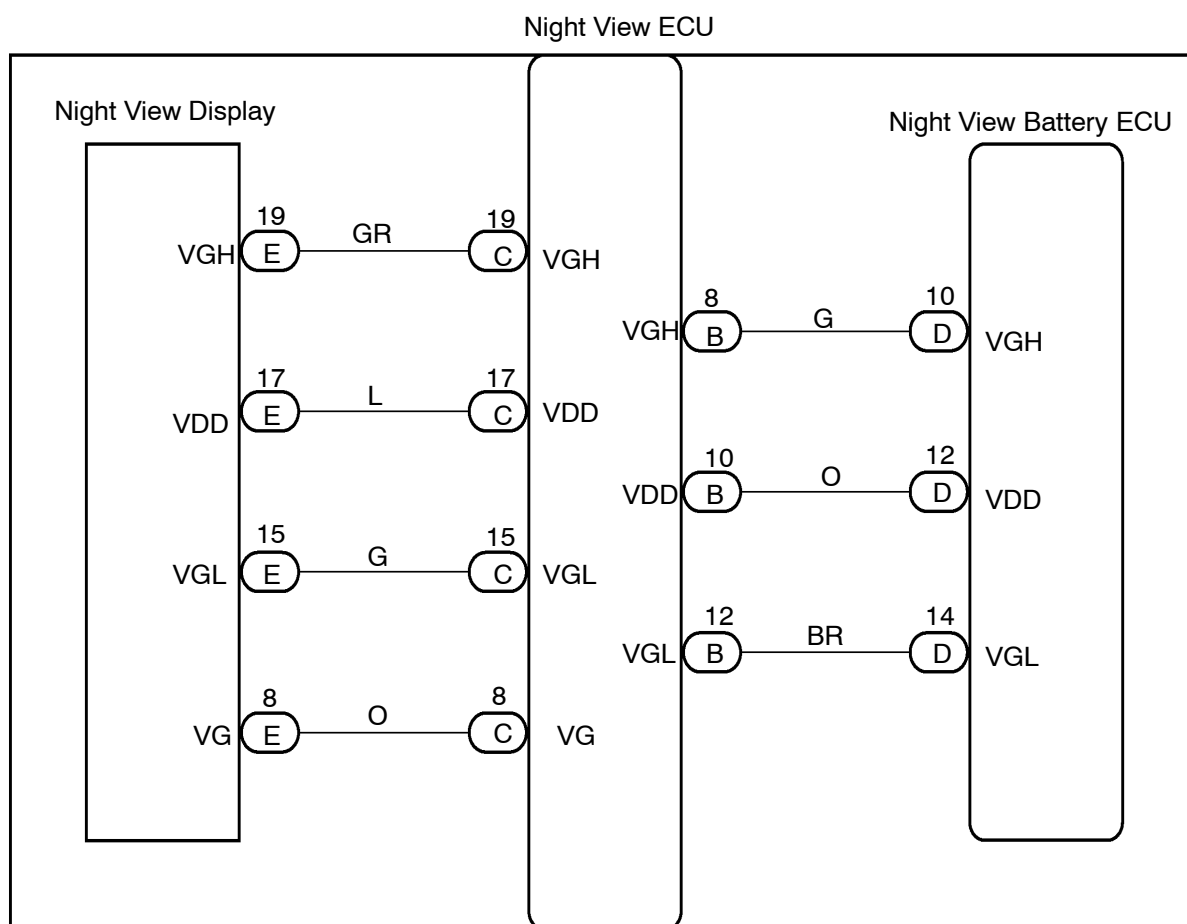


## 6. Screen is white

### CIRCUIT DESCRIPTION

White screen occurs by a malfunction of the Night View Camera or the Night View Display, and also by dirt on the windshield.

### WIRING DIAGRAM



H

I26409

## INSPECTION PROCEDURE

|   |                                                           |
|---|-----------------------------------------------------------|
| 1 | Check the windshield glass in front of Night View Camera. |
|---|-----------------------------------------------------------|

**OK:**

Windshield glass is clean.

