

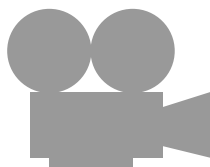
Installer's Guide

5TEM6/A5AHV 120V Conversion Kit

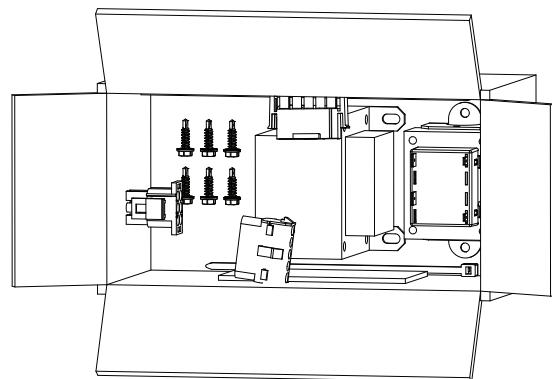
Model: BAYAH120VKT

Used ONLY with 5TEM6 / A5AHV Air Handlers

Scan the below QR code for more information.



Scan to see help videos on this product



Note: ALL phases of this installation must comply with NATIONAL, STATE AND LOCAL CODES.

Note: "Graphics in this document are for representation only. Actual model may differ in appearance."

⚠ SAFETY WARNING

Only qualified personnel should install and service the equipment. The installation, starting up, and servicing of heating, ventilating, and air-conditioning equipment can be hazardous and requires specific knowledge and training. Improperly installed, adjusted or altered equipment by an unqualified person could result in death or serious injury. When working on the equipment, observe all precautions in the literature and on the tags, stickers, and labels that are attached to the equipment.

Safety Section

Important: This document is customer property and is to remain with this unit. Please return to service information pack upon completion of work.

⚠ WARNING

HAZARDOUS VOLTAGE!

Failure to follow this Warning could result in property damage, severe personal injury, or death.

Disconnect all electric power, including remote disconnects before servicing. Follow proper lockout/tagout procedures to ensure the power cannot be inadvertently energized.

⚠ WARNING

LIVE ELECTRICAL COMPONENTS!

Failure to follow this Warning could result in property damage, severe personal injury, or death.

Follow all electrical safety precautions when exposed to live electrical components. It may be necessary to work with live electrical components during installation, testing, servicing, and troubleshooting of this product.

⚠ WARNING

GROUNDING REQUIRED!

The Cabinet must have an uninterrupted or unbroken ground according to National Electrical Code, ANSI/NFPA 70 – "latest edition" and Canadian Electrical Code, CSA C22.1 or local codes to minimize personal injury if an electrical fault should occur. Failure to follow this warning could result in an electrical shock, fire, injury, or death.

⚠ WARNING

HOT SURFACE!

Prevent all wires from touching any hot surfaces. Failure to follow this warning could result in dangerous operation, serious injury, death, or property damage.

⚠ CAUTION

DO NOT USE ELECTRIC HEATER!

Do Not Use 208/230V heater when 120V conversion kit is installed in the unit. Failure to follow this Caution could result in property damage or personal injury.

⚠ CAUTION

SHARP EDGE HAZARD!

Failure to follow this Caution could result in property damage or personal injury. Be careful of sharp edge on equipment or any other cuts made on sheet metal while installing or servicing.

