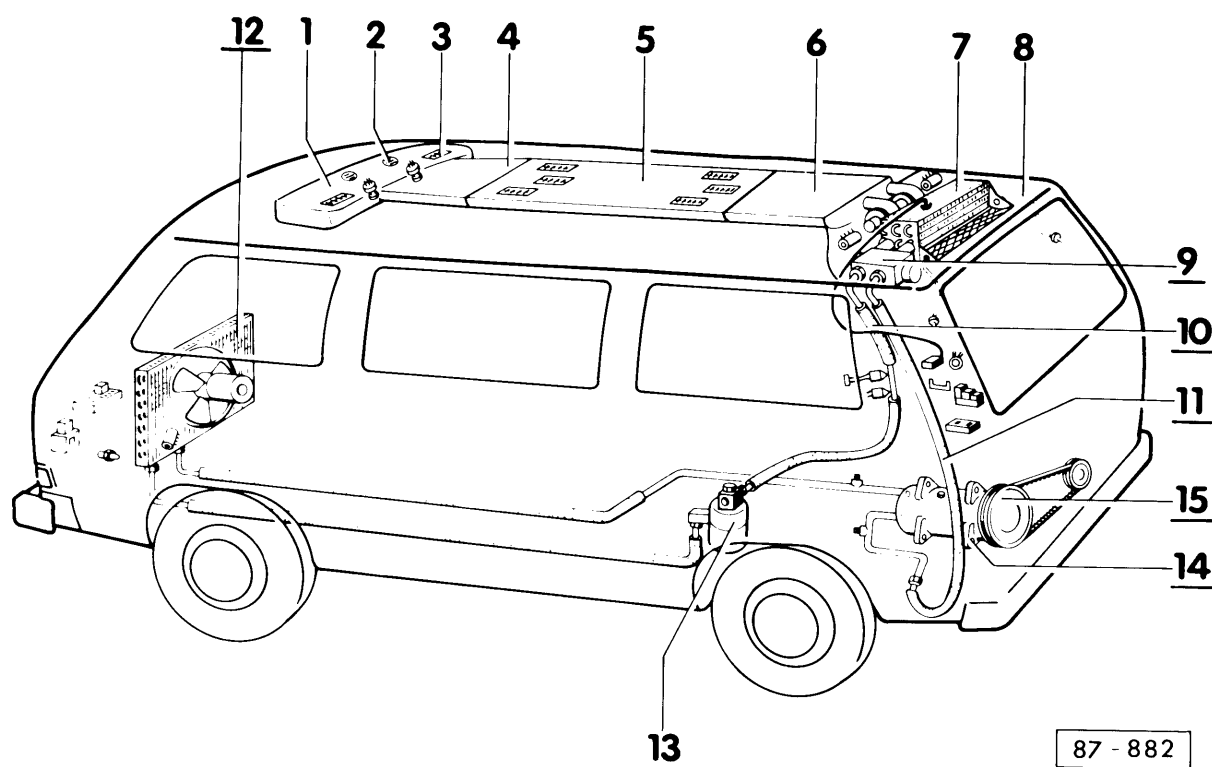


Quick Data	Index	
<p>Refrigerant R-12 capacity</p> <ul style="list-style-type: none">●1450 grams (50.75 oz) <p>Refrigerant oil</p> <ul style="list-style-type: none">●evaporator 2.02 oz●accumulator 0.3 oz●high pressure hose 0.3 ozlow pressure hose 0.3 oz●compressor 5.07 oz	<p>From 1986</p> <p>A/C evaporator 87.12</p> <ul style="list-style-type: none">removing 87.14 <p>A/C evaporator housing 87.12</p> <ul style="list-style-type: none">removing 87.10, 87.11 <p>Air distrubution system 87.9</p> <p>Air outlets 87.13</p> <p>Component locations 87.2, 87.3</p> <p>Expansion valve</p> <ul style="list-style-type: none">removing 87.14, 87.15 <p>Fuse locations 87.4</p> <p>Refrigerant system</p> <ul style="list-style-type: none">cautions and warnings 87.7controls 87.6discharging 87.8 <p>Relay locations 87.5</p>	

87 Air Conditioner



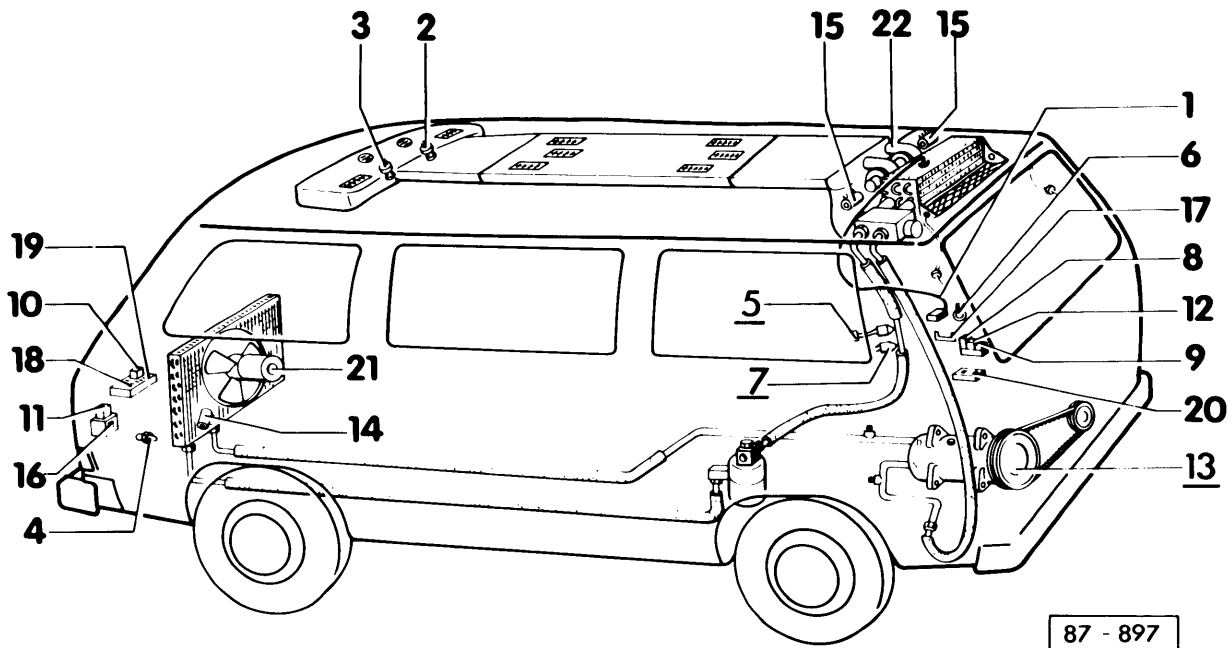
87 - 882

- 1 — Front housing
- 2 — Round air outlet
- 3 — Outlet
- 4 — Front air duct
- 5 — Center air duct
- 6 — Rear air duct
- 7 — Evaporator housing
- 8 — Water drain tubes
- 9 — Expansion valve