**HINT:**

Night View Camera Cleaning Method (see page [DI-1077](#)).

**NG**

Clean the windshield glass  
(Dirt on the windshield glass).

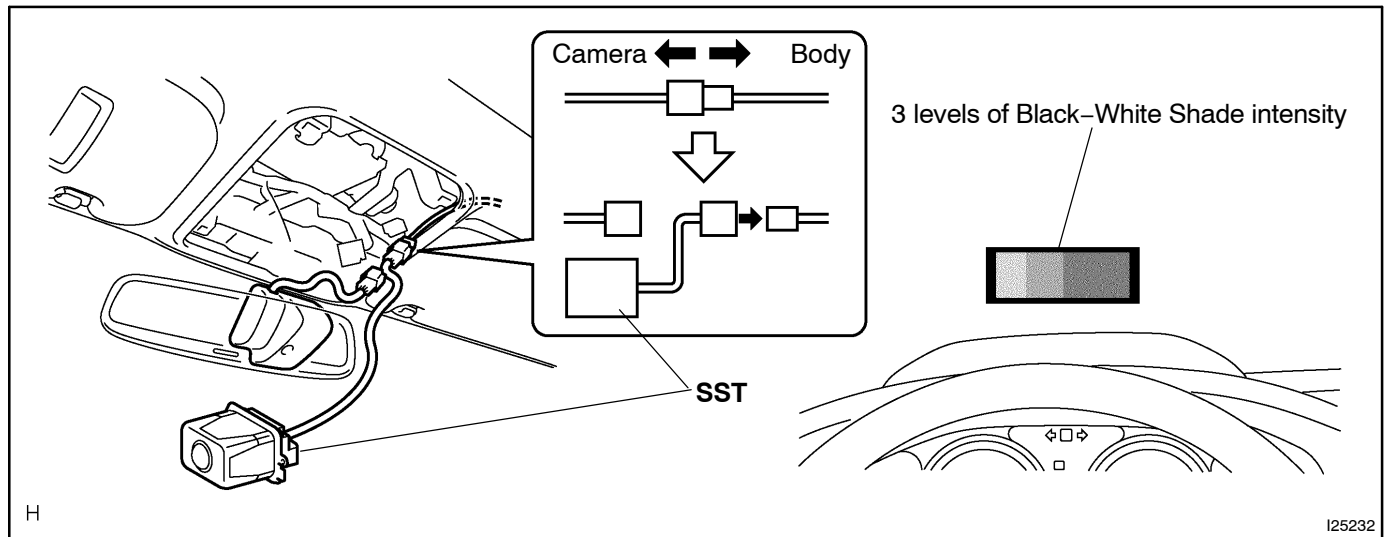
**OK**

## 2 Check Night View Camera using SST.

### PREPARATION:

- (a) Remove the over head junction (map light cover).
- (b) Remove the connector from the Night View Camera.
- (c) Connect SST to the wire harness of the Night View Camera on the body side as shown in the illustration.

SST 09991-00610



- (d) Turn the ignition switch ON.
- (e) Switch to Inspection Mode (See page [DI-1077](#)).

### CHECK:

Check the screen of the Night View Display.

### OK:

3 levels of Black-White shade intensity displayed.

NG

Go to step 3.

