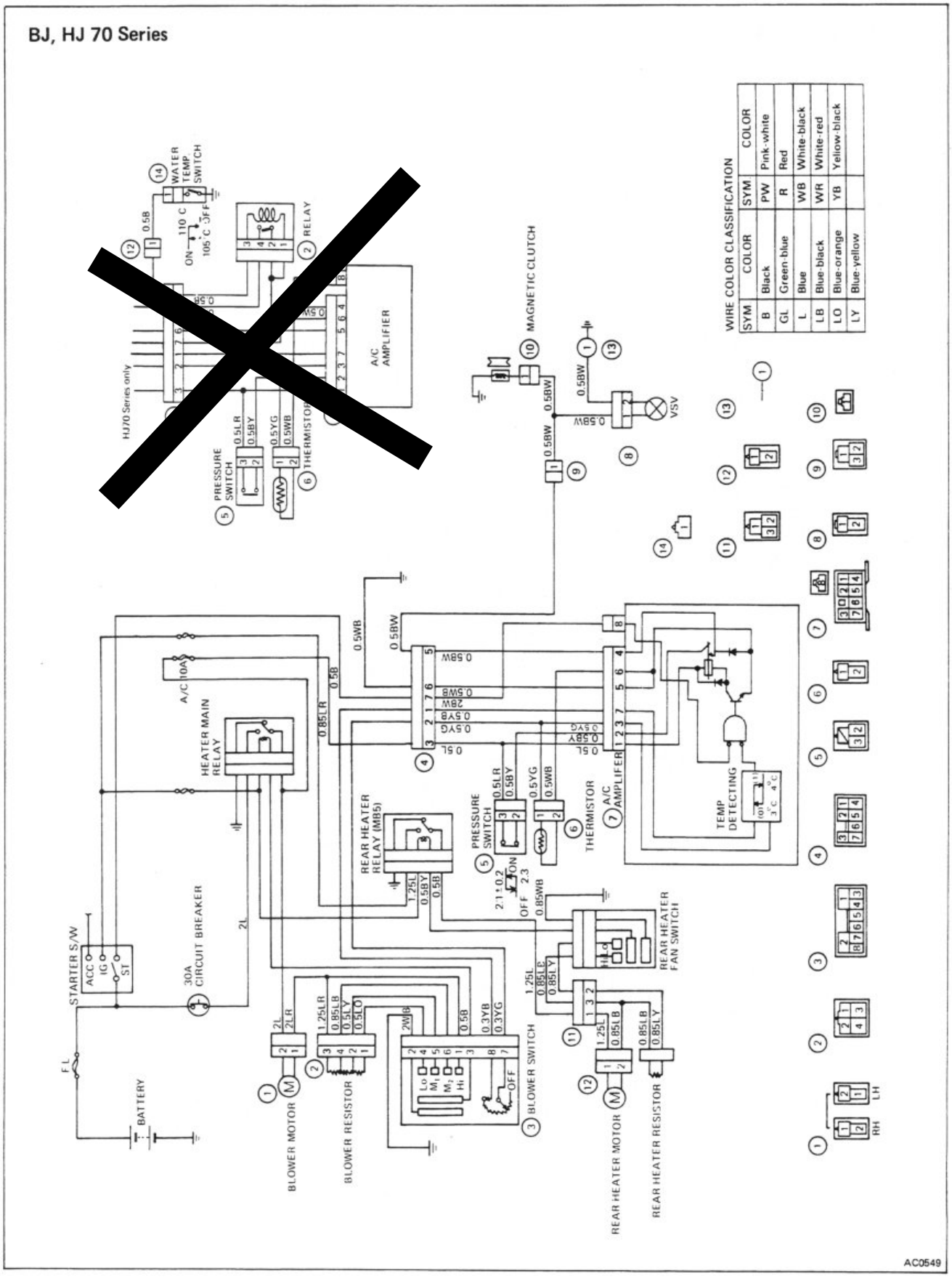
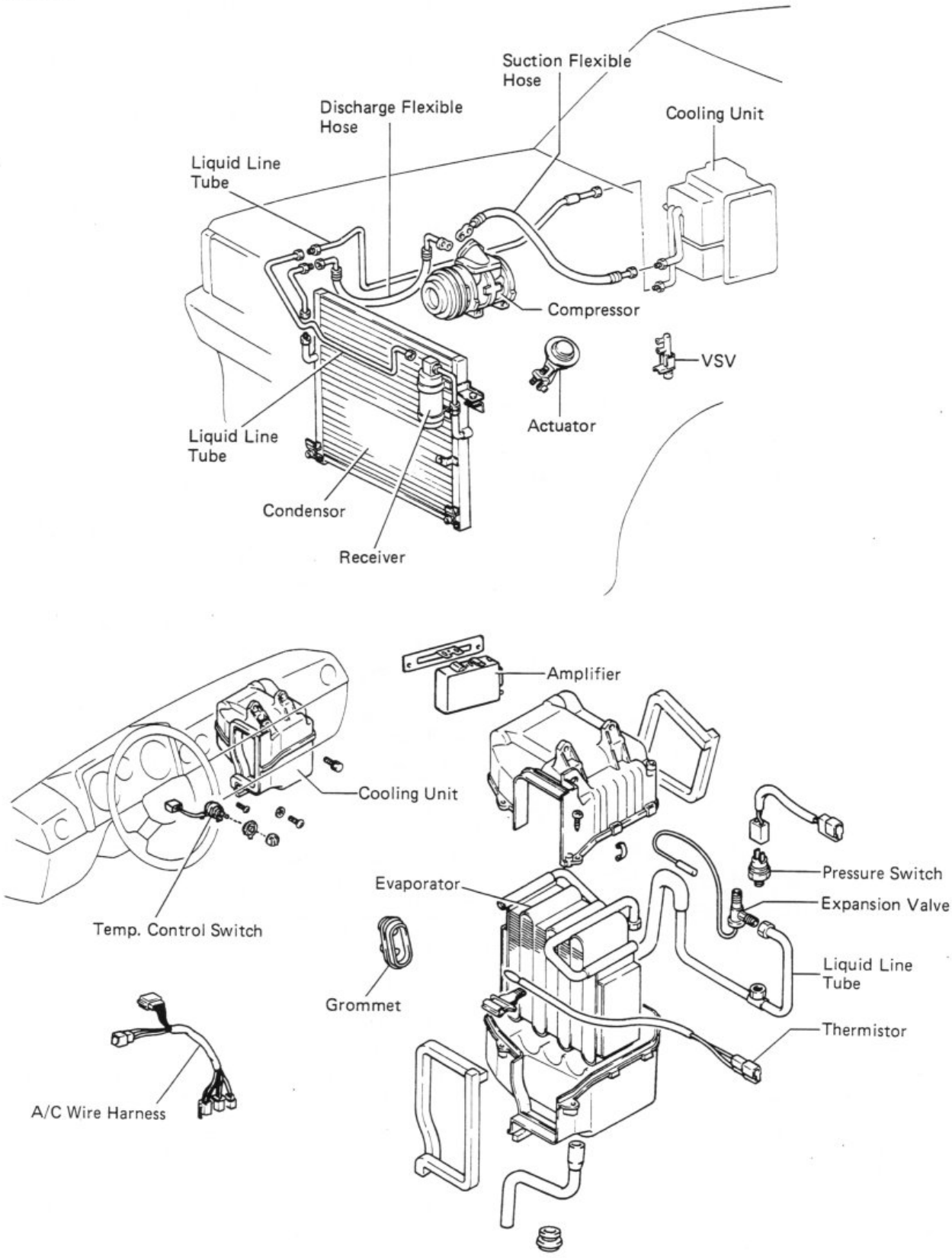
AIR CONDITIONING SYSTEM CIRCUIT (Cont'd)

