

PASSIVE RESTRAINT SYSTEMS

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GENERAL INFORMATION

INTRODUCTION

A dual front airbag system is a standard equipment safety feature on this model. The system includes an inflatable airbag module in the center of the steering wheel, and a second inflatable airbag module in the instrument panel above the glove box. This system is designed to reduce serious injuries to the driver and front seat passenger during a frontal impact of the vehicle.

To test this passive restraint system, refer to the proper Diagnostic Procedures manual. If an airbag module assembly is defective and non-deployed, refer to the Chrysler Corporation current parts return list in the Warranty Policies and Procedures manual for the proper handling procedures.

Following are general descriptions of the major components in the airbag system. Refer to 8W-43 - Airbag System in Group 8W - Wiring Diagrams for complete circuit descriptions and diagrams.

NOTE: This group covers both Left-Hand Drive (LHD) and Right-Hand Drive (RHD) versions of this model. Whenever required and feasible, the RHD versions of affected vehicle components have been constructed as mirror-image of the LHD versions. While most of the illustrations used in this group represent only the LHD version, the diagnostic and service procedures outlined can generally be applied to either version. Exceptions to this rule have been clearly identified as LHD or RHD, if a special illustration or procedure is required.

GENERAL INFORMATION (Continued)

WARNING:

- **THE AIRBAG SYSTEM IS A SENSITIVE, COMPLEX ELECTROMECHANICAL UNIT. BEFORE ATTEMPTING TO DIAGNOSE OR SERVICE ANY AIRBAG SYSTEM OR RELATED STEERING WHEEL, STEERING COLUMN, OR INSTRUMENT PANEL COMPONENTS YOU MUST FIRST DISCONNECT AND ISOLATE THE BATTERY NEGATIVE (GROUND) CABLE. THEN WAIT TWO MINUTES FOR THE SYSTEM CAPACITOR TO DISCHARGE BEFORE FURTHER SYSTEM SERVICE. THIS IS THE ONLY SURE WAY TO DISABLE THE AIRBAG SYSTEM. FAILURE TO DO THIS COULD RESULT IN ACCIDENTAL AIRBAG DEPLOYMENT AND POSSIBLE PERSONAL INJURY.**

- **THE AIRBAG 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 (SODIUM HYDROXIDE IS FORMED IN THE PRESENCE OF MOISTURE) OR COMBUSTIBLE COMPOUNDS. IN ADDITION, THE PASSENGER AIRBAG MODULE CONTAINS ARGON GAS PRESSURIZED TO OVER 2500 PSI. DO NOT ATTEMPT TO DISMANTLE AN AIRBAG MODULE OR TAMPER WITH ITS INFLATOR. DO NOT PUNCTURE, INCINERATE, OR BRING INTO CONTACT WITH ELECTRICITY. DO NOT STORE AT TEMPERATURES EXCEEDING 93° C (200° F).**

- **REPLACE AIRBAG SYSTEM COMPONENTS ONLY WITH PARTS SPECIFIED IN THE CHRYSLER MOPAR PARTS CATALOG. SUBSTITUTE PARTS MAY APPEAR INTERCHANGEABLE, BUT INTERNAL DIFFERENCES MAY RESULT IN INFERIOR OCCUPANT PROTECTION.**

- **THE FASTENERS, SCREWS, AND BOLTS ORIGINALLY USED FOR THE AIRBAG SYSTEM COMPONENTS HAVE SPECIAL COATINGS AND ARE SPECIFICALLY DESIGNED FOR THE AIRBAG SYSTEM. THEY MUST NEVER BE REPLACED WITH ANY SUBSTITUTES. ANY TIME A NEW FASTENER IS NEEDED, REPLACE IT WITH THE CORRECT FASTENERS PROVIDED IN THE SERVICE PACKAGE OR SPECIFIED IN THE CHRYSLER MOPAR PARTS CATALOG.**

- **WHEN A STEERING COLUMN HAS AN AIRBAG MODULE ATTACHED, NEVER PLACE THE COLUMN ON THE FLOOR OR ANY OTHER SURFACE WITH THE STEERING WHEEL OR AIRBAG MODULE FACE DOWN.**

DESCRIPTION AND OPERATION

AIRBAG MODULE*DRIVER SIDE*

The airbag module protective trim cover is the most visible part of the driver side airbag system. The module is mounted directly to the steering wheel. Located under the airbag module trim cover are the horn switch, the airbag cushion, and the airbag cushion supporting components. The airbag module includes a housing to which the cushion and inflator are attached and sealed. The airbag module cannot be repaired, and must be replaced if deployed or in any way damaged.

The inflator assembly is mounted to the back of the airbag module. The inflator seals the hole in the airbag cushion so it can discharge the gas it produces directly into the cushion when supplied with the proper electrical signal. The protective trim cover is fitted to the front of the airbag module and forms a decorative cover in the center of the steering wheel. Upon airbag deployment, this cover will split at a predetermined breakout line.

PASSENGER SIDE

The instrument panel top pad is the most visible part of the passenger side airbag system. Located under the instrument panel top pad are the airbag cushion and its supporting components. The airbag module includes a housing to which the cushion and inflator are attached and sealed. The airbag module cannot be repaired, and must be replaced if deployed or in any way damaged.

The inflator assembly is mounted to the back of the airbag module. The inflator seals the hole in the airbag cushion so it can discharge the gas it produces directly into the cushion when supplied with the proper electrical signal. The instrument panel top pad above the glove box opening has a door and predetermined breakout lines concealed beneath its decorative cover. Upon airbag deployment, the top pad will split at the breakout lines and the door will pivot out of the way.

The airbag module is secured to two mounting brackets beneath the instrument panel top pad and above the glove box opening. The airbag front mounting bracket (closest to the dash panel) is welded to the instrument panel armature. The airbag rear mounting bracket (closest to the passenger) is bolted to the instrument panel armature. Following an airbag deployment, the airbag rear mounting bracket and the instrument panel top pad must be replaced. If the airbag front mounting bracket is damaged, the instrument panel armature assembly must also be replaced.

DESCRIPTION AND OPERATION (Continued)

STORAGE

An airbag module must be stored in its original, special container until used for service. Also, it must be stored in a clean, dry environment; away from sources of extreme heat, sparks, and high electrical energy. Always place or store an airbag module on a surface with its trim cover or airbag side facing up, to minimize movement in case of an accidental deployment.

