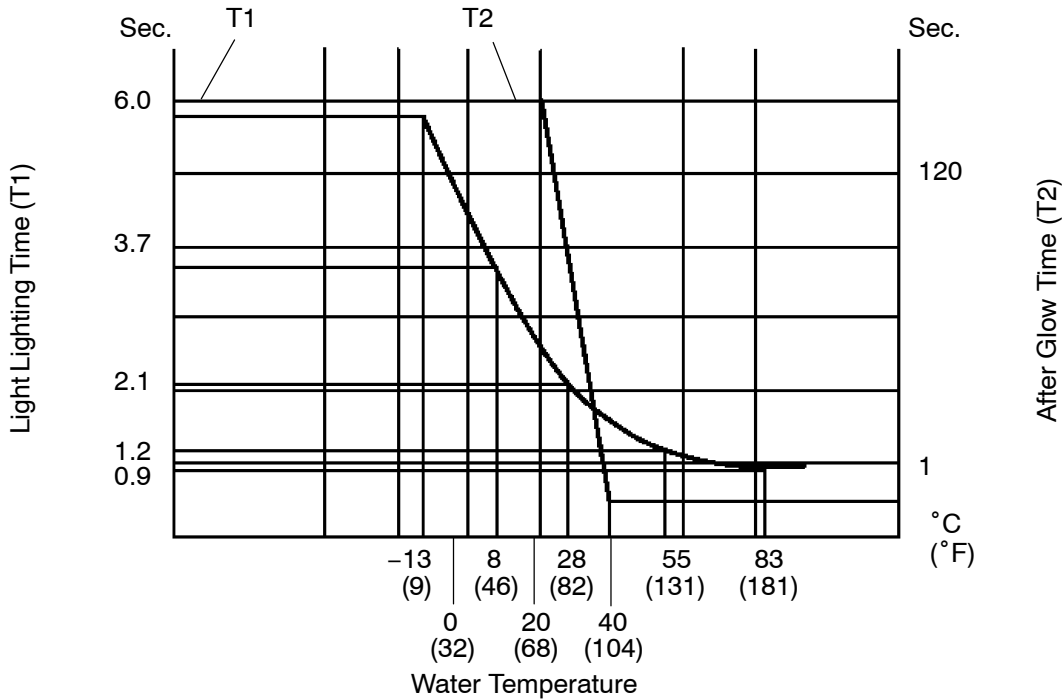


Pre-Heating Control Circuit

CIRCUIT DESCRIPTION

When the ignition switch turns ON, the emission ECU calculates the glow indicator lighting time/heating corresponding to the coolant temperature at that time and turns ON the glow indicator light/glow plug relay. As the ceramics is used for a glow plug material, the current control is not performed.



A07781

The diagram illustrates the glow plug system for a 1987 Nissan 2400 SE. Key components and their connections include:

- Battery:** Connected to the main power line (W-L).
- F19 Fusible Link Box:** Contains a main fuse (GLOW) and a glow plug relay (Glow Plug).
- Center J/B:** A junction box containing a gauge (GAUGE) and a 60A fuse (AM1).
- Ignition SW:** The ignition switch, connected to the main power line.
- Combination Meter:** Connected to the main power line.
- Glow Plug:** The glow plug itself, connected to the main power line.
- Emission ECU:** The emission control unit, connected to the main power line.

Wire colors and terminal numbers are indicated throughout the diagram, such as B-Y, R-L, B-W, W, and W-L. The diagram also shows the connection to the glow plug relay (Glow Plug) and the glow plug itself.

1	Does glow indicator light up?
---	-------------------------------

Turn the ignition switch ON.

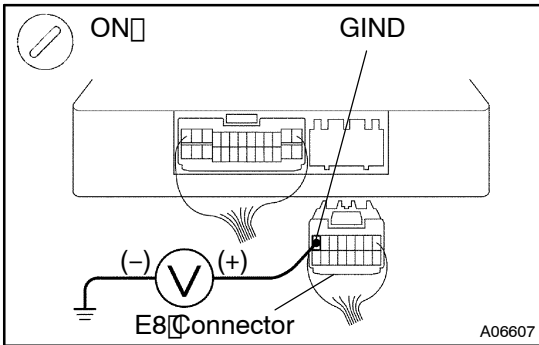
Does the glow indicator light up?

The glow indicator lights up for 0.5 sec. or more.

Go to step 5.

NG

2 Check voltage between terminal GIND of emission ECU connector and body ground.



PREPARATION:

- Disconnect the emission ECU from the body panel (See page EC-3).
- Disconnect the E8 connector of the emission ECU.
- Turn the ignition switch ON.

CHECK:

Measure the voltage between terminal GIND of the emission ECU connector and body ground.

OK:

Voltage: 9 – 14 V

OK

Check and replace emission ECU (See page EC-3).

NG

3 Check GAUGE fuse.

PREPARATION:

Remove the GAUGE fuse.

CHECK:

Measure the continuity of the GAUGE fuse.

OK:

Continuity

NG

Check for short in all harness and components connected to GAUGE fuse.

OK

4 Check glow indicator light bulb.

NG

Replace bulb.

OK

Check for open in harness and connector between combination meter and emission ECU, and combination meter and GAUGE fuse (See page IN-19).

5 Check glow indicator lighting time and after glow time (See page ST-1).

NG

Check and replace emission ECU (See page EC-3).

OK

6 Are there any DTC being output?

YES

Go to relevant DTC chart.

NO

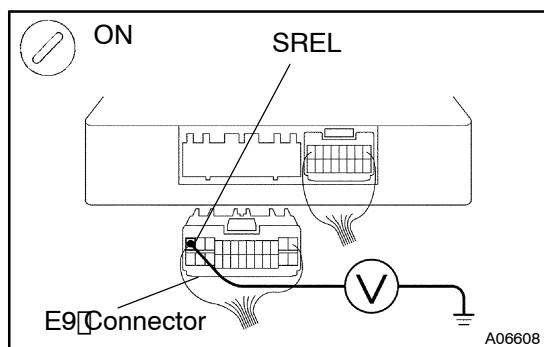
7 Check glow plug relay (See page ST-1).

NG

Replace glow plug relay.

OK

8 Check voltage between terminal SREL of emission ECU connector and body ground at cranking.



PREPARATION:

- (a) Disconnect the emission ECU from the body panel (See page EC-3).
- (b) Disconnect the E9 connector from the emission ECU.
- (c) Turn the ignition switch STA.

CHECK:

Measure the voltage between terminal SREL of the emission ECU connector and body ground at cranking.

OK:

Voltage: 9 – 14 V

NG

Check and replace emission ECU (See page IN-19).

OK

9 Check for open and short in harness and connector between glow plug relay and emission ECU, and glow plug relay and body ground (See page IN-19).

NG

Repair or replace harness or connector.

OK

10 Check resistance of glow plug (See page ST-1).

NG

Replace glow plug.

OK

11 Check glow plug installation.

NG

Tighten glow plug.

OK

12 Check for open in harness and connector between glow plug relay and glow plug (See page IN-19).

NG

Repair or replace harness or connector.

OK

Proceed to next circuit inspection shown on problem symptoms table (See page DI-11).