

Arc Flash Oil Sample Device Assembly

Padmount Transformer Installation Instructions

Patent # 9116081









Tools Needed to Mount Device:

- 1. Greenlee 4" (4 1/2" OD) knockout or 4 1/2" hole saw
- 2. 7/16" or 1/2" drill bit
- 3. Sharpie
- 4. Phillips and common screw drivers
- 5. 9/16" and 11/16" box end wrench
- 6. Crescent wrench
- 7. Drill
- 8. Razor Knife



| Item # | Description | Qty |
|--------|--------------------------------------|-----|
| Α | Black Nipple | 1 |
| В | NPT Black Tee | 1 |
| С | Female Black Bushing | 1 |
| D | Zinc Plated Elbow | 1 |
| E | 1/4" Nipple, 1/4" NTP Male End | 1 |
| F | USS Flat Washer Plated | 5 |
| G | Serrated Flange Nut | 5 |
| Н | 1/4" Nipple, 7/16"-20 NTP Female End | 1 |
| J | Cable Tie Mount Base | 5 |
| K | Cable Tie | 5 |
| L | Stainless Hose Clamp | 2 |
| M | Stainless Braided Hose | 1 |
| N | Black Hose | 1 |
| Р | Gasket | 1 |
| Q | Hole Layout Templet Sticker | 1 |
| Х | Unit Sticker | 1 |









