

# MITSUBISHI ELECTRIC

Air Conditioning For Building Application

## Filter Box PAC-KE63·80·140TB-F

### Installation Manual

This installation manual contains only the description of how to install the Filter box PAC-KE63·80·140TB-F. For information about how to wire and how to install air conditioning units, see the installation manual for them.

For your safety, first be sure to read "1 Safety Precautions" described below thoroughly and then install the Filter box PAC-KE63·80·140TB-F correctly.

## 1 Safety Precautions

● The following two symbols are used to denote dangers that may be caused by incorrect use and their degree:

<b>⚠ WARNING</b>	This symbol denotes what could lead to serious injury or death if you misuse the PAC-KE63·80·140TB-F.
<b>⚠ CAUTION</b>	This symbol denotes what could lead to a personal injury or damage to your property if you misuse the PAC-KE63·80·140TB-F.

● After reading this installation manual, keep it in a place where the final user can see it anytime he or she wants to it. When someone moves, repairs or uses the PAC-KE63·80·140TB-F, make sure that this manual is forwarded to the final user.

### ⚠ WARNING

**Always have the unit installed by Authorized Mitsubishi Representative or similar professional.**  
Improper installation by the user could result in problems such as water leakage, electric shock or fire.

**Install the unit according to this Installation Manual.**  
If the unit is installed improperly, water leakage, electric shock or fire may result.

**Always use the designated cables and connect them properly. When connecting the terminals, make sure that external forces from the cable is not being conveyed to the terminal and then tighten it securely.**  
Improper or loose connections could cause excessive heat or fire.

**Have all electric work performed by a properly licensed electrician. Electric work should be performed in strict adherence to procedures to this Installation Manual. Always provide a dedicated power supply.**  
If the capacity of the power supply is inadequate, it could result in problems such as electric shock or fire.

**Only use Mitsubishi-approved accessories, such as an air cleaner, humidifier or electric heater.**  
Always have such accessories installed by an Authorized Mitsubishi Representative or similar professional. Improper installation by the user may result in water leakage, electric shock or fire.

**Never modify the unit and always have repairs performed by an Authorized Mitsubishi Representative.**  
Improper repair could result in problems such as water leakage, electric shock or fire.

### ⚠ CAUTION

#### PRECAUTIONS BEFORE INSTALLATION

**Never use for special applications such as storing food, plants, precision equipment or art.**  
The quality of these items may deteriorate.

**Never use the unit in special environments.**  
Special environments with high concentrations of oil, steam or sulfuric gases will reduce the performance of the air condition and cause its parts to deteriorate.

**Never install the unit where run-off could result in damage.**  
If the humidity in the room exceeds 80% or if the drain becomes clogged, water may drain off of the indoor unit. When the unit is used for heating, there may be drainage from the outdoor unit. If required, provide collector drain for the outdoor unit.

**Always provide adequate signal noise protection when installing in facilities such as hospitals and communication stations.**  
Equipment at these facilities, such as inverters, in-house generators, high-frequency medical equipment, two-way communication equipment, may cause the air conditioner to operate improperly. Conversely, the signal noise from the air conditioner may affect the operation of medical equipment and two-way communication equipment and this could interfere with the medical treatment being given a patient or cause disturbances or interference in video broadcasting equipment.

#### PRECAUTIONS BEFORE REMOVE AND ELECTRIC WORK

**Route wiring so that there is no tension.**  
Tension could cause the wire to break and this could result in excessive heat or fire.

**Dispose of packing materials properly.**

**Use care when transporting the unit.**  
•Always use two or more people for lifting a product weight 20 kg. or more.  
•Some products are packaged with plastic wrapping bands. Never use these for lifting or transporting the product.  
•Never touch the fins on the heat exchanger. They are sharp and could cause cuts.  
•Never allow children to play with the plastic bags used for packaging. Always tear them up when disposing. A child could suffocate in these bags.

