



MOD-3-TFT MOD 3Z, 3C, 3D

Cold-applied, high-voltage termination modification kit for 3/C shielded and non-shielded power cables

ENERGY DIVISION

**Suggested Installation Equipment
(not supplied with kit)**

- Cable preparation tools
- Tyco Electronics P63 cable preparation kit or cable manufacturer approved solvent
- Clean, lint-free cloths
- Non-conducting abrasive cloth, 120 grit or finer
- Electrician's tape
- Connector(s) and installation tools
- Tyco Electronics recommended torch

Safety Instructions

Warning: When installing electrical power system accessories, failure to follow applicable personal safety requirements and written installation instructions could result in fire or explosion and serious or fatal injuries.

As Tyco Electronics has no control over field conditions which influence product installation, it is understood that the user must take this into account and apply his own experience and expertise when installing product.

Customer Service

For 24 hour customer service, call 800-327-6996.

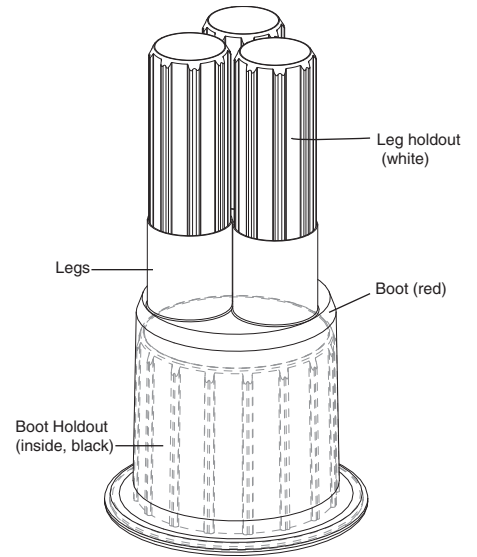
1. Product selection.

Check kit selection with cable diameter dimensions in Table 1.

Table 1

Kit	Minimum/Maximum Shield Diameter	Minimum/Maximum Jacket Diameter
MOD-3Z-TFT (Indoor)	0.60 - 1.72" (15 - 43mm)	---
MOD-3C-TFT (Outdoor)	0.60 - 1.40" (15 - 35mm)	1.3 - 3.5" (33 - 89mm)
MOD-3D-TFT (Outdoor)	1.20 - 1.72" (30 - 43mm)	2.7 - 4.5" (69 - 114mm)

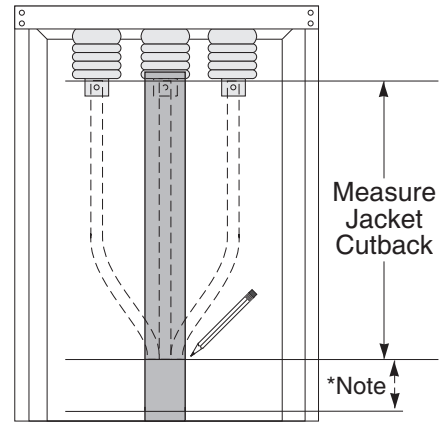
Note: If installing MOD-3Z-TFT, go to Step 6 on page 5.



2. Determine jacket cutback and mark cable.

Cutback must be long enough to allow positioning of insulated conductors without violating the bend radius (usually 10 times the diameter of the cable).

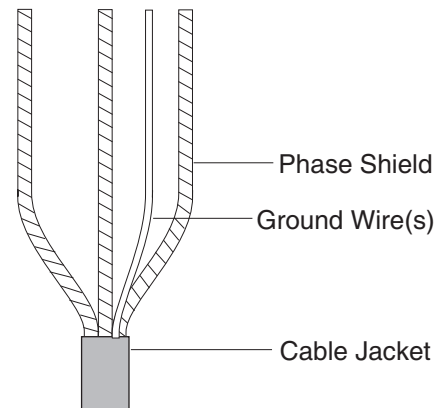
Note: If a sealing boot is to be used, at least 4" (102mm) of jacket must be visible extending from the conduit opening.



