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## SECTION 9E

# INSTRUMENTATION/DRIVER INFORMATION

**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 B unless otherwise noted.

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## DESCRIPTION AND OPERATION

### CIGAR LIGHTER

The cigar lighter is located in the front portion of the instrument panel. 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 release itself fully from the heating element. Cigar lighter is not equipped with the lamp.

### ASHTRAY

The ashtray is located in the lower portion of the instrument panel. In case of cleaning the ashtray up, remove the ashtray by pushing the upper button and clean it up. The ashtray lamp is optional.

### 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.

### DIGITAL CLOCK

The digital clock is located in the instrument panel, below the defroster grille. The clock is capable of a 12 – 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, 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/ODOMETER/TRIP ODOMETER

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.

The odometer measures the total distance the vehicle has traveled since it was manufactured. It consists of an instrument cluster gauge connected to the vehicle speed sensor on the transaxle output shaft.

The trip odometer measures the distance the vehicle has traveled since the odometer was last reset. It consists of an instrument cluster gauge connected to the vehicle speed sensor on the transaxle 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 without the ignition switch 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.

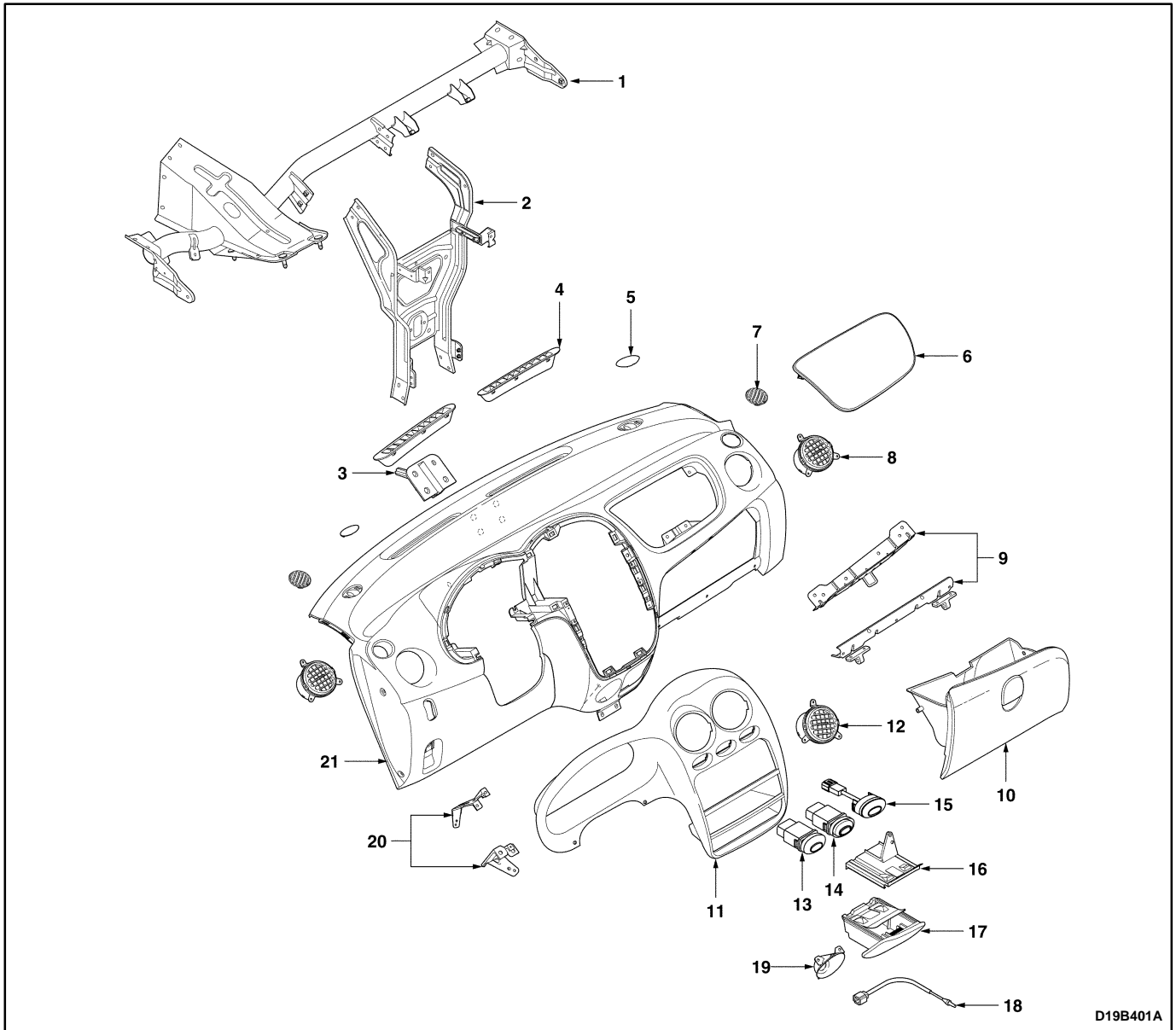
### INSTRUMENT CLUSTER INDICATOR LAMPS

The instrument cluster contains indicator lamps that indicate the functioning of certain systems or the existence 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.

