

Installation, Operation, and Maintenance

Convertible Air Handlers 1-1/2 – 5 Ton

Black Epoxy Coil

GAM5B0A18M11EB

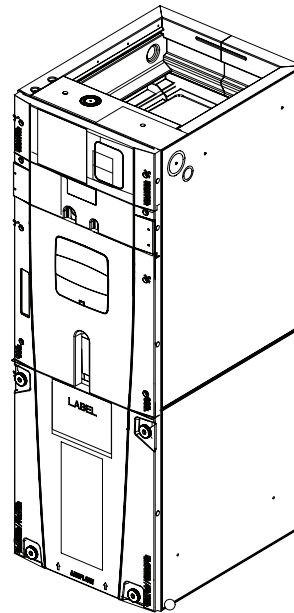
GAM5B0A24M21EB

GAM5B0B36M31EB

GAM5B0C42M31EB

GAM5B0C48M41EB

GAM5B0C60M51EB



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.

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

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

Important: These instructions do not cover all variations in systems nor provide for every possible contingency to be met in connection with the installation. Should further information be desired or should particular problems arise which are not covered sufficiently for the purchaser's purposes, the matter should be referred to your installing dealer or local distributor.

Note: The manufacturer recommends installing ONLY A.H.R.I. approved, matched indoor and outdoor systems. Some of the benefits of installing approved matched indoor and outdoor split systems are maximum efficiency, optimum performance, and the best overall system reliability.

Note: Condensation may occur on the surface of the air handler when installed in an unconditioned space. When units are installed in unconditioned spaces, verify that all electrical and refrigerant line penetrations on the air handler are sealed completely.

Important: GAM5B0C60M51EB air handler applied in downflow or horizontal configurations should not exceed 2000 CFM. Airflow above 2000 CFM could result in water blow-off. For verification, see airflow table.

Important: The GAM5 air handlers will only use the following internal electric heaters:

BAYEAAC04BK1	BAYEAAC08BK1	BAYEAAC10LG1	BAYEABC15LG3
BAYEAAC04LG1	BAYEAAC08LG1	BAYEAAC10LG3	BAYEABC20BK1
BAYEAAC05BK1	BAYEAAC10BK1	BAYEABC15BK1	BAYEACC25BK1
BAYEAAC05LG1			

Note: Representative illustrations only included in this document. Most illustrations display the upflow configuration.

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Section 1. Safety Information

WARNING

SAFETY HAZARD! This information is intended for use by individuals possessing adequate backgrounds of electrical and mechanical experience. Any attempt to repair a central air conditioning product may result in personal injury and/or property damage. The manufacturer or seller cannot be responsible for the interpretation of this information, nor can it assume any liability in connection with its use.

WARNING

LIVE ELECTRICAL COMPONENTS! During installation, testing, servicing, and troubleshooting of this product, it may be necessary to work with live electrical components. Failure to follow all electrical safety precautions when exposed to live electrical components could result in death or serious injury.

CAUTION

HAZARDOUS VAPORS! Do not install an air handler with a non-ducted return in the same closet, alcove, or utility room as a fossil fuel device. Hazardous vapors can be distributed throughout the conditioned space and equipment damage can result.

WARNING

This product can expose you to chemicals including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to [www. P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

Important: Panel damage can occur with prolonged exposure to POE lubricants. Air handler front panels that come in contact with POE oil must be washed immediately with soapy water.

Important: Can not leave door panels in the sun during installation as the extreme temperature has a tendency to warp the plastic outer panel.

CAUTION

CORROSION HAZARD! To prevent shortening its service life, the air handler should not be used during the finishing phases of construction. The low return air temperatures can lead to the formation of condensate. Condensate in the presence of chlorides and fluorides from paint, varnish, stains, adhesives, cleaning compounds, and cement creates a corrosive condition which may cause rapid deterioration of the cabinet and internal components.

CAUTION

SAFETY HAZARD! Sharp Edge Hazard. Be careful of sharp edges on equipment or any cuts made on sheet metal while installing or servicing. Personal injury may result.

WARNING

PRESSURIZED REFRIGERANT! SYSTEM CONTAINS OIL AND REFRIGERANT UNDER HIGH PRESSURE. RECOVER REFRIGERANT TO RELIEVE PRESSURE BEFORE OPENING THE SYSTEM.

DO NOT USE NON-APPROVED REFRIGERANTS OR REFRIGERANT SUBSTITUTES OR REFRIGERANT ADDITIVES.

Note: This unit is certified to UL 1995.

The interior cabinet wall meets the following:

- UL94-5VA Flame Class Listed
- UL723 Steiner Tunnel Listed for 25/50 Flame/Smoke
- UL746C Listed for Exposure to Ultraviolet Light, Water Exposure and Immersion

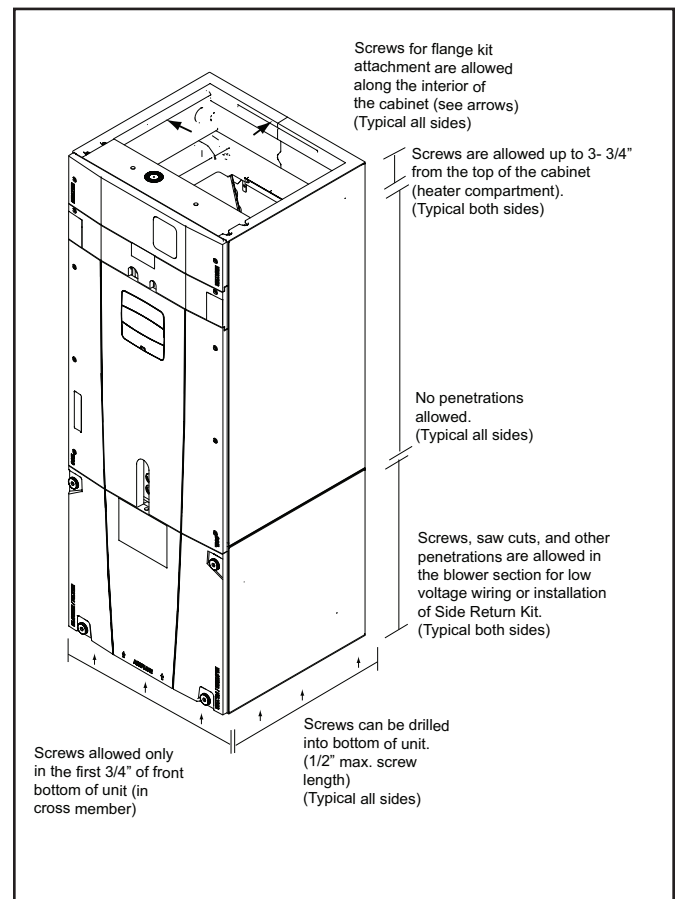
Section 2. Unit Design

2.1 Cabinet Penetration

Important: Due to the unique design of this unit, which allows the electrical wiring to be routed within the insulation, do not screw, cut, or otherwise puncture the unit cabinet in any location other than the ones illustrated.

Important: Under no conditions should metal strap-ping be attached to the unit to be used as support mechanisms for carrying or suspension purposes.

Note: Remove the cardboard from the bottom of the blower. Cut the tie wrap and remove the foam block located at the motor.



2.2 Panel Removal

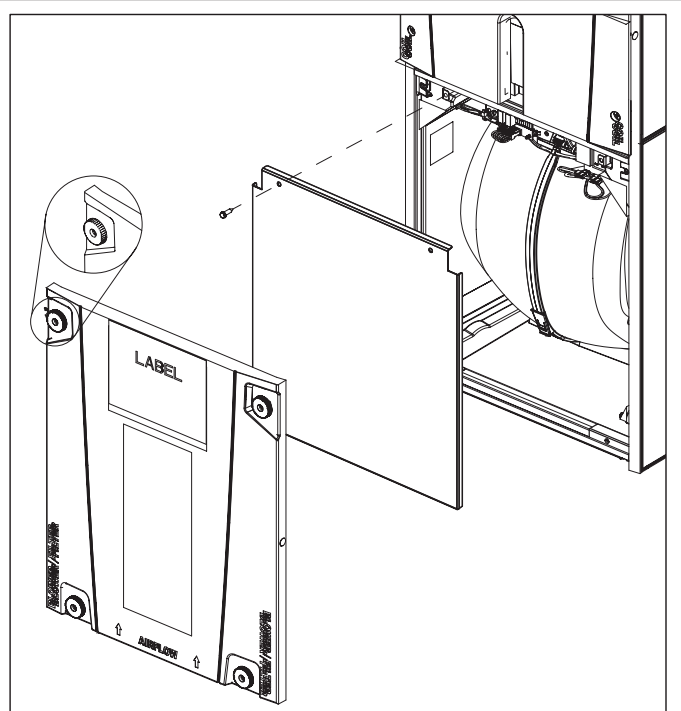
The unit contains four (4) access panels: Blower/Filter, Coil, Line Set, and Heater.

The Blower/Filter panel is removed using thumb screws.

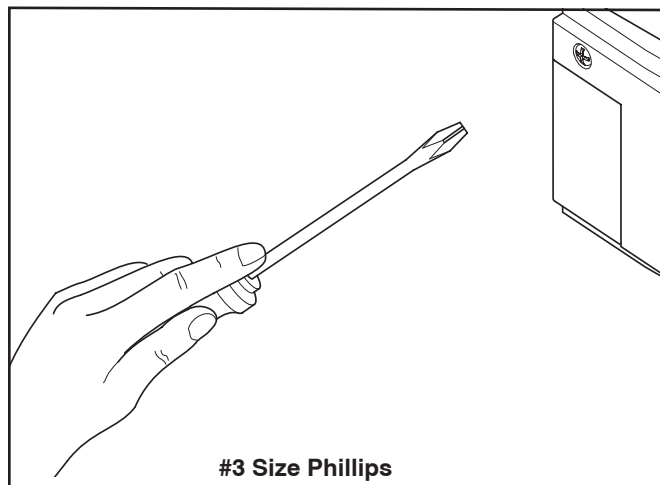
1. Turn thumb screws on Blower/Filter panel.
2. Pull top of panel out, away from cabinet.
3. Lift panel up out of channel.
4. Set aside.

The Block off plate is removed with a 5/16" nut driver.

1. Remove the two 5/16" screws at the top of the block off plate
2. Pull top of panel out, away from cabinet.
3. Lift panel up and off mounting bosses at the bottom
4. Set aside.



The Coil, Line Set, and Heater panels are removed using Phillips head screws.



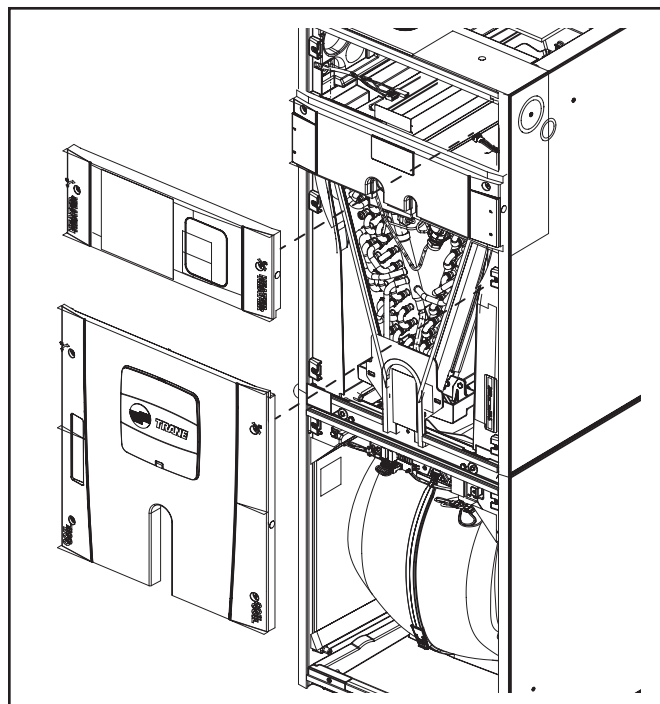
Coil and Heater panels must be removed prior to removing the Line Set panel.

To remove Coil Panel:

1. Turn screws on Coil panel.
2. Pull top of panel out, away from cabinet.
3. Pull panel up and out of channel.
4. Set aside.

To remove Heater Panel:

1. Turn screws on Heater panel.
2. Pull panel straight out, away from cabinet.
3. Set aside.

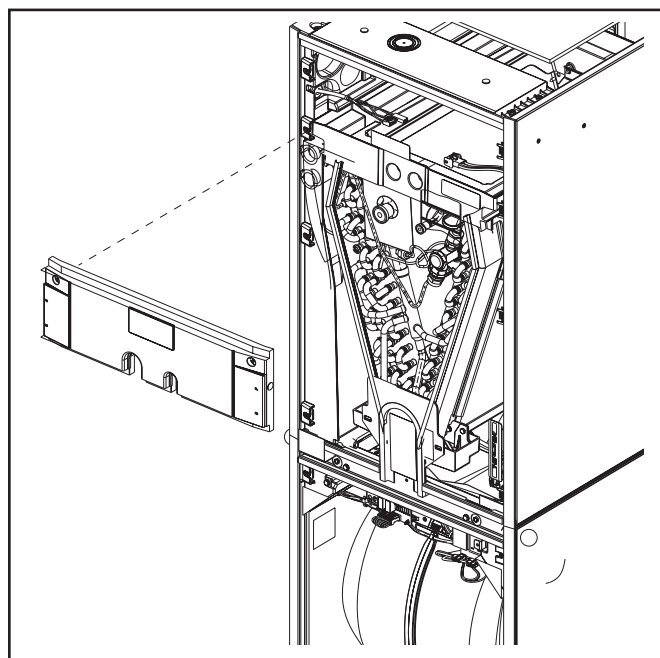


Removal of the Line Set panel is required for all refrigerant line brazing and some condensate line assembly depending on your orientation.

To remove Line Set panel:

1. Remove both Heater and Coil panels.
2. Turn screws on Line Set Panel.
2. Pull panel straight out, away from cabinet.
3. Set aside.

NOTE: After replacing all panels, loosen the Line Set Panel screws approximately 1/4 - 1/2 turn. This will improve the seal between the Heater Panel and Line Set Panel.



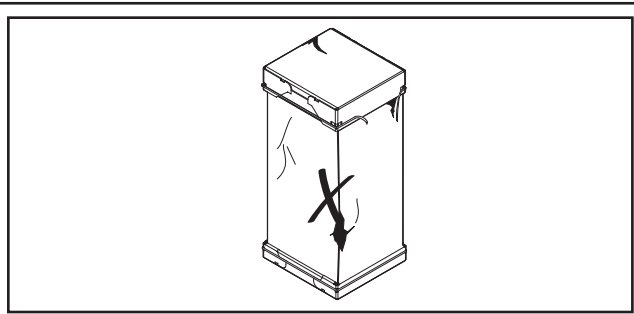
Section 3. Unit Preparation

3.1 Prepare The Unit For Installation

STEP 1 - Check for damage and report promptly to the carrier any damage found to the unit.

Note: If the unit must be transported in a horizontal position, it must be laid on its back (marked "REAR" on carton).

Note: After the unit is removed from the carton, release pressure from the coil to verify coil is pressurized and leak free.



3.2 Unit Accessories

Table 3.1

Accessory Number	Description	Fits Cabinet Size
BAYEAA04BK1	Electric Heater, 4kW, Breaker, 24V Control, 1 Ph	A to C
BAYEAA04LG1	Electric Heater, 4kW, Lugs, 24V Control, 1 Ph	A to C
BAYEAA05BK1	Electric Heater, 5kW, Breaker, 24V Control, 1 Ph	A to C
BAYEAA05LG1	Electric Heater, 5kW, Lugs, 24V Control, 1 Ph	A to C
BAYEAA08BK1	Electric Heater, 8kW, Breaker, 24V Control, 1 Ph	A to C
BAYEAA08LG1	Electric Heater, 8kW, Lugs, 24V Control, 1 Ph	A to C
BAYEAA10BK1	Electric Heater, 10kW, Breaker, 24V Control, 1 Ph	A to C
BAYEAA10LG1	Electric Heater, 10kW, Lugs, 24V Control, 1 Ph	A to C
BAYEAA10LG3	Electric Heater, 10kW, Lugs, 24V Control, 3 Ph	A to C
BAYEAB15BK1	Electric Heater, 15kW, Breaker, 24V Control, 1 Ph	B to C
BAYEAB15LG3	Electric Heater, 15kW, Lugs, 24V Control, 3 Ph	B to C
BAYEAB20BK1	Electric Heater, 20kW, Breaker, 24V Control, 1 Ph	B to C
BAYEAC25BK1	Electric Heater, 25kW, Breaker, 24V Control, 1 Ph	C
BAYSUPFLGAA	Supply Duct Flange A	A
BAYSUPFLGBA	Supply Duct Flange B	B
BAYSUPFLGCA	Supply Duct Flange C	C
BAYRETFLGAA	Return Duct Flange A	A
BAYRETFLGBA	Return Duct Flange B	B
BAYRETFLGCA	Return Duct Flange C	C
BAYSRKIT100A	Side Return Kit	A to C
BAYFLR1620A	High Velocity Filter Kit, 16" X 20" X 1" (10 filters)	A
BAYFLR2020A	High Velocity Filter Kit, 20" X 20" X 1" (10 filters)	B
BAYFLR2220A	High Velocity Filter Kit, 22" X 20" X 1" (10 filters)	C
TASB175SB	Plenum Stand with Integrated Sound Baffle A	A
TASB215SB	Plenum Stand with Integrated Sound Baffle B	B
TASB235SB	Plenum Stand with Integrated Sound Baffle C	C
MITISRKIT1620	Side Return Kit with 16" x 20" Filter	A to C
BAYFRKIT175	Front Return Kit for 17.5" Cabinet	A
BAYFRKIT210	Front Return Kit for 21.0" Cabinet	B
BAYFRKIT235	Front Return Kit for 23.5" Cabinet	C
BAYBAFKT175	Sound Baffle Kit for 17.5" Cabinet	A
BAYBAFKT210	Sound Baffle Kit for 21.0" Cabinet	B
BAYBAFKT235	Sound Baffle Kit for 23.5" Cabinet	C
TASSBK175	Sound Baffle Kit for 17.5" Cabinet	A
TASSBK215	Sound Baffle Kit for 21.0" Cabinet	B
TASSBK235	Sound Baffle Kit for 23.5" Cabinet	C
BAYICSKIT01A	Internal Condensate Switch Kit	A to C
BAYHHKIT001A	Horizontal Hanger Kit	A to C
BAYUVCLK001A	UV Lights	A to C
BAYLVKIT100A	Low Voltage Conduit Entry Kit	A to C
BAYSPEKT200A	Single Point Power Entry Kit	B to C
BAYWAAA05SC1AA	Hydronic heater, A cabinet, no control, slide-in	A
BAYWABB07SC1AA	Hydronic heater, B cabinet, no control, slide-in	B
BAYWACC08SC1AA	Hydronic heater, C cabinet, no control, slide-in	C
BAYWACC11SC1AA	Hydronic heater, C cabinet, no control, external	C
BAYATXV1836	R-22 TXV conversion kit	GAM5B0A18-24
BAYATXV4248	R-22 TXV conversion kit	GAM5B0B30-36,GAM5B0C42
BAYATXV6060	R-22 TXV conversion kit	GAM5B0C48-60
BAYINSKT175A	Solcoustic® Liner Kit - 17.5" Cabinet	A
BAYINSKT215A	Solcoustic® Liner Kit - 21.5" Cabinet	B
BAYINSKT235A	Solcoustic® Liner Kit - 23.5" Cabinet	C
BAYCNDPIP01A	3/4" PVC Threaded Pipe Kit Foam Seal (10 per box)	A to C

Section 4. Optional Cabinet Disassembly

4.1 Disassemble cabinet for installation in tight areas or as needed.

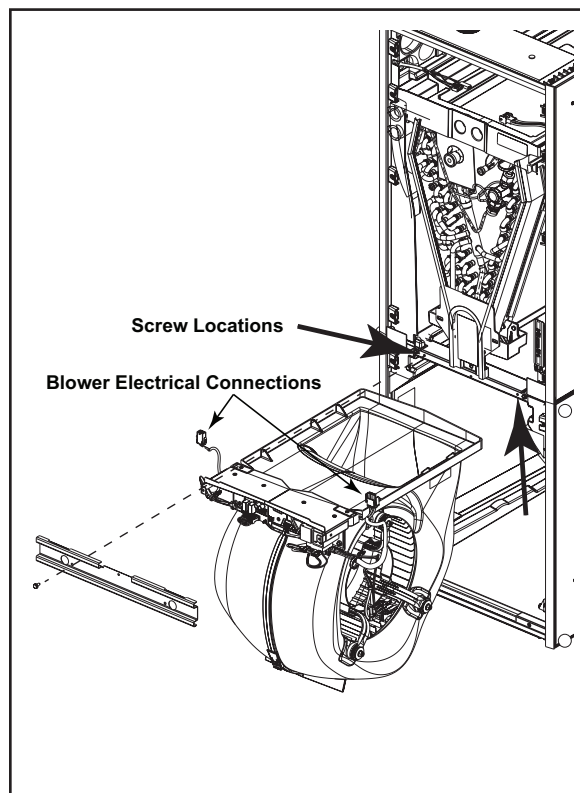
Note: If the unit must be transported in a horizontal position, it must be laid on its back (marked “REAR” on carton).

Note: To reassemble cabinet, follow the steps in reverse order. Ensure electrical connections are secure and the plug clips are engaged.

STEP 1 - Remove all four front panels. See Section 2.2.

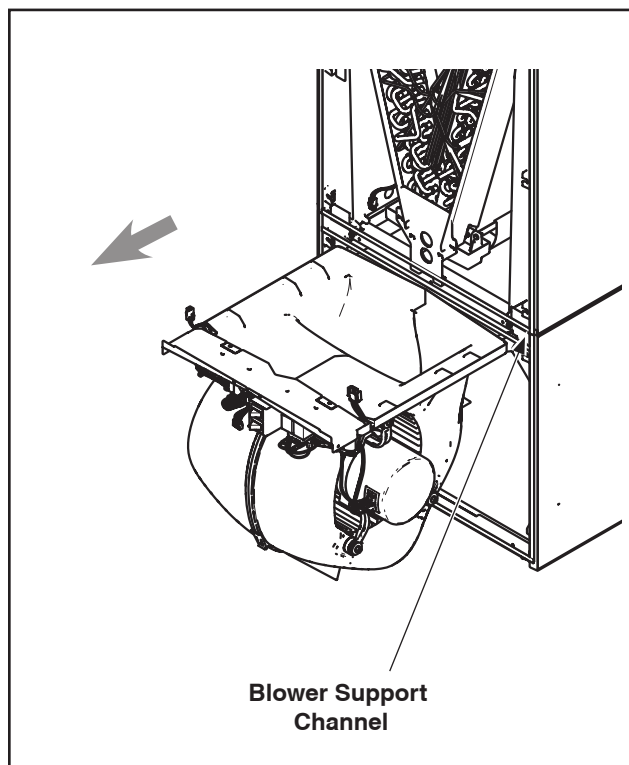
STEP 2 - Remove the two screws on the seal bar and pull the seal bar straight out.

