KBP Disconnect Switch Field-Install Instructions

Read these instructions before installing your disconnect switch onto your KBP electric heater. Check the heater label to ensure that the heater's electrical rating does not exceed the disconnect switch's electrical rating.

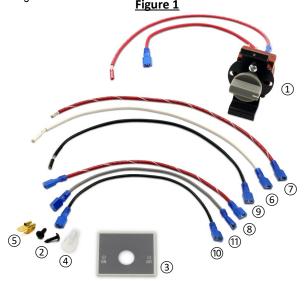
CAUTION

Turn off the power and lock the supply line for the heater at the main service box before install.

TOOLS NEEDED

- Screwdriver (Square) or Electric Drill
- Wire Cutters
- Pliers or Crimper

Verify that your kit contains all of the components listed below and as seen in **Figure 1**. Please note, you will not use every component in the kit. The kit contains parts for multiple configurations. The below table will list all components that are used or not used based on the series model and voltage you have purchased.



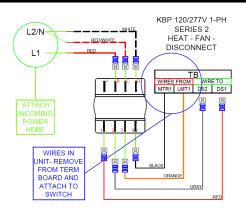
| | MODEL | Series 2 | Series 2 | Series 2 | Platinum X | Platinum X | Platinum X | ECO2S | ECO2S |
|----------------------------------|-------|----------|----------|----------|-----------------|-----------------|------------|----------|----------|
| - | VOLT | 120/277 | 208/240 | 208/240 | 277 | 208/240 | 208/240 | 120 | 208/240 |
| ITEM | PH | 1 | 1 | 3 | 1 | 1 | 3 | 1 | 1 |
| 1. Switch/Knob/Bracket/Red Wires | | Х | Х | Х | Х | Х | Х | Х | Х |
| 2. Bracket Mounting Screws | | Χ | Χ | Χ | Χ | Х | Х | Χ | Х |
| 3. On/Off Label | | NOT USED | NOT USED | NOT USED | Χ | Χ | Χ | Χ | Х |
| 4. Splice Cap | | NOT USED | NOT USED | NOT USED | NOT USED | NOT USED | NOT USED | Χ | Х |
| 5. Brass Jumper | | NOT USED | NOT USED | Χ | NOT USED | NOT USED | NOT USED | NOT USED | NOT USED |
| 6. White Wire Spade/Bare | | Χ | NOT USED | NOT USED | Χ | NOT USED | NOT USED | Χ | NOT USED |
| 7. Red/White Wire Spade/Bare | | Χ | Х | Х | NOT USED | NOT USED | Χ | NOT USED | NOT USED |
| 8. Red/White Wire 2 Spade | | NOT USED | NOT USED | Χ | NOT USED | NOT USED | Х | NOT USED | NOT USED |
| 9. Black Wire Spade/Bare | | NOT USED | Χ | Х | NOT USED | Χ | Χ | Х | Х |
| 10. Black Wire 2 Spade | | NOT USED | NOT USED | Х | Х | Х | Χ | NOT USED | Х |
| 11. Gray Wire 2 Spade | | Χ | Χ | Х | NOT USED | NOT USED | NOT USED | NOT USED | NOT USED |

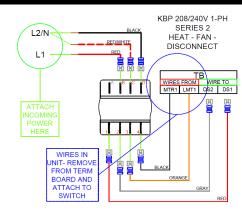
Installing the Disconnect:

- 1. Disconnect the unit from power and lock out power to the fixture.
- 2. Remove the wiring compartment cover by removing the captive screw at the base of the heater. Swing open the hinged wiring compartment lid.
- 3. Remove the open knockout or plugs located on the front right side of the heater's control panel. This is where the disconnect switch will be installed.
- 4. Depending on your KBP heater model, the wiring will vary. Use the matching diagrams on the next pages to make the necessary wiring connections on your disconnect switch. You may want to fully wire the disconnect switch before mounting it onto the unit to easily see and access terminals.
- With the knob removed, install the disconnect switch and mounting bracket onto the heater using the 2 supplied screws.
- 6. If you have an ECO2S or PlatinumX model, attach the On/Off label from the kit overtop the knockout hole for the disconnect switch. The other models will have an existing Heat/Fan/Disconnect label and not use this.
- 6. Re-attach the knob onto the disconnect switch.
- 7. Close the wiring compartment and secure it with the screw. Once power is applied to the fixture, verify function of the disconnect switch.

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KBP Heat/Fan/Disconnect





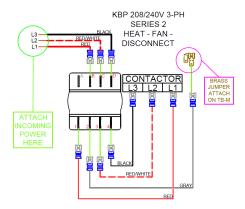
For single phase models of the KBP 120V, 208V, 240V, and 277V with the "-S2" model designation, you will start by attaching the spade terminal end of the red/white wire to terminal C, leaving the bare end available to connect power.

If you have a 120V or 277V model, you will connect the spade terminal of the white wire to switch terminal D, leaving the bare end available to connect power to. Connect the white and red/white power wire bare ends together with the incoming power. Connect the bare end of the existing red wire to incoming power.

If you have the 208/240V model, you will take the spade end of the black wire and connect it to terminal D, leaving the bare end to connect power to. Connect the black and red/white power wire bare ends together with incoming power. Then connect the bare end of the existing red wire to incoming power.