Part A

Part B

Exploded Completed Assembly

Completed Assembly

Part A & B









Part C

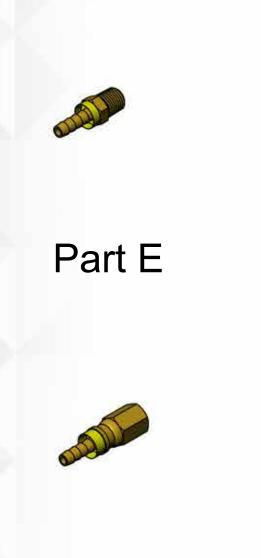
Part D

Exploded Completed Assembly

Completed Assembly

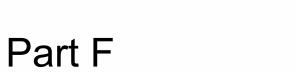
Part C & D

















Part G



Part H

Part J



Part M





Part K

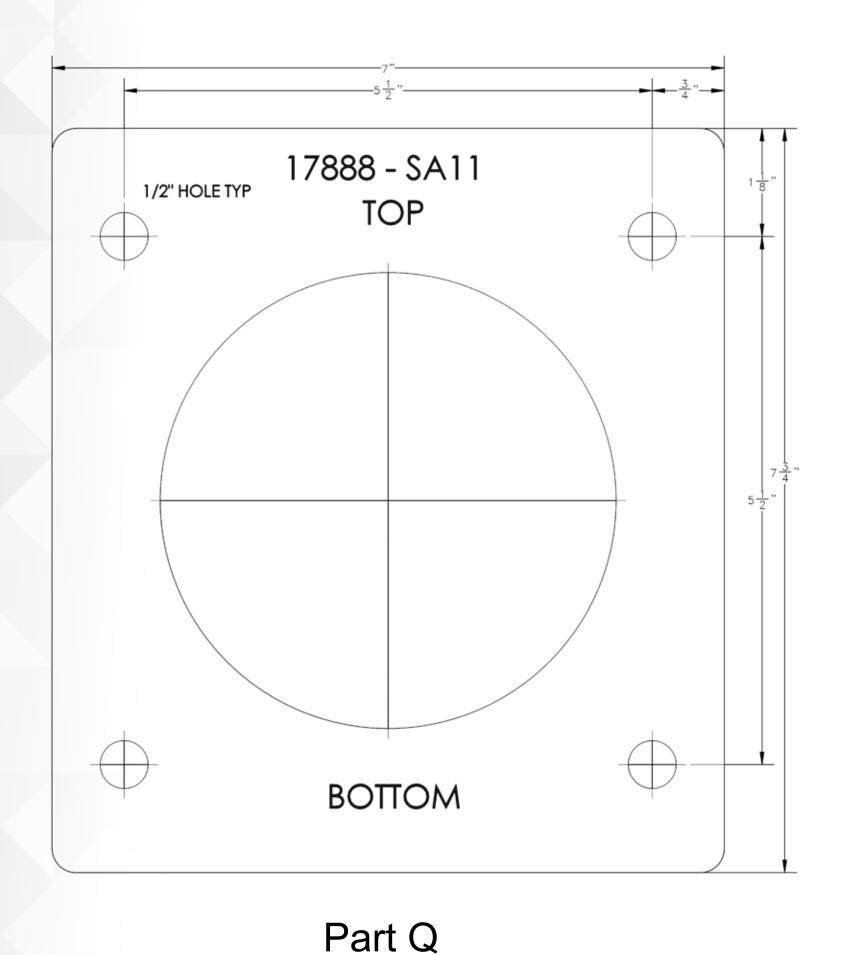


Part N

Part L

Part P

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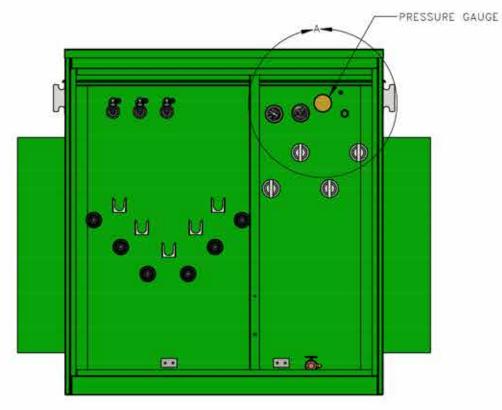


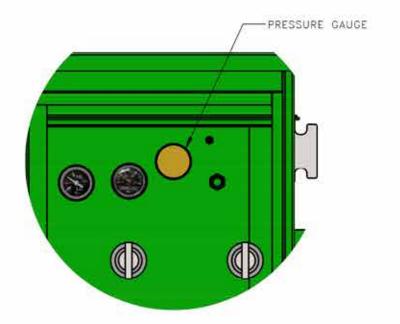
Part X

UNIT MUST BE DE-ENERGIZED PRIOR TO KIT INSTALLATION

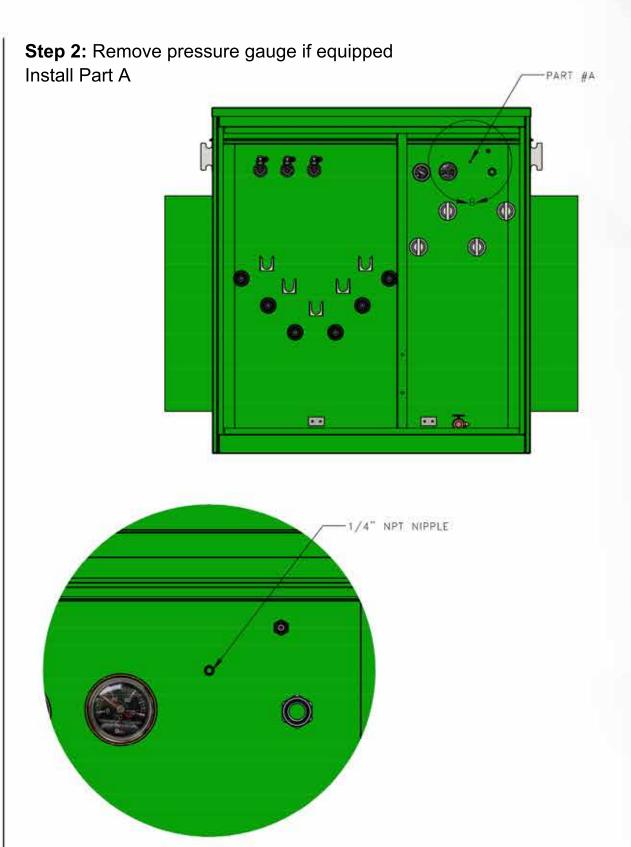
Note: Arc Flash Oil Sample Devices shall ONLY be installed while transformers are de-energized. Never attempt to install on a transformer that is in service. Follow and comply with all OSHA and NFPA-70E related standards.