- 10 — Low pressure refrigerant hose
- 11 — High pressure refrigerant hose
- 12 — **Condenser**
 - condenser can be lowered from vehicle with radiator without discharging A/C refrigerant system
- 13 — **Receiver/drier**
- 14 — **A/C compressor**
- 15 — **A/C compressor clutch**

Note

Discharge A/C refrigerant system before removing components represented with underlined numbers



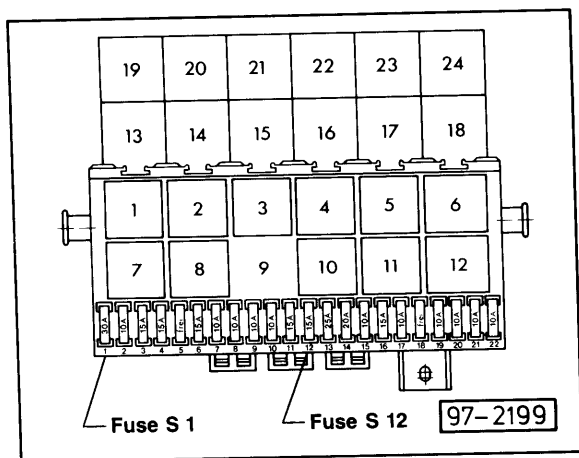
87 - 897

- | | |
|--|---|
| 1 — A/C thermostat | 12 — Evaporator fan relay |
| 2 — A/C switch | 13 — A/C compressor clutch |
| 3 — Evaporator fan switch | 14 — Radiator cooling fan series resistance |
| 4 — Radiator cooling fan thermoswitch | 15 — Evaporator fan series resistance |
| 5 — A/C refrigerant high pressure switch | 16 — Radiator cooling fan fuse |
| 6 — Ambient air temperature switch | 17 — Fuse S0 (50A) |
| 7 — A/C refrigerant low pressure switch | 18 — Fuse S1 (30A) |
| 8 — A/C relay | 19 — Fuse S12 (15A) |
| 9 — A/C compressor clutch relay | 20 — Fuse S51 (20A) for evaporator fan |
| 10 — Radiator cooling fan relay, 2nd stage | 21 — Radiator cooling fan |
| 11 — Radiator cooling fan relay, 3rd stage | 22 — Evaporator fan |

87 Air Conditioner

Components

Fuse locations



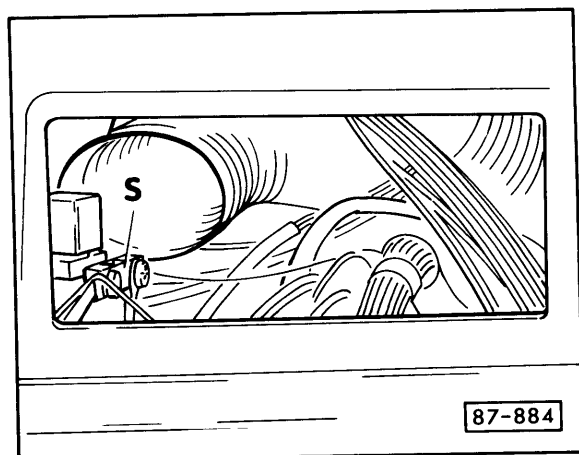
Fuse/relay panel

Fuse S1

- 30A — to Rad. cool. fan thermostats and Rad. cool. fan relay 2nd stage

Fuse S12

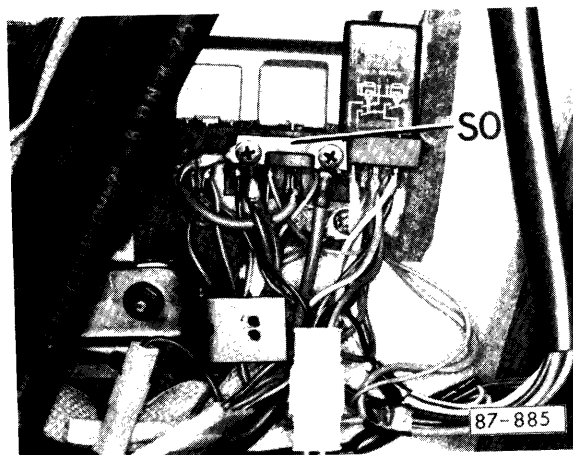
- 15A — to Fresh air fan and A/C switch



Additional Fuse/relay adaptor (behind left air vent in instrument panel)

Fuse S

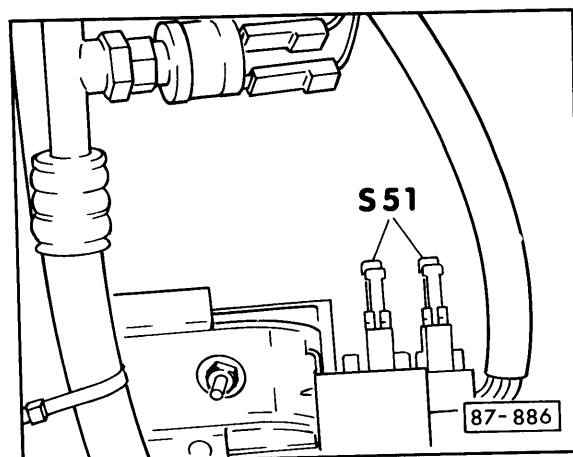
- 50A — to Rad. cool. fan relay 3rd stage



Additional Fuse/relay panel (behind left rear 'C' pillar cover)

