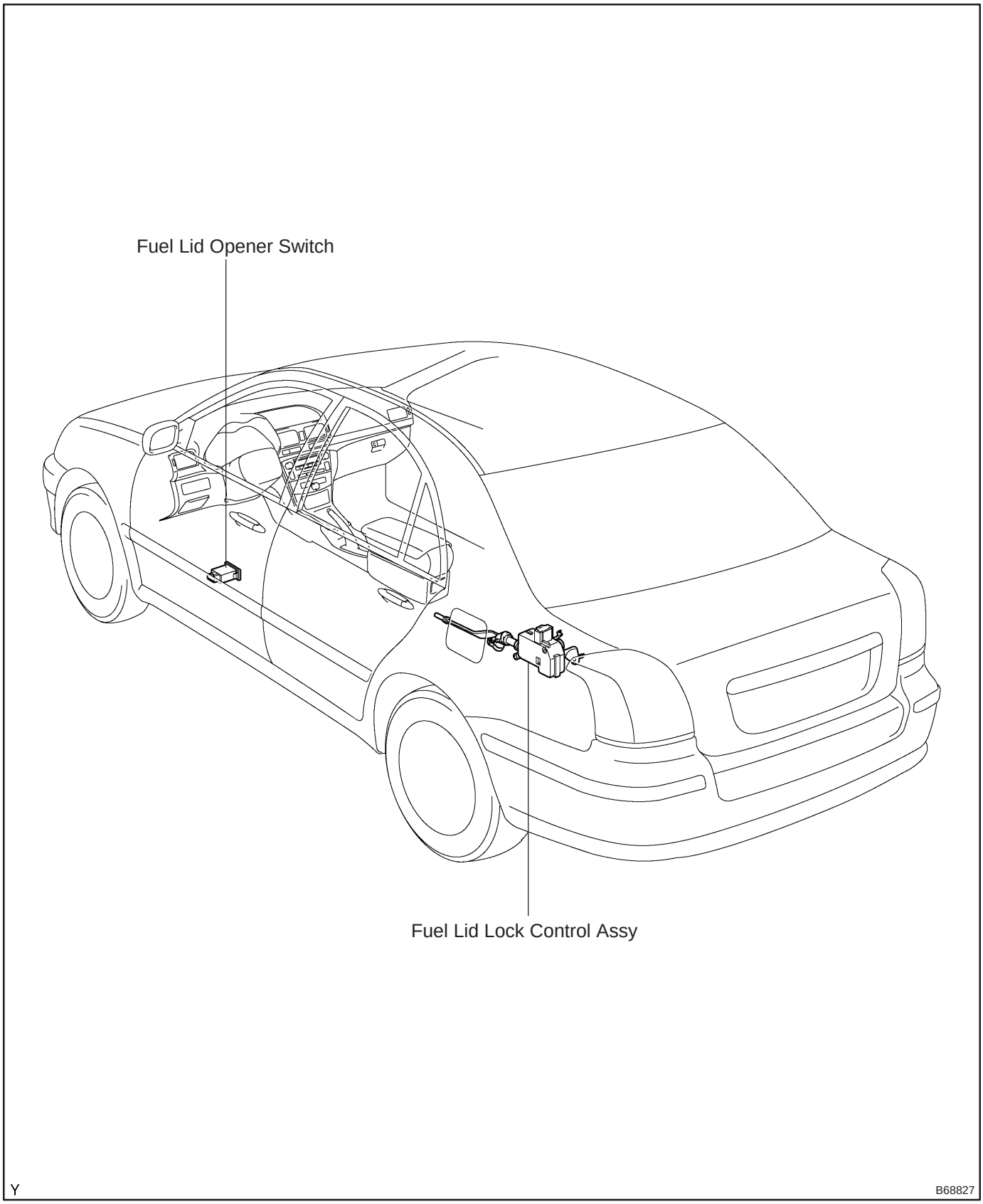
FUEL LID OPENER SYSTEM

LOCATION

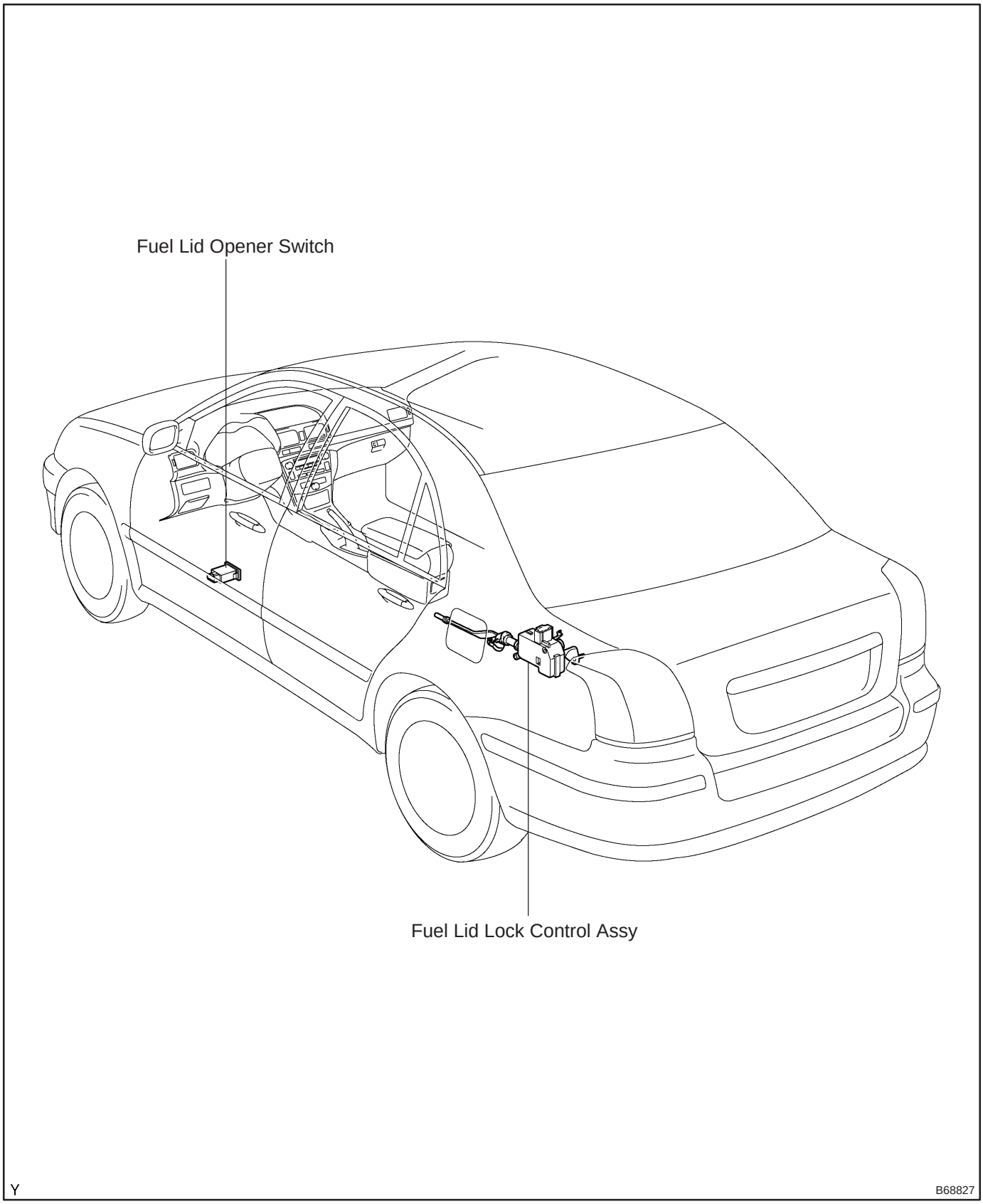
73092–02



FUEL LID OPENER SYSTEM

LOCATION

73092–02



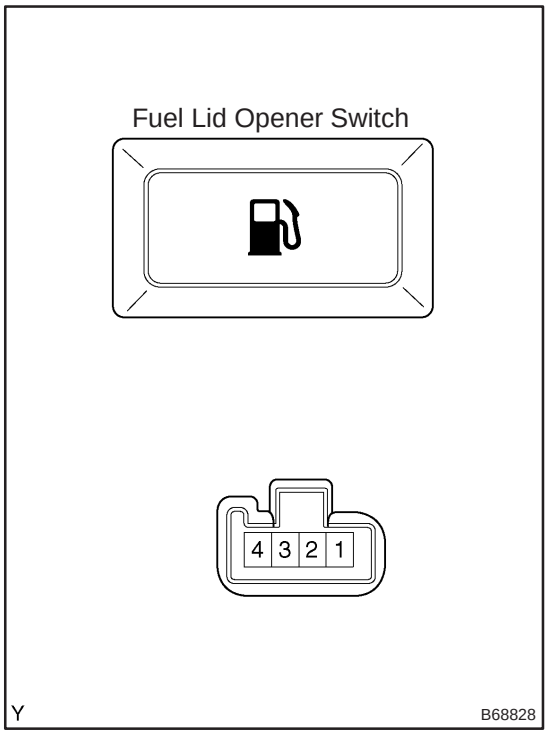
73094–02

PROBLEM SYMPTOMS TABLE

Symptom	Suspected Area	See Page
Fuel lid opener does not operate.	1. FUEL OPN fuse 2. Fuel lid opener switch 3. Fuel lid lock control assy 4. Wire harness	68–1 73–30 73–30

73095–02

INSPECTION



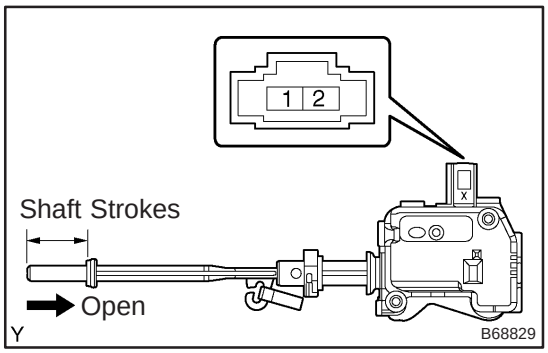
1. INSPECT FUEL LID OPENER SWITCH

(a) Check the switch resistance.

Standard:

Tester Connection	Switch Position	Specified Condition
2 – 3	OFF	10 kΩ or higher
	ON	Below 1 Ω

If the result is not as specified, replace the switch.



2. INSPECT FUEL LID LOCK CONTROL ASSY

(a) Apply battery voltage to the lock control and check the motor operates in the direction.

Standard:

Measurement Condition	Specified Condition
Battery positive (+) → Terminal 2 Battery negative (–) → Terminal 1	Open direction

If the result is not as specified, replace the lock control assy.

(b) Check the shaft strokes.

