

Installation Instructions: K656SR and M656SR Straight Receptacle

CONTENTS: Receptacle housing, Bushing adapter, Cable adapter, Aluminum holding collar, Hex head bolt, Hose clamp (35kV only), Crimp connector, Belleville washer, Flat washer, Hex wrench, Nylon venting rod, Lubricant, Brass bolt, Bushing converter contact, Installation Instructions, Crimp chart.

The K656SR and M656SR provide an in-line cable connection to a standard ANSI-386 600 amp 15kV, 25Kv or 35kV bushing.

DANGER

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

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.

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

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.

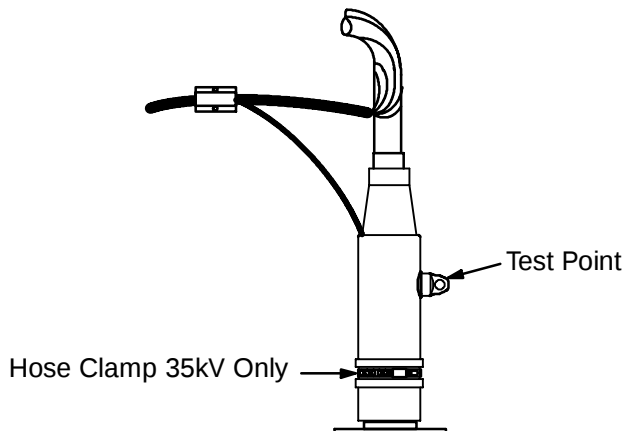
Limited Warranty:

1. T&B 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, T&B will, at its option, repair or replace the defective product.
2. In no event shall T&B be liable for any consequential, indirect or special damages, nor will T&B 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 T&B products immediately voids all warranties.

THE WARRANTIES AND REMEDIES CONTAINED HEREIN ARE EXCLUSIVE AND ARE IN LIEU OF ALL OTHER WARRANTIES AND REMEDIES, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE SPECIFICALLY DISCLAIMED.

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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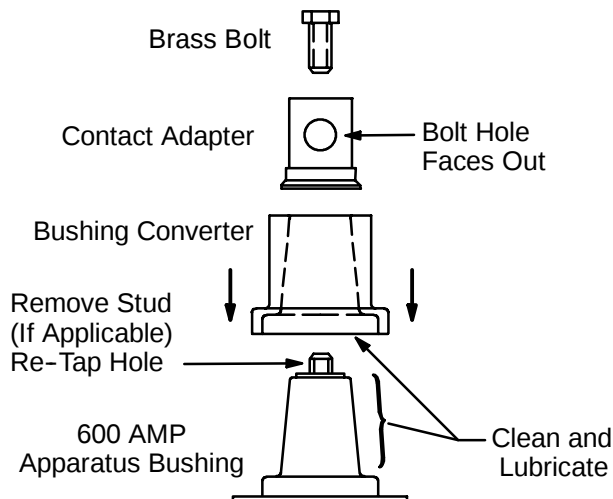
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GENERAL INSTRUCTIONS

STEP 1

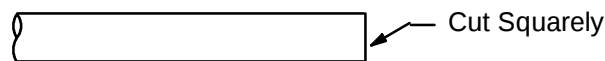
1. If stud is present in apparatus bushing, remove the stud and re-tap the hole using 5/8-11 tap.
2. Clean and lubricate apparatus bushing and bushing converter interface. Assemble bushing converter onto apparatus bushing. Apply 3-4 drops of Loctite to threads of brass bolt. Assemble contact adapter to apparatus bushing, with bolt hole facing out, using 5/8" brass bolt. Torque to 60 ft.-lbs.



STEP 2

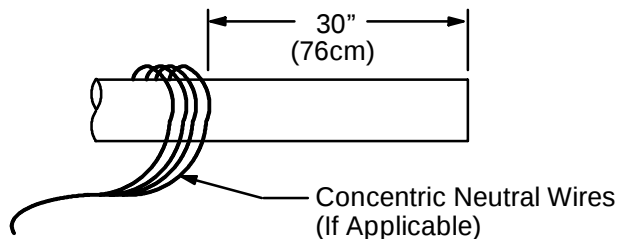
Train the cable end and straighten into final position. Cut cable squarely.