OK

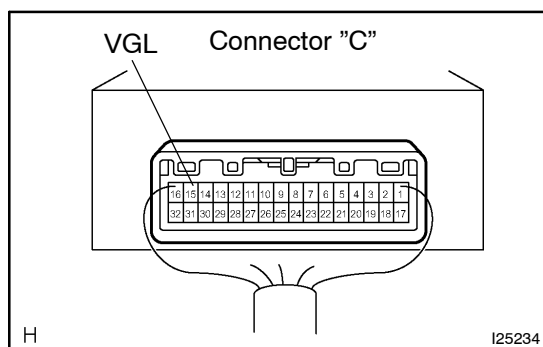
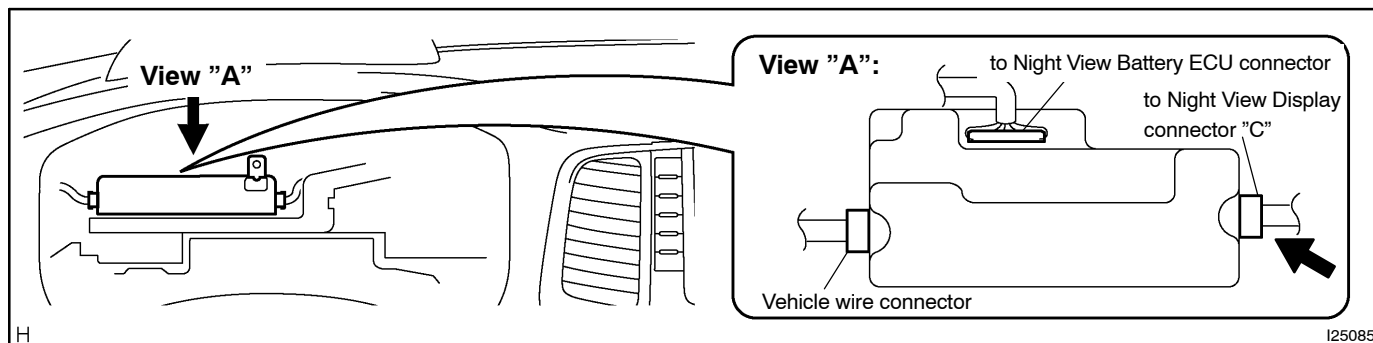
Replace Night View Camera.

### 3 Check voltage between terminal VGL of Night View ECU connector "C" and body ground.

#### PREPARATION:

- Remove the combination meter.
- Turn the ignition switch ON.

#### CHECK:



Measure voltage between terminal VGL of the Night View ECU connector "C" and body ground.

(Terminals of ECU: See page [DI-1081](#))

#### OK:

#### Voltage:

VGL: -15 to -17 V

(Terminal voltages must meet the specified value between 0 and 20 seconds after ignition switch ON.)

NG

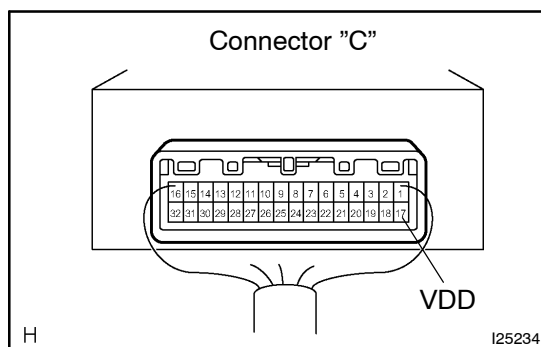
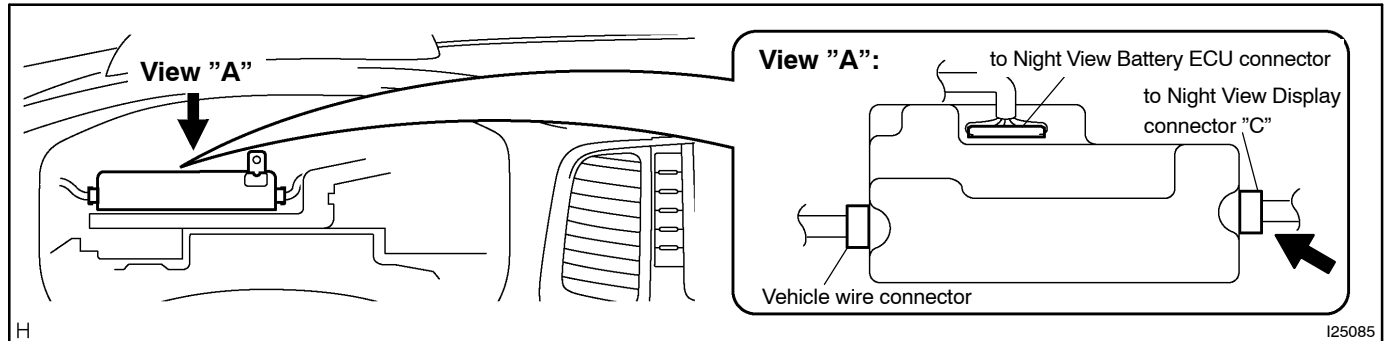
Go to step 7.