# COMPONENT LOCATOR

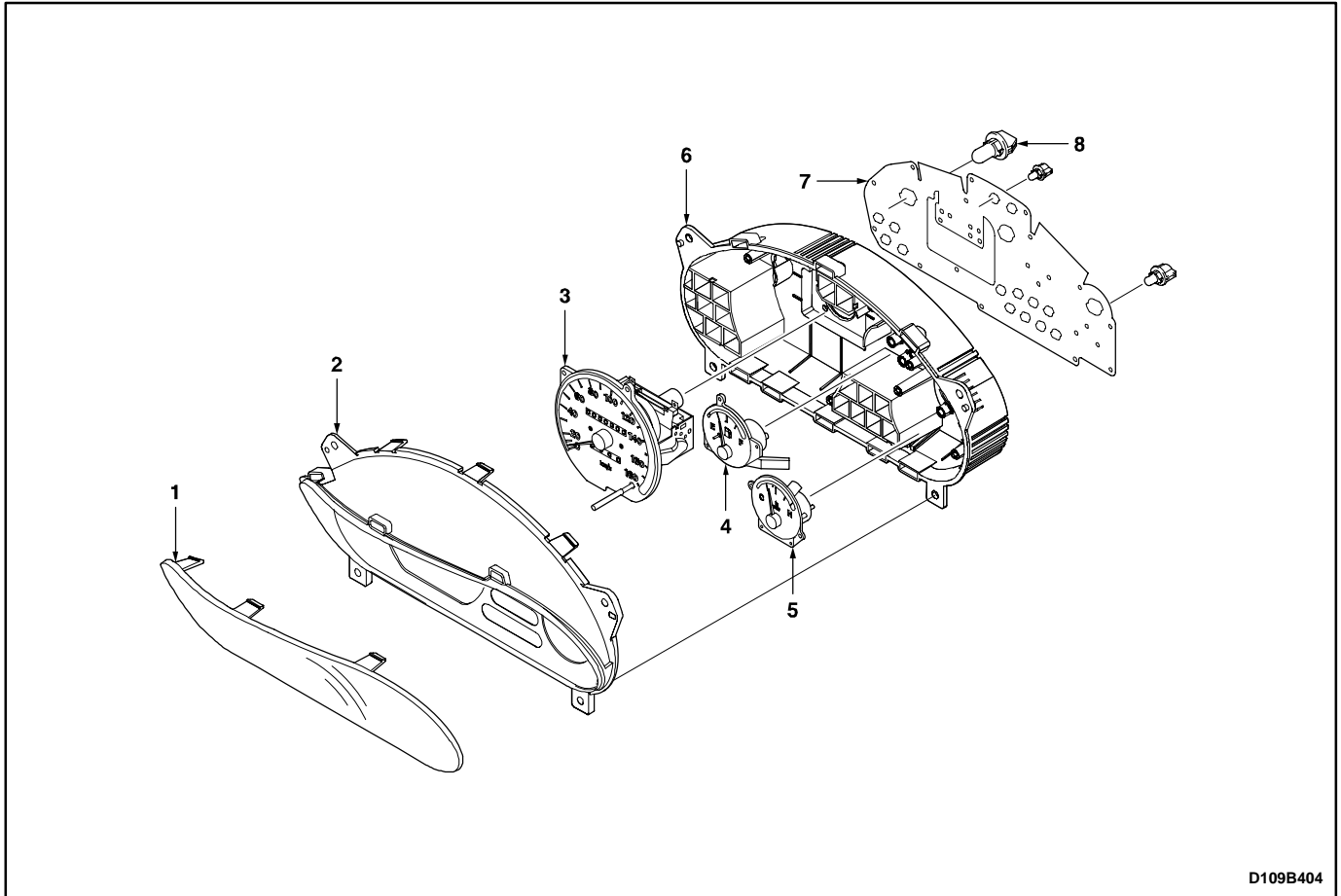
## INSTRUMENT PANEL ASSEMBLY

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



- |                                   |  |
|-----------------------------------|--|
| 1. Tie-Bar                        | 11. Instrument Cluster Housing Molding   |
| 2. Tie-Bar Center                 | 12. Center Ventilation Grille            |
| 3. Instrument Panel Guide         | 13. Switch Blank Cover (Fog Lamp Switch) |
| 4. Defroster Grille               | 14. Hazard Warning Switch                |
| 5. Instrument Panel Upper Cap     | 15. Immobilizer LED Indicator Switch     |
| 6. Passenger's Airbag Blank Cover | 16. Ashtray Bracket                      |
| 7. Demister Grille                | 17. Ashtray                              |
| 8. Side Ventilation Grille        | 18. Ashtray Lamp                         |
| 9. Glove Box Bracket              | 19. Cigar Lighter Housing                |
| 10. Glove Box                     | 20. Instrument Cluster Bracket           |
|                                   | 21. Instrument Panel                     |

## INSTRUMENT CLUSTER

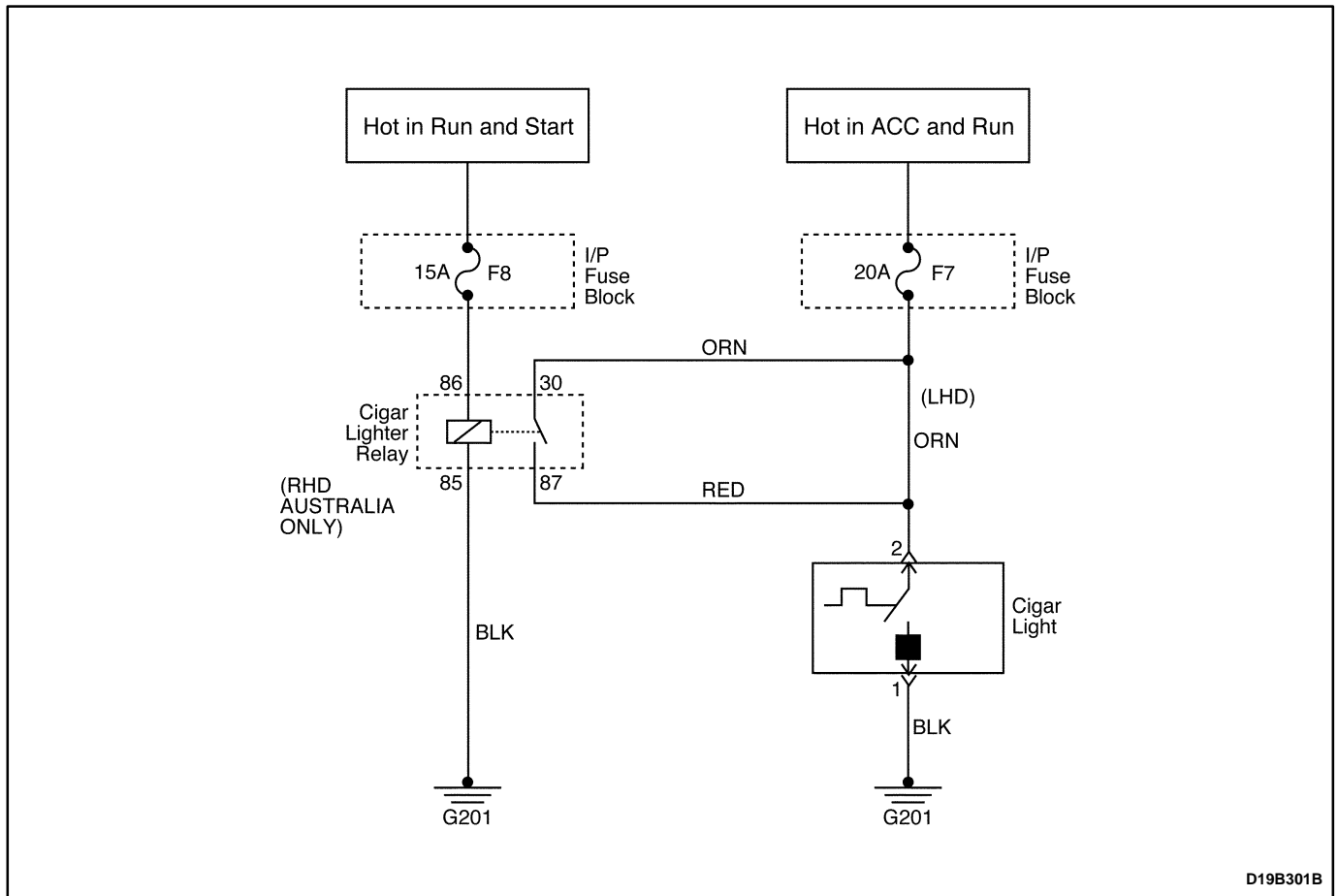


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1. Instrument Cluster Lens
2. Instrument Cluster Window Plate
3. Speedometer Gauge
4. Fuel Gauge

