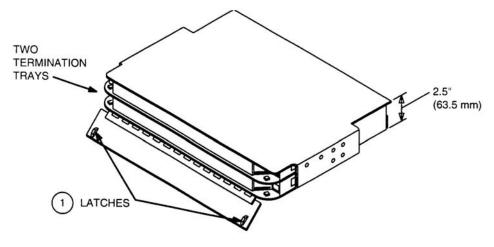
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STEP 1—CHECK SHELF AND PARTS

- 1. Pull down the latches to open the front door.
- 2. Individual trays open and pivot to the left by pressing the right latch of each tray.

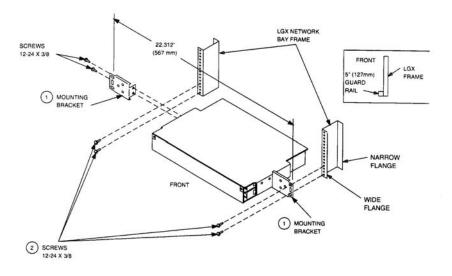


LST1LP SHELF

Note: Individual trays may be made to pivot in either direction (left or right). See STEP 3 for instructions on changing pivot direction.

STEP 2—INSTALL SHELF MOUNTING BRACKET AND MOUNT SHELF

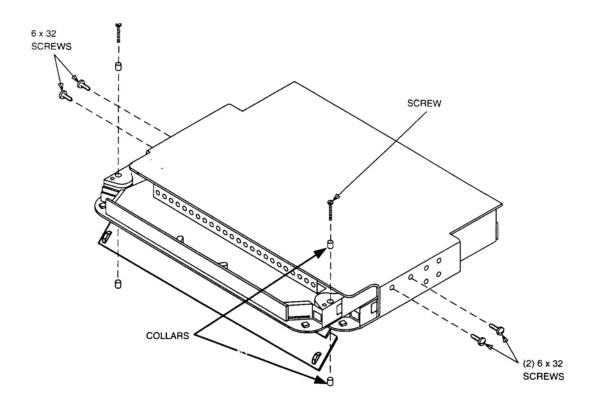
- 1. Position and attach each mounting bracket to side of shelf using proper mounting holes (see below) with two (2) 12-24x3/8 screws.
- 2. Install shelf to front of *LGX*[®] frame with two (2) 12-24x3/8 screws per mounting bracket.



STEP 3—CHANGING PIVOTING DIRECTION (GO TO STEP 4 IF THIS STEP IS NOT REQUIRED)

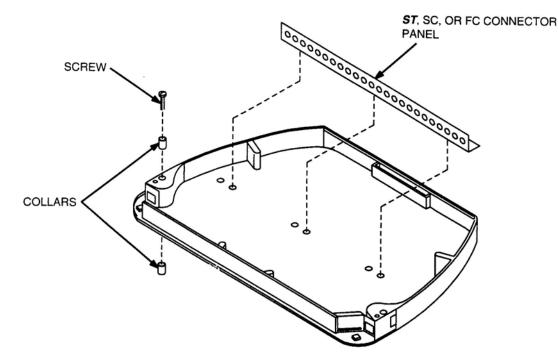
- 1. Identify tray to be changed. Remove four (4) 6x32 screws from sides of tray [two (2) per side].
- 2. Slide tray forward 1-1/2 inches (38 mm) to 2 inches (51 mm).
- **3.** Remove one (1) screw and two (2) pivoting collars.
- 4. Insert two (2) collars in opposite pivoting point. Insert and tighten screw.
- 5. Slide tray back into shelf housing. Make sure tray slides on left and right tabs in back of shelf.
- 6. Reinstall four (4) 6x32 screws in side of tray.

Note: If bottom tray pivot point is to be changed, the tray above it must be completely removed to allow access to pivot screw and collars of bottom tray.



STEP 4—INSTALLING ST[®], SC, OR FC CONNECTOR PANEL

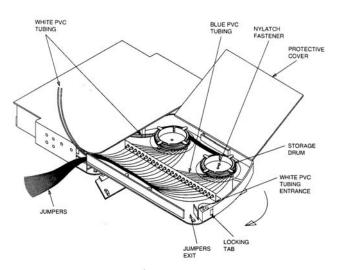
1. The *ST*, SC, or FC connector panel has three (3) *NYLATCH*[™] fasteners that secure it to the termination tray. These fasteners should be seated in the holes opposite from the pivoting corner. For example, if the termination tray pivots to the left corner, the *ST*, SC, or FC connector panel is secured in the right side holes as shown in the figure below. The opposite is true if the tray pivots in the right corner.



