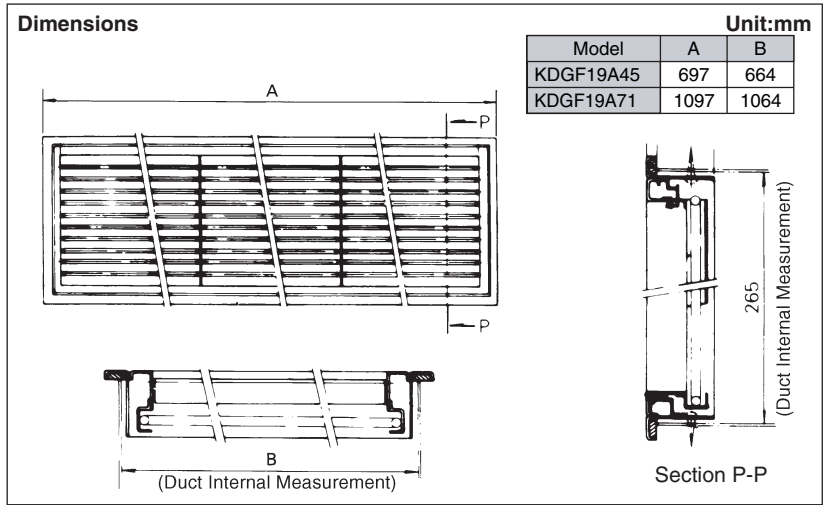
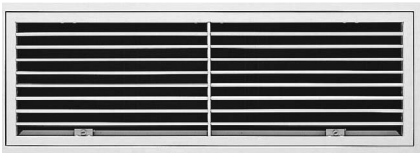


6. FXVD

- Ceiling Mounted Low Silhouette Duct Type -

6.1 KDGF19A45.71 — Decoration Panel

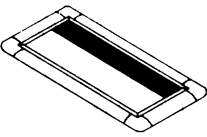


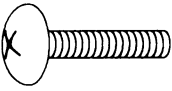
7. FXS(YQ) / FXYB - Ceiling Mounted Built-in Type -

7.1 BYBS32·45·71·125DJW1 — Decoration panel

① Check of the parts

- The box contains this manual and the parts listed below.

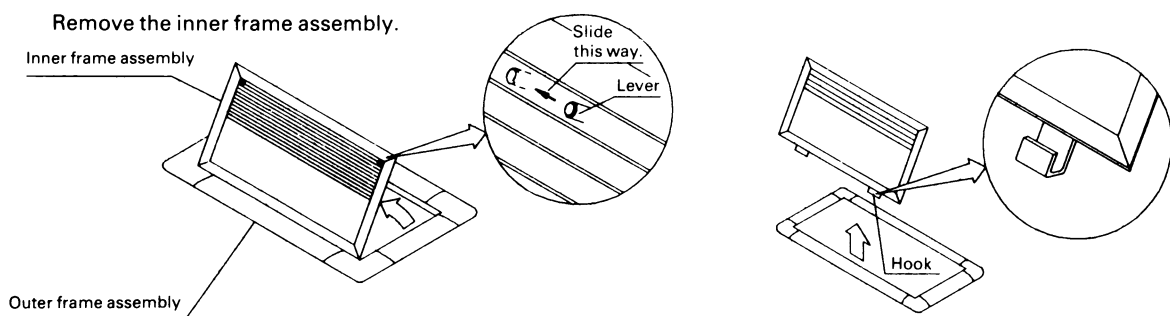
Item	Description	Quantity
Decoration panel		1 set

Item	Description	Quantity
Decoration panel fixing screw	 M5 × 40	4 pcs.

② Preparing the decoration panel

- Handle the suction panel with care.

< **Never lean the panel against a wall, etc. nor leave it on a projecting object. (For preventions of dents or damages to the panel surface.)** >



- Slide the inner frame assembly's lever and pull up the inner frame assembly.
- Unhook the inner frame assembly off the hook holes.

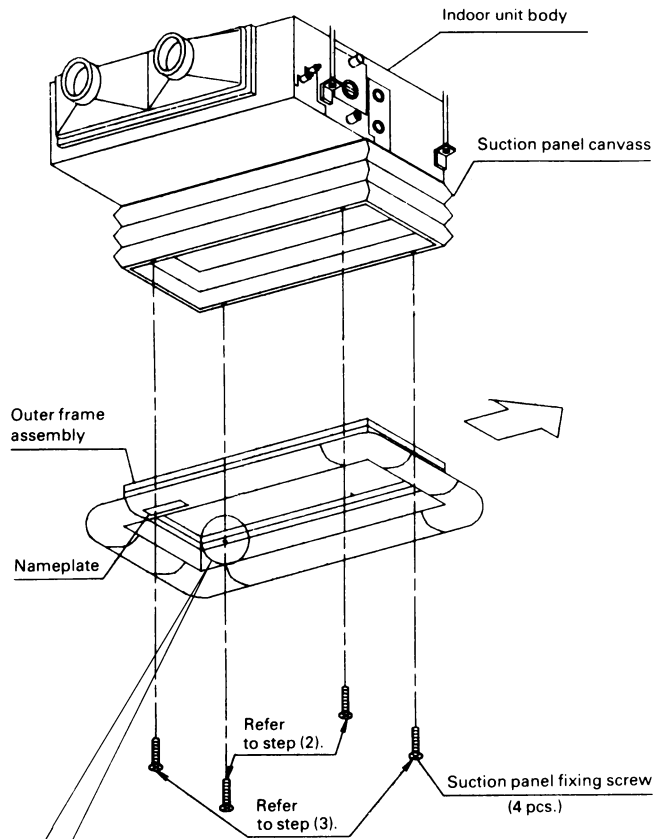
C: 1PA43807D

③ Installing the outer frame assembly

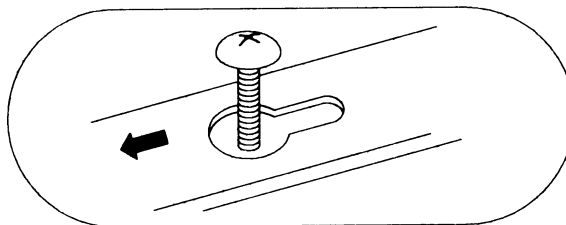
- This decoration panel can be installed to the air-conditioner body either directly or using a canvas for decoration panel (optional).

1. For installation using the decoration panel canvas

◀Read also the instruction manual accompanying the decoration panel canvas.▶

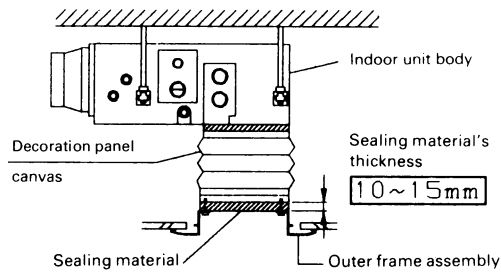


- (1) Install the decoration panel canvas to the indoor unit body. (Make the tightening length of the screws about 10 mm.)
- (2) Mount two suction decoration panel fixing screws to the decoration panel canvas and temporarily tighten them.
- (3) Move the outer frame assembly in the direction of the arrow to rest it on the two screws temporarily.



C: 1PA43807D

- (4) Mount the rest two screws to the suction panel canvas and tighten all the four screws securely until the sealing material becomes 10 to 15 mm thick.

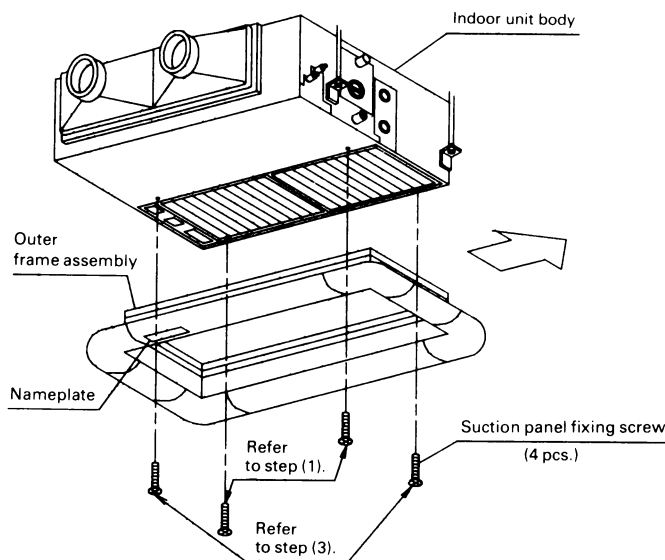


Tighten the fixing screws until the sealing material becomes 10 to 15 mm thick.

- (5) Use the chain and turnbuckle supplied for the decoration panel canvas to make no gap between the canvas and the ceiling

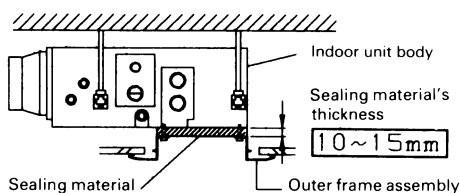
< Install the suction panel to the indoor unit body in the correct direction with the nameplate on the panel coming to the position shown in the left figure. >

2. For direct installation



- (1) Mount two decoration panel fixing screws to the indoor unit body and tighten them temporarily. (Make the tightening length of the screws about 10 mm.)
- (2) Move the outer frame assembly in the direction of the arrow to rest it on the two screws temporarily.
- (3) Install the outer frame assembly by following the steps (3) and (4) in "1. For installation using the decoration panel canvas".

Note: In case there is a gap between the decoration panel and the ceiling, adjust the height of the indoor unit. (Refer to the indoor unit installation manual.)

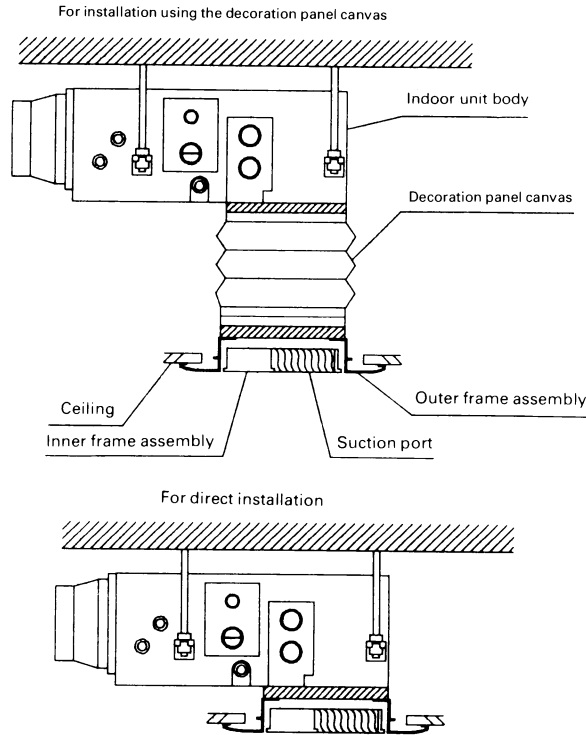


Tighten the fixing screws until the sealing material becomes 10 to 15 mm thick.

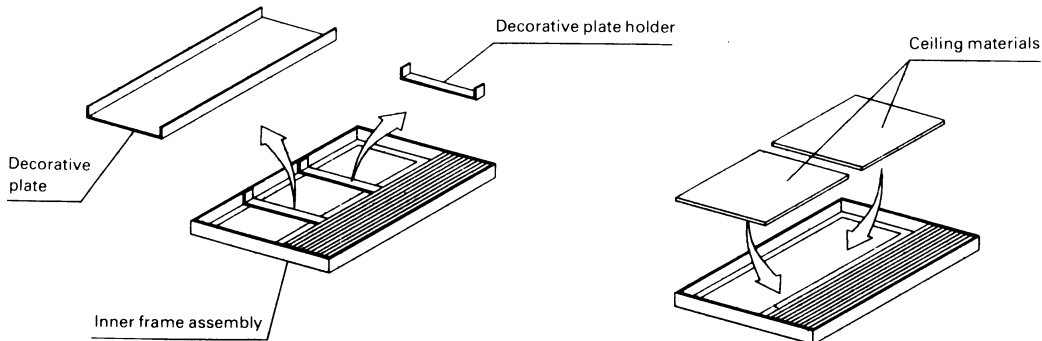
< Install the decoration panel to the indoor unit body in the correct direction with the nameplate on the panel coming to the position shown in the left figure. >

④ Installing the inner frame assembly

- Install the inner frame assembly to the outer frame assembly by following the reverse steps mentioned in "2. Preparing the decoration panel".



< Ceiling materials can be attached to the inner frame assembly. For their installation, take the following steps. >



- (1) Remove the decorative plate holder from the inner frame assembly.
- (2) Remove the decorative plate and place the ceiling materials instead.
- (3) Using the decorative panel holder removed in the step (1), fix the ceiling material.

Note:

Installation of the ceiling materials makes the decorative panel unnecessary. Make the ceiling materials less than 15 mm thick.

C: 1PA43807D

7.2 KTB25K36W, KTB25KA56-80-160W — Service Access Panel

KTB25KA80W



Item	Model	KTB25K36W(T)(F)	KTB25KA56W KTB25K56T(F)	KTB25KA80W KTB25K80T(F)	KTB25KA160W KTB25K160T(F)
Colour		W : White, T : Brown, F : Fresh white			
Accessories		Installation manual.			
Mass (Weight)	kg	6.0	6.5	9.0	10.7

Caution

- Ceiling joist and ceiling joist support required. (Locally procured.)

Dimensions **Unit:mm**

Model	Colour	AA	AB	AC	AD	AE
KTB25K36W	White	626	115	266	591	606
KTB25K36T	Brown	626	115	266	591	606
KTB25K36F	Fresh white	626	115	266	591	606
KTB25KA56W	White	776	190	416	741	756
KTB25K56T	Brown	776	190	416	741	756
KTB25K56F	Fresh white	776	190	416	741	756
KTB25KA80W	White	1076	340	716	1041	1056
KTB25K80T	Brown	1076	340	716	1041	1056
KTB25K80F	Fresh white	1076	340	716	1041	1056
KTB25KA160W	White	1476	540	2X558=1116	1441	1456
KTB25K160T	Brown	1476	540	2X558=1116	1441	1456
KTB25K160F	Fresh white	1476	540	2X558=1116	1441	1456

JC : D3K1126A

- The inspection hatch can be made to look nice with the service access panel.
- Thin 10 mm design for the exposed part.

Installation



AIR CONDITIONER

Directions for Mounting Access Panels

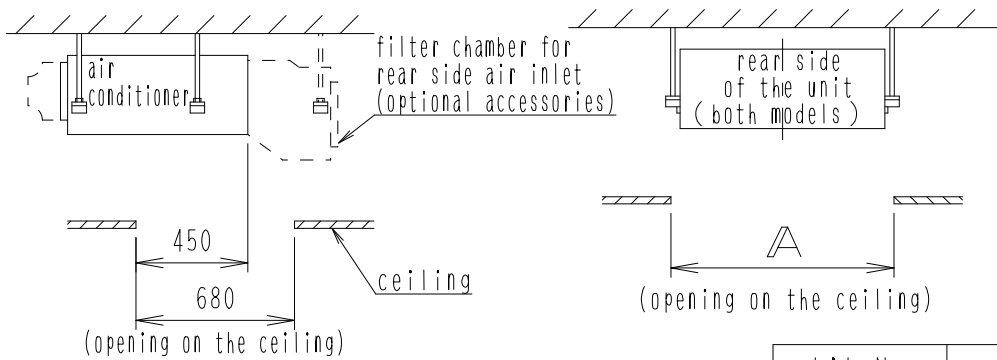
READ THESE INSTRUCTIONS CAREFULLY BEFORE INSTALLATION.

●KEEP THIS MANUAL IN A HANDY PLACE FOR FUTURE REFERENCE.

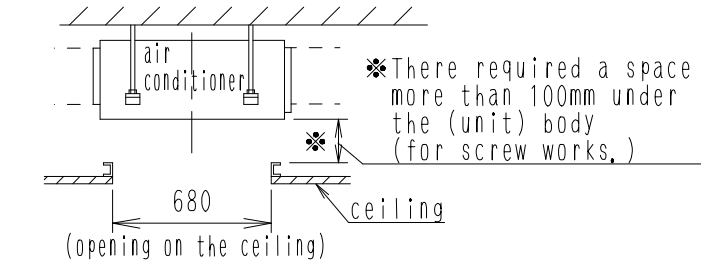
Before Mounting the Panel

1. Prepare an opening on the ceiling.

Built-In Type

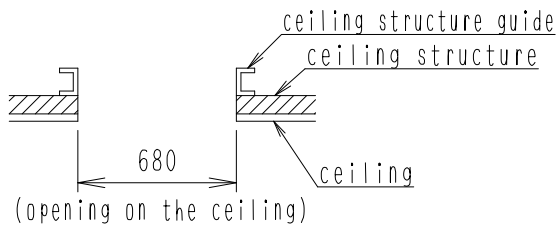


Duct Type



kit No.	A
KTB25K36	606
KTB25K56 KTB25KA56	756
KTB25K80 KTB25KA80	1056
KTB25K160 KTB25KA160	1456

2. Mount the ceiling structure guide on the edge of the ceiling structure.

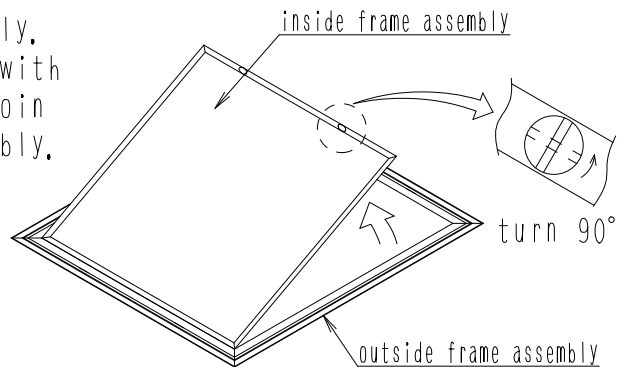


Service Works for Duct Type Models

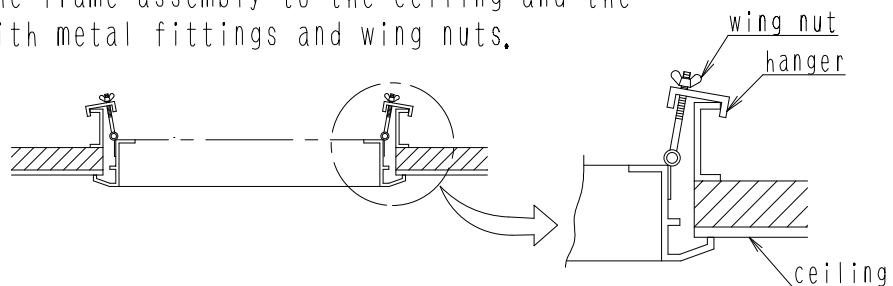
Service works for maintenance shall be done (accessed) from the * space (the above).
Please prepare short-length screw drivers (100mm or less.)

Mounting the Panel

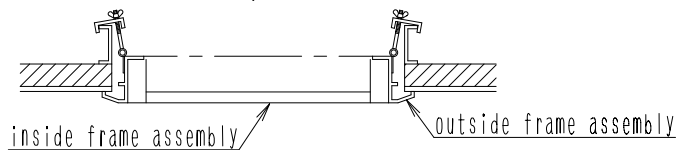
1. Remove the inside frame assembly.
 - Turn the lock 90° to the left with a flat-top screw driver or a coin to open the inside frame assembly.



2. Mount the outside frame assembly on the ceiling.
 - Fasten the frame assembly to the ceiling and the guide with metal fittings and wing nuts.



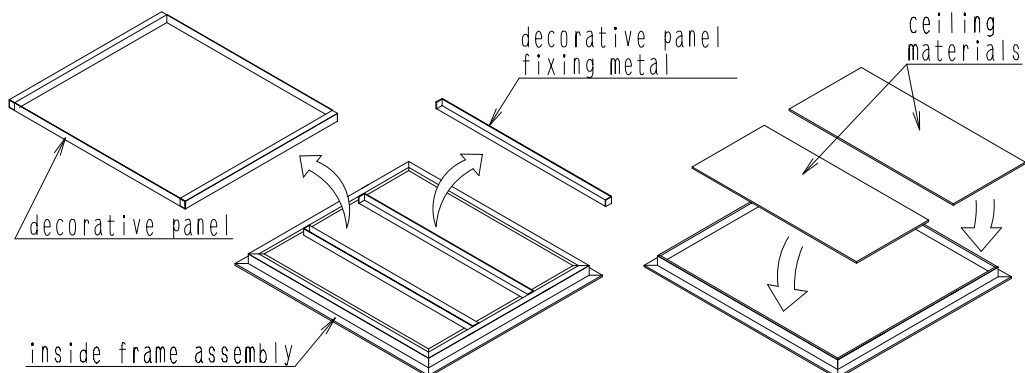
3. Mount the inside frame assembly to the fixed outside frame assembly.



Mounting of Ceiling Materials

Ceiling materials can be optionally mounted to the inside frame assembly. Mounting methods are as follows:-

- ① Remove the decorative panel fixing metal of the inside frame assembly.
 - ② Take out the decorative panel and mount the ceiling materials instead.
 - ③ Put back the fixing metal (①) to hold the ceiling materials.
- (Note) Decorative panel is not required when mounting ceiling materials.



3P225173A

7.3 KNM25K32-50-63-125V1 — Natural Evaporating Pan Type Humidifier



Model	KNM25K32V1	KNM25K50V1	KNM25K63V1	KNM25K125V1
Humidifying Capacity (L/h)	0.4	0.6	1.0	1.8
Power Supply	Single Phase, 220-240V 50Hz			
Power Consumption (W)	12			
Water Inlet Port	1/2B			
Water Outlet Port	VP25 (External dia. ϕ 32) (drain pipe at indoor unit)			
Accessories	Humidifier assembly, Solenoid valve box assembly, Feed water line assembly, Service cover 1, Service cover 2, Installation manual, Clamp, Fixing screw, Guide rail fixing plate, Binding band, Installation caution label, Feed water pipe			

Installation

1. Preparation

Tools required for the installation work:

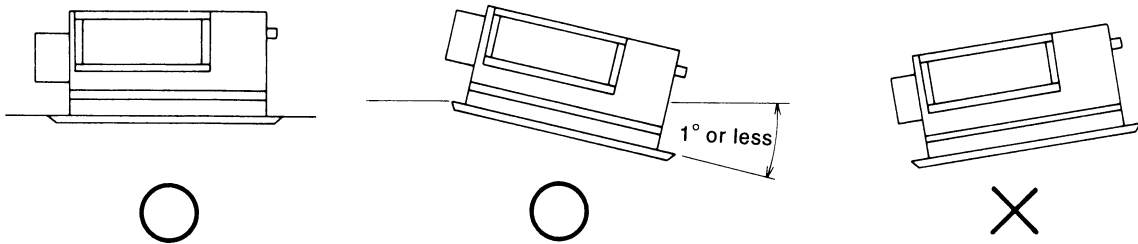
Wrench (nominal sizes 14 and 17), adjustable wrench, Phillips screwdriver, pliers, pipe cutter, flaring tool, drill, hammer, etc.

2. Installation precautions

Keep the following points in mind to run the kit smoothly at full capacity. Be sure to correct any problem before use.

■ Installation place

1. Make sure that the beam or ceiling is stable and strong enough to withstand the product weight. Some structural members of a building may be too weak to set up the kit.
2. Place the kit at a level or with the drain pipe side slightly tilted down (1° or less). Otherwise water may leak out.

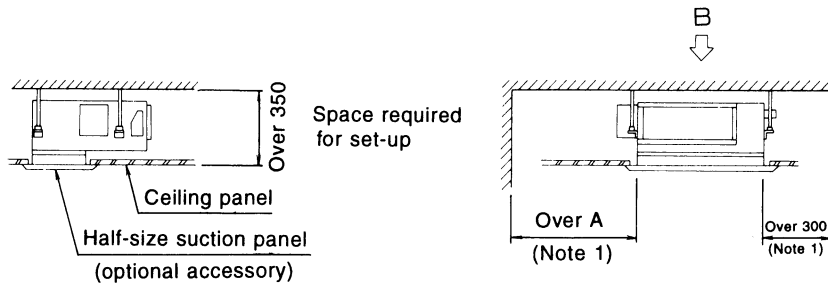


3PA36474-16M

3. For easier servicing, ensure the following open access space.

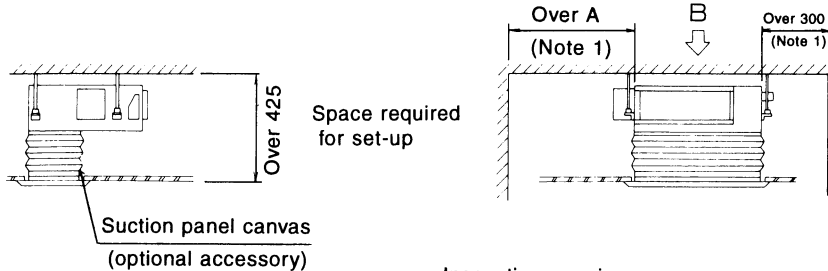
(1) When installing the half-size suction panel Keep the dimensions illustrated below. Provide an inspection opening 450x450 mm or larger.

① For direct set-up

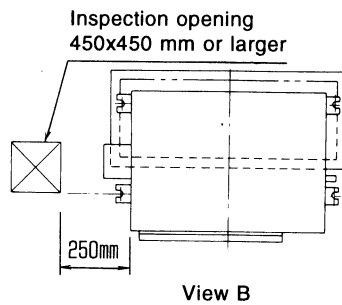


Kit	A
KNM25K32V1	800
KNM25K50V1	800
KNM25K63V1	800
KNM25K125V1	1200

② For set-up together with the suction panel canvas



Note 1: Open access space



4. Avoid the following places: NO FIRE zones, places exposed to combustible gas, corrosive gas, salty dust, metallic dust, water vapor, oil mist and water drops.
A fire or malfunction may result.

5. Make sure that the air is not blown out directly to people in the room. If exposed to the blown air in winter or spring or autumn, you may feel chilly.

3. Installation procedure

When the ceiling work is not completed, the kit can be fixed before or after the installation of air conditioner. However, the kit is installed easier before the installation of air conditioner. Illustrations show the fixing before installation.

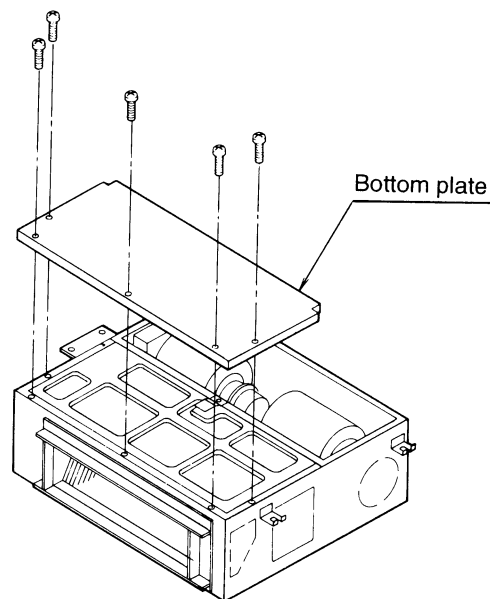
[Precaution]

When this kit and the auxiliary electric heater kit are both mounted on the air conditioner, be sure to set up the auxiliary electric heater first into position.

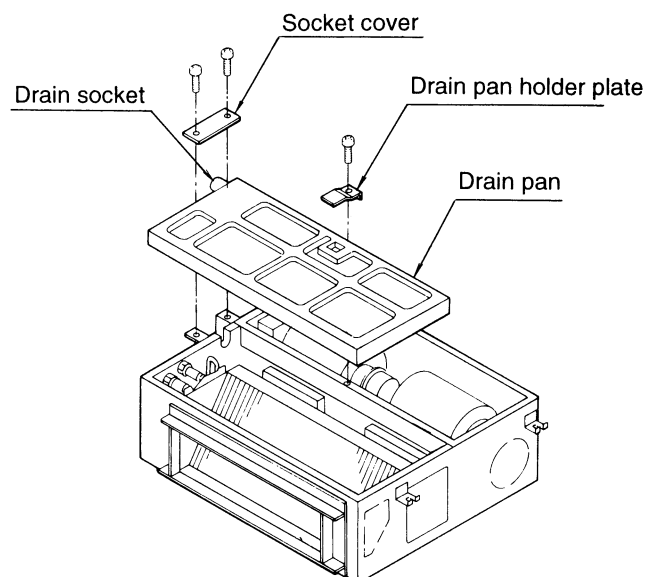
3-1 Removal of parts of air conditioner body

Illustrations and the number of screws may differ from those shown in the figure below depending on models.

- (1) Remove the bottom plate.

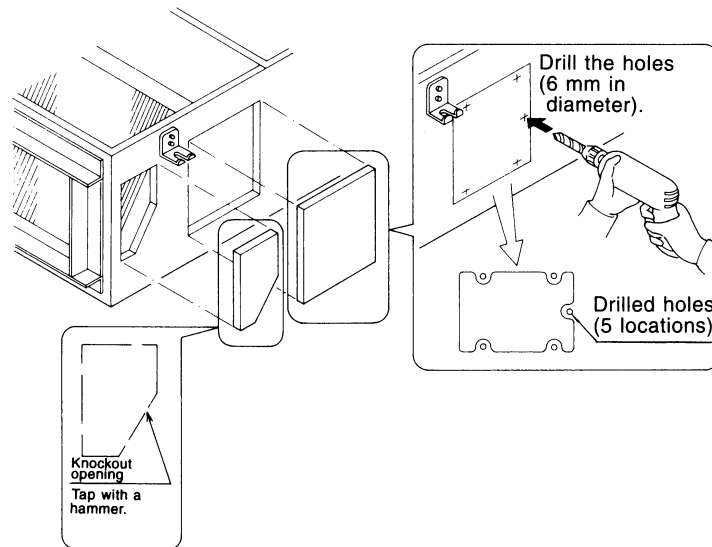


- (2) Remove the drain pan holder plate and the drain socket cover. Then, remove the drain pan. While preventing a strong force from being applied to the drain socket, lift the drain pan directly above little by little and remove the drain pan.

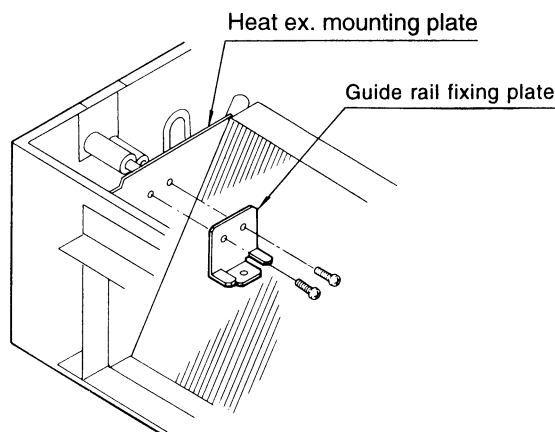


3-2 Setting up the humidifier assembly (Be sure to wear work gloves or the like.)

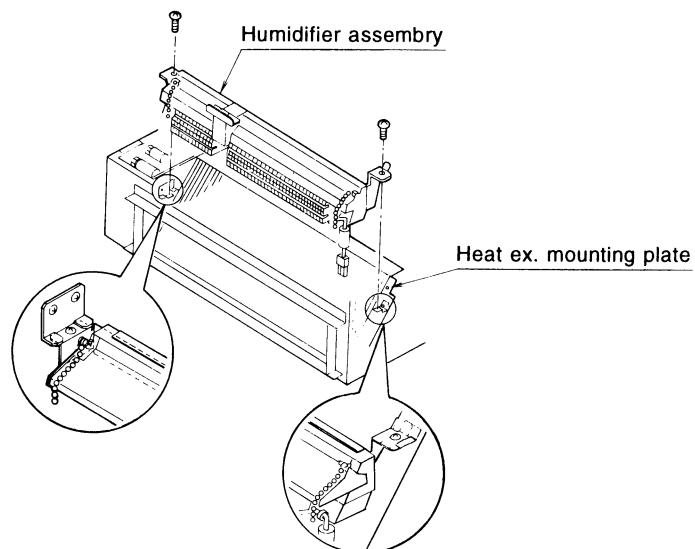
- (1) Make two knockout openings in the side.



- (2) Fix the guide rail fixing plate on the heat exchanger mounting plate.

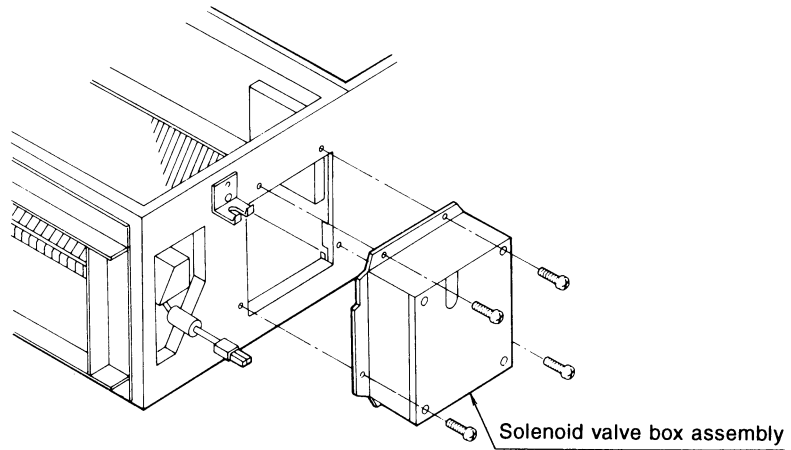


- (3) Fit the humidifier assembly on the guide rail bracket and the heat exchanger mounting plate.

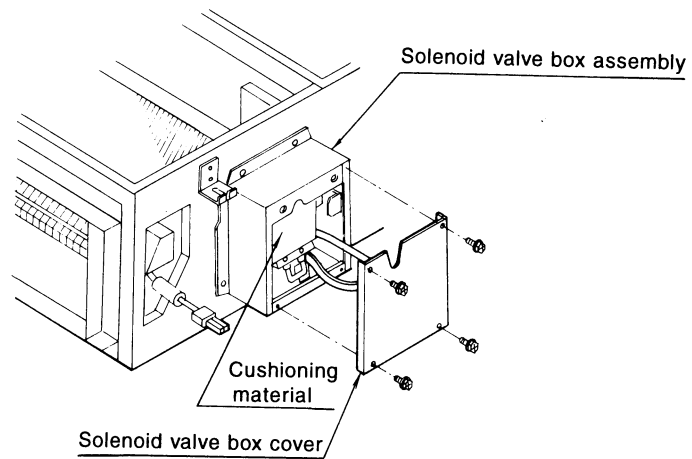


3-3 Setting up the solenoid valve box assembly

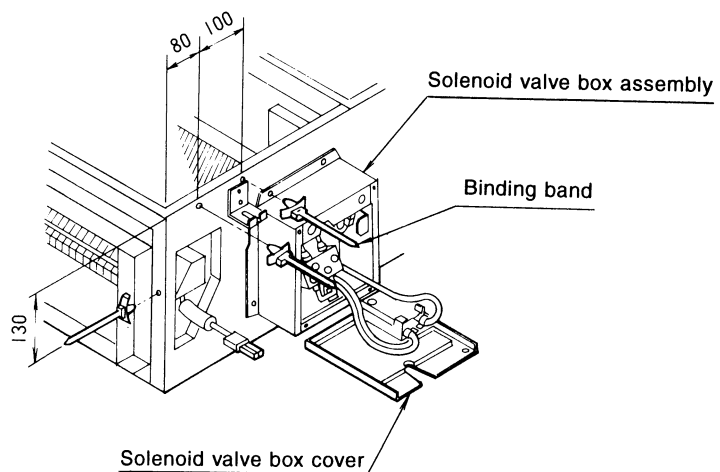
- (1) Attach the solenoid valve box assembly on the side of the air conditioner.



- (2) Remove the solenoid valve box cover and take out the cushioning material.

