

# LOW AMBIENT CONTROLLER INSTALLATION MANUAL



JAYLOAM001

16123000A17426 V.B

Thank you very much for purchasing our product.  
Before using your unit, please read this manual carefully and keep it for future reference.

## SAFETY PRECAUTION

- Read the safety precautions carefully before installing the unit.
- Stated below are important safety issues that must be obeyed.
- Confirm there is no abnormal phenomena during test operation after complete, then leave the manual with the end user.
- Meaning of marks:

 <b>WARNING</b>	Indicates a hazardous situation which, if not avoided, could result in death or serious injury.
 <b>CAUTION</b>	Indicates a hazardous situation which, if not avoided, could result in minor to moderate injury.



### WARNING

**Please have a professional install this unit.**

Installation by other persons may lead to improper installation, electric shock or fire.

**Strictly follow this manual.**

Improper installation may lead to electric shock or fire.

**Reinstallation must be performed by professionals.**

Improper installation may lead to electric shock or fire.

**Do not disassemble the heat pump unless you are a professional servicing or repairing the unit.**

Disassembly by a non-professional may cause abnormal operation or heating, which may result in fire.

**Make sure all power to unit is turned off.**

Before installing, modifying, or servicing system, main electrical disconnect switch must be in the OFF position and install a lockout tag. There may be more than 1 disconnect switch. Always use a suitable warning label.

**Beware of potential cut hazards.**

Sheet metal parts may have sharp edges or burrs. Use care and wear appropriate protective clothing and gloves when handling parts.



### CAUTION

**Follow all safety codes.**

Wear safety glasses, protective clothing, and work gloves. Use wet cloth for brazing operations and have fire extinguisher available. Read these instructions thoroughly and follow all warnings or cautions included in literature and attached to the unit. Consult local building codes and current editions of the National Electrical Code (NEC) NFPA70. In Canada, refer to current editions of the Canadian electrical code CSA 22.1.

## Introduction

These instructions cover installation of ICM Part No.325-HN on all split system heat pumps. The device is designed to control outdoor fan motor speed under low outdoor temperature conditions. It is specifically designed to control condenser fan motor speed in response to the saturated condensing temperature during operation in cooling mode only. **This kit is not applied on the units with ECM fan motor.** Parts necessary for mounting control and sensor assembly are included in the kit. Either assembly can be replaced independently of the other.

## Mounting sensor

STEP 1- Be certain power to unit is disconnected.

STEP 2- Route sensor wire through the knockout on side plate then the right hole on E-part box and over to outside row of coil (left side), be careful not to harm tubing (Figure 1).

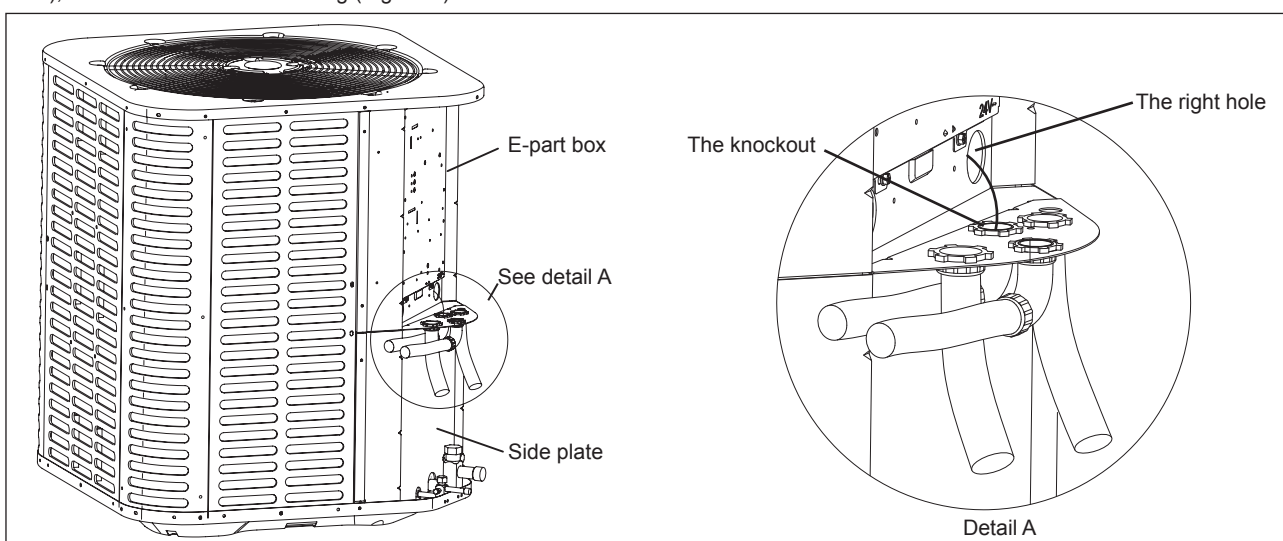


Figure 1

STEP 3- Find the coil return bend as shown in Figure 2 on which sensor will be mounted.

