

10. Screen is dark

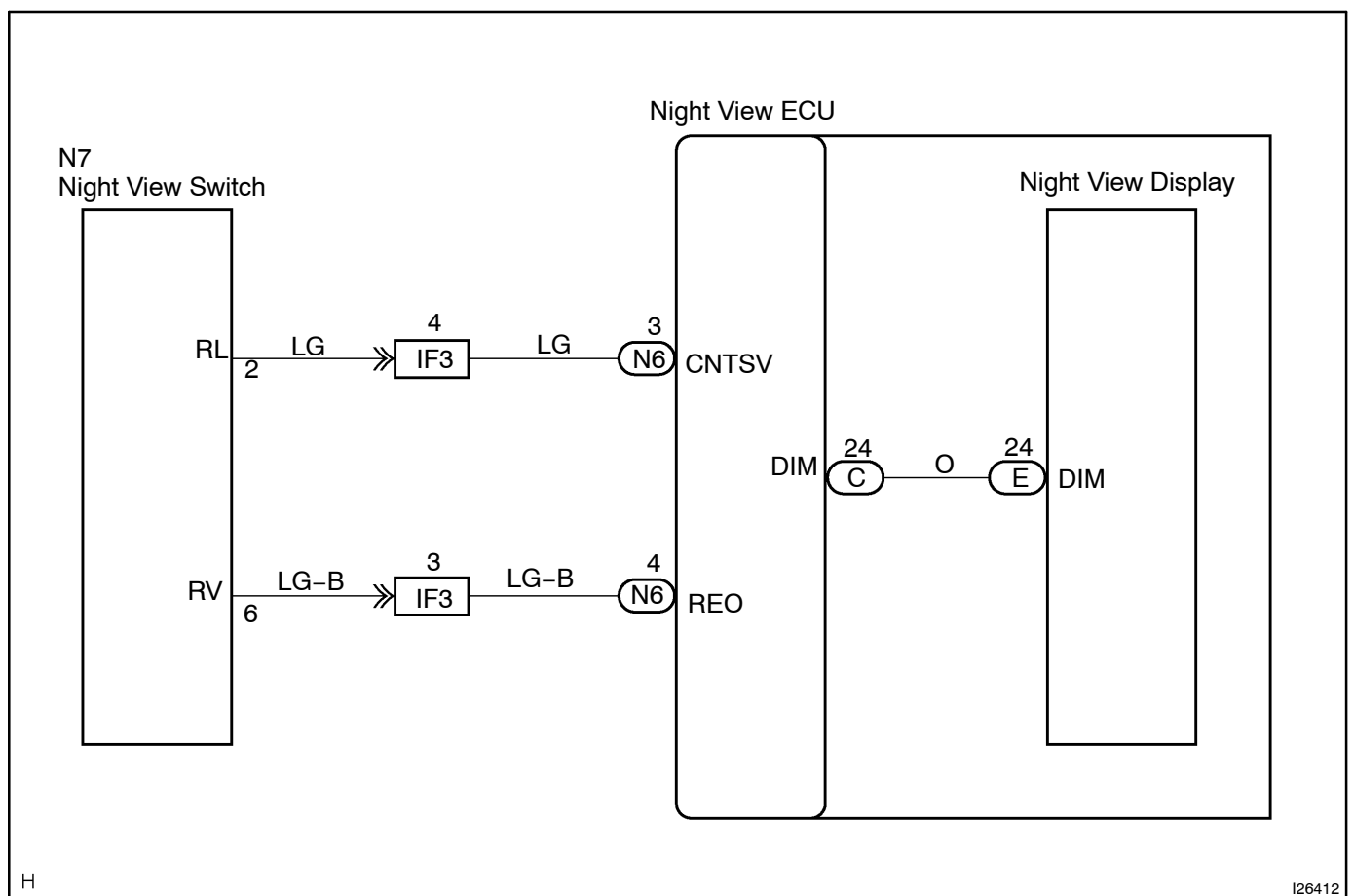
11. Blurred bright image is displayed

12. Double image is displayed

CIRCUIT DESCRIPTION

Dark screen, blurred image, and double image occur by dirt on the windshield and mis-adjustment of the rheostat of the Night View Switch by the user.

