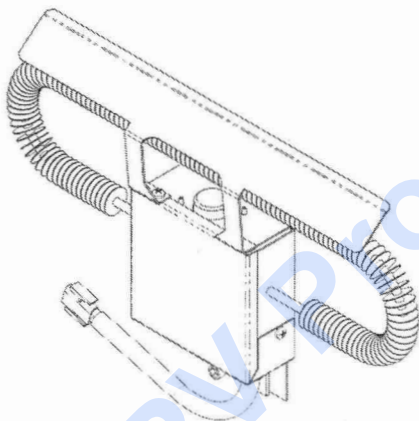


Coleman-Mach

An AIRXCEL Brand

INSTALLATION INSTRUCTIONS FOR 9233A4551 & 9233A4552 HEATER ACCESSORY

For the: 45000 Series & 48000 Series
MACH 3/MACH 10/MACH 15 Roof Top Units



WARNINGS

IMPORTANT NOTICE

These instructions are for the use of qualified individuals specially trained and experienced in the installation of this type of equipment and related system components.

Installation and service personnel are required by some states to be licensed. PERSONS NOT QUALIFIED SHALL NOT INSTALL NOR SERVICE THIS EQUIPMENT.

NOTE: The words "SHALL" or "MUST" indicate a requirement which is essential to satisfactory and safe product performance. The words "Should" or "May" indicate a recommendation or advice which is not essential and not required but which may be useful or helpful.

WARNING! – SHOCK HAZARD To prevent the possibility of severe personal injury or equipment damage due to electrical shock, always be sure the electrical power source to the appliance is disconnected.

CAREFULLY FOLLOW ALL INSTRUCTIONS AND WARNINGS IN THIS BOOKLET TO AVOID DAMAGE TO THE EQUIPMENT, PERSONAL INJURY OR FIRE.

WARNING! Improper installation may damage equipment, can create a hazard, and will void the warranty. The use of components not tested in combination with these units will void the warranty, may make the equipment in violation of state codes, may create a hazard, and may ruin the equipment.

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GENERAL INFORMATION

This heater accessory kit is intended to be installed with **heat ready** ceiling assemblies on 45000 & 48000 series rooftop units to provide 5460 BTUH of electric heat. The heat ready ceiling assemblies are equipped with a heat/cool thermostat (either on the ceiling assembly or a wall thermostat) and a two pin heater wire receptacle to facilitate installation of this accessory.

If the ceiling assembly is not heat ready, additional components may need to be purchased and installed. Consult your dealer or retailer for more information.

Two Selector Switch Knobs are included so that you can match the selector switch knob to the temperature knob installed on your heat ready ceiling assembly model.

PACKAGE CONTENTS

- 1) Heater Assembly
- 2) Selector Switch Knob

NOTE: The optional heater accessory kit is intended to take the chill out of the indoor air when the air is a few degrees too cool for comfort. The heater is an effective "chill chaser". **It is not a substitute for a furnace.**

Do not expect the heating coil on your heater to glow. Since the fan draws in cold air and forces it over the heater coil, the heater coil will not turn red. A hint of red may occur where the moving air does not directly touch the heating coil.

The heater is equipped with a safety lockout circuit which shuts down the heater if there is an abnormal condition.

Contact your selling dealer or you may access our website at www.Airxcel.com for service center locations.

Airxcel Inc. support help may be accessed by email at RVPSupport@Airxcel.com.

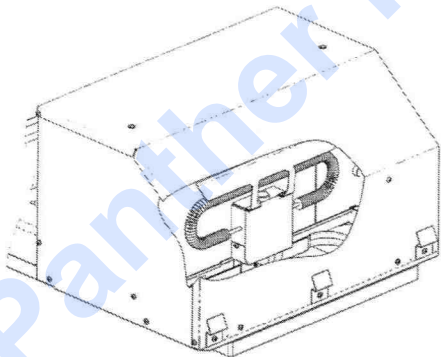
TOOLS NEEDED

- Phillips Head Screwdriver
- 3/16" Allen Wrench

INSTALLATION OF HEATER ASSEMBLY

IMPORTANT

BEFORE BEGINNING THE INSTALLATION, THE ROOFTOP UNIT MUST BE IN THE OFF MODE AND THE ROOFTOP UNIT POWER BREAKER IS SWITCHED OFF.



