

CORNING

ST Connectors Termination Procedure

Series: 720-N0N0-0NN0N

C	Update address and fax number	10/26/2018
B	Initial Release	
Version	Revision History Summary	Issue Date

SERIES 720-N0N0-0NN0N
ST CONNECTORS
TERMINATION PROCEDURE

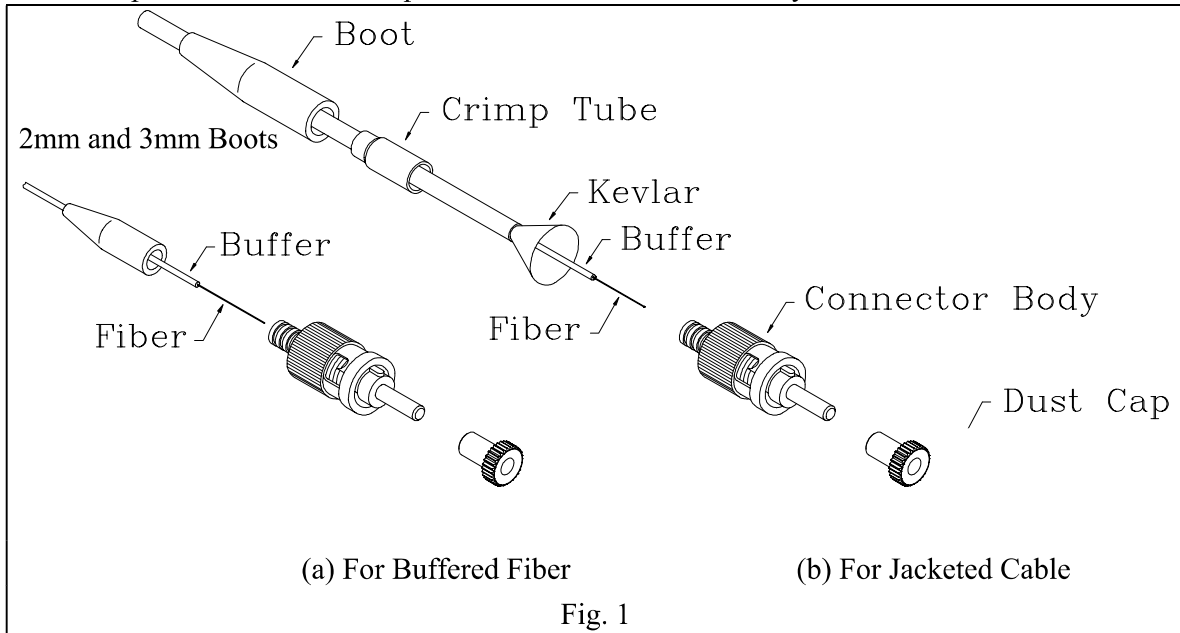


I INTRODUCTION

This termination procedure is for 720 Series Connectors. Please read this procedure thoroughly before assembly. All tools and materials required are listed in Section III.

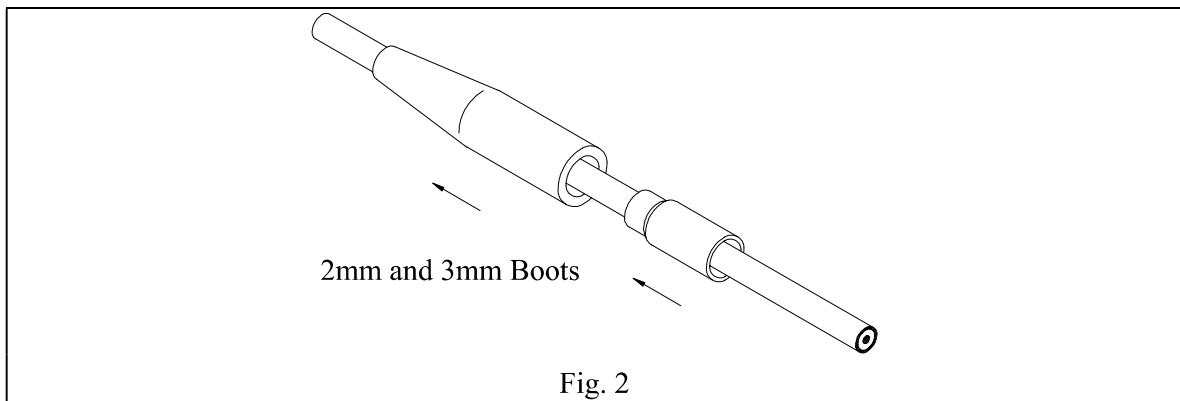
II DESCRIPTION

Fig. 1 shows the structure of Series 720 ST connector, standard type, which consists of Connector Body, Crimp Tube, Boot, and Dust Cap. Connectors for different cables/fibers may vary slightly by boots or crimp tubes. Follow the steps below to make cable assembly.



