1801, 51/B1802, 51/B1803: DRIVER-SIDE AIR BAG NO. 1 SQUIB CIRCUIT SHORT, OPEN, SHORT TO GROUND OR SHORT TO BATTERY

Possible Causes

Diagnostic Trouble Codes (DTCs) 51/B1800, 51/B1801, 51/B1802 or 51/B1803 could be caused by a short to ground, open, short or short to battery in No. 1 squib circuit, squib malfunction, spiral cable malfunction or air bag sensor assembly malfunction.

NOTE: During testing, if DTCs other than DTC 51/B1800, 51/B1801, 51/B1802 or 51/B1803 are displayed, disregard them.

Diagnostic Procedure

1. Turn ignition switch to LOCK position. Disable air bag system. See **DISABLING SYSTEM** under DISABLING & ACTIVATING AIR BAG SYSTEM. If using Toyota hand-held tester, retrieve 5 digit DTC. See **RETRIEVING AIR BAG SYSTEM DTCS USING TOYOTA HAND-HELD TESTER** under DIAGNOSTICS. If DTC B1800 is retrieved, go to next step. If DTC B1801 is retrieved, go to step 4 . If DTC B1802 is retrieved, go to step 5 . If DTC B1803 is retrieved, go to step 6 . If using diagnosis check wire, retrieve 2 digit DTC. See **RETRIEVING AIR BAG SYSTEM DTCS USING DIAGNOSIS CHECK WIRE** under DIAGNOSTICS. If DTC 51 is retrieved, go to step 7 .
2. Inspect spiral cable connectors for disengaged lock button or deformed or damaged lock claw. If connectors are okay, go to next step. If connectors are not okay, replace spiral cable. See **SPIRAL CABLE** under REMOVAL & INSTALLATION.
3. Release short spring mechanism on air bag sensor assembly connector C7. See **RELEASING SHORT**

SPRING under DIAGNOSTICS. Measure resistance between Yellow/Black wire (circuit D+) and Yellow wire (circuit D-) on harness side of Black upper spiral cable connector. See **WIRING DIAGRAMS** . If resistance is less than one megohm, go to step 13 . If resistance is more than one megohm, go to step 10 .

4. Measure resistance between Yellow/Black wire (circuit D+) and Yellow wire (circuit D-) on harness side of Black upper spiral cable connector. See **WIRING DIAGRAMS** . If resistance is less than one ohm, go to step 11 . If resistance is more than one ohm, go to step 15 .
5. Measure resistance between ground and Yellow/Black wire (circuit D+) on harness side of Black upper spiral cable connector. See **WIRING DIAGRAMS** . Measure resistance between ground and Yellow (circuit D-) wire on harness side of Black upper spiral cable connector. If resistance is more than one ohm, go to step 11 . If resistance is less than one megohm, go to step 17 .
6. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Measure voltage between ground and Yellow/Black wire (circuit D+) on harness side of Black upper spiral cable connector. See **WIRING DIAGRAMS** . Measure voltage between ground and Yellow wire (circuit D-) on harness side of Black upper spiral cable connector. If voltage is less than one volt, go to step 11 . If voltage is more than one volt, go to step 19 .
7. Inspect spiral cable connectors for disengaged lock button or deformed or damaged lock claw. If connectors are okay, go to next step. If connectors are not okay, replace spiral cable. See **SPIRAL CABLE** under ADJUSTMENTS.
8. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Measure voltage between ground and Yellow/Black wire (circuit D+) on harness side of Black upper spiral cable connector. See **WIRING DIAGRAMS** . Measure voltage between ground and Yellow wire (circuit D-) on harness side of Black upper spiral cable connector. Voltage should be less than one volt. Turn ignition switch to LOCK position. Disconnect negative battery cable and wait at least 90 seconds. Measure resistance between Yellow/Black wire and Yellow wire on harness side of Black upper spiral cable connector. Resistance should be less than one ohm. Measure resistance between ground and Yellow/Black wire on harness side of Black upper spiral cable connector. Measure resistance between ground and Yellow wire on harness side of Black upper spiral cable connector. Resistance should be more than one megohm. Release short spring mechanism on air bag sensor assembly connector C7. See **RELEASING SHORT SPRING** under DIAGNOSTICS. Measure resistance between Yellow/Black wire and Yellow wire on harness side of Black upper spiral cable connector. Resistance should be more than one megohm. If voltage and resistance readings are normal, go to next step. If voltage and resistance readings are not normal, go to step 21 .
9. Replace driver-side air bag module. See **DRIVER-SIDE AIR BAG MODULE** under REMOVAL & INSTALLATION. Reconnect air bag sensor assembly harness connectors. Turn ignition switch to ON position. Wait at least 60 seconds. Clear DTCs. See **CLEARING CODES** under DIAGNOSTICS. Turn ignition switch to LOCK position. Wait at least 20 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Retrieve DTCs. If DTC 51 is displayed, replace air bag sensor assembly. See **AIR BAG SENSOR ASSEMBLY** under REMOVAL & INSTALLATION. If DTC 51 is not displayed, test is complete.
10. Reconnect air bag sensor assembly connectors. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Clear DTCs. See **CLEARING CODES** under DIAGNOSTICS. Turn ignition switch to LOCK position. Wait at least 20 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Retrieve DTCs. See **RETRIEVING CODES** under DIAGNOSTICS. If DTC B1800 is displayed, replace air bag sensor assembly. See **AIR BAG SENSOR ASSEMBLY** under REMOVAL & INSTALLATION. If DTC B1800 is not displayed, go to step 12 .

11. If sent here from step 6 , turn ignition switch to LOCK position. Disconnect negative battery cable and wait at least 90 seconds. If sent here from any step, reconnect air bag sensor assembly connectors. Connect jumper wire between Yellow/Black wire and Yellow wire on harness side of Black upper spiral cable connector. See **WIRING DIAGRAMS** . Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Clear DTCs. See **CLEARING CODES** under DIAGNOSTICS. Turn ignition switch to LOCK position. Wait at least 20 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Retrieve DTCs. See **RETRIEVING CODES** under DIAGNOSTICS. If DTCs B1801, B1802 or B1803 are displayed, replace air bag sensor assembly. See **AIR BAG SENSOR ASSEMBLY** under REMOVAL & INSTALLATION. If DTC B1801, B1802 or B1803 are not displayed, go to next step.
12. Turn ignition switch to LOCK position. Disconnect negative battery cable and wait at least 90 seconds. If sent here from step 11 , remove jumper wire. If sent here from any step, connect spiral cable harness connectors to driver-side air bag module. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Clear DTCs. See **CLEARING CODES** under DIAGNOSTICS. Turn ignition switch to LOCK position. Wait at least 20 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Retrieve DTCs. See **RETRIEVING CODES** under DIAGNOSTICS. If DTCs B1800, B1801, B1802 or B1803 are displayed, replace driver-side air bag module. See **DRIVER-SIDE AIR BAG MODULE** under REMOVAL & INSTALLATION. If DTC B1800, B1801, B1802 or B1803 are not displayed, ensure air bag sensor assembly is in check mode. See **CHECK MODE PROCEDURE** under DIAGNOSTICS. Check for intermittent air bag system fault. See **AIR BAG WARNING LIGHT INTERMITTENT** .
13. Disconnect lower spiral cable harness connector. Measure resistance between Yellow/Black wire and Yellow wire on harness side of lower spiral cable connector. If resistance is less than one megohm, replace wiring harness between air bag sensor assembly and spiral cable. If resistance is more than one megohm, go to next step.
14. Release short spring mechanism on lower spiral cable harness connector. Measure resistance between Yellow/Black wire and Yellow wire on harness side of Black upper spiral cable connector. If resistance is less than one megohm, replace spiral cable. See **SPIRAL CABLE** under REMOVAL & INSTALLATION. If resistance is more than one megohm, ensure air bag sensor assembly is in check mode. See **CHECK MODE PROCEDURE** under DIAGNOSTICS. Check for intermittent air bag system fault. See **AIR BAG WARNING LIGHT INTERMITTENT** .
15. Disconnect lower spiral cable harness connector. Measure resistance between Yellow/Black wire and Yellow wire on harness side of lower spiral cable connector. If resistance is more than one ohm, replace wiring harness between air bag sensor assembly and spiral cable. If resistance is less than one ohm, go to next step.
16. Measure resistance between Yellow/Black wire and Yellow wire on harness side of Black upper spiral cable connector. If resistance is more than one ohm, replace spiral cable. See **SPIRAL CABLE** under REMOVAL & INSTALLATION. If resistance is less than one ohm, ensure air bag sensor assembly is in check mode. See **CHECK MODE PROCEDURE** under DIAGNOSTICS. Check for intermittent air bag system fault. See **AIR BAG WARNING LIGHT INTERMITTENT** .
17. Disconnect lower spiral cable harness connector. Measure resistance between ground and Yellow/Black wire on harness side of lower spiral cable connector. Measure resistance between ground and Yellow wire on harness side of lower spiral cable connector. If resistance is more than one megohm, replace wiring harness between air bag sensor assembly and spiral cable. If resistance is less than one megohm, go to next step.

18. Measure resistance between ground and Yellow/Black wire on harness side of Black upper spiral cable connector. Measure resistance between ground and Yellow wire on harness side of Black upper spiral cable connector. If resistance is more than one megohm, replace spiral cable. See **SPIRAL CABLE** under REMOVAL & INSTALLATION. If resistance is less than one megohm, ensure air bag sensor assembly is in check mode. See **CHECK MODE PROCEDURE** under DIAGNOSTICS. Check for intermittent air bag system fault. See **AIR BAG WARNING LIGHT INTERMITTENT** .
19. Turn ignition switch to LOCK position. Disconnect negative battery cable and wait at least 90 seconds. Disconnect lower spiral cable harness connector. Measure voltage between ground and Yellow/Black wire on harness side of lower spiral cable connector. Measure voltage between ground and Yellow wire on harness side of lower spiral cable connector. If voltage is more than one volt, replace wiring harness between air bag sensor assembly and spiral cable. If voltage is less than one volt, go to next step.
20. Measure voltage between ground and Yellow/Black wire on harness side of Black upper spiral cable connector. Measure voltage between ground and Yellow wire on harness side of Black upper spiral cable connector. If voltage is more than one volt, replace spiral cable. See **SPIRAL CABLE** under REMOVAL & INSTALLATION. If voltage is less than one volt, ensure air bag sensor assembly is in check mode. See **CHECK MODE PROCEDURE** under DIAGNOSTICS. Check for intermittent air bag system fault. See **AIR BAG WARNING LIGHT INTERMITTENT** .
21. Restore short spring mechanism to original condition. Disconnect lower spiral cable harness connector. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Measure voltage between ground and Yellow/Black wire on harness side of lower spiral cable connector. Measure voltage between ground and Yellow wire on harness side of lower spiral cable connector. Voltage should be less than one volt. Turn ignition switch to LOCK position. Disconnect negative battery cable and wait at least 90 seconds. Measure resistance between Yellow/Black wire and Yellow wire on harness side of lower spiral cable connector. Resistance should be less than one ohm. Measure resistance between ground and Yellow/Black wire on harness side of lower spiral cable connector. Measure resistance between ground and Yellow wire on harness side of lower spiral cable connector. Resistance should be more than one megohm. Release short spring mechanism on air bag sensor assembly connector C7. Measure resistance between Yellow/Black wire and Yellow wire on harness side of lower spiral cable connector. Resistance should be more than one megohm. If voltage and resistance readings are normal, go to next step. If voltage and resistance readings are not normal, replace wiring harness between air bag sensor assembly and spiral cable.
22. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Measure voltage between ground and Yellow/Black wire on harness side of Black upper spiral cable connector. Measure voltage between ground and Yellow wire on harness side of Black upper spiral cable connector. Voltage should be less than one volt. Turn ignition switch to LOCK position. Disconnect negative battery cable and wait at least 90 seconds. Measure resistance between Yellow/Black wire and Yellow wire on harness side of Black upper spiral cable connector. Resistance should be less than one ohm. Measure resistance between ground and Yellow/Black wire on harness side of Black upper spiral cable connector. Measure resistance between ground and Yellow wire on harness side of Black upper spiral cable connector. Resistance should be more than one megohm. Release short spring mechanism on lower spiral cable connector. Measure resistance between Yellow/Black wire and Yellow wire on harness side of Black upper spiral cable connector. Resistance should be more than one megohm. If voltage and resistance readings are normal, ensure air bag sensor assembly is in check mode. See **CHECK MODE PROCEDURE** under DIAGNOSTICS. Check for intermittent air bag system fault. See **AIR BAG WARNING LIGHT INTERMITTENT** . If voltage and resistance readings are not normal, replace spiral cable. See **SPIRAL CABLE** under REMOVAL & INSTALLATION.