NOTE:

The heater assembly is designed to be installed in the return air side of the rooftop unit as shown above.

When installing the heater assembly on a new unit install, it will be helpful to only install the rear two hold down bolts. This will capture and locate the mounting frame, but still allow installation of the heater assembly (and control box if using) without interference from the bolts.

When installing the heater assembly on an existing install, it will be helpful to back-out the front two hold down bolts. This will keep the rooftop unit and mounting frame in position, but still allow installation of the heater assembly without interference from the mounting bolts.

NOTE:

Retain all hardware for re-assembly.

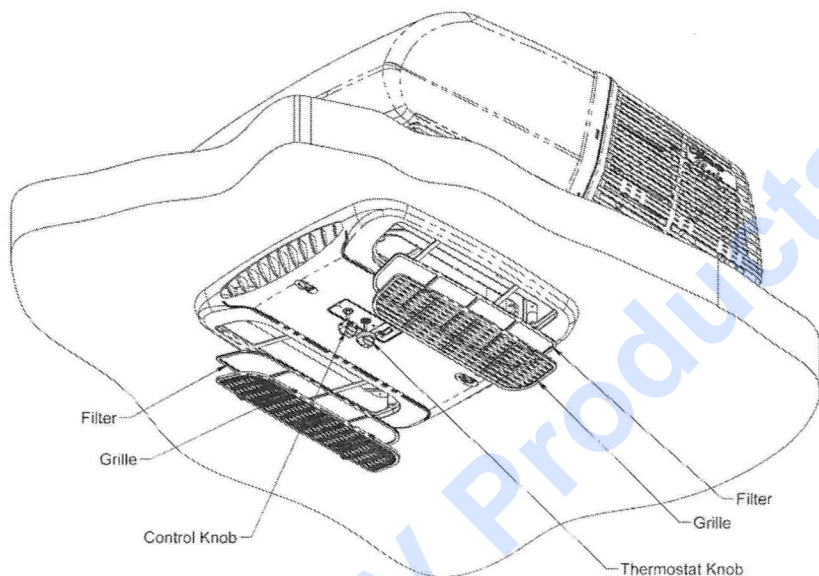
NOTE:

The non-ducted ceiling assembly and the Chill Grille assembly in the illustrations are shown for reference. The model you have may vary in appearance.

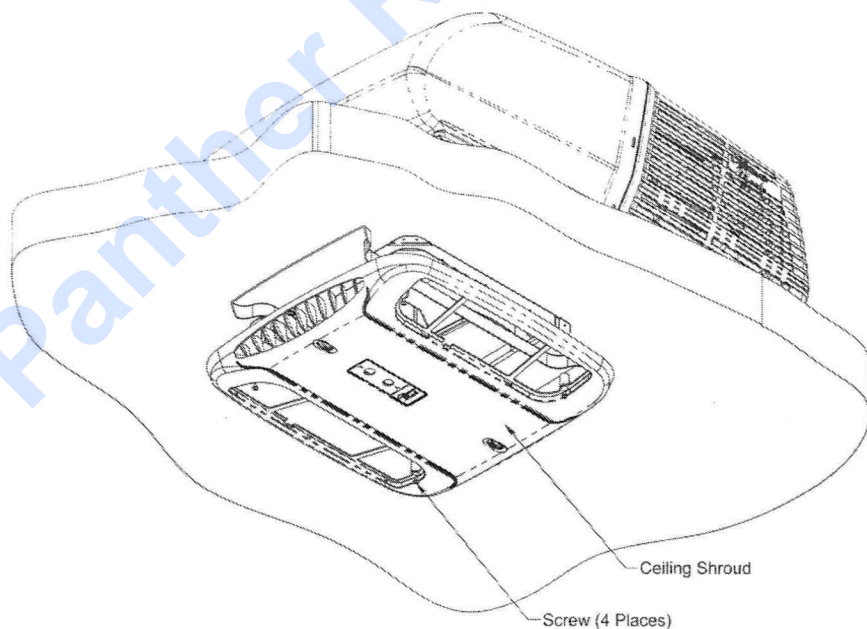
A. NON-DUCTED CEILING ASSEMBLY

1. Ensure that the power to the unit has been turned off at the breaker. To verify that the power is off to the rooftop unit, turn the control knob on the Ceiling Assembly to HIGH FAN to see if the rooftop unit blower produces air. When power has been determined to be off, return the setting on the Control Knob to OFF.

