

# MAINTENANCE AND REPAIR

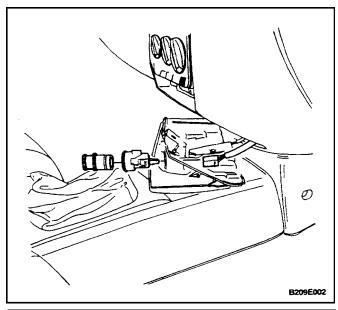
# **ON-VEHICLE SERVICE**

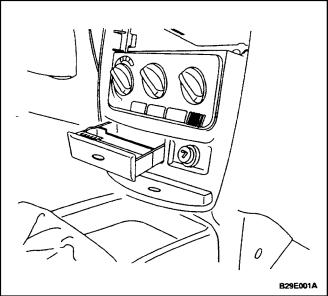
# **CIGAR LIGHTER**

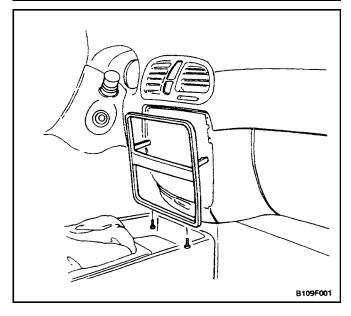
- 1. Disconnect the negative battery cable.
- 2. Remove the floor console. Refer to "Glove Box" in this section.

- 3. Remove the screw and driver/passenger knee bolster. Refer to "Driver/passenger Knee Bolster"in this section 9G.
- 4. Remove the screws and the audio system trim plate.

- 5. Disconnect the cigar lighter and ashtray lamp electrical connectors.
- 6. Remove the cigar lighter from the cigar lighter housing.
- 7. Remove the cigar lighter housing from the ashtray housing.







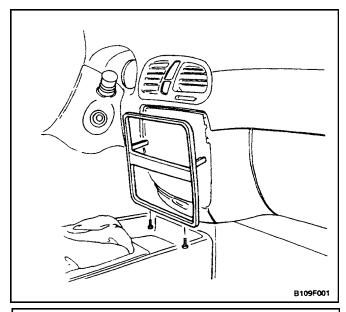
- 1. Install the cigar lighter housing in the ashtray housing.
- 2. Install the cigar lighter in the cigar lighter housing.
- 3. Connect the cigar lighter electrical connector.

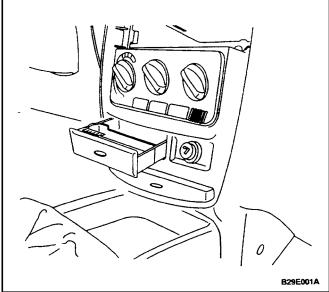
4. Install the ashtray housing with the screw.

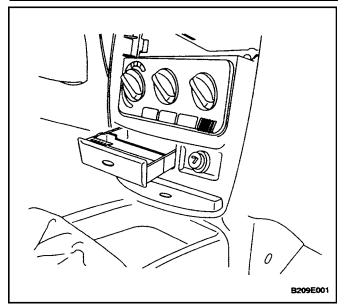
# **Tighten**

Tighten the ashtray housing screw to 2.5 N•m (22 lbin).

- 5. Install the audio system trim plate with the screws.
- 6. Install glove box, driver/passenger knee bolster with the screws.
- 7. Connect the negative battery cable.







#### **ASHTRAY**

#### **Removal Procedure**

- 1. Disconnect the negative battery cable.
- 2. Remove the screws and the glove box.

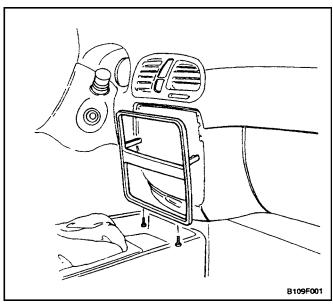
- 3. Remove the screw and driver/passenger knee bolster.
- 4. Remove the screws and the audio system trim plate.
- 5. Disconnect the ashtray electrical connector.

