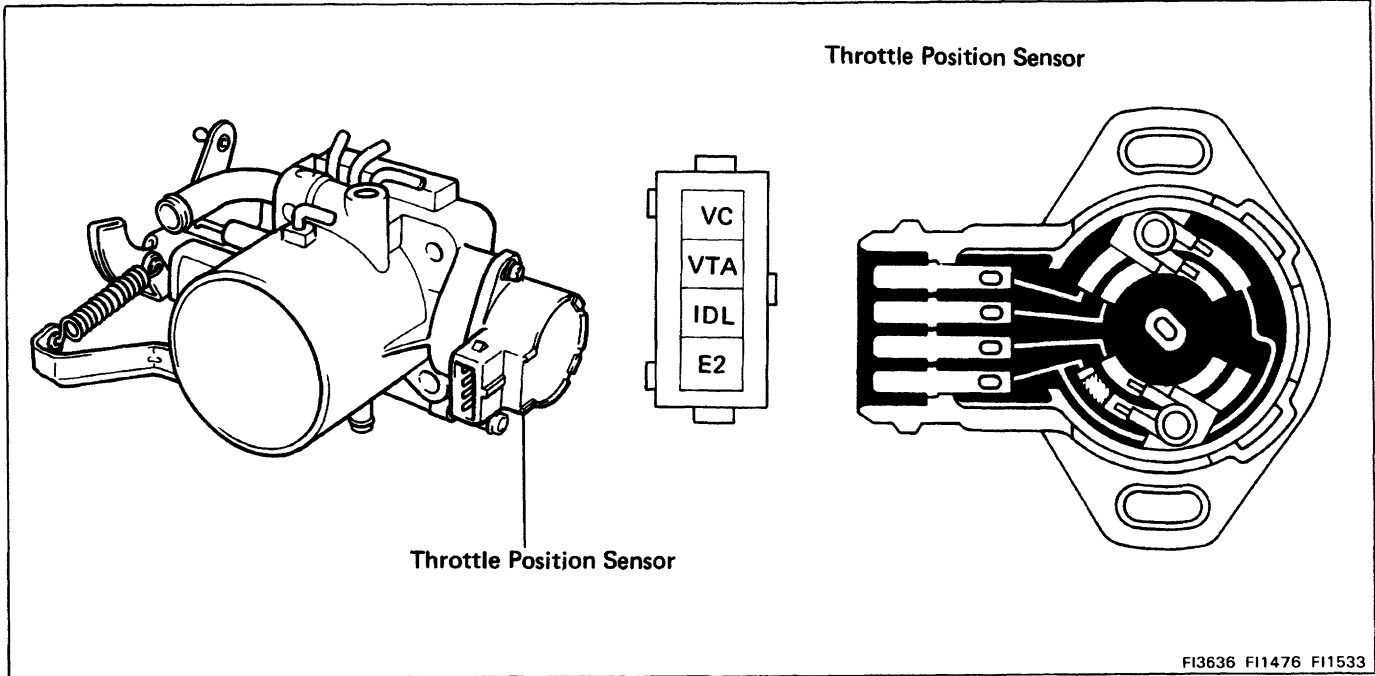


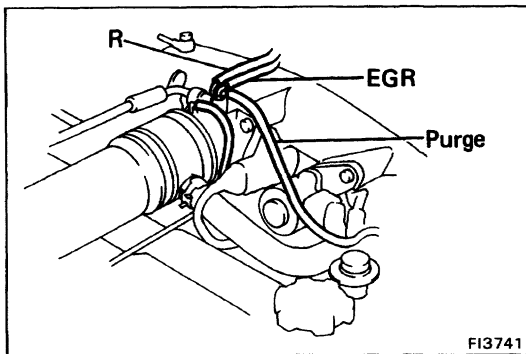
Throttle Body



ON-VEHICLE INSPECTION

1. INSPECT THROTTLE BODY

(a) Check that the throttle linkage moves smoothly.



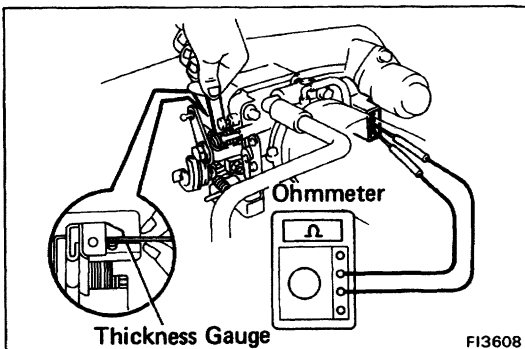
(b) Check the vacuum at each port.

