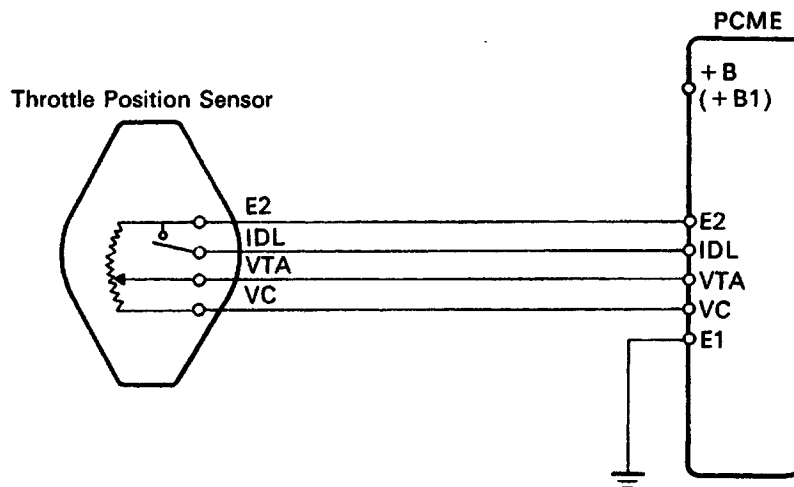
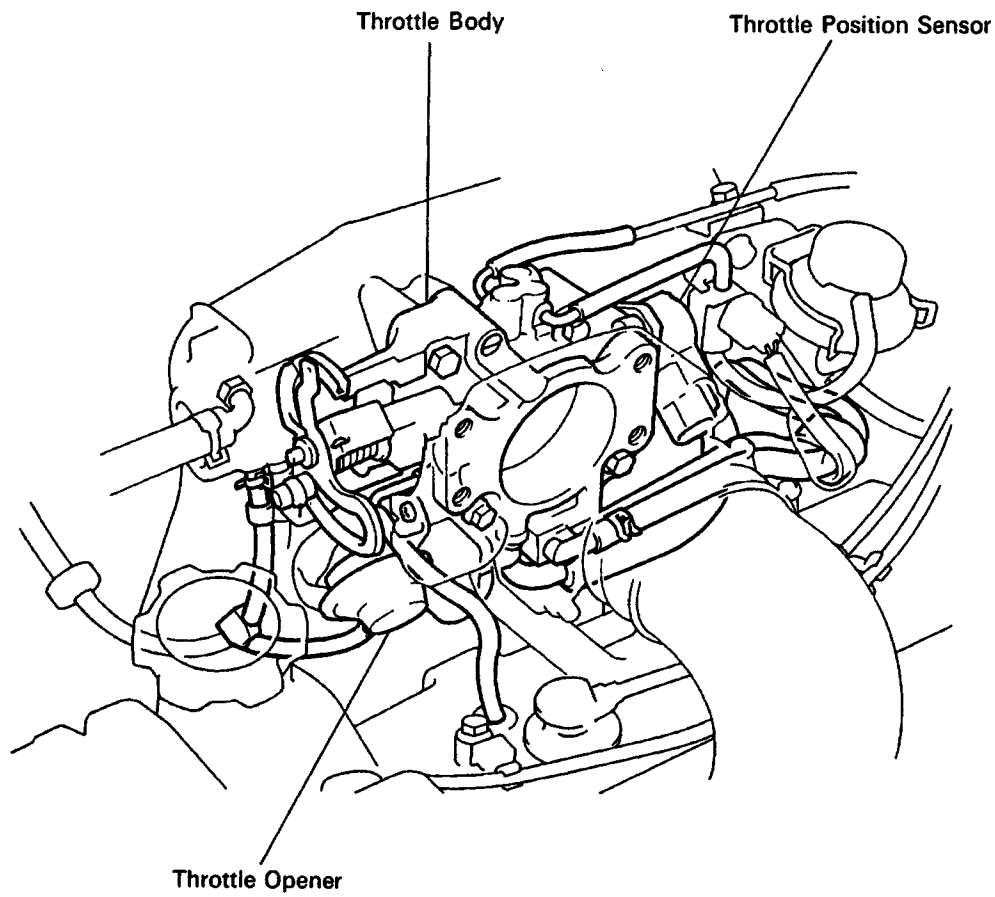
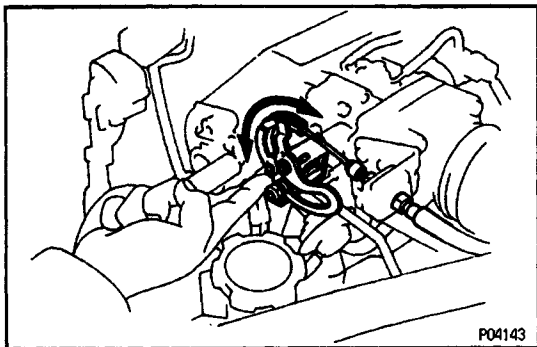