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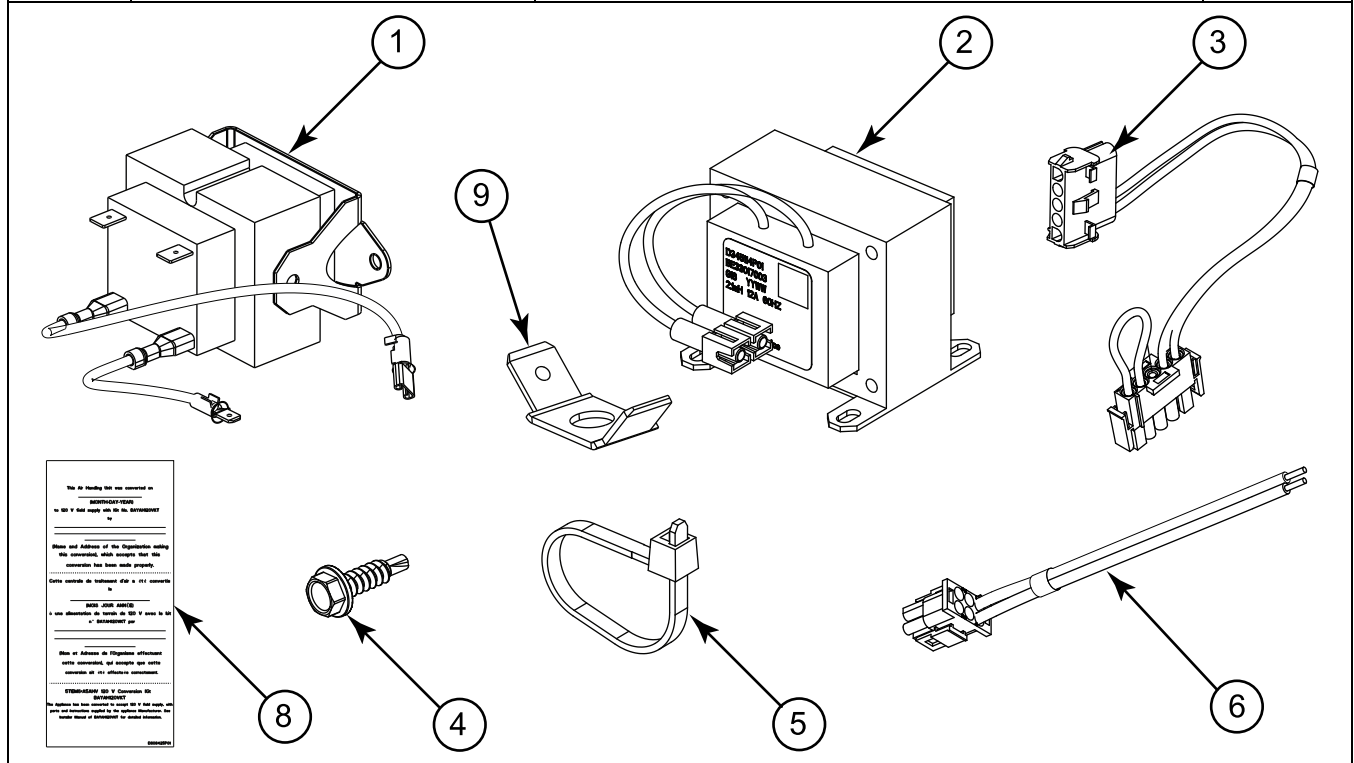
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General Information

Kit Components

Table 1. BAYAH120VKT Kit Components

Item No.	Part Number	Part Description	Qty.
1	D808458P01	35VA 120/24V Transformer	1
2	D345114P01	Line Choke	1
3	D807945P01	Adapter Harness for Motor - 120V	1
4	D345206P01	Self Drilling Screw	6
5	C107736P06	Cable Tie	1
6	D808396P01	6-pin polarized plug - White and Black	1
7	18-GJ97D1-1C-EN	Installer Guide	1
8	D808425P01	120V Conversion label	1
9	D803716P01	Ground Terminal	1

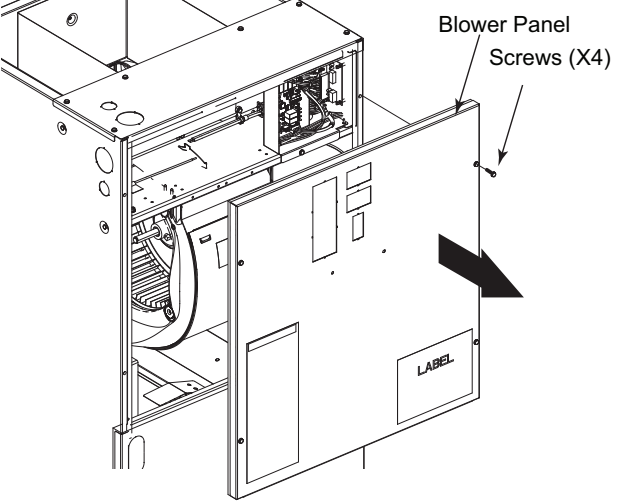
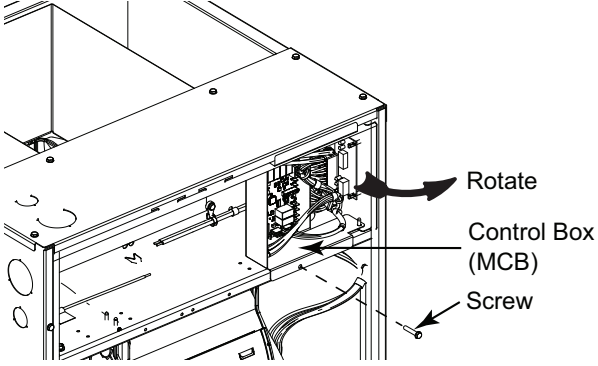
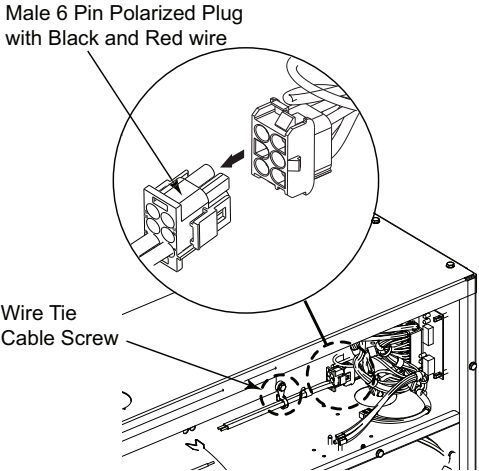


Application

The 5TEM6/A5AHV 120V Conversion Kit can only be used in 5TEM6/A5AHV AHUs. Factory shipped 5TEM6/A5AHV AHU connect to 208/230V field power supply. With this Kit customers can use 120V Field supply, to power up the AHU.