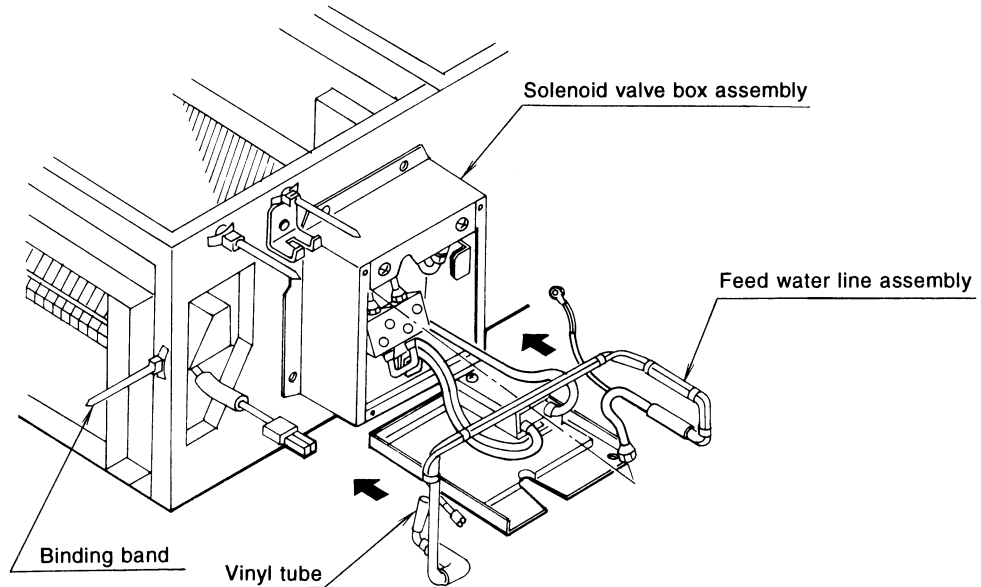


- (3) Fix the binding band.

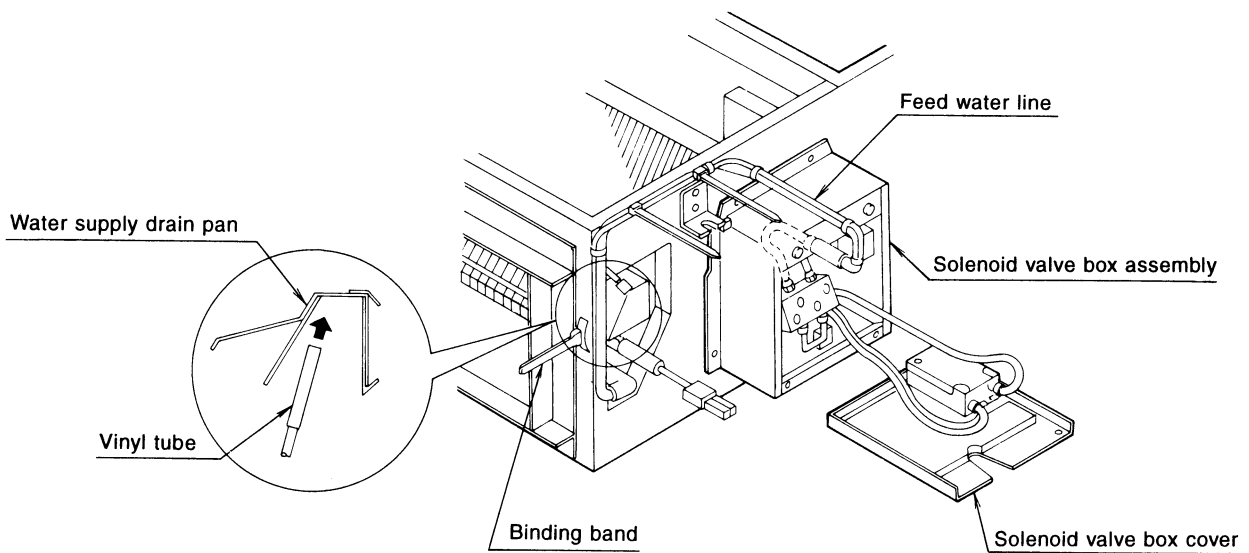


3PA36474-16M

- (4) Connect the feed water line assembly. Using a wrench, tighten up the flare nuts at the solenoid valve connection.

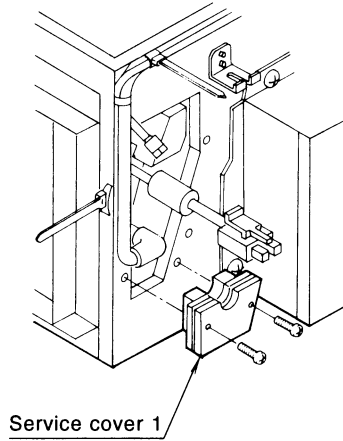


- (5) Insert the vinyl tube of the feed water line end into the water supply drain pan.

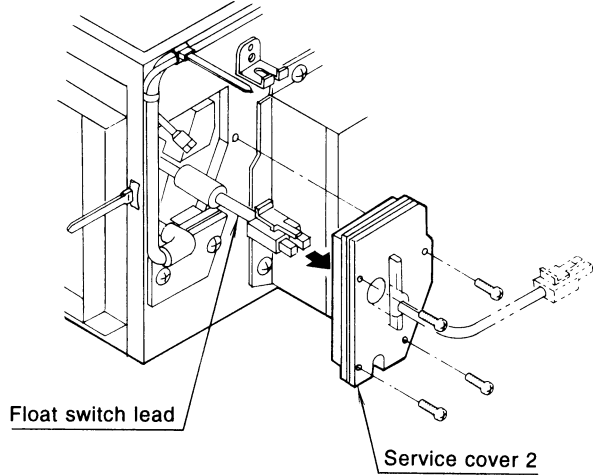


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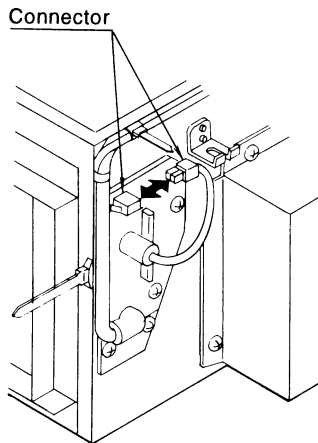
(6) Attach the service cover 1.



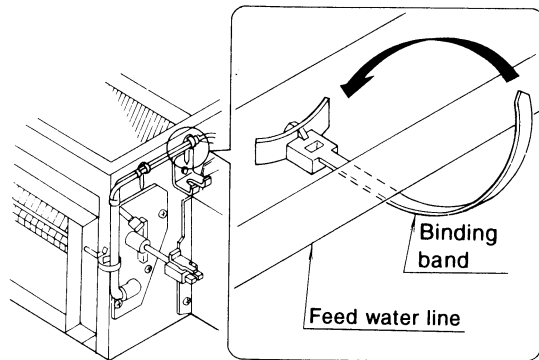
(7) Make sure the above vinyl tube is tight in the water supply drain pan. Pass the float switch lead wire through the service cover 2.



(8) Couple the connector of the float switch lead wire.



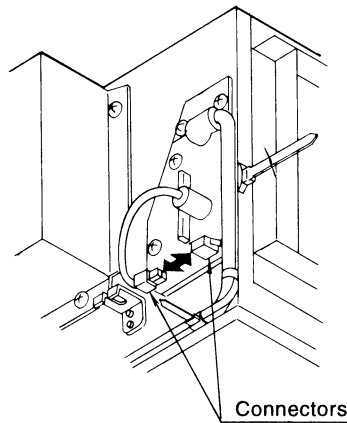
(9) Fix the feed water line with the binding band.



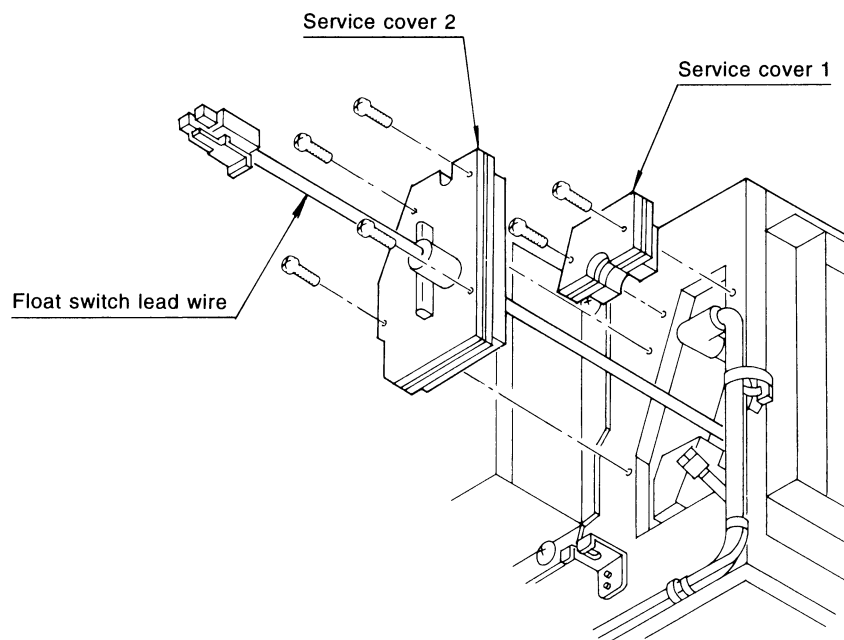
3PA36474-16M

4. Replacement the wetted elements from the side (with half-size suction panel)

- (1) Turn off the power and close the main valve of the feed water line.
- (2) Disconnect the float switch connectors.



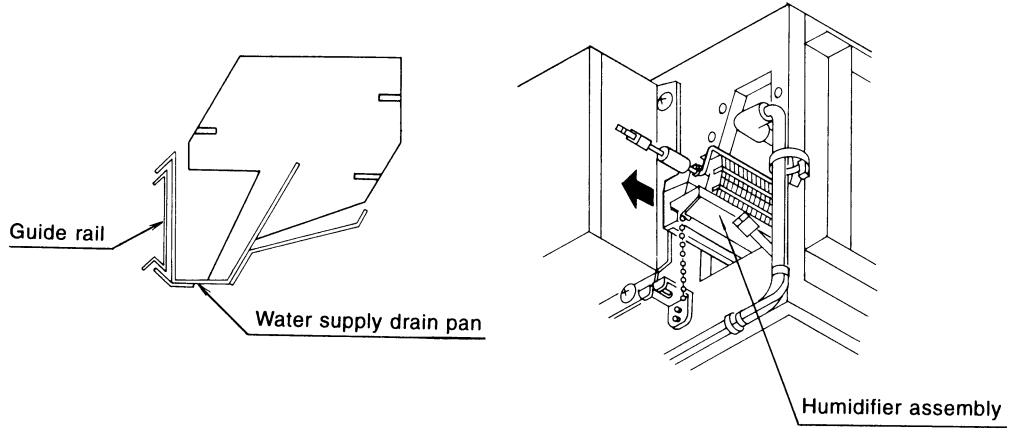
- (3) Remove the service covers.



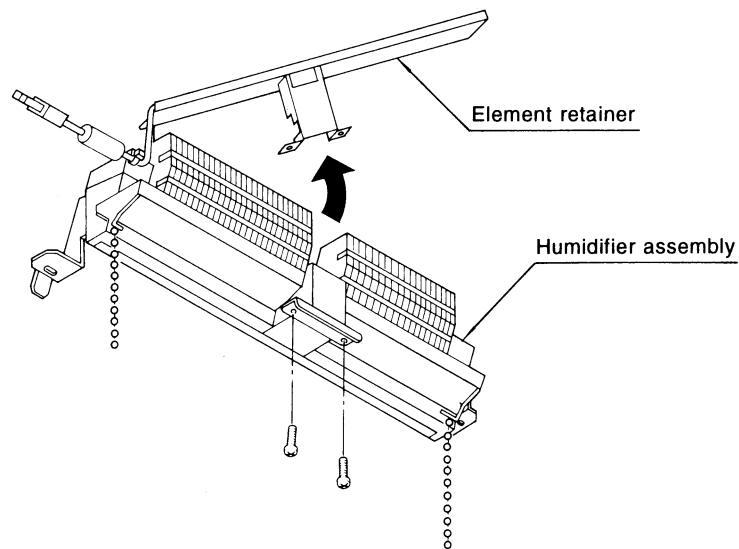
3PA36474-16M

(4) Replace the wetted elements.

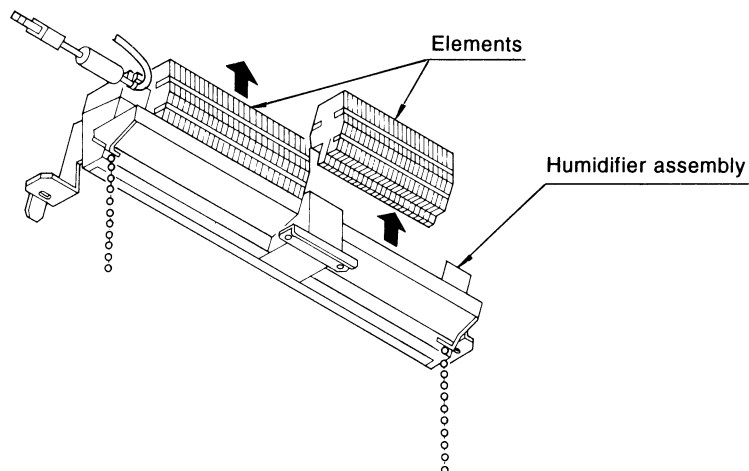
- ① Draw the entire humidifier assembly along the guide rail out of the side of the air conditioner.



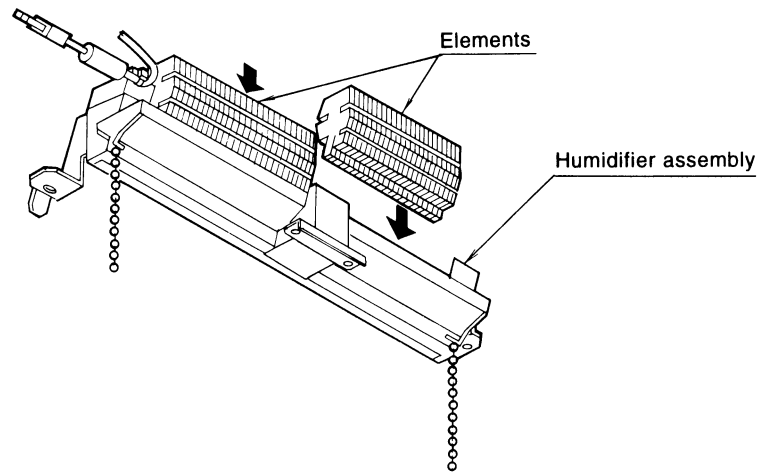
- ② Remove the wetted element retainer.



- ③ Remove the wetted elements.



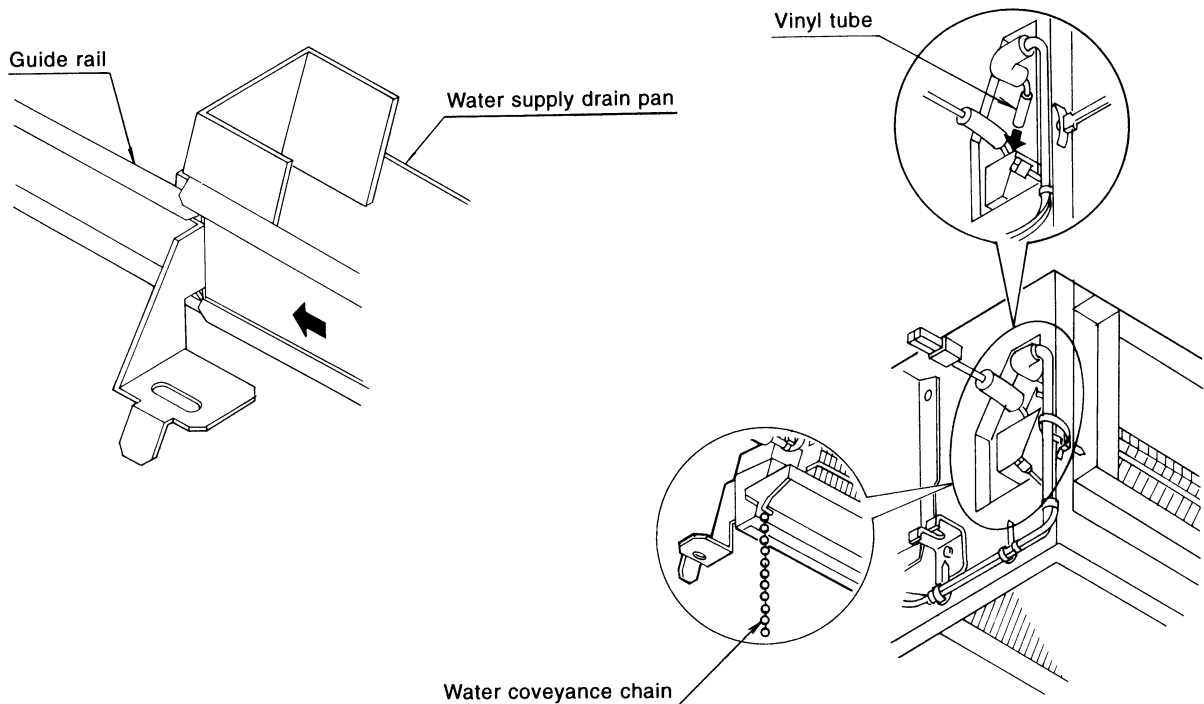
- ④ Take out the replacement elements.



- (5) Fit all the parts back into position in the reverse order.

[Precaution]

Mount the humidifier assembly on the guide rail as shown below. Push it deep into position. At this time, check the following points; **that the vinyl tube at the feed water line end is tight in the water supply drain pan, and that the water conveyance chains (2 pcs.) are hanging straight down.** Finally place the access covers back.



5. Repair and other information

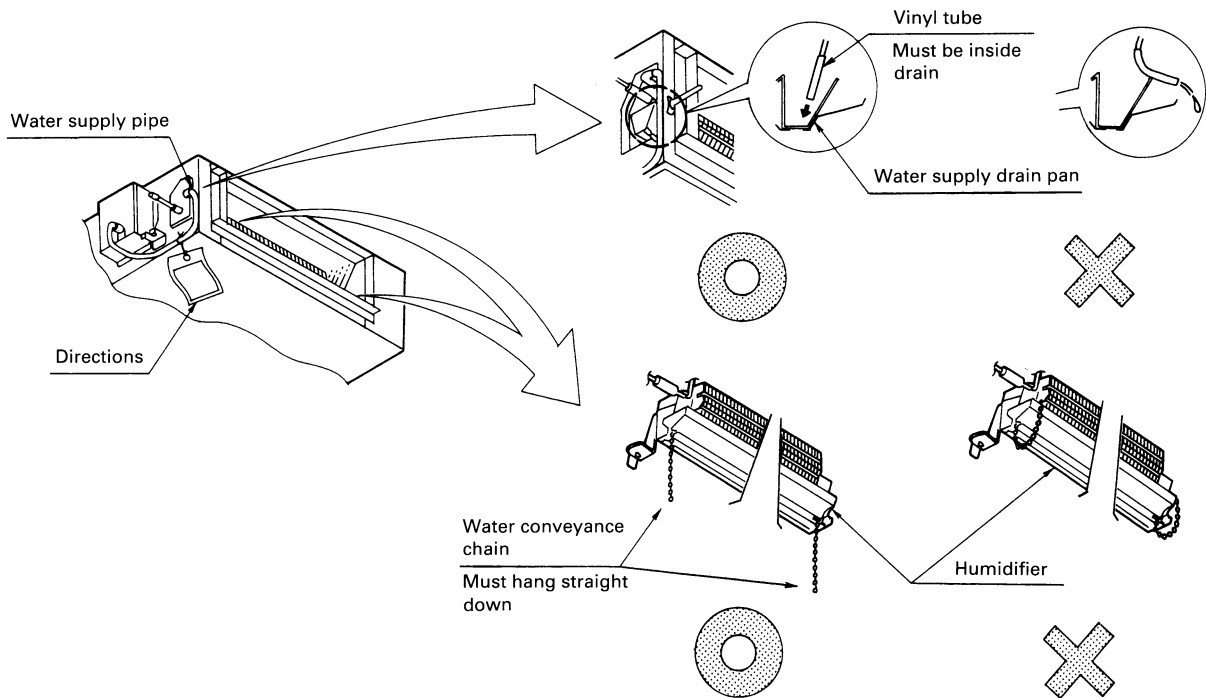
For details, refer to "TROUBLE SHOOTING" in the operation manual attached to the outdoor unit.

3PA36474-16M

■ Precautions

After suspending the indoor unit, be sure to check the following items for the humidifier before performing duct work in order to prevent water leaks.

- ① The vinyl tube at the end of the water supply pipe must be in the water supply drain pan.
- ② The water conveyance chain must hang straight down.



3PA36474-16M

7.4 KEA25K32-50-63-100-125VE — Auxiliary Electric Heater



Item		Model	KEA25K32VE	KEA25K50VE	KEA25K63VE	KEA25K100VE	KEA25K125VE	
Power supply		Single phase, 50Hz/60Hz 220-240V/220V						
Switching	Full capacity	0.75kW	1.2kW	1.4kW	2.1kW	2.8kW		
	Partial	Not Applicable						
Heater operating current (A)		3.8	6.0	7.0	10.5	14		
Wiring		Parallel Connection						
Room temperature control		Automatic by temperature controller (Computer-controlled thermocouple inside AC unit)						
Safety device		Current fuse						
Accessories		Auxiliary electric heater assembly. Magnetic contact box assembly. Electric wiring ties. Safety label. Installation manual. Screws.						

Installation

1. Preparation

1. Electric work must be performed by a qualified electrician.
2. Changes to electrical equipment
 Fitting an auxiliary electric heater means that a large power supply is required. In many cases the electrical equipment (lead-in power wirings, switches, transformers, etc.) and electric power contact are insufficient and changes are required.
3. Tools required for the installation work
 Screwdrivers, pliers, cutters, nippers, pincers, etc.

2. Installation procedure

When the ceiling work is not completed, the kit can be fixed before or after the installation of air conditioner. However, the kit is installed easier before the installation of the air conditioner. Illustrations show the fixing before installation.

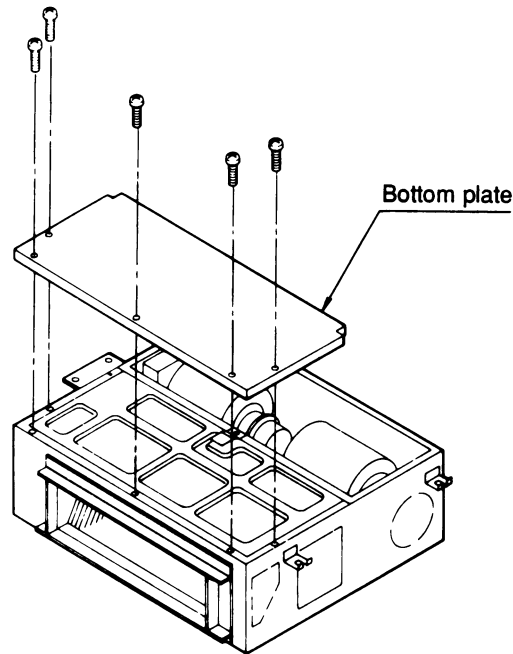
NOTE) When installing both the kit and a natural evaporating pan type humidifier, be sure to install the kit first.

3PA36474-14K

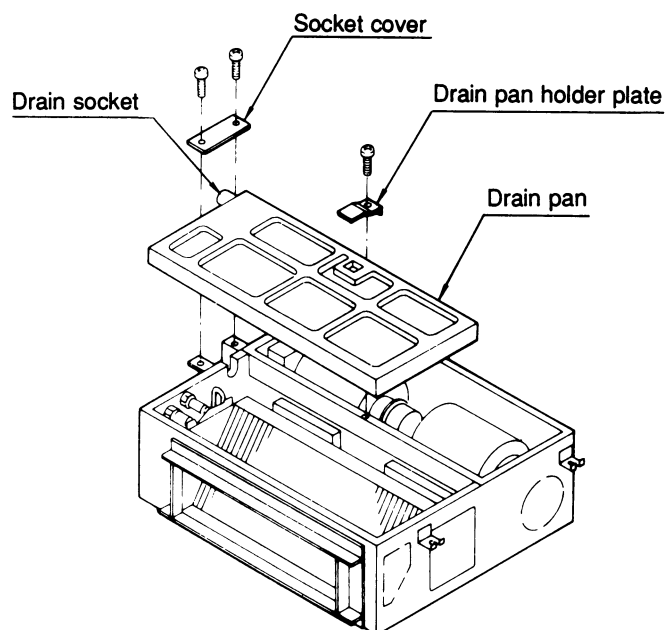
2-1 Removal of parts of air conditioner body

Illustrations and the number of screws may differ from those shown in the figure below depending on models.

- (1) Remove the bottom plate.

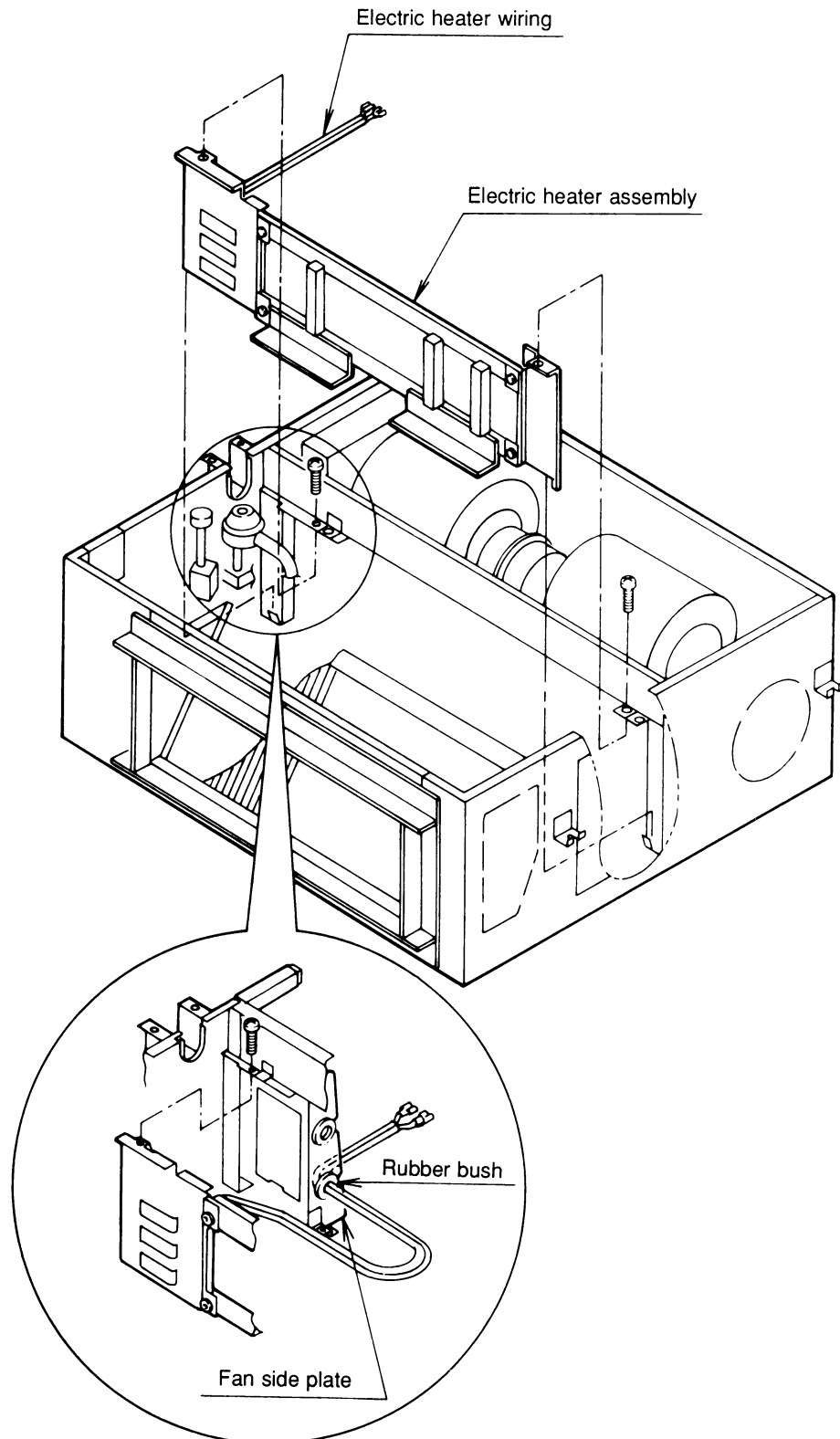


- (2) Remove the drain pan holder plate and the drain socket cover. Then, remove the drain pan. While preventing a strong force from being applied to the drain socket, lift the drain pan directly above little by little and remove the drain pan.



2-2 Installation of electric heater assembly

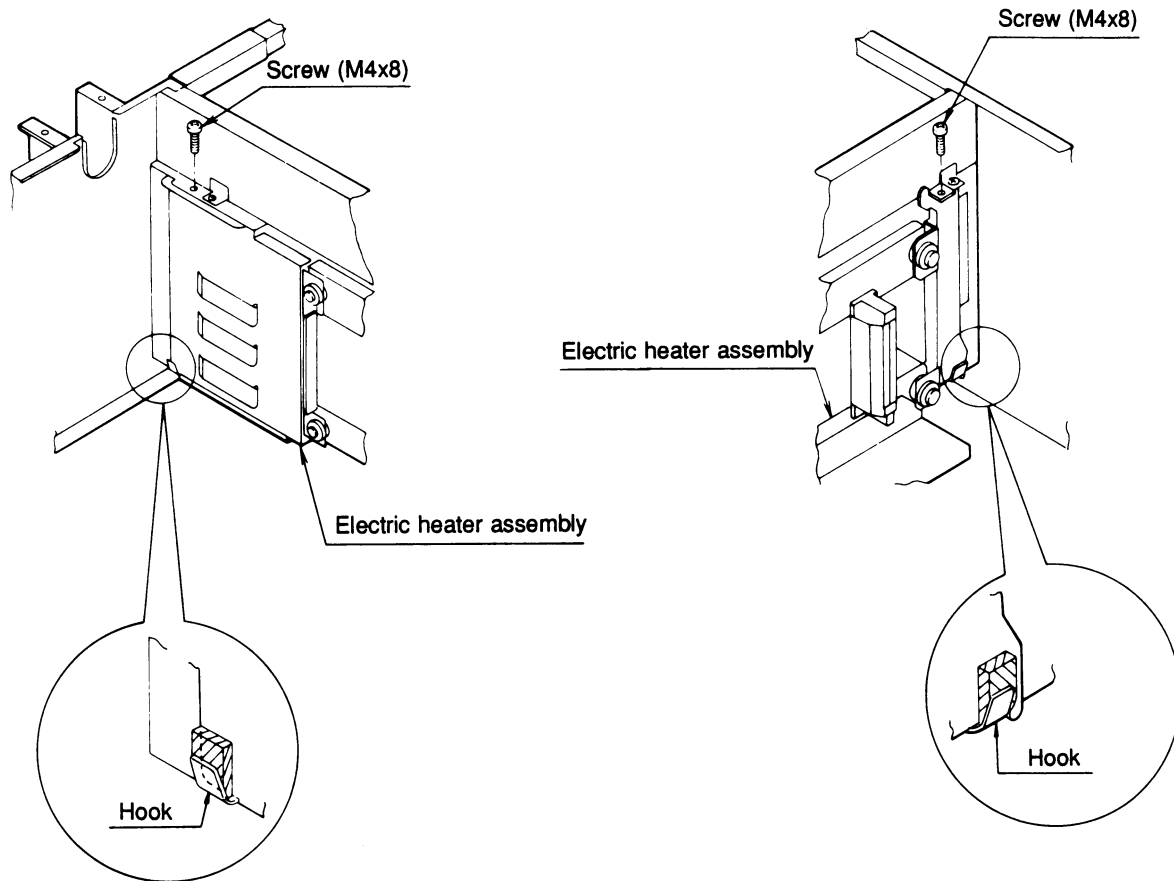
Pass the electric wiring of the electric heater through the rubber bush of the fan side plate and insert the electric heater assembly into the gap between the heat exchanger and the fan assembly.



3PA36474-14K

[Details of installation]

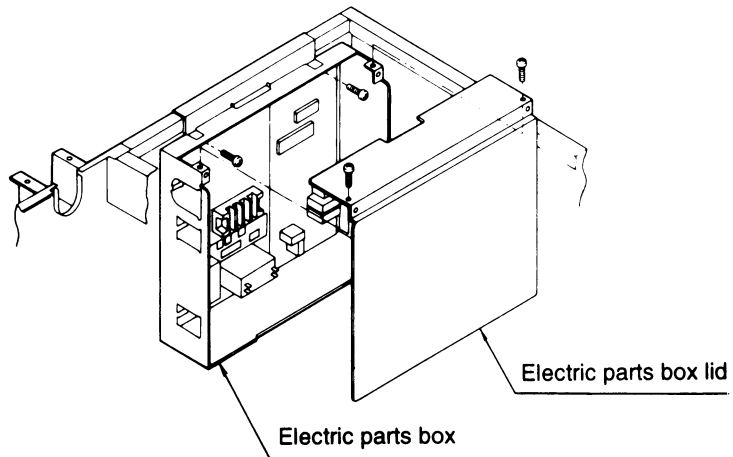
Before screwing up, confirm that the electric heater assembly is securely fitted on the hook and that tap holes are properly aligned.



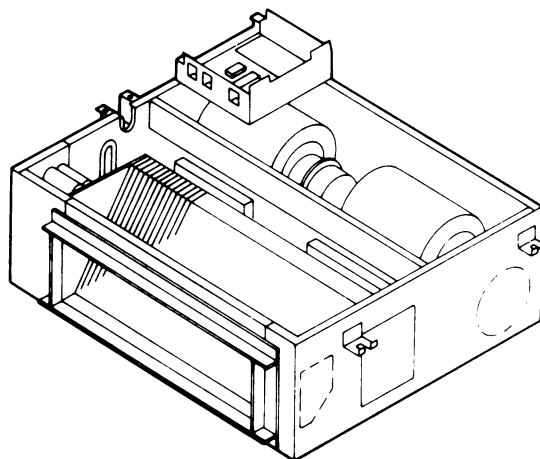
3PA36474-14K

2-3 Removal of control box

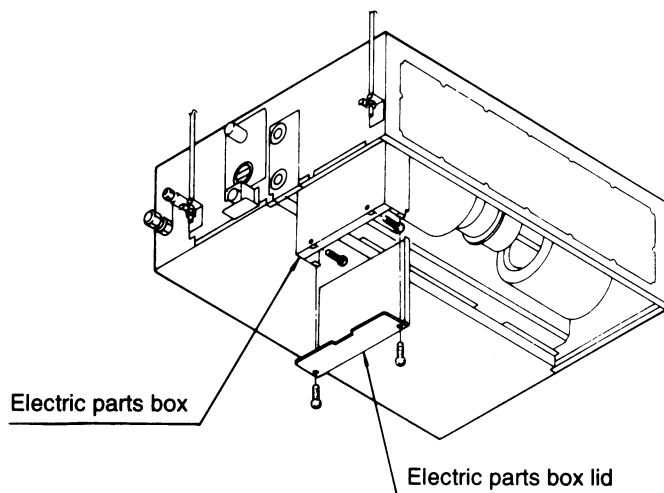
(1) Remove the electric parts box lid and the control box.



(2) Pull out the electric parts box.



If the air conditioner is installed already, remove the electric parts box lid, pull out the electric parts box, and suspend the electric parts box on the air conditioner using the hook on the back of the electric parts box.



7.5 KAFJ252L36, KAFJ253L36

KAF252LA56-80-160, KAF253LA56-80-160 — High-Efficiency Filter

KAF252LA56



Dimensions Unit:mm

Model		A
KAFJ252L36	KAFJ253L36	500
KAF252LA56	KAF253LA56	650
KAF252LA80	KAF253LA80	448×1 502×1
KAF252LA160	KAF253LA160	698×1 652×1

C: D3K1408B
C: D3K04917
C: D3K04916

- Cannot be water-washed for reuse.
- Below inlet :
The Filter Chamber (for High efficiency filter) (KAJ25L36D, KAJ25LA56 · 80 · 160D) is required when the high efficiency filter will be installed.
- Rear inlet :
The Filter Chamber (for High efficiency filter) (KAJ25L36B, KAJ25LA56 · 80 · 160B or KDF-25A36B · 56B · 80B · 160B) is required when the high efficiency Filter will be installed.