STEP 3 - Disconnect all wiring connections routed to the blower assembly.

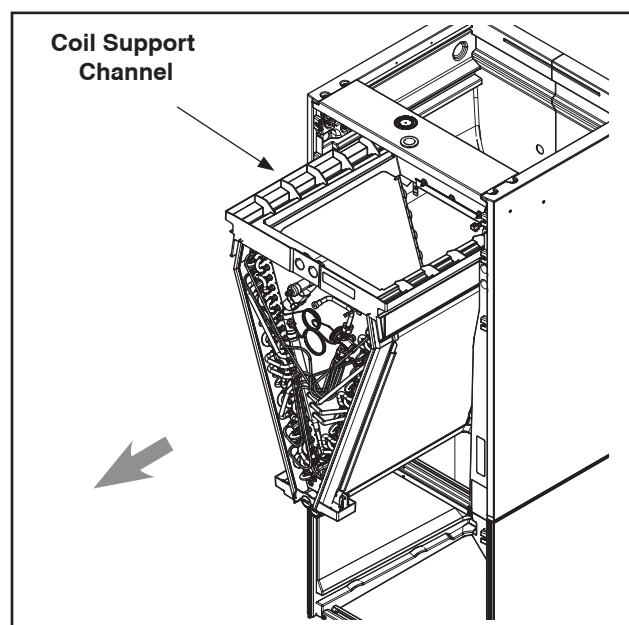


STEP 4 - Slide Blower assembly out of unit using built-in blower support channels and set aside.

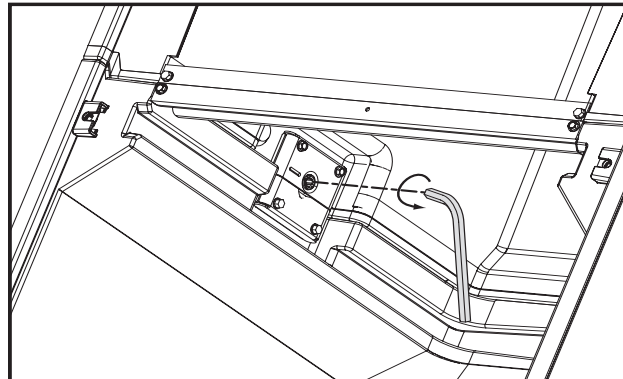
Note: Remove the cardboard from the bottom of the blower. Cut the tie wrap and remove the foam block located at the motor.



STEP 5 - Slide Coil assembly out of unit using built-in coil support channels and set aside.

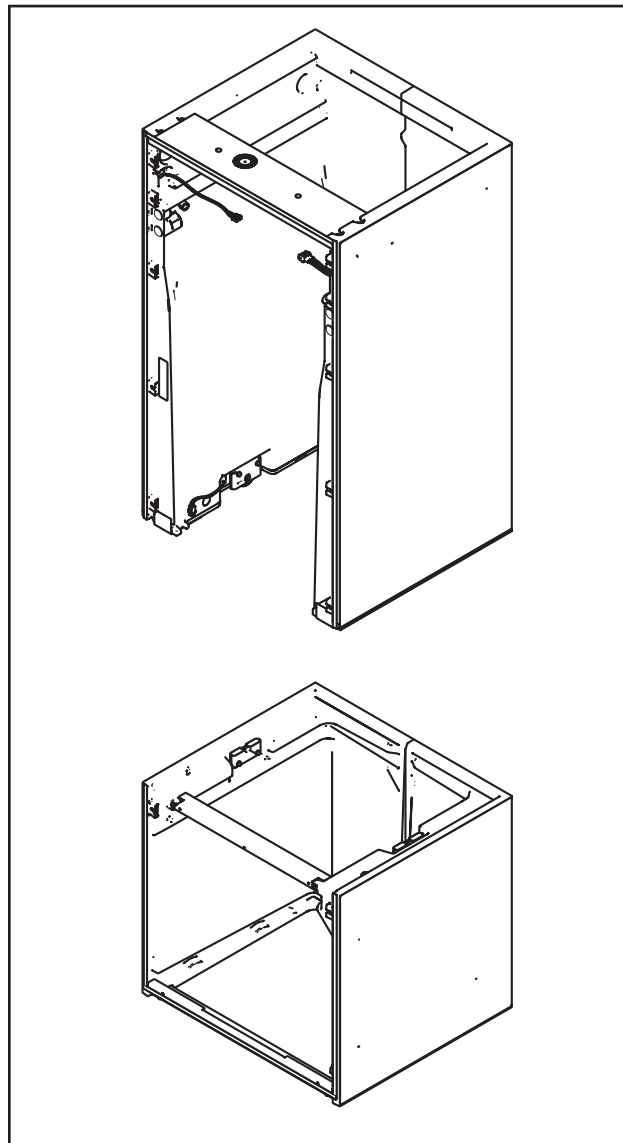


STEP 6 - Use a 5/16 Allen wrench on the locking mechanism on each side of the bottom half of the cabinet to loosen the locking mechanism. The locks loosen by turning counter-clockwise approximately 3/4 of a turn.

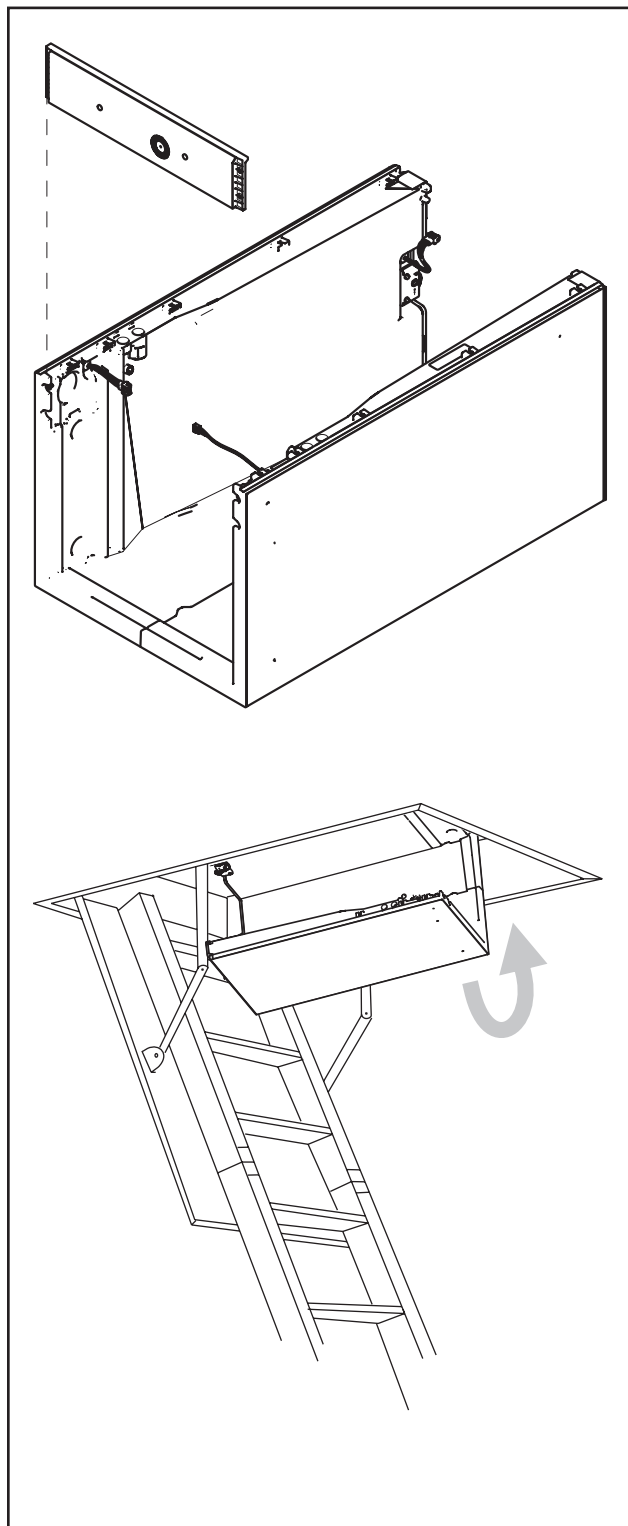


STEP 7 - Lift the Coil section up and away from the Blower section. Set aside.

Note: When separating the two cabinet pieces, make sure the gasket remains intact.



STEP 8 - For extremely tight spaces where the cabinet needs to be rotated through a small opening, remove the top panel. Use a manual driver to avoid stripping screw holes.



STEP 9 - Continue preparation by following the proper carrying procedures shown in Section 5.

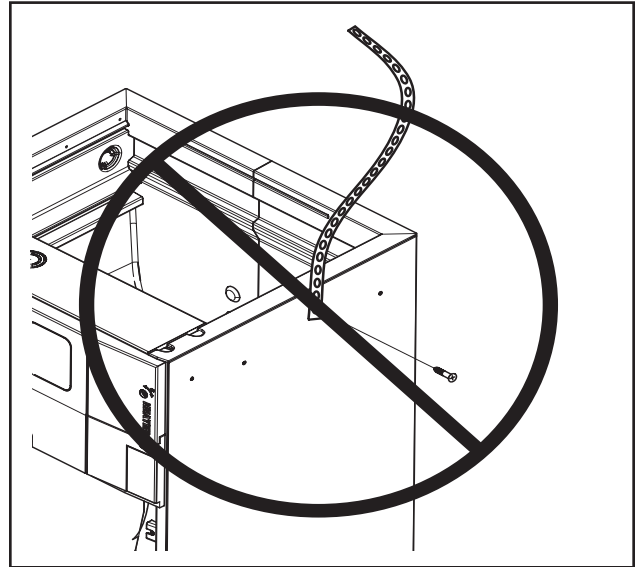
Section 5. Place Unit at Location

5.1 Carry Unit

STEP 1 - Carry the unit to the installation location.

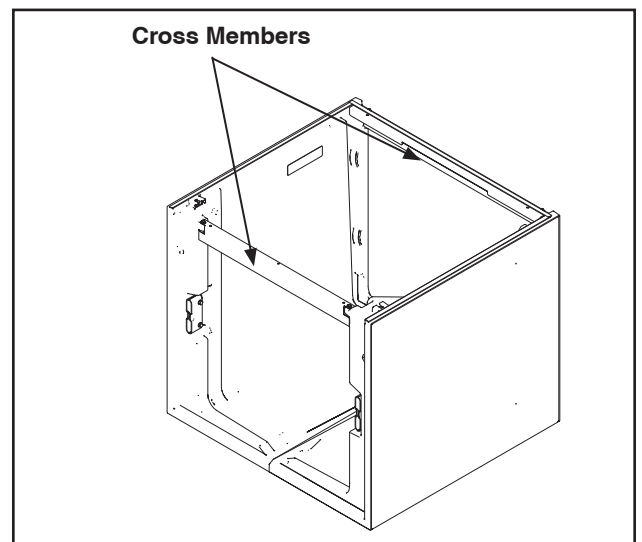
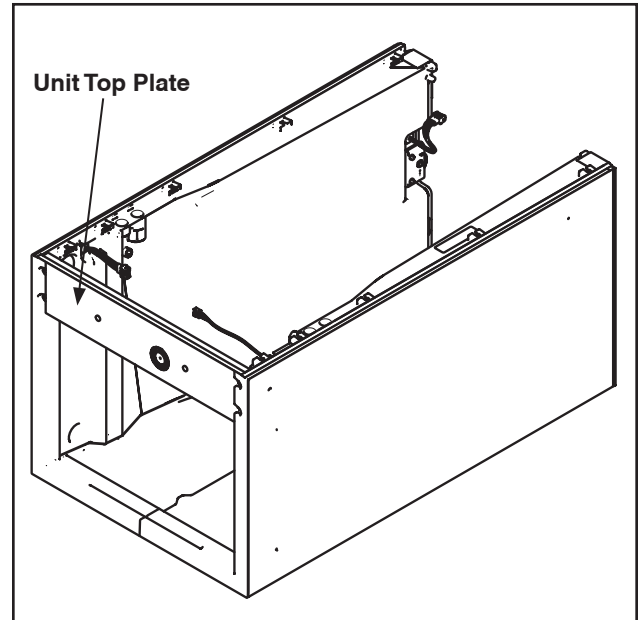
STEP 2 - Reassemble by reversing the steps listed in Section 4 if disassembly was required.

Important: Under no conditions should metal strap-ping be attached to the unit to be used as support mechanisms for carrying or suspension purposes.



Approved carrying:

1. Hold by the unit top plate or crossmembers and use as handle for lifting and carrying the coil and blower sections.

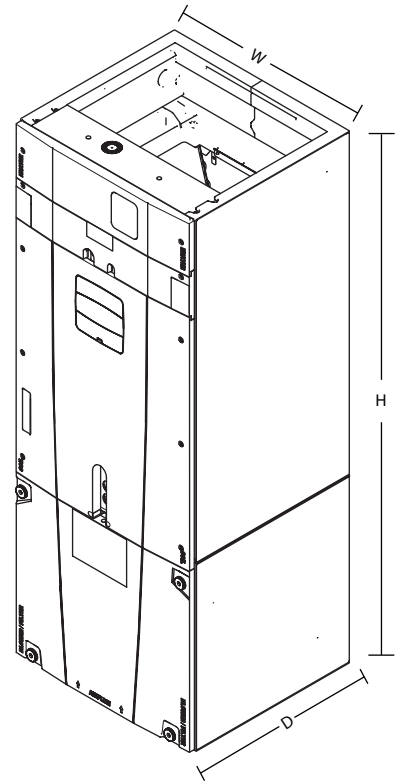


Section 6. Unit Location Considerations

6.1 Unit Dimensions and Weight

Table 6.1

Model Number	H x D x W in.	*Blower Compartment in.	Unit Net Weight lbs.
GAM5B0A18M11EB	50 x 22 x 17 1/2	22	120
GAM5B0A24M21EB	50 x 22 x 17 1/2	22	120
GAM5B0B36M31EB	56 x 22 x 21	22	143
GAM5B0C42M31EB	57 x 22 x 23 1/2	22	158
GAM5B0C48M41EB	62 x 22 x 23 1/2	22	174
GAM5B0C60M51EB	62 x 22 x 23 1/2	22	178
*Subtract from total height to get Coil and Heater compartment height.			

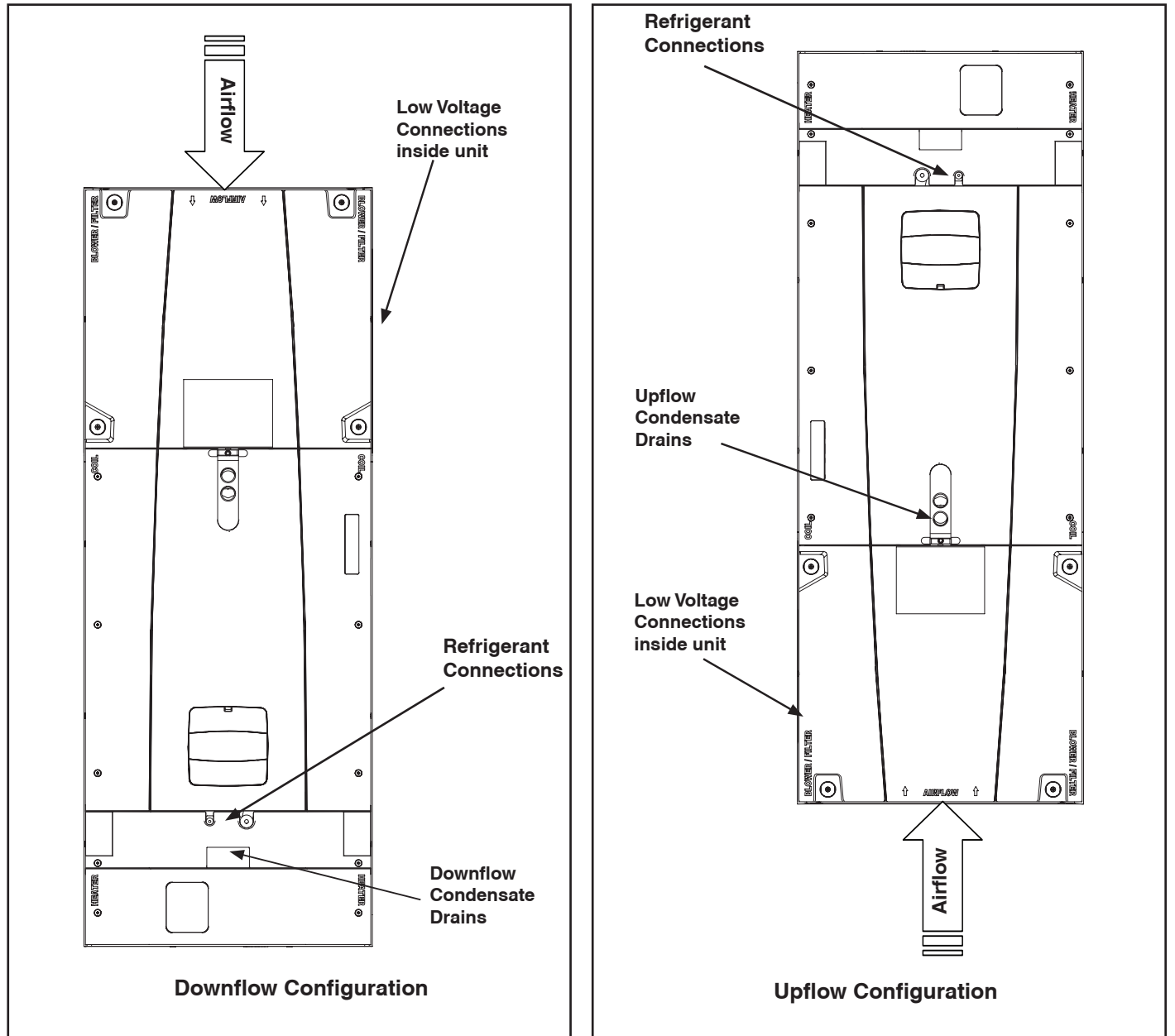


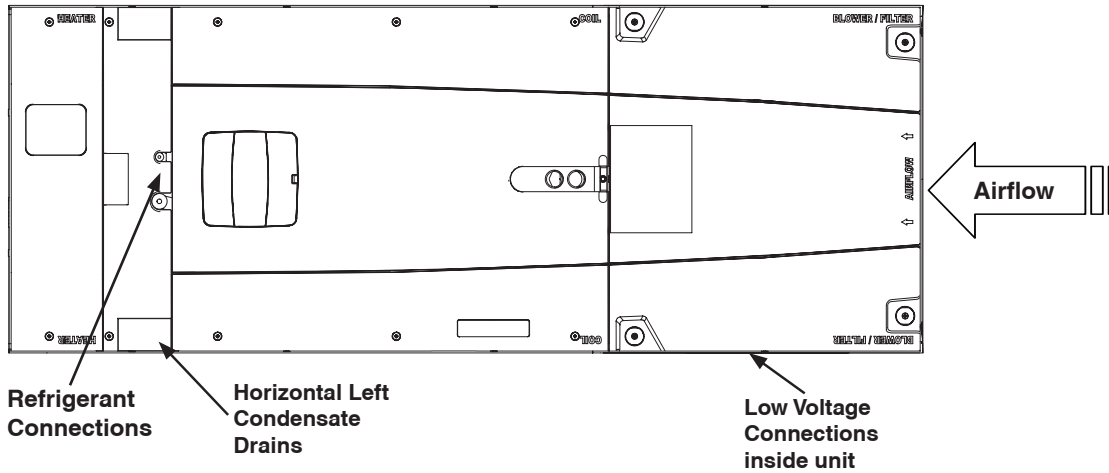
6.2 Four-Way Conversion

To place the unit in the configuration your application requires (upflow, downflow, horizontal right, or horizontal left), simply turn the unit to that orientation.

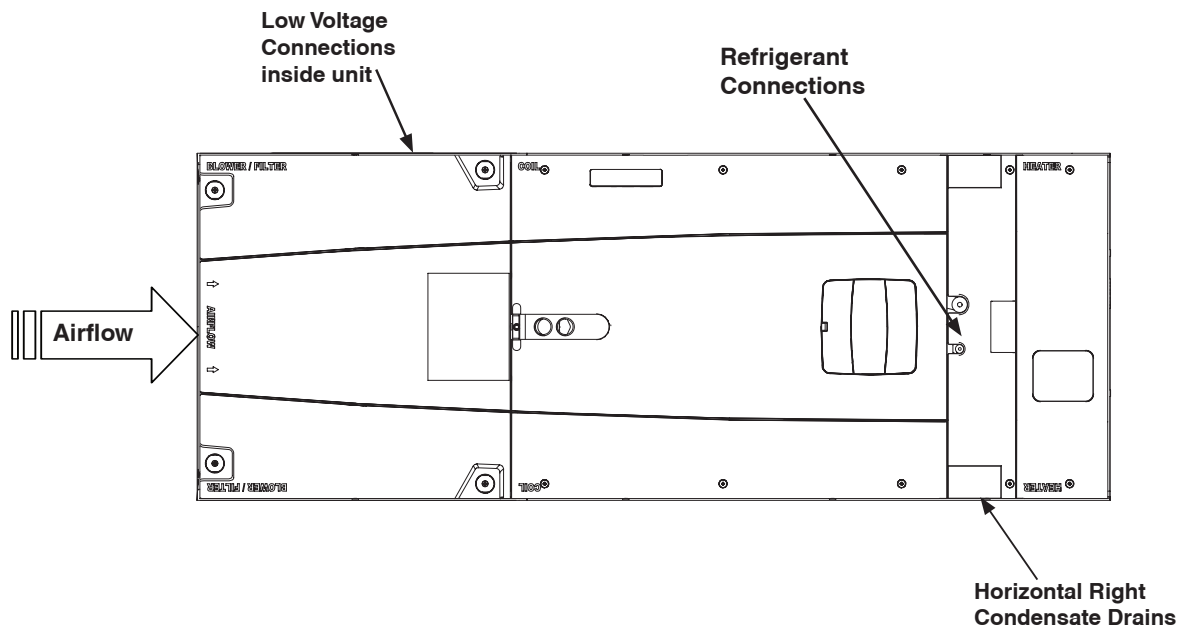
Note: The air handlers are shipped from the factory suitable for four-way application.

Note: Entry for low voltage connections is allowed on either side of cabinet.





