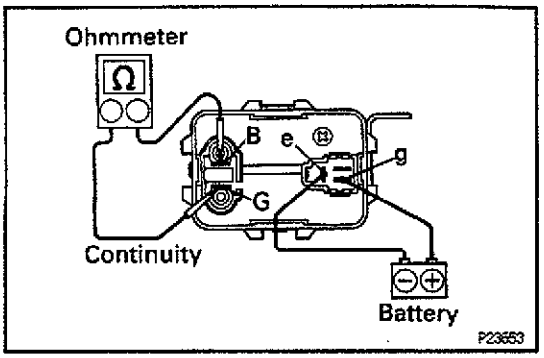


B. Inspect relay operation

(a) Apply battery voltage across terminals e and g.

(b) Using an ohmmeter, check that there is continuity between terminals B and G.

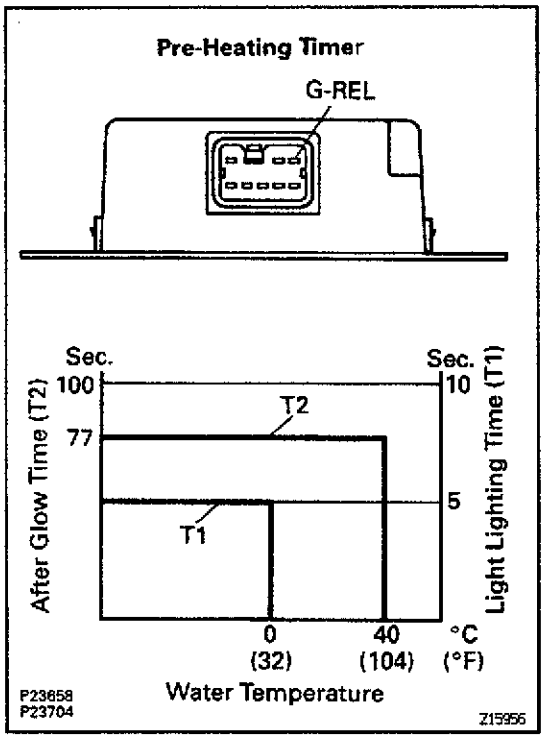
If operation is not as specified, replace the relay.

3. REINSTALL GLOW PLUG RELAY

Glow Plugs

(See pre–heating system (super glow type/3B for BB))

ST



PRE–HEATING SYSTEM (14B)

ST08Q–05

On–Vehicle Inspection

1. DISCONNECT WATER TEMPERATURE SENSOR CONNECTOR

2. INSPECT LIGHTING TIME OF INTAKE HEATER INDICATOR LIGHT

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

Light lighting time:

Approx. 5 seconds

3. INSPECT AFTER GLOW

Turn the ignition switch ON, and measure the time battery voltage is applied to terminal G–REL of the pre–heating timer.

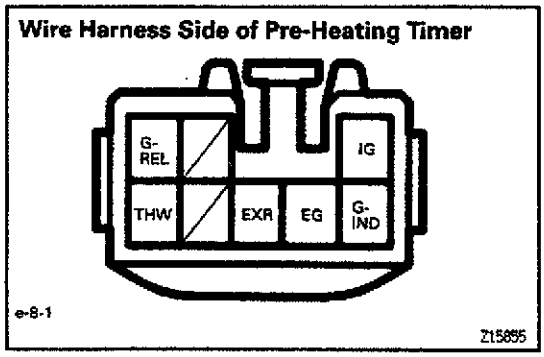
After glow time:

Approx. 77 seconds

4. RECONNECT WATER TEMPERATURE SENSOR CONNECTOR

ST08Q–01

Pre–Heating Timer



PRE–HEATING TIMER INSPECTION

1. DISCONNECT PRE–HEATING TIMER CONNECTOR

LOCATION: See relay locations in Electrical Wiring Diagram.

2. INSPECT PRE–HEATING TIMER CIRCUIT

Check the connector on the wire harness side as shown in these chart:

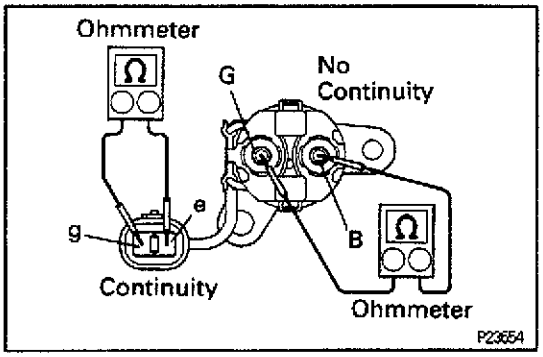
Check for	Tester connection	Condition	Specified value
Voltage	G-IND – Ground	Ignition switch OFF	No voltage
		Ignition switch ON	Battery voltage
Voltage	IG – Ground	Ignition switch OFF	No voltage
		Ignition switch ON	Battery voltage
Continuity	G-REL – Ground	–	Continuity
Continuity	THW, EG – Ground	–	Continuity