Next, take the existing black wire going to MTR1 on the terminal board, disconnect it, and reconnect it to the switch at terminal 4. After, take the existing orange wire going to terminal board spade labeled LMT1, disconnect it, and reconnect it to the switch terminal 3. Now, take the gray wire and attach it to terminal 2 on the switch and DS2 on the terminal board. Lastly, take the red wire coming from terminal 1 on the switch and connect the other end to the terminal board labeled DS1.

Your switch is now fully wired and can be installed into the unit.



For three phase models of the KBP 208V and 240V with the "-S2" model designation, you will start by attaching the spade terminal end of the red/white and black wires to terminals C and D respectively, leaving the bare ends available to connect power. The red wire is already attached to the switch.

Next, remove the existing incoming power wire off of the contactor in position L3. Replace that wire with a double spaded black wire from the kit. Connect the opposite end to terminal 4 on the disconnect switch.

After, remove the existing incoming power wire off of the contactor in position L2. Replace that wire with a double spaded red/white wire from the kit. Connect the opposite end to terminal 3 on the disconnect switch.

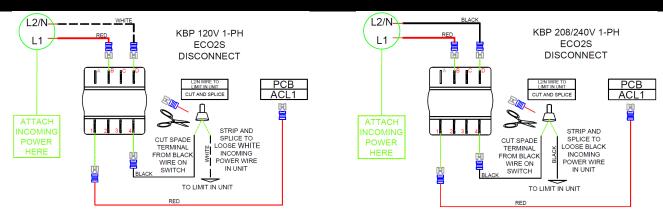
Now, remove the existing incoming power wire off of the contactor in position L1. Replace that wire with a double spaded red wire from the kit. Connect the opposite end to terminal 1 on the disconnect switch.

Lastly, using the double spaded gray wire, connect one end to position 2 on the disconnect switch. Take the other end of the wire and attach the brass jumper to the spade. Then take that jumper spade, disconnect one of the black wires from the "TB-M" terminal block and attach it to the brass jumper as well. Take the brass jumper and attach it back onto the TB-M terminal block in the same position that the black wire was originally in. Reference the wiring diagram to locate TB-M. There should be 3 wires going to 2 terminals on TB-M now.

Connect the red, red/white, and black bare ends to incoming power.

Your switch is now fully wired and can be installed into the unit.

KBP Disconnect

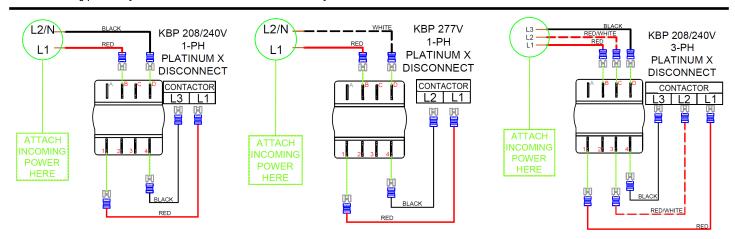


For single phase models of the KBP models with the "-ECO2S" model designation, you will start by attaching the spade/bare wires to the disconnect switch. The red spade/bare wire will come pre-attached to the disconnect switch, along with the red double spaded wire. The 120V model will attach the white spade/bare wire to terminal D. The 208V and 240V models will attach the black spade/bare wire to terminal D.

Next, take the other end of the double spaded red wire at terminal 1 and connect it to the printed circuit board at terminal ACL1, removing the existing red incoming power wire from ACL1. The PCB is directly labeled on the board itself. The terminal is also labeled on your wiring diagram to show positioning relative to the board.

After, take the double spaded black wire from the kit and attach one end to the disconnect switch at terminal 4. Take wire cutters to remove the spade from the opposite end of the wire. Strip 1 inch of the wire coat to expose the bare wire. Using the splice cap, connect the newly stripped black wire and splice it together with the original wire from the limit using crimpers or pliers. For 120V, this is a white wire. For 208V and 240V models, this is a black wire. Any properly rated wire nuts can be used in place of the splice cap.

Attach incoming power to your wire bare ends. Your switch is now fully wired and able to be installed onto the heater.



For all models of the PlatinumX variant of the KBP, you will start by attaching the spade/bare wires to the disconnect switch. The red spade/bare wire will come pre-attached to the disconnect switch, along with the red double spaded wire.

For 208 and 240V single phase models, you will connect the black wire to terminal D on the disconnect switch. The bare end will connect incoming power.

For 277V models, you will connect the white wire to terminal D on the disconnect switch. The bare end will connect to incoming power.

For 208 and 240V 3-phase models, you will connect the red/white and black wires to terminals C and D respectively on the disconnect switch. The bare ends will be left to connect incoming power.

Next, for the single phase models of 208V, 240V, and 277V, you will connect the black double spaded wire to terminal 4 on the disconnect switch, with the red wire already connected to terminal 1. For 208V and 240V models, you will connect the other end of the red wire to terminal L1 on the contactor and the other end of the black wire to L3 on the contactor. For 277V models, you will also connect the red wire to terminal L1 on the contactor, but you will connect the black wire to terminal L2 on the contactor.

For 3-phase models of the 208V and 240V PlatinumX, you will take the double spaded red/white and black wires and connect them toterminals 3 and 4 respectively on the disconnect switch. Then, take the other ends of the red, red/white, and black wires and connect those to terminals L1, L2, and L3 respectively on the contactor. Connect the bare ends of the red, red/white, and black wires to incoming power.

Your switch is now fully wired and able to be installed onto the heater.