

EHK

ELECTRIC HEAT KITS

INSTALLATION INSTRUCTIONS

Goodman Manufacturing Company, L.P. © 2010
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Attention Installing Personnel

As a professional installer, you have an obligation to know the product better than the customer. This includes all safety precautions and related items.

Prior to actual installation, thoroughly familiarize yourself with this Instruction Manual. Pay special attention to all safety warnings. Often during installation or repair, it is possible to place yourself in a position which is more hazardous than when the unit is in operation.

Remember, it is **your** responsibility to install the product safely and to know it well enough to be able to instruct a customer in its safe use.

Safety is a matter of common sense...a matter of thinking before acting. Most dealers have a list of specific good safety practices...follow them.

The precautions listed in this Installation Manual are intended as supplemental to existing practices. However, if there is a direct conflict between existing practices and the content of this manual, the precautions listed here take precedence.

Description

The following installation instructions supplement is for the EHK heater kits for installation in the following models:

CPC180 & CPC240

These instructions should be used only as a supplement to the installation instructions provided with the above units.

WARNING

HIGH VOLTAGE!

DISCONNECT **ALL** POWER BEFORE SERVICING OR INSTALLING THIS UNIT. MULTIPLE POWER SOURCES MAY BE PRESENT. FAILURE TO DO SO MAY CAUSE PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.



CAUTION

TO AVOID POSSIBLE PERSONAL INJURY, USE EXTREME CAUTION IF USING POWER TOOLS TO REMOVE THE SMALL BREAKER MOUNTING BRACKETS. THE BRACKETS MAY QUICKLY ROTATE AND CAUSE INJURY.

1. Disconnect all power to the unit.
2. Remove control box door.
3. Remove filter door.
4. Remove heat access door.

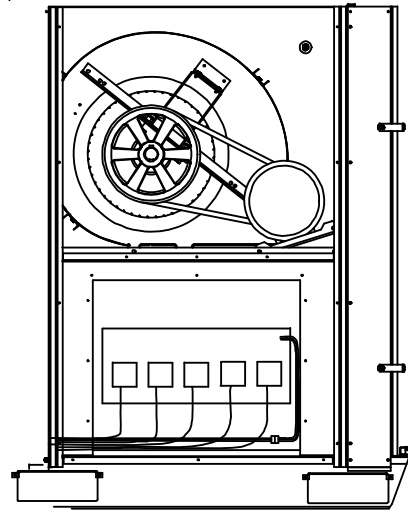


Figure 1

5. Remove EHK Heater Kit from box. Orient the heater element bracket as shown in Figure 2.
6. Install heater kit in opening using screws and align with mounting plate holes. Ensure that the other side of the heater kit is resting on the support channel.



Figure 2



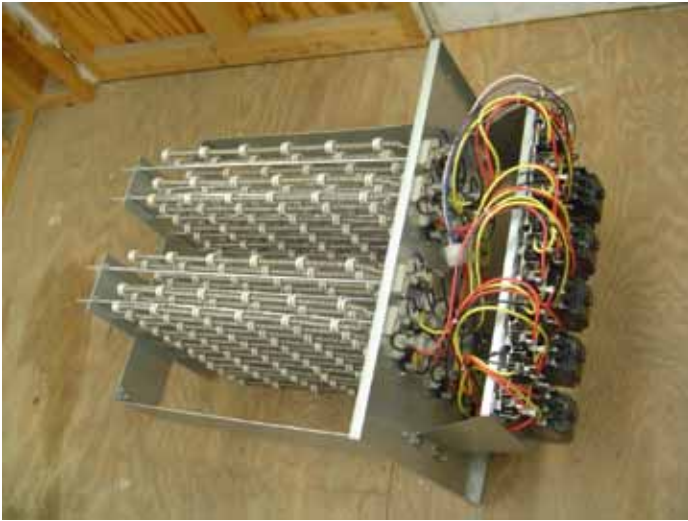


Figure 3

7. Route the EHK yellow, black and red wires through the hole in the blower deck and into the control box as shown in Figure 4.
8. Connect EHK wires to the single point wire kit as shown in Figure 4.

