

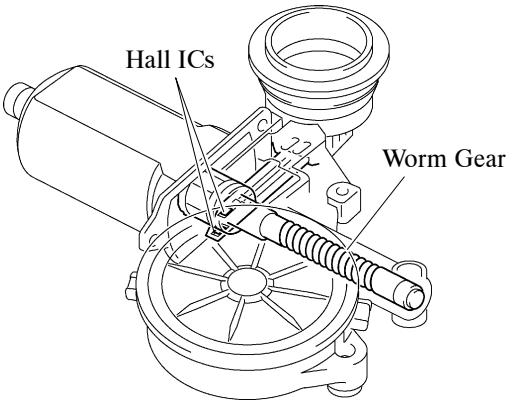
■JAM PROTECTION FUNCTION

A jam protection function automatically stops the power window and moves it downward if a foreign object gets jammed in the door window during one-touch auto up operation.

- The operation of the jam protection function is described below.

Door window position from full close	Operation
200 mm (7.87 in.) or more	Down operation of 50 mm (1.97 in.) or one second.
200 mm (7.87 in.) or less	Down operation until door window operation of 200 mm (7.87 in.) is reached or five seconds.

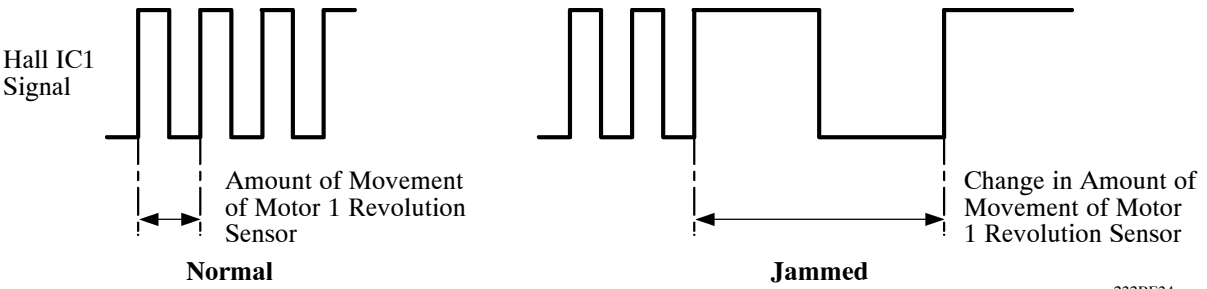
- The worm gear and two hall ICs in the power window motor assembly are used to enable power window jam protection.



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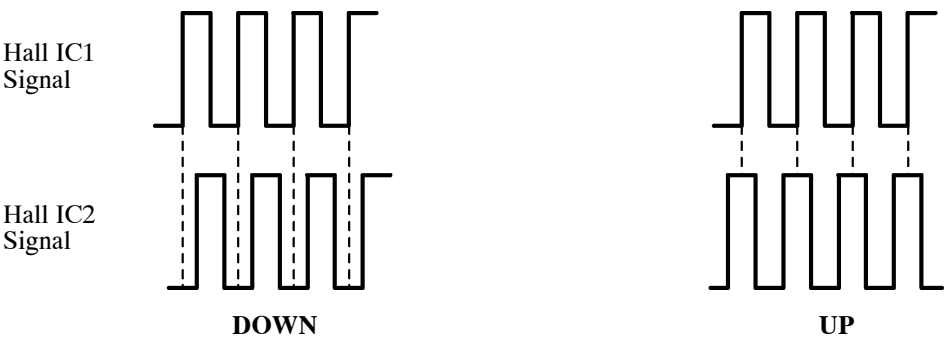
- The hall IC converts the changes in the magnetic flux that occur through the rotation of the worm gear into pulse signals and outputs them to the power window regulator master switch assembly or power window switch.
- To control the jam protection function, these switches determine the amount of movement and jamming of the window glass based on the pulse signals from the hall IC1; and the switches judge the direction of the window glass movement based on the phase difference between the pulses from the hall IC1 and hall IC2.

► Judgment of Movement and Jamming ◀



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► Judgment of Moving Direction ◀



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