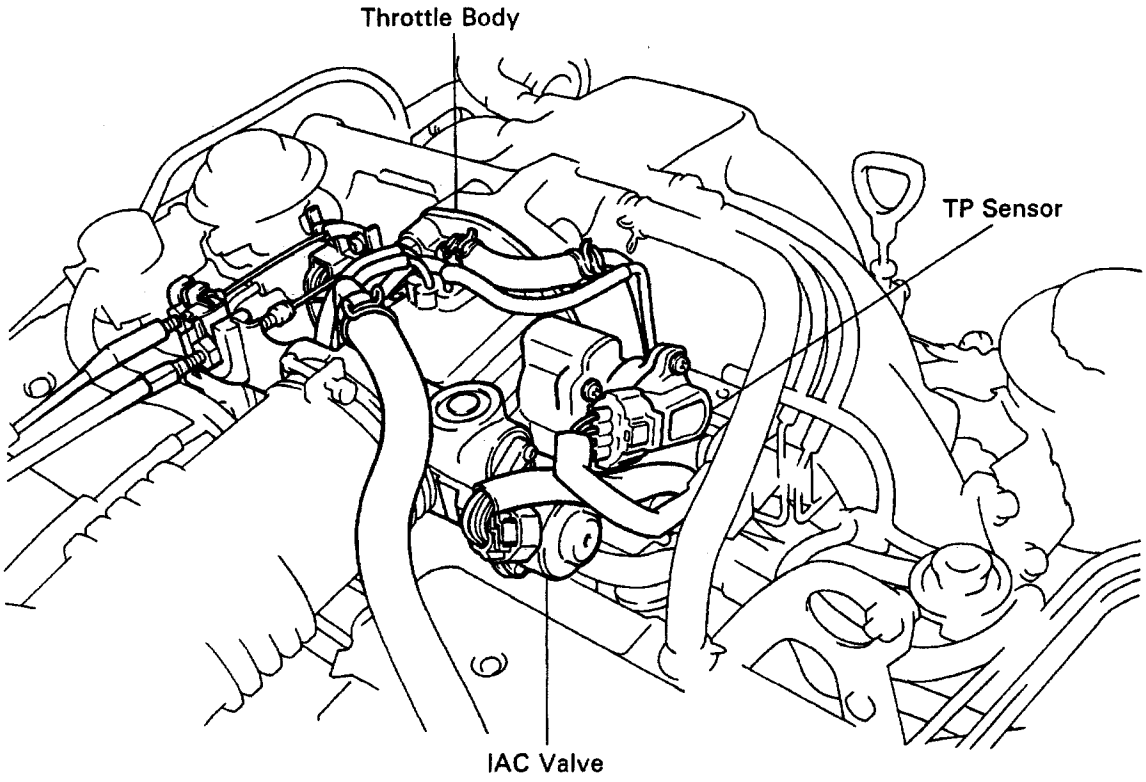
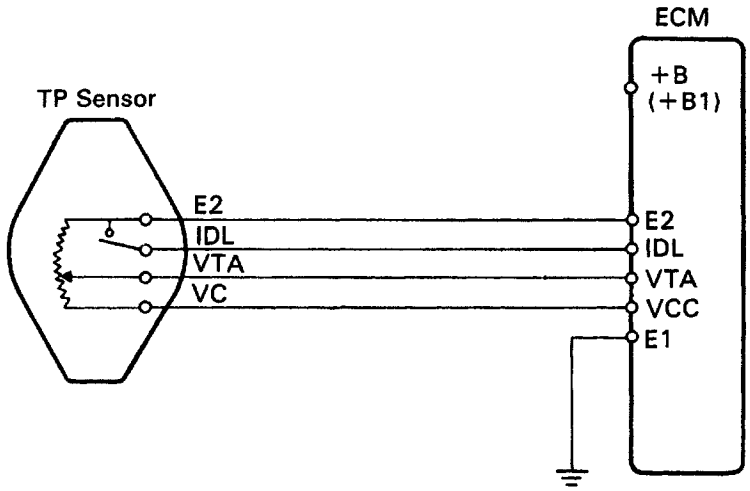
THROTTLE BODY

