GENERAL INFORMATION

Air Bag Deactivation Procedures

SPECIAL CARE DURING MECHANICAL REPAIRS

WARNING: To avoid injury from accidental air bag deployment, read and carefully follow all appropriate SERVICE PRECAUTIONS and DISABLING & ACTIVATING AIR BAG SYSTEM procedures.

In some instances, it may be necessary to remove the steering column or instrument panel to access blower motor housing, heater assembly, evaporator assembly and other related A/C-heater system components. Observe specific manufacturer SERVICE PRECAUTIONS when working on vehicle with an air bag system.

Electrical sources should NEVER be allowed near inflator on back of air bag module. NEVER probe air bag system electrical wires with an analog volt-ohmmeter or test light. Always disable air bag system before servicing vehicle. See appropriate DISABLING & ACTIVATING AIR BAG SYSTEM procedure. Failure to disable system properly may result in accidental air bag deployment and possible personal injury.

If air bag system is not fully functional for any reason, DO NOT drive vehicle until system is repaired and functions properly. 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 system is repaired and functions properly.

CHRYSLER CORP.

All Chrysler vehicles are equipped with driver-side and passenger-side air bags. Unless specific models are mentioned, the following procedures apply to all models with an air bag system.

SYSTEM OPERATION CHECK

- 1. Ensure negative battery cable or negative battery cable remote terminal is disconnected and isolated. Connect Diagnostic Read-Out Box III (DRB-III) scan tool to 16-pin Data Link Connector (DLC) located left of steering column at lower edge of instrument panel. Turn ignition switch to ON position and exit vehicle. Ensure latest version of correct DRB cartridge is being used.
- 2. After ensuring there is no one inside vehicle, connect negative battery cable or negative battery cable remote terminal. Using DRB, read and record active and any stored Diagnostic Trouble Codes (DTCs). Diagnose as necessary. Clear DTCs and recheck for DTCs. If a problem still exists DTC data will not clear.
- 3. Ignition switch should still be in ON position. Ensure no one is inside vehicle. From a position outside vehicle and away from air bag modules (in case of air bag deployment), turn ignition switch to OFF position for about 10 seconds, and then back to ON position. Observe AIR BAG indicator. It should come on for 6-8 seconds and then go out, indicating system is functioning properly.
- 4. If AIR BAG indicator fails to come on, comes on and stays on, or comes on while driving, a system malfunction exists. Perform air bag system self-diagnostics, and repair air bag system.

SERVICE PRECAUTIONS

Observe the following precautions when working with or near air bag systems:

- Disconnect and isolate negative battery cable before servicing vehicle. Allow system capacitor to discharge for 2 minutes before removing air bag components.
- Disable air bag system before servicing any air bag system or steering column component. Failure to do this may result in accidental air bag deployment and possible personal injury. See **DISABLING & ACTIVATING AIR BAG SYSTEM**.
- Always wear safety glasses when servicing or handling an air bag.
- Air bag module must be stored in its original special container until used for service. It must be stored in a clean, dry place, away from sources of extreme heat, sparks and high electrical energy.
- When placing a live air bag on a bench or other surface, always face air bag and trim cover up, away from surface. This will reduce motion of module if accidentally deployed.
- When a steering column has been removed from vehicle with an air bag module attached, never place column on the floor or any other surface with the steering wheel or air bag module face down.
- After deployment, air bag surface may contain sodium hydroxide deposits, which irritate skin. Sodium hydroxide is a product of gas generant combustion. Always wear safety glasses, rubber gloves and a long-sleeved shirt during clean-up. Wash hands using mild soap and water. Follow correct disposal procedures.
- When carrying a live air bag module, point trim cover away from your body to minimize injury in case of accidental deployment.
- DO NOT disconnect or connect air bag module while battery is connected. Never disassemble air bag module. There are no serviceable parts within the module.
- The air bag control module contains an impact sensor which enables the system to deploy air bags. Never strike the air bag control module. If air bag control module is accidentally dropped, module MUST be replaced.
- Clockspring, air bag module, and seat belt pre-tensioner (if equipped) MUST be replaced if air bag is deployed.
- On Caravan, Town & Country and Voyager, when driver-side air bag is deployed because of a collision, the complete steering column assembly, steering column clockspring, steering wheel, driver-side air bag cover/horn module, and lower steering coupler MUST be replaced.
- On Dakota, Durango and Ram Van/Wagon, driver-side air bag module inflator assembly contains sodium azide and potassium nitrate. These materials are poisonous and extremely flammable; contact with acid, water, or heavy metals may produce harmful and irritating gases.
- On Dakota and Ram Pickup, ALWAYS remove and replace the air bag control module and its mounting bracket as a unit. DO NOT transfer the module to another bracket.
- On Ram Pickups, whenever passenger-side air bag module is removed and reinstalled, air distribution panel outlet barrels in passenger-side air bag door panel outlet housings MUST be replaced. Panel outlet barrels must be replaced with NEW barrels. Occupant injuries could result during air bag deployment if outlet barrels are not replaced.
- On Ram Pickups, after air bag deployment, both air bag modules, clockspring, and the steering column assembly MUST be replaced. During air bag deployment, these components will be damaged or weakened, and are NOT intended to be reused.

• Fasteners, screws and bolts used to fasten air bag components have a special coating and are specifically designed for air bag system. Use only original equipment fasteners.

DISABLING & ACTIVATING AIR BAG SYSTEM

- WARNING: Wait at least 2 MINUTES after disconnecting negative battery cable. Servicing air bag system before 2 minutes elapse may cause accidental air bag deployment and possible personal injury.
- WARNING: Ram Pickup models are equipped with a Passenger Air Bag Disarm Switch (PADS) used to disarm passenger-side air bag module. This switch is to be used when child restraint devices are positioned in right front seat. This switch is ONLY used to disarm passenger-side air bag module, it CANNOT disarm entire air bag system and should NOT be used in place of disabling and activating air bag system procedure.

Disabling & Activating Air Bag System

- 1. Turn ignition off. On Avenger, Caravan, Dakota, Durango, Neon, Ram Pickup, Ram Van/Wagon, Sebring Coupe, Talon and Town & Country, disconnect and isolate negative battery cable.
- 2. On Breeze, Cirrus, Concorde, Intrepid, Sebring Convertible and Stratus, disconnect and isolate negative battery cable remote terminal. On Concorde and Intrepid battery remote cable is located on right strut tower. On Breeze, Cirrus, Sebring Convertible and Stratus, battery remote cable is located on left strut tower.
- 3. On all models, wait at least 2 MINUTES for system capacitor to discharge before servicing or working near air bag system components. To activate system, turn ignition off and reconnect negative battery cable or negative battery cable remote terminal. See **SYSTEM OPERATION CHECK**.

FORD MOTOR CO.

All Ford vehicles are equipped with a dual air bag system. Unless specific models are mentioned, the following procedures apply to all models with an air bag system.

SYSTEM OPERATION CHECK

- 1. Turn ignition switch to RUN position. Observe AIR BAG indicator with air bags installed. If AIR BAG indicator comes on for approximately 6 seconds then goes out, air bag system is functioning properly and no fault codes exist.
- 2. If a fault code is detected in air bag system during system check, AIR BAG indicator will fail to light, stay on continuously or flash.
- 3. The AIR BAG indicator may not start flashing for approximately 30 seconds (16 seconds on Mark VIII) after ignition switch has been turned to RUN position. This time is required for diagnostic monitor to complete test air bag system.
- 4. If AIR BAG indicator is inoperative and a system fault exists, an audible tone of 5 sets of 5 beeps will be

heard. If this occurs, air bag system service is required.

SERVICE PRECAUTIONS

Observe the following precautions when working with air bag systems:

- Disable air bag system before servicing any air bag system or steering column components. Failure to do so may result in accidental air bag deployment and possible personal injury. See **DISABLING & ACTIVATING AIR BAG SYSTEM**.
- Because of critical system operating requirements, DO NOT service sensors, clockspring, air bag diagnostic monitor or air bag module. Servicing is made by replacement only.
- Always wear gloves and safety glasses when servicing an air bag-equipped vehicle or handling an air bag.
- When carrying a live air bag, point air bag and trim cover away from your body. This minimizes chance of injury in case of accidental deployment.
- When placing a live air bag on a bench or other surface, always face air bag and trim cover up, 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 may irritate skin. Sodium hydroxide is a product of the gas generant combustion. Always wear gloves and safety glasses when handling a deployed air bag. Wash hands using mild soap and water. Follow correct disposal procedures.
- Air bag modules with discolored or damaged cover deployment doors must be replaced, not repainted.
- Vehicle impact sensor orientation is critical for proper system operation. If vehicle is involved in a collision, inspect sensor mounting brackets for deformation. Ensure body structure in sensor mounting area is restored to its original condition. If damaged, the impact sensor must be replaced regardless of whether or not air bag is deployed.
- Never probe connectors on air bag module. Doing so may cause air bag deployment and personal injury.
- The instruction to DISCONNECT always refers to a component connector. DO NOT remove a component from vehicle when instructed to DISCONNECT.
- Air bag simulators MUST be removed and the air bags reconnected when the air bag system is reactivated.
- After any servicing, perform **<u>SYSTEM OPERATION CHECK</u>**.

DISABLING & ACTIVATING AIR BAG SYSTEM

WARNING: If vehicle is equipped with a passenger-side air bag, both driver-side and passenger-side air bag modules MUST be disconnected and an air bag simulator installed to wiring harness.

Disabling System (Continental, Crown Victoria, Grand Marquis & Town Car)

- 1. Record preset radio station frequencies. Disconnect negative battery cable. Wait at least one minute. This time is required for back-up power supply in diagnostic monitor to deplete its stored energy.
- 2. Remove driver-side air bag module. See **DRIVER-SIDE AIR BAG MODULE**. Disconnect driver-side air bag module connector. Attach air bag simulator to air bag connector to simulate driver-side air bag.

See AIR BAG SIMULATOR APPLICATION table. See Fig. 1.

3. Remove passenger-side air bag module. See **PASSENGER-SIDE AIR BAG MODULE**. Disconnect passenger-side air bag connector. Install air bag simulator to air bag module harness connector to simulate air bag. See **AIR BAG SIMULATOR APPLICATION** table. Connect negative battery cable.

Activating System

- 1. Disconnect negative battery cable. Wait at least one minute. Remove air bag simulators from driver-side and passenger-side air bag wiring harness connectors.
- 2. Connect driver-side air bag connector to air bag module. Install driver-side air bag module onto steering wheel. See **DRIVER-SIDE AIR BAG MODULE**.
- Connect passenger-side air bag connector to air bag module. Install passenger-side air bag into instrument panel. See <u>PASSENGER-SIDE AIR BAG MODULE</u>. Connect negative battery cable. Perform <u>SYSTEM OPERATION CHECK</u>. Program radio station frequencies.

Disabling System (Contour, Mystique & Windstar)

- 1. Record preset radio station frequencies. Disconnect negative battery cable. Wait at least one minute. This time is required for back-up power supply in diagnostic monitor to deplete its stored energy.
- Remove driver-side air bag module. See <u>DRIVER-SIDE AIR BAG MODULE</u>. Install air bag simulator to driver-side air bag module harness connector to simulate air bag. See <u>AIR BAG</u>
 <u>SIMULATOR APPLICATION</u> table. See <u>Fig. 1</u>. A trouble code will set if an incorrect air bag simulator is installed.
- 3. Remove passenger-side air bag module. See **PASSENGER-SIDE AIR BAG MODULE**. Install air bag simulator to passenger-side air bag module harness connector to simulate air bag. A trouble code will set if an incorrect air bag simulator is installed. Connect negative battery cable.

Activating System

- 1. Disconnect negative battery cable. Wait at least one minute. This time is required for back-up power supply in diagnostic monitor to deplete its stored energy. Remove driver-side and passenger-side air bag simulators.
- Install driver-side and passenger-side air bag modules. Tighten mounting bolts to specification. See <u>TORQUE SPECIFICATIONS</u>. Connect negative battery cable. Perform <u>SYSTEM OPERATION</u> <u>CHECK</u>. Program radio station frequencies.

Disabling System (Escort, Escort Coupe, "F" Series Pickups & Tracer)

- 1. Disconnect negative battery cable. On "F" Series Pickups, remove battery to starter relay cable. Wait at least one minute. This time is required for back-up power supply in air bag Electronic Crash Sensor (ECS) module or diagnostic monitor to deplete its stored energy.
- 2. Remove driver-side air bag module from vehicle. See **DRIVER-SIDE AIR BAG MODULE**. Position air bag module on bench with trim cover facing up.
- 3. Install air bag simulator to driver-side air bag module harness connector to simulate air bag. See <u>AIR</u> <u>BAG SIMULATOR APPLICATION</u> table. See <u>Fig. 1</u>. A trouble code will set if an incorrect air bag

simulator is installed.

- 4. Remove passenger-side air bag module. See **PASSENGER-SIDE AIR BAG MODULE**. Position air bag module on bench with trim cover facing up.
- Install air bag simulator to air bag module harness connector to simulate air bag. See <u>AIR BAG</u> <u>SIMULATOR APPLICATION</u> table. See <u>Fig. 1</u>. A trouble code will set if an incorrect air bag simulator is installed. Connect negative battery cable.

Activating System

- 1. Disconnect negative battery cable. On "F" Series Pickups, remove battery to starter relay cable. On all models, wait at least one minute. This time is required for back-up power supply in ECS or diagnostic monitor to deplete its stored energy. Remove air bag simulators.
- Install driver-side air bag module and passenger-side air bag module. Tighten mounting bolts to specification. See <u>TORQUE SPECIFICATIONS</u>. Connect negative battery cable. Perform <u>SYSTEM</u> <u>OPERATION CHECK</u>.

CAUTION: On all "E" series vans equipped with an auxiliary battery (gas engine) or a secondary battery (diesel engine), both batteries must be disconnected to ensure air bag system is disabled. See <u>DISABLING SYSTEM ("E" SERIES</u> <u>VANS WITH DUAL BATTERIES)</u>.

Disabling System ("E" Series Vans With One Battery)

- 1. Disconnect negative battery cable. Wait at least one minute. This time is required for back-up power supply in diagnostic monitor to deplete its stored energy.
- 2. Remove driver-side air bag module from vehicle. See **DRIVER-SIDE AIR BAG MODULE**. Position air bag module on bench with trim cover facing up. Install air bag simulator to driver-side air bag module harness connector to simulate air bag. See **AIR BAG SIMULATOR APPLICATION** table. See **Fig. 1**. A trouble code will set if an incorrect air bag simulator is installed.
- 3. Remove passenger-side air bag module. See <u>PASSENGER-SIDE AIR BAG MODULE</u>. Position air bag module on bench with trim cover facing up. Install air bag simulator to air bag module harness connector to simulate air bag. See <u>AIR BAG SIMULATOR APPLICATION</u> table. See <u>Fig. 1</u>. A trouble code will set if an incorrect air bag simulator is installed. Connect negative battery cable.

Activating System

- 1. Disconnect negative battery cable. Wait at least one minute. This time is required for back-up power supply in diagnostic monitor to deplete its stored energy. Remove air bag simulators.
- Install driver-side air bag module and passenger-side air bag module. Tighten mounting bolts to specification. See <u>TORQUE SPECIFICATIONS</u>. Connect negative battery cable. Perform <u>SYSTEM</u> <u>OPERATION CHECK</u>.

Disabling System ("E" Series Vans With Dual Batteries)

1. If vehicle is equipped with a diesel engine, go to next step. If vehicle is equipped with a gas engine,

disconnect primary battery (engine compartment) negative battery cable. Disconnect auxiliary battery frame ground cable and isolate cable (located on right side frame rail). Wait at least one minute. This time is required for back-up power supply in diagnostic monitor to deplete its stored energy.

- 2. If vehicle is equipped with a diesel engine, disconnect secondary battery positive cable terminal from primary battery positive terminal (engine compartment). Isolate secondary battery positive cable to ensure battery cable does not contact any ground surface. Disconnect primary battery negative cable. Disconnect primary battery-to-starter relay cable. Wait at least one minute. This time is required for back-up power supply in diagnostic monitor to deplete its stored energy.
- 3. On all models, remove driver-side air bag module from vehicle. See <u>DRIVER-SIDE AIR BAG</u> <u>MODULE</u>. Position air bag module on bench with trim cover facing up. Install air bag simulator to driver-side air bag module harness connector to simulate air bag. See <u>AIR BAG SIMULATOR</u> <u>APPLICATION</u> table. See <u>Fig. 1</u>. A trouble code will set if an incorrect air bag simulator is installed.
- 4. Remove passenger-side air bag module. See **PASSENGER-SIDE AIR BAG MODULE**. Position air bag module on bench with trim cover facing up. Install air bag simulator to air bag module harness connector to simulate air bag. See **AIR BAG SIMULATOR APPLICATION** table. See **Fig. 1**. A trouble code will set if an incorrect air bag simulator is installed. Connect battery cables in reverse order of disabling procedure.

Activating System

- 1. Disconnect battery cables. Wait at least one minute. This time is required for back-up power supply in diagnostic monitor to deplete its stored energy. Remove air bag simulators.
- 2. Install driver-side air bag module and passenger-side air bag module. Tighten mounting bolts to specification. See <u>TORQUE SPECIFICATIONS</u>. Connect battery cables in reverse order of disabling procedure. Perform <u>SYSTEM OPERATION CHECK</u>.

Disabling System (Explorer, Expedition, Mountaineer, Navigator & Ranger)

- 1. Disconnect negative battery cable. Wait at least one minute. This time is required for back-up power supply in diagnostic monitor to deplete its stored energy.
- Remove driver-side air bag from vehicle. See <u>DRIVER-SIDE AIR BAG MODULE</u>. Attach air bag simulator to air bag connector to simulate driver-side air bag. See <u>AIR BAG SIMULATOR</u> <u>APPLICATION</u> table.
- Remove passenger-side air bag module. See <u>PASSENGER-SIDE AIR BAG MODULE</u>. Attach air bag simulator to air bag connector to simulate passenger-side air bag. See <u>AIR BAG SIMULATOR</u> <u>APPLICATION</u> table.

Activating System

- 1. Disconnect negative battery cable. Wait at least one minute. This time is required for back-up power supply in diagnostic monitor to deplete its stored energy. Remove air bag simulators.
- 2. Install driver-side and passenger-side air bag modules. Tighten mounting bolts to specification. See <u>TORQUE SPECIFICATIONS</u>. Connect positive battery cable. Perform <u>SYSTEM OPERATION</u> <u>CHECK</u>.

Disabling System (Mark VIII, Mustang, Sable & Taurus)

- 1. Record preset radio station frequencies. Disconnect negative battery cable. Wait at least one minute. This time is required for back-up power supply in diagnostic monitor to deplete its stored energy.
- 2. Remove driver-side air bag module from vehicle. See **DRIVER-SIDE AIR BAG MODULE**. Position air bag module on bench with trim cover facing up.
- Install air bag simulator to air bag module harness connector to simulate air bag. See <u>AIR BAG</u> <u>SIMULATOR APPLICATION</u> table. See <u>Fig. 1</u>. A trouble code will set if an incorrect air bag simulator is installed. If vehicle has a passenger-side air bag, go to next step. If vehicle has only a driverside air bag, connect negative battery cable.
- 4. Remove passenger-side air bag module from instrument panel. See <u>PASSENGER-SIDE AIR BAG</u> <u>MODULE</u>. Position air bag module on bench with trim cover facing up. Install air bag simulator to air bag module harness connector(s) to simulate air bag. See <u>AIR BAG SIMULATOR APPLICATION</u> table. See <u>Fig. 1</u>. A trouble code will set if an incorrect air bag simulator is installed. Connect negative battery cable.

Activating System

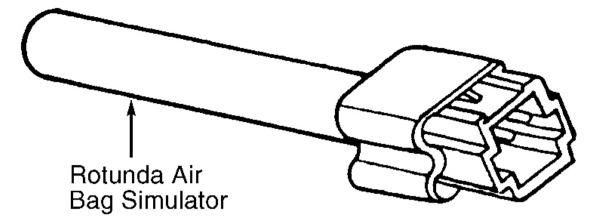
- 1. Disconnect negative battery cable. Wait at least one minute. This time is required for back-up power supply in diagnostic monitor to deplete its stored energy. Remove air bag simulators.
- Install driver-side and passenger-side air bag modules. See <u>DRIVER-SIDE AIR BAG MODULE</u> and <u>PASSENGER-SIDE AIR BAG MODULE</u>. Connect negative battery cable. Perform <u>SYSTEM</u> <u>OPERATION CHECK</u>. Program radio station frequencies.

