

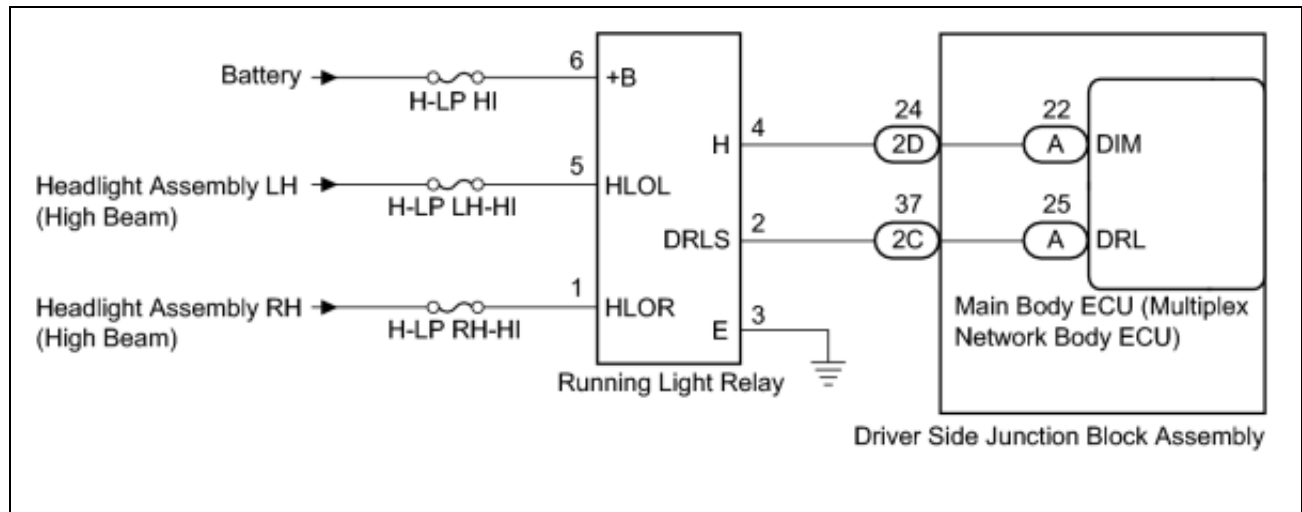
Last Modified: 12-17-2013	6.6 J	Doc ID: RM000001A7L095X
Model Year: 2014	Model: 4Runner	Prod Date Range: [08/2013 -]
Title: LIGHTING (EXT): LIGHTING SYSTEM: Headlight (HI-BEAM) Circuit; 2014 MY 4Runner [08/2013 -]		

Headlight (HI-BEAM) Circuit

DESCRIPTION

The main body ECU (multiplex network body ECU) receives headlight dimmer switch information signals, and illuminates the high beam headlight.

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:
Inspect the fuses and bulbs for circuits related to this system before performing the following inspection procedure.

PROCEDURE

1.	PERFORM ACTIVE TEST USING TECHSTREAM (DAYTIME RUNNING LIGHT)
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(a) Using the Techstream, perform the Active Test INFO .

Main Body

TESTER DISPLAY	TEST PART	CONTROL RANGE	DIAGNOSTIC NOTE
Daytime Running Light	Running light relay	ON/OFF	-
Head Light Hi	Running light relay	ON/OFF	-

OK:

Running light relay operates (high beam headlights illuminate).

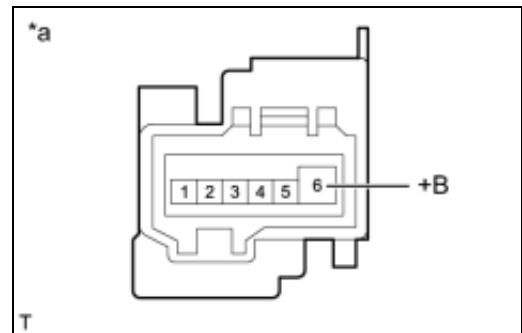
NG ► **GO TO STEP 2****OK** ► **PROCEED TO NEXT SUSPECTED AREA SHOWN
IN PROBLEM SYMPTOMS TABLE****2. CHECK HARNESS AND CONNECTOR (BATTERY - RUNNING LIGHT RELAY)**

(a) Remove the running light relay from the engine room relay block, junction block.

