Rear Climate Control System

NOTE: Where installed, the rear climate control system (RCCS) will only function when the front climate control system (FCCS) has first been activated. Any deactivation of the FCCS, will automatically deactivate the RCCS. Reactivation of the FCCS will not automatically reactivate the RCCS, manual intervention is required.

Rear Climate Control Panel

The rear climate control panel has its own integrated control module that, where appropriate can be overridden by signals from the main CCM.

Provided the FCCS is already active, the RCCS can be controlled by:

- rear seat passengers using the rear climate control panel (RCCP);
- front seat passengers using the touch-screen (telematics display module).

NOTE: Adjustments using the RCCP are ignored when the telematics display is showing the 4-zone climate control.

Climate control features can be controlled by push buttons and a rotary control. When a function button is pressed, selection is confirmed by a 'beep'. The LCD uses graphic symbols to provide additional confirmation of the system status.

NOTE: The RCCP is not configurable but may be reprogrammed using WDS if necessary; refer to **JTIS**.

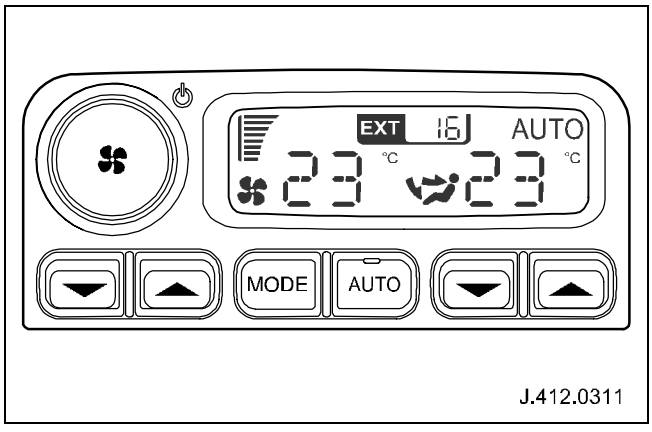

Fig. 86 Rear climate control panel

Operation

Provided the FCCS is already active, the RCCS can be activated using the RCCP by selecting 'AUTO' or depressing the blower knob.

AUTO operation

Selecting 'AUTO' provides full automatic temperature control, including blower speed and air distribution, for both rear positions.

Temperature control

The left and right zone temperatures can be set independently using the red and blue buttons, in the same manner as the front system.

NOTE:

- **HI/LO (maximum/minimum temperatures) cannot be selected from the rear control panel.**
- **Selection of HI/LO using the driver's Tset button, will apply to all four zones and overrides any rear temperature selections.**

MODE button

Pressing the 'MODE' button deselects the 'AUTO' tell-tale LED and allows a choice of manual air distribution. Each press of the 'MODE' button, will cycle through the following air flow options: face level only; face and floor levels; floor only.

Blower speed

Rotating the blower speed knob deselects the 'AUTO' tell-tale LED and allows the blower speed to be changed as confirmed by the bars on the LCD.

NOTE: Selecting the defrost (DEF) option from the front control panel, will limit the rear system blower-speed, but otherwise the rear system will function normally.

Deactivation

Depressing the blower control knob will deactivate the rear system.

Air Distribution

Air distribution to the rear passenger zones is via the registers that are integral to the 4–zone floor console; refer to **Floor Console**.

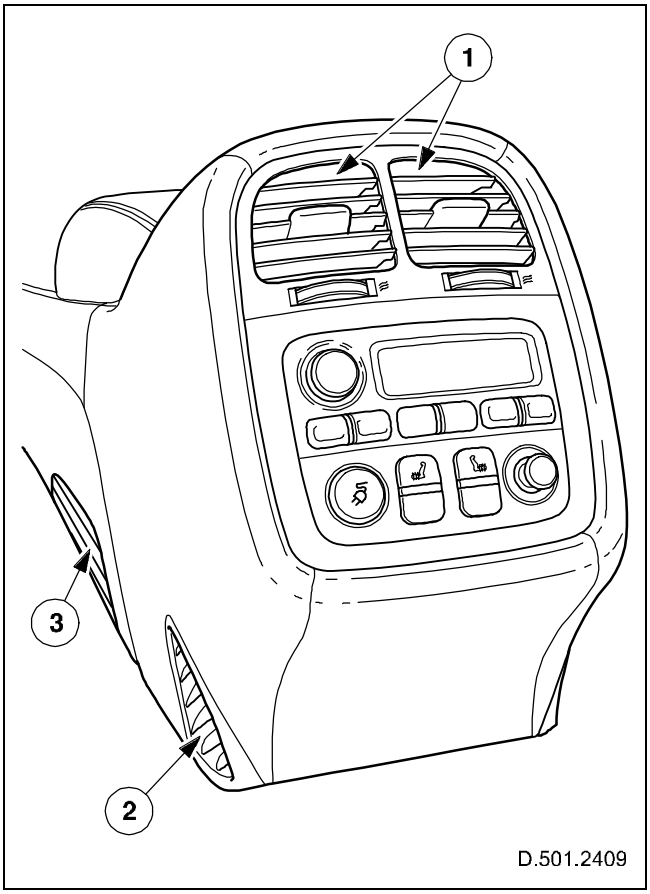

Fig. 87 Rear air distribution

1. Rear face-registers
2. Rear floor-registers
3. Input register

NOTE: The rear face-registers are unique to the 4-zone arrangement.

