

# Back Door Courtesy Switch Circuit

## DESCRIPTION

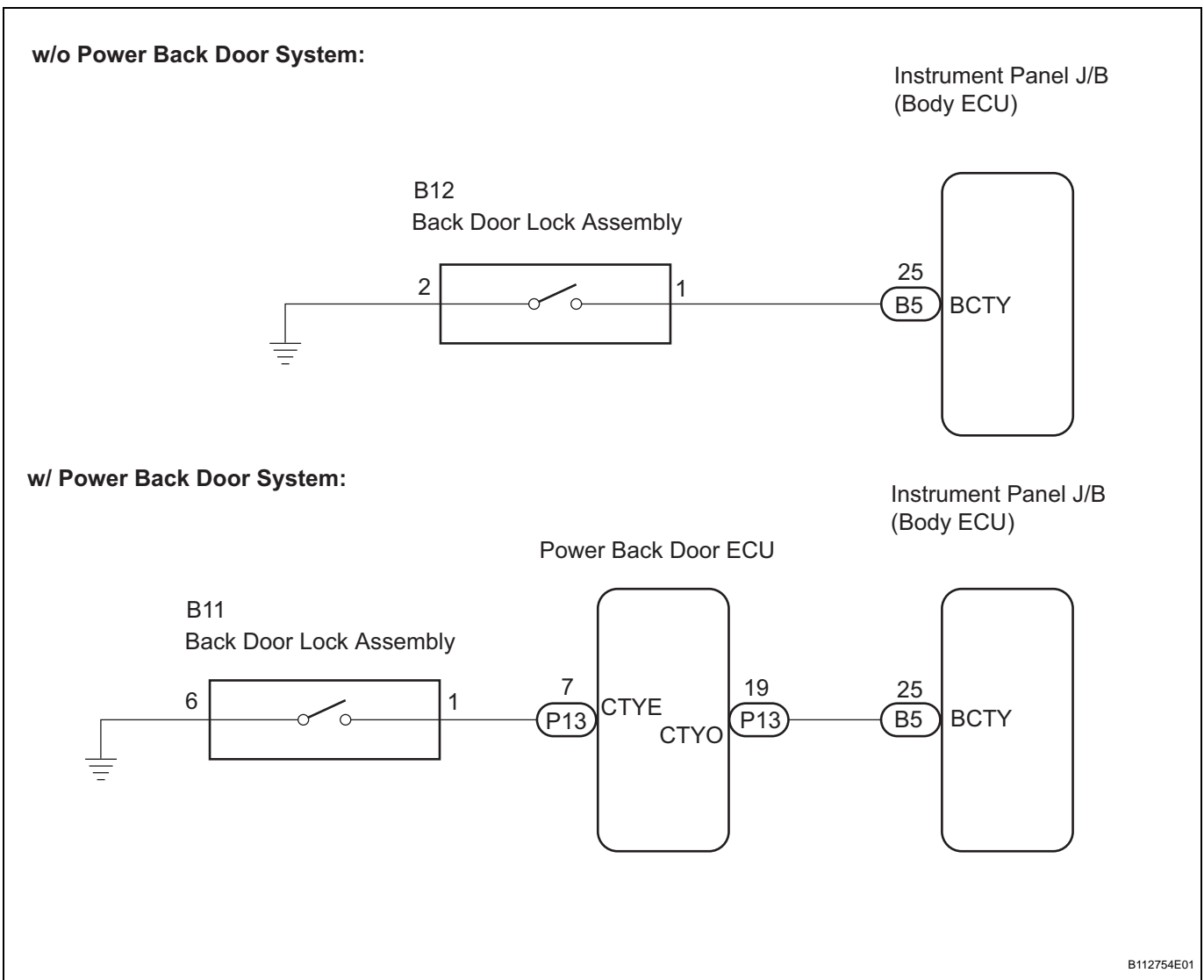
w/o power back door system:

The back door courtesy switch is built into the back door lock assembly. The switch turns on when the back door is opened and turns off when the door is closed. The body ECU applies voltage to the back door lock assembly via terminal BCTY. Back door open/close state signals are input to the body ECU.

w/ power back door system:

The back door courtesy switch is built into the back door lock assembly. The switch turns on when the back door is opened and turns off when the door is closed. The power back ECU applies voltage to the back door lock assembly via terminal CTYE. Back door open/close state signals are input to the power back door ECU. The back door ECU sends the back door open/close state signals to the body ECU.

