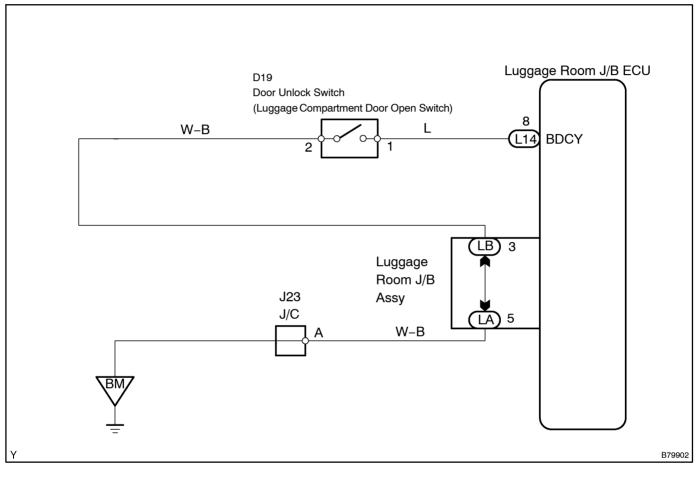
# DOOR UNLOCK SWITCH (LUGGAGE COMPARTMENT DOOR OPEN SWITCH) CIRCUIT

## **CIRCUIT DESCRIPTION**

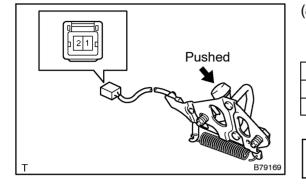
The door unlock switch (luggage compartment door open switch) is built in the luggage door lock assembly. This switch is turned on when the luggage door is opened and turned off when the door is closed.

### WIRING DIAGRAM



## **INSPECTION PROCEDURE**

- 1
- **INSPECT LUGGAGE COMPARTMENT DOOR STRIKER ASSY (DOOR UNLOCK** SWITCH)



(a)	Measure the resistance of the switch terminals when the
	switch is operated.

#### Standard:

Tester Connection	Switch Condition	Specified Condition
1 – 2	Pushed	Below 1 $\Omega$
1 – 2	Not pushed	10 k $\Omega$ or higher

REPLACE LUGGAGE COMPARTMENT DOOR STRIKER ASSY

AND

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#### CHECK WIRE HARNESS (LUGGAGE COMPARTMENT DOOR STRIKER ASSY 2 (DOOR UNLOCK SWITCH) - LUGGAGE ROOM J/B ECU AND BODY GROUND)

NG

Disconnect D19 striker connector. (a) Wire Harness Side Disconnect L14 ECU connector. (b) Measure the resistance of the wire harness side connec-(c) D19 tors. Luggage Compartment Door Standard: Striker Assy Tester Connection Specified Condition D19-1 - L14-8 (BDCY) Below 1  $\Omega$ D19-2 - Body ground Below 1 Ω L14 Luggage Room J/B ECU 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 BDCY REPAIR OR REPLACE **HARNESS** NG B78392 CONNECTOR

OK

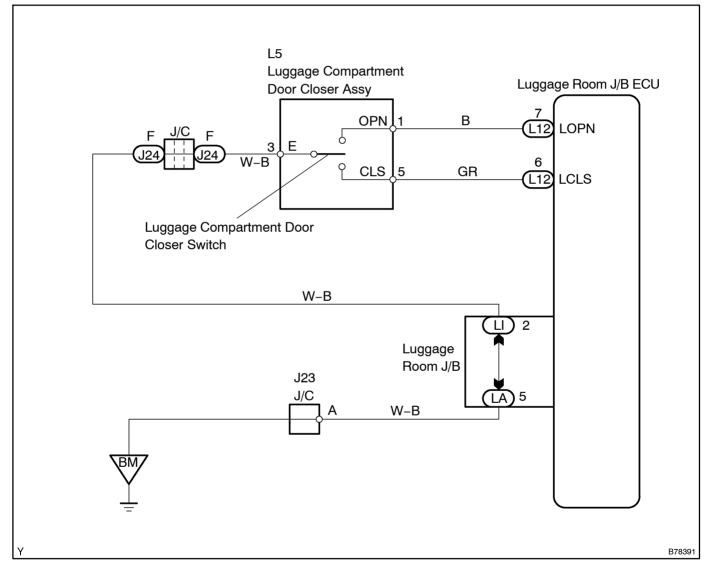
#### PROCEED TO NEXT CIRCUIT INSPECTION SHOWN ON PROBLEM SYMPTOMS TABLE (See page 05-2898)