DTC 52/B1805, 52/B1806, 52/B1807, 52/B1808: PASSENGER-SIDE AIR BAG NO. 1 SQUIB CIRCUIT SHORT, OPEN, SHORT TO GROUND OR SHORT TO BATTERY**Possible Causes**

Diagnostic Trouble Codes (DTCs) 52/B1805, 52/B1806, 52/B1807 or 52/B1808 could be caused by a short to ground, open, short or short to battery in No. 1 squib circuit, squib malfunction or air bag sensor assembly malfunction.

NOTE: During testing, if DTCs other than DTC 52/B1805, 52/B1806, 52/B1807 or 52/B1808 are displayed, disregard them.

Diagnostic Procedure

1. Turn ignition switch to LOCK position. Disable air bag system. See **DISABLING SYSTEM** under **DISABLING & ACTIVATING AIR BAG SYSTEM**. If using Toyota hand-held tester, retrieve 5 digit DTC. See **RETRIEVING AIR BAG SYSTEM DTCS USING TOYOTA HAND-HELD TESTER** under **DIAGNOSTICS**. If DTC B1805 is retrieved, go to next step. If DTC B1806 is retrieved, go to step 4 . If DTC B1807 is retrieved, go to step 5 . If DTC B1808 is retrieved, go to step 6 . If using diagnosis check wire, retrieve 2 digit DTC. See **RETRIEVING AIR BAG SYSTEM DTCS USING DIAGNOSIS CHECK WIRE** under **DIAGNOSTICS**. If DTC 52 is retrieved, go to step 7 .
2. Inspect passenger-side air bag module connectors for disengaged lock button or deformed or damaged lock claw. If connectors are okay, go to next step. If connectors are not okay, replace instrument panel wiring harness.
3. Release short spring mechanism on air bag sensor assembly connector C7. See **RELEASING SHORT SPRING** under **DIAGNOSTICS**. Measure resistance between Yellow/Red wire (circuit P+) and Yellow/Green wire (circuit P-) on harness side of passenger-side air bag module connector. See **WIRING DIAGRAMS** . If resistance is less than one megohm, replace instrument panel wiring harness. If resistance is more than one megohm, go to step 10 .
4. Measure resistance between Yellow/Red wire (circuit P+) and Yellow/Green wire (circuit P-) on harness side of passenger-side air bag module connector. See **WIRING DIAGRAMS** . If resistance is less than one ohm, go to step 11 . If resistance is more than one ohm, replace instrument panel wiring harness.
5. Measure resistance between ground and Yellow/Red wire (circuit P+) on harness side of passenger-side air bag module connector. See **WIRING DIAGRAMS** . Measure resistance between ground and Yellow/Green (circuit P-) wire on harness side of passenger-side air bag module connector. If resistance is more than one megohm, go to step 11 . If resistance is less than one megohm, replace instrument panel wiring harness.
6. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Measure voltage between ground and Yellow/Red wire (circuit P+) on harness side of passenger-side air bag module connector. See **WIRING DIAGRAMS** . Measure voltage between ground and Yellow/Green wire (circuit P-) on harness side of passenger-side air bag module connector. If voltage is less than one volt, go to step 11 . If voltage is more than one volt, replace instrument panel wiring harness.
7. Inspect passenger-side air bag module connectors for disengaged lock button or deformed or damaged lock claw. If connectors are okay, go to next step. If connectors are not okay, replace instrument panel wiring harness.

8. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Measure voltage between ground and Yellow/Red wire (circuit P+) on harness side of passenger-side air bag module connector. See [WIRING DIAGRAMS](#) . Measure voltage between ground and Yellow/Green wire (circuit P-) on harness side of passenger-side air bag module connector. Voltage should be less than one volt. Turn ignition switch to LOCK position. Disconnect negative battery cable and wait at least 90 seconds. Measure resistance between Yellow/Red wire and Yellow/Green wire on harness side of passenger-side air bag module connector. Resistance should be less than one ohm. Measure resistance between ground and Yellow/Red wire on harness side of passenger-side air bag module connector. Measure resistance between ground and Yellow/Green wire on harness side of passenger-side air bag module connector. Resistance should be more than one megohm. Release short spring mechanism on air bag sensor assembly connector C7. See **RELEASING SHORT SPRING** under DIAGNOSTICS. Measure resistance between Yellow/Red wire and Yellow/Green wire on harness side of passenger-side air bag module connector. Resistance should be more than one megohm. If voltage and resistance readings are normal, go to next step. If voltage and resistance readings are not normal, replace instrument panel wiring harness.
9. Replace passenger-side air bag module. See **PASSENGER-SIDE AIR BAG MODULE** under REMOVAL & INSTALLATION. Reconnect air bag sensor assembly harness connectors. Turn ignition switch to ON position. Wait at least 60 seconds. Clear DTCs. See **CLEARING CODES** under DIAGNOSTICS. Turn ignition switch to LOCK position. Wait at least 20 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Retrieve DTCs. If DTC 52 is displayed, replace air bag sensor assembly. See **AIR BAG SENSOR ASSEMBLY** under REMOVAL & INSTALLATION. If DTC 52 is not displayed, test is complete.
10. Reconnect air bag sensor assembly connectors. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Clear DTCs. See **CLEARING CODES** under DIAGNOSTICS. Turn ignition switch to LOCK position. Wait at least 20 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Retrieve DTCs. See **RETRIEVING CODES** under DIAGNOSTICS. If DTC B1805 is displayed, replace air bag sensor assembly. See **AIR BAG SENSOR ASSEMBLY** under REMOVAL & INSTALLATION. If DTC B1805 is not displayed, go to step 12 .
11. If sent here from step 6 , turn ignition switch to LOCK position. Disconnect negative battery cable and wait at least 90 seconds. If sent here from any step, reconnect air bag sensor assembly connectors. Connect jumper wire between Yellow/Red wire and Yellow/Green wire on harness side of passenger-side air bag module connector. See **WIRING DIAGRAMS** . Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Clear DTCs. See **CLEARING CODES** under DIAGNOSTICS. Turn ignition switch to LOCK position. Wait at least 20 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Retrieve DTCs. See **RETRIEVING CODES** under DIAGNOSTICS. If DTCs B1806, B1807 or B1808 are displayed, replace air bag sensor assembly. See **AIR BAG SENSOR ASSEMBLY** under REMOVAL & INSTALLATION. If DTC B1806, B1807 or B1808 are not displayed, go to next step.
12. Turn ignition switch to LOCK position. Disconnect negative battery cable and wait at least 90 seconds. If sent here from step 11 , remove jumper wire. If sent here from any step, connect spiral cable harness connectors to passenger-side air bag module. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Clear DTCs. See **CLEARING CODES** under DIAGNOSTICS. Turn ignition switch to LOCK position. Wait at least 20 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Retrieve DTCs. See **RETRIEVING CODES** under DIAGNOSTICS. If DTCs B1805, B1806, B1807 or B1808 are displayed, replace passenger-side air bag module. See **PASSENGER-SIDE AIR BAG MODULE** under REMOVAL & INSTALLATION. If

DTC B1805, B1806, B1807 or B1808 are not displayed, ensure air bag sensor assembly is in check mode. See **CHECK MODE PROCEDURE** under DIAGNOSTICS. Check for intermittent air bag system fault. See **AIR BAG WARNING LIGHT INTERMITTENT** .

DTC 53/B1810, 53/B1811, 53/B1812, 53/B1813: DRIVER-SIDE AIR BAG NO. 2 SQUIB CIRCUIT SHORT, OPEN, SHORT TO GROUND OR SHORT TO BATTERY

Possible Causes

Diagnostic Trouble Codes (DTCs) 53/B1810, 53/B1811, 53/B1812 or 53/B1813 could be caused by a short to ground, open, short or short to battery in No. 2 squib circuit, squib malfunction, spiral cable malfunction or air bag sensor assembly malfunction.

NOTE: During testing, if DTCs other than DTC 53/B1810, 53/B1811, 53/B1812 or 53/B1813 are displayed, disregard them.

Diagnostic Procedure

1. Turn ignition switch to LOCK position. Disable air bag system. See **DISABLING SYSTEM** under DISABLING & ACTIVATING AIR BAG SYSTEM. If using Toyota hand-held tester, retrieve 5 digit DTC. See **RETRIEVING AIR BAG SYSTEM DTCS USING TOYOTA HAND-HELD TESTER** under DIAGNOSTICS. If DTC B1810 is retrieved, go to next step. If DTC B1811 is retrieved, go to step 4 . If DTC B1812 is retrieved, go to step 5 . If DTC B1813 is retrieved, go to step 6 . If using diagnosis check wire, retrieve 2 digit DTC. See **RETRIEVING AIR BAG SYSTEM DTCS USING DIAGNOSIS CHECK WIRE** under DIAGNOSTICS. If DTC 53 is retrieved, go to step 7 .
2. Inspect spiral cable connectors for disengaged lock button or deformed or damaged lock claw. If connectors are okay, go to next step. If connectors are not okay, replace spiral cable. See **SPIRAL CABLE** under REMOVAL & INSTALLATION.
3. Release short spring mechanism on air bag sensor assembly connector C7. See **RELEASING SHORT SPRING** under DIAGNOSTICS. Measure resistance between Yellow/Violet wire (circuit D2+) and Yellow/Orange wire (circuit D2-) on harness side of Orange upper spiral cable connector. See **WIRING DIAGRAMS** . If resistance is less than one megohm, go to step 13 . If resistance is more than one megohm, go to step 10 .
4. Measure resistance between Yellow/Violet wire (circuit D2+) and Yellow/Orange wire (circuit D2-) on harness side of Orange upper spiral cable connector. See **WIRING DIAGRAMS** . If resistance is less than one ohm, go to step 11 . If resistance is more than one ohm, go to step 15 .
5. Measure resistance between ground and Yellow/Violet wire (circuit D2+) on harness side of Orange upper spiral cable connector. See **WIRING DIAGRAMS** . Measure resistance between ground and Yellow (circuit D2-) wire on harness side of Orange upper spiral cable connector. If resistance is more than one ohm, go to step 11 . If resistance is less than one megohm, go to step 17 .
6. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Measure voltage between ground and Yellow/Violet wire (circuit D2+) on harness side of Orange upper spiral cable connector. See **WIRING DIAGRAMS** . Measure voltage between ground and Yellow/Orange wire (circuit D2-) on harness side of Orange upper spiral cable connector. If voltage is less than one volt, go to step 11 . If voltage is more than one volt, go to step 19 .
7. Inspect spiral cable connectors for disengaged lock button or deformed or damaged lock claw. If

connectors are okay, go to next step. If connectors are not okay, replace spiral cable. See **SPIRAL CABLE** under REMOVAL & INSTALLATION.

8. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Measure voltage between ground and Yellow/Violet wire (circuit D2+) on harness side of Orange upper spiral cable connector. See **WIRING DIAGRAMS** . Measure voltage between ground and Yellow/Orange wire (circuit D2-) on harness side of Orange upper spiral cable connector. Voltage should be less than one volt. Turn ignition switch to LOCK position. Disconnect negative battery cable and wait at least 90 seconds. Measure resistance between Yellow/Violet wire and Yellow/Orange wire on harness side of Orange upper spiral cable connector. Resistance should be less than one ohm. Measure resistance between ground and Yellow/Violet wire on harness side of Orange upper spiral cable connector. Measure resistance between ground and Yellow/Orange wire on harness side of Orange upper spiral cable connector. Resistance should be more than one megohm. Release short spring mechanism on air bag sensor assembly connector C7. See **RELEASING SHORT SPRING** under DIAGNOSTICS. Measure resistance between Yellow/Violet wire and Yellow/Orange wire on harness side of Orange upper spiral cable connector. Resistance should be more than one megohm. If voltage and resistance readings are normal, go to next step. If voltage and resistance readings are not normal, go to step 21 .
9. Replace driver-side air bag module. See **DRIVER-SIDE AIR BAG MODULE** under REMOVAL & INSTALLATION. Reconnect air bag sensor assembly harness connectors. Turn ignition switch to ON position. Wait at least 60 seconds. Clear DTCs. See **CLEARING CODES** under DIAGNOSTICS. Turn ignition switch to LOCK position. Wait at least 20 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Retrieve DTCs. If DTC 53 is displayed, replace air bag sensor assembly. See **AIR BAG SENSOR ASSEMBLY** under REMOVAL & INSTALLATION. If DTC 53 is not displayed, test is complete.
10. Reconnect air bag sensor assembly connectors. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Clear DTCs. See **CLEARING CODES** under DIAGNOSTICS. Turn ignition switch to LOCK position. Wait at least 20 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Retrieve DTCs. See **RETRIEVING CODES** under DIAGNOSTICS. If DTC B1810 is displayed, replace air bag sensor assembly. See **AIR BAG SENSOR ASSEMBLY** under REMOVAL & INSTALLATION. If DTC B1810 is not displayed, go to step 12 .
11. If sent here from step 6 , turn ignition switch to LOCK position. Disconnect negative battery cable and wait at least 90 seconds. If sent here from any step, reconnect air bag sensor assembly connectors. Connect jumper wire between Yellow/Violet wire and Yellow/Orange wire on harness side of Orange upper spiral cable connector. See **WIRING DIAGRAMS** . Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Clear DTCs. See **CLEARING CODES** under DIAGNOSTICS. Turn ignition switch to LOCK position. Wait at least 20 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Retrieve DTCs. See **RETRIEVING CODES** under DIAGNOSTICS. If DTCs B1811, B1812 or B1813 are displayed, replace air bag sensor assembly. See **AIR BAG SENSOR ASSEMBLY** under REMOVAL & INSTALLATION. If DTC B1811, B1812 or B1813 are not displayed, go to next step.
12. Turn ignition switch to LOCK position. Disconnect negative battery cable and wait at least 90 seconds. If sent here from step 11 , remove jumper wire. If sent here from any step, connect spiral cable harness connectors to driver-side air bag module. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Clear DTCs. See **CLEARING CODES** under DIAGNOSTICS. Turn ignition switch to LOCK position. Wait at least 20 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Retrieve DTCs. See **RETRIEVING CODES** under DIAGNOSTICS. If DTCs B1810, B1811, B1812 or B1813 are displayed, replace driver-side air bag

module. See **DRIVER-SIDE AIR BAG MODULE** under REMOVAL & INSTALLATION. If DTC B1810, B1811, B1812 or B1813 are not displayed, ensure air bag sensor assembly is in check mode. See **CHECK MODE PROCEDURE** under DIAGNOSTICS. Check for intermittent air bag system fault. See **AIR BAG WARNING LIGHT INTERMITTENT**.

13. Disconnect lower spiral cable harness connector. Measure resistance between Yellow/Violet wire and Yellow/Orange wire on harness side of lower spiral cable connector. If resistance is less than one megohm, replace wiring harness between air bag sensor assembly and spiral cable. If resistance is more than one megohm, go to next step.
14. Release short spring mechanism on lower spiral cable harness connector. Measure resistance between Yellow/Violet wire and Yellow/Orange wire on harness side of Orange upper spiral cable connector. If resistance is less than one megohm, replace spiral cable. See **SPIRAL CABLE** under REMOVAL & INSTALLATION. If resistance is more than one megohm, ensure air bag sensor assembly is in check mode. See **CHECK MODE PROCEDURE** under DIAGNOSTICS. Check for intermittent air bag system fault. See **AIR BAG WARNING LIGHT INTERMITTENT**.
15. Disconnect lower spiral cable harness connector. Measure resistance between Yellow/Violet wire and Yellow/Orange wire on harness side of lower spiral cable connector. If resistance is more than one ohm, replace wiring harness between air bag sensor assembly and spiral cable. If resistance is less than one ohm, go to next step.
16. Measure resistance between Yellow/Violet wire and Yellow/Orange wire on harness side of Orange upper spiral cable connector. If resistance is more than one ohm, replace spiral cable. See **SPIRAL CABLE** under REMOVAL & INSTALLATION. If resistance is less than one ohm, ensure air bag sensor assembly is in check mode. See **CHECK MODE PROCEDURE** under DIAGNOSTICS. Check for intermittent air bag system fault. See **AIR BAG WARNING LIGHT INTERMITTENT**.
17. Disconnect lower spiral cable harness connector. Measure resistance between ground and Yellow/Violet wire on harness side of lower spiral cable connector. Measure resistance between ground and Yellow/Orange wire on harness side of lower spiral cable connector. If resistance is more than one megohm, replace wiring harness between air bag sensor assembly and spiral cable. If resistance is less than one megohm, go to next step.
18. Measure resistance between ground and Yellow/Violet wire on harness side of Orange upper spiral cable connector. Measure resistance between ground and Yellow/Orange wire on harness side of Orange upper spiral cable connector. If resistance is more than one megohm, replace spiral cable. See **SPIRAL CABLE** under REMOVAL & INSTALLATION. If resistance is less than one megohm, ensure air bag sensor assembly is in check mode. See **CHECK MODE PROCEDURE** under DIAGNOSTICS. Check for intermittent air bag system fault. See **AIR BAG WARNING LIGHT INTERMITTENT**.
19. Turn ignition switch to LOCK position. Disconnect negative battery cable and wait at least 90 seconds. Disconnect lower spiral cable harness connector. Measure voltage between ground and Yellow/Violet wire on harness side of lower spiral cable connector. Measure voltage between ground and Yellow/Orange wire on harness side of lower spiral cable connector. If voltage is more than one volt, replace wiring harness between air bag sensor assembly and spiral cable. If voltage is less than one volt, go to next step.
20. Measure voltage between ground and Yellow/Violet wire on harness side of Orange upper spiral cable connector. Measure voltage between ground and Yellow/Orange wire on harness side of Orange upper spiral cable connector. If voltage is more than one volt, replace spiral cable. See **SPIRAL CABLE** under REMOVAL & INSTALLATION. If voltage is less than one volt, ensure air bag sensor assembly is in check mode. See **CHECK MODE PROCEDURE** under DIAGNOSTICS. Check for intermittent air bag

system fault. See **AIR BAG WARNING LIGHT INTERMITTENT**.

21. Restore short spring mechanism to original condition. Disconnect lower spiral cable harness connector. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Measure voltage between ground and Yellow/Violet wire on harness side of lower spiral cable connector. Measure voltage between ground and Yellow/Orange wire on harness side of lower spiral cable connector. Voltage should be less than one volt. Turn ignition switch to LOCK position. Disconnect negative battery cable and wait at least 90 seconds. Measure resistance between Yellow/Violet wire and Yellow/Orange wire on harness side of lower spiral cable connector. Resistance should be less than one ohm. Measure resistance between ground and Yellow/Violet wire on harness side of lower spiral cable connector. Measure resistance between ground and Yellow/Orange wire on harness side of lower spiral cable connector. Resistance should be more than one megohm. Release short spring mechanism on air bag sensor assembly connector C7. Measure resistance between Yellow/Violet wire and Yellow/Orange wire on harness side of lower spiral cable connector. Resistance should be more than one megohm. If voltage and resistance readings are normal, go to next step. If voltage and resistance readings are not normal, replace wiring harness between air bag sensor assembly and spiral cable.
22. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Measure voltage between ground and Yellow/Violet wire on harness side of Orange upper spiral cable connector. Measure voltage between ground and Yellow/Orange wire on harness side of Orange upper spiral cable connector. Voltage should be less than one volt. Turn ignition switch to LOCK position. Disconnect negative battery cable and wait at least 90 seconds. Measure resistance between Yellow/Violet wire and Yellow/Orange wire on harness side of Orange upper spiral cable connector. Resistance should be less than one ohm. Measure resistance between ground and Yellow/Violet wire on harness side of Orange upper spiral cable connector. Measure resistance between ground and Yellow/Orange wire on harness side of Orange upper spiral cable connector. Resistance should be more than one megohm. Release short spring mechanism on lower spiral cable connector. Measure resistance between Yellow/Violet wire and Yellow/Orange wire on harness side of Orange upper spiral cable connector. Resistance should be more than one megohm. If voltage and resistance readings are normal, ensure air bag sensor assembly is in check mode. See **CHECK MODE PROCEDURE** under DIAGNOSTICS. Check for intermittent air bag system fault. See **AIR BAG WARNING LIGHT INTERMITTENT**. If voltage and resistance readings are not normal, replace spiral cable. See **SPIRAL CABLE** under REMOVAL & INSTALLATION.

DTC 54/B1815, 54/B1816, 54/B1817, 54/B1818: PASSENGER-SIDE AIR BAG NO. 2 SQUIB CIRCUIT SHORT, OPEN, SHORT TO GROUND OR SHORT TO BATTERY

Possible Causes

Diagnostic Trouble Codes (DTCs) 54/B1815, 54/B1816, 54/B1817 or 54/B1818 could be caused by a short to ground, open, short or short to battery in No. 2 squib circuit, squib malfunction or air bag sensor assembly malfunction.

NOTE: During testing, if DTCs other than DTC 54/B1815, 54/B1816, 54/B1817 or 54/B1818 are displayed, disregard them.

Diagnostic Procedure

1. Turn ignition switch to LOCK position. Disable air bag system. See **DISABLING SYSTEM** under DISABLING & ACTIVATING AIR BAG SYSTEM. If using Toyota hand-held tester, retrieve 5 digit

DTC. See **RETRIEVING AIR BAG SYSTEM DTCS USING TOYOTA HAND-HELD TESTER** under DIAGNOSTICS. If DTC B1815 is retrieved, go to next step. If DTC B1816 is retrieved, go to step 4 . If DTC B1817 is retrieved, go to step 5 . If DTC B1818 is retrieved, go to step 6 . If using diagnosis check wire, retrieve 2 digit DTC. See **RETRIEVING AIR BAG SYSTEM DTCS USING DIAGNOSIS CHECK WIRE** under DIAGNOSTICS. If DTC 54 is retrieved, go to step 7 .