Disabling System (Villager)

- 1. Disconnect negative battery cable. Wait at least 10 minutes. This time is required for back-up power supply in diagnostic monitor to deplete its stored energy.
- 2. Remove panel covering lower portion of steering column to access driver-side air bag module connector. Disconnect driver-side air bag connector from air bag module. Install Air Bag Simulator (T94P-50-A) to air bag module harness connector to simulate air bag.
- 3. Disconnect passenger-side air bag module connector. Connector is located behind glove box. Install Air Bag Simulator (T96P-50-A) to air bag module harness connector to simulate air bag. Connect negative battery cable.

Activating System

- 1. Disconnect negative battery cable. Wait at least 10 minutes. This time is required for back-up power supply in diagnostic monitor to deplete its stored energy.
- 2. Remove air bag simulators. Connect negative battery cable. Perform SYSTEM OPERATION CHECK.



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Fig. 1: Identifying Air Bag Simulator (Typical) Courtesy of FORD MOTOR CO.

Application	Driver-Side	Passenger-Side
Continental	105-00012	105-00012
Contour & Mystique	105-R0012	105-R0012
Crown Victoria & Grand Marquis	105-R0010	105-R0010
Escort ⁽¹⁾ & Tracer	105-00012	105-00012
"E" Series Vans	105-R0012	105-R0012
Expedition & Navigator	105-R0012	105-R0012
Explorer & Mountaineer	105-R0012	105-R0012
"F" Series Pickups	105-R0012	105-R0012
Mark VIII	105-R0012	105-R0012
Mustang	105-R0012	105-R0012
Ranger	105-00012	105-00012
Sable & Taurus	105-R0012	105-R0012
Town Car	105-00012	105-00012
Villager	T94P-50-A	T96P-50-A
Windstar	105-R0010	105-R0010

AIR BAG SIMULATOR APPLICATION

DRIVER-SIDE AIR BAG MODULE

Removal & Installation (Expedition, Explorer, "E" Series Vans, "F" Series Pickups, Mountaineer, Navigator & Ranger)

- 1. Disable air bag system. See **DISABLING & ACTIVATING AIR BAG SYSTEM**. Wait at least one minute. This time is required for back-up power supply in diagnostic monitor to deplete its stored energy.
- 2. Ensure front wheels are pointed straight ahead. Remove back cover plugs (if equipped) and air bag

module retaining bolts. Lift air bag module from steering wheel.

- 3. Disconnect horn connector. Disconnect air bag module connector. Remove driver-side air bag module from vehicle. Position air bag module on bench with trim cover facing up.
- 4. To install, reverse removal procedure. Tighten mounting bolts to specification. See **TORQUE SPECIFICATIONS**. Connect battery cable(s). Perform **SYSTEM OPERATION CHECK**.

Removal & Installation (Continental, Crown Victoria, Grand Marquis, Mark VIII, Mustang, Sable, Taurus & Town Car)

- 1. Record preset radio station frequencies. Disconnect negative battery cable. Wait at least one minute. This time is required for back-up power supply in diagnostic monitor to deplete its stored energy.
- 2. Remove steering wheel spoke covers (if equipped). Remove back cover plugs and air bag module retaining bolts and washers. Lift air bag module from steering wheel.
- 3. Disconnect air bag module, horn and speed control connectors (if equipped). Remove driver-side air bag module from vehicle. Position air bag module on bench with trim cover facing up.
- To install, reverse removal procedure. Tighten mounting bolts to specification. See <u>TORQUE</u> <u>SPECIFICATIONS</u>. Connect negative battery cable. Perform <u>SYSTEM OPERATION CHECK</u>. Program radio station frequencies.

Removal & Installation (Contour & Mystique)

- 1. Disconnect negative battery cable. Disconnect positive battery cable. Wait at least one minute. This time is required for back-up power supply in diagnostic monitor to deplete its stored energy.
- 2. Remove upper and lower steering column shroud from steering column. Rotate steering wheel to access driver-side air bag module retaining bolts. Remove driver-side air bag module. Disconnect driver-side air bag module connector and remove from vehicle. Position air bag module on bench with trim cover facing up.
- 3. To install, reverse removal procedure. Tighten mounting bolts to specification. See <u>TORQUE</u> <u>SPECIFICATIONS</u>. Connect positive battery cable. Connect negative battery cable. Perform <u>SYSTEM</u> <u>OPERATION CHECK</u>.

Removal & Installation (Escort, Escort Coupe & Tracer)

- 1. Disconnect negative battery cable. Wait at least one minute. This time is required for back-up power supply in air bag Electronic Crash Sensor (ECS) module to deplete its stored energy.
- 2. Ensure front wheels are pointed straight ahead. Remove air bag module retaining bolts. Lift air bag module from steering wheel. Disconnect air bag module connector. Remove driver-side air bag module from vehicle. Position air bag module on bench with trim cover facing up.
- 3. To install, reverse removal procedure. Tighten mounting bolts to specification. See <u>TORQUE</u> <u>SPECIFICATIONS</u>. Connect negative battery cable. Perform <u>SYSTEM OPERATION CHECK</u>.

Removal & Installation (Windstar)

1. Record preset radio station frequencies. Disconnect negative battery cable. Wait at least one minute. This time is required for back-up power supply in diagnostic monitor to deplete its stored energy.

- 2. Remove back cover plugs and air bag module retaining bolts. Lift air bag module from steering wheel. Disconnect air bag module and horn connectors. Remove driver-side air bag module from vehicle. Position air bag module on bench with trim cover facing up.
- To install, reverse removal procedure. Tighten mounting bolts to specification. See <u>TORQUE</u> <u>SPECIFICATIONS</u>. Connect negative battery cable. Perform <u>SYSTEM OPERATION CHECK</u>. Program radio station frequencies.

PASSENGER-SIDE AIR BAG MODULE

Removal & Installation (Continental, Crown Victoria, Grand Marquis & Town Car)

- 1. Record preset radio station frequencies. Disconnect negative battery cable. Wait at least one minute. This time is required for back-up power supply in diagnostic monitor to deplete its stored energy.
- 2. On Crown Victoria and Grand Marquis, unsnap and remove upper instrument panel molding. On Town Car, open glove box door, release assist cable, press sides inward and lower glove box door to floor. On Continental, Crown Victoria and Grand Marquis, open glove box door, press sides inward and lower it to floor. On Continental and Town Car, disconnect passenger-side air bag module connector. On all models, remove passenger-side air bag module retaining bolts.
- 3. On Crown Victoria and Grand Marquis, disconnect passenger-side air bag module connector. On all models, push passenger-side air bag module from inside instrument panel. Remove passenger-side air bag module without handling edges of trim cover.
- 4. To install, reverse removal procedure. Ensure wiring harness is not pinched between air bag module and instrument panel. On Town Car, ensure trim cover retaining clips on back of air bag module are fully seated in slots. On all models, tighten mounting bolts to specification. See **TORQUE SPECIFICATIONS**.

Removal & Installation (Contour & Mystique)

- 1. Disconnect negative battery cable. Disconnect positive battery cable. Wait at least one minute. This time is required for back-up power supply in diagnostic monitor to deplete its stored energy.
- 2. Push sides of glove box inward, and lower glove box to floor. Remove 4 screws, disconnect glove box light, and remove glove box upper cover. Remove A/C duct.
- 3. Through glove box opening, remove 2 passenger-side air bag module retaining nuts and 2 retaining bolts. Disconnect passenger-side air bag module connector. Remove passenger-side air bag module from vehicle. Position air bag module on bench with trim cover facing up.
- 4. To install, reverse removal procedure. Tighten mounting bolts and nuts to specification. See **TORQUE SPECIFICATIONS**. Perform **SYSTEM OPERATION CHECK**.

Removal & Installation ("E" Series Vans)

- 1. Disable air bag system. See **DISABLING & ACTIVATING AIR BAG SYSTEM**. Wait at least one minute. This time is required for back-up power supply in diagnostic monitor to deplete its stored energy.
- 2. Remove right lower instrument panel finish panel and panel reinforcement. Remove 3 passenger-side air bag module retaining nuts. Carefully slide a flat-blade screwdriver (3/8 x 4") under right bottom edge of passenger-side air bag door.

- 3. Lift upward and separate door from retaining clip. Using hands, lift door upwards and separate door from remaining clips. Disconnect passenger-side air bag connector and remove passenger air bag module. Remove 6 offset air bag door retaining clips from instrument panel.
- To install, reverse removal procedure. Tighten air bag mounting bolts to specification. See <u>TORQUE</u> <u>SPECIFICATIONS</u>. Install 6 NEW offset retaining clips onto air bag module door. Activate air bag system. See <u>DISABLING & ACTIVATING AIR BAG SYSTEM</u>. Perform <u>SYSTEM OPERATION</u> <u>CHECK</u>.

Removal & Installation (Expedition, "F" Series Pickups & Navigator)

- 1. Disconnect negative battery cable. Disconnect positive battery cable (battery to starter relay cable on "F" series pickups). Wait at least one minute. This time is required for back-up power supply in diagnostic monitor to deplete its stored energy.
- 2. Remove instrument panel relay cover from top, right side of instrument panel. Remove 3 passenger-side air bag module retaining bolts. Disconnect passenger-side air bag module connector, located in relay cover opening.
- Gently pull passenger-side air bag module from instrument panel. To install, reverse removal procedure. Tighten mounting bolts to specification. See <u>TORQUE SPECIFICATIONS</u>. Perform <u>SYSTEM</u> <u>OPERATION CHECK</u>.

Removal & Installation (Explorer & Mountaineer)

- 1. Disconnect negative battery cable. Disconnect battery to starter relay cable. Wait at least one minute. This time is required for back-up power supply in diagnostic monitor to deplete its stored energy.
- 2. Open glove box. Push sides of glove box toward each other, and lower glove box to floor. Remove passenger-side air bag module retaining bolts. Push passenger-side air bag module from behind instrument panel.
- 3. Using both hands, gently pull passenger-side air bag module from instrument panel. Disconnect passenger-side air bag module connector, located on left side of air bag.
- 4. To install, reverse removal procedure. Tighten mounting bolts to specification. See <u>TORQUE</u> <u>SPECIFICATIONS</u>. Perform <u>SYSTEM OPERATION CHECK</u>.

Removal & Installation (Escort, Escort Coupe & Tracer)

- 1. Disconnect negative battery cable. Wait at least one minute. This time is required for back-up power supply in air bag Electronic Crash Sensor (ECS) module to deplete its stored energy.
- 2. Push in tabs on glove box door, and lower door. Remove 2 glove box hinge-to-instrument panel bolts. Remove glove box. Remove 4 passenger-side air bag module bolts. Pull passenger-side air bag module from instrument panel. Disconnect passenger-side air bag module connector. Remove passenger-side air bag module from vehicle. Position air bag module on bench with trim cover facing up.
- 3. To install, reverse removal procedure. Tighten mounting bolts to specification. See **TORQUE SPECIFICATIONS**.

Removal & Installation (Mark VIII)

- 1. Move steering column to full out and down position. Disconnect negative battery cable. Wait at least one minute. This time is required for back-up power supply in diagnostic monitor to deplete its stored energy.
- 2. Remove lower instrument panel steering column cover. Disconnect steering column connectors. Remove 4 nuts and lower steering column onto instrument panel reinforcing bar. Remove upper instrument panel steering column cover. Pull headlight switch knob rearward and remove switch knob and shaft. Remove left instrument panel finish panel. Pull left end of finish panel rearward to unsnap retainers.
- 3. Remove instrument panel dimmer switch and disconnect connector. Remove 4 upper instrument panel cluster finish panel screws located behind left instrument panel finish panel and above steering column. Pull left end of finish panel far enough away from instrument panel to disconnect wiring connectors. Remove instrument panel cluster finish panel.
- 4. Remove right instrument panel finish panel. Open glove box, release glove box door stops and cable, and lower glove door to full open position. Remove A/C evaporator register duct. Remove 2 lower and 3 upper retaining bolts from passenger-side air bag module.
- 5. Disconnect air bag module connector. Remove passenger-side air bag module from vehicle. Position passenger-side air bag module on bench with trim cover facing up.
- To install, reverse removal procedure. Tighten air bag module retaining screws to specification. See <u>TORQUE SPECIFICATIONS</u>. Tighten steering column mounting nuts to 26-33 ft. lbs. (35-45 N.m). Install outside steering column cover screw before installing inside screw. Connect negative battery cable. Perform <u>SYSTEM OPERATION CHECK</u>.

Removal & Installation (Mustang & Ranger)

- 1. Record preset radio station frequencies. Disconnect negative battery cable. Wait at least one minute. This time is required for back-up power supply in diagnostic monitor to deplete its stored energy.
- 2. Push sides of glove box toward each other, and lower glove box to floor. Remove right side A/C duct (Mustang only). Remove passenger-side air bag module retaining bolts. Disconnect passenger-side air bag module connector, located on left side of air bag. Remove air bag connector from steel reinforcement.
- 3. Gently pull each corner of air bag cover to disengage cover-to-instrument panel attachments. Push passenger-side air bag module from behind instrument panel. Using both hands, pull passenger-side air bag module from instrument panel. DO NOT handle air bag module by edges of deployment doors.
- 4. To install, reverse removal procedure. Tighten mounting bolts to specification. See **TORQUE SPECIFICATIONS**. Perform **SYSTEM OPERATION CHECK**. Program radio station frequencies.

Removal & Installation (Sable & Taurus)

- 1. Record preset radio station frequencies. Disconnect negative battery cable. Wait at least one minute. This time is required for back-up power supply in diagnostic monitor to deplete its stored energy.
- 2. Air bag module trim cover is retained by snap-in tabs. Remove air bag module trim cover from instrument panel. Open glove box, press sides inward, and lower glove box to floor.
- 3. Through glove box opening, remove 2 air bag module retaining screws. Disconnect 2 air bag module connectors. Remove passenger-side air bag module from vehicle. Position air bag module on bench with trim cover facing up.
- 4. To install, reverse removal procedure. Tighten retaining screws to specification. See **TORQUE SPECIFICATIONS**. Connect negative battery cable. Perform **SYSTEM OPERATION CHECK**.

Program radio station frequencies.

Removal & Installation (Windstar)

- 1. Record preset radio station frequencies. Disconnect negative battery cable. Wait at least one minute. This time is required for back-up power supply in diagnostic monitor to deplete its stored energy.
- 2. Remove instrument cluster trim panel and left instrument panel finish panel. Remove instrument panel finish panel retaining clips. Open glove box, press sides inward, and lower glove box to floor.
- 3. Remove 4 passenger-side air bag module front retaining bolts. Disconnect passenger-side air bag module connector located on left side of module. Remove passenger-side air bag module from vehicle. Position air bag module on bench with trim cover facing up.
- To install, reverse removal procedure. Tighten mounting bolts to specification. See <u>TORQUE</u> <u>SPECIFICATIONS</u>. Connect positive battery cable. Connect negative battery cable. Perform <u>SYSTEM</u> <u>OPERATION CHECK</u>. Program radio station frequencies.

TORQUE SPECIFICATIONS

	Driver-Side INCH Lbs.	Passenger-Side INCH Lbs.
Application	(N.m)	(N.m)
Continental	90-122 (10.2-13.8)	62-97 (7.0-11.0)
Contour & Mystique	35-45 (4.0-5.0)	132-156 (14.9-17.6)
Crown Victoria & Grand Marquis	24-33 (2.7-3.7)	(1)
Escort & Tracer	70-104 (7.9-11.7)	70-104 (7.9-11.7)
"E" Series Vans	90-107 (10.2-12.0)	(2)
Expedition & Navigator	79-106 (8.9-12.0)	67-92 (7.6-10.4)
Explorer & Mountaineer	67-92 (7.6-10.4)	67-92 (7.6-10.4)
"F" Series	79-106 (8.9-12.0)	67-92 (7.6-10.4)
Mustang	90-122 (10.2-13.8)	62-97 (7.0-11.0)
Mark VIII	90-122 (10.2-13.8)	(3)
Ranger	67-92 (7.6-10.4)	67-92 (7.6-10.4)
Sable & Taurus	90-122 (10.2-13.8)	68-92 (7.7-10.4)
Town Car	90-122 (10.2-13.8)	67-92 (7.6-10.4)
Windstar	98-115 (11.0-13.0)	71-88 (8.0-10.0)

AIR BAG MODULE TORQUE SPECIFICATIONS (FORD)

(1) On Crown Victoria and Grand Marquis, tighten passenger-side air bag module lower bolts to 67-92 INCH lbs. (7.6-10.4 N.m) and upper bolts to 19-25 INCH lbs. (2.1-2.8 N.m).

- (2) On "E" Series Vans, tighten passenger-side air bag module nuts to 14-19 ft. lbs. (19-26 N.m).
- (3) On Mark VIII, tighten passenger-side air bag module 2 lower bolts to 62-97 INCH lbs. (7.0-11.0 N.m) and 3 upper bolts to 9-18 INCH lbs. (1.0-2.0 N.m).

GENERAL MOTORS

The following models are equipped with a driver-side only air bag system: 3500 Series "G" Vans with Camper, Cutaway, or RV package. All other models are equipped with driver-side and passenger-side air bag systems.

Catera, DeVille, Prizm, Silhouette, Trans Sport and Venture may be equipped with driver and front passenger side-impact air bags and seat belt pretensioners.

On "C" and "K" series pickups equipped with an air bag system, AIR BAG will be molded into the middle of the driver-side air bag cover and into the passenger-side air bag vinyl trim cover. There will also be an air bag warning light on the instrument panel which comes on during bulb check.

WARNING: On "C" and "K" series pickups equipped with a passenger-side air bag, there is a passenger-side air bag ON/OFF switch. This switch is to be used when child restraint devices are positioned in right front seat. This switch is ONLY used to disarm passenger-side air bag module, it CANNOT disarm entire air bag system and should NOT be used in place of disabling and activating air bag system procedure.

SYSTEM OPERATION CHECK

Catera

Turn ignition switch from OFF position to RUN position. If air bag system is operating normally, AIR BAG warning light will come on for 3-4 seconds and then go out. If AIR BAG warning light does not operate as specified a system malfunction is indicated.

All Other Models

- 1. On "C" and "K" series pickups equipped with a passenger-side air bag ON/OFF switch, ensure ON/OFF switch is in ON position.
- 2. On all models, turn ignition switch to RUN position. Ensure AIR BAG warning light flashes 7 times and stays off. If AIR BAG warning light operation is as specified, system is functioning normally.

On all models, the following AIR BAG warning light conditions indicate possible system failure:

- Light does not come on at all.
- Light comes on while vehicle is driven.
- Light flashes 7 times and remains on.
- Light flashes 4 times during bulb check.
- Light does not flash, but remains on when ignition is turned on.

Air bag system faults are often caused by a disconnected or loose electrical connector due to previous service on vehicle. Always check Yellow 2-pin connector(s) at base of steering column.

SERVICE PRECAUTIONS

Observe the following service precautions when working with air bag systems:

- Disable air bag system before servicing any air bag system or steering column component. Failure to do this may result in accidental air bag deployment and possible personal injury. If vehicle is equipped with passenger-side air bag, both modules (driver and passenger) MUST be disabled. See **DISABLING & ACTIVATING AIR BAG SYSTEM**.
- After repairs, stay well away from air bag module(s) and turn ignition switch to RUN position. Ensure AIR BAG warning light is working properly and no system faults are indicated. See <u>SYSTEM</u> <u>OPERATION CHECK</u>.
- Always wear safety glasses when servicing or handling an air bag.
- Air bag module must be stored in its original special container until it is ready to be used for service. It must be stored in a clean, dry place, away from sources of extreme heat, sparks or high electrical energy.
- When placing a live air bag module on a bench or other surface, always face air bag and trim cover up, 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 can irritate skin. Always wear safety glasses, rubber gloves and a long-sleeved shirt during clean-up. Wash hands using mild soap and water. Follow correct disposal procedures.
- When carrying a live air bag module, point trim cover away from your body to minimize injury in case of accidental deployment.
- DO NOT carry seat belt pretensioner by wiring harness or connector. Seat belt pretensioner can be carried by piston tube. When handling a live seat belt pretensioner, DO NOT touch seat belt pretensioner in cable area between buckle and mounting bolt hole. DO NOT cover pretensioner piston tube opening with hands or point open end at yourself or others.
- Coil assembly must be replaced whenever air bag is deployed. Replace SDM, driver-side air bag module or passenger-side air bag module if it has been dropped from a height greater than 3 feet.
- Electrical sources should never be allowed near inflator on back of air bag module.
- If water enters the vehicle's interior and soaks the carpet, the SDM or SDM harness connector may need to be replaced. Inspect the affected area and remove all the water. Repair the water damage, replace the SDM harness connector, and replace the SDM. Failure to do this may result in accidental air bag deployment and possible personal injury.
- If air bag system is not fully functional for any reason, vehicle should not be driven until system is repaired. 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 repairs can be made.