IMPORTANT: To ensure maximum available length for crimp growth, cut cable end square.



STEP 2A

Unwrap the concentric neutral wires (if applicable) a distance of 30" (76cm). **DO NOT CUT.** Bend and fold back out of the way.

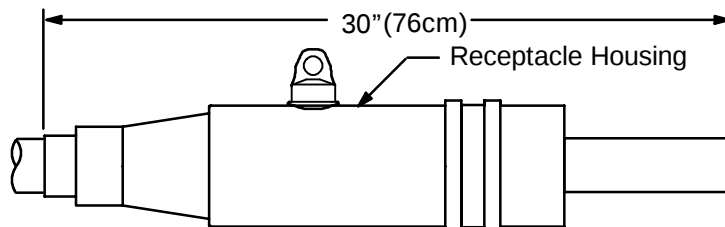


STEP 3

Wipe the outer jacket clean a distance of 38" (96.5cm) or up to concentric neutral wires.

STEP 4

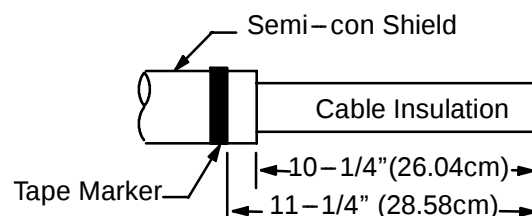
Slide receptacle housing onto the cable a distance of 30" (76cm).



STEP 5 CABLE PREPARATION

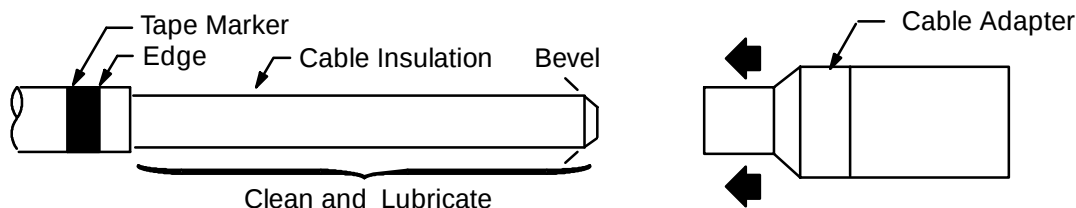
Semi-con SHIELD

Remove semi-con shield and install tape marker to dimensions shown. Do not cut or nick the cable insulation.



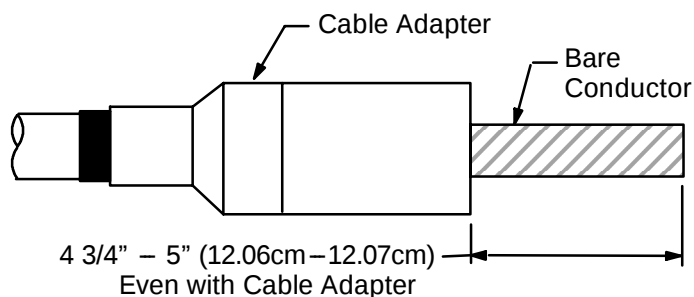
STEP 6 CABLE ADAPTER

Bevel the end of the cable insulation at a 45 degree angle, approximately 1/4" (6mm) back. Thoroughly clean, then lubricate cable insulation, always working toward semi-con shield. Install cable adapter, small end first, until it is flush with the edge of the tape marker.



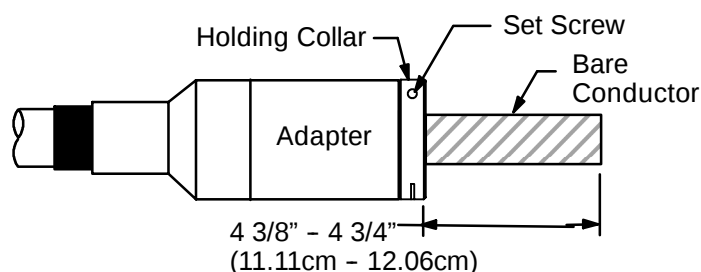
STEP 7 CONDUCTOR

Remove the protruding cable insulation by cutting it even with the end of the cable adapter. Do not cut or nick the cable adapter or the conductor. The length of exposed conductor should be 4 3/4" - 5" (12.06cm-12.7cm). Otherwise redo assembly.



