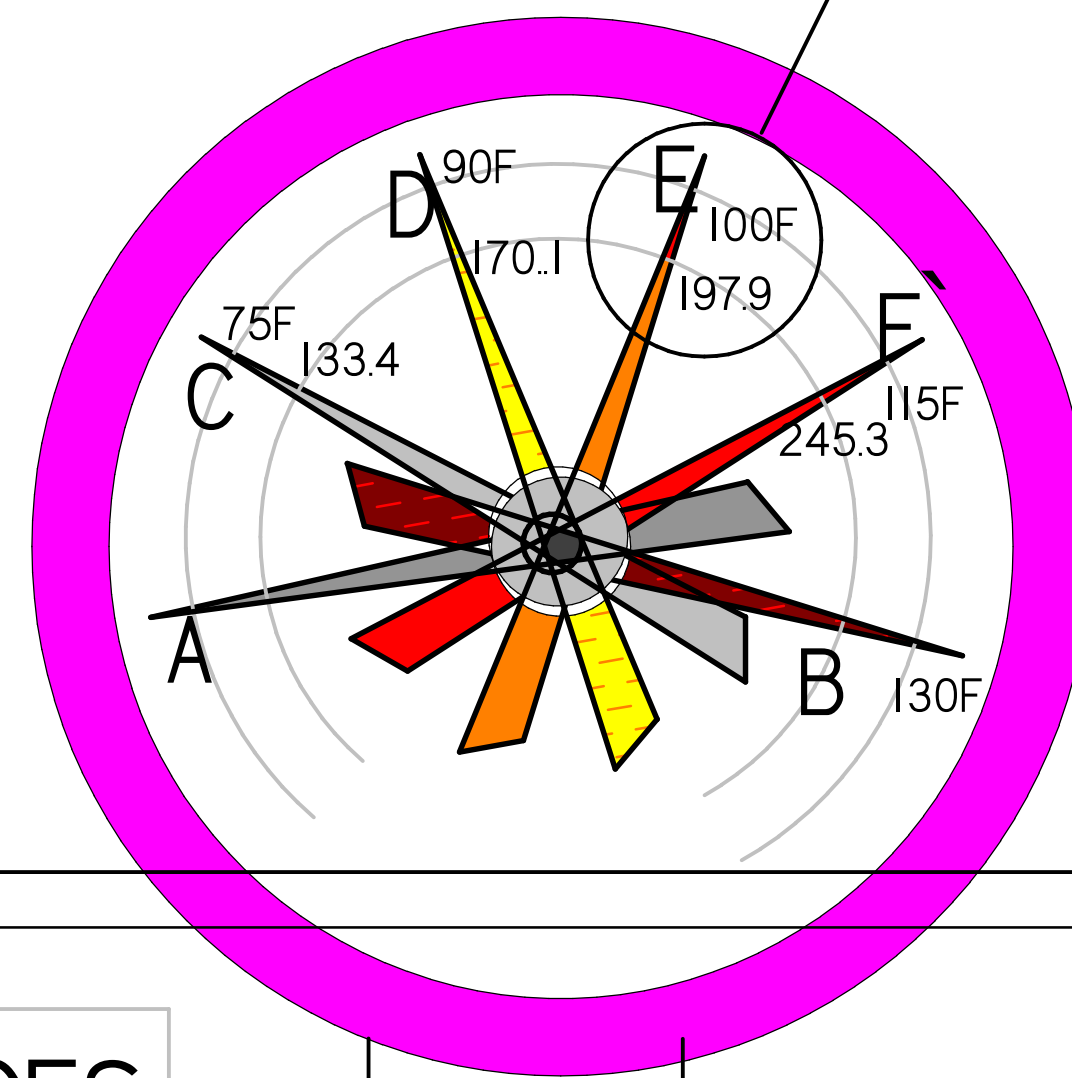
