

Installation Instruction

Upflow—Downflow
Heating—Cooling

CC5A Uncased Coil
CD5A Cased Coil

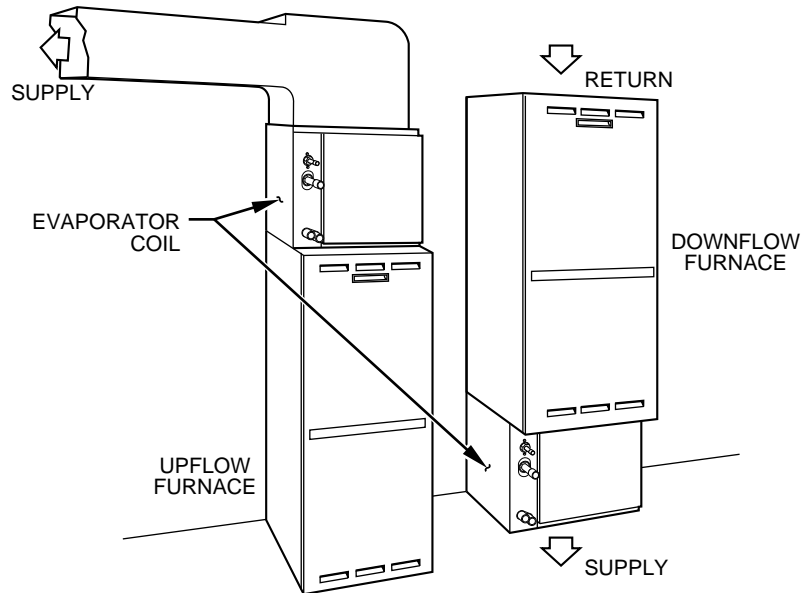


Fig. 1—Typical Installation of CD5A Coil


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NOTE: Read the entire instruction manual before starting the installation.

SAFETY CONSIDERATIONS

Improper installation, adjustment, alteration, service, maintenance, or use can cause explosion, fire, electrical shock or other conditions which may cause personal injury or property damage. Consult a qualified installer, service agency, or your distributor or branch for information or assistance. The qualified installer or agency must use factory-authorized kits or accessories when modifying this product. Refer to the individual instructions packaged with the kits or accessories when installing.

Follow all safety codes. Wear safety glasses and work gloves. Use quenching cloth for brazing operations. Have fire extinguisher available. Read these instructions thoroughly and follow all warning or cautions attached to the unit. Consult local building codes and National Electrical Code (NEC) for special requirements.

It is important to recognize safety information. This is the safety-alert symbol . When you see this symbol on the unit and in instructions or manuals, be alert to the potential for personal injury.

Understand the signal word— DANGER, WARNING, or CAUTION. These words are used with the safety-alert symbol. DANGER identifies the most serious hazards which **will** result in severe personal injury or death. WARNING signifies hazards that **could** result in personal injury or death. CAUTION is used to identify unsafe practices, which **would** result in minor personal injury or product and property damage.

 **WARNING:** Before installation or servicing system, always turn off main power to system. There may be more than 1 disconnect switch. Turn off accessory heater power if applicable. Electrical shock can cause personal injury or death.

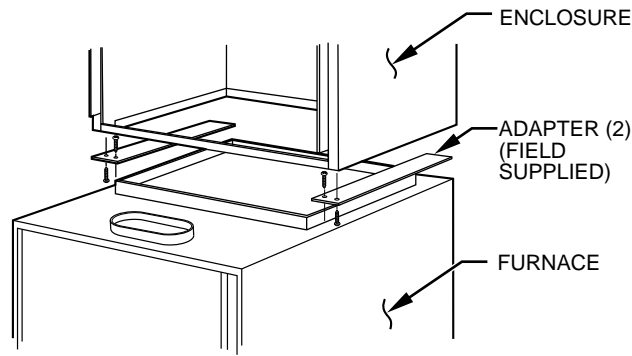
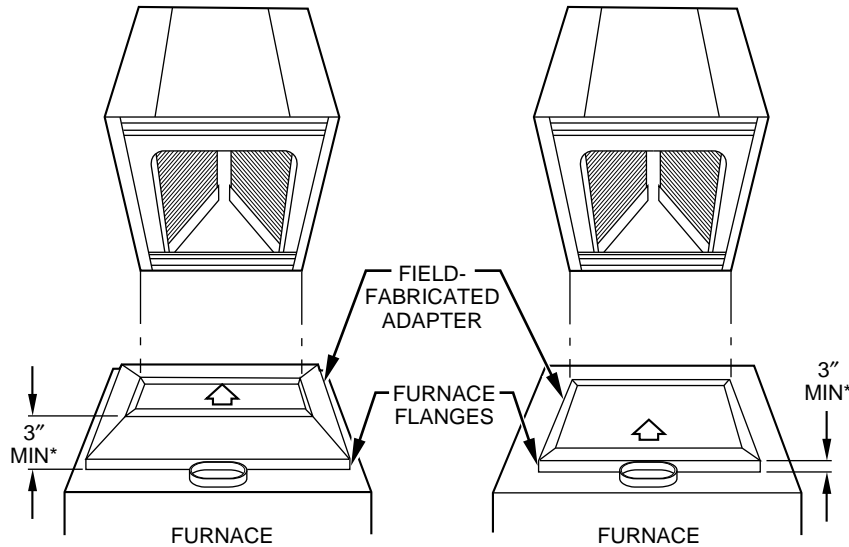


