SECTION 9H

SEATS

CAUTION: Disconnect the negative battery cable before removing or installing any electrical unit or when a tool or equipment could easily come in contact with exposed electrical terminals. Disconnecting this cable will help prevent personal injury and damage to the vehicle. The ignition must also be in LOCK unless otherwise noted.

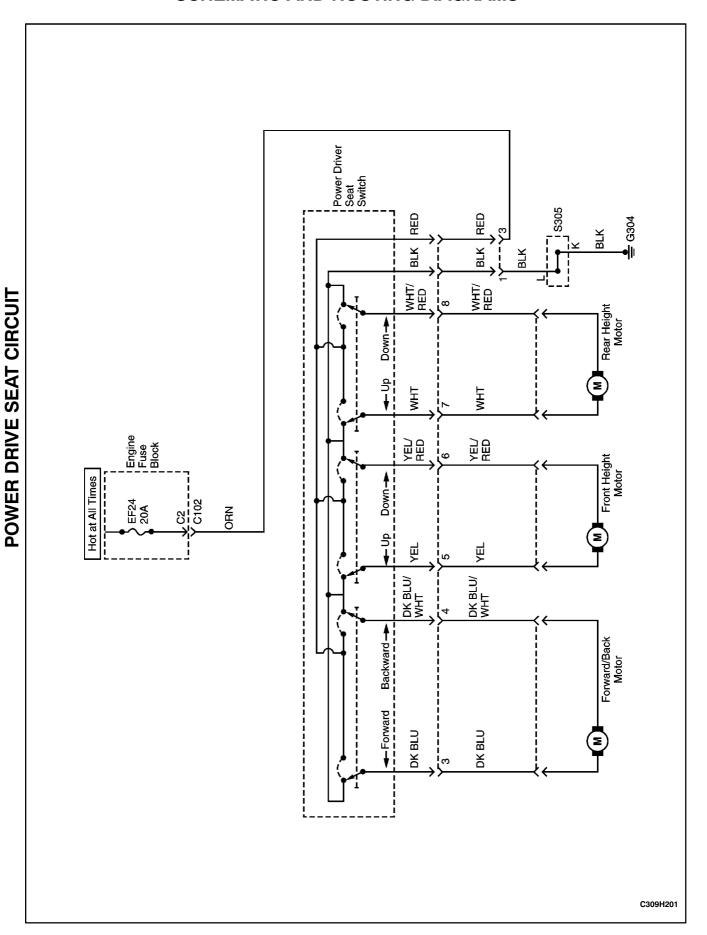
TABLE OF CONTENTS

Specifications	9H-1	Lumbar Support Lever	9H-13
Fastener Tightening Specifications	9H-1	Height Adjustment Knobs	9H-13
Schematic and Routing Diagrams	9H-2	Front Seat Trim	9H-14
Power Drive Seat Circuit	9H-2	Head Restraint	9H-15
Diagnosis	9H-3	Rear Seat Cushion	9H-16
Power Drive Seat	9H-3	Split Rear Seatback	9H-16
Maintenance and Repair	9H-7	Split Rear Seatback Hinge	9H-17
On-Vehicle Service		Split Rear Seatback Lock Striker	9H-18
Front Bucket Seat	9H-7	Rear Seat Side Bolster Cushion	9H-19
Front Seatback	9H-8	Rear Seat Center Armrest	9H-20
Front Seat Cushion	9H-9	Seat Covers	9H-20
Front Bucket Seat Track	9H-10	General Description and System	
Power Driver Seat Tilt Motors	9H-11	Operation	
Power Driver Seat Slide Assembly	9H-11	Seats	9H-17
Seat Recliner Lever	9H-12		

SPECIFICATIONS FASTENER TIGHTENING SPECIFICATIONS

Application	N•m	Lb-Ft	Lb-In
Armrest Nuts	12	_	106
Front Seatback Bolts	45	33	-
Front Seat Cover Screws	12	-	106
Front Seat Cushion Bolts	12	-	106
Front Seat Trim Screws	12	-	106
Front Seat-to-Floor Bolts	25	18	-
Height Adjustment Knob Screw	2	-	18
Lumbar Support Lever Screw	10	-	89
Rear Seatback Bolts	25	18	-
Rear Seatback Lock Striker Bolts	25	18	-
Rear Seatback Nuts	25	18	-
Rear Seat Hinge Bolts	12	-	106
Rear Seat Side Bolster Cushion Bolt	25	18	-
Seat Recliner Lever Screw	12	-	106
Slide Assembly Bolts	25	18	-
Slide Assembly Nuts	15	11	-
Slide Assembly Screws	10	-	89
Tilt Motor Bolts	13	-	115

SCHEMATIC AND ROUTING DIAGRAMS



DIAGNOSIS

POWER DRIVER SEAT

Caution: If the driver seat motor is powered directly from a battery, personal injury could be caused by sparking and sudden heating of the terminals if the wires from the battery are touched together. Use a fused jumper wire, and use terminal test adapters if available. If terminal test adapters are not available, use insulating tape to reduce the possibility of touching the jumpers together.