EG1AH-02





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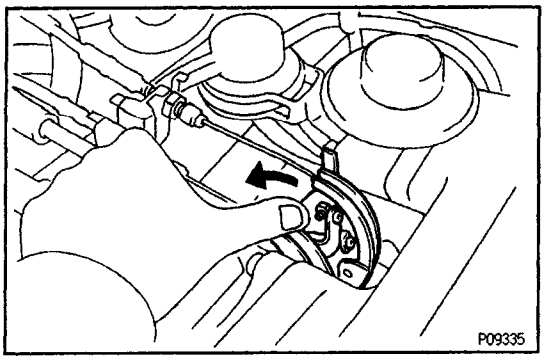
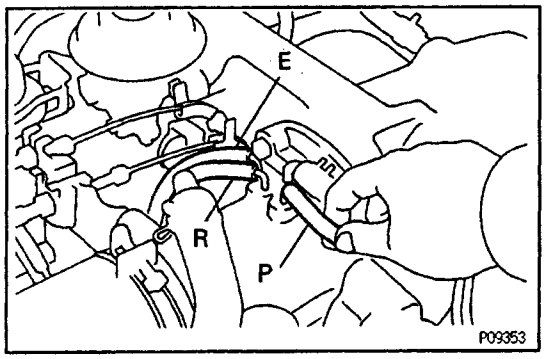
EG1BH-03

ON-VEHICLE INSPECTION



1. INSPECT THROTTLE BODY

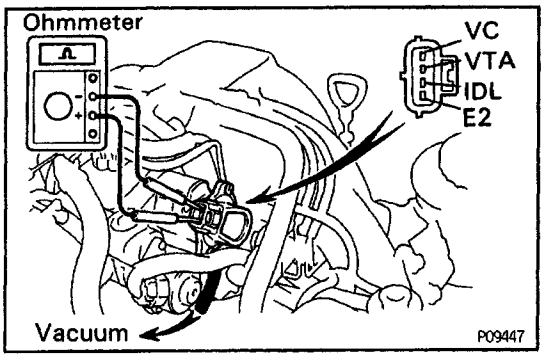
(a) Check that the throttle linkage moves smoothly.



(b) Check the vacuum at each port.

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

Port name	At idle	At 3,500 rpm
P	No vacuum	Vacuum
E	No vacuum	Vacuum
R	No vacuum	Vacuum



2. INSPECT THROTTLE POSITION SENSOR

(a) Disconnect the TP sensor connector.

(b) Apply vacuum to the throttle opener.

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

Throttle valve condition	Between terminals	Resistance
Fully closed	**VTA** - E2	0.2 - 5.7 kΩ
Fully closed	**IDL** - E2	2.3 kΩ or- less
Open	1DL - E2	Infinity
Fully open	**VTA** - E2	2.0 - 10.2 kΩ
–	VC - E2	2.5 - 5.9 kΩ

(d) Reconnect the TP sensor connector.

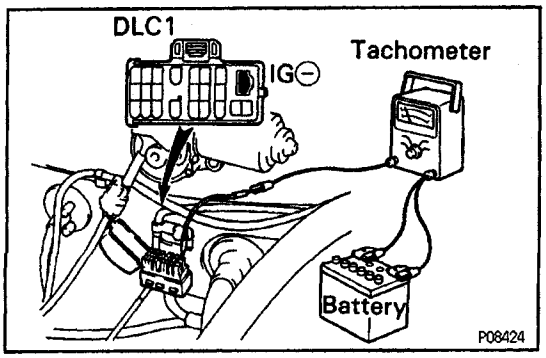
3. INSPECT AND ADJUST DASHPOT

A. Warm up engine

Allow the engine to warm up to normal operating temperature.

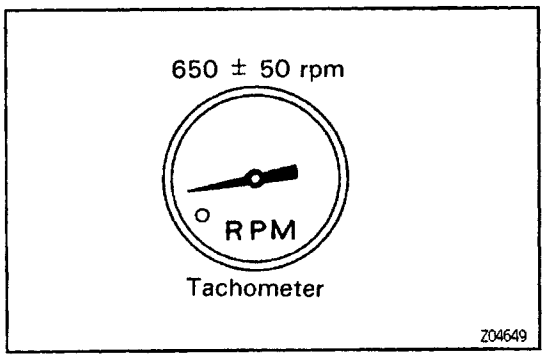
B. Connect tachometer

Connect the test probe of a tachometer to terminal IG (-) of the DLC1.



