

Installation & Operating Instructions

164/274/373FT2-AB, FT3-AB, FT4-AB

FEED-THRU/GROUNDING DEVICE

CONTENTS: Feed-thru Body Complete with Mounting Hardware, Lubricant, Operating Instructions.

IMPORTANT: Read these instructions and the Loadbreak Elbow Operating Instructions COMPLETELY before operating connectors.

The feed-thru 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 8. To use the feed-thru as a grounding point, follow steps 1 to 5 and 9 to 10.

The 164FTX-AB is provided with a yellow seating ring which provides indication of full seating. This product is identified by a yellow ID washer attached to the eyebolt.

The 274FTX-AB is provided with a yellow band which 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.

The 373FTX-AB is provided with a black band which provides vents for improved switching performance. This product is identified by a natural ID washer attached to the eyebolt.

DANGER

All apparatus must be de-energized during installation or removal of part(s).

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.

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

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

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

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.

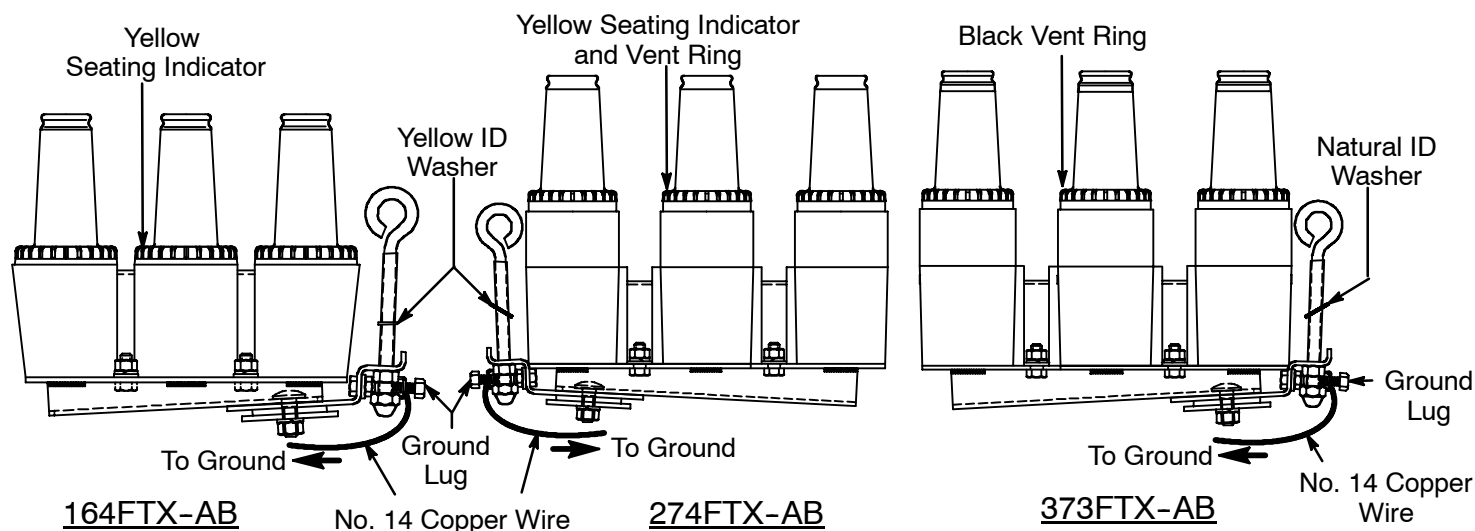
If this product is supplied with a protective shipping cover(s), remove this shipping cover(s) and replace with the appropriate HV insulated cap(s) or connector(s) before submerging or energizing the circuit.

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

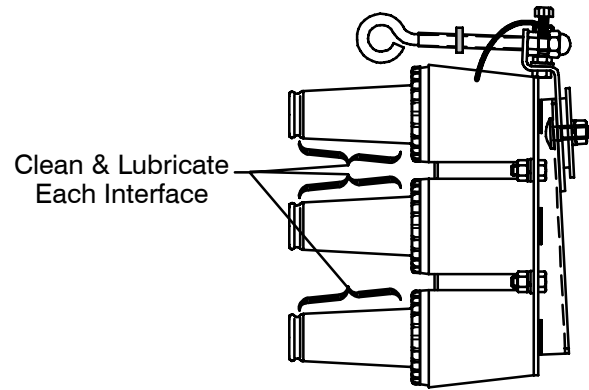
Grounding - Insert ground lead into the grounding lug provided on the mounting hardware and tighten lug. Ground lead should be No. 14 copper wire or equivalent. Connect the opposite end of the lead to ground, leaving enough slack to operate with a hotstick.



