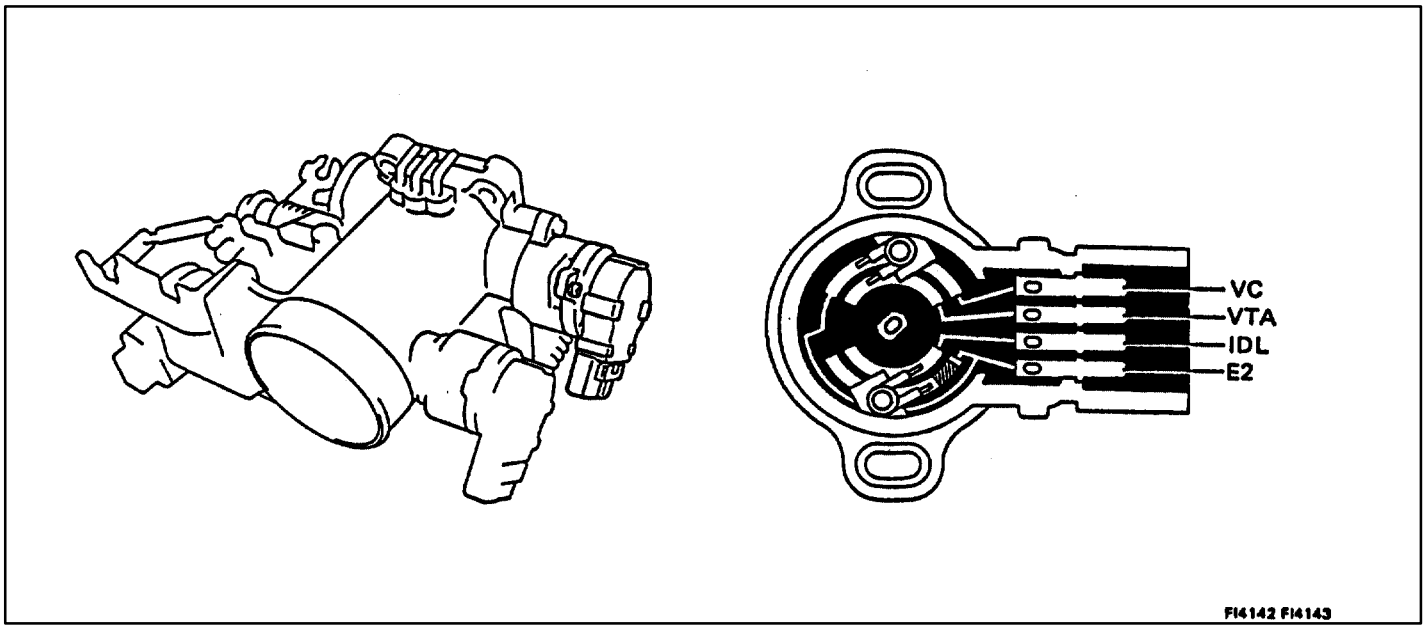
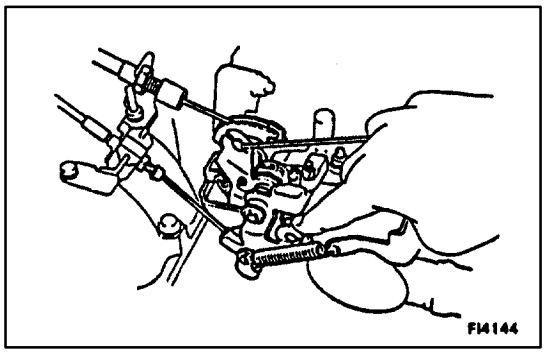
Throttle Body

