

MRT-1070 (10/23/13) Heater & T/C Replacement Gen 1 Standard Solder Pot

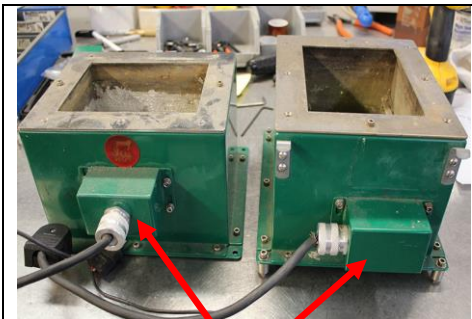
Tool List:

Safety Glasses
Standard Allen wrench set
Precision Screwdriver Slotted
Phillips Screwdriver
Sharp Knife
Wire Strippers
Dust Mask
Rubber Gloves
Soldering Iron



NOTE: If the Solder Pot Will not Heat See Heater Trouble Shooting ATD-1072

“Before starting this procedure empty the Solder from the Pot.”



J Box

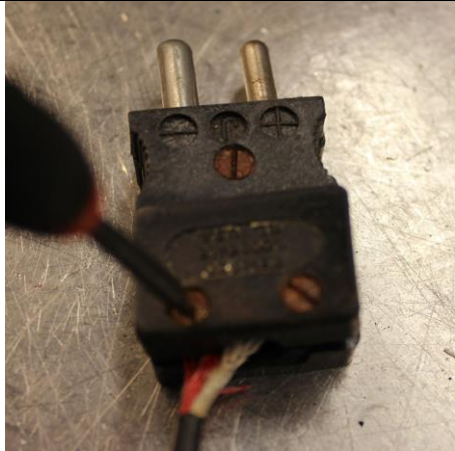
This Procedure will work with
both styles of Solder Pots.

Note: J Box positions.

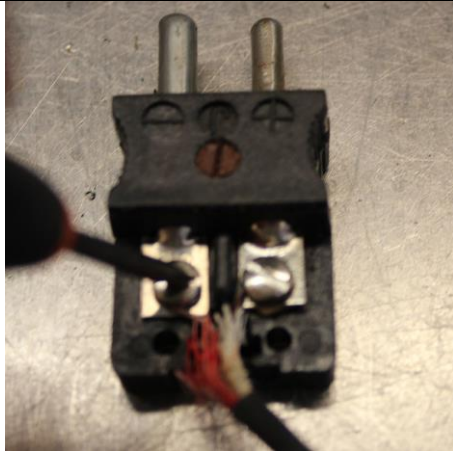
MAKE SURE TO SAVE ALL PARTS!

“Always wear Safety Glasses while performing maintenance on A.C.E. Solder Pots”

1. Heater & T/C Removal



Remove T/C Plug Cover Using a Precision screwdriver as seen.
Save cover and screws



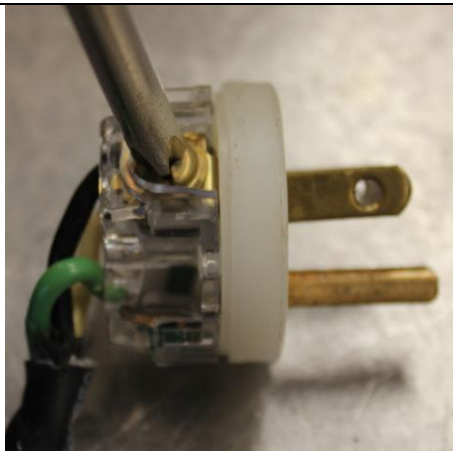
Remove T/C Plug
Loosen screws ONLY!
Save T/C Plug
P/N E0061.1



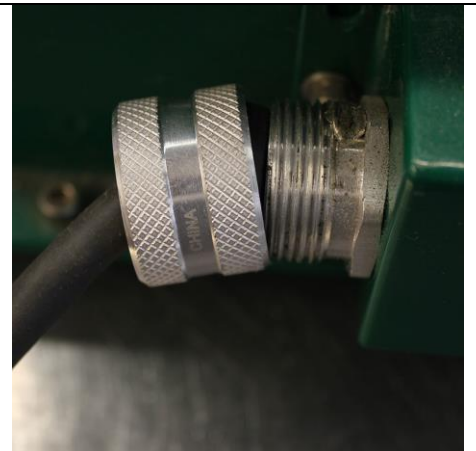
Remove Cord Grip from 90 deg. Plug Using a Phillips screwdriver as seen.
Save all parts!