Horizontal Left Configuration



Horizontal Right Configuration

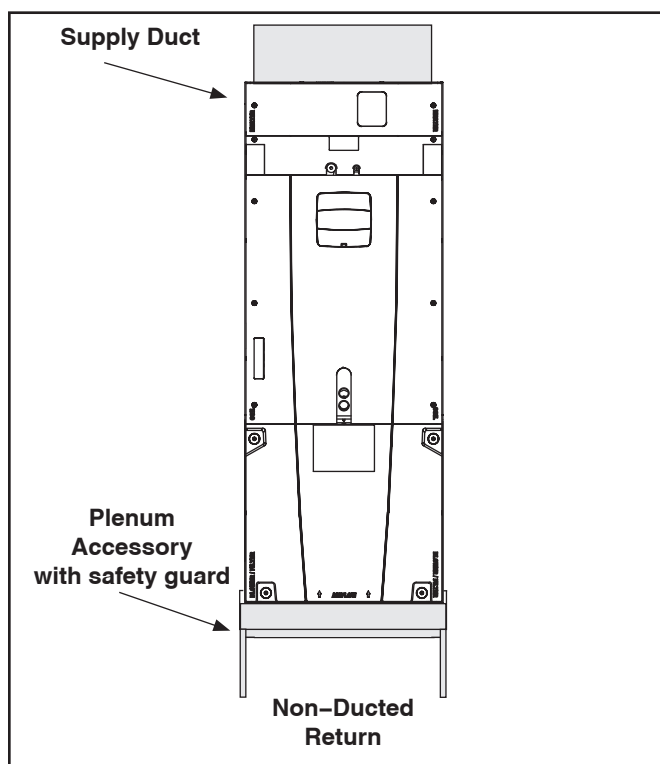
6.3 Non Ducted Applications

⚠ CAUTION

HAZARDOUS VAPORS! Do not install an air handler with a non-ducted return in the same closet, alcove, or utility room as a fossil fuel device. Hazardous vapors can be distributed throughout the conditioned space and equipment damage can result.

Non-Ducted Return Installations:

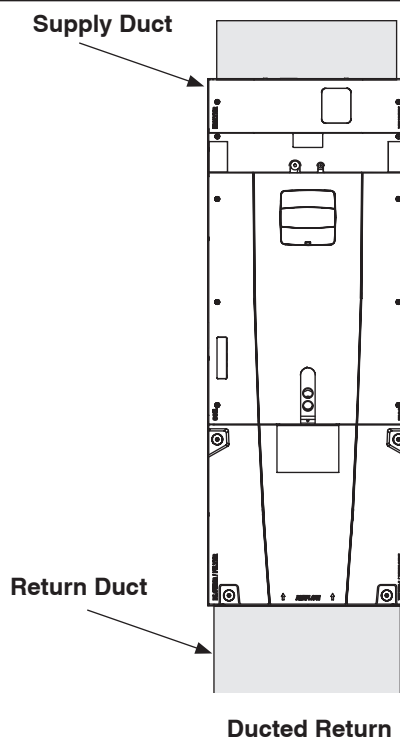
- Installation in a closet, an alcove, or a utility room without a return duct requires the use of a plenum accessory kit as it uses the area space as a return air plenum. Minimum clearances to combustible materials and service access must be observed (see outline drawing).
- This area may also be used for other purposes, including an electric hot water heater, but in no case shall a fossil fuel device be installed and/or operated in the same closet, alcove, or utility room.
- Review local codes to determine limitations if the unit is installed without a return air duct.



6.4 Ducted Applications

Ducted Return Installations:

- Installation in an attic, garage, or crawl space with ducted supply and return air is appropriate. Minimum clearances to combustible materials and service access must be observed (see outline drawing).



6.5 Additional Unit Preparation Considerations

For proper installation the following items must be considered prior to moving the unit to its installation site:

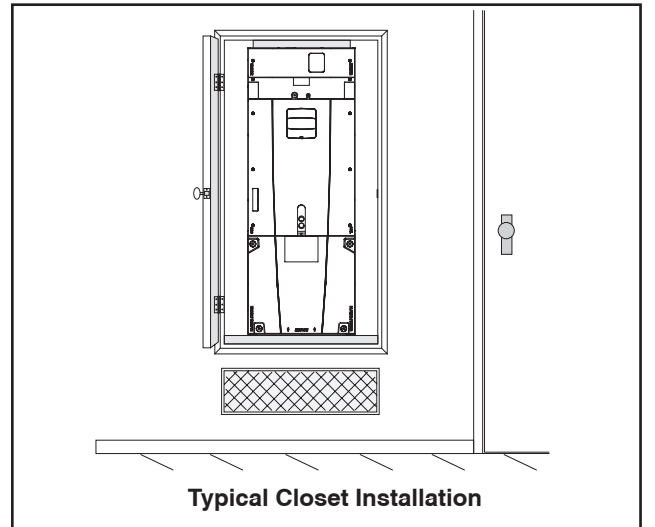
- Important: When the air handler is located adjacent to the living area, the system should be carefully designed with returns which minimize noise transmission through the return air grill. Although the air handler is designed with large blowers operating at moderate speeds, any blower moving a high volume of air will produce audible noise which could be objectionable when the unit is located very close to a living area. It is often advisable to route the return ducts under the floor through the attic. Such design permits the installation of air return remote from the living area (i.e. central hall).
- Pursuant to Florida Building Code 13-610.2.A.2.1, this unit meets the criteria for a factory sealed air handler.
- If a side return is needed for your application, the side return **MUST** be installed prior to moving the air handler to its installation location. Unless two side returns are used, the Side Return Kit may not be on the same side as the LV wiring entry point. See the Side Return Kit # BAYSRKIT100A Installer Guide for detailed instructions, if used.
- Study the unit's outline drawing and dimensions prior to selecting the installation site. Note in advance which electrical conduit entry points and condensate drain holes are to be used, so that proper clearance allowances can be made for installation and future maintenance.
- Installation of the air handler must be made prior to, or at the same time as, the installation of the outdoor unit in order to allow access for refrigerant lines.
- Consider the overall space needed when external accessories are used, additional height and width requirements may exist.
- These units are not approved for outdoor installation.
- These units must be installed in the proper air flow direction.
- Any third-party heater accessories, including hydronic coils and duct heaters must be downstream of the unit.
- Note: No atomizing style humidifier is allowed in the return plenum with the use of this unit.
- Excessive bypass air may cause water blow-off, which will adversely affect system operation and air cleaner performance. To verify bypass airflow, follow the Bypass Humidifier Pre-Installation Checkout and Set-Up Procedures available through your local distributor. Ask for publication number 18-CH37D1-* Steam and Flow-through Fan Power Duct-mounted Humidifiers. Follow the humidifier installation instructions. These should only be installed on the supply air side of the system.
- Note: The air handlers have been evaluated in accordance with the Code of Federal Regulations, Chapter XX, Part 3280 or the equivalent. "SUITABLE FOR MOBILE HOME USE."
- Important: The GAM5B0C60M51SB and GAM5B0C-60M51EA air handlers applied in downflow or horizontal configurations should not exceed 2000 CFM. Airflow above 2000 CFM could result in water blow-off. For verification, see airflow table.
- Note: This unit is certified to UL 60335-2-40. The interior cabinet wall meets the following:
 - UL94-5VA Flame Class Listed
 - UL723 Steiner Tunnel Listed for 25/50 Flame/Smoke
 - UL746C Listed for Exposure to Ultraviolet Light, Water Exposure and Immersion

Section 7. Setting the Unit – Vertical Installation

7.1 Considerations

Provide a minimum height of 14 inches for proper unrestricted airflow below the unit. Allow a minimum of 21 inches clearance in front of the air handler to permit maintenance and removal of filter.

- Position unit on suitable foundation. If a manufacturer approved accessory is not used, a frame strong enough to support the total weight of the unit, accessories, and duct work must be provided.
- Isolate unit from the foundation using a suitable isolating material.



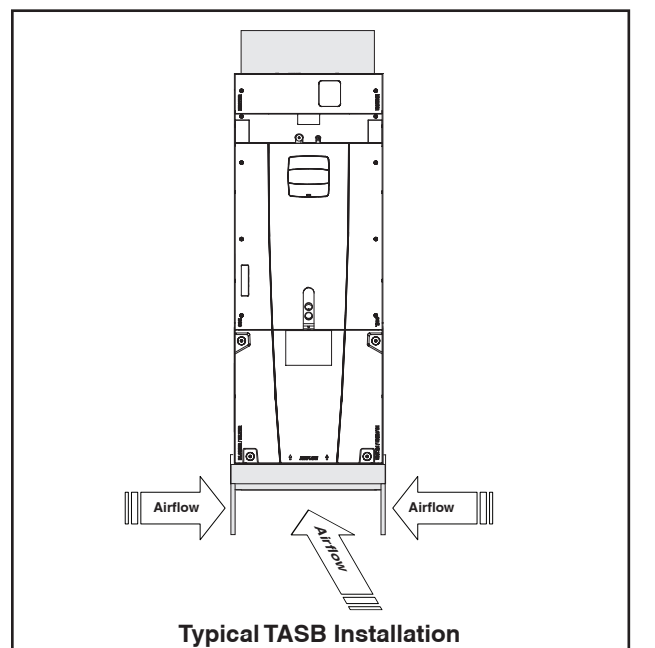
7.2 Upflow Installation

TASB Installation

1. Assemble the TASB using the TASB's Installer Guide.

TASB175SB for use with 17.5" cabinets
TASB215SB for use with 21.5" cabinets
TASB235SB for use with 23.5" cabinets

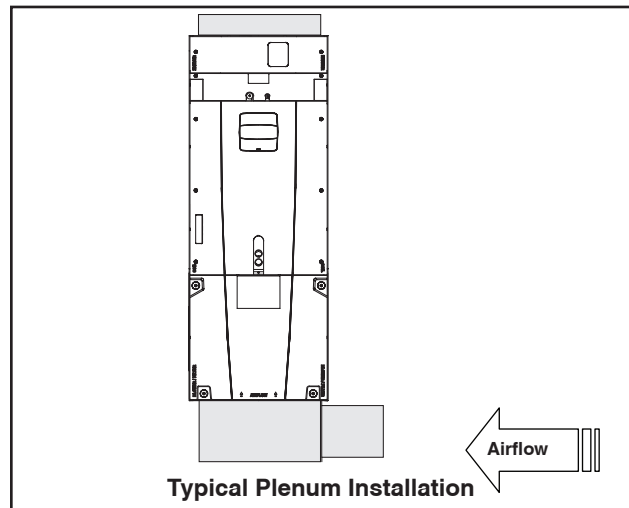
Contact your distributor for more information.



Plenum Installation

1. Assemble the plenum using the plenum's Installer Guide.

On units with sheet metal returns: Return plenum must be flanged. Sheet metal drill point screws must be 1/2" in length or shorter.

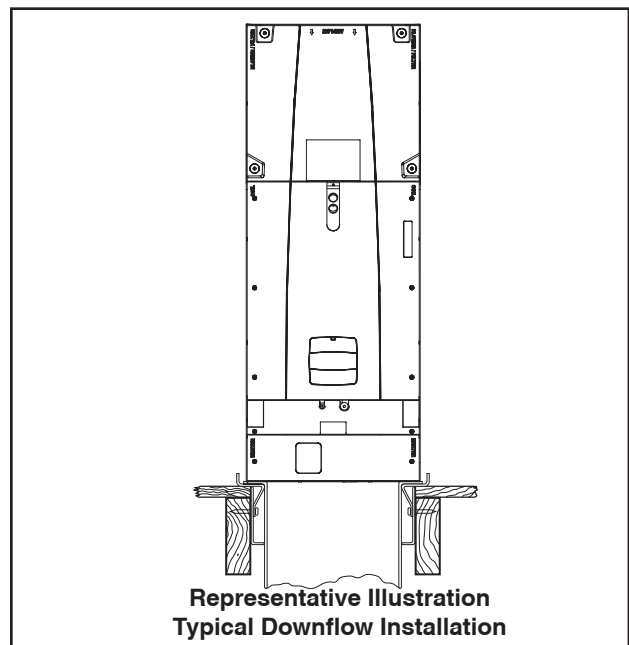


7.3 Downflow Installation

- Downflow installation must comply with national, state, and local codes.
- The air handlers are rated for zero clearance from combustible materials.

STEP 1 - Prepare the location site as appropriate for your application and per national, state, and local code requirements.

STEP 2 - Set the unit in position.



Section 8. Setting the Unit – Horizontal Installation

8.1 Considerations

Important: Due to the unique design of this unit, which allows the electrical wiring to be routed within the insulation, do not screw, cut, or otherwise puncture the unit cabinet in any location other than the ones illustrated in this Installer Guide or in an approved accessory's Installer Guide.

Important: Make certain that the unit has been installed in a level position to ensure proper draining.

Important: Under no conditions should metal strapping be attached to the unit to be used as support mechanisms for carrying or suspension purposes.

STEP 1 - Support the unit from the bottom (near both ends). The service access must remain unobstructed.

Important: The unit can only be supported from the bottom unless using kit BAYHHKIT001A. Do not drill or screw supports into any area of the cabinet.

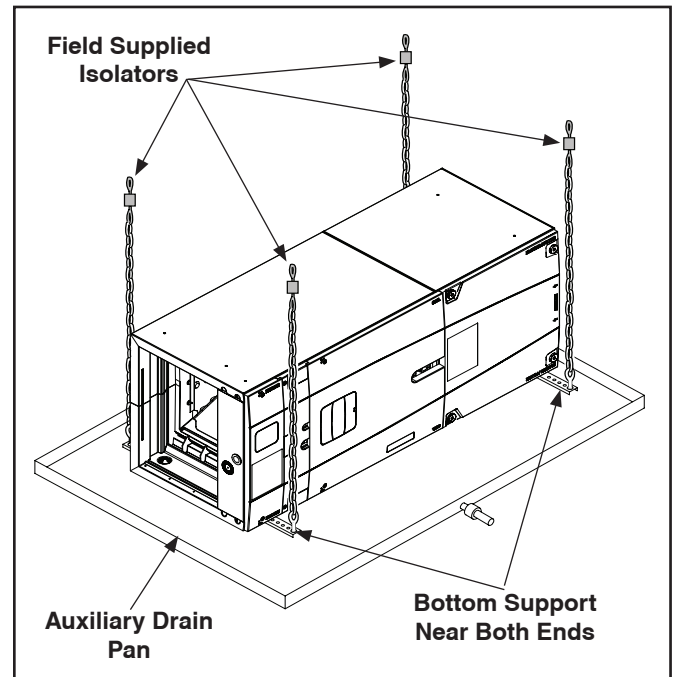
Note: Do not allow the unit to be used as strain relief.

- Approved bottom support methods are rails, u-channels (Unistrut®), or other load bearing materials.
- The unit must be isolated carefully to prevent sound transmission. Field supplied vibration isolators are recommended.

STEP 2 – Install an auxiliary drain pan under the horizontal air handler to prevent possible damage to ceilings.

- Isolate the auxiliary drain pan from the unit and from the structure.
- Connect the auxiliary drain pan to a separate drain line and terminate according to local codes.

Important: For the 5 ton air handler model GAM5B0C60M51EB, tap 5 should not be used in the downflow or horizontal orientations. Using Tap 5 could result in water blowing off the coil.



Note: BAYHHKIT001A Hanging Bracket Kit may be ordered separately.

Important: The BAYHHKIT001A may not be used if the cabinet has been altered per Installer Guide 18-GJ58D1-1.

Section 9. Connecting the Duct work

9.1 Duct Connection Considerations

Important: Due to the unique design of this unit, which allows the electrical wiring to be routed within the insulation, do not screw, cut, or otherwise puncture the unit cabinet in any location other than the ones illustrated in this Installer Guide or in an approved accessory's Installer Guide.

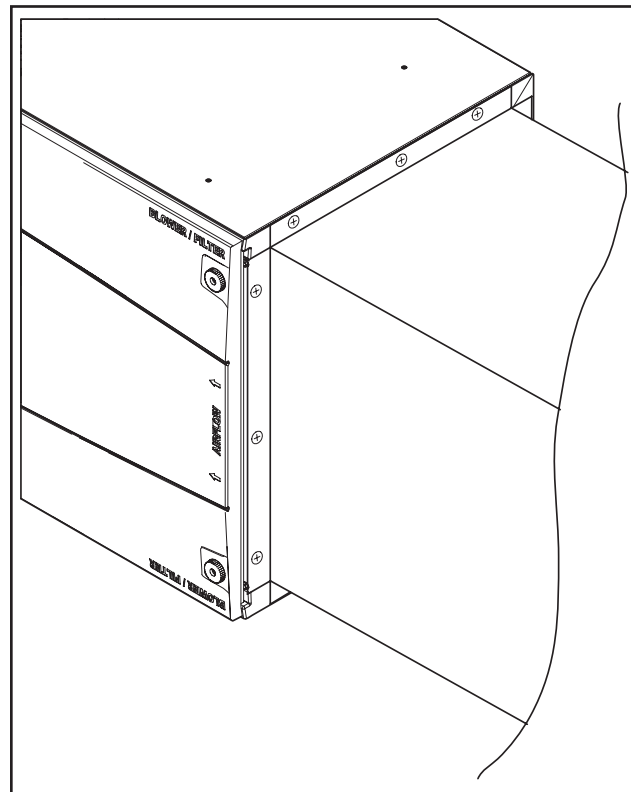
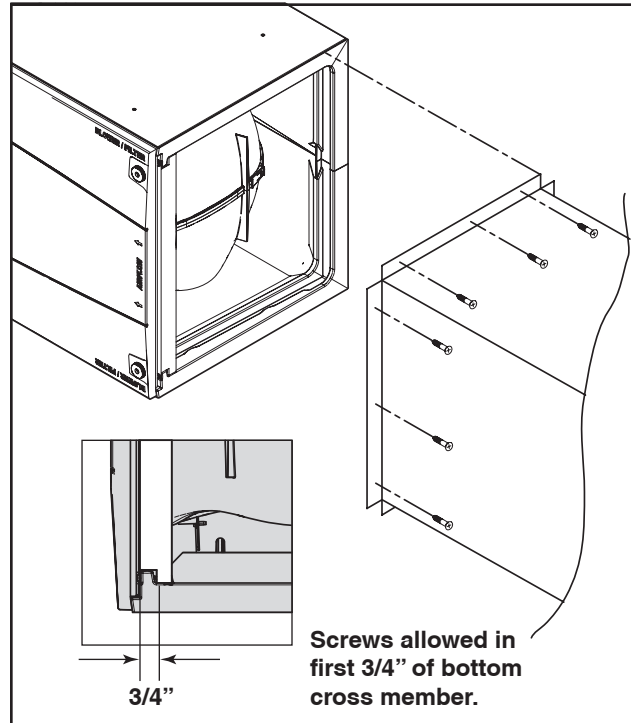
Important: Under no conditions should metal strapping be attached to the unit to be used as support mechanisms for carrying or suspension purposes.

Important: On units with sheet metal returns: Return air plenum must be flanged. Sheet metal drill point screws must be 1/2" in length or shorter.

- The supply and return air ducts must be connected to the unit with non flammable duct connectors.
- See the Outline drawing for sizes of the duct connections.
- After the ducts are secured, seal around the supply and return ducts to prevent air leakage.
- Insulate all duct work that will be outside of conditioned spaces.
- Convertible Duct Flange Kits are available to connect the supply plenum or for mounting on the discharge opening to provide a "flush fit" for 1-1/2" duct board applications.
- If front or rear return is required, the air handler must be elevated - placed on a pedestal or plenum and duct must be connected to this pedestal or plenum.
- If side return is required, the Side Return Kit # BAYSRKIT100A accessory must be used. A remote filter will be required.
- To ensure maximum efficiency and system performance, the existing supply and return duct system static pressures must not exceed the total available static pressure of the air handler. Reference ACCA Manual D, Manual S and Manual RS along with the air handler Product Data and Service Facts for additional information.

Note: Side return is not approved without Side Return Kit # BAYSRKIT100. More than one Side Return Kit may be necessary depending on the application. Refer to the Installation Guide in BAYSRKIT100 for approved duct connections, sizing, number, transitions, and accessory application.

Note: Duct work must be supported as appropriate. See National and local codes for guidelines. Do not depend on the unit to support duct work.



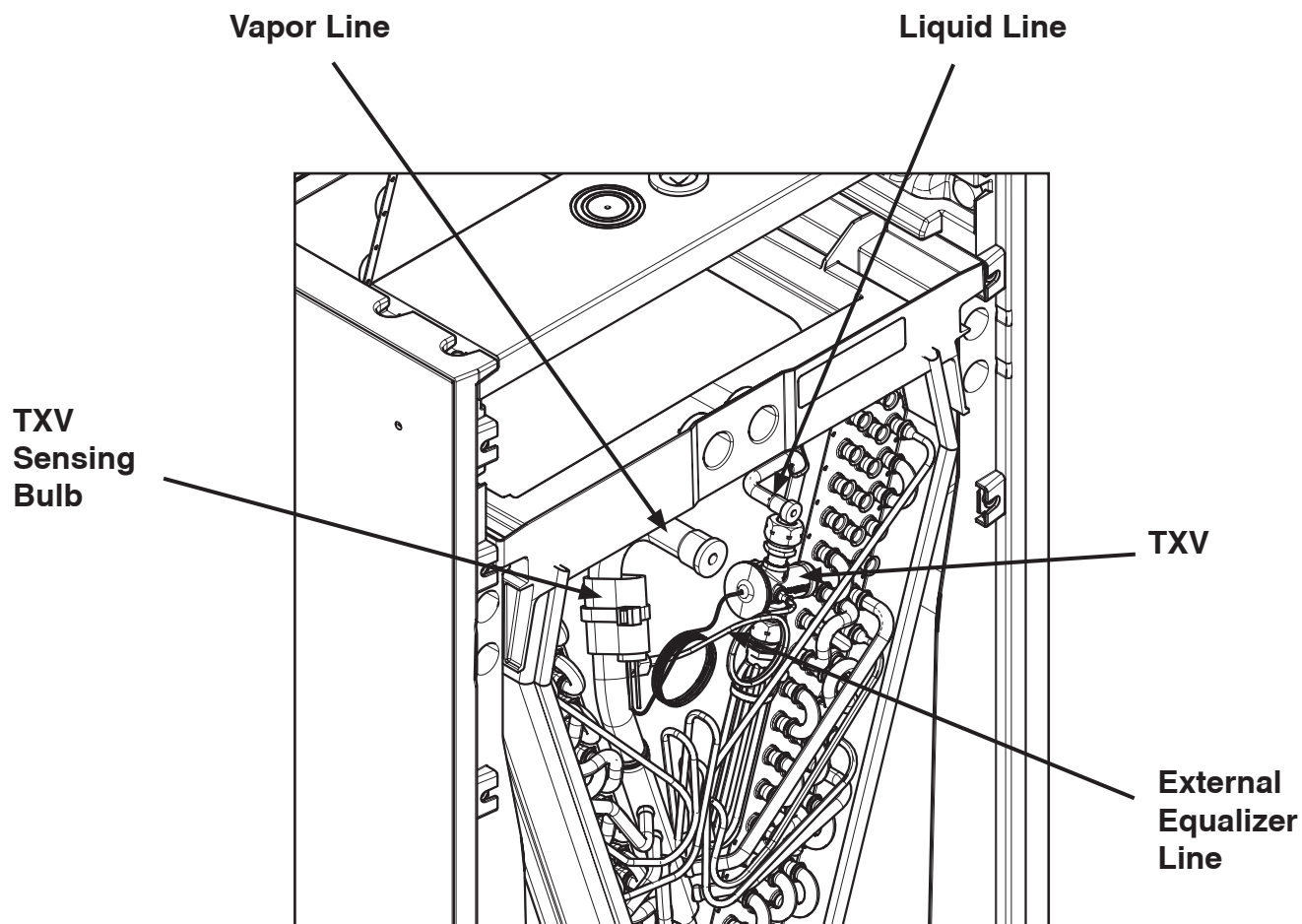
Section 10. Refrigerant Line

10.1 Refrigerant Line Connection Sizes

Table 10.1

Refrigerant Line Set and Connection Sizes		
Model	Vapor Line Connection	Liquid Line Connection
GAM5B0A18M11EB	3/4	3/8
GAM5B0A24M21EB	3/4	3/8
GAM5B0B36M31EB	7/8	3/8
GAM5B0C42M31EB	7/8	3/8
GAM5B0C48M41EB	7/8	3/8
GAM5B0C60M51EB	7/8	3/8
Note: Refrigerant line sets should match the vapor line connection size in this table when connecting to any single stage outdoor unit.		