OK

- 4 Check voltage between terminal VDD of Night View ECU connector "C" and body ground.**

**PREPARATION:**

Ignition switch ON.

**CHECK:**

Measure voltage between terminal VDD of the Night View ECU connector "C" and body ground.

(Terminals of ECU: See page [DI-1081](#))

**OK:****Voltage:****VDD: 4.75 to 5.25 V**

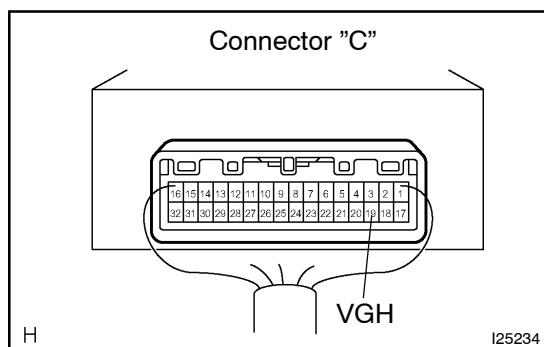
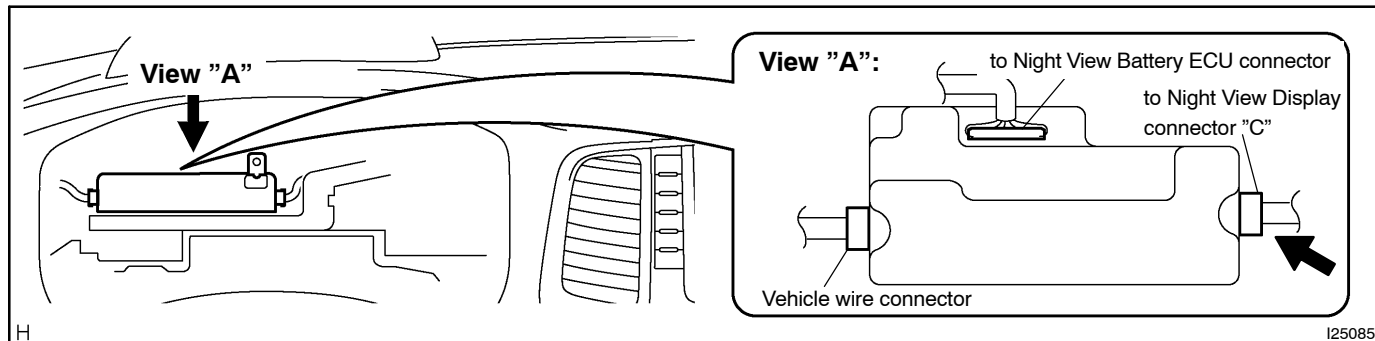
(Terminal voltages must meet the specified value between 0 and 20 seconds after ignition switch ON.)

**NG****Go to step 7.****OK**

- 5 Check voltage between terminal VGH of Night View ECU connector "C" and body ground.**

**PREPARATION:**

Ignition switch ON.

**CHECK:**

Measure voltage between terminal VGH of the Night View ECU connector "C" and body ground.

(Terminals of ECU: See page [DI-1081](#))

**OK:****Voltage:****VGH: 17.4 to 18.6 V**

(Terminal voltages must meet the specified value between 0 and 20 seconds after ignition switch ON.)