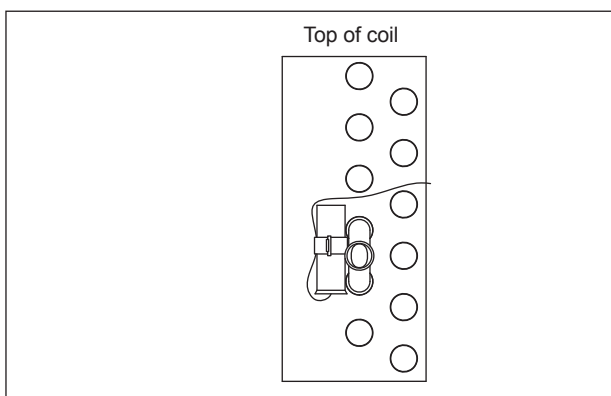


Figure 2

STEP 4- Secure sensor on the condenser coil found in STEP 2 with the belt supplied.

Note: The sensor is delicate. Handle with care.

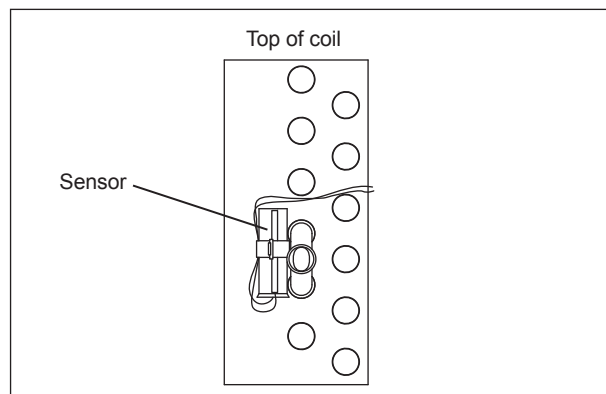


Figure 3

STEP 5- Bind unused wire and secure it near or next to control.

STEP 6- Protect sensor wire from physical damage or wind movement where necessary.

**Note:** Wiring in field installed, an insulated sleeve that meets local laws and regulations must be added to protect the wires.

## Mounting control assembly

STEP 7- Put control assembly in electrical box and fasten it with two screws provided with the kit.

STEP 8- See wiring diagram for wiring connections (Figure 5).

**Note:** The high voltage power supply must agree with the equipment nameplate.

Power wiring must comply with National, State and Local Codes.

Follow instructions on unit wiring diagram located on the inside of the access panel.

