

Installation Manual for T-Tube Connecting Kit (for 4-Way Cassette Type)

Model	TKCI-160K
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NOTE:

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

IMPORTANT NOTICE:

- Johnson Controls-Hitachi Air Conditioning pursues a policy of continuous improvement in design and performance of products. We reserve the right to vary specifications without notice.
- No part of this manual may be reproduced without Johnson Controls-Hitachi Air Conditioning' written permission.
- Keep this manual for future reference.
- Johnson Controls-Hitachi Air Conditioning cannot anticipate every possible circumstance that might involve a potential hazard.
- This kit is designed for a combination of Johnson Controls-Hitachi Air Conditioning air conditioners. Do not use this kit by itself or in combination with other companies' air conditioners.
- Perform a test run after installation to check for abnormalities.
- Signal words are used to identify levels of hazard seriousness. Definitions for identifying hazard levels are provided below with their respective signal words.

▲ DANGER

: Indicates a hazardous situation that, if not avoided, will result in death or serious injury.

▲ WARNING

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

▲ 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 contractor.

Installation Restriction

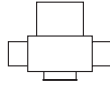
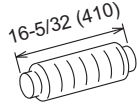
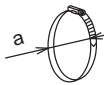
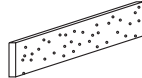
- This kit must be used with a Fresh Air Intake Kit.
- This kit cannot supply fresh air by itself. Therefore, connect a duct and supply fresh air from the dedicated outside air system or the duct fan.
- When using this kit with the dedicated outside air system, the maximum fresh air intake volume should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

CAUTION

- Install the T-tube flange and flexible duct in a compartment handling air for circulation through a duct supplying only one room.

1. Factory-Supplied Accessories

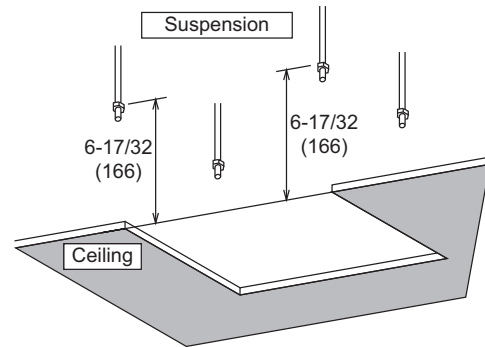
Unit: inch (mm)

No.	Accessory		Qty.	
①	T-Tube Flange		1	
②	Flexible Duct		2	
③	Plate Band		$\phi 2-15/16$ ($\phi 75$)	4
			$\phi 5-29/32$ ($\phi 150$)	1
④	Insulation		1	

2. Mounting Indoor Unit

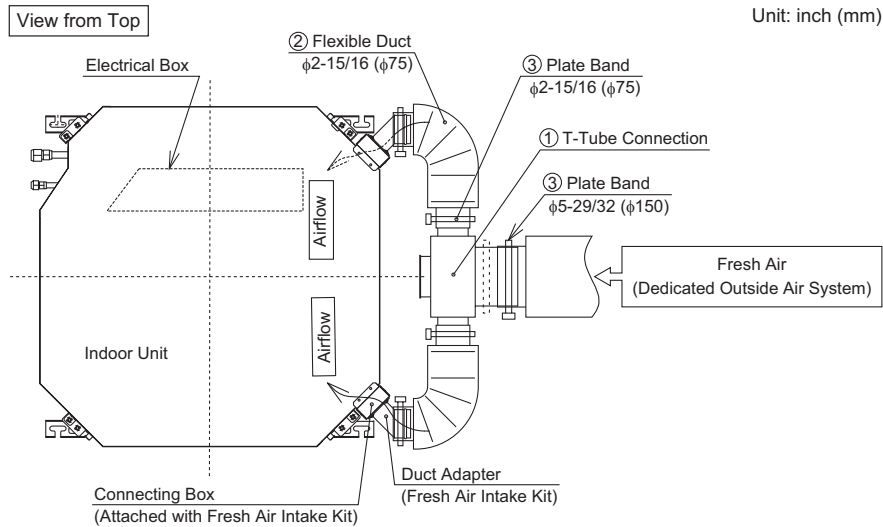
- (1) Provide a distance as shown in the figure at the right.
- (2) Suspend the indoor unit with a suspension bolt and attach the intake box of the fresh air intake kit to the indoor unit by referring to the "Installation Manual" for the indoor unit and the fresh air intake kit.
- (3) Attach the connecting box of the fresh air intake kit to the intake box by referring to the "Installation Manual" for the fresh air intake kit.

