

Evaporator Superheat

May 2013

Adjusting TXV Superheat after installation

Before leaving the factory, a specific superheat setting is made on each and every Parker TXV. A standard superheat setting has been established for every size and every thermostatic charge. This standard setting provides the proper superheat on the average system to which the particular TXV size and charge is likely to be applied. Therefore, in most cases, a superheat adjustment on the job will not be necessary. Parker recommends a change in the superheat adjustment only after it has been determined that it is required. Review manufacturers recommendations for superheat of their evaporator. A careful measurement of the operating superheat, using the recommended procedure, will establish if a change would be beneficial. Several conditions should be met before measuring Superheat:

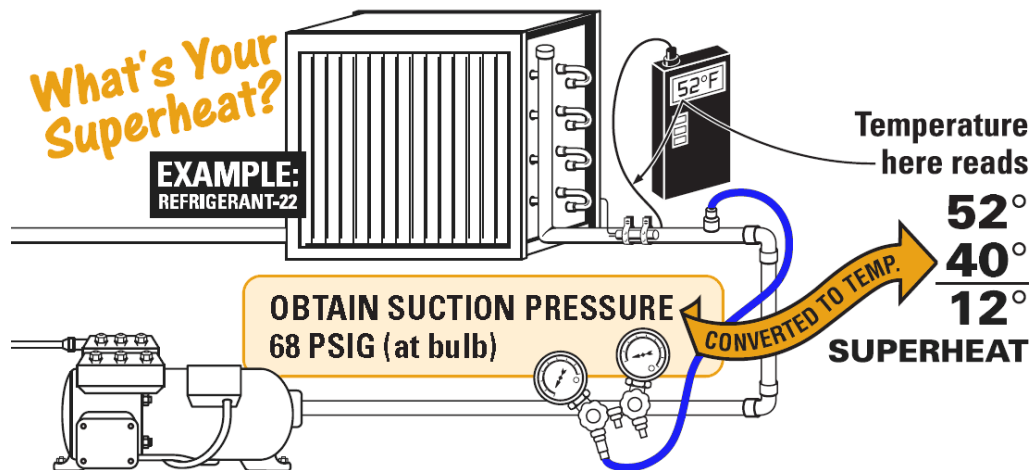
1. Proper system Refrigerant Charge.
2. Proper air flow across the Evaporator Coil.
3. System is operating at or near design conditions.

To reduce the superheat, turn the adjusting stem **COUNTERCLOCKWISE**. To increase the superheat, turn the adjusting stem **CLOCKWISE**. When adjusting the valve, make no more than 1/2 turn of the stem at a time and observe the change in superheat closely to prevent over-shooting the desired setting. There is a general waiting period of 15 to 20 minutes after making this adjustment before measuring superheat again. On adjustable TXVs, Parker attempts to position the adjusting stem at the half-way point when it is at the standard setting. This allows maximum adjustment in both directions.

Parker supplies a number of OEMs with **non-adjustable** TXV's. The OEM determines the superheat setting through laboratory testing of the unit. These valves **SHOULD NOT** be adjusted in the field.

Recommended Evaporator Superheat Settings (when manufacturers recommendation not known)

Application	Air Conditioning & Heat Pump	Commercial Refrigeration	Low Temp Refrigeration
Evap. Temp °F	50° to 40°	40° to 0°	0° to -40°
Suggested Superheat Settings °F	6° to 12°	6° to 10°	4° to 6°



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