Step 1: Open pressure relief valve to remove all N2 pressure in headspace. If equipped N2 gauge on the transformer, verify 0 PSIG and proceed to the next step.



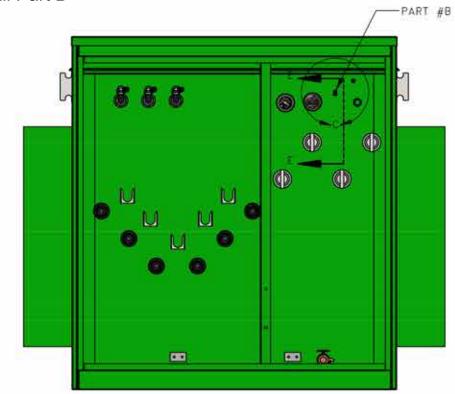


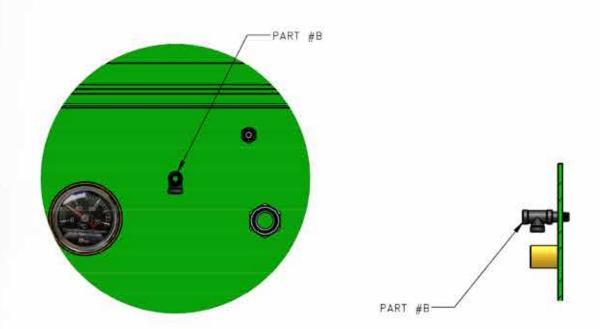




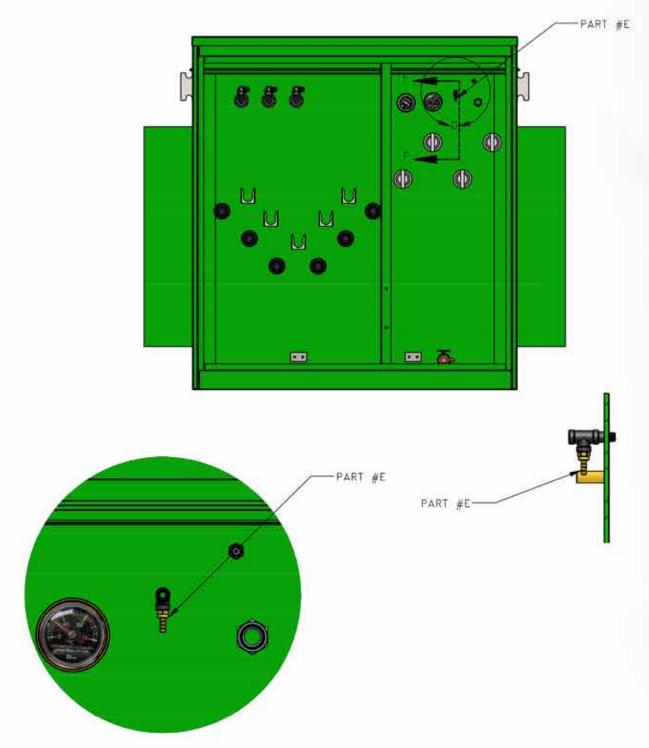


Step 3: Install Part B



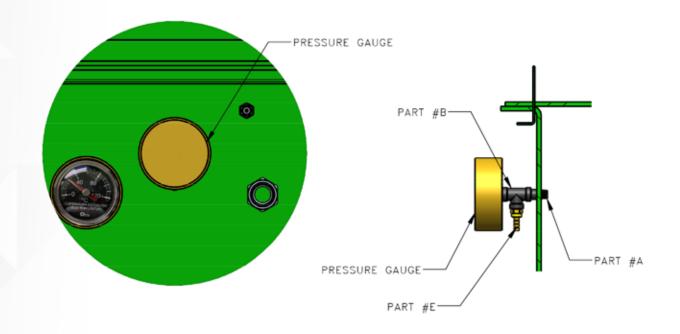


Step 4: Install Part E





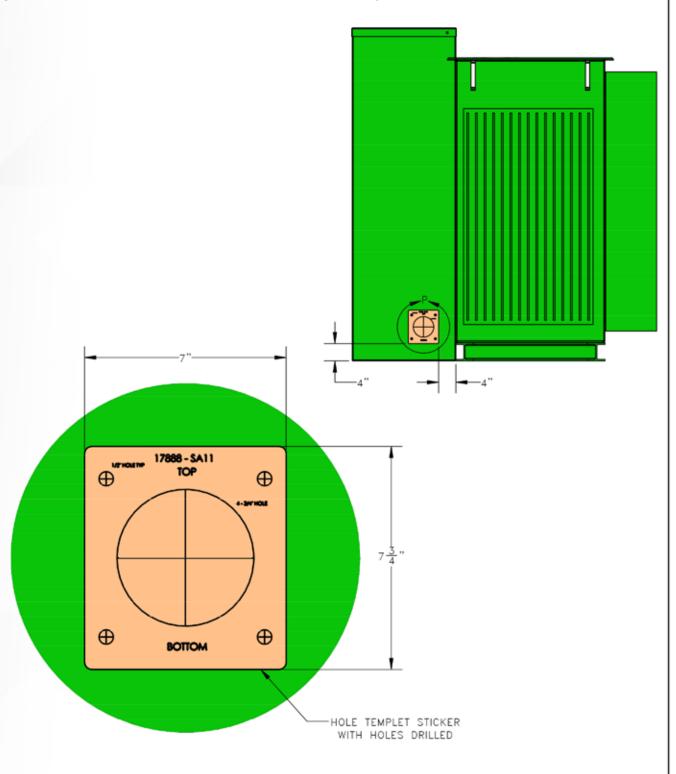
Step 5: Reinstall pressure gauge



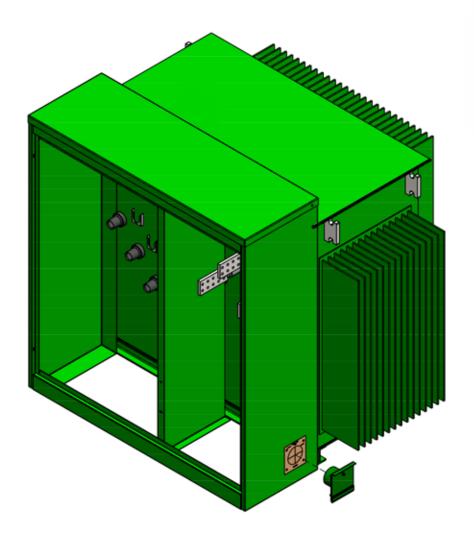
