System Deinstallation

Table of Contents

February 23, 2026
© S&C Electric Company 2026, all rights reserved

Qualified Persons

⚠ WARNING

Only qualified persons knowledgeable in the installation, operation, and maintenance of overhead and underground electric distribution equipment, along with all associated hazards, may install, operate, and maintain the equipment covered by this publication. A qualified person is someone trained and competent in:

- The skills and techniques necessary to distinguish exposed live parts from nonlive parts of electrical equipment
- The skills and techniques necessary to determine the proper approach distances corresponding to the voltages to which the qualified person will be exposed
- The proper use of special precautionary techniques, personal protective equipment, insulated and shielding materials, and insulated tools for working on or near exposed energized parts of electrical equipment

These instructions are intended only for such qualified persons. They are not intended to be a substitute for adequate training and experience in safety procedures for this type of equipment.

Read This Instruction Sheet

NOTICE

Thoroughly and carefully read this instruction sheet and all materials included in the product's instruction handbook before removing the EdgeRestore Underground Distribution Restoration System from a transformer. Become familiar with the Safety Information on pages 3 through 4 and Safety Precautions on page 5. The latest version of this publication is available online in PDF format at **sandc.com/en/contact-us/product-literature/**.

Retain This Instruction Sheet

This instruction sheet is a permanent part of the EdgeRestore Underground Distribution Restoration System. Designate a location where users can easily retrieve and refer to this publication.

Proper Application

⚠ WARNING

The equipment in this publication is only intended for application on distribution transformers. The application must be within the ratings furnished for the EdgeRestore Underground Distribution Restoration System. Ratings for the EdgeRestore system are listed in the ratings table in Specification Bulletin 676-31 The ratings are also on the nameplate QR code affixed to the product.

Understanding Safety-Alert Messages

Several types of safety-alert messages may appear throughout this instruction sheet and on labels and tags attached to the product. Become familiar with these types of messages and the importance of these signal words:

⚠ DANGER

"DANGER" identifies the most serious and immediate hazards that will likely result in serious personal injury or death if instructions, including recommended precautions, are not followed.

⚠ WARNING

"WARNING" identifies hazards or unsafe practices that can result in serious personal injury or death if instructions, including recommended precautions, are not followed.

⚠ CAUTION

"CAUTION" identifies hazards or unsafe practices that can result in minor personal injury if instructions, including recommended precautions, are not followed.

NOTICE

"NOTICE" identifies important procedures or requirements that can result in product or property damage if instructions are not followed.

Following Safety Instructions

If any portion of this instruction sheet is unclear and assistance is needed, contact the nearest S&C Sales Office or S&C Authorized Distributor, or call the S&C Global Support and Monitoring Center at 1-888-762-1100. Telephone numbers are also listed on S&C's website, **sandc.com**.

NOTICE

Read this instruction sheet thoroughly and carefully before deinstalling the EdgeRestore Underground Distribution Restoration System.

Replacement Instructions and Labels

If additional copies of this instruction sheet are required, contact the nearest S&C Sales Office, or S&C Authorized Distributor, or S&C Headquarters, or S&C Electric Canada Ltd.

It is important any missing, damaged, or faded labels on the equipment be replaced immediately. Replacement labels are available by contacting the nearest S&C Sales Office or S&C Authorized Distributor, or S&C Headquarters, or S&C Electric Canada Ltd.

Location of Safety Labels

Reorder Information for Safety Labels

Location	Safety Alert Message	Description	Part Number
A	NAMEPLATE	Identification nameplate. Includes QR code that takes users to nameplate information, serial number, and ratings information.	G-9671-1●

● One per bushing well interrupter.

⚠ DANGER

The EdgeRestore Underground Distribution Restoration System operates at high voltage. Failure to observe the precautions below will result in serious personal injury or death.

Some of these precautions may differ from your company's operating procedures and rules. Where a discrepancy exists, follow your company's operating procedures and rules.

1. **QUALIFIED PERSONS.** Access to the EdgeRestore Underground Distribution Restoration System must be restricted to qualified persons. See the "Qualified Persons" section on page 2.
2. **SAFETY PROCEDURES**. Always follow safe operating procedures and rules. Always maintain clearance from energized components.
3. **PERSONAL PROTECTIVE EQUIPMENT**. Always use suitable protective equipment, such as rubber gloves, rubber mats, hard hats, safety shoes, safety glasses, and arc-flash clothing, in accordance with safe operating procedures and rules.
4. **DOORS.** Doors must be securely closed and latched, with padlocks in place at all times unless work is being performed inside the transformer.
5. **SAFETY LABELS.** Do not remove or obscure any of the "DANGER," "WARNING," "CAUTION," or "NOTICE" labels.
6. **HANDLING TOOLS**. The EdgeRestore Underground Distribution Restoration System is designed for operation with a shotgun-style hot stick.
7. **ENERGIZED BUSHINGS.** Always assume the transformer or EdgeRestore Underground Distribution Restoration System bushings are energized unless tested and/or grounded per utility operating procedures.
8. **GROUNDING.** The EdgeRestore Underground Distribution Restoration System must be bonded to an earth or transformer ground before energizing and at all times when energized.
9. **BACKFEED.** The transformer, bushings, and cables may be energized by backfeed from the loop side.
10. **MAINTAINING PROPER CLEARANCE**. Always maintain proper clearance from energized components. The open vacuum interrupter does not provide a working clearance. Insulated caps or other suitable provisions should be used if one elbow is parked and the EdgeRestore Bushing Well Interrupter is open.
11. **VACUUM INTERRUPTER POSITION.** Always confirm the **Open/Close** position of each EdgeRestore Bushing Well Interrupter by visually observing its indicator.
12. **CABLE THUMPING.** The elbow must be disconnected from the EdgeRestore Bushing Well Interrupter before thumping a cable section.

Handling

If moving the EdgeRestore Automatic Restoration System components to another location, or removing the EdgeRestore system temporarily in order to maintain or decommission a transformer, handle the bushing well interrupters carefully to avoid scratching the black conductive paint. Work gloves should be worn at all times when handling the bushing well interrupters. Paint from the bushing well interrupters may transfer to hands and clothing. If the original packaging isn't available, S&C recommends carefully wrapping the bushing well interrupters in kraft paper or anti-static foam and securing them in cardboard box.

