

Installation Instructions

1601A4 (1) - Loadbreak Bushing Insert

CONTENTS: Loadbreak Bushing Insert, Lubricant (DO NOT SUBSTITUTE), Installation Instructions.

The 1601A4 is designed to provide the apparatus interface for Elastimold® 15kV class (8.3kV phase-to-ground and 14.4kV phase-to-phase) loadbreak connections. A yellow band provides indication of full elbow seating. This product is identified by a yellow button attached to one grounding eye.

DANGER

All apparatus must be de-energized during installation or removal of part(s) except for test point caps and indicators that can be installed and operated energized.

Do not touch or move energized products in the work area.

These instructions do not attempt to provide for every possible contingency.

Failure to follow these instructions will result in damage to the product and serious or fatal injury.

This product should be installed only by competent personnel trained in good safety practices involving high voltage electrical equipment. These instructions are not intended as a substitute for adequate training or experience in such safety practices.

All apparatus must be installed and operated in accordance with individual user, local and national work rules and electrical standards.

If this product is supplied with a protective shipping cover(s), remove this shipping cover(s) and replace with the appropriate HV insulated cap(s) or connector(s) before submerging or energizing the circuit.

Inspect parts for damage, rating and compatibility with mating parts.

Excess distortion of the assembled product may result in its failure.

After installation loadbreak products can be operated energized per operating instructions. All deadbreak connectors must be de-energized before operating.

Connectors must be operated with a full insulated "hotstick" type tool. Consult the company's safe work practices for the required tool length.

FOR MORE INFORMATION ON PARTS, INSTALLATION RATINGS AND COMPATIBILITY, CALL THE NEAREST ABB OFFICE.

Limited Warranty:

1. ABB Installation Products Inc. warrants that its products will be free from defects in materials or workmanship for a period of two (2) years, except for tools which are warranted separately (see warranty accompanying those products). Fisher Pierce® products and Elastimold® Reclosers are warranted for three years; and Joslyn™ VBT and VBU capacitor switches are warranted for four years or 40,000 operations whichever occurs first. Upon prompt notification of a warranted defect, ABB Installation Products Inc. will, at its option, repair or replace the defective product.
2. In no event shall ABB Installation Products Inc. be liable for any consequential, indirect or special damages, nor will ABB Installation Products Inc. be liable for transportation, labor, or other charges arising out of the removal or reinstallation of its products. Liability for breach of warranty is limited to the cost of repair or replacement of the warranted product only.
3. Misuse, misapplication or modification of ABB Installation Products Inc. products immediately voids all warranties.

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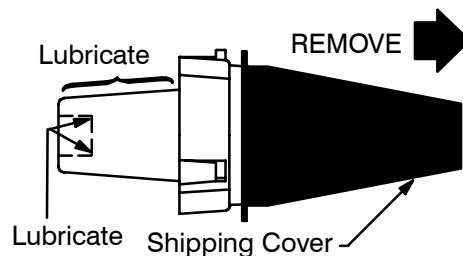
IMPORTANT

1. Check contents of package to ensure they are complete and undamaged.
 2. Check all components to ensure proper fit with cable and/or mating products.
 3. Read entire installation instructions before starting.
 4. Have all required tools at hand and maintain cleanliness throughout the procedure.
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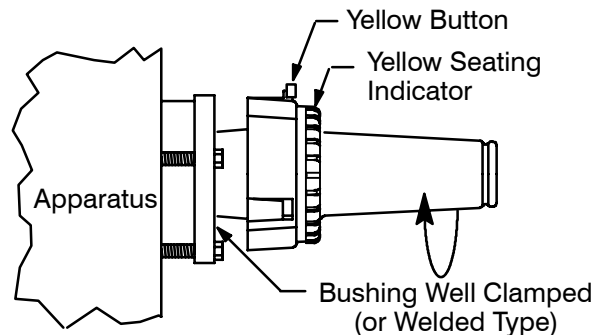
STEP 1

Inspect the apparatus bushing well to ensure it is dry and free from all contaminants. Remove the protective shipping cover from the bushing insert. Lubricate the bushing well interface area of the bushing insert with the supplied lubricant or ELASTIMOLD approved lubricant. **DO NOT SUBSTITUTE.** Other lubricants may be harmful to this product and its mating products.



STEP 2

Place the lubricated portion of the bushing insert in the apparatus bushing well. Hand tighten the bushing insert in a clockwise direction until it bottoms.