Installation Instructions for Converting the unit to 120V

Follow the below steps to convert the unit to 120V:

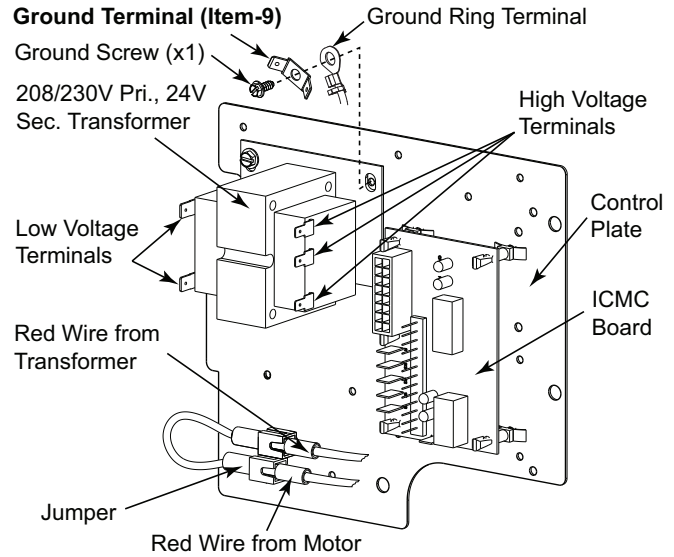
<ol style="list-style-type: none">1. Disconnect the power supply of the unit.2. Remove the Front Blower Panel to get access to the Control Panel.	 <p>Blower Panel Screws (X4)</p> <p>LABEL</p>
<ol style="list-style-type: none">3. Remove the screw that attaches Control Box (MCB) to the frame.4. Rotate the Control Box (MCB) to get access to the backside of the controls.	 <p>Rotate Control Box (MCB) Screw</p>
<ol style="list-style-type: none">5. Disconnect the male 6-pin polarized plug with Black and Red wire from the unit and remove the Cable Tie Screw. <p>Note: Retain the 6-pin polarized plug (Black and Red) within the unit for future conversion back to 230V.</p>	 <p>Male 6 Pin Polarized Plug with Black and Red wire</p> <p>Wire Tie Cable Screw</p> <p>Note: The Control Box (MCB) is not shown for clarity.</p>

Installation Instructions for Converting the unit to 120V

6. Disconnect the Jumper and Harness from 230/24V Transformer (High Voltage & Low Voltage Terminal).
7. Remove the Ground Screw and place the **Ground Terminal (Item-9)** over the Ground Ring Terminal and secure with the same Ground screw.

Note: Refer Wiring Diagram (Figure 1) for detailed wiring information.

Note: Retain the jumper within the unit for future conversion back to 230V.



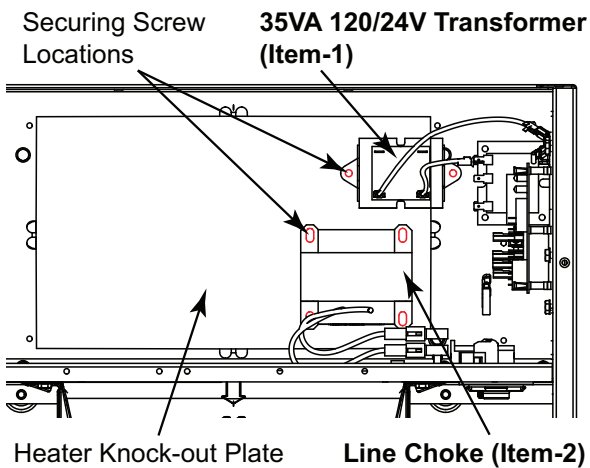
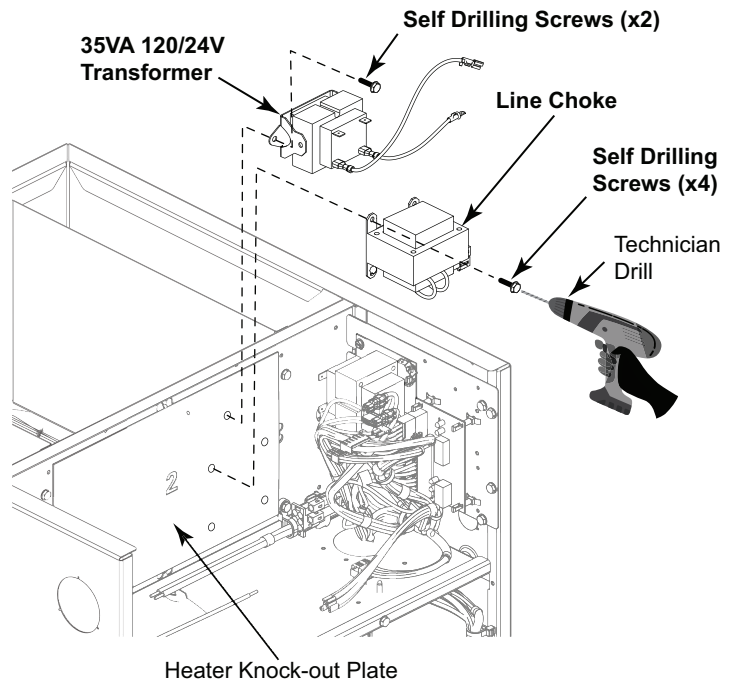
Note: Full unit is not shown for better view.

