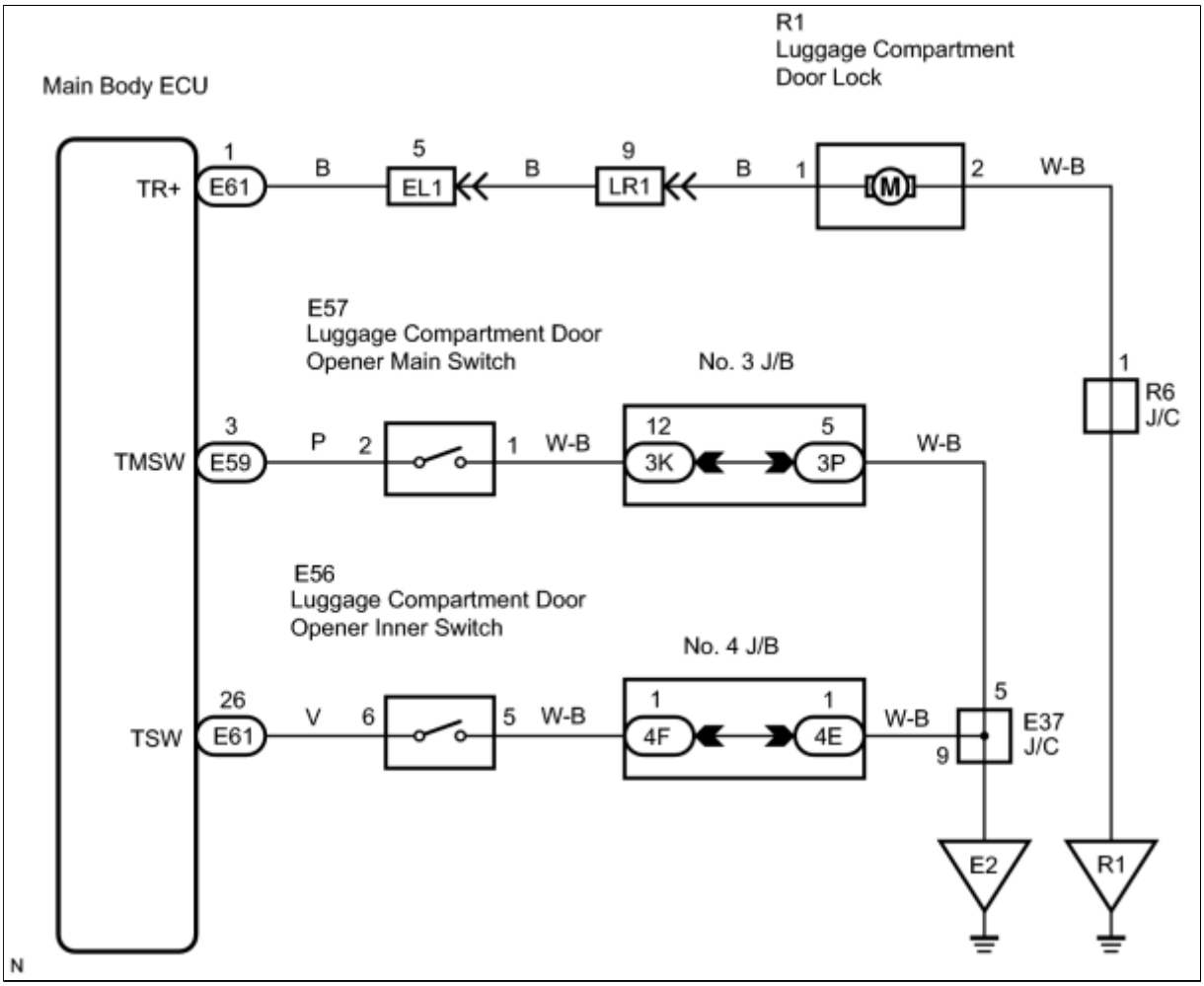
Last Modified: 7-13-2007		1.6 J
Service Category: Vehicle Exterior	**Section:** Door/Hatch	
Model Year: 2008	**Model:** ES350	**Doc ID:** RM000001SHK009X
Title: ENGINE HOOD / DOOR: LUGGAGE COMPARTMENT DOOR OPENER SYSTEM: Luggage Compartment Door Opener Circuit (2008 ES350)		

Luggage Compartment Door Opener Circuit

DESCRIPTION

While the main body ECU has received the OFF signal from the luggage compartment opener main switch, the main body ECU activates the luggage compartment door lock motor when the ON signal from the luggage compartment door opener inner switch is received.

