## Installation Manual for Fresh Air Intake Kit (for 4-Way Cassette Type)

Model	OACI-160K3
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#### NOTE:

Applicable indoor unit may be different depending on the product series. Refer to the product catalog for applicable indoor unit model.

#### **IMPORTANT NOTICE:**

- We pursue a policy of continuing improvement in design and performance of products.
   The right is therefore reserved to vary specifications without notice.
- We cannot anticipate every possible circumstance that might involve a potential hazard.
- This kit is designed for combination of our Air Conditioners.
   Do not use this kit itself or combination of other companies Air Conditioners.
- No part of this manual may be reproduced without written permission.
- Signal words are used to identify levels of hazard seriousness.
   Definitions for identifying hazard levels are provided below with their respective signal words.

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A DANGER	Indicates a hazardous situation that, if not avoided, will result in death or serious injury.
AWARNING	Indicates a hazardous situation that, if not avoided, could result in death or serious injury.
<b>A</b> CAUTION	Indicates a hazardous situation that, if not avoided, could result in minor or moderate injury.
NOTICE	Indicates information considered important, but not hazard-related (e.g. messages relating to property damage).
NOTE	Indicates an useful information for operation and/or maintenance.

- It is assumed that this kit will be installed and serviced by English speaking people. If this is not the case, the customer should add safety, caution and operating signs in the native language.
- If you have any questions, contact your distributor or dealer.
- This manual gives a common description and information for this fresh air intake kit which you operate as well as for other models.
- This manual should be considered as a permanent part of the air conditioning equipment and should remain with the air conditioning equipment.
- Do not use this kit under the following conditions:
  - \* where there is oil vapor and the oil is dispersed (machine shops, kitchen, etc.).
  - \* where generation, flowing or staying of flammable gas and corrosive gas may be occurred.

#### Installation Restriction

- This kit can not supply the fresh air by itself. Therefore, connect a duct and supply fresh air from the dedicated outside air system or the duct fan.
- When using this kit with the dedicated outside air system, the maximum fresh air intake volume should be within 20% of the rated air flow volume of the indoor unit. In addition, when using this kit without the dedicated outside air system, pay attention not to cause dew condensation inside this kit, the duct and the indoor unit.

## **AWARNING**

- Turn OFF the power source before the installation work. If not, it may cause a fire or an electric shock.
- The installation work shall be performed according to this installation manual.

  If the installation is not completed, it may cause dew condensation by air leakage, injury by falling down the fresh air intake kit and the air panel.

### < Transportation and Handling >

- 1. Transport the fresh air intake kit with packing as it is to the installation location.
- 2. Do not put any materials on the fresh air intake kit.
- 3. Do not stand the fresh air intake kit after unpacking. It may be deformed. Place it on flat place.

## 1. Factory-Supplied Accessories

Unit: inch (mm)

No.	Accessory			Q'ty
1)	Intake Box		33-15/32 (850)	1
2 Connecting Box	Connecting Boy	Right Part		1
	Left Part		1	
3	Truss Head Screw		× MM (13/32L (10L)	4
4)	Insulation for Duct Adaptor		19/32t (15t)	4

## 2. Mounting Indoor Unit

Perform the mounting work by more than 2 people.

- (1) Provide a distance as shown in the figure below.
- (2) Suspend the indoor unit.

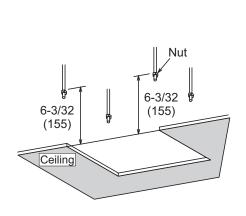
(The installation detail should be referred to the installation manual of 4-Way Cassette Type.)

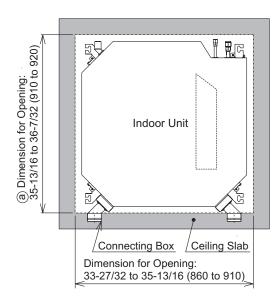
## **ACAUTION**

The dimensions for opening are shown in the figure below.

If the dimension (a) is 35-7/16 inch (900mm) or less, the ceiling slab will interfere with the connecting box.

