

■ WIRELESS DOOR LOCK REMOTE CONTROL SYSTEM

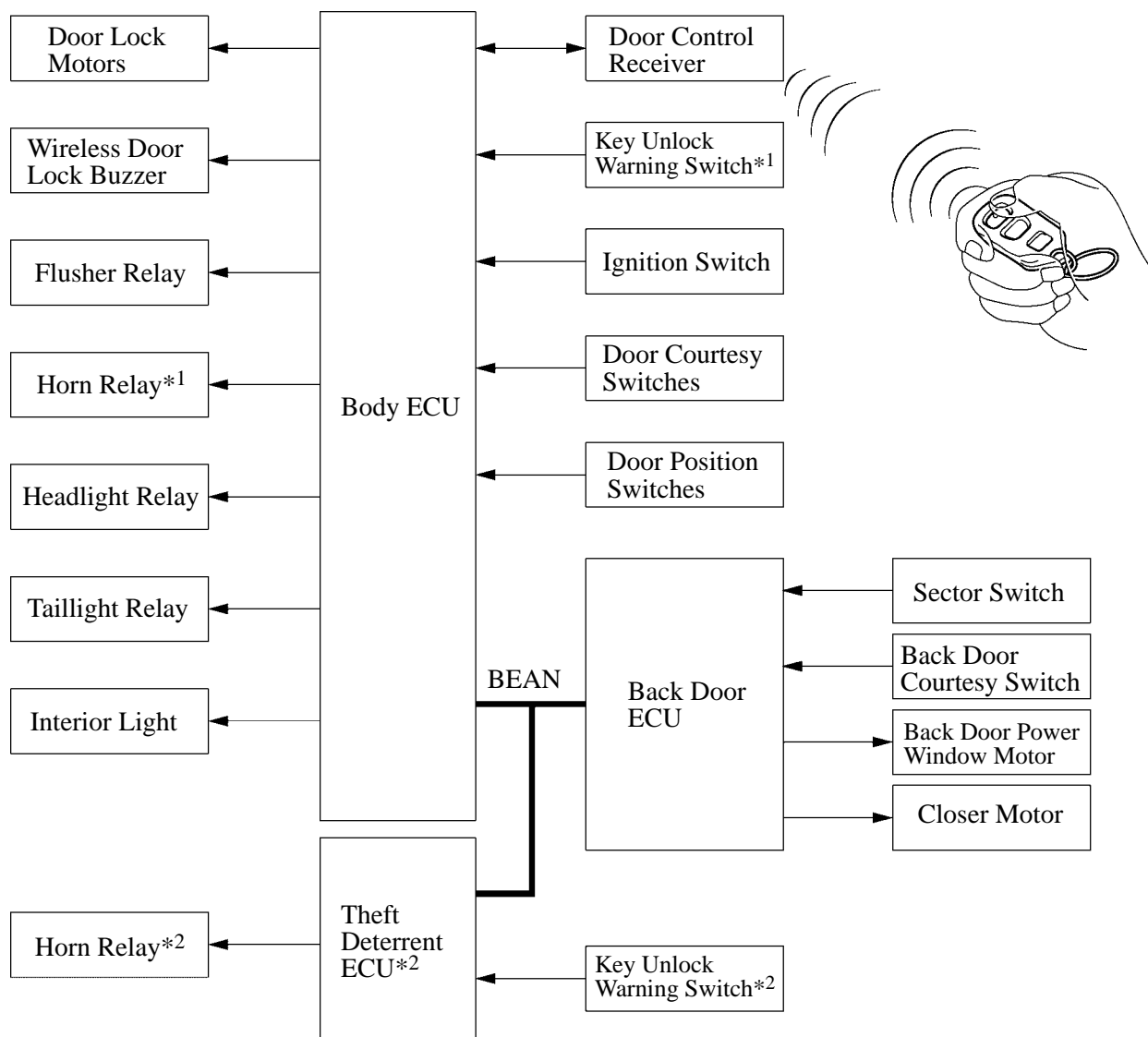
1. General

The wireless door lock remote control system has been adopted as standard equipment.

This system is a convenient system for locking and unlocking all the doors, at a distance. This system in the '03 4Runner has the following features:

- In this system, the wireless door control receiver performs the code identification process and the body ECU effects the door lock control. Serial data link is provided for communication between the wireless door control receiver and the body ECU.
- A key-holder type transmitter is used, and it contains the following four switches: the door lock switch, door unlock switch, back door power window open switch and panic switch.
- A rolling code system, in which the signal configuration changes each time when a signal is transmitted by the transmitter, has been adopted.

