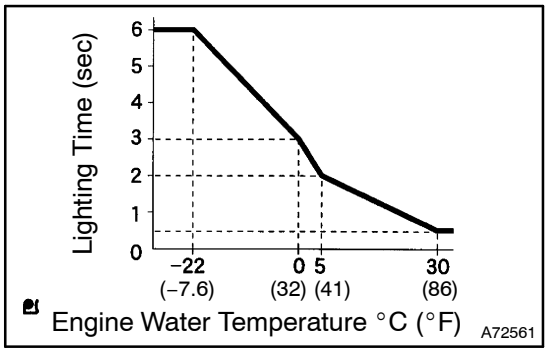
PRE–HEATING SYSTEM (1KD–FTV)

190JE–01

ON–VEHICLE INSPECTION

NOTICE:

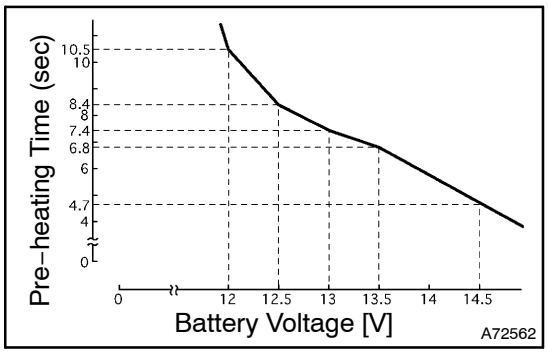
Turn the ignition switch OFF for 60 seconds before performing this inspections.



1. INSPECT LIGHTING TIME OF GLOW INDICATOR LIGHT

(a) Turn the ignition switch ON, and measure the lighting time.

Light lighting time: Refer to the chart graph



2. INSPECT PRE–HEATING

(a) Turn the ignition switch ON, measure the time when the battery voltage is applied to the glow plugs.

SST 09082–00030, 09083–00150

Pre–Heating time:

Engine coolant temperature	Pre–Heating time
40 °C or more	1 sec
40 °C or less	Refer to the chart graph (15 sec at the longest)

(b) Turn the ignition switch STA, check the battery voltage is applied to the glow plugs.

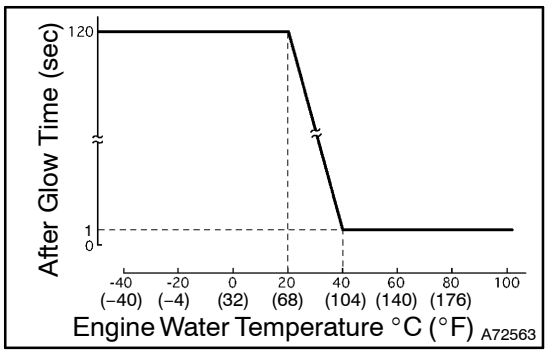
SST 09082–00030, 09083–00150

(c) While cranking the engine, measure the time when the battery voltage is applied to the glow plugs.

SST 09082–00030, 09083–00150

Pre–Heating time:

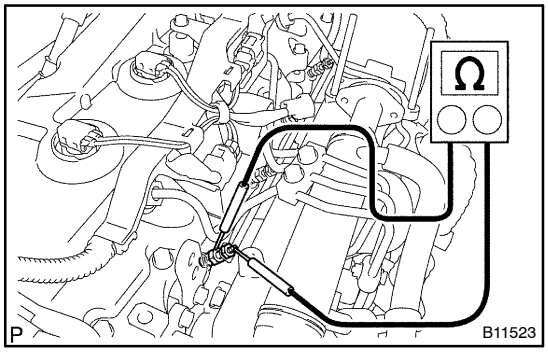
Engine coolant temperature	Pre–Heating time
40 °C or more	1 sec
40 °C or less	Refer to the chart graph (15 sec at the longest)



3. INSPECT AFTER GLOW TIME

(a) After the engine starting, measure the time when the battery voltage is applied to the terminal SREL of the ECM.

After glow time: Refer to the chart graph



4. INSPECT GLOW PLUGS

(a) 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)

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.**