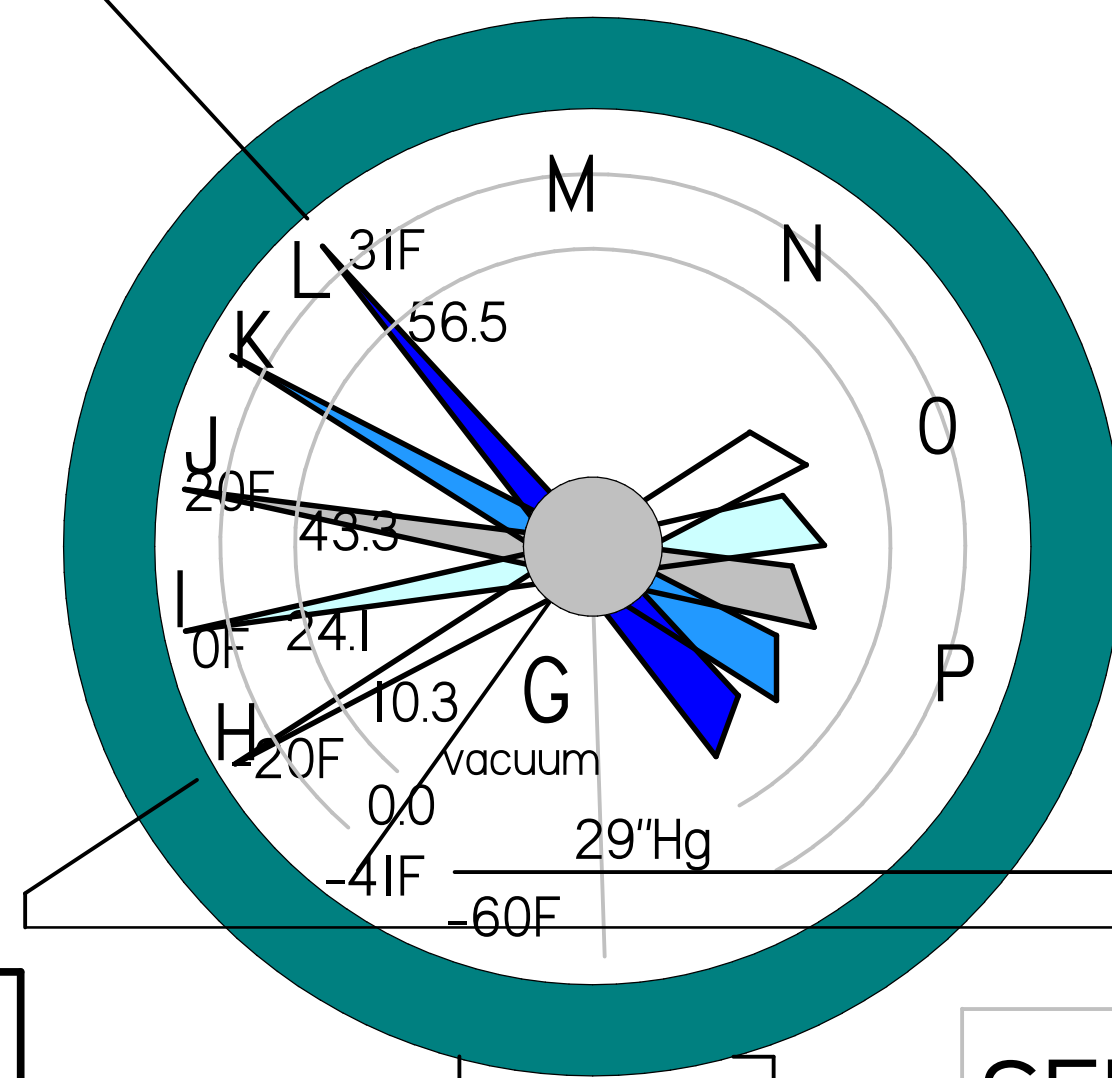