NOTICE:

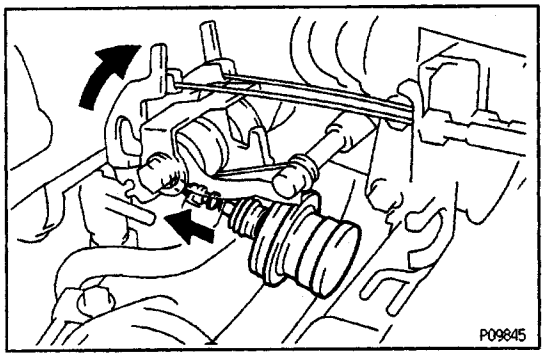
- **Never allow the tachometer terminal to touch ground as it could result in damage to the igniter and/or ignition coil.**
- **As some tachometers are not compatible with this ignition system, we recommend that you confirm the compatibility of your unit before use.**



C. Check idle speed

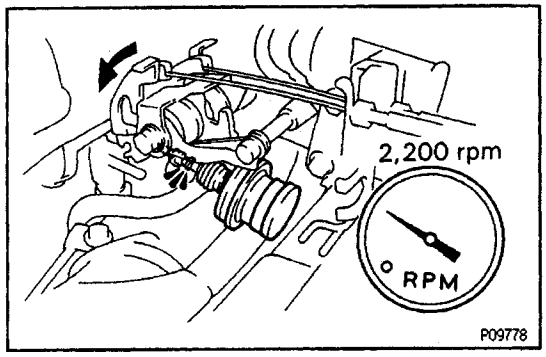
Idle speed :

650 ± 50 rpm (N position)



D. Check and adjust dashpot setting speed

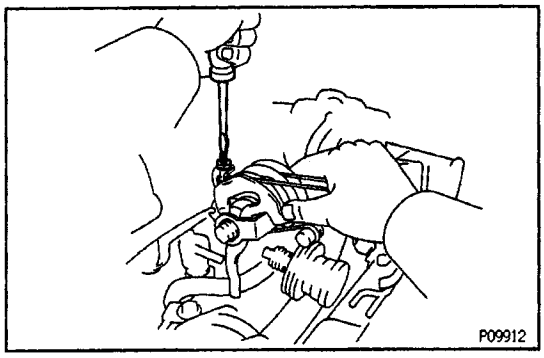
(a) Open the throttle valve until the throttle lever separates from the dashpot end.



(b) Release the throttle valve gradually, and check the dashpot setting speed when the throttle lever touched the dashpot end.

Dashpot setting speed:

2,200 ± 300 rpm



If not as specified, adjust using the following proceduce:

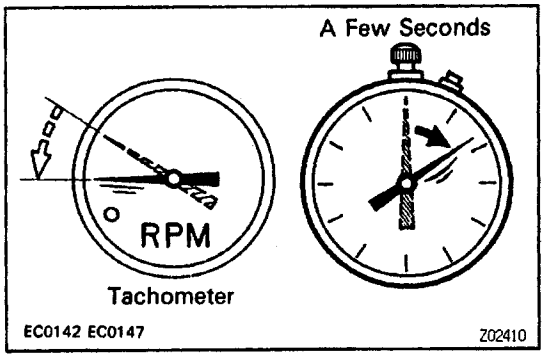
(a) Stop the engine.

(b) Loosen the lock nut of the stopper bolt.

(c) Adjust the dashpot setting speed by turning the stopper bolt.

(d) Start the engine and check the dashpot setting speed.

(e) Retighten the lock nut.



E. Check VTV operation

(a) Maintain the engine at 3,500 rpm.

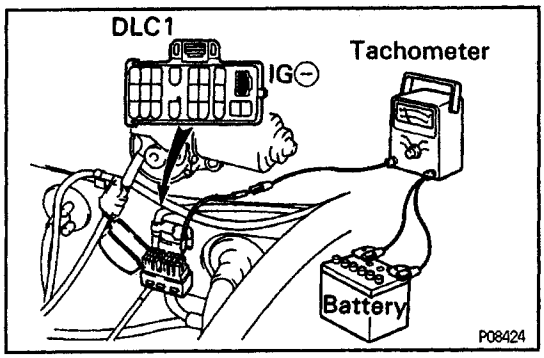
(b) Release the throttle valve, and check that the engine returns to idle in a few seconds.

F. Disconnect tachometer

4. INSPECT THROTTLE OPENER

A. Warm up engine

Allow the engine to warm up to normal operating temperature.



B. Connect tachometer

Connect the test probe of a tachometer to terminal IG (-) of the DLC 1.