Fig. 2—Adapter Installation when Field Fabricated Plenum Overhangs Furnace

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*** CAUTION:** Do not mount coil lower than 3 in. minimum or furnace failure may result.

Fig. 3—Adapter Installation when Coil Casing Underhangs Furnace

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INTRODUCTION

Use this instruction manual to install CC5A or CD5A indoor coils on upflow or downflow furnaces. (See Fig. 1.) Do not install coil in horizontal position. Model CD5A is enclosed in a casing. CC5A is an unenclosed bare coil, requiring a field-fabricated or accessory enclosure.

INSTALLATION

PROCEDURE 1—INSPECT EQUIPMENT

File claim with shipper if equipment is damaged or incomplete.

PROCEDURE 2—SELECT INSTALLATION PROCEDURE

For uncased coils (CC5A) follow:

A. Upflow CC5A Uncased Coil Installation. See Table 3 for dimensions and accessory part numbers.

For cased coils (CD5A) in upflow application follow:

B. Upflow CD5A Cased Coil Installation. See Table 2 for dimensions and overhang options. Note instructions for placement of coil casing on furnace.

For cased coils (CD5A) in downflow application follow:

C. Downflow CD5A Cased Coil Installation.

PROCEDURE 3—INSTALLATION OF FURNACE COILS

A. Upflow CC5A Furnace Coil Installation

1. Mount factory coil support (shipped with coil) directly on furnace flanges to support the coil.

a. If uncased coil overhangs furnace refer to Table 1.

If table indicates that coil mounting height is zero, use factory supplied coil supports.

If table indicates that coil mounting height is other than zero, use field supplied coil supports, at specified height, and block off any bypass air as shown in Fig. 2.

2. Slide coil into plenum opening.
3. Cover plenum opening with field supplied front panel.
4. When installing uncased coil into pre-installed accessory coil casing, use Table 3 to verify correct match.

B. Upflow CD5A Cased Coil Installation

NOTE: The cased coil is designed to fit furnaces of the same width and the next narrower size, with no field fabricated adapters.

1. Set coil in place on upflow furnace discharge air opening.
2. Ensure coil is level for proper condensate drainage. Do not tip coil toward condensate drain. Coil casing need not be fastened or screwed to furnace.
3. When installing narrow coil on wide furnace create field fabricated adapter. (See Fig. 3)

C. Downflow CD5A Cased Coil Installation

1. Set cased coil on supply duct opening.
2. When coil casing width matches furnace width, furnace can be placed directly on the cased coil.

NOTE: In downflow installation with a 4-way multipoise furnace, break off perforated duct flanges on furnace. See furnace installation instructions.

3. Coils that underhang (casing is narrower than the furnace) must have a 2-1/4 in. long (minimum) field fabricated transition between furnace and coil casing.
4. Coils that overhang (casing is wider than the furnace) do not require a transition in downflow application. However, a field supplied furnace shelf should be constructed to fit furnace to coil casing opening.
5. Set furnace on coil casing or field supplied furnace self.

PROCEDURE 4—CONNECT REFRIGERANT PIPING

Use accessory tubing package or field-supplied tubing of refrigerant grade. Suction tube must be insulated. Do not use damaged, dirty, or contaminated tubing because it may plug refrigerant flow-control device. ALWAYS evacuate the coil and field-supplied tubing before opening outdoor unit service valves.