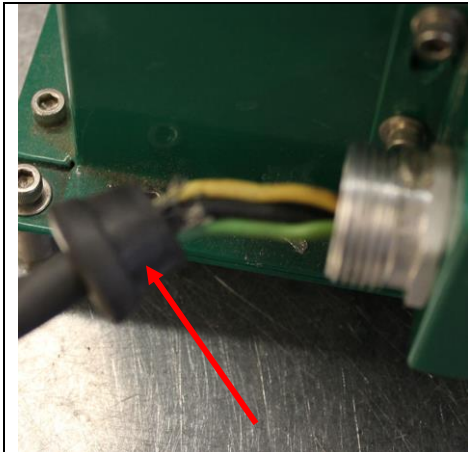
Remove Cover from 90 deg. Plug Using a Phillips screwdriver as seen.
Save all parts!



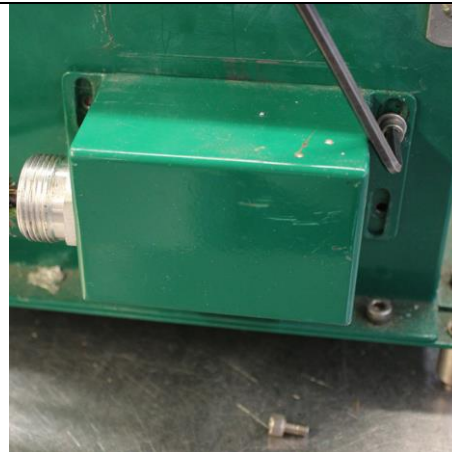
Remove wires 90 deg. Plug Using a Phillips screwdriver as seen.
Save all parts!
P/N E0011



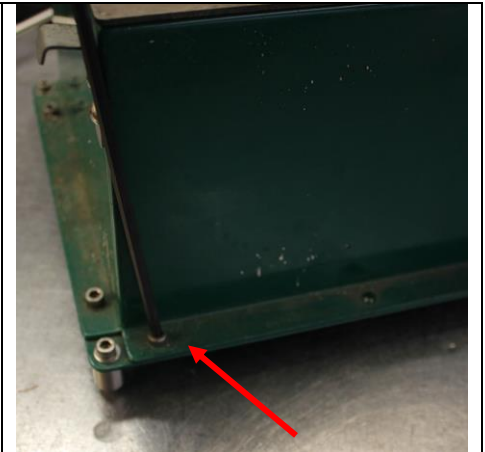
Remove Cord Grip from J Box
As shown.
Save ALL parts!



Slide Cord Grip thru wires
As shown
Save ALL parts!
P/N E0098



Remove Junction Box (J Box)
Using 9/64" Allen wrench
removing 8-32 5/16" screws. (4X)
Save Screws & washers

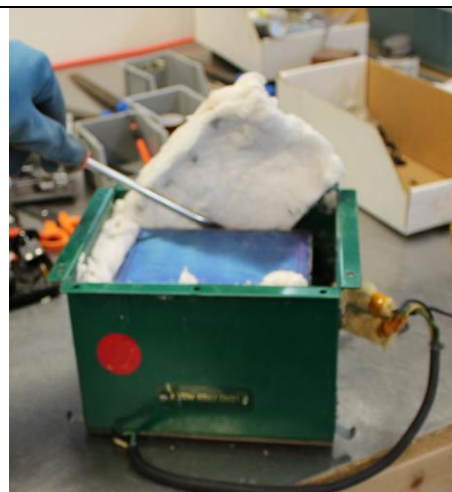


Remove Bottom Cover
Using 5/32" Allen wrench
removing 10-32 1/4" screws. (10X)
Save Screws

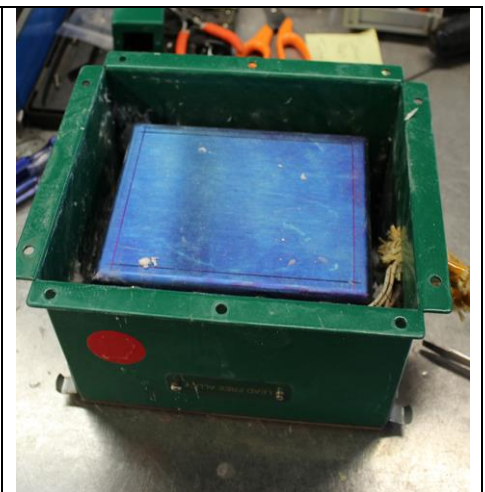
“Always wear Safety Glasses, Dust Mask and Rubber Gloves while working with insulation.”