5. Temperature Gauge
6. Instrument Cluster Case
7. Fronted Circuit Plate
8. Instrument Cluster Bulb

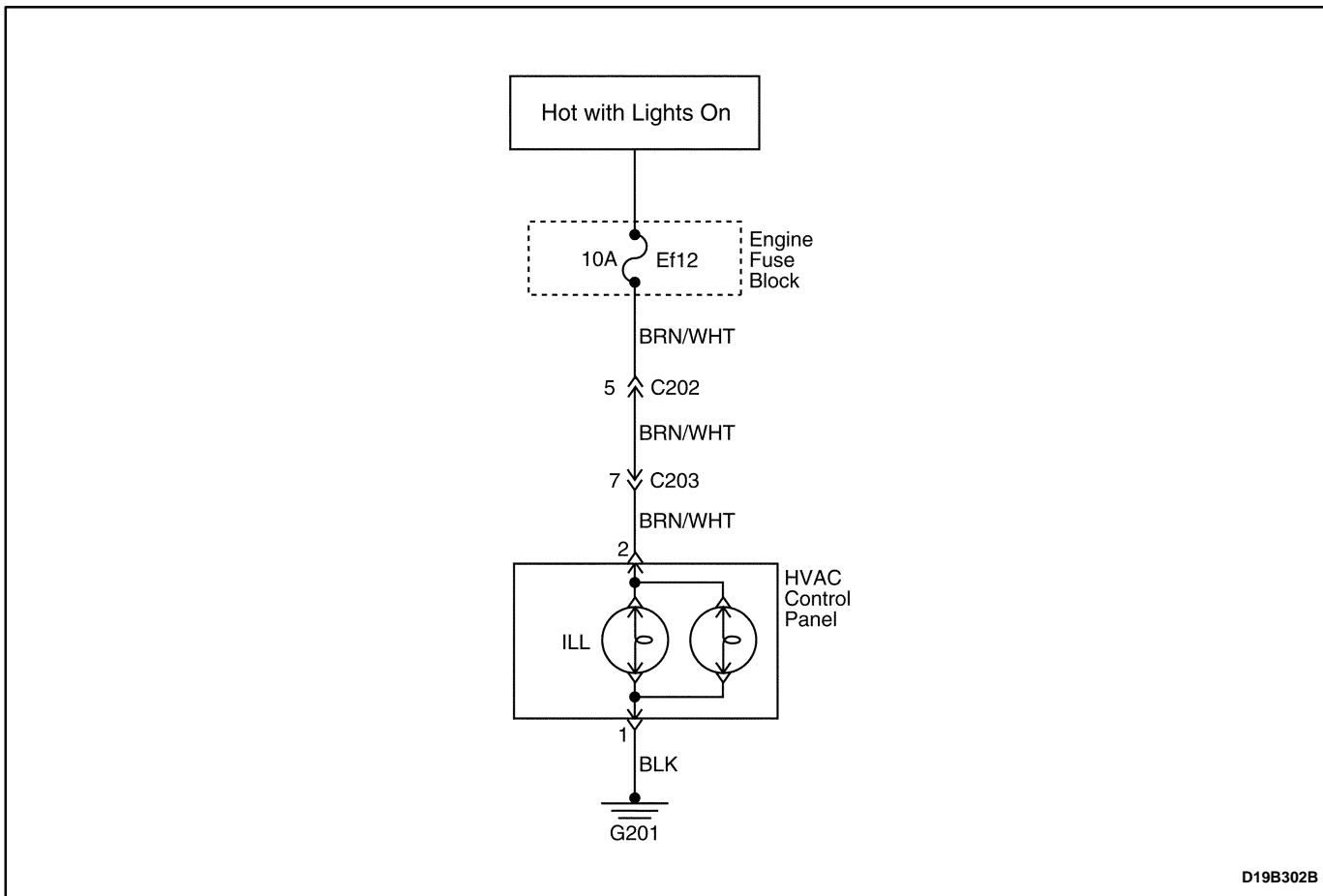
# DIAGNOSTIC INFORMATION AND PROCEDURES



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## CIGAR LIGHTER

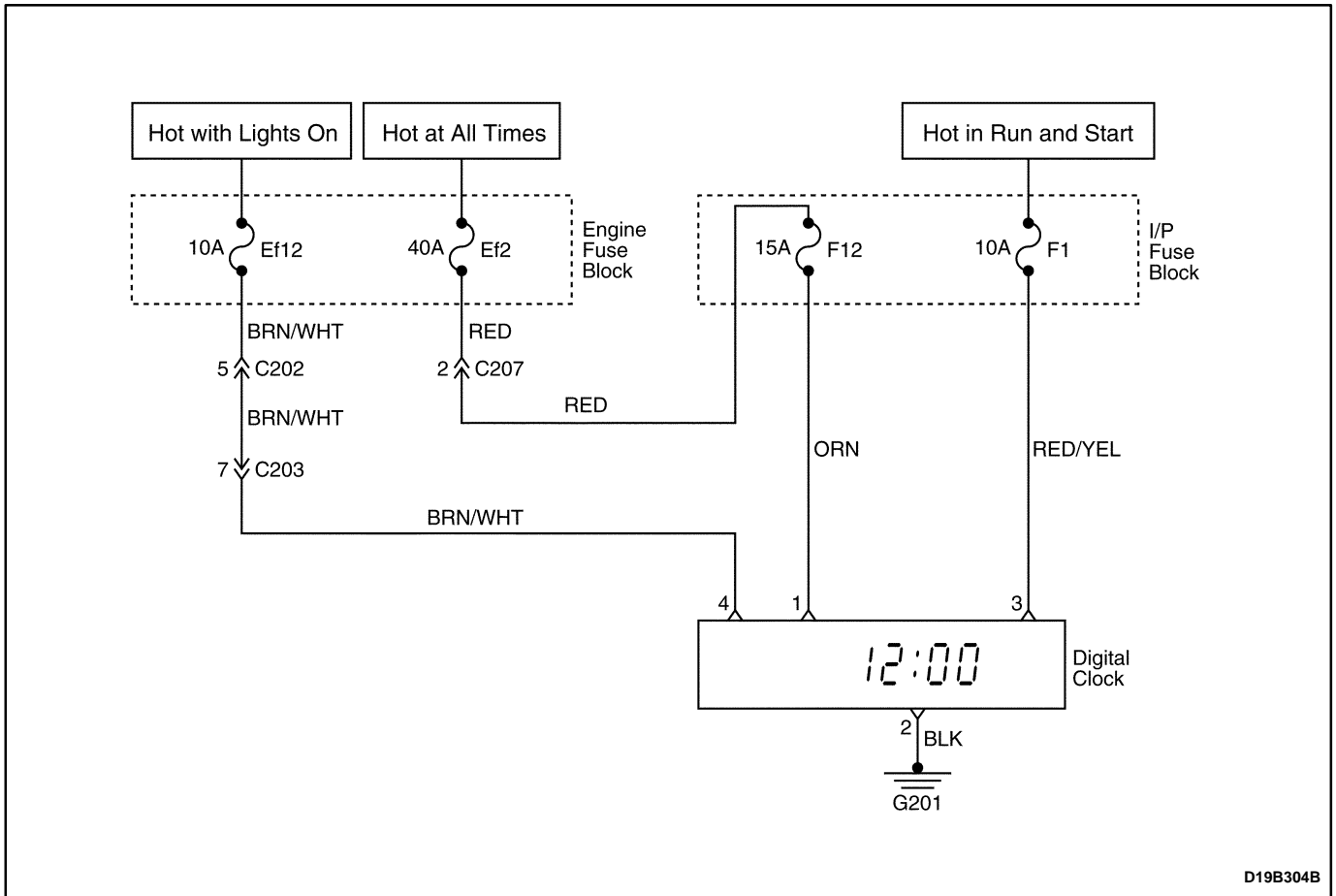
Condition	Probable Cause	Correction
Cigar Lighter Inoperative	<ul style="list-style-type: none"> <li>The open or a short in the power supply circuit to the fuse F7.</li> </ul>	<ul style="list-style-type: none"> <li>Repair or Replace the wiring harness.</li> </ul>
	<ul style="list-style-type: none"> <li>Fuse F7 is blown.</li> </ul>	<ul style="list-style-type: none"> <li>Replace the fuse F7.</li> </ul>
	<ul style="list-style-type: none"> <li>The circuit between the fuse F7 and the terminal 2 of the cigar lighter connector is the open circuit or a short circuit.</li> </ul>	<ul style="list-style-type: none"> <li>Repair or Replace the wiring harness.</li> </ul>
	<ul style="list-style-type: none"> <li>Faulty the cigar lighter connector.</li> </ul>	<ul style="list-style-type: none"> <li>Repair or Replace the cigar lighter connector.</li> </ul>
	<ul style="list-style-type: none"> <li>Cigar lighter element is blown.</li> </ul>	<ul style="list-style-type: none"> <li>Replace the cigar lighter.</li> </ul>
	<ul style="list-style-type: none"> <li>Open ground (G201) circuit.</li> </ul>	<ul style="list-style-type: none"> <li>Repair the open ground circuit.</li> </ul>



