

■ Adjustment of mounting plate (SLUH-AZ) in horizontal direction

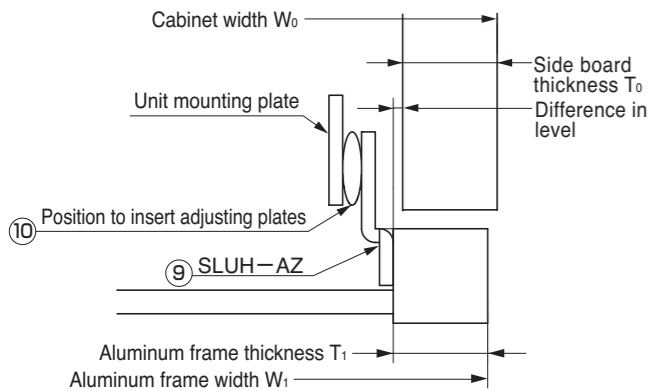


Fig. 9. Indication of position to insert adjusting plates

In case the SLUH-AZ mounting plate ⑨ is used, for horizontal adjustment it is necessary to insert the adjusting plates ⑩ of the required quantity between the unit mounting plate and the mounting plate. (Fig. 9)
Calculate the required quantity of adjusting plates depending on the value of difference in level shown on Fig. 9. (Table 2)

$$\text{Value of difference in level shown on Fig. 9} = \frac{(W_0 - T_0 \times 2) - (W_1 - T_1 \times 2)}{2}$$

W_0 = Cabinet width T_0 = Cabinet side board thickness
 W_1 = Aluminum frame width T_1 = Aluminum frame thickness (as a rule, $T_1 = 20$)

Table 2. Required quantity of adjusting plates depending on difference in level

| Value of difference in level shown on Fig. 9 | 0 | 1 | 2 | 3 | 4 |
|--|---|---|---|---|---|
| Required quantity of adjusting plates for one side | 2 | 2 | 1 | 0 | 0 |

■ Adjustment of door opening and closing speed

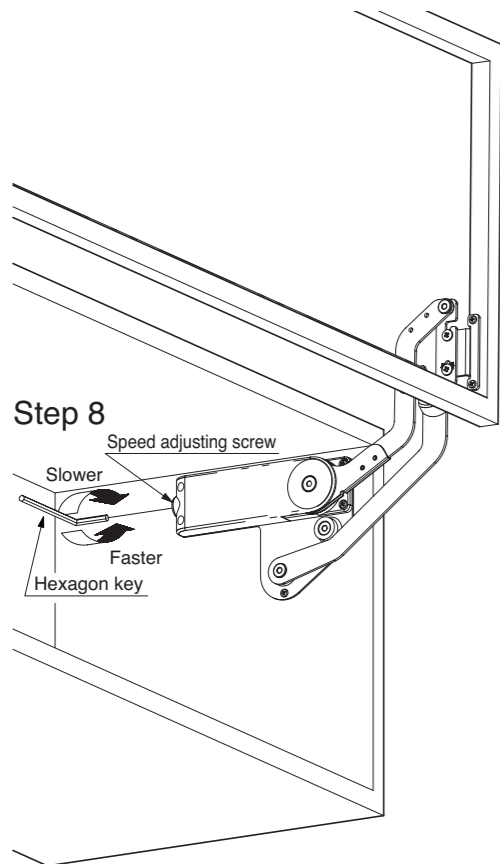
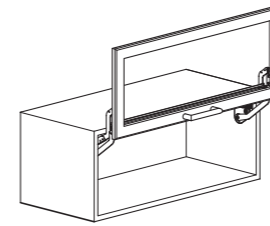


Fig. 10. Adjustment of door opening and closing speed

Step 8. Adjust the door opening speed with the speed adjusting screw of the body backside.
Speed adjustment is carried out with the 5mm Hexagon key. (Fig. 10)
Turn it clockwise : faster, counterclockwise : slower.

⚠ Turn the speed adjusting screw carefully. Too much force or torque to the speed adjusting screw may cause product damage.



Read this manual carefully for proper installation and operation.
Incorrect installation and improper use of the product may cause damage to the unit and also cause injury.
This manual should be kept by the user after installation.