10.2 Refrigerant System Layout

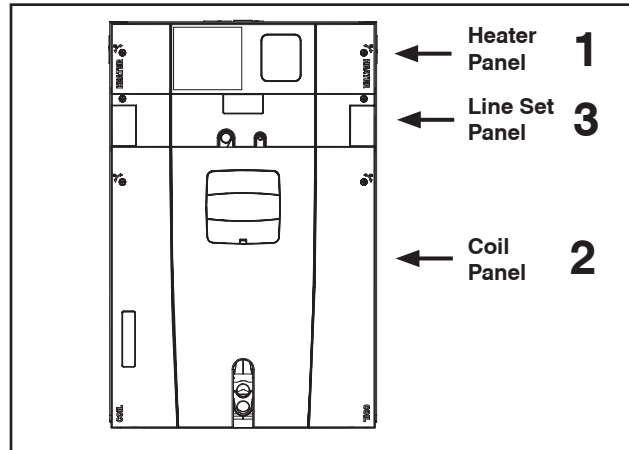


Note: An inlet strainer is located inside the liquid line mechanical fitting.

Section 11. Refrigerant Line Brazing

11.1 Braze The Refrigerant Lines

STEP 1 - Remove Heater, Coil, and Line Set panels.
(See Section 2.2 Panel Removal)



Important: Do NOT unseal coil refrigerant connection stubs until ready to make connections.

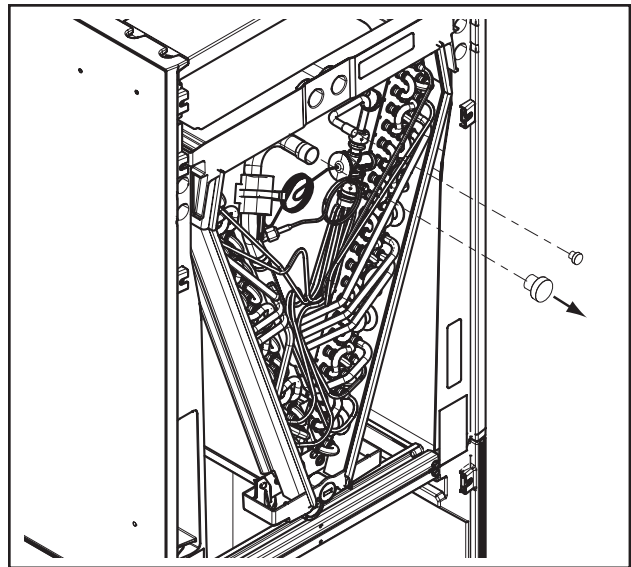
Important: Heat Sensitive Bulb.

The TXV sensing bulb must be removed or a wet rag must be wrapped around the suction line between the Bulb and the braze joint to protect the Bulb from failure due to overheating.

Caution: This coil is pressurized with 8-12 psig of dry air. Do not stand directly in front of the coil connections when removing sealing plugs.

STEP 2 - Remove the sealing plug from the indoor coil suction (vapor) line.

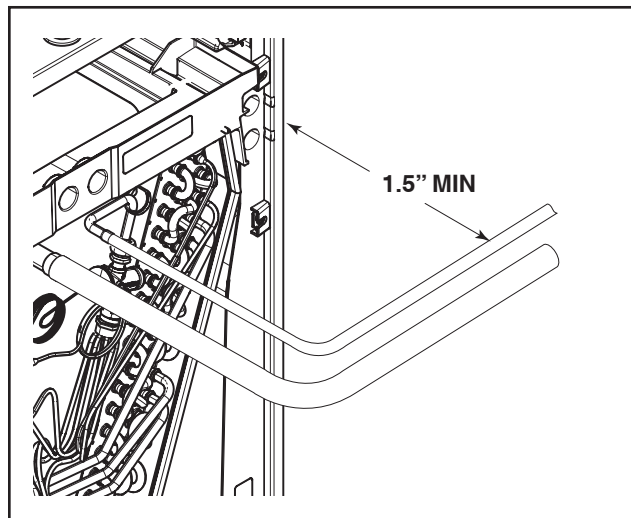
STEP 3 - Remove the sealing plug from the indoor coil liquid connection.



STEP 4 - Connect, but do not braze, field line set to indoor coil.

Allow a minimum of 1.5 inches of refrigerant line set before using an elbow coupling.

Important: Service access to the auxiliary heater must remain unobstructed.



Important: Heat Sensitive Bulb.

The TXV sensing bulb must be removed or a wet rag must be wrapped around the suction line between the Bulb and the braze joint to protect the Bulb from failure due to overheating.

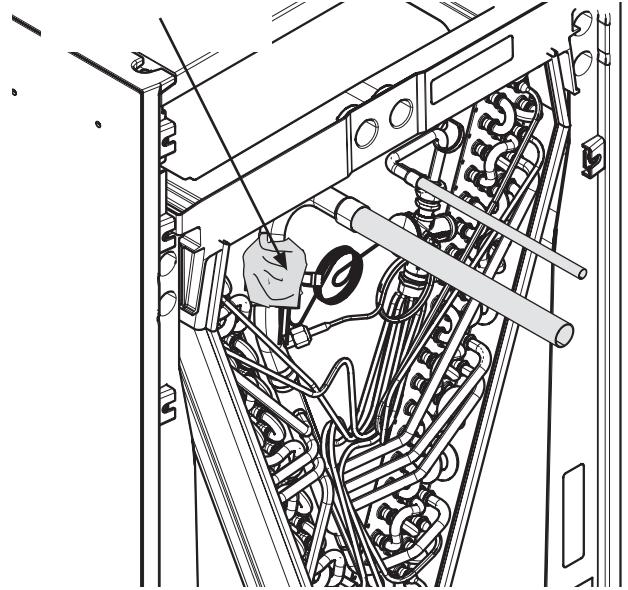
STEP 5 - Braze refrigerant line connections.

Note: The suction line must be insulated prior to brazing the line set to the air handler stubs.

1. Pull back the insulation before brazing the suction line.
2. Wrap the TXV sensing bulb and line section between the bulb and braze joint with a wet rag.
3. Braze the refrigerant line connections.

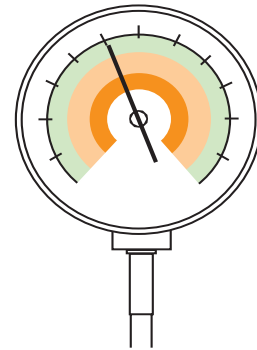
Important: Care must be taken during brazing to avoid damage to unit components and wiring.

Wet Rag on
TXV sensor bulb

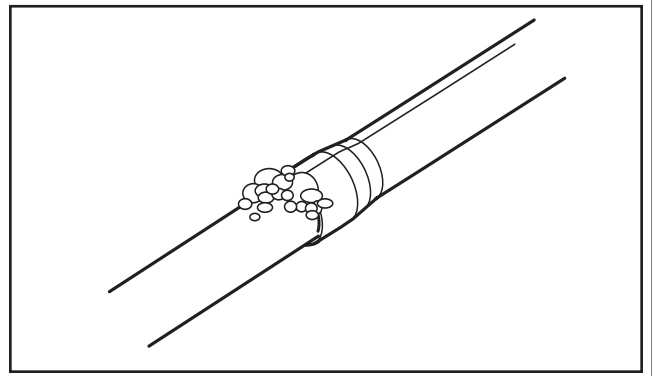


STEP 6 - Pressurize the refrigerant lines and evaporator coil to 150 PSIG using dry nitrogen.

150 PSIG

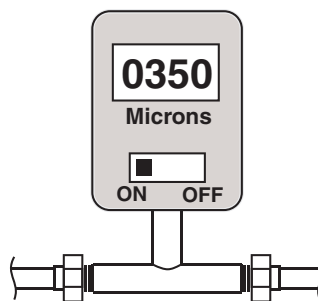


STEP 7 - Check for leaks by using a soapy solution or bubbles at each brazed location.



Important: Do not open the service valves until the refrigerant lines and indoor coil leak check and evacuation are complete.

STEP 8 - Evacuate until the micron gauge reads no higher than 350 microns, then close off the valve to the vacuum pump.



STEP 9 - Observe the micron gauge. Evacuation is complete if the micron gauge does not rise above 500 microns in one (1) minute.

Once evacuation is complete blank off the vacuum pump and micron gauge, and close the valves on the manifold gauge set.

Note: Charge system using Outdoor unit's Installer Guide or Service Facts.



STEP 10 - Replace the Line Set panel.

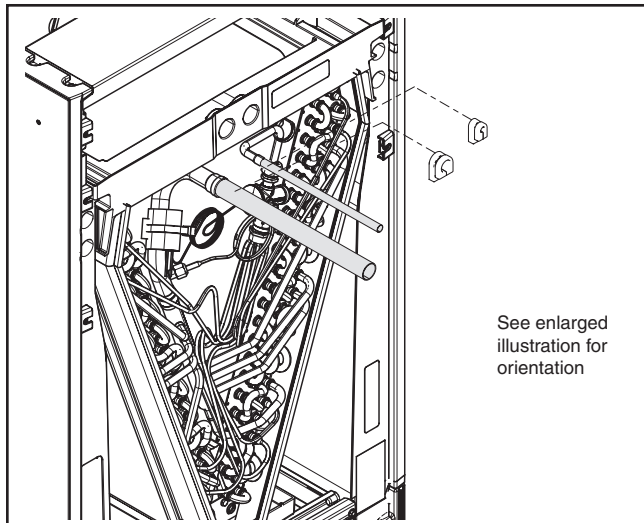
1. Allow time for tubing to cool.
2. Install grommets to line set piping.

Note: A slight amount of dish soap can be used to aid in the installation of the grommets. Remove any excess from the tubing and grommet after the grommet is installed.

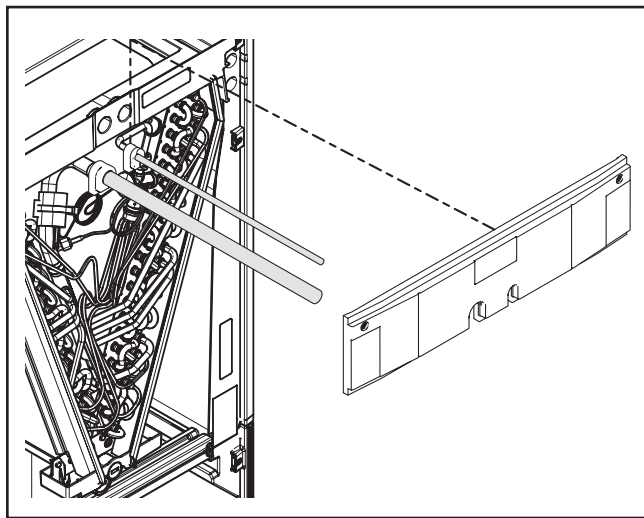
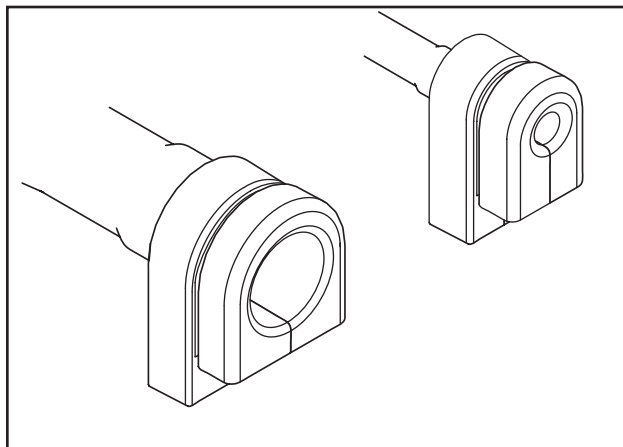
3. Slide the bottom of the Line Set panel down over the refrigerant lines and grommets. The grommets will seal the line openings.

Note: If installing in a horizontal application, complete the condensate connection preparations per Section 12, Step 3 before installing the Line Set panel.

4. Tighten screws on the Line Set panel.



See enlarged illustration for orientation



Section 12. Condensate Drain Piping

12.1 Condensate Drain Piping Considerations

- Condensate drain plumbing must comply with national, state, and local codes.
- Route condensate drain lines away from air handler so they do not interfere with access panels.
- Slope the drain lines downward a minimum of 1/4" per foot, support per local codes.
- A 1.5" minimum distance from the coil panel to the inside of the condensate tubing is recommended for coil panel removal.
- Do not use reducing fittings in the condensate drain lines.
- Do not connect the drain line to a closed drain system.
- Do not use a torch or flame near the plastic drain pan coupling.
- A P-trap is not required for proper drainage due to the positive pressure of the air handler; however, it is recommended to prevent efficiency loss of conditioned air.

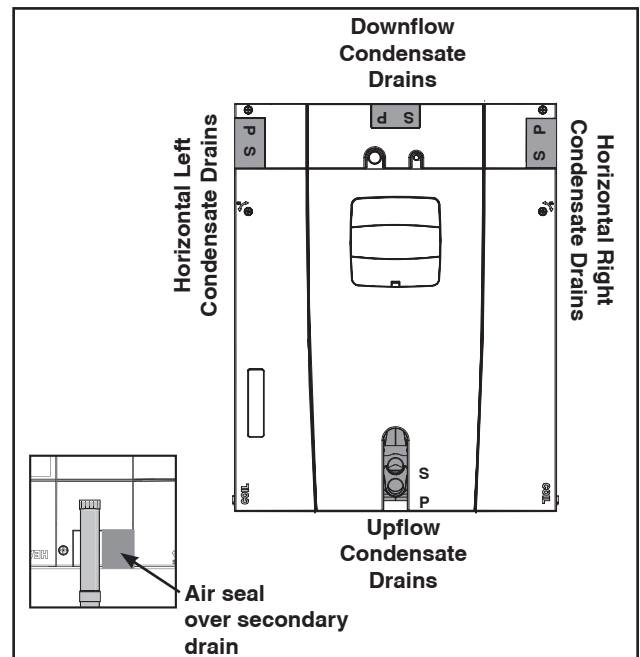
12.2 Connect Condensate Drain Piping

Note: Downflow and horizontal orientations require the Line Set panel to be removed in order to make the drain connections. **Note:** Make certain that the unit has been installed in a level position to allow for proper draining.

STEP 1 - Select the drain connections that are oriented for your application.

STEP 2 - Prepare the condensate drain connections.

- From the factory, the unit comes with plugs in both upflow condensate drains and an additional plug in the documentation packet.
- For upflow applications, remove upflow condensate plug(s) and connect condensate piping.
- For all other applications, do not remove upflow condensate plugs. Remove the cover from the needed condensate drain connections and connect condensate piping.
- If the secondary condensate opening is not used, plug the condensate opening with the fitting supplied in the documentation pack. Use scissors to cut the air seal in half and re-install over the unused opening.



Note: A small amount of sealant must be applied around the drain line(s) passing through the panel to prevent air leakage and possible water drips.

- **Dry fit and test clearance for coil panel removal before applying PVC/CPVC cement**
- **Use Teflon tape on the air handler drain line connections. Do not use pipe joint compound or PVC/CPVC cement on drain nipple.**
- **Hand tighten the drain pipe.**

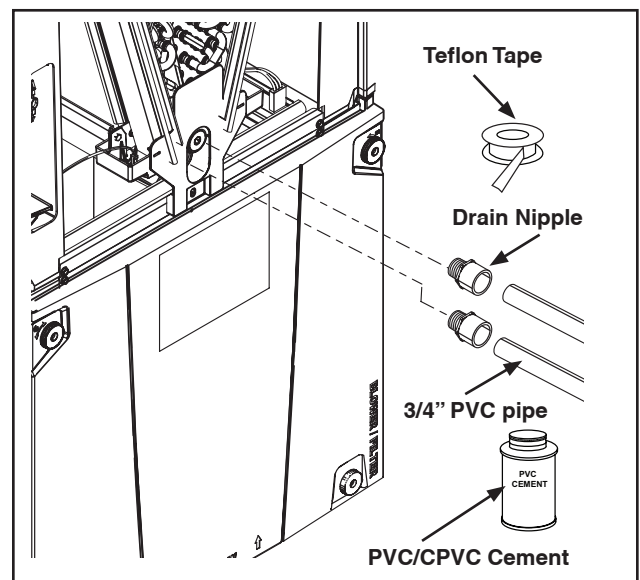
STEP 3 - For Upflow installations, connect 3/4" PVC pipe to the threaded drain nipple with PVC/CPVC cement. 1.5" minimum clearance to the condensate piping is needed for coil panel removal. Thread the assembly into the primary drain connection (repeat for the secondary drain connection if used).

Important: For Horizontal and Downflow installations, the following order must be observed:

- 1) Remove panel and insert the 3/4" nipples.
- 2) Reinstall the panel.
- 3) Connect the condensate lines to the nipples.

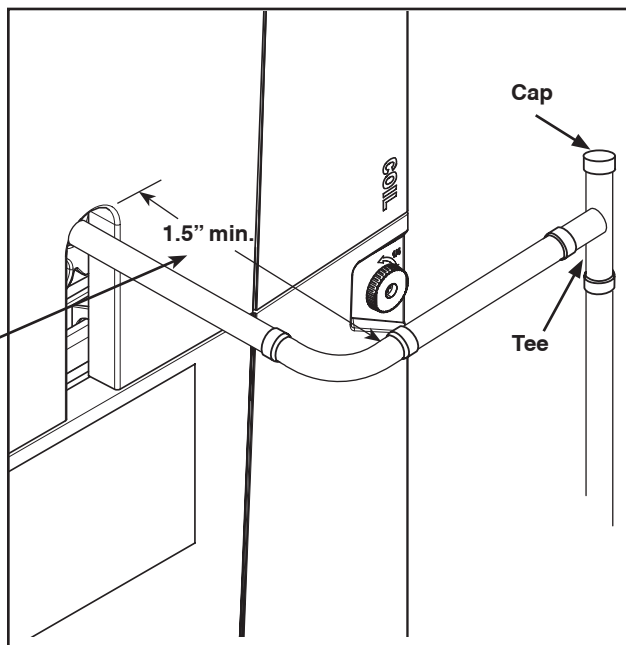
Note: A small amount of sealant must be applied around the drain line(s) passing through the panel to prevent air leakage and possible water drips.

Optional pipe kit BAYCNDPIP01A is available (10 pcs per kit).



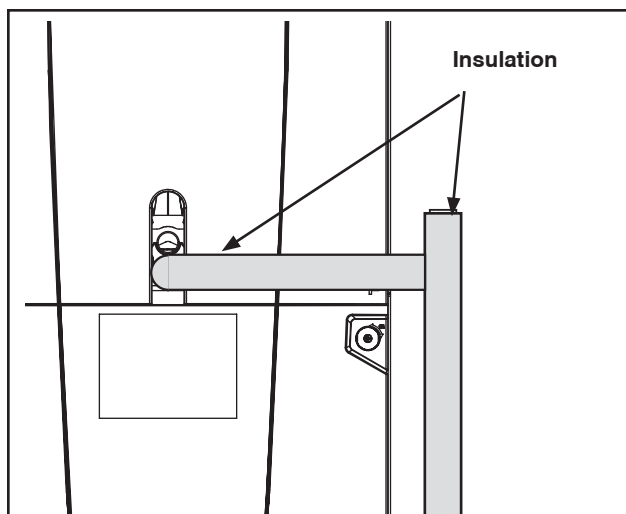
STEP 4 - Install a clean-out tee in the primary drain line for future maintenance. It is recommended that you install a cap on the top of the tee.

1.5" minimum clearance is recommended from cabinet to inside edge of tubing



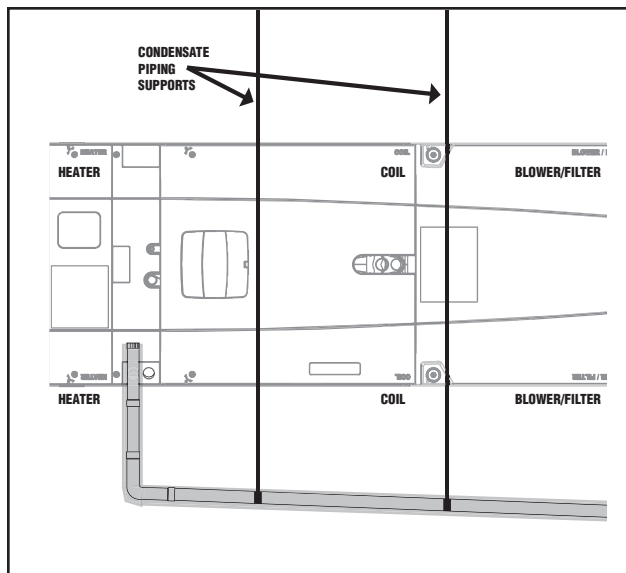
STEP 5 - Insulate the primary drain line to prevent sweating where dew point temperatures may be met. (Optional depending on climate and application needs.)

Provide a means of drainage to prevent winter freeze-up of condensate line. (Optional depending on climate and application needs.)



STEP 6 - Support the condensate piping outside the unit per local codes for proper drainage and to prevent sagging.

Allow 1/4" of downward slope for each foot of pipe.



Section 13. Electrical – High Voltage

13.1 High Voltage Power Supply

The high voltage power supply must match the equipment nameplate.

Power wiring, including ground wiring, must comply with national, state, and local codes.

Field wiring diagrams for supplementary electric heaters are shipped with the heater.

⚠ WARNING

LIVE ELECTRICAL COMPONENTS!

During installation, testing, servicing, and troubleshooting of this product, it may be necessary to work with live electrical components. Failure to follow all electrical safety precautions when exposed to live electrical components could result in death or serious injury.

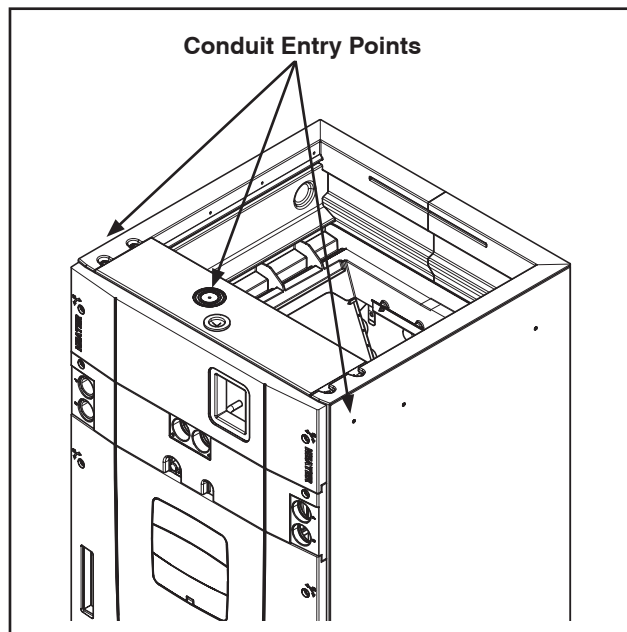
13.2 Make Electrical Connections

STEP 1 - Route High Voltage wiring to unit.