Fuse S0

- 50A — to A/C relay and evaporator fan relay

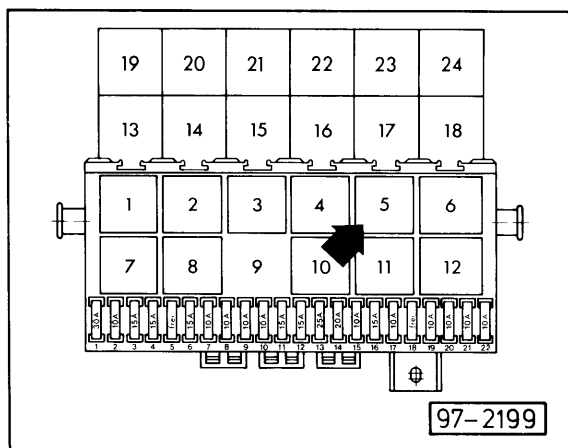


Additional Fuse/relay panel (behind left rear 'C' pillar cover)

Fuses S51

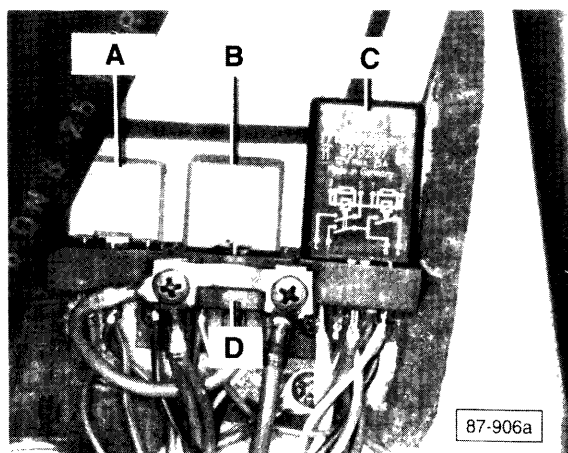
- 20A — one fuse for each A/C evaporator fan

Relay locations



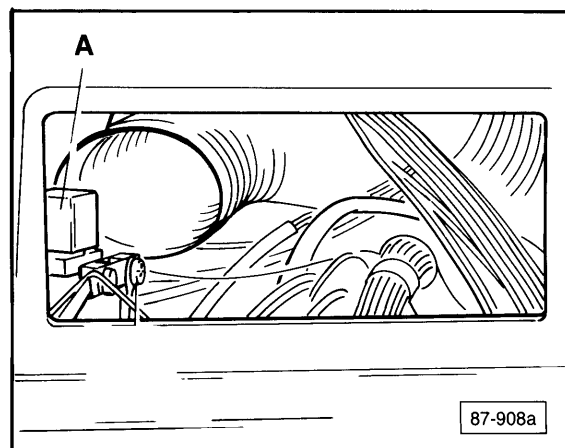
Fuse/relay panel

Radiator cooling fan relay 2nd stage (arrow)



Additional Fuse/relay panel (behind left rear 'C' pillar cover)

- A — A/C compressor clutch relay
- B — Evaporator fan relay
- C — A/C relay
- D — Fuse S0

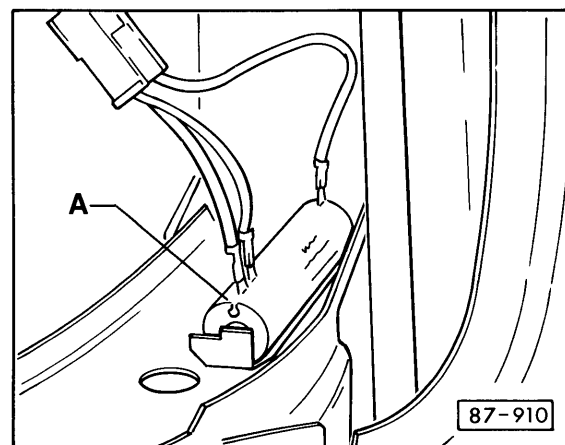


Additional Fuse/relay panel (behind left front fresh air vent)

Picture with vent removed

A — Radiator cooling fan relay 3rd stage

Radiator cooling fan series resistance

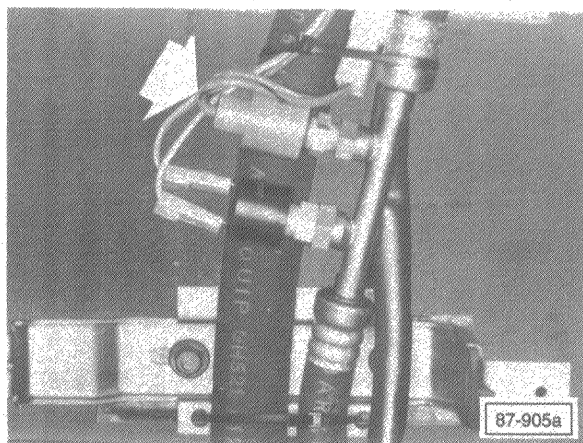


Radiator cooling fan series resistance

- behind left headlight
- A — Resistor block

A/C refrigerant system controls

Locations



A/C refrigerant high pressure switch (arrow)

- switches Rad. cool fan to higher speed if refrigerant pressure becomes too high

Opens

- 12.0 bar (174.0 psi)

Closes

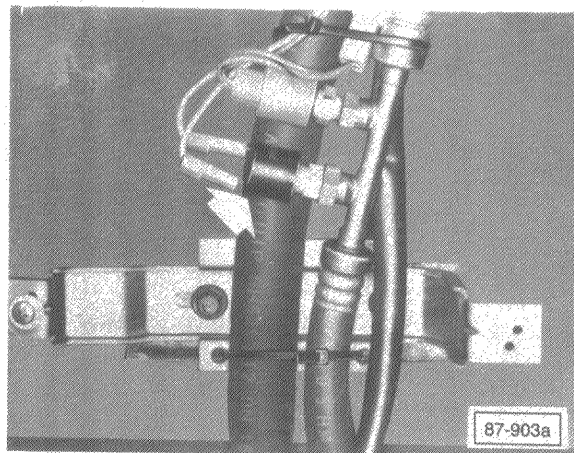
- 14.5 bar (210.2 psi)

Thread size

- 1/8" - 27 NPT

Torque

- 25.0 Nm



A/C refrigerant low pressure switch (arrow)

