

SPK SINGLE POINT WIRING KITS

INSTALLATION INSTRUCTIONS

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 SPK Single Point Wiring kits for installation in the following models:

Horizontal Models	*P**CH**41
	*P**HH**41
	*PC***H41
	*PH***H41
Multi-Position Models	*P**CM**41
	*P**HM**41
	*PC***M41
	*PH***M41

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.

Remove the contents of the SPK from the box and check inventory with Table 1 before starting.



Part	Qty.
Single Point Assembly	1
- Mounting Plate	1
- Cover	1
- Distribution Block	1
- Breaker	1
- Black Electric Heat Wires	5
- Unit Wire Harness	1
- Wire from Block to Breaker	2
Literature Bag	1
- Installation Instructions	1
- Wiring Diagram	1
- 1/4" Male Multiplier Terminals	2
- Cutting Screw	1
- Blunt Tip Screw	1
- Wire Ties	4

Table 1



Horizontal Models

1. Disconnect all power to the unit.

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2. Remove control box door and blower door (Figure 1).

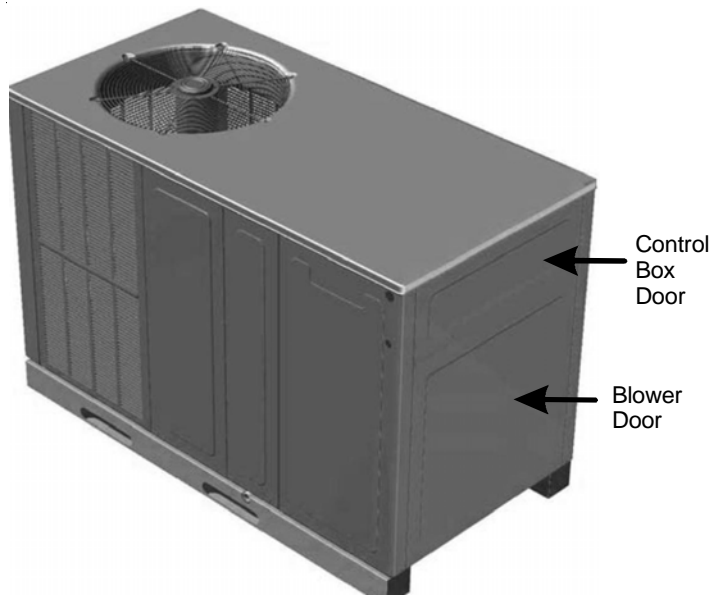


Figure 1

3. Remove cover from single point assembly.
4. Remove the 2 screws from the electric heat compartment and use these to mount the single point assembly as shown in Figure 2.

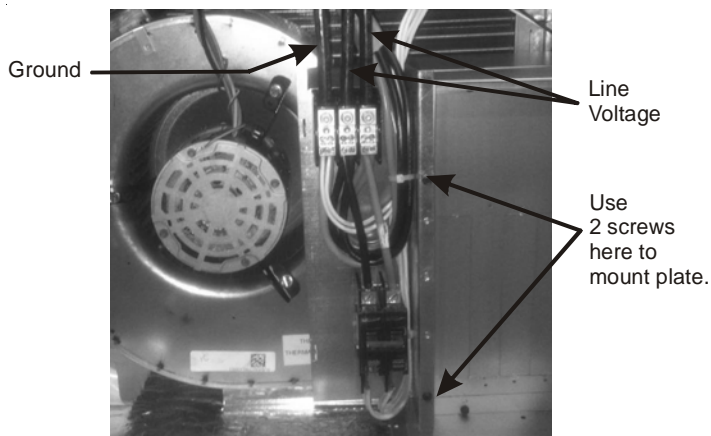


Figure 2

5. Bring line voltage into the blower compartment. Use the knock-out at the left/bottom side of the blower compartment, or cut a hole (sized correctly for the conduit being used) into the panel on the right side of the blower compartment, just above the electric heat compartment. See Figure 3.