2. In existing installs, remove the control and thermostat knobs, grilles, and filters.
- The knobs can be removed by gently pulling downward on the knobs.
- The grills are removed by pulling on the exposed tabs.
- The filters are held in place by tabs on the ceiling assembly shroud so it may be necessary to use a slight twisting motion to remove the filters.

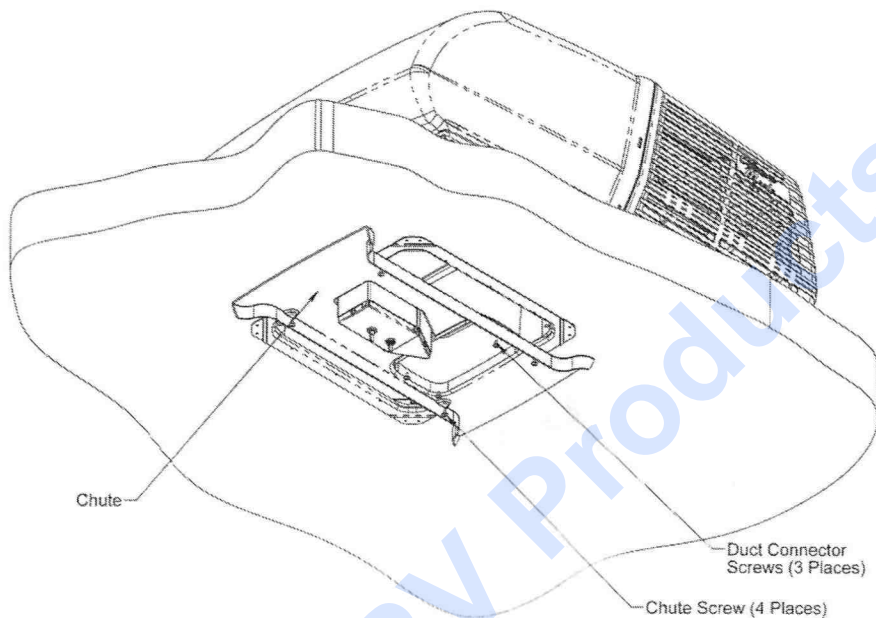


3. Remove the ceiling shroud by removing four (4) screws.

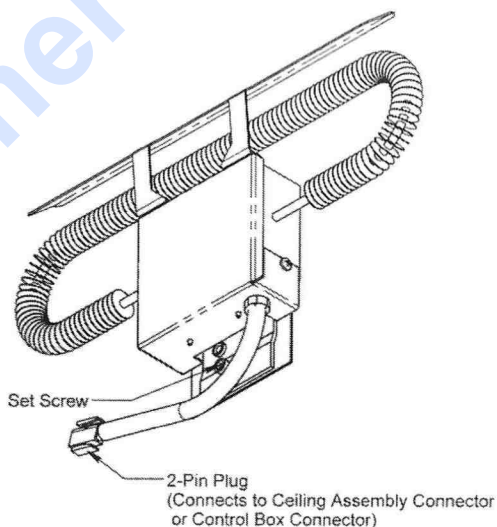


4. Remove the chute from the ceiling by first removing the three (3) screws holding the plastic duct connector to the upper unit base pan. Then remove the four (4) screws holding the chute to the ceiling.

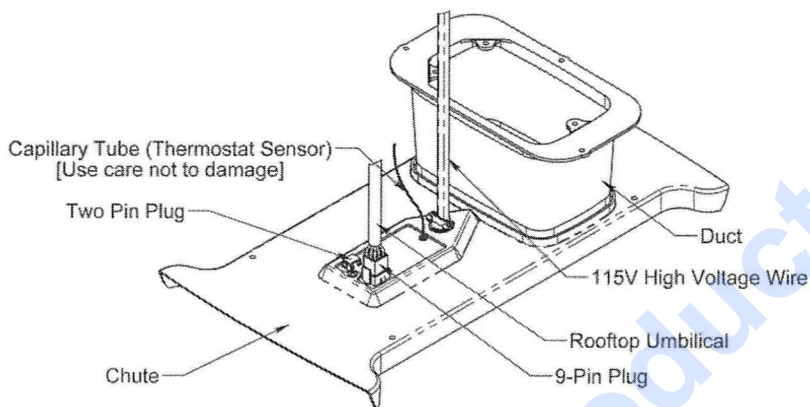
NOTE: The high voltage wiring will support the chute when installing the heater assembly. Letting the chute hang by the high voltage wires will not harm the unit since the high voltage wires are secured by a strain relief.