65 (colorimetric method)

Item	Model	KAFJ252L36	KAF252LA56	KAF252LA80	KAF252LA160
Air flow rate (m ³ /min)		9	14	19	38
Average efficiency (%)		65 (colorimetric method)			
Initial pressure loss (Pa)		16 or less	14 or less	14 or less	22 or less
Final pressure loss (Pa)		98			
Life (h)		2,500 (dust concentration 0.15 mg/m ³)			
Filter element		Flame-resistant type (with mildew-proof)			
Number of sheets included		1	1	2 (each 1)	2 (each 1)
Mass (kg)		0.5	0.6	0.9	1.2

90 (colorimetric method)

Item	Model	KAFJ253L36	KAF253LA56	KAF253LA80	KAF253LA160
Air flow rate (m ³ /min)		9	14	19	38
Average efficiency (%)		90 (colorimetric method)			
Initial pressure loss (Pa)		21 or less	24 or less	24 or less	34 or less
Final pressure loss (Pa)		98			
Life (h)		1,800 (dust concentration 0.15 mg/m ³)			
Filter element		Flame-resistant type (with mildew-proof)			
Number of sheets included		1	1	2 (each 1)	2 (each 1)
Mass (kg)		0.5	0.6	0.9	1.2

Note) •The filter chamber is required when the high efficiency filter will be installed.

Installation

1. Cassette fan mounted / High-efficiency filter

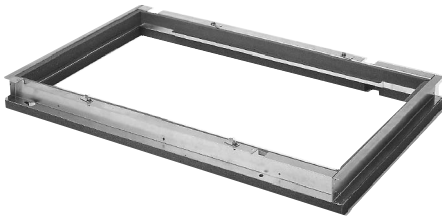
2. Ceiling return / High efficiency filter

3. Duct fan mounted / high efficiency filter

3 7.5 KAFJ252L36, KAFJ253L36, KAF252LA56-80-160, KAF253LA56-80-160

7.6 KAJ25L36D, KAJ25LA56-80-160D — Filter Chamber for Bottom Suction

KAJ25LA56D



Dimensions

Unit:mm

Model	A	B	C	Weight
KAJ25L36D	550	125	225	2.3kg
KAJ25LA56D	700	200	300	2.8kg
KAJ25LA80D	1000	350	450	3.5kg
KAJ25LA160D	1400	550	650	4.0kg

JC: D3K1420B

- If there is not enough pitch in the drain pipe due to the attached cassette, this may be used as a spacer.
- Filter replacement is easily performed.

Item		Model	KAJ25L36D	KAJ25LA56D	KAJ25LA80D	KAJ25LA160D
Inserted filter	65% (colorimetric method)		KAFJ252L36	KAF252LA56	KAF252LA80	KAF252LA160
	90% (colorimetric method)		KAFJ253L36	KAF253LA56	KAF253LA80	KAF253LA160
Mass (kg)			2.3	2.8	3.5	4.0
Component parts			Filter chamber. Panel attachment plate. Screws. Installation manual.			

Installation

1. This kit contains the following parts and accessories

Name	Quantity			
	KAJ25L36D	KAJ25L56D KAJ25LA56D	KAJ25L80D KAJ25LA80D	KAJ25L160D KAJ25LA160D
Filter chamber for bottom suction	1	1	1	1
Fixing plate for panel	4	4	4	4
Screws for fixing plate for panel	4	4	4	4
Screws	4	4	4	4
Installation manual	1	1	1	1

2. Required tools

Screwdriver ⊕

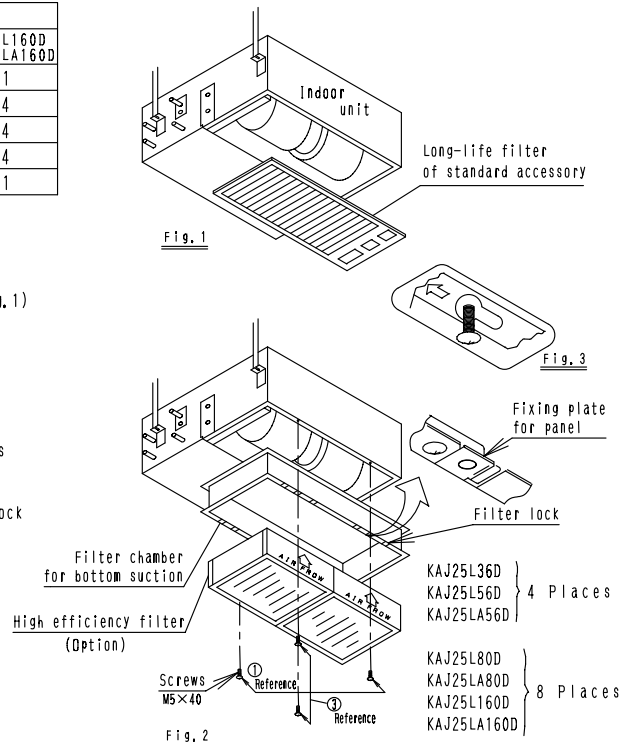
3. Operating procedures

- (1) Remove the long-life filters of standard accessory from indoor unit, (Fig.1)
- (2) Installation of the bottom suction filter chamber
 - ① Tighten two filter chamber installation screws to the indoor unit. Screw them in deep enough so that they do not fall out of place. (Leave about 30mm of thread exposed.)
 - ② Fit the filter chamber over the screws and slide in the direction of the arrow in fig.3, to hang the filter chamber on the indoor unit.
 - ③ Fit the remaining two installation screws and tighten all four screws until the seal is 10~15mm thick.
- (3) Attach the fixing plate for panel to the filter chamber, (Fig.2)
- (4) Fit the high efficiency filter (option) inside the filter chamber and lock in place with the filter lock, (Fig.2)

Filter chamber for bottom suction	High efficiency filter	
	(65%)	(90%)
KAJ25L36D	KAFJ252L36	KAFJ253L36
KAJ25L56D	KAFJ252L56	KAFJ253L56
KAJ25LA56D	KAF252LA56	KAF253LA56
KAJ25L80D	KAFJ252L80	KAFJ253L80
KAJ25LA80D	KAF252LA80	KAF253LA80
KAJ25L160D	KAFJ252L160	KAFJ253L160
KAJ25LA160D	KAF252LA160	KAF253LA160

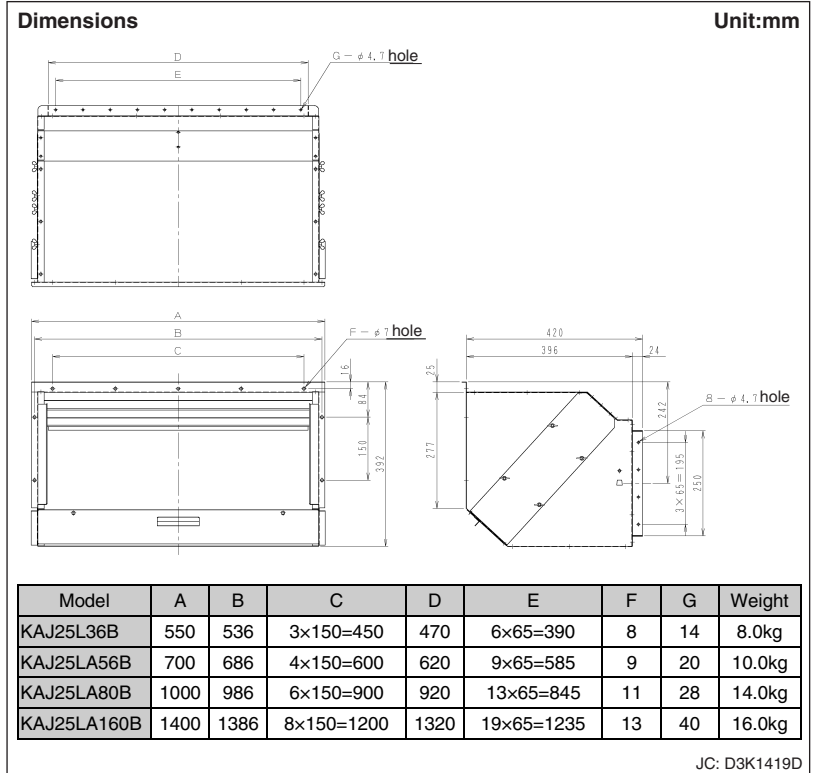
4. Cautions for the installation

- Install the filter chamber as explain in these instructions.
- Install the filter chamber in the orientation shown in the right figure.



7.7 KAJ25L36B, KAJ25LA56-80-160B — Filter Chamber for Rear Suction

KAJ25LA56B



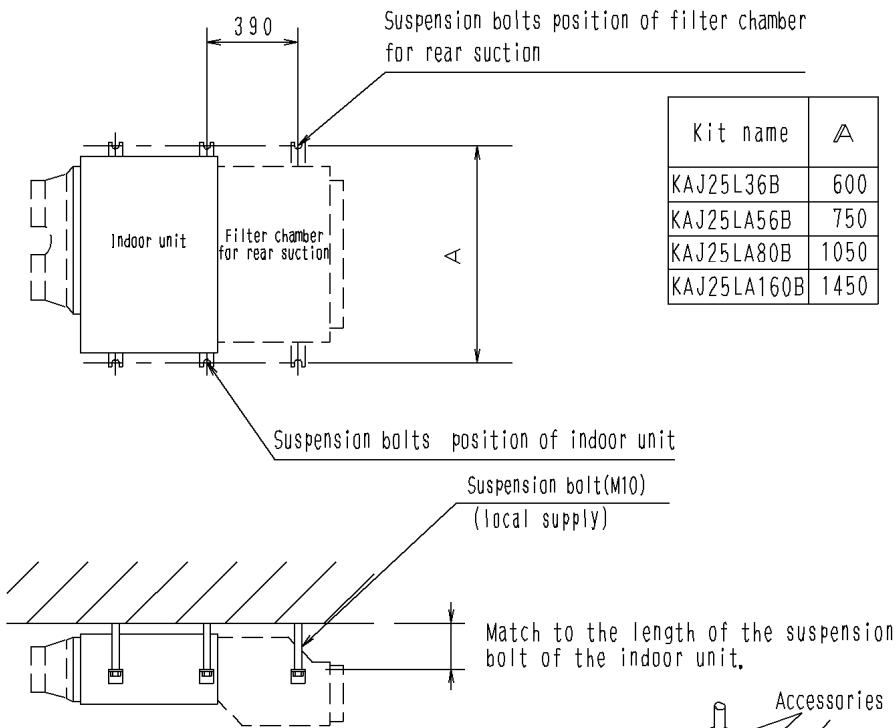
- May be used with either the long-life filter or high-efficiency filter.
- The suction duct can also be connected.

Item		Model	KAJ25L36B	KAJ25LA56B	KAJ25LA80B	KAJ25LA160B
Inner dimensions of flange (mm)	Width		470	620	920	1,320
	Length		250			
Inserted filter	65% (colorimetric method)		KAFJ252L36	KAF252LA56	KAF252LA80	KAF252LA160
	90% (colorimetric method)		KAFJ253L36	KAF253LA56	KAF253LA80	KAF253LA160
Mass (kg)			8.0	10.0	14.0	16.0
Component parts			Filter chamber. Screen plate for rear suction. Washer for suspension bracket. Screws. Installation manual.			

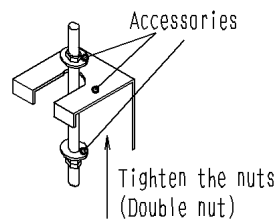
3 7.7 KAJ25L36B, KAJ25LA56-80-160B

Preparation before installation

- ① Set the suspension bolts in position.
(Location of the suspension bolts)



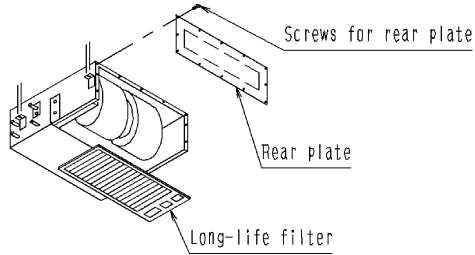
Set the hole-in anchor for the existing building and embedded inserts or embedded anchors for new building, which can support the weight sufficiently.



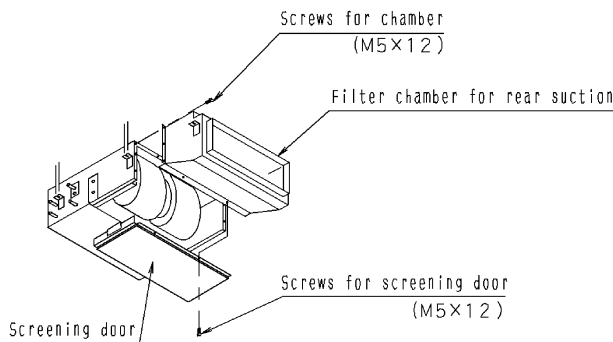
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Installation of filter chamber

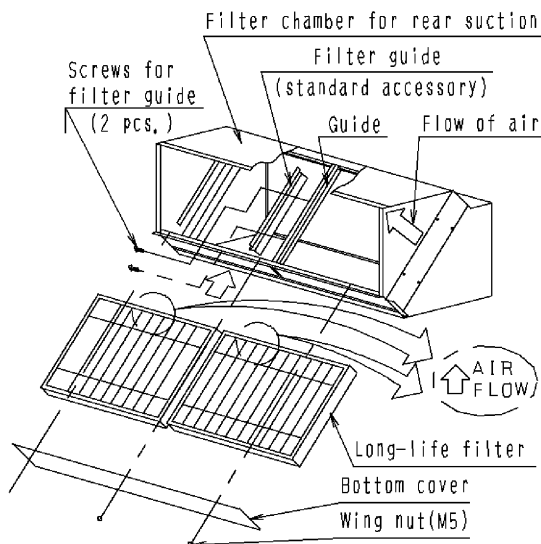
- ① Remove the long-life filter and the rear plate of the indoor unit,



- ② Set the filter chamber for rear suction to the suspension bolts with nut and the washer temporarily,
 ③ Fasten the filter chamber for rear suction to the indoor unit tightly,
 ④ Fix the filter chamber for rear suction to the suspension bolts tightly,
 ⑤ Install the screening door to the bottom of the indoor unit with screws,



When the long-life filter is used



(Procedure)(When the maintenance of the filter is carried out from the bottom.)

(The long-life filter of standard accessory shall be used,

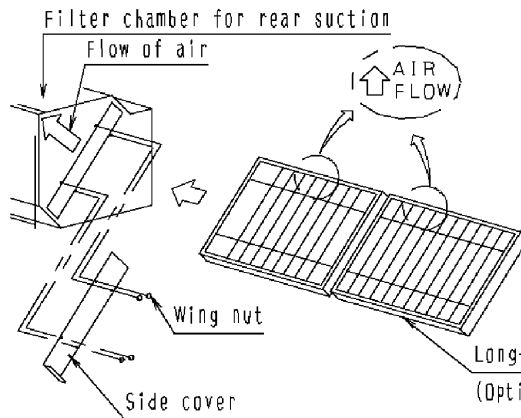
- (1) Remove the bottom cover,
- (2) Install the filter guide with 2 screws to the center of the guide of the filter chamber,
(Only for 80 and 160 model)
- (3) Install the long-life filter to the rail of the leeward,

(Caution)

Match the arrow mark of the long-life filter to the flow of the air,

- (4) Install the bottom cover,

3K016914

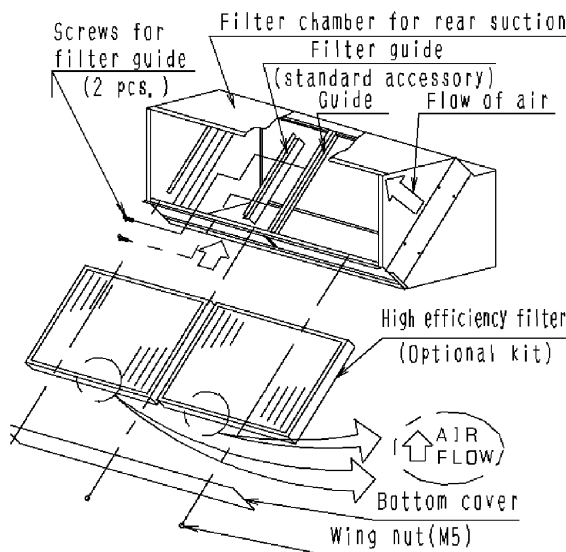


(Procedure) (When the maintenance of the filter is carried out from the side,)
 (Refer to the following table for the type of the long-life filter,)
 (1) Remove the side cover,
 (2) Install the long-life filter to the rail of the guide of the leeward,
(Caution)
 Match the arrow mark of the long-life filter to the flow of the air,
 (3) Install the side cover,
 Long-life filter
 (Optional kit for 80 and 160 type filter chamber)

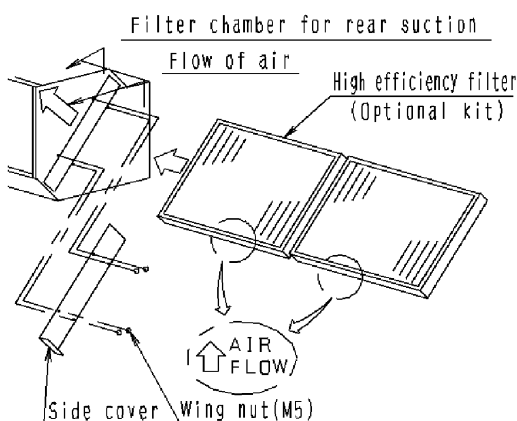
Kit name	KAJ25L36B	KAJ25LA56B	KAJ25LA80B	KAJ25LA160B
Long-life filter	Long-life filter of standard accessories shall be used,		KAFJ259L80	KAFJ259L160

When the high efficiency filter (optional kit) is used

Kit name	KAJ25L36B	KAJ25LA56B	KAJ25LA80B	KAJ25LA160B	
High efficiency filter kit	65%	KAFJ252L36	KAF252LA56	KAF252LA80	KAF252LA160
	90%	KAFJ253L36	KAF253LA56	KAF253LA80	KAF253LA160



(Procedure)
 (When the maintenance of the filter is carried out from the bottom,)
 (1) Remove the bottom cover,
 (2) Install the filter guide with 2 screws to the center of the guide of the filter chamber,
 (Only for 80 and 160 model)
 (3) Install the high efficiency filter to the rail of the windward,
(Caution) Match the arrow mark of the high efficiency filter to the flow of the air,
 (4) Install the bottom cover,



(Procedure)
 (When the maintenance of the filter is carried out from the side,)
 (Refer to the following table for the type of long-life filter,)
 (1) Remove the side cover,
 (2) Install the high efficiency filter to the rail of the guide of the windward,
(Caution) Match the arrow mark of the high efficiency filter to the flow of the air,
 (3) Install the side cover,

7.8 KAFJ251K36-56-80-160 — Replacement Long-Life Filter

KAFJ251K80



Caution

- Can be water-washed. Can be reused.

Dimensions Unit:mm

Model	A-B
KAFJ251K36	506×377
KAFJ251K56	656×377
KAFJ251K80	506×377 451×377
KAFJ251K160	701×377 656×377

JC: D3K1147B
JC: D3K1148B

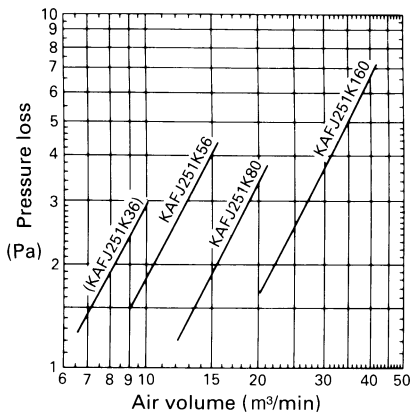
Specifications

Item	Model	KAFJ251K36	KAFJ251K56	KAFJ251K80	KAFJ251K160
Average Efficiency (%)		50% (Gravity method)			
Pressure Loss (Pa)	Initial	10 or less		4.9 or less	
	Final	49			
Materials		Mildew Proof Resin Net			
Number Required per Model		1	1	2 (each 1)	2 (each 1)
Life Time (h)		2,500 hours (dust particle concentration at 0.15 mg/m ³)			
Applicable Model		20 · 25 · 32 Class	40 · 50 Class	63 Class	80 · 100 · 125 Class

Note:

The filter models for 20 ~ 50 Class can be used also as Rear-suction types.

Characteristics of filter



7.9 KSA-25K36, KSA-25KA56-80-160 — Canvas Duct (Air Suction Canvas)

KSA-25KA80



Dimensions Unit:mm

Model	A	B	C	D
KSA-25K36	550	514	125	225
KSA-25KA56	700	664	200	300
KSA-25KA80	1,000	964	350	450
KSA-25KA160	1,400	1,364	550	650

- Can be attached so that there is no gap in the ceiling using the included turn buckle.

Item	Model	KSA-25K36	KSA-25KA56	KSA-25KA80	KSA-25KA160
Canvas duct		Flame retardant			
Mass (kg)		1.8	2.2	2.8	3.6
Component parts		Air suction canvas. Turn buckle. Mounting screw. Adjustment plate. Installation manual.			
Applicable model		BYBS32DJW1	BYBS45DJW1	BYBS71DJW1	BYBS125DJW1

Installation

1. This kit contains the following parts and accessories.

Name	Quantity			
	KSA-25K36	KSA-25K56 KSA-25KA56	KSA-25K80 KSA-25KA80	KSA-25K160 KSA-25KA160
Air suction canvas	1	1	1	1
Turnbuckle	4	4	4	4
Screws for air suction canvas	4	4	4	4
Adjuster plate	4	4	4	4
Screws for adjuster plate	4	4	4	4
Installation manual	1	1	1	1

2. Require tools

Screwdriver (+), Nippers

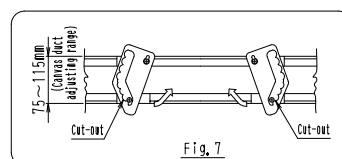
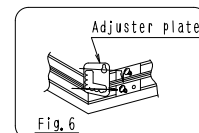
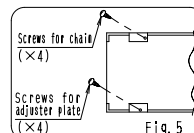
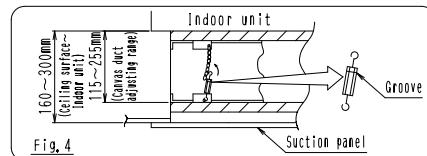
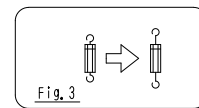
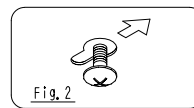
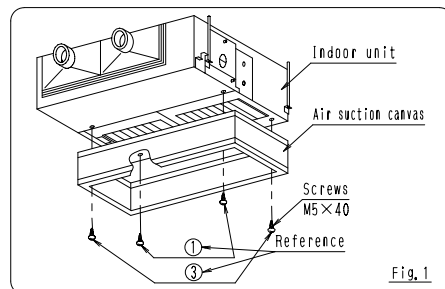
3. Operation procedures

(1) Install the air suction canvas

- ① Tighten two screws for air suction canvas to the indoor unit. (Leave about 30mm of thread exposed.)
- ② Fit the air suction canvas over the screws and slide the direction of the arrow in Fig.2, to hang the air suction canvas on the indoor unit.
- ③ Fit the remaining two screws and tighten all four screws until the seal is about 5mm thick.

(2) Adjust the air suction canvas

- ① Attach the suction panel. For details, see the installation manual provided with the suction panel.
 - [To use the turnbuckle]
 - The canvas duct can be adjusted in the 115~255mm range. [See Fig.4]
 - a. Attach the turnbuckles to the canvas duct and hook the turnbuckles to the chain at a point that closes the gap between the ceiling surface and the suction panel, (Fig.4) (Before attaching the turnbuckles, lengthen the screws. Attach them with the groove facing upwards.) [Fig.3]
 - b. Turn the turnbuckles clockwise until the gap between the ceiling surface and the suction panel closes tightly. Cut any extra chain with the nippers.
 - [To use the adjuster plate] (Only for the decoration panel)
 - The canvas duct can be adjusted in the 75~115mm range. [See Fig.7]
 - The adjuster plate cannot be used with electric precipitator or high efficiency filters.
 - a. Remove the chain and put the four screws back in the same holes. Tighten also the four screws for adjuster plate to the indoor unit. [Fig.5]
 - b. Hook one adjuster plate on each of the 4 sets of screws tightened in step a. [Fig.6] (Orient the adjuster plate as shown in Fig.7.)
 - c. Slightly raise the decoration panel and turn the adjuster plate until the gap between ceiling surface and the decoration panel closes. Make sure the cut-out on each of the adjuster plates locks onto the bottom screw. [Fig.7]
 - d. Tighten all screws definitively.



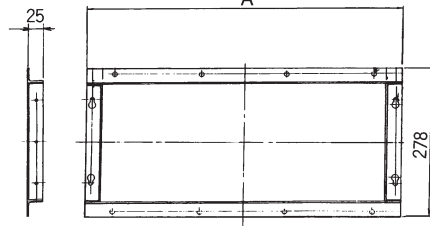
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7.11 KDJ2507K36-56-80-160 — Air Suction Flange

KDJ2507K80



Dimensions

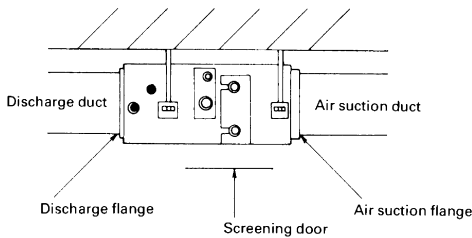


Unit:mm

Model	A
KDJ2507K36	527
KDJ2507K56	677
KDJ2507K80	977
KDJ2507K160	1,377

C: D3K1157

Example of installation



Item	Model	KDJ2507K36	KDJ2507K56	KDJ2507K80	KDJ2507K160
Size of connecting duct (mm)	Width	477	627	927	1327
	Length	228			
Materials	Galvanized steel plate				
Component parts	Flange for suction. Packing. Screws. Installation Manual.				
Applicable model	FXS20-25-32	FXS40-50	FXS63	FXS80-100-125	

Note : When connecting a square duct to the intake side, the “screening door (KBBJ25KA80)” of optional kit is needed.

Installation

1. This kit contains the following parts and accessories.

Name	Quantity			
	KDJ2507K36 KD2507B32	KDJ2507K56 KD2507B45	KDJ2507K80 KD2507B63	KDJ2507K160 KD2507B125
Air suction flange	1	1	1	1
Screws	12	14	18	24
Installation manual	1	1	1	1

(Caution) This kit requires the screening door, (option)

2. Required tools

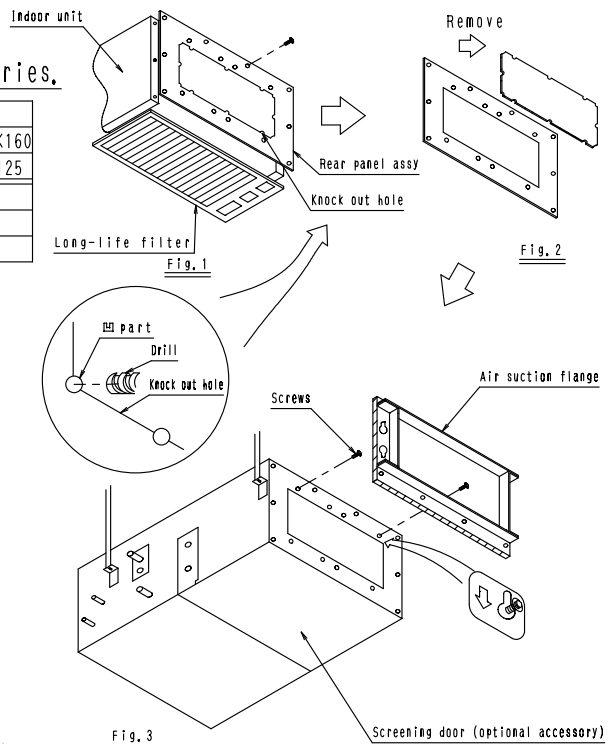
Screwdriver, Nippers, Drill (φ6mm), Cutter knife

3. Operating procedures

- Remove the long-life filter from the indoor unit, (Fig.1)
- Remove the rear panel assembly, (Fig.1)
- Drill φ6 holes in the rear panel around the knock-out hole recess and knock out hole.
- Cut the sound-proofing to the rear panel size and shape with a cutter knife, (fig.2)
- Attach the rear panel to the air conditioner, (Fig.3)
- Attach the screening door to the indoor unit, (Fig.3)
 - Tighten two installation screws to the indoor unit, (Leave about 5mm of thread exposed,)
 - Hang the air suction flange on the screws and then tighten all screws definitively.

4. Cautions for the installation

- Install the flange for the suction as explain in these instructions,
- Fasten the screws tightly so as no gap between the indoor unit and the air suction flange (have a packing).



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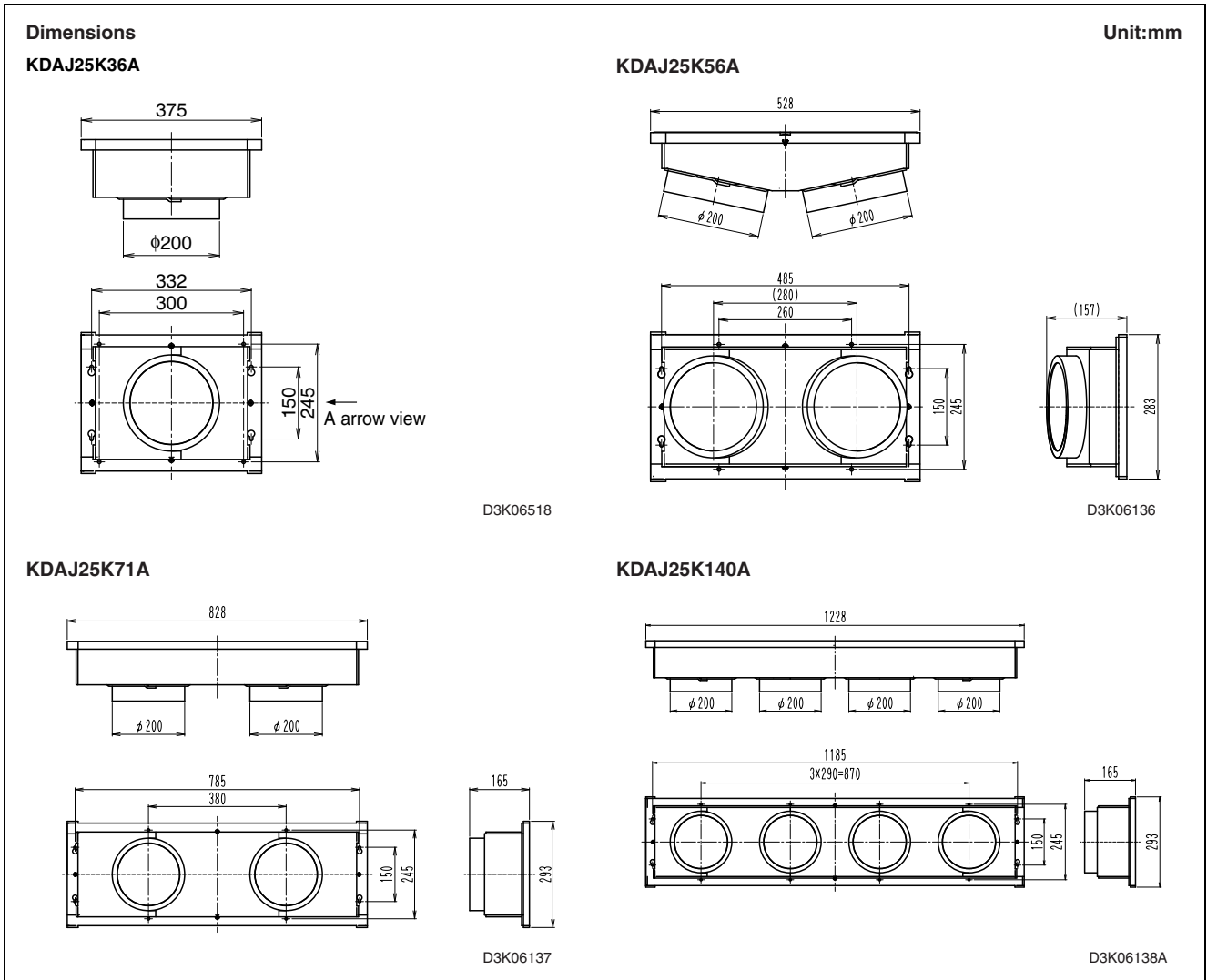
7.12 KDAJ25K36-56-80-140A — Air Discharge Adaptor

KDAJ25K56A

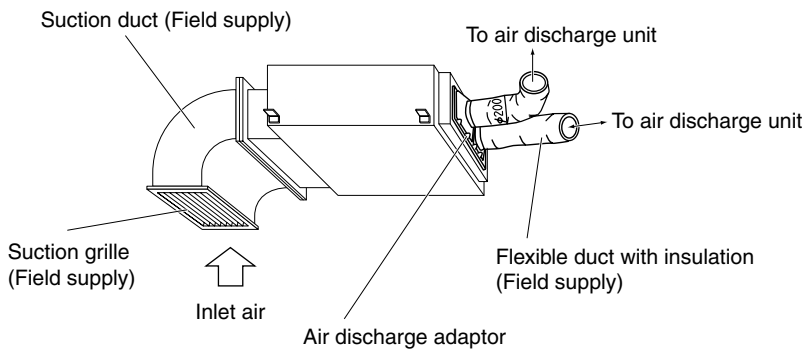


Model		KDAJ25K36A	KDAJ25K56A	KDAJ25K71A	KDAJ25K140A
Item					
Duct connection diameter		φ200×1 port	φ200×2 port	φ200×2 port	φ200×4 port
Material		Hot-dip zinc coated steel sheets. EPS. Insulation.			
Accessories		Screws. Installation manual.			
Mass (Weight)	kg	1.1	1.5	2.5	3.5

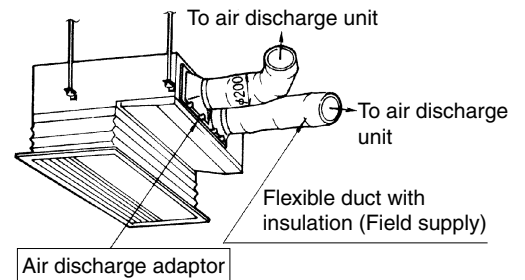
3
7.12 KDAJ25K36-56-80-140A



Example of installation (FXMQ-P)



Example of installation (FXSYQ/FXYB)

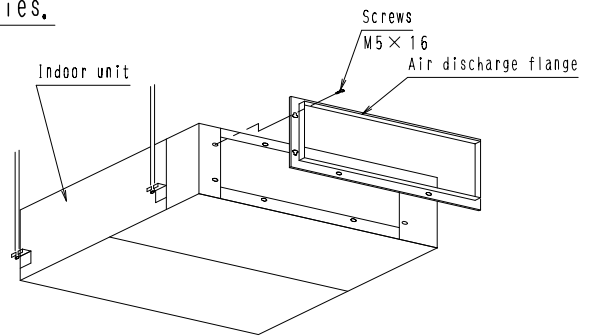


Installation

Air discharge adapter installation manual

1. This kit contains the following parts and accessories.

Name	Quantity			
	KDAJ25K36A	KDAJ25K56A	KDAJ25K71A	KDAJ25K140A
Air discharge adapter	1	1	1	1
Installation manual	1	1	1	1
Screws	8	8	8	12

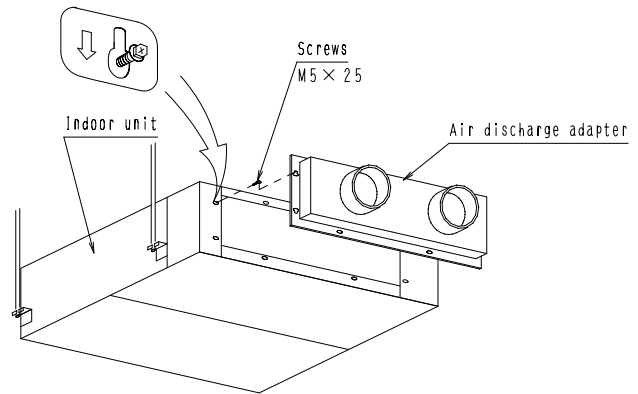


2. Required tools

Screwdriver ⊕

3. Operating procedures

1. Remove the air discharge flange from indoor unit.
2. Attach the air discharge adapter to the indoor unit.
 - ① Tighten two installation screws to the indoor unit. (Leave about 20mm of the thread exposed.)
 - ② Hang the air discharge adapter on the screws and then tighten all screws definitively.



