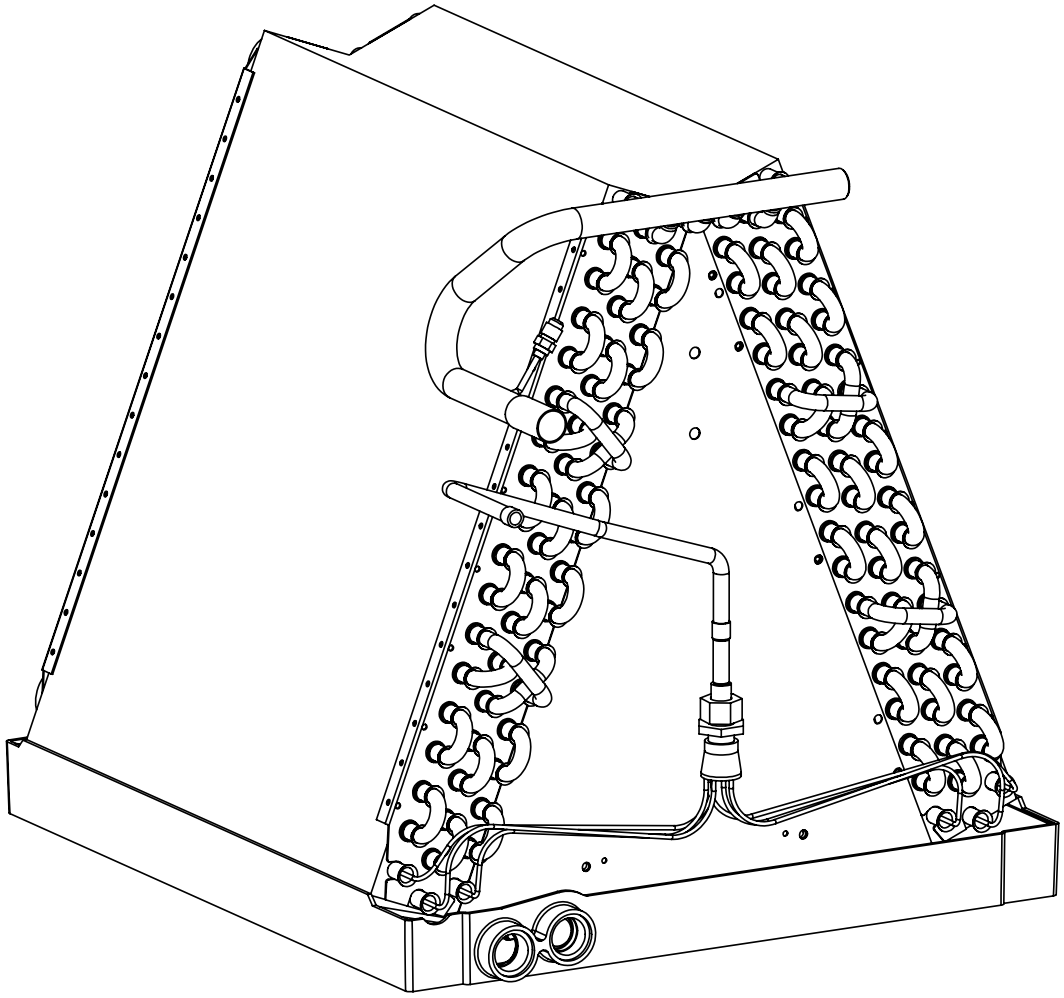
SPLIT SYSTEM UNCASED REPLACEMENT INDOOR COILS

INSTALLATION INSTRUCTIONS

REPLCOILXXHS HIGH SEER SERIES



IMPORTANT

ATTENTION INSTALLERS:

It is your responsibility to know this product better than your customer. This includes being able to install the product according to strict safety guidelines and instructing the customer on how to operate and maintain the equipment for the life of the product. Safety should always be the deciding factor when installing this product and using common sense plays an important role as well. Pay attention to all safety warnings and any other special notes highlighted in the manual. Improper installation of the furnace or failure to follow safety warnings could result in serious injury, death, or property damage.

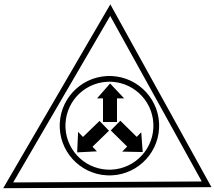
These instructions are primarily intended to assist qualified individuals experienced in the proper installation of this appliance. Some local codes require licensed installation/service personnel for this type of equipment. Please read all instructions carefully before starting the installation. Return these instructions to the customer's package for future reference.

