

INSTALLATION INSTRUCTIONS



VEXAR R-22 EVAPORATOR COIL



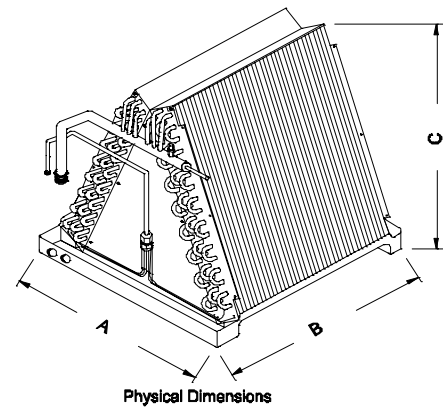
IMPORTANT NOTICE:

These instructions are primarily intended to assist qualified individuals trained and experienced in the proper installation of this type equipment. Some state codes require installation and service personnel to be licensed. Refer to authorities having jurisdiction for additional guidance.

APPLICATION:

This uncased Manufactured Housing AC and HP coil series are designed as a high efficiency "A" coil to be installed on new and existing downflow Manufactured Housing furnaces. They will readily fit on top of or into the coil cavity of most series Manufactured Housing furnaces.

Model #	Connection	Nominal Size	A	B	C
184849 **	Q.C.	3.5-4.0	18	19 5/8	18"
183036 *	Q.C.	2.5-3.0	18	19 5/8	14"
1836QA *	Q.C.	1.5-3.0	18	19 5/8	14"
1836SA *	Sweat	1.5-3.0	18	19 5/8	14"
1837QA *	Q.C.	1.5-3.0	18	19 5/8	14"
1837SA **	Sweat	1.5-3.0	18	19 5/8	14"
1848QA **	Q.C.	2.5-5.0	18	19 5/8	18"
1848SA *	Sweat	2.5-5.0	18	19 5/8	18"
1849QA **	Q.C.	2.5-5.0	18	19 5/8	18"
1849SA **	Sweat	2.5-5.0	18	19 5/8	18"
184854 **	Q.C.	4.0	18	19 5/8	18.5"
185054 **	Q.C.	4.5-5.0	18	19 5/8	18.5"
1854QA **	Q.C.	2.5-5.0	18	19 5/8	18.5"
1854SA *	Sweat	3.5-5.0	18	19 5/8	18.5"
186000 **	Q.C.	2.5-5.0	18	19 5/8	20.5"
186100 **	Q.C.	2.5-5.0	18	19 5/8	24.5"



* = 3/4 Suction & 3/8 Liquid
 ** = 7/8 Suction & 3/8 Liquid
 QC = # 6 & # 11 Male Fittings

NOTE: VEXAR COILS, BLOWER, AND OTHER ACCESSORIES INSTALLED WHEN AIR CONDITIONING IS ADDED TO MANUFACTURED HOUSING FURNACES WILL COMPLY TO HUD REGULATIONS REQUIRING THIRD PARTY APPROVALS. EFFICIENCY AND CAPACITY RATINGS AS REQUIRED BY HUD ARE LISTED IN CURRENT ARI DIRECTORY FOR VEXAR COIL MODELS MATCHED WITH CONDENSING UNITS. THESE COIL RATINGS ARE BASED ON AIR QUANTITIES CONSISTENT WITH THOSE THAT ARE ENCOUNTERED IN TYPICAL MANUFACTURED HOUSING AIR CONDITIONING APPLICATIONS.

INSTALLATION OF INDOOR COILS IN 3400, 3500 AND EB SERIES COLEMAN AND FE AND E()E SERIES NORDYNE ELECTRIC FURNACES.

DANGER! SHOCK HAZARD

FAILURE TO INSTALL A DRAIN LINE AND TRAP CORRECTLY, OR AT ALL, COULD RESULT IN CONDENSATE FLOWING OUT OF COIL DRAIN PAN AND INTO FURNACE WHICH CAN RESULT IN POTENTIAL SHOCK HAZARD.

