

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

- This mechanism is composed of the right-hand and left-hand unit bodies. Pay attention to the direction when installing.
- This is the mechanism exclusively for a horizontal bi-folding type door application. Be reminded that we can not take the responsibility for damages and injuries caused by other applications, as well as by disassembly, conversion and the application to the doors exceeding the standard ranges shown in the item "Applicable door ranges".
- This mechanism should be installed to a wardrobe or a cabinet properly in accordance with the indications of this Manual. Notice that the non-observance of the specified dimensions not only lead to failure to show the full performance of this mechanism, but also may result in damage and also cause injury.
- Be sure to use the attached screws for installing this mechanism. Otherwise the disconnection of the mechanism parts 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 not to induce bent or torsion.

Cautions for operation

- Keep the doors from forced opening and closing. It is prohibited to open the doors over a full open angle or to close the doors 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. Sever injury may be caused.
- It is necessary to periodically check the fixing screws for loosening. Tighten the I

■ PARTS DESCRIPTION

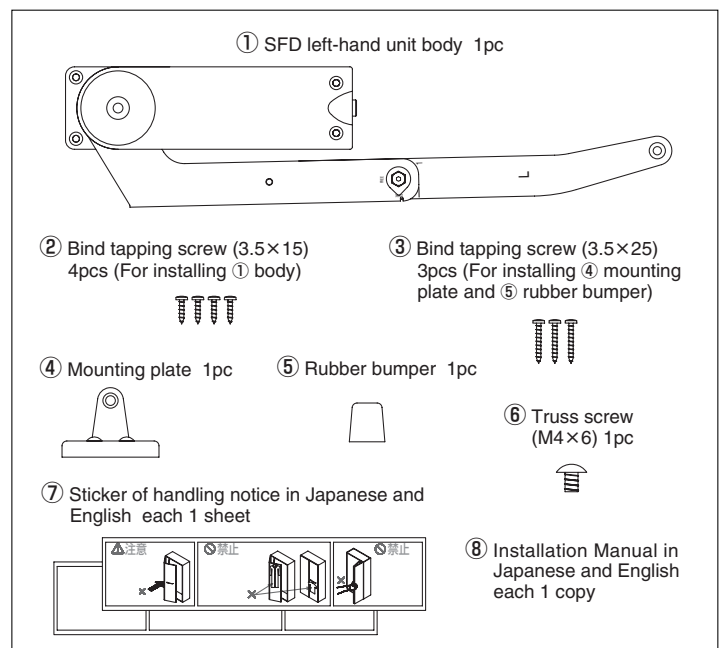
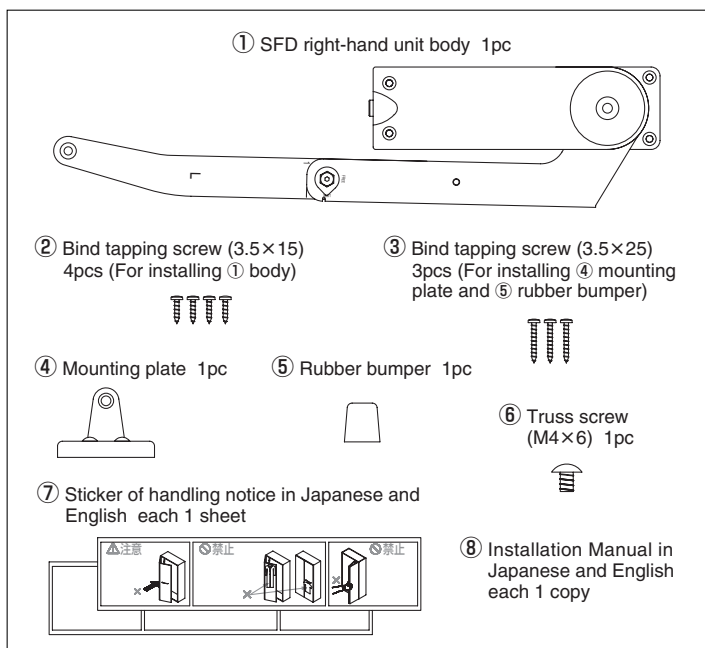


Fig.1 Parts description

Hexagon key(2.5mm, 5mm, 8mm) are needed for installation. In addition to the above, prepare one handle and the slide and center hinges of quantities recommended by our company in Table 1 (p. 2) separately.