- switches A/C compressor clutch **OFF** when refrigerant pressure is too low

Opens

- 2.0 bar + 0.3 bar (29.0 psi + 4.3 psi)

Closes

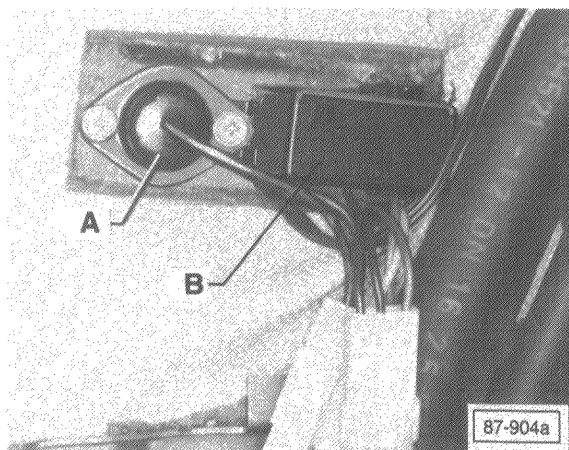
- 3.0 bar + 0.3 bar (43.5 psi + 4.3 psi)

Thread size

- 3/8" - UNF

Torque

- 20.0 Nm



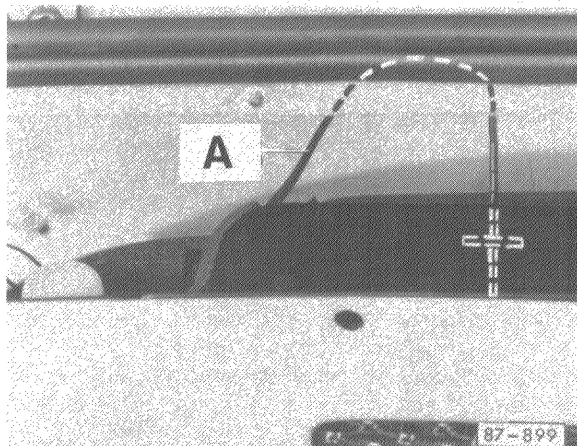
Ambient temperature switch and A/C thermostat (behind left rear 'C' pillar cover)

A — Ambient temperature switch

- switches A/C compressor **OFF** when outside temperature is under 38°F

B — A/C thermostat

- switches A/C compressor **OFF** when evaporator temperature reaches pre-determined value



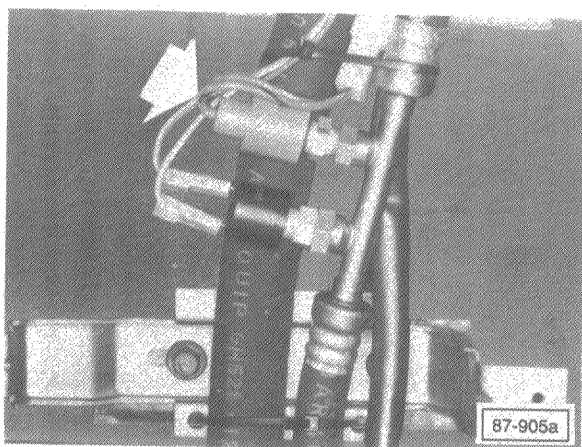
A/C thermostat capillary tube (A)

- insert through hole in upper evaporator housing

- approx. 50mm (2.0 in)

A/C refrigerant system controls

Locations



A/C refrigerant high pressure switch (arrow)

- switches Rad. cool fan to higher speed if refrigerant pressure becomes too high

Opens

- 12.0 bar (174.0 psi)

Closes

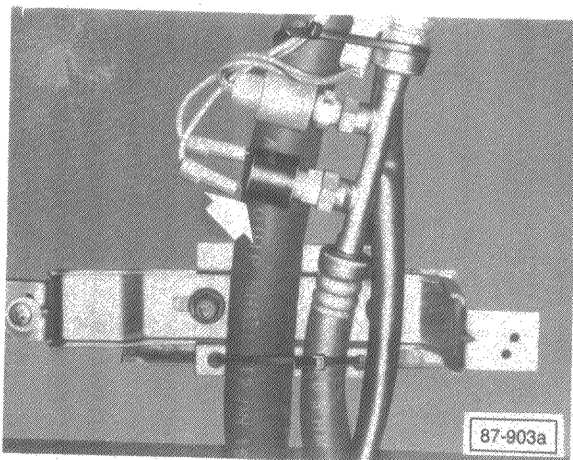
- 14.5 bar (210.2 psi)

Thread size

- 1/8" - 27 NPT

Torque

- 25.0 Nm



A/C refrigerant low pressure switch (arrow)

- switches A/C compressor clutch **OFF** when refrigerant pressure is too low

Opens

- 2.0 bar + 0.3 bar (29.0 psi + 4.3 psi)

Closes

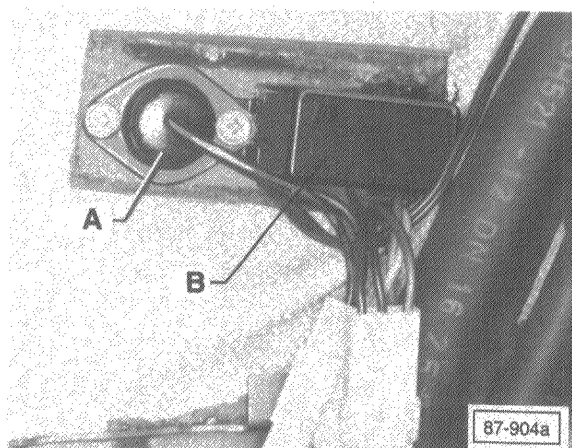
- 3.0 bar + 0.3 bar (43.5 psi + 4.3 psi)

Thread size

- 3/8" - UNF

Torque

- 20.0 Nm



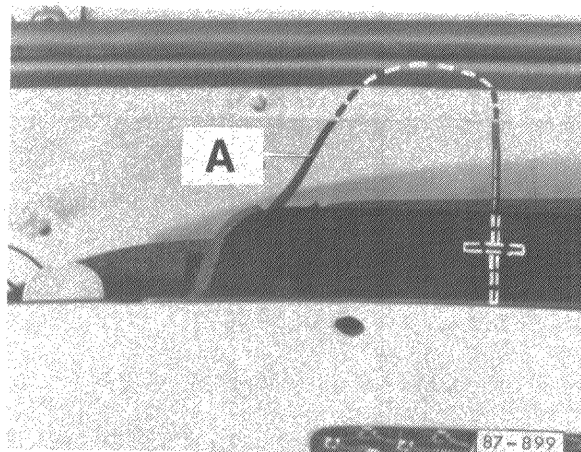
Ambient temperature switch and A/C thermostat (behind left rear 'C' pillar cover)

