## **CORNING**

# MT-RJ Connectors Termination Procedure

Series: 723-NN10-NNNNN

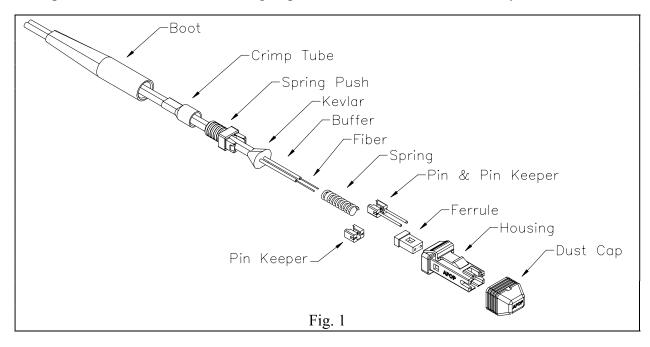
F	Update address and fax number	10/26/2018
E	Initial Release	
Version	Revision History Summary	Issue Date

#### I INTRODUCTION

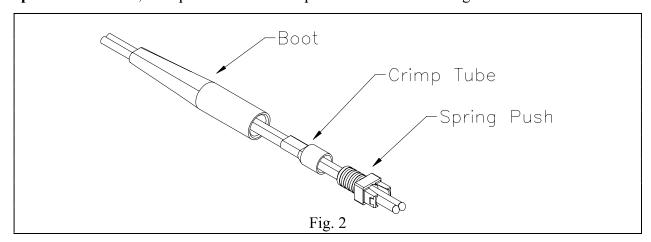
This termination procedure is for 723-NN10-NNNNN MT-RJ 2-fibers Zipcord Connectors. Please read this procedure thoroughly before starting assembly. 723-NN10-NNNNN suits the 1.6~2.0mm zipcord cable.

#### II DESCRIPTION

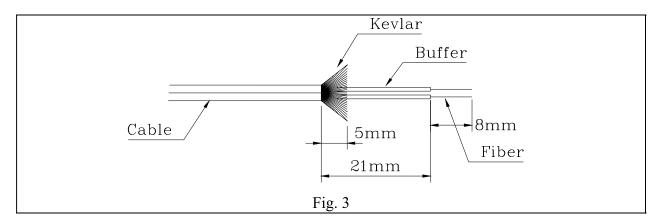
Fig. 1 shows the structure of Series 723-NN10-NNNNN MT-RJ 2-fibers Zipcord connector, which consists of Housing, Ferrule, Pin Keeper (with pin or without pin), Spring, Spring Push, Crimp Tube, Dust Cap and Boot. Follow the following steps to make MT-RJ Cable Assembly.



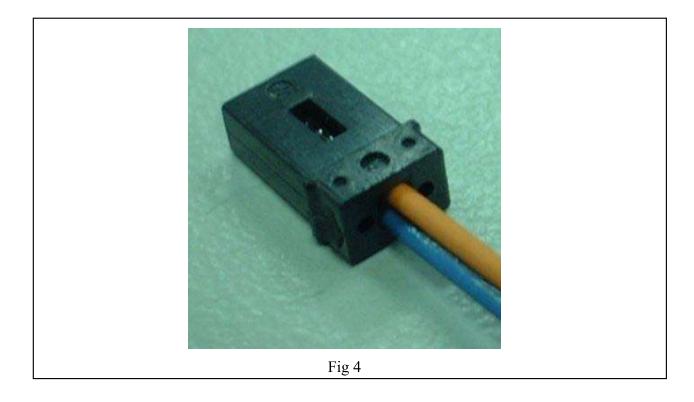
**Step 1** Slide Boots, Crimp Tubes onto the Zipcord Cable shown in Fig. 2.



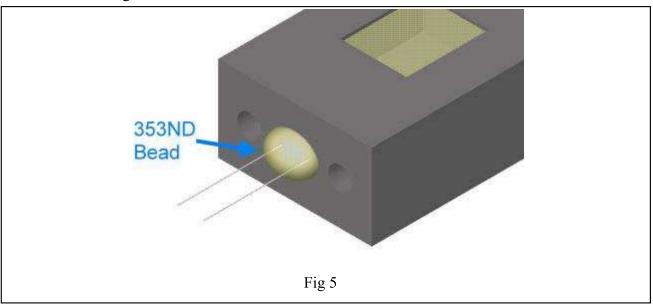
**Step 2** Use Jacket Stripper to cut cable jacket. Kevlar cutter to cut the strength member (Kevlar). See Fig. 3 for the correct dimensions.



