

# DAIKIN Heat Reclaim Ventilator **Optional CO<sub>2</sub> Sensor accessories Optional Kit** INSTALLATION MANUAL

BRYMA65, 100, 200

Read these instructions carefully before installation

2P344148-1D

Read following SAFETY CONSIDERATIONS for installation carefully before installing the kit and be sure to install it correctly.

● This manual classifies the precautions into WARNINGS and CAUTIONS. Be sure to follow all the precautions below: They are all important for ensuring safety.

<b>⚠ WARNING</b>	Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
<b>⚠ CAUTION</b>	Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

● After the installation is completed, test the air conditioner and check if the air conditioner operates properly. Explain to the customer how to use the kit with the aid of the instructions. See **OPERATION PROCEDURE** mentioned in the reverse side of this manual. Ask the user to keep this manual in a handy place for future reference.

## ⚠ WARNING

Ask your local dealer or qualified personnel to carry out installation work. Do not attempt to install the kit yourself. Improper installation may result in injuries by the falling parts etc.

Perform installation work in accordance with this installation manual. Improper installation may result in injuries by the falling parts etc.

This optional kit is exclusively provided for the DAIKIN Heat Reclaim Ventilator unit. Be sure to confirm the applicable model before connected to Heat Reclaim Ventilator Unit. Improper installation may result in injuries by the falling parts etc.

Consult your local dealer or specified service representative regarding relocation, installation, disassembly and repairing your Heat Reclaim Ventilator.

Do not attempt to install the kit yourself. Improper installation may result in electric shocks or a fire. Injuries may result if the Heat Reclaim Ventilator unit falls.

When servicing, be sure that the power supply to the unit is disconnected and keep sufficient distance from existing wires. Otherwise, it may result in electric shocks.

This product is not a measurement instrument based on the Measurement Act. Do not use this product as a safety device in purpose to detect toxic gas or flammable gas that causes oxygen deficiency or carbon monoxide intoxication.

## ⚠ CAUTION

Follow the installation manual supplied with the Heat Reclaim Ventilator unit for details of selecting the installation site and the method of installation. Improper installation may result in electric shocks or a fire. Injuries may result if the Heat Reclaim Ventilator unit falls.

In addition to CO<sub>2</sub>, the CO<sub>2</sub> Sensor is also sensitive to the gases listed below.

(Chlorofluorocarbon, town gas, LP gas, thinner, gasoline, alcohol, hair lacquer, carbon monoxide, insecticide (spray type), combustion gas like as kerosene stove and automotive exhaust gas.)

Behavior of the sensor may be influenced by rapid temperature change or humidity fluctuation. In that case, adjust the ventilation volume to 'High' or 'Ultra-High' rather than 'Auto'.

Set the ventilation volume to 'High' or 'Ultra-High' rather than 'Auto' when the Heat Reclaim Ventilator is used for the purpose of removing odor or dusts regardless of CO<sub>2</sub> concentration.

The accuracy of the CO<sub>2</sub> Sensor detection may be reduced due to a large amount of CO<sub>2</sub>.

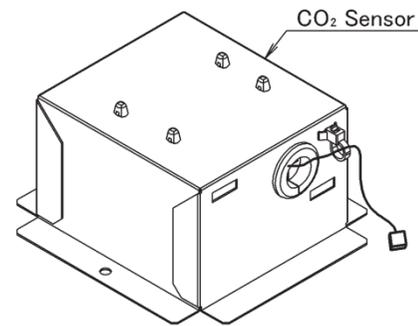
Set the ventilation volume to 'High' when using the Heat Reclaim Ventilator where usually a large amount of CO<sub>2</sub> is generated.

The airflow volume increases automatically with the automatic operation mode, which may result in noise increase.

Set the 'Fresh up' mode when the ventilation design included not only the living space but also the miscellaneous exhaust from toilets and other area.

Otherwise, the air balance may be disrupted and miscellaneous exhaust may enter the living space.

## Name of part



## Accessories

Check whether that the following accessories are accurately included with the kit.

Name	① Clamp	② Sealing material	Installation manual	③ Clamp
Qty.	2 pcs.	1 pc.	1 set	1 pc.
Shape				

## Models

Check whether the kit model is corresponding with your unit.

