

## Installation Instructions

# Sealing Adapter for Secondary Transformer Bushings

For use with  
1000 & 2500 kVA Secondary Transformer  
Bushings From the Following Manufactureres:  
ABB, GE & Carte

Prepared For:  
Consolidated Edison of New York



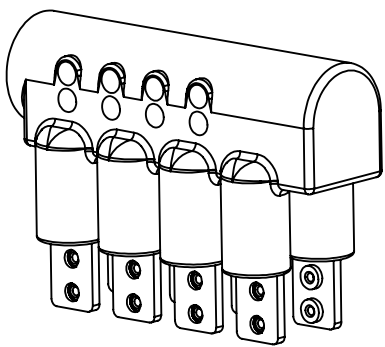
## WARNING

- System **MUST** be de-energized during installation of this product or its components.
- Failure to follow these instructions could result in damage to the bushing and serious or fatal injury.

## KIT CONTENTS

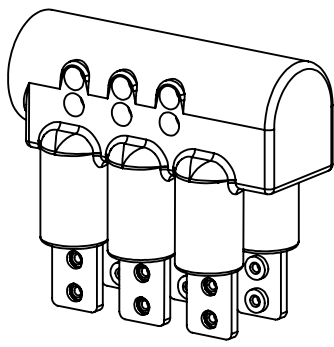
Check package contents to be sure they are complete, undamaged,  
and properly sized for the application.

C/S #504-0592



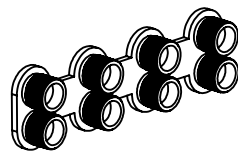
Sealed Bushing Adapter for  
2500 kVA Transformers  
(1) Piece

C/S #590-0865

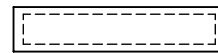


Sealed Bushing Adapter for  
1000 kVA Transformers  
(1) Piece

The items shown below are included in all  
1000 & 2500 kVA SBA kits (C/S #504-0592 & 590-0865)



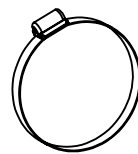
Bolt Sealing Plug  
(1) Piece



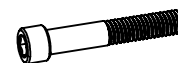
Adapter Sealing  
Mastic  
(1) Piece



Lug Mounting  
Hardware  
C/S #504-0592 - (16) Sets  
C/S #590-0865 - (12) Sets

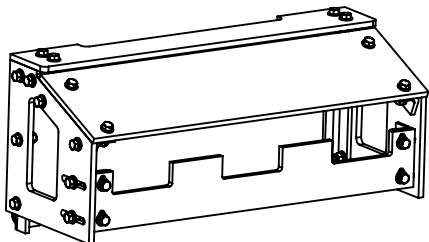


Hose Clamp  
(1) Piece

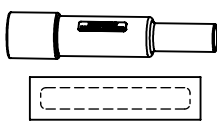


Adapter Mounting  
Hardware  
C/S #504-0592 - (8) Sets  
C/S #590-0865 - (6) Sets

### Packaged Separately



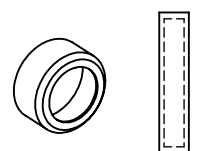
Hood Support for 1000 kVA SBA  
C/S #590-0867 - (1) Piece



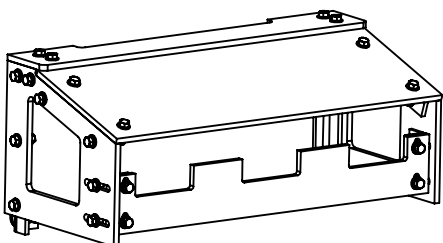
(1) Cable Boot for Use with  
Standard Lugs  
(1) Sealing Mastic  
C/S #596-0664 - 500 kcmil  
C/S #596-0665 - 750 kcmil



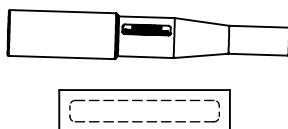
Standard Lug  
C/S #570-2519 - 500 kcmil  
C/S #570-2527 - 750 kcmil



Carte Bushing Adapter  
w/ Sealing Mastic  
(1) Piece Each  
C/S #503-0640



Hood Support for 2500 kVA SBA  
C/S #504-0591 - (1) Piece



(1) Cable Boot for Use with  
Limiter Lugs  
(1) Sealing Mastic  
C/S #596-0666 - 500 kcmil  
C/S #596-0667 - 750 kcmil

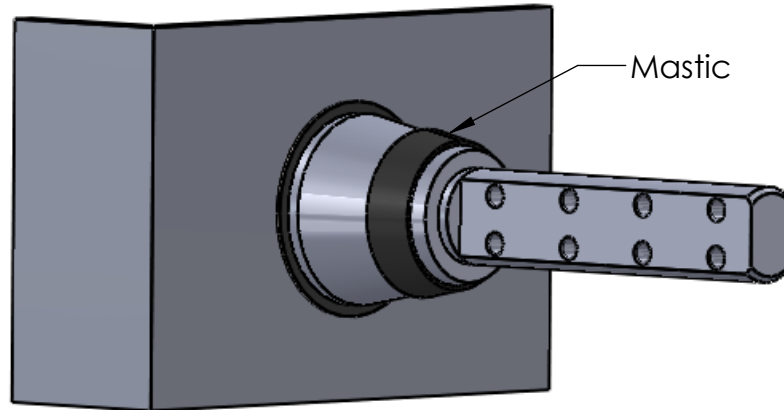


Terminal Sealing Cap  
w/ Hose Clamp  
(1) Piece Each  
C/S #596-0668

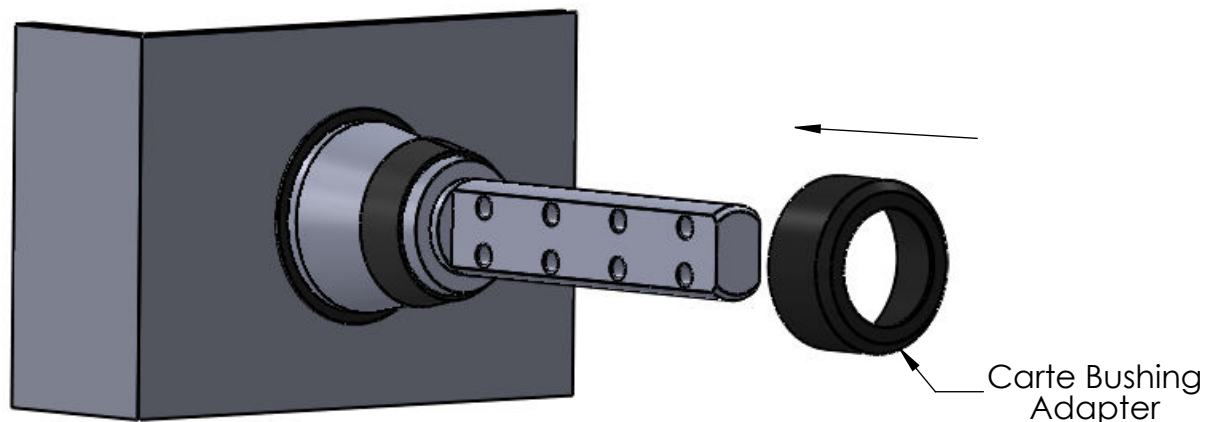
### Installation Instructions

#### Step 1: Apply Mastic Seal to Bushing (For Carte Transformer Bushings ONLY)

Using the supplied mastic, install one strip around the front of the bushing terminal. Wrap mastic around epoxy section only, as shown below. Press mastic firmly together at overlap.

