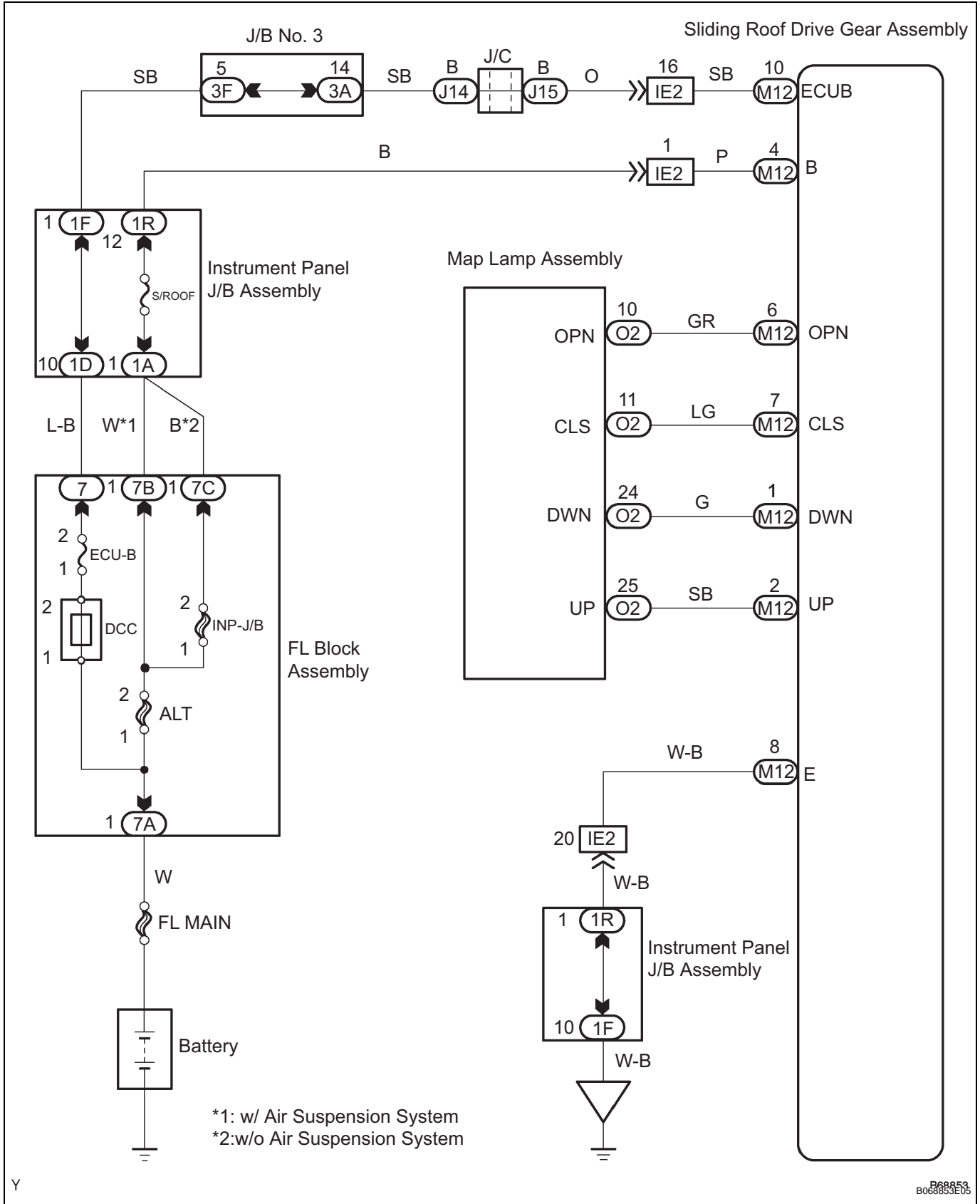


**Sliding Roof does not Move by Operating Sliding Roof Control Switch****DESCRIPTION**

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

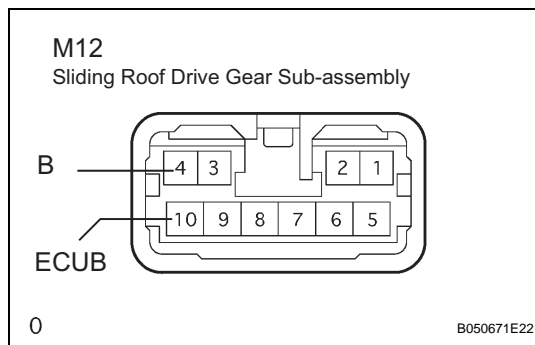
Standard (Sliding roof ECU) :

Item	Test Details	Diagnostic Note
SLIDE ROOF	Operate sliding roof CLOSE	-
	Operate sliding roof OPEN	-

