HFC-410A CHARGING INFORMATION

FOR COMPLETE CHARGING DETAILS, REFER TO THE OUTDOOR UNIT INSTALLATION INSTRUCTION.

Maintenance checks using the Normal Operating Pressures table

Table 1 may be used to help perform maintenance checks. This table is not a procedure for charging the system and any minor variations in the pressures may be expected due to differences in installations. However, significant deviations could mean that the system is not properly charged or that a problem exists with some component in the system.

Matchups/Charge Levels and Line Set Lengths

Table 2 lists all the Lennox recommended indoor unit matchups along with the charge levels for the various sizes of outdoor units. ***Charge levels on the unit nameplate are based on installations with 15' (4.6m) line sets; be sure to consider any difference in line set length (see Installation Instructions for more details).***

Charge Using the Weigh-in Method

If the system is void of refrigerant, locate and repair any leaks and then weigh in the refrigerant charge into the unit. For charge adjustments, be sure to consider line set length differences and, referring to table 2, adjust for the matchup difference.

1 - Recover the refrigerant from the unit.
2 - Conduct leak check; evacuate as previously outlined.
3 - Weigh in the unit nameplate charge, adjusting for matchup and line set length differences. If weighing facilities are not available use the Subcooling method.

Charge Using the Subcooling Method

Cooling Mode - When the outdoor ambient temperature is 60°F and above, use the cooling mode to adjust the charge using the subcooling method. Target subcooling values in table 2 are based on 70 to 80°F indoor return air temperature.

Heating Mode - When the outdoor ambient temperature is below 60°F, use the heating mode to adjust the charge using the subcooling charge levels (table). Target subcooling values in table 2 are based on 65-75°F indoor return air temperature.

Table 1 - Normal Operating Pressures (Liquid ±10 and Suction ±5 psig)

The values in this table are "most-popular-match-up" pressures; indoor match up, indoor air quantity, and indoor load will cause the pressures to vary.

Model	-036	-042	-048	-060
°F*	Liquid Line Pressure / Vapor Line Pressure			
COOLING	LIQ./VAP.	LIQ./VAP.	LIQ./VAP.	LIQ./VAP.
65	220 / 138	223 / 125	231 / 136	243 / 136
70	236 / 140	241 / 130	248 / 139	263 / 137
75	256 / 141	261 / 134	271 / 140	282 / 138
80	276 / 142	282 / 138	291 / 142	306 / 139
85	298 / 143	302 / 139	312 / 143	327 / 140
90	321 / 144	326 / 140	335 / 144	351 / 141
95	344 / 144	349 / 141	359 / 145	376 / 142
100	369 / 146	374 / 142	384 / 146	401 / 143
105	394 / 147	399 / 143	411 / 148	426 / 145
110	421 / 148	428 / 145	439 / 149	452 / 146
115	449 / 149	455 / 146	468 / 150	484 / 148
HEATING	LIQ./VAP.	LIQ./VAP.	LIQ./VAP.	LIQ./VAP.
60	350 / 134	373 / 139	355 / 130	351 / 117
50	331 / 117	363 / 117	336 / 113	333 / 105
40	313 / 97	348 / 97	315 / 88	316 / 88
30	298 / 83	336 / 74	296 / 72	308 / 70
20	284 / 66	322 / 64	286 / 64	300 / 61
*Temperature of the air entering the outdoor coil.				

Table 2 - Indoor Units Matchups and Subcooling Charge Levels

INDOOR MATCHUPS	Target Subcooling Heating (±5°F)	Target Subcooling Cooling (±1°F)	*Add charge lb	*Add charge oz	INDOOR MATCHUPS	Target Subcooling Heating (±5°F)	Target Subcooling Cooling (±1°F)	*Add charge lb	*Add charge oz	INDOOR MATCHUPS	Target Subcooling Heating (±5°F)	Target Subcooling Cooling (±1°F)	*Add charge lb	*Add charge oz
TPA*H4–036			**lb**	**oz**	CBX27UH-042	12	6	0	8	CH23-68	20	9	2	9
C33-44C	13	6	0	0	CBX32M-048	12	6	0	7	CH33-50/60C	11	8	1	1
CBX27UH-036	13	6	0	3	CBX32MV-048	12	6	0	8	CH33-62D	10	7	1	14
CBX32M-036	13	6	0	2	CBX40UHV-042 and -048	12	6	0	8	CH33-60D	11	8	0	0
CBX32M-042	13	6	0	3	CH33-43	12	6	0	7	CR33-50/60C	35	5	0	0
CBX32MV-036	13	6	0	3	CH33-62D	12	6	0	10	CR33-60D	37	6	0	0
CBX32MV-048	11	8	2	5	CH33-50/60C	12	6	0	7	CX34-62C and -62D	10	7	1	7
CBX40UHV-036	13	6	0	3	CH33-60D	12	6	0	4	CX34-49C	11	8	0	14
CBX40UHV-042 and -048	11	8	2	5	CR33-50/60C and -60D	26	6	0	4	CX34-60D	11	8	0	0
CH33-50/60C	11	8	2	5	CX34-62C and -62D	12	6	0	9	**TPA*H4–060**			**lb**	**oz**
CH33-44B	13	6	1	7	CX34-49C	12	6	0	7	CBX27UH-060	12	5	0	0
CH33-48B	13	6	1	8	CX34-60D	12	6	0	4	CBX32M-048 and -060	12	5	0	0
CR33-50/60C	25	4	1	15	**TPA*H4–048**			**lb**	**oz**	CBX32MV-048 and -060	12	5	0	0
CR33-48B/C	25	5	0	9	CBX27UH-048	11	8	1	2	CBX40UHV-048 and -060	12	5	0	0
CX34-49C	13	6	2	4	CBX32M-048 and -060	11	8	1	2	CBX32MV-068	12	7	1	0
CX34-43B/C and -50/60C	13	6	1	8	CBX32MV-048	25	8	0	0	CH23-68	12	5	0	0
CX34-38A/B S/N# 6007 and after and -44/48	6	6	0	0	CBX32MV-060	11	8	1	2	CH33-50/60C	12	5	0	0
CX34-38A/B before S/N# 6007	13	6	0	0	CBX40UHV-048	25	8	0	0	CH33-62D	12	5	0	0
TPA*H4–042			**lb**	**oz**	CBX40UHV-060	11	8	1	2	CX34-62C and -62D	12	7	1	0
CH23-68	20	9	0	13	CBX32MV-068	10	7	1	12	*Add charge = Extra matchup amount required in addition to charge indicated on Heat Pump nameplate (remember to also add any charge required for line set differences from 15 feet). **SN** indicates serial number.				