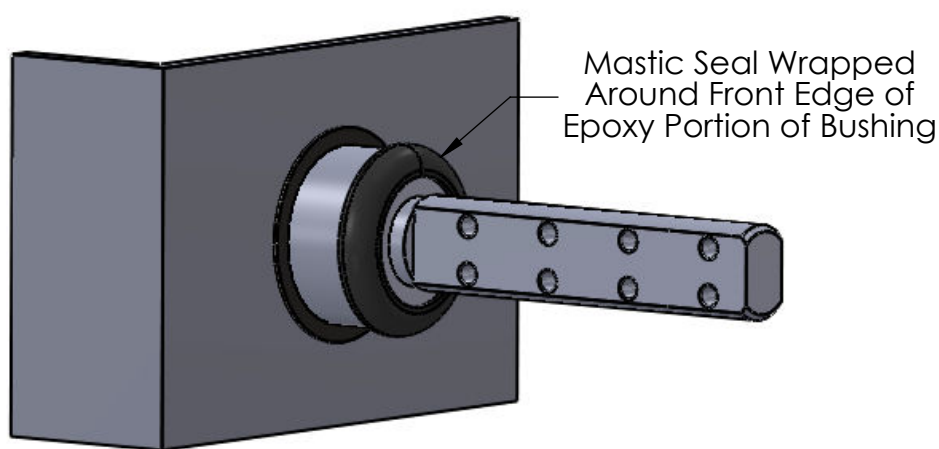


Install Carte bushing adapter with the open end facing the transformer, as shown below. Press Carte bushing adapter firmly into mastic.



#### Step 2: Apply Mastic Seal to Bushing (For GE, ABB, & Carte Transformer Bushings)

Using the supplied mastic, install one strip around the front edge of the bushing terminal. Wrap mastic around epoxy section only, as shown below. Press mastic firmly together at overlap.



GE Transformer Bushing

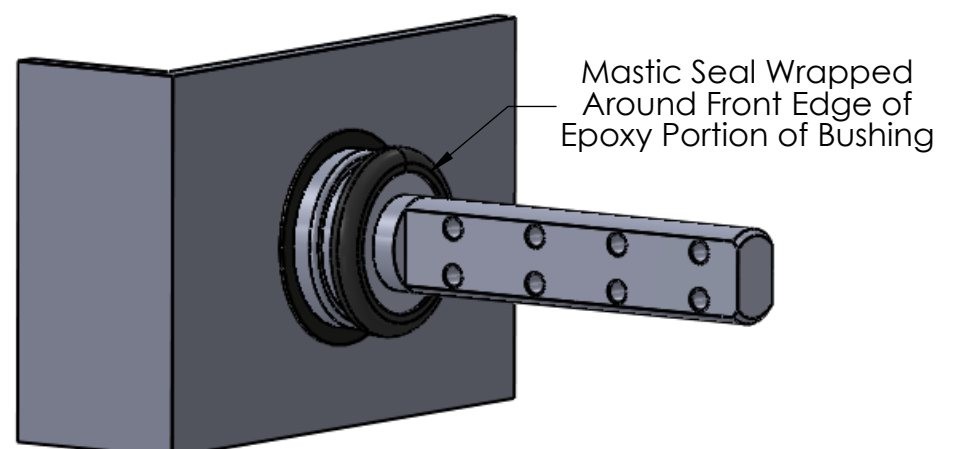
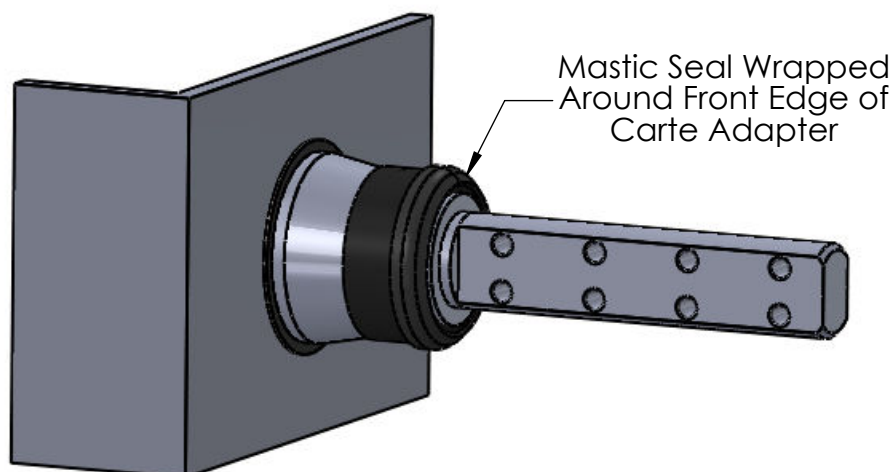


