

PRE-HEATING SYSTEM (Super Glow Type) **INSPECTION**

STOF3-01

1. INSPECT LIGHTING TIME OF GLOW INDICATOR LIGHT

Turn the ignition switch ON, and measure the lighting time.

Light lighting time (T1): Refer to the chart graph

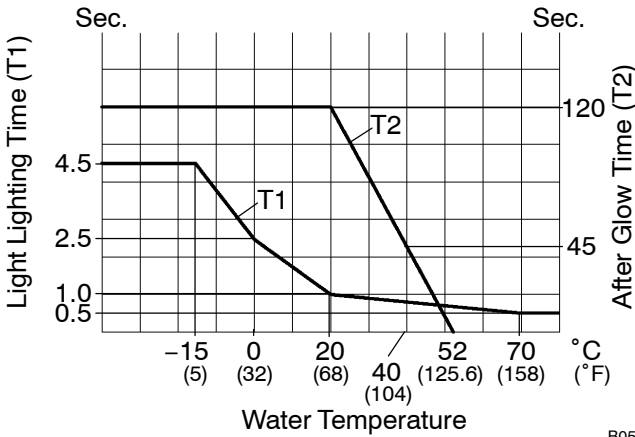
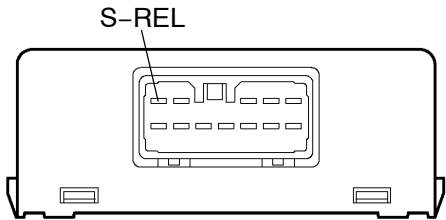
2. INSPECT AFTER GLOW TIME

Turn the ignition switch ON, and measure the time battery voltage is applied to terminal S-REL of the preheating timer.

After glow time (T2):

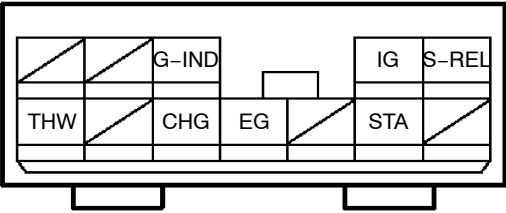
Refer to the chart graph (After starting the engine)

Pre-Heating Timer



B05167

Wire Harness Side



B05166

3. INSPECT PRE-HEATING TIMER

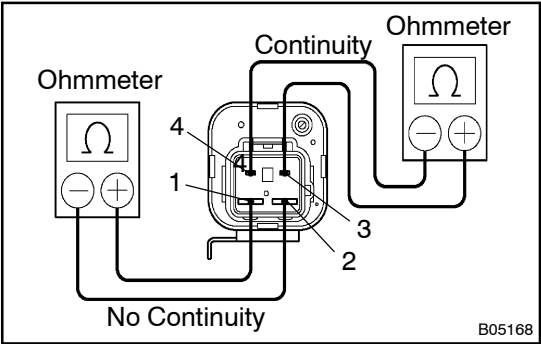
(a) Disconnect the pre-heating timer connector.

LOCATION: See relay locations in Electrical Wiring Diagram.

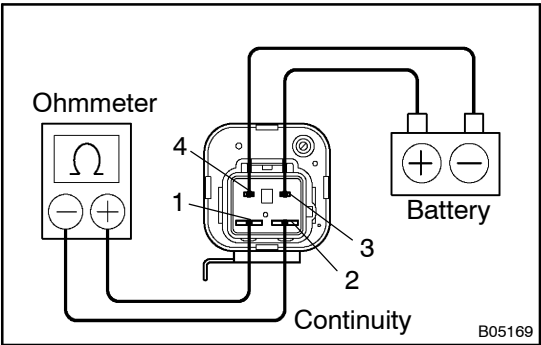
- (b) Inspect the pre-heating timer circuit.
Check the connector on the wire harness side as shown in these chart:

Tester connection	Condition	Specified value
G-IND – Ground	Ignition switch OFF	No voltage
	Ignition switch ON	Battery voltage
IG – Ground	Ignition switch OFF	No voltage
	Ignition switch ON	Battery voltage
STA – Ground	Ignition switch OFF	No voltage
	Ignition switch START	Battery voltage
S-REL – Ground	-	Continuity
THW – Ground	-	Continuity
EG – Ground	-	Continuity

- (c) Reconnect the pre-heating timer connector.
- 4. INSPECT GLOW PLUG RELAY**
- (a) Remove the glow plug relay.
LOCATION: See relay locations in Electrical Wiring Diagram.

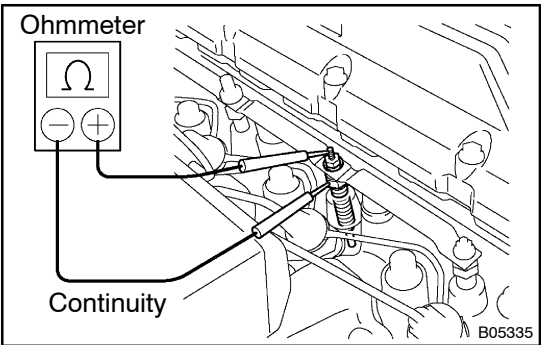


- (b) Inspect the glow plug relay continuity.
- (1) Using an ohmmeter, check that there is no continuity between terminals 1 and 2.
If there is continuity, replace the relay.
- (2) Check that there is continuity between terminals 3 and 4.
If there is no continuity, replace the relay.



- (c) Inspect the glow plug relay operation.
- (1) Apply battery voltage across terminals 3 and 4.
- (2) Using an ohmmeter, check that there is continuity between terminals 1 and 2.
If there is no continuity, replace the relay.

- (d) Reinstall the glow plug relay.
- 5. INSPECT WATER TEMPERATURE SENSOR**
(See page ED-5)



- 6. INSPECT GLOW PLUGS**
Using an ohmmeter, check that there is continuity between the glow plug terminal and ground.

Standard resistance: Approx. 0.75 Ω at 20°C (68°F)

If there is no continuity, replace the glow plug.

Torque: 13 N·m (130 kgf·cm, 10 ft·lbf)

NOTICE:

- Be careful not to damage the glow plug pipes as it could cause an open circuit or shorten life of the glow plugs.

- **Avoid getting oil and gasoline on the glow plug when cleaning.**
- **During inspection, be sure to wipe any oil of the terminal and bakelite washer with a dry cloth.**
- **Be careful not to apply more than 11 V to the glow plug as it could cause an open circuit.**