DISABLING & ACTIVATING AIR BAG SYSTEM

WARNING: System reserve capacitor inside DERM or Sensing and Diagnostic Module (SDM) retains sufficient voltage to deploy air bag(s) for at least 10 MINUTES after air bag system fuse is removed. Servicing air bag system before 10 minutes has elapsed may cause accidental air bag deployment and possible personal injury.

Disabling & Activating System (Corvette)

- 1. Turn steering wheel to place wheels in straight-ahead position. Turn ignition switch to LOCK position, and remove key. Remove SDM fuse from instrument panel fuse block located on passenger-side floor board, behind carpet. Wait at least 10 MINUTES.
- 2. Remove sound insulator from under steering column. Remove Connector Position Assurance (CPA) clip, and disconnect driver-side air bag Yellow 2-pin connector located at base of steering column. Remove CPA clip, and disconnect passenger-side air bag Yellow 2-pin connector located near base of steering column.
- 3. To activate air bag system, connect Yellow 2-pin connectors. Install CPA clips. Install sound insulators. Install SDM fuse.
- 4. Staying well away from air bag module(s), turn ignition switch to RUN position. Ensure AIR BAG warning light flashes 7 times and stays off. See **<u>SYSTEM OPERATION CHECK</u>**.

Disabling & Activating System (Catera)

- 1. Turn steering wheel to place front wheels in straight-ahead position. Turn ignition switch to LOCK position, and remove key. Wait one MINUTE. Disconnect negative battery cable and isolate.
- 2. To activate air bag system, ensure front wheels are in a straight-ahead position. Turn ignition switch to LOCK position and remove ignition key. Connect negative battery cable. Staying well away from air bag modules, turn ignition switch to ON position. Ensure AIR BAG warning light comes on for 3-4 seconds and then goes out. **SYSTEM OPERATION CHECK**.

NOTE: DeVille and Seville STS are equipped with side-impact air bags. Remove SIR fuse from trunk compartment fuse block. Remove front door trim panels and disconnect side impact air bag module Yellow 2-pin connectors to deactivate side-impact air bags.

Disabling & Activating System (Concours, DeVille, Eldorado & Seville)

- 1. Turn steering wheel to place front wheels in straight-ahead position. Turn ignition switch to LOCK position, and remove key. Remove SIR fuse from trunk compartment fuse block (behind carpet in left front corner of trunk). Wait at least 10 MINUTES.
- 2. Remove sound insulator from under steering column. Remove Connector Position Assurance (CPA) clip, and disconnect Yellow 2-pin connector located at base of steering column. Remove CPA clip, and disconnect Yellow 2-pin connector from passenger inflator module pigtail through trap door inside glove box.
- 3. To activate air bag system, connect Yellow 2-pin connectors. Install CPA clips. Install sound insulator. Install SIR fuse. Staying well away from air bag modules, turn ignition switch to RUN position. Ensure AIR BAG warning light flashes 7 times and stays off. See **SYSTEM OPERATION CHECK**.

Disabling & Activating System (Cutlass & Malibu)

1. Turn steering wheel to place wheels in straight-ahead position. Turn ignition switch to LOCK position, and remove ignition key. Remove AIR BAG fuse from left instrument panel wiring harness junction block located at end of instrument panel. Wait at least 10 MINUTES.

- 2. Remove Connector Position Assurance (CPA) clip from driver-side air bag module Yellow 2-pin connector located above left side instrument panel wiring harness junction block. Disconnect driver-side air bag module Yellow 2-pin connector.
- 3. Remove CPA clip from passenger-side Yellow 2-pin connector located above right side instrument panel wiring harness junction block. Disconnect passenger-side Yellow 2-pin connector.
- 4. To activate air bag system, ensure ignition switch is in LOCK position and ignition key is removed. Connect air bag module Yellow 2-pin connectors and install CPA clips. Install AIR BAG fuse in left side instrument panel wiring harness junction block.
- 5. Staying well away from air bag modules, turn ignition switch to RUN position. Ensure AIR BAG warning light flashes 7 times and stays off. See **<u>SYSTEM OPERATION CHECK</u>**.

NOTE: When fuse is removed and ignition switch is in ON position, AIR BAG warning light will be on. This is a normal operation and does not indicate an SIR system malfunction.

Disabling & Activating System (Grand Prix)

- 1. Turn steering wheel to place wheels in straight-ahead position. Turn ignition switch to LOCK position, and remove ignition key. Remove SIR fuse from fuse block located behind glove box door. Wait at least 10 MINUTES.
- 2. Remove left side instrument panel insulator. Remove Connector Position Assurance (CPA) clip from driver-side air bag module Yellow 2-pin connector located at base of steering column. Disconnect driver-side air bag module Yellow 2-pin connector.
- 3. Remove CPA clip from passenger-side Yellow 2-pin connector located at right side of steering column. Disconnect passenger-side Yellow 2-pin connector.
- 4. To activate air bag system, ensure ignition switch is in LOCK position and ignition key is removed. Connect air bag module Yellow 2-pin connectors and install CPA clips. Install SIR fuse in fuse block.
- 5. Staying well away from air bag modules, turn ignition switch to RUN position. Ensure AIR BAG warning light flashes 7 times and stays off. See **<u>SYSTEM OPERATION CHECK</u>**.

NOTE: When fuse is removed and ignition switch is in ON position, AIR BAG warning light will be on. This is a normal operation and does not indicate an SIR system malfunction.

Disabling & Activating System (Lumina & Monte Carlo)

- 1. Turn steering wheel to place wheels in straight-ahead position. Turn ignition switch to LOCK position, and remove ignition key. Remove fuse No. 21 from instrument panel fuse block, located on end of instrument panel. Wait at least 10 MINUTES.
- 2. Remove sound insulator from under steering column. Remove Connector Position Assurance (CPA) clip, and disconnect driver-side air bag module Yellow 2-pin connector located at base of steering column.
- 3. Remove right side sound insulator from under instrument panel. Remove CPA clip from passenger-side Yellow 2-pin connector and disconnect passenger-side Yellow 2-pin connector located behind glove box.
- 4. To activate air bag system, ensure ignition switch is in LOCK position and ignition key is removed.

Connect air bag module Yellow 2-pin connectors and install CPA clips. Install left and right sound insulators. Install fuse No. 21 into instrument panel fuse block.

5. Staying well away from air bag modules, turn ignition switch to RUN position. Ensure AIR BAG warning light flashes 7 times and stays off. See **<u>SYSTEM OPERATION CHECK</u>**.

Disabling & Activating System (Metro & Tracker)

- 1. Turn steering wheel to place wheels in straight-ahead position. Turn ignition switch to LOCK position, and remove key.
- On Metro, remove AIR BAG fuse from junction block located under instrument panel, near base of steering column. On Tracker, remove AIR BAG fuse from air bag fuse block located near base of steering column. On all models, wait at least 10 MINUTES. Remove steering wheel side cover. Remove Connector Position Assurance (CPA) clip, release driver-side air bag module Yellow 2-pin connector lock and disconnect connector.
- 3. Open glove box, push right and left stoppers inward and lower glove box door. Remove Connector Position Assurance (CPA) clip, release passenger-side air bag module Yellow 2-pin connector lock and disconnect connector.
- 4. To activate air bag system, turn ignition switch to LOCK position and remove key. Connect and lock air bag module Yellow 2-pin connectors, and install CPA clips. To complete installation, reverse removal procedure. Install AIR BAG fuse. Staying well away from air bag modules, turn ignition switch to ON position. Ensure AIR BAG warning light flashes 7 times and stays off. If AIR BAG warning light does not operate as described, see **SYSTEM OPERATION CHECK**.

NOTE: When fuse is removed and ignition switch is in ON position, AIR BAG warning light will be on. This is a normal operation and does not indicate an SIR system malfunction.

NOTE: Prizm is equipped with driver-side and front passenger-side air bags and driver and front passenger side-impact air bags.

Disabling & Activating System (Prizm)

- 1. Turn steering wheel to place wheels in straight-ahead position. Turn ignition switch to LOCK position, and remove ignition key. Remove AIR BAG fuse from junction block located near base of steering column. Wait at least 10 MINUTES.
- Locate driver-side air bag module coil behind steering wheel, release 2-pin connector lock and disconnect Yellow 2-pin connector. Remove right side kick panel. Remove 2 lower bolts and 3 upper screws from glove box. Remove glove box. Release passenger-side air bag module 2-pin connector lock and disconnect Yellow 2-pin connector.
- 3. Locate driver and front passenger side air bag module Yellow 2-pin connectors under front seats. Release side air bag 2-pin connector locks and disconnect Yellow 2-pin connectors.
- 4. To activate air bag system, ensure ignition switch is in LOCK position and ignition key is removed. Connect and lock driver and front passenger side air bag Yellow 2-pin connectors located under front seats.
- 5. Connect and lock passenger-side air bag module Yellow 2-pin connector. Install glove box and tighten

bolts and screws to 11 ft. lbs. (15 N.m). Connect Yellow 2-pin connector behind steering wheel and lock Yellow 2-pin connector.

6. Install AIR BAG fuse to junction block. Staying well away from air bag modules, turn ignition switch to ON position. Ensure AIR BAG warning light flashes 7 times and stays off. If AIR BAG warning light does not operate as described, see **SYSTEM OPERATION CHECK**.

NOTE: When AIR BAG fuse is removed and ignition switch is in ON position, AIR BAG warning light will be on. This is a normal operation and does not indicate an SIR system malfunction.

Disabling & Activating System (Saturn)

- 1. Turn steering wheel to place wheels in straight-ahead position. Turn ignition switch to LOCK position, and remove key.
- 2. Remove AIR BAG fuse from instrument panel junction block. Wait 10 MINUTES. Locate driver-side air bag module Yellow 2-pin connector near base of steering column. Remove Connector Position Assurance (CPA) clip, and disconnect Yellow 2-pin connector at base of steering column.
- 3. Passenger-side air bag module connector is located under upper instrument panel trim panel. To access connector, locate upper trim panel screw caps at center of instrument panel. Remove screw caps and upper trim panel screws.
- 4. Remove upper trim panel by lifting up on rear edge to release clips. Pull panel rearward out of clips at bottom of windshield. Remove upper trim panel insulator. When removing upper trim panel, DO NOT damage VIN plate and upper trim panel seal. Locate passenger-side air bag module Yellow 2-pin connector in center of instrument panel. Remove CPA clip, and disconnect Yellow 2-pin connector.
- 5. To activate air bag system, turn ignition switch to LOCK position and remove key. Connect Yellow 2-pin connectors, and install CPA clips. To complete installation, reverse removal procedure. Install AIR BAG fuse. Turn ignition switch to RUN position. Ensure AIR BAG warning light flashes 7 times and stays off. If AIR BAG warning light does not operate as described, see **SYSTEM OPERATION CHECK**.

Disabling & Activating System (Silhouette, Trans Sport & Venture)

NOTE: Silhouette, Trans Sport and Venture are equipped with driver-side, front passenger-side air bags, driver and front passenger side-impact air bags, and seat belt pretensioners.

- 1. Turn steering wheel to place wheels in straight-ahead position. Turn ignition switch to LOCK position, and remove ignition key. Remove Supplemental Inflatable Restraint (SIR) fuse from instrument panel fuse block. Wait at least 10 MINUTES.
- 2. Remove left side sound insulator from under steering column. Remove Connector Position Assurance (CPA) clip, and disconnect Yellow 2-pin connector located at base of steering column.
- 3. Remove right side sound insulator from right side of instrument panel. Remove Connector Position Assurance (CPA) clip, and disconnect 2-pin connector from passenger inflator module pigtail.
- 4. Locate driver-side air bag Yellow 2-pin connector and driver seat belt pretensioner Yellow 2-pin connector under driver's seat. Remove CPA from each connector and disconnect Yellow connectors.

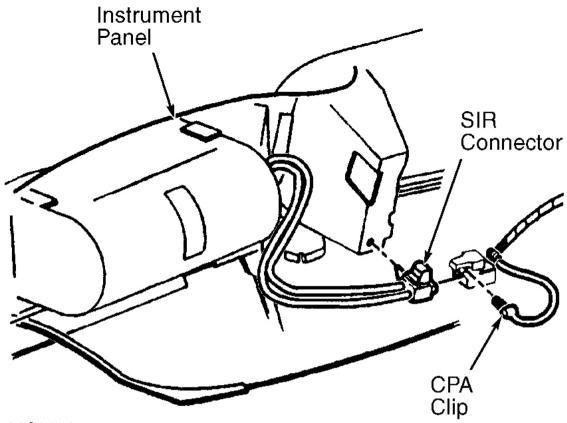
- Locate passenger-side air bag Yellow 2-pin connector and front passenger seat belt pretensioner Yellow 2-pin connector under front passenger's seat. Remove CPA clip from each connector and disconnect Yellow connectors.
- 6. To activate air bag system, ensure ignition switch is in LOCK position and ignition key is removed. Connect air bag and seat belt pretensioner Yellow 2-pin connectors located under instrument panel and front seats. Install CPA clips. Install knee bolsters, sound insulators. Install SIR fuse.
- 7. Staying well away from both air bag modules, turn ignition switch to RUN position. Ensure AIR BAG warning light flashes 7 times and stays off. If AIR BAG warning light does not operate as described, see **SYSTEM OPERATION CHECK**.

Disabling & Activating System (All Other Models)

- 1. Turn steering wheel to place wheels in straight-ahead position. Turn ignition switch to LOCK position, and remove ignition key. Remove AIR BAG fuse, AIRBAG 1C fuse, or Supplemental Inflatable Restraint (SIR) fuse from instrument panel fuse block (underhood junction block on Park Avenue). Wait at least 10 MINUTES.
- 2. Remove knee bolster, sound insulator, or trim panel (as necessary) from under steering column. Remove Connector Position Assurance (CPA) clip, and disconnect Yellow 2-pin connector located at base of steering column. See **Fig. 2** or **Fig. 3**.

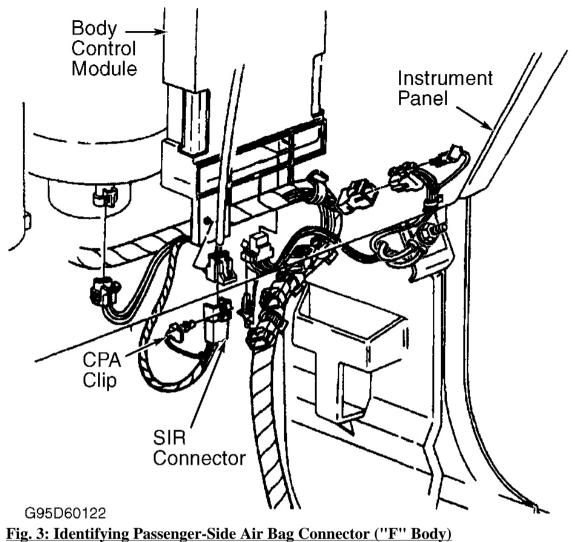
NOTE: On "C" & "K" Series Pickups, Cavalier, Century, Grand Prix, Intrigue, Regal, Sierra, Suburban and Sunfire, passenger-side air bag Yellow 2-pin connector is located near base of steering column.

- 3. On models with passenger-side air bag, remove knee bolster, trim panel, sound insulator, glove box or glove box door (as necessary) from right side of instrument panel. Remove CPA clip, and disconnect passenger-side Yellow 2-pin connector from passenger inflator module pigtail.
- 4. To activate air bag system, ensure ignition switch is in LOCK position and ignition key is removed. Connect air bag module Yellow 2-pin connectors. Install CPA clips. Install AIR BAG fuse, AIRBAG 1C fuse, or SIR fuse. Install knee bolsters, sound insulators, trim panels, glove box or glove box door (if removed).
- 5. Staying well away from air bag modules, turn ignition switch to RUN position. Ensure AIR BAG warning light flashes 7 times and stays off. If AIR BAG warning light does not operate as described, see **SYSTEM OPERATION CHECK**.
- NOTE: When fuse is removed and ignition switch is in ON position, AIR BAG warning light will be on. This is a normal operation and does not indicate an SIR system malfunction.



96C31247

Fig. 2: Identifying Passenger-Side Air Bag Connector (Astro & Safari) Courtesy of GENERAL MOTORS CORP.



Courtesy of GENERAL MOTORS CORP.

JEEP

All models are equipped with a with dual air bag system. Unless specific models are mentioned, the following procedures apply to all models with air bag system.

SYSTEM OPERATION CHECK

- 1. Ensure negative battery cable is disconnected and isolated. Connect Diagnostic Read-Out Box III (DRB-III) scan tool to 16-pin Data Link Connector (DLC) located left of steering column at lower edge of instrument panel. Turn ignition switch to ON position and exit vehicle. Ensure latest version of correct DRB cartridge is being used.
- 2. After ensuring there is no one inside vehicle, connect negative battery cable. Using DRB, read and record active and any stored Diagnostic Trouble Codes (DTCs). If any DTCs are present, diagnose as necessary. Clear DTCs and recheck for DTCs. If a problem still exists DTC data will not clear.

- 3. Ignition switch should still be in ON position. Ensure no one is inside vehicle. From a position outside vehicle and away from air bag modules (in case of air bag deployment), turn ignition switch to OFF position for about 10 seconds, and then back to ON position. Observe AIR BAG warning light. It should come on for 6-8 seconds and then go out, indicating system is functioning properly.
- 4. If AIR BAG warning light fails to come on, comes on and stays on, or comes on while driving, a system malfunction exists. Perform air bag system self-diagnostics, and repair air bag system.

SERVICE PRECAUTIONS

Observe the following precautions when working with or near air bag systems:

- Disconnect and isolate negative battery cable before servicing vehicle. Allow system capacitor to discharge for 2 minutes before removing air bag components.
- Disable air bag system before servicing any air bag system or steering column component. Failure to do this may result in accidental air bag deployment and possible personal injury. See **DISABLING & ACTIVATING AIR BAG SYSTEM**.
- Always wear safety glasses when servicing or handling an air bag.
- Air bag module must be stored in its original special container until used for service. It must be stored in a clean, dry place, away from sources of extreme heat, sparks and high electrical energy.
- When placing a live air bag on a bench or other surface, always face air bag and trim cover up, away from surface. This will reduce motion of module if accidentally deployed.
- When a steering column has an air bag module attached, never place column on the floor or any other surface with the steering wheel or air bag module face down.
- The air bag module inflator assembly contains sodium azide and potassium nitrate. These materials are poisonous and extremely flammable; contact with acid, water, or heavy metals may produce harmful and irritating gases.
- Passenger-side air bag contains argon gas pressurized to over 2500 psi (175.8 kg/cm²). DO NOT attempt to dismantle air bag module or tamper with its inflator. DO NOT puncture, incinerate, or bring air bag into contact with electricity. DO NOT store air bag at temperatures exceeding 200°F (93°C).
- After deployment, air bag surface may contain sodium hydroxide deposits, which irritate skin. Sodium hydroxide is a product of the gas generant combustion. Always wear safety glasses, rubber gloves and a long-sleeved shirt during clean-up. Wash hands using mild soap and water. Follow correct disposal procedures.
- When carrying a live air bag module, point trim cover away from your body to minimize injury in case of accidental deployment.
- The horn switch is integral with the air bag module trim cover. Failure to take the proper precautions could result in accidental, incomplete, or improper air bag deployment and possible personal injury.
- DO NOT disconnect or connect air bag module while battery is connected. Never disassemble air bag module. There are no serviceable parts within the module.
- On Wrangler, when both air bag door bracket "J" nuts are removed from the instrument panel armature, they must be replaced with 2 NEW "J" nuts. Ensure all fasteners for air bag door are installed. Failure to do this could result in incomplete, or improper air bag deployment and possible personal injury.
- The air bag control module contains an impact sensor which enables the system to deploy the air bags.

Never strike the air bag control module. If air bag control module is accidentally dropped, the module MUST be replaced.

- Clockspring and air bag module MUST be replaced if air bag is deployed.
- On Grand Cherokee and Wrangler, ALWAYS remove and replace air bag control module and its mounting bracket as a unit. DO NOT transfer the module to another bracket.
- Fasteners, screws and bolts used to fasten air bag components have a special coating and are specifically designed for air bag system. Use only original equipment fasteners. On Grand Cherokee, if the passenger-side air bag module mounting screws cannot be tightened to the specified torque, replace screws with the OEM-approved over-sized screws.

