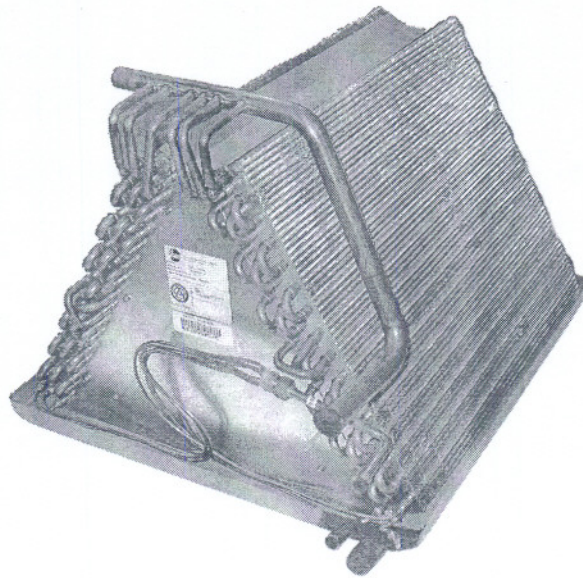


INDOOR COIL

Installation Instructions Replacement R-22 A-Coil Model RCTA – B060



WARNING!

BECAUSE OF POSSIBLE DAMAGE TO EQUIPMENT OR PERSONAL INJURY, INSTALLATION, SERVICE, AND MAINTENANCE SHOULD BE PERFORMED BY A TRAINED, QUALIFIED SERVICE PERSON. THIS PRODUCT CONTAINS NO CONSUMER SERVICEABLE ITEMS.

General:

RCTA-B060 replacement A-coil evaporator designed for use with R-22 outdoor cooling condensing or heat pump units. This coil consists of 3 rows using 3/8 tubes in lieu of the original 5/16 tubes. A metal drain pan, similar to the coils that it replaces is supplied with this coil.

These instructions are intended as a general guide and do not supersede local codes in any way. Consult with local authorities having jurisdiction before installation.

The RCTA-B060 coil will replace older Rheem coil models noted in Table 1 below:

RCLB-A048S	RCMB-A048S	RCMB-A060S	RCPB-C039S
RCPB-B042S	RCPB-C042S	RCPB-B048S	RCPB-C048S
RCQB-B042S	RCQB-C042S	RCTB-A037S	RCTB-A048S
RCTB-A060S	RCTB-B060S		

Table 1

Vertical Upflow & Downflow Applications

These coils can be used in all vertical upflow and some downflow applications. This coil is designed to fit all RHQA-16 air handler applications. RHQA-20 air handler applications are limited to upflow or horizontal only due to downflow airflow restrictions. This coil will also fit REAB-B16 electric furnace applications. Electric furnace REAB-B20 applications are limited to upflow only due to downflow airflow restrictions.

Due to the depth of the RCTA-B060 coil, this coil will **not** fit into any of the RXAL-B series of coil enclosures. If this coil is to be used with a gas furnace, a field fabricated, insulated, coil enclosure is required. The coil enclosure must meet all applicable codes.

Downflow applications are limited. Downflow applications for indoor airflows of greater than 1600 cfm can result in water blowoff and are not recommended.

Horizontal Applications

Horizontal applications utilize the RXCH-A16 or B16 horizontal drain pans. The RXCH-A16 drain pan is required for REAB electric furnace application. The RXCH-B16 drain pan is required for RHQA applications. Horizontal drain pan extension kits RXCH-A161 may be required for REAB electric furnace applications.

If this coil will replace existing horizontal installations, the appropriate horizontal drain pans and extension kits are likely to be installed.

Flow Controls

These coils are supplied with a flow-check, fixed orifice flow control only. This flow control will allow the refrigerant flow to reverse for heating operation while bypassing the orifice. Some of the original coils noted in Table 1 may have been supplied with a thermostatic expansion valve. A proper orifice size is included with this coil for those applications.