STEP 2

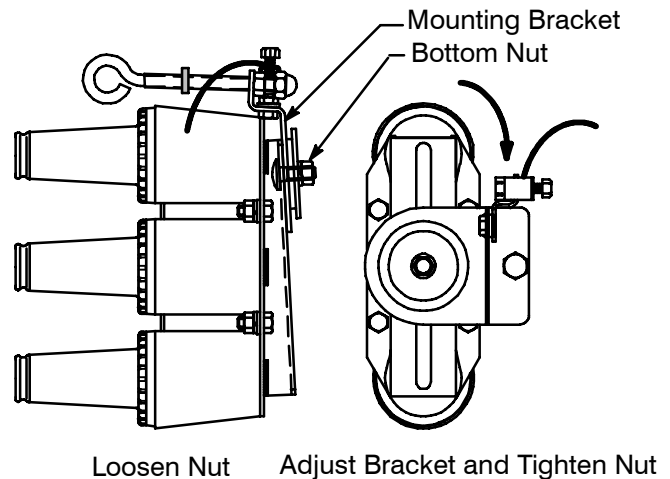
Remove the protective caps from the bushings of the feed-thru.

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).



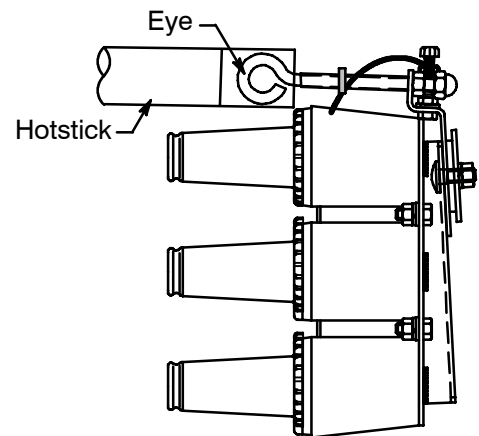
STEP 3

The mounting bracket adjustment is done by loosening the bottom nut. Loosen only enough to allow the mounting bracket to be moved. Rotate the bracket into position required and tighten bottom nut.



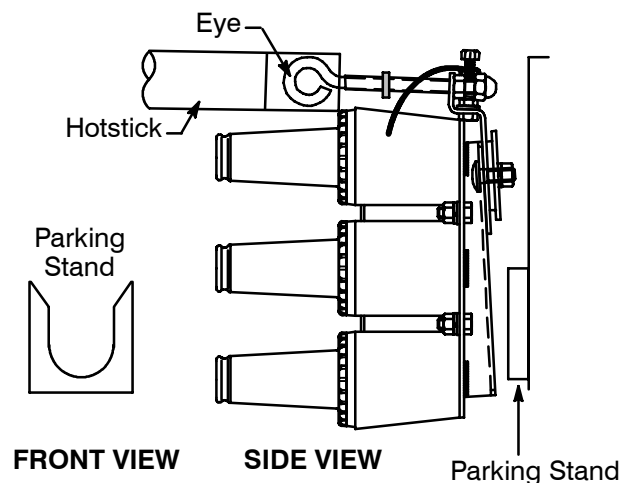
STEP 4

Attach feed-thru eye firmly to hotstick.



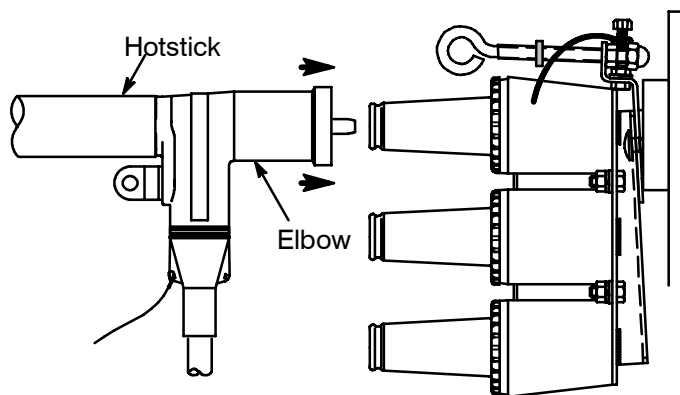
STEP 5

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.



STEP 6

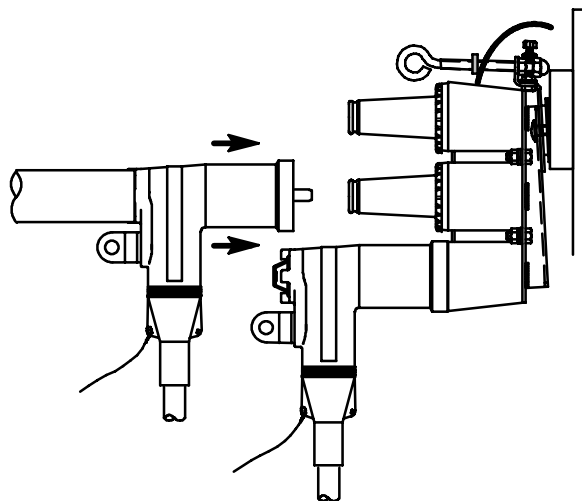
Remove one loadbreak elbow from its apparatus loadbreak bushing following the applicable loadbreak operating instructions. Using a hotstick, firmly attached to the elbow, insert the probe tip into one feed-thru until the first slight resistance is felt. Immediately push the elbow home with a fast, firm straight motion which will engage the internal lock on the mating interfaces.