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### HVAC PANEL ILLUMINATION

Condition	Probable Cause	Correction
HVAC Panel Illumination Inoperative	<ul style="list-style-type: none"> <li>The open or a short in the power supply circuit to the fuse Ef12.</li> </ul>	<ul style="list-style-type: none"> <li>Repair or Replace the wiring harness.</li> </ul>
	<ul style="list-style-type: none"> <li>Fuse Ef12 is blown.</li> </ul>	<ul style="list-style-type: none"> <li>Replace the fuse Ef12</li> </ul>
	<ul style="list-style-type: none"> <li>The circuit between the fuse Ef12 and the terminal 2 of the HVAC panel illumination connector is the open circuit or a short circuit.</li> </ul>	<ul style="list-style-type: none"> <li>Repair or Replace the wiring harness.</li> </ul>
	<ul style="list-style-type: none"> <li>Faulty the HVAC panel illumination connector.</li> </ul>	<ul style="list-style-type: none"> <li>Repair or Replace the instrument panel illumination connector.</li> </ul>
	<ul style="list-style-type: none"> <li>HVAC panel illumination bulb is blown.</li> </ul>	<ul style="list-style-type: none"> <li>Replace the bulb.</li> </ul>
	<ul style="list-style-type: none"> <li>Open ground (G201) circuit.</li> </ul>	<ul style="list-style-type: none"> <li>Repair the open ground circuit.</li> </ul>



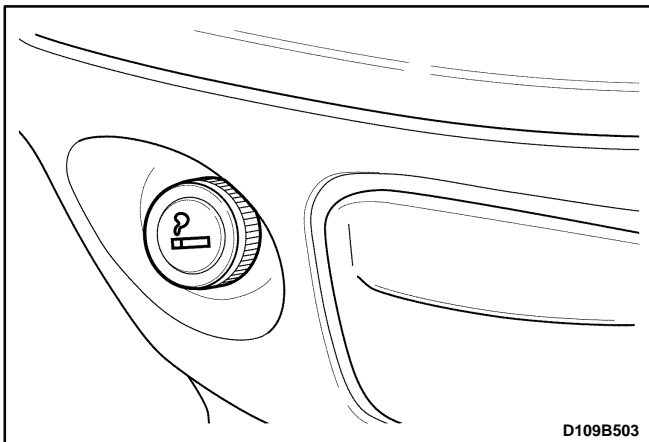
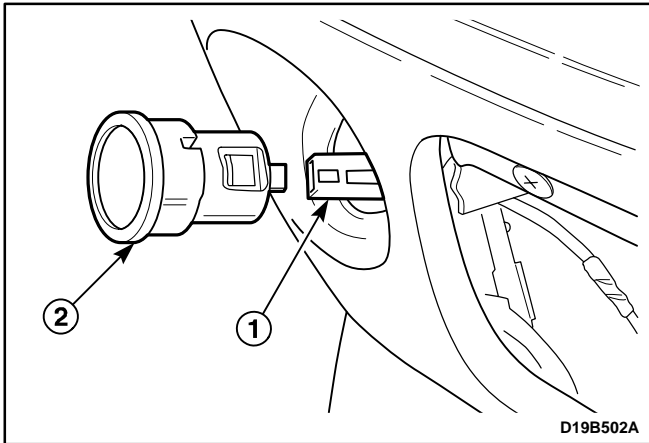
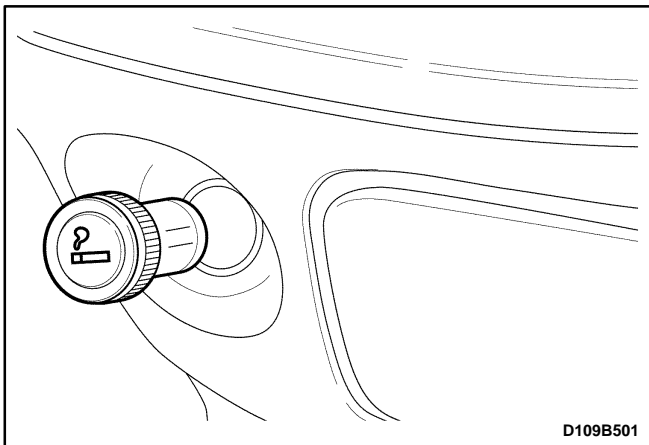
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## DIGITAL CLOCK

Condition	Probable Cause	Correction
Digital Clock Inoperative	<ul style="list-style-type: none"> <li>The open or a short in the power supply circuit to the fuse Ef2 regardless of the ignition position.</li> </ul>	<ul style="list-style-type: none"> <li>Repair or Replace the power supply circuit wiring harness.</li> </ul>
	<ul style="list-style-type: none"> <li>The open or a short in the power supply circuit to the fuse F1 with the ignition position I.</li> </ul>	<ul style="list-style-type: none"> <li>Repair or Replace the power supply circuit wiring harness.</li> </ul>
	<ul style="list-style-type: none"> <li>The open or a short in the power supply circuit to the fuse Ef12 with the interior courtesy lamp ON.</li> </ul>	<ul style="list-style-type: none"> <li>Repair or Replace the power supply circuit wiring harness.</li> </ul>
	<ul style="list-style-type: none"> <li>The circuit between the fuse Ef2 and the fuse F12 is open or short.</li> </ul>	<ul style="list-style-type: none"> <li>Repair or Replace the wiring harness.</li> </ul>
	<ul style="list-style-type: none"> <li>Fuse Ef2, Ef12, F1 or F12 is blown.</li> </ul>	<ul style="list-style-type: none"> <li>Replace and fuse.</li> </ul>
	<ul style="list-style-type: none"> <li>The circuit between the fuse F12 and the digital clock connector.</li> </ul>	<ul style="list-style-type: none"> <li>Repair or Replace the wiring harness.</li> </ul>
	<ul style="list-style-type: none"> <li>The circuit between the fuse F1 and the digital clock connector.</li> </ul>	<ul style="list-style-type: none"> <li>Repair or Replace the wiring harness.</li> </ul>
	<ul style="list-style-type: none"> <li>The circuit between the Ef12 and the digital clock connector.</li> </ul>	<ul style="list-style-type: none"> <li>Repair or Replace the wiring harness.</li> </ul>
	<ul style="list-style-type: none"> <li>Faulty digital clock.</li> </ul>	<ul style="list-style-type: none"> <li>Replace the digital clock.</li> </ul>
<ul style="list-style-type: none"> <li>Open ground (G201) circuit.</li> </ul>	<ul style="list-style-type: none"> <li>Repair the open ground circuit.</li> </ul>	

