DI60B–01

| DTC | B1421 | Solar Sensor Circuit |
|---|---|---|

## CIRCUIT DESCRIPTION
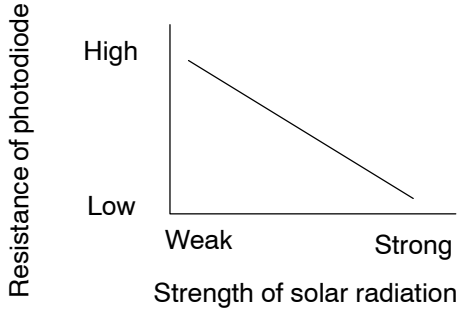


A photo diode in the solar sensor detects solar radiation and sends signals to the A/C control assembly.

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

## WIRING DIAGRAM



*1: LHD models
*2: RHD models

I11824
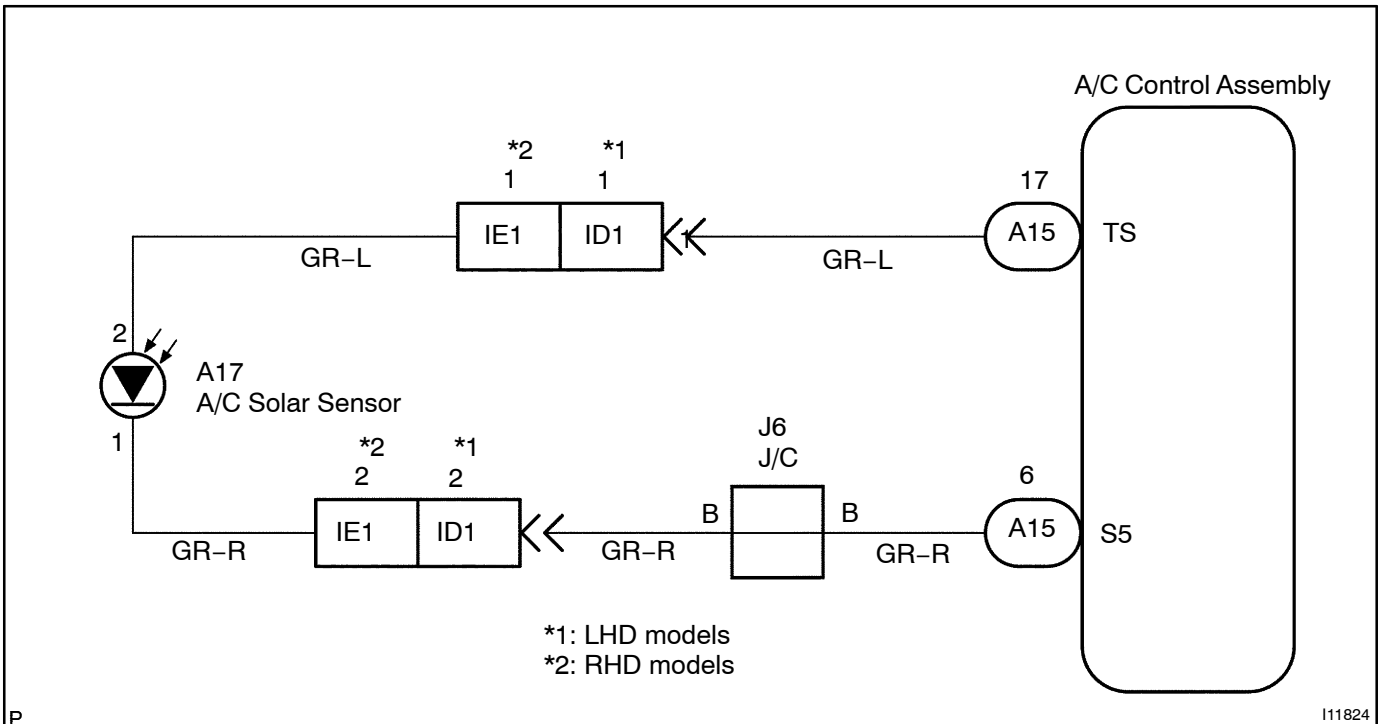
# INSPECTION PROCEDURE

HINT:

In case of using the hand–held tester, start the inspection step 1 and in case of not using the hand–held tester, start from step 2.

| 1 | Check solar sensor using hand–held tester. |
|---|---|

**PREPARATION:**

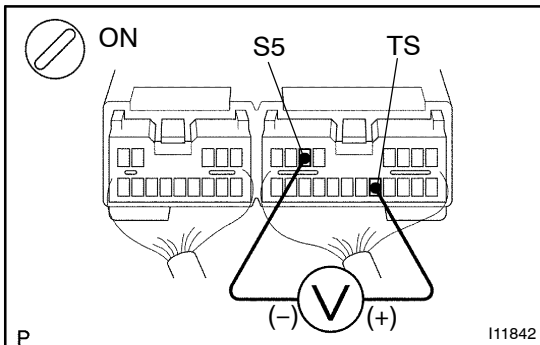Connect the hand–held tester to the DLC3.

**CHECK:**

Check the solar sensor using DATA LIST.

OK > Check and replace A/C control assembly.

NG ↓

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



**PREPARATION:**

Remove A/C control assembly with connectors still connected.

**CHECK:**

(a) Turn ignition switch to ON.

(b) Measure voltage between terminals S5 and TS of A/C control assembly 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:

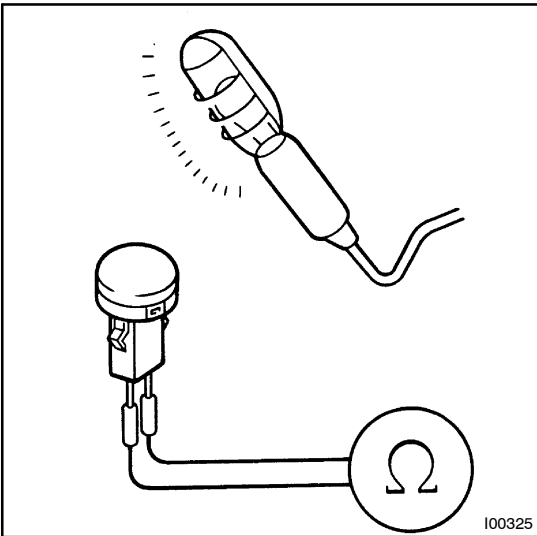As the inspection light is moved away from the sensor, the voltage increases.

NG > Go to step 3.

OK ↓

Proceed to next circuit inspection shown on problem symptoms table (See page DI–674). However-er, if DTC B1421 is displayed, check and replace A/C control assembly.

| 3 | Check solar sensor. |
|---|---|



**PREPARATION:**
Remove solar sensor (See page AC–65).
**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 : ∞ Ω (no continuity)**
**PREPARATION:**
(a)　Remove the cloth from the solar sensor and subject the sensor to electric light.
(b)　Measure resistance.
**OK:**
　　**Resistance : Approx. 10 kΩ (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–32). |
|---|---|

| NG⟩ | Repair or replace harness or connector. |
|---|---|

**OK**

| Check and replace A/C control assembly. |
|---|