## Installation manual

# **Variable Refrigerant Flow System**

Panel for Mini 4-Way Cassette Indoor Unit

Model Numbers: TVEPANPC4SUSET, PNL4WAYMINI23A

#### A SAFETY WARNING

Only qualified personnel should install and service the equipment. The installation starting up, and servicing of heating, ventilating, and air-conditioning equipment can be hazardous and requires specific knowledge and training. Improperly installed, adjusted or altered equipment by an unqualified person could result in death or serious injury. When working on the equipment, observe all precautions in the literature and on the tags, stickers, and labels that are attached to the equipment.

**WARNING** 

Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.



Indicates a potentially hazardous situation which, if not avoided, could result in minor or moderate injury. It could also be used to alert against unsafe practices.

Indicates a situation that could result in equipment or property-

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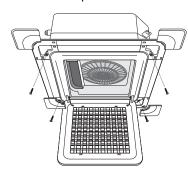
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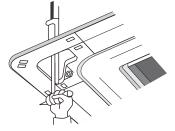


- 7. Tighten them evenly to eliminate gaps between panel and ceiling.
- 8. Replace the corners on the panel.

6. Install the four screws into the panel.



Note: You can adjust the height of three of the corners as shown in the illustration, but you cannot adjust the corner with the piping connections.



#### **Important Environmental Concerns**

Scientific research has shown that certain man-made chemicals can affect the earth's naturally occurring stratospheric ozone layer when released to the atmosphere. In particular, several of the identified chemicals that may affect the ozone layer are refrigerants that contain Chlorine, Fluorine and Carbon (CFCs) and those containing Hydrogen, Chlorine, Fluorine and Carbon (HCFCs). Not all refrigerants containing these compounds have the same potential impact to the environment. Trane advocates the responsible handling of all refrigerantsincluding industry replacements for CFCs such as HCFCs and HFCs.

#### Important Responsible Refrigerant Practices

Trane believes that responsible refrigerant practices are important to the environment, our customers, and the air conditioning industry. All technicians who handle refrigerants must be certified. The Federal Clean Air Act (Section 608) sets forth the requirements for handling, reclaiming, recovering and recycling of certain refrigerants and the equipment that is used in these service procedures. In addition, some states or municipalities may have additional requirements that must also be adhered to for responsible management of refrigerants. Know the applicable laws and follow them.

#### **WARNING**

### **Personal Protective Equipment Required!**

Installing/servicing this unit could result in exposure to electrical, mechanical and chemical hazards. Before installing/servicing this unit, technicians MUST put on all Personal Protective Equipment (PPE) recommended for the work being undertaken. ALWAYS refer to appropriate MSDS sheets and OSHA guidelines for proper PPE. When working with or around hazardous chemicals, ALWAYS refer to the appropriate MSDS sheets and OSHA guidelines for information on allowable personal exposure levels, proper respiratory protection and handling recommendations. If there is a risk of arc or flash, technicians MUST put on all necessary Personal Protective Equipment (PPE) in accordance with NFPA70E for arc/flash protection PRIOR to servicing the unit. Failure to follow recommendations could result in death or serious injury.

### **A** WARNING

#### Proper Field Wiring and Grounding Required!

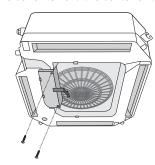
as described in NEC and your local/state electrical codes. Failure to follow code could result in death or serious injury.



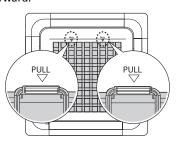
Use the 4 screws (type M5XL35) that are provided with the panel or any M5 screw that is at least 0.78 in. (20 mm) long and has a flat washer.



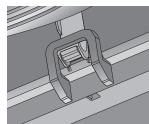
- 1. Loosen the screws to the cover of the indoor unit electrical component
- 2. Slide the cover toward the center and down to remove it.



3. Open the grill by locating the two hooks at the top of the grill and pulling

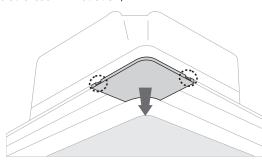


4. Using the hooks on either side of the indoor unit, attach the panel to the



To avoid damage to wiring, handle the corner with the digital display carefully.