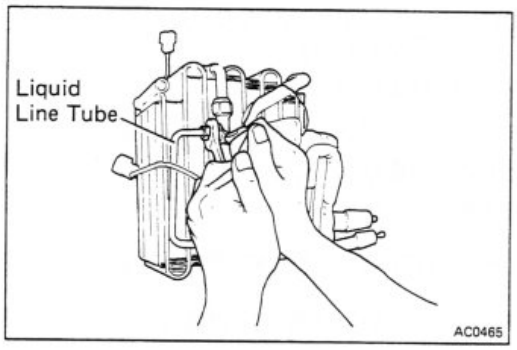
BJ, HJ 70 Series



SYSTEM COMPONENTS

70 Series





3. REMOVE COMPONENTS FROM EVAPORATOR

(a) Remove the heat insulator.

(b) Disconnect the liquid line tube from inlet fitting of the expansion valve.

(c) Disconnect the expansion valve from the inlet fitting of the evaporator.

(d) Remove the pressure switch, if necessary.

Evaporator

INSPECTION OF EVAPORATOR

1. CHECK EVAPORATOR FINS FOR BLOCKAGE

If the fins are clogged, clean them with compressed air.

CAUTION: **Never use water to clean the evaporator.**

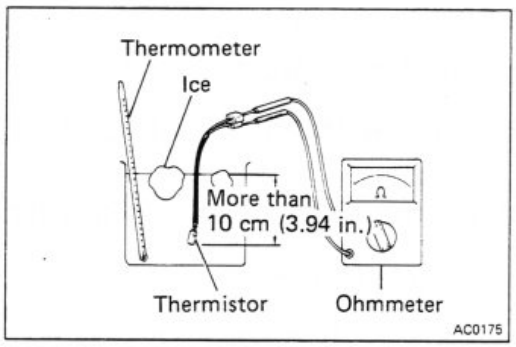
2. CHECK FITTINGS FOR CRACKS OR SCRATCHES

Repair as necessary.

Thermistor

INSPECTION OF THERMISTOR

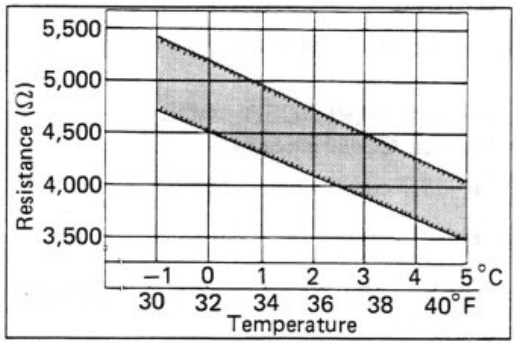
CHECK THERMISTOR OPERATION

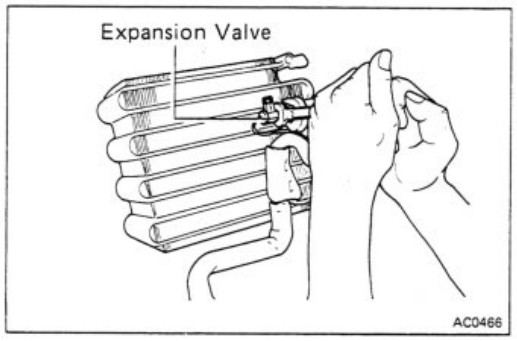


(a) Place the thermistor in cold water. While varying the temperature of the water, measure the resistance at the connector and, at the same time, measure the temperature of the water with a thermometer.

(b) Compare the two readings on the chart.

If the intersection is not between the two lines, replace the thermistor.





ASSEMBLY OF FRONT COOLING UNIT

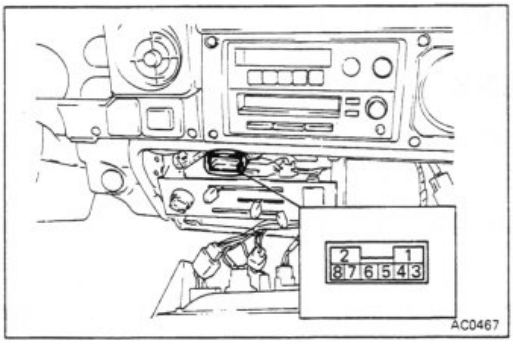
(See pages AC-22, 23)

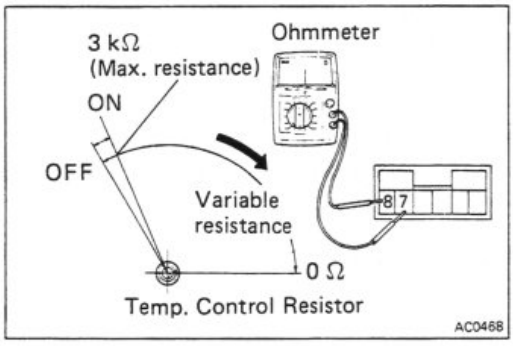
1. INSTALL COMPONENTS ON EVAPORATOR

(a) Connect the expansion valve to the inlet fitting of the evaporator. Torque the nut.

Torque: 235 kg-cm (17 ft-lb, 23 N·m)

NOTE: Be sure that the O-ring is positioned on the tube fitting.





TEMP. CONTROL RESISTOR (70 Series)

ON-VEHICLE INSPECTION

1. DISCONNECT NEGATIVE CABLE FROM BATTERY
2. REMOVE CENTER CLUSTER PANEL
3. DISCONNECT TEMP. CONTROL RESISTOR CONNECTOR
4. CHECK TEMP. CONTROL RESISTOR FOR RESISTANCE

   Using an ohmmeter, check for resistance between the terminals while rotating the resistor.

