

LAMP®

FD80-AFH HEAVY DUTY ALUMINUM FRAME SLIDING DOOR (Surface Mount Roller, Two-way Soft Close) Installation Manual

Part No.FD80DHCMP-AF

Thank you for selecting our product. Before starting installation, please read this manual thoroughly to ensure correct installation. Please keep this manual at hand for future reference.

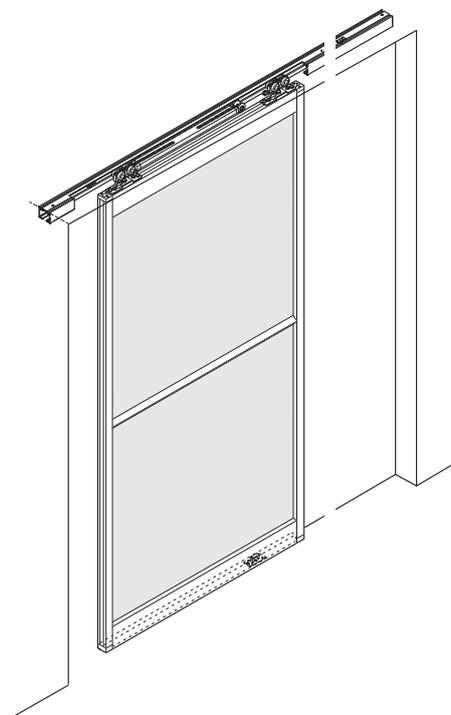
ABOUT THE PRODUCT

- This product is a parts set for heavy duty aluminum frame sliding door system for indoor use.
- Two-way soft closer enables two-way soft closing movement for both direction.

SPECIFICATIONS

	Without Intermediate support ⑬	With Intermediate support ⑬
Door width	804 mm – 900 mm	804 mm – 1500 mm
Max.Door height	2200 mm	2500 mm
Min.Door thickness	5 mm or 6 mm	
Max.Door weight	80 kg	
Height adjustable range	4 mm upward, 4 mm downward	

- The closing speed of the soft closing type door may change due to ambient temperature, operating method or installation quality.
- Recommended ambient temperature range is 5 to 40 degrees centigrade.



FOR YOUR SAFE WORK AND CORRECT INSTALLATION

Meaning of symbols

 Warning Caution	 Prohibited	 Required
------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------

⚠ WARNING: If these warnings are not followed, it may result in death or serious injury.

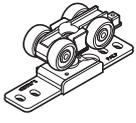
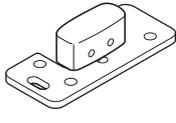
- ❗ This (sliding door system) should be installed by an experienced person who has correct knowledge. If the system is not installed correctly, the door will not operate smoothly, and or may cause injury.
- ❗ It is necessary to manufacture the frame with sufficient strength so it endures the weight of the door and impact shocks upon opening/closing the door. A frame with poor strength might result in improper and slower movement of the door. In the worst case, the door might drop down and cause injury.
- ⊘ Do not try to use this product for any other purposes other than originally intended for. Do not use the parts for applications that are out of specification.
- ⊘ Do not disassemble nor modify any parts than those described in this document.

⚠ Caution: If these cautions are not followed, it may result in injury or damage.

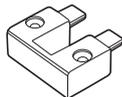
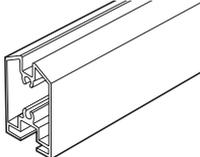
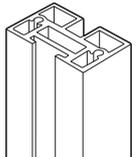
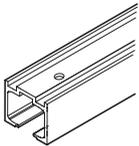
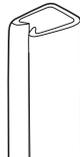
- ❗ Make sure to follow the designated measurements and specifications as well as horizontal and verticals angles. Make sure that the frame is not warped, since it may affect the movement of the door.
- ❗ If cutting any parts, make sure to remove any burr before installation. Also check the upper track for any left-over burr or scrap and remove these.
- ❗ This (sliding door system) is a part for architectural fittings. After installation, make sure to test the finished product thoroughly to ensure that it is well-functioning and safe.
- ❗ Make sure to test the screws for slack at regular intervals (one month from first usage, half year and then one time every year is recommended).
- ⚠ To avoid damaging of aluminum frame, carry out installation work on clean floor.
- ⚠ Please use the tempered glass. It is recommended to use shatter-proof film on the glass.
- ❗ When installing “pocket door” specification, make “easy-maintenance” structure. For example, use removable panel.

COMPONENT PARTS

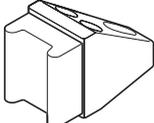
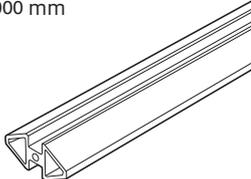
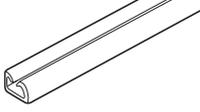
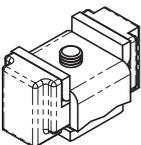
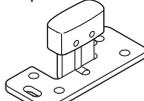
Parts set (FD80DHCMP-AF) per door

<p>① Two-way Soft Closer (surface mount) + Trigger Accessory screw : Pan head tapping screw 4 x 45 4 pcs (not needed for this set) Countersunk head tapping screw 4 x 30(φ6head) 4 pcs (for trigger)</p>  <p>1 pc 2 pcs</p>	<p>② Upper roller (surface mount) Accessory screw : Pan head tapping screw 4 x 45 4 pcs (not needed for this set)</p>  <p>1 pc</p>	<p>③ Floor guide S Accessory screw : Bind head tapping screw 4 x 16 5 pcs</p>  <p>1 pc</p>
<p>④ Plate nut Accessory screw : Hexagon socket button head screw M5 x 16 8 pcs Spring lock washer 5 8 pcs Plain washer 5 8 pcs</p>  <p>1 set</p>		

Required Parts

<p>⑤ Corner Part</p>  <p>4 pcs / door</p>	<p>⑥ Mount screw set</p> <ul style="list-style-type: none"> Hexagon socket head cap screw M6 x 30 8 pcs (for Frame⑦⑧) Hexagon socket head cap screw M4 x 30 6 pcs (for Intermediate support⑬) Hexagon socket countersunk head screw M4 x 25 8 pcs (for Corner Part⑤) <p>1 set</p>	<p>⑦ Horizontal frame 2000 mm</p> 	<p>⑧ Vertical frame 2500 mm/3000 mm</p> 
<p>⑨ Upper track (Various sizes) Accessory screw : Pan head tapping screws 5x40</p> 	<p>⑩ Gasket for 5 mm glass : 2500 mm for 6 mm glass : 3000 mm</p> 	<p>⑪ Edge cover 2500 mm/3000 mm</p> 	

