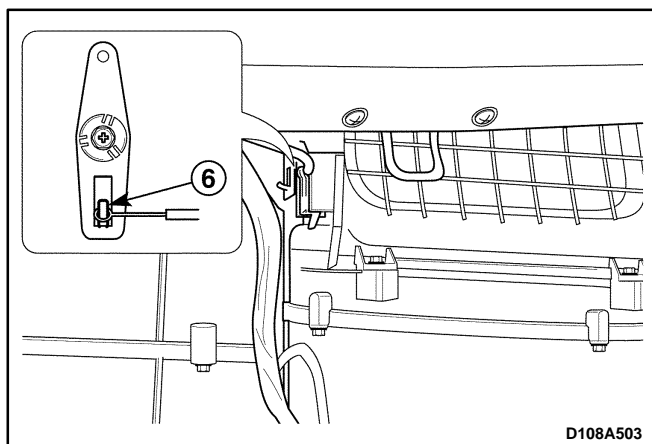
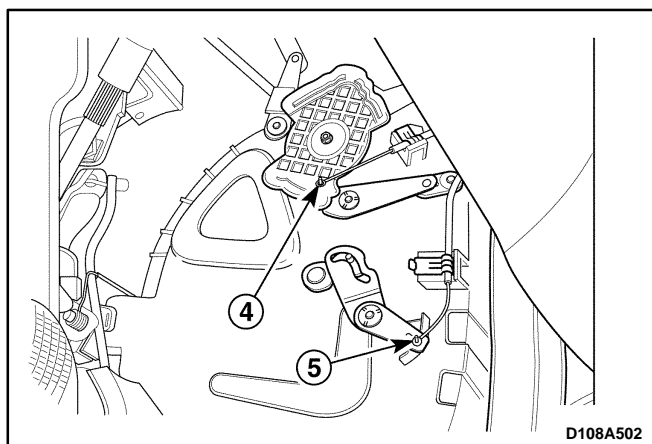
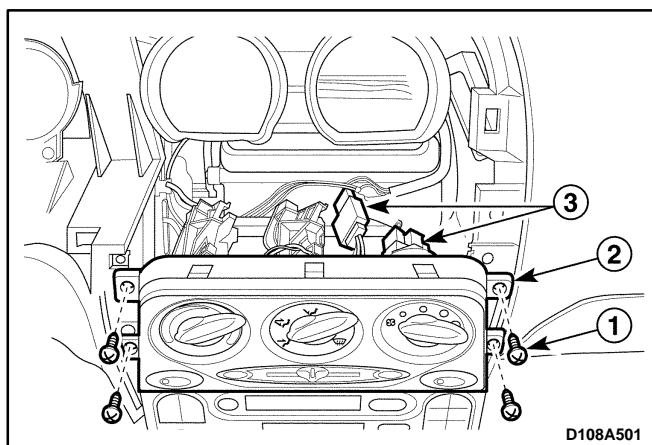


## REPAIR INSTRUCTIONS

### ON-VEHICLE SERVICE

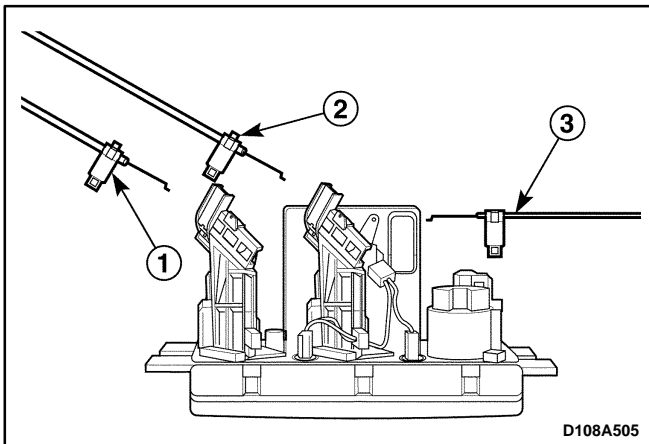
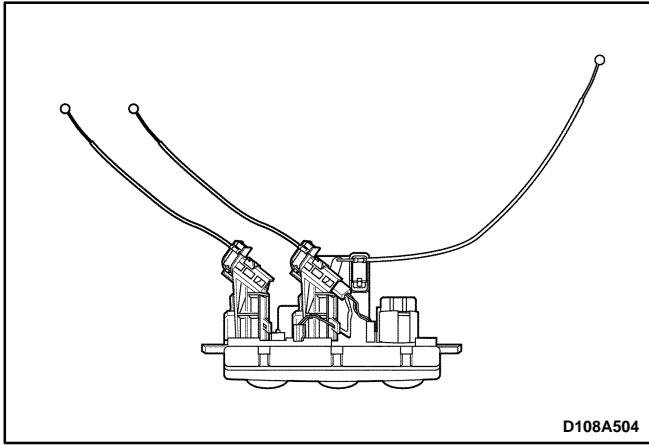