Diagnostic Aids

If resistance is measured between the terminals of the motor connectors, the frontward/backward motor resistance is approximately equal to 1 Ω , the front height

motor resistance is approximately equal to 5 $\Omega,$ and the rear height motor resistance is approximately equal to 9 $\Omega.$

Power Driver Seat Does Not Work

Step	Action	Value(s)	Yes	No
1	Visually and physically check for proper connections at the following connectors: The four-pin connector under the driver seat. The connector to the power driver seat switch. Were the connectors firmly attached?	-	Go to <i>Step 3</i>	Go to Step 2
2	 Properly connect the connectors. Attempt to adjust the power driver seat. Does the power driver seat work after the connectors were correctly attached? 	-	System OK	Go to <i>Step 3</i>
3	Attempt to adjust the power driver seat in each of the three directions: frontward/backward, front height, rear height. Does the seat adjust in any direction?	-	Go to <i>Step 8</i>	Go to Step 4
4	 Disconnect the four-pin connector from the body wiring harness which is found under the driver seat. Turn the ignition ON. Check the voltage at the ORN wire and the body harness side of the four-pin connector. Is the voltage equal to the specified value? 	11-14 v	Go to <i>Step 6</i>	Go to <i>Step 5</i>
5	Repair the power supply to the ORN wire and fuse EF24. Is the repair complete?	-	System OK	-
6	Use an ohmmeter to check the resistance between ground and the BLK wire at the disconnected four-pin connector, body harness side. Is the resistance equal to the specified value?	≈0 Ω	Go to <i>Step 8</i>	Go to <i>Step 7</i>
7	Repair the open BLK wire between ground and the four-pin body harness connector under the driver seat. Is the repair complete?	-	System OK	-
8	Attempt to adjust the power driver seat forward and backward. Does the power driver seat move forward and backward?	-	Go to Step 14	Go to Step 9

Power Driver Seat Does Not Work (Cont'd)

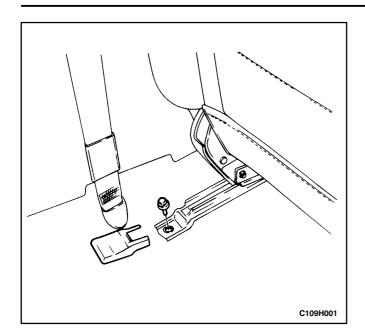
Step	Action	Value(s)	Yes	No
	 Disconnect the power driver seat switch electrical connector. Move a vehicle battery near enough to the power driver seat switch so that jumper wires can reach from the battery to the switch. 			
	Connect a jumper wire between the test battery negative terminal and the DK BLU wire at terminal 3 on the motor side of the power driver seat switch.			
9	4. Carefully connect a fused jumper wire between the test battery positive terminal the DK BLU/WHT wire at terminal 4 on the motor side of the power driver seat switch. The two terminals are close together, and the motor may have a short circuit, so a fused jumper wire is recommended. Do not allow the wires from the battery to touch each other. If the motor is okay and it is not at the end of its travel, the power driver seat should move.	-		
	5. To enable the motor to operate in the opposite direction, carefully reverse the battery connections between DK BLU and DK BLU/WHT. Does the motor run backward and forward when the motor was directly powered by a vehicle battery?		Go to Step 10	Go to Step 11
10	 Replace the power driver seat switch. The power driver seat switch can be installed backward, so test the switch to verify that it is installed correctly before reinstalling the front power driver seat trim and switch. Install the front power driver seat trim. Is the repair complete? 	-	System OK	-
11	 Disconnect the two-pin connector that joins the DK BLU and DK BLU/WHT wires from the power driver seat switch to the forward/backward motor. Use an ohmmeter to check the resistance of the DK BLU and DK BLU/WHT wires between the power driver seat switch connector and the forward/backward motor connector. 			
	Is the resistance of each wire equal to the specified value?	≈ 0 Ω	Go to Step 13	Go to Step 12
12	Repair the open circuit in the DK BLU wire or the DK BLU/WHT wire. Is the repair complete?	-	System OK	-
13	Replace the power driver seat motor assembly. Is the repair complete?	-	System OK	_
14	Attempt to adjust the power driver seat front height. Does the front height adjustment work?	-	Go to Step 18	Go to Step 15

Power Driver Seat Does Not Work (Cont'd)

Step	Action	Value(s)	Yes	No
15	 Disconnect the power driver seat switch electrical connector. Move a vehicle battery near enough to the power driver seat switch so that jumper wires can reach from the battery to the switch. Connect a jumper wire between the test battery negative terminal and the YEL wire at terminal 5 on the motor side of the power driver seat switch. Carefully connect a fused jumper wire between the test battery positive terminal and the YEL/RED wire at terminal 6 on the motor side of the power driver seat switch. The two terminals are close together, and the motor may have a short circuit, so a fused jumper wire is recommended. Do not allow the wires from the battery to touch each other. If the motor is good and it is not at the end of its travel, the power driver seat should move. To enable the motor to operate in the opposite direction, carefully reverse the battery connections between YEL and YEL/RED. Did the height adjust up and down when the motor was directly powered by a vehicle battery? 	1	Go to Step 10	Go to Step 16
16	 Disconnect the two-pin connector that joins the YEL and YEL/RED wires from the power driver seat switch to the front height motor. Use an ohmmeter to check the resistance of the YEL and YEL/RED wires between the power driver seat switch connector and the front height motor connector. Is the resistance of each wire equal to the specified value? 	$pprox 0 \Omega$	Go to Step 13	Go to Step 17
17	Repair the open circuit in the YEL wire or the YEL/RED wire. Is the repair complete?	-	System OK	-
18	Attempt to adjust the power driver seat rear height. Does the rear height adjustment work?	-	System OK	Go to Step 19

