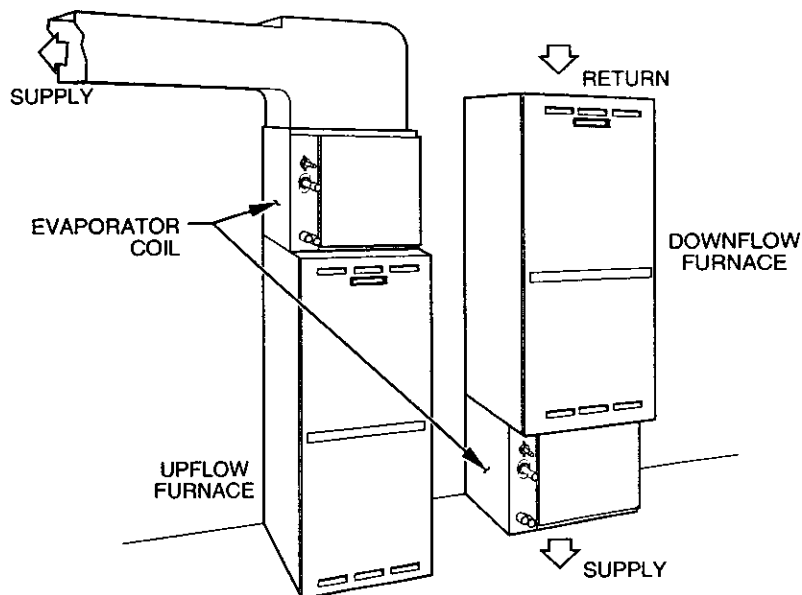


Installation Instructions

Upflow—Downflow CC5A Uncased Coil
Heating—Cooling CD5A, CD5P Cased Coil

CC5A
CD5A/CD5P



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Fig. 1—Typical Installation Cased Coils


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

This symbol → indicates a change since the last issue.

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 cloths for brazing operations. Have fire extinguisher available. Read these instructions thoroughly and follow all warnings or cautions attached to the unit. Consult local building codes and National Electrical Codes (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 words DANGER, WARNING, and 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 which **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. NOTE is used to highlight suggestions which **will** result in enhanced installation, reliability, or operation.

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

 **CAUTION:** This coil contains Nitrogen precharge of 15 PSI. Release of this pressure through the center of the rubber plugs is required before removing the plugs.

IMPORTANT: Nitrogen can leak out through the hole that the needle pierced in the plugs. This does not indicate a leaking coil nor warrant return of the coil.

Table 1—Coil Mounting Position in Upflow Field Fabricated Plenum

CC5A COIL	FIELD SUPPLIED PLENUM WIDTH (IN.)	COIL MOUNTING HEIGHT ABOVE FURNACE FLANGES (IN.)
A018, A024, A030	12-1/2 15-13/16	0 3-3/4
W024, 2030, A036	15-13/16 19-5/16	0 3-3/4
W036, A042, C048	19-5/16 22-13/16	0 3-3/4
W042, A060, W048	22-13/16	0
W060	29-7/8	0

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

INTRODUCTION

Use this instruction manual to install CC5A or CD5A/CD5P indoor coils on upflow or downflow furnaces. (See Fig. 1.) Do not install coil in horizontal position. Models CD5A/CD5P are enclosed in a casing. Model CC5A is an unenclosed (bare) coil that requires a field-fabricated or accessory enclosure.

IMPORTANT: Some coils are rotated 90 degrees. See Table 2 and Table 3 for lists of the sideways coils.

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.

IMPORTANT: 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/CD5P 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/CD5P Cased Coil Installation**

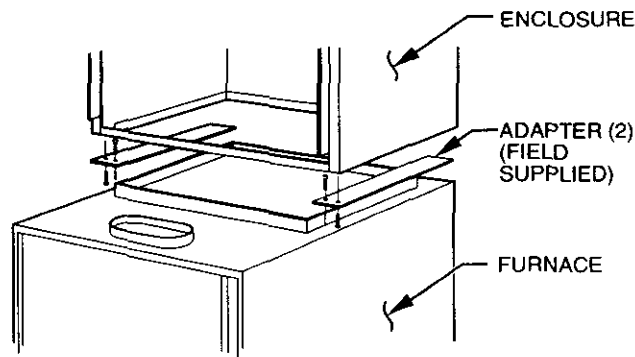
IMPORTANT: Installing "A" coils rotated 90 degrees from the front of the furnace in downflow applications can cause water blowoff or coil freeze up. This is due to the concentration of air on one coil slab or lack of air on the opposite coil slab. If the airflow is high due to ductwork or other causes, and there is a chance for water blowoff, it is recommended that a 3-in. field-supplied adapter be placed between the coil and the furnace to allow the air to distribute evenly to both coil slabs. (See Fig. 5.)

