

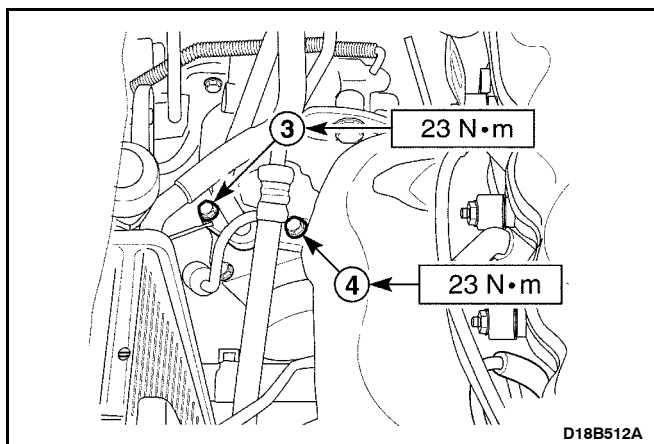
Installation Procedure

1. Install the compressor with the mounting bolts.

Tighten

- Tighten the compressor-to-bracket upper bolt to 20 N·m (15 lb-ft) (1).
- Tighten the compressor-to-bracket lower bolts to 22 N·m (16 lb-ft) (2).

2. Connect the electrical connector.



3. Install the A/C high pressure pipe line to the compressor with the bolt.

Tighten

Tighten the A/C high pressure pipe line bolt to 23 N·m (17 lb-ft) (3).

4. Install the A/C low pressure pipe line to the compressor with the bolt.

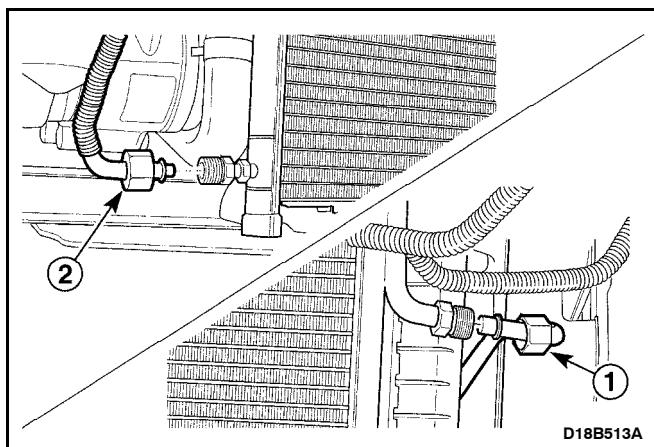
Tighten

Tighten the A/C low pressure pipe line bolt to 23 N·m (17 lb-ft) (4).

5. Evacuate and charge the system. Refer to "Discharging, Adding Oil, Evacuating, and Charging Procedure for A/C System" in this section.

6. Install the A/C belt. Refer to *Section 6B, Power Steering Pump*.

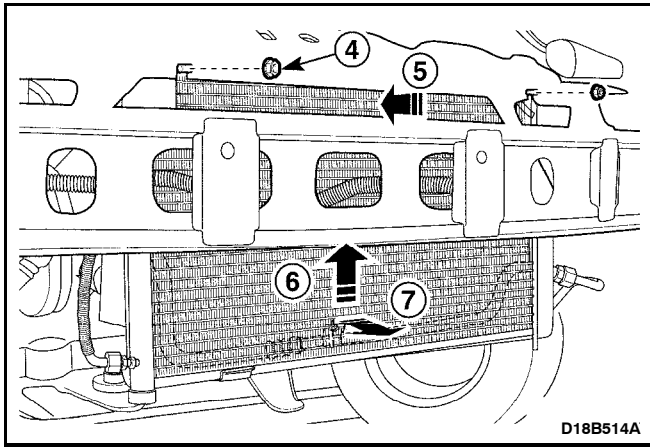
7. Install the receiver dryer. Refer to "Receiver Dryer and Dual Cut Switch" in this section.



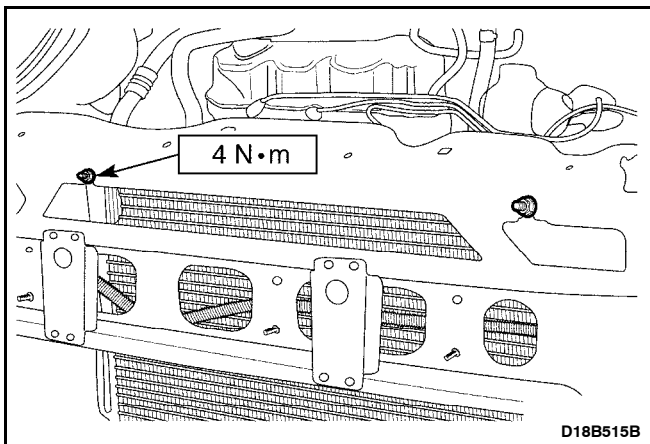
CONDENSER

1. Disconnect the negative battery cable.
2. Remove the front bumper fascia. Refer to *Section 90, Bumpers and Fascias*.
3. Discharge and recover the refrigerant. Refer to "Discharging, Adding Oil, Evacuating, and Charging Procedures for A/C system" in this section.
4. Remove the condenser.

- Loosen the condenser pipe-to-compressor pipe fitting (1).
- Loosen the condenser pipe-to-receiver dryer pipe fitting (2).



- Remove the condenser mounting nuts (3).
- Push the top of the condenser (4).
- Take off the condenser from the lower bracket by lifting the condenser (5).
- Remove the condenser (6).



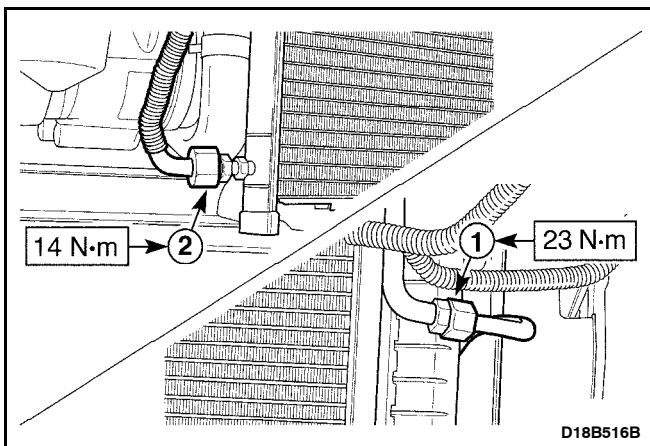
Installation Procedure

Important: Discard the removed O-rings.