3. Remove outer jacket.

Remove the outer jacket (and/or armor) and any filler or bedding tapes around all three phases to the mark made in Step 2.

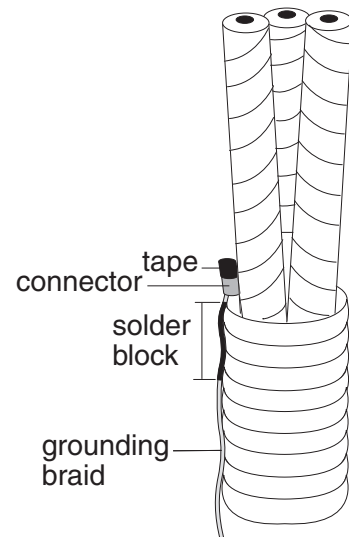
Note: Do not cut into the shielding layer or phase insulation.



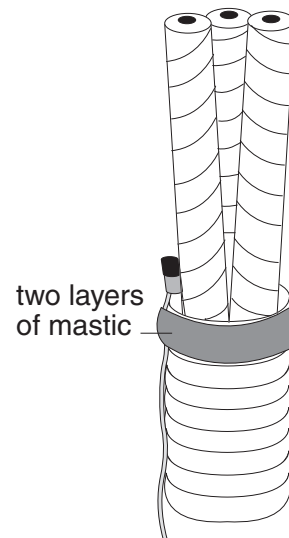
4. Connect ground wire to grounding braid.

- Pull ground wire out to the side slightly for accessibility. Trim ground wire to 1" above armor level.
- Using appropriate connector (not included), attach ground braid to ground wire so that the solder-blocked portion of the ground braid is flush with the ring cut in the cable jacket. (see illustration to the right)
- Tape the end of the connector so there are no exposed sharp edges.

Note: Only one ground braid is provided in the kit. If the cable has more than one ground wire, contact Tyco Electronics Inside Sales (1-800-327-6996) or your local distributor to order sufficient extra ground braids to accommodate your cable.



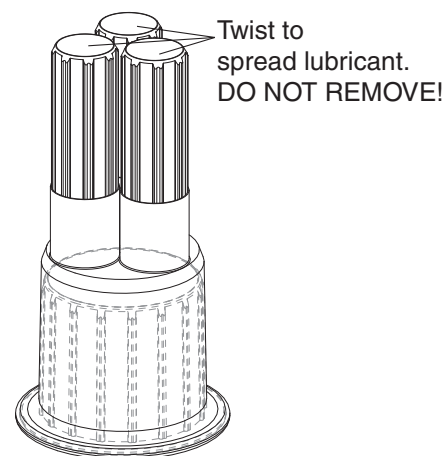
- d. Apply two wraps of red mastic around the cable jacket under the solder blocked part of the ground braid, then apply a second wrap of red mastic around the cable jacket and the ground braid. If correctly installed, there should be mastic over and under the solder block of the ground braid (see illustration to the right).



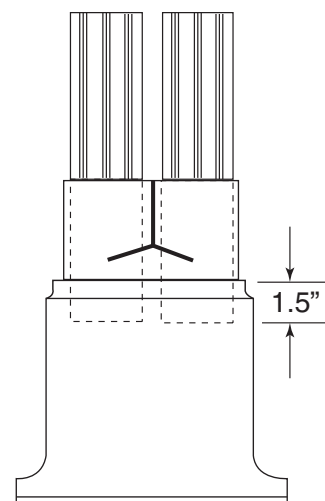
5. Install Boot.

Note: For MOD-3C-TFT boot, do not remove plastic wrap from the large end of the boot until step d.

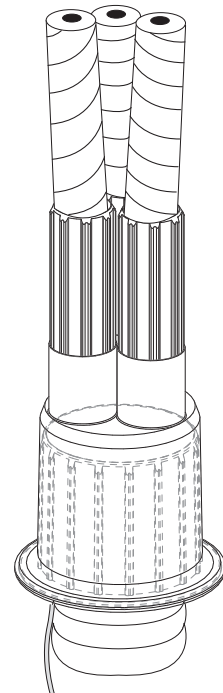
- a. Holding each leg of the boot in turn, twist each holdout several times to spread internal lubricant.