ABB Transformer Bushing

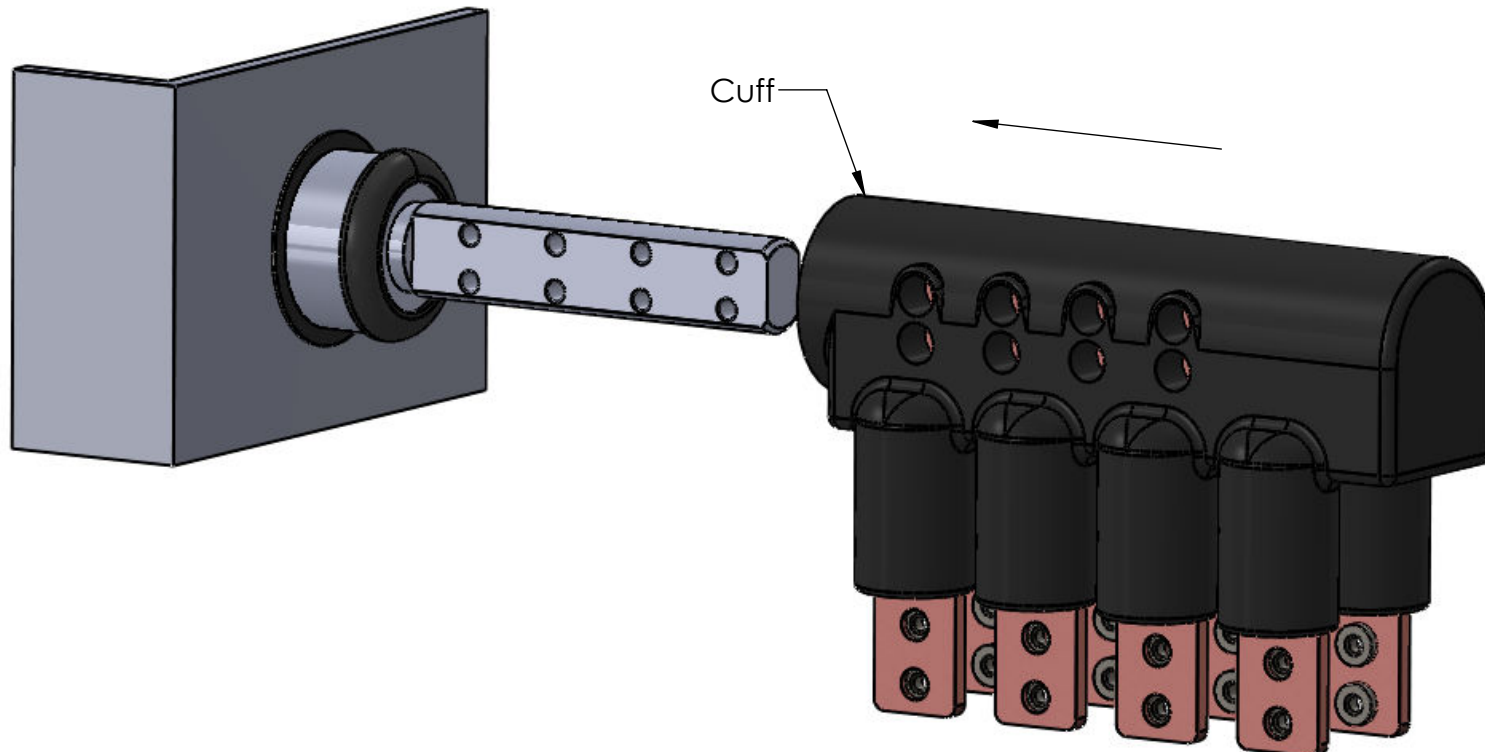


Carte Transformer Bushing

## Installation Instructions

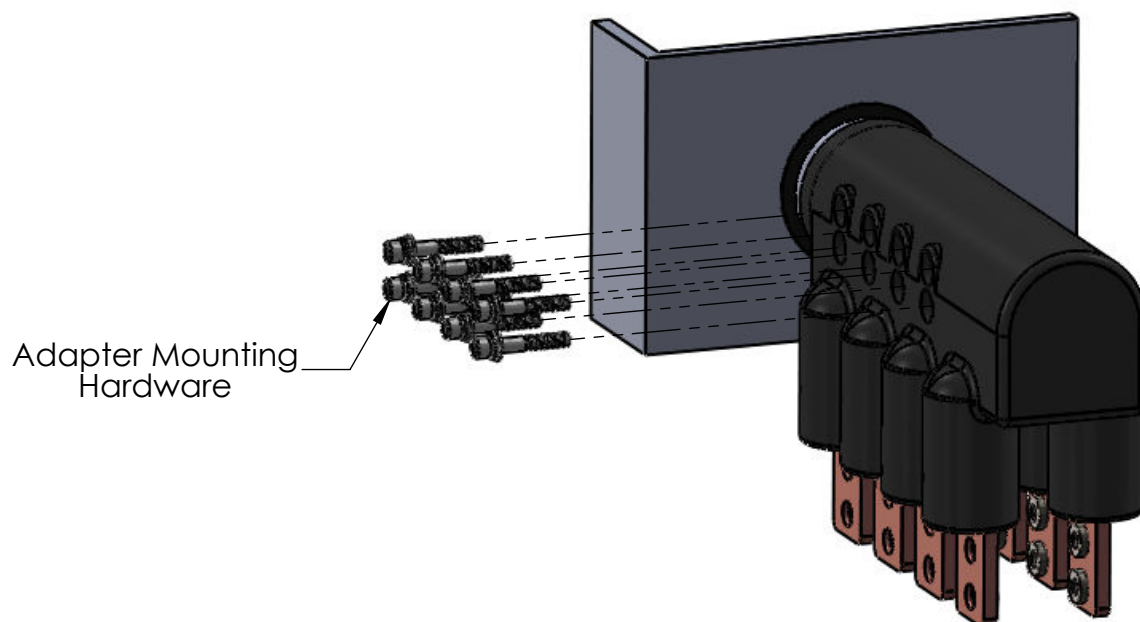
### Step 3: Install Sealed Bushing Adapter on Transformer Bushing Terminal (2500 kVA Version Shown As Reference)

Install the sealed bushing adapter on the prepared bushing terminal. Make sure the rubber cuff of the sealed bushing adapter sits overtop of the prepared mastic seal. Make sure to fully install sealed bushing adapter; all 8 bolt holes should be aligned with the bushing terminal once fully installed.



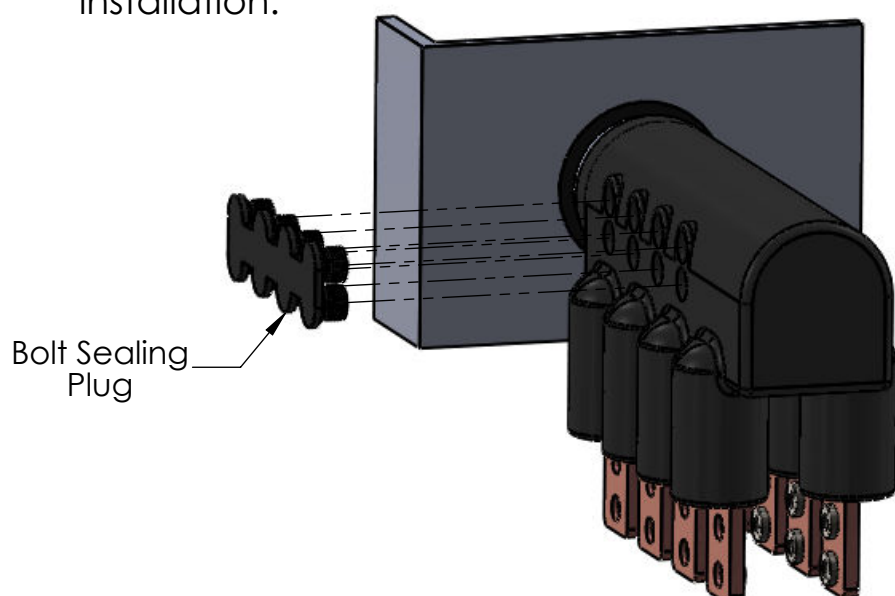
### Step 4: Fasten Sealed Bushing Adapter to Transformer Bushing Terminal

Using the supplied hardware, fasten the bushing adapter to the transformer bushing terminal. Tighten bolt to 40 ft-lbs. Repeat for all remaining bolt locations.

