Cold Climate Heated Hose

SAFETY

Electrical Hazard

WARNING: THIS EQUIPMENT CONTAINS HIGH VOLTAGE! ELECTRICAL SHOCK CAN CAUSE SERIOUS OR FATAL INJURY. ONLY QUALIFIED PERSONNEL SHOULD ATTEMPT PLACEMENT, OPERATION AND MAINTENANCE OF ELECTRICAL EQUIPMENT. REMOVE ALL SOURCES OF ELECTRICAL POWER BEFORE PERFORMING ANY SERVICE WORK TO THE MACHINE. USE PROPER LOCKOUT TAGOUT (LOTO) PROCEDURES TO ENSURE A SAFE WORK ENVIRONMENT.

Entanglement Hazard

WARNING: ENSURE THAT PERSONNEL ARE CLEAR OF THE ELECTRIC CORD AND CHAIN TO AVOID ENTANGLEMENT.

Laceration Hazard

CAUTION: WHEN UNPACKING, BE CAREFUL AS THE PACKAGING STAPLES MAY BE SHARP AND CAUSE LACERATION IF PROPER CARE IS NOT USED.

Cold Climate Heated Hose

Hatch Requirement

A 12 inch (305 mm) diameter hatch opening is required to fit the GS Mixer through.

Power Requirement

120VAC, 20amp GFCI protected service and means of quick power disconnect recommended.

