



A Furukawa Company

Use and Care of the OFS Quick Split RT Tool

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1. General

1.1 The OFS Quick Split RT (Ribbon Tube) tool is used to open sections of ribbon buffer tubes during end-prep and mid-span splicing operations. The Quick Split RT tool is used to ring-cut and split the tube in half longitudinally without damaging the optical fibers.

1.2 The Quick Split RT tool is designed to work on ribbon buffer tubes with either 6.0 or 7.2 mm nominal diameter.

1.3 End-prep and mid-span cable entry can easily and effectively be accomplished using the OFS Quick Split RT Tool. Select fibers and/or ribbons within a single tube can be accessed for mid-span splicing and testing without disturbing the other fibers. Proper use of the tool can eliminate unnecessary fiber or cable cuts, prevent added splice loss, and minimize labor and material costs.

1.4 The Quick Split RT tool is typically used in branch-splice architectures where only a few fibers or ribbons in the buffer tube are routed to another location. The tool is also used during emergency "hot cut" or roll-over applications to prevent unwanted fiber cuts

1.5 The following procedure describes the use and maintenance of the OFS Quick Split RT Tool. For ordering information, please call OFS customer service at 888-FIBER-HELP (888-342-3743).

2. Precautions

2.1 Ribbon buffer tubes are sensitive to excessive bending, pulling, and crushing forces. Care must be taken when handling ribbon buffer tubes. Improper handling of the buffer tubes may result in broken fibers or ribbons.

3. Tools and Materials

3.1 The following tools and materials are required to operate and maintain the Quick Split RT tool.

- Extra blades (provided with the tool)
- Small screwdriver
- Approved fiber cleaning solvent
- Lint free wipes

4. Tool Description

4.1 The tool is composed of upper and lower body sections. Each section contains a semi-circular groove that runs along the length of the tool. An injector style razor blade is centered in the groove and positioned at a preset depth to split the wall of a ribbon buffer tube (Figure 1).

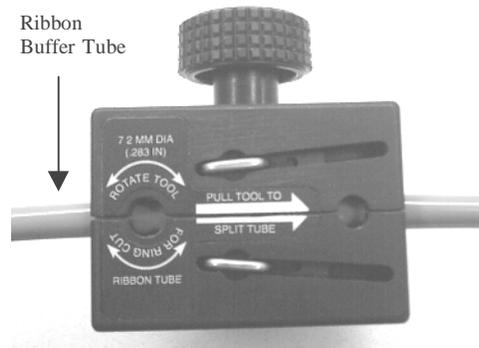


Figure 1 –Slitting the buffer tube.

4.2 Each body section also contains a semi-circular groove that runs perpendicular to the splitting groove. This groove is positioned such that the corner of the razor blade scores the buffer tube as the tool is rotated around the tube (Figure 2).

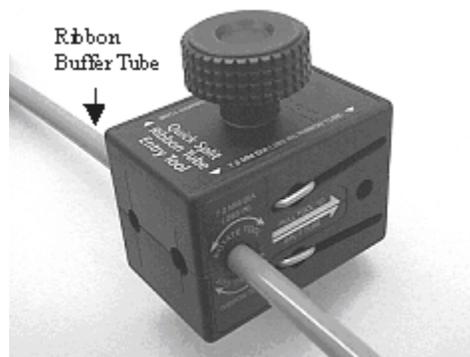


Figure 2 – Ring cutting the buffer tube.

5. Cutting Blades

5.1 Always begin a ring cut or tube splitting with new blades.

5.2 The tool utilizes only 1/3 of the blade length to split or ring cut the buffer tube. The blades may be reversed in the tool to utilize both sides of the blades.

5.3 The blades may be used for **only** one tube split and two ring cuts before blade replacement or reversal is necessary (see blade replacement instructions in Section 8).

5.4 If no ring cuts are being done, the blades must be changed, or reversed, after each tube split.

6. Ring Cutting Procedure

6.1 This procedure assumes that the cable sheath has been removed and the ribbon buffer tubes are exposed. Refer to OFS Installation Practice IP-011A (dielectric cable) or IP-011B (armored cable) for sheath removal instructions.

6.2 Mark the length of the ribbon buffer tube to be removed (Figure 3).

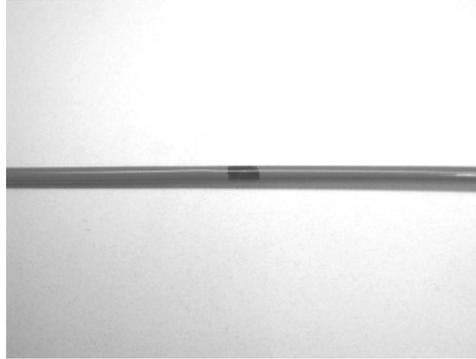


Figure 3 – Mark the section of buffer tube to be removed

6.3 Open the Quick Split RT tool by turning the thumbscrew counter-clockwise as far as it will turn. Identify the proper ring cutting groove as labeled on the side of the Quick Split RT tool.