(1.) Set cased coil on supply duct opening.

(2.) Place field fabricated 3 in. adapter on coil casing. Adapter should be tapered to fit coil/furnace combination when one of them is larger than the other. (See Fig. 5.)

(3.) Set furnace on adapter.

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



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

NOTE: When removing a coil from its casing in the downflow position, support the coil enclosure with field supplied bracing. (See Fig. 4.)

PROCEDURE 4—CONNECT REFRIGERANT PIPING

Use accessory tubing package or field-supplied tubing of refrigerant grade, see Product Data information for ordering. 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 mismatched systems, use line sizes recommended in outdoor unit Installation Instructions.

The coil can be connected to outdoor units using accessory tubing packages or field-supplied tubing of refrigerant grade. Always evacuate tubing and reclaim refrigerant when making connections or flaring tubing. Leak check connections before insulating entire suction line.

⚠ CAUTION: To avoid valve damage to the refrigerant control device 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 the plugs only when ready to make the connection.

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

The following section applies to only the CC5A and CD5A coils:

b. System Refrigerant Control

A refrigerant control device (bypass type piston) is factory supplied with coil. (See Table 2 and Fig. 6.) 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.

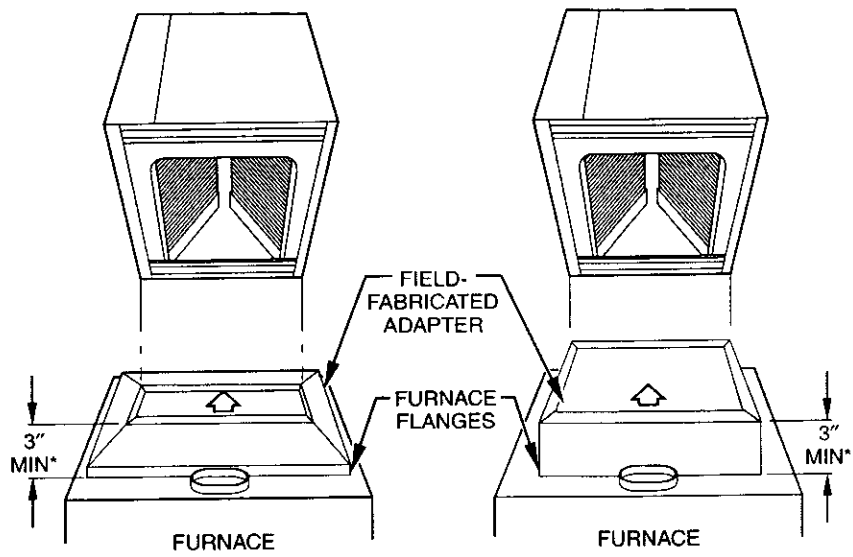
c. Liquid Line

- (1.) Replace piston if required. Check the piston size stamped into side of brass hex nut. (See Fig. 7.) 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 replace, hand tighten the brass hex nut, then tighten with 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. OF REFRIGERANT TUBING IN GROUND. If any section of tubing is buried, there must be a 6 in. 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.

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



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

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Fig. 3—Adapter Installation When Coil Casing Underhangs Furnace

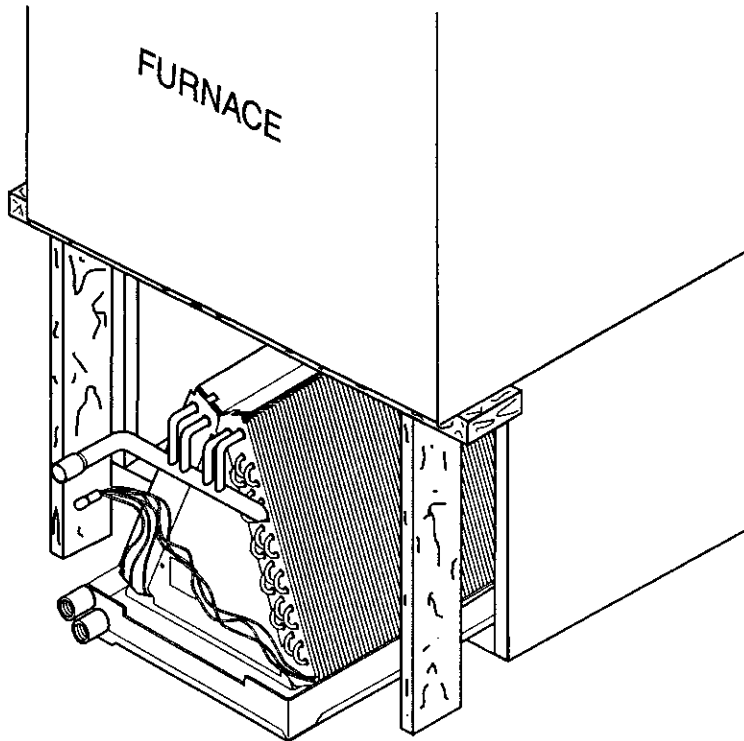
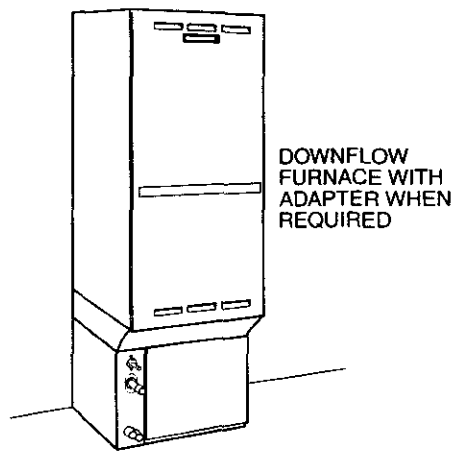