   If an ohmmeter indicates incorrect resistance, replace the resistor.
5. CONNECT TEMP. CONTROL RESISTOR CONNECTOR
6. INSTALL CENTER CLUSTER PANEL
7. CONNECT NEGATIVE CABLE TO BATTERY

REFRIGERANT LINES

ON-VEHICLE INSPECTION

1. INSPECT HOSES AND TUBES FOR LEAKAGE

   Use a gas leak tester. Replace if necessary.
2. CHECK THAT HOSE AND TUBE CLAMPS ARE NOT LOOSE

   Tighten or replace, as necessary.

REPLACEMENT OF REFRIGERANT LINES

(See pages AC-22, 23)

1. DISCHARGE REFRIGERATION SYSTEM (See page AC-17)
2. REPLACE FAULTY TUBE OR HOSE

   NOTE: Cap the open fittings immediately to keep moisture out of the system.

Torque specification for O-ring fittings

Fitting size	Torque
0.31 in. tube for liquid line	135 kg-cm (10 ft-lb, 13 N·m)
0.50 in. tube for discharge line	225 kg-cm (16 ft-lb, 22 N·m)
0.62 in. tube for suction line	325 kg-cm (24 ft-lb, 32 N·m)

3. EVACUATE, CHARGE AND TEST REFRIGERATION SYSTEM (See page AC-17)

PRESSURE SWITCH

(See pages AC-22, 23)

INSPECTION OF PRESSURE SWITCH

1. CHECK REFRIGERANT PRESSURE

   (a) Connect the hoses of the manifold gauge set to the compressor service valves and observe the gauge reading.

   (b) The gauge reading must be more than 2.1 kg/cm² (30 psi, 206 kPa) when the ambient temperature is higher than 0°C (32°F).

   If the pressure is less than 2.1 kg/cm² (30 psi, 206 kPa), charge the refrigerant.

2. CHECK PRESSURE SWITCH

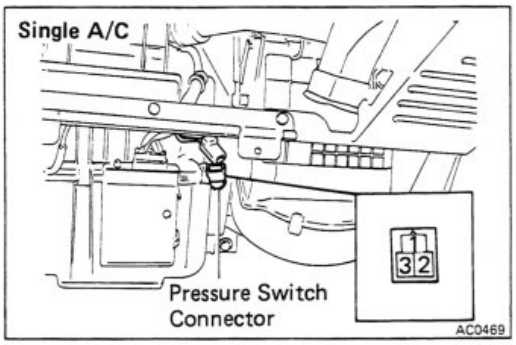
   (a) Remove the glove box. (Ex. Dual A/C)

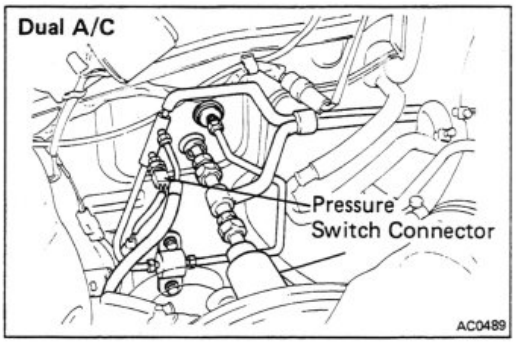
   (b) Disconnect the lead wires of the A/C harness.

   (c) Using an ohmmeter, check the continuity between the two terminals of the pressure switch.
   The ohmmeter must indicate zero ohms.

   If there is no continuity, replace the pressure switch.

3. REINSTALL REMOVED PARTS IN REVERSE ORDER





AIR CONDITIONER AMPLIFIER

(See pages AC-22, 23)

INSPECTION OF AIR CONDITIONER AMPLIFIER

CHECK ENGINE SPEED DETECTING CIRCUIT

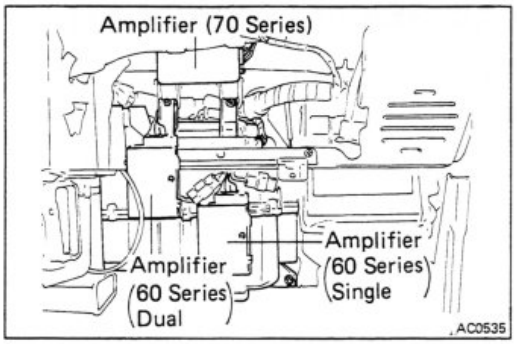
(a) Run the engine and operate the air conditioner.

