Evaporator						
	Dew		Dew		Dew	
(F)	(psig)	(F)	(psig)	(F)	(psig)	
-26	2.8	4	21.1	34	51.5	
-24	3.7	6	22.7	36	54.0	
-22	4.7	8	24.4	38	56.7	
-20	5.7	10	26.1	40	59.4	
-18	6.7	12	27.8	42	62.1	
-16	7.8	14	29.7	44	65.0	
-14	8.9	16	31.6	46	67.9	
-12	10.1	18	33.5	48	71.0	
-10	11.3	20	35.5	50	74.1	
-8	12.5	22	37.6	52	77.3	
-6	13.8	24	39.7	54	80.5	
-4	15.2	26	41.9	56	83.9	
-2	16.6	28	44.2	58	87.3	
0	18.0	30	46.6	60	90.9	
2	19.5	32	49.0			

	Condenser						
	Bubble		Bubble		Bubble		
(F)	(psig)	(F)	(psig)	(F)	(psig)		
80	145.4	102	204.1	122	270.3		
82	150.2	104	210.2	124	277.7		
84	155.1	106	216.3	126	285.2		
86	160.1	108	222.6	128	292.8		
88	165.2	110	229.0	130	300.6		
90	170.4	112	235.6	132	308.6		
92	175.7	114	242.3	134	316.6		
94	181.2	116	249.1	136	324.9		
96	186.7	118	256.0	138	333.3		
98	192.4	120	263.1	140	341.8		
100	198.2						

#### **Conversion Data**

Suction PSIG
Suction Temp
Discharge PSIG
Discharge Temp
Evap. Superheat
Comp. Superheat
Subcooling
Ambient Temp
Weight of Refrigerant
Comp. Oil Temp
Comp. Oil Level
Comp. Motor Amps

Pre	Post
L1	
L2	
L3	





## REMEMBER WHEN CONVERTING OR RETROETTING

IEN CONVERTING OR RETROFITTIN

DID YOU....?

- ✓ Verify your pressure control.
- Confirm the fan cycling setpoints.
- ✓ Label the system.
- Verify the metering device sizing.

Unless the service conditions indicate contamination, oil change is not required and standard filter driers can be used. Remember oil loss can occur during the recovery process. Check oil level after system has stabilized. Adjust if necessary.

If leaks occur, you may recharge (top-off) without effecting system performance.

As with other replacements, systems directly converted from R-22 will experience shrinkage of elastomers, which could contribute to leakage.

Label the system.

Since the <u>majority</u> components are the same between NU-22 and NU-22B, just a difference in the percentage composition, and the refrigerant's capacity is increased, we feel it is beneficial in the future to top off NU-22 systems with NU-22B when the need arises.

If there are any questions concerning the application of NU-22B, contact ICOR TECH2TECH FOR SUPPORT AT 866-433-8324 OR www.icorinternational.com.

NU-22B® IS ANOTHER QUALITY PRODUCT FROM
THE PRODUCERS OF HOT SHOT® AND ONE SHOT®(C)
LEADING THE INDUSTRY
IN REPLACEMENT REFRIGERANTS

10640 E. 59th Street • Indianapolis, IN 46236 800-497-6805 • Fax 317-826-3214 icorinfo@icorinternational.com • www.icorinternational.com

# **CONVERSION GUIDELINES**



R-422B

- ✓ ASHRAE DESIGNATED AND SAFETY CLASSIFIED A1: NONTOXIC / NONFLAMMABLE
- **✓ EPA SNAP LISTED**
- ✓ NON-OZONE DEPLETING
- ✓ LOW GLOBAL WARMING IMPACT
- ✓ FOR USE IN NEW AND EXISTING
  R-22, R-407C, R-417A & R-422D SYSTEMS
- ✓ COMPATIBLE WITH ALL STANDARD REFRIGERANT OILS
- ✓ LOWER CONVERSION COSTS
- ✓ R-22 LIKE OPERATING CHARACTERISTICS
- ✓ BROAD APPLICATION RANGE

  Low Medium High Temperatures
- ✓ STOCKING DISTRIBUTORS NATIONWIDE

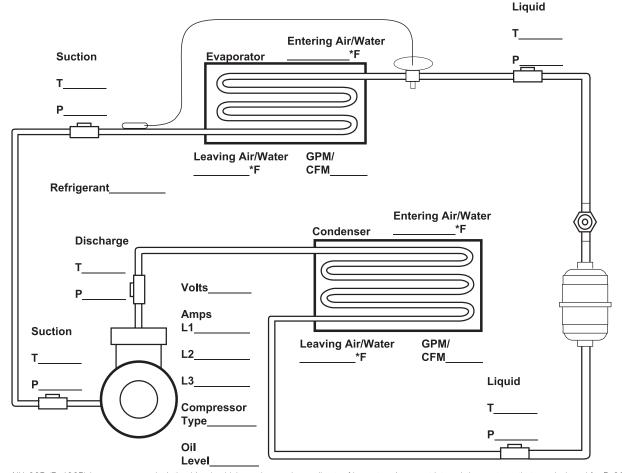
Change from CFC and HCFC to HFC refrigerants may cause a retraction in the o-rings and elastomers. Besure to repair or replace after recovery of the original refrigerant. Failure to address this at this time may cause unnecessary loss of refrigerant.