The installation kit, including the control, a current sensor, a bushing well interrupter support system that includes a parking stand, and miscellaneous installation supplies and hardware should be put together in a box or moisture-free bag. If components are wet after deinstallation, let them dry before packing for storage.

⚠ WARNING

DO NOT disassemble the EdgeRestore Bushing Well Interrupters or the control. There are no customer-serviceable parts inside the bushing well interrupters or control. Disassembly will defeat the moisture seal and void the warranty. **Operating a bushing well interrupter that has been disassembled can result in arcing, burns, and electric shock.**

NOTICE

DO NOT drop the EdgeRestore Bushing Well Interrupters or the control or subject any of its parts to undue stress during installation. Do not place the bushing well interrupters on the ground. Placing the bushing well interrupters on the ground may introduce dirt and contamination at the connection points.

NOTICE

Inspect the conductive black paint on the bushing well interrupters for deep scratches where the Cypoxy™ Insulator material may be exposed. If deep scratches are found, contact S&C Electric Company before installation. Energizing bushing well interrupters with deep scratches in the black paint may affect product function.

Long-Term Storage

For long-term storage of a deinstalled EdgeRestore system, S&C recommends contacting a local Sales Office and requesting duplicate original packing boxes.

To avoid damage from moisture and UV radiation, S&C recommends storing the EdgeRestore system indoors in its shipping packaging. Storing the bushing well interrupters outside of the shipping carton may expose them to extended UV radiation which can damage the product.

While the system components inside the packaging are moisture-proof, storing the EdgeRestore Underground Restoration System unprotected outdoors can damage the packaging.

⚠ DANGER

Make sure the transformer is de-energized, isolated from all power sources, and grounded before starting de-installation. **Failure to completely de-energize the transformer before installing the EdgeRestore Underground Distribution Restoration System will result in severe personal injury or death.**

Tools and Supplies Required

The following tools, supplies, and parts are required:

- A ⅜-inch, long-style Allen wrench (hex key) or an extra-long hex ⅜-inch bit for socket wrench (Shaft length should be more than 5 inches [127 mm].)

Note: A long-style or long-reach bit for a socket wrench is recommended. See Figure 1. T-handled or L-handled Allen wrenches may not properly clear the top of the bushing well interrupter during installation.

- S&C Plug Install/Removal Tool part number CVA-1099-1 See Figure 2.
- A ⅜-inch socket
- A 3⁄16-inch Allen wrench (hex key)
- A 9⁄16-inch combination wrench
- A #2 Phillips head screwdriver
- A bushing well interrupter torque tool (S&C recommends the Speed Systems Inc. BIT/E180AT Loadbreak Torquing Tool. See Figure 3.)
- A shotgun stick or hookstick with a distribution prong
- Cotton or soft leather-palmed work gloves

Recommended Supplies

- Cardboard or cloth to place components on during removal
- Packing supplies. See “Handling” on page 6.
- Cable ties to secure cables

Figure 1. An example of a long-style Allen hex key bit for a ⅜-inch socket wrench.

Figure 2. S&C Plug Install/Removal Tool part number CVA-1099-1.

Figure 3. Speed Systems’ BIT/E180AT Loadbreak Torquing Tool.

Normally closed control

Normally open control

System Control. The logic center of the system, the EdgeRestore system control (normally open or normally closed) communicates with other EdgeRestore systems on the loop to quickly restore power.

H1B EdgeRestore Bushing Well Interrupter

Support system and parking stand. The system provides support for the bushing well interrupters and control. The control can be easily removed when the parking stand is in use.

H1A EdgeRestore Bushing Well Interrupter. The H1A bushing well interrupter uses a current sensor to sense current on the transformer.

Complete EdgeRestore Underground Distribution Restoration System

Current sensor. This is only required on the H1A bushing well interrupter. The sensor continuously monitors for the presence of current, signaling the control module in the event of an outage.

EdgeRestore Bushing Well Interrupter. This contains a compact vacuum interrupter and an actuating mechanism used for switching.

Plug and cap. These cover the mounting bolt connecting the bushing well interrupter to the bushing well adapter.

Swivel foot. This is used on both the H1A and H1B bushing well interrupter for support for ANSI Type 1 transformers.

Bushing well adapter. The adapter provides a secure connection between the transformer's bushing well and the EdgeRestore Bushing Well Interrupter.

Loadbreak insert. (User supplied.)

EdgeRestore Bushing Well Interrupter

Figure 4. EdgeRestore Underground Distribution Restoration System for Type 1 Transformer Overview.

⚠ DANGER

Make sure the transformer is de-energized, isolated from all power sources, and grounded before starting de-installation. **Failure to completely de-energize the transformer before installing the EdgeRestore Underground Distribution Restoration System will result in severe personal injury or death.**

Remove the Control

To disconnect all connectors from the control and remove the control, complete the following steps:

STEP 1. Disconnect the six pin power connector from the control. Then, disconnect the black 10-gauge wire that is attached to either X1 or X3 on the secondary transformer and the white 10-gauge wire attached to X2. Typically this is the lighting connection on the transformer secondary connections that can be used for this purpose. See Figure 5.

STEP 2. If remote monitoring is installed, disconnect the Molex 2042200002 connector from the control and from the monitoring device.

STEP 3. Disconnect the control cables originating from both bushing well interrupters, and from the current sensor. Make sure the connector ends do not collect dirt or debris.

STEP 4. Lift the control off of the parking stand and set it aside in a protected area.

Remove the Grounding (Drain) Wires and Loadbreak Inserts

Note: If moving the EdgeRestore system to a new location, S&C recommends using a new length of drain wire. See Figure 6 and Figure 7.

Drain wire runs between the tab on the loadbreak insert to the grounding point on each bushing well interrupter and terminates on the transformer ground bus. Remove all drain wire.

Remove the loadbreak inserts from the bushing well interrupters per the manufacturer's directions.

