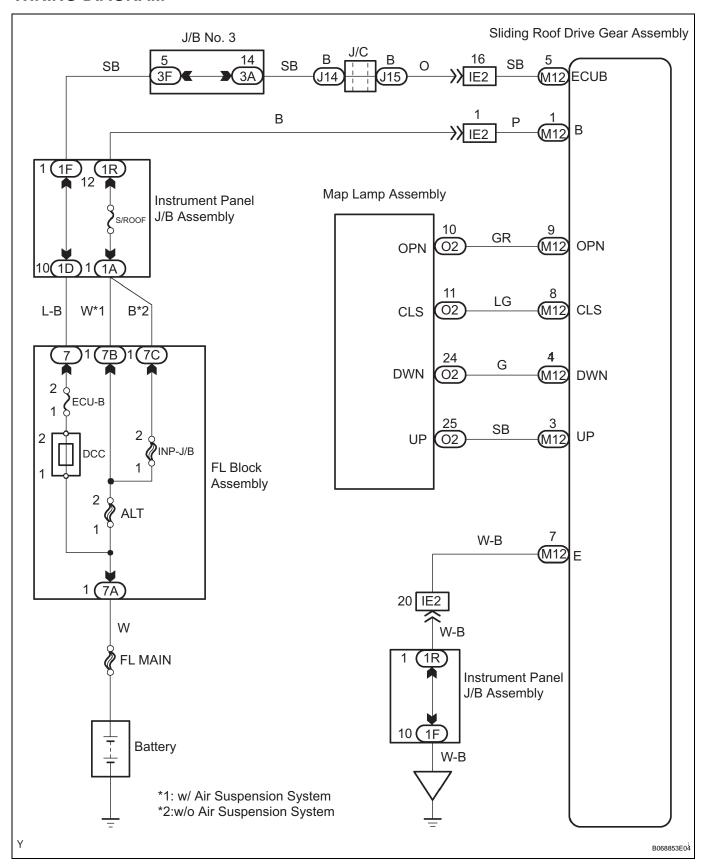
Sliding Roof does not Move by Operating Sliding Roof Control Switch

DESCRIPTION

The sliding roof drive gear (Sliding roof ECU) monitors a sliding roof motor switch signal in line and the motor built in the sliding roof gear is driven.

WIRING DIAGRAM



1 PERFORM ACTIVE TEST BY INTELLIGENT TESTER

- (a) Connect into intelligent tester to the DLC3.
- (b) Enter the ACTIVE TEST of the intelligent tester.

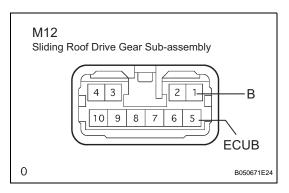
Standard (Sliding roof ECU):

| Item | Test Details | Diagnostic Note |
|------------|--------------------------------|-----------------|
| SLIDE ROOF | Operate sliding roof CLOSE/UP | - |
| SLIDE ROOF | Operate sliding roof OPEN/DOWN | - |

OK Go to step 4



2 CHECK SLIDING ROOF DRIVE GEAR SUB-ASSEMBLY (POWER SOURCE)



- (a) Disconnect the M12 drive gear connector.
- (b) Check the voltage between the wire harness side connector and the body ground.

Voltage

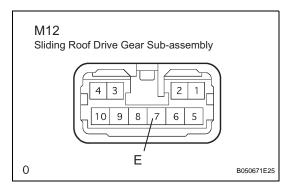
| Tester Connection | Specified Condition | |
|----------------------------|---------------------|--|
| M12-5 (ECUB) - Body ground | 10 to 14 V | |
| M12-1 (B) - Body ground | 10 10 14 V | |

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REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

3 CHECK SLIDING ROOF DRIVE GEAR SUB-ASSEMBLY (GROUND)



- (a) Disconnect the M12 drive gear connector.
- (b) Check the resistance between the wire harness side connector and the body ground.