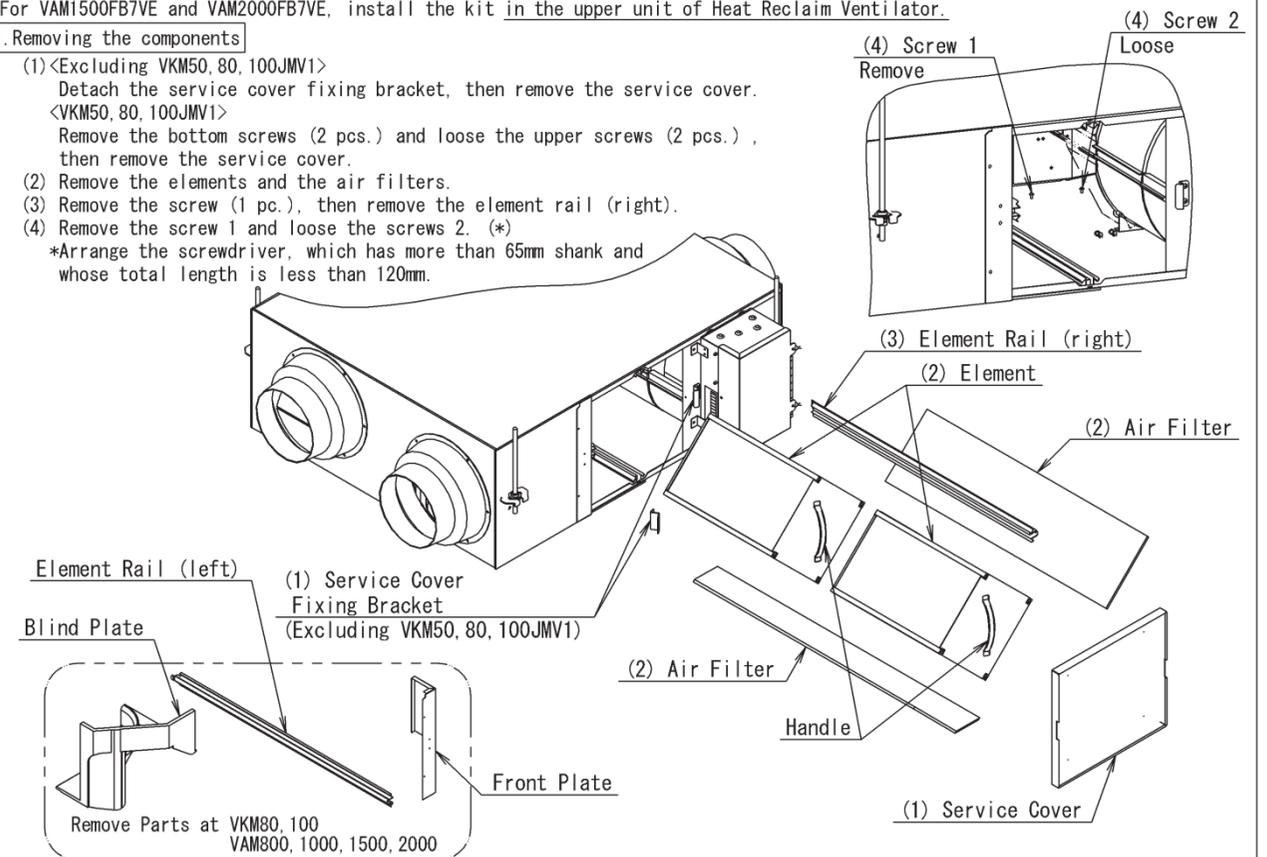
MODEL	APPLICABLE MODEL
BRYMA65	VAM350FB7VE, VAM500FB7VE VAM650FB7VE, VKM50GB (M) V1 VKM50JMV1
BRYMA100	VAM800FB7VE, VAM1000FB7VE VKM80GB (M) V1, VKM100GB (M) V1 VKM80JMV1, VKM100JMV1
BRYMA200	VAM1500FB7VE, VAM2000FB7VE

## 1 CO<sub>2</sub> SENSOR OPTIONAL KIT INSTALLATION

Install the CO<sub>2</sub> Sensor Optional Kit to the Heat Reclaim Ventilator according to the following procedure:  
\*For VAM1500FB7VE and VAM2000FB7VE, install the kit in the upper unit of Heat Reclaim Ventilator.