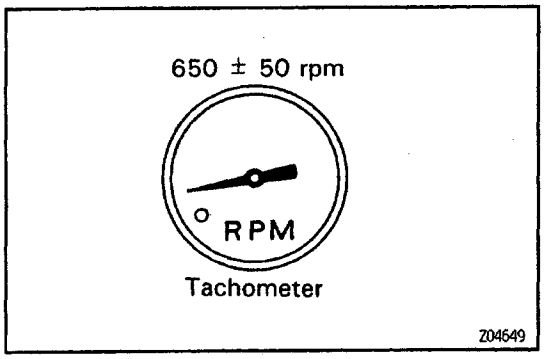
NOTICE:

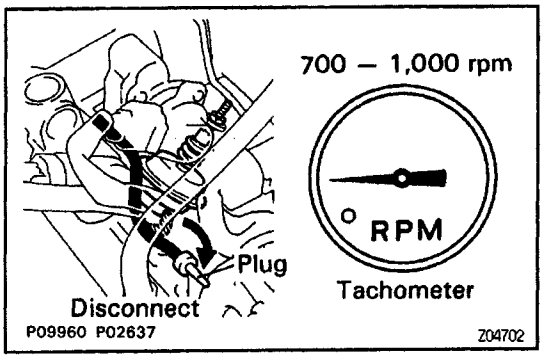
- **Never allow the tachometer terminal to touch ground as it could result in damage to the igniter and/or ignition coil.**
- **As some tachometers are not compatible with this ignition system, we recommend that you confirm the compatibility of your- unit before use.**

C. Check idle speed

Idle speed:

650 ± 50 rpm (N position)





D. Check 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:

700 - 1,000 rpm

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

(c) Stop the engine.

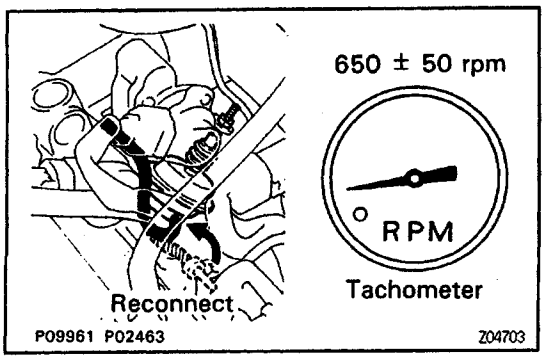
(d) Reconnect the vacuum hose to the throttle opener.

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

Idle speed:

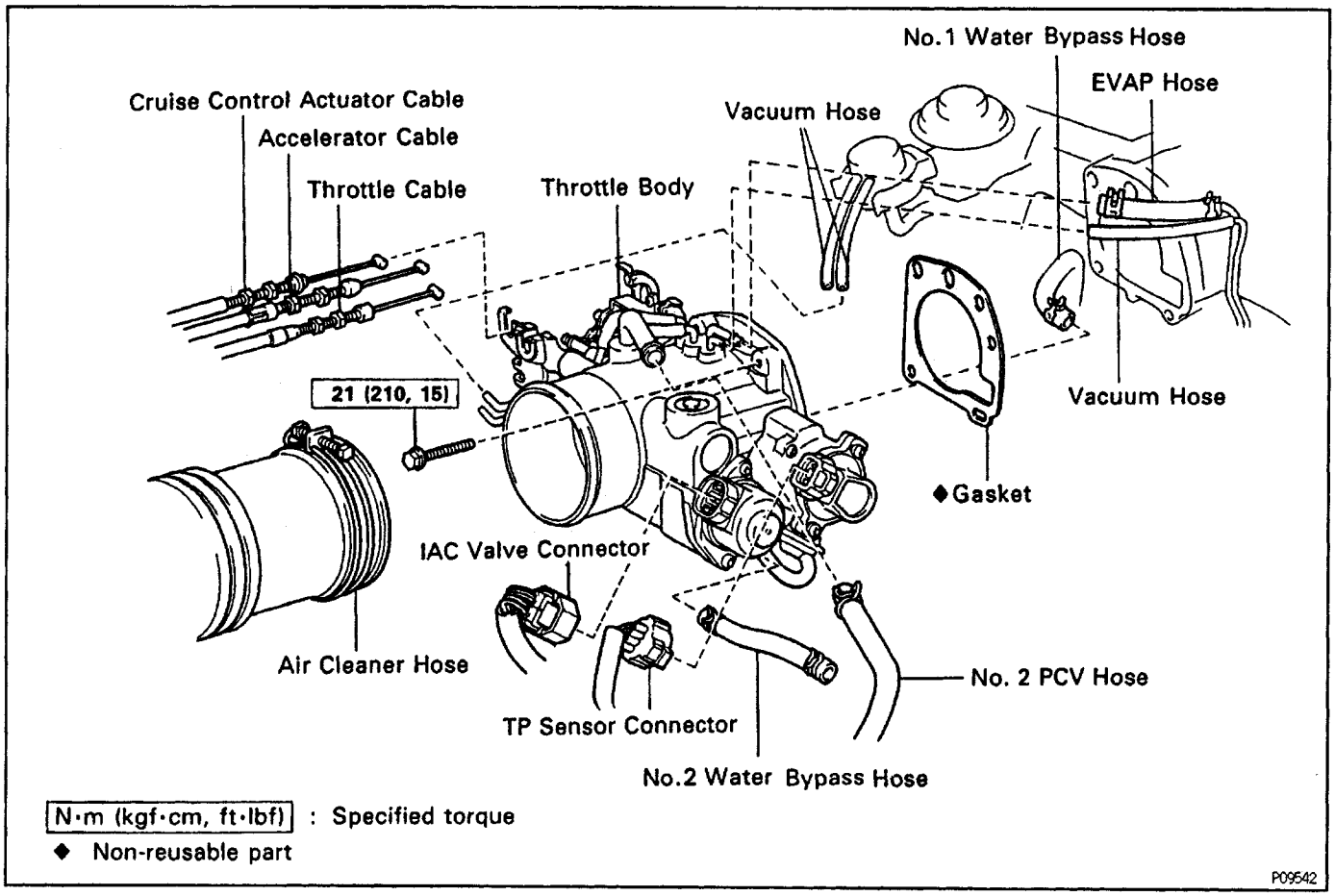
650 ± 50 rpm (N position)