WIRING DIAGRAM



INSPECTION PROCEDURE

1	Check installation of front bumper.
----------	--

CHECK:

Check installation of the front bumper.

HINT:

The Night View Projector is installed in the front bumper.

The light axis of the Night View Projector should be normal if the front bumper is installed on the body properly.

OK:

No damage or deformation of the front bumper and the Night View Projector.

All repairs should be completed based on the standard value in the Body Repair Manual.

HINT:

If objects are displayed too bright on the screen when the objects stand or exist within 100 m, the light axis of the Night View Projector may not be at the correct angle.

NG

Inspect and replace front bumper or Night View Projector.

OK

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

OK:

Windshield glass is clean.

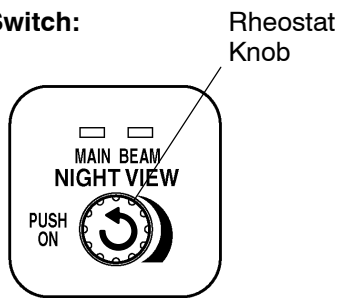
HINT:

Night View Camera Cleaning Method (see page [DI-1253](#)).

NG

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

OK

3 Check Night View Rheostat operation.**Night View Switch:****CHECK:**

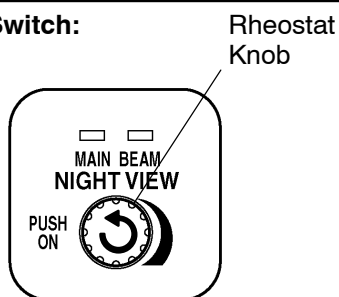
Adjust the rheostat and check if the display returns to normal.

OK:

Display is normal after adjusting rheostat.

NG**Go to step 4.****OK**

**Mis-adjustment of the Night View Switch
(Rheostat Function).**

4 Check Night View Switch operation.**Night View Switch:****CHECK:**

Check if the display illumination brightness can be changed (rheostat function).

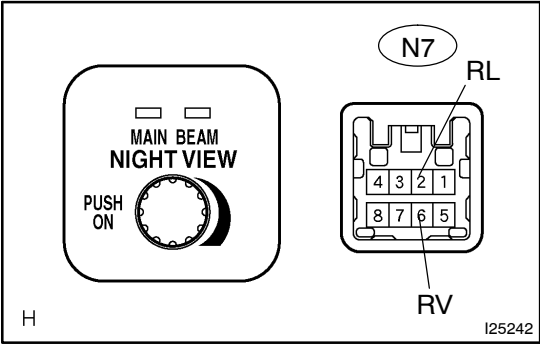
OK:

**Illumination brightness can be slightly changed
(though not significantly).**

(NG: No change in brightness.)

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

5 Check resistance between terminals RL and RV of Night View Switch.

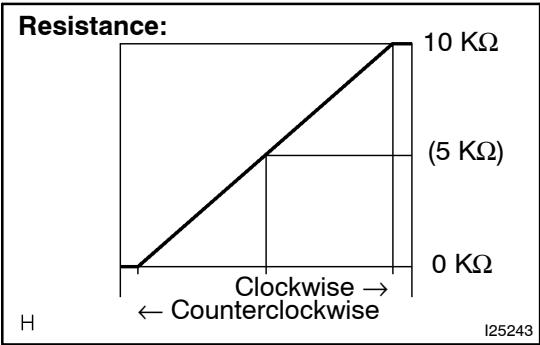


PREPARATION:

- (a) Remove the Night View Switch.
- (b) Disconnect the connector from the Night View Switch.

