SYSTEM DESCRIPTION

1. DESCRIPTION

The power window control system has the following functions.

Function	Outline
Manual UP / DOWN function	Driver side power window: Function that raises window while power window switch is pulled up, and lowers window while pushed halfway down (window stops as soon as switch is released) Other power windows: Function that raises window while power window switch is pulled up, and lowers window while pushed down (window stops as soon as switch is released)
AUTO DOWN function	Function that enables window of driver side door to be fully opened by one full push downward on power window switch
Remote UP / DOWN function	Function that allows power window master switch to control manual UP / DOWN operation of passenger side power window and rear power windows



PROBLEM SYMPTOMS TABLE

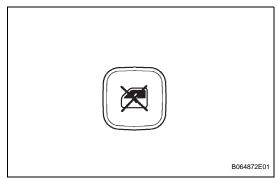
HINT:

Use the table below to help determine the cause of the problem symptom. The potential causes of the symptoms are listed in order of probability in the "Suspected Area" column of the table. Check each symptom by checking the suspected areas in the order they are listed. Replace parts as necessary.

Power window control system

Symptom	Suspected area	
	1. GAUGE fuse	-
All a server of a decrea de la el constant	2. POWER relay	WS-36
All power windows do not operate	3. Ignition switch	ST-18
	4. Wire harness	-
ALITO DOMAN for a fine data and a part of	Power window regulator master switch assembly	WS-8
AUTO DOWN function does not operate	2. Power window regulator motor assembly (front LH)	WS-13
	Power window regulator master switch assembly	WS-8
Only one power window does not operate	2. Power window regulator switch assembly	WS-11
	3. Power window regulator motor assembly	WS-13
	4. Wire harness	-
Window lock system does not operate	Power window regulator master switch assembly WS-8	





ON-VEHICLE INSPECTION

- 1. CHECK POWER WINDOW REGULATOR MASTER SWITCH ASSEMBLY (WINDOW LOCK SWITCH)
 - (a) Check that operation of the power windows except the driver side power window is disabled when the window lock switch of the power window regulator master switch is pressed.
 - (b) Check that the power windows can operate when the window lock switch is pressed again.

2. CHECK MANUAL UP / DOWN FUNCTION

(a) Check that the AUTO switch of the master switch can operate the driver side power window as follows:

OK:

Condition	Master Switch	Switch Operation	Power Window
Ignition switch ON	Driver side	Pulled up	UP (closes)
Ignition switch ON	Driver side	Pushed halfway down	DOWN (opens)

(b) Check that each regulator switch can operate each power window as follows:

OK:

Condition	Regulator Switch	Switch Operation	Power Window
Condition	Regulator Switch	Switch Operation	Power Willdow
Ignition switch ONWindow lock switch OFF	Passenger side	Pulled up	UP (closes)
Ignition switch ONWindow lock switch OFF	Passenger side	Pushed down	DOWN (opens)
Ignition switch ON Window lock switch OFF	Rear LH	Pulled up	UP (closes)
Ignition switch ON Window lock switch OFF	Rear LH	Pushed down	DOWN (opens)

Condition	Regulator Switch	Switch Operation	Power Window
Ignition switch ON Window lock switch OFF	Rear RH	Pulled up	UP (closes)
Ignition switch ONWindow lock switch OFF	Rear RH	Pushed down	DOWN (opens)

3. CHECK AUTO DOWN FUNCTION

(a) Check that the AUTO switch of the master switch can operate the driver side power window as follows:

OK:

Condition	Master Switch	Switch Operation	Power Window
Ignition switch ON	Driver side	Fully pushed down	AUTO DOWN (fully opens)

4. CHECK REMOTE UP / DOWN FUNCTION

(a) Check that the power window regulator master switch can operate the power windows besides the driver side power window as follows:

OK:

Condition	Master Switch	Switch Operation	Power Window
Ignition switch ONWindow lock switch OFF	Passenger side	Pulled up	UP (closes)
Ignition switch ONWindow lock switch OFF	Passenger side	Pushed down	DOWN (opens)
Ignition switch ONWindow lock switch OFF	Rear LH	Pulled up	UP (closes)
Ignition switch ONWindow lock switch OFF	Rear LH	Pushed down	DOWN (opens)
Ignition switch ONWindow lock switch OFF	Rear RH	Pulled up	UP (closes)
Ignition switch ONWindow lock switch OFF	Rear RH	Pushed down	DOWN (opens)

5. CHECK PTC OPERATION

HINT:

PTC operation is a function that prevents overloading of the power window regulator by stopping the motor. PTC operation activates when the power window regulator switch is operated for a predetermined amount of time.

- (a) Pull up and hold the power window regulator switch for more than 90 seconds. Then release the switch.
- (b) Check that pressing the switch does not move the window.
- (c) Wait until 60 seconds have passed since the switch was released in the first step. Check that pressing the switch results in normal window movement.