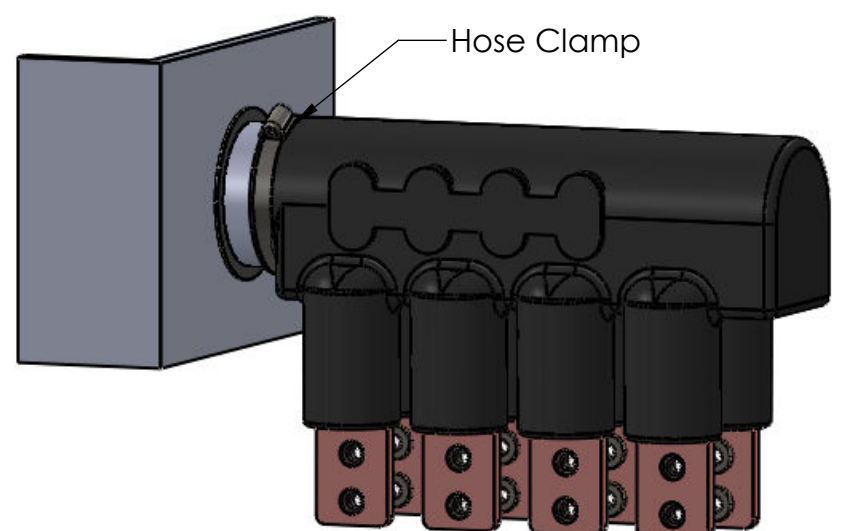


Ensure all bolts are installed and torqued to 40 ft-lbs before proceeding to next step.

Install bolt sealing plug as shown below. Press firmly on each hole location to ensure full installation.



Install stainless steel hose clamp around rubber cuff of sealed bushing adapter, as shown below.



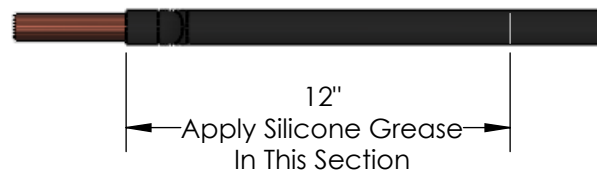


## Installation Instructions

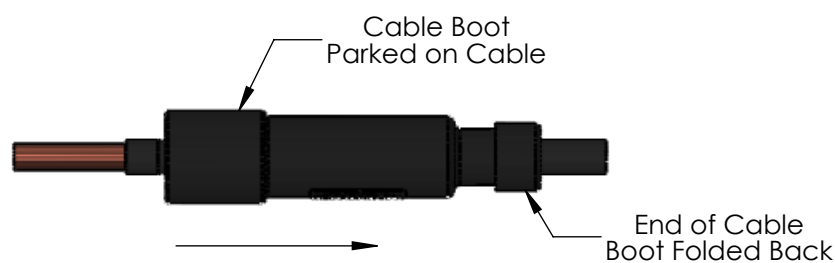
### Step 5: Cable Installation

5A: Cutback cable jacket and insulation per standard practice.

Apply silicone grease to cable jacket as shown below.  
Use only approved silicone grease (Class & Stock #639-1437).



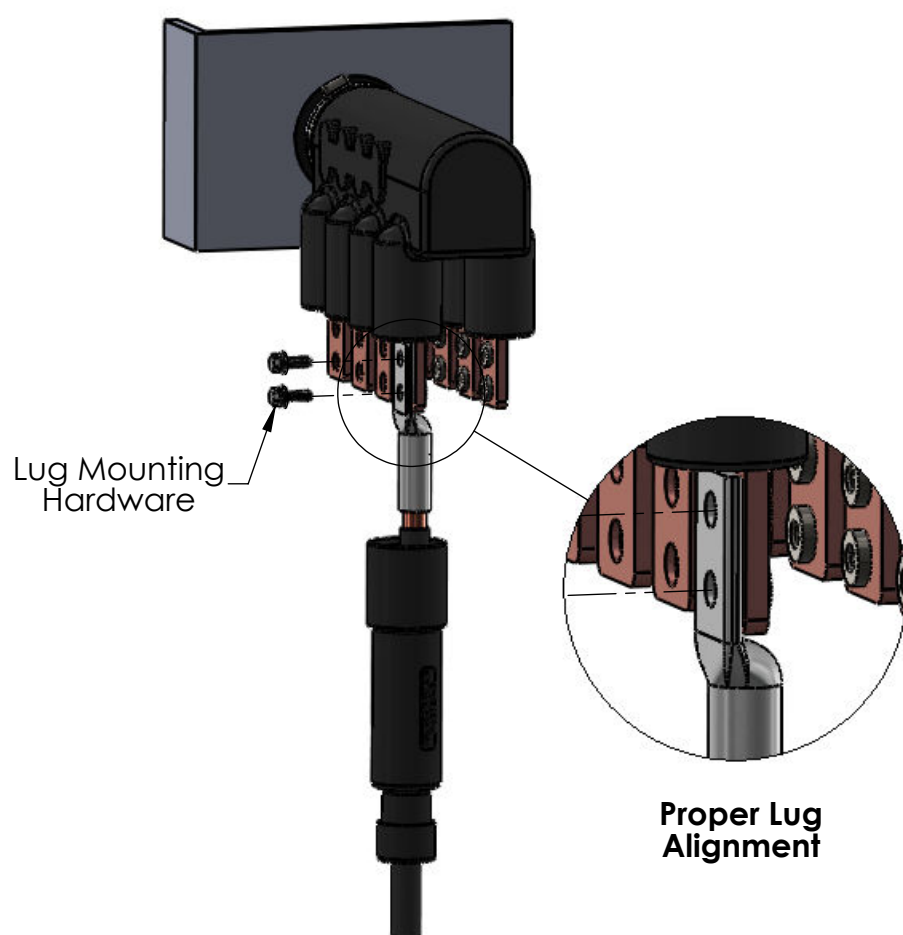
5B: Slide cable boot onto cable as shown below. The small end of the cable boot is supplied folded back to assist with the mastic seal; be sure to keep folded back until instructed to unfold.