APPLICABLE DOOR RANGES, MOUNTING DIMENSIONS

APPLICABLE DOOR RANGES

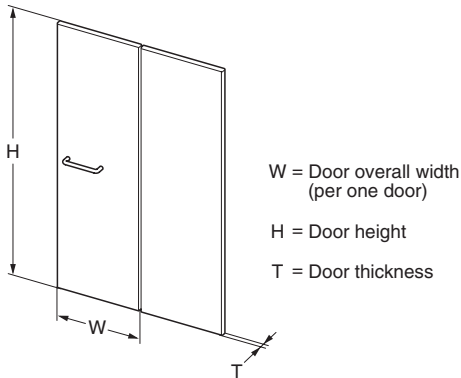


Fig. 2. Cabinet (for right-hand side)

※When using this mechanism it is necessary to consider the dimensions and the weight of an applicable door. Contact our sales representatives in case of installing to a door exceeding the following ranges.

Door overall width W : 380mm ~ 460mm (per one door)
 Door height H : max. 2600 mm
 Door thickness T : 18 ~ 30mm (Refer to Fig. 2)
 Door weight max. 8kg(per one door)

- The concealed hinges should be used as a door hanging device. The LAMP brand 220 series concealed hinges (product No. H220-26/16T for outset specification or product No. H220-26/0T for inset specification) are recommended.
- For connecting two doors be sure to use our standard center hinges (product No. CH75).
- The required quantities of slide and center hinges depend on the door height (Refer to Table 1).
- One each concealed hinges should be installed at a distance of 100mm from the upper and lower edges of a door. When using three and more concealed hinges, for strength it is recommended to install the middle concealed hinge slightly higher than the center point of the upper and lower concealed hinges. The other dimensions concerning the installation of concealed hinges differ depending on the concrete hinges.
- The center hinges should be installed at an equal interval along the door height. In this case the joint gap of 2mm between doors should be taken into account (Refer to Fig. 3).

Table 1. Required quantities of hinges (recommendation)

Door height (mm)	Concealed hinge (pcs)	Center hinge (pcs)
~ 500	2	2
500 ~ 1000	3	2
1000 ~ 1500	4	3
1500 ~ 2000	5	4
2000 ~ 2600	6	4

MOUNTING DIMENSIONS

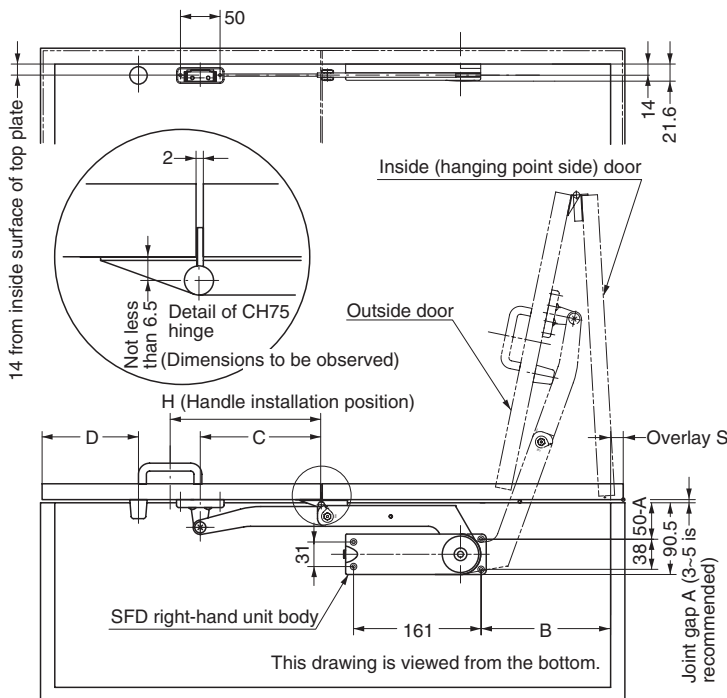


Fig. 3-1. Mounting dimensions for overlay specification (for right-hand side)

