

Daikin Air Conditioners Fresh Air Intake Kit Installation manual

KDDQ55C140

READ THESE INSTRUCTIONS CAREFULLY BEFORE INSTALLATION.
KEEP THIS MANUAL IN A HANDY PLACE FOR FUTURE REFERENCE.

⚠ Caution

Before starting the installation work, carefully read the following safety precautions and observe them to ensure safety during work.

- Make sure to use the attached or specified components to install the products. Otherwise, it may cause air leak or the product may fall.
- After installation, check whether there is no abnormality during the trial operation.

REMARKS

- This kit can be installed to the Ceiling Mounted Cassette Type Air Conditioner (Round-flow type).
- Before installation, make sure the indoor unit name.
- Refer to the installation manuals for the indoor unit and the decoration panel.
- In case of mounting a duct fan, make sure to use a wiring adapter for electrical appendices and link with the indoor unit fan.
- Be sure to install the attached sensor assy.

Combination table

| Kit name | Applicable indoor units | |
|------------|-------------------------|--|
| KDDQ55C140 | SPLIT | FCQ35·50·60·71·100·125·140C7VEB FCQH71·100·125·140C7VEB |
| | VRV | FXFQ20·25·32·40·50·63·80·100·125P7VEB |


Max fresh air intake volume table

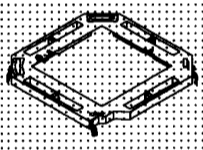
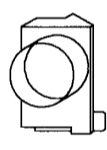
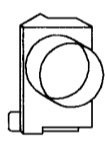
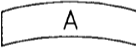
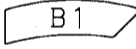


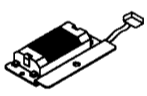

- The maximum intake air flow volume is following table. If the intake air flow volume is too large, the operating sound may rise or detection of the indoor unit suction temperature may be affected.



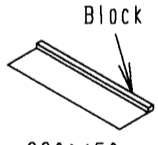
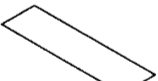

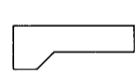


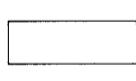
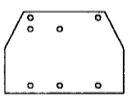
| FCQ~C7VEB | 35 | 50 | 60 | 71 | 100 | 125 | 140 |
|--|-----|-----|-----|-----|-----|-----|-----|
| Max fresh air intake volume (m ³ /min.) | 2.5 | 2.5 | 2.7 | 3.2 | 4.3 | 4.3 | 4.3 |

| FCQH~C7VEB | 71 | 100 | 125 | 140 |
|--|-----|-----|-----|-----|
| Max fresh air intake volume (m ³ /min.) | 4.0 | 4.3 | 4.3 | 4.3 |

| FXFQ~P7VEB | 20 | 25 | 32 | 40 | 50 | 63 | 80 | 100 | 125 |
|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Max fresh air intake volume (m ³ /min.) | 2.5 | 2.5 | 2.5 | 2.7 | 3.1 | 3.5 | 4.3 | 4.3 | 4.3 |

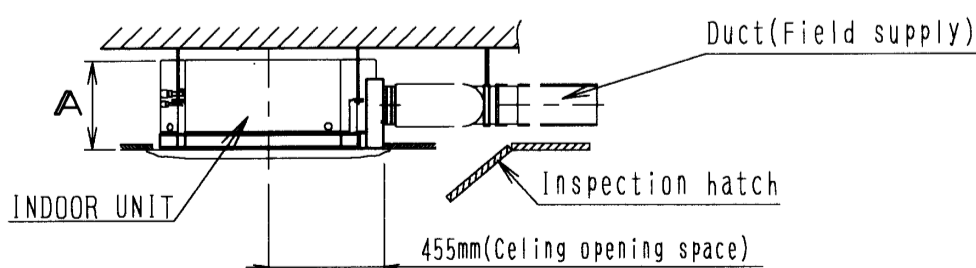
Components Check if the following parts are included with your kit.
Shaded part  is separately packed.