#### **Installation Procedure**

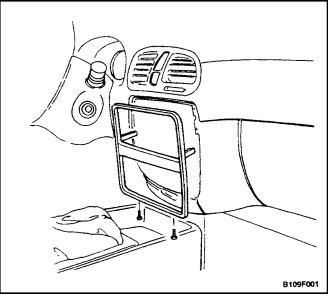
- 1. Connect the ashtray electrical connector.
- 2. Install the screw and the ashtray housing.

#### **Tighten**

Tighten the ashtray housing screw to 2.5 N•m (22 lbin).



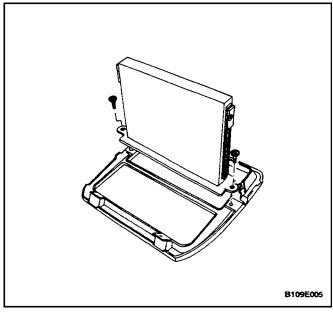
- 3. Install the audio system trim plate with the screws.
- 4. Install glove box, driver/passenger knee bolster with the screws.
- 5. Connect the negative battery cable.



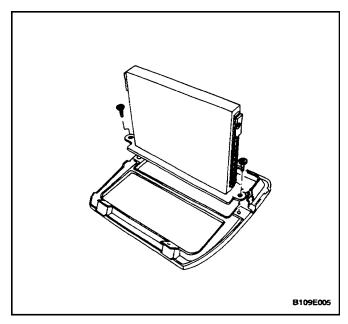
# **CUP HOLDER**

## **Removal Procedure**

- 1. Remove the screws and the glove box.
- Remove the screw and driver/passenger knee bolster.



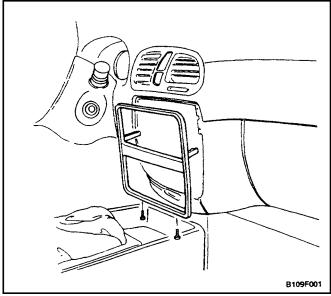
3. Remove the screws and the cup holder from the audio system trim plate.



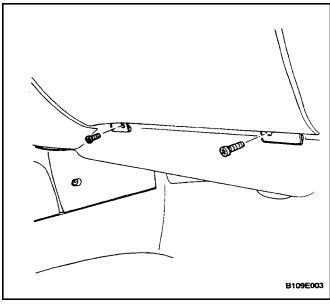
1. Install the cup holder to the audio system trim plate with the screws.

# **Tighten**

Tighten the cup holder screws to 2.5 N•m (22 lb-in).

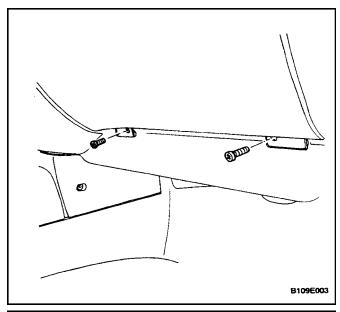


- 2. Install the audio system trim plate with the screws.
- 3. Install glove box, driver/passenger knee bolster with the screws.



# **GLOVE BOX**

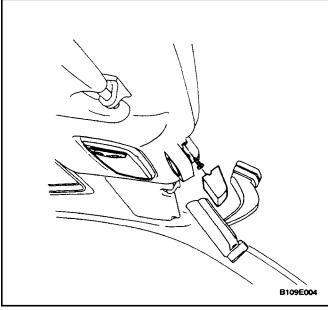
- 1. Remove the screws at the base of the glove box.
- 2. Open and remove the glove box.



- 1. Position the glove box in the instrument panel.
- 2. Install the glove box with the screws.

# **Tighten**

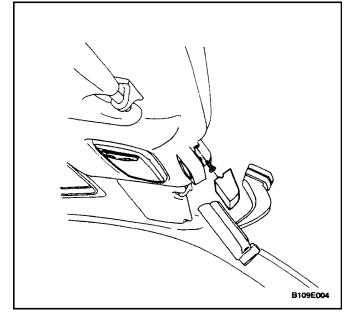
Tighten the glove box screws to 5.5 N•m (49 lb-in).



# **DIGITAL CLOCK**

#### **Removal Procedure**

- 1. Disconnect the negative battery cable.
- 2. Remove the plastic cover to reveal the screws.
- 3. Remove the screws and the digital clock.
- 4. Disconnect the electrical connector.