## LUGGAGE COMPARTMENT DOOR CLOSER SWITCH CIRCUIT

## **CIRCUIT DESCRIPTION**

The luggage door lock assembly consists of: 1) the luggage closer motor, which performs opener and closer operations based on signals from the luggage room J/B ECU; 2) 2 position detection switches (LOPN, LCLS), which check the position of the closer motor; and 3) the luggage door courtesy switch (LCTY), which sends signals to start/stop the closer operation and illuminates the luggage room light. The luggage door lock switch (BDCY) is built into the luggage door striker assembly, detects whether the luggage door is open or closed, and transmits ON/OFF signals to the luggage room J/B ECU.

### WIRING DIAGRAM



05-2919

## INSPECTION PROCEDURE

## 1 READ VALUE OF DATA LIST (LUGGAGE COMPARTMENT DOOR CLOSER SWITCH)

## (a) Check the DATA LIST for proper functioning of the luggage compartment door closer switch. **Luggage room J/B ECU:**

Item	Measurement Item / Display (Range)	Normal Condition	Diagnostic Note
OPEN POS SW	Luggage open position switch signal / ON or OFF	ON: Door is closed OFF: Door is opened	-
CLOSE POS SW	Luggage close posi- tion switch signal / ON or OFF	ON: Door is opened OFF: Door is closed	-

OK: "ON" (luggage compartment door is open/closed) appears on the screen.

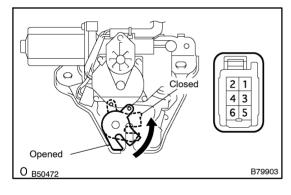
NG > Go to step 2

ΟΚ

2

PROCEED TO NEXT CIRCUIT INSPECTION SHOWN ON PROBLEM SYMPTOMS TABLE (See page 05–2898)

### INSPECT LUGGAGE COMPARTMENT DOOR CLOSER SWITCH



(a) Measure the resistance of the switch terminals when the switch is operated.

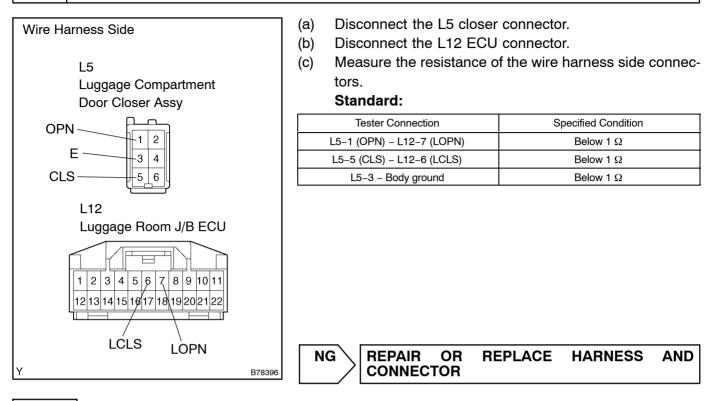
Standard:

Tester Connection	Switch Condition	Specified Condition	
Door opened: 1 – 3	ON	Below 1 Ω	
Door closed: 3 – 5	ON	Below 1 Ω	
Door opened: 1 – 3	OFF	10 k $\Omega$ or higher	
Door closed: 3 – 5	OFF	10 k $\Omega$ or higher	