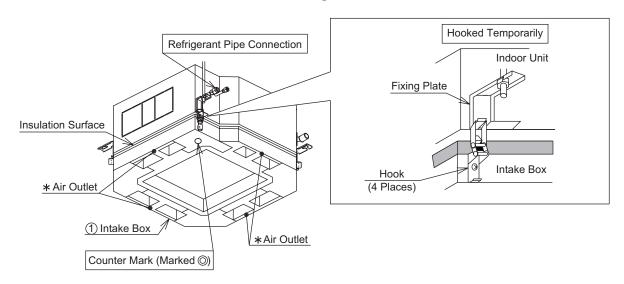
Unit: inch (mm)





## 3. Attaching Intake Box (1) to Indoor Unit

- 1 Fit the corner position of the refrigerant pipe connection at the indoor unit and the position stamped the counter mark (marked ①) at the intake box (1).
- 2 Hook temporarily hooks (4 places) at the intake box (1) to the fixing plate at the indoor unit.



#### **ACAUTION**

- Do not hold the air outlet part (marked \*) in the above figure when attaching the intake box.
   If held, deformation may occur.
- Check to ensure that the attaching direction of the intake box (1) to the indoor unit. If the direction is wrong, it may cause the indoor unit breakage due to falling down, air leakage, dew condensation, etc.

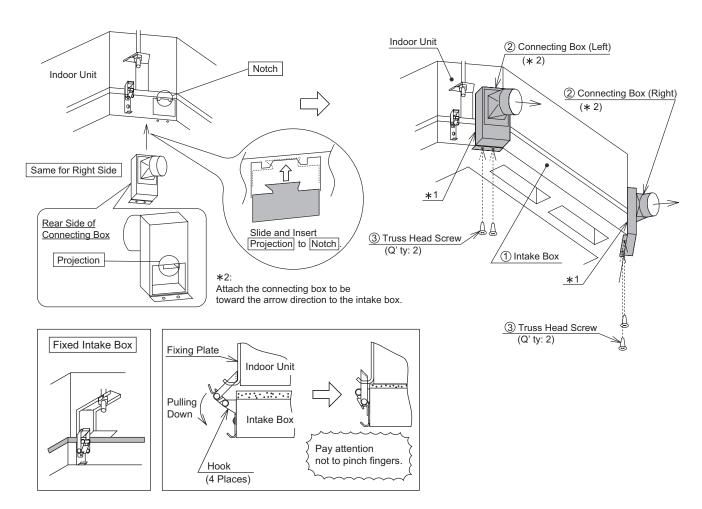
## 4. Attaching Connecting Box (2)

- 1 Slide and insert the projection at the connecting box (2) to the notch at the intake box (1). (Perform the same work for the other side.)
- 2 Fix the connecting boxes (2) by two truss head screws (3) to each side.

  After fixing the connecting boxes (2), fix the intake box pulling down each hook.

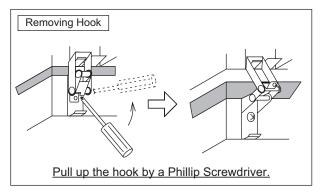
#### **ACAUTION**

- The workability will be facilitated if the connecting box (2) is attached to the intake box (1) before installing the ceiling slab.
- The connecting box (②) shall be attached to the intake box (①) without gap at the connection part (marked \*1).
  - If there is gap, air leakage may occur.
- The intake box (1) is still hooked temporarily after fixing the connecting box. Fix the intake box (1) pulling down hooks.



## **ACAUTION**

- When pulling down hooks, the upper part of hook may come down swiftly.
   Pay attention not to pinch fingers.
- When removing the intake box from the indoor unit after pulling down hooks, refer the figure "Removing Hook".