DISABLING & ACTIVATING AIR BAG SYSTEM

WARNING: Wait at least 2 MINUTES after disconnecting negative battery cable. Servicing air bag system before 2 minutes elapse may cause accidental air bag deployment and possible personal injury.

Disabling & Activating System

To disable system, turn ignition switch to OFF position. Disconnect negative battery cable, and isolate battery cable end. Wait at least 2 MINUTES for system capacitor to discharge before servicing or working near air bag system components. To activate system, reconnect negative battery cable. See **SYSTEM OPERATION CHECK**.

GENERAL INFORMATION

Air Bag Deactivation Procedures

SPECIAL CARE DURING MECHANICAL REPAIRS

- WARNING: To avoid injury from accidental air bag deployment, read and carefully follow all SERVICE PRECAUTIONS and DISABLING & ACTIVATING AIR BAG SYSTEM procedures.
- WARNING: Some vehicles are equipped with a passenger-side air bag ON/OFF switch. This switch should NOT be used in place of specified vehicle air bag system disabling and activating procedures.

WARNING: DO NOT use any type of back-up power supply (memory saver) from outside vehicle to avoid memory loss in memory systems (if equipped). Back-up power supplies can provide enough voltage to deploy air bags.

In some instances, it may be necessary to remove steering column or instrument panel to gain access to transmission control related components. Observe manufacturer service precautions when working on a vehicle equipped with an air bag system. See appropriate manufacturer's SERVICE PRECAUTIONS.

Electrical sources should never be allowed near inflator on back of air bag module. Never probe air bag system electrical wires with analog volt-ohmmeter or test light. Always disable air bag system before servicing vehicle. See appropriate DISABLING & ACTIVATING AIR BAG SYSTEM procedure. Failure to do so could result in accidental air bag deployment and possible personal injury.

If air bag system is not fully functional for any reason, **DO NOT** drive vehicle until system is repaired and is again 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 system is repaired and functions properly.

ACURA

NOTE: For Acura SLX information, see <u>ISUZU</u> Trooper.

SYSTEM OPERATION CHECK

When ignition is turned on, SRS indicator light should come on for about 6 seconds and then go off. If indicator does not come on, or does not go off after about 6 seconds or comes on while driving, air bag system must be inspected as soon as possible.

SERVICE PRECAUTIONS

Observe these precautions when working with air bag systems and seat belt pretensioners (if equipped):

- Disable SRS before servicing any SRS, instrument panel or steering column component. Failure to do this could result in accidental air bag deployment, causing personal injury and/or vehicle damage. See **DISABLING & ACTIVATING AIR BAG SYSTEM**.
- Wait at least 3 MINUTES after disabling air bag system. A back-up power circuit capacitor (in SRS control unit) maintains system voltage for about 3 minutes after battery is disconnected. Servicing air bag system or seat belt pretensioners before 3 minutes may cause accidental air bag deployment and possible personal injury.
- After an accident, all SRS components, including wiring harnesses and brackets, must be inspected. If any components are damaged or bent, they must be replaced, even if air bag did not deploy. Check steering column, knee bolster, instrument panel steering column reinforcement plate and lower brace for damage. **DO NOT** repair any component or wiring. If components or wiring are damaged or defective, replacement is required.
- Carefully inspect all SRS components before installation. **DO NOT** install any component that shows signs of being dropped or improperly handled, such as dents, cracks or other deformities.
- **DO NOT** install SRS components previously installed on another vehicle. When replacing SRS components, use only NEW, manufacturer supplied components.
- Always wear safety glasses when servicing SRS or handling an air bag or seat belt pretensioner (if equipped).
- **DO NOT** attempt to disassemble air bag assembly or seat belt pretensioner (if equipped). Neither component has any serviceable or reusable parts.
- A replacement air bag assembly must be stored in its original special container until used for service. Special container must be stored in a clean, dry place, away from sources of extreme heat, sparks and high electrical energy.
- When placing a live air bag assembly on a bench or other surface, always face air bag and trim cover up, away from surface. This will reduce motion of air bag assembly if accidentally deployed.
- During installation or replacement of SRS control unit, **DO NOT** bump, drop or strike unit or immediate area. SRS unit could be damaged and/or air bag deployment could occur.
- After deployment, air bag assembly is very hot. Wait 30 minutes before handling. After deployment, air bag surface may contain deposits of sodium azide and potassium nitrate, which can irritate skin. Always wear safety glasses, rubber gloves and long-sleeved shirt during clean-up, and wash hands using mild soap and water. Follow correct disposal procedures.
- After air bag deployment, inspect all SRS wiring harnesses for heat or other damage. Replace, **DO NOT** repair, any damaged harnesses. Ensure all SRS ground connections are clean and tight. Ensure SRS wiring harnesses are installed so that they are not pinched or interfere with other components.
- **DO NOT** allow any electrical source near front or side air bag inflators or near seat belt tensioner connector.
- When carrying a live air bag assembly, trim cover pad should be pointed away from body to minimize injury in case of accidental air bag deployment.
- If SRS is not fully functional for any reason, vehicle should not be driven until system is repaired. **DO NOT** remove any component or in any way disable system from operating normally. If SRS is not functional, park vehicle until repairs can be made.

DISABLING & ACTIVATING AIR BAG SYSTEM

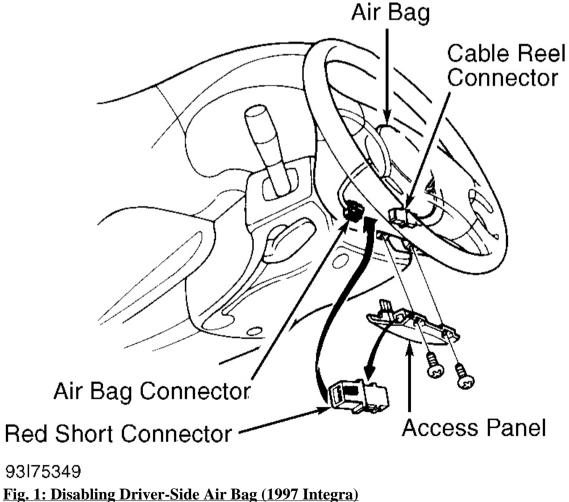
NOTE: On vehicles with radio anti-theft protection system, obtain security code from vehicle owner before disconnecting battery cable.

Disabling Driver-Side Air Bag (1997 Integra)

- 1. Turn ignition off. Disconnect both battery cables and wait at least 3 MINUTES. Remove access panel from steering wheel. See **Fig. 1**. Remove Red short connector from holder on access panel.
- 2.

WARNING: If SRS Red short connectors are not properly installed, static electricity can deploy air bags and seat belt pretensioners (if equipped).

Disconnect air bag connector from cable reel connector. Connect Red short connector to air bag connector. Driver-side air bag is now disabled. Disable passenger-side air bag.



Courtesy of AMERICAN HONDA MOTOR CO., INC.

Disabling Passenger-Side Air Bag (1997 Integra)

Remove glove box. Disconnect harness connector from passenger-side air bag connector. Connect Red short connector to passenger-side air bag connector. See <u>Fig. 2</u>. Passenger-side air bag is now disabled.

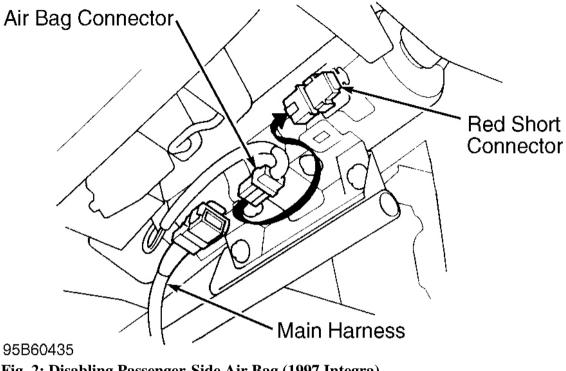


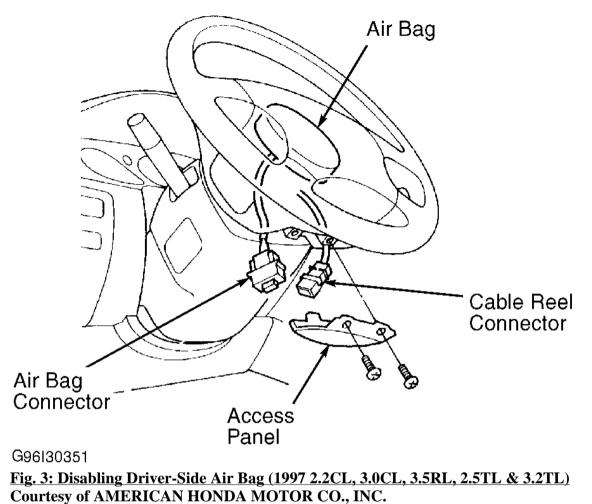
Fig. 2: Disabling Passenger-Side Air Bag (1997 Integra) Courtesy of AMERICAN HONDA MOTOR CO., INC.

Activating System (1997 Integra)

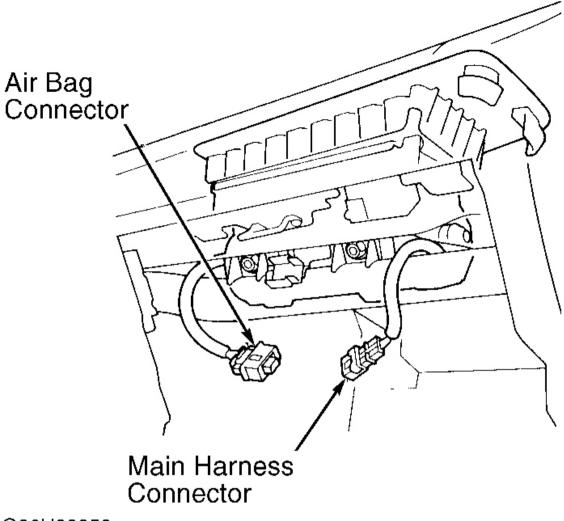
Ensure ignition switch is in OFF position and both battery cables are disconnected. Remove Red short connector(s) installed during DISABLING SYSTEM. Install Red short connector(s) in holder(s). Reconnect connectors as necessary. Install access panel to steering wheel (install glove box as necessary). Reconnect battery cables. Ensure system is functioning properly. See **SYSTEM OPERATION CHECK**.

Disabling System (1997 2.2CL, 3.0CL, 3.5RL, 2.5TL & 3.2TL)

- 1. Obtain radio anti-theft code and write down preset radio frequencies. Ensure ignition is OFF. Disconnect both battery cables and wait at least 3 MINUTES.
- 2. From bottom rear of steering wheel, remove access panel. Disconnect 2-pin driver-side air bag connector. See **Fig. 3**. Air bag connector is automatically shorted.



- 2 Remove glove box. Disconnect 2 pin passenger side air bag connector. See Fig. 4 an
- Remove glove box. Disconnect 2-pin passenger-side air bag connector. See <u>Fig. 4</u> and <u>Fig. 5</u>. On 3.5RL, remove left and right "B" pillar trim panels. Disconnect 2-pin seat belt pretensioner connectors. See <u>Fig. 6</u>.



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Fig. 4: Disabling Passenger-Side Air Bag (1997 2.2CL, 3.0CL & 3.5RL) Courtesy of AMERICAN HONDA MOTOR CO., INC.

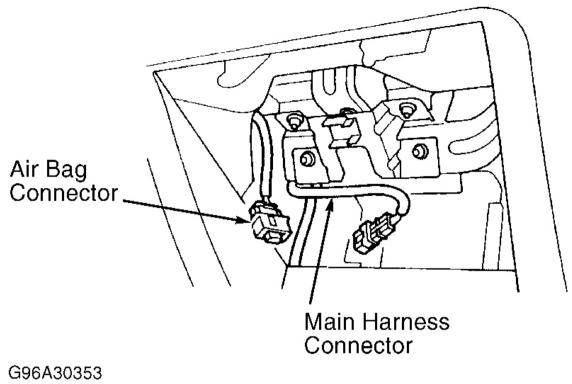
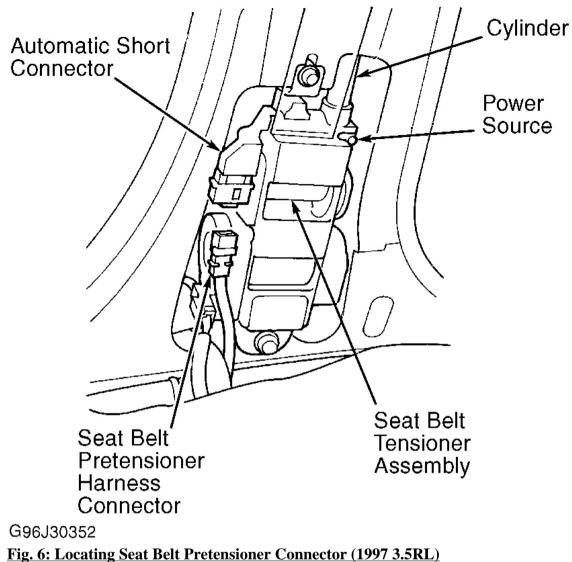


Fig. 5: Disabling Passenger-Side Air Bag (1997 2.5TL & 3.2TL) Courtesy of AMERICAN HONDA MOTOR CO., INC.



Courtesy of AMERICAN HONDA MOTOR CO., INC.

Activating System (1997 2.2CL, 3.0CL, 3.5RL, 2.5TL & 3.2TL)

- 1. Ensure ignition is OFF and both battery cables are disconnected. Connect 2-pin driver-side air bag connector.
- 2.
- NOTE: On 3.5RL, the Powertrain Control Module (PCM) memory MUST be reset after disconnecting the battery. See appropriate COMPUTER RELEARN PROCEDURES article in GENERAL INFORMATION.

Connect 2-pin passenger-side air bag connector. On 3.5RL, connect 2-pin seat belt pretensioner connectors. On all models, reconnect battery cables. Check SRS indicator light to ensure system is functioning properly. See **<u>SYSTEM OPERATION CHECK</u>**. Reset radio frequencies.

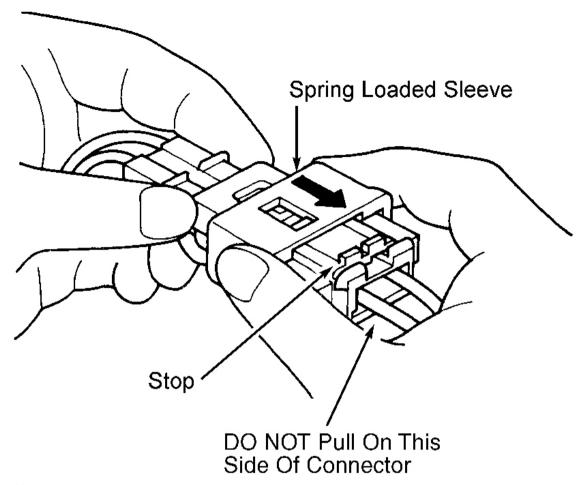
Disabling Air Bag System (1998 Models)

- NOTE: To release SRS system connector lock, pull spring-loaded sleeve toward stop while holding opposite half of connector. Continue pulling connector sleeve and until connector halves are separated. DO NOT pull on connector half. See <u>Fig. 7</u>.
 - 1. Obtain radio anti-theft code from vehicle owner and write down preset radio frequencies. Ensure ignition is OFF. Disconnect negative battery cable and then positive battery cable. Wait at least 3 MINUTES.
 - 2. Remove access panel from under steering wheel. Disconnect 2-pin connector between driver-side air bag and cable reel. See <u>Fig. 7</u> and <u>Fig. 8</u>. When disconnected, air bag connector power and ground terminals are automatically shorted together.
 - 3. Remove glove box. Disconnect 2-pin connector between passenger-side air bag and SRS main harness. See **Fig. 7** and **Fig. 9** or **Fig. 10**. When disconnected, air bag connector power and ground terminals are automatically shorted together.
 - 4. On 3.5RL, slide front seats fully forward and remove front and rear side trim. Remove front and rear door trim and left and right "B" pillar trim panels. Disconnect 2-pin connector between both front seat belt pretensioners and SRS main harness. See Fig. 7 and Fig. 11. When disconnected, seat belt pretensioner connector power and ground terminals are automatically shorted together.

NOTE: To reconnect SRS connector, push sleeve-side connector half toward pawl-side connector half without touching sleeve. As connector halves are pressed together pawl will push sleeve back. When connector halves are completely connected, pawl will release spring-loaded sleeve and lock connector.

Activating Air Bag System (1998 Models)

- 1. Ensure ignition is OFF and both battery cables are disconnected. Connect 2-pin driver-side air bag connector to cable reel connector. Install access panel under steering wheel.
- 2. Connect 2-pin passenger-side air bag connector to SRS harness connector. Install glove box. On 3.5RL, connect both front seat belt pretensioner 2-pin connector to SRS main harness. Install trim panels.
- 3. On all models, ensure ignition is off. Connect positive battery cable and then negative battery cable. Ensure air bag system is functioning properly. See **<u>SYSTEM OPERATION CHECK</u>**. Reset radio antitheft code and preset radio frequencies.
- NOTE: On 3.5RL, Powertrain Control Module (PCM) memory must be reset after disconnecting battery. Start and run engine at 3000 RPM with no loads and transmission in Park or Neutral. When radiator fan comes on allow engine to idle for 5 minutes with A/C, headlights and rear defogger off.



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Fig. 7: Disconnecting Air Bag Spring-Loaded Locking Connector (1998 Acura) Courtesy of AMERICAN HONDA MOTOR CO., INC.

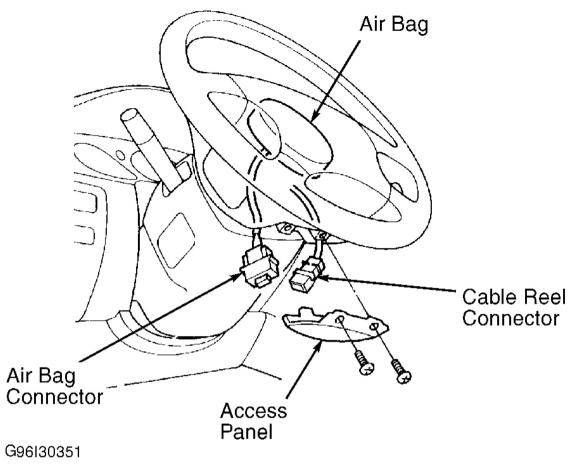
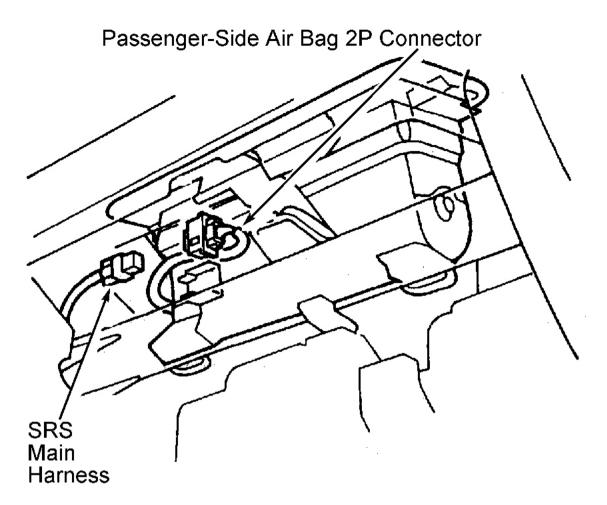


Fig. 8: Disabling Driver-Side Air Bag (1998 Acura & Honda) Courtesy of AMERICAN HONDA MOTOR CO., INC.



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Fig. 9: Disabling Passenger-Side Air Bag (1998 2.3CL & 3.0CL) Courtesy of AMERICAN HONDA MOTOR CO., INC.