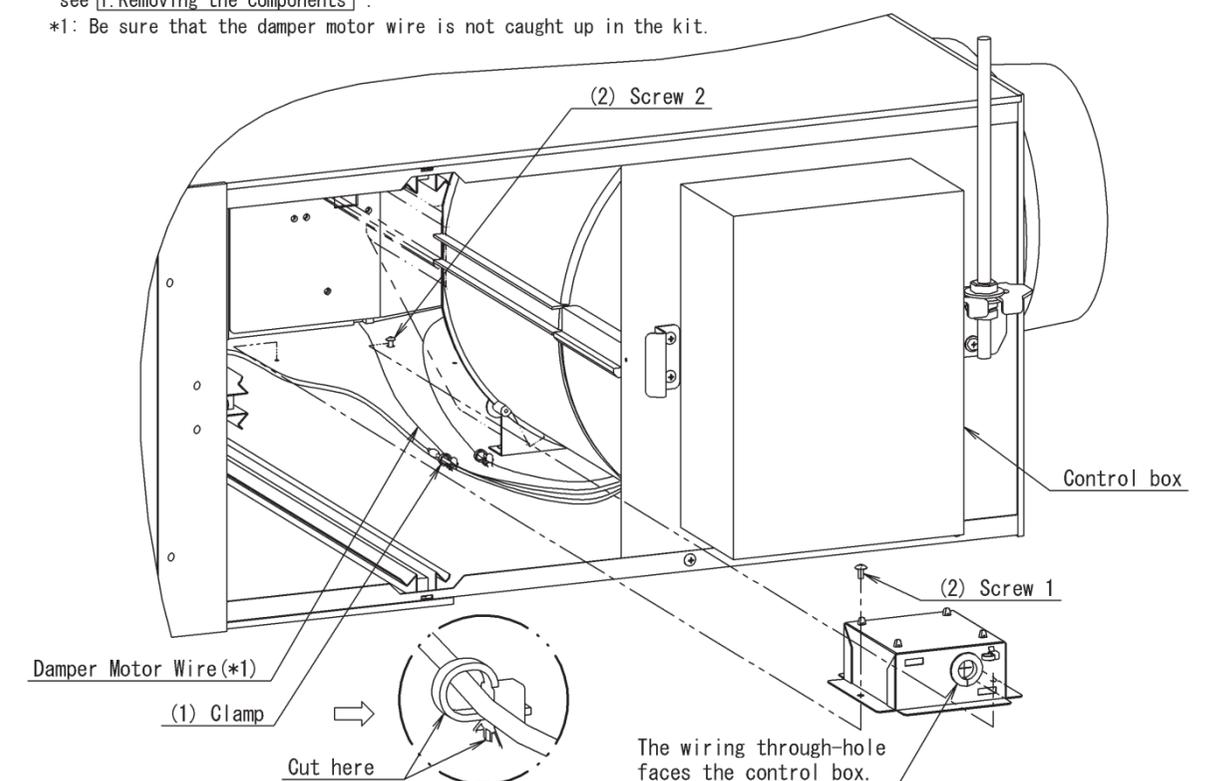
### 1. Removing the components

- (1) <Excluding VKM50, 80, 100JMV1>  
Detach the service cover fixing bracket, then remove the service cover.  
<VKM50, 80, 100JMV1>  
Remove the bottom screws (2 pcs.) and loose the upper screws (2 pcs.), then remove the service cover.
- (2) Remove the elements and the air filters.
- (3) Remove the screw (1 pc.), then remove the element rail (right).
- (4) Remove the screw 1 and loose the screws 2. (\*)  
\*Arrange the screwdriver, which has more than 65mm shank and whose total length is less than 120mm.



