

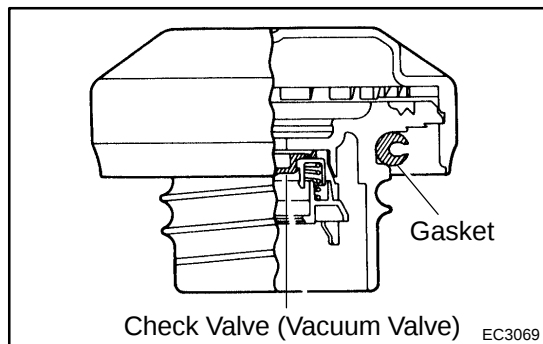
INSPECTION

1. VISUALLY INSPECT LINES AND CONNECTIONS

Look for loose connections, sharp bends or damage.

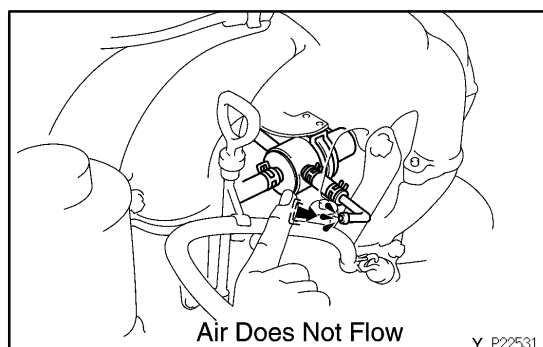
2. VISUALLY INSPECT FUEL TANK

Look for deformation, cracks or fuel leakage.



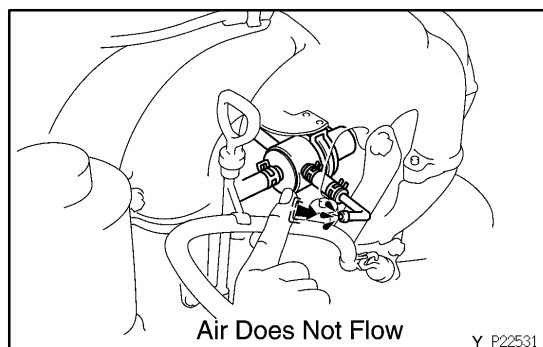
3. VISUALLY INSPECT FUEL TANK CAP

Check if the cap and/or gasket are deformed or damaged. If necessary, repair or replace the cap.



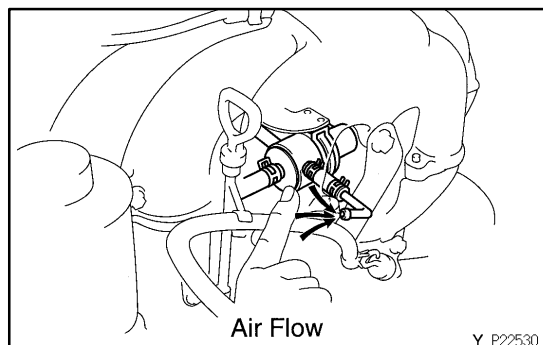
4. INSPECT TVV OPERATION WITH COLD ENGINE

- The engine coolant temperature should be below 45°C (113°F).
- Disconnect the EVAP hose from the union pipe.
- Start the engine.
- Gradually increase the engine speed from idle to 3,000 rpm and check that air suction is not felt at the union pipe.



5. INSPECT OPERATION OF VCV WITH HOT ENGINE

- Warm up the engine.
- With the engine idling, check that air suction is not felt at union pipe.

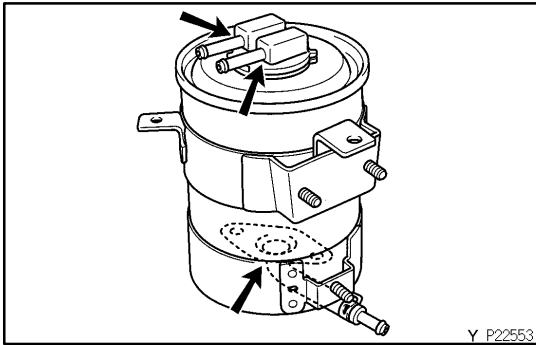


- Gradually increase the engine speed to 3,000 rpm and check that there is air suction at the union pipe.
 - Reconnect the EVAP hose to the union pipe.
- If no problem is found with this inspection, system is normal; otherwise inspect each part.

