

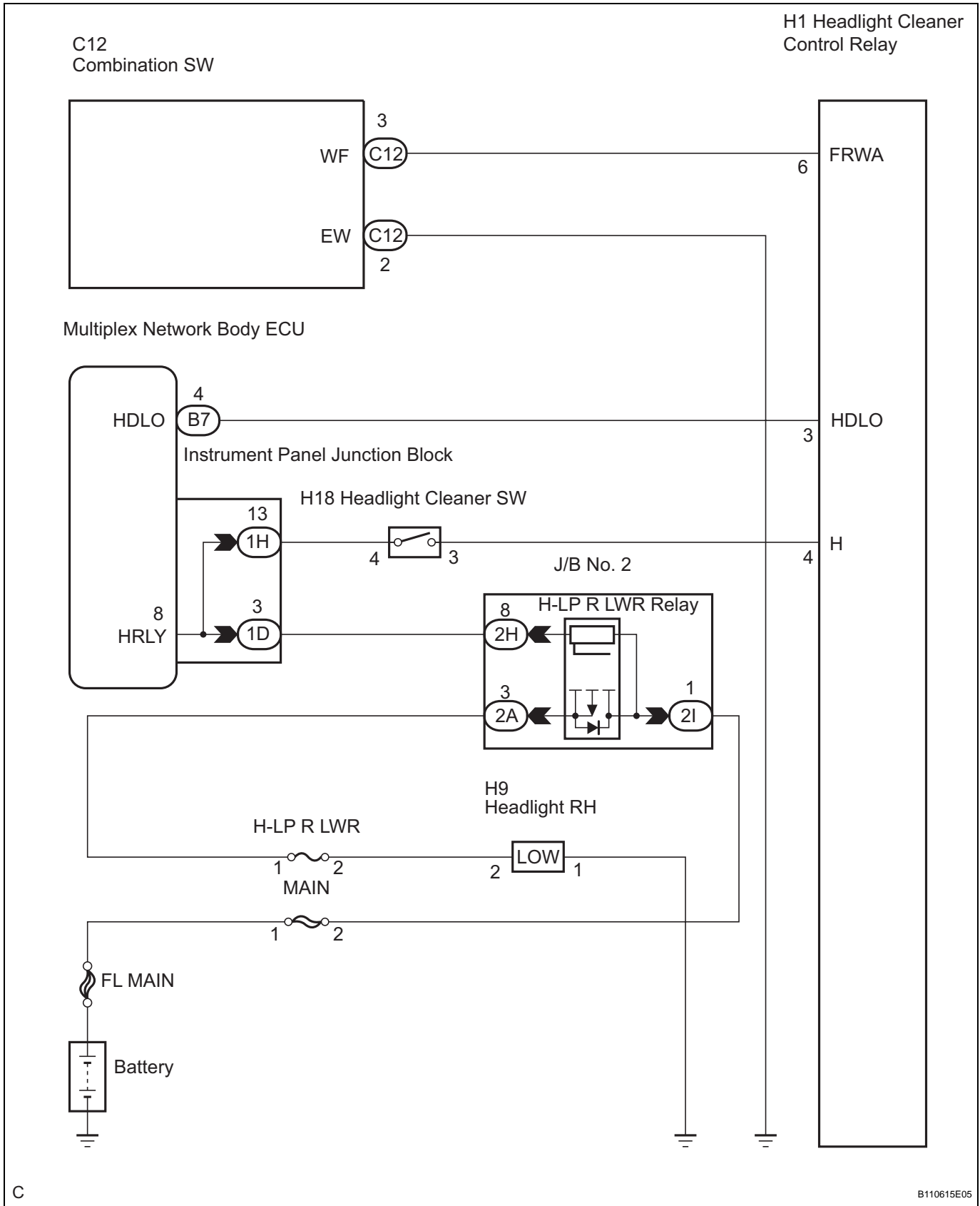
Headlight Cleaner Switch Circuit

DESCRIPTION

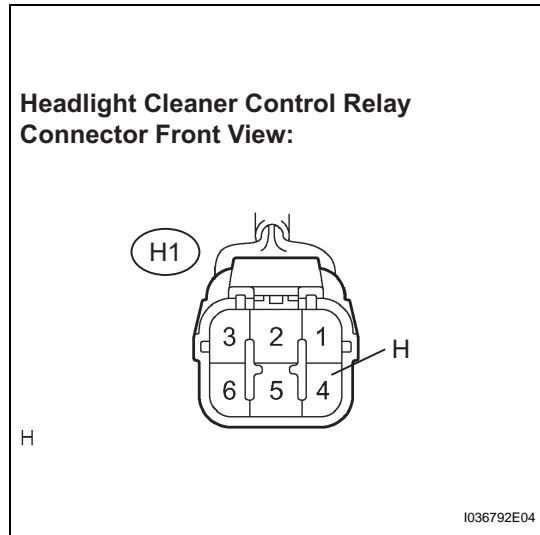
This circuit sends the signal for the headlight cleaner control relay to operate the headlight cleaner motor and pump assembly. The signal is sent when the headlight cleaner switch or the front washer switch is turned ON.

The headlight cleaner does not work while the multiplex network body computer sends the signal that the daytime running light system is in operation.

WIRING DIAGRAM



1 INSPECT HEADLIGHT CLEANER CONTROL RELAY



- (a) Disconnect the connector from the headlight cleaner control relay.