IMPACT SENSOR

The impact sensor provides verification of the direction and severity of an impact. One impact sensor is used. It is located inside the Airbag Control Module (ACM), which is secured to a bracket on the floor pan transmission tunnel inside the vehicle.

The impact sensor is an accelerometer that senses the rate of deceleration. The microprocessor in the ACM monitors the impact sensor signal. A pre-programmed decision algorithm in the microprocessor determines when the deceleration rate indicates an impact that is severe enough to require airbag system protection. When the programmed conditions are met, the ACM sends an electrical signal to deploy the airbag system components.

The impact sensor is calibrated for the specific vehicle. The sensor is only serviced as a unit with the ACM. The sensor cannot be repaired or adjusted and, if faulty or damaged, the ACM unit must be replaced.

CLOCKSPRING

The clockspring is mounted on the steering column behind the steering wheel. This assembly consists of a plastic housing which contains a flat, ribbon-like, electrically conductive tape that winds and unwinds with the steering wheel rotation.

The clockspring is used to maintain a continuous electrical circuit between the wire harness and the driver side airbag module, the horn switch, the vehicle speed control switches, and the remote radio switches on vehicles that are so equipped. There are also separate versions of the clockspring for models equipped with or without the optional speed proportional steering. Refer to Group 19 - Steering for more information.

The clockspring must be properly centered when it is installed on the steering column following any service removal, or it will be damaged. See the Clockspring Centering procedure in this group for more information.

The clockspring cannot be repaired. If the clockspring is faulty, damaged, or if the airbag has been deployed, the clockspring must be replaced.

AIRBAG CONTROL MODULE

The Airbag Control Module (ACM) contains the impact sensor, and a microprocessor that monitors the impact sensor signals and the airbag system electrical circuits to determine the system readiness. The ACM contains On-Board Diagnostics (OBD), and will send an airbag lamp-on message to the instrument cluster on the Chrysler Collision Detection (CCD) data bus to light the airbag indicator lamp in the instrument cluster when a monitored airbag system fault occurs.

The ACM also contains an energy-storage capacitor. This capacitor stores enough electrical energy to deploy the airbags for up to one second following a battery disconnect or failure during an impact. The purpose of the capacitor is to provide airbag system protection in a severe secondary impact, if the initial impact has damaged or disconnected the battery, but was not severe enough to deploy the airbags.

The ACM cannot be repaired and, if damaged or faulty, it must be replaced.

DIAGNOSIS AND TESTING**AIRBAG SYSTEM**

A DRB scan tool is required for diagnosis of the airbag system. Refer to the proper Diagnostic Procedures manual for more information.

(1) Disconnect and isolate the battery negative cable. If the airbag has not been deployed, wait two minutes for the system capacitor to discharge before further service.

(2) Connect the DRB scan tool to the 16-way data link wire harness connector. The connector is located on the driver side lower edge of the instrument panel, outboard of the steering column (Fig. 1).

(3) Turn the ignition switch to the On position. Exit the vehicle with the DRB. Use the latest version of the proper DRB cartridge.

(4) After checking that nobody is inside the vehicle, reconnect the battery negative cable.

(5) Using the DRB, read and record the active Diagnostic Trouble Code (DTC) data.

(6) Read and record any stored DTC data.

(7) Refer to the proper Diagnostic Procedures manual, if any DTC is found in Step 5 or Step 6.

(8) Erase the stored DTC data. If any problems remain, the stored DTC data will not erase.

(9) With the ignition switch still in the On position, make sure nobody is in the vehicle.

(10) From outside of the vehicle (away from the airbag modules in case of an accidental deployment) turn the ignition switch to the Off position for about ten seconds, and then back to the On position. Observe the airbag indicator lamp in the instrument cluster. It should light for six to eight seconds, and

DIAGNOSIS AND TESTING (Continued)

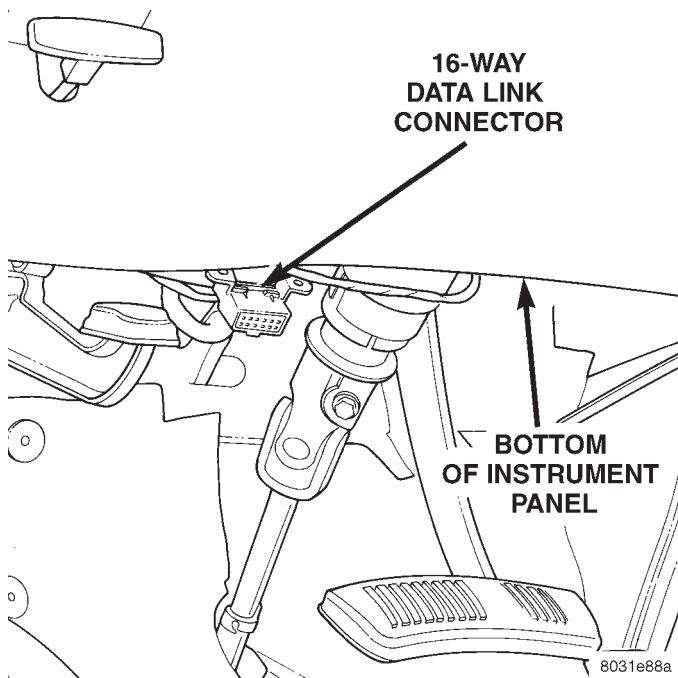


Fig. 1 16-Way Data Link Connector - Typical

then go out. This indicates that the airbag system is functioning normally.

NOTE: If the airbag indicator lamp fails to light, or lights and stays on, there is an airbag system malfunction. Refer to the proper Diagnostic Procedures manual to diagnose the problem.

SERVICE PROCEDURES

AIRBAG SYSTEM

NON-DEPLOYED

At no time should any source of electricity be permitted near the inflator on the back of an airbag module. When carrying a non-deployed airbag module, the trim cover or airbag side of the module should be pointed away from the body to minimize injury in the event of an accidental deployment. If the module is placed on a bench or any other surface, the trim cover or airbag side of the module should be face up to minimize movement in the event of an accidental deployment.

