

# 3M™ Scotchlok™ Shield Bond Connector Assembly 4460-D\FO and and 4460-D\FO-SS

**Instructions** 



#### 1.0 General

This practice describes the cable preparation for dielectric and nondielectric cables with single and dual strength members using 3M<sup>™</sup> Scotchlok<sup>™</sup> Shield Bond Connector Assembly 4460-D/FO and 4460-D/FO-SS. For applications requiring multiple bond braids the 4460-D/FO connector should be used.

### 2.0 Components

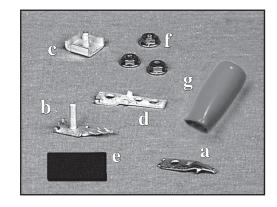
- 2.1 4460-D/FO connector component parts are as follows:
  - a) Connector Top
  - b) Connector Bottom 3/4" Stud
  - c) Lock Cap
  - d) Extension Bracket
  - e) Fiber Protector
  - f) Securing Nuts
  - g) Rubber Boot
- 2.2 4460-D/FO-SS connector component parts are as follows:
  - a) Connector Top
  - b) Connector Bottom 5/8" Stud
  - c) Lock Cap
  - d) Extension Bracket
  - e) Fiber Protector
  - f) Securing Nuts
  - g) Rubber Boot

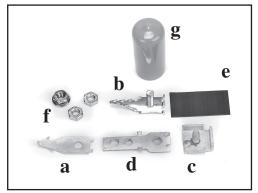
Note: Visually inspect all components. If any component is missing or appears damaged, do not install.

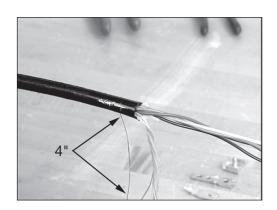
Call 3M customer service at 1-800-426-8688 for a replacement product.

#### 3.0 Procedure

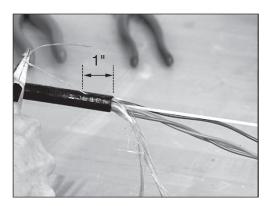
3.1 Prepare cable per company practice. Leave four extra inches (10.2 cm) of excess ripcord, and core wrap and strain members (dielectric or metallic) on each end of the cable sheath opening for easier shield bond installation.





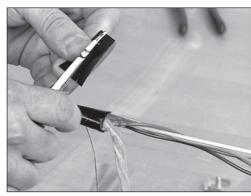


3.2 Using the ripcords for the poly sheath, proceed to slit one inch (2.5 cm) of the jacket open on both sides of the cable. This will allow enough room around the central buffer tube or single buffers for the 3M<sup>™</sup> Scotchlok<sup>™</sup> Shield Bond Connector Assembly 4460-D\FO to be installed.

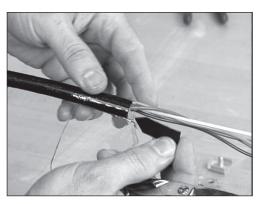


3.3 Cut or trim the plastic fiber protector along its length to suit the cable jacket size, and trim a point on one end.

Note: Creasing the fiber protector slightly down the center of its length helps with alignment to the connector and easier insertion.



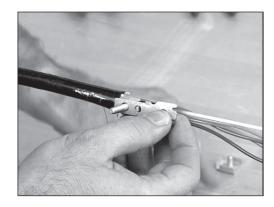
3.4 Insert the fiber protector between the metal cable shield and core wrap to a distance near or equal to its own length.



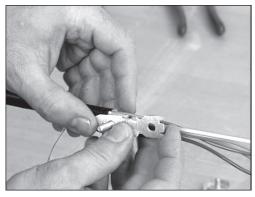
3.5 Install the connector bottom between the cable shield and fiber protector until it stops at the top of the outer sheath opening due to the two outward protruding tabs on the connector bottom. Tap the outer cable sheath in the connector bottom area to set the connector teeth.



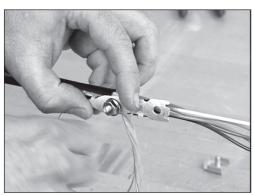
Place the extension bracket over the stud of the connector bottom. Tabs facing up.



3.6 Place the connector top over the extension bracket.

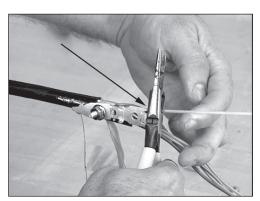


Place the first securing nut on the connector bottom stud and hand tighten.



# 4.0 Dielectric Strength Members

4.1 Single strength members and dual dielectric strength members should be trimmed slightly shorter than the top of the extension bracket.

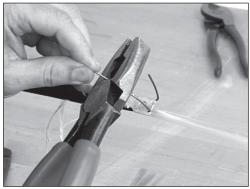


## 5.0 Metallic Strength Members

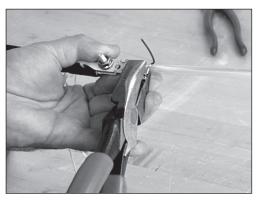
5.1 Dual metallic strength members should be routed through the slots in the extension bracket and folded over.



Trim the wires to 3/4 inches long (1.9 cm) beyond the top of the extension bracket.



5.2 Crimp wires flat while positioning the ends inside of the tabs on the extension bracket.



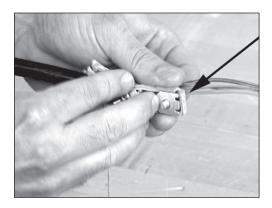
# 6.0 Completing installation for both Metallic and Dielectric strength members.

6.1 Wind any loose Kevlar® Strands around the lock cap stud for added strain relief before positioning the lock cap onto the extension bracket.





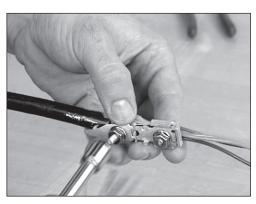
6.2 Position the lock cap from behind onto the extension bracket while capturing either the dielectric or metallic strain members.



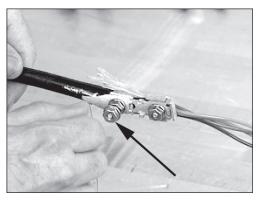
Install second securing nut and tighten down completely.



6.3 Making sure that all parts of the connector are kept in alignment, proceed to tighten the lower securing nut completely. Torque nut to 30-35 in-lbs (3.4-4.0 kg·m).

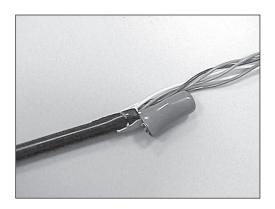


6.4 Add the third securing nut to the connector bottom stud only for adding any ground wires or straps. Torque nut to 30-35 in-lbs (3.4-4.0 kg·m).



6.5 Slide rubber boot onto assembly.

Finished 3M<sup>™</sup> Scotchlok<sup>™</sup> Shield Bond Connector Assembly 4460-D\FO on loose tube cable.



6.6 Slide rubber boot onto assembly.

Finished  $3M^{TM}$  Scotchlok  $^{TM}$  Shield Bond Connector Assembly 4460-D\FO on single tube cable.



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