Partially remove each leg holdout allowing about 1.5" (38mm) of holdout to remain inside large black plastic body holdout. Do Not Remove Completely.

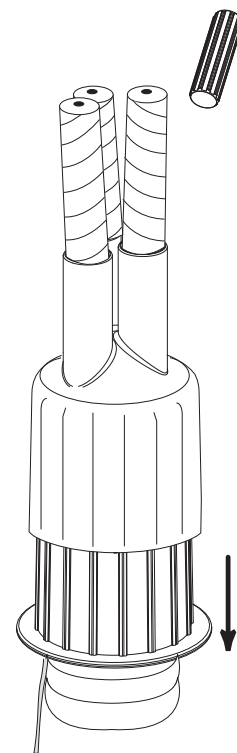
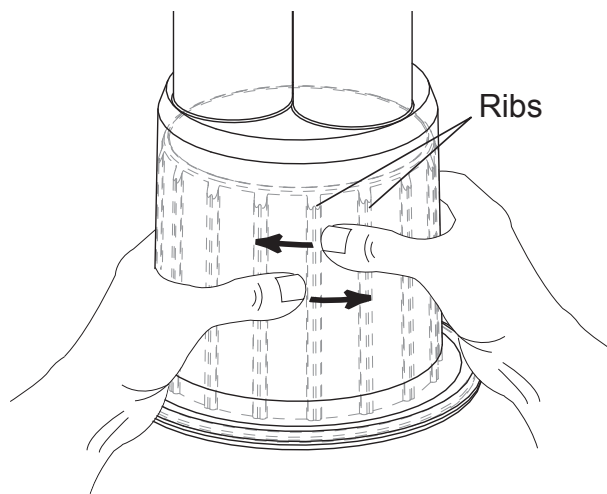


- b. Install boot over three phases, resting it on the crotch of the cables (see illustration to the right).

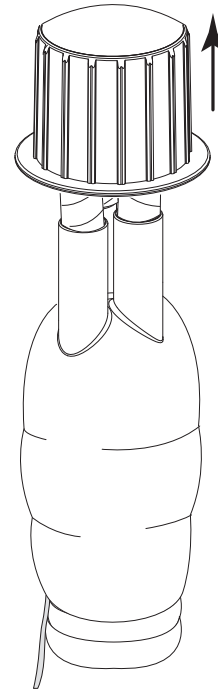


- c. Rotate and pull to remove each leg holdout. Discard holdouts.
- d. **For MOD-3C-TFT Boot only:** Remove plastic wrap from the large end of the boot. Massage the large end of the boot with your thumbs to spread internal lubricant to the ribs of the boot holdout (see illustration below). Be sure to massage the entire circumference of the boot. The holdout will begin to ease itself out of the boot. Pull down on the holdout to accelerate.

For MOD-3D-TFT Boot only: Massage the large end of the boot with your thumbs to spread internal lubricant to the ribs of the boot holdout (see illustration below). Be sure to massage the entire circumference of the boot. Roll the lip of the large end of the boot up to release the black plastic body holdout. Roll the lip up around the bottom of the holdout, then allow the holdout to ease itself out of the boot. Pull down on the holdout to accelerate the installation (see illustration to the right).



- e. Pull the boot holdout up over the top of the core cables and discard it.

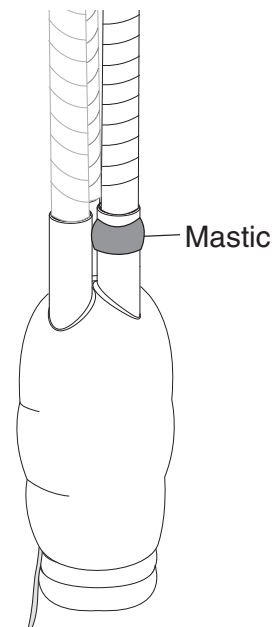


If installing MOD-3Z-TFT, start here.