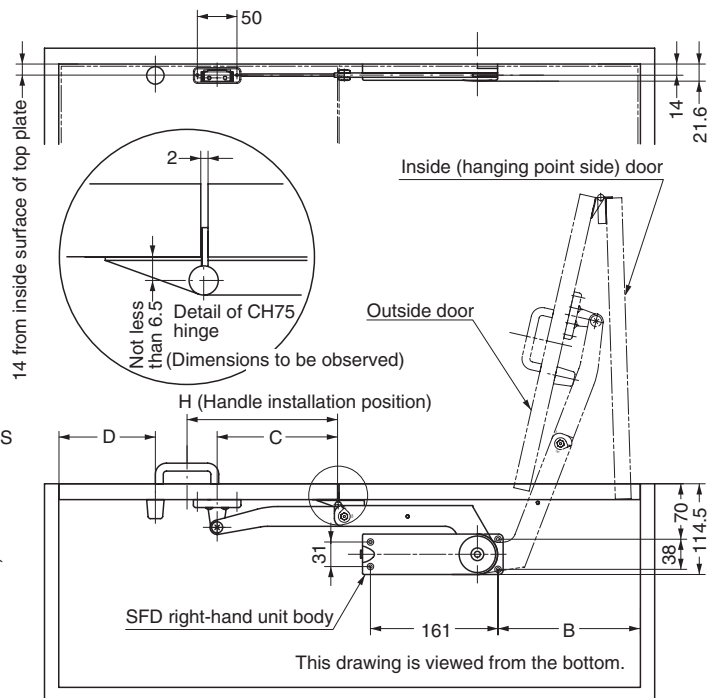


Fig. 3-2. Mounting dimensions for inset specification (for right-hand side)

Table 2-1. Mounting dimensions for outset specification

Arm size	Standard door width	Width ranges of applicable door	Arm length adjusting mark	Dimension B	Dimension C	Dimension D	Dimension H
L	380	375 ~ 385	1	179.5 - S	152	(150)	(190)
	390	385 ~ 395	2	184.5 - S	155	(155)	(195)
	400	395 ~ 405	3	189.5 - S	158	(160)	(200)
	410	405 ~ 415	4	194.5 - S	161	(165)	(205)
	420	415 ~ 425	5	199.5 - S	164	(170)	(210)
	430	425 ~ 435	6	204.5 - S	167	(170)	(215)
	440	435 ~ 445	7	209.5 - S	170	(175)	(220)
	450	445 ~ 455	8	214.5 - S	173	(180)	(225)
	460	455 ~ 465	9	219.5 - S	176	(180)	(230)

Table 2-2. Mounting dimensions for inset specification

Arm size	Standard door width	Width ranges of applicable door	Arm length adjusting mark	Dimension B	Dimension C	Dimension D	Dimension H
L	380	375 ~ 385	1	179.5	152	(150)	(190)
	390	385 ~ 395	2	184.5	155	(155)	(195)
	400	395 ~ 405	3	189.5	158	(160)	(200)
	410	405 ~ 415	4	194.5	161	(165)	(205)
	420	415 ~ 425	5	199.5	164	(170)	(210)
	430	425 ~ 435	6	204.5	167	(170)	(215)
	440	435 ~ 445	7	209.5	170	(175)	(220)
	450	445 ~ 455	8	214.5	173	(180)	(225)
	460	455 ~ 465	9	219.5	176	(180)	(230)

ARM LENGTH ADJUSTMENT, INSTALLATION PROCEDURE

ARM LENGTH ADJUSTMENT

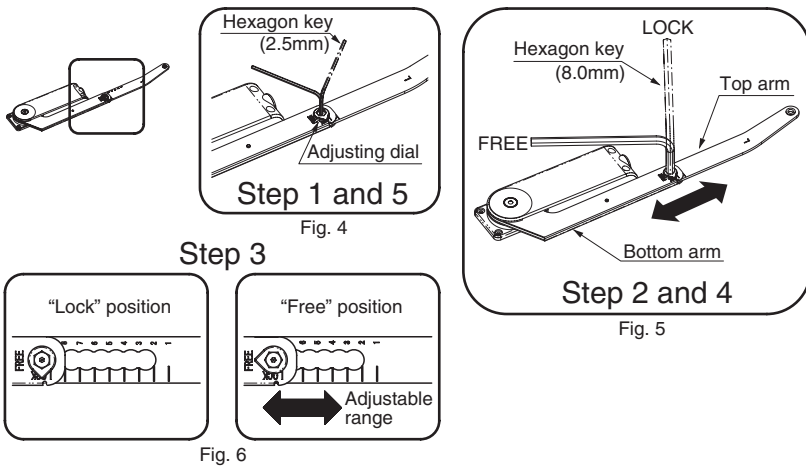


Fig. 4,5,6 Arm adjustment procedure

- step1 Using a hexagon key (2.5mm) loosen the socket screw securing the adjusting dial (Fig. 4).
- step2 Using a hexagon key (8.0mm) set the adjusting dial point to the "Free" position (Fig. 5).
- step3 Adjust the arm length when the adjusting dial point is set at the "Free" position (Table 2 and Fig. 6). For adjusting set the edge of the bottom arm to the numeral marked line shown on the inside end of the top arm.
- step4 Using a hexagon key (8.0mm) set the adjusting dial point to the "Lock" position (Fig. 5).
- step5 Using a hexagon key (2.5mm) tighten the socket screw securing the adjusting dial (Fig. 4).