E. Disconnect tachometer



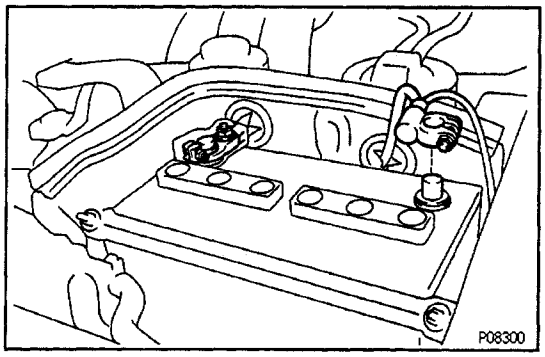
EG13G-04

COMPONENTS FOR REMOVAL AND INSTALLATION

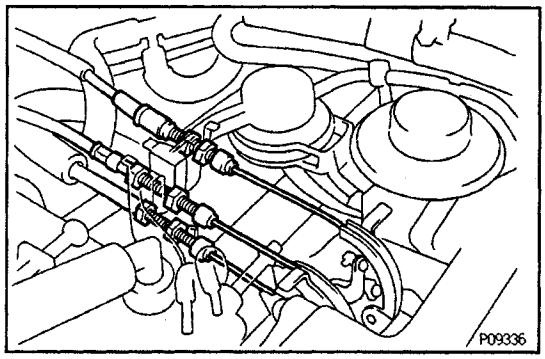


EG1AJ-03

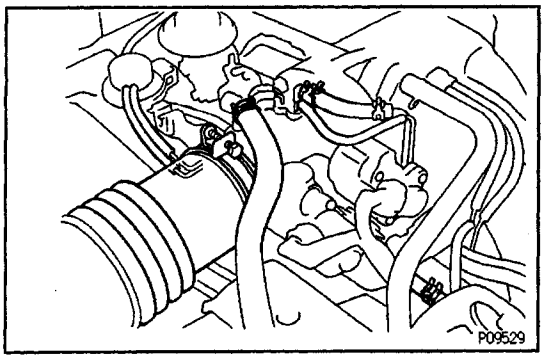
THROTTLE BODY REMOVAL



1. DISCONNECT NEGATIVE TERMINAL CABLE FROM BATTERY
2. DRAIN ENGINE COOLANT

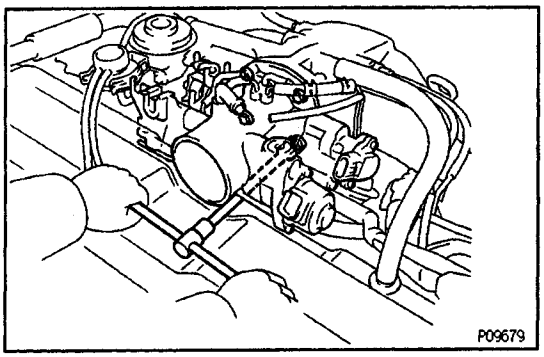


3. DISCONNECT CRUISE CONTROL ACTUATOR CABLE
4. DISCONNECT ACCELERATOR CABLE
5. DISCONNECT THROTTLE CABLE

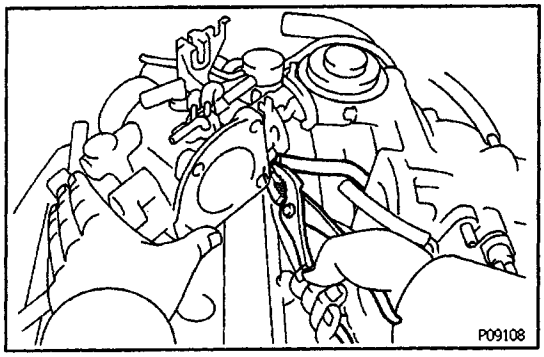


6. DISCONNECT AIR CLEANER HOSE
7. DISCONNECT NO.2 PCV HOSE
8. DISCONNECT EVAP HOSE
9. DISCONNECT VACUUM HOSES
10. DISCONNECT N0.2 WATER BYPASS HOSE

