



ULTRATEMP[®] / XLHP[®]

COMPRESSOR CONVERSION KIT

INSTALL INSTRUCTIONS

IMPORTANT SAFETY INSTRUCTIONS
READ AND FOLLOW ALL INSTRUCTIONS
SAVE THESE INSTRUCTIONS

CUSTOMER SERVICE / TECHNICAL SUPPORT

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Digital copies of all UltraTemp manuals can be found at www.pentair.com, or by scanning the provided QR code.

Se pueden encontrar copias digitales de todos los manuales de UltraTemp en www.pentair.com, o escaneando el código QR proporcionado.

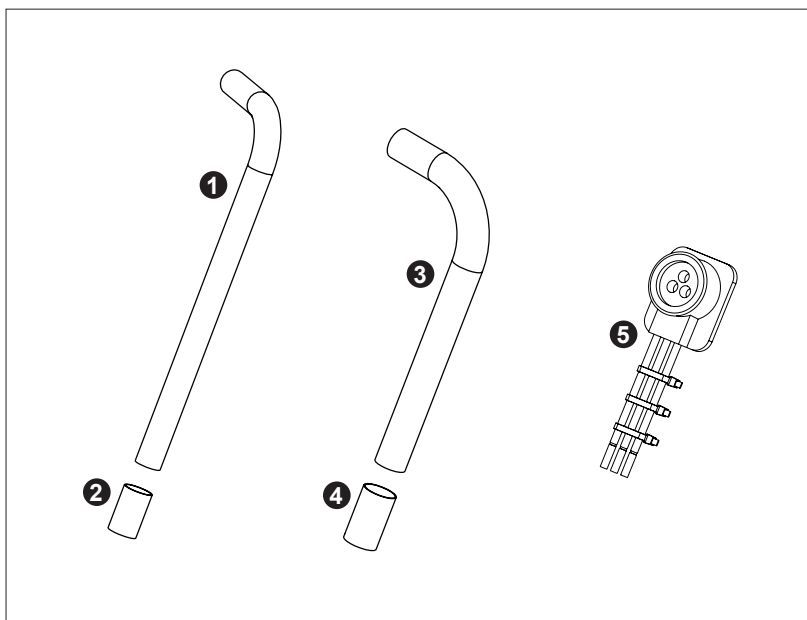
Des copies numériques de tous les manuels UltraTemp peuvent être trouvées sur www.pentair.com, ou en scannant le code QR fourni.



IMPORTANT! Compressor conversion must be performed by a licensed professional in accordance with all applicable national and/or local codes. All brazing should be performed using nitrogen or equivalent inert shielding gas to prevent oxidation.

KIT CONTENTS

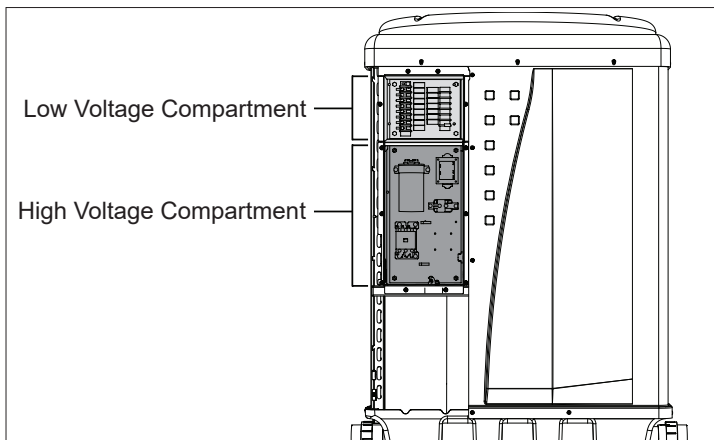
1. 1/2" Discharge Pipe
2. 1/2" Pipe Coupling
3. 7/8" Suction Pipe
4. 7/8" Pipe Coupling
5. Compressor Wiring Harness
6. Wiring Diagram Label (not shown)



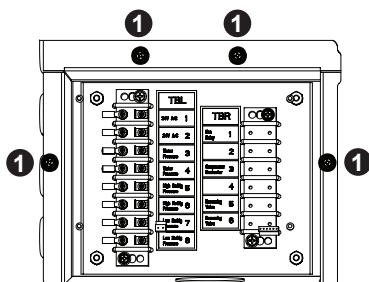
INSTALLATION

Accessing the Compressor

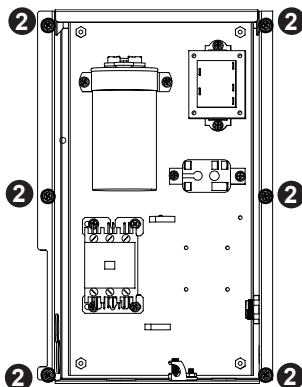
1. Disconnect power to the heat pump at the circuit breaker.
2. Remove both service panels from the front of the heat pump.