4. Cautions for the installation

Fasten the screws tightly so as no gap between the indoor unit and the air discharge adapter,

3P012475C

8. FXM(Q)

8.1 KAF372AA36-56-80-160 / KAF373AA36-56-80-160 — High Efficiency Filter

KAF372AA56



Model		KAF372 AA36	KAF373 AA36	KAF372 AA56	KAF373 AA56	KAF372 AA80	KAF373 AA80	KAF372 AA160	KAF373 AA160
Initial pressure loss	Pa	15 or less	21 or less	35 or less	54 or less	35 or less	54 or less	38 or less	56 or less
Final pressure loss	Pa	98 or less							
Average efficiency (colorimetric method)	%	65	90	65	90	65	90	65	90
Air flow rate / 1 sheet	m ³ /min	9.8							
Life *1	h	2,500	1,800	2,500	1,800	2,500	1,800	2,500	1,800
Filter element		Non-woven fabric of synthetic fiber							
Number of sheets included		1	1	2	2	3	3	4	4

Caution

- Cannot be water-washed for reuse.
- The filter chamber (for high efficiency filter) (KDDF37AA36 / KDDF37AA56 / KDDF37AA80 / KDDF37AA160) is required when the high efficiency filter will be installed.

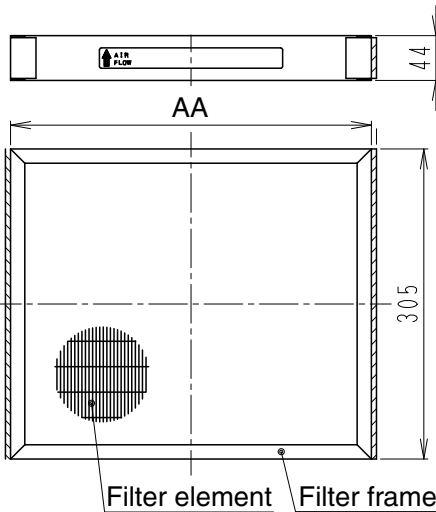
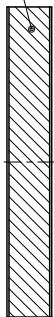
Note:

*1. Dust concentration 0.15 mg/m³

Dimensions

Unit:mm

Hook and loose fastener (black)

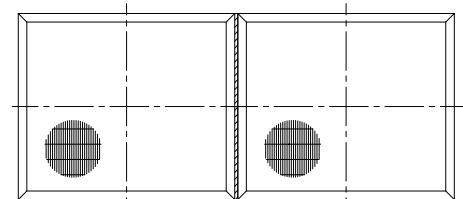


Hook and loose fastener (white)



AA	Applied models
550	KAF372AA36 KAF373AA36
355	KAF372AA56, 80, 160 KAF373AA56, 80, 160

Note:
KAF372AA36, KAF373AA36:
Without hook and loose fastener.



Filter connecting figure

J : D3K06645
J : D3K07003

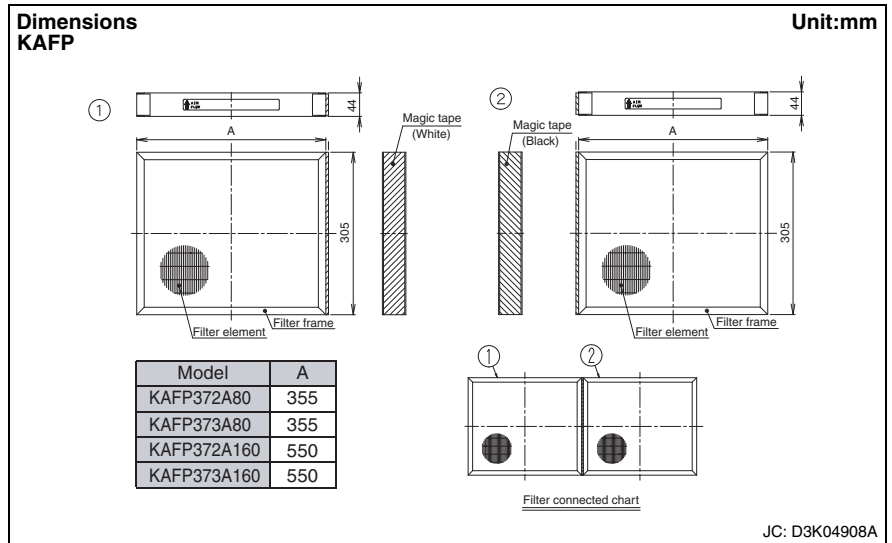
8.2 KAFP372A80-160, KAFJ372L280 / KAFP373A80-160, KAFJ373L280 — High-Efficiency Filter

KAFP372A80



Caution

- Cannot be water-washed for reuse.
- The filter chamber (for high efficiency filter) (KDDFP37A80/KDDFP37A160) is required when the high efficiency filter will be installed.

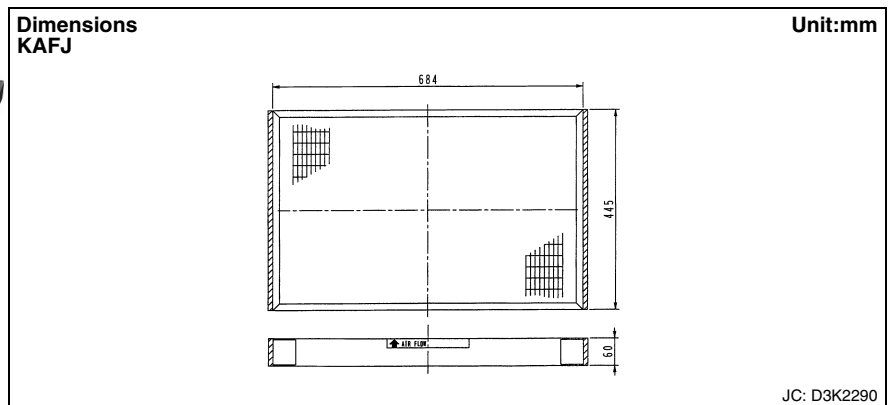


KAFJ372L280



Caution

- Cannot be water-washed for reuse.
- The filter chamber (for high efficiency filter) (KDJ3705L280) is required when the high efficiency filter will be installed.

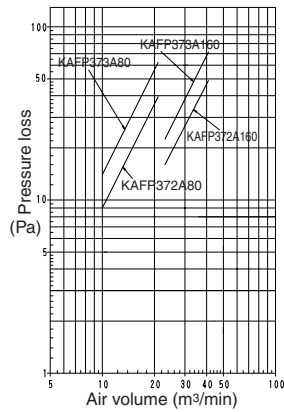


Specification

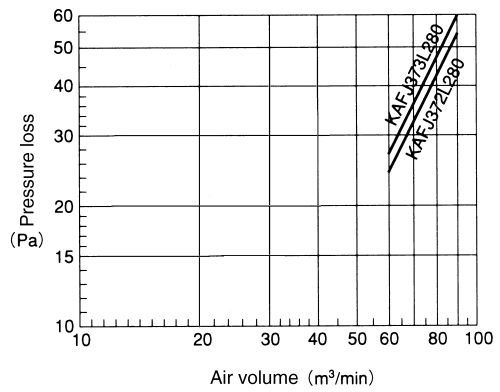
Model	65% type						90% type					
	KAFP372A80		KAFP372A160		KAFJ372L280		KAFP373A80		KAFP373A160		KAFJ373L280	
Filter Chamber	KDDFP37A80		KDDFP37A160		KDJ3705L280		KDDFP37A80		KDDFP37A160		KDJ3705L280	
Dimension (W×D×T) (mm)	355×305×44		550×305×44		684×445×60		355×305×44		550×305×44		684×445×60	
Average Dust Collection Efficiency (%)	Colorimetric method 65%						Colorimetric method 90%					
Initial Pressure Loss (Pa)	18	35 or less	26	38 or less	27	42	28	54 or less	36	56 or less	29	45
Final Pressure Loss (Pa)	98						98					
Filter	Non-woven fabric of synthetic fiber						Non-woven fabric of synthetic fiber					
Life Time (h)	2500 hours (dust density 0.15mg/m ³)						1800 hours (dust density 0.15mg/m ³)					
Seats Structured	2		2		2		2		2		2	
Applicable Models	40 Class	50-63-80 Class	100 Class	125 Class	200-250 Class		40 Class	50-63-80 Class	100 Class	125 Class	200-250 Class	

Characteristics of filter

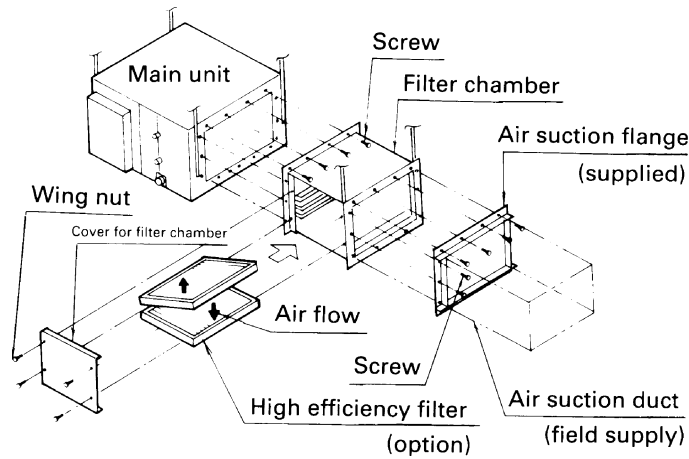
■ KAFP372A80, KAFP372A160,
KAFP373A80, KAFP373A160



■ KAFJ372L280, KAFJ373L280



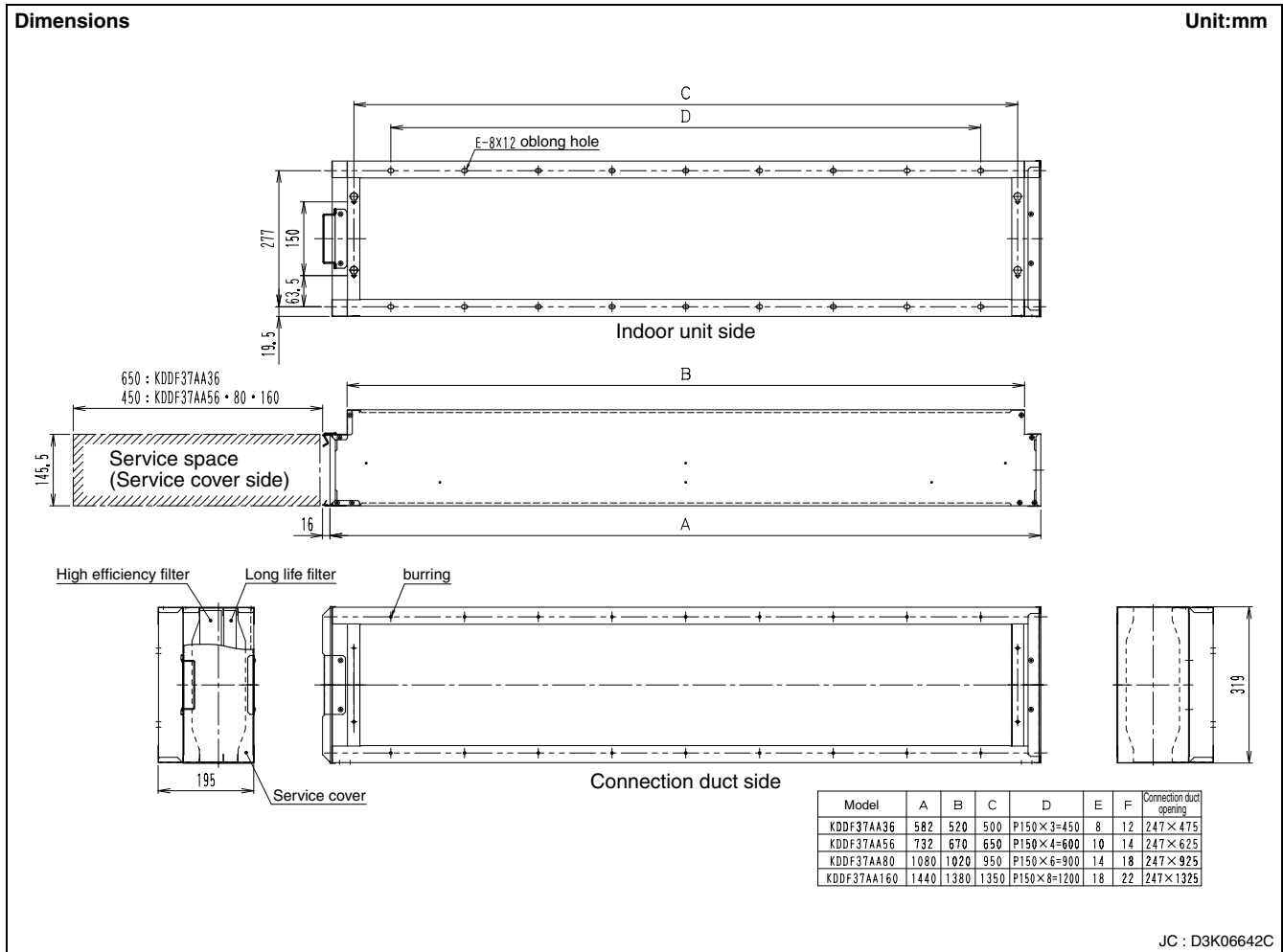
Installation



- Meet the airflow direction and arrow mark putting on the High efficiency filter.
- It is impossible to be built in with the air cleaning unit together.

8.3 KDDF37AA36-56-80-160 — High Efficiency Filter Chamber

Item		Model				
		KDDF37AA36	KDDF37AA56	KDDF37AA80	KDDF37AA160	
Inserted filter	High efficiency filter	65% (colorimetric method)	KAF372AA36	KAF372AA56	KAF372AA80	KAF372AA160
		90% (colorimetric method)	KAF373AA36	KAF373AA56	KAF373AA80	KAF373AA160
	Long life filter	KAF371AA36	KAF371AA56	KAF371AA80	KAF371AA160	
Accessories		Mounting screws. Installation manual.				
Mass (Weight)		kg	4.5	6	7	9



Installation

DAIKIN AIR CONDITIONERS Filter Chamber «Ceiling Mounted Duct Connection Type» Installation Manual

KDDF37AA36 • 56 • 80 • 160

Read this manual in advance and follow all the instructions given in the manual to conduct the installation of the product

⚠️ Precautions Conduct the installation of the product correctly after carefully reading the safety precautions specified below.

- Request your dealer or contractor to conduct the installation of the product. Users' unauthorized installation work may result in the falling of the product or air leakage.
- Conduct the installation of the product correctly by following all the instructions given in the manual. A defect in the installation work may result in the falling of the product or air leakage.
- Be sure to use parts specified in this manual and the accessories provided with the product for the installation of the product. Failure to use these parts may result in the falling of the product or air leakage.
- Conduct the trial operation of the product after the installation of the product and check that there are no abnormalities.

Precautions

- This product can be mounted to air conditioners of ceiling mounted duct connection type.
- Mount the product after checking the model name of the indoor unit with the table on the right-hand side.
- Refer to the operation manual and installation manual for the indoor unit as well at the time of the installation of the product.
- In the case of using the product for a ceiling return application, (Except KAF375AA36) prepare a protection net (KPN37A56, KPN37A 80, or KPN37A 160) as an optional accessory.
- Use of long-life filters
Long-life filters can be washed and used again. On completion of installation, advise the customer of the cleaning interval and removal method of the filters by using the operation manual for the indoor unit and this installation manual.
- Use of high-performance filters
High-performance filters cannot be washed in water for reuse. On completion of installation, advise the customer of the cleaning interval of the filters by using the operation manual for the indoor unit.

Parts Make sure that the following parts are provided with the product.

Name	Filter chamber	Mounting screw	Installation Manual
Shape			
		M5×16	
Number	1	1 2	1 (This copy)
		1 4	
		1 8	
		2 8	

Combination table The use of the chamber requires each filter as an optional accessory.

Name of model	High-performance filter (optional accessory)	Long-life filter (optional accessory)	Name of model incorporable into indoor unit
KDDF37AA36	KAF372AA36	KAF371AA36	VRV FXMQ20・25・32PVE
	KAF373AA36		
KDDF37AA56	KAF372AA56	KAF371AA56	VRV FXMQ40PVE
	KAF373AA56		
KDDF37AA80	KAF372AA80	KAF371AA80	SkyAir FBQ71DV1
	KAF373AA80		VRV FXMQ50・63・80 PVE
KDDF37AA160	KAF372AA160	KAF371AA160	SkyAir FBQ100・125・140DV1
	KAF373AA160		VRV FXMQ100・125・140 PVE

KAF372AA36, KAF372AA56, KAF372AA80, and KAF372AA160: 65% (colorimeter method)
KAF373AA36, KAF373AA56, KAF373AA80, and KAF373AA160: 90% (colorimeter method)

1 Before installation <Do not throw away the required accessories until the installation of the product is completed.>

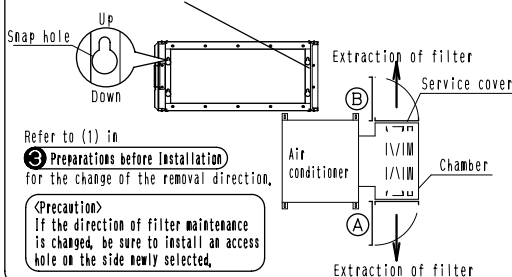
- (1) Decide the carry-in route.
- (2) Carry the product into the place of installation without unpacking the product. If it is unavoidable to unpack and carry in the product, pay the utmost attention to handle the product.

2 Selecting Place of Installation <Refer to the installation manual provided to the indoor unit as well.>

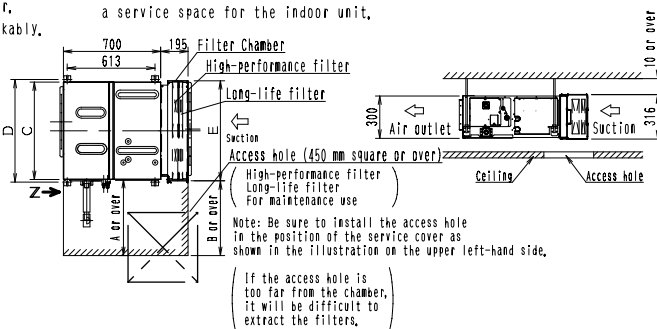
- (1) Select the place of installation with the consent of the customer, provided that the following conditions are satisfied,
 - A place bearing the weight of the indoor unit and filter chamber,
 - A place where the lower part of the ceiling does not lean remarkably,
 - A place where an installation workspace can be secured.

- (2) Either the left- or right-hand side service cover can be used to remove the filters. Select the direction of removal according to the condition of installation. (The service cover in position (A) is set for opening and closing before shipping.) At that time, confirm the up-and-down direction of the filter chamber through the snap holes located on the left- and right-hand sides of the frame on the air conditioner connection side.

- (3) Install the access hole for the filter service space as shown below.
 - Refer to the installation manual for the indoor unit and provide a service space for the indoor unit.



Refer to (1) in **3 Preparations before Installation** for the change of the removal direction.
<Precaution> If the direction of filter maintenance is changed, be sure to install an access hole on the side newly selected.



(Unit: mm)

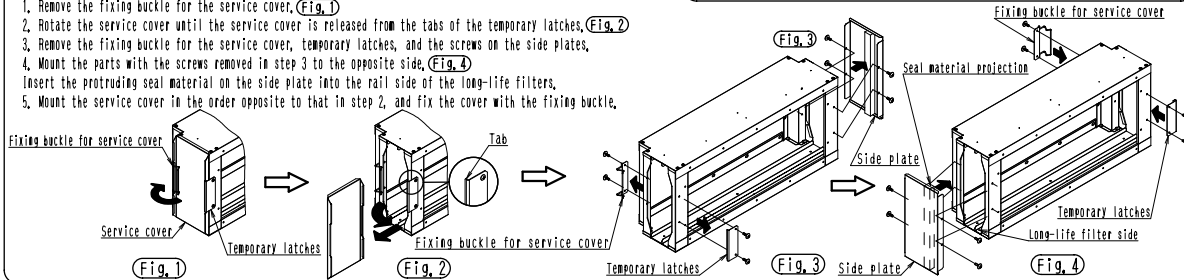
Unit name	A	B	C	D	E
KDDF37AA36	650	650	550	588	582
KDDF37AA56	450	450	700	738	720
KDDF37AA80	450	450	1000	1038	1080
KDDF37AA160	450	450	1400	1438	1440

3 Preparations before Installation Refer to the installation manual provided to the indoor unit as well.

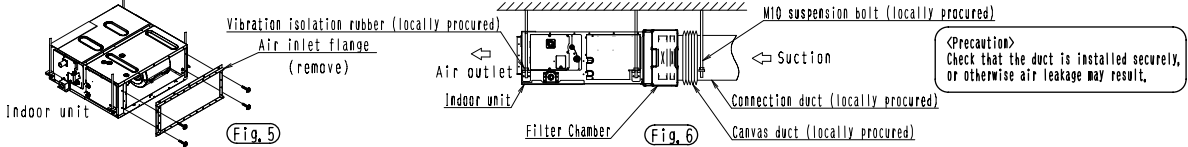
- (1) Take the following procedure in the case of changing the direction of filter extraction.
Example: When changing the opening and closing direction of the service cover from (A) to (B) as shown in **2 Selecting Place of Installation** - (2)

1. Remove the fixing buckle for the service cover, (Fig. 1)
2. Rotate the service cover until the service cover is released from the tabs of the temporary latches, (Fig. 2)
3. Remove the fixing buckle for the service cover, temporary latches, and the screws on the side plates, (Fig. 3)
4. Mount the parts with the screws removed in step 3 to the opposite side, (Fig. 4)
5. Mount the service cover in the order opposite to that in step 2, and fix the cover with the fixing buckle.

<Precaution> Check that the fixing buckle securely locks the service cover. Otherwise, air leakage may result.

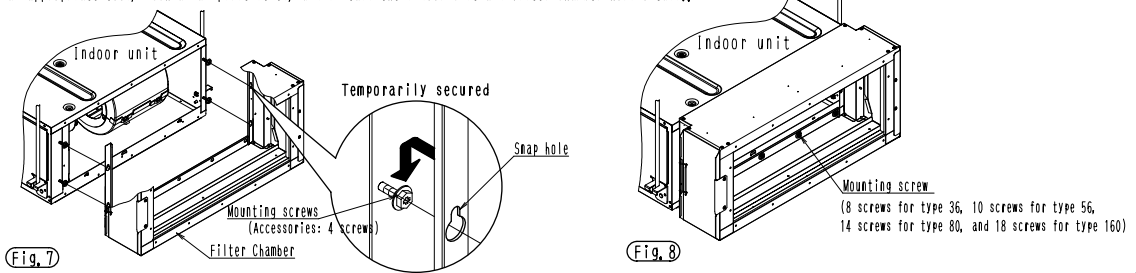


- (2) Remove the air inlet flange of the indoor unit, (Fig. 5)
- (3) In the case of connecting on-site ducts to the air outlet of the indoor unit and the air inlet of the filter chamber, mount a canvas duct (locally procured) to the air inlet flange so that the vibration of the filter chamber will not be propagated to the ducts or ceiling, (Fig. 6)
 - Install the connected ducts with suspension bolts (locally procured) so that the weight of the connected ducts will not be imposed on the air inlet flange.
 - Moreover, apply an adsorption material (thermal insulator) to the inner wall of the on-site duct and attach vibration isolation rubber to the suspension bolts for the indoor unit.
 - In the case of connecting the local duct to the air inlet side of the filter chamber, mount the dismounted air inlet flange to the air inlet side of the filter chamber with the screws removed from the indoor unit and those provided to the indoor unit.



4 Installation of Filter Chamber

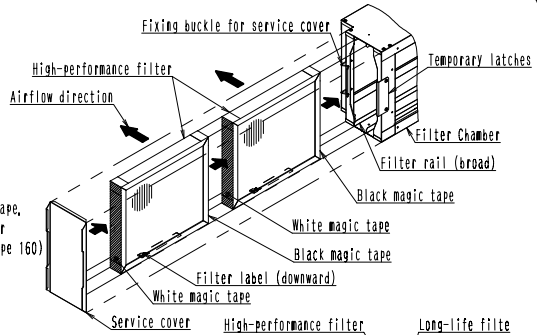
- The filter chamber mounted to the indoor unit can be hung on the suspension bolts.
- (1) Temporarily tighten the mounting screws provided with the product to the 4 points of the indoor unit, (Fig. 5). Tap threads on the screws on the indoor unit in advance to secure the filter chamber.
 - (2) Temporarily secure the chamber with the screws prepared in (1) through the snap holes from the inner side of the chamber.
 - (3) Tighten the 4 temporarily secured screws after tightening the provided mounting screws (8 screws for type 36, 10 screws for type 56, 14 screws for type 80, and 18 screws for type 160) in all the screw holes in the chamber.
 - (4) Use an appropriate tool, such as a spirit level, and install the indoor unit and filter chamber horizontally.



5 Filter Mounting Procedure

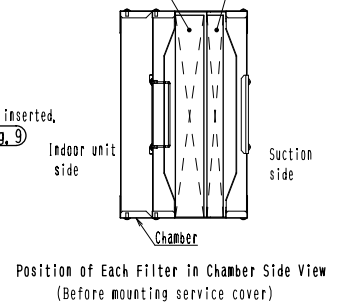
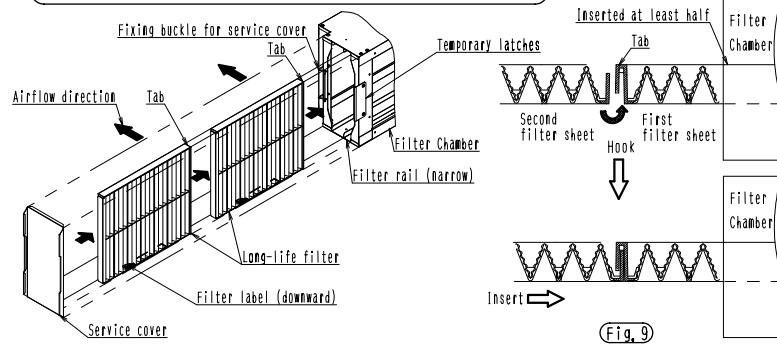
High-performance filter

- There is no difference in mounting method between the 65% type and 90% type.
- (1) Refer to (1) in 3 Preparations before Installation and remove the service cover. Remove the fixing buckle for the service cover and rotate the service cover until the service cover is released from the tabs of the temporary latches.
 - (2) Insert the first sheet (provided with black magic tape) according to the wide filter rail with the filter label faced downward while checking that the airflow direction is in conformity with the direction of the arrows.
 - (3) After the first filter is perfectly inserted, insert the next filter (on the white magic tape side as shown in the illustration on the right-hand side) and secure the filter with the magic tape.
 - (4) After inserting the filter all the way into the filter chamber, mount the service cover in the order opposite to that in (1). (Number of filters: 1 for type 36, 2 for type 56, 3 for type 80, and 4 for type 160)
- <Precaution>
Check that the fixing buckle securely locks the service cover. Otherwise, air leakage may result.

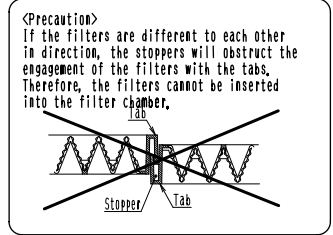


Long-life filter

- (1) Refer to (1) in 3 Preparations before Installation and remove the service cover. Remove the fixing buckle for the service cover and rotate the service cover until the service cover is released from the tabs of the temporary latches.
 - (2) Insert the filter according to the filter rail with the filter label faced downward while checking that the airflow direction is in conformity with the directions of the arrows.
 - (3) Be sure to hook the next filter to the tab on the first filter and insert the next filter when more than half the first filter is inserted.
 - (4) After inserting the filter all the way into the filter chamber, mount the service cover in the order opposite to that in (1) (Number of filters: 1 for type 36, 2 for type 56, 3 for type 80, and 4 for type 160)
- <Precaution>
Check that the fixing buckle securely locks the service cover. Otherwise, air leakage may result.

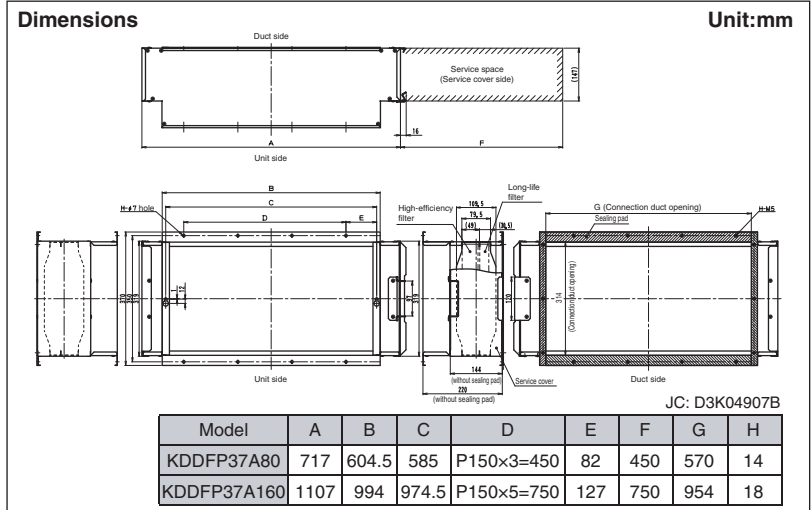


Position of Each Filter in Chamber Side View (Before mounting service cover)



8.4 KDDFP37A80-160 — Filter Chamber

KDDFP37A80

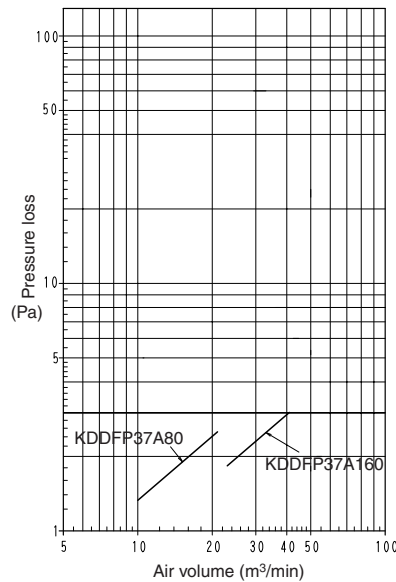


Item		Model	KDDFP37A80	KDDFP37A160
Inserted filter	65% (colorimetric method)		KAFP372A80	KAFP372A160
	90% (colorimetric method)		KAFP373A80	KAFP373A160
	Long-life filter		KAFP371A80	KAFP371A160
Mass (kg)			5.0	7.0
Accessories			Mounting screws. Installation manual.	

- Set the anchor bolts
(the size of anchor boll should be M10.)

Characteristics of filter

■KDDFP37A80, KDDFP37A160



Installations

1 Before Installation <The accessories necessary for installation work should not be cast away until the work has been finished.>

- (1) Determine a carry-in route.
- (2) When carrying in the filter chamber, it should be carried into the place to be installed, in the form of a bale package. If it is carried in at unpacked condition, handling should be made with sufficient care.

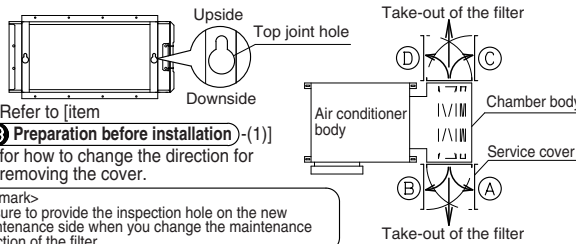
2 Selection of the location to be installed <Refer to the installation manual attached to the indoor unit.>

(1) For the location to be installed, select the place that conforms to the following conditions, together with customer's agreement.

- The place that has sufficient strength to bear the weight of the indoor unit and filter chamber.
- The place where lower surface of a ceiling is not significantly inclined.
- The place where a service space can be kept from the viewpoint of installation.

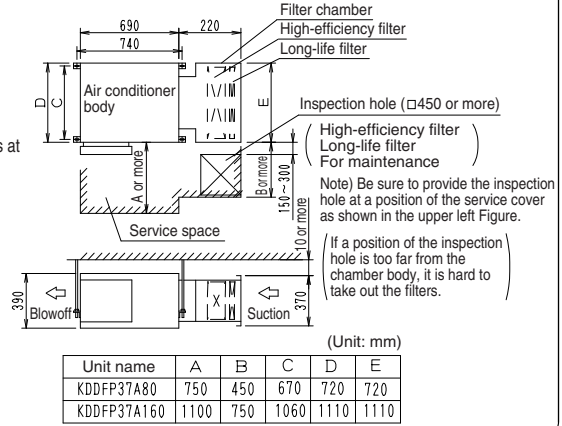
(2) There are four directions for removing the maintenance service cover of the filter. Direction of the removal should be changed in accordance with an installed condition.

(At shipping, the cover is fitted at the opening and closing location (A).) At this time, confirm the vertical direction of the filter chamber, by means of the top joint holes at the right and left sides of the connection side toward an air conditioner body.



Refer to [item **3 Preparation before installation** -(1)] for how to change the direction for removing the cover.

<Remark>
Be sure to provide the inspection hole on the new maintenance side when you change the maintenance direction of the filter.



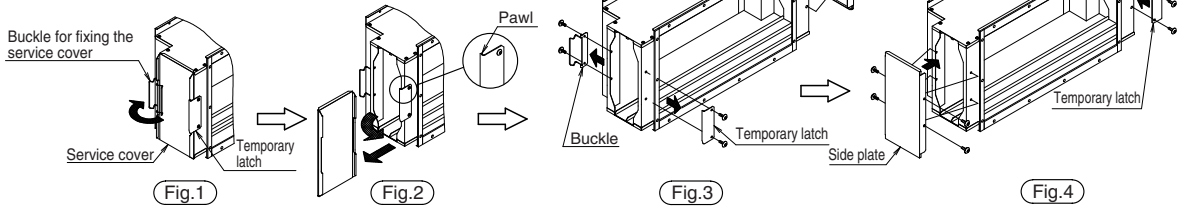
3 Preparation before installation <Refer to the installation manual attached to the indoor unit.>

(1) If direction of taking out the filter is changed, the work should be made in the following procedure.

Example) In the case of changing the opening and closing direction of the service cover from (A) to (C) as shown in [item **2 Selection of the location to be installed** -(2)],

1. Detach the buckle for fixing the service cover. (Fig.1)
2. Rotate the service cover until it is detached from the pawl of the temporary latch. (Fig.2)
3. Detach the buckle, latch, and the screws of the side plate. Then, remove the cover from the chamber body. (Fig.3)
4. Relocate the parts detached in accordance with above item 3, to the new position. (Fig.4)
5. Fit the service cover in accordance with the reverse procedure of above item 2, and fix it with the buckle.

<Remark>
Confirm that the service cover is securely fixed with the buckle. If fixing is not made steadily, it may cause air leakage.

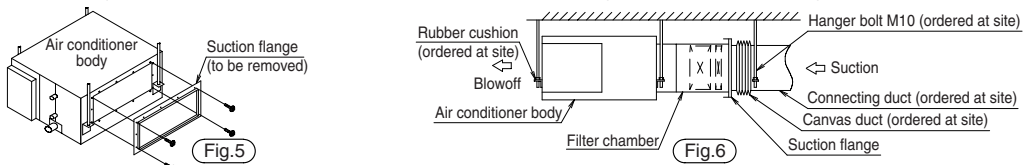


(2) Remove the suction inlet flange of the air conditioner body. (Fig.5)

In the case of connecting the site-duct to the suction side of the filter chamber, fit the removed suction inlet flange to the suction side of the filter chamber, with the screws which has been detached from the air conditioner body.