THROTTLE BODY

EG01-01

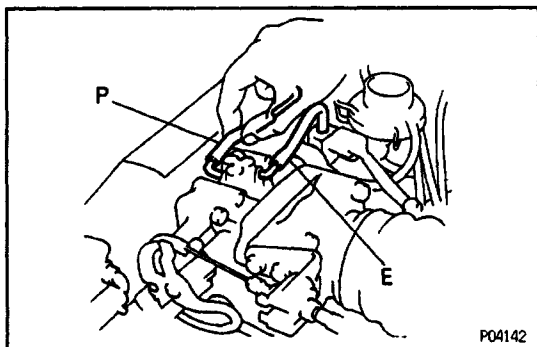




ON-VEHICLE INSPECTION

1. INSPECT THROTTLE BODY

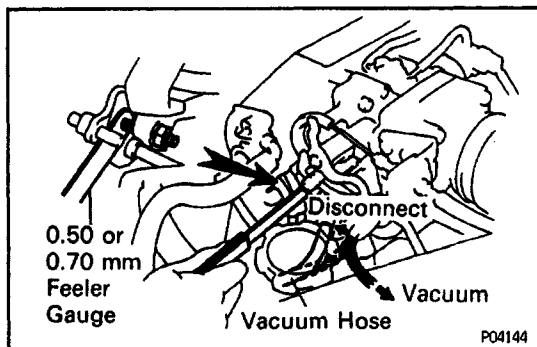
(a) Check that the throttle linkage moves smoothly.



(b) Check the vacuum at each port.

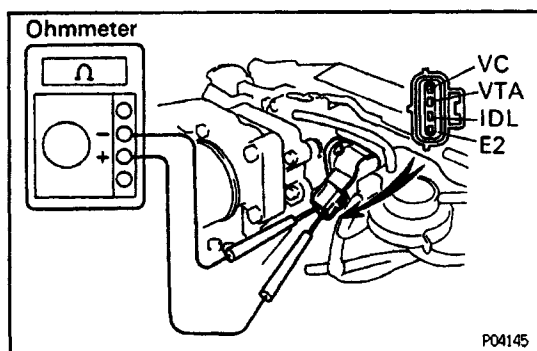
- Start the engine.
- Check the vacuum with your finger.

Port name	At idle	Other than idle
P	No vacuum	Vacuum
E	No vacuum	Vacuum



2. INSPECT THROTTLE POSITION SENSOR

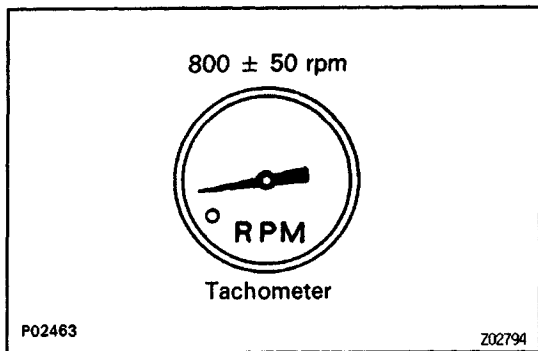
- Disconnect the sensor connector.
- Disconnect the vacuum hose from the throttle opener.
- Apply vacuum to the throttle opener.
- Insert a feeler gauge between the throttle stop screw and stop lever.



(e) Using an ohmmeter, measure the resistance between each terminal.

Clearance between lever and stop screw	Between terminals	Resistance
0 mm (0 in.)	VTA - E2	0.2 - 5.7 k Ω
0.50 mm (0.020 in.)	IDL - E2	2.3 k Ω or less
0.70 mm (0.028 in.)	IDL - E2	Infinity
Throttle valve fully open	VTA - E2	2.0 - 10.2 k Ω
-	VC - E2	2.5 - 5.9 k Ω

- Reconnect the vacuum hose to the throttle opener.
- Reconnect the sensor connector.