8. Aligning the **35VA 120/24V Transformer (Item-1)** and **Line Choke (Item-2)**:

- Approximately, position the **Transformer (Item-1)** and **Line Choke (Item-2)** as shown in the image below.

Note: For smaller B cabinets, the transformer will be shifted to the left on the heater knockout plate; leaving a little room between the factory 230 volt transformer & field installed 120 volt transformer.

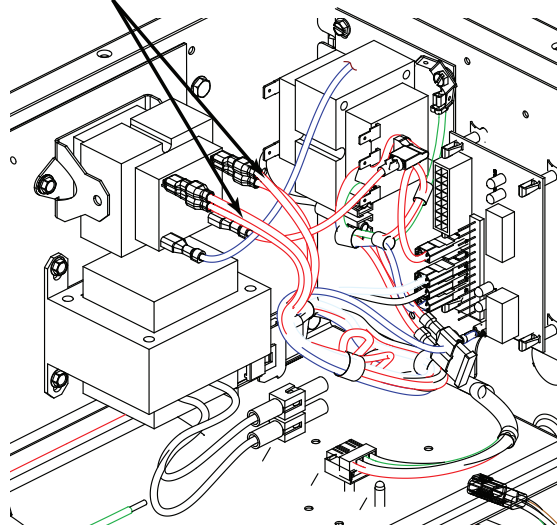
- Mark the mounting location using the **Self Drilling Screw (Item-4)**.
- Using the **Self Drilling Screws (Item-4)**, drill holes in the marked location.
- Once the holes are drilled, secure the **35VA 120/24V Transformer (Item-1)** at the top and **Line Choke (Item-2)** at the bottom on the Heater Knock-out Plate with the **Self Drilling Screws (Item-4)**.



9. Connect the High Voltage Harness (Red and Black) to the Primary terminal of the **35VA 120/24V Transformer (Item-1)**.

Note: Refer Wiring Diagram (Figure 2) for detailed wiring information.

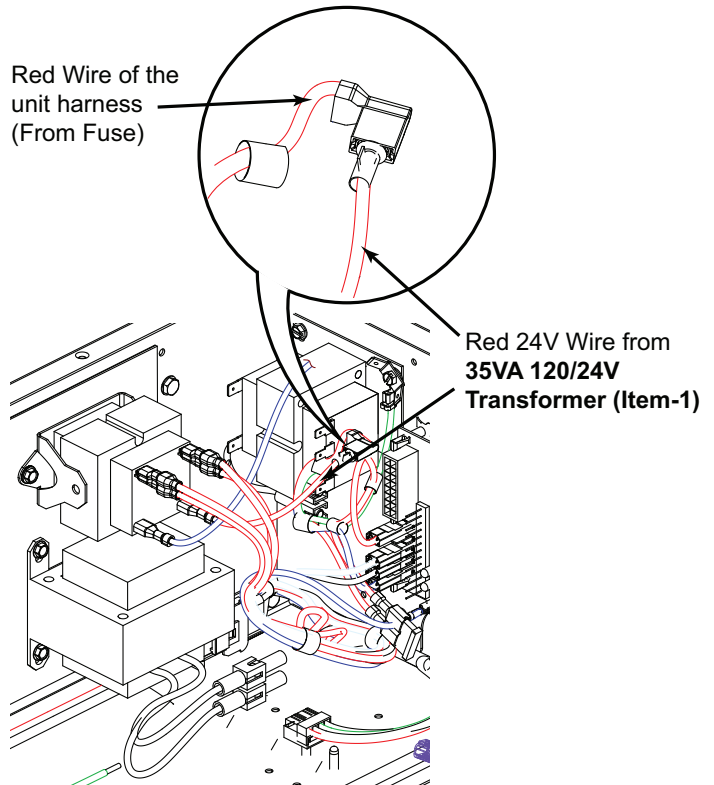
High Voltage Harnesses



10. Connect the Red 24V wire from secondary of the **35VA 120/24V Transformer (Item-1)** to the Red wire of the unit harness (from Fuse) that was removed from the secondary of the 230/24V Transformer.

Note: Refer Wiring Diagram (Figure 2) for detailed wiring information.

