

LAMP[®]

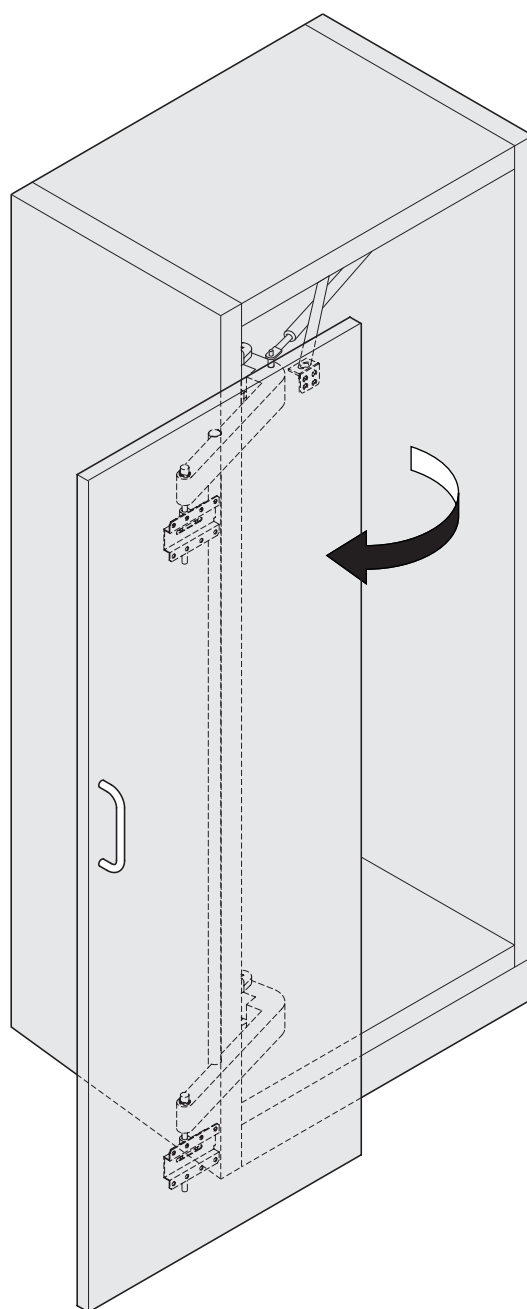
Flat Door Hardware FAD-44 Instruction Manual

Wooden Frame Type

PAT.P

Thank you very much for your purchase of our product.

For safe and proper assembly, fully read this manual before installation.



Safety Cautions

For your safety, be sure to read the following safety cautions first.



Please follow these instructions carefully for proper use.



WARNING

Indicates a matter which, if neglected, may cause loss of life or serious injuries.



CAUTION

Indicates a matter which, if neglected, may cause injuries or property damage.

In addition, the following pictographs are used to indicate the types of warnings (cautions).

Meanings of pictographs	
	Indicates a warning (caution) which you are required to take. It is followed by specific content of the warning (caution).
	Indicates an act which you must not do. It is followed by specific content of the act.
	Indicates an instruction which you must follow. It is followed by specific content of the instruction.



If you need to install this product, ask the dealer that you purchased our product or technicians who are skilled in the installation work of the product. Improper installation may lead to a fall of the product during usage, causing an extreme danger.

Notes on works

Handling of product

- The door is not supplied.
- After unpacking the product, check for damages on the parts.
- DO NOT modify the product. Otherwise, its strength may be decreased.
- Ask the technicians who are skilled in the installation work of the product for assembly or installation of the product.
- When working on the product, be sure to observe the instructions in this manual.

● Specifications

Cabinet inner width	From 750 mm to 800 mm* * If the overlay distance on both sides of side plate is 25 mm, the door width should be 800 to 850 mm.	Door thickness	From 24 to 38 mm
		Door weight	Max. 30 kg / 1 door
Door height	2380 mm max.	Side plate thickness	25 mm min.

● Description of parts

1

Hinge base x 2 Channel rail x 1 Support arm square nut x 1 Gas spring square nut x 1

Screw		Q'ty
Countersunk self-tapping screw 4x20		5
Countersunk self-tapping screw 4.5x30		12

2

Arm connecting pipe x 1 Pipe clamp x 1

Screw		Q'ty
Hexagon socket head cap screw M6x35		4
Flat washer		4

3

Gas spring holder x 1 Screw pin x 1 Conical spring washer x 1

Screw		Q'ty
Hexagon socket head cap screw M6x12		2
Spring washer		2
Square nut M6		2
Flat washer		2
E-ring		2

4

Bearing housing x 4

Screw		Q'ty
Hexagon socket head cap screw M6x12		8
Spring washer		8

5

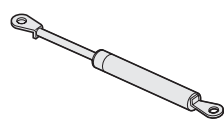
Positioning unit x 2

Screw		Q'ty
Cross-recessed blind self-tapping screw 4.5 x 20		16
Hexagon head bolt M10x150		2
Hexagon nut M10		2
Flat washer		2

6

Support arm x 1 Upper arm (w/ stopper) x 1 Lower arm x 1 Clear cushion rubber x1 + 1 (spare)

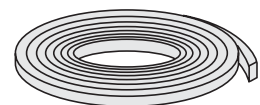
Screw		Q'ty
Hexagon socket head cap screw M6x12		4
Spring washer		4
Flat washer		2
Square nut M6		2



