

# TOSHIBA



EB99813701

Installation Manual

1 English

## *AIR CONDITIONER (Compact 4-way type)* **Installation Manual**

For commercial use

**Ceiling panel**

Model name: \_\_\_\_\_

**RBC-UM21PG(W)-E**

**Delivery to the customer**



After finishing installation, perform a test run to confirm that no problems exist, and explain how to use and maintain the product to the customer following the Owner's Manual of the unit. Ask the customer to keep this Installation Manual together with the Owner's Manual and Installation Manual of the unit.

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# 1 Precautions for Safety

These safety cautions describe important matters concerning safety to prevent injury to users or other people and damages to property. Please read through this manual after understanding the contents below (meanings of indications), and be sure to follow the description.

Indication	Meaning of Indication
 <b>WARNING</b>	Text set off in this manner indicates that failure to adhere to the directions in the warning could result in serious bodily harm (*1) or loss of life if the product is handled improperly.
 <b>CAUTION</b>	Text set off in this manner indicates that failure to adhere to the directions in the caution could result in slight injury (*2) or damage (*3) to property if the product is handled improperly.

\*1: Serious bodily harm indicates loss of eyesight, injury, burns, electric shock, bone fracture, poisoning, and other injuries which leave aftereffect and require hospitalization or long-term treatment as an outpatient.  
 \*2: Slight injury indicates injury, burns, electric shock, and other injuries which do not require hospitalization or long-term treatment as an outpatient.  
 \*3: Damage to property indicates damage extending to buildings, household effects, domestic livestock, and pets.

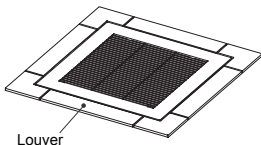
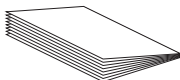
## **WARNING**

- **Ask an authorized dealer or qualified installation professional for installation.**  
Inappropriate installation may result in water leakage, electric shock or fire.
- **Perform installation work properly according to the Installation Manual.**  
Inappropriate installation may result in water leakage, electric shock or fire.
- **Install the unit property in a location that is durable enough to support the weight of the unit.**  
Insufficient durability may cause the unit to fall, which may result in injury.
- **Electrical work must be performed by a qualified electrician in accordance with the Installation Manual.**  
**The work must satisfy all local, national and international regulations.**  
**Make sure the air conditioner uses an exclusive power supply.**  
An insufficient power supply capacity or inappropriate installation may cause fire.
- **Use predefined wire and connect them certainly. Keep the connecting terminal free from external force.**  
It may cause an exothermic or a fire.
- **Do not modify or repair the product.**  
Incomplete modification or repair may result in electric shock or fire.

## **CAUTION**

- **Wear protective gloves during installation.**  
Failure to wear proper protective gear may result in injury.

## 2 Components

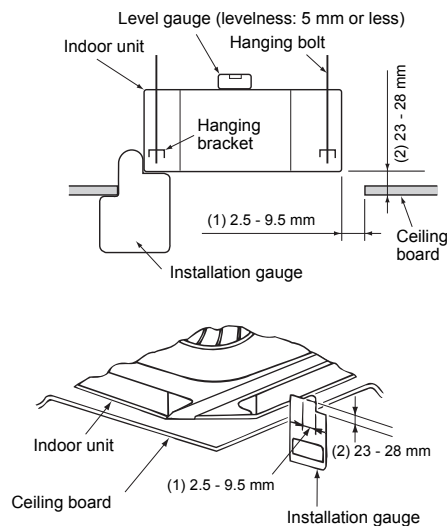
Part name	Quantity	Shape	Usage
Ceiling panel	1		
Installation manual	1		

\* Do not apply an excessive force on the louver. It may cause a trouble.

## 3 Preparation Before Installing the Ceiling Panel

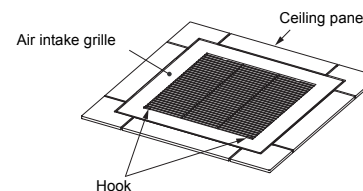
### ■ Position check of indoor unit

- 1 Confirm the position of the indoor unit according to the Installation Manual.
- 2 Check whether size of the ceiling opening hole is in the following range or not.  
580 mm × 580 mm to 594 mm × 594 mm
- 3 Using the installation gauge which is attached to the indoor unit package, determine position of the indoor unit against the ceiling surface. If the position of the indoor unit is not correct, air leak, water leak (dewing), or malfunction of the louver is caused.
  - Do not put the ceiling panel downward, lean it, or leave it on a projection to avoid a damage on the surface of the ceiling panel.
  - Handle with care so as not to deform the tentative hanging hooks attached to the rear side of the ceiling panel.
  - Do not apply excessive force on the louver or the styrofoam on the air outlet while hanging it tentatively to the indoor unit. (It may causes a trouble on the louver.)