1. Turn off electrical power to the furnace at the main house disconnect. **Caution: Furnace may be connected to more than one supply circuit.**
2. Remove air filter at top of furnace cabinet, if E()E or FE furnace.
3. Remove knock-outs in furnace bottom and cut holes in the floor for refrigerant lines, condensate drain and control wiring.
4. Install furnace insulation to prevent condensate forming on furnace walls.
5. On Coleman furnace install coil support shelf. On Nordyne furnace set coil on top of furnace or install optional coil cavity and remove knock-out at top of furnace.
6. Attach drain pan gasket provided with coil to underside of coil pan and center and **level indoor coil for proper drainage** and air flow.
7. Install Accessory air filters for proper filtration. Seal-off any openings to prevent air by-passing filter or coil.
8. Route low voltage wiring, refrigerant lines and drain tubing through floor penetration. **(WARNING! If drain hose is below 40 Deg F during installation warm before expanding and/or forming.)**
9. Form 3” deep trap using (field supplied) tape and (provided) flexible drain hose and connect to coil pan drain securing with clamp provided. The most efficient use of drain material is to form a “P” trap under house. Make sure that all drain piping under the home is supported and secured properly.
10. Connect refrigerant lines per instructions on line set box. Make sure to lubricate quick connect threads for proper mating. Refer to installation instructions for additional information on outdoor unit and line set hook-ups.
11. Make low voltage connection per instructions with outdoor unit, blower control and T-stat; then restore power to furnace.
12. Replace furnace door.
13. Check operation of system.

INSTALLATION OF COILS IN 7900, 7700, 7600, 4000 DG**, DL**, COA*, AND CGA* SERIES COLEMAN GAS AND OIL FURNACES AND M1*, M3*, MG**, MM**, MGH, MGB, MAC SERIES NORDYNE GAS AND OIL FURNACES.

IMPORTANT

Do not install any coil in a gas furnace which is to be operated during the heating season without attaching the refrigerant lines to the coil. Possible coil damage will result from excessive refrigerant pressure build up during heating operation.

1. Turn off electrical power to furnace.
2. Remove the furnace door.
3. Turn off the gas supply and remove the fuel piping from in front of the coil compartment if it was routed inside the furnace coil compartment.
4. Remove the coil cover panel from the furnace, retaining screws for future use.
5. Remove knock-outs in furnace bottom for low voltage wiring, refrigerant lines and condensate drain: drill or cut holes through floor.
6. Attach drain pan gasket provided with coil to underside of coil pan. **Center and level indoor coil for proper drainage and air flow.**
7. Route low voltage wiring, refrigerant lines and drain tubing through floor penetration.
8. Connect drain hose to coil pan drain; securing with clamp provided.
9. Remove knock-out from coil cavity panel and cut fiberglass insulation (not on all models) covering suction and liquid line manifolds and drain openings.
10. Reinstall coil cavity panel and attach two pieces of silver foam tape to close off the opening on coil compartment cover. Silver tape provided in the small parts package packed in the coil box.
11. Connect refrigerant lines per instructions on line set box. Make sure to lubricate quick connect threads for proper mating. Refer to installation instructions for outdoor unit for additional information on line set hook-ups.
12. Make low voltage connections per instructions with outdoor unit, blower control and T-stat.
13. Reconnect the gas piping if necessary per Federal, State, and Local Codes using industry standards for that operation.
14. Install accessory filter insuring proper filtration. Seal off any openings to prevent air by-passing filter.

15. Turn on gas/electric supply to furnace.
16. Replace furnace door and check operation.

GENERAL COIL INSTALLATION NOTES

1. For optimum performance efficiency, adjust system charge as recommended by condensing unit manufacturer.

NOTICE

MOST VEXAR COILS HAVE TXV METERING DEVICES. HOWEVER, THE BULB IS NOT MOUNTED. PROPER MOUNTING OF THE SENSING BULB IS MANDATORY.

The sensing bulb should be installed on a horizontal run of the manifold if possible. On line under 7/8" OD the bulb may be installed in a position of about 2 or 10 o'clock. with 7/8" OD and over, the bulb should be installed in a position of about 4 or 8 o'clock.

If bulb installation is made on a vertical run, the bulb should be located at least 6 inches from any bend, and on the tubing side opposite the plane of the bend. On vertical bulb installations, the bulb should be positioned with bulb capillary tube at the top. (See diagram on page 4)

Bulb must be installed securely using provided clamp and properly insulated for correct operation.