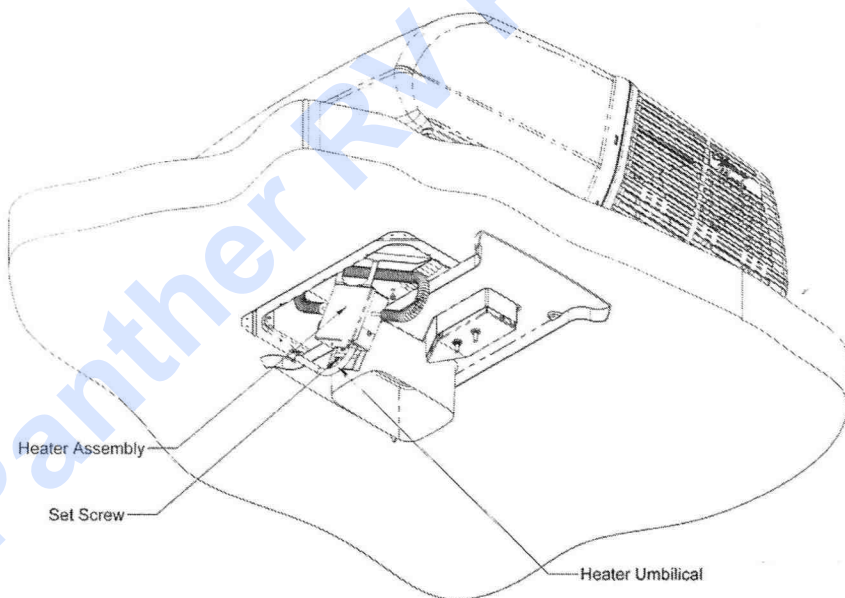
5. Ensure that the set screw on the heater assembly is retracted sufficiently to allow installation over the base pan extrusion.



6. Remove and discard the two pin plug from the two pin connector on the ceiling assembly.
- Note: The heater umbilical plug and the ceiling assembly two pin connector are position specific and must be aligned properly to snap together.
- Plug the heater umbilical into the two pin connector on the ceiling assembly. The connectors must "snap-lock" into position.



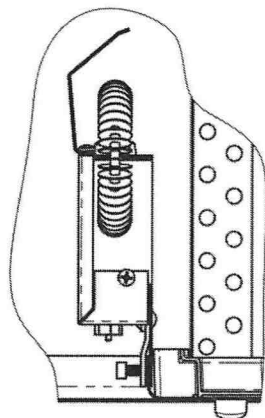
7. Insert the heater assembly into the return air opening as shown below being careful not to tear the insulation on the evaporator top.



8. Place the heater assembly over the base pan extrusion. (A sticker on the base pan extrusion indicates the position on the base pan for the Electric Heater. (The Sticker may state Electric Heat or Air Purifier.)

NOTE: Electric Heat and Air Purifier cannot be installed on the same rooftop unit.

The heater bracket must be installed between the base pan and the plastic drain pan as shown below.



9. Using the 3/16" Allen Wrench, tighten the set screw to secure the assembly to the base pan to prevent movement.

ADD ADDITIONAL WIRE TIES TO WIRES, AS NEEDED, TO ENSURE WIRES WILL HAVE NO CONTACT WITH THE HEATER ASSEMBLY OR ANY SHARP EDGES. KEEP IN MIND THAT HIGH VELOCITY AIR WILL BE ENCOUNTERED IN THIS AREA.

