

GROUP

SEATS 41

(70000)

SECTION TITLE	PAGE	SECTION TITLE	PAGE
RESTRAINT SYSTEM — SUPPLEMENTAL AIR		SEAT, CHILD RESTRAINT — TETHER	
BAG.....41-58-1		ATTACHMENT.....41-52-1	
SEAT AND SHOULDER SAFETY BELT.....41-50-1		SEATS, FRONT.....41-04-1	
		SEATS, REAR.....41-20-1	

SECTION 41-04 Seats, Front

SUBJECT	PAGE	SUBJECT	PAGE
DESCRIPTION.....41-04-1		REMOVAL AND INSTALLATION (Cont'd.)	
REMOVAL AND INSTALLATION		Seat Height Adjuster, LH Seat.....41-04-9	
Head Restraint and Cover.....41-04-7		Seat Height Adjustment Mechanism Control	
Lumbar Support Assembly, LH Seat.....41-04-8		Assembly, LH Seat.....41-04-9	
Reclining Mechanism.....41-04-7		Seat Track Assembly.....41-04-2	
Seat.....41-04-1		SPECIAL SERVICE TOOLS.....41-04-10	
Seat Back.....41-04-4		SPECIFICATIONS.....41-04-10	
Seat Back Cover and Cushion.....41-04-5		VEHICLE APPLICATION.....41-04-1	
Seat Cover and Cushion.....41-04-3			

VEHICLE APPLICATION

Capri.

DESCRIPTION

The front seats are singular bucket style units. The driver's seat incorporates mechanisms for a reclining seat back, lumbar adjustment, height adjustment and fore-and-aft movement. The passenger's seat incorporates mechanisms for a reclining seat back, and fore-and-aft movement only.

REMOVAL AND INSTALLATION

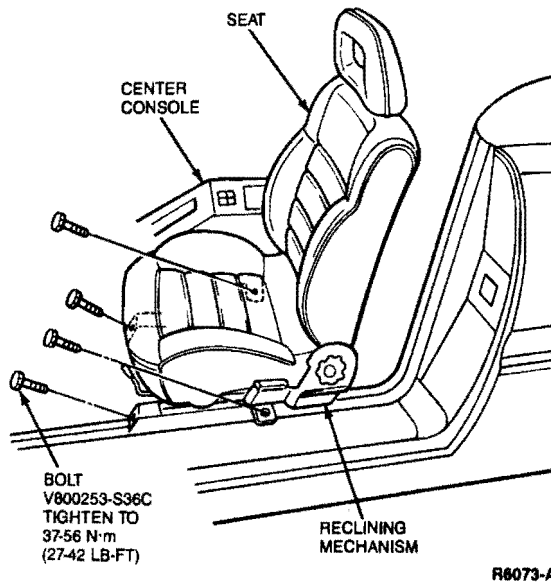
Seat

Removal

1. Remove two bolts retaining front of seat assembly to floor.

2. Remove two bolts retaining rear of seat to floor.
3. Carefully remove seat assembly from vehicle.

REMOVAL AND INSTALLATION (Continued)



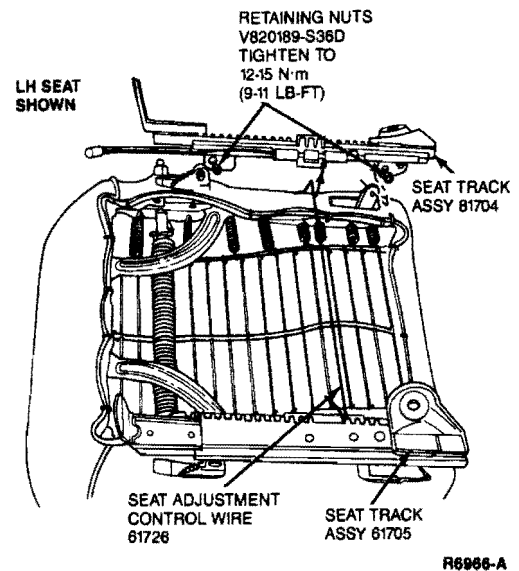
Installation

1. Position seat assembly into vehicle.
2. Install two front bolts.
3. Install two rear bolts.
4. Tighten bolts to 36-56 N·m (27-42 lb-ft).
5. Check all seat functions for proper operation.

Seat Track Assembly

Removal

1. Remove seat assembly as outlined.
2. Place seat upside-down on a clean work surface.
3. Note position of seat adjustment control wire for proper installation and remove.
4. On RH seat, remove seat track spring.
5. Remove nuts securing seat track to seat frame. Note position of seat adjustment for proper installation.
6. Remove seat track.



Installation

1. Position seat track onto studs. Ensure adjustment position is equal on both seat tracks.
2. Install retaining nuts. Tighten to 12-15 N·m (9-11 lb-ft).
3. Install seat adjustment control wire as removed.

NOTE: Improper installation of the seat adjustment wire can cause the adjustment unit to function improperly.

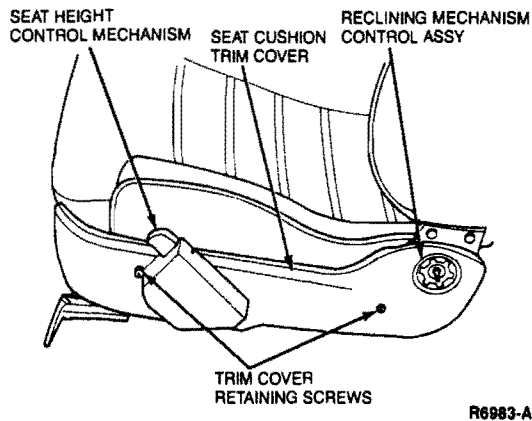
REMOVAL AND INSTALLATION (Continued)

4. On RH seat, install seat track spring.
5. Install seat as outlined.

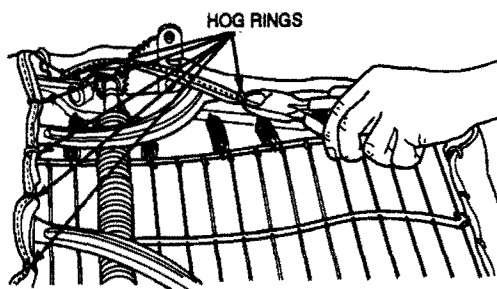
Seat Cover and Cushion

Removal

1. Remove seat as outlined.
2. Remove seat back and tracks as outlined.
3. Remove height adjustment control assembly as outlined (LH seat only).
4. Remove trim cover.

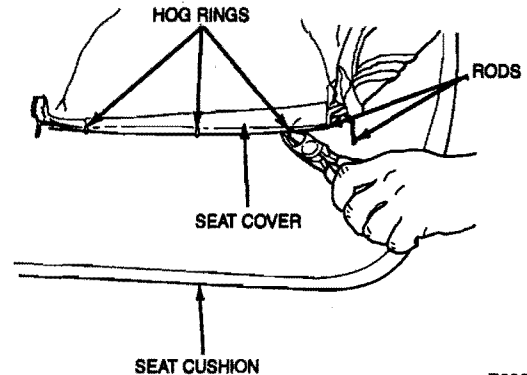


5. Cut and remove hog rings retaining cushion cover to seat frame.



R6967-A

CAUTION: Some hog rings are connected to metal rods embedded in the seat cushion. Use care when removing seat cover to prevent tearing rods from cushion.

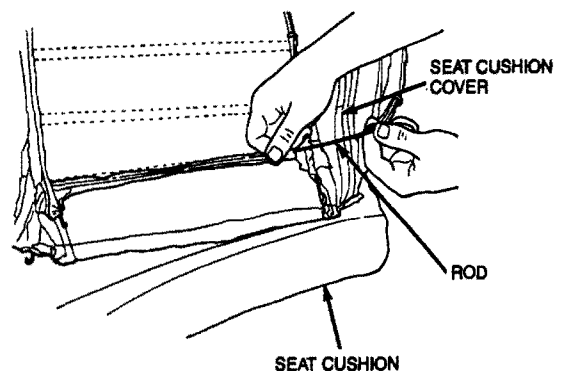


R6968-A

6. Carefully roll seat cover up and cut hog rings from seat cushion. Remove cushion cover.
7. Remove seat cushion, if necessary.

Installation

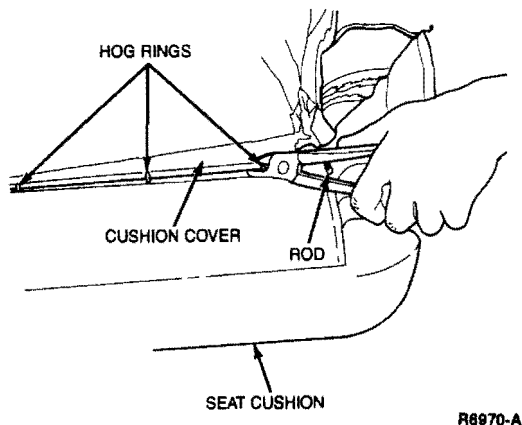
1. Position cushion on seat frame, if removed.
2. Ensure rods are inserted in seat cushion cover.



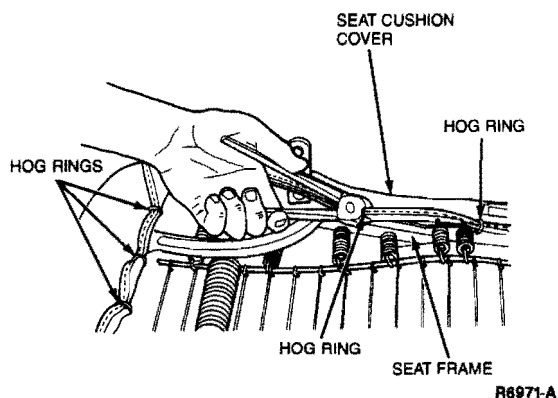
R6969-A

REMOVAL AND INSTALLATION (Continued)

3. Position cushion cover and install hog rings to rods embedded in cushion.



4. Fit cushion cover around seat frame and install hog rings.

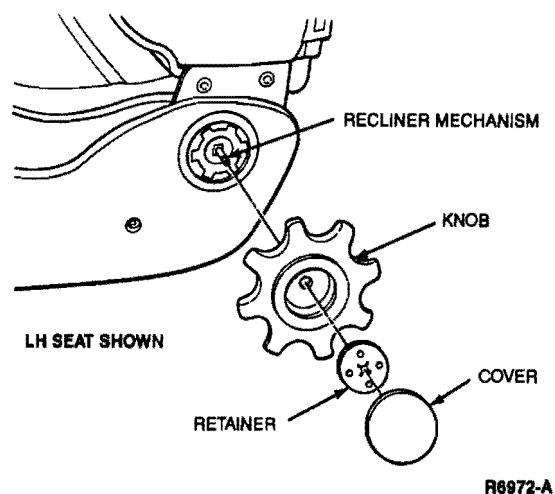


5. Install seat back and seat tracks as outlined.
6. Install trim cover.
7. Install height control assembly as outlined (LH seat only).
8. Install seat as outlined.

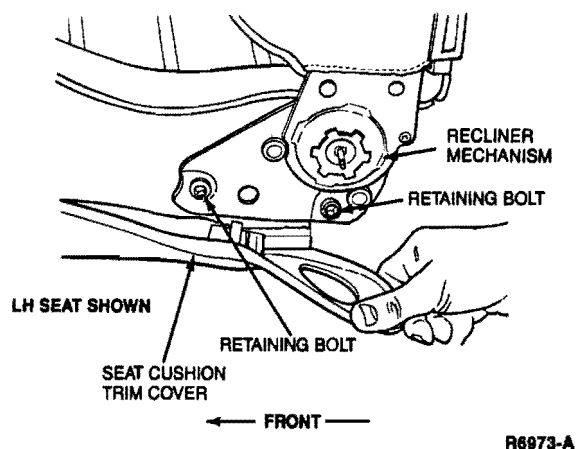
Seat Back

Removal

1. Remove seat as outlined. Place seat on workbench.
2. Remove recliner knob, cover and retainer.

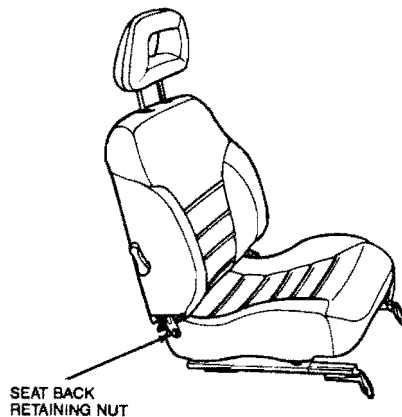


3. Remove seat cushion trim cover retaining screws.
4. Carefully pull back trim cover and remove seat back recliner retaining bolts. On RH seat only, disconnect seat track release cable.



REMOVAL AND INSTALLATION (Continued)

5. Remove seat back retaining nut. Remove seat back.



LH SEAT SHOWN

R6974-A

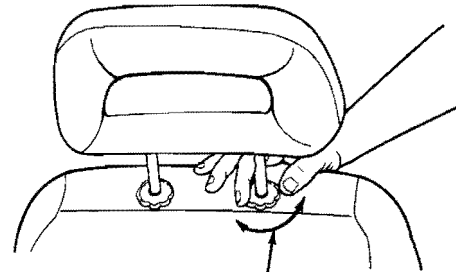
Installation

1. Position seat back to seat cushion.
2. Install retaining nut. Tighten to 15-19 N·m (11-14 lb-ft). Install reclining mechanism retaining bolts. Tighten to 31-41 N·m (23-30 lb-ft).
3. On RH seat only, connect seat track release cable.
4. Install seat cushion trim cover retaining screws.
5. Install recliner knob, retainer and cover.

Seat Back Cover and Cushion

Removal

1. Remove seat back as outlined.
2. Remove head restraint by turning retainer in direction of arrow and lifting off head restraint.

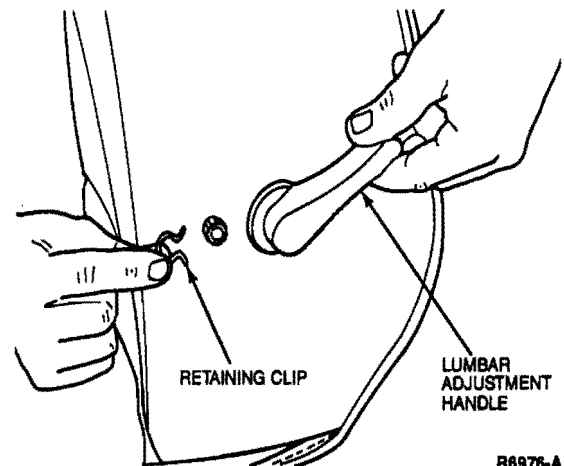


TURN IN DIRECTION
OF ARROW WHILE
LIFTING HEAD RESTRAINT

LH SEAT SHOWN

R6975-A

3. Remove lumbar adjustment handle by removing retaining clip (LH seat only).

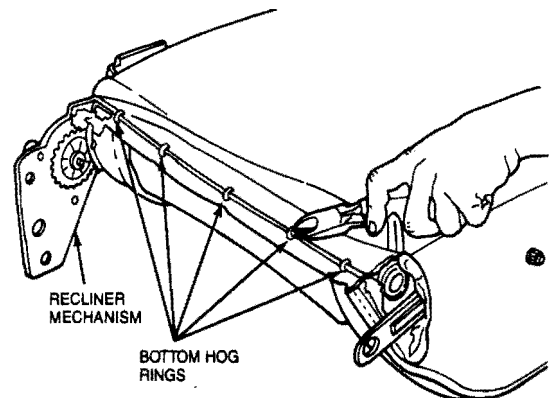


RETAINING CLIP

LUMBAR
ADJUSTMENT
HANDLE

R6976-A

4. Remove bottom hog rings.

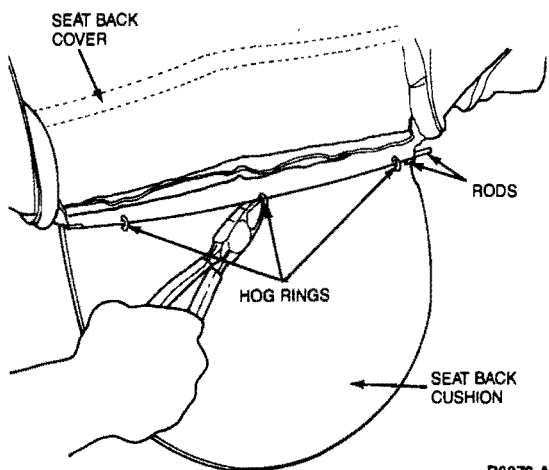
RECLINER
MECHANISMBOTTOM HOG
RINGS

LH SEAT SHOWN

R6977-A

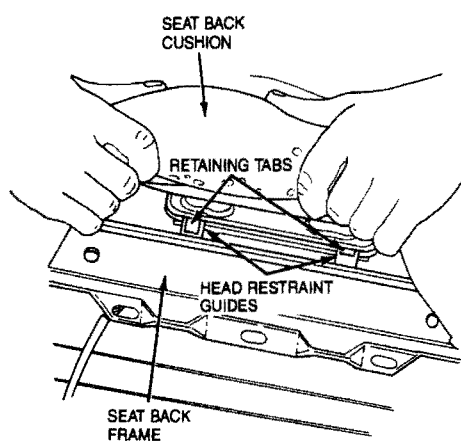
REMOVAL AND INSTALLATION (Continued)

5. Carefully roll up cover and remove hog rings attached to rod in seat back cushion.



R6978-A

6. Release head restraint guide retaining tabs and remove guides.

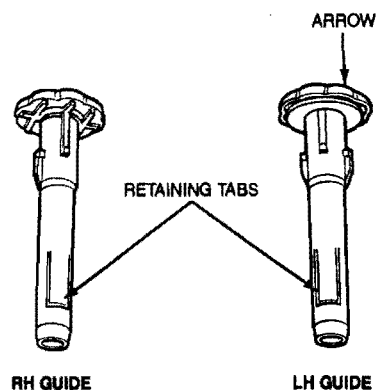


R6979-A

7. Remove seat back cover.
8. Remove cushion, if necessary.

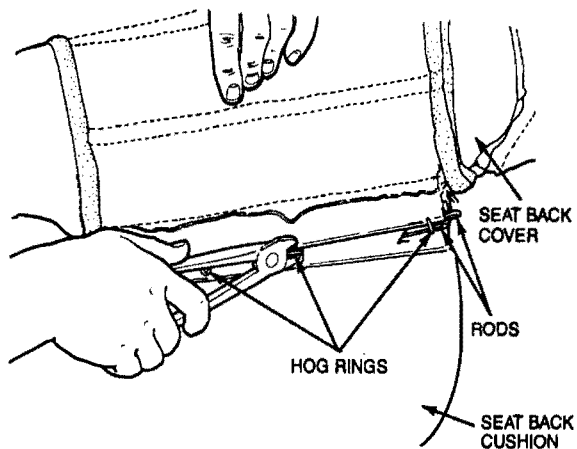
Installation

1. Position cushion to seat back frame.
2. Position seat back cover to top of seat back. Install head restraint guides. Ensure arrow on LH guide points toward front. Ensure retaining tabs are secure.



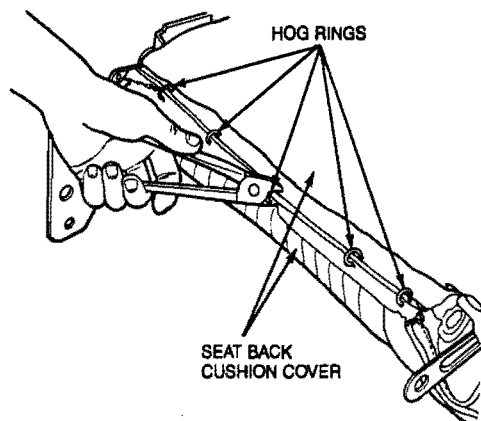
R6980-A

3. Unroll cover down to rod in cushion. Ensure rod is in position in cover. Install hog rings.



R6981-A

4. Carefully unroll cover. Install bottom hog rings.



R6982-A

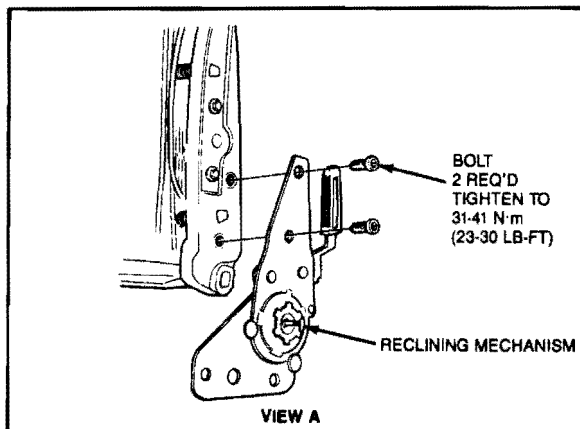
5. Install lumbar adjustment handle and retaining clip.