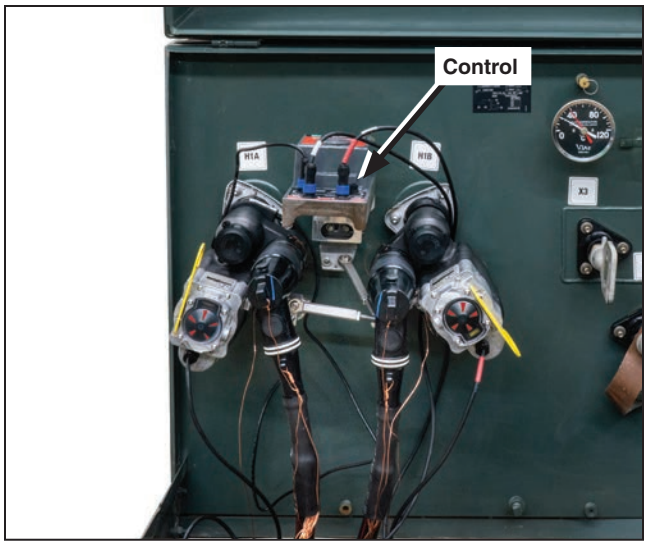


Figure 5. Location of control and control connections. A normally closed control is shown.

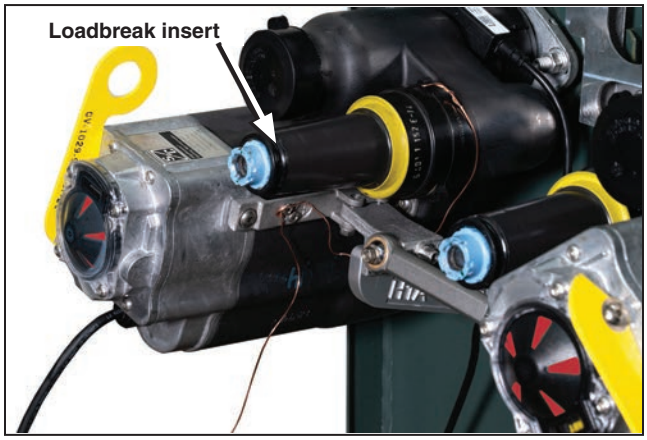


Figure 6. The grounding tab on the loadbreak insert.

Figure 7. The bushing well interrupter grounding point.

Remove the Caps and Plugs

To remove the plugs, complete the following steps:

STEP 1. Remove the cap. See Figure 8.

STEP 2. Attach the plug install/removal tool to the end of the plug. The tool will not screw all the way flush to the plug.

STEP 3. Attach a shotgun stick or a hookstick fitted with a distribution prong to the plug install/removal tool. Pull with significant force to remove the plug. See Figure 9.

STEP 4. Clean any silicone lubricant off of the plug, and set it and the cap aside in a protected area.

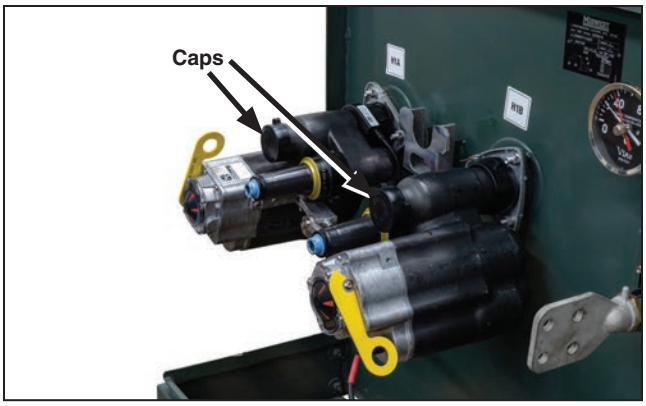


Figure 8. Remove the caps from the bushing well interrupters.

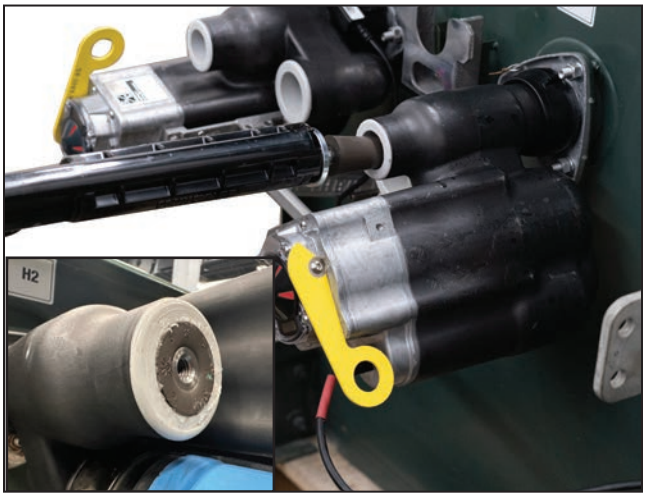


Figure 9. Thread the tool into the plug (insert) and using a shotgun stick or hookstick, pull the plug out of the bushing well interrupter opening.

Remove the Parking Stand Spacer

To remove the optional parking stand spacer, complete the following steps:

STEP 1. Loosen and remove the two ¼–20 × ⅝-inch flange head bolts shown in Figure 10. Remove the parking stand spacer.

STEP 2. Rethread the hardware into the holes they were removed from to prevent loss.

Remove the Parking Stand Spacer and Optional Parking Stand Extender

To remove the optional parking stand extender and parking stand spacer, complete the following steps:

STEP 1. Loosen and remove the four ¼–20 × ⅝-inch flange head bolts shown in Figure 11.

STEP 2. Remove the parking stand spacer and then the extender. See Figure 12. Rethread the hardware into the holes they were removed from to prevent loss.

