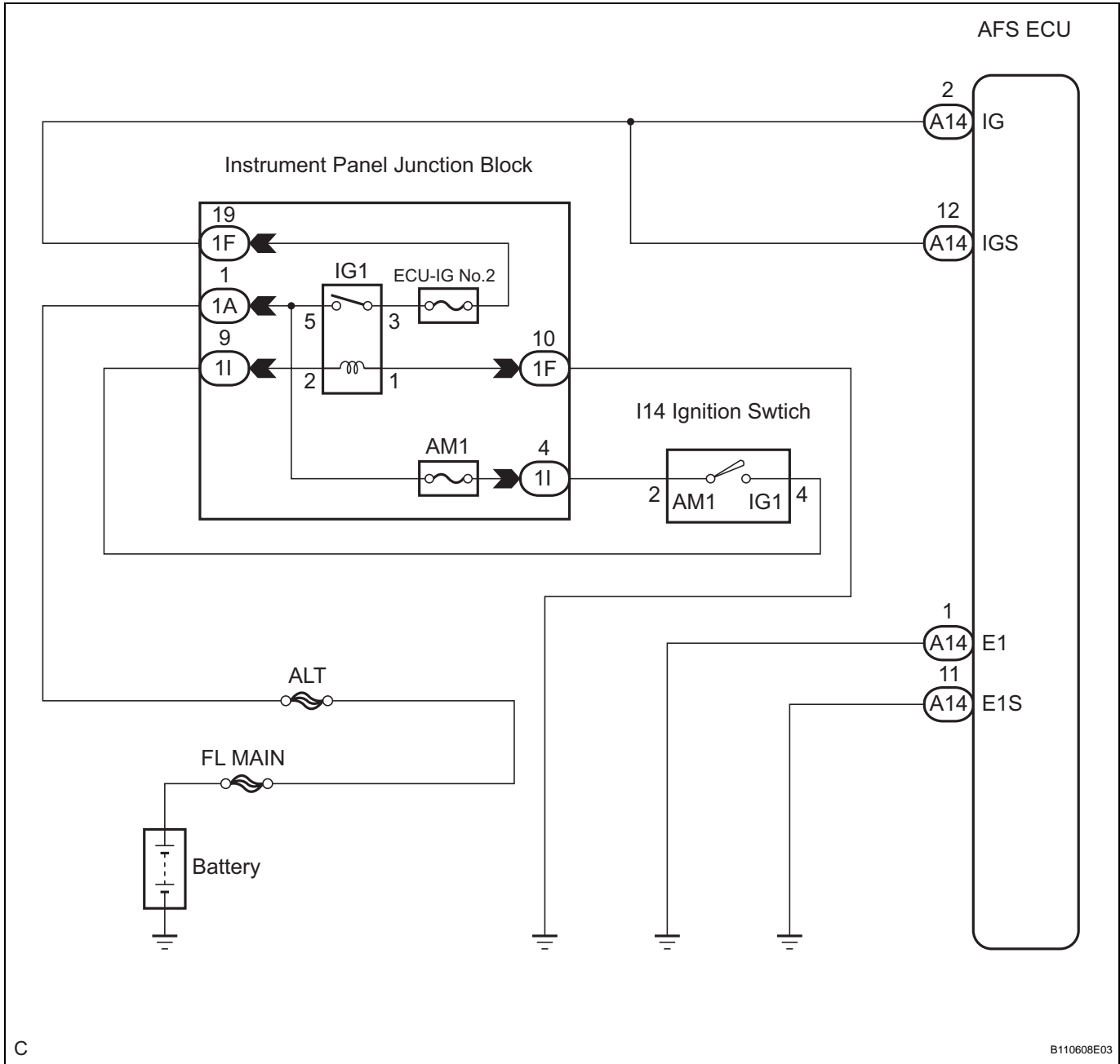


## AFS ECU Power Source Circuit

### DESCRIPTION

This circuit detects the state of the ignition switch and send it to the AFS ECU.

### WIRING DIAGRAM



1

INSPECT FUSE

- (a) Inspect the ECU-IG No.2 fuse and AM1 fuse in the instrument panel junction block assembly.