Heat Pump Applications

Heat pump applications are sensitive to correct charge balance between heating and cooling operation modes. The internal volume of the RCTA-B060 coil will not meet the requirements of all the older indoor coils and older heat pump outdoor sections (RPGB, RPCC, RPFB, RPGC, for example). The allowable indoor coil replacements are the RPCB-C039, RPCB-C042, and RPCB-C048. ***The RCTA-B060 coil cannot be used to replace any RCQB-B042, C042 or larger with older heat pumps due to the smaller internal volume.***

The RCTA-B060 coil may be used in any heat pump system in which the outdoor unit is rated with a Multiflex indoor coil, models RCHA, RCHJ, and RCBA, except models RCHJ-51 or RCHJ-61.

Matched system components, new indoor and outdoor, are recommended for all applications in which the RCTA-B060 will not provide the proper match.

The heat pump system must be charged in cooling only with a recommended subcooling of 10° F at the liquid service valve of the outdoor unit.

RCTA-B060 Replacement Coil

Coil Dimensions

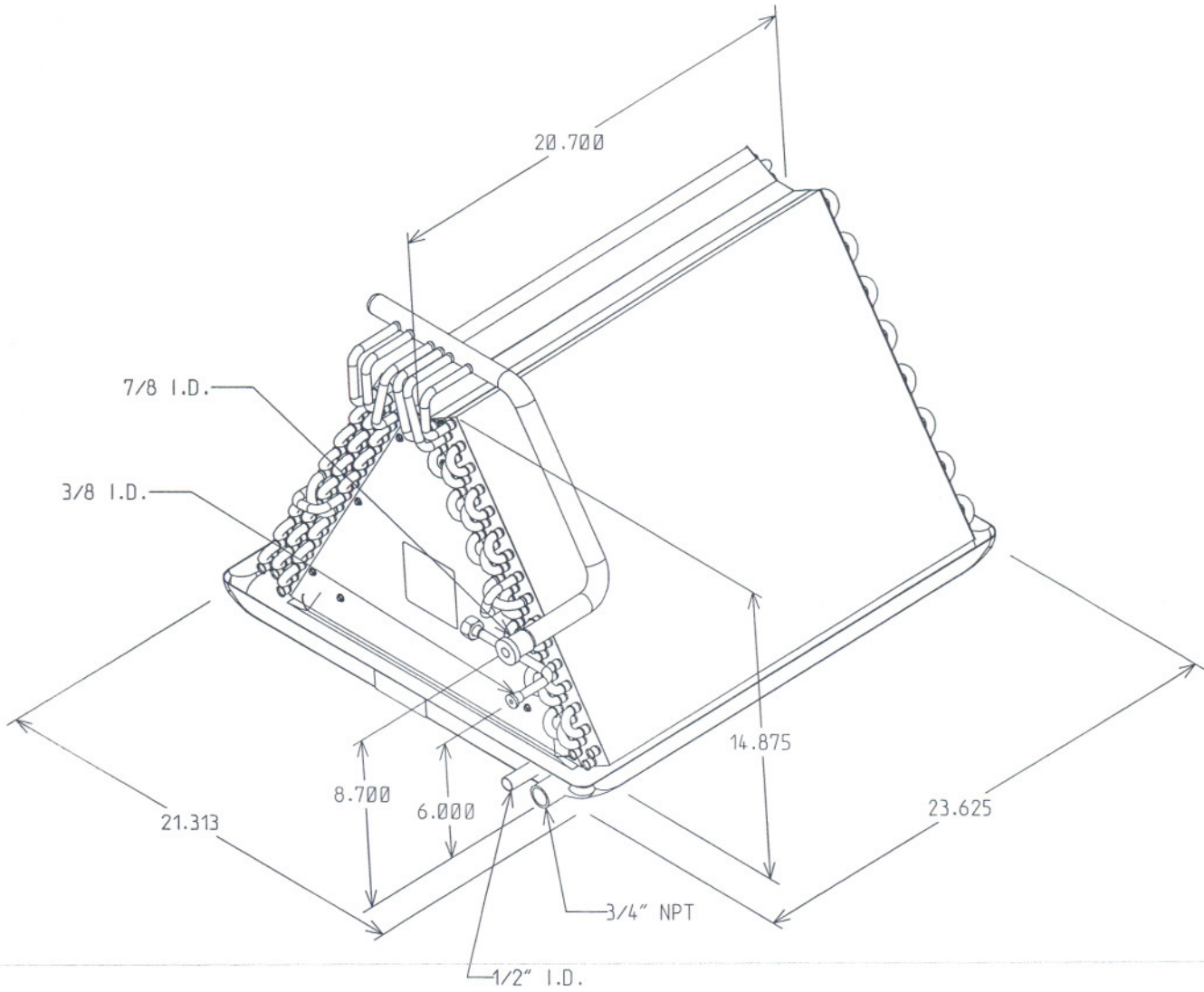


Figure 1

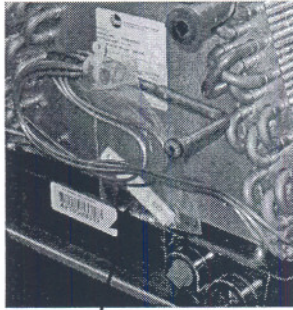
RCTA-B, Wet Coil Pressure Drop

Airflow CFM	1200	1400	1600	2000
Inches, WC	0.18	0.22	0.25	0.32

Table 2

Receiving:

Check coil for shipping damage. If you should find damage, immediately contact the last carrier. Verify carton contents to verify that all required parts are within the carton. Contents include:



Orifices
(contained within bag)

Orifice Size	Location
73	Bag
78	Distributor
83	Bag
90	Bag

Table 3

Installation

IMPORTANT

The Clean Air Act of 1990 bans the intentional venting of refrigerant (CFC's and HFC's) as of July 1, 1992. Approved methods of reclaiming must be followed. Fines and/or incarceration may be levied for non-compliance.

WARNING!

Coils are shipped with a 10 psi dry air holding charge. Puncture rubber plug on suction line to release charge before removing plugs. Note: The absence of pressure does not verify a leak. Check the coil for leaks before installing, or returning it to your local wholesaler.

CAUTION!

When an evaporator coil is installed in an attic or above a finished ceiling, an auxiliary drain pan should be provided under the unit as specified by most local building codes.

1. Pump down the outdoor unit by closing off the liquid line service valve. After the majority of the charge has been pumped into the outdoor coil, close the suction service valve and reclaim the remaining charge in the system.