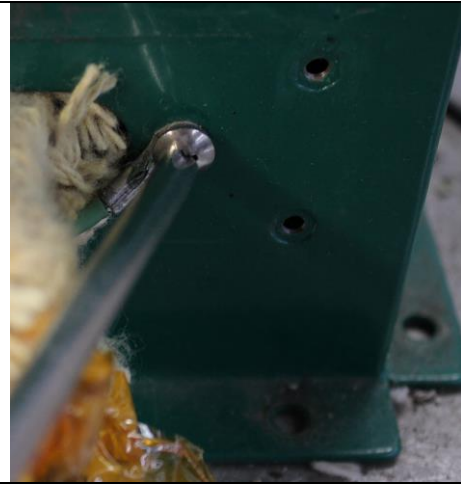
Remove Bottom Cover
The insulation will be exposed.
Wear Dust Mask and Rubber Gloves!



Remove Insulation from tank.
Use a large screwdriver to slide
pieces out as seen.
Save all insulation.
**Wear Dust Mask and Rubber
Gloves!**



Remove All Insulation
As shown.
Save all insulation.



Loosen Ground Wire Screw and remove ground wire.



Remove Screws from tank
Using Phillips screwdriver removing 8-32 3/8 phil flat screws. (6X) Save Screws

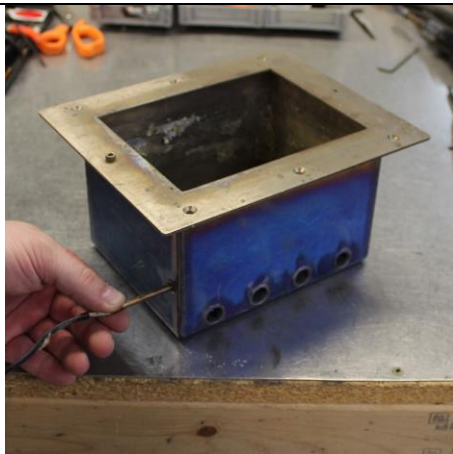


Remove Tank from Shell
Wear Dust Mask and Rubber Gloves!

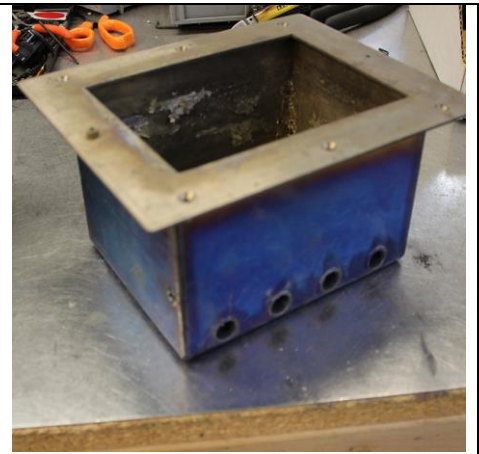
NOTE: When replacing Thermocouple ONLY- Do Not remove Heaters!



When replacing Heaters Remove Heaters from Tank & throw away.
P/N E0058

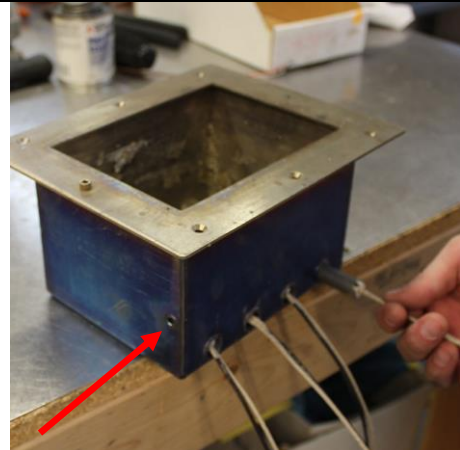


When replacing Thermocouple Remove T/C from Tank & throw away.
P/N E0059



Check Tank for any visible Solder Leaks!
P/N 10000201 Lead Alloy
P/N 10000201T Lead Free

2. Installing Heaters & Thermocouple



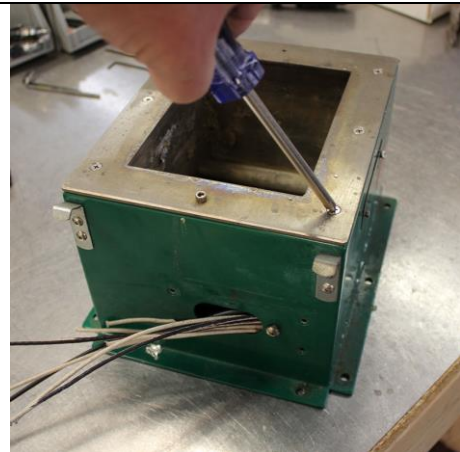
Slide the pre-coated Heaters into the tank. The Thermocouple tube must be facing Front!



