

COOLING UNITS KITS AND ACCESSORIES

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ALUMINUM AIR-HANDLER-COIL REPLACEMENT KIT

INSTALLATION INSTRUCTIONS FOR REPLACEMENT ALUMINUM INDOOR COIL – AIR HANDLER UNITS

Shipping and Packing List

Package 1 of 1 contains:

- 1 – Aluminum coil assembly with upflow drain pan and factory-installed check / expansion valve
- 1 – Installation instructions

Check the replacement coil for shipping damage. If you find any damage, immediately contact the last carrier.

⚠ WARNING

Improper installation, adjustment, alteration, service or maintenance can cause property damage, personal injury or loss of life. Installation and service must be performed by a licensed professional HVAC installer or equivalent, service agency, or the gas supplier.

⚠ CAUTION

As with any mechanical equipment, contact with sharp sheet metal edges can result in personal injury. Take care while handling this equipment and wear gloves and protective clothing.

⚠ WARNING



Electric Shock Hazard! – Disconnect all power supplies before servicing.

Replace all parts and panels before operating.

Failure to do so can result in death or electrical shock.

General

Verify that the new coil has holding charge by slowly removing the plugs. The coil should have approximately 10 psi dry air holding charge. If there is no charge, repressurize the coil and check for leaks.

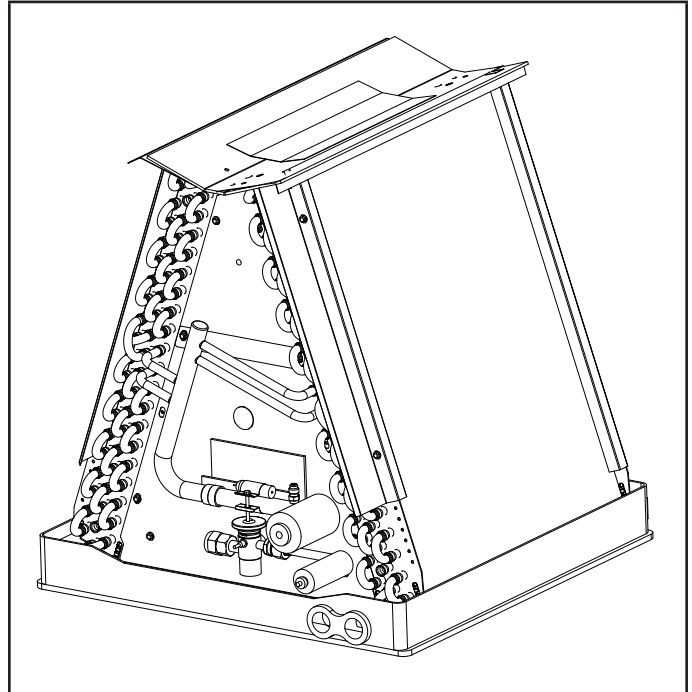


FIGURE 1. Aluminum Replacement Coil

Application

The coil is shipped ready to be installed in an **upflow** or **horizontal right-hand** application.

In a **horizontal left-hand** application the top cap must be rotated and internal condensate tray relocated to the correct position for the application as shown in the air handler installation instructions.

In a **downflow** application, the drip shields and top narrow top cap (-048 and -060 only) must be removed from the original coil and reinstalled on the replacement coil.

Installation

IMPORTANT

The stub of the coil must be secured if any adjustments to the liquid line are needed. Do not allow it to move.

IMPORTANT

Apply a wet cloth to the factory copper joints to prevent heat damage when brazing in the field copper-to-copper joints for the replacement coil.

WARNING



Danger of fire. Bleeding the refrigerant charge from only the high side may result in pressurization of the low side shell and suction tubing. Application of a brazing torch to a pressurized system may result in ignition of the refrigerant and oil mixture. Check the high and low pressures before applying heat.

CAUTION

Brazing alloys and flux contain materials which are hazardous to your health.