Optional parts

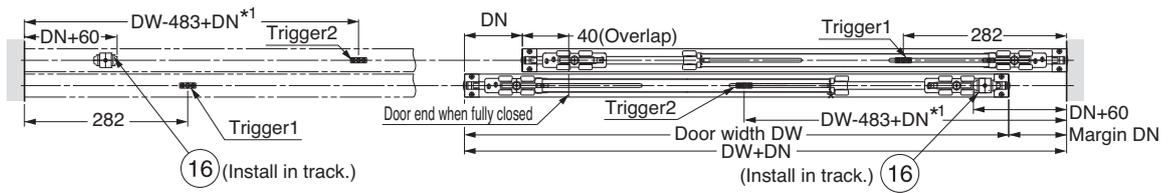
<p>⑫ Door stopper (floor) Item No. : FD30-HTKY Accessory screw : Bind head tapping screw 4x30 3 pcs Needed when vertical frame is not used.</p> 	<p>⑬ Intermediate support Item No. : AF-25-W03 2000 mm</p> 	<p>⑭ Gasket for Intermediate support Item No. : for 5 mm glass ... AF-25-P03 for 6 mm glass ... AF-25-P16 2500 mm</p> 	<p>⑮ Handle Item No. : WN799Z160E101 It is adhered after drilling two 7 mm dia. holes.</p> 
<p>⑯ Stopper block Item No. : FD80-HSB This is used in the upper track.</p> 	<p>⑰ Floor guide L Item No. : FD50-BG32 Accessory screw : Bind head tapping screw 4x16 5 pcs This is used when larger space below the door is required.</p> 	<p>⑱ Spanner Item No. FD30-FSP</p>  <p>Nominal designation 10, 12</p>	

INSTALLATION DRAWING (EXAMPLE)

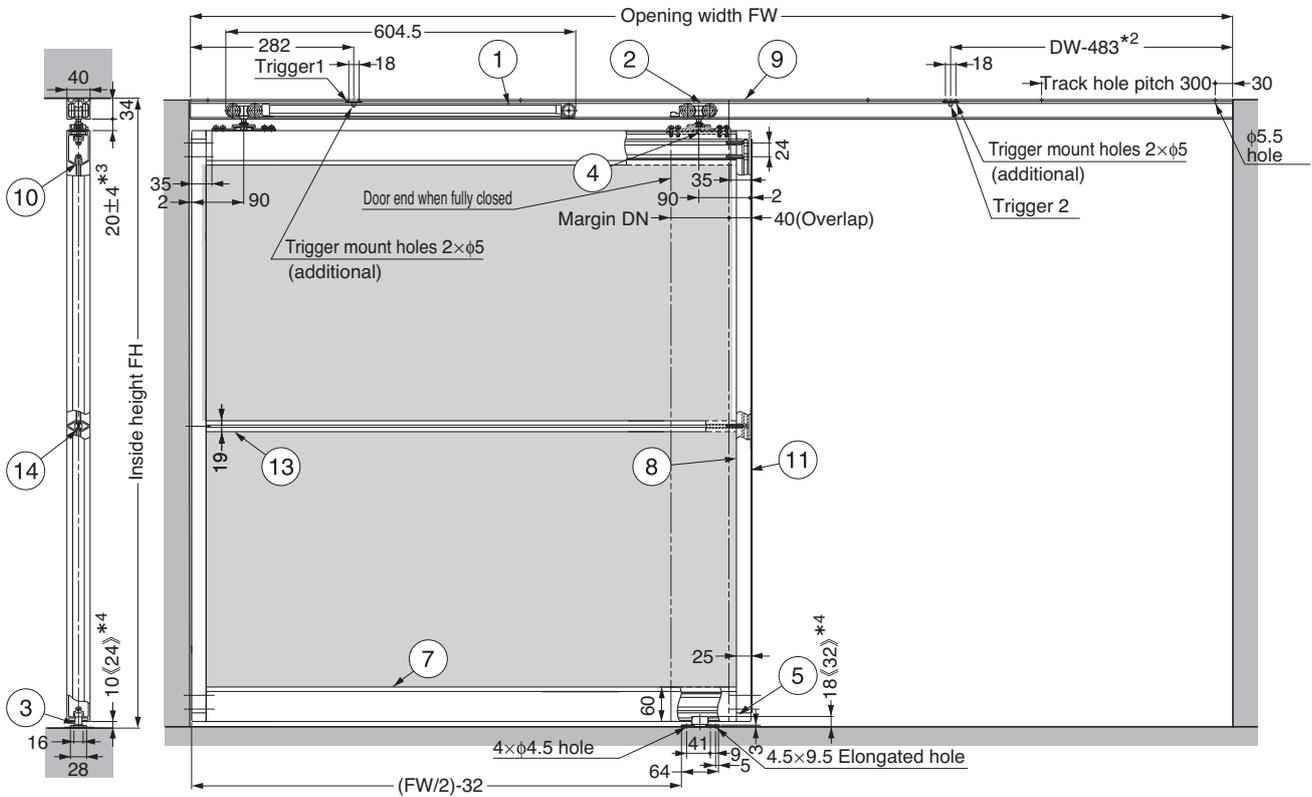
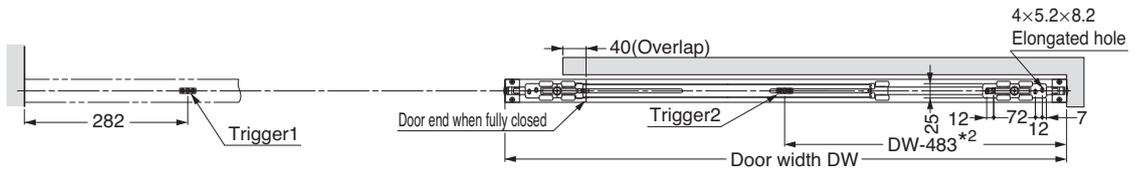
Refer to page 4 about the dimensions of the doors and glass panels.

Double sliding

Part set: Use 2 sets of FD80DHCMP-AF



Single sliding



- *3 Height adjustable range : -4 mm to +4 mm.
- *4 Dimension 《 》 : when floor guide L17(optional) is used.

INSTALLATION DIMENSIONS FOR TRIGGER 2

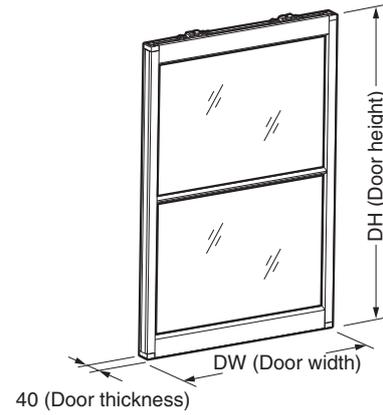
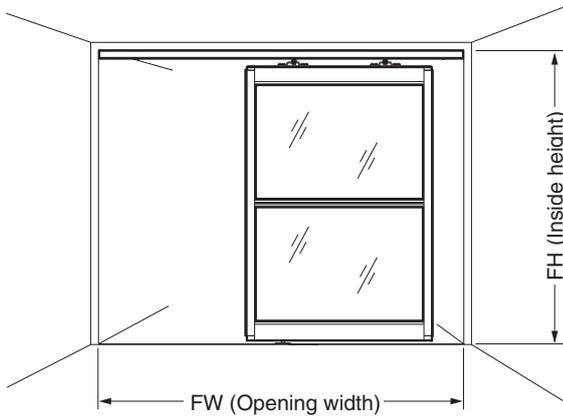
Please add the Margin DN to dimension for Trigger 2, if you are using a protruding handle. Example shown below.