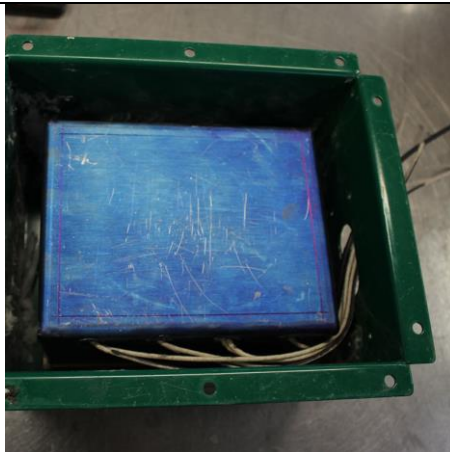
Install T/C to the proper side of the tank. As Shown.



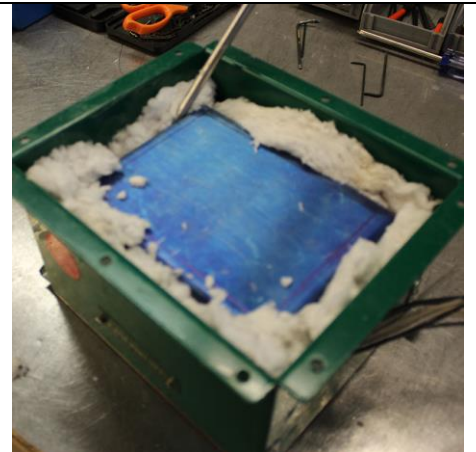
Form wires and T/C and Slide Tank into Shell.



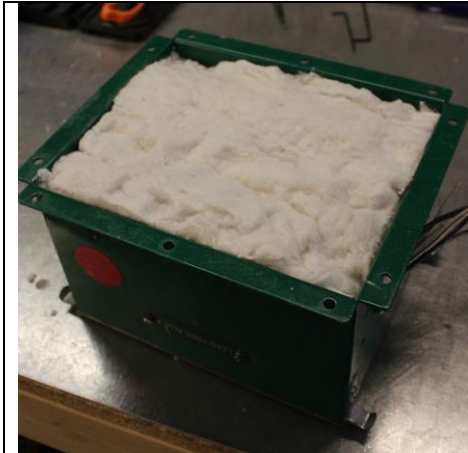
Secure Tank to the Shell
Using the 8-32 3/8" phil flat screws. (6X)



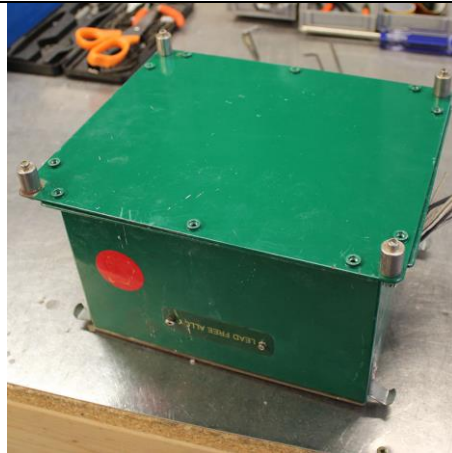
Turn Pot over and adjust wires
Make sure Heaters are Properly aligned.



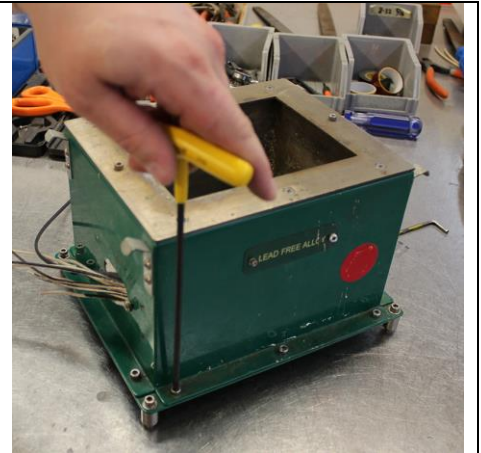
Insert Insulation
Use a large screwdriver to slide pieces in as seen.
Try to form the wires away from the tank!



