Patented

FIBERLIGN®
FIBER OPTIC SPLICE ORGANIZER
(Horizontal Stacking)

Be sure to read completely and understand this procedure before applying product.

Be sure to select the proper size PREFORMED™ product before application.

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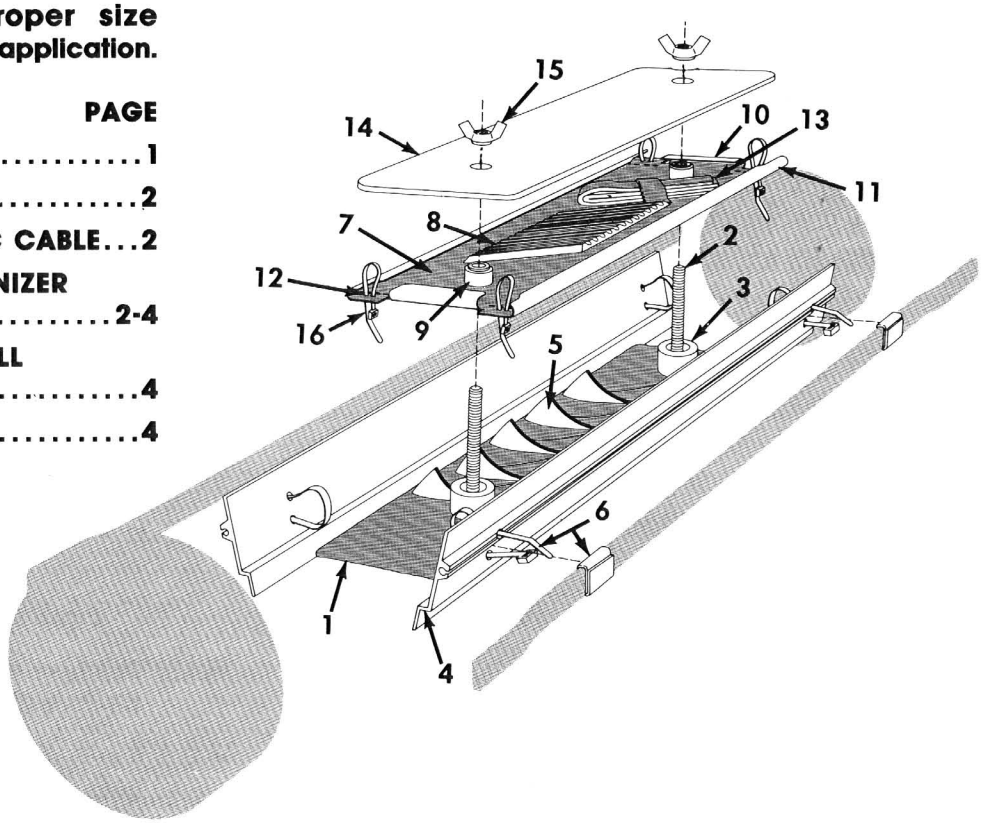

Figure 1 — Mainframe Assembly (8000185)

1.00 NOMENCLATURE

1. Mainframe Assembly
2. Stud (2)
3. Spacer (2)
4. Mainframe Ledge
5. Velcro Hook Tape
6. Tie Wraps (4) & Tape (12")
7. Splice Tray Assembly
8. Grooved Splice Block
9. Spacer (2)
10. Splice Tray End Retainer (2)
11. Splice Tray Side Retainer (2)
12. Cable Tie Hole Sets (16)
13. Felt Adhesive Strips
14. Snap-on Lid (1 per tray)
15. Wing Nuts (2)
16. Tie Wraps (4)

Splice Tray Assembly (8000184) for protected fusion or mechanical splice (up to 12)
" " " (8000182) for unprotected fusion splices (up to 12)
" " " (8001023) for Rotary splices (up to 12)
" " " (8001042) for Fibrlok* splices (up to 12)
" " " (8001045) for protected fusion or mechanical splices (up to 18)

*Fibrlok is a trademark of the 3M Company

2.00 DESCRIPTION

2.01 Preformed Line Products FIBERLIGN® Fiber Optic Organizer is designed to help organize the delicate optical fibers, facilitate the splicing operation and store the surplus fiber. It is presently recommended for use with the 6½" FIBERLIGN® Splice Case.

