

CORNING

MT-RJ Connectors Termination Procedure

Series: 723-NN20-NNNNN

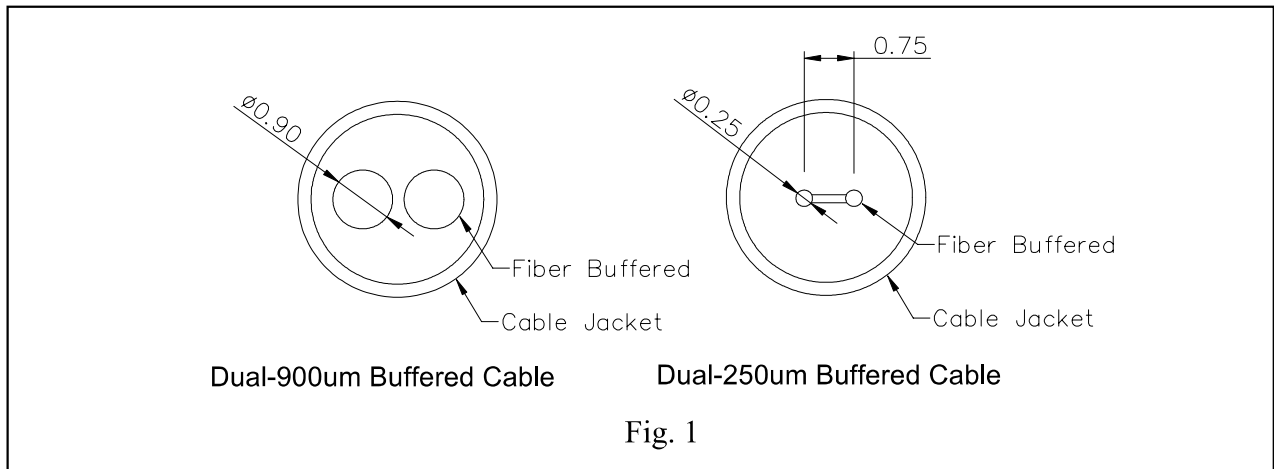
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**SERIES 723-NN20-NNNNN
MT-RJ CONNECTORS
TERMINATION PROCEDURE**