Lapcon mount-on series



Lapcon is an innovative technology developed and designed for ultimate shock absorption and the smoothest opening and closing movement imaginable.

⚠ CAUTION Any failure to observe the following cautions may result in personal injury and property damage.

Cautions for installation

- The right-hand and left-hand side bodies of this mechanism should be installed in set.
- This is the swing lift up mechanism for a cabinet door. Be reminded that we can not take the responsibility for damages and injuries caused by other applications, disassembly, conversion and the application to the door exceeding the standard ranges shown in the item "Type selection method".
- This mechanism must be installed to the cabinet correctly in accordance with the indications of this manual. Notice that the non-observance of the specified dimensions not only does not enable this mechanism to show its full performance, but also may result in damage and also cause injury.
- It is necessary to use the attached screws for installing this mechanism. Otherwise the disconnection of this mechanism may happen causing injury.
- For improvement the specification may be changed without notice. As for details please verify the actual goods.
- The applicable door must have the construction for which it is difficult to induce bent or torsion.

Cautions for operation

- Keep a door from forced opening and closing. It is prohibited to open a door over a full open level or to close a door with excess force.
- The working temperature range of this mechanism is 5~35°C. Opening and closing speed of the door depends on the temperature. This is not the symptom of troubles. It is prohibited to use this mechanism at the temperature exceeding the specified range. It is not permitted to apply this mechanism for the cabinet installing a heat-generating microwave oven or other similar appliances.
- Be careful not to insert a finger into the arm mechanism of the unit. Severe injury may be caused.
- It is necessary to periodically check the fixing screws for loosening. Tighten the loosed screws as required.

■ Part description

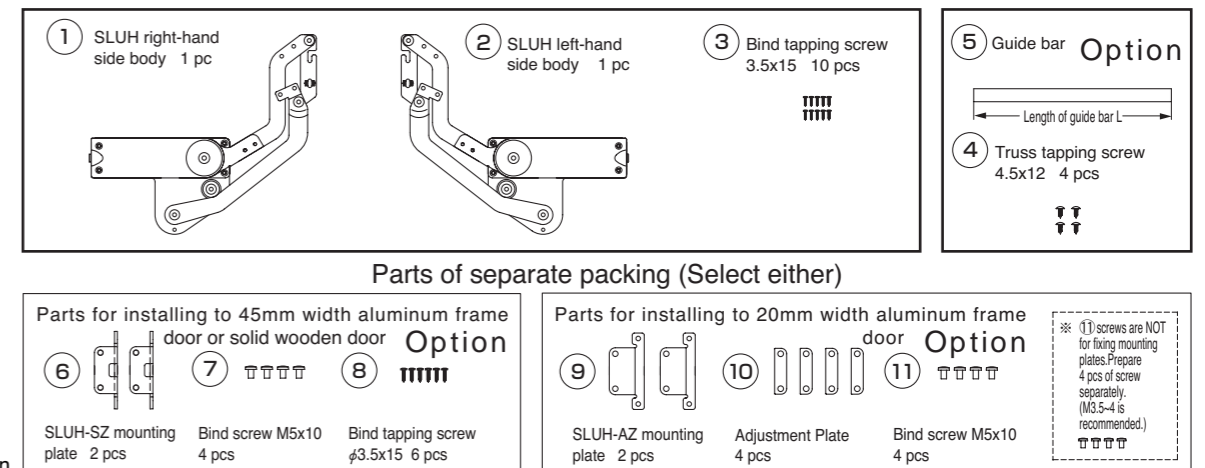


Fig. 1. Part description

■ Type selection method

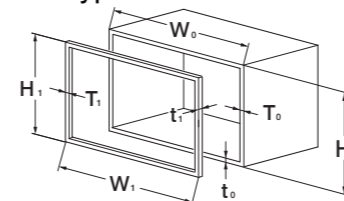


Fig. 2. Cabinet

W_0 = Cabinet overall width
 H_0 = Cabinet overall height
 T_0 = Cabinet side board thickness
 t_0 = Cabinet bottom board thickness
 W_1 = Door overall width
 H_1 = Door height
 T_1 = Aluminum frame width
 t_1 = Door thickness