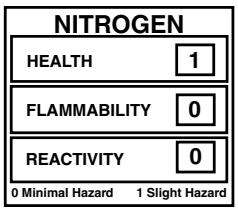
DO NOT DESTROY. PLEASE READ CAREFULLY & KEEP IN A SAFE PLACE FOR FUTURE REFERENCE.

IMPORTANT SAFETY INFORMATION

Please read all instructions before servicing this equipment. Pay attention to all safety warnings and any other special notes highlighted in the manual. Safety markings are used frequently throughout this manual to designate a degree or level of seriousness and should not be ignored. **WARNING** indicates a potentially hazardous situation that if not avoided, could result in personal injury or death. **CAUTION** indicates a potentially hazardous situation that if not avoided, may result in minor or moderate injury or property damage.

⚠ WARNING:





This coil is pressurized with Nitrogen at the factory. Avoid direct face exposure or contact with valve when gas is escaping. Always ensure adequate ventilation is present during the depressurization process. Any uncertainties should be addressed before proceeding.

⚠ WARNING:

This coil must be installed in accordance with the instructions outlined in this manual during the installation, service, and operation of this unit. Unqualified individuals should not attempt to interpret these instructions or install this equipment. If you do not posses mechanical skills or tools, call your local dealer for assistance. Under no circumstances should the equipment owner attempt to install and/or service this equipment. Failure to follow safety recommendations could result in possible damage to the equipment, serious personal injury or death.

⚠ WARNING:

PROPOSITION 65 WARNING: This product contains chemicals known to the state of California to cause cancer, birth defects or other reproductive harm.

- The installer must comply with all local codes and regulations which govern the installation of this type of equipment. Local codes and regulations take precedence over any recommendations contained in these instructions. Consult local building codes for special installation requirements.
- Familiarize yourself with the controls that shut off the electrical power to the unit. If the unit needs to be shut down for an extended period of time, turn off electrical power at the circuit breaker. For your safety always turn off the electrical power before performing service or maintenance on the unit.
- Installation of equipment may require brazing operations. Installer must comply with safety codes and wear appropriate safety equipment (safety glasses, work gloves, fire extinguisher, etc.) when performing brazing operations.
- Follow all precautions in the literature, on tags, and on labels provided with the equipment. Read and thoroughly understand the instructions provided with the equipment prior to performing the installation and operational checkout of the equipment.
- Use caution when handling this equipment or removing components. Personal injury can occur from sharp metal edges present in all sheet metal constructed equipment.

GENERAL INFORMATION

These uncased replacement coils are designed for upflow, downflow, or horizontal applications.

- Check the coils orifice size and confirm that it's suitable for application with the intended outdoor unit. Depending on application, additional installer supplied orifice or TXV may be required.
- Verify that the air delivery of the furnace/air handler is adequate to handle the static pressure drop of the coil, filter, and duct work.
- If precise forming of refrigerant lines is required, a copper tubing bender is recommended. Avoid sharp bends and contact of the refrigerant lines with metal surfaces.
- Refrigerant lines should be wrapped with pressure sensitive neoprene or other suitable material where they pass against sharply edged sheet metal.
- Horizontal installations require a horizontal drain pan kit to be installed. See Table 1 (page 4) for part number.

COIL INSTALLATION

⚠ WARNING:

ELECTRICAL SHOCK, FIRE OR EXPLOSION HAZARD

Failure to follow safety warnings exactly could result in serious injury or property damage.

Improper servicing could result in dangerous operation, serious injury, death or property damage.

- **Before servicing, disconnect all electrical power to the indoor blower.**
- **When servicing controls, label all wires prior to disconnecting. Reconnect wires correctly.**
- **Verify proper operation after servicing.**

⚠ CAUTION:

The coil must be level to ensure proper condensate drainage. An unlevel installation may result in structural damage, premature equipment failure, or possible personal injury.

1. Disconnect all electrical power to the furnace or air handler.
2. Remove system refrigerant per industry standard practices.
3. Disconnect and remove existing evaporator coil.

System Depressurization

1. Remove the cap (Figure 1) from the end of the liquid line.
2. Verify pressurization by depressing the Schrader valve on the end of the liquid line. Listen for any escaping gas. If there is no pressure, test the coil for leakage.
   - If leakage is found, clearly mark the location of the leak and return the coil to the distributor for processing.
   - If no leaks are found, the coil may be installed.
3. Depress the valve to relieve all pressure from the coil.
4. Proceed to the appropriate lineset connection for installations with factory installed orifice. See pages 4 - 5.
   - Go to *Changing the Orifice* section if your installation is with a different orifice.
   - Go to *Installing a TXV kit* if your installation is equipped with a TXV.

