

# INSTALLATION INSTRUCTIONS

## NEUTRALIZING KIT

**NOTE:** For the use on 90+ AFUE condensing gas furnaces.

**NOTE:** Read the entire instruction manual before starting the installation.


### SAFETY CONSIDERATIONS

Installing and servicing heating equipment can be hazardous due to gas and electrical components. Only trained and qualified personnel should install, repair, or service heating equipment.

Untrained personnel can perform basic maintenance functions, such as cleaning and replacing air filters. Trained service personnel must perform all other operations. When working on heating equipment, observe precautions in the literature, on tags, and on labels attached to or shipped with the unit, and other safety precautions that may apply.

Follow all safety codes. In the United States, follow all safety codes including the National Fuel Gas Code (NFPA 54-2012/ANSI Z223.1-2012). In Canada, refer to the National Standard of Canada, Natural Gas and Propane Installation Codes (NSCNGPIC), CAN/CGA-B149.1 and .2.

Wear safety glasses and work gloves. Have a fire extinguisher available during start-up, adjustment steps, and service calls.

Recognize safety information. This is the safety-alert symbol . When you see this symbol on the furnace and in instructions or manuals, be alert to the potential for personal injury.

Understand the signal words DANGER, WARNING, and CAUTION. These words are used with the safety-alert symbol. DANGER identifies the most serious hazards which **will** result in severe personal injury or death. WARNING signifies a hazard which **could** result in personal injury or death. CAUTION is used to identify unsafe practices which **may** result in minor personal injury or product and property damage. NOTE is used to highlight suggestions which **will** result in enhanced installation, reliability, or operation.

### Kit Contents

DESCRIPTION	QUANTITY
Neutralizer Pack	1
2 inch Pipe Assembly	1
2 inch Cap	1
1/2 inch Barb Fitting	2

1. A condensate or sump pump **MUST** be used if local codes require, or if no inside floor drain is available, A condensate neutralizer cartridge **MUST** be installed in the drain line unless pump is approved for use with acidic condensate.

2. Install an overflow line if routing to floor drain or sump pump.
3. A condensate pump **MUST** have an auxiliary safety switch to prevent operation of furnace and resulting overflow of condensate in the event of pump failure. The safety switch **MUST** be wired through the R circuit **ONLY** (low voltage) to provide operation in either heating or cooling modes.

### CONDENSTATE DRAIN AND NEUTRALIZER

**NOTE:** Drain line and overflow line can be 1/2 inch PVC flex tube or schedule 40 with a disconnect union so the trap can be removed. Drains must terminate at an inside drain to prevent freezing of condensate and possible property damage.

**INSTALLATION OF NEUTRALIZER** – A condensate neutralizer cartridge **MUST** be installed in the drain line in a horizontal position **ONLY**.

1. Screw barb fittings into end caps
2. Pour neutralizing pack into open end.
3. Tighten remaining cap onto the other end (seal threads with silicone rubber to prevent leakage).
4. Connect neutralizer kit between furnace and floor drain or condensate pump.
5. Affix the 1/2 inch PVC flex tube or schedule 40 coming from the furnace to the barb.
6. Affix 1/2 inch PVC flex or schedule 40 to the other side of cartridge discharging into the drain or sump pump.

Do not use Condensate for any reason as it is acidic.

Inspect the drain line and overflow line at least monthly. If the Condensate Neutralizer Cartridge becomes plugged the condensate will flow through the overflow line.

If this happens, disconnect the drain line cartridge and unscrew end cap from cartridge. Pour the neutralizer out and thoroughly flush neutralizer and inside of cartridge with water. Pour neutralizer back into cartridge and connect drain line. The threads on the cartridge should be sealed with silicone rubber (bathtub caulk) to prevent leakage.

### OVERFLOW DRAIN LINE

An overflow drain line should be added to the installation when furnace is located in an area that may be susceptible to water damage.

If the trap or neutralizer becomes blocked and there is not an overflow drain line, the water-acid solution will overflow onto the floor through the open end of the barb "T". This spillage could cause property damage.

# OVERFLOW DRAIN LINE INSTALLATION

## Preferred Method

Install a barb "T" in drain line prior to neutralizer. Run a clear flexible PVC line from the horizontal outlet of barb "T" to the drain.

## Alternate Method

Install a barb "T" in drain line prior to neutralizer. Install a second barb "T" in the line on the outlet side of Neutralizer Kit. Run a clear flexible PVC line from the horizontal outlet of barb "T" installed on the outlet side of the Neutralizer Kit. **NOTE:** Seal all threaded surfaces with silicone rubber caulking (non-paintable).