| Name | ① Suction Chamber | ② Connecting Chamber (Right) | ③ Connecting Chamber (left) | ④ Sealing material A | ⑤ Sealing material B | ⑥ Desiccant tape | ⑦ Screw | ⑧ Sensor Assy | ⑨ Clamp |
|----------|---|---|---|--|---|---|--|---|---|
| Shape |  |  |  |  |  |  |  M5×12 |  |  |
| Quantity | 1 pcs. | 1 pcs. | 1 pcs. | 1 pcs. | 1 pcs. | 2 pcs. | 4 pcs. | 1 pcs. | 2 pcs. |

| Name | ⑩ Screw (for sensor) | ⑪ Partition plate | ⑫ Desiccant tape | ⑬ Desiccant tape | ⑭ Sealing material | ⑮ Desiccant tape | ⑯ Desiccant tape | ⑰ Desiccant tape | ⑱ Thermal insulation | ⑲ Thermal insulation |
|----------|--|---|--|---|---|---|---|--|---|---|
| Shape |  M4×12 |  |  Block 330×50mm |  330×50mm |  35×52×t15mm |  |  |  10×87mm |  80×260mm |  |
| Quantity | 1 pcs. | 1 pcs. | 1 pcs. | 1 pcs. | 1 pcs. | 1 pcs. | 1 pcs. | 1 pcs. | 1 pcs. | 1 pcs. |

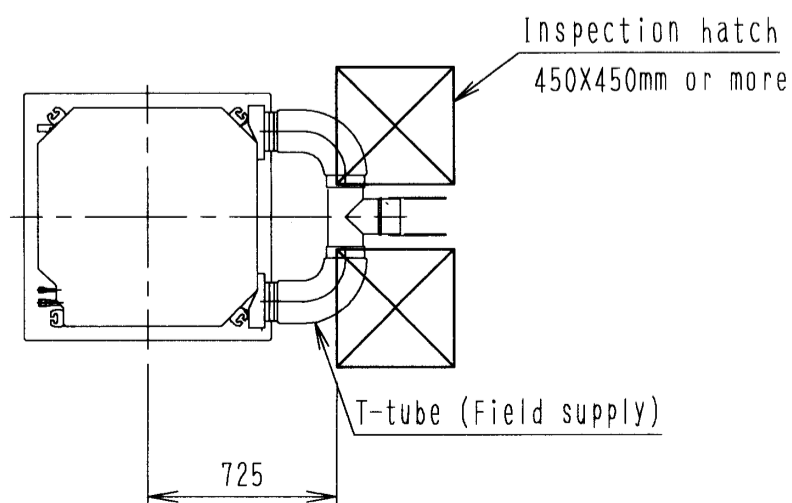
1 Selection of Location and Access Door

1. Refer to the following table.



| Indoor unit | A (mm) |
|---|--------|
| FCQ35·50·60·71C7VEB FXFQ20·25·32·40·50·63P7VEB | 264 |
| FCQ100·125·140C7VEB FCQH71C7VEB FXFQ80·100P7VEB | 306 |
| FCQH100·125·140C7VEB FXFQ125P7VEB | 348 |

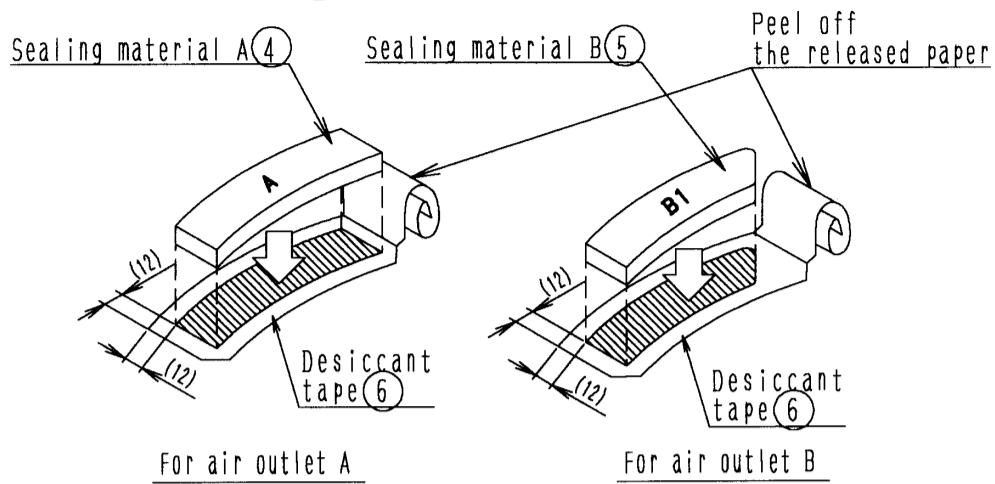
2. Install inspection hatch (Either one of inspection hatches must be installed.)



