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Job: C08L140385 Model: FH248C-AAEIS868	Inspector: Leapley Date: 12/9/2008
Liebert Deluxe S Warranty Inspection Check	-
The following information must be fully completed and establish your equipment warranty. If your local Liebe or check our website at www.liebert.com. Installer <u>Spectrum Mechanical Inc.</u> Address	ert sales office is not known, call 1-800-LIEBERT
	Inne Co. 97.618
Owner <u>Cal-Tech</u> Addres	Pasadena, 64 91125
Contact Name	
Contact Telephone #	
Installation Date	
Unit Model No. FH248C AAETS 868 Serial N	0. COBLI40385
Condenser/Drycooler Model No	
Condenser/Drycooler Serial No	
Was the unit received in good condition? Yes	
If no, has the carrier been notified?	14
Have the manuals been kept with unit?	
Have the manuals been kept with unit?	nitoring or switchover panel?Yes_/_No
If Yes Serial #Model	
With the Main Disconnect OFF check the following Check internal piping clamps, tight and secure. File Check belts for correct tension and alignment. Check for secure electrical connections; Mate N'Le Remove shipping blocks from compressor(s) / adju Remove all debris from unit area.	eld piping properly supported and secure. oc connections to electronic boards.

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		à.			
INSPECT and RECORD					
Main fan HP. <u>5</u> Voltage <u>460</u>					
Proper Belt tension and alignment / Belt Size	BX-48				
Motor Sheave 21975X 1/8 Fan Pulley 28k 120 H					
Filter Size 18- 24-24 Quantity 4					
Piping Size (Air Cooled Only) Discharge	Liquid	-	_		
Piping trapped according to installation manual. (A	Air Cooled	)			
Total Equivilant length for discharge and liquid pip	oing				
#1 compressor ModelSerial No.	/				
#2 compressor ModelSerial No	/				
START-UP					
1. Turn ON Main Disconnect					
2. Check voltage at disconnect and record.		a			
L1-L2 474.4 L2-L3 474.8	Ľ	1-L3	473.6		
3. Check all control voltage transformers for proper c	outout Sec	cońdary volt	age(s) should n	ot exce	ed
27 VAC under load. Change tap if necessary. T1	-			or one	
4. Check fan rotation for proper direction. Change w	viring at co	ntactor if ne	cessary.		
E. Chaele Main Fan amne and second					
5. Check Main Fan amps and record.					
L1 5.0 L2 5.3 L3 5.0 F	use fils	12-15			
		5			
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		N 1998 - 1999 - 1999 - 199 - 19			

- -

6. Increase Temperature Setpoint to energize reheats. Check	and record amperage.
#1_19.1 #2 19.5 #3 19.3 Fuse FRS-	
NOTES: Adjust all setpoints for proper operation after tes	
With advanced microprocessor controls, you can use diagno components.	
7. Increase humidity setpoint to energize humidifier. Check and	d record amperage.
L1 5.4 L2 5.6 L3 5.7 Fuse FRS	
Infrared: check water level and adjust high limit float for proper	operation
If condensate pump has been supplied, check for proper op	peration.
R Chilled water and econe soil (shand) and	
8. Chilled water and econo coil (glycool) only.	
<ul> <li>Decrease temperature setpoint to energize valve motor.</li> <li> Check for full valve travel in cooling mode.</li> </ul>	
Adjust controls out of cooling mode. Check for valve close	sure.
9. Decrease humidity setpoint to call for dehumidification.	
Check for valve travel in dehumidification mode.	
	<i>π</i>
10. Decrease temperature setpoint to energize compressor(s).	Check and record compressor amps.
#1 L1L2L3Fuse_	
#2 L1L2L3	
11. Check compressor operating pressure and record.	
Suction Pressure 1) Discharge Pre	
2) Bischarge i /e	2)
12. Sight Glass clear? 1) Dry? 1)	
2)	
<ol> <li>Check compressor oil sight glass per operation manual, sho Adjust accordingly.</li> </ol>	buid be 1/2 to 1/4 full write furthing.
Aujust accordingly.	
14. Check superheat on each circuit. Should be approximately	10°-20°.
Circuit 1)Circuit 2)	
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FAGE 04/0/