Unit: inch (mm)



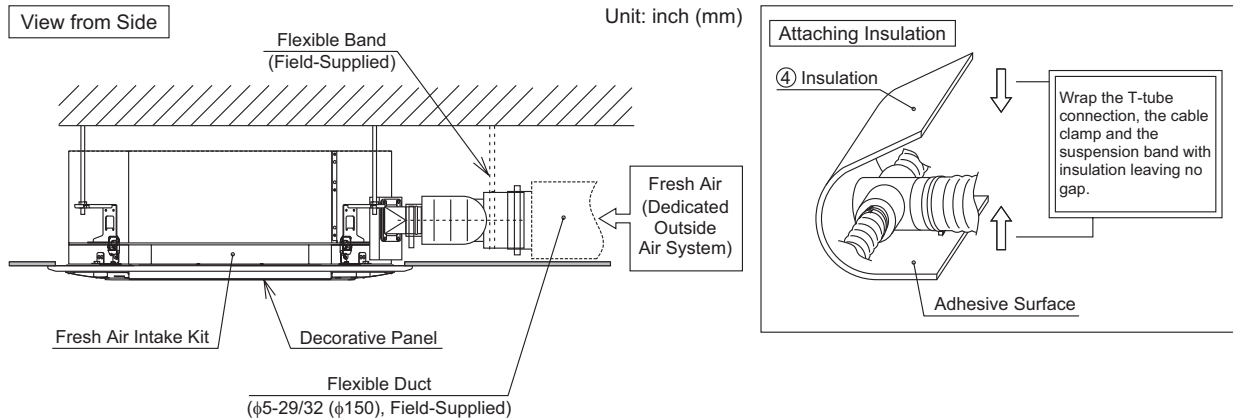
3. Attaching T-Tube Connecting Kit

- 1 Connect the flexible ducts ($\phi 2-15/16$ inch ($\phi 75$ mm)) to the duct adapters ($\phi 2-15/16$ inch ($\phi 75$ mm)) by tightening the plate bands (for $\phi 2-15/16$ inch ($\phi 75$ mm)).
- 2 Connect both joints of T-tube connection to the flexible ducts ($\phi 2-15/16$ inch ($\phi 75$ mm)) by tightening the plate bands (for $\phi 2-15/16$ inch ($\phi 75$ mm)).
- 3 Attach the suspension band (field-supplied) and connect the flexible duct for the dedicated outside air system ($\phi 5-29/32$ inch ($\phi 150$ mm), field-supplied) by tightening the plate band ($\phi 5-29/32$ inch ($\phi 150$ mm)).
- 4 Attach the insulation according to the figure at the lower right. When attaching, wrap the T-tube connection, the plate band and the suspension band (field-supplied) with insulation to cover without leaving a gap.



CAUTION

- If there is not a service access door for the T-tube connecting kit, attach it before installing the decorative panel. The T-Tube Connecting Kit cannot be attached after installing the decorative panel.
- Condensation may occur if the insulation is attached, leaving a gap.
- Securely attach the suspension band (field-supplied) making sure not to apply excessive force to the connecting box. If excessive force is applied to the connecting box, air leakage and condensation may occur because of a gap between the connecting box and the duct adapter.
- Wind aluminum tape (field-supplied) around the duct connection to prevent air leakage.



CAUTION

< Duct Connecting >

- Do not perform the ducting work as shown below.

Sharp Bend



Incorrect

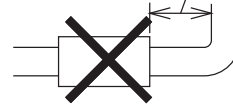
Repeated Bend



Incorrect

Bend near the outlet of dedicated outside air system.

Shorter than 5-29/32inch (150mm)
(for ϕ 5-29/32inch (ϕ 150mm) flexible duct)



Incorrect

- Insulate the duct to prevent condensation.
- If the duct is passed through a fire retarding section such as fireproof construction, a damper shall be installed or the structure will be without fire protection.
- If the metal duct is run through a wall made of wood, insulate between the duct and the wall.