Operating Instructions 274FT(1) Feed–Thru/Grounding Device

CONTENTS: Feed-thru body complete with mounting hardware, Lubricant, Operating Instructions.

The feed thru provides interconnected apparatus interfaces for Elastimold 25kV class (15.2kV phase–to–ground and 26.3kV phase–to–phase) loadbreak connections and can be used for the following functions:

A. A junction point. **B.** A grounding point.

To use the feed–thru as a junction point, follow steps 1 to 5 and 6A and 7A.

To use the feed–thru as a grounding point, follow steps 1 to 5 and 6B to 9B.

A yellow band provides indication of full elbow seating and also provides vents for improved switching performance. This product is identified by a yellow ID washer attached to the eyebolt.

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.

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

All apparatus must be installed and operated in accordance with individual user, local, and national work rules. These instructions do not attempt to provide for every possible contingency.

Do not touch or move energized products.

"Loadbreak connectors must be operated with a full insulated "hotstick" type live–line tool." Consult the company's safe work practices for the required live–line tool length.

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

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

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.

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

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.

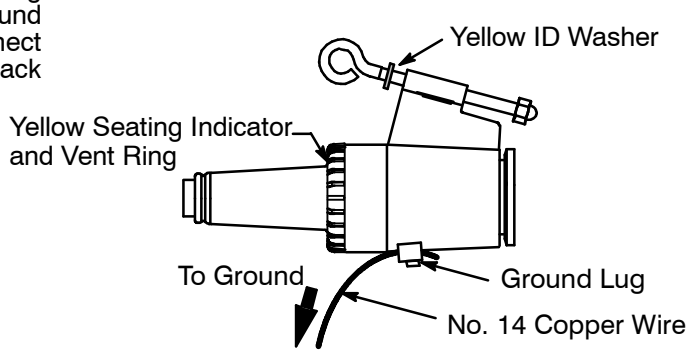
FOR MORE INFORMATION ON PARTS, INSTALLATION RATINGS AND COMPATIBILITY, CALL THE NEAREST ELASTIMOLD OFFICE.

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.

STEP 1

Grounding– Insert ground lead into the grounding lug provided on the mounting hardware and tighten lug. Ground lead should be No. 14 copper wire or equivalent. Connect the opposite end of the lead to ground, leaving enough slack to operate with a hotstick.



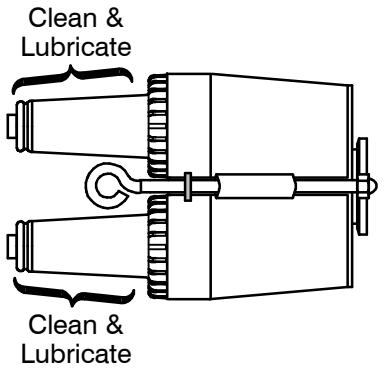
Thomas&Betts
8155 T&B Boulevard, Memphis, Tennessee 38125
(800) 888-0211 Fax: (800) 888-0690

STEP 2

Remove the protective caps from the bushings of the feed–thru.

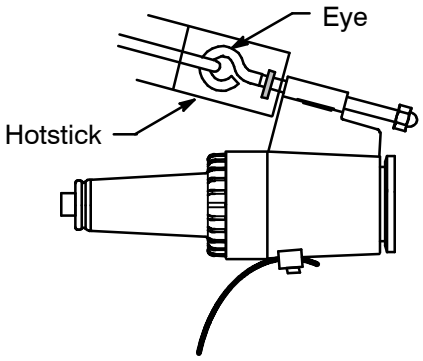
PROTECTIVE CAPS MUST NOT BE ON THE BUSHINGS OF THE FEED–THRU WHEN THE FEED–THRU IS BEING USED. When the feed–thru is not in use, the protective caps should be placed on the bushings of the feed–thru to protect them from dirt and other contaminants.

Clean the bushing surfaces and lubricate them with the lubricant supplied. DO NOT SUBSTITUTE. Other lubricants may be harmful to this product and its mating product(s).



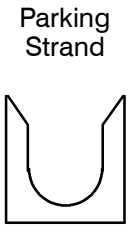
STEP 3

Attach feed–thru eye firmly to hotstick.

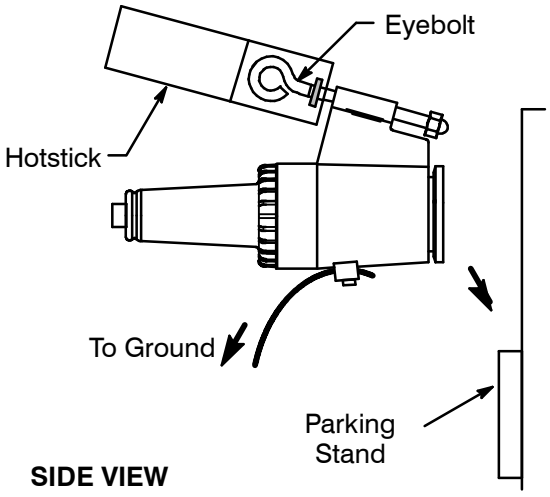


STEP 4

Using a hotstick, slide feed–thru onto parking stand. Unlock hotstick and back off, to allow space for eyebolt to be tightened. Tighten eyebolt by rotating hotstick clockwise until snug. DO NOT OVERTIGHTEN. Release hotstick.



