

Installation Instructions

Through-the-Base Gas and Electric Connections

Foundation™ Packaged Rooftop Units 3 to 5 Tons

Model Number:	Used With:
Through-the-Base Electric BAYTBUE320*	G/EB*036-060 G/ED*036-060

Through-the-Base Gas BAYTBGF320*	GB*036-060 GD*036-060
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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.

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Warnings, Cautions, and Notices

Read this manual thoroughly before operating or servicing this unit. Safety advisories appear throughout this manual as required. Your personal safety and the proper operation of this machine depend upon the strict observance of these precautions.

The three types of advisories are defined as follows:

WARNING Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION Indicates a potentially hazardous situation which, if not avoided, could result in minor or moderate injury. It could also be used to alert against unsafe practices.

NOTICE Indicates a situation that could result in equipment or property-damage only accidents.

Important Environmental Concerns

Scientific research has shown that certain man-made chemicals can affect the earth's naturally occurring stratospheric ozone layer when released to the atmosphere. In particular, several of the identified chemicals that may affect the ozone layer are refrigerants that contain Chlorine, Fluorine and Carbon (CFCs) and those containing Hydrogen, Chlorine, Fluorine and Carbon (HCFCs). Not all refrigerants containing these compounds have the same potential impact to the environment. Trane advocates the responsible handling of all refrigerants.

Important Responsible Refrigerant Practices

Trane believes that responsible refrigerant practices are important to the environment, our customers, and the air conditioning industry. All technicians who handle refrigerants must be certified according to local rules. For the USA, the Federal Clean Air Act (Section 608) sets forth the requirements for handling, reclaiming, recovering and recycling of certain refrigerants and the equipment that is used in these service procedures. In addition, some states or municipalities may have additional requirements that must also be adhered to for responsible management of refrigerants. Know the applicable laws and follow them.

WARNING

Proper Field Wiring and Grounding Required!
Failure to follow code could result in death or serious injury. All field wiring MUST be performed by qualified personnel. Improperly installed and grounded field wiring poses FIRE and ELECTROCUTION hazards. To avoid these hazards, you MUST follow requirements for field wiring installation and grounding as described in NEC and your local/state/national electrical codes.

WARNING

Personal Protective Equipment (PPE) Required!
Failure to wear proper PPE for the job being undertaken could result in death or serious injury. Technicians, in order to protect themselves from potential electrical, mechanical, and chemical hazards, MUST follow precautions in this manual and on the tags, stickers, and labels, as well as the instructions below:

- Before installing/servicing this unit, technicians MUST put on all PPE required for the work being undertaken (Examples; cut resistant gloves/sleeves, butyl gloves, safety glasses, hard hat/bump cap, fall protection, electrical PPE and arc flash clothing). ALWAYS refer to appropriate Safety Data Sheets (SDS) and OSHA guidelines for proper PPE.
- When working with or around hazardous chemicals, ALWAYS refer to the appropriate SDS and OSHA/GHS (Global Harmonized System of Classification and Labeling of Chemicals) guidelines for information on allowable personal exposure levels, proper respiratory protection and handling instructions.
- If there is a risk of energized electrical contact, arc, or flash, technicians MUST put on all PPE in accordance with OSHA, NFPA 70E, or other country-specific requirements for arc flash protection, PRIOR to servicing the unit. NEVER PERFORM ANY SWITCHING, DISCONNECTING, OR VOLTAGE TESTING WITHOUT PROPER ELECTRICAL PPE AND ARC FLASH CLOTHING. ENSURE ELECTRICAL METERS AND EQUIPMENT ARE PROPERLY RATED FOR INTENDED VOLTAGE.

WARNING

Follow EHS Policies!
Failure to follow instructions below could result in death or serious injury.

- All Trane personnel must follow the company's Environmental, Health and Safety (EHS) policies when performing work such as hot work, electrical, fall protection, lockout/tagout, refrigerant handling, etc. Where local regulations are more stringent than these policies, those regulations supersede these policies.
- Non-Trane personnel should always follow local regulations.

WARNING

R-454B Flammable A2L Refrigerant!
Failure to use proper equipment or components as described below could result in equipment failure, and possibly fire, which could result in death, serious injury, or equipment damage.
The equipment described in this manual uses R-454B refrigerant which is flammable (A2L). Use ONLY R-454B rated service equipment and components. For specific handling concerns with R-454B, contact your local representative.

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General Information

These instructions describe field assembly and installation for through-the-base gas and through-the-base electric options. Instructions are for units with a 1/2-inch gas supply line.