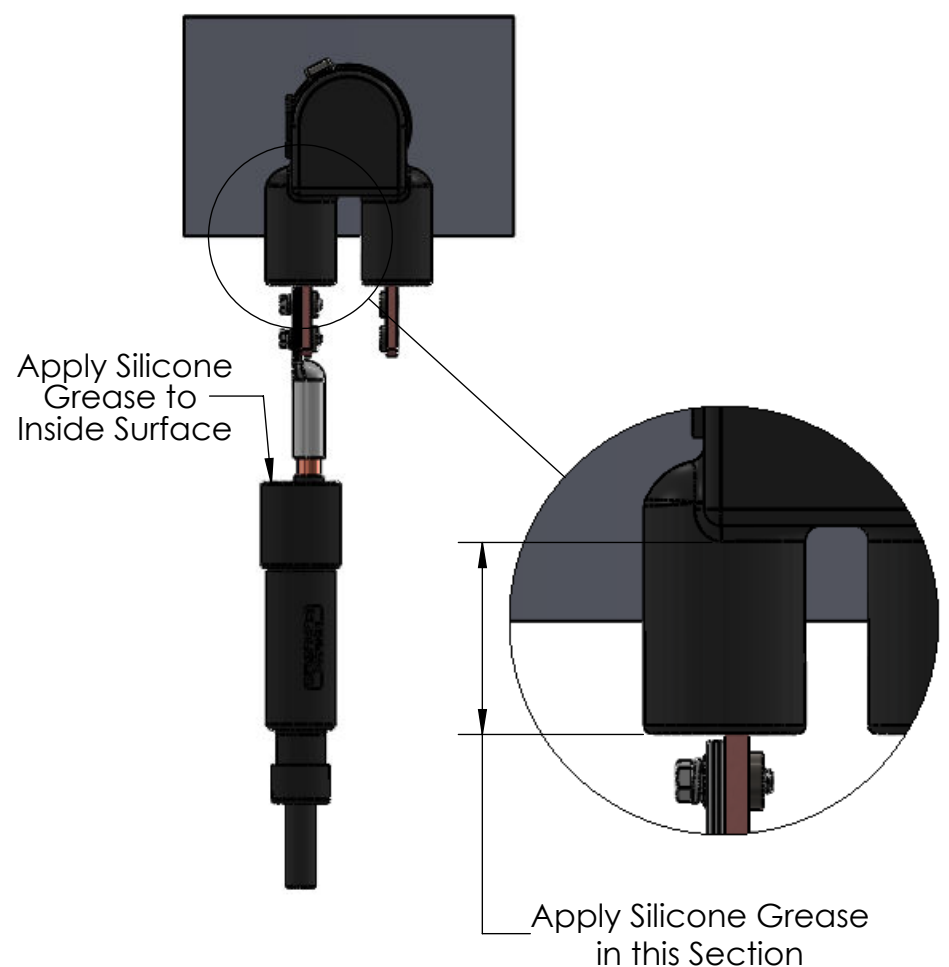
5C: Crimp lug to cable.



5D: Mount cable to sealed bushing adapter using supplied hardware. Align lug as shown below. Torque bolts to 40ft-lbs.



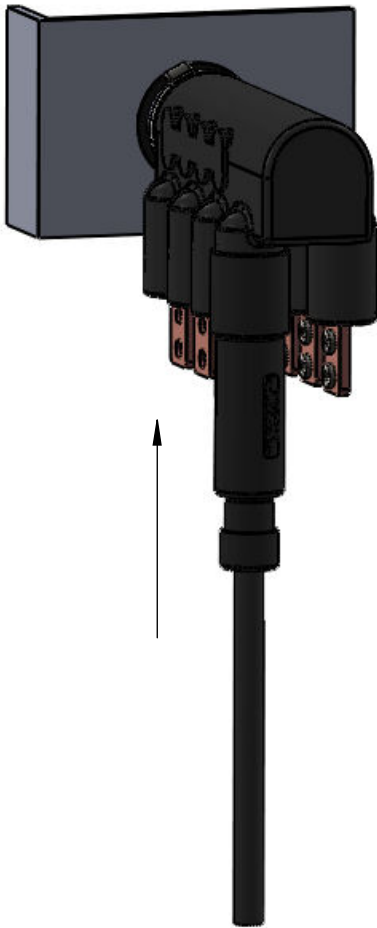
5E: Apply silicone grease to sealed bushing adapter and sealing boot as shown below.



