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Service Category: Vehicle Interior	Section: Door Lock	
Model Year: 2008	Model: ES350	Doc ID: RM000000YC6016X
Title: DOOR LOCK: SMART ACCESS SYSTEM WITH PUSH-BUTTON START: ON-VEHICLE INSPECTION (2008 ES350)		

ON-VEHICLE INSPECTION

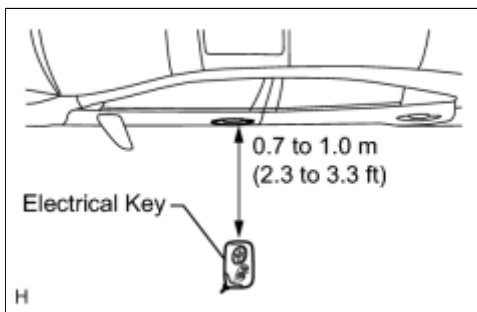
1. SMART ACCESS SYSTEM WITH PUSH-BUTTON START OPERATION INSPECTION

HINT: Refer to **PROBLEM SYMPTOMS TABLE** if the results of the following checks are not normal INFO.

(a) Check the entry unlock function.

(1) Use the wireless lock operation to lock the doors. With the electrical key in your possession, touch a door's outside handle (touch sensor) and check that the door unlocks.

(b) Check the entry unlock operation's detection area.



(1) Step 1: Hold the electrical key at the same height as the door's outside handle (approximately 0.8 m (2.6 ft)). Pay attention to the direction of the electrical key in the illustration.

(2) Step 2: When the electrical key is brought within 0.7 to 1.0 m (2.3 to 3.3 ft) of the vehicle, check that the system enters unlock standby mode.

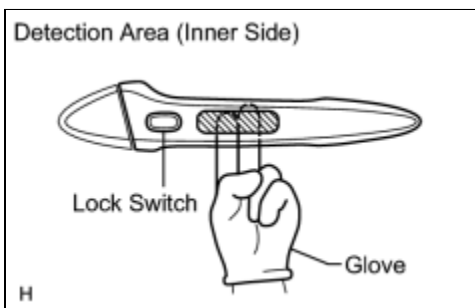
HINT:

Unlock standby mode is signified by the electrical key's red LED illuminating.

(3) Step 3: After the system enters unlock standby mode, touch the outside handle's sensor within 3 seconds. Check that the door unlocks.

NOTICE:

The electrical key cannot communicate with the system within a 0.2 m (0.6 ft) radius of each outside handle.



(4) Step 4: Repeat steps 2 and 3 for the remaining doors.

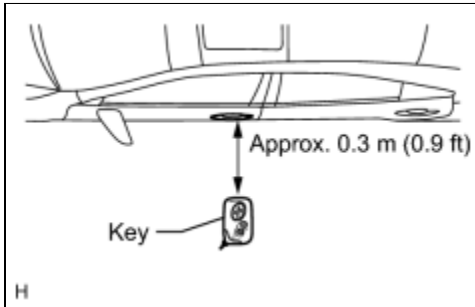
- (5) Step 5: Inspect the door electrical key oscillator's response sensitivity. Wear protective gloves, set the system to unlock standby mode, and check that touching the inner side of the outside handle (the highlighted area in the illustration) with your finger causes the door to unlock.

NOTICE:

When touching the highlighted area, tapping too quickly or having extended contact may not trigger the sensor. In such a case, the door will not unlock.

- (6) Step 6: Repeat step 5 for the remaining doors.

- (c) Check the entry lock function.



- (1) Step 1: Close all of the vehicle's doors. With the electrical key in your possession outside the vehicle, check that pressing the lock switch locks the doors.

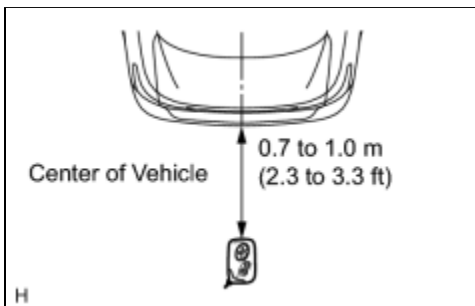
- (2) Step 2: Inspect the entry lock operation's detection area and the indoor electrical key antenna for wave leaks. Hold the electrical key at a height of 1 m (3.3 ft) (0.1 m (0.3 ft) above the lower edge of the window frame). Pay attention to the direction and position of the electrical key in the illustration. When the electrical key is approximately 0.3 m (0.9 ft) from the vehicle and the lock switch is pressed, check that the all doors lock and the warning buzzer (for when the electrical key is forgotten) does not sound. If the warning buzzer sounds, the indoor electrical key antenna may have a wave leak.

HINT:

Do not press the lock switch with the same hand that is holding the electrical key because the electrical key cannot communicate with the system within a 0.2 m (0.6 ft) radius of the outside handle. The doors will not lock.

- (3) Step 3: Repeat steps 1 and 2 for the remaining doors.

- (d) Check the entry luggage compartment door open function.



- (1) Close the luggage compartment door. With the electrical key in your possession, check that pressing the power luggage door open switch opens the luggage compartment door.