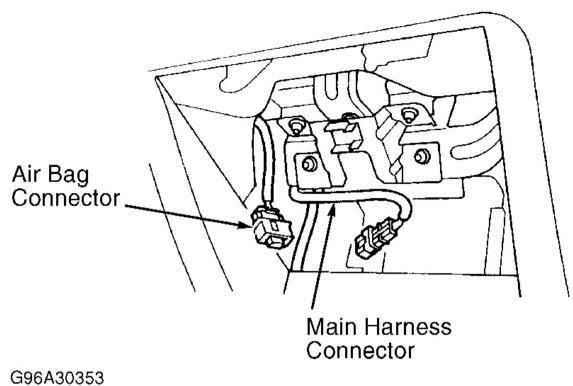
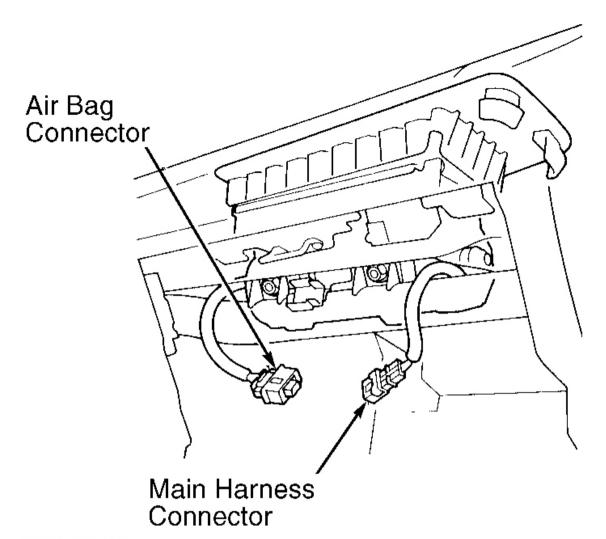
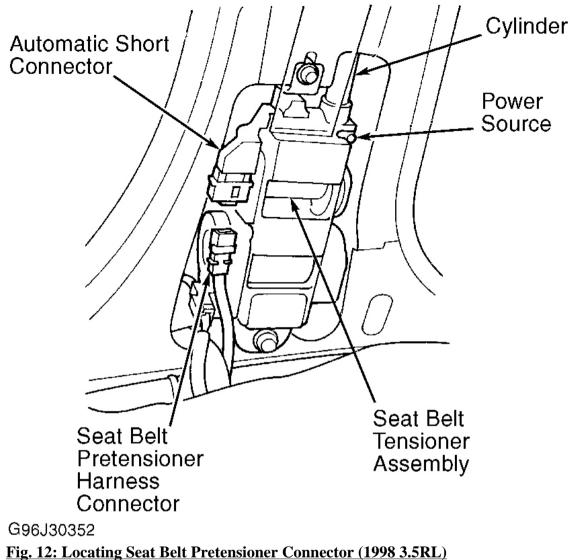


Fig. 10: Disabling Passenger-Side Air Bag (1998 2.5TL & 3.2TL) Courtesy of AMERICAN HONDA MOTOR CO., INC.



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Fig. 11: Disabling Passenger-Side Air Bag (1998 3.5RL) Courtesy of AMERICAN HONDA MOTOR CO., INC.



Courtesy of AMERICAN HONDA MOTOR CO., INC.

AUDI

SYSTEM OPERATION CHECK

Turn ignition switch to ON position. AIR BAG indicator light should come on for about 4 seconds on A4 and about 10 seconds on A6, and then go out. If light flashes and then remains on, control unit has detected a system fault. If light does not glow, check bulb. If bulb is okay, diagnose air bag system.

SERVICE PRECAUTIONS

Observe these precautions when working with air bag systems:

• Disable air bag system before servicing any air bag system component or component located in

instrument panel or steering column. See **DISABLING & ACTIVATING AIR BAG SYSTEM**.

- Because of critical operating requirements of air bag system, **DO NOT** attempt to service any air bag system component. If a component is faulty it must be replaced.
- **DO NOT** leave air bag components unattended. Install air bag components in vehicle immediately after they are obtained.
- NEVER point open end of a seat belt tensioner at another person.
- Only install NEW air bag system components supplied by manufacturer. **DO NOT** use components previously installed in another vehicle.
- **DO NOT** use air bag components that have been dropped from heights of approximately 20 inches or more.
- **DO NOT** allow chemical cleaners, oil or grease to contact vinyl covering on air bag.
- **DO NOT** place stickers or covers on steering wheel, passenger-side instrument panel or over front seat backs. Using a seat cushion, mat or pad on front passenger seat, may inhibit operation of seat occupied sensor and side air bags.
- Disable SRS before performing electric welding on vehicle.
- **DO NOT** expose air bag to temperatures greater than 212°F (100°C).
- **DO NOT** allow any electrical source near front or side air bag inflators or near seat belt tensioner connector.
- When carrying a live air bag assembly, trim cover pad should be pointed away from body to minimize injury in case of accidental air bag deployment.
- If SRS is not fully functional for any reason, vehicle should not be driven until system is repaired. **DO NOT** remove any component or in any way disable system from operating normally. If SRS is not functional, park vehicle until repairs can be made.

DISABLING & ACTIVATING AIR BAG SYSTEM

- 1. Obtain radio anti-theft code from vehicle owner and write down preset radio frequencies. To disable air bag system, disconnect and shield negative battery cable.
- To activate system, ensure no one is in passenger compartment and reconnect negative battery cable. Perform system operation check to ensure system is functioning properly. See <u>SYSTEM OPERATION</u> <u>CHECK</u>. Input radio anti-theft security code and reset radio frequencies.

BMW

SYSTEM OPERATION CHECK

Turn ignition switch to ON position. SRS is operational if warning light comes on and then goes out after about 4-6 seconds. There is a SRS malfunction if SRS warning light does not come on, comes on briefly or blinks and goes out, and then comes on and stays on. A SRS malfunction is also indicated if SRS warning light comes on and stays on or flickers while driving.

SERVICE PRECAUTIONS

Observe these precautions when working on SRS:

- When working around steering column and before any repairs are performed, disable SRS. See **DISABLING & ACTIVATING AIR BAG SYSTEM**.
- Before straightening damaged metal or arc-welding, disable SRS and disconnect front sensors, front air bag modules, seat belt tensioners (if equipped) and side air bag modules connectors. See **DISABLING & ACTIVATING AIR BAG SYSTEM**.
- After disabling SRS, wait at least 10 MINUTES before servicing vehicle. SRS control unit maintains SRS voltage for about 10 minutes after system is disabled. Servicing SRS before 10 minutes may cause accidental air bag deployment and possible personal injury.
- Always wear safety glasses and gloves when handling a deployed air bag module. Air bag module may contain sodium hydroxide deposits, which irritates skin.
- Handle sensors carefully. Never strike or jar sensors. All sensors and mounting bracket bolts must be tightened to specification to ensure proper sensor operation.
- Never use any SRS component that has been dropped from 2 feet or more.
- **DO NOT** repair any SRS component or wiring harness. Wiring harnesses and connectors are Orange for immediate identification.
- Always handle air bag module with trim cover away from body. Always place air bag module on workbench with trim cover up, away from loose objects. **DO NOT** leave air bag modules unattended.
- Never expose SRS components to temperatures greater than $167^{\circ}F(75^{\circ}C)$.
- Front air bag modules, belt tensioners and side air bag modules (if equipped) can only be checked while installed in vehicle and using a BMW Service Tester/DIS. Only attempt SRS inspections using specified procedures and checking devices.
- Never expose any SRS system components to cleaning agents such as solvents, gasoline, lye, etc.

DISABLING & ACTIVATING AIR BAG SYSTEM

CAUTION: Ensure radio is off before disconnecting battery. This will prevent damage to radio microprocessor.

WARNING: After disabling system, wait at least 10 MINUTES before servicing vehicle. Energy capacitor in SRS control unit maintains system voltage for about 10 minutes after system is disabled. Servicing system before 10 minutes may cause accidental air bag deployment and possible personal injury.

Disabling System

- 1. Before proceeding, see <u>SERVICE PRECAUTIONS</u>. Retrieve fault codes before disconnecting battery. Ensure ignition is off. Disconnect and shield negative battery cable. Wait at least 10 MINUTES for energy capacitor in SRS control unit to discharge.
- 2. To disable driver-side air bag, remove steering column lower casing cover. See **Fig. 13**. Remove Orange SRS connector from its holder on steering column and disconnect connector. To disable passenger-side air bag, remove glove box. Disconnect both Orange SRS connectors from passenger-side air bag module.

3. If vehicle is equipped with belt tensioners disconnect belt tensioner Orange connector. If vehicle is equipped side air bags, remove door panel and disconnect side air bag Orange connector. System is now disabled.

Activating System

- 1. Ensure ignition switch is in OFF position. Reconnect all Orange SRS connectors that were disconnected. Position each Orange SRS connector back into appropriate holder. To complete installation, reverse access procedures.
- 2. Ensure no one is inside vehicle and connect negative battery cable. System is now activated. Perform system operation check to ensure system is functioning properly and no fault codes are set. See **<u>SYSTEM</u> <u>OPERATION CHECK</u>**.

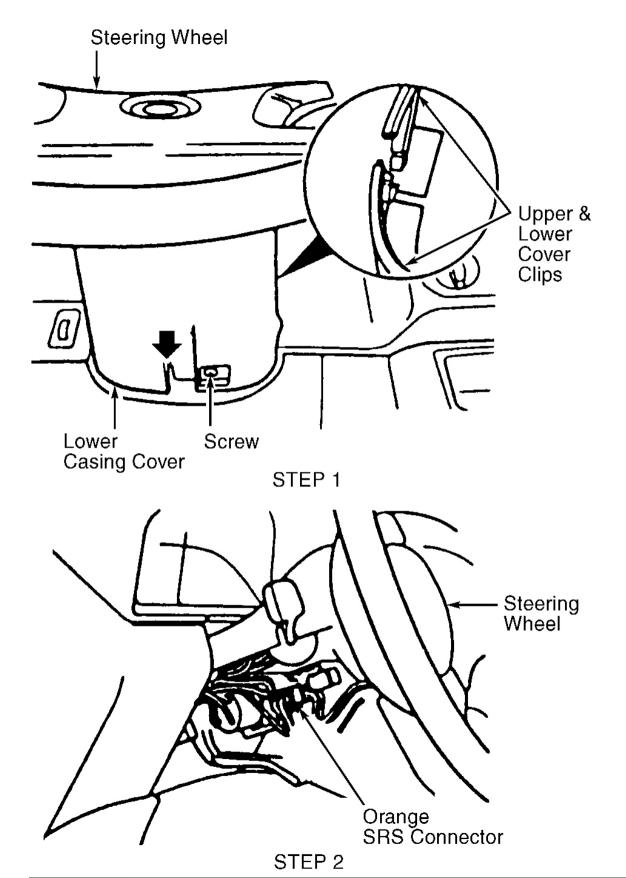


Fig. 13: Locating Steering Column Orange SRS Connector (BMW) Courtesy of BMW OF NORTH AMERICA

HONDA

NOTE: For Honda Passport information see ISUZU Rodeo.

SYSTEM OPERATION CHECK

When ignition is turned on, SRS indicator light should come on for about 6 seconds and then go off. If indicator does not come on, or does not go off after about 6 seconds or comes on while driving, air bag system must be inspected as soon as possible.

SERVICE PRECAUTIONS

Observe these precautions when working with air bag systems:

- Disable air bag system before servicing any SRS or steering column component. Failure to do this could result in accidental air bag deployment and possible personal injury. See **<u>DISABLING &</u>** <u>**ACTIVATING AIR BAG SYSTEM**</u>.
- After an accident, all SRS components, including harness and brackets, must be inspected. If any components are damaged or bent, they must be replaced, even if a deployment did not occur. Check steering column, knee bolster, instrument panel steering column reinforcement plate and lower brace for damage.
- **DO NOT** service any component or wiring. If components or wiring are damaged or defective, replacement is necessary. **DO NOT** use components from another vehicle. Only use new replacement components supplied by manufacturer.
- Always wear safety glasses when servicing or handling an air bag.
- Air bag module must be stored in its original special container until used for service. It must be stored in a clean, dry place, away from sources of extreme heat, sparks and high electrical energy.
- When placing a live air bag module on a bench or other surface, always face air bag and trim cover up, 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 can irritate skin. Always wear safety glasses, rubber gloves and long-sleeved shirt during clean-up, and wash hands using mild soap and water. Follow correct disposal procedures.
- NEVER allow any electrical source near inflator on back of air bag module.
- When carrying a live air bag module, trim cover should be pointed away from body to minimize injury in case of deployment.
- When installing SRS wiring harnesses, ensure they will not be pinched or interfere with other vehicle components.
- If SRS is not fully functional for any reason, vehicle should not be driven until system is repaired. **DO NOT** remove any component or in any way disable system from operating normally. If SRS is not functional, park vehicle until repairs can be made.

DISABLING & ACTIVATING AIR BAG SYSTEM

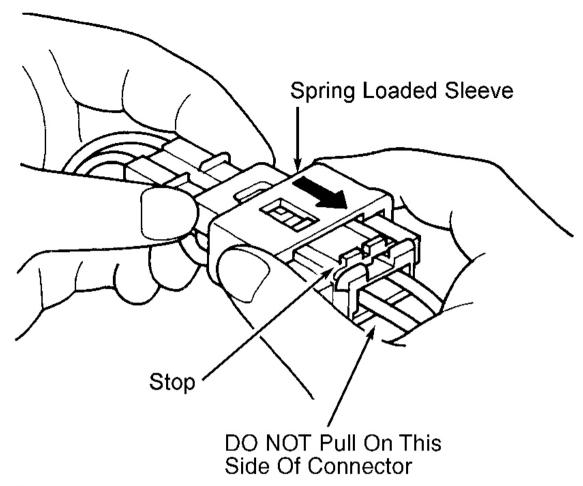
NOTE: To release SRS connector lock, pull spring-loaded sleeve toward stop while holding opposite half of connector. Continue pulling connector sleeve until connector halves are separated. DO NOT pull on connector half. See Fig. 7.

Disabling Air Bag System

- 1. Obtain radio anti-theft code from vehicle owner and write down preset radio frequencies. Ensure ignition is OFF. Disconnect negative battery cable and then positive battery cable. Wait at least 3 MINUTES.
- 2. Remove access panel from under steering wheel. Disconnect 2-pin connector between driver-side air bag and cable reel. See <u>Fig. 7</u> and <u>Fig. 8</u>. When disconnected, air bag connector half power and ground terminals are automatically shorted together.
- 3. Remove glove box. Disconnect 2-pin connector between passenger-side air bag and SRS main harness. See <u>Fig. 7</u> and <u>Fig. 16</u>, <u>Fig. 17</u>, <u>Fig. 18</u> or <u>Fig. 19</u>. When disconnected, air bag connector half power and ground terminals are automatically shorted together.
- NOTE: To reconnect SRS connector, push sleeve-side connector half toward pawl-side connector half without touching sleeve. As connector halves are pressed together pawl will push sleeve back. When connector halves are completely connected, pawl will release spring-loaded sleeve and connector will lock.

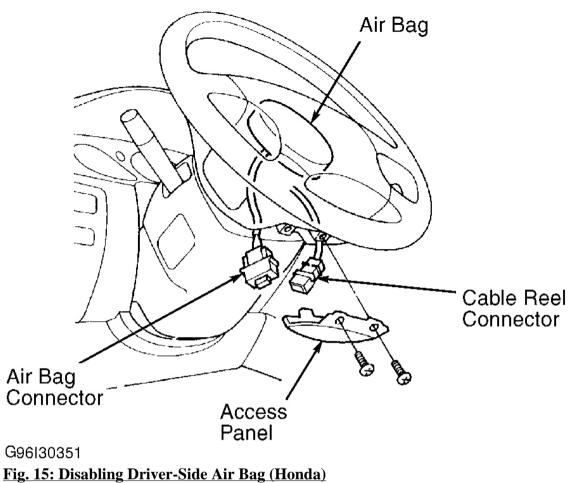
Activating Air Bag System

- 1. Ensure ignition is OFF and both battery cables are disconnected. Connect 2-pin driver-side air bag connector.
- Connect 2-pin passenger-side air bag connector. Reconnect battery cables. Check SRS indicator light to ensure system is functioning properly. See <u>SYSTEM OPERATION CHECK</u>. Reprogram radio frequencies.

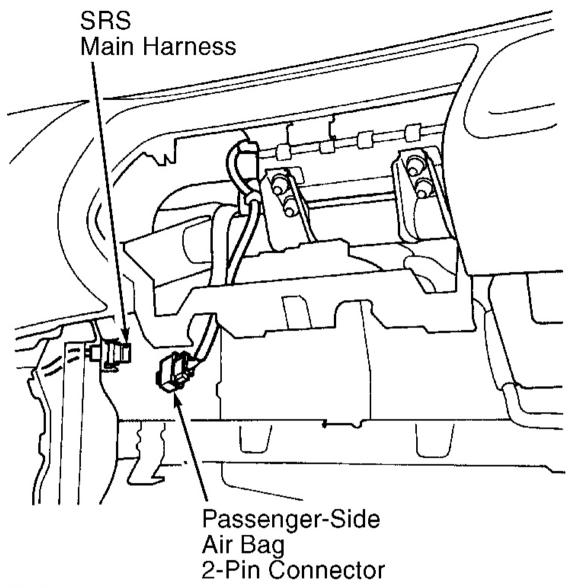


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Fig. 14: Disconnecting Air Bag Spring-Loaded Locking Connector (Honda) Courtesy of AMERICAN HONDA MOTOR CO., INC.



Courtesy of AMERICAN HONDA MOTOR CO., INC.



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Fig. 16: Disabling Passenger-Side Air Bag (Accord) Courtesy of AMERICAN HONDA MOTOR CO., INC.

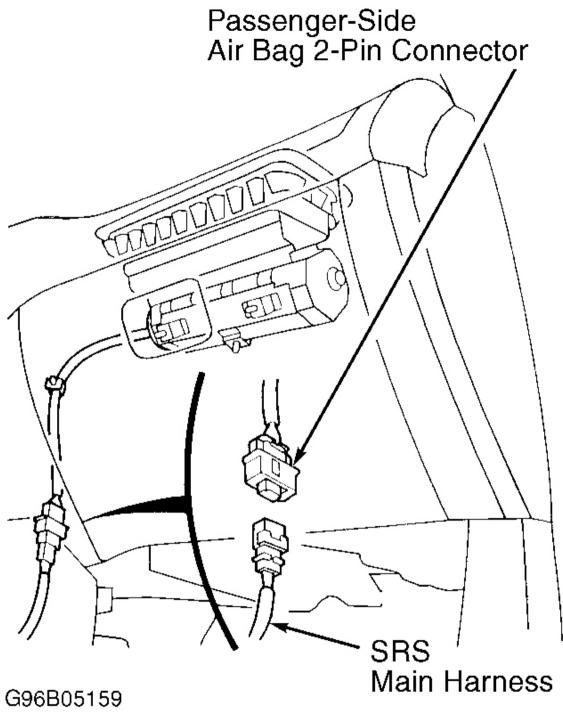
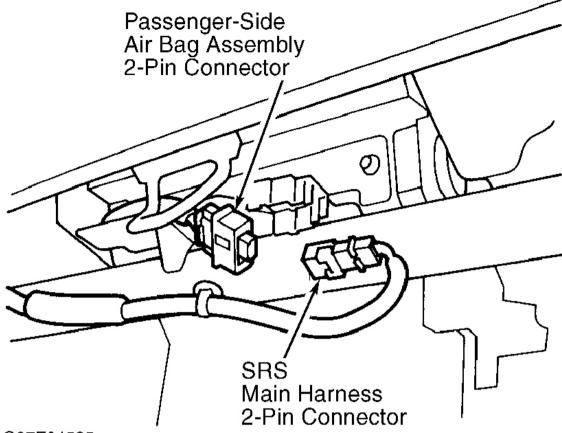
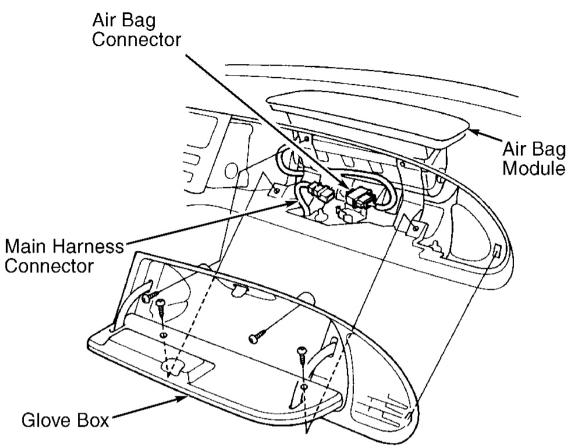


Fig. 17: Disabling Passenger-Side Air Bag (Civic & CR-V) Courtesy of AMERICAN HONDA MOTOR CO., INC.



G97E04585

Fig. 18: Disabling Passenger-Side Air Bag (Prelude) Courtesy of AMERICAN HONDA MOTOR CO., INC.