FOR JUNCTION POINT APPLICATION FOLLOW STEPS 7 AND 8

STEP 7

Remove second loadbreak elbow, following the applicable loadbreak operating instructions. Using a hotstick, firmly attached to the elbow, insert the probe tip into the remaining feed-thru until the first slight resistance is felt. Immediately push the elbow home with a fast, firm straight motion which will engage the internal lock on the mating interfaces. Remove and repeat for third and fourth elbows (if applicable).



STEP 8

When it is desired to re-connect 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 9 TO 10

IMPORTANT: Do not insert grounding elbow into Feed-Thru unless circuit has been tested "De-Energized".

STEP 9

Ensure that the system is de-energized with either of the following procedures.

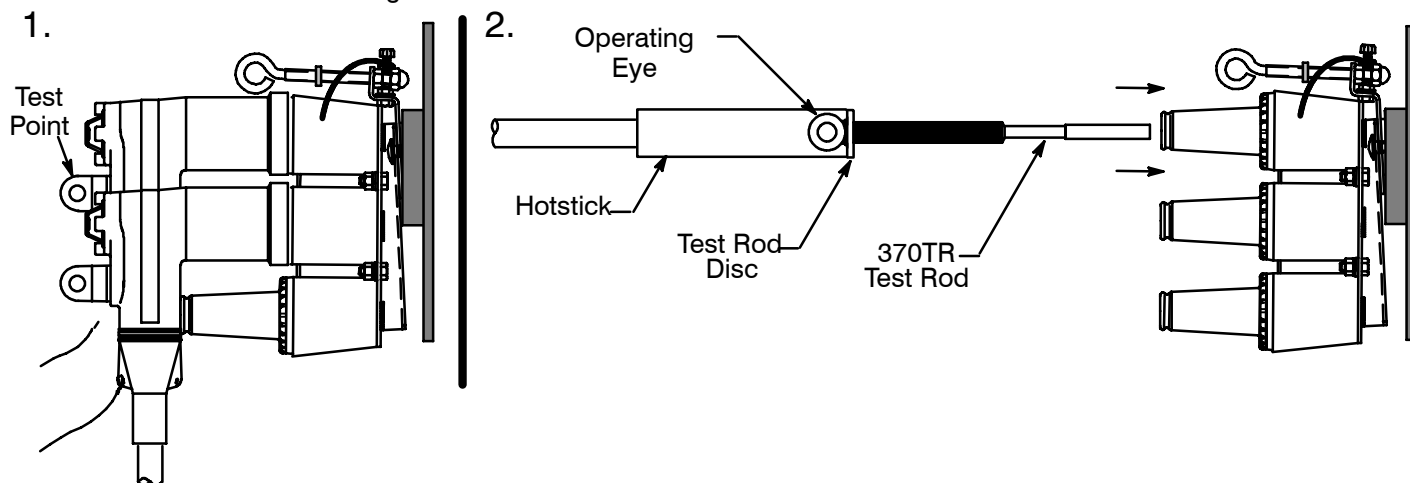
1. Check the capacitive test point on the loadbreak elbow for voltage, with an appropriate voltage detection device.

CAUTION: The voltage test point is a capacitance device; it is not directly connected to the conductor. It requires the use of specially designed instruments. Do not use conventional voltage measuring requirements; NO INDICATION WILL BE OBTAINED.

2. Remove existing elbow or insulated cap from the bushing with a hotstick following the applicable loadbreak operating instructions. Firmly tighten a hotstick to the 370TR test rod operating eye. Insert the test rod into the bushing. Using a meter capable of direct reading the system voltage, check the test rod disc for voltage. Remove test rod.

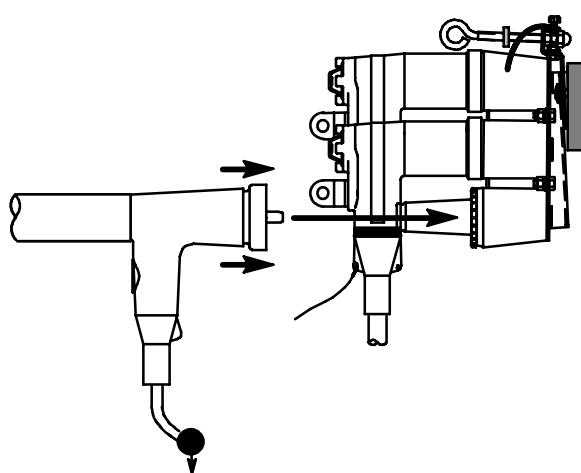
IMPORTANT: If voltage is indicated by either of the two preceding procedures, do not proceed without De-energizing the system.

IMPORTANT: 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 10

Install ground elbow onto the bushing plug of the feed-thru, following the grounding elbow operating instructions (IS-160/370GLR).



SEATING INDICATION FOR 15kV & 25kV PARTS

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