REPLACE LUGGAGE COMPARTMENT DOOR CLOSER SWITCH

OK

#### 3 CHECK WIRE HARNESS (LUGGAGE COMPARTMENT DOOR CLOSER SWITCH – LUGGAGE ROOM J/B ECU AND BODY GROUND)



#### OK

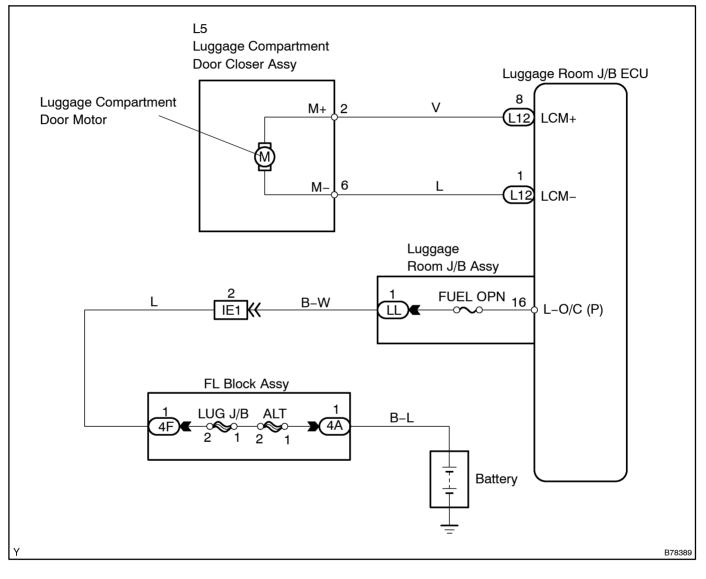
## PROCEED TO NEXT CIRCUIT INSPECTION SHOWN ON PROBLEM SYMPTOMS TABLE (See page 05–2898)

## LUGGAGE COMPARTMENT DOOR CLOSER MOTOR CIRCUIT

## **CIRCUIT DESCRIPTION**

Open and close operations of the luggage door is monitored and the signals are sent to the luggage room J/B ECU. The luggage compartment door closer motor is built into the luggage compartment door lock assembly.

### WIRING DIAGRAM



### **INSPECTION PROCEDURE**

#### 1 PERFORM ACTIVE TEST (TRUNK LID OPEN)

(a) Select the ACTIVE TEST, use the hand-held tester to generate a control command, and then check the luggage compartment door opener motor.

Luggage room J/B ECU:

Item	Test Detail	Diagnostic Note
TRUNK LID OPEN	Operate luggage compartment door motor OFF / ON	-

#### OK: Luggage compartment door is opened.

NG > Go to step 2

OK

PROCEED TO NEXT CIRCUIT INSPECTION SHOWN ON PROBLEM SYMPTOMS TABLE (See page 05–2898)

#### 2 INSPECT FUSE (FUEL OPN)

- (a) Remove the FUEL OPN fuse from the luggage room J/B ECU.
- (b) Measure the resistance. Standard: Below 1  $\Omega$

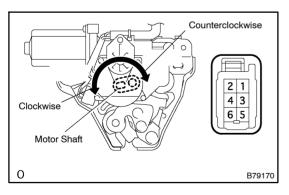
NG REPLACE FUSE

**CLOSER ASSY** 

OK

3

INSPECT LUGGAGE COMPARTMENT DOOR CLOSER ASSY (LUGGAGE COMPARTMENT DOOR CLOSER MOTOR)



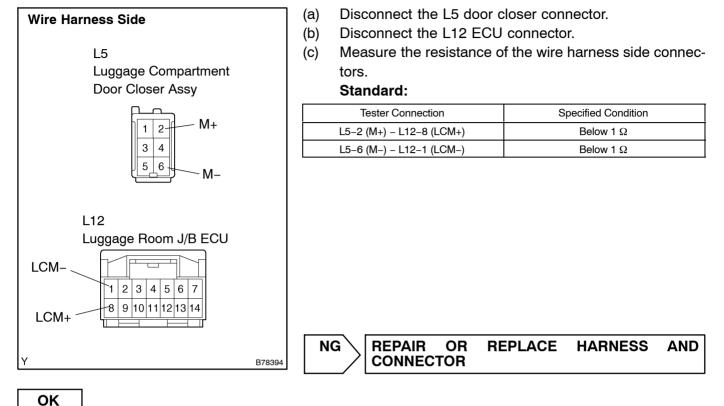
(a) Apply battery voltage to the closer motor and check operation of the motor.