STEP 2 - Select a conduit entry point. Drill a hole for the desired conduit size (up to 1-1/2"). Locating targets are identified on the units.

1. Select the entry point you will use to bring in your high voltage wiring.

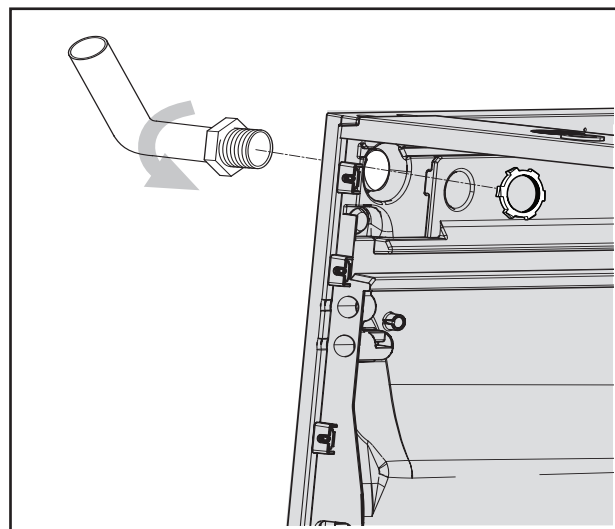
Note: When drilling access through cabinet do not drill into any internal components. Remove internal components before drilling through cabinet if possible. Damage to the air handler or heater could result.



STEP 3 - Route conduit (if used) to the entry point and connect.

1. Use one hand to secure the conduit nut from inside of the heater compartment.
2. Connect field supplied conduit (up to 1-1/2") to conduit nut.

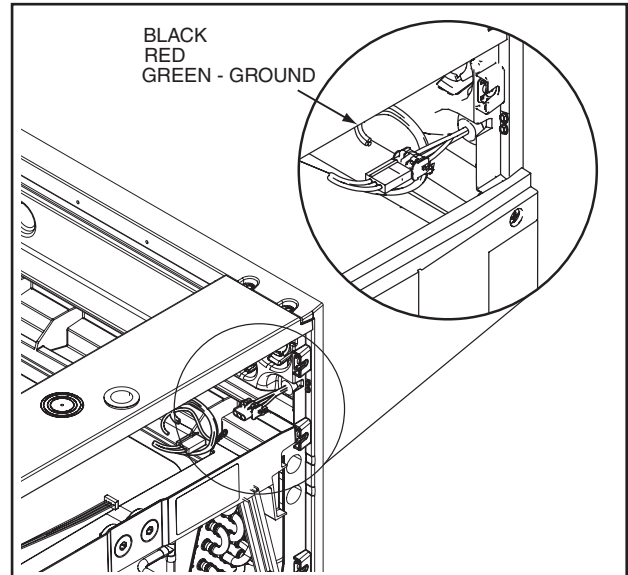
Note: Reducing bushings may be required for your application.



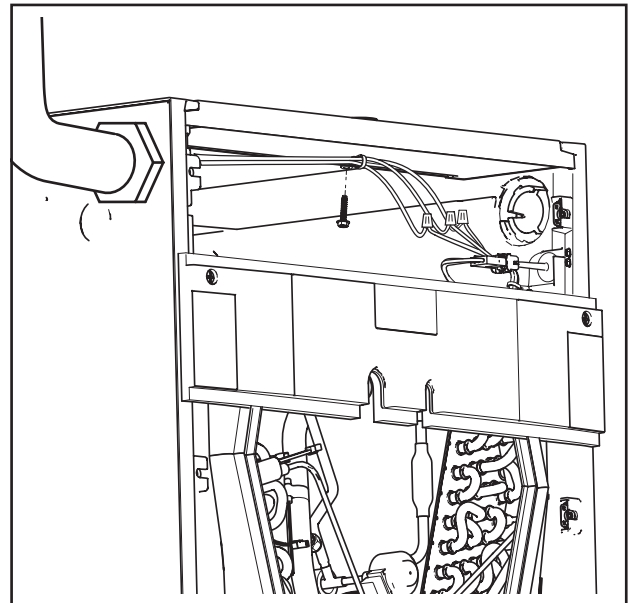
STEP 4 - If an electric heater IS NOT being installed, remove the pigtail harness from the documentation pack and connect it to the plug on the inside of the Heater Compartment in the cabinet.

If an electric heater IS being installed, see the Installer's Guide shipped with the electric heater.

Connect L1, L2, and ground wiring to pigtail harness in Heater Compartment using wire nuts. The incoming ground wiring will mate up with the green wire shown in the illustration.

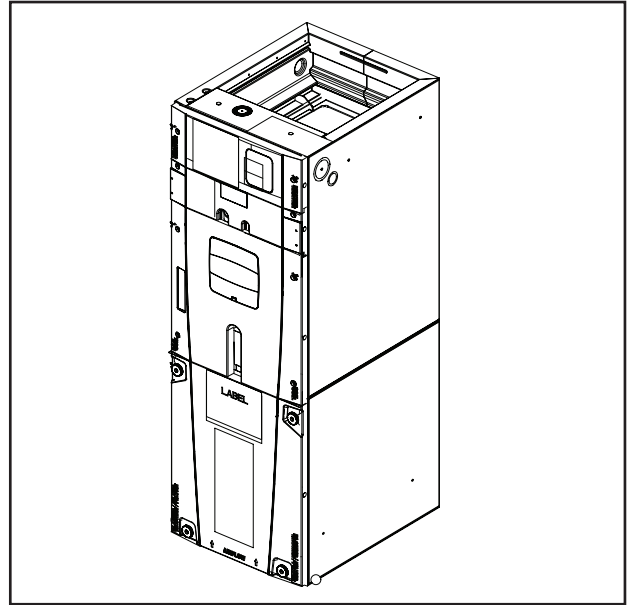


STEP 5 - If the L1, L2, and ground wires enter the case from the left side, use a field supplied 1/2"-5/8" maximum length screw and wire tie to hold the wires to the top center of the Heater Compartment.



STEP 6 - Reinstall all panels before starting the air handler.

NOTE: After replacing all panels, loosen the Line Set Panel screws approximately 1/4 - 1/2 turn. This will improve the seal between the Heater Panel and Line Set Panel.



13.3 Secure Coil (All Applications)

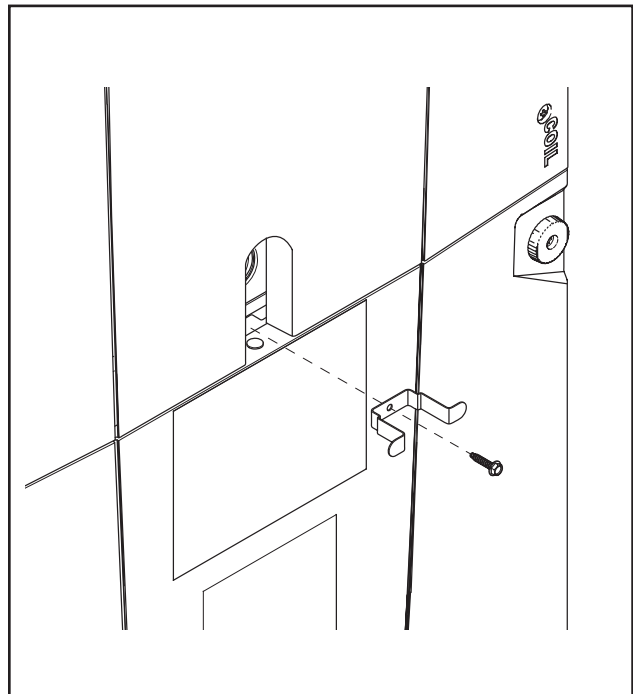
STEP 1 - Remove screw and coil panel bracket from documentation packet.

STEP 2 - Place the coil panel bracket into position and use screw to secure the coil panel bracket and seal plate to the support bar.

Important: The Coil Seal Plate and screw secure the coil in the center of the air handler. Failure to follow these steps can prevent the Coil Panel from being easily replaced on the unit.

Important: The Blower Panel may be removed if needed to help align the new screw with the seal plate and crossmember.

Important: For the 5 ton air handler model, tap 5 should not be used in the downflow or horizontal orientations. Using Tap 5 could result in water blowing off the coil.



Section 14. Electrical – Low Voltage

14.1 Low Voltage Maximum Wire Length

Table 14.1 defines the maximum total length of low voltage wiring from the outdoor unit, to the indoor unit, and to the thermostat.

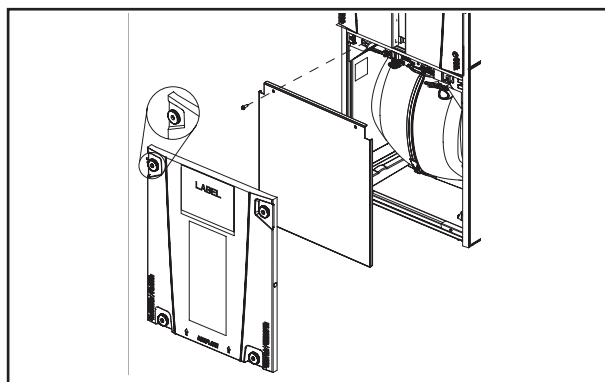
Table 14.1

24 VOLTS	
WIRE SIZE	MAX. WIRE LENGTH
18 AWG	150 Ft.
16 AWG	225 Ft.
14 AWG	300 Ft.

14.2 Low Voltage Hook-up Instructions

STEP 1 - Remove the Blower panels by removing the four fasteners and then pulling away from the cabinet to remove.

STEP 2 - Remove the block off plate by removing the two 5/16" screws at the top and pulling the top out and up off the support bosses at the bottom.



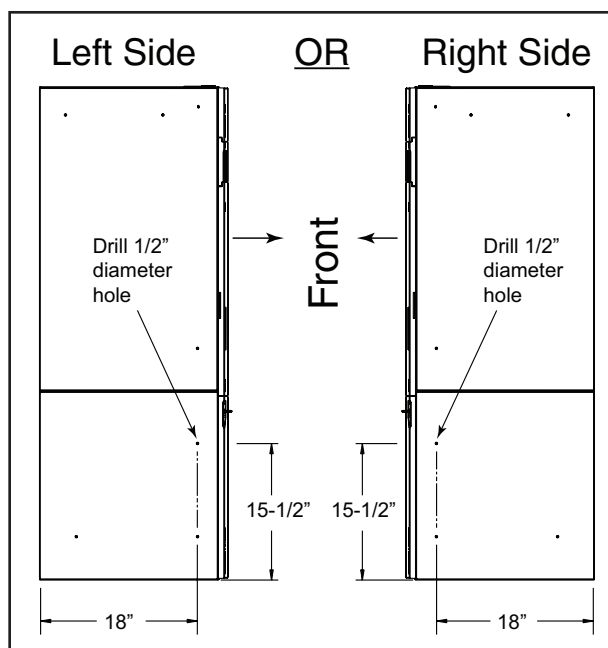
STEP 3 - For Low voltage entry, drill a .5" diameter hole size in side of blower cabinet at location shown on illustration. A 3/8" bushing is supplied in the doc pack.

STEP 4 - Route control wiring to unit and Insert Low voltage wiring.

Note: After the LV wires have been inserted through the new hole, the hole must be sealed.

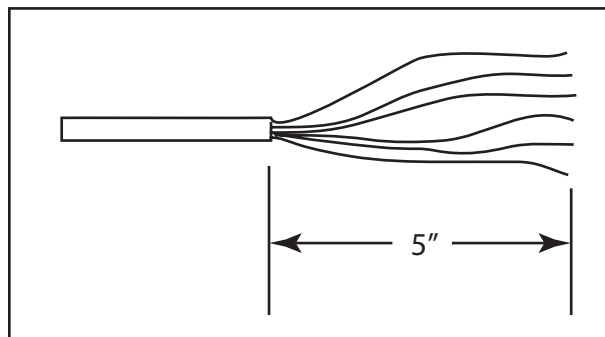
Note: If a side return kit is used, the LV entry must be on the opposite side of the air handler.

Note: When drilling access through cabinet do not drill into any internal components. Remove internal components before drilling through cabinet if possible. Damage to the air handler or heater could result.



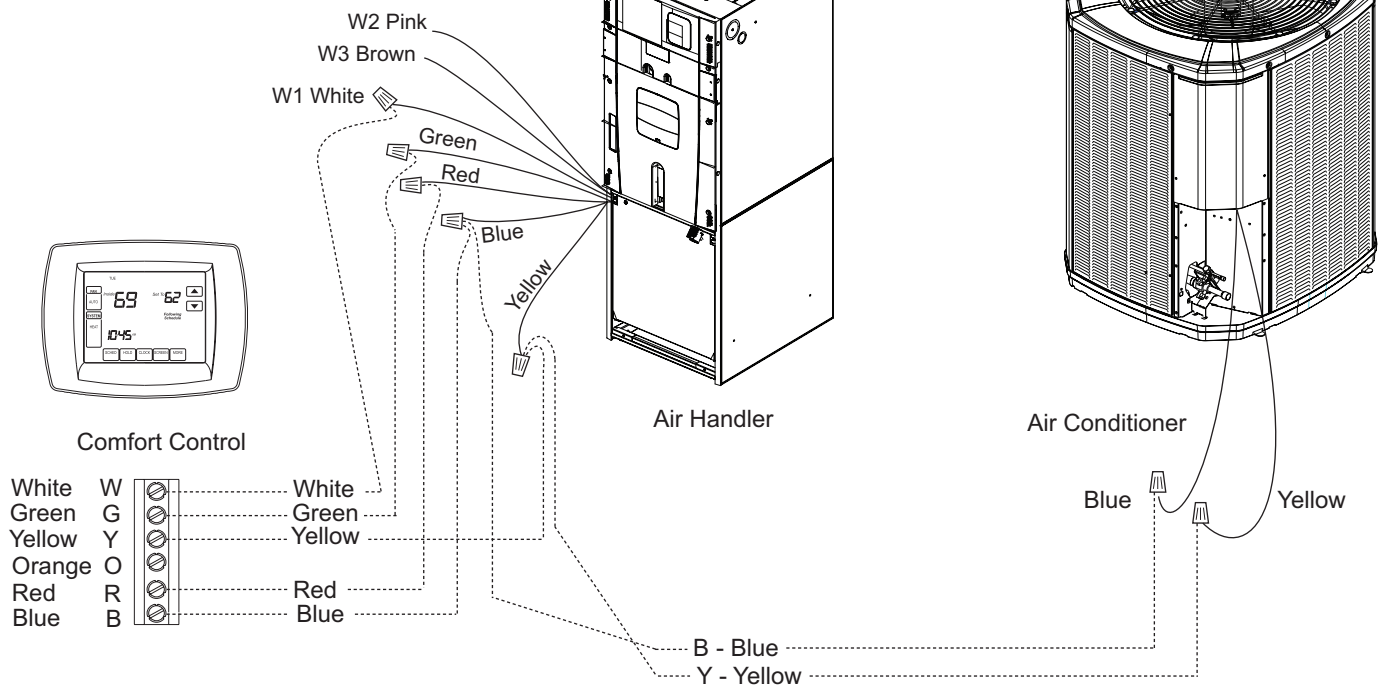
Note: Strain relief must be provided on the inside of the air handler cabinet for the low voltage wiring. Field supplied thermostat wires may be wire tied as a bundle to the existing strain relieved low voltage pigtail leads in the air handler unit.

STEP 5 - Remove the external sheathing of the wiring approximately 5".



STEP 6 - Using field supplied wire nuts, make connections per hookup diagrams.

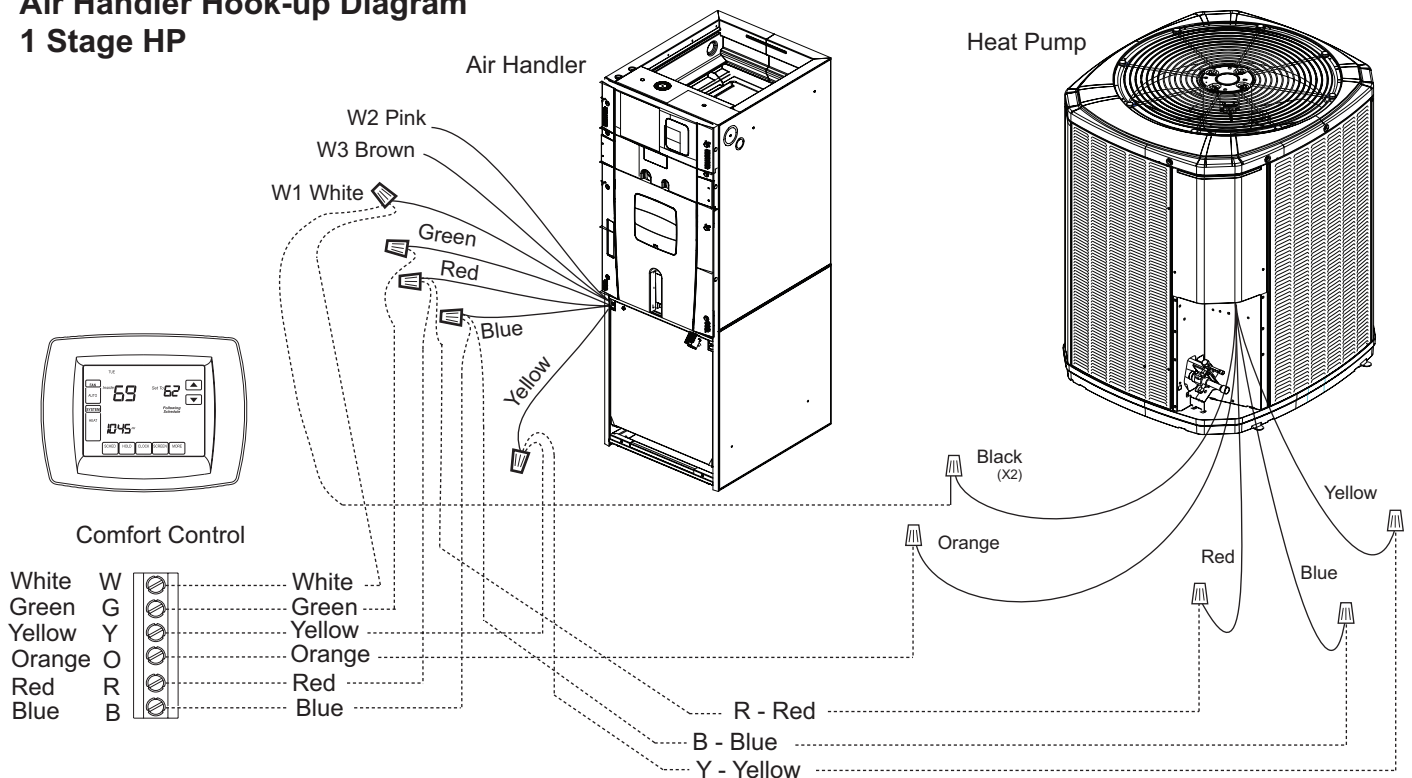
Air Handler Hook-up Diagram 1 Stage Cooling



..... Field wiring

* For multiple stages of electric heat, jumper W1, W2, and W3 together if comfort control has only one stage of heat.

Air Handler Hook-up Diagram 1 Stage HP

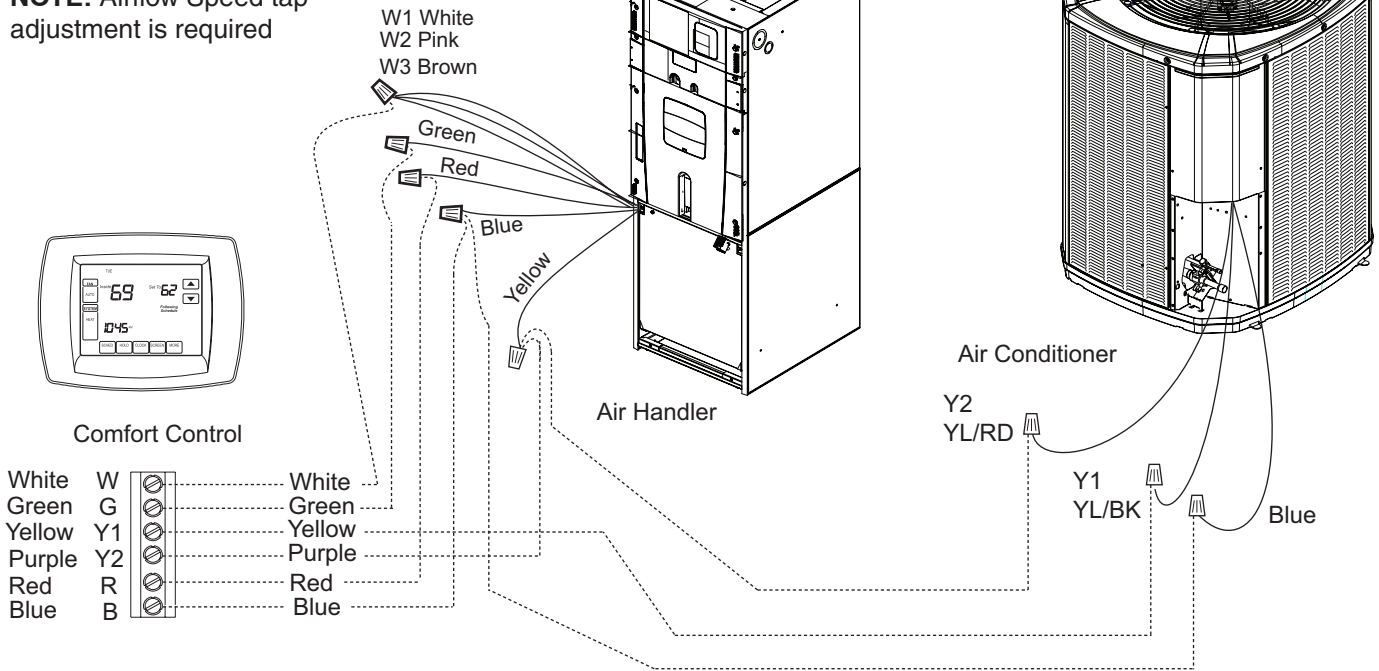


..... Field wiring

* For multiple stages of electric heat, jumper W1, W2, and W3 together if comfort control has only one stage of heat

Air Handler Hook-up Diagram 2 Stage Cooling

NOTE: Airflow Speed tap adjustment is required

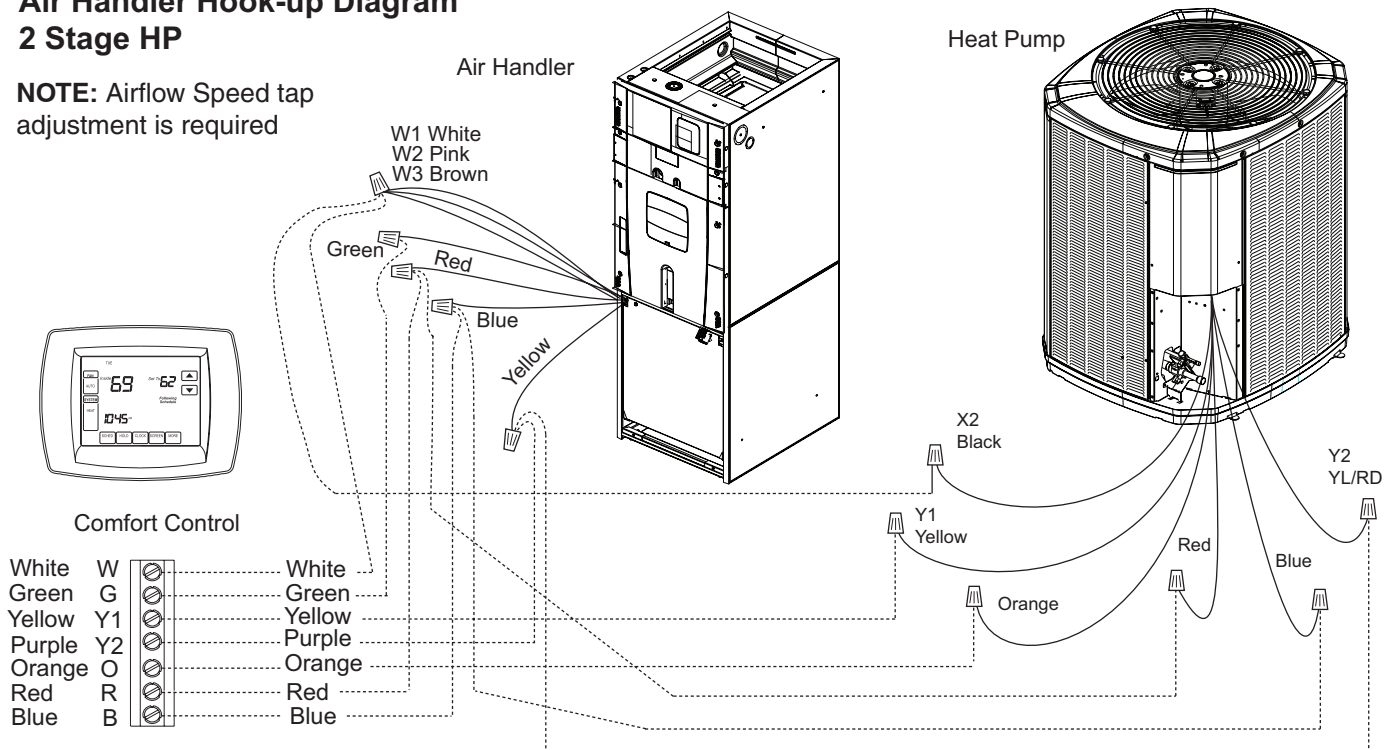


..... Field wiring

- * For multiple stages of electric heat, jumper W1, W2, and W3 together if comfort control has only one stage of heat.
- Airflow adjustment will be required for two stage applications.