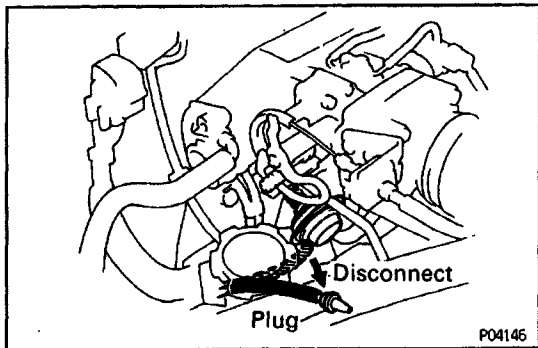
3. INSPECT THROTTLE OPENER

A. Warm up engine

Allow the engine to warm up to normal operating temperature.

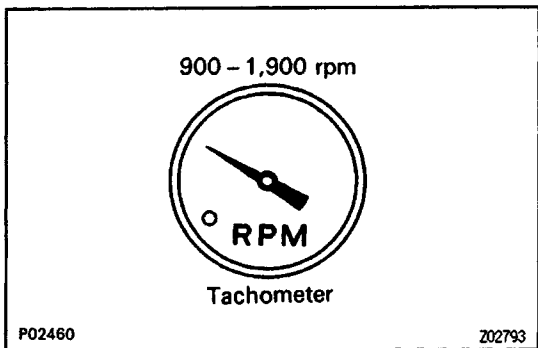
B. Check idle speed

Idle speed:
800 ± 50 rpm



C. Check and adjust throttle opener setting speed

(a) Disconnect the vacuum hose from the throttle opener, and plug the hose end.



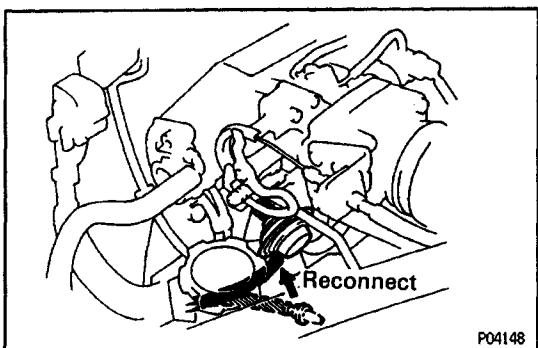
(b) Check the throttle opener setting speed.

Throttle opener setting speed:

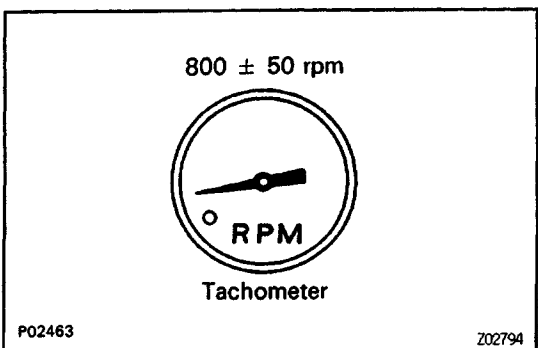
900 - 1,900 rpm (w/ Cooling fan OFF)

If the throttle opener setting is not as specified, replace the throttle body assembly.

(c) Stop the engine.