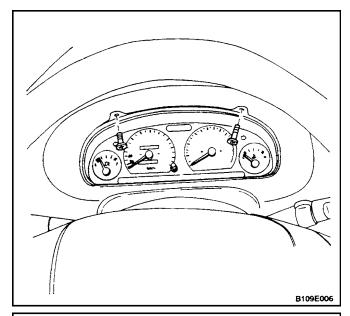
#### **Installation Procedure**

- 1. Connect the electrical connector.
- 2. Install the digital clock with the screws.

#### **Tighten**

Tighten the digital clock screws to 4 N•m (35 lb-in).

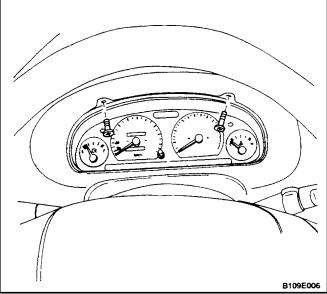
- 3. Install the cluster housing.
- 4. Connect the negative battery cable.



#### **INSTRUMENT CLUSTER**

#### **Removal Procedure**

- 1. Disconnect the negative battery cable.
- 2. Remove the screws and the instrument cluster.
- Disconnect the electrical connectors.



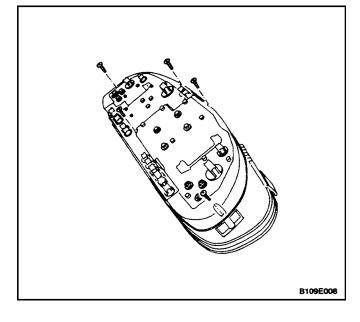
#### **Installation Procedure**

- 1. Connect the electrical connectors.
- 2. Install the instrument cluster with the screws.

#### **Tighten**

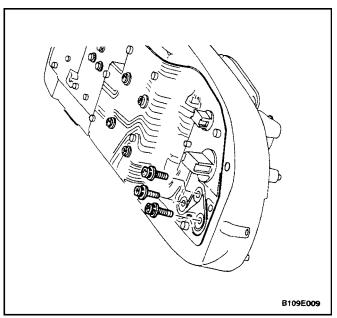
Tighten the instrument cluster screws to 4 N•m (35 lb-in).

3. Connect the negative battery cable.

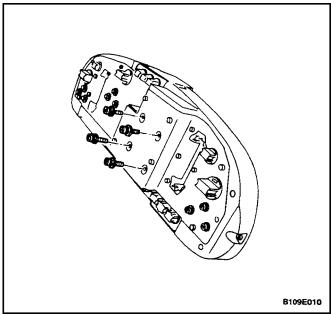


# SPEEDOMETER/ODOMETER/TRIP ODOMETER

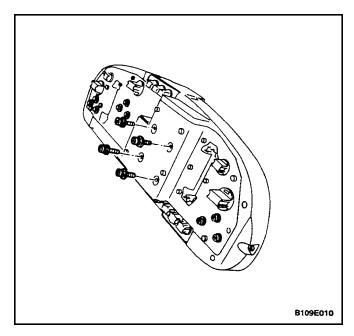
- 1. Disconnect the negative battery cable.
- 2. Remove the instrument cluster. Refer to "Instrument Cluster" in this section.
- 3. Push the locking and remove the instrument cluster lens.



4. Remove the screws and the fuel gauge.



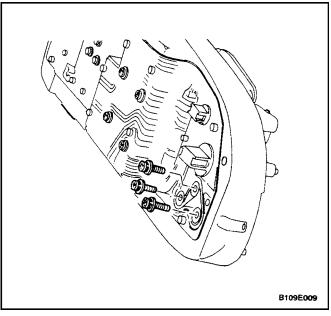
5. Remove the screws and the speedometer/odometer from the instrument cluster.



1. Install the speedometer/odometer in the instrument cluster with the screws.

#### **Tighten**

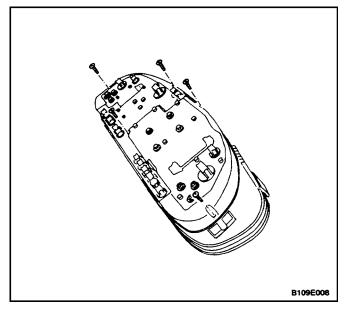
Tighten the speedometer/odometer screws to 2.5 N•m (22 lb-in).