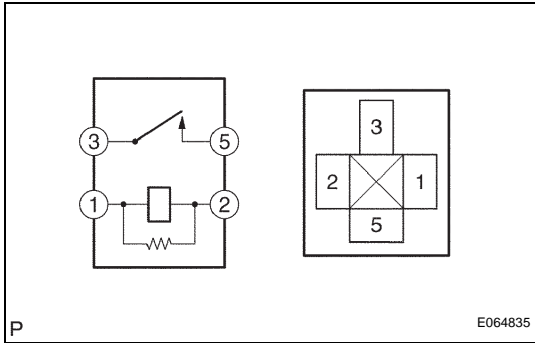
**Resistance:**  
**Below 1  $\Omega$**

NG → REPLACE FUSE

OK

**2 INSPECT RELAY**

- (a) Remove the IG1 relay from the instrument panel J/B assembly.
- (b) Measure the resistance according to the value(s) in the table below.



**Resistance**

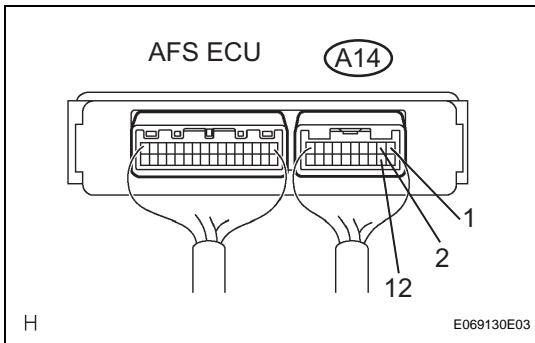
Tester connection	Condition	Specified resistance
3 - 5	Always	10 kΩ or higher
3 - 5	Apply B+ between the terminal 1 and 2	Below 1 Ω

NG → REPLACE RELAY

OK

**3 INSPECT AFS ECU**

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



**Voltage**

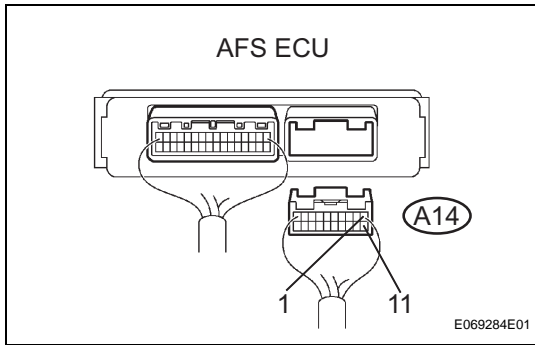
Tester connection	Condition	Specified condition
A14-2 (IG) - A14-1 (E1)	Ignition switch OFF → ON	Below 1 V → 10 to 14 V
A14-12 (IGS) - A14-1 (E1)	Ignition switch OFF → ON	Below 1 V → 10 to 14 V

NG → Go to step 4

OK

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

**4 CHECK HARNESS AND CONNECTOR (AFS ECU - BODY GROUND)**



- (a) Disconnect the A14 connector from headlight swivel ECU assembly.
- (b) Measure the resistance according to the value(s) in the table below.

