



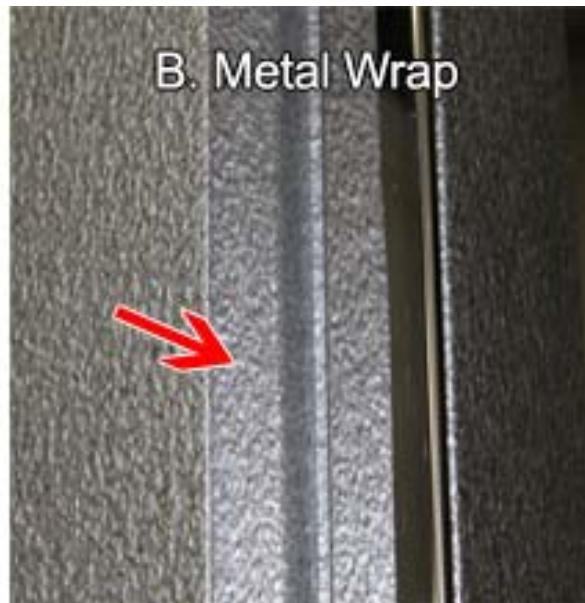
Replacement Heater Wire Instructions for U.S. Cooler walk-in doors

U.S. Cooler produces 2 types of doors – both installation instructions are included in this manual. Verify which type of door you have to ensure you follow the correct installation instructions.

Which type of door do I have?

Looking at the side of the door frame:

- A. If the door has a gray vinyl extrusion on the side of the frame it is a **Polyurethane** Door.
- B. If the door has a metal wrap on the side of the frame it is an **Extruded Polystyrene** Door.





A. REPLACEMENT OF LOOPED HEATER WIRE WITH SELF-REGULATING WIRE IN A URETHANE FOAM DOOR

CAUTION: Wire is designed to perform under low temp conditions. Do not energize heater wire unless freezer is running or possible overheating of door gasket could occur.

- Disconnect power.
- Block doorway with curtain to prevent cold air loss and subsequent product warming.
- Remove the threshold screws that hold the threshold down to floor. Drill out rivets holding threshold to bottom plate with a 1/8" drill bit.
- The door heater wire casing consists of a stainless steel cap that hooks onto the pvc frame. The cap is shaped like a C and the edges hook around fingers on the frame. Beginning with the piece on the top of the frame, place a wide flat blade screwdriver under the outer edge of the cap and turn to gently lift cap. Work the cap off gently and a little at a time to keep from marring the pvc frame. (Fig 1&2)
- Unwire the heater wire from the junction box and pull leads through 90 degree elbow and remove old heater wire.
- Remove old caulking around ends of threshold, in the corners of the stainless steel trim, and in the 90 degree elbow attached to the lamp fixture.
- Drill a series of 1/4" holes about 1/2" deep into pvc extrusion just above the threshold plate from the heater wire groove out to the door opening on both door frame legs. Using drill bit drill out holes to create an opening from the wire groove out to the door opening to allow heater wire to sit in. (Fig 3)
- Take a sharp wood chisel and chisel out the edges of the groove the heater wire sits in 3" above and below the door frame hole. (Fig 4)
- Cut 1/8" off the bottom of the tracking on the sides of the door frame with a pair of tin snips. Make sure there are no sharp edges on end of tracking.
- Push heater wire in center groove of pvc extrusion across top and down the hinge side of the frame. Start heater wire at the corner so that the only the 3 flexible 14Ga wires are going through the conduit hole. (Fig 5&6&7)
- Replace the tracking on the hinge side of the door frame. Hook tracking under the outside edge of the base (edge furthest away from door opening) and then push down over inner edge of base track.
- Run heater wire across threshold plate Tape every 6" with foil tape. **MAKE SURE HEATER WIRE IS IN FRONT OF THE HOLES THAT ATTACH THE THRESHOLD PLATE DOWN TO PREVENT DAMAGE FROM SCREWS.** Start heater wire up latch side of frame. (Figure 8)
- Reattach threshold with threshold screws and rivet back to threshold plate.
- Cut heater wire 1" from the end of the track. Cut outer braid back from end 2". Cut a 1/4" slot down center of the end of the heater wire and cut 1/4" off one of the bus wires. (See figure 9)
- Center small piece of heat shrink tubing on end of heater wire and heat shrink. Bend small piece of heater wire over on itself and place the large piece of heat shrink tubing over all of the end and heat shrink. (Fig 10)
- Connect black lead of heat wire to black lead in light fixture. Connect white lead of heat wire to white lead in light fixture. Connect green lead of heat wire to green lead in lamp fixture.
- Make sure heat wire is functioning properly. Replace the rest of the tracking on the door frame. (Fig 11)
- Recaulk corners of tracking and threshold and 90 degree elbow (To alleviate any condensation problems).
- Reattach threshold with threshold screws and rivet back to threshold plate. (Fig 12)