Standard: 18.0 mm (0.709 in.) or more

KEY REMINDER WARNING SYSTEM

730GU–01

ON–VEHICLE INSPECTION

1. FUNCTION CHECK

(a) Check that the key reminder warning buzzer sounds.
  (1) With the driver side door closed, insert the key into the ignition switch lock cylinder, and then turn the key to LOCK.
  (2) Then, check that the buzzer sounds intermittently when the driver side door is opened.

(b) Check that the key reminder warning buzzer stops.
  (1) Check that the buzzer stops sounding when any of the following operations is done while the buzzer is sounding.
    - Close the driver side door (front door courtesy lamp switch assy is off).
    - Turn the ignition switch ON.
    - Pull out the key from the ignition switch lock cylinder.

POWER DOOR LOCK CONTROL SYSTEM

730GV–01

ON–VEHICLE INSPECTION

1. DOOR LOCK FAIL–SAFE

(a) When a malfunction in the door control switch (manual switch, driver's door lock) has been detected, door lock/unlock operation becomes disabled.

2. CHECK ELECTRICAL DOOR LOCK OPERATION

(a) Check the basic function.

(1) Check that all doors lock when the door control switch (for manual operation) is turned to LOCK and all doors unlock when turned to UNLOCK.

(2) Check that all doors lock when the driver's door is locked from the outside using the key. Check that all doors unlock when the driver's door is unlocked from the outside using the key.

(b) Check the key lock–in prevention function.

NOTICE:

In order to prevent the key from being locked in, the inspection should be made with the driver side door glass open.

(1) Have the key inserted into the ignition key cylinder.

(2) With the driver side door open, check that all doors unlock immediately after the door lock knob for the driver side door is turned to LOCK.

(3) With the driver side door open, check that all doors unlock immediately after the door control switch (for manual operation) is turned to LOCK.

(4) With the driver side door open, turn the driver side door lock knob to LOCK and hold it for 2 seconds or more, and then close the driver side door. Then check that all doors unlock.

(c) Check the security function.

(1) Close all doors with the driver side door glass open so that the door control switch can be operated from outside the vehicle

(2) Pull out the key, open the driver side door and then close and lock the door without using the key. Then, check that all doors do not unlock when the door control switch (for manual operation) is turned to UNLOCK from outside the vehicle.

(3) Pull out the key, close and lock the driver side door by key operation. Under this condition, check that all doors do not unlock when the door control switch (for manual operation) is turned to UNLOCK from outside the vehicle.

(4) Pull out the key, close the driver side door and lock the door by wireless door lock operation. Then, check that all doors do not unlock when the door control switch (for manual operation) is turned to UNLOCK from outside the vehicle.

HINT:

Check that the security function is canceled under the following conditions.

- The ignition switch is turned ON.
- The driver side door is unlocked using the key.
- The door control switch (for manual operation) is turned to UNLOCK after the door control knob is turned to UNLOCK manually.
- The doors are unlocked with wireless operation.

(d) Check the illumination function.
  (1) Set the room light switch in the DOOR position.
  (2) With all doors locked, check that all doors unlock when the driver side door lock cylinder is turned to UNLOCK using the key and that the room right turns on.
  (3) Check that the room light turns off in approx. 15 seconds after the doors have not been opened for a while.

3. w/ Double lock:

CHECK DOUBLE LOCKING FUNCTION SYSTEM

(a) Check that the double locking system is set to ON.
  (1) Open all the windows.
  (2) Turn the ignition switch to LOCK and remove the key.
  (3) Open and close the driver side door, and make sure that all doors including the back door are closed securely.
  (4) Push the LOCK switch on the wireless transmitter twice within 5 seconds, and check that the hazard warning lights flash once at this time to show that the system is set.
  (5) Try to unlock all doors using the inside handle of the vehicle, and check that none of the doors unlock.

NOTICE:

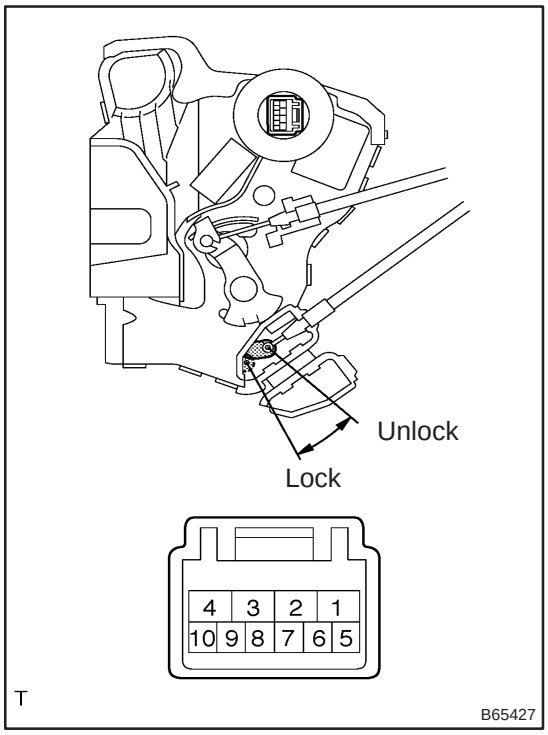
- **The double locking system cannot be set to ON without using the wireless transmitter.**
- **The double locking system operation is not related to the back door.**

(b) Check that the double locking system is set to OFF.
  (1) Push the UNLOCK switch on the wireless transmitter while the double locking system is ON, and check that the hazard warning lights flash twice at this time to show that the system is set to OFF.
  (2) Check that the doors can be opened both by the inside handle and the outside handle.

NOTICE:

If the battery of the wireless transmitter is dead, only the driver side door can be opened using the key. However, the theft deterrent system still remains on. Therefore, be aware that the theft alarm is set off when the door is opened without the use of the wireless transmitter.

INSPECTION



1. INSPECT FRONT DOOR W/MOTOR LOCK ASSY LH (W/O DOUBLE DOOR LOCK)

(a) Apply battery voltage to the door lock motor and check operation.

Standard:

Measurement Condition	Specified Condition
Battery positive (+) → Terminal 4 Battery negative (–) → Terminal 1	Lock
Battery positive (+) → Terminal 1 Battery negative (–) → Terminal 4	Unlock

If the result is not as specified, replace the door lock assy.

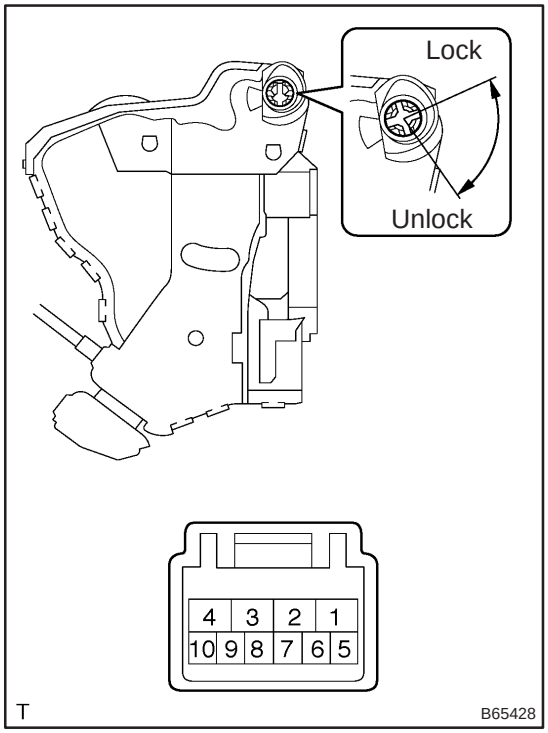
(b) Driver side only:

Check the resistance of the position switch.

Standard:

Tester Connection	Door Lock Position	Specified Condition
7 – 8	Lock	10 kΩ or higher
	Unlock	Below 1 Ω

If the result is not as specified, replace the door lock assy.



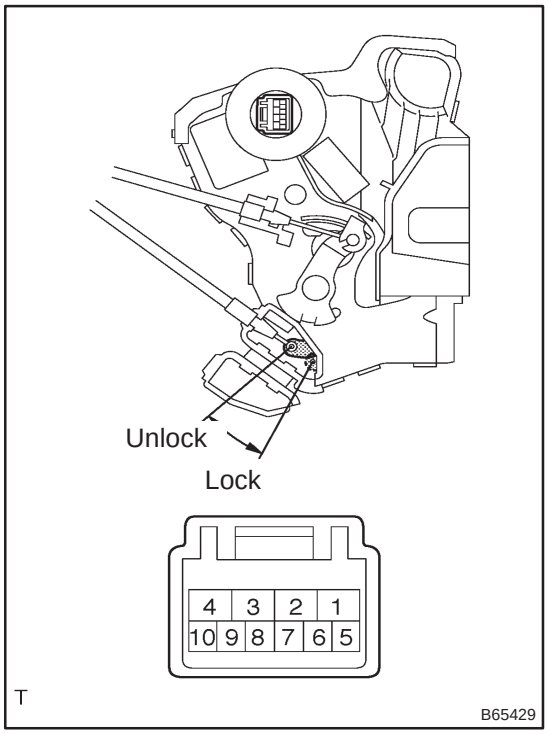
(c) Driver side only:

Check the resistance of the door lock and unlock switch.

Standard:

Tester Connection	Door Lock Position	Specified Condition
7 – 9	Lock	Below 1 Ω
7 – 9	OFF	10 kΩ or higher
7 – 10		
7 – 10	Unlock	Below 1 Ω

If the result is not as specified, replace the door lock assy.



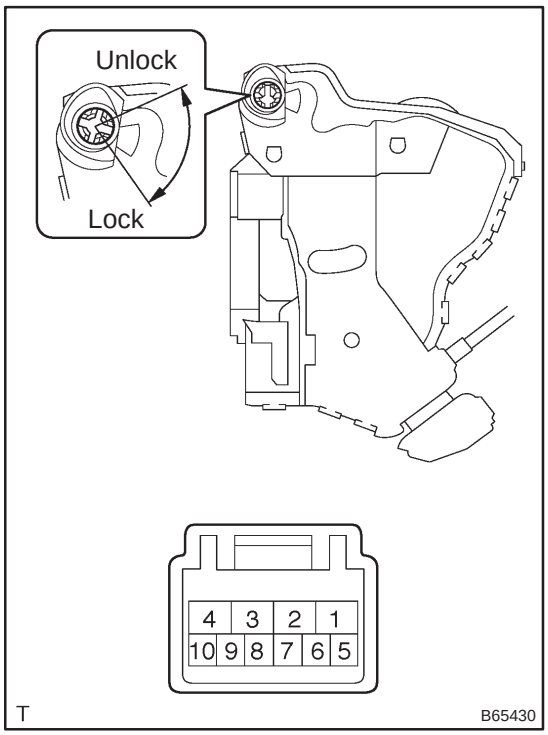
2. INSPECT FRONT DOOR W/MOTOR LOCK ASSY RH (W/O DOUBLE DOOR LOCK)

(a) Apply battery voltage to the door lock motor and check operation.

