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ISC VALVE

ON–VEHICLE INSPECTION

EG7D2–01

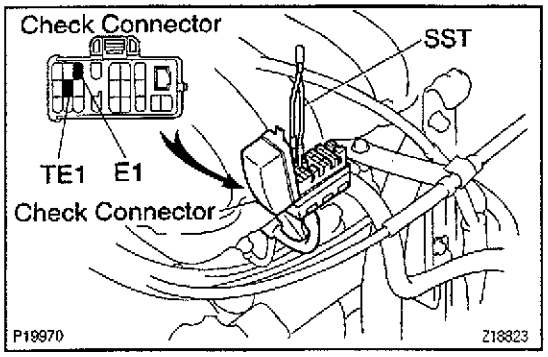
1. INSPECT ISC VALVE OPERATION

(a) Initial conditions:
- Engine at normal operating temperature
- Idle speed checked correctly
- Transmission in neutral position
- A/C switch OFF

(b) Using SST, connect terminals TE1 and E1 of the check connector.
SST 09843–18020

(c) After engine speed is kept at approx. 1,000 rpm for 5 seconds, check that it returns to idle speed.
If the engine speed operation is not as specified, check the ISC valve, wiring and ECU.

(d) Remove the SST from the check connector.
SST 09843–18020



2. INSPECT ISC VALVE RESISTANCE

NOTICE: "Cold" and "Hot" in the following sentences express the temperature of the coils themselves. "Cold" is from −10°C (14°F) to 50°C (122°F) and "Hot" is from 50°C (122°F) to 100°C (212°F).

(a) Disconnect the ISC valve connector.

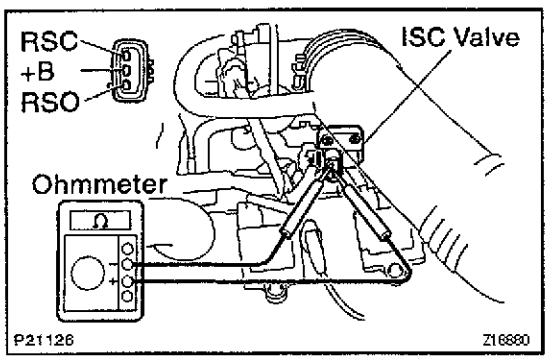
(b) Using an ohmmeter, measure the resistance between terminal +B and other terminals (RSC, RSO).

Resistance:

Cold: 17.0 – 24.5 Ω

Hot: 21.5 – 28.5 Ω

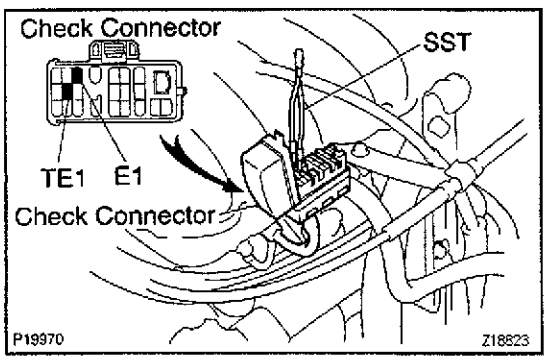
If resistance is not as specified, replace the ISC valve.



(c) Reconnect the ISC valve connector.

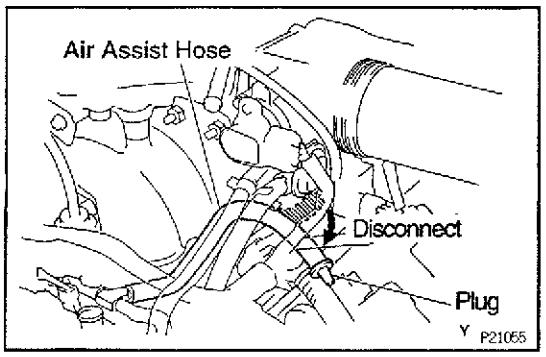
3. INSPECT AIR ASSIST SYSTEM

(a) Initial conditions:
- Engine at normal operating temperature
- Idle speed checked correctly
- Transmission in neutral position
- A/C switch OFF



(b) Using SST, connect terminals TE1 and E1 of the check connector.
SST 09843–18020