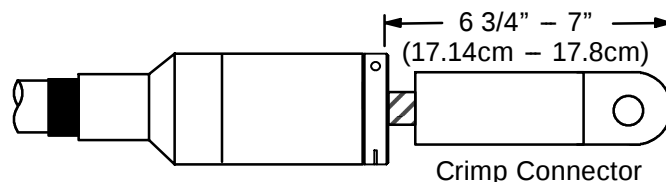
STEP 8

Position the holding collar over the conductor and flush against the cable adapter. Using the hex wrench supplied, tighten setscrew.



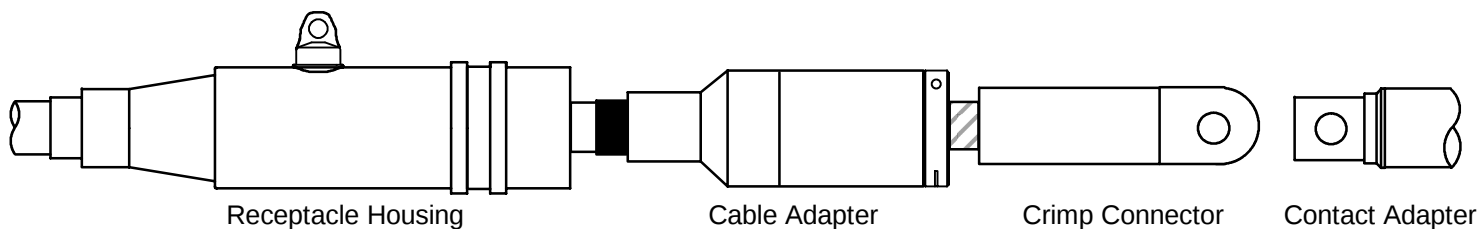
STEP 9

Remove the protective cap from the crimp connector. If using aluminum cable wire, brush the conductor and immediately insert into the crimp connector which contains inhibitor. *Make sure conductor is fully inserted into the crimp barrel.* Measure the distance from the end of the connector to the holding collar. If the distance is over 7" (17.8cm) do not proceed. Redo all previous work.



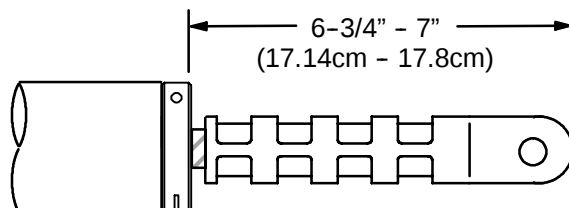
STEP 10

Confirm that components are oriented in the order shown below. CONFIRM THAT THE BOLT HOLE IN THE CRIMP CONNECTORS IS ALIGNED WITH THE BOLT HOLE IN THE CONTACT ADAPTER.



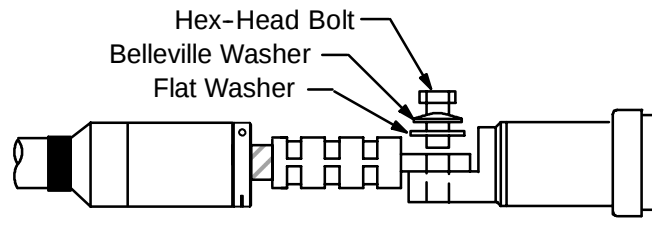
STEP 11

Crimp the connectors following the instructions packaged with the connectors. *Rotate each crimp 90°.* After crimping, measure the distance from the end of the connector to the holding collar. If the distance is over 7" (17.8cm) do not proceed. Redo all previous work.