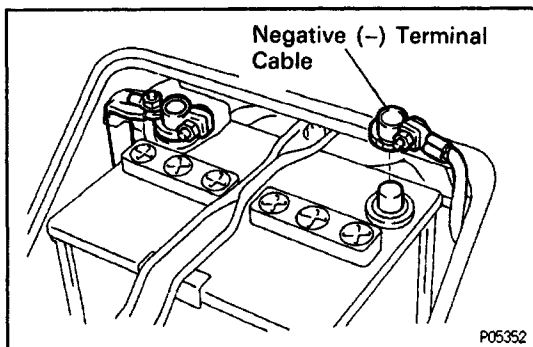
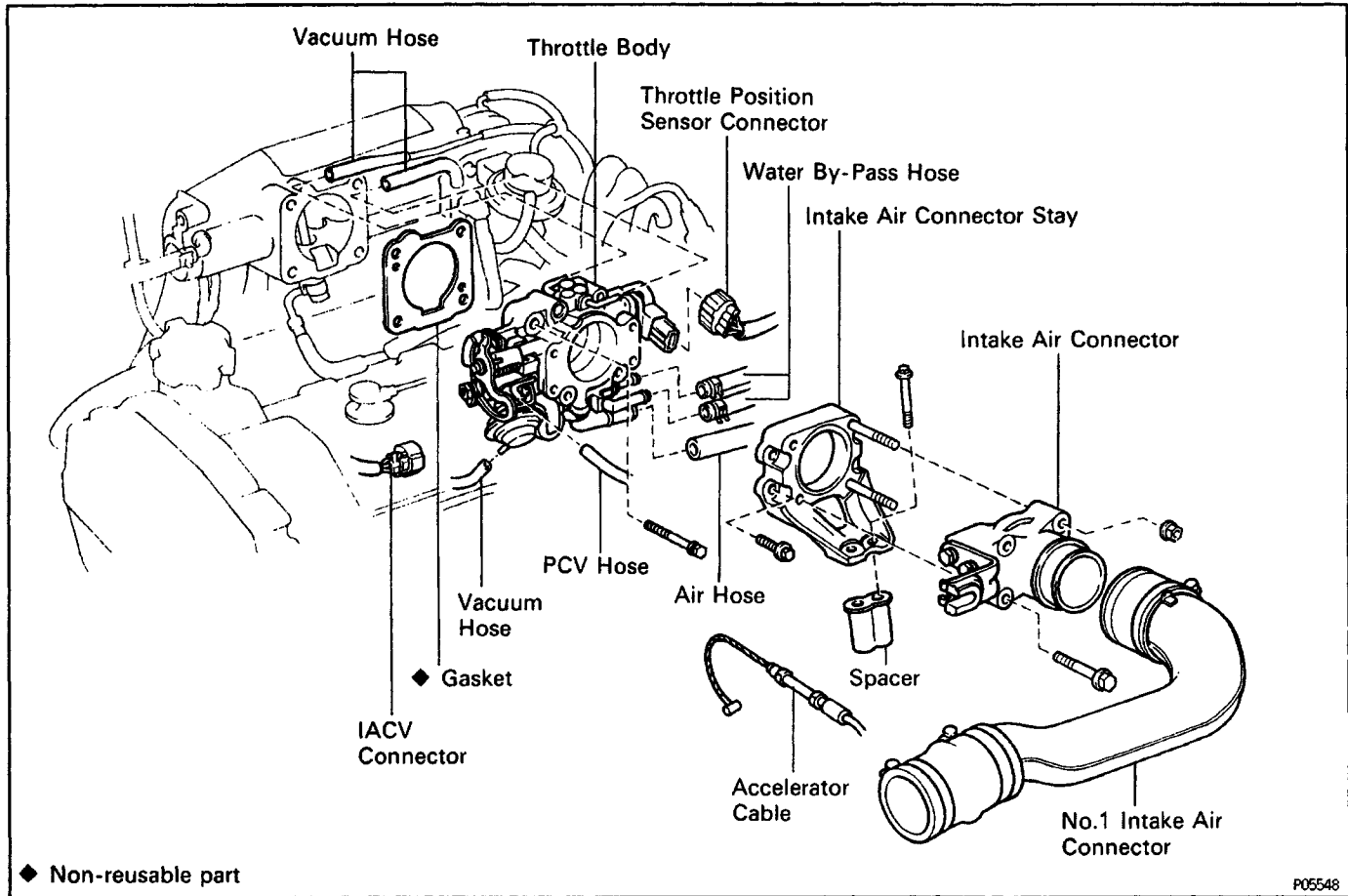
(d) Reconnect the vacuum hose to the throttle opener.



(e) Start the engine, and check that the idle rpm returns to the correct speed.

Idle speed:
800 ± 50 rpm

COMPONENTS FOR REMOVAL AND INSTALLATION



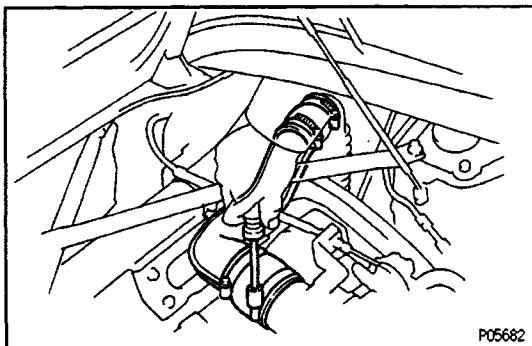
THROTTLE BODY REMOVAL

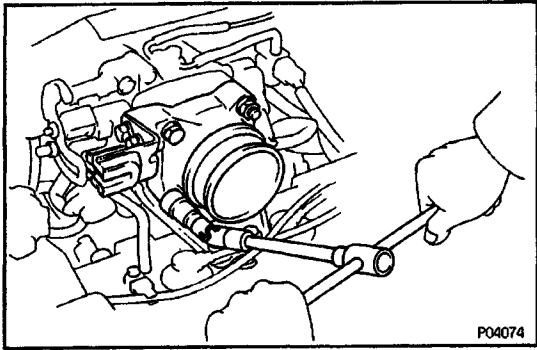
(See Components for Removal Installation)