3. To access the Low Voltage Compartment, remove the four *Screws (1)* securing the Control Panel and allow it to swing downwards.



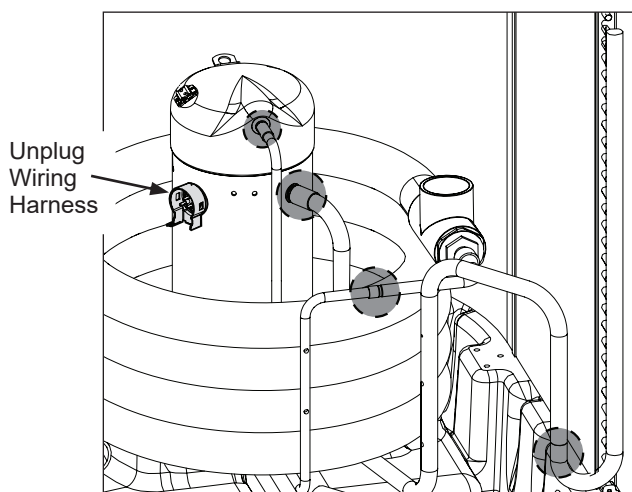
4. To access the High Voltage Compartment, remove the six *Screws (2)* securing the High Voltage Compartment Cover and place cover aside.



Removing the Emerson Compressor

1. Remove compressor blanket and unplug Compressor Wiring Harness from the Compressor.
2. Disconnect Compressor Wiring Harness (red, black, and purple wires) from Compressor Contactor and discard wiring harness.
3. Reclaim refrigerant in accordance with all applicable national and/or local codes.
4. **Heat Only Units:** Unbraid the 1/2" discharge and 7/8" suction lines at the four points show in the diagram below.

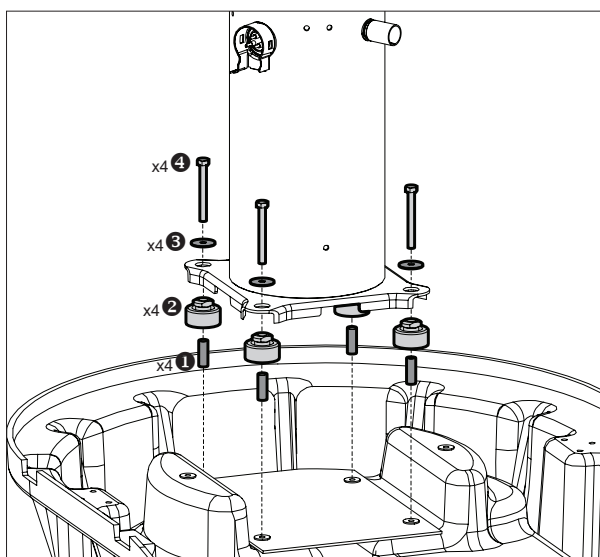
Heat/Cool Units: Unbraid the 1/2" discharge and 7/8" suction lines from the compressor and reversing valve.



5. Set unbrazed copper pipes aside.
6. Remove hardware securing the compressor and remove compressor from the heat pump.

Installing the LG Compressor

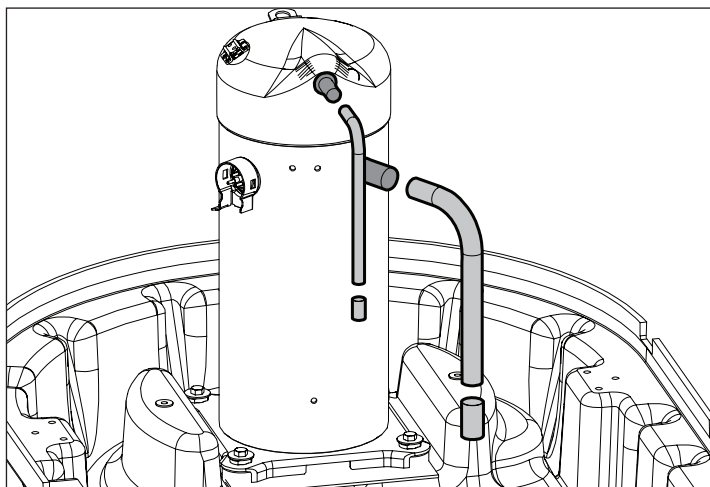
1. Install the compressor into the UltraTemp base using the four *Spacers* (1) and *Grommets* (2) provided in the compressor replacement kit.



