

INITIALIZATION

1. RESET SLIDING ROOF MOTOR

(a) The sliding roof may not operate automatically and the jam protection function will not function correctly after you reconnect, replace or recharge the battery. In any of these cases, reset the sliding roof system using the following method.

- (1) Push and hold the slide switch toward the front or tilt switch on the rear side.
- (2) Check that the sliding roof will tilt up and down, or slide open and close.
- (3) After the slide operation, release the switch.
- (4) Make sure that the sliding roof opens and closes automatically.

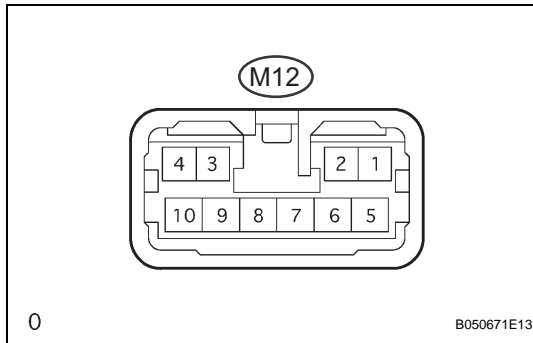
HINT:

If the battery terminal is disconnected, the ECU of the sliding roof motor may not detect the position of the roof glass. If the AUTO operation function is still disabled even after the sliding roof motor is reset, the hall IC (built in the sliding roof motor assembly) for detecting the roof glass position may be malfunctioning.

PROBLEM SYMPTOMS TABLE

Sliding roof system (Standard type)

Symptom	Suspected area	See page
Sliding roof does not move using sliding roof control switch	1. Sliding roof drive gear assembly (Sliding roof ECU)	RF-32
	2. Map light assembly (Slide roof control switch)	RF-54
	3. Wire harness	-



TERMINALS OF ECU

1. **CHECK SLIDING ROOF DRIVE GEAR ASSEMBLY (SLIDING ROOF ECU)**
 - (a) Disconnect the M12 ECU connector.
 - (b) Check the voltage and resistance of each terminal of the wire harness side connector.

Voltage

Symbols (Terminal No.)	Wiring Color	Terminal Description	Condition	Specified Condition
ECUB (M12-5) - E (M12-7)	SB - W-B	+B (ECUB) power supply	Constant	10 to 14 V
B (M12-1) - E (M12-7)	P - W-B	+B (B) power supply	Constant	10 to 14 V
IG (M12-6) - E (M12-7)	BR - W-B	Ignition power supply	Ignition switch OFF → ON	0 V → 10 to 14 V

Resistance

Symbols (Terminal No.)	Wiring Color	Terminal Description	Condition	Specified Condition
OPN (M12-9) - E (M12-7)	GR - W-B	Sliding roof motor open output	Slide switch (OPEN) OFF → ON	10 k Ω or higher → Below 1 Ω
CLS (M12-8) - E (M12-7)	LG - W-B	Sliding roof motor close output	Slide switch (CLOSE) OFF → ON	10 k Ω or higher → Below 1 Ω
UP (M12-3) - E (M12-7)	SB - W-B	Sliding roof motor up output	Tilt switch (UP) OFF → ON	10 k Ω or higher → Below 1 Ω
DWN (M12-4) - E (M12-7)	G - W-B	Sliding roof motor down output	Tilt switch (DOWN) OFF → ON	10 k Ω or higher → Below 1 Ω
E (M12-7) - Body ground	W-B - Body ground	Ground	Constant	Below 1 Ω

If the result is not as specified, there may be a malfunction on the wire harness side.

- (c) Reconnect the M12 ECU connector.
- (d) Check the voltage and resistance of each terminal of the connector.

