



Changing the BD Expansion Valve

Valves that no longer adjust to the proper pressure or become plugged and do not pass refrigerant need to be replaced.

Valves with a red heat shrink band around the plastic moisture cap have been set by Sea Frost before shipping. Do not disturb the cover or remove the heat shrink band. Valves for R-134a systems are set at about 1 to 2 PSI. (Valves for the Bdxpx are set at 15 PSI. This is for refrigerant R-404a.)

To Replace a Valve

Evacuate the refrigerant. Loosen and unscrew the Swagelok nut attaching the valve to the cold plate. Carefully un-roll the 1/8" tubing from the valve by turning the valve.

Heat the inlet nut with a heat gun to soften the LOCTITE used on the threads of this assembly. Hold the inlet nut with a wrench and un-screw the valve from the inlet nut.

Note: There is no swivel on the 1/8" to the inlet nut. If the inlet nut is turned it will twist and break the 1/8" tube and destroy supply line.

Clean the female threads on the inlet nut. Make certain no LOCTITE crumbs are in the nut.

Apply one drop of LOCTITE 271 (Red permanent) on the male threads of the new valve and thread it into the inlet nut. Use a backup wrench on the inlet nut and tighten the connection by turning the valve.

The 1/8" supply line can be re-wrapped around the valve body but if the tubing is work hardened with a potential to kink make a smooth bend with the excess. The original wrapping was for strain relief.

Position the valve to re-join the Swagelok nut. Finger tighten the nut to assure it is not cross threaded. Tighten to wrench snug then using two wrenches turn the nut 90 degrees further. Swagelok is a special fitting and should not be tightened beyond 90 degrees from wrench snug. If the connection leaks in the leak test tighten slightly more until the leak stops. Over tightening this connection will ruin the spring compensating feature of Swagelok making it necessary to replace the connection.

Evacuate the system, leak check and recharge.