Table 1. Type and suitable door weight

| Type | Door weight (kg) |
|--------|------------------|
| SLUH-2 | 3.5 ~ 4.5 |
| SLUH-3 | 4.5 ~ 6.0 |
| SLUH-4 | 6.0 ~ 7.0 |
| SLUH-5 | 7.0 ~ 8.0 |

Table 2. Guide bar length L (mm)

| | Cabinet width = | |
|--------------|-----------------|-------|
| | 600mm | 900mm |
| Arm's part A | 515 | 815 |
| Arm's part B | 535 | 835 |

The above length shown in Table 2 is calculated in case of the cabinet side board thickness $T_0 = 15$ mm. The guide bars for Table 2 are in stock as our standard length of product.

- Select the suitable type of this mechanism depending on the weight of the applicable door (including the handle weight) as per Table 1.
- When using this mechanism it is necessary to consider such dimensions as cabinet overall width (W_0) and door height (H_1). (Fig. 2)
- The cabinet overall width (W_0) of 600 and 900mm are our standard cabinet application.
- The door height (H_1) should be in the range of 360~400mm.
- The guide bar length (L) has been designed for cabinet overall width (W_0) = 600 & 900mm and cabinet side board thickness (T_0) = 15mm. (Table 2)
In case the cabinet side board thickness (T_0) exceeds 15mm, it is necessary to cut and adjust the guide bar to the required length according to the formula.
- The guide bar as a rule is mounted to only the part A of the arm. (Fig. 5) When more stable movement is required, it is necessary to add another guide bar and mount it to the part B of the arm. (Fig. 5)

⚠ When mounting the guide bar to the part B, note that its length is different from the one for the part A.

Formula to calculate the suitable guide bar length
For the part A, the guide bar length = $W_0 - (T_0 \times 2) - 55$
For the part B, the guide bar length = $W_0 - (T_0 \times 2) - 35$