CHECK:

Measure resistance between terminals RL and RV of the Night View Switch.



OK:

Resistance:

Condition	Specification
When turned fully clockwise	Approx. 10 kΩ
When turned fully counterclockwise	Approx. 0 Ω

NG

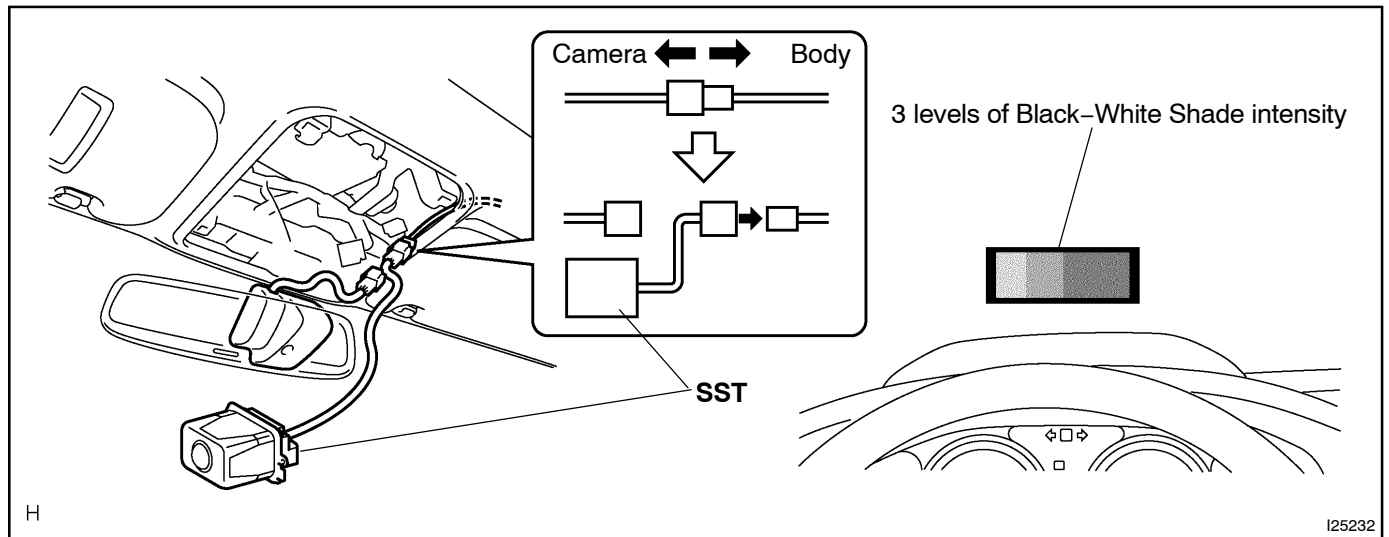
Replace Night View Switch.

OK

6 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-1253](#)).

CHECK:

Check the screen of the Night View Display.

OK:

3 levels of Black-White shade intensity displayed.

NG

Replace Night View ECU.