1. Install the condenser with the nuts.

Tighten

Tighten the condenser mounting nuts to 4 N·m (36 lb-in).

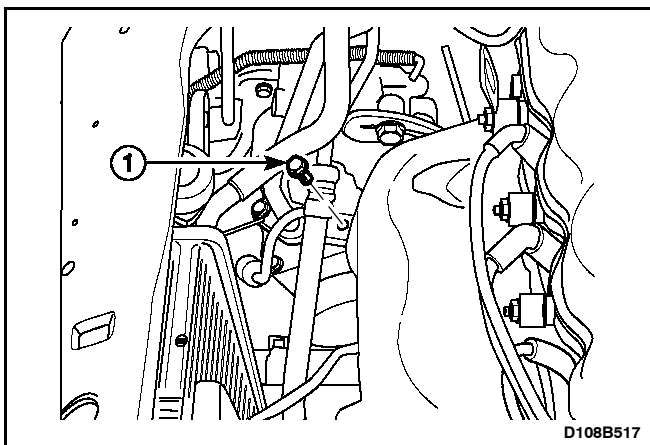


2. Tighten the fittings and the bolt.

Tighten

- Tighten the condenser pipe-to-compressor pipe fitting to 23 N·m (17 lb-ft) (1).
- Tighten the condenser pipe-to-receiver dryer pipe fitting to 14 N·m (10.5 lb-ft) (2).

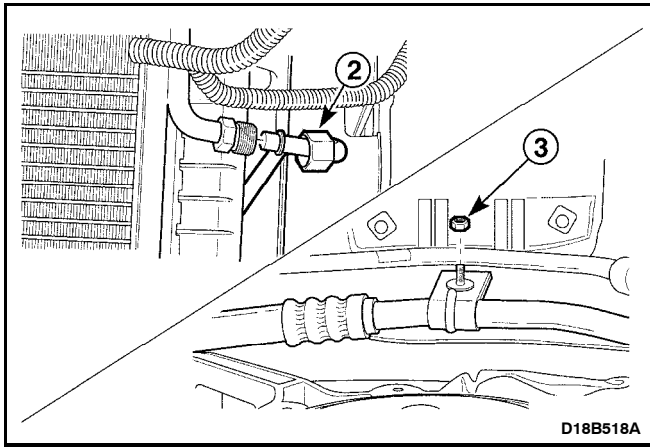
3. Evacuate and recharge the system. Refer to "Discharging, Adding Oil, Evacuating, and Charging Procedures for A/C System" in this section.
4. Install the front bumper fascia. Refer to *Section 90, Bumpers and Fascias*.
5. Connect the negative battery cable.



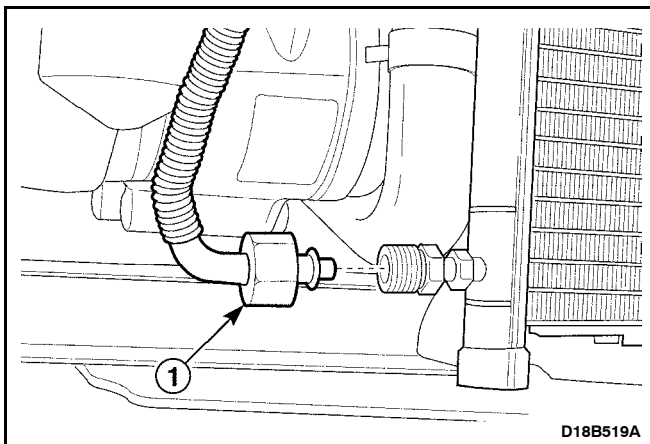
A/C HIGH PRESSURE PIPE LINE (Left-Hand Drive Shown, Right-Hand Drive Similar)

Removal Procedure

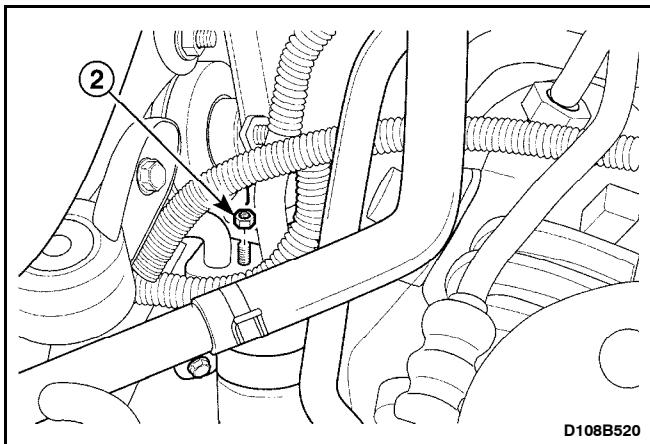
1. Disconnect the negative battery cable.
2. Remove the front bumper fascia. Refer to *Section 90, Bumpers and Fascias*.
3. Discharge and recover the refrigerant. Refer to "Discharging, Adding Oil, Evacuating, and Charging Procedures for A/C System" in this section.
4. Remove the A/C high pressure pipe line between the compressor and the condenser.
 - Remove the bolt securing the high pressure pipe line to the compressor (1).



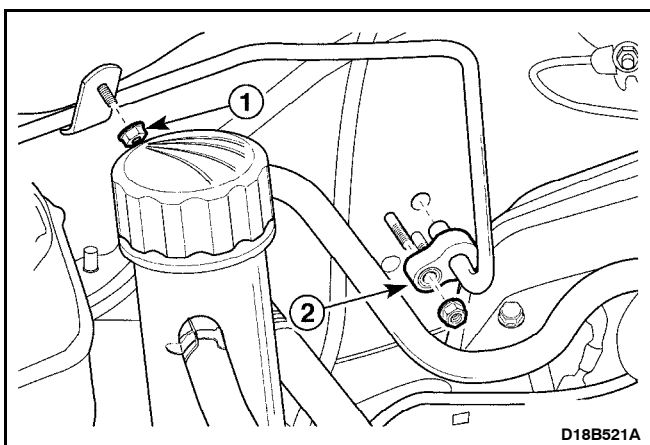
- Loosen the fitting securing the high pressure pipe line to the condenser pipe line (2).
- Remove the clamp nut (3).