REMOVAL AND INSTALLATION (Continued)

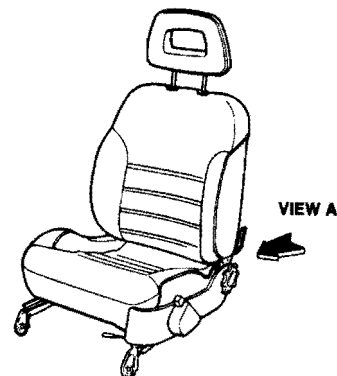
- | | |
|---|------------------------------|
| 6. Install head restraint.
7. Install seat back as outlined. | 8. Install seat as outlined. |
|---|------------------------------|

Reclining Mechanism**Removal**

1. Remove seat as outlined.



2. Remove seat back as outlined.
3. Remove bottom hog rings. Roll up cover to expose reclining mechanism.
4. Remove reclining mechanism and retaining bolts.



R6988-A

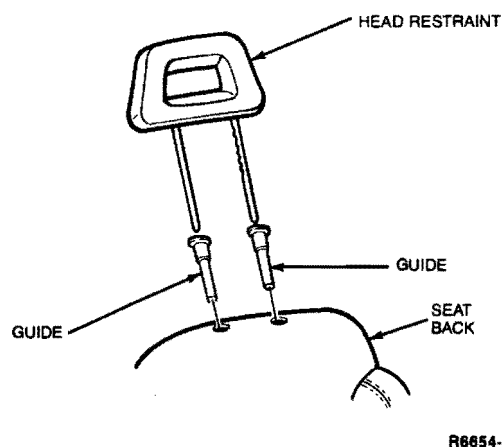
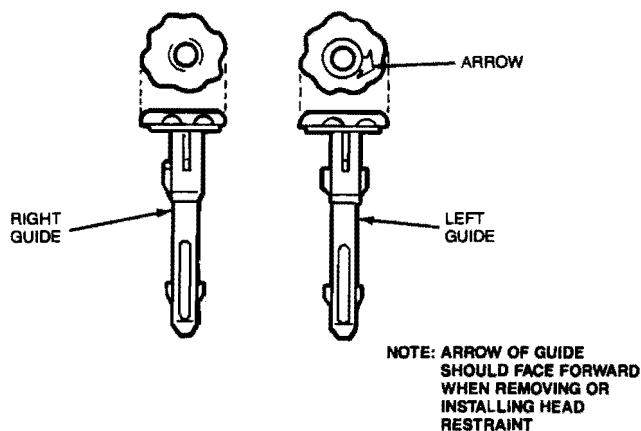
Installation

- | | |
|---|--|
| <ol style="list-style-type: none"> 1. Position reclining mechanism and install retaining bolts. Tighten bolts to 31-41 N·m(23-30 lb-ft). | <ol style="list-style-type: none"> 2. Position seat back cover and install bottom hog rings. 3. Install seat back to seat cushion as outlined. 4. Install seat as outlined. |
|---|--|

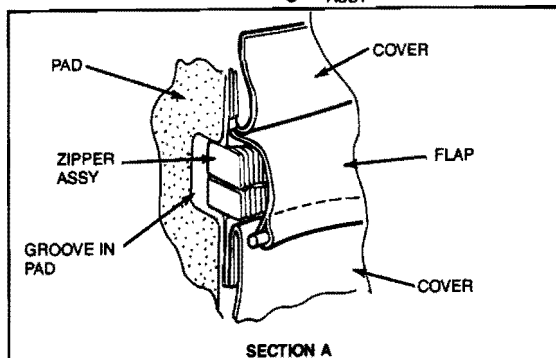
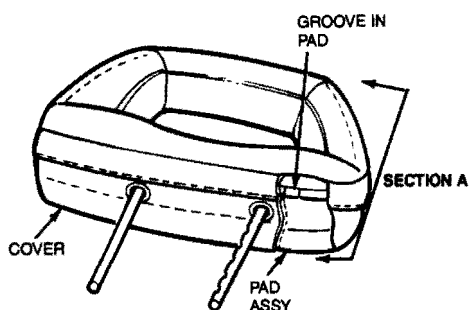
Head Restraint and Cover**Removal and Installation**

1. Rotate top of head restraint guide with arrow and lift head restraint off seat back.

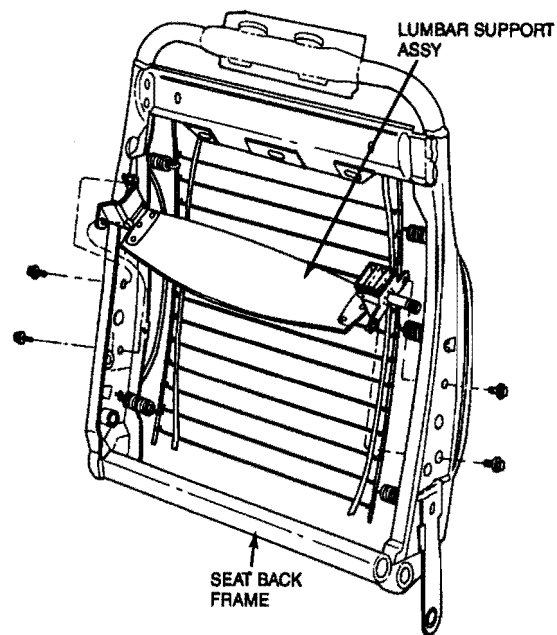
REMOVAL AND INSTALLATION (Continued)



2. Lift up on cover flap. Unzip cover.
3. Remove cover.
4. To install, reverse Steps 1, 2 and 3.



2. Remove seat back cover as outlined.
3. Remove lumbar support and retaining bolts.



Lumbar Support Assembly, LH Seat Removal

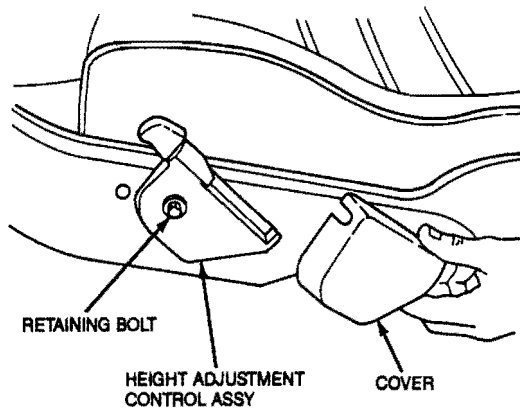
1. Remove seat and seat back as outlined.

Installation

1. Position lumbar support in seat back frame. Install retaining bolts.
2. Install seat back cover as outlined.
3. Install seat back as outlined.
4. Install seat as outlined.

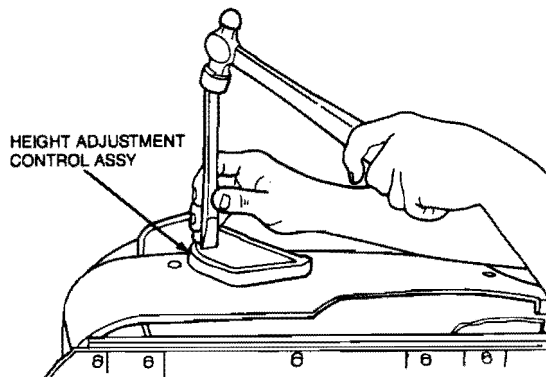
REMOVAL AND INSTALLATION (Continued)**Seat Height Adjustment Mechanism Control Assembly, LH Seat****Removal**

1. Set adjustment to highest position.
2. Remove seat as outlined. Place on work bench.
3. Remove height adjustment cover.
4. Remove control assembly retaining bolt. DO NOT remove control assembly.



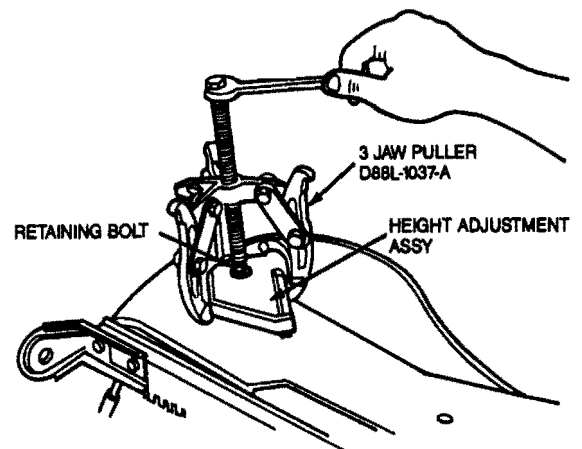
R6984-A

5. Mark position of control assembly on shaft.



R6985-A

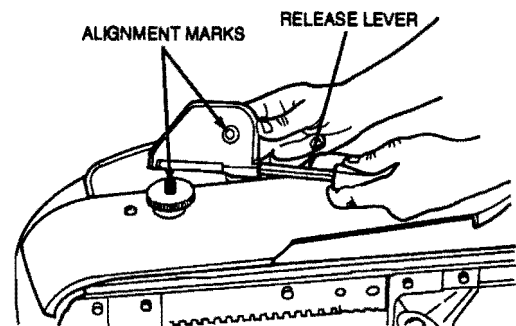
6. Loosely install control assembly retaining bolt. If necessary, use 3-Jaw Puller D88L-1037-A or equivalent to remove assembly.



R6986-A

Installation

1. Position alignment marks and install control assembly to shaft. Hold release lever in the extended position while installing.



R6987-A

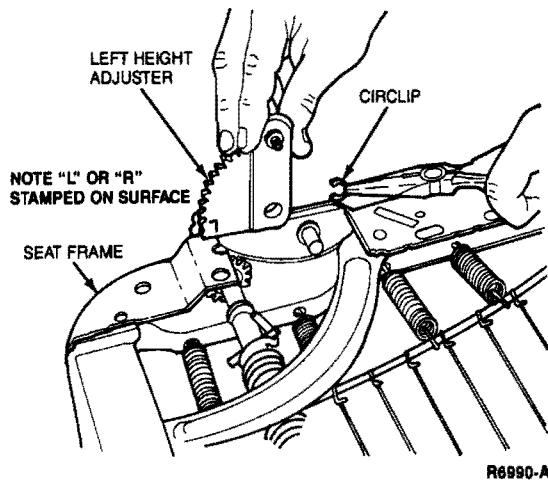
2. Install retaining bolt.
3. Install height adjustment cover.
4. Install seat as outlined.
5. Check for proper operation.

Seat Height Adjuster, LH Seat**Removal and Installation**

1. Remove seat as outlined.
2. Remove seat track as outlined.

REMOVAL AND INSTALLATION (Continued)

3. Remove height adjuster.



NOTE: Adjusters are marked "L" and "R" for correct installation.

4. To install, reverse Steps 1, 2 and 3.

SPECIFICATIONS**TORQUE SPECIFICATIONS**

Description	Nm	Lb-Ft
Seat Retaining Bolts-to-Floor	36-56	27-42
Nuts Retaining Seat Track-to-Frame	12-15	9-11
Seat Back Retaining Nut	15-19	11-14
Reclining Mechanism Retaining Bolts	31-41	23-30

SPECIAL SERVICE TOOLS

Tool Number	Description
D88L-1037-A	3-Jaw Puller

SECTION 41-20 Seats, Rear

SUBJECT	PAGE	SUBJECT	PAGE
DESCRIPTION	41-20-1	REMOVAL AND INSTALLATION (Cont'd.)	
REMOVAL AND INSTALLATION		Latch, Seat Back.....	41-20-5
Actuator Lock Set.....	41-20-8	Seat Back and Cover	41-20-1
Cable Actuator	41-20-7	Seat Cushion	41-20-4
Latch Cable, Seat Back.....	41-20-6	VEHICLE APPLICATION	41-20-1

VEHICLE APPLICATION

Capri.

DESCRIPTION

The rear seat back is hinged to allow access to the luggage compartment. The release actuator is located in the driver's door jamb. A cable connects the actuator to the latch.

A key-operated lock secures the release actuator to prevent entry to the luggage compartment.

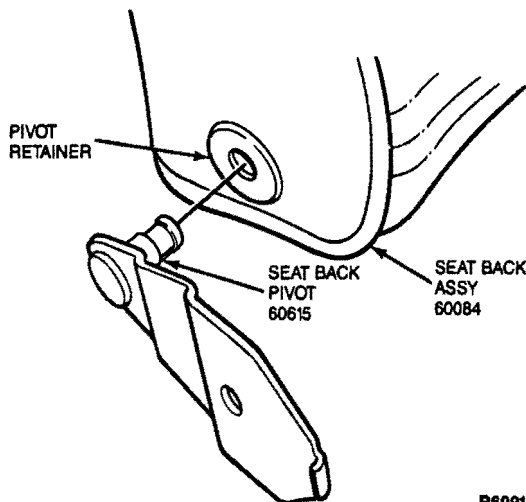
The rear seat cushion is secured to the floor by metal hooks that lock into floor brackets.

REMOVAL AND INSTALLATION

Seat Back and Cover

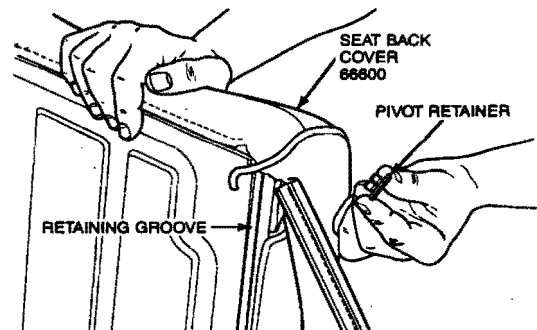
Removal

1. Fold seat back down by pulling up on release actuator.
2. Remove pivot retaining bolt and washer from each side and remove seat back.
3. Remove seat back pivots.



R6991-A

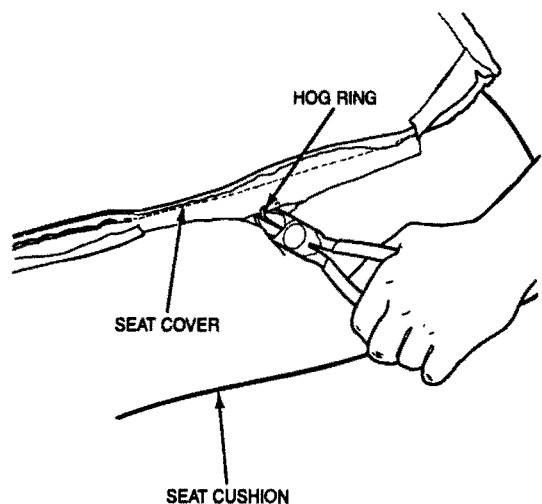
4. Roll seat back cover out of retaining groove. Remove pivot retainers.



R6992-A

5. Roll back cover and cut hog rings.

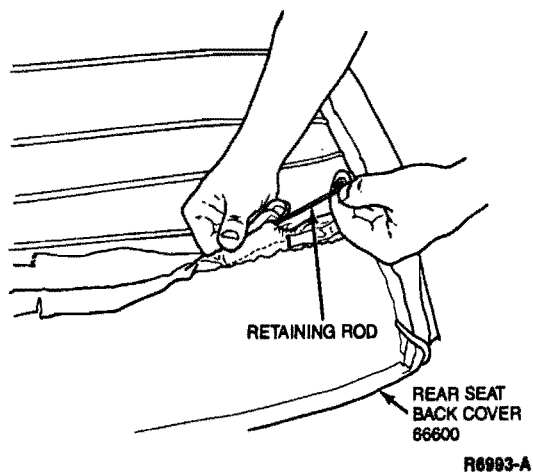
REMOVAL AND INSTALLATION (Continued)



R6997-A

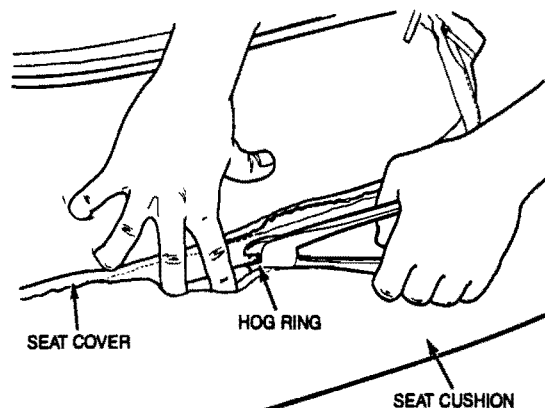
Installation

NOTE: If installing new seat cover, make sure retaining rod is in place in cover.



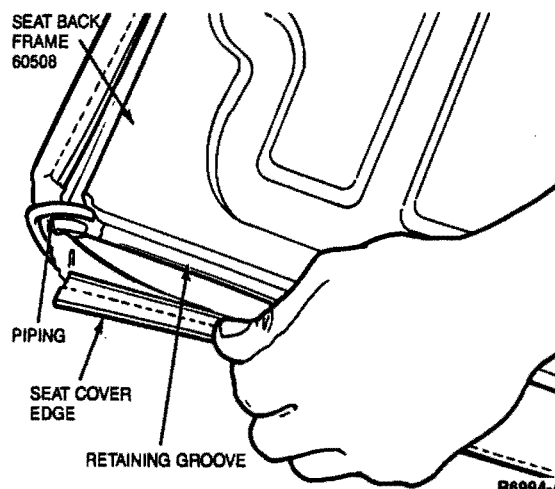
R6993-A

1. Position cover on cushion and install hog rings.



R6996-A

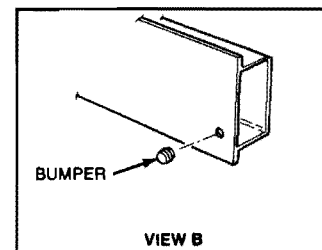
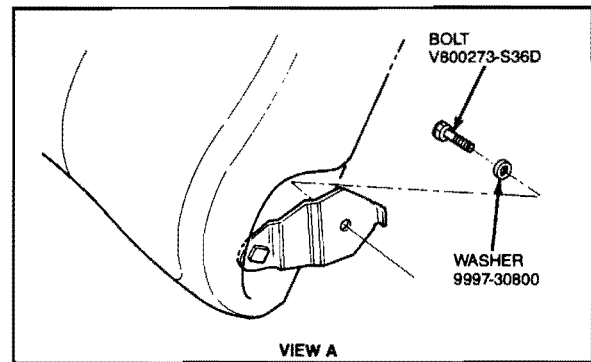
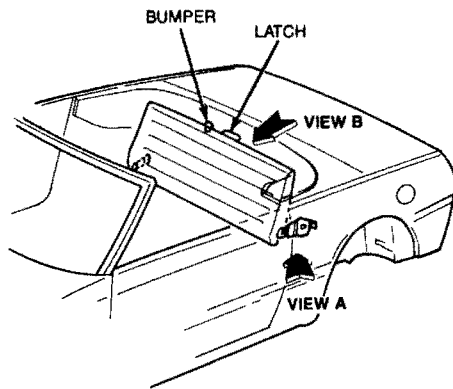
2. Insert cover edges into retaining groove, and insert piping in corners of seat back frame.



R6994-A

3. Install seat back pivots and pivot retainers.
4. Install seat back assembly. Make sure bumpers are in place behind seat back.

REMOVAL AND INSTALLATION (Continued)



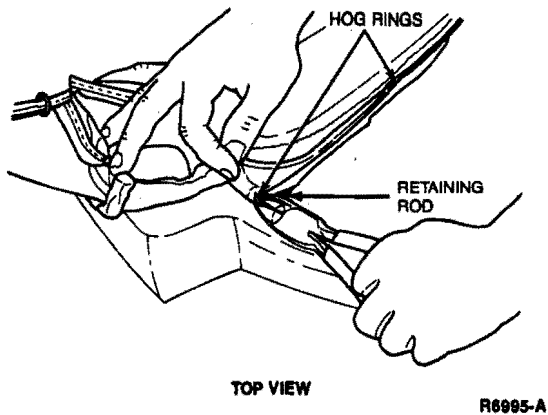
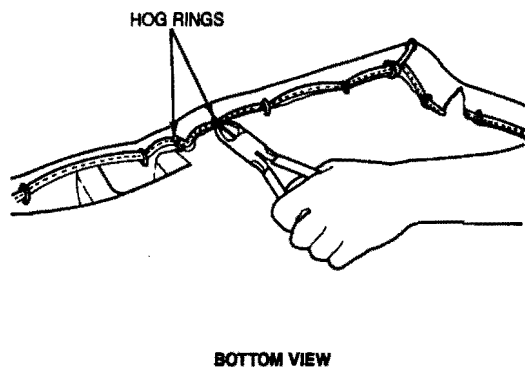
R6096-A

REMOVAL AND INSTALLATION (Continued)

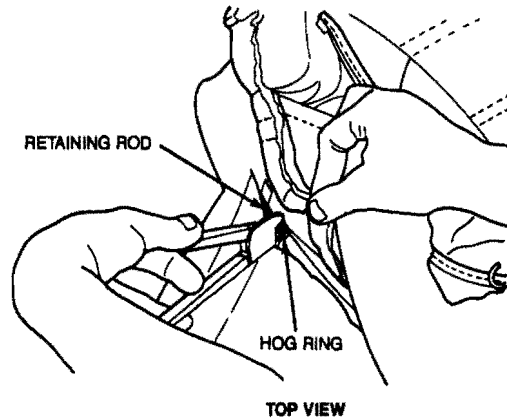
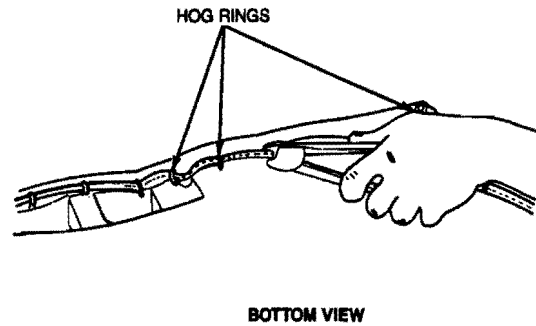
5. Place seat back into position and check operation of latch. Adjust latch if necessary.