**Resistance**

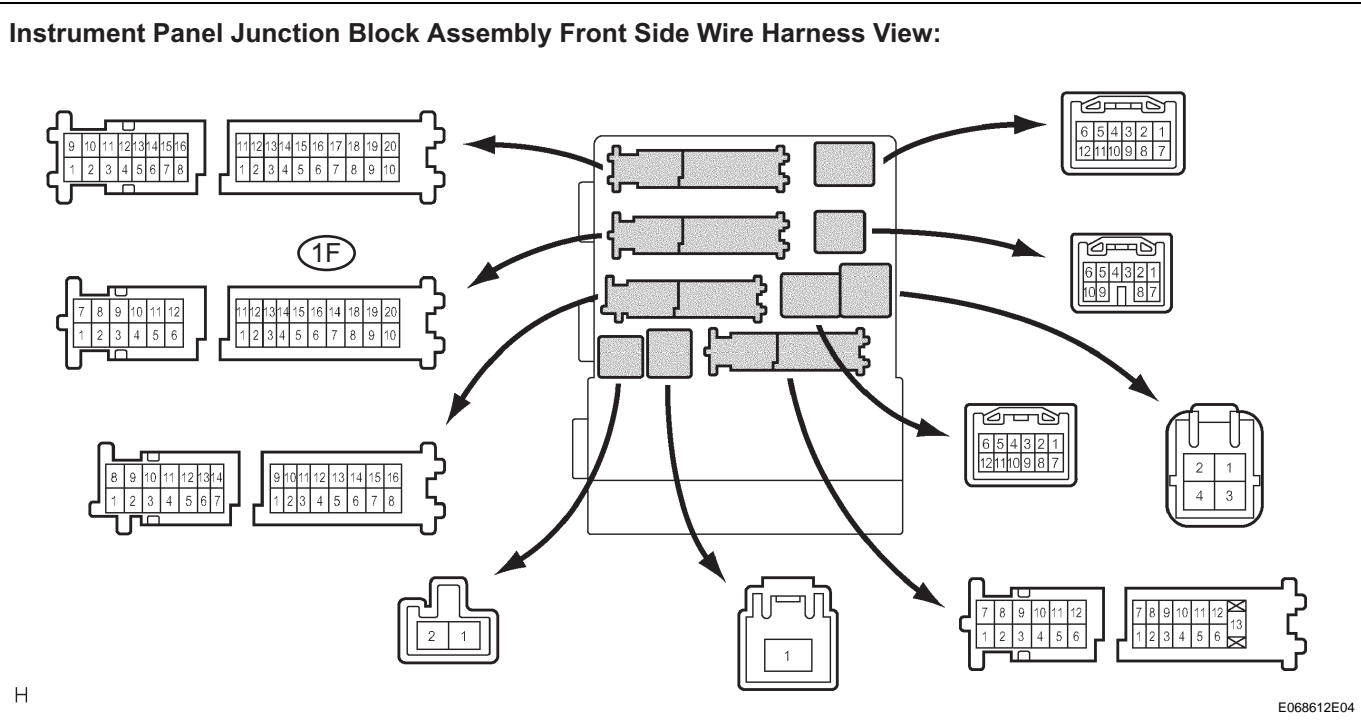
Tester connection	Condition	Specified condition
A14-1 (E1) - Body ground	Always	Below 1 Ω
A14-11 (E1S) - Body ground	Always	Below 1 Ω

**NG** REPAIR OR REPLACE HARNESS OR CONNECTOR

**OK**

**5 INSPECT INSTRUMENT PANEL J/B ASSEMBLY**

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



**Voltage**

Tester connection	Condition	Specified condition
1F-19 - Body ground	Ignition switch OFF → ON	Below 1 V → 10 to 14 V