Standard:

Measurement Condition	Specified Condition
Battery positive (+) → Terminal 4 Battery negative (–) → Terminal 1	Lock
Battery positive (+) → Terminal 1 Battery negative (–) → Terminal 4	Unlock

If the result is not as specified, replace the door lock assy.



(b) Driver side only:

Check the door lock and unlock switch resistance.

Standard:

Tester Connection	Door Lock Position	Specified Condition
6 – 8	Lock	Below 1 Ω
6 – 8	OFF	10 kΩ or higher
5 – 8		
5 – 8	Unlock	Below 1 Ω

If the result is not as specified, replace the door lock assy.

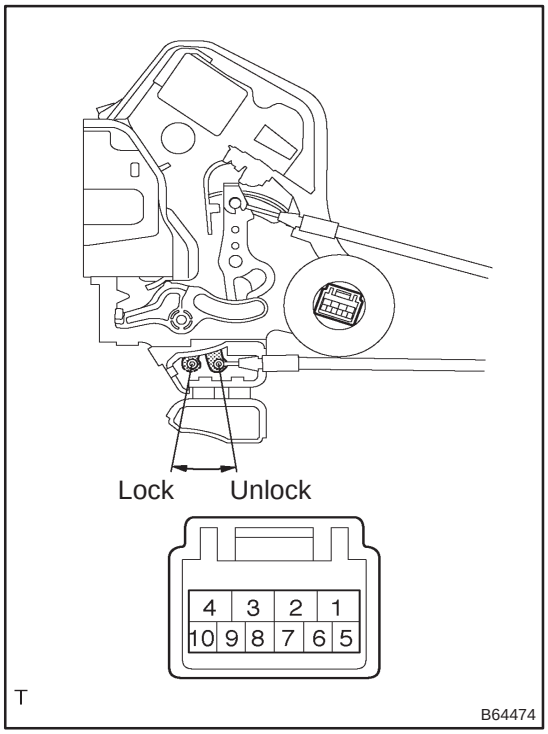
(c) Driver side only:

Check the position switch resistance.

Standard:

Tester Connection	Door Lock Position	Specified Condition
7 – 8	Lock	10 kΩ or higher
	Unlock	Below 1 Ω

If the result is not as specified, replace the door lock assy.



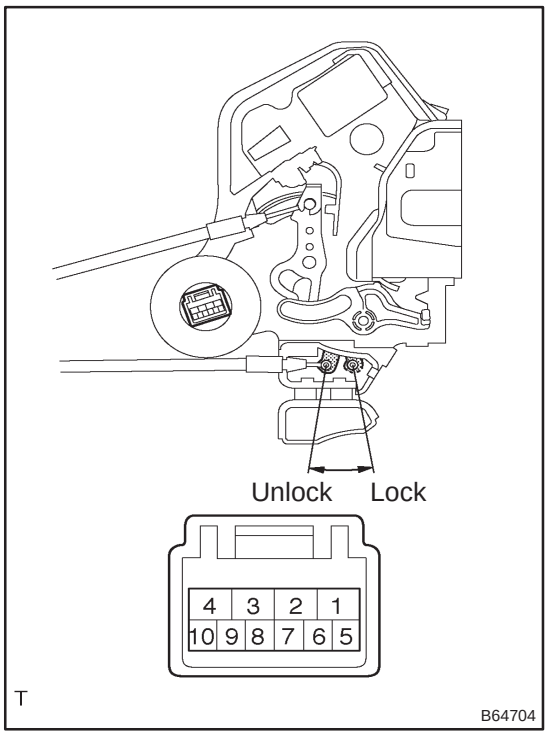
3. INSPECT REAR DOOR W/MOTOR LOCK ASSY LH (W/O DOUBLE DOOR LOCK)

(a) Apply battery voltage to the door lock motor and check operation.

Standard:

MeasurementCondition	SpecifiedCondition
Battery positive (+) → Terminal 4 Battery negative (–) → Terminal 1	Lock
Battery positive (+) → Terminal 1 Battery negative (–) → Terminal 4	Unlock

If the result is not as specified, replace the door lock assy.



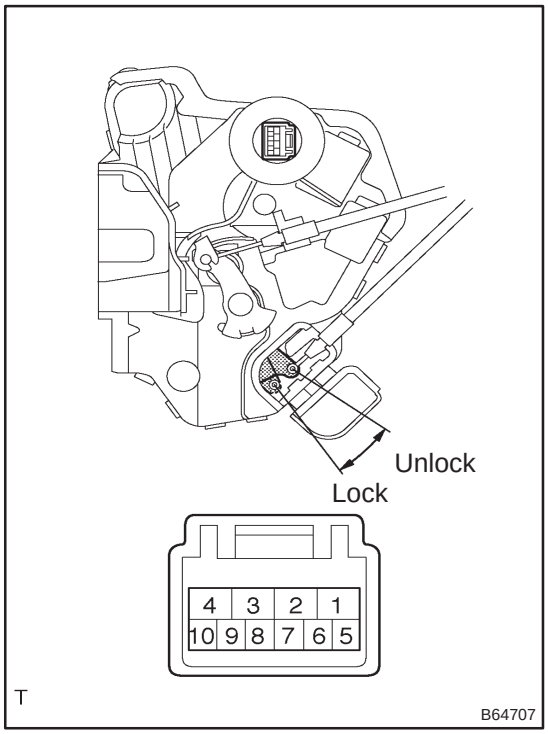
4. INSPECT REAR DOOR W/MOTOR LOCK ASSY RH (W/O DOUBLE DOOR LOCK)

(a) Apply battery voltage to the door lock motor and check operation.

Standard:

MeasurementCondition	SpecifiedCondition
Battery positive (+) → Terminal 4 Battery negative (–) → Terminal 1	Lock
Battery positive (+) → Terminal 1 Battery negative (–) → Terminal 4	Unlock

If the result is not as specified, replace the door lock assy.



5. INSPECT FRONT DOOR W/MOTOR LOCK ASSY LH (W/ DOUBLE DOOR LOCK)

(a) Apply battery voltage to the door lock motor and check operation.

Standard:

MeasurementCondition	SpecifiedCondition
Battery positive (+) → Terminal 4 Battery negative (–) → Terminal 3	Lock
Battery positive (+) → Terminal 3 Battery negative (–) → Terminal 4	Unlock

If the result is not as specified, replace the door lock assy.

(b) Check the resistance of the position switch.

Standard:

Tester Connection	Door Lock Position	SpecifiedCondition
7 – 8	Lock	10 kΩ or higher
	Unlock	Below 1 Ω

If the result is not as specified, replace the door lock assy.

(c) Check operation of the double lock motor.

(1) Apply battery voltage to the door lock motor and set it to LOCK.

(2) Apply battery voltage to the double lock motor and check operation.

Standard:

MeasurementCondition	SpecifiedCondition
Battery positive (+) → Terminal 2 Battery negative (–) → Terminal 1	Double Locking System is ON
Battery positive (+) → Terminal 1 Battery negative (–) → Terminal 2	Double Locking System is OFF

(3) Check that the doors cannot be unlocked by operating the control cable while the double locking system is ON.

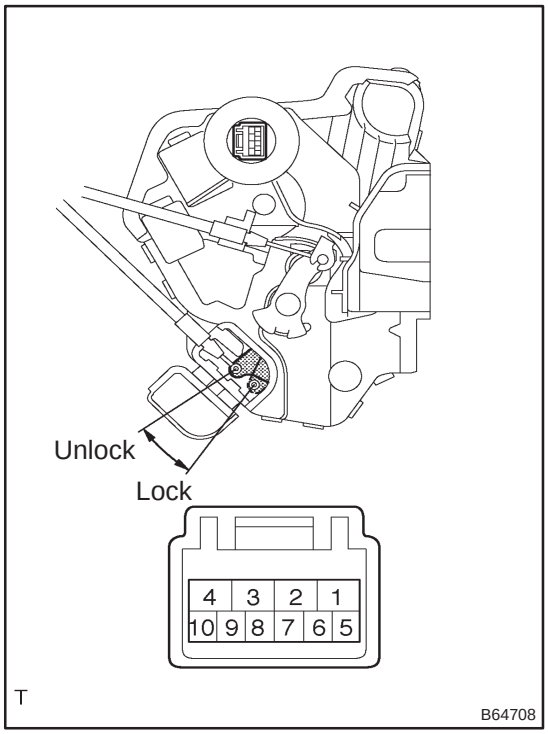
If the result is not as specified, replace the door lock assy.

(d) Check the resistance of the double lock position switch.

Standard:

Tester Connection	Double Lock Position	SpecifiedCondition
5 – 6	SET	Below 1 Ω
	UNSET	10 kΩ or higher

If the result is not as specified, replace the door lock assy.



6. INSPECT FRONT DOOR W/MOTOR LOCK ASSY RH (W/ DOUBLE DOOR LOCK)

(a) Apply battery voltage to the door lock motor and check operation.

Standard:

Measurement Condition	Specified Condition
Battery positive (+) → Terminal 2 Battery negative (–) → Terminal 1	Lock
Battery positive (+) → Terminal 1 Battery negative (–) → Terminal 2	Unlock

If the result is not as specified, replace the door lock assy.

(b) Check the resistance of the position switch.

Standard:

Tester Connection	Door Lock Position	Specified Condition
7 – 8	Lock	10 kΩ or higher
	Unlock	Below 1 Ω

If the result is not as specified, replace the door lock assy.

(c) Check operation of the double lock motor.

(1) Apply battery voltage to the door lock motor and set it to LOCK.

(2) Apply battery voltage to the double lock motor and check operation.

Standard:

Measurement Condition	Specified Condition
Battery positive (+) → Terminal 4 Battery negative (–) → Terminal 3	Double Locking System is ON
Battery positive (+) → Terminal 3 Battery negative (–) → Terminal 4	Double Locking System is OFF

(3) Check that the doors cannot be unlocked by operating the control cable while the double locking system is ON.

If the result is not as specified, replace the door lock assy.

(d) Check the resistance of the double lock position switch.