Resistance

| Tester Connection | Specified Condition |
|-------------------------|---------------------|
| M12-7 (E) - Body ground | Below 1 Ω |

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REPAIR OR REPLACE HARNESS AND CONNECTOR

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REPLACE SLIDING ROOF DRIVE GEAR SUB-ASSEMBLY



4 READ VALUE OF INTELLIGENT TESTER (SLIDING ROOF MOTOR)

(a) Check the DATA LIST for proper functioning of the sliding roof motor.

| Item | Measurement Item/ Display (Range) | Normal Condition | Diagnostic Note |
|--------------|--|--|-----------------|
| LIMIT SW1 | Sliding roof operating signal/ON or OFF | ON: Sliding roof motor is operating OFF: Sliding roof motor is not operating | - |
| LIMIT SW2 | Sliding roof operating signal/ON or OFF | ON: Sliding roof motor is operating OFF: Sliding roof motor is not operating | - |
| MOTOR PULSE | Sliding roof operating signal/HI or LO | HI: Sliding roof motor is operating LO: Sliding roof motor is not operating | - |
| MOTOR STATUS | Sliding roof operating signal/ NORMAL or LOCK | NORMAL: Sliding roof motor is not operating LOCK: Sliding roof motor is operating | - |

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REPLACE SLIDING ROOF DRIVE GEAR SUB-ASSEMBLY

OK

5 READ VALUE OF INTELLIGENT TESTER (SLIDING ROOF TILT AND SLIDE SWITCH)

(a) Check the DATA LIST for proper functioning of the tilt and slide switches.

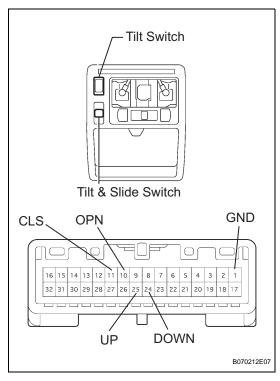
| Item | Measurement Item/ Display (Range) | Normal Condition | Diagnostic Note |
|----------|---|--|-----------------|
| OPEN SW | Sliding roof open switch signal/ ON or OFF | ON: Sliding roof open switch is pressed OFF: Sliding roof open switch is not pressed | - |
| CLOSE SW | Sliding roof open switch signal/ ON or OFF | ON: Sliding roof close switch is pressed OFF: Sliding roof close switch is not pressed | - |
| UP SW | Sliding roof open switch signal/ ON or OFF | ON: Sliding roof up switch is pressed OFF: Sliding roof up switch is not pressed | - |
| DOWN SW | Sliding roof open switch signal/ ON or OFF | ON: Sliding roof down switch is pressed OFF: Sliding roof down switch is not pressed | - |

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REPLACE SLIDING ROOF DRIVE GEAR SUB-ASSEMBLY



6 INSPECT MAP LIGHT ASSEMBLY



(a) Check the tilt switch resistance.

Resistance

| Tester Connection | Switch Position | Specified Condition |
|--------------------|-----------------|---------------------|
| 24 (DWN) - 1 (GND) | DOWN | Below 1 Ω |
| 25 (UP) - 1 (GND) | UP | Delow 1 22 |

(b) Check the tilt & slide switch resistance.

Resistance

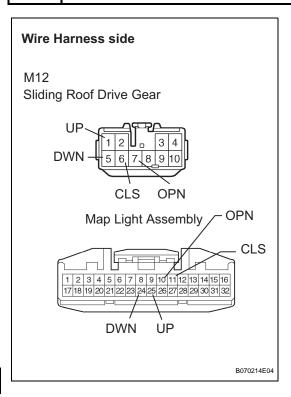
| Tester Connection | Switch Position | Specified Condition | |
|--------------------|-----------------|---------------------|--|
| 10 (OPN) - 1 (GND) | OPEN | Below 1 Ω | |
| 11 (CLS) - 1 (GND) | CLOSE | Delow 1 22 | |

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REPLACE MAP LIGHT ASSEMBLY



7 CHECK WIRE HARNESS ((SLIDING ROOF ECU) - MAP LIGHT ASSEMBLY)



- Disconnect the M12 drive gear and O2 map light connectors.
- (b) Check the resistance between the wire harness side connectors.

Resistance

| Tester Connection | Specified Condition |
|---------------------------|---------------------|
| M12-6 (OPN) - O2-10 (OPN) | |
| M12-7 (CLS) - O2-11 (CLS) | Below 1 Ω |
| M12-1 (DWN) - O2-24 (DWN) | |
| M12-2 (UP) - O2-25 (UP) | |

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REPAIR OR REPLACE HARNESS AND CONNECTOR

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REPLACE SLIDING ROOF DRIVE GEAR SUB-ASSEMBLY