⚠ Do not turn the adjusting dial by force. Otherwise product breakage may happen. After adjusting the arm length be sure to set the adjusting dial point to the "Lock" position and fix the dial with the socket screw.

INSTALLATION PROCEDURE

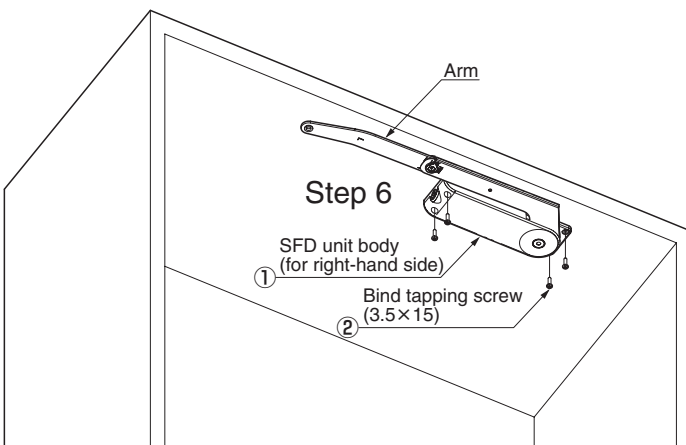


Fig. 7. Installation of unit body

● Installation of SFD unit body

- step6 Put the unit body ① the arm length of which has been adjusted according to the door width on the specified position of the inside surface of a cabinet (As for the mounting dimensions refer to Fig. 3 and Table 2) and fix it with the attached bind tapping screws (3.5x15) ② (Fig. 7).

⚠ Be reminded that careless handling of the arm may lead to its accidental rotation by the action of the mounted-in spring and cause injury. Moreover, be careful not to insert your fingers into the arm mechanism when operating.

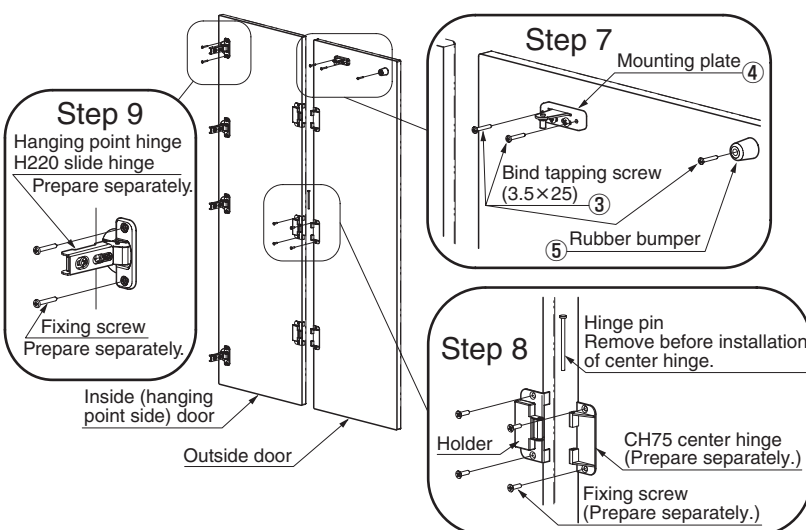


Fig. 8. Installation of mounting plate and hinges (for right-hand side)

● Installation of mounting plate and center hinges

- step7 Fix the mounting plate ④ and the rubber bumper ⑤ tightly to the specified position of the rear surface of an outside door with the bind tapping screws (3.5x25) ③ (Fig. 8).
- step8 Remove the hinge pin of the CH75 center hinge separating the latter into two halves and install them to the outside and inside (hanging point side) doors respectively. The hinge half with a holder should be installed to the inside door (Fig. 8).
※ Refer to " ■ Applicable door ranges" for necessary number of hinges.
- step9 Install the slide hinges to the inside door (Fig. 8).
※ Refer to " ■ Applicable door ranges" for necessary number of hinges.

