

MITSUBISHI

MITSUBISHI ELECTRIC Air Conditioner Optional Parts Outside Air Intake Duct Flange Installation Manual PAC-KH110F

WT03833X06

CAUTION PAC-KH110F should only be used with the models that are listed in the table of applicable models.

Safety Precautions

- Read the following safety precautions before installation.
- Observe these safety precautions for your safety.

WARNING	This symbol is intended to alert the user to the presence of important instructions that must be followed to avoid the risk of serious injury or death.
CAUTION	This symbol is intended to alert the user to the presence of important instructions that must be followed to avoid the risk of serious consequences that may result in certain circumstances.

- After reading this manual, give it to the user to retain for future reference.
- Keep this manual for easy reference. When the unit is moved or repaired, give this manual to those who provide these services. When the user changes, make sure that the new user receives this manual.

WARNING

Ask your dealer or a qualified technician to install the unit. <ul style="list-style-type: none">• Improper installation by the user may result in water leakage, electric shock, or fire.	Properly install the parts according to the instructions in this installation manual. <ul style="list-style-type: none">• Improper installation may result in water leakage, electric shock, or fire.
Only use specified cables. Securely connect each cable so that the terminals do not carry the weight of the cable. <ul style="list-style-type: none">• Improperly connected or fixed cables may produce heat and start a fire.	Have all electrical work performed by an authorized electrician according to the local regulations and instructions in this manual, and a dedicated circuit must be used. <ul style="list-style-type: none">• Insufficient capacity of the power supply circuit or improper installation may result in electric shock or fire.
Only use those optional parts (e.g., humidifier) that are recommended by MITSUBISHI. <ul style="list-style-type: none">• Ask a qualified technician to install optional parts. Improper installation by the user may result in water leakage, electric shock, or fire.	Do not make any modifications or alterations to the unit. Consult your dealer for repair. <ul style="list-style-type: none">• Improper repair may result in water leakage, electric shock, or fire.

Before installing the unit

CAUTION

Do not use the unit to keep food items, animals, plants, precision instruments, artefacts, or for other special purposes. <ul style="list-style-type: none">• The unit is not designed to preserve food products.	Do not use the unit in an unusual environment. <ul style="list-style-type: none">• Do not install the unit where a large amount of oil, steam, or sulphuric gas is present. Doing so may lead to a remarkable drop in performance or damage to some components of the unit.
When installing the unit in a hospital or communication facility, take appropriate measures to reduce noise interference. <ul style="list-style-type: none">• Inverter equipment, private power generators, high-frequency medical equipment, or wireless radio equipment may interfere with the normal operation of the air conditioner or vice versa.	Do not install the unit on or over things that are subject to water damage. <ul style="list-style-type: none">• When the humidity level exceeds 80% or if the drainage system is clogged, the indoor unit may drip water. During heating cycle, drain water is discharged from the outdoor unit. Install a centralized drainage system if necessary.

Before installing the unit (moving and reinstalling the unit) and performing electrical work

CAUTION

Do not put tension on the electric wires. <ul style="list-style-type: none">• If tension is put on the wires, they may break and result in excessive heat or fire.	Exercise caution when transporting products. <ul style="list-style-type: none">• Products weighing more than 20 kg should not be carried alone.• Do not carry the product by the PP bands that are used on some products.• Do not touch the heat exchanger fins. They are sharp and pose a risk of cuts.• Plastic bags may pose a risk of choking hazard to children. Tear plastic bags into pieces before disposing of them.
Properly dispose of the packing materials.	

Before the test run

WARNING

Do not operate switches with wet hands.

- Doing so poses a risk of electric shock.

Do not operate the unit without panels and safety guards.

- Rotating, high-temperature, or high-voltage parts on the unit pose a risk of burns and/or electric shock.

Do not operate the unit without the air filter.

- Dust particles may build up in the system and cause malfunctions.

Do not turn off the power immediately after stopping the operation.

- Keep the unit on for at least five minutes before turning off the power to prevent water leakage or malfunction.

