



ThermoSoft®
INTERNATIONAL CORPORATION

Power Connection Kit
Instructions

Power Connection Kit Installation



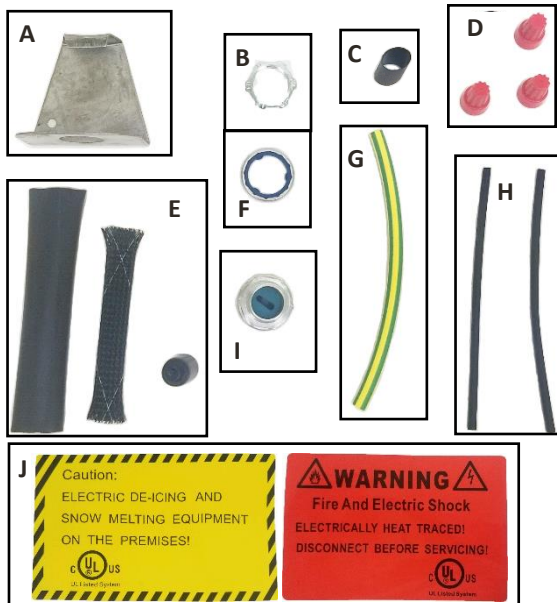
IMPORTANT: Read this manual before attempting to install your heating system. Incorrect installation could create damage and will invalidate your warranty.

TECHNICAL HELPLINE
1-847-607-6286

DESCRIPTION

ThermoSoft's Power Connection Kit is for use with NeverFreeze® self-regulating cable for roofs and gutters. The kit connects a live cable in a junction box with a power source. It includes an end seal kit which consists of a woven braid sleeve, shrink tube, and heat shrink cap.

CONTENTS



- A – Mounting Bracket (for Piping)
- B – Lock Nut
- C – Shrink Tube (1/2"x1")
- D – Wire Nuts (3 Total)
- E – End Seal Kit
- F – Blue Grommet and Gasket
- G – Yellow Shrink Tube (1/4"x6")
- H – Long Shrink Tubes (2 total) (1/8" x 5 1/2")
- I – Seal Fitting, White Grommet, Gasket
- J - Labels

TOOLS NEEDED

- Heat Gun
- Measuring Tape
- Wrench
- Pen
- Screwdriver
- Needle-Nose Pliers
- Wire Cutter
- Utility Knife

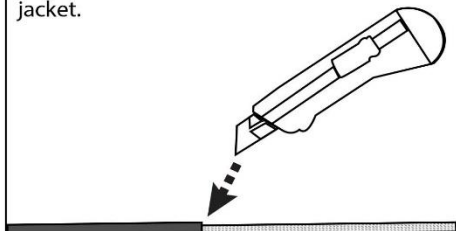
WARNING

- Burning while heating shrink tubes will create fumes that may irritate skin, throat or eyes.
- If you have any questions, stop install and call ThermoSoft® or consult a licensed electrician before moving forward.

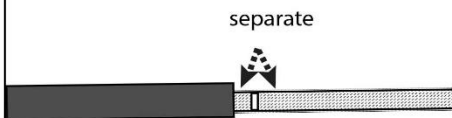
Step 1: Slide the Seal Fitting, White Grommet, Gasket and Seal Fitting Screw (I) onto NeverFreeze® heating cable.



Step 2: Use a utility knife to slice around the heating cable's outer jacket at a distance of 7" (178mm) from the end. DO NOT CUT BRAID OR INNER JACKET. Bend where slice is to break off outer jacket.



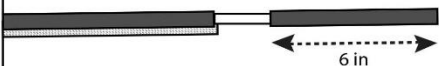
Step 3: CAREFULLY widen open slit in braid to expose heating element. Pull heating element out gently.



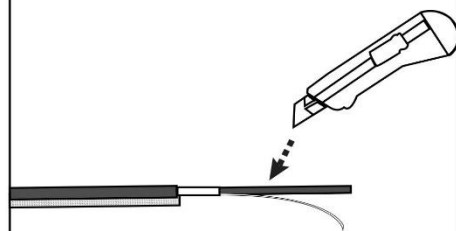
Step 4: Coax the heating element out of the braid more. Bend the heating cable and push the insulation out of the braid.



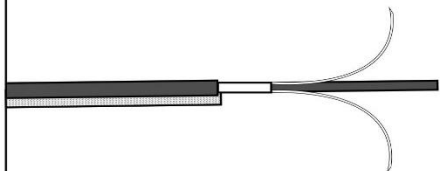
Step 5: Move braid to the side. Cut off insulation of cable 6" from its end.



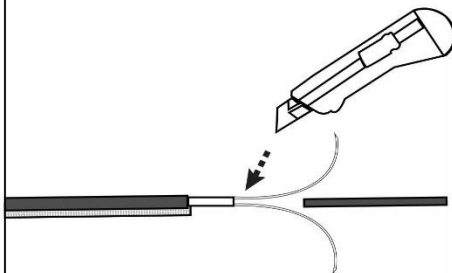
Step 6: Use utility knife to cut PTC and expose wires. BE CAREFUL NOT TO KNICK OR CUT WIRES.