Standard:

Tester Connection	Double Lock Position	Specified Condition
9 – 10	SET	Below 1 Ω
	UNSET	10 kΩ or higher

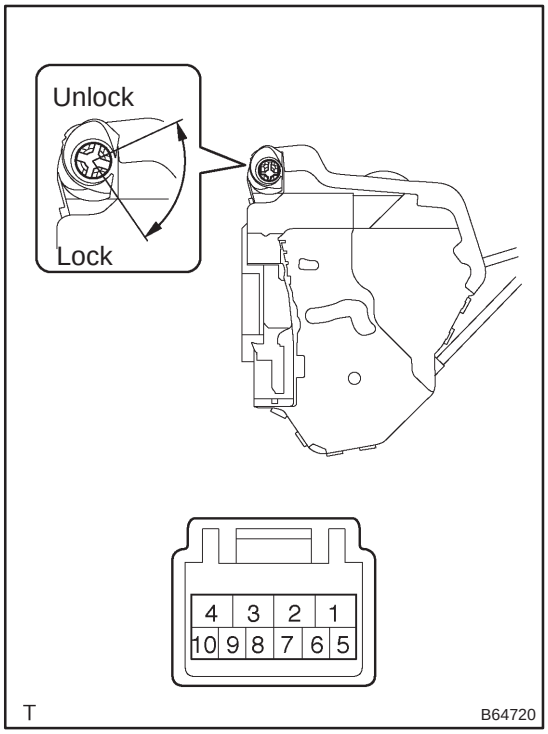
If the result is not as specified, replace the door lock assy.

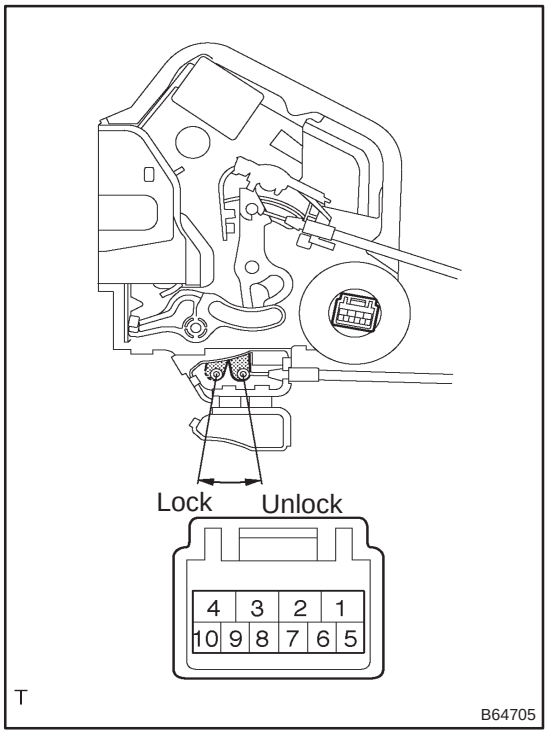
(e) Check the resistance of the door lock and unlock switch.

Standard:

Tester Connection	Door Lock Position	Specified Condition
6 – 8	Lock	Below 1 Ω
6 – 8	OFF	10 kΩ or higher
5 – 8		
5 – 8	Unlock	Below 1 Ω

If the result is not as specified, replace the door lock assy.





7. INSPECT REAR DOOR W/MOTOR LOCK ASSY LH (W/ DOUBLE DOOR LOCK)

(a) Apply battery voltage to the door lock motor and check operation.

Standard:

MeasurementCondition	SpecifiedCondition
Battery positive (+) → Terminal 2 Battery negative (–) → Terminal 1	Lock
Battery positive (+) → Terminal 1 Battery negative (–) → Terminal 2	Unlock

If the result is not as specified, replace the door lock assy.

(b) Check the resistance of the position switch.

Standard:

Tester Connection	Door Lock Position	SpecifiedCondition
5 – 6	Lock	Below 1 Ω
	Unlock	10 kΩ or higher

If the result is not as specified, replace the door lock assy.

(c) Check operation of the double lock motor.

(1) Apply battery voltage to the door lock motor and set it to LOCK.

(2) Apply battery voltage to the double lock motor and check operation.

Standard:

MeasurementCondition	SpecifiedCondition
Battery positive (+) → Terminal 4 Battery negative (–) → Terminal 3	Double Locking System is ON
Battery positive (+) → Terminal 3 Battery negative (–) → Terminal 4	Double Locking System is OFF

(3) Check that the doors cannot be unlocked by operating the control cable while the double locking system is ON.

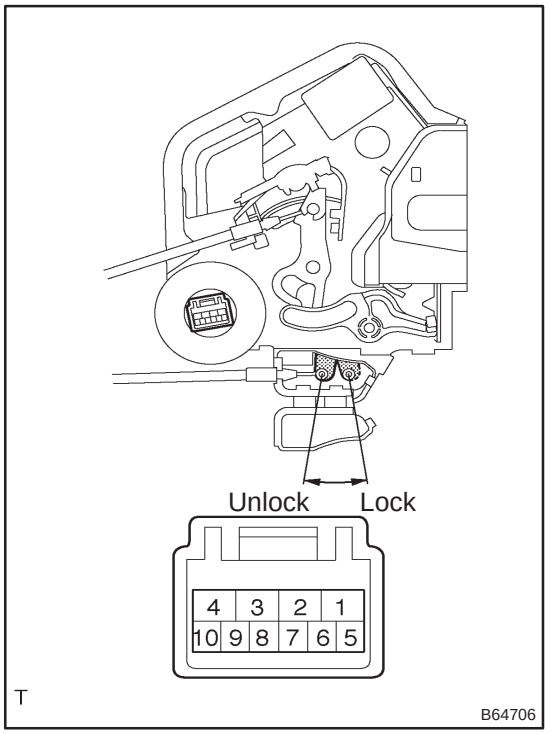
If the result is not as specified, replace the door lock assy.

(d) Check the resistance of the double lock position switch.

Standard:

Tester Connection	Double Lock Position	SpecifiedCondition
9 – 10	SET	Below 1 Ω
	UNSET	10 kΩ or higher

If the result is not as specified, replace the door lock assy.



8. INSPECT REAR DOOR W/MOTOR LOCK ASSY RH (W/ DOUBLE DOOR LOCK)

(a) Apply battery voltage to the door lock motor and check operation.

Standard:

MeasurementCondition	SpecifiedCondition
Battery positive (+) → Terminal 4 Battery negative (–) → Terminal 3	Lock
Battery positive (+) → Terminal 3 Battery negative (–) → Terminal 4	Unlock

If the result is not as specified, replace the door lock assy.

(b) Check the resistance of the position switch.

Standard:

Tester Connection	Door Lock Position	SpecifiedCondition
9 – 10	Lock	Below 1 Ω
	Unlock	10 kΩ or higher

If the result is not as specified, replace the door lock assy.

(c) Check operation of the double lock motor.

(1) Apply battery voltage to the door lock motor and set it to LOCK.

(2) Apply battery voltage to the double lock motor and check operation.

Standard:

MeasurementCondition	SpecifiedCondition
Battery positive (+) → Terminal 2 Battery negative (–) → Terminal 1	Double Locking System is ON
Battery positive (+) → Terminal 1 Battery negative (–) → Terminal 2	Double Locking System is OFF

(3) Check that the doors cannot be unlocked by operating the control cable while the double locking system is ON.

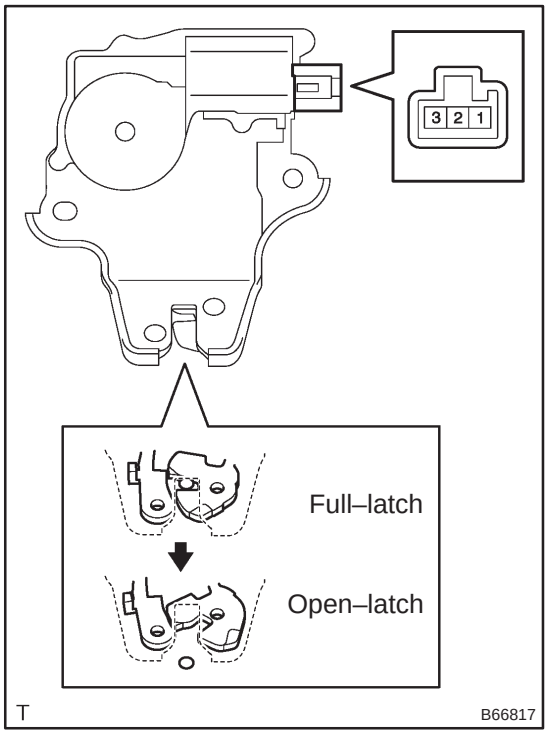
If the result is not as specified, replace the door lock assy.

(d) Check the resistance of the double lock position switch.

Standard:

Tester Connection	Double Lock Position	SpecifiedCondition
5 – 6	SET	Below 1 Ω
	UNSET	10 kΩ or higher

If the result is not as specified, replace the door lock assy.



9. INSPECT BACK DOOR LOCK ASSY (SEDAN MODELS)

(a) Check operation of the door lock.

(1) Using a screwdriver, push the latch in order to put the back door lock in the locked condition (full–latch position).

(2) Apply battery voltage to the door lock and check operation of the latch.

Standard:

Measurement Condition	Specified Condition
Battery positive (+) → Terminal 1 Battery negative (–) → Terminal 3	Latch turns to open–latch position

If the result is not as specified, replace the door lock assy.

(b) Apply battery voltage to the door lock motor and check motor operation.

Standard:

Measurement Condition	Specified Condition
Battery positive (+) → Terminal 3 Battery negative (–) → Terminal 1	Clockwise (Motor in normal rotation)
Battery positive (+) → Terminal 1 Battery negative (–) → Terminal 3	Counterclockwise (Motor in reverse rotation)

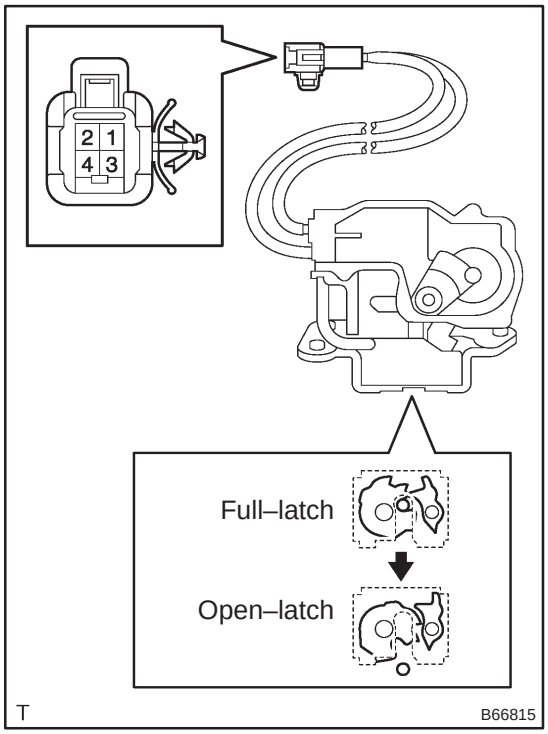
If the result is not as specified, replace the door lock assy.

(c) Check the resistance of the courtesy switch.

Standard:

Tester Connection	Door Lock Latch Position	Specified Condition
2 – 3	Open–latch position	Below 1 Ω
	Full–latch position	10 kΩ or higher

If the result is not as specified, replace the door lock assy.



10. INSPECT BACK DOOR LOCK ASSY (WAGON MODELS)

(a) Check operation of the door lock.