#### PRECAUTIONS BEFORE TEST RUN

**Never touch the switch with wet hands.**  
Electric shock could occur.

**Never operate the air conditioner with the air filter removed.**  
Particles will enter into the air conditioner and cause damage.

**Never operate the air conditioner with the panel or guard removed.**  
The hand could come in contact with rotating, hot or high-pressure components. They could cause electrical shock or entanglement.

**Never turn off the power supply immediately after stopping the unit.**  
Wait five minutes or more before turning off the power supply. Turning off the power supply before that time could result in water leakage or damage.

## 2 Confirming the Supplied Parts

### 1. Model names and applicable models

Model name	Applicable types	Applicable filter			
		Filter	Model name	Size	Q'ty
PAC-KE63TB-F	PEFY-P40-P50-P63VMH PEFY-P15-P18-P24NMHU-E	Long life filter	PAC-KE86LAF	298 × 300	2
		High-efficiency filter (NBS65%)	PAC-KE31AF	298 × 600	1
		High-efficiency filter (NBS90%)	PAC-KE41AF	298 × 600	1
PAC-KE80TB-F	PEFY-P71-P80VMH PEFY-P27-P30NMHU-E PEFY-P30NMHU-E-F	Long life filter	PAC-KE88LAF	298 × 300	3
		High-efficiency filter (NBS65%)	PAC-KE33AF	298 × 300	1
		High-efficiency filter (NBS90%)	PAC-KE43AF	298 × 600	1
PAC-KE140TB-F	PEFY-P100-P125-P140VMH PEFY-P36-P48-P54NMHU-E PEFY-P54NMHU-E-F	Long life filter	PAC-KE89LAF	298 × 300	3
		High-efficiency filter (NBS65%)	PAC-KE34AF	298 × 500	1
		High-efficiency filter (NBS90%)	PAC-KE44AF	298 × 600	1
				298 × 500	1
298 × 600	1				

### 2. Provided parts

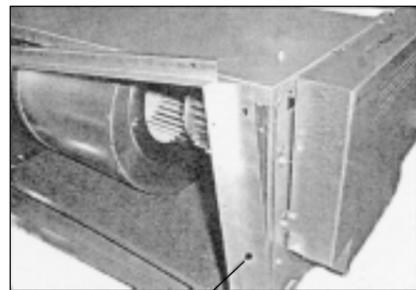
Check that the packet includes the following parts in addition to this installation manual.

PARTS	SHAPE	Q'ty
① SCREW(4 × 10)		10

### 3 Attach the filter box

Attach the filter box before installing the indoor unit.

1. Remove the fixing screws (10 screws) and then remove the flange from the indoor unit. (Refer to Photo 3-1)  
Note) These screws will be reused. Keep them in a safe place.



Intake flange Photo. 3-1

2. At the time of shipping, the filter box has a long-life filter. If the high-efficiency filter is to be used, refer to [4 Modification procedure when using high-efficiency filter] and change the filter retainer plate.

3. Open the cover on the side of the filter box.

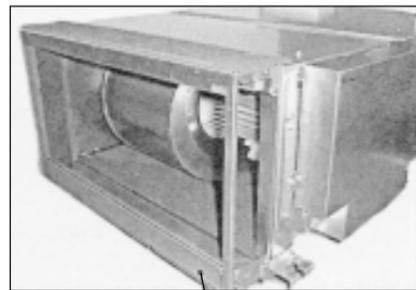
4. Use the screws provided to mount the filter box. (Refer to Photo 3-2)

PAC-KE63TB-F ... 7 Screws

PAC-KE80TB-F ... 9 Screws

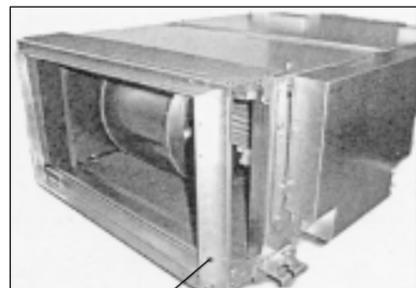
PAC-KE140TB-F ... 9 Screws

Note) Failure to firmly tighten the screws will cause air leakage. Make sure the screws are firmly tightened.