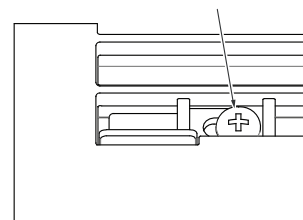


## 4 Installation to Indoor Unit

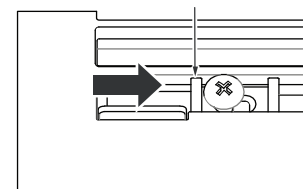
### ■ Removal of air intake grille



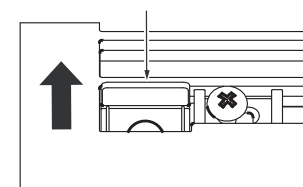
- 1 Loosen the fixing screw.



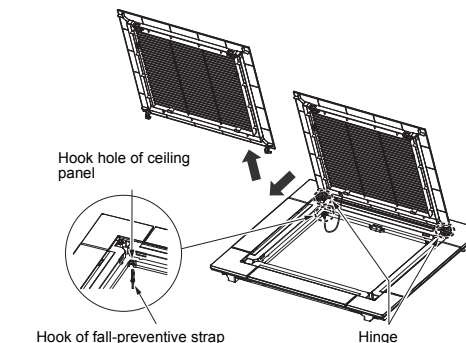
- 2 Slide the fixing bracket toward the inside.



- 3 Holding the air intake grille, slide the hook in the direction of the arrow and slowly open the grille.

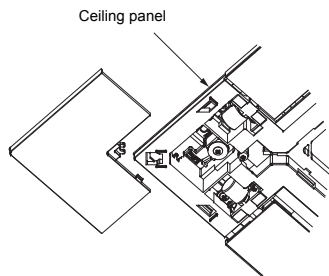
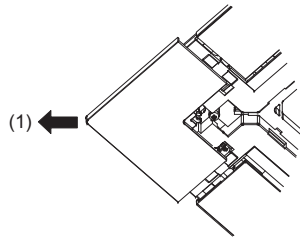
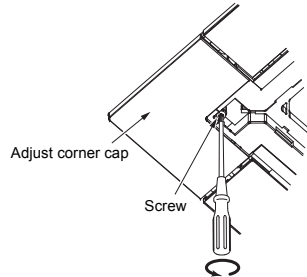


- 4 Take off hook of the fall-preventive strap from the ceiling panel. Remove the hinge section of the air intake grille from the ceiling panel while the air intake grille is opened.



## ■ Removal of adjust corner cap

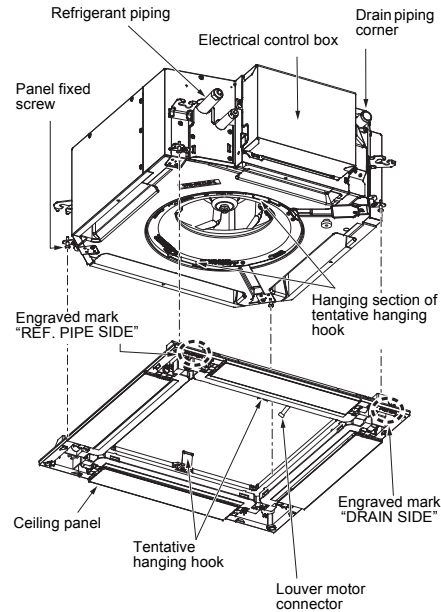
- 1 Loosen the fixing screws on the adjust corner cap.
- 2 Slide the adjust corner cap toward direction of the arrow mark (1) and then remove it. (Fig. 1)



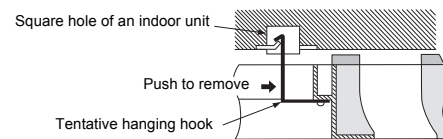
(Fig. 1)

## ■ Installation of ceiling panel

- 1 Insert the two tentative hanging hooks of the ceiling panel into the square holes in the indoor unit. (Fig. 2, Fig. 3)
  - The ceiling panel aligns directionally with the indoor unit. Check that the lead wires of louver motor connector are on the Electrical control box side.



(Fig. 2)

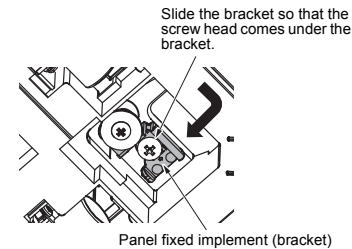
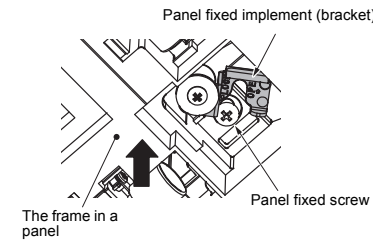


(Fig. 3)

- When removing the ceiling panel, push the tentative hanging hooks toward the outside while supporting the panel.

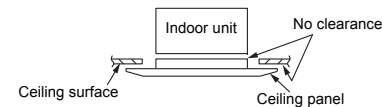
- 2 Lift the corner of the frame in a panel, slide the panel fixed implement (bracket) so that the panel fixed screw head comes under the bracket. Do the same for all four corners. (Fig. 4)
  - Panel fixed screws are attached to the indoor unit before shipment.
  - Slide the bracket after loosening the panel fixed screw so that the bracket is easy to be hooked on the screw head. Tighten the panel fixed screw again after sliding the bracket.