6. REMOVE CHARCOAL CANISTER WITH BRACKET

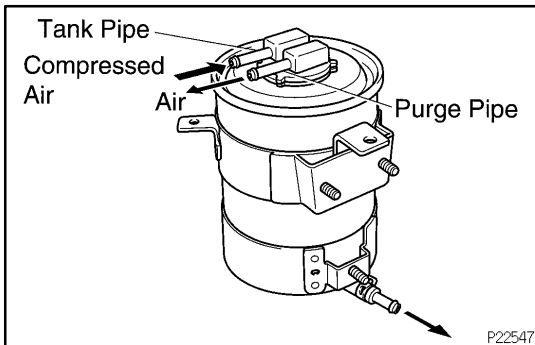
7. REMOVE CHARCOAL CANISTER FROM BRACKET

8. REMOVE CAP FROM CHARCOAL CANISTER



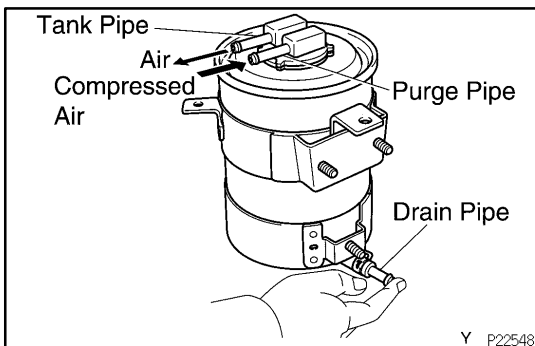
9. VISUALLY INSPECT CHARCOAL CANISTER

Look for cracks or damage.



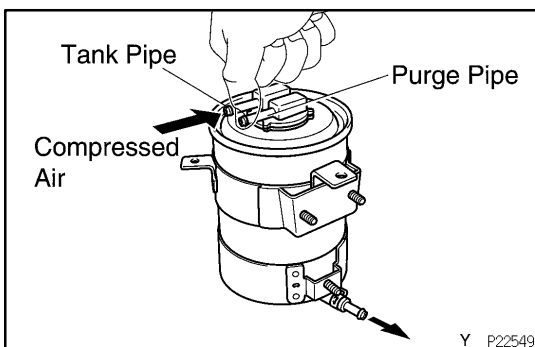
10. INSPECT FOR CLOGGED FILTER AND STUCK VALVE

(a) Using low pressure compressed air (7.26 kPa, 74 gf/cm², 1.05 psi), blow into tank pipe and check that air flows without resistance from the other pipes.



(b) While holding drain pipe closed, blow air (1.96 kPa, 20 gf/cm², 0.28 psi) into purge pipe and check that air flow without resistance from tank pipe.

If a problem is found, replace the charcoal canister.



11. CLEAN FILTER IN CANISTER

Clean the filter by blowing 294 kPa (3 kgf/cm², 43 psi) of compressed air into tank pipe while holding purge pipe closed.

NOTICE:

Do not attempt to wash the canister. No activated carbon should come out.

12. REINSTALL CAP TO CHARCOAL CANISTER

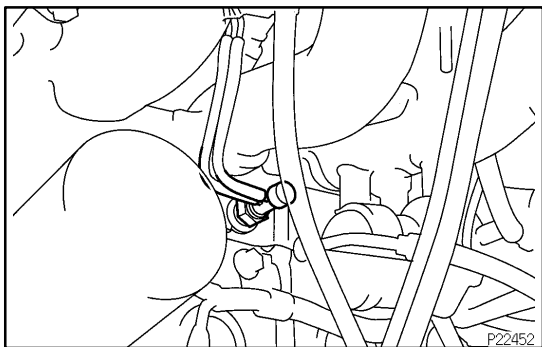
13. REINSTALL CHARCOAL CANISTER TO BRACKET

Torque: 14 N·m (145 kgf·cm, 10 ft·lbf)

