

Installation Manual for Motion Sensor Kit (for 1-Way Cassette Type)

Model	SOR-NES
-------	---------

NOTE:

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

Read this Installation Manual carefully before installing this motion sensor kit.

This is the Installation Manual for the motion sensor kit. Read the Installation and Maintenance Manual for the indoor unit as well.

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 motion sensor 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.
- This manual gives a common description and information for this motion sensor kit, as well as for other models, which you may operate.
- This manual should be considered as a permanent part of the air conditioning equipment and should remain with the air conditioning equipment. Forward this information to the building owner and request that they maintain all the equipment manuals.

1. Introduction

- This product is designed for standard air conditioning only.
Do not use this product for other purposes.
- Do not install the unit in the following places. It may cause a fire, damage, corrosion or failure.
 - * Places where a fire, oil, steam or powder may directly enter the unit such as right above a kitchen.
 - * Places where oil (including machinery oil) may be present.
 - * Places where sulfide gas coalesce, such as hot springs.
 - * Places where inflammable gas may be generated or flow.
 - * Regions where dense, salt-laden airflow is heavy, such as coastal regions.
 - * Regions where the air quality is of high acidity or alkalinity.
 - * Areas where harmful gases are generated from decomposition.
- Pay attention to the following points when installing the unit in a hospital or other facility where nearby electromagnetic waves are generated from medical devices.
 - * Do not install the unit in a place where electromagnetic waves can directly radiate into the electrical box, controller cable or controller.
 - * Install the unit at least 9.8 ft. (3m) away from devices generating electromagnetic waves, such as a radio.
- Do not install the unit in a location where animals and plants can come into direct contact with the outlet air stream. It could adversely affect animals and plants.
- Do not install the motion sensor kit in the following places. It may cause misdetection, undetectable motion or the deterioration of the sensor.
 - * Places where ambient temperature change is drastic.
 - * Places where excessive force or vibration is applied to the sensor.
 - * Places where static electricity or electromagnetic waves may generate.
 - * Places where there is interference for infrared light such as mist in a detecting area.
 - * Places where the lens for the sensor is exposed to high temperature and humidity for a long period of time.
 - * Places where fluid and corrosive gases exist.
 - * Places where direct light such as sunlight or headlights affect the sensor.
 - * Places where hot air, for example from a heater, directly affects the sensor.
 - * Places where the airflow returns to the sensor by bouncing off objects.
 - * Places where blower devices such as ceiling fans or ventilating fans affect the airflow from the indoor unit.
 - * Places where weather affects the surface of the sensor.
 - * Places where the lens surface may smudge or be damaged by dust.

Be aware that the detecting function will be decreased if the lens has smudges.
If this happens, wipe off smudges using a cotton swab soaked in alcohol (isopropyl alcohol is recommended.) or a soft cloth. (When wiping off smudges on the sensor lens, do not apply excessive force. If excessive force is applied, the resin lens may be damaged leading to malfunctions such as misdetection or undetectable motions.)

Installation

⚠ WARNING

- Correctly perform the installation work referred to this "Installation Manual".
If the installation is not completed correctly, there may be an injury as a result of the motion sensor kit falling.
- Do not install the motion sensor kit where flammable gases may generate or enter.
- Turn OFF the power supply completely before performing the installation work and the electrical wiring work for the motion sensor kit. Not doing so may cause an electric shock.

⚠ CAUTION

- Do not apply excessive force when removing the side pocket cover. Otherwise, it may cause damage to the plastic hook, or may result in injury.
- Hold the decorative panel securely with your hands to prevent it from falling when it is removed.

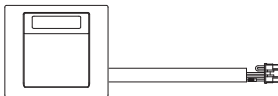


Electrical Work

⚠ WARNING

- Correctly perform the electrical wiring work.
If the electrical work is not completed correctly, heat generation at the connection, a fire or an electric shock may occur.
- Make sure that the electrical wires are securely fixed so that an external force is not applied to the terminal connections of the wirings. If securing is not completed correctly, there may be heat generation or a fire.
- Turn OFF the power supply completely before performing the installation work and the electrical wiring work for the motion sensor kit. Not doing so may cause an electric shock.

2. Before Installation Work

Check to ensure that the following accessories are packed with the motion sensor kit.