2. FOR COILS EQUIPPED WITH FLORATOR USE THE SPECIFIC ORIFICE PISTON SIZE AS RECOMMENDED BY CONDENSING UNIT MANUFACTURER FOR THE SPECIFIC CONDENSING UNIT. COILS WITH TXV'S SHOULD BE SIZED PROPERLY PER TONNAGE AND TYPE REFRIGERANT. CONSULT FACTORY FOR PROPER APPLICATION.
3. Coil should be sprayed with liquid detergent thoroughly before installation to assure elimination of water blowoff and for maximum performance. If not sprayed approximately 50 hours of break in time is required to achieve results.
4. Always be sure coil is installed level and that it drains toward drain fittings. Connect drain line to open drain but never to a closed sewer. Pitch drain lines away from drain pan. Always test drain line with water before operating.
5. A WATER TRAP is recommended on all "A" coil applications but is REQUIRED ON PULL THRU DOWNFLOW COIL INSTALLATIONS ON ELECTRIC FURNACES. Failure to provide can result in improper drainage or POTENTIAL SHOCK HAZARD.
6. Check all field installed refrigerant connections with electronic leak detector, halide torch, or soap bubbles.
7. Refer to installation instructions provided with the outdoor unit, indoor heating and cooling blower package and line sets for completion of system installation.

8. Complete all data on the Furnace Air Conditioning Accessory Label provided (use a ball point pen) listing all model numbers and certification authorities. Install this label in furnace vestibule. THE HUD REQUIREMENTS ARE NOT MET UNLESS THE DATA IS ENTERED AND THE LABEL IS ATTACHED TO FURNACE SHOWING CERTIFICATION AUTHORITY FOR THE APPROVALS OF BLOWER AND COIL.

WARNING! THE USE OF COMPONENTS NOT TESTED IN COMBINATION WITH SPECIFIC MAKES AND MODEL FURNACES MAY MAKE THE EQUIPMENT IN VIOLATION OF STATE CODES. MAY CREATE A HAZARD AND MAY DAMAGE THE EQUIPMENT. IN ADDITION, THE NATIONAL MANUFACTURED HOUSING CONSTRUCTION AND SAFETY STANDARDS ACT AND ITS REGULATIONS REQUIRE THE USE OF COMPONENTS TESTED OR CERTIFIED BY A NATIONALLY RECOGNIZED TESTING LABORATORY IN ALL MANUFACTURED HOMES CONSTRUCTED OR SOLD SUBJECT TO TO THAT ACT.

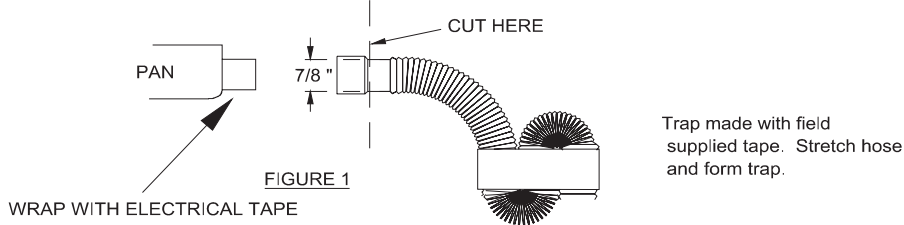
INSTALLATION OF COILS IN OTHER DOWNFLOW RETROFIT APPLICATIONS

The plastic pan coils may also be used with furnaces or air handlers other than those models covered in the preceding sections of these instructions providing that:

1. The furnace has a blower with sufficient air delivery to handle the air requirements of the air conditioning system being used.
2. The proper retrofit control box is used to prevent the possibility of the outdoor unit and furnace operating at the same time.
3. The coil cabinet or any built-in coil compartment should fit the coil properly so that no air will be bypassed around the coil
4. Do not use any coil cabinet or coil smaller than the warm air outlet of the furnace or air handler. Otherwise, the coil and cabinet may seriously affect the airflow from the furnace, resulting in a limiting condition and failure to work properly.
5. A drain tube must be installed and secured with hose clamp.
6. A water trap must be installed whenever a coil is used on the inlet side of a furnace.
7. Never install the coil on the inlet side of a fuel burning appliance or any other furnace or air handler not properly insulated or listed for inlet coil applications by UL.

FOR VERSION "A"

INSTALLATION OF COLLAPSIBLE HOSE ON SINGLE CONDENSATE DRAIN CONNECTION
CAUTION-----BEFORE INSTALLING COIL IN FURNACE, SEE FIGURE 1.