OK:

Measurement Condition	Specified Condition	
Battery positive $(+) \rightarrow$ Terminal 2 Battery negative $(-) \rightarrow$ Terminal 6	Motor shaft rotates clockwise	
Battery positive $(+) \rightarrow$ Terminal 6 Battery negative $(-) \rightarrow$ Terminal 2	Motor shaft rotates counterclockwise	
NG REPLACE LUGGAGE COMPARTMENT DOOR		

ОК

## 4 CHECK WIRE HARNESS (LUGGAGE COMPARTMENT DOOR CLOSER ASSY – LUGGAGE ROOM J/B ECU)



## PROCEED TO NEXT CIRCUIT INSPECTION SHOWN ON PROBLEM SYMPTOMS TABLE (See page 05–2898)

05H5D\_02

## **ON-VEHICLE INSPECTION**

#### 1. CHECK LUGGAGE COMPARTMENT CLOSER SYSTEM

- (a) Make the luggage door ajar (luggage courtesy switch OFF and door open/close detection switch OFF). Check that the motor starts operating and fully closes (fully locks) the door.
- (b) Make the luggage door ajar (luggage courtesy switch OFF and door open/close detection switch OFF). When the motor starts operating, perform luggage door opening operation by turning on any of the following switches: 1) the door unlock switch (key switch); 2) the luggage electrical key switch\*; or 3) the trunk panel (luggage compartment door) opening switch. Check that the motor stops its operation and starts reverse rotations (starts opening). As a result, the luggage door should not be in the fully closed position.

#### HINT:

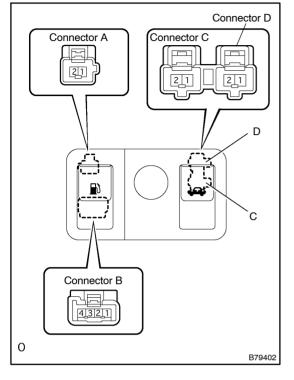
\*: w/ Smart key system

#### 2. CHECK LUGGAGE COMPARTMENT OPENER SYSTEM

- (a) Pull the trunk panel (luggage compartment door) opening switch. Check that the luggage compartment door is opened.
- (b) Insert the key into the key cylinder on the opening switch and push the key to the LOCK position. Check that pulling the trunk panel (luggage compartment door) opening switch does not open the luggage compartment door.

05H5M-02

## INSPECTION



#### 1. INSPECT LUGGAGE DOOR OPENING SWITCH ASSY (LUGGAGE COMPARTMENT DOOR OPENER SWITCH)

(a) Measure the resistance between the terminals of the connectors C and D.

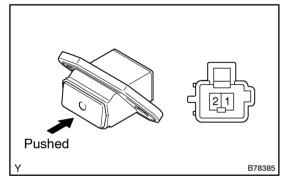
#### Standard:

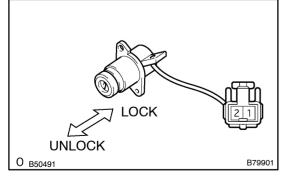
Tester Connection	Switch Condition	Specified Condition
C–1 – D–2	OFF (not operated)	Below 1 $\Omega$
C–1 – D–2	ON (operated)	10 k $\Omega$ or higher

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

- (b) Check the switch LED.
  - (1) Apply battery voltage to connector B–2 and check that the switch LED illuminates.