DW	*2 [Margin DN=0 mm] Installation dimension for Trigger 2	*1 [For Double sliding only] Example [Margin DN=70 mm] DW-483+DN is the Installation dimension for Trigger 2
1,000	517	587
1,100	617	687
1,200	717	787
1,300	817	887
1,400	917	987
1,500	1,017	1,087

DIMENSIONS OF DOORS

(Cut off after the decimal point for the divided dimensions.)

■ Drawing of installed door



$$DH \text{ (Door height)} = FH - 64$$

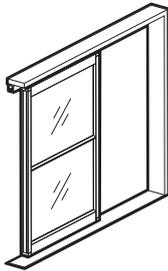
$$\text{Single sliding DW (Door width)} = \frac{FW + DN \text{ (Margin)} + 40}{2}$$

$$\text{Double sliding DW (Door width)} = \frac{FW + 40}{2}$$

$$GH \text{ (Glass height)} = \frac{DH - 104 - (\text{Number of Intermediate support} \times 11)}{\text{Number of glass panels}}$$

$$GW \text{ (Glass width)} = DW - 34$$

Example 1



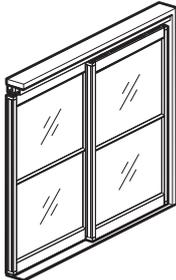
Ex: 1 door on single track

Size of the door when Opening width 1800 mm and Opening height 2400 mm with 80 mm of margin

$$DH = 2400 - 64 \\ = 2336 \text{ mm}$$

$$DW = \frac{1800 + 80 + 40}{2} \\ = 960 \text{ mm}$$

Example 2



Ex: 2 door on single track

Size of each door when Opening width 1800 mm and Opening height 2400 mm

$$DH = 2400 - 64 \\ = 2336 \text{ mm}$$

$$DW = \frac{1800 + 40}{2} \\ = 920 \text{ mm}$$

1 Cutting and hole processing of standard length parts

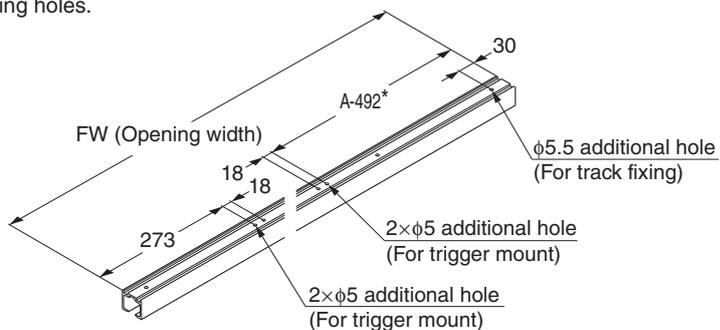
⚠ Caution

- Cut carefully so the cut edge is square to avoid bias and skewing.
- Make sure to remove any burr. Also check the upper track for any left-over burr or scrap and remove these.

1-1 Processing of Upper track⑨

Length = FW (Opening width)

Refer to the figure on the right for cutting and drilling holes.



About dimension A (See the drawing on page 3 for the detail.)

Single sliding

$$A = DW \text{ (Door width)}$$

$$= \frac{FW \text{ (Opening width)} + DN \text{ (Margin)} + 40}{2}$$

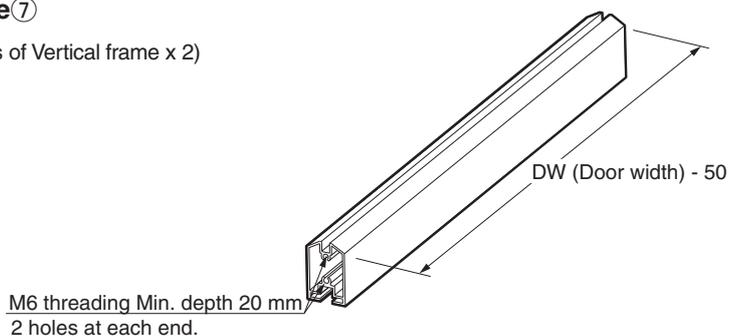
Double sliding

$$A = DW \text{ (Door width)} + DN \text{ (Margin)}$$

$$= \frac{FW \text{ (Opening width)} + 40}{2} + DN \text{ (Margin)}$$

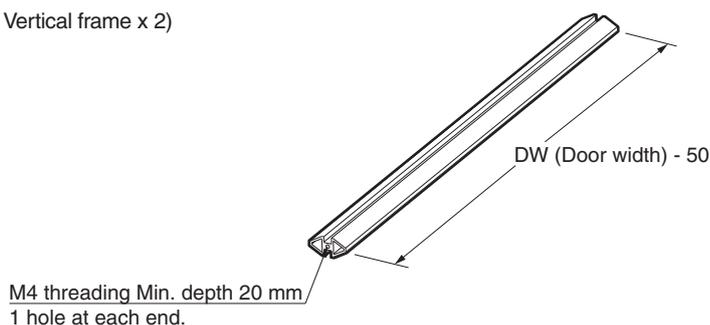
1-2 Processing of Horizontal frame⑦

Length = DW(Door width) - 50 (Thickness of Vertical frame x 2)

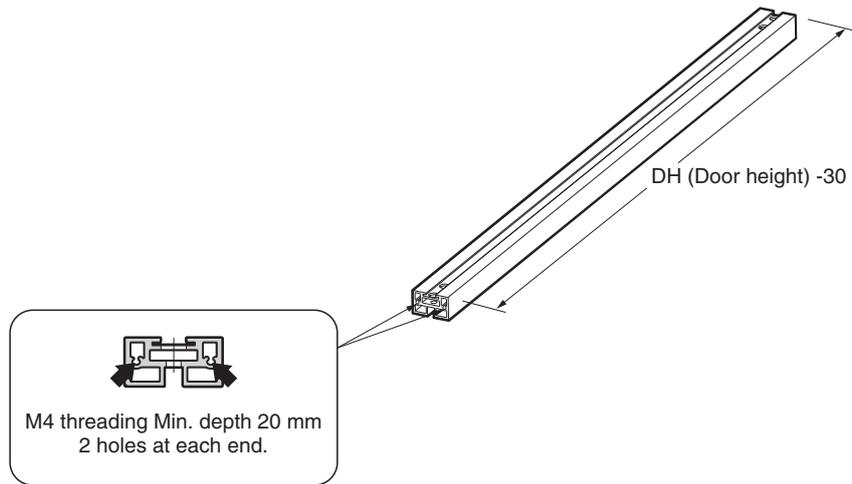


1-3 Cutting and hole processing of Intermediate support⑬, when used

Length = DW(Door width) - 50 (Thickness of Vertical frame x 2)