WIRING DIAGRAM



INSPECTION PROCEDURE

PROCEDURE

1.	**PERFORM ACTIVE TEST BY TECHSTREAM**

(a) Connect Techstream to the DLC3.

(b) Turn the engine switch on (IG).

(c) Turn the tester on.

(d) Enter the following menus: Body Electrical / Main Body / Active Test.

(e) Perform the Active Test according to the display on the tester.

Main Body:

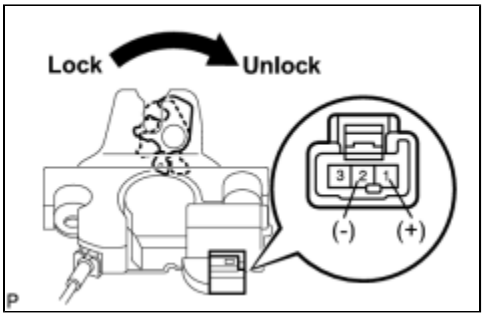
TESTER DISPLAY	TEST PART	CONTROL RANGE	DIAGNOSTIC NOTE
Trunk/Bdor Open	Operate luggage compartment door lock motor	ON/OFF	-

OK:
Luggage compartment door lock motor operates.

OK ▶ **READ VALUE OF TECHSTREAM**

NG ▼

2.	INSPECT LUGGAGE COMPARTMENT DOOR LOCK



(a) Remove the luggage compartment door lock INFO .

(b) Move the door lock to the lock position.

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

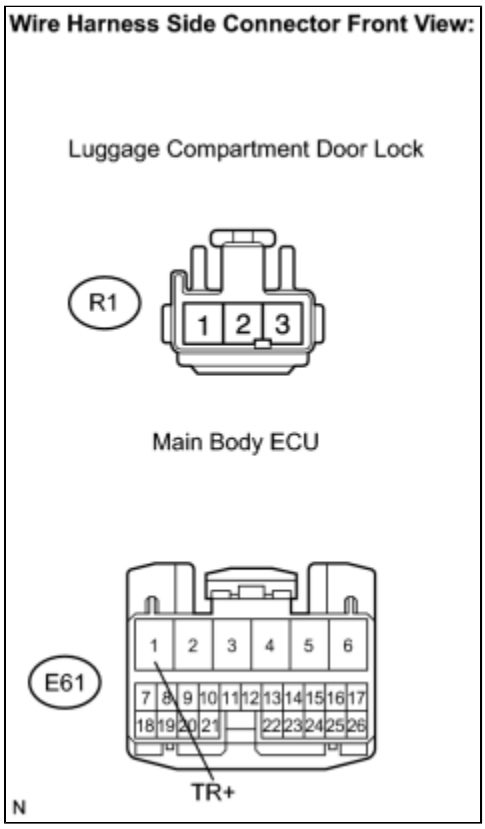
OK:

MEASUREMENT CONDITION	SPECIFIED CONDITION
Battery positive (+) → Terminal 1 Battery negative (-) → Terminal 2	Luggage compartment door lock motor unlock

NG ▶ **REPLACE LUGGAGE COMPARTMENT DOOR LOCK**

OK ▼

3.	CHECK HARNESS AND CONNECTOR (LUGGAGE COMPARTMENT DOOR LOCK - MAIN BODY ECU)



(a) Disconnect the R1 lock and E61 ECU connectors.

(b) Measure the resistance according to the value(s) in the table below.