10. After the Heater Assembly installation has been completed, continue with the installation of the front two mounting bolts.
11. Return the chute to its original position and secure to the mounting frame with four (4) screws. Re-assemble the duct collar to the rooftop unit base pan with three (3) screws.
12. Assemble the ceiling shroud to the mounting frame using four (4) screws.
13. Re-install the return air grilles and filters to the ceiling assembly shroud.
14. Re-assemble the temperature control knob.
15. Install the selector switch knob found in this kit that matches the style of the temperature knob installed on your ceiling assembly. Discard the original "cool only" knob.
16. Restore power to the rooftop unit.
17. The Heater Installation can be checked out by the following procedure:
- Turn the selector knob to the "LOW HEAT" position. At "LOW HEAT", the fan will operate on low speed with heat output at maximum.
 - Rotate the thermostat (temperature control) knob to a position that will engage the heater. The thermostat will turn the heater on when the temperature of the air entering the rooftop unit drops below this setting a few degrees and automatically turns off when the temperature of the air entering the rooftop unit rises a few degrees above this setting. The heater will continue to cycle on and off in this fashion until the selector knob is turned to another mode of operation or the temperature knob is lowered.

Heater Operation is detailed in the rooftop unit "Installation, Operation and Maintenance Instructions" included with the rooftop unit.

B. DUCTED CEILING ASSEMBLY

IMPORTANT: When adding the Heater Accessory to an existing roof top unit installation that is equipped with a ducted ceiling assembly, it may be necessary to change the control box; add an additional thermostat cable wire and replace the existing wall thermostat with a new wall thermostat with the heater function to accept the additional thermostat cable wire.

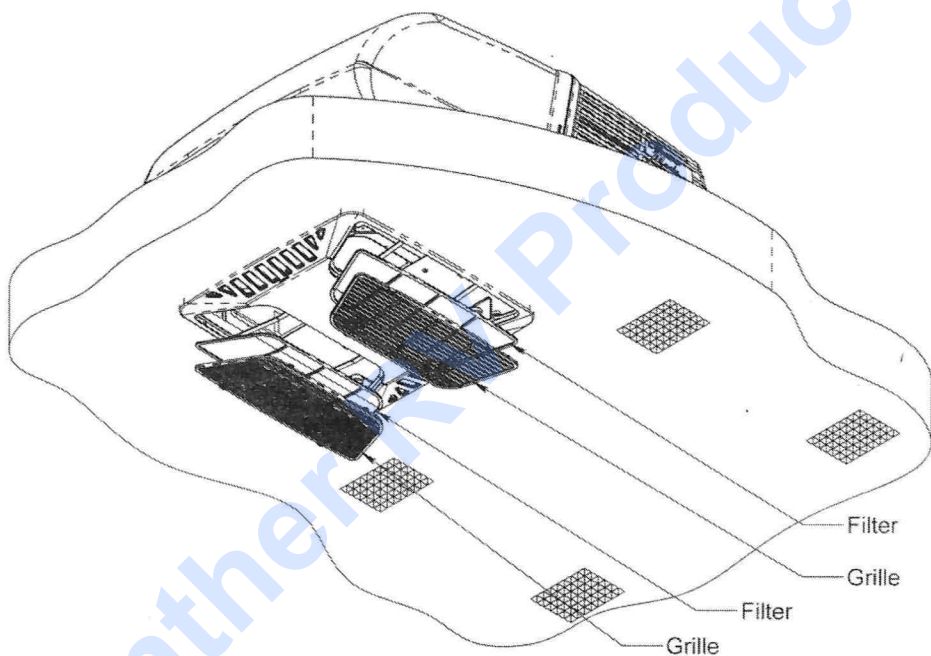
1. Ensure that the power to the unit has been turned off at the breaker. To verify that the power is off to the rooftop unit, turn the Thermostat to HIGH FAN to see if the rooftop unit blower produces air. When the power has been determined to be off, return the setting on the Thermostat to OFF.

TURN OFF 12 VDC.