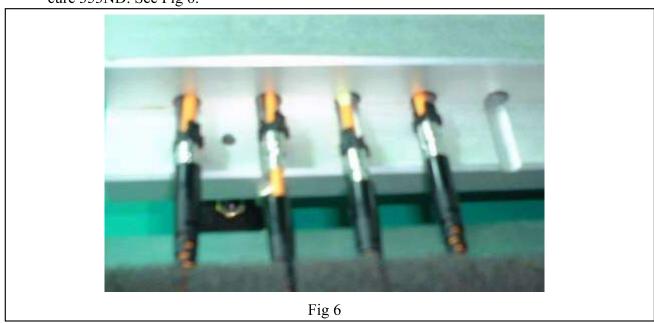
- **Step 3** Use Buffer Stripper to remove the required length of buffer and use alcohol and lens wiper to clean the bare fiber. See Fig. 3 for the correct dimensions or use the MT-RJ Dimension Template.
- **Step 4** Assemble Spring, insert bare fiber carefully into ferrule. Apply a couple of drops of the prepared EPO-TEK 353ND into ferrule with syringe or needle. 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.



**Step 5** Slide the fiber gently in and out of ferrule to form the EPO-TEK 353ND bead on the end of ferrule. Apply a drop of EPO-TEK 353ND on the tip of ferrule to form the EPO-TEK 353ND bead. See Fig. 5.



**Step 6** Mount the connector carefully onto the curing fixture. Place the connector into curing oven to cure 353ND. See Fig 6.



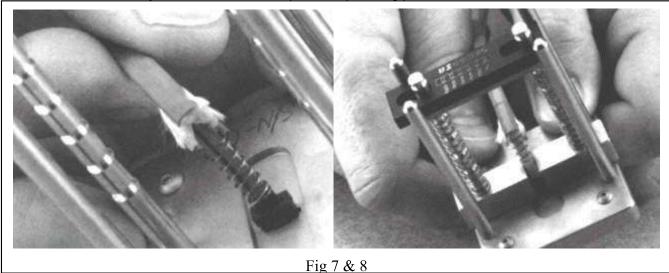
**Step 7** Remove the fixture from the connector after 353ND is fully cured. Use a fiber scriber to score the protruded fiber slightly at the point where the fiber and epoxy bead meet. Gently push the tip of fiber until the fiber separates.

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.

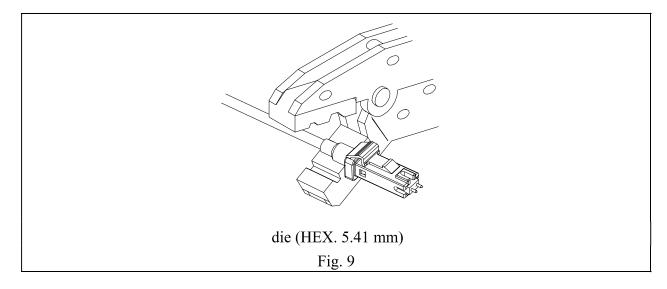
**Step 8** Place a 16 μm polishing paper on a glass pad and mount the connector onto the special designed polishing jig or suitable polishing fixture. See fig 7 and 8.

**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.



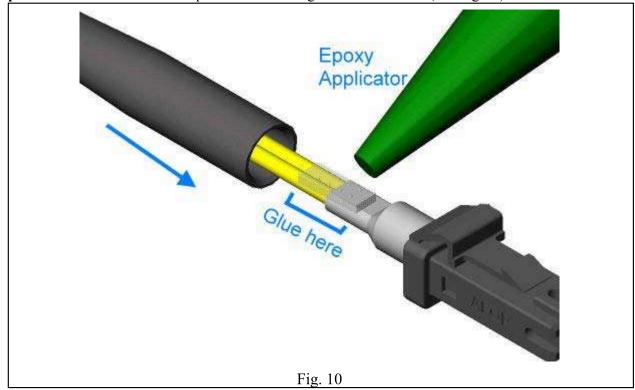
**Step 9** Polish the end of connector by applying light pressure on the connector and move the connector polishing jig by an 8-figure until the polishing traces caused by protruded fiber disappear.

- Step 10 Repeat the previous step with a 5  $\mu$ m and 1  $\mu$ m polishing paper respectively.
- **Step 11** Clean connector end and use a X200 microscope to inspect the end surface of the connect.
- **Step 12** Repeat Step #5 through Step #10 for the connector #2.
- **Step 13** 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 with the crimping tool (Fig. 9).

Step 14 Slide boot over the crimped tube and use glue to fix the boot(See fig 10).



### 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 2MM CRIMPING TOOL	714-0032-005
POLISHING TOOL	714-0051-006
GLASS 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