2.02 For Safety Considerations, refer to the end of this application procedure.

3.00 PREPARATION OF FIBER OPTIC CABLE

3.01 Please note these special instructions for installing **Fiber Optic Cables.**

PLP® TIP:
Most fiber optic cables are smaller in diameter. Since the cable is smaller and more flexible, we use ¾" LOCK-TAPE™ Sealant because it is easier to stretch.

3.02 To determine what size hole to drill, use the special Fiber Optic Measure Tape included with the FIBERLIGN® Splice Case. Use the number to select the proper hole size indicated on the tape.

3.03 For drilling these holes, PLP® has a kit available that may be used for fiber optic cable as well as larger copper cable installations, either 8000452 (without bits) or 8000454 (with bits). If it is not available to you, then a drill press or some method of keeping the drill bit vertical must be used.

3.04 The cable is cleaned, scuffed, and prepared the same as copper cable, except ¾" LOCK-TAPE Sealant must be used for half lapping around the cable. Only **one** half lap layer is necessary. Stretch the LOCK-TAPE Sealant when wrapping, reducing the width from ¾" to ½".

3.05 For butt splices, be sure to seal off the opposing end plate by sandwiching two layers of LOCK-TAPE Sealant between the end plates, white side out.

PLP TIP:
For proper positioning of the strength member first be certain that the cable entry hole in the end plate is cut for a position somewhat below the mainframe.

3.06 Remove a sufficient amount of the fiber optic cable jacket so that approximately 100 inches of the buffer tubes are left exposed.

PLP TIP:
If metallic members are present, place a temporary bonding jumper across the splice opening as a safety precaution.

4.00 FIBERLIGN FIBER OPTIC ORGANIZER INSTALLATION

4.01 Position the mainframe assembly between the torque bars of the Splice Case and offset slightly to the left or the right of center. Remove and discard the plastic tubing from the torque bars (Fig. 2). Mark the location of the tie wrap holes into the torque bars.

4.02 Using only the black tape supplied, apply one wrap at each tie wrap location on the torque bars. Do not stretch tape while wrapping (Fig. 2).

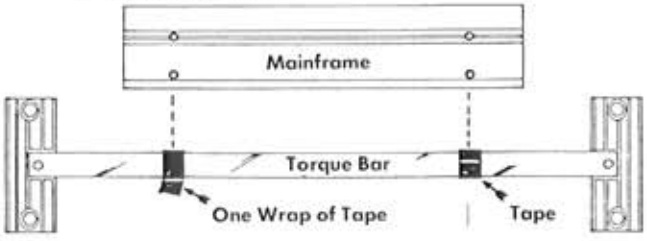

Figure 2 — Applying Tape

4.03 Position mainframe aligning the tie wrap holes with the tape (Fig. 2).

4.04 Insert tie wrap by starting from the bottom hole, up the inside of the mainframe, and then down through the tie wrap head (Fig. 3).

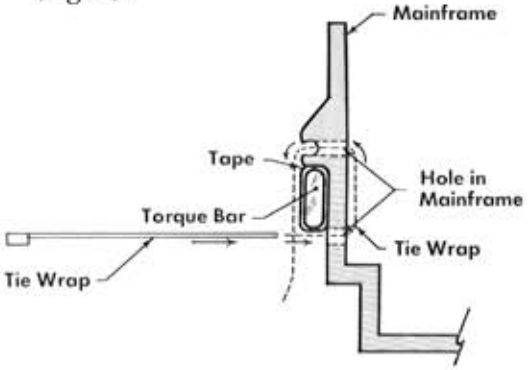

Figure 3 — Securing Mainframe to Torque Bar

4.05 Lead the buffer tubes into the mainframe assembly. Loop them around the studs so that a sufficient amount of excess fiber

slack is taken up. Now secure the buffer tubes to the mainframe with the velcro strips (Fig. 4).