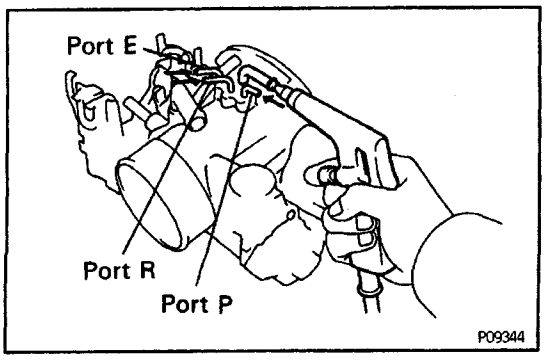
11. DISCONNECT THROTTLE POSITION SENSOR CONNECTOR
12. DISCONNECT IDLE AIR CONTROL VALVE CONNECTOR



13. REMOVE THROTTLE BODY
(a) Remove the 4 bolts, and disconnect the throttle body from the air intake chamber.
(b) Remove the throttle body gasket.



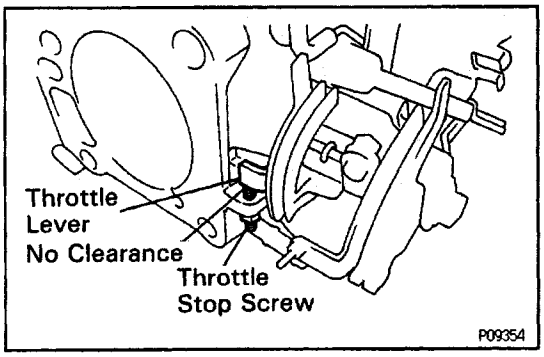
(c) Disconnect the No.1 water bypass hose from the throttle body, and remove the throttle body.
(d) Disconnect the No.2 water bypass hose from the throttle body.



EGODH-08

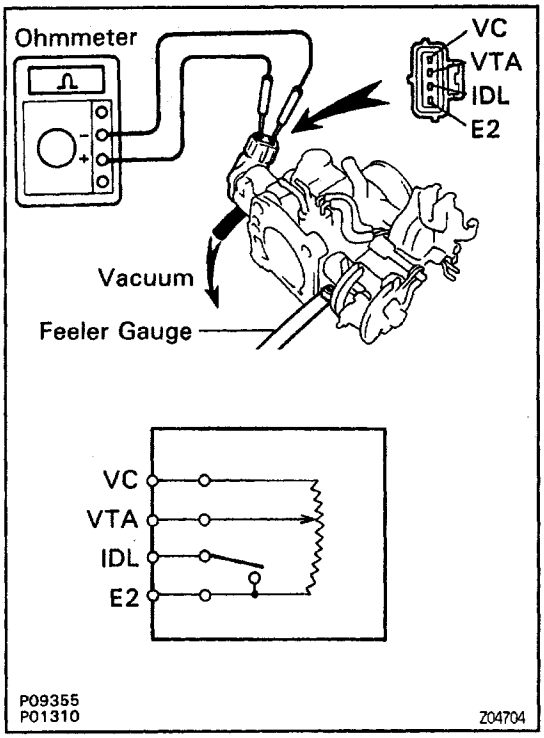
THROTTLE BODY INSPECTION

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 TP sensor, dashpot and IAC valve.