Gas spring x 1

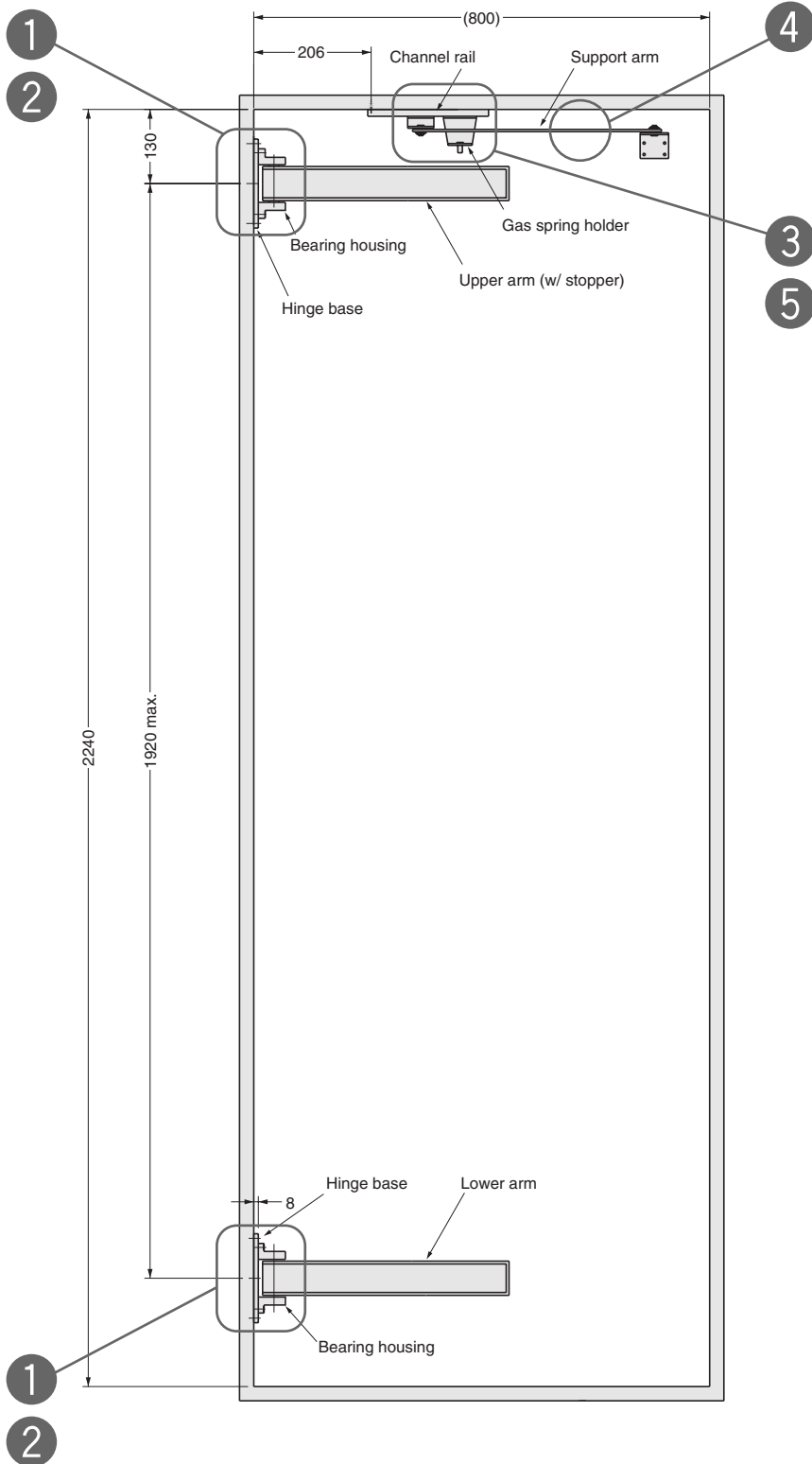


Handle x 1



Pile seal x 1

1 Installing Parts to Cabinet (Wooden Frame)

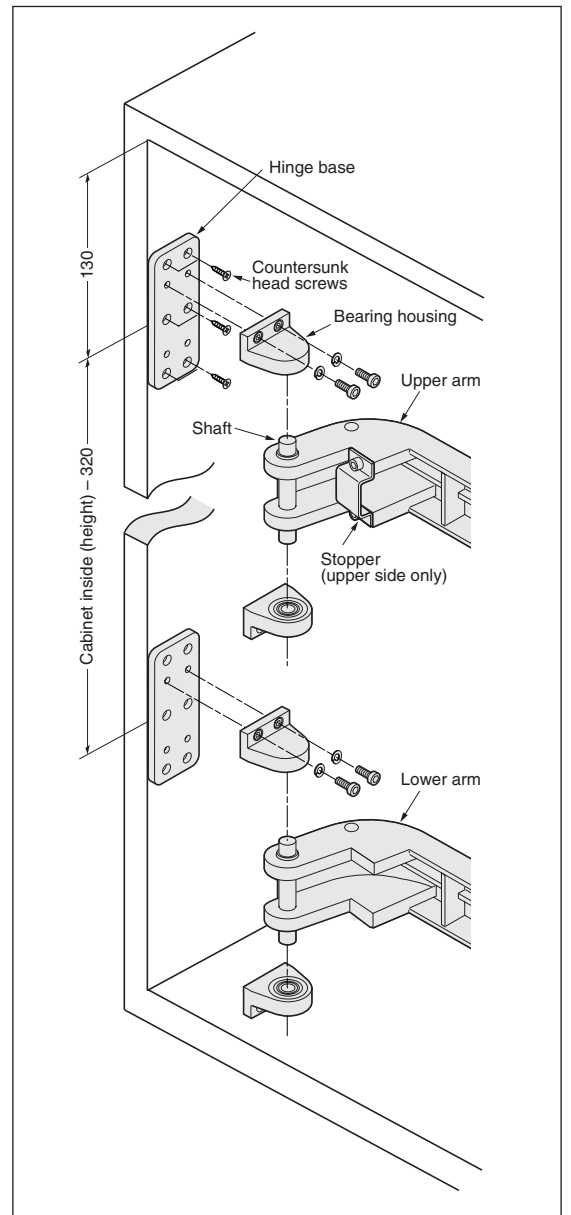


1 Installing parts to side plate of cabinet (wooden frame)

Fix the "Hinge base" to the cabinet (wooden frame) with the supplied screws.

2 Installing upper and lower arms

Insert the shafts of the "Upper and lower arms" into the "Bearing housing" as shown in the figure below, and fix them to the "Hinge bases" with the supplied countersunk head screws.



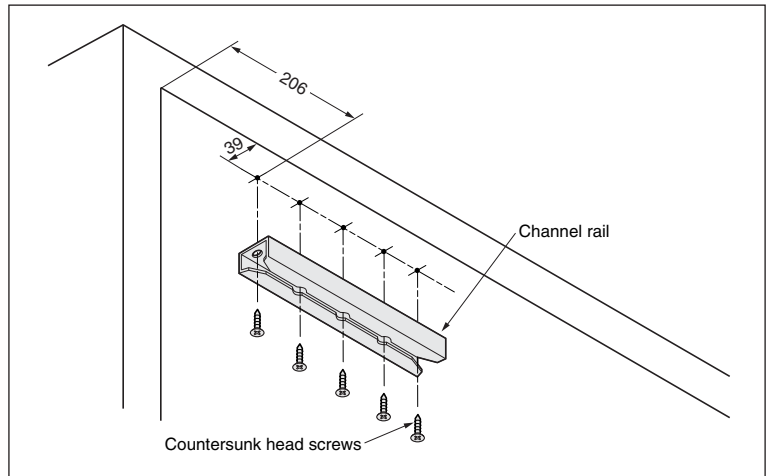
Symbols from ① to ⑤ shown in the figure indicate the locations described below.