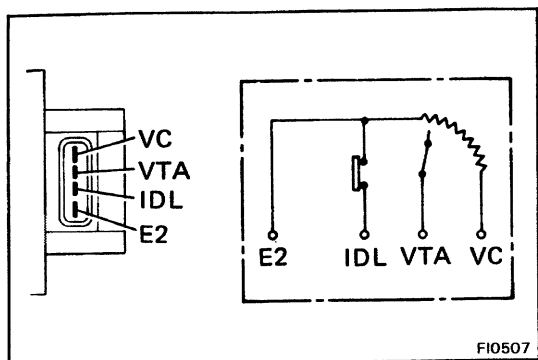
- Start the engine.
- Check the vacuum with your finger.

Port Name	At idling	Other than idling
Purge	No vacuum	Vacuum
EGR	No vacuum	Vacuum
R	No vacuum	No vacuum

2. INSPECT THROTTLE POSITION SENSOR

- (a) Disconnect the sensor connector.
- (b) Insert a thickness gauge between the throttle stop screw and stop lever.
- (c) Using an ohmmeter, measure the resistance between each terminal.





Clearance between lever and stop screw	Between terminals	Resistance
0 mm (0 in.)	VTA - E2	0.3 - 6.3 kΩ
0.50 mm (0.0197 in.)	IDL - E2	2.3 kΩ or less
0.90 mm (0.0354 in.)	IDL - E2	Infinity
Throttle valve fully open	VTA - E2	3.5 - 10.3 kΩ
-	VC - E2	4.25 - 8.25 kΩ

(d) Reconnect the sensor connector.

3. INSPECT DASH POT (DP)

A. Warm up engine

Allow the engine to warm up to normal operating temperature.

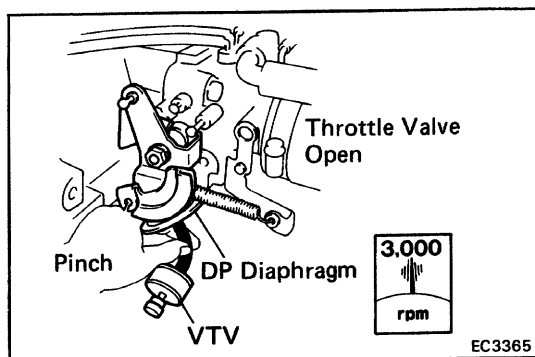
B. Check idle speed

Idle speed: 700 rpm

C. Check and adjust dash pot (DP) setting speed

(a) Maintain engine speed at 3,000 rpm.

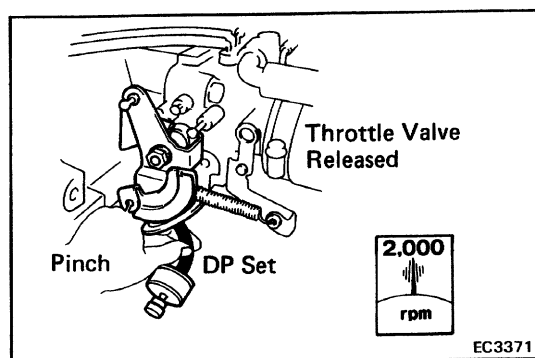
(b) Pinch the vacuum hose between the DP and VTV.



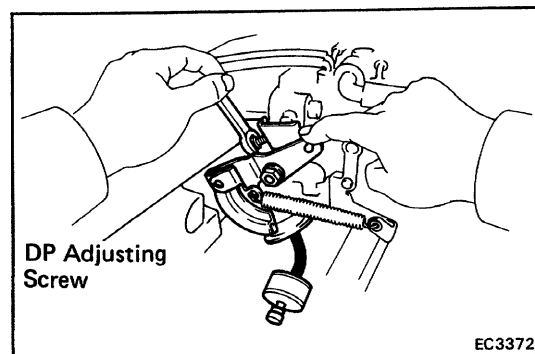
(c) Release the throttle valve.

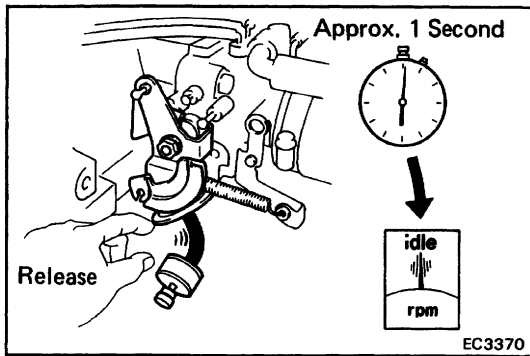
(d) Check that the DP is set.

