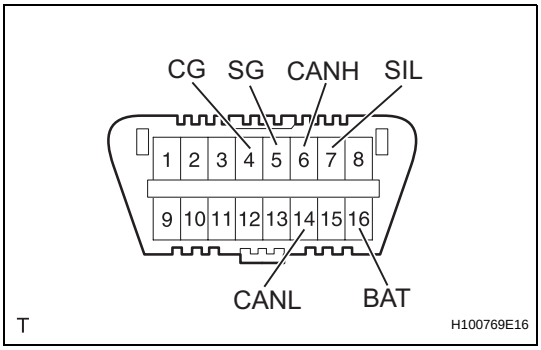
PROBLEM SYMPTOMS TABLE

POWER WINDOW CONTROL SYSTEM (W/ JAM PROTECTION)

Symptom	Suspected Area	See page
AUTO UP/DOWN function does not operate	1. Power window regulator motor assembly (Driver side)	WS-10
	2. Wire harness	WS-10
	3. Power window regulator master switch assembly	WS-10
Remote UP/DOWN function does not operate	1. Power window regulator motor assembly (Driver side)	WS-13
	2. Power window regulator master switch assembly	WS-13
	3. Wire harness	WS-13
Manual UP/DOWN function does not operate on driver side	1. P/W fuse	WS-16
	2. Power window regulator master switch assembly	WS-16
	3. Power window regulator motor assembly (Driver side)	WS-16
	4. Wire harness	WS-16
Manual UP/DOWN function does not operate on passenger side only	1. Power window regulator switch assembly (Passenger side)	WS-19
	2. Power window regulator motor assembly (Passenger side)	WS-19
	3. Wire harness	WS-19
Manual UP/DOWN function does not operate on rear LH only	1. Power window regulator switch assembly rear (Rear LH)	WS-22
	2. Power window regulator motor assembly LH (Rear LH)	WS-22
	3. Wire harness	WS-22
Manual UP/DOWN function does not operate on rear RH only	1. Power window regulator switch assembly rear (Rear RH)	WS-25
	2. Power window regulator motor assembly RH (Rear RH)	WS-25
	3. Wire harness	WS-25
Power windows do not operate at all	1. PWR fuse	WS-28
	2. ECU-IG fuse	WS-28
	3. P/W relay	WS-28
	4. IG1 relay	WS-28
	5. Power window regulator master switch assembly	WS-28
	6. Wire harness	WS-28
	7. Driver side J/B assembly (Multiplex network body ECU)	WS-28
Power window can be operated after ignition switch is turned OFF even if operative conditions are not met	1. Front door courtesy lamp switch	WS-32
	2. Wire harness	WS-32
	3. Driver side J/B assembly (Multiplex network body ECU)	WS-32
AUTO UP operation does not fully close power window (Jam protection function is activated)	1. Front door glass run LH	WS-35
	2. Front door window glass LH	WS-35
	3. Front door window regulator sub-assembly LH	WS-35
Power window can be operated by wireless operation	Driver side J/B assembly (Multiplex network body ECU)	WS-36



DIAGNOSIS SYSTEM

1. CHECK DLC3

(a) The vehicle's ECU uses ISO 15765-4 for communication protocol. The terminal arrangement of the DLC3 complies with SAE J1962 and matches the ISO 15765-4 format.

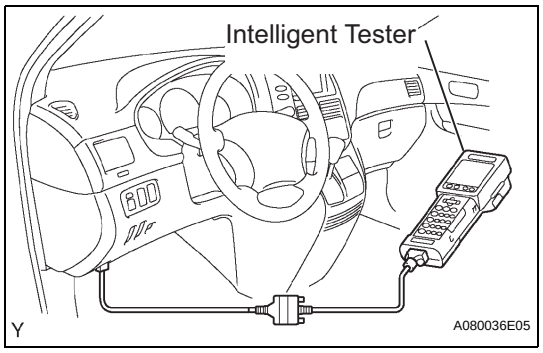
Symbols (Terminal No.)	Terminal Description	Condition	Specified Condition
SIL (7) - SG (5)	Bus "+" line	During transmission	Pulse generation
CG (4) - Body ground	Chassis ground	Always	Below 1 Ω

Symbols (Terminal No.)	Terminal Description	Condition	Specified Condition
SG (5) - Body ground	Signal ground	Always	Below 1 Ω
BAT (16) - Body ground	Battery positive	Always	10 to 14 V
CANH (6) - CANL (14)	CAN bus line	Ignition switch OFF*	54 to 69 Ω
CANH (6) - CG (4)	HIGH-level CAN bus line	Ignition switch OFF*	200 Ω or higher
CANL (14) - CG (4)	LOW-level CAN bus line	Ignition switch OFF*	200 Ω or higher
CANH (6) - BAT (16)	HIGH-level CAN bus line	Ignition switch OFF*	6 kΩ or higher
CANL (14) - BAT (16)	LOW-level CAN bus line	Ignition switch OFF*	6 kΩ or higher

NOTICE:

***: Before measuring the resistance, leave the vehicle as is for at least 1 minute and do not operate the ignition switch, any other switches or the doors.**

If the result is not as specified, the DLC3 may have a malfunction. Repair or replace the harness and connector.



(b) Connect the cable of the intelligent tester to the DLC3, turn the ignition switch to the ON position and attempt to use the intelligent tester. If the screen displays a communication error message, a problem exists in the vehicle side of the tester side.
HINT:

- If communication is normal when the tool is connected to another vehicle, inspect the DLC3 on the original vehicle.
- If communication is still impossible when the tool is connected to another vehicle, the problem is probably in the tool itself. Consult the Service Department listed in the tool's instruction manual.