

IMMOBILIZER SYSTEM

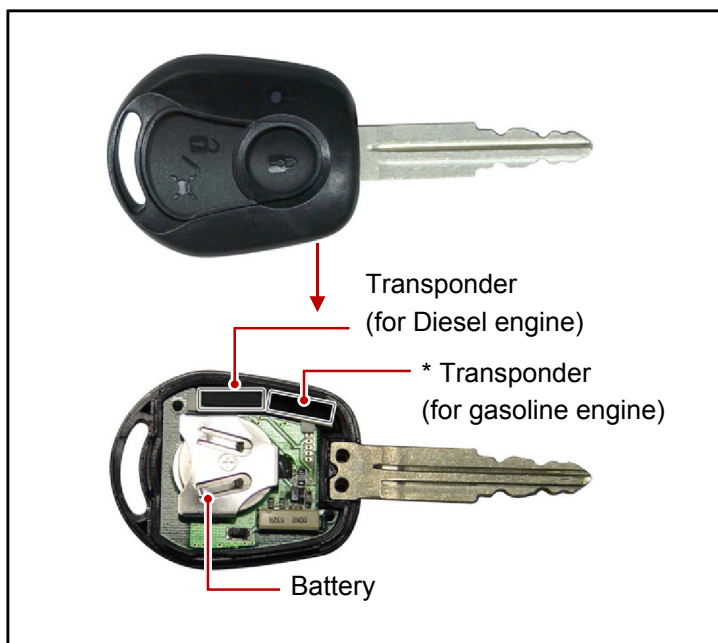
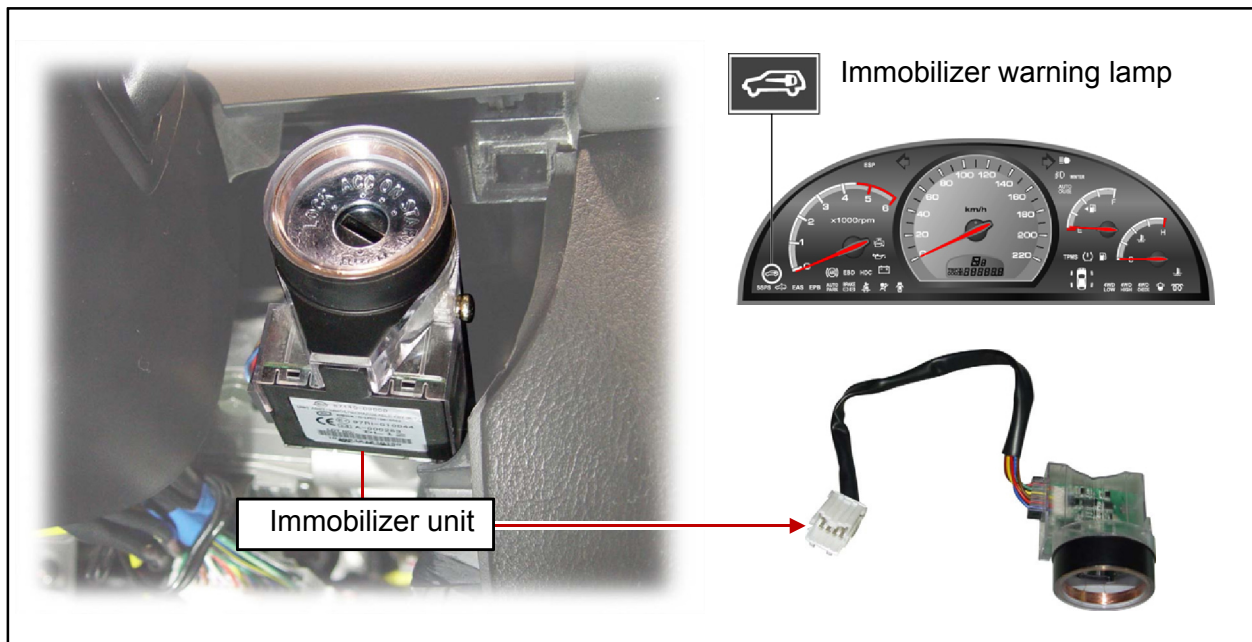
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OVERVIEW AND OPERATION PROCESS

1. OVERVIEW

► What is the immobilizer system?

The immobilizer system prevents the vehicle theft by allowing only the authorized key to start the engine. The transponder inside the key communicates with the immobilizer installed in the key box, and the system permits the engine to start after confirming the encrypted coding from the engine ECU. Refer to the information that follows for specific functions and their descriptions.