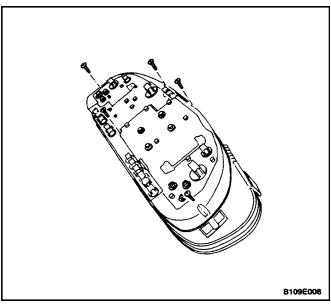
2. Install the fuel gauge with the screws.

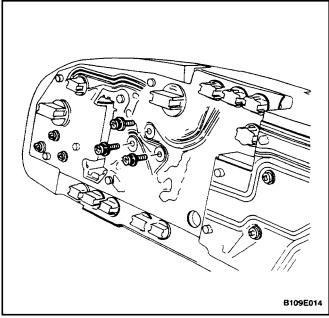
# **Tighten**

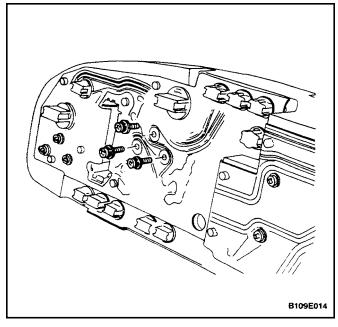
Tighten the fuel gauge screws to 2.5 N•m (22 lb-in).



- 3. Install the instrument cluster lens with the screws.
- 4. Install the instrument cluster. Refer to "Instrument Cluster" in this section.
- 5. Connect the negative battery cable.







#### **TACHOMETER**

#### **Removal Procedure**

- 1. Disconnect the negative battery cable.
- 2. Remove the instrument cluster. Refer to "Instrument Cluster" in this section
- 3. Remove the screws and the instrument cluster lens.

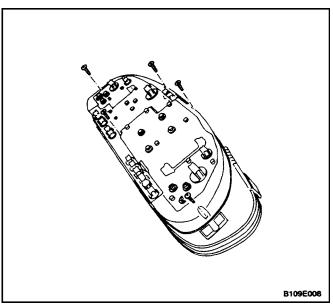
4. Remove the screws and the tachometer from the instrument cluster.

#### **Installation Procedure**

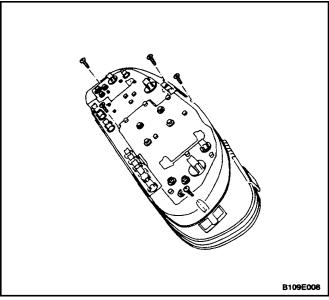
1. Install the tachometer to the instrument cluster with the screws.

## **Tighten**

Tighten the tachometer screws to 2.5 N•m (22 lb-in).



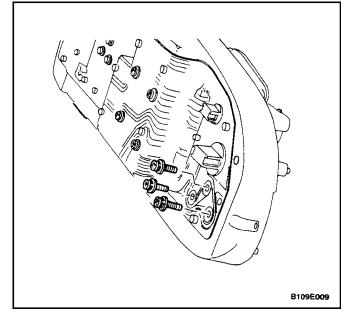
- 2. Install the instrument cluster lens.
- 3. Install the instrument cluster. Refer to "Instrument Cluster" in this section.
- 4. Connect the negative battery cable.



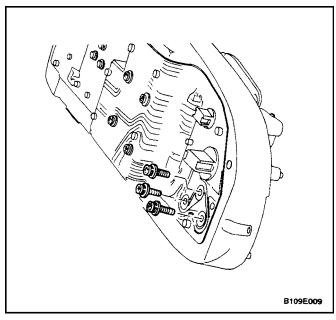


#### **Removal Procedure**

- 1. Disconnect the negative battery cable.
- 2. Remove the instrument cluster. Refer to "Instrument Cluster" in this section.
- 3. Remove the instrument cluster lens.



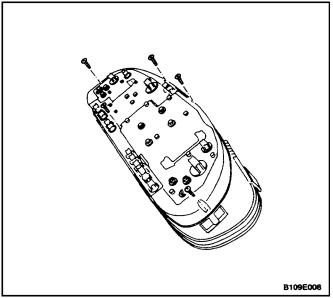
4. Remove the fuel gauge screws and the fuel gauge from the cluster assembly.