STEP 5—ROUTING OF FIBERS AND JUMPERS

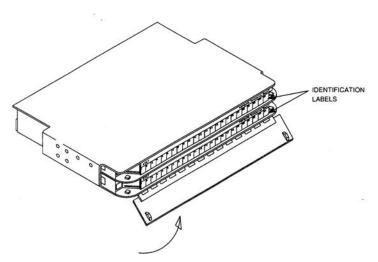
- 1. Pivot tray open by pressing locking tab on side of tray.
- 2. Lift open protective cover of tray. Jumpers and fibers should enter and exit through pivoting side of tray.
- **3.** Prepare and ground Outside Plant cable as shown in 636-299-110. Fibers should be routed from prepared cable to termination tray in white PVC tubing [twelve (12) fibers per tube].
- 4. Route two (2) white PVC tubes into termination tray through narrow entrance. Stop tubing just short of storage drums, leaving enough slack in PVC tubing for 6-inch loop in vertical trough.
- **5.** Fiber should extend 24 inches (609.6 mm) from end of white PVC tubing. To protect fibers, route each fiber through blue buffer tubing.
- 6. Install ST, SC, or FC connector on each fiber, and terminate fibers on back of termination panel.
- **7.** Remove storage drum by pulling **NYLATCH** fastener in middle of drum. Wrap slack length of twelve (12) fibers around drum.
- **8.** Secure drum to tray by seating alignment pin (on bottom of drum) in alignment hole (in tray bottom) and pressing *NYLATCH* fastener.
- 9. Repeat Steps 7 and 8 for other fibers.

10. Jumpers are terminated on front of termination panel. Jumpers are then routed out of tray through jumper exit.



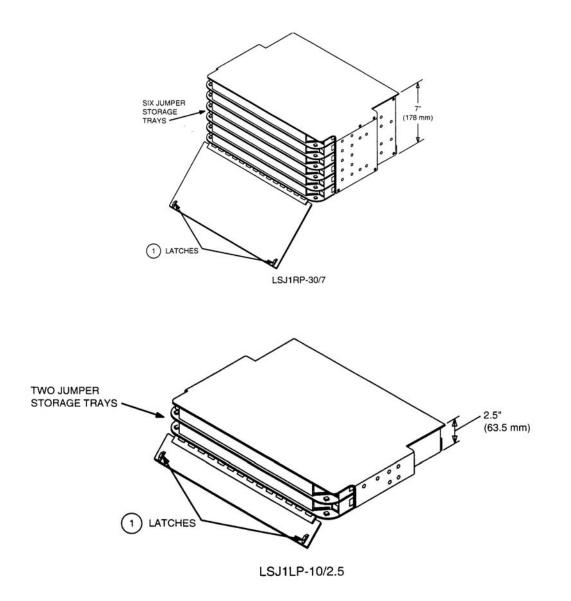
Note: Jumpers and fibers should enter and exit through pivoting side of tray.

- **11.** Close protective cover of tray, making sure that all jumpers and fibers enter and exit through pivoting side of tray and are inside tray.
- **12.** Pivot tray shut.
- **13.** Install and write jumper assignments on identification label.
- 14. Close front door of shelf.



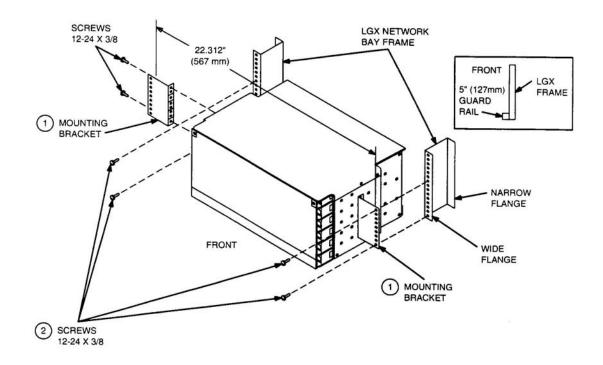
STEP 1—CHECK SHELF AND PARTS

- **1.** Pull down the latches to open the front door.
- 2. Individual trays open and pivot to the right by pressing the left latch of each tray.
 - **Note:** Individual trays may be made to pivot in either direction (left or right). See STEP 3 for instructions on changing pivot direction.



STEP 2—INSTALL SHELF MOUNTING BRACKET AND MOUNT SHELF

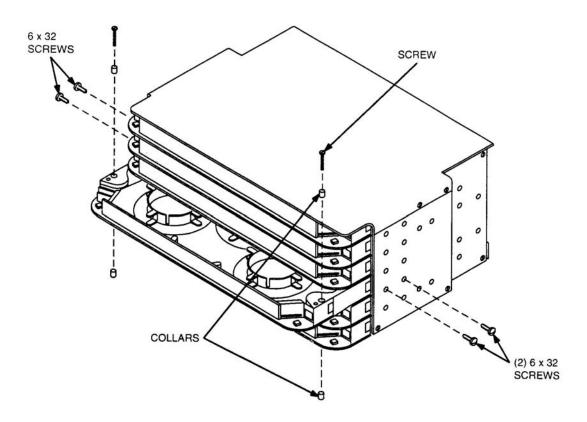
- 1. Position and attach each mounting bracket to side of shelf using proper mounting holes (see below) with two (2) 12-24x3/8 screws.
- 2. Install shelf to front of LGX[®] frame with two (2) 12-24x3/8 screws per mounting bracket.