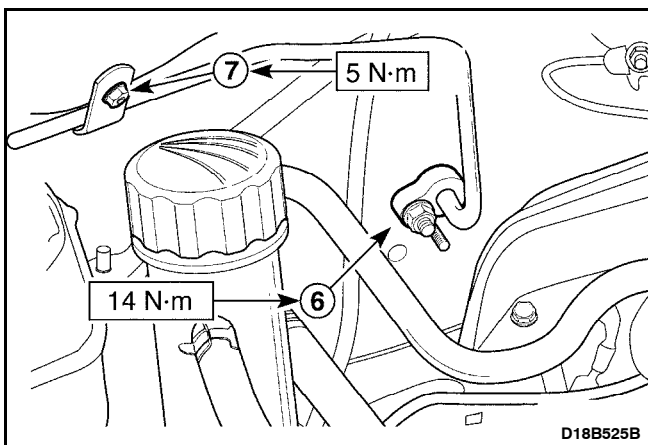
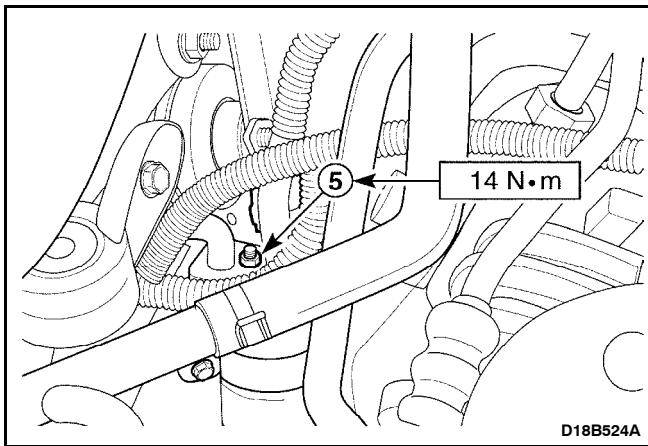
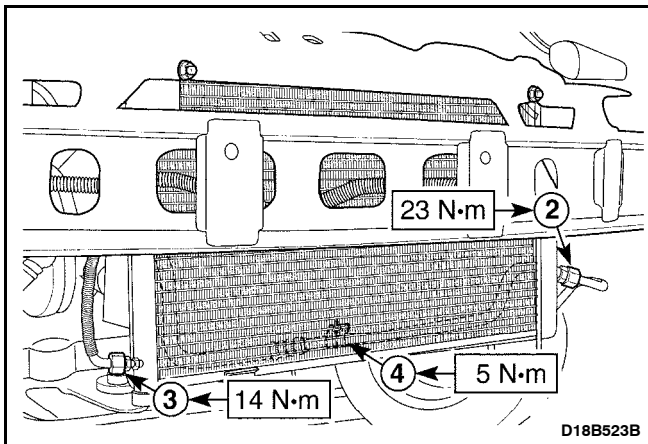
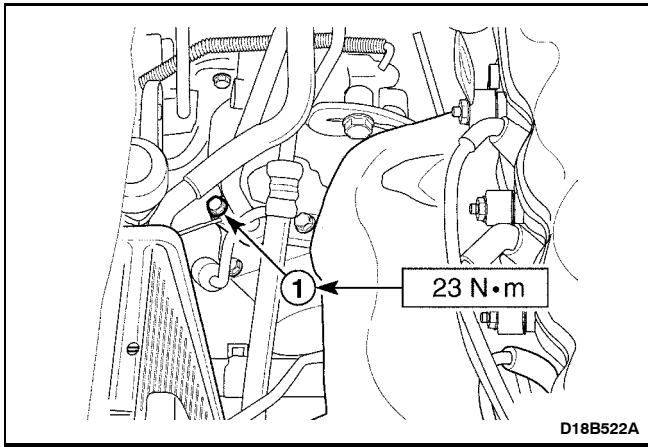
5. Remove the A/C high pressure pipe line between the condenser and the receiver dryer.
 - Loosen the fitting securing the receiver dryer to the condenser (1).



- Remove the receiver dryer flange nuts (2).



6. Remove the A/C high pressure pipe line between the receiver dryer and the evaporator.
 - Remove the purge control valve. Refer to *Section 1F, Engine Controls*.
 - Remove the bracket nut (1).
 - Loosen the fitting (2).