- To prevent injury, do not touch the metal edges of the product with unprotected hands.
- Fit as described below.

1. Fitting

(1) Applicable Types

These optional components may be assembled in the main units in the table at right. Check the applicable type to prevent incorrect use.

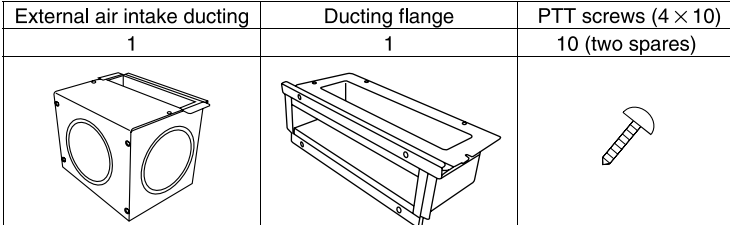
(2) Miscellaneous

- These optional components may be connected to 150 mm diameter circular ducting (circular ducting and circular ducting flanges procured on-site).

2. Components

These optional components include the components shown at right. Check that these components are present before fitting.

External air intake ducting	Ducting flange	PTT screws (4 × 10)
1	1	10 (two spares)



3. Fitting Details

- (1) Cut the knockout hole (45 × 240) on the side opposite to the piping with nippers.
- (2) Cut out and remove the thermal insulation on the inside around the knockout hole (see Fig.1). Ensure that the drain pan is not damaged while cutting.
- (3) Fit the ducting flange using the four supplied 4 × 10 PTT screws (see Fig.2)
- (4) Connect the external air intake ducting to the flange firmly using the four supplied 4 × 10 PTT screws (see Fig.3). Air leaks may occur if the ducting is not fitted correctly.

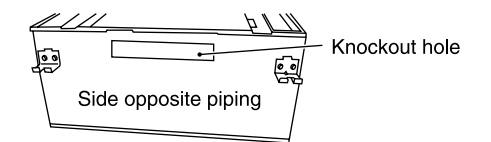


Fig.1

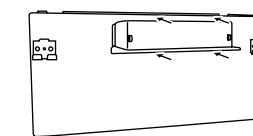


Fig.2

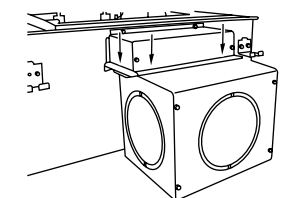


Fig.3

- (5) Open the external air inflow hole (150mm diameter) connecting the external air ducting (see Fig.4).

Set the external-internal air mixture to the range of use conditions as shown in the capacity diagram.

◆ Adjusting air intake volume

Cut the joiners at left and right of the external air inflow hole with a pair of cutters and rotate the cover to open (see Fig.4).

◆ Fully open

As with intake adjustment, cut the joiners at left and right and rotate the cover repeatedly to remove (see Fig.4).

- (6) Connect the ducting procured on-site. **Connect the ducting while ensuring that excess loads are not applied to the external air intake ducting on its vertical or horizontal axes.** Application of excess loads to the ducting may result in its deformation and air leaks.

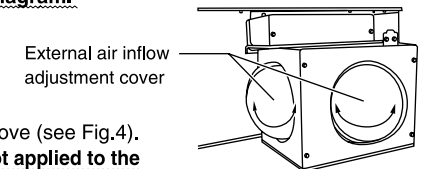


Fig.4

External Air Intake Cautions

- **Pass external air through an air filter before use.** Dust and contamination may clog the product, resulting in malfunctions.
- **Check again that the external-internal air mixture is as per the range of use conditions shown in the capacity diagram.**
- **Under some circumstances, external air intake volume and air temperature may affect indoor temperature detection, preventing detection of the actual indoor temperature.**
- **In such cases, change to the sensor in the remote controller, or the optional room thermostat (PAC-SE40TS). See the main unit installation manual for details of these changes**

Note for the installer

- After the installation is completed, give this installation manual to the user.

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