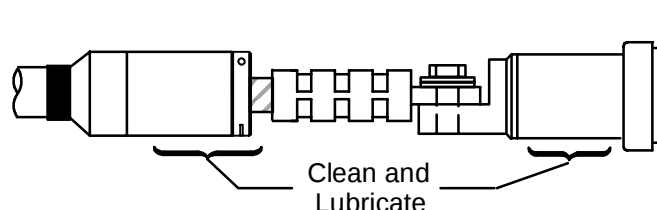
STEP 12

Assemble the washers and bolt in the following order: Flat washer against spade contact, Belleville washer (concave side down), hex-head bolt. Hand tighten. The splice and cables are now in their final positions. Using a torque wrench with a 15/16 socket, tighten to 50-60 ft.-lbs. *Do not attempt to move or reposition any part of the assembly after the bolts are tightened.*



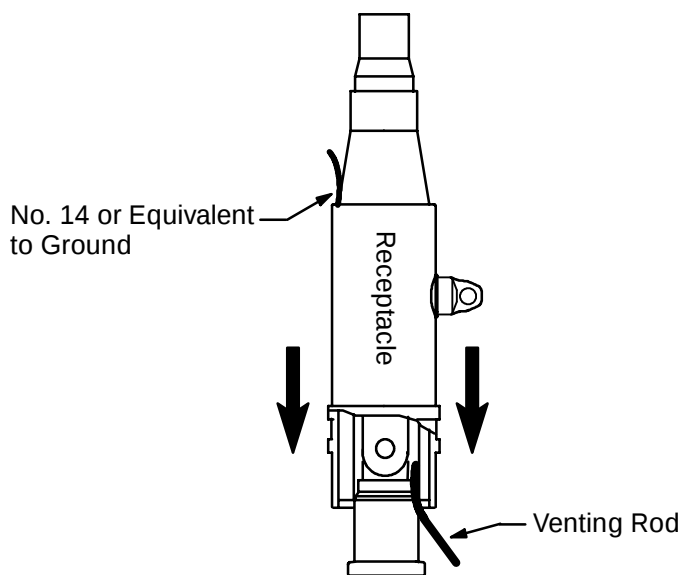
STEP 13

Apply supplied lubricant or ELASTIMOLD approved lubricant generously to the outside of the cable adapter and the area of the bushing adapter as shown. **DO NOT SUBSTITUTE.** Other lubricants may be harmful to this product or its mating product.



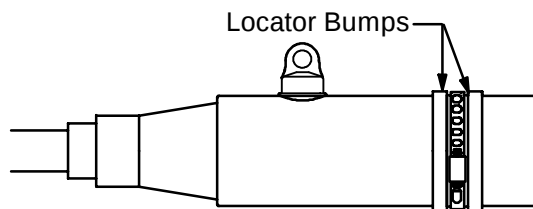
STEP 14

Slide the receptacle housing over the cable adapter and up to the edge of the interface (position shown). Insert the nylon venting rod (supplied). Slide the receptacle housing onto the bushing converter until fully seated. Remove the venting rod. Connect a short piece of wire (No. 14 AWG) copper or equivalent to the grounding eye of the receptacle housing. Make a small loop and twist tightly, taking care not to damage the eye. Gather together the concentric neutral wires. Using a suitable connector, connect the neutral wires and the grounding wire.



STEP 15 FOR 35kV ONLY

Position hose clamp between locator bumps on receptacle housing. Tighten clamp until an audible click.



VOLTAGE TEST

ELASTIMOLD connector equipped with an integral capacitance test point can be used to establish whether or not the circuit is energized. When using the test point, complete the following steps:

1. Remove test point cap with a hotstick. When removing cap, **PEEL OFF AT AN ANGLE** rather than pulling directly in line with the test point assembly.
2. **WARNING:** THE VOLTAGE TEST POINT IS A CAPACITANCE DEVICE, IT IS NOT DIRECTLY CONNECTED TO THE CONDUCTOR. Do not use conventional voltage measuring equipment. Follow the manufacturer's directions for the meter that is used. Test with a suitable sensing device, made for use with separable connectors manufactured with capacitive test points, to determine if cable is energized. Contamination, moisture, dirt, etc. around the test point or use of the wrong measuring equipment can provide a false "no voltage" indication on an energized elbow. To prevent serious or fatal injury treat the elbow as energized until the "no voltage" test point indication is confirmed by other means.
3. After voltage detection has been made, clean and lubricate the inside surface of the cap with silicone lubricant supplied and replace it on the test point.

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