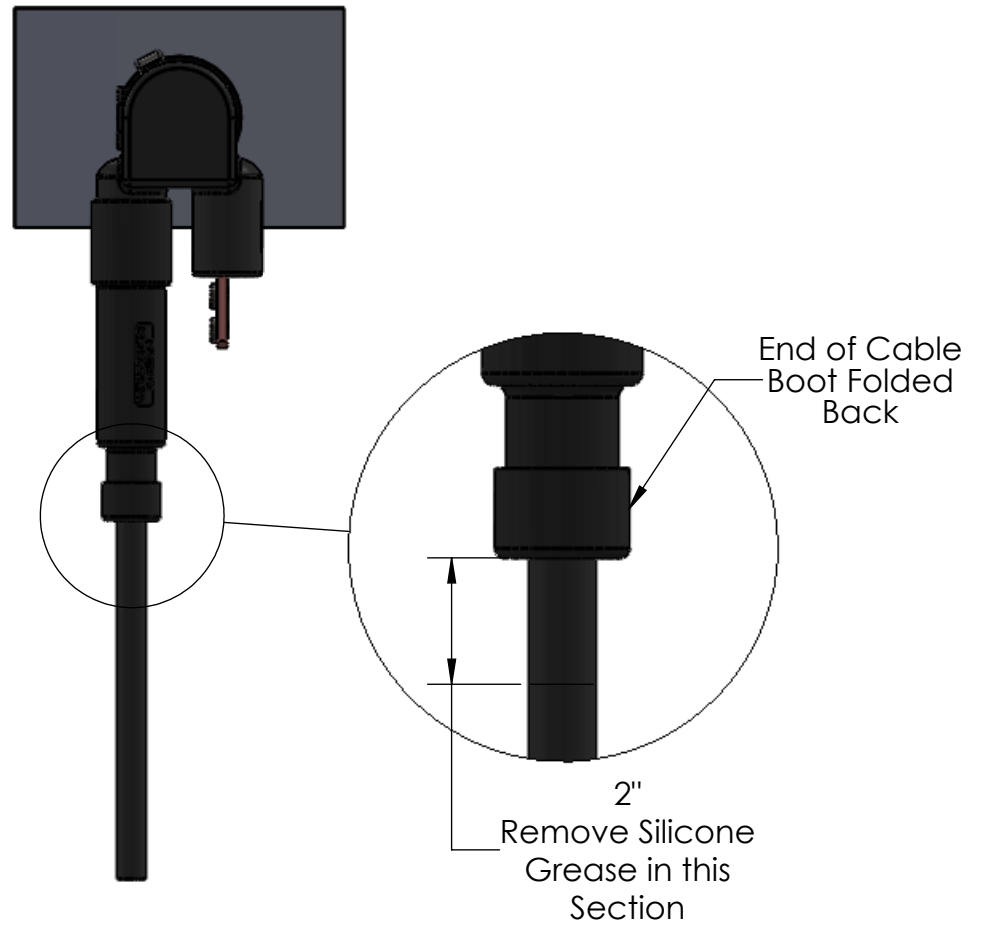
## Installation Instructions

### Step 5: Cable Installation (Continued)

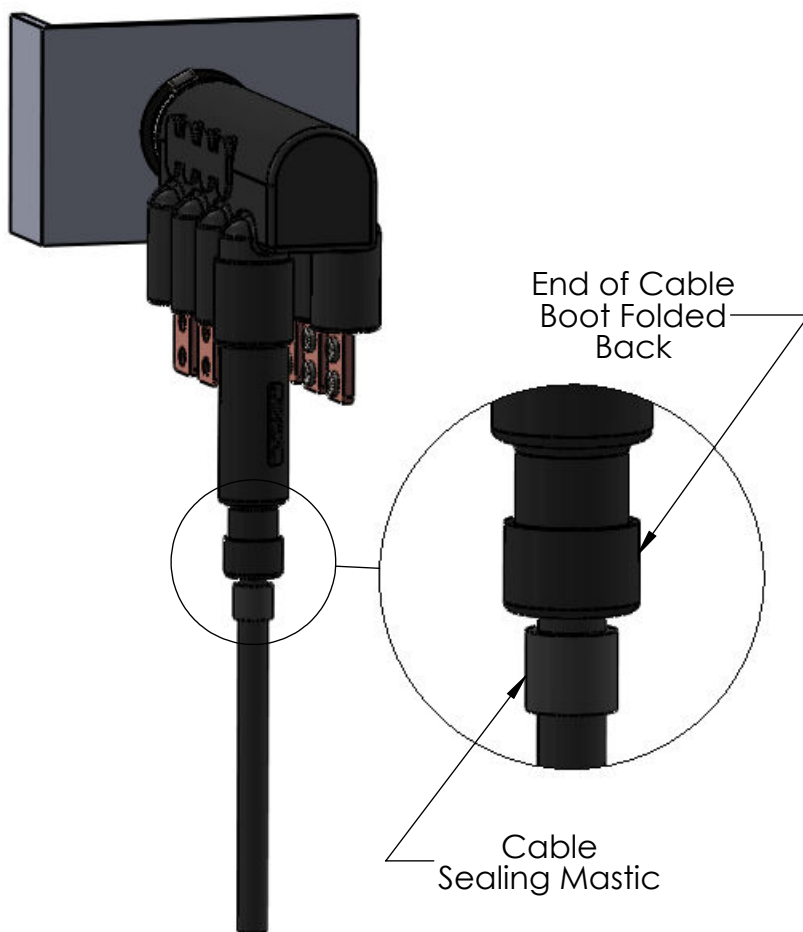
5F: Slide cable boot onto Sealed Bushing Adapter as shown below.



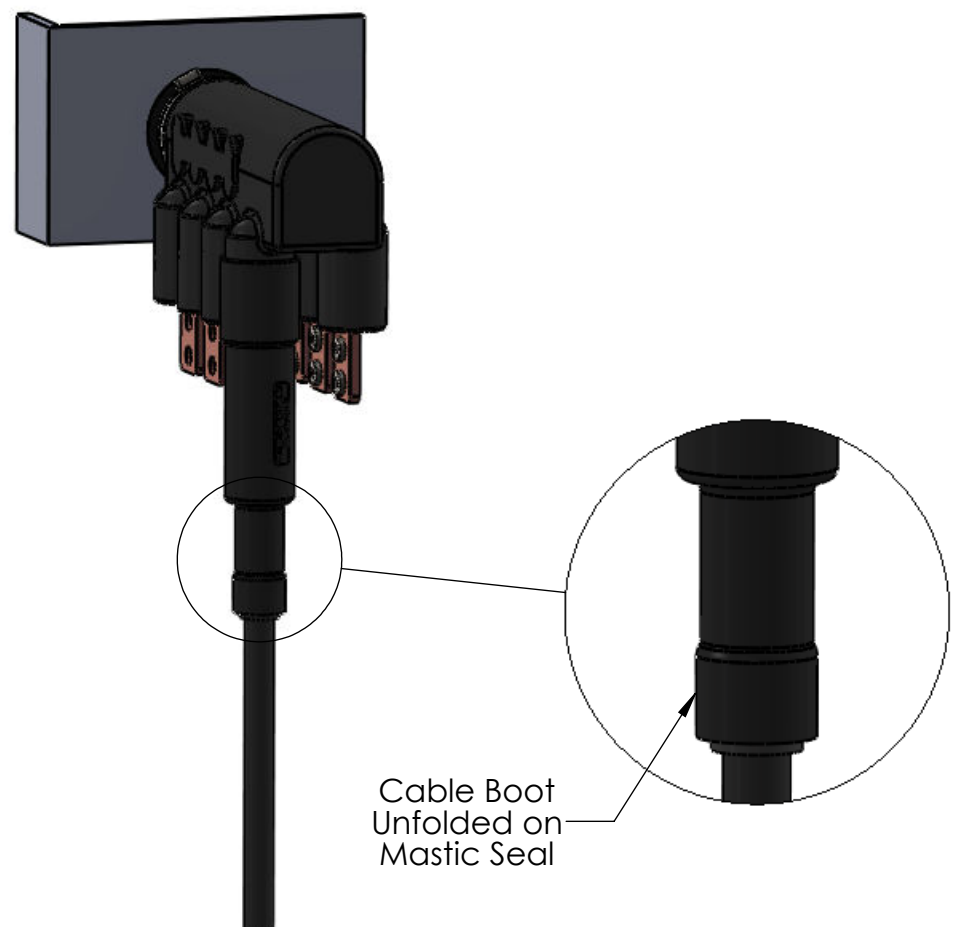
5G: Remove silicone grease using approved cleaning wipes (Class & Stock #634-2026) as shown below.



5H: Apply one strip of cable sealing mastic to cleaned cable section as shown below. Press mastic firmly together at overlap.



5I: Unfold lower section of cable boot overtop installed mastic.



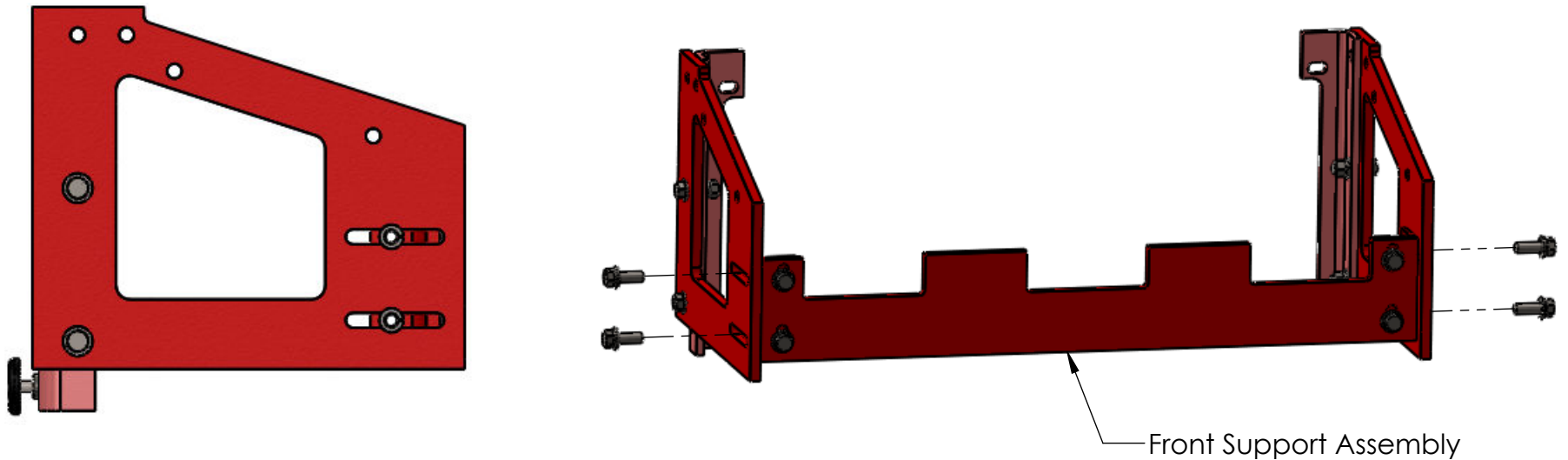
**Repeat step 5 for all 8 cable connections.**