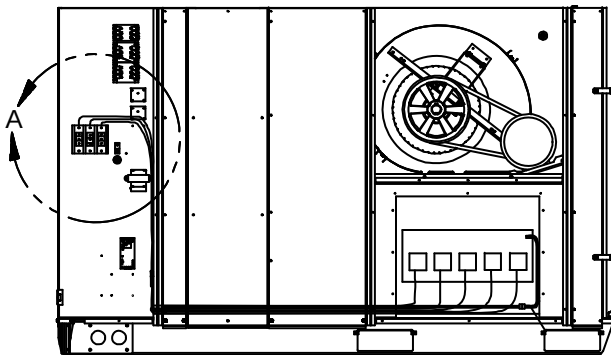
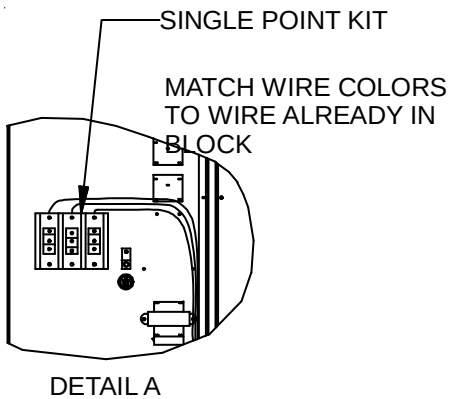


Figure 4

9. Locate the 9-pin harness in the unit and remove and discard the empty male plug if so equipped.
10. Connect the 9-pin plug from the unit to the 9-pin plug in the heater kit.

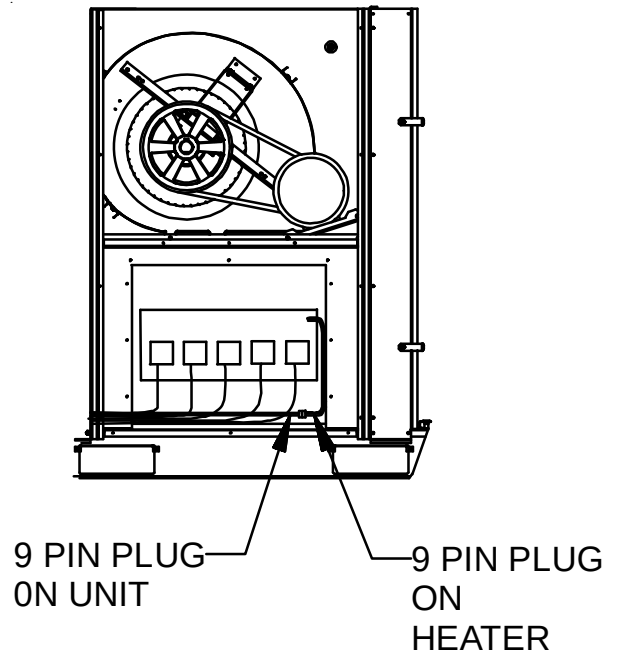


Figure 5

11. Set minimum CFM for unit based on Appendix B, Minimum Airflow for Electric Heat Table. See unit literature for instructions on how to change fan CFM.
12. Install control box door, filter and heat access door.
13. Reconnect power.
14. Test unit to ensure it is functioning properly.

