

# Installation Manual for Snow Protection Hood (for Outdoor Unit)

**Model: ASG-TP50LS**

This snow protection hood prevents snow from entering the outdoor unit and prevents strong winds from blowing against the heat exchanger. Be sure to read this manual carefully for correct performance before installation work.

## **IMPORTANT NOTICE:**

- Johnson Controls pursues a policy of continuous improvement in design and performance of products. We reserve the right to vary specifications without notice.
- Johnson Controls cannot anticipate every possible circumstance that might involve a potential hazard.
- No part of this manual may be reproduced without Johnson Controls' written permission.
- Keep this manual for future reference.
- Do not use this kit by itself or in combination with other companies' air conditioners. This kit is designed for a combination of Johnson Control air conditioners only.
- Use the field-supplied safety wire rope to prevent outdoor unit from overturning. Use a stay or safety wire rope to hold the snow protection hood properly to the outdoor unit against a strong wind or earthquake, for reinforced installation.
- Perform a test run after installation to check for abnormalities.
- Use signal words to identify levels of hazard seriousness. Definitions for identifying hazard levels are provided below with their respective signal words.

### **⚠ 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.

## **1. Applicable Unit**

### **NOTICE:**

The applicable outdoor unit may be different depending on the product series. Be sure to confirm with the product catalogue before installation.

Name	Hood for Left Side Air Inlet
Model	ASG-TP50LS
Applicable Outdoor Unit (Representative Model)	(H,Y)VAHP072B32S (H,Y)VAHP072B42S

## **2. Installation Work**

- (1) After the snow protection hood is installed, noise at the air outlet side may slightly increase. Consider carefully the air discharge direction when installing.
- (2) Tighten the snow protection hood securely to the top panel and side panel of the outdoor unit with the supplied screws (accessories). Not doing so may cause vibration or abnormal noise.
- (3) Avoid obstacles in the direction of air discharge from the snow protection hood to prevent short circuit or a reduction in the airflow rate.
- (4) Do not install other outdoor units in the direction of the air outlet. If the air blown out of the snow protection hood is sucked into the other outdoor unit, it may cause a malfunction of the unit.
- (5) Double-check the strength of the anchor bolts of the outdoor unit. The wind loads on the outdoor unit change by attaching the snow protection hood. The required installation strength also changes in strong wind.
- (6) After installing the snow protection hood, cooling/heating performance may be slightly affected depending on usage.

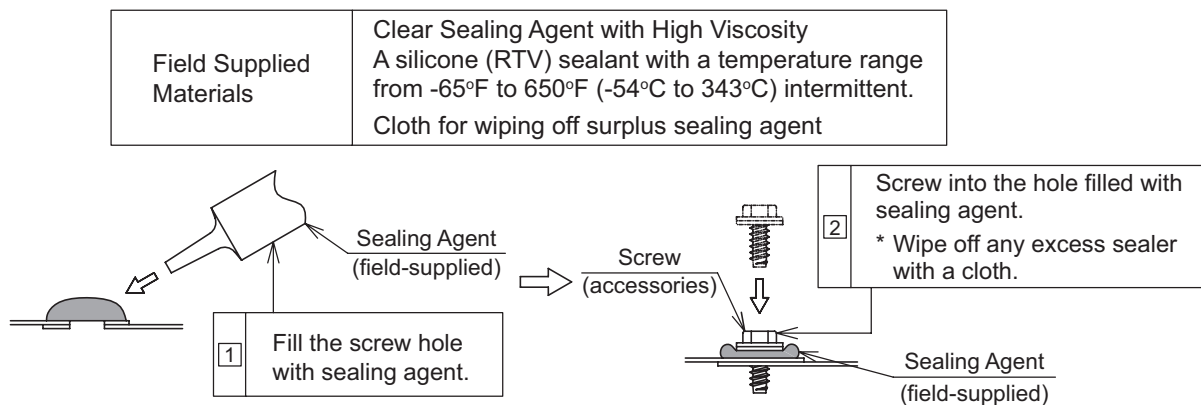
## ⚠ WARNING

To hold the snow protection hood properly to the outdoor unit against a strong wind or an earthquake, use safety wire rope reinforced installation and to prevent the outdoor unit from overturning.