## REPAIR INSTRUCTIONS

### ON-VEHICLE SERVICE



#### CIGAR LIGHTER

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

##### Removal Procedure

1. Disconnect the negative battery cable.
2. Remove the ashtray from the ashtray housing.
3. Remove the cigar lighter from the cigar lighter socket.

4. Remove the cigar lighter socket from the cigar lighter housing.

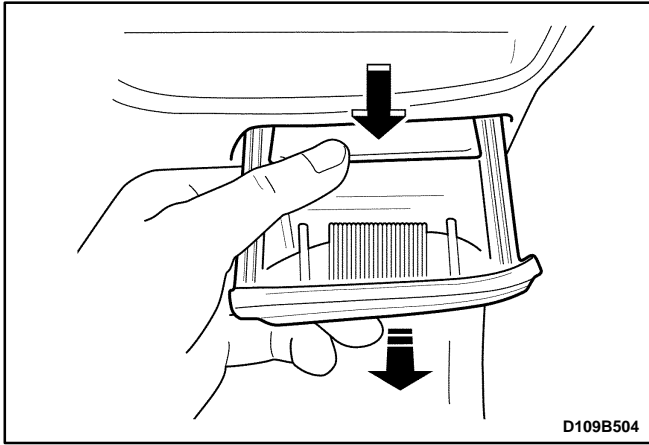
**Caution:** *Ashtray housing edge could cause serious injury.*

- Push out the socket.
- Disconnect the electrical connector (1).
- Remove the socket (2).

##### Installation Procedure

1. Connect the electrical connector.
2. Install the cigar lighter socket.
3. Install the cigar lighter in the cigar lighter socket.
4. Install the ashtray.
5. Connect the negative battery cable.





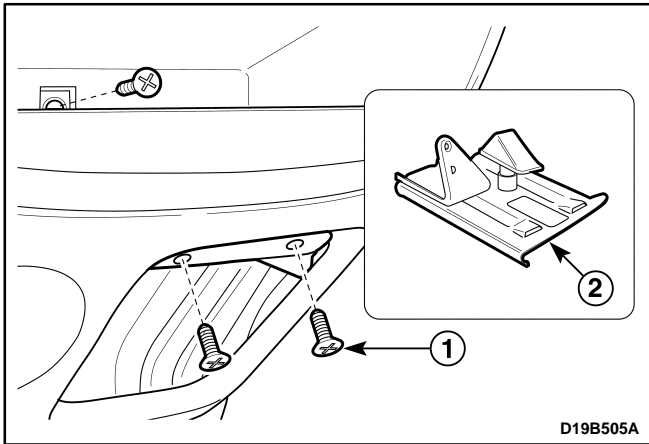
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## ASHTRAY

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

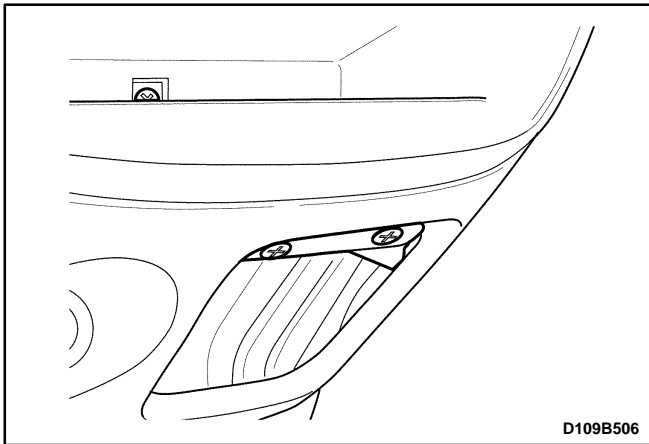
### Removal Procedure

1. Remove the ashtray from the ashtray bracket.
  - Pull off the ashtray by pressing the upper button.



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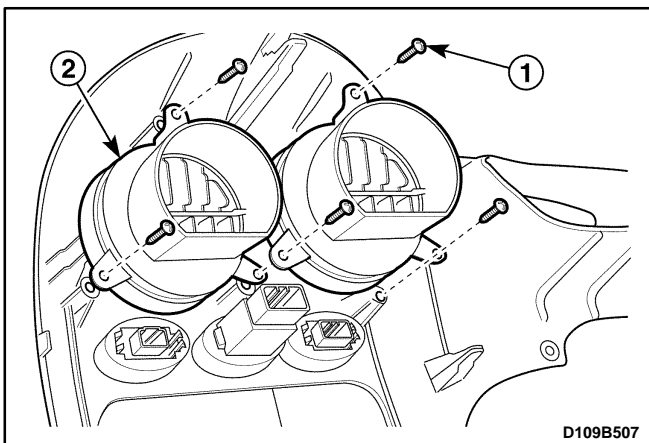
2. Remove the ashtray bracket from the instrument panel.
  - Remove the screws (1).
  - Remove the ashtray bracket (3).



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### Installation Procedure

1. Install the ashtray bracket with the screws.
2. Install the ashtray.



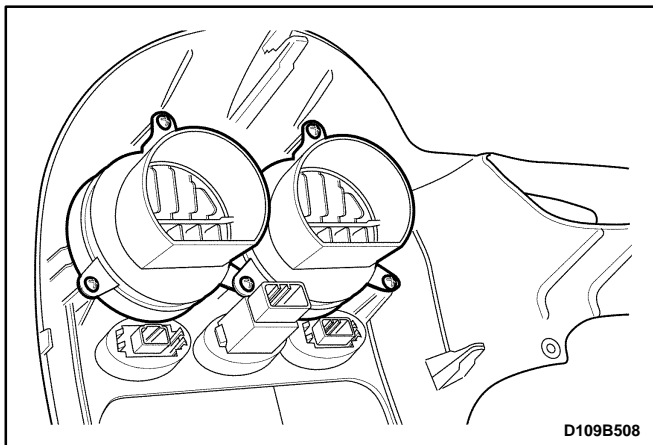
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## INSTRUMENT CLUSTER TRIM PANEL VENTS

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

### Removal Procedure

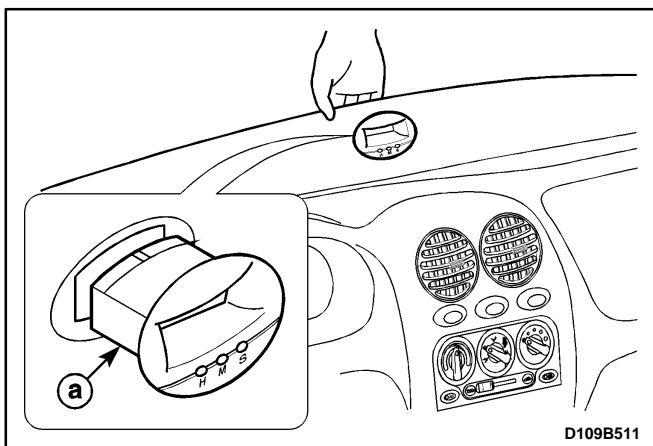
1. Remove the instrument cluster trim panel from the instrument panel. Refer to "Instrument Cluster Trim Panel" in this section.
2. Remove the vent from the instrument cluster trim panel.
  - Remove the screws (1).
  - Remove the vents (2).



