■ HEATED & VENTILATED SEAT SYSTEM

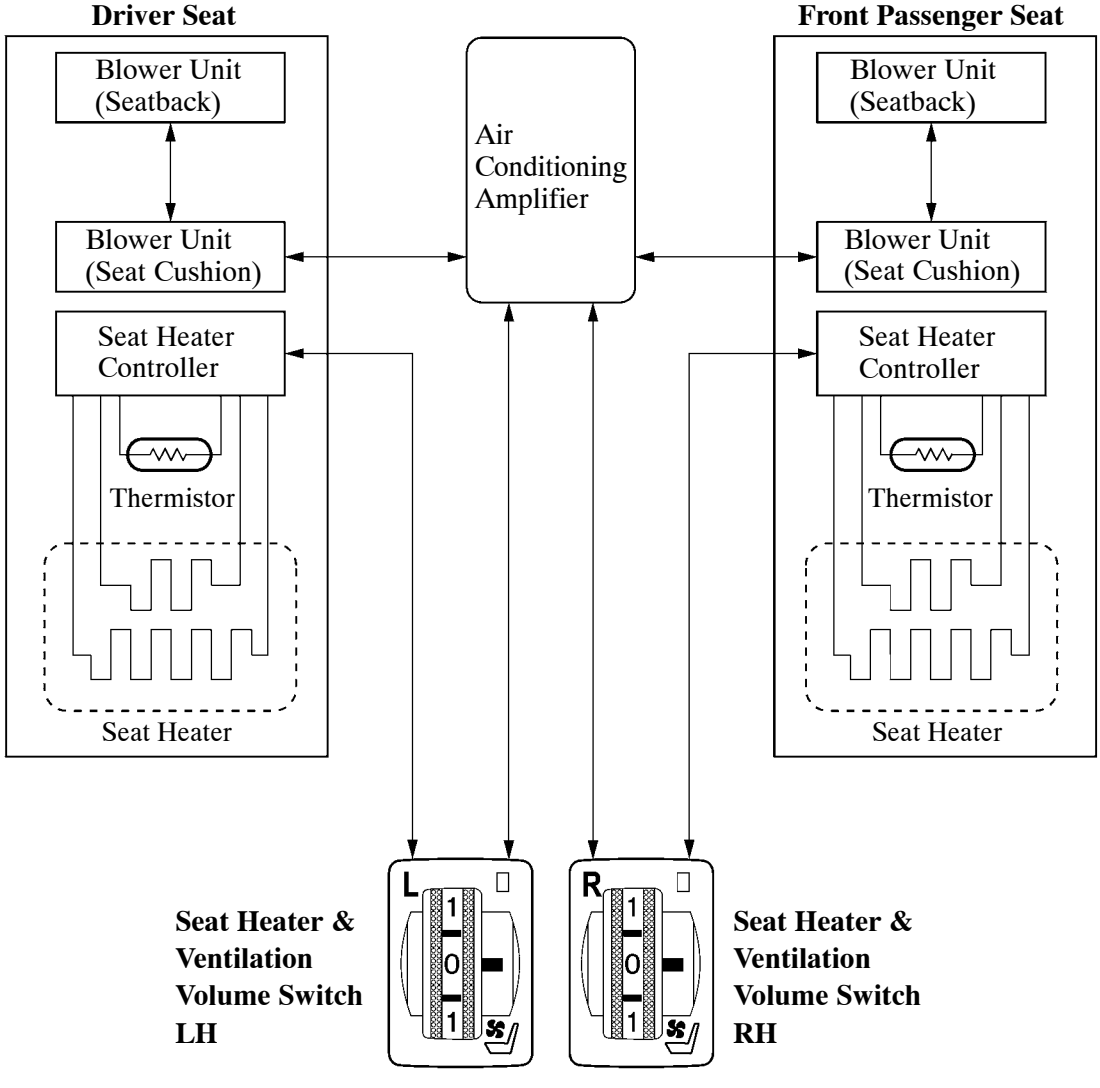
1. Description

The heated & ventilated seat system has a heating function and a ventilation function, in addition to the blower units provided in the conventional seat ventilation system. This provides a high level of comfort.

- The heating function and the ventilation function cannot be operated at the same time.
- For the ventilation function, only air in the cabin is used and hot or cold air is not blown.
- The ventilation function is controlled by an air conditioning amplifier.
- The heating functions are individually controlled by a seat heater controller in each seat.
- The heated & ventilated seat system is available as optional equipment for the driver and front passenger seats on the limited grade of CrewMax cab models with 3UR-FE engine and 3UR-FBE engine.