Power Driver Seat Does Not Work (Cont'd)

Step	Action	Value(s)	Yes	No
19	 Disconnect the power driver seat switch electrical connector. Move a vehicle battery near enough to the power driver seat switch so that jumper wires can reach from the battery to the switch. Connect a jumper wire between the test battery negative terminal and the WHT wire at terminal 7 on the motor side of the power driver seat switch. Carefully connect a fused jumper wire between the test battery positive terminal the WHT/RED wire at terminal 8 on the motor side of the power driver seat switch. The two terminals are close together, and the motor may have a short circuit, so a fused jumper wire is recommended. Do not allow the wires from the battery to touch each other. If the motor is good and it is not at the end of its travel, the power driver seat should move. To enable the motor to operate in the opposite direction, carefully reverse the battery connections between WHT and WHT/RED. Did the height adjust up and down when the motor was directly powered by a vehicle battery? 	-	Go to Step 10	Go to <i>Step 20</i>
20	 Disconnect the two-pin connector that joins the WHT and WHT/RED wires from the power driver seat switch to the front height motor. Use an ohmmeter to check the resistance of the WHT and WHT/RED wires between the power driver seat switch connector and the front height motor connector. Is the resistance of each wire equal to the specified value? 	≈ 0 Ω	Go to Step 13	Go to Step 21
21	Repair the open circuit in the WHT wire or the WHT/RED wire. Is the repair complete?	-	System OK	



MAINTENANCE AND REPAIR

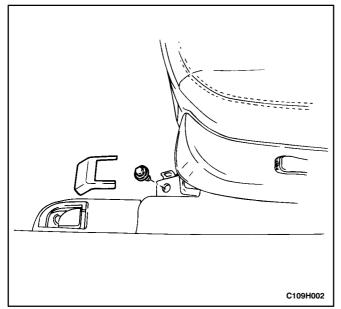
ON-VEHICLE SERVICE

FRONT BUCKET SEAT

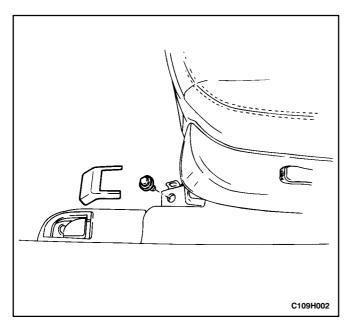
(Left-Hand Drive Shown, Right-Hand Drive Similar)

Removal Procedure

- 1. Disconnect the negative battery cable.
- 2. Remove the plastic caps and the bolts securing the rear portion of the front seat to the floor.



- 3. Remove the plastic caps and the bolts securing the front portion of the front seat to the floor (power driver seat shown, manual driver seat similar).
- 4. Disconnect the electrical connectors.
- 5. Remove the seat.



Installation Procedure

- 1. Install the seat.
- 2. Connect the electrical connectors.

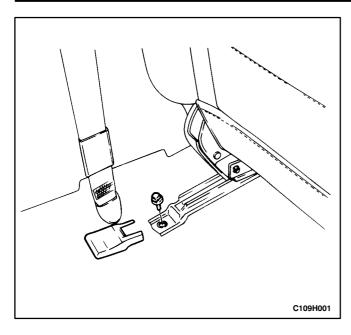
Notice: Dissimilar metals in direct contact with each other may corrode rapidly. Make sure to use the correct fasteners to prevent premature corrosion.

3. Install the bolts into the front portion of the front seat (power driver seat shown, manual driver seat similar).

Tighten

Tighten the front seat-to-floor bolts to 25 N•m (18 lb-ft).

4. Install the plastic caps.

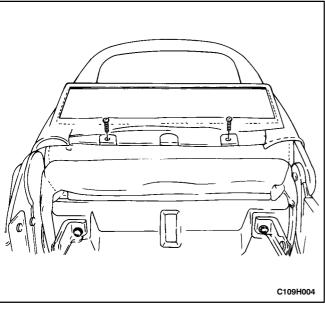


5. Install the bolts into the rear portion of the front seat.

Tighten

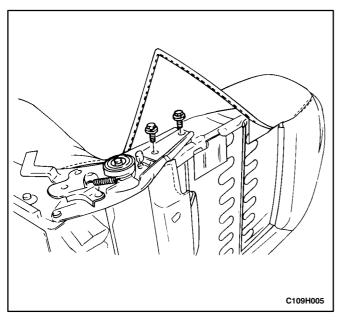
Tighten the front seat-to-floor bolts to 25 N•m (18 lb-ft).

- 6. Install the plastic caps.
- 7. Connect the negative battery cable.

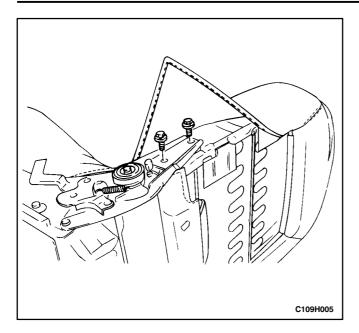


FRONT SEATBACK

- 1. Remove the front bucket seat from the vehicle. Refer to "Front Bucket Seats" in this section.
- 2. Remove the screws and slide the back panel down to remove.