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Fig. 19: Disabling Passenger-Side Air Bag (Odyssey) Courtesy of AMERICAN HONDA MOTOR CO., INC.

HYUNDAI

SYSTEM OPERATION CHECK

When ignition is turned to on position SRS indicator light should flash 6 times, then turn off. If SRS indicator light does not function as stated or comes on during vehicle operation, a failure has occurred in SRS and must be repaired.

SERVICE PRECAUTIONS

Observe these precautions when working with air bag system:

- Disable air bag system before servicing any air bag system, instrument panel or steering column component. See **DISABLING & ACTIVATING AIR BAG SYSTEM**.
- After disabling SRS, wait at least 30 SECONDS before working on or near SRS. SRS is equipped with a back-up power source that may allow air bags to deploy up to 30 seconds after negative battery cable is disconnected.
- Store air bag module in ambient temperatures less than 199°F (93°C), without high humidity and away

from electrical noise.

- When placing a live air bag on a bench or other surface, ensure pad top surface is facing up, away from bench surface. This will reduce motion of module if it is accidentally deployed.
- Because of critical operating requirements of air bag system, **DO NOT** attempt to service air bag module (s), clockspring, wiring harness or SRS Control Module (SRSCM). Air bag system repairs are only made by replacement of faulty components. **DO NOT** use any component previously installed on another vehicle. Use NEW components only.
- If any air bag system component has been dropped, or there are cracks, dents or other defects in case, bracket or connector, replace with NEW component.
- **DO NOT** attempt to measure resistance across air bag module squib connector. Accidental air bag deployment is possible which could cause personal injury.
- 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, and wash hands using mild soap and water.
- SRS control module must be replaced after deploying air bags one time. After deployment of an air bag, replace clockspring with a new one.
- Before using electric welding, disconnect air bag Yellow connectors located at base of steering column, near multifunction switch connector.
- After SRS repairs are completed, ensure system is functioning properly. See **<u>SYSTEM OPERATING</u>** <u>CHECK</u>.

DISABLING & ACTIVATING AIR BAG SYSTEM

To disable SRS, turn ignition switch to LOCK position. Disconnect and isolate negative battery cable. Wait at least 30 SECONDS before servicing SRS. To activate SRS, reconnect negative battery cable. Perform **SYSTEM OPERATING CHECK**.

INFINITI

SYSTEM OPERATION CHECK

On I30 and QX4, turn ignition ON and verify that AIR BAG indicator light comes on for about 7 seconds, then goes off. On Q45, turn ignition ON and verify that AIR BAG indicator light and SEAT BELT indicator light and chime come on for about 7 seconds, then go off.

On all models, if AIR BAG indicator light does not come on or after about 7 seconds does not go out or begins to flash, a SRS malfunction has been detected. On Q45, if SEAT BELT indicator light does not come on or stays on longer than 7 seconds with seat belt fastened, a seat belt pretensioner malfunction has been detected.

SERVICE PRECAUTIONS

Observe these precautions when working with air bag systems:

• Disable SRS system before servicing any SRS component, instrument panel components, steering column components or seat belt pretensioners (if equipped). Failure to do this could result in accidental activation

of SRS and causing personal injury and/or vehicle damage. See **<u>DISABLING & ACTIVATING AIR</u> <u>BAG SYSTEM</u>**.

- Wait at least 3 MINUTES after disabling SRS before servicing vehicle. System maintains SRS system voltage for about 3 minutes. Servicing air bag system or seat belt pretensioners (if equipped) before 3 minutes could result in accidental SRS activation, causing personal injury and/or vehicle damage.
- After repairs, ensure AIR BAG indicator light is operating properly and no system faults are indicated. See **<u>SYSTEM OPERATION CHECK</u>**.
- Always wear safety glasses when servicing or handling an air bag system components.
- Air bag modules and seat belt pretensioners (if equipped) must be stored their original special containers until installation. They must be stored in a clean, dry place, away from sources of extreme heat, sparks or high electrical energy.
- Always place SRS components on a clean flat surface. When placing a live air bag module on a bench, always face air bag and trim cover up, away from surface. This will reduce motion of module if accidentally activated.
- After deployment, air bag surface may contain deposits of sodium hydroxide, which can irritate skin. Always wear safety glasses, rubber gloves and long-sleeved shirt during clean-up, and wash hands using mild soap and water. Follow correct disposal procedures.
- At no time should any electrical source be allowed near inflator on back of air bag module.
- When carrying a live air bag module, trim cover should be pointed away from body to minimize injury in case of accidental air bag deployment.
- **DO NOT** probe a wire through insulator; this will damage wire and eventually cause failure due to corrosion.
- If SRS system is not fully functional for any reason, vehicle should not be driven until system is repaired. **DO NOT** remove bulbs, modules, sensors or other components or in any way disable system from operating normally. If SRS system is not functional, park vehicle until repairs can be made.

DISABLING & ACTIVATING AIR BAG SYSTEM

Disabling Air Bag System

Record preset radio station frequencies. Turn ignition off. Disconnect and shield negative battery cable and then positive battery cable. Wait at least 3 MINUTES.

Activating Air Bag System

Ensure ignition is off. Connect positive battery cable and then negative battery cable. Ensure AIR BAG and SEAT BELT indicator lights are operating properly and no system faults are indicated. See **<u>SYSTEM</u> OPERATION CHECK**.

ISUZU

NOTE: For Isuzu Oasis information, see <u>HONDA</u>Odyssey.

SYSTEM OPERATION CHECK

Turn ignition ON and verify that AIR BAG indicator light flashes 7 times, then turns off. AIR BAG indicator light should not come on during vehicle operation. If AIR BAG indicator light does not function as described, service air bag system.

SERVICE PRECAUTIONS

Observe these precautions when working with air bag system:

- Disable SRS system before servicing any SRS system, instrument panel or steering column component. Failure to do this could result in accidental air bag deployment, and possible personal injury and/or vehicle damage. See **DISABLING & ACTIVATING AIR BAG SYSTEM**.
- Wait at least 15 SECONDS (10 MINUTES on Hombre) after disabling SRS before servicing vehicle. System maintains SRS system voltage for time specified. Servicing SRS system before time has elapsed could result in accidental air bag deployment, and possible personal injury and/or vehicle damage.
- After repairs, ensure AIR BAG indicator light is operating properly and no system faults are indicated. See **<u>SYSTEM OPERATION CHECK</u>**.
- Always wear safety glasses when servicing or handling an air bag.
- Air bag modules must be stored in original special container until used for service. They must be stored in a clean, dry place, away from sources of extreme heat, sparks or high electrical energy.
- When placing a live air bag module on a bench or other flat surface, always face air bag and trim cover up, away from surface. This will reduce motion of module if accidentally deployed.
- Any SRS component dropped from a height greater than 39 inches must be replaced.
- **DO NOT** subject SRS components to temperatures greater than 150°F (66°C).
- After deployment, air bag surface may contain deposits of sodium hydroxide, which can irritate skin. Always wear safety glasses, rubber gloves and long-sleeved shirt during clean-up, and wash hands using mild soap and water. Follow correct disposal procedures.
- At no time should any electrical source be allowed near inflator on back of air bag module.
- When carrying a live air bag module, trim cover should be pointed away from body to minimize injury in case of accidental air bag deployment.
- **DO NOT** attempt to disassemble any SRS component. SRS components are serviced as a complete unit and contain no serviceable components.
- **DO NOT** probe a wire through insulator; this will damage wire and eventually cause failure due to corrosion.
- If SRS system is not fully functional for any reason, vehicle should not be driven until system is repaired. **DO NOT** remove bulbs, modules, sensors or other components or in any way disable system from operating normally. If SRS system is not functional, park vehicle until repairs can be made.

DISABLING & ACTIVATING AIR BAG SYSTEM

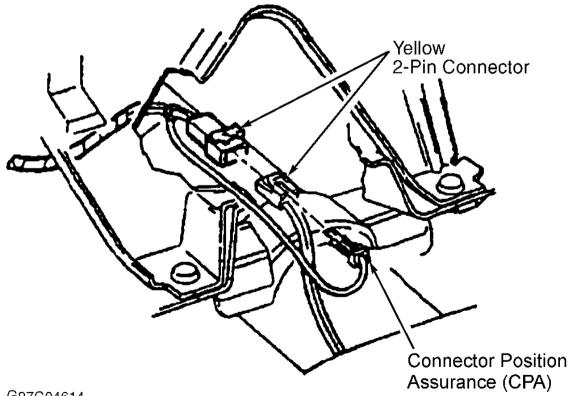
Disabling System (Hombre)

1. Turn steering wheel to place front wheels in straight-ahead position. Turn ignition switch to LOCK position and remove ignition key. Remove AIR BAG (10-amp) fuse from instrument panel fuse block. Wait at least 10 MINUTES before servicing vehicle.

 Remove driver-side sound insulator and knee bolster. Remove Connector Position Assurance (CPA) clip and disconnect driver-side air bag Yellow SRS 2-pin connector at base of steering column. See <u>Fig. 20</u>. Remove glove box. Remove CPA clip and disconnect passenger-side air bag Yellow SRS 2-pin connector behind glove box. SRS system is now disabled.

Activating System (Hombre)

- 1. Ensure ignition switch is in LOCK position, and ignition key is removed. Reconnect Yellow SRS 2-pin connectors and install CPA clips. Install knee bolster, sound insulator, trim panels and glove box.
- 2. Staying well away from air bag modules, turn ignition switch to RUN position. Ensure AIR BAG warning light flashes 7 times, and then turns off. If AIR BAG warning light does not operate as described, see **SYSTEM OPERATION CHECK**.
- NOTE: When AIR BAG fuse is removed and ignition switch is in ON position, AIR BAG indicator light will be on. This is a normal operation and does not indicate an SRS malfunction.



G97G04614

Fig. 20: Disconnecting Driver-Side Yellow 2-Pin SRS Connector (Hombre) Courtesy of ISUZU MOTOR, CO.

Disabling System (1997 Rodeo)

1. Turn ignition switch to LOCK position and remove key. Wait 15 SECONDS before servicing vehicle. Remove SRS fuses (SRS-1 and SRS-2) from instrument panel fuse block.

2. Unplug Yellow 3-pin connector at base of steering column. Remove glove box assembly. Unplug 2-pin connector from behind glove box assembly.

Activating System (1997 Rodeo)

- 1. Ensure ignition switch is in LOCK position, and remove key. Reconnect passenger-side Yellow 2-pin connector. Install glove box assembly. Reconnect driver-side Yellow 3-pin connector.
- 2. Install SRS fuses. Turn ignition switch to RUN position. Check AIR BAG indicator light to ensure it flashes 7 times, then turns off.

NOTE: With fuses removed and ignition switch in RUN position, AIR BAG warning light will be on. This is a normal operation and does not indicate an SRS malfunction.

Disabling System (1997 Trooper)

- 1. Turn ignition switch to LOCK position and remove key. Wait 15 SECONDS before servicing vehicle. Remove SRS fuses (C-21 and C22) from instrument panel fuse block.
- 2. Unplug Yellow 3-pin connector at base of steering column. Remove glove box assembly. Unplug Yellow 4-pin connector from behind glove box assembly.

Activating System (1997 Trooper)

- 1. Ensure ignition switch is in LOCK position, and remove key. Reconnect passenger-side Yellow 4-pin connector. Install glove box assembly. Reconnect driver-side Yellow 3-pin connector.
- 2. Install SRS fuses. Turn ignition switch to RUN position. Check AIR BAG indicator light to ensure it flashes 7 times, then turns off.

Disabling System (1998 Rodeo & Trooper)

- 1. Turn ignition switch to LOCK position and remove ignition key. Wait 15 SECONDS before servicing vehicle. Remove SRS C-21 or SRS-1 (10-amp) fuse located in left side instrument panel lower fuse block or disconnect negative battery cable.
- 2. Disconnect driver-side air bag Yellow 2-pin connector located at base of steering column. Remove glove box assembly. Disconnect passenger-side air bag Yellow 2-pin connector located behind glove box assembly.

Activating System (1998 Rodeo & Trooper)

- 1. Ensure ignition switch is in LOCK position, and ignition key is removed. Connect passenger-side Yellow 2-pin connector. Install glove box assembly. Connect driver-side Yellow 2-pin connector.
- 2. Install SRS C-21 or SRS-1 fuse, or connect negative battery cable. Staying well away from air bag modules, turn ignition switch to ON position. Ensure AIR BAG indicator light operates properly, see **SYSTEM OPERATION CHECK**.

NOTE: When SRS C-21 or SRS-1 fuse is removed and ignition switch is in ON position, AIR BAG indicator light will be on. This is a normal operation and does not indicate an SRS malfunction.

KIA

SYSTEM OPERATION CHECK

Turn ignition on. AIR BAG warning light in instrument cluster should come on for 4-8 seconds and then turn off. If AIR BAG warning light does not function as described, repair air bag system.

SERVICE PRECAUTIONS

Observe the following precautions when servicing SRS:

- Disable SRS before servicing any SRS 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**.
- After turning ignition switch to LOCK position, disconnecting negative battery cables, and turning headlight switch on, wait at least 10 MINUTES before servicing vehicle. SRS is equipped with a back-up power source that may allow air bag to deploy within 10 MINUTES after disconnecting negative battery cable.
- In a minor collision in which air bags did not deploy, inspect front air bag sensors and steering wheel pad.
- NEVER use air bag components from another vehicle. Replace air bag components with NEW components.
- Never disassemble or repair system components. Replace cracked, dented or otherwise damaged system components.
- DO NOT expose air bag components to heat or flame, high humidity or electrical noise.
- After servicing SRS, check air bag warning light to ensure system is functioning properly. See **<u>SYSTEM</u>** <u>**OPERATION CHECK**</u>.
- Always wear safety glasses when servicing or handling an air bag.
- When placing a live air bag on a bench or other flat surface, always face air bag trim cover up, 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.
- When carrying a live air bag module, trim cover must be pointed away from body to minimize injury in case of accidental air bag deployment.
- If SRS 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 SRS is not functional, park vehicle until it is repaired and functions properly.

DISABLING & ACTIVATING AIR BAG SYSTEM

To disable SRS, turn ignition switch to LOCK position. Disconnect negative battery cable and then positive battery cable. Wait at least 10 MINUTES before servicing vehicle. To ensure a complete SRS back-up power supply discharge, turn headlights on. To activate SRS, ensure headlights are turned off. Connect positive battery cable and then negative cable. Perform **<u>SYSTEM OPERATION CHECK</u>**.

LEXUS

SYSTEM OPERATION CHECK

Turn ignition switch to ACC or ON position. Air bag indicator light in instrument cluster should come on for about 6 seconds, then go out. If indicator light remains on or flashes, a SRS malfunction has been detected.

SERVICE PRECAUTIONS

Observe the following precautions when servicing SRS:

- Disable SRS before servicing any SRS, instrument panel 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**.
- Before disconnecting battery check for SRS diagnostic trouble codes.
- **DO NOT** use any type of back-up power supply from outside vehicle to avoid memory loss in memory systems. Back-up power supplies can provide enough voltage to activate SRS components.
- After turning ignition switch to LOCK position and disconnecting negative battery cable, wait at least 90 SECONDS before working on vehicle. SRS is equipped with a back-up power source that may allow air bag to deploy within 90 seconds after disconnecting negative battery cable.
- In a minor collision in which air bags did not deploy, inspect front air bag sensors and steering wheel pad.
- Remove air bag sensors if an impact is likely to be applied to area close to sensors during repair.
- Never disassemble or repair system components. Replace cracked, dented or otherwise damaged system components.
- **DO NOT** expose front air bag sensors, center air bag sensor assembly, steering wheel pad, passenger-side air bag, side air bags or seat belt pretensioners directly to hot air or flame.
- **DO NOT** store air bag modules where they will be exposed to temperatures greater than 199°F (93°C), high humidity or electrical noise. **DO NOT** store seat belt pretensioners to temperatures greater than 176° F (80°C), high humidity or electrical noise.
- Information labels are attached to air bag components. Follow all notices on labels.
- After servicing SRS, check air bag indicator light to ensure system is functioning properly. See <u>SYSTEM</u> <u>OPERATION CHECK</u>.
- Always wear safety glasses when servicing or handling air bags or seat belt pretensioners.
- When placing a live air bag on a bench or other flat surface, always face air bag and trim cover up, 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.

- **DO NOT** install components previously installed on another vehicle. Only use NEW components supplied by manufacturer.
- When using electric welding, disconnect air bag module and seat belt pretensioner connectors.
- When carrying a live air bag module, trim cover must be pointed away from body to minimize injury in case of accidental air bag deployment.
- If SRS 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 SRS is not functional, park vehicle until it is repaired and functions properly. See **SYSTEM OPERATION CHECK**.

DISABLING & ACTIVATING AIR BAG SYSTEM

Disabling System (ES300 & LS400)

- 1. Obtain radio anti-theft protection code from vehicle owner and record preset radio frequencies before disconnecting battery.
- 2. Place front wheels in straight-ahead position. Turn ignition switch to LOCK position. Disconnect and shield negative battery cable. Wait at least 90 SECONDS before working on vehicle.
- Disconnect driver-side air bag module Yellow 2-pin connector located under steering column lower cover, near combination switch connector. See Fig. 22. Disconnect passenger-side air bag module Yellow 2-pin connector located on finish plate at left side of glove box. See Fig. 23. Air bag connector terminals are automatically shorted together. See Fig. 21.
- 4. Disconnect left and right side air bag module Yellow 2-pin connectors located under each front seat. Disconnect left and right seat belt pretensioner Yellow 2-pin connectors located under lower front scuff plate and floor carpet. Air bag connector terminals are automatically shorted together. See **Fig. 21**.

Activating System (ES300 & LS400)

Connect all seat belt pretensioner and air bag Yellow 2-pin connectors in reverse order. Install all removed covers. Connect negative battery cable. Staying well away from air bag modules, turn ignition switch to ACC or ON position. Ensure AIR BAG indicator light operates properly, see **SYSTEM OPERATION CHECK**.

Disabling System (GS300 & GS400)

- 1. Obtain radio anti-theft protection code from vehicle owner and record preset radio frequencies before disconnecting battery.
- 2. Place front wheels in straight-ahead position. Turn ignition switch to LOCK position. Disconnect and shield negative battery cable. Wait at least 90 SECONDS before working on vehicle.
- 3. Disconnect driver-side air bag module Yellow 2-pin connector located under steering column lower cover, near combination switch connector. Disconnect passenger-side air bag module Yellow 2-pin connector located on finish plate at right side of glove box. Air bag connector terminals are automatically shorted together. See **Fig. 21**.
- 4. Disconnect left and right side air bag modules Yellow 2-pin connectors located under each front seat.

Disconnect left and right seat belt pretensioner Yellow 2-pin connectors located at center pillar lower garnish. Air bag connector terminals are automatically shorted together. See **Fig. 21**.

Activating System (GS300 & GS400)

Connect all seat belt pretensioner and air bag Yellow 2-pin connectors in reverse order. Install all removed covers. Connect negative battery cable. Staying well away from air bag modules, turn ignition switch to ACC or ON position. Ensure AIR BAG indicator light operates properly, see **SYSTEM OPERATION CHECK**.

Disabling System (SC300 & SC400)

- 1. Obtain radio anti-theft protection code from vehicle owner and record preset radio frequencies before disconnecting battery.
- 2. Place front wheels in straight-ahead position. Turn ignition switch to LOCK position. Disconnect and shield negative battery cable. Wait at least 90 SECONDS before working on vehicle.
- 3. Disconnect driver-side air bag module connector located under steering column, near combination switch. Air bag connector terminals are automatically shorted together. See Fig. 21 and Fig. 24.
- Open glove box. Remove passenger-side air bag connector cover from inside glove box. Disconnect passenger-side air bag connector. Air bag connector terminals are automatically shorted together. See <u>Fig.</u> <u>21</u> and <u>Fig. 25</u>.

Activating System (SC300 & SC400)

Connect passenger-side air bag Yellow 2-pin connector. Connect driver-side air bag Yellow 2-pin connector. Install covers. Connect negative battery cable. Staying well away from air bag modules, turn ignition switch to ACC or ON position. Ensure AIR BAG indicator light operates properly, see **SYSTEM OPERATION CHECK**.

Disabling System (LX450)

- 1. Obtain radio anti-theft protection code from vehicle owner and record preset radio frequencies before disconnecting battery.
- 2. Place front wheels in straight-ahead position. Turn ignition switch to LOCK position. Disconnect and shield negative battery cable. Wait at least 90 SECONDS before working on vehicle.
- 3. Disconnect driver-side air bag module Yellow 2-pin connector located under steering column, near combination switch. Air bag connector terminals are automatically shorted together. See **Fig. 21**.
- 4. Remove glove box door. Remove passenger-side air bag connector from air bag bracket. Disconnect passenger-side air bag Yellow 2-pin connector. Air bag connector terminals are automatically shorted together. See **Fig. 21** and **Fig. 26**.