Modification basis	
Application basis	
Affected VIN	

2. BASIC FUNCTIONS OF IMMOBILIZER KEY (REKES FUNCTION)

The information below is the function that applies to the REKES key and immobilizer key.

Door Lock Button

Lock (briefly press)

- If you press this button briefly, all doors and the tailgate are locked and the theft deterrent mode is activated.
- When the theft deterrent mode is activated, the hazard warning flashers blink twice.



Door Unlock/Panic Button

1. Unlock (briefly press)

- If you press this button briefly, all doors and the tail gate are unlocked and the theft deterrent mode is deactivated.
- When the deterrent mode is deactivated, hazard warning flashers blink once.

2. Panic function (press and hold)

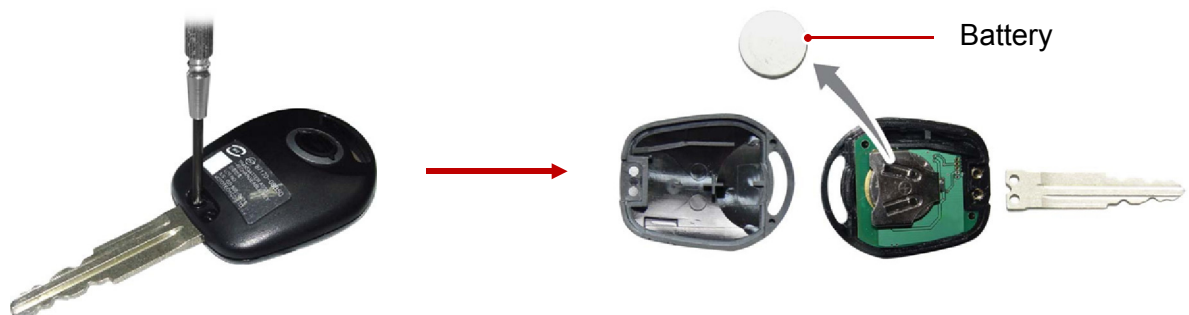
- If you are in your vehicle and feel threatened while the ignition key is inserted into the key switch, you may activate the alarm to call attention. If you press this button, the warning siren will sound for approx. 27 seconds.
- The panic function will stop when any of the buttons on the remote control key is pressed.

Panic Button

(operative only when the ignition key is inserted)