Changing the Orifice

NOTE: Before proceeding, perform steps 1 - 3 in the System Depressurization section and confirm that the restrictor orifice size meets the requirements outlined in the outdoor unit installation manual. Factory supplied orifice sizes are listed in Table 2 (page 4). If the orifice must be replaced, follow steps 1 - 5.

⚠ CAUTION:

To prevent damage to the unit or internal components, it is recommended that two wrenches be used when loosening or tightening nuts. Do not over tighten!

1. Using two wrenches, loosen the nut and distributor body as shown in Figure 2. Turn the assembly nut counter-clockwise until the orifice body halves are separated.
2. Insert a light-gauge wire hook between the distributor body and the restrictor orifice while being careful not to scratch either part. Carefully remove the restrictor orifice from the distributor body. See Figure 3.
3. Check the actual size of the new orifice. The size is stamped on its side. Do not use pin gauges to measure the orifice diameter.
4. Insert the new orifice into the distributor body, rounded end down. See Figure 4.

⚠ CAUTION:

To prevent damage to the unit or internal components, it is recommended that two wrenches be used when loosening or tightening nuts. Do not over tighten!

5. Realign the assembly nut on the distributor body and hand tighten both components. Mark a line on both bodies and then tighten an additional 1/4 turn using two wrenches. The movement of the two lines will show how much the nut is tightened. If a torque wrench is used, tighten to 10-12 ft. lbs. or 14-16 Nm.
6. Proceed to the appropriate lineset connection section. See pages 4 - 5.

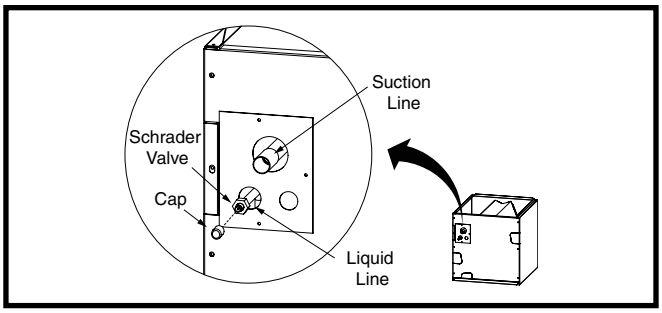


Figure 1. Suction & Liquid Line Locations

Installing a TXV Kit

A separate TXV kit and C5 replacement tube kit are required. See Tables 3 - 5 (page 5) for proper kit part numbers.

⚠ CAUTION:

To prevent damage to the unit or internal components, it is recommended that two wrenches be used when loosening or tightening nuts. Do not over tighten!

1. Using two wrenches, loosen the distributor and liquid line body halves. Turn the assembly nut counter-clockwise.
2. Discard the removed liquid line.
3. Insert a light-gauge wire hook between the distributor body and the restrictor orifice while being careful not to scratch either part. Carefully remove the restrictor orifice from the distributor body. See Figure 3.
4. Connect the distributor to the outlet side of the valve.
5. Braze the new liquid line from the C5 replacement tube kit and liquid line stub & screen (included in TXV kit) with dry nitrogen flowing through the joints.

   IMPORTANT: Brazing operation should be performed before connecting assembly to the TXV. This protects the TXV from heat. Liquid nitrogen prevents internal oxidation and scaling from occurring.

   NOTE: The liquid line is sold separately, see Table 3 (page 5) for appropriate part number.

6. Connect the liquid line to the inlet side of the valve.
7. Realign the assembly nut on the distributor body and hand tighten both components. Mark a line on both bodies and then tighten an additional 1/4 turn using two wrenches. The movement of the two lines will show how much the nut is tightened. If a torque wrench is used, tighten to 10-12 ft. lbs. or 14-16 Nm.
8. Using two wrenches, tighten both ends of the valve.
9. Secure the sensing bulb to the suction line using the clamp supplied with the kit.
10. Wrap the bulb, clamp, and suction line together with tar tape or other insulating material.

IMPORTANT NOTES:

- **The sensing bulb must be located flush against the suction line for optimum heat transfer.**
- **Avoid attaching the sensing bulb to the lowest part of the suction line where condensate may accumulate.**
- **Do not locate the sensing bulb on vertical sections of the lineset.**
- **For horizontal lines, the bulb should not be located at 12 or 6 o'clock position of the suction line. The best location is at 4 or 8 o'clock.**

- **For additional information on proper sensing bulb locations, please refer to the valve manufacturer's instructions.**

11. Remove and discard the Schrader valve from the suction header port. **IMPORTANT:** The TXV will not function if the valve is not removed.
12. Connect the equalization line from the TXV to the 1/4 port located on the suction line.