Standard resistance:

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
R1-1 - E61-1 (TR+)	Always	Below 1 Ω
R1-1 - Body ground	Always	10 kΩ or higher
R1-2 - Body ground	Always	Below 1 Ω

NG ▶ **REPAIR OR REPLACE HARNESS OR CONNECTOR**

OK ▼

4.	READ VALUE OF TECHSTREAM

(a) Connect Techstream to the DLC3.

(b) Turn the engine switch on (IG).

(c) Turn the tester on.

(d) Enter the following menus: Body Electrical / Main Body / Data List.

(e) Read the Data List according to the display on the tester.

Main Body:

TESTER DISPLAY	MEASUREMENT ITEM/RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
Trnk/Bdr Opn SW	Luggage door opening inner switch/ON or OFF	ON: Luggage compartment door opener inner switch is pressed OFF: Luggage compartment door opener inner switch is not pressed	-
Trnk Main SW	Luggage door opener main switch signal/ON or OFF	ON: Luggage compartment door opener main switch is pushed ON: Luggage compartment door opener main switch is not pushed	-

OK:

ON (luggage compartment door opener inner switch is pressed) appears on the tester.

OK:

ON (luggage compartment door opener main switch is pressed) appears on the tester.

Result:

RESULT	PROCEED TO
NG (Luggage compartment door opener main switch)	A
NG (Luggage compartment door opener inner switch)	B
OK (Luggage compartment door opener main switch and Luggage compartment door opener inner switch)	C

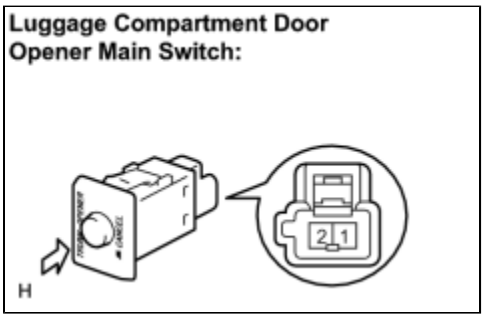
B ▶ **INSPECT LUGGAGE COMPARTMENT DOOR OPENER INNER SWITCH**

C ▶ **REPLACE INSTRUMENT PANEL JUNCTION BLOCK (MAIN BODY ECU)**

A ▼

5.	**INSPECT LUGGAGE COMPARTMENT DOOR OPENER MAIN SWITCH**

Luggage Compartment Door Opener Main Switch:



(a) Remove the luggage compartment door opener main switch INFO .

(b) Measure the resistance according to the value(s) in the table below.

Standard resistance:

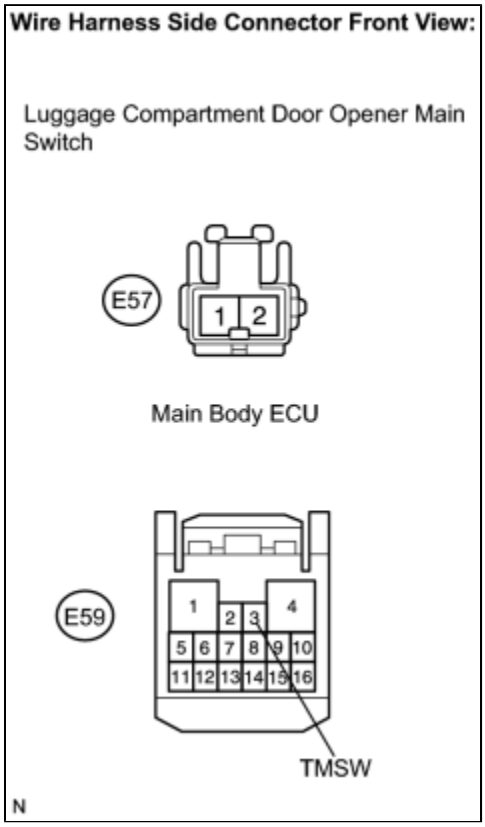
TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
1 - 2	Switch free (OFF)	10 kΩ or higher
	Switch pushed (ON)	Below 1 Ω

NG ▶ **REPLACE LUGGAGE COMPARTMENT DOOR MAIN OPENER SWITCH**

OK ▼

6.	**CHECK HARNESS AND CONNECTOR (LUGGAGE COMPARTMENT DOOR OPENER MAIN SW - MAIN BODY ECU)**

(a) Install the luggage compartment door opener main switch INFO .