Figure 1

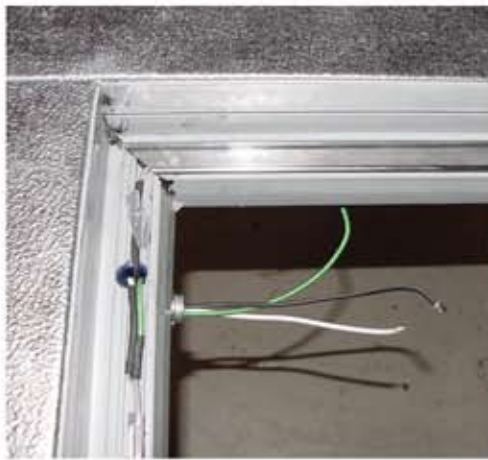


Figure 2



Figure 3



Figure 4



Figure 5



Figure 6



Figure 7

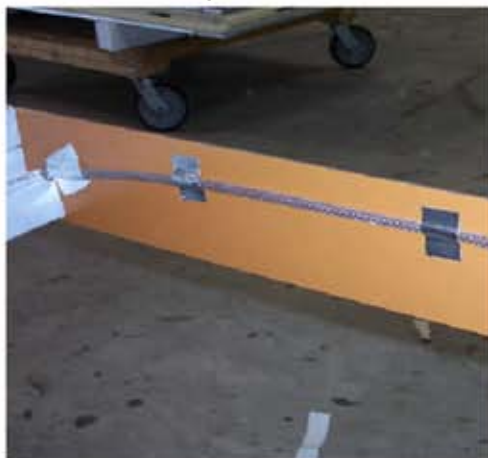


Figure 8



Figure 9



Figure 10



Figure 11



Figure 12



B. REPLACEMENT OF LOOPED HEATER WIRE WITH SELF-REGULATING WIRE IN AN EXTRUDED POLYSTYRENE DOOR

CAUTION: Wire is designed to perform under low temp conditions. Do not energize heater wire unless freezer is running or possible overheating of door gasket could occur.

- Disconnect power.
- Block doorway with curtain to prevent cold air loss and subsequent product warming.
- Remove the threshold screws that hold the threshold down to floor. Drill out rivets holding threshold to bottom plate with a 1/8" drill bit.
- The door heater wire casing consists of 2 parts, a galvanized base channel that is fastened to the door frame, and a stainless steel cap that hooks over the base. (Fig 1) Remove the stainless steel cap only. The cap is shaped like a C and the edges hook around the base channel. Beginning with the piece on the header of the door, place a flat edge between the frame and the cap and gently push cap towards opening of the door. This will unhook the inner edge allowing you to push the cap back towards the frame and loosen the other edge. (Fig 2 & 3)
- Unwire the heater wire from the junction box and pull leads through 90 degree elbow. Untape wire from base channel and remove old heater wire.
- Remove old caulking around ends of threshold, in the corners of the stainless steel trim, and in the 90 degree elbow attached to the lamp fixture.
- Replace any large headed screws that would hold up new heater wire with drywall screws. (Fig 4)
- Run heater wire across base channel at top of door, taping every 6" with foil tape. Start heater wire at the corner so that the only the 3 flexible 14Ga wires are going from the corner down to the conduit hole. (Fig 5)
- Replace the tracking on the top of the door frame. Hook tracking under the outside edge of the base (edge furthest away from door opening) and then push down over inner edge of base track. (Fig 6)
- Cut 1/8" off the bottom of the tracking on the sides of the door frame with a pair of tin snips. Make sure there are no sharp edges on end of tracking.
- Run heater wire down metal track on hinge side of door frame taping every 6" with foil tape.
- Replace the tracking on the hinge side of the door frame.
- Run heater wire across threshold plate Tape every 6" with foil tape. **MAKE SURE HEATER WIRE IS IN FRONT OF THE HOLES THAT ATTACH THE THRESHOLD PLATE DOWN TO PREVENT DAMAGE FROM SCREWS.** (Fig 7&8)
- Reattach threshold with threshold screws and rivet back to threshold plate. (Fig 9)
- Cut heater wire 1" from the end of the track. Cut outer braid back from end 2". Cut a 1/4" slot down center of the end of the heater wire and cut 1/4" off one of the bus wires. (Fig 10)
- Center small piece of heat shrink tubing on end of heater wire and heat shrink. Bend small piece of heater wire over on itself and place the large piece of heat shrink tubing over all of the end and heat shrink. (Fig 11)
- Run heater wire up the metal track at side of the door frame, taping every 6" with foil tape, Heater wire will run along side of the supply wires at top of the metal track. (Fig 12)
- Connect black lead of heat wire to black lead in light fixture. Connect white lead of heat wire to white lead in light fixture. Connect green lead of heat wire to green lead in lamp fixture.
- Recaulk corners of tracking and threshold and 90 degree elbow (To alleviate any condensation problems). Make sure heater wire is functioning properly.



Figure 1



Figure 2



Figure 3



Figure 4



Figure 5



Figure 6



Figure 7



Figure 8



Figure 9



Figure 10



Figure 11

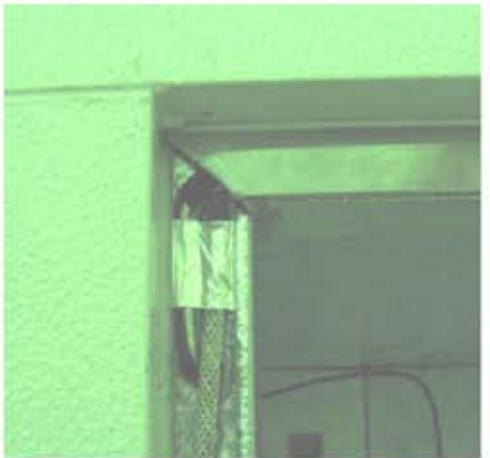


Figure 12