Filter box Photo. 3-2

5. Attach the intake flange removed in Step 1. to the filter box. (Refer to Photo 3-3)



Flange Photo. 3-3

6. After the filter (sold separately) has been inserted, close the cover. (Refer to Photo 3-4)

If two or more filters are to be used, arrange them so that the filter tabs face each other at the inside.

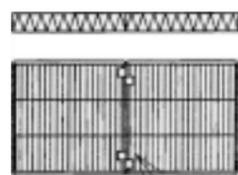


Fig. 3-1

Arrange so the tabs face each other

Filter (Sold separately)



Photo. 3-4

#### CAUTION

Never place your hand inside the filter box during maintenance. If the filter tabs become caught when the filter is removed for maintenance, use a long stick or similar item to remove the remaining filter.

### 4 Modification procedure when using high-efficiency filter

The filter box has a long-life filter when it is shipped. If a high-efficiency filter is to be used, the filter retainer plate must be changed using the following procedure.

To change to the long-life filter after the high-efficiency filter has been used, it is necessary to do ditto.

1. Remove the fixing screws (two screws) on the filter box shown in Photo 4-1 and remove the filter retainer plate.

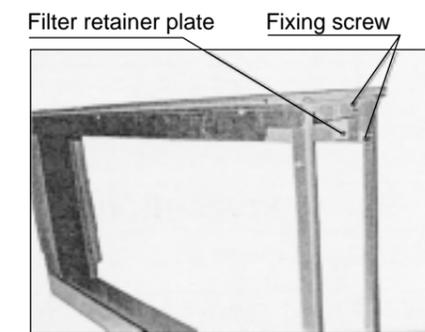
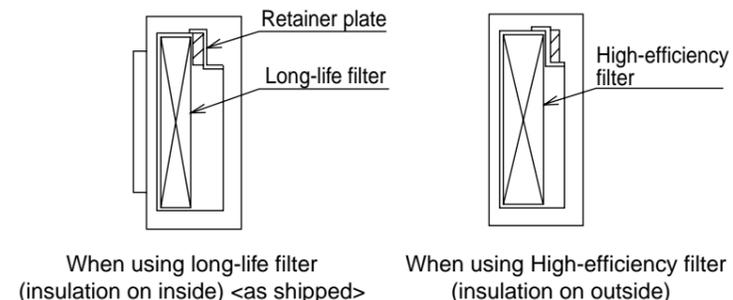


Photo. 4-1

2. Mount the filter retainer plate so that the side with the insulation is facing to the outside. Mount by inserting the back side and securing with screws in the front. (Photo 4-2)



When using long-life filter (insulation on inside) <as shipped>

When using High-efficiency filter (insulation on outside)

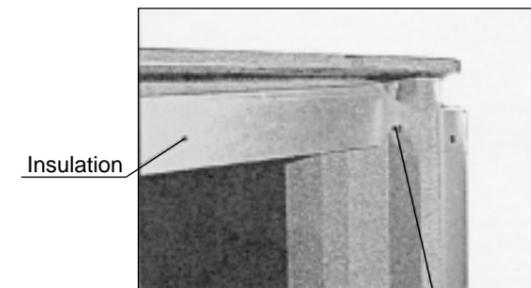


Photo. 4-2

### 5 Modification procedure for filter

To change to the long-life filter after the high-efficiency filter has been used, change the arrangement of the retainer plate so that the side with the insulation is now on the inside. (Restore to the arrangement at the time of shipping as shown in Photo 4-1.)

#### Final Check

The last step of the procedure is to make sure that nothing has been overlooked during the procedure. In addition, once the filter box has been mounted and the above procedure has been completed, carefully check for air leakage at the connections of the indoor unit.

#### CAUTION

The high-efficiency filter and the long-life filter cannot be used together in the filter box.

For more detailed information, please consult your dealer.