In addition, the airbag system should be disarmed whenever any steering wheel, steering column, or instrument panel components require diagnosis or service. Failure to observe this warning could result in accidental airbag deployment and possible personal injury. Refer to Group 8E - Instrument Panel Systems for additional service procedures on the instrument panel. Refer to Group 19 - Steering for

additional service procedures on the steering wheel and steering column.

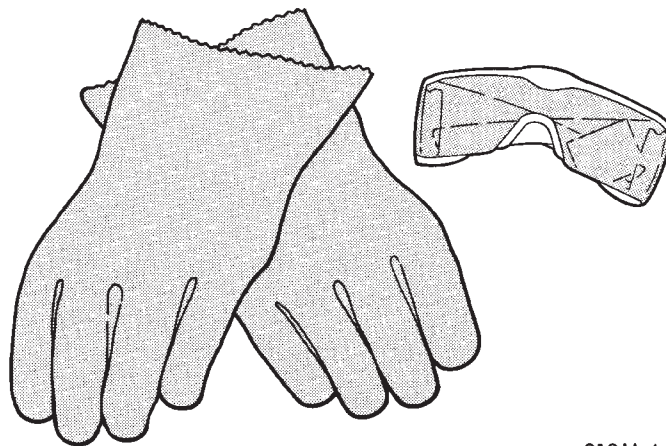
DEPLOYED

Any vehicle which is to be returned to use after an airbag deployment, must have both airbag modules, the clockspring, the instrument panel top pad, and the passenger side airbag rear mounting bracket replaced. These components will be damaged or weakened as a result of an airbag deployment, which may or may not be obvious during a visual inspection, and are not intended for reuse.

Other vehicle components should be closely inspected, but are to be replaced only as required by the extent of the visible damage incurred.

CLEANUP PROCEDURE

Following an airbag system deployment, the vehicle interior will contain a powdery residue. This residue is primarily sodium bicarbonate (baking soda), used as an airbag cushion lubricant. However, there will also be traces of sodium hydroxide powder, a chemical by-product of the generant used for airbag deployment. Since this powder can irritate the skin, eyes, nose, or throat, be sure to wear safety glasses, rubber gloves, and a long-sleeved shirt during cleanup (Fig. 2).



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Fig. 2 Wear Safety Glasses and Rubber Gloves

WARNING: IF YOU EXPERIENCE SKIN IRRITATION DURING CLEANUP, RUN COOL WATER OVER THE AFFECTED AREA. ALSO, IF YOU EXPERIENCE IRRITATION OF THE NOSE OR THROAT, EXIT THE VEHICLE FOR FRESH AIR UNTIL THE IRRITATION CEASES. IF IRRITATION CONTINUES, SEE A PHYSICIAN.

Begin the cleanup by removing the airbag modules from the vehicle as described in this group.

Use a vacuum cleaner to remove any residual powder from the vehicle interior. Clean from outside the

SERVICE PROCEDURES (Continued)

vehicle and work your way inside, so that you avoid kneeling or sitting on a non-cleaned area.

Be sure to vacuum the heater and air conditioning outlets as well (Fig. 3). Run the heater and air conditioning blower on the lowest speed setting and vacuum any powder expelled from the outlets. You may need to vacuum the interior of the vehicle a second time to recover all of the powder.

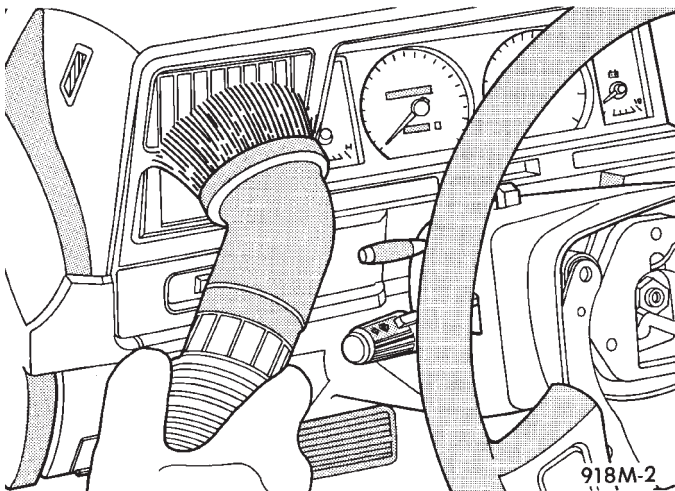


Fig. 3 Vacuum Heater and A/C Outlets

Place the deployed airbag modules in your vehicular scrap pile.

REMOVAL AND INSTALLATION

AIRBAG MODULE

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- **WHEN REMOVING A DEPLOYED AIRBAG MODULE, RUBBER GLOVES, EYE PROTECTION, AND A LONG-SLEEVED SHIRT SHOULD BE WORN. THERE MAY BE DEPOSITS ON THE AIRBAG MODULE AND OTHER INTERIOR SURFACES. IN LARGE DOSES, THESE DEPOSITS MAY CAUSE IRRITATION TO THE SKIN AND EYES.**

DRIVER SIDE

(1) Disconnect and isolate the battery negative cable. If the airbag module has not been deployed, wait two minutes for the system capacitor to discharge before further service.

(2) From the underside of the steering wheel, remove the three screws that secure the driver side airbag module to the steering wheel (Fig. 4).

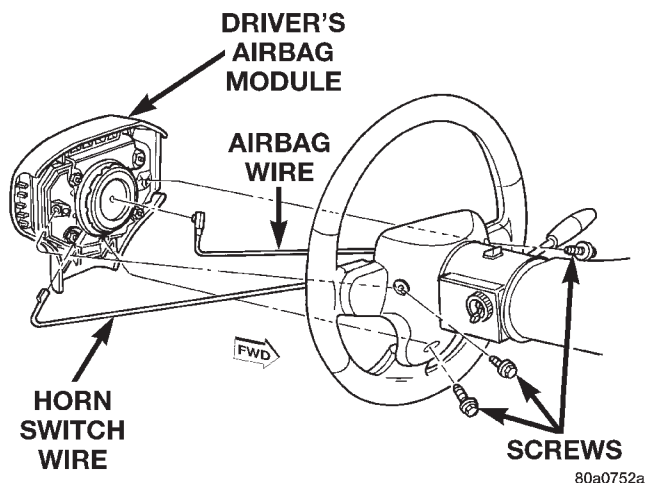


Fig. 4 Driver Side Airbag Module Remove/Install

(3) Pull the airbag module away from the steering wheel far enough to unplug the airbag module and horn switch wire harness connectors from the back of the airbag module.