■ INSTALLATION OF DOORS TO CABINET

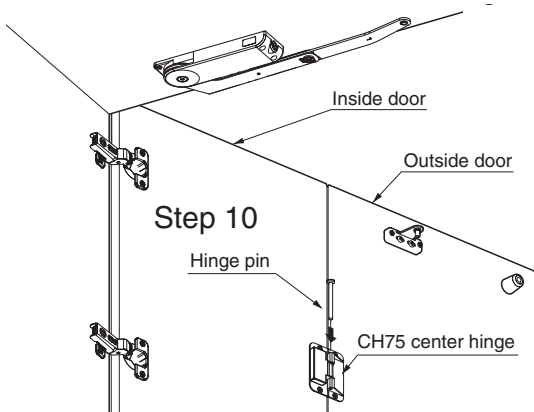


Fig. 9 Installation of doors (for right-hand side)

step10 Install the inside door to the cabinet. When a one-touch type hinge is used as a door hanging device, ascertain that the mounting plate of the hinge and the unit body have been fixed tightly.

Putting together the center hinge halves of the outside and inside doors respectively, insert the hinge pin through for hanging the outside door (Fig. 9).

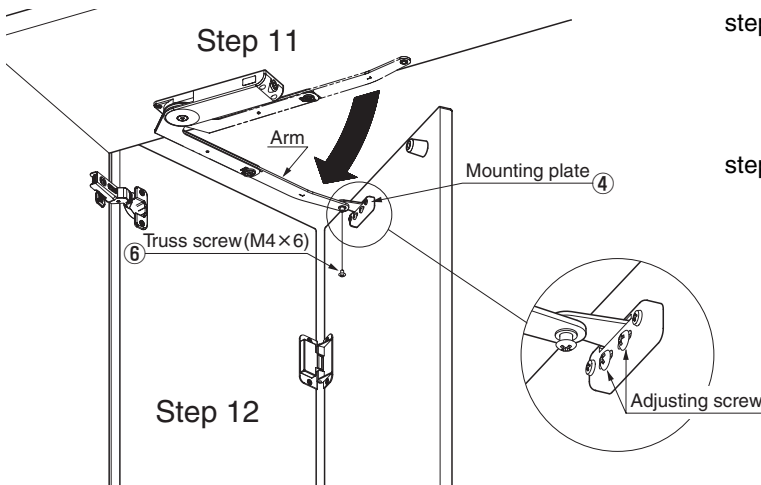


Fig. 10 Installation of doors (for right-hand side)

step11 Fit the projection of the mounting plate (4) into the arm hole to the limit (Fig. 10), and then fix them tightly with the truss screw (M4x6) (6). The tightening torque should be not less than 15kgf · cm (1.5N · m).

step12 When the door cannot be shut fully, loosen the adjusting screws of the mounting plate and fix the latter at the position where the door is closed fully. The adjusting screws are able to adjust the horizontal position in the range of ±5mm. After fixing the position be sure to tighten the adjusting screws additionally (Fig. 10).

■ ADJUSTMENT OF DOOR OPENING AND CLOSING SPEED

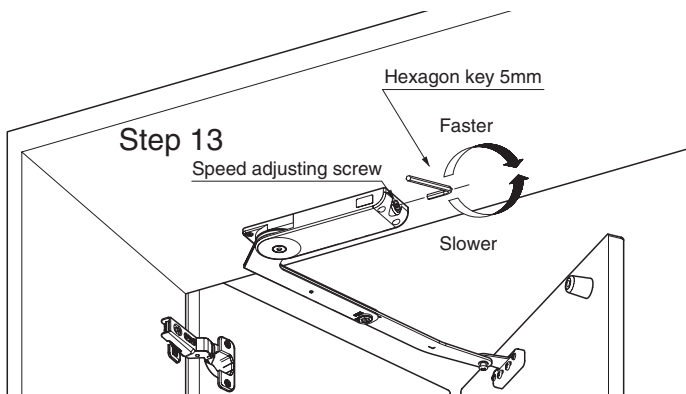


Fig. 11. Adjustment of door opening and closing speed (for right-hand side)

step13 Opening and closing the door, adjust the door opening and closing speed with the speed adjusting screw of the body backside. Speed adjustment is carried out with the 5mm hexagon key (Fig. 11).

Opening and closing speed will be faster when the adjusting screw is turned clockwise as viewed from the backside body, and slower when the adjusting screw is turned counter-clockwise.

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



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