(3) In the case of connecting the site-duct to the blowoff outlet of the air conditioner body and to the inlet of the filter chamber, fit the canvas duct (ordered at site) to the inlet flange, so that vibration of the machine body may not transmitted to the duct and the ceiling (Fig.6).

Also, carry out lining work of the site-duct with an absorbent (heat insulation material), and fitting of rubber cushions on the hanger bolts for the air conditioner body.



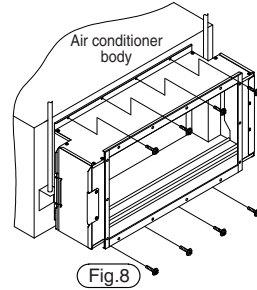
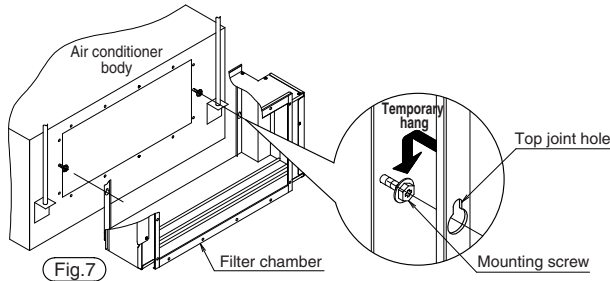
J: 3K016835

4 Installation of the filter chamber

It is also possible to lift up the products with the hanger bolts, on the condition in which the filter chamber has been previously fitted on the air conditioner body.

- (1) Fit the mounting screws which are attached to this kit, onto the air conditioner body at two positions. (Fig.7)
- (2) Temporarily hang the air conditioner body with the screws fitted in accordance with above item (1), into the top joint holes of the filter chamber body, from inside.
- (3) After tightened the chamber at all the outer screw holes by means of the attached mounting screws, tighten two inside screws which has been used for the temporary hanger. (Fig.8)
- (4) The air conditioner body and filter chamber should be installed horizontally by using a level vial etc.

<Remarks>
 • If screws are not tightened steadily, it may cause air leakage.
 • If the product is not installed horizontally, it may cause air leakage, or take-out of the filter may become difficult.



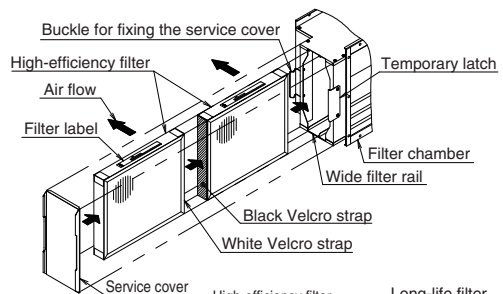
5 Fitting procedure of the filter

In the case of High-efficiency filter

Fitting procedure is same for both the 65% type and the 90% type.

- (1) Remove the service cover. For the method of removal, refer to [item ③ Preparation before installation]-(1)]. Detach the buckle for fixing the service cover and then rotate the service cover until it is detached from the pawl of the temporary latch.
- (2) Insert the first piece of filter (black Velcro strap attached); while aligned into the wide filter rails, by setting the arrow mark to an airflow direction such that the filter label comes to upper face.
- (3) After confirmed that the first filter has been inserted for more than its half size into the filter chamber, then insert the second piece of filter (white Velcro strap attached); while fixing it to the first filter using a Velcro strap.
- (4) After inserted two filters securely into the back of the filter chamber, fit the service cover in accordance with the reverse procedure of item (1).

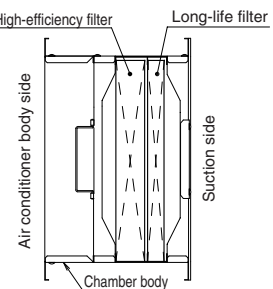
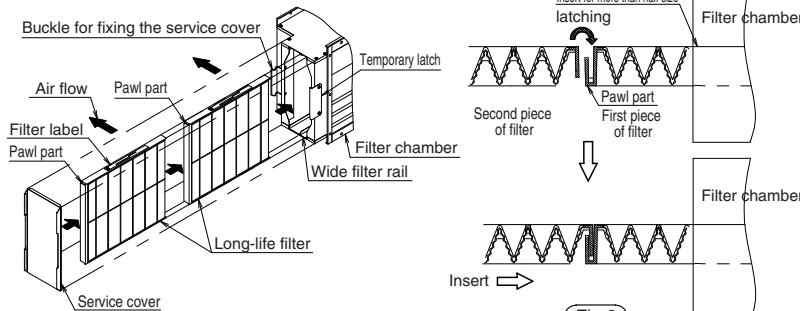
<Remark>
 Confirm that the service cover is securely fixed with the buckle.
 If fixing is not made steadily, it may cause air leakage.



In the case of Long-life filter

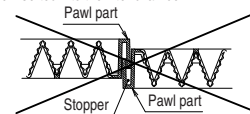
- (1) Remove the service cover. For the method of removal, refer to [item ③ Preparation before installation]-(1)]. Detach the buckle for fixing the service cover and then rotate the service cover until it is detached from the pawl of the temporary latch.
- (2) Insert the first piece of filter while aligned into the narrow filter rails, by setting the arrow mark to an airflow direction such that the filter label comes to upper face.
- (3) After confirmed that the first filter has been inserted for more than its half size into the filter chamber, then insert the second piece of filter while latching it on the pawl part of the first one. (Fig.9)
 The second filter cannot be fully inserted unless directions of the two filters fits.
- (4) After inserted the two filters securely into the back of the filter chamber, fit the service cover in accordance with the reverse procedure of item (1).

<Remark>
 Confirm that the service cover is securely fixed with the buckle.
 If fixing is not made steadily, it may cause air leakage.



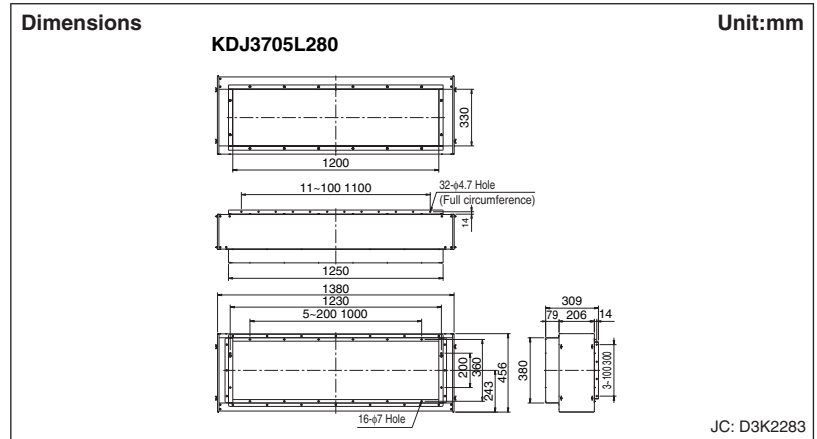
Position of each filter in the side view of the filter chamber (before the service cover is fitted)

<Remark>
 If each direction of the filters is different and when they are tried to be latched each other with their same pawls, the latching cannot be properly made due to the stopper. Consequently, the filters cannot be inserted into the filter chamber.



J: 3K016835

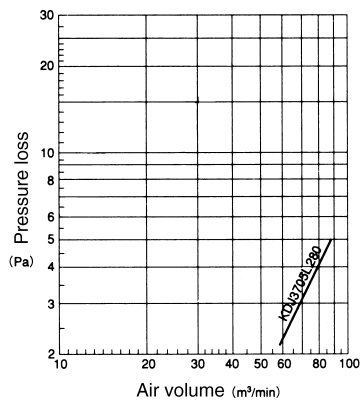
8.5 KDJ3705L280 — Filter Chamber



Item	Model	KDJ3705L280
Inserted filter	65% (colorimetric method)	KAFJ372L280
	90% (colorimetric method)	KAFJ373L280
	Long-life filter	KAFJ371L280
Mass (kg)		14
Specifications		Hot galvanization
Accessories		Mounting screws. Installation manual.

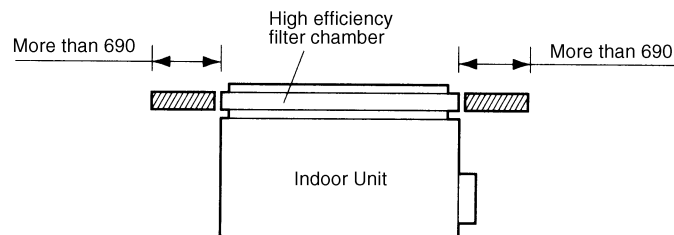
Characteristics of filter

■KDJ3705L280

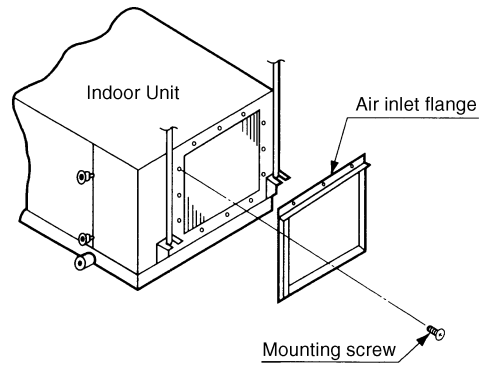


Preparation before installation

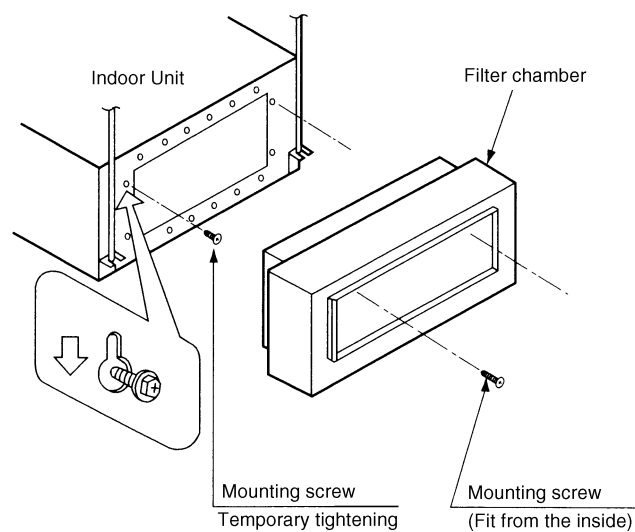
Keep a service space on one side of the unit to facilitate replacement of the high-efficiency filter or the long-life filter.



1. Remove the air inlet flange from the indoor unit. (Some models do not have the air inlet flange.)

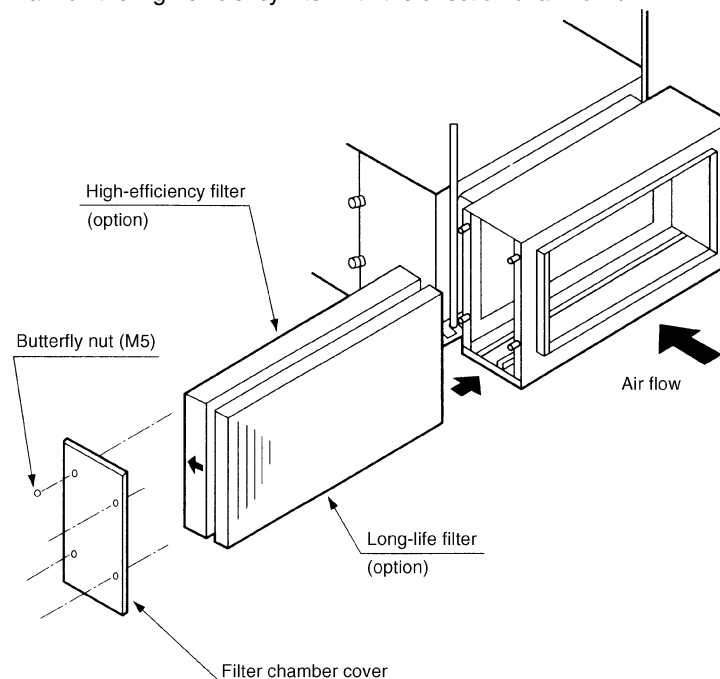


2. Fit the filter chamber on the indoor unit using the supplied screws.
 - Tighten the two mounting screws on the indoor unit temporary.
 - After temporary fitting the filter chamber, tighten all the screws firmly from the inside of the filter chamber.

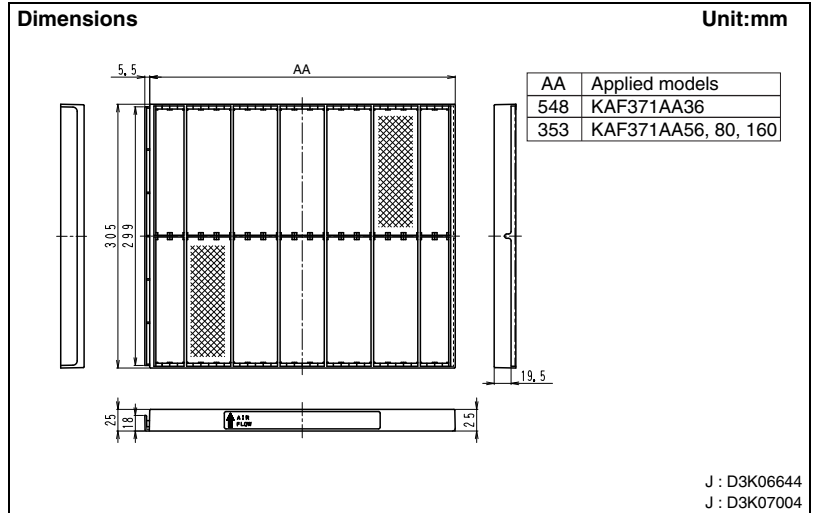


- Prepare the optional high-efficiency filter or long-life filter.
 1. Remove the filter chamber cover.
 2. Insert the filter.
 3. Fit the filter chamber cover.

Caution Align the arrow mark on the high-efficiency filter with the direction of air flow.



8.6 KAF371AA36-56-80-160 — Long Life Filter



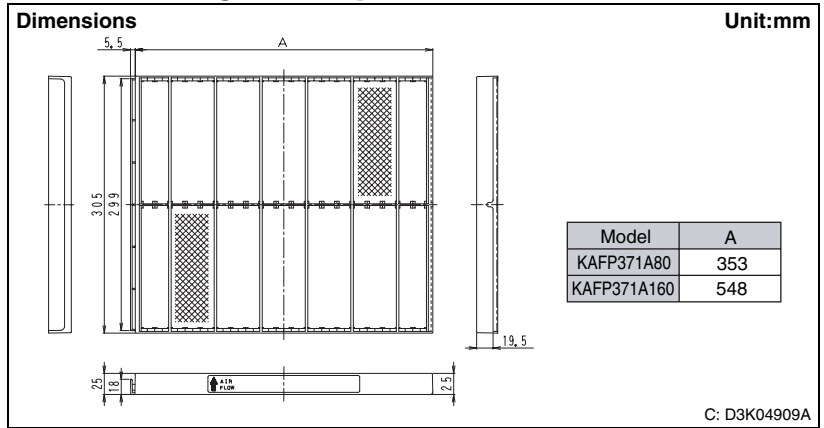
Caution

- Can be water-washed. Can be reused.
- The filter chamber (KDDF37AA36 / KDDF37AA56 / KDDF37AA80 / KDDF37AA160) is required when the long life filter will be installed.

		Model			
		KAF371AA36	KAF371AA56	KAF371AA80	KAF371AA160
Item	Model				
Initial pressure loss	Pa	3 or less	7 or less		8 or less
Final pressure loss	Pa	49 or less			
Average efficiency	%	50 (gravity method)			
Air flow rate / 1 sheet	m ³ /min	9.8			
Life	h	2,500 (dust concentration 0.15 mg/m ³)			
Filter element		Mildew-proof resin net (Polypropylene)			
Filter frame		Polystyrene			
Number of sheets included		1	2	3	4

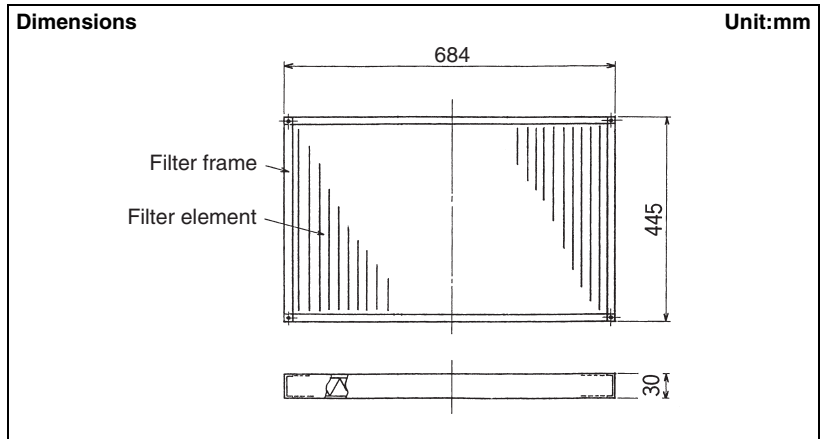
8.7 KAFP371A80-160, KAFJ371L280 — Long Life Replacement Filter

KAFP371A80



Caution

- Can be water-washed. Can be reused.
- The filter chamber (KDDFP37A80 · 160, KDJ3705L280) is required when the long life filter will be installed.

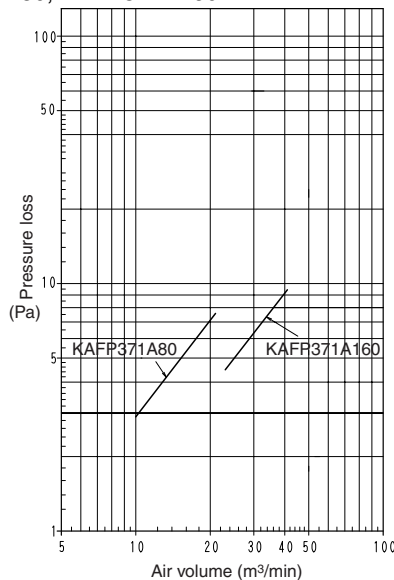


Specifications

Item	Model	KAFP371A80	KAFP371A160	KAFJ371L280
Filter Chamber for Bottom Suction		KDDFP37A80	KDDFP37A160	KDJ3705L280
Dimensions (WxDxT) mm		358.5x305x25	553.5x305x25	684x445x30
Average Efficiency (%)		50% (Gravity method)		
Pressure Loss (Pa)	Initial	7	8	9.8 (1mmH ₂ O)
	Final	49 (5mmH ₂ O)		
Material		Mildew Proof Resin Net		
Number Required per Unit		2	2	2
Life Time (h)		2,500 h (dust particle concentration at 0.15mg/m ³)		
Applicable Model		40-50-63-80 Class	100-125 Class	200-250 Class

Characteristics of filter

■KAFP371A80, KAFP371A160



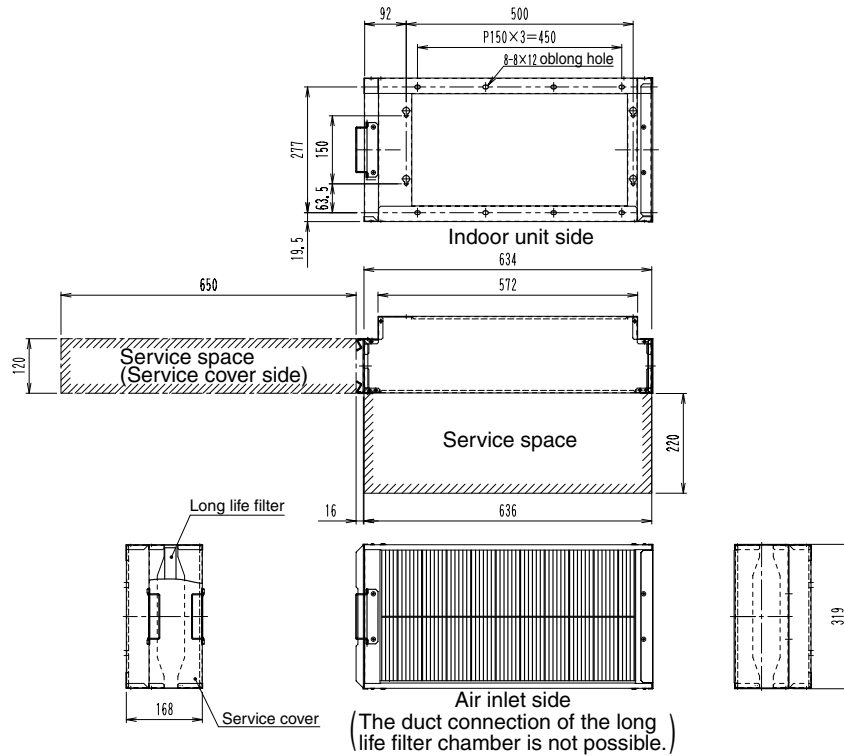
8.8 KAF375AA36-56-80-160 — Long Life Filter Chamber Kit

Model		KAF375AA36	KAF375AA56	KAF375AA80	KAF375AA160
Item		KAF371AA36	KAF371AA56	KAF371AA80	KAF371AA160
Long life filter *1		KAF371AA36	KAF371AA56	KAF371AA80	KAF371AA160
Accessories		Mounting screws. Installation manual.	Protection net. Mounting screws. Installation manual.		
Mass (Weight)	kg	4	4.5	5.5	7.5

Note: *1. The long life filter is packed inside the chamber.

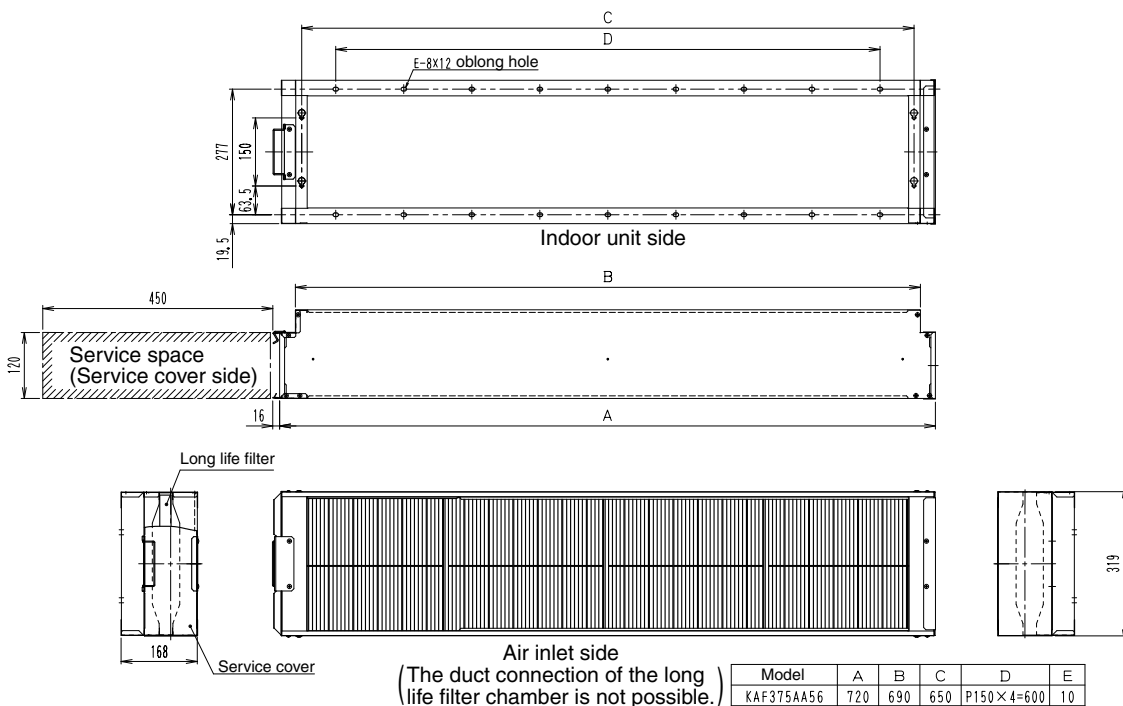
Dimensions
KAF375AA36

Unit:mm



J: D3K07519A

KAF375AA56 / KAF375AA80 / KAF375AA160



Model	A	B	C	D	E
KAF375AA56	720	690	650	P150×4=600	10
KAF375AA80	1080	1020	950	P150×6=900	14
KAF375A160	1440	1380	1350	P150×8=1200	18

J: D3K06729A

Installation

DAIKIN AIR CONDITIONERS Long-life Filter Chamber Kit《Ceiling Mounted Duct Connection Type》 **Installation Manual**

KAF375AA36 • 56 • 80 • 160

Read this manual in advance and follow all the instructions given in the manual to conduct the installation of the product.

⚠️ Precautions Conduct the installation of the product correctly after carefully reading the safety precautions specified below.

- Request your dealer or contractor to conduct the installation of the product. Users' unauthorized installation work may result in the falling of the product or air leakage.
- Conduct the installation of the product correctly by following all the instructions given in the manual. A defect in the installation work may result in the falling of the product or air leakage.
- Be sure to use parts specified in this manual and the accessories provided with the product for the installation of the product. Failure to use these parts may result in the falling of the product or air leakage.
- Conduct the trial operation of the product after the installation of the product and check that there are no abnormalities.

Precautions

- This product can be mounted to air conditioners of ceiling mounted duct connection type.
- Mount the product after checking the model name of the indoor unit with the table on the right-hand side.
- Refer to the operation manual and installation manual for the indoor unit as well at the time of the installation of the product.
- The duct connection of the long-life filter chamber is not possible.
- Long-life filter
The long-life filter can be washed and used again. On completion of installation, advise the customer of the cleaning interval and removal method of the filter by using the operation manual for the indoor unit and this installation manual.

Parts Make sure that the following parts are provided with the product.

Name	Filter Chamber	Long-life filter	Protection net	Mounting screw	Mounting screw	Installation Manual
Shape						
Number	1	1	1	2	2	1 (This copy)

Combination table The above long-life filters are packed inside the chamber.

Name of model	Long-life filter (optional accessory)	Inspection panel (optional accessory)	Name of model incorporable into indoor unit
KAF375AA36	KAF371AA36	KTBJ25K36W KTBJ25K36F KTBJ25K36T	VRV FXMQ20 • 25 • 35PVE
KAF375AA56	KAF371AA56	KTBJ25K56W KTBJ25K56F KTBJ25K56T	VRV FXMQ40PVE
KAF375AA80	KAF371AA80	KTBJ25K80W KTBJ25K80F KTBJ25K80T	SkyAir FBQ71DV1 FBQ71DVET
		VRV FXMQ50 • 63 • 80 PVE	
KAF375AA160	KAF371AA160	KTBJ25K160W KTBJ25K160F KTBJ25K160T	SkyAir FBQ100 • 125 • 140 DV1 FBQ100 • 125 • 140 DVET
		VRV FXMQ100 • 125 • 140 PVE	

- 1 Before installation** Do not throw away the required accessories until the installation of the product is completed.
- Decide the carry-in route.
 - Carry the product into the place of installation without unpacking the product. If it is unavoidable to unpack and carry in the product, pay the utmost attention to handle the product.

2 Selecting Place of Installation <Refer to the installation manual provided to the indoor unit as well, >

(1) Select the place of installation with the consent of the customer, provided that the following conditions are satisfied.

- A place bearing the weight of the indoor unit and filter chamber.
- A place where the lower part of the ceiling does not lean remarkably.
- A place where an installation workspace can be secured.

(2) Either the left- or right-hand side service cover can be used to remove the filters. Select the direction of removal according to the condition of installation. (The service cover in position (A) is set for opening and closing before shipping.) At that time, confirm the up-and-down direction of the filter chamber through the snap holes located on the left- and right-hand sides of the frame on the air conditioner connection side.

Refer to (1) in **3 Preparations before Installation** for the change of the removal direction.

<Precaution> If the direction of filter maintenance is changed, be sure to install an access hole on the side newly selected.

(3) Install the access hole for the filter service space as shown below.

- Refer to the installation manual for the indoor unit and provide a service space for the indoor unit.
- In the case of performing the maintenance of the long-life filters from the back (on the suction side), install an inspection panel (optional accessory) on the air inlet side.

Note: Be sure to install the access hole in the position of the service cover as shown in the illustration on the upper left-hand side, to extract the filters.

(If the access hole is too far from the chamber, it will be difficult to extract the filters.)

(Unit : mm)

Unit Name	A	B	C	D	E	F
KAF375AA36	650	650	550	588	633	606
KAF375AA56	450	450	700	738	720	756
KAF375AA80	450	450	1000	1038	1080	1056
KAF375AA160	450	450	1400	1438	1440	1456

In the case of maintenance from the back (air inlet side)

3 Preparations before Installation <Refer to the installation manual provided to the indoor unit as well, >

(1) Take the following procedure in the case of changing the direction of filter extraction.

Example: When changing the opening and closing direction of the service cover from (A) to (B) as shown in **2 Selecting Place of Installation**-(2).

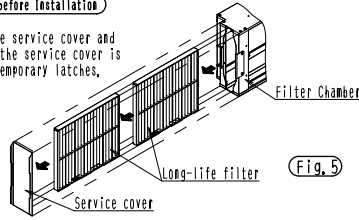
- Remove the fixing buckle for the service cover, (Fig. 1)
- Rotate the service cover until the service cover is released from the tabs of the temporary latches, (KAF375AA56 • 80 • 160) Remove the the service cover, (KAF375AA36) (Fig. 2)
- Remove the fixing buckle for the service cover, temporary latches, and the screws on the side plates, (Fig. 3)
- Mount the parts with the screws removed in step 3 to the opposite side.

Insert the protruding seal material on the side plate into the rail side of the filter.

- Mount the service cover in the order opposite to that in step 2, and fix the cover with the fixing buckle.

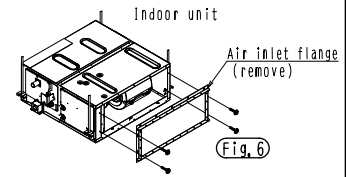
<Precaution> Check that the fixing buckle securely locks the service cover. Otherwise, air leakage may result.

- (2) Remove the long life filters from the chambers in advance, Refer to (1) in **④ Preparations before Installation** and remove the service cover. Remove the fixing buckle for the service cover and rotate the service cover until the service cover is released from the tabs of the temporary latches.



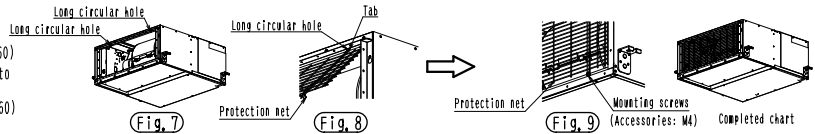
- (3) Remove the air inlet flange of the indoor unit, **Fig. 6**

No on-site duct can be connected to the air inlet side of the filter chamber.



④ Attachment of Protection Net < Except KAF375AA36 >

- (1) Attach the protection net to the indoor unit. Insert the tabs of the protection net as shown in Fig. 7 into the long circular holes on the upper part of the indoor unit as shown in Fig. 8, (2 places for type 56 and 4 places for type 80 and type 160)
 (2) As shown in Fig. 9, secure the protection net attached to the indoor unit in (1) with mounting screws, (2 places for type 56 and 4 places for type 80 and type 160)

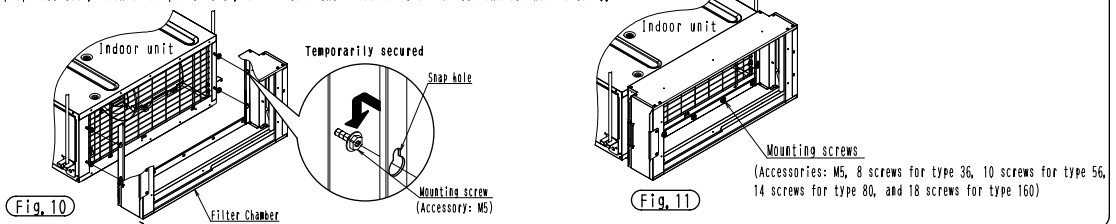


⑤ Installation of Filter Chamber

The filter chamber mounted to the indoor unit can be hung on the suspension bolts.

- (1) Attach the mounting screws provided with the kit to the 4 points of the indoor unit, **Fig. 10**
 (2) Temporarily secure the chamber with the screws prepared in (1) through the snap holes from the inner side of the chamber.
 (3) Tighten the 4 temporarily secured screws after tightening the provided mounting screws **Fig. 11**
 (8 screws for type 36, 10 screws for type 56, 14 screws for type 80, and 18 screws for type 160) in all the screw holes in the chamber
 (4) Use an appropriate tool, such as a spirit level, and install the indoor unit and filter chamber horizontally.

<Precaution>
 • Air leakage may result if the screws are not tightened securely.
 • Air leakage may result or the filters may not be extracted with ease if the filter chamber is not installed horizontally

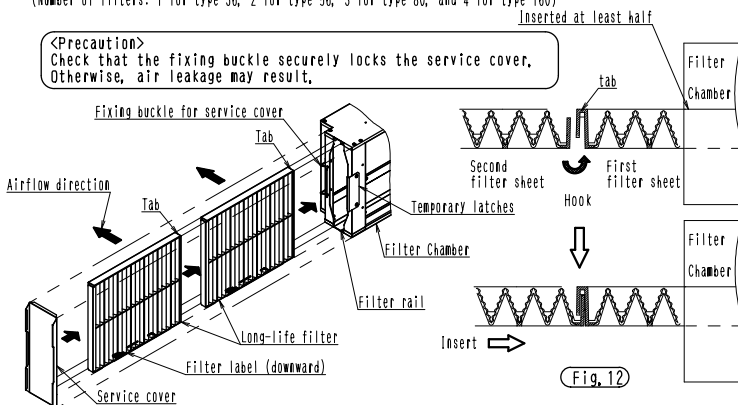


⑥ Mounting Procedure for Long-life Filter

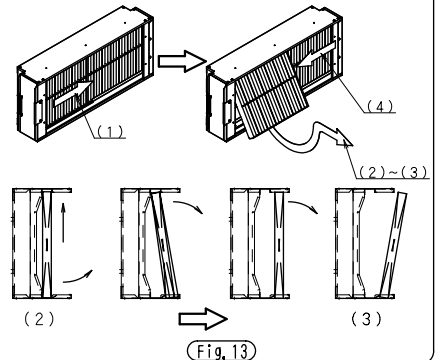
Mounting of Long-life Filter

- (1) Refer to (1) in **④ Preparations before Installation** and remove the service cover. Remove the fixing buckle for the service cover and rotate the service cover until the service cover is released from the tabs of the temporary latches.
 (2) Insert the filter according to the filter rail with the filter label faced downward while checking that the airflow direction is in conformity with the direction of the arrows.
 (3) Be sure to hook the next filter to the tab on the first filter and insert the next filter when more than half the first filter is inserted. The filter cannot be inserted unless the direction of the filter is correct. (Except KAF375AA36) **Fig. 12**
 (4) After inserting the filter all the way into the filter chamber, mount the service cover in the order opposite to that in (1). (Number of filters: 1 for type 36, 2 for type 56, 3 for type 80, and 4 for type 160)

<Precaution>
 Check that the fixing buckle securely locks the service cover. Otherwise, air leakage may result.



<Precaution>
 If the filters are different to each other in direction, the stoppers will obstruct the engagement of the filters with the tabs. Therefore, the filters cannot be inserted into the filter chamber.