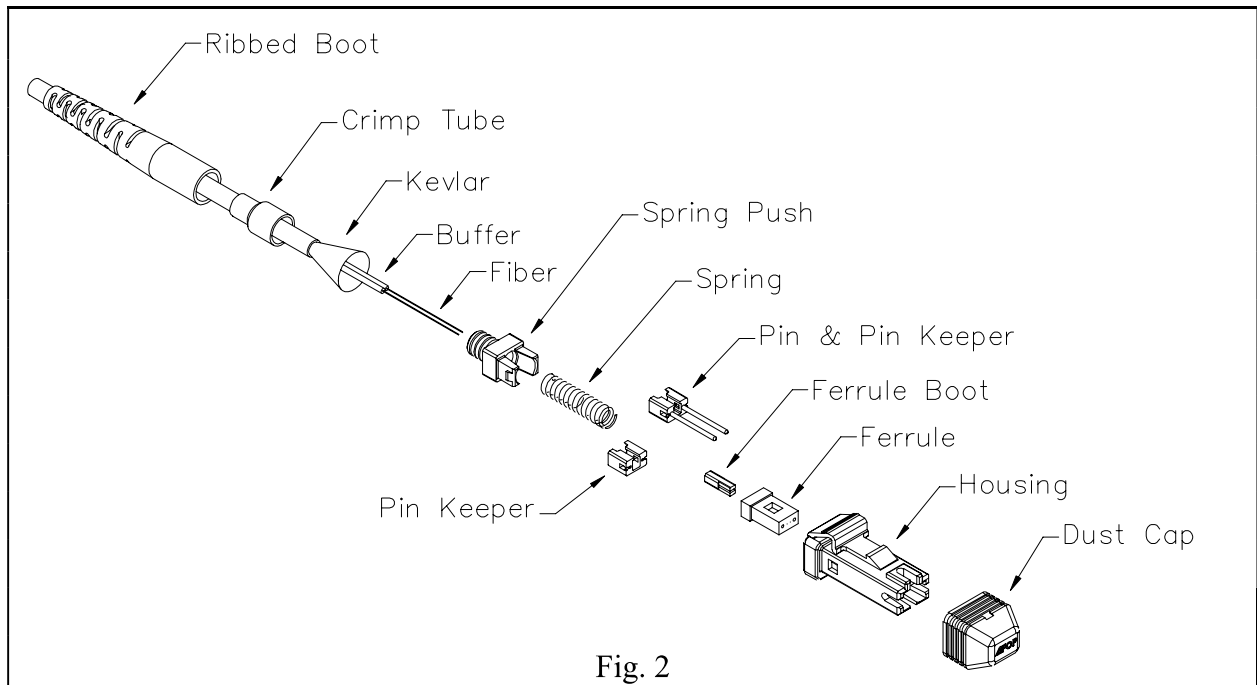
I INTRODUCTION

This termination procedure is for 723-NN20-NNNNN MT-RJ 2-fibers Connectors. Please read this procedure thoroughly before starting assembly. This procedure suits 3mm outer diameter cable with 2-fibers. MT-RJ connectors could be used in dual-900um buffer and dual-250um buffer cable (See Fig. 1).



II DESCRIPTION

Fig. 2 shows the structure of Series 723 MT-RJ 2-fibers connector, which consists of Housing, Ferrule, Ferrule Boot, Pin Keeper (with pin or without pin), Spring, Spring Push, Crimp Tube, Dust Cap and Boot. Follow the following steps to make MT-RJ Cable Assembly.



Step 1 Slide Boots, Crimp Tubes onto the 2-fibers Cable shown in Fig. 3.

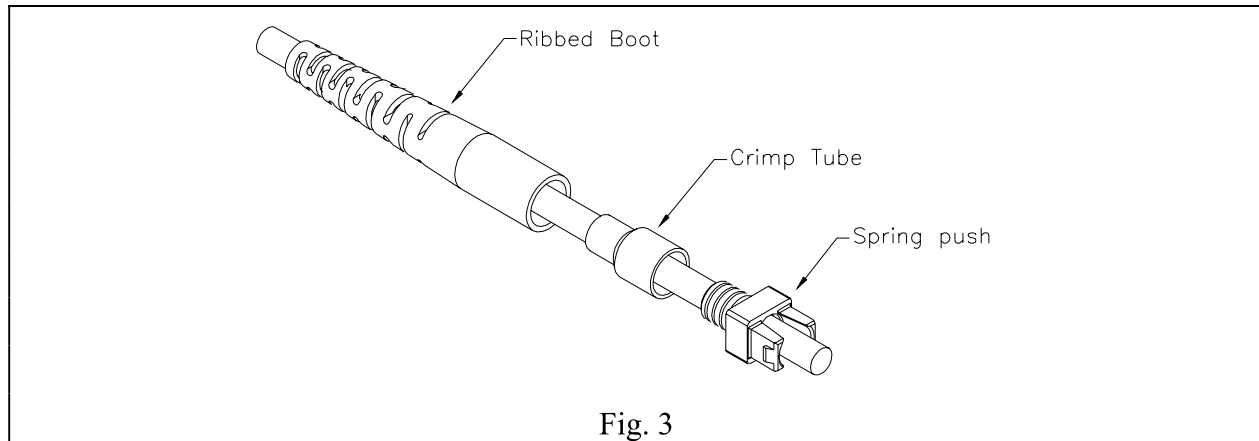


Fig. 3

Step 2 Use Jacket Stripper to cut cable jacket. Kevlar cutter to cut the strength member (Kevlar). Use knife to separate cable jacket. See Fig. 4 for the correct dimensions.

