

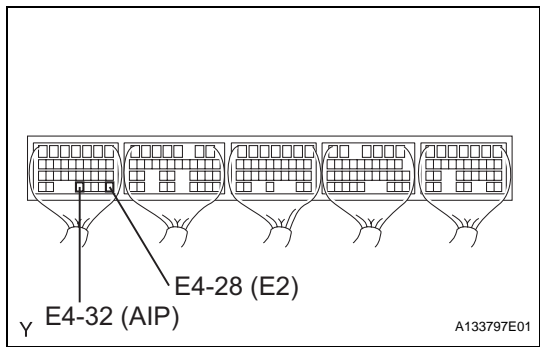
ON-VEHICLE INSPECTION

1. INSPECT PRESSURE SENSOR

- (a) Turn the ignition switch to the ON position.
- (b) Measure the voltage between terminals E4-32 (AIP) and E4-28 (E2) of the ECM connector.

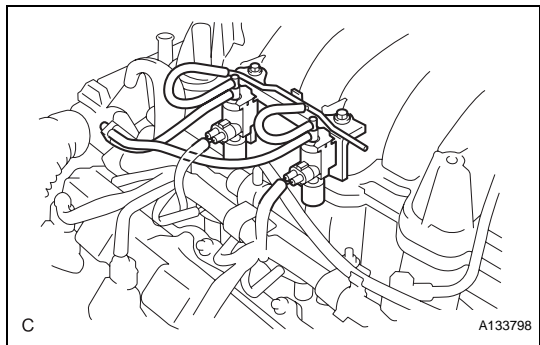
Voltage:
1.0 to 2.2 V

If the voltage is not as specified, replace the pressure sensor, wire harness or ECM.



2. INSPECT VSV FOR AIR INJECTION SYSTEM

- (a) Disconnect the connector from the VSV (Procedure "A").
- (b) Disconnect the 2 vacuum hoses from the VSV (Procedure "B").



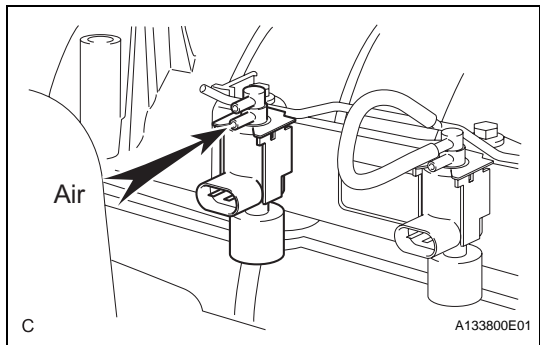
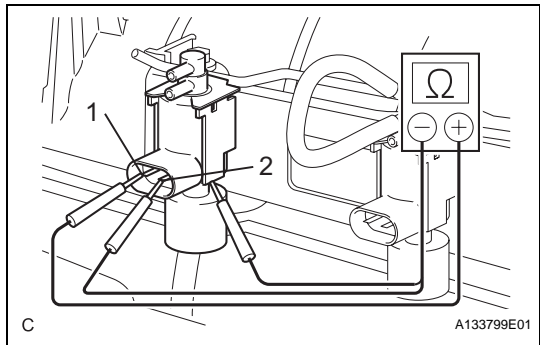
- (c) Using an ohmmeter, measure the resistance between the terminals (Procedure "C").

Resistance

Tester Connection	Specified Condition
1 - 2	33 to 39 Ω at 20°C (68°F)
1 - Body ground	10 M Ω or higher
2 - Body ground	10 M Ω or higher

If the resistance is not as specified, replace the VSV.

- (d) Check that air does not flow from the port as shown in the illustration (Procedure "D").
If the result is not as specified, replace the VSV.

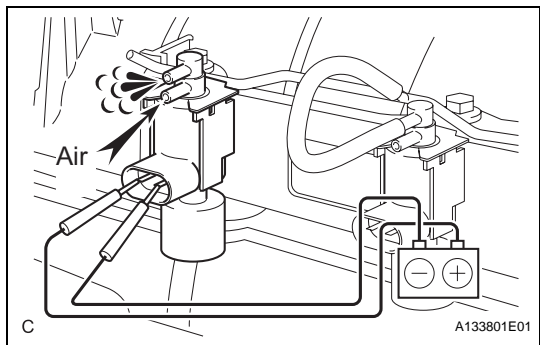


- (e) Apply positive battery between the terminals, and check that air flows from the port (Procedure "E").
If the result is not as specified, replace the VSV.

- (f) Connect the 2 vacuum hoses to the VSV (Procedure "F").

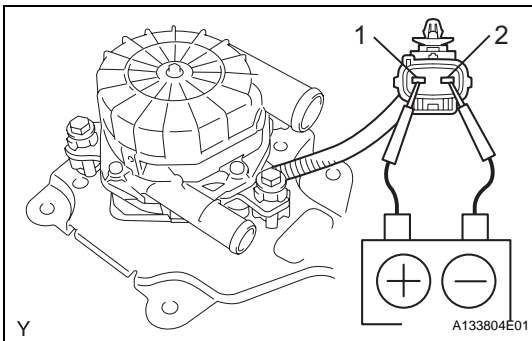
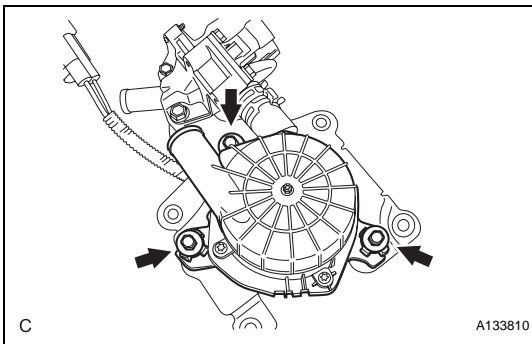
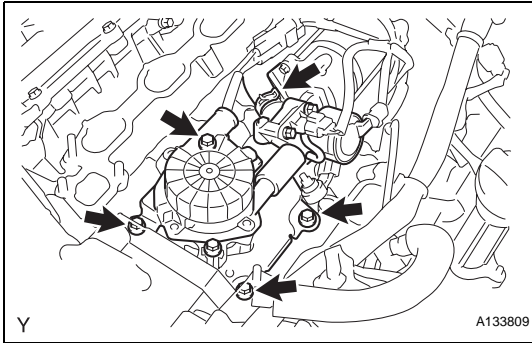
NOTICE:
Be sure to connect the vacuum hoses correctly.

