

INSTALLATION OF EXPANSION VALVE

The following steps are for installing the Expansion Valve at the condensing unit for Hiwall DX Fancoil applications. Outdoor installation is required to locate the noise of expansion away from the users.

STEPS:



Figure - 1. Bend pipe to "S" shape.

#1 Use 3/8" refrigeration copper approximately 7" long. Using a small tubing bender, bend to an "S" shape 4" tall (See Fig.1).

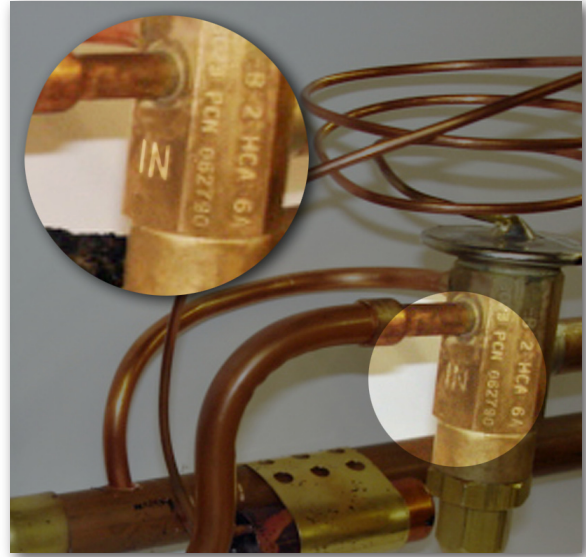


Figure - 2. Note that Inlet side is marked with the letters "IN".

#2 Fit expansion valve to 3/8" "S" bend on inlet side of valve. Inlet and outlet are clearly marked on valve (see Fig.2). Fit to condenser liquid service valve.

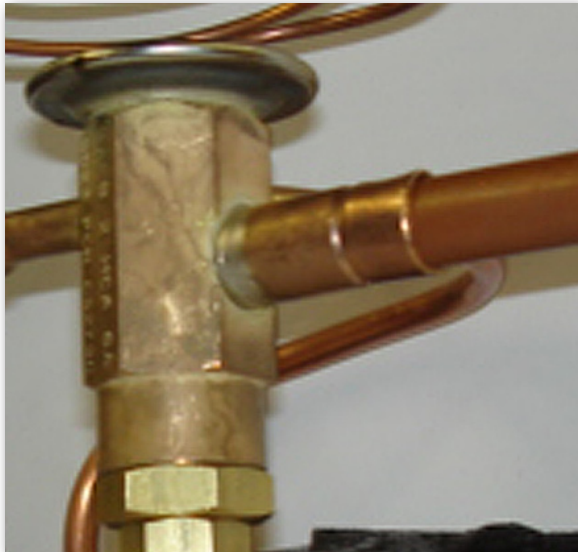


Figure - 3. Outlet side of valve.

#3 Fit 1/2" to 3/8" copper reducer (if required) to outlet side of expansion valve. Fit to refrigerant line going to the evaporator (See Fig.3).

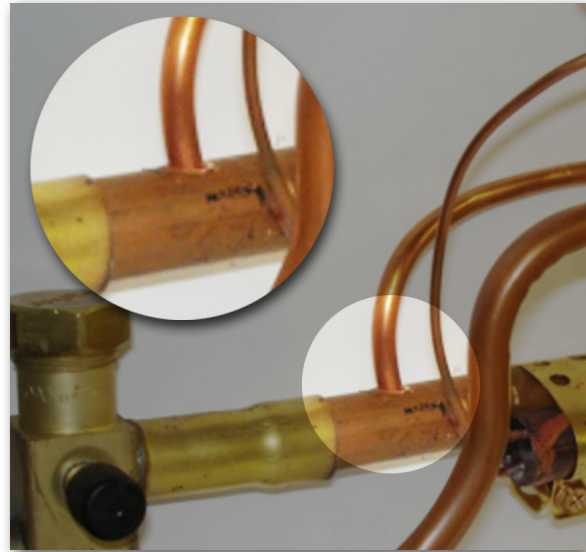


Figure - 4. Pierce of 5/16" hole on suction line.

#4 Using a line piercing tool to make a 5/16" hole on suction line 1-1/2" from the suction service valve connection at condenser (See Fig.4).

