# 6. Precaution for Smart Key System Operation

#### **Smart Functions in General**

## 1) Functions and operation ranges

The functions will not operate if the smart key is not present within the detection areas described below. Furthermore, the functions may not operate or their operating range may decrease if the battery is drained or in the presence of strong radio waves or noise. There are also areas in which the functions may not operate properly due to the shape of the vehicle body.

Function	Operation Range
Smart Lock/	Applicable within approximately 0.7 to 1.0 m (2.8 to 4.0 in.) radius from each door
Smart Unlock	handle. However, this function may not operate near the windows or door handles.
Smart Ignition	Applicable within vehicle interior: However, this function may not operate if the smart key is placed on the instrument panel, on the rear tray, in the glove box, or on the floor; therefore, do not place the smart key in those areas. If the smart key is placed in the luggage compartment, the engine cannot be started. Even if the smart key is placed outside of the vehicle, this function may not operate if the smart key is placed near a window.
Smart Trunk Open	Applicable within approximately 0.7 to 1.0 m (2.8 to 4.0 in.) radius from the smart trunk open switch: However, this function may not operate if the smart key is placed near the center of a bumper.

## 2) The smart key system uses very weak radio waves

The smart functions and the wireless door lock remote control functions may not operate properly (unable to operate the smart lock, unlock, ignition, and trunk open functions, or a false alarm is issued) in the situations described below. In this case, use the enclosed mechanical key to lock or unlock the doors and insert the smart key to operate the ignition.

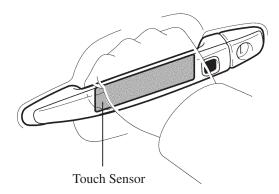
- The presence of a facility that generates strong radio waves nearby, such as a TV tower, electric power plant, broadcasting station or medical device.
- The user has a wireless communication device such as a wireless transmitter or portable telephone along with the smart key.
- The smart key is covered with a metal object or is placed near a metal object.
- A radio wave type wireless door lock remote control is being used in the vicinity.
- When placing by electrical appliances etc.

## 3) The smart functions will not operate if the battery enclosed in the smart key becomes drained

In this case, use the enclosed mechanical key to lock or unlock the doors and insert the smart key to operate the ignition.

#### **Smart Unlock**

• To perform a smart unlock, make sure to touch the inside area of the door handle as shown in the diagram below. Its response may be delayed or not operated if the door handle is touched by a hand wearing a leather glove or a ski glove.



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- When performing a smart unlock, verify that the door has been unlocked (answer back by the wireless door lock buzzer, hazard light, and flashing of the smart indicator) before pulling on the door handle. The door might not unlock if the user approaches it suddenly or pulls on the door handle suddenly. If a door could not be unlocked, the system retries unlocking it four times, at 750 ms intervals. However, if the user is pulling on the handle during a retry, it might not be possible to unlock the door due to mechanical constraints. In this case, return the door handle one time to its original position.
- If the smart key is placed near the door handle, it might not be possible to smart unlock the door at times.
- If the door is open when a smart unlock is operated, a warning buzzer beeps. Also, if the lock switch is pushed while opening or closing the door with the smart key carried, the warning buzzer beeps.
- As long as the smart key is within the vehicle exterior detection area, the door will unlock even if a person
  who does not have the smart key touches the door handle. However a door other than the door that
  resulted in check OK will not be unlocked.
- When the smart key is within the vehicle exterior detection area, the door might smart unlock if a large
  amount of water is splashed on the door handle, such as during a car wash or in heavy rain. However if
  the door is not opened or closed within approximately 30 seconds, it will lock automatically as a theft
  preventive measure.

## **Smart Unlock Mode Switching**

In the one-side or individual door unlock mode, if the user gets into the vehicle from the driver door carrying the smart key with him, all the smart unlock controls will be stopped for security with the carried smart key. Also, if the user gets out of the vehicle from driver door and moves to outside of the detection area carrying the smart key with him, unlock control by the smart key will be possible. However, unlock control may not be carried out for five seconds after he gets out from the vehicle. In this case, operate unlock control again after five seconds.