STEP 3—CHANGING PIVOTING DIRECTION (GO TO STEP 4 IF THIS STEP IS NOT REQUIRED)

- 1. Identify tray to be changed. Remove four (4) 6x32 screws from sides of tray [two (2) per side].
- 2. Slide tray forward 1-1/2 inches (38 mm) to 2 inches (51 mm).
- 3. Remove one (1) screw and two (2) pivoting collars.
- 4. Insert two (2) collars in opposite pivoting point. Insert and tighten screw.
- 5. Slide tray back into shelf housing. Make sure tray slides on left and right tabs in back of shelf.
- 6. Reinstall four (4) 6x32 screws in side of tray.

Note: If bottom tray pivot point is to be changed, the tray above it must be completely removed to allow access to pivot screw and collars of bottom tray.

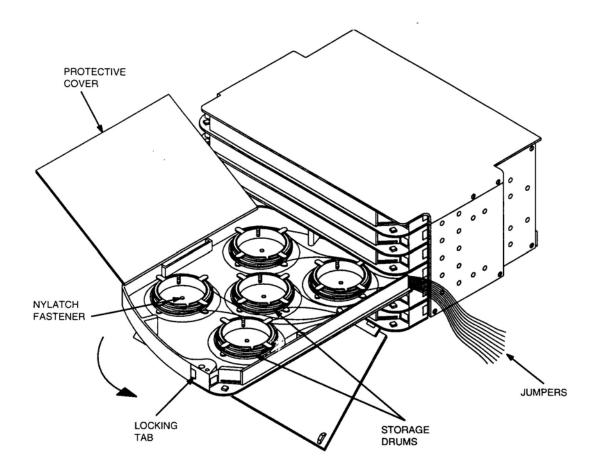


STEP 4—STORAGE OF FIBER JUMPERS INSIDE TRAYS

- 1. Pivot tray open by pressing locking tab on side of tray.
- 2. Lift open protective cover of tray.
- 3. Remove storage drum by pulling *NYLATCH* fastener in middle of drum.

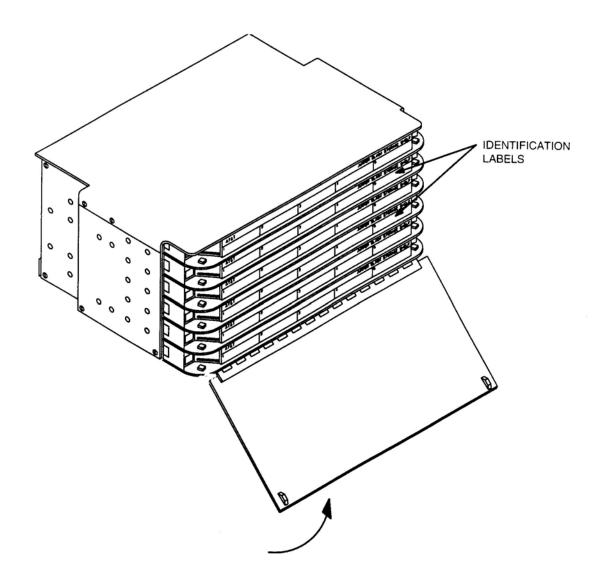
Note: Jumpers should enter and exit through same opening on pivoting side of tray. Enough slack should be left for 6-inch (152 mm) loop in vertical trough.

- **4.** Wrap slack length of jumper around each drum. Each drum can store up to 30 feet (9.14 m) of jumper.
- 5. Place drums back in tray, making sure alignment pin (on bottom of drum) seats in guide hole in bottom of tray. Fasten it to tray by pressing **NYLATCH** fastener.
- 6. Repeat Steps 3 through 5 for more jumper storage.



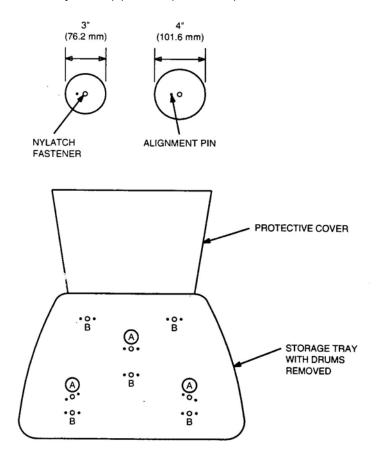
STEP 4—STORAGE OF FIBER JUMPERS INSIDE TRAYS (CONTINUED)

- 7. Close protective cover of tray, making sure that all jumpers and fibers enter and exit through pivoting side of tray and are inside tray.
- 8. Pivot tray shut.
- 9. Install and write jumper assignments on identification label.
- **10.** Close front door of shelf.