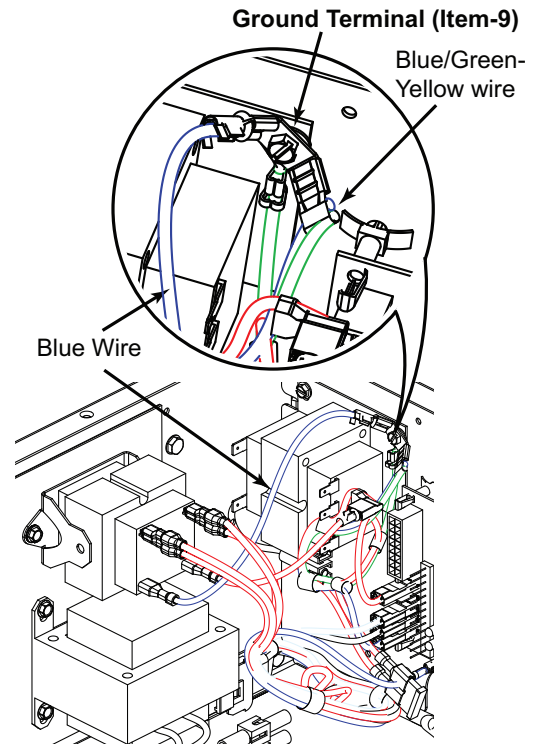
Red Wire of the unit harness (From Fuse)



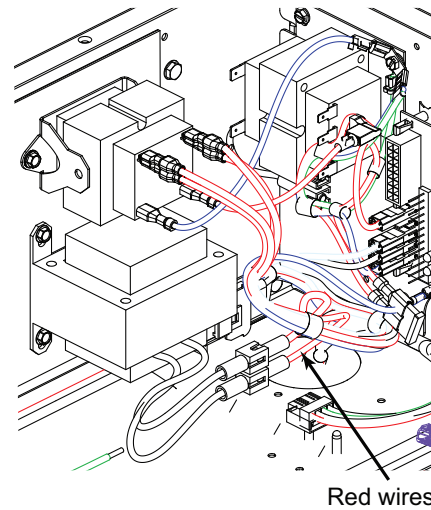
Installation Instructions for Converting the unit to 120V

11. Connect the Blue wire from secondary of the **35VA 120/24V Transformer (Item-1)** to one side of the **Ground Terminal (Item-9)**, and connect the Blue/Green-Yellow wire that was removed from the secondary of the 230/24V Transformer to the other side of the **Ground Terminal (Item-9)**.

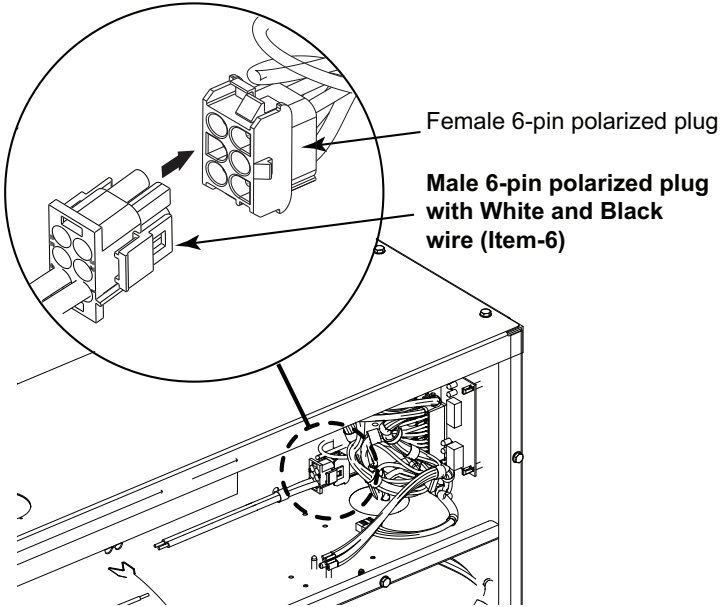
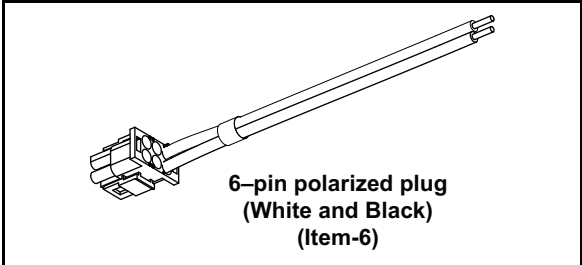
Note: Refer Wiring Diagram (Figure 2) for detailed wiring information.