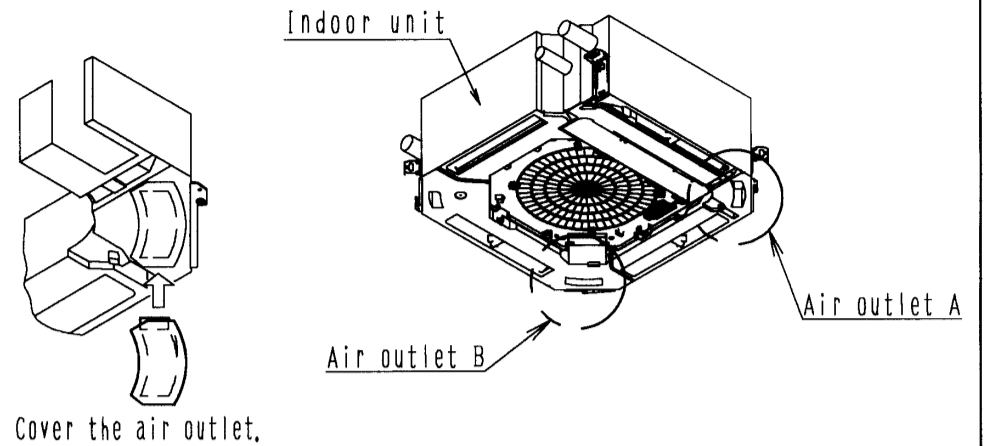
2 Preparation of a indoor unit

Make sure to turn off the power supply before remove the control box lid.
Remove the decoration panel, when the panel is already installed.

(1) Stick the sealing material A(4) and B(5) to the desiccant tape(6).



(2) Cover the air outlet of indoor unit by the left parts.



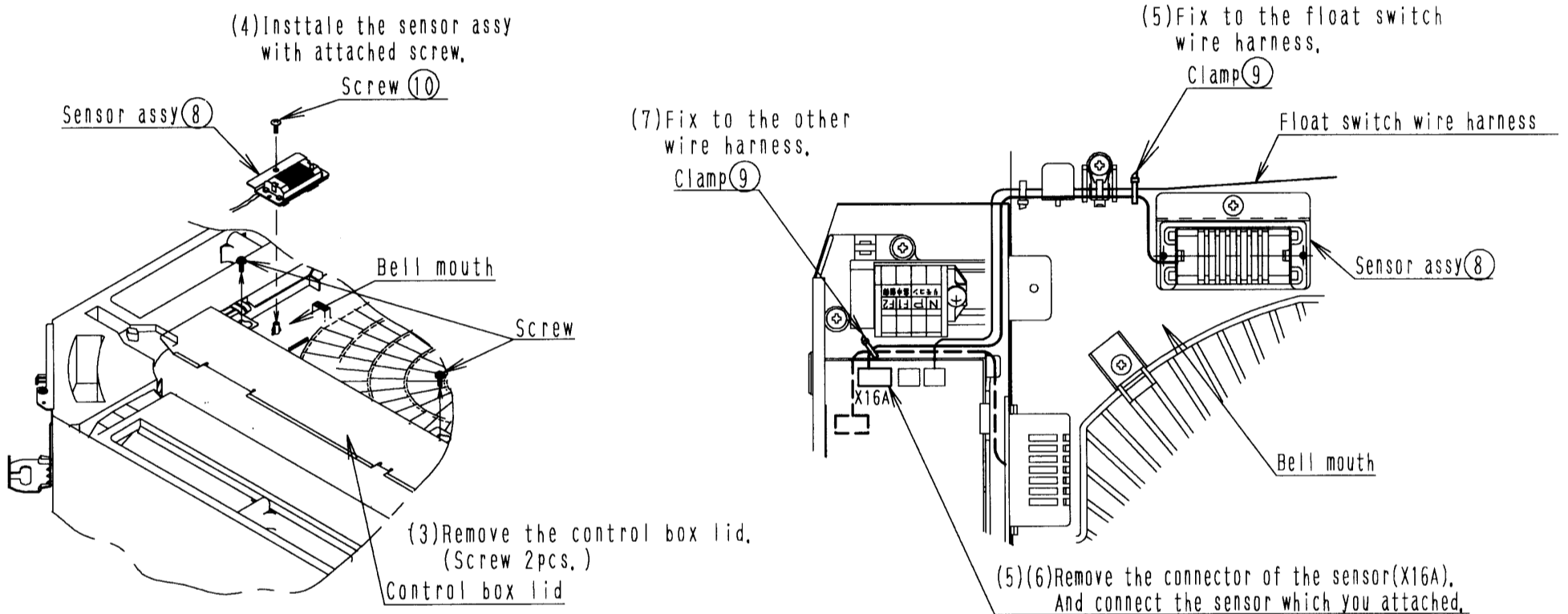
(3) Refer to the installation manual of the indoor unit, remove the control box lid of indoor unit.

(4) Install the sensor assy with screw(10) to the indoor unit through the bell mouth.
(Don't pinch the float switch wire harness.)