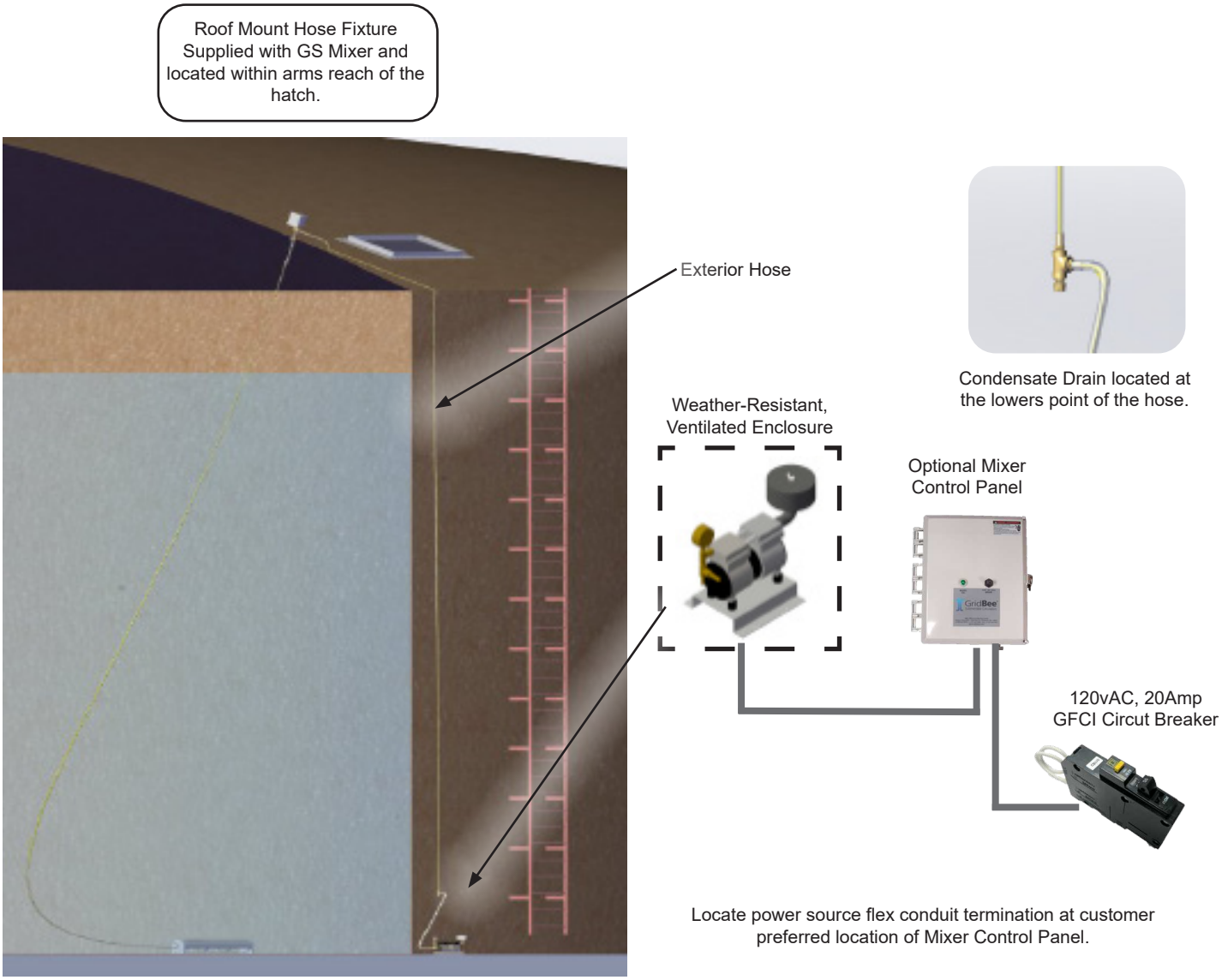


Figure 1: *Typical GS Placement*

RATING					FULL LOAD		LOCKED ROTOR AMPS
HP	KW	VOLTS	HZ	S.F.	(2) AMPS	WATTS	
1	0.655	115	60	1.6	6.0	655	18

Cold Climate Heated Hose

Contents

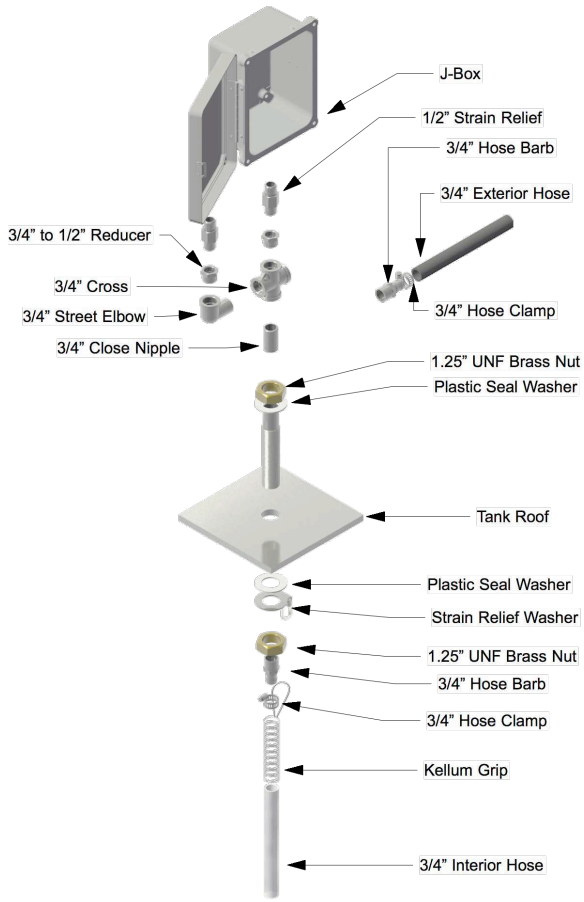
Thank you for purchasing the Winterized Hose. The winterized hose is designed to help prevent freezing of the air line that feeds the Mixer.

When opening the box ensure that you have all the components listed.

The instructions here will replace the standard hose that is shown in the Manual.

Install Overview

The Winterized Hose uses a self regulating heating element that will keep the hose from frosting shut. The heating element power starts at the air unit and has a junction box on the top of the tank. The heating element then runs down and ends a few feet from the machine.



Exploded ISO View

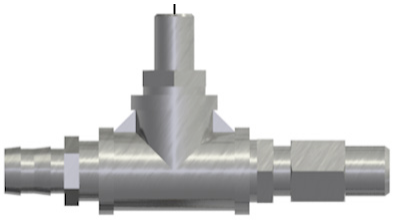


Figure 1: *Electrical Connection Assembly*

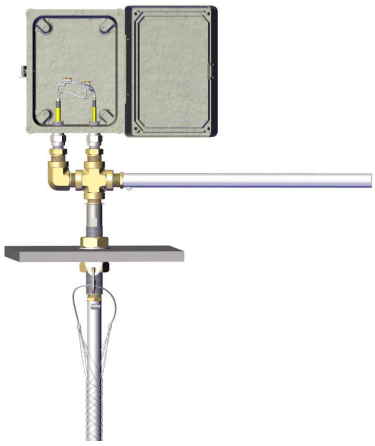


Figure 2: *Tank Penetration Assembly with External Hose*

Figure 3:*Interior Hose with Internal Heating Element*

Cold Climate Heated Hose

Top of Tank Penetration Fixture

Step 1: Locate the hatch where the Mixer will be installed through and mark a penetration point on the roof or the penetration fitting that the air hose will pass through. When selecting a penetration location through the roof, be sure to confirm the following:

A. The penetration is not going to hit an internal tank beam.
B. The penetration is centered within a clear footprint of approximately 8-inch X 8-inch (20cmX20cm)
C. The penetration can be accessed on the inside of the tank with a catch bucket when reaching from the hatch.

Step 2: Use a cordless drill with the 1-5/16 inch (33mm) hole saw and begin drilling a hole through the tank roof. A small amount of food grade vegetable oil works well for lubrication of the hole saw. Prior to completing the penetration, position a catch bucket below the penetration point to catch filings and the hole cut out. If a catch bucket is not readily available, use the cardboard box the hole saw and fittings came in to catch the filings and disc cut out from falling into the tank.

Step 3: Thoroughly clean all surfaces around the penetration of any filings before removing the catch bucket. The penetration is now ready for a sealant application and installation of the Penetration Fitting.

Step 4: Apply a healthy amount of sealant on all the surrounding surfaces of the penetration (interior, exterior, and inner wall). This will prevent future corrosion of the roof around the fixture.

Step 5: Insert Tank Penetration Assembly into hole, that has been sealed with lexel. Place seal washer and strain relief washer and brass nut on to penetration assembly and tighten nut.

Step 6: Place kellem grip on end of internal hose that has yellow heating element extending from hose.

Step 7: Install Hose Barb into end of penetration fitting inside of tank and tighten. Fish yellow heating element through the penetration fixture, so the end is on the exterior of the tank. Attach kellem grip to strain relief washer using quicklink, attach hose to hose barb using hose clamp and tighten.

Step 8: Attach the crossfitting and fish exterior hose yellow heating element through the crossfitting, see figure Attach exterior hose to hose barb and tighten with a hose clamp.