This figure shows installation to the cabinet.

frame) ! Installing Parts to Roof of Cabinet (Wooden Frame)

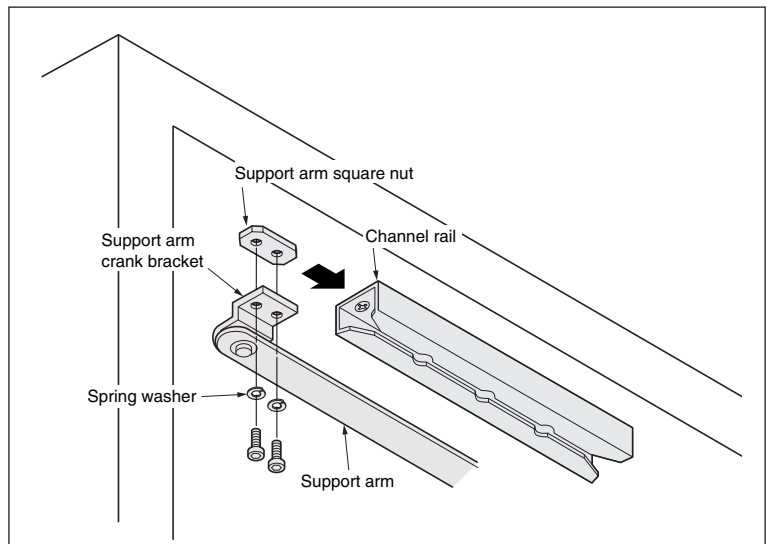
3 Installing channel rail

As shown in the figure, fix the "Channel rail" to the bottom of the roof with the supplied countersunk head screws.



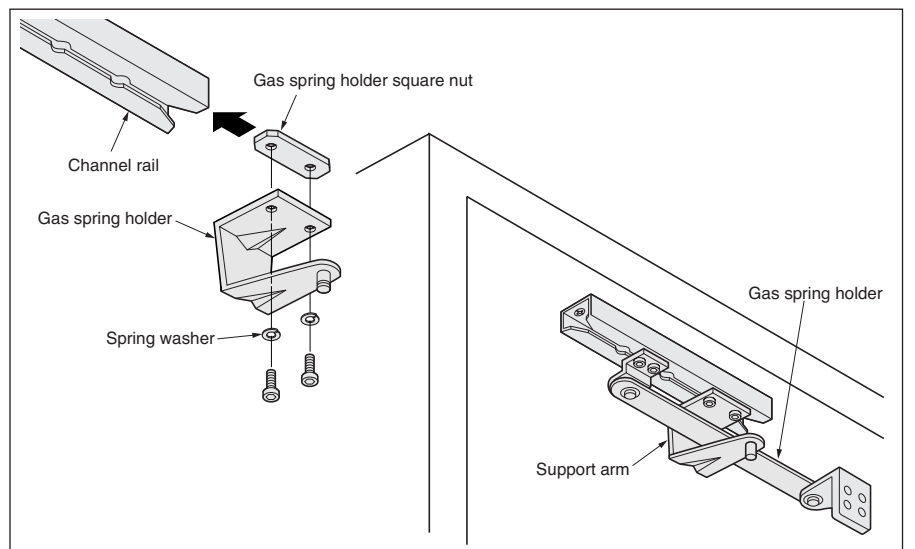
4 Installing support arm bracket

Insert the "Support arm square nut" into the "Channel rail", and temporarily fix the "Support arm crank bracket" with the supplied screws as shown in the figure shown on the right side.

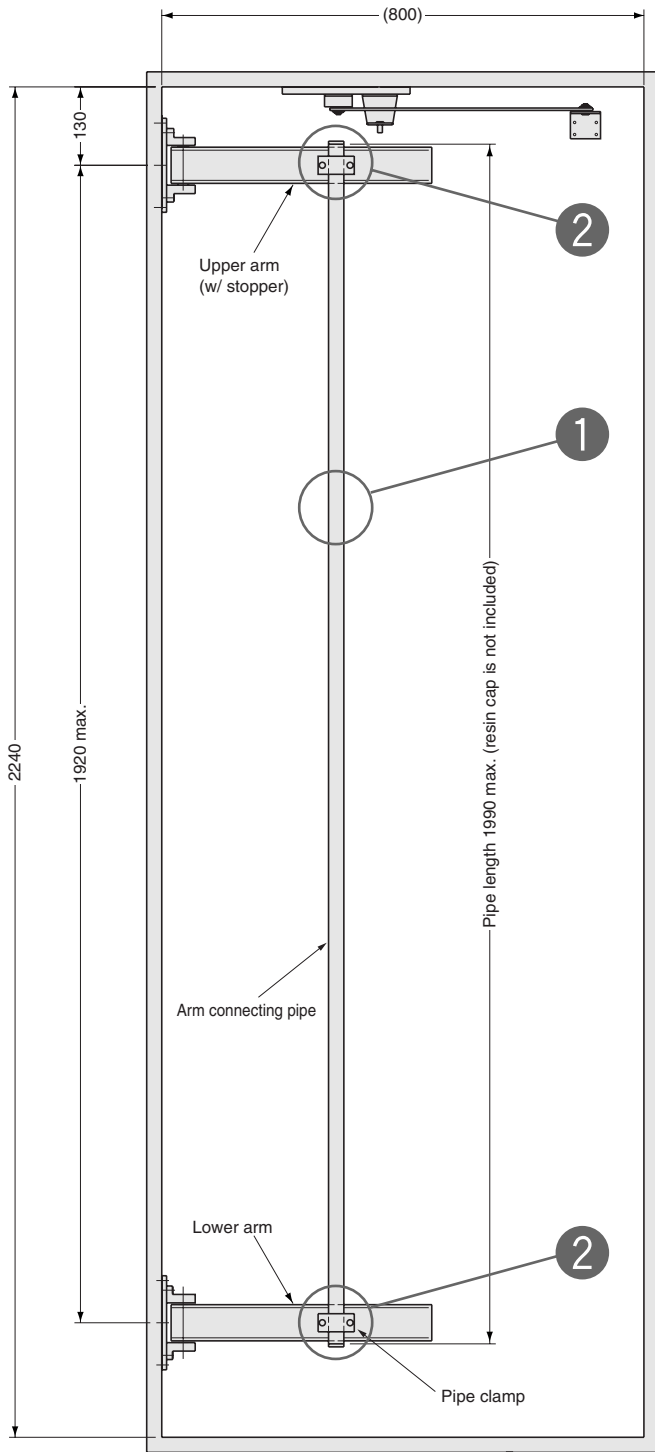


5 Installing gas spring holder

Insert the "Gas spring square nut" into the "Channel rail", and temporarily fix the "Gas spring holder" with the supplied screws, as shown in the figure on the right side.