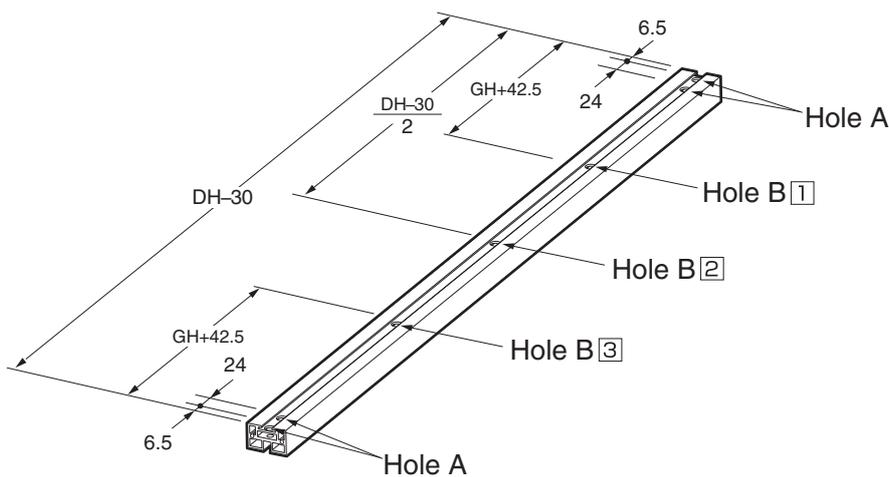
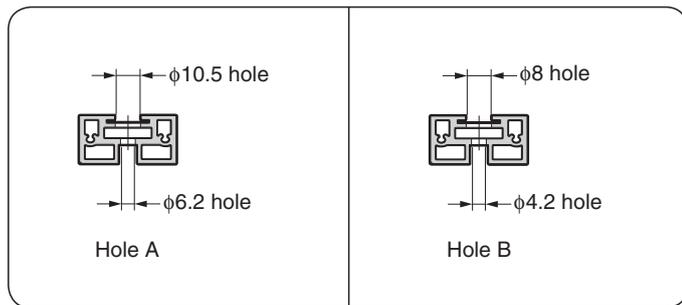
1-4 Processing of Vertical frame[Ⓢ] - Step 1



1-5 Processing of Vertical frame[Ⓢ] - Step 2

Drill holes according to the quantity of Intermediate support.

- Hole A only if there is no Intermediate support
- Hole A + B^② for 1 Intermediate support
- Hole A + B^①, B^③ for 2 Intermediate supports
- Hole A + B^①, B^②, B^③ for 3 Intermediate supports

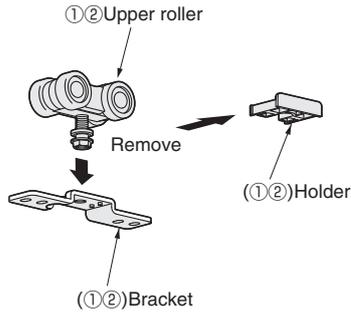


DH: Door height
GH: Glass height

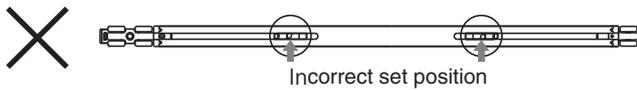
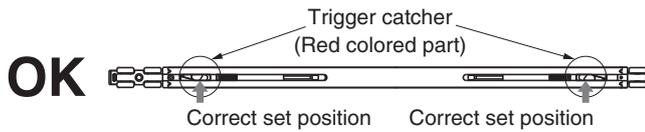
2 Assembling parts

2-1 Disassembling Rollers

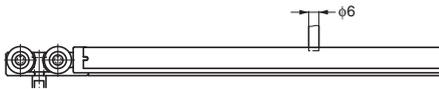
Remove upper roller bracket and holder.



2-2 Confirmation before installing Two-way soft closer



If the position is wrong, pull back the trigger catcher to the correct position using 6 mm diameter hard bar.

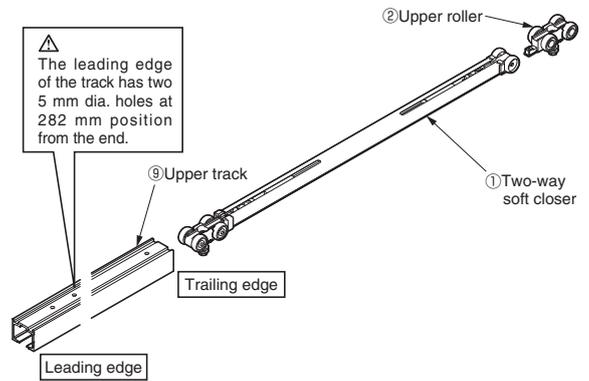


Caution

If the closer is installed without conformation, it will cause the trouble such as no-sliding of door.

2-3 Assembly of parts for track

- (1) Assemble the parts in order of ① to ② with care of direction.
- (2) Tape around rollers and upper track to prevent drop of inserted parts.

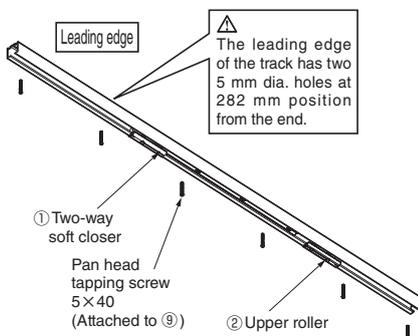


3 Installing Upper track⑨, Trigger①, and Floor guide S③

3-1 Mounting Upper track⑨

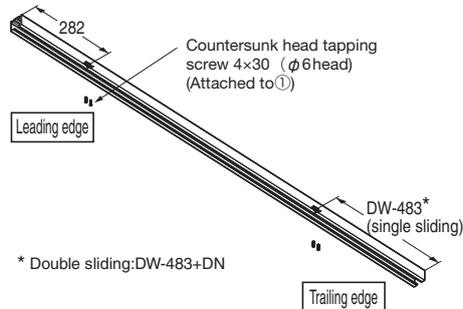
Confirm that leading edge of the upper track is in same direction as the leading edge of the door.

Fix the upper track with attached screws.



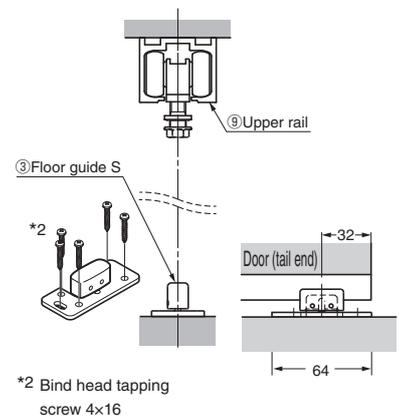
3-2 Installing Trigger①

According to "Installation Drawing (Example)", install triggers with attached screws.



