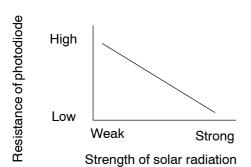
DI90R-01

DTC	RrDEF, DEF	Solar Sensor Circuit
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DTC 2 1 Solar Sensor Circuit

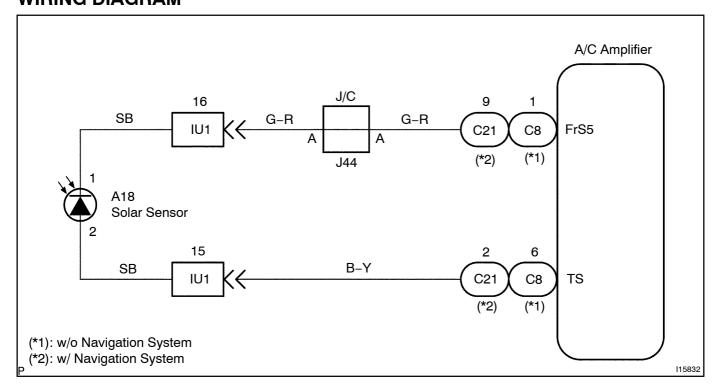
# **CIRCUIT DESCRIPTION**



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

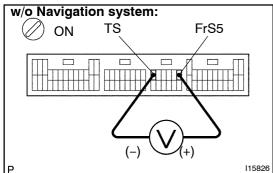
Blinking light	Detection Item	Trouble Area
RrDEF DEF	Open or short in solar sensor circuit. Please note that display of diagnostic trouble code 21 is not abnormal when the sensor is not receiving solar radiation.	Solar sensor     Harness or connector between solar sensor and A/C amplifier     A/C amplifier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

# **WIRING DIAGRAM**



# **INSPECTION PROCEDURE**

Check voltage between terminals FrS5 and TS of A/C amplifier connector.



# W/ Navigation system: ON TS FrS5

# **PREPARATION:**

Remove A/C amplifier with connectors still connected.

### CHECK:

- (a) Turn ignition switch to ON.
- (b) Measure voltage between terminals FrS5 and TS of A/C amplifier connector when the solar sensor is subjected to an electric light, and when the sensor is covered by al cloth.

# OK:

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

### HINT:

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

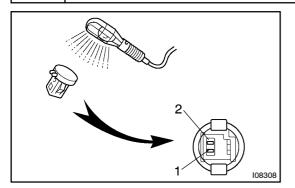


ОК

1

Proceed to next circuit inspection shown on problem symptoms table (See page DI-130). However, if RrDEF and DEF indicators light up (or DTC 2 1 is displayed), check and replace amplifier.

2 Check solar sensor.



# PREPARATION:

Remove solar sensor.

# **CHECK:**

- (a) Cover the sensor with a cloth.
- (b) 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:**

- (a) Remove the cloth from the solar sensor and subject the sensor to electric light.
- (b) Measure resistance.

### OK:

Resistance : Approx. 4  $k\Omega$  (continuity)

HINT:

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

NG

Replace solar sensor.

OK

3

Check harness and connector between A/C amplifier and solar sensor (See page IN-34).

NG

Repair or replace harness or connector.

OK

Check and replace A/C control assembly.