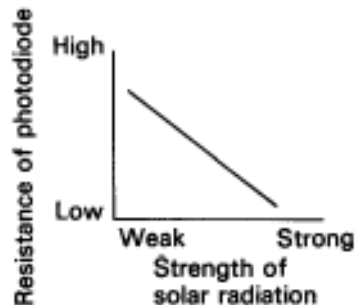
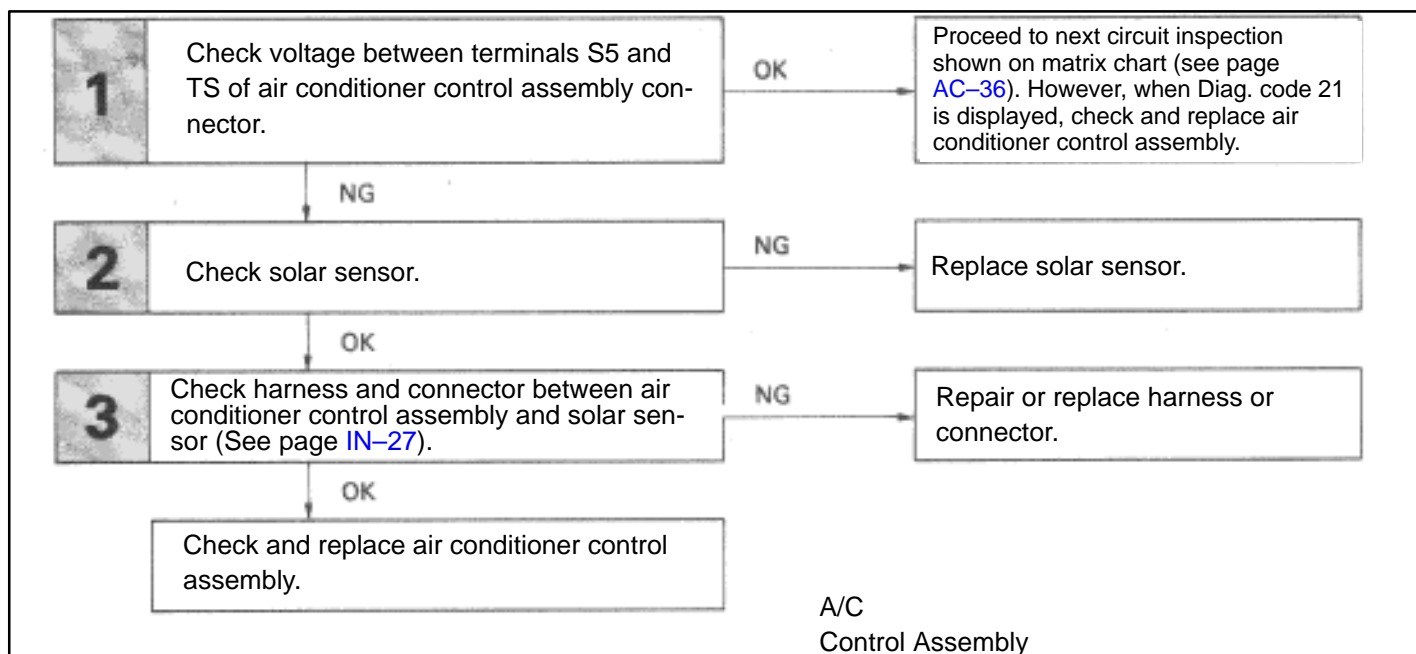
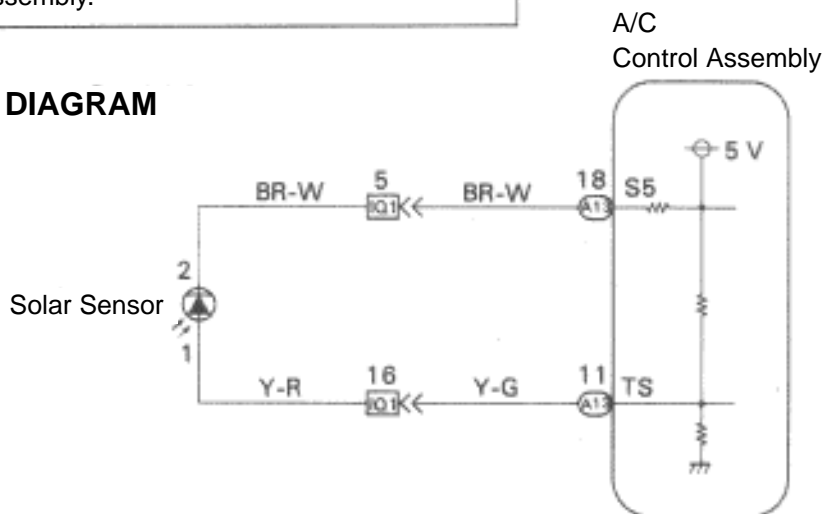