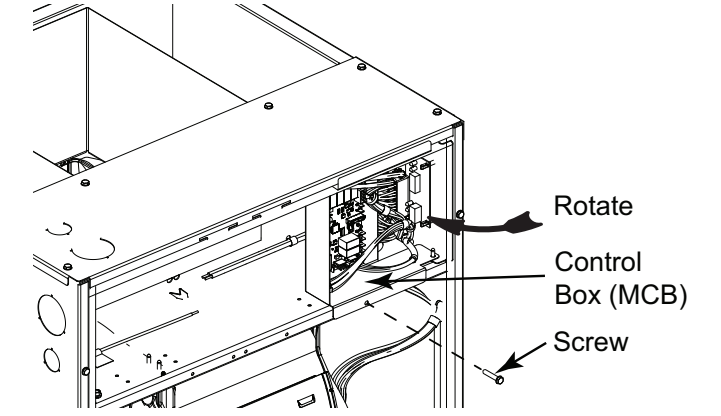
12. Connect the **Line Choke (Item-2)** terminals to the Red wires as shown in the figure.



13. Connect the Male **6-pin polarized plug (Item-6)** with White and Black wire to the Female 6-pin polarized plug.



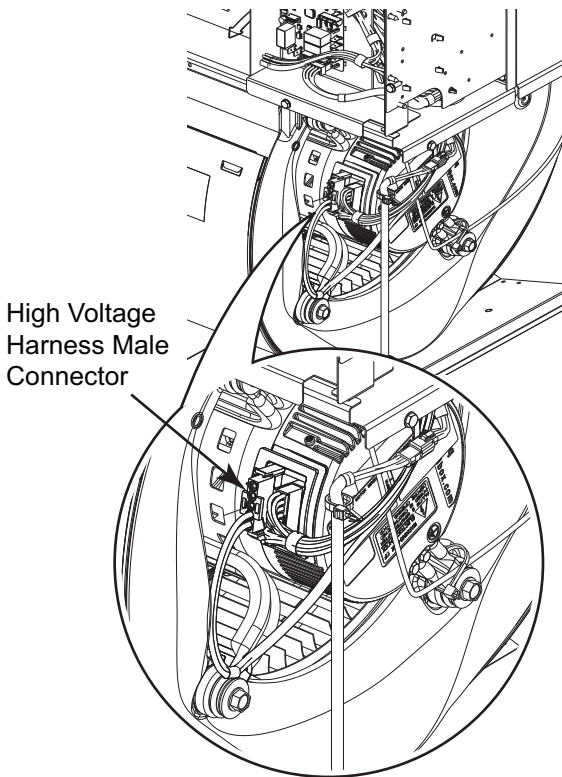
14. Re-attach the Control Box (MCB) to the frame using the screw that was removed earlier in the Step 3.



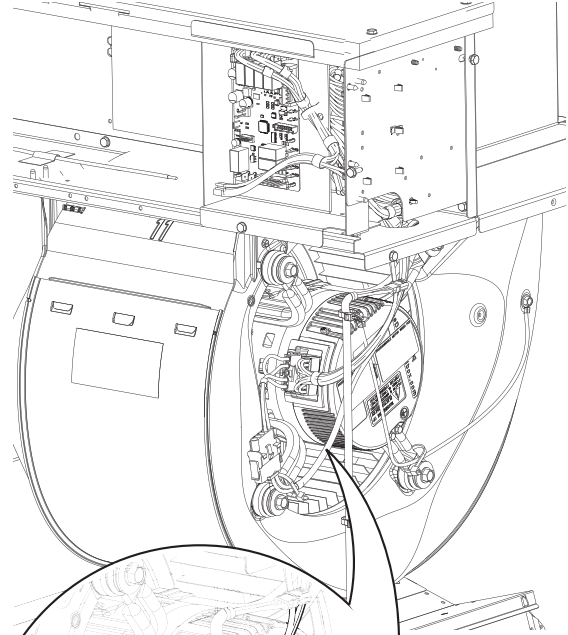
Installation Instructions for Converting the unit to 120V

15. Remove the High Voltage Harness (Red and Black) male connector from the motor and connect it to the female end connector of the **120V Adapter Harness for Motor (Item-3)**.
16. Connect the male end connector of **120V Adapter Harness for Motor (Item-3)** to the Motor.
17. Secure the High Voltage Harness to the motor arm using a **Cable Tie (Item-5)**. Ensure the harness cannot be pulled into the blower wheel.

Default Unit Connection

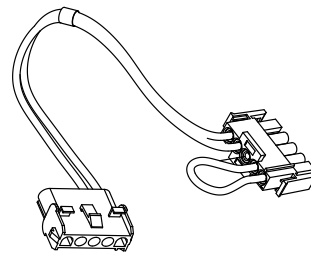


Motor Connection for 120V Adapter Harness



Adapter Harness for Motor - 120V (Item-3)