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

Standard Voltage:

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
Running light relay terminal 6 (+B) - Body ground	Always	11 to 14 V

**Text in Illustration**

*a Front view of wire harness connector
(to Running Light Relay)

NG ► **REPAIR OR REPLACE HARNESS OR CONNECTOR****OK****3. CHECK HARNESS AND CONNECTOR (RUNNING LIGHT RELAY - DRIVER SIDE JUNCTION BLOCK ASSEMBLY)**

(a) Remove the running light relay from the engine room relay block, junction block.

(b) Disconnect the 2C and 2D driver side junction block assembly.

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

Standard Resistance (Check for Open):

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
Running light relay terminal 4 (H) - 2D-24	Always	Below 1 Ω
Running light relay terminal 2 (DRLS) - 2C-37	Always	Below 1 Ω
Running light relay terminal 3 (E) - Body ground	Always	Below 1 Ω

Standard Resistance (Check for Short):

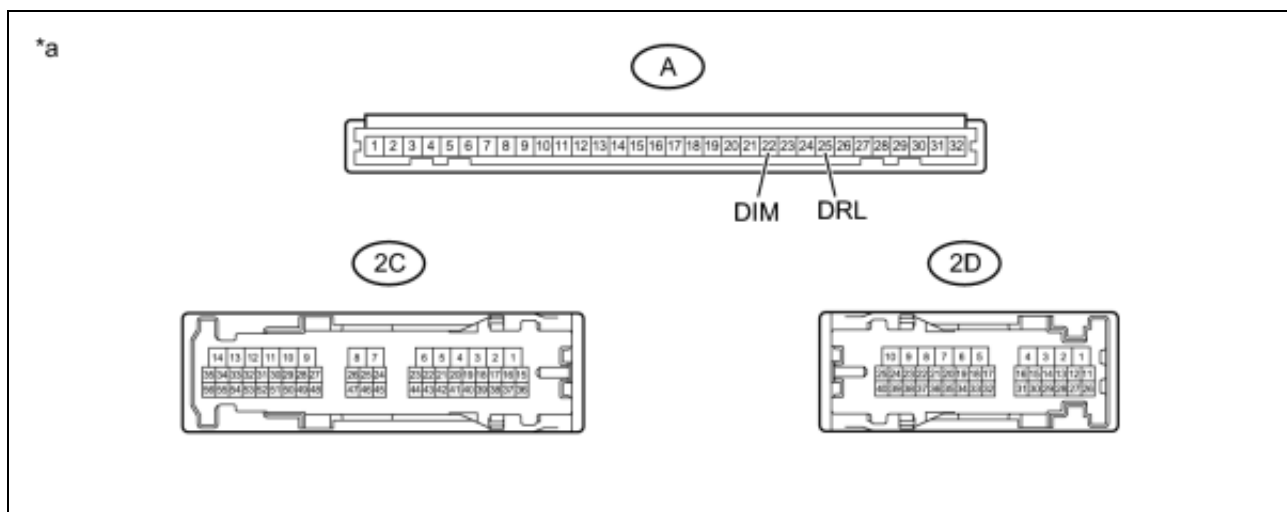
TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
Running light relay terminal 4 (H) or 2D-24 - Body ground	Always	10 k Ω or higher
Running light relay terminal 2 (DRLS) or 2C-37 - Body ground	Always	10 k Ω or higher

NG ► REPAIR OR REPLACE HARNESS OR CONNECTOR

OK ► GO TO STEP 4

4. CHECK DRIVER SIDE JUNCTION BLOCK ASSEMBLY

(a) Remove the driver side junction block assembly **INFO**.



(b) Remove the main body ECU (multiplex network body ECU) from the driver side junction block assembly.

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

Standard Resistance:

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
2D-24 - A-22 (DIM)	Always	Below 1 Ω

Text in Illustration

*a	Component without harness connected (Driver Side Junction Block Assembly)	-	-
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NG▶REPLACE DRIVER SIDE JUNCTION BLOCK ASSEMBLY

OK▼

5.	REPLACE RUNNING LIGHT RELAY
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- (a) Replace the running light relay.
- (b) Check that the daytime running lights operate normally INFO .

OK:
The daytime running lights operate normally.

NG▶REPLACE MAIN BODY ECU (MULTIPLEX NETWORK BODY ECU)

OK▶END (RUNNING LIGHT RELAY WAS DEFECTIVE)