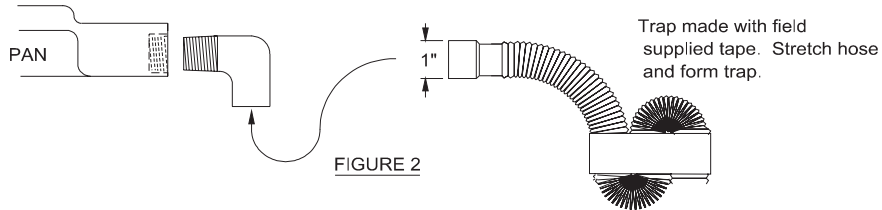


CUT PORTION OF HOSE OFF ON ONE END AT SHOULDER AS SHOWN ABOVE.
WRAP 2 OR 3 TIMES AROUND THE PAN CONNECTOR WITH ELECTRICAL TAPE FOR A LEAK-TIGHT FIT.
SLIP SMALLER 7/8" I.D. SECTION OF HOSE ON TO DRAIN CONNECTION.
SECURE WITH HOSE CLAMP.

FOR VERSION "B"

TWO FITTINGS ARE SHIPPED IN THE ACCESSORY PACKAGE TO BE USED WITH THE MOBILE HOME PLASTIC PAN THE 90 DEG ELL CAN BE SCREWED IN THE LEFT DRAIN FITTING (MAIN) TO TURN DOWN AND EXIT FURNACE ENCLOSED DRAIN HOSE WILL SLIP OVER THE FITTING OR A STANDARD PVC FITTING CAN BE USED IF CODE REQUIRES RIGHT DRAIN CONNECTION HAS A WEB IN IT TO PREVENT FLOW UNLESS A SECONDARY DRAIN IS REQUIRED A STRAIGHT FITTING IS SHIPPED IN THE ACCESSORY PACKAGE TO BE USED FOR THE AUXILIARY DRAIN WHERE REQUIRED. KNOCK OUT WEB AND INSERT FITTING. TURN DOWN WITH A STANDARD 3/4 IN PVC ELL

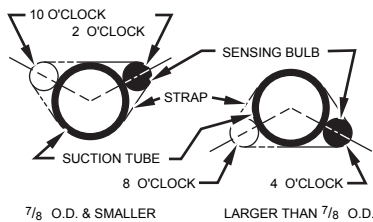
INSTALLATION OF COLLAPSIBLE HOSE ON SINGLE / AUX. CONDENSATE DRAIN CONNECTION
CAUTION-----BEFORE INSTALLING COIL IN FURNACE, SEE FIGURE 2.



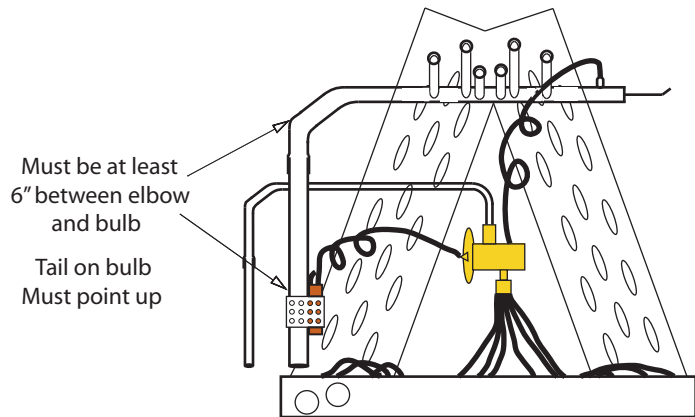
SLIP 1" I.D. SECTION OF HOSE ON TO 90 DEG. DRAIN FITTING.
HOSE IN SOME CASES IS VERY TIGHT BUT WILL STRETCH AS IT IS WORKED ON.
IF HOSE CAN BE LEFT ON DURING INSTALLATION PUT PROVIDED CLAMP ON AT THIS TIME.
IF HOSE MUST BE REMOVED TO COMPLETE INSTALLATION MAKE SURE IT IS STRETCHED TO ALLOW FOR EASIER REATTACHMENT.

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TXV BULB LOCATION DIAGRAM



Horizontal Bulb Locations



Vertical Riser Application

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