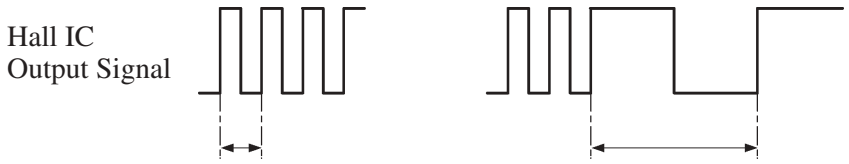
■JAM PROTECTION FUNCTION

1. Jam Protection by Hall IC

If an object is jammed during the operation of the slide door, the power slide door ECU detects a change in the width of the pulses that are output by the Hall ICs of the slide door motor. If the power slide door ECU receives pulse fluctuations during the opening or closing operation of the slide door, it sounds the slide door warning buzzer for 0.1 seconds, and retracts the slide door. The detection of the overload is corrected at predetermined intervals in accordance with the changes in the speed of the motor (the moving speed of the slide door).

▶ Judgment of Amount of Movement and Opening/Closing Speed ◀



Slide Door Motor 1 Revolution (Normal)

Slide Door Motor 1 Revolution (Jammed)

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2. Jam Protection by Touch Sensor

If the touch sensor that is provided at the front end of the slide door becomes compressed due to the jamming of an object while the slide door is moving in the closing direction, the resistance of the sensor changes. When the ON signal of the touch sensor is input in the power slide door ECU, the close relay turns OFF to cut off the current that was flowing in the closing direction, thus stopping the slide door motor. After the slide door warning buzzer sounds for approximately 0.1 seconds, the open relay turns ON to operate the slide door motor in reverse, in the opening direction.

3. Continuous Jamming Detected

If the power slide door ECU detects two consecutive jamming in a slide door operation, in the next instant, the ECU turns OFF the slide door motor and the magnetic clutch. As a result, the slide door can be operated manually.