AC1V3–01

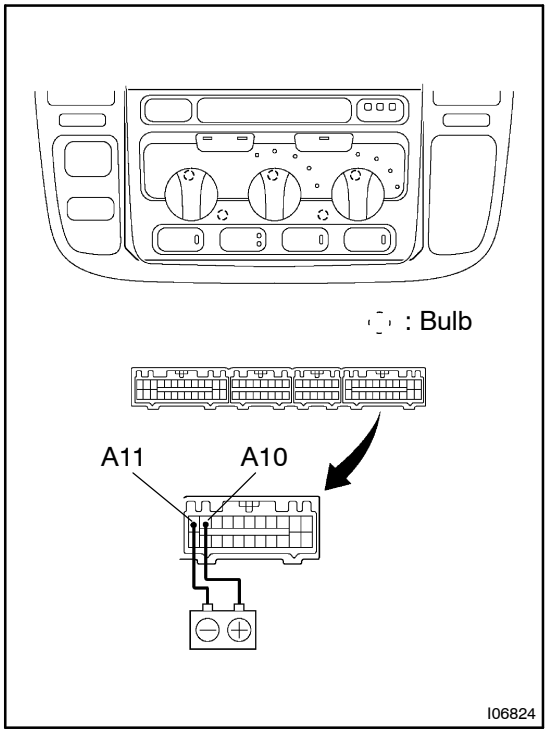
INSPECTION

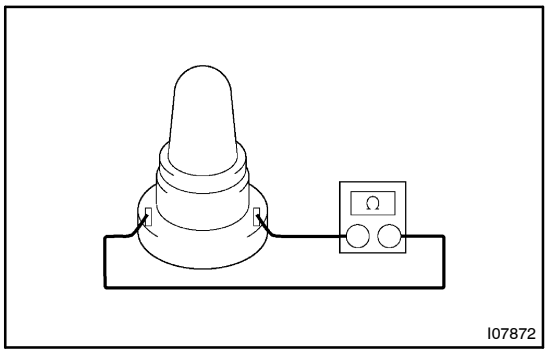
1. INSPECT ILLUMINATION OPERATION

(a) Connect the positive (+) lead from the battery to terminal A–10 and negative (–) lead to terminal A–11 then check that the illuminations lights up.

If operation is not as specified, check the faulty bulb.

(b) Remove the bulb (See page AC–177).





(c) Apply the tester as shown in the illustration to the test for continuity.

If continuity exists, replace the heater control.

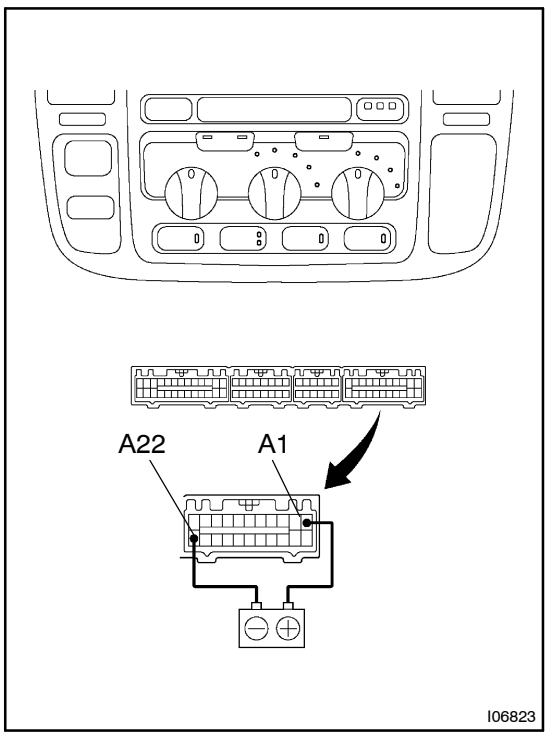
If no continuity exists, replace the bulb.

2. INSPECT INDICATORS OPERATION

(a) Connect the positive (+) lead from the battery to terminal A–1 and negative (–) lead to terminal A –22.

(b) Check that the indicators light up while operate the switches.

If operation is not as specified, replace the heater control.