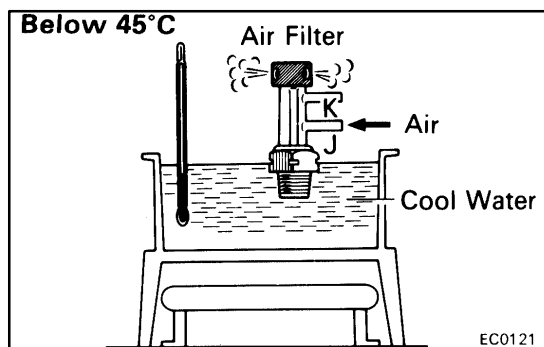
14. REINSTALL CHARCOAL CANISTER WITH BRACKET

Torque: 18 N·m (185 kgf·cm, 13 ft·lbf)

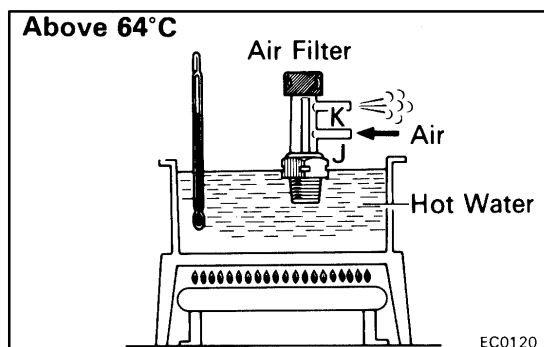
15. DRAIN ENGINE COOLANT

**16. REMOVE TVV FROM CYLINDER HEAD**

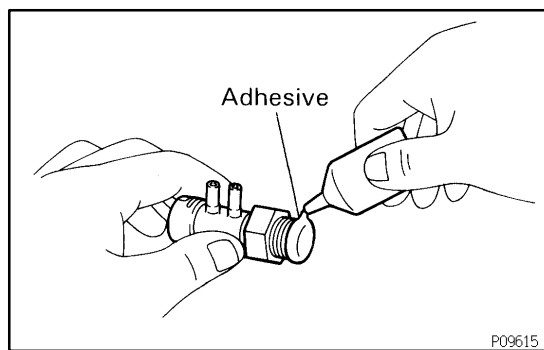
- (a) Disconnect the 2 vacuum hoses.
- (b) Remove the TVV.

**17. INSPECT TVV OPERATION**

- (a) Cool the TVV to below 45°C (113°F) with cool water.
- (b) Check that air flows from pipe J to the air filter.



- (c) Heat the TVV to above 64°C (147°F) with hot water.
 - (d) Check that air flows from pipe J to pipe K.
- If operation is not as specified, replace the TVV.

**18. REINSTALL TVV**

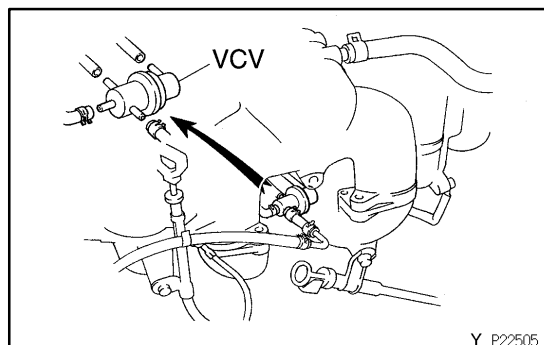
- (a) Apply adhesive to 2 or 3 threads of the TVV, and install it.

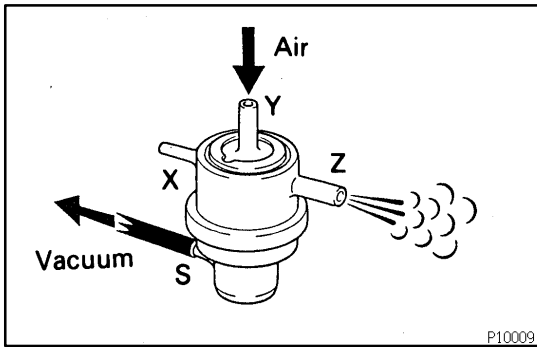
Adhesive:

Part No. 08833-00070, THREE BOND 1324 or equivalent

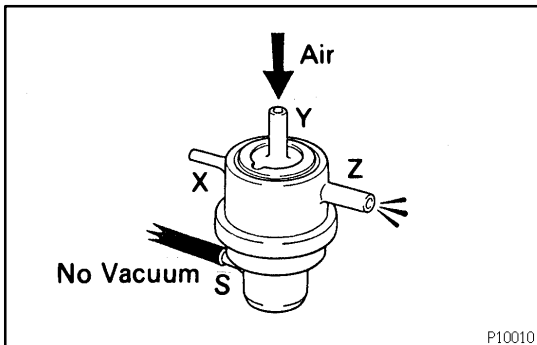
Torque: 29 N·m (300 kgf·cm, 22 ft·lbf)

- (b) Reconnect 2 vacuum hoses.

19. REFILL WITH ENGINE COOLANT**20. REMOVE INTAKE MANIFOLD STAY****21. REMOVE VCV**

**22. INSPECT VCV**

- (a) Apply vacuum above 9.3 kPa (70 mmHg, 2.76 in.Hg) to pipe S.
- (b) Blow air into pipe Y and check that air comes out of pipe Z.

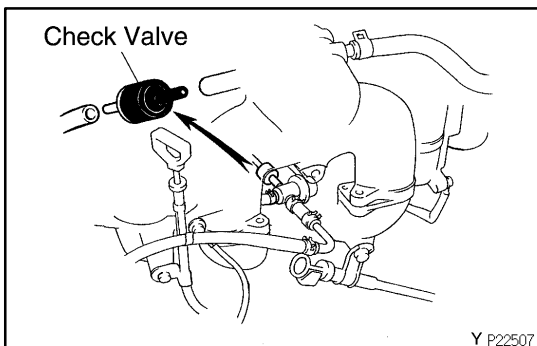
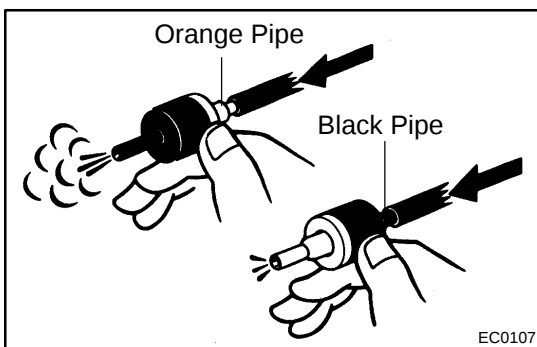


- (c) Stop the applied vacuum.
- (d) Blow air into pipe Y and check that air does not come out of pipe Z.

If operation is not as specified, replace the VCV.

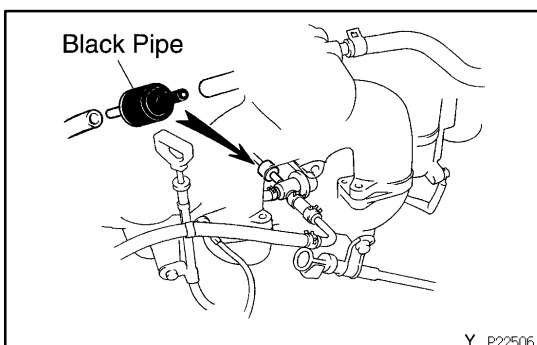
23. REINSTALL VCV**24. INSTALL INTAKE MANIFOLD STAY**

Torque: 36 N·m (360 kgf·cm, 26 ft·lbf)

**25. REMOVE INTAKE MANIFOLD STAY****26. REMOVE CHECK VALVE****27. INSPECT CHECK VALVE**

- (a) Check that air flows from the orange pipe to the black pipe.
- (b) Check that air does not flow from the black pipe to the orange pipe.

If operation is not as specified, replace the check valve.

**28. REINSTALL CHECK VALVE**

HINT:

Reinstall the check valve with the black pipe facing the VCV side.

29. INSTALL INTAKE MANIFOLD STAY

Torque: 36 N·m (360 kgf·cm, 26 ft·lbf)