Step 6: Place part Q in the cabinet side PART #Q-17888 - SA11 TOP \oplus \oplus воттом



Step 7: Drill out holes to the size marked on templet.



Step 8: Insert Part P on the back side of the Arc Flash Sample Oil Assembly Insert Arc Flash Sample Oil Device Assembly into the drilled holes.





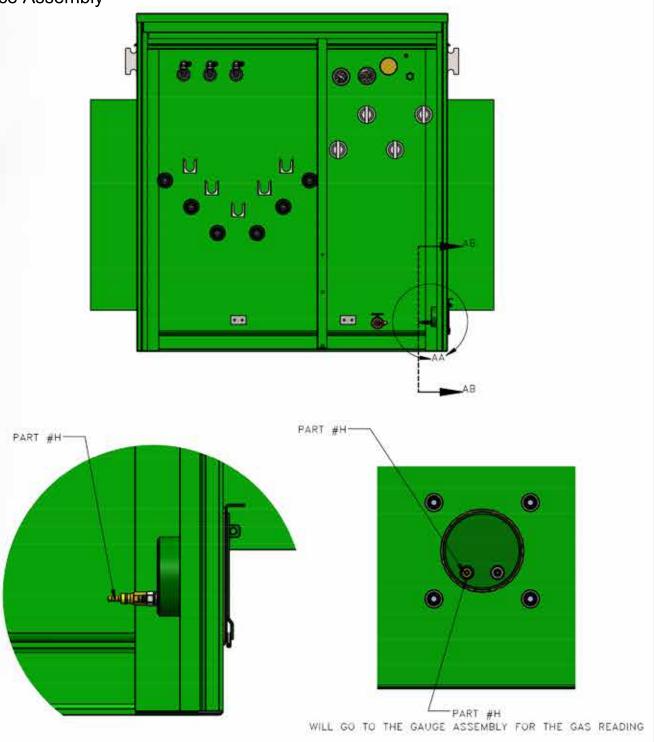
Step 9: Bolt on the Arc Flash Oil Sample Device Assembly using Part F and Part G 8 6 ° PART #F--PART #G -- PART #F -PART #F -PART #G -PART #G