ICOR recommends verification of the metering device sizing with the distributor or manufacturer of the device.

- 1) RECORD SYSTEM PRE-CONVERSION DATA: Prior to converting, the system should be monitored and all system and component operating conditions recorded for future reference. (SEE FORM ON REVERSE SIDE)
- 2) RECOVER THE REFRIGERANT 100% of the refrigerant must be recovered from system in accordance with all EPA guidelines.\*Recording the weight of the refrigerant you recover will assist you in determining the amount of NU-22B® necessary for the conversion.
- **3) PERFORM OIL ANALYSIS:** Check system oil for acidity, water and solids (metal shavings). If detected perform a complete system oil change using the OEM specified type and amount of oil.
- 4) INSTALL NEW FILTER DRIER AND OIL FILTER: The oil analysis will tell you what type of filter drier you need to use. Systems with coalescent oil separators and/or compressor oil filters need to be changed, too
- **5) LEAK CHECK SYSTEM:** Pressure test system with dry nitrogen. DO NOT exceed the equipment's design pressure. NU-22B® can be detected with any standard form of leak detection designed to detect HFC refrigerants.
- **6) EVACUATE SYSTEM:** To remove non-condensables and moisture in the system, a minimum 500 micron vacuum must be achieved.
- **7) CHARGE SYSTEM:** Remove LIQUID ONLY from NU-22B® cylinder. When initially charging system, NU-22B® can be added directly into the receiver tank or high-pressure side of the system with compressor off. Charge ratios for NU-22B® may vary depending on system design and application. The initial charge of NU-22B® should be 95% of the original existing refrigerant charge.
- **8) RUN SYSTEM:** Check pressures, subcooling, and superheat temperatures. Use NU-22B® P/T chart on reverse side. If additional NU-22B® needs to be added, do so in 5% increments. If system performance is inadequate, call ICOR for support at 866-433-8324.
- 9) PROPERLY LABEL SYSTEM: Avoid mixing refrigerants by properly labeling your system. For NU-22B® system ID labels, call the ICOR support hotline at 800-497-6805.
- **10) POSTCONVERSIONLEAKCHECK:** After operation of system begins, do a thorough system leak check.
- **11) RECORD SYSTEM POST CONVERSION DATA:** Monitor and evaluate system performance and record data. This information can be compared to your pre-conversion data for a full conversion evaluation and can be used if further technical support is required.

#### **NU-22B® CONVERSION GUIDELINES**

#### FOR R-22, R-407C, R-417A & R-422D DX SYSTEMS



NU-22B (R-422B) is a non-ozone depleting blend, which can be used as a direct refrigerant replacement into existing systems that are designed for R-22, R-407C or R-422D. It is compatible with all standard ACR system lubricants, i.e. MO, AB, and POE oils.

### **System Requirements:**

- 1) System must be designed for use with R-22 or R-407C, free of leaks, and in sound operating condition.
- 2) NU-22B is designed for use in systems utilizing direct expansion metering, i.e. TXV, orifice, cap tube. Before using NU-22B in a flooded system consult ICOR's technical staff. NU-22B or any other replacement refrigerant should NOT be used in a Trane 3-D® or Danfoss SM scroll compressor. NU-22B or any other replacement refrigerant should NOT be used with an Electronic Expansion Valve (EEV).
- 3) The system should be operating within its design capacity. Conversion to NU-22B will not increase system capacity. Consult ICOR before converting any system with pre-existing capacity problems.
- 4) The system should be charged with the proper type and amount of lubricant, as required by the original equipment and component manufacturers. If the system has inherent oil return problems or experiences post conversion oil return problems consult ICOR tech support at 866-433-8324.

NOTIFICATION TO USERS: The information contained in this document is given in good faith based on our current knowledge. It is only an indication and should not be construed as an endorsement or guarantee of performance to any specific application and is in no way binding. We guarantee that our products comply with our sales specifications. This information is not to be used as a substitution for system analysis as to suitability. Users are responsible for compliance with local, state, and federal regulations for recovery and evacuation.