**Place bottom section of
Insulation in Solder Pot.**

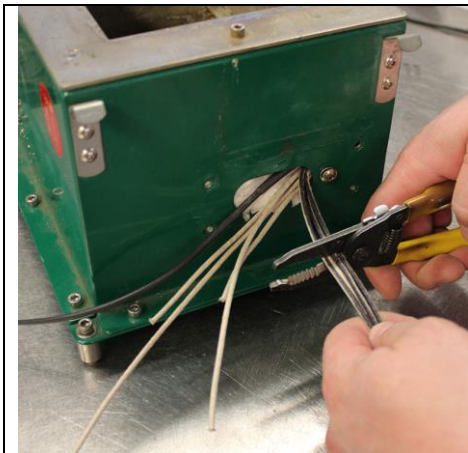


**Place Bottom Cover on Solder
Pot and flip over.**



**Secure Bottom Cover
to Solder Pot**
Using 5/32" Allen wrench using
10-32 1/4 screws. (10X)

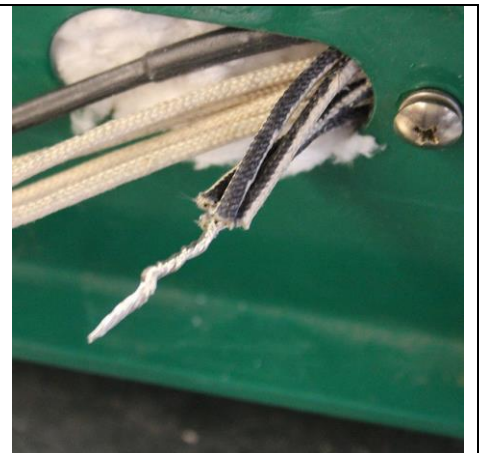
NOTE: Separate Black Wires From the White Wires!



Trim Heater Wires
Cut wires approx. 3" from tank.
As shown.



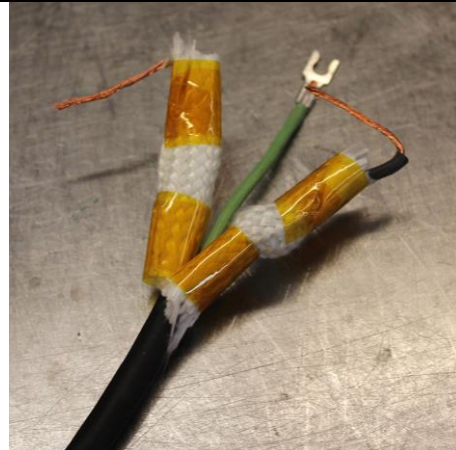
Trim to expose 1" of each wire.
As shown.



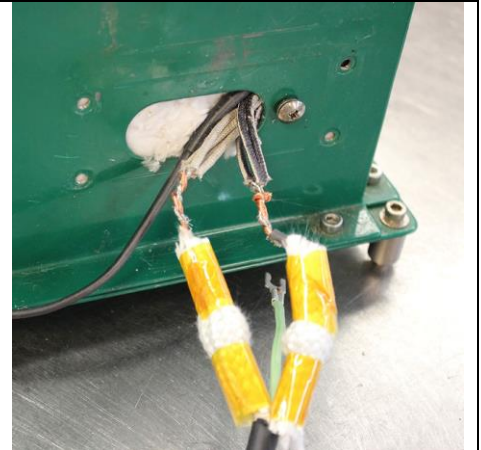
Twist Wires Firmly together.
NOTE: Only the black wires!



Repeat Above steps to the **White** Wires.



Take the **Pre-Trimmed Electrical Wire**. Make sure **insulation** is in place as shown.



Twist Electrical wires to heater wires. Match Black to Black & White to White. Make sure insulation has proper position. As seen.



Add Flux then **Solder** wires (2X) to make a proper connection.

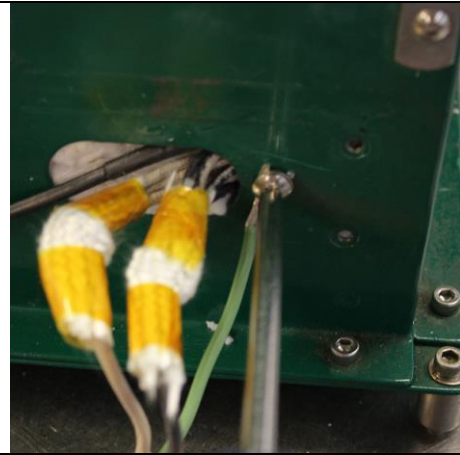


Wrap exposed wires in Kapton tape as seen.

