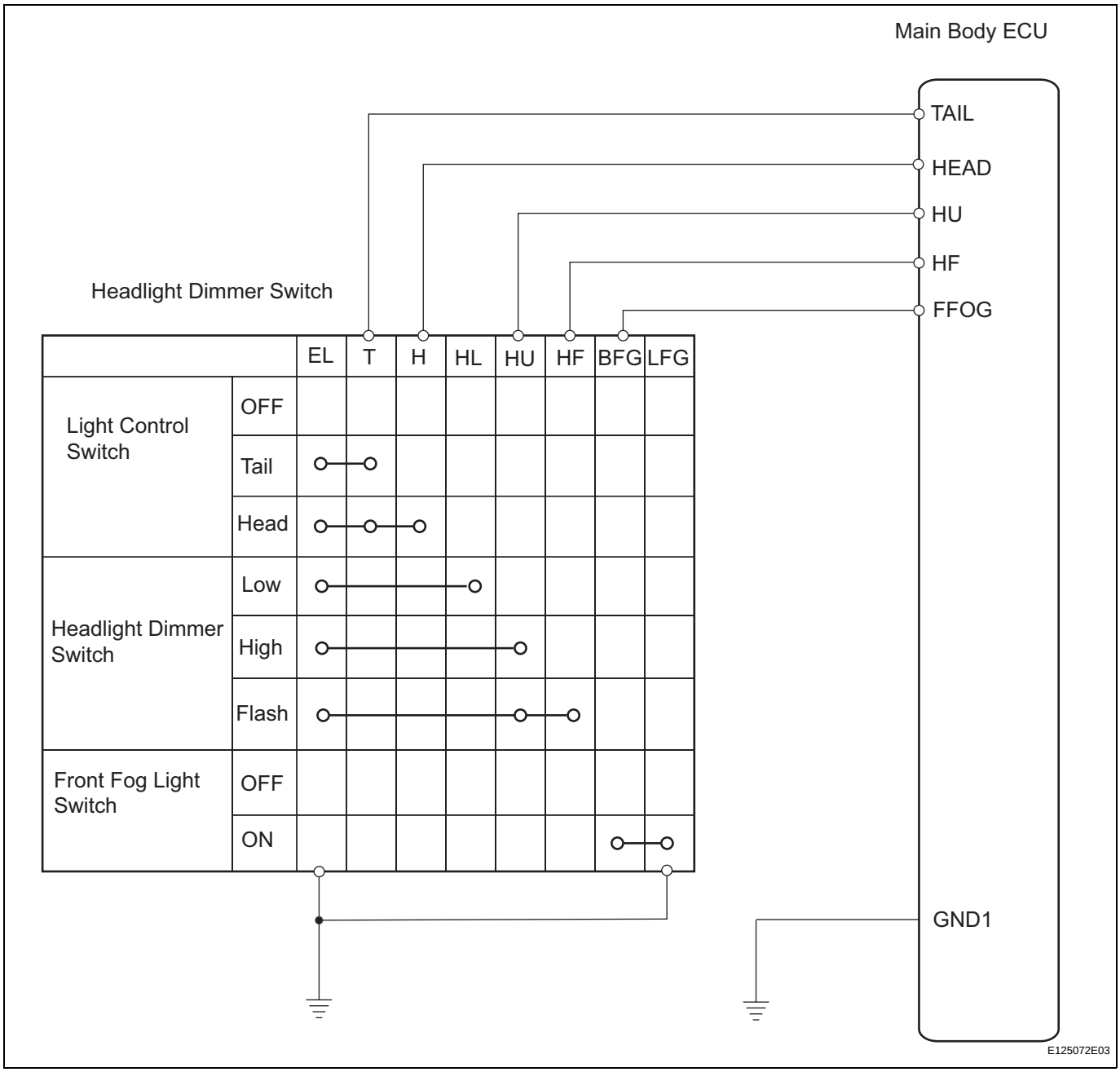
Light Control Switch Circuit

DESCRIPTION

This circuit detects the state of the headlight dimmer switch.

WIRING DIAGRAM



INSPECTION PROCEDURE

1	READ VALUE OF INTELLIGENT TESTER (MAIN BODY ECU)

(a) Connect the intelligent tester to the DLC3.
(b) Turn the ignition switch ON and press the intelligent tester main switch ON.

