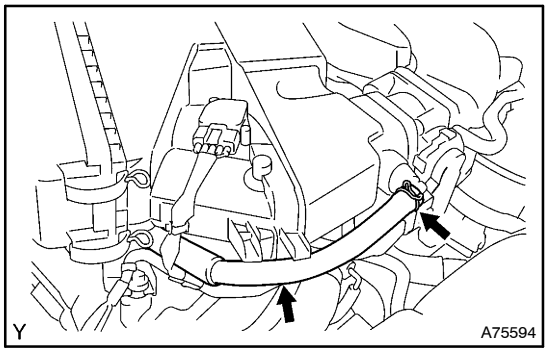
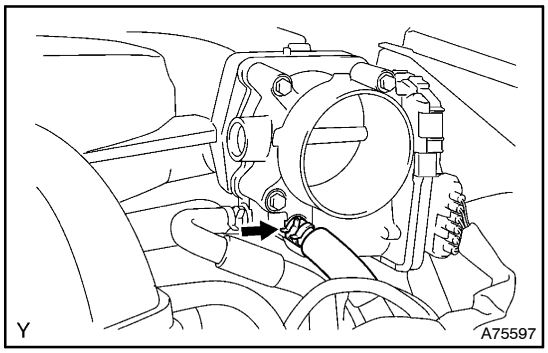
110OV–03

# REPLACEMENT

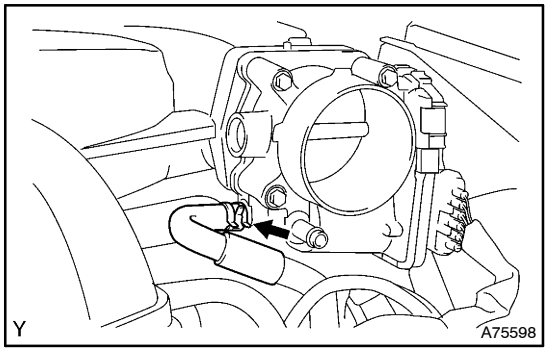
1. DISCHARGE FUEL SYSTEM PRESSURE (See page 11–1)
2. DRAIN ENGINE COOLANT (See page 16–5)
3. REMOVE V–BANK COVER (See page 10–7)