**RESULT:**

|    |                                               |
|----|-----------------------------------------------|
| OK | A<br>(When not using oscilloscope)            |
|    | <Reference><br>B<br>(when using oscilloscope) |
| NG | C                                             |

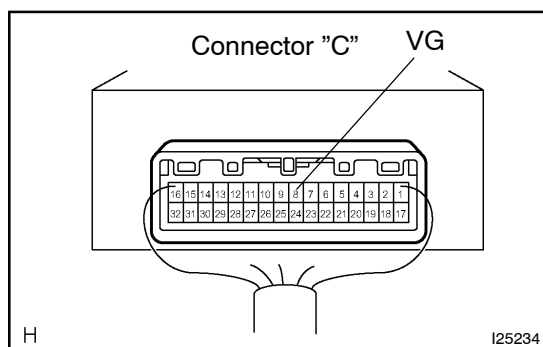
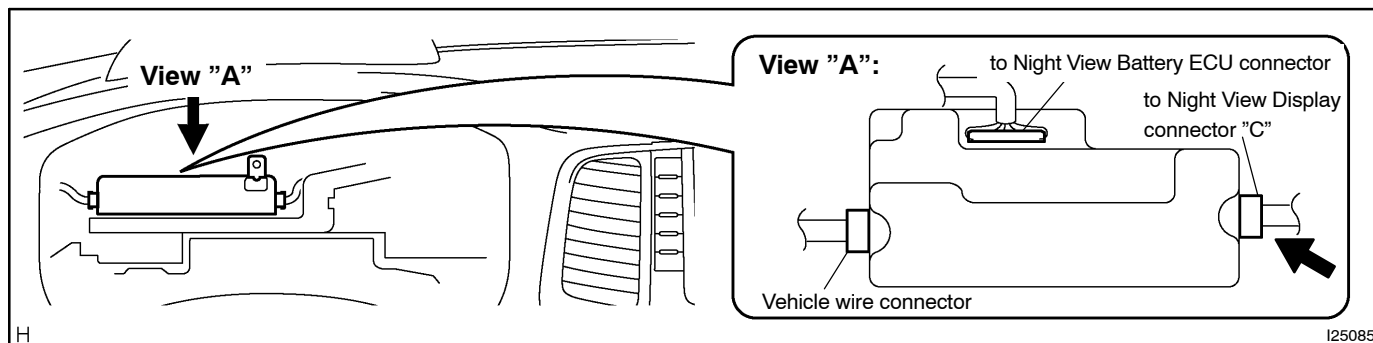
**B****Go to step 6.****C****Go to step 7.****A****Replace Night View ECU.****HINT:**

If the symptom still occurs, replace the Night View Display.

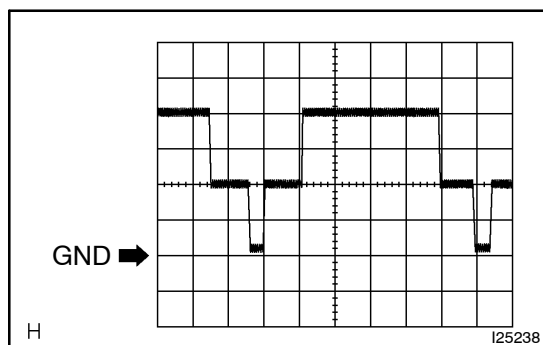
- 6 Using an oscilloscope, check the output waveform between terminal VG of Night View ECU and body ground.**

**PREPARATION:**

- (a) Ignition switch ON.  
 (b) Inspection Mode ON (See page [DI-1077](#)).