Step 7: Peel back exposed wires.



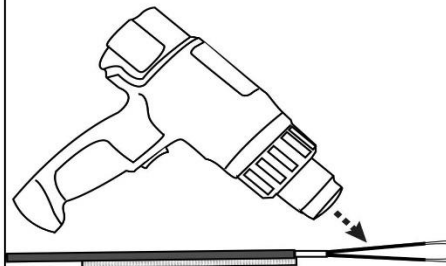
Step 8: Cut PTC off leaving wires. BE CAREFUL NOT TO KNICK OR CUT WIRES.



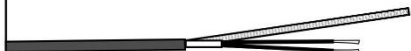
Step 9: Slide the two long shrink tubes (H) onto exposed wires.



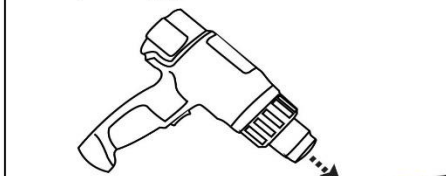
Step 10: Use a heat gun to shrink the tubes, moving heat side to side.



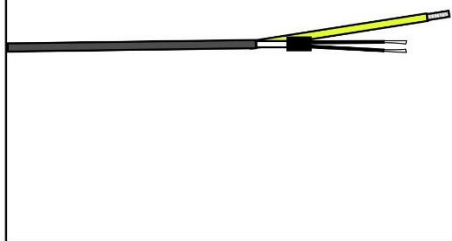
Step 11: Lift up the braid that was folded over.



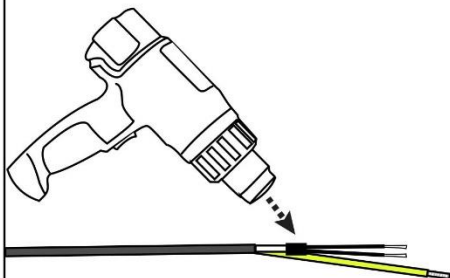
Step 12: Slide the yellow shrink tube (G) over the braid and use heat gun to shrink, moving gun side to side.



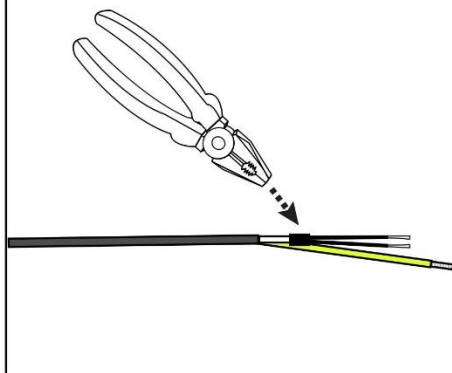
Step 13: Slide the short black shrink tube (C) onto the end of the heating cables.



Step 14: Use the heat gun and heat the short shrink tube evenly. Stop when adhesive comes out the ends.



Step 15: While the tube is hot, use pliers to pinch between wires for 10 seconds.

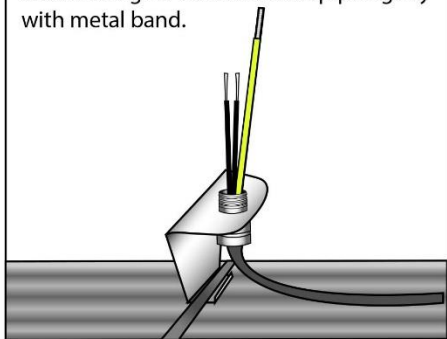


The final product should look like this:

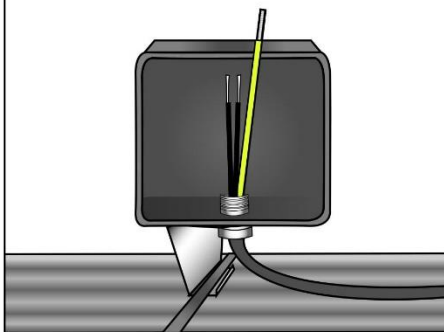


See next page for electrical connection steps.

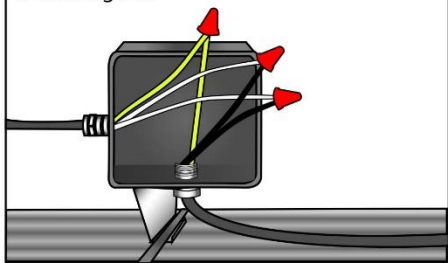
Step 16: Attach Mounting Bracket (A) to the pipe you will be heating. Place Seal Fitting (I) into position of bracket with cables straight. Fix bracket on pipe tightly with metal band.



Step 17: Use junction box. Tighten after inserting heating cable. Leave minimum 6" inside box.



Step 18: Make connections. Connect the power wires to the cable wires, and the ground wire to the cable braid. Wire nuts (D) cannot be connected with aluminum wires. Ground the junction box. For heating cables with outer jacket, see shown figure.



Step 19: Place Caution sticker on junction box.