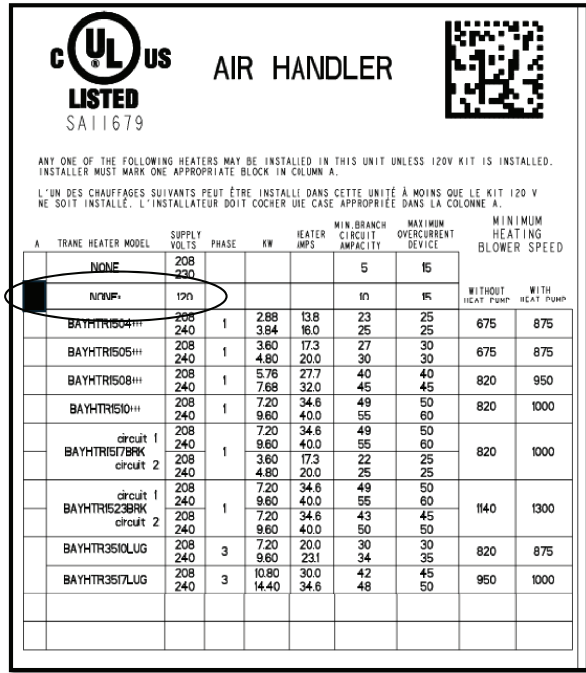
Cable Tie (Item-5)



Adapter Harness for Motor - 120V (Item-3)

Installation Instructions for Converting the unit to 120V

18. Re-attach the front blower panel and connect the 120V field supply to the unit
19. On the unit Nameplate check off the Row with 120V supply Volts.

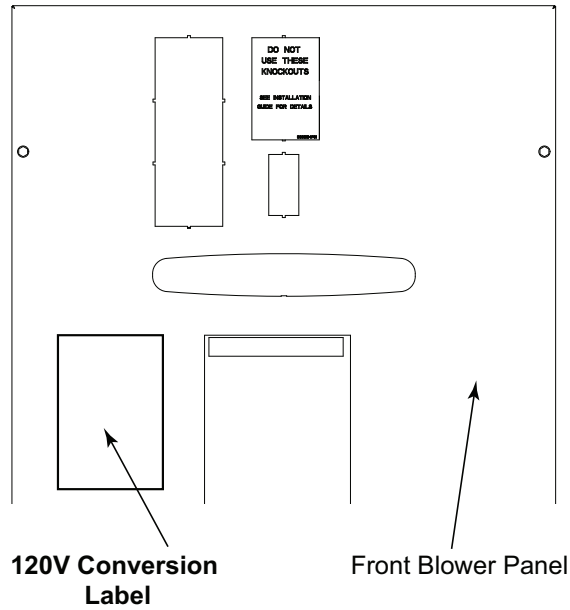


UL LISTED AIR HANDLER SA11679

ANY ONE OF THE FOLLOWING HEATERS MAY BE INSTALLED IN THIS UNIT UNLESS 120V KIT IS INSTALLED. INSTALLER MUST MARK ONE APPROPRIATE BLOCK IN COLUMN A.
 L'UN DES CHAUFFAGES SUIVANTS PEUT ÊTRE INSTALLÉ DANS CETTE UNITÉ À MOINS QUE LE KIT 120 V NE SOIT INSTALLÉ. L'INSTALLATEUR DOIT COCHER UNE CASE APPROPRIÉE DANS LA COLONNE A.

