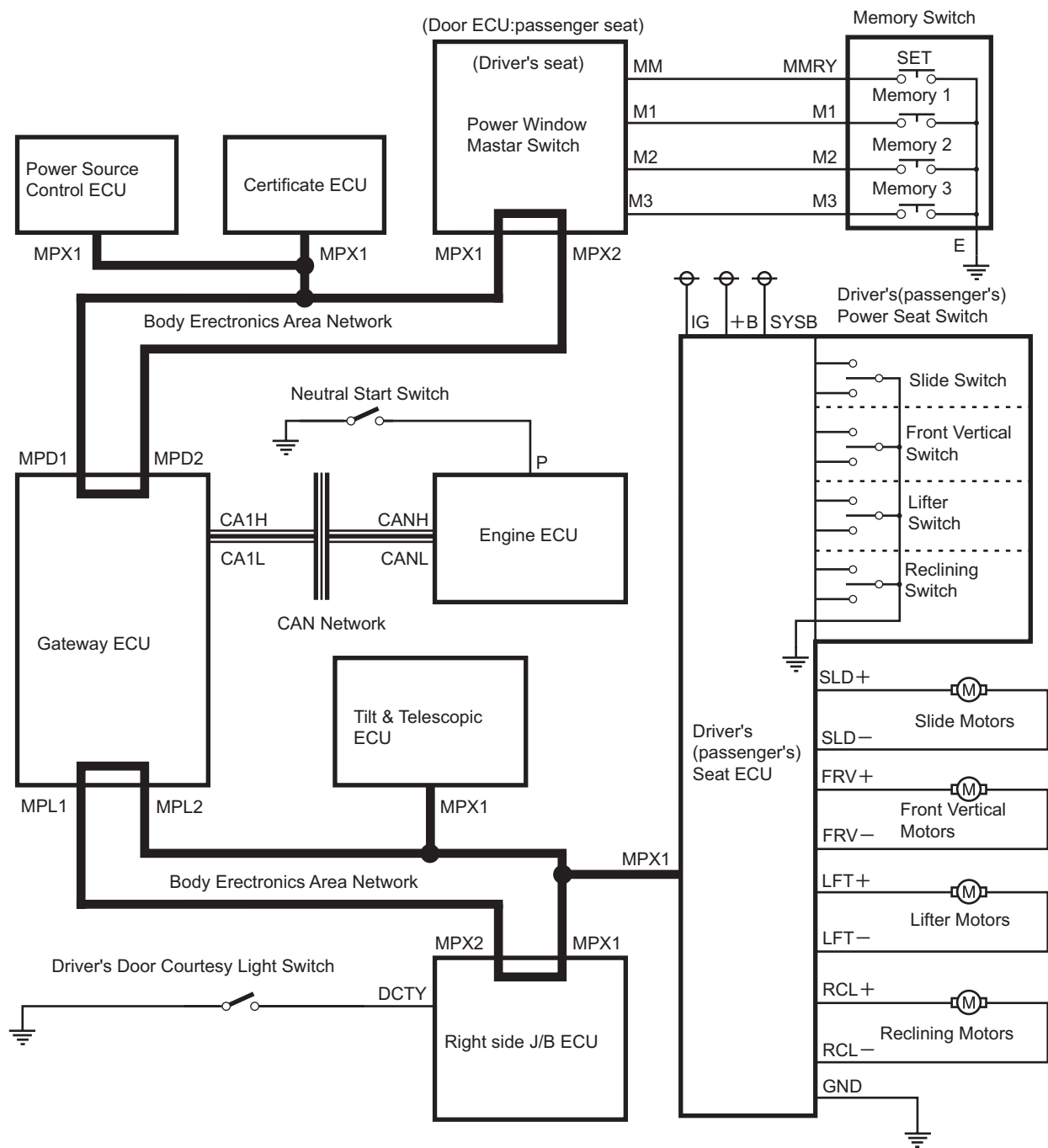


Memory System Control



Driving Position Memorize Operation Conditions

- The transfer of the system to the memory operation mode requires that the driver's seat ECU meets all the conditions listed in the table below, based on the inputs received from the BEAN (Body Electronics Area Network) (or the CAN (Controller Area Network)) and the power seat switch operation signal.

Driving Position Memory Operation Condition

- "Engine switch ON" signal is received from the right side J/B ECU.
- "Retrieval stop signal" is received from the tilt & telescopic ECU.
- "Shift position P" signal is received from the engine ECU.
- There is no input of power seat switch operation signal and the seat adjuster motors are stopped.

Driving Position Memorize Operation

- Upon receiving the input of the current waveforms from the sliding motor, front vertical motor, lifter motor, and reclining motor, the driver's seat ECU performs an internal process to detect the driver's seat position. The tilt & telescopic ECU detects the steering position based on the pulse signals from the tilt motor and the telescopic motor.
- After the memory operation conditions have been met, the driver's seat ECU memorizes the driver's seat position at the time the memory switch [SET] signal and the [1] (or [2] or [3]) signal are received from the power window master switch via the BEAN (Body Electronics Area Network).
- The driver's seat ECU memorizes the driver's seat position while simultaneously transmitting a "memory command" signal to the tilt & telescopic ECU via the BEAN (Body Electronics Area Network). The tilt & telescopic ECU memorizes the steering position at the time it receives this signal.
- The buzzer sounds approximately 0.5 seconds upon the completion of the memorization of the driving position.