1. DISCONNECT CABLE FROM NEGATIVE TERMINAL OF BATTERY

CAUTION: Turn the ignition switch to 'LOCK'. Disconnect the negative terminal from the battery. Wait at least 20 seconds before proceeding with work.

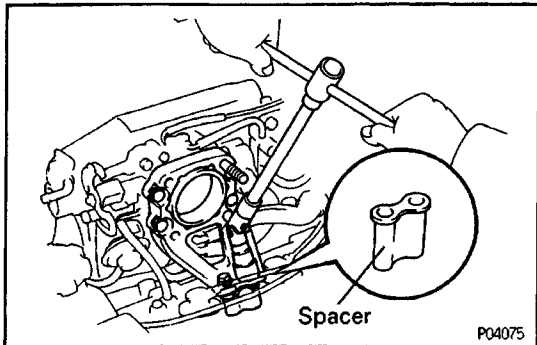
2. DRAIN ENGINE COOLANT
3. DISCONNECT ACCELERATOR CABLE FROM THROTTLE BODY
4. REMOVE NO.1 INTAKE AIR CONNECTOR





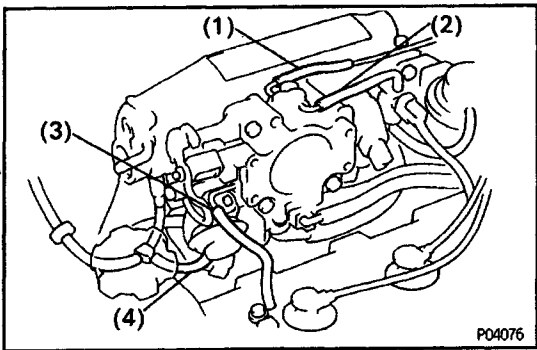
5. REMOVE INTAKE AIR CONNECTOR

Remove the two bolts, two nuts and intake air connector.



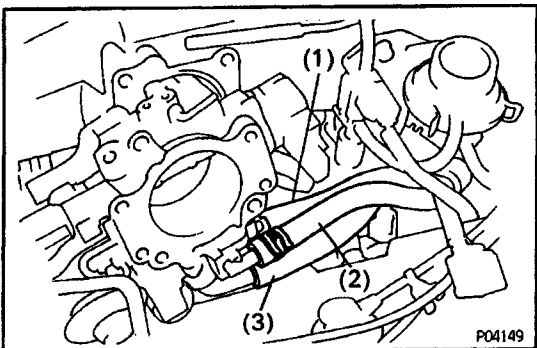
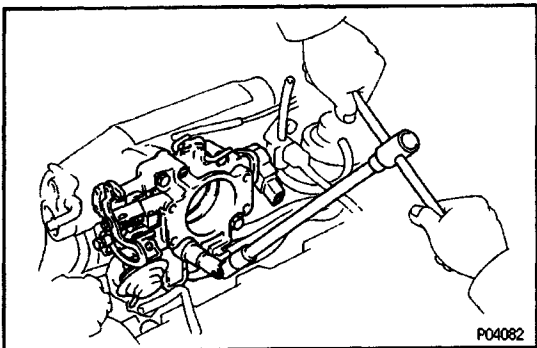
6. REMOVE INTAKE AIR CONNECTOR STAY

- (a) Remove the six bolts and intake air connector stay.
- (b) Remove the spacer.