2. System Diagram

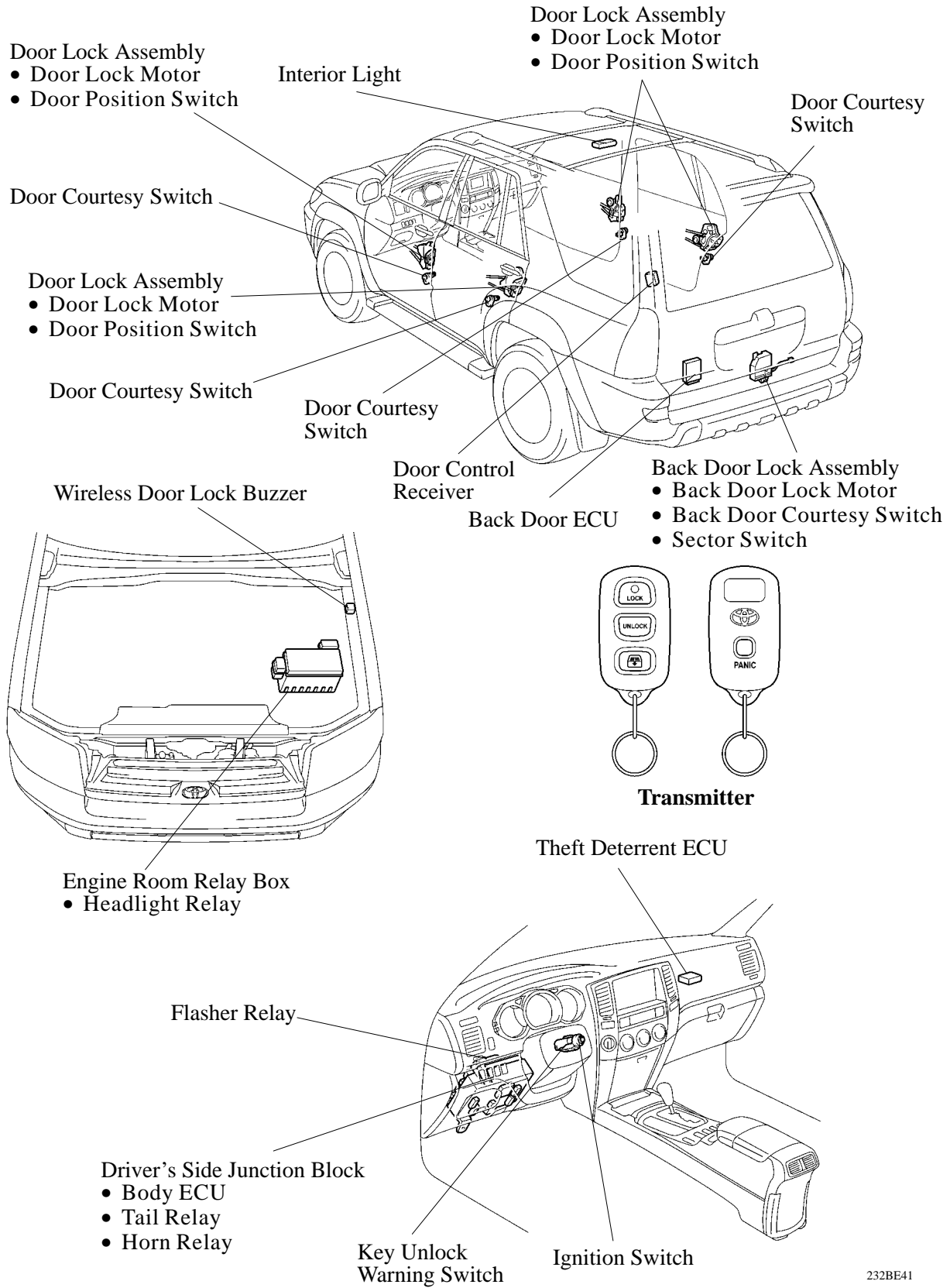


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*1: Models without Theft Deterrent System

*2: Models with Theft Deterrent System

3. Layout of Main Component



4. Function

General

The wireless door lock remote control system in the '03 4Runner has the following functions.

Function	Outline
All Doors Lock Operation	Pressing the door lock switch of the transmitter locks all doors.
All Doors Unlock (2-step Unlock) Operation*	Pressing the door unlock switch twice within 3 seconds opens all doors after opening the driver's door.
Back Door Power Window Open Operation	Keeping the luggage door opener switch of the transmitter pressed longer than about 1 second opens the back door power window.
Answer Back Operation*	When the transmitter is used for locking or unlocking the doors, for opening the luggage door, or a power window is operated, this function momentarily sounds the buzzer to inform the user that the operation has been completed.
	When the transmitter is used for locking the doors, this function flashes the hazard lights to inform the user that the operation has been completed.
Panic Alarm Operation*	Keeping the PANIC switch of the transmitter pressed longer than about 2 ~ 3 seconds activates the alarm of the theft deterrent system (to sound the horn, flash the headlights, taillights, and hazard 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.
Repeat Function	If a door is not locked in response to the locking operation of the transmitter, the body ECU will output a lock signal after the 1 second.
Illuminated Entry Function*	When all the doors are locked, pressing the door unlock switch causes the interior lights to illuminate simultaneously with the unlock operation.
Security Function	Sends an operation signal as a rolling code.
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.
Transmitter Recognition Code Registration Function	Enables the registering (writing and storing) of 4 types of transmitter recognition codes in the EEPROM that is contained in the body ECU.
Self-Diagnosis	If there is a malfunction in the system, the body ECU stores the DTCs (Diagnostic Trouble Codes) in its memory.

*: The setting of function can be changed using the customized body electronics system. For details, refer to Customized Body Electronics System section on page BE-6.

Transmitter Recognition Code Registration Function

The table below shows the 4 special coded ID registration function modes through which up to 4 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 2003 4Runner Repair Manual (Pub. No. RM1001U) 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 Body 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 to prohibit the wireless door lock function. This mode is used when the transmitter is lost.