- (2) Inspect the entry luggage compartment door open operation's detection area. Hold the electrical key at the same height as the power luggage door open switch (approximately 0.8 m (2.6 ft)) and align the key with the center of the rear of the vehicle. Pay attention to the direction of the electrical key shown in the illustration. When the electrical key is brought within 0.7 to 1.0 m (2.3 to 3.3 ft) of the vehicle, check that pressing the power luggage door open switch opens the luggage compartment door.

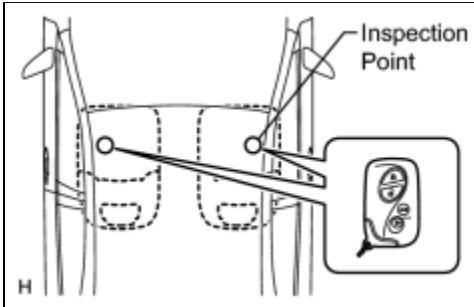
- (e) Check the entry ignition function.

(1) When the engine is off:

With the electrical key in your possession and the brake pedal depressed, check that pressing the engine switch releases the steering wheel lock and starts the engine.

HINT:

The engine can be started only when the engine switch indicator illuminates in green.



(2) When the engine is running:

With the electrical key in your possession, check that pressing the engine switch stops the engine.

HINT:

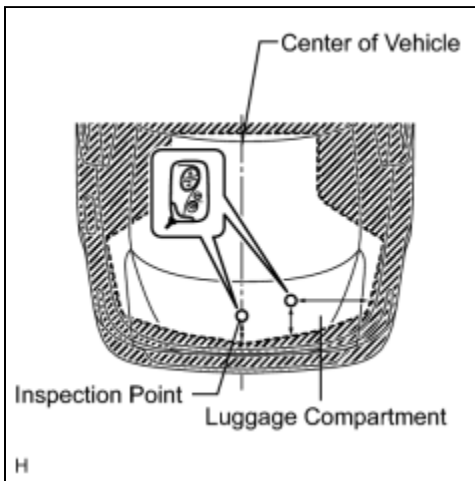
The shift position must be P to stop the engine.

(3) Inspect the entry ignition operation's detection area. Pay attention to the direction of the electrical key in the illustration. When the electrical key is in either of the 2 inspection points in the illustration, check that the engine can start.

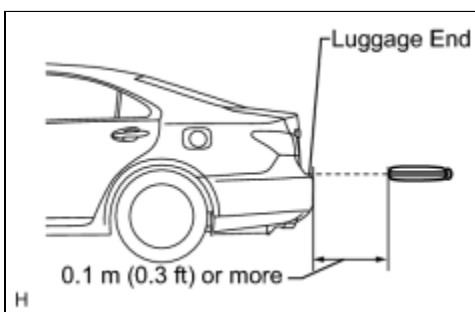
NOTICE:

The engine cannot be started when the electrical key is on the instrument panel, rear package tray, or in the glove box.

(f) Check the electrical key lock-in prevention function.



(1) Place the electrical key in the luggage compartment with all doors locked. Check that: 1) closing the luggage compartment door triggers the electrical key's wireless buzzer (which lasts approximately 2 seconds), and 2) pressing the power luggage door open switch opens the luggage compartment door.



(2) Inspect the electrical key lock-in prevention's detection area. Pay attention to the direction of the electrical key shown in the illustration. When the electrical key is in either of the 2 inspection points in the illustration, check that: 1) closing the luggage compartment door sounds the electrical key's wireless buzzer, and 2) pressing the power luggage door open switch opens the luggage compartment door.

NOTICE:

If the electrical key is inside a metal storage item, such as a metal

briefcase or metal box, the electrical key will not be detected by the system.

- (3) Inspect the electrical key lock-in prevention's detection area and the entry door control receiver for wave leaks. Hold the electrical key at the same height as the lower edge of the luggage compartment door and align the key with the center of the rear of the vehicle. Pay attention to the direction and position of the electrical key shown in the illustration. When the electrical key is over 0.1 m (0.3 ft) from the vehicle's rear bumper, check that the electrical key's wireless buzzer does not sound.

If the warning buzzer sounds, the entry door control receiver may have a wave leak.

- (g) Check the electrical key cancel function.

- (1) While the engine switch is on (IG), check that the power luggage door open switch, entry ignition, electrical key lock-in prevention and warning are the only switch in the smart access system with push-button start that can be operated.
- (2) While the electrical key cancel function (smart access system with push-button start cancel function) is ON, check that all functions in the smart access system with push-button start cannot be operated.

- (h) Check the answer-back function (hazard warning light flashing and buzzer sounding).

ENTRY OPERATION	HAZARD WARNING LIGHT	BUZZER
Entry Door Lock	Flashes once	Sounds once
Entry Door Unlock	Flashes twice	Sounds twice
Entry Luggage Compartment Door Open	Does not flash	Does not sound

- (i) Check that the electrical key reminder warning buzzer sounds.

- (1) Carry the electrical key in the vehicle and close the driver side door. Then turn the engine switch off or on (ACC). Turn the engine switch off and the steering lock is unlocked or engine switch is on (ACC).
- (2) Open the driver side door and check that the buzzer sounds intermittently.

- (j) Check that the electrical key reminder warning buzzer stops.

- (1) When the buzzer is sounding, check that the buzzer stops sounding if either of the following is performed:
- Close the driver side door (front door courtesy light switch is off).
 - Turn the engine switch on (IG, ACC) and lock the steering lock.