- \* There is no need to remove the panel fixed screw.



(Fig. 4)

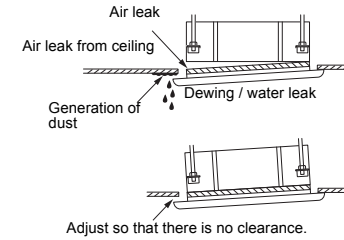
- 3 Confirm there are no gaps between the indoor unit and ceiling panel or the ceiling panel and ceiling surface. (Fig. 5)



(Fig. 5)

## ⚠ CAUTION

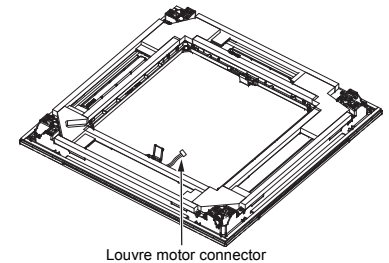
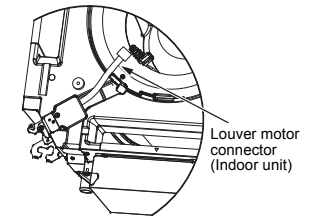
- As shown in the following figure, a trouble may be caused if the screws are incompletely tightened.
- When a clearance is found between the ceiling surface and the ceiling panel, readjust height of the indoor unit even if the screws have been tightened.



(Fig. 6)

## ■ Wiring of ceiling panel

Connect the louver motor connector on the ceiling panel side and louver motor connector on the indoor unit side. (Fig. 7)



(Fig. 7)

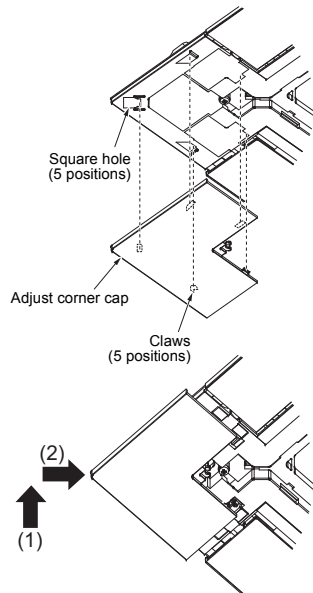
## ■ Installation of adjust corner cap / air intake grille

Install the adjust corner cap / air intake grille in the reverse procedure of installation to the indoor unit.

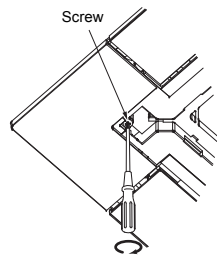
### Installation of adjust corner cap

**1** As shown in Fig. 8, install the adjust corner cap to the ceiling panel and fix it by screw.

- Align the clips on the back of the adjust corner cap with the holes in the corners of the panel and press them into the holes by pressing in direction (1) and sliding the cap in direction (2).



**Note**  
Tightening torque:  
1 N·m or less

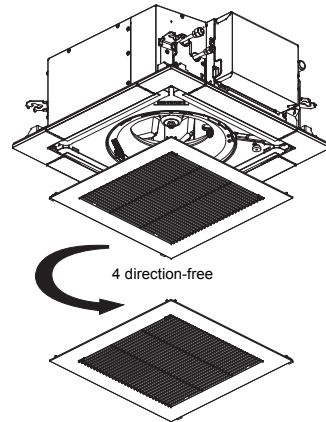


(Fig. 8)

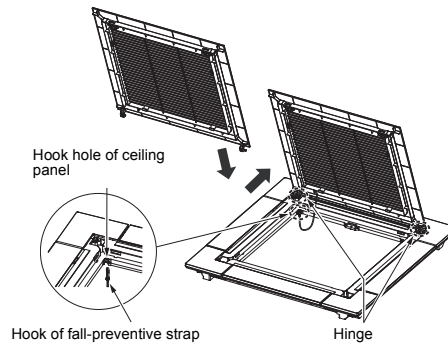
- Check that none of the clips are out of alignment.

### Installation of air intake grille

- To install the air intake grille, follow to the reverse procedure of the removal.  
This ceiling panel can be installed from anyone of 4 directions by turning the air intake grille. Change the direction on the customer's demand or according to the direction matching of the air intake grille when multiple units are installed.
- Do not pinch the louver motor wiring connector to install the air intake grille.**
- Attach a strap to prevent falling of the air intake grille to the ceiling panel.
- Close the air intake grille hooks. Slide the fixing brackets and securely fix them with fixing screw.



(Fig. 9)



## 5 Others

### Check after installation

- Check again there is no clearance between the indoor unit and the ceiling panel, and between the ceiling panel and the ceiling surface.
  - \* A clearance causes water leak or dewing.
- Check the cables are connected surely.
  - \* Incomplete connection causes such a trouble as the louver does not work.

### For wireless remote controller

For details of installation, refer to the Installation Manual attached to the wireless remote controller kit (sold separately).

### NOTE

After confirmation of the above items, hand a set of this manual, manuals for the indoor unit, manual for products sold separately to the customer.  
For cleaning of the filter, ask the maintenance professional.

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