FRONT VIEW

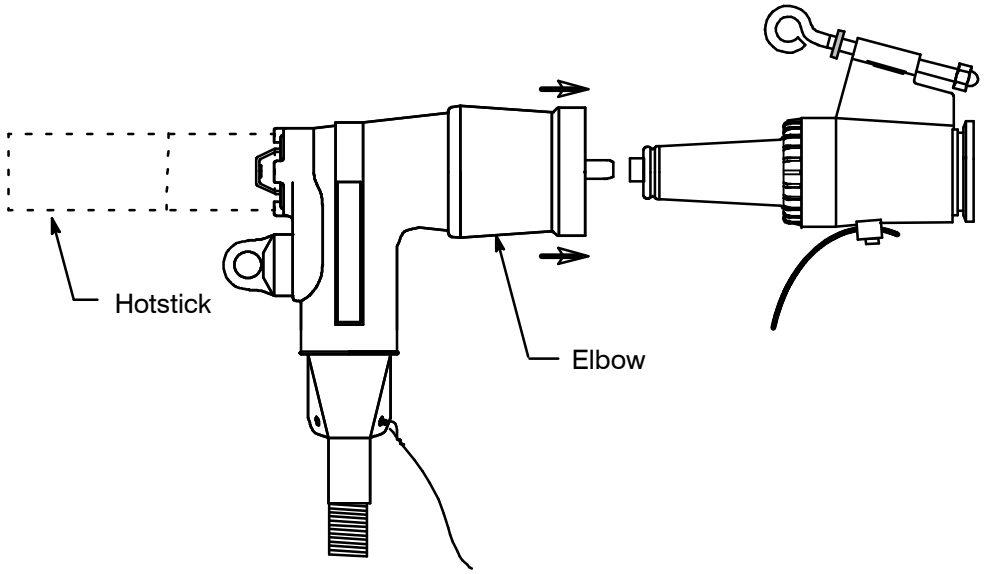


SIDE VIEW

STEP 5

CAUTION: Check that ground lead is connected between feed–thru lug and ground before assembling elbow. Do not attempt to attach ground lead after elbow is assembled.

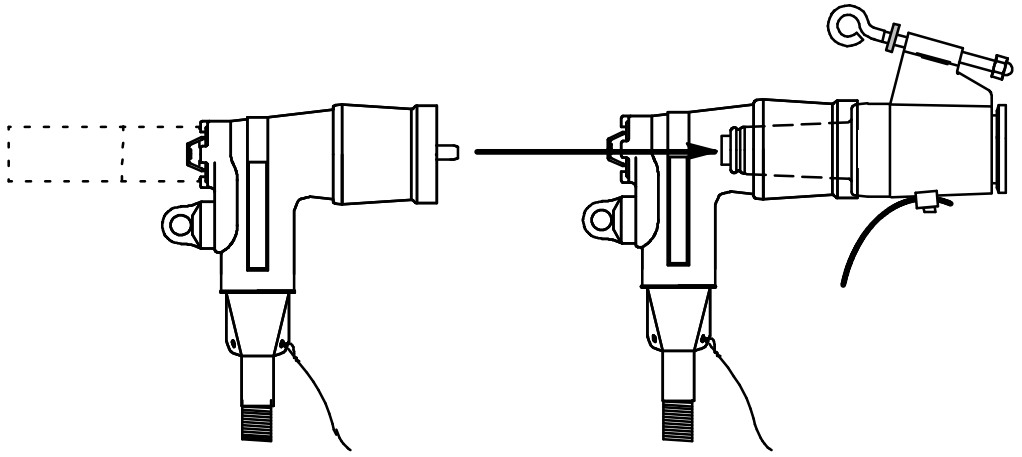
Remove one loadbreak elbow from its apparatus loadbreak bushing plug following the applicable loadbreak operating instructions (IS– 273,274LR). Using a hotstick, firmly attached to the elbow, insert the pin contact of the loadbreak elbow into one of the feed–thru bushings, approximately 2". Immediately push the elbow home with a fast, firm straight motion which will engage the internal lock on the mating interfaces. Release hotstick.



FOR JUNCTION POINT APPLICATION FOLLOW STEPS 6A AND 7A

STEP 6A

Remove the second loadbreak elbow, following the applicable LOADBREAK operating instructions (IS–273/274LR). Using a hotstick, firmly attached to the elbow, insert the pin contact of the loadbreak elbow into the remaining feed–thru bushing approximately 2". Immediately push the elbow home with a fast, firm straight motion which will engage the internal lock on the mating interfaces. Release hotstick.