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MOUNTING DIMENSIONS

MOUNTING DIMENSIONS FOR INSTALLING TO 45MM WIDTH ALUMINUM FRAME DOOR OR SOLID WOODEN DOOR

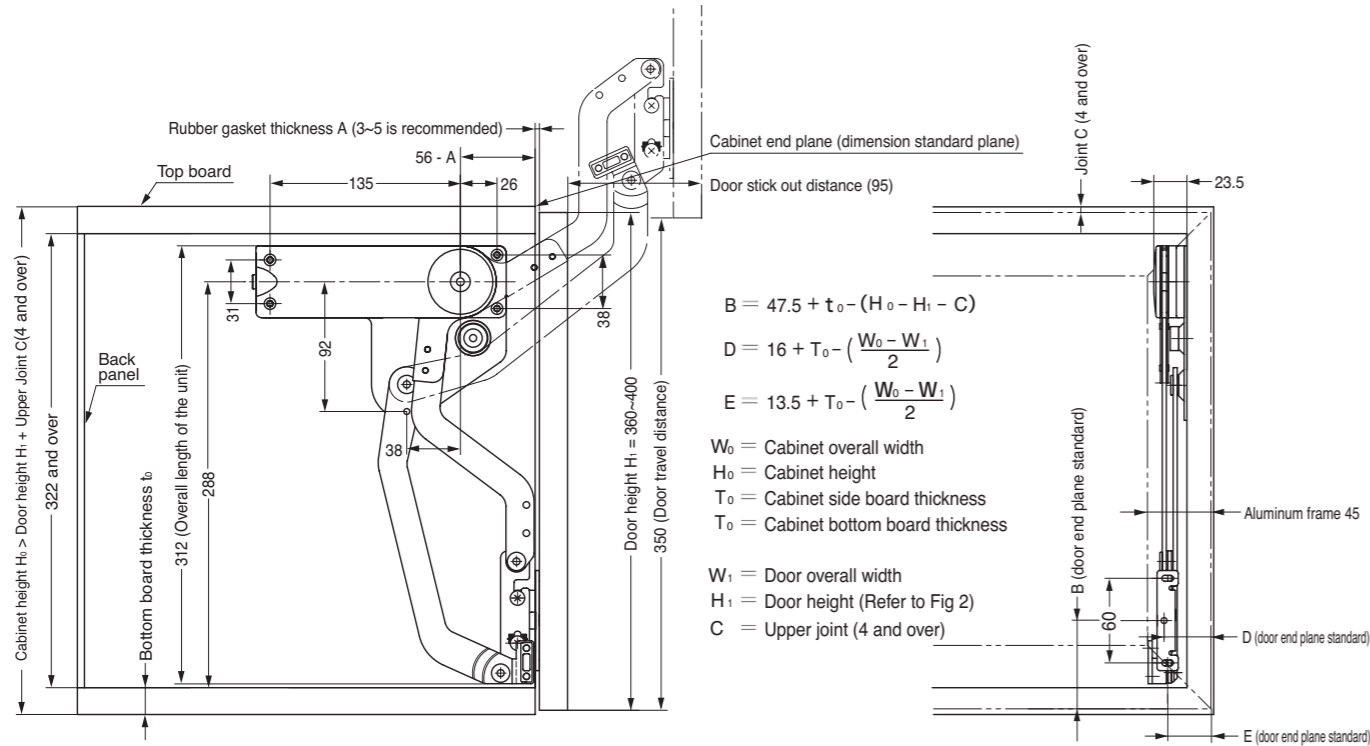


Fig.3. Mounting dimensions for installing to 45mm width aluminum frame door or solid wooden door