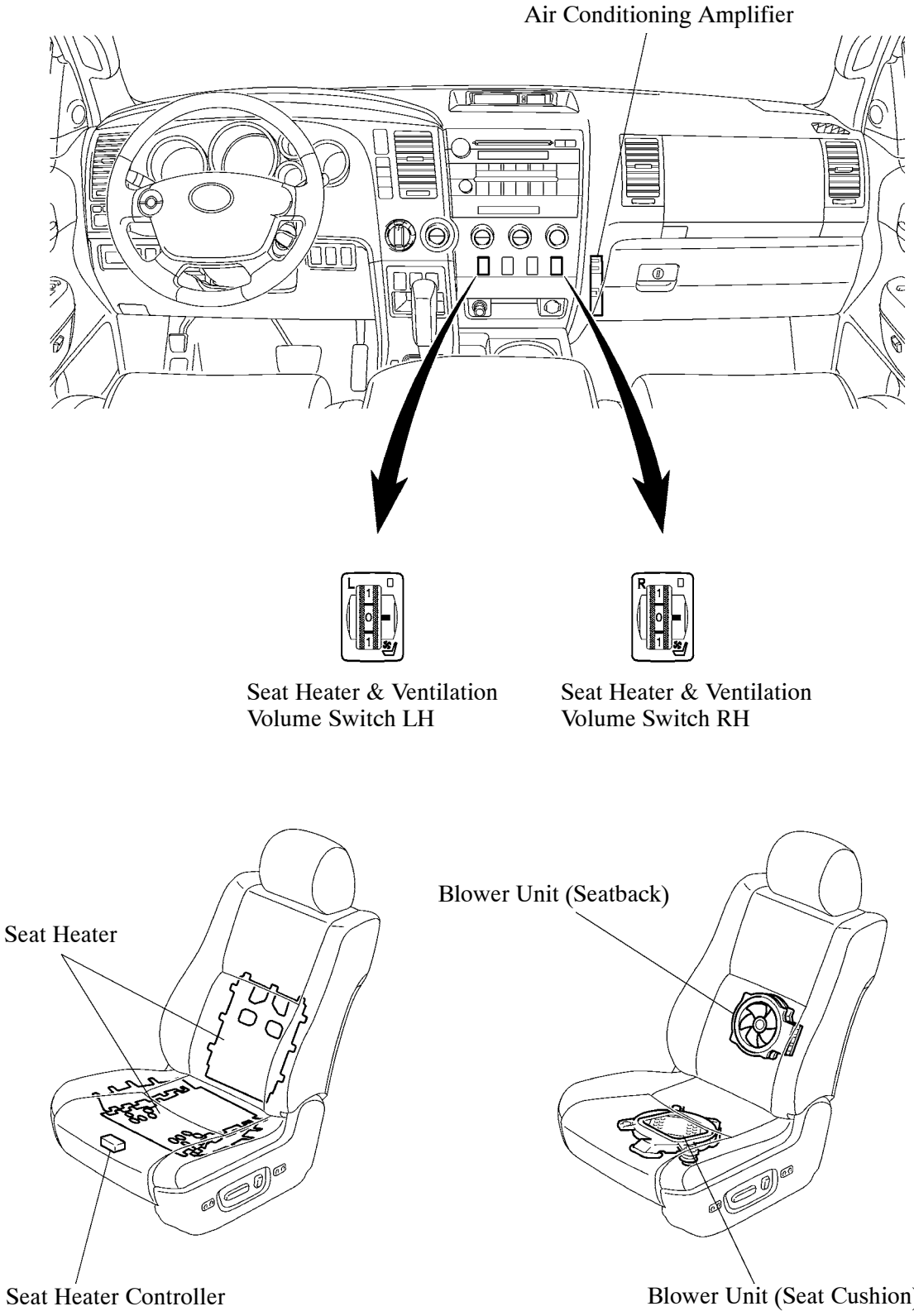
2. System Diagram

The heated & ventilated seat system consists of the seat heater, blower unit, seat heater & ventilation volume switch, seat heater controller, and air conditioning amplifier.



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3. Layout of Main Components



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4. System Control

Seat Heated Control

- When the user turns the seat heater & ventilation volume switch on, the seat heater controller detects the temperature set at the seat heater & ventilation volume switch.
- At the same time, the seat heater controller detects the temperature of the seat cover using the thermistor*1 provided in the seat cushion.
- Then, the seat heater controller applies an electrical current in accordance with the various conditions in order to adjust the seat cover temperature to the set temperature.
- When the seat cover temperature reaches approximately 50°C, the thermostat*2 in the seat cushion heater cuts off the current to the seat heaters (and restores the current when the seat cover temperature reaches approximately 30°C).

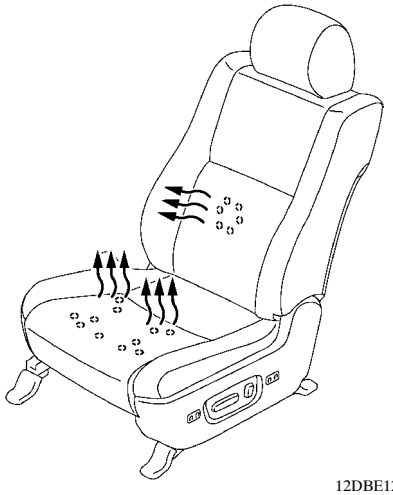
*1: An element that uses a semiconductor (with properties in which the resistance is high at normal temperatures and gets lower as the temperature rises) in which the electrical resistance changes considerably with slight changes in temperature.

*2: A temperature adjustment device that automatically controls the heat source through the use of a switch that utilizes a bimetal strip or the expansion of mercury.

Seat Ventilated Control

- By turning the seat heater & ventilation volume switch upwards from off in the center position, the ventilation volume can be adjusted to 3 levels. The indicator light illuminates green to indicate that the ventilation function is operating.
- When the user operates the seat heater & ventilation volume switch located on the lower part of the heater control panel, the blower motors in the seatback and seat cushion climate control blower operate to direct the air drawn in from behind the climate control blower to both the seatback and seat cushion pads.
- After the air is directed to both the seatback and seat cushion pads, it travels throughout the pads along the grooves provided in the pads. Then, it spreads to the entire seat along the slab urethane layer, and is discharged through the perforations in the genuine leather seat cover.

▶ Ventilation Function ◀



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