### CONTROL ASSEMBLY AND CONTROL CABLES

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

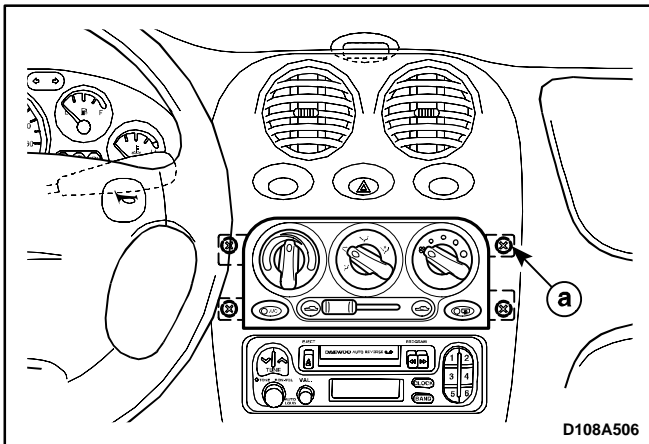
#### Removal Procedure

1. Disconnect the negative battery cable.
2. Remove the instrument cluster housing trim panel. Refer to *Section 9E, Instrumentation/Driver information*.
3. Remove the control assembly.
  - Remove the control assembly retaining screws (1).
  - Separate the control assembly from the instrument panel (2).
  - Disconnect the electrical connectors (3).
  - Disconnect the mode control cable from the heater module (4).
  - Disconnect the temperature control cable from the heater module (5).
- Remove the glove box from the instrument panel. Refer to *Section 9E, Instrumentation/Driver Information*.
- Disconnect the recirculating/fresh air door cable from the blower module (6).



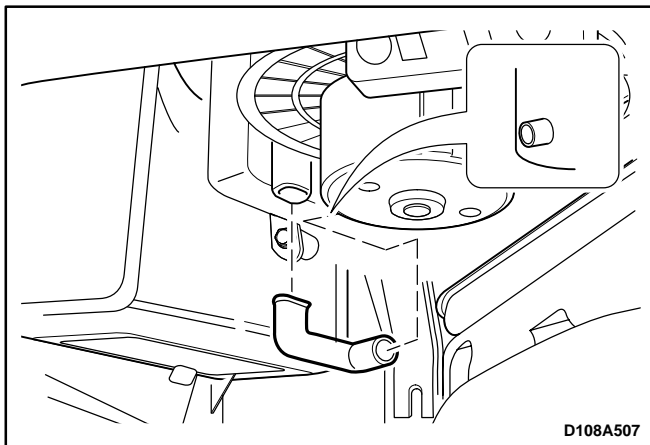
4. Disconnect the control cables from the control assembly.

- Disconnect the temperature control cable (1).
- Disconnect the mode control cable (2).
- Disconnect the recirculating/fresh air door cable (3).



### Installation Procedure

1. Connect the control cables to the control assembly.
2. Connect the recirculating/fresh air door cable to the blower module.
3. Install the glove box to the instrument panel. Refer to *Section 9E, Instrumentation/Driver Information*.
4. Connect the temperature control cable and the mode control cable to the heater module.
5. Connect the electrical connectors.
6. Install the control assembly with the screws.
7. Install the instrument cluster housing trim panel. Refer to *Section 9E, Instrumentation/Driver Information*.
8. Connect the negative battery cable.

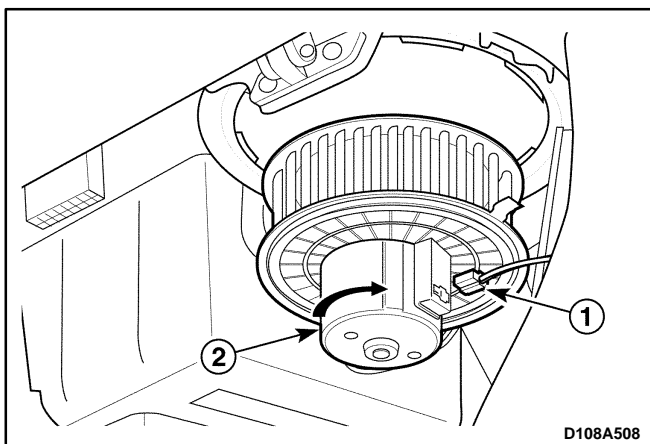


## BLOWER MOTOR AND COOLING HOSE

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

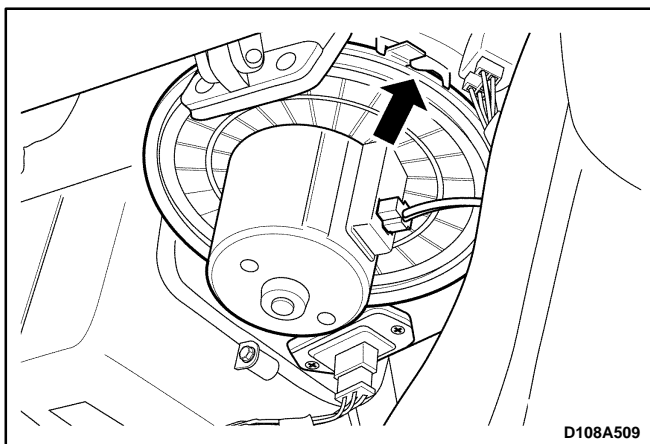
### Removal Procedure

1. Remove the blower motor cooling hose.



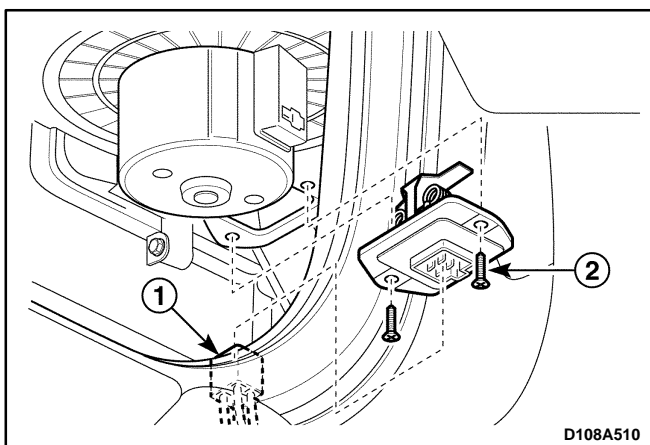
2. Remove the blower motor.

- Disconnect the motor electrical connector (1).
- Turn the blower motor (2).