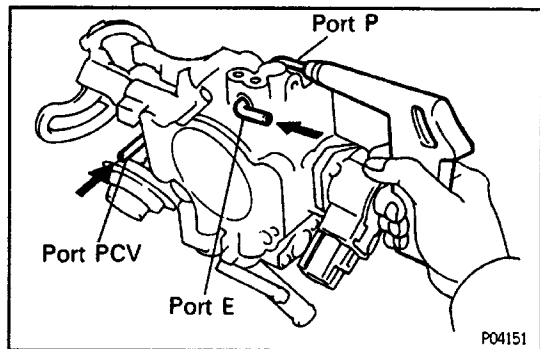


7. REMOVE THROTTLE BODY

- (a) Disconnect the following connector:
 - Throttle position sensor connector
 - IACV connector
- (b) Disconnect the following hoses:
 - (1) Vacuum hose from port "P" of throttle body
 - (2) Vacuum hose from port "E" of throttle body
 - (3) PCV hose from port PCV of throttle body
 - (4) Vacuum hose from throttle opener.
- (c) Remove the four bolts, and disconnect the throttle body from the intake manifold.
- (d) Remove the throttle body gasket.



- (e) Disconnect the following hoses from the throttle body, and remove the throttle body:
 - (1) Water by-pass hose (from upper side of No. 1 air tube)
 - (2) Water by-pass hose (from lower side of No. 1 air tube)
 - (3) Air hose (from No. 1 air tube)

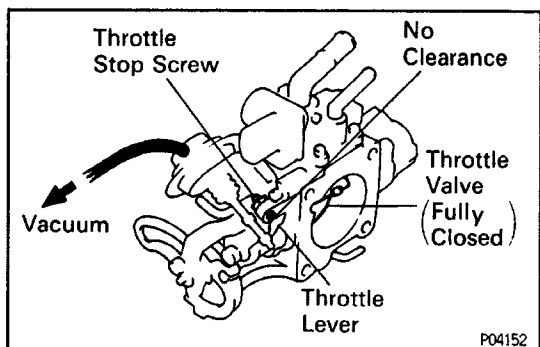


THROTTLE BODY INSPECTION

1. CLEAN THROTTLE BODY

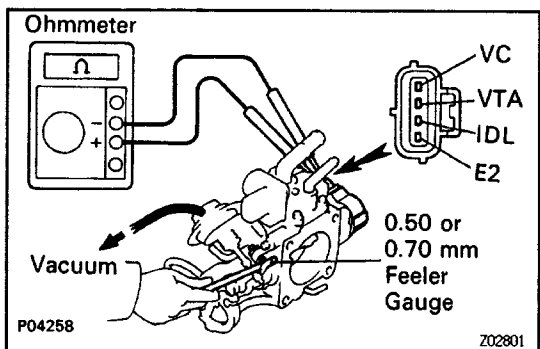
- Using a soft brush and carburetor cleaner, clean the cast parts.
- Using compressed air, clean all the passages and apertures.

NOTICE: To prevent deterioration, do not clean the throttle position sensor.



2. INSPECT THROTTLE VALVE

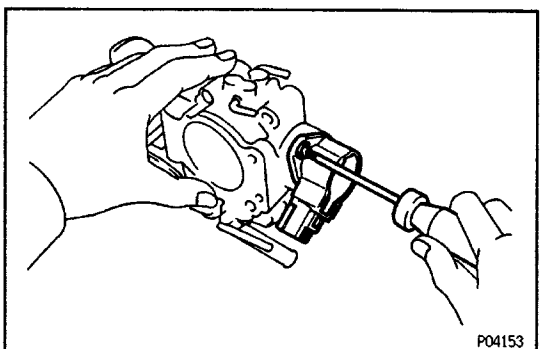
- Apply vacuum to the throttle opener.
- Check that there is no clearance between the throttle stop screw and throttle lever when the throttle valve is fully closed.



3. INSPECT THROTTLE POSITION SENSOR

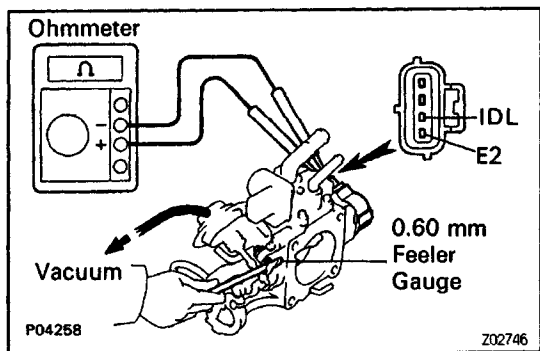
- Apply vacuum to the throttle opener.
- Insert a feeler gauge between the throttle stop screw and stop lever.
- Using an ohmmeter, measure the resistance between each terminal.

