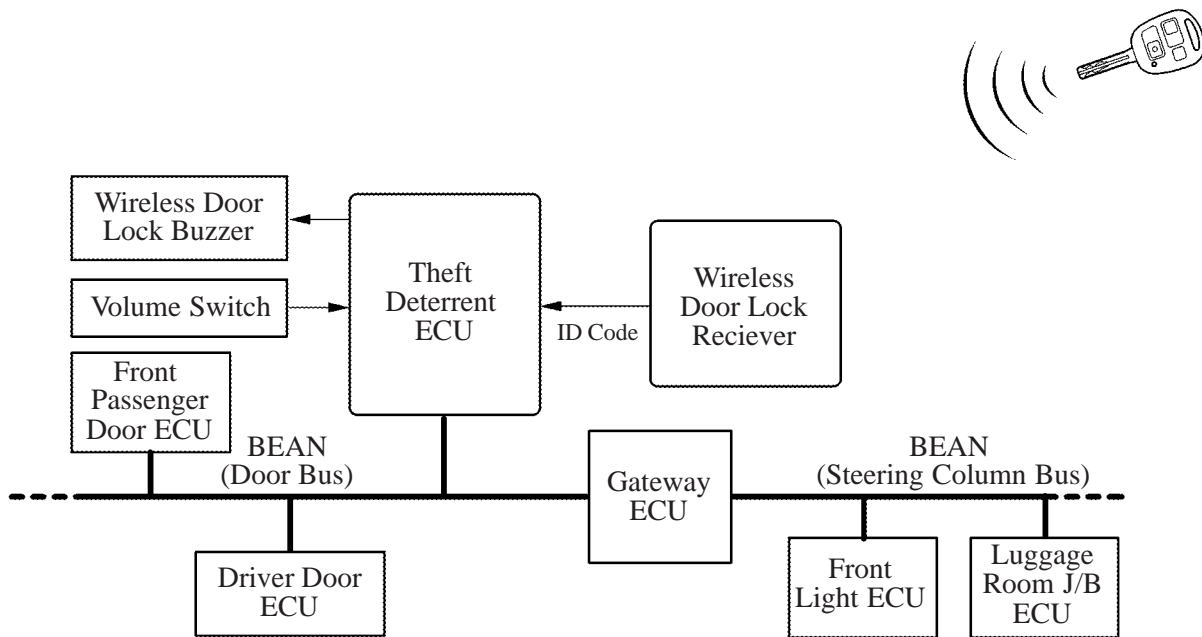## ■WIRELESS DOOR LOCK REMOTE CONTROL SYSTEM

1. General

- The wireless door lock remote control system is a convenient system for locking and unlocking all the doors, at a distance.

- In this system, the wireless door control receiver receives radio frequency from transmitter and the Theft deterrent ECU performs the code identification process and effects the door lock control.

- The Theft deterrent ECU uses the BEAN to output signals to the ECUs, the ECUs receive the signals, and actuate the actuators.

- The wireless door lock receiver is enclosed in the inside rear view mirror.