A — Ambient temperature switch

- switches A/C compressor **OFF** when outside temperature is under 38°F

B — A/C thermostat

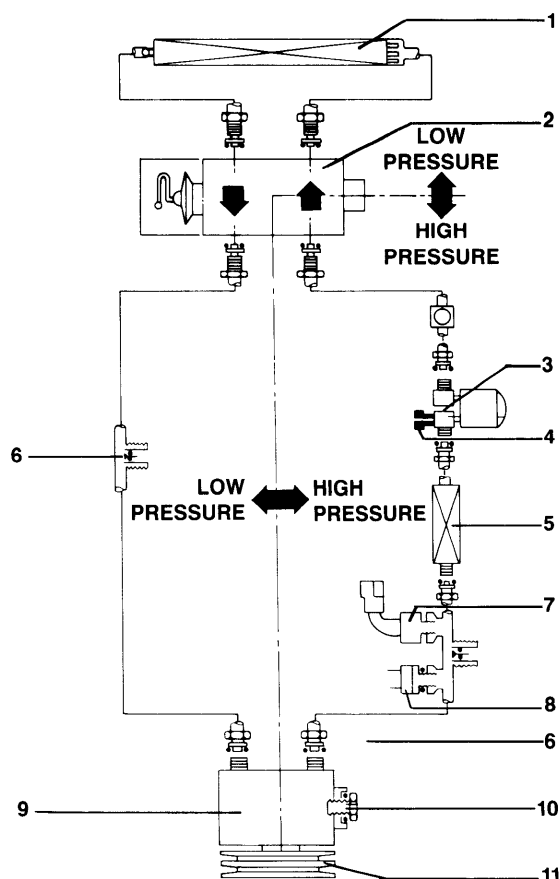
- switches A/C compressor **OFF** when evaporator temperature reaches pre-determined value



A/C thermostat capillary tube (A)

— insert through hole in upper evaporator housing

- approx. 50mm (2.0 in)



87-890

WARNING

Always wear safety goggles when charging or discharging system.

Be sure work area is well ventilated. R-12 is heavier than air and can accumulate in areas of poor air circulation.

Avoid inhaling fumes when using flame-type leak detector. R-12 becomes poisonous gas after coming into contact with open flame

CAUTION

Always discharge refrigerant from air conditioner system before loosening connections, hoses, etc.

- 1 — Evaporator
- 2 — Expansion valve
- 3 — Receiver/drier
- 4 — Safety plug
- 5 — Condenser
- 6 — Service valve
- 7 — A/C refrigerant high pressure switch
- 8 — A/C refrigerant low pressure switch
- 9 — A/C compressor
- 10 — Drain plug
- 11 — A/C compressor clutch

CAUTION

Discharge refrigerant from system when it is necessary to weld near refrigerant hoses with arc or resistance welding systems. During electrical welding process invisible ultraviolet rays are given off which penetrate refrigerant hoses and decompose refrigerant

Note

Plug all openings in system when removing/replacing parts. This prevents entry of dirt and moisture which may foul system.

Drops of moisture may cause expansion valve to ice up, blocking refrigerant flow and stopping cooling action

1986-1987

Refrigerant system,
Cautions and warnings

87.7

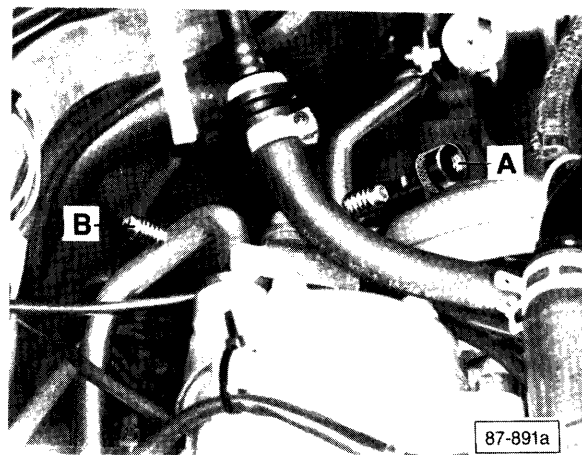
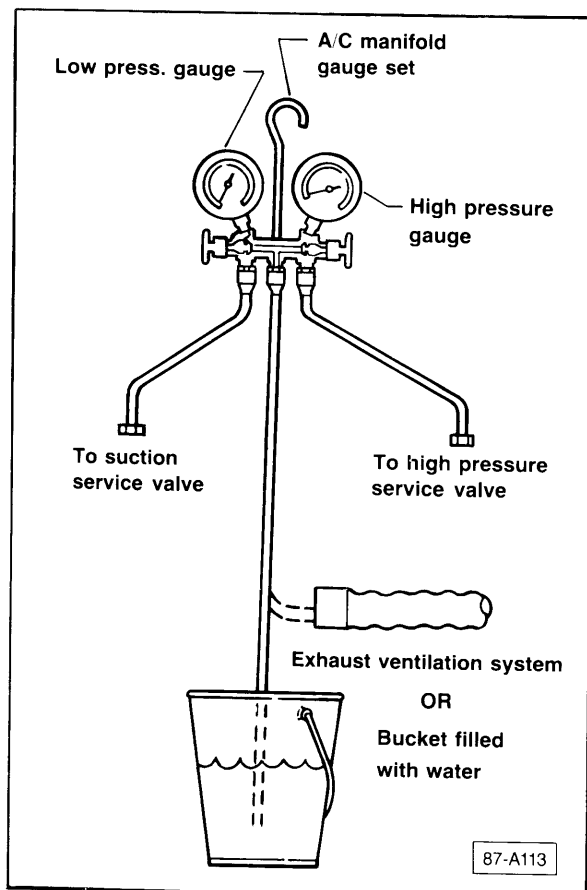
87 Air Conditioner

Refrigerant system, discharging

Note

Follow safety precautions on pg 87.7 when discharging or charging A/C refrigerant system