DP setting speed: 2,000 rpm



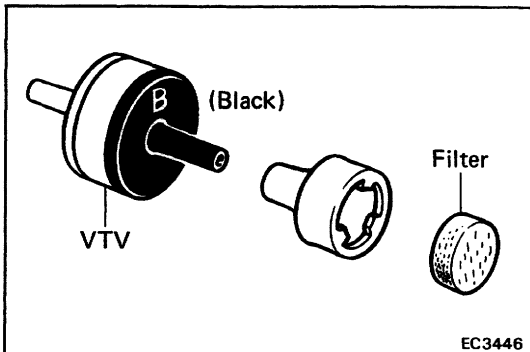
(e) If not as specified, adjust with the DP adjusting screw.





D. Check operation of VTV

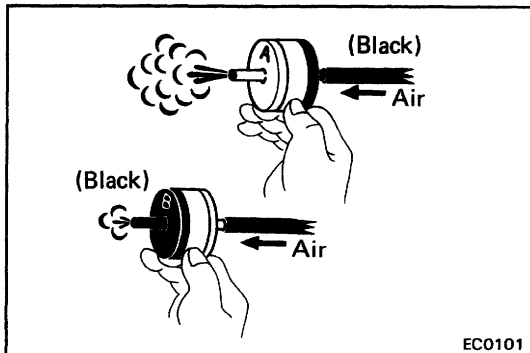
- (a) Set the DP setting speed in the same procedure as above; (a) to (c).
- (b) Release the pinched hose and check that the engine returns to idle speed in approx. 1 second.



4. INSPECT VTV

A. Check and clean filter on VTV

- (a) Check the filter for contamination or damage.
- (b) Using compressed air, clean the filter.

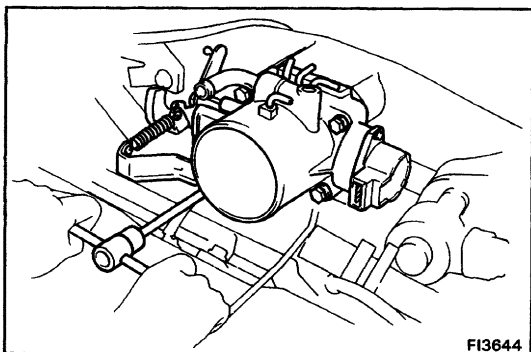


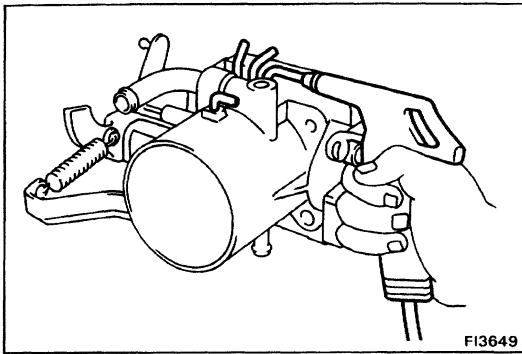
B. Check VTV by blowing air into each side

- (a) Check that air flows without resistance from B to A.
- (b) Check that air flows with difficulty from A to B.

REMOVAL OF THROTTLE BODY

1. DRAIN ENGINE COOLANT
2. REMOVE PCV PIPE WITH HOSES
3. DISCONNECT THROTTLE CABLE FROM THROTTLE LINKAGE
4. DISCONNECT ACCELERATOR CONNECTING ROD FROM THROTTLE LINKAGE
5. REMOVE AIR INTAKE CONNECTOR
6. DISCONNECT EMISSION CONTROL VACUUM HOSES
7. DISCONNECT THROTTLE POSITION SENSOR CONNECTOR
8. DISCONNECT NO.2 WATER BY-PASS HOSE FROM ISC VALVE
9. REMOVE THROTTLE BODY
 - (a) Remove the accelerator bracket.
 - (b) Remove the four bolts, throttle body and gasket.
 - (c) Disconnect the No.3 water by-pass hose.
 - (d) Remove the VTV and No. 2 water by-pass hose.