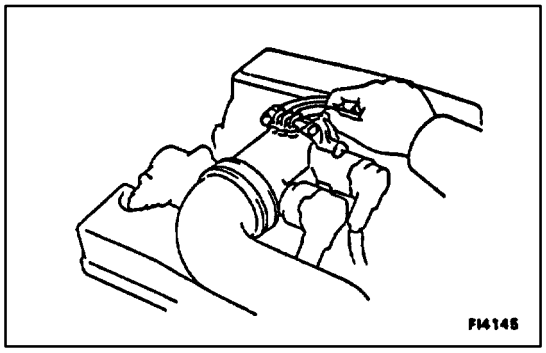




ON–VEHICLE CHECK

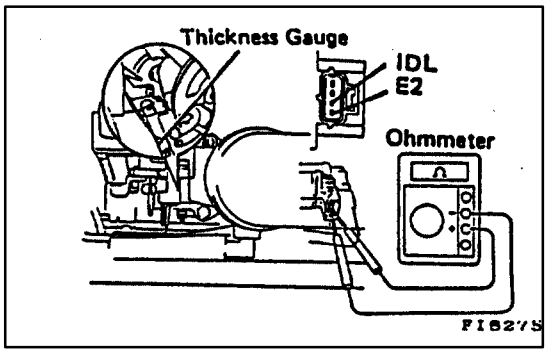
1. CHECK THROTTLE BODY

(a) Check that the throttle linkage moves smoothly.



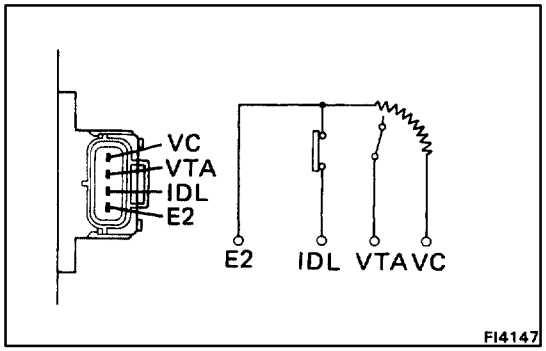
(b) Check the vacuum at each port.
- Start the engine.
- Check the vacuum with your finger.

Port No.	At idling	At 3,000 rpm
E	No vacuum	Vacuum
R	No. vacuum	Vacuum
P	No vacuum	Vacuum



2. CHECK THROTTLE POSITION SENSOR

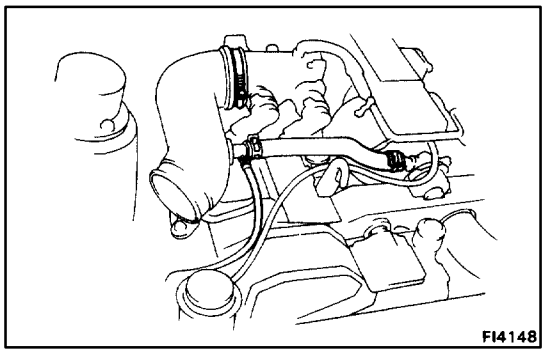
Check the resistance between the terminals.
- Disconnect the connector from the sensor.
- Insert a thickness gauge between the throttle stop screw and stop lever.
- Using an ohmmeter, check the resistance between each terminal.



Clearance between lever and stop screw	Between terminals	Resistance
0 mm (0 in.)	VTA–E2	0.2–1.2 kΩ
0.40 mm (0.0157 in.)	IDL–E2	Less than 2.3 kΩ
0.85 mm (0.0335 in.)	IDL–E2	Infinity
Throttle valve fully opened position	VTA–E2	3.3–10 kΩ
–	VC–E2	4–9 kΩ

If the resistance is not as specified, adjust or replace the throttle position sensor.

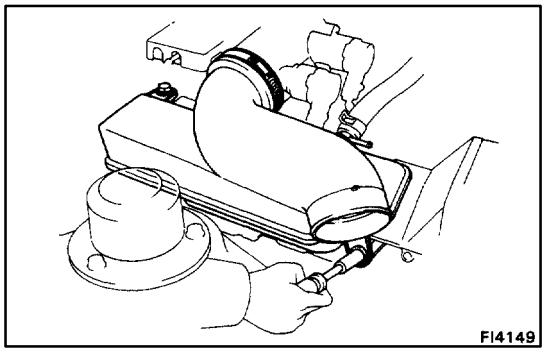
(d) Connect the throttle position sensor connector.



REMOVAL OF THROTTLE BODY

1. REMOVE AIR CLEANER WITH AIR FLOW METER
(See steps 1 to 3 on page FI–48)

2. DRAIN COOLANT
(See step 3 on pages CO–5, 6)

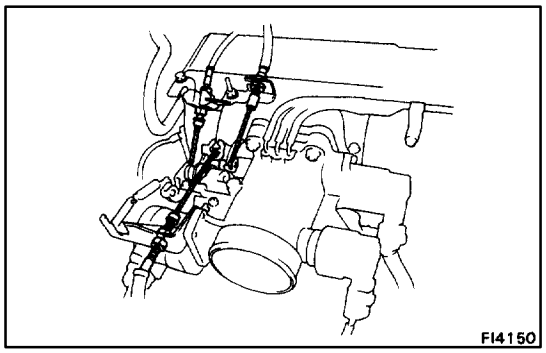


3. DISCONNECT INTAKE AIR CONNECTOR PIPE

(a) Disconnect the ISC air hose and PS idle–up hose.

