

Installation Instructions

Through-the-Base Gas Piping

Precedent™ Packaged Rooftop Units

3 to 25 Tons

Model Number: Precedent 3 to 25 Tons
Used With: Gas Heat Digit 1 = Y, D

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.

Introduction

Warnings, Cautions, and Notices

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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Revision History

- Used with information updated to meet A2L standards.
- Updated General Information and Parts List in Installation chapter.

Installation

3 to 12.5 Tons – Digit 39 = A, B, C

General Information

Carefully review installation instructions.

These instructions describe field assembly and installation of gas piping for through-the-base gas option. The following installation instructions are for units with a half inch gas supply line.

Inspection

1. Unpack all components of the kit.
2. Check carefully for shipping damage. If any damage is found, report it immediately, and file a claim against the transportation company.

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.

WARNING

Hazard of Explosion or Fire!

Failure to follow instructions could result in death or serious injury and equipment or property damage. Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

IF YOU SMELL GAS, follow instructions below:

- Do not try to light any appliance.
- Do not touch any electrical switch.
- Do not use any phone in your building.
- Open windows and doors.
- Alert others and evacuate building immediately.
- From a phone outside of the building, immediately call your gas supplier. Follow the gas supplier's instructions. If you cannot reach your gas supplier, call the fire department.

Table 1. Parts list

Item	Qty	Description	1/2 in. Fitting	3/4 in. Fitting
A	2	Grommets		
B	1	TBUG Bracket		
C	1	90° Elbow		
D	1	Pipe Fitting	½ in. x 7¼ in.	¾ in. x 6½ in.
E	1	Gas Ball Valve		
F	1	Street Elbow		
G	1	Pipe Fitting	½ in. x 2½ in.	¾ in. x 2¼ in.
H	1	Tee Pipe		
I	1	Pipe Fitting	½ in. x 4 in.	¾ in. x 4 in.
J	1	Pipe Cap		
K	2	Pipe Fitting	½ in. x 2¾ in.	¾ in. x 2 in.

Installation

Table 1. Parts list (continued)

Item	Qty	Description	1/2 in. Fitting	3/4 in. Fitting
L	1	Pipe Union		
M	1	Pipe Fitting	1/2 in. x 4 1/2 in.	3/4 in. x 5 1/4 in.

Through-the-Base Gas Pipe Installation

Note: See [Figure 1, p. 6](#) and [Table 1](#) while performing the following steps.

1. Remove the plastic plug from the holes in the center post and insert the grommets (A). Install one grommet (A) into bracket (B) and slide grommet (A) and bracket (B) over gas supply line. Attach bracket (B) with one screw to side wall.
2. Apply pipe sealant on threads of the gas supply line.
3. Thread and tighten a 90° elbow (C) to the gas supply line.
4. Slide the pipe fitting (D) through the top grommet (A).
5. Apply sealant to both ends, thread and tighten the pipe (D) into the 90° elbow (C) on the gas supply line.
6. Thread and tighten the gas ball valve (E) on to pipe fitting (D).
7. Apply pipe sealant on threads of street elbow (F) and thread street elbow into gas ball valve (E).
8. Apply pipe sealant on threads of pipe fitting (G), thread and tighten into street elbow (F).
9. Thread and tighten tee pipe (H) onto the pipe fitting (G).
10. Apply pipe sealant on threads of pipe fitting (K), thread and tighten into tee pipe (H).
11. Slide the pipe fitting (M) through the bottom grommet (A).
12. Apply sealant to both ends, thread and tighten the pipe fitting (M) into the 90° elbow (C) on the gas valve.
13. Disassemble pipe union (L).
14. Thread one half of the disassembled pipe union (L) onto the end of the close pipe fitting (K).
15. Thread the other half of the disassembled pipe union (L) onto the end of the pipe fitting (M).
16. Reassemble pipe union (L) and tighten.
17. Apply sealant to both ends of the drip leg pipe fitting (I).
18. Thread and tighten pipe fitting (I) into bottom side of tee pipe (H).
19. Thread and tighten pipe cap (J) to bottom of drip leg pipe fitting (I).

Figure 1. Piping connections

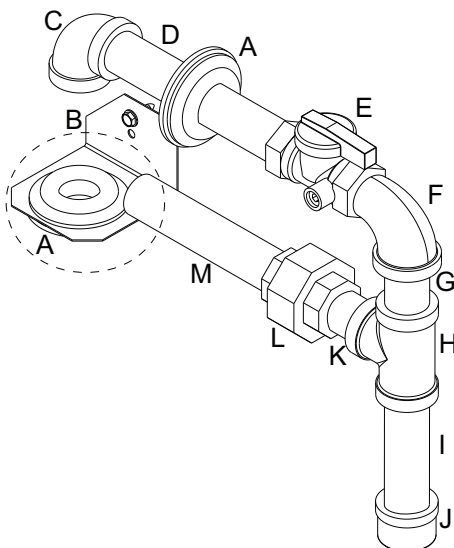
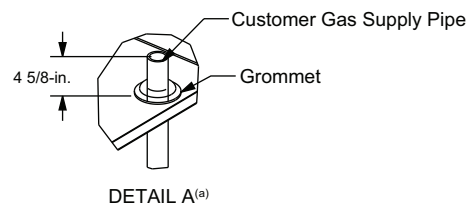


Figure 2. Three quarter detail



^(a) Height of gas pipe required from inside unit base to through-the-base gas pipe assembly (factory provided).