Fig. 4—Coil Enclosure Bracing

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Fig. 5—Downflow — High Airflow

Table 2—CD5A/CD5P Coil Information

MODEL NUMBER	TONNAGE	METERING DEVICE		FLUSH FIT TO FURNACE WIDTH (IN.)	FITS NEXT SMALLER FURNACE
		Piston No.	TXV		Equal Overhang Factory Supplied
CD5AXA018014	1-1/2	52	—	14-3/16	—
CD5AXA024014	2	59	—	14-3/16	—
CD5AXA030014	2-1/2	67	—	14-3/16	—
CD5AXW024017	2	59	—	17-1/2	X
CD5AXW030017	2-1/2	67	—	17-1/2	X
CD5AXA036017	3	70	—	17-1/2	X
CD5AXW036021	3	70	—	21	X
CD5AXA042021	3-1/2	78	—	21	X
CD5AXA048021	4	84	—	24-1/2	X
CD5AXC048021	4	84	—	21	X
*CD5AXW042024	3-1/2	78	—	24-1/2	X
*CD5AXW048024	4	84	—	24-1/2	X
*CD5AXA060024	5	90	—	24-1/2	X
*CD5AXW060031	5	90	—	31	X
*CD5PXX060024	5	—	EA36YD154	24-1/2	X

*Sideways Coils

Table 3—CC5A Coil Information

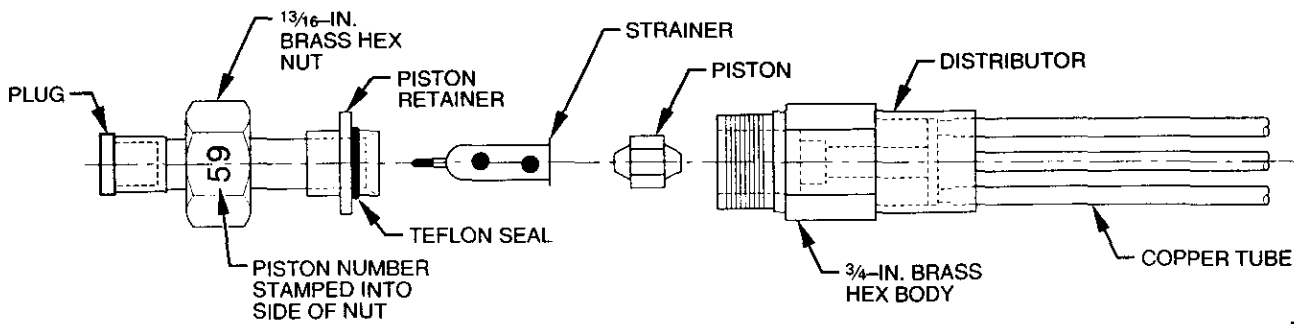
MODEL NUMBER	TONNAGE	METERING DEVICE PISTON NO.	MATCHED FURNACE WIDTH (IN.)	ACCESSORY CASING
CC5AXA018014	1-1/2	52	14-3/16	KCAKC1212ECC
CC5AXA024014	2	59	14-3/16	14-3/16W X 19H X 21D 12 Casing/Pallet
CC5AXA030014	2-1/2	67	14-3/16	
CC5AXW024017	2	59	17-1/2	KCAKC1312ECC
CC5AXW030017	2-1/2	67	17-1/2	17-1/2W X 20-1/2H X 21D 12 Casing/Pallet
CC5AXA036017	3	70	17-1/2	
CC5AXW036021	3	70	21	KCAKC1408ECC
CC5AXA042021	3-1/2	78	21	21W X 22H X 21D 8 Casing/Pallet
CC5AXC048021	4	84	21	
*CC5AXW042024	3-1/2	78	24-1/2	KCAKC1508ECC
*CC5AXW048024	4	84	24-1/2	24-1/2W X 22H X 21D 8 Casing/Pallet
*CC5AXA060024	5	90	24-1/2	
*CC5AXW060031	5	90	31	KCAKC1604ECC 31-1/2W X 22H X 21D 4 Casing/Pallet