Air Handler Hook-up Diagram 2 Stage HP

NOTE: Airflow Speed tap adjustment is required



..... Field wiring

- * For multiple stages of electric heat, jumper W1, W2, and W3 together if comfort control has only one stage of heat.
- Airflow adjustment will be required for two stage applications.

Section 15. Product Specifications

MODEL	GAM5B0A18M11EB	GAM5B0A24M21EB	GAM5B0B36M31EB
RATED VOLTS/PH/HZ.	208-230/1/60	208-230/1/60	208-230/1/60
RATINGS ①	See O.D. Specifications	See O.D. Specifications	See O.D. Specifications
INDOOR COIL — Type	Plate Fin	Plate Fin	Plate Fin
Rows — F.P.I.	3 - 14	3 - 14	3 - 14
Face Area (sq. ft.)	3.67	3.67	5.04
Tube Size (in.)	3/8	3/8	3/8
Refrigerant Control	TXV	TXV	TXV
Drain Conn. Size (in.) ②	3/4 NPT	3/4 NPT	3/4 NPT
DUCT CONNECTIONS	See Outline Drawing	See Outline Drawing	See Outline Drawing
INDOOR FAN — Type	Centrifugal	Centrifugal	Centrifugal
Diameter-Width (In.)	11 X 8	11 X 8	11 X 10
No. Used	1	1	1
Drive - No. Speeds	Direct - 5	Direct - 5	Direct - 5
CFM vs. in. w.g.	See Fan Performance Table	See Fan Performance Table	See Fan Performance Table
No. Motors — H.P.	1 - 1/3	1 - 1/3	1 - 1/2
Motor Speed RPM	1050	1050	1050
Volts/Ph/Hz	208-230/1/60	208-230/1/60	208-230/1/60
F.L. Amps	2.8	2.8	4.1
FILTER			
Filter Furnished?	No	No	No
Type Recommended	Throwaway	Throwaway	Throwaway
No.-Size-Thickness	1 - 16 X 20 - 1 in.	1 - 16 X 20 - 1 in.	1 - 20 X 20 - 1 in.
REFRIGERANT	R-410A	R-410A	R-410A
Ref. Line Connections	Brazed	Brazed	Brazed
Coupling or Conn. Size — in. Gas	3/4	3/4	7/8
Coupling or Conn. Size — in. Liq.	3/8	3/8	3/8
DIMENSIONS	H x W x D	H x W x D	H x W x D
Crated (In.)	51-3/8 x 20-1/2 x 25-3/4	51-3/8 x 20-1/2 x 25-3/4	57-1/4 x 24-1/4 x 25-3/4
Uncrated	49-7/8 x 17-1/2 x 21-3/4	49-7/8 x 17-1/2 x 21-3/4	55-3/4 x 21-1/4 x 21-3/4
WEIGHT			
Shipping (Lbs.)/Net (Lbs.)	126/120	126/120	150/142

MODEL	GAM5B0C42M31EB	GAM5B0C48M41EB	GAM5B0C60M51EB
RATED VOLTS/PH/HZ.	208-230/1/60	208-230/1/60	208-230/1/60
RATINGS ①	See O.D. Specifications	See O.D. Specifications	See O.D. Specifications
INDOOR COIL — Type	Plate Fin	Plate Fin	Plate Fin
Rows — F.P.I.	4 - 14	4 - 14	4 - 14
Face Area (sq. ft.)	5.04	5.96	5.96
Tube Size (in.)	3/8	3/8	3/8
Refrigerant Control	TXV	TXV	TXV
Drain Conn. Size (in.) ②	3/4 NPT	3/4 NPT	3/4 NPT
DUCT CONNECTIONS	See Outline Drawing	See Outline Drawing	See Outline Drawing
INDOOR FAN — Type	Centrifugal	Centrifugal	Centrifugal
Diameter-Width (In.)	11 X 10	11 X 10	11 X 10
No. Used	1	1	1
Drive - No. Speeds	Direct - 5	Direct - 5	Direct - 5
CFM vs. in. w.g.	See Fan Performance Table	See Fan Performance Table	See Fan Performance Table
No. Motors — H.P.	1 - 1/2	1 - 3/4	1 - 1
Motor Speed RPM	1050	1050	1050
Volts/Ph/Hz	208-230/1/60	208-230/1/60	208-230/1/60
F.L. Amps	4.1	6.0	7.6
FILTER			
Filter Furnished?	No	No	No
Type Recommended	Throwaway	Throwaway	Throwaway
No.-Size-Thickness	1 - 22 X 20 - 1 in.	1 - 22 X 20 - 1 in.	1 - 22 X 20 - 1 in.
REFRIGERANT	R-410A	R-410A	R-410A
Ref. Line Connections	Brazed	Brazed	Brazed
Coupling or Conn. Size — in. Gas	7/8	7/8	7/8
Coupling or Conn. Size — in. Liq.	3/8	3/8	3/8
DIMENSIONS	H x W x D	H x W x D	H x W x D
Crated (In.)	58-1/2 x 27-1/2 x 25-3/4	63-1/4 x 27-1/2 x 25-3/4	63-1/4 x 27-1/2 x 25-3/4
Uncrated	56-7/8 x 23-1/2 x 21-3/4	61-3/4 x 23-1/2 x 21-3/4	61-3/4 x 23-1/2 x 21-3/4
WEIGHT			
Shipping (Lbs.)/Net (Lbs.)	163/153	176/166	180/170

① These Air Handlers are A.R.I. certified with various Split System Air Conditioners and Heat Pumps (ARI STANDARD 210/240). Refer to the Split System Outdoor Unit Product Data Guides for performance data.

② 3/4" Male Plastic Pipe (Ref.: ASTM 1785-76)

Section 16. Airflow Performance

AIRFLOW PERFORMANCE										
GAM5B0A18M11EB										
EXTERNAL STATIC (in w.g)	AIRFLOW (CFM)									
	Speed Taps – 230 VOLTS					Speed Taps – 208 VOLTS				
	5	4 †	3	2	1	5	4 †	3	2	1
0	1081	977	930	862	556	1078	974	927	858	553
0.1	1044	922	850	806	379	1038	916	844	800	373
0.2	995	880	787	702	202	987	871	778	693	193
0.3	956	830	738	621	-	944	819	727	610	-
0.4	914	788	692	562	-	900	774	677	548	-
0.5	872	749	646	502	-	855	732	629	485	-
0.6	838	707	590	445	-	819	687	570	425	-
0.7	802	650	528	389	-	779	628	505	367	-
0.8	755	598	478	327	-	730	573	453	302	-
0.9	708	539	420	-	-	680	512	392	-	-
NOTES: 1. Values are with wet coil and without filters. 2. Contact your particular filter manufacturer for pressure drop data. 3. Electric heater pressure drop is negligible and is included within the airflow data. 4. Tap 1 is an continuous fan speed tap for single stage systems. Airflow adjustment is required for 2 stage systems. See Airflow adjustment section. 5. † Factory Setting										

GAM5B0A18M11SB, GAM5B0A18M11EA MINIMUM HEATER AIRFLOW CFM		
Heater	Minimum Air Speed Tap	
	Without Heat Pump	With Heat Pump
BAYEAAC04BK1 BAYEAAC04LG1	Tap 3	Tap 4
BAYEAAC05BK1 BAYEAAC05LG1	Tap 3	Tap 4
BAYEAAC08BK1 BAYEAAC08LG1	Tap 3	Tap 4
BAYEAAC10BK1 BAYEAAC10LG1	Tap 3 ①	Tap 5 ①
BAYEAAC10LG3	Tap 5	Tap 5 ②
BAYEABC15BK1	-	-
BAYEABC20BK1	-	-
① Heater not qualified for downflow installations ② Approved for 240 V only		

Note: Heating and cooling speeds are the same, factory set at Speed Tap #4.

Note: A “G” only signal from the comfort control will run the blower at a lower speed, factory set at Speed Tap #1. See the Sequence of Operation for additional information.

Note: Speed Tap 1 is NOT used for two stage systems. Two stage systems will require an airflow adjustment.

AIRFLOW PERFORMANCE										
GAM5B0A24M21EB										
EXTERNAL STATIC (in w.g)	AIRFLOW (CFM)									
	Speed Taps – 230 VOLTS					Speed Taps – 208 VOLTS				
	5	4 †	3	2	1	5	4 †	3	2	1
0	1081	977	937	928	579	1078	974	933	925	576
0.1	1044	922	868	844	418	1038	916	863	838	412
0.2	995	880	817	777	306	987	871	808	768	298
0.3	956	830	767	729	-	944	819	756	717	-
0.4	914	788	719	682	-	900	774	705	668	-
0.5	872	749	680	635	-	855	732	663	618	-
0.6	838	707	628	577	-	819	687	609	557	-
0.7	802	650	566	515	-	779	628	544	492	-
0.8	755	598	511	467	-	730	573	486	442	-
0.9	708	539	460	407	-	680	512	432	-	-
NOTES: 1. Values are with wet coil and without filters. 2. Contact your particular filter manufacturer for pressure drop data. 3. Electric heater pressure drop is negligible and is included within the airflow data. 4. Tap 1 is an continuous fan speed tap for single stage systems. Airflow adjustment is required for 2 stage systems. See Airflow adjustment section. 5. † Factory Setting										

GAM5B0A24M21SB, GAM5B0A24M21EA MINIMUM HEATER AIRFLOW CFM		
Heater	Minimum Air Speed Tap	
	Without HP	With HP
BAYEAAC04BK1 BAYEAAC04LG1	Tap 3	Tap 4
BAYEAAC05BK1 BAYEAAC05LG1	Tap 3	Tap 4
BAYEAAC08BK1 BAYEAAC08LG1	Tap 3	Tap 4
BAYEAAC10BK1 BAYEAAC10LG1	Tap 3 ①	Tap 5 ①
BAYEAAC10LG3	Tap 5	Tap 5 ②
BAYEABC15BK1	-	-
BAYEABC20BK1	-	-
① Heater not qualified for downflow installations ② Approved for 240 V only		

Note: Heating and cooling speeds are the same, factory set at Speed Tap #4.

Note: A “G” only signal from the comfort control will run the blower at a lower speed, factory set at Speed Tap #1. See the Sequence of Operation for additional information.

Note: Speed Tap 1 is NOT used for two stage systems. Two stage systems will require an airflow adjustment.

AIRFLOW PERFORMANCE										
GAM5B0B36M31EB										
EXTERNAL STATIC (in w.g)	AIRFLOW (CFM)									
	Speed Taps – 230 VOLTS					Speed Taps – 208 VOLTS				
	5	4 †	3	2	1	5	4 †	3	2	1
0	1438	1387	1197	1013	732	1435	1383	1194	1009	729
0.1	1394	1340	1143	945	552	1388	1334	1137	939	546
0.2	1350	1299	1090	892	413	1341	1291	1082	884	404
0.3	1301	1245	1031	817	305	1289	1233	1019	806	293
0.4	1253	1197	975	751	209	1239	1183	960	737	195
0.5	1205	1151	917	651	-	1188	1134	900	634	-
0.6	1155	1094	837	578	-	1136	1075	817	559	-
0.7	1099	1032	766	499	-	1077	1010	744	476	-
0.8	1039	972	691	453	-	1014	946	666	-	-
0.9	964	889	633	409	-	936	861	605	-	-
NOTES: 1. Values are with wet coil and without filters. 2. Contact your particular filter manufacturer for pressure drop data. 3. Electric heater pressure drop is negligible and is included within the airflow data. 4. Tap 1 is an continuous fan speed tap for single stage systems. Airflow adjustment is required for 2 stage systems. See Airflow adjustment section. 5. † Factory Setting										

GAM5B0B36M31SB, GAM5B0B36M31EA MINIMUM HEATER AIRFLOW CFM		
Heater	Minimum Air Speed Tap	
	Without HP	With HP
BAYEAAC04BK1 BAYEAAC04LG1	Tap 2	Tap 3
BAYEAAC05BK1 BAYEAAC05LG1	Tap 2	Tap 3
BAYEAAC08BK1 BAYEAAC08LG1	Tap 3	Tap 4
BAYEAAC10BK1 BAYEAAC10LG1	Tap 4	Tap 5
BAYEAAC10LG3	Tap 4	Tap 5
BAYEABC15BK1	Tap 4	Tap 5
BAYEABC15LG3	Tap 4	Tap 5
BAYEABC20BK1	-	-
BAYEACC25BK1	-	-

Note: Heating and cooling speeds are the same, factory set at Speed Tap #4.

Note: A “G” only signal from the comfort control will run the blower at a lower speed, factory set at Speed Tap #1. See the Sequence of Operation for additional information.

Note: Speed Tap 1 is NOT used for two stage systems. Two stage systems will require an airflow adjustment.

AIRFLOW PERFORMANCE										
GAM5B0C42M31EB										
EXTERNAL STATIC (in w.g)	AIRFLOW (CFM)									
	Speed Taps – 230 VOLTS					Speed Taps – 208 VOLTS				
	5	4 †	3	2	1	5	4 †	3	2	1
0	1644	1575	1401	1266	752	1641	1572	1398	1263	749
0.1	1596	1525	1346	1215	665	1590	1519	1340	1209	659
0.2	1550	1480	1300	1157	569	1542	1471	1291	1148	560
0.3	1509	1437	1252	1110	492	1497	1425	1241	1099	480
0.4	1463	1391	1205	1058	384	1449	1377	1191	1043	370
0.5	1420	1345	1151	980	327	1403	1328	1134	963	310
0.6	1376	1301	1085	917	259	1356	1282	1066	898	239
0.7	1332	1251	1020	865	-	1310	1228	998	842	-
0.8	1271	1179	969	813	-	1246	1154	944	788	-
0.9	1199	1119	924	747	-	1171	1091	897	719	-
NOTES: 1. Values are with wet coil and without filters. 2. Contact your particular filter manufacturer for pressure drop data. 3. Electric heater pressure drop is negligible and is included within the airflow data. 4. Tap 1 is an continuous fan speed tap for single stage systems. Airflow adjustment is required for 2 stage systems. See Airflow adjustment section. 5. † Factory Setting										

GAM5B0C42M31SB, GAM5B0C42M31EA MINIMUM HEATER AIRFLOW CFM		
Heater	Minimum Air Speed Tap	
	Without HP	With HP
BAYEAAC04BK1 BAYEAAC04LG1	Tap 2	Tap 3
BAYEAAC05BK1 BAYEAAC05LG1	Tap 2	Tap 3
BAYEAAC08BK1 BAYEAAC08LG1	Tap 2	Tap 3
BAYEAAC10BK1 BAYEAAC10LG1	Tap 2	Tap 3
BAYEAAC10LG3	Tap 2	Tap 3
BAYEABC15BK1	Tap 3	Tap 4
BAYEABC15LG3	Tap 3	Tap 4
BAYEABC20BK1	-	-
BAYEACC25BK1	-	-

Note: Heating and cooling speeds are the same, factory set at Speed Tap #4.

Note: A “G” only signal from the comfort control will run the blower at a lower speed, factory set at Speed Tap #1. See the Sequence of Operation for additional information.

Note: Speed Tap 1 is NOT used for two stage systems. Two stage systems will require an airflow adjustment.

AIRFLOW PERFORMANCE										
GAM5B0C48M41EB										
EXTERNAL STATIC (in w.g)	AIRFLOW (CFM)									
	Speed Taps – 230 VOLTS					Speed Taps – 208 VOLTS				
	5	4 †	3	2	1	5	4 †	3	2	1
0	1913	1770	1694	1593	866	1910	1767	1691	1590	863
0.1	1874	1730	1653	1547	791	1868	1724	1647	1541	785
0.2	1834	1690	1611	1505	699	1825	1681	1602	1496	690
0.3	1791	1646	1567	1456	620	1780	1635	1556	1445	609
0.4	1748	1600	1521	1410	537	1734	1586	1506	1396	522
0.5	1708	1556	1476	1367	453	1691	1539	1459	1350	437
0.6	1668	1516	1436	1326	370	1648	1496	1416	1306	351
0.7	1629	1475	1394	1283	-	1607	1452	1372	1260	-
0.8	1588	1435	1352	1236	-	1563	1410	1327	1211	-
0.9	1541	1390	1304	1183	-	1513	1362	1276	1156	-
NOTES: 1. Values are with wet coil and without filters. 2. Contact your particular filter manufacturer for pressure drop data. 3. Electric heater pressure drop is negligible and is included within the airflow data. 4. Tap 1 is an continuous fan speed tap for single stage systems. Airflow adjustment is required for 2 stage systems. See Airflow adjustment section. 5. † Factory Setting										

GAM5B0C48M41SB, GAM5B0C48M41EA MINIMUM HEATER AIRFLOW CFM		
Heater	Minimum Air Speed Tap	
	Without HP	With HP
BAYEAAC04BK1 BAYEAAC04LG1	Tap 2	Tap 3
BAYEAAC05BK1 BAYEAAC05LG1	Tap 2	Tap 3
BAYEAAC08BK1 BAYEAAC08LG1	Tap 2	Tap 3
BAYEAAC10BK1 BAYEAAC10LG1	Tap 2	Tap 3
BAYEAAC10LG3	Tap 2	Tap 3
BAYEABC15BK1	Tap 3	Tap 4
BAYEABC15LG3	Tap 3	Tap 4
BAYEABC20BK1	Tap 3	Tap 4
BAYEACC25BK1	Tap 4	Tap 5

Note: Heating and cooling speeds are the same, factory set at Speed Tap #4.

Note: A “G” only signal from the comfort control will run the blower at a lower speed, factory set at Speed Tap #1. See the Sequence of Operation for additional information.

Note: Speed Tap 1 is NOT used for two stage systems. Two stage systems will require an airflow adjustment.

AIRFLOW PERFORMANCE										
GAM5B0C60M51EB										
EXTERNAL STATIC (in w.g)	AIRFLOW (CFM)									
	Speed Taps – 230 VOLTS					Speed Taps – 208 VOLTS				
	5	4 †	3	2	1	5	4 †	3	2	1
0	2327	2020	1914	1819	1125	2324	2017	1910	1816	1122
0.1	2285	1980	1873	1780	990	2279	1974	1867	1774	984
0.2	2237	1944	1835	1740	831	2228	1935	1826	1731	822
0.3	2182	1908	1800	1705	600	2171	1896	1789	1693	589
0.4	2125	1869	1756	1659	331	2111	1854	1742	1645	317
0.5	2062	1830	1717	1620	249	2045	1813	1700	1603	232
0.6	1995	1747	1664	1575	187	1975	1727	1644	1555	168
0.7	1922	1707	1629	1540	-	1899	1685	1607	1518	-
0.8	1844	1673	1594	1502	-	1819	1648	1569	1477	-
0.9	1761	1629	1553	1464	-	1733	1601	1525	1436	-

NOTES:

1. Values are with wet coil and without filters.
2. Contact your particular filter manufacturer for pressure drop data.
3. Electric heater pressure drop is negligible and is included within the airflow data.
4. Tap 1 is an continuous fan speed tap for single stage systems. Airflow adjustment is required for 2 stage systems. See Airflow adjustment section.
5. If the air handler is applied in downflow or horizontal configurations, the airflow should not exceed 2000 CFM. Airflow above 2000 CFM could result in water blow-off.
6. † Factory Setting

GAM5B0C60M51SB, GAM5B0C60M51EA MINIMUM HEATER AIRFLOW CFM		
Heater	Minimum Air Speed Tap	
	Without HP	With HP
BAYEAAAC04BK1 BAYEAAAC04LG1	Tap 2	Tap 3
BAYEAAAC05BK1 BAYEAAAC05LG1	Tap 2	Tap 3
BAYEAAAC08BK1 BAYEAAAC08LG1	Tap 2	Tap 3
BAYEAAAC10BK1 BAYEAAAC10LG1	Tap 2	Tap 3
BAYEAAAC10LG3	Tap 2	Tap 3
BAYEABC15BK1	Tap 3	Tap 4
BAYEABC15LG3	Tap 3	Tap 4
BAYEABC20BK1	Tap 3	Tap 4
BAYEACC25BK1	Tap 4	Tap 5 ①②
① If the air handler is applied in downflow or horizontal configurations, the airflow should not exceed 2000 CFM. Airflow above 2000 CFM could result in water blow-off.		
② Tap 5 can be used but only when the external static pressure is .6" or above.		

Note: Heating and cooling speeds are the same, factory set at Speed Tap #4.

Note: A "G" only signal from the comfort control will run the blower at a lower speed, factory set at Speed Tap #1. See the Sequence of Operation for additional information.