— disconnect wires at A/C compressor



- connect hose from high pressure gauge to high pressure service valve (A)
- connect hose from low pressure gauge to suction service valve (B)
- open low pressure gauge valve until bubbles are visible in water or hiss is heard from discharge hose
- open high pressure valve slightly

CAUTION

Discharge A/C refrigerant system slowly to prevent loss of refrigerant oil

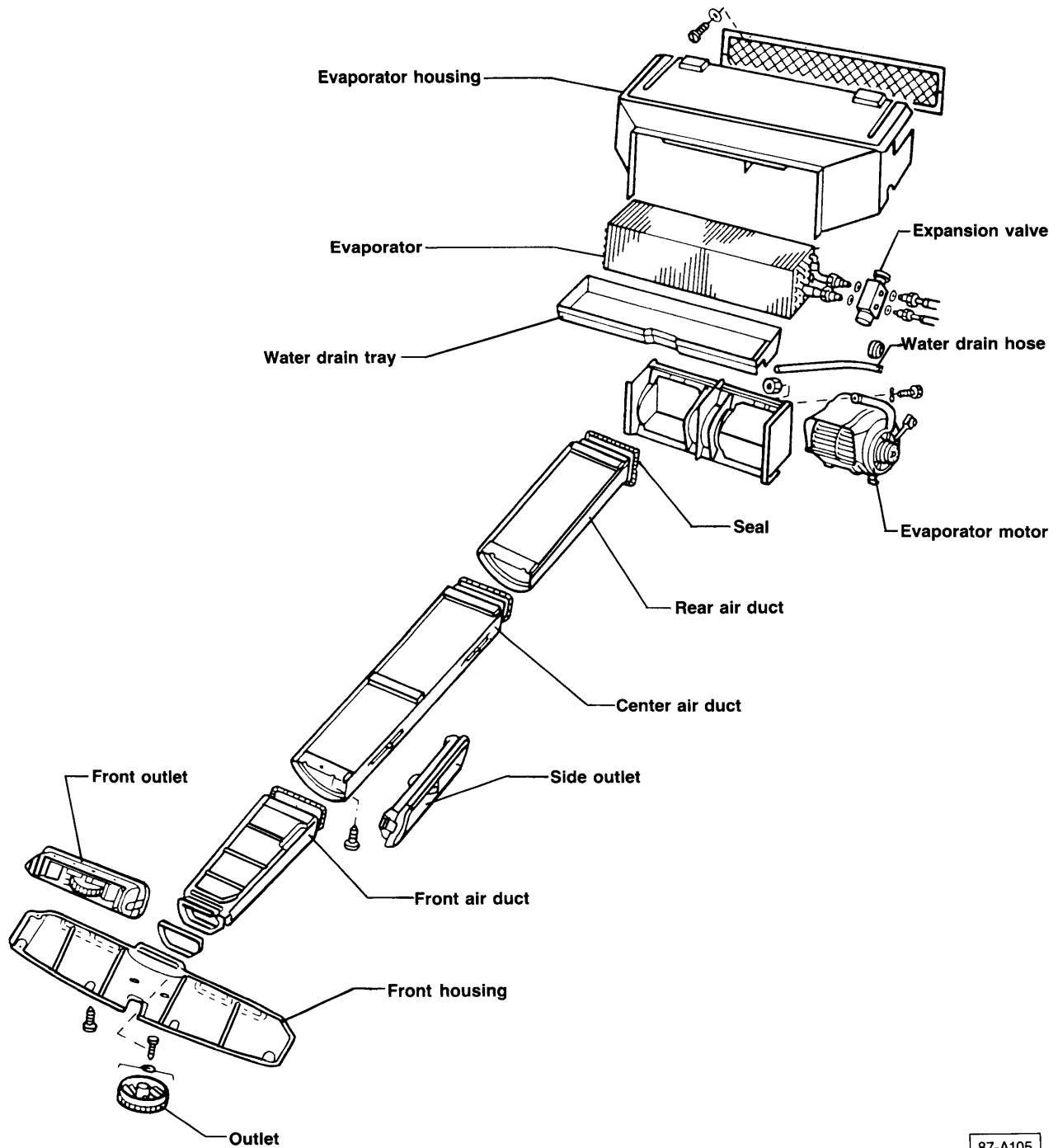
- close manifold gauge valves when refrigerant stops flowing

WARNING

Always wear safety goggles when charging or discharging system. Be sure work area is well ventilated. Refrigerant-12 is heavier than air and can accumulate in areas of poor air circulation.

Avoid inhaling fumes when using flame type leak detector. Refrigerant-12 becomes poisonous gas after coming into contact with open flame.

Air distribution system



87-A105

1986-1987

Air distribution system

87.9

87 Air Conditioner

A/C evaporator housing, removing

Work sequence

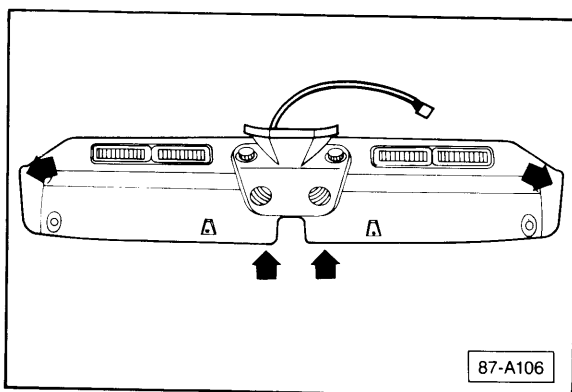
CAUTION

Before starting to work on any part of electrical system, disconnect battery ground strap

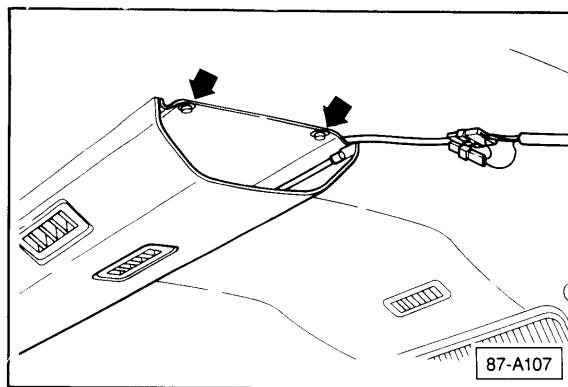
Note

It is possible to lower A/C evaporator housing without discharging A/C refrigerant system.