No.	Accessory	Qty.	Remarks
①	Motion Sensor Kit 	1	with Connecting Cable
②	Clamp 	3	for Fixing Cable
③	Cord Band 	3	for Fixing Cable
④	Installation Manual	1	-

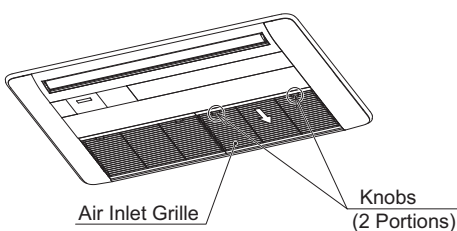
3. Installation

NOTICE

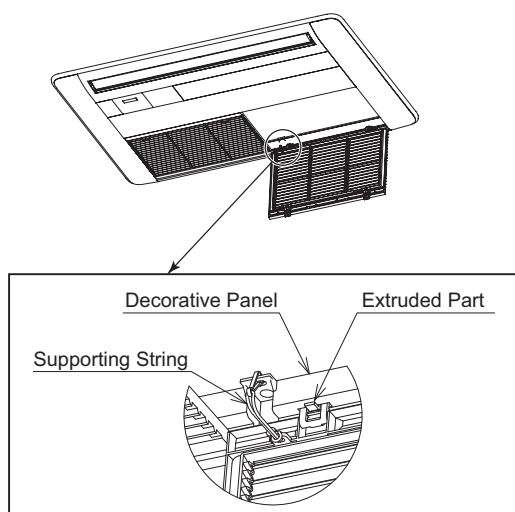
- Do not run the connecting cable for the motion sensor kit and the power supply wiring (208/230V) in parallel. It may cause a malfunction of the motion sensor kit from electromagnetic interference (EMI).
- When the motion sensor kit is installed along with the indoor unit, start from procedure [3].
- When the motion sensor kit is installed after the indoor unit's installation, be sure to turn off the power supply completely before starting installation.

[1] Air Inlet Grille Removal

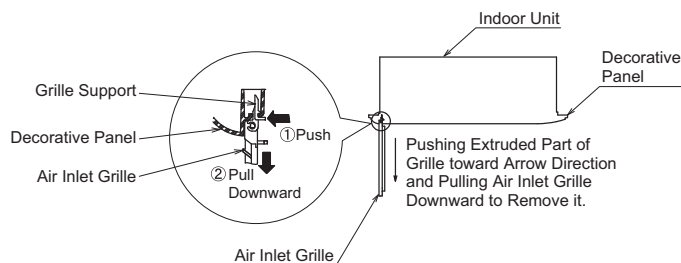
- (1) The air inlet grille can be opened by pushing the knob at the air inlet grille backward.



- (2) Remove the hook of the supporting string from the decorative panel.



- (3) Open the air inlet grille. The air inlet grille can be removed by pushing the extruded part of the grille in the direction of the arrow, and pulling the air inlet grille downward as shown in the figure at the right.



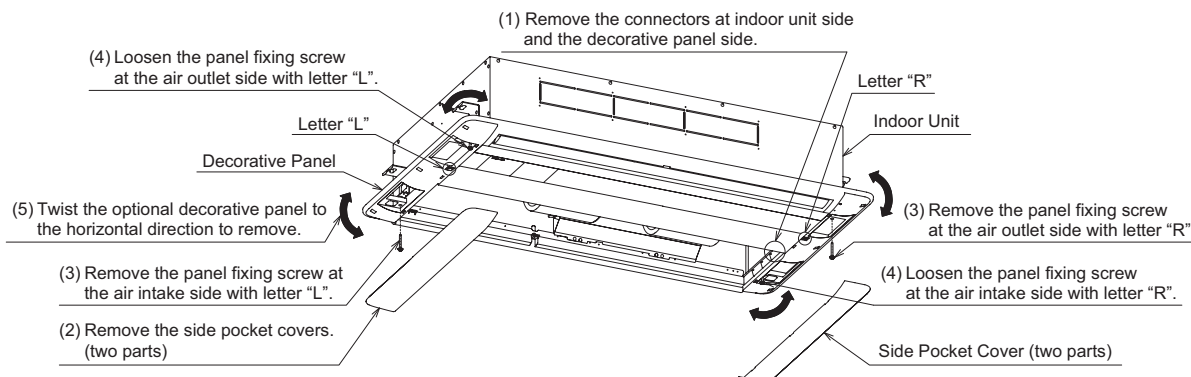
NOTICE

Be careful not to let the air inlet grille or air filter fall during removal.

2 Decorative Panel Removal

Follow the procedures from (1) to (5).

At least two personnel are required for removing.