Note: Speed Tap 1 is NOT used for two stage systems. Two stage systems will require an airflow adjustment.

Section 17. Wiring Data

WIRING DATA											
GAM5B0A18M11EB											
Heater Model No.	No. of Circuits	240 VOLT					208 VOLT				
		Capacity		Heater Amps per Circuit	Minimum Circuit Ampacity	Maximum Overload Protection	Capacity		Heater Amps per Circuit	Minimum Circuit Ampacity	Maximum Overload Protection
		kW	BTUH				kW	BTUH			
No Heater	-	-	-	2.8*	4	15	-	-	2.8*	4	15
BAYEAC04BK1 BAYEAC04LG1	1	3.84	13100	16.0	24	25	2.88	9800	13.8	21	25
BAYEAC05BK1 BAYEAC05LG1	1	4.80	16400	20.0	29	30	3.60	12300	17.3	25	25
BAYEAC08BK1 BAYEAC08LG1	1	7.68	26200	32.0	44	45	5.76	19700	27.7	38	40
BAYEAC10BK1 ① BAYEAC10LG1 ①	1	9.60	32800	40.0	54	60	7.20	24600	34.6	47	50
BAYEAC10LG3 ②	1-3 PH	9.60	32800	23.1	32	35	7.20	24600	20.0	28	30
Note: * Motor Amps ① Heater not qualified for downflow installations ② Approved for 240 V only with Heat Pump											

WIRING DATA											
GAM5B0A24M21EB											
Heater Model No.	No. of Circuits	240 VOLT					208 VOLT				
		Capacity		Heater Amps per Circuit	Minimum Circuit Ampacity	Maximum Overload Protection	Capacity		Heater Amps per Circuit	Minimum Circuit Ampacity	Maximum Overload Protection
		kW	BTUH				kW	BTUH			
No Heater	-	-	-	2.8*	4	15	-	-	2.8*	4	15
BAYEAC04BK1 BAYEAC04LG1	1	3.84	13100	16.0	24	25	2.88	9800	13.8	21	25
BAYEAC05BK1 BAYEAC05LG1	1	4.80	16400	20.0	29	30	3.60	12300	17.3	25	25
BAYEAC08BK1 BAYEAC08LG1	1	7.68	26200	32.0	44	45	5.76	19700	27.7	38	40
BAYEAC10BK1 ① BAYEAC10LG1 ①	1	9.60	32800	40.0	54	60	7.20	24600	34.6	47	50
BAYEAC10LG3 ②	1-3 PH	9.60	32800	23.1	32	35	7.20	24600	20.0	28	30
Note: * Motor Amps ① Heater not qualified for downflow installations ② Approved for 240 V only with Heat Pump											

WIRING DATA											
GAM5B0B36M31EB											
Heater Model No.	No. of Circuits	240 VOLT					208 VOLT				
		Capacity		Heater Amps per Circuit	Minimum Circuit Ampacity	Maximum Overload Protection	Capacity		Heater Amps per Circuit	Minimum Circuit Ampacity	Maximum Overload Protection
		kW	BTUH				kW	BTUH			
No Heater	-	-	-	4.1*	5	15	-	-	4.1*	5	15
BAYEAAC04BK1 BAYEAAC04LG1	1	3.84	13100	16.0	25	25	2.88	9800	13.8	22	25
BAYEAAC05BK1 BAYEAAC05LG1	1	4.80	16400	20.0	30	30	3.60	12300	17.3	27	30
BAYEAAC08BK1 BAYEAAC08LG1	1	7.68	26200	32.0	45	45	5.76	19700	27.7	40	40
BAYEAAC10BK1 BAYEAAC10LG1	1	9.60	32800	40.0	55	60	7.20	24600	34.6	48	50
BAYEAAC10LG3	1-3 PH	9.60	32800	23.1	33	35	7.20	24600	20.0	30	30
BAYEABC15LG3	1-3 PH	14.40	49200	34.6	48	50	10.80	36900	30.0	42	45
BAYEABC15BK1 - Circuit 1①	2	9.60	32800	40	55	60	7.20	24600	34.6	48	50
BAYEABC15BK1 - Circuit 2		4.80	16400	20	25	25	3.60	12300	17.3	22	25

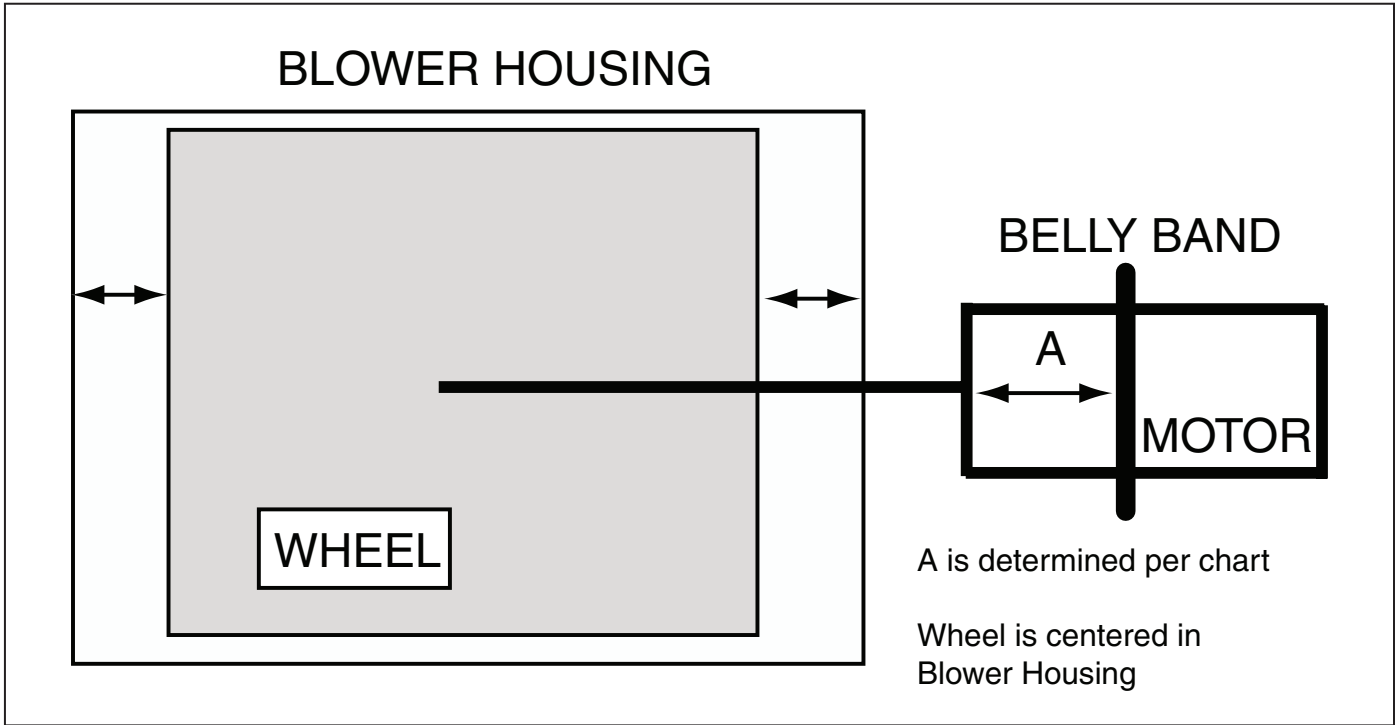
Note: * Motor Amps
① MCA and MOP for circuit 1 contains the motor amps

WIRING DATA											
GAM5B0C42M31EB											
Heater Model No.	No. of Circuits	240 VOLT					208 VOLT				
		Capacity		Heater Amps per Circuit	Minimum Circuit Ampacity	Maximum Overload Protection	Capacity		Heater Amps per Circuit	Minimum Circuit Ampacity	Maximum Overload Protection
		kW	BTUH				kW	BTUH			
No Heater	-	-	-	4.1*	5	15	-	-	4.1*	5	15
BAYEAAC04BK1 BAYEAAC04LG1	1	3.84	13100	16.0	25	25	2.88	9800	13.8	22	25
BAYEAAC05BK1 BAYEAAC05LG1	1	4.80	16400	20.0	30	30	3.60	12300	17.3	27	30
BAYEAAC08BK1 BAYEAAC08LG1	1	7.68	26200	32.0	45	45	5.76	19700	27.7	40	40
BAYEAAC10BK1 BAYEAAC10LG1	1	9.60	32800	40.0	55	60	7.20	24600	34.6	48	50
BAYEAAC10LG3	1-3 PH	9.60	32800	23.1	33	35	7.20	24600	20.0	30	30
BAYEABC15LG3	1-3 PH	14.40	49200	34.6	48	50	10.80	36900	30.0	42	45
BAYEABC15BK1 - Circuit 1①	2	9.60	32800	40	55	60	7.20	24600	34.6	48	50
BAYEABC15BK1 - Circuit 2		4.80	16400	20	25	25	3.60	12300	17.3	22	25
Note: * Motor Amps											
① MCA and MOP for circuit 1 contains the motor amps											

WIRING DATA											
GAM5B0C48M41EB											
Heater Model No.	No. of Circuits	240 VOLT					208 VOLT				
		Capacity		Heater Amps per Circuit	Minimum Circuit Ampacity	Maximum Overload Protection	Capacity		Heater Amps per Circuit	Minimum Circuit Ampacity	Maximum Overload Protection
		kW	BTUH				kW	BTUH			
No Heater	-	-	-	6.0*	8	15	-	-	6.0*	8	15
BAYEAAC04BK1 BAYEAAC04LG1	1	3.84	13100	16.0	28	30	2.88	9800	13.8	25	25
BAYEAAC05BK1 BAYEAAC05LG1	1	4.80	16400	20.0	33	35	3.60	12300	17.3	29	30
BAYEAAC08BK1 BAYEAAC08LG1	1	7.68	26200	32.0	48	50	5.76	19700	27.7	42	45
BAYEAAC10BK1 BAYEAAC10LG1	1	9.60	32800	40.0	58	60	7.20	24600	34.6	51	60
BAYEAAC10LG3	1-3 PH	9.60	32800	23.1	36	40	7.20	24600	20.0	32	35
BAYEABC15LG3	1-3 PH	14.40	49200	34.6	50	50	10.80	36900	30.0	44	45
BAYEABC15BK1 - Circuit 1①	2	9.60	32800	40	58	60	7.20	24600	34.6	51	60
BAYEABC15BK1 - Circuit 2		4.80	16400	20	25	25	3.60	12300	17.3	22	25
BAYEABC20BK1 - Circuit 1①	2	9.60	32800	40	58	60	7.20	24600	34.6	51	60
BAYEABC20BK1 - Circuit 2		9.60	32800	40	50	50	7.20	24600	34.6	43	45
BAYEACC25BK1 - Circuit 1①	3	9.60	32800	40	58	60	7.20	24600	34.6	51	60
BAYEACC25BK1 - Circuit 2		9.60	32800	40	50	50	7.20	24600	34.6	43	45
BAYEACC25BK1 - Circuit 3		4.80	16400	20	25	25	3.60	12300	17.3	22	25
Note: * Motor Amps											
① MCA and MOP for circuit 1 contains the motor amps											

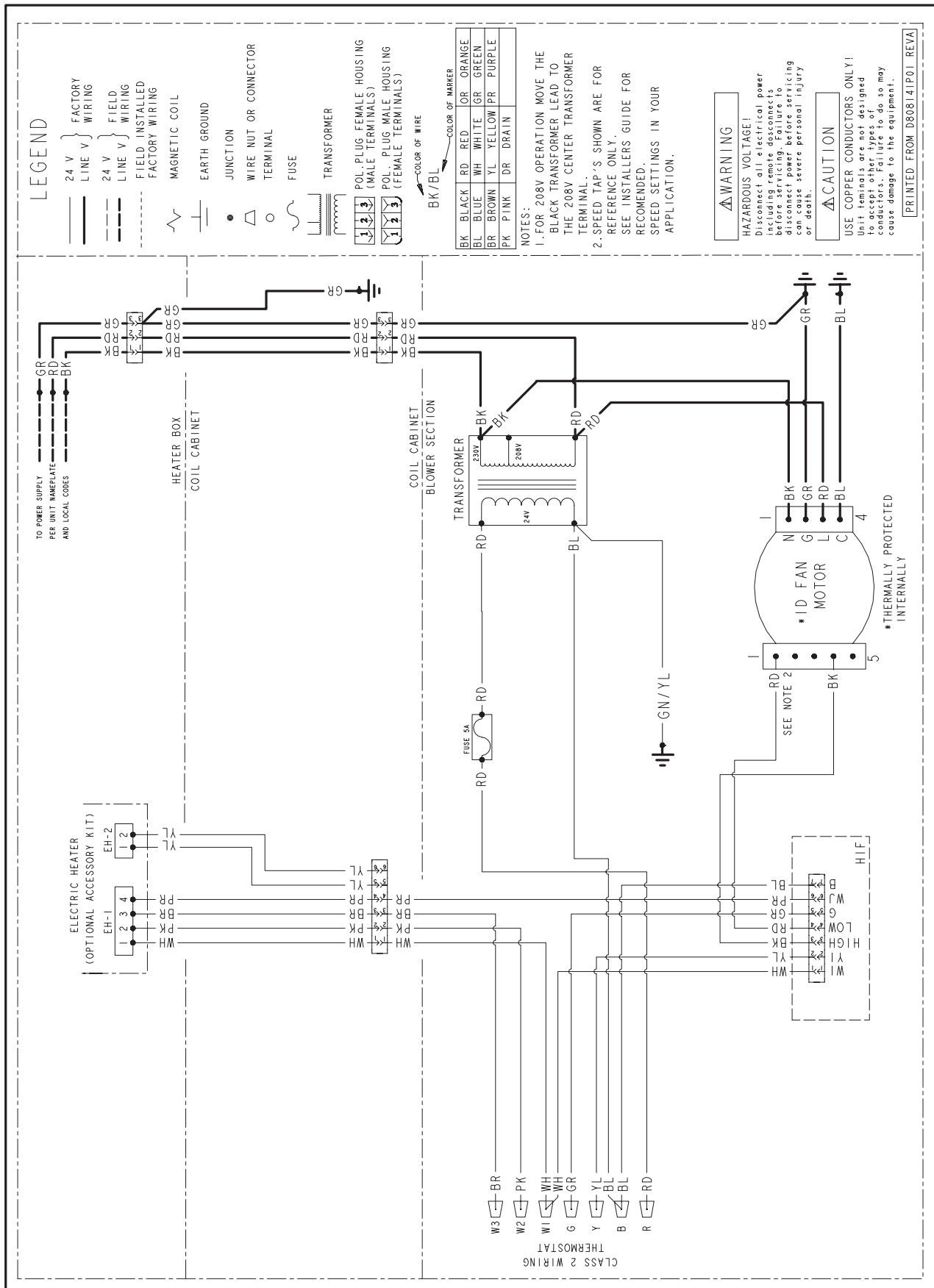
WIRING DATA											
GAM5B0C60M51EB											
Heater Model No.	No. of Circuits	240 VOLT					208 VOLT				
		Capacity		Heater Amps per Circuit	Minimum Circuit Ampacity	Maximum Overload Protection	Capacity		Heater Amps per Circuit	Minimum Circuit Ampacity	Maximum Overload Protection
		kW	BTUH				kW	BTUH			
No Heater	-	-	-	7.6*	10	15	-	-	7.6*	10	15
BAYEAAC04BK1 BAYEAAC04LG1	1	3.84	13100	16.0	30	30	2.88	9800	13.8	27	30
BAYEAAC05BK1 BAYEAAC05LG1	1	4.80	16400	20.0	35	35	3.60	12300	17.3	31	35
BAYEAAC08BK1 BAYEAAC08LG1	1	7.68	26200	32.0	50	50	5.76	19700	27.7	44	45
BAYEAAC10BK1 BAYEAAC10LG1	1	9.60	32800	40.0	60	60	7.20	24600	34.6	53	60
BAYEAAC10LG3	1-3 PH	9.60	32800	23.1	37	40	7.20	24600	20.0	34	35
BAYEABC15LG3	1-3 PH	14.40	49200	34.6	52	60	10.80	36900	30.0	46	50
BAYEABC15BK1 - Circuit 1①	2	9.60	32800	40	60	60	7.20	24600	34.6	53	60
BAYEABC15BK1 - Circuit 2		4.80	16400	20	25	25	3.60	12300	17.3	22	25
BAYEABC20BK1 - Circuit 1①	2	9.60	32800	40	60	60	7.20	24600	34.6	53	60
BAYEABC20BK1 - Circuit 2		9.60	32800	40	50	50	7.20	24600	34.6	43	45
BAYEACC25BK1②③- Circuit 1①	3	9.60	32800	40	60	60	7.20	24600	34.6	53	60
BAYEACC25BK1 - Circuit 2		9.60	32800	40	50	50	7.20	24600	34.6	43	45
BAYEACC25BK1 - Circuit 3		4.80	16400	20	25	25	3.60	12300	17.3	22	25
Note: * Motor Amps											
① MCA and MOP for circuit 1 contains the motor amps											
② If the air handler is applied in downflow or horizontal configurations, the airflow should not exceed 2000 CFM. Airflow above 2000 CFM could result in water blow-off.											
③ Tap 5 can be used but only when the external static pressure is .6" or above.											

Section 18. Distance From Belly Band To Shaft Face Of Motor For Minimum Vibration

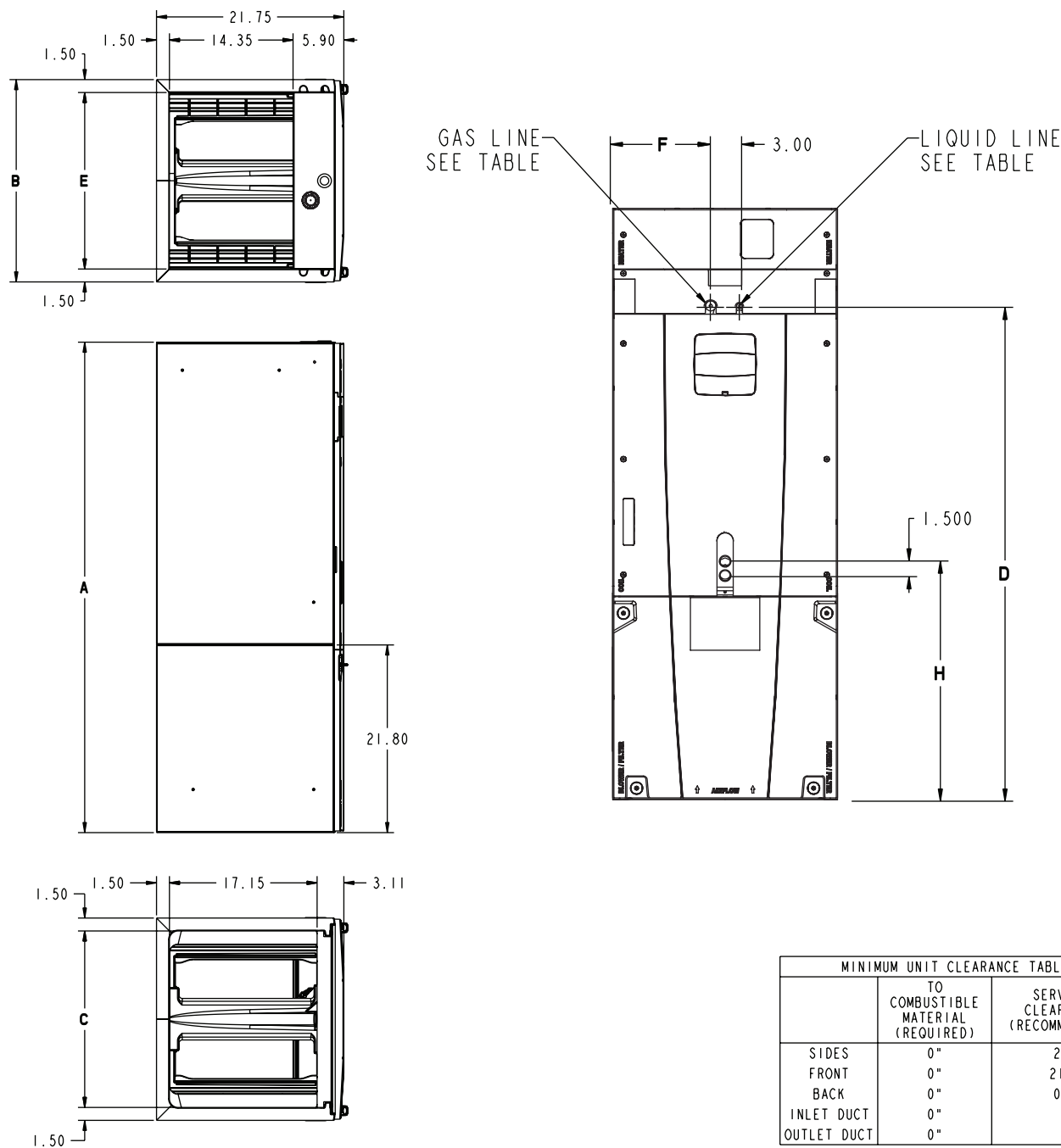


MODEL	DIM "A"
GAM5B0A18M11EB	1-1/8
GAM5B0A24M21EB	1-1/8
GAM5B0B36M31EB	1-1/2
GAM5B0C42M31EB	1-1/2
GAM5B0C48M41EB	2-1/4
GAM5B0C60M51EB	2-1/4

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Section 20. Unit Outline Drawing



MODEL NO.	A	B	C	D	E	F	H	FLOW CONTROL	GAS LINE BRAZE	LIQ. LINE BRAZE
GAM5B0A18	49.9	17.5	14.5	39.6	14.5	7.3	24.4	TXV	3/4	3/8
GAM5B0A24	49.9	17.5	14.5	39.6	14.5	7.3	24.4	TXV	3/4	3/8
GAM5B0B36	55.7	21.3	18.4	45.5	18.4	9.2	24.8	TXV	7/8	3/8
GAM5B0C42	56.9	23.5	20.5	46.7	20.5	10.3	24.5	TXV	7/8	3/8
GAM5B0C48	61.7	23.5	20.5	51.5	20.5	10.3	24.9	TXV	7/8	3/8
GAM5B0C60	61.7	23.5	20.5	51.5	20.5	10.3	24.9	TXV	7/8	3/8

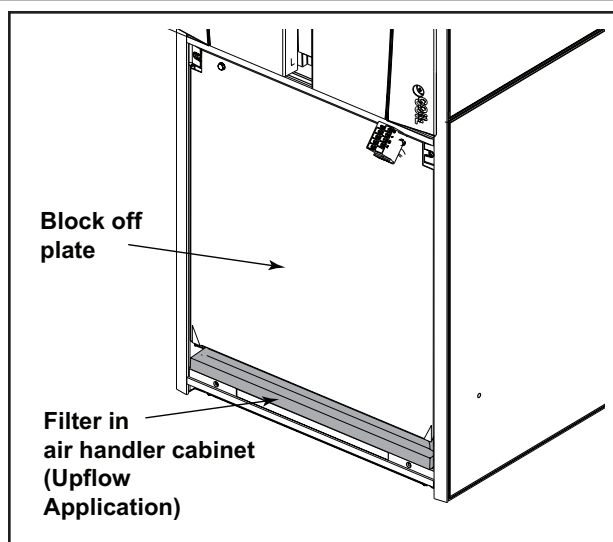
Section 21. Filters

21.1 Filter Considerations

- A filter must be installed within the system.
- A filter channel is provided in the unit, at the bottom of the Blower/Filter compartment.
- For customer ease of filter maintenance, it is recommended that a properly sized remote filter grill(s) be installed for units that are difficult to access. Airflow should not exceed the maximum rated velocity of the filter being used.