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





#### 2. INSPECT LUGGAGE ELECTRICAL KEY SWITCH (PUSH SWITCH)

(a) Measure the resistance between the terminals of the connector when the switch is operated.

#### Standard:

Tester Connection	Switch Condition	Specified Condition
1 – 2	Pushed	Below 1 $\Omega$
1 – 2	Not pushed	10 k $\Omega$ or higher

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

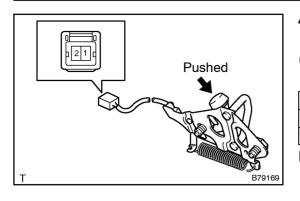
## 3. INSPECT LUGGAGE COMPARTMENT DOOR KEY UNLOCK SWITCH

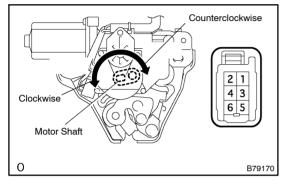
(a) Operate the key cylinder with the key and measure the resistance between terminals 1 and 2 of the switch connector.

#### Standard:

Switch Condition	Specified Condition
LOCK (key cylinder is pushed)	Below 1 Ω
UNLOCK (key cylinder is not pushed)	10 k $\Omega$ or higher

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





### 4. INSPECT LUGGAGE COMPARTMENT DOOR STRIKER ASSY (DOOR UNLOCK SWITCH)

(a) Measure the resistance of the switch. **Standard:** 

Switch Condition	Tester Connection	Specified Condition
Pushed	1 – 2	Below 1 Ω
Not push	1 – 2	10 k $\Omega$ or higher

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

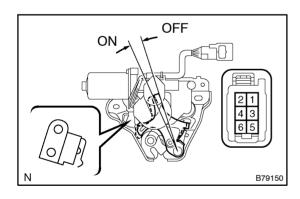
#### 5. INSPECT LUGGAGE COMPARTMENT DOOR CLOSER ASSY

(a) Apply battery voltage to the closer motor and check operation of the motor.

#### OK:

Measurement Condition	Specified Condition
Battery positive $(+) \rightarrow$ Terminal 2 Battery negative $(-) \rightarrow$ Terminal 6	Clockwise
Battery positive (+) → Terminal 6 Battery negative (-) → Terminal 2	Counterclockwise (jam protection function operating)

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

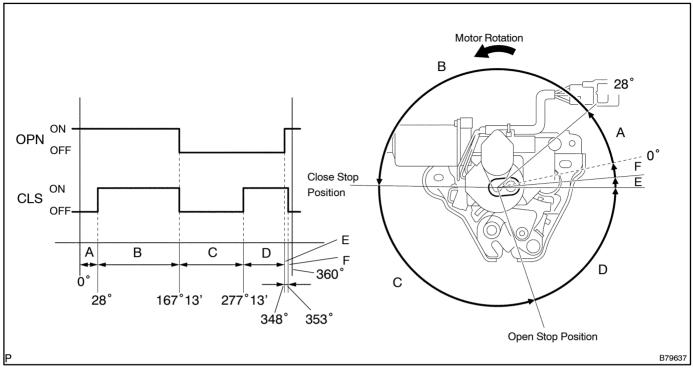


## (b) Measure the resistance of the courtesy switch. **Standard:**

Tester Connection	Switch Position	Specified Condition
3 – 4	Not Pushed (ON)	Below 1 $\Omega$
3 – 4	Pushed (OFF)	10 k $\Omega$ or higher

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

(c) Measure the open/close position detection switch resistance.



#### Standard (Open switch):

Tester Connection	Closer Position	Specified Condition
1 –3	A, B, E and F	Below 1 $\Omega$
1 – 3	C and D	10 k $\Omega$ or higher

If the result is not as specified, replace the door closer assy. **Standard (Close switch):** 

Tester Connection	Closer Position	Specified Condition
1 –[5	B and D	Below 1 $\Omega$
1 – 5	A, C, E and F	10 k $\Omega$ or higher

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