(5) Remove the connector of the sensor(X16A) that already attached on printed circuit board.

(6) Connect the sensor which you attached to the indoor unit, to the connector(X16).

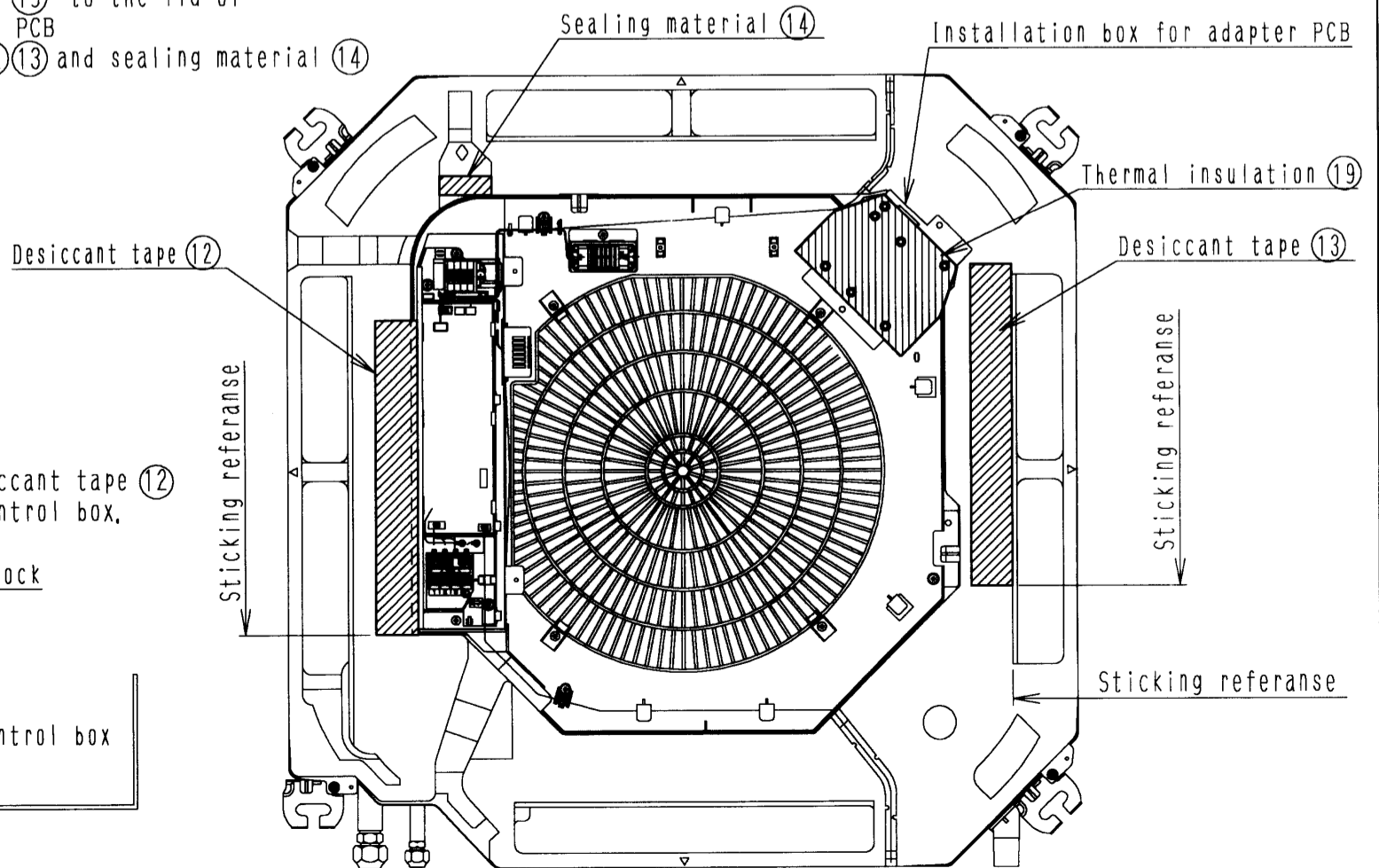
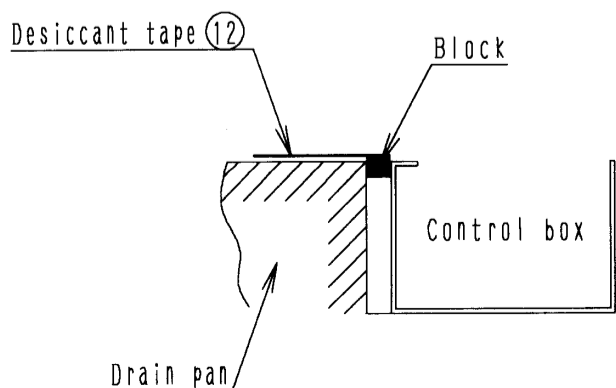
(7) Fix the wire harness by attached clamps(9) to the other wire harness.