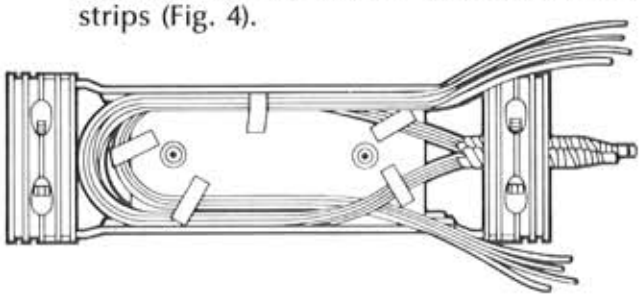

Figure 4 — Positioning Buffer Tubes

PLP® TIP:

Due to the holding capabilities of the end plates additional fastening is not required for the outer cable sheath.

4.06 Bond the cable shield according to your company's accepted practices. If there is a strength member to be mechanically joined, route it underneath the mainframe and utilize a suitable connector (Fig. 5).

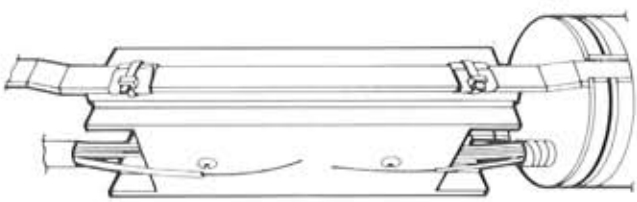

Figure 5 — Positioning Strength Member

4.07 Choose the appropriate splice tray assembly(s).

4.08 Remove approximately 54 inches of buffer tube so that there is a sufficient amount of glass fiber for splicing and splice tray placement.

PLP TIP:

You may want to trial lay the buffer tube onto the splice tray. This can assure you of the right location and exposing enough fiber (Fig. 6).

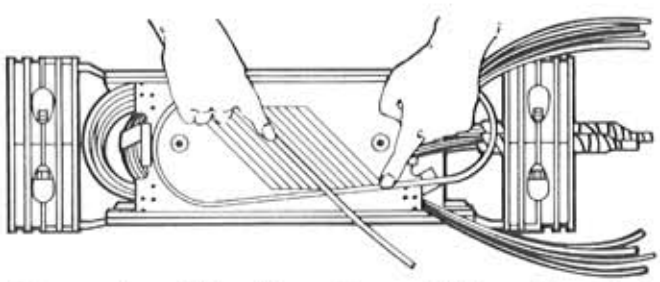

Figure 6 — Checking Correct Fiber Needed

4.09 Thoroughly "squeaky" clean the buffer tube of any grease, etc., for a width of 2 inches in from the glass fiber.

4.10 Cut a ¾" to 1" section of felt adhesive and apply it around the section of buffer tube that you just cleaned.

PLP TIP:

Step 4.10 will be a necessary procedure to properly cushion and secure the buffer tube.

4.11 Now position the felt-covered section of buffer tube onto the end of the splice tray assembly so it lies between a set of cable tie holes. Insert a cable tie through both holes and secure the cushioned buffer tube. Be certain that the locking section of the cable tie is on top of the tray (Fig. 7).

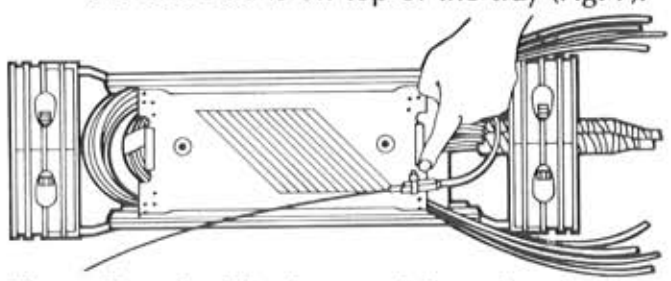

Figure 7 — Positioning and Securing Buffer Tube

4.12 Lead the glass fiber into the space tray assembly. Loop it, with a maximum radius, around the tray and inside the retainer walls to take up the fiber slack. Shown below are two methods to position the fiber slack from a butt or straight piece (Fig. 8; Fig. 9).