- 3. Reposition the left side seatback cover.
- 4. Remove the bolts and the seatback.



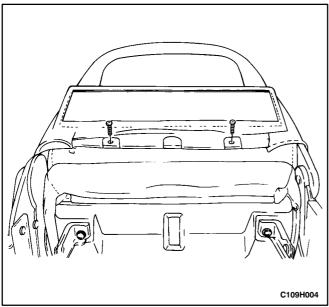
1. Install the seatback onto the seat cushion.

Notice: Dissimilar metals in direct contact with each other may corrode rapidly. Make sure to use the correct fasteners to prevent premature corrosion.

2. Install the front seatback bolts.

Tighten

Tighten the front seatback bolts to 45 N•m (33 lb-ft).

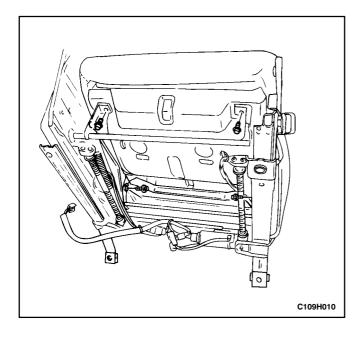


- 3. Install the seat cover to its original position.
- 4. Install the back panel onto the seat with the screws.

Tighten

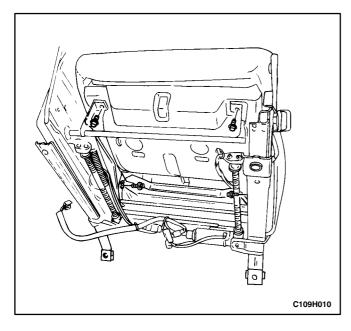
Tighten the front seat cover screws to 12 N•m (106 lb-in).

5. Install the front bucket seat in the vehicle. Refer to "Front Bucket Seats" in this section.



FRONT SEAT CUSHION

- 1. Remove the front seat from the vehicle. Refer to "Front Bucket Seats" in this section.
- 2. Remove the seat cushion bolts (power driver seat shown, manual driver seat similar).
- 3. Remove the cushion from the seat track.



1. Install the cushion onto the seat track.

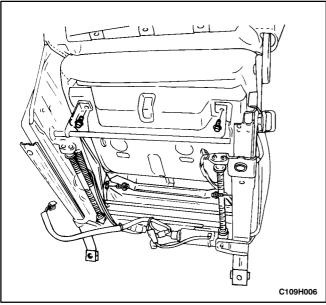
Notice: Dissimilar metals in direct contact with each other may corrode rapidly. Make sure to use the correct fasteners to prevent premature corrosion.

2. Install the seat track to the seat cushion with the bolts (power driver seat shown, manual driver seat similar).

Tighten

Tighten the front seat cushion bolts to 12 N•m (106 lb-ft).

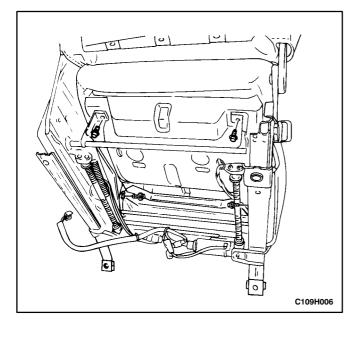
3. Install the front seat in the vehicle. Refer to "Front Bucket Seats" in this section.



FRONT BUCKET SEAT TRACK

Removal Procedure

- 1. Remove the seatback. Refer to "Front Seatback" in this section.
- 2. Remove the seat trim. Refer to "Front Seat Trim" in this section.
- 3. Remove the seat cushion bolts (power driver seat shown, manual driver seat similar).
- 4. Remove the seat track from the seat cushion.



Installation Procedure

1. Install the cushion onto the seat track.

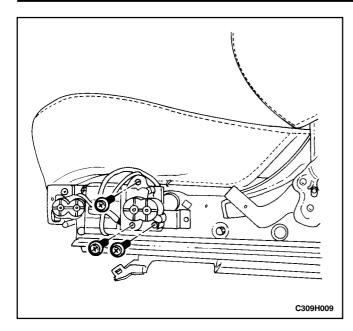
Notice: Dissimilar metals in direct contact with each other may corrode rapidly. Make sure to use the correct fasteners to prevent premature corrosion.

Install the seat track to the seat cushion with the seat cushion bolts (power driver seat shown, manual driver seat similar).

Tighten

Tighten the front seat cushion bolts to 12 N•m (106 lb-ft).

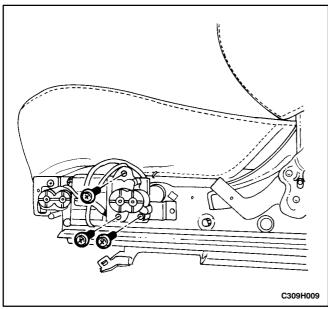
- 3. Install the seat trim. Refer to "Front Seat Trim" in this section.
- 4. Install the seatback. Refer to "Front Seatback" in this section.



POWER DRIVER SEAT TILT MOTORS

Removal Procedure

- Remove the driver seat. Refer to "Front Bucket Seat" in this section.
- Remove the front seat trim. Refer to "Front Seat Trim" in this section.
- 3. Remove the bolts and the motor.