**Repeat steps 1-5 for remaining bushing terminals.**

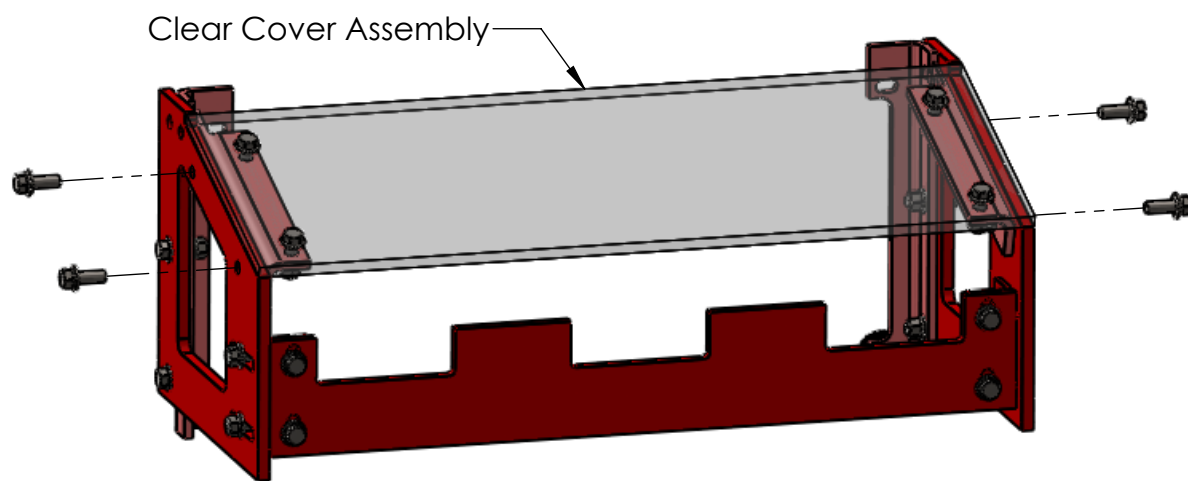
## Installation Instructions

### Step 6: Support Frame Assembly

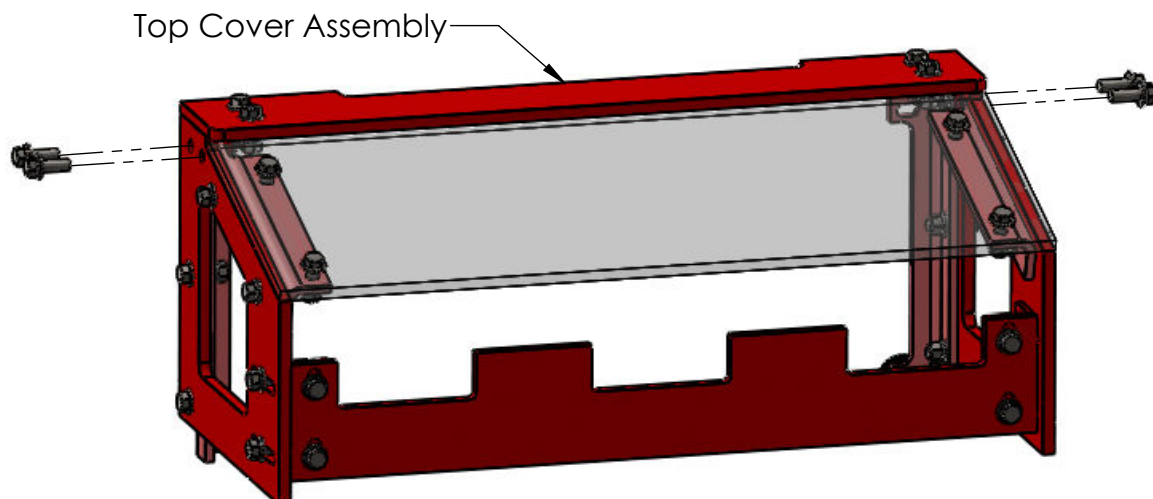
6A: Install supplied hardware through slots as shown below and hand tighten bolts (leave loose for adjustment).



6B: Install Clear Cover Assembly using the supplied hardware as shown below.



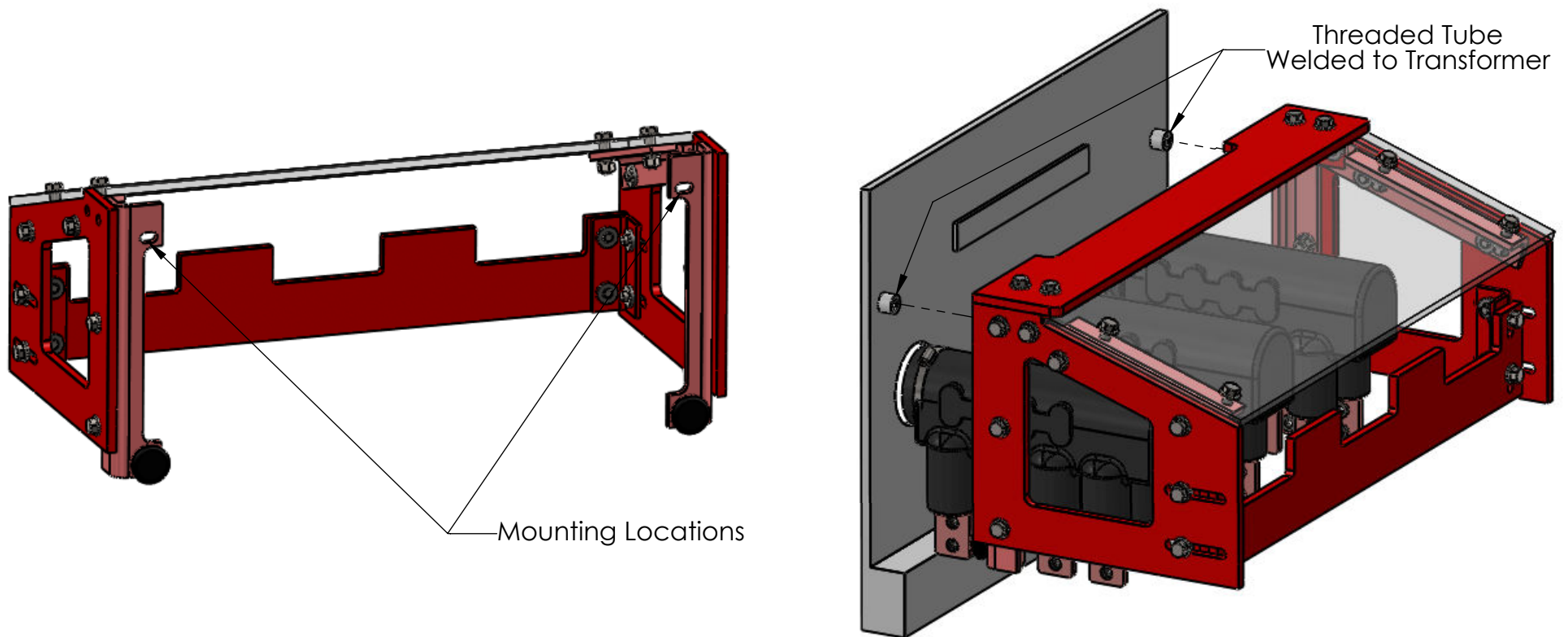
6C: Install Top Cover Assembly using the supplied hardware as shown below.