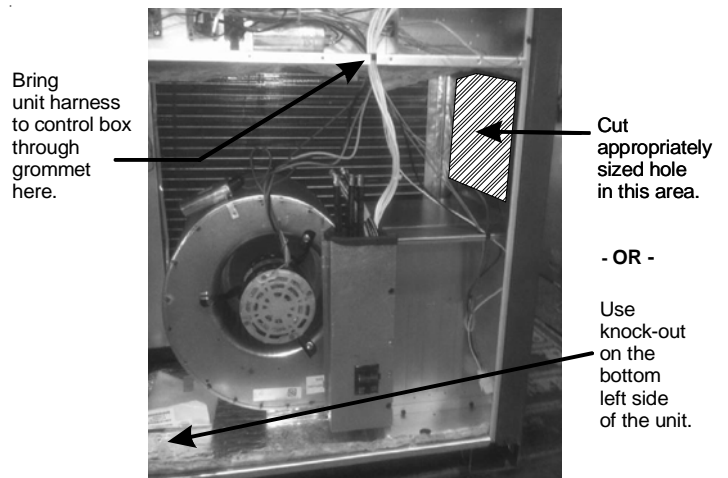


Figure 3

6. Connect line voltage to the middle lug (for heat pumps – L1 / for coolers – L2).
7. Connect line voltage to the far right lug (for heat pumps – L2 / for coolers – L1).
8. Connect the ground wire to the lug on the far left (Figure 2).
9. Route the unit wiring (the wires connected to the breaker and the shorter green wire) into the control box through the grommet on the bottom. See Figure 3.
10. Connect the green wire into the ground lug.
11. For heat pumps, connect the black wires to L1 on the contactor, and the purple wires to L2. (SPK-50 and SPK-60 will have a black wire labeled with a #3 instead of the purple wire.)
For coolers, connect the black wires to L2 on the contactor and the purple wires to L1. (SPK-50 and SPK-60 will have a black wire labeled with a #3 instead of the purple wire.)
NOTE: If needed the 2 male multiplier terminals that come with the kit can be used to create enough open terminals on the contactor.
12. Route the remaining 4 black and one green electric heat wires to the electric heat compartment.
13. Connect the green wire to the ground lug on the electric heat kit.
14. For heat pumps, connect the 2 wires coming from the middle lug on the distribution block to the L1 lugs on the breakers for the electric heat kit (1 wire per breaker/smaller gauge wire on smaller amperage breaker).
For coolers, connect the 2 wires to the L2 lugs on the breakers (1 wire per breaker/smaller gauge wire on smaller amperage breaker).
15. For heat pumps, connect the 2 wires coming from the far right lug on the distribution block (the ends will be labeled with a #3) to the L2 lugs on the breakers for the electric heat kit (1 wire per breaker/smaller gauge wire on smaller amperage breaker).
For coolers, connect the 2 wires to the L1 lugs on the breakers (1 wire per breaker/smaller gauge wire on smaller amperage breaker).
NOTE: Circuit breaker lugs and ground lug should be torqued to 25 - 45 IN-LBS. All wire strands should be inserted into lugs before tightening the set screw.
NOTE: 4 wire ties have been provided in the literature bag. Use these as needed to route / dress wires.

16. Place the cover on the kit as shown in Figure 4. Drive the cutting screw provided with the single point kit to attach the cover using the hole shown in Figure 4. Once the hole is made, remove the cutting screw and replace with the blunt tip screw also provided with the kit.

NOTE: Breaker for single point kit must be in the OFF position, for the cover to fit correctly.

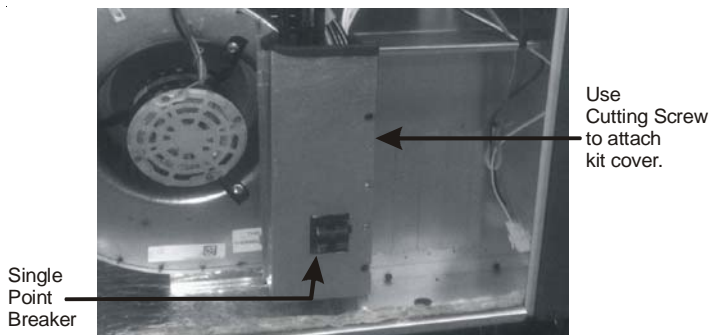


Figure 4

17. Flip single point breaker to the ON position.
18. Attach wiring diagram label next to the unit wiring diagram that is located on the back of the control box door.
19. Attach blower compartment and control box door back on the unit.
20. Begin the normal unit start-up procedures.