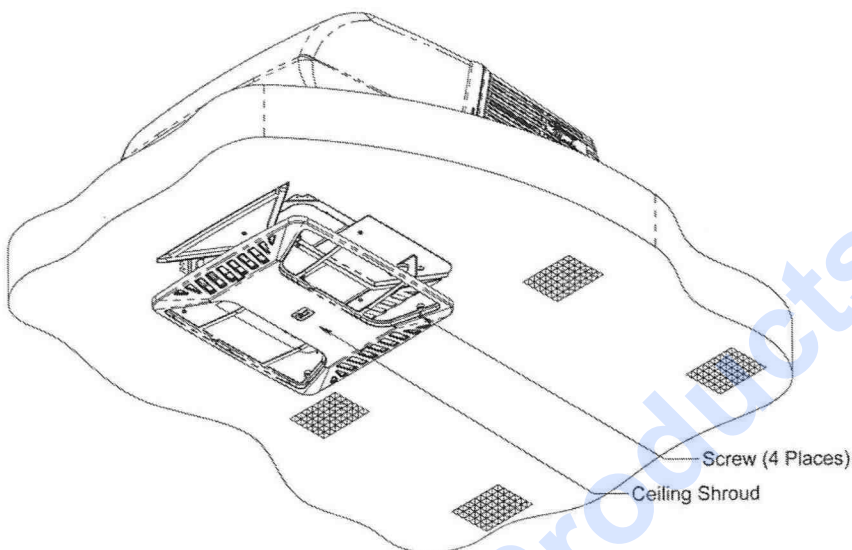
2. In existing installs, remove the grille and filter.

The grilles are removed by pulling on the exposed tabs.

The filters are held in place by tabs on the ceiling assembly shroud so it may be necessary to use a slight twisting motion to remove the filters.