2. INSPECT THROTTLE VALVE

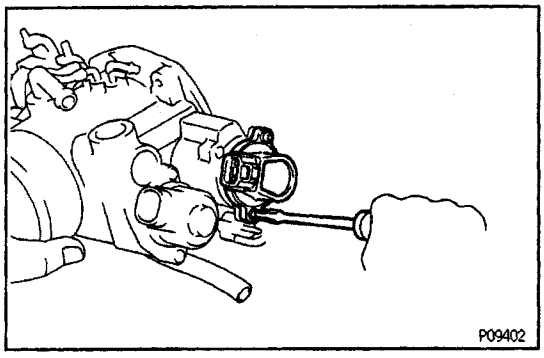
(a) Apply vacuum to the throttle opener.
(b) Check that there is no clearance between the throttle stop screw and throttle lever when the closed throttle position.



3. INSPECT THROTTLE POSITION SENSOR

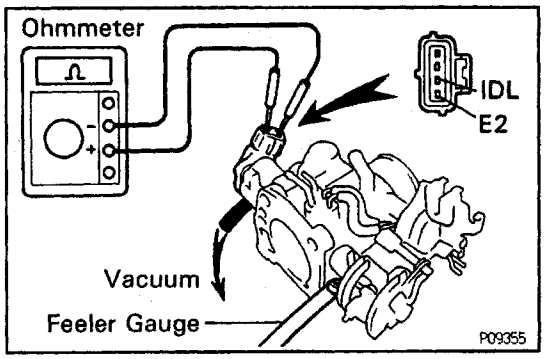
(a) Apply vacuum to the throttle opener.
(b) Insert a feeler gauge between the throttle stop screw and stop lever.
(c) Using an ohmmeter, measure the resistance between each terminal.

Clearance between lever and stop screw	Between terminals	Resistance
0 mm (0 in.)	VTA - E2	0.2 - 5.7 kΩ
0.50 mm (0.020 in.)	IDL-E2	2.3 k() or less
0.75 mm (0.030 in.)	IDL - E2	Infinity
Throttle valve fully open	VT A - E2	2.0 - 10.2 kΩ
–	VC - E2	2.5 - 5.9 kΩ

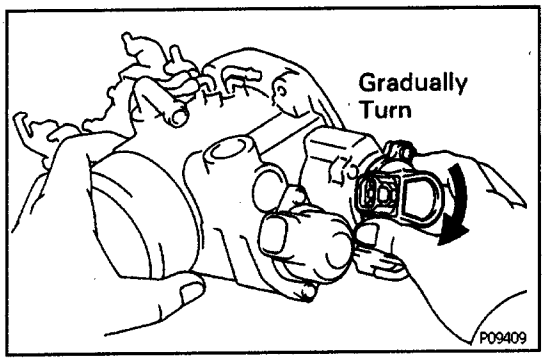


4. IF NECESSARY, ADJUST THROTTLE POSITION SENSOR

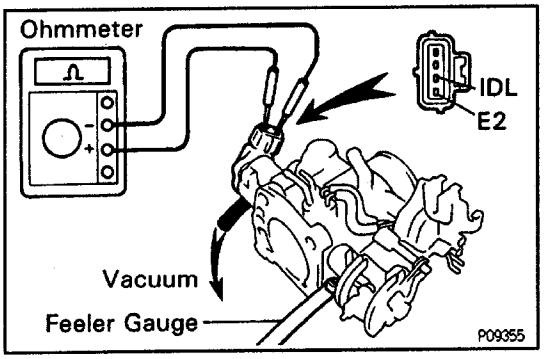
(a) Loosen the 2 set screws of the TP sensor.



(b) Apply vacuum to the throttle opener.
(c) Insert a 0.62 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 TP sensor.