- (b) Measure the voltage according to the value(s) in the table below.

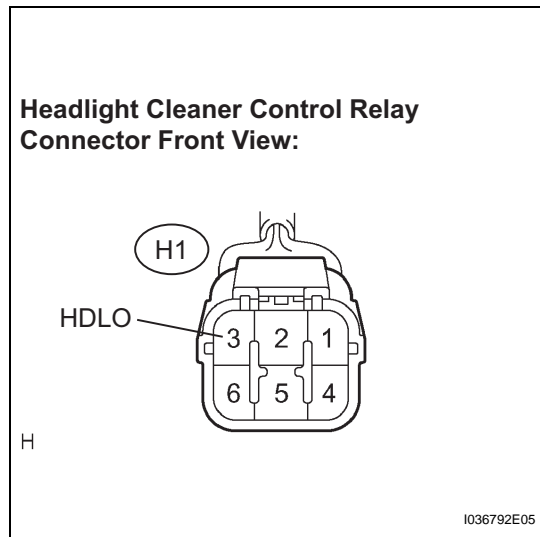
Standard voltage

Tester Connection	Condition	Specified Condition
H - Body ground	light control switch HEAD, headlight cleaner switch OFF → ON	Below 1 V → 10 to 14 V

NG → **Go to step 4**

OK

2 INSPECT HEADLIGHT CLEANER CONTROL RELAY



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

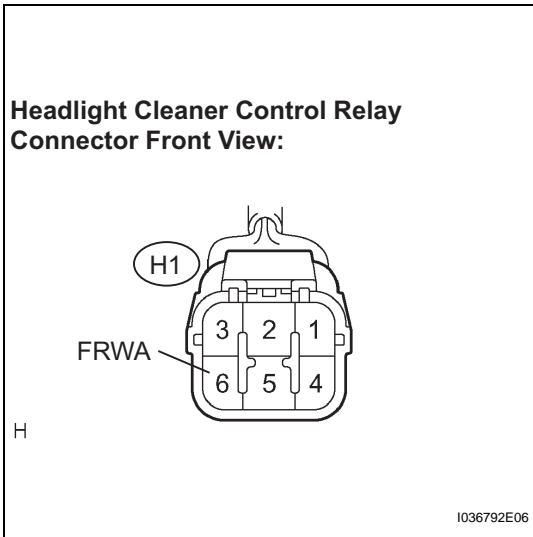
Standard voltage

Tester Connection	Condition	Specified Condition
HDLO - Body ground	Engine idling, parking brake released, Light control switch OFF and shift in any position other than P position.	10 to 14 V