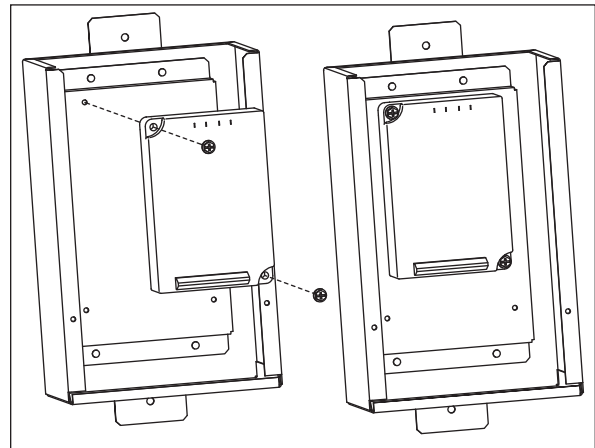


Figure 4

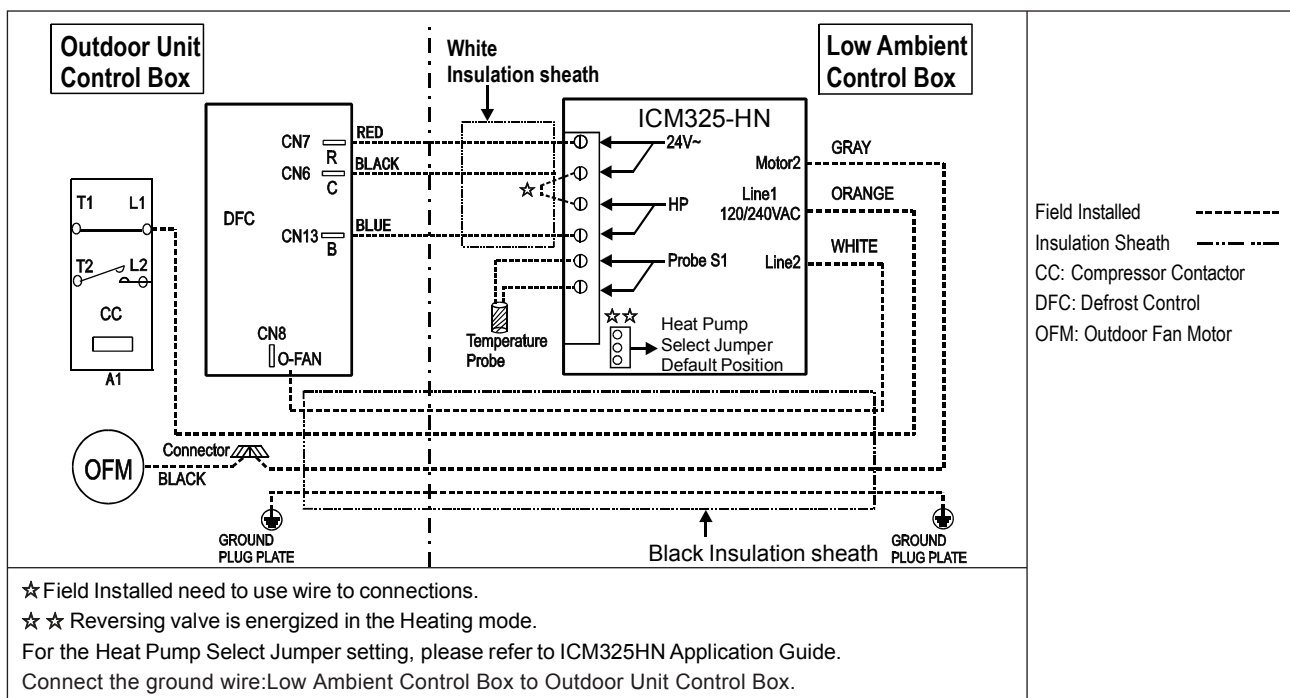


Figure 5

- Remove the fan black wire from the Defrost Control Board.
- Connect the white wire of ICM325-HN to CN8.

- Cut the black terminal of the Outdoor Fan Motor.

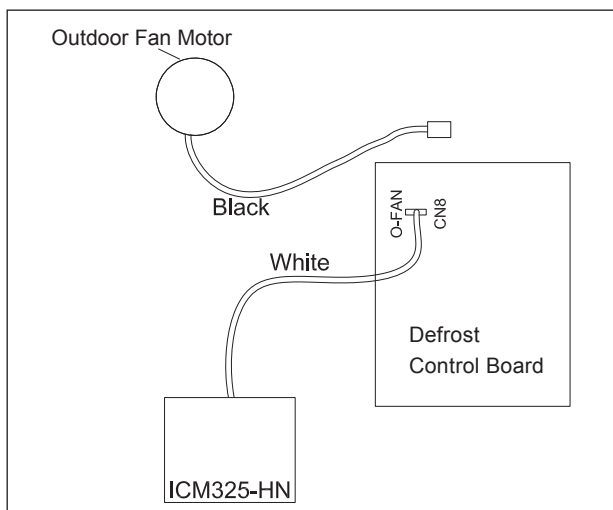


Figure 6

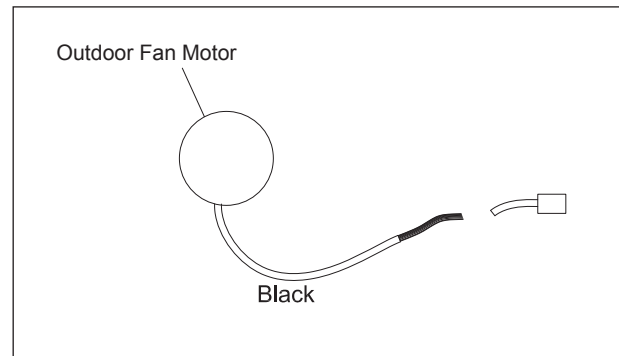


Figure 7

## Mounting control assembly

- Connect the Outdoor Fan Motor black wire with the grey wire of the ICM325-HN Module with the terminal.

