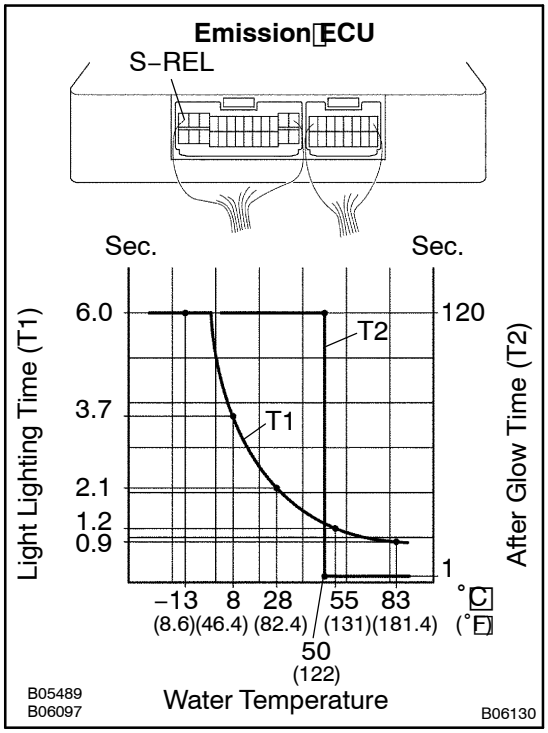


PRE–HEATING SYSTEM

ST0G2–01

INSPECTION

1. INSPECT LIGHTING TIME OF GLOW INDICATOR LIGHT

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

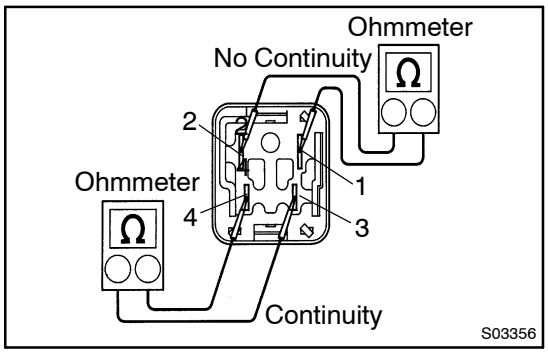
Light lighting time (T1): Refer to the chart graph

2. INSPECT AFTER GLOW TIME

Turn the ignition switch to START, after the engine starts, measure the time when the battery voltage is applied to terminal S–REL of the emission ECU.

After glow time (T2): Refer to the chart graph

3. INSPECT EMISSION ECU (See page DI–15)



4. INSPECT GLOW PLUG RELAY

(a) Remove the relay box cover.

(b) Remove the glow plug relay.

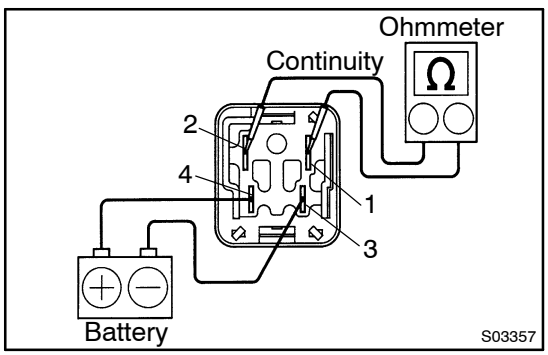
(c) Inspect the glow plug relay continuity.

(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.



(d) Inspect the glow plug relay operation.

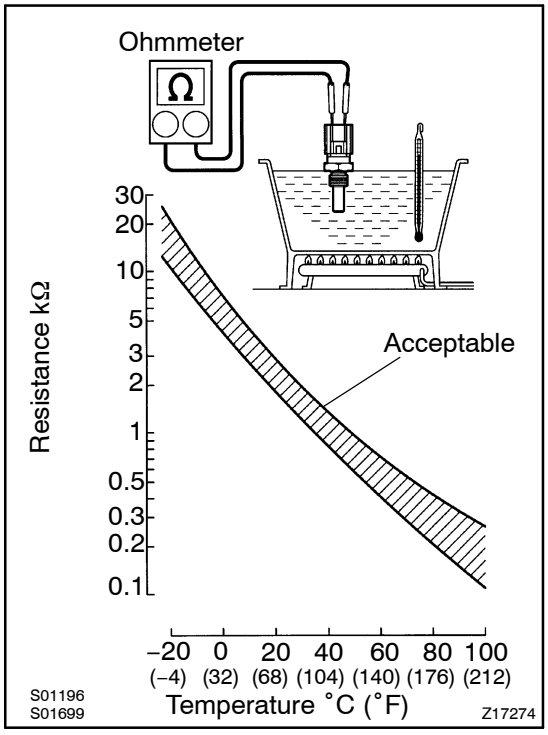
(1) Apply battery voltage across terminals 3 and 4.

(2) Using an ohmmeter, check that there is continuity between terminals 1 and 2.

If there is no continuity, replace the relay.

(e) Reinstall the glow plug relay.

(f) Reinstall the relay box cover.



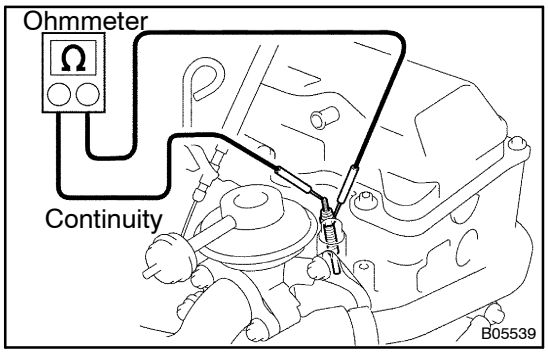
5. INSPECT WATER TEMPERATURE SENSOR

(a) Remove the water temperature sensor.
LOCATION: In the right rear of the cylinder block.

(b) Using an ohmmeter, measure the resistance of the water temperature sensor between the terminals.
Resistance: Refer to the chart graph

If the resistance is not as specified, replace the sensor.

(c) Reinstall the water temperature sensor.
Torque: 20.4 N·m (200 kgf·cm, 15 ft·lbf)



6. INSPECT GLOW PLUGS

Using an ohmmeter, check that there is continuity between the glow plug terminal and ground.
Standard resistance: Approx. 0.72 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 no to apply more than 11 V to the glow plug as it could cause an open circuit.**