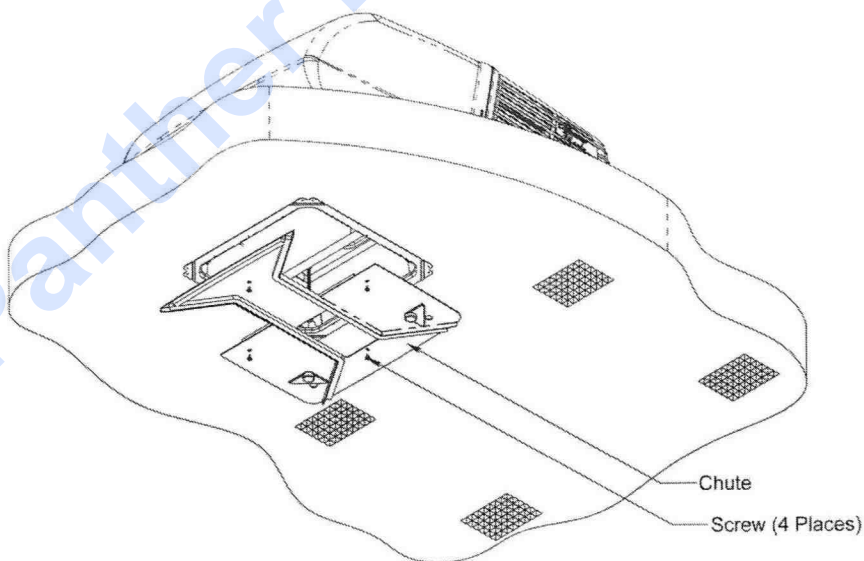


3. Remove the ceiling shroud by removing four (4) screws.

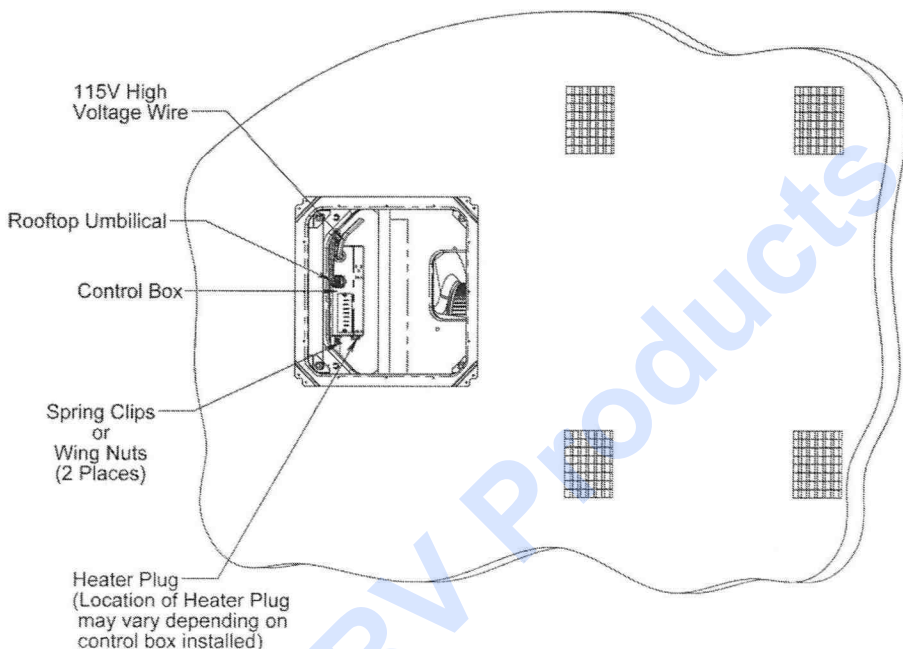


4. Remove the chute from the ceiling by removing four (4) screws.

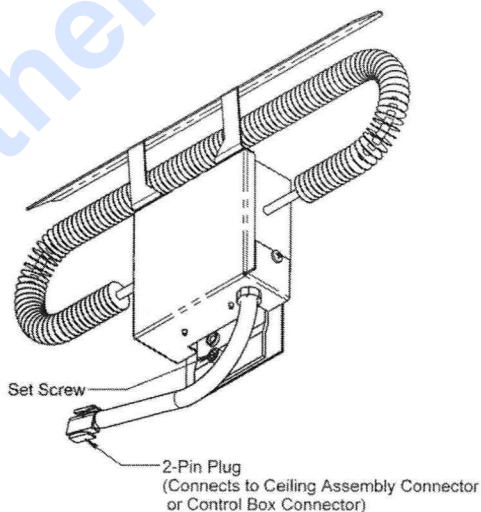
NOTE: If the installed control box is not equipped with the two pin plug, a new control box must be purchased and installed. Install the new cool/heat ready control box following the instructions included with the control box kit. The wall thermostat must be changed to a Heat/Cool Thermostat and an additional thermostat cable run from the Wall Thermostat W position to the upper unit control box to connect to W on the terminal board.



5. If needed, the control box can easily be removed by hand. The control box has been secured in place by either spring clips or wing nuts which can be removed by hand. If the control box is removed, the high voltage wiring will support the control box while installing the heater assembly. Letting the control box hang by the high voltage wires will not harm the unit since the high voltage wires are secured by a strain relief.



6. Ensure that the set screw on the Heater Assembly is retracted sufficiently to allow installation over the base pan extrusion.



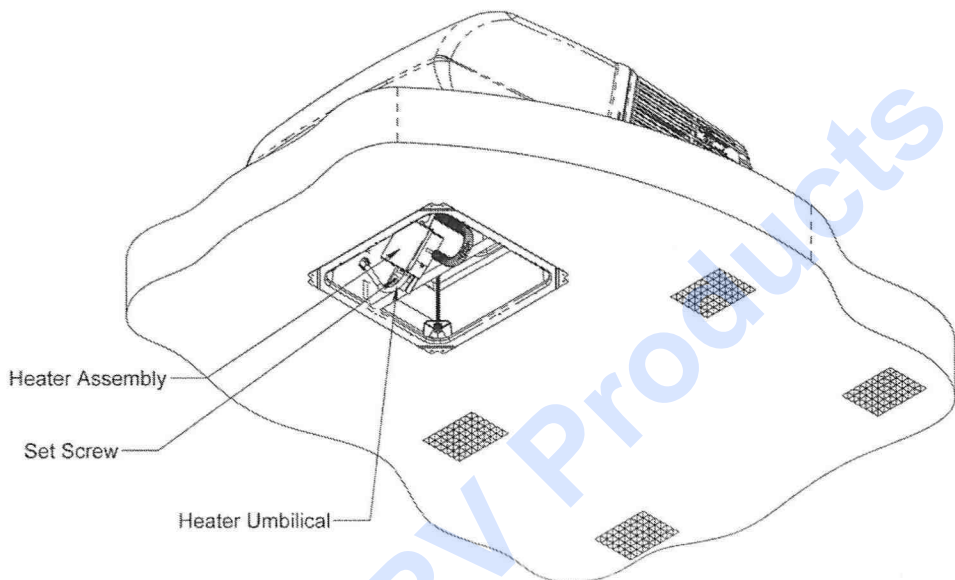
7. Remove and discard the two pin plug from the two pin connector on the control box.

Note: The heater umbilical plug and the control box two pin connector are position specific and must be aligned properly to snap together.

Plug the heater umbilical into the two pin connector on the control box. The connectors must "snap-lock" into position.

Insert the heater assembly into the return air opening as shown below being careful not to tear the insulation on the evaporator top.