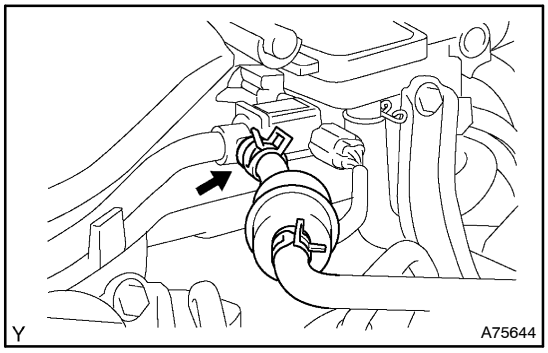

4. DISCONNECT VENTILATION HOSE NO.2
5. REMOVE AIR CLEANER ASSY (See page 10–7)



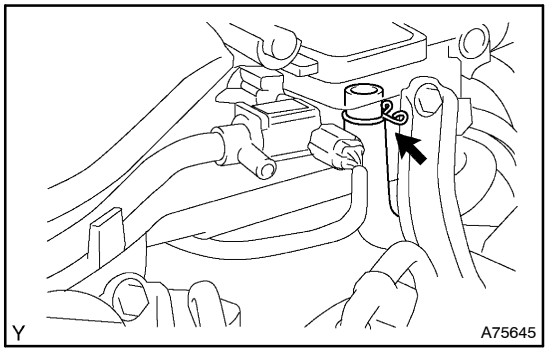

6. DISCONNECT WATER BY–PASS HOSE NO.5



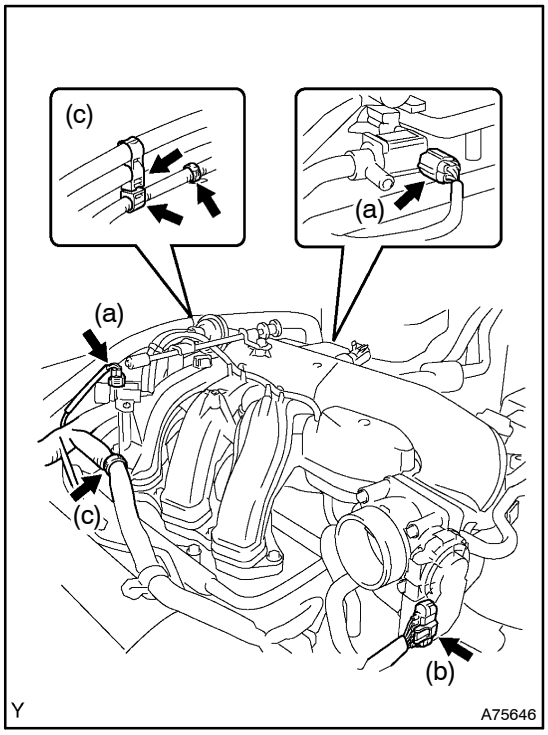

7. DISCONNECT WATER BY–PASS HOSE NO.4




8. DISCONNECT FUEL VAPOR FEED HOSE ASSY

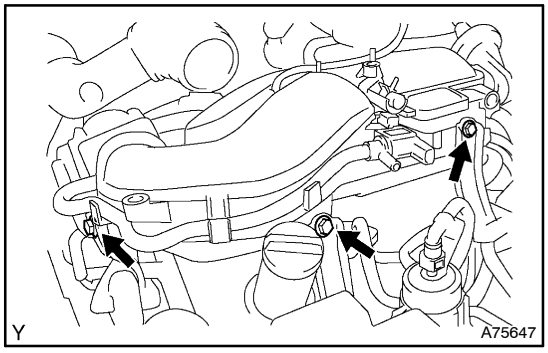



**9. DISCONNECT VENTILATION HOSE**

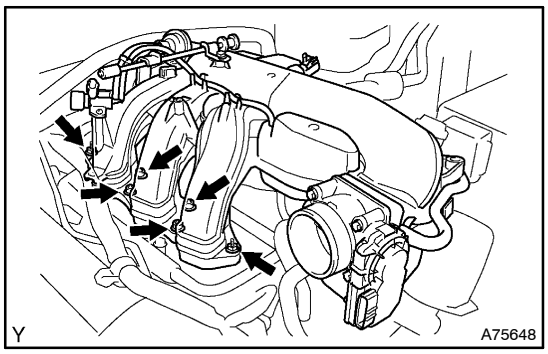



**10. REMOVE INTAKE AIR SURGE TANK**

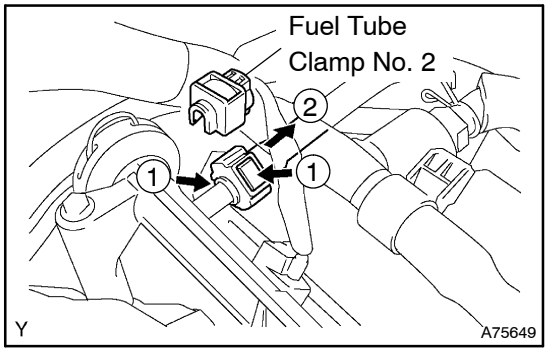
(a) Disconnect the 2 VSV connectors.
(b) Disconnect the throttle motor connector.
(c) Remove the 3 wire harness clamps and the hose clamp.




(d) Remove the 3 upper bolts which are used to secure the 2 surge tank stays and the throttle body bracket.




(e) Using the socket allen wrench 8, remove the 4 bolts.
(f) Remove the 2 nuts and the intake air surge tank.
(g) Remove the gasket from the intake air surge tank.



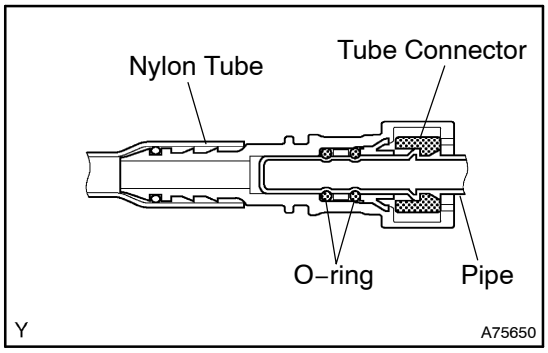

**11. DISCONNECT FUEL PIPE SUB–ASSY NO.1**

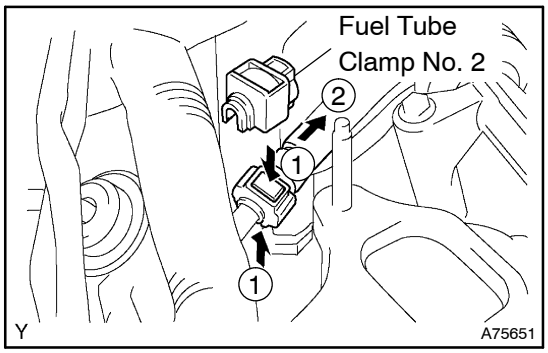
(a) Remove the fuel pipe clamp No. 2.