## ⚠ CAUTION

- Install the snow protection hood to avoid direct facing the seasonal or strong wind.
- Protect the screws and the snow protection hood from scratches or scrapes that may cause rust. Handle with care the snow protection hood during assembly and installation.
- Apply touch-up coating or sealing (field-supplied) at the screw holes of the outdoor unit in order to prevent rusting.
- Even though the hood is stainless, salt or iron may cause rust. Be aware of this during installation or maintenance.
- The snow protection hood is heavy-weight. More than two people are required for installation. Be sure to wear personal protective equipment (PPE).

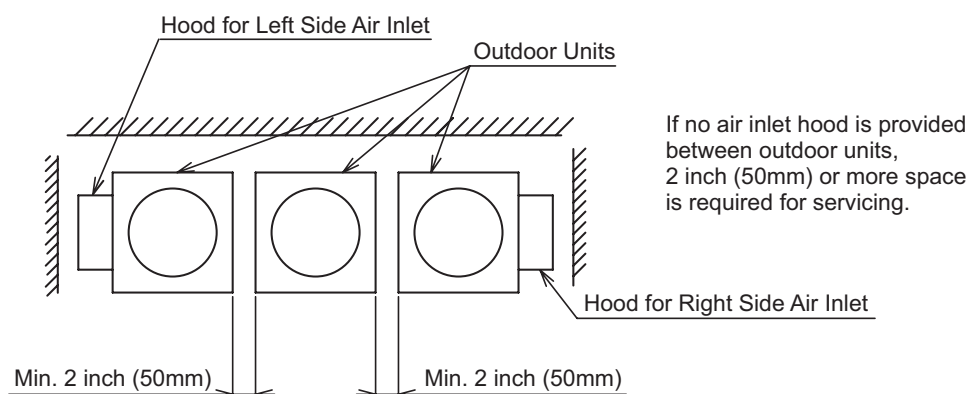
### Sealing Procedures (Example)



### 3. Selection of Installation Location

- (1) Install the outdoor unit at the suitable height in consideration of snow accumulation. Increase the base height or additionally provide the frame under the unit (higher than snow accumulation), and secure the outdoor unit securely with anchor bolts.
- (2) Install the unit at location where fallen snow from the building does not hit.
- (3) Ensure adequate service space in consideration of snow accumulation height and snow removal operation.
- (4) Clear away any obstacles. There must be no obstacles in the air discharge direction.
- (5) When installing multiple outdoor units, provide service space as shown below.



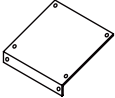




### Service Space for Multiple Outdoor Units Installation



#### 4. Before Installation

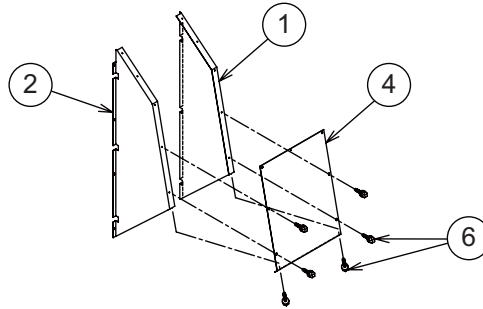
Check that all the following accessories are packed with the unit before installation.

Unit: inch (mm)

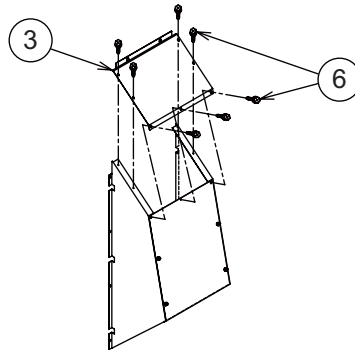
No.	Accessory		Qty.	Remarks
			ASG-TP50LS	
①	Right Side Plate		1	
②	Left Side Plate		1	
③	Faceplate (Top Side)		1	
④	Faceplate (Bottom Side)		1	
⑤	Screw (for Installation)	 M5 x 1/2L (12L) (tapping screw type B)	11 (1)	Used for installation. Use with a burred, threaded hole. (1): Spare
⑥	Screw (for Assembling)	 M5 x 9/16L (14L) (tapping screw type C)	14 (1)	Used for assembling. Use with a weld nut. (1): Spare
⑦	Self-Tapping Screw	 M4 x 1/2L (13L)	3	Used for preparing hole.