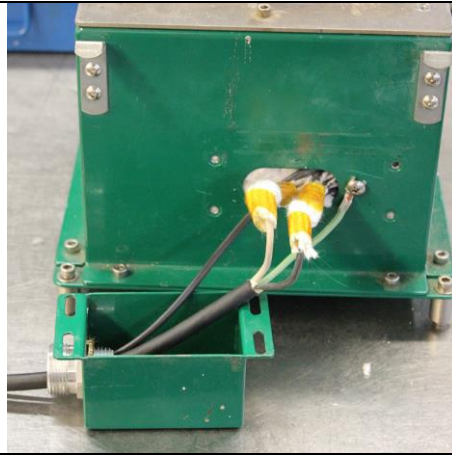


Slide Insulation Braid over the Kapton covered wires. As Shown.

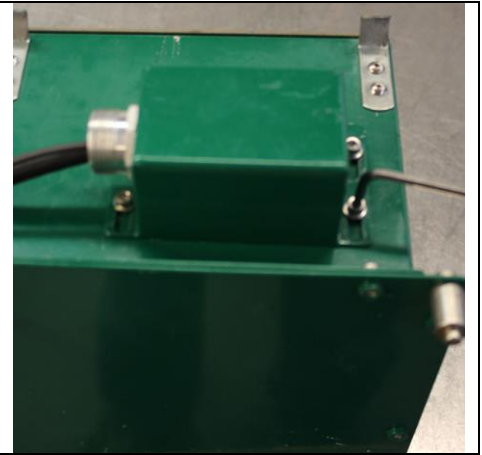
NOTE: When adding J Box Make Sure Wires are run to the Rear of the Pot!



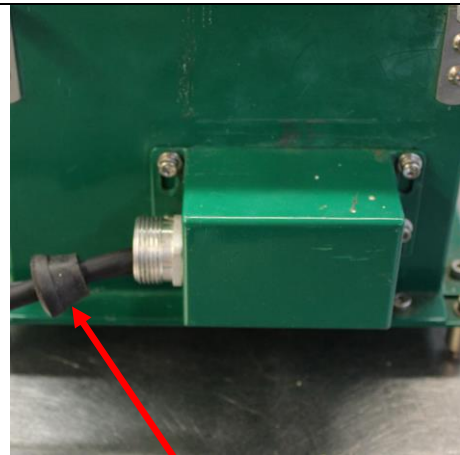
Connect Ground wire
As shown.



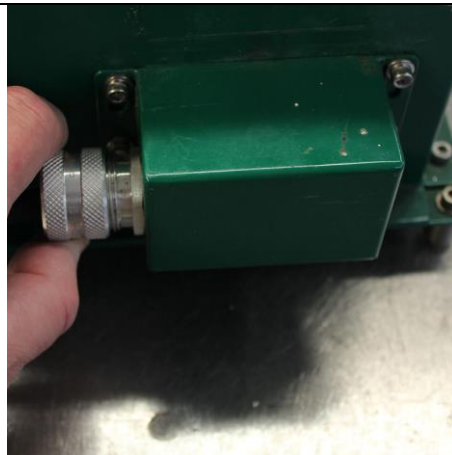
Slide wires thru J Box so wires are facing toward the **Rear** of the pot!



Turn Pot on side and Slide J Box in the down position.
Secure the J Box using 8-32 5/16 screws (4X) & thick washers. As seen.



Slide Cord Grip over wires and into place. Then position holder so it does not pinch wires.

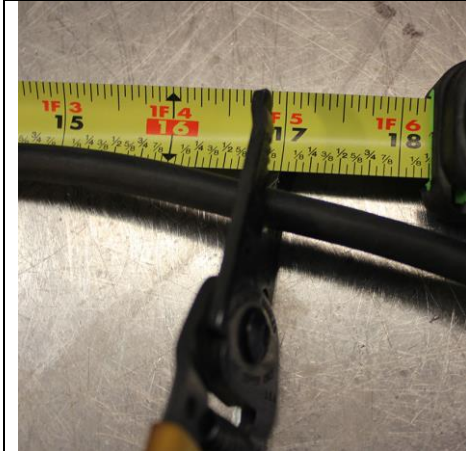


Slide Cord Grip NUT in place and screw on tight.



Measure Electrical wire 17 inches from cord grip.

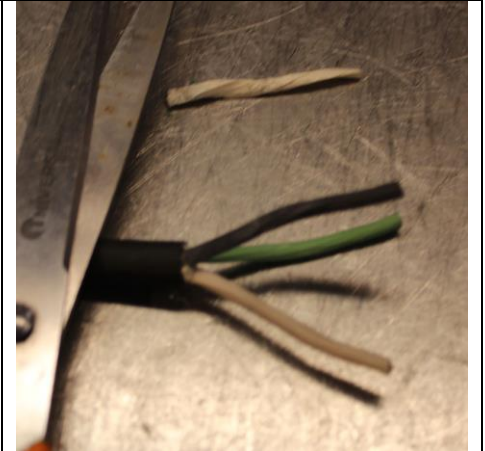
NOTE: For Rear Mount J Box Measure Electrical wire 12 inches from cord grip!