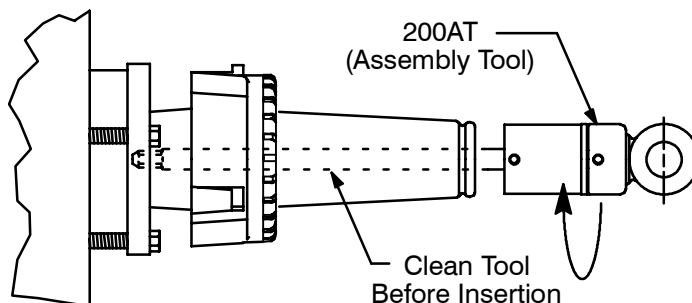


STEP 2 - ALTERNATE

Place the lubricated portion of the bushing insert in the apparatus bushing well. Insert 200AT assembly tool in bore of bushing insert until fully seated. Insert suitable rod through the eye of the tool and turn in a clockwise direction. Continue to rotate the eye of the 200AT until it begins to ratchet signifying the proper assembly torque (164–204 in/lbs) has been reached. Remove 200AT from bushing insert.

CAUTION: The use of other tools can damage the bushing insert. Tighten by hand or with a 200AT only.

WARNING: 200AT should be periodically calibrated to ensure the absolute minimum clockwise torque. A field aged 200AT torque limiter must never be less than 120 inch-pounds to ensure a good 200 ampere connection.

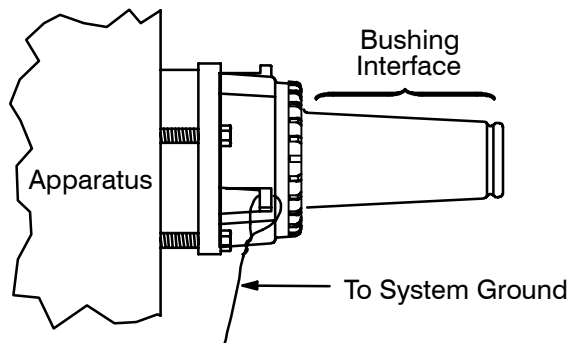


STEP 3

Push a length of copper wire (No. 14 AWG (2,5mm²) or equivalent) through one of the grounding tabs on the bushing insert. Make a small loop and twist tight, taking care not to damage the grounding tab. Connect free end of electrostatic grounding wire to the system ground using a suitable connector.

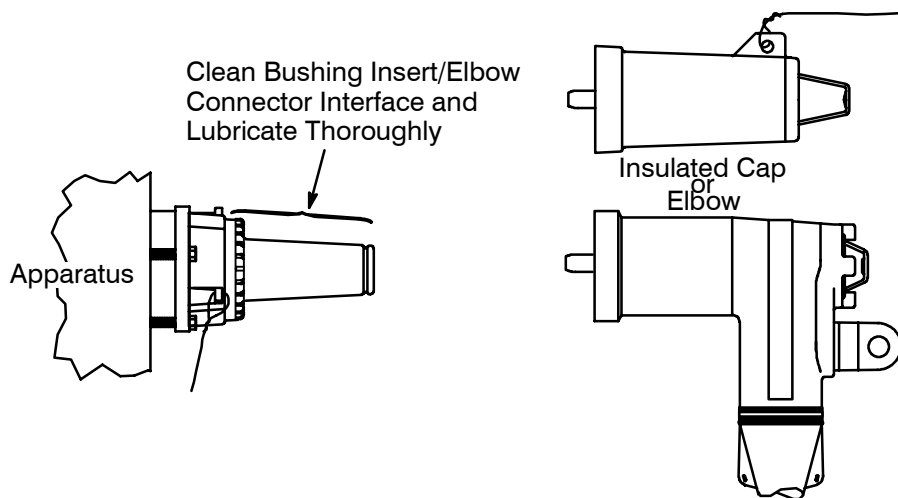
The electrostatic grounding wire should be installed in such a manner so as not to contact the bushing interface or adjacent bushing interfaces or interfere with the placement of accessories on nearby parking stands.

This step provides assurance that the insulation shield on the bushing insert is grounded.



STEP 4

Thoroughly wipe the bushing interface clean of any contaminants and lubricate with the supplied lubricant. Install the mating products to the bushing insert following the instructions supplied with the mating products. **If the bushing insert is not to be immediately mated with an elbow connector, insulated cap or grounding elbow connector, replace the shipping cover. Do not energize or submerge the apparatus with the shipping cover on the bushing insert.** This is a protective cover only, which is not insulated or water tight and only intended to keep the bushing surfaces clean during handling and installation.



STEP 5 SEATING INDICATION

Complete assembly of an insulated cap or elbow is indicated by no portion of the yellow band being visible when viewed from the side.