Multi-Position Models

1. Disconnect all power to the unit.

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2. Remove the control box and blower door. See Figure 5.

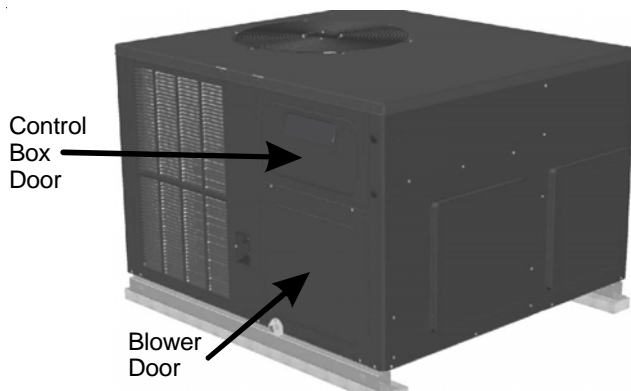


Figure 5

3. Remove cover from single point assembly.
4. Remove the 2 screws in the blower housing and use these to mount the single point assembly as shown in Figure 6.

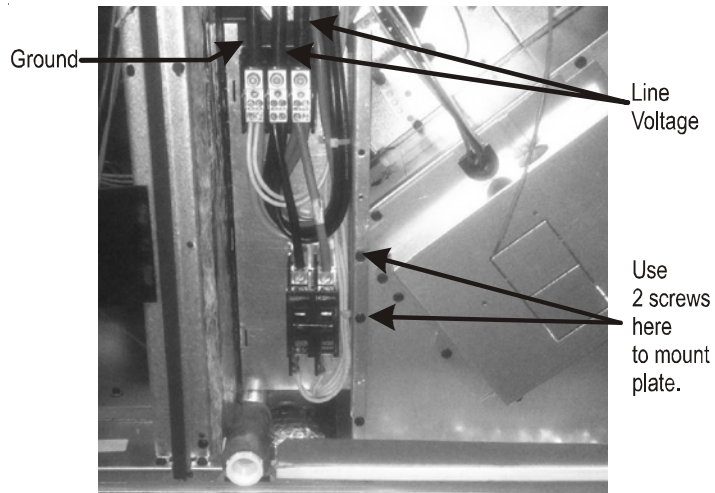


Figure 6

5. Bring line voltage into the blower compartment. Use one of the knockouts at the top right corner of the unit. Instead of going into the control box, bring power to the single point assembly.
6. Connect line voltage to the middle lug (for heat pumps – L1 / for coolers – L2).
7. Connect line voltage to the far right lug (for heat pumps – L2 / for coolers – L1).
8. Connect the ground wire to the lug on the far left (Figure 6).
9. Route the unit wiring (the wires connected to the breaker and the shorter green wire) into the control box through the grommet on the bottom. See Figure 7.

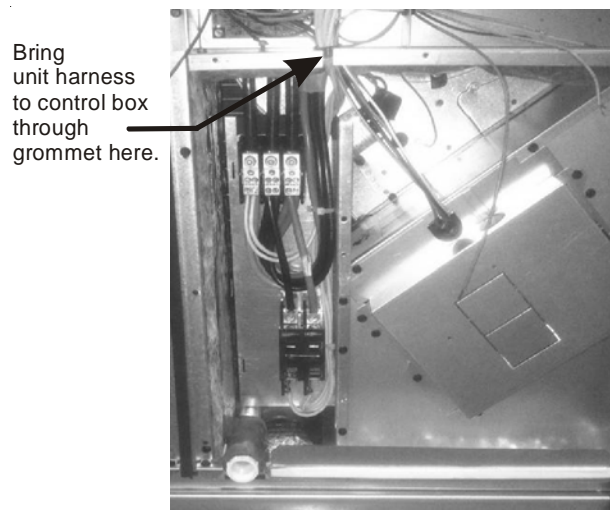


Figure 7

10. Connect the green wire into the ground lug.
11. For heat pumps, connect the black wires to L1 on the contactor, and the purple wires to L2. (SPK-50 and SPK-60 will have a black wire labeled with a #3 instead of the purple wire.)
 For coolers, connect the black wires to L2 on the contactor and the purple wires to L1. (SPK-50 and SPK-60 will have a black wire labeled with a #3 instead of the purple wire.)
NOTE: If needed the 2 male multiplier terminals that come with the kit can be used to create enough open terminals on the contactor.