Removal of long-life filter from the back

- (1) Push the filter in the direction of arrows.
 (2) Lift the filter on the left front side a little, and rotate and remove the lower side to the air inlet side from the rail.
 (3) Extract the filter after pulling and removing the upper part of the filter in the front direction from the rail.
 (4) Shift the remaining filters to the left front side in sequence, and remove the filter like the first one explained in step (3). (Except KAF375AA36)

Fig. 13

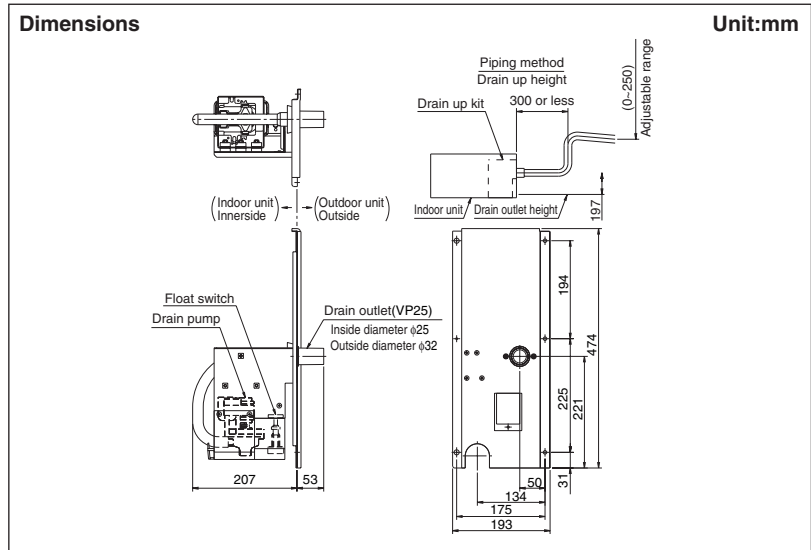
Fig. 13

8.9 KDU30L250VE — Drain Pump Kit



Caution

The bottom surface of this kit should be located at a level 120 mm lower than the bottom surface of the indoor unit. Therefore, arm space/length at the ceiling should be higher/longer by at least 120 mm than the standard dimension.



Item	Model	KDU30L250VE
Power supply		Single phase 220-240/220V 50/60Hz
Power consumption (W)		19/17 (50/60Hz) (when Idling)
Drain-up Lift (mm)		Standard drain outlet of the unit +197~+447
Drain outlet		VP25 (External dia. φ32, Internal dia. φ25)
Safety device		Float switch
Mass (kg)		10
Accessories		Drain pump box. Drain connection pipe. Drain hose. Hose band. Sealing pad. Clamp. Mounting screw.

Installation

Applicable air conditioner
FXMQ200/250MAVE
FXM200/250LVE

Installation space

View from air discharge side

Accessories Check the following accessories are included in the kit.

Name	Drain hose	Hose band	Sealing pad	Plug cover	Relaying wire harness	Plug
Quantity	1pc.	1pc.	1pc.	1pc.	1pc.	1pc.
Shape						

Name	Screw(M5)	Side plate	Drain pump ass'y	Thermal insulation(1)	Thermal insulation(2)	(OTHER)
Quantity	3pcs.	1pc.	1pc.	1pc.	1pc.	- INSTALLATION MANUAL - Clamp
Shape						

Tools required for the installation work
Screwdriver(⊕), Nipper

Notes on installation

If the drain pump kit has already been installed, note the following when installing the indoor unit.

- Do not install the indoor unit on an incline against drainage flow (away from the drain outlet). This can lead to water leaks.

Air discharge side

Drain outlet (Indoor unit)

1° less

1° less

Drain outlet (Indoor unit)

1 Installation procedure <Wiring is easier if done before the unit is hung from the ceiling or the intake duct attached.>
<If wiring after installing the suction duct, remove the electric parts box.>

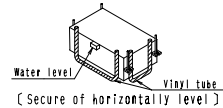
Note When installing the drain pump ass'y on the indoor unit, do not hold the unit by the drain socket. The socket neck will break under pressure and consequently cause water to leak.

- ① Detach the indoor unit's electric parts box cover, left side panel and the service cover on the left panel. (The left side panel is unnecessary,)
- ② Stick the attached thermal insulation(1) to the lower part of drain pan socket.
- ③ Feed the drain pump wires from the drain pump ass'y through the rubber bush on the lower half of the fan partition.
- ④ Feed the float switch wires from the drain pump ass'y through the rubber bush on top half of the fan partition.
- ⑤ Install the drain pump ass'y inside the indoor unit.
- ⑥ Attach the included side panel to the indoor unit.
- ⑦ Feed the float switch wires into the electric parts box from the rubber bush on the lower left side of the box.
- ⑧ Connect the included relay harness to the drain pump wires and feed it into the electric parts box through the lower right rubber bush.
- ⑨ Attach the included plug to the drain pump socket of the indoor unit and insulate the plug cover, mounting the clamp. Wrap the thermal insulation(2) over the clamp. Seal the plug to ensure water does not leak.

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2 Indoor unit installation

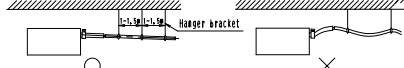
- ① Install the unit temporarily.
- ② Using the attached positioning jig for installation, adjust the height of the unit.
- ③ Check the unit is horizontally level.
- ⚠ The unit is equipped with a built-in drain pump and float switch. Level the four corners with a conventional level or a vinyl tube containing water.
(If the unit is tilted against condensate flow, the float switch may malfunction and cause water to drip.)



3 Drain piping work

<<Rig the drain pipe as shown below and take measures against condensation,>>
<<Improperly rigged piping could lead to leaks and eventually wet furniture and belongings,>>

- Install the drain pipes,
- The diameter of the drain pipe should be greater than or equal to the diameter of the connecting pipe. (Vinyl tube; pipe size: 25 mm; outer dimension 32 mm).
 - Keep the drain pipe short and sloping downwards at a gradient of at least 1/100 to prevent air pockets from forming.
 - If the drain hose cannot be sufficiently set on a slope, execute the drain raising piping.
 - To keep the drain hose from sagging, space hanging wires every 1 to 1.5 m.

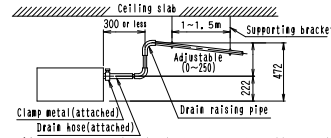


- Use the attached drain hose and clamp metal. Insert the drain hose into the drain socket, up to the white tape. Tighten the clamp until the screw head is less than 4 mm from the hose.
- Wrap the attached sealing pad over the clamp and drain hose to insulate.
- Insulate the drain hose inside the building.
- Be sure to insulate the following two items in order to prevent water leakage caused by condensation.
 - Indoors drain piping
 - Drain socket

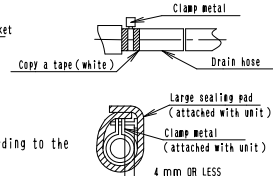
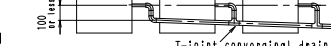
While referring to the figure on the right, insulate the clamp and drain hose with the attached large sealing pad.

<Precaution for drain raising piping>

- Install the drain raising pipes at a height of less than 250 mm.
- Install the drain raising pipes at a right angle to the indoor unit and no more than 300 mm from the unit.



- If converging multiple drain pipes, install according to the procedure shown below.

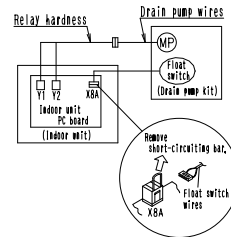


4 Electric wiring work

Wire the drain pump kit as explained here below. Be careful not to wire incorrectly. Install terminals, connectors and screws so that they do not come loose. Also, cover all spliced wires to prevent contact.

- Detach the indoor unit's electric parts box cover.
- Wire as follows.

1. Wire as indicated in the below right illustration and in included wiring diagrams.
2. Remove the short-circuiting bar from X8A on the indoor unit PC board (inside electric parts box) and connect the float switch wires.
3. Connect the included relay harness to the drain pump wire connector.
4. Connect the drain pump wires to the Y1 and Y2 terminals on the indoor unit PC board.
5. When finished wiring, draw up wire slack, bundle neatly and lock down.



5 Test operation

Check drain pump kit installation and wiring connections again. Next, to check drain up kit drainage, slowly pour about 1,000 cc of water into the drain pan from the water port on the indoor unit. Check water flows smoothly. (The outlet socket of the drain pump kit is transparent, so drainage can be easily checked.) Make the test operation as follows.

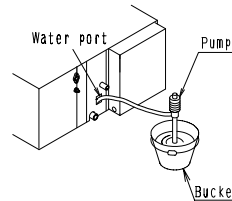
When electric wiring work is finished

- Check drainage flow during COOL running.

When electric wiring work is not finished

- Detach the electric parts box cover and connect the remote controller and power supply to the indoor unit.
- Set the test operation mode from the remote controller and press the MODE button until displaying "FAN". Then, press the START/STOP button. The indoor unit's fan and drain pump will start up and drainage can be checked.
- Be careful with power ON because the fan will turn.

*When finished the test operation, reattach the service cover removed in step [1] of [Installation procedure].

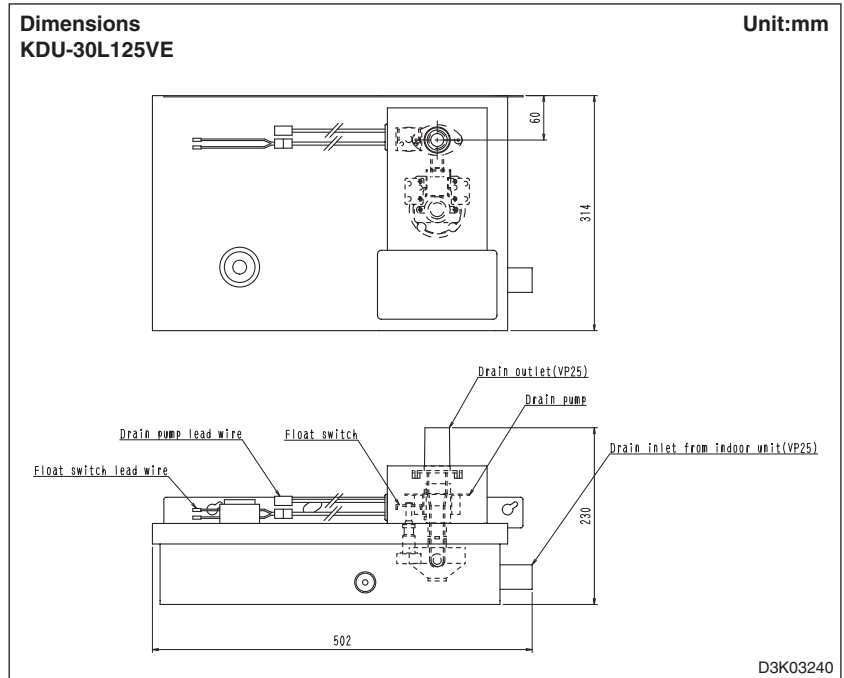


6 Post-installation checks

After installing the equipment, make the following checks.

Items to be checked	Check
That the indoor unit and drain pump are level.	
That the drain hose is properly connected (No fear of water leaks).	
That the drain hose is sloping downward (1/50~1/100 gradient).	
That the drain hose is properly insulated.	
That wiring is correct.	

8.10 KDU-30L125VE — Drain Pump Kit



Item	Model	KDU-30L125VE
Power supply		Single phase 220-240V/220V (50/60 Hz)
Power consumption (W)		12/11
Pump height		300-750 mm from indoor unit outlet
Mass (kg)		5.8
Accessories		Drain connector. Drain horse. Horse band. Thermal insulation. Clamp. Screw. Hanger. Installation manual.

Caution

The bottom surface of this kit should be located at a level 120 mm lower than the bottom surface of the indoor unit. Therefore, arm space/length at the ceiling should be higher/longer by at least 120 mm than the standard dimension.

Installation

Applicable air conditioner
FXM40-125LVE

Installation space

Slope drain hose downwards

~750mm

400

120

Drain pump kit

Provide a inspection hatch in a position which makes it easy to service the indoor unit and drain pump kit. (See the service space for the indoor unit). Refer to the installation manual provided with the indoor unit.

Installation precautions

If the drain pump kit has already been installed, note the following points when installing the indoor unit.

- Do not install the indoor unit on an incline against drainage flow (away from the drain outlet). This can lead to water leaks.

Air discharge side

Drain outlet (Indoor unit)

1° less

1° less

Drain outlet (Indoor unit)

Accessories Check the following accessories are included in the kit.

Name	Drain Pump	Hanger	Drain hose	Drain hose	Hose band	Thermal Insulation(1)
Quantity	1pc.	1pc.	1pc.	1pc.	3pcs.	2pcs.
Shape	①	②	③	④	⑤	⑥

Name	Thermal Insulation(2)	Clamp	Screw	Installation manual	PCB Support	Terminal PCB
Quantity	4pcs.	2pcs.	3pcs.	1pc.	4pcs.	1pc.
Shape	⑦	⑧	⑨	⑩	⑪	⑫

Name	Terminal PCB mounting plate
Quantity	1pc.
Shape	⑬

Tools required for the installation work
Screwdrivers(⊕, ⊖), Nippers, Spanner

Preparations of installation

① Installation space,
The height in the ceiling is necessary more than 520mm. (See the right illustration.) Set the service hole located at the indoor unit and the drain kit. (See the service space of the indoor unit)

Ceiling slab

Indoor unit

Drain pump kit

Ceiling surface

520mm at least

② Installation drain pump kit,
Install this kit after hanging the indoor unit. Installation before hanging the indoor unit causes damage. (This drain pump kit is installed below the indoor unit by 120mm.)

In case of installation this kit before installation the indoor unit, set the indoor unit on the wooden blocks. Do not give an excessive load after installation this kit. (Take special care of the socket.)

Indoor unit

Wooden blocks

12cm at least

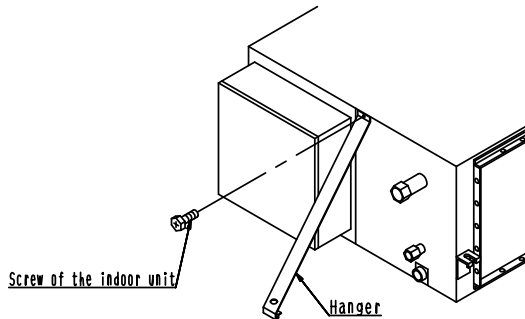
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1 Installation procedure (Note)Install the indoor unit on the ceiling first.

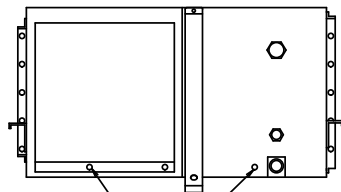
① Installation of the drain pump kit on the indoor unit.

1. Remove the screw from the right side of the indoor unit switchbox and tighten the screw temporarily to hold the hanger.

(Note)Screws of the indoor unit are covered with the thermal insulations. Remove the screw through the thermal insulation.

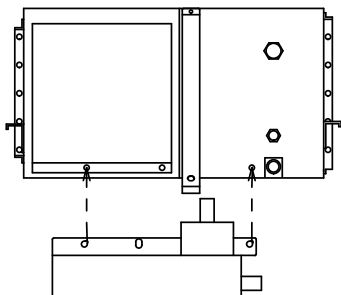


2. Loosen two screws of the indoor unit until the screwhead are no less than 5mm from the indoor unit.

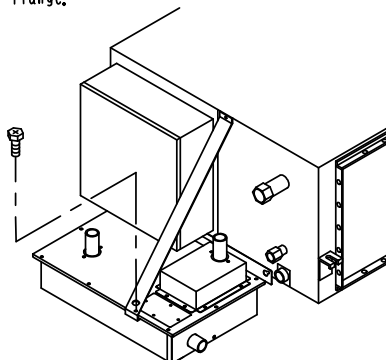


Loosen these screws until the screwheads are no less than 5mm from the indoor unit.

3. Insert these screws of the indoor unit into the key holes of the drain pump kit.



4. Hang the lower hanger to the flange of the drain pump kit and tighten the attached screw through the sealant of the drain kit flange.



5. Tighten the two screws removed before (term 1, 2).

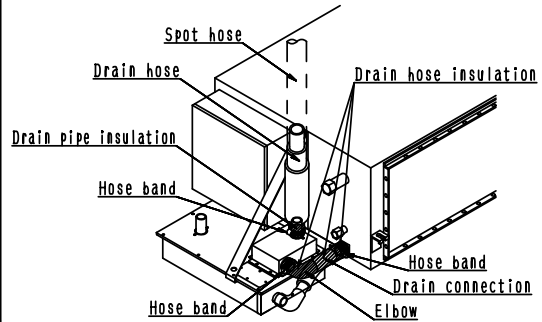
- ② Connect the drain connection hose from the drain pump kit to the indoor unit.

(Note)Connect the drain connection hose from the elbow of the connection hose to the drain pump box. Connect the attached drain hose to the outlet of the drain pump.

(Note)Keep the drain hose sloping downwards.

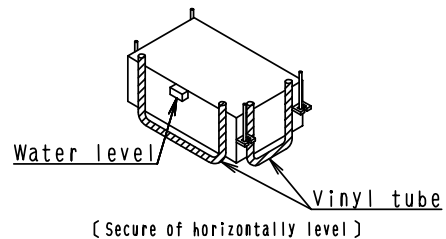
1. Tighten the attached hose band.
2. Insulate the hose band (3 items) except the outlet of drain pump after checking the drainage.

(Note)Insulate the elbow of the drain connector and foam insulation.



2 Indoor unit installation

- ① Install the unit temporarily.
- ② Using the attached positioning jig for installation, adjust the height of the unit.
- ③ Check the unit is horizontally level.



⚠ The unit is equipped with a built-in drain pump and float switch. Level the four corners with a conventional level or a vinyl tube containing water.

(If the unit is tilted against condensate flow, the float switch may malfunction and cause water to drip.)

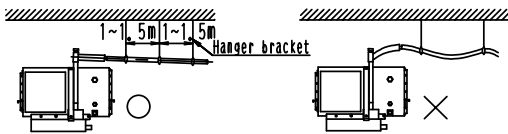
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3 Drain piping work

«(Fix the drain pipe as shown below and take measures against condensation.)»
 «(Improperly piped piping could lead to leaks and eventually wet furniture and belongings.)»

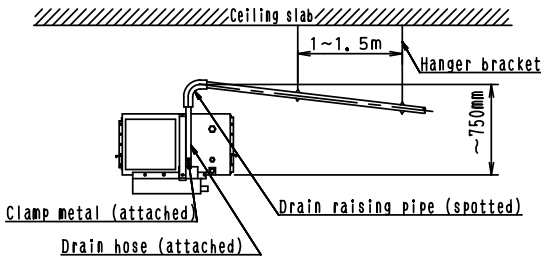
Install the drain pipes.

1. The diameter of the drain pipe should be greater than or equal to the diameter of the connecting pipe. (Vinyl tube; pipe size: 25 mm; outer dimension 32 mm).
2. Keep the drain pipe short and sloping downwards at a gradient of at least 1/100 to prevent air pockets from forming.
3. If the drain hose cannot be sufficiently set on a slope, execute the drain raising piping.
4. To keep the drain hose from sagging, space hanging wires every 1 to 1.5 m.

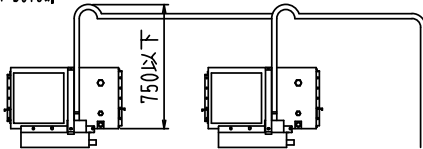


<Precaution for drain raising piping>

1. Install the drain raising pipes at a height of less than 750mm from the indoor unit outlet.
2. Install the drain raising pipes at a right angle to the indoor unit.



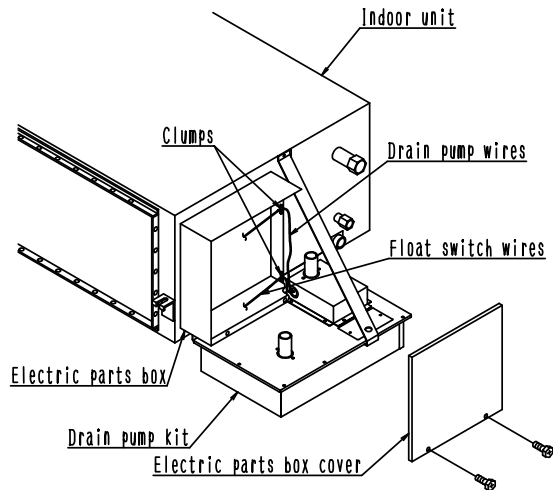
3. If converging multiple drain pipes, install according to the procedure shown below.



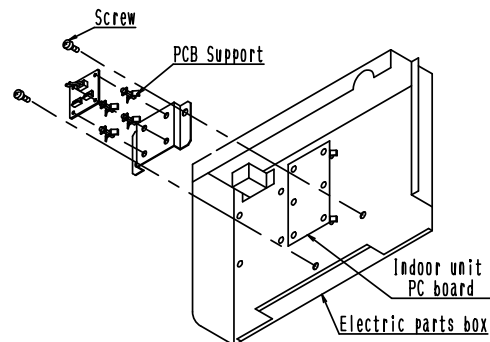
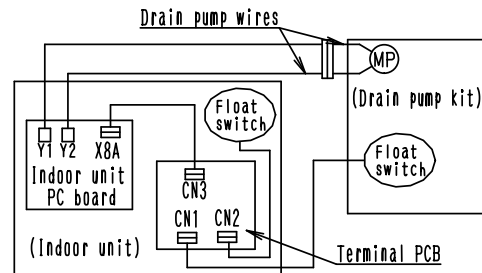
4 Electric wiring work

Wire the drain pump kit as explained here below. Be careful not to wire incorrectly.

- Install terminals, connectors and screws so that they do not come loose. Also, cover all spliced wires to prevent contact.
1. Detach the indoor unit's electric parts box cover.
 2. Wire as follows.



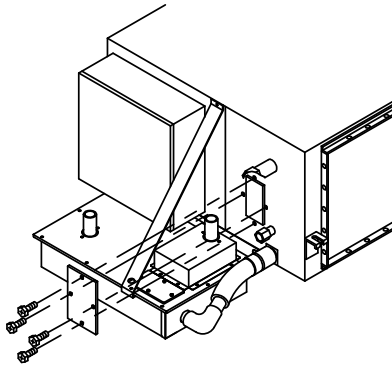
1. Wire as indicated in the below right illustration and in the included wiring diagrams.
 2. Fix the attached terminal PCB mounting plate on the indoor unit switch box and mount the terminal PCB. (*1)
 3. Remove the X8A connector (green) on the indoor unit PCB and reconnect it to CN2 on the terminal PCB (attached). (*1)
 4. Connect the float switch lead wires that come out from the kit to CN1 on the terminal PCB (attached). (*1)
 5. Connect the lead wires that come out from CN3 on the terminal PCB (attached) to X8A on the indoor unit PCB. (*1)
 6. Connect the drain pump lead wires to Y1 and Y2 on the indoor unit PCB.
 7. When finished wiring, draw up wire slack, bundle neatly and lock down.
- (*1) See the wiring diagrams.
 if the float switch is not connect to X8A on the indoor unit PCB, connect the float switch lead wires of the Kit directly to X8A.



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5 Test operation

Check drain pump kit installation and wiring connections again. Then, to check the drain status of the drain up kit, remove the access hole cover of the indoor unit and slowly pour 1000 cc of water through the access hole and check if water smoothly flows out or not.
 (The outlet socket of the drain pump kit is transparent, so drainage can be easily checked.)
 (Note) Be careful not to spatter wires with water while pouring.
 Make the test operation as belows.



When electric wiring work is finished

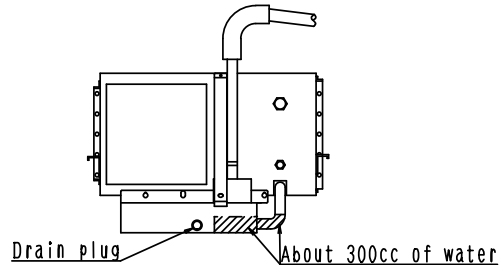
○ Check drainage flow during COOL running.

When electric wiring work is not finished

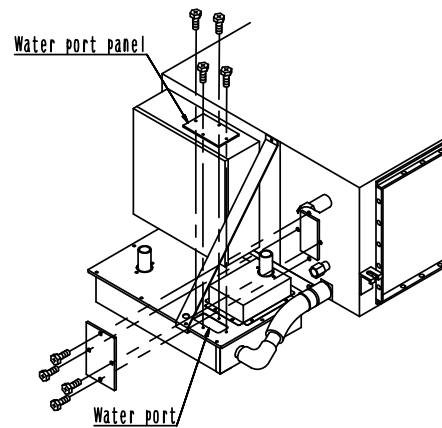
1. Detach the electric parts box cover and connect the remote controller and power supply to the indoor unit.
 2. Set the test operation mode from the remote controller and press the MODE button until displaying "FAN". Then, press the START/STOP button. The indoor unit's fan and drain pump will start up and drainage can be checked.
 3. Be careful with power ON because the fan will turn.
- ※ When finished the test operation, reattach the service cover removed in step [1] of [Installation procedure].

Note on draining water in maintenance

- After every cooling season is over, clean the drain up pump kit.
1. Make sure to drain off the water from the kit. After pulling out the drain plug and discharging drain water in the drain pan, about 300cc of water is stagnant in the dam of the drain pan.



2. After removing the access hole covers, remove the dirt around the access holes. See the figure below.
3. After the unit is cleaned, put the covers back to their places.



6 Post-installation checks

After installing the equipment, make the following checks.

Items to be checked	Check
That the indoor unit and drain pump are level.	
That the drain hose is properly connected (No fear of water leaks).	
That the drain hose is sloping downward (1/50~1/100 gradient).	
That the drain hose is properly insulated.	
That wiring is correct.	

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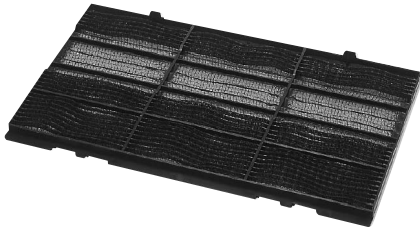
• Caution for Use

The bottom surface of this kit should be located at a level 120 mm lower than the bottom surface of the indoor unit. Therefore, arm space/length at the ceiling should be higher/longer by at least 120 mm than the standard dimension.

9. FXH(Q)

9.1 KAF501DA56·80·112 — Replacement Long-life Filter

KAF501DA56



Caution

- Can be water-washed. Can be reused.

Dimensions

Unit:mm

Model	A
KAF501DA56	430
KAF501DA80	530
KAF501DA112	430
KAF501DA160	493

D3K3074A

Item		Model	KAF501DA56	KAF501DA80	KAF501DA112	KAF501DA160	
Initial pressure loss	Pa	10 or less					
Final pressure loss	Pa	59 or less					
Average efficiency	%	45 (gravity method)					
Air flow rate	m ³ /min		13	17	24	32	
	l/sec		217	283	400	533	
Life	h	2,500 (dust concentration 0.15 mg/m ³)					
Filter element		Mildew-proof resin net					
Number of sheets included			2	2	3	3	
Mass (Weight)	kg		0.3	0.4	0.5	0.6	

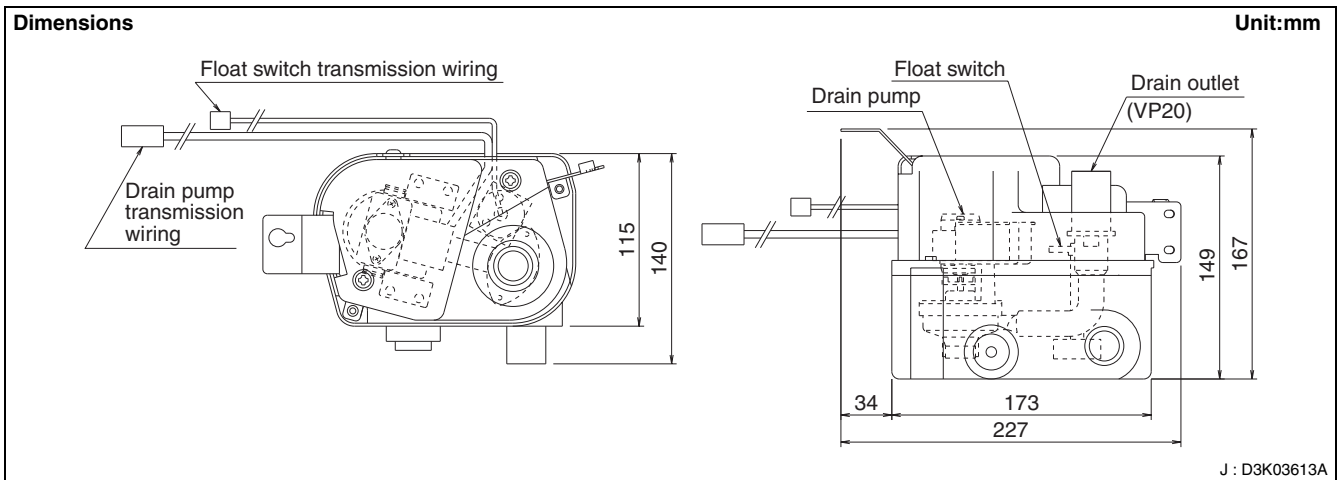
3
9.1 KAF501DA56·80·112

9.2 KDU50N60VE / KDU50N125VE — Drain-up Kit

KDU50N60VE
KDU50N125VE



Item		Model	KDU50N60VE	KDU50N125VE
Drain-up lift		mm	600	
Drain Con. diameter			VP20 (Ex. dia. ϕ 26, Int. dia. ϕ 20)	
Pump	Power supply		Single phase 220-240V/220V 50/60Hz (from Indoor Unit PCB)	
	Power consumption	W	13.5/12 (50/60Hz)	



Installation

Perform all installation work accurately only after reading these precautions.

- The safety precautions provided in this manual are classified into two categories: "⚠WARNING", and "⚠CAUTION". Hazardous situations which may be caused by incorrect installations and could result in death or serious injury are described in the columns indicated with "⚠WARNING". However, even the items described in the columns indicated with "⚠CAUTION" could result in hazardous situations depending on the condition. Since these warnings and cautions are extremely important to secure safety, always observe them when performing the work.
- After completing installation, perform a test run to see if there is anything wrong. Also, explain to the customer how to use and maintain the unit, following the operation manual. Have the customer store this installation manual along with the operating manual.

⚠ WARNING

The installation should be performed only by the qualified installer. Improper installation, if any, may cause water leakage, electrical shock, or fire.

Perform the installation work in accordance with the installation manual. Improper installation may cause water leakage, electrical shock, or fire.

Use only the attached accessories and the specified parts for installation. Otherwise it may cause water leakage, electrical shock, or fire.

Use the specified wires for all wiring, making sure that all terminal connections are fastened securely and free of external pressure. Defective connections or fastening may cause heat or fires.

⚠ CAUTION

Connect all pipes, observing the instructions in the installation manual, to ensure proper drainage. Make sure they are insulated to prevent condensation from forming. If the piping is done incorrectly drain may leak and damage furniture.

Do not install in the following locations.

1. Locations with mineral oil in the atmosphere, or food preparation areas where drops of oil or steam can reach the unit, as resin parts will deteriorate and may cause leaking or falling parts.
2. Locations where sulfurous gas or other corrosive gases are produced. Copper pipes or brazed areas may corrode, causing the refrigerant to leak.
3. Locations where there is machinery which gives off electromagnetic waves. This may cause the control system to malfunction, impeding proper functioning of the unit.
4. Locations where gas might leak into the atmosphere, or locations where thinner, gasoline, or other volatile or flammable substances are handled. An explosion could be caused by gas leaking and accumulating around the drain pump kit.

Caution

- This kit may be attached to a ceiling-hung air conditioner.
- Check the indoor unit main unit type on the list below before installing.
- When installing, also refer to installation manual for the indoor unit main unit.

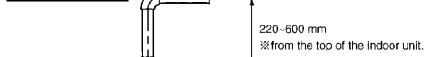
Combination List

Model	Combinable indoor unit models	
KDU50N60VE	VRV	FXHQ32MAVE
KDU50N125VE	VRV	FXHQ63-100MAVE

Particular caution should be exercised for the following items. Re-check all items after installation is completed.

Item to be checked	In case of malfunction	Check column
Has the installation of the indoor unit main unit and the drain up kit each been done without fault?	Falling, condensation, shaking	
Are all wires connected without fault?	Inoperable, burning	
Is the drain flowing smoothly?	Leaking	

Drain up height



※ Be sure the drain up kit is at least 220 mm above the unit, as the sound of the water flowing may otherwise become louder.

Parts

Name	① Drain up kit	② Drain hose	③ Hose band	④ Screw (M4)	⑤ Clamp material	⑥ attached pipes	⑦ Insulation pipe cover	⑧ Insulating material										
								⑧-1 For attached pipes	⑧-2 For indoor drain hose	⑧-3 For the drain hose connections								
Shape						(For gas piping) ※1 (For liquid piping)	(Large) (Medium) (Small) ※2 	 (For gas piping) 200×50×15 (For liquid piping) 200×30×15	 185×230×15	 170×30×110								
Qty	KDU50N60VE	1	2	3	3	12	1	1	1	1	1	1	1	1	1	1	1	1
	KDU50N125VE	1	2	3	3	12	1	1	1	1	1	1	1	1	1	1	1	1

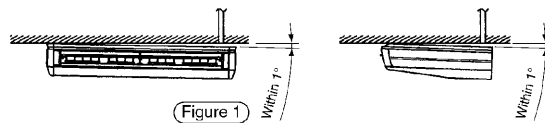
※1. KDU50N60VE: Two types of gas pipes are attached.
 ※2. KDU50N60VE: Two types of insulation covers (medium) are attached.

Tools required for installation

- ⊕ ⊖ Flathead screwdriver, nipper, cutter

Precaution when installing

Install the indoor unit level or slightly tilted to the right or back (within 1°) (Figure 1)



1 Preparations before hanging the indoor unit

The drain up kit is installed after the air conditioner main unit is hung. Preparations are required before hanging the air conditioner.

Mounting space

Select the place for the indoor unit to be installed in consideration of the installation service space. Note, however, that there must be at least 60 mm of service space to the right of the indoor unit main unit. See the installation manual attached to the indoor unit for the service space for the indoor unit. (Figure 2)

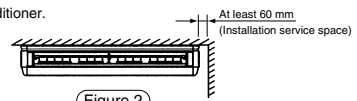
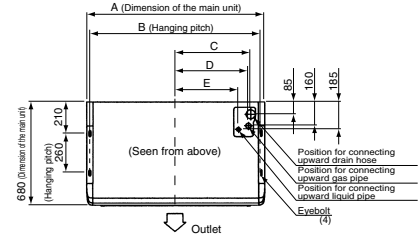


Figure 2

- (1) Select the position of the pipe outage, the drain pipe outage, and the wiring outage, and make holes in those positions. The locations are displayed on the installation pattern paper attached to the indoor unit, so use the paper pattern. (Figure 3)
- (2) Perform the refrigerant and drain piping work following the installation manual attached to the indoor unit. Field drain piping should be as short as possible and with a downward slope (1/25 – 1/100) to prevent air pockets. (Figure 4) Be sure to insulate all drainpipes which run above the ceiling. Be sure to fix the field drain pipe to the support brackets in the ceiling. (Figure 4)
- (3) Connect the attached piping ⑥ and the field refrigerant piping. For the attached pipes ⑥, select the liquid and gas pipes which match the pipe diameters of the corresponding indoor unit. When connecting the flare nuts, refer to the installation manual attached to the indoor unit.
- (4) Wrap the insulation pipe cover attached to the indoor unit and fasten with the clamp material ⑤. (For both gas and liquid pipes.) (Figure 5)
- (5) Be sure to use adhesive when connecting the attached drain hose ② and the field drain piping in the ceiling. (Figure 4)
- (6) Insulate the drain hose using the attached insulation pipe cover (large) ⑦. (Figure 6)



Outlet

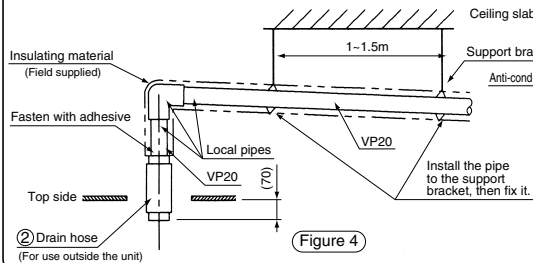


Figure 4

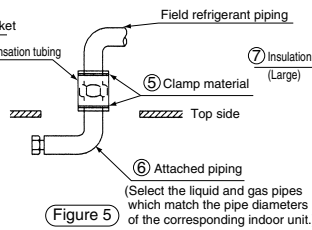


Figure 5

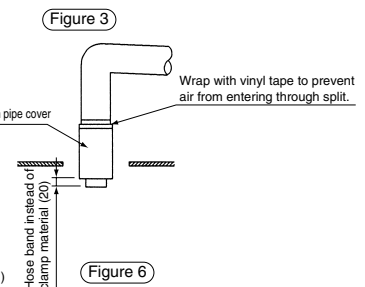


Figure 6

2 Installation Outline

Remove the lid from the top of the indoor unit, and hang the indoor unit main unit before installing the drain up kit in the following manner. (Figure 7)

1. Complete the electrical wiring following the installation manual attached to the indoor unit. (Use the wiring through-hole in the top side of the indoor unit to pull the wiring into the indoor unit main unit.)
2. Connect the refrigerant piping to the indoor unit.
 - (1) Connect the liquid and gas piping to the indoor unit main unit. (Figure 8)

- (2) Wrap the piping connections with the attached insulation pipe cover (medium and small) ⑦ and fasten either end with the attached clamp material ⑤. Next, put the attached insulating material ⑧. Wrap gas-side piping with the insulating material attached the indoor unit on top of the insulation pipe cover wrapped on the piping connections. (For the KDU50M60VE, there are two types of Insulation pipe covers (medium) for the gas pipe connection. Select the one appropriate for the piping size.)

