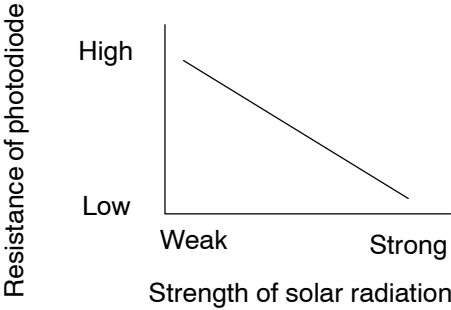


DTC	B1421/21	Solar Sensor Circuit (Passenger side)
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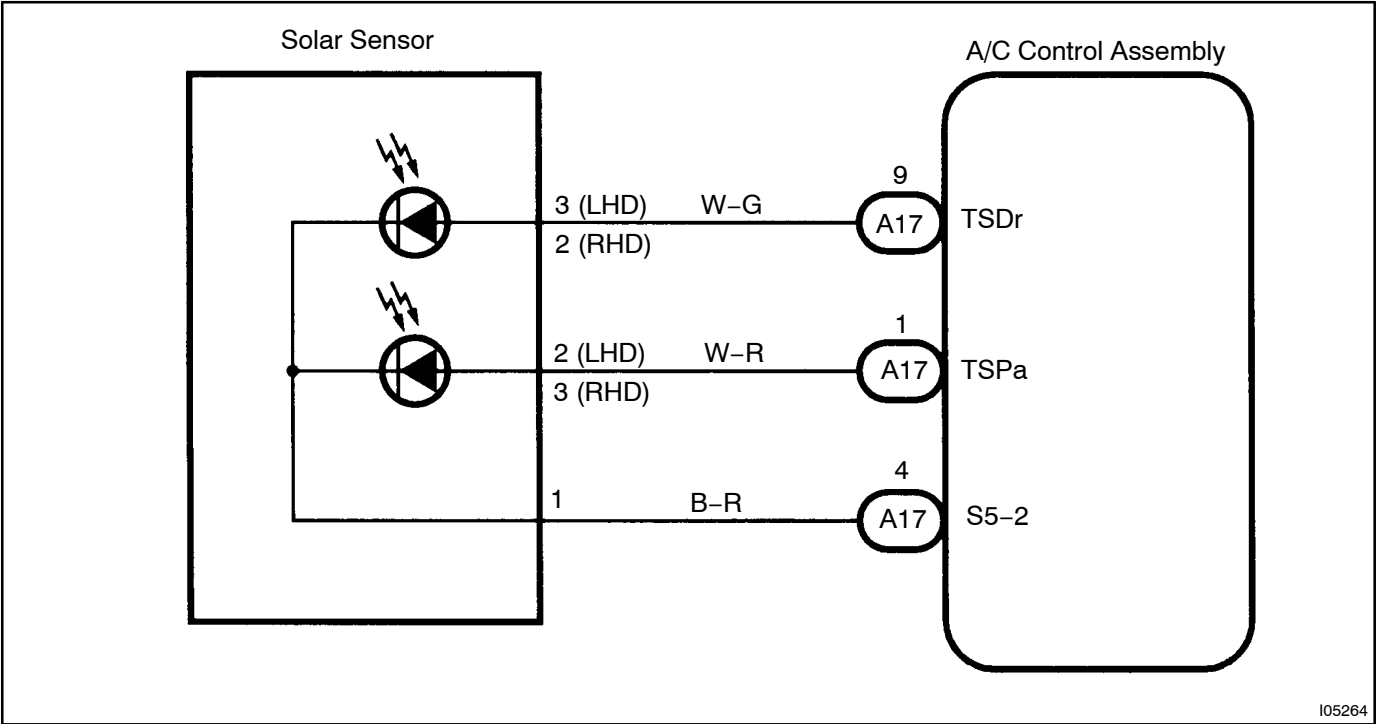
CIRCUIT DESCRIPTION



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

DTC No.	Detection Item	Trouble Area
B1421/21	Open or short in solar sensor circuit. Please note that display of diagnostic trouble code 21 is not abnormal when the sensor is not receiving solar radiation.	•Solar sensor. •Harness or connector between solar sensor and A/C control assembly. •A/C control assembly.