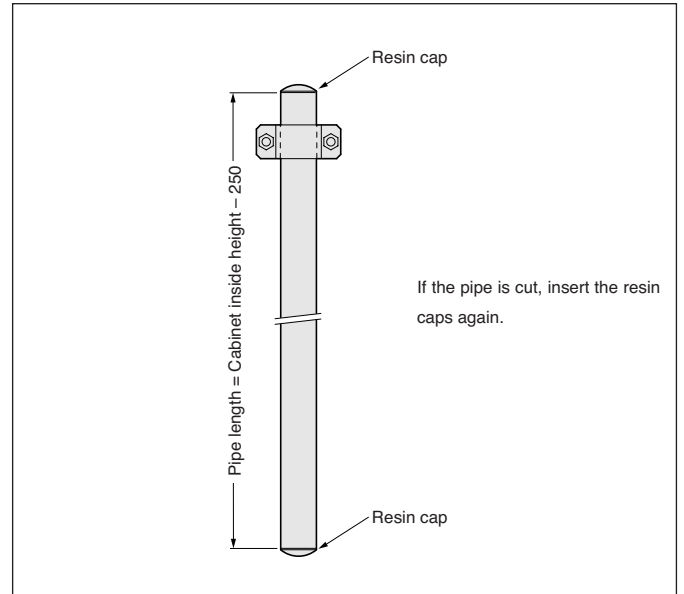


2 Installing Arm Connecting Pipe



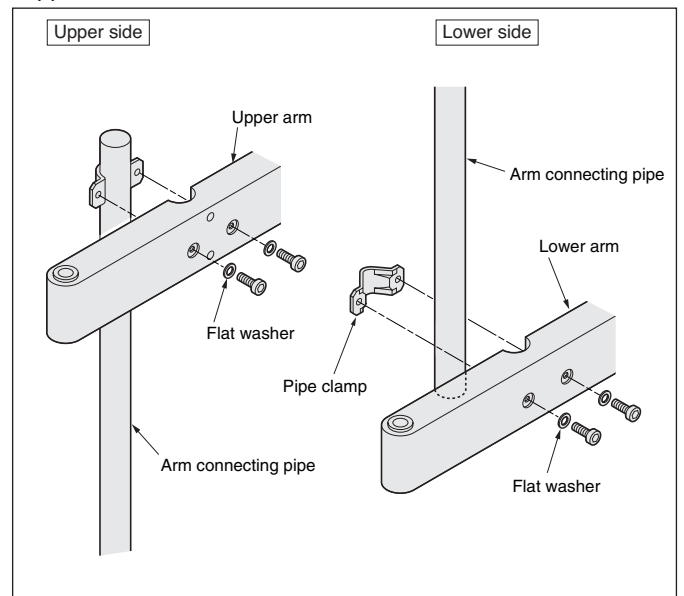
1 Length of arm connecting pipe

Cut the "Arm connecting pipe" as shown on the figure below.