STEP 5—STORAGE OF LIGHTGUIDE BUILDING CABLE (LGBC)

Slack storage shelves are provided with five (5) drums, 3 inches (76.2 mm) in diameter, in each storage tray. The 3-inch (76.2 mm) drums are for storage of slack fiber jumpers. For storage of slack LGBC, The 3-inch (76.2 mm) drums must be removed from trays and replaced with 4-inch (101.6 mm) drums provided in LP-LGBC4A Kit. Only three (3) 4-inch (101.6 mm) drums will fit into each slack storage tray.



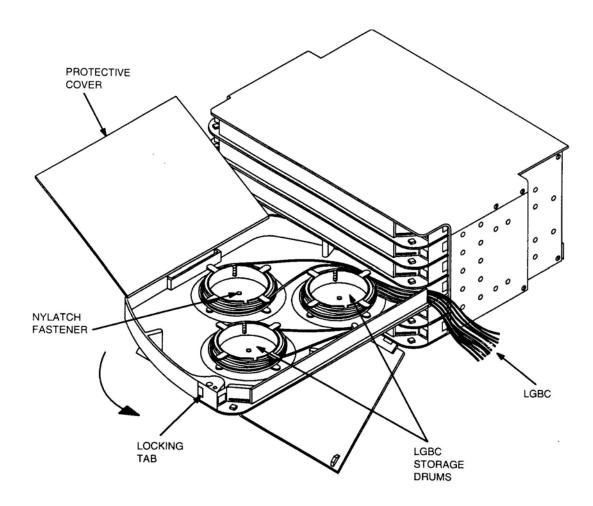
- (A) Positions for LGBC 4-inch (101.6 mm) drums (LP-LGBC4A Kit). Center hole for **NYLATCH** fastener. Small holes are for alignment pin.
- (B) Positions for slack fiber jumper 3-inch (76.2 mm) drums.

STEP 5—STORAGE OF LIGHTGUIDE BUILDING CABLE (LGBC) (CONTINUED)

- 1. Pull down on latches to open front door.
- 2. Pivot tray open by pressing locking tab on side of tray.
- **3.** Lift open protective cover of tray.
- 4. Remove 3-inch (76.2 mm) drums by pulling NYLATCH fastener in middle of drums.
- 5. Wrap slack LGBC around 4-inch (101.6 mm) drum. Up to 10 feet (3 m) of LGBC can be stored on drum.

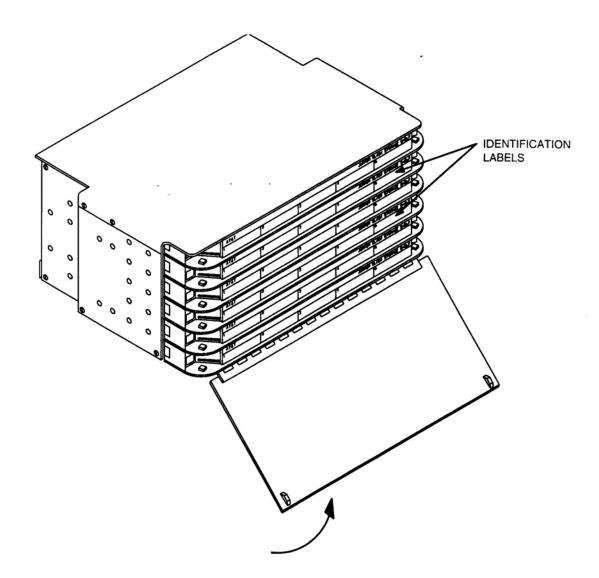
Note: Jumpers should enter and exit through same opening on pivoting side of tray. Enough slack should be left for 6-inch (152 mm) loop in vertical trough.

6. Install 4-inch (101.6 mm) drum in tray, making sure alignment pin on bottom of drum seats in guide hole in bottom of tray. Press *NYLATCH* fastener to secure drum.



STEP 5—STORAGE OF LIGHTGUIDE BUILDING CABLE (LGBC) (CONTINUED)

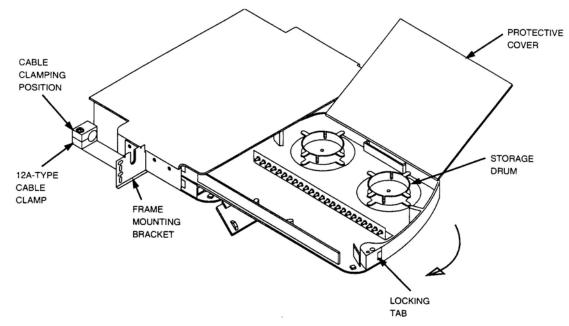
- 1. Close protective cover of tray, making sure that all LGBC enter and exit through pivoting side of tray and are inside tray.
- 2. Pivot tray shut.
- 3. Write LGBC assignments on identification label.
- 4. Close front door of shelf.