MOUNTING DIMENSIONS FOR INSTALLING TO 20MM WIDTH ALUMINUM FRAME DOOR

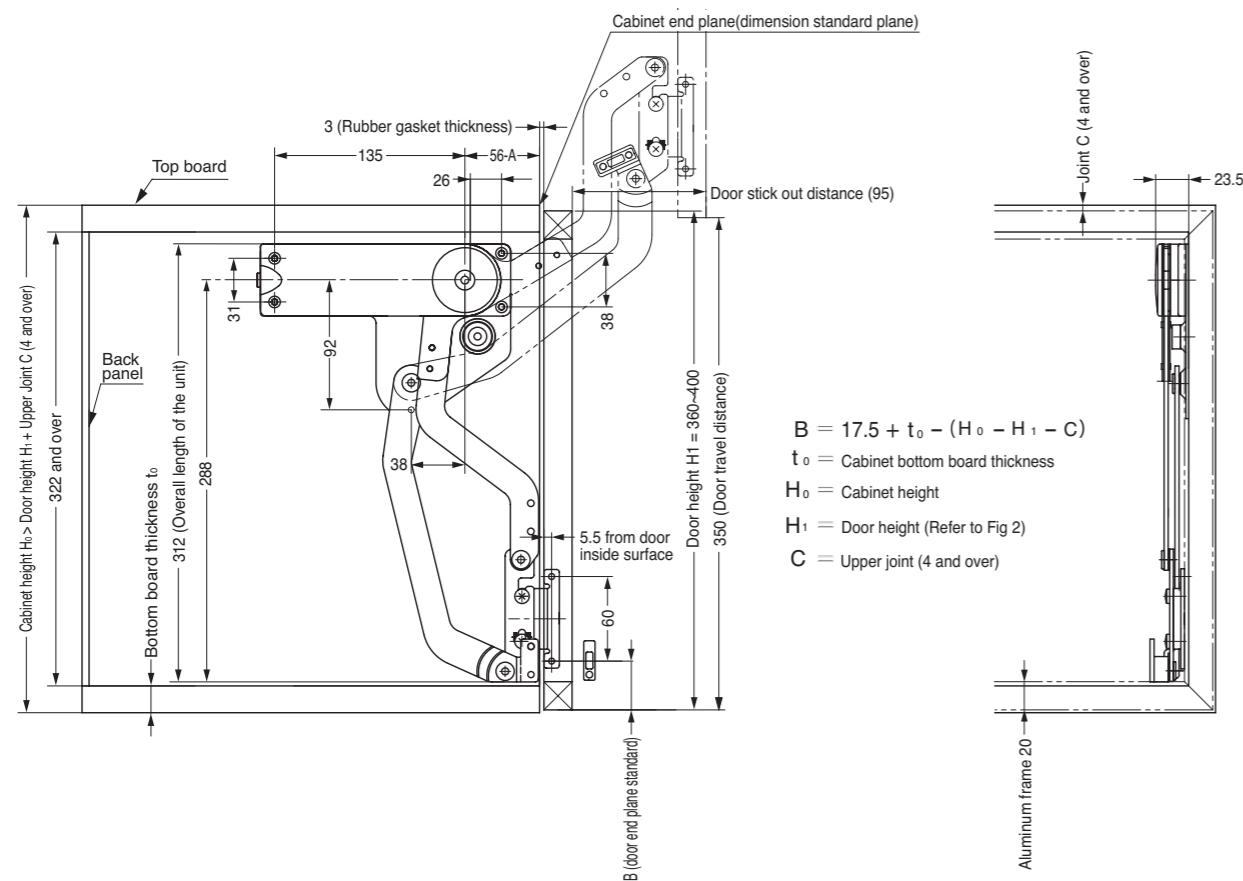


Fig. 4. Mounting dimensions for installing to 20mm width aluminum frame door

INSTALLATION PROCEDURE

Installation of side bodies (SLUH)

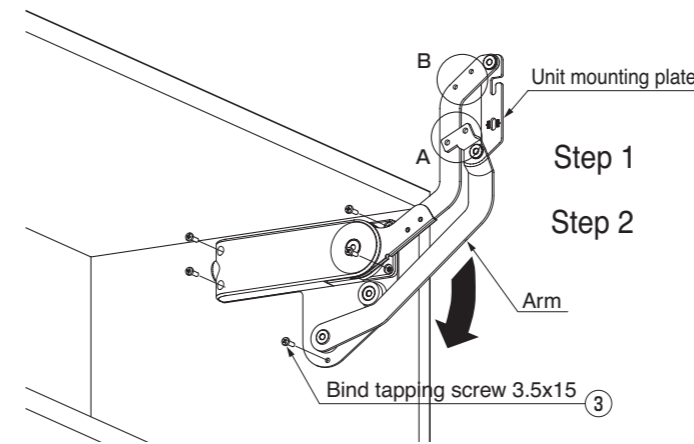


Fig. 5. Installation of side body

- Step 1. Place the SLUH body unit; ① SLUH right-hand side body and ② SLUH left-hand side body to the specified position of the inside surface of the cabinet (as for the mounting dimensions refer to Fig. 3 and 4) and fix the positions with the attached bind tapping screws 3.5x15 ③. (Fig. 5)
- Step 2. Supporting the arm and the unit mounting plate, turn them slowly in the arrow direction, and remove the cardboard stopper.

⚠ In this step, do not release your hand from the mechanism during turning its arm. It may cause injury. Be careful not to insert your fingers into the arm mechanism when turning it.

Installation of mounting plate (SLUH-SZ or SLUH-AZ)

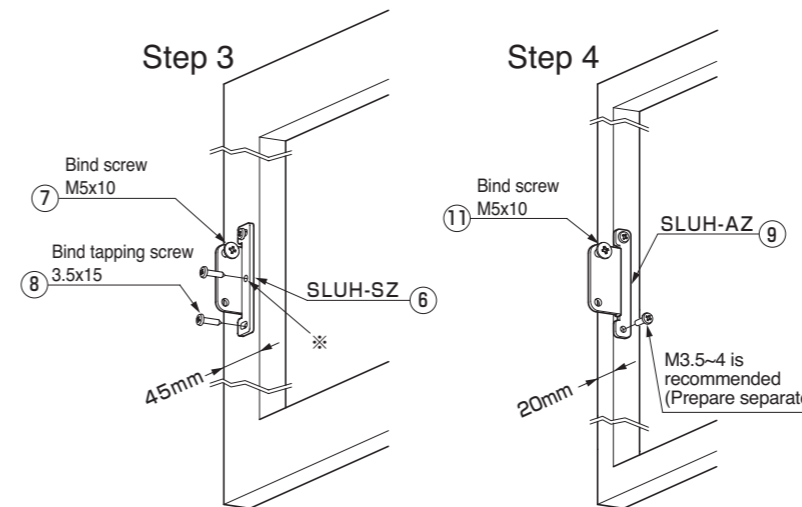


Fig. 6. Installation of mounting plate (SLUH-SZ) (for 45mm width aluminum frame door or solid wooden door)
 Fig. 7. Installation of mounting plate (SLUH-AZ) (for 20mm width aluminum frame door)