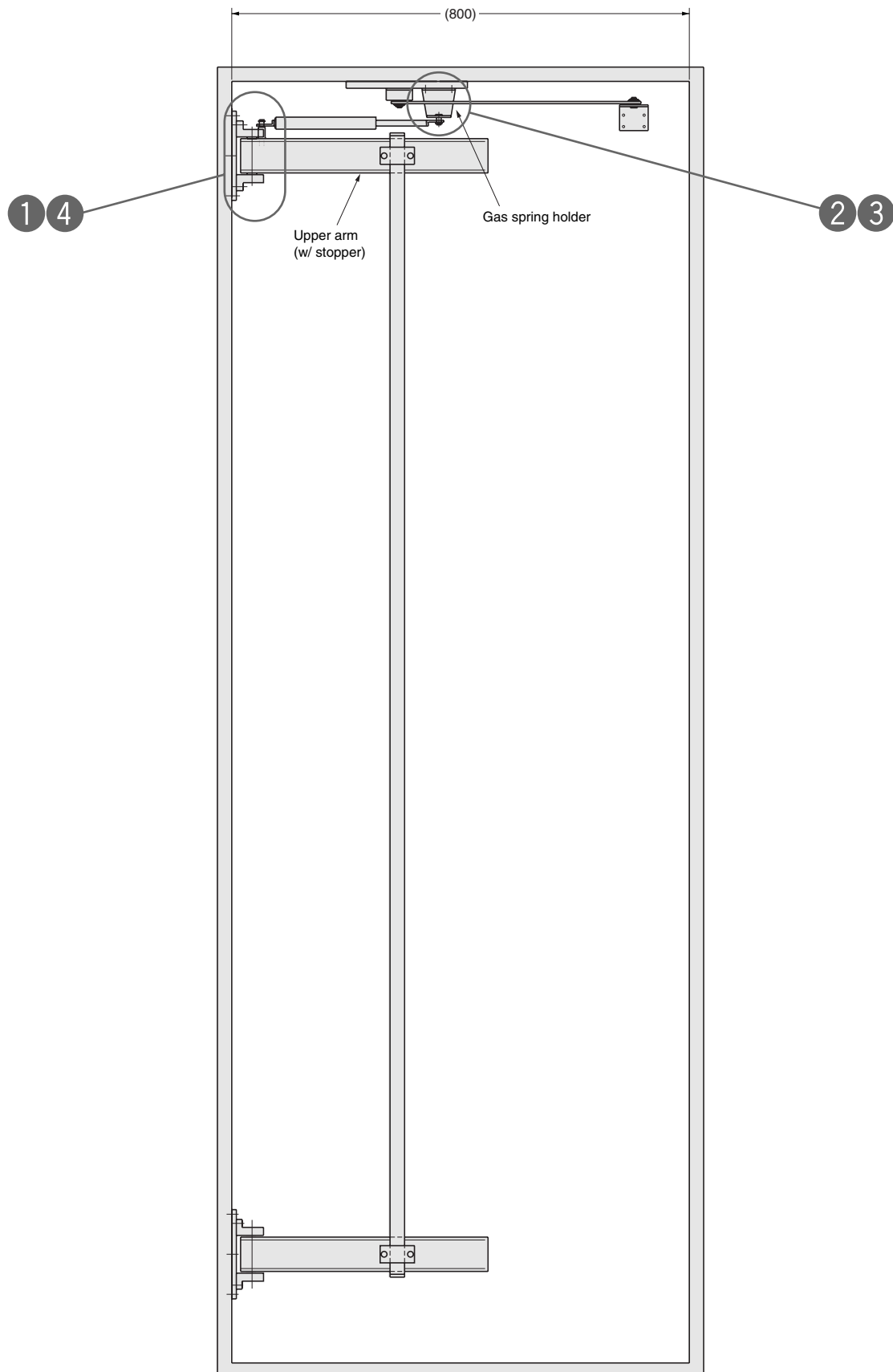


2 Installing arm connecting pipe

Fit the "Arm connecting pipe" to the recess of the "Upper arm", and fix it with the supplied screws. Fix the "Arm connecting pipe" to the "Lower arm" with the "Pipe clamp" and the supplied screws.

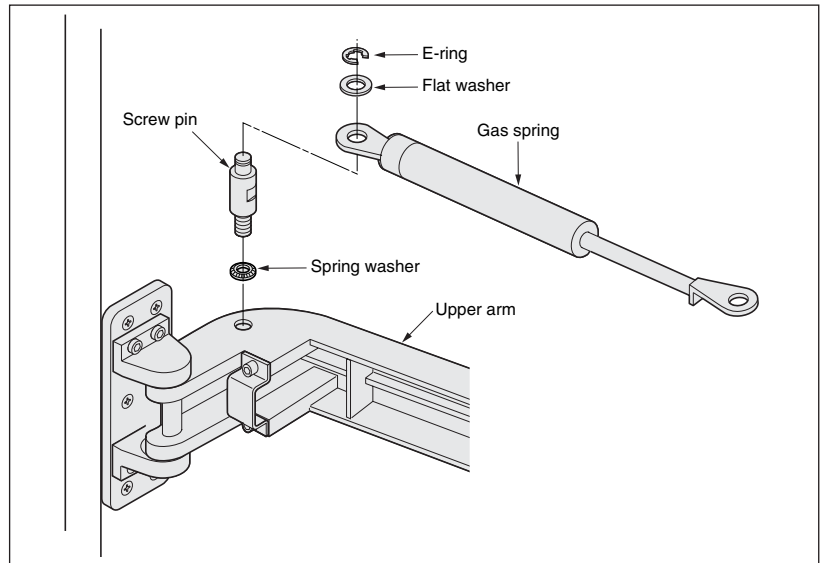


3 Installing Gas Spring



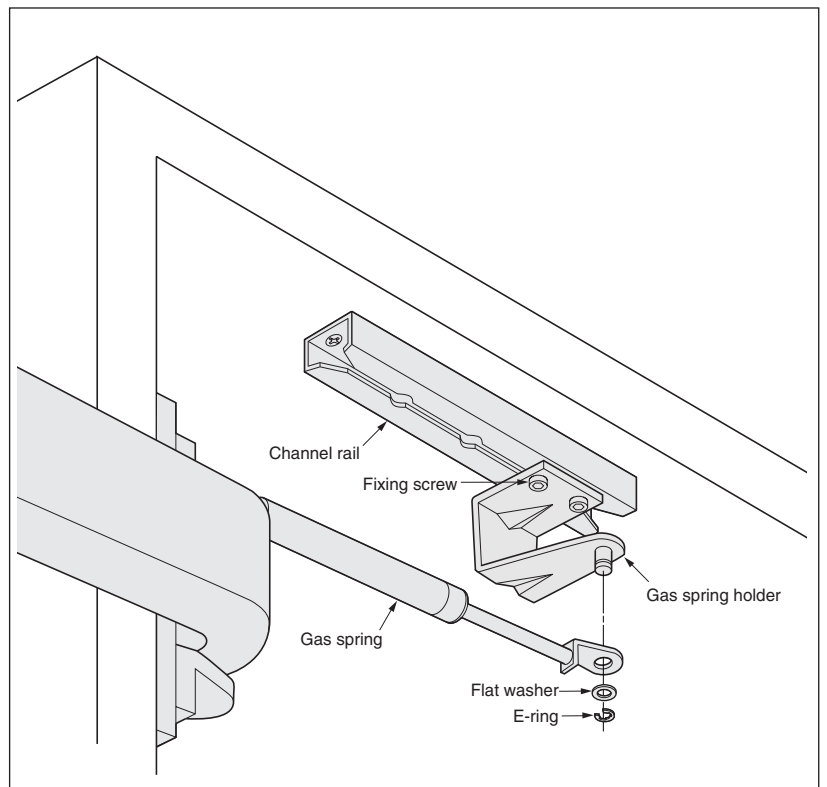
1 Installing the gas spring (arm side)

Fully screw the "Screw pin" into the tapped hole on the top face of the "Upper arm". (Use a wrench (10).)
Set the "Gas spring" to the "Screw pin" as shown in the figure on the right side.



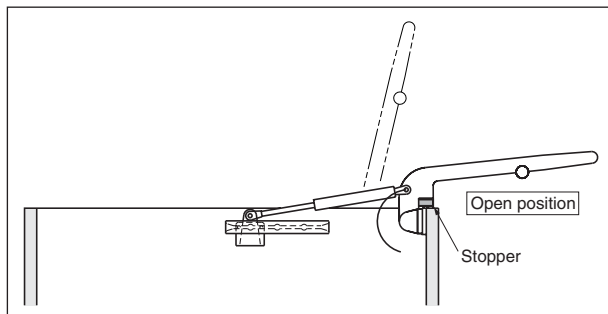
2 Installing the gas spring (roof side)

Loosen the screw on "Gas spring holder" so that the holder can be moved.
Move the arm to the stopper of "Upper arm" until it contacts with the end of cabinet (open position), move the "Gas spring holder" along the rail, and install the gas spring to the screw pin as below.