12.5 to 25 Tons – Digit 39 = D

General Information

Carefully review installation instructions.

These instructions describe field assembly and installation of gas piping for through-the-base gas option. The following installation instructions are for units with a three quarter gas supply line.

Inspection

1. Unpack all components of the kit.
2. Check carefully for shipping damage. If any damage is found, report it immediately, and file a claim against the transportation company.

⚠ 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.

⚠ WARNING

Hazard of Explosion or Fire!

Failure to follow instructions could result in death or serious injury and equipment or property damage.

Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

IF YOU SMELL GAS, follow instructions below:

- Do not try to light any appliance.
- Do not touch any electrical switch.
- Do not use any phone in your building.
- Open windows and doors.
- Alert others and evacuate building immediately.
- From a phone outside of the building, immediately call your gas supplier. Follow the gas supplier's instructions. If you cannot reach your gas supplier, call the fire department.

Table 2. Parts list

Item	Qty	Description	3/4 in. Fitting
A	3	Grommet	
B	1	90° Elbow	
C	1	Black Pipe Fitting	¾ in. x 8½ in.
D	1	Tee Pipe	
E	1	Black Pipe Fitting	¾ in. x 4 in.
F	1	Pipe Cap	
G	2	Black Pipe Fitting	¾ in. x 2½ in.
H	2	Street Elbow	
I	1	Pipe Union	
J	1	Gas Shut-off Valve	
K	2	Black Pipe Fitting	¾ in. x 6½ in.

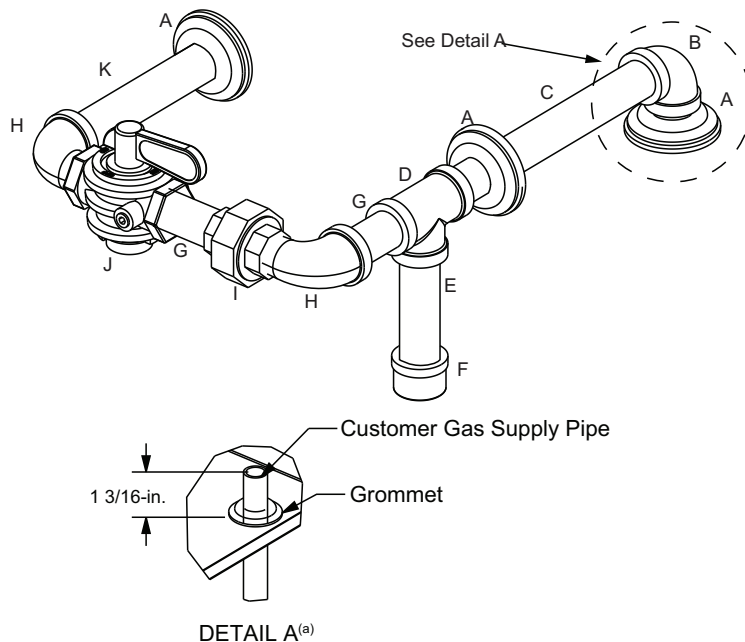
Installation

Gas Supply Installation

Note: Refer to [Figure 3, p. 8](#) and [Table 2](#) while performing the following steps.

1. Remove the plastic plug from the hole in the through-the-base panel on the unit. If not factory installed, slide grommet (A) over gas supply line.
2. Apply pipe sealant on threads of the gas supply line. Tighten a 90° elbow (B) on the gas supply pipeline.
3. Slide the pipe fitting (C) through the right-hand side grommet (A) on the panel.
4. Apply sealant to both ends, thread and tighten the pipe fitting (C) into the 90° elbow (B) on the gas supply line.
5. Thread and tighten the tee pipe (D) on to the pipe fitting (C).
6. Apply sealant to both ends, thread and tighten the pipe fitting (E) into the lower opening of the pipe tee (D).
7. Close the end of the pipe fitting (E) using a pipe cap (F).
8. Apply sealant to both ends, thread and tighten the pipe fitting (G) into the open end of the tee pipe (D).
9. Thread and tighten the street elbow (H) into pipe fitting (G).
10. Slide the pipe fitting (K) through the left-hand side grommet (A) on the panel.
11. Apply sealant to both ends, thread and tighten the pipe fitting (K) into the union in the unit gas valve pipe train.
12. Thread and tighten the street elbow (H) into pipe fitting (K).
13. Apply pipe sealant on threads of street elbow (H) and thread and tighten the gas shut-off valve (J) onto the street elbow (H).
14. Apply sealant to both ends, thread and tighten the pipe fitting (G) into the gas shut-off valve (J).
15. Disassemble pipe union (I).
16. Thread one half of the disassembled pipe union (I) onto the end of the pipe fitting (G).
17. Apply pipe sealant on threads of street elbow (H) on pipe fitting (G) and thread the other half of the disassembled pipe union (I) onto the end of the street elbow (H).
18. Reassemble pipe union (I) and tighten.

Figure 3. Gas piping connections



^(a) Height of gas pipe required from inside unit base to through-the-base gas pipe assembly (factory provided).

Notes

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