2. Inspect passenger-side air bag module connectors for disengaged lock button or deformed or damaged lock claw. If connectors are okay, go to next step. If connectors are not okay, replace instrument panel wiring harness.
3. Release short spring mechanism on air bag sensor assembly connector C7. See **RELEASING SHORT SPRING** under DIAGNOSTICS. Measure resistance between Yellow/Gray wire (circuit P2+) and Yellow/Pink wire (circuit P2-) on harness side of passenger-side air bag module connector. See **WIRING DIAGRAMS** . If resistance is less than one megohm, replace instrument panel wiring harness. If resistance is more than one megohm, go to step 10 .
4. Measure resistance between Yellow/Gray wire (circuit P2+) and Yellow/Pink wire (circuit P2-) on harness side of passenger-side air bag module connector. See **WIRING DIAGRAMS** . If resistance is less than one ohm, go to step 11 . If resistance is more than one ohm, replace instrument panel wiring harness.
5. Measure resistance between ground and Yellow/Gray wire (circuit P2+) on harness side of passenger-side air bag module connector. See **WIRING DIAGRAMS** . Measure resistance between ground and Yellow/Pink (circuit P2-) wire on harness side of passenger-side air bag module connector. If resistance is more than one megohm, go to step 11 . If resistance is less than one megohm, replace instrument panel wiring harness.
6. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Measure voltage between ground and Yellow/Gray wire (circuit P2+) on harness side of passenger-side air bag module connector. See **WIRING DIAGRAMS** . Measure voltage between ground and Yellow/Pink wire (circuit P2-) on harness side of passenger-side air bag module connector. If voltage is less than one volt, go to step 11 . If voltage is more than one volt, replace instrument panel wiring harness.
7. Inspect passenger-side air bag module connectors for disengaged lock button or deformed or damaged lock claw. If connectors are okay, go to next step. If connectors are not okay, replace instrument panel wiring harness.
8. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Measure voltage between ground and Yellow/Gray wire (circuit P2+) on harness side of passenger-side air bag module connector. See **WIRING DIAGRAMS** . Measure voltage between ground and Yellow/Pink wire (circuit P2-) on harness side of passenger-side air bag module connector. Voltage should be less than one volt. Turn ignition switch to LOCK position. Disconnect negative battery cable and wait at least 90 seconds. Measure resistance between Yellow/Gray wire and Yellow/Pink wire on harness side of passenger-side air bag module connector. Resistance should be less than one ohm. Measure resistance between ground and Yellow/Gray wire on harness side of passenger-side air bag module connector. Measure resistance between ground and Yellow/Pink wire on harness side of passenger-side air bag module connector. Resistance should be more than one megohm. Release short spring mechanism on air bag sensor assembly connector C7. See **RELEASING SHORT SPRING** under DIAGNOSTICS. Measure resistance between Yellow/Gray wire and Yellow/Pink wire on harness side of passenger-side air bag module connector. Resistance should be more than one megohm. If voltage and resistance readings are normal, go to next step. If voltage and resistance readings are not normal, replace instrument panel wiring harness.

9. Replace passenger-side air bag module. See **PASSENGER-SIDE AIR BAG MODULE** under REMOVAL & INSTALLATION. Reconnect air bag sensor assembly harness connectors. Turn ignition switch to ON position. Wait at least 60 seconds. Clear DTCs. See **CLEARING CODES** under DIAGNOSTICS. Turn ignition switch to LOCK position. Wait at least 20 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Retrieve DTCs. If DTC 54 is displayed, replace air bag sensor assembly. See **AIR BAG SENSOR ASSEMBLY** under REMOVAL & INSTALLATION. If DTC 54 is not displayed, test is complete.
10. Reconnect air bag sensor assembly connectors. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Clear DTCs. See **CLEARING CODES** under DIAGNOSTICS. Turn ignition switch to LOCK position. Wait at least 20 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Retrieve DTCs. See **RETRIEVING CODES** under DIAGNOSTICS. If DTC B1815 is displayed, replace air bag sensor assembly. See **AIR BAG SENSOR ASSEMBLY** under REMOVAL & INSTALLATION. If DTC B1815 is not displayed, go to step 12 .
11. If sent here from step 6 , turn ignition switch to LOCK position. Disconnect negative battery cable and wait at least 90 seconds. If sent here from any step, reconnect air bag sensor assembly connectors. Connect jumper wire between Yellow/Gray wire and Yellow/Pink wire on harness side of passenger-side air bag module connector. See **WIRING DIAGRAMS** . Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Clear DTCs. See **CLEARING CODES** under DIAGNOSTICS. Turn ignition switch to LOCK position. Wait at least 20 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Retrieve DTCs. See **RETRIEVING CODES** under DIAGNOSTICS. If DTCs B1816, B1817 or B1818 are displayed, replace air bag sensor assembly. See **AIR BAG SENSOR ASSEMBLY** under REMOVAL & INSTALLATION. If DTC B1816, B1817 or B1818 are not displayed, go to next step.
12. Turn ignition switch to LOCK position. Disconnect negative battery cable and wait at least 90 seconds. If sent here from step 11 , remove jumper wire. If sent here from any step, connect spiral cable harness connectors to passenger-side air bag module. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Clear DTCs. See **CLEARING CODES** under DIAGNOSTICS. Turn ignition switch to LOCK position. Wait at least 20 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Retrieve DTCs. See **RETRIEVING CODES** under DIAGNOSTICS. If DTCs B1815, B1816, B1817 or B1818 are displayed, replace passenger-side air bag module. See **PASSENGER-SIDE AIR BAG MODULE** under REMOVAL & INSTALLATION. If DTC B1815, B1816, B1817 or B1818 are not displayed, ensure air bag sensor assembly is in check mode. See **CHECK MODE PROCEDURE** under DIAGNOSTICS. Check for intermittent air bag system fault. See **AIR BAG WARNING LIGHT INTERMITTENT** .

DTC 55/B1820, 55/B1821, 55/B1822, 55/B1823: LEFT SIDE AIR BAG SQUIB CIRCUIT SHORT, OPEN, SHORT TO GROUND OR SHORT TO BATTERY

Possible Causes

Diagnostic Trouble Codes (DTCs) 55/B1820, 55/B1821, 55/B1822 or 55/B1823 could be caused by a short to ground, open, short or short to battery in left side air bag squib circuit, squib malfunction or air bag sensor assembly malfunction.

NOTE: During testing, if DTCs other than DTC 55/B1820, 55/B1821, 55/B1822 or 55/B1823 are displayed, disregard them.

Diagnostic Procedure

1. Turn ignition switch to LOCK position. Disable air bag system. See **DISABLING SYSTEM** under **DISABLING & ACTIVATING AIR BAG SYSTEM**. If using Toyota hand-held tester, retrieve 5 digit DTC. See **RETRIEVING AIR BAG SYSTEM DTCS USING TOYOTA HAND-HELD TESTER** under **DIAGNOSTICS**. If DTC B1820 is retrieved, go to next step. If DTC B1821 is retrieved, go to step 3 . If DTC B1822 is retrieved, go to step 4 . If DTC B1823 is retrieved, go to step 5 . If using diagnosis check wire, retrieve 2 digit DTC. See **RETRIEVING AIR BAG SYSTEM DTCS USING DIAGNOSIS CHECK WIRE** under **DIAGNOSTICS**. If DTC 55 is retrieved, go to step 6 .
2. Release short spring mechanism on air bag sensor assembly connector C6. See **RELEASING SHORT SPRING** under **DIAGNOSTICS**. Measure resistance between Yellow/Red wire (circuit SFD+) and Yellow/Green wire (circuit SFD-) on harness side of left side curtain air bag module connector. See **WIRING DIAGRAMS** . If resistance is less than one megohm, replace wire harness between left side air bag module and air bag sensor assembly. If resistance is more than one megohm, go to step 8 .
3. Measure resistance between Yellow/Red wire (circuit SFD+) and Yellow/Green wire (circuit SFD-) on harness side of left side curtain air bag module connector. See **WIRING DIAGRAMS** . If resistance is less than one ohm, go to step 9 . If resistance is more than one ohm, replace wire harness between left side air bag module and air bag sensor assembly.
4. Measure resistance between ground and Yellow/Red wire (circuit SFD+) on harness side of left side curtain air bag module connector. See **WIRING DIAGRAMS** . Measure resistance between ground and Yellow/Green (circuit SFD-) wire on harness side of left side curtain air bag module connector. If resistance is more than one megohm, go to step 9 . If resistance is less than one megohm, replace wire harness between left side air bag module and air bag sensor assembly.
5. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Measure voltage between ground and Yellow/Red wire (circuit SFD+) on harness side of left side curtain air bag module connector. See **WIRING DIAGRAMS** . Measure voltage between ground and Yellow/Green wire (circuit SFD-) on harness side of left side curtain air bag module connector. If voltage is less than one volt, go to step 9 . If voltage is more than one volt, replace wire harness between left side air bag module and air bag sensor assembly.
6. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Measure voltage between ground and Yellow/Red wire (circuit SFD+) on harness side of left side curtain air bag module connector. See **WIRING DIAGRAMS** . Measure voltage between ground and Yellow/Green wire (circuit SFD-) on harness side of left side curtain air bag module connector. Voltage should be less than one volt. Turn ignition switch to LOCK position. Disconnect negative battery cable and wait at least 90 seconds. Measure resistance between Yellow/Red wire and Yellow/Green wire on harness side of left side curtain air bag module connector. Resistance should be less than one ohm. Measure resistance between ground and Yellow/Red wire on harness side of left side curtain air bag module connector. Measure resistance between ground and Yellow/Green wire on harness side of left side curtain air bag module connector. Resistance should be more than one megohm. Release short spring mechanism on air bag sensor assembly connector C8. See **RELEASING SHORT SPRING** under **DIAGNOSTICS**. Measure resistance between Yellow/Red wire and Yellow/Green wire on harness side of left side curtain air bag module connector. Resistance should be more than one megohm. If voltage and resistance readings are normal, go to next step. If voltage and resistance readings are not normal, replace wire harness between left side air bag module and air bag sensor assembly.
7. Replace left side air bag module. See **SIDE AIR BAG MODULE** under **REMOVAL & INSTALLATION**. Reconnect air bag sensor assembly harness connectors. Turn ignition switch to ON

position. Wait at least 60 seconds. Clear DTCs. See **CLEARING CODES** under DIAGNOSTICS. Turn ignition switch to LOCK position. Wait at least 20 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Retrieve DTCs. If DTC 55 is displayed, replace air bag sensor assembly. See **AIR BAG SENSOR ASSEMBLY** under REMOVAL & INSTALLATION. If DTC 55 is not displayed, test is complete.