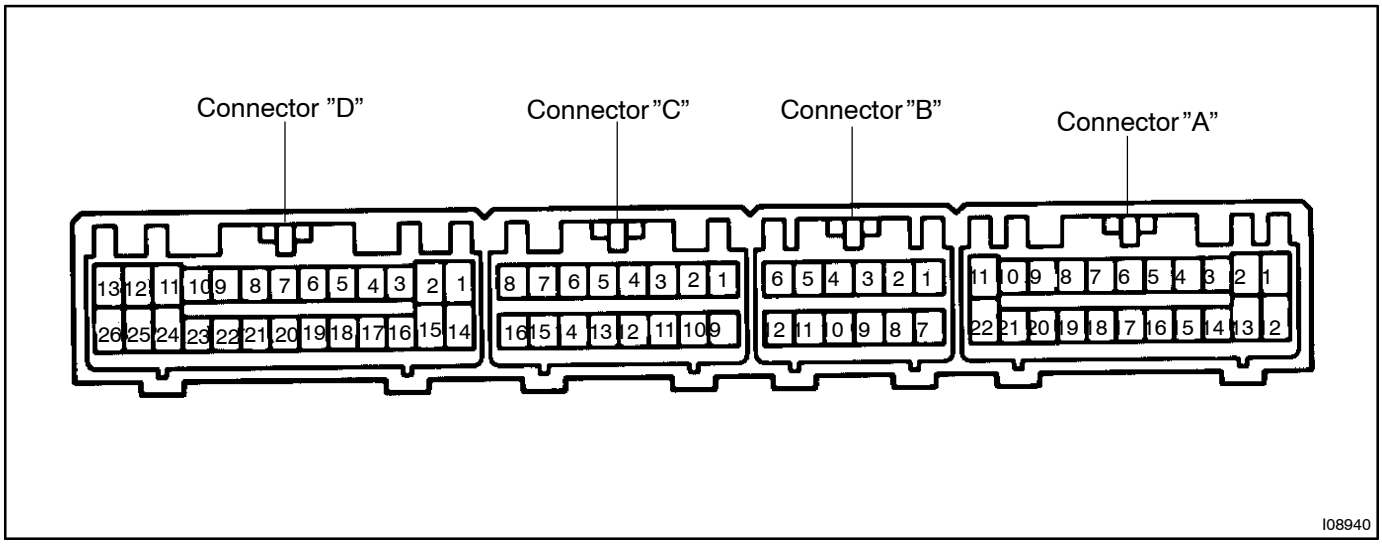
3. Manual A/C

INSPECT A/C CONTROL ASSEMBLY CIRCUIT

Connect the connectors to A/C control assembly and inspect wire harness side from the back side as shown in the chart below.

Test conditions:

- Run engine at idle speed
- Set on manifold gauge set



Tester connection	Condition	Specified condition
A22 – Ground	Constant	Continuity
A13 – A22	Constant	Continuity
A3 – A22	Hazard switch ON	Continuity
A4 – A22	Diff. lock switch OFF	Continuity
A5 – A22	Diff. lock switch OFF	Continuity
A17 – A22	Push in antenna down switch	Continuity
A18 – A22	Push in antenna up switch	Continuity
A19 – Ground	Diff. lock switch ON	Continuity
D10 – Ground	Refrigerant pressure at 196 – 3,140 kPa	Continuity
	Refrigerant pressure at less than 196 kPa or more than 3,140 kPa	No continuity
D12 – Ground	Constant	No continuity
B3 – B12	Ambient temperature at 25 °C (77 °F)	1.7 k Ω
B4 – B12	Evaporator temperature at 25 °C (77 °F)	1.5 k Ω
A1 – Ground	Constant	Battery voltage
	Turn ignition switch to LOCK or ACC	No voltage
A2 – Ground	Turn ignition switch to ACC	Battery voltage
A6 – Ground	Air inlet control switch at "FRESH"	Battery voltage
	Air inlet control switch at "RECIRC"	Below 1.0 V
A7 – Ground	Air inlet control switch at "FRESH"	Below 1.0 V
	Air inlet control switch at "RECIRC"	Battery voltage