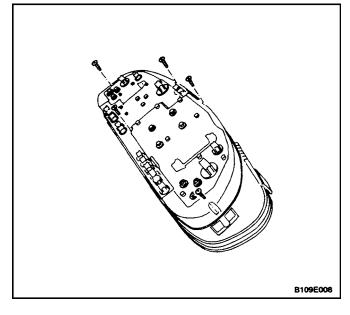
1. Install the fuel gauge to the cluster assembly with the fuel gauge screws.

#### **Tighten**

Tighten the fuel gauge screws to 2.5 N•m (22 lb-in).

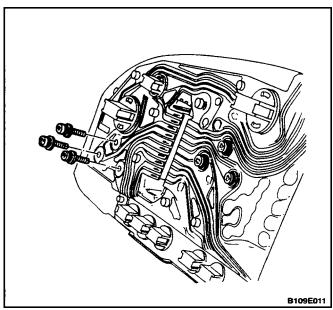


- 2. Install the instrument cluster lens.
- 3. Install the instrument cluster. Refer to "Instrument Cluster" in this section.
- 4. Connect the negative battery cable.

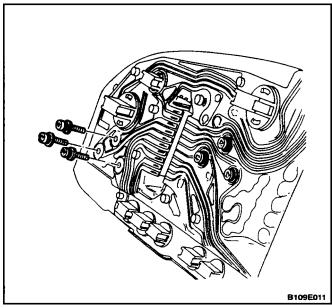


# **TEMPERATURE GAUGE**

- 1. Disconnect the negative battery cable.
- 2. Remove the instrument cluster. Refer to "Instrument Cluster" in this section.
- 3. Remove the instrument cluster lens screws and the instrument cluster lens.



4. Remove the temperature gauge screws and the temperature gauge from the cluster assembly.

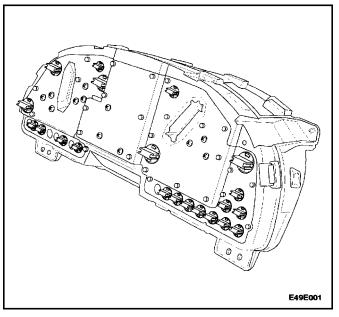


#### **Installation Procedure**

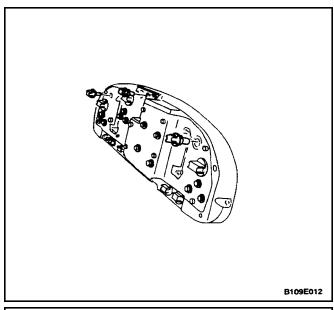
1. Install the temperature gauge to the cluster assembly with the temperature gauge screws.

#### Tighten

Tighten the temperature gauge screws to 2.5 N•m (22 lb–in).



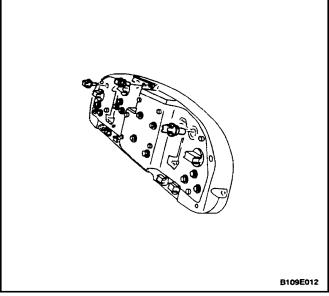
- 2. Install the instrument cluster lens.
- 3. Install the instrument cluster. Refer to "Instrument Cluster" in this section.
- 4. Connect the negative battery cable.



# INSTRUMENT CLUSTER INDICATOR LAMPS

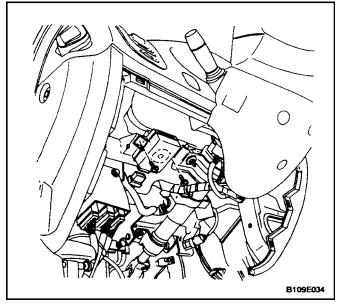
#### **Removal Procedure**

- 1. Disconnect the negative battery cable.
- 2. Remove the instrument cluster. Refer to "Instrument Cluster" in this section.
- 3. Remove the bulb from the rear of the cluster.



