

# 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 (T 1): Refer to the chart graph**

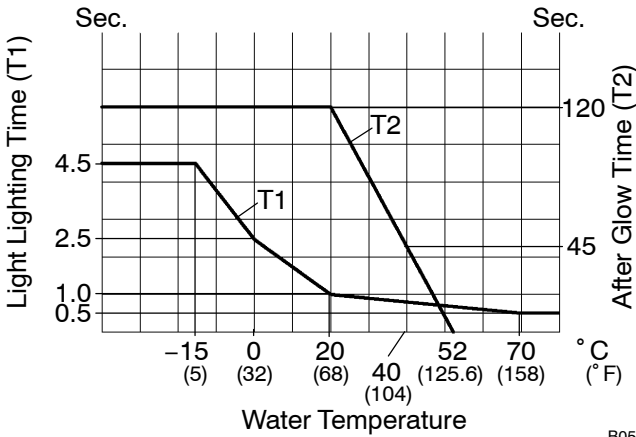
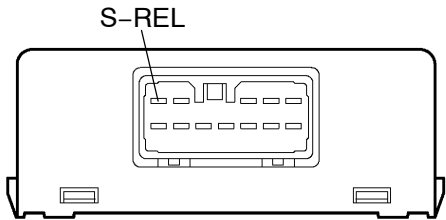
## 2. INSPECT AFTER GLOW TIME

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):**

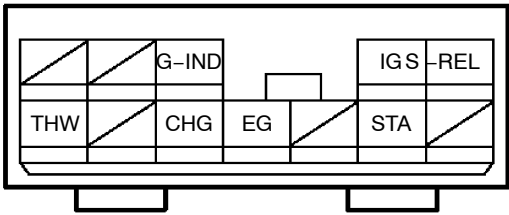
**Refer to the chart graph (After starting the engine)**

Pre-Heating Timer



B05167

Wire Harness Side



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## 3. INSPECT PRE -HEATING TIMER

(a) Disconnect the pre -heating timer connector.

LOCATION: See relay locations in Electrical Wiring Diagram.

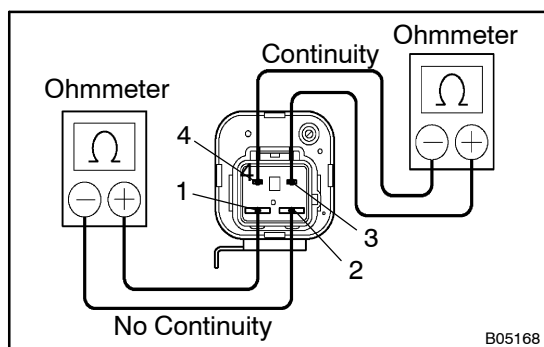
- (b) Inspect the pre-heating timer circuit.  
Check the connector on the wire harness side as shown in these chart:

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

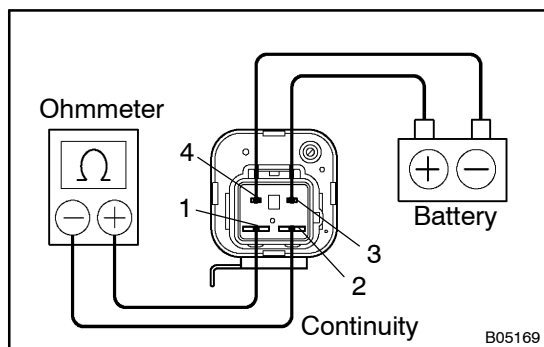
- (c) Reconnect the pre-heating timer connector.

#### 4. INSPECT GLOW PLUG RELAY

- (a) Remove the glow plug relay.  
LOCATION: See relay locations in Electrical Wiring Diagram.

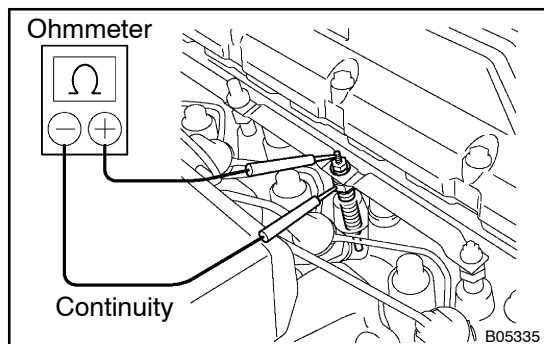


- (b) Inspect the glow plug relay continuity.  
(1) Using an ohmmeter, check that there is no continuity between terminals 1 and 2.  
If there is continuity, replace the relay.  
(2) Check that there is continuity between terminals 3 and 4.  
If there is no continuity, replace the relay.



- (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  $\Omega$  at 20 °C (68 °F)**

If there is no continuity, replace the glow plug.

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

#### 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.**