## WIRING DIAGRAM



<b>1</b>	<b>CHECK VEHICLE TYPE</b>
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Vehicle type	Proceed to
w/o Power back door system	A
w/ Power back door system	B

A

**B** **Go to step 4**

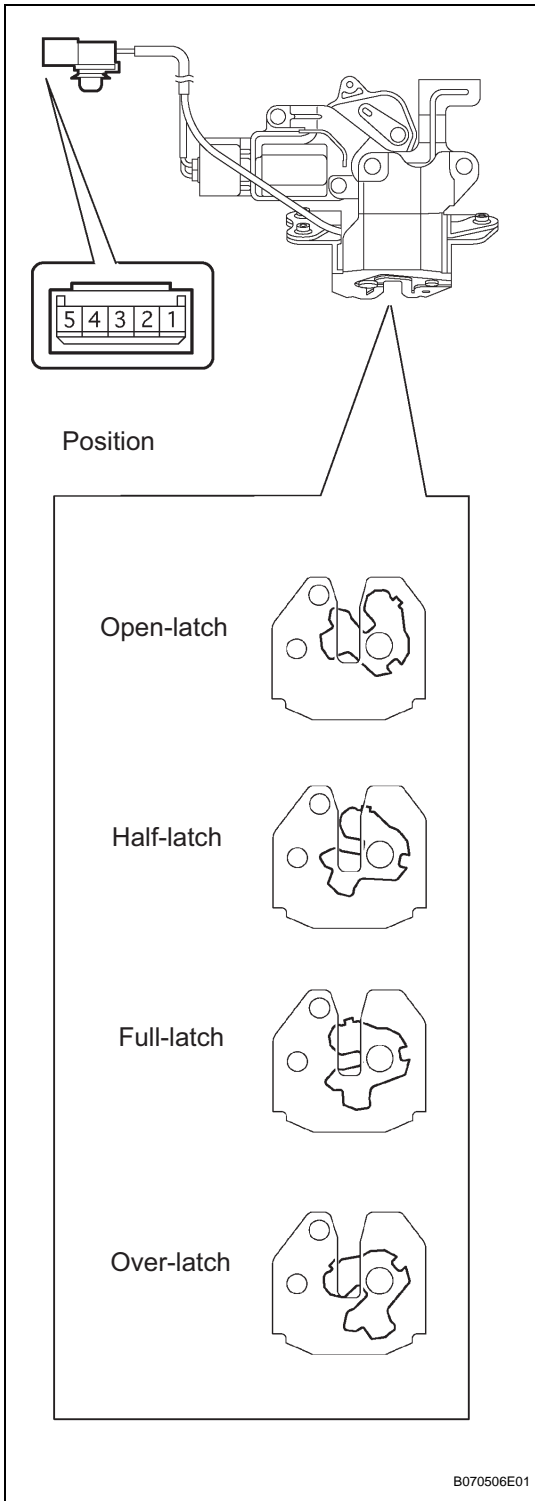
**2 INSPECT BACK DOOR LOCK ASSEMBLY**

- (a) Remove the back door lock assembly.
- (b) Measure the resistance according to the value(s) in the table below.