### 2. Installing the optional kit

- (1) Remove the clamp (1 pc.) as mentioned in the figure below.
  - (2) Install the optional kit with the screws (1 and 2) described in step (4) see **1. Removing the components**.
- \*1: Be sure that the damper motor wire is not caught up in the kit.



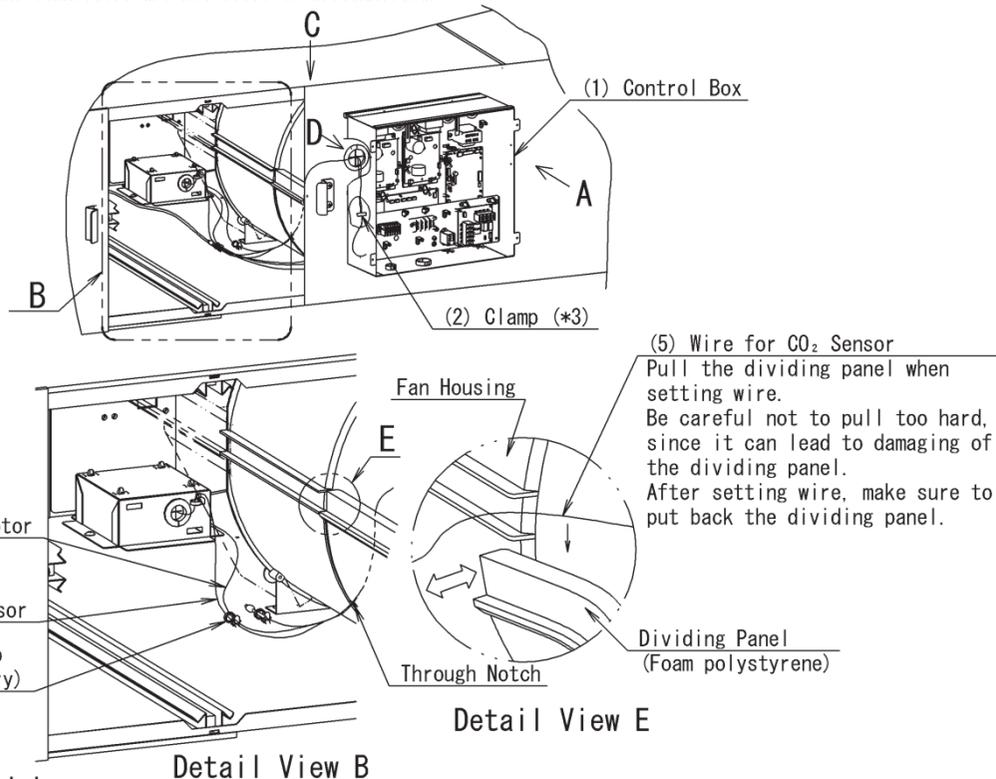
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H297 x W420