Installation Procedure

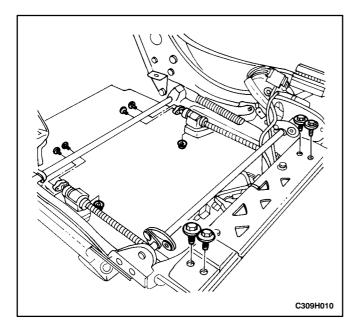
Notice: Dissimilar metals in direct contact with each other may corrode rapidly. Make sure to use the correct fasteners to prevent premature corrosion.

1. Install the motor with the bolts (front motor shown).

Tighten

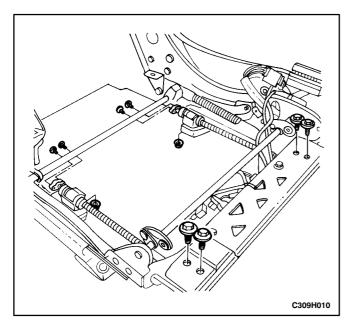
Tighten the tilt motor bolts to 13 Nem (115 lb-in).

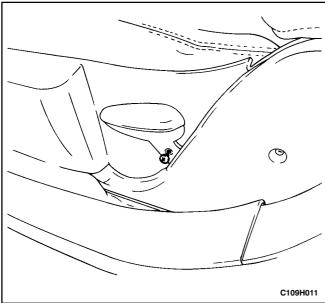
- 2. Install the front seat trim. Refer to "Front Seat Trim" in this section.
- 3. Install the driver seat. Refer to "Front Bucket Seat" in this section.

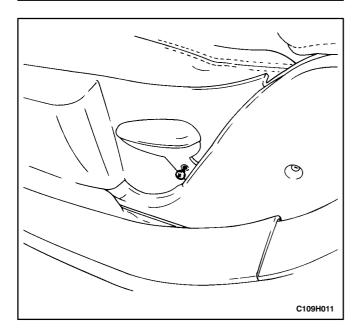


POWER DRIVER SEAT SLIDE ASSEMBLY

- Remove the driver seat. Refer to "Front Bucket Seat" in this section.
- 2. Remove the front seat cushion. Refer to "Front Seat Cushion" in this section.
- 3. Disconnect the electrical connector.
- Remove the bolts, the nuts, the screws, and the slide assembly.







Notice: Dissimilar metals in direct contact with each other may corrode rapidly. Make sure to use the correct fasteners to prevent premature corrosion.

1. Install the slide assembly with the bolts, the nuts, and the screws.

Tighten

Tighten the slide assembly bolts to 25 N•m (18 lb-ft). Tighten the slide assembly nuts to 15 N•m (11 lb-ft). Tighten the slide assembly screws to 10 N•m (89 lb-in).

- 2. Connect the electrical connector.
- 3. Install the front seat cushion. Refer to "Front Seat Cushion" in this section.
- 4. Install the driver seat. Refer to "Front Bucket Seat" in this section.

SEAT RECLINER LEVER

Removal Procedure

1. Remove the screw and the seat recliner lever (power driver seat shown, manual driver seat similar).

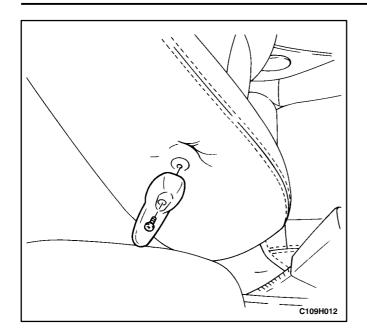
Installation Procedure

Notice: Dissimilar metals in direct contact with each other may corrode rapidly. Make sure to use the correct fasteners to prevent premature corrosion.

1. Install the seat recliner lever with the screw (power driver seat shown, manual driver seat similar).

Tighten

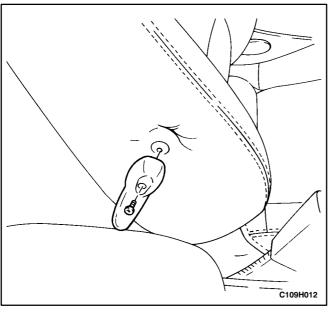
Tighten the seat recliner lever screw to 12 N•m (106 lb-in).



LUMBAR SUPPORT LEVER

Removal Procedure

1. Remove the screw and the lumbar support lever.



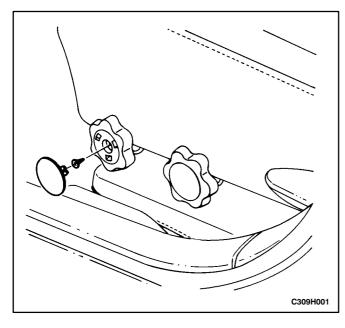
Installation Procedure

Notice: Dissimilar metals in direct contact with each other may corrode rapidly. Make sure to use the correct fasteners to prevent premature corrosion.

