



Temperature Diagnostic Flow Chart C - Evaporator Superheat Test

Measure the Evaporator Inlet Line Temperature on the Evaporator Side of the Orifice Tube, as Close to the Evaporator Case as Possible. Measure the Evaporator Outlet Line Temperature Before the Accumulator, as Close to the Evaporator Case as Possible. The Ideal Temperature Reading Between the Inlet and Outlet is 0°F. The Acceptable Temperature Range for the OUTLET Tube is from 5°F Colder to 5°F Warmer than the Inlet Tube. Refrigerant Flowing Within these Temperatures Will be Able to Carry Sufficient Oil Back to the Compressor. Excessive Outlet Temperature (Super-Heating) Indicates that All the Refrigerant has Evaporated. There is Insufficient Liquid Refrigerant Available to Carry the Oil Up, Out of the Evaporator and Back to the Compressor.

*Outlet Tube
Colder Than 5°F*

Check System for Overcharge Condition

*Inspect Orifice Tube For:
Leaking O-Ring Seals
Correct Application (too large)*

*Outlet Tube Warmer
Than 5°F*

*Check System For:
Undercharge Condition
Excessive Oil in the System*

*Inspect Orifice Tube For:
Restrictions - Dirty Screen
Correct Application (too small)*

Note: Diagnostic Chart C applies to orifice tube systems. Most TXV systems do not provide easy access for superheat testing.