(1) Using a screwdriver, push the latch in order to put the back door lock in the locked condition (full–latch position).

(2) Apply battery voltage to the door lock and check operation of the latch.

Standard:

Measurement Condition	Specified Condition
Battery positive (+) → Terminal 4 Battery negative (–) → Terminal 3	Latch turns to open–latch position

If the result is not as specified, replace the door lock assy.

(b) Apply battery voltage to the door lock motor and check motor operation.

Standard:

Measurement Condition	Specified Condition
Battery positive (+) → Terminal 4 Battery negative (–) → Terminal 3	Clockwise (Motor in normal rotation)
Battery positive (+) → Terminal 3 Battery negative (–) → Terminal 4	Counterclockwise (Motor in reverse rotation)

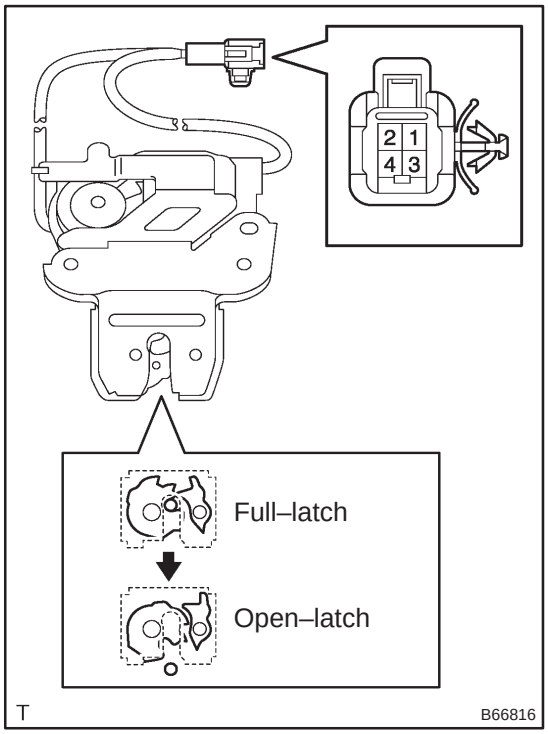
If the result is not as specified, replace the door lock assy.

(c) Check the resistance of the courtesy switch.

Standard:

Tester Connection	Door Lock Latch Position	Specified Condition
1 – 2	Open–latch position	Below 1 Ω
	Full–latch position	10 kΩ or higher

If the result is not as specified, replace the door lock assy.



11. INSPECT BACK DOOR LOCK ASSY (LIFTBACK MODELS)

(a) Check operation of the door lock.

(1) Using a screwdriver, push the latch in order to put the back door lock in the locked condition (full–latch position).

(2) Apply battery voltage to the door lock and check operation of the latch.

Standard:

Measurement Condition	Specified Condition
Battery positive (+) → Terminal 4 Battery negative (–) → Terminal 3	Latch turns to open–latch position

If the result is not as specified, replace the door lock assy.

(b) Apply battery voltage to the door lock motor and check motor operation.

Standard:

Measurement Condition	Specified Condition
Battery positive (+) → Terminal 4 Battery negative (–) → Terminal 3	Clockwise (Motor in normal rotation)
Battery positive (+) → Terminal 3 Battery negative (–) → Terminal 4	Counterclockwise (Motor in reverse rotation)

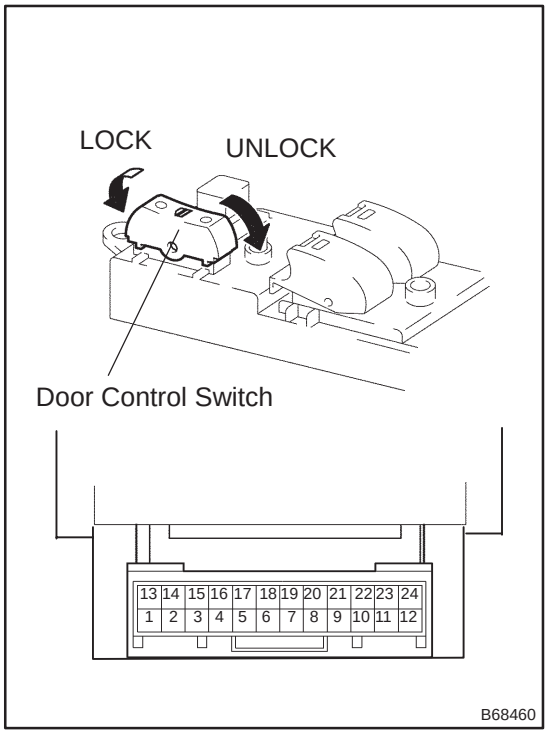
If the result is not as specified, replace the door lock assy.

(c) Check the resistance of the courtesy switch.

Standard:

Tester Connection	Door Lock Latch Position	Specified Condition
1 – 2	Open–latch position	Below 1 Ω
	Full–latch position	10 kΩ or higher

If the result is not as specified, replace the door lock assy.



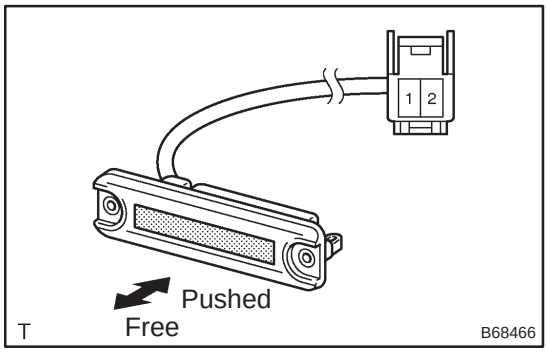
12. INSPECT POWER WINDOW REGULATOR MASTER SWITCH ASSY

(a) Check the resistance of the door control switch.

Standard:

Tester Connection	Door Lock Position	Specified Condition
7 – 8	Lock	Below 1 Ω
7 – 8	OFF	10 kΩ or higher
5 – 7		
5 – 7	Unlock	Below 1 Ω

If the result is not as specified, replace the switch assy.



13. INSPECT BACK DOOR OPENER SWITCH ASSY

(a) Check the resistance of the switch.

Standard:

Tester Connection	Switch Position	Specified Condition
1 – 2	Free	10 kΩ or higher
	Pushed	Below 1 Ω

If the result is not as specified, replace the door lock assy.

THEFT DETERRENT SYSTEM

730G8–01

ON–VEHICLE INSPECTION

1. OUTLINE OF THEFT DETERRENT SYSTEM

(a) When the theft deterrent system detects that the vehicle is being tampered with, the system sets off the alarm, causing the horns to sound and the lights to light up or blink in order to alert people around the vehicle to the theft.

(b) The theft deterrent system has an active arming mode; a disarmed state, an arming preparation state, an armed state and an alarm sounding state.

(1) Disarmed state:
- The alarm function is not operating.
- The theft deterrent system is not operating.

(2) Arming preparation state:
- The time until the system goes into the armed state.
- The theft deterrent system is not operating.

(3) Armed state:
- The theft deterrent system is operating.

HINT:

If the vehicle remains in a condition that sets off the alarm (any door remains open, engine hood remains open, ignition switch remains directly connected) after the alarm ends, the alarm will be set off repeatedly a maximum of 10 times for every one of the above specified conditions.

Alarm time: Approx. 27.5 sec. x 10

(4) Alarm sounding state:

When the theft deterrent system detects that the vehicle is being tampered with while in the armed state, the system causes the horns to sound and the lights to light up or blink in order to alert people around the vehicle to the theft.

Refer to table below for alarm method and time:

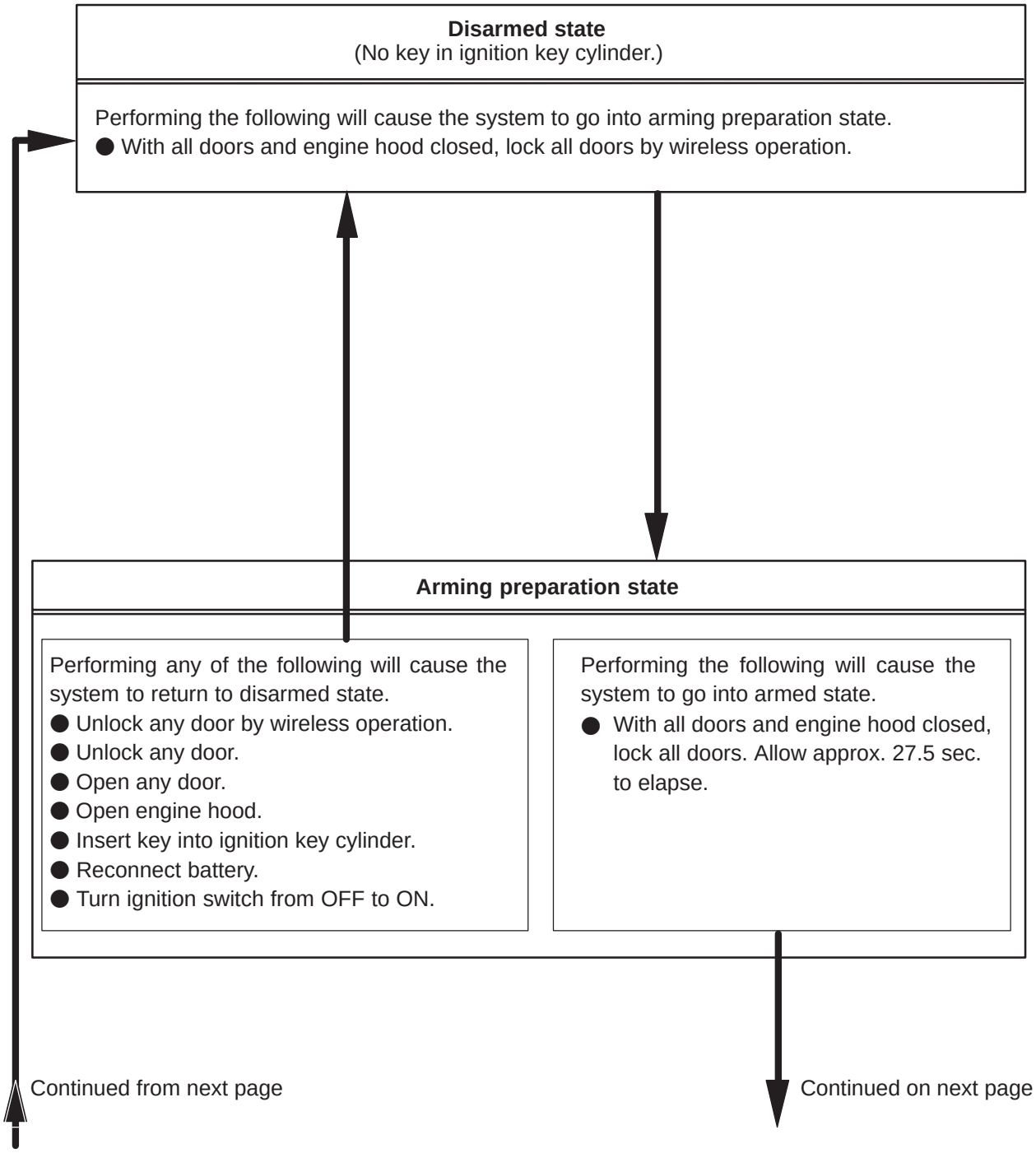
Alarm Method	Hazard Warning Lamp	Blinking (Cycle of flasher relay)
	Room Lamp	Illuminating
	Vehicle Horn	Sounding (Cycle of 0.4 sec.)
	Self–power Siren	Sounding (Cycle of 0.4 sec.)
Alarm Time	Approx. 27.5 sec. (Maximum 10 times)	

