LAMP

FD80-AFH HEAVY DUTY ALUMINUM FRAME SLIDING DOOR Installation Manual Surface Mounted Roller, Two-way Soft Close 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 is a parts set for a heavy duty aluminum frame sliding door system for stores, public facilities and residences.
- Provides the door with a two step soft motion in each direction when opening and closing.

SPECIFICATIONS

Required number of intermediate supports (3)	0	1	2	3	
Door height	Max. 2200 mm			2201 – 2700 mm	
Door width	804 – 9	00 mm	901 – 1500 mm		
Glass thickness	5 mm or 6 mm				
Max. Door weight	80 kg/door				
Vertical adjustment	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







Required

Marning:If not followed, death or serious injury may result.

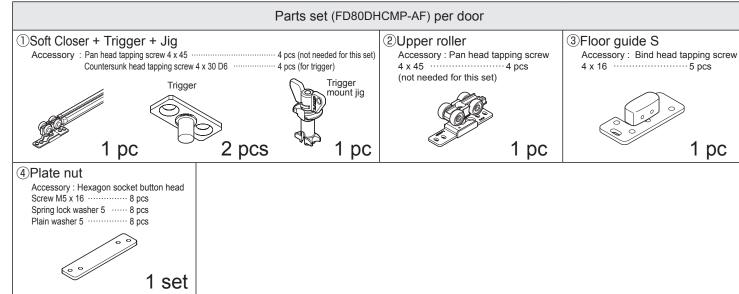
- This (sliding door system) should be installed by a qualified person. If the system is not installed correctly, the door will not operate smoothly, and may cause injury.
- It is necessary to manufacture the frame with sufficient strength so that it endures the weight of the door and any impact upon opening/closing the door. Only use designated screws and ensure that they are fastened firmly. A frame with poor strength or loose screws might result in the door falling and causing injury
- On not try to use this product for anything other than its original purpose. Do not use any part for applications outside of its specification.
- O Do not disassemble nor modify any parts other than those described in this document.

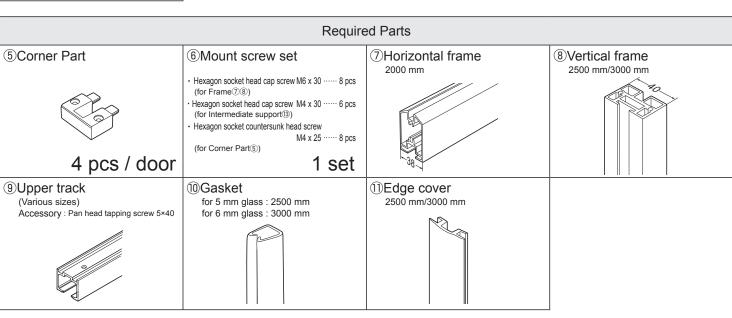
Caution:If not followed, injury or damage may result.

- ① Make sure to follow the designated dimensions, specifications, and horizontal/vertical 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 burrs before installation. Also check the upper track for any left-over burrs or scraps and remove these.
- ① This product 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. Please inform the end user about general precautions and safety to prevent improper use.
- ① Make sure to check the screws for slack at regular intervals (one month from first usage, half a 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.

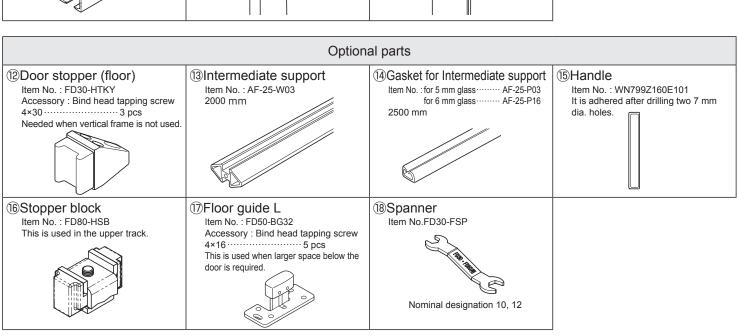


COMPONENT PARTS





1 pc



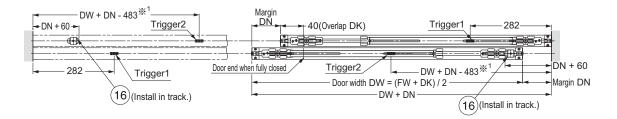


INSTALLATION DRAWING (EXAMPLE)

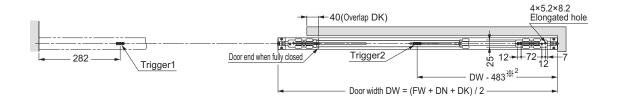
Refer to page 4 about the dimensions of the doors and glass panels.