(b) Loosen the clamp.

(c) Remove the two bolts and remove the intake air connector pipe.



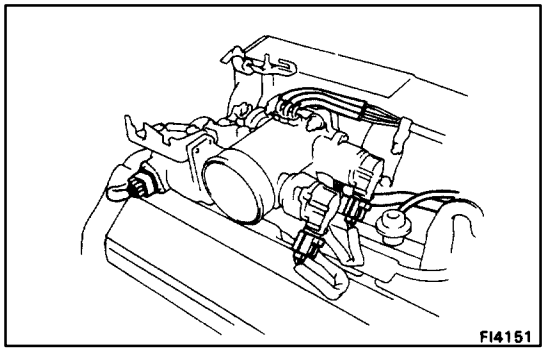
4. REMOVE THROTTLE BODY COVER

5. DISCONNECT FOLLOWING CABLES:

(a) Cruise control cable

(b) Throttle cable

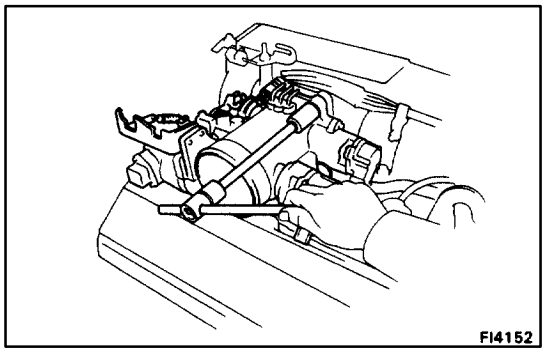
(c) Accelerator control cable

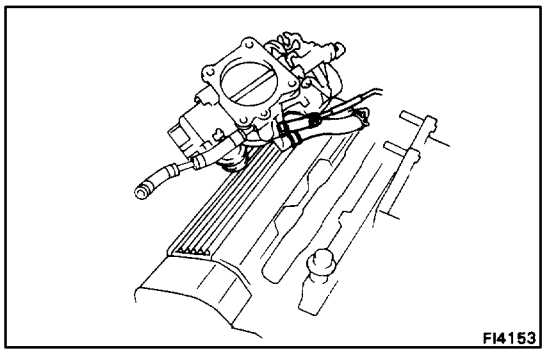


6. REMOVE THROTTLE BODY

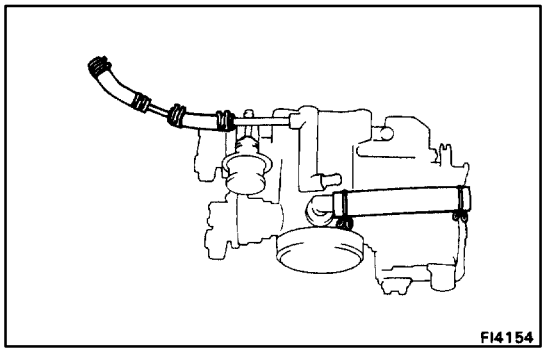
(a) Disconnect the three vacuum hoses from the throttle body.
(b) Remove the vacuum hose from the pressure regulator.
(c) Remove the upper high–tension cord cover.
(d) Remove the No.5 water by–pass pipe from the ISC valve.
(e) Disconnect the following connectors:
- (w/TRAC)
  Throttle valve motor connector
- (w/TRAC)
  Sub–throttle position sensor connector
- Main throttle position sensor connector

(f) Remove the two nuts and two bolts, separate the throttle body from the air intake chamber and remove the gasket.



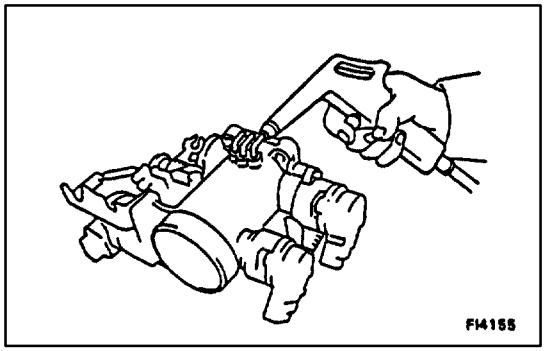


(g) Remove the No.2 PCV hose from the cylinder head cover.
(h) Remove the No.1 water by–pass pipe from the throttle body
(i) Remove the throttle body.



