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Last Modified: 7-13-2007	1.6 U			
Service Category: Vehicle Exterior	Section: Mirror (ext)			
Model Year: 2008	Model: ES350	Doc ID: RM0000011W400VX		
Title: MIRROR: POWER MIRROR CONTROL SYSTEM (w/ Memory): TERMINALS OF ECU (2008 ES350)				

TERMINALS OF ECU

1. CHECK OUTER MIRROR CONTROL ECU LH



- (a) Disconnect the E65 and E66 connectors.
- (b) Measure the voltage and resistance according to the value(s) in the table below.

Standard voltage:

SYMBOLS (TERMINAL NO.)	WIRING COLOR	TERMINAL DESCRIPTION	CONDITION	SPECIFIED CONDITION
ACC (E66-4) - Body ground	L - Body ground	Ignition power supply	Engine switch off \rightarrow on (IG)	0 V \rightarrow 10 to 14 V
B (E66-3) - Body ground	V - Body ground	+B power supply	Always	10 to 14 V

Standard resistance:

SYMBOLS (TERMINAL NO.)	WIRING COLOR	TERMINAL DESCRIPTION	CONDITION	SPECIFIED CONDITION
E1 (E65-3) - Body ground	Y - Body ground	Ground	Always	Below 1 Ω

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

- (c) Reconnect the E65 and E66 connectors.
- (d) Measure the voltage according to the value(s) in the table below.

Standard voltage:

SYMBOLS (TERMINAL NO.)	WIRING COLOR	TERMINAL DESCRIPTION	CONDITION	SPECIFIED CONDITION
VC (E65-2) - Body ground	V - Body ground	Power source for mirror position sensor	Engine switch off \rightarrow on (IG)	0 V \rightarrow 0 to 5 V
VSR (E65-4) - Body ground	GR - Body ground	Vertical direction position signal	Engine switch on (IG), Left/Right adjustment switch L side, Mirror switch uppermost position \rightarrow lowermost position	0 V \rightarrow 1 to 3 V
			Engine switch on (IG), Left/Right adjustment	

HSRL (E65-5) - Body ground	P - Body ground	Horizontal direction position signal	switch L side, Mirror switch innermost position \rightarrow outermost position	0 V \rightarrow 1 to 3 V
LP (E65-17) - Body ground	O - Body ground	Foot light signal (LH side)	Foot light OFF \rightarrow ON	0 V \rightarrow 10 to 14 V
M+L (E65-18) - Body ground	R - Body ground	Outer mirror switch signal (Right or Down)	Engine switch on (IG), Left/Right adjustment switch L side, Mirror switch OFF \rightarrow RIGHT or DOWN	$ 0 \ V \rightarrow 10 \ \text{to} \ 14 \\ V $
MHL (E65-19) - Body ground	B - Body ground	Outer mirror switch signal (Left or Down)	Engine switch on (IG), Left/Right adjustment switch L side, Mirror switch OFF \rightarrow LEFT or DOWN	$ 0 V \rightarrow 10 \text{ to } 14 \\ V $
MVL (E65-20) - Body ground	L - Body ground	Outer mirror switch signal (Up or Right)	Engine switch on (IG), Left/Right adjustment switch L side, Mirror switch OFF \rightarrow UP or Right	$ 0 \ V \rightarrow 10 \ to \ 14 \\ V $
VSRR (E65-24) - Body ground	W - Body ground	Vertical direction position signal	Engine switch on (IG), Left/Right adjustment switch L side, Mirror switch uppermost position \rightarrow lowermost position	0 V \rightarrow 1 to 3 V
HSRR (E65-25) - Body ground	B - Body ground	Horizontal direction position signal	Engine switch on (IG), Left/Right adjustment switch L side, Mirror switch innermost position \rightarrow outermost position	0 V \rightarrow 1 to 3 V
LP (E65-37) - Body ground	L - Body ground	Foot light signal (RH side)	Foot light OFF \rightarrow ON	$ 0 V \rightarrow 10 \text{ to } 14 \\ V $
M+R (E65-38) - Body ground	O - Body ground	Outer mirror switch signal (Right or Down)	Engine switch on (IG), Left/Right adjustment switch L side, Mirror switch OFF \rightarrow RIGHT or DOWN	$ 0 \ V \rightarrow 10 \ to \ 14 \\ V $
MHR (E65-39) - Body ground	GR - Body ground	Outer mirror switch signal (Left or Down)	Engine switch on (IG), Left/Right adjustment switch L side, Mirror switch OFF \rightarrow LEFT or DOWN	$ 0 \ V \rightarrow 10 \ to \ 14 \\ V $
MVR (E65-40) - Body ground	P - Body ground	Outer mirror switch signal (Up or Right)	Engine switch on (IG), Left/Right adjustment switch L side, Mirror switch OFF \rightarrow UP or Right	$ 0 V \rightarrow 10 \text{ to } 14 \\ V $
RL (E66-1) - Body ground (*1)	SB - Body ground	Retract operation signal (LH side)	Engine switch on (IG), outer mirror is driving position \rightarrow Retract position	$ 0 V \rightarrow 10 \text{ to } 14 \\ V $
FL (E66-2) - Body ground (*1)	W - Body ground	Retract operation signal (LH side)	Engine switch on (IG), outer mirror is retract position \rightarrow Driving position	$ 0 V \rightarrow 10 \text{ to } 14 \\ V $
RR (E66-5) - Body ground (*1)	LG - Body ground	Retract operation signal (RH side)	Engine switch on (IG), outer mirror is driving position \rightarrow Retract position	$0 \xrightarrow{V \to 10 \text{ to } 14}_{V}$
FR (E66-6) - Body ground (*1)	G - Body ground	Retract operation signal (RH side)	Engine switch on (IG), outer mirror is retract position \rightarrow Driving position	$\begin{array}{c} 0 \\ V \rightarrow 10 \text{ to } 14 \\ V \end{array}$

HINT:

*1: with Retract Mirror