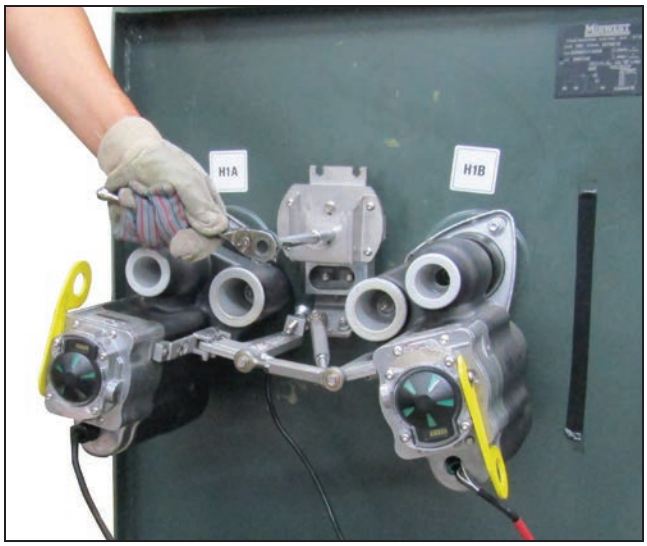


Figure 10. Loosening the bolts.

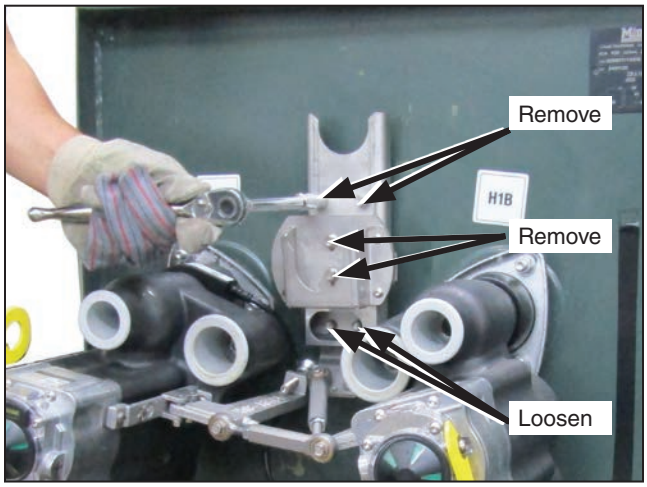


Figure 11. Remove the two screws on extender. Loosen the screws on the parking stand spacer and parking stand extender.

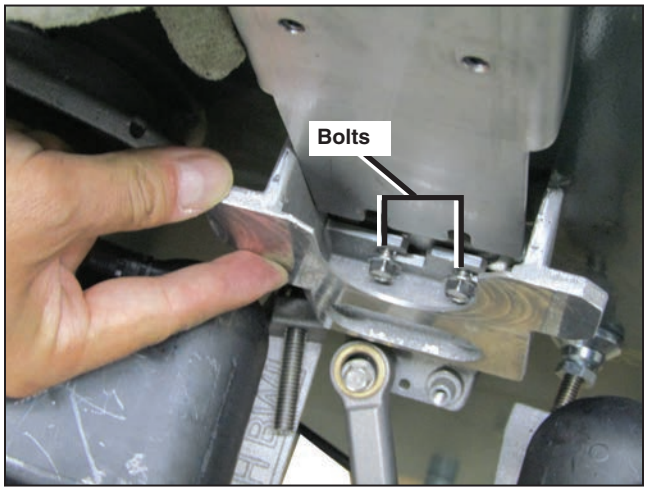


Figure 12. The parking stand extender should be pulled out from between the parking stand bolts and parking stand.

Removing the Support Strut System

To remove the support strut system, complete the following steps:

STEP 1. Loosen the two jam nuts using the 9/16-inch combination wrench as shown in Figure 13.

STEP 2. Loosen and remove the three 1/4–20 × 5/8-inch flange-head bolts shown in Figure 13. To avoid losing the flange-head bolts, they can be reth-readed into the bosses.

STEP 3. Remove the cross-brace link, then remove the loose end of the adjustable link connected to the parking stand. The adjustable link can be left attached to the parking stand assembly.