### Installation Procedure

1. Install the blower motor by turning the motor clockwise.
2. Connect the motor electrical connector.
3. Install the blower motor cooling hose.

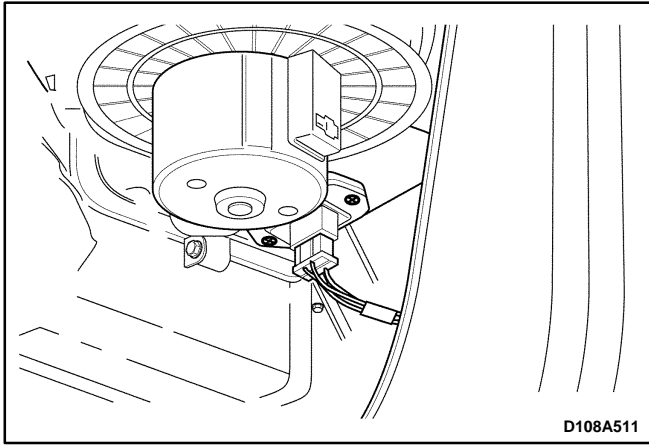


## BLOWER RESISTOR

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

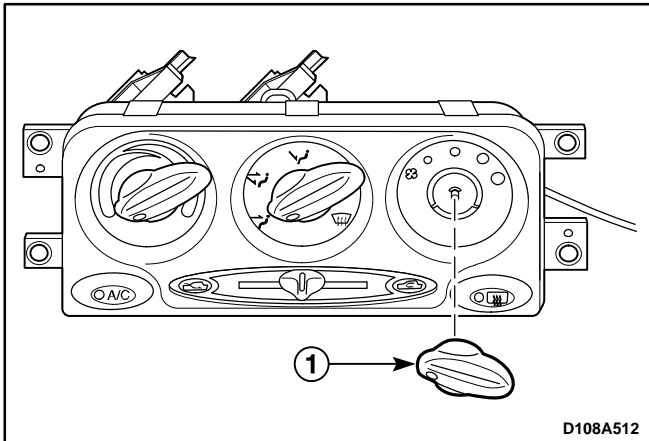
### Removal Procedure

1. Remove the blower resistor.
  - Disconnect the blower resistor connector (1).
  - Remove the screws (2).



### Installation Procedure

1. Install the blower resistor with the retaining screws.
2. Connect the blower resistor connector.

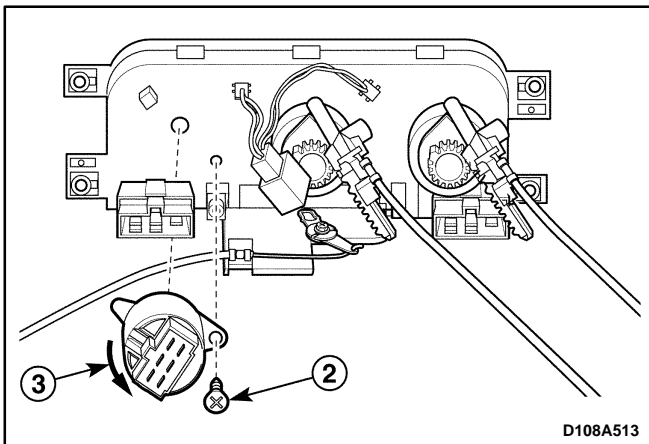


### BLOWER MOTOR SWITCH

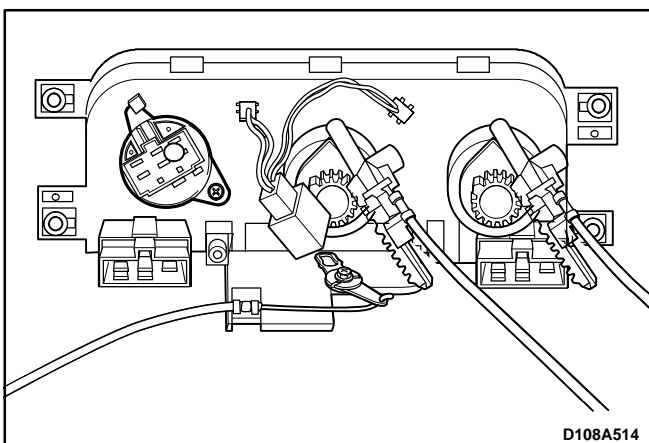
(Left-Hand Drive Shown, Right-Hand Drive Similar)

### Removal Procedure

1. Remove the control assembly. Refer to "Control Assembly and Control Cables" in this section.
2. Remove the blower motor switch.
  - Remove the switch knob (1).