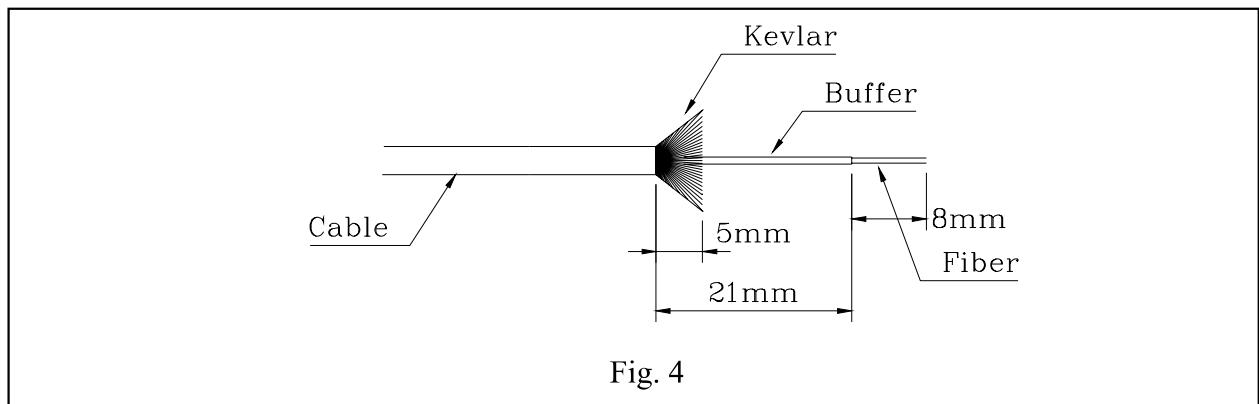


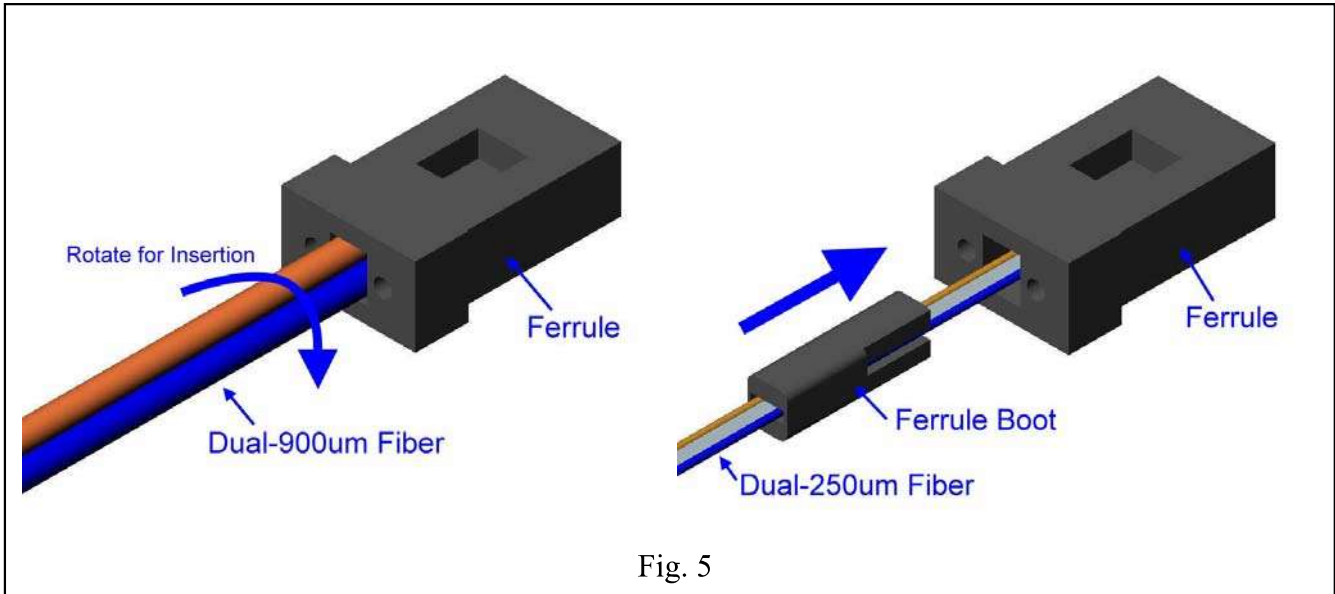
Fig. 4

Step 3 Use Buffer Stripper to remove the required length of buffer and use alcohol and lens wiper to clean the bare fiber. See Fig. 3 for the correct dimensions or use the MT-RJ Dimension Template.