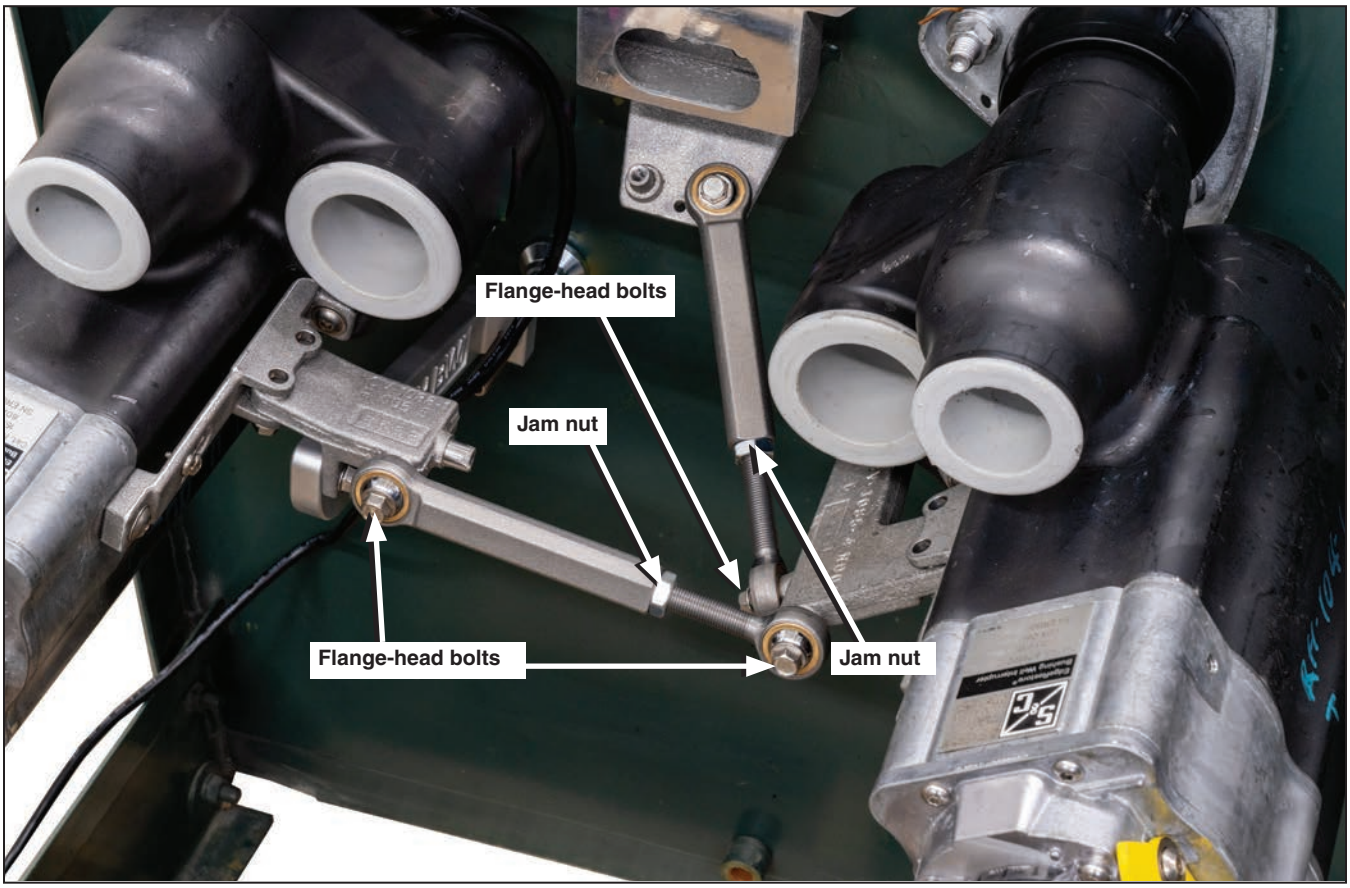


Figure 13. Loosen all bolts and jam nuts.

Remove the Bushing Well Interrupters

To remove the bushing well interrupters, complete the following steps for each bushing well interrupter:

STEP 1. There is a captive bolt inside the bushing well interrupter. Support the bushing well interrupter with one hand, and loosen the captive bolt using a ⅜-inch long-style Allen wrench. See Figure 14.

STEP 2. Remove the bushing well interrupter from the bushing well adapter.

For the H1A bushing well adapter: Remove the current sensor. See Figure 15.

STEP 3. If packing the EdgeRestore system in S&C provided packing cartons, remove the two ¼–20 × ⅝-inch flange-head bolts securing the swivel foot to the H1A bushing well interrupter. Thread the bolts into the swivel foot to avoid loss. See Figure 16.

STEP 4. Replace the caps on the bushing well interrupters to prevent loss.

Figure 14. Loosen the captive bolt.

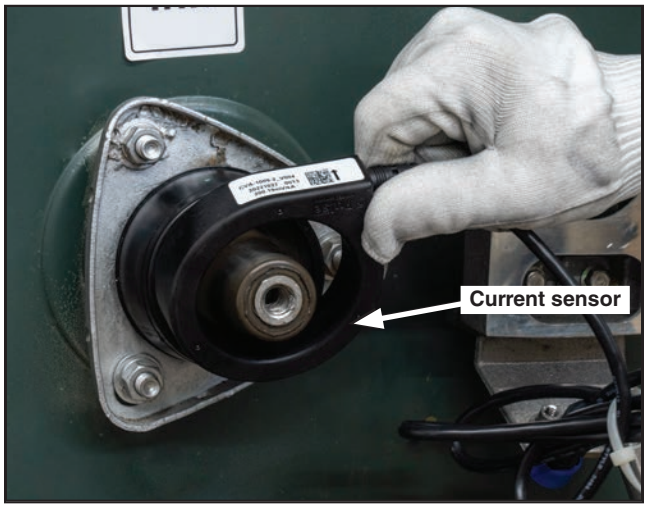


Figure 15. Remove the current sensor from the H1A bushing well interrupter.

Figure 16. When storing in an S&C carton, remove the swivel foot on the H1A bushing well interrupter.

Remove the Parking Stand Link Bracket

To remove the parking stand link bracket and parking stand, complete the following steps:

STEP 1. Loosen the two ¼–20 flange-head bolts with a wrench equipped with a ⅜-inch socket. See Figure 17.

STEP 2. Slide the parking stand bracket off of the bolts. Remove it and the parking stand link bracket.

Remove the Bushing Well Adapters

Remove the bushing well adapters using the bushing well interrupter torque tool. Wipe off any silicone lubricant with a soft cloth before packing. See Figure 18.

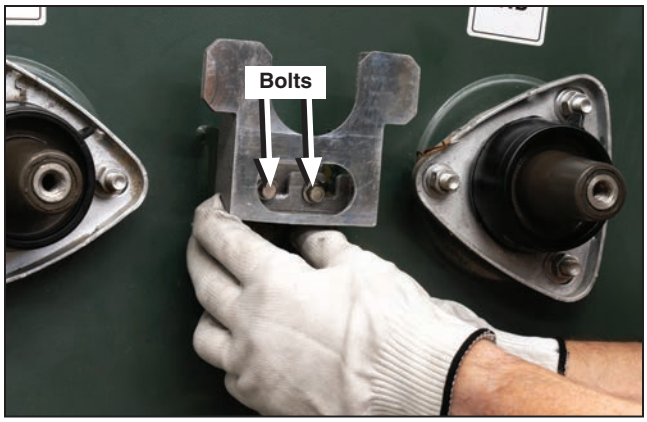


Figure 17. Remove the bolts.

Figure 18. Remove the bushing well adapters.