Step 10: Install Part C and Part D into the drain valve **8 9** . PART #D PART #C--PART #C PART #D

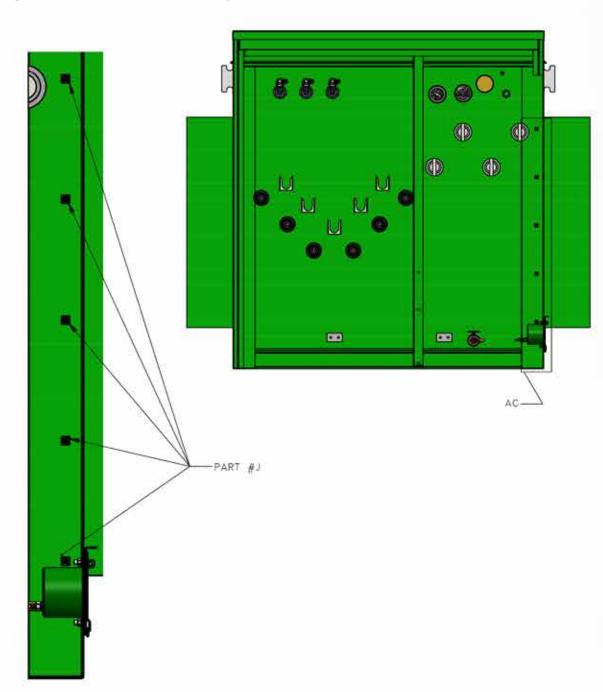
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Step 11: InstallPart H on the back of the Arc Flash Oil Sample Device Assembly



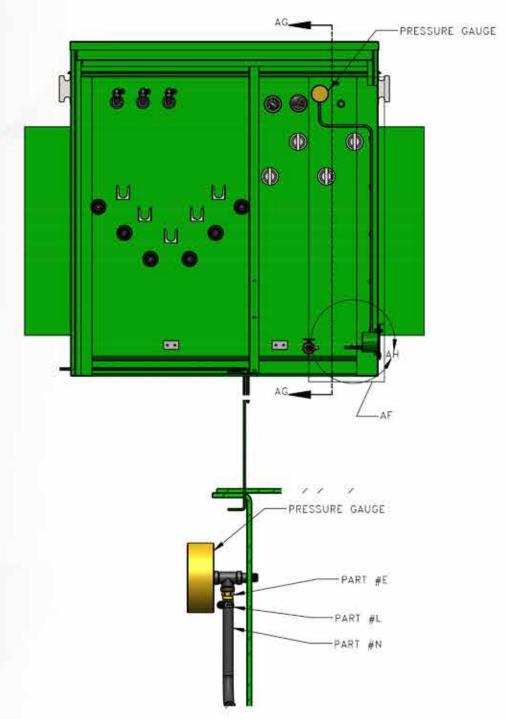
Step 12: Install Part J even spaced on the tank wall