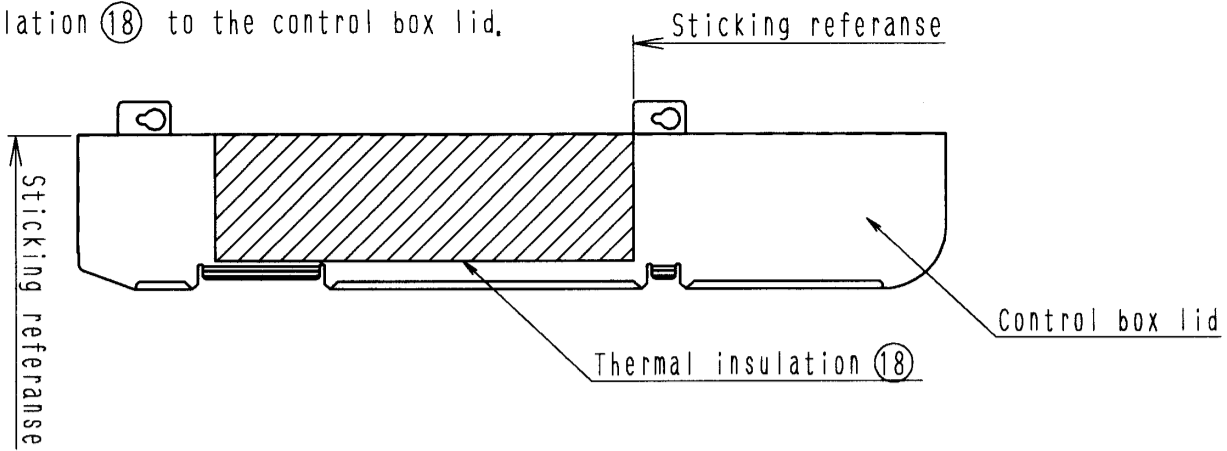
(8) Stick the thermal insulation(19) to the lid of installation box for adapter PCB

(9) Stick the desiccant tapes(12)(13) and sealing material(14) to the indoor unit.

Push the block part of the desiccant tape(12) in between a drain pan and a control box.