STEP 7A

When it is desired to reconnect the elbow(s) to the apparatus bushing(s), first make certain no faults exist on the system. To return the loadbreak elbow to the apparatus bushing, reverse the operational sequence, following the applicable loadbreak–loadmake operating instructions.

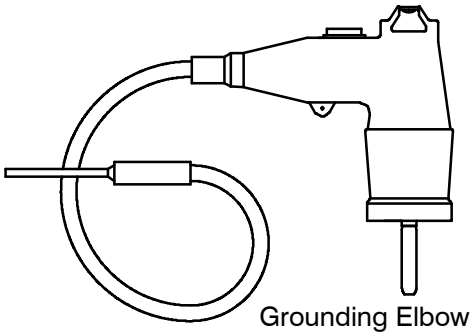
FOR GROUNDING POINT APPLICATION FOLLOW STEPS 6B TO 9B

STEP 6B

Connect lead on ELASTIMOLD 370GLR grounding elbow to ground.

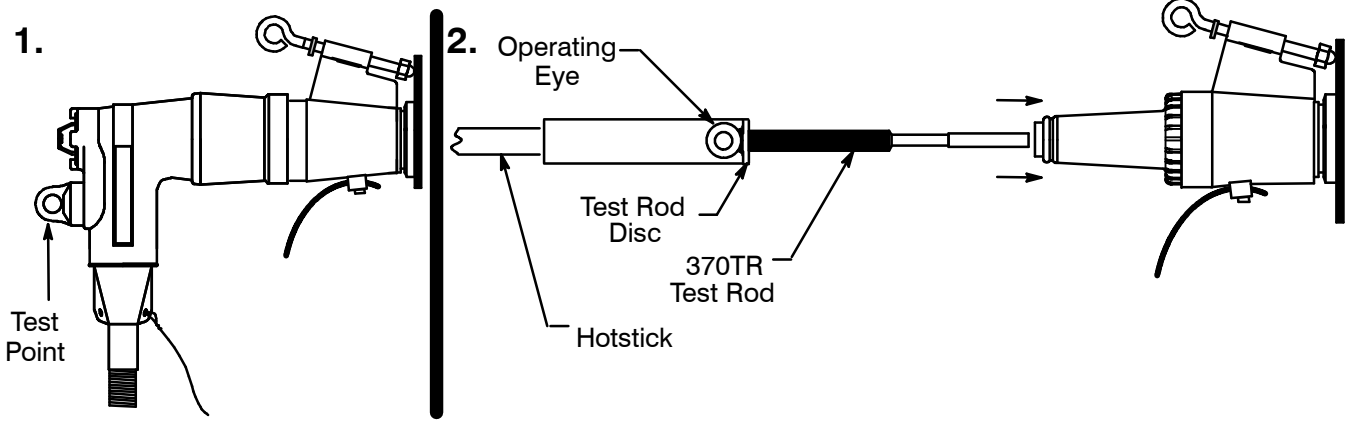
CAUTION: Do not attempt to connect the ground lead to ground after assembling the grounding elbow on the bushing. If bushing is energized contact with an ungrounded lead will cause serious or fatal injury from electric shock.

IMPORTANT: Do not insert grounding elbow into feed–thru unless circuit has been tested "dead".



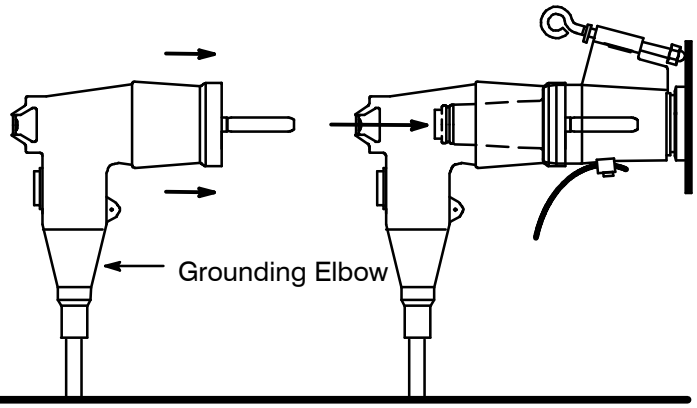
STEP 7B

To test "dead" use the capacitive test point on the 274LR elbow or using a 370TR test rod, attach the test rod eye firmly to the hotstick. Insert the test rod into the second plug of the feed–thru. Check the test rod disc for voltage. The hotstick eye and disc of the test rod are not insulated; be careful to keep them clear from ground until tested "de–energized".



STEP 8B

After the circuit has been tested "dead" remove the test rod and, using the hotstick, immediately insert the grounding elbow.



STEP 9B

When it is desired to reconnect the elbow to the apparatus bushing, first make certain no faults exist on the system to return the loadbreak elbow to the apparatus bushing. To remove the grounding elbow reverse the operational sequence following the applicable loadbreak–loadmake operating instructions.

STEP 10 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.