OK

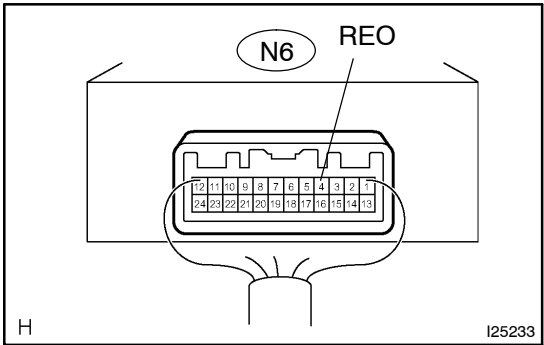
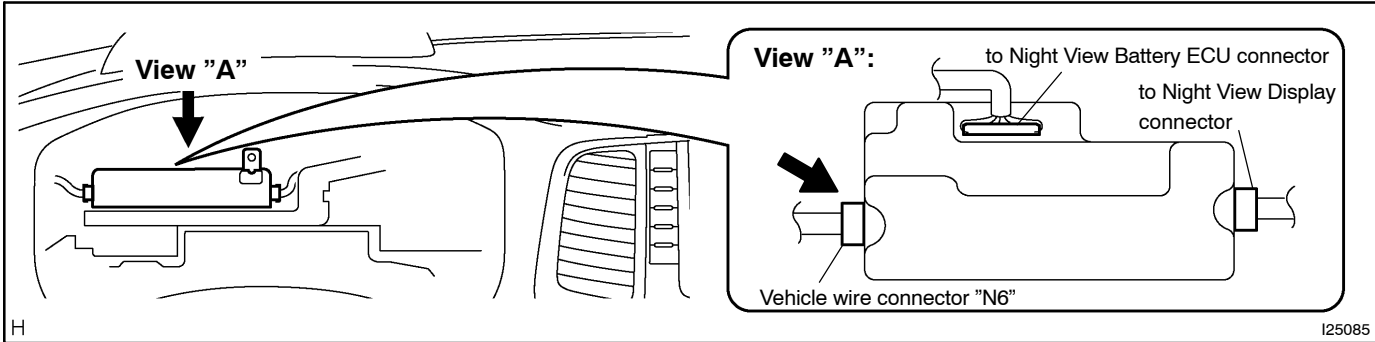
Replace Night View Camera.

7 Check Voltage between terminal REO of Night View ECU and body ground.

PREPARATION:

- (a) Remove the combination meter.
- (b) Turn the ignition switch ON.
- (c) Switch to Inspection Mode (See page [DI-1253](#)).

CHECK:



Measure voltage between terminal REO of the Night View ECU connector "N6" and body ground while rotating rheostat.
(Terminals of ECU: See page [DI-1257](#))

OK:

The voltage changes within 0 to 5 V when rotating the rheostat.

NG

Go to step 10.

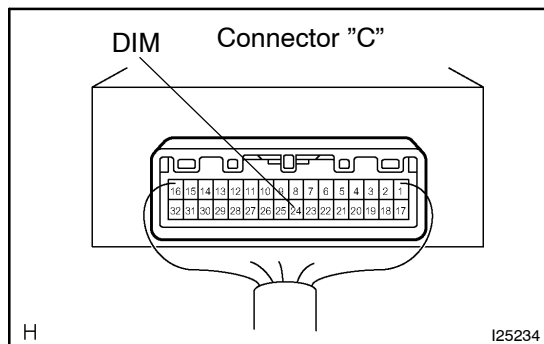
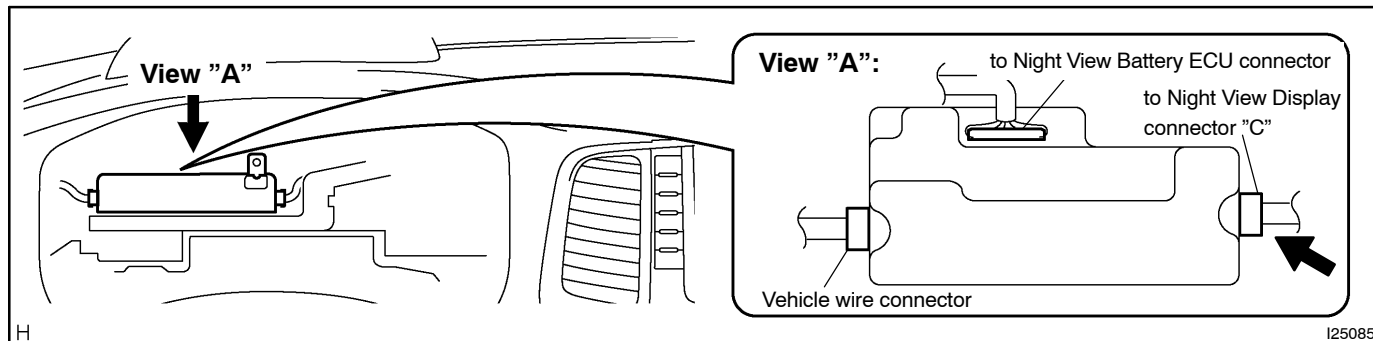
OK