1. Install the lumbar support lever with the screw.

Tighten

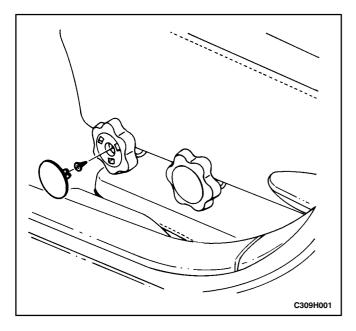
Tighten the lumbar support lever screw to 10 N•m (89 lb-in).



HEIGHT ADJUSTMENT KNOBS

(Left-Hand Drive Shown, Right-Hand Drive Similar)

- 1. Remove the cap to reveal the screw.
- 2. Remove the screw and the height adjustment knob (front knob shown).



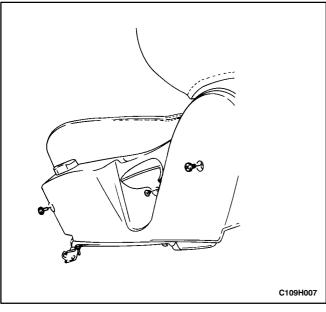
Notice: Dissimilar metals in direct contact with each other may corrode rapidly. Make sure to use the correct fasteners to prevent premature corrosion.

1. Install the height adjustment knob with the screw (front knob shown).

Tighten

Tighten the height adjustment knob screw to 2 N•m (18 lb-in).

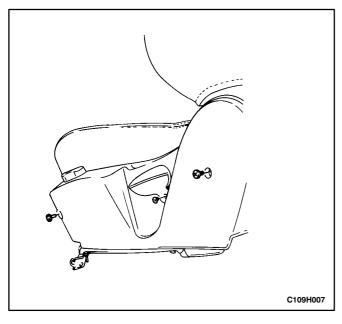
2. Install the cap onto the height adjustment knob.



FRONT SEAT TRIM

Removal Procedure

- 1. Remove the front bucket seat from the vehicle. Refer to "Front Bucket Seats" in this section.
- 2. Remove the screw and the recliner lever (power driver seat shown, manual driver seat similar).
- 3. Remove the screws and the front seat trim.



Installation Procedure

Notice: Dissimilar metals in direct contact with each other may corrode rapidly. Make sure to use the correct fasteners to prevent premature corrosion.

1. Install the front seat trim with the screws.

Tighten

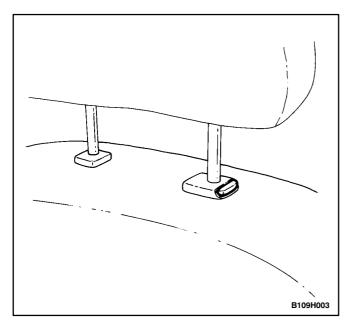
Tighten the front seat trim screws to 12 N•m (106 lb-in).

2. Install the recliner lever with the screw (power driver seat shown, manual driver seat similar).

Tighten

Tighten the seat recliner lever screw to 12 N•m (106 lb-in).

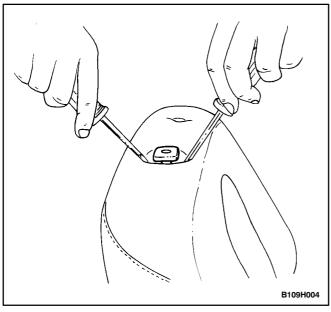
3. Install the front bucket seat in the vehicle. Refer to "Front Bucket Seats" in this section.



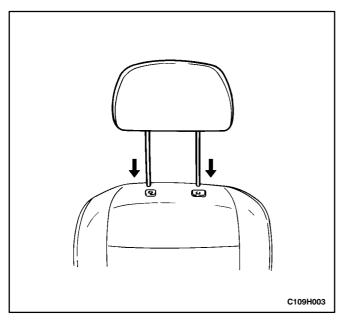
HEAD RESTRAINT

Removal Procedure

1. Press in the head restraint adjust button and remove the head restraint from the seatback.

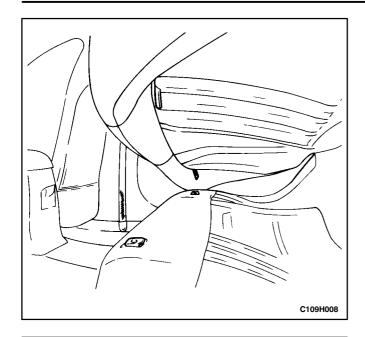


- 2. Insert two flat head screwdrivers down the front and back side of the guide sleeves.
- 3. With the screwdrivers, press in the retaining latches and remove the guide sleeves.



Installation Procedure

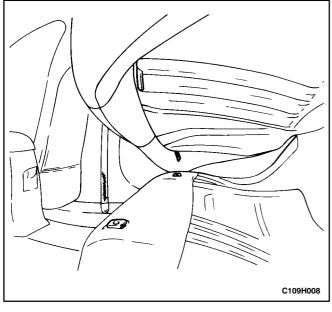
- 1. Install the guide sleeves into the seatback and press them down in order to engage the guide sleeve retaining latches.
- 2. Install the head restraint into the guide sleeves.



