Prevent Frozen Pipes For Good ... No Digging. No Wrapping. No Problem!

(877) 881-2980

HotLine™ Internal Pipe Heater Sewer Line Installation Manual

General HotLine Internal Sewer Pipe Heater Installation Instructions

The HotLine internal Sewer Pipe Heater is an economical, "set-it-and-forget-it", pipe-freeze protection device.

Just install it, plug it in, and leave it plugged in until freezing temperatures are over for the year.

For most HotLine lengths, your water and sewer pipes will be protected from freezing for just pennies per day.

The HotLine heating element consists of an insulated modern alloy resistance wire encased in a copper or plastic tube for protection of water and sewer lines. The excellent heat conductivity of the tube delivers heat directly into the water or sewer line where it is needed most.

The following instructions will enable you to select the length and install the HotLine heating element. When installed properly, the HotLine Internal Pipe Heater will be dependable, trouble-free, and - as long as it's plugged in - provide excellent freeze protection for many years.
HotLine Internal Pipe Heater Installation Instructions For Sanitary Sewer Lines

Installation Criteria:

To install the HotLine heating element successfully in the outgoing sanitary sewer line, the line should be at least a 1½" minimum sewer pipe with long sweeping bends.

The sanitary sewer pipe must be clear and open from the point of entry to the sanitary sewer main.

The HotLine heating element cannot be installed through valves or sharp bends. The minimum diameter of any bends must be 4".

The sanitary sewer line must have the proper type of fittings for the installation of the HotLine heating element.

This may require the cutting and replacement of existing sections of the sanitary sewer line.

The enclosed drawing illustrates how a typical installation might look:

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The type of material used for the existing sanitary sewer line and how it is installed may require different types of fittings and techniques.

Tee’s, Y’s and saddles may need to be installed in the existing sanitary sewer pipe before the length of the HotLine can be determined.

**Requirements to determine the length of the Hotline heating element:**

To measure for the required length of HotLine heating element, it will be necessary that the proper tools be used to determine the clear inside length of the sanitary sewer pipe to be protected.

1️⃣ *HotLine heating elements are engineered for the specific length ordered and can not be modified or cut after manufacturing.*

The most accurate way is to use an electrician’s fish tape, (this item can be purchased at a hardware store, or a home construction supply store).

If Item #(C), #(D), and #(E) as noted below and on the enclosed drawing are not installed, they need to be installed by the owner/plumber to help determine the correct length required.

🔧 **Tools required:**

- 100’ - 0” (plus) electrician’s fish tape
- 100’ - 0” tape measure

**Measuring Procedure:**

1. Insert the electrician’s fish tape through the bushing #(D and E) until it hits the septic tank or main.
2. Pull back the electrician’s fish tape 2 inches and mark at the face-edge of the flush adapter fitting.
3. Then pull back the electrician’s fish tape approximately 2 feet and reinsert to verify the first measurement was correct.
4. Measure the fish tape with a continuous tape to determine the correct length required.

**Installation Items You Need:**
A. Sanitary Sewer Line From Residence to Main (existing)
B. Sanitary Sewer Line From Residence (existing)
C. 4" or 3" Sanitary Tee or Y (if does not exist, one needs to be installed)
D. 4" or 3" x 2" or 1½" or 1¼" Bushing (FTG x P)
E. 3" or 2" or 1½" or 1¼" x ½"; Flush Adapter (FTG x F)
F. ½" Threaded Plug, to be installed temporarily after measurements are taken, to seal the sewer pipe until the HotLine is received and ready to be installed.

The following items will be furnished with or installed on the HotLine heating element:

1. Strain Relief - 3 parts: male fitting, compression cone and hex compression nut. Will be installed on the HotLine heating element.
2. Ground Wire Clamp
3. Ground Wire
4. LB Conduit Body Box With Strain Reliefs (one of the strain reliefs will be installed on the HotLine heating element), See Item #(1)
5. Low Voltage Output Wire (Black [5.1] and White [5.2]) from Power Center Box (transformer)
6. Power Center Box
7. Electrical Wire To Receptacle

Installation Schematic: (See enclosed drawing):
**Sewer Line Installation:**

The HotLine Power Center box should be located out of the weather, less than five feet (1.524m) from an electrical outlet and within two feet (.6096m) of the HotLine heating element.