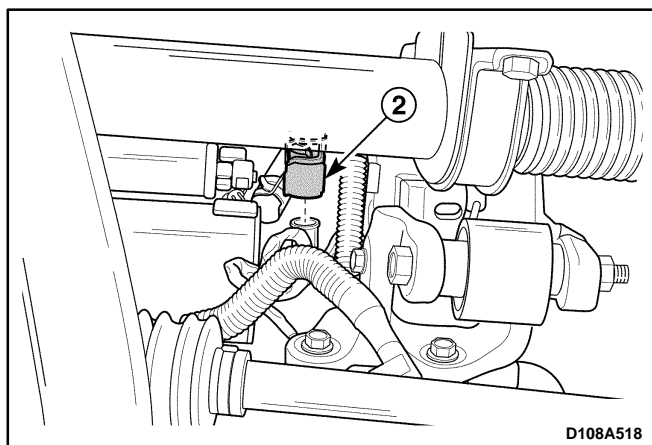
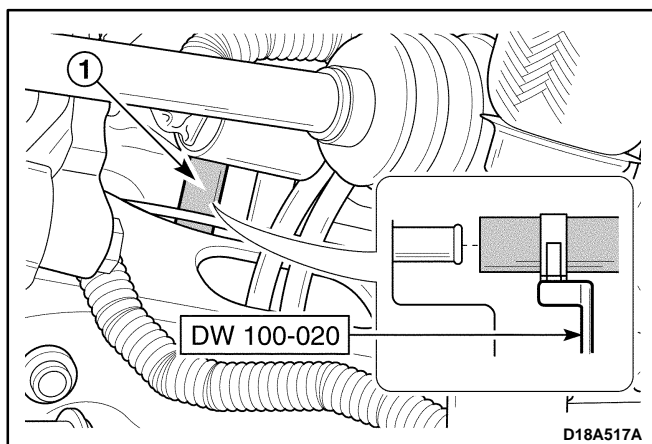
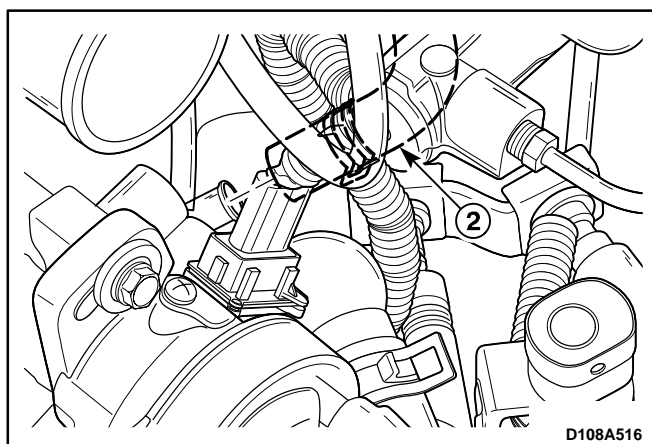
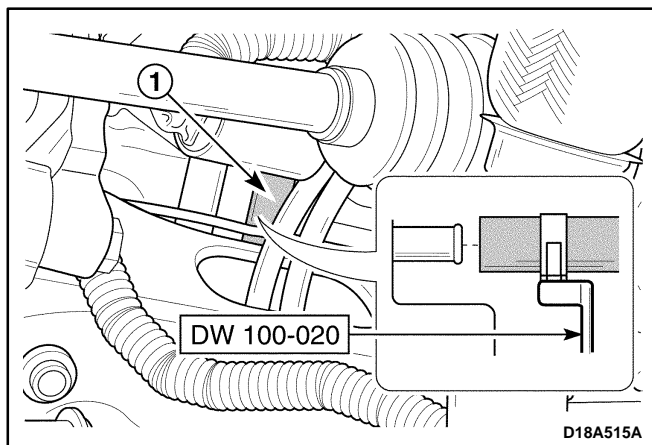


- Remove the blower motor switch retaining screw (2).
- Turn the blower motor switch anticlockwise (3).



### Installation Procedure

1. Install the blower motor switch with the screw.
2. Install the switch knob.
3. Install the control assembly. Refer to "Control Assembly and Control Cables" in this section.



## HEATER HOSES

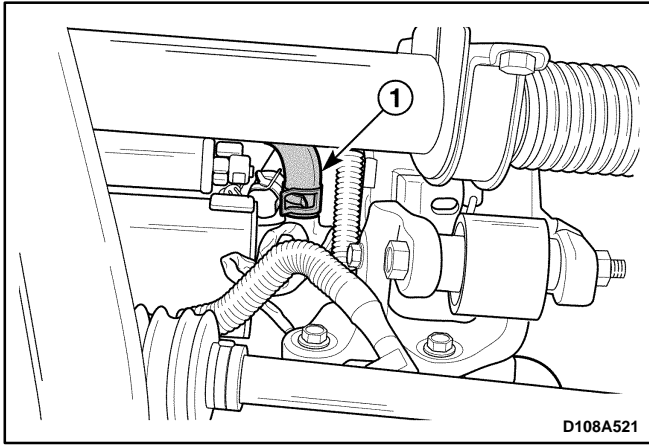
(Left-Hand Drive Shown, Right-Hand Drive Similar)

### Tool Required

DW100-020 Hose Remover/Installer.

### Removal Procedure

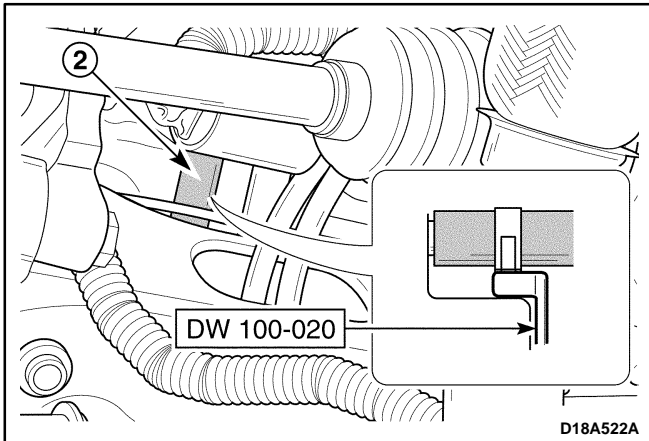
1. Disconnect the negative battery cable.
2. Drain the coolant.
3. Remove the heater inlet hoses.
  - Remove the air cleaner housing.
  - Raise and suitably support the vehicle.
  - Disconnect the hose from the heater module using a hose remover DW100-020 (1).
  - Lower the vehicle.
  - Disconnect the hose from the thermostat (2).
4. Remove the heater outlet hoses.
  - Raise and suitably support the vehicle.
  - Disconnect the hose from the heater module using a hose remover DW100-020 (1).
  - Disconnect the B<sup>+</sup> terminal from the starter. Refer to *Section 1E, Engine Electrical*.
  - Disconnect the heater hose from the engine (2).