(4) Remove the airbag module from the steering wheel.

(5) If the airbag has been deployed, see the procedure for replacing the clockspring in this group.

(6) When installing the airbag module, connect the clockspring wire harness connector to the module by pressing straight in on the connector. Be certain that the connector is fully engaged by observing the latching clip arms on the top of the connector.

(7) Install the three airbag module mounting screws and tighten to 10.2 N·m (90 in. lbs.).

(8) Do not connect the battery negative cable at this time. See Airbag System in Diagnosis and Testing for the proper procedures.

PASSENGER SIDE

The following procedure is for replacement of a faulty or damaged passenger side airbag module. If the passenger side airbag module has been deployed, the instrument panel top pad and passenger side airbag rear mounting bracket must be replaced. Refer to Group 8E - Instrument Panel Systems for the procedures required for instrument panel top pad service.

(1) Disconnect and isolate the battery negative cable. If the airbag module has not been deployed, wait two minutes for the system capacitor to discharge before further service.

REMOVAL AND INSTALLATION (Continued)

(2) Remove the instrument panel top pad. Refer to Group 8E - Instrument Panel Systems for the procedures.

(3) Remove the two screws that secure the airbag module to the front airbag mounting bracket (Fig. 5).

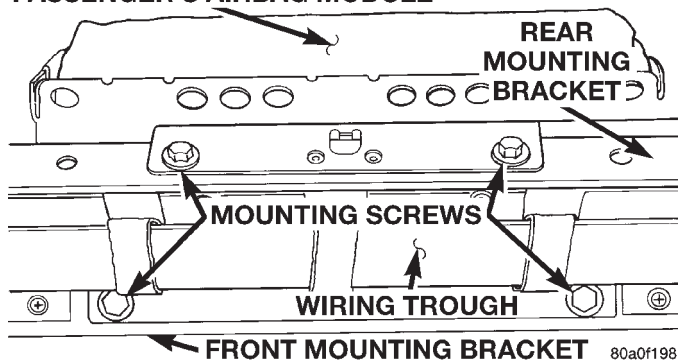
PASSENGER'S AIRBAG MODULE

Fig. 5 Passenger Side Airbag Module Remove/Install

(4) Remove the two screws that secure the airbag module to the rear airbag mounting bracket.

(5) Unplug the airbag module wire harness connector and remove the airbag module from the instrument panel.

(6) If the airbag has been deployed, see the procedure for replacing the passenger side rear airbag mounting bracket in this group.

WARNING: USE EXTREME CARE TO PREVENT ANY FOREIGN MATERIAL FROM ENTERING THE PASSENGER SIDE AIRBAG MODULE, OR BECOMING ENTRAPPED BETWEEN THE INSTRUMENT PANEL TOP PAD AND THE PASSENGER SIDE AIRBAG MODULE. FAILURE TO OBSERVE THIS WARNING COULD RESULT IN OCCUPANT INJURIES UPON AIRBAG DEPLOYMENT.

(7) Install and tighten the airbag module mounting screws to 11.75 N·m (105 in. lbs.).

NOTE: If the airbag module mounting screws cannot be tightened to the specified torque value, replace the screws with the oversized screws specified in the Mopar Parts Catalog.

(8) Reverse the remaining removal procedures to complete the installation.

(9) When reinstalling the passenger side airbag module, be certain that the airbag module wire harness connector latches are fully engaged.

(10) Do not connect the battery negative cable at this time. See Airbag System in Diagnosis and Testing for the proper procedures.

DRIVER SIDE AIRBAG TRIM COVER AND HORN SWITCH**WARNING:**

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- **THE HORN SWITCH IS INTEGRAL TO THE AIRBAG MODULE TRIM COVER. SERVICE OF THIS COMPONENT SHOULD BE PERFORMED ONLY BY CHRYSLER-TRAINED AND AUTHORIZED DEALER SERVICE TECHNICIANS. FAILURE TO TAKE THE PROPER PRECAUTIONS OR TO FOLLOW THE PROPER PROCEDURES COULD RESULT IN ACCIDENTAL, INCOMPLETE, OR IMPROPER AIRBAG DEPLOYMENT AND POSSIBLE PERSONAL INJURY.**

(1) Disconnect and isolate the battery negative cable. If the airbag module has not been deployed, wait two minutes for the system capacitor to discharge before further service.

(2) Remove the driver side airbag module as described in this group.

(3) Remove the two plastic horn switch feed wire retainers from the studs on the airbag housing (Fig. 6).

(4) Unplug the horn switch ground wire from the airbag module lower trim cover retainer.

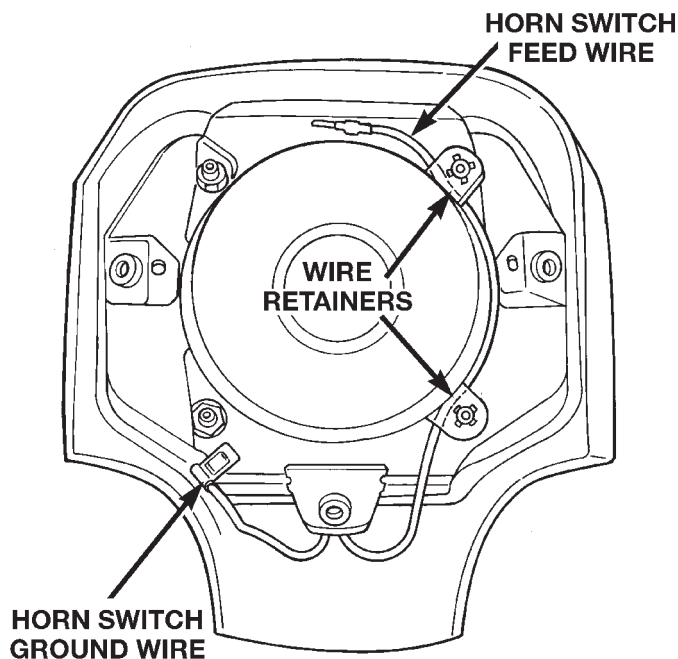
(5) Remove the four nuts that secure the upper and lower trim cover retainers to the studs on the airbag housing (Fig. 7).