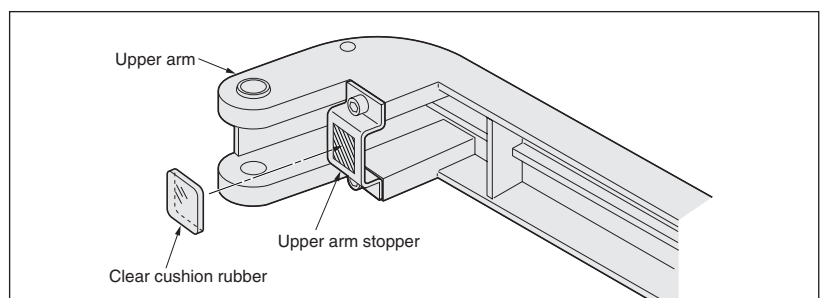
3 Tightening gas spring holder

Tighten the screw on gas spring holder while the stopper of the "Upper arm" is coming in contact with the end of cabinet.



4 Attaching clear cushion rubber

Return the upper arm in close position, and attach the clear cushion rubber to the center of the "Stopper of upper arm" as the drawing.



4 Installing Parts to Door

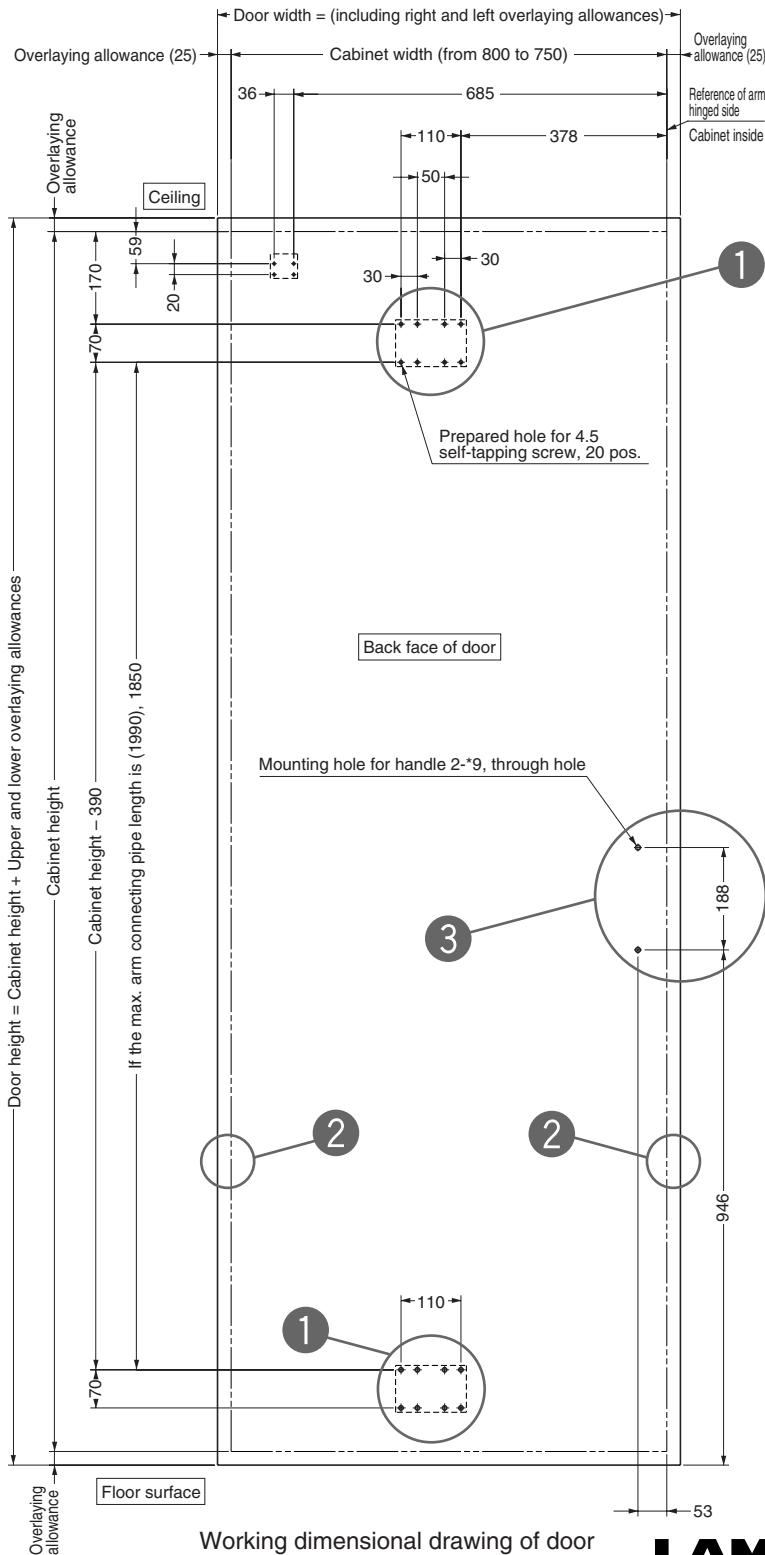
The door is not supplied.

CAUTION

Set core material of which strength is enough for secure tightening of self-tapping screws to the locations that parts are to be installed.

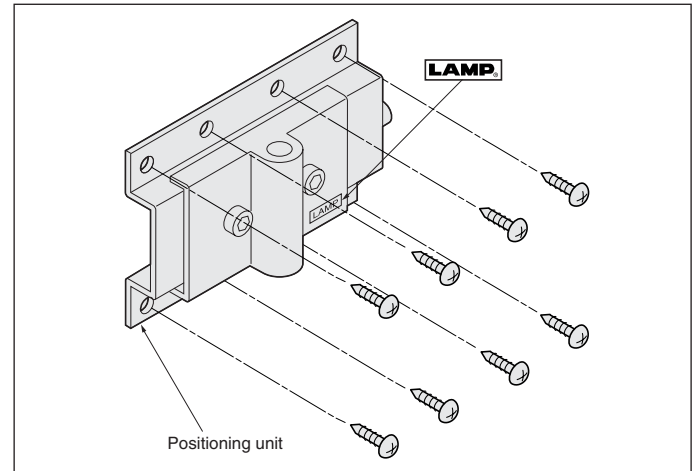
CAUTION

Dimensions in lateral direction are determined with the (width) of the cabinet (wooden frame) regarded as the reference position. If the door end face is regarded as the reference position, add the overlaying allowance.