REAR SEAT CUSHION

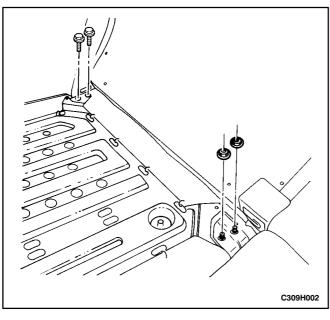
Removal Procedure

1. Remove the rear seat cushion from the floor by lifting it off the retaining brackets and sliding it forward.



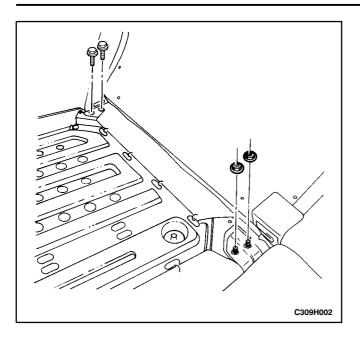
Installation Procedure

1. Install the rear seat cushion by inserting the metal loops into the rear retaining brackets and pressing the front of the seat cushion down.



SPLIT REAR SEATBACK

- 1. Lower the rear seatbacks.
- 2. Remove the retaining clips and reposition the rear seatback backside cover.
- 3. Remove the nuts, the bolts, and the seatback from the hinges.



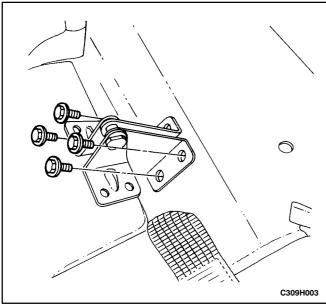
Notice: Dissimilar metals in direct contact with each other may corrode rapidly. Make sure to use the correct fasteners to prevent premature corrosion.

1. Install the seatback to the hinges with the bolts and the nuts.

Tighten

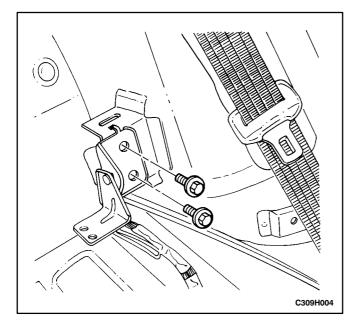
Tighten the rear seatback bolts to 25 N•m (18 lb-ft). Tighten the rear seatback nuts to 25 N•m (18 lb-ft).

- 2. Install the rear seatback backside cover with the retaining clips.
- 3. Raise and secure the rear seatbacks in the upright position.

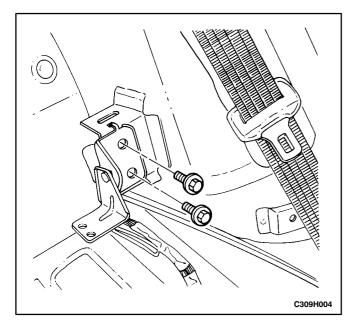


SPLIT REAR SEATBACK HINGE

- 1. Remove the rear seatback and the rear seat cushion. Refer to "Split Rear Seatback" and "Rear Seat Cushion" in this section.
- 2. Remove the bolts and the seatback center hinge.



- 4. Remove the rear seat side bolster cushion. Refer to "Rear Seat Side Bolster Cushion" in this section.
- 5. Remove the bolts and the seatback outer hinge.

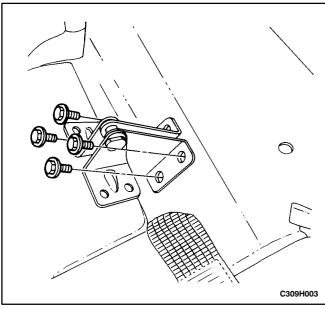


Notice: Dissimilar metals in direct contact with each other may corrode rapidly. Make sure to use the correct fasteners to prevent premature corrosion.

1. Install the seatback outer hinge with the bolts.

Tighten

Tighten the rear seat hinge bolts to 12 N•m (106 lb-in).

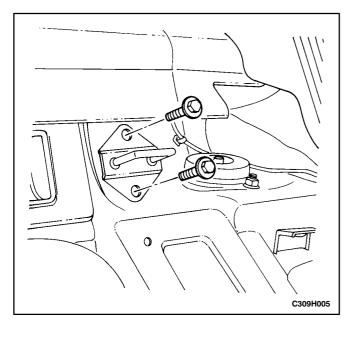


- 2. Install the rear seat side bolster cushion. Refer to "Rear Seat Side Bolster Cushion" in this section.
- 3. Install the seatback center hinge with the bolts.

Tighten

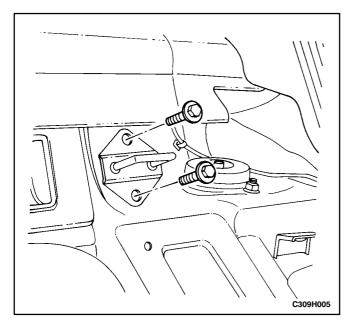
Tighten the rear seat hinge bolts to 12 N•m (106 lb-in).

4. Install the rear seatback and the rear seat cushion. Refer to "Split Rear Seatback" and "Rear Seat Cushion" in this section.



SPLIT REAR SEATBACK LOCK STRIKER

- 1. Lower the rear seatbacks.
- 2. Remove the rear seat side bolster cushion. Refer to "Rear Seat Side Bolster Cushion" in this section.
- 3. Remove the retaining clips and the back panel trim cover.
- 4. Remove the bolts and the seatback lock strikers.