#### **Smart Lock**

- To lock a door, make sure to press the lock switch on the outside handle. The door might not lock if it is depressed too quickly.
- It might not be possible to smart lock the door if the smart key is placed near the vehicle interior (window or door handle).
- Even if the smart key is within the vehicle exterior detection area, if the lock switch is depressed without turning OFF the ignition switch, a warning will be issued to alert the driver that the ignition switch has not been turned OFF (by emitting a beep sound outside of the vehicle), without being able to smart lock the door.
- When the smart key is within the vehicle interior detection area, pressing the lock switch will cause the system to issue a key confinement warning (by emitting a beep sound outside of the vehicle), without being able to smart lock the door. Even if the smart key is located outside of the vehicle, the warning buzzer could beep if the smart key is placed near a window or door handle. In this case, take the smart key slightly away from the door and press the lock switch.
- If the smart key is placed on the instrument panel, on the rear tray, in the glove box, or on the floor, the key confinement prevention function might not activate, causing the doors to lock through the smart lock operation. Therefore, make sure to keep the smart key in your possession.
- Even if the smart key is located within the vehicle interior detection area, it is possible to perform a wireless lock, manual lock, or key-linked lock. However, after a door is locked in this manner, it is prohibited from being smart unlocked. (After a wireless lock, manual lock, or key-linked lock, it is possible to smart unlock the door as long as the smart key is not located within the vehicle interior detection area.)
- After a smart lock, the door cannot be smart unlocked for approximately 3 seconds.
- While the door is ajar, even when the user presses the lock button on the outside handle, the smart lock function cannot be carried out and alarm will beep.

### **Smart Ignition**

- After the smart indicator has illuminated upon pushing the engine switch, slowly turn the ignition switch. It could become caught if it is turned too quickly.
- If the engine switch is depressed when the smart key is not located within the vehicle interior detection area, "**Key is not Detected**" will appear on the display.
- The engine can be started if the smart key is located in the vehicle interior. Before exiting the vehicle, return the ignition switch to the LOCK position, and carry the smart key in your possession.
- 1) If the driver's door is opened without returning the ignition switch to the LOCK position (except when the engine is running), a warning will be issued to alert the driver that the ignition switch has not been turned OFF (by emitting a "bong-bong" sound within the vehicle interior) while the door remains open.
- 2) If the smart key is taken out of the vehicle without returning the ignition switch to the LOCK position, if any door that is open is subsequently closed, a warning will be issued to alert the driver that the ignition switch has not been turned OFF by emitting a "bong" sound in the vehicle interior and a "beep" sound outside of the vehicle. At the same time, the display in the meter will indicate "**Key is not Detected**".
- 3) If the shift lever is in a position other than "P", the ignition switch cannot be turned to the LOCK position. If the driver's door is opened in this state, a warning will be issued to alert the driver that the shift lever has not been returned to the "P" position by indicating on the display in the meter "Shift to P Range" and by emitting a beep sound within the vehicle interior. After the driver reenters the vehicle, the engine will not start unless the shift lever is in the "P" position.

### **Smart Trunk Open**

At times, the luggage compartment door might not open if the smart key is placed near the center of a bumper.

## Smart Key Confine Prevention inside Luggage Compartment

Do not place the smart key in the luggage compartment.

- The key confinement prevention function will be activated when the luggage compartment door is closed while the smart key is placed inside the luggage compartment. Beware that the system might not operate properly depending on the surrounding radio wave conditions such as the location of the key (near the spare tire or edge of the luggage compartment for example) or the condition of the key (placed inside a metal brief case, near a metal object, etc.).
- If the smart key is confined in the luggage compartment, the luggage compartment door can be subsequently opened by operating the trunk lid opener push switch ON. Therefore, there is the risk of vehicle theft. When a warning is issued, make sure to check the inside of the luggage compartment.
- If the smart key is located right next to the luggage compartment door, beware that a key confinement
  warning may be issued by beeping outside of the vehicle while the luggage compartment door is being
  closed.

#### **Smart Cancel**

The smart function will not operate under the conditions listed below. Make sure to check them when the smart functions do not operate at all case.

- The smart cancel switch provided below the driver's side instrument panel is turned ON.
- The key is inserted in the engine switch.
- The smart key is the sub key (there is no trunk lid opener push switch on the key).
- There is no battery in the smart key (the indicator does not flash even if the buttons on the smart key are depressed).