NG

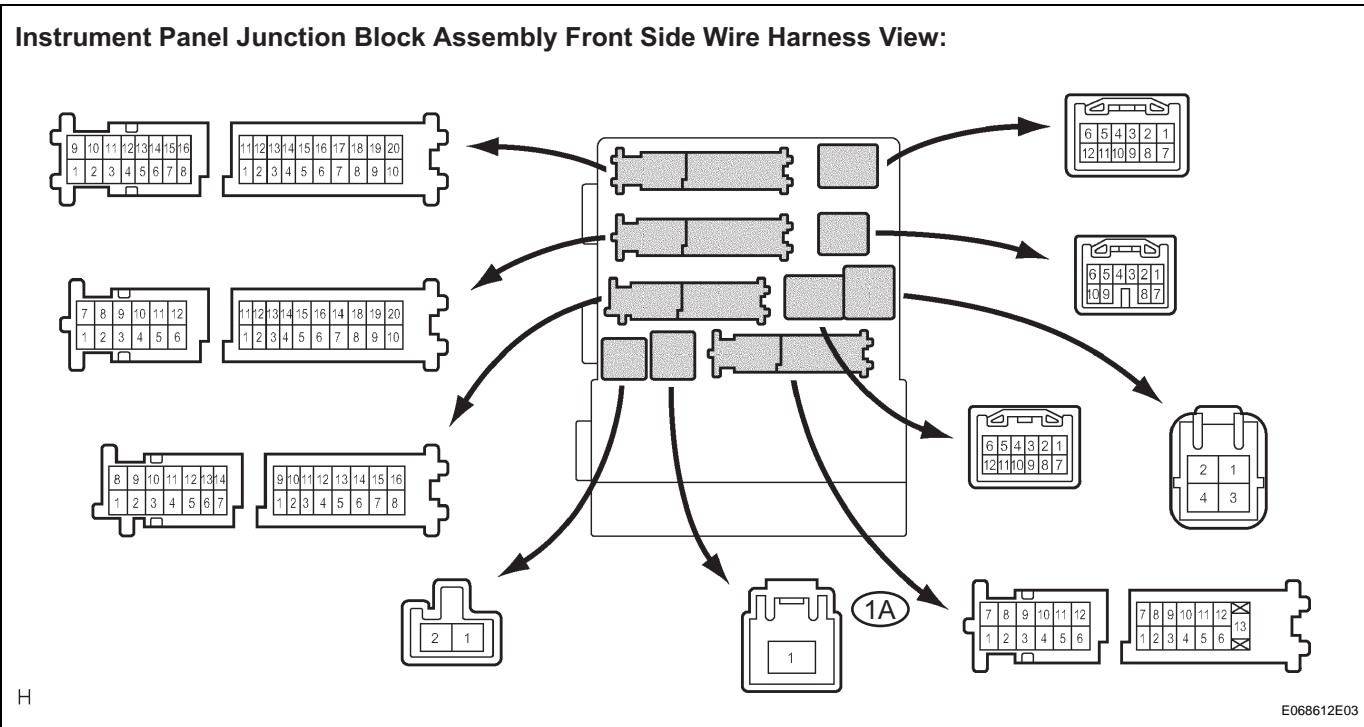
Go to step 6

OK

REPAIR OR REPLACE HARNESS OR CONNECTOR (INSTRUMENT PANEL J/B ASSEMBLY - AFS ECU)

**6 INSPECT INSTRUMENT PANEL J/B ASSEMBLY (POWER SOURCE CIRCUIT)**

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



**Voltage**

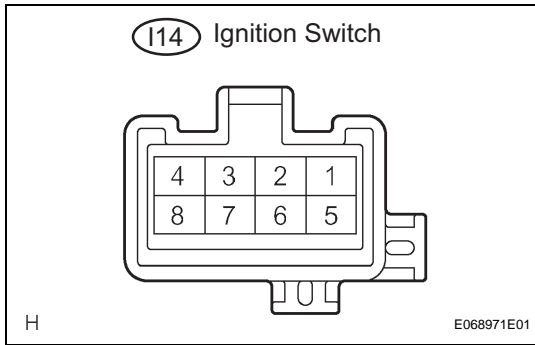
Tester connection	Condition	Specified condition
1A-1 - Body ground	Always	10 to 14 V

NG

REPAIR OR REPLACE HARNESS OR CONNECTOR (BATTERY - INSTRUMENT PANEL J/B ASSEMBLY)

OK

**7 INSPECT IGNITION SWITCH**



- (a) Disconnect the ignition switch connector.
- (b) Measure the resistance according to the value(s) in the table below.

**Resistance**

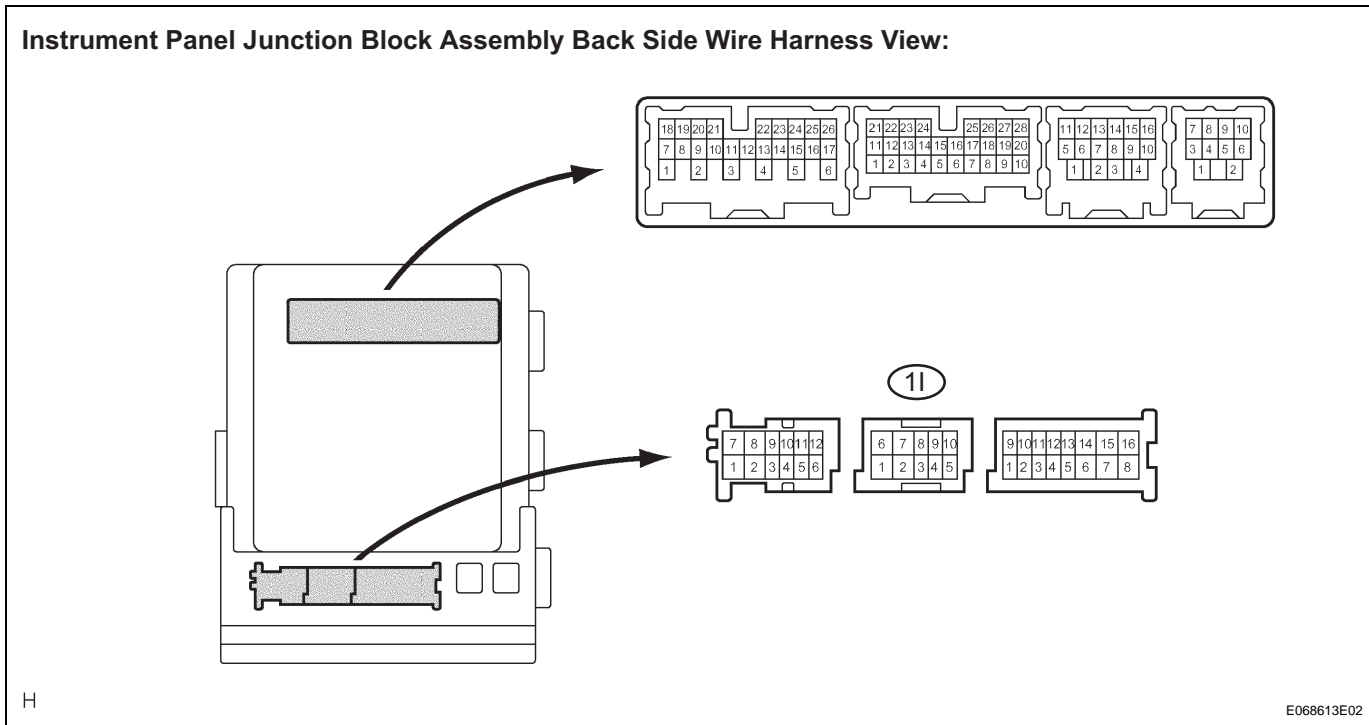
Tester connection	Condition	Specified condition
2 - 4	Ignition switch OFF	10 kΩ or higher
2 - 4	Ignition switch ON	Below 1 Ω