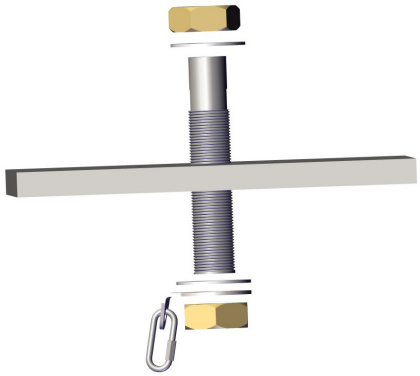


Figure 4: *Step 4 & 5 Tank Penetration Assembly*

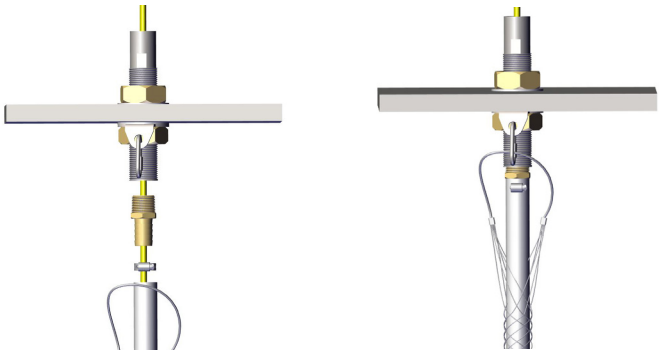


Figure 5: *Step 7 Attach Interior Hose to Penetration Assembly*

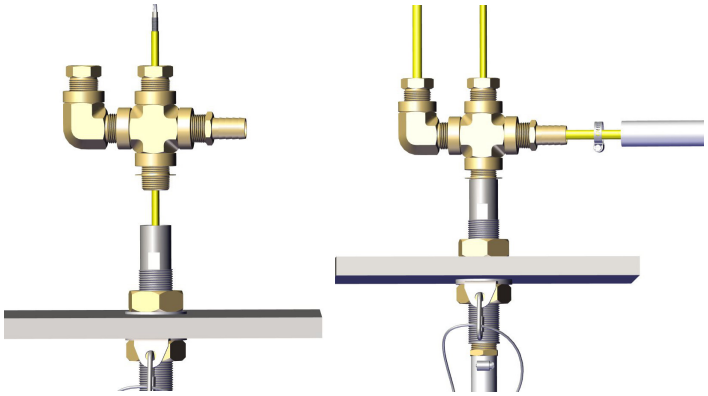


Figure 6: *Step 8 Attach crossfitting and connect exterior hose.*

Cold Climate Heated Hose

Top of Tank Penetration Fixture Junction Box

Step 1: Assemble strain relief for heating element. *(See figure 8)*

Step 2: Slide the base of the strain relief over the Heating element and thread into the cross fitting.

Step 3: Slide the rubber grommet on to end of heating element.

Step 4: Using a sharp knife, cut a 2” split in the outer sheathing of the heating element.

Step 5: Apply sealant to cut area.

Step 6: Slide grommet up to the middle of cut area.

Step 7: Slide heating element back to the strain relief.

Step 8: Screw top half of strain relief on to bottom half and tighten.

Step 9: Place Junction box over both strain reliefs and tighten lock nuts to secure.

Step 10: Strip the heating element and connect according to wiring diagram.

Step 11: After connection has been made and verified lose and latch junction box.

If after testing system, leaking has occurred ensure that every connection has been sealed with thread tape and if need be repeat step 1-11 again on strain reliefs.

NOTE: Ensure that the sealant is given at least 4 hours from application to harden before pressurizing system.