Step 1 Slide Boot and Crimp Tube onto the cable shown in Fig. 2.

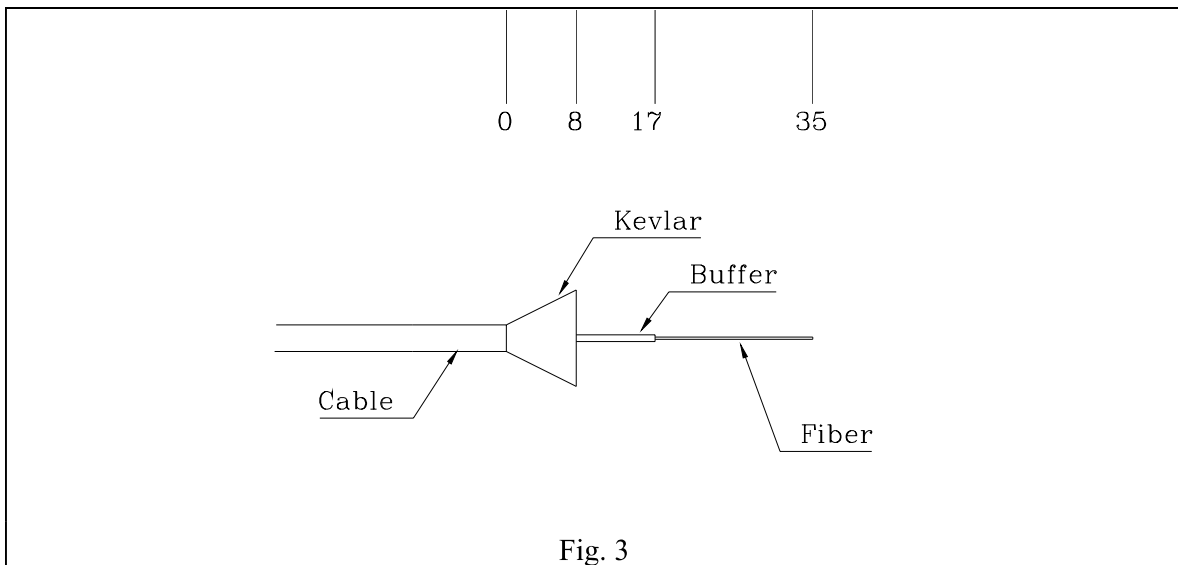
Note: Do not use Crimp Tube and Boot for Buffered Fiber Connectors. Use Rubber Boot instead.



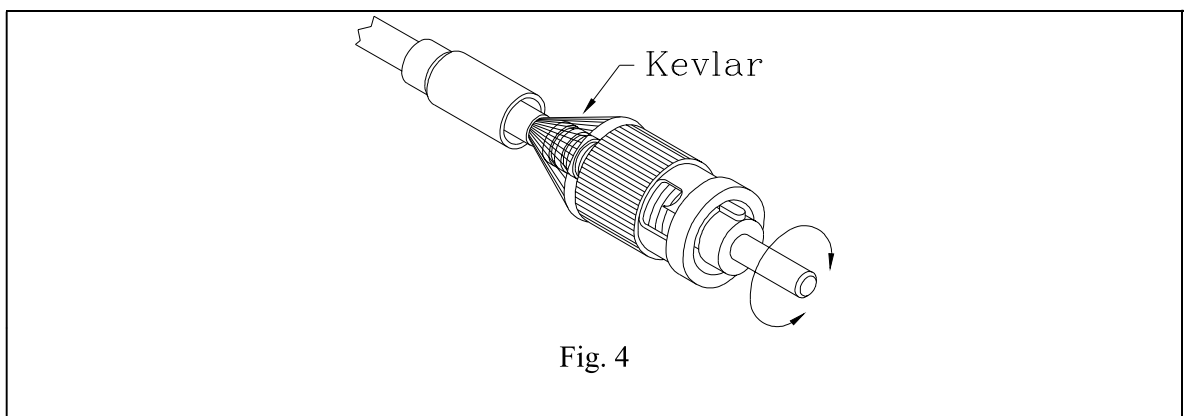
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- Step 2** Use jacket stripper to cut cable jacket and strength member (Kevlar). See Fig. 3 for the correct dimensions or use the ST Dimension Template.
- Step 3** Use buffer stripper to remove the require length of buffer and use alcohol and lens wiper to clean the bare fiber. See Fig. 3 for the correct dimensions or use the ST Dimension Template.