**NG** → **REPLACE IGNITION SWITCH**

**OK**

**8 INSPECT INSTRUMENT PANEL J/B ASSEMBLY**

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



**Voltage**

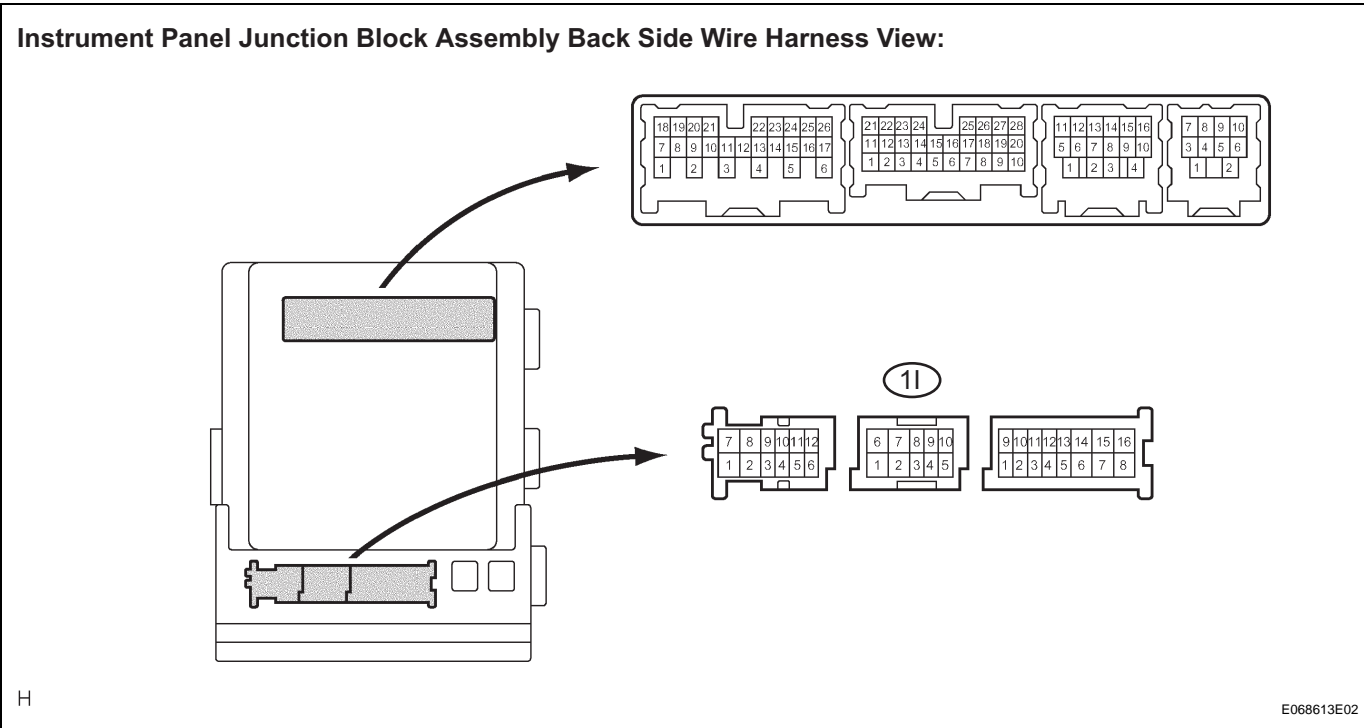
Tester connection	Condition	Specified condition
11-4 - Body ground	Always	10 to 14 V