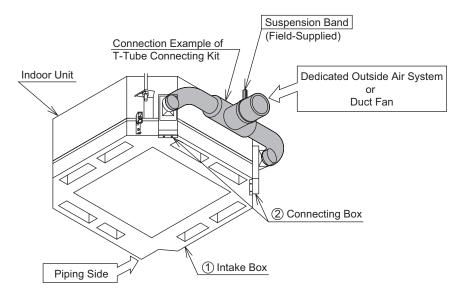


### 5. Connecting to Duct (Field-Supplied)

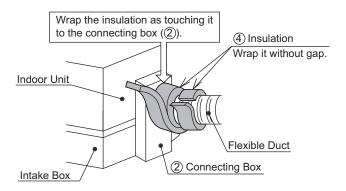
Connect the duct to the connecting boxes ( $\bigcirc$ ) with  $\phi$ 2-15/16 inch ( $\phi$ 75mm) flanges using the T-tube connecting kit (optional) or a duct. (The installation detail should be referred to the installation manual of the T-tube connecting kit.)

## **ACAUTION**

- Before mounting the air panel, securely connect the duct to the connecting box and connect the dedicated outside air system or the duct fan according to the installation limit.
- When installing the T-tube connecting kit or a duct, securely attach the suspension band not to apply
  excessive force to the connecting box. If not, air leakage and dew condensation may occur due to
  cause gap between the connecting box and the duct adaptor.



## 6. Attaching Insulation (4) after Attaching Duct

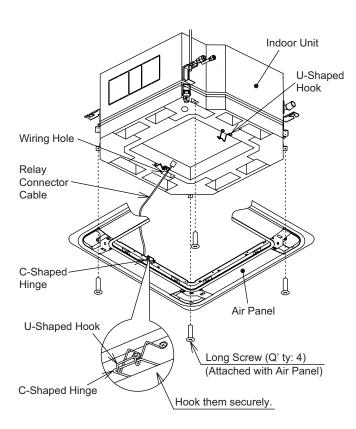


### 7. Mounting Air Panel to Indoor Unit

- 1 Check to ensure that the corner position of the refrigerant pipe connection at the indoor unit and the position stamped as "Ref. Pipe 冷媒配管" at the air panel are the same.
- [2] Hook temporarily the air panel to catch the C-shaped hinges onto the U-shaped hooks.
- 3 Fix the air panel to the indoor unit by long screws (accessory for the air panel, Q'ty 4).
  Tighten the long screws until touching the stopper to the fixing plate. (The installation detail should be referred to the installation manual of the air panel.)

## **ACAUTION**

- Securely hook temporarily before mounting the air panel to the intake box. If the air panel is not hooked temporarily, it may fall down.
- Pay attention that air leakage or dew condensation may occur if there is gap between the air outlet and the intake box.
- Tighten long screws according to the specified torque when mounting the air panel to the indoor unit.
- Use a phillips screwdriver or a spanner (13/32 inch (10mm)) to tighten long screws.



## 8. Electrical Wiring Connection

## **ACAUTION**

- Perform securely the electrical wiring connection.

  If not completed, heat generation at the connection, a fire or an electric shock may occur.
- Make sure that the wires are securely fixed in order not to apply an external force to the terminal connections of the wirings. If fixing is not completed, heat generation or a fire will occur.
- 1 Check to ensure that the power source is turned OFF.
- 2 Connect the air panel wiring to the relay connector for the air panel. Fix the extra length of the air panel wiring by the plastic band (Field-Supplied).

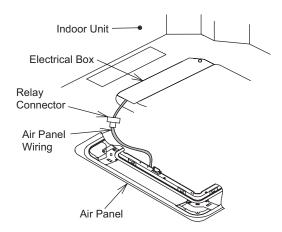
The connection position should be referred to the installation manual of the air panel.

## **ACAUTION**

• Before connecting the air panel wiring with the relay connector for the air panel, turn OFF the power source.

If the wirings are connected without turning OFF the power source, the unit can not activate normally.

Pay attention to handle the electrical wiring.
 If the electrical wiring is caught in the indoor fan and disconnected, it may cause breakage of the air conditioner.



# 9. Optional "T-Tube Connection Kit" Connecting Example