**Diag. Code 21****Solar Sensor Circuit****— CIRCUIT DESCRIPTION —**

A photo diode in the solar sensor detects solar radiation and sends signals to the air conditioner control assembly.



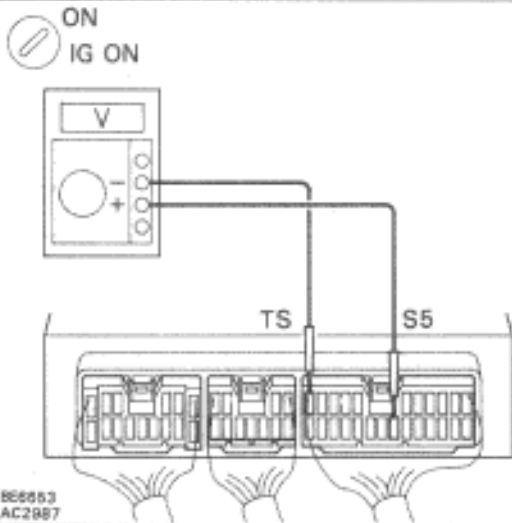
Code No.	Diag. Code Detecting Condition	Trouble area
21	Open or short in solar sensor circuit. (Please note that display of diagnostic code 21 is not abnormal when the sensor is not receiving solar radiation.)	<ul style="list-style-type: none"> <li>Solar sensor.</li> <li>Harness or connector between solar sensor and A/C control assembly.</li> <li>A/C control assembly.</li> </ul>

**— DIAGNOSTIC CHART —****WIRING DIAGRAM**

## INSPECTION PROCEDURE

1

Check voltage between terminals S5 and TS of air conditioner control assembly connector.



NG

P

1. Remove console upper panel (See page [BO-111](#))

2. Remove A/C control assembly with connectors still connected.

C

3. Turn ignition switch ON.

Measure voltage between terminals S5 and TS of air conditioner control assembly connector when the solar sensor is subjected to an electric light, when the sensor is covered by a cloth.

OK

Condition	Voltage
Sensor subjected to electric light	Below 4 V
Sensor covered by a cloth	4 ~ 4.5 V

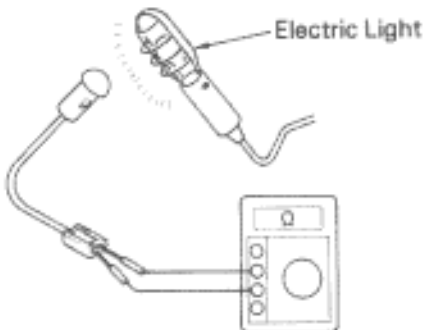
In addition, when the inspection light is gradually moved away from the sensor, the voltage increases.

OK

Proceed to next circuit inspection shown on matrix chart (see page [AC-36](#)). However, when Diag. code 14 is displayed, check and repair air conditioner control assembly.

2

Check solar sensor.



OK

P

1. Remove solar sensor from dashboard.

2. Disconnect solar sensor connector

C

1. Cover the sensor by a cloth.

2. Measure resistance between terminals 1 and 2 of solar sensor connector.

Hint

**Connect positive ⊕ lead of ohmmeter to terminal 2 and negative ⊖ lead to terminal 1 of the solar sensor.**

P

1. Remove the cloth from the solar sensor and subject the sensor to electric light.

2. Measure resistance.

OK

**Voltage:**      **Resistance:** Approx. 4 kΩ (continuity)

In addition, as the electric light is moved gradually away from the sensor the resistance increases.

NG

Replace solar sensor.

3

Check for open and short in harness and connector between air conditioner control assembly and solar sensor (see page [IN-27](#)).

OK

NG

Repair or replace harness or connector.

Check and replace air conditioner control assembly.