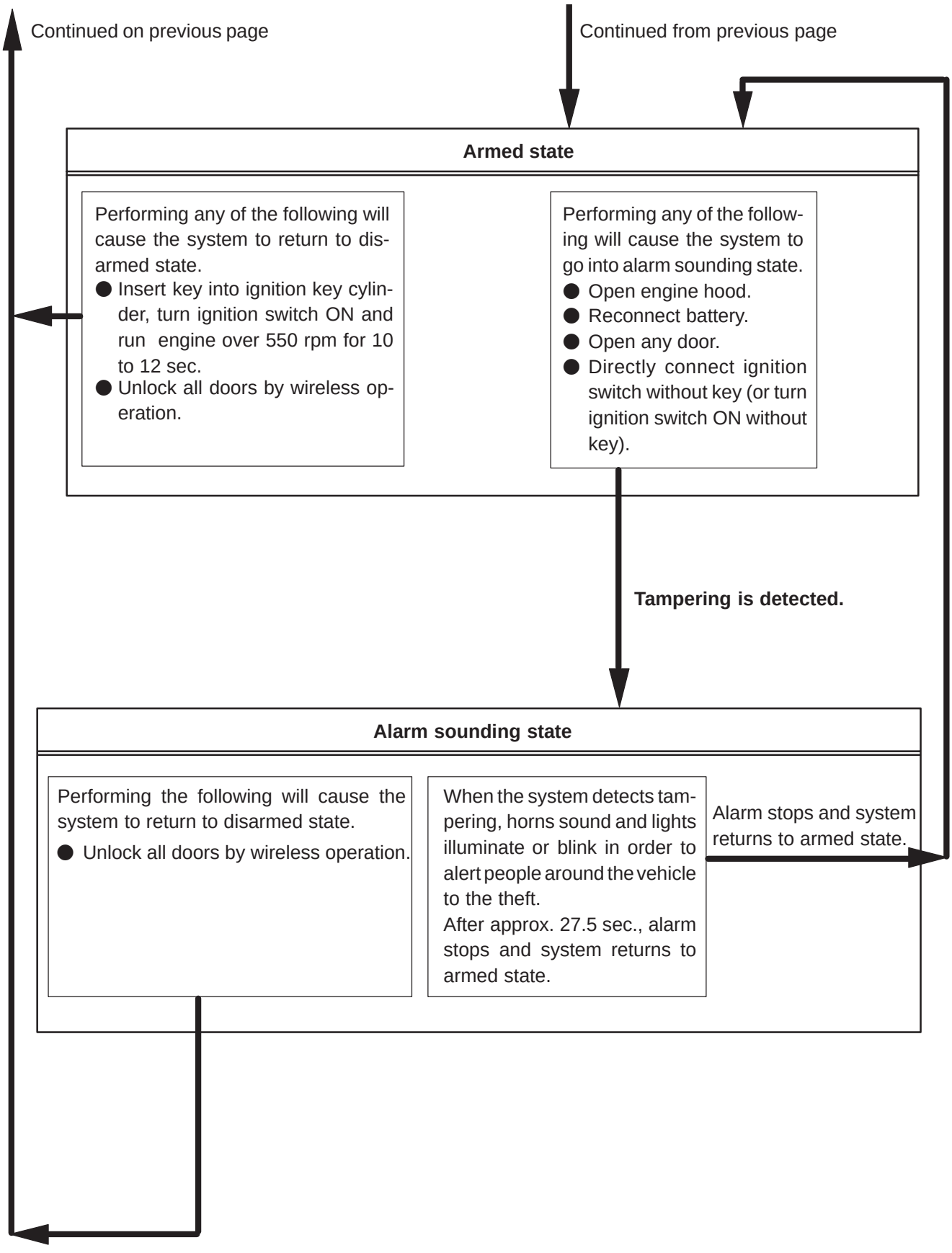
HINT:

If any of the doors are unlocked with no key in the ignition key cylinder during the armed state, a forced door lock signal will be output (See step 3).

2. ACTIVE ARMING MODE

- Active arming mode starts the alarm control right when the doors are locked.

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Armed state
Performing any of the following will cause the system to return to disarmed state.
● Insert key into ignition key cylinder, turn ignition switch ON and run engine over 550 rpm for 10 to 12 sec.
● Unlock all doors by wireless operation.
Performing any of the following will cause the system to go into alarm sounding state.
● Open engine hood.
● Reconnect battery.
● Open any door.
● Directly connect ignition switch without key (or turn ignition switch ON without key).
Tampering is detected.
Alarm sounding state
Performing the following will cause the system to return to disarmed state.
● Unlock all doors by wireless operation.
When the system detects tampering, horns sound and lights illuminate or blink in order to alert people around the vehicle to the theft.
After approx. 27.5 sec., alarm stops and system returns to armed state.
Alarm stops and system returns to armed state.
Alarm sounding state is canceled.

3. FORCED DOOR LOCK CONTROL

(a) The forced door lock control prevents the vehicle from being tampered with. Immediately after a door is unlocked (alarm starts), the door is forced to lock by a forced door lock signal.

(1) Conditions that force the doors to lock:

When no key is in the ignition key cylinder and 0.4 seconds have elapsed after the previous output of a forced door lock signal, the doors will be forced to lock if any of the following conditions is present.

- The theft deterrent system is in the armed state of active arming mode.
- All the doors are locked. → Any door is unlocked.
- Any door is unlocked.

HINT:

Only Europe:

Forced door lock control does not operate if any door is unlocked by key.

4. ALARM MEMORY FUNCTION

(a) If the alarm is set off (tampering is detected) while the theft deterrent system is set, the alarm memory function will record it. Whenever you cancel the theft deterrent system, the alarm memory function causes the taillights to light up for 2 seconds in order to inform you that the alarm has been set off.

(1) Conditions of the alarm memory function that cause the taillights to light up:

When the theft deterrent system has entered into the alarm sounding state (tampering has been detected) even once, the taillights will light up for 2 seconds if any of the following conditions is present.

- Switched to the disarmed state from the armed state.

5. SECURITY INDICATOR OUTPUT

(a) The theft warning ECU outputs a signal to light up the security indicator, according to the state of the theft deterrent system. However, some of the actual lighting conditions of the security indicator are different from the outputs of the theft warning ECU.

Output:

State of Theft Deterrent System	Security Indicator	
	Output Signals from Theft Warning ECU	Actual Lighting Condition
Disarmed state	OFF	OFF (Immobiliser system unset) BLINKING (Immobiliser system set)
Arming preparation state	ON	ON
Armed state	OFF	BLINKING
Alarm sounding state	ON	ON

Blinking cycle:

Time	Security Indicator
0.2 sec.	ON
1.8 sec.	OFF

HINT:

When the immobiliser system is set, the security indicator blinks during the disarmed state and the armed state, due to the output signals from the immobiliser system.

6. INTRUSION (THEFT WARNING) SENSOR

(a) Function of the intrusion sensor:

The intrusion sensor (theft warning redar sensor) senses any moving object by using ultrasonic waves and outputs the signals to communicate an intrusion to the theft warning ECU so that the theft deterrent system can set off the alarm.

When the theft deterrent system is switched to the arming preparation state, the intrusion sensor is supplied with S+B by the theft warning ECU. This causes the theft deterrent system to set off the alarm when the signal is input from the intrusion sensor in a situation such as the window glass being broken.

(b) Press the intrusion sensor OFF switch.

HINT:

The theft deterrent system can be set (switched to the arming preparation state) with the intrusion sensor OFF when an animal is left inside the vehicle.

(1) Make sure that the theft deterrent system is in the disarmed state.

(2) Press the intrusion sensor OFF switch once.

HINT:

The intrusion sensor and the OFF switch are provided on the roof console box in the vehicle front interior.

NOTICE:

The intrusion sensor returns to ON (initial state) when the doors are unlocked by the wireless operation.

7. THEFT WARNING (SELF–POWER) SIREN

(a) The theft warning siren has an internal battery. If any of the vehicle's battery or communication lines are opened, the theft warning siren detects it by itself and sounds. Although the theft warning siren usually sounds by receiving a signal from the theft warning ECU usually, the theft warning siren can sound using its internal battery in case that the vehicle's battery is opened.

(b) The theft warning ECU sends an arming signal to the theft warning siren while transferring to the armed state, as well as sending a disarming signal to the siren while transferring to the disarmed state. Additionally, the theft warning ECU can sound the theft warning siren by sending an alarm signal in the alarm sounding state.

TRANSMITTER BATTERY

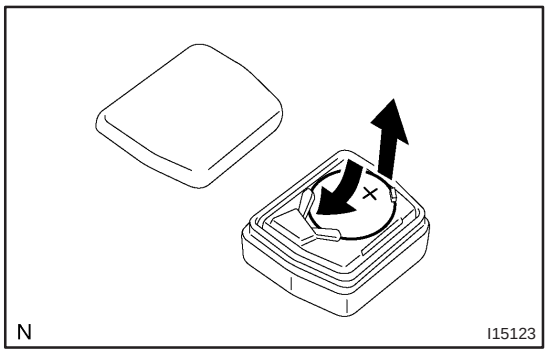
730EW–02

REPLACEMENT

1. REMOVE TRANSMITTER SUB–ASSY MODULE SET DOOR CONTROL (See page 73–18)

NOTICE:

Special caution should be taken for handling each component as they are precision electronic components.



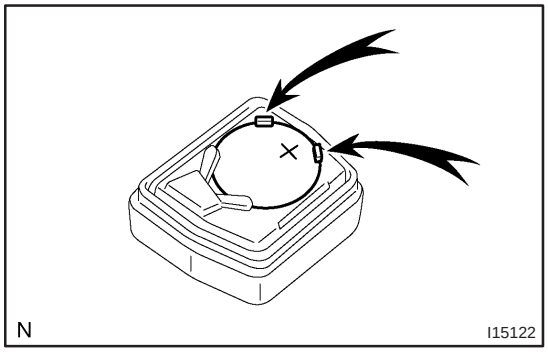
2. REMOVE TRANSMITTER BATTERY

(a) Remove the cover.