(6) Remove the upper and lower trim cover retainers from the airbag housing studs.

(7) Disengage the five trim cover locking blocks from the lip around the outside edge of the airbag housing and remove the housing from the cover (Fig. 8).

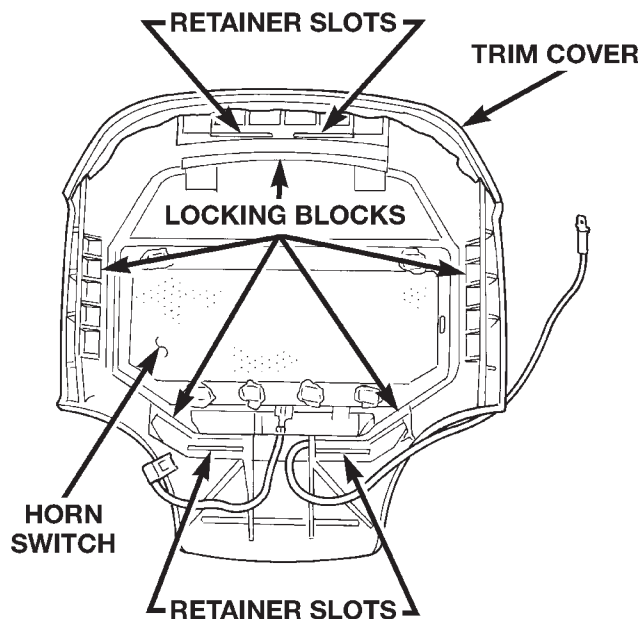
WARNING: USE EXTREME CARE TO PREVENT ANY FOREIGN MATERIAL FROM ENTERING THE DRIVER SIDE AIRBAG MODULE, OR BECOMING ENTRAPPED BETWEEN THE DRIVER SIDE AIRBAG MODULE TRIM COVER AND THE DRIVER SIDE AIRBAG MODULE. FAILURE TO OBSERVE THIS WARNING COULD RESULT IN OCCUPANT INJURIES UPON AIRBAG DEPLOYMENT.

REMOVAL AND INSTALLATION (Continued)



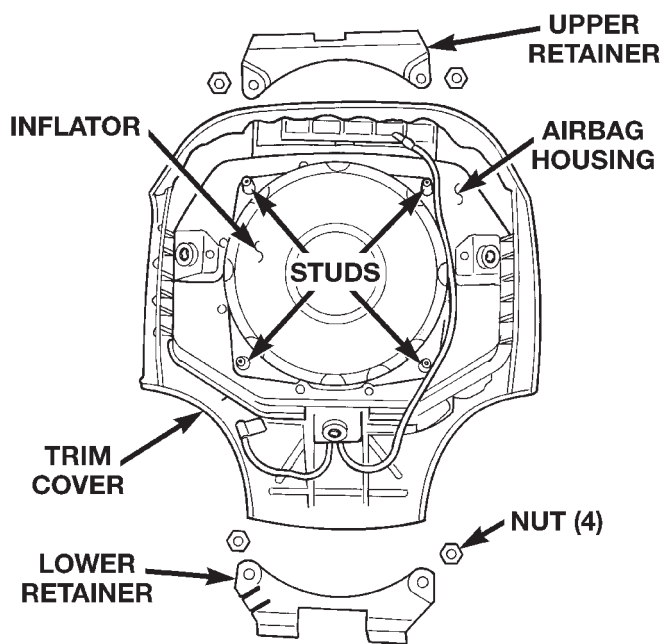
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Fig. 6 Horn Switch Feed Wires Remove/Install



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Fig. 8 Airbag Trim Cover Remove/Install



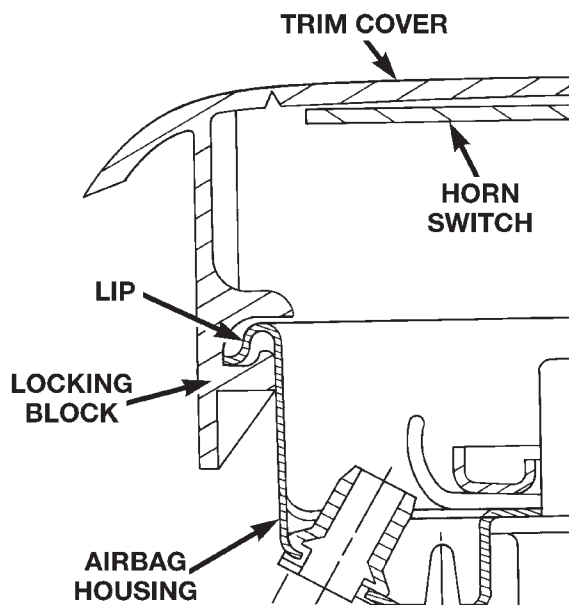
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Fig. 7 Airbag Trim Cover Retainers Remove/Install

(8) When installing the trim cover and horn switch, be certain that the locking blocks are fully engaged on the lip of the airbag housing (Fig. 9).

(9) When installing the upper and lower trim cover retainers, be certain that the tabs on each retainer are engaged in the retainer slots of the trim cover (Fig. 8).

(10) Install and tighten the trim cover retainer nuts to 10 N·m (90 in. lbs.).



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Fig. 9 Airbag Trim Cover Locking Blocks Installed

(11) Reverse the remaining removal procedures to complete the installation, but do not connect the battery negative cable at this time. See Airbag System in Diagnosis and Testing for the proper procedures.

PASSENGER SIDE AIRBAG REAR MOUNTING BRACKET

(1) Remove the passenger side airbag module as described in this group.

REMOVAL AND INSTALLATION (Continued)

(2) Remove the screws that secure the instrument panel wire harness trough to the airbag rear mounting bracket.

(3) Remove the heater-A/C control from the instrument panel. Refer to Group 24 - Heating and Air Conditioning for the procedures.

(4) Reach through the heater-A/C control opening in the instrument panel to remove the two bolts that secure the inboard end of the airbag rear mounting bracket to the instrument panel armature (Fig. 10).