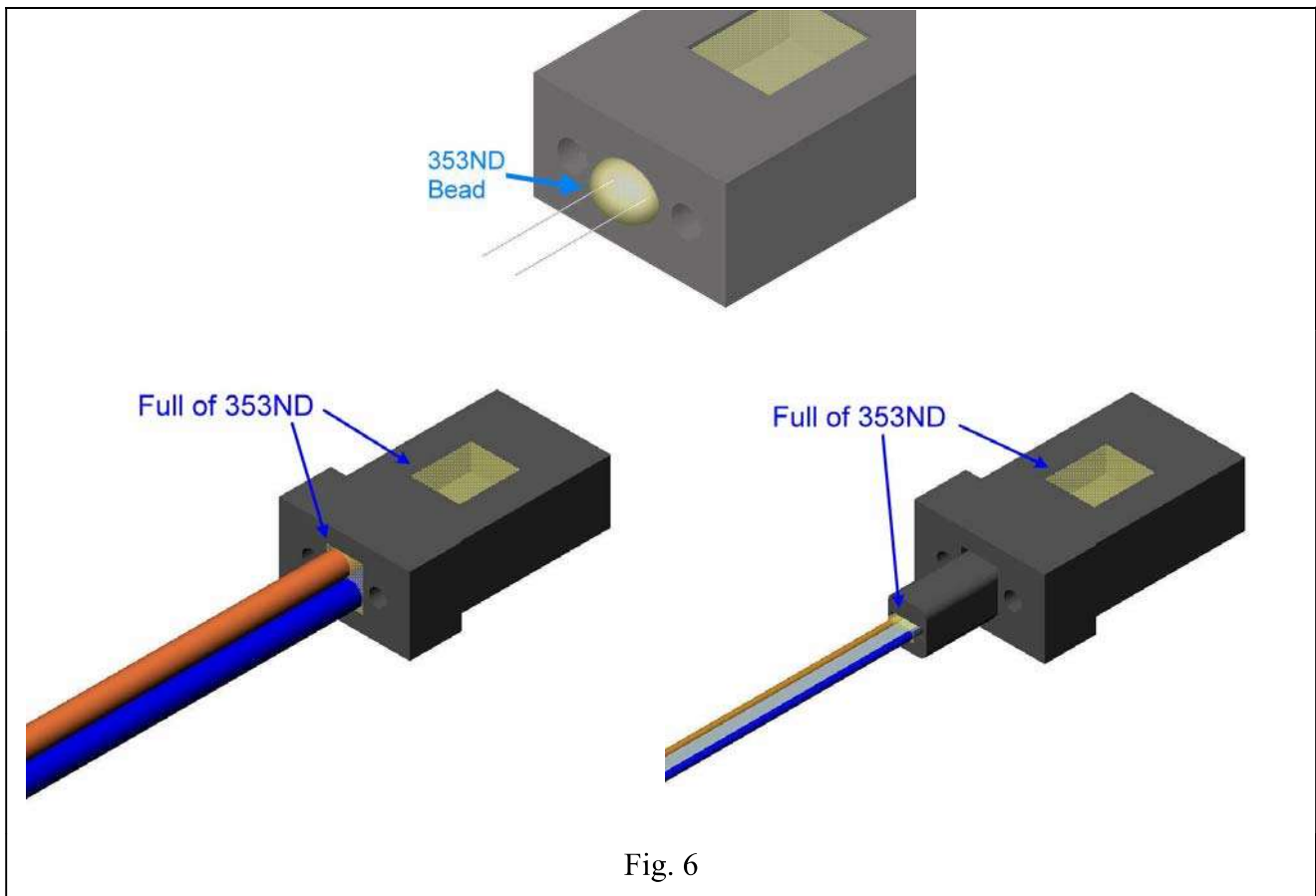
Step 4 Assemble Spring and Ferrule Boot, insert bare fiber carefully into ferrule. Apply a couple of drops of the prepared 353ND into ferrule with syringe or needle.

Note: Dual-900um buffered cable doesn't need ferrule boot.

Step 5 If the outer diameter of buffer fiber is 900um, please rotate the buffer slightly and push it into ferrule as Fig 4 shown. The 900um buffer must push into ferrule until can't go forward. If the outer diameter fo buffer fiber is 250um, please push the ferrule boot into the ferrule until can't go forward. Please see the Fig. 5.



Step 6 Slide the fiber gently in and out of ferrule to form the 353ND bead on the surface of ferrule. Apply 353ND on the tip of ferrule to form the 353ND bead. See Fig. 6. Inject 353ND to the window of the ferrule and the rear hole.



Step 7 Mount the connector carefully onto the curing fixture. Place the connector into curing oven to cure 353ND.



Fig 7

Step 8 Remove the fixture from the connector after 353ND is fully cured. Use a fiber scribe to score the protruded fiber slightly at the point where the fiber and 353ND bead meet. Gently push the tip of fiber until the fiber separates.

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

(b) Fiber shall be scored again if fiber is not broken by light push on the tip of fiber.