**NG** **REPLACE INSTRUMENT PANEL J/B ASSEMBLY**

**OK**

**9 INSPECT INSTRUMENT PANEL J/B ASSEMBLY**

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



**Voltage**

Tester connection	Condition	Specified condition
1I-9 - Body ground	Ignition switch OFF → ON	Below 1 V → 10 to 14 V

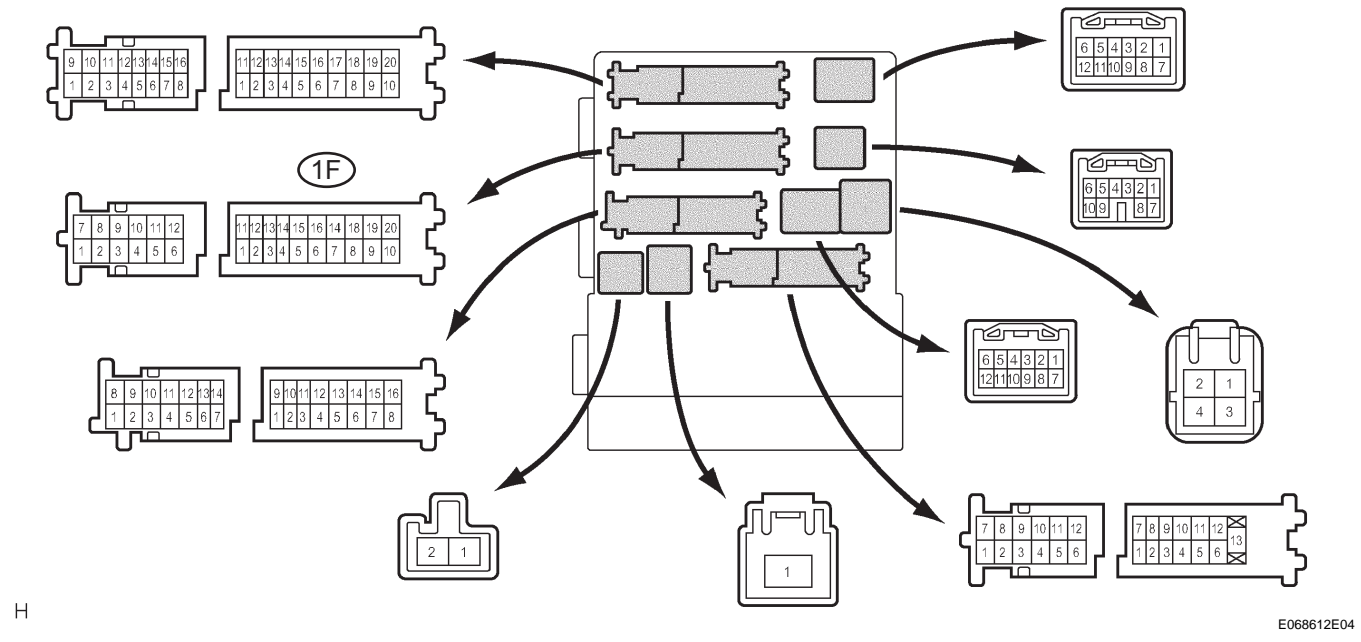
**NG** **REPAIR OR REPLACE HARNESS OR CONNECTOR**

**OK**

**10 CHECK HARNESS AND CONNECTOR (INSTRUMENT PANEL J/B ASSEMBLY - BODY GROUND)**

- (a) Disconnect the 1F connector from the instrument panel junction block assembly.
- (b) Measure the resistance according to the value(s) in the table below.

Instrument Panel Junction Block Assembly Front Side Wire Harness View:



Resistance

Tester connection	Condition	Specified condition
1F-10 - Body ground	Always	Below 1 Ω

NG

REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

REPLACE INSTRUMENT PANEL J/B ASSEMBLY