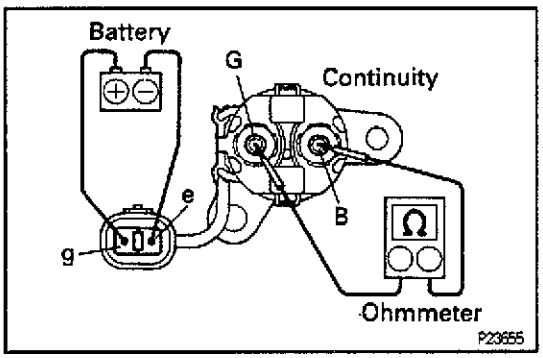
V06811

3. RECONNECT PRE–HEATING TIMER CONNECTOR

Intake Heater Relay (BB)

(See No.1 glow plug relay in pre–heating system (super glow type/3B for BB))





Intake Heater Relay (BU111, 141)

INTAKE HEATER RELAY INSPECTION

1. **REMOVE INTAKE HEATER RELAY**
   LOCATION: See relay locations in Electrical Wiring Diagram.
2. **INSPECT INTAKE HEATER RELAY**

A. Inspect relay continuity

(a) Using an ohmmeter, check that there is continuity between terminals e and g.

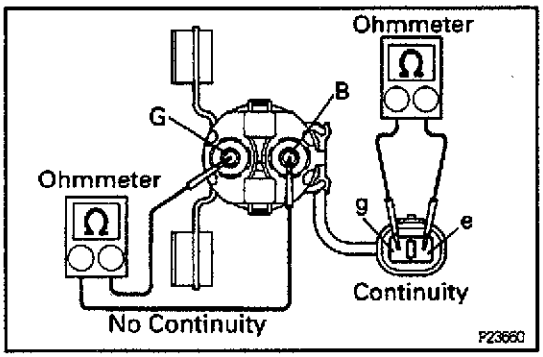
(b) Check that there is no continuity between terminals B and G.
If continuity is not as specified, replace the relay.

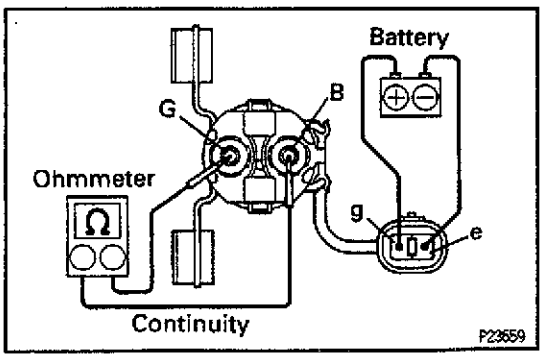
B. Inspect relay operation

(a) Apply battery voltage across terminals e and g.

(b) Using an ohmmeter, check that there is continuity between terminals B and G.
If operation is not as specified, replace the relay.

3. **REINSTALL INTAKE HEATER RELAY**





Intake Heater Relay (BU211)

INTAKE HEATER RELAY INSPECTION

1. **REMOVE INTAKE HEATER RELAY**
   LOCATION: See relay locations in Electrical Wiring Diagram.
2. **INSPECT INTAKE HEATER RELAY**

A. Inspect relay continuity

(a) Using an ohmmeter, check that there is continuity between terminals e and g.

(b) Check that there is no continuity between terminals B and G.
If continuity is not as specified, replace the relay.

B. Inspect relay operation

(a) Apply battery voltage across terminals e and g.

(b) Using an ohmmeter, check that there is continuity between terminals B and G.
If operation is not as specified, replace the relay.