8. Reconnect air bag sensor assembly connectors. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Clear DTCs. See **CLEARING CODES** under DIAGNOSTICS. Turn ignition switch to LOCK position. Wait at least 20 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Retrieve DTCs. See **RETRIEVING CODES** under DIAGNOSTICS. If DTC B1820 is displayed, replace air bag sensor assembly. See **AIR BAG SENSOR ASSEMBLY** under REMOVAL & INSTALLATION. If DTC B1820 is not displayed, go to step 10 .
9. If sent here from step 5 , turn ignition switch to LOCK position. Disconnect negative battery cable and wait at least 90 seconds. If sent here from any step, reconnect air bag sensor assembly connectors. Connect jumper wire between Yellow/Red wire and Yellow/Green wire on harness side of left side curtain air bag module connector. See **WIRING DIAGRAMS** . Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Clear DTCs. See **CLEARING CODES** under DIAGNOSTICS. Turn ignition switch to LOCK position. Wait at least 20 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Retrieve DTCs. See **RETRIEVING CODES** under DIAGNOSTICS. If DTCs B1821, B1822 or B1823 are displayed, replace air bag sensor assembly. See **AIR BAG SENSOR ASSEMBLY** under REMOVAL & INSTALLATION. If DTC B1821, B1822 or B1823 are not displayed, go to next step.
10. Turn ignition switch to LOCK position. Disconnect negative battery cable and wait at least 90 seconds. If sent here from step 9 , remove jumper wire. If sent here from any step, connect left side air bag module harness connectors. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Clear DTCs. See **CLEARING CODES** under DIAGNOSTICS. Turn ignition switch to LOCK position. Wait at least 20 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Retrieve DTCs. See **RETRIEVING CODES** under DIAGNOSTICS. If DTCs B1820, B1821, B1822 or B1823 are displayed, replace left side air bag module. See **SIDE AIR BAG MODULE** under REMOVAL & INSTALLATION. If DTC B1820, B1821, B1822 or B1823 are not displayed, ensure air bag sensor assembly is in check mode. See **CHECK MODE PROCEDURE** under DIAGNOSTICS. Check for intermittent air bag system fault. See **AIR BAG WARNING LIGHT INTERMITTENT** .

DTC 56/B1825, 56/B1826, 56/B1827, 56/B1828: RIGHT SIDE AIR BAG SQUIB CIRCUIT SHORT, OPEN, SHORT TO GROUND OR SHORT TO BATTERY

Possible Causes

Diagnostic Trouble Codes (DTCs) 56/B1825, 56/B1826, 56/B1827 or 56/B1828 could be caused by a short to ground, open, short or short to battery in right side air bag squib circuit, squib malfunction or air bag sensor assembly malfunction.

NOTE: During testing, if DTCs other than DTC 56/B1825, 56/B1826, 56/B1827 or 56/B1828 are displayed, disregard them.

Diagnostic Procedure

2004 Toyota RAV4

2004 ACCESSORIES/SAFETY EQUIPMENT Toyota - Air Bag Restraint Systems

1. Turn ignition switch to LOCK position. Disable air bag system. See **DISABLING SYSTEM** under DISABLING & ACTIVATING AIR BAG SYSTEM. If using Toyota hand-held tester, retrieve 5 digit DTC. See **RETRIEVING AIR BAG SYSTEM DTCS USING TOYOTA HAND-HELD TESTER** under DIAGNOSTICS. If DTC B1825 is retrieved, go to next step. If DTC B1826 is retrieved, go to step 3 . If DTC B1827 is retrieved, go to step 4 . If DTC B1828 is retrieved, go to step 5 . If using diagnosis check wire, retrieve 2 digit DTC. See **RETRIEVING AIR BAG SYSTEM DTCS USING DIAGNOSIS CHECK WIRE** under DIAGNOSTICS. If DTC 56 is retrieved, go to step 6 .
2. Release short spring mechanism on air bag sensor assembly connector C8. See **RELEASING SHORT SPRING** under DIAGNOSTICS. Measure resistance between Yellow/Red wire (circuit SFP+) and Yellow/Green wire (circuit SFP-) on harness side of right side air bag module connector. See **WIRING DIAGRAMS** . If resistance is less than one megohm, replace wire harness between right side air bag module and air bag sensor assembly. If resistance is more than one megohm, go to step 8 .
3. Measure resistance between Yellow/Red wire (circuit SFP+) and Yellow/Green wire (circuit SFP-) on harness side of right side air bag module connector. See **WIRING DIAGRAMS** . If resistance is less than one ohm, go to step 9 . If resistance is more than one ohm, replace wire harness between right side air bag module and air bag sensor assembly.
4. Measure resistance between ground and Yellow/Red wire (circuit SFP+) on harness side of right side air bag module connector. See **WIRING DIAGRAMS** . Measure resistance between ground and Yellow/Green (circuit SFP-) wire on harness side of right side air bag module connector. If resistance is more than one megohm, go to step 9 . If resistance is less than one megohm, replace wire harness between right side air bag module and air bag sensor assembly.
5. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Measure voltage between ground and Yellow/Red wire (circuit SFP+) on harness side of right side air bag module connector. See **WIRING DIAGRAMS** . Measure voltage between ground and Yellow/Green wire (circuit SFP-) on harness side of right side air bag module connector. If voltage is less than one volt, go to step 9 . If voltage is more than one volt, replace wire harness between right side air bag module and air bag sensor assembly.
6. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Measure voltage between ground and Yellow/Red wire (circuit SFP+) on harness side of right side air bag module connector. See **WIRING DIAGRAMS** . Measure voltage between ground and Yellow/Green wire (circuit SFP-) on harness side of right side air bag module connector. Voltage should be less than one volt. Turn ignition switch to LOCK position. Disconnect negative battery cable and wait at least 90 seconds. Measure resistance between Yellow/Red wire and Yellow/Green wire on harness side of right side air bag module connector. Resistance should be less than one ohm. Measure resistance between ground and Yellow/Red wire on harness side of right side air bag module connector. Measure resistance between ground and Yellow/Green wire on harness side of right side air bag module connector. Resistance should be more than one megohm. Release short spring mechanism on air bag sensor assembly connector C8. See **RELEASING SHORT SPRING** under DIAGNOSTICS. Measure resistance between Yellow/Red wire and Yellow/Green wire on harness side of right side air bag module connector. Resistance should be more than one megohm. If voltage and resistance readings are normal, go to next step. If voltage and resistance readings are not normal, replace wire harness between right side air bag module and air bag sensor assembly.
7. Replace right side air bag module. See **SIDE AIR BAG MODULE** under REMOVAL & INSTALLATION. Reconnect air bag sensor assembly harness connectors. Turn ignition switch to ON position. Wait at least 60 seconds. Clear DTCs. See **CLEARING CODES** under DIAGNOSTICS. Turn ignition switch to LOCK position. Wait at least 20 seconds. Turn ignition switch to ON position. Wait at

least 60 seconds. Retrieve DTCs. If DTC 56 is displayed, replace air bag sensor assembly. See **AIR BAG SENSOR ASSEMBLY** under REMOVAL & INSTALLATION. If DTC 56 is not displayed, test is complete.

8. Reconnect air bag sensor assembly connectors. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Clear DTCs. See **CLEARING CODES** under DIAGNOSTICS. Turn ignition switch to LOCK position. Wait at least 20 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Retrieve DTCs. See **RETRIEVING CODES** under DIAGNOSTICS. If DTC B1825 is displayed, replace air bag sensor assembly. See **AIR BAG SENSOR ASSEMBLY** under REMOVAL & INSTALLATION. If DTC B1825 is not displayed, go to step 10 .
9. If sent here from step 5 , turn ignition switch to LOCK position. Disconnect negative battery cable and wait at least 90 seconds. If sent here from any step, reconnect air bag sensor assembly connectors. Connect jumper wire between Yellow/Red wire and Yellow/Green wire on harness side of right side air bag module connector. See **WIRING DIAGRAMS** . Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Clear DTCs. See **CLEARING CODES** under DIAGNOSTICS. Turn ignition switch to LOCK position. Wait at least 20 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Retrieve DTCs. See **RETRIEVING CODES** under DIAGNOSTICS. If DTCs B1826, B1827 or B1828 are displayed, replace air bag sensor assembly. See **AIR BAG SENSOR ASSEMBLY** under REMOVAL & INSTALLATION. If DTC B1826, B1827 or B1828 are not displayed, go to next step.
10. Turn ignition switch to LOCK position. Disconnect negative battery cable and wait at least 90 seconds. If sent here from step 9 , remove jumper wire. If sent here from any step, connect right side air bag module harness connectors. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Clear DTCs. See **CLEARING CODES** under DIAGNOSTICS. Turn ignition switch to LOCK position. Wait at least 20 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Retrieve DTCs. See **RETRIEVING CODES** under DIAGNOSTICS. If DTCs B1825, B1826, B1827 or B1828 are displayed, replace right side air bag module. See **SIDE AIR BAG MODULE** under REMOVAL & INSTALLATION. If DTC B1825, B1826, B1827 or B1828 are not displayed, ensure air bag sensor assembly is in check mode. See **CHECK MODE PROCEDURE** under DIAGNOSTICS. Check for intermittent air bag system fault. See **AIR BAG WARNING LIGHT INTERMITTENT** .

DTC 57/B1830, 57/B1831, 57/B1832, 57/B1833: LEFT SIDE CURTAIN AIR BAG SQUIB CIRCUIT SHORT, OPEN, SHORT TO GROUND OR SHORT TO BATTERY

Possible Causes

Diagnostic Trouble Codes (DTCs) 57/B1830, 57/B1831, 57/B1832 or 57/B1833 could be caused by a short to ground, open, short or short to battery in left side curtain air bag squib circuit, squib malfunction or air bag sensor assembly malfunction.

NOTE: During testing, if DTCs other than DTC 57/B1830, 57/B1831, 57/B1832 or 57/B1833 are displayed, disregard them.

Diagnostic Procedure

1. Turn ignition switch to LOCK position. Disable air bag system. See **DISABLING SYSTEM** under

DISABLING & ACTIVATING AIR BAG SYSTEM. If using Toyota hand-held tester, retrieve 5 digit DTC. See **RETRIEVING AIR BAG SYSTEM DTCS USING TOYOTA HAND-HELD TESTER** under DIAGNOSTICS. If DTC B1830 is retrieved, go to next step. If DTC B1831 is retrieved, go to step 3 . If DTC B1832 is retrieved, go to step 4 . If DTC B1833 is retrieved, go to step 5 . If using diagnosis check wire, retrieve 2 digit DTC. See **RETRIEVING AIR BAG SYSTEM DTCS USING DIAGNOSIS CHECK WIRE** under DIAGNOSTICS. If DTC 57 is retrieved, go to step 6 .