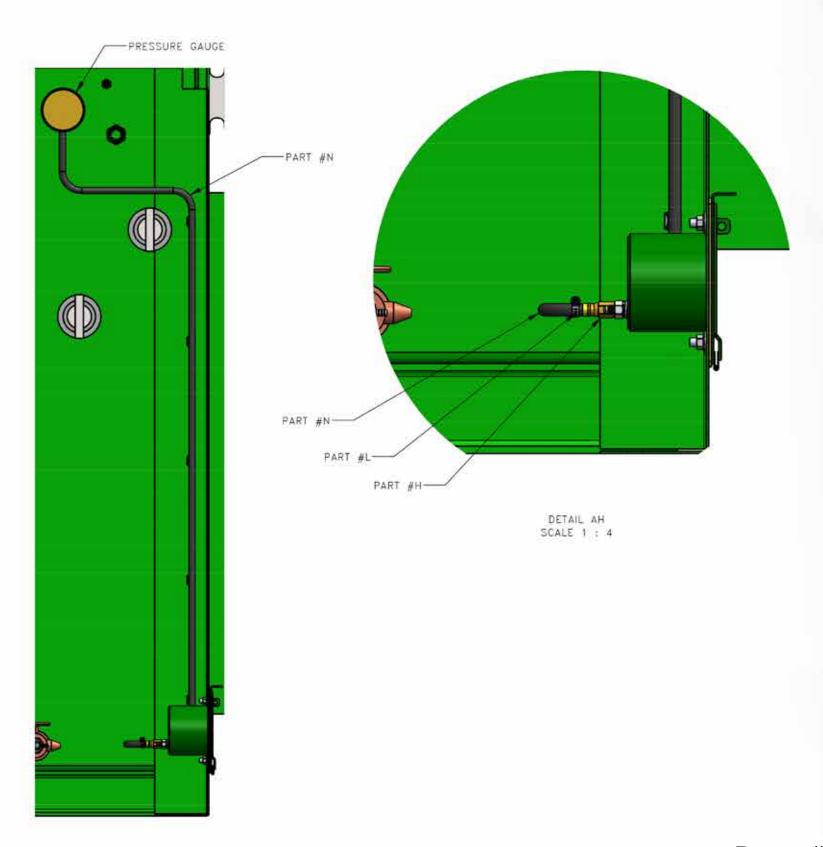




Step 13: Install Part N onto Part E behind the pressure gauge and install Part N into Part H that is attached to the Arc Flash Oil Sample Device Assembly

Install Part L to each end of Part N





MAINTAIN PROPER CLEARANCES FOR LIVE PARTS AND CREEPING DISTANCE



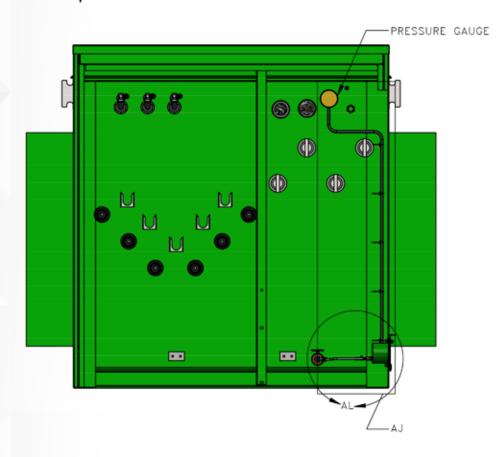
Step 14: Install M on Part H that is attached to the Arc Flash Oil Sample Device Assembly and install Part M onto Part D on the drain valve

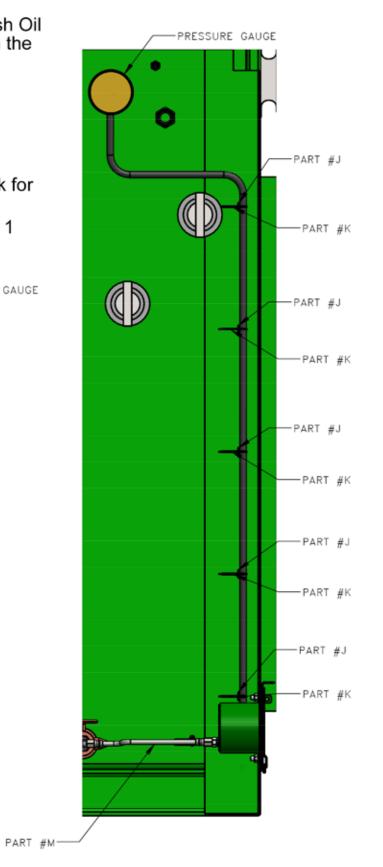
Install Part K around Part N and through Part J

