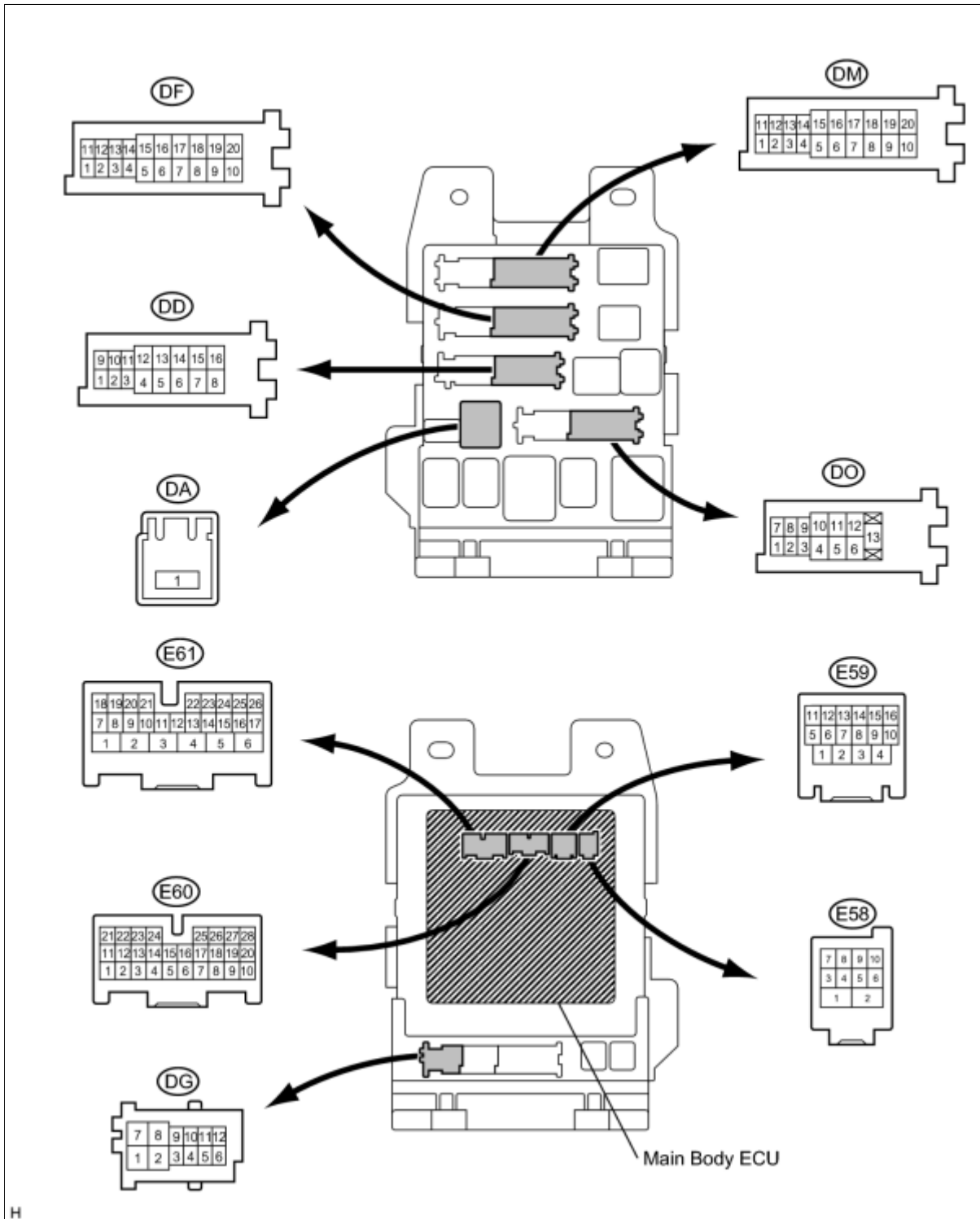


Last Modified: 7-13-2007		1.7 U
Service Category: Vehicle Interior		Section: Theft Deterrent/Keyless Entry
Model Year: 2008		Model: ES350 Doc ID: RM000001PQV00TX
Title: THEFT DETERRENT: THEFT DETERRENT SYSTEM: TERMINALS OF ECU (2008 ES350)		

## TERMINALS OF ECU

### 1. CHECK MAIN BODY ECU (INSTRUMENT PANEL J/B)

- (a) Disconnect the main body ECU (instrument panel J/B) connectors.



(b) Measure the resistance and voltage between each terminal of the wire harness side connectors and body ground.