General

Refer to **New XJ Range Electrical Guide** for detailed connection information and an indication of the flow of electrical data between climate control components.

Diagnostics

The climate control system:

- constantly monitors the status of the system;
- where appropriate, stores a DTC within the climate control module for analysis using WDS.

Air conditioning charge weight

The air conditioning charge weight for 4-zone systems is different to 2-zone systems; refer to the information label located in the engine compartment and to **JTIS**.

Rear Climate Control System Components

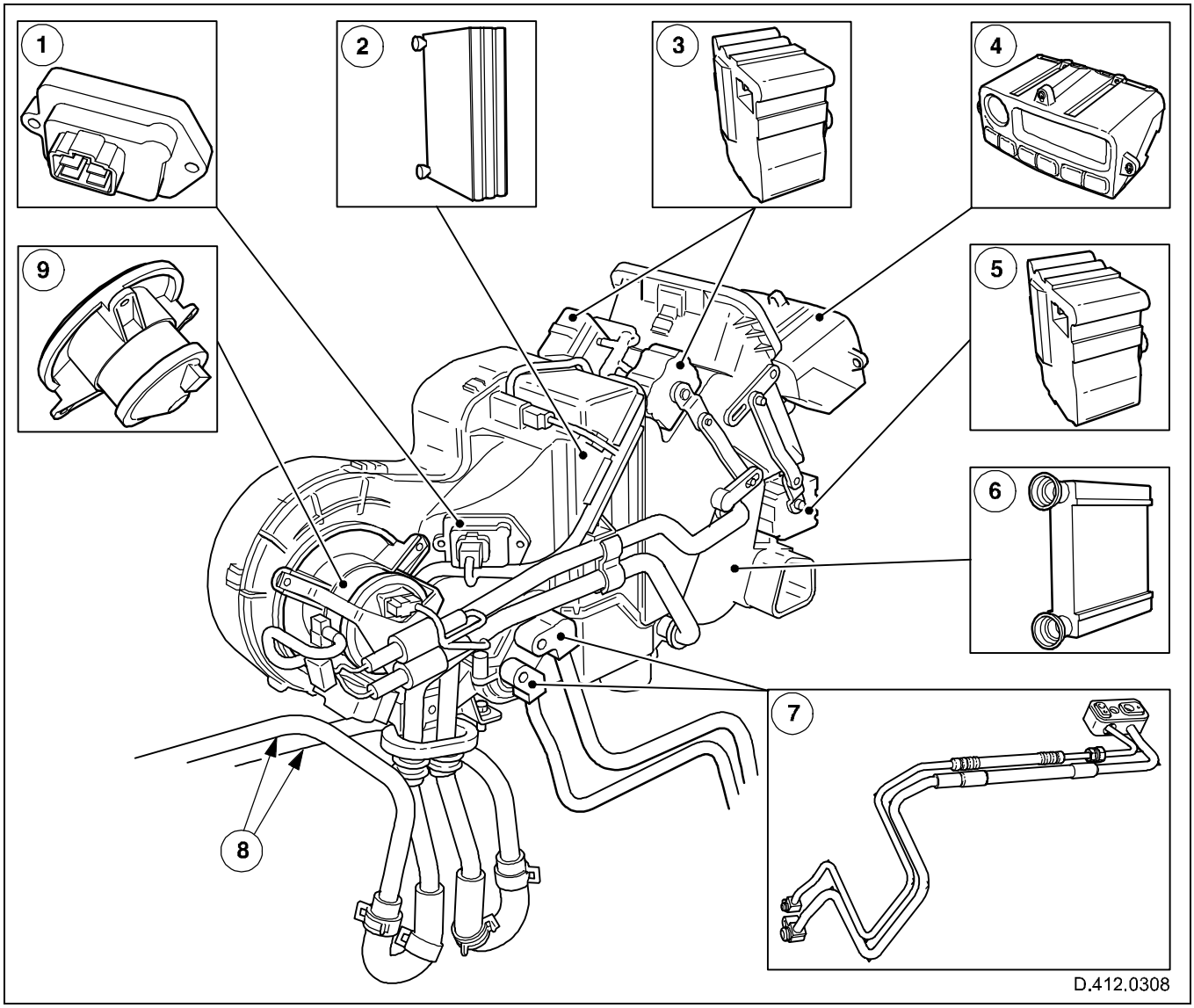

Fig. 88 System components

1. Blower speed module
2. Evaporator core
3. Temperature blend door actuator
4. Climate control panel (includes control module)
5. Floor/face door actuator
6. Heater core
7. Evaporator lines assembly
8. Heater pipes
9. Blower motor
10. Evaporator sensor (not shown)

NOTE: The blower speed module used for the rear climate control assembly is unique and not interchangeable with that installed to the front climate control assembly.

