CORNING

MT-RJ Connectors Termination Procedure

Series: 723-NN3N-NNNNN

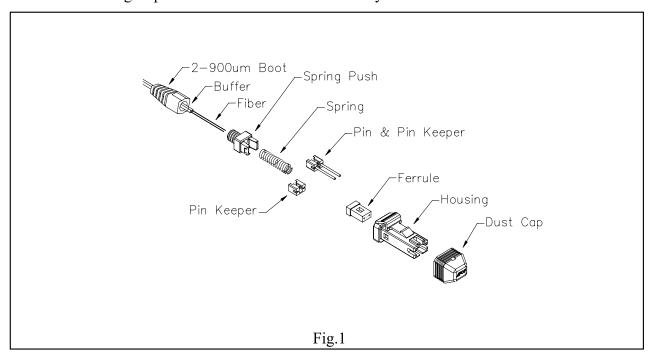
| В | Update address and fax number | 10/26/2018 |
|---------|-------------------------------|------------|
| Α | Initial Release | |
| Version | Revision History Summary | Issue Date |

I INTRODUCTION

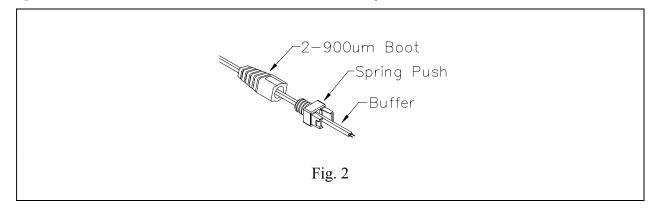
This termination procedure is for 723-SERIES MT-RJ 2-900um fibers Connectors. Please read this procedure thoroughly before starting assembly. This procedure suits 2-900um outer diameter buffer fibers.

II DESCRIPTION

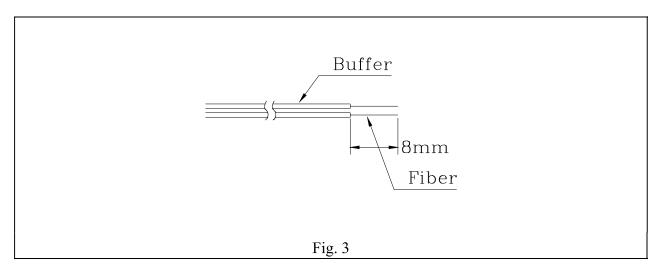
Fig. 1 shows the structure of Series 723 MT-RJ 2-900um fibers connector, which consists of Housing, Ferrule, Pin Keeper (with pin or without pin), Spring, Spring Push, Dust Cap and 2-900um Boot. Follow the following steps to make MT-RJ Cable Assembly.



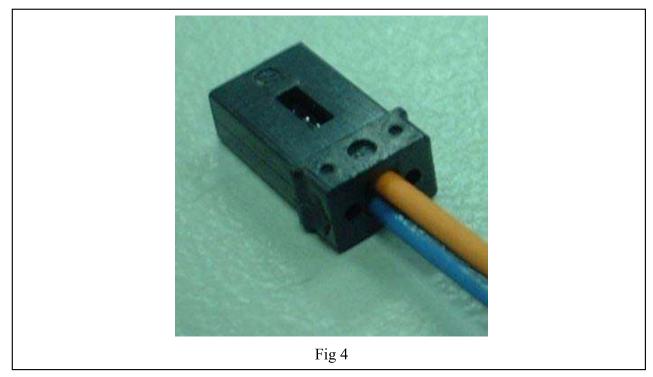
Step 1 Slide Boots onto the 2-fibers Cable shown in Fig. 2.



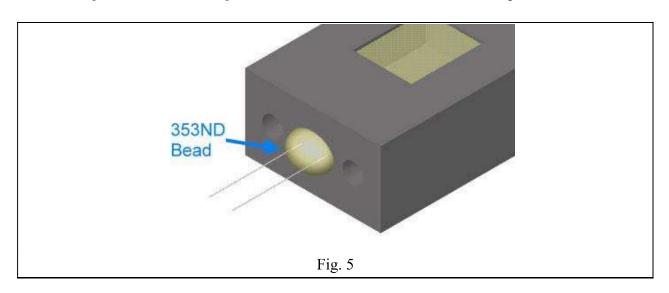
Step 2 Use Buffer Stripper to remove the required length of buffer and use alcohol and lens wiper to clean the bare fiber. See Fig. 3 for the correct dimensions or use the MT-RJ Dimension Template.



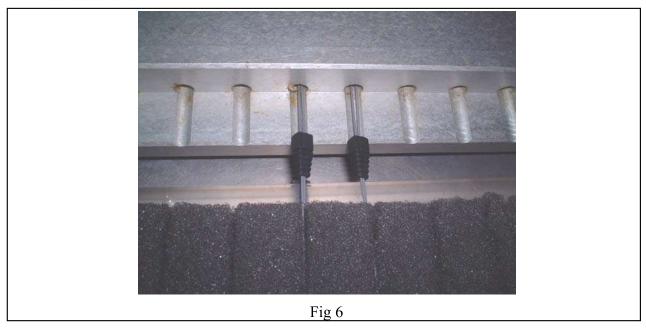
Step 3 Assemble Spring, insert bare fiber carefully into ferrule. Apply a couple of drops of the prepared 353ND into ferrule with syringe or needle. If the outer diameter of buffer fiber is 900um, please rotate the buffer slightly and push it into ferrule as Fig 4 shown. The 900um buffer must push into ferrule until can't go forward.



Step 4 Slide the fiber gently in and out of ferrule to form the 353ND bead on the end of ferrule. Apply a drop of 353ND on the tip of ferrule to form the 353ND bead. See Fig. 5.



Step 5 Mount the connector carefully onto the curing fixture. Place the connector into curing oven to cure 353ND.



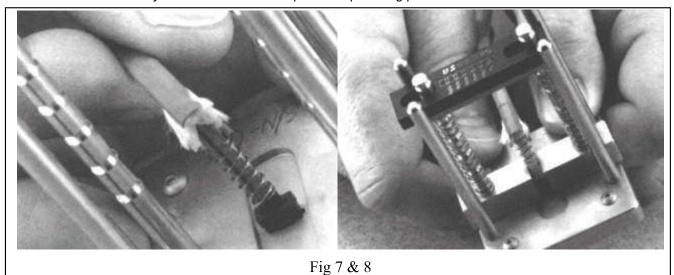
Step 6 Remove the fixture from the connector after 353ND is fully cured. Use a fiber scriber to score the protruded fiber slightly at the point where the fiber and 353ND bead meet. Gently push the tip of fiber until the fiber separates.

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 7 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 8** 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 9** Repeat the previous step with a 5 μ m and 1 μ m polishing paper respectively.
- **Step 10** Clean connector end and use a X200 microscope to inspect the end surface of the connect.
- **Step 11** Repeat Step #5 through Step #10 for the connector #2.
- **Step 12** 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.
- Step 13 Slide 2-900um boot over the end spring push.

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 |
|-----------------------|--------------|
| BUFFER STRIPPER | 714-0011-004 |
| DIMENSION TEMPLATES | 714-0052-011 |
| FIBER SCRIBER | 714-0011-010 |
| MICROSCOPE X200 | 714-0021-008 |
| 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 |