

Loadbreak Apparatus Connectors

200 Amp 15 kV Class and 25 kV Class Loadbreak Rotatable Feedthru Insert Installation Instructions

Service Information

S500-13-1

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PRODUCT INFORMATION

Introduction

The Cooper Power Systems Rotatable Feedthru Insert is used to provide dual bushings from a single apparatus bushing well. It makes converting radial-feed transformers to feed-thru transformers and adding in-line arrester protection both easy and practical. Its patented, built-in torque-limiting ratchet prevents operators from accidentally breaking bushing well studs during installation. The ratchet feature also allows the operator to rotate the feedthru insert 360° to orient it in the best position for the application. The bail assembly supplied with the kit can be used to prevent the insert from moving.

CAUTION: The Cooper Power Systems 200 A Loadbreak Rotatable Feedthru Insert is designed to be operated in accordance with normal safe operating procedures. These instructions are not intended to supersede or replace existing safety and operating procedures. The bushing insert should be installed and serviced only by personnel knowledgeable of good safety practices and fully trained on the installation and application of high voltage electrical equipment.

WARNING: All associated apparatus must be de-energized during installation, maintenance or removal.

Read This Manual First

Read and understand the contents of this manual and follow all locally approved procedures and safety practices before installing or operating this equipment.

Additional Information

These instructions cannot cover all details or variations in the equipment, procedures, or process described nor provide directions for meeting every possible contingency during installation, operation, or maintenance. For additional information, contact your Cooper Power Systems Representative.

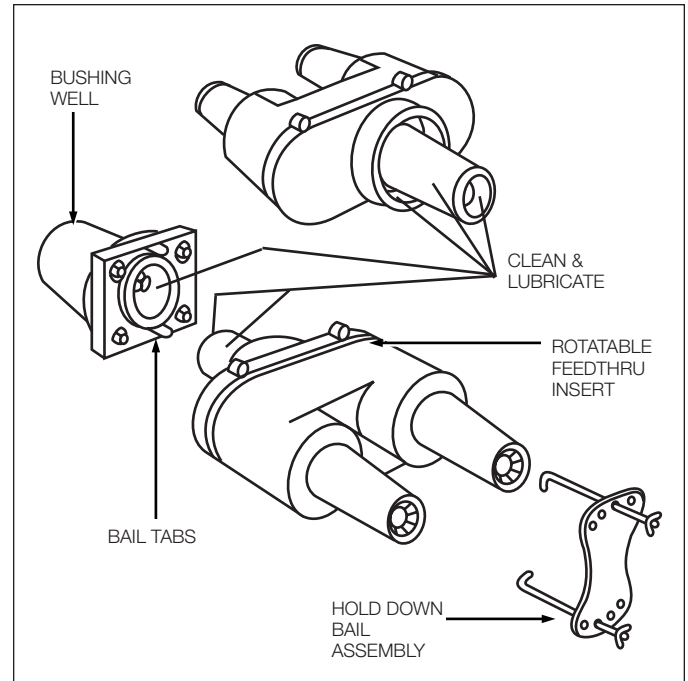


Figure 1. Rotatable Feedthru Insert installation into bushing well.

Acceptance and Initial Inspection

Each Rotatable Feedthru Insert is in good condition when accepted by the carrier for shipment. Upon receipt, inspect the shipping container for signs of damage. Unpack the Rotatable Feedthru Insert and inspect it thoroughly for damage incurred during shipment. If damage is discovered, file a claim with the carrier immediately.

Handling and Storage

Be careful during handling and storage of the Rotatable Feedthru Insert to minimize the possibility of damage. If the Rotatable Feedthru Insert is to be stored for any length of time prior to installation, provide a clean, dry storage area.

Standards

ISO 9001:2000 Certified Quality Management System



SAFETY FOR LIFE



Cooper Power Systems products meet or exceed all applicable industry standards relating to product safety. We actively promote safe practices in the use and maintenance of our products through our service literature, instructional training programs, and the continuous efforts of all Cooper Power Systems employees involved in product design, manufacture, marketing and service.