- On the new LS430, a volume switch that adjusts the volume of the wireless door lock buzzer in 5 stages has been provided.
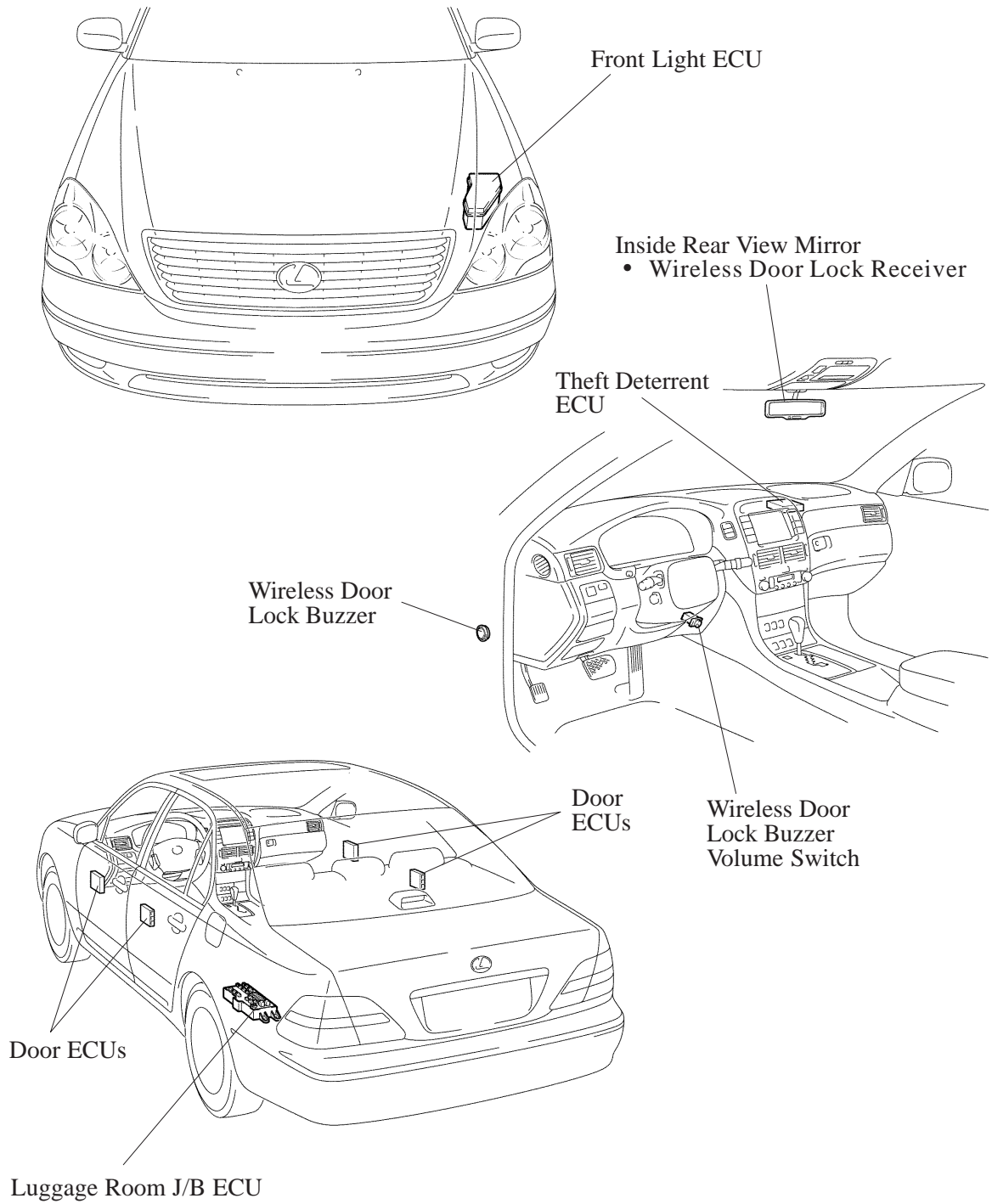
▶ **System Diagram** ◀

189BE190

┌─ **Service Tip** ───

In case of making new ignition key due to the loss of it, is necessary to register recognition code. Refer to see the LEXUS LS430 Repair Manual (Pub. No. RM792E).