## 5. Installation Procedures

- (1) Tighten the faceplate (bottom side) (④) with the right side plate (①) and left side plate (②) together (six places) by using the assembly screws (⑥).

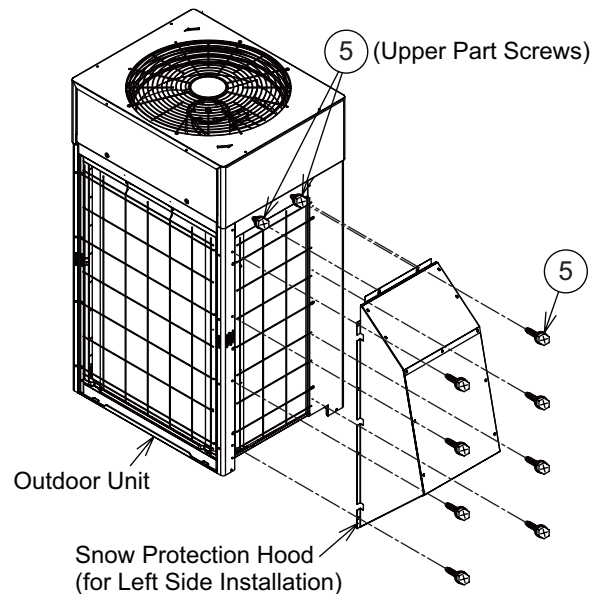
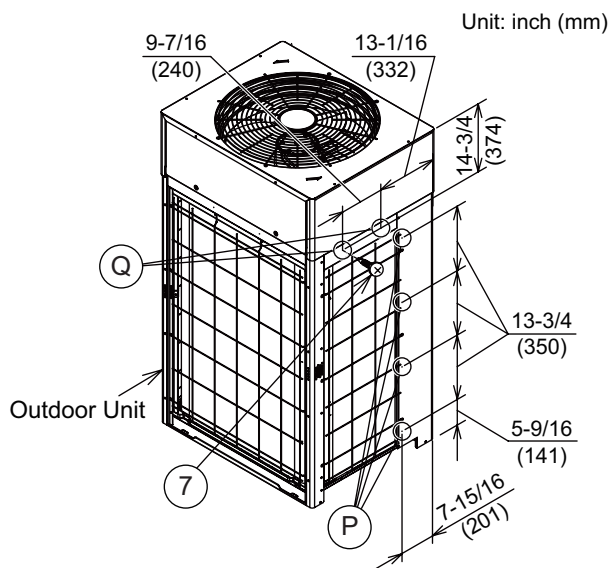


- (2) Tighten the faceplate (top side) (③) (seven places) by using the assembly screws (⑥).



- (3) Prepare holes using self-tapping screw (⑦) at the indentations ① (four places) and part ② (two places) as shown in the bottom left figure.