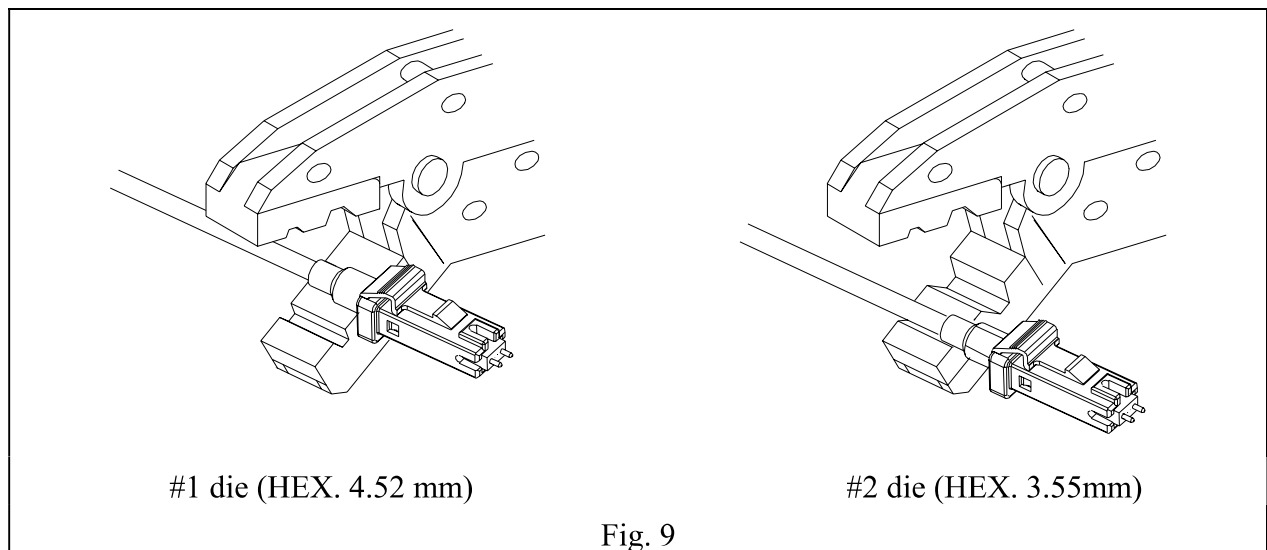
Step 9 Place a 16 μm polishing paper on a glass pad and mount the connector onto the AFOP special designed polishing jig or suitable polishing fixture. See fig 8.

Note: Polishing Machine manufacturers offer different polishing procedures. Please refer to its own manuals for proper polishing process. Also, this polishing procedure is for reference only. Cable assembly makers should develop its own polishing process.



Fig 8

- Step 10** Polish the end of connector by applying light pressure on the connector and move the connector polishing jig by an 8-figure until the polishing traces caused by protruded fiber disappear.
- Step 11** Repeat the previous step with a 5 μm and 1 μm polishing paper respectively.
- Step 12** Clean connector end and use a X200 microscope to inspect the end surface of the connect.
- Step 13** Repeat Step #5 through Step #10 for the connector #2.
- Step 14** After completing both of connector body polishing, slide the pin keeper into the ferrule. Slide spring and spring push, and put the connector subassembly into the housing. Slide crimp tube over Kevlar and Connector Body. Crimp the tube twice with the crimping tool (Fig. 9). Crimp the large end tube with #1 die first and small end tube with #2 die later.



- Step 15** Slide boot over the crimped tube.

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III REQUIRED TOOLS AND MATERIALS

Note: Most Tools and Consumable material are standard and can be purchased through its own manufacturers or distributors.

TOOLS	P/N
JACKET STRIPPER	714-0011-003
KEVLAR CUTTER	714-0011-002
BUFFER STRIPPER	714-0011-004
DIMENSION TEMPLATES	714-0051-011
FIBER SCRIBER	714-0011-010
MICROSCOPE X200	714-0021-008
MTRJ 3MM CRIMPING TOOL	714-0031-005
POLISHING TOOL(MT-RJ)	714-0051-006
POLISHING PAD	714-0011-007
CONSUMABLE ITEMS	P/N
353ND EPO-TEK	710-0041-004
POLISHING PAPER 16 μm	710-0016-001
POLISHING PAPER 5 μm	710-0014-001
POLISHING PAPER 1 μm	710-0012-001
LENS WIPER	710-0011-002
SYRINGE	710-0011-008