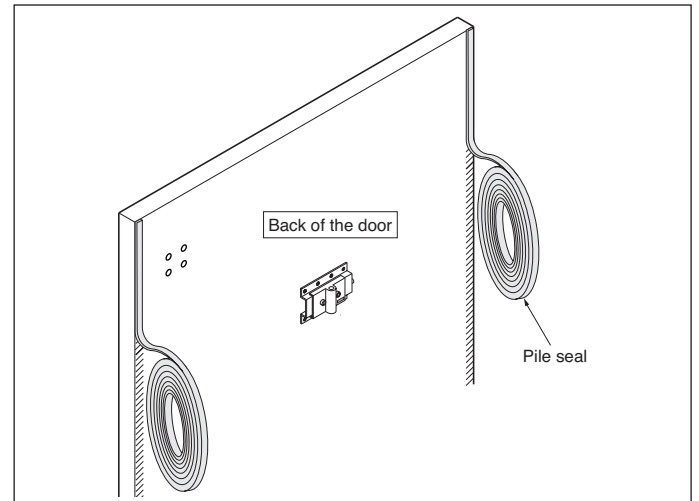
1 Fixing positioning unit

Fix the "Positioning unit" to the back of the door with the supplied screws so that the **LAMP** mark can be seen as below.



2 Attaching pile seal

Attach "Pile seal" to the (edge of the door) shown as below.

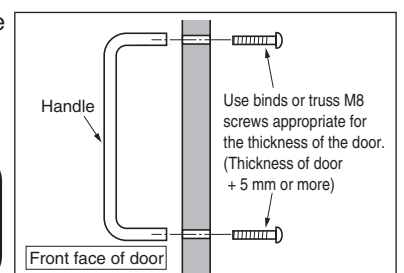


3 Installing the handle

Install the handle to the front of the door.

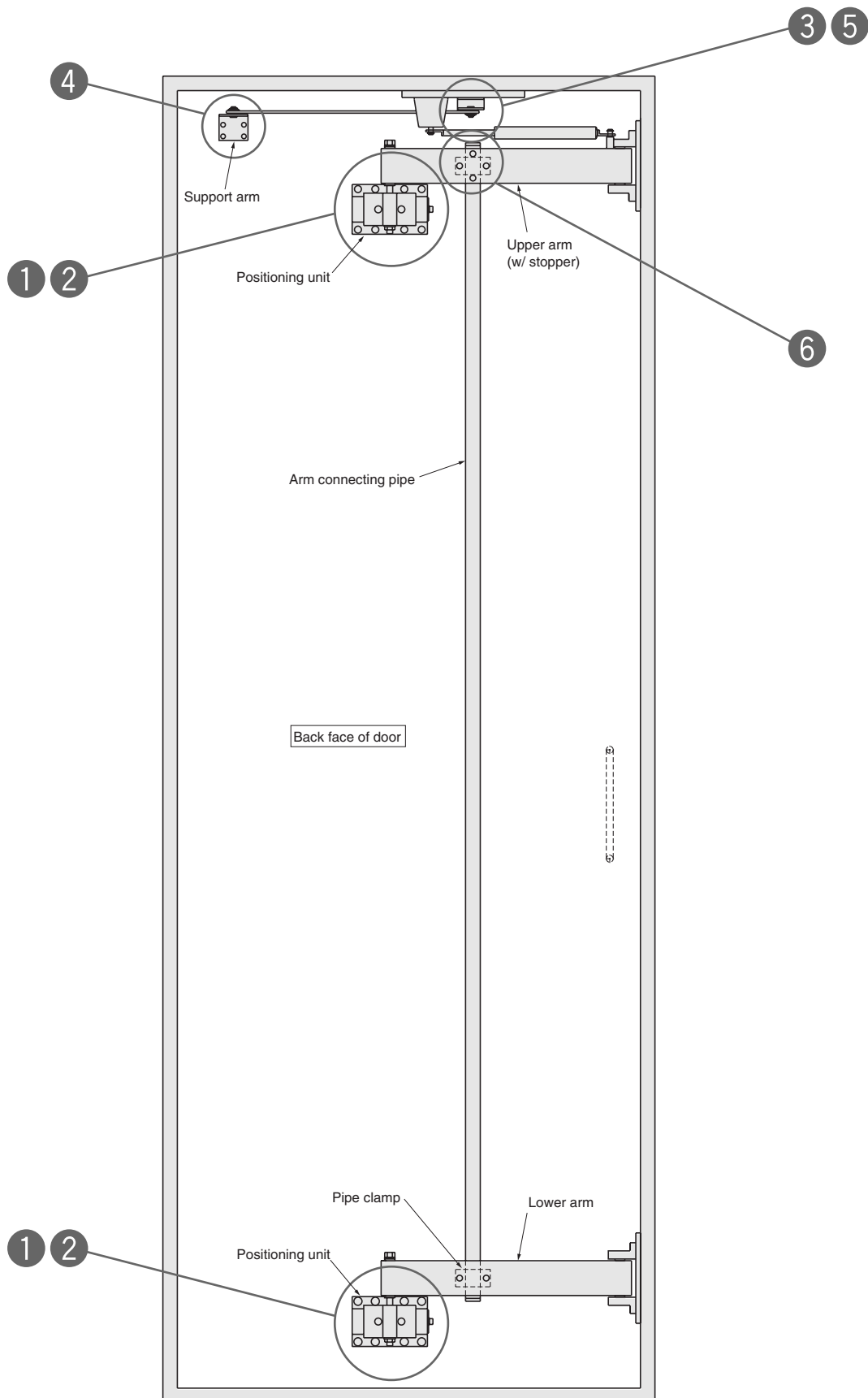
CAUTION

Be sure to install the handle to the location closer to the hinge than the center of the door.



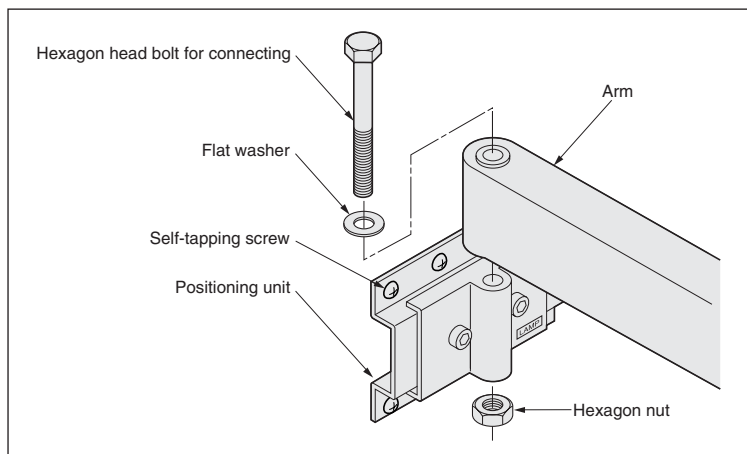
5

Installing Door



1 Connecting upper and lower arms to positioning unit

Connect the upper and lower arms to the "Positioning unit". Insert hexagon head bolt with flat washer, then screw it by hexagon nut.