(b) Pinch the tube connector and then pull out the fuel pipe.

**NOTICE:**

- **Check if there is any dirt or mud around the connector before this operation and remove the dirt as necessary.**
- **Be careful of mud because the quick connector has an O–ring which seals the pipe and connector that can be contaminated.**
- **Do not use any tool in this operation.**
- **Do not bend or twist the nylon tube. Protect the connector by covering it with a vinyl or plastic bag.**
- **When the pipe and the connector are stuck, push and pull the connector to release and pull the connector out carefully.**



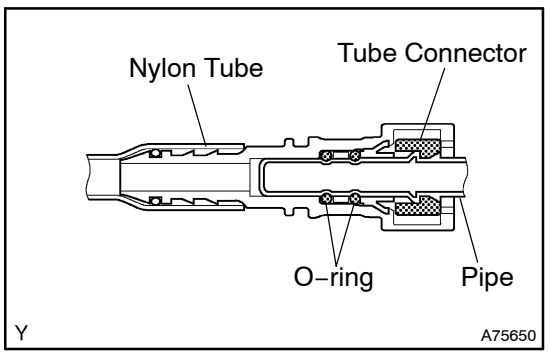

**12. DISCONNECT FUEL PIPE SUB–ASSY NO.2**

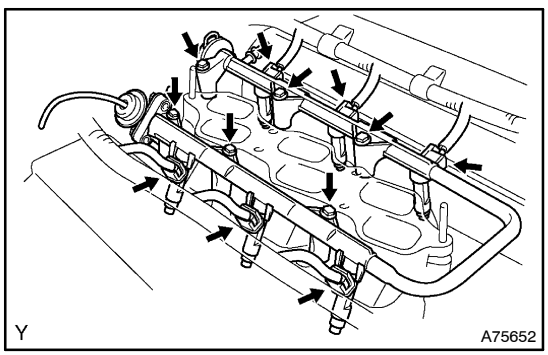
(a) Remove the fuel pipe clamp No. 2.

(b) Pinch the tube connector and then pull out the fuel pipe.

**NOTICE:**

- **Check if there is any dirt or mud around the connector before this operation and remove the dirt as necessary.**
- **Be careful of mud because the quick connector has an O–ring which seals the pipe and connector that can be contaminated.**
- **Do not use any tool in this operation.**
- **Do not bend or twist the nylon tube. Protect the connector by covering it with a vinyl or plastic bag.**
- **When the pipe and the connector are stuck, push and pull the connector to release and pull the connector out carefully.**



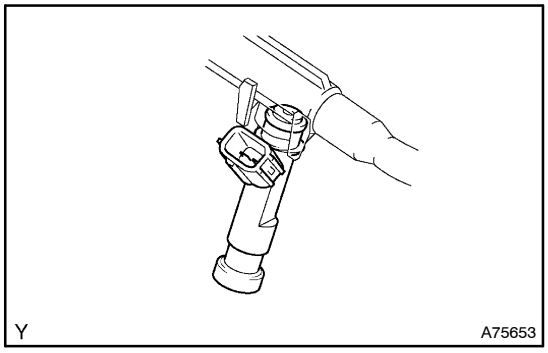

**13. REMOVE FUEL DELIVERY PIPE SUB–ASSY**

(a) Disconnect the 6 fuel injector connectors.

(b) Remove the 6 bolts and the fuel delivery pipe together with the 6 fuel injectors.

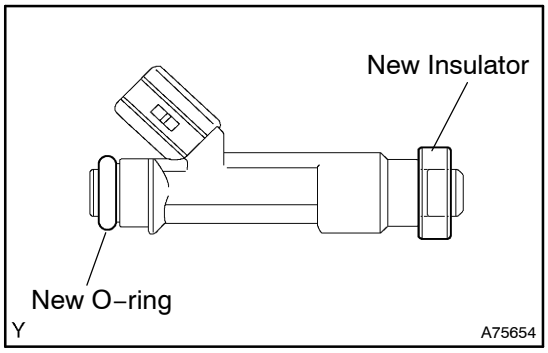
**NOTICE:**

**Be careful not to drop the injectors when removing the fuel delivery pipe.**




**14. REMOVE FUEL INJECTOR ASSY**

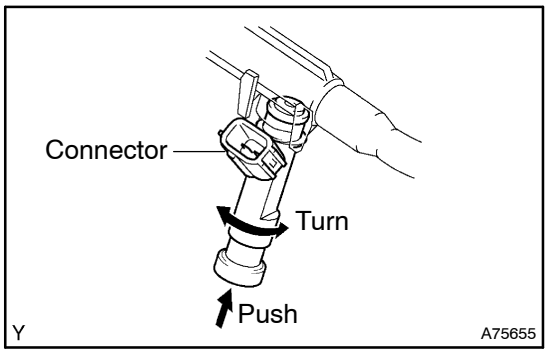
(a) Pull out the 6 fuel injectors.