(b) Remove the transmitter battery (lithium battery).

NOTICE:

- **Do not push the terminals with your finger.**
- **Prying up the battery (lithium battery) to forcibly remove it will cause deformation of the terminals.**
- **Do not touch the battery with wet hands. Water may cause unexpected rust.**
- **Do not touch or move any components inside the transmitter as it may interfere with proper operation.**



3. INSTALL TRANSMITTER BATTERY

(a) Install a new battery (lithium battery) with the positive (+) side up, as shown in the illustration.

NOTICE:

- **Be sure that the positive side and the negative side of the transmitter battery are matched–up correctly.**
- **Be careful not to bend the electrode of the transmitter battery insertion.**
- **Be careful that dust or oil does not adhere to the transmitter case.**

(b) Install the cover.

NOTICE:

If the screws are loose, it may cause faulty contact between the battery (lithium battery) and the terminals.

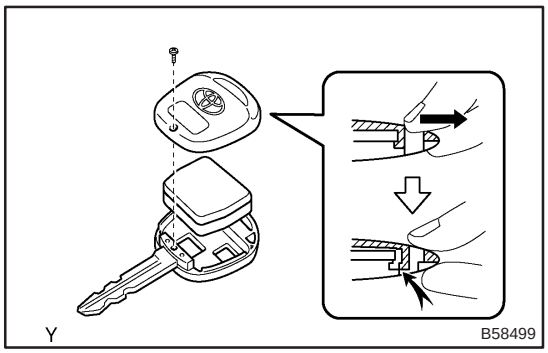
TRANSMITTER SUB–ASSY MODULE SET DOOR CONTROL

730EX–03

REPLACEMENT

HINT:

The installation is in the reverse order of the removal.



1. REMOVE TRANSMITTER SUB–ASSY MODULE SET DOOR CONTROL

NOTICE:

Special caution should be taken when handling each component as they are precise electronic components.

(a) Using a screwdriver, remove the screw.

(b) Push the cover with your finger as shown in the illustration so a gap appears. Then, pry out the cover using that gap.

NOTICE:

Do not forcibly pry up the cover.

730EZ–03

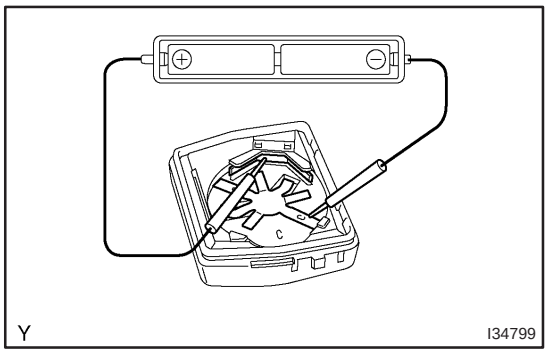
INSPECTION

1. INSPECT TRANSMITTER SUB–ASSY MODULE SET DOOR CONTROL

(a) Inspect operation of the transmitter.

(1) Remove the battery (lithium battery) from the transmitter (See page 73–17).

(2) Install a new or normal battery (lithium battery).



HINT:
When a new or normal battery is not available, connect 2 new 1.5 V batteries in a series, connect the battery positive (+) to the battery receptacle side terminal and battery negative (–) to the bottom terminal, then apply 3 V of voltage to the transmitter.

(3) In a location that is approx. 1 m (3.28 ft) away from the driver side outside door handle in the right direction, point the key plate of the transmitter at the vehicle and check operation of the transmitter by pressing the transmission switch on the transmitter body.

Standard:

The door lock can be operated via the remote control.

The LED lights up more than once.

HINT:

- The minimum operational distance differs, depending on the operator, the way the transmitter is held, and the location.
- Since the transmitter uses faint electric waves, the operational distance might be shortened if noise or strong electric wave occurs in the area where the frequency is used.

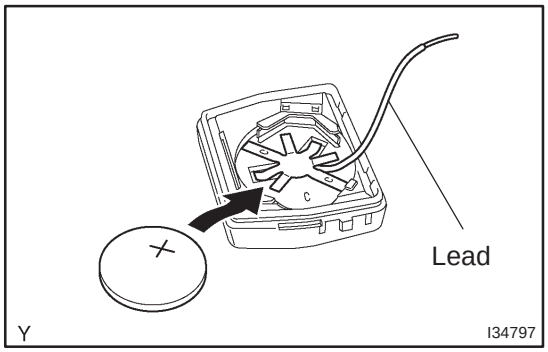
(4) Install the battery (lithium battery).

(b) Inspect the battery capacity.

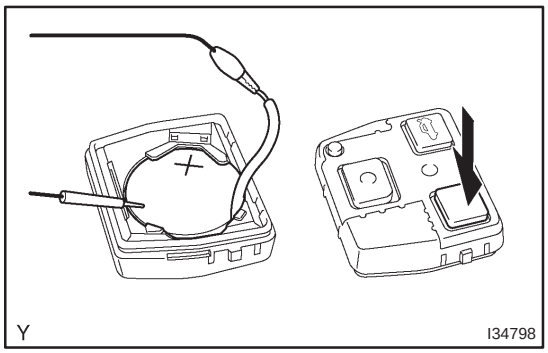
HINT:

- The capacity of the battery can be determined only when the battery is installed in the transmitter. For a lithium battery used in the transmitter, a voltage of more than 2.5 V is shown on the tester until the energy is completely consumed, while no battery is installed in the transmitter. Therefore, it is necessary to measure the voltage while the battery is installed in the transmitter (a resistance of 1.2 kΩ is applied to the battery) when checking the amount of energy left in the battery.
- If the transmitter is faulty, the amount of energy left in the battery might not be checked correctly.

(1) Remove the battery (lithium battery) from the transmitter (See page 73–17).



(2) Connect the lead to the negative (–) terminal of the transmitter and install the battery.



(3) Connect the tester positive (+) probe to the (+) battery (lithium battery) and the tester negative (–) probe to the lead respectively.
(4) Press one of the transmission switches on the transmitter for approx. 1 second.
(5) Press the transmission switch on the transmitter again to check the voltage.

Standard: 2.2 V or higher

HINT:

- When the temperature of the battery is low, the inspection can not be made correctly.
  When the outcome of the test is less than 2.2 V, conduct the test again after leaving the battery in a place with a temperature of 18°C (64°F) for more than 30 minutes.
- The automatic power–off function causes the voltage of the battery to be 2.5 V or more (a voltage with no resistance applied to the battery) when 0.8 seconds have passed after the switch is pressed. Therefore, make sure to read the voltage just after the switch is pressed.
- Because high voltage might be shown once or twice after the battery returns to the specified temperature, the inspection should be made with the voltage shown after the switch is pressed at least 3 times.

(6) Disconnect the lead.
(7) Set the battery (lithium battery) in the transmitter.

730EY–02

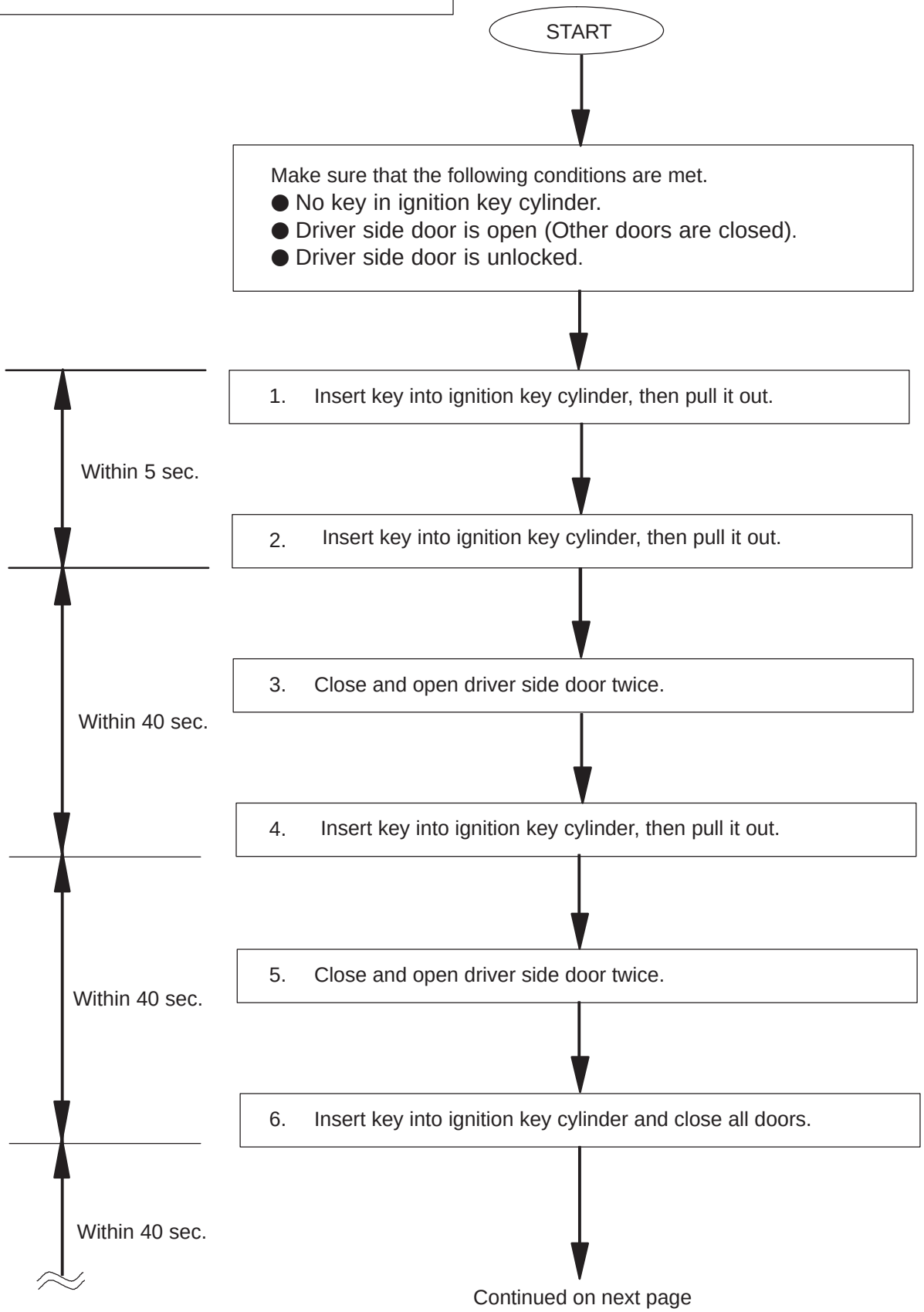
REGISTRATION

1. REGISTER RECOGNITION CODE

HINT:

- Register the recognition code when replacing the door control transmitter or the door control receiverr.
- The add mode is used to register new recognition codes while still retaining codes already registered. This mode is used when a new transmitter is added. If the number of registered codes exceeds 4, the previously registered codes will be erased in order, starting from the first registered code.
- The rewrite mode is used to erase all the previously registered recognition codes in order to register new recognition codes. This mode is used when the transmitter or the door control receiver is exchanged for a new one.
- The confirmation mode is used to confirm how many recognition codes have already been registered before an additional registration of a recognition codes.
- The all clear mode is used to erase all the registered codes and disables the wireless door lock function. This mode is used when the transmitter is lost.
- All the following registration procedures must be performed in order continuously.