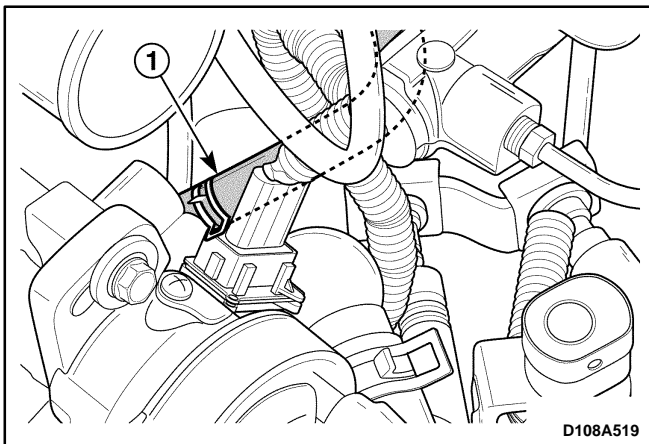
## Installation Procedure

### 1. Install the heater outlet hoses.

- Connect the heater hose to the engine (1).
- Connect the B<sup>+</sup> terminal to the starter. Refer to *Section 1E, Engine Electrical*.

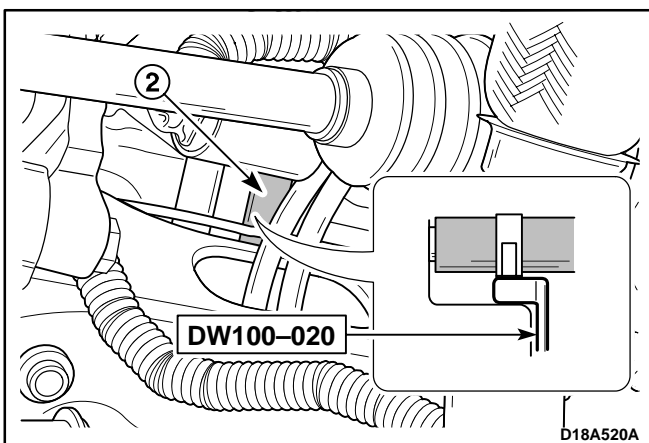


- Connect the hose to the heater module using a hose installer DW100-020 (2).
- Lower the vehicle.



### 2. Install the heater inlet hoses.

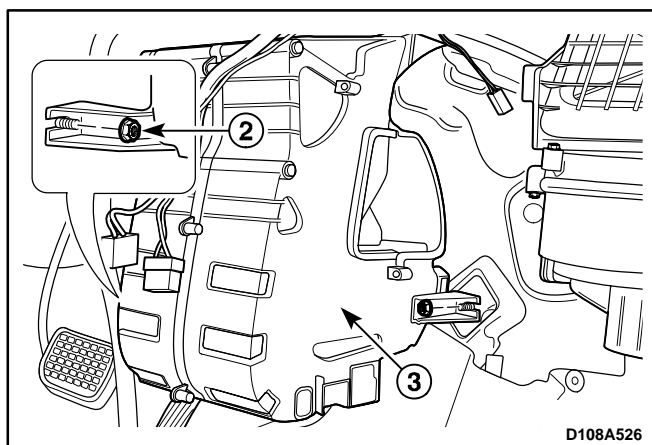
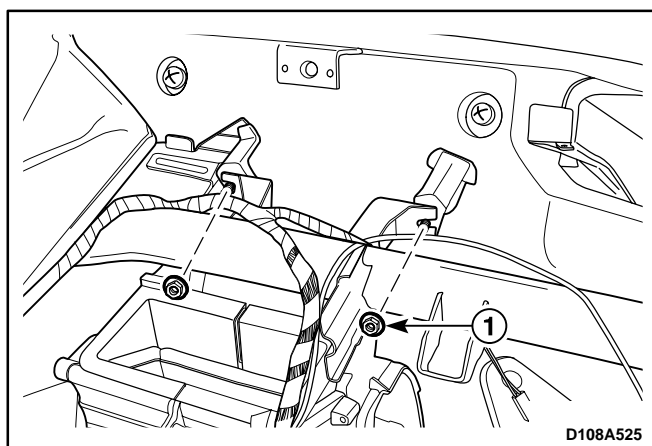
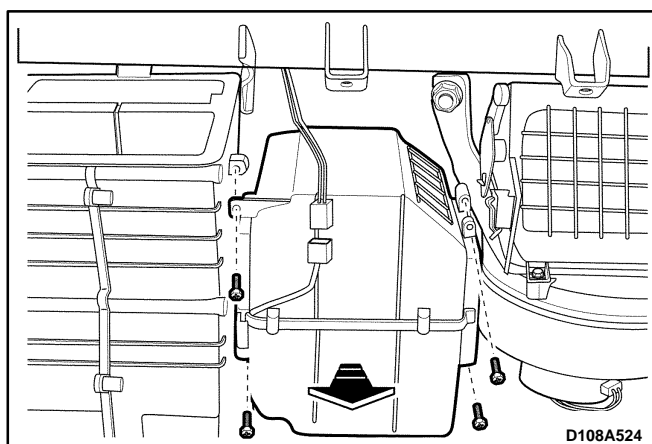
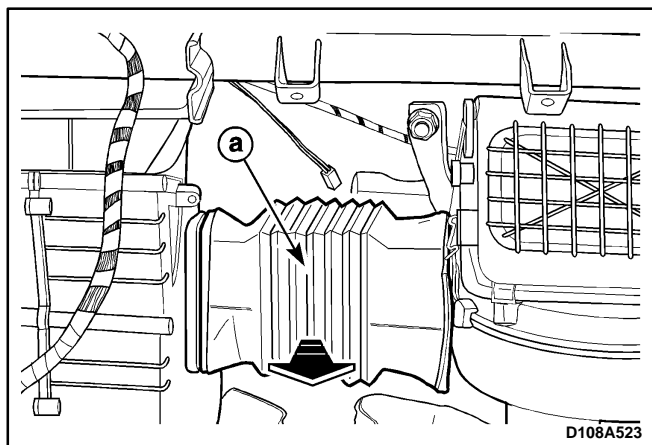
- Connect the hose to the thermostat (1).
- Raise and suitably support the vehicle.