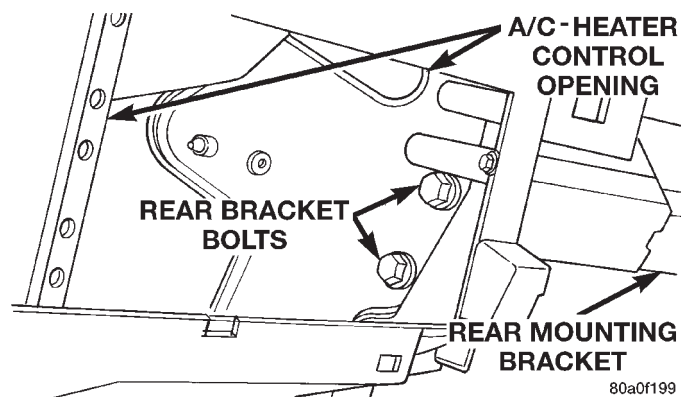


Fig. 10 Inboard Mounting Bolts Remove/Install

(5) Remove the two bolts that secure the outboard end of the airbag rear mounting bracket from the passenger side outboard end of the instrument panel armature (Fig. 11).

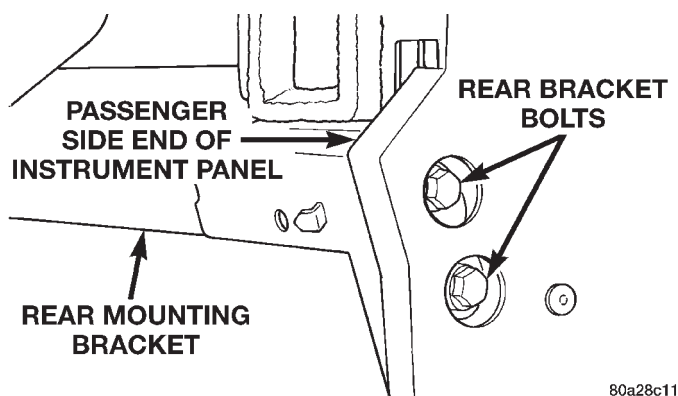


Fig. 11 Outboard Mounting Bolts Remove/Install

(6) Remove the airbag rear mounting bracket through the lower opening of the instrument panel armature, outboard end first.

(7) Reverse the removal procedures to install. Tighten the mounting bolts to 11.75 N·m (105 in. lbs.).

AIRBAG CONTROL MODULE

WARNING:

- THE AIRBAG CONTROL MODULE CONTAINS THE IMPACT SENSOR, WHICH ENABLES THE SYSTEM TO DEPLOY THE AIRBAG. BEFORE ATTEMPT-

ING TO DIAGNOSE OR SERVICE ANY AIRBAG SYSTEM OR RELATED STEERING WHEEL, STEERING COLUMN, OR INSTRUMENT PANEL COMPONENTS YOU MUST FIRST DISCONNECT AND ISOLATE THE BATTERY NEGATIVE (GROUND) CABLE. THEN WAIT TWO MINUTES FOR THE SYSTEM CAPACITOR TO DISCHARGE BEFORE FURTHER SYSTEM SERVICE. THIS IS THE ONLY SURE WAY TO DISABLE THE AIRBAG SYSTEM. FAILURE TO DO THIS COULD RESULT IN ACCIDENTAL AIRBAG DEPLOYMENT AND POSSIBLE PERSONAL INJURY.

- NEVER STRIKE OR KICK THE AIRBAG CONTROL MODULE, AS IT CAN DAMAGE THE IMPACT SENSOR OR AFFECT ITS CALIBRATION. IF AN AIRBAG CONTROL MODULE IS ACCIDENTALLY DROPPED DURING SERVICE, THE MODULE MUST BE SCRAPPED AND REPLACED WITH A NEW UNIT.

(1) Disconnect and isolate the battery negative cable. If the airbag has not been deployed, wait two minutes for the system capacitor to discharge before further service.

(2) If the vehicle is equipped with an automatic transmission, pull the transmission shift lever handle straight up firmly and quickly to remove the handle. If the vehicle is equipped with a manual transmission, remove the shift lever knob by removing the bezel and nut from the top of the knob.

(3) Release the automatic transmission shift indicator bezel or the manual transmission shift lever boot, and the transfer case shift indicator bezel by prying between the edge of the bezel or boot and the floor console with a trim stick or another suitable wide flat-bladed tool (Fig. 12).

(4) Raise the shift indicator bezel(s) far enough from the console to remove the lamp sockets from the bezel(s), then remove the bezel(s) and/or boot from the console.

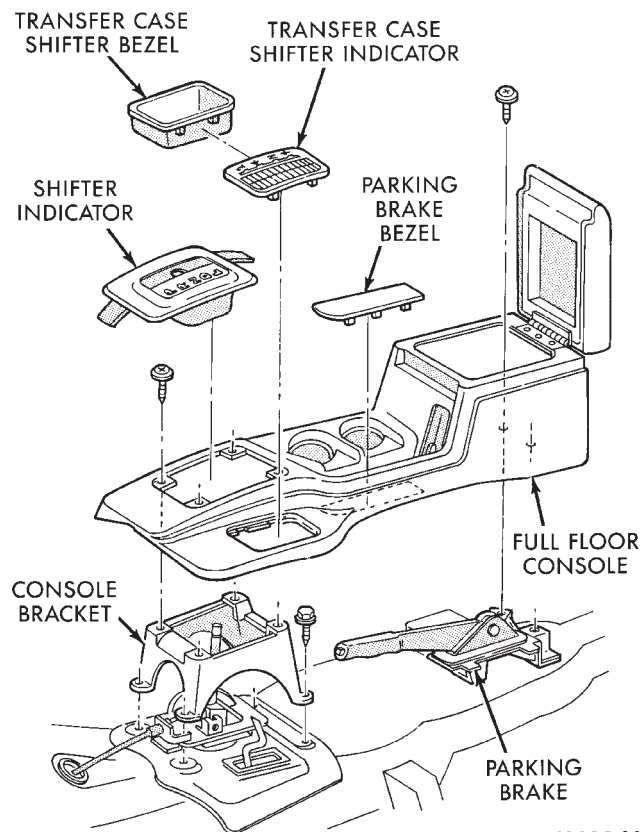
(5) Remove the screws that secure the floor console to the console and parking brake lever mounting brackets.

(6) Remove the floor console from the floor pan transmission tunnel.

(7) Unplug the Airbag Control Module (ACM) wire harness connector. To unplug the connector, first pull the two white locks out about 3 mm (0.125 in.) from each side of the connector (Fig. 13). Then squeeze the two connector latch tabs between the thumb and forefinger, while pulling the connector out from the ACM.