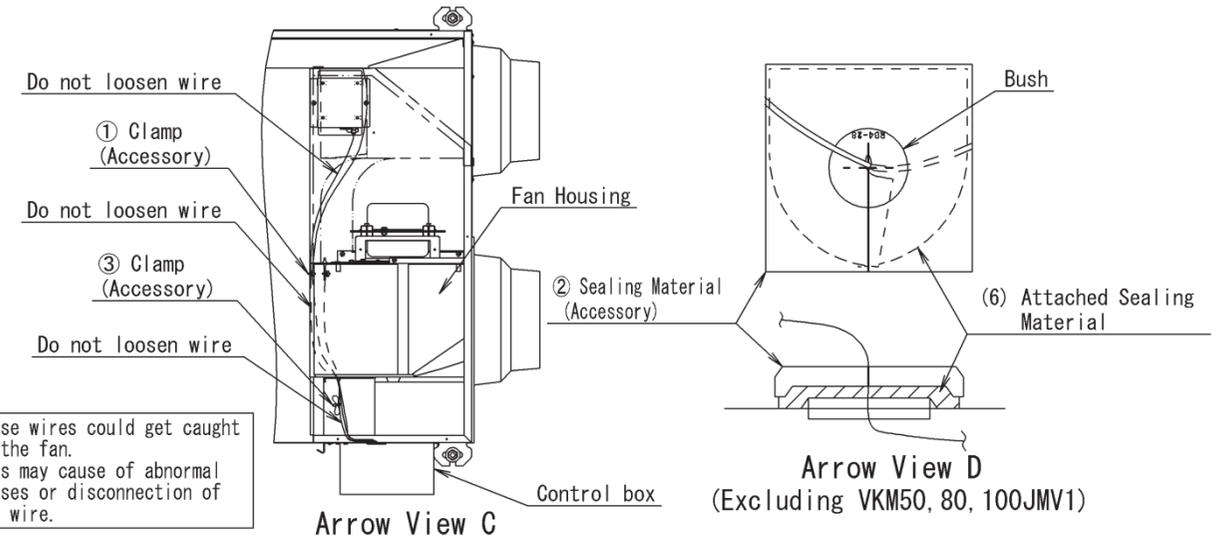
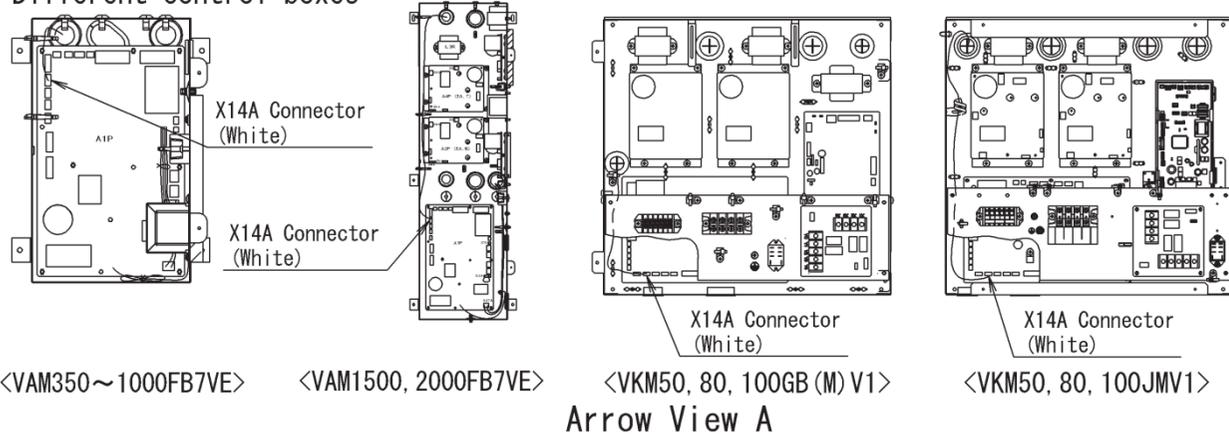
### 3. Wiring Connection of CO<sub>2</sub> Sensor

**⚠ WARNING** Do not forget to cut off the power supply. Otherwise, any injury or electrical shock may be caused.

- (1) Remove the screws of the control box lid, and open the control box as the figure below indicates.  
\*When opening the control box lid, discharge any static electricity from your body by touching the product casing, etc., beforehand.  
Failure to do so may result in damage to electrical components.
- (2) Remove the clamp (1pc.) indicated in the figure below. (Excluding VKM50, 80, 100JMV1)
- (3) Bring out the wire from inside of the unit through the bush, then firmly insert it to the X14A connector. (See Arrow View A)
- (4) Bundle the wire together with the damper motor wire by the ① clamp (accessory) at the position indicated in the figure. (See Detail View B) (\*1)
- (5) Secure the wire to get caught between the fan housing and the dividing panel. (See Arrow View C and Detail View E) (\*2)
- (6) Cover with the ② sealing material (accessory) on top of the preliminarily-attached sealing material to seal a gap around the wire as the figure below indicates. (See Arrow View C and D) (Excluding VKM50, 80, 100JMV1)
- (7) Bind up excess the CO<sub>2</sub> Sensor wire and bundle together with the damper motor wires from the inside of the unit by the ③ clamp (accessory), then fix them to the control box.  
\*1 : After bundling, cut off the excess edge of the clamp  
\*2 : To install the element rail correctly, the wire must be clamped.  
\*3 : When bundling the wires, be sure to open the control box completely as shown in the figure below.  
\*4 : Loosen the wire clamps as necessary when setting wire.  
After setting wire, make sure to return the wire clamps to their original state and check that the connectors are not loose or disconnected.