⚠ CAUTION:

To prevent damage to the unit or internal components, it is recommended that two wrenches be used when loosening or tightening nuts. Do not over tighten!

13. Using two wrenches, tighten all connections.

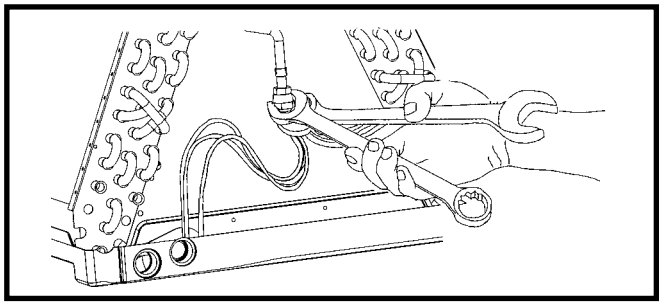


Figure 2. Loosening of Nut & Distributor Body

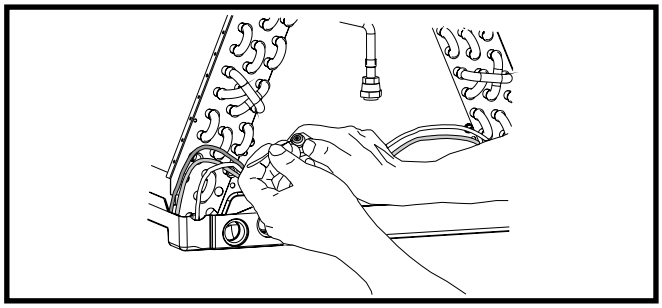


Figure 3. Removal of Orifice

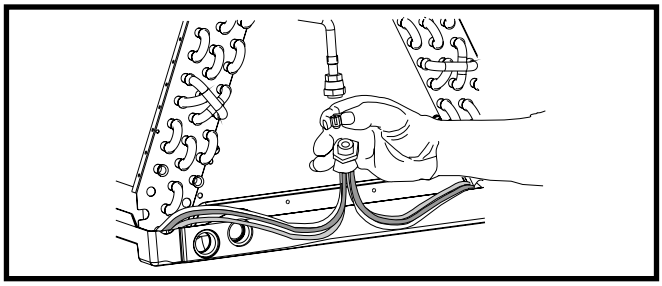


Figure 4. Restrictor Insertion into Distributor Body

NOMINAL CABINET HEIGHT	HORIZONTAL DRAIN KIT PN
20"	920265
26"	920266
30"	920267

Table 1. Horizontal Drain Kits

LINESET CONNECTIONS

Connecting Brazed Linesets

1. If TXV kit and new liquid line are being installed, skip to step 4.
2. If original liquid line is being used, relieve all pressure from the coil by depressing the valve on the liquid line. Remove the valve core.
3. Using all appropriate cautions, unbraze and remove the valve holder on the liquid line.
4. Verify the lineset ends are round, clean, and free of any burrs.
5. Connect the suction and liquid lineset tubes.

⚠ CAUTION:

It is recommended that a wet rag be wrapped around the suction line in front of the close off plate before applying heat. Failure to keep components cool during brazing may result in structural damage, premature equipment failure, or possible personal injury.

IMPORTANT: To prevent internal oxidation and scaling from occuring, braze all connections with dry nitrogen flowing through the joints.

6. Braze the individual connections with dry nitrogen flowing through the joints.
7. Wrap the refrigerant lines with pressure sensitive neoprene or other suitable material especially where the lines enter the opening in the sheet metal.
8. Proceed to *Completing the Installation*.

Completing the Installation

1. Check the system for leaks, including the lineset and the brazed joints. **NOTE:** Apply a soap and water solution on each joint or union with a small paintbrush. If bubbling is observed, the connection is not adequately sealed.
2. Evacuate the system of moisture and non-condensables to prevent low efficiency operation or damage to the unit. The suggested range of evacuation is 250 - 500 microns.
3. Charge the system with refrigerant. **Please Refer to the outdoor unit installation manual for additional charging instructions.**
4. Install the coil access door (if removed).
5. Properly dispose of all removed parts.
6. Apply power to the unit.

PART NUMBER	MODEL	WIDTH	ORIFICE SIZE
921951	REPLCOIL01HS	A	0.067
921952	REPLCOIL02HS	B	0.067
921953	REPLCOIL03HS	B	0.080
921954	REPLCOIL04HS	C	0.093
921955	REPLCOIL05HS	C	0.099

NOTE: Individual restrictors are available by part number - PN664*** (where *** represents the size). Example: 664103 is a restrictor 0.103 in diameter.