● In case of SLUH-SZ mounting plate (for 45mm width aluminum frame door or solid wooden door)

- Step 3. Fix the SLUH-SZ mounting plate ⑥ to the specified position of the back of the door with the attached bind tapping screw 3.5x15 ⑧. (Fig. 6)
- For both sides of the door, insert and temporarily fix the bind screw M5x10 ⑦ into the upper threaded hole of the mounting plate set to the door. (Fig. 6)

In case the SLUH-SZ mounting plate ⑥ is used, first fasten only the oblong hole, and after fixed the final horizontal position fasten the bind screw M5x10 into the circular hole *.

● In case of SLUH-AZ mounting plate (for 20mm width aluminum frame door)

- Step 4. Fix the SLUH-AZ mounting plate ⑨ to the specified position of the back of the door.
- The fixing screws are not supplied. Prepare them separately (M3.5~4 is recommended).
- Fasten the mounting plate with the prepared fixing screws. (Fig. 7)
- For both sides of the door, insert and temporarily fix the bind screw M5x10 ⑪ into the upper threaded hole of the mounting plate set to the door. (Fig. 7)

● Common procedures for SLUH-SZ and SLUH-AZ mounting plates

- Step 5. Insert the bind screw ⑦ (or ⑪) temporarily fastened to the mounting plate SLUH-SZ (or SLUH-AZ) into the notch of the unit mounting plate of the EZ-SLU side body. (Fig. 8)
- After inserted, adjust installing angle position so that the screw of the other side can be fixed. (Fig. 8)
- Step 6. After putting in the door, fasten it inserting the bind screws M5x10 ⑦ (or ⑪) for both sides into the lower threaded hole of the mounting plate SLUH-SZ (or SLUH-AZ) through the oblong hole of the unit mounting plate. (Fig. 8)
- After adjusting the door in the vertical and horizontal directions, tighten two bind screws M5x10 for every side firmly.

(In case the SLUH-AZ mounting plate ⑨ is used, for horizontal adjustment it is necessary to insert the adjusting plates ⑩ of the required quantity between the unit mounting plate and the mounting plate.)

→ Refer to the next item.

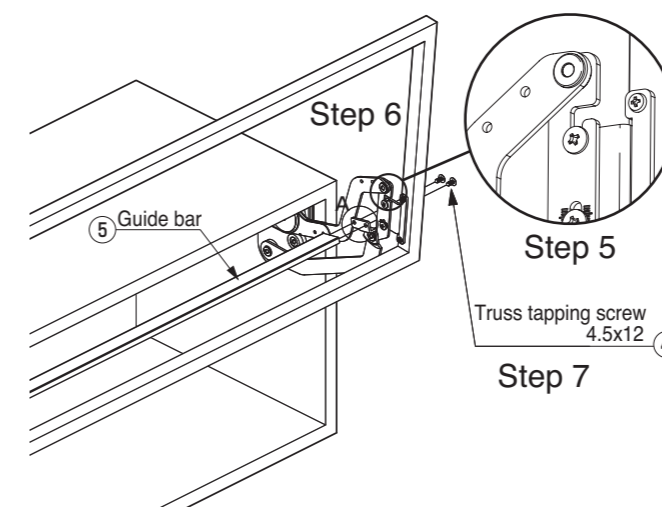


Fig. 8. Installation of 20mm width aluminum frame door
 (The same procedures are carried out for 45mm width aluminum frame door or solid wooden door)

- Step 7. Fix the guide bar ⑤ to the part A of the arm mechanism securely with the attached truss tapping screw 4.5x12 ④. (Fig. 8)