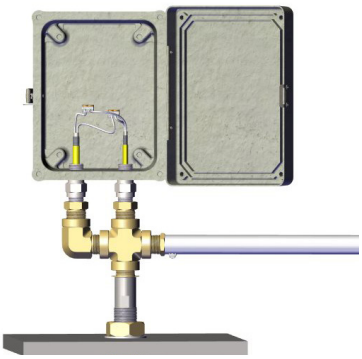


Figure 7: *Strain Relief Install Instructions*

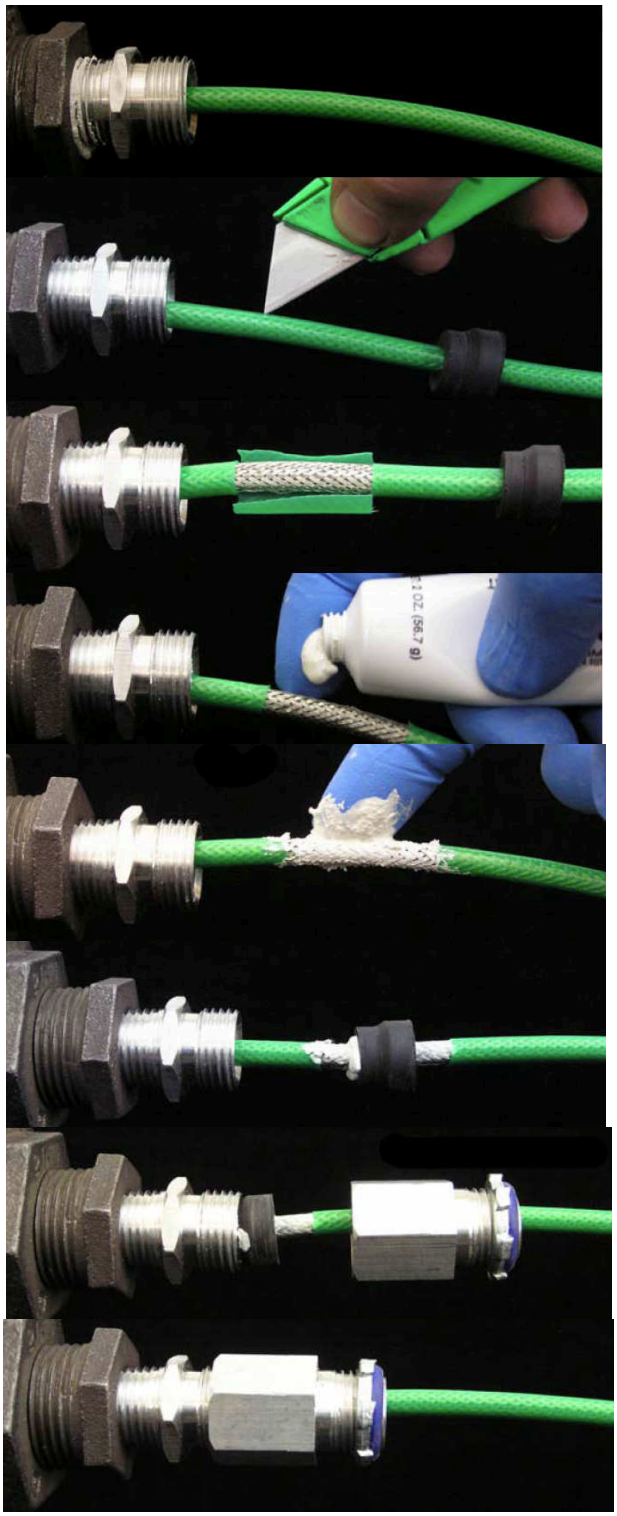


Figure 8: *Strain Relief Install Instructions*

Cold Climate Heated Hose

Step 1: Determine the best route for the exterior hose.

Step 2: Secure the hose.

Step 3: Determine the location of the air compressor.

Step 4: Determine the lowest elevation point of the hose. The lowest elevation point will be where the drain assembly is placed.

Step 5: Using a utility knife and a wire cutter, carefully cut the exterior hose around the internal heating element. *(See figure 9)*

Step 6: Slide the exterior hose off of the internal heating element. *(See figure 10)*

Step 7: Insert heating element into and through the drain assembly.

Step 8: Carefully slide drain assembly to the previously cut hose and secure using hose clamp.

Step 9: Reinstall previously removed section of exterior hose over the heating element. Secure to drain assembly using hose clamp.

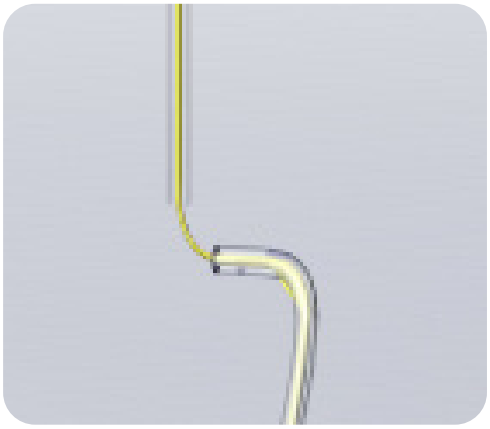


Figure 9: *Step 4 & 5 Cut and remove Exterior hose from heating element.*

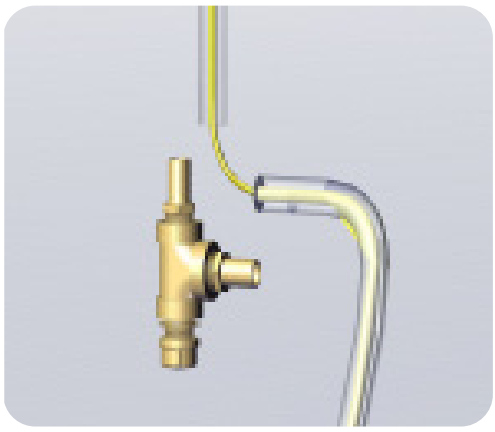


Figure 10: *Step 6, 7 & 8 Attach Exterior Hose to Drain Assembly*

Figure 11: *Step 7 & 8 Attach Interior Hose to Penetration Assembly*

Cold Climate Heated Hose

Air Unit Hook Up

Images are reference only, may not represent actual components.

Step 1: Remove the hose barb from the air unit, if supplied with one. *(See Figure 12)*

Step 2: Rotate the entire discharge assembly and attached the electrical connection assembly. If required. (*See Figure 13)*

Step 3: After attaching the electrical connection assembly, rotate the discharge assembly back to original position. (*See Figure 14)*

Step 4: Slide a Hose Clamp over the heated exterior hose and slide the heating element through the electrical connection assembly and push hose onto hose barb.

Step 5: Assemble strain relief fitting according to instructions on previous page and tighten hose clamp.