The HotLine Power Center box should be anchored to a secured element with screws through the flanges at the top of the Power Center box after assembly and installation. Screws and proper anchors are furnished by the owner or plumber.

» When installing the HotLine heating element, verify that the strain relief and fittings are all in place on the heating element tube in the order as shown on the enclosed isometric drawing.

» Then carefully unwind the coil from the tip end as you are putting the tip end of the heating element tube into the sanitary sewer pipe.

» ⚠️ Do not pull the HotLine Internal Pipe Heater element off the side of the coil - *Unroll Only!*

» ⚠️ Do not bend it sharply and do not kink or smash the heating element tube. **Doing so will VOID the warranty.**
Keep the HotLine Internal Pipe Heater element as reasonably straight as possible as you unwind. It will easily slip into place if kept straight.

If your HotLine is longer than 50 feet you will need assistance installing it:

1. Tape a nail to the end of the electrician's fish tape, or use a plumber's camera.

2. On the 50 feet or longer HotLines you will find an eyelet on the tip end.

3. Take a small piece of string and put it through the eyelet and tie a knot.

4. Then with the electrician's fish tape, slide the nail through the string and slowly start to insert the HotLine in the sanitary sewer line by pushing on the fish tape or camera.

5. Once the HotLine is installed, give a slight jerk on the fish tape or camera to release the HotLine from the fish tape or camera.

6. Then, pull out the fish tape or camera and your HotLine will be installed. DO NOT WORRY ABOUT THE STRING AS IT WILL JUST FLOAT IN THE WATER LINE.

Remove the LB conduit body box cover and gasket and set aside to be reinstated after wires are connected.

The HotLine Internal Pipe Heater element should project approximately 1' - 0" out from face of the strain relief male fitting in the sanitary sewer pipe for ease of connecting the wires within the LB conduit body box (Item #4 above).

The HotLine Internal Pipe Heater element can be pushed through the strain relief for ease of connecting the wires together.

**Make and enclose the following connections within the LB conduit body box (Item #5 above).**

Using the nuts and bolts that are attached to the end of the HotLine heating element:

» Connect the white wire of the low voltage output wire from the power
center box to the copper ground wire clamp of the HotLine heating element.

» Connect the black wire of the low voltage output wire from the power center box to the center insulated modern alloy resistance wire of the HotLine heating element.

» After the low voltage output wires have been connected, pull the connection back into the LB conduit body box (Item #4 above).

» ⚠ Make sure these connections are not touching each other inside the box as they could short out!

» Install and tighten the strain relief to the straight end of the LB Box.

» Tighten the other strain relief in the LB conduit body box onto the low voltage output wire

» Then install the LB conduit body box cover and gasket.

With the electrical hook up complete, push the HotLine heating element into the plumbing sewer line. Then tighten the strain relief fitting's hex nut.

This completes the Sewer installation. The HotLine Internal Pipe Heater can be put into service.

The last connection to be made is to plug the power cord into the nearby 120 Volt outlet.
**WARNING:**

» Do not connect the HotLine heating element directly to any 120 Volt outlet.

» The HoltLine Internal Pipe Heater must operate only from the supplied HotLine heating element Power Center box.

» The top of the power center box may reach 176° F (80° C).

Other considerations:

The HotLine Power Center box contains an indicator light, operates on 120 Volts (240 Volts), and provides a low voltage output to the HotLine heating element.

❗ *There is no need to ever open the Power Center box!*

The fuse which protects the 120 Volt (240 Volts) winding of the power center box may be changed without opening the Power Center box.

There are no required hookup connections within the HotLine Power Center box.

The HotLine Power Center box should be located out of the weather, less than five feet from an electrical outlet and within two feet of the HotLine heating element.

The HotLine Power Center box should be anchored to a secured element with screws through the flanges at the top of the Power Center box. Screws and proper anchors are furnished by owner or plumber.

All HotLine heating element equipment has been designed and fabricated for continuous operating service.

The HotLine heating element can operate in a wet or dry atmosphere (inside the sanitary sewer pipe) without reducing the life expectancy of the pipes.

If need help with your installation please call *(877) 881-2980* for assistance.