2. Remove the coil from the air handler or furnace by:
 - a. Unsweating the coil connections
 - b. Removing the drain fittings
 - c. Remove the coil access panel
 - d. Remove the tubing panel
 - e. Remove the existing coil
3. If the previous coil utilized a horizontal drain pan, RXCH-A16 or B16, this drain pan can be reused. The drain pan extension, RXCH-A161 for REAB electric furnace applications can also be reused. Inspect the drain pan and extension, if required, for rust or damage. Replace the drain pan and extension if necessary. Save the bracket used to attach the horizontal drain pan to the coil as the bracket will be reused to attach the RCTA-B060 coil to the horizontal drain pan.
4. Remove the bag of orifices attached to the liquid line of the RCTA-B060 coil. The coil ships with the #78 orifice installed. Replace the #78, if required, with an orifice based on Table 4 below. Be sure to relieve the dry air holding charge pressure from the coil. Then remove liquid line from distributor, note the position of the orifice in the distributor, and remove the orifice from the distributor. Insert the new orifice into the distributor so that it is in the same position as the old orifice. Reattach the liquid line to the distributor.

Coil Size Tons	Orifice Size
3	73
3½	78
4	83
5	90

Table 4

(Note: #78 orifice is factory installed)

5. The RCTA-B060 will fit the RHQA air handler or the REAB electric furnace without then need for any adapters. Remove any adapters in the air handler or furnace so that only the side rails, attached to the air handler or furnace cabinet, are present. Remove any adapters in the back of the air handler or furnace so that only the back bracket, attached to the back of the cabinet remains.
6. If horizontal application, attach the coil to the horizontal drain pan using the brackets from the drain pan kit or the brackets saved in Step 3. The RCTA-B060 has engagement holes in the end sheet metal used to attach the 2 coil slabs. The engagement holes are located toward the top of the coil.
7. Slide the coil into the air handler or furnace. Line-up drain fittings and refrigerant lines with the openings in the air handler or furnace access panels and reattach the panels.
8. Braze the refrigerant liquid and suction connections to the liquid and suction lines on the coil. See the section entitled "Refrigerant Piping" for additional instructions.
9. Leak check the connections and make sure the coil is leak tight.

