

LGX/LCX092 All-Aluminum OD Coil, Reheat, Refrigerant Charge and Check

WARNING-Do not exceed nameplate charge under any condition.

This unit is factory charged and should require no further adjustment. If the system requires additional refrigerant, reclaim the charge, evacuate the system, and add required nameplate charge.

NOTE - System charging is not recommended below 60°F (15°C). In temperatures below 60°F (15°C), the charge must be weighed into the system.

If weighing facilities are not available, or to check the charge, use the following procedure:

IMPORTANT - Charge unit in standard cooling mode at full load.

1-Make sure outdoor coil is clean. Attach gauge manifolds and operate unit at full CFM in cooling mode with economizer disabled until system stabilizes (approximately five minutes). Make sure all outdoor air dampers are closed.

Mobile service app: RTU Menu > Component Test > Cooling > Cooling Stage 3.

2-Compare the normal operating pressures to the pressures obtained from the gauges. Check unit components if there are significant differences.

3-Measure the outdoor ambient temperature and the suction pressure. Refer to the charging curve to determine a target liquid temperature.

NOTE - Pressures are listed for sea level applications.

4-Use the same thermometer to accurately measure the liquid temperature (in the outdoor section).

- If measured liquid temperature is higher than the target liquid temperature, add refrigerant to the system.
- If measured liquid temperature is lower than the target liquid temperature, recover some refrigerant from the system.

5-Add or remove charge in increments. Allow the system to stabilize each time refrigerant is added or removed.

6-Continue the process until measured liquid temperature agrees with the target liquid temperature. Do not go below the target liquid temperature when adjusting charge. Note that suction pressure can change as charge is adjusted.

7-Example Circuit 1: At 95°F outdoor ambient and a measured suction pressure of 130psig, the target liquid temperature is 97°F. For a measured liquid temperature of 104°F, add charge in increments until measured liquid temperature agrees with the target liquid temperature.

Normal Operating Pressures

Outdoor Coil Entering Air Temperature

	65°F		75°F		85°F		95°F		105°F		115°F	
	Suct (psig)	Disc (psig)	Suct (psig)	Disc (psig)	Suct (psig)	Disc (psig)	Suct (psig)	Disc (psig)	Suct (psig)	Disc (psig)	Suct (psig)	Disc (psig)
Circuit 1	94	233	96	270	98	313	100	364	101	422	103	488
	101	235	103	271	105	313	107	363	110	420	111	484
	115	245	118	277	121	317	124	365	127	420	130	482
	131	260	135	290	139	328	143	373	146	425	149	485
Circuit 2	111	226	114	261	117	301	120	344	123	391	125	443
	116	230	120	265	124	305	127	348	131	396	134	447
	127	239	132	274	137	314	141	358	146	406	150	458
	137	249	144	285	150	326	155	370	161	418	166	470

Charging Curves

Outdoor Temperature (°F)

