Position Sensor Circuit

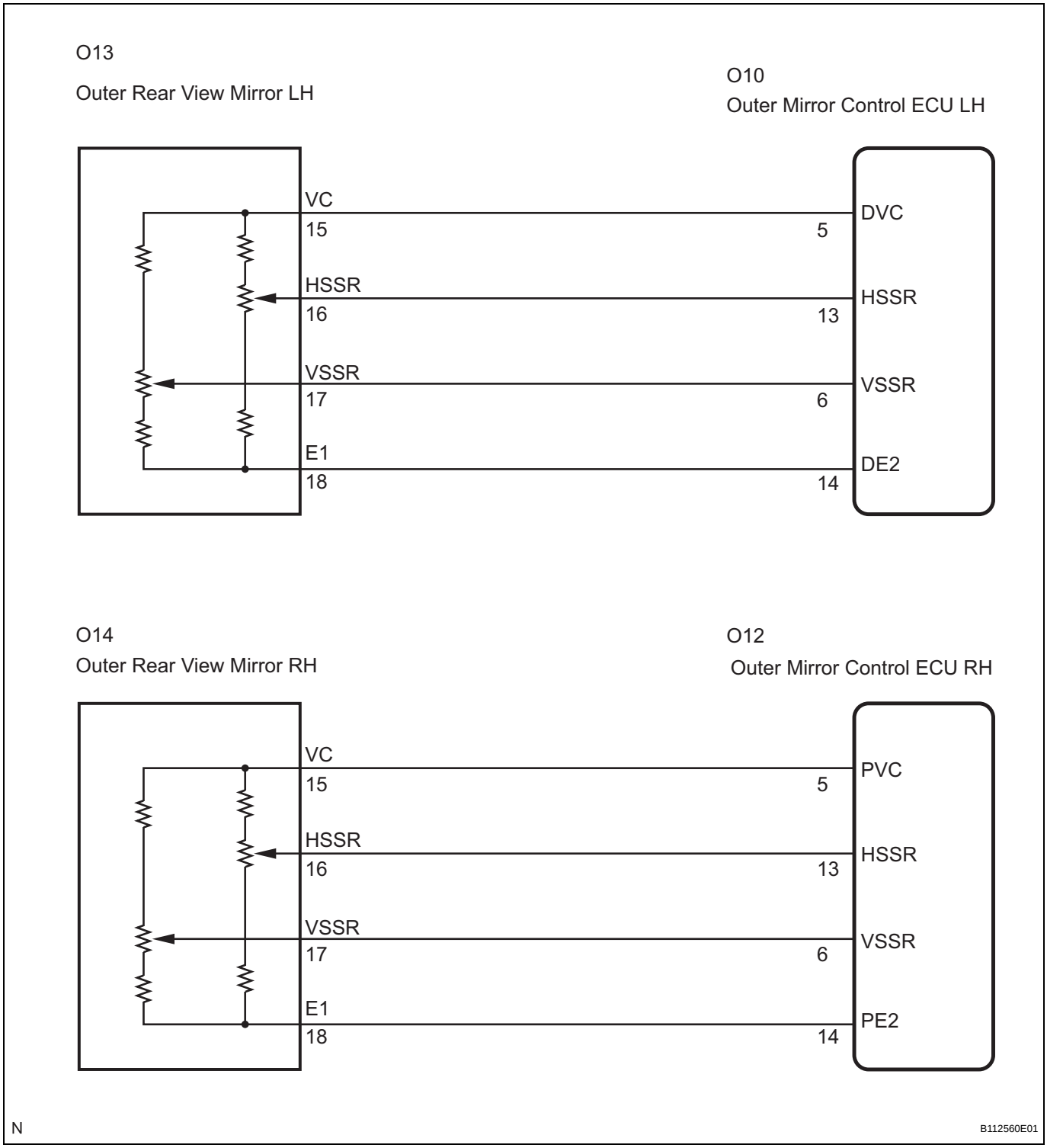
DESCRIPTION

When SET and 1 or 2 are pressed, the position sensor detects the mirror position and sends the signal to the outer mirror control ECU. Then when position 1 or 2 is pressed, the outer mirror control ECU drives the mirror motor based on the memorized sensor positions.