Activating System (LX450)

Connect passenger-side air bag Yellow 2-pin connector. Connect driver-side air bag Yellow 2-pin connector. Install covers. Connect negative battery cable. Staying well away from air bag modules, turn ignition switch to ACC or ON position. Ensure AIR BAG indicator light operates properly, see **SYSTEM OPERATION** <u>CHECK</u>.

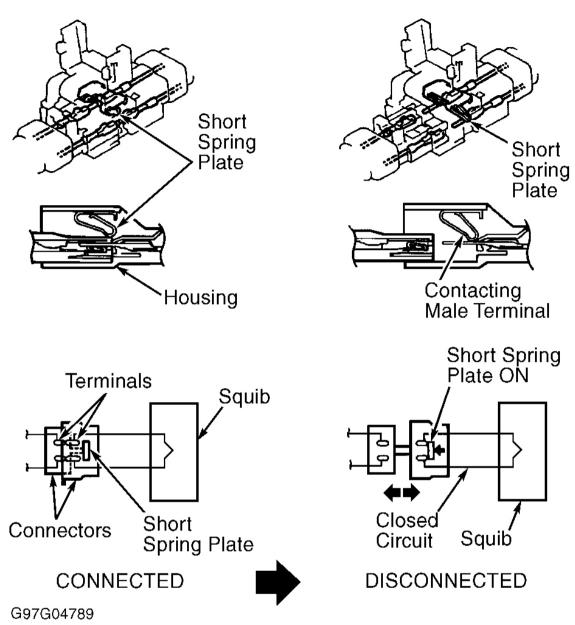
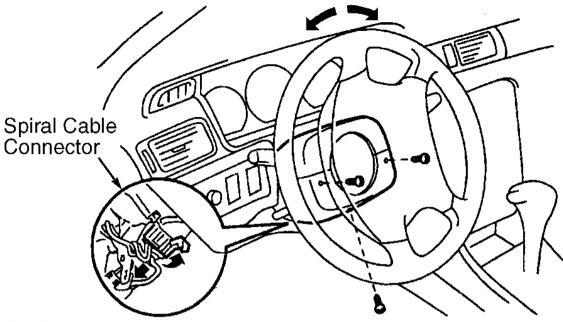
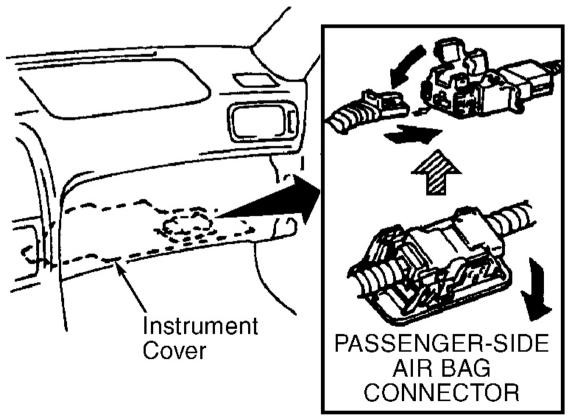


Fig. 21: Air Bag Activation Prevention Mechanism Connector (Lexus) Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.



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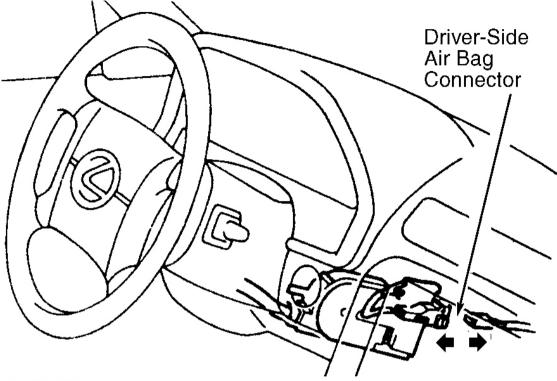
Fig. 22: Disconnecting Driver-Side Air Bag Connector (ES300 & LS400) Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.



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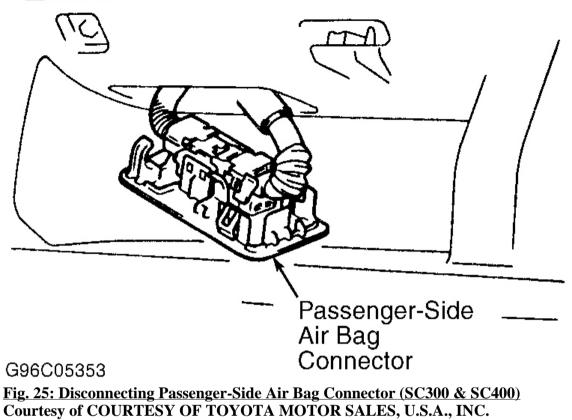
Fig. 23: Disconnecting Passenger-Side Air Bag Connector (ES300 & LS400 Shown; GS300 & GS400 Are

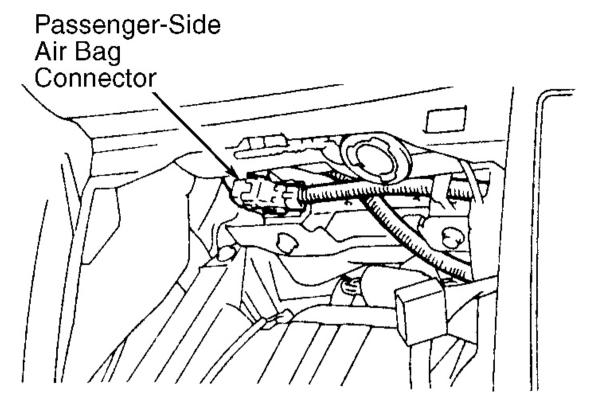
<u>Similar</u>) Courtesy of COURTESY OF TOYOTA MOTOR SALES, U.S.A., INC.



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Fig. 24: Disconnecting Driver-Side Air Bag Connector (SC300 & SC400) Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.





G96G05369 Fig. 26: Disconnecting Passenger-Side Air Bag Connector (LX450) Courtesy of COURTESY OF TOYOTA MOTOR SALES, U.S.A., INC.

MAZDA

SYSTEM OPERATION CHECK

Turn ignition on. AIR BAG indicator light in instrument cluster should come on for 6 seconds and then turn off. If AIR BAG indicator light does not come on, stays on or flashes, a SRS fault has been detected.

SERVICE PRECAUTIONS

Observe these precautions when working with air bag system:

- Disable air bag system before servicing any air bag system or steering column component. See **DISABLING & ACTIVATING AIR BAG SYSTEM**.
- Wait at least ONE MINUTE after disabling air bag system before servicing vehicle. Air bag system activation voltage is maintained for about ONE MINUTE after system is disabled. Failure to wait at least ONE MINUTE before servicing system may cause accidental air bag deployment and possible personal injury.
- Because of critical system operating requirements, **DO NOT** service any air bag system component or wiring harness. Corrections are made by component replacement only.
- DO NOT use an ohmmeter to check resistance of air bag module, as it may cause air bag deployment.

- When carrying a live (undeployed) module, ensure trim cover is pointed away from body. This minimizes chance of injury in event of accidental air bag deployment.
- When placing a live air bag module on a bench or other flat surface, always face trim cover up to reduce motion of module if it is accidentally deployed.
- Crash sensors must always be installed with arrow on sensor facing front of vehicle. Also, check sensors for cracks, defects and rust before installation. Replace crash sensor(s) as necessary.
- Air bag system clockspring MUST be aligned in neutral position, since its rotation ability is limited. **DO NOT** turn steering wheel or column after removal of steering gear.
- **DO NOT** install components previously installed on another vehicle. Only use NEW components supplied by manufacturer.
- **DO NOT** store air bag modules where they will be exposed to temperatures greater than 199°F (93°C), high humidity or electrical noise.
- Information labels are attached to air bag components. Follow all notices on labels.
- After servicing SRS, check air bag indicator light to ensure system is functioning properly. See **<u>SYSTEM</u>** <u>**OPERATION CHECK**</u>.
- Always wear safety glasses when servicing or handling air bags or seat belt pretensioners.
- A double-lock mechanism is used on clockspring connectors. **DO NOT** use excessive force when disconnecting connectors, as damage to connector may occur.
- If SRS 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 SRS is not functional, park vehicle until it is repaired and functions properly. See **SYSTEM OPERATION CHECK**.

DISABLING & ACTIVATING AIR BAG SYSTEM

Disabling System (Except Protege)

- 1. Obtain radio anti-theft protection code from vehicle owner prior to servicing vehicle or deactivate radio anti-theft function before disconnecting vehicle battery.
- 2. Turn ignition switch to LOCK position. Disconnect and shield negative battery cable. Wait at least ONE MINUTE for back-up power supply to be depleted.
- Remove cover below left side of instrument panel. Disconnect clockspring connector for driver-side air bag. See <u>Fig. 27</u> or <u>Fig. 28</u>. Remove glove box cover (MPV) and glove box. Disconnect passenger-side air bag module connector. See <u>Fig. 29</u>.

Activating System (Except Protege)

Ensure negative battery cable is disconnected. Connect passenger-side air bag module connector. Install glove box cover and glove box. Connect driver air bag clockspring connector. Install lower cover. Connect negative battery cable. See **SYSTEM OPERATION CHECK**.

Disabling System (Protege)

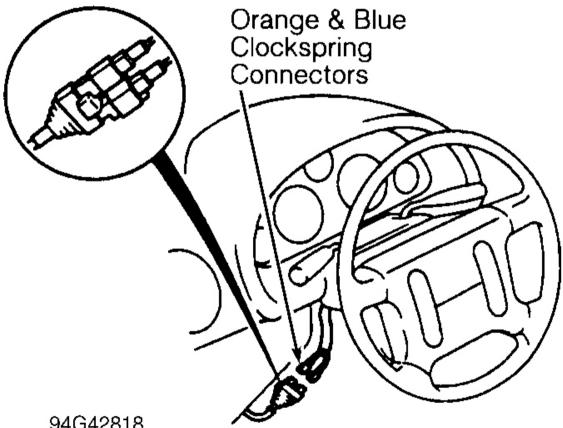
1. Obtain radio anti-theft protection code from vehicle owner prior to servicing vehicle or deactivate radio

anti-theft function before disconnecting vehicle battery.

- 2. Turn ignition switch to LOCK position. Disconnect and shield negative battery cable. Wait at least ONE MINUTE for back-up power supply to be depleted.
- 3. Remove cover below left side of instrument panel. Disconnect clockspring connector for driver-side air bag. Remove passenger-side front scuff plate and right kick panel trim. Disconnect passenger air bag module connector.

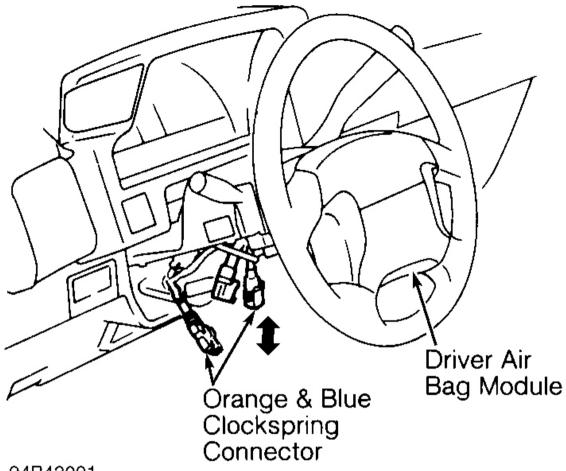
Activating System (Protege)

Ensure negative battery cable is disconnected. Connect passenger air bag module connector. Install right kick panel trim and scuff plate. Connect driver air bag clockspring connector. Install lower cover. Connect negative battery cable. See SYSTEM OPERATION CHECK .



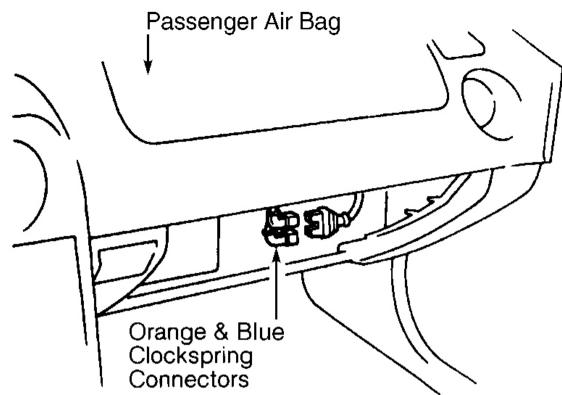
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Fig. 27: Locating Driver Air Bag Clockspring Connectors (Miata Shown; Other Models Are Similar) **Courtesy of MAZDA MOTORS CORP.**



94B43001

Fig. 28: Locating Driver Air Bag Clockspring Connectors (MPV) Courtesy of MAZDA MOTORS CORP.



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Fig. 29: Locating Passenger Air Bag Clockspring Connectors (Miata Shown; Other Models Are Similar) Courtesy of MAZDA MOTORS CORP.

MERCEDES-BENZ

- NOTE: Information CLK, CL500, ML320, SLK, SL320 and SL500 is not available from manufacturer.
- NOTE: Some models may be equipped with side-impact air bag systems. Disabling and activating procedures for these systems are not covered in this article.

SYSTEM OPERATION CHECK

Supplemental Restraint System (SRS) warning light indicates air bag and seat belt Emergency Tensioning Retractor (ETR) system readiness. Turn ignition on. SRS warning light will come on, and then go out after approximately 4 seconds indicating system is functioning properly.

If SRS warning light does not come on, comes on while driving or is on all the time (for crash related faults), there is a system fault. If SRS warning light stays on for a duration of approximately 2 minutes, a non-crash related fault is present. Repair malfunctioning system.

Some vehicles may be equipped with passenger-side/child safety seat air bag deactivation system. System requires a special child safety seat and a specially designed passenger front seat. When child seat is installed in

passenger seat, the passenger-side front air bag is disabled.

When child seat IS properly installed, AIRBAG OFF indicator light will come on and stay on when ignition is in ON or RUN position. When child seat is NOT installed and ignition is turned on, AIRBAG OFF indicator light will come on for approximately 6 seconds and then go out.

SERVICE PRECAUTIONS

Observe following precautions when working with air bag systems:

- When working around steering column and/or instrument panel components, and before any repairs are performed, disable air bag system.
- Before straightening any damage to body, or before performing electrical arc-welding, disable air bag system.
- If air bag module or seat belt tensioner is dropped from a height greater than 20 inches it must be replaced.
- Always wear safety glasses and gloves when handling a deployed air bag module or ETR module. Air bag module may contain sodium hydroxide deposits which are irritating to the skin.
- **DO NOT** repair any SRS component or wiring harness. SRS servicing requires replacement of faulty component. **DO NOT** use components previously installed on another vehicle. Only use SRS components supplied by manufacturer.
- Always handle air bag module with trim cover away from body. Always place air bag module on workbench with trim cover up, away from loose objects.
- DO NOT expose any SRS component to temperatures in excess of 212°F (100°C).
- **DO NOT** leave SRS components unattended. If work is interrupted, SRS component should be stored in a secure, locked area.
- DO NOT expose any SRS component to cleaning agents or other solvents, grease, gasoline, etc.
- If SRS 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 SRS is not functional, park vehicle until it is repaired and functions properly. See **SYSTEM OPERATION CHECK**.

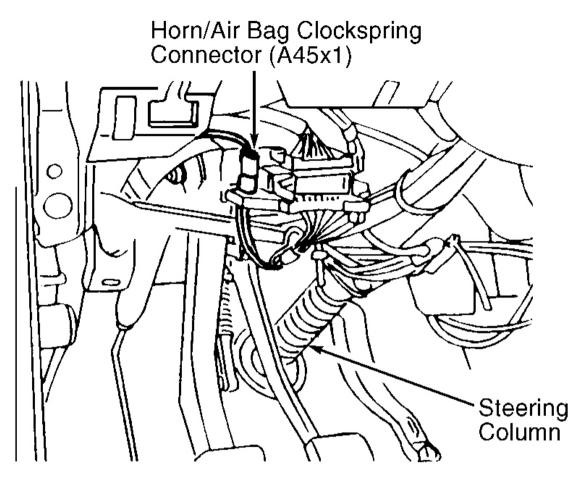
DISABLING & ACTIVATING AIR BAG SYSTEM

Disabling System (C230 & C280)

- Turn ignition off and remove ignition key. Disconnect and shield negative battery cable. Remove covers as necessary to access horn/air bag clockspring connector (A45x1) located at base of steering column. See Fig. 30.
- Disconnect horn/air bag clockspring connector. Remove passenger floor covering and door sill covers as necessary to access passenger air bag connector (X28/12). See <u>Fig. 31</u>. Disconnect passenger air bag connector. System is now disabled.

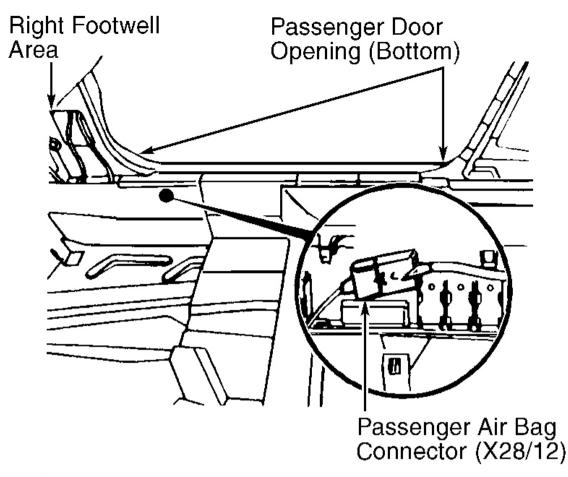
Activating System

Ensure ignition is off. Reconnect horn/air bag clockspring connector. Reconnect passenger air bag connector. Reconnect negative battery cable. System is now activated. Perform **<u>SYSTEM OPERATION CHECK</u>**.



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Fig. 30: Locating Air Bag Clockspring Connector (C230 & C280) Courtesy of MERCEDES-BENZ OF NORTH AMERICA



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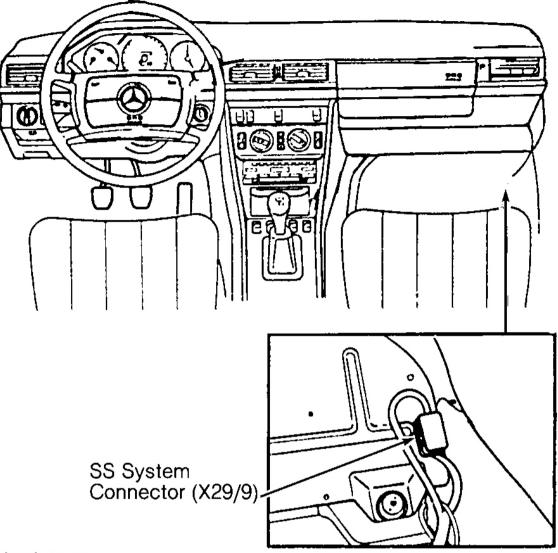
Fig. 31: Locating Passenger Air Bag Connector (C230 & C280) Courtesy of MERCEDES-BENZ OF NORTH AMERICA

Disabling System (E300D, E300DT, E320, E420 & E430)

Turn ignition off and remove ignition key. Disconnect and shield negative battery cable. Remove passenger foot mat. Remove passenger footrest. Disconnect SRS system connector (X29/9) located at passenger footwell area. See **Fig. 32**. System is now disabled.

Activating System

Ensure ignition is off. Reconnect SRS system connector. Reconnect negative battery cable. System is now activated. Perform **SYSTEM OPERATION CHECK**.



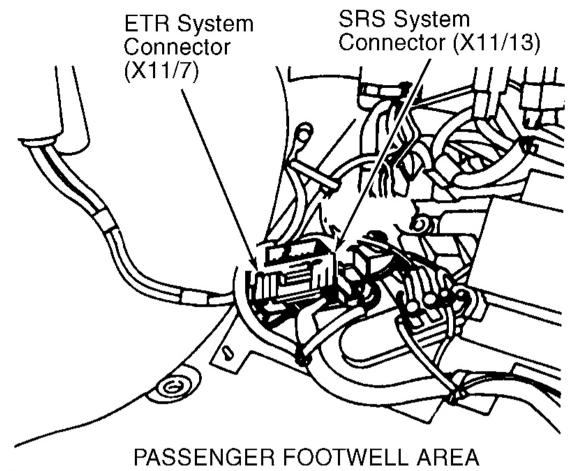
G95G10013 Fig. 32: Locating SRS Connector (E300D, E300DT, E320, E420 & E430) Courtesy of MERCEDES-BENZ OF NORTH AMERICA

Disabling System (S320, S420 & S500)

Turn ignition off and remove ignition key. Disconnect and shield negative battery cable. Remove passenger foot mat. Remove passenger footrest. Disconnect Red SRS system connector (X11/13) located at passenger footwell area. See **Fig. 33**. System is now disabled.