Seat Cushion**Removal**

1. Push down and back on seat cushion then lift to release seat cushion retaining hooks.
2. Remove hog rings and seat cushion cover if necessary.

**Installation**

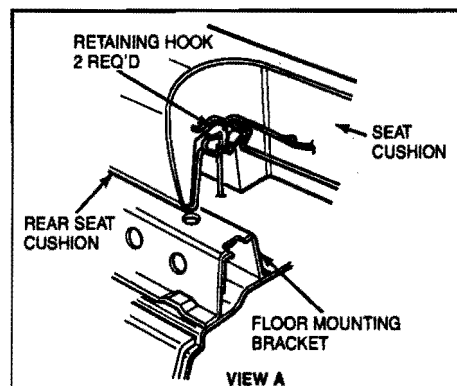
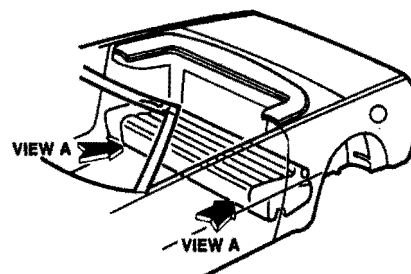
1. Install cover with hog rings if removed.



2. Position safety belts.

REMOVAL AND INSTALLATION (Continued)

3. Position seat cushion and push down. Pull forward and up to make sure retaining hooks are locked in place.



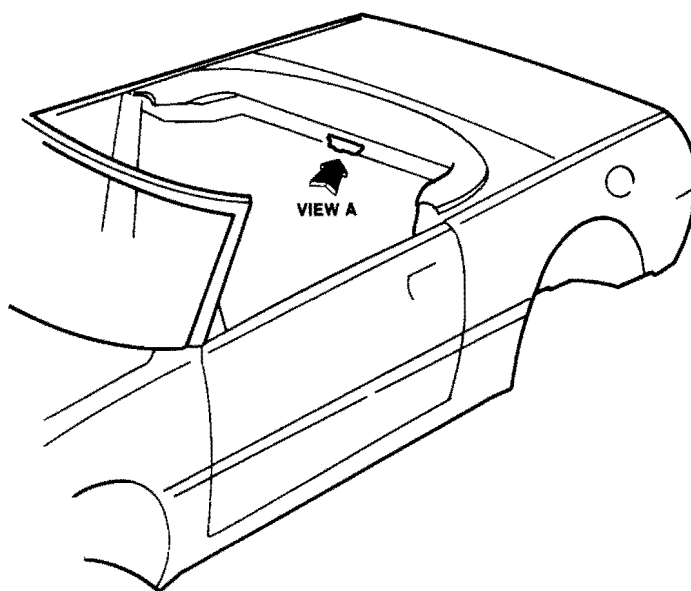
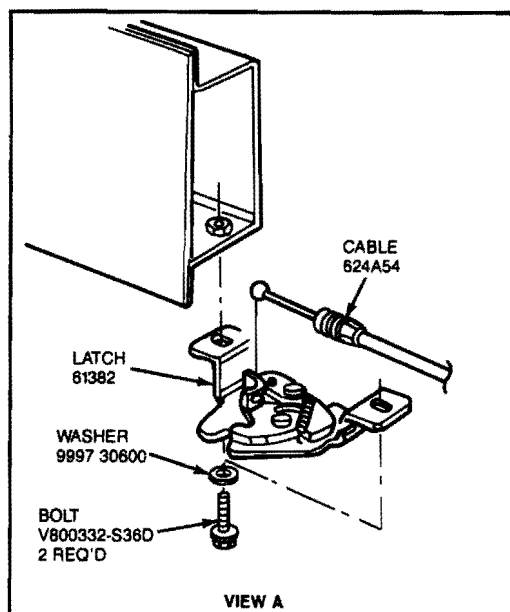
R6097-A

Latch, Seat Back**Removal**

1. Fold seat back down by pulling up on release actuator (work through luggage compartment to manually release latch if required).

2. Remove two bolts and latch.
3. Disengage cable end.

REMOVAL AND INSTALLATION (Continued)



R6098-A

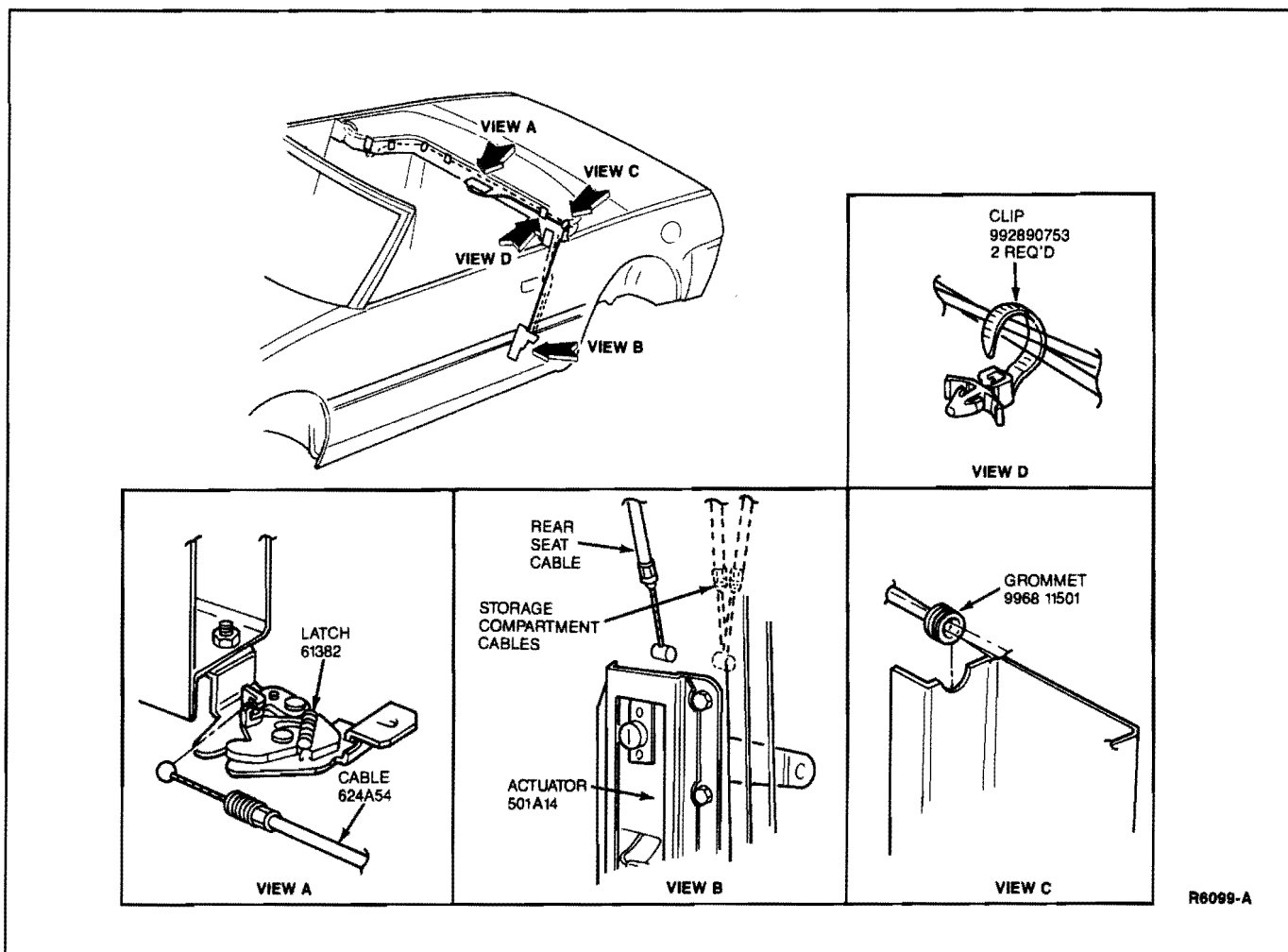
Installation

1. Connect cable end.
2. Install latch with two bolts.
3. Place seat back into position and check operation of latch. Adjust latch if necessary.

Latch Cable, Seat Back**Removal**

1. Fold seat back down by pulling up on release actuator (work through luggage compartment to manually release latch if required).
2. Disengage cable end from latch.
3. Remove actuator as outlined.
4. Disengage cable end from actuator.
5. Remove clips and cable assembly.

REMOVAL AND INSTALLATION (Continued)

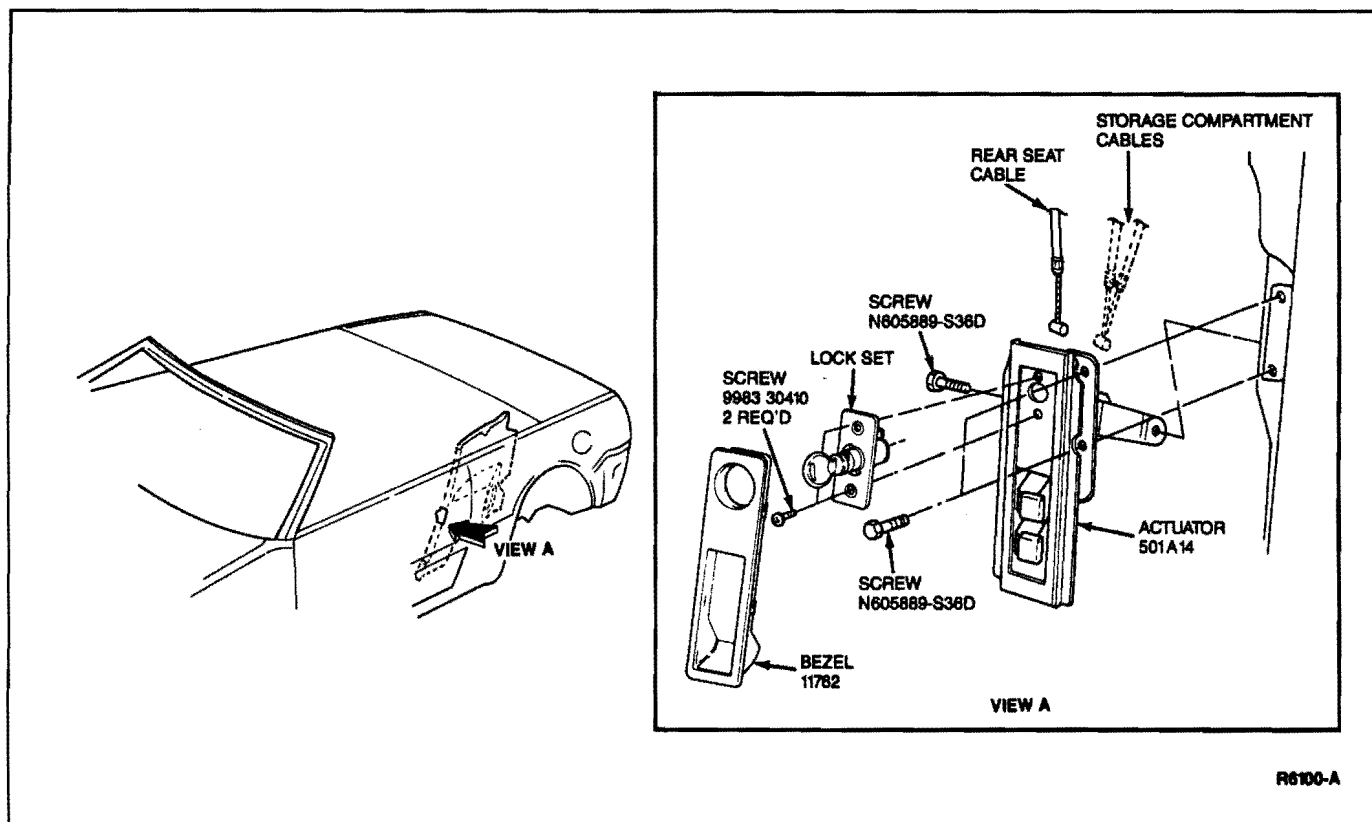
**Installation**

1. Make sure grommets are in place and route cable assembly.
2. Install clips.
3. Connect cable end to actuator.
4. Install actuator as outlined.
5. Connect cable end to latch.
6. Place seat back into position and check operation of latch. Adjust latch if necessary.

Cable Actuator**Removal**

1. Remove actuator bezel.
2. Remove safety belt cover screw and lift cover up to access quarter trim panel screw.
3. Remove trim panel screw.
4. Disengage door weatherstrip from quarter panel.
5. Position quarter trim panel out of way.
6. Remove screws and actuator assembly.
7. Position actuator to access cables and disengage cables from actuator.
8. Remove actuator.

REMOVAL AND INSTALLATION (Continued)



R6100-A

Installation

1. Install actuator.
2. Connect cables to actuator.
3. Position actuator assembly and install screws.
4. Check actuator for proper operation.
5. Install quarter trim panel and door weatherstrip.
6. Install bezel.

2. Turn lock set to locked position.
3. Remove two retaining screws from lock set and remove lock set.

Installation

1. Install lock set and install two retaining screws.
2. Unlock lock set and check operation.
3. Install actuator bezel.

Actuator Lock Set**Removal**

1. Remove actuator bezel.

SECTION 41-50 Seat and Shoulder Safety Belts

SUBJECT	PAGE	SUBJECT	PAGE
ADJUSTMENTS	41-50-2	REMOVAL AND INSTALLATION	
CLEANING		Buckle Assembly, Front	41-50-2
Belt Webbing	41-50-5	Retractor and Harness Assembly, Front	41-50-2
DESCRIPTION	41-50-1	Retractor and Harness Assembly, Rear	41-50-3
MAJOR SERVICE OPERATIONS		Seat Buckle, Rear	41-50-4
Functional Test Procedure	41-50-5	VEHICLE APPLICATION	41-50-1
Safety Belt Maintenance	41-50-4		

VEHICLE APPLICATION

Capri.

DESCRIPTION

A continuous loop, single retractor restraint system is used in both front and rear seating positions on all models.

The seat and shoulder safety belts are factory installed. If seat belts or shoulder safety belts are removed for any reason, they must be installed as outlined.

WARNING: SAFETY BELT ASSEMBLIES MUST BE INSTALLED IN MATCHED SETS AS RECEIVED AND MUST NOT BE INTERCHANGED BETWEEN VEHICLE MODELS.

IF A COMPONENT PORTION OF A SEAT BELT OR SHOULDER SAFETY BELT ASSEMBLY IS NON-FUNCTIONAL OR DAMAGED, THE ENTIRE ASSEMBLY (BUCKLE, TONGUE AND SHOULDER HARNESS PORTIONS) MUST BE REPLACED. THE REPLACEMENT ASSEMBLY MUST BE INSTALLED AS A MATCHED SET AND THE MANUFACTURER'S IDENTIFICATION ON THE LABEL ON THE RETRACTOR WEBBING MUST MATCH THE MANUFACTURER'S IDENTIFICATION ON THE BUCKLE'S BASE. UNDER NO CIRCUMSTANCES ARE SEAT BELT OR SHOULDER SAFETY BELT COMPONENTS TO BE REPLACED AS INDIVIDUAL COMPONENTS.

WARNING: CHILDREN HAVING A SEATING HEIGHT GREATER THAN 71 CM (28 INCHES), WHICH IS THE MAXIMUM HEIGHT FOR USE OF TOT-GUARD, SHOULD USE THE SAFETY BELTS PROVIDED WITH THE VEHICLE. HOWEVER, THE SHOULDER BELT PORTION OF THE LAP SHOULDER SAFETY BELT SHOULD NOT BE USED IF IT CONTACTS THE CHILD'S FACE, CHIN, NECK OR THROAT. IF THE SHOULDER BELT CONTACTS OR REMAINS IN FRONT OF THE CHILD'S FACE, CHIN, NECK OR THROAT, PLACE THE SHOULDER PORTION BEHIND THE CHILD'S BACK. FAILURE TO FOLLOW THIS PRECAUTION CAN INCREASE THE RISK OR SEVERITY OF INJURY IN EVENT OF A COLLISION.

WARNING: ALL VEHICLE OCCUPANTS, INCLUDING PREGNANT WOMEN, SHOULD WEAR SAFETY BELTS FOR MAXIMUM PROTECTION IN THE EVENT OF A COLLISION. ALL VEHICLE OCCUPANTS, INCLUDING PREGNANT WOMEN, SHOULD BE SURE THE LAP SAFETY BELT PORTION OF THE LAP-SHOULDER BELT IS FITTED SNUGLY AND AS LOW AS POSSIBLE AROUND THE HIPS, NOT THE WAIST. SHOULDER BELTS SHOULD ALSO BE PROPERLY ADJUSTED FOR MINIMUM SLACK. FAILURE TO PROPERLY UTILIZE THE SAFETY BELTS MAY INCREASE THE CHANCE AND/OR SEVERITY OF INJURY IN THE EVENT OF A COLLISION.

WARNING: ACCORDING TO ACCIDENT STATISTICS, PROPERLY RESTRAINED CHILDREN ARE SAFER IN THE REAR SEAT THAN IN THE FRONT SEAT. FOR YOUNG CHILDREN, INFANT AND CHILD RESTRAINTS SHOULD BE OBTAINED AND USED IN ACCORDANCE WITH THE INSTRUCTIONS PROVIDED BY THE MANUFACTURER OF THE INFANT AND CHILD RESTRAINT. FOR CHILD RESTRAINT INFORMATION REFER TO SECTION 41-52. CHILD RESTRAINT USE IS REQUIRED BY LAW.

NOTE: Safety belt assemblies must be replaced after they have been subjected to loading by occupants in a collision.

ADJUSTMENTS

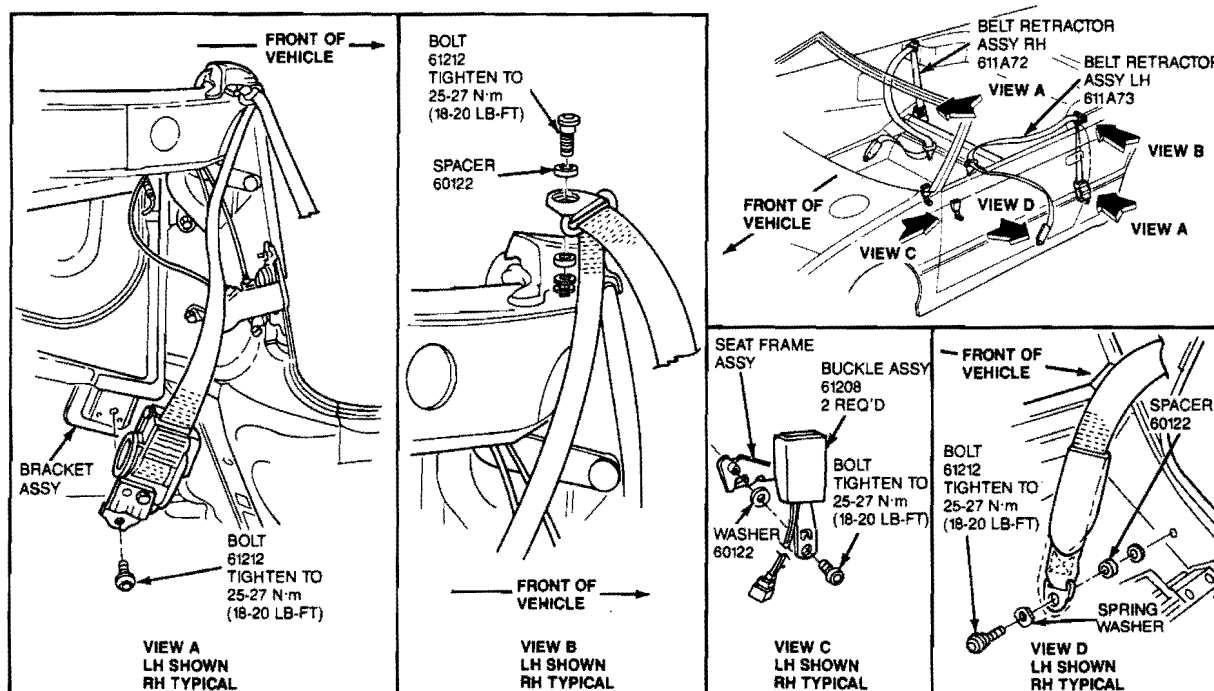
Refer to the Owner Guide for safety belt adjustment procedures.

REMOVAL AND INSTALLATION

Retractor and Harness Assembly, Front

Removal

1. Remove interior trim to gain access to retractor. Refer to Section 45-03.
2. Remove bolt, washer and retractor.
3. Remove cover and remove bolt, sash guide pivot, spacer and lockwasher at door opening.
4. Remove bolt, spring washer anchor, spacer and lockwasher.
5. Remove retractor and harness assembly.