Flow Chart of Recognition Code Registration



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Mode Selection:

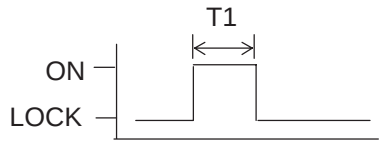
7. Turn ignition switch from LOCK to ON and back to LOCK at approximately 1 second intervals according to the number of times shown below.

Number of ON–LOCK operations of ignition switch:

Add Mode

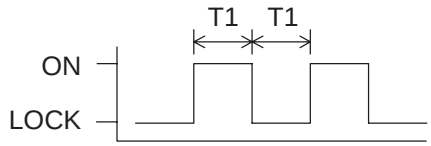
ON–LOCK operation: 1 time

T1: Approx. 1 sec.



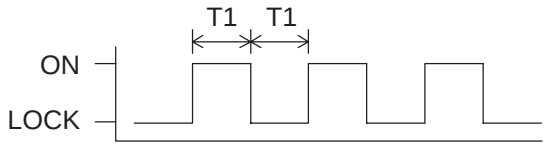
Rewrite Mode

ON–LOCK operation: 2 times



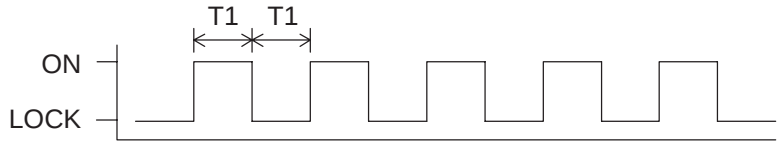
Confirmation Mode

ON–LOCK operation: 3 times



All Clear Mode

ON–LOCK operation: 5 times



If the number of the ON–LOCK operations of the ignition switch is 0, 4 or 6 or more, there will be no response (power door lock and unlock operation) to inform which mode has been selected.

Within 40 sec.

8. Remove key from ignition key cylinder.

Within 3 sec.

Continued on next page

Within 3 sec.

Continued from previous page

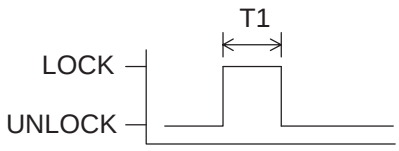
Response to selected mode (Power door lock operation):

Integration relay automatically performs power door LOCK–UNLOCK operation to inform which mode has been selected.

Add Mode

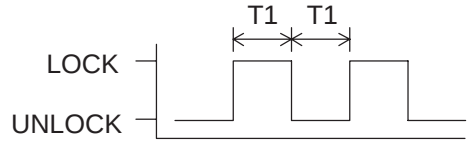
LOCK–UNLOCK operation: 1 time

T1: Approx. 1 sec.
T2: Approx. 2 sec.



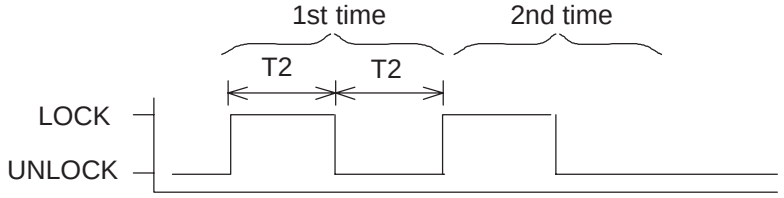
Rewrite Mode

LOCK–UNLOCK operation: 2 times



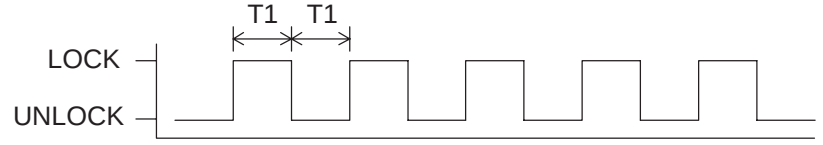
Confirmation Mode

LOCK–UNLOCK operation: The number of registered codes (1 – 5 times)



All Clear Mode

LOCK–UNLOCK operation: 5 times



HINT:

● In the confirmation mode, when LOCK–UNLOCK operation is performed twice, the number of registered recognition codes is 2.

● In the confirmation mode, when 0 codes are registered, LOCK–UNLOCK operation is automatically performed 5 times.

Within 40 sec.

Add Mode or Rewrite Mode

Continued on next page

Confirmation Mode and All Clear Mode

Registration procedures are completed.

Continued from previous page

Within 40 sec.

9. Press either LOCK or UNLOCK switch on transmitter once.

Within 3 sec.

10. Press the same switch again.

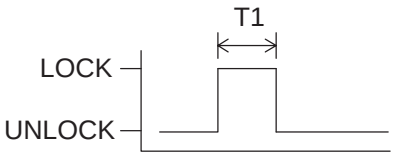
Within 3 sec.

Response to registration completion:

Integration relay automatically performs power door LOCK–UNLOCK operation to show whether registration has been completed correctly or not.

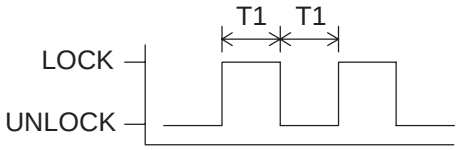
LOCK–UNLOCK Occurs Once

Registration of recognition code has been completed.



LOCK–UNLOCK Occurs Twice

Registration of recognition code has failed.



T1: Approx. 1 sec.

HINT:
If LOCK–UNLOCK operation is performed twice, registration of recognition code has failed. Perform registration procedures by beginning once again.

Within 40 sec.

If other transmitter is to be registered.

HINT:
4 recognition codes can be registered at once.

Proceed to flow chart to finish registration.

Perform either of the following.

- Open a door.
- Insert key into ignition key cylinder.

Registration of recognition codes (add mode and rewrite mode) is completed.

WIRELESS DOOR LOCK CONTROL SYSTEM

730EU–02

PRECAUTION

1. NOTICES WHEN CHECKING

(a) The wireless door lock remote control function operates only when the following 3 conditions are met.
  (1) All the doors are closed.
  (2) No key is inserted in the ignition key cylinder.
  (3) The power door lock system operates normally.

HINT:

The door UNLOCK and luggage door (back door) UNLOCK functions operate even when a door is open.

(b) The wireless door lock remote control operational area differs depending on the situation.
  (1) The operational area differs depending on the operators and the ways the transmitter is held.
  (2) In certain areas, the remote control function will only operate partially for the operational area will be reduced due to the vehicle body shape and the influence of the surrounding environment.
  (3) Since the transmitter uses faint electric waves, strong electric waves or noise in the frequency used may reduce the operational area or the remote control may not function.
  (4) When the battery weakens, the operational area is reduced or the remote control may not function.

HINT:

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

ON–VEHICLE INSPECTION

1. CHECK WIRELESS DOOR LOCK CONTROL FUNCTIONS

HINT:

- The switch described in this text is a switch for transmitting signals (LOCK switch, UNLOCK switch and luggage door (back door) unlock switch) which is built in the door control transmitter.
- All the functions listed below must be checked in comparison with the remote control operational area.

(a) Put the vehicle under the conditions that allow the wireless control function to be operated (See PRECAUTION on page 73–14).

(b) Check the basic function.

(1) Check whether the LED of the transmitter lights up 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 luggage door (back door) lock when the LOCK switch is pressed (However, this will not happen when any door is open).

(3) w/ Double locking system:
Check that the double locking system is set when the LOCK switch is pressed within 5 seconds after the above step (However, the double locking system is not applicable to the luggage door (back door)).

CAUTION:

Never activate the double locking system when there are people in the vehicle, because all the doors cannot be opened from inside the vehicle with the system on. If you lock the doors by accident, push UNLOCK switch of the door control transmitter.

(4) Check that all the doors including the luggage door (back door) unlock when the UNLOCK switch is pressed. Also, check that the double locking system is canceled at the same time.

(5) Check that the luggage door (back door) unlocks when the luggage door (back door) unlock switch is pressed.

HINT:

The UNLOCK switch and luggage door (back door) unlock switch can unlock the doors even when any door is open.

(c) Check the chattering prevention function.

(1) Check that the corresponding operation occurs only once, and not repeated continuously while the switch is held down. However, when the switch is operated repeatedly at 1 second intervals, check that the corresponding operation is carried out.

(d) Check the automatic locking function.

(1) Check that all the doors including the luggage door (back door) lock automatically as long as none of them have been opened or locked within approx. 30 seconds after they are unlocked by pressing the switch.

(2) Check that the automatic locking function does not operate when any door including the luggage door (back door) has been opened or all of them have been locked within approx. 30 seconds after they are unlocked by pressing the switch.

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

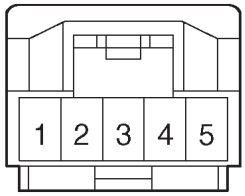
(1) Check that the doors can not be locked by the switch while the key is in the ignition key cylinder. However, this does not apply when the system is in the recognition code registration mode.

(f) Check the repeat function.

(1) Check that all the doors attempt to automatically lock once again 1 second after the LOCK switch has been pressed while the movement of the driver side door control knob, which is in the unlocked state, is being restricted.

(g) Check the hazard warning lamps flashing function (answer–back).
  (1) When the LOCK switch is pressed, check that the hazard warning lamps flash once, simultaneously with the locking of all the doors.
  (2) When the UNLOCK switch is pressed once, check that the hazard warning lamps flash twice simultaneously with the unlocking of all the doors.
  (3) When the luggage door (back door) unlock switch is pressed once, check that the hazard warning lamps flash twice simultaneously with the unlocking of the luggage door (back door).

Wire Harness Side



Door Control Receiver

B59092

2. CHECK DOOR CONTROL RECEIVER

(a) Disconnect the receiver connector.

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

Standard:

Tester Connection	Condition	Specified Condition
5 (+B) – Body ground	Constant	10 to 14 V
1 (GROUND) – Body ground	Constant	Below 1 Ω

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

(c) Reconnect the connector and check the voltage between the terminal and body ground.

Standard:

Tester Connection	Condition	Specified Condition
2 (RDA) – Body ground	No key in ignition key cylinder, 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.