3-3 Installing Floor guide S③

Install the Floor guide so that it stays under the door when it is opened or closed.

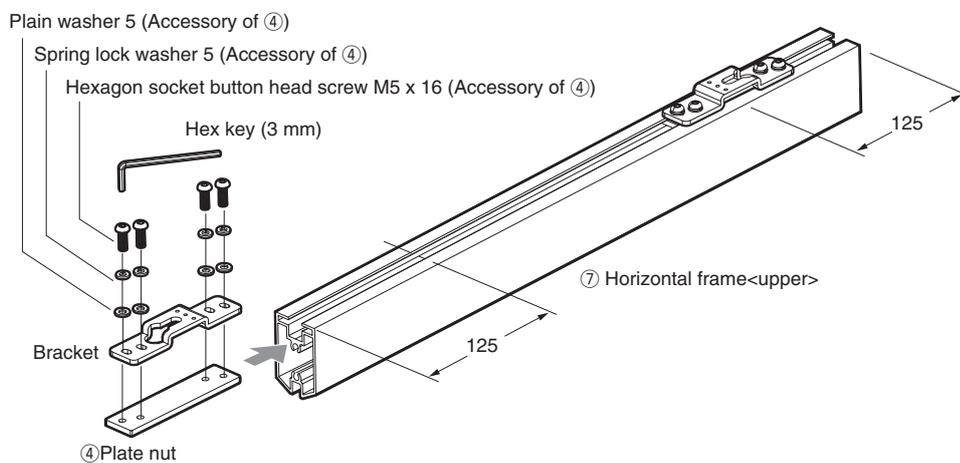


4 Assembling door

⚠ Caution

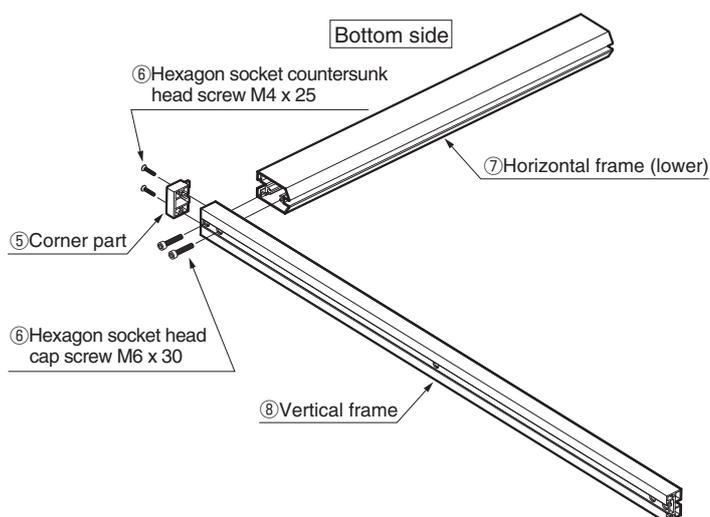
- Coat screw threads with anti-loose material such as "thread locking".
- During door installation, handle the glass carefully to prevent injury.

4-1 Preparation of Horizontal frame⑦ - Upper

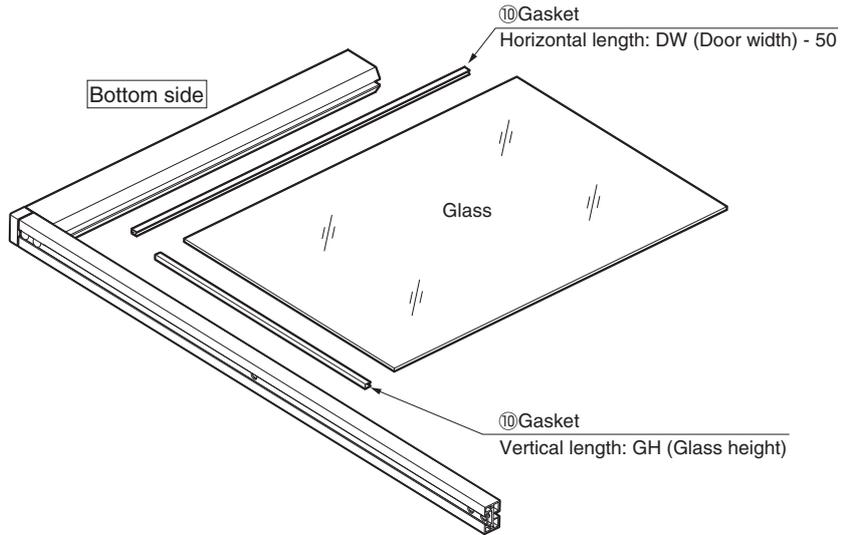


Set the Bracket to upper Horizontal frame ⑦, using Plate nut ④.
The distance from the edge and Bracket center should be 125 mm.

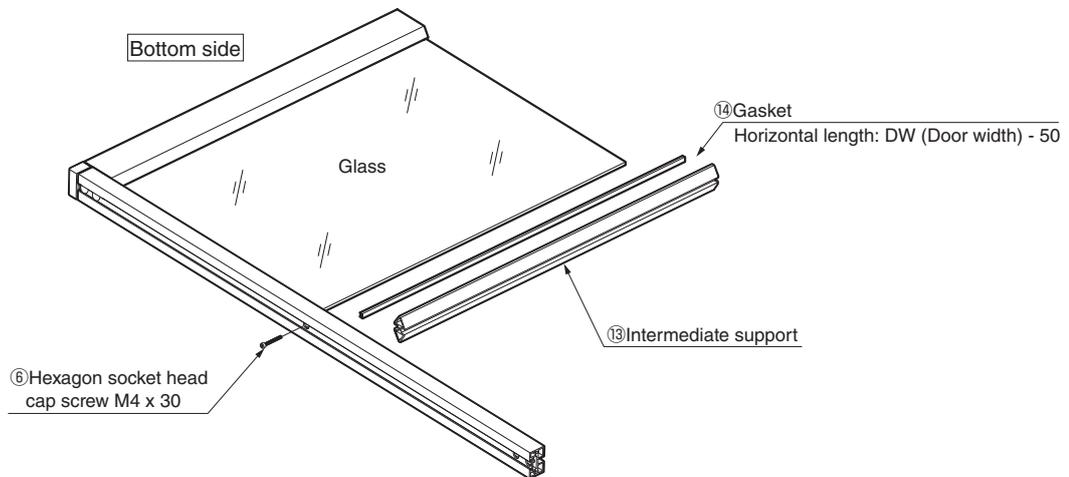
4-2 Assembly of Horizontal frame⑦ (lower) and Vertical frame⑧