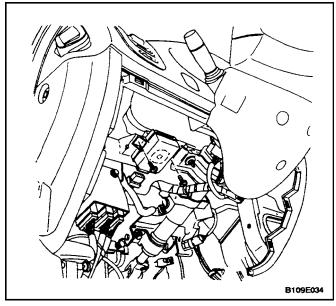
#### **Installation Procedure**

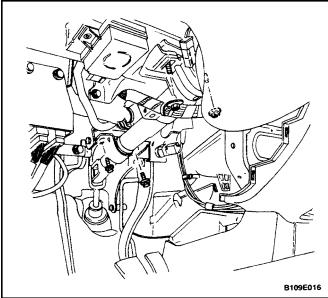
- 1. Install the new bulb.
- 2. Install the instrument cluster. Refer to "Instrument Cluster" in this section
- 3. Connect the negative battery cable.

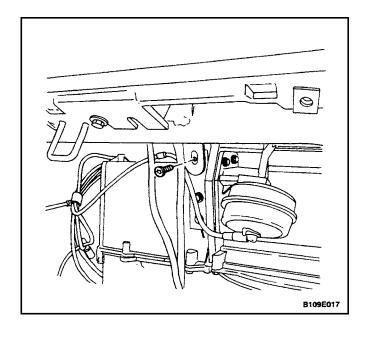


# **CHIME MODULE**

- 1. Disconnect the negative battery cable.
- 2. Remove the knee bolster trim panel beneath the steering column.
- 3. Disconnect the electrical connector.
- 4. Remove the screws and the chime module.







1. Install the chime module with the screws.

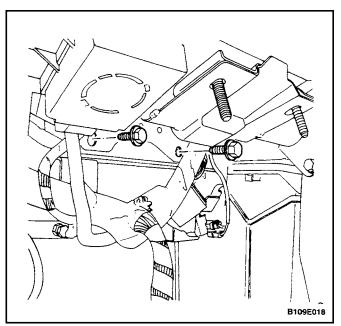
#### **Tighten**

Tighten the chime module screws to 4 N•m (35 lb-in).

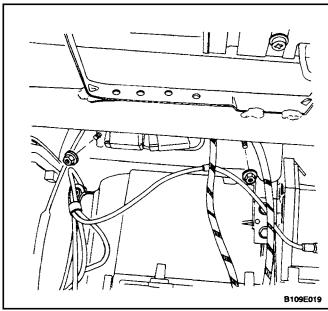
- 2. Connect the electrical connector.
- 3. Install the knee bolster trim panel beneath the steering column.
- 4. Connect the negative battery cable.

#### **INSTRUMENT PANEL**

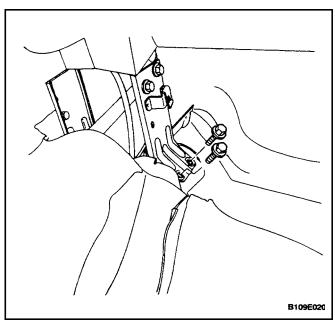
- 1. Disconnect the negative battery cable.
- 2. Remove the floor console. Refer to Section 9G, Interior Trim.
- 3. Remove the audio system. Refer to Section 9F, Audio Systems.
- 4. Remove the HVAC controls. Refer to Section 7A, Heating and Ventilation System.
- 5. Remove the instrument cluster. Refer to "Instrument Cluster" in this section.
- 6. Remove the A-pillar trim panels. Refer to Section 9G, Interior Trim.
- 7. Install the driver and passenger knee bolsters. Refer to Section 9G, Interior Trim.
- 8. Disconnect the sun sensor electrical connector.
- 9. Remove the nuts and the bolts that secure the steering column.
- 10. Lower the steering column.
- 11. Remove the screw that secures the instrument panel to the heater air distributor case.



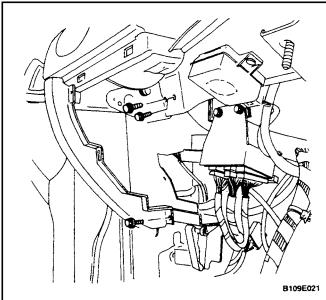
12. Remove the bolts that secure the instrument panel to the pedal assembly.