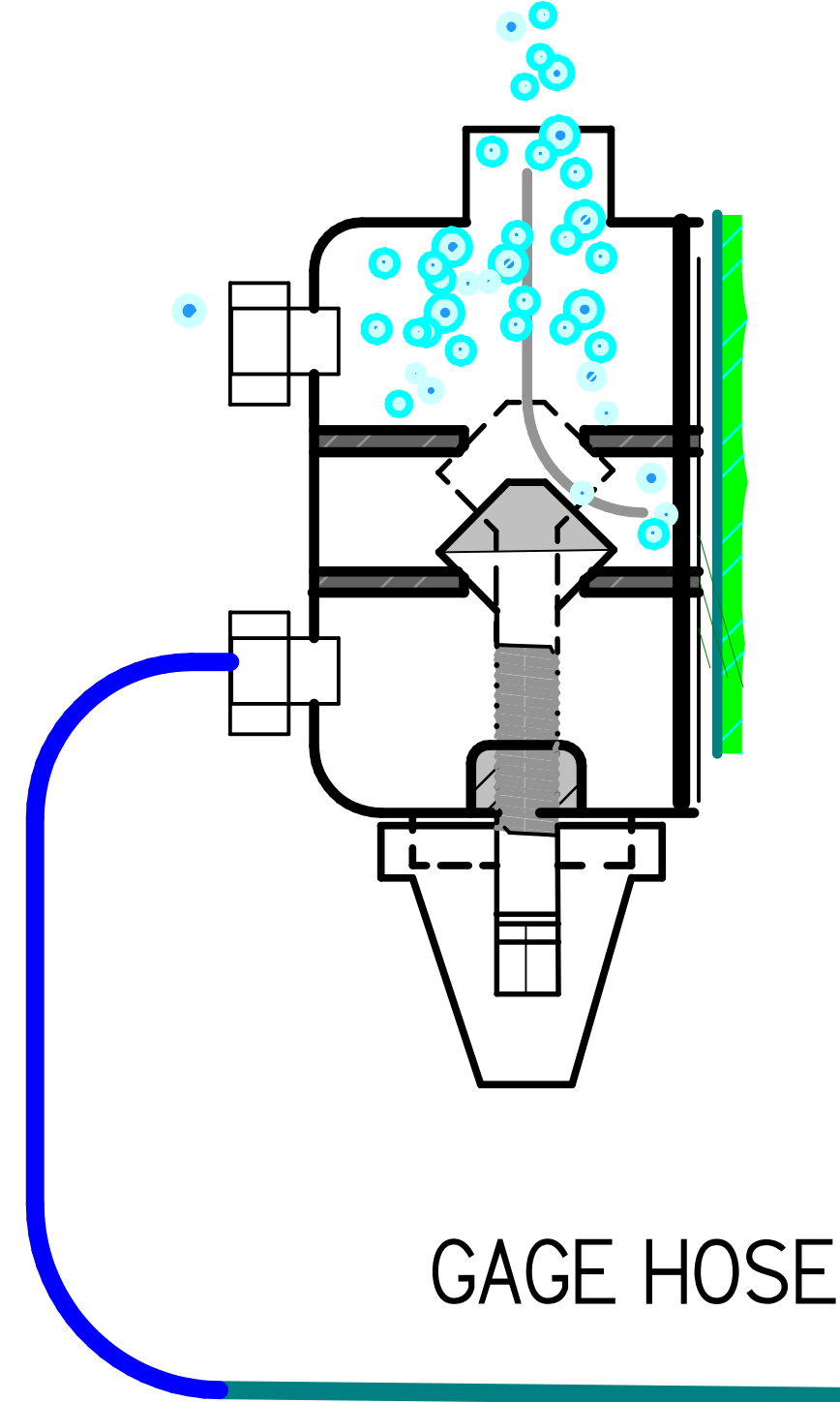