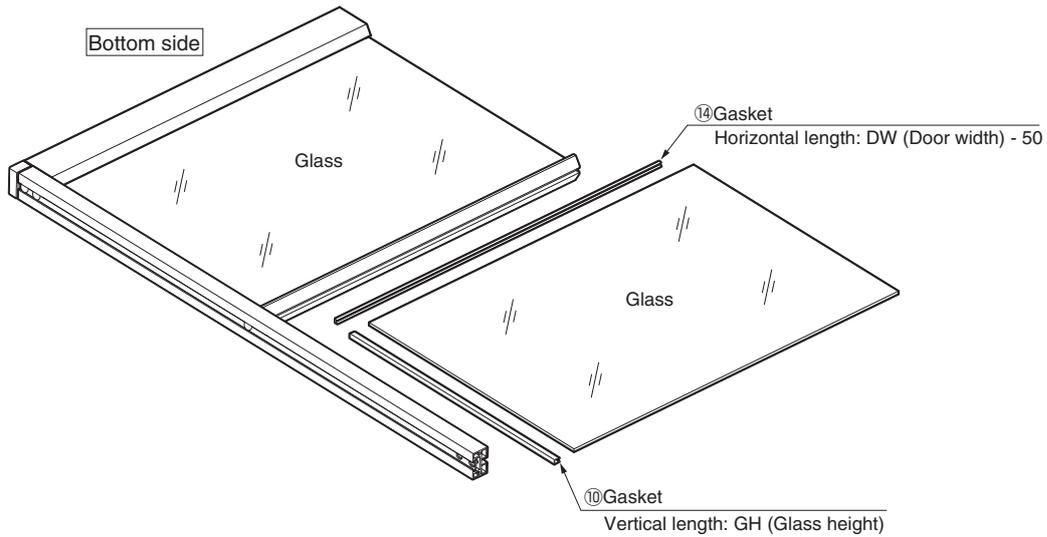
4-3 Insertion of glass - Step 1



4-4 Assembly of Intermediate support^⑬, when used

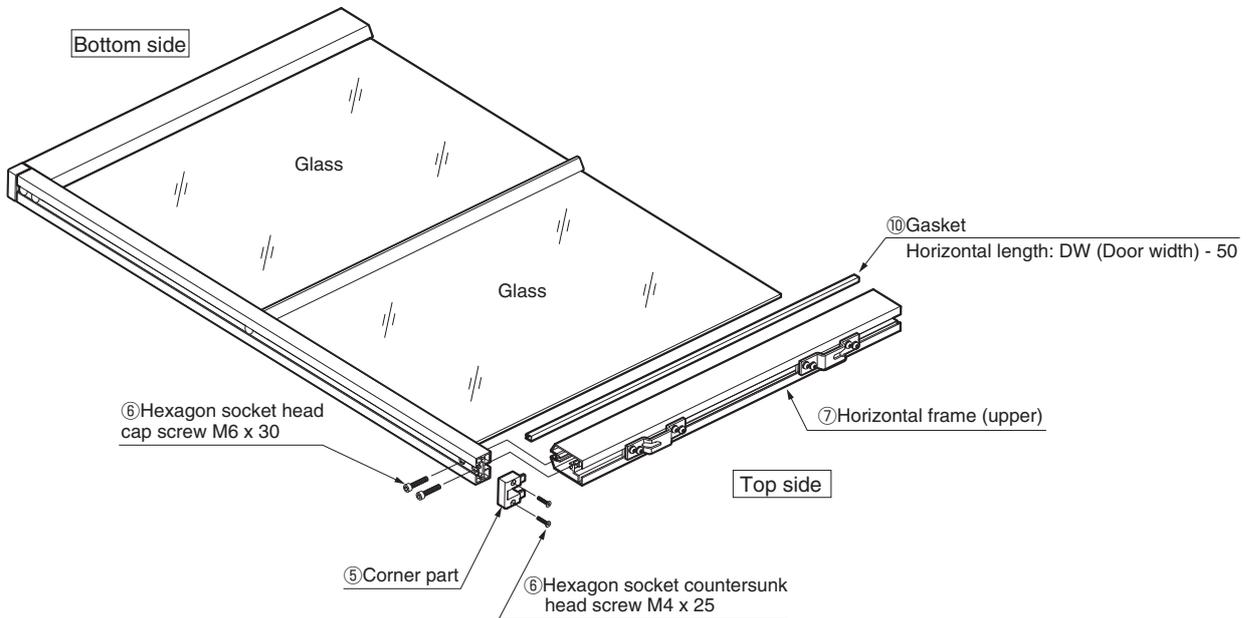


4-5 Insertion of glass - Step 2, when Intermediate support is used

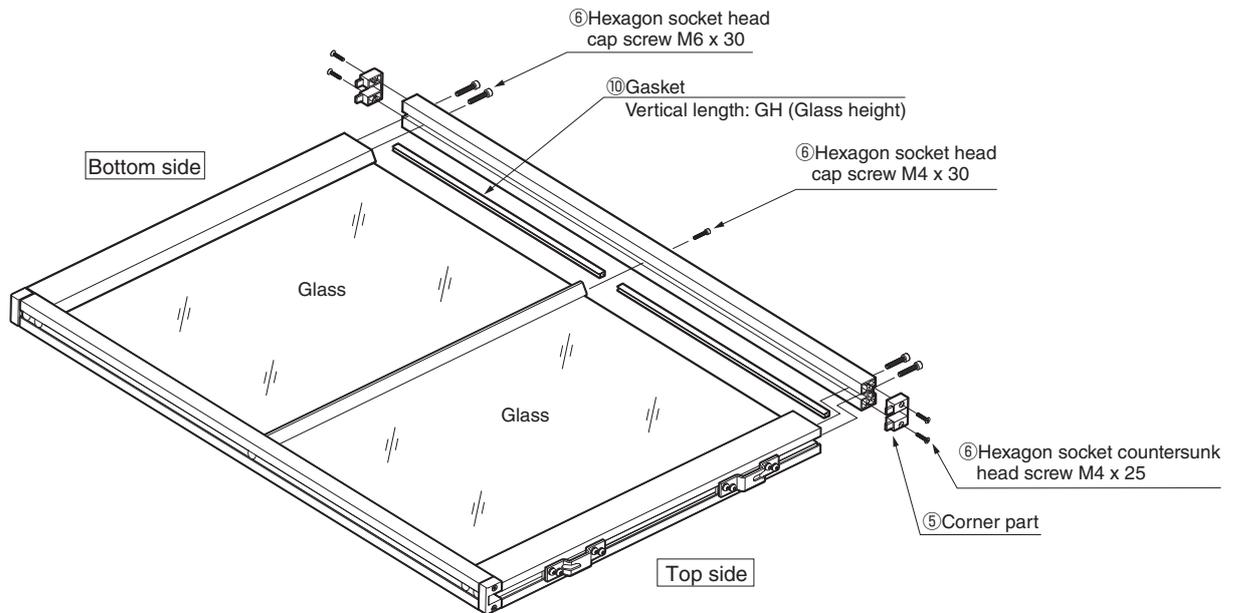


When using more than two Intermediate supports, repeat procedures 4-4 to 4-5.

