

## 7. Description of Operation

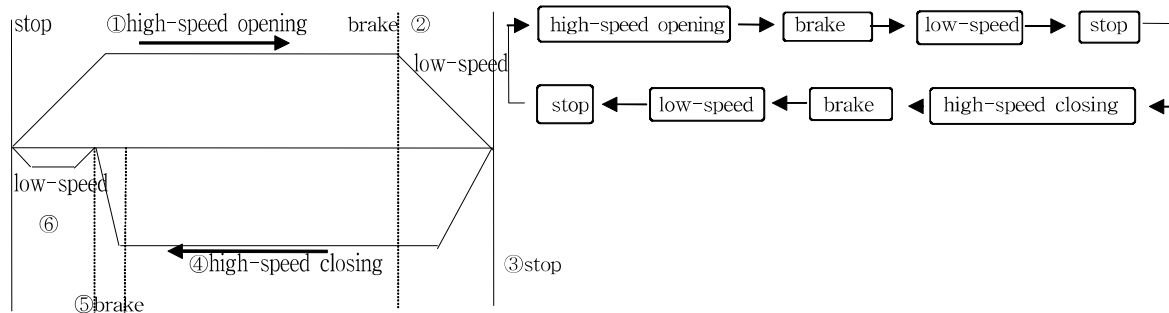
### Description of Movements

#### 1) Operation at power input

When a power switch is on, it opens with high-speed(memorizing the opening door width) and closes with low-speed(memorizing the closing door width).

\*Feasibility of low-speed control

#### 2) Operating description of tubular operation cycle



(1)When a sensor signal is on, it opens with high-speed. After a brake is applied before a complete opening, it opens completely at low-speed.(1 cycle operation)

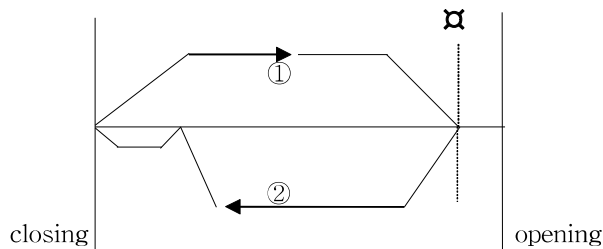
(2)When a sensor signal is off, it closes at high-speed after hold time. After a brake is applied before a complete closing, it closes completely at low-speed.

(3)While a door is being shut with safety sensor on, the door opens in reverse. And after hold time when either a body or an object is thoroughly passed, it closes.

### Description of operation at an abnormal occurrence

#### 1. A case of an obstacle at opening:

- ①When there is an obstacle, it stops and closes at low-speed(safety velocity).
- ②When a sensor signal is perceived, it opens and closes after hold time.

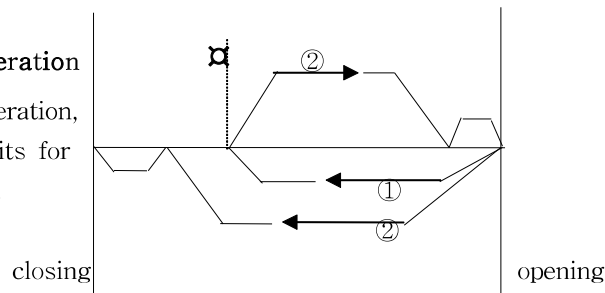


#### 2. A case of an obstacle at closing:

When there is an obstacle at closing, a door reopens in reverse.

#### 3. A case of an imperfect factor at safety operation

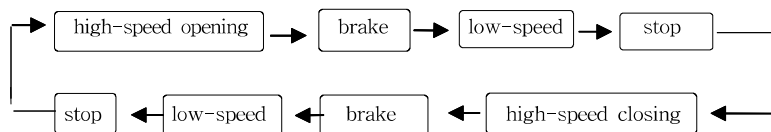
When there is an imperfect factor at safety operation, an interrupt ringing tone rings 7 times and waits for an inspection after the system is put to a stop.



## 8. Adjustment at Test Running

First, Send a signal While power is turn on and the setting will be started.  
(Although power is turn on, unless you send a signal, the setting won't be started)

1. Turn off power S/W
2. After installing the engine unit, recheck looseness of volt.  
Transcable must be plugged in properly.
3. Check transit condition of the door.
  - + Is transit resistance of door, barrier too high?
  - + Is tension of belt normal? If a belt spins, an error occurs in operation.
  - + Is low-speed too slow? If low-speed is too slow, reopening may occur.
4. Adjust opening direction S/W.  
Right direction (ADH-FW door) ON - door opens to the right hand.  
Left direction (ADH-FW door) OFF - door opens to the left hand.
5. Completing the above sensor procedure, turn power S/W on.
6. Launch a sensor and check automatic door operation.  
When the sensor is launched, it will perform basic operation as an automatic door as the following shows.



- ※ Right after the beginning of operation, width of high-speed opening and closing are widened.  
Every time the previous operation is repeated, width of the high-speed opening and closing becomes narrower and stable in the optimum operation state.
7. If the sensor isn't set to sense, it closes after the hold time.
    - ※ When the sensor is not connected, a movement can be perceived just like when the sensor is sensed by shortening an input terminal.
  8. As the sensor senses, adjust with each volume for speed adjusting.
- 1) Inspection item

Inspection item	S t a t u s	Adjustment and Confirmation
<b>Brake adjustment</b>	When the break is too powerful	Eliminate the low section (od,cd) value by 1 step.
<b>Closing speed adjustment</b>	When the closing speed is too fast	Adjust by reducing low-speed value (ss) one step at a time
<b>Low-speed adjustment</b>	When the low-speed is too fast and makes noise	Adjust by reducing low-speed value (ss) one step at a time