| REVISION HISTORY | | | |
|------------------|-------------|------|----------|
| REV | DESCRIPTION | DATE | APPROVED |
| | | | |

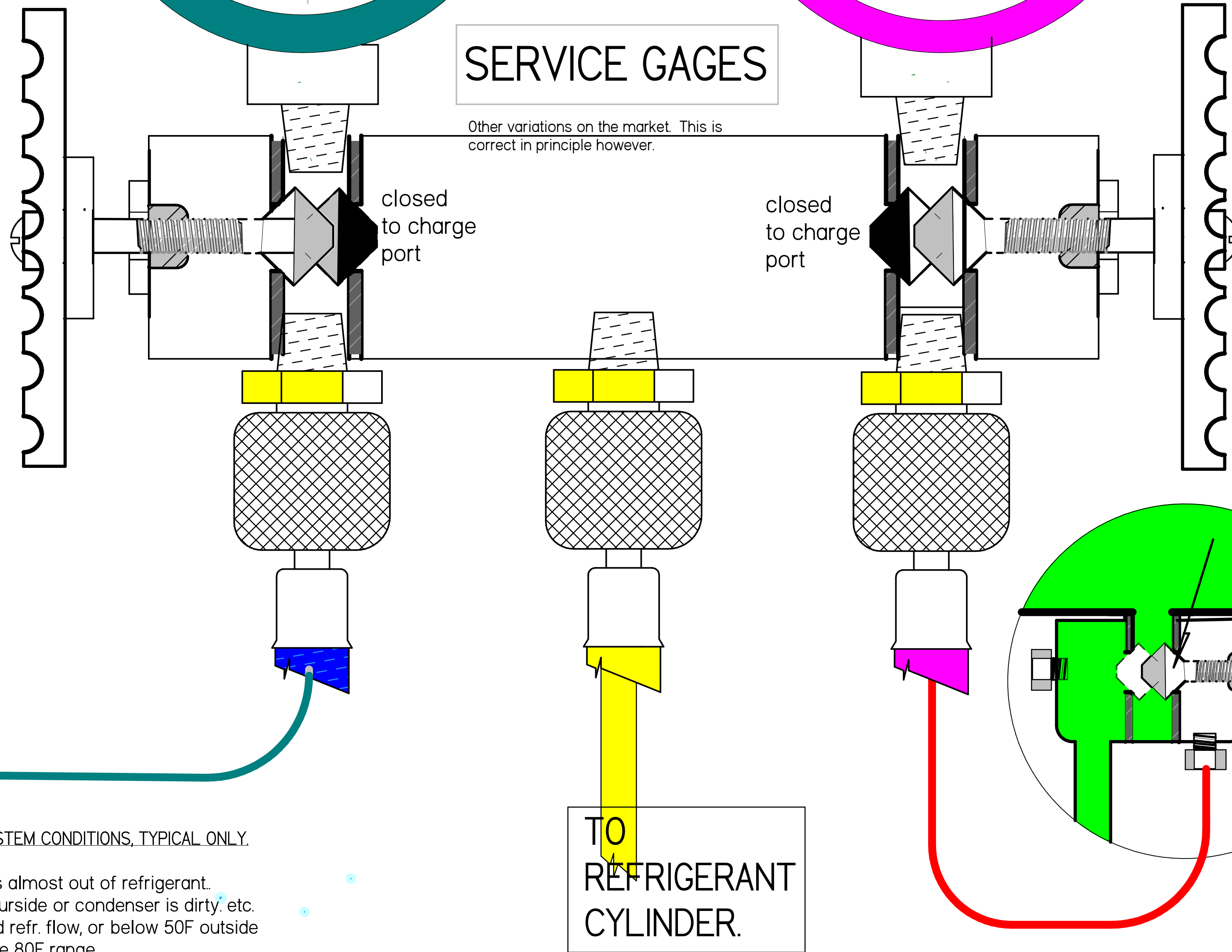
COMPRESSOR SUCTION SERVICE VALVE.