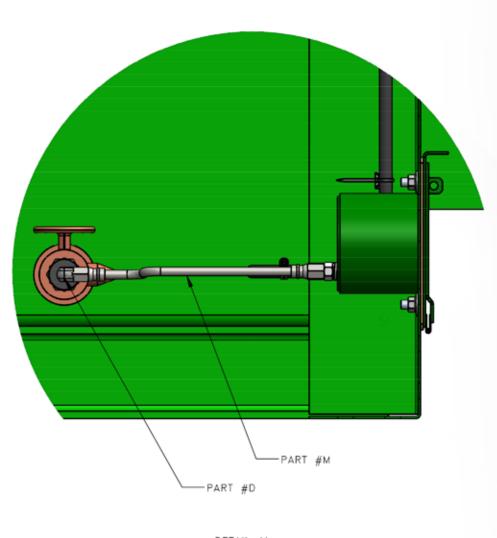
Step 15: Open drain valve & check for leaks related to connections on part M

Step 16: Pressurize headspace with N2 to 5 PSI and check for leaks on the transformer.

After no leaks are confirmed, release pressure of the N2 to 1 PSI for headspace blanket





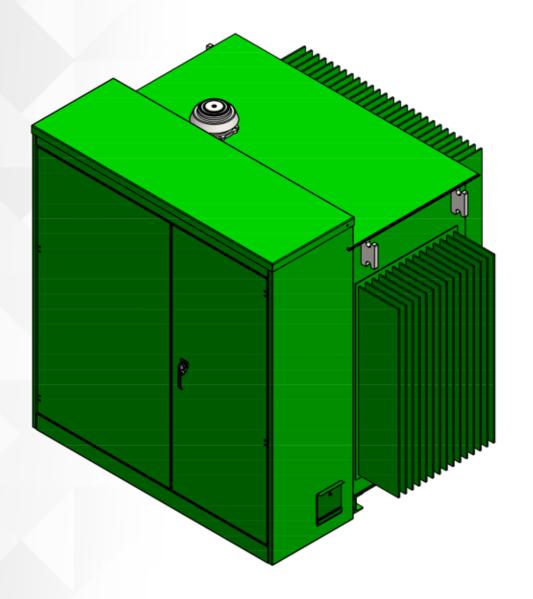


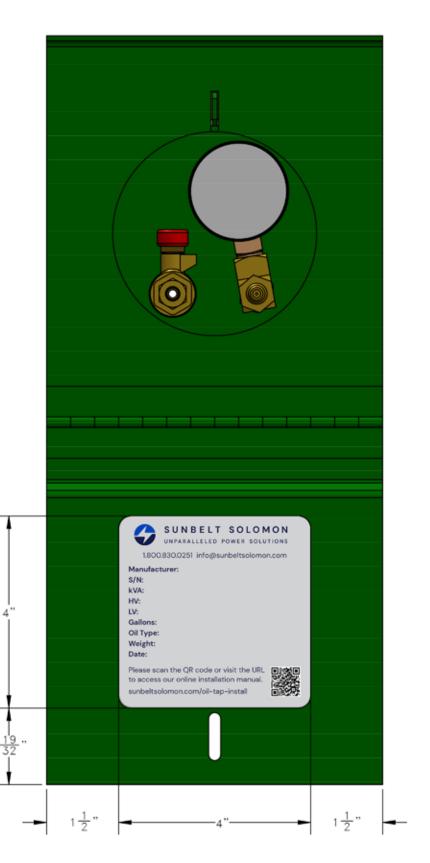
DETAIL AL SCALE 1 : 4

Step 17: Fill out the following information on Part X and install Part X as shown on the detail layout.

Step 18: Close door on the Arc Flash Oil Sample Device Assembly and Add a lock to the provided location on the door.

Note: There is a 6" split hose and 2-qty cable ties added to the kit. The hose is to go around the braided stainless hose if in contact with the cables or conduit to prevent wear of the braided stainless hose from rubbing.









Part X