Table 2. Replacement Coil Specs

KIT PN	KIT MODEL	A WIDTH 18" SLAB	B WIDTH 18" SLAB	B WIDTH 24" SLAB	C WIDTH 24" SLAB	C WIDTH 28" SLAB
921287	Kit, C5 REPL Tube, A18, 1 ea	1				
921288	Kit, C5 REPL Tube, B18, 1 ea		1			
921289	Kit, C5 REPL Tube, B24, 1 ea			1		
921290	Kit, C5 REPL Tube, C24, 1 ea				1	
921291	Kit, C5 REPL Tube, C28, 1 ea					1

Table 3. C5 Replacement Tube Kit PN's

AIR HANDLER MODEL	AIR HANDLER SKU	REPLACEMENT COIL SKU	ANTEATER COIL MODEL	ANTEATER COIL SKU	TXV KIT	TUBE KIT, SINGLE
B4VM-X24K-A	920770D	919626D	REPLCOIL01HS	921951	920668A	921287
B4VM-X30K-A	920772D	919510D	REPLCOIL01HS	921951	920669A	921287
B4VM-X24K-B	920424D	917189D *	REPLCOIL02HS	921952	920668A	921288
B4VM-X30K-B	920773D	919512D	REPLCOIL02HS	921952	920669A	921288
B4VM-X24K-B	920424D	920362D **	REPLCOIL03HS	921953	920668A	921289
B4VM-X36K-B	920425D	917190D *	REPLCOIL03HS	921953	920670A	921289
B4VM-X36K-B	920425D	919630D **	REPLCOIL03HS	921953	920670A	921289
B4VM-X48K-B	920775D	919515D	REPLCOIL03HS	921953	920672A	921289
B4VM-X48K-C	920426D	917191D *	REPLCOIL05HS	921955	920672A	921291
B4VM-X48K-C	920426D	919517D **	REPLCOIL05HS	921955	920672A	921291
B4VM-X60K-C	920427D	917192D *	REPLCOIL05HS	921955	920673A	921291
B4VM-X60K-C	920427D	919518D **	REPLCOIL05HS	921955	920673A	921291
B6BM-X24K-A	921312	921898	REPLCOIL01HS	921951	920669A	921287
B6BM-X30K-A	921314	921900	REPLCOIL01HS	921951	920670A	921287
B6VMAX24K-A	921164	921887	REPLCOIL01HS	921951	920669A	921287
B6VMAX30K-A	921166	921889	REPLCOIL01HS	921951	920670A	921287
B6BM-X24K-B	921313	921899	REPLCOIL02HS	921952	920669A	921288
B6BM-X30K-B	921315	921901	REPLCOIL02HS	921952	920670A	921288
B6VMAX30K-B	921167	921890	REPLCOIL02HS	921952	920670A	921288
B6BM-X36K-B	921316	921902	REPLCOIL03HS	921953	920670A	921289
B6BM-X42K-B	921317	921903	REPLCOIL03HS	921953	920671A	921289
B6VMAX24K-B	921165	921888	REPLCOIL03HS	921953	920669A	921289
B6VMAX36K-B	921168	921891	REPLCOIL03HS	921953	920670A	921289
B6VMAX42K-B	921169	921892	REPLCOIL03HS	921953	920671A	921289
B6BM-X48K-C	921318	921904	REPLCOIL05HS	921955	920672A	921291
B6BM-X60K-C	921319	921905	REPLCOIL05HS	921955	920673A	921291
B6VMAX48K-C	921171	921893	REPLCOIL05HS	921955	920672A	921291
B6VMAX60K-C	921172	921894	REPLCOIL05HS	921955	920673A	921291

* Built prior July 2008
** Built after July 2008

Table 4. Air Handler Coil Substitution Matrix

COIL MODEL	COIL SKU	ANTEATER COIL MODEL	ANTEATER COIL SKU	TXV KIT	TUBE KIT, SINGLE
C4BA-X24U-B	917189D	REPLCOIL02HS	921299	920669A	921288
C4BA-X24C-B	917138D				
C4BH-X24C-B	917186D				
C4BA-X36U-B	917190D	REPLCOIL03HS	921300	920670A	921289
C4BA-X36C-B	917139D				
C4BH-X36C-B	917183D				
C4BA-X48U-C	917191D	REPLCOIL05HS	921302	920672A	921291
C4BA-X48C-C	917140D				
C4BH-X48C-C	917184D				
C4BA-X60U-C	917192D	REPLCOIL05HS	921303	920673A	921291
C4BA-X60C-C	917141D				
C4BH-X60C-C	917185D				

Table 5. Coil Substitution Matrix

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709410A (Replaces 7094100)