COMMSCOPE®

OMX™ Bay System

Application Guide
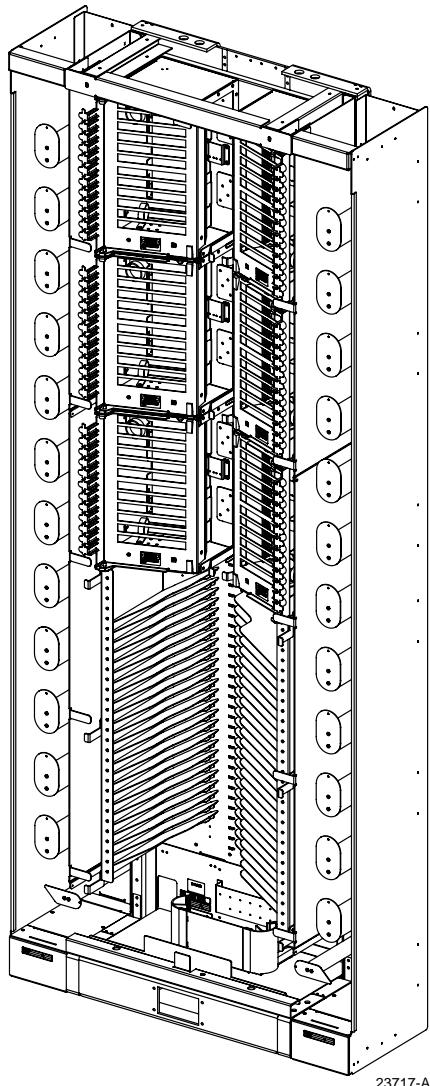
23717-A

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REVISION HISTORY

ISSUE	DATE	REASON FOR CHANGE
1	12/2009	Original.
Rev B	May 2022	Re-branded. from ADC to CommScope.

TRADEMARK INFORMATION

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http://www.cs-pat.com

PRODUCT SUPPORT

http://www.commscope.com/SupportCenter

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TABLE OF CONTENTS

ABOUT THIS MANUAL

This manual contains descriptions, rack configurations, applications, and cable routing instructions for the OMX600 bay

ADMONISHMENTS

Important safety admonishments are used throughout this manual to warn of possible hazards to persons or equipment. An admonishment identifies a possible hazard and then explains what may happen if the hazard is not avoided. The admonishments — in the form of Dangers, Warnings, and Cautions — must be followed at all times. These warnings are flagged by use of the triangular alert icon (seen below), and are listed in descending order of severity of injury or damage and likelihood of occurrence.

⚠️ **Danger:** *Danger is used to indicate the presence of a hazard that **will** cause severe personal injury, death, or substantial property damage if the hazard is not avoided.*

⚠️ **Warning:** *Warning is used to indicate the presence of a hazard that **can** cause severe personal injury, death, or substantial property damage if the hazard is not avoided.*

⚠️ **Caution:** *Caution is used to indicate the presence of a hazard that **will** or **can** cause minor personal injury or property damage if the hazard is not avoided.*

RELATED PUBLICATIONS

Listed below are related manuals and their publication numbers. Copies of these publications can be ordered by contacting the CommScope Technical Assistance Center using the URL: http://www.commscope/SupportCenter

Title/Description	Document Number
Round Splice Tray Cable Routing Instructions	**90-321**
Provides instructions for routing fiber optic cables in a round splice tray.	
Optical Fiber Systems Cleaning and Mating Instruction	**90-159**
Provides instructions for cleaning and mating optical connectors.	
OMX Patch Cord Routing Guide	**93-092**
Provides patch cord routing instructions for an OMX bay.	

1 DESCRIPTION

1.1 OMX Bay

The OMX600 bay is a modular frame that provides mounting positions for termination modules, splice modules, and jumper storage modules in a 600 mm × 300 mm footprint. The modular design provides several configuration options, depending on the application. Figure 1 shows a skeleton bay and a fully configured bay that can accommodate 576 terminations and 576 splices, respectively.

END GUARD
(BOTH SIDES)

TERMINATION
MODULE (6)

INTERBAY
MANAGEMENT
PANEL
(BOTH SIDES)

SPLICE MODULE
PANELS

CABLE TROUGH

NOTE: ADAPTERS NOT SHOWN

SKELETON BAY

FULLY LOADED OMX600 BAY

16685-B