2. Release short spring mechanism on air bag sensor assembly connector C6. See **RELEASING SHORT SPRING** under DIAGNOSTICS. Measure resistance between Yellow/Violet wire (circuit ICD+) and Yellow/Orange wire (circuit ICD-) on harness side of left side curtain air bag module connector. See **WIRING DIAGRAMS** . If resistance is less than one megohm, replace wire harness between left side curtain air bag module and air bag sensor assembly. If resistance is more than one megohm, go to step 8 .
3. Measure resistance between Yellow/Violet wire (circuit ICD+) and Yellow/Orange wire (circuit ICD-) on harness side of left side curtain air bag module connector. See **WIRING DIAGRAMS** . If resistance is less than one ohm, go to step 9 . If resistance is more than one ohm, replace wire harness between left side curtain air bag module and air bag sensor assembly.
4. Measure resistance between ground and Yellow/Violet wire (circuit ICD+) on harness side of left side curtain air bag module connector. See **WIRING DIAGRAMS** . Measure resistance between ground and Yellow/Orange (circuit ICD-) wire on harness side of left side curtain air bag module connector. If resistance is more than one megohm, go to step 8 . If resistance is less than one megohm, replace wire harness between left side curtain air bag module and air bag sensor assembly.
5. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Measure voltage between ground and Yellow/Violet wire (circuit ICD+) on harness side of left side curtain air bag module connector. See **WIRING DIAGRAMS** . Measure voltage between ground and Yellow/Orange wire (circuit ICD-) on harness side of left side curtain air bag module connector. If voltage is less than one volt, go to step 9 . If voltage is more than one volt, replace wire harness between left side curtain air bag module and air bag sensor assembly.
6. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Measure voltage between ground and Yellow/Violet wire (circuit ICD+) on harness side of left side curtain air bag module connector. See **WIRING DIAGRAMS** . Measure voltage between ground and Yellow/Orange wire (circuit ICD-) on harness side of left side curtain air bag module connector. Voltage should be less than one volt. Turn ignition switch to LOCK position. Disconnect negative battery cable and wait at least 90 seconds. Measure resistance between Yellow/Violet wire and Yellow/Orange wire on harness side of left side curtain air bag module connector. Resistance should be less than one ohm. Measure resistance between ground and Yellow/Violet wire on harness side of left side curtain air bag module connector. Measure resistance between ground and Yellow/Orange wire on harness side of left side curtain air bag module connector. Resistance should be more than one megohm. Release short spring mechanism on air bag sensor assembly connector C6. See **RELEASING SHORT SPRING** under DIAGNOSTICS. Measure resistance between Yellow/Violet wire and Yellow/Orange wire on harness side of left side curtain air bag module connector. Resistance should be more than one megohm. If voltage and resistance readings are normal, go to next step. If voltage and resistance readings are not normal, replace wire harness between left side curtain air bag module and air bag sensor assembly.
7. Replace left side curtain air bag module. See **SIDE CURTAIN AIR BAG MODULE** under REMOVAL & INSTALLATION. Reconnect air bag sensor assembly harness connectors. Turn ignition switch to ON position. Wait at least 60 seconds. Clear DTCs. See **CLEARING CODES** under DIAGNOSTICS. Turn ignition switch to LOCK position. Wait at least 20 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Retrieve DTCs. If DTC 57 is displayed, replace air bag sensor assembly. See **AIR BAG**

SENSOR ASSEMBLY under REMOVAL & INSTALLATION. If DTC 57 is not displayed, test is complete.

8. Reconnect air bag sensor assembly connectors. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Clear DTCs. See **CLEARING CODES** under DIAGNOSTICS. Turn ignition switch to LOCK position. Wait at least 20 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Retrieve DTCs. See **RETRIEVING CODES** under DIAGNOSTICS. If DTC B1830 is displayed, replace air bag sensor assembly. See **AIR BAG SENSOR ASSEMBLY** under REMOVAL & INSTALLATION. If DTC B1830 is not displayed, go to step 10 .
9. If sent here from step 5 , turn ignition switch to LOCK position. Disconnect negative battery cable and wait at least 90 seconds. If sent here from any step, reconnect air bag sensor assembly connectors. Connect jumper wire between Yellow/Violet wire and Yellow/Orange wire on harness side of left side curtain air bag module connector. See **WIRING DIAGRAMS** . Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Clear DTCs. See **CLEARING CODES** under DIAGNOSTICS. Turn ignition switch to LOCK position. Wait at least 20 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Retrieve DTCs. See **RETRIEVING CODES** under DIAGNOSTICS. If DTCs B1831, B1832 or B1833 are displayed, replace air bag sensor assembly. See **AIR BAG SENSOR ASSEMBLY** under REMOVAL & INSTALLATION. If DTC B1831, B1832 or B1833 are not displayed, go to next step.
10. Turn ignition switch to LOCK position. Disconnect negative battery cable and wait at least 90 seconds. If sent here from step 9 , remove jumper wire. If sent here from any step, connect left side air bag module harness connectors. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Clear DTCs. See **CLEARING CODES** under DIAGNOSTICS. Turn ignition switch to LOCK position. Wait at least 20 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Retrieve DTCs. See **RETRIEVING CODES** under DIAGNOSTICS. If DTCs B1830, B1831, B1832 or B1833 are displayed, replace left side curtain air bag module. See **SIDE CURTAIN AIR BAG MODULE** under REMOVAL & INSTALLATION. If DTC B1830, B1831, B1832 or B1833 are not displayed, ensure air bag sensor assembly is in check mode. See **CHECK MODE PROCEDURE** under DIAGNOSTICS. Check for intermittent air bag system fault. See **AIR BAG WARNING LIGHT INTERMITTENT** .

DTC 58/B1835, 58/B1836, 58/B1837, 58/B1838: RIGHT SIDE CURTAIN AIR BAG SQUIB CIRCUIT SHORT, OPEN, SHORT TO GROUND OR SHORT TO BATTERY

Possible Causes

Diagnostic Trouble Codes (DTCs) 57/B1835, 57/B1836, 57/B1837 or 57/B1838 could be caused by a short to ground, open, short or short to battery in right side curtain air bag squib circuit, squib malfunction or air bag sensor assembly malfunction.

NOTE: During testing, if DTCs other than DTC 57/B1835, 57/B1836, 57/B1837 or 57/B1838 are displayed, disregard them.

Diagnostic Procedure

1. Turn ignition switch to LOCK position. Disable air bag system. See **DISABLING SYSTEM** under DISABLING & ACTIVATING AIR BAG SYSTEM. If using Toyota hand-held tester, retrieve 5 digit

DTC. See **RETRIEVING AIR BAG SYSTEM DTCS USING TOYOTA HAND-HELD TESTER** under DIAGNOSTICS. If DTC B1835 is retrieved, go to next step. If DTC B1836 is retrieved, go to step 3 . If DTC B1837 is retrieved, go to step 4 . If DTC B1838 is retrieved, go to step 5 . If using diagnosis check wire, retrieve 2 digit DTC. See **RETRIEVING AIR BAG SYSTEM DTCS USING DIAGNOSIS CHECK WIRE** under DIAGNOSTICS. If DTC 57 is retrieved, go to step 6 .

2. Release short spring mechanism on air bag sensor assembly connector C8. See **RELEASING SHORT SPRING** under DIAGNOSTICS. Measure resistance between Yellow/Violet wire (circuit ICP+) and Yellow/Orange wire (circuit ICP-) on harness side of left side curtain air bag module connector. See **WIRING DIAGRAMS** . If resistance is less than one megohm, replace wire harness between right side curtain air bag module and air bag sensor assembly. If resistance is more than one megohm, go to step 8 .
3. Measure resistance between Yellow/Violet wire (circuit ICP+) and Yellow/Orange wire (circuit ICP-) on harness side of left side curtain air bag module connector. See **WIRING DIAGRAMS** . If resistance is less than one ohm, go to step 9 . If resistance is more than one ohm, replace wire harness between right side curtain air bag module and air bag sensor assembly.
4. Measure resistance between ground and Yellow/Violet wire (circuit ICP+) on harness side of left side curtain air bag module connector. See **WIRING DIAGRAMS** . Measure resistance between ground and Yellow/Orange (circuit ICP-) wire on harness side of left side curtain air bag module connector. If resistance is more than one megohm, go to step 9 . If resistance is less than one megohm, replace wire harness between right side curtain air bag module and air bag sensor assembly.
5. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Measure voltage between ground and Yellow/Violet wire (circuit ICP+) on harness side of left side curtain air bag module connector. See **WIRING DIAGRAMS** . Measure voltage between ground and Yellow/Orange wire (circuit ICP-) on harness side of left side curtain air bag module connector. If voltage is less than one volt, go to step 9 . If voltage is more than one volt, replace wire harness between right side curtain air bag module and air bag sensor assembly.
6. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Measure voltage between ground and Yellow/Violet wire (circuit ICP+) on harness side of left side curtain air bag module connector. See **WIRING DIAGRAMS** . Measure voltage between ground and Yellow/Orange wire (circuit ICP-) on harness side of left side curtain air bag module connector. Voltage should be less than one volt. Turn ignition switch to LOCK position. Disconnect negative battery cable and wait at least 90 seconds. Measure resistance between Yellow/Violet wire and Yellow/Orange wire on harness side of left side curtain air bag module connector. Resistance should be less than one ohm. Measure resistance between ground and Yellow/Violet wire on harness side of left side curtain air bag module connector. Measure resistance between ground and Yellow/Orange wire on harness side of left side curtain air bag module connector. Resistance should be more than one megohm. Release short spring mechanism on air bag sensor assembly connector C8. See **RELEASING SHORT SPRING** under DIAGNOSTICS. Measure resistance between Yellow/Violet wire and Yellow/Orange wire on harness side of left side curtain air bag module connector. Resistance should be more than one megohm. If voltage and resistance readings are normal, go to next step. If voltage and resistance readings are not normal, replace wire harness between right side curtain air bag module and air bag sensor assembly.
7. Replace right side curtain air bag module. See **SIDE CURTAIN AIR BAG MODULE** under REMOVAL & INSTALLATION. Reconnect air bag sensor assembly harness connectors. Turn ignition switch to ON position. Wait at least 60 seconds. Clear DTCs. See **CLEARING CODES** under DIAGNOSTICS. Turn ignition switch to LOCK position. Wait at least 20 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Retrieve DTCs. If DTC 57 is displayed, replace air bag sensor assembly. See **AIR BAG SENSOR ASSEMBLY** under REMOVAL & INSTALLATION. If DTC 57 is

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not displayed, test is complete.

8. Reconnect air bag sensor assembly connectors. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Clear DTCs. See [CLEARING CODES](#) under DIAGNOSTICS. Turn ignition switch to LOCK position. Wait at least 20 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Retrieve DTCs. See [RETRIEVING CODES](#) under DIAGNOSTICS. If DTC B1835 is displayed, replace air bag sensor assembly. See [AIR BAG SENSOR ASSEMBLY](#) under REMOVAL & INSTALLATION. If DTC B1835 is not displayed, go to step 10 .
9. If sent here from step 5 , turn ignition switch to LOCK position. Disconnect negative battery cable and wait at least 90 seconds. If sent here from any step, reconnect air bag sensor assembly connectors. Connect jumper wire between Yellow/Violet wire and Yellow/Orange wire on harness side of left side curtain air bag module connector. See [WIRING DIAGRAMS](#) . Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Clear DTCs. See [CLEARING CODES](#) under DIAGNOSTICS. Turn ignition switch to LOCK position. Wait at least 20 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Retrieve DTCs. See [RETRIEVING CODES](#) under DIAGNOSTICS. If DTCs B1836, B1837 or B1838 are displayed, replace air bag sensor assembly. See [AIR BAG SENSOR ASSEMBLY](#) under REMOVAL & INSTALLATION. If DTC B1836, B1837 or B1838 are not displayed, go to next step.
10. Turn ignition switch to LOCK position. Disconnect negative battery cable and wait at least 90 seconds. If sent here from step 9 , remove jumper wire. If sent here from any step, connect right side air bag module harness connectors. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Clear DTCs. See [CLEARING CODES](#) under DIAGNOSTICS. Turn ignition switch to LOCK position. Wait at least 20 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Retrieve DTCs. See [RETRIEVING CODES](#) under DIAGNOSTICS. If DTCs B1835, B1836, B1837 or B1838 are displayed, replace right side curtain air bag module. See [SIDE CURTAIN AIR BAG MODULE](#) under REMOVAL & INSTALLATION. If DTC B1835, B1836, B1837 or B1838 are not displayed, ensure air bag sensor assembly is in check mode. See [CHECK MODE PROCEDURE](#) under DIAGNOSTICS. Check for intermittent air bag system fault. See [AIR BAG WARNING LIGHT INTERMITTENT](#) .