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14. Check p	ressure switch settings. (Make sure	switches are o	perational by shut	ting down condenser
	er and monitoring refrigerant pressur			
High	h pressure cutout 1)	2)	1	
	pressure cutout 1)	2)	-	
Low	pressure cut in 1)	2)	/	
15. Winter C	Control System (air cool only)			
	e-Temp Liquid Level correct per insta			
Re	cord voltage to heater pads/	Vol	ts	
16. If the he	ead pressures recorded above equal	105°F conden	ising temperature,	no adjustment of the
glycol/v	water regulating valves is required. If	f these conder	ising temperatures	are above 110°F,
adjust t	the regulating valves to lower the hea	ad pressure. If	f the system has ba	alancing valves in it,
these v	valves also should be adjusted. After	the condensir	ng temperature has	s been set up
	y, the system should be allowed to ru			stable conditions.
	ering condenser water/glycol tempera			
Lea	ving condenser water/glycol tempera	ature 63°	Ē	
Your input is	important to us Was start up succesful,	no factory issue	es? If so please chec	k Yes.
Was start up I	unsuccessful, factory issues to resolve?	If so please chee	ck No and provide co	mments.
Yes				
No No	Please Comment		1	
1000 L 0				
START-UP	0			
	D BY Samuel Casto	START-UP	DATE	
	(Please print name)			
	Cal Mala IT		16 1.70 0070	
COMPANY	Speetron Mechanical Inc	PHONE 7	17 619-99/9	
	IMPOR	RTANT		
	This form must be	properly (	completed an	Ч
	returned to your lo	cal Lieber	T Sales Office	
	If your Local Liebert Sa	ales Office is	not known	
	Call 1-800-LIEBERT or check			.com
			3	
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## CHECKLIST FOR COMPLETED INSTALLATION

#### **Moving and Placing Equipment**

- 1. Unpack and check recieved material.
- 2. Proper clearence for service access has been maintained around equipment.
- 3. Equipment is level and mounting fasteners are tight.

4. If the equipment has been disassembled for installation, unit must be reassembled per instructions.

#### Electrical

1. Supply voltage and phase matches equipment nameplate.

2. Wiring connections completed between disconnect switch, evaporator unit and heat rejection equipment.

3. Power line circuit breakers or fuses have proper ratings for equipment installed.

4. Control wiring connections completed between indoor evaporator and heat rejection equipment.

- 5. All internal and external high and low voltage wiring connections are tight.
- [9] 6. Confirm that unit is properly grounded to an earth ground.
- (a) 7. Control transformer setting matches incoming power.
- [] 8. Electrical service conforms to national and local codes.
- 11 9. Check blowers and compressors (scroll only) for proper rotation.

## Piping

- 1. Piping completed to refrigerant or coolant loop (if required).
- 2. Piping had been leak-checked, evacuated and charged (if required).
- 3. Piping is properly sized, sloped, trapped as shown in the piping schematics
- 14. Check piping inside and outside of equipment for proper support.
- 5. Ensure that factory clamps have been reinstalled
- [1] 6. Drain line connected and pitched per local code.
- 7. Water supply line connected to humidifier

## Other

- 1. Ducting complete (if required), maintain access to filters
- 2. Filters installed

3. Check fasteners that secure compressors, reheats, humidifier and motors—some may have become loose during shipment

- 19 4. Verify water detection is properly installed around all units (recommended)
- 5. Control panel DIP switches are set based on user requirements
- E 6. Blower drive system rotates freely and belts are properly aligned and tensioned

7. Compressor shipping blocks removed and springs adjusted (se 5.3 - Semi-Hermetic

# Compressor Spring Isolation System).

- 8. Remove rubber band from float in optional infrared humidifier.
- 9. Installation materials and tools have been removed from equipment (literature, shipping materials, construction materials, tools, etc.)
- 10. Locate blank startup sheet, ready for completion by installer or startup technician.

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		AIR CONDI	TIONING DESIG						SE	RVICE	TICKE	ET #:	11	758	
10/10	SPECIAU	PECTRUM INSTALLA			Job Site: (gl-Tech										
	MECHANICA		ICENSE #764636 r., Unit DD, Irvine, CA 926	18	Addres										
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۵.	Date 4.15.09 Job Name				City.	P.O. No.		Materials	Used D	escriptio	n i		Amou	nt	
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	Custorner P.O. #	ST	ZIP										i		
	REPORT												l L		
	Star-Up: Star	ted unit	checked										1		
GAL	911 amos and	all Units	,	11.									1		
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9496799980						LIMITED	WARRANT	Y: All m	aterials,	parts and	equipm	ent are	warranted	by the	
949						company is	ers' or supplies warranted by	/ 30 days	or as oth	ervise in	licated in	writing.	The above	named	
	Keep this for your EPA records. Refriger	ant add R	lb	S		are not aut	nakes no othe horized to ma	ke any su	ich warraz	aties on b	ehall of th	ne above	named co	mpany.	
11:36	Above Order Completed Satisfactorily	UNIT #				TIME				URS					
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3/2	Print Name	SERIAL		1				te		-		Truck Charge	I		
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