- Step 4** Have the epoxy ready according to the manufacture's instructions and put part of the mixed epoxy into a small container. The rest of epoxy should be stored in the freezer for latter use.
- Step 5** Apply a couple of drops of the epoxy to the inside of Connector Body by using a needle or syringe.
- Step 6** Insert bare fiber carefully into the epoxy-filled connector. Slightly rotating the connector will help the fiber to get through the ferrule. See Fig. 4.



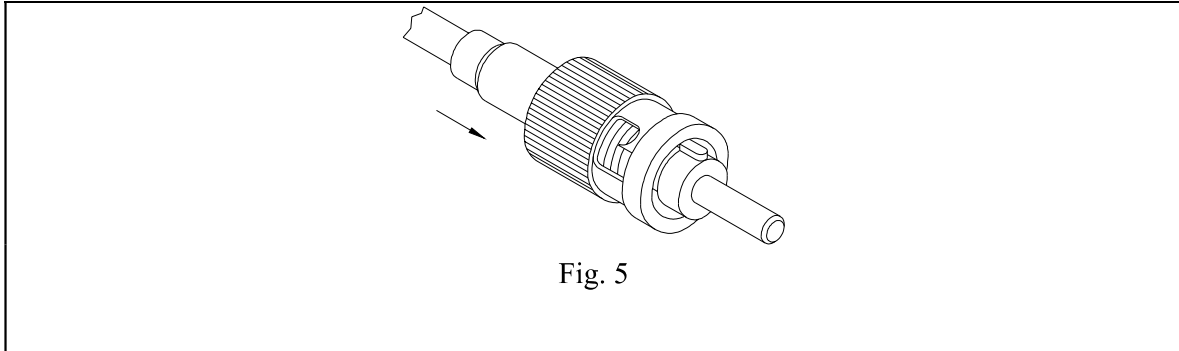
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Step 7 Slide the fiber gently in and out of ferrule to form the epoxy bead on the end of ferrule. Or, apply a drop of epoxy on ferrule endface to form the epoxy bead around fiber.

Step 8 Slide crimp tube over Kevlar and connector body shown in Fig. 5.

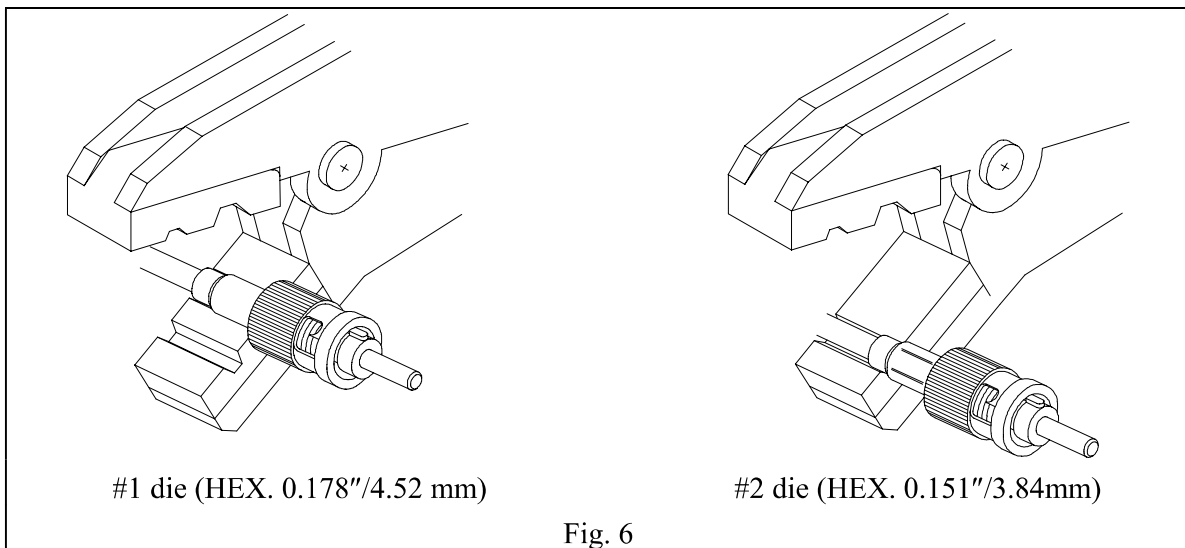
Note: Skip Step 8 & Step 9 for Buffered Fiber termination.