10. Evacuate the interconnecting lines and coil.
11. Reinstall the condensate drain lines. See the section entitled "Condensate Drain" for additional instructions.
12. Open the service valves and start the system. Allow at least 10 minutes for the system to equalize operating pressures. Check pressures and temperatures using the charge chart supplied with the outdoor unit.
 - a. A coarse charge determination can be made by using the subcooling and superheat at the service valves. Subcooling should be approximately 10° F when outdoor ambient is 80-100° F. Superheat will vary from about 15-20° F at 80° outdoor ambient to 8-12° F at 100° F. ***Do not allow the superheat to drop below 8° F and use the charge chart with the outdoor unit whenever possible.***
13. Seal all openings in the air handler or furnace using high quality tape or sealant to prevent outside air leakage into the cabinet.

Refrigerant Piping:

Refrigerant sweat connections provided with the coil are 3/8" ODF Liquid line and 7/8" ODF Suction line. Check outdoor unit instructions for proper interconnecting line sizing.

A liquid line filter dryer or strainer is recommended.

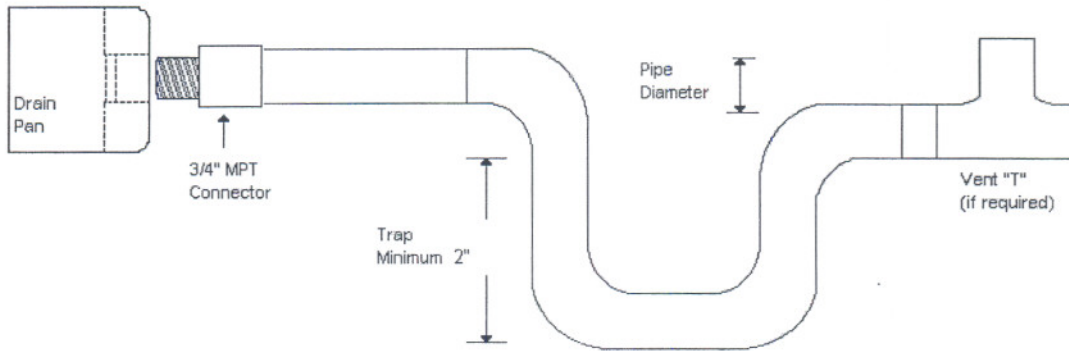
Condensate Drain:

CAUTION!

All coils are provided with a secondary drain fitting. It should be trapped and piped to a location that will give the occupant a visual warning that the primary drain is clogged.

1. Coils are equipped with right side primary and secondary drain connections. Primary drain connection is 3/4" NPT while the secondary is 1/2" ID. The secondary drain connection has a drain plug to prevent condensate leakage if this connection is not utilized. Remove the plug before connecting to the secondary drain.
2. Attach primary drain line to the drain pan with 3/4" male pipe thread PVC fittings. **DO NOT TIGHTEN ABOVE 10 FT-LBS OF TORQUE.** This maximum torque is slightly above hand tight.
3. Attach secondary copper drain line by brazing 1/2" line to the secondary drain fitting.
4. Do not reduce drain line sizes.
5. Route drain line(s) so they will not be exposed to freezing temperatures and do not interfere with accessibility to the coil, air handling system or filter. The drain should be pitched downward 1" per 10' with a 2" trap (if required) as close to the coil as possible. If line makes a second trap, or has an extended run before termination, a vent tee should be installed after the trap closest to the pan.

If the coil is located in or above a living space where damage may result from condensate overflow, a separate 1/2" drain must be provided from the secondary drain connection. Run this drain to a place in compliance with local installation codes where it will be noticed when unit is operational. Condensate flowing from the secondary drain indicates a plugged primary drain.



Prime the trap with water. Test line for leaks. Test water flow with unit in operation.