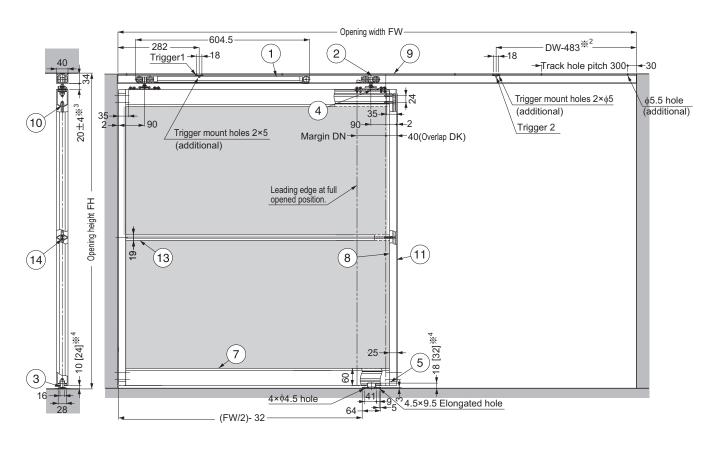
When a vertical frame is not used, use a door stopper (floor) ② and stopper block ⑥.

Double slidingPart set:Use 2 sets of FD80DHCMP-AF



Single sliding





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.

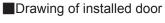
DW		% 1 [For Double sliding only] Example [Margin DN = 70 mm] DW + DN - 483 is the Installation dimension for Trigger 2
1,000	517	587
1,100	617	687
1,200	717	787
1,300	817	887
1,400	917	987
1,500	1,017	1,087

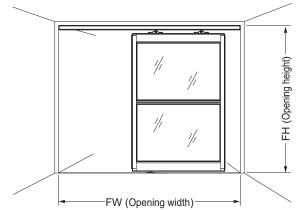
- $\%^3$ Vertical adjustment range : -4 mm to +4 mm.
- $\%^4$ Dimension in [] : when floor guide L 1 (option) is used.

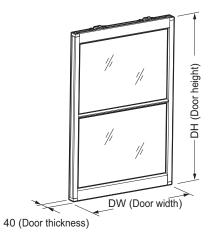


DIMENSIONS OF DOORS

(Round off the decimal point for the divided dimensions.)





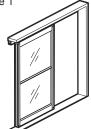


Single sliding DW (Door width) =
$$\frac{\text{FW + DN (Margin) + DK (Overlap)}}{2}$$

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

GH (Glass height) =
$$\frac{DH - 104 - (Number of Intermediate support $\textcircled{3} \times 11)}{Number of glass panels}$$$

Example 1



Ex: 1 door on single track

Size of the door with Opening width 1800 mm, Opening height 2400 mm, Margin 80 mm and Overlap 40 mm.

$$DH = 2400 - 64$$

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

Example 2



Ex: 2 door on single track

Size of each door with Opening width 1800 mm, Opening height 2400 mm and Overlap 40 mm.

$$DH = 2400 - 64$$

$$DW = \frac{1800 + 40}{2}$$

= 920 mm

1 Cutting and Hole Processing of Standard Length Parts

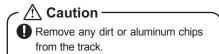
⚠ Caution -

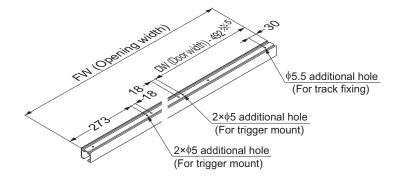
Cut carefully so the cut edge is square to avoid bias and skewing.

When cutting, reinforce the track to prevent deformation at the cut section.

[1] Processing of Upper track 9

- (1) Length = FW (Opening width)
- (2) Refer to the figure on the right for cutting and drilling holes.