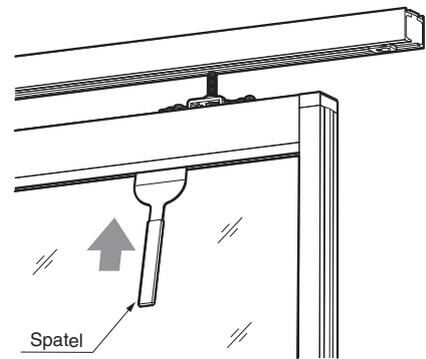
4-6 Assembly of Horizontal frame 7 (upper)



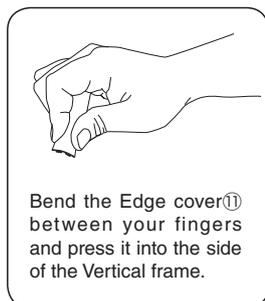
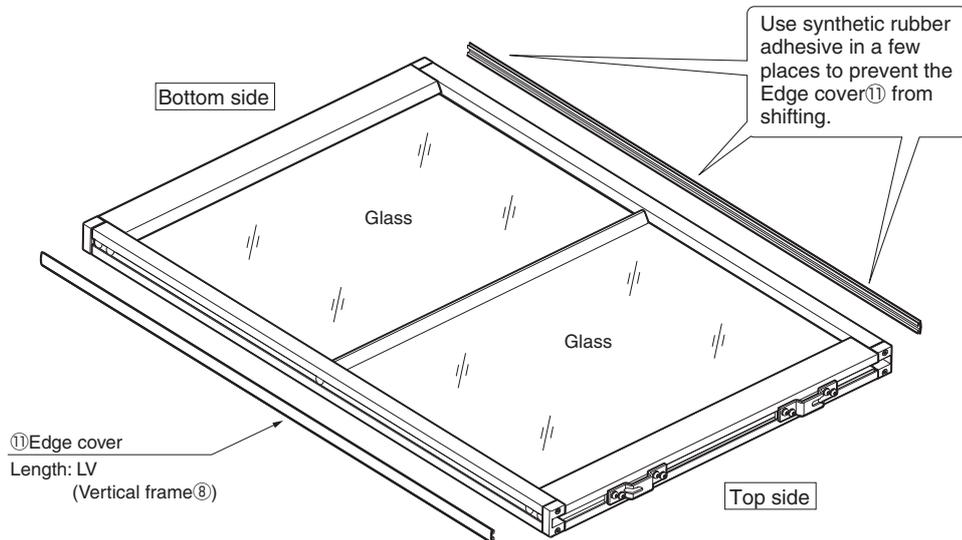
4-7 Assembly of Vertical frame^⑧



You may find the Gasket coming off from the frame.
In such case, use a Spatel or something to push it in and be careful not to scratch the glass.



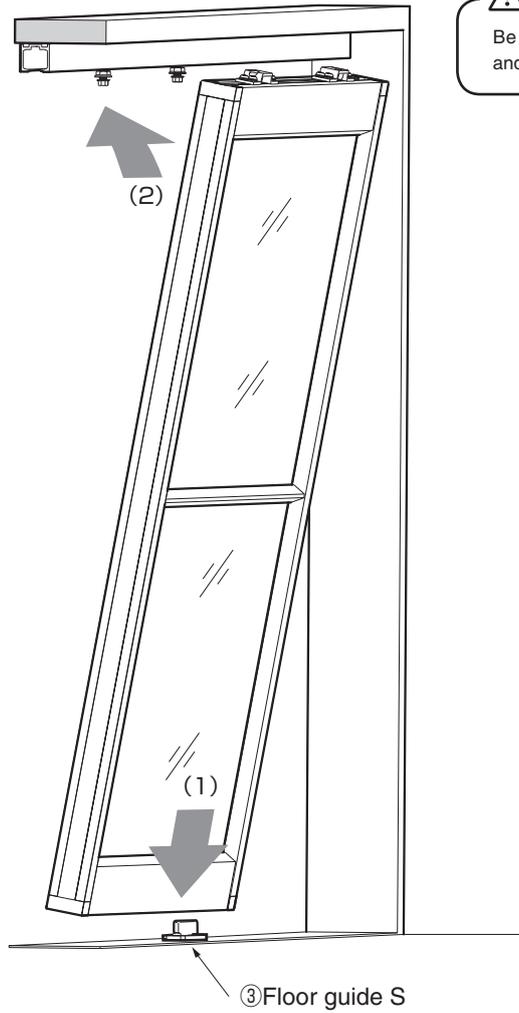
4-8 Assembly of Edge covers^⑪



⚠ Caution

Before attaching the Edge covers, make sure the frame is not biased or skewed, and that all bolts are tight.
Make sure the parts are firmly assembled and there is no warping or skewing.

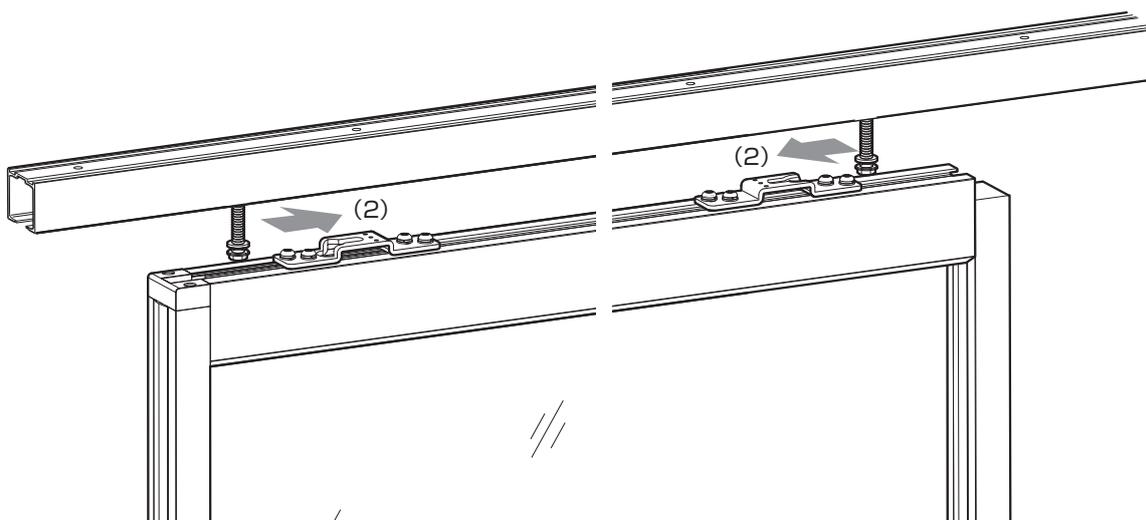
5 Hanging the door



⚠ Caution

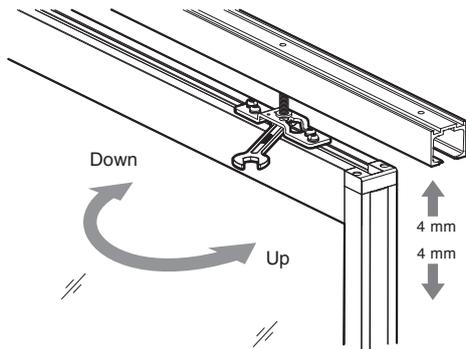
Be sure to have someone with knowledge and experience assist you.