Also, pass the lead wires of swing motor and thermistor through the clamp section of the top lid and fix it so they are as they were before removing the topside through lid. In order to prevent dust from entering the indoor unit, block any crevices between the lid and the pipes with putty.

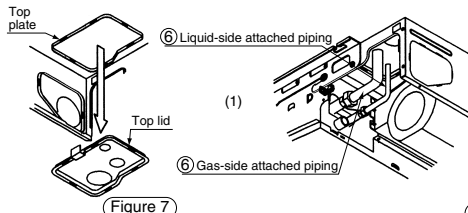


Figure 7

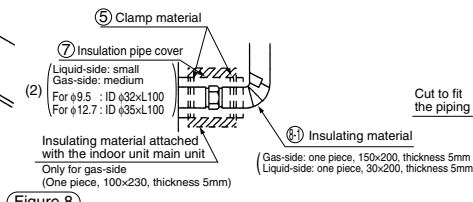


Figure 8

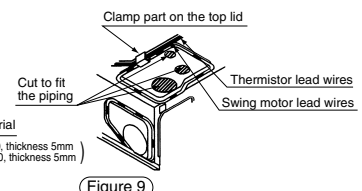


Figure 9

3. Mount the drain up kit to the indoor unit.

- (1) Remove the screws from the top of the indoor unit, and insert the attached screws ④ temporarily. Next, temporarily put the screwed clamps on either end of the drain up kit, and tighten the screws. (Figure 10) Take out the lead wires of drain pump and the float switch from the back of the drain up kit. Wire the local wiring as shown in (Figure 11).

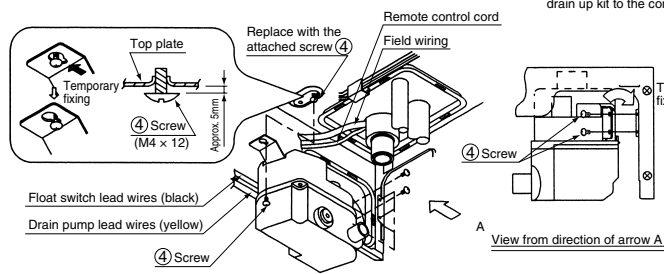


Figure 10

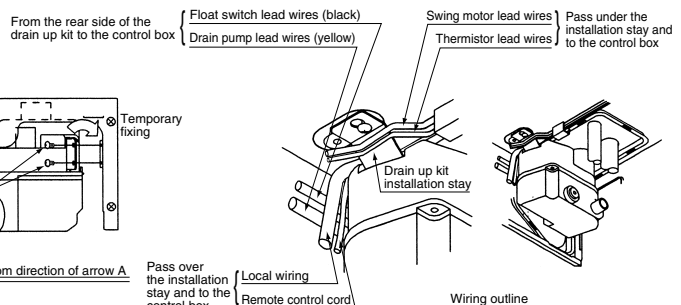


Figure 11

- (2) Insert the hose band ③ into the external drain hose, firmly insert the drain hose all the way into the drain socket in the drain up kit, and wrap it firmly with the hose band ③ within the area designated by the black tape on the hose end. (Figure 12)
- (3) Put the attached insulating material ② to the external drain hose connector, as shown in (Figure 13).
- (4) Connect the indoor unit drain socket and the drain up kit drain socket with the attached drain hose ② inserting it all the way in, and wrap it firmly with the hose band ③ within the area designated by the black tape on the hose end. Make sure the hose band connector comes to the top, as in (Figure 15). (Figure 14)
- (5) Insulate the drain hose ② fixed by the procedure (4) using the attached insulating material ②. Wrap the entire surface over the hose band on the drain hose. (Figure 16)

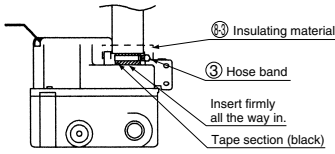


Figure 12

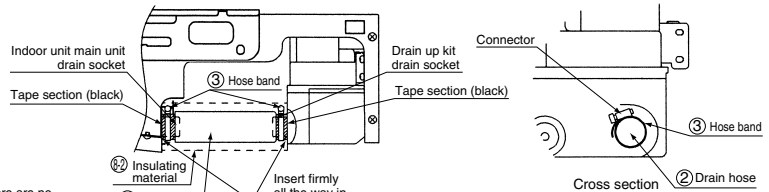


Figure 14

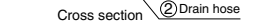


Figure 15

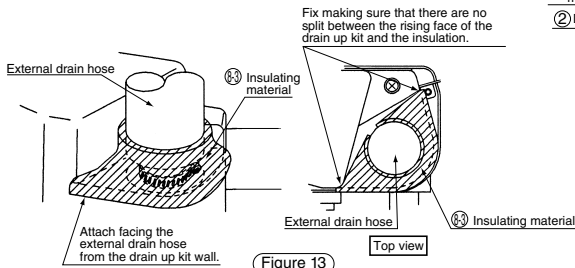


Figure 13

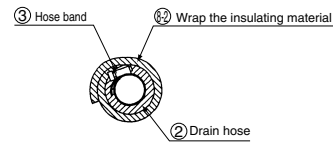


Figure 16

3 Electrical wiring

· Wire the float switch lead wires (black), coming out of the drain up kit, and the drain pump lead wires (yellow) in the manner described below. (Removing the control box makes wiring work easier.) When doing wiring work, be sure to shut off the power. (Figure 17)

- Refer also to the "Electric Wiring Diagram Plate" when performing wiring work. (It can be found on the control box lid.)
- (1) Remove the control box from the indoor unit.
- (2) Connect the drain pump lead wires (yellow) to X25A (the white connector) on the indoor unit PC board assembly.
- (3) The connector on the PC board assembly to which the float switch lead wires (black) must be connected differs depending on the indoor unit series (Sky Air or VRV Air Conditioner).
 (Sky Air) : Remove the short circuit connector connected to X15A (a green connector), and connect the float switch lead wires.
 (VRV Air Conditioner) : Remove the short circuit connector connected to X8A (a green connector), and connect the float switch lead wires.
- (4) After all the wires are connected, arrange them, pass the float switch lead wire (black) through the clamping material, and secure it together with the drain pump lead wire (yellow) from above the wiring inside the indoor unit using the included clamping material ⑤.
- (5) Store and secure any extra lead wire with the included clamping material ⑤, so that the lid is not pushed up. Attach the control box securely.

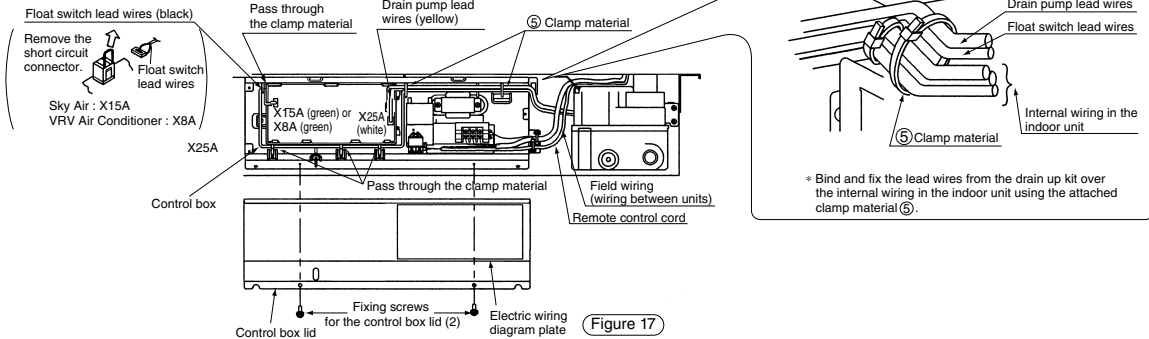


Figure 17

4 Installing the decorative panels and suction grill

· Refer to the installation manual for the indoor unit and mount the decorative panels and suction grill firmly following the procedure in the opposite way of removing.

C: 3K012643

5 Test Run Procedure

In order to determine the condition of the drainage, slowly pour approximately 1500 ml of water into the unit from the air outlet. Follow the procedure below to check the drainage. (Figure 18)
 The test run procedure differs depending on the indoor unit series (Sky Air or VRV Air Conditioner), so follow the appropriate procedure below.

Sky Air

If the wiring work is complete

- o Check the drainage while operating in cooling mode.

If the wiring work is not complete

- o Remove the control box lid, connect a single-phase power supply (50/60Hz 220-240V) to No. 1 and No. 2 (in the power supply terminal block), and then for safety's sake, close the lid before turning the power on. (Figure 19)
- o Only the drain pump will run automatically for 10 minutes, so during this time make sure water is draining out.
- o Once the drain check is complete, remove the power wires and replace the control box lid as it was.



- o Do not connect anything to No. 3 in the power supply terminal block (the drain pump will not operate.)
- o Do not touch the electrical part, emergency switch. The drain check described above can be performed without moving the emergency switch.

VRV Air Conditioner

If the wiring work is complete

- o Check the drainage while operating in cooling mode.

If the wiring work is not complete

- o Remove the control box lid and connect the remote control and the single-phase power source (50/60Hz 220-240V/220V) to the remote control terminal block (P1, P2) and the power supply terminal block (L, N).
- o Next, switch the unit to test run mode from the remote control, press the mode switch button to select 'fan', and then press the start/stop button to start the indoor fan and the drain pump. Check the drainage.
- o Take precaution, because the fan will operate as well.

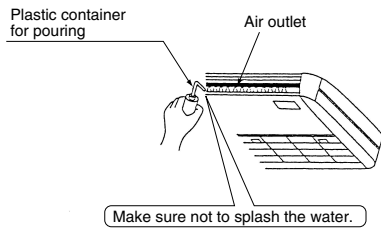


Figure 18

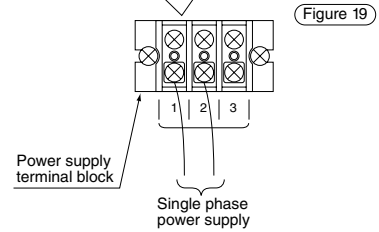
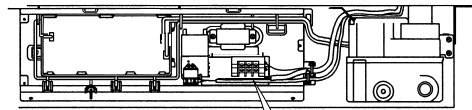
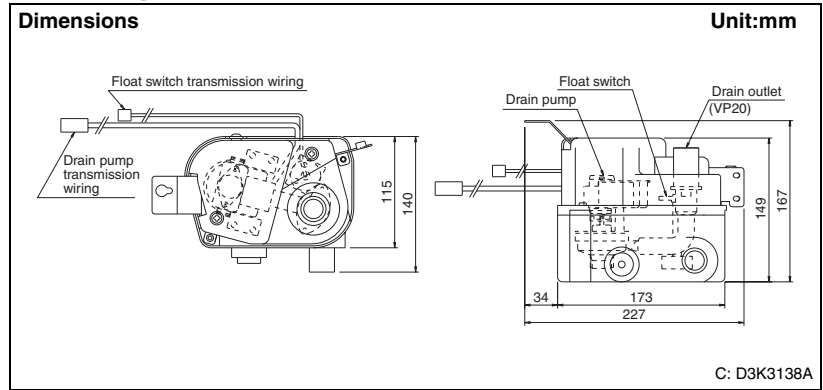


Figure 19

C: 3K012643

9.3 KDU50B50-71-125VE — Drain Pump Kit



Specifications

Items		Model	KDU50B50VE	KDU50B71VE	KDU50B125VE
Drain-up Lift (mm)			600		
Drain Con. Diameter			VP20 (Ex. dia. φ26, Int. dia. φ20)		
Pump	Power Supply		Single phase 220-240V/220V 50/60Hz (from Indoor Unit PC Board)		
	Power Consumption (W)		13.5/12 (50/60Hz)		
Applicable Models			32 Class	63 Class	100 Class

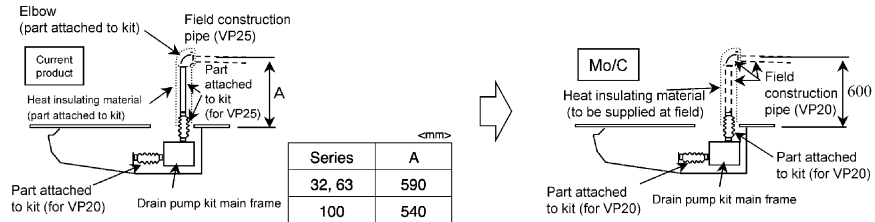
Precaution at use

1. Don't turn off the power within 5 minutes after cooling operation stops.
2. The liquid crystal display blinks to inform us that safety device actuated.
3. When cooling operation's season is over, extract drain water.

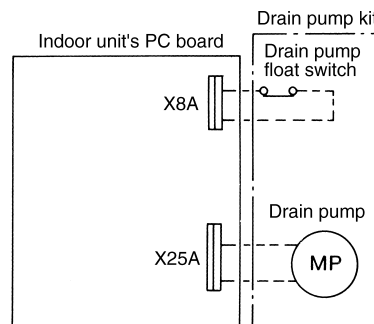
Installation guide of the drain pump kit

<Changes in drain pump kit>

- Exit drain pipe has been changed from VP25 to VP20 (to meet the drain diameter of main frame).
- Attached drain pipe (450 mm chloride vinyl straight pipe bellow, elbow) -> only bellow hose for VP20
- All units of drain up height was unified to 600mm (From the bottom of the ceiling)



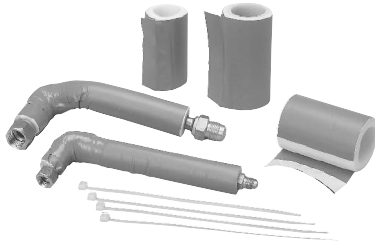
Wiring diagram



Remove the X8A short circuit connector when the float switch will be connected.

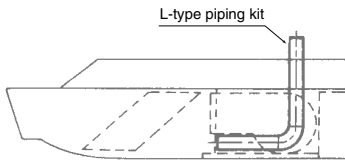
9.4 KHFP5MA63-160 — L-type Piping Kit (for Upward Direction)

KHFP5MA35



When you install the refrigerant piping in the ceiling, the piping is required to be bent L-type in the unit as shown on the right. This L-type piping kit is developed to facilitate such installation.

Installation



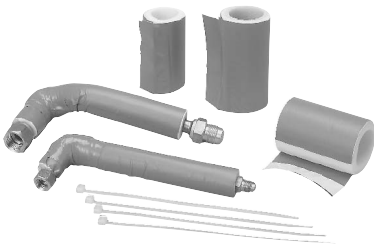
Dimensions		Unit:mm	
KHFP5MA35			Piping for Liquid Side (R410A #6.4)
			Piping for Gas side (R410A #9.5)
KHFP5MA63			Piping for Liquid Side (R410A #6.4)
			Piping for Gas side (R410A #12.7)
KHFP5MA160			Piping for liquid side (R410A #9.5)
			Piping for gas side (R410A #15.9)

J : D3K03612B

Item	Model	KHFP5MA35	KHFP5MA63	KHFP5MA160
Accessories		Installation for fitting : 1 set Clamp material : 4 pieces		

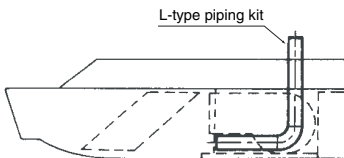
9.5 KHFJ5F50-80-160 — L-Type Piping Kit (for Upward Direction)

KHFJ5F50



When you install the refrigerant piping in the ceiling, the piping is required to be bent L-type in the unit as shown on the right. This L-type piping kit is developed to facilitate such installation.

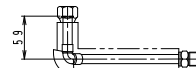
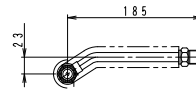
Installation



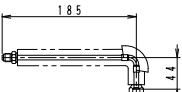
Dimensions

Unit:mm

KHFJ5F50

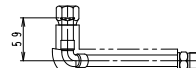
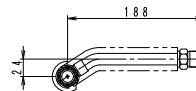


Piping for Gas side
(KHFJ5F50)

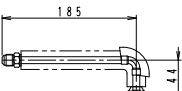


Piping for Liquid Side
(KHFJ5F50)

KHFJ5F80

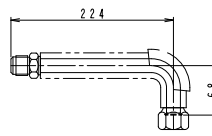


Piping for Gas side
(KHFJ5F80)

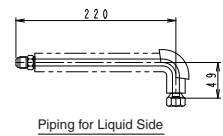


Piping for Liquid Side
(KHFJ5F80)

KHFJ5F160



Piping for Gas side
(KHFJ5F160)



Piping for Liquid Side
(KHFJ5F160)

JC: D3K1267

10.FXA (Q)

10.1 K-KDU572EVE (Supplying goods to order) — Drain Pump Kit

Operating sound as small as 25dB

Features

1. Silent operation with no sign of pump operation
2. Design matching with wall mounted type air conditioner
3. Can be interlocked with air conditioner.

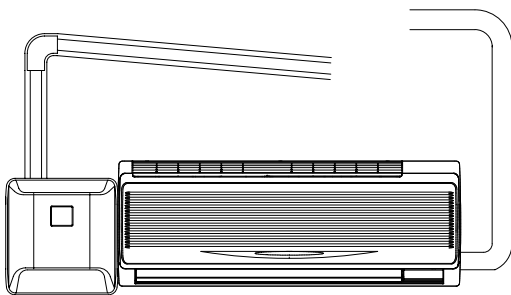


Usage

- Home, office, and store
- Optimum for redesign

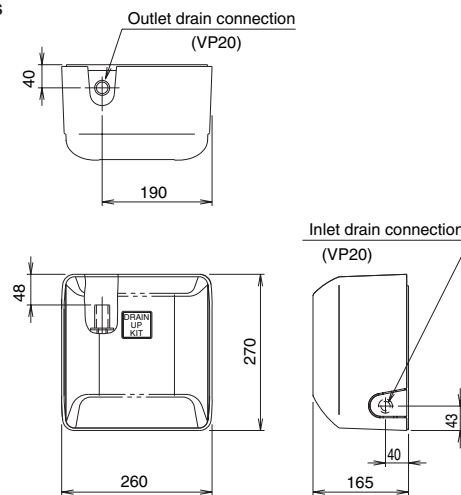
Caution :

- Drain pump kit is only for the air conditioner. Please use it for the drain treatment of the air conditioner.
- Be sure to lay the piping inclined down after drain-up, which is different from drain pump.
- Please do not use it in the place where soot such as kitchens is shrouded and the place where an organic solvent drifts.



Dimensions

Unit : mm

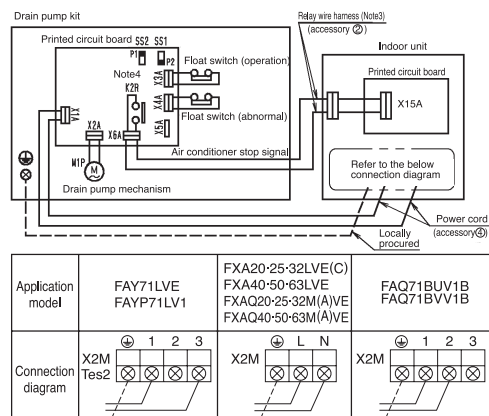


Specification

	K-KDU572EVE
Drain pump head (mm) (Note 1)	1,000
Power supply	Single phase 220-240/220V, 50/60Hz
Power consumption	14.1/12.9 (W)
Operating current	0.18/0.16 (A)
Insulation	Class E
Drain inlet connection pipe diameter	VP20 (Note 2)
Drain exit connection pipe diameter	VP20
Safety device	Float switch
Operating sound (dB)	25
Machine weight (Mass)(kg)	3.2
Drain exhaust flow rate (ml/min)	400

Note : 1. Height from bottom of drain pump kit up to the drain pipe.
2. Connect to the VP13 using the soft reducing socket.

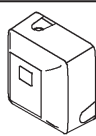




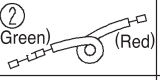


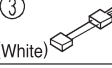


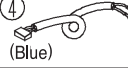







Wiring Diagram



The earth wire (copper) should be at least 2.0mm² or φ 1.6mm.
When the relay wire harness is connected, remove the X15A short-circuit connector.

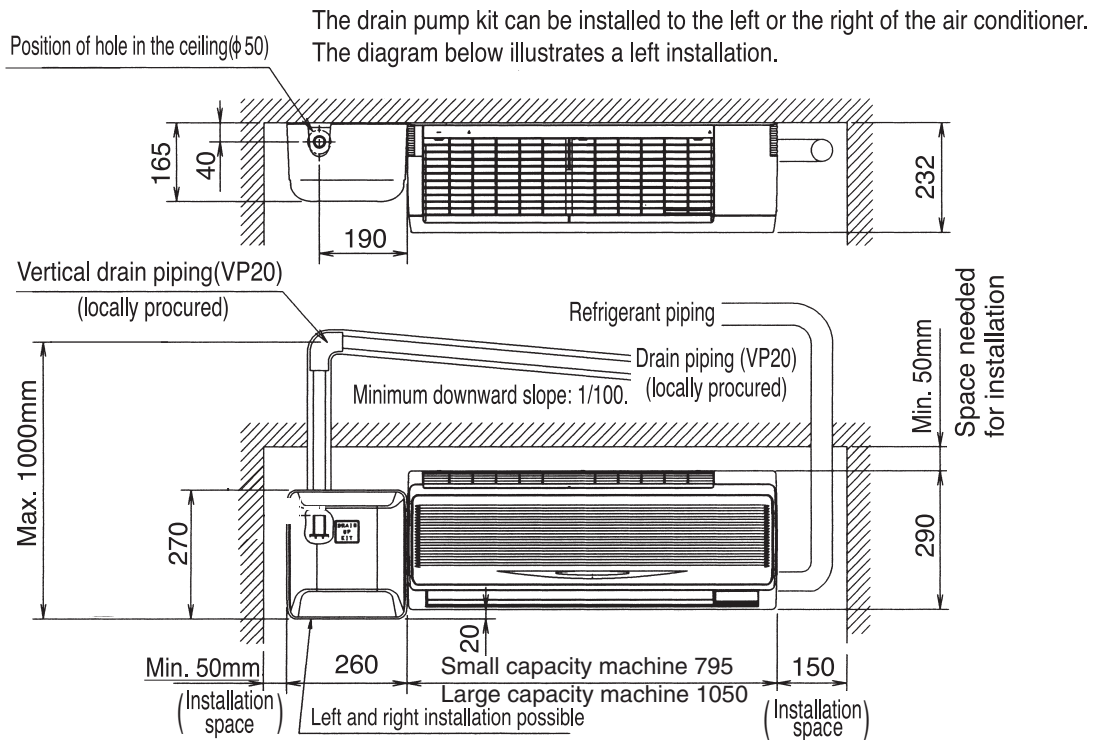
- Note : 1. Don't forget to turn on the power. If it is not turned on, the air conditioner will perform an error stop and operation will not be possible.
2. Make sure that slide switch SS1 on the drain pump kit printed circuit board assembly is set to P2 and slide switch SS2 is set to P1.
3. The relay wire harness cannot be extended.
4. Turning on the power will close the K2R connector, making is a non-volt B connector.

Component Parts

Name	Shape	Quantity	Name	Shape	Quantity	Name	Shape	Quantity
Drain Pump Kit		1	Insulation	 50X300Xt10	1	Rigid polyvinyl chloride pipe (Note3)	 VP13 365	1
			Clamp		2	Soft drain pipe	 VP20 200	1
Relay wire harness	 (Green) (Red)	1	Clamp		1	Screw washer	 (White)	1
Connecting harness	 (White)	1	Soft reducing socket	 VP13	1	Screw	 M5X35	5
Power cord	 (Blue)	1	Drain hose	 150	1	Clamp material		4
Insulation pipe cover		1				Paper pattern for Installation		1
Insulation	 90X300Xt2	1	Rigid polyvinyl chloride pipe joint	 VP13 57	1	Installation manual		1

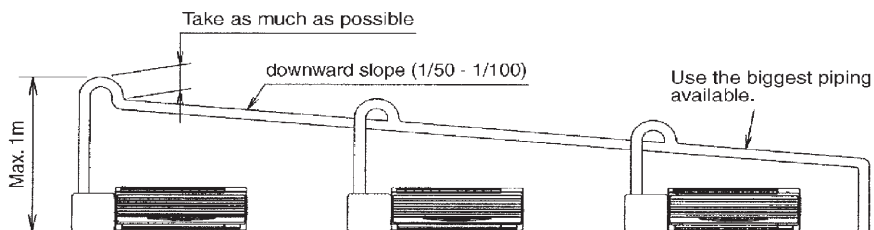
Note 3: This pipe must be procured locally for the large capacity machine.

External drawing of drain pump kit and Service space



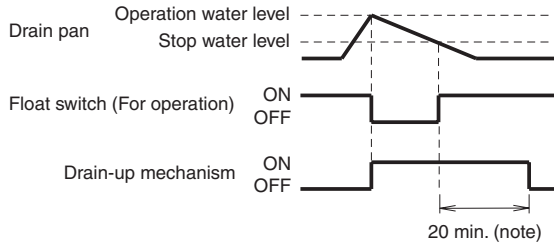
(When using centralized piping)

- Follow the figure below to make sure there is absolutely no back-up when using centralized piping.



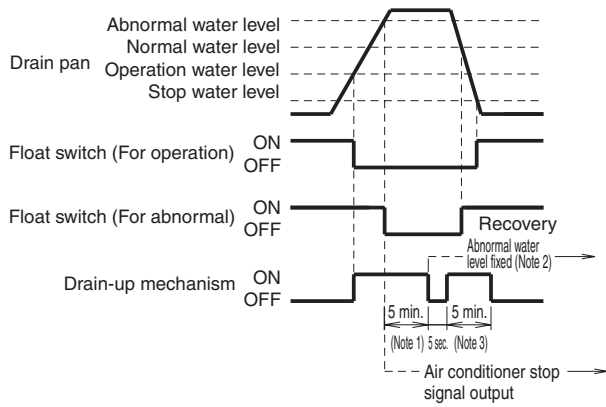
Description of operation

1: Operation at normal water level (Air conditioner operates when water level is at operation level, and when water level is at stop level, residual operation is performed.)



2: Operation at abnormal water level

(When water level is abnormal, the air conditioner stops. When abnormal water level is kept five minutes or longer, abnormal water level is established, and residual operation is performed.)



Note 1) When the float switch (for abnormal water level) is reset within five minutes, the air conditioner operates again with "normal water level".

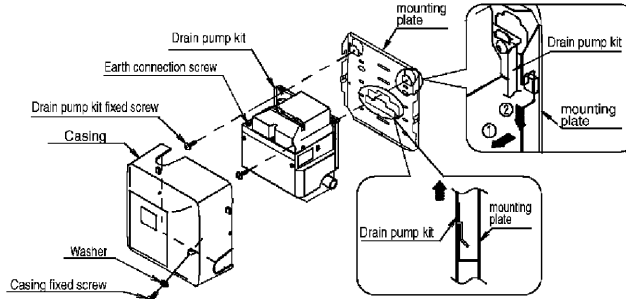
Note 2) When abnormal water level is fixed, power must be turned on again for operating again.

Note 3) When the cycle of operation 5 minutes - stop 5 seconds - operation 5 minutes is finished, if the float switch (for abnormal water level) is not reset, keep operation of drain pump until the switch is reset.

1 Pre-installation preparations ● See the indoor unit's installation manual for indoor unit work.

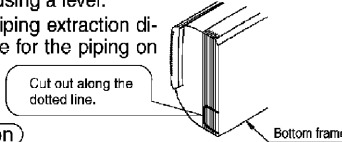
Drain pump kit preparations

- Remove the casing and the drain pump kit from the mounting plate.
- 1. Remove the casing fixed screw and pull the casing down and forward.
- 2. Remove 2 Screws of the drain pump kit and lift the drain pump kit out.



2 Indoor unit preparations ● Make sure the indoor unit is installed first.

1. Attaching of the indoor unit mounting plate
After installing the mounting plate following the directions in the indoor unit, make sure it is plainness using a level.
2. Decide the left and the right piping extraction direction and cut off the exit hole for the piping on the bottom frame by the cutter etc.



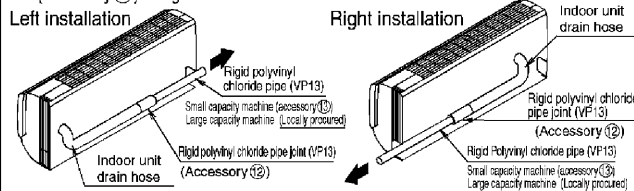
3. Connecting the drain hose

In the case of a left installation

1. Connect the rigid polyvinyl chloride pipe joint (accessory ⑫) to the indoor unit drain hose using adhesive.
2. Connect the rigid polyvinyl chloride pipe (accessory ⑬ for small capacity machine. Local procurement for the large capacity) to the rigid polyvinyl chloride pipe joint (accessory ⑫) using adhesive.

In the case of a right installation

1. Remove the drain hose connected to the indoor unit and replace with a drain plug and insulation tube.
2. The drain hose removed from the indoor unit is attached to left side.
3. Connect the rigid polyvinyl chloride pipe joint (accessory ⑫) to the indoor unit drain hose using adhesive.
4. Connect the rigid polyvinyl chloride pipe (accessory ⑬ for small capacity machine. Local procurement for the large capacity) to the rigid polyvinyl chloride pipe joint (accessory ⑫) using adhesive.

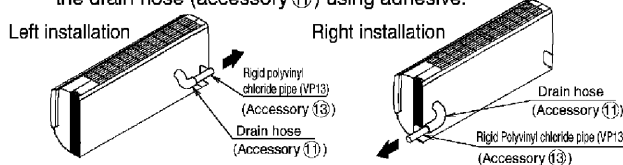


Replacing the drain plug

- ① Remove the drain plug and the insulation tube.
 - ② Remove the standard drain hose. (The standard drain hose is not used to connect the drain pump kit.)
 - ③ Replace the drain plug and the insulation tube onto the right side.
- Replacing the drain plug
- Do not apply lubricating (refrigerant machine oil) when inserting. This may cause deterioration and water leaks.
- Insert a hexagon wrench (4mm).
- Make sure there are no gaps.

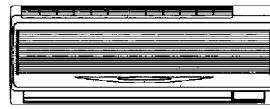
When using the drain hose (accessory ⑪)

- ① Remove the indoor unit drain hose and attach the drain hose (accessory ⑪).
- ② Connect the rigid polyvinyl chloride pipe (accessory ⑬) to the drain hose (accessory ⑪) using adhesive.

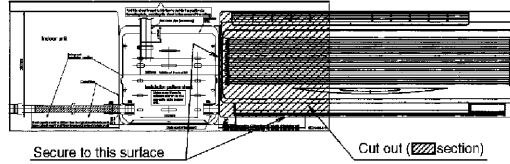


3 Installing the mounting plate

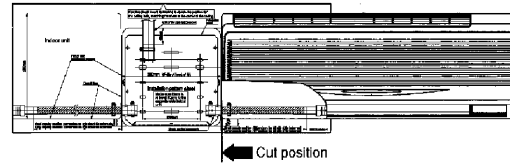
1. Install the indoor unit.



2. Cut out the indoor unit section from the paper pattern for installation (accessory ⑬) and attach to the installation position on the indoor unit.

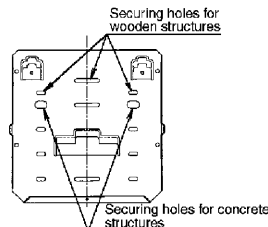


3. Cut the rigid polyvinyl chloride pipe (accessory ⑬) attached to the indoor unit to the length indicated on the paper pattern for installation.



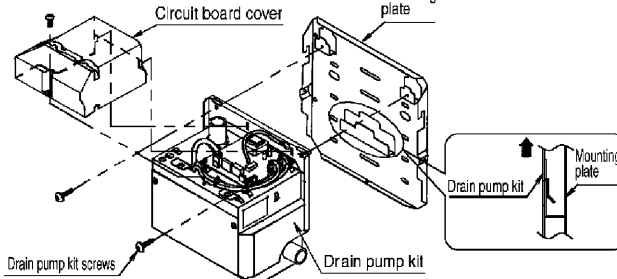
4. Determine the position to secure the mounting plate for the drain pump kit by matching to the paper pattern for installation. Remove the paper pattern for install once this is done.

- If using screws (accessory ⑬), fix it at least 4 positions.
- For concrete, attach it using commercially available anchors (M8) and bolts.



5. Attach the drain pump kit to the mounting plate and squeeze in the fixed screws.

6. Remove the circuit board cover.



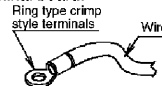
4 Attaching the relay wire harness, the connection harness, and the power cord.

Caution Only connect after shutting off the power.

< Precautions when laying power and earth wiring >

Use ring type crimp style terminals for connections to the inter-unit wiring terminal block and the earth wiring. When none are available, follow the instructions below.

- Do not connect wiring of different thicknesses to the inter-unit wiring terminal block. (Looseness in the terminal may cause abnormal heat.)
- For wiring, use the designated power wire and connect firmly, then secure to prevent outside pressure being exerted on the terminal board.
- Use an appropriate screwdriver for tightening the terminal screws. A screwdriver with a small head will strip the head and make proper tightening impossible.
- Over-tightening the terminal screws may break them.
- See the table at right for tightening torque for the terminal screws.

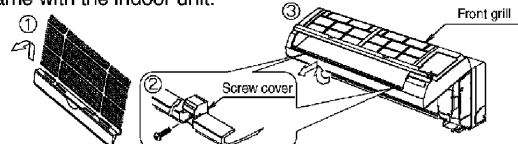


Tightening torque(N·m)	
Inter-unit wiring terminal block	1.18 - 1.44
earth terminal	1.44 - 1.94

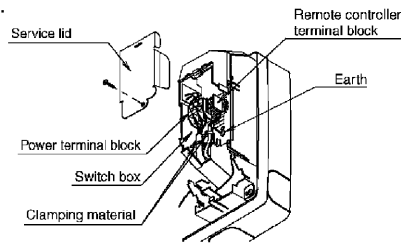
For the FXYA71LV, FAYP71LV1, FXA20·25·32LVE(C)
FXYA40·50·63LVE, FXAQ20·25·32·40·50·63M(A)VE

- Connect the relay wire harness (accessory ②) and the power cord (accessory ④) to the indoor unit.

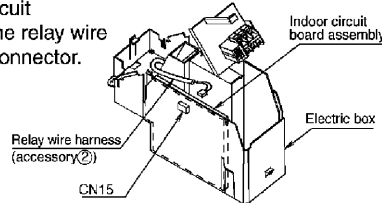
1. Remove the front grill according to the instruction manual that came with the indoor unit.



2. Remove the service lid.

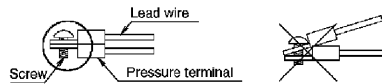


3. Remove the indoor circuit board assembly CN15 short-circuit connector and connect the relay wire harness (accessory ②) connector.