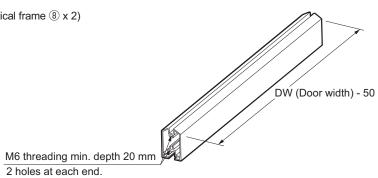


⁸ For double sliding

DW (Door width) + DN (Margin) - 492

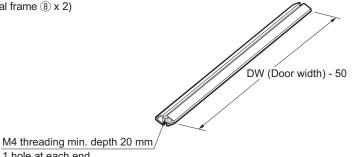
[2] Processing of Horizontal frame 7

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



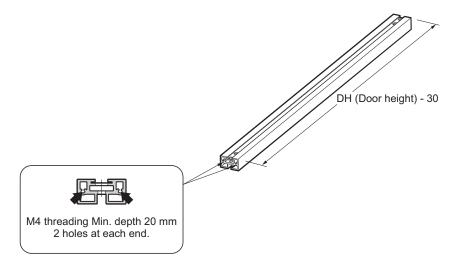
[3] Cutting and hole processing of Intermediate support (3), when used

Length = DW (Door width) - 50 (Thickness of vertical frame (8) x 2)



1 hole at each end.

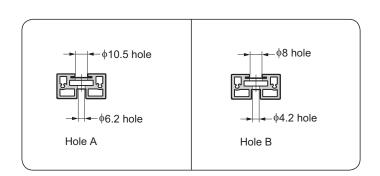
[4] Processing of Vertical frame ® - Step 1

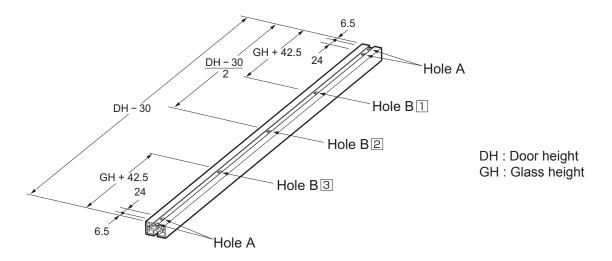


[5] Processing of Vertical frame ® - Step 2

Drill holes according to the quantity of intermediate support $\ensuremath{\mathfrak{G}}$.

Hole A only if there is no intermediate support $\ 3$ Hole A + B $\ 2$ for 1 intermediate support $\ 3$ Hole A + B $\ 1$, B $\ 3$ for 2 intermediate supports $\ 3$ Hole A + B $\ 1$, B $\ 2$, B $\ 3$ for 3 intermediate supports $\ 3$



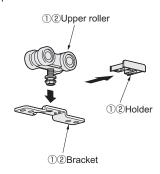




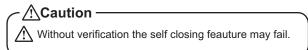
2 Assembling Parts

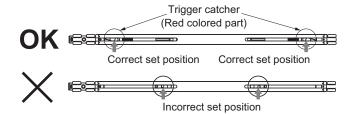
[1] Disassembling Rollers

Remove upper roller bracket and holder.



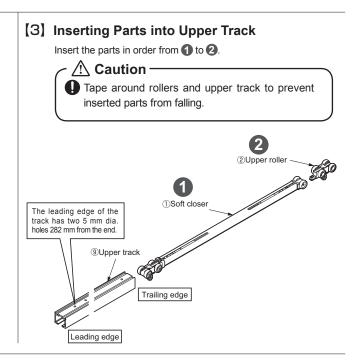
[2] Verification Before Installing Soft Closer





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

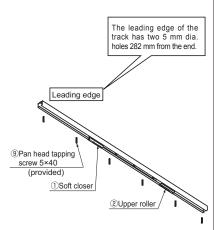




3 Fixing Upper Track (9), Trigger (1), and Floor Guide

[1] Fixing Upper track 9

Fasten the upper track with provided screws.

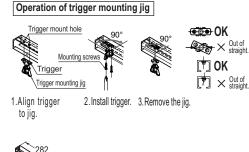


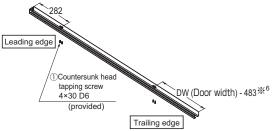
⚠ Caution

Remove any dirt or aluminum chips from the track.

Be careful not to overtighten the screws and screw heads protruding on upper track. It may cause defomation of track or damage of soft closer.

[2] Fixing Trigger ①



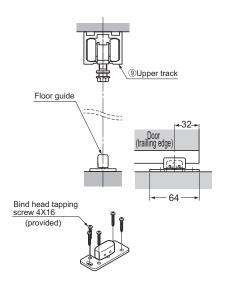


⁸ For double sliding

DW (Door width) + DN (Margin) - 483

(3) Fixing Floor guide

- (1)Position floor guide just below the center of upper track.
- (2)Position the floor guide so that the roller part stays under the door when it is opened or closed.





4 Assembling Door



① Coat screw threads with an anti-backoff material such as "thread locking".