- Connect the hose to the heater module using a hose installer DW100-020 (2).
- Lower the vehicle.
- Install the air cleaner housing.

### 3. Refill the coolant. Refer to *Section 1D, Engine Cooling*.

### 4. Connect the negative battery cable.

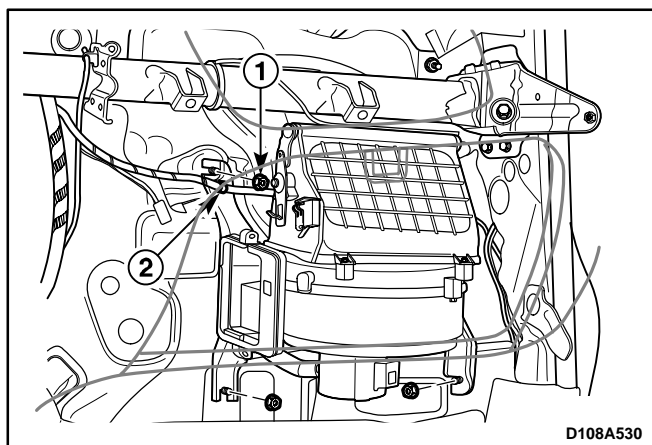
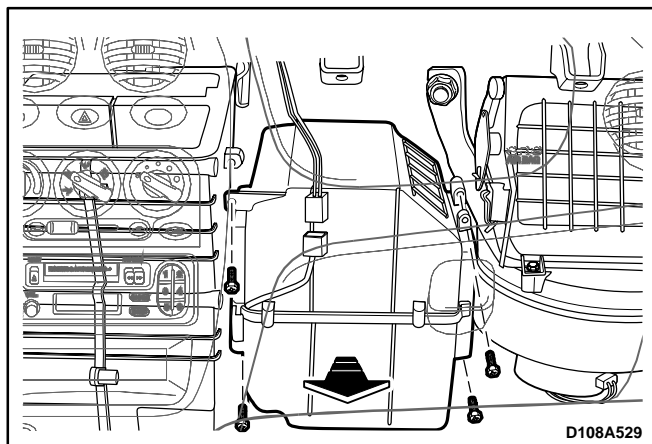
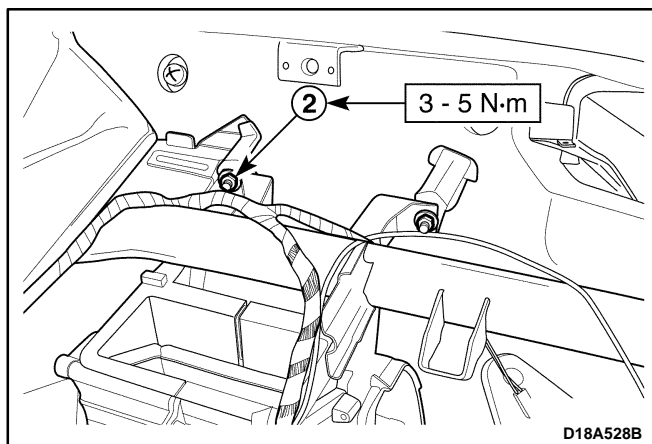
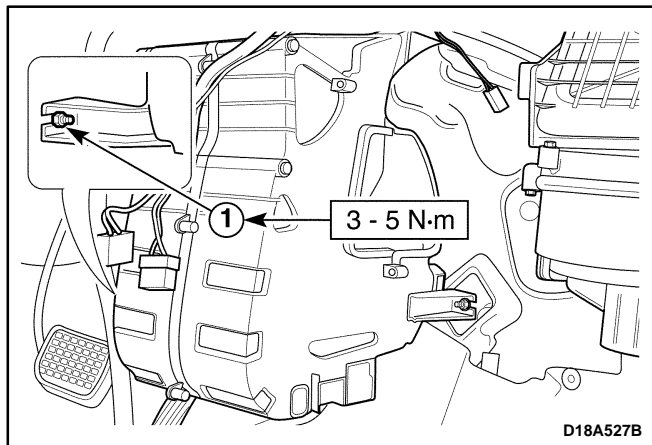


## HEATER MODULE

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

### Removal Procedure

1. Disconnect the heater hoses from the heater module. Refer to "Heater Hoses" in this section.
2. Remove the instrument panel and the lower tie bar center. Refer to *Section 9E, Instrumentation/Driver Information*.
3. Remove the heater module-to-blower module connection tube on the vehicle not equipped with A/C.
  - a. Heater module-to-blower module connection tube.
4. Remove the evaporator on the vehicle equipped with A/C. Refer to *Section 7B, Manual Control Heating, Ventilation, and Air Conditioning System*.
5. Remove the heater module.
  - Remove the upper nuts (1).
  - Remove the lower nuts (2).
  - Remove the heater module (3).



## Installation Procedure

1. Install the heater module with the nuts.

### Tighten

Tighten the heater module lower nuts to 3–5 N·m (27–44 lb-in) (1).