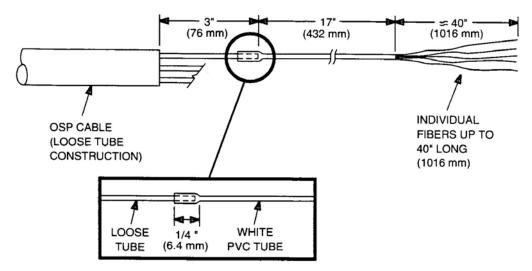
LSTJ-LP-12SC/2.5 LIGHTGUIDE SLACK STORAGE SHELF CABLE INSTALLATION FOR CABINET APPLICATIONS

STEP 1—FIBER SPLICING AND TERMINATION OF OUTSIDE PLANT (OSP) CABLES

- 1. Attach appropriate mounting brackets and 12A-type cable clamps to shelves. (Notice that cable clamping positions are provided for either left or right entry into each unit).
- 2. Remove 5 feet (1.5 m) of cable sheath, exposing individual loose tubes of cable.
- **3.** Remove 57 inches (1448 mm) of individual tubes (exposing fibers) leaving 3 inches (76 mm) of loose tube extended beyond cable sheath end.

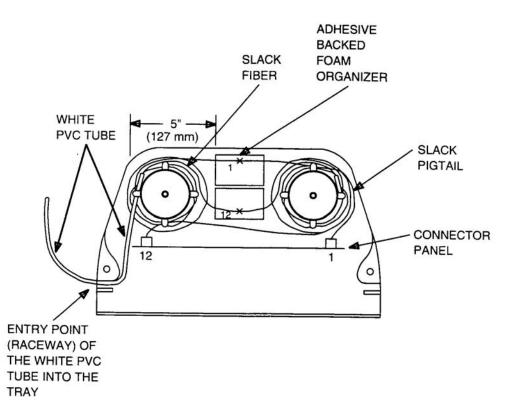


- **4.** Cut 17-inch (432 mm) length of white PVC tubing and route it over exposed fibers, pressing white PVC tubing against loose tube ensuring that it overlaps loose tube by ¼-inch (6.4 mm).
- 5. Clamp cable to shelf with 12A0type cable clamp.

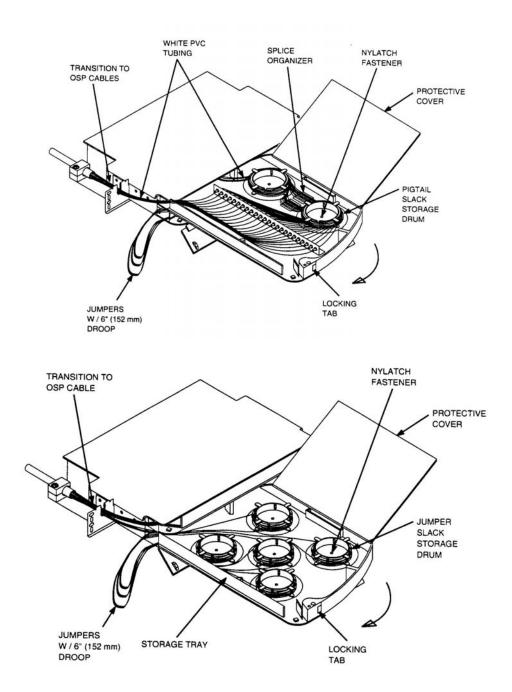


6. Dress white PVC tubing through entry slot and into pivoting tray.

- 7. Mark white PVC tubing where it enters pivoting tray. Cut 1-inch (25.4 mm) length of adhesive-backed foam and wrap tubing (to protect it from wear) at marked location. Press tubing and foam back into raceway in pivoting tray.
- **8.** Lay tube inside pivoting tray as shown below.
- 9. Attach shelf to frame.
- **10.** Attach adhesive-backed foam organizers inside pivoting tray. Place 5 inches (127 mm) from left side.
- **11.** Splice OSP fibers to pigtails as per local instruction.
- 12. Plug individual pigtails into connector couplings and store fibers around drum.
- **13.** Continue with Steps 11 and 12 until all pigtails are spliced and plugged in, and slack fibers are stored.
- **14.** Plug each jumper into electronic equipment at far end, and plug near end into appropriate coupling location.
- **15.** Route slack jumper lengths to last two pivoting trays, starting with top tray.