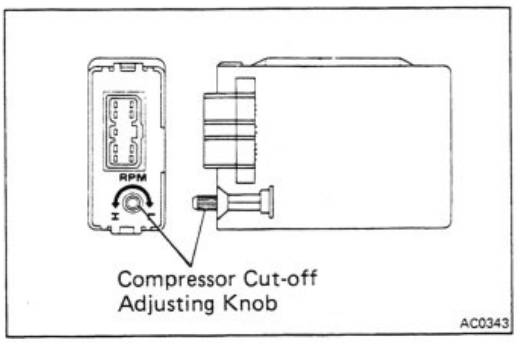
(b) Check that the magnetic clutch disengages at the specified engine revolution.

Cut-off rpm: 600 – 700 rpm

If the cut-off rpm is too high, turn the adjusting knob clockwise to adjust.

If the cut-off rpm is too low, turn the adjusting knob counterclockwise to adjust.



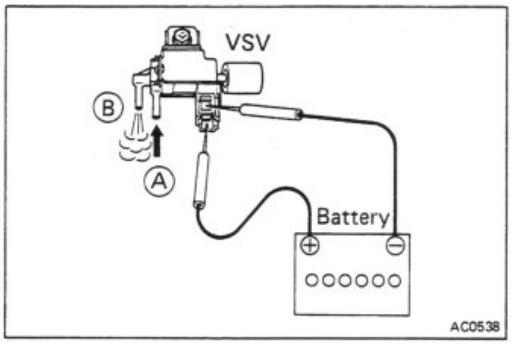


VACUUM SWITCHING VALVE (VSV)

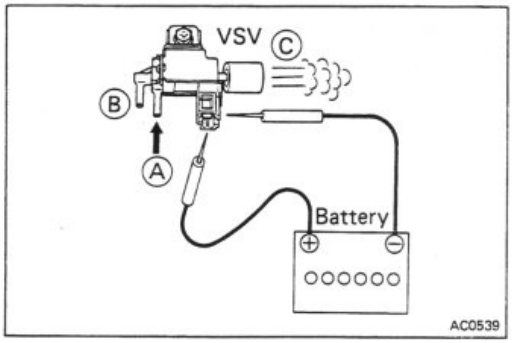
(See pages AC-22, 23)

INSPECTION OF VSV

1. DISCONNECT VACUUM HOSES AND CONNECTOR FROM VSV

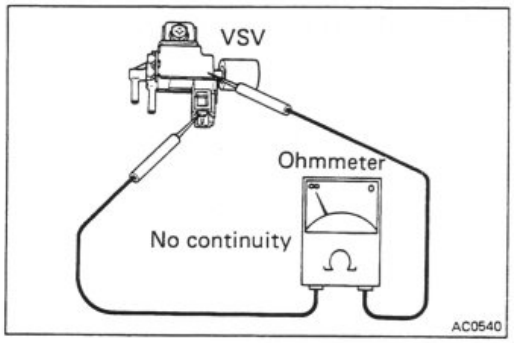


2. CHECK VACUUM CIRCUIT CONTINUITY IN VSV BY BLOWING AIR INTO PIPE
   (a) Connect the VSV terminals to the battery terminals as shown.
   (b) Blow into pipe Ⓐ and check that air comes out of pipe Ⓑ.



   (c) Disconnect the battery.
   (d) Blow into pipe Ⓐ and check that air comes out of filter Ⓒ – not out of pipe Ⓑ.

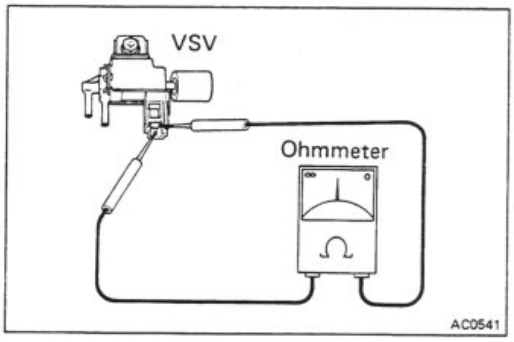
   If a problem is found, replace the VSV.



3. CHECK FOR SHORT CIRCUIT

   Using an ohmmeter, check that there is no continuity between each terminal and the VSV body.

   If a short circuit is found, repair or replace the VSV.



4. CHECK FOR OPEN CIRCUIT

   Using an ohmmeter, measure the resistance between two terminals of the VSV.

   Specified resistance: 37 – 44Ω at 20°C (68°F)

   If the resistance is not within specification, replace the VSV.