Activating System

Ensure ignition is off. Reconnect Red SRS system connector. Reconnect negative battery cable. System is now activated. Perform **SYSTEM OPERATION CHECK**.



G94C43234 Fig. 33: Locating Red SRS Connector (S320, S420 & S500) Courtesy of MERCEDES-BENZ OF NORTH AMERICA

MITSUBISHI

SYSTEM OPERATION CHECK

Turn ignition on. SRS warning light on instrument panel should come on for about 7 seconds then turn off. This indicates SRS is functioning properly. If SRS warning light does not come on, stays on, or comes on while driving, SRS is malfunctioning and needs repair.

SERVICE PRECAUTIONS

Observe the following precautions when working with SRS:

- Disable SRS before servicing any SRS or steering column component. Failure to do this may result in accidental air bag deployment and possible personal injury.
- Wait at least ONE MINUTE after disabling air bag system before servicing vehicle. Air bag system maintains enough voltage to deploy air bags for ONE MINUTE after disconnecting battery.

- After servicing, check SRS warning light to verify system operation. See **<u>SYSTEM OPERATION</u>** <u>**CHECK**</u>.
- Always wear safety glasses when servicing or handling an air bag.
- **DO NOT** expose air bag module and clockspring to temperatures greater than 200°F (93°C).
- When placing a live air bag module on a bench or other surface, always face air bag module and trim cover up, away from surface. This will reduce motion of module if air bag accidentally deploys.
- After air bag deploys, 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. Wash hands using mild soap and water. Follow correct clean-up and disposal procedures.
- Because of critical system operating requirements, **DO NOT** service any SRS components, including wiring harness. Repairs are only made by replacing defective component(s).
- **DO NOT** allow any electrical source near inflator on the back of air bag module.
- When carrying a live (undeployed) air bag module, trim cover must be pointed away from body to minimize injury in case of accidental air bag deployment.
- **DO NOT** probe a wire through insulator, as this will damage wire and eventually cause failure due to corrosion.
- If SRS is not fully functional for any reason, **DO NOT** drive vehicle until system is repaired and is fully functional. **DO NOT** remove bulbs, modules, sensors or other components, or in any way disable system from operating normally. If SRS is not functional, park vehicle until repairs are made.

To disable system, turn ignition switch to LOCK position. Disconnect and isolate negative battery cable. Wait at least ONE MINUTE before servicing vehicle. To activate system, ensure ignition switch is in LOCK position and reconnect negative battery cable. Staying well away from air bag modules, turn ignition switch to ON position. Ensure AIR BAG indicator light operates properly, see **<u>SYSTEM OPERATION CHECK</u>**.

NISSAN

SYSTEM OPERATION CHECK

Turn ignition on. AIR BAG warning light should come on for about 7 seconds and then go off, indicating SRS is okay. If AIR BAG warning light does not come on, service Supplemental Restraint System (SRS). If AIR BAG warning light stays on constantly, service SRS. If AIR BAG warning light comes on for about 7 seconds, goes off, then starts flashing, a fault code is set in memory.

NOTE: On vehicles equipped with seat belt pretensioner, the seat belt warning light should also come on for about 7 seconds and then go off (with seat belt fastened).

SERVICE PRECAUTIONS

Observe these precautions when working with air bag systems:

- Disable SRS before servicing any SRS or steering column component. See **DISABLING & ACTIVATING AIR BAG SYSTEM**.
- Wait at least 3 MINUTES after disabling SRS before servicing vehicle. SRS voltage is maintained for at least 3 minutes after system is disabled. Servicing system before 3-minute period may cause accidental SRS deployment and possible personal injury.
- Air bag will operate only when ignition switch is in ON or START position. Ignition switch should be in OFF position when working under hood or inside vehicle.
- When servicing vehicle, SRS and related parts should be pointed away from technician.
- **DO NOT** use a circuit tester to check air bag harness connectors. SRS wiring harness and connectors have Yellow insulation for easy identification. Keep all ground points clean.
- Impact sensor(s), safing sensor and tunnel sensor must be installed with arrow marks facing front of vehicle. Also, check sensors for cracks, defects and rust before installation. Replace sensors as necessary.
- If steering gear is removed, **DO NOT** turn steering wheel or column shaft. Rotation of SRS spiral cable under steering wheel air bag module is limited. SRS spiral cable must be aligned in neutral position (centered).
- On vehicles equipped with passenger-side air bag module ON/OFF switch, ensure ON/OFF switch is in the same position as when vehicle was brought in for service.
- Handle air bag modules carefully. Always place air bag modules with pad facing upward. **DO NOT** disassemble air bag module.
- If accidentally deployed, rubber cap on seat belt pretensioner will be blown out of cylinder tip by high temperature gases. When laying aside seat belt pretensioner, ensure cylinder tip points away from people (place pretensioners in a box if possible).
- After servicing, perform **<u>SYSTEM OPERATION CHECK</u>**.
- **DO NOT** expose air bag module to temperatures exceeding 194°F (90°C). **DO NOT** allow oil, grease or water to contact module.
- If vehicle is damaged in a collision, check impact sensor, tunnel and safing sensors and related wiring harnesses.
- Before discarding an air bag module or seat belt pretensioner (including scrapping a vehicle with air bag system), always deploy air bag(s) and seat belt pretensioners.
- Replace used mounting bolts with NEW mounting bolts.

WARNING: Some vehicles are equipped with a passenger-side air bag ON/OFF switch. This switch should NOT be used in place of specified vehicle air bag system disabling and activating procedures.

To disable SRS, turn ignition off. Disconnect and shield BOTH battery cables. Wait at least 3 MINUTES before working on vehicle. To activate SRS, connect battery cables. Turn ignition on. Ensure AIR BAG indicator light operates as specified. See **<u>SYSTEM OPERATION CHECK</u>**.

SUBARU

SYSTEM OPERATION CHECK

Turn ignition on. AIR BAG warning light in instrument cluster should come on and then go out after approximately 7 seconds. If AIR BAG warning light stays on for longer than 7 seconds, or does not come on, SRS is malfunctioning.

SERVICE PRECAUTIONS

Observe following precautions when working with air bag system:

- Disable SRS before servicing any SRS or steering column component. Failure to disable system could result in accidental air bag deployment and possible personal injury. See **DISABLING & ACTIVATING AIR BAG SYSTEM**.
- Wait at least 20 SECONDS after disconnecting battery cable before servicing SRS. See **<u>DISABLING &</u>** <u>ACTIVATING AIR BAG SYSTEM</u>. Back-up power supply maintains SRS power for 20 seconds after battery is disconnected. Servicing SRS before 20 seconds have elapsed may cause accidental air bag deployment and possible personal injury.
- Whenever possible when working near, removing, or installing an undeployed air bag module, **DO NOT** position yourself directly in front of air bag.
- In a minor collision in which air bag does not deploy, front air bag impact sensors and steering wheel pad should be inspected.
- If side air bag must be replaced, seat and air bag must be replaced as an assembly.
- DO NOT use air bag parts from another vehicle. Replace air bag parts with new parts.
- Remove front impact sensors if shocks are likely to be applied to area near sensors during repairs.
- **DO NOT** repair damage or open circuits found in SRS harnesses. Manufacturer recommends replacement of any defective SRS harness with a new part.
- DO NOT disassemble and attempt repair of front impact sensors or steering wheel pad.
- If front impact sensors, control unit, or steering wheel pad is dropped, or if there are cracks, dents, or other defects in the case or connector, replace parts with new ones.
- **DO NOT** expose front impact sensors, control unit, or steering wheel pad to temperatures greater than 194°F (90°C).
- **DO NOT** apply tester probes directly to any SRS harness connector terminal.
- Information labels are attached to air bag components. Follow all notices on labels.
- After work on SRS is completed, verify system is functioning properly. See **SYSTEM OPERATION** <u>CHECK</u>.
- Always wear safety glasses when servicing or handling an air bag.
- **DO NOT** check for air bag module continuity with air bag removed from vehicle.
- When placing a live air bag on a bench or other surface, always face air bag and trim cover up, 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 sleeves shirt during clean-up. Wash hands with mild soap and water.

- When carrying a live air bag module, point trim cover away from body to minimize injury in case of deployment.
- If SRS 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 SRS is not functional, park vehicle until it is repaired and functions properly.

To disable SRS, turn ignition off. Disconnect and shield negative battery cable. After battery cable has been disconnected, wait at least 20 SECONDS before servicing SRS. To activate SRS, reconnect negative battery cable. Observe AIR BAG warning light to verify system is functioning properly. See **SYSTEM OPERATION CHECK**.

SUZUKI

SYSTEM OPERATION CHECK

Turn ignition switch to ON position. If system is functioning normally, AIR BAG indicator should flash 7 times (6 times on Esteem). If air bag warning light does not operate as specified, service air bag system.

SERVICE PRECAUTIONS

Observe the following precautions when servicing SRS:

- Disable air bag system before servicing any air bag or steering column component. Failure to disable air bag could result in accidental air bag deployment and possible personal injury. See **DISABLING & ACTIVATING AIR BAG SYSTEM**.
- After turning ignition switch to LOCK position and removing AIR BAG or AIR BAG-IG fuse, wait at least 10 SECONDS before working on vehicle. Sensing and Diagnostic Module (SDM) maintains a reserve voltage for up to 10 seconds.
- Always wear safety glasses when servicing or handling an air bag.
- Handle air bag module(s) carefully. Always place air bag module(s) with pad facing upward. **DO NOT** disassemble air bag module.
- If the air bag system and another vehicle system both need repair, the air bag system must be repaired first to avoid unintended air bag deployment.
- **DO NOT** modify steering wheel, dashboard, or any other air bag system component. Modifications can adversely affect air bag system performance and lead to personal injury.
- Never use air bag parts from another vehicle. Replace air bag parts with new parts.
- Remove air bag modules and SDM if repairing the vehicle requires exposing the vehicle to temperatures over 200°F (93°C). Never expose air bag system components directly to hot air or flames.
- Remove air bag components if repairing the vehicle requires impacting (shocking) the vehicle.
- When using electric welding equipment, always disconnect air bag module connectors.

• If painting vehicle, **DO NOT** expose air bag harness or connectors to paint mist.

DISABLING & ACTIVATING AIR BAG SYSTEM

NOTE: With AIR BAG or AIR BAG-IG fuse removed and ignition on, AIR BAG warning light will be on. This is normal and does not indicate an air bag system malfunction.

Disabling System

- Ensure wheels are in straight-ahead position. Turn ignition switch to LOCK position. Remove ignition key. Remove AIR BAG or AIR BAG-IG fuse from fuse block, located on left kick panel. Wait at least 10 SECONDS before working on vehicle. Remove left side cap from steering wheel. Release locking lever and disconnect Yellow connector for driver-side air bag module.
- 2. Pull out glove box while pushing in both right and left sides. Release locking lever and disconnect Yellow connector for passenger-side air bag module (located in glove box opening).

Activating System

Reconnect driver-side air bag module and passenger-side air bag module connector. Install AIR BAG or AIR BAG-IG fuse. Perform **SYSTEM OPERATION CHECK**.

ΤΟΥΟΤΑ

WARNING: Some vehicles are equipped with a passenger-side air bag ON/OFF switch. This switch should NOT be used in place of specified vehicle air bag system disabling and activating procedures.

SYSTEM OPERATION CHECK

Turn ignition switch to ACC or ON position. Air bag warning light should come on for about 6 seconds, then go out. If air bag warning light does not operate as specified, service air bag system.

SERVICE PRECAUTIONS

Observe the following precautions when servicing SRS:

- Disable SRS before servicing any SRS or steering column component. Failure to disable air bag could result in accidental air bag deployment and possible personal injury. See **<u>DISABLING &</u>** <u>**ACTIVATING AIR BAG SYSTEM**</u>.
- After turning ignition switch to LOCK position and disconnecting negative battery cable, wait at least 90 SECONDS before working on vehicle. SRS is equipped with a back-up power source that may allow air bag to deploy until 90 seconds after disconnecting negative battery cable.
- Remove center air bag sensor and front air bag sensors if repairing the vehicle requires impacting (shocking) the vehicle.

- Center air bag sensor contains mercury. After replacement, **DO NOT** destroy old part. When scrapping vehicle or replacing center air bag sensor, remove center air bag sensor and dispose of it as toxic waste.
- Never disassemble and repair front air bag sensors, center air bag sensor or steering wheel pad.
- Replace dropped, cracked, dented or otherwise damaged component.
- **DO NOT** expose front air bag sensors, center air bag sensor or steering wheel pad directly to heat or flame.
- Information labels are attached to air bag components. Follow all notices on labels.
- After work on SRS is completed, check air bag warning light to ensure system is functioning properly. See **<u>SYSTEM OPERATION CHECK</u>**.
- 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 upward, 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 body to minimize injury in case of accidental air bag deployment.
- If SRS 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 SRS is not functional, park vehicle until it is repaired and functions properly.

WARNING: Some vehicles are equipped with a passenger-side air bag ON/OFF switch. This switch should NOT be used in place of specified vehicle air bag system disabling and activating procedures.

Disabling Air Bag System

- 1. Obtain radio anti-theft protection code from owner prior to servicing vehicle or deactivate radio anti-theft function before disconnecting vehicle battery.
- 2. Place front wheels in straight-ahead position. Turn ignition switch to LOCK position. Disconnect and shield negative battery cable. Wait at least 90 SECONDS before working on vehicle.
- 3. Remove lower finish panel and steering column lower cover. Remove heater-to-register duct (Supra only). Disconnect driver-side air bag module connector. Air bag connector terminals are automatically shorted together.
- 4. Disconnect passenger-side air bag connector, accessible through finish plate on top or side of glove box opening. Air bag connector is automatically shorted.

Activating Air Bag System

Connect passenger-side air bag connector. Connect driver-side air bag module connector. Install heater-to-

register duct (Supra only). Install steering column lower cover and finish panel. Connect negative battery cable. Perform **<u>SYSTEM OPERATION CHECK</u>**.

VOLKSWAGEN

SYSTEM OPERATION CHECK

An air bag light is located on left side of instrument cluster. Air bag light is used to indicate readiness of system. This light, which glows when ignition switch is on or engine is started, will stay on a few seconds while air bag control unit performs an electronic test of system. If air bag light does not glow when ignition is on or does not go out after a few seconds, a fault probably exists in system. If a fault occurs while ignition is on, it is stored in fault memory. Warning light will then glow and air bag system will be switched off. If warning light glows or flickers while driving, air bag system should be tested.

SERVICE PRECAUTIONS

Observe these precautions when working with air bag systems:

- Before disconnecting battery cable(s) and disabling air bag system, obtain radio security code from vehicle owner.
- **DO NOT** use a computer memory saver tool. Using computer memory saver tool will keep air bag system active and may cause accidental deployment of air bag.
- Disable air bag system before servicing any air bag system or steering column component. See **DISABLING AIR BAG SYSTEM**.
- Because of critical operating requirements of system, **DO NOT** attempt to service any air bag system component.
- Air bag parts should not be left unattended. They should be installed in vehicle immediately after obtaining them.
- Air bag components which have been dropped more than 20 inches should not be used.
- DO NOT expose air bag system components to temperatures greater than 212°F (100°C).
- Chemical cleaners, oil and grease should not contact vinyl covering on air bag.
- DO NOT place stickers or covers on steering wheel.
- Always disable air bag system before performing electric welding on vehicle.

DISABLING & ACTIVATING AIR BAG SYSTEM

To disable air bag system, disconnect and shield negative battery cable. To activate system, turn ignition switch to ON position. Ensure no one is inside vehicle and connect negative battery cable. Perform a system operational check to ensure proper system operation. See **<u>SYSTEM OPERATION CHECK</u>**.

VOLVO

NOTE: Information on C70 is not available from manufacturer.

SYSTEM OPERATION CHECK

Turn ignition switch to ON position (engine not running). If no fault codes are present, SRS warning light will go out after 10 seconds. If SRS is malfunctioning, SRS fault code will be stored in crash sensor memory during the following conditions:

- SRS warning light does not glow.
- SRS warning light does not go out after 10 seconds.
- SRS warning light does not go out after engine is started.
- SRS warning light comes on while driving.

If SRS warning light indicates a malfunction, diagnose air bag system.

Seat Belt Tensioner Inspection

- 1. There are 2 methods of determining seat belt tensioner activation. Start by pulling seat belt out and releasing it. If belt normally extends easily to full length, tensioner has not been activated. If either belt sticks, jerks when reeling and unreeling or fails to reel, both belts must be replaced.
- 2. If seat belt tensioner activation cannot be determined, turn ignition switch to OFF position. Disconnect negative battery cable. Remove "B" post inner panel. Insert a steel rod into tensioner tube to establish position of plunger.
- 3. On 850, S70 and V70, if plunger position is near bottom of tensioner tube, seat belt tensioner has been activated and both belts must be replaced. If plunger position is near top of tensioner tube, seat belt tensioner has not deployed.
- 4. On 960, S90 and V90, if plunger position is near bottom of tensioner tube, seat belt tensioner has not deployed. If plunger position is near top of tensioner tube, seat belt tensioner has been activated and both belts must be replaced.

SERVICE PRECAUTIONS

Observe these precautions when working with air bag systems:

- Always disable SRS before performing any air bag repairs. See **DISABLING & ACTIVATING AIR BAG SYSTEM**.
- Always wear safety glasses and gloves when handling a deployed air bag module and/or seat belt tensioners. Air bag module and/or seat belt tensioners may contain sodium hydroxide deposits, which irritate skin.
- Use caution when handling sensors. Never strike or jar sensors. All sensors and mounting bracket bolts must be tightened carefully to ensure proper sensor operation.
- Never apply power to SRS if any SRS crash sensor is not securely mounted to vehicle.
- Never make any measurement directly on air bag module(s) or seat belt tensioners.
- Wiring repairs should not be performed on any portion of SRS wiring harness.
- Always handle air bag modules with trim cover away from body. Always place air bag module on workbench with trim cover facing up, away from loose objects.

WARNING: DO NOT disconnect crash sensor connector or standby power unit to disable system. This action could cause air bag to deploy.

Disabling System

- 1. Obtain radio security code from vehicle owner. Ensure radio is off before disconnecting battery. This will prevent damage to radio microprocessor.
- 2. Before proceeding, see <u>SERVICE PRECAUTIONS</u>. Turn ignition switch to OFF position. Disconnect and shield negative battery cable. Locate and disconnect air bag module and seat belt tensioner connectors and passenger-side air bag module connector.
- 3. On models with side air bags, remove cover from side seat compartment. Remove transport safety device from inside of cover. Install transport safety device onto side impact sensor. See **Fig. 34**. Repeat procedure for opposite front seat. SRS system is now disabled.

Activating System

After repairs are performed, ensure all wiring and component connectors are connected. Turn ignition switch to ON position. Connect negative battery cable. Ensure vehicle is not occupied when connecting battery cable. Ensure system is functioning properly. See **SYSTEM OPERATION CHECK**.

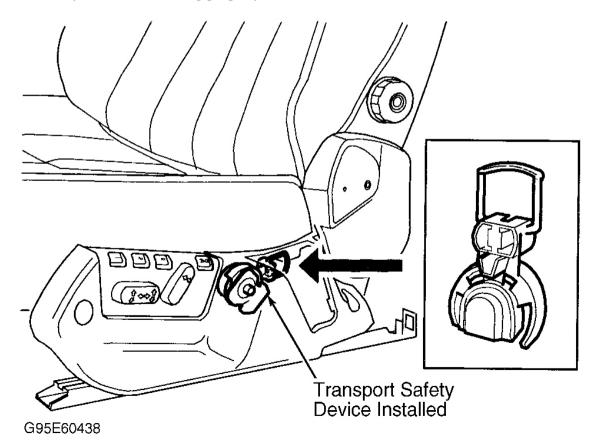


Fig. 34: Disabling Side Air Bags (960, S90 & V90 Shown; 850, S70 & V70 Are Similar) Courtesy of VOLVO CARS OF NORTH AMERICA