# AIR CONDITIONER AMPLIFIER (for Rear A/C)

AC1UH–01

## ON–VEHICLE INSPECTION

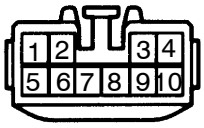
**1. REMOVE THESE PARTS:**

(a) Rear door scuff plate RH

(b) Rear floor mat support plate

(c) Quarter trim panel RH
(See page BO–90)

**Wire Harness Side**



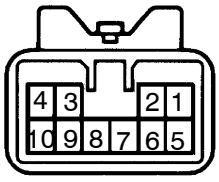

e-10-1 Z15513

**2. Manual A/C:**
**INSPECT REAR A/C AMPLIFIER CIRCUIT**

(a) Disconnect the connector from amplifier and inspect the connector on wire harness side, as shown in the chart.
Test conditions:
- Turn ignition switch to ON
- Rear blower speed control switch at "HI" position

| Tester connection | Condition | Specified condition |
|---|---|---|
| 4 – Ground | Constant | Continuity |
| 6 – 2 | Rear cooler temperature lever at "MAX. COOL" position | 3.0 kΩ |
| | Rear cooler temperature lever at "MAX. WARM" position | 0 kΩ |
| 2 – 10 | Rear evaporator temperature at 25 °C (77 °F) | 1.5 kΩ |
| 7 – Ground | Constant | Battery voltage |
| | Turn ignition switch to LOCK or ACC | No voltage |

**From Back Side**




e-10-2 Z15514

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

(b) Connect the connector to amplifier and inspect the wire harness connector from the back side, as shown in the chart.
Test conditions:
- Running engine at idle speed
- Rear cooler switch ON
- Rear blower speed control switch at "HI" position
- Rear cooler temperature switch at "MAX. COOL" position

| Tester connection | Condition | Specified condition |
|---|---|---|
| 8 – Ground | Constant | Below 0.7 V |
| | Rear cooler switch OFF | No voltage |

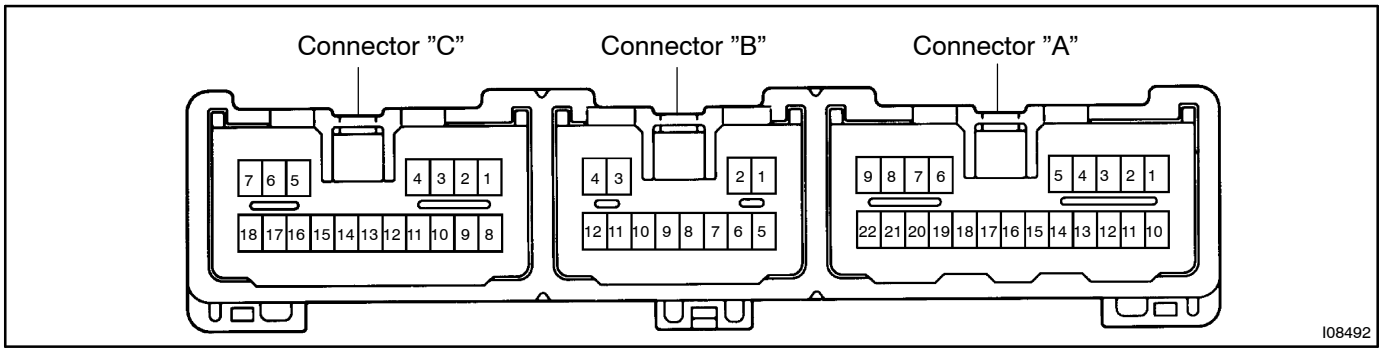
If the circuit is not as specified, inspect the connected to other parts. If the circuits is as specified, try replace the amplifier with a new one.

### 3. Auto A/C:
### INSPECT REAR A/C AMPLIFIER CIRCUIT

Connect the connector to amplifier and inspect the wire harness connector from the back side, as shown in the chart.