R6066-A

Installation

1. Install retractor and harness assembly with washer and bolt as shown. Tighten bolt to 25-27 N·m (18-20 lb-ft).
2. Install sash guide pivot with lockwasher, spacer, and bolt as shown. Tighten bolt to 25-27 N·m (18-20 lb-ft).
3. Install anchor with lockwasher, spacer, spring washer and bolt as shown. Tighten bolt to 25-27 N·m (18-20 lb-ft).
4. Install interior trim. Refer to Section 45-03.
5. Verify proper operation of harness assembly, as outlined.

Buckle Assembly, Front

Removal

1. Remove front seat to gain access to front buckle bolt.
2. Remove bolt and spring washer.

Installation

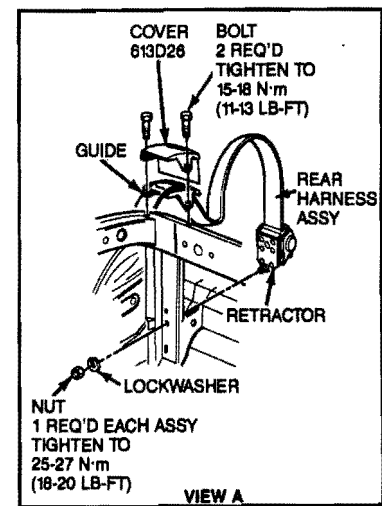
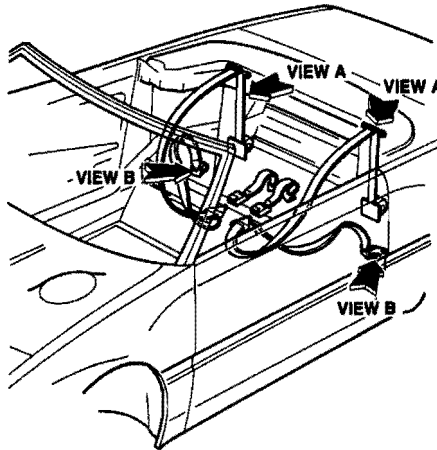
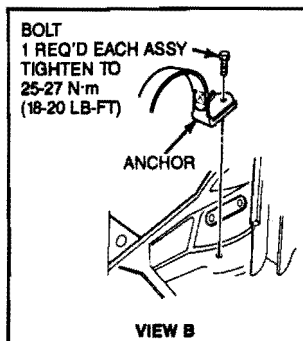
1. Install front buckle with spring washer and bolt. Tighten bolt to 25-27 N·m (18-20 lb-ft).
2. Install front seat.
3. Verify proper operation of harness assembly, as outlined.

REMOVAL AND INSTALLATION (Continued)

Retractor and Harness Assembly, Rear**Removal**

NOTE: It will be necessary to raise convertible top.

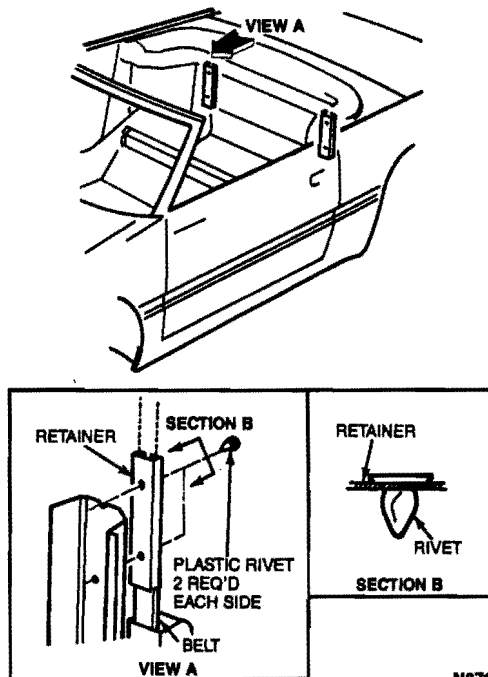
1. Lower the rear seat back.
2. Remove the rear inner fender covers located in the convertible top storage compartment.
3. Remove rear trim panel to access anchor end of harness. Refer to Section 45-03.
4. Remove nut, lockwasher and retractor assembly.
5. Remove two bolts, guide and cover.
6. Remove bolt and anchor end of harness.
7. Remove retractor and harness assembly.



R6067-A

REMOVAL AND INSTALLATION (Continued)

8. Remove plastic rivets and retainers if necessary.



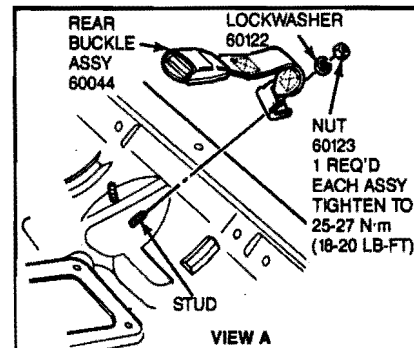
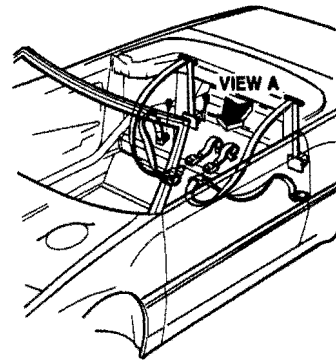
N8712-A

Installation

1. Install retainers with plastic rivets if removed.
2. Position harness and retractor assembly.
3. Install retractor with lockwasher and nut as shown. Tighten nut to 25-27 N·m (18-20 lb-ft).
4. Install guide with two bolts. Tighten bolts to 15-18 N·m (11-13 lb-ft).
5. Install anchor end of harness with bolt. Tighten bolt to 25-27 N·m (18-20 lb-ft).
6. Install rear inner fender covers located in convertible top storage compartment.
7. Install rear trim panel. Refer to Section 45-03.
8. Verify proper operation of harness assembly, as outlined.

Seat Buckle, Rear**Removal**

1. Remove rear seat cushion. Refer to Section 41-14.
2. Remove nut and lockwasher securing rear seat buckle. Remove rear seat buckle from stud.



R6093-A

Installation

1. Position rear seat buckle onto stud.
2. Install lockwasher and nut. Tighten nut to 25-27 N·m (18-20 lb-ft).
3. Install rear seat cushion. Refer to Section 41-14.
4. Verify proper operation of harness assembly, as outlined.

MAJOR SERVICE OPERATIONS**Safety Belt Maintenance**

Safety belt assemblies should be periodically inspected to make sure that they have not become damaged and that they remain in proper operating condition, particularly if they have been subjected to severe stress.

WARNING: ALL SAFETY BELT ASSEMBLIES INCLUDING RETRACTORS AND ATTACHING HARDWARE SHOULD BE INSPECTED AFTER ANY COLLISION. FORD RECOMMENDS THAT ALL SAFETY BELT ASSEMBLIES IN USE DURING A COLLISION BE REPLACED UNLESS THE COLLISION WAS MINOR AND A QUALIFIED TECHNICIAN FINDS THAT THE BELTS SHOW NO DAMAGE AND CONTINUE TO OPERATE PROPERLY. SAFETY BELT ASSEMBLIES NOT IN USE DURING A COLLISION SHOULD ALSO BE INSPECTED AND REPLACED IF EITHER DAMAGE OR IMPROPER OPERATION IS NOTED.

MAJOR SERVICE OPERATIONS (Continued)

Before installing the new safety belt assembly, safety belt attaching areas must be inspected for damage and distortion. If the attaching points are damaged or distorted, the sheet metal must be worked back to its original shape and structural integrity.

Functional Test Procedure**Continuous Loop Shoulder /Lap Belt Test**

1. Driver will buckle up and proceed to a safe test area. If passenger safety belt must be tested, a passenger should be buckled into seat. (The passenger belt may be tested by the driver, providing that the driver has the ability to grasp the passenger belt and extend it approximately 660mm (26 inches) with no compromise to safe driving. This applies to the 8 km/h (5 mph) test only).

NOTE: The shoulder belt should not be extended fully to prevent the possibility of a false feeling (full extension vs. lockup).

2. After reaching a safe area to perform sudden stops, the driver will attain a speed of approximately 8 km/h (5 mph). The driver should inform the passenger (if applicable) that he is preparing to make a severe brake application. At this time, both the driver and passenger should grasp their respective shoulder harnesses and prepare to lean slightly forward at the moment brake application is made.

WARNING: THE DRIVER AND PASSENGER MUST BE PREPARED TO BRACE THEMSELVES IN THE EVENT THE RETRACTOR DOES NOT LOCK.

3. The driver will make a maximum brake application without tire skid. The maximum brake application should be on dry concrete or equivalent hard road surface, never on a wet or gravel road. The driver and passenger should lean forward slightly into the shoulder harness. At this instant, belts should lock up without webbing payout.

4. If there is a lockup of shoulder straps, safety belt assemblies are functioning properly. Should retractors fail to lock up at the 8 km/h (5 mph) speed, repeat the test at a constant 24 km/h (15 mph). This test must be performed with a passenger if passenger belt is to be tested.

NOTE: If the retractor of a new safety belt assembly has been bolted into a damaged or distorted mounting area, the new retractor could be warped and may not function. If this is the case, reshape the sheet metal and install another new complete safety belt assembly.

5. If shoulder belts do not lock up at 24 km/h (15 mph) test, return the vehicle for service of the malfunctioning seat belts. If necessary, remove retractor and rework sheet metal at retractor's mounting surface. Install retractor assembly and test safety belt assemblies as previously stated.

CLEANING**Belt Webbing**

Clean the belt webbing with any mild soap solution recommended for cleaning upholstery or carpets. Follow instructions provided with soap. **DO NOT BLEACH OR DYE THE WEBBING, AS WEBBING MAY WEAKEN.**

SECTION 41-52 Seat, Child Restraint—Tether Attachment

SUBJECT	PAGE	SUBJECT	PAGE
DESCRIPTION	41-52-1	VEHICLE APPLICATION	41-52-1
INSTALLATION			
Tether Attachment.....	41-52-1		

VEHICLE APPLICATION

Capri.

DESCRIPTION

Some child safety seats provide a tether strap which goes over the back of the vehicle seat and attaches to an anchorage in the floor or panel behind the rear seat. (Ford Tot-Guard Child Seat does not require a top tether strap.)

WARNING: WHEN USING ANY INFANT OR CHILD RESTRAINT SYSTEM IT IS IMPORTANT THAT YOU FOLLOW THE INSTRUCTIONS PROVIDED BY THE MANUFACTURER CONCERNING ITS INSTALLATION AND USE. FAILURE TO FOLLOW EACH OF THE RESTRAINT MANUFACTURER'S INSTRUCTIONS CAN RESULT IN A CHILD STRIKING THE VEHICLE'S INTERIOR DURING A SUDDEN STOP OR COLLISION.

WARNING: CHILDREN HAVING A SEATING HEIGHT GREATER THAN 71CM (28 inches), WHICH IS THE MAXIMUM HEIGHT FOR USE OF THE TOT-GUARD SHOULD USE THE SAFETY BELTS PROVIDED WITH THE VEHICLE. HOWEVER, THE SHOULDER BELT PORTION OF THE LAP SHOULDER SAFETY BELT SHOULD NOT BE USED IF IT CONTACTS THE CHILD'S FACE, CHIN, NECK OR THROAT. IF THE SHOULDER BELT CONTACTS OR REMAINS IN FRONT OF THE CHILD'S FACE, CHIN, NECK OR THROAT, PLACE THE SHOULDER PORTION BEHIND THE CHILD'S BACK. FAILURE TO FOLLOW THIS PRECAUTION CAN INCREASE THE RISK OR SEVERITY OF INJURY IN THE EVENT OF A COLLISION.

INSTALLATION

Tether Attachment

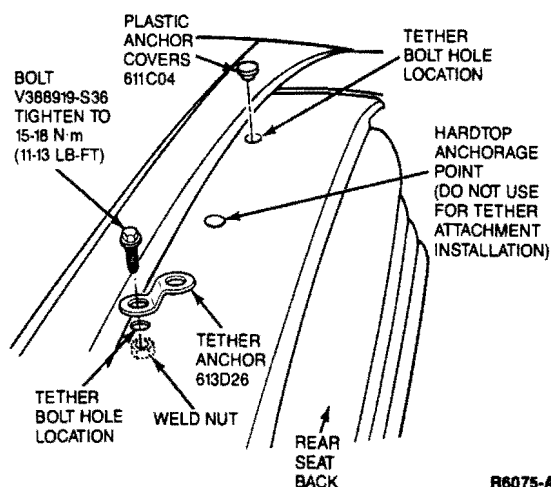
1. Locate and remove both plastic anchor covers.

CAUTION: Be careful not to damage threaded weld-nut.

NOTE: The center mounting hole is used to secure the removable hardtop. DO NOT use this mounting hole for the tether attachment installation.

2. Install hardware provided with the kit using the restraint manufacturer's instructions.

WARNING: IT IS IMPORTANT THAT THE ATTACHMENTS BE SECURELY TIGHTENED TO THE RESTRAINT MANUFACTURER'S SPECIFICATIONS. OTHERWISE, THE CHILD SAFETY SEAT MAY NOT BE PROPERLY SECURED AND THE CHILD COULD BE INJURED IN CASE OF A SUDDEN STOP OR ACCIDENT.



R6075-A

SECTION 41-58 Restraint System—Supplemental Air Bag

SUBJECT	PAGE	SUBJECT	PAGE
DESCRIPTION		PARTS REPLACEMENT	
Backup Power Supply	41-58-4	Repair of Air Bag Equipped Vehicles Involved In	
Diagnostic Monitor	41-58-2	Accidents.....	41-58-28
Driver Air Bag	41-58-1	REMOVAL AND INSTALLATION	
Ignitor	41-58-3	Air Bag Clockspring	41-58-34
Sensors.....	41-58-3	Air Bag Module	41-58-33
System Readiness Indicator Lamp	41-58-2	Backup Power Supply	41-58-34
Tone Generator	41-58-2	Diagnostic Assembly	41-58-33
Wiring.....	41-58-2	Sensor, Front Center	41-58-31
DIAGNOSIS AND TESTING	41-58-4	Sensor, Front, Left or Right	41-58-32
DISPOSAL PROCEDURES		Sensor, Rear	41-58-32
Air Bag Disposal	41-58-30	SERVICE PRECAUTIONS	
Deactivating the System	41-58-31	Deployed Air Bag	41-58-29
Deployed Air Bag	41-58-30	General Information.....	41-58-29
Reactivating the System	41-58-31	Live Air Bags.....	41-58-29
Scrapped Vehicle	41-58-30	SPECIAL SERVICE TOOLS	41-58-35
Undeployed Air Bag—Faulty.....	41-58-30	SPECIFICATIONS	41-58-34
OPERATION	41-58-4	VEHICLE APPLICATION	41-58-1

VEHICLE APPLICATION

Capri.

DESCRIPTION

The Supplemental Driver Air Bag Restraint System is designed to provide increased frontal accident protection for the driver IN ADDITION TO that provided by the safety belt system. **FORD RECOMMENDS THE USE OF SAFETY BELTS FOR ALL VEHICLE OCCUPANTS.**

The system uses a series of sensors to monitor the deceleration rates of the vehicle. If a crash occurs at a speed in excess of 22.5 km/h (14 mph) the sensors will close and the control module will deploy the air bag. The air bag is designed to fully inflate before the driver moves forward, and to deflate slowly when struck by the driver.

The Air Bag System consists of two basic subsystems:

1. The driver air bag.
2. The electrical system which includes impact sensors and an electronic monitoring unit.

Driver Air Bag

The driver air bag is mounted in the center of the steering wheel. The unit consists of:

- Inflator.
- Mounting plate and retainer ring.
- Bag assembly.
- Steering wheel trim cover.

NOTE: The driver air bag unit is not a serviceable item, and must be serviced as a complete assembly.

Inflator

The inflator is a lightweight aluminum housing which contains the materials that generate the gases required for air bag inflation.

DESCRIPTION (Continued)

The chemicals which generate the gas are normally very stable. In order for the chemical reaction to be initiated, an ignitor is installed to the center of the inflator. The ignitor converts the electrical signal to thermal energy, causing the ignition of the inflator gas generant. This ignition reaction combusts the sodium azide / molybdenum disulphide gas generant in the inflator, producing nitrogen gas, which inflates the air bag.

WARNING: THE AIR BAG INFLATOR CONTAINS MATERIALS THAT ARE TOXIC PRIOR TO COMBUSTION. IF THE METAL CANISTER IS RUPTURED, DIRECT CONTACT WITH THE GENERANT MAY BE MADE, AND MAY BE ABSORBED THROUGH THE SKIN. IN THE EVENT OF EXPOSURE, SEEK FRESH AIR, CONTACT A DOCTOR, AND WASH THOROUGHLY. DO NOT USE NEAR HEAT, ELECTRIC SPARKS OR FLAME.

Air Bag

The air bag is constructed of neoprene coated nylon, is 710mm (28 inches) in diameter and fills a volume of about 65 liters (2.3 cubic feet) in approximately 40 milliseconds.

Mounting Plate and Retainer Ring

The mounting plate and retainer ring attach and seal the base assembly to the inflator. The mounting bracket is also used to attach the trim cover and to mount the entire unit to the wheel by means of four nuts.

Steering Wheel Trim Cover

The cover encases the air bag assembly. When the air bag is activated, a tear seam moulded into the steering wheel trim cover separates to allow inflation of the bag assembly.

Electrical System

The air bag system is powered directly from the battery. The system can function with the ignition switch in any position, including OFF and LOCK. The system can also function when the driver's seat is unoccupied. The electrical system performs three main functions:

- Detects an impact.
- Switches electrical power to the ignitor.
- Monitors the system to determine readiness.

The electrical components include:

- Electronic diagnostic monitor.
- Air bag system readiness indicator lamp.
- Wiring harness.
- Sensors.
- Ignitor assembly.
- Backup power supply.

Diagnostic Monitor

The diagnostic monitor assembly contains a microcomputer that monitors the electrical system components and connections. The monitor performs a self-check of the microcomputer internal circuits and energizes the system readiness indicator lamp during prove out and whenever a fault occurs. System electrical faults can be detected and are translated into coded lamp displays. If certain faults occur, the system will be disarmed by a firing disarm device built into the monitor. If a system fault exists and the lamp is malfunctioning, an audible tone will be heard indicating the need for service.

Tone Generator

The air bag readiness lamp is the prime means of determining the air bag system condition. However, a series of five sets of five tones will be heard if the readiness lamp is out and a fault occurs in the system. This means that the air bag system is in need of service. The tone pattern will repeat periodically until the lamp failure is serviced. Unless serviced, the system may not function properly in the event of an accident.

System Readiness Indicator Lamp

The system readiness indicator is an instrument cluster mounted lamp that will momentarily illuminate whenever the ignition switch is turned from the OFF position to the RUN position if the air bag system is functioning properly. If the system is not functioning properly, the lamp will either fail to illuminate, stay on continuously, or illuminate in a flashing mode (if a system fault exists and the lamp is malfunctioning, a warning tone will be heard indicating the need for service). If a fault occurs after prove out, the lamp will either illuminate continuously or in a coded flashing mode.

Copyright © 1990, Ford Motor Co.

Wiring

The wiring harness of the system is integral with the main vehicle harness.

The steering column has a clockspring assembly to transfer electrical signals from the steering wheel to the steering column. The clockspring has plugs which connect with the column harness at one end, and with the inflator assembly at the other. Between them is a long flexible ribbon conductor which allows approximately five and a half turns of the steering wheel. During installation, it is essential that the clockspring is installed so that its center position is aligned with the center position of the steering rack.

www.techcapri.com

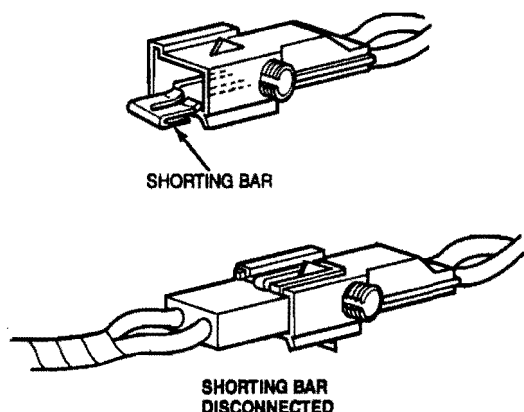
DESCRIPTION (Continued)

Ignitor

The ignitor is used to convert the electrical signal from the diagnostic module into heat energy to activate the inflator.

The ignitor requires a nominal 3.1 amps for 3 milliseconds to activate, however, it will operate on a much smaller current than this.

Both the ignitor lead and the clockspring lead have plugs into which shorting bars are installed. When the plug is disconnected, the shorting bar shorts the other two ignitor leads to each other to prevent accidental electrical connection and subsequent inflation of the air bag.

