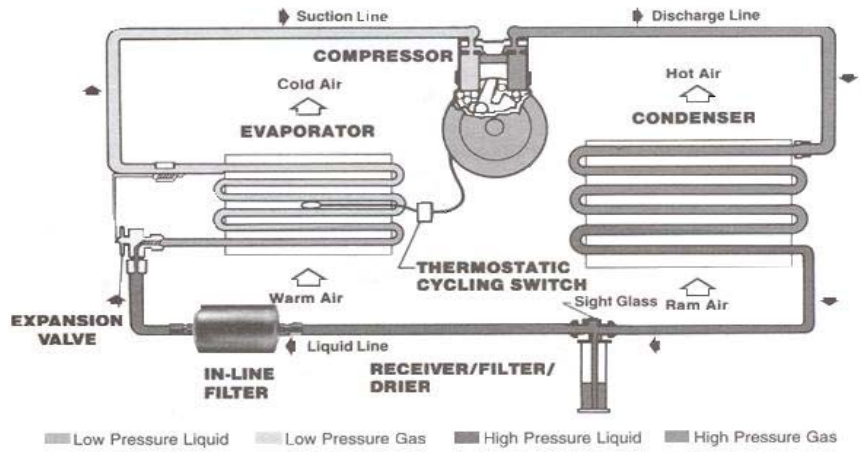




805 13th Street North
Humboldt, IA 50548
1-800-806-5312

A/C System Trouble-Shooting



| Normal Operating System | | | |
|-------------------------|-------------|-------------------|--|
| Pressure | | Evaporator Outlet | Air Duct Temperature Max A/C - Low Blower |
| Low Side | High Side | | |
| 10-30 PSI | 150-285 PSI | Cold | 40 - 50 Degrees |

| Malfunctioning System | | | | |
|-----------------------|-----------|---|---|--|
| Low Side | High Side | Symptom(s) | Problem(s) | Solution |
| Low | Low | Poor cooling, a lot of bubbles or foam in sight glass, evaporator warm | Low refrigerant charge due to leak(s) in A/C system | Repair leak(s), Recharge with refrigerant |
| Normal to Low | High | Poor cooling, cool receiver drier | Restricted condenser | Flush condenser internally or replace condenser |
| Low | Low | Poor cooling, cool receiver drier | Restricted receiver/drier | Replace receiver drier, flush system |
| Low | Low | Poor cooling, hot receiver drier | Expansion valve plugged, defective | Replace expansion valve, flush system |
| Normal to Low | Normal | Cooling good initially then warms and air flow decreases (evap. freeze-up) | Defective thermostatic switch or compressor cycling switch | Replace thermostatic switch or compressor clutch cycling switch |
| High | Low | Pressure gauge readings are opposite of what they should be | Compressor hoses installed on the wrong ports | Remove hoses from compressor and re-install on the correct ports (S) suction, (D) discharge |
| High | Low | Poor to no cooling system pressure equalizes very quickly when system is turned off | Defective compressor or worn out | Replace compressor, receiver drier and flush system |
| Normal to High | High | Poor cooling | System overcharge | Correct the amount of refrigerant in the system |
| Normal to High | High | Poor cooling at low speeds, engine overheats | Condenser or Radiator plugged externally, condenser fan motor or switch not working | Clean condenser and or radiator with compressed air or water pressure, straighten fins, replace condenser motor or switch |
| | | Air conditioning system will not turn on | No refrigerant, blown fuse, defective thermostat, pressure switch, broken wire, loose connector | Repair leak(s), Recharge with refrigerant, replace fuse(s), replace defective switch(s), check for loose connections or broken wires |