**CHECK:**

Using an oscilloscope, check the output waveform between terminal VG of the Night View ECU connector "C" and body ground. (Terminals of ECU: See page [DI-1081](#))

**OK:**

The output waveform is as shown in the illustration.  
 (Reference) oscilloscope condition:

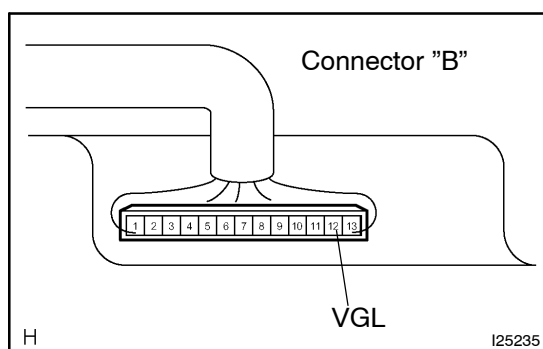
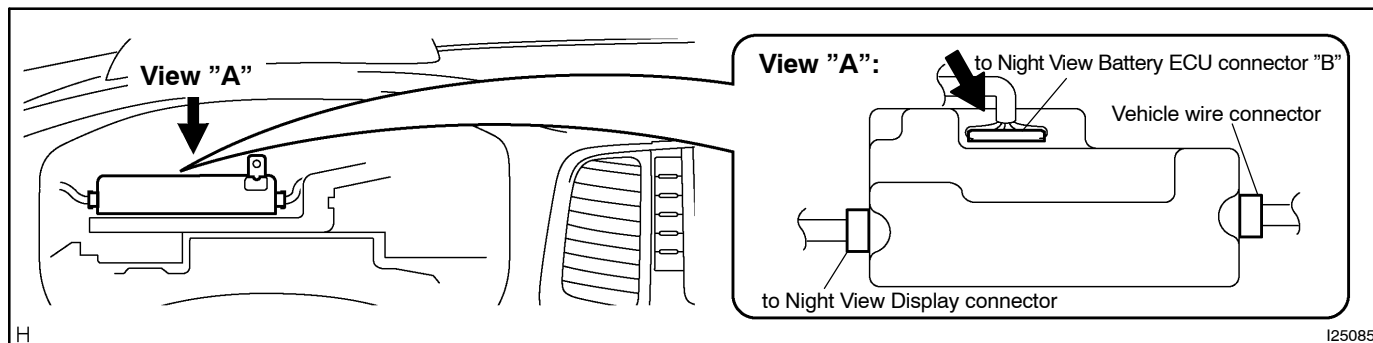
| Item              | Contents                         |
|-------------------|----------------------------------|
| Tool setting      | 200 mV / DIV, 10 $\mu$ s / DIV   |
| Vehicle condition | When Night View System starts up |

**NG****Replace Night View Display.****OK****Replace Night View ECU.**

- 7 Check voltage between terminal VGL of Night View ECU connector "B" and body ground.**

**PREPARATION:**

Ignition switch ON.

**CHECK:**

Measure voltage between terminal VGL of the Night View ECU connector "B" and body ground.

(Terminals of ECU: See page [DI-1081](#))