- (g) Connect the connector to the VSV (Procedure "G").
- (h) Perform procedures "A" to "G" for the other VSV.



REMOVAL

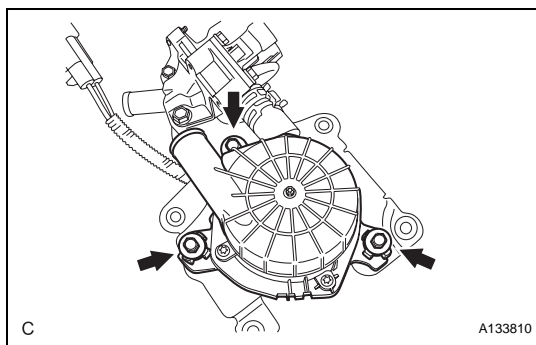
1. DISCHARGE FUEL SYSTEM PRESSURE
2. DRAIN ENGINE COOLANT (See page [CO-3](#))
3. REMOVE THROTTLE BODY COVER SUB-ASSEMBLY (See page [ES-477](#))
4. REMOVE AIR CLEANER HOSE ASSEMBLY (See page [ES-477](#))
5. DISCONNECT FUEL HOSE (See page [FU-10](#))
6. DISCONNECT FUEL NO. 2 HOSE
7. DISCONNECT CONNECTORS FROM INTAKE MANIFOLD (See page [ES-497](#))
8. DISCONNECT HOSES FROM INTAKE MANIFOLD (See page [ES-497](#))
9. REMOVE INTAKE MANIFOLD ASSEMBLY (See page [ES-498](#))
10. REMOVE WATER BY-PASS PIPE SUB-ASSEMBLY (See page [EM-45](#))
11. REMOVE AIR PUMP ASSEMBLY WITH BRACKET
 - (a) Disconnect the No.2 air hose from the air switching valve.
 - (b) Disconnect the air switching valve connector.
 - (c) Disconnect the pressure sensor connector for the air injection system.
 - (d) Remove the 4 bolts and air pump with bracket assembly.



12. REMOVE AIR PUMP ASSEMBLY
 - (a) Remove the 3 bolts and air pump assembly.
 - (b) Remove the 3 insulators from the air pump assembly.

INSPECTION

1. INSPECT AIR PUMP ASSEMBLY
 - (a) Connect the positive (+) lead from the battery to terminal 1 and the negative (-) lead to terminal 2, and check that air flows.
If operation is not as specified, replace the air pump.

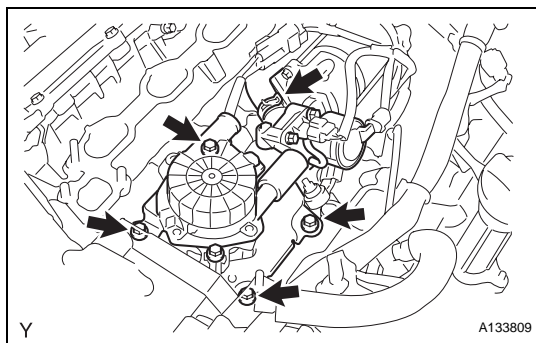


INSTALLATION

1. INSTALL AIR PUMP ASSEMBLY

- (a) Install the 3 insulators to the air pump assembly.
- (b) Install the air pump assembly with the 3 bolts.

Torque: 10 N*m (102 kgf*cm, 7 ft.*lbf)



2. INSTALL AIR PUMP ASSEMBLY WITH BRACKET

- (a) Install the air pump assembly with the 4 bolts.
Torque: 16 N*m (163 kgf*cm, 12 ft.*lbf)
- (b) Connect the pressure sensor connector for the air injection system.
- (c) Connect the air switching valve connector.
- (d) Connect the No. 2 air hose to the air switching valve.

3. INSTALL WATER BY-PASS PIPE SUB-ASSEMBLY (See page [EM-53](#))

4. INSTALL INTAKE MANIFOLD ASSEMBLY (See page [ES-500](#))

5. CONNECT HOSES FROM INTAKE MANIFOLD (See page [ES-501](#))

6. CONNECT CONNECTORS FROM INTAKE MANIFOLD (See page [ES-501](#))

7. INSTALL FUEL NO. 2 HOSE

8. INSTALL FUEL HOSE (See page [FU-13](#))

9. INSTALL AIR CLEANER HOSE ASSEMBLY

10. INSTALL THROTTLE BODY COVER SUB-ASSEMBLY (See page [ES-478](#))

11. ADD ENGINE COOLANT (See page [CO-3](#))

12. CHECK FOR ENGINE COOLANT LEAKS (See page [CO-4](#))

13. CHECK FOR FUEL LEAKS (See page [FU-5](#))