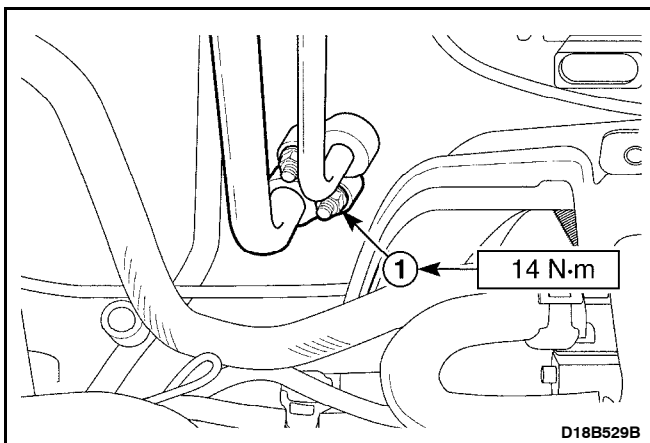
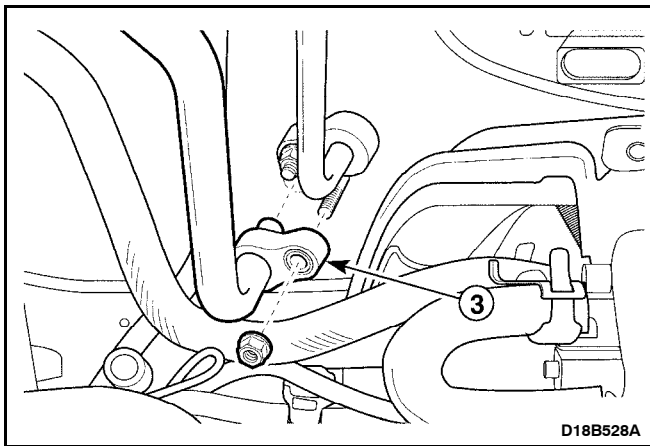
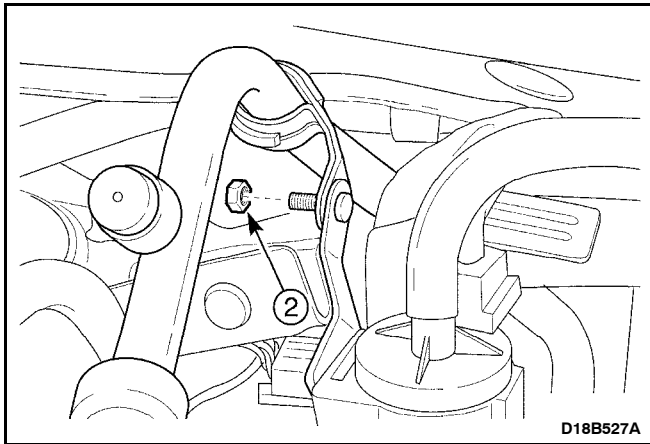
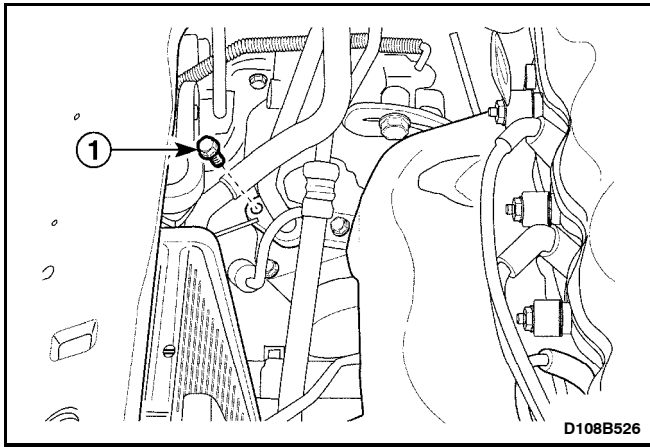
Installation Procedure

Important: Discard the removed O-rings.

1. Install the high pressure pipe lines with the bolts, the nuts, and the fittings.

Tighten

- Tighten the bolt securing the high pressure pipe line to the compressor to 23 N·m (17 lb-ft) (1).
 - Tighten the fitting securing the high pressure pipe line to the condenser pipe line to 23 N·m (17 lb-ft) (2).
 - Tighten the fitting securing the high pressure pipe line to the receiver dryer to 14 N·m (10.5 lb-ft) (3).
 - Tighten the bracket nut to 5 N·m (44 lb-in) (4).
 - Tighten the receiver dryer flange nuts to 14 N·m (10.5 lb-ft) (5).
 - Tighten the nut securing the high pressure pipe line to the evaporator to 14 N·m (10.5 lb-ft) (6).
 - Tighten the bracket nut to 5 N·m (44 lb-in) (7).
2. Install the purge control valve. Refer to *Section 1F, Engine controls*.
 3. Evacuate and recharge the system. Refer to "Discharging, Adding Oil, Evacuating, and Charging Procedures for A/C System" in this section.
 4. Install the front bumper fascia. Refer to *Section 90, Bumpers and Fascias*.
 5. Connect the negative battery cable.



A/C LOW PRESSURE PIPE LINE (Left-Hand Drive Shown, Right-Hand Drive Similar)

Removal Procedure

1. Disconnect the negative battery cable.
2. Discharge and recover the refrigerant. Refer to "Discharging, Adding Oil, Evacuating, and Charging Procedures for A/C System" in this section.
3. Remove the A/C low pressure pipe line.
 - Remove the bolt securing the A/C low pressure pipe line at the compressor (1).

- Remove the bracket nut from shut bar (2).

- Remove the purge control valve. Refer to *Section 1F, Engine Controls*.
- Loosen the nut securing the A/C low pressure pipe line at the evaporator (3).

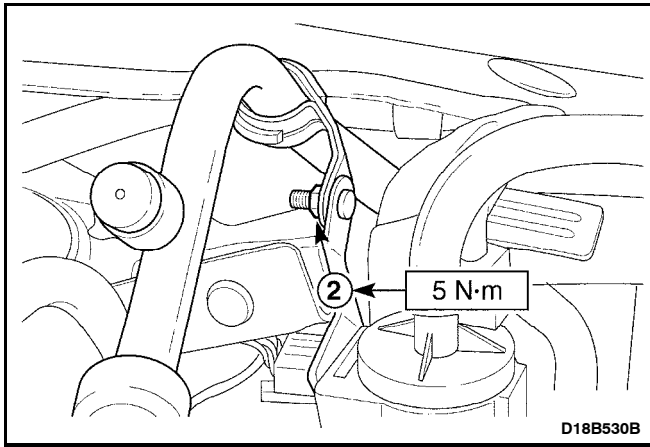
Installation Procedure

Important: Discard the removed O-rings.

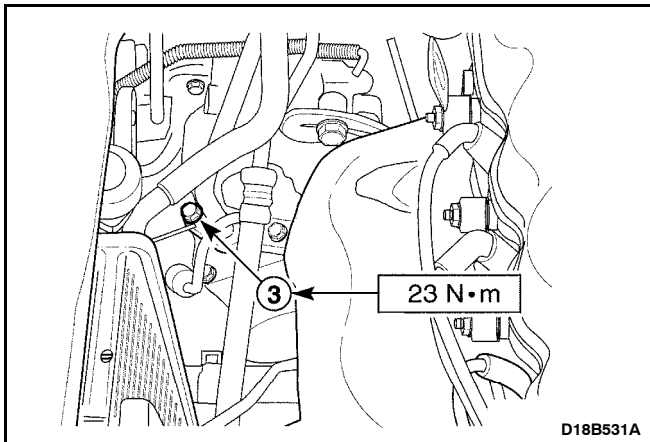
1. Install the A/C low pressure pipe line.