*Sideways Coils

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 provide in each coil.

Install a trap in condensate line of coil, as close to the coil as possible. Make trap at least 3 in. deep and not higher than bottom of unit condensate drain opening. (See Fig. 8.) Pitch Condensate line to open drain or sump.



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Fig. 6—Refrigerant Control Device Components for CC5A/CD5A

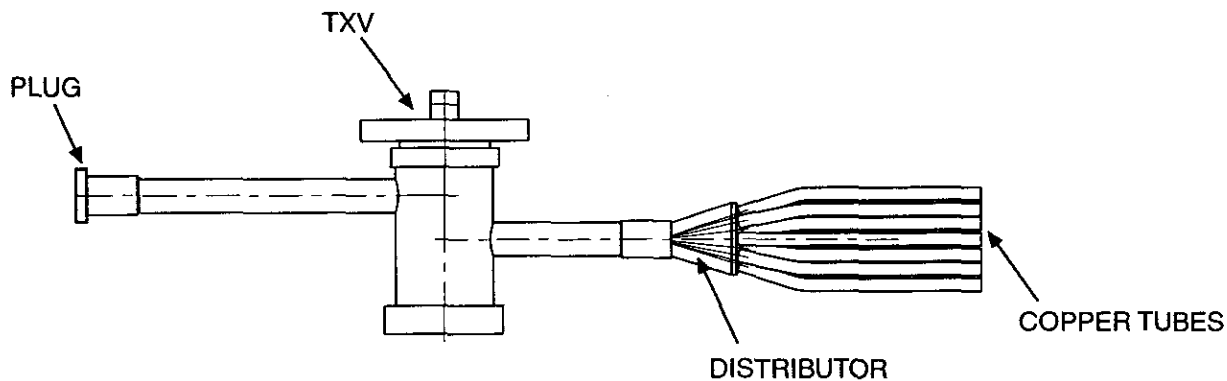


Fig. 7—Refrigerant Control Device Components for CD5P

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NOTE: If unit is located in or above a living space where damage may result from condensate overflow, a field-supplied, external condensate pan should be installed under the entire unit, and a secondary condensate line (with appropriate trap) should be run from the unit into the pan. Any condensate in this external condensate pan should be drained to a noticeable place. As an alternative to using an external condensate pan, some localities may allow the running of a separate 3/4 in. condensate line (with appropriate trap) per local code to a place where the condensate will be noticeable. The owner of the structure must be informed that when condensate flows from secondary drain or external condensate pan, the unit requires servicing or water damage will occur.

NOTE: To avoid drainage problems, test the primary drain line by slowly pouring water into the pan. Check piping for leaks and proper condensate drainage. Using the secondary drain as explained in the previous note provides future protection against overflow due to a clogged primary drain.

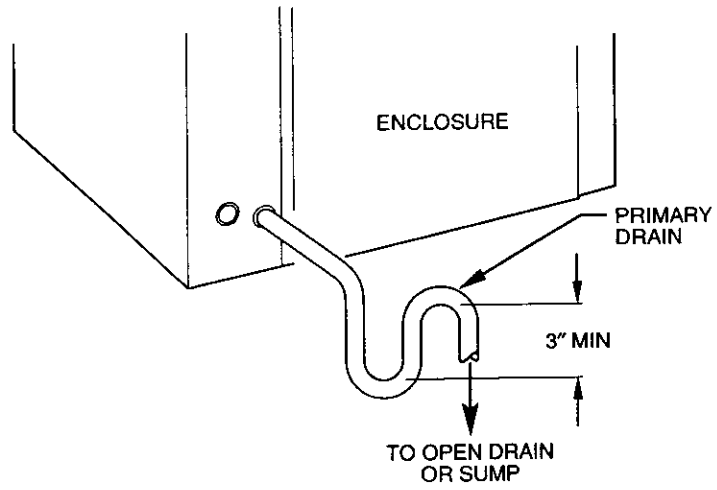


Fig. 8—Condensate Trap

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