NOTE: Always remove and replace the airbag control module and its mounting bracket as a unit. Replacement modules include a replacement mounting bracket. Do not transfer the module to another mounting bracket.

REMOVAL AND INSTALLATION (Continued)



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Fig. 12 Floor Console Components

(8) Remove the four screws that secure the ACM mounting bracket to the floor pan transmission tunnel (Fig. 14).

(9) Remove the ACM and mounting bracket as a unit.

(10) When installing the ACM, position the unit with the arrow on the ACM housing pointing forward.

(11) Attach the ACM to the floor pan transmission tunnel with the four mounting screws. Tighten the mounting screws to 10.7 N·m (95 in. lbs.).

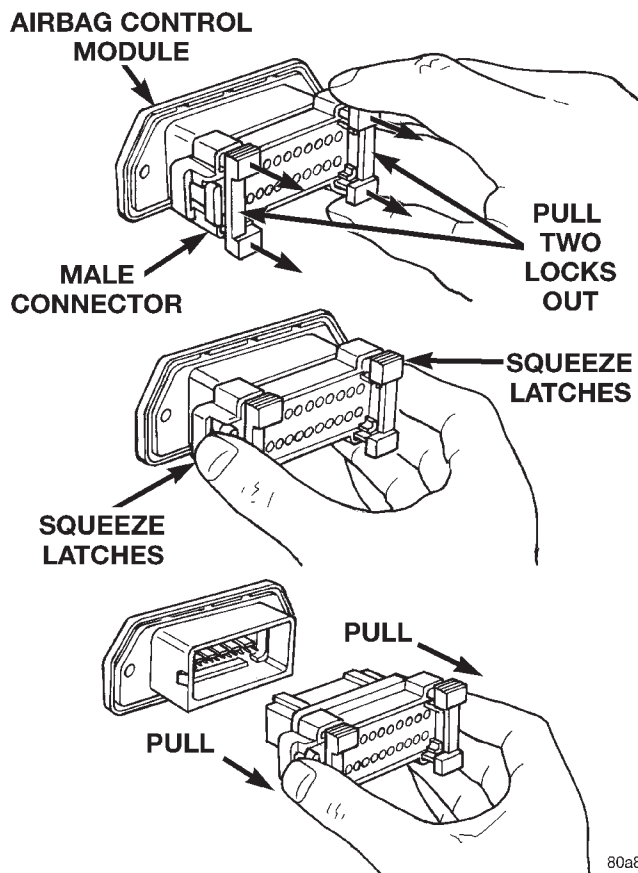
(12) Plug in the wire harness connector to the ACM. Be certain that the connector latches are fully engaged and that the connector locks are pushed in.

(13) Reverse the remaining removal procedures to complete the installation.

(14) Do not connect the battery negative cable at this time. See Airbag System in Diagnosis and Testing for the proper procedures.

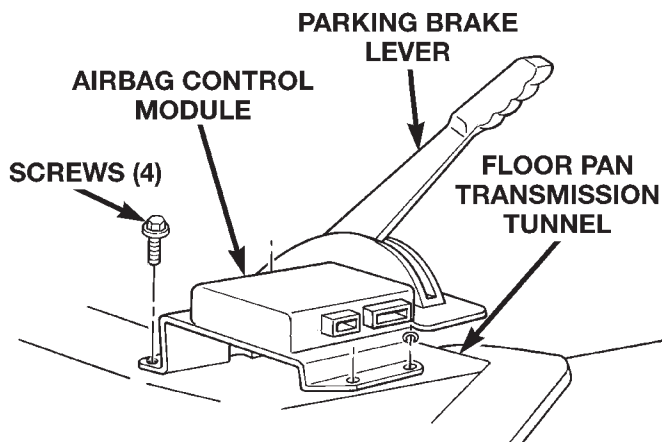
CLOCKSPRING

WARNING: THE AIRBAG SYSTEM IS A SENSITIVE, COMPLEX ELECTROMECHANICAL UNIT. BEFORE ATTEMPTING TO DIAGNOSE OR SERVICE ANY AIRBAG SYSTEM OR RELATED STEERING WHEEL, STEERING COLUMN, OR INSTRUMENT PANEL



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Fig. 13 Airbag Control Module Connector Removal



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Fig. 14 Airbag Control Module Remove/Install

COMPONENTS YOU MUST FIRST DISCONNECT AND ISOLATE THE BATTERY NEGATIVE (GROUND) CABLE. THEN WAIT TWO MINUTES FOR THE SYSTEM CAPACITOR TO DISCHARGE BEFORE FURTHER SYSTEM SERVICE. THIS IS THE ONLY SURE WAY TO DISABLE THE AIRBAG SYSTEM. FAILURE TO DO THIS COULD RESULT IN ACCIDENTAL AIRBAG DEPLOYMENT AND POSSIBLE PERSONAL INJURY.

REMOVAL AND INSTALLATION (Continued)

(1) Turn the steering wheel until the front wheels are in the straight-ahead position before starting the procedure.

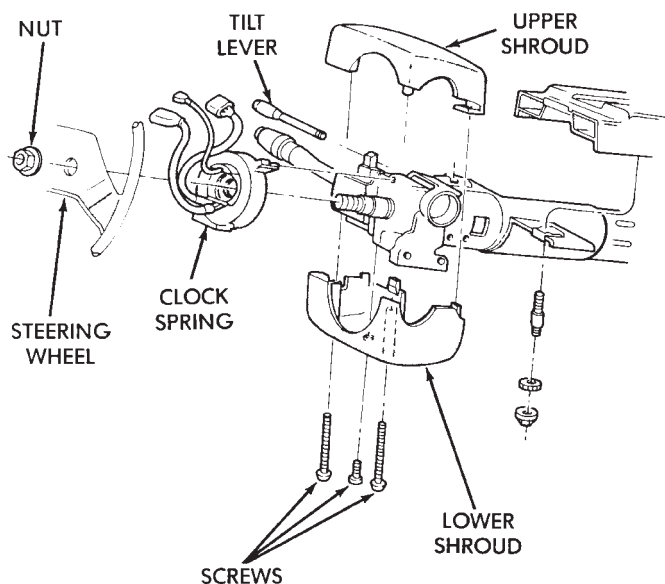
(2) Disconnect and isolate the battery negative cable. If the airbag has not been deployed, wait two minutes for the system capacitor to discharge before further service.