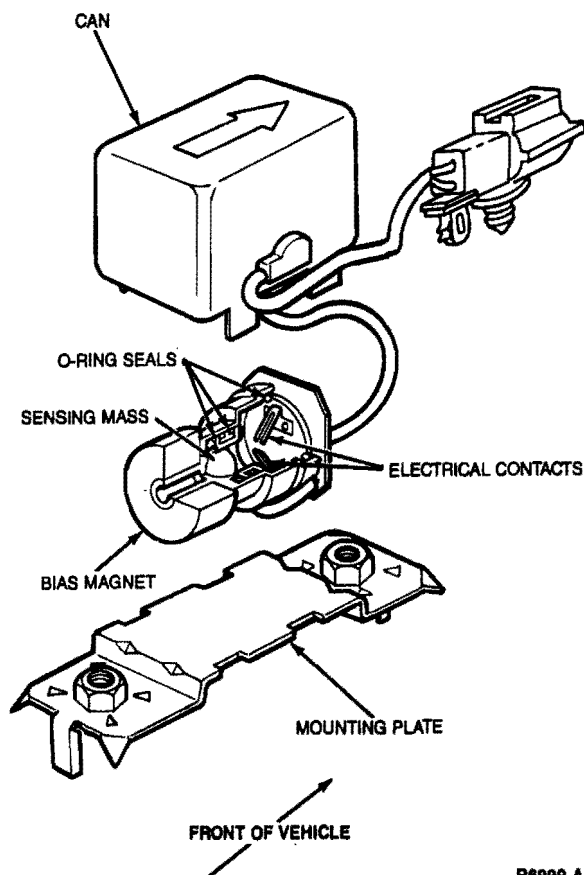


R7004-A

Sensors

The sensor assembly is a switch which reacts to impacts according to direction and force. It discriminates between impacts that require air bag inflation and those which do not. When an impact occurs that requires air bag inflation, the sensor contacts close, completing the electrical circuit necessary for system operation.

The crash sensor is constructed of a ball in a tube with contacts at one end.



R6999-A

The ball is held away from the contacts by a magnet at the opposite end of the tube. During an impact, if the change in vehicle's velocity is great enough, the ball will break away from the magnetic attraction and travel down the tube and close the contacts.

The travel of the ball in the tube is air damped by having a very small gap between the ball and the tube. This prevents closure of the contacts during short duration velocity changes. The major difference between a crash sensor and a safing sensor is the ball to contact distance which is reduced in the safing sensor.

There are five sensors located in the vehicle:

- At the LH tow bracket.
- At the RH tow bracket.
- A dual sensor at the radiator support.
- Under the console behind the hand brake lever (safing sensor).

At least two sensors, one safing, and one front crash sensor, must be activated to inflate the air bag.

DESCRIPTION (Continued)

Backup Power Supply

A backup power supply is included in the system to provide air bag firing circuit power if the battery or battery cables are damaged or cut very early in an accident before the sensors can close. The battery backup contains a 3300 uf, 25 V capacitor that takes approximately 15 minutes to discharge after the battery is disconnected.

WARNING: THE BACKUP POWER SUPPLY MUST BE DISCONNECTED BEFORE ANY AIR BAG SYSTEM COMPONENT IS SERVICED.

OPERATION

When the ignition switch is turned to the RUN position a yellow AIR BAG lamp will illuminate in the instrument cluster for approximately four to eight seconds. If the lamp goes out and stays out, the air bag system is fully serviceable. If there is a fault in the system, the lamp will then flash a code corresponding to the fault present. Depending on the nature of the fault, the system may still be operational.

It is important to understand that the system is operational regardless of the ignition switch position. The air bag system obtains its power from its own circuit independent of the ignition/accessory circuits. It is only necessary to have the ignition switch set to the RUN position to obtain a system OK or the fault codes.

If a vehicle is involved in a crash, one of the front crash sensors and one of the safing sensors must close in order for the system to inflate the air bag.

When a crash sensor and a safing sensor close at the same time, battery power will flow to the air bag inflator. Inside the inflator, an igniter will then heat the gas generant and cause it to ignite. This ignition will cause the sodium azide/copper oxide gas generant to produce nitrogen gas which will inflate the air bag. The air bag will fully inflate in less than 40 milliseconds.

DIAGNOSIS AND TESTING

The diagnostic module has a coded flashing indicator lamp feature which assists the service technician in isolating a system malfunction or fault. The codes are produced by a series of air bag lamp flashes. Each flash is on for about one-half second and off for about one-half second. The number of flashes in each series is based on the type of fault being detected. The code (series of flashes) is repeated when the ignition switch is in the RUN position and a fault exists. The coded fault feature is prioritized that if two or more different faults occur at the same time, the highest priority fault indication will be shown until corrected.

NOTE: If a system fault exists and the lamp is malfunctioning, an audible tone will be heard indicating the need for service. The tone produced is a series of five sets of five beeps. The number of beeps does NOT indicate the fault code; it means the lamp is out and that a fault is present.

The faults and associated codes are listed in the Fault Code Priorities chart in the order that they are ranked from top to bottom. In other words, the fault (or code) at the top of the list has the highest priority (or ranking) and would be shown over any other code by the air bag lamp. The fault (or code) at the bottom of the list has the lowest priority (or ranking). These listings are for information only and should not be used for system diagnosis or troubleshooting. The following diagnostic charts and deactivation procedure should be used to pinpoint specific fault and to safely diagnose and service the system. However, if after using the diagnostic charts, the fault is not located, proceed to the diagnostic schematic to perform additional diagnostic checks to determine and correct uncommon faults.

"Check Connection" means inspect connector for proper seating to mating connector, inspect terminals for good contact and inspect wiring for proper crimping to terminal.

All continuity checks are done with the system deactivated as follows:

- Disconnect battery ground and battery backup power supply.
- Remove the four nut and washer assemblies securing the air bag to the steering wheel.
- Disconnect the air bag connector from the clockspring.
- Attach a jumper wire to the air bag terminals on the clockspring.

"Disconnect" does not mean removal.

A disconnected part is not reconnected until specific reconnect instruction is given.

The following test equipment is used:

- Dwell-Tach-Volt-Ohms Tester Rotunda 059-00010 or equivalent.
- Jumper Wire.

NOTE: Attach positive (+) lead to circuit voltage and negative (-) lead to specified ground. (If a Digital Voltmeter is used on any wire in the 10 amp (meter) fuse any wire in the 10 amp ("meter") fuse circuit with module disconnected, the readout will not indicate the correct voltage.

All resistance checks must be made with the negative lead to the ohmmeter at vehicle ground, not battery ground, unless specifically directed otherwise. Two places are recommended; the clutch housing or the cigar lighter housing.

Refer to the Fault Code Priorities Chart, the System Schematic, Connector Illustration and the Diagnosis Charts for Diagnosis and Testing.

DIAGNOSIS AND TESTING (Continued)

VERIFY AIR BAG LAMP means to turn the ignition switch to RUN and count the flashes only after the code (series of flashes) has cycled twice. If the air bag lamp comes on continuously for four to eight seconds and then goes out, the system is functioning properly and all faults have been serviced.

CAUTION: The diagnostic system checks for open circuits, but not for shorts in all circuits. To prevent unintentional deployment of the Air Bag, perform System Prove Out procedures prior to reactivating the system.

System Prove Out Procedures

- Install jumper wire to air bag connector, turn ignition switch to Run - indicator lamp should illuminate for 4 to 8 seconds, then go out.
- Remove jumper, turn ignition switch to Run - check for code 6.
- Turn ignition switch to Accessory and monitor for 5 X 5 tone (light should go out).
- Indication other than the above indicates a potential short - do not activate system - refer to fault code priority box.

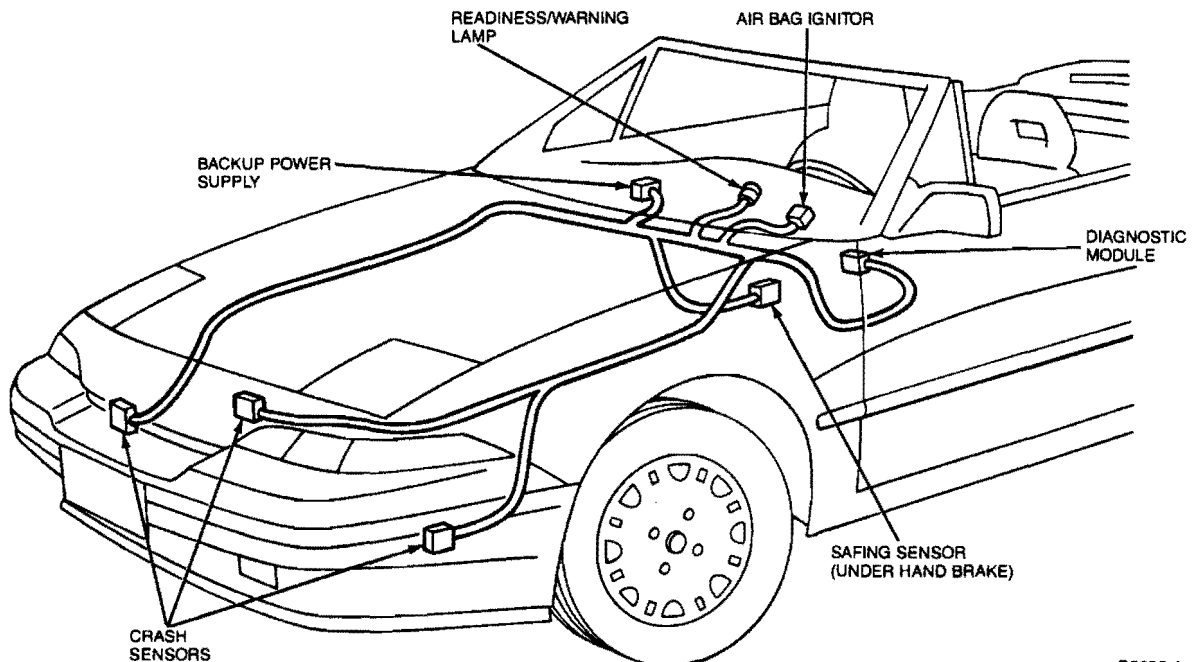
FAULT CODE PRIORITIES

Number of Flashes	Probable Fault	Go To Step
No Lamp	Inoperative air bag indicator lamp circuit	A1
Continuous Light	Diagnostic module disconnected or faulty	B1
3	Loss of air bag deployment circuit power or backup power supply disconnected	D1
5	Igniter circuit, or forward crash sensor deployment circuit shorted to ground	F1
10	Faulty firing circuit disarm device	K1
4	Potential short in air bag deployment circuit	E1
6	Driver air bag circuit inoperative	G1
7	Open module wiring circuit	H1
8	Forward crash sensor improperly attached or grounded	I1
9	Open forward crash sensor deployment circuit	J1
2	All forward crash sensors disconnected	C1
Tones 5 Sets of 5 Beeps	Air bag indicator lamp out and another fault	*

*CAUTION: If the indicator lamp and the audio warning are inoperative and the radio does not work, check the audio fuse, as the tone generator is fused with the radio.

CR5618-A

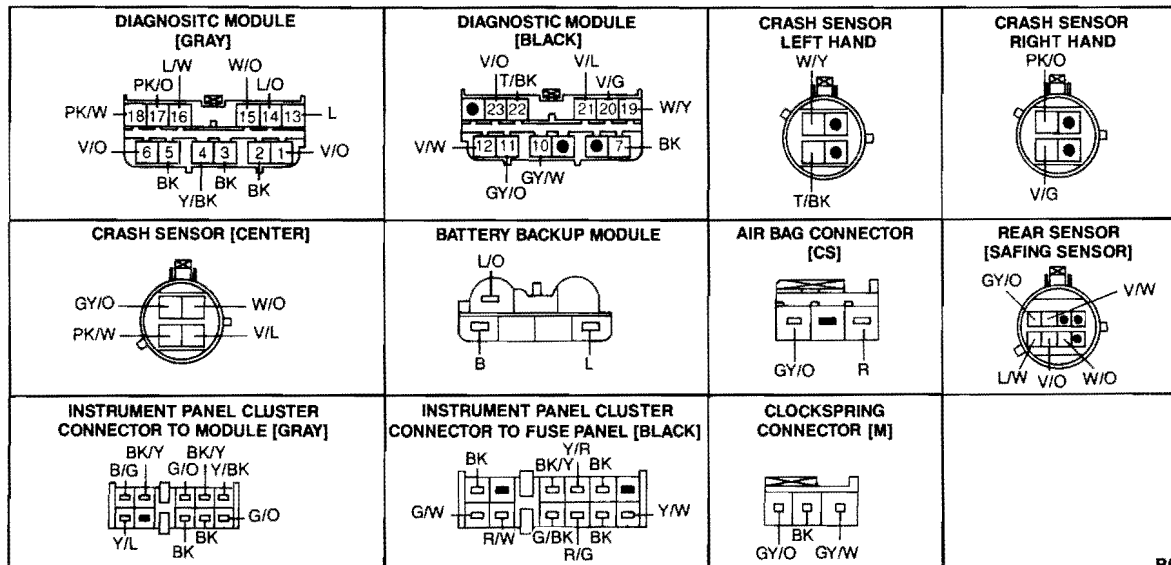
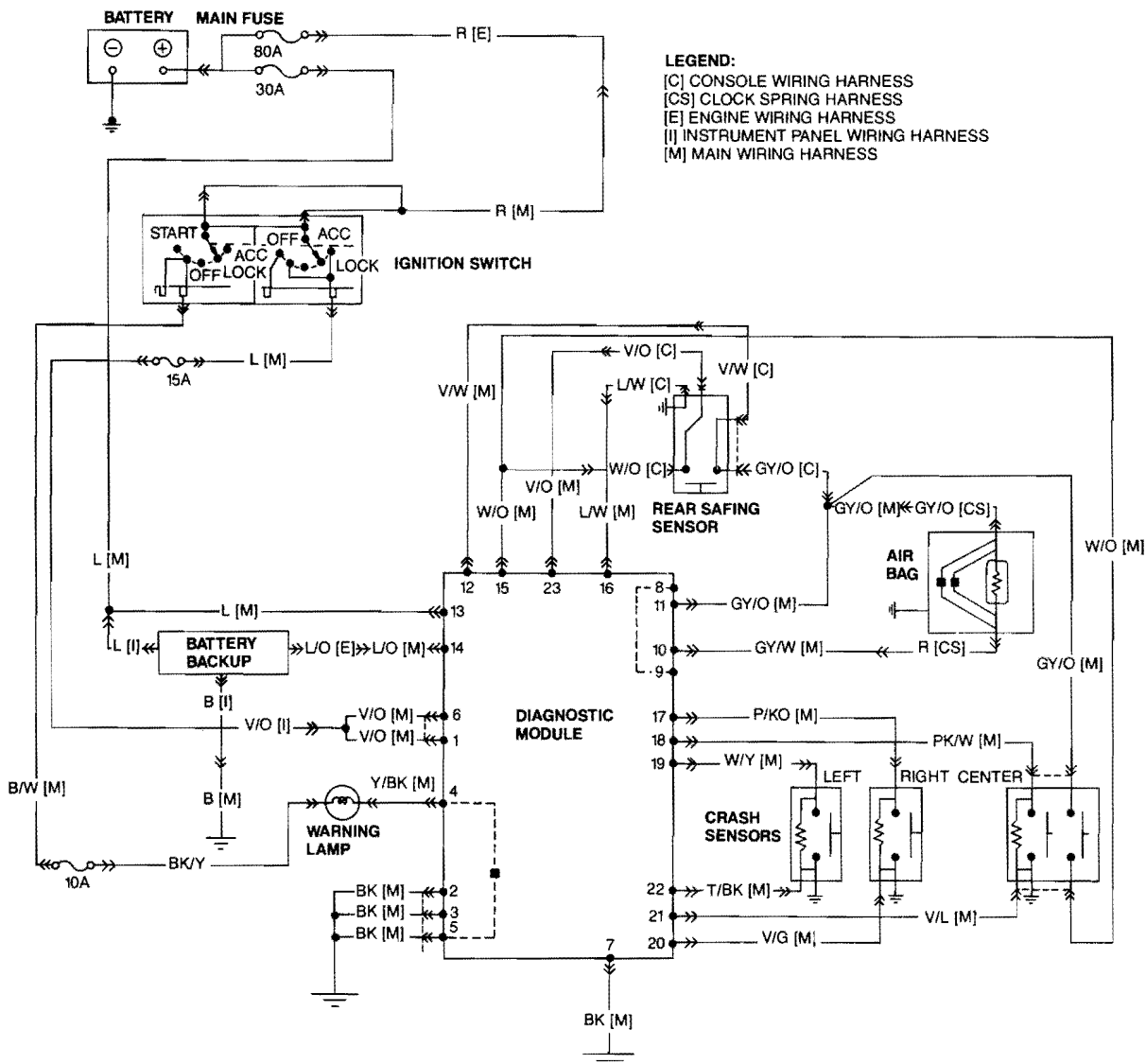
Component Location and Identification



R5625-A

DIAGNOSIS AND TESTING (Continued)

Air Bag System Schematic



DIAGNOSIS AND TESTING (Continued)

**Fault Indication—Air Bag Lamp
Does Not Light
Probable Fault—Inoperative Air Bag Lamp Circuit**

TEST STEP		RESULT	ACTION TO TAKE
A1	DURING SYSTEM PROVE-OUT AIR BAG INDICATOR LAMP DID NOT LIGHT		
A2	CHECK WARNING LAMPS		
	<ul style="list-style-type: none"> Turn ignition switch from OFF to RUN. Warning lamps should light. Do engine and safety belt warning lamps light? 	Yes No	► GO to A7. ► GO to A3.
A3	CHECK FUSE		
	<ul style="list-style-type: none"> Turn ignition switch to OFF. Check meter fuse. Is fuse blown? 	Yes No	► GO to A4. ► GO to A5.
A4	REPLACE FUSE		
	<ul style="list-style-type: none"> Install new fuse into fuse panel. Turn ignition switch to RUN. Did fuse blow again? 	No Yes	► VERIFY engine, safety belt and air bag warning lamps. ► TURN ignition switch to OFF. DEACTIVATE air bag system. TRACE BK/Y wire from cluster connector to fuse panel to find short to ground and SERVICE. REACTIVATE system and VERIFY warning lamps.
A5	RECHECK WARNING LAMPS		
	<ul style="list-style-type: none"> Remove cluster connector to fuse panel, then reconnect connector. Turn ignition switch from OFF to RUN. Verify engine and safety belt warning lamps. Do engine and safety belt warning lamps light? 	No Yes	► GO to A6. ► VERIFY engine, safety belt and air bag warning lamps.
A6	CHECK FOR OPEN AIR BAG LAMP CIRCUIT		
	<ul style="list-style-type: none"> Turn ignition switch to OFF. Deactivate air bag system. Remove meter fuse. Attach ohmmeter to BK/Y wire at fuse panel and cluster wiring connector. Is resistance less than 1 ohm? 	Yes No	► REPLACE bulbs and / or cluster printed circuit as required. REACTIVATE system and VERIFY warning lamps. ► TRACE BK/Y wire from cluster connector to fuse panel to find open in circuit, and REPAIR. REACTIVATE air bag system and VERIFY warning lamps.

DIAGNOSIS AND TESTING (Continued)

**Fault Indication — Air Bag Lamp
Does Not Light
Probable Fault — Inoperative Air Bag Lamp Circuit (Continued)**

TEST STEP		RESULT	ACTION TO TAKE
A7	CHECK THAT MODULE CONNECTOR IS PROPERLY CONNECTED		
	<ul style="list-style-type: none"> Are the diagnostic module connectors properly connected? 	<p>Yes</p> <p>No</p>	<p>GO to A8.</p> <p>Properly connect diagnostic module connectors. VERIFY air bag lamp. If air bag lamp does not light GO to A9.</p>
A8	CHECK LAMP WITH MODULE CONNECTOR DISCONNECTED		
	<ul style="list-style-type: none"> Turn ignition switch to OFF. Remove module from bracket. Disconnect diagnostic module wiring gray connector from module assembly. Turn ignition switch to RUN. Is the air bag lamp continuously on? 	<p>No</p> <p>Yes</p>	<p>GO to A9.</p> <p>GO to A10.</p>
A9	CHECK MODULE CONNECTOR		
	<ul style="list-style-type: none"> Turn ignition switch to OFF. Deactivate air bag system. Visually inspect the module connector to be sure Pin 5 (BK wire) and Pin 4 (Y / BK wire) on the gray connector are touching each other. Turn ignition switch to RUN. Does air bag lamp flash continuously? 	<p>Yes</p> <p>No</p>	<p>GO to A10.</p> <p>GO to A11.</p>
A10	CHECK AIR BAG LAMP CIRCUIT VOLTAGE		
	<ul style="list-style-type: none"> Turn ignition switch to OFF. Deactivate air bag system. Attach voltmeter to Pin 6 (V / O wire) on gray module wiring connector and to ground. Turn ignition switch to RUN. Is voltage greater than 10 volts? 	<p>Yes</p> <p>No</p>	<p>TURN ignition switch to OFF. REPLACE diagnostic module. REACTIVATE air bag system. TURN ignition switch to RUN. VERIFY air bag warning lamp.</p> <p>TURN ignition switch to OFF. CHECK audio fuse (15 amp). REPLACE fuse if blown and / or trace V / O wire from gray module wiring connector Pin 6 to fuse panel to find open and / or short to ground, and REPAIR. REACTIVATE air bag system. Turn ignition to RUN. VERIFY air bag warning lamp.</p>

DIAGNOSIS AND TESTING (Continued)

**Fault Indication—Air Bag Lamp
Does Not Light
Probable Fault—Inoperative Air Bag Lamp Circuit (Continued)**

TEST STEP		RESULT	ACTION TO TAKE
A11	CHECK AIR BAG CIRCUIT GROUND		
	<ul style="list-style-type: none"> ● Reconnect diagnostic module assembly connectors. 	Yes	<ul style="list-style-type: none"> ▶ TURN ignition to OFF. REMOVE jumper wire. SERVICE ground circuit. REACTIVATE air bag system. TURN ignition key to RUN. VERIFY air bag warning lamp.
	<ul style="list-style-type: none"> ● Attach a jumper wire to Pin 5 (BK wire) through back of module wiring connector and to ground. ● Does air bag lamp light? 	No	<ul style="list-style-type: none"> ▶ GO to A12.
A12	INSPECT CLUSTER PRINTED CIRCUIT		
	<ul style="list-style-type: none"> ● Turn ignition switch to OFF. 	Yes	<ul style="list-style-type: none"> ▶ REPLACE printed circuit, connector and / or bulb as required. ACTIVATE air bag system. TURN ignition switch to RUN. VERIFY air bag warning lamp.
	<ul style="list-style-type: none"> ● Remove jumper wire from Pin 5 and ground. 	No	<ul style="list-style-type: none"> ▶ TRACE BK / Y wires from cluster to the Y / BK wire at module connector to find open and SERVICE. REACTIVATE air bag system. TURN ignition to RUN. VERIFY air bag warning lamp.
	<ul style="list-style-type: none"> ● Disconnect cluster connector. ● Visually inspect cluster printed circuit and air bag lamp. ● Does printed circuit or connector have any defects and / or is air bag lamp burnt out? 		