Clearance between lever and stop screw	Between terminals	Resistance
0 mm (0 in.)	VTA - E2	0.2 - 5.7 k Ω
0.50 mm (0.020 in.)	IDL - E2	2.3 k Ω or less
0.70 mm (0.028 in.)	IDL - E2	Infinity
Throttle valve fully open	VTA - E2	2.0 - 10.2 k Ω
-	VC - E2	2.5 - 5.9 k Ω

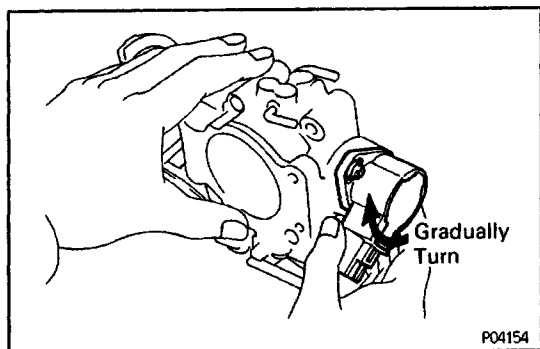


4. IF NECESSARY, ADJUST THROTTLE POSITION SENSOR

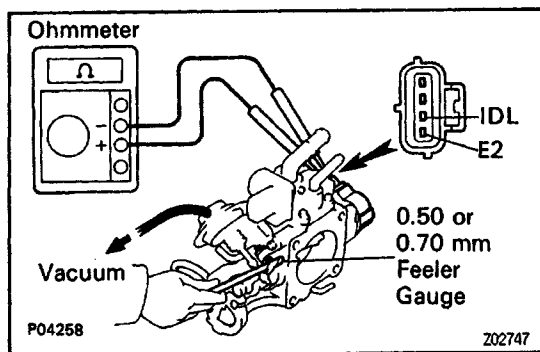
- Loosen the two set screws of the sensor.



- (b) Apply vacuum to the throttle opener.
- (c) Insert a 0.60 mm (0.024 in.) feeler gauge between the throttle stop screw and stop lever.
- (d) Connect the test probe of an ohmmeter to the terminals IDL and E2 of the sensor.

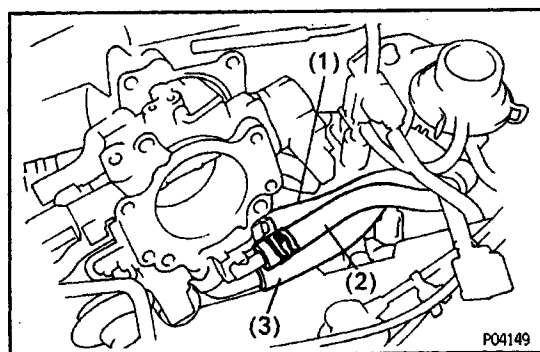


- (e) Gradually turn the sensor clockwise until the ohmmeter deflects, and secure it with the two set screws.



- (f) Recheck the continuity between terminals IDL and E2.

Clearance between lever and stop screw	Continuity (IDL - E2)
0.50 mm (0.020 in.)	Continuity
0.70 mm (0.028 in.)	No continuity



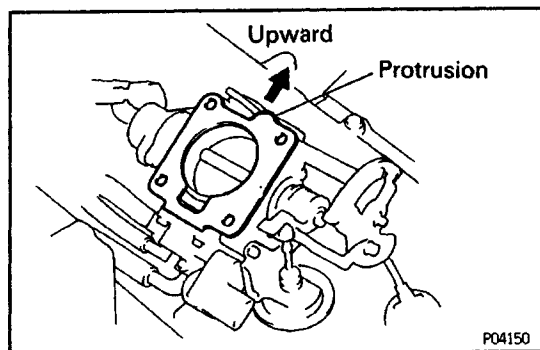
THROTTLE BODY INSTALLATION

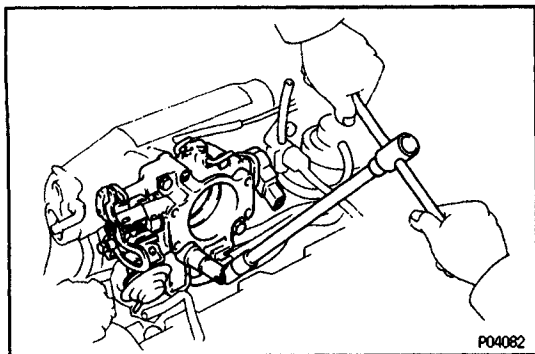
EG0Y7-01

(See Components for Removal and Installation)

1. INSTALL THROTTLE BODY

- (a) Connect the following hoses to the throttle body:
 - (1) Water by-pass hose (from upper side of No. 1 air tube)
 - (2) Water by-pass hose (from lower side of No. 1 air tube)
 - (3) Air hose (from No. 1 air tube)
- (b) Install a new gasket on the throttle body, facing the protrusion upward.