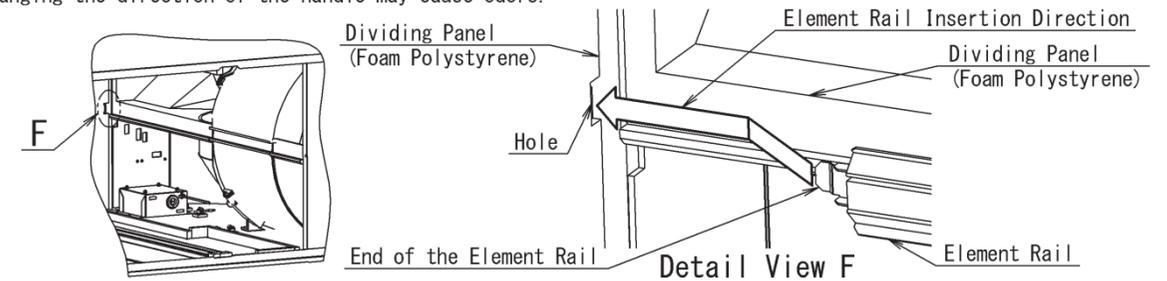


#### Different control boxes



#### 4. Installing the components

- Close the control box lid, then install the components with the reverse procedure of 1. Removing the components.
- \*Insert the end of the element rail into the hole along the dividing panel, be careful not to damage the dividing panel. (See Detail View F)
  - \*Position the handle side vertically, and insert the elements with the handle side facing you. Changing the direction of the handle may cause odors.



#### 2 INITIAL SETTING

- (1) Make sure that the control box in the ventilator is closed before turning on the power supply.
- (2) Turn on the power supply, then check the ventilation volume displayed in the remote controller (optional accessory).  
- Make sure that each time the ventilation volume is selected, the ventilator volume display changes in the following sequence.  
Low → High → Auto
- (3) If the 'Auto' does not display or the error code 'CH' display, the following cause can be assumed.
  - a. Connection failure ⇒ Open the control box and check the connectors are connected properly.
  - b. Wire disconnection ⇒ Contact your dealer.
  - c. Failure in the CO<sub>2</sub> Optional Kit (main unit) ⇒ Contact your dealer.

**⚠ CAUTION** After completion of the initial setting, check that the components removed for installing the optional kit, such as the heat exchange elements, air filters, are installed in the correct position.

#### OPERATION PROCEDURE

Set the 'Auto' mode by the remote controller to operate with the appropriate airflow volume adjusted depending on CO<sub>2</sub> concentration.  
Refer to the operation manual accompanying the remote controller.  
(Setting to 'Auto' mode forces the unit to operate in 'High' mode for 20 minutes in order to decrease CO<sub>2</sub> concentration.)  
The ventilation air flow is not automatically changed when the actual ventilation mode is bypass.

- CO<sub>2</sub> Sensor
  - Detects CO<sub>2</sub> concentration around the CO<sub>2</sub> Sensor after 30 minutes of the power-on, and perceives it as a criterion value (generally atmospheric CO<sub>2</sub> concentration).
  - Therefore, there may be a large gap between the actual concentration and the detected concentration if the CO<sub>2</sub> concentration around the CO<sub>2</sub> Sensor or CO<sub>2</sub> concentration in the room is higher at 30 minutes after the power-on.
  - However, the gap becomes progressively smaller at the time of low CO<sub>2</sub> concentration (at night, or time of low traffic) since the CO<sub>2</sub> Sensor always updates the criterion value by the self-correction mechanism.
  - If the unit is used in an area with higher CO<sub>2</sub> concentration (e.g. a place along a main road): before installation, measure the CO<sub>2</sub> concentration outside the building.
  - If the CO<sub>2</sub> concentration exceeds 500ppm, the CO<sub>2</sub> Sensor setting has to be corrected.
  - Ask your dealer about the correction of the CO<sub>2</sub> Sensor settings.