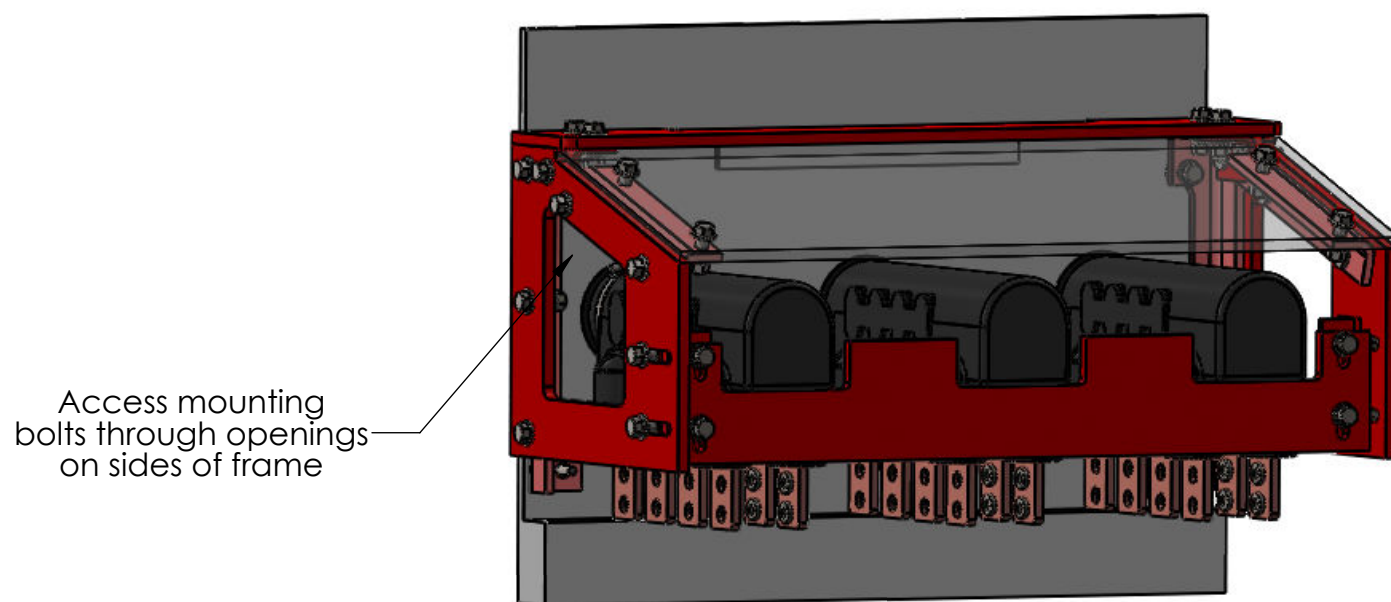
## Installation Instructions

### Step 7: Support Frame Installation

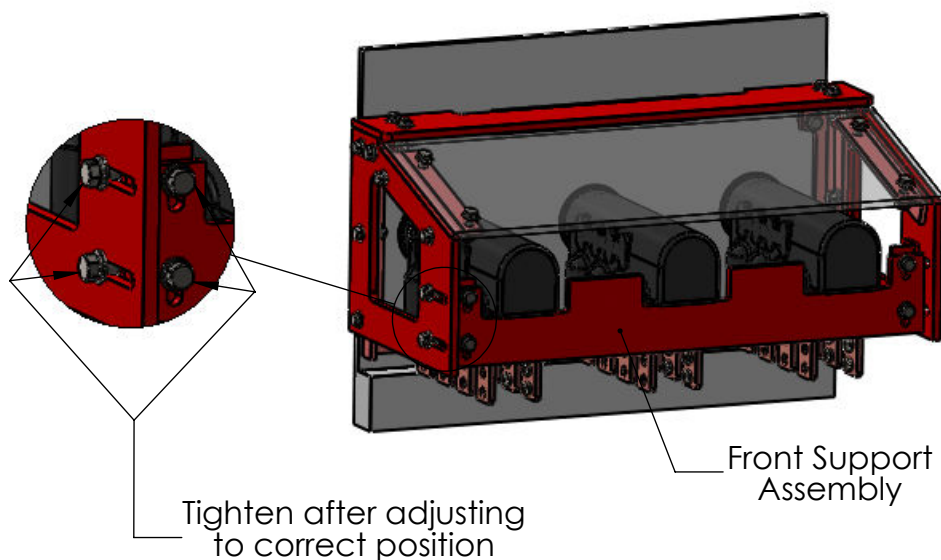
Position the support frame with the transformer such that the mounting locations of the frame align with the threaded tubes welded to the face of the transformer.



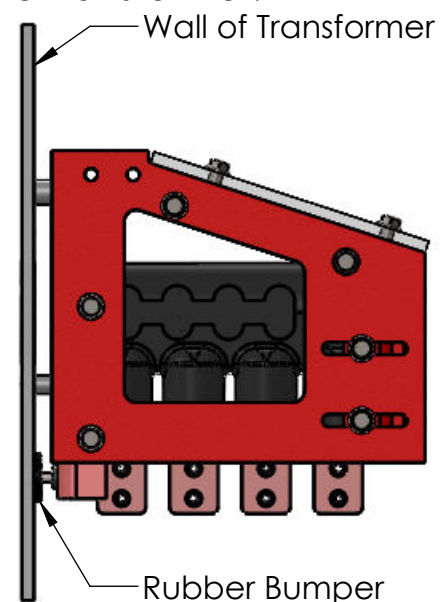
Fasten support frame to transformer using supplied hardware. Access to fasten bolts can be achieved via the window cut into the sides of the frame.



Adjust position of Front Support Assembly so it sits against the bottom of the Sealed Bushing Adapters. Tighten all bolts as shown below.



By hand, tighten both rubber bumpers against the wall of the transformer.



## Installation Complete