NG → **Go to step 6**

OK

3 INSPECT HEADLIGHT CLEANER CONTROL RELAY



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

Standard resistance

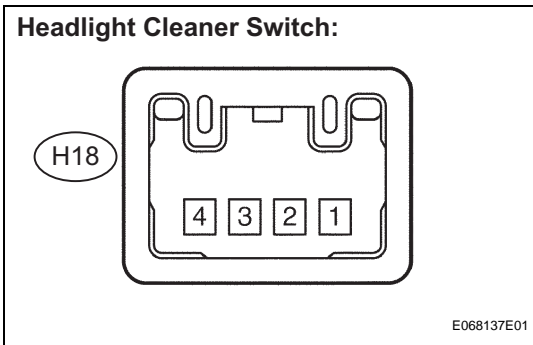
Tester Connection	Condition	Specified Condition
FRWA - Body ground	Front washer switch OFF → ON	10 kΩ or higher → Below 1 Ω

NG → **Go to step 7**

OK

PROCEED TO NEXT CIRCUIT INSPECTION SHOWN IN PROBLEM SYMPTOMS TABLE

4 INSPECT HEADLIGHT CLEANER SWITCH ASSEMBLY



(a) Disconnect the connector from the headlight cleaner switch.

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

Standard resistance

Tester Connection	Condition	Specified Condition
4 - 3	Headlight cleaner switch not pushed → pushed	10 kΩ or higher → Below 1 Ω

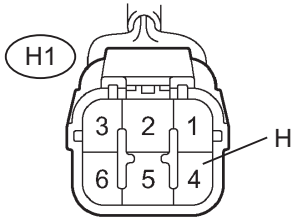
NG → **REPLACE HEADLIGHT CLEANER SWITCH ASSEMBLY**

OK

5 CHECK HARNESS AND CONNECTOR (HEADLIGHT CLEANER CONTROL RELAY - INSTRUMENT PANEL J/B))

- (a) Disconnect the connector from the headlight cleaner control relay.
- (b) Disconnect the connector from the instrument panel J/B.

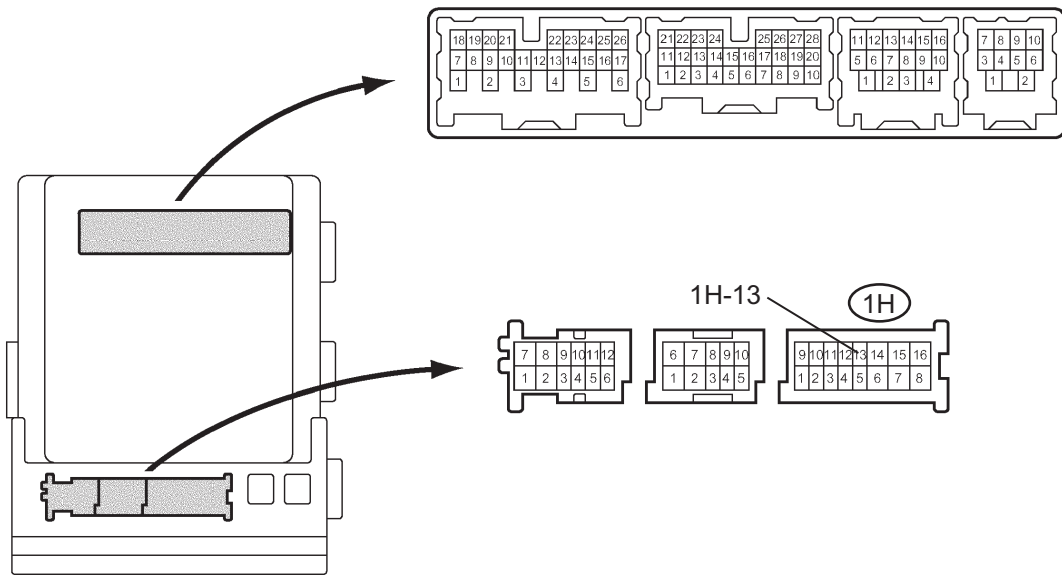
Headlight Cleaner Control Relay Connector Front View:



H

I036792E07

Instrument Panel Junction Block Assembly Back Side:



H

E068613E14

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

Standard resistance

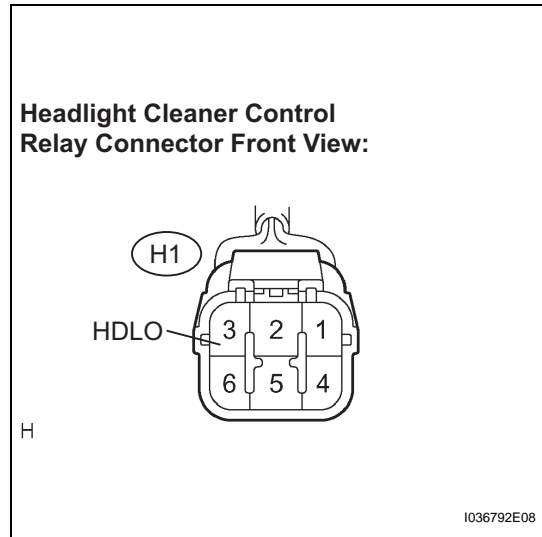
Tester Connection	Condition	Specified Condition
H - 1H-13	Headlight cleaner switch not pushed → pushed	10 kΩ or higher → Below 1 Ω
H - Body ground	Always	10 kΩ or higher

NG REPAIR OR REPLACE HARNESS OR CONNECTOR

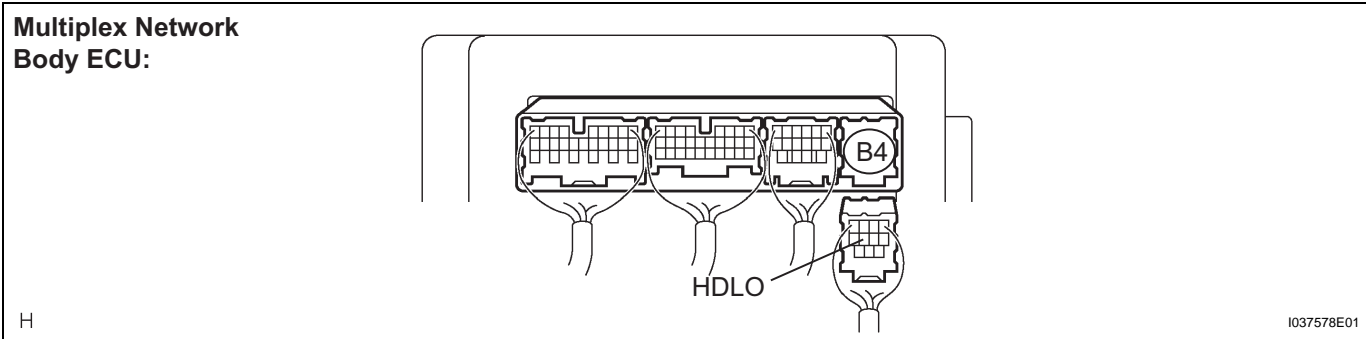
OK

REPLACE INSTRUMENT PANEL JUNCTION BLOCK ASSEMBLY

6 CHECK HARNESS AND CONNECTOR (HEADLIGHT CLEANER CONTROL RELAY - BODY ECU)



- (a) Disconnect the connector from the headlight cleaner.
- (b) Disconnect the connector from the multiplex network body ECU.



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

Standard resistance

Tester Connection	Condition	Specified Condition
HDLO - HDLO	Always	Below 1 Ω
HDLO - Body ground	Always	10 kΩ or higher

NG REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

REPLACE INSTRUMENT PANEL JUNCTION BLOCK ASSEMBLY

7**INSPECT WINDSHIELD WIPER SWITCH ASSEMBLY**

- (a) Inspect the windshield wiper switch assembly (See page [WW-50](#)).

NG**REPLACE WINDSHIELD WIPER SWITCH ASSEMBLY****OK****REPAIR OR REPLACE HARNESS OR CONNECTOR**