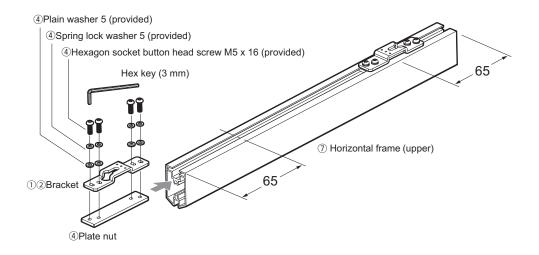
During door installation, handle the glass carefully to prevent injury.

[1] Preparation of Horizontal frame ⑦ - Upper

⚠ Caution -

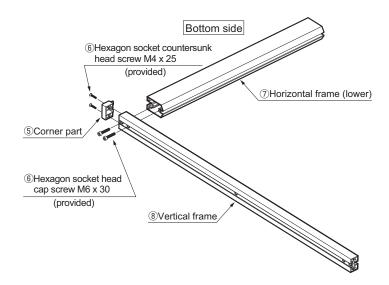
Pay attention to the direction of the brackets.

The open part of the bracket should face in the outside direction.



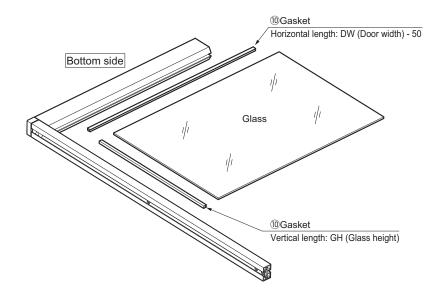
Fasten the bracket to upper horizontal frame ${\Bbb O}$, using plate nut ${\Bbb A}$. The distance from the edge and bracket center should be 65 mm.