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(c) Select the items below in the DATA LIST, and read the displays on the intelligent tester.

Main body ECU

Item	Measurement / Display (Range)	Normal Condition	Diagnostic Note
DIMMER SW	Headlight dimmer switch signal / ON or OFF	ON: Headlight dimmer switch is in HI or FLASH position OFF: Headlight dimmer switch is in LO position	-
PASSING LIGHT SW	Passing light switch signal / ON or OFF	ON: Headlight dimmer switch is in FLASH position OFF: Headlight dimmer switch is in except FLASH position	-
FRONT FOG LIGHT SW	Front fog light switch signal / ON or OFF	ON: Front fog light switch is in ON position OFF: Front fog light switch is in OFF position	-
HEADLIGHT SW	Headlight control switch signal (HEAD) / ON or OFF	ON: Light control switch is in HEAD position OFF: Light control switch is in except HEAD position	-
HEADLIGHT SW (Tail)	Headlight control switch signal (TAIL) / ON or OFF	ON: Light control switch is in TAIL or HEAD position OFF: Light control switch is in except OFF position	-

OK:
ON is displayed on the intelligent tester screen.

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

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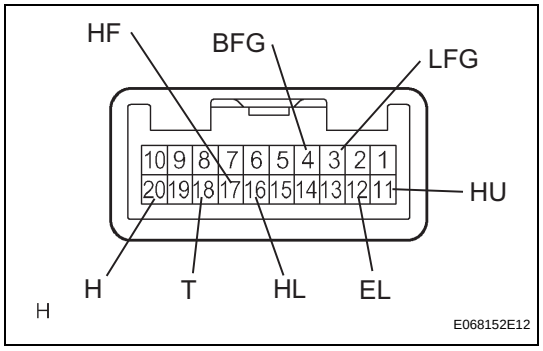
2 INSPECT HEADLIGHT DIMMER SWITCH



(a) Remove the headlight dimmer switch.
(b) Measure the resistance of the switch.

Standard resistance

Tester Connection	Condition	Specified Condition
18 (T) - 12 (EL)	OFF	10 kΩ or higher
18 (T) - 12 (EL)	TAIL	Below 1 Ω
20 (H) - 12 (EL)	OFF	10 kΩ or higher
20 (H) - 12 (EL)	HEAD	Below 1 Ω
16 (HL) - 12 (EL)	HIGH or FLASH	10 kΩ or higher
16 (HL) - 12 (EL)	LOW	Below 1 Ω
11 (HU) - 12 (EL)	LOW or FLASH	10 kΩ or higher
11 (HU) - 12 (EL)	HIGH	Below 1 Ω
17 (HF) - 12 (EL)	LOW or HIGH	10 kΩ or higher
17 (HF) - 12 (EL)	FLASH	Below 1 Ω
4 (BFG) - 3 (LFG)	Fog light switch OFF	10 kΩ or higher
4 (BFG) - 3 (LFG)	Fog light switch ON	Below 1 Ω