5. Detach the panel corners by using the two grooves on each panel corner (see circled areas in illustration).

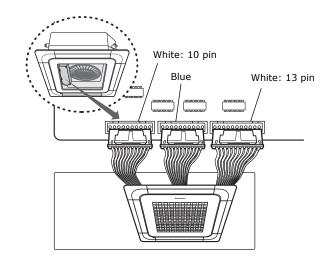




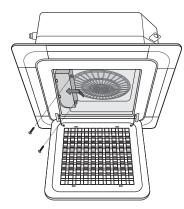
All field wiring MUST be performed by qualified personnel. Improperly installed and grounded field wiring poses FIRE and ELECTROCUTION hazards. To avoid these hazards, you MUST follow requirements for field wiring installation and grounding



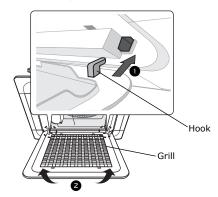
9. Connect the three panel cables into the proper sockets inside the indoor electrical component box. Note the different number of pins on the white connectors. .



10. Close the electrical component box cover and tighten the screws.

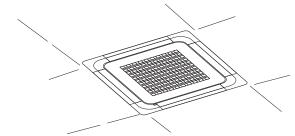


11. Close the grill (attach it first if it has been detached). Ensure that the hooks on the back of the grill fit properly into the grooves on the panel  $(\bullet)$ . Then push the panel closed  $(\bullet)$ .

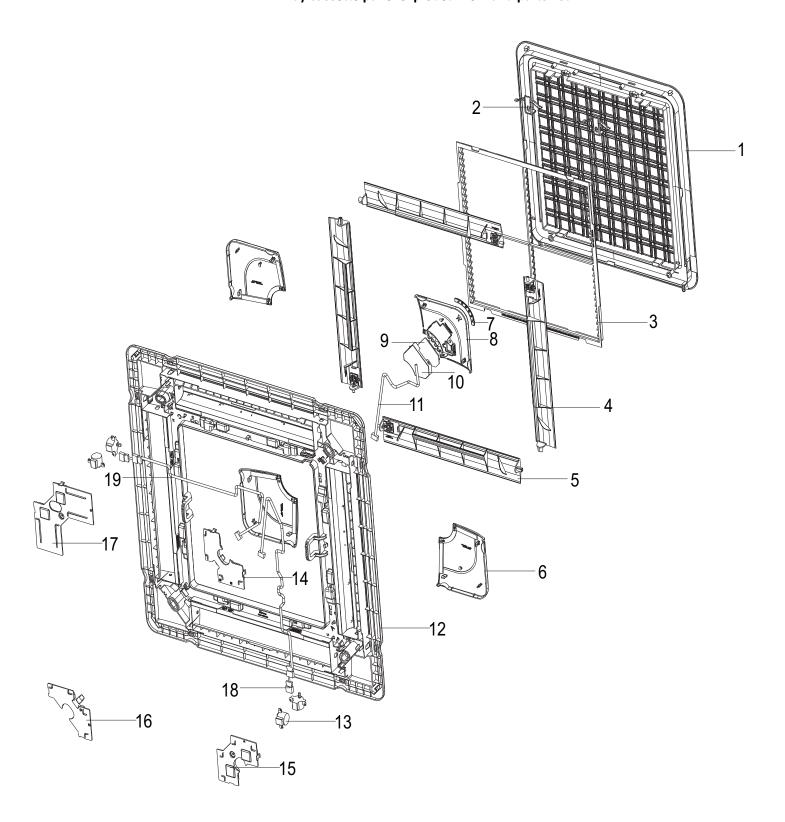


#### 12.Check the following:

- Ensure that the screws have been tightened adequately so that there are no leaks between ceiling and panel.
- Ensure that the discharge vents are not blocked.
- If the angle on the air flow blades was inadvertently changed during installation or maintenance, cycle power to the unit to re-align the blades and restore them to their proper angle.



# Mini 4-way cassette panel exploded view and parts list



1	Filter
2	Lever-clamp
3	Panel grill stripe
4	Assy Blade-A
5	Assy Blade-B
6	Assy cover-corner
7	Window LED
8	Cover-display
9	Assy PCB panel-display
10	Cover-PBA
11	Assy connector wire-4way display
12	Panel-base
13	Motor step
14	Assy cover-bottom A
15	Assy cover-bottom B
16	Assy cover-bottom C
17	Assy cover-bottom D
18	Assy connector wire-louver
19	Assy connector wire-louver

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