

Quality and Continuous Improvement

Number: TIC 2019-0019 **Date:** 08/28/2019

Title: Ductless 38MA*R - FV4C Adapter Assembly

Product Category: Ductless Single Zone

Products Affected:

Ductless Single Zone Heat Pump Condensing Unit Coupled with FV4C Fan Coil:

38MA*R sizes 12K – 36K approved combinations.

38MAQB12R--3 & FV4CNF002L00

38MAQB18R--3 & FV4CNF002L00

38MAQB24R--3 & FV4CNF002L00

38MAQB30R--3 & FV4CN(B,F)003L

38MAQB36R--3 & FV4CN(B,F)003L

Situation:

Ductless Single Zone heat pump condensing units 38MA*R sizes 12K – 36K approved combinations that can be paired with the FV4C indoor fan coil units require a piping adapter. The liquid line connection for this combination must be modified as a result of TXV replacement. The adapter (RCD part # 331831-701) may be fabricated by following the procedure below.

Technical Information:

This Technical Information Communication (TIC2019-0019) is being released today to inform our Distribution Sales and Service Teams of the procedure involved in making the piping adapter for use in the FV4C when it is paired with the 38MA*R sizes 12K – 36K approved combinations. The piping adapter is necessary because the factory installed TXV is removed from the indoor coil for this application. The part number that must be ordered from RCD to accomplish this procedure is part # 331831-701. All other parts should be sourced locally or field fabricated.

<u>CAUTION:</u> The procedure below calls for brazing parts. It is required to **flow nitrogen** during brazing in order to maintain the internal integrity and cleanliness of the copper tubing and fittings.



Procedure for making the adapter

Assemble the following parts to create the adapter for connecting to the liquid line.



1. 331831-701 Adapter Assembly

Note the Teflon Gasket!!



Teflon Gasket properly installed (before brazing).





2. 90 degree bend in the end of the 3/8" line set.



3. Measure 1 1/4" to obtain cut point.





4. Cut tubing to insert into Adapter 331831-701

Be sure that the brass nut is in place before brazing the 331831-701 adapter. Temporarily remove Teflon gasket before brazing.

Flow Nitrogen.

Braze the adapter onto the end of the 90 degree bend at the tip of the line set.

Alternate Method.

Other field supplied parts include:
Precut 3/8" tubing to a minimum of 3 3/4" length. (source locally)
3/8" – long radius **STREET** elbow. (source locally)
3/8" coupling (source locally)





5. Long Radius (LR) Street Elbow



6. 3/8" Coupling



7. Separate pieces – braze pieces with Teflon Gasket removed... FLOW NITROGEN while brazing.





8. Assembled Adapter Parts

For either method:
Place Teflon gasket on Chatleff adapter brass tip,
Hand tighten adapter nut onto aluminum distributor,
Double-wrench to tighten the fitting an additional ½ turn.