Evaporator coil iced, cold liquid getting back to compressor, icing this valve and compressor body. Expansion valve stuck open, evap, fans failed, TEV iced inside and stuck open. foams oil, ruins its lubricity, ruins compressor bearings. Slugs liquid into the valves and breaks them.



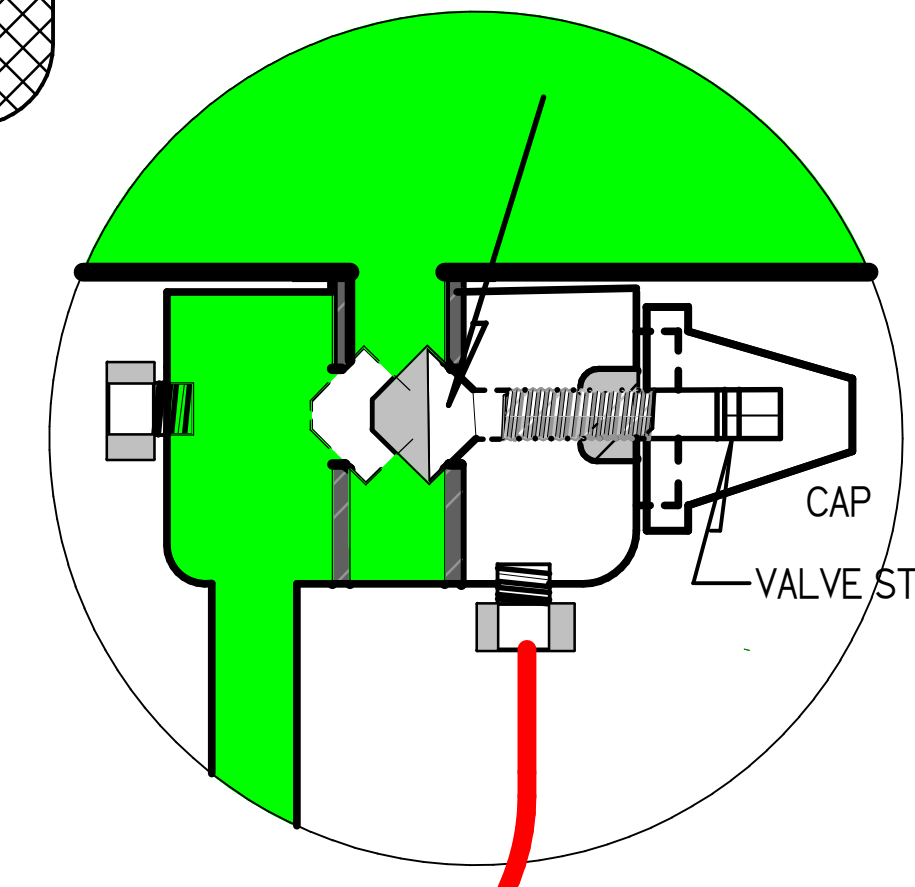
SERVICE GAGES

Other variations on the market. This is correct in principle however.



R-22 Pressure / Temperature Chart

| Deg F | PSIG | Deg F | PSIG | Deg F | PSIG |
|-------|-------|-------|------|-------|-------|
| -60F | -11.9 | 12F | 34.9 | 43F | 73.5 |
| -55F | -9.1 | 13F | 35.9 | 44F | 75.0 |
| -50F | -6.0 | 14F | 36.9 | 45F | 76.6 |
| -45F | -2.6 | 15F | 37.9 | 46F | 78.2 |
| -40F | 0.6 | 16F | 38.9 | 47F | 79.8 |
| -35F | 2.7 | 17F | 40.0 | 48F | 81.4 |
| -30F | 5.0 | 18F | 41.1 | 49F | 83.0 |
| -25F | 7.5 | 19F | 42.2 | 50F | 84.7 |
| -20F | 10.3 | 20F | 43.3 | 55F | 93.3 |
| -18F | 11.5 | 21F | 44.4 | 60F | 102.5 |
| -16F | 12.7 | 22F | 45.5 | 65F | 112.2 |
| -14F | 13.9 | 23F | 46.7 | 70F | 122.5 |
| -12F | 15.2 | 24F | 47.8 | 75F | 133.4 |
| -10F | 16.6 | 25F | 49.0 | 80F | 145.0 |
| -8F | 18.0 | 26F | 50.2 | 85F | 157.2 |
| -6F | 19.4 | 27F | 51.5 | 90F | 170.1 |
| -4F | 20.9 | 28F | 52.7 | 95F | 183.7 |
| -2F | 22.5 | 29F | 54.0 | 100F | 197.9 |
| 0F | 24.1 | 30F | 55.2 | 105F | 212.9 |
| 1F | 24.9 | 31F | 56.5 | 110F | 228.7 |
| 2F | 25.7 | 32F | 57.8 | 115F | 245.3 |



— VALVE SHOWN 'BACK SEATED' CLOSED TO GAGE PORT, OPEN TO REFRIGERANT FLOW.

GAGE READING LEGEND, VARIOUS SYSTEM CONDITIONS, TYPICAL ONLY.

- A. With compressor OFF, system is almost out of refrigerant.
- B. With compressor ON, its 110+F outside or condenser is dirty, etc.
- C. System out of gas, or restricted refr. flow, or below 50F outside
- D. Normal for outside temps in the 80F range.
- E. Normal for 85-90F day.
- F. Normal for a hot day 100-105F.
- G. Vacuum range, don't run a system below 0 psig.
- H. Typical frozen storage range if system is working OK.
- I. - J. Ice machine range, 35F box with coil undersized.
- K. AC range if its low on gas or filter is dirty, , high for a 35F box.
- L. Air conditioning range if its working right.
- M, N O P. High suction pressure, very warm air over evap coils or bad valves in the compressor, typically.

World class personal coaching by Telephone on any diagram or System on this site.

Refrigeration Temp . Pressure Chart