NOTE: Not illustrated, but part of the system and integral to the rear climate control assembly are the thermal expansion valve and magnetic shut-off valve for the refrigerant.

System Interconnections

Fig. 89 shows a typical layout for vehicles fitted with front and rear climate control systems.

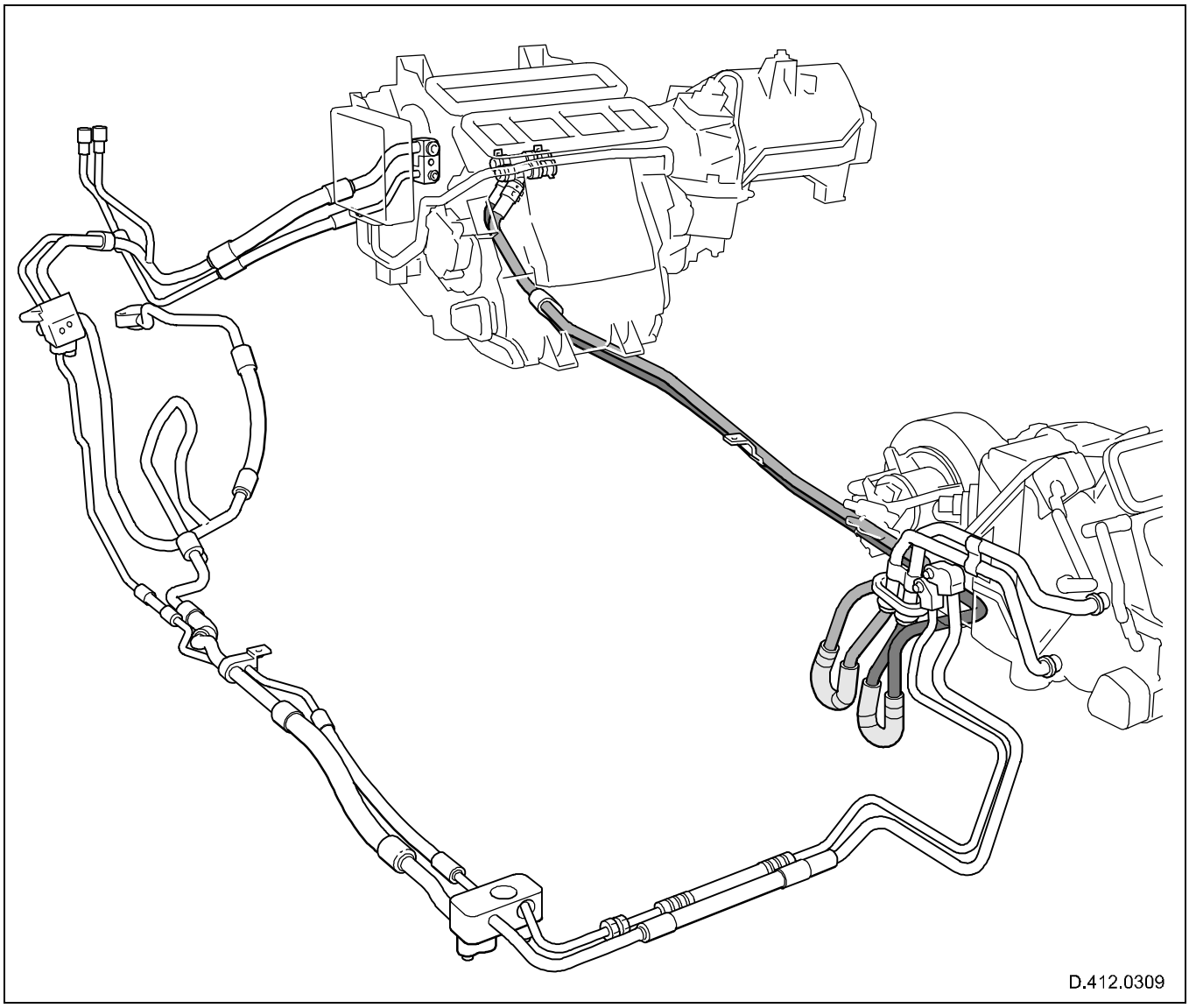

Fig. 89 Rear climate control - typical layout

Refrigerant Flow

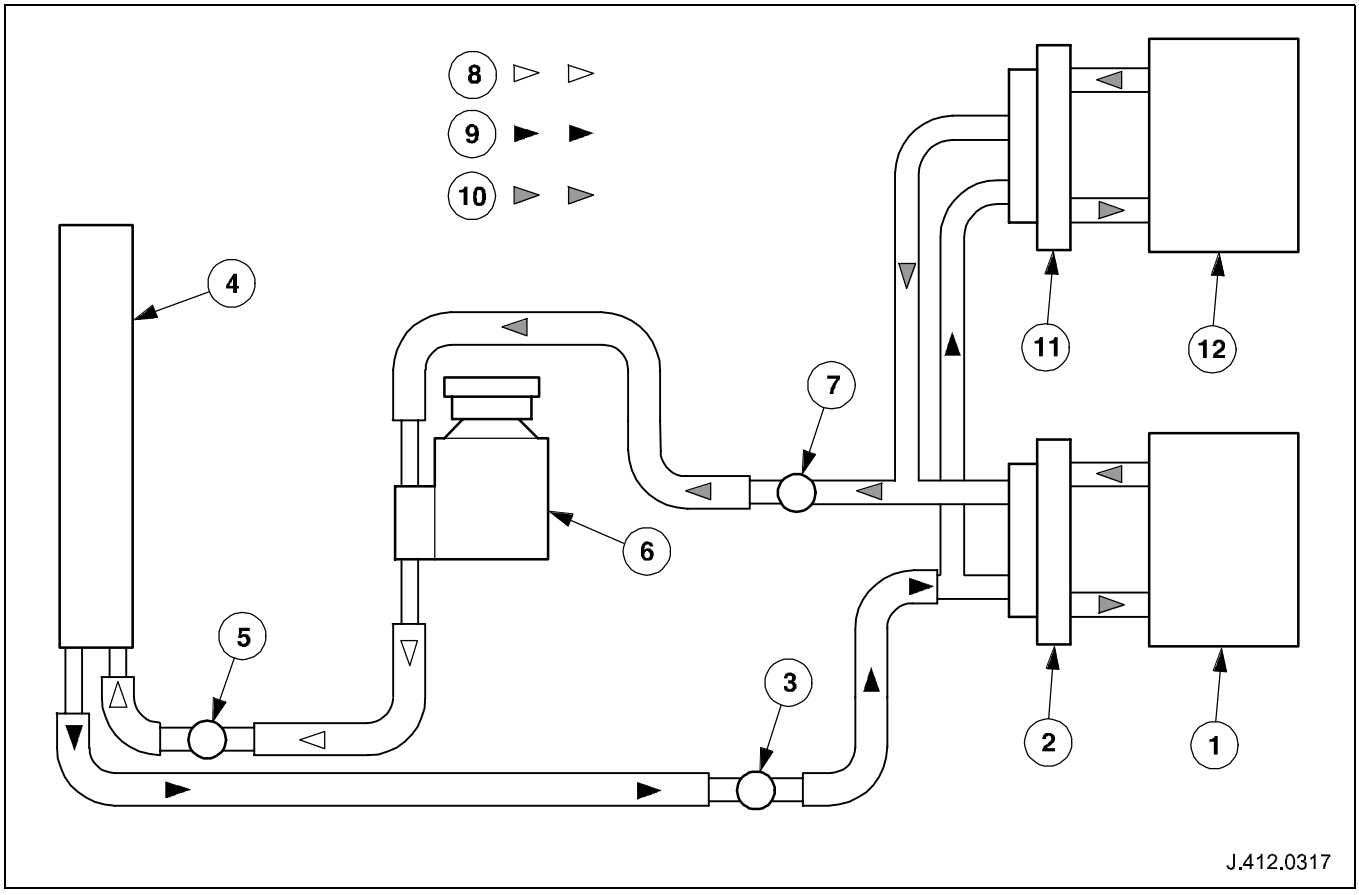

Fig. 90 Air-conditioning refrigerant flow (4–zone)

1. Front evaporator core
2. Front thermostatic expansion valve
3. High-side charge port
4. Condenser/receiver-drier
5. Pressure transducer
6. Compressor
7. Low-side charge port
8. High-pressure refrigerant (gaseous and hot)
9. High-pressure refrigerant (liquid and warm)
10. Low-pressure refrigerant (gaseous/liquid)
11. Rear thermostatic expansion valve
12. Rear evaporator core

NOTE: Not illustrated, but part of the system and integral to the rear climate control assembly is the magnetic shut-off valve for the refrigerant.