A8 – Ground	Temperature control dial at "MAX. COOL"	Battery voltage
	Temperature control dial at "MAX. WARM"	Below 1.0 V
A9 – Ground	Temperature control dial at "MAX. COOL"	Below 1.0 V
	Temperature control dial at "MAX. WARM"	Battery voltage
A10 – A11	Turn light control switch to ON	Battery voltage
	Turn light control switch to OFF	No voltage
A12 – Ground	Constant	Battery voltage
B1 – Ground	Constant	5.0 V
B3 – B12	Ambient temperature at 25 °C (77 °F)	1.7 k Ω
B4 – B12	Fr. Evaporator temperature at 25 °C (77 °F)	1.5 k Ω
B5 – B12	Cool box evaporator temperature at 25 °C (77 °F)	1.5 k Ω
B7 – Ground	Rear heater switch OFF	Battery voltage
	Rear heater switch ON	Below 1.0 V
B8 – B12	Temperature control dial at "MAX. COOL"	Approx. 4.0 V
	Temperature control dial "MAX. WARM"	Approx. 1.0 V
B9 – B12	Air inlet control switch at "FRESH"	Approx. 1.0 V
	Air inlet control switch at "RECIRC"	Approx. 4.0 V
B12 – A22	Constant	Continuity
C1 – Ground	A/C switch ON	Below 1.0 V
	A/C switch OFF	Battery voltage
C2 – Ground	Rear cooler switch OFF	Battery voltage
	Rear cooler switch ON	Below 1.0 V
C3 – Ground	Mode control switch "FACE"	Below 1.0 V
	Mode control switch except "FACE"	Battery voltage
C4 – Ground	Mode control switch "BI –LEVEL"	Below 1.0 V
	Mode control switch except "BI –LEVEL"	Battery voltage
C5 – Ground	Mode control switch "FOOT"	Below 1.0 V
	Mode control switch except "FOOT"	Battery voltage
C10 – Ground	Mode control switch "FOOT/DEF"	Below 1.0 V
	Mode control switch except "FOOT/DEF"	Battery voltage
C11 – Ground	Mode control switch "DEF"	Below 1.0 V
	Mode control switch except "DEF"	Battery voltage
C6 – Ground	Cool box control switch: OFF	Battery voltage
	Cool box control switch: "NORM"	Below 1.0 V
C7 – Ground	Cool box control switch: "NORM"	Battery voltage
	Cool box control switch: "MAX"	Below 1.0 V
D8 – Ground	Cool box control switch "OFF"	Battery voltage
	Push in cool box control switch	Below 1.0 V
C14 – Ground	Compressor operates	Below 1.0 V
	Compressor does not operate	Battery voltage
C13 – Ground	Front A/C blower motor operates	Below 1.0 V
	Front A/C blower motor does not operate	Battery voltage
C8 – Ground	Rear defogger switch OFF	Battery voltage
	Rear defogger switch ON	Below 1.0 V

C15 – Ground	Compressor operates	Below 1.0 V
	Compressor does not operate	Battery voltage
C16 – Ground	Cool box control switch OFF	Battery voltage
	Cool box control switch ON	Below 1.0 V
D1 – Ground	Mirror heater switch OFF	Battery voltage
	Mirror heater switch ON	Below 1.0 V
D14 – Ground	Front blower switch at HI position	Below 1.0 V
D15 – Ground	Front blower switch at M1 position	Below 1.0 V
D2 – Ground	Front blower switch at M2 position	Below 1.0 V
D3 – Ground	Rear cooler switch ON	Below 1.0 V
	Rear cooler switch OFF	Battery voltage
D4 – Ground	Rear heater switch HI	Below 1.0 V
	Rear heater switch LO	Battery voltage
D16 – Ground	Rear heater switch OFF	Battery voltage
	Rear heater switch ON	Below 1.0 V
D17 – Ground	Rear heater ”LO” indicator lights up	Below 4.0 V
D26 – Ground	Rear heater ”HI” indicator lights up	Below 4.0 V
D20 – Ground	Rear cooler switch ON	Below 1.0 V
	Rear cooler switch OFF	No voltage
D21 – Ground	Rear cooler switch OFF	No continuity
	Rear cooler switch ON	Continuity
D23 – Ground	Compressor operates	Below 1.0 V
	Compressor does not operate	Battery voltage

If the circuits is as specified, try to replace the amplifier with a new one.

If the circuits is not as specified, inspect the circuits connected to other parts.

4. **Auto A/C:**
   INSPECT A/C CONTROL ASSEMBLY CIRCUIT
   (See page DI–855)