Tighten the heater module upper nuts to 3–5 N·m (27–44 lb-in) (2).

2. Install the evaporator on the vehicle equipped with A/C. Refer to *Section 7B, Manual Control Heating, Ventilation, and Air Conditioning System*.
3. Install the heater module-to-blower module connection tube on the vehicle not equipped with A/C with the screw.
4. Install the instrument panel and the lower tie bar. Refer to *Section 9E, Instrumentation/Driver Information*.
5. Connect the heater hoses to the heater module. Refer to "Heater Hoses" in this section.

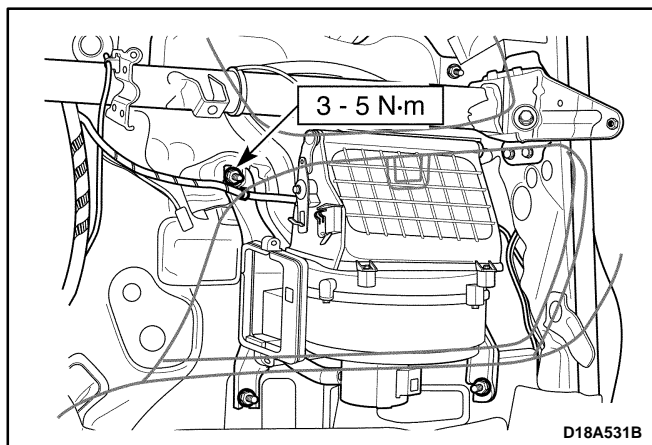
## BLOWER MODULE

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

### Removal Procedure

1. Remove the glove box from the instrument panel. Refer to *Section 9E, Instrumentation/Driver Information*.
2. Remove the heater module-to-blower module connection tube on the vehicle not equipped with A/C. Refer to "Heater Module" in this section.
3. Remove the evaporator on the vehicle equipped with A/C. Refer to *Section 7B, Manual Control Heating, Ventilation, and Air Conditioning System*.
4. Remove the blower resistor. Refer to "Blower Resistor" in this section.
5. Disconnect the blower motor connector. Refer to "Blower Motor and Cooling Hose" in this section.
6. Remove the blower module.
  - Remove the nuts (1).
  - Disconnect the wiring harness (2).





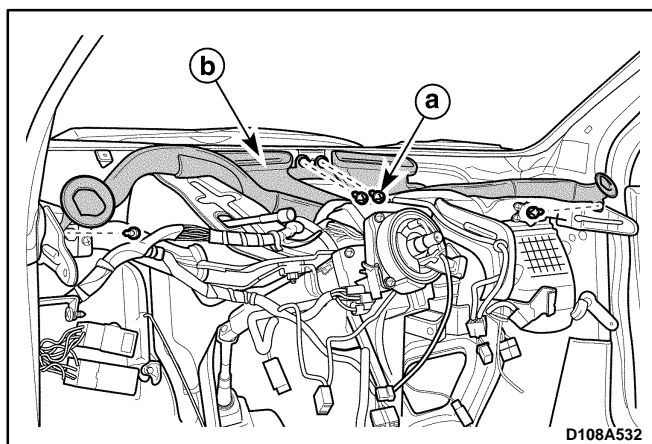
## Installation Procedure

1. Install the blower module with the nuts.

### Tighten

Tighten the blower module retaining nuts to 3–5 N•m (27–44 lb-in).

2. Connect the wiring harness.
3. Connect the blower motor connector. Refer to “Blower Motor and Cooling Hose” in this section.
4. Install the blower resistor. Refer to “Blower Resistor” in this section.
5. Install the evaporator on the vehicle equipped with A/C. Refer to *Section 7B, Manual Control Heating, Ventilation, and Air Conditioning System*.
6. Install the heater module-to-blower module connection tube on the vehicle not equipped with A/C. Refer to “Heater Module” in this section.
7. Install the glove box to the instrument panel. Refer to *Section 9E, Instrumentation/Driver Information*.

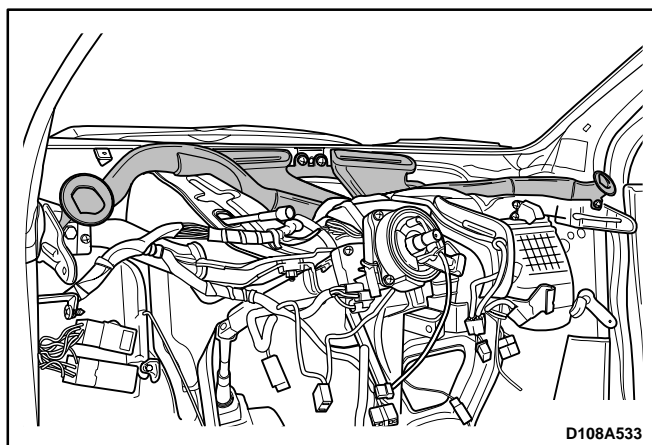


## DEFROSTER DUCT AND HOSES

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

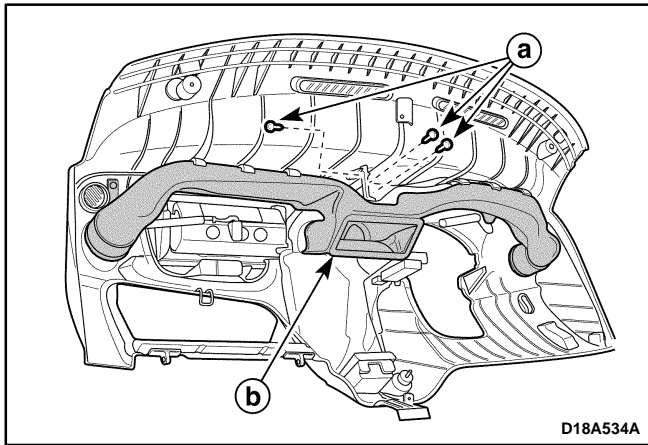
### Removal Procedure

1. Remove the instrument panel. Refer to *Section 9E, Instrumentation/Driver Information*.
2. Remove the defroster duct and hoses retaining screws.
  - a. Retaining screw.
3. Remove the defroster duct and hoses.
  - b. Defroster duct and hoses.