8 Using an oscilloscope, check the output waveform between terminal DIM of Night View ECU and body ground.

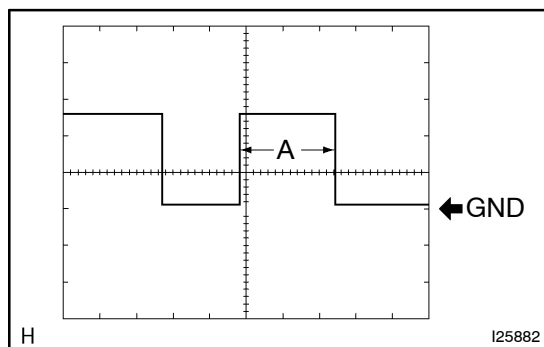
PREPARATION:

- (a) Ignition switch ON.
- (b) Inspection Mode ON (See page [DI-1253](#)).

CHECK:



Using an oscilloscope, check the output waveform between terminal DIM of the Night View ECU connector "C" and body ground. (Terminals of ECU: See page [DI-1257](#))



OK:

The duty ratio changes (length of "A" becomes shorter) while rotating the Night View Switch clockwise.

(Reference) oscilloscope condition:

Item	Contents
Tool setting	2 V / DIV, 1 ms / DIV
Vehicle condition	When Night View System starts up

NG

Replace Night View ECU.

OK

9

Check using Inspection Mode.

PREPARATION:

Inspection Mode ON (See page [DI-1253](#)).

CHECK:

Verify the screen is normal by operating the Night View Switch (rheostat function).

OK:

Normal screen is displayed.

NG

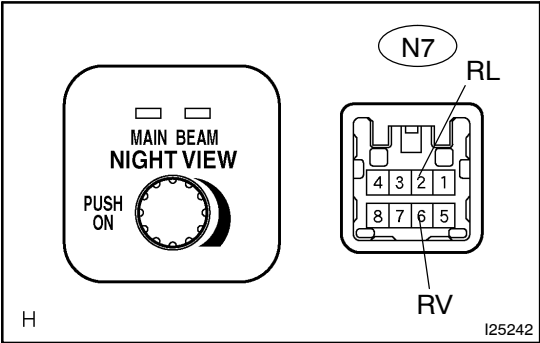
Replace Night View Display.

OK

Replace Night View ECU.

10

Check resistance between terminals RL and RV of Night View Switch.

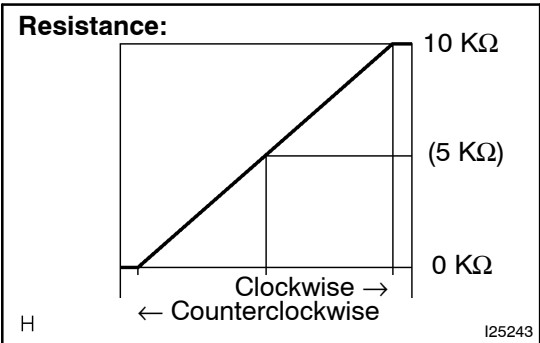


PREPARATION:

- (a) Remove the Night View Switch.
- (b) Disconnect the connector from the Night View Switch.

CHECK:

Measure resistance between terminals RL and RV of the Night View Switch.



OK:

Resistance:

Condition	Specification
When turned fully clockwise	Approx. 10 kΩ
When turned fully counterclockwise	Approx. 0 Ω

NG

Replace Night View Switch.

OK

Repair or replace wire harness or connector.