(c) Install the throttle body with the four bolts.

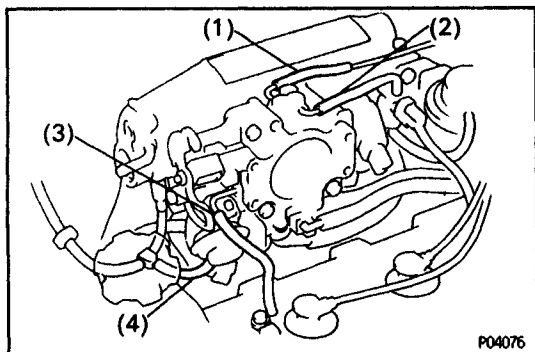
Torque: 19 N-m (195 kgf-cm, 14 ft-lbf)

Different bolt lengths are used for the upper and lower sides.

Bolt length:

45 mm (1.77 in.) for upper side

70 mm (2.76 in.) for lower side



(d) Connect the following hoses:

(1) Vacuum hose to port "P" of throttle body

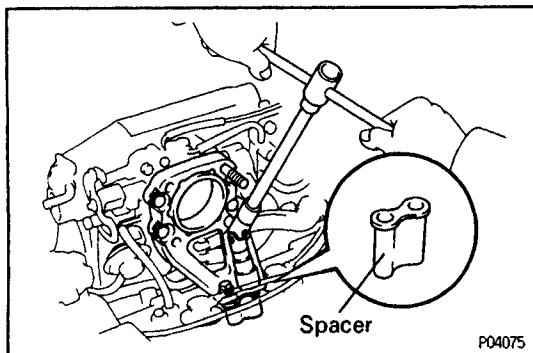
(2) Vacuum hose to port "E" of throttle body

(3) PCV hose to port PCV of throttle body

(4) Vacuum hose to throttle opener

(e) Connect the following connector:

- Throttle position sensor connector
- IACV connector



2. INSTALL INTAKE AIR CONNECTOR STAY

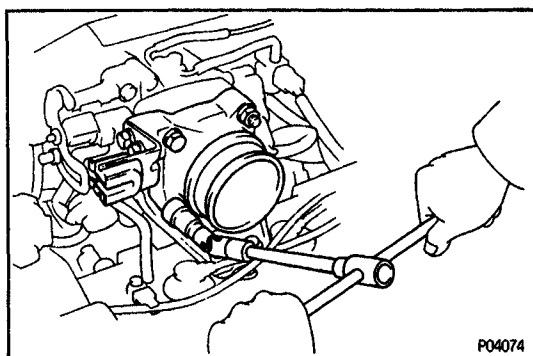
(a) Install the spacer.

(b) Install the intake air connector stay with the six bolts.

Torque:

7.8 N-m (80 kgf-cm, 69 in.-lbf) for 10 mm head

19 N-m (195 kgf-cm, 14 ft-lbf) for 12 mm head

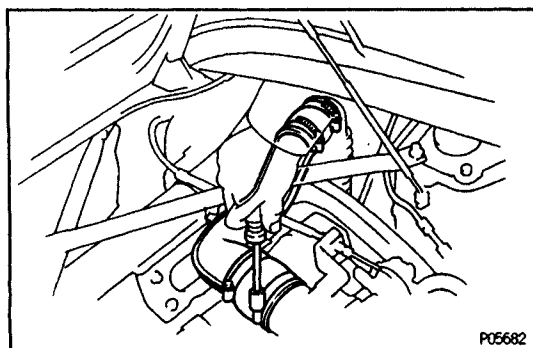


3. INSTALL INTAKE AIR CONNECTOR

Install the intake air connector with the two bolts and two nuts.

Torque: 19 N-m (195 kgf-cm, 14 ft-lbf)

4. CONNECT ACCELERATOR CABLE TO THROTTLE BODY



5. INSTALL NO.1 INTAKE AIR CONNECTOR

6. CONNECT CABLE TO NEGATIVE TERMINAL OF BATTERY

7. REFILL WITH ENGINE COOLANT

8. START ENGINE AND CHECK FOR ENGINE COOLANT