### Installation Procedure

1. Install the defroster duct and hoses with the screws.
2. Install the instrument panel. Refer to *Section 9E, Instrumentation/Driver Information*.

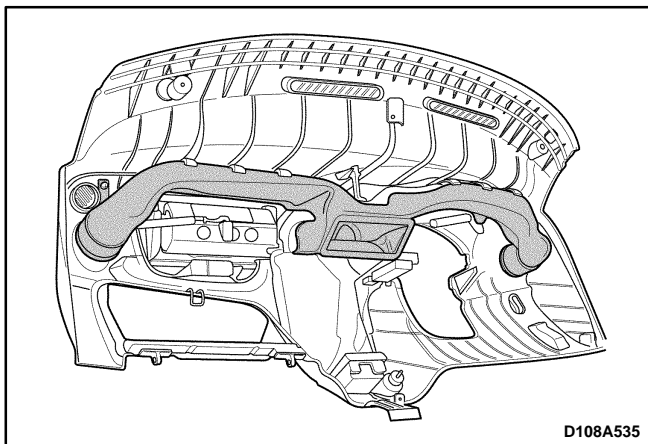


## VENTILATION DUCT

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

### Removal Procedure

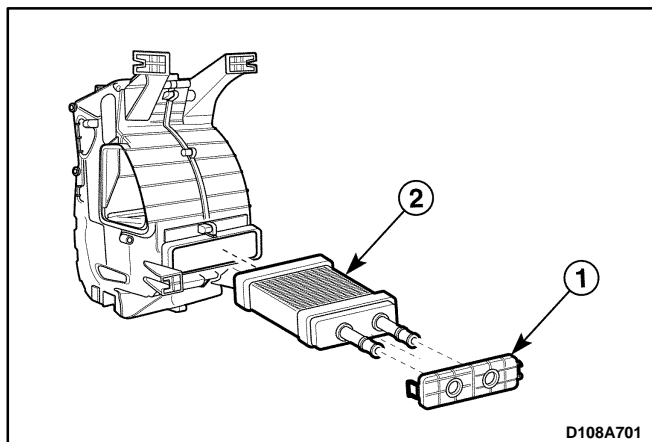
1. Remove the instrument panel. Refer to *Section 9E, Instrumentation/Driver Information*.
2. Remove the ventilation duct retaining screws.
  - a. Retaining screw.
3. Remove the ventilation duct.
  - b. Ventilation duct.



### Installation Procedure

1. Install the ventilation duct with the screws.
2. Install the instrument panel. Refer to *Section 9E, Instrumentation/Driver Information*.

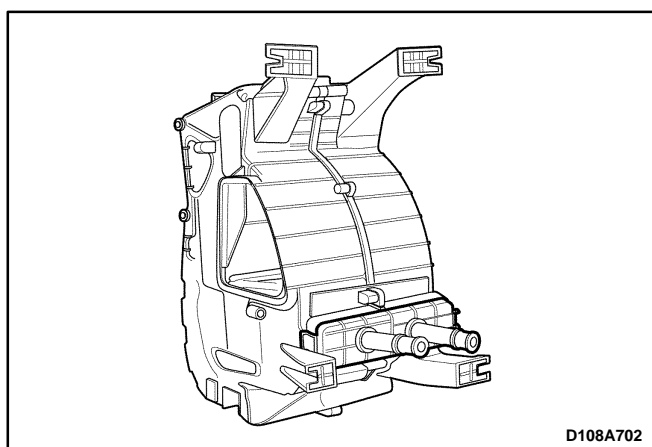
## UNIT REPAIR



### HEATER CORE

#### Disassembly Procedure

1. Remove the heater module. Refer to "Heater Module" in this section.
2. Remove the heater core.
  - Remove the heater core cover (1).
  - Remove the heater core (2).



#### Assembly Procedure

1. Install the heater core to the heater module.
2. Install the heater core cover.
3. Install the heater module. Refer to "Heater Module" in this section.

# SPECIFICATIONS

## GENERAL SPECIFICATIONS

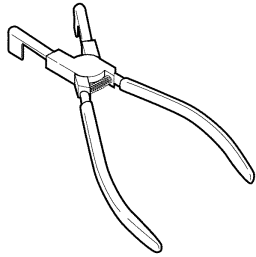
Application		Unit	Description
Maximum Heating Capacity		cal/h	7,300
Blower Motor Resistance	1 st	$\Omega$	2.25 – 2.75
	2 nd	$\Omega$	1.08 – 1.32
	3 rd	$\Omega$	0.36 – 0.44
	4 th	$\Omega$	–

## FASTENER TIGHTENING SPECIFICATIONS

Application	N•m	Lb-Ft	Lb-In
Heater Module Nuts	3 – 5	–	27 – 44
Blower Module Nuts	3 – 5	–	27 – 44

## SPECIAL TOOLS AND EQUIPMENT

### SPECIAL TOOLS TABLE

 <p>D102B119</p>	<p><b>DW 100-020</b> <b>Spring Clamp</b> <b>Remover/Installer</b></p>
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## AIR FLOW THROUGH DUCTS (NON-A/C)

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