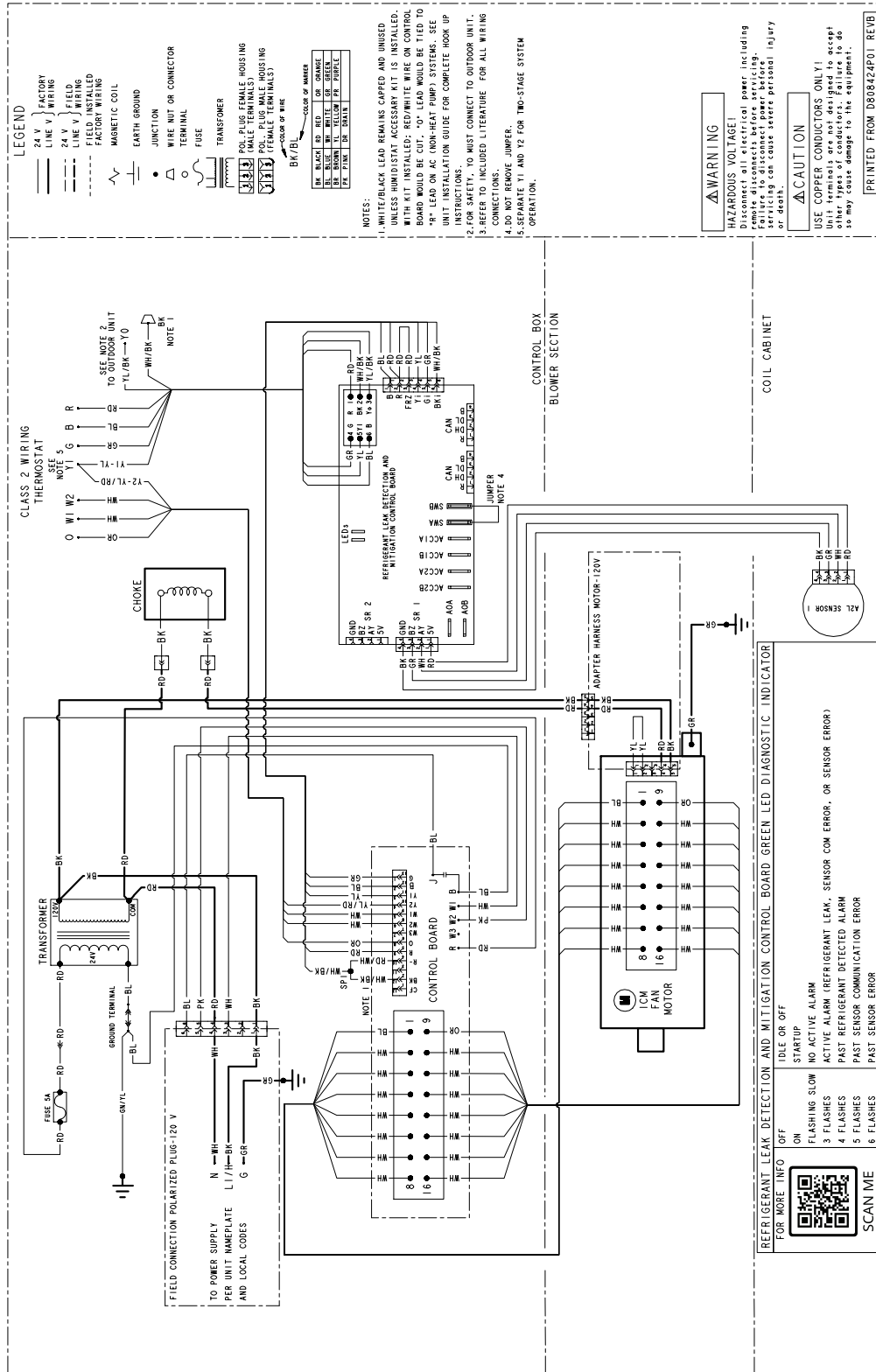
A	TRANE HEATER MODEL	SUPPLY VOLTS	PHASE	KW	HEATER INPS	MIN. BRANCH CIRCUIT AMPACITY	MAXIMUM OVERCURRENT DEVICE	MINIMUM HEATING BLOWER SPEED	
	NONE	208 230				5	15		
	NONE	120				10	15	WITHOUT HEAT PUMP	WITH HEAT PUMP
	BAYHTR1504H	208 240	1	2.88 3.84	13.8 16.0	23 25	25 25	675	875
	BAYHTR1505H	208 240	1	3.60 4.80	17.3 20.0	27 30	30 30	675	875
	BAYHTR1508H	208 240	1	5.76 7.68	27.7 32.0	40 45	40 45	820	950
	BAYHTR1510H	208 240	1	7.20 9.60	34.6 40.0	49 55	50 60	820	1000
	circuit 1	208 240	1	7.20 9.60	34.6 40.0	49 55	50 60		
	BAYHTR1517BRK	208 240	1	3.60 4.80	17.3 20.0	22 25	25 25	820	1000
	circuit 1	208 240	1	7.20 9.60	34.6 40.0	49 55	50 60		
	BAYHTR1523BRK	208 240	1	7.20 9.60	34.6 40.0	43 50	45 50	1140	1300
	circuit 1	208 240	1	7.20 9.60	34.6 40.0	43 50	45 50		
	BAYHTR3510LUG	208 240	3	7.20 9.60	20.0 23.1	30 34	30 35	820	875
	BAYHTR3517LUG	208 240	3	10.80 14.40	30.0 34.6	42 48	45 50	950	1000

20. Attach the **120V conversion label (Item-8)** to the front blower panel in the available space and the unit is now ready for the 120V field application.



Note: Original jumper and male 6-pin polarized plug shall be retained in the unit itself. These can be used in the future if converting back to a 230V field supply.

Figure 2. 5TEM6/A5AHV Wiring Diagram with 120V Power Supply



Check List

Check List to follow before starting the unit with 120V Conversion Kit application:

1. Ensure that 35VA 120/24V transformer is connected.
2. Ensure the line choke is connected.
3. Check the wire harnesses are connected to the correct terminals of the components by verifying with the wiring diagram as shown in Figure 2.
4. Ensure the 120V adapter harness for motor is firmly connected to the motor and high voltage harness.
5. Ensure the male 6-pin polarized plug (Red and Black) and jumper are left in the unit.
6. Ensure the 120V conversion label is attached to the front blower panel.

Conversion of 5TEM6/A5AHV from 120V to 208/230V:

SCAN the below QR code to follow the conversion steps or you can also check the Installer's Guide 18-GJ97D1-1C-ADD-EN.

(The below pages will be an electronic document and will not be supplied with the Kit).



About Trane and American Standard Heating and Air Conditioning

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The manufacturer has a policy of continuous data improvement and it reserves the right to change design and specifications without notice. We are committed to using environmentally conscious print practices.

18-GJ97D1-1C-EN 12 Dec 2024

Supersedes 18-GJ97D1-1B-EN (November 2024)

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