Inspection

1. Check carefully for shipping damage. If any damage is found, report it immediately, and file a claim against the transportation company. Replace damaged parts with authorized parts only.
2. Compare the order number on the shipping label with the accessory identification information on the ordering and shipping documents to verify that the correct accessory has been received.

Parts List

Through-the-Base Gas		Through-the-Base Electric	
Description	Qty	Description	Qty
Fitting - Pipe: 0.50 NPS X 3.50 length, Black Finish	3	Connector - Conduit, 1/2 Straight	1
Union - Ground Joint, 0.50-in. NPTI	2	Connector - Conduit, 1 1/4 Straight	1
Elbow: 90 Degree, 0.50-in.	2	—	—
Tee Pipe: 0.50 NPTI	1	—	—
Cap, Pipe: 0.50 NPS	1	—	—
Fitting - Pipe: 0.50 NPS X 3.00 length, Black Finish	1	—	—
Valve: Gas Shut-Off 0.50 NPTI	1	—	—
Fitting - Pipe: 0.50 NPS X 8.00 length, Black Finish	1	—	—
Fitting - Pipe: 0.50 NPS X 6.00 length, Black Finish	1	—	—
Elbow: NPS 90 Degree	1	—	—
Grommet - Molded, 0.825-0.919 ID MLD	2	—	—
TBUG Bracket	1	—	—
Union - Pipe, Ground Joint	2	—	—

Installation

WARNING

Hazardous Voltage and Gas!
Failure to turn off gas or disconnect power before servicing could result in an explosion or electrocution which could result in death or serious injury. Turn off the gas supply and disconnect all electric power, including remote disconnects, before servicing the unit. Follow proper lockout/tagout procedures to ensure the power can not be inadvertently energized.

Figure 1. Through-the-base fittings location

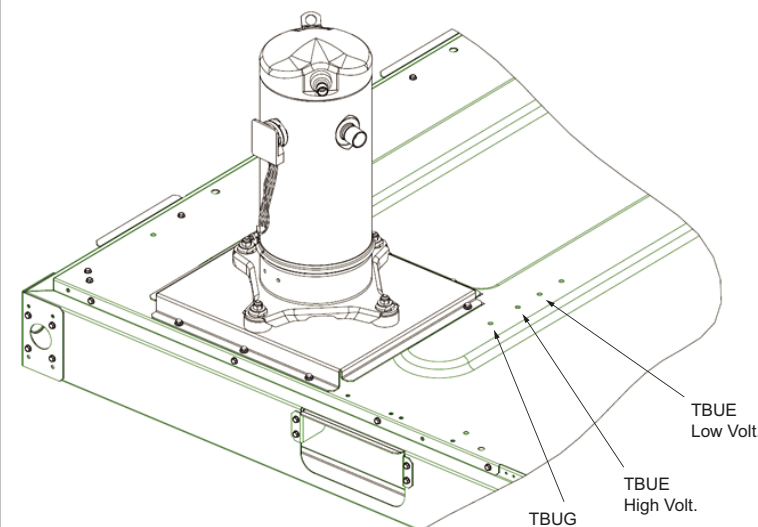


Table 1. Through-the-base holes size chart

BAY Kit Number	Connection Size	Usage	Hole Size On Base Pan
BAYTBGF320*	1/2	TBUG	1-5/8
BAYTBUE320*	1/2	TBUE – Low Voltage	7/8
	1-1/4	TBUE – High Voltage	1-3/4