Driving Position playback Operation Conditions

- The transfer of the system to the retrieval operation mode requires that the driver's seat ECU meets all the conditions listed in the table below, based on the inputs of the vehicle condition signals received from the BEAN (Body Electronics Area Network) or the CAN (Controller Area Network) and the state of the position data in memory.

Driving Position Retrieval Operation Conditions

- "Engine switch ON" signal is received from the right side J/B ECU.
- "Memory switch OFF" signal is received from the power window master switch.
- "Shift position P" signal is received from the engine ECU.
- Driving position data is stored in memory.

Driving Position Key Off playback Operation Conditions

- The transfer of the system to the key-OFF retrieval mode requires that the driver's seat ECU meets all the conditions listed in the table below, based on the inputs of the vehicle condition signals received from the BEAN (Body Electronics Area Network) and the state of the position data in memory.

Key-OFF Retrieval Operation Conditions

- "Engine switch OFF" signal is received from the right side J/B ECU.
- Within approximately 30 seconds upon receiving a "driver's door courtesy light switch ON" signal from the right side J/B ECU.
- "Memory switch OFF" signal is received from the power window master switch.
- Driving position data is stored in memory.

Driving Position playback Operation

- After the retrieval operation conditions or the key-OFF retrieval operation conditions have been met, if the driver's seat ECU receives the memory switch [1] (or [2], or [3]) signal from the power window master switch via the BEAN (Body Electronics Area Network), the system actuates the buzzer for approximately 0.1 second. Then, the system actuates the seat adjuster motors using a programmed, pre-determined retrieval operation sequence until the seat position that is currently being recognized matches the memorized driver's seat position.
- When the system reaches the retrieval operation sequence for the steering position, the driver's seat ECU transmits a "retrieval starting command signal" to the tilt & telescopic ECU. Upon verifying the completion of the steering position retrieval operation through communication with the tilt & telescopic ECU, the seat position ECU starts the actuation of the seat adjuster motors, which corresponds to the next retrieval sequence.

Driving Position playback Operation Stopped Conditions

- During a retrieval operation, if the driver's seat ECU detects any one of the conditions listed below based on the inputs of the vehicle condition signals received from the BEAN (Body Electronics Area Network) and the power seat switch signal, the ECU will stop the retrieval operation.

Retrieval Operation Stopping Conditions

- A shift position signal other than "P" is received from the engine ECU.
- Any one of the memory switch signals, [SET], [1], [2], or [3] is received from the power window master switch.

Processing of System Failed

- During a seat position retrieval operation, if the driver's seat ECU detects a failure in a seat adjuster motor, the ECU will stop the retrieval operation of the corresponding seat adjuster at that time, and transfers to the retrieval operation that corresponds to the next retrieval operation sequence.
- If the communication between the driver's seat ECU and the tilt & telescopic ECU via the BEAN (Body Electronics Area Network) is disrupted, the system will transfer to the retrieval operation that corresponds to the next retrieval operation sequence, instead of performing steering position retrieval control.

Memory Call Operation Conditions

- The transfer of the system to the memory call operation mode requires that the driver's seat ECU meets all the conditions listed in the table below, based on the inputs of the vehicle condition signals received from the BEAN (Body Electronics Area Network).

Memory Call Operation Conditions

- "Engine switch OFF" signal is received from the right side J/B ECU.
- "Driver's door courtesy light switch OFF" signal is received from the right side J/B ECU.
- "ACC OFF" signal* is received from the right side J/B ECU.
- "Key code check OFF" signal* is received from the power source control ECU.
- A memory call registration* that corresponds to memory switch [1] (or [2] or [3]) is present.

❖REFERENCE❖

*For memory call retrieval operation only

Memory Call Registration Operation

- After the memory call operation conditions have been met, when the driver presses the lock or unlock button on the key while keeping the [1] (or [2] or [3]) button on the memory switch pressed, the driver's seat ECU will receive a key ID signal and a key command (lock or unlock) signal from the right side J/B ECU, while continuing to receive the memory switch [1] (or [2] or [3]) signal from the power window master switch via the BEAN (Body Electronics Area Network).
- Upon receiving the foregoing signals, the driver's seat ECU assigns the key ID to the memory switch [1] (or [2] or [3]) to complete the memory call registration.
- The buzzer sounds approximately 0.5 seconds upon the completion of the memory call registration.

Memory Call Registration Cancel Operation

- After the memory call operation conditions have been met, when the driver presses the lock or unlock button on the key while keeping the [SET] button on the memory switch pressed, the driver's seat ECU will receive a key ID signal and a key command (lock or unlock) signal from the right side J/B ECU, while continuing to receive the memory switch [SET] signal from the power window master switch via the BEAN (Body Electronics Area Network).
- Upon receiving the foregoing signals, the driver's seat ECU cancels the memory call registration of the key that was used in the operation.
- The buzzer sounds twice at an approximate 0.1-second interval upon the completion of the memory call registration cancellation.

Memory Call playback Operation

- After the memory call operation conditions have been met, when the driver unlocks the door through the use of the door unlock function (or the unlock button on the key), the driver's seat ECU will receive a key ID signal and a door unlock signal from the right side J/B ECU via the BEAN (Body Electronics Area Network).
- When the driver opens the driver's door during the foregoing conditions, the driver's seat ECU will receive a memory call retrieval instruction signal from the certificate ECU (or a driver's door courtesy light switch ON signal from the right side J/B ECU) via the BEAN (Body Electronics Area Network), in order to start the memory call retrieval operation.
- The buzzer sounds approximately 0.1 second upon the starting of the memory call retrieval.