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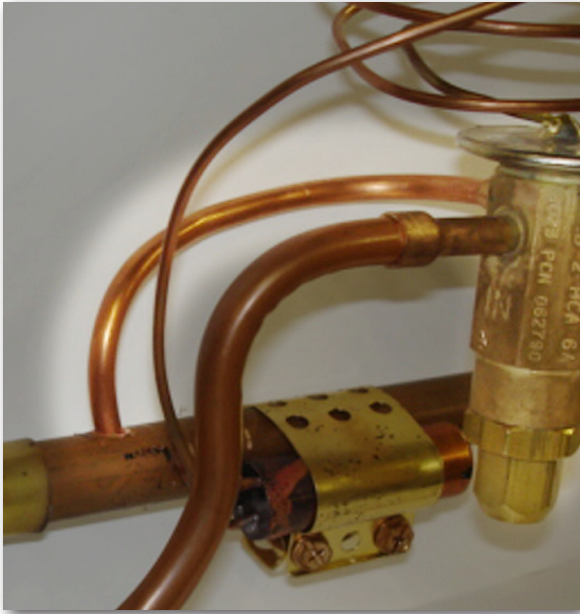


Figure - 5. Connection from expansion valve to 5/16" on suction line.

#5 Using a small tubing bender. Bend 1/4" copper to connection on expansion valve external equalizer line to 5/16" hole on suction line (See Fig.5).

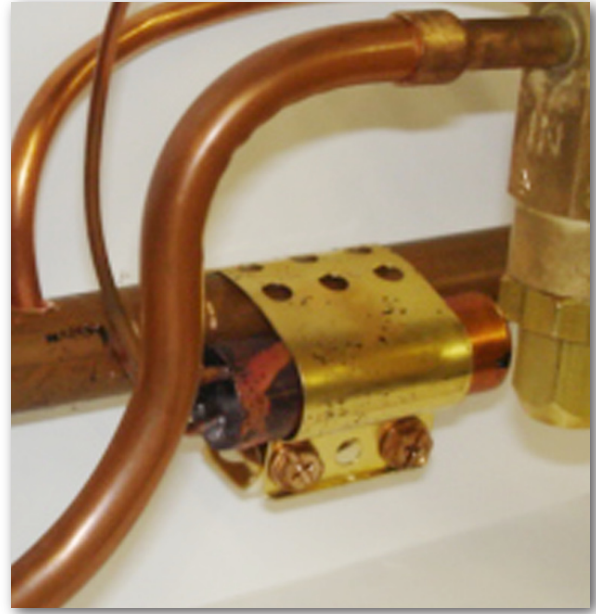


Figure - 6. Sensor bulb in the 4 o'clock position on suction line.

#6 Locate and install the sensor bulb on the suction line. The sensor bulb should be installed in the 4 o'clock or 8 o'clock position as per manufactures installation guide (see Fig.6 & 7). Be sure to insulate the Sensor Bulb.



Figure - 7. Insulate the Sensor bulb as well as both refrigerant lines.

#7 Insulate both of the refrigerant lines from the condenser to the evaporator.

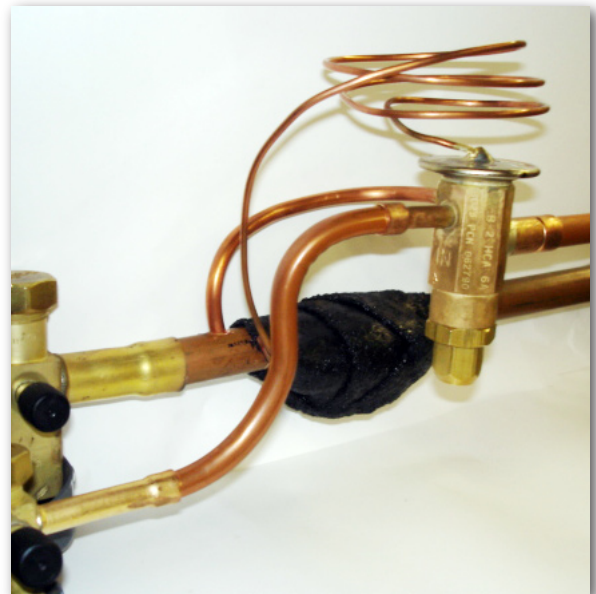


Figure - 8. Completed installation.

Notes:

- 1) Use 15% Silver Brazing Rod on all joints
- 2) Do not overheat the expansion valve and service valve when brazing
- 3) Always wet rag the expansion valve and service valve when brazing
- 4) Always use refrigeration grade copper for connections
- 5) Always insulate both liquid and suction lines to prevent capacity loss