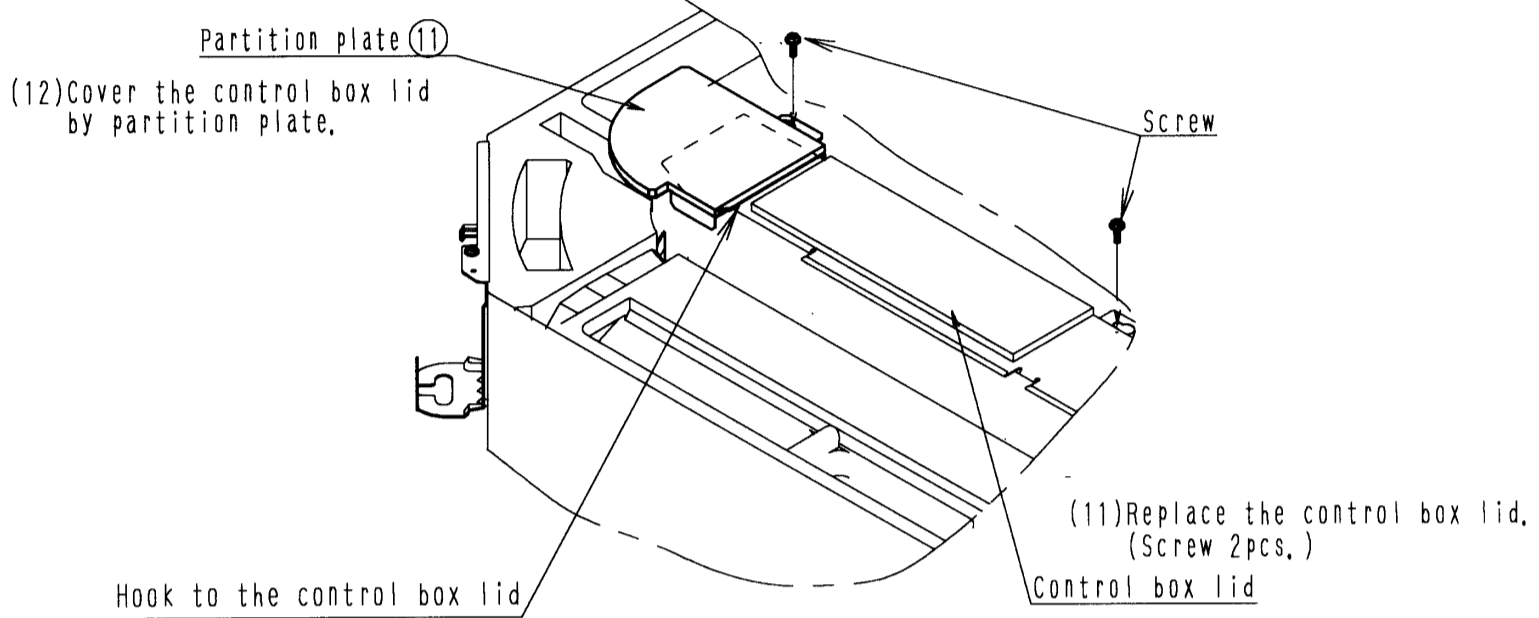


(10) Stick the thermal insulation (18) to the control box lid.



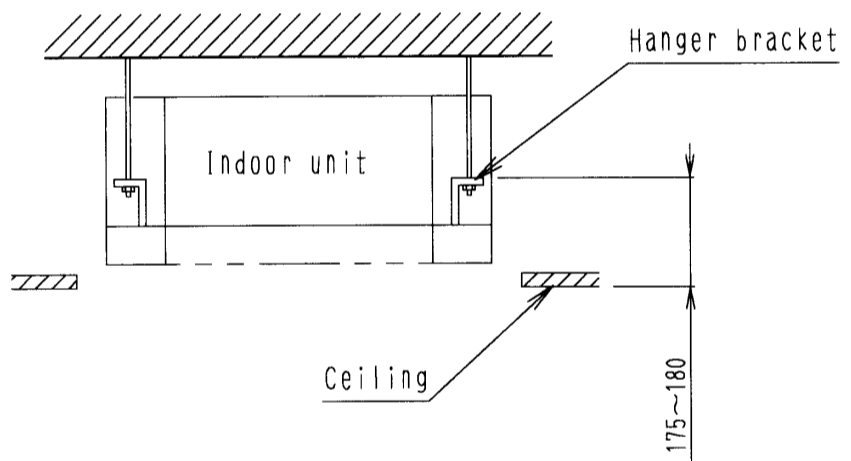
(11) After finish wiring, replace the control box lid refer to the installation manual of the indoor unit.

(12) Cover the control box lid by partition plate (11) and fix by the lid's screw.
(Hook the partition plate to the control box lid.)



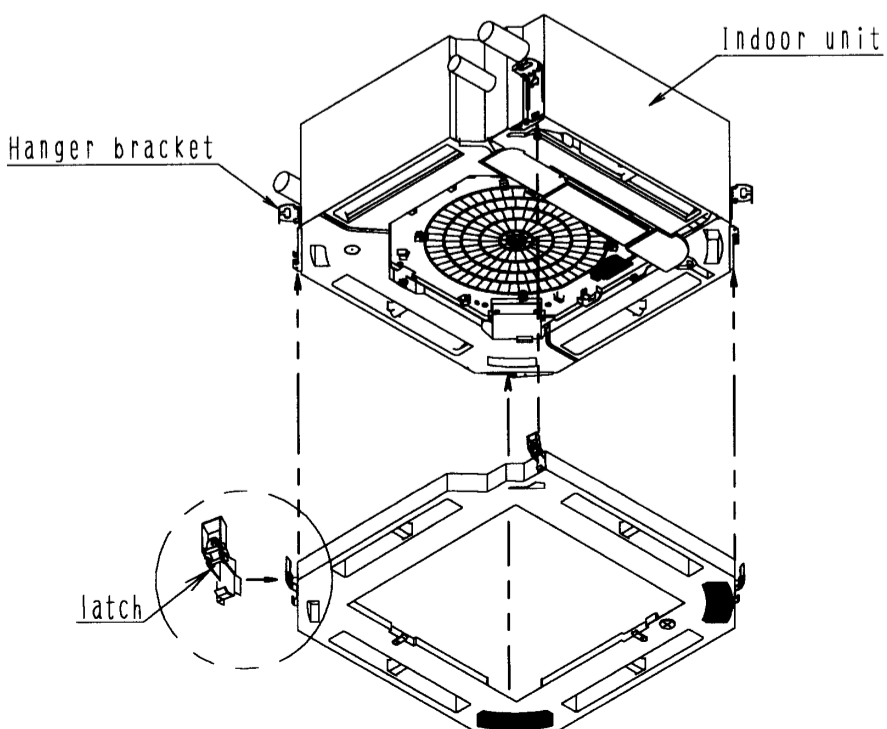
3 Install the indoor unit

Install the indoor unit.
Refer to the installation manual of the indoor unit.
(For the height of the unit, refer to the drawing right.)

