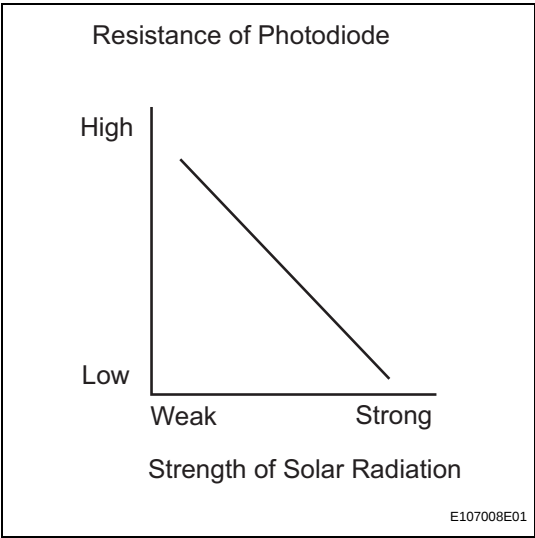


DTC	21	Solar Sensor Circuit (Passenger Side)
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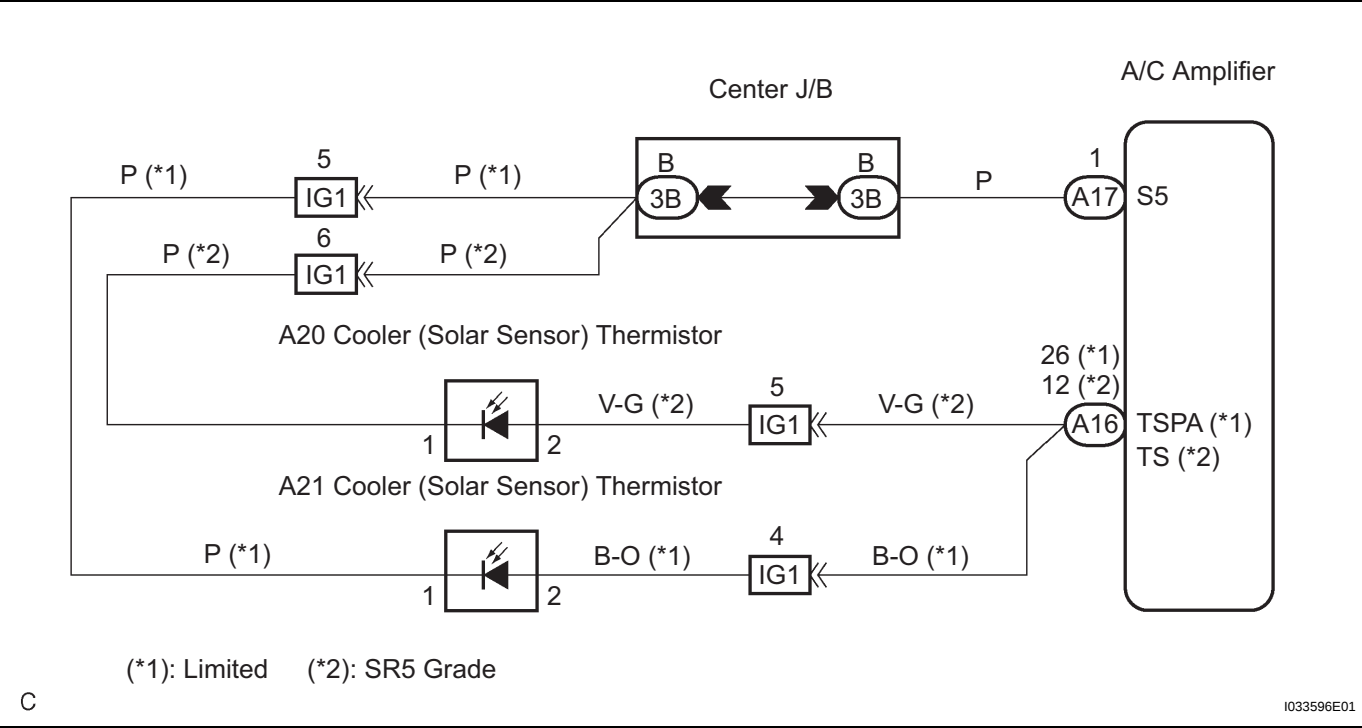
DESCRIPTION

A photodiode in the cooler (solar sensor) thermistor detects solar radiation and sends signals to the A/C amplifier.