3. **REINSTALL INTAKE HEATER RELAY**

ST08L–01

Water Temperature Sensor

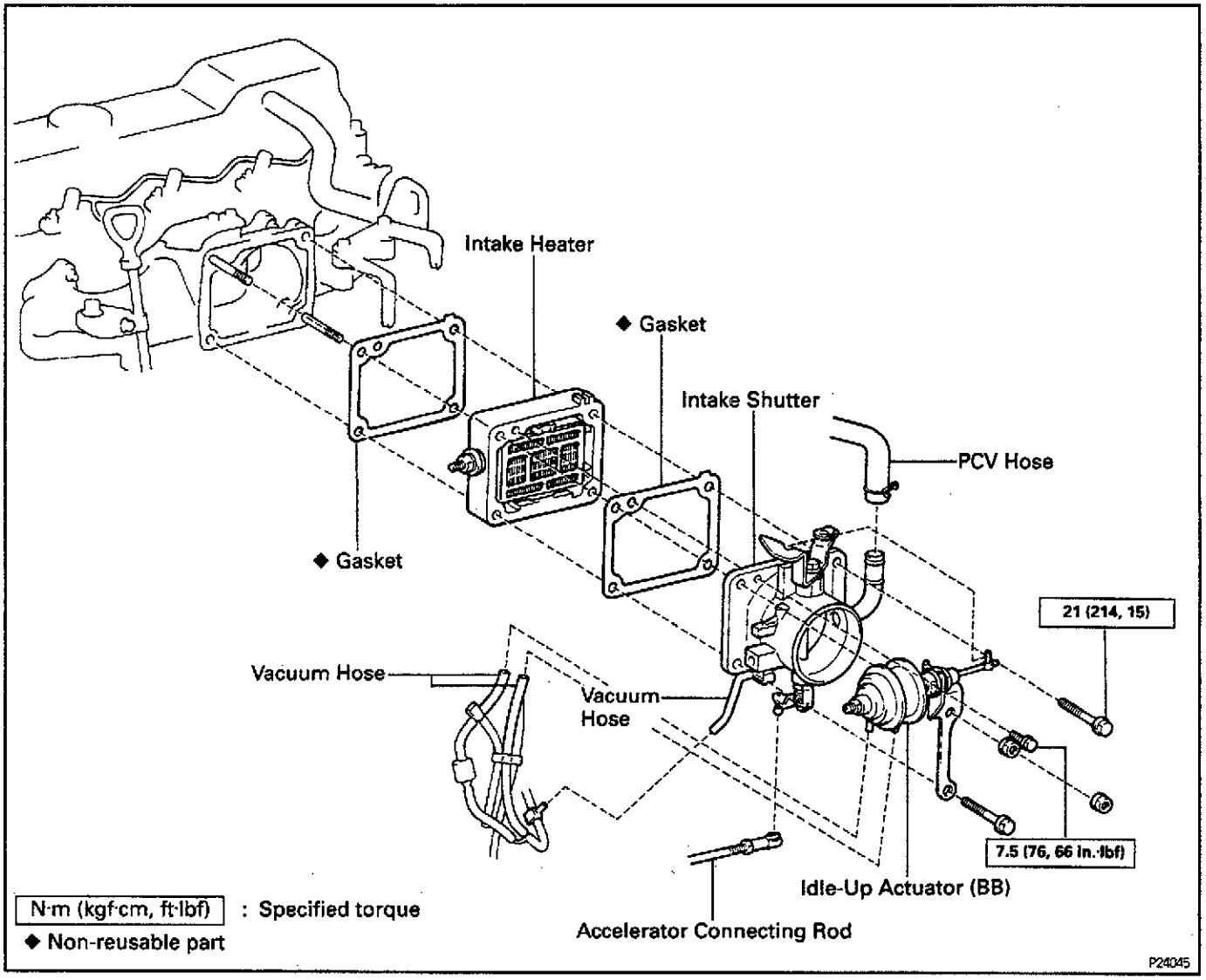
(See pre–heating system (super glow type/3B for BB))

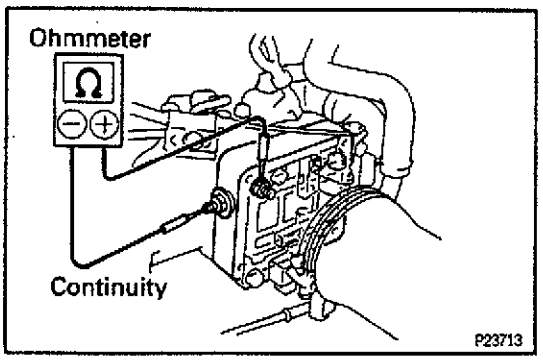
ST08M–01

Intake Heater

COMPONENTS FOR REMOVAL AND INSTALLATION

ST





ST08R–01

INTAKE HEATER INSPECTION

INSPECT INTAKE HEATER

Using an ohmmeter, check that there is continuity between the intake heater terminal and ground.
If there is no continuity, replace the intake heater.