Normally closed control

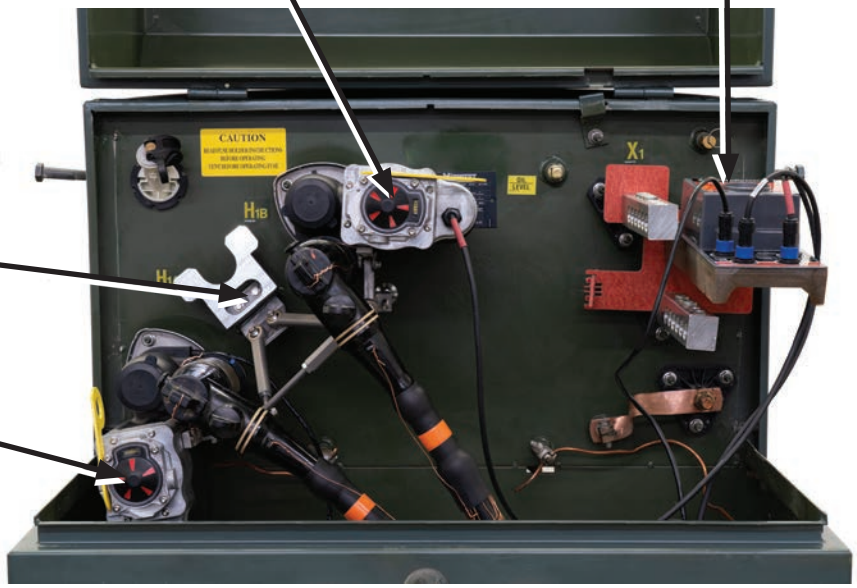
Normally open control

H1B EdgeRestore Bushing Well Interrupter.

System Control. The logic center of the system, the EdgeRestore system control (normally open or normally closed) communicates with other EdgeRestore systems on the loop to quickly restore power. May also install on parking stand.

Support system and parking stand. The system provides support for the bushing well interrupters while keeping the parking stand available for use. Alternate installation position for control.

H1A EdgeRestore Bushing Well Interrupter. The H1A bushing well interrupter uses a current sensor to sense current on the transformer.



Complete EdgeRestore Underground Distribution Restoration System

Current sensor. Only required on the H1A bushing well interrupter. The sensor continuously monitors for the presence of current, signaling the control module in the event of an outage.

H1A EdgeRestore Bushing Well Interrupter. This contains a compact vacuum interrupter and an actuating mechanism used for switching.

Plug and cap. These cover the mounting bolt connecting the bushing well interrupter to the bushing well adapter.

Swivel foot. This is only required on the H1B bushing well interrupter for ANSI Type 2 transformers.

Bushing well adapter. The adapter provides a secure connection between the transformer's bushing well and the EdgeRestore Bushing Well Interrupter.

Loadbreak insert. (User supplied.)

EdgeRestore Bushing Well Interrupter

Figure 19. EdgeRestore Underground Distribution Restoration System for Type 2 Transformer Overview.

⚠ DANGER

Make sure the transformer is de-energized, isolated from all power sources, and grounded before starting de-installation. **Failure to completely de-energize the transformer before installing the EdgeRestore Underground Distribution Restoration System will result in severe personal injury or death.**

Remove the Control

To disconnect all connectors from the control and remove the control, complete the following steps:

STEP 1. Disconnect the six pin power connector from the control. Then, disconnect the black 10-gauge wire that is attached to either X1 or X3 on the secondary transformer and the white 10-gauge wire attached to X2. Typically this is the lighting connection on the transformer secondary connections that can be used for this purpose. See Figure 20.

STEP 2. If remote monitoring is installed, disconnect the Molex 2042200002 connector from the control and from the monitoring device.

STEP 3. Disconnect the control cables originating from both bushing well interrupters, and from the current sensor. Make sure the connector ends do not collect dirt or debris.

STEP 4. ***If the control is mounted to the transformer secondaries:*** Lift the control off of the hangar and set it aside in a protected area. Remove the hangar and support. See Figure 20.

If the control is mounted to the parking stand: Lift the control off of the parking stand and set it aside in a protected area. See Figure 21.

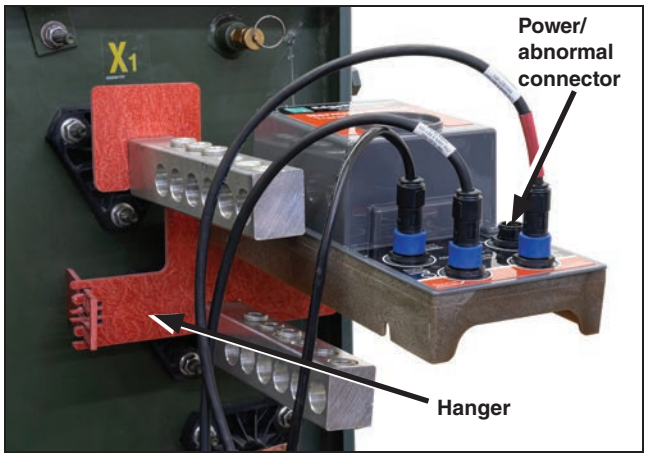


Figure 20. Control connections. A normally closed control is shown.

Figure 21. Remove the control from the parking stand.

Remove the Grounding (Drain) Wires and Loadbreak Inserts

Note: If moving the EdgeRestore system to a new location, S&C recommends using a new length of drain wire.

Drain wire runs between the tab on the loadbreak insert to the grounding point on each bushing well interrupter and terminates on the transformer ground bus. Remove all drain wire. See Figure 22 and Figure 23.

Remove the loadbreak inserts from the bushing well interrupters per the manufacturer's directions.

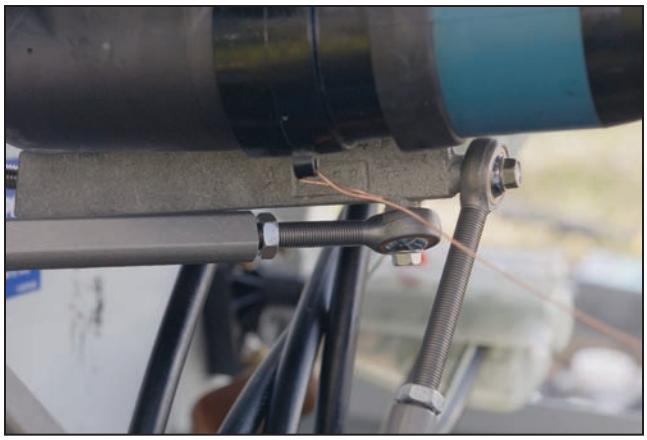


Figure 22. The grounding tab on the loadbreak insert.

Figure 23. The bushing well interrupter grounding point.