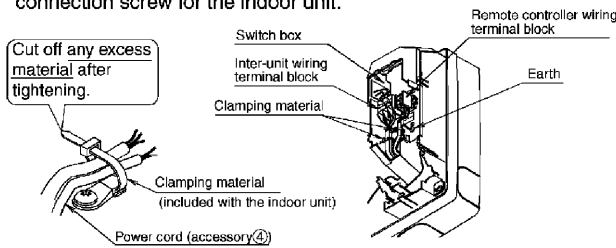


4. Connect the power cord (accessory ④) to the indoor unit inter-unit wiring terminal block.

- When connecting the terminal to the inter-unit wiring terminal block, make sure it is attached properly, as shown below. If the pressure terminals are mistakenly attached in the same direction, the surface of the terminal that is touching will be reduced, causing heat and perhaps burn damage.



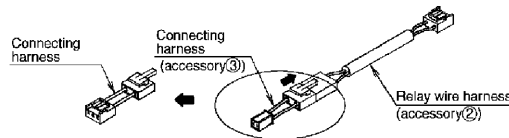
5. Connect the earth wire (locally procured-copper wire at least 2mm²) between the unit and the drain up kit with the earth connection screw for the indoor unit.



For the FAQ71BUV1B, FAQ71BVV1B

- Connect the relay wire harness (accessory ②), the connecting harness (accessory ③), and the power cord (accessory ④) to the indoor unit.

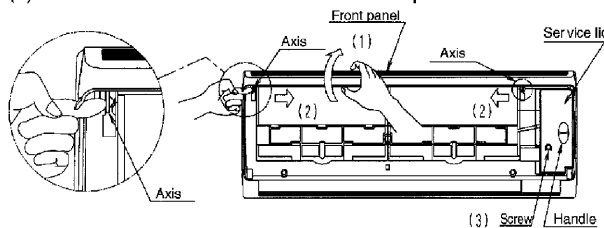
1. Remove the connecting harness on the relay wire harness (accessory ②) and connect the included connecting harness (accessory ③).



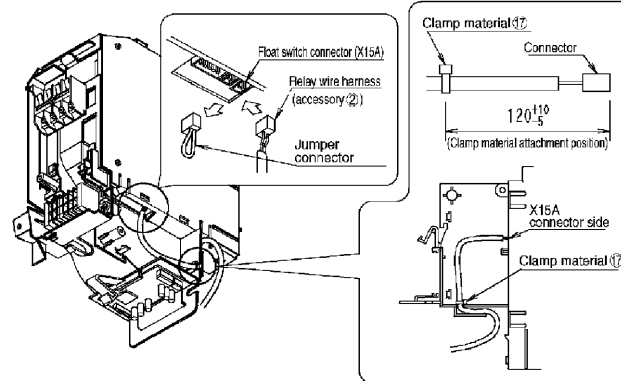
2. How to remove a front panel and the service lid according to the indoor unit installation manual.

[Removing the front panel and service lid]

- (1) Open the front panel as far as it stops.
- (2) Push the axes on either side of the front panel towards the center of the main unit and remove.
(You can also remove it by sliding the front panel either to the left or right and pulling it forward.)
- (3) Remove the screws from the service lid and pull the handle forward.

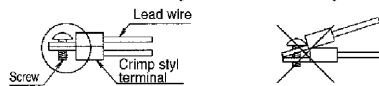


3. Remove the indoor unit printed circuit board X15A Jumper connector and connect the relay wire harness (accessory ②) connector.

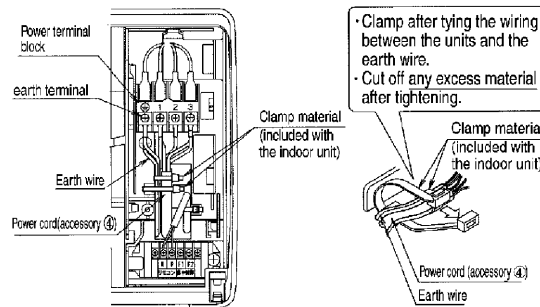


4. Connect the power cord (accessory ④) to the indoor unit inter-unit wiring terminal block.

● When connecting the terminal to the inter-unit wiring terminal block, make sure it is attached properly, as shown below. If the crimp styl terminals are mistakenly attached in the same direction, the surface of the terminal that is touching will be reduced, causing heat and perhaps burn damage.



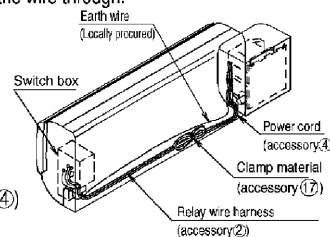
5. Connect the earth wire (locally procured - copper wire at least 2mm²) between the indoor unit and the drain pump kit with the ground connection screw for the indoor unit. Be sure to perform earthing. Make sure the earthing resistance is below 100 ohms.



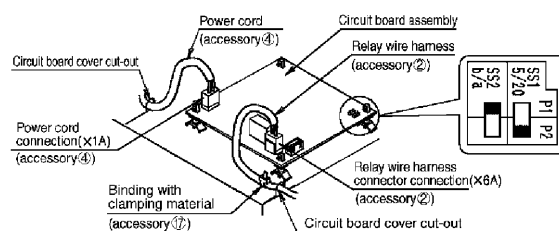
5 Passing the wire through

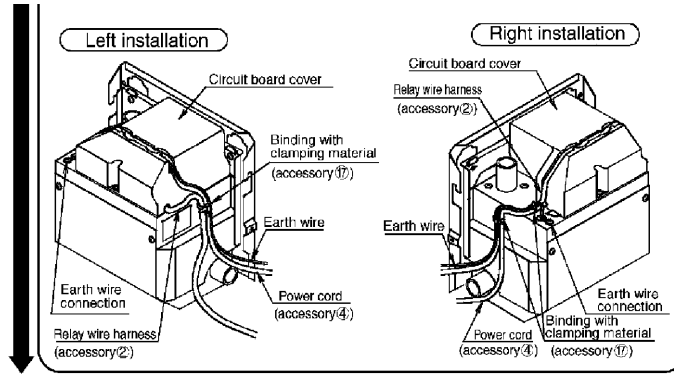
1. See the figure below for how to pass the wire through.

The relay wire harness, power cord and earth wire should be matched to the space inside the indoor unit.



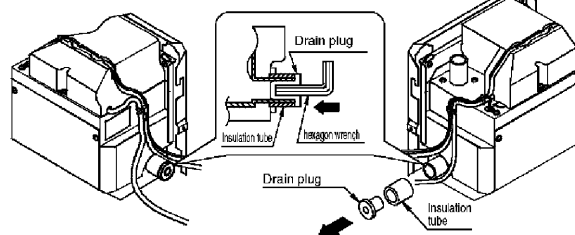
2. Connect the relay wire harness (accessory ②) to the drain pump kit circuit board assembly connector (X6A).
3. Connect the power cord (accessory ④) to the drain pump kit circuit board assembly connector (X1A).
4. Secure the earth wire (locally procured-copper wire at least 2mm²) to the drain pump kit using the earth connection screw.
5. Tighten the relay wire harness (accessory ②) using the clamping material.
6. Make sure that slide switch SS1 on the drain pump kit printed circuit board is set to P2 and slide switch SS2 is set to P1.
7. Attach the circuit board cover.
8. Tighten the relay wire harness (accessory ②), power cord (accessory ④), and earth wire (locally procured) using the clamping material.
9. Bundle excess relay wire harness (accessory ②) using the clamping material (accessory ⑰) and store away.
10. Connect the earth wire.



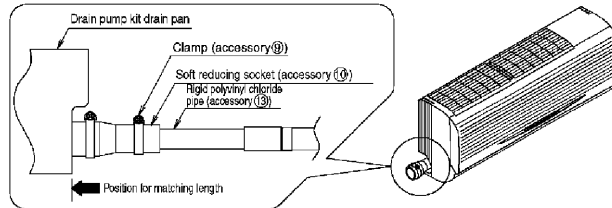


6 Installing the drain pump kit and drain piping.

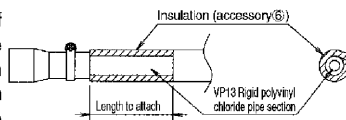
- When installing the drain pump kit to the right, transfer the drain plug and the insulating tubing from the left to the right.
 - When performing a left installation, there is no need to transfer these items.



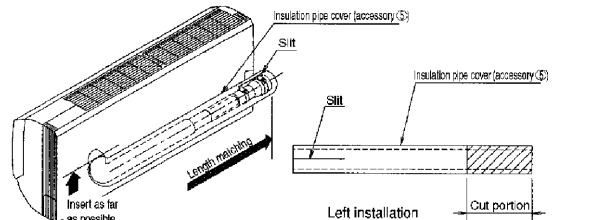
- Insert the clamp (accessory 9) and the soft reducing socket (accessory 10) into the indoor unit rigid polyvinyl chloride pipe (accessory 13), then match the position and tighten up the clamp to match the length of the drain pump kit drain pan socket.



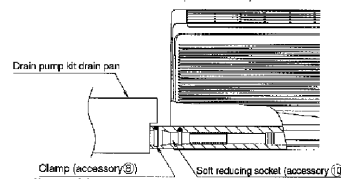
- Matching the dimensions of the area required, cut the right length of insulation (accessory 6) for the drain hose rigid polyvinyl chloride pipe section and attach.



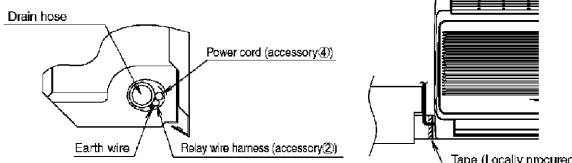
- Insert the insulation pipe cover (accessory 5) as far into the drain hose as it can go.
 - There is a slit in one side of the insulation pipe cover. Position the slit side to the drain pump kit.
 - Cut the insulation pipe cover to match the length of the drain hose.



- Insert the clamp (accessory 8) and the soft reducing socket (accessory 10) into the drain pump kit drain socket and tighten it.



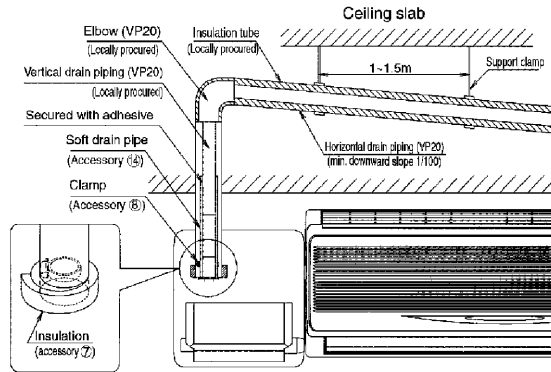
- Secure the insulation tubing and power line with tape.



7. Connect the exit pipe.

- Be sure to use adhesive to connect the soft drain pipe (accessory ⑭) and the ceiling-side locally-procured the drain pipe.
- Connections on the drain pump kit should be secured with a clamp (accessory ⑧) and wrapped with insulation (accessory ⑦).

- ⚠ Caution**
- Exit piping parts must be procured locally.
 - Be sure to insulate the drain piping.
 - Give the horizontal sections on the drain piping a downward slope of at least 1/100 and make sure no air bubbles accumulate.
 - Secure long horizontal sections with support clamps to prevent them from shaking.



7 Test run

- Make sure the pump is running and water is draining.
- Make sure there are no leaks from the drain pipes when draining.

- ⚠ Caution**
- Before the work confirm the power off.
 - After replacing the circuit board cover to its original location, turn on the power.

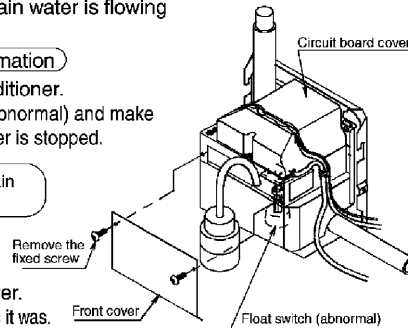
1. Remove the front cover on the drain pump kit and fill the drain pan halfway with water.
2. Turn on the power and make sure that the drain pump is working properly and the drain water is flowing smoothly.

Abnormal-stop confirmation

1. Turn on the air conditioner.
2. Lift the float switch (abnormal) and make sure the air conditioner is stopped.

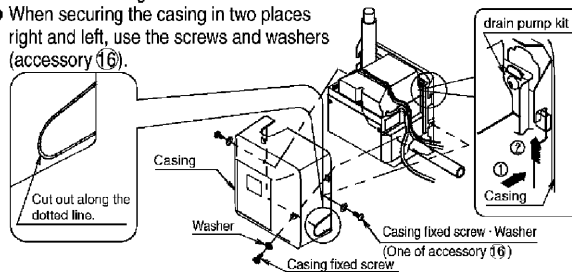
- ⚠ Caution** Do not get the drain pump mechanism

- After checking, replace the front cover.
- Rebuild the indoor unit as it was.



8 Attaching the casing

- Cut out the piping exit hole from the casing.
- Secure the casing with the installation screws and washers as described below.
- When securing the casing in two places right and left, use the screws and washers (accessory ⑩).



9 Checks after completion

You should re-check the following after completion of work.

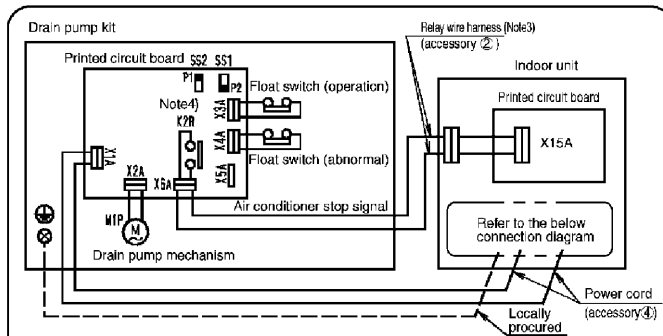
Items to be checked	Check column
Are the indoor unit and drain pump kit level?	
Is the drain piping properly connected?	
Is there any possibility of developing water leaks?	
Is the drain piping run on a downhill grade?(1/50-1/100)	
Is the drain hose properly insulated?	
Is the equipment wired correctly?	

After test running the air conditioner, use the operating in cooling and check the operating sound of the drain pump kit.

10 Cautions during operation

- The pump repeats an operation stop with the float switch for operation during airconditioning operation.
- After cooling is stopped, the residual water will be drained out, so do not turn off the power immediately.
- Wait at least 5 minutes after the unit has stopped before turning off the power. When not turning off a power supply, a remains operation about 20 minutes back drain pump stops.
- When a safe circuit operates, operation of an air conditioner is stopped.
- During air conditioning operation, when water leaks from the inside of an are conditioner or a drain pump kit, please stop operation immediately.
- Since the drain exit is choked up or there is possibility that the safe circuit may not operate normally, please inform the store of purchase.

Electric wiring



Application model	FAY71LVE FAYP71LV1	FXA20·25·32LVE(C) FXA40·50·63LVE FXAQ20·25·32M(A)VE FXAQ40·50·63M(A)VE	FAQ71BUB1B FAQ71BVV1B
Connection diagram			

The earth wire (copper) should be at least 2.0mm² or φ 1.6mm.
When the relay wire harness is connected, remove the X15A short-circuit connector.

- Note1: Don't forget to turn on the power. If it is not turned on, the air conditioner will perform an error stop and operation will not be possible.
- Note2: Make sure that slide switch SS1 on the drain pump kit printed circuit board assembly is set to P2 and slide switch SS2 is set to P1.
- Note3: The relay wire harness cannot be extended.
- Note4: Turning on the power will close the K2R connector, making is a non-volt B connector.

C: 3K019618

11.FXL (Q) / FXN (Q)

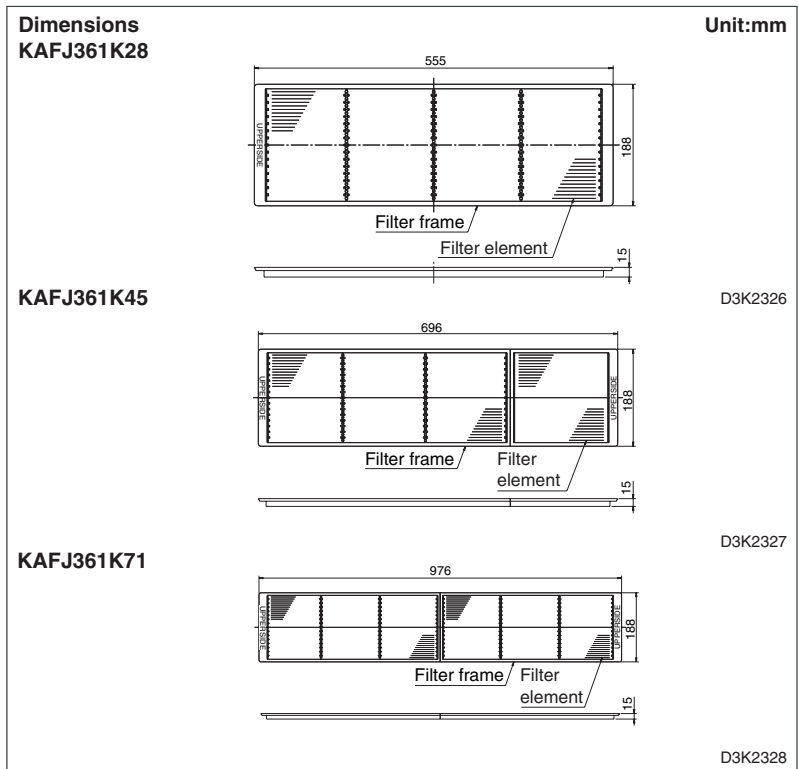
11.1 KAFJ361K28-45-71 — Long Life Replacement Filter

KAFJ361K28



- Can be water-washed. Can be reused.

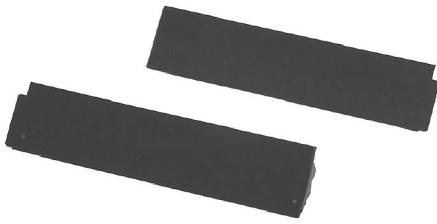
Item	Model	KAFJ361K28	KAFJ361K45	KAFJ361K71
Applied Models		20 · 25 Class	32 · 40 Class	50 · 63 Class
Average efficiency (%)		50 (Gravity method)		
Initial pressure loss (Pa)		9.8 or less		
Final pressure loss (Pa)		29.4		
Life (h)		2,500 (dust concentration 0.15 mg/m ³)		
Filter element		Mildew-proof resin net		
Number of sheets included		1		
Mass (kg)		0.1	0.2	0.3



12. FXUQ

12.1 KDBT49FA80-140 — Decoration Panel for Air Discharge

KDBT49FA80



Dimensions Unit:mm

Model	A	B
KDBT49FA80	100	100
KDBT49FA140	155	155

JC: D3K2099D

Item	Model	KDBT49FA80	KDBT49FA140
Material		Galvanized sheet iron (with flocking)	
Accessories		Installation manual	

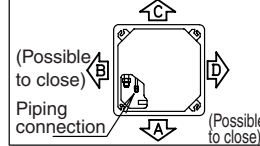
Installation

Note

- This kit can be attached to the new ceiling suspended cassette type.
- Refer to the installation manual of the indoor unit body as well as this instruction for the installation.
- This kit can be attached to the air outlet A and B.
(Refer to the figure on the right concerning the outlet's name)

Contents of Kit Make sure this kit contains the following parts.

View from a ceiling level.

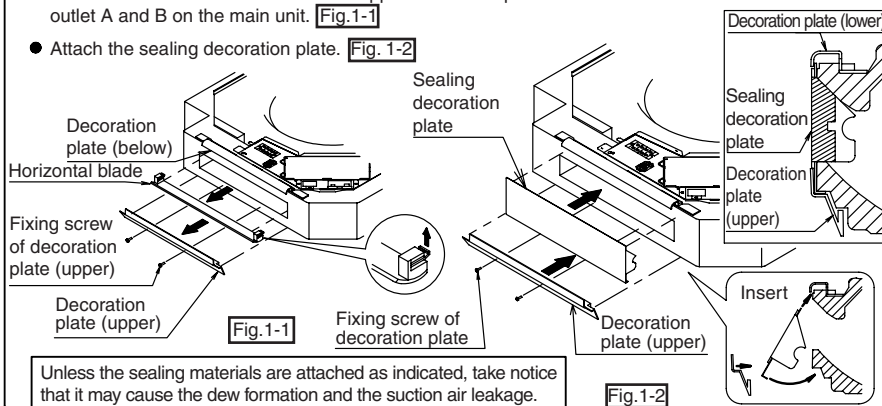


Name	Air outlet sealing decoration plate		Installation manual
	For the air outlet A	For the air outlet B	
Shape			
Quantity	1 set	1 set	1 sheet

1 Attachment onto the indoor unit

Be sure to attach it in the state that the corner cover has been removed, before the installation of the main unit.

- Remove the horizontal blade and the upper decoration plate from the air outlet A and B on the main unit. **Fig.1-1**
- Attach the sealing decoration plate. **Fig. 1-2**



Unless the sealing materials are attached as indicated, take notice that it may cause the dew formation and the suction air leakage.

2 Field setting by the remote controller

- The field setting is required for the two-way or three way discharge, when this kit is attached. Refer to "Gist of Field Setting" attached in the remote controller for the setting procedure and the operation, and then switch over the setting position number as follows.

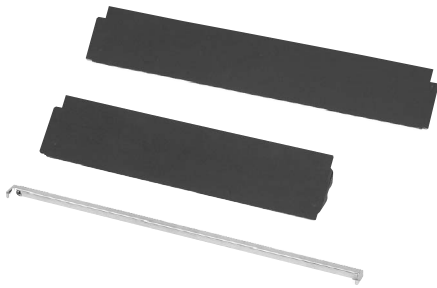
Settings	Mode No.	First code No.	Second code No.
3-way discharge	1 3 (2 3)	1	0 2
2-way discharge			0 3

The second code No. was set to "01" for 4-way discharge at the delivery.

J : 3P003070A

12.2 KDBH49FA80-140 — Sealing Member of Air Discharge Outlet

KDBH49FA80



Dimensions

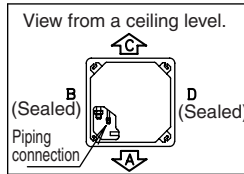
		Unit:mm	
Model	A	B	
KDBH49FA80	100	100	
KDBH49FA140	155	155	

Item	Model	KDBH49FA80	KDBH49FA140
Material		Galvanized steel iron (with flocking)	
Accessories		Connecting plate: 1 Mounting clasp: 1 Mounting screw: 1 Installation Manual	

Installation

Note

- This kit can be attached to the new ceiling suspended cassette type.
- Refer to the installation manual of the indoor unit body as well as this instruction for the installation.
- This kit is for sealing the air outlets of B and D. Do not attach it to the outlet of A and C. (The figure on the right shows the pattern of air outlet after the kits have been attached.)



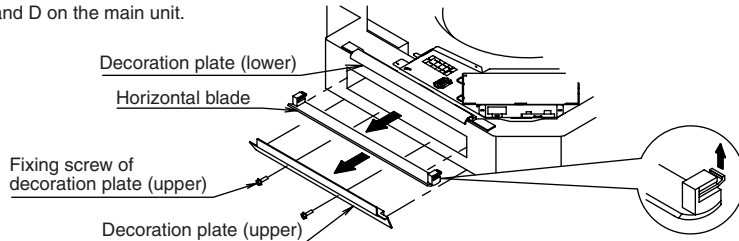
Contents of Kit Make sure this kit contains the following parts.

Name	Sealing decoration plate	Connecting plate	Fixing metal	Screw	Installation manual
Shape	For the air outlet B (Short)	For the air outlet D (Long)		M4 × 8	
Quantity	1 set	1 set	1 piece	1 set	1 sheet

1 Preparation for installation

Before the installation of the main unit, be sure to attach it in the state that the corner cover has been removed.

- Remove the horizontal blade and the upper decoration plate from the air outlet B and D on the main unit.



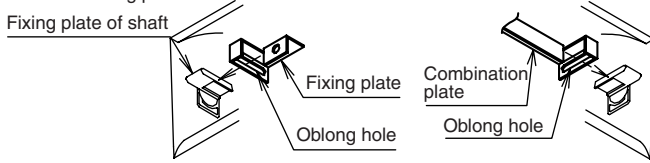
JC : 3P003049C

2 Attachment onto the indoor unit

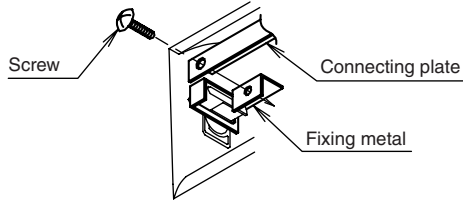
- Attach the connecting plate to the air outlet D.

Take notice for the fact that the auto-swing of the horizontal blade on the A will not work when this kit is attached to the air outlet B.

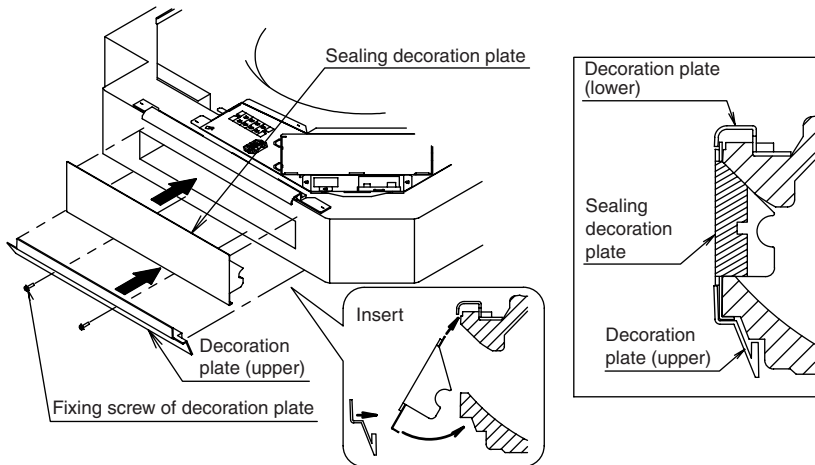
- (1) Pass the fixed plate of the shaft through the oblong holes on the fixed metal and the connecting plate in the direction indicated below.



- (2) Fix the fixing metal and the connecting plate with the screw in the accessories.



- Attach the sealing decoration plate to the air outlet B and D, and then attach the decoration plate (upper)



Unless the sealing materials are attached as indicated, take notice that it may cause the dew formation and the suction air leakage.

3 Field setting by the remote controller

- The field setting is required for the two-way discharge when this kit is attached. Refer to " Gist of Field Setting" attached in the remote controller for the setting procedure and the operation, and then switch over the setting position number as follows.

Attaching KDBH49FA80

Mode No.	First Code No.	Second Code No.
1 3 (2 3)	1	0 3
	5	0 3

Attaching KDBH49FA140

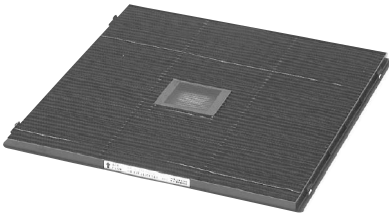
Mode No.	First Code No.	Second Code No.
1 3 (2 3)	1	0 3

The second code No. was set to "01" for 4-way discharge at the delivery.

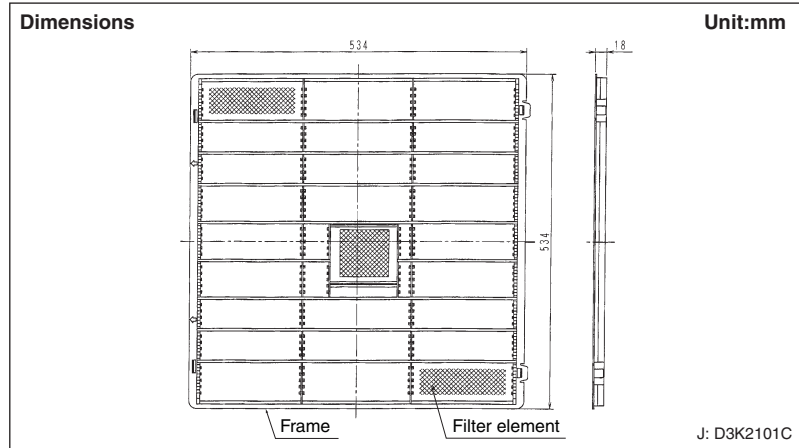
Make sure the auto-swing action if it moves smoothly after the field setting.

JC : 3P003049C

12.3 KAF495FA140 — Replacement Long Life Filter

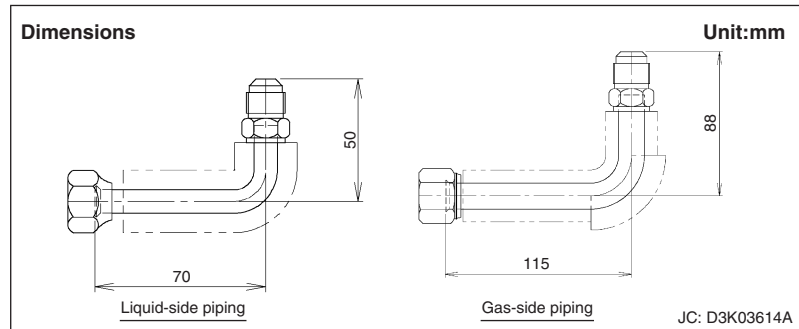


- Can be water-washed. Can be reused.



Item	Model	KAF495FA140
Conditions for use		Atmospheric temperature (0-60°C) Relative humidity (40-95%)
Initial pressure loss (Pa)		7 or less
Final pressure loss (Pa)		49 or less
Average efficiency (%)		50 (Gravity method)
Life (h)		2,500 (dust concentration 0.15 mg/m ³)
Fan strength passing through filter		18.5m ³ / min
Filter element		Mildew-proof resin net
Required number of sheets		1
Mass (kg)		0.4

12.4 KHFP49MA140 — L Connection Piping Kit



Item	Model	KHFP49MA140
Connection piping diameter	Liquid side	φ9.5
	Gas side	φ15.9
Accessories		Insulation. Binding band.

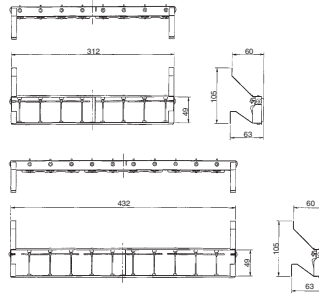
12.5 KDGJ49FA80-140 — Vertical Flap Kit

KDGJ49FA80

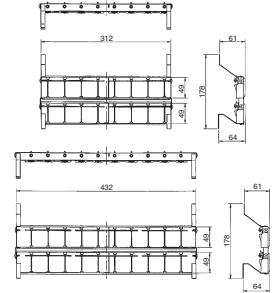


Dimensions

KDGJ49FA80



KDGJ49FA140



Unit:mm

J: D3K2097B
J: D3K2098B

Item	Model	KDGJ49FA80	KDGJ49FA140
Material		Blade fixing plate: Galvanized steel Iron Blade: polypropylene	
Number in box		4(2×2 each)	
Accessories		Installation manual	

Installation

Note

- This kit can be attached to the new ceiling suspended cassette type.
- Refer to the installation manual of the indoor unit body as well as this instruction for the installation.

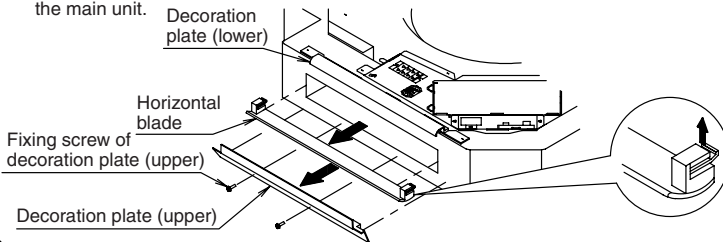
Contents of Kit Make sure this kit contains the following parts.

Name	Vertical blade assembly (Long)	Vertical blade assembly (Short)	Installation manual
Shape			
Quantity	2 sets	2 sets	1 sheet
	—	—	1 sheet

1 Preparation for installation

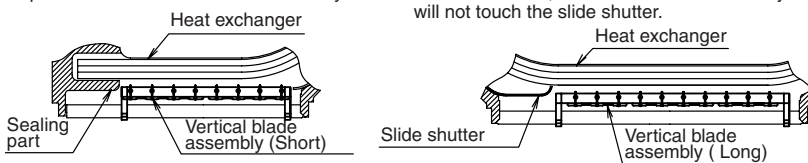
Before the installation of the main unit, be sure to attach it in the state that the corner cover has been removed, before the installation of the main unit.

- Remove the horizontal blade and the upper decoration plate from the air outlet A and B on the main unit.



2 Attachment onto the indoor unit

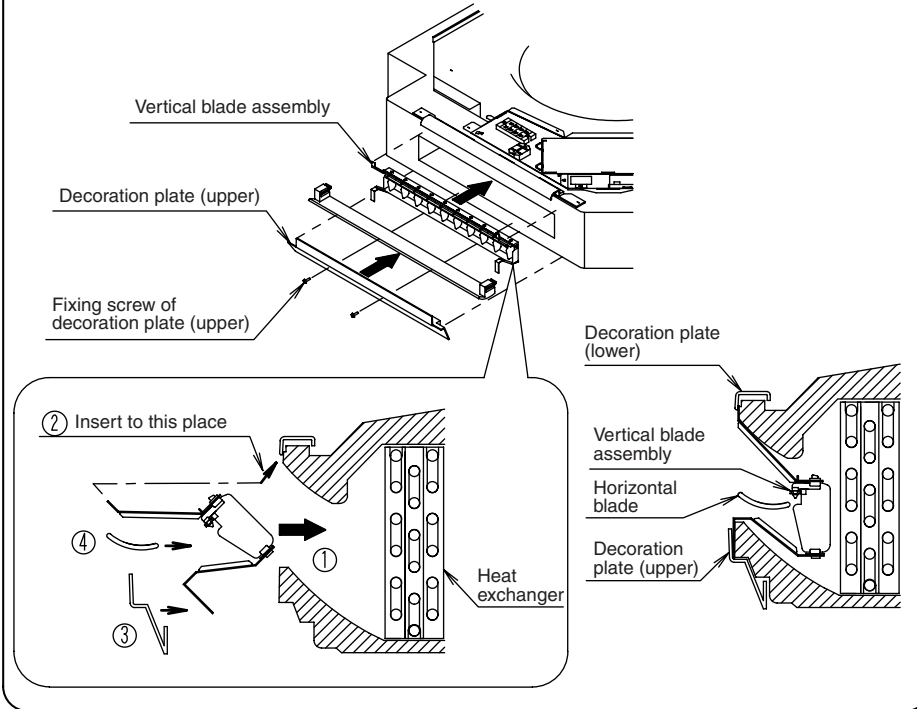
- Caution for the position to attach.
 - Short air outlet
Attach the kit so as not to touch the sealing part of the air outlet with the kit's body.
 - Long air outlet
In case of using it in a condition that the slide shutter is closed, attach it so that the kit body will not touch the slide shutter.



J : 3P003071A

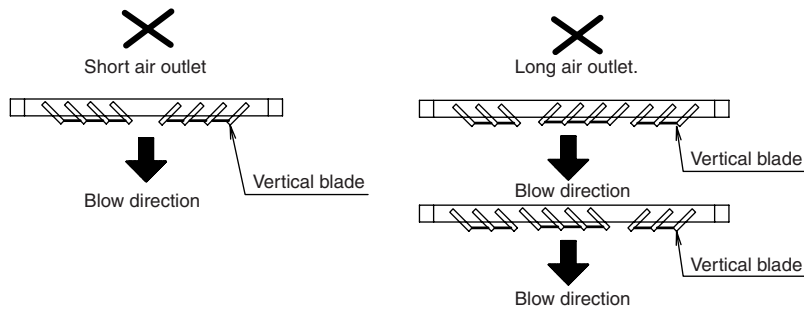
● Attach the vertical blade

- ① Insert the vertical blade to the depth of the air outlet.
- ② Insert the hook on the lower part of the vertical blade to in between the decoration plate (lower).
- ③ Attach the decoration plate (upper).
- ④ Attach the horizontal blade.



3 After the attachment work < Give your customer the following instruction. >

Do not use the vertical blade in the direction mentioned below. Otherwise it will be in danger of generating dew on the air outlet of the indoor unit's body.



J : 3P003071A