Tighten

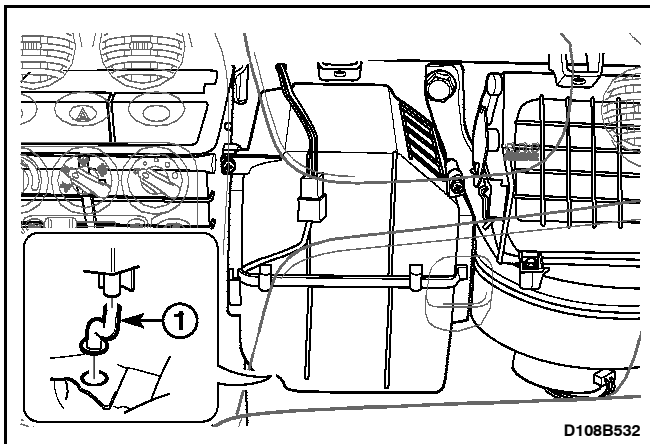
- Tighten the nut securing the A/C low pressure pipe line at the evaporator to 14 N·m (10.5 lb-ft) (1).



- Tighten the bracket nut to 5 N·m (44 lb-in) (2).



- Tighten the bolt securing the A/C low pressure pipe line at the compressor to 23 N·m (17 lb-ft) (3).
2. Evacuate and recharge the system. Refer to “Discharging, Adding Oil, Evacuating, and Charging Procedure for A/C System” in this section.
 3. Connect the negative battery cable.

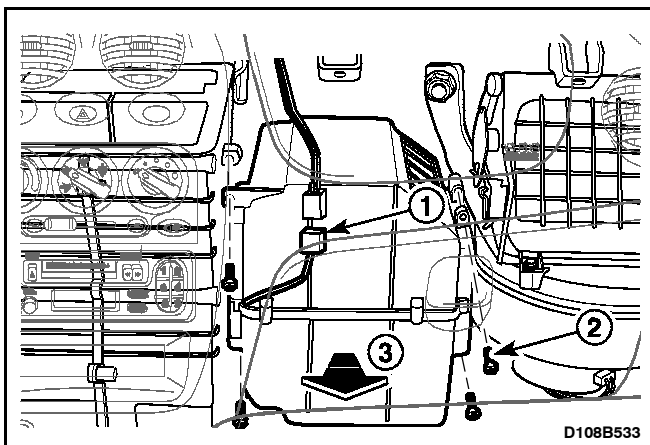


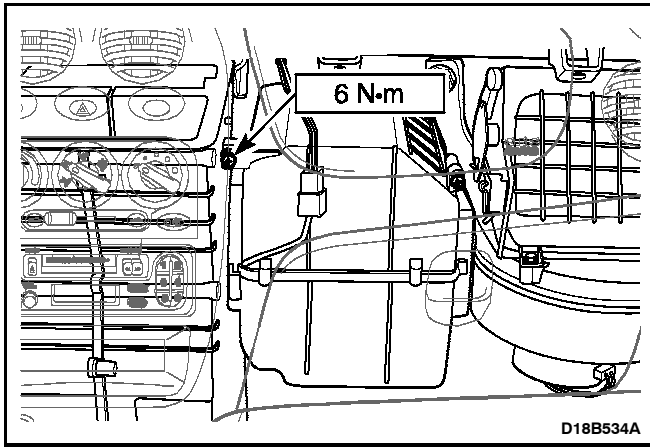
EVAPORATOR UNIT AND DRAIN HOSE

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

Removal Procedure

1. Disconnect the negative battery cable.
2. Discharge and recover the refrigerant. Refer to “Discharging, Adding Oil, Evacuating, and Charging Procedures for A/C System” in this section.
3. Loosen the high pressure pipe line (receiver dryer → evaporator) nut and the low pressure pipe line (evaporator → compressor) nut.
4. Remove the glove box. Refer to *Section 9E, Instrumentation/Driver information*.
5. Remove the evaporator unit.
 - Remove the drain hose (1).
 - Disconnect the thermistor connector (2).
 - Remove the screws (3).
 - Remove the evaporator backward slowly (4).

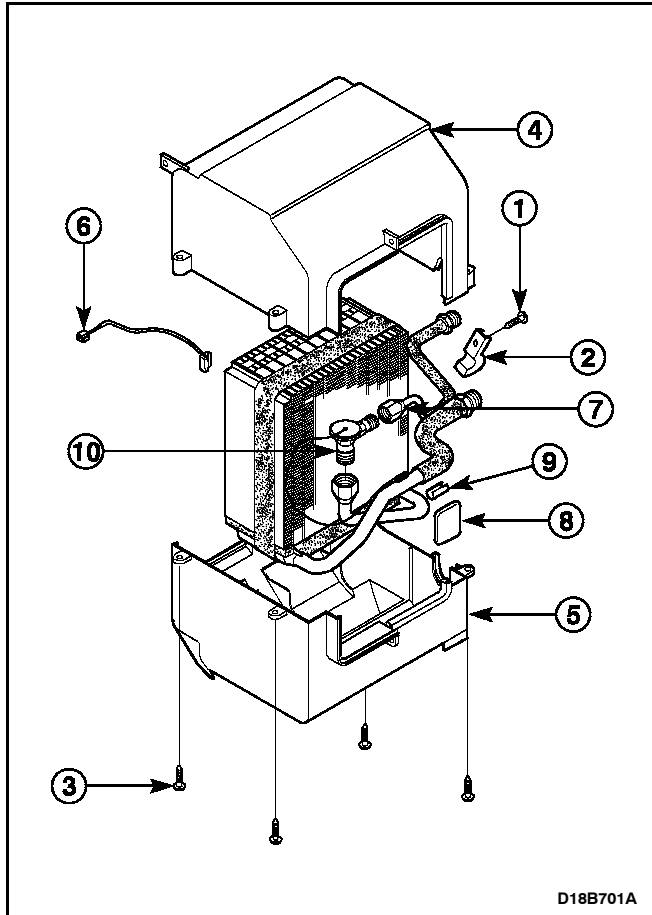




Installation Procedure

1. Install the evaporator with the screws.
2. Connect the thermistor connector.
3. Install the drain hose.
4. Install the glove box. Refer to *Section 9E, Instrumentation / Driver Information*.
5. Tighten the high pressure pipe line (receiver dryer → evaporator) nut and the low pressure pipe line (evaporator → compressor) nut to 14 N·m (10.5 lb-ft).
6. Evacuate and recharge the system. Refer to “Discharging, Adding Oil, Evacuating, and Charging Procedures for A/C System” in this section.
7. Connect the negative battery cable.