DTC 73/B1900, 73/B1901, 73/B1902, 73/B1903: LEFT SEAT BELT PRETENSIONER SQUIB CIRCUIT SHORT, OPEN, SHORT TO GROUND OR SHORT TO BATTERY

Possible Causes

Diagnostic Trouble Codes (DTCs) 73/B1900, 73/B1901, 73/B1902 or 73/B1903 could be caused by a short to ground, open, short or short to battery in left seat belt pretensioner squib circuit, squib malfunction or air bag sensor assembly malfunction.

NOTE: During testing, if DTCs other than DTC 73/B1900, 73/B1901, 73/B1902 or 73/B1903 are displayed, disregard them.

Diagnostic Procedure

1. Turn ignition switch to LOCK position. Disable air bag system. See [DISABLING SYSTEM](#) under DISABLING & ACTIVATING AIR BAG SYSTEM. If using Toyota hand-held tester, retrieve 5 digit DTC. See [RETRIEVING AIR BAG SYSTEM DTCS USING TOYOTA HAND-HELD TESTER](#)

under DIAGNOSTICS. If DTC B1900 is retrieved, go to next step. If DTC B1901 is retrieved, go to step 4 . If DTC B1902 is retrieved, go to step 5 . If DTC B1903 is retrieved, go to step 6 . If using diagnosis check wire, retrieve 2 digit DTC. See **RETRIEVING AIR BAG SYSTEM DTCS USING DIAGNOSIS CHECK WIRE** under DIAGNOSTICS. If DTC 73 is retrieved, go to step 7 .

2. Inspect left seat belt pretensioner connector for disengaged lock button or deformed or damaged lock claw. If connectors are okay, go to next step. If connectors are not okay, replace wire harness between left seat belt pretensioner and air bag sensor assembly.
3. Release short spring mechanism on air bag sensor assembly connector C6. See **RELEASING SHORT SPRING** under DIAGNOSTICS. Measure resistance between Yellow/Black wire (circuit PD+) and Yellow wire (circuit PD-) on harness side of left seat belt pretensioner connector. See **WIRING DIAGRAMS** . If resistance is less than one megohm, replace wire harness between left seat belt pretensioner and air bag sensor assembly. If resistance is more than one megohm, go to step 10 .
4. Measure resistance between Yellow/Black wire (circuit PD+) and Yellow wire (circuit PD-) on harness side of left seat belt pretensioner connector. See **WIRING DIAGRAMS** . If resistance is less than one ohm, go to step 11 . If resistance is more than one ohm, replace wire harness between left seat belt pretensioner and air bag sensor assembly.
5. Measure resistance between ground and Yellow/Black wire (circuit PD+) on harness side of left seat belt pretensioner connector. See **WIRING DIAGRAMS** . Measure resistance between ground and Yellow (circuit PD-) wire on harness side of left seat belt pretensioner connector. If resistance is more than one megohm, go to step 11 . If resistance is less than one megohm, replace wire harness between left seat belt pretensioner and air bag sensor assembly.
6. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Measure voltage between ground and Yellow/Black wire (circuit PD+) on harness side of left seat belt pretensioner connector. See **WIRING DIAGRAMS** . Measure voltage between ground and Yellow wire (circuit PD-) on harness side of left seat belt pretensioner connector. If voltage is less than one volt, go to step 11 . If voltage is more than one volt, replace wire harness between left seat belt pretensioner and air bag sensor assembly.
7. Inspect left seat belt pretensioner connector for disengaged lock button or deformed or damaged lock claw. If connectors are okay, go to next step. If connectors are not okay, replace wire harness between left seat belt pretensioner and air bag sensor assembly.
8. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Measure voltage between ground and Yellow/Black wire (circuit PD+) on harness side of left seat belt pretensioner connector. See **WIRING DIAGRAMS** . Measure voltage between ground and Yellow wire (circuit PD-) on harness side of left seat belt pretensioner connector. Voltage should be less than one volt. Turn ignition switch to LOCK position. Disconnect negative battery cable and wait at least 90 seconds. Measure resistance between Yellow/Black wire and Yellow wire on harness side of left seat belt pretensioner connector. Resistance should be less than one ohm. Measure resistance between ground and Yellow/Black wire on harness side of left seat belt pretensioner connector. Measure resistance between ground and Yellow wire on harness side of left seat belt pretensioner connector. Resistance should be more than one megohm. Release short spring mechanism on air bag sensor assembly connector C6. See **RELEASING SHORT SPRING** under DIAGNOSTICS. Measure resistance between Yellow/Black wire and Yellow wire on harness side of left seat belt pretensioner connector. Resistance should be more than one megohm. If voltage and resistance readings are normal, go to next step. If voltage and resistance readings are not normal, replace wire harness between left seat belt pretensioner and air bag sensor assembly.

9. Replace left seat belt pretensioner. See **SEAT BELT PRETENSIONER** under REMOVAL & INSTALLATION. Reconnect air bag sensor assembly harness connectors. Turn ignition switch to ON position. Wait at least 60 seconds. Clear DTCs. See **CLEARING CODES** under DIAGNOSTICS. Turn ignition switch to LOCK position. Wait at least 20 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Retrieve DTCs. If DTC 73 is displayed, replace air bag sensor assembly. See **AIR BAG SENSOR ASSEMBLY** under REMOVAL & INSTALLATION. If DTC 73 is not displayed, test is complete.
10. Reconnect air bag sensor assembly connectors. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Clear DTCs. See **CLEARING CODES** under DIAGNOSTICS. Turn ignition switch to LOCK position. Wait at least 20 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Retrieve DTCs. See **RETRIEVING CODES** under DIAGNOSTICS. If DTC B1900 is displayed, replace air bag sensor assembly. See **AIR BAG SENSOR ASSEMBLY** under REMOVAL & INSTALLATION. If DTC B1900 is not displayed, go to step 12 .
11. If sent here from step 6 , turn ignition switch to LOCK position. Disconnect negative battery cable and wait at least 90 seconds. If sent here from any step, reconnect air bag sensor assembly connectors. Connect jumper wire between Yellow/Black wire and Yellow wire on harness side of left seat belt pretensioner connector. See **WIRING DIAGRAMS** . Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Clear DTCs. See **CLEARING CODES** under DIAGNOSTICS. Turn ignition switch to LOCK position. Wait at least 20 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Retrieve DTCs. See **RETRIEVING CODES** under DIAGNOSTICS. If DTCs B1901, B1902 or B1903 are displayed, replace air bag sensor assembly. See **AIR BAG SENSOR ASSEMBLY** under REMOVAL & INSTALLATION. If DTC B1901, B1902 or B1903 are not displayed, go to next step.
12. Turn ignition switch to LOCK position. Disconnect negative battery cable and wait at least 90 seconds. If sent here from step 10 , remove jumper wire. If sent here from any step, connect left side air bag module harness connectors. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Clear DTCs. See **CLEARING CODES** under DIAGNOSTICS. Turn ignition switch to LOCK position. Wait at least 20 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Retrieve DTCs. See **RETRIEVING CODES** under DIAGNOSTICS. If DTCs B1900, B1901, B1902 or B1903 are displayed, replace left seat belt pretensioner. See **SEAT BELT PRETENSIONER** under REMOVAL & INSTALLATION. If DTC B1900, B1901, B1902 or B1903 are not displayed, ensure air bag sensor assembly is in check mode. See **CHECK MODE PROCEDURE** under DIAGNOSTICS. Check for intermittent air bag system fault. See **AIR BAG WARNING LIGHT INTERMITTENT** .

DTC 74/B1905, 74/B1906, 74/B1907, 74/B1908: RIGHT SEAT BELT PRETENSIONER SQUIB CIRCUIT SHORT, OPEN, SHORT TO GROUND OR SHORT TO BATTERY

Possible Causes

Diagnostic Trouble Codes (DTCs) 74/B1905, 74/B1906, 74/B1907 or 74/B1908 could be caused by a short to ground, open, short or short to battery in right seat belt pretensioner squib circuit, squib malfunction or air bag sensor assembly malfunction.

NOTE: During testing, if DTCs other than DTC 74/B1905, 74/B1906, 74/B1907 or 74/B1908 are displayed, disregard them.

Diagnostic Procedure

1. Turn ignition switch to LOCK position. Disable air bag system. See **DISABLING SYSTEM** under **DISABLING & ACTIVATING AIR BAG SYSTEM**. If using Toyota hand-held tester, retrieve 5 digit DTC. See **RETRIEVING AIR BAG SYSTEM DTCS USING TOYOTA HAND-HELD TESTER** under **DIAGNOSTICS**. If DTC B1905 is retrieved, go to next step. If DTC B1906 is retrieved, go to step 4 . If DTC B1907 is retrieved, go to step 5 . If DTC B1908 is retrieved, go to step 6 . If using diagnosis check wire, retrieve 2 digit DTC. See **RETRIEVING AIR BAG SYSTEM DTCS USING DIAGNOSIS CHECK WIRE** under **DIAGNOSTICS**. If DTC 74 is retrieved, go to step 7 .
2. Inspect right seat belt pretensioner connector for disengaged lock button or deformed or damaged lock claw. If connectors are okay, go to next step. If connectors are not okay, replace right seat belt pretensioner. See **SEAT BELT PRETENSIONER** under **REMOVAL & INSTALLATION**.
3. Release short spring mechanism on air bag sensor assembly connector C8. See **RELEASING SHORT SPRING** under **DIAGNOSTICS**. Measure resistance between Yellow/Black wire (circuit PP+) and Yellow wire (circuit PP-) on harness side of right seat belt pretensioner connector. See **WIRING DIAGRAMS** . If resistance is less than one megohm, replace wire harness between right seat belt pretensioner and air bag sensor assembly. If resistance is more than one megohm, go to step 10 .
4. Measure resistance between Yellow/Black wire (circuit PP+) and Yellow wire (circuit PP-) on harness side of right seat belt pretensioner connector. See **WIRING DIAGRAMS** . If resistance is less than one ohm, go to step 11 . If resistance is more than one ohm, replace wire harness between right seat belt pretensioner and air bag sensor assembly.
5. Measure resistance between ground and Yellow/Black wire (circuit PP+) on harness side of right seat belt pretensioner connector. See **WIRING DIAGRAMS** . Measure resistance between ground and Yellow (circuit PP-) wire on harness side of right seat belt pretensioner connector. If resistance is more than one megohm, go to step 10 . If resistance is less than one megohm, replace wire harness between right seat belt pretensioner and air bag sensor assembly.
6. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Measure voltage between ground and Yellow/Black wire (circuit PP+) on harness side of right seat belt pretensioner connector. See **WIRING DIAGRAMS** . Measure voltage between ground and Yellow wire (circuit PP-) on harness side of right seat belt pretensioner connector. If voltage is less than one volt, go to step 11 . If voltage is more than one volt, replace wire harness between right seat belt pretensioner and air bag sensor assembly.
7. Inspect right seat belt pretensioner connector for disengaged lock button or deformed or damaged lock claw. If connectors are okay, go to next step. If connectors are not okay, replace right seat belt pretensioner. See **SEAT BELT PRETENSIONER** under **REMOVAL & INSTALLATION**.
8. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Measure voltage between ground and Yellow/Black wire (circuit PP+) on harness side of right seat belt pretensioner connector. See **WIRING DIAGRAMS** . Measure voltage between ground and Yellow wire (circuit PP-) on harness side of right seat belt pretensioner connector. Voltage should be less than one volt. Turn ignition switch to LOCK position. Disconnect negative battery cable and wait at least 90 seconds. Measure resistance between Yellow/Black wire and Yellow wire on harness side of right seat belt pretensioner connector. Resistance should be less than one ohm. Measure resistance between ground and Yellow/Black wire on harness side of right seat belt pretensioner connector. Measure resistance between ground and Yellow wire on harness side of right seat belt pretensioner connector. Resistance should be more than one megohm. Release short spring mechanism on air bag sensor assembly connector C8. See **RELEASING SHORT SPRING** under **DIAGNOSTICS**. Measure resistance between