OK

Go to step 4

NG

**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.

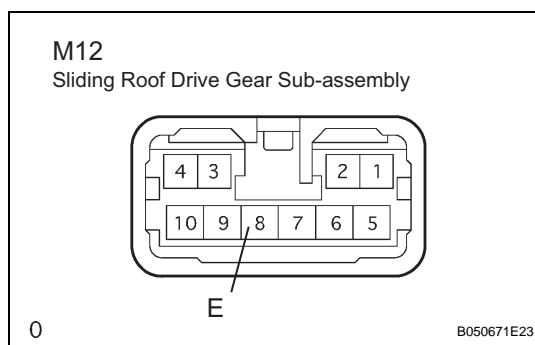
**Voltage**

Tester Connection	Specified Condition
M12-10 (ECUB) - Body ground	10 to 14 V
M12-4 (B) - Body ground	

NG

**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
M12-8 (E) - Body ground	Below 1 $\Omega$

NG

**REPAIR OR REPLACE HARNESS AND CONNECTOR**

OK

**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 operating LOCK: Sliding roof motor is not operating	-

**NG**

**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.

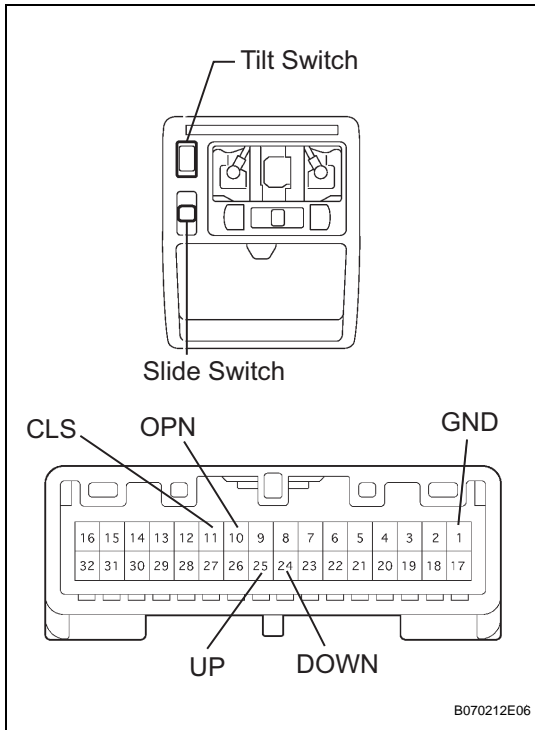
Item	Measurement Item/ Display (Range)	Normal Condition	Diagnostic Note
OPEN SW	Sliding roof open switch signal/ON or OFF	ON: Sliding roof open switch is pressed OFF: Sliding roof open switch is not pressed	-
CLOSE SW	Sliding roof open switch signal/ON or OFF	ON: Sliding roof close switch is pressed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

**NG**

**REPLACE SLIDING ROOF DRIVE GEAR SUB-ASSEMBLY**

**OK**

**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	

(b) Check the slide switch resistance.

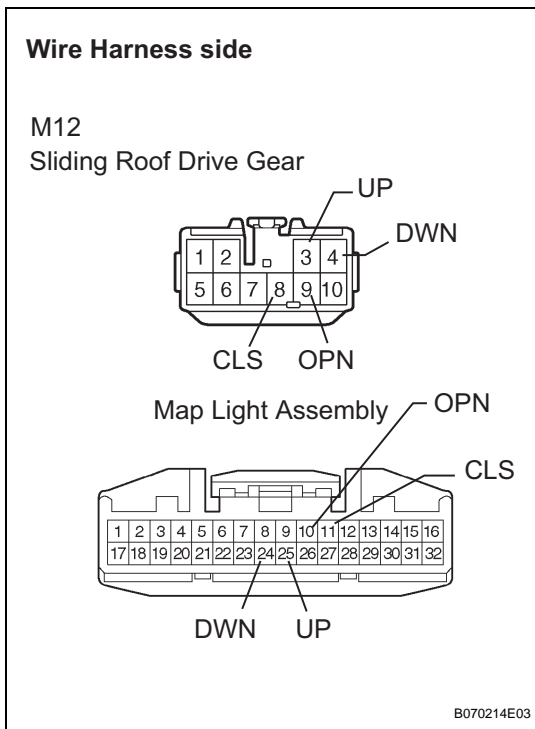
**Resistance**

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

**NG** → **REPLACE MAP LIGHT ASSEMBLY**

**OK**

**7 CHECK WIRE HARNESS (SLIDING ROOF DRIVE GEAR ASSEMBLY (SLIDING ROOF ECU))**



(a) 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
M12-9 (OPN) - O2-10 (OPN)	Below 1 Ω
M12-8 (CLS) - O2-11 (CLS)	
M12-4 (DWN) - O2-24 (DWN)	
M12-3 (UP) - O2-25 (UP)	

**NG** → **REPAIR OR REPLACE HARNESS AND CONNECTOR**

OK

REPLACE SLIDING ROOF DRIVE GEAR SUB-ASSEMBLY