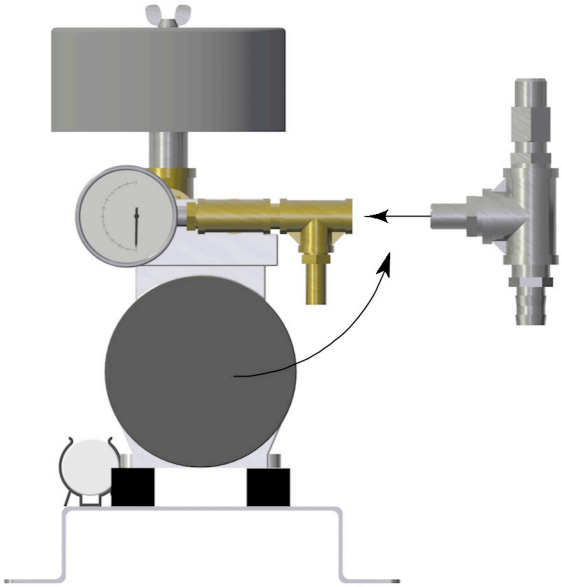


Figure 13: *Step 2 Rotate and attach assembly*

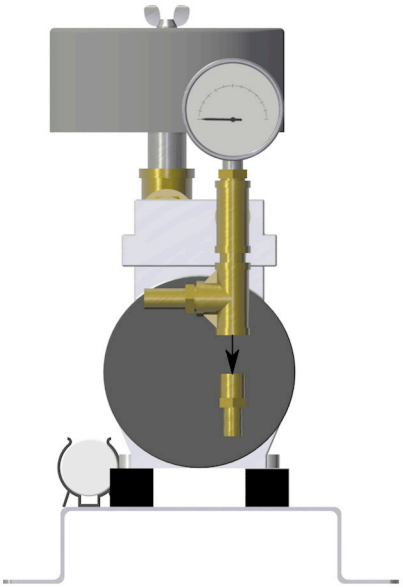


Figure 12: *Step 1 Removal of hose barb*

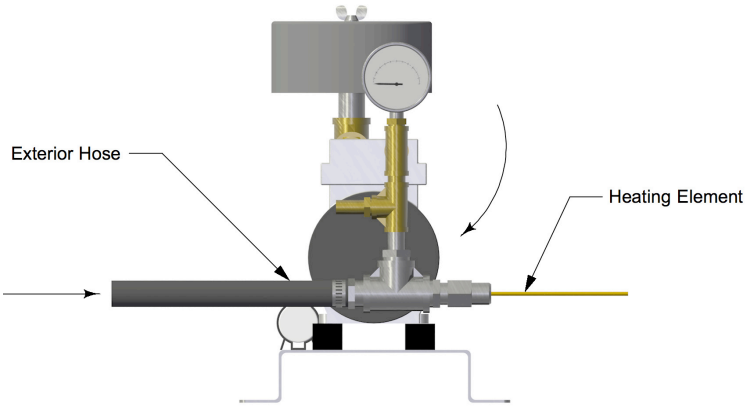


Figure 14: *Step 3, 4 & 5 Twist back to original position*

Cold Climate Heated Hose

Wiring Diagram

The Heating Element is a self regulating 120VAC.

Ensure that all National, State, and Local Electrical Codes are followed.

Connections should only be made by a licensed electrician.

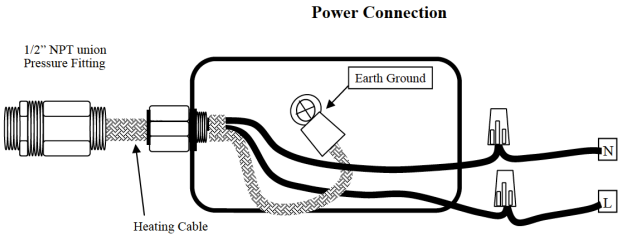


Figure 15: *Wiring Diagram*

Figure 16: *Testing Heating Element with Megger*

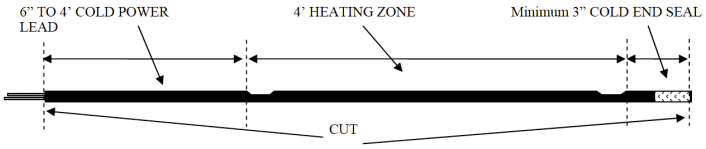


Figure 18: *Cutting Diagram*

ELECTRICAL HAZARD

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