■ ENTRY AND START CONTROL

Function of Main Components

▶ Start Function ◀

- The main components of the start function have the following function:

Components		Function
Electrical Key Transmitter Sub-assembly		Receives signals from the antennas and returns the ID code to the certification ECU (smart key ECU assembly).
Engine Switch (Push Start Switch)		● Transmits the engine switch signal to the certification ECU (smart key ECU assembly). ● Receives the ID code and transmits it to the certification ECU (smart key ECU assembly) when the key battery is low.
Certification ECU (Smart Key ECU Assembly)		● Certifies the ID code received from the electrical key transmitter sub-assembly and transmits the certification results to the steering lock actuator assembly (steering lock ECU). ● Receives the steering unlock from the, and transmits each unset signal to the steering lock actuator assembly (steering lock ECU).
No. 2 Indoor Electrical Key Antenna Assembly (Front Floor)		Receives a request signal from the certification ECU (smart key ECU assembly) and forms an actuation area in the vehicle.
No. 3 Indoor Electrical Key Antenna Assembly (Rear Quarter Panel LH)		
ID Code Box (Immobilizer Code ECU)		Receives a request signal from the certification ECU (smart key ECU assembly) and transmits the engine immobiliser set/unset request signals to the ECM.
ECM		Receives the signal from ID code box (immobilizer code ECU) and performs engine ignition.
Steering Lock Actuator Assembly (Steering Lock ECU)		● Receives the command signal from the certification ECU (smart key ECU assembly) and activates the steering lock actuator. ● Registers the ID verification code.
Combination Meter Assembly	Multi-information Display	Informs the driver of system malfunctions by displaying a warning message.
	Key Operation/Warning Light	Informs the driver of power source or system malfunctions by varying the illumination of the indicator light.
	Buzzer	Sounds to inform the driver of malfunctions in the entry and start system.

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Components		Function
Shift Lock Control Unit Assembly	Shift Lock Control ECU Sub-assembly	Outputs the shift position P detection switch signal to the certification ECU (smart key ECU assembly).
Stop Light Switch Assembly		Outputs the state of the brake pedal to the certification ECU (smart key ECU assembly).
Park/Neutral Position Switch Assembly		Outputs the shift position signal to the certification ECU (smart key ECU assembly).

▶ Entry Function ◀

- The main components of the entry function have the following functions:

Components	Function
Electrical Key Transmitter Sub-assembly	● When receiving the request signals that are output by the No. 1 indoor electrical key antenna assembly (front bumper RH/LH), No. 2 indoor electrical key antenna assembly (engine service hole main cover), No. 3 indoor electrical key antenna assembly (rear quarter panel LH), electrical key antenna (rear bumper LH) the key outputs information such as the key ID and vehicle ID. ● When a driver pushes the lock unlock button or luggage compartment door opener button on the key, the key outputs a request signal. ● When receiving the radio wave that is output by the transponder key amplifier in the engine switch, the key outputs information such as the key ID and vehicle ID. ● Integrates with the mechanical key in order to unlock the doors when the key battery is low.
Certification ECU (Smart Key ECU Assembly)	● Receives the ID code from the key in the actuation area. ● Judges and certifies the key. ● Controls the No. 1 indoor electrical key antenna assembly (front bumper RH/LH), No. 2 indoor electrical key antenna assembly (engine service hole main cover), No. 3 indoor electrical key antenna assembly (rear quarter panel LH) and electrical key antenna (rear bumper LH). ● Transmits door lock/unlock request signals during the entry function. ● Transmits steering lock/unlock request signals. ● Transmits engine immobiliser set/unset request signals.

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Components		Function
Main body ECU (Instrument Panel Junction Block Assembly)		● Receives the request signal from the certification ECU (smart key ECU assembly) and actuates the door lock motors to unlock or lock all the doors. ● Transmits the condition of each door to the certification ECU (smart key ECU assembly).
No. 1 Indoor Electrical Key Antenna Assembly (RH/LH)		Receives a request signal from the certification ECU (smart key ECU assembly), and creates an actuation area around front door RH/LH.
Electrical Key Antenna		Receives a request signal from the certification ECU (smart key ECU assembly), and forms an actuation area around the back door.
Front Outside Door Handle Assembly RH	Lock/Unlock Switch	Transmits the door lock unlock request signal to the certification ECU (smart key ECU assembly).
Front Outside Door Handle Assembly LH		
License Plate Light Cord		
Front Door Lock Assembly RH/LH	Door Lock Motor	Drives the motor in response to signals from the main body ECU (instrument panel junction block assembly) and locks or unlocks the front doors.
	Door Lock Position Switch	Detects whether the door is locked or unlocked and sends this information to the main body ECU (instrument panel junction block assembly).
Slide Door Lock Remote Control Assembly RH/LH	Door Lock Motor	Drives the door lock motor in response to signals from the main body ECU (instrument panel junction block assembly) and locks or unlocks the slide doors.
Back Door Remote Control Assembly	Back Door Lock Motor	Drives the door lock motor in response to signals from the main body ECU (instrument panel junction block assembly) and actuate the back door lock assembly.
Back Door Lock Assembly	Back Door Courtesy Light Switch	Outputs the state of the back door to the main body ECU (instrument panel junction block assembly).
Front Door Courtesy Light Switch Assembly (RH/LH)		Outputs the state of the front door to the main body ECU (instrument panel junction block assembly).

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Components		Function
Rear Door Courtesy Light Switch Assembly (RH/LH)		Outputs the state of the slide door to the main body ECU (instrument panel junction block assembly).
Wireless Door Lock Buzzer		● Sounds as an answer back for entry lock/unlock and wireless lock/unlock to inform the driver. ● Sounds to inform the driver of malfunctions in the entry and start system.
Combination Meter Assembly	Multi-information Display	Informs the driver of system malfunctions by displaying a warning message.
	Key Operation/Warning Light	Informs the driver of power source or system malfunctions by varying the illumination of the indicator light.
	Buzzer	Sounds to inform the driver of malfunctions in the entry and start system.