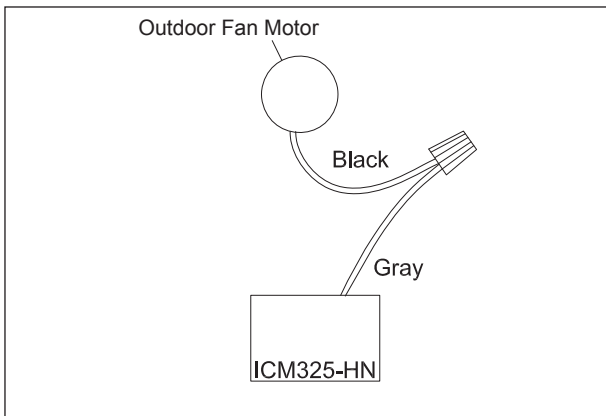


Figure 8

STEP 9- Fasten the wires with the strap and screws provided.

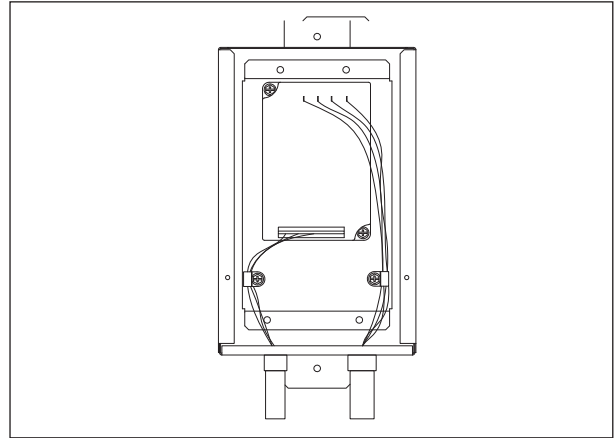


Figure 9

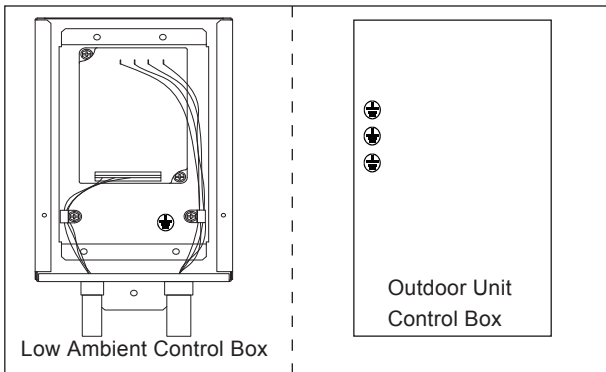


Figure 10

STEP 10- Connect the ground wire:Low Ambient Control Box to Outdoor Unit Control Box.

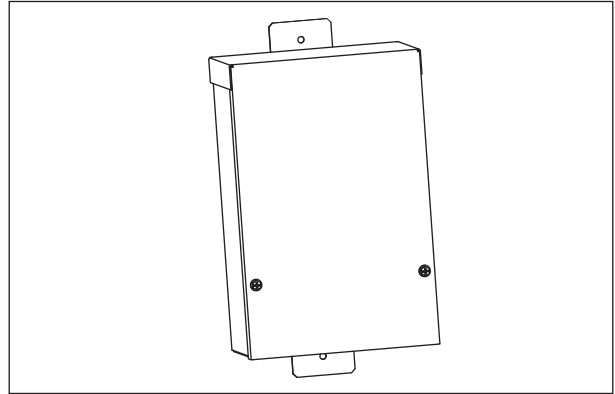


Figure 11

STEP 11- Cover and fasten the lid with two screws provided.

## Mounting electrical box

STEP 12- Mount electric control box assembly to unit and fasten it with original screws.

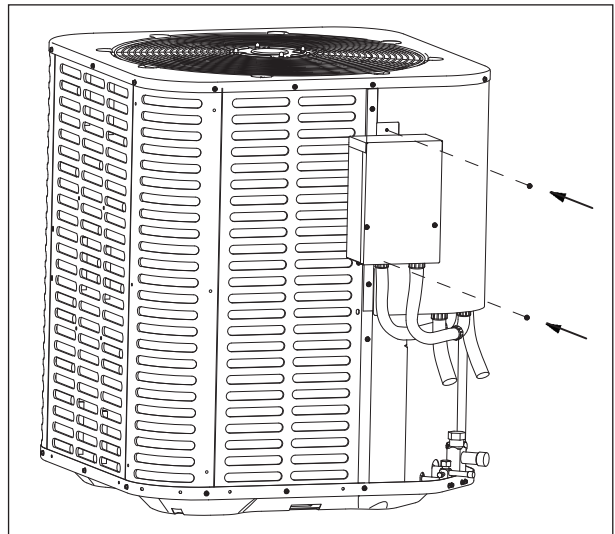


Figure 12