Table 21.1 Filter Sizes

Cabinet Size*	A	B	C
Filter Size	16 x 20	20 x 20	22 x 20
* Cabinet size is indicated by the 7th digit in model number.			



Section 22. Start Up

22.1 System Charge Adjustments

The following combinations should be charged to 8 degrees sub-cooling to maintain ratings.

Indoor Unit Model No.	Outdoor Unit Model No.
GAM5B0A18M11EB	4A6B4018E1 4A6H5018E1
GAM5B0A24M21EB	4A6B4024E1 4A6H5024E1
GAM5B0B36M31EB	4A6B4036E1 4A6H5036E1
GAM5B0C42M31EB	4A6B4042E1 4A6H5042E1
GAM5B0C48M41EB	4A6B4048E1 4A6H5048E1 4A6B4049E1 4A6H5049E1
GAM5B0C60M51EB	4A6B4060E1 4A6H5060E1 4A6B4061E1 4A6H5061E1

All other non-rated matches must be charged per the nameplate charging instructions.

The following combinations should be charged to 8 degrees sub-cooling to maintain ratings.

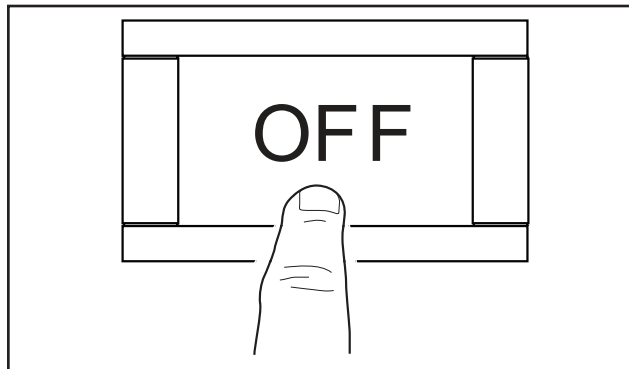
Indoor Unit Model No.	Outdoor Unit Model No.
GAM5B0A18M11EB	4TWB4018E1 4TWR5018E1
GAM5B0A24M21EB	4TWB4024E1 4TWR5024E1
GAM5B0B36M31EB	4TWB4036E1 4TWR5036E1
GAM5B0C42M31EB	4TWB4042E1 4TWR5042E1
GAM5B0C48M41EB	4TWB4048E1 4TWR5048E1 4TWB4049E1 4TWR5049E1 4TWX5049E1
GAM5B0C60M51EB	4TWB4060E1 4TWR5060E1 4TWB4061E1 4TWR5061E1 4TWX5061E1

All other non-rated matches must be charged per the nameplate charging instructions.

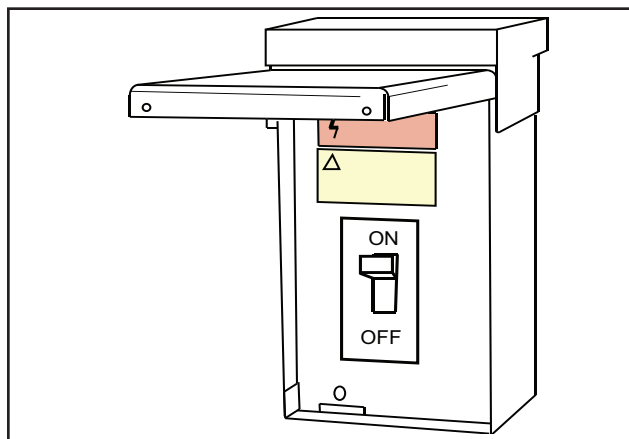
22.2 System Start Up

STEP 1 - Make sure all panels are securely in place and that all wiring has been properly dressed and secured.

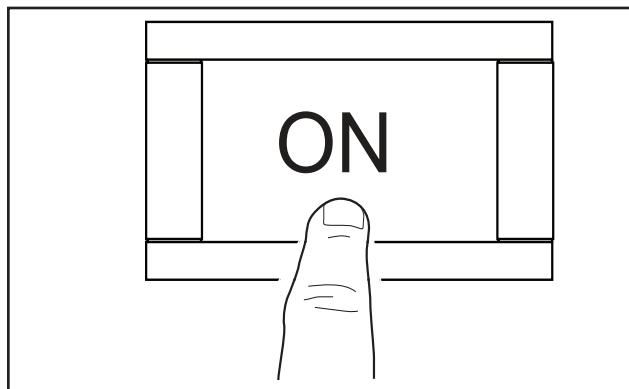
STEP 2 - Set the system thermostat to OFF.



STEP 3 - Turn on electrical power disconnect(s) to apply power to the indoor and outdoor units.



STEP 4 - Set the system thermostat to ON.



Section 23. 2–Stage Outdoor Adjustment

23.1 Adjustments for 2–Stage outdoor AC models

16 SEER Cooling Models					
OD MODEL	ID MODEL	SPEED TAP	SYSTEM STAGE	CFM	ESP
4TTR6024A*	GAM5B0A24M21*	4	H	800	0.333
4TTX6024G*		2	L	725	0.273
4A7A6024G*					
4TTR6036A*	GAM5B0B36M31*	4	H	1225	0.357
4TTX6036G*		3	L	1070	0.272
4A7A6036G*					
4TTR6036A*	GAM5B0C42M31*	3	H	1225	0.400
4TTX6036G*		2	L	1115	0.331
4A7A6036G*					
4TTR6048A*	GAM5B0C48M41*	3	H	1500	0.381
4TTX6048G*		2	L	1415	0.339
4A7A6048G*					
4TTR6060A*	GAM5B0C60M51*	3	H	1700	0.390
4TTX6060E*		2	L	1645	0.365
4A7A6060E*					
17 SEER Cooling Models					
OD MODEL	ID MODEL	SPEED TAP	SYSTEM STAGE	CFM	ESP
4TTR7024A*	GAM5B0A24M21*	4	H	800	0.333
4TTX7024A*		2	L	725	0.273
4A7A7024A*					
4TTR7036A*	GAM5B0B36M31*	4	H	1225	0.357
4TTX7036A*		3	L	1070	0.272
4A7A7036A*					
4TTR7036A*	GAM5B0C42M31*	3	H	1225	0.400
4TTX7036A*		2	L	1115	0.331
4A7A7036A*					
4TTR7048A*	GAM5B0C48M41*	3	H	1475	0.449
4TTX7048A*		2	L	1390	0.399
4A7A7048A*					
4TTR7060A*	GAM5B0C60M51*	3	H	1700	0.390
4TTX7060A*		2	L	1645	0.365
4A7A7060A*					

NOTES

- 1) Speed Tap settings must be changed for two stage operation
- 2) Speed Tap settings listed are for the rated ESP, settings may be different depending on your ESP
- 3) Minimum airflow for electric heat must be maintained. (High Stage)

23.2 Adjustments for 2–Stage outdoor HP models

16 SEER Heat Pump Models					
OD MODEL	ID MODEL	SPEED TAP	SYSTEM STAGE	CFM	ESP
4TWR6024A* ^④	GAM5B0A24M21*	4	H	800	0.333
4TWX6024G* ^④		3	L	750	0.293
4A6H6024G* ^④					
4TWR6024A*	GAM5B0B30M21*	3	H	750	0.383
4TWX6024G*		2	L	665	0.301
4A6H6024G*					
4TWR6036A*	GAM5B0B36M31*	4	H	1150	0.500
4TWX6036E*		3	L	1005	0.382
4A6H6036E*					
4TWR6048A*	GAM5B0C42M31*	4	H	1375	0.468
4TWX6048G*		3	L	1235	0.378
4A6H6048G*					
4TWR6048A*	GAM5B0C48M41*	4	H	1575	0.400
4TWX6048G*		2	L	1420	0.325
4A6H6048G*					
4TWR6060A*	GAM5B0C60M51*	3	H	1700	0.390
4TWX6060E*		2	L	1645	0.365
4A6H6060E*					
17 SEER Heat Pump Models					
OD MODEL	ID MODEL	SPEED TAP	SYSTEM STAGE	CFM	ESP
4TWR7024A* ^④	GAM5B0A24M21*	4	H	800	0.333
4TWX7024A* ^④		3	L	750	0.293
4A6H7024A* ^④					
4TWR7024A*	GAM5B0B30M21*	3	H	750	0.383
4TWX7024A*		2	L	665	.0301
4A6H7024A*					
4TWR7036A*	GAM5B0B36M31*	4	H	1150	0.500
4TWX7036A*		3	L	1005	0.382
4A6H7036A*					
4TWR7048A*	GAM5B0C48M41*	4	H	1575	0.400
4TWX7048A*		2	L	1420	0.325
4A6H7048A*					
4TWR7060A*	GAM5B0C60M51*	3	H	1700	0.390
4TWX7060A*		2	L	1645	0.365
4A6H7060A*					

NOTES

- 1) Speed Tap settings must be changed for two stage operation
- 2) Speed Tap settings listed are for the rated ESP, settings may be different depending on your ESP
- 3) Minimum airflow for electric heat must be maintained. (High Stage)
- 4) Subcooling must be adjusted to 9°F for this match

System Matched with:	Indoor Unit Model No.	Outdoor Unit Model No.	Subcooling
16 SEER HP	GAM5B0A24M21*	4TWR6024A*, 4TWX6024G* 4A6H6024G*, 4TWR7024A* 4TWX7024A*, 4A6H7024A*	9°
All other matches must be charged per the nameplate charging instructions.			

Section 24. Sequence of Operation

24.1 Sequence of Operation

GAM5 Sequence of Operation:

See unit, electric heat, and field wiring diagrams for additional information.

Continuous Fan

IMPORTANT: If the indoor air exceeds 60% relative humidity or simply feels uncomfortably humid, it is recommended that the indoor fan only be used in the AUTO mode.

1. R-G contacts close on comfort control sending 24VAC to the G terminal on the fan relay
2. Low speed contacts close in the fan relay and send 24VAC on terminal labeled "LOW".
3. Blower motor will now run on low speed. Speed is field selectable.

Single Stage Heat Pump OD (cooling)

1. R-Y contacts close on the comfort control sending 24VAC to the Y terminal on the fan relay and the Y in the outdoor unit.
2. R-G contacts also close on the comfort control sending 24VAC to the G terminal on the fan relay. (The combination of 24VAC on terminals Y and G on the fan relay will close the high speed contacts of the fan relay)
3. R-O contacts on the comfort control close sending 24VAC to the O terminal on the switch over valve in the outdoor unit.
4. The blower motor will now run on high speed. Speed is field selectable.

Two Stage Heat Pump OD (cooling)

- 1) R-Y1 contacts close on the comfort control sending 24VAC to Y1 at the outdoor unit.
- 2) R-G contacts close on the comfort control sending 24VAC to the G terminal of the fan relay. (G only will run the fan on low stage setting)
- 3) R-O contacts close on the comfort control sending 24VAC to O on the switchover valve in the outdoor unit.
- 4) R-Y2 contacts close on the comfort control sending 24VAC to Y2 at the outdoor unit. 24VAC is also sent to the Y terminal on the fan relay. The combination of 24VAC on terminals Y and G on the fan relay will close the high speed contacts on the fan relay.

Single Stage Heat Pump OD (heating)

1. R-Y contacts close on the comfort control sending 24VAC to Y terminal on the fan relay and the Y in the outdoor unit.
2. R-G contacts also close on the comfort control sending 24VAC to the G terminal on the fan relay. (The combination of 24VAC on terminals Y and G on the fan relay will close the high speed contacts of the fan relay) The blower motor will now run on high speed.
3. The blower motor will now run on high speed.

Two Stage Heat Pump OD (heating)

- 1) R-Y1 contacts close on the comfort control sending 24VAC to Y1 at the outdoor unit.
- 2) R-G contacts close on the comfort control sending 24VAC to the G terminal of the fan relay. (G only will run the fan on low stage setting)
- 3) R-Y2 contacts close on the comfort control sending 24VAC to Y2 at the outdoor unit. 24VAC is also sent to the Y terminal on the fan relay. The combination of 24VAC on terminals Y and G on the fan relay will close the high speed contacts on the fan relay.

Single Stage Cooling OD

1. R-Y contacts close on the comfort control sending 24VAC to Y terminal on fan relay and the Y in the outdoor unit.
2. R-G contacts also close on the comfort control sending 24VAC to the G terminal on the fan relay. (The combination of 24VAC on terminals Y and G on the fan relay will close the high speed contacts of the fan relay)
3. The blower motor will now run on high speed

Two Stage Cooling OD

1. R-Y1 contacts close on the comfort control sending 24VAC to Y1 at the outdoor unit.
2. R-G contacts close on the comfort control sending 24VAC to the G terminal of the fan relay. (G only will run the fan on low stage setting)
3. R-Y2 contacts close on the comfort control sending 24VAC to Y2 at the outdoor unit. 24VAC is also sent to the Y terminal on the fan relay. The combination of 24VAC on terminals Y and G on the fan relay will close the high speed contacts on the fan relay.

Electric Heating

1. R-W contacts close on the comfort control sending 24VAC to the W terminal on the fan relay. 24VAC is also sent to EHC to energize the heat relay.
2. R-G contacts close on the comfort control sending 24VAC to the G terminal on the fan relay. (The combination of 24VAC on terminals W and G on the fan relay will close the high speed contacts of the fan relay)
3. WJ contacts on the fan relay close providing an interlock circuit to allow the electric heat relays to operate.

The comfort control must be setup to control R-G contacts with a call for electric heat. This closes the interlock circuit and allows the heat relay circuit to be energized.

Section 25. Checkout Procedures

25.1 Operational And Checkout Procedures

Final phases of this installation are the unit Operational and Checkout Procedures. To obtain proper performance, all units must be operated and charge adjustments made in accordance with procedures found in the Service Facts of the Outdoor Unit.

CHECKOUT PROCEDURE

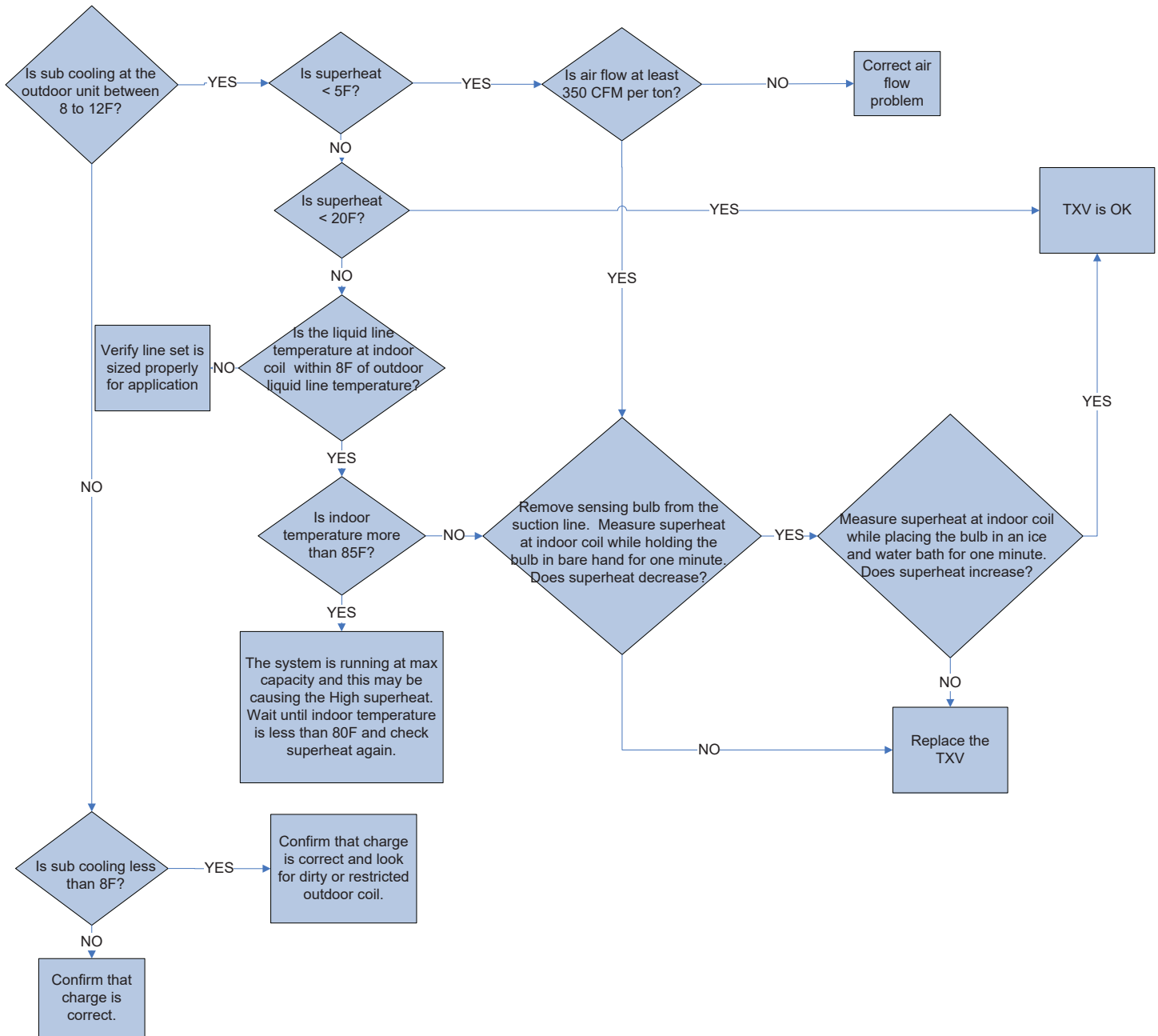
After installation has been completed, it is recommended that the entire system be checked against the following list:

- | | |
|---|---|
| 1. Be sure unit suspension (if used) is secure and that there are no tools or loose debris in or around or on top of the unit. [] | 6. Check drain lines and be sure all joints are tight. [] |
| 2. Properly insulate suction lines and fittings. [] | 7. Be sure the return air filter is installed. [] |
| 3. Properly secure and isolate all refrigerant lines. [] | 8. Be sure that the correct airflow setting is used. (Indoor Blower Motor). [] |
| 4. Verify that all electrical connections are tight. [] | 9. Operate complete system in each mode to verify proper performance. Verify operation of supplementary electric heater. [] |
| 5. Check all duct outlets; they must be open and unrestricted. [] | |

Section 26. Troubleshooting

Before starting, insure the blower wheel, indoor and outdoor coils are clean.

Troubleshooting Indoor TXV / Cooling Mode



CONSTANT TORQUE MOTOR TROUBLESHOOTING FOR GAM5

NOTE: The fan control has a 90 second "OFF" delay that is factory set on. To turn this feature off, turn dip switch to 0 and cycle power to the unit.

Constant Torque Motor Troubleshooting

This terminal block is located on the motor. Look for labels below on the motor side of the connection.

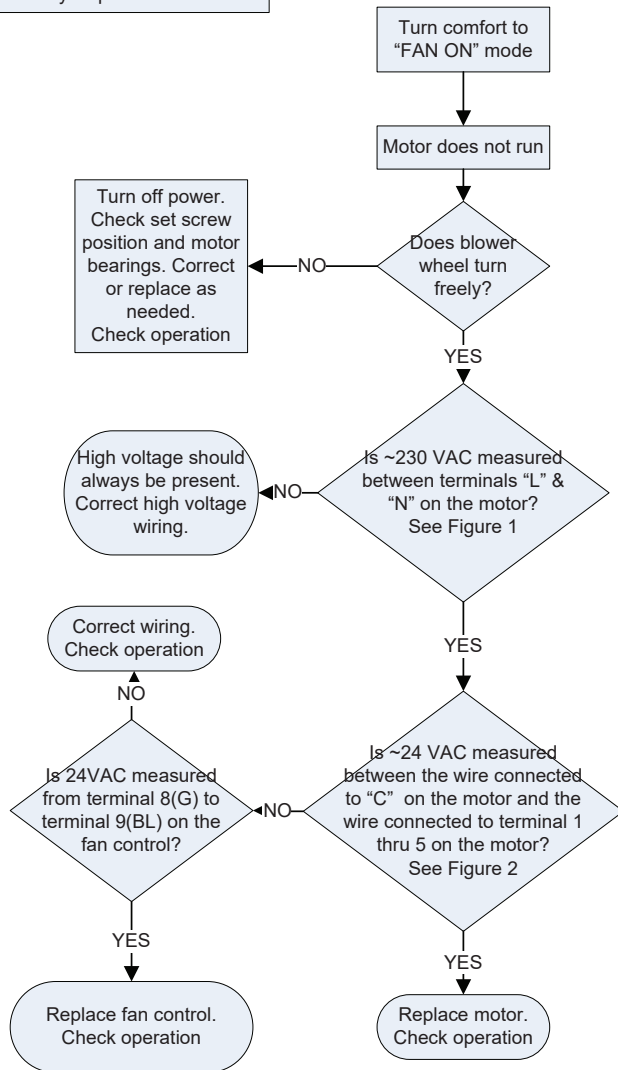


FIGURE 1

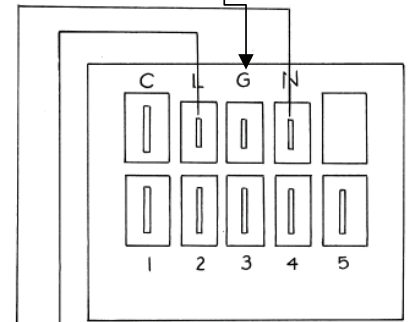
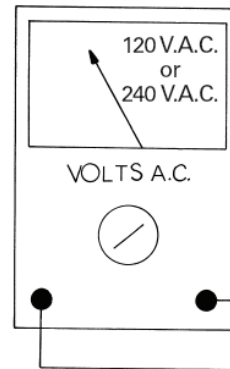
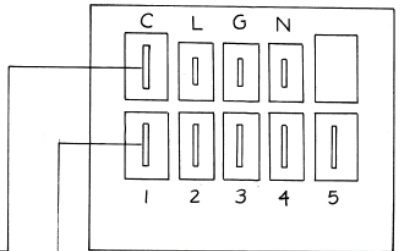
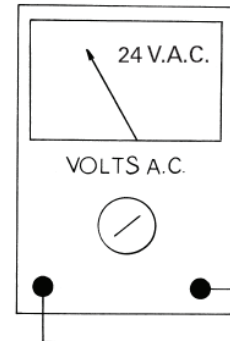


FIGURE 2



NOTES

NOTES

About Trane and American Standard Heating and Air Conditioning

Trane and American Standard create comfortable, energy efficient indoor environments for residential applications. For more information, please visit www.trane.com or www.americanstandardair.com



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-GJ04D1-15B-EN 28 Jul 2023

Supersedes 18-GJ04D1-15A-EN (April 2020)

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