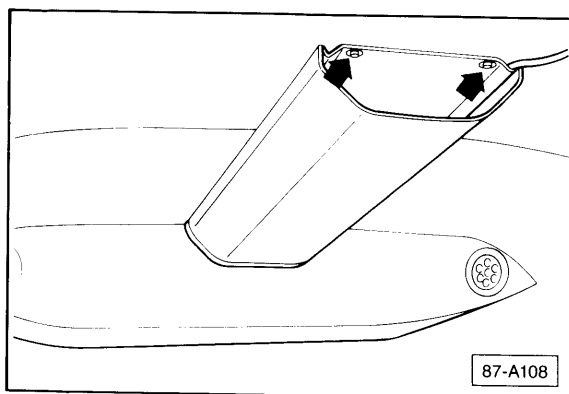
Discharge A/C refrigerant only when replacing parts in refrigerant system.



- remove sunvisors and sunvisor retaining clips
- remove front housing attaching screws (**arrows**)
- lower front housing and front air duct
- disconnect wiring connectors to A/C switches
- remove front housing and front air duct

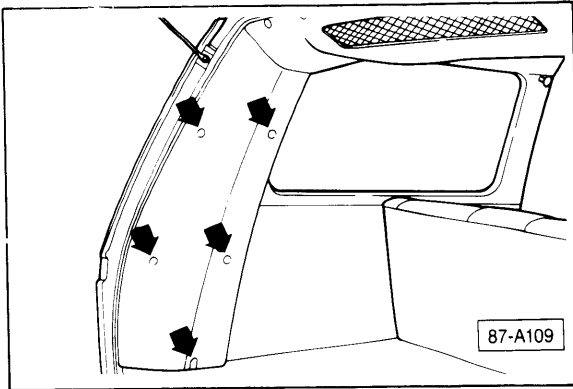


- remove center air duct attaching screws (**arrows**)
- remove center air duct

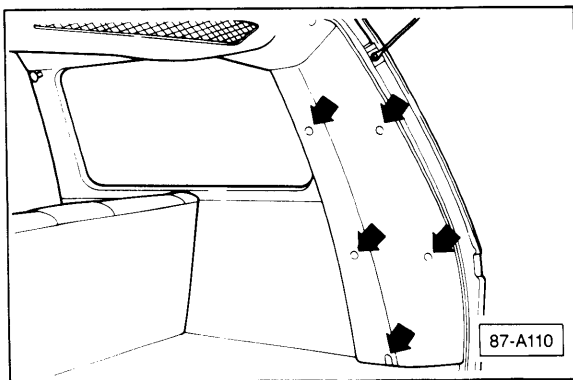


- remove rear air duct attaching screws (**arrows**)
- remove rear air duct

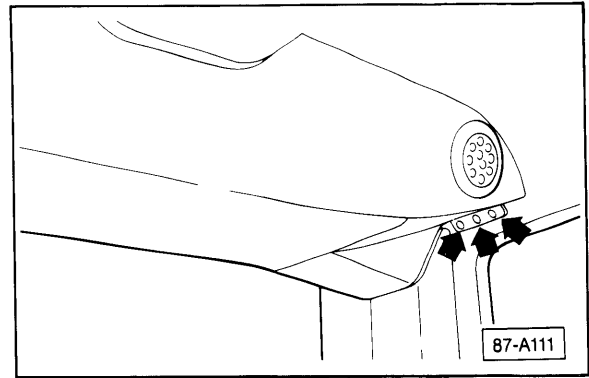
more



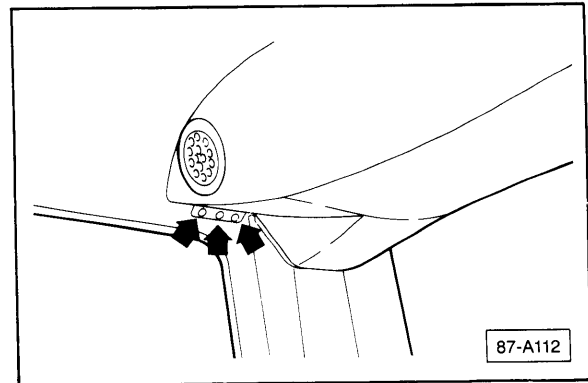
- remove left side rear trim panel screws (**arrows**)
- remove trim panel



- remove right side rear trim panel screws (**arrows**)
- remove trim panel



- support evaporator housing with universal lift crane
- remove left side evaporator housing attaching bolts (**arrows**)



- remove right side evaporator housing attaching bolts (**arrows**)
- lower evaporator housing
- remove evaporator housing covers
- remove evaporator