**Fault Indication—Air Bag Lamp
Stays On
Probable Fault—Diagnostic Module Fault**

TEST STEP		RESULT	ACTION TO TAKE
B1	DURING SYSTEM PROVE-OUT AIR BAG LAMP STAYS ON		
B2	CHECK DIAGNOSTIC MODULE		
	<ul style="list-style-type: none"> ● Visually inspect diagnostic module for proper connection to module wiring connectors. 	Yes	<ul style="list-style-type: none"> ▶ GO to B3.
	<ul style="list-style-type: none"> ● Is diagnostic module properly connected? 	No	<ul style="list-style-type: none"> ▶ SERVICE connector(s). VERIFY air bag lamp.

DIAGNOSIS AND TESTING (Continued)

**Fault Indication—Air Bag Lamp
Stays On
Probable Fault—Diagnostic Module Fault (Continued)**

TEST STEP		RESULT	ACTION TO TAKE
B3	CHECKING DIAGNOSTIC MODULE—CONTINUED		
<ul style="list-style-type: none"> ● Deactivate air bag system. 		No	<ul style="list-style-type: none"> ▶ REPLACE diagnostic module. RECONNECT system. VERIFY air bag lamp.
<ul style="list-style-type: none"> ● Disconnect diagnostic module. 		Yes	<ul style="list-style-type: none"> ▶ TRACE Y/BK wire from diagnostic module to find contact to ground and SERVICE. RECONNECT system. VERIFY air bag lamp.
<ul style="list-style-type: none"> ● Insert toothpick or other non-conducting object into wiring connector between Pins 4 and 5 to depress shorting bar between the two terminals. 			
<ul style="list-style-type: none"> ● Verify air bag lamp. 			
<ul style="list-style-type: none"> ● Is air bag lamp still on? 			

DIAGNOSIS AND TESTING (Continued)

Fault Indication – Air Bag Lamp Flashes Two Times

Probable Fault – All Forward Crash Sensors Disconnected

TEST STEP		RESULT	ACTION TO TAKE																
C1	DURING SYSTEM PROVE-OUT AIR BAG LAMP PROVIDES A FAULT INDICATION OF 2 FLASHES																		
C2	INSPECT FRONT SENSORS																		
	<ul style="list-style-type: none"> Visually inspect all three front sensor assembly connections and the monitor connectors. 	All three sensors are properly connected. ► One or all sensors are not properly connected. ►	GO to C3 . Properly connect the sensor(s) or monitor connectors. VERIFY Air Bag lamp.																
C3	INSPECT WIRING CONNECTORS																		
	<ul style="list-style-type: none"> Deactivate Air Bag system. Remove monitor from bracket. Disconnect diagnostic monitor. Visually inspect monitor wiring connector for proper connection at Pin numbers: 17 (PK/O) 18 (PK/W) 19 (W/Y) 20 (V/G) 21 (V/L) 22 (T/BK) Are all connections made? 	Yes ► No ►	GO to C4 . SERVICE monitor connections. RECONNECT system. VERIFY Air Bag lamp. REACTIVATE system.																
C4	CHECK RESISTANCE IN DIAGNOSTIC MONITOR CIRCUITS																		
	<ul style="list-style-type: none"> Perform all of the following circuit tests with monitor disconnected. Attach the lead of the ohmmeter to each set of pins indicated on the diagnostic monitor wiring connector to check the resistance between them. 	Yes ► Resistance is NOT between 1000-1300 ohms on one or more of the tests. ►	REPLACE diagnostic monitor. VERIFY Air Bag lamp. REACTIVATE system. TRACE appropriate circuit(s) and find open and SERVICE. CONNECT diagnostic monitor. VERIFY Air Bag lamp. REACTIVATE system.																
	<table border="1"> <thead> <tr> <th>Pin A</th><th>Pin B</th><th>Corresponding Sensor</th><th>Circuit Wires</th></tr> </thead> <tbody> <tr> <td>17</td><td>20</td><td>Right</td><td>PK/O V/G</td></tr> <tr> <td>18</td><td>21</td><td>Center</td><td>PK/W V/L</td></tr> <tr> <td>19</td><td>22</td><td>Left</td><td>W/Y T/BK</td></tr> </tbody> </table>	Pin A	Pin B	Corresponding Sensor	Circuit Wires	17	20	Right	PK/O V/G	18	21	Center	PK/W V/L	19	22	Left	W/Y T/BK		
Pin A	Pin B	Corresponding Sensor	Circuit Wires																
17	20	Right	PK/O V/G																
18	21	Center	PK/W V/L																
19	22	Left	W/Y T/BK																
	<ul style="list-style-type: none"> Is resistance between 1000-1300 ohms for each sensor? 																		

CR5618-A

DIAGNOSIS AND TESTING (Continued)

**Fault Indication—Air Bag Lamp
Flashes Three Times
Probable Fault—Loss of Air Bag Circuit
Deployment Power or Backup Power Supply Disconnected**

TEST STEP		RESULT	ACTION TO TAKE
D1	DURING SYSTEM PROVE-OUT AIR BAG LAMP PROVIDES A FAULT INDICATION OF 3 FLASHES		
D2	VISUAL INSPECTION OF FUSE IN L WIRE CIRCUIT		
	<ul style="list-style-type: none"> Visually inspect 30 amp fuse in L wire circuit for damage. 	Yes	<ul style="list-style-type: none"> DISCONNECT battery ground cable and backup power supply. TRACE L wire to find short to ground and SERVICE. REPLACE 30 amp fuse. RECONNECT backup power supply and battery ground cable. VERIFY air bag lamp.
	<ul style="list-style-type: none"> Is the fuse open (blown)? 	No	<ul style="list-style-type: none"> GO to D3.
D3	VISUAL INSPECTION OF FUSES IN V/O WIRE CIRCUIT		
	<ul style="list-style-type: none"> Visually inspect 15 amp audio fuse in V/O wire circuit for damage. 	Yes	<ul style="list-style-type: none"> DISCONNECT battery negative cable and backup power supply. TRACE V/O wire to find short to ground and SERVICE. REPLACE 15 amp audio fuse. RECONNECT backup power supply and battery negative cable. VERIFY air bag lamp.
	<ul style="list-style-type: none"> Is the fuse open (blown)? 	No	<ul style="list-style-type: none"> GO to D4.
D4	CHECK POWER SUPPLY VOLTAGE		
	<ul style="list-style-type: none"> Deactivate air bag system. 	No	<ul style="list-style-type: none"> DISCONNECT battery negative cable and backup power supply. TRACE V/O wire from diagnostic module gray connector to find open circuit and SERVICE. RECONNECT backup power supply and battery negative cable. VERIFY air bag lamp. REACTIVATE system.
	<ul style="list-style-type: none"> Remove module from bracket. Disconnect diagnostic module. Attach a voltmeter to Pin 13 (L wire) on diagnostic module gray wiring connector and to ground. Is voltage greater than 10 volts? 	Yes	<ul style="list-style-type: none"> GO to D5.

DIAGNOSIS AND TESTING (Continued)

**Fault Indication—Air Bag Lamp
Flashes Three Times
Probable Fault—Loss of Air Bag Circuit
Deployment Power or Backup Power Supply Disconnected (Continued)**

TEST STEP		RESULT	ACTION TO TAKE
D5	CHECK BACKUP POWER SUPPLY		
	<ul style="list-style-type: none"> ● Attach voltmeter to Pin 14, L / O wire on diagnostic wiring gray connector at module and to ground. 	No	<ul style="list-style-type: none"> ▶ CHECK for backup power supply connections. SERVICE as required. If OK, CHECK L / O and V / O wires. REPAIR as required. RECONNECT and REACTIVATE system. VERIFY air bag lamp.
	<ul style="list-style-type: none"> ● Is voltage greater than 10 volts? 	Yes	<ul style="list-style-type: none"> ▶ GO to D6.
D6	CHECK RESISTANCE IN W / O WIRE CIRCUIT		
	<ul style="list-style-type: none"> ● Using an ohmmeter find resistance in Pin 15 (W / O wire) on diagnostic module gray wiring connector and to ground. 	No	<ul style="list-style-type: none"> ▶ REPLACE diagnostic module. RECONNECT system. VERIFY air bag lamp. REACTIVATE system.
	<ul style="list-style-type: none"> ● Is resistance less than 1 ohm? 	Yes	<ul style="list-style-type: none"> ▶ GO to D7.
D7	CHECK RESISTANCE IN W / O WIRE CIRCUIT—CONTINUED		
	<ul style="list-style-type: none"> ● Disconnect rear safing sensor. 	No	<ul style="list-style-type: none"> ▶ GO to D9.
	<ul style="list-style-type: none"> ● Attach ohmmeter to Pin 15 (W / O wire) on diagnostic module wiring connector and to ground. 	Yes	<ul style="list-style-type: none"> ▶ GO to D8.
	<ul style="list-style-type: none"> ● Is resistance less than 1 ohm? 		
D8	CHECK RESISTANCE IN W / O WIRE CIRCUIT—CONTINUED		
	<ul style="list-style-type: none"> ● Disconnect center front sensor. 	No	<ul style="list-style-type: none"> ▶ REPLACE center front sensor. REPLACE diagnostic module. RECONNECT system. VERIFY air bag lamp. REACTIVATE system.
	<ul style="list-style-type: none"> ● Attach ohmmeter to Pin 15 (W / O wire) on diagnostic module wiring connector and to ground. 	Yes	<ul style="list-style-type: none"> ▶ TRACE W / O wire to find contact to ground and SERVICE. REPLACE diagnostic module. RECONNECT system. VERIFY air bag lamp. REACTIVATE system.
	<ul style="list-style-type: none"> ● Is resistance less than 1 ohm? 		

DIAGNOSIS AND TESTING (Continued)

**Fault Indication—Air Bag Lamp
Flashes Three Times
Probable Fault—Loss of Air Bag Circuit
Deployment Power or Backup Power Supply Disconnected (Continued)**

TEST STEP		RESULT	ACTION TO TAKE
D9	CHECK RESISTANCE V / O WIRE CIRCUIT		
	<ul style="list-style-type: none"> ● Attach ohmmeter to V / O wire circuit on rear safing sensor wiring connector and to ground. 	No	<ul style="list-style-type: none"> ▶ REPLACE safing sensor. REPLACE diagnostic module. RECONNECT system. VERIFY air bag lamp. REACTIVATE system.
	<ul style="list-style-type: none"> ● Is resistance less than 1 ohm? 	Yes	<ul style="list-style-type: none"> ▶ TRACE V / O wire from rear safing sensor to find contact to ground and SERVICE. REPLACE diagnostic module. RECONNECT system. VERIFY air bag lamp. REACTIVATE system.

**Fault Indication—Air Bag
Flashes Four Times
Probable Fault—Potential Short in Air Bag
Deployment Circuit**

TEST STEP		RESULT	ACTION TO TAKE
E1	DURING SYSTEM PROVE-OUT AIR BAG LAMP PROVIDES A FAULT INDICATION OF 4 FLASHES		
E2	CHECK REAR SAFING SENSOR GROUND		
	<ul style="list-style-type: none"> ● Deactivate system. ● Place jumper wire on the rear safing sensor L / W wire and to ground. ● Verify lamp. Does air bag lamp flash code 4? 	Yes	<ul style="list-style-type: none"> ▶ GO to E5.
		No	<ul style="list-style-type: none"> ▶ GO to E3.
E3	CONTINUE REAR SAFING SENSOR CHECK		
	<ul style="list-style-type: none"> ● Remove jumper wire from rear safing sensor L / W wire. ● Loosen and tighten rear safing sensor attaching screws. ● Turn ignition switch to RUN. ● Does air bag lamp flash code 4? 	Yes	<ul style="list-style-type: none"> ▶ GO to E4.
		No	<ul style="list-style-type: none"> ▶ VERIFY air bag lamp.
E4	CHECK SAFING SENSOR GROUND CIRCUIT		
	<ul style="list-style-type: none"> ● Turn ignition switch to OFF. 	Yes	<ul style="list-style-type: none"> ▶ INSPECT connector terminals and wires and SERVICE as required. REACTIVATE system. VERIFY air bag lamp.
	<ul style="list-style-type: none"> ● Disconnect rear safing sensor wiring connector. 	No	<ul style="list-style-type: none"> ▶ REPLACE rear safing sensor. REACTIVATE system. VERIFY air bag lamp.
	<ul style="list-style-type: none"> ● Attach ohmmeter to L / W wire in sensor connector and to ground. ● Is resistance less than 1 ohm? 		

DIAGNOSIS AND TESTING (Continued)

**Fault Indication—Air Bag
Flashes Four Times
Probable Fault—Potential Short in Air Bag
Deployment Circuit (Continued)**

TEST STEP		RESULT	ACTION TO TAKE
E5	CHECK W / O WIRE CIRCUIT IN CENTER FRONT SENSOR		
	<ul style="list-style-type: none"> Remove jumper wire from rear safing sensor L / W wire. Disconnect center front sensor. 	Yes	GO to E6.
		No	REPLACE center front sensor. RECONNECT system. VERIFY lamp. REACTIVATE system. VERIFY lamp.
	<ul style="list-style-type: none"> Verify lamp. Does lamp flash code 4? 		
E6	CONTINUE W / O WIRE CIRCUIT CHECK		
	<ul style="list-style-type: none"> Check resistance between Pin 15 (W / O wire in the gray connector) and Pin 23 (V / O wire in the black connector) at the back of the diagnostic module connectors. 	Yes	GO to E8.
	<ul style="list-style-type: none"> Is resistance less than 1 ohm? 	No	GO to E7.
E7	CHECK REAR SAFING SENSOR RESISTANCE		
	<ul style="list-style-type: none"> Disconnect rear safing sensor. 	Yes	TRACE wires W / O and V / O back to diagnostic module for open circuit and SERVICE (check connectors and terminals to confirm proper connections). If no open circuit exists, REPLACE diagnostic module. RECONNECT system. REACTIVATE system. VERIFY air bag lamp.
	<ul style="list-style-type: none"> Check resistance between W / O and V / O wires. 	No	REPLACE rear safing sensor. RECONNECT system. REACTIVATE system. VERIFY air bag lamp.
	<ul style="list-style-type: none"> Is resistance less than 1 ohm? 		

DIAGNOSIS AND TESTING (Continued)

**Fault Indication—Air Bag
Flashes Four Times
Probable Fault—Potential Short in Air Bag
Deployment Circuit (Continued)**

TEST STEP		RESULT	ACTION TO TAKE
E8	CHECK FOR REAR SAFING SENSOR SHORT OR FORWARD CRASH SENSOR INPUT SHORT		
	<ul style="list-style-type: none"> Check voltage at back of diagnostic module gray connector Pin 17 (PK/O wire) and to ground. Is voltage less than 1 volt? 	<p>Yes</p> <p>No</p>	<p>GO to E9.</p> <p>A short to B+ (Battery Positive) exists in the forward crash sensor input wires GY/O, PK/O, PK/W or W/Y wires. DISCONNECT diagnostic module and CHECK for voltage on these circuits. If no short to B+ exists, REPLACE diagnostic module. RECONNECT system. REACTIVATE system. VERIFY air bag lamp.</p>
E9	CHECK V/W WIRE CIRCUIT VOLTAGE		
	<ul style="list-style-type: none"> Disconnect rear safing sensor. With voltmeter, probe wiring connector V/W wire to ground. Is V/W wire at battery voltage? 	<p>Yes</p> <p>No</p>	<p>GO to E11.</p> <p>GO to E10.</p>
E10	CHECK V/W WIRE CIRCUIT FOR OPEN		
	<ul style="list-style-type: none"> With voltmeter, check voltage at back of diagnostic module black connector, Pin 12 (V/W wire). Is V/W wire at battery voltage? 	<p>Yes</p> <p>No</p>	<p>SERVICE open in V/W wire between diagnostic module and rear sensor. RECONNECT system. REACTIVATE system. VERIFY lamp.</p> <p>REPLACE diagnostic module.</p>
E11	CHECK SHORT TO BATTERY POSITIVE (B+)		
	<ul style="list-style-type: none"> Remove diagnostic module from bracket. With voltmeter, check rear safing sensor wiring connector between V/W wire and ground. Is V/W wire still at battery voltage? 	<p>Yes</p> <p>No</p>	<p>Short to B+ exists in V/W wire between diagnostic module and rear safing sensor. TRACE circuit and SERVICE. If no short exists, REPLACE diagnostic module. RECONNECT system. VERIFY air bag lamp. REACTIVATE system. VERIFY air bag lamp.</p> <p>RECONNECT diagnostic module. GO to E12.</p>

DIAGNOSIS AND TESTING (Continued)

**Fault Indication—Air Bag
Flashes Four Times
Probable Fault—Potential Short in Air Bag
Deployment Circuit (Continued)**

TEST STEP		RESULT	ACTION TO TAKE
E 12	CHECK REAR SAFING SENSOR		
	<ul style="list-style-type: none"> With diagnostic module reconnected check rear safing sensor resistance between V/W and GY/O wires. Is resistance less than 1 ohm? 	<p>Yes</p> <p>No</p>	<p>GO to E 13.</p> <p>REPLACE rear safing sensor. RECONNECT system. REACTIVATE system. VERIFY air bag lamp.</p>
E 13	REAR SAFING SENSOR CHECKS—CONTINUED		
	<ul style="list-style-type: none"> Check rear safing sensor resistance between V/W wire and W/O, V/O and L/W wires. Are all paths open circuits (off scale)? 	<p>Yes</p> <p>No</p>	<p>An open exists in GY/O wire between the rear safing sensor and the diagnostic module, Pin 11. FIND open and SERVICE. If no open exists, REPLACE diagnostic module. RECONNECT system. REACTIVATE system. VERIFY air bag lamp.</p> <p>REPLACE rear safing sensor. RECONNECT system. REACTIVATE system. VERIFY air bag lamp.</p>

DIAGNOSIS AND TESTING (Continued)

Fault Indication — Air Bag Lamp Flashes Five Times

Probable Fault — Forward Crash Sensor Or Igniter Circuit Shorted To Ground

TEST STEP			RESULT	ACTION TO TAKE												
F1	DURING SYSTEM PROVE-OUT AIR BAG LAMP PROVIDES A FAULT INDICATION OF 5 FLASHES															
F2	CHECK AIR BAG															
<ul style="list-style-type: none">● Turn ignition OFF.● Deactivate system.● Verify lamp. Does Air Bag lamp flash 5 times?			Yes	GO to F3.												
			No	Disconnect battery ground and backup power supply. REPLACE driver air bag. RECONNECT and REACTIVATE system. VERIFY Air Bag lamp. If code 10 is present, REPLACE diagnostic monitor.												
F3	VERIFY LAMP WITH ALL THREE FRONT SENSORS DISCONNECTED															
<ul style="list-style-type: none">● Deactivate system.● Disconnect all front sensors (Left, Right and Center).● Verify Air Bag lamp.			Air Bag lamp flashes fault code 5	GO to F4.												
			Air Bag lamp flashes fault code 10	GO to F5.												
			Air Bag lamp does not flash either fault 5 or 10	REPLACE diagnostic monitor. RECONNECT system. VERIFY Air Bag lamp. REACTIVATE system.												
F4	CHECK RESISTANCE OF THE FRONT SENSORS															
<ul style="list-style-type: none">● Check for intermittent short in Pins 17 (PK/O), 18 (PK/W) and 19 (W/Y).● Perform all three of the following tests.● Attach ohmmeter to ground and to appropriate pin on each front sensor connector.			Yes	REPLACE diagnostic monitor. RECONNECT system. VERIFY Air Bag lamp. REACTIVATE system.												
			Resistance is NOT between 1000-1300 ohms for one or all sensors	REPLACE sensor(s). VERIFY Air Bag lamp. If lamp flashes fault code 10, INSTALL a new diagnostic monitor. REACTIVATE system. VERIFY Air Bag lamp.												
<table><thead><tr><th>Sensor</th><th>Pin</th><th>Wire Color</th></tr></thead><tbody><tr><td>Right</td><td>17</td><td>PK/O</td></tr><tr><td>Center</td><td>18</td><td>PK/W</td></tr><tr><td>Left</td><td>19</td><td>W/Y</td></tr></tbody></table>			Sensor	Pin	Wire Color	Right	17	PK/O	Center	18	PK/W	Left	19	W/Y		
Sensor	Pin	Wire Color														
Right	17	PK/O														
Center	18	PK/W														
Left	19	W/Y														
<ul style="list-style-type: none">● Is resistance between 1000-1300 ohms for each sensor?																