SYMBOLS (TERMINAL NO.)	WIRING COLOR	TERMINAL DESCRIPTION	CONDITION	SPECIFIED CONDITION
GND3 (E59-1) - Body ground	W-B - Body ground	Ground	Always	Below 1 $\Omega$
RCTY (E60-7) - Body ground	GR - Body ground	Rear courtesy light switch RH input	Rear door RH CLOSED (OFF) → OPEN (ON)	10 k $\Omega$ or higher → Below 1 $\Omega$
PCTY (E60-21) - Body ground	G - Body ground	Passenger side courtesy light switch input	Passenger side door CLOSED (OFF) → OPEN (ON)	10 k $\Omega$ or higher → Below 1 $\Omega$
LGCY (E60-25) - Body ground	W - Body ground	Luggage compartment door courtesy light switch input	Luggage compartment door CLOSED (OFF) → OPEN (ON)	10 k $\Omega$ or higher → Below 1 $\Omega$
DCTY (E61-24) - Body ground	GR - Body ground	Driver side door courtesy light switch input	Driver side door CLOSED (OFF) → OPEN (ON)	10 k $\Omega$ or higher → Below 1 $\Omega$
ACC (DA-1) - Body ground	W - Body ground	Ignition power supply (ACC signal)	Engine switch on (ACC) → off	10 to 14 V → Below 1 V
IG (DA-1) - Body ground	W - Body ground	Ignition power supply (IG signal)	Engine switch on (IG) → off	10 to 14 V → Below 1 V
BATB (DA-1) - Body ground	W - Body ground	+B (power battery system) power supply	Always	10 to 14 V
ALTB (DD-16) - Body ground	W - Body ground	+B (power system alternator system) power supply	Always	10 to 14 V
GND1 (DF-10) - Body ground	W-B - Body ground	Ground	Always	Below 1 $\Omega$
LCTY (DO-7) - Body ground	B - Body ground	Rear courtesy light switch LH input	Rear door LH CLOSED (OFF) → OPEN (ON)	10 k $\Omega$ or higher → Below 1 $\Omega$

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

(c) Reconnect the main body ECU (instrument panel J/B) connectors.

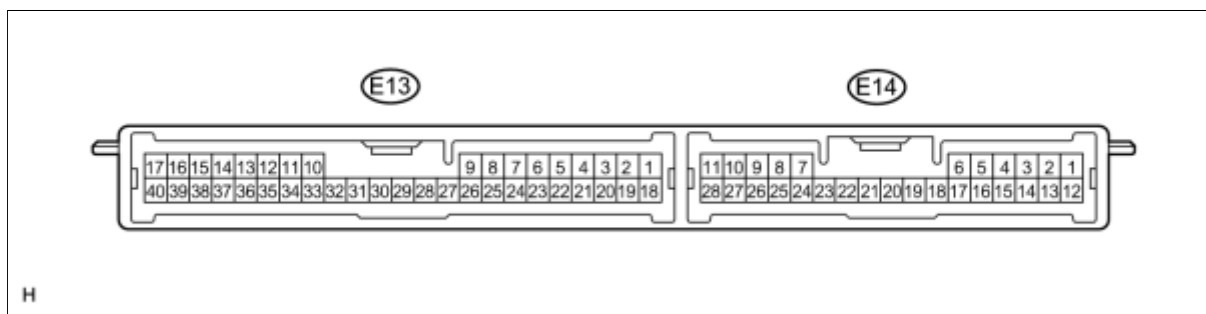
(d) Measure the voltage between each terminal of the wire harness side connectors and body ground.

SYMBOLS (TERMINAL NO.)	WIRING COLOR	TERMINAL DESCRIPTION	CONDITION	SPECIFIED CONDITION
HAZ (E59-4) - Body ground	W - Body ground	Turn signal flasher relay signal	System is in alarm sounding state	Below 1 V
HORN (DD-11) - Body ground	B - Body ground	Vehicle horn drive	Vehicle horn is sounding (Theft deterrent system is in alarm sounding state)	Pulse generation (0 V ← → 12 V)

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

## 2. CHECK CERTIFICATION ECU ASSEMBLY

(a) Disconnect the E13 and E14 ECU connectors.



(b) Measure the voltage and resistance of the wire harness side connector.

SYMBOLS (TERMINAL NO.)	WIRING COLOR	TERMINAL DESCRIPTION	CONDITION	SPECIFIED CONDITION
+B1 (E13-1) - E (E13-17)	W - W-B	Battery power supply	Always	10 to 14 V
E (E13-17) - Body ground	W-B - Body ground	Ground	Always	Below 1 $\Omega$
HSW (E14-24) - Body ground	R - Body ground	Engine hood courtesy switch	Engine hood OPEN (OFF) → CLOSED (ON)	10 k $\Omega$ or higher → Below 1 $\Omega$

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

(c) Reconnect the E13 and E14 ECU connectors.

(d) Measure the voltage of the connector.

SYMBOLS (TERMINAL NO.)	WIRING COLOR	TERMINAL DESCRIPTION	CONDITION	SPECIFIED CONDITION
IND (E13-2) - Body ground	Y - Body ground	Security indicator output	Security indicator is on (It lights up only in arming preparation state or alarm sounding state. It flashes when immobiliser is operating.)	3 to 6 V
SH- (E14-20) - Body ground	P - Body ground	Security horn drive	Security horn is sounding (Theft deterrent system is in alarm sounding state)	Pulse generation (0 V ← → 12 V)

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