**OK:****Voltage:**

**VGL: -15 to -17 V**

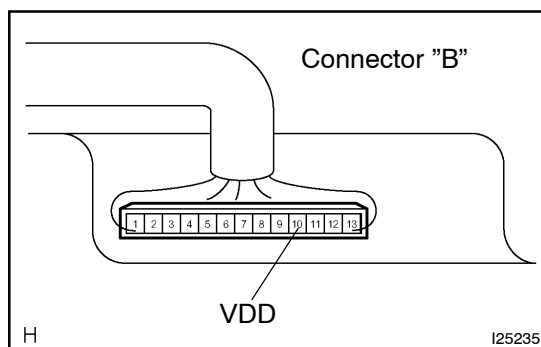
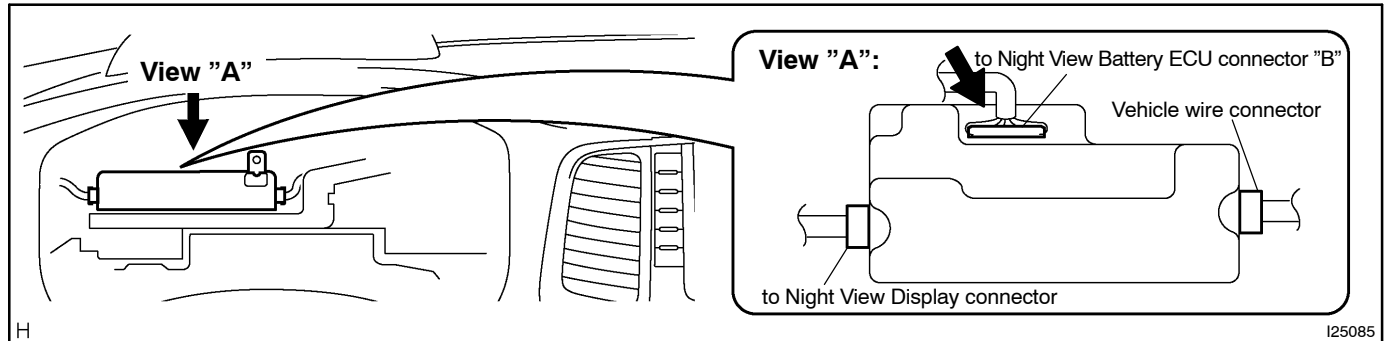
**(Terminal voltages must meet the specified value between 0 and 20 seconds after ignition switch ON.)**

**NG****Go to step 10.****OK**

- |          |                                                                                            |
|----------|--------------------------------------------------------------------------------------------|
| <b>8</b> | <b>Check voltage between terminal VDD of Night View ECU connector "B" and body ground.</b> |
|----------|--------------------------------------------------------------------------------------------|

**PREPARATION:**

Ignition switch ON.

**CHECK:**

Measure voltage between terminal VGL, VDD, VGH of the Night View ECU connector "B" and body ground.  
(Terminals of ECU: See page [DI-1081](#))

**OK:****Voltage:****VDD: 4.75 to 5.25 V**

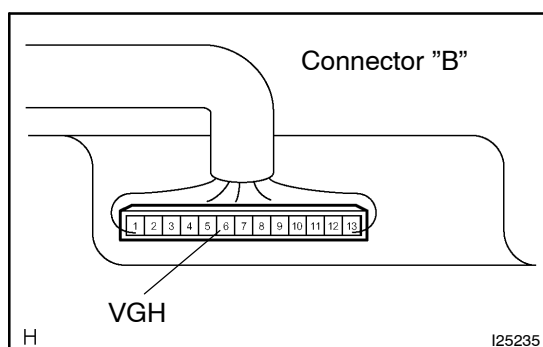
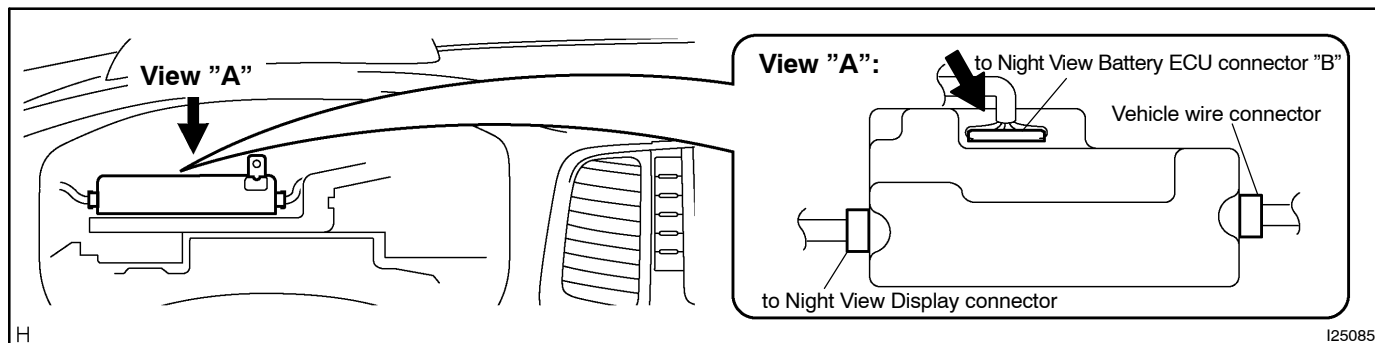
**(Terminal voltages must meet the specified value between 0 and 20 seconds after ignition switch ON.)**

**NG****Go to step 10.****OK**

- 9 Check voltage between terminal VGH of Night View ECU connector "B" and body ground.**

**PREPARATION:**

Ignition switch ON.