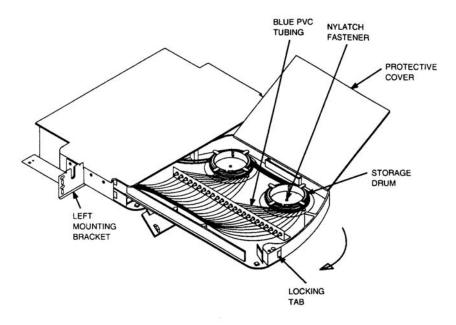


- **16.** Dress slack jumpers around drum, making sure that 6-inch (152 mm) droop length is provided on outside of shelf.
- 17. Continue with Steps 14 through 16 until all jumpers are stored.
 - **Note:** Each drum can store up to 30 feet (9 m) of slack jumper. Recommended storage is up to three (3) jumpers per drum.

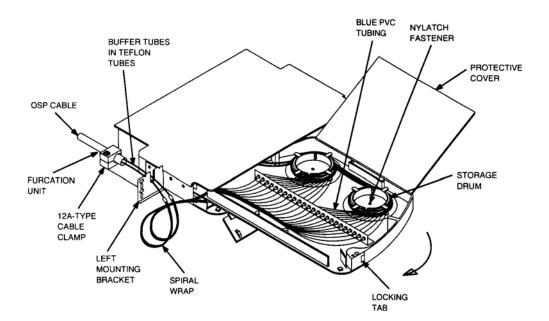


STEP 2—CABLE CLAMPING AND FIBER ROUTING OF PRETERMINATED CABLES

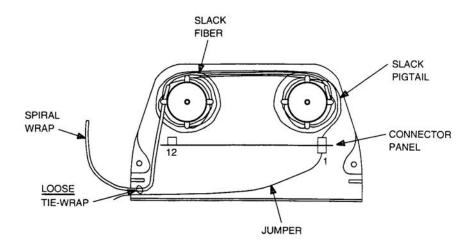
1. Attach appropriate mounting brackets and 12A-type cable clamps to shelves. (Cable clamping positions are provided for either left or right entry into shelves).



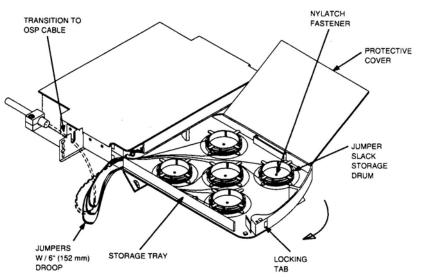
- 2. Clamp Furcation Unit of preterminated cable into 12A-type cable clamps.
- **3.** Attach shelf to frame.



- **4.** Measure 21 inches (533 mm) from cable clamp and secure spiral wrap to pivoting tray with small tie wrap.
- 5. Plug individual preterminated connectors into connector couplings, and store slack fibers around one (1) of the drums.
- 6. Continue with Step 6 until all connectors are plugged in and slack fibers are stored.
- 7. Plug each jumper into electronic equipment at far end, and plug near end into appropriate coupling location.



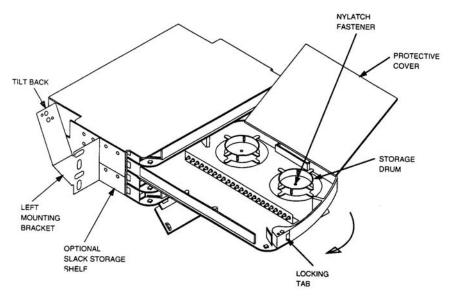
- 8. Route slack jumper lengths to last two pivoting trays (starting with top tray).
- **9.** Dress slack jumpers around drums, making sure 6-inch (152 mm) droop length is provided on outside of shelf.
- **10.** Continue until all jumpers are stored.
 - Note: Each drum can store up to 30 feet (9 m) of slack jumper. Recommended storage is up to three (3) jumpers per drum.



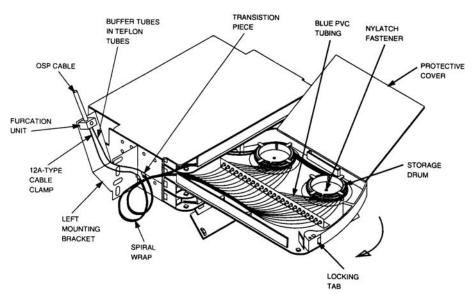
LSTJ-LP-24SC/5.0 LIGHTGUIDE SLACK STORAGE SHELF CABLE INSTALLATION FOR CEV APPLICATIONS

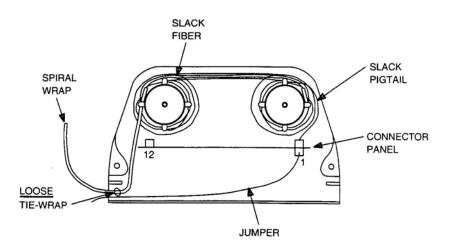
STEP 1—CABLE CLAMPING ABD FIBER ROUTING OF PRETERMINATED CABLES

1. Attach appropriate mounting brackets and 12A-type cable clamps to shelf. (Notice that cable clamping positions are provided for either left or right entry into each unit).