**15. INSTALL FUEL INJECTOR ASSY**

(a) Install new insulators to the each fuel injector.

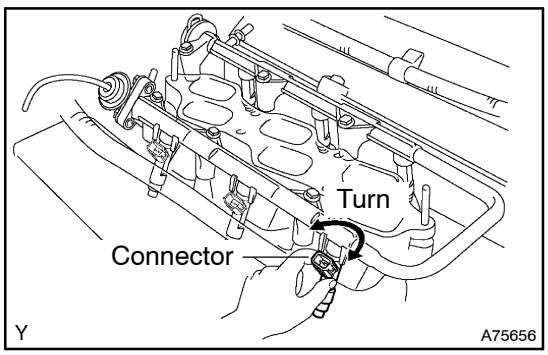
(b) Apply a light coat of spindle oil or gasoline to new O–rings and install it to the each fuel injector.




(c) Apply a light coat of spindle oil or gasoline on the place where a fuel delivery pipe contacts the O–ring.

(d) Push the fuel injector while twisting it back and force to install it in the fuel delivery pipe.

(e) Position the fuel injector connector outward.




**16. INSTALL FUEL DELIVERY PIPE SUB–ASSY**

(a) Place the fuel delivery pipe and the 6 fuel injectors together to the intake manifold.

(b) Temporarily install the 6 bolts which are used to hold the fuel delivery pipe to the intake manifold.

(c) Check that the fuel injectors rotate smoothly.

HINT:

If fuel injectors do not rotate smoothly, the probable cause is incorrect installation of O–rings. Replace an O–ring.

(d) Position the fuel injector connector outward.

(e) Tighten the 6 bolts which are used to hold the fuel delivery pipe to the intake manifold.

**Torque: 15 N·m (153 kgf·cm, 11 ft·lbf)**

(f) Connect the 6 fuel injector connectors.

**17. CONNECT FUEL PIPE SUB–ASSY NO.2**

(a) Push in the tube connector to the pipe then tube connector makes ”click” sound.

**NOTICE:**

- **Check if there is any damage or foreign objects on the connected part of the fuel pipe.**
- **After connecting, check if the fuel tube connector and the pipe are securely connected by pulling on them.**

(b) Install the fuel pipe clamp No. 2.

**18. CONNECT FUEL PIPE SUB–ASSY NO.1**

(a) Push in the tube connector to the pipe then tube connector makes ”click” sound.

**NOTICE:**

- **Check if there is any damage or foreign objects on the connected part of the fuel pipe.**
- **After connecting, check if the fuel tube connector and the pipe are securely connected by pulling on them.**

(b) Install the fuel pipe clamp No. 2.

**19. INSTALL INTAKE AIR SURGE TANK**

(a) Install a new gasket to the intake air surge tank.

(b) Install the intake air surge tank with the 2 nuts.

**Torque: 28 N·m (286 kgf·cm, 21 ft·lbf)**

(c) Using a socket allen wrench 8, install the 4 bolts.

**Torque: 28 N·m (286 kgf·cm, 21 ft·lbf)**

(d) Install the 3 upper bolts which are used to secure the 2 surge tank stays and the throttle body bracket.

**Torque: 21 N·m (214 kgf·cm, 16 ft·lbf)**

(e) Install the 3 wire harness clamps and the hose clamp.

(f) Connect the throttle motor connector.

(g) Connect the 2 VSV connectors.

**20. CONNECT VENTILATION HOSE**

**21. CONNECT FUEL VAPOR FEED HOSE ASSY**

**22. CONNECT WATER BY–PASS HOSE NO.4**

**23. CONNECT WATER BY–PASS HOSE NO.5**

**24. INSTALL AIR CLEANER ASSY (See page 10–7)**

**25. CONNECT VENTILATION HOSE NO.2**

**26. INSTALL V–BANK COVER (See page 10–7)**

**27. ADD ENGINE COOLANT (See page 16–5)**

**28. CHECK FOR ENGINE COOLANT LEAKS (See page 16–1)**

**29. CHECK FOR FUEL LEAKS (See page 11–5)**