[2] Assembly of Horizontal frame ① (lower) and Vertical frame ®

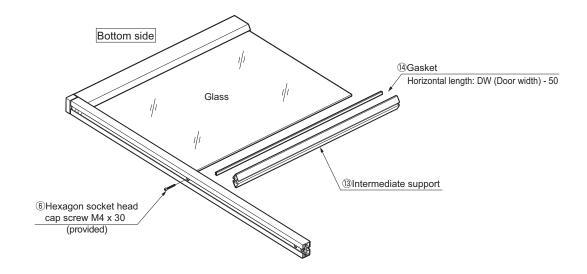




[3] Insertion of glass - Step 1

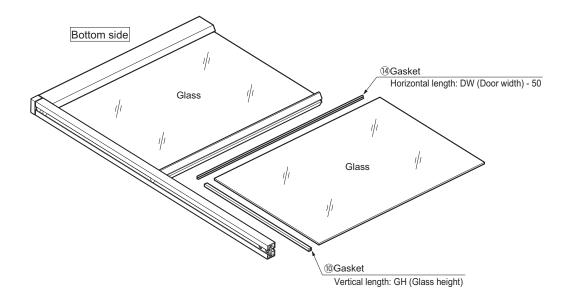


[4] Assembly of Intermediate support ③, when used



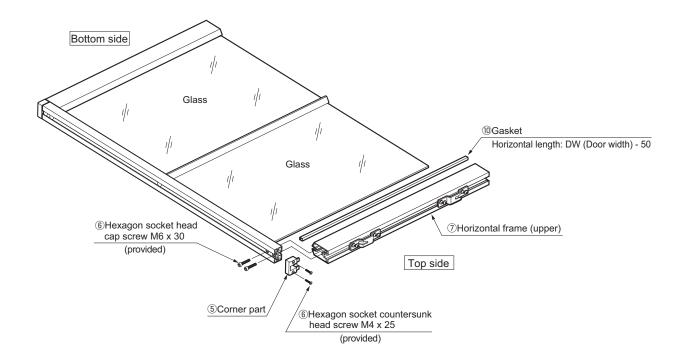


[5] Insertion of glass - Step 2, when Intermediate support is used

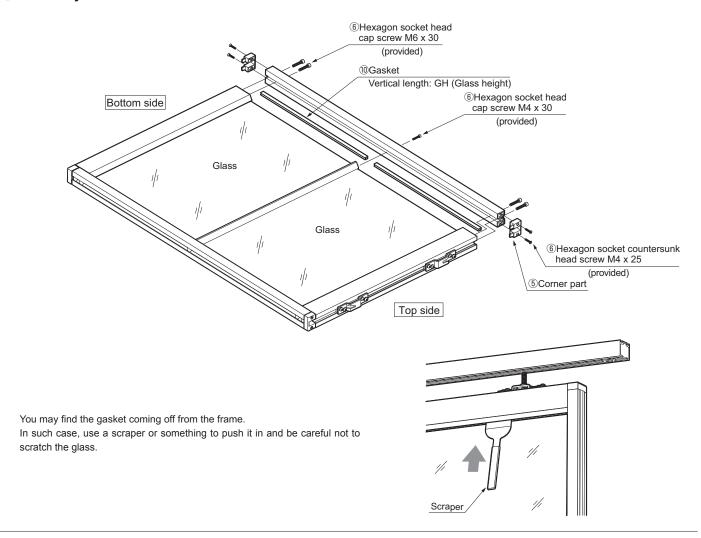


When using more than two Intermediate supports, repeat procedures $\boxed{4}$ - $\boxed{4}$ to $\boxed{4}$ - $\boxed{5}$

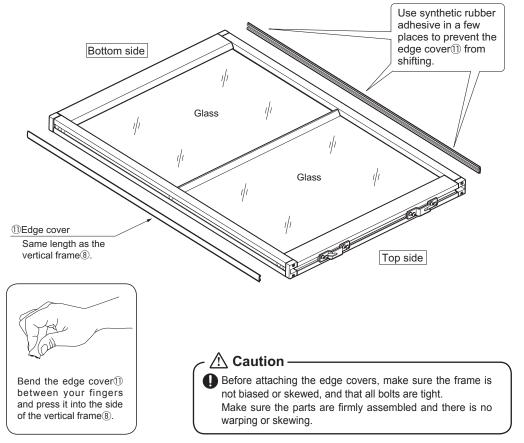
[6] Assembly of Horizontal frame ① (upper)



[7] Assembly of Vertical frame ®

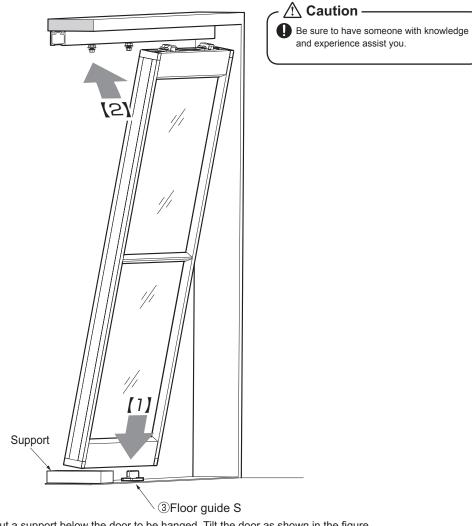


[8] Assembly of Edge covers (1)

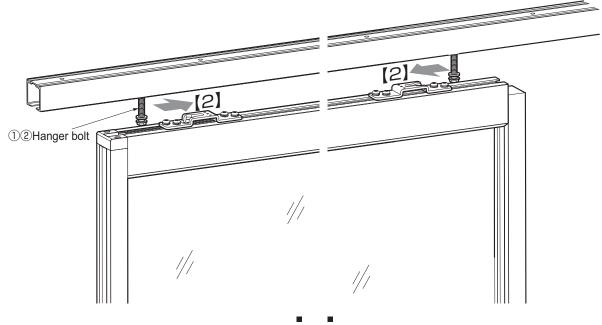




5 Hanging the Door

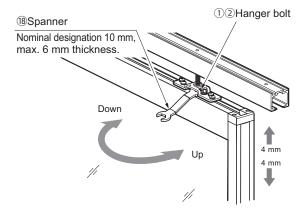


- [1] Put a support below the door to be hanged. Tilt the door as shown in the figure, and set the floor guide S③ to the groove of the bottom horizontal frame⑦.
- [2] Push the door and set the hanger bolts as shown in the figure below.



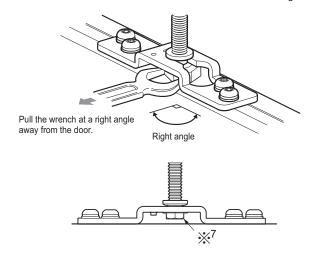
6 Adjustment of Door Height

- [1] Remove the support from under the door.
- [2] Adjust the door so that it is parallel to the upper track with 6-14 mm clearance between the door and floor.

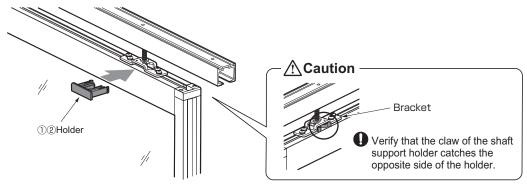


[3] After adjusting the door, pull the wrench at a right angle away from the door. Make sure the width across flats of the bolt head is as shown in the figure

^{*7}.