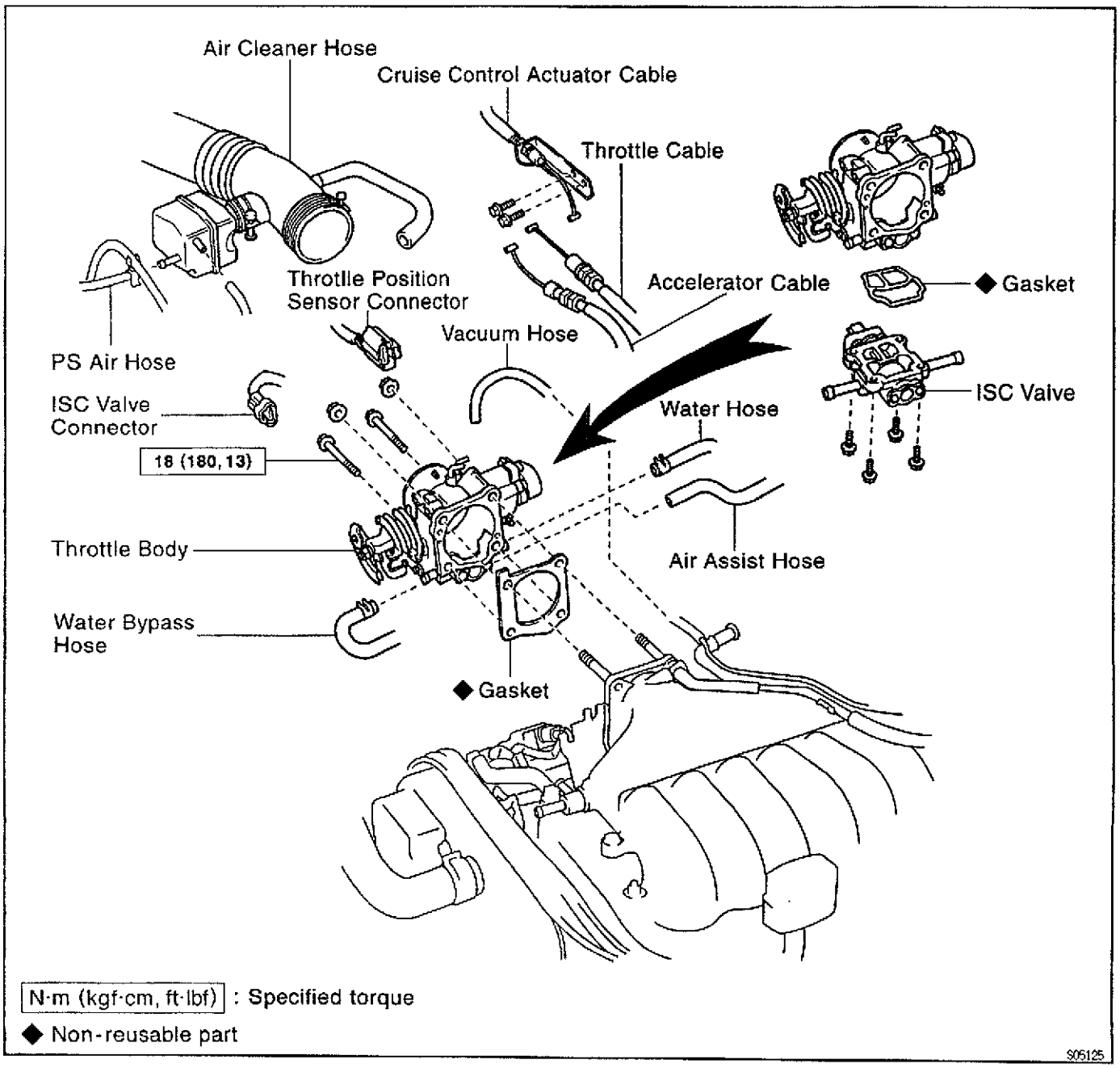
(c) After engine speed is kept at 900 – 1,300 rpm for 10 seconds, check that it returns to idle speed.



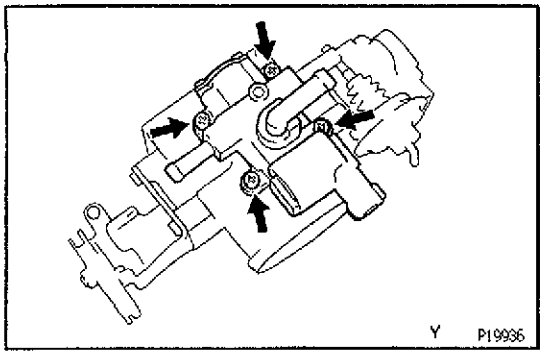
(d) Stop the engine.
(e) Disconnect the air assist hose from the ISC valve, and plug it.
(f) Start the engine and check that the idle speed reaches 500 rpm or below (the engine may stall).
If the idle does not reach 500 rpm or below, check for a leak between the air assist hoses, pipe and injectors.
(g) Remove the SST from the check connector.
SST 09843–18020
(h) Reconnect the air assist hose to the ISC valve.

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COMPONENTS FOR REMOVAL AND INSTALLATION

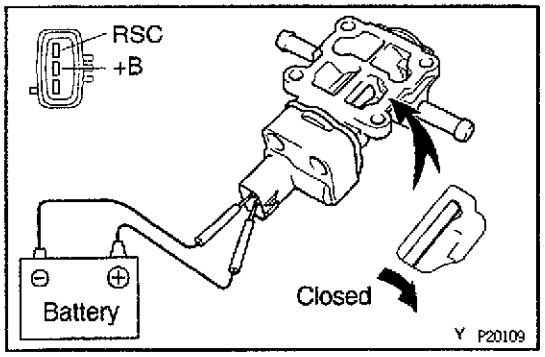


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ISC VALVE REMOVAL

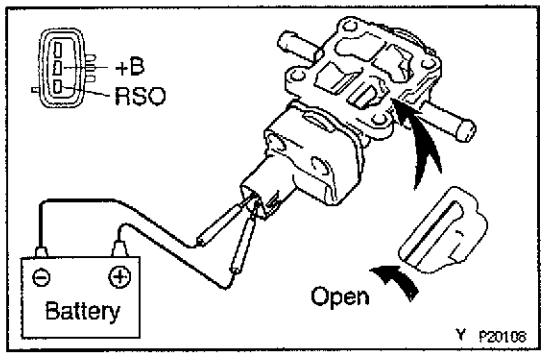
1. **REMOVE THROTTLE BODY**
   (See throttle body removal)
2. **REMOVE ISC VALVE**
   Remove the 4 screws, ISC valve and gasket.
   INSTALLATION HINT: Place a new gasket on the throttle body.



ISC VALVE INSPECTION

INSPECT ISC VALVE OPERATION

(a) Connect the positive (+) lead from the battery to terminal +B and the negative (−) lead to terminal RSC, and check that the valve is closed.



(b) Connect the positive (+) lead from the battery to terminal +B and negative (−) lead to terminal RSO, and check that the valve is open.
If operation is not as specified, replace the ISC valve.

ISC VALVE INSTALLATION

Installation is in the reverse order removal.