ADJUSTMENT PROCEDURE

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



Fig. 9. Indication of position to insert adjusting plates

Adjustment of door opening and closing speed



For Overseas Customers SUGATSUNE SUGATSUNE KOGYO CO., LTD.

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is necessary to insert the adjusting plates (8) 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) $V_1 - T_1 \times 2$

$$\frac{(W_0 - T_0 \times 2) - (V_0)}{2}$$

 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

Step 7. Adjust the door opening and closing speed with the speed adjusting

Speed adjustment is carried out with the 5mm Hexagon key. (Fig. 10) Turn it clockwise : faster, counterclockwise : slower.

 \wedge Turn the speed adjusting screw carefully. Too much force or torgue to the speed adjusting screw may cause product damage.

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LAMP_® **EZ-SLU** SWING ASSIST MECHANISM INSTALLATION MANUAL



This manual should be kept by the user after installation.

Lapcon mount-on series Lacon

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.
- od".
- 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 angle 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 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. Sever injury may be caused. It is necessary to periodically check the fixing screws for loosing. Tighten the loosed screws as required.

Part description



Fig. 1. Part description

Type selection method

Calculate the door torque according to the following formula considering the weight and the height of the applicable door. Select the suitable type as per Table 1



Fig. 2. Cabinet

.AMP

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.

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

This is the mechanism exclusively for a flap type door application. 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 meth-

This mechanism must be installed to the cabinet correctly in accordance with the indications of this manual. Notice that the non-observance of the

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

0	2 EZ-SLU left-hand side body 1pc) Bind tapping screw 3.5x15 10pcs				
te packing (select either)						
on	Parts for installing to 20mm width aluminum fra	^{ame door} Option				
		9 1111				
,	SLUH-AZ mounting plate Adjusting plate 2pcs 4pcs	Bind screw M5x10 4pcs				
	※ Screws for fixing mounting plates Not included in accessories. Prepare them separa (Recommendation: M3.5~4) 百百百百	tely. 4pcs				

Door height (m) /2 x Door weight (kg) x 9.8 = Door torque (N·m)

Table 1. Type and suitable door weight

Door torque		
17.6~23.9 N·m (180~244 kgf·cm)		
24.0~30.2 N·m (245~309 kgf·cm)		
30.3~36.7 N·m (310~375 kgf·cm)		

• The cabinet width (W_o) should be in the range of 600~900mm.

The cabinet height (H) should be in the range of 600~750mm.

• The cabinet weight should be in the range of 6.0~10.0kg (incl. the handle weight). * Contact our sales representatives in case of installing to a cabinet exceeding the indicated ranges



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









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)



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 1. Place the EZ-SLU body unit; 1) the right-hand side body and 2 the left-hand side body to the specified position on the inside surface of the cabinet (as for the mounting dimensions refer to Fig. 3 and 4) and fix the positions except * A part with the attached bind tapping screws 3.5x15 ③.
- Step 2. Supporting the arm and the unit mounting plate, turn them slowly in the arrow direction, and when the fixing hole of * A part appears, fix its position with the bind tapping screw 3.5x15 ③ in the same way as Step 1.

When turning the arm, remove the cardboard stopper.

 $\underline{\Lambda}$ 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 when turning it.

- 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 ④ to the specified position of the back of the door with the attached bind tapping screw 3.5x15 6 . (Fig. 6)

For both sides of the door, insert and temporarily fix the bind screw M5x10 (5) into the upper threaded hole of the mounting plate set to the door. (Fig. 6)

In case the SLUH-SZ mounting plate ④ 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 $\widehat{\mathcal{D}}$ 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 (9) into the upper threaded hole of the mounting plate set to the door. (Fig. 7)

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

Step 5. Insert the bind screw (9) (or (5)) temporarily fastened to the mounting plate SLUH-AZ (or SLUH-SZ) 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 (9) (or (5)) for both sides into the lower threaded hole of the mounting plate SLUH-AZ (or SLUH-SZ) 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 7) is used, for horizontal adjustment it is necessary to insert the adjusting plates (8) of the required quantity between the unit mounting plate and the mounting plate.) \rightarrow Refer to the following item.