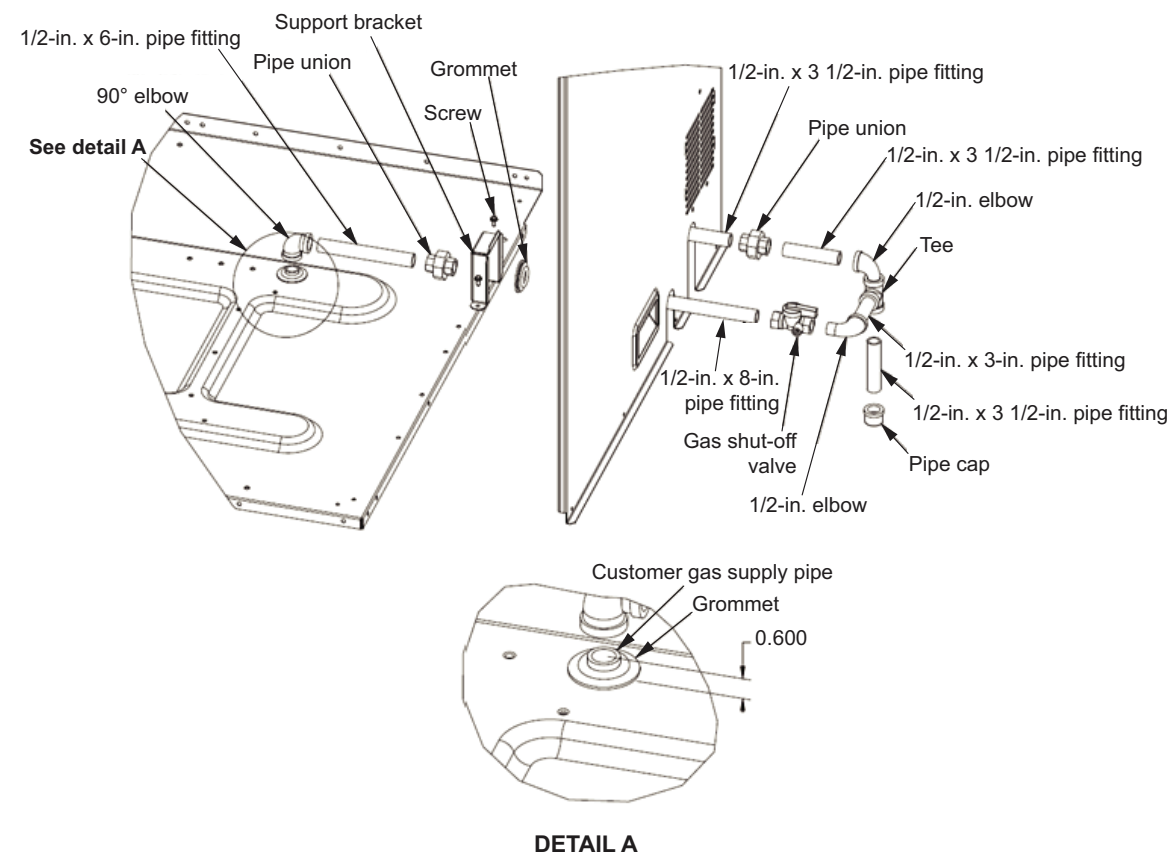
1. Locate three embossed dimples in the base pan near the base of the compressor (see Figure 1). These dimples mark the locations where high voltage power, control wires, and gas connection will be routed through the roof curb and the unit base pan.
2. Using a round knockout hole punch, punch out embossed dimples. See Table 1 for correct punch size.

Installation – Through-the-Base Gas

Note: See Figure 2 for installation steps below.

1. Slide grommet over gas supply line and fit the line through the gas connection hole in the base pan (see Figure 1).
2. Apply pipe sealant on threads of the gas supply line. Tighten an elbow on the gas supply.
3. Apply sealant on 6-inch fitting and add pipe union to the other end.
4. Apply sealant on 8-inch fitting and tighten on the pipe union. Slide the grommet over 8-inch fitting and hook in the grommet to support bracket.
5. Thread and tighten the gas shut-off valve on to the other end of 8-inch pipe fitting.
6. Apply pipe sealant on threads of a 1/2-inch elbow, thread and tighten into the other end of the shut-off valve.
7. Apply pipe sealant on threads of 3-inch fitting and thread the fitting into the other end of the 1/2-inch elbow.
8. Apply pipe sealant on threads of a 1/2-inch Tee, thread and tighten into 3-inch fitting coming off of the elbow.
9. Thread and tighten a 3.5-inch pipe fitting onto the lower end of the 1/2-inch tee and thread and tighten cap at the end.
10. Apply pipe sealant on threads of 1/2-inch 90° elbow. Thread and tighten into tee on one end and 3.5-inch fitting on other end.
11. Apply pipe sealant on pipe union and thread and tighten into the 3.5-inch fitting.
12. Apply sealant to both ends of 3.5-inch fitting, slide through opening on the side post. Thread and tighten the 3.5-inch pipe on one end into pipe union and other end into gas valve.

Figure 2. Through-the-base gas connection



Installation – Through-the-Base Electric

Note: See Figure 3 for installation steps below.

1. Install electrical bulkhead connectors. Place one connector beneath the base pan and mount the other above the base pan.
2. When the electrical bulkhead connectors are in place, field supplied and installed liquid tight conduit connectors and conduits may be attached to the connectors.
3. Pull correctly rated high voltage and low voltage wires through appropriate conduits (see Figure 1) and connect to the unit. Refer to the Installation, Operation, and Maintenance ship-with manual.

Important: Follow all local and national electrical codes when installing electrical service to the rooftop.

Figure 3. Through-the-base electrical conduits