PROCEDURE 5—CONNECT REFRIGERANT LIQUID AND SUCTION LINES

For matched and mix-matched system, use system suction line sizes recommended in outdoor unit installation instruction.

CD5A and CC5A coils can be connected to outdoor units using accessory tubing packages or field-supplied tubing of refrigerant grade. Always evacuate tubing and reclaim refrigerant when sweat connections are made or when tubing must be flared. If field-supplied tubing is used, insulate entire suction line.

⚠ CAUTION: To avoid valve damage while brazing, service valves must be wrapped with a heat-sinking material such as a wet cloth.

A. Suction Line

Suction line is designed for field sweat connection. Line is plugged to keep out moisture and dirt. Remove these plugs only when ready to make connection.

⚠ CAUTION: If unit is to be installed on system with a thermostatic expansion valve, removal of the indoor coil piston is required.

B. System Refrigerant Control

A refrigerant control device (bypass type piston) is factory supplied with coil. (See Tables 2 and 3.) The piston has a refrigerant metering hole through it, and is field replaceable.

The piston shipped with the indoor coil may be different from the piston shipped with the outdoor condensing unit. If this is the case, you must replace the indoor piston. Always use the piston shipped with the outdoor condensing unit.

C. Liquid Line

1. Replace piston if required. Check the piston size stamped into side of brass hex nut. (See Fig. 4.) If this piston number does not match required piston shown on outdoor unit rating plate, replace indoor piston with piston shipped with outdoor unit.
2. When the piston is replaced, hand tighten the brass hex nut, then tighten the wrench 1/2 turn.
3. Remove rubber plug.
4. Liquid line is designed for sweat connection.

⚠ CAUTION: Remove Teflon seal during brazing. Replace when fitting has cooled.

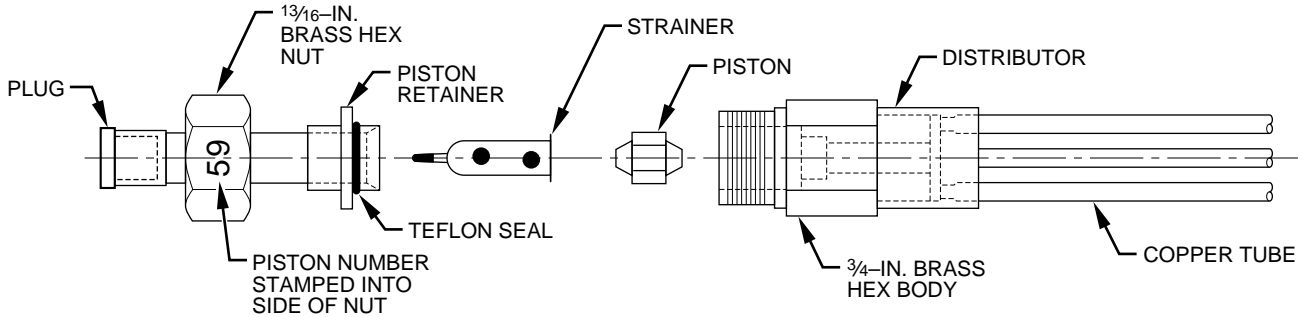
⚠ CAUTION: DO NOT BURY MORE THAN 36 IN. (914mm) OF REFRIGERANT TUBING IN GROUND. If any section of tubing is buried, there must be a 6- in.(152mm) vertical rise to the valve connections on the outdoor unit. If more than the recommended length is buried, refrigerant may migrate to cooler buried section during extended periods of unit shutdown, causing refrigerant slugging and possible compressor damage at start-up.

Table 1—Coil Mounting Position in Upflow Field Fabricated Plenum

COIL CC5A	FIELD-SUPPLIED PLENUM WIDTH (IN.)	COIL MOUNTING HEIGHT ABOVE FURNACE FLANGES (IN.)
A018, A024	12-1/2 15-13/16	0* 3-3/4
W024, W030, A036	15-13/16 19-5/16	0* 3-3/4
A042	19-5/16 22-16/16	0* 3-3/4
W042, A060	22-13/16	0*
W060	29-7/8	0*

Coil support channels are mounted on furnace flanges. Discard when field-fabricated adapters are used.

NOTE: Wrap a wet cloth around rear of fitting to prevent damage to factory-made joints.



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Fig. 4—Refrigerant Control Device Components

PROCEDURE 6—MAKE CONDENSATE DRAIN LINE CONNECTION

The coil is designed to dispose of accumulated water through built-in condensate drain fitting. Two 3/4-in. female threaded pipe connections are provided in each coil.