APPENDIX A BLOWER PERFORMANCE TABLES

BELT DRIVE-STANDARD DOWNSHOT

CPC180 STANDARD BELT DRIVE

ESP, In H ₂ O	TURNS OPEN													
	0		1		2		3		4		5		6	
	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
0.2	---	---	---	---	---	---	---	---	---	---	7203	2.18	6718	1.94
0.4	---	---	---	---	---	---	7306	2.54	6777	2.14	6257	1.80	5711	1.66
0.6	---	---	7477	2.97	6899	2.51	6323	2.10	5716	1.72	5103	1.39	---	---
0.8	7112	2.96	6467	2.46	5795	2.01	5101	1.61	---	---	---	---	---	---
1.0	5983	2.38	5190	1.89	---	---	---	---	---	---	---	---	---	---
1.2	4426	1.71	---	---	---	---	---	---	---	---	---	---	---	---

CPC240 STANDARD BELT DRIVE

ESP, In H ₂ O	TURNS OPEN													
	0		1		2		3		4		5		6	
	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
0.2	---	---	---	---	---	---	---	---	---	---	---	---	9664	4.05
0.4	---	---	---	---	---	---	---	---	9570	4.08	9197	3.82	8702	3.51
0.6	---	---	---	---	---	---	9038	3.82	8460	3.46	7949	3.14	---	---
0.8	---	---	8171	2.93	7630	3.70	7068	2.79	---	---	---	---	---	---
1.0	---	---	7901	2.85	7203	3.42	---	---	---	---	---	---	---	---
1.2	7344	4.35	---	---	---	---	---	---	---	---	---	---	---	---

BELT DRIVE - HIGH STATIC DOWNSHOT

CPC180 HIGH STATIC BELT DRIVE

ESP, In H ₂ O	TURNS OPEN													
	0		1		2		3		4		5		6	
	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
1.0	---	---	---	---	---	---	---	---	---	---	7120	3.26	6223	2.55
1.2	---	---	---	---	---	---	---	---	6927	3.39	5924	2.61	---	---
1.4	---	---	---	---	---	---	6739	3.52	5602	2.65	---	---	---	---
1.6	---	---	---	---	6587	3.69	5245	2.67	---	---	---	---	---	---
1.8	---	---	6419	3.84	4877	2.70	---	---	---	---	---	---	---	---
2.0	6261	4.01	---	---	---	---	---	---	---	---	---	---	---	---

CPC240 HIGH STATIC BELT DRIVE

ESP, In H ₂ O	TURNS OPEN													
	0		1		2		3		4		5		6	
	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
1.0	---	---	---	---	---	---	---	---	9090	5.79	8297	5.06	7479	3.62
1.2	---	---	---	---	---	---	8774	5.60	7914	4.83	6989	4.07	---	---
1.4	---	---	---	---	8471	5.43	7549	4.63	---	---	---	---	---	---
1.6	---	---	8209	6.14	7194	4.45	---	---	---	---	---	---	---	---
1.8	7967	6.02	6883	5.01	---	---	---	---	---	---	---	---	---	---
2.0	6594	4.87	---	---	---	---	---	---	---	---	---	---	---	---

NOTES: High static airflow requires installation of high static kit (HSKT180 or 240), or factory-built High Static model.
Unit factory shipped with sheave set at 2.5 turns open.
Air flow tables represent dry coil with filters installed; SCFM correction factor for wet coil is 4%.

APPENDIX B MINIMUM AIRFLOW FOR ELECTRIC HEAT

UNIT	HEATER KIT MODEL NUMBER	MINIMUM CFM Downshot	HEATER KIT MODEL NUMBER	MINIMUM CFM Downshot	HEATER KIT MODEL NUMBER	MINIMUM CFM Downshot
15 TON	EHK3-31	5250	EHK4-31	5250	EHK7-31	5250
	EHK3-46	5250	EHK4-46	5250	EHK7-46	5250
	EHK3-60	5250	EHK4-60	5250	EHK7-60	5250
20 TON	EHK3-31	7000	EHK4-31	7000	EHK7-31	7000
	EHK3-46	7000	EHK4-46	7000	EHK7-46	7000
	EHK3-60	7000	EHK4-60	7000	EHK7-60	7000
	EHK3-75	7000	EHK4-75	7000	EHK7-75	7000

When using electric heat kit, use of the single point kit installed in the unit is required to meet UL requirements.



ATTENTION INSTALLING PERSONNEL

Use only the heater kit specified for each model as dictated by the table above.