**Standard resistance (Courtesy switch)**

Tester Connection	Door Lock Latch Position	Specified Condition
1 - 2	Open-latch	Below 1 $\Omega$
1 - 2	Half-latch	Below 1 $\Omega$
1 - 2	Full-latch	10 k $\Omega$ or higher
1 - 2	Over-latch	10 k $\Omega$ or higher

**NG** **REPLACE BACK DOOR LOCK ASSEMBLY**



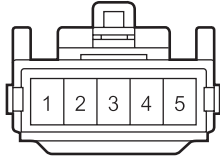
**OK**

**DL**

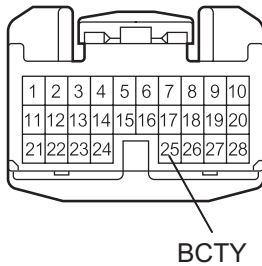
**3 CHECK WIRE HARNESS (BACK DOOR LOCK ASSEMBLY - INSTRUMENT PANEL J/B (BODY ECU))**

Wire Harness Side:

B12  
Back Door Lock Assembly



B5  
Instrument Panel J/B (Body ECU)



B112756E01

- (a) Disconnect the back door lock assembly connector.
- (b) Disconnect the instrument panel J/B connector.
- (c) Measure the resistance according to the value(s) in the table below.

**Standard resistance**

Tester Connection	Condition	Specified Condition
B12-1 - B5-25 (BCTY)	Always	Below 1 Ω
B12-2 - Body ground	Always	Below 1 Ω

**NG** REPAIR OR REPLACE HARNESS OR CONNECTOR

DL

OK

**PROCEED TO NEXT CIRCUIT INSPECTION SHOWN IN PROBLEM SYMPTOMS TABLE**

**4 READ VALUE OF DATA LIST**

- (a) Check the DATA LIST to ensure proper function of the back door courtesy switch.

BACK DOOR:

Item	Measurement Item / Display (Range)	Normal Condition	Diagnostic Note
COURTESY SW	Back door courtesy switch signal (built in power back door lock) /ON or OFF	ON: Driver side door is open OFF: Driver side door is closed	-

**OK:**  
The display is as specified in the normal condition.

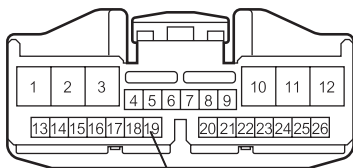
**NG** Go to step 6

OK

**5 CHECK WIRE HARNESS (POWER BACK DOOR ECU - INSTRUMENT PANEL J/B)**

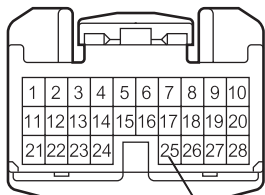
Wire Harness Side:

P13  
Power Back Door ECU



CTYO

B5  
Instrument Panel J/B (Body ECU)



BCTY

B112755E01

- (a) Disconnect the power back door ECU connector.
- (b) Disconnect the instrument panel J/B connector.
- (c) Measure the resistance according to the value(s) in the table below.

**Standard resistance**

Tester Connection	Condition	Specified Condition
P13-19 (CTYO) - B5-25 (BCTY)	Always	Below 1 Ω