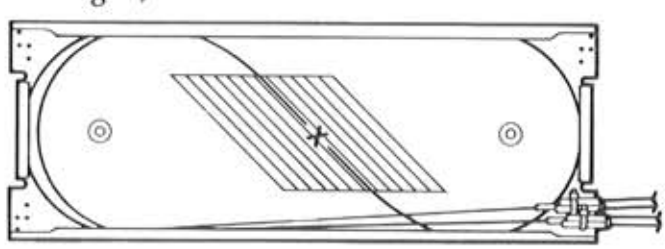

Figure 8 — Fiber Positioning, Same End

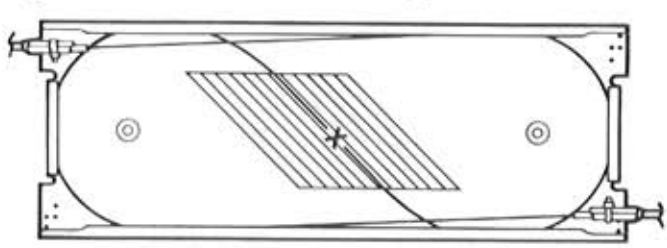

Figure 9 — Fiber Positioning, Opposite Ends

4.13 Splice the fiber according to your accepted company practices.

4.14 Position each splice into the grooved splice block. Use a small amount of RTV sealant (if required) to secure the splice in place. Now secure the fiber slack inside the splice tray with the felt adhesive strips (Fig. 10).

PLP® TIP:
As an alternative, a length of felt adhesive strip over the splices can be used to secure the splices in place.

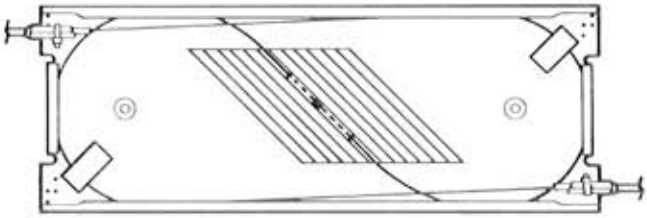

Figure 10 — Securing Splice and Fiber Slack

PLP TIP:
If removal or reapplication of the felt adhesive strips is necessary, remove them at 45° angles as shown (Fig. 11). This lessens the chance that the fiber will be pulled out with the strip.

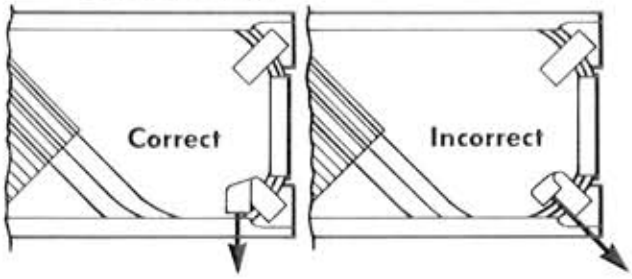

Figure 11 — Removing Felt Adhesive Strips

4.15 Repeat steps 4.06 through 4.14 for each spliced fiber, and for each splice tray assembly.

4.16 After all splicing has been completed, position the trays onto the mainframe studs. Secure the trays snugly, using the wing nuts that are supplied (Fig. 12).

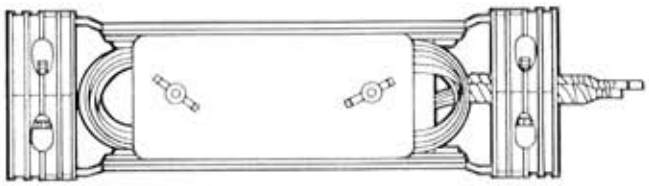

Figure 12 — Complete FIBERLIGN® Fiber Optic Organizer Installation

5.00 FIBER OPTIC SPLICE CASE SHELL APPLICATION

5.01 For application instructions that concern Fiber Optic Splice Case Shell placement and closing, consult with Splice Case application procedure number SP-2644-1.

6.00 SAFETY CONSIDERATIONS

6.01 This application procedure is not intended to supercede any company construction or safety standards. This procedure is offered only to illustrate safe application for the individual. Failure to follow these procedures and restrictions may result in personal injury.

6.02 When working in the area of energized lines, extra care should be taken to prevent accidental electric contact.

6.03 For proper performance and personal safety, be sure to select the proper size PREFORMED™ product before application.

6.04 This product is intended for use by trained craftsmen only. This product SHOULD NOT BE USED by anyone who is not familiar with and trained in the use of it.

PREFORMED LINE PRODUCTS
P.O. Box 91129, Cleveland, Ohio 44101 (216) 461-5200

Litho in U.S.A.

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