Remove the Caps and Plugs

To remove the plugs, complete the following steps:

STEP 1. Remove the cap. See Figure 24.

STEP 2. Attach the plug install/removal tool to the end of the plug. The tool will not screw all the way flush to the plug.

STEP 3. Attach a shotgun stick or a hookstick fitted with a distribution prong to the plug install/removal tool. Pull with significant force to remove the plug. See Figure 25.

STEP 4. Clean any silicone lubricant off of the plug, and set it and the cap aside in a protected area.

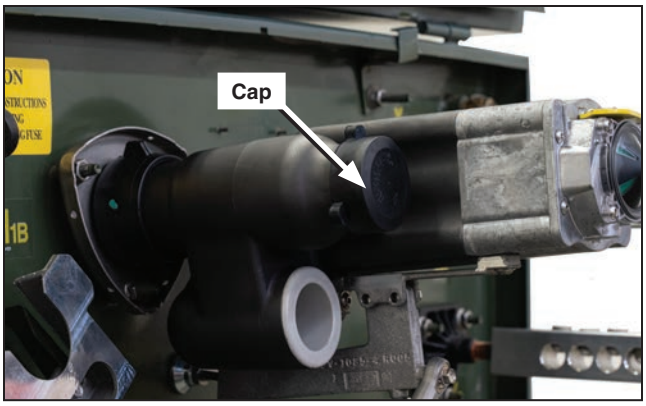


Figure 24. Remove the caps from the bushing well interrupters.

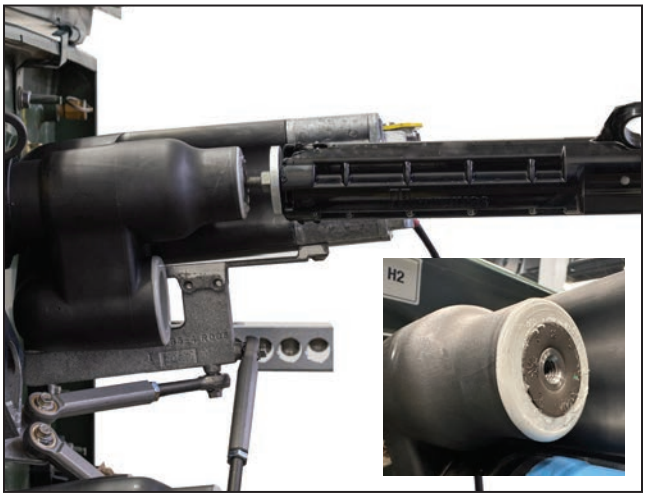


Figure 25. Thread the tool into the plug (inset) and using a shotgun stick or hookstick, pull the plug out of the bushing well interrupter opening.

Remove the Parking Stand Spacer

To remove the optional parking stand spacer, complete the following steps:

STEP 1. Loosen and remove the two ¼–20 × ⅝-inch flange head bolts shown in Figure 26. Remove the parking stand spacer.

STEP 2. Rethread the hardware into the holes they were removed from to prevent loss.

Figure 26. Loosen the bolts.

Removing the Support Strut System

To remove the support strut system, complete the following steps:

STEP 1. Loosen the three jam nuts using the 9/16-inch combination wrench as shown in Figure 27.

STEP 2. Loosen and remove the four 1/4–20 × 5/8-inch flange-head bolts shown in Figure 27. To avoid losing the flange-head bolts, they can be reth-readed into the bosses.

STEP 3. Remove the cross-brace link, then remove the loose ends of the adjustable links connected to the parking stand. The adjustable links can be left attached to the parking stand assembly.