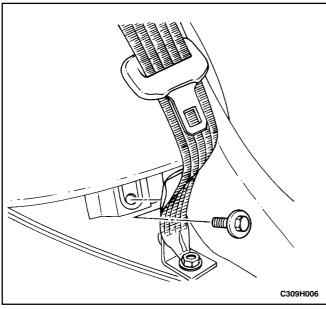
Notice: Dissimilar metals in direct contact with each other may corrode rapidly. Make sure to use the correct fasteners to prevent premature corrosion.

1. Install the seatback lock strikers with the bolts.

Tighten

Tighten the rear seatback lock striker bolts to 25 N•m (18 lb-ft).

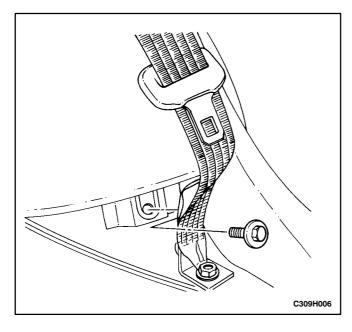
- 2. Install the back panel trim cover with the retaining clips.
- 3. Install the rear seat side bolster cushion. Refer to "Rear Seat Side Bolster Cushion" in this section.
- 4. Raise and secure the rear seatbacks in the upright position.



REAR SEAT SIDE BOLSTER CUSHION

Removal Procedure

- 1. Remove the rear seat cushion. Refer to "Rear Seat Cushion" in this section.
- 2. Remove the bolt securing the rear seat side bolster cushion.
- 3. Lift and remove the rear seat side bolster cushion.



Installation Procedure

1. Slide the rear seat side bolster cushion into the retaining brackets.

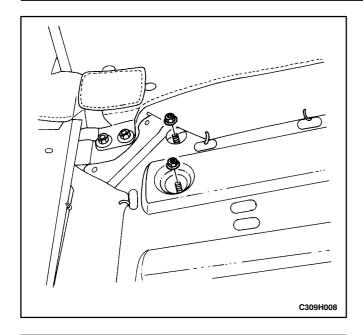
Notice: Dissimilar metals in direct contact with each other may corrode rapidly. Make sure to use the correct fasteners to prevent premature corrosion.

2. Install the rear seat side bolster cushion with the bolt.

Tighten

Tighten the rear seat side bolster cushion bolts to 25 N•m (18 lb-ft).

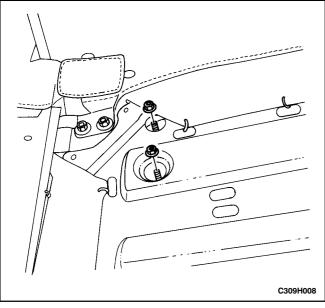
3. Install the rear seat cushion. Refer to "Rear Seat Cushion" in this section.



REAR SEAT CENTER ARMREST

Removal Procedure

- 1. Lower the rear seatbacks.
- 2. Remove the retaining clips and reposition the rear seatback backside cover.
- 3. Remove the nuts and the armrest.



Installation Procedure

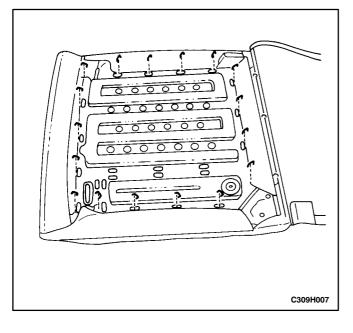
Notice: Dissimilar metals in direct contact with each other may corrode rapidly. Make sure to use the correct fasteners to prevent premature corrosion.

1. Install the armrest with the nuts.

Tighten

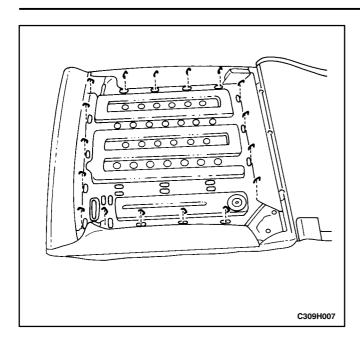
Tighten the armrest nuts to 12 N•m (106 lb-in).

- 2. Install the rear seatback backside cover with the retaining clips.
- 3. Raise and secure the rear seatbacks in the upright position.



SEAT COVERS

- Remove the seatback and/or cushion. Refer to "Front Seatback," "Front Seat Cushion," "Split Rear Seatback," and/or "Rear Seat Cushion" in this section.
- 2. Remove the hog rings from the seatback and/or cushion.
- 3. Remove the seat cover from the seatback and/or cushion.



- 1. Install the seat cover onto the seatback and/or cushion with new hog rings.
- 2. Install the seatback and/or seat cushion. Refer to "Front Seatback," "Front Seat Cushion," "Split Rear Seatback," and/or "Rear Seat Cushion" in this section.

GENERAL DESCRIPTION AND SYSTEM OPERATION

SEATS

Important: Do not attempt to change the designed seat position by altering the designed seat adjuster-to-floor pan anchor provisions or the seat adjuster-to-seat frame anchor provisions. Changing seat position could affect the performance of the seat system.

This vehicle is equipped with front bucket seats with separate, adjustable head restraints and a three-passenger rear seat. Seat cushions and back have formed foam pads, which fit the contours of the full panel seatback frame assembly and also the designed contour of the seat cushion frame. The front bucket seats also have a recline, a height, and a lumbar adjustment.