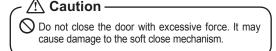


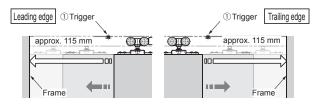
[4] Insert the holder as shown below.



7 Verification of Sliding Door Closer Operation

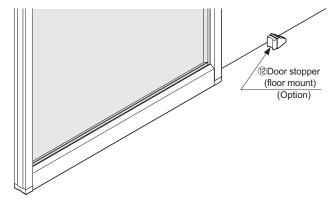
- [1] Close the door slowly and check that the soft closer works correctly. The soft closer is engaged approximately 115 mm at the leading edge before the door reaches its final position.
- [2] Carry out similar verification for the door trailing edge.
- [3] Please refer to the "TROUBLESHOOTING" section when the soft closer does not work correctly.





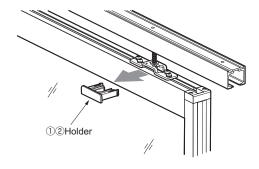
8 Installing Door Stopper (2) (Option)

When a vertical frame is not used, use a door stopper[®] of option.



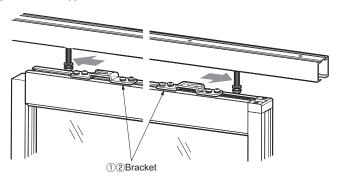
HOW TO REMOVE DOOR

- [1] Put a 10 mm support under the door.
- [2] Pull out the holder.



[4] Remove the door from the floor guide.

[3] Pull out the upper roller from the bracket.



Final verification Verify that all screws are securely tightened, and verify that all screws have been used.

PERIODICAL INSPECTION

Clean inside of track

Check upper and lower gaps between the door and frame. If necessary, adjust the gaps.

TROUBLESHOOTING

Trouble	Checkpoint	Solution
Door stops during soft		Verify that the track fixing screws are not loosened. Then, adjust the door
closing		height such that the clearance between the door bottom and floor is 6 - 14 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 as it may damage soft closer.
	The position of the trigger catcher may become dislocated (See section 2 - [2].)	Check the status of the trigger catcher in section 2 - [2].
Abnormal noise during operation	Check if door bottom contacts the floor.	Verify that the track fixing screws are not loosened. Then, adjust the door height such that the clearance between the door bottom and floor is 6 - 14 mm.
	Check if door touches adjacent parts.	Correct door position to avoid contact with adjacent objects. Adjust position of the floor guide.
	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 bottom contacts the floor.	Verify that the track fixing screws are not loosened. Then, adjust the door height such that the clearance between the door bottom and floor is 6 - 14 mm.
	Check if door touches adjacent parts.	Correct door position to avoid contact with adjacent objects. Adjust position of the floor guide.
Door does not move.	Check the track retaining screws for looseness.	Retighten screws to free the roller.
Door starts to move.	Check the upper track if it is set horizontally.	Using a level gauge, reset upper track horizontally.

SUGATSUNE KOGYO CO.,LTD

Tokyo, JAPAN Shanghai, CHINA
Phone: +81 (0)3 3866 2260 E-mail: export@sugatsune.co.jp Phone: +86 21 3632 1858

SUGATSUNE KOGYO (UK) LTD Reading, UK Phone: +44 118 9272 955 E-mail:sales@sugatsune.co.uk

SUGATSUNE EUROPE GmbH Düsseldorf, GERMANY Phone: +49 211 53812900 E-mail:sales@sugatsune.eu

SUGATSUNE SHANGHAI Co., LTD

E-mail:lamp@sugatsune.com.cn

Guangzhou, CHINA

Phone: +86 20 6639 3552 E-mail:lamp@sugatsune.com.cn SUGATSUNE AMERICA, INC

California, USA
Phone: +1 310 329 6373 E-mail:sales@sugatsune.com

Chicago, USA

Phone: +1 312 461 1081 E-mail:chicagoshowroom@sugatsune.com.

SUGATSUNE KOGYO INDIA PRIVATE LIMITED Mumbai, INDIA SUGATSUNE CANADA, INC.

Phone: +1 514 312 5267 E-mail:support@sugatsune.ca

Phone: +91 22 28314490/91 E-mail:sales@sugatsune.in ISO9001(Japan Offices and Sugatsune America) and ISO14001(Chiba Production division and Logistics center), certified.