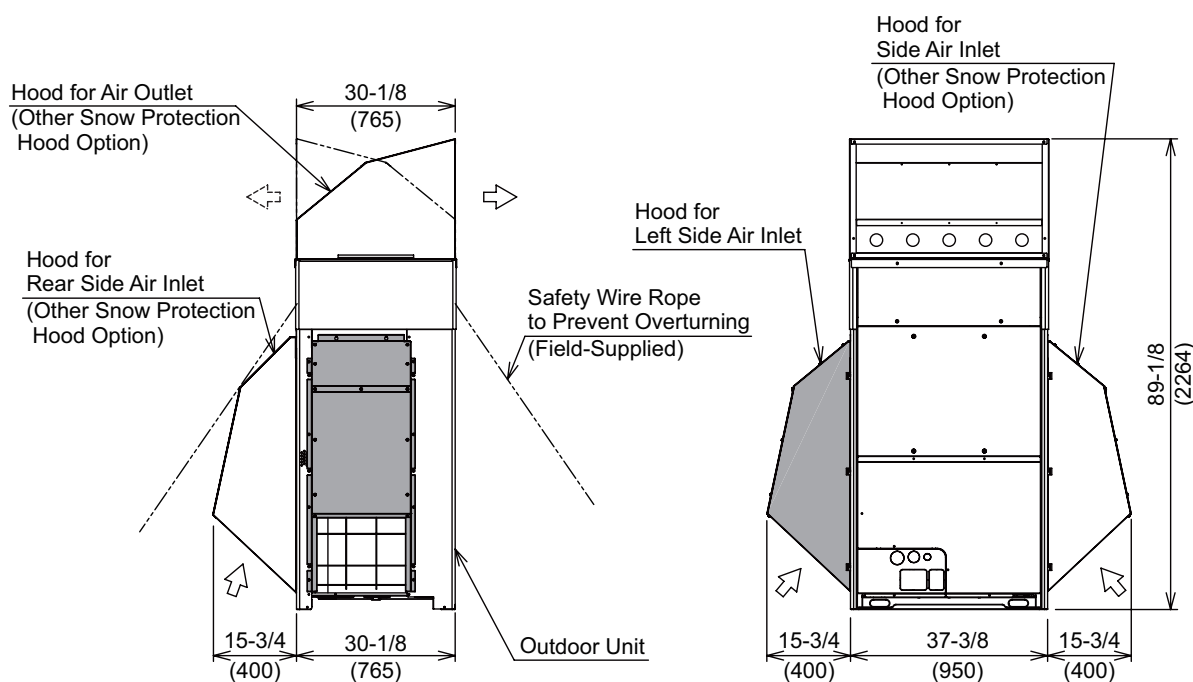
- (4) Tighten two installation screws (⑤) into the holes made at part ② but not the all way down. After hooking the snow protection hood (for left side installation), securely tighten the other eight installation screws (⑤). Finally, tighten the upper two screws securely.



## 6. Installation Appearance

The following examples illustrate a small cabinet.

Unit: inch (mm)



### Available Combinations

Applicable Outdoor Unit (Representative Model)	Model		
	(H,Y)VAHP072B32S (H,Y)VAHP072B42S	(H,Y)VAHP096 - 144B32S (H,Y)VAHP096 - 144B42S	(H,Y)VAHP168, 192B32S (H,Y)VAHP168, 192B42S
Hood for Air Outlet	ASG-TP50FAS	ASG-TP50FBS	ASG-TP50FCS
Hood for Rear Side Air Inlet	ASG-TP50BAS	ASG-TP50BBS	ASG-TP50BCS
Hood for Left Side Air Inlet	ASG-TP50LS	ASG-TP50RS	
Hood for Right Side Air Inlet	ASG-TP50RS		

### NOTICE:

This manual applies only to the combination indicated with  .

For other snow protection hood options, refer to each installation manual.

## 7. Maintenance and Servicing

Even if during the warranty period, the snow protection hood becomes rusted under conditions that are caused by alkaline or corrosive moisture, it is recommended to provide salt damage resistance products to prevent such damage.

In order to prolong the product life, perform periodical maintenance to prevent significant aging due to deterioration. Perform the following tasks as part of routine preventative maintenance for the equipment.

(1) Red Rust Generation Check

If red rust is generated, scour the rust off.

(2) Retighten installation and assembly screws.

Check for loose screws and retighten when inspection and maintenance is performed. In order to prevent screw breakage, be sure to tighten to the following torque specifications:

\* M5 Tapping Screw Type C for Assembling ⑥:  $2.6 \pm 0.7$  [lbf-ft] ( $3.5 \pm 1.0$  [N•m])

\* M5 Tapping Screw Type B for Installation ⑤:  $1.8 \pm 0.7$  [lbf-ft] ( $2.5 \pm 1.0$  [N•m])