Installing

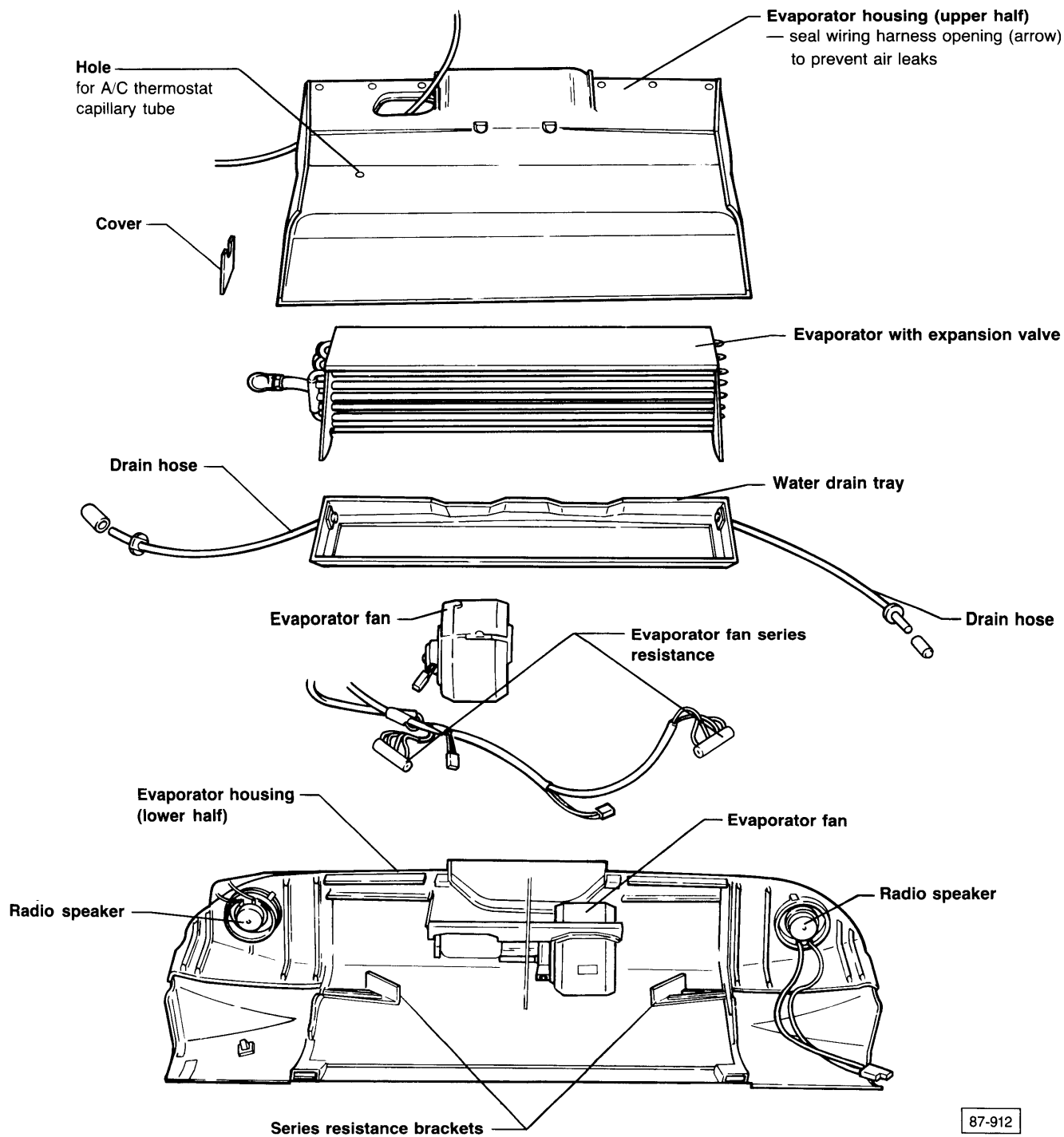
- install in reverse order of removal
- re-charge A/C refrigerant system

87 Air Conditioner

Evaporator housing, assembling/disassembling

Note

Evaporator housing can be lowered and disassembled without discharging A/C refrigerant system.



87-912

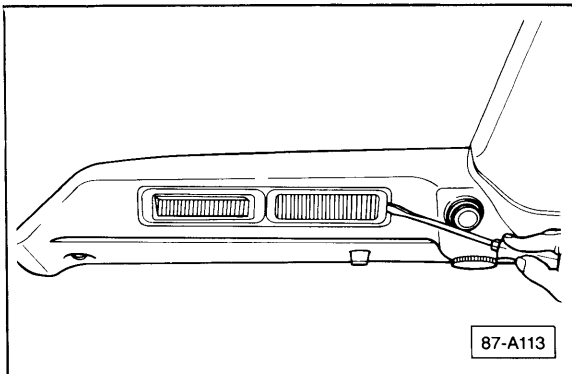
87.12

A/C evaporator housing

1986-1987

Air outlets, removing

Work sequence



- push in retaining tab with screwdriver
- pry vent out

87 Air Conditioner

A/C evaporator or expansion valve, removing/installing

Work sequence

CAUTION

Before starting to work on any part of electrical system disconnect battery ground strap

- disconnect wiring to A/C compressor clutch at A/C compressor
- discharge A/C refrigerant system

Note

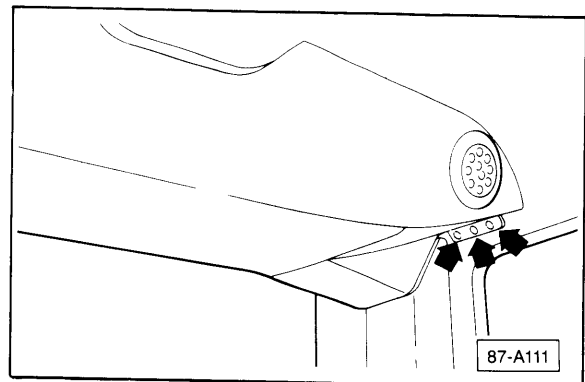
Plug all openings in system when removing/replacing parts. This prevents entry of dirt and moisture which may foul system.

Drops of moisture may cause expansion valve to ice up, blocking refrigerant flow and stopping cooling action

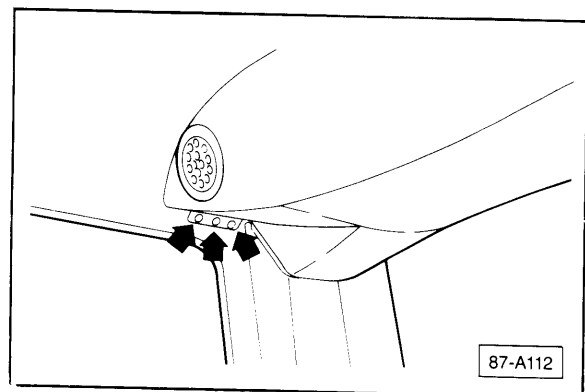
- remove sunvisors and retaining clips
- remove front housing and front air duct
- disconnect wiring harness to A/C switches

- remove center air duct
- remove rear air duct

- remove carpet in luggage area
- remove left rear trim panel
- remove right rear trim panel



- support evaporator housing with universal lift crane
- remove left side evaporator housing attaching bolts (**arrows**)



- remove right side evaporator housing attaching bolts (**arrows**)
- lower evaporator housing
- remove evaporator housing covers

more

- remove A/C refrigerant hoses from expansion valve
- remove evaporator from housing
- remove expansion valve from evaporator

Installing

- install in reverse sequence

CAUTION

Always replace O-rings when replacing A/C refrigerant components.

Coat O-rings lightly with refrigerant oil before assembly

- re-charge A/C refrigerant system
- connect battery ground cable
- re-connect wiring at A/C compressor clutch