Measure Electrical wire
from cord grip
17 inches for side mount J Box
Then cut the excess wire.

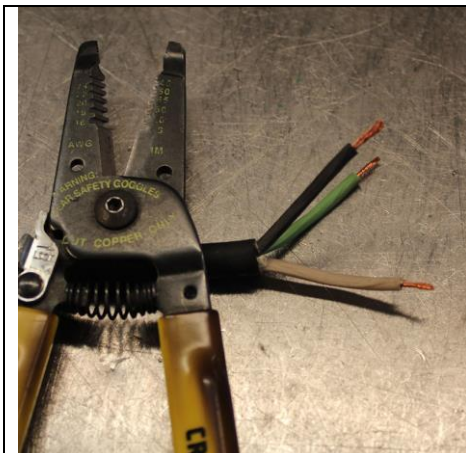


Using a sharp knife
Trim Electrical Wire approx.
1.0 - 1.5 inches from end.

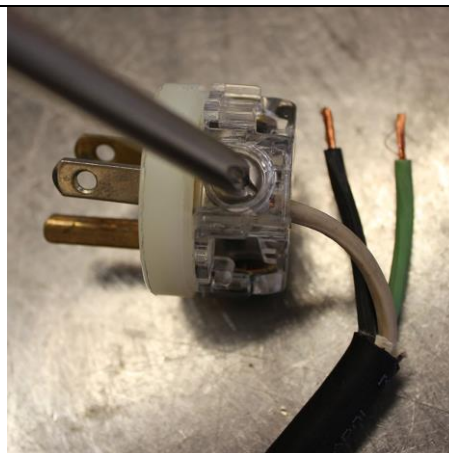


Separate wires and cut away
insulation strips using scissors.

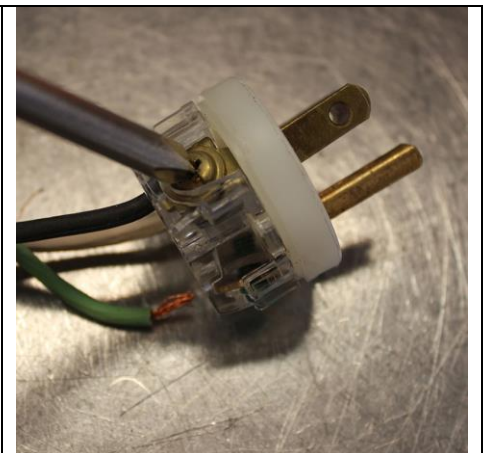
NOTE: For Rear Mount J Box Measure Electrical wire 12 inches from cord grip!



Using the strip gauge on the plug
for length. **Strip the 3 wires** and
twist them tightly.
As Shown.

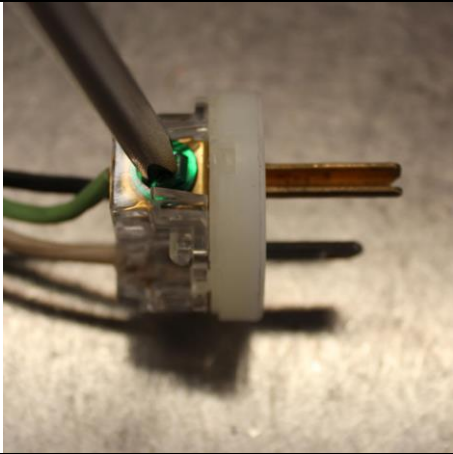


Insert the **White wire (Neutral)**
into the **silver screw hole**
and tighten firmly.
As Seen.



Insert the **Black wire (Load)**
into the **copper screw hole**
(Straight across)
and tighten firmly.
As Seen.

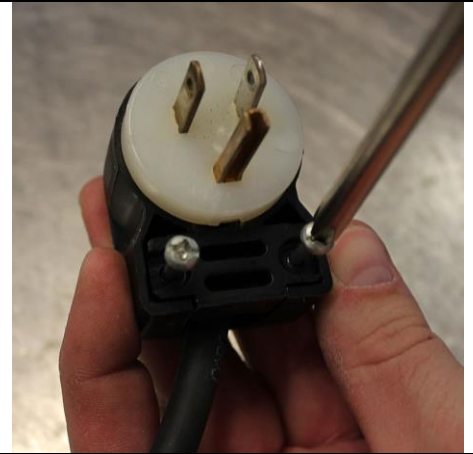
NOTE: Notice the orientation of the PLUG in the cover!