We strongly urge that you always follow all locally approved safety procedures and safety instructions when working around high-voltage lines and equipment and support our “Safety For Life” mission.

SAFETY INFORMATION

The instructions in this manual are not intended as a substitute for proper training or adequate experience in the safe operation of the equipment described. Only competent technicians, who are familiar with this equipment should install, operate and service it.


A competent technician has these qualifications:


- *Is thoroughly familiar with these instructions.*
- *Is trained in industry-accepted high- and low-voltage safe operating practices and procedures.*
- *Is trained and authorized to energize, de-energize, clear, and ground power distribution equipment.*
- *Is trained in the care and use of protective equipment such as flash clothing, safety glasses, face shield, hard hat, rubber gloves, hotstick, etc.*


Following is important safety information. For safe installation and operation of this equipment, be sure to read and understand all cautions and warnings.

Hazard Statement Definitions

This manual may contain four types of hazard statements:

 **DANGER:** Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

 **WARNING:** Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

 **CAUTION:** Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

CAUTION: Indicates a potentially hazardous situation which, if not avoided, may result in equipment damage only.

Safety Instructions

Following are general caution and warning statements that apply to this equipment. Additional statements, related to specific tasks and procedures, are located throughout the manual.



DANGER: Hazardous voltage. Contact with high voltage will cause death or severe personal injury. Follow all locally approved safety procedures when working around high- and low-voltage lines and equipment.



WARNING: Before installing, operating, maintaining, or testing this equipment, carefully read and understand the contents of this manual. Improper operation, handling or maintenance can result in death, severe personal injury, and equipment damage.



WARNING: This equipment is not intended to protect human life. Follow all locally approved procedures and safety practices when installing or operating this equipment. Failure to comply may result in death, severe personal injury and equipment damage.



WARNING: Power distribution equipment must be selected for the intended application. It must be installed and serviced by competent personnel who have been trained and understand proper safety procedures. These instructions are written for such personnel and are not a substitute for adequate training and experience in safety procedures. Failure to properly select, install or maintain this equipment can result in death, severe personal injury, and equipment damage.



INSTALLATION INSTRUCTIONS

Step 1

CLEAN AND LUBRICATE

- Visually inspect for damage and correct rating.
- Verify that apparatus is de-energized.
- Clean any foreign contaminants from the surfaces of the bushing well and rotatable feedthru insert interfaces.
- Apply a thin even coating of grease to mating surfaces of the rotatable feedthru insert and the bushing well. (Refer to Figure 1.)

Step 2

INSTALL

- Place base of rotatable feedthru insert into bushing well.
- Turn rotatable feedthru insert clockwise onto bushing well stud.
- An audible click signals that threads and interface are fully seated.
- Continue clockwise rotation to position feedthru.
- Insert the holddown bail hooks into bail tabs and assemble bail across the center of the feedthru insert using wing nuts.

Step 3

GROUND

- Attach #14 AWG copper ground wire to bushing insert grounding tab.
- Connect ground wire to system ground.

Step 4

REMOVE CAPS

- Remove red shipping caps prior to energizing.



CAUTION: Do not energize unit while red shipping caps are on rotatable feedthru insert. Loadbreak Elbows, Surge Arresters, or insulated protective caps should be installed before rotatable feedthru insert is energized.

- Install mating products following instructions supplied with the product.

REMOVAL INSTRUCTIONS

- De-energize apparatus and verify apparatus is de-energized.
- Remove mating products and place in stand-off device or a clean, dry location.
- Loosen wing nuts of holddown bail and remove bail assembly.
- Remove #14 AWG ground wire.
- Grab bushing interfaces of rotatable feedthru insert and turn counterclockwise until feedthru comes loose from bushing well.

