

Symptoms Exhibited *

Condition/Solutions

Suction Pressure	Discharge Pressure	Superheat	SubCooling	
Lower Than Normal	Lower Than Normal	Lower Than Normal	Lower Than Normal	Insufficient air flow across Evaporator coil. Check filter, blower speed tap selected, blower motor, wheel, and capacitor.
Lower Than Normal	Lower Than Normal	Higher Than Normal	Lower Than Normal	Insufficient refrigerant charge. Check system for leak(s). Recover refrigerant, repair leak(s), evacuate system to 500 microns, and re-charge with refrigerant.
Lower Than Normal	Lower Than Normal	Higher Than Normal	Higher Than Normal	Restriction in refrigerant circuit. Look for significant temperature difference at point of restriction. Possible incorrect orifice pin (too small) or TXV stuck closed.
Higher Than Normal	Higher Than Normal	Higher Than Normal	Higher Than Normal	Excessive loading of Evaporator coil. Due to excessive air flow across coil or open return duct in unconditioned space. Check blower speed tap setting (too high) and return duct for leakage.
Higher Than Normal	Higher Than Normal	Lower Than Normal	Lower Than Normal	Insufficient air flow across Condenser coil. Check cleanliness of coil. Check condenser fan motor, blade, and capacitor.
Higher Than Normal	Higher Than Normal	Lower Than Normal	Higher Than Normal	Excessive refrigerant charge. Recover refrigerant from system and re-charge with refrigerant, or adjust charge using Superheat or Subcooling method.
Higher Than Normal	Higher Than Normal	Lower Than Normal	May Be Either Lower or Higher Than Normal	Air and/or Non-Condensibles in system. Recover refrigerant from system, evacuate system to 500 microns, and re-charge.
Higher Than Normal	Lower Than Normal	Lower Than Normal	Lower Than Normal	Incorrect/over feeding Metering device. Check for proper pin size or loose TXV sensing bulb, or TXV stuck open.
Higher Than Normal	Lower Than Normal	May Be Either Lower or Higher Than Normal	May Be Either Lower or Higher Than Normal	Defective valves in compressor (I.E. runs but doesn't pump) abnormally low Amp draw and abnormally high compressor temperature may be indicated.