WIRING DIAGRAM



I05264

INSPECTION PROCEDURE

HINT:

In case of using the LEXUS hard-held tester, start the inspection step 1 and in case of not using the LEXUS hard-held tester, start from step 2.

1 Check solar sensor (Passenger Side) using LEXUS hard-held tester.

PREPARATION:

Connect the LEXUS hard-held tester to the DLC3.

CHECK:

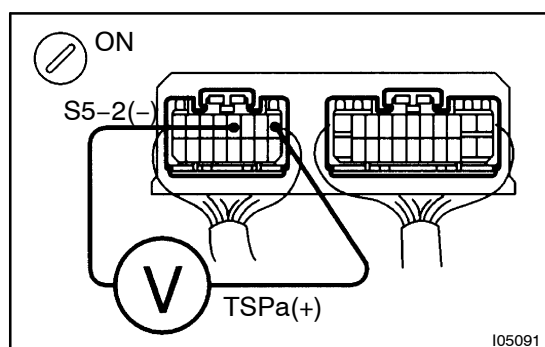
Check the solar sensor (Passenger Side) using DATA LIST.

OK

Check and replace A/C control assembly.

NG

2 Check voltage between terminals S5-2 and TSPa of A/C control assembly connector.



PREPARATION:

Remove A/C control assembly with connectors still connected.

CHECK:

- Turn ignition switch ON.
- Measure voltage between terminals S5-2 and TSPa of A/C control assembly connector when the solar sensor is subjected to an electric light, and when the sensor is covered by a cloth.

OK:

Condition	Voltage
Sensor subjected to electric light	0.8 – 4.3 V
Sensor covered by a cloth	Below 0.8 V

HINT:

As the inspection light is moved away from the sensor, the voltage increases.

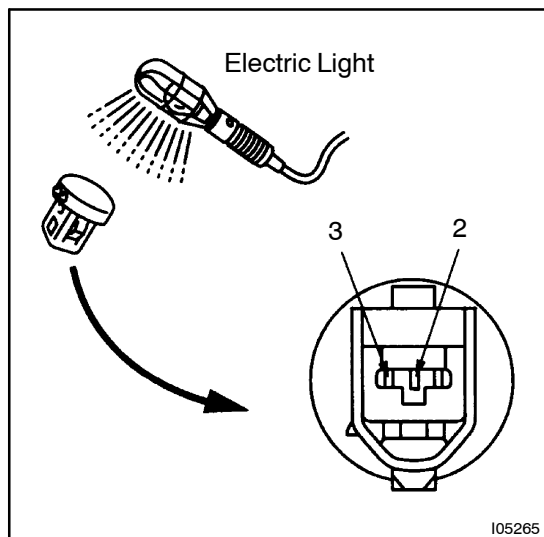
NG

Go to step 3.

OK

Proceed to next circuit inspection shown on problem symptoms table (See page DI-912). However, if DTC B1421/21 is displayed, check and replace A/C control assembly.

3 Check solar sensor.



PREPARATION:

Remove solar sensor.

CHECK:

- Cover the sensor by a cloth.
- Measure resistance between terminals 1 and 2 of solar sensor connector.

HINT:

Connect positive (+) lead of ohmmeter to terminal 1 and negative (–) lead to terminal 2 of the solar sensor.

OK:

Resistance : $\infty \Omega$ (no continuity)

PREPARATION:

- Remove the cloth from the solar sensor and subject the sensor to electric light.
- Measure resistance.

OK:

Resistance : Approx. 4 k Ω (continuity)

HINT:

As the electric light is moved away from the sensor, the resistance increases.

NG

Replace solar sensor.

OK

4 Check harness and connector between A/C control assembly and solar sensor (See page IN-29).

NG

Repair or replace harness or connector.

OK

Check and replace A/C control assembly.