(e) Gradually turn the TP sensor clockwise until the ohmmeter deflects, and secure it with the 2 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
0.75 mm (0.030 in.)	No continuity

EG1AK-08

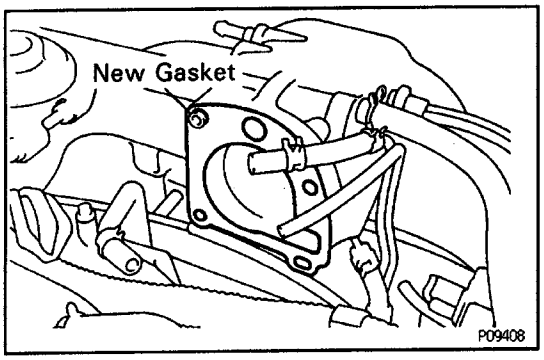
THROTTLE BODY INSTALLATION

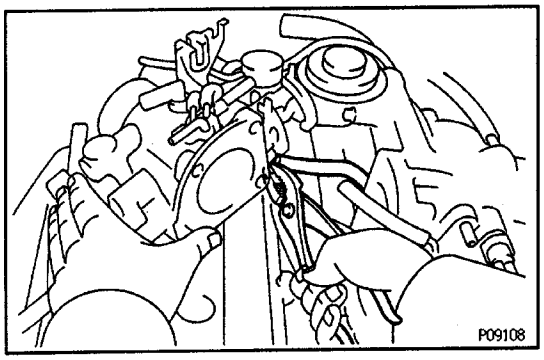
(See Components for Removal and Installation)

1. INSTALL THROTTLE BODY

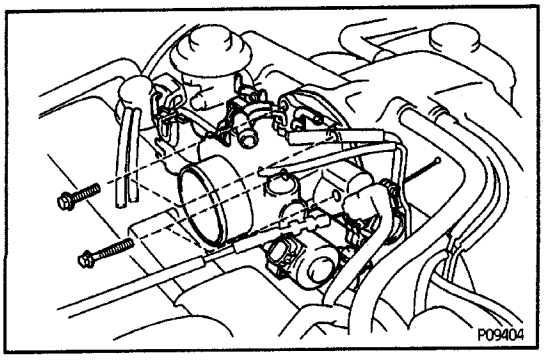
(a) Install the No.2 water bypass hose to the throttle body.

(b) Install a new gasket on the air intake chamber.





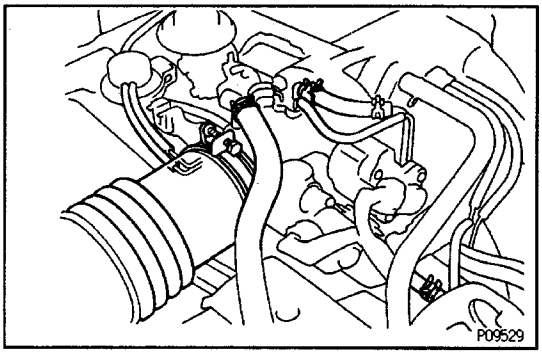
(c) Connect the No.1 water bypass hose to the throttle body.



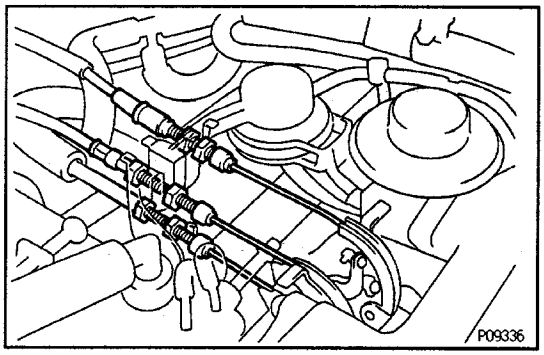
(d) Install the throttle body with the 4 bolts.

Torque: 21 N-m (210 kgf-cm, 15 ft-lbf)

2. CONNECT IDLE AIR CONTROL VALVE CONNECTOR
3. CONNECT THROTTLE POSITION SENSOR CONNECTOR



4. CONNECT NO.2 WATER BYPASS HOSE
5. CONNECT VACUUM HOSES
6. CONNECT EVAP HOSE
7. CONNECT NO.2 PCV HOSE
8. CONNECT AIR CLEANER HOSE



9. CONNECT THROTTLE CABLE
10. CONNECT ACCELERATOR CABLE
11. CONNECT CRUISE CONTROL ACTUATOR CABLE

12. FILL WITH ENGINE COOLANT
13. CONNECT NEGATIVE TERMINAL CABLE TO BATTERY