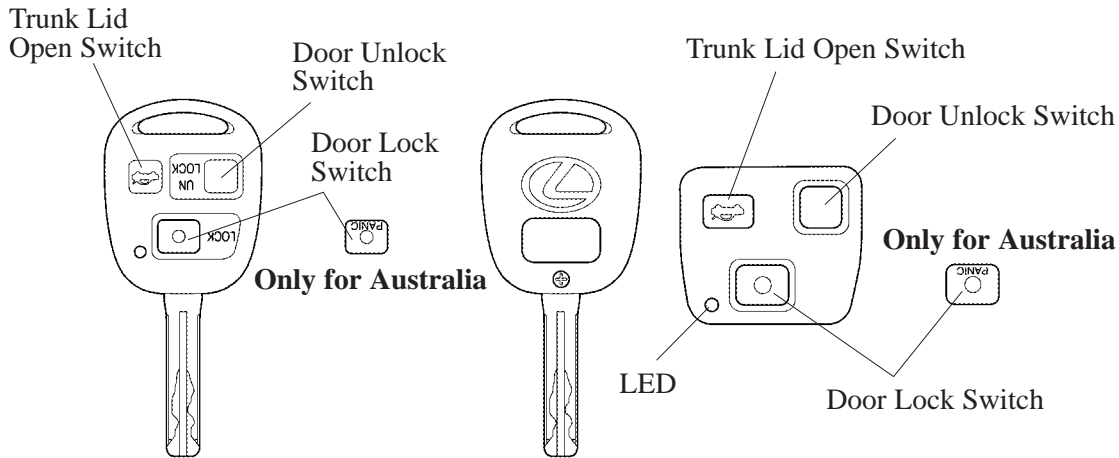## 2. Layout of Component

Front Light ECU

Inside Rear View Mirror
• Wireless Door Lock Receiver

Theft Deterrent ECU

Wireless Door Lock Buzzer

Door ECUs

Wireless Door Lock Buzzer Volume Switch

Door ECUs

Luggage Room J/B ECU

BE

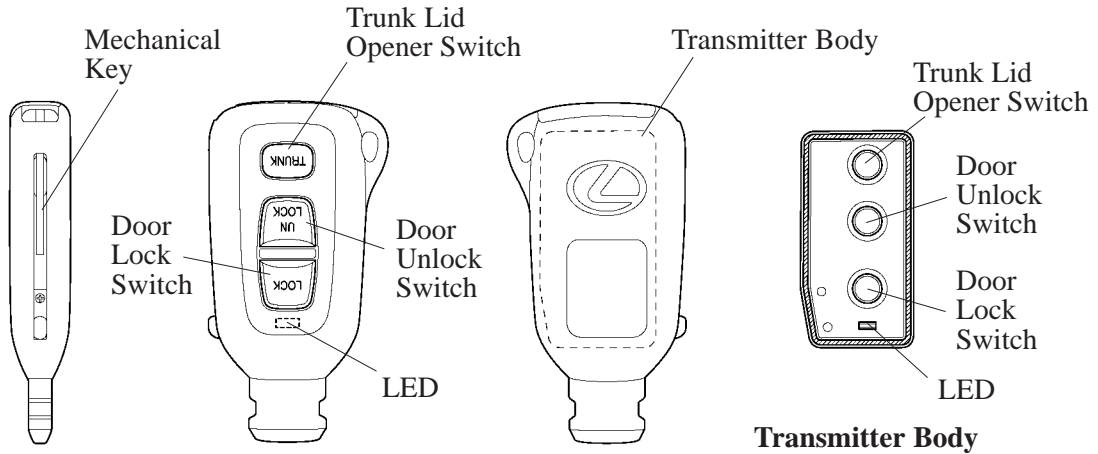189BE203

3. Construction

Transmitter

A key integrated, three-button type transmitter has been adopted. This transmitter is equipped with an LED display function to monitor the condition of the battery.

Furthermore, its construction allows the key molded the transmitter body to be separated completely for improve serviceablility.

Mechanical Key

189BE195

Smart Key

189BE192

4. Function

The wireless door lock remote control system in the LS430 has the following functions.

Function	Outline	Europe	Austra-lia	G.C.C. Coun-tries
All Door Lock Operation	Pressing the "door lock" switch of the transmitter locks all doors.	◯	◯	◯
2-Step Unlock Operation	Pressing the "door unlock" switch of the transmitter once unlocks only the driver's door, and pressing it twice within 3 seconds opens all doors.	—	◯	◯
All Doors Un-lock Operation	Pressing the "door unlock" switch of the transmitter once unlocks all doors.	◯	—	—
Trunk Lid Open Operation	Keeping the "trunk lid opener" switch of the transmitter pressed longer than about 1 second opens the trunk lid.	◯	◯	◯
Answer Back Operation	The hazard light is flashed once when locking, and the hazard light is flashed twice when unlocking, to inform that the operation has been completed.	◯	◯	◯
Power Window Open Operation	Keeping the "door unlock" switch of the transmitter pressed longer than abut 2~3 seconds opens all the windows and moon roof while the switch is being pressed.	◯	◯	◯
Power Window Close Operation	Keeping the "door lock" switch of the transmitter pressed longer than abut 2~3 seconds closes all the windows and moon roof while the switch is being pressed.	◯	—	◯
Panic Alarm Operation	Keeping the "door lock" switch of the transmitter pressed longer than abut 2~3 seconds activates the alarm of the theft deterrent system (to sound the horn, and flash the headlights, taillights and turn signal lights).	—	◯	—
Automatic Lock Function	If none of the doors are opened within 30 seconds after they are unlocked by the wireless door lock remote control, all the doors are locked again automatically.	◯	◯	◯
Door Ajar Warning Function	If any door is open or ajar, pressing the "door lock" switch of the transmitter will cause the wireless door lock buzzer to sound for about 10 seconds.	◯	◯	◯
Interior Light Function	The front interior light and ignition switch light turns on at the same time the doors are unlocked by a transmitter switch operation.	◯	◯	◯
Repeat Function	If a door is not locked in response to the locking operation of the transmitter, the Theft deterrent ECU will output a lock signal after the 1 second.	◯	◯	◯
Lock/Unlock Operation Verification Function	When the transmitter is used to lock or unlock the doors and open the trunk lid, this function sounds the wireless door lock buzzer to inform that the operation has been completed.	—	◯	◯
Open/Close Operation Verification Function	When the transmitter is used to open or close the windows, this function sounds the wireless door lock buzzer to inform that the operation has been completed.	◯	◯*	◯
Transmitter Recognition Code Registration Function	Enables the registering (writing and storing) of 8 types of transmitter recognition code in the EEPROM that is contained in the Theft deterrent ECU.	◯	◯	◯

*: Open Operation Only

BE

Transmitter Recognition Code Registration Function

The table below shows the 4 special coded ID registration function modes through which up to 8 different codes can be registered. The codes are electronically registered (written to and stored) in the EEPROM. For details of the recognition code registration procedure refer to the LEXUS LS430 Repair Manual (Pub. No. RM792E) to register the codes correctly.

Mode	Function
Rewrite Mode	Erases all previously registered codes and registers only the newly received codes. This mode is used whenever a transmitter or the Theft deterrent ECU is replaced.
Add Mode	Adds a newly received code while preserving any previously registered codes. This mode is used when adding a new transmitter. If the number of codes exceeds 4, the oldest registered code is erased first.
Confirm Mode	Confirms how many codes are currently registered. When adding a new code, this mode is used to check how many codes already exist.
Prohibit Mode	To delete all the registered codes and the to prohibit the wireless door lock function. This mode is used when the transmitter is lost.