(3) Remove the airbag module as described in this group.

(4) If the vehicle is so equipped, unplug the wire harness connectors for the vehicle speed control switches and the remote radio switches.

(5) Remove the steering wheel with a steering wheel puller (Special Tool C-3428B).

(6) Remove the upper and lower steering column shrouds to gain access to the clockspring wire harness connectors (Fig. 15).



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Fig. 15 Steering Column Shrouds Remove/Install-Typical

(7) Unplug the wire harness connectors from the clockspring.

(8) Remove the lower fixed column shroud.

(9) Unplug the wire harness connector between the clockspring and the instrument panel wire harness, located near the base of the steering column.

(10) To remove the clockspring, lift the locating fingers of the clockspring assembly from the steering column as necessary. The clockspring cannot be repaired. It must be replaced if faulty, or if the airbag has been deployed.

(11) When installing the clockspring, snap the clockspring onto the steering column. If the clockspring is not properly positioned, see Clockspring

Centering in this group before installing the steering wheel.

(12) Plug the clockspring wire harness connector into the instrument panel wire harness. Be certain that the wire harness locator clips are properly seated on the outside of the wiring trough and that the connector latches are fully engaged.

(13) Reinstall the steering column shrouds. Be certain that the clockspring wire harness is inside the shrouds.

(14) The front wheels should still be in the straight-ahead position. Install the steering wheel being certain to fit the flats on the hub of the steering wheel onto the formations on the inside of the clockspring. Pull the wire harnesses from the clockspring through the upper and lower holes in the steering wheel hub. Tighten the steering wheel nut to 61 N·m (45 ft. lbs.). Be certain not to pinch the wiring between the steering wheel and the nut.

(15) If the vehicle is so equipped, plug in the vehicle speed control switch and remote radio switch wire harness connectors.

(16) Install the airbag module as described in this group.

ADJUSTMENTS

CLOCKSPRING CENTERING

If the rotating tape within the clockspring is not positioned properly in relation to the steering wheel and the front wheels, the clockspring may fail during use. The clockspring must be centered if it is not known to be properly positioned, or if the front wheels were moved from the straight-ahead position with the clockspring removed during any service procedure.

WARNING: THE AIRBAG SYSTEM IS A SENSITIVE, COMPLEX ELECTROMECHANICAL UNIT. BEFORE ATTEMPTING TO DIAGNOSE OR SERVICE ANY AIRBAG SYSTEM OR RELATED STEERING WHEEL, STEERING COLUMN, OR INSTRUMENT PANEL COMPONENTS YOU MUST FIRST DISCONNECT AND ISOLATE THE BATTERY NEGATIVE (GROUND) CABLE. THEN WAIT TWO MINUTES FOR THE SYSTEM CAPACITOR TO DISCHARGE BEFORE FURTHER SYSTEM SERVICE. THIS IS THE ONLY SURE WAY TO DISABLE THE AIRBAG SYSTEM. FAILURE TO DO THIS COULD RESULT IN ACCIDENTAL AIRBAG DEPLOYMENT AND POSSIBLE PERSONAL INJURY.

(1) Turn the steering wheel until the front wheels are in the straight-ahead position before starting the centering procedure.

ADJUSTMENTS (Continued)

(2) Disconnect and isolate the battery negative cable. If the airbag has not been deployed, wait two minutes for the system capacitor to discharge before further service.

(3) Remove the airbag module as described in this group.

(4) If the vehicle is so equipped, unplug the wire harness connectors from the vehicle speed control switches and the remote radio switches.

(5) Remove the steering wheel with a steering wheel puller (Special Tool C-3428B).

(6) Depress the two plastic clockspring auto-locking tabs (Fig. 16).

(7) Keeping the locking mechanism disengaged, rotate the clockspring rotor clockwise to the end of its travel. Do not apply excessive torque.

(8) From the end of the clockwise travel, rotate the rotor two and one-half turns counterclockwise. The horn wire harness should end up at the top, and the airbag wire harness at the bottom.

(9) The front wheels should still be in the straight-ahead position. Install the steering wheel being certain to fit the flats on the hub of the steering wheel onto the formations on the inside of the clockspring. Pull the wire harnesses from the clockspring through the upper and lower holes in the steering wheel hub. Tighten the steering wheel nut to 61 N·m (45 ft. lbs.). Be certain not to pinch any of the wiring between the steering wheel and the nut.

(10) If the vehicle is so equipped, plug in the vehicle speed control switch and remote radio switch wire harness connectors.

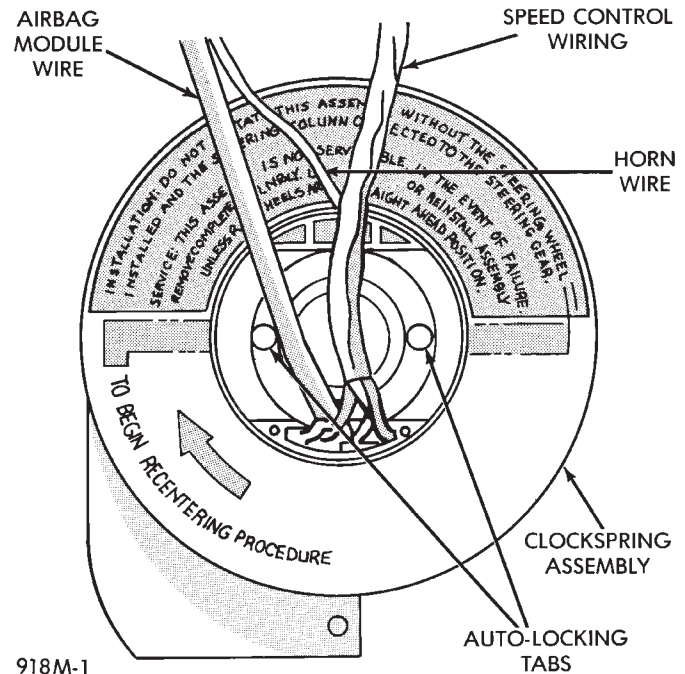


Fig. 16 Clockspring Auto-Locking Tabs

(11) Install the airbag module as described in this group.