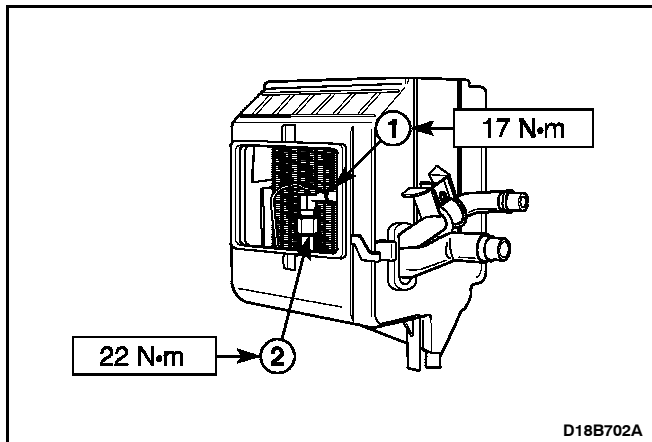
UNIT REPAIR



EVAPORATOR CORE AND EXPANSION VALVE

Disassembly Procedure

1. Remove the evaporator unit. Refer to "Evaporator Unit and Drain Hose" in this section.
2. Remove the evaporator core and expansion valve.
 - Remove the screw (1).
 - Remove the clamp (2).
 - Remove the screws securing the evaporator case cover (3).
 - Remove the upper evaporator case cover (4).
 - Remove the lower evaporator case cover (5).
 - Remove the thermistor (6).
 - Loosen the fitting and remove the high pressure pipe line (7).
 - Remove the tape (8).
 - Remove the evaporator plate seal (9).
 - Loosen the fitting and remove the expansion valve (10).



Assembly Procedure

1. Install the expansion valve with the fitting.

Tighten

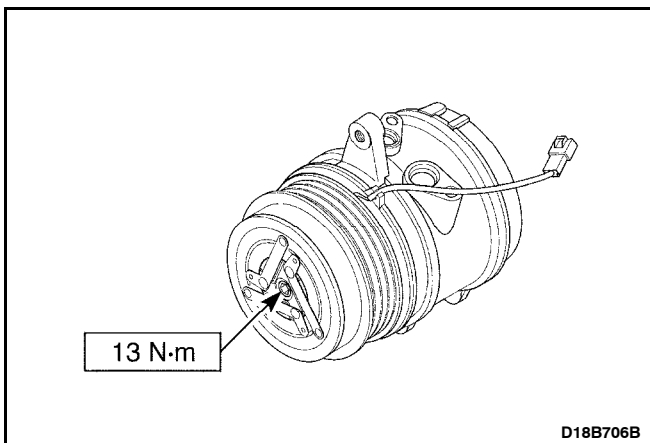
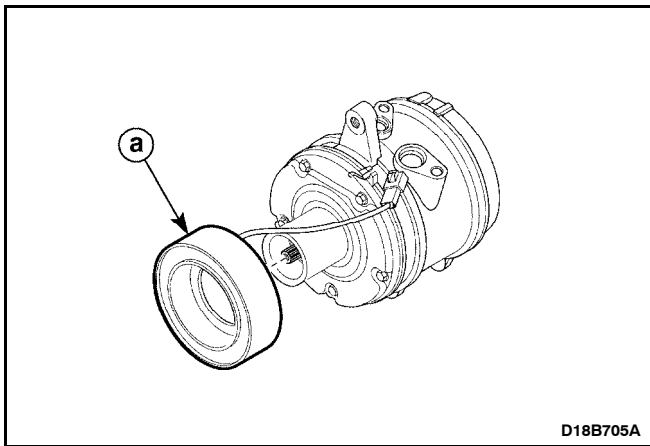
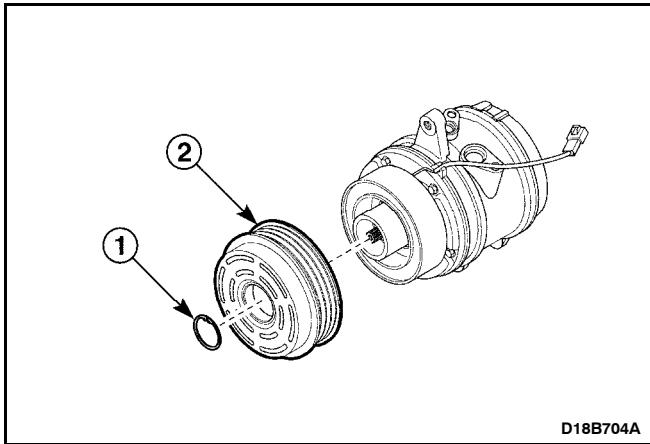
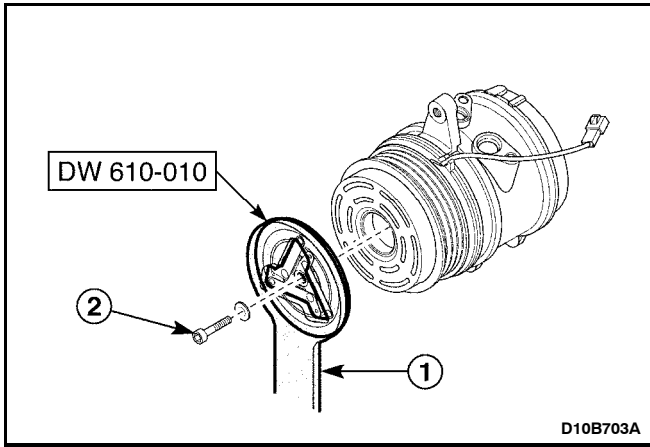
Tighten the high pressure pipe line coupling to 17 N·m (13 lb-ft) (1).