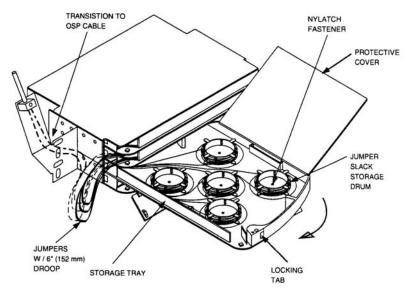


- **2.** Clamp Furcation Unit of preterminated cable into 12A-type cable clamps.
- 3. Attach shelf to frame.
- 4. Measure 21 inches (533 mm) from cable clamp and secure spiral wrap to pivoting tray with small tie wrap.





- **5.** Plug individual preterminated connectors into connector couplings and store fibers around one of the drums.
- 6. Continue with previous Steps until all connectors are plugged in, and slack fibers are stored.
- 7. Plug each jumper into electronic equipment at far end, and plug near end into appropriate coupling location.
- 8. Route slack jumper lengths to last two pivoting trays, starting with top tray.

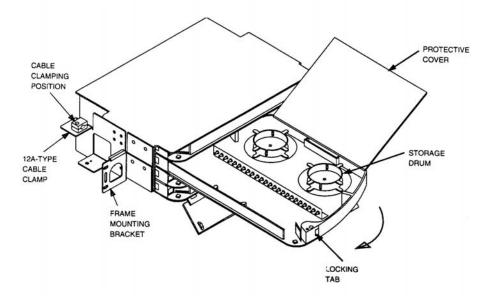


- **9.** Dress slack jumpers around drum, making sure that 6-inch (152 mm) droop length is provided on outside of shelf.
- **10.** Continue until all jumpers are stored.
 - Note: Each drum can store up to 30 feet (9 m) of slack jumper. Recommended storage is up to three (3) jumpers per drum.

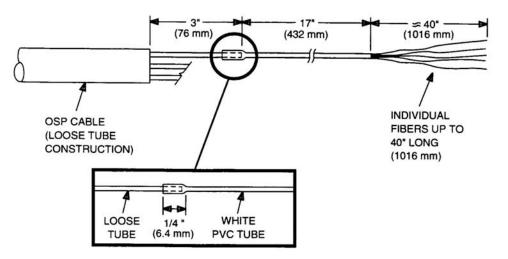
LSTJ-LP-24SC/5.0 LIGHTGUIDE SLACK STORAGE SHELF CABLE INSTALLATION FOR CABINET APPLICATIONS

STEP 1—FIBER SPLICING AND TERMINATION OF OUTSIDE PLANT (OSP) CABLES

- 1. Attach appropriate mounting brackets and 12A-type cable clamps to shelves. (Notice that cable clamping positions are provided for either left or right entry into each unit).
- 2. Remove 5 feet (1.5 m) of cable sheath, exposing individual loose tubes of cable.
- **3.** Remove 57 inches (1448 mm) of individual tubes (exposing fibers) leaving 3 inches (76 mm) of loose tube extended beyond cable sheath end.



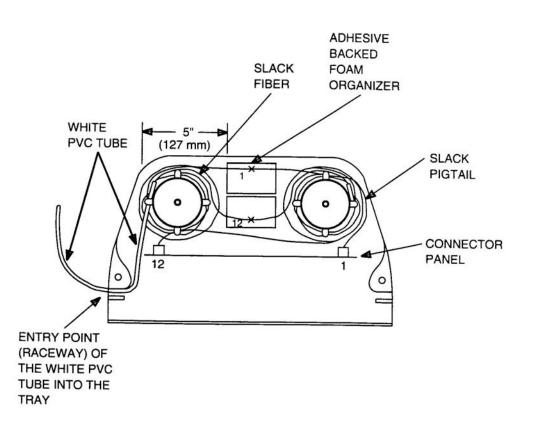
- **4.** Cut 17-inch (432 mm) length of white PVC tubing and route it over exposed fibers, pressing white PVC tubing against loose tube ensuring that it overlaps loose tube by ¼-inch (6.4 mm).
- 5. Clamp cable to shelf with 12A-type cable clamp.