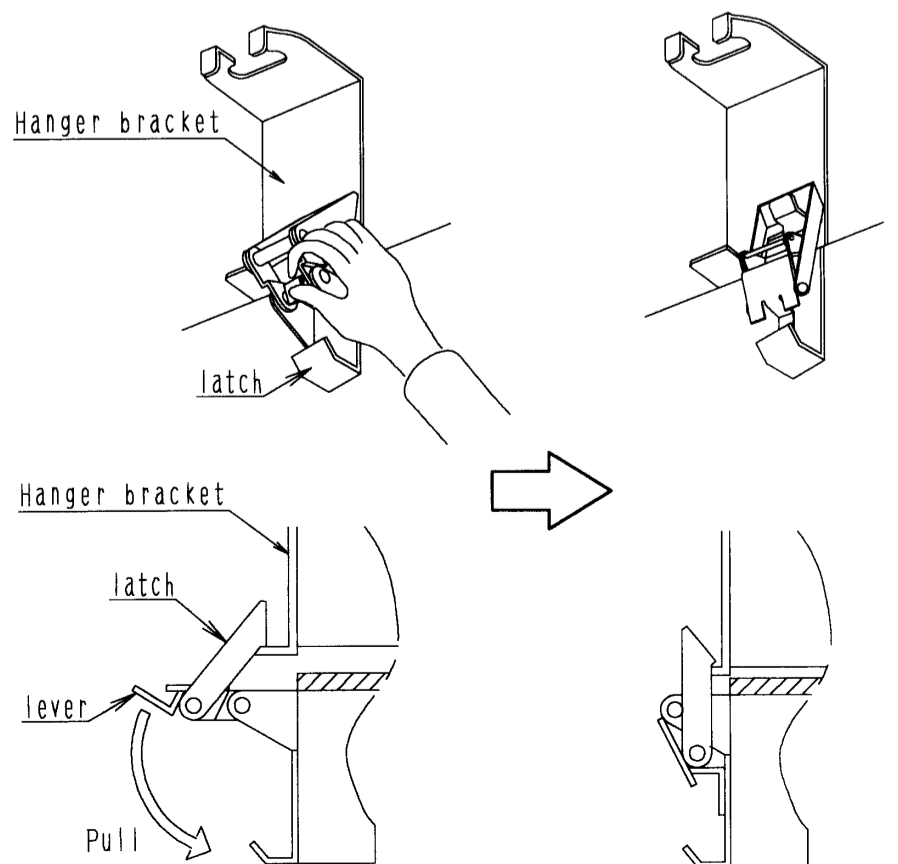


4 Install the Suction chamber

(1) Temporary install the suction chamber (1) to the indoor unit by hanging the latches to the hanger brackets of indoor unit. (4 portions)



(2) Pull the lever parts of latches downward and fix suction chamber.

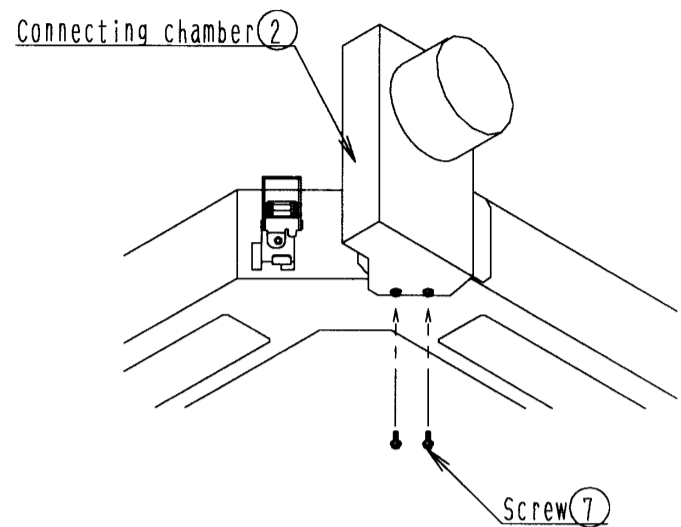
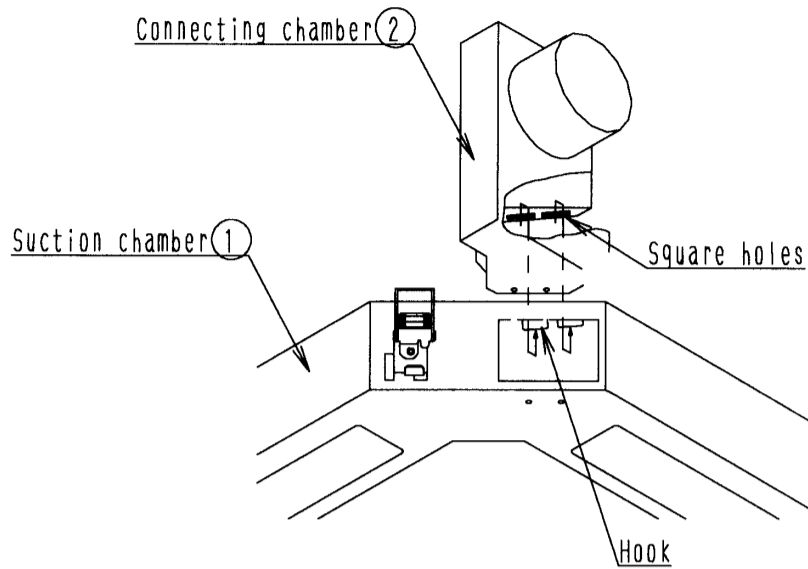