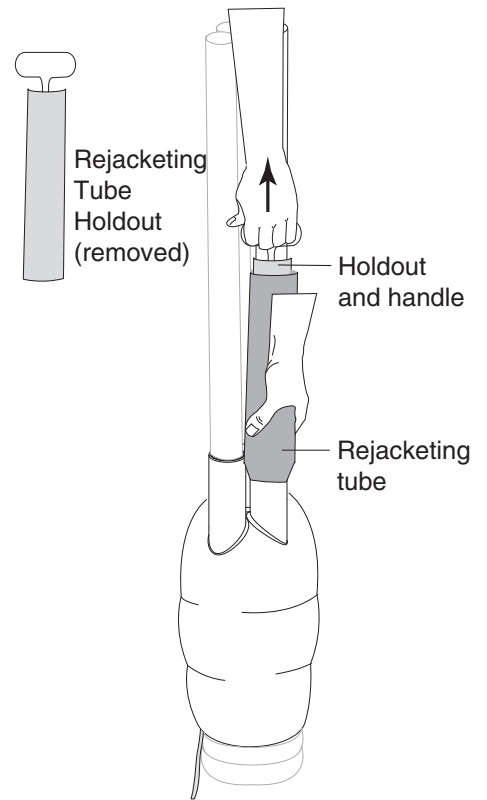
Note: The picture shown is the cable with an outdoor sealing boot installed. The MOD-3Z-TFT indoor termination does not require a sealing boot; therefore, for MOD-3Z-TFT installations, please ignore references to the boot and sealant.

6. Install Rejacketing Tubes.

- a. Apply two layers of mastic around one "bootleg", $\frac{1}{4}$ " from the end of the boot (see illustration to the right).



- b. Carefully remove the red tagged adhesive tape from end of holdout. Install one re-jacketing tube over the phase with the slots pointing toward the cable's free end. The bottom of the tube should be slightly below the bottom edge of the mastic. Insert the pulling tool in the provided slots in the holdout. Holding the gray tube with one hand, use the other hand to pull the handle upward, removing the blue holdout. Stretch the gray tube over the length of the core cable as you remove the holdout (see illustration to the right). Discard holdout.

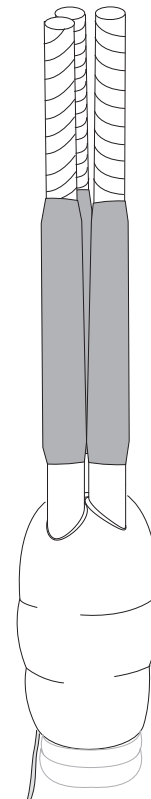


- c. If the grey re-jacketing tube does not cover the entire length of the phase, additional re-jacketing tubes can be applied. Wrap two layers of red mastic around the end of the first re-jacketing tube, $\frac{1}{4}$ " from the edge of the tube, before applying the second tube in the same manner (see Step b). Two re-jacketing tubes per phase are included with the kit. If additional re-jacketing tubes are required, they must be ordered separately.

- d. Ring cut the re-jacketing tube with a sharp knife at the appropriate cutback length for the termination. Refer to termination kits (sold separately) for cutback dimensions.

- e. Repeat steps 6a-d for remaining two phases.

7. Installation Complete.



The Information contained in these installation instructions is for use only by installers trained to make electrical power installations and is intended to describe the correct method of installation for this product. However, Tyco Electronics has no control over the field conditions which influence product installation. It is the user's responsibility to determine the suitability of the installation method in the user's field conditions. Tyco Electronics' only obligations are those in Tyco Electronics' standard Conditions of Sale for this product and in no case will Tyco Electronics be liable for any other incidental, indirect or consequential damages arising from the use or misuse of the products. TE logo and Tyco Electronics are trademarks. 2003, 2005-2006, 2008 Copyright, Tyco Electronics Corporation. All rights reserved.