12. Route the remaining 4 black and one green electric heat wires to the electric heat compartment.
13. Connect the green wire to the ground lug on the electric heat kit.
14. For heat pumps, connect the 2 wires coming from the middle lug on the distribution block to the L1 lugs on the breakers of the electric heat kit (1 wire per breaker/smaller gauge wire on smaller amperage breaker).
For coolers, connect the 2 wires to the L2 lugs on the breakers (1 wire per breaker/smaller gauge wire on smaller amperage breaker).
15. For heat pumps, connect the 2 wires coming from the far right lug on the distribution block (the ends will be labeled with a #3) to the L2 lugs on the breakers of the electric heat kit (1 wire per breaker/smaller gauge wire on smaller amperage breaker).

For coolers, connect the 2 wires to the L1 lugs on the breakers (1 wire per breaker/smaller gauge wire on smaller amperage breaker).

NOTE: Circuit breaker lugs and ground lug should be torqued to 25 - 45 IN-LBS. All wire strands should be inserted into lugs before tightening the set screw.

NOTE: 4 wire ties have been provided in the literature bag. Use these as needed to route / dress wires.

16. Place the cover on the kit as shown in Figure 8. Attach the cover using the blunt tip screw provided with the single point kit.

NOTE: Breaker for single point kit must be in the OFF position, for the cover to fit correctly.

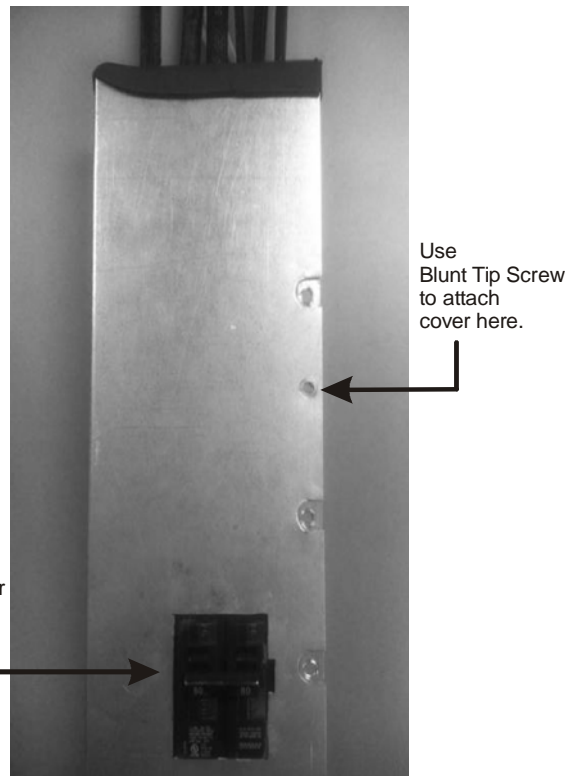


Figure 8

17. Flip single point breaker to the ON position.
18. Attach wiring diagram label next to the unit wiring diagram that is located on the back of the control box door.
19. Attach blower compartment and control box door back on the unit.
20. Begin the normal unit start-up procedures.

NOTE: SPECIFICATIONS AND PERFORMANCE DATA LISTED HEREIN ARE SUBJECT TO CHANGE WITHOUT NOTICE

Quality Makes the Difference!

All of our systems are designed and manufactured with the same high quality standards regardless of size or efficiency. We have designed these units to significantly reduce the most frequent causes of product failure. They are simple to service and forgiving to operate. We use quality materials and components. Finally, every unit is run tested before it leaves the factory. That's why we know. . . **There's No Better Quality.**

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