

13 SEER AIR CONDITIONING CHARGING PROCEDURE

1. CHARGE THE SYSTEM BY WEIGHT, IF OUTDOOR TEMPERATURE IS BELOW 65°F:

OUTDOOR UNITS ARE FACTORY CHARGED WITH R410A FOR 15 FT. OF LINE SET. ADD OR REMOVE 0.6 OZ. FOR EVERY FOOT OF LINE SET DIFFERENT THAN 15 FT. FINAL CHARGE ADJUSTMENT MUST BE MADE PER ITEM (2) BELOW, ONCE THE OUTDOOR TEMPERATURE RISE ABOVE 65 °F.

2. IF OUTDOOR TEMPERATURE IS ABOVE 65°F, ADJUST CHARGE AS FOLLOWS:

- A. CHECK FOR PROPER AIR FLOW AND RUN THE SYSTEM FOR 20 MINUTES FOR STABILIZATION
- B. USE SUPERHEAT FOR ORIFICE COILS (SEE TABLE BELOW)
- C. USE SUBCOOLING FOR TXV COILS (SEE TABLE BELOW), PROVIDED THAT SUPERHEAT IS WITHIN 8-16 °F AT OUTDOOR UNIT AND THE REFERENCED PRESSURES BELOW ARE WITHIN ± 3 PSI FOR LOW SIDE AND ± 10 PSI FOR HIGH SIDE
- D. CONTACT TECHNICAL SERVICE, IF MEASURED VALUES ARE OUTSIDE THE RANGE OF THE LISTED DATA

MODELS	18	24	30	36	42	48	60		
TABLE 1 - SUBCOOLING METHOD (TXV SYSTEM) ± 1 °F									
OUTDOOR TEMP (°F)	LIQUID LINE SATURATION TEMPERATURE MINUS LIQUID LINE TEMPERATURE								
65	5	8	5	3	8	6	4		
75	5	8	6	3	9	7	4		
85	5	8	6	4	9	7	5		
95	6	9	8	4	10	8	5		
105	7	9	8	5	11	9	5		
115	9	10	9	5	11	9	4		
TABLE 2 - APPROACH METHOD (TXV SYSTEM) ± 1 °F - FOR REFERENCE ONLY									
LIQUID LINE TEMPERATURE MINUS OUTDOOR AMBIENT TEMPERATURE									
TEMP (°F)	8	11	10	13	7	7	13		
TABLE 3 - OPERATING PRESSURES (FOR REFERENCE)									
OUTDOOR TEMP (°F)	HIGH / LOW PRESSURES (PSI)								
65	238/132	256/134	254/129	263/132	251/128	260/130	258/128		
75	278/137	298/138	296/133	309/137	294/132	300/134	300/133		
85	318/142	341/141	338/137	354/139	338/135	340/139	342/137		
95	358/147	383/145	380/141	400/141	381/139	380/143	384/142		
105	411/150	437/149	439/145	458/150	434/142	430/148	435/144		
115	464/153	490/152	498/148	515/153	487/145	492/153	485/146		
TABLE 4 - SUPERHEAT METHOD (ORIFICE SYSTEM) ± 1 °F									
SUCTION LINE SATURATION TEMPERATURE MINUS SUCTION LINE TEMPERATURE									
OUTDOOR TEMP (°F)	65	70	75	80	85	90	95	100	105
SUPERHEAT (°F)	35	30	25	22	18	12	8	5	5

ALL MEASUREMENTS ARE AT THE SERVICE VALVES AND ARE BASED ON 80db/67wb INDOOR TEMPERATURE.

RFC SIZE	18	24	30	36	42	48	60
	0.053	0.057	0.063	0.072	0.074	0.082	0.090