2. **UltraTemp 110, 120, and 140 model compressors:** Copper tubes must be modified. Follow Steps 2a through 2c for instructions.

All other UltraTemp models: Skip to Step 3, on the next page.

- a. Using the provided 'L' tubes and couplers, dry fit and mark the copper suction and discharge lines.

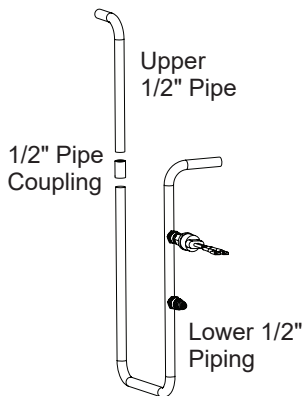


- b. Cut the copper tubes to length. Clean and deburr the cut ends of the tubes.

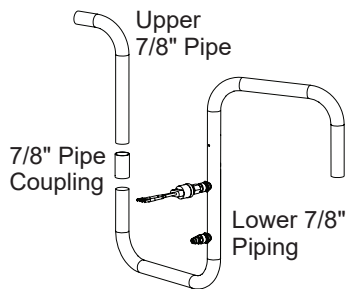
Installing the LG Compressor (cont.)

- c. Braze the 'L' tubes and couplers to the existing copper tubes.

DISCHARGE LINE



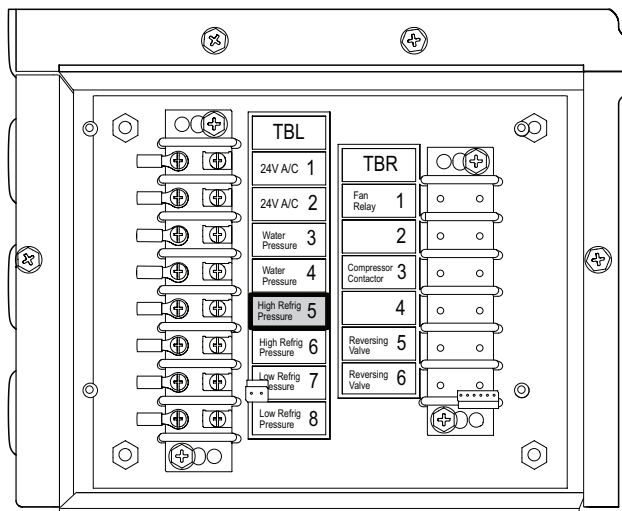
SUCTION LINE



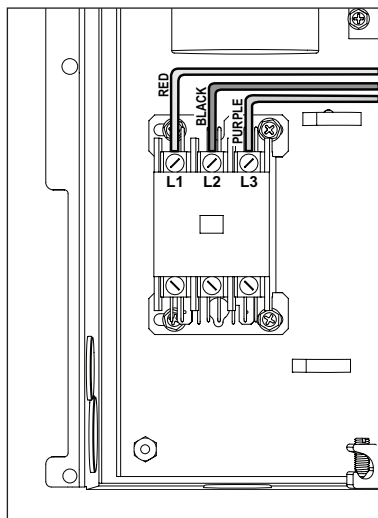
3. Braze the 1/2" and 7/8" copper tubes into place.
4. Plug the new Compressor Wiring Harness into the Compressor and secure using the included harness clip.
5. Once braze joints have cooled, reinstall the compressor blanket.
6. Evacuate the unit to below 500 microns.
7. Charge the heat pump to the weight specified on the performance label located at the bottom left corner of the small service panel.

Wiring the LG Compressor

1. Route the blue Thermal Protector Wires from the Compressor into the High Voltage Compartment and then up into the Low Voltage Compartment.
2. Disconnect the black wire from Terminal 5 "High Refrig. Pressure."



3. Connect a blue Thermal Protector Wire to the black wire that was just disconnected.
4. Connect the second blue Thermal Protector Wire to Terminal 5 "High Refrig. Pressure."
5. Route red, black, and purple wires from the new Wiring Harness into the High Voltage Compartment.
6. Reconnect red, black, and purple wires to the High Voltage Contactor. Red to L1, black to L2, and purple to L3.
7. Apply provided Wiring Diagram Label over the existing wiring diagram, located on the backside of the High Voltage Compartment Cover.
8. Reinstall the Control Panel and High Voltage Compartment Cover.
9. Reinstall both service panels onto the front of the heat pump.
10. Reconnect power to the heat pump at the circuit breaker.





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P/N 476300 REV. D 4/28/2025