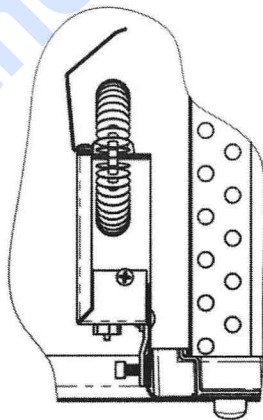
Re-install the control box, if removed.



8. Place the heater assembly over the base pan extrusion. (A sticker on the base pan extrusion indicates the position on the base pan for the Electric Heater. (The Sticker may state Electric Heat or Air Purifier.)

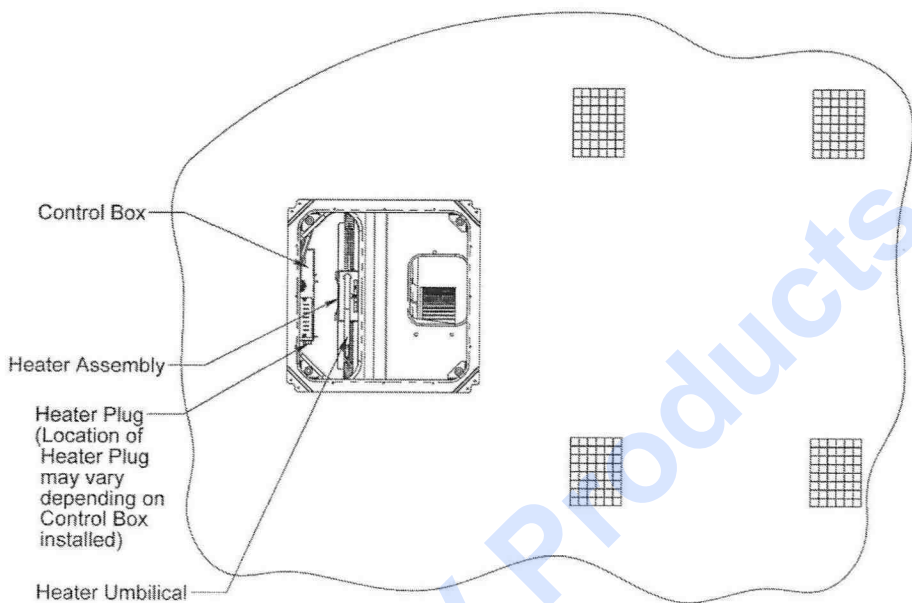
NOTE: Electric Heat and Air Purifier cannot be installed on the same rooftop unit.

The heater bracket must be installed between the base pan and the plastic drain pan.



9. Using the 3/16" Allen Wrench, tighten the set screw to secure the assembly to the base pan to prevent movement.

ADD ADDITIONAL WIRE TIES TO WIRES, AS NEEDED, TO ENSURE WIRES WILL HAVE NO CONTACT WITH THE HEATER ASSEMBLY OR ANY SHARP EDGES. KEEP IN MIND THAT HIGH VELOCITY AIR WILL BE ENCOUNTERED IN THIS AREA.



10. After the Heater Assembly installation has been completed, continue with the installation of the front two mounting bolts.
11. Return the chute to its original position, ensuring the duct divider is positioned between the two ribs. Secure the chute to the mount frame with four (4) screws.
12. Raise the shroud assembly so that it properly nests with the chute. Attach the ceiling shroud to the mount frame using four (4) screws.
13. Re-install the return air grille and filter to the ceiling assembly shroud.
14. Restore all power to the rooftop unit.
15. The Heater Installation can be checked out by the following procedure:
 - A. Press the **MODE** button on the thermostat to wake the thermostat. When the **MODE** button is pressed again, the mode will change. Press the **MODE** button again until the **HEAT** function is displayed.
 - B. Adjust the temperature setting to engage the heater. The thermostat will turn the heater on when the room temperature drops below this setting a few degrees and automatically turns off when the room temperature rises a few degrees above this setting. The heater will continue to cycle on and off in this fashion until the **MODE** is changed to another mode of operation or the temperature setting is lowered.

Refer to the Thermostat Installation Instructions provided with the thermostat for more details on the operation of all functions.

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PO Box 4020 • Wichita, KS 67204 • 574.247.9235 • www.AIRXCEL.com
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