

TECHNICAL BULLETIN

Reference: RS-51 (R470b) Retrofits & Vessel Pressures

To avoid high pressure release from system vessels, follow the guidelines below.

Notes:

- 1. Normally older R22 systems that were retrofitted to R404a will have receivers/vessels rated at 300 psi. Most newer systems designed for R404a and R507a may have receivers/vessels rated for 400/450 psi. Older R404 and R507 systems should be checked for receivers/vessels pressure rating.
- 2. Usually, the maximum working pressure of receivers/vessels are rated for the pressure of the designed system refrigerant at 130°F evaporation temperature (Bubble/Dew). Normal operating temperatures range from 104°F to 110°F.
- 3. Use a refrigerants Pressure/Temperature chart and the above temperature/range to determine a refrigerants pressure at those temperatures.
- 4. For refrigerant *blends*, use the "Liquid Bubble Point psi" to determine the condenser discharge (head) pressure.
- 5. System Pressure ratings should be reviewed when converting to RS-51 to ensure operating pressures will not exceed high pressure rating for receivers/vessels and settings of pressure safety devices such as relief valves and high-pressure switches.
- 6. Receiver pressure rating is important when considering refrigerant conversions.
- 7. Note: R404a systems may originally have been an R22 system. In this case, the receiver may be rated for 300 psi. This needs to be checked because RS-51 pressures will be higher than 300 psi.
- 8. Most Receivers manufactured for HFC refrigerants after 2014 (approximately) were made with pressure ratings of 400-450. Receivers made for R410a have a pressure rating of 600.

ComStar International Inc.

20-47 128 Street

College Point, NY 11356 Phone: (800) 328-0142 Fax: (718)353-5998

Email: customerservice@comstarproducts.com

Website: www.comstarproducts.com