

POWER WINDOW SYSTEM OPERATION

B3E091258000T04

Manual Open/Close

- The window opens/closes according to the down (push) or up (pull) operation of the power window main switches and the power window subswitches.

Auto-Open/Close

- The window automatically moves to a fully-opened or closed position when the power window main switches or the power window subswitches are operated two times, either down (push) or up (pull).

Auto Reverse Pinch Protection Function

- If any object is pinched in the window during auto-close operation, the window automatically opens **approx. 200 mm {7.9 in}**.

Two-step down function

- If a switch is lightly pushed (manual open operation) when the window is completely closed, the window lowers a set distance. (Initial setting is **approx. 30 mm {1.2 in}**.)
- If the manual open operation is performed with the two-step down function enabled, the window will always stop momentarily. (This is not a malfunction.)
- The set distance the window goes down can be changed. (Within a range of **approx. 20-100 mm {0.79-3.9 in}**.)
- The two-step down function can be disabled. (Initial setting is enabled)
- If the operation of the auto open/close, manual close or window obstruction is detected during two-step down function operation, these other operations are given priority.
- Does not function during IG OFF timer operation.

IG OFF Timer

- Allows operation of the driver's power window for **approx. 45 s** after the ignition switch has been turned from the ACC to the LOCK position.

Fail-safe

- The power window system is switched to fail-safe mode to prevent a malfunction when the P/W CM detects a malfunction in the pulse signal (Hall IC).

Malfunction condition	IG SW ON	IG SW OFF	Recovery condition
Pulse 1 (for pinching and door glass position detection) stopping malfunction • Pulse 2 pulse detected but pulse 1 not detected when opening or closing			

Pulse 2 (for door glass direction detection) stopping malfunction • Pulse 1 detected but pulse 2 is not detected during close or open operation	Automatic operation is prohibited	Auto and manual operation are prohibited	Pulse signals 1 and 2 detected normally during close operation, and redetection of fully-closed position return/non-return ranges
Pulse signal malfunction detected (Inversion of input signals of or large phase deviation between pulses 1 and 2) • Difference detected between the direction detected by the signals of pulses 1 and 2, and the actual direction			
Non-return range downturn malfunction • The signal input from pulse 1 is higher than the position stored in the P/W main switch is detected during close operation			
Pulse 1 and 2 stopping malfunction • Pulse signals 1 and 2 not detected after open operation initiated from the fully closed position			