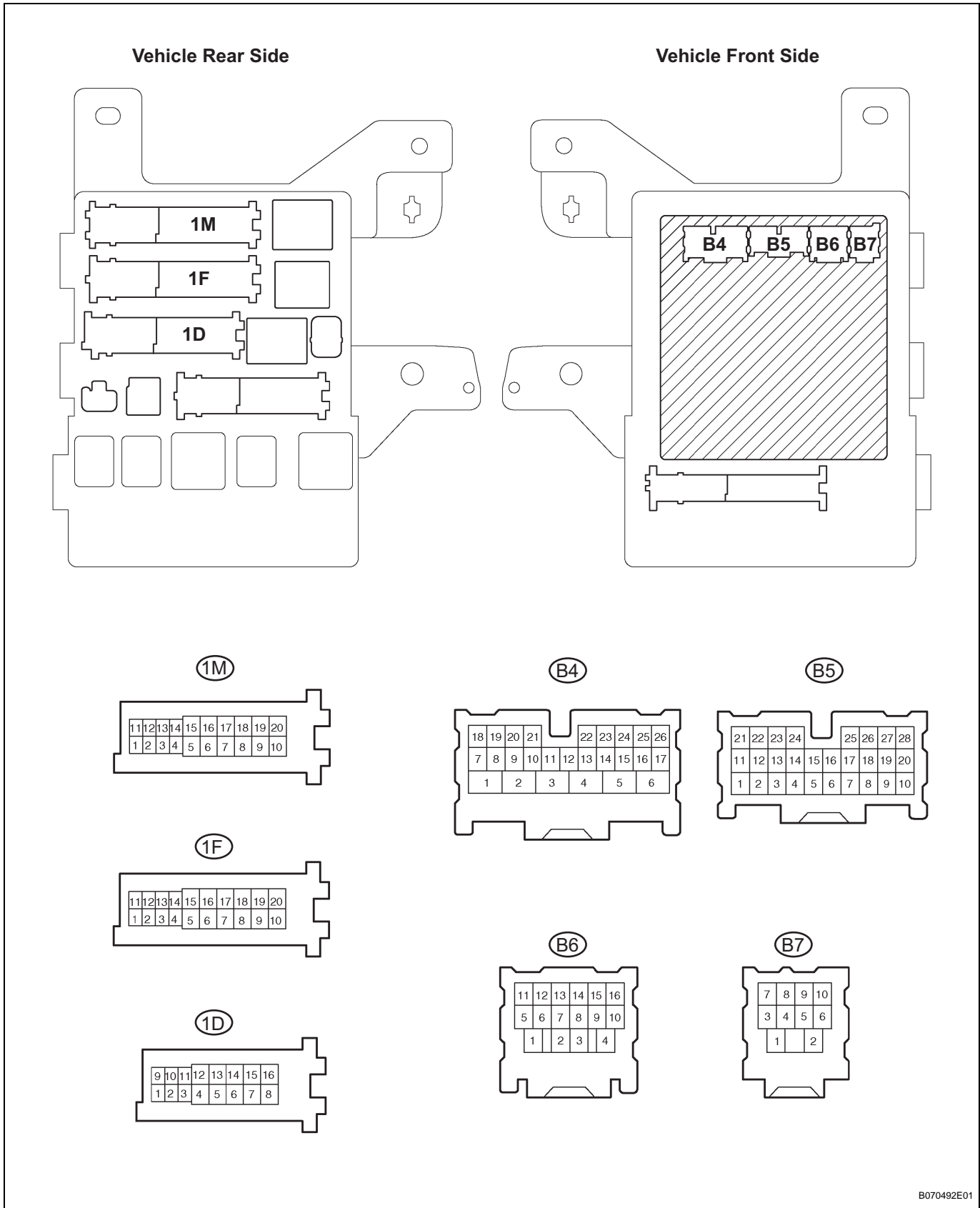
Resistance

Symbols (Terminal No.)	Wiring Color	Terminal Description	Condition	Specified Condition
OPN (M12-9) - E (M12-7)	GR - W-B	Sliding roof motor open output	Slide switch (OPEN) OFF → ON	10 to 14 V → 0 V
CLS (M12-8) - E (M12-7)	LG - W-B	Sliding roof motor close output	Slide switch (CLOSE) OFF → ON	10 to 14 V → 0 V
UP (M12-3) - E (M12-7)	SB - W-B	Sliding roof motor up output	Tilt switch (UP) OFF → ON	10 to 14 V → 0 V
DWN (M12-4) - E (M12-7)	G - W-B	Sliding roof motor down output	Tilt switch (DOWN) OFF → ON	10 to 14 V → 0 V

If the result is not as specified, the sliding roof ECU may have a malfunction.