2. Install the evaporator plate seal.
3. Install the tape.
4. Install the high pressure pipe line with the fitting.

Tighten

Tighten the expansion valve coupling to 22 N·m (16 lb-ft) (2).

5. Install the thermistor.
6. Install the screws securing the evaporator case cover.
7. Install the clamp and the screw.
8. Install the evaporator unit. Refer to "Evaporator Unit and Drain Hose" in this section.



COMPRESSOR OVERHAUL

Tools Required

DW-610-010 Clutch Hub Holding Tool

Disassembly Procedure

1. Remove the compressor. Refer to "Compressor" in this section.
2. Remove the clutch drive plate.
 - Use the clutch hub holding tool DW-610-010 to keep the clutch drive plate (1).
 - Remove the shaft bolt (2).
3. Remove the compressor pulley.
 - Remove the snap ring using a ring pryer (1).
 - Remove the pulley (2).
4. Disconnect the wiring harness holder and remove the electromagnetic clutch.
 - a. Electromagnetic clutch

Assembly Procedure

1. Connect the wiring harness holder and install the clutch coil.
2. Install the snap ring and compressor pulley.
3. Use the clutch hub holding tool DW-610-010, install the clutch drive plate with the shaft bolt.

Tighten

Tighten the shaft bolt to 13 N·m (115 lb-in).

4. Install the compressor. Refer to "Compressor" in this section.

SPECIFICATIONS

GENERAL SPECIFICATIONS

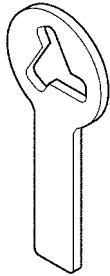
Application		Unit	Description
Compressor		-	SP-10.4PK
Receiver-Dryer		-	AL R/DRIER
Refrigerant	Type	-	R-134a System
	Capacity	g	500 (RHD : 530)
Refrigerant Oil in A/C System	Type	-	RL 244 PAG OIL
	Capacity	cc	150
A/C Cooling Capacity (Airflow rate 8.7 kg/min)		Kcal/h	5,500
Refrigerant Pressure in A/C System (Engine Idle, Fresh Air 30°C (86°F), Ambient Temperature 25°C-35°C (77°F-95°F), Temperature to Full Cold)	Low Pressure Side	kPa (psi)	200 (2.9)
	High Pressure Side	kPa (psi)	1,500 (217.5)
A/C Compressor ON/OFF Condition (Refer to Section 1F, Engine Controls About the A/C Compressor ON/OFF Condition According to Engine Operating Status)	Evaporator Thermistor Temperature	°C (°F)	
	Dual Cut Switch Pressure	kPa	

FASTENER TIGHTENING SPECIFICATIONS

Application	N•m	Lb-Ft	Lb-In
Compressor Upper Bracket Bolts	20	15	-
Compressor Front Head-to-Rear Head Through-Bolt	22	16	-
High Pressure Pipe Line (Compressor → Condenser) Bolt	23	17	-
High Pressure Pipe Line (Compressor → Condenser) Fitting	23	17	-
High Pressure Pipe Line (Compressor → Condenser) Clamp Nut	5	-	44
Receiver-Dryer Flange Nut	14	10.5	-
High Pressure Pipe Line (Condenser → Receiver-Dryer) Fitting Nut	14	10.5	-
High Pressure Pipe Line (Receiver-Dryer → Evaporator) Fitting Nut	14	10.5	-
High Pressure Pipe Line (Receiver-Dryer → Evaporator) Clamp Nut	5	-	44
Low Pressure Pipe Line (Evaporator → Compressor) Fitting Nut	14	10.5	-
Low Pressure Pipe Line (Evaporator → Compressor) Clamp Nut	5	-	44
Low Pressure Pipe Line (Evaporator → Compressor) Compressor Bolt	23	17	-
Dual Cut Switch	13	-	115
Receiver-Dryer Bracket-to-Body Bolts	5	-	44
Receiver-Dryer Bracket Bolt	5	-	44
Expansion Valve Coupling (Receiver-Dryer → Expansion Valve)	17	13	-
Expansion Valve Coupling (Expansion Valve → Evaporator)	22	16	-
Compressor Shaft Bolt	13	-	115
Condenser Mounting Nuts	4	-	36