5 Install the connecting chamber

Drawing below is explanation of the installation method of the connecting chamber (right) ②.
About the installation method of the connecting chamber (left) ③ it is the same as right.

- (1) Thread the hooks of the suction chamber ① to the square holes of the connecting chamber ②.
And set the connecting chamber ② at the side of the suction chamber ①.

- (2) Fix the connecting chamber ② with attached screws ⑦.



6 Duct connection < Duct : diameter 150mm >

- (1) Connect duct to the connecting chamber.
(Insert duct to the end of the connecting chamber's tube portion.)
(2) Tie the connected portions with band and wrap with tape to prevent air leak.
(3) Insulate the duct to prevent condensate.
(4) Hang and fix the portion of a T-tube.
Otherwise, a opening is made by the dignity of a pipe between an indoor unit and suction chamber.

Caution

- Do not perform the following duct work,

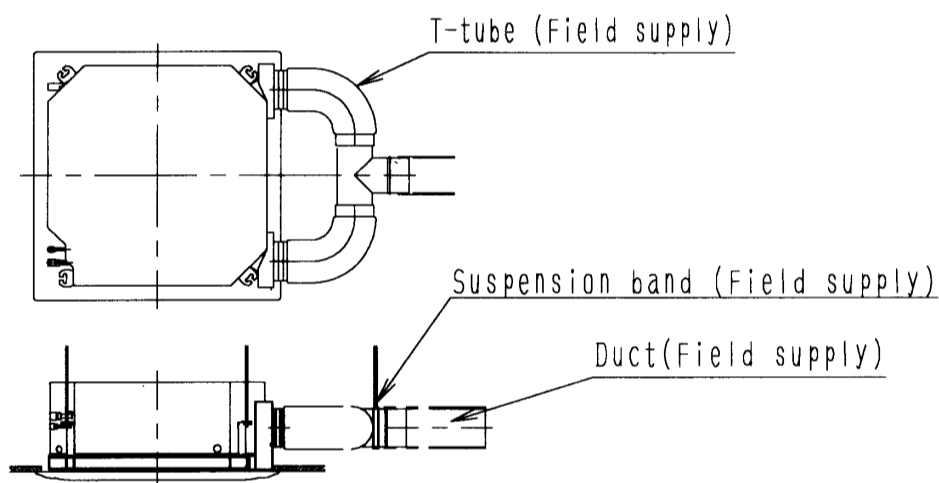
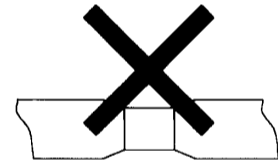
To bend excessively



To bend too many times



To reduce the diameter



Caution

- Follow the local code or regulation to install the duct.
- In case that metal duct is penetrated through wooden wall, make sure the duct and the wall are electrically insulated.
- At the outdoor side, install the duct inclined downwardly so that the rain will not get into the duct. (Inclination 1/100 to 1/50)
- Where it contact the outside air, make sure to install screen to avoid birds, small animals or insects getting inside the duct.
- Where it contact the outside air, make sure to install air filter to protect heat exchanger for indoor unit.

7 Install the decoration panel

- (1) Stick desiccant tapes ⑮⑯⑰ to the decoration panel.

- (2) Install the decoration panel.

- Refer to the installation manual of the decoration panel.
- Thread a wire harness of swing motor through the hole of suction chamber.