2. CHECK INSTRUMENT PANEL J/B ASSEMBLY (MULTIPLEX NETWORK BODY ECU)

(a) Disconnect the 1D, 1F and 1M J/B connectors.



- (b) Check the voltage and resistance between each terminal of the wire harness side connectors and body ground.

Voltage

Symbols (Terminal No.)	Wiring Color	Terminal Description	Condition	Specified Condition
BECU (1D-10) - Body ground	LB - Body ground	+B (BECU) power supply	Constant	10 to 14 V

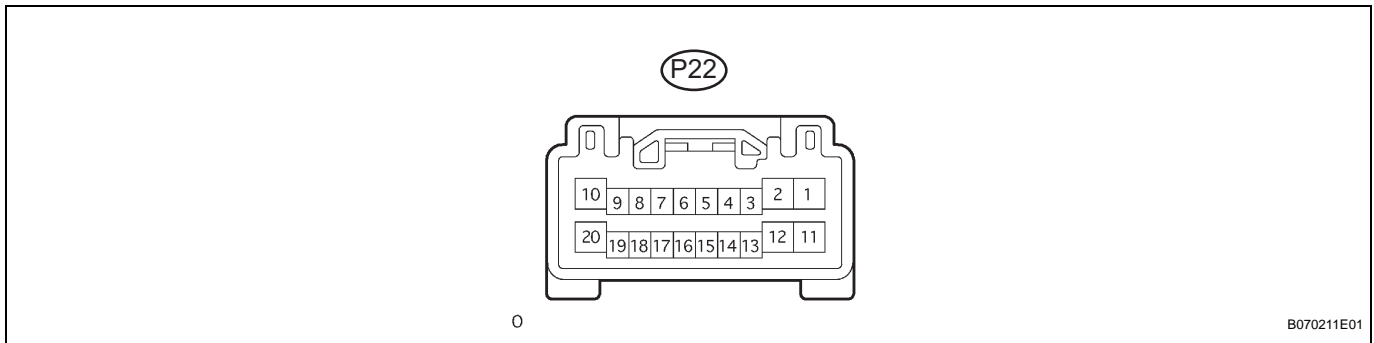
Resistance

Symbols (Terminal No.)	Wiring Color	Terminal Description	Condition	Specified Condition
GND1 (1F-10) - Body ground	W-B - Body ground	Ground	Constant	Below 1 Ω
GND2 (1M-9) - Body ground	W-B - Body ground	Ground	Constant	Below 1 Ω

If the result is not as specified, there may be a malfunction on the wire harness side.

3. CHECK POWER WINDOW REGULATOR MASTER SWITCH ASSEMBLY

- (a) Disconnect the P22 ECU connector.



- (b) Check the voltage and resistance of each terminal of the wire harness side connectors.

Voltage

Symbols (Terminal No.)	Wiring Color	Terminal Description	Condition	Specified Condition
BDR (P22-10) - GND (P22-2)	G - W-B	+B (BDR) power supply	Constant	10 to 14 V
CPUB (P22-9) - GND (P22-2)	L-B - W-B	+B (CPUB) power supply	Constant	10 to 14 V
SIG (P22-20) - GND (P22-2)	BR - W-B	Ignition power supply	Ignition switch OFF → ON	0 V → 10 to 14 V

Resistance

Symbols (Terminal No.)	Wiring Color	Terminal Description	Condition	Specified Condition
GND (P22-2) - Body ground	W-B - Body ground	Ground	Constant	Below 1 Ω

If the result is not as specified, there may be a malfunction on the wire harness side.