HINT:

The power mirror control system is part of the multiplex communication system. This system features shared communication wiring that reduces the wiring complexity of the communication lines. The first step in any repair is to confirm the proper operation of the communication system. Proceed with troubleshooting after the communication has been verified (See Multiplex Communication System) (See page MP-4).

WIRING DIAGRAM



INSPECTION PROCEDURE

1	**READ VALUE OF INTELLIGENT TESTER**

(a) Connect the intelligent tester to the DLC3.
(b) Ignition switch on.
(c) Enter the following menus: DIAGNOSIS / ENHANCED OBD II / DATA LIST.

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(d) Read the DATA LIST according to the display on the tester.

MIRROR-L/MIRROR-R

Item	Test Details	Diagnostic Note
MIRR POS SEN V	Vertical mirror position/MIN: 0, MAX 5 V	Within range from 0 to 5 V
MIRR POS SEN H	Horizontal mirror position/MIN: 0, MAX 5 V	Within range from 0 to 5 V

OK:
Tester displayed is 0 V to 5 V.

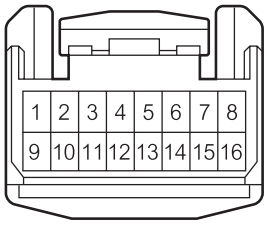
OK → **PROCEED TO NEXT CIRCUIT INSPECTION SHOWN IN PROBLEM SYMPTOMS TABLE**

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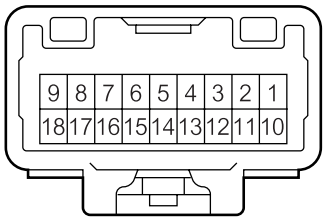
2 CHECK HARNESS AND CONNECTOR (OUTER REAR VIEW MIRROR - OUTER MIRROR CONTROL ECU)

Connector Front View:

O10
O12
Outer Mirror Control ECU



O13
O14
Outer Rear View Mirror



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(a) Disconnect the O10 or O12 ECU connector.
(b) Disconnect the O13 or O14 outer mirror connector.
(c) Measure the resistance according to the value(s) in the table below.

Resistance

Tester Connection (Symbols)	Condition	Specified Condition
O13-15 - O10-5 (DVC) (*1)	Always	Below 1 Ω
O14-15 - O12-5 (PVC) (*2)	Always	Below 1 Ω
O13-16 - O10-13 (HSSR) (*1)	Always	Below 1 Ω
O14-16 - O12-13 (HSSR) (*2)	Always	Below 1 Ω
O13-17 - O10-6 (VSSR) (*1)	Always	Below 1 Ω
O14-17 - O12-6 (VSSR) (*2)	Always	Below 1 Ω
O13-18 - O10-14 (DE2) (*1)	Always	Below 1 Ω
O14-18 - O12-14 (PE2) (*2)	Always	Below 1 Ω
O10-5 (DVC) - Body ground (*1)	Always	10 kΩ or higher
O12-5 (PVC) - Body ground (*2)	Always	10 kΩ or higher
O10-13 (HSSR) - Body ground (*1)	Always	10 kΩ or higher
O12-13 (HSSR) - Body ground (*2)	Always	10 kΩ or higher
O10-6 (VSSR) - Body ground (*1)	Always	10 kΩ or higher
O12-6 (VSSR) - Body ground (*2)	Always	10 kΩ or higher
O10-14 (DE2) - Body ground (*1)	Always	10 kΩ or higher
O12-14 (PE2) - Body ground (*2)	Always	10 kΩ or higher

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*1: LH side
*2: RH side

NG → **REPAIR OR REPLACE HARNESS OR CONNECTOR**

OK

REPLACE OUTER MIRROR CONTROL ECU