Test conditions:

- Turn ignition switch to ON




| Tester connection | Condition | Specified condition |
|---|---|---|
| A1 – Ground | Constant | Battery voltage |
| A2 – Ground | Constant | Battery voltage |
| | Turn ignition switch to OFF | No voltage |
| A3 – Ground | Rr. heater control at ”FACE” and ”LO” | Approx. 7.2 V |
| | Rr. heater control at ”FACE” and ”ME” | Approx. 4.2 V |
| | Rr. heater control at ”FACE”and ”HI” | Approx. 0.5 V |
| A4 – Ground | Rr. heater control at ”FACE” and ”OFF” | Below 1.0 V |
| | Rr. heater control at ”FACE” and ”LO” | 1.5 – 3.0 V |
| A5 – Ground | Constant | 4.5 – 5.5 V |
| A6 – A9 | Rr. temperature control at ”MAX. COOL” | 4.0 V |
| | Rr. temperature control at ”MAX. WARM” | Below 1.0 V |
| A7 – A9 | Evaporator temperature at 0 °C (32 °F) | 2.0 – 2.4 V |
| | Evaporator temperature at 15 °C (59 °F) | 19. – 1.8 V |
| A8 – A9 | Rr. heater air inlet temperature at 25 °C (77 °F) | 1.5 – 1.9 V |
| | Rr. heater air inlet temperature at 40 °C (104 °F) | 1.2 – 1.6 V |
| A9 – A22 | Constant | Continuity |
| A11 – Ground | Rr. temperature control at ”MAX. WARM” | Below 1.0 V |
| | Rr. temperature control at ”MAX. COOL” | Battery voltage (in 16 seconds) |
| A12 – Ground | Rr. temperature control at ”MAX. COOL” | Below 1.0 V |
| | Rr. temperature control at ”MAX. WARM” | Battery voltage (in 16 seconds) |
| A13 – Ground | Rr. heater control at ”FACE” and OFF | Battery voltage |
| | Rr. heater control at ”FACE” and LO | Below 1.0 V |
| A14 – Ground | Rr. heater control at ”FACE” and OFF | Battery voltage |
| | Rr. heater control at ”FACE” and LO | Below 1.0 V |

| | | |
|---|---|---|
| A15 – Ground | Rr. heater control at "FOOT" and LO | Approx. 7.2 V |
| | Rr. heater control at "FOOT" and ME | Approx. 4.2 V |
| | Rr. heater control at "FOOT" and HI | Approx. 0.5 V |
| A16 – Ground | Rr. heater control at "FOOT" and OFF | Below 1.0 V |
| | Rr. heater control at "FOOT" and LO | 1.5 – 3.0V |
| A22 – Ground | Constant | Continuity |
| B1 – A2 | Constant | Continuity |
| B4 – A5 | Constant | Continuity |
| B5 – A10 | Constant | Continuity |
| B7 – B12 | Rr. room temperature at 25 °C (77 °F) | 1.8 – 2.2 V |
| | Rr. room temperature at 40 °C (104 °F) | 1.2 – 1.6 V |
| B8 – B12 | Rr. temperature control at "MAX. COOL" | 5.0 V |
| | Rr. temperature control at "MAX. WARM" | No voltage |
| C1 – C8 | Push in "AUTO" switch | Below 1.0 V |
| | AUTO switch OFF | Battery voltage |
| C2 – C8 | Constant | Battery voltage |
| | Push in Rr. OFF switch | Below 1.0 V |
| C3 – C8 | Constant | Battery voltage |
| | Push in Rr. LO switch | Below 1.0 V |
| C4 – C8 | Constant | Battery voltage |
| | Push in Rr. ME switch | Below 1.0 V |
| C5 – Ground | Push in except Rr. AUTO switch | Battery voltage |
| | Push in Rr. AUTO switch | Below 1.0 V |
| C6 – Ground | Push in except Rr. LO switch | Battery voltage |
| | Push in LO switch | Below 1.0 V |
| C7 – Ground | Push in except Rr. ME switch | Battery voltage |
| | Push in ME switch | Below 1.0 V |
| C8 – A9 | Constant | Continuity |
| C9 – Ground | Push in Rr. HI switch | Below 1.0 V |
| | Constant | Battery voltage |
| C10 – Ground | Constant | Battery voltage |
| | Push in Rr. FACE switch | Below 1.0 V |
| C11 – Ground | Constant | Battery voltage |
| | Push in Rr. B/L switch | Below 1.0 V |
| C12 – Ground | Constant | Battery voltage |
| | Push in Rr. FOOT switch | Below 1.0 V |
| C15 – Ground | Push in except Rr. FACE switch | Battery voltage |
| | Push in Rr. FACE switch | Below 1.0 V |
| C16 – Ground | Push in except Rr. B/L switch | Battery voltage |
| | Push in Rr. B/L switch | Below 1.0 V |
| C17 – Ground | Push in except Rr. FOOT switch | Battery voltage |
| | Push in Rr. FOOT switch | Below 1.0 V |
| C18 – Ground | Push in except Rr. HI switch | Battery voltage |
| | Push in Rr. HI switch | Below 1.0 V |