2 Vertical and horizontal positioning of door

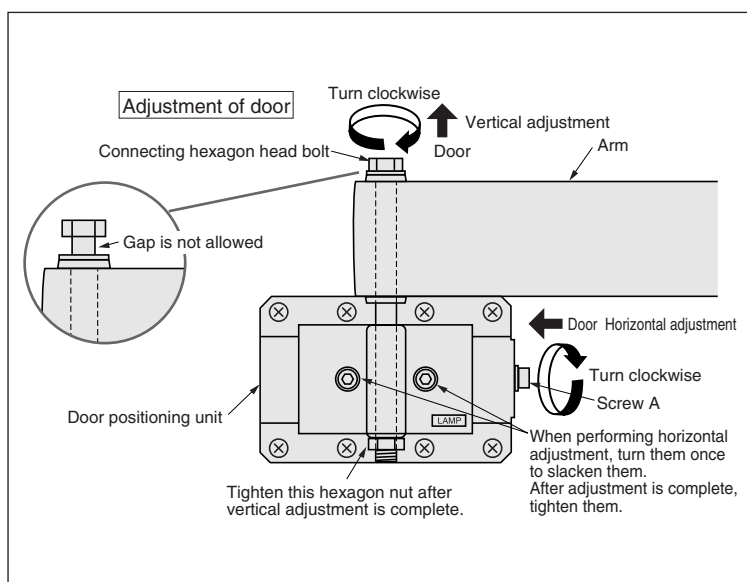
Adjust the vertical and horizontal positions after closing the door completely.

Horizontal adjusting: Turn the screw A of the "Door positioning unit" clockwise. Then, the door is moved leftward when it is seen from the back of the door. It is moved rightward when the screw A is turned counterclockwise.

Vertical adjusting: Turn the connecting hexagon head bolt clockwise. Then, the door is raised. It can be lowered when it is turned counterclockwise.

CAUTION

For both the upper and lower arms, gap should not be allowed between the head of the hexagon head bolt and the flat washer. If there is any gap, turn the hexagon head bolt clockwise to eliminate the gap so that the weight of the door is received by the upper and lower arms uniformly.



3 Loosing bracket

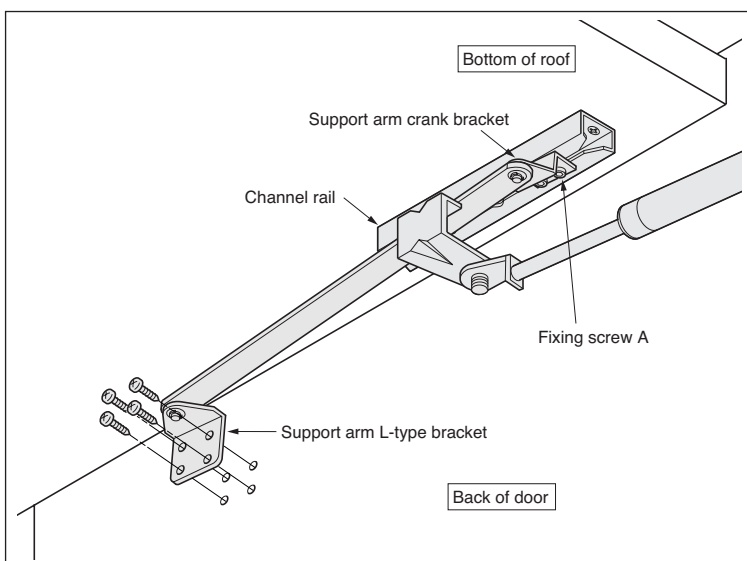
Loosen the fixing screw A so that the "Support arm crank bracket" is slid along the groove of the "Channel rail".

4 Fixing support arm

When the door is completely closed, fix the "Support arm L-type bracket" to the door with the supplied screws.

5 Fixing bracket

Tighten the fixing screw A, and fix the "Support arm crank bracket".

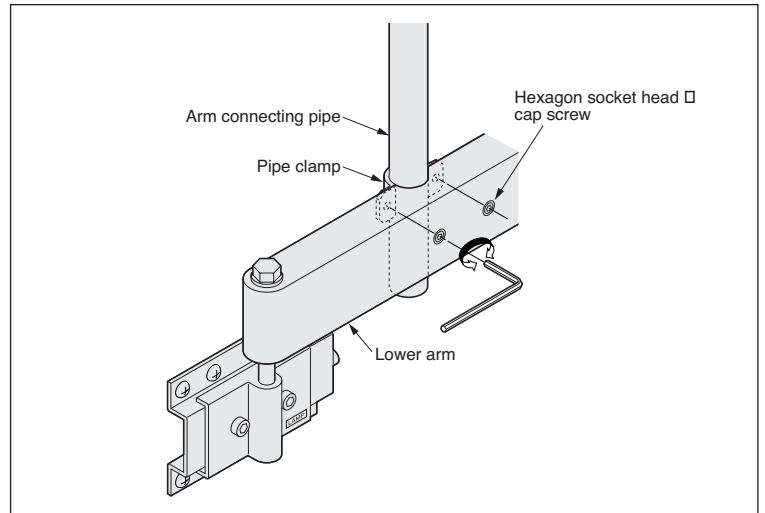


! When the door position is required to adjust, be sure to loosen the fixing screw A first so that the bracket can be slid. After adjustment is complete, fix the "Support arm crank bracket".

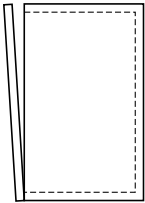
6 Adjusting the gap between cabinet (wooden frame) and door

While keeping the door closed with no gap between the door and cabinet (wooden frame), loosen the "Hexagon socket head cap screws" fixing the "Pipe clamp" attached to the lower arm, and retighten them.

If there is any gap, adjust it by referring to the following instructions on the adjustment and figures on the right side.



- If there is any gap between the "Cabinet" and the upper side of the door, be sure to loosen the fixing screw A at first, and tighten the "Door close positioning screw C". Then, retighten the fixing screw A for re-adjustment.



- If there is any gap between the "Cabinet" and the lower side of the door, adjust the upper "Door close positioning screw B" in a similar manner to the above.