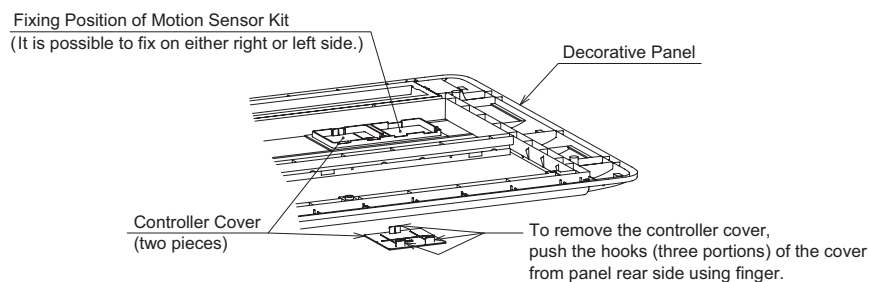
CAUTION

- Do not apply excessive force to remove the side pocket covers. Otherwise, it may cause deformation or damage to the fixing hooks of the side pocket covers, or may result in injury.
- Hold the decorative panel securely to prevent it from falling when it is removed.

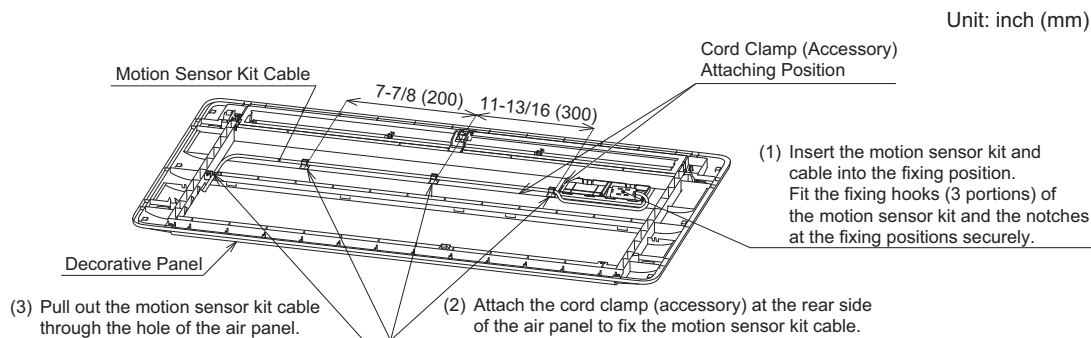
3 Controller Cover Removal

CAUTION

Do not apply excessive force to remove the controller cover. Otherwise, it may cause damage to the fixing hooks of the controller cover, or may result in injury.



- 4 Follow the procedures from (1) to (3) to install the motion sensor kit on the decorative panel.

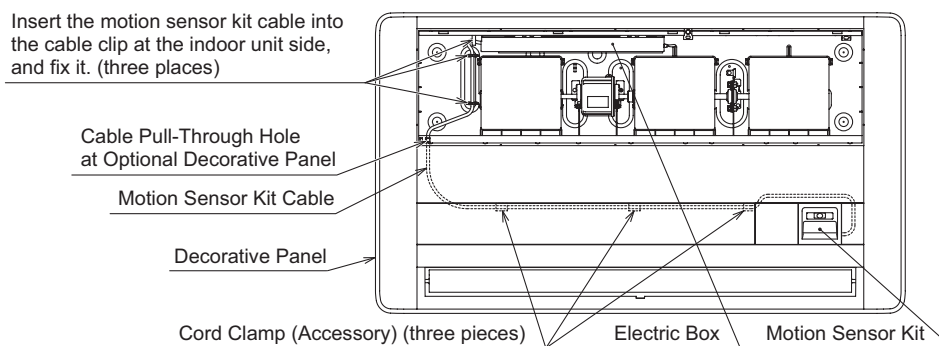


NOTICE

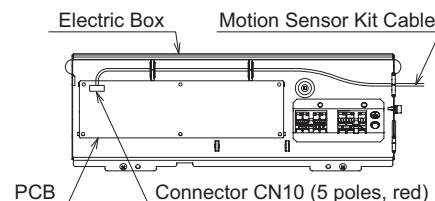
- Pay attention to the installation direction of the motion sensor kit. The number of fixing hooks of the motion sensor kit and the notches at the fixing position should match.
- Check to ensure that the motion sensor kit is installed securely.
- Be sure to attach the cord clamp (accessory) according to the required position. Otherwise, condensation may occur because of a gap between the decorative panel and the indoor unit.

- 5 Install the decorative panel to the indoor unit according to the “Installation Manual” included with the decorative panel.

- 6 Secure the motion sensor kit cable with the cord clamp of the indoor unit.



- 7 Remove the electric box cover of the indoor unit. Connect the motion sensor kit cable to the connector CN10 (5 poles, red) on the PCB as shown at the right. The DIP switch setting is not required since the motion sensor kit is automatically recognized when the power supply is turned ON.



NOTICE

- After running the sensor cords, secure the cord with a cord band and store it in the electric box.

