05IBY–01

ON–VEHICLE INSPECTION

1. NOTES WHEN CHECKING

(a) Power door LOCK/UNLOCK function:

This wireless door lock control operates only when the following 3 conditions are met.

(1) No key is inserted into the key slot.

(2) All the doors are closed.

(3) The power door lock system is functioning normally.

(4) Key is not within the smart key detection area.

HINT:

The UNLOCK function operates even when one of the doors is open.

(b) The wireless transmitter operational range differs depending on the situation.

(1) The operating area differs depending on the user, the way the transmitter is held and the location.

(2) In certain areas, the operating area will be reduced due to the vehicle body shape and the influence of the surrounding environment.

(3) Since the transmitter uses weak electric waves, the operating area might be shortened if noise or strong electric waves occur in the area where the transmitter is used. Or, the transmitter may weak function.

(4) When the battery weakens, the operating area is reduced or the transmitter may not function.

HINT:

If the transmitter has been left in a place that is exposed to direct sunlight, such as on the instrument panel, the battery may weaken or other problems may occur.

2. WIRELESS DOOR LOCK CONTROL FUNCTIONS

HINT:

- The switches described below transmit signals and are built into the door control transmitter.
- The operational range must be taken into account while checks are being made.

(a) Put the vehicle in conditions that allow the wireless control function to be operated (see page 05–1979).

(b) Check basic functions.

(1) Check that the LED of the transmitter lights 3 times when each switch is pressed 3 times.

HINT:

If the LED does not light up when the switch has been pressed 3 times or more, it may have a dead battery.

(2) Check that all the doors including the back door lock when the LOCK switch is pressed.

(3) Check that only the driver side door unlocks when the UNLOCK switch is pressed once, and that the remaining doors unlock when the UNLOCK switch is pressed again within 3 seconds.

(c) Check the chattering prevention function.

(1) Check that pressing a switch will result in the switch's operation occurring only once; and when the switch is held down, the operation is not repeated continuously. Also, make sure that when the switch is pressed in approximately 1 second intervals, the switch's operation will occur each time.

(d) Check the automatic locking function.

(1) Check that if all of the doors are unlocked with the UNLOCK switch and none of the doors are opened or locked within approximately 30 seconds, the door automatically relock.

(2) Check that if all of the doors are unlocked with the UNLOCK switch and a door is opened or locked within approximately 30 seconds, the automatic locking function does not operate.

(e) Check the switch operation fail–safe function.

(1) Check that the doors cannot be locked by a switch while the key is in the key slot. However, this does not apply when the system is in recognition code registration mode.

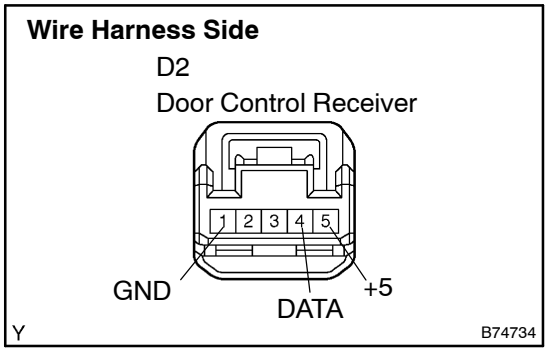
(f) Check the operation stop function when a door is open or not completely closed.
  (1) Check that if a door is open or not completely closed, the doors cannot be locked by the LOCK switch.

(g) Check the repeat function.
  (1) Check that if the LOCK switch is pressed while the movement of the driver side door control knob (in the unlocked state) is restricted, the repeat function attempts to lock all of the doors again 2 seconds later.

(h) Check the answer–back function. (Australia)
  (1) When the LOCK switch is pressed, check that the lamps flash once and the buzzer sounds once simultaneously with the locking of all the doors.
  (2) When the UNLOCK switch is pressed once, check that the lamps flash twice and the buzzer sounds twice simultaneously with the unlocking of the driver side door.
  (3) When the UNLOCK switch is pressed again within 3 seconds, check that the lamps flash twice and the buzzer sounds twice simultaneously with the unlocking of all the doors.

(i) Check the answer–back function. (Except Australia)
  (1) When the LOCK switch is pressed, check that the lamps flash once simultaneously with the locking of all the doors.
  (2) When the UNLOCK switch is pressed once, check that the lamps flash twice simultaneously with the unlocking of the driver side door.
  (3) When the UNLOCK switch is pressed again within 3 seconds, check that the lamps flash twice simultaneously with the unlocking of all the doors.

(j) Check the illuminated entry function.
  (1) When all the doors are locked, pressing the UNLOCK switch causes the room lamp (when the lamp switch is in the DOOR position) to illuminate simultaneously with the unlock operation.
  (2) Check that the room lamp turns off in approximately 15 seconds if doors have not been opened.



3. CHECK DOOR CONTROL RECEIVER

(a) Disconnect the D2 receiver connector.

(b) Measure the voltage and resistance between the terminals of the wire harness side connector and body ground.

Standard:

Tester Connection	Specified Condition
D2–5 (+5) – Body ground	4.6 to 5.4 V
D2–1 – Body ground	Below 1 Ω

If the result is not as specified, there may be a malfunction on the wire harness side.

(c) Reconnect the D2 receiver connector.

(d) Measure the voltage between the terminal and body ground.

Standard:

Tester Connection	Condition	Specified Condition
D2–4 (RDA) – Body ground	No key in key slot, all doors closed and each transmitter switch OFF → ON	Below 1 V → Approx. 6 to 7 V → Below 1 V

If the result is not as specified, the receiver may have a malfunction.