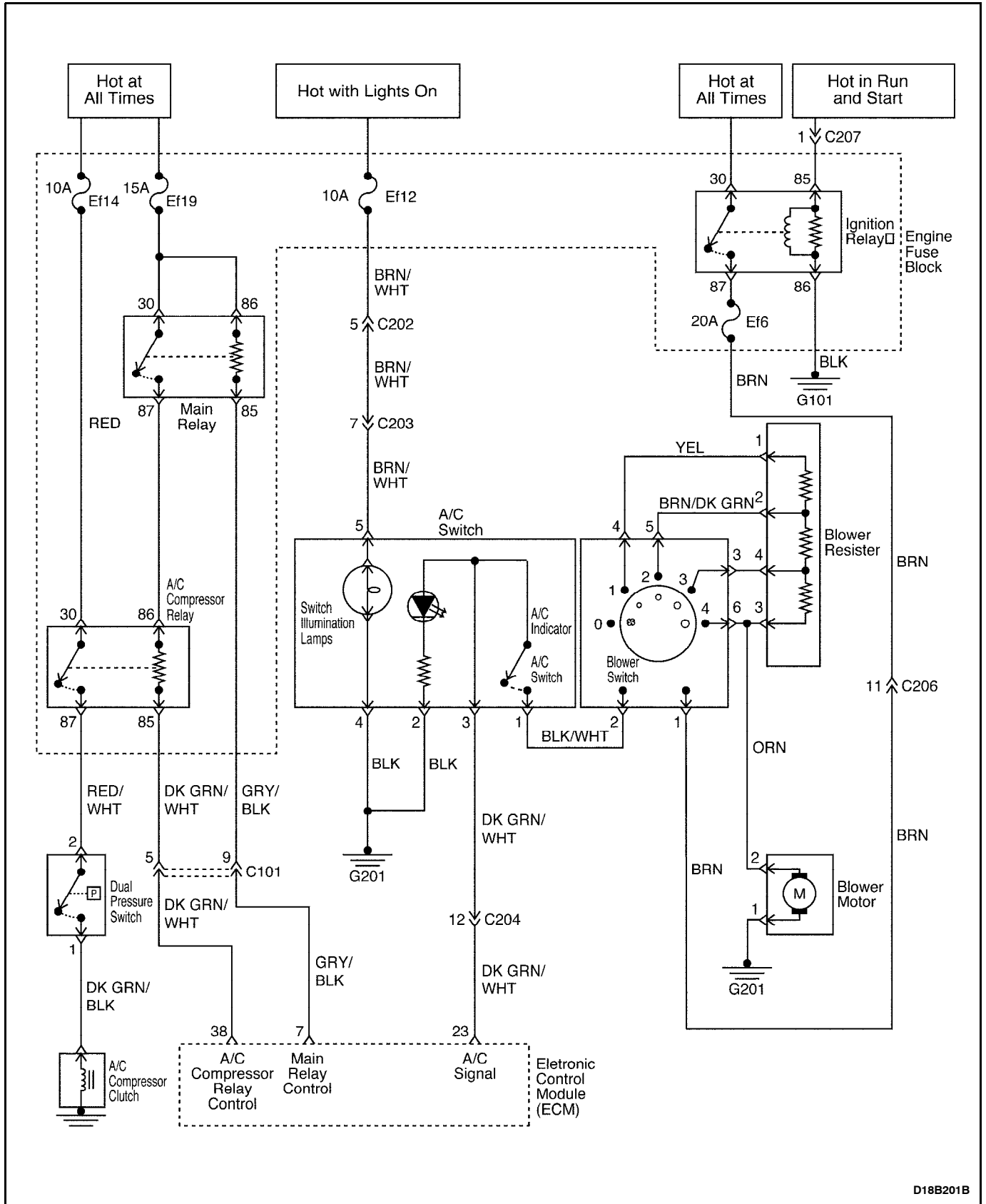
SPECIAL TOOLS AND EQUIPMENT

SPECIAL TOOLS TABLE

 <p>D108B101</p>	<p>DW-610-010 Clutch Hub Holding Tool</p>
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SCHEMATIC AND ROUTING DIAGRAMS

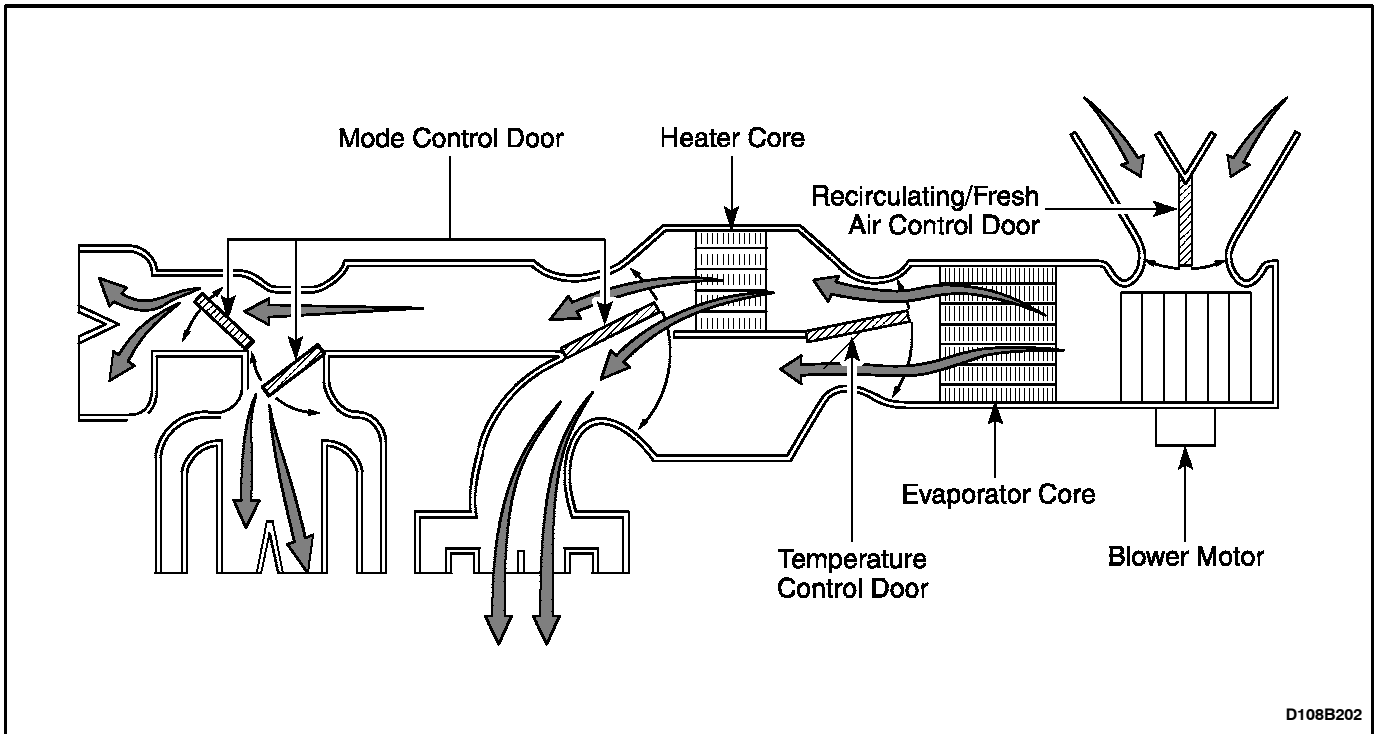
A/C DIAGRAMS



D18B201B

A/C AIRFLOW

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



A/C SYSTEM

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