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### Installation Procedure

1. Install the vents to the instrument cluster trim panel with the screws.
2. Install the instrument cluster trim panel. Refer to “Instrument Cluster Trim Panel” in this section.



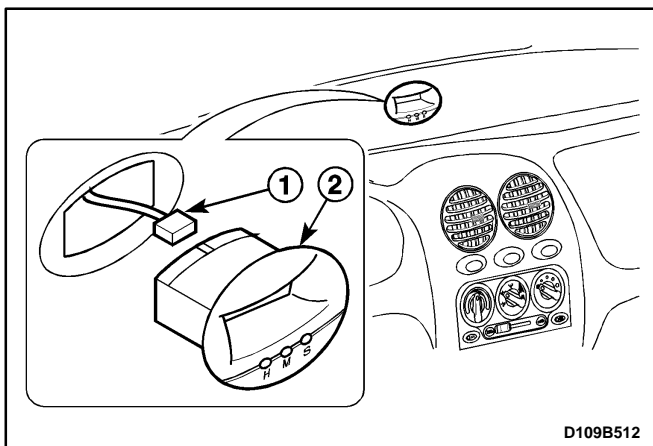
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### DIGITAL CLOCK

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

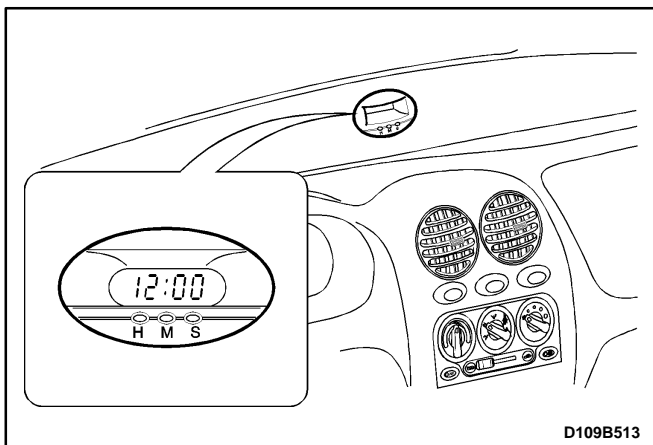
#### Removal Procedure

1. Disconnect the negative battery cable.
2. Pry off the defroster grille.
3. Unlock the locking of the digital clock.
  - a. Digital clock.



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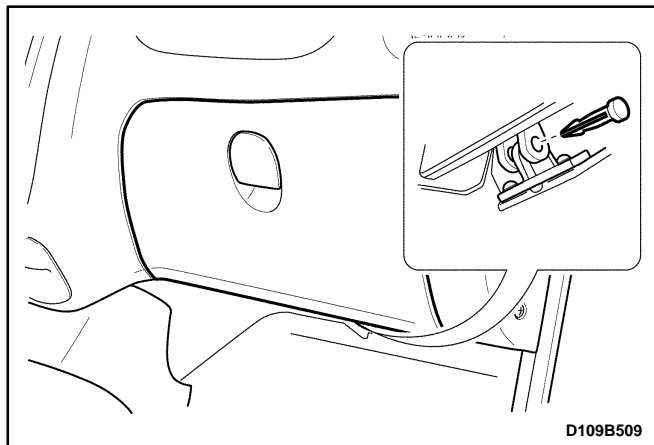
4. Remove the digital clock from the instrument panel.
  - Disconnect the electrical connector (1).
  - Remove the digital clock (2).



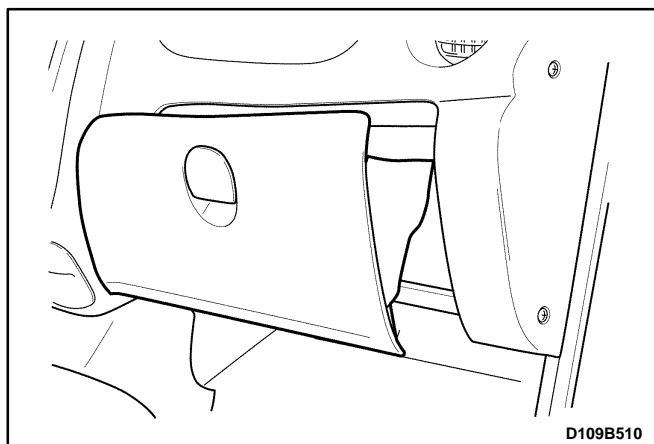
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#### Installation Procedure

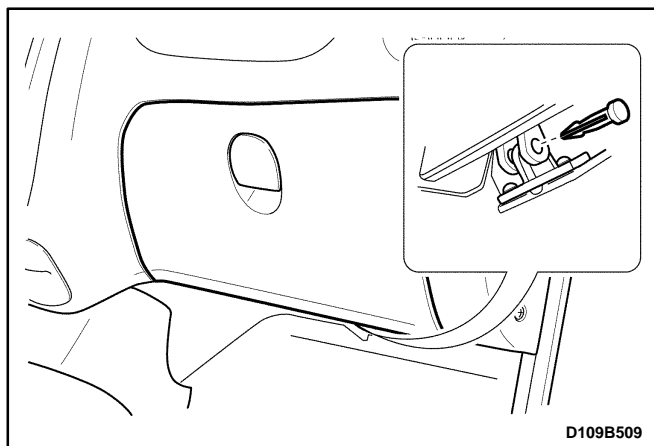
1. Connect the electrical connector.
2. Install the digital clock to the instrument panel.
3. Connect the negative battery cable.
4. Set the clock.