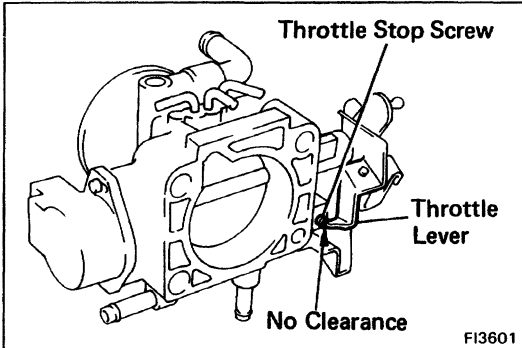


INSPECTION OF THROTTLE BODY

1. CLEAN THROTTLE BODY

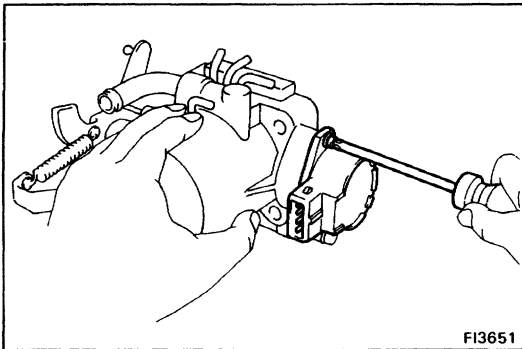
- (a) Using a soft brush and carburetor cleaner, clean the cast parts.
- (b) Using compressed air, clean all the passages and apertures.

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



2. INSPECT THROTTLE VALVE

Check that there is no clearance between the throttle stop screw and throttle lever when the throttle valve is fully closed.

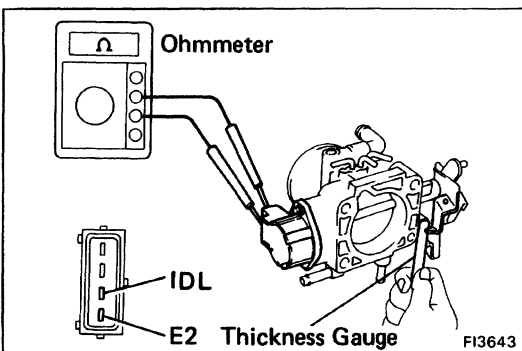


3. INSPECT THROTTLE POSITION SENSOR

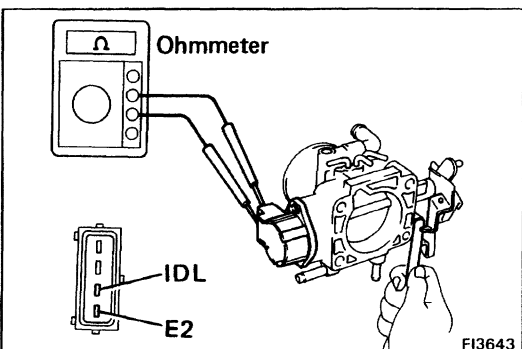
(See step 2 on page [FI-68](#))

4. IF NECESSARY, ADJUST THROTTLE POSITION SENSOR

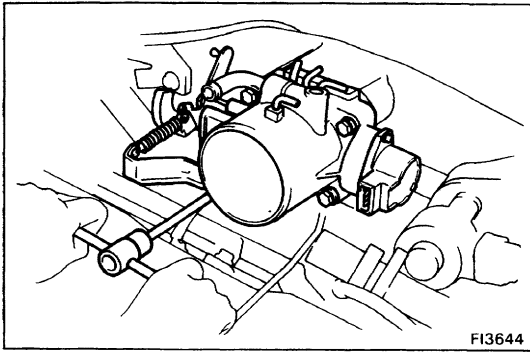
- (a) Loosen the two set screws of the sensor.
- (b) Insert a 0.70 mm (0.0276 in.) thickness gauge between the throttle stop screw and stop lever.
- (c) Connect the test probe of an ohmmeter to the terminals IDL and E2 of the sensor.
- (d) Gradually turn the sensor clockwise until the ohmmeter deflects, and secure it with the two screws.



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



Clearance between lever and stop screw	Continuity (IDL - E2)
0.50 mm (0.0197 in.)	Continuity
0.90 mm (0.0354 in.)	No continuity



INSTALLATION OF THROTTLE BODY

1. INSTALL THROTTLE BODY

- (a) Install the VTV and No.2 water by-pass hose to the throttle body.
- (b) Connect the No. 3 water by-pass hose to the throttle body.
- (e) Install a new gasket and the throttle body with the four bolts.

Torque: 130 kg-cm 19 ft-lb, 13 N-m

- (d) Install the accelerator bracket.

2. CONNECT NO.2 WATER BY-PASS HOSE TO ISC VALVE

3. CONNECT THROTTLE POSITION SENSOR CONNECTOR

4. CONNECT EMISSION CONTROL VACUUM HOSES

5. INSTALL AIR INTAKE CONNECTOR

6. CONNECT ACCELERATOR CONNECTING ROD TO THROTTLE LINKAGE

7. CONNECT THROTTLE CABLE, AND ADJUST IT

8. CONNECT PCV PIPE WITH HOSES

9. FILL WITH ENGINE COOLANT (See page [CO-5](#))