Avoid breathing vapors or fumes from brazing operations. Perform operations only in well-ventilated areas.

Wear gloves and protective goggles or face shield to protect against burns.

Wash hands with soap and water after handling brazing alloys and flux.

IMPORTANT

Refrigerant lines must be clean, dry, refrigerant-grade copper lines. Air handler coils should be installed only with specified line sizes for approved system combinations.

Handle the refrigerant lines gently during the installation process. Sharp bends or kinks in the lines will cause a restriction.

Do not remove the caps from the lines or system connection points until connections are ready to be completed.

FOR BRAZED FITTINGS:

- 1 - Pump down the system and recover the refrigerant from the system.
- 2 - Disconnect power to the indoor unit.
- 3 - Remove the coil access panels.
- 4 - Disconnect the condensate drain lines connected to the drain pan.
- 5 - Disconnect the liquid and vapor refrigerant line connections by unbrazing the connections at the swaged joints.

- 6 - Remove the existing coil from the air handler cabinet.
- 7 - Prepare the coil for installation in the air handler.
 - a. The replacement coil as shipped is ready to install in an upflow or horizontal RIGHT-HAND Application.
 - b. In horizontal LEFT-HAND applications, the top cap and internal condensate tray must be rotated. See original air handler instructions for details or use the existing coil as a guide.
 - c. In downflow applications, the downflow drip shields and narrow top cap (048 & 060 Only) must be removed from the existing coil and reinstalled on the replacement coil.
- 8 - Install the replacement Quantum Aluminum coil in the air handler.
- 9 - Allow the holding charge to escape by slowly removing the rubber plugs.
- 10 - Braze in the liquid and vapor lines to coil connections and reconnect the condensate drain lines.
- 11 - Once the installation of the replacement coil is complete, confirm that all refrigerant tubing and wiring is routed away from other wiring and sharp metal edges.
- 12 - Replace the access panel and seal up all opening to prevent humid air from entering the unit.
- 13 - Restore power to the air handler unit.
- 14 - Refer to the outdoor unit installation instructions for leak testing, evacuation and start-up procedures. Charge the unit as outlined in the outdoor unit installation instructions and using the refrigerant charging label on the outdoor unit.

FOR BRAZE-FREE FITTINGS:

- 1 - Pump down the system and recover the refrigerant from the system.
- 2 - Disconnect power to the indoor unit.
- 3 - Remove the coil access panels.
- 4 - Disconnect the condensate drain lines connected to the drain pan.
- 5 - Cut existing coil liquid and vapor line fittings off.
- 6 - Remove the existing coil from the air handler cabinet.
- 7 - Prepare the coil for installation in the air handler.
 - a. The replacement coil as shipped is ready to install in an upflow or horizontal RIGHT-HAND application.
 - b. In horizontal LEFT-HAND applications, the top cap and internal condensate tray must be rotated. See original air handler instructions for details or use the existing coil as a guide.
 - c. In downflow applications, the downflow drip shields and narrow top cap (048 & 060 only) must be removed from the existing coil and reinstalled on the replacement coil.

- 8 - Install the replacement aluminum coil in the air handler.
- 9 - Allow the holding charge to escape by slowly removing the rubber plugs.
- 10 - Remove bell from the stubbed connection using a tubing cutter.
- 11 - Position the refrigerant piping and follow the assembly instructions provided with the braze-free connector.
- 12 - Once the installation of the replacement coil is complete, confirm that all refrigerant tubing and wiring is routed away from other wiring and sharp metal edges.
- 13 - Replace the access panel and seal up all openings to prevent humid air from entering the unit.
- 14 - Restore power to the air handler unit.
- 15 - Refer to the outdoor unit installation instructions for leak testing, evacuation and start-up procedures. Charge the unit as outlined in the outdoor unit installation instructions and using the refrigerant charging label on the outdoor unit.