**CHECK:**

Measure voltage between terminal VGH of the Night View ECU connector "B" and body ground.

(Terminals of ECU: See page [DI-1081](#))

**OK:****Voltage:****VGH: 17.4 to 18.6 V**

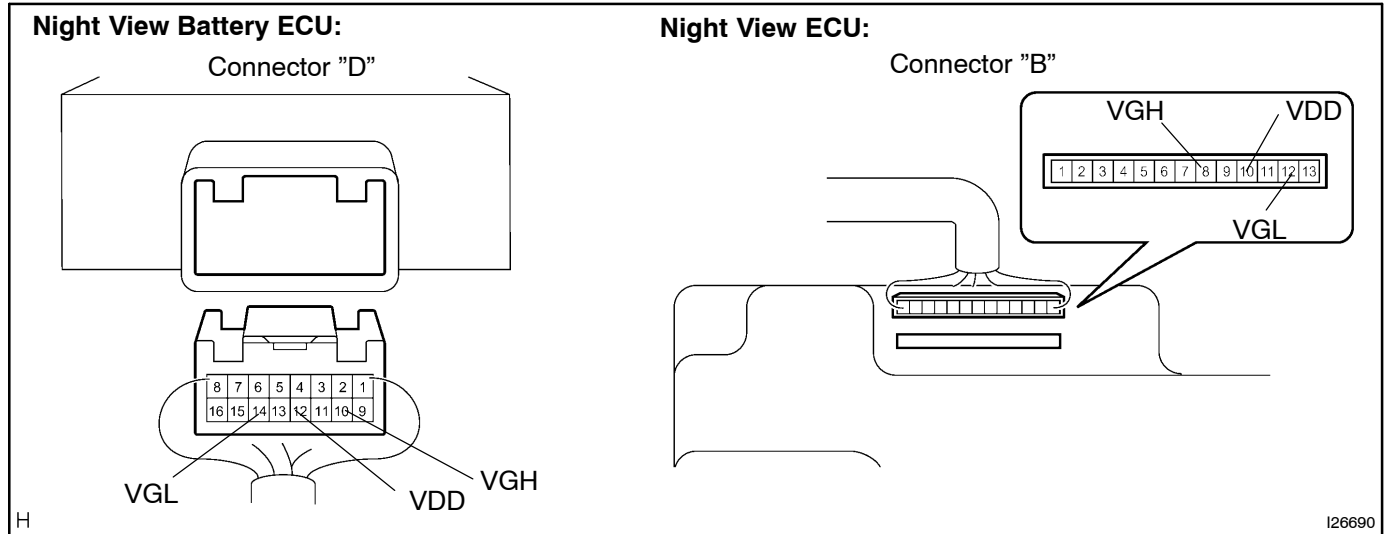
(Terminal voltages must meet the specified value between 0 and 20 seconds after ignition switch ON.)

**NG****Go to step 10.****OK****Replace Night View ECU.**

- 10 Check wire harness between terminals VGL, VDD, VGH of Night View Battery ECU and Night View ECU (See page [IN-36](#)).**

**PREPARATION:**

Remove the wire harness between the Night View Battery ECU and the Night View ECU.

**CHECK:**

Check the resistance between terminals VGL, VDD, VGH of connector "D" to "B".

(Terminals of ECU: See page [DI-1081](#))

**OK:**

**Resistance: Less than 1  $\Omega$**

**NG**

**Replace wire harness.**

**OK**

**Replace Night View Battery ECU.**