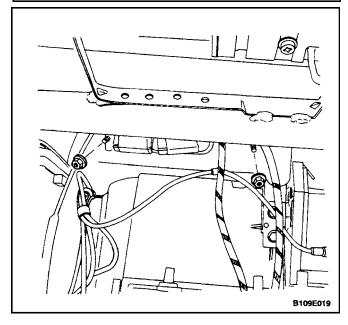
13. Remove the nuts that secure the back of the instrument panel to the bulkhead.



14. Remove the bolts that secure the bottom of the instrument panel to the floor.



- 15. Remove the bolts that secure the sides of the instrument panel to the body.
- 16. Disconnect the instrument panel electrical connectors.
- 17. Remove the Instrument panel.



#### **Installation Procedure**

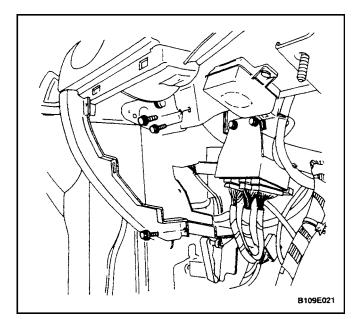
- 1. Position the instrument panel in the vehicle.
- 2. Connect the instrument panel electrical connectors.

**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 nuts securing the back of the instrument panel to the bulkhead.

#### **Tighten**

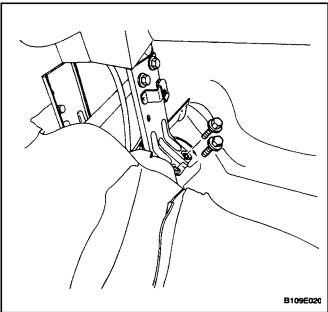
Tighten the instrument panel–to–bulkhead nuts to 10 N•m (89 lb–in).



4. Install the bolts securing the sides of the instrument panel to the body.

# **Tighten**

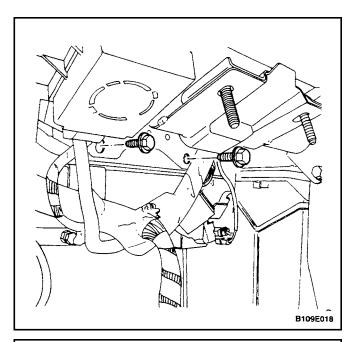
Tighten the instrument panel-to-body bolts to 22 N•m (16 lb-ft).



5. Install the bolts securing the bottom of the instrument panel to the floor.

# **Tighten**

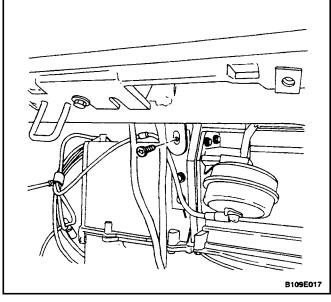
Tighten the instrument panel—to—floor bolts to 22 N•m (16 lb—ft).



6. Install the bolts securing the instrument panel to the pedal assembly.

# **Tighten**

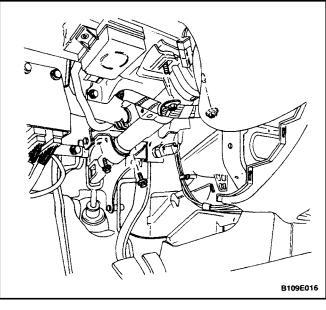
Tighten the instrument panel-to-pedal assembly bolts to 22 N•m (16 lb-ft).



7. Install the screw securing the instrument panel to the heater air distribution case.

#### **Tighten**

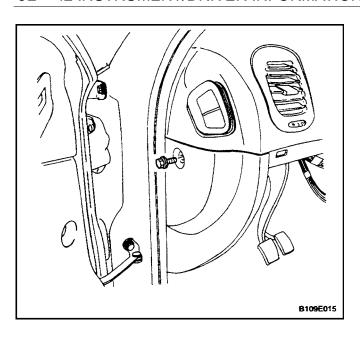
Tighten the instrument panel-to-heater air distribution case screw to 2 N•m (18 lb-in).



- 8. Raise the steering column.
- 9. Connect the steering column electrical connectors.
- 10. Install the nuts and the bolts securing the steering column.

#### **Tighten**

Tighten the steering column nuts to 22 N•m (16 lb–ft). Tighten the steering column bolts to 22 N•m (16 lb–ft).