(b) Disconnect the E57 switch and E59 ECU connectors.

(c) Measure the resistance according to the value(s) in the table below.

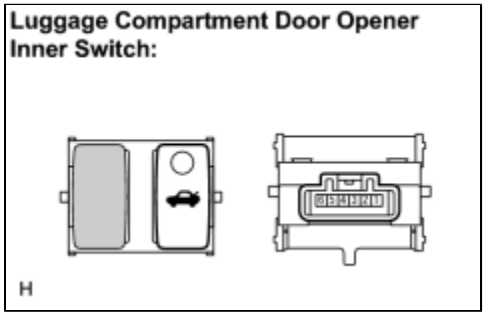
Standard resistance:

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
E57-2 - E59-3 (TMSW)	Always	Below 1 Ω
E57-2 - Body ground	Always	10 kΩ or higher
E57-1 - Body ground	Always	Below 1 Ω

NG **REPAIR OR REPLACE HARNESS OR CONNECTOR**

OK ▶ REPLACE INSTRUMENT PANEL JUNCTION BLOCK (MAIN BODY ECU)

7.	INSPECT LUGGAGE COMPARTMENT DOOR OPENER INNER SWITCH



(a) Remove the luggage compartment door opener inner switch INFO .

(b) Measure the resistance according to the value(s) in the table below.

Standard resistance:

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
5 - 6	Switch free (OFF)	10 kΩ or higher
	Switch pushed (ON)	Below 1 Ω

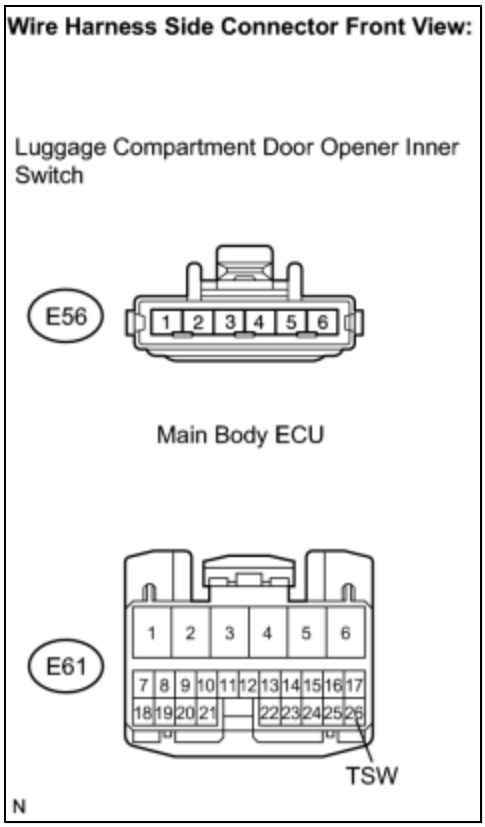
NG ▶ REPLACE LUGGAGE COMPARTMENT DOOR OPENER INNER SWITCH

OK ▼

8.	CHECK HARNESS AND CONNECTOR (LUGGAGE COMPARTMENT DOOR OPENER INNER SW - MAIN BODY ECU)

(a) Install the luggage compartment door opener inner switch INFO .

(b) Disconnect the E56 switch and E61 ECU connectors.



(c) Measure the resistance according to the value(s) in the table below.

Standard resistance:

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
E56-6 - E61-26 (TSW)	Always	Below 1 Ω
E56-6 - Body ground	Always	10 kΩ or higher
E56-5 - Body ground	Always	Below 1 Ω

NG ▶ **REPAIR OR REPLACE HARNESS OR CONNECTOR**

OK ▶ **REPLACE INSTRUMENT PANEL JUNCTION BLOCK (MAIN BODY ECU)**