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D109B510



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## GLOVE BOX

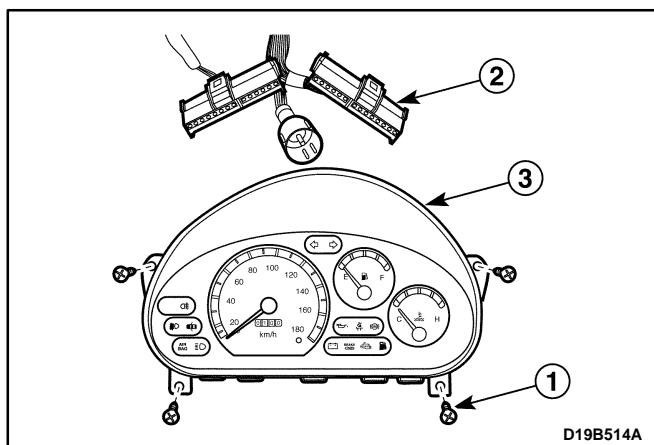
(Left-Hand Drive Shown, Right-Hand Drive Similar)

### Removal Procedure

1. Remove the hinge pins at the base of the glove box.
2. Remove the glove box from the instrument panel.

### Installation Procedure

1. Install the glove box to the instrument panel with the hinge pins.

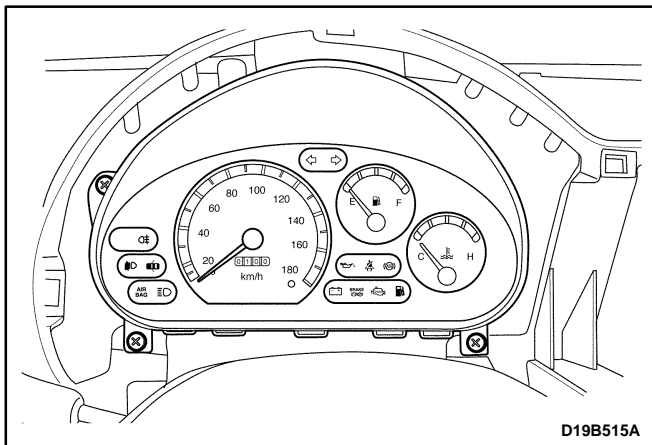


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## INSTRUMENT CLUSTER

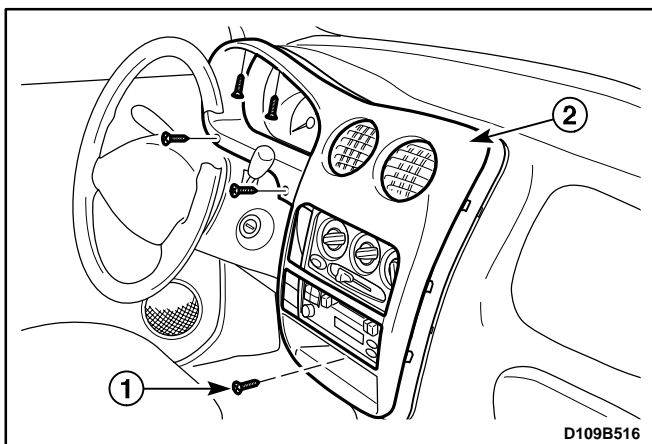
### Removal Procedure

1. Disconnect the negative battery cable.
2. Remove the instrument cluster trim panel from the instrument panel. Refer to "Instrument Cluster Trim Panel" in this section.
3. Remove the instrument cluster assembly from the instrument panel.
  - Remove the screws (1).
  - Disconnect the electrical connector and the speedometer cable (2).
  - Remove the instrument cluster (3).



### Installation Procedure

1. Connect the electrical connector and the speedometer cable.
2. Install the instrument cluster assembly to instrument panel with screws.
3. Install the instrument cluster trim panel to the instrument panel. Refer to “Instrument Cluster Trim Panel” in this section.
4. Connect the negative battery cable.



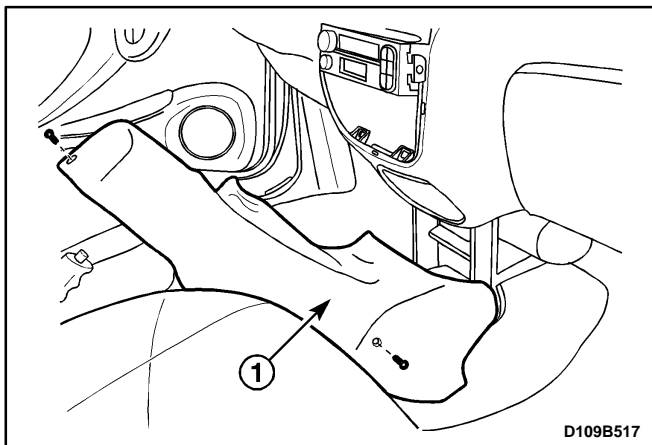
## INSTRUMENT PANEL

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

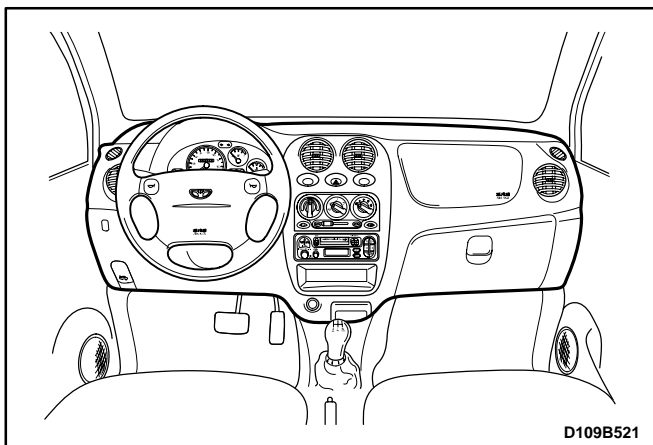
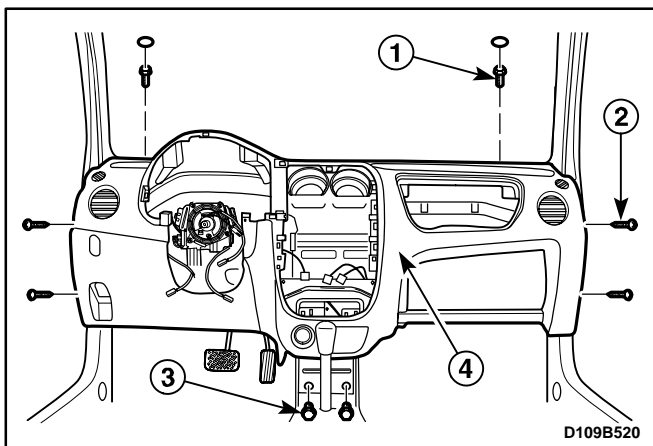
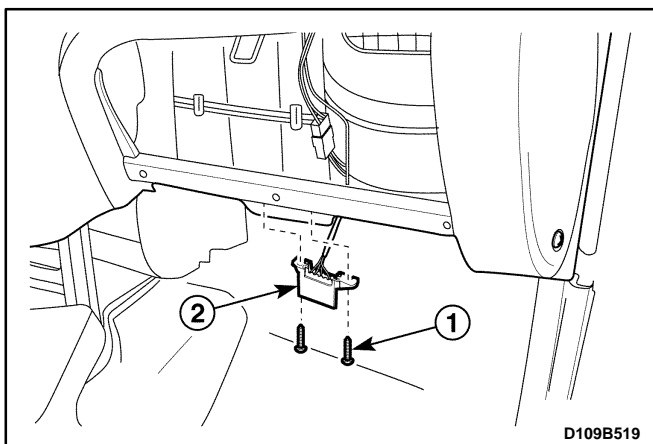
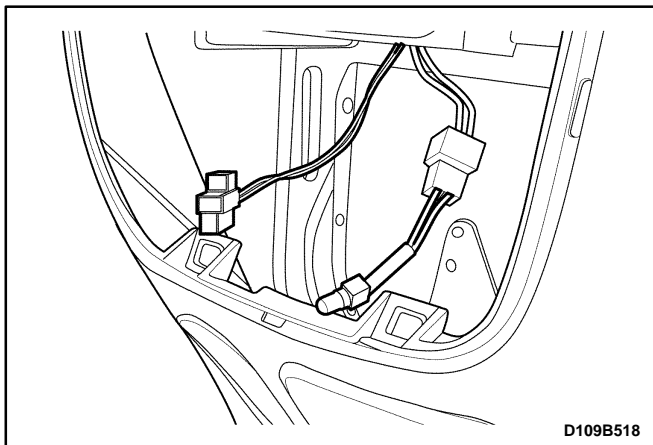
### Removal Procedure