7. DISCONNECT FOLLOWING HOSES FROM THROTTLE BODY:

(a) No.2 PCV hose
(b) No.5 water by–pass pipe



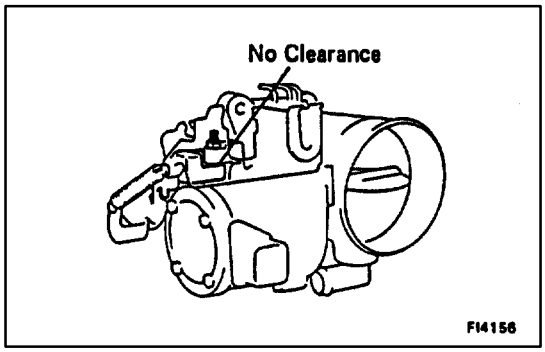
INSPECTION OF THROTTLE BODY

1. CLEAN THROTTLE BODY BEFORE INSPECTION

(a) Wash and clean the removed parts with carburetor cleaner and a soft brush.

(b) Using compressed air, blow all passages and apertures in the throttle body.

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

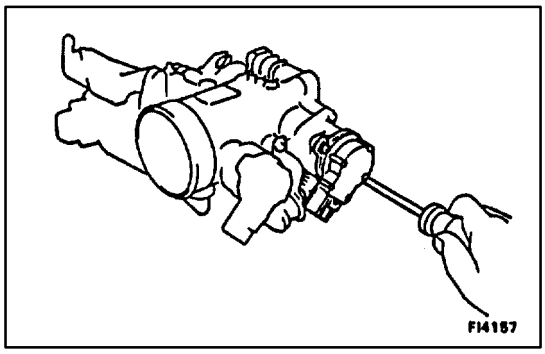


2. CHECK THROTTLE VALVE

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

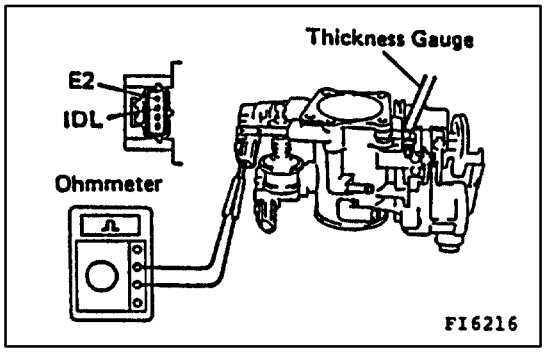
INSPECTION OF THROTTLE POSITION SENSOR

(See step 2 on pages FI–50, 51)

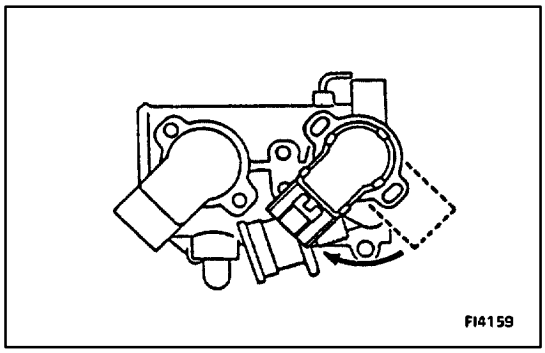


1. IF NECESSARY, ADJUST THROTTLE POSITION SENSOR

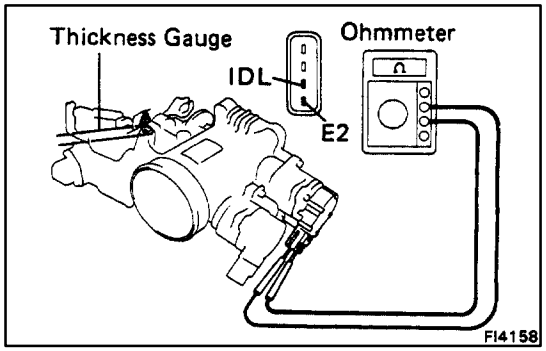
(a) Loosen the two screws of the throttle position sensor.



(b) Insert a thickness gauge (0.40 mm/0.0157 in.) between the throttle stop screw and lever, and connect an ohmmeter between terminals IDL and E2.