- 11. Install the driver and passenger knee bolsters. Refer to Section 9G, Interior Trim.
- 12. Install the A-pillar trim panels. Refer to Section 9G, Interior Trim.
- 13. Remove the instrument cluster. Refer to "Instrument Cluster" in this section.
- 14. Remove the HVAC controls. Refer to Section 7A, Heating and Ventilation System.
- 15. Install the audio system. Refer to Section 9F, Audio Systems.
- 16. Install the floor console. Refer to Section 9G, Interior Trim.
- 17. Connect the negative battery cable.

# GENERAL DESCRIPTION AND SYSTEM OPERATION

#### **CIGAR LIGHTER**

The cigar lighter is located the floor console. To use the lighter, push it in completely. When the lighter is hot, it will release itself from contact with the heating element. The lighter and the heating element can be damaged if the lighter is not allowed to fully release itself from the heating element.

#### **ASHTRAY**

The ashtray is located below the audio system. To access the ashtray, pull it out of the ashtray housing. The ashtray lamp will go on when the parking lamps or the headlamps are on.

#### **INSTRUMENT PANEL VENTS**

The center and the side vents in the instrument panel can be adjusted up and down and from side to side. The side vents can also be aimed toward the side windows in order to defog them.

#### **GLOVE BOX**

The glove box can be opened by pulling up on the latch handle. The glove box must be removed in order to gain access to the passenger–side airbag module (if equipped).

#### **DIGITAL CLOCK**

The digital clock is located cluster housing. The clock is capable of a 12-hour or a 24-hour display.

#### INSTRUMENT CLUSTER

The instrument cluster is located above the steering column and in the instrument cluster trim panel. The instrument cluster contains the instruments that provide the driver with vehicle performance information. The instrument cluster contains a speedometer, a tachometer, an odometer, a trip odometer, a temperature gauge, a fuel gauge and several indicator lamps. For replacement of the indicator lamp bulbs contained in the instrument cluster, refer to "Instrument Cluster Indicator Lamps Specifications" in this section.

#### **SPEEDOMETER**

The speedometer measures the speed of the vehicle. It consists of an instrument cluster gauge connected to the vehicle speed sensor on the transaxle output shaft.

#### TRIP ODOMETER

The trip odometer measures the distance the vehicle has traveled since it was last reset. It consists of an instrument cluster gauge connected to the sending unit on the trans-

axle output shaft. The trip odometer can be reset to zero at any time so that the driver can record the distance traveled from any starting point.

#### **FUEL GAUGE**

The fuel gauge consists of an instrument cluster gauge connected to a sending unit in the fuel tank.

The fuel gauge indicates the quantity of fuel in the tank only when the ignition switch is turned to ON or ACC. When the ignition is turned to LOCK or START, the pointer may come to rest at any position.

#### **TEMPERATURE GAUGE**

The temperature gauge consists of an instrument cluster gauge connected to a temperature sensor that is in contact with the circulating engine coolant.

The temperature gauge indicates the temperature of the coolant. Prolonged driving or idling in very hot weather may cause the pointer to move beyond the center of the gauge. The engine is overheating if the pointer moves into the red zone at the upper limit of the gauge.

# INSTRUMENT CLUSTER INDICATOR LAMPS

The instrument cluster contains indicator lamps that indicate the functioning of certain systems or the exis—tence of potential problems with the operation of the vehicle. The indicator lamps are replaceable. For replacement of the indicator lamps contained in the instrument cluster, refer to "Instrument Cluster Indicator Lamps Specifications" in this section.

#### **TACHOMETER**

The tachometer measures the engine's speed in terms of thousands of revolutions per minute. It consists of an instrument cluster gauge connected to a sending unit in the powertrain control module (PCM)/engine control module (ECM).

**Notice:** Do not operate the engine in the red zone; otherwise, engine damage may occur.

#### CHIME MODULE

The chime module will sound in order to bring attention to one or more of the following conditions:

- The lights are on and the ignition switch is not in ACC, ON, or START.
- The ignition key is in the ignition switch when the driver's door is open.
- The seat belt is unbuckled when the ignition switch is in ON or START.
- The driver's side door is open when the ignition is in ACC, ON, or START.

Voltage is supplied at all times through the fuse block to power the chime module.