NG → **REPLACE HEADLIGHT DIMMER SWITCH ASSEMBLY**

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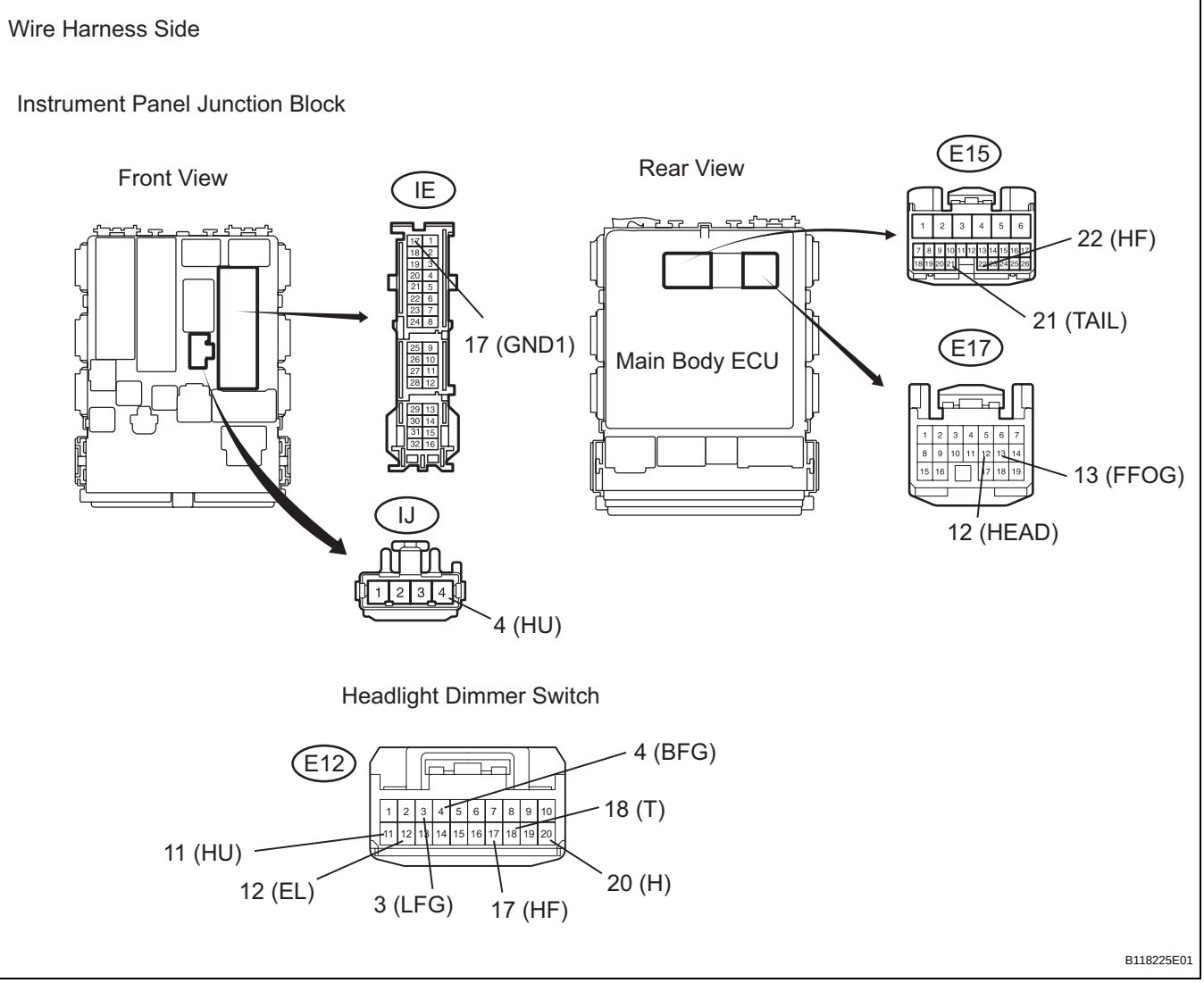
3	CHECK WIRE HARNESS (MAIN BODY ECU - DIMMER SWITCH AND BODY GROUND)



(a) Disconnect the E12 headlight dimmer switch connector.
(b) Disconnect the IE and IJ instrument panel junction block connectors.
(c) Disconnect the E15 and E17 main body ECU connectors.
(d) Measure the resistance of the wire harness side connectors.

Standard resistance

Tester Connection	Specified Condition
E15-22 (HF) - E12-17 (HF)	Below 1 Ω
E15-22 (HF) or E12-17 (HF) - Body ground	10 kΩ or higher
E15-21 (TAIL) - E12-18 (T)	Below 1 Ω
E15-21 (TAIL) or E12-18 (T) - Body ground	10 kΩ or higher
E17-12 (HEAD) - E12-20 (H)	Below 1 Ω

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Tester Connection	Specified Condition
E17-12 (HEAD) or E12-20 (H) - Body ground	10 kΩ or higher
E17-13 (FFOG) - E12-4 (BFG)	Below 1 Ω
E17-13 (FFOG) or E12-4 (BFG) - Body ground	10 kΩ or higher
IJ-4 (HU) - E12-11 (HU)	Below 1 Ω
IJ-4 (HU) or E12-11 (HU) - Body ground	10 kΩ or higher
E12-12 (EL) - Body ground	Below 1 Ω
E12-3 (LFG) - Body ground	Below 1 Ω
IE-17 (GND1) - Body ground	Below 1 Ω

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

OK

REPLACE INSTRUMENT PANEL JUNCTION BLOCK (MAIN BODY ECU)