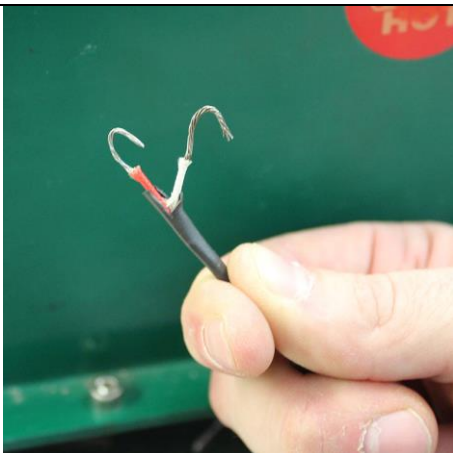
Insert the **Tan wire (Ground)** into the **Copper screw hole** then tighten firmly.
As Seen.



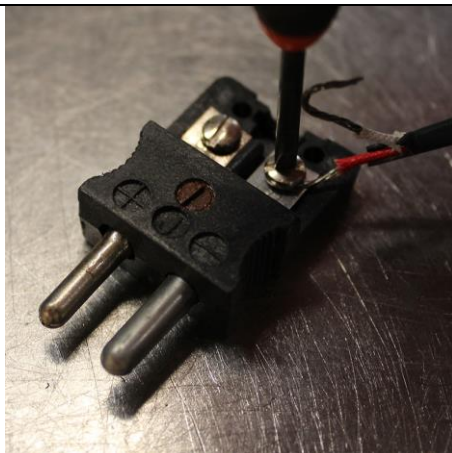
Secure Plug cover by adjusting the 3 wires and screw on firmly.
As Shown



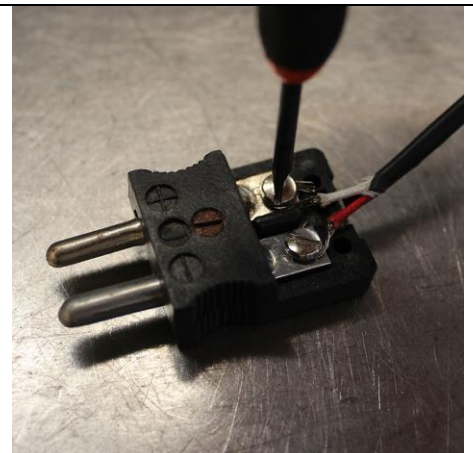
Secure Plug cord grip as shown



Form the Thermocouple wires Red & White as Shown.



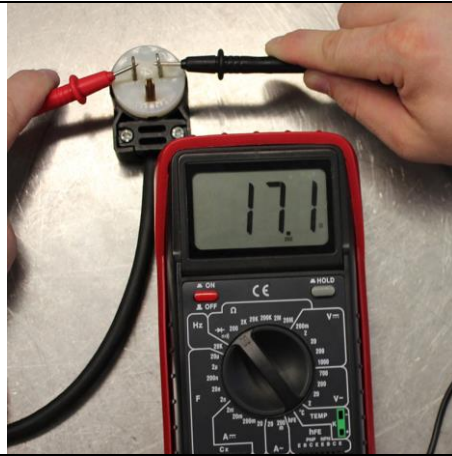
Attach the **Red wire** to the **Negative side** of the T/C as seen.
Then screw **tightly**.
Notice the **big plug**.



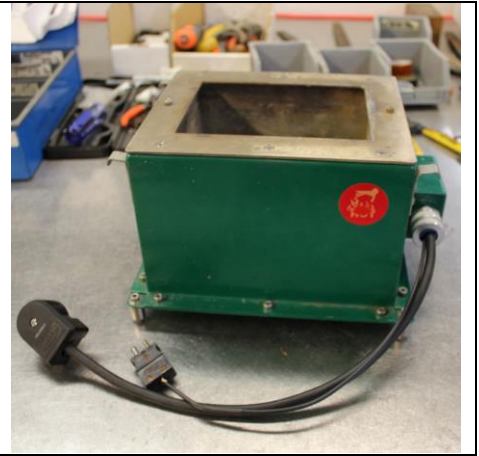
Attach the **White wire** to the **Positive side** of the T/C as seen.
Then screw **tightly**.



**Attach T/C Cover
As Shown.**



Using an ohm Meter on 200 ohm
setting measure the plugs as
shown.
The range s/b **17-18 ohms.**



Completed ACE Solder Pot!

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