Step 9 Crimp the tube twice by the crimping tool. (See Fig. 6) Crimp the large end tube with #1 die first and small end tube with #2 die after.

Note: (a) In case of Buffered Fiber termination, skip this step.

(b) #2 die is HEX 0.128"/3.25mm when a 2mm Crimp tube is applied.



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Step 10 Slide the boot over the crimped tube shown in Fig. 7 and carefully mount the connector onto the curing fixture and place that into curing oven.

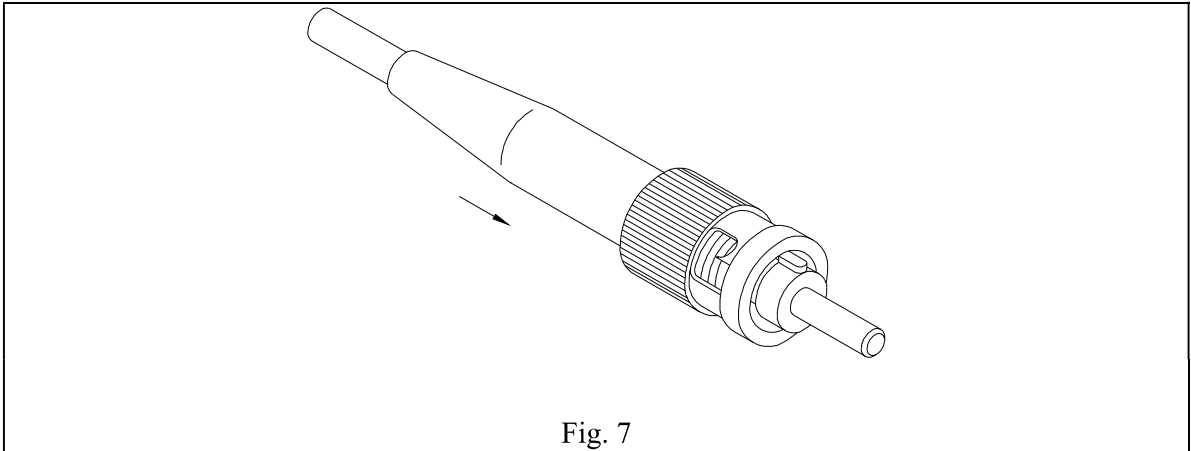


Fig. 7

Step 11 Remove the fixture from the connector after epoxy fully cured and use a fiber scribe to score the protruded fiber slightly at the point where the fiber and epoxy bead meet. Gently push the tip of fiber until they separate.

Note: (a) Do not break the fiber directly when the fiber is scored.

(b) Fiber shall be scored again if fiber doesn't break by light push on the tip of fiber.

Step 12 Use alcohol and Lens Wiper to clean the Polishing Pad and Polishing Tool and Place a 5 μ m Polishing Paper onto the Polishing Pad and mount the connector onto the Polishing Tool.

Step 13 Polish the connector with 8-figure motion until the tip of the ferrule turn light blue(vary the pressure as necessary).

Step 14 Repeat the previous step with a 1 μ m and a 0.3 μ m polishing papers respectively.

Step 15 Clean the connector and use a X100 Microscope to inspect the end surface of the connector.

Note: Polishing Machine manufacturers offer different polishing procedures. Please refer to polishing machine manuals for proper polishing process.

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III REQUIRED TOOLS AND MATERIAL

***Note:** Most tools and Consumable material are standard and can be purchased through distributors.*

TOOLS
JACKET STRIPPER
KEVLAR CUTTER
BUFFER STRIPPER
DIMENSION TEMPLATE(ST)
FIBER SCRIBER
MICROSCOPE X100
CRIMPING TOOL(ST, FC, SC)
POLISHING TOOL(ST)
POLISHING PAD
CONSUMABLE ITEMS
EPOXY
POLISHING PAPER 5 μ m
POLISHING PAPER 1 μ m
POLISHING PAPER 0.3 μ m
LENS WIPER
SYRINGE