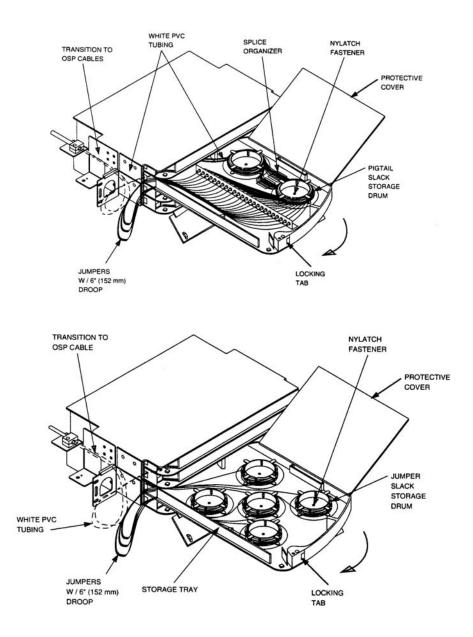
- 6. Dress white PVC tubing through entry slot and into pivoting tray.
- 7. Mark white PVC tubing where it enters pivoting tray. Cut 1-inch (25.4 mm) length of adhesive-backed foam and wrap tubing (to protect it from wear) at marked location. Press tubing and foam back into raceway in pivoting tray.
- **8.** Lay tube inside pivoting tray as shown below.
- **9.** Attach shelf to frame.
- 10. Attach adhesive-backed foam organizers inside pivoting tray. Place 5 inches (127 mm) from left side.
- **11.** Splice OSP fibers to pigtails as per local instruction.
- **12.** Plug individual pigtails into connector couplings and store fibers around drum.
- **13.** Continue with Steps 11 and 12 until all pigtails are spliced and plugged in, and slack fibers are stored.
- **14.** Plug each jumper into electronic equipment at far end, and plug near end into appropriate coupling location in terminating tray.
- **15.** Route slack jumper lengths into bottom two pivoting trays, starting with upper tray.

Note: Shelf layout: Top two (2) trays used for termination.

Bottom two (2) trays used for jumper slack storage.



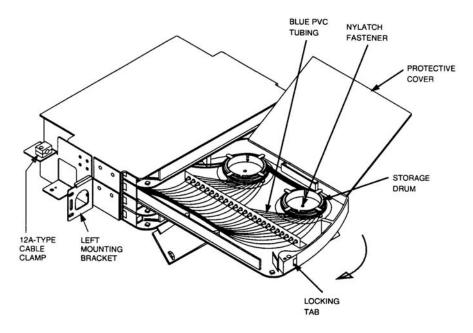
- **16.** Dress slack jumpers around drum, making sure that 6-inch (152 mm) droop length is provided on outside of shelf.
- **17.** Continue with Steps 14 through 16 until all jumpers are stored.
 - Note: Each drum can store up to 30 feet (9 m) of slack jumper. Recommended storage is up to three (3) jumpers per drum.



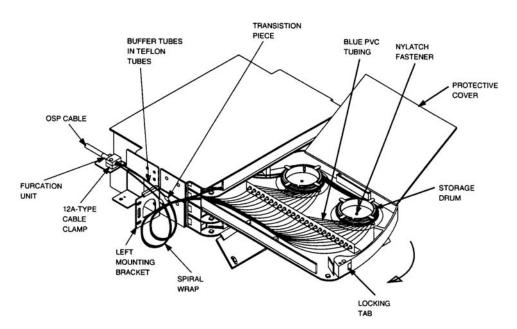
Note: Fiber routing labels are included and can be placed on protective covers for future references.

STEP 2—CABLE CLAMPING AND FIBER ROUTING OF PRETERMINATED CABLES

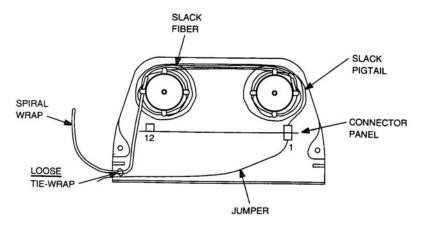
1. Attach appropriate mounting brackets and 12A-type cable clamps to shelves. (Cable clamping positions are provided for either left or right entry into shelves).



- 2. Clamp Furcation Unit of preterminated cable into 12A-type cable clamps.
- **3.** Attach shelf to frame.



- 4. Measure 21 inches (533 mm) from cable clamp and secure spiral wrap to pivoting tray with small tie wrap.
- 5. Plug individual preterminated connectors into connector couplings, and store slack fibers around one (1) of the drums.
- 6. Continue with Step 6 until all connectors are plugged in and slack fibers are stored.
- 7. Plug each jumper into electronic equipment at far end, and plug near end into appropriate coupling location.
- 8. Route slack jumper lengths to last two pivoting trays (starting with top tray).



- **9.** Dress slack jumpers around drums, making sure 6-inch (152 mm) droop length is provided on outside of shelf.
- 10. Continue until all jumpers are stored.
 - **Note:** Each drum can store up to 30 feet (9 m) of slack jumper. Recommended storage is up to three (3) jumpers per drum.