CR5619-A

DIAGNOSIS AND TESTING (Continued)

Fault Indication — Air Bag Lamp Flashes Five Times

Probable Fault — Shorted Forward Crash Sensor Deployment Circuit

TEST STEP		RESULT	ACTION TO TAKE								
F5	CHECK RESISTANCE IN THE FORWARD CRASH SENSOR DEPLOYMENT CIRCUIT										
<ul style="list-style-type: none">● Remove monitor from bracket.● Disconnect diagnostic monitor.● Perform all three of the following tests.● Attach ohmmeter to ground and to appropriate pin on the diagnostic monitor wiring connector.		Yes	TRACE appropriate circuit(s) to find contact to ground and SERVICE. RECONNECT system. VERIFY Air Bag lamp. If lamp flashes fault code 10, INSTALL a new diagnostic monitor. REACTIVATE system. VERIFY Air Bag lamp.								
<table><tr><th>Pin No.</th><th>Wire Color</th></tr><tr><td>17</td><td>PK/O</td></tr><tr><td>18</td><td>PK/W</td></tr><tr><td>19</td><td>W/Y</td></tr></table>		Pin No.	Wire Color	17	PK/O	18	PK/W	19	W/Y	Resistance is 1 ohm or greater	GO to F6.
Pin No.	Wire Color										
17	PK/O										
18	PK/W										
19	W/Y										
<ul style="list-style-type: none">● Is resistance less than 1 ohm for any test?											
F6	CHECK GY/W WIRE BETWEEN MONITOR BLACK CONNECTOR AND DRIVER AIR BAG										
<ul style="list-style-type: none">● Remove jumper in wiring connector to driver air bag. Leave open.● Fault code should change to Code 4 or Code 6.		Code 6	GO to F7.								
		Code 4	GO to F8.								

CR5620-A

DIAGNOSIS AND TESTING (Continued)

Fault Indication — Air Bag Lamp Flashes Five Times

Probable Fault — Forward Crash Sensor Or Igniter Circuit Shorted To Ground

TEST STEP		RESULT	ACTION TO TAKE
F7	CHECK CLOCKSPRING		
<ul style="list-style-type: none"> ● Short to ground in GY/W wire between driver air bag and diagnostic monitor black connector. ● Disconnect clockspring connector from main harness at base of column. ● Place jumper wire between GY/O and GY/W wires of main harness. ● Verify lamp. Does lamp flash code 6? 		Yes	TRACE and SERVICE GY/W wire short to ground between clockspring and diagnostic monitor black connector. If code 10 is present, or no short exists, REPLACE diagnostic monitor.
		No lamp goes out	REPLACE clockspring. RECONNECT system. If code 10 is present, REPLACE monitor. VERIFY Air Bag lamp.
F8	CHECK FOR IGNITER CIRCUIT SHORTED TO GROUND		
<ul style="list-style-type: none"> ● Disconnect rear safing sensor. ● With an ohmmeter, check GY/O wire to ground. ● Is resistance less than 1 ohm? 		Yes	A short to ground exists in GY/O wire between safing sensors, air bag, and Pin 11 of diagnostic monitor. TRACE short to ground. REPAIR as required. RECONNECT and REACTIVATE system. VERIFY lamp. If no short is found, or code 10 is present, replace diagnostic module.
		No	GO to F9.

CR5621-A

DIAGNOSIS AND TESTING (Continued)

Fault Indication — Air Bag Lamp Flashes Five Times

Probable Fault — Forward Crash Sensor Or Igniter Circuit Shorted To Ground

TEST STEP		RESULT	ACTION TO TAKE
F9	CHECK FOR IGNITER CIRCUIT SHORTED TO GROUND — CONTINUED		
<ul style="list-style-type: none"> ● With an ohmmeter, check V/W wire at Pin 12 and ground. ● Is resistance less than 1 ohm? 		Yes	TRACE short to ground in V/W wire. REPAIR as required. RECONNECT and REACTIVATE system. VERIFY lamp. If code 10 exists, REPLACE monitor.
		No	GO to F10.
F10	CHECK REAR SAFING SENSOR		
<ul style="list-style-type: none"> ● With an ohmmeter, check V/W wire in sensor connector and ground (with sensor attached to vehicle). ● Is resistance less than 1 ohm? 		Yes	REPLACE rear safing sensor. If code 10 exists, REPLACE diagnostic monitor. RECONNECT and REACTIVATE system. VERIFY Air Bag lamp.
		No	REPLACE diagnostic monitor. RECONNECT and REACTIVATE system. VERIFY Air Bag lamp.

CR7127-A

DIAGNOSIS AND TESTING (Continued)

**Fault Indication—Air Bag Lamp
Flashes Six Times
Probable Fault—Driver Air Bag Circuit
Inoperative**

TEST STEP		RESULT	ACTION TO TAKE
G1	DURING SYSTEM PROVE-OUT AIR BAG LAMP PROVIDES A FAULT CODE OF 6 FLASHES		
G2	CHECK CLOCKSPRING <ul style="list-style-type: none"> Deactivate air bag system. Verify air bag lamp while slowly rotating the steering wheel assembly. Does the air bag lamp still flash fault code 6 and / or flash intermittently? 	Yes No	GO to G3 . DISCONNECT battery negative cable and backup power supply. REMOVE jumper wire. INSTALL a new driver air bag. RECONNECT system. VERIFY air bag lamp.
G3	CHECK CLOCKSPRING—CONTINUED <ul style="list-style-type: none"> Disconnect clockspring wiring connector at base of steering column. Place a jumper wire across the GY / O and GY / W wires of the clockspring main harness wire connector. Verify air bag lamp. Does the air bag lamp still flash fault code 6? 	Yes No	GO to G4 . DISCONNECT battery negative cable and backup power supply. REMOVE jumper wire from air bag clockspring wiring connector. INSTALL new clockspring. RECONNECT system. VERIFY air bag lamp. REACTIVATE system.

DIAGNOSIS AND TESTING (Continued)

**Fault Indication—Air Bag Lamp
Flashes Six Times
Probable Fault—Driver Air Bag Circuit
Inoperative (Continued)**

TEST STEP		RESULT	ACTION TO TAKE
G4	CHECK AIR BAG DIAGNOSTIC MODULE CONNECTORS		
	<ul style="list-style-type: none"> Remove jumper wire from clockspring main harness wiring connector. Remove diagnostic module from bracket. 	Yes	▶ GO to G5.
	<ul style="list-style-type: none"> Disconnect diagnostic module connectors. Before continuing, visually inspect black connector to ensure that the GY / O wire and GY / W wire are touching. Attach ohmmeter to the GY / O wire on the black module wiring connector and GY / O wire on the clockspring wiring connector. Is resistance less than 1 ohm? 	No	▶ TRACE GY / O wire from clockspring wiring connector to diagnostic module connector to locate and SERVICE open circuit. RECONNECT system. REACTIVATE air bag system. VERIFY air bag lamp.
G5	CHECK RESISTANCE IN CIRCUITS		
	<ul style="list-style-type: none"> Attach ohmmeter to GY / W wire on diagnostic module black wiring connector and to GY / W wire on the clockspring connector. 	Yes	▶ INSTALL a new diagnostic module. RECONNECT system. REACTIVATE system. VERIFY air bag lamp.
	<ul style="list-style-type: none"> Is resistance less than 1 ohm? 	No	▶ TRACE GY / W wire from clockspring connector to diagnostic module to find open and SERVICE. RECONNECT system. REACTIVATE system. VERIFY air bag lamp.

**Fault Indication—Air Bag Lamp
Flashes Seven Times
Probable Fault—Module Wiring Circuit
Inoperative**

TEST STEP		RESULT	ACTION TO TAKE
H1	DURING SYSTEM PROVE-OUT AIR BAG LAMP PROVIDES A FAULT INDICATION OF 7 FLASHES		
H2	VERIFY AIR BAG LAMP		
	<ul style="list-style-type: none"> Deactivate air bag system. Remove diagnostic module from bracket. 	Yes	▶ GO to H3.
	<ul style="list-style-type: none"> Disconnect and visually inspect diagnostic module wiring connectors. Reconnect diagnostic module wiring connector. Does air bag lamp flash code ?? 	No	▶ REACTIVATE system. TURN ignition switch to RUN. VERIFY air bag lamp.

DIAGNOSIS AND TESTING (Continued)

**Fault Indication—Air Bag Lamp
Flashes Seven Times
Probable Fault—Module Wiring Circuit
Inoperative (Continued)**

TEST STEP		RESULT	ACTION TO TAKE
H3	INSPECT DIAGNOSTIC MODULE PIN 7		
	<ul style="list-style-type: none"> ● Disconnect diagnostic module. ● Inspect BK wire in black wiring connector for good connection to module Pin 7. ● Is BK wire properly seated to Pin 7 and good contact made? 	Yes No	GO to H4. SERVICE terminal and / or connector. RECONNECT diagnostic module. VERIFY air bag lamp.
H4	INSPECT MODULE WIRING CIRCUIT GROUND		
	<ul style="list-style-type: none"> ● Disconnect diagnostic module. ● With ohmmeter, measure resistance from BK wire in black connector to ground. ● Is resistance less than 1 ohm? 	Yes No	REPLACE diagnostic module. RECONNECT system. VERIFY air bag lamp. FIND open circuit and SERVICE. RECONNECT system. VERIFY air bag lamp.

DIAGNOSIS AND TESTING (Continued)

Fault Indication — Air Bag Lamp Flashes Eight Times

Probable Fault — Forward Crash Sensor Improperly Attached or Grounded

TEST STEP		RESULT	ACTION TO TAKE								
I1	DURING SYSTEM PROVE-OUT AIR BAG LAMP PROVIDES A FAULT INDICATION OF 8 FLASHES										
I2	INSPECT FRONT SENSORS										
<ul style="list-style-type: none">● Visually inspect each front sensor to ensure they are installed properly (grounded) to the vehicle.● Are all sensors properly installed to vehicle?		Yes	GO to I3.								
		No	INSTALL sensor(s) properly. VERIFY Air Bag lamp.								
I3	INSPECT EACH SENSOR'S WIRING CONNECTORS										
<ul style="list-style-type: none">● Visually check each front sensor connector for proper connection to vehicle wiring.● Are all sensors properly connected?		Yes	GO to I4.								
		No	CONNECT sensor(s) properly. VERIFY Air Bag lamp.								
I4	CHECK FOR RESISTANCE IN FRONT SENSORS										
<ul style="list-style-type: none">● Disconnect battery ground cable and power supply.● Disconnect all front sensors.● Perform the following tests.● Attach an ohmmeter to ground and to appropriate wire connector on each front sensor connector.		Yes	GO to I5.								
		No	REPLACE sensor(s). VERIFY Air Bag lamp.								
<table><tr><th>Sensor</th><th>Wire Color</th></tr><tr><td>Right</td><td>V/G</td></tr><tr><td>Left</td><td>T/BK</td></tr><tr><td>Center</td><td>V/L</td></tr></table>		Sensor	Wire Color	Right	V/G	Left	T/BK	Center	V/L		
Sensor	Wire Color										
Right	V/G										
Left	T/BK										
Center	V/L										
<ul style="list-style-type: none">● Is resistance less than 1 ohm for each test?											

CR5622-A

DIAGNOSIS AND TESTING (Continued)

Fault Indication — Air Bag Lamp Flashes Eight Times

Probable Fault — Forward Crash Sensor Improperly Attached or Grounded

TEST STEP		RESULT	ACTION TO TAKE								
15	CHECK FOR RESISTANCE IN FORWARD CRASH SENSOR WIRE CIRCUITS										
<ul style="list-style-type: none">● Reconnect all front sensors.● Remove monitor from bracket.● Perform all three of the following tests.● Attach ohmmeter to ground and to appropriate pin on diagnostic monitor black connector. Probe back of connector.		Yes	INSPECT terminals in diagnostic monitor connector and SERVICE as required. If terminals and connections are OK, INSTALL a new diagnostic monitor. RECONNECT system. VERIFY Air Bag lamp.								
		No	TRACE appropriate circuit(s) to find open(s) and SERVICE. RECONNECT system. VERIFY Air Bag lamp.								
<table><tr><th>Pin No.</th><th>Wire Color</th></tr><tr><td>20</td><td>V/G</td></tr><tr><td>21</td><td>V/L</td></tr><tr><td>22</td><td>T/BK</td></tr></table>		Pin No.	Wire Color	20	V/G	21	V/L	22	T/BK		
Pin No.	Wire Color										
20	V/G										
21	V/L										
22	T/BK										
<ul style="list-style-type: none">● Is resistance less than 1 ohm for each test?											

CR7126-A

DIAGNOSIS AND TESTING (Continued)

Fault Indication — Air Bag Lamp Flashes Nine Times

Probable Fault — Open Forward Crash Sensor Deployment Circuit

TEST STEP		RESULT	ACTION TO TAKE
J1	DURING SYSTEM PROVE-OUT AIR BAG LAMP PROVIDES A FAULT INDICATION OF 9 FLASHES		
J2	INSPECT EACH FRONT SENSOR CONNECTOR TO VEHICLE WIRING		
<ul style="list-style-type: none">Visually inspect each front sensor, left, right, and center for a proper connection to the vehicle wiring.Are all sensors properly connected?		Yes No	GO to J3. CONNECT sensor(s) properly. VERIFY Air Bag lamp.
J3	CHECK RESISTANCE OF EACH FRONT SENSOR		
<ul style="list-style-type: none">Disconnect battery ground cable and power supply.Disconnect all front sensors.Perform all three of the following tests on all three of the front sensors.Attach ohmmeter to ground and to appropriate wire on front sensor connector.		Yes No	GO to J4. REPLACE those sensors that did not have a resistance between 1000-1300 ohms. RECONNECT system. VERIFY Air Bag lamp.
Sensor		Wire Color	
Right		PK/O	
Center		PK/W	
Left		W/Y	
<ul style="list-style-type: none">Is resistance of each sensor between 1000-1300 ohms for each test?			
J4	CHECK RESISTANCE OF FORWARD CRASH SENSOR DEPLOYMENT CIRCUIT WIRES		
<ul style="list-style-type: none">Reconnect front sensors.Deactivate system.Perform all three of the following tests.Disconnect diagnostic monitor and attach ohmmeter to ground and to appropriate wires on diagnostic monitor wiring connectors.		Yes No	REPLACE diagnostic monitor. RECONNECT system. VERIFY Air Bag lamp. REACTIVATE system. TRACE appropriate circuits to locate opens and SERVICE. RECONNECT system. VERIFY Air Bag lamp. REACTIVATE system.
Connector No.		Wire Color	
17		PK/O	
18		PK/W	
19		W/Y	
<ul style="list-style-type: none">Is resistance between 1000-1300 ohms for each test?			

CR5623-A

DIAGNOSIS AND TESTING (Continued)

Fault Indication—Air Bag Lamp
Flashes Ten Times
Probable Fault—Firing Circuit Disarm
Device Blown Due to Deployment Circuit Shorted to Ground

TEST STEP		RESULT	ACTION TO TAKE
K1	DURING SYSTEM PROVE-OUT AIR BAG LAMP PROVIDES A FAULT INDICATION OF 10 FLASHES		
K2	MONITOR AIR BAG INDICATOR LAMP		
	<ul style="list-style-type: none"> Lamp flashes 10 times. 	Yes	<ul style="list-style-type: none"> PERFORM procedures in Steps F1 through F10.
	<ul style="list-style-type: none"> CAUTION: A thermal fuse is built into the diagnostic module that opens the battery and power supply circuit to the air bag should a short occur in the air bag deployment circuit without a safing sensor being closed. This prevents unwarranted air bag deployment due to damaged vehicle wiring. CAUTION: The Code 10 is a result of a short to ground, as described in the diagnosis for a Code 5. Code 10 is normally found after repair of a Code 5 condition. If the Code 5 is intermittent, just the Code 10 may be showing. Always look for Code 5 shorts before repairing the Code 10, (replacing the diagnostic module). Since the thermal fuse is built into the diagnostic module, the module must be replaced to repair a Code 10. Refer to Code 5 Diagnosis. 	No	<ul style="list-style-type: none"> End of testing.

PARTS REPLACEMENT

The various major assemblies in the air bag system have been designed to be tamper resistant and are not intended to be disassembled for service. Component assemblies should be removed and replaced as required. Information on proper handling, storage and disposal of the air bag inflator assemblies is provided in this section.

Repair of Air Bag Equipped Vehicles Involved in Accidents

While repairing an air bag equipped vehicle that has been involved in an accident, check sensors and wiring. Sensor to vehicle positioning is critical for proper system operation. If a vehicle equipped with an air bag system is involved in a crash where the mud guards or grill area have been damaged, inspect the sensor mounting brackets for damage. If damaged, the sensor should be replaced whether or not the air bag has been deployed. In addition, make sure that the body structure in the area of the sensor has been restored to its original condition.

Inspect the sensor wiring and the wiring harness for any damage that may have occurred due to the accident. Repair or replace any damaged wiring, terminals, insulation or connectors as required. If splices are required in adjacent wiring, they should be staggered by 50mm (2 inches).

A waterproof butt splice has been released that should be used for all repairs to wiring located in the engine compartment. The "DURASEAL" heat shrinkable nylon splice provides a long lasting joint that can withstand water, salt, condensation, corrosion and heat, all of which cause problems for conventional unsealed splices.

The inner wall of the splice is lined with a special adhesive that melts as the splice is heated and flows under pressure from the tubing, filling voids and sealing the splice.

PARTS REPLACEMENT (Continued)

The "DURASEAL" splice can be easily installed using a standard crimp tool and a heat gun. They are also color coded for easy identification of sizes, yet are transparent for visual inspection of the finished splice.

INSTALLATION INSTRUCTIONS



1. STRIP WIRES 7.6mm (0.3 INCH)
INSERT INTO CRIMP BARREL



2. CRIMP USING CRIMP TOOL FOR
PREINSULATED CRIMPS.



3. HEAT SPLICE WITH HEAT GUN UNTIL
TUBING SHRINKS AND ADHESIVE
FLOWS FROM EACH END.

R7000-A

Part Number	Part Name	Class
E6FZ-14488-A	Butt Connector Gauge: 18-22, Color: Red	C
E6FZ-14488-B	Butt Connector Gauge: 14-16, Color: Blue	C
E6FZ-14488-C	Butt Connector Gauge: 10-12, Color: Yellow	C

CR7001-A

If the accident involved deployment of the air bag, the steering column may have been loaded sufficiently to deform the steering column mounting brackets or damage the column wiring. An inspection should be made of the column structure and clockspring wiring to make sure that any damaged components are replaced. Refer to Section 13-01.

After all service, verify the air bag indicator lamp. Refer to Diagnosis and Testing.

SERVICE PRECAUTIONS

WARNING: SAFE HANDLING OF THE AIR BAG REQUIRES FOLLOWING THE PROCEDURES DESCRIBED BELOW FOR BOTH LIVE AND DEPLOYED AIR BAGS. ALWAYS WEAR SAFETY GLASSES WHEN SERVICING AN AIR BAG SYSTEM, AND WHEN HANDLING AN AIR BAG.

Live Air Bags

WHEN CARRYING A LIVE AIR BAG, MAKE SURE THE BAG AND TRIM COVER ARE POINTED AWAY FROM YOUR BODY. IN THE UNLIKELY EVENT OF AN ACCIDENTAL DEPLOYMENT, THE BAG WILL THEN DEPLOY WITH MINIMAL CHANCE OF INJURY. IN ADDITION, WHEN PLACING A LIVE AIR BAG ON A BENCH OR OTHER SURFACE, ALWAYS FACE THE BAG AND TRIM COVER UP, AWAY FROM THE SURFACE. THIS WILL REDUCE THE MOTION OF THE UNIT IF IT IS ACCIDENTALLY DEPLOYED.