Install a trap in condensate line of CD5A and CC5A coil as close to coil as possible. Make trap at least 3 in. deep and not higher than bottom of unit condensate drain opening. (See Fig. 5.) Pitch condensate line to open drain or sump.

When coil is installed over a finished ceiling and/or living area, a secondary sheet metal condensate pan must be constructed and installed under entire unit.

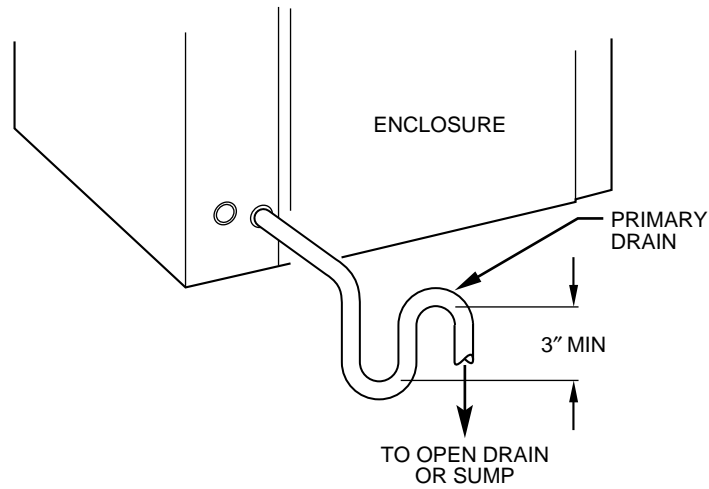
→ **Table 2—CD5A Cased Coil Dimensions**

MODEL NUMBER	TONNAGE	METERING DEVICE PISTON NO.	FLUSH FIT TO FURNACE WIDTH (IN.)	FITS NEXT SMALLER FURNACE
				Equal Overhang Factory Supplied
CD5AXA018014AAAA	1-1/2	52	14 -3/16	----
CD5AXA024014AAAA	2	59	14 -3/16	----
CD5AXA030014AAAA	2-1/2	67	14 -3/16	----
CD5AXW024017AAAA	2	59	17-1/2	X
CD5AXW030017AAAA	2-1/2	67	17-1/2	X
CD5AXA036017AAAA	3	70	17-1/2	X
CD5AXW036021AAAA	3	70	21	X
CD5AXA042021AAAA	3-1/2	78	21	X
CD5AXA048021AAAA	4	84	21	X
CD5AXC048021AAAA	4	84	21	X
CD5AXW042024AAAA	3-1/2	78	24-1/2	X
CD5AXW048024AAAA	4	84	24-1/2	X
CD5AXA060024AAAA	5	90	24-1/2	X
CD5AXW060031AAAA	5	90	31	X

System Control

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The piston shipped with the indoor coil may be different from the piston shipped with the outdoor condensing unit. If this is the case you may need to change the indoor piston. Always use the piston shipped with the outdoor condensing unit.



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Fig. 5—Condensate Trap

→ **Table 3—CC5A Uncased Coil Dimensions**

MODEL NUMBER	TONNAGE	METERING DEVICE PISTON NO.	MATCHED FURNACE WIDTH (IN.)	ACCESSORY CASING
CC5AXA018014AAAA	1-1/2	52	14- 3/16	KCAKC1212ECC 14-3/16W x 19H x 21D 12 Casings/Pallet
CC5AXA024014AAAA	2	59	14 -3/16	
CC5AXA030014AAAA	2-1/2	67	14 -3/16	
CC5AXW024017AAAA	2	59	17-1/2	KCAKC1312ECC 17-1/2W x 20 1/2H x 21D 12 Casings/Pallet
CC5AXW030017AAAA	2-1/2	67	17-1/2	
CC5AXA036017AAAA	3	70	17-1/2	
CC5AXW042021AAAA	3-1/2	78	21	KCAKC1408ECC 21W x 22H x 21D 8 Casings/Pallet
CC5AXC048021AAAA	4	84	21	
CC5AXW042024AAAA	3-1/2	78	24-1/2	KCAKC1508ECC 24-1/2W x 22H x 21D 8 Casings/Pallet
CC5AXW048024AAAA	4	84	24-1/2	
CC5AXA060024AAAA	5	90	24-1/2	
CC5AXW060031AAAA	5	90	31	KCAKC1602ECC 31-1/2W x 22H x 21D 2 Casings/Pallet