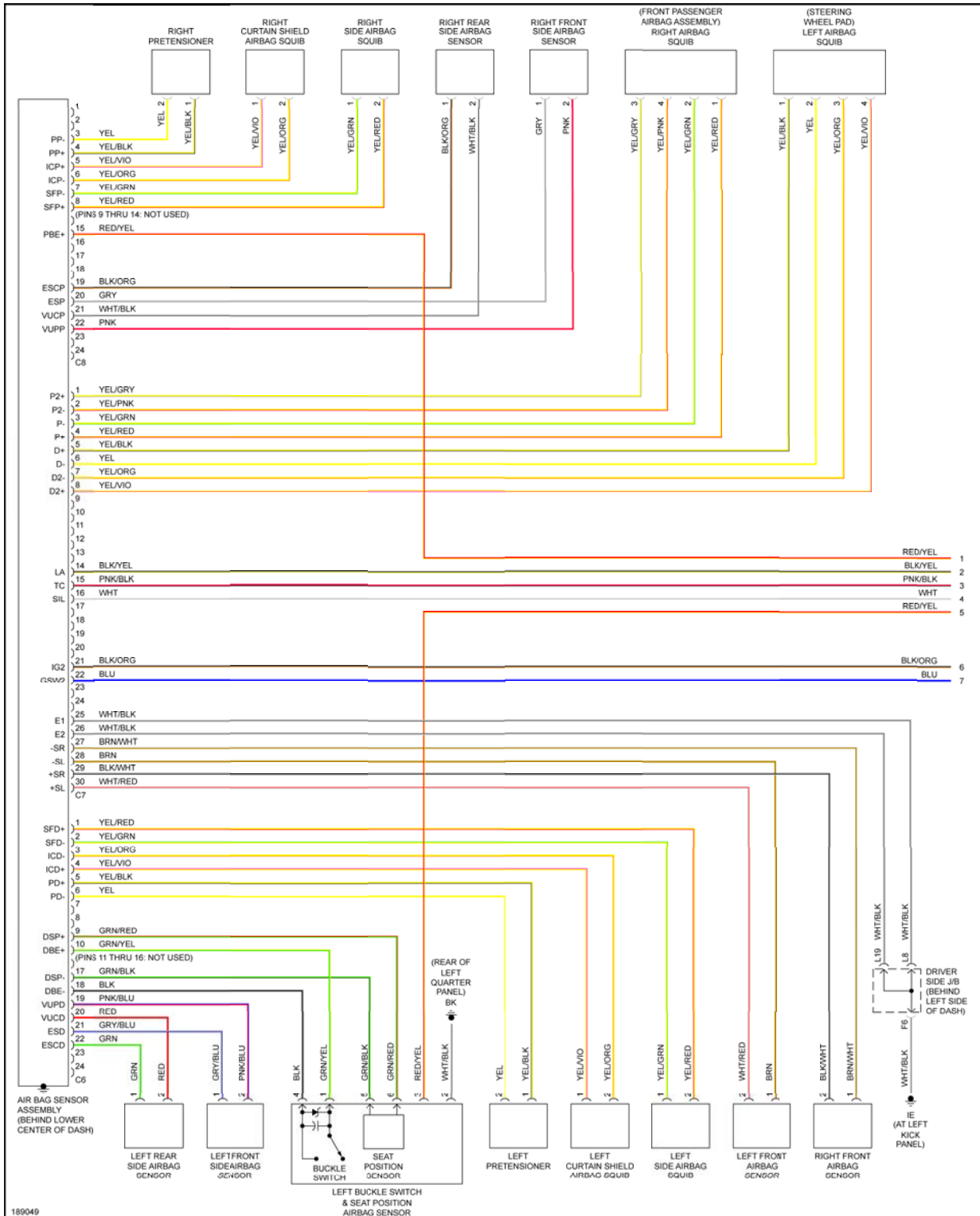
Yellow/Black wire and Yellow wire on harness side of right seat belt pretensioner connector. Resistance should be more than one megohm. If voltage and resistance readings are normal, go to next step. If voltage and resistance readings are not normal, replace wire harness between right seat belt pretensioner and air bag sensor assembly.

9. Replace right seat belt pretensioner. See **SEAT BELT PRETENSIONER** under REMOVAL & INSTALLATION. Reconnect air bag sensor assembly harness connectors. Turn ignition switch to ON position. Wait at least 60 seconds. Clear DTCs. See **CLEARING CODES** under DIAGNOSTICS. Turn ignition switch to LOCK position. Wait at least 20 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Retrieve DTCs. If DTC 74 is displayed, replace air bag sensor assembly. See **AIR BAG SENSOR ASSEMBLY** under REMOVAL & INSTALLATION. If DTC 74 is not displayed, test is complete.
10. Reconnect air bag sensor assembly connectors. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Clear DTCs. See **CLEARING CODES** under DIAGNOSTICS. Turn ignition switch to LOCK position. Wait at least 20 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Retrieve DTCs. See **RETRIEVING CODES** under DIAGNOSTICS. If DTC B1905 is displayed, replace air bag sensor assembly. See **AIR BAG SENSOR ASSEMBLY** under REMOVAL & INSTALLATION. If DTC B1905 is not displayed, go to step 12 .
11. If sent here from step 6 , turn ignition switch to LOCK position. Disconnect negative battery cable and wait at least 90 seconds. If sent here from any step, reconnect air bag sensor assembly connectors. Connect jumper wire between Yellow/Black wire and Yellow wire on harness side of right seat belt pretensioner connector. See **WIRING DIAGRAMS** . Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Clear DTCs. See **CLEARING CODES** under DIAGNOSTICS. Turn ignition switch to LOCK position. Wait at least 20 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Retrieve DTCs. See **RETRIEVING CODES** under DIAGNOSTICS. If DTCs B1906, B1907 or B1908 are displayed, replace air bag sensor assembly. See **AIR BAG SENSOR ASSEMBLY** under REMOVAL & INSTALLATION. If DTC B1906, B1907 or B1908 are not displayed, go to next step.
12. Turn ignition switch to LOCK position. Disconnect negative battery cable and wait at least 90 seconds. If sent here from step 10 , remove jumper wire. If sent here from any step, connect right side air bag module harness connectors. Connect negative battery cable. Wait at least 2 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Clear DTCs. See **CLEARING CODES** under DIAGNOSTICS. Turn ignition switch to LOCK position. Wait at least 20 seconds. Turn ignition switch to ON position. Wait at least 60 seconds. Retrieve DTCs. See **RETRIEVING CODES** under DIAGNOSTICS. If DTCs B1905, B1906, B1907 or B1908 are displayed, replace right seat belt pretensioner. See **SEAT BELT PRETENSIONER** under REMOVAL & INSTALLATION. If DTC B1905, B1906, B1907 or B1908 are not displayed, ensure air bag sensor assembly is in check mode. See **CHECK MODE PROCEDURE** under DIAGNOSTICS. Check for intermittent air bag system fault. See **AIR BAG WARNING LIGHT INTERMITTENT** .

WIRING DIAGRAMS

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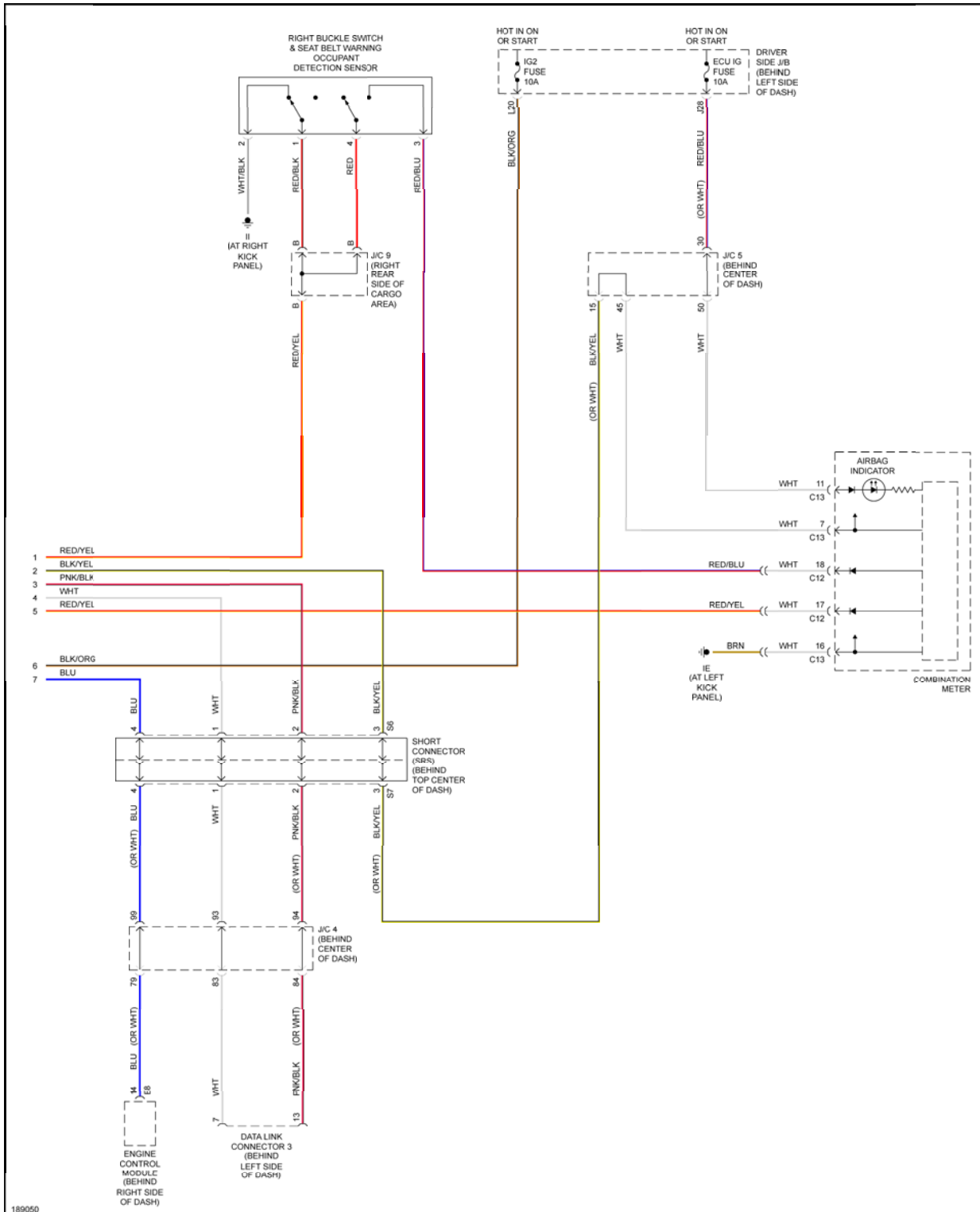


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Fig. 22: Air Bag System Wiring Diagram (RAV4-1 Of 2)

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Fig. 23: Air Bag System Wiring Diagram (RAV4-2 Of 2)