DTC No.	Detection Item	Trouble Area
21	Open or short in solar sensor circuit	- Cooler (solar sensor) thermistor - Harness or connector between cooler (solar sensor) thermistor and A/C amplifier - A/C amplifier

WIRING DIAGRAM



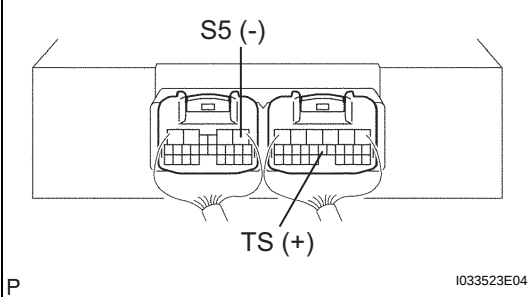
INSPECTION PROCEDURE

HINT:

If the check is performed in a dark place, DTC 21, 24 (solar sensor circuit abnormal) may be output.

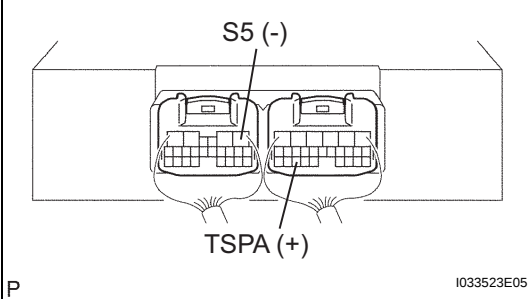
1 INSPECT AIR CONDITIONING AMPLIFIER (TS, TSP, S5)

SR-5 grade:



- (a) Remove the A/C amplifier with the connectors still connected.

Limited grade:



- (b) Measure the voltage according to the value(s) in the table below.

Standard voltage

Tester Connection (Symbols)	Condition	Specified Condition
A17-1 (S5) - A16-26 (TSPA) (*1)	Ignition switch ON	0.8 to 4.3 V
A17-1 (S5) - A16-12 (TS) (*2)	Ignition switch ON	0.8 to 4.3 V

*1: Limited

*2: SR5 Grade

HINT:

- Use an incandescent light for inspection. Bring it within 30 cm (11.8 in.) of the cooler (solar sensor) thermistor.
- Move the light away from the sensor voltage increases
- Move the light closer to the sensor voltage decreases

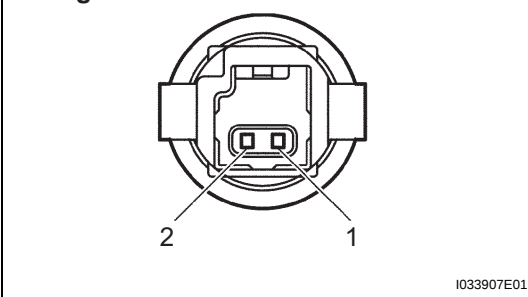
OK

PROCEED TO NEXT CIRCUIT INSPECTION SHOWN IN PROBLEM SYMPTOMS TABLE

NG

2 INSPECT COOLER (SOLAR SENSOR) THERMISTOR

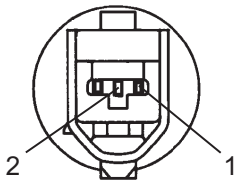
SR-5 grade:



- (a) Remove the cooler (solar sensor) thermistor.

AC

Limited grade:



1033908E01

- (b) Measure the resistance according to the value(s) in the table below.
- (c) Connect the positive (+) lead from the ohmmeter to terminal 2 and the negative (-) lead to terminal 1 of the cooler (solar sensor) thermistor.

Standard resistance

Tester Connection	Condition	Specified Condition
2 - 1	Sensor is subject to electric light	Except $\infty \Omega$
2 - 1	Sensor is covered with a cloth	$\infty \Omega$ (No continuity)

NOTICE:

The connection procedure for using a digital tester such as an electrical tester is shown above. When using an analog tester, connect the negative (-) lead to terminal 2 and positive (+) lead to terminal 1 of the cooler (solar sensor) thermistor.

HINT:

- As the inspection light is moved away from the sensor, the resistance increases.
- Use an incandescent light for inspection. Bring it within 30 cm (11.8 in.) of the cooler (solar sensor) thermistor.

NG

REPLACE COOLER (SOLAR SENSOR) THERMISTOR

OK

3

CHECK HARNESS AND CONNECTOR (COOLER (SOLAR SENSOR) THERMISTOR - A/C AMPLIFIER)

- (a) Check for open and short circuit in the harness and the connector between the cooler (solar sensor) thermistor and the A/C amplifier (See page [IN-38](#)).

NG

REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

4

CHECK DTC

- (a) Start up the DTC check mode.
- (b) Check that DTC 21 is not output again.

Result

Result	Proceed to
DTC 21 is output.	A
DTC 21 is not output.	B

B

SYSTEM IS OK

A

REPLACE AIR CONDITIONING AMPLIFIER