1. Disconnect the negative battery cable.
2. Remove the driver’s airbag module from the steering wheel. Refer to *Section 8B, Supplemental Inflatable Restraints (SIR)* (For the vehicle equipped with the airbag).
3. Remove the steering wheel from the steering column. Refer to *Section 6E, Steering Wheel and Column*.
4. Remove the steering column trim cover. Refer to *Section 6E, Steering Wheel and Column*.
5. Remove the signal lamp switch and the wiper switch. Refer to *Section 6E, Steering Wheel and Column*.
6. Pry off the A-pillar trim panels. Refer to *Section 9G, Interior Trim*.
7. Remove the instrument cluster trim panel from the instrument panel.
  - Remove the screws (1)
  - Using a flathead screwdriver, remove the instrument cluster trim panel (2).

**Notice:** To prevent the instrument panel damage, cover the flathead screwdriver with a soft cloth.



8. Remove the hood latch release lever from the instrument panel. Refer to *Section 9R, Body Front End*.
9. Remove the glove box assembly from the instrument panel. Refer to “Glove Box” in this section.
10. Remove the passenger’s airbag module from the instrument panel. Refer to *Section 8B, Supplemental Inflatable Restraints (SIR)* (For vehicle equipped with the airbag).
11. Put aside the floor console after removing the screws (1).



12. Remove the instrument cluster assembly. Refer to "Instrument Cluster" in this section.
13. Remove the A/C controller from the instrument. Refer to *Section 7B, Manual Control Heating, Ventilation, and Air Conditioning System*.
14. Remove the audio system from the instrument panel. Refer to *Section 9F, Audio Systems*.
15. Disconnect the cigar lighter connector.
16. Disconnect the ashtray lamp if equipped.

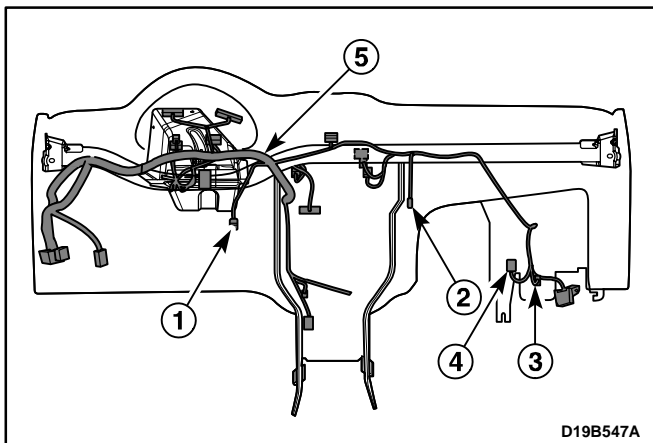
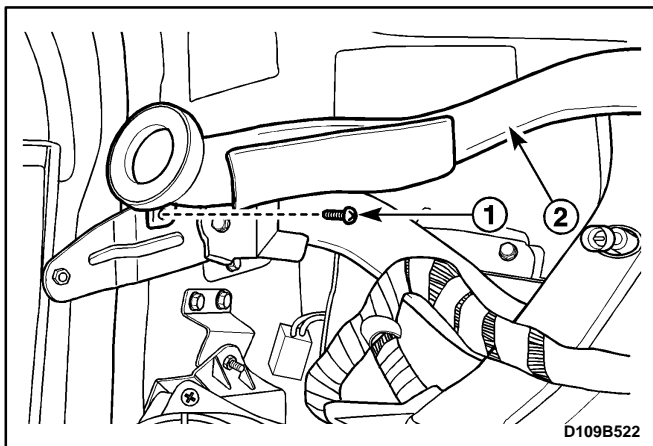
17. Disconnect the ALDL connector.
  - Remove the screws (1).
  - Disconnect the ALDL connector (2).

18. Remove the instrument trim panel assembly.
  - Remove the bolts after removing the caps (1).
  - Remove the screws on the side plate (2).
  - Remove the tie-bar retaining bolts on the lower panel (3).
  - Remove the instrument trim panel assembly (4).

### Installation Procedure

1. Install the instrument trim panel assembly with the bolts and screws.
2. Connect the ALDL connector with the screws.
3. Connect the ashtray lamp if equipped with.
4. Connect the cigar lighter connector.
5. Install the audio system to the instrument panel. Refer to *Section 9F, Audio Systems*.
6. Install the A/C controller to the instrument panel. Refer to *Section 7B, Manual Control Heating, Ventilation, and Air Conditioning System*.

7. Install the instrument cluster assembly. Refer to “Instrument Cluster” in this section.
8. Install the floor console with the screws.
9. Install the passenger’s airbag module to the instrument panel. Refer to *Section 8B, Supplemental Inflatable Restraints (SIR)* (For vehicle equipped with the airbag).
10. Install the glove box assembly to the instrument panel. Refer to “Glove Box” in this section.
11. Install the hood latch release lever to the instrument panel. Refer to *Section 9R, Body Front End*.
12. Install the instrument cluster trim panel to the instrument cluster trim panel with the screws.
13. Install the A-pillar trim panels. Refer to *Section 9G, Interior Trim*.
14. Install the signal lamp switch and the wiper switch. Refer to *Section 6E, Steering Wheel and Column*.
15. Install the steering column trim cover. Refer to *Section 6E, Steering Wheel and Column*.
16. Install the steering wheel to the steering column.
17. Install the driver’s airbag module to the steering wheel. Refer to *Section 8B, Supplemental Inflatable Restraints (SIR)* (For vehicle equipped with the airbag).
18. Connect the negative battery cable.



## TIE-BAR

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

### Removal Procedure

1. Disconnect the negative battery cable.
2. Remove the instrument panel assembly. Refer to “Instrument Panel” in this section.
3. Remove the defroster duct hose from the tie-bar.
  - Remove the screws (1).
  - Remove the defroster duct hose (2).
4. Remove the nuts and the steering column. Refer to *Section 6E, Steering Wheel and Column*.
5. Disconnect the electrical connectors and electrical wiring harness after removing the electrical wiring harness strips.
  - Remove the electrical wiring harness strip.
  - Disconnect the brake switch connector (1).
  - Disconnect the thermostat connector (2).
  - Disconnect the blow motor connector (3).
  - Disconnect the blow motor resistance connector (4).
  - Disconnect the electrical wiring harness (5).