Deployed Air Bag

SAFETY PRECAUTIONS MUST ALSO BE OBSERVED WHEN HANDLING A DEPLOYED AIR BAG. AFTER DEPLOYMENT, THE AIR BAG SURFACE MAY BE CONTAMINATED WITH DEPOSITS OF SODIUM HYDROXIDE, A PRODUCT OF THE GAS GENERANT COMBUSTION THAT IS IRRITATING TO THE SKIN. ALWAYS WEAR GLOVES AND SAFETY GLASSES WHEN HANDLING A DEPLOYED AIR BAG, AND WASH HANDS WITH SOAP AND WATER AFTERWARD.

General Information

BECAUSE OF THE CRITICAL OPERATION REQUIREMENTS OF THE SYSTEM, DO NOT ATTEMPT TO SERVICE THE SENSORS, CLOCKSPring, MODULE, BATTERY BACKUP OR THE AIR BAG. CORRECTIONS ARE MADE BY REPLACEMENT ONLY.

IF EVER A PART IS REPLACED AND THE NEW PART DID NOT CORRECT THE CONDITION, INSTALL THE ORIGINAL PART AND PERFORM THE DIAGNOSTIC PROCEDURE AGAIN.

WARNING: NEVER PROBE THE CONNECTIONS OF THE AIR BAG. DOING SO MAY RESULT IN DEPLOYMENT OF THE AIR BAG AND PERSONAL INJURY. ALL COMPONENT REPLACEMENTS AND WIRING REPAIRS MUST BE MADE WITH THE BATTERY GROUND AND THE BATTERY BACKUP DISCONNECTED.

DISPOSAL PROCEDURES

Several situations may arise when some form of disposal action must be undertaken; scrapping a vehicle containing a deployed air bag, scrapping a vehicle with a live air bag, disposal of a live but electrically inoperative air bag module, and scrapping a deployed module. These situations and the disposal recommendations are shown in the following chart and discussed in detail below.

DISPOSAL PROCEDURES (Continued)

AIR BAG DISPOSAL RECOMMENDATIONS

CONDITION	INSTRUCTIONS
1. Vehicle to be Scrapped; Live Air Bag.	Electrically Deploy Using Procedures 1 or 2 as Required.
2. Vehicle to be Scrapped; Deployed Air Bag.	Scrap Vehicle in the Usual Manner.
3. Module Replaced; Faulty but Live Air Bag.	Package and Label Properly. Return Per Instructions with New Air Bag.
4. Module Replaced; Deployed Air Bag.	Scrap Module in the Usual Manner.

CR7005-A

Deployed Air Bag

To service a vehicle in which the air bag has been deployed, the deployed air bag must be replaced with a new air bag assembly. The deployed air bag can be disposed of in the same manner as any other part to be scrapped.

Undeployed Air Bag—Faulty

In the event that an air bag is diagnosed as being faulty, the faulty air bag must be replaced with a new air bag assembly. The faulty air bag **CANNOT BE DISPOSED OF IN THE NORMAL MANNER**, and must be returned to Ford Motor Company for proper disposal.

Air bags must be packaged and shipped in compliance with the relevant government transport regulations. Retain the packaging used for the new air bag, including the label. Return the faulty air bag according to the instructions provided with the new air bag.

Scrapped Vehicle

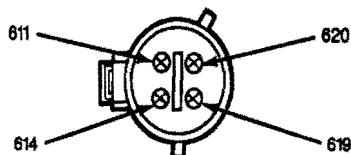
Some vehicles may be damaged or inoperable to the point that service cannot be made, but still contain an undeployed air bag. This condition could occur with side or rear impacts, rollover, or if the vehicle is past its useful life. **THE AIR BAG SHOULD BE DEPLOYED PRIOR TO VEHICLE SCRAPPAGE BY FOLLOWING PROCEDURE 1 OR 2 AS FOLLOWS:**

Air Bag Disposal**Procedure 1****Electronic Deployment with Intact Wiring**

This procedure assumes that the air bag wiring is intact, and that no fault codes are indicated, and that a battery is connected to the vehicle. This procedure is to be performed outdoors away from other personnel, since the deploying air bag makes a loud report on actuation. It is advisable to wear hearing protection during this procedure.

1. Check and clear the front seat of all loose objects.

2. Do not permit any occupants to remain in the vehicle.
3. Open the hood and check for a properly connected battery.
4. Turn the ignition switch to the RUN position and observe the air bag readiness indicator. If the system proves out normally, go to Step 5. If a fault code is displayed go to Procedure 2 to deploy the air bag. Turn the ignition switch to the OFF position.
5. Locate the center crash sensor at the top of the radiator support. Locate the connector on the wiring from the sensor.
6. Pull the connector apart and examine the wiring harness end (not the sensor end). Identify circuits 611, 614, 619 and 620.



R7002-A

7. Using a 152mm (6 inch) length of bared wire, short pin 619 to ground. Then, with another piece of wire, short pin 611 to pin 614. The air bag should deploy. If the air bag does not deploy, go to Procedure 2.
8. If successful, a loud report will be heard and the bag material will be visible in the center of the steering wheel. Allow at least 10 minutes before approaching the air bag to allow for cooling and dispersal of the gases.

The air bag is now inoperative and the vehicle may be disposed in the normal manner.

Procedure 2**Remote Deployment of Air Bag**

This procedure is to be used in the event that a vehicle with a live air bag is to be scrapped, but the vehicle wiring, or the air bag system, is faulty.

DISPOSAL PROCEDURES (Continued)

WARNING: REMOTE DEPLOYMENT IS TO BE PERFORMED OUTDOORS WITH ALL PERSONNEL AT LEAST 7 METERS (22 FEET) AWAY TO ENSURE PERSONAL SAFETY AND DUE TO THE LOUD REPORT WHICH OCCURS WHEN THE AIR BAG IS DEPLOYED.

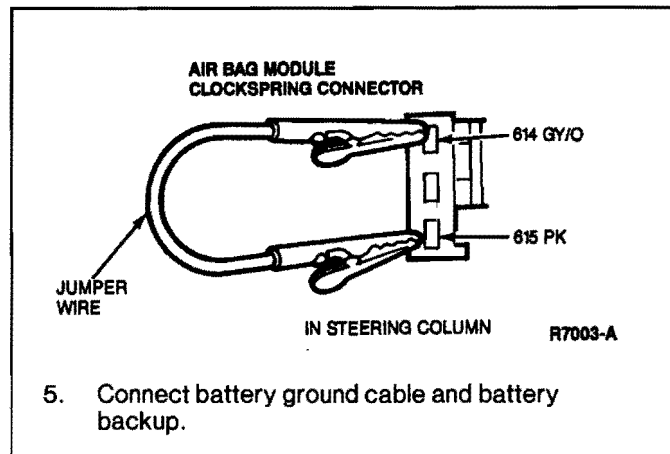
1. Remove the air bag from the vehicle as outlined.
2. Remove the connector by cutting the wires to the air bag, and strip the insulation from the ends. Using two wires 20 feet long, connect one wire to each of the air bag wires.

3. Place the air bag with the trim cover facing upward on a flat surface in a remote area such as a parking lot or field.

WARNING: DO NOT PLACE THE AIR BAG WITH THE TRIM FACING DOWN AS THE DEPLOYING AIR BAG MAY RICOCHET AND CAUSE PERSONAL INJURY.

4. Remaining at least 7 meters (22 feet) away from the air bag, deploy it by touching the other ends of the wire to a 12 volt battery. If the air bag does not deploy, follow the procedure for FAULTY UNDEPLOYED AIR BAGS.
5. If successful, a loud report will be heard and the bag material will be visible. Allow at least 10 minutes before approaching the air bag to allow for cooling and dispersal of the gases.

The air bag is now inoperative and both the vehicle and the air bag may be scrapped in the normal manner.



5. Connect battery ground cable and battery backup.

Reactivating the System

1. Disconnect battery ground cable and battery backup power supply.
2. Remove jumper wire from air bag terminals on clockspring, if connected.
3. Connect air bag to the clockspring.
4. Position air bag on steering wheel and secure with four nut and washer assemblies. Tighten nuts to 2-3 N·m (17-26 lb-in).
5. Connect battery ground cable and battery backup power supply.
6. Verify air bag indicator lamp.

Deactivating the System

1. Disconnect battery ground cable and battery backup power supply.
2. Remove the four nut and washer assemblies securing the air bag to the steering wheel.
3. Disconnect the air bag connector from the clockspring.
4. Attach a jumper wire to the air bag terminals on the clockspring.

REMOVAL AND INSTALLATION

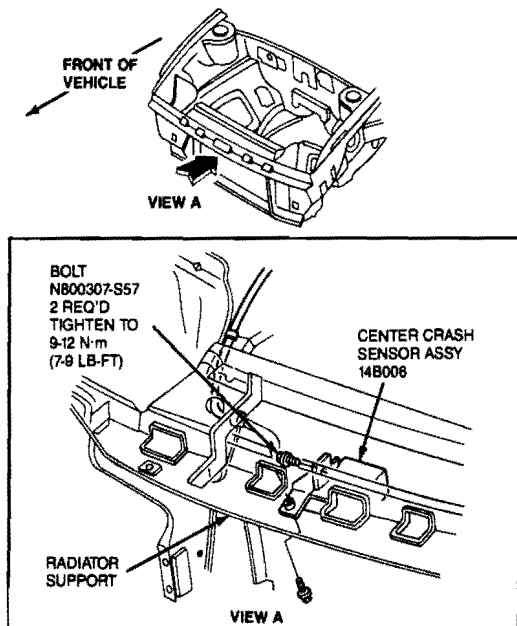
WARNING: THE ELECTRICAL CIRCUIT NECESSARY FOR SYSTEM DEPLOYMENT IS POWERED DIRECTLY FROM THE BATTERY. TO AVOID ACCIDENTAL DEPLOYMENT AND POSSIBLE PERSONAL INJURY, THE BATTERY GROUND CABLE AND THE BATTERY BACKUP MUST BE DISCONNECTED PRIOR TO SERVICING ANY SYSTEM COMPONENTS.

Sensor, Front Center**Removal**

1. Disconnect battery ground cable and battery backup power supply.
2. Remove front bumper assembly. Refer to Section 47-02.
3. Disconnect center front sensor connector from wiring harness connector.

REMOVAL AND INSTALLATION (Continued)

4. Remove the two bolts retaining the sensor to the radiator support. Remove the sensor from the vehicle.



R7010-A

Installation

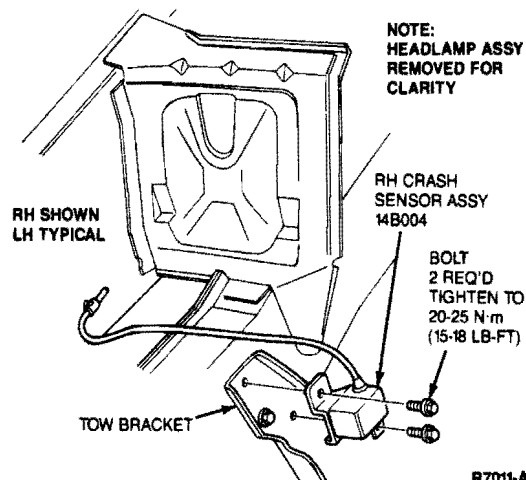
1. Position the sensor with the arrow on top pointing toward the front of the vehicle and secure to the radiator support with two bolts. Tighten bolts to 9-12 N·m (7-9 lb-ft).
2. Connect sensor lead to the wiring harness connector.
3. Install front bumper assembly.
4. Connect battery ground cable and battery backup.
5. Verify air bag indicator lamp.

Sensor, Front, Left or Right**Removal**

WARNING: THE ELECTRICAL CIRCUIT NECESSARY FOR SYSTEM DEPLOYMENT IS POWERED DIRECTLY FROM THE BATTERY. TO AVOID ACCIDENTAL DEPLOYMENT AND POSSIBLE PERSONAL INJURY, THE BATTERY GROUND CABLE AND THE BATTERY BACKUP MUST BE DISCONNECTED PRIOR TO SERVICING OR REPLACING ANY SYSTEM COMPONENTS.

1. Raise the headlamps by using the service switch. If servicing LH sensor, remove LH headlamp bezel and splash shield.

2. Disconnect battery ground cable and battery backup power supply.
3. Remove electrical connector retaining clip from the apron under headlamp.
4. Disconnect the electrical connector.
5. Remove the two bolts retaining the sensor and remove the sensor.



R7011-A

Installation

1. Position the sensor in the vehicle, ensuring that the arrow faces to the front of the vehicle. Install sensor retaining bolts and tighten to 20-25 N·m (15-18 lb-ft).
2. Connect the sensor lead to the wiring harness connector.
3. Install the connector retaining clip into the hole in the apron. If servicing LH sensor, install LH headlamp splash shield and bezel.
4. Connect battery ground cable and battery backup power supply.
5. Lower the headlamps.
6. Verify air bag indicator lamp.

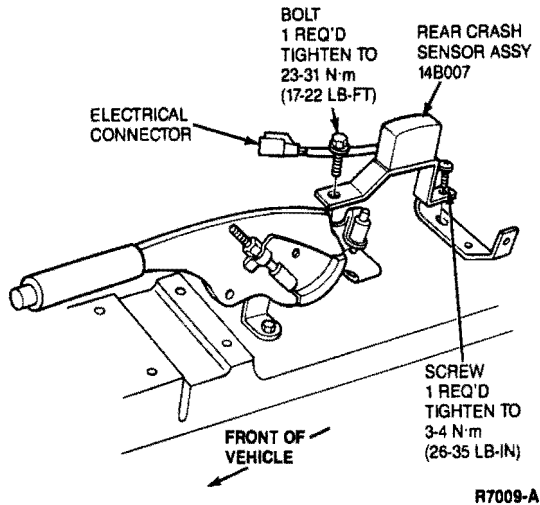
Sensor, Rear**Removal**

WARNING: THE ELECTRICAL CIRCUIT NECESSARY FOR SYSTEM DEPLOYMENT IS POWERED DIRECTLY FROM THE BATTERY. TO AVOID POSSIBLE PERSONAL INJURY, THE BATTERY GROUND CABLE AND THE BATTERY BACKUP MUST BE DISCONNECTED PRIOR TO SERVICING OR REPLACING ANY SYSTEM COMPONENTS.

1. Disconnect battery ground cable and battery backup power supply.

REMOVAL AND INSTALLATION (Continued)

2. Remove center console. Refer to Section 45-31.
3. Remove sensor retaining screw and bolt.
4. Disconnect sensor lead from wiring harness connector.
5. Remove sensor.

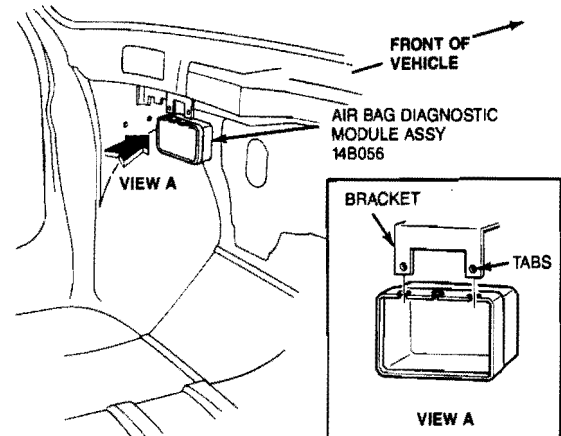
**Installation**

1. Connect the sensor lead to the wiring harness connector.
2. Position the sensor and make sure the arrow faces to the front of the vehicle.
3. Install sensor retaining bolt and screw. Tighten screw to 3-4 N·m (26-35 lb-in). Tighten bolt to 23-31 N·m (17-22 lb-ft).
4. Install console. Refer to Section 45-31.
5. Connect battery ground cable and battery backup power supply.
6. Verify air bag indicator lamp.

Diagnostic Assembly**Removal**

WARNING: THE ELECTRICAL CIRCUIT NECESSARY FOR SYSTEM DEPLOYMENT IS POWERED DIRECTLY FROM THE BATTERY. TO AVOID ACCIDENTAL DEPLOYMENT AND POSSIBLE PERSONAL INJURY, THE BATTERY GROUND CABLE AND THE BATTERY BACKUP MUST BE DISCONNECTED PRIOR TO SERVICING OR REPLACING ANY SYSTEM COMPONENTS.

1. Disconnect battery ground cable and battery backup power supply.
2. Locate diagnostic module (a blue box) mounted behind the fuse panel in the instrument panel.
3. Depress the two tabs retaining the module and remove module.
4. Disconnect the connector and remove the module.

**Installation**

1. Connect connector to the module.
2. Position the module on the bracket. Ensure tabs lock into place.
3. Connect battery ground cable and battery backup power supply.
4. Verify air bag indicator lamp.

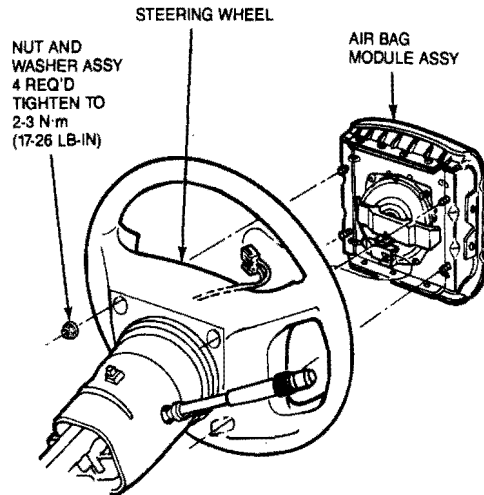
Air Bag Module**Removal**

WARNING: THE ELECTRICAL CIRCUIT NECESSARY FOR SYSTEM DEPLOYMENT IS POWERED DIRECTLY FROM THE BATTERY. TO AVOID ACCIDENTAL DEPLOYMENT AND POSSIBLE PERSONAL INJURY, THE BATTERY GROUND CABLE AND THE BATTERY BACKUP MUST BE DISCONNECTED PRIOR TO SERVICING ANY SYSTEM COMPONENTS.

1. Disconnect battery ground cable and battery backup power supply.
2. Remove the four nut and washer assemblies securing the air bag to the steering wheel.

REMOVAL AND INSTALLATION (Continued)

3. Disconnect the air bag connector to the clockspring and remove air bag.



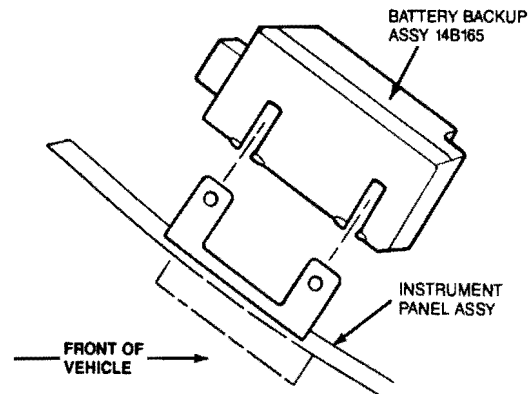
R7013-A

CAUTION: Follow air bag handling procedures.

Installation

1. Connect the air bag connector to the clockspring.
2. Position the air bag on the steering wheel, and install four nut and washer assemblies. Tighten to 2-3 N·m (17-26 lb-in).
3. Connect battery ground cable and battery backup power supply.
4. Verify air bag indicator lamp.

2. Lower the glove compartment door fully by depressing the stops.
3. Detach the battery backup which is a blue rectangular box on the outer LH side of the glove compartment and attached to the instrument panel.
4. Disconnect electrical connector.
5. Remove the module by depressing the tabs and pulling the module up and away from the instrument panel.



R7014-A

Installation

1. Connect the electrical connector.
2. Attach the battery backup to the instrument panel.
3. Install and close the glove compartment.
4. Connect battery ground cable.
5. Verify air bag indicator lamp.

Air Bag Clockspring

Refer to Section 13-04.

Backup Power Supply**Removal**

WARNING: THE ELECTRICAL CIRCUIT NECESSARY FOR SYSTEM DEPLOYMENT IS POWERED DIRECTLY FROM THE BATTERY. TO AVOID ACCIDENTAL DEPLOYMENT AND POSSIBLE PERSONAL INJURY, THE BATTERY GROUND CABLE AND THE BATTERY BACKUP MUST BE DISCONNECTED PRIOR TO SERVICING ANY SYSTEM COMPONENTS.

1. Disconnect battery ground cable.

SPECIFICATIONS

MAJOR SYSTEM COMPONENT PART NUMBERS

Component	Part Number
Air Bag Module Assy	T043B13A
Sensor and Bracket Assy, Front Right	14B004 A
Sensor and Bracket Assy, Front Left	14B005 A
Sensor and Bracket Assy, Center	14B006 A
Sensor and Bracket Assy, Rear	14B007 A
Module Assy, Air Bag Diagnostic	14B056 A
Backup Power Supply	14B165 A

CR5624-A

SPECIFICATIONS (Continued)**TORQUE SPECIFICATIONS**

Description	Nm	Lb-Ft
Air Bag Module	2-3	17-26 (Lb-In)
Crash Sensor, Center	9-12	7-9
Crash Sensor, RH/LH	20-25	15-18
Crash Sensor, Rear—Bolt	23-31	17-22
Crash Sensor, Rear—Screw	3-4	26-35 (Lb-In)

SPECIAL SERVICE TOOLS**ROTUNDA EQUIPMENT**

Model	Description
059-00010	Dwell-Tach-Volt-Ohms Tester