- (1) Put a support below the door to be hanged. Tilt the door as shown in the figure, and set the Floor guide S③ to the groove of the bottom Horizontal frame⑦.
- (2) Push the door and set the hanger bolts as shown in the figure below.

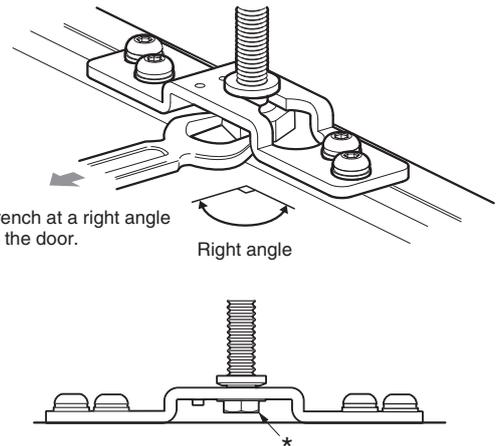


6 Adjustment of door height

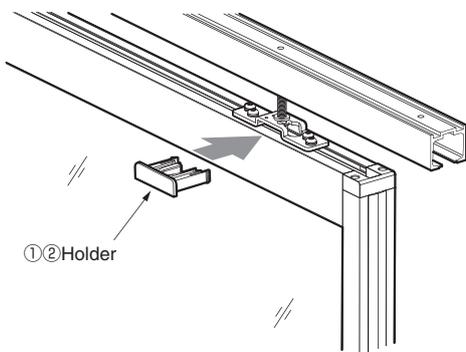
- (1) Remove the support under the door.
- (2) Turn the bolt and adjust the height of the door.
The height adjustment range is +4 mm to -4 mm from factory setting (totally 8 mm).
(Tool: nominal 10 wrench, max. 6 mm thick)



- (3) After adjusting the door, pull the wrench at a right angle away from the door.
Make sure the width across flats of the bolt head is as shown in the figure*.

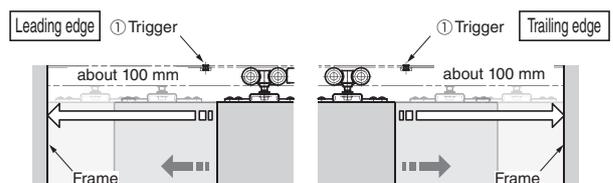


- (4) Insert the holder as shown below.



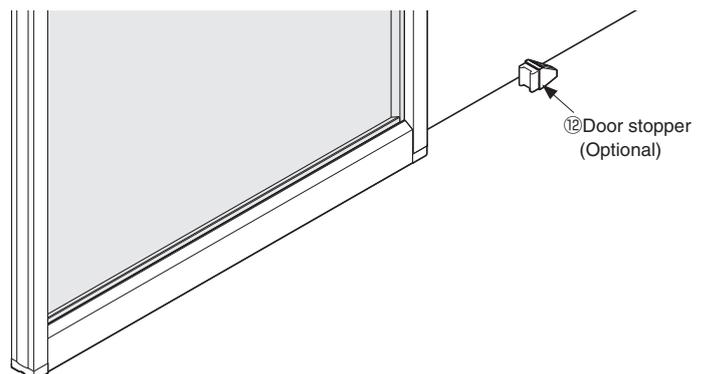
7 Confirming Two-way soft closer operation

- (1) Slowly move the door toward door head, and confirm that sliding door closer starts its function at approx. 100 mm before full-close position.
- (2) Also, confirm that the door closer starts its function at approx. 100 mm before full-open position.
If the closer is not working correctly, check the Troubleshooting section.

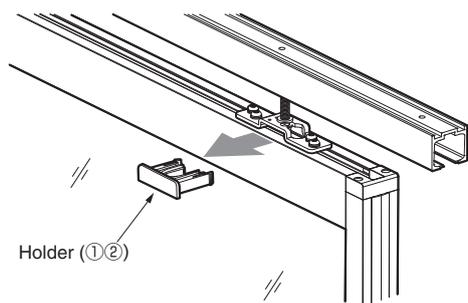


8 Installing Door stopper^⑫ (Option)

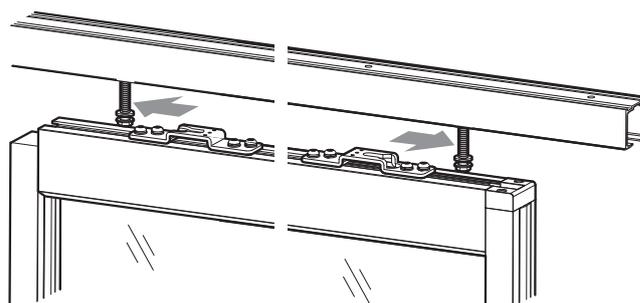
Make sure to install the Door stopper^⑫ when vertical frame is not used.



HOW TO REMOVE DOOR



(3) Pull out the Upper roller from the Bracket.



Periodical Inspection

- Clean inside of track.
- Check upper space and lower space of the door. If necessary, correct the space.

TROUBLESHOOTING

Trouble	Checkpoint	Solution
Door stops during soft closing	Check if door bottom contacts with floor.	Confirm that track fixing screws are not loosened. Then, adjust door height such that clearance between door bottom and floor becomes 6 - 13 mm.
	Check if upper track is set horizontally.	Using a level gauge, reset upper track horizontally.
	Check if mohair seal is installed.	Reduce the friction between mohair and door.
No soft closing	Check if trigger is installed.	Install trigger to correct position.
	Check if door is closed by excessive force.	Do not close door by excessive force and it may damage soft closer.
	The position of trigger catcher might change to the incorrect position inside the track. (See section 2-2 .)	Slowly moving the door toward leading edge side, then push the door firmly. Repeat this action to the opposite side as well. If it is still not improved, check the status of trigger catcher in section 2-2 .
Abnormal noise during operation	Check if door touches other parts.	Provide necessary space between door and adjacent objects.
	Check track rollers for aluminum dust.	Remove the track and pull out the roller. Then, clean the roller.
	Check for loose screws retaining the upper track.	Tighten the screw.
Heavy door operation	Check if door touches adjacent parts.	Correct door position to avoid contact to other objects. Adjust position of floor guide or stopper.
	Check if door is warped.	Use a door without warp.
Door does not move.	Check track retaining screws for looseness.	Roller touches with screw. Retighten screws to free the roller.

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