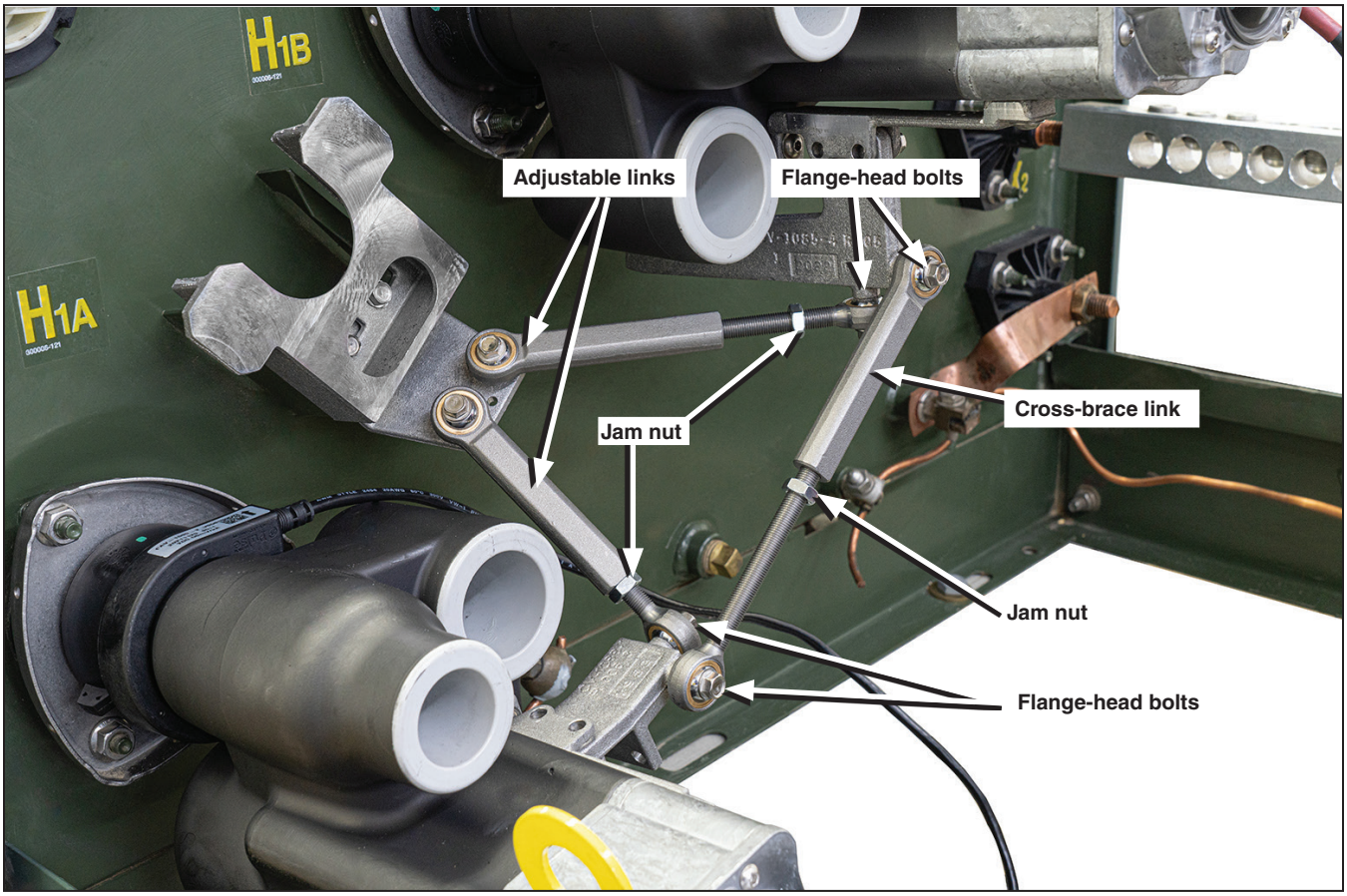


Figure 27. Loosen all bolts and jam nuts.

Remove the Bushing Well Interrupters

To remove the bushing well interrupters, complete the following steps for each bushing well interrupter:

STEP 1. There is a captive bolt inside the bushing well interrupter. Support the bushing well interrupter with one hand, and loosen the captive bolt using a ⅜-inch long-style Allen wrench. See Figure 28.

STEP 2. Remove the bushing well interrupter from the bushing well adapter.

For the H1A bushing well adapter: Remove the current sensor. See Figure 29.

STEP 3. Replace the caps on the bushing well interrupters to prevent loss.

Remove the Parking Stand Link Bracket

To remove the parking stand link bracket and parking stand, complete the following steps:

STEP 1. Loosen the two ¼–20 flange-head bolts with a wrench equipped with a ⅜-inch socket. See Figure 30.

STEP 2. Slide the parking stand bracket off of the bolts. Remove it and the parking stand link bracket.

Figure 28. Loosen the captive bolt.

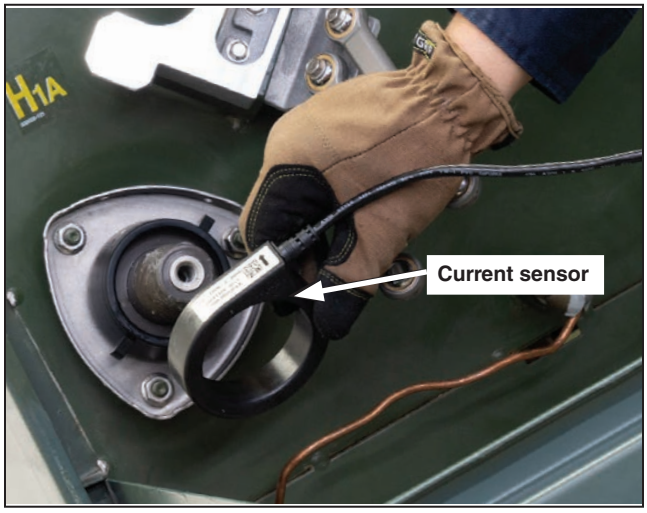


Figure 29. Remove the current sensor from the H1A bushing well interrupter.

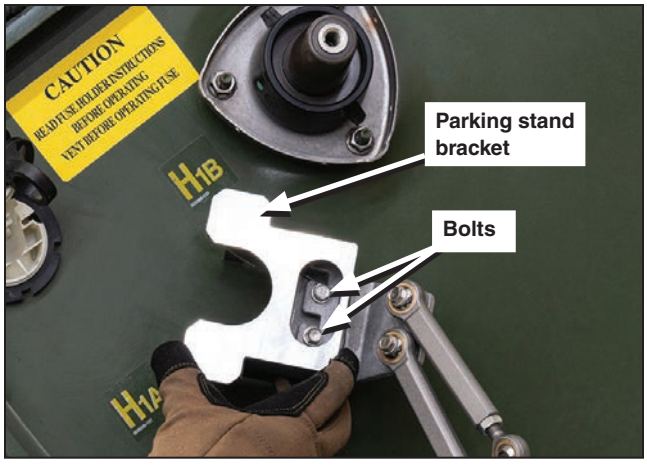


Figure 30. Remove the bolts.

Remove the Bushing Well Adapters

Remove the bushing well adapters using the bushing well interrupter torque tool. Wipe off any silicone lubricant with a soft cloth before packing. See Figure 31.

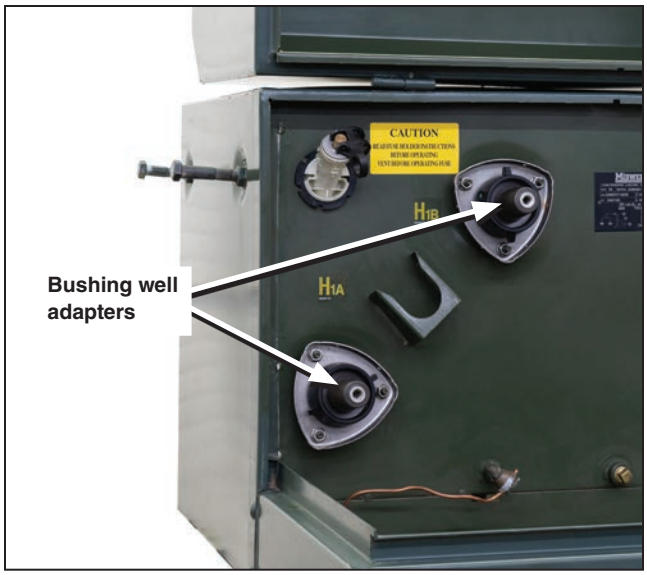


Figure 31. Uninstall the bushing well adapters.