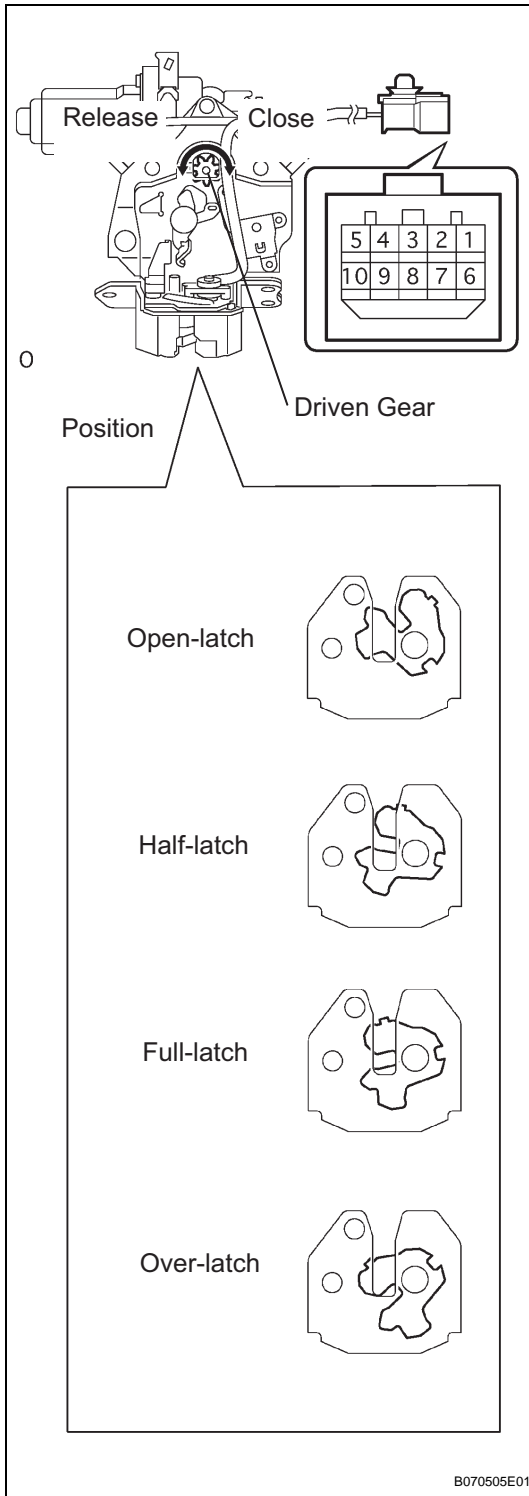
**NG REPAIR OR REPLACE HARNESS OR CONNECTOR**

DL

**OK**

**PROCEED TO NEXT CIRCUIT INSPECTION SHOWN IN PROBLEM SYMPTOMS TABLE**

## 6 INSPECT BACK DOOR LOCK ASSEMBLY



- Remove the back door lock assembly.
- Measure the resistance according to the value(s) in the table below.

### Standard resistance (Courtesy switch)

Tester Connection	Door Lock Latch Position	Specified Condition
1 - 6	Open-latch	Below 1 $\Omega$
1 - 6	Half-latch	Below 1 $\Omega$
1 - 6	Full-latch	10 k $\Omega$ or higher
1 - 6	Over-latch	10 k $\Omega$ or higher

**NG**

**REPLACE BACK DOOR LOCK ASSEMBLY**

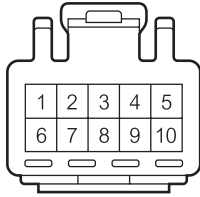
**DL**

**OK**

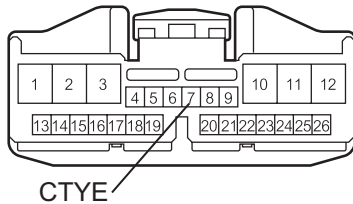
**7 CHECK WIRE HARNESS (BACK DOOR LOCK ASSEMBLY - POWER BACK DOOR ECU)**

Wire Harness Side:

B11  
Back Door Lock Assembly



P13  
Power Back Door ECU



H

B111702E08

- (a) Disconnect the back door lock assembly connector.
- (b) Disconnect the power back door ECU connector.
- (c) Measure the resistance according to the value(s) in the table below.

**Standard resistance**

Tester Connection	Condition	Specified Condition
B11-1 - P13-7 (CTYE)	Always	Below 1 Ω
B11-6 - Body ground	Always	Below 1 Ω

**NG** REPAIR OR REPLACE HARNESS OR CONNECTOR

**OK**

**PROCEED TO NEXT CIRCUIT INSPECTION SHOWN IN PROBLEM SYMPTOMS TABLE**