Battery Replacement

Specification	CR 2032
Quantity	one

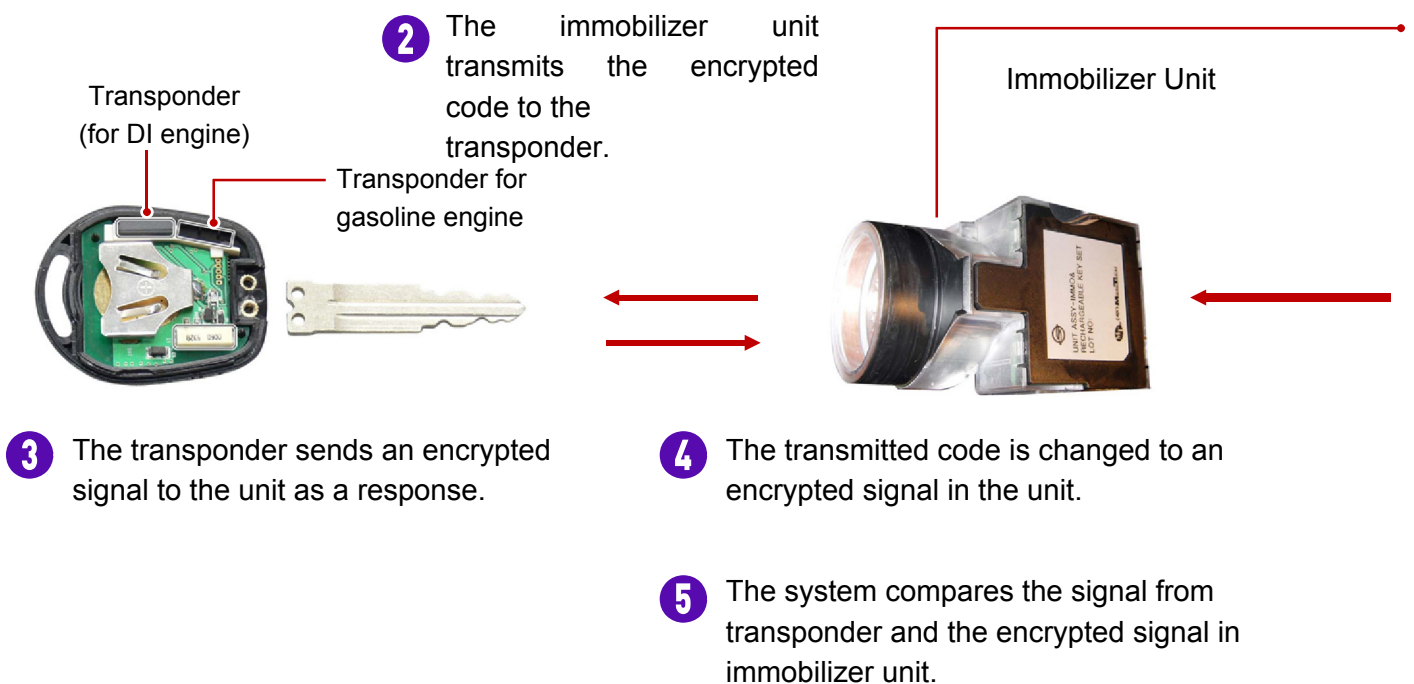
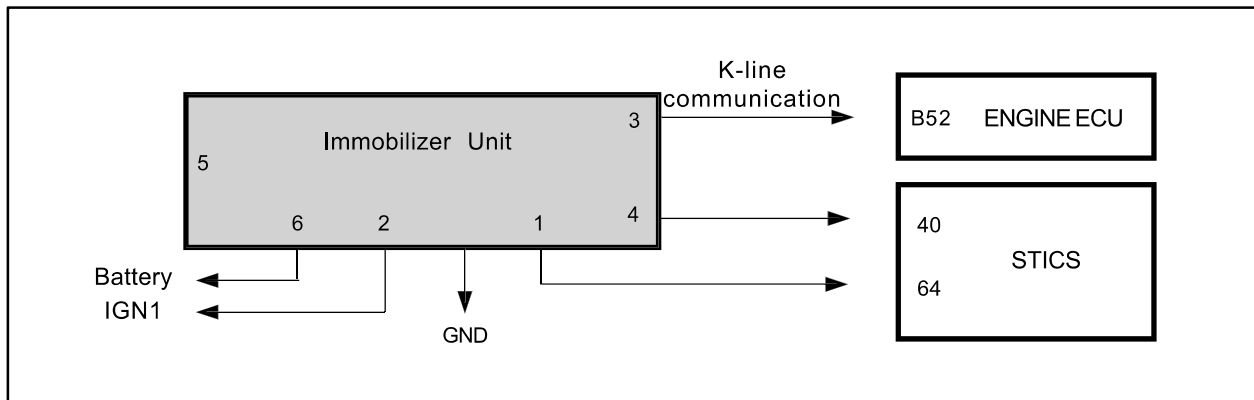


Modification basis	
Application basis	
Affected VIN	

3. OTHER FUNCTIONS IN SYSTEM

► Immobilizer Function

The immobilizer system prevents the vehicle theft by allowing only the authorized key to start the engine. The transponder inside the key communicates with the immobilizer installed in the key box, and the system permits the engine to start after confirming the encrypted coding from the engine ECU.



⚠ CAUTION

In the following cases, a driver may be unable to start the vehicle with the immobilizer.

- When two or more immobilizer keys come into contact with (each) other(s).
- When the key is close to any device sending or receiving electromagnetic fields or waves.
- When the key is close to any electronic or electric devices such as lightening equipment, security keys or security cards.
- When the key is close to a magnetic or metal object or a battery.

Modification basis	
Application basis	
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► Immobilizer and Warning Lamp



This indicator comes on when the ignition key is communicating with the engine control unit (during engine starting) and goes out after starting the engine.

- Lamp ON: in communication
- Blinking twice for one second: immobilizer system failure
- Blinking once for two seconds: immobilizer unit is not coded

CAUTION

- The immobilizer indicator does not come on if the communication time between immobilizer key and ECU is too short.

- 1 When turning the ignition key to ON position, the ECU transmits the challenge message to the immobilizer unit. (to verify whether the key is valid)

**ENGINE CONTROL
UNIT (ECU)**



- 6 Only when the two signals are identical, it recognizes the key as the authorized one and transmits the positive message to the ECU.

- 7 The ECU enable the engine to be started.

CAUTION

- Do not drop or shock to the transponder in the key as it may be damaged.
- With a damaged transponder, the engine cannot be started.
- When you erase the code or register an extra key, let the owner attend on the site. In any case, the immobilizer system can not be removed from the vehicle. If you attempt to remove it and damage the system, starting will be impossible, so never attempt to remove, damage or modify it.
- The remote engine starter cannot be installed on the vehicle equipped with the immobilizer system.

Modification basis	
Application basis	
Affected VIN	