SYSTEM DESCRIPTION

1. GENERAL DESCRIPTION

(a) The power seat control system is equipped with the following function:
- The front seats are equipped with electric adjuster slide, reclining, lifter, front vertical and lumbar support adjustment functions.

(b) The power seat control system (w/ memory) is equipped with the following functions:
- Individual seat positions for two different drivers can be stored for the slide, reclining, front vertical and lifter.
- Similarly, power mirror positions for two different drivers can be stored. These are stored/restored together with the seat positions by pushing the seat memory switch.
- The above operations are performed using the multiplex communication system.
- As a safety precaution, the system does not allow seat position restoration unless the ignition switch is in the ON position and the shift lever is in the P position.
- Manual adjustment of the lumbar support function can be performed even when the position control ECU and switch assembly (power seat control switch and ECU) is not functional.

When the power seat control switch is operated, a command signal is sent to the position control ECU and switch assembly (power seat control switch and ECU). The position control ECU and switch assembly (power seat control switch and ECU) then activates the appropriate seat motor as needed. This memory system does not use a seat position sensor. The seat position is detected by counting pulses that are output when the motor turns. The position control ECU and switch assembly (power seat control switch and ECU) is designed so that a malfunction of the seat memory system will not interfere with seat control. The seat memory switch also sends signals to the position control ECU and switch assembly (power seat control switch and ECU) to memorize a given seat position. Two seat positions can be memorized. The seat memory switch is later used to send signals to the position control ECU and switch assembly (power seat control switch and ECU) to return the seat to either of the memorized positions.

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2. FUNCTION OF MAIN COMPONENT (w/ MEMORY)

(a) The following functions are available.

Components	Function
Seat slide motor	Slides the driver side seat back and forth based on signals from the position control ECU and switch assembly (power seat control switch and ECU).

Components	Function
Seat reclining motor	Reclines the driver side seat back and forth based on signals from the position control ECU and switch assembly (power seat control switch and ECU).
Seat front vertical motor	Moves the front part of the driver side seat cushion up and down based on signals from the position control ECU and switch assembly (power seat control switch and ECU).
Seat lifter motor	Moves the driver side seat cushion up and down based on signals from the position control ECU and switch assembly (power seat control switch and ECU). This motor operates, and driver side seat rear vertical raises and lowers, and driver side seat rear vertical raises and lowers.
Set switch Memory switch	When the set and memory switches are pressed simultaneously, SET, 1 or 2 switch signal is input to the power window regulator switch assembly (power window master switch) and sends the seat memory switch signal via the multiplex communication system. When only the memory switch is pressed, SET, 1 or 2 switch signal is input to power window regulator switch assembly (power window master switch) and driver side seat position changes according to memory.
Lumbar support adjuster motor	Receives signal from lumber front power seat switch, motor operates, and lumber support can be adjusted
Front power seat switch (reclining, lifter, slide, front vertical)	Based on switches operated, seat adjuster signals are input into position control ECU and seat is adjusted accordingly
Lumbar front power seat switch	Based on switches operated, seat is adjusted accordingly

3. SYSTEM OPERATION

(a) The front power seats adjustment and position memory are shown in the chart below.

Seat Adjustment Function	Driver Side	Front Passenger Side
Slide	Power, memory*	Power
Reclining	Power, memory*	Power
Front Vertical	Power, memory*	-
Lifter	Power, memory*	-
Lumbar Support	Power	-

*: with Seat Position Memory System

In the memory function, the memory switch operation signal is transferred from the outer mirror control ECU LH to the position control ECU and switch assembly (power seat control switch and ECU) via the multiplex communication line. Then, either the seat position is stored in memory or the previously stored seat position is recalled to set the appropriate seat position.