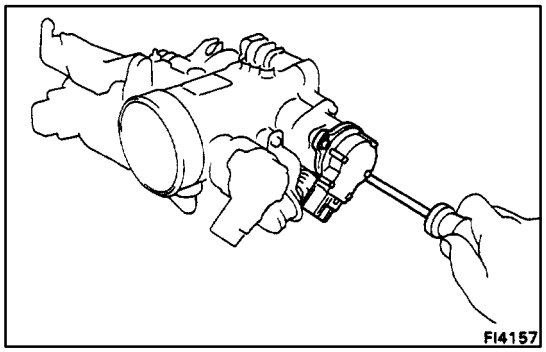


(c) Gradually turn the throttle position sensor clockwise until an ohmmeter resistance is gone, then secure the sensor with two screws.



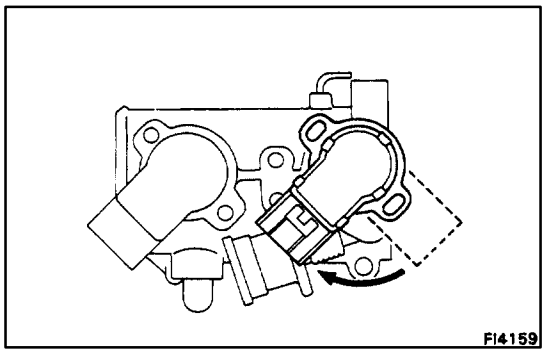
(d) Using a thickness gauge, recheck the continuity between terminals IDL and E2.

Clealane between lever and stop screw	Continuity (IDL–E2)
0.40 mm (0.0157 in.)	Continuity
0.85 mm (0.0335 in.)	No continuity

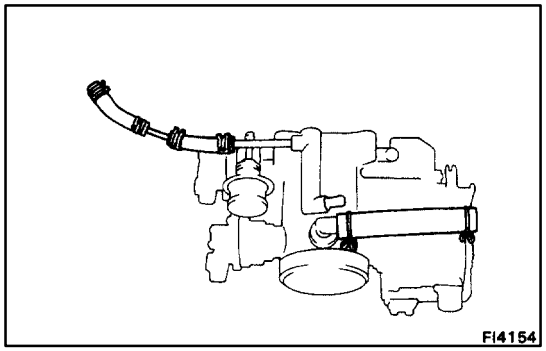


2. IF NECESSARY, REPLACE THROTTLE POSITION SENSOR

(a) Remove the two screws and throttle position sensor.



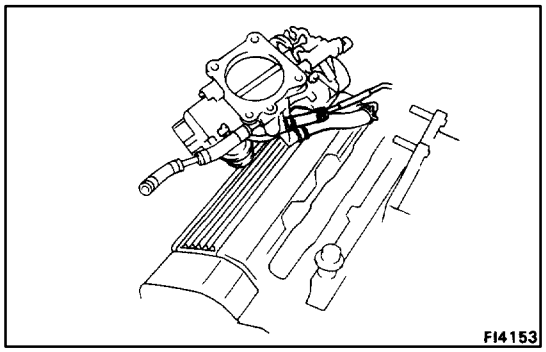
(b) Check that the throttle valve is fully closed.
(c) Place the sensor on the throttle body as shown in the figure.
(d) Turn the sensor clockwise, and temporarily install the two screws.
(e) Adjust throttle position sensor.
(See step 1 on pages FI–53, FI–54)



INSTALLATION OF THROTTLE BODY

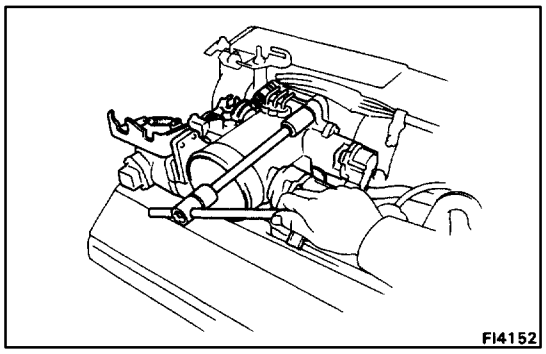
1. INSTALL FOLLOWING HOSES TO THROTTLE BODY:

(a) No.2 water by–pass hose
(b) No.3 water by–pass hose
(c) No.2 PCV hose



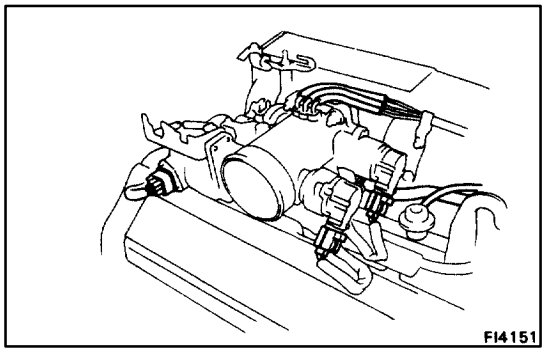
2. INSTALL THROTTLE BODY

(a) Install a new gasket to the air intake chamber.
(b) Connect the No.2 PCV hose to the cylinder head cover.
(c) Connect the No.1 water by–pass hose to the throttle body.



(d) Install the throttle body to the air intake chamber with two nuts and two bolts.

Torque: 185 kg–cm (13 ft–lb, 18 N·m)

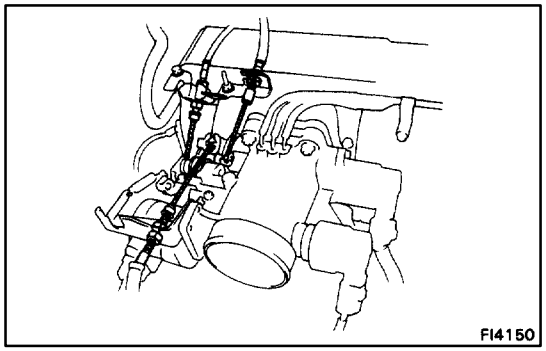


(e) Connect the following connectors to the throttle body:

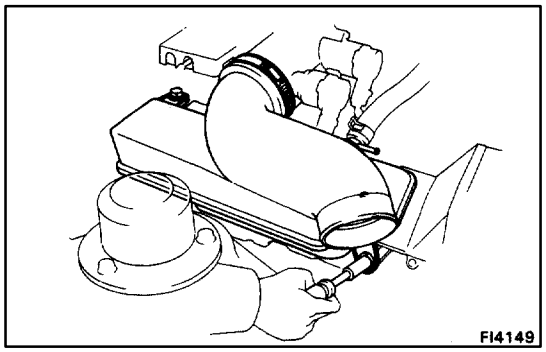
- Main throttle position sensor connector
- (w/TRAC)
  Sub–throttle position sensor connector
- (w/TRAC)
  Throttle valve motor connector

HINT: The wiring of the sub–throttle position sensor connector has yellow taping.

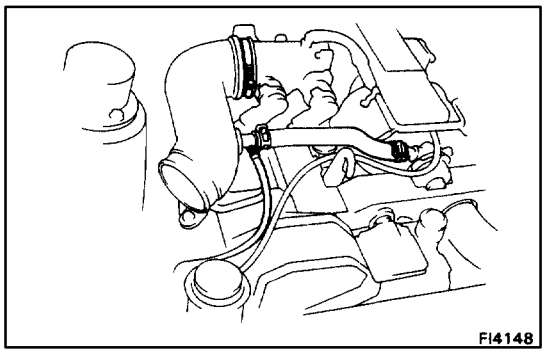
(f) Install the No.5 water by–pass hose to the ISC valve.
(g) Install the upper high–tension cord cover.
(h) Install the vacuum hose to the pressure regulator.
(i) Connect the three vacuum hoses to the throttle body.



3. **CONNECT FOLLOWING CABLES:**
   (a) Cruise control cable
   (b) Throttle cable
   (c) Accelerator control cable
4. **INSTALL THROTTLE BODY COVER**



5. **CONNECT INTAKE AIR CONNECTOR PIPE**
   (a) Install the intake air connector pipe with two bolts, and tighten the clamp.
   Torque: 50 kg–cm (45 in.–lb, 4.9 N·m)
   (b) Connect the ISC air hose and PS idle–up hose.



6. **INSTALL AIR CLEANER WITH AIR FLOW METER**
   (See steps 2 to 4 on page FI–49)

7. **FILL WITH COOLANT**
   (See step 3 on page CO–5)
8. **CHECK FOR COOLANT LEAKS**
   Start the engine and check for coolant leakage.
9. **CHECK COOLANT LEVEL**
   (See step 1 on page CO–5)