6.4 Place the ribbon buffer tube in the ring cutting groove. Close the tool completely by rotating the handle clockwise.

6.5 Loosen the thumbscrew by turning it $\frac{1}{4}$ turn counter-clockwise and rotate the Quick Split RT tool $\frac{1}{2}$ turn around the ribbon buffer tube (Figure 4). After completing the ring cut, open the tool by rotating the handle counter-clockwise and remove the tool from the ribbon buffer tube. **Be careful not to nick the fibers when removing the tool from the buffer tube.**

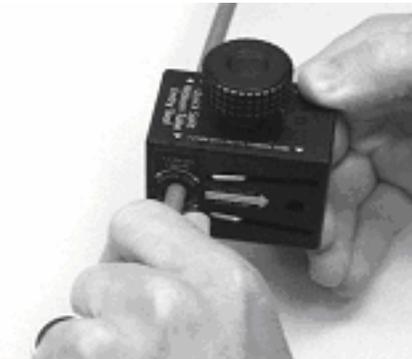


Figure 4 – Rotate the tool $\frac{1}{2}$ turn to ring cut the buffer tube.

6.6 Remove the buffer tube from the end of the ribbons and clean them with lint free wipes and an approved fiber cleaning solvent. Dry the ribbons thoroughly after cleaning. See OFS Installation Practice IP-041 *AccuRibbon® Cleaning Procedure* for detailed ribbon cleaning instructions. The fiber ribbons are now ready for testing and/or splicing.

7. Buffer Tube Splitting Procedure

7.1 Mark the length of the ribbon buffer tube to be removed.

7.2 Open the Quick Split RT tool by turning the thumbscrew counter-clockwise as far as it will turn. Identify the proper slitting groove as labeled on the side of the tool.

7.3 Orient the tool so that the proper slitting groove is facing you. The “pull to split” direction arrows should be pointing to the right.

7.4 Place the ribbon buffer tube into the proper slitting groove of the Quick Split RT tool. Align the buffer tube mark with the tip of the cutting blade and close the tool completely by rotating the handle clockwise.

7.5 Pull the Quick Split RT tool along the tube in the direction indicated by the “pull to split” arrows (Figure 5).



Figure 5 – Pull the Quick Split RT tool lengthwise to split the tube.

7.6 When the desired length of tube is opened, remove the tool by rotating the handle counter-clockwise.

7.7 Ring cut each end of the slit buffer tube using the procedures outlined in Section 6.

7.8 Carefully separate the ribbon stack from the split buffer tube. Clean the fiber ribbons using lint free wipes and an approved fiber cleaning solvent. Dry the ribbons thoroughly after cleaning. See OFS Installation Practice IP-041 *AccuRibbon® Cleaning Procedure* for detailed ribbon cleaning instructions. The fiber ribbons are now ready for testing and/or splicing.

8. Tool Maintenance

8.1 The cutting blades can be removed for reversal or replacement by removing the “U” shaped locking clip located in the side of the tool.

8.2 Remove the locking clip by placing a small screw driver behind the center of the clip and pry it out (Figure 6).



Figure 6 – Remove the locking clip.

8.3 Insert the tip of the locking clip in the elongated slot and push the cutting blade out of the tool (Figure 7).

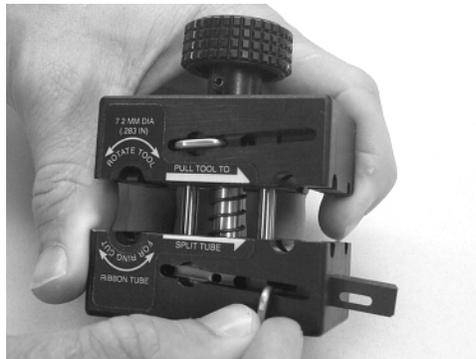


Figure 7 – Slide the cutting blade out of the tool.

8.4 Clean the razor blade groove by sliding a business card or similar item through the groove to remove any dirt or debris.

8.5 Slide a new blade into position in the groove. Position the blade so that the edges of the blade slots align with the locking clip holes.

8.6 Push the locking clip back into the locking clip holes and fully seat the locking clip. The locking clip should be flush with the side of the tool.

8.7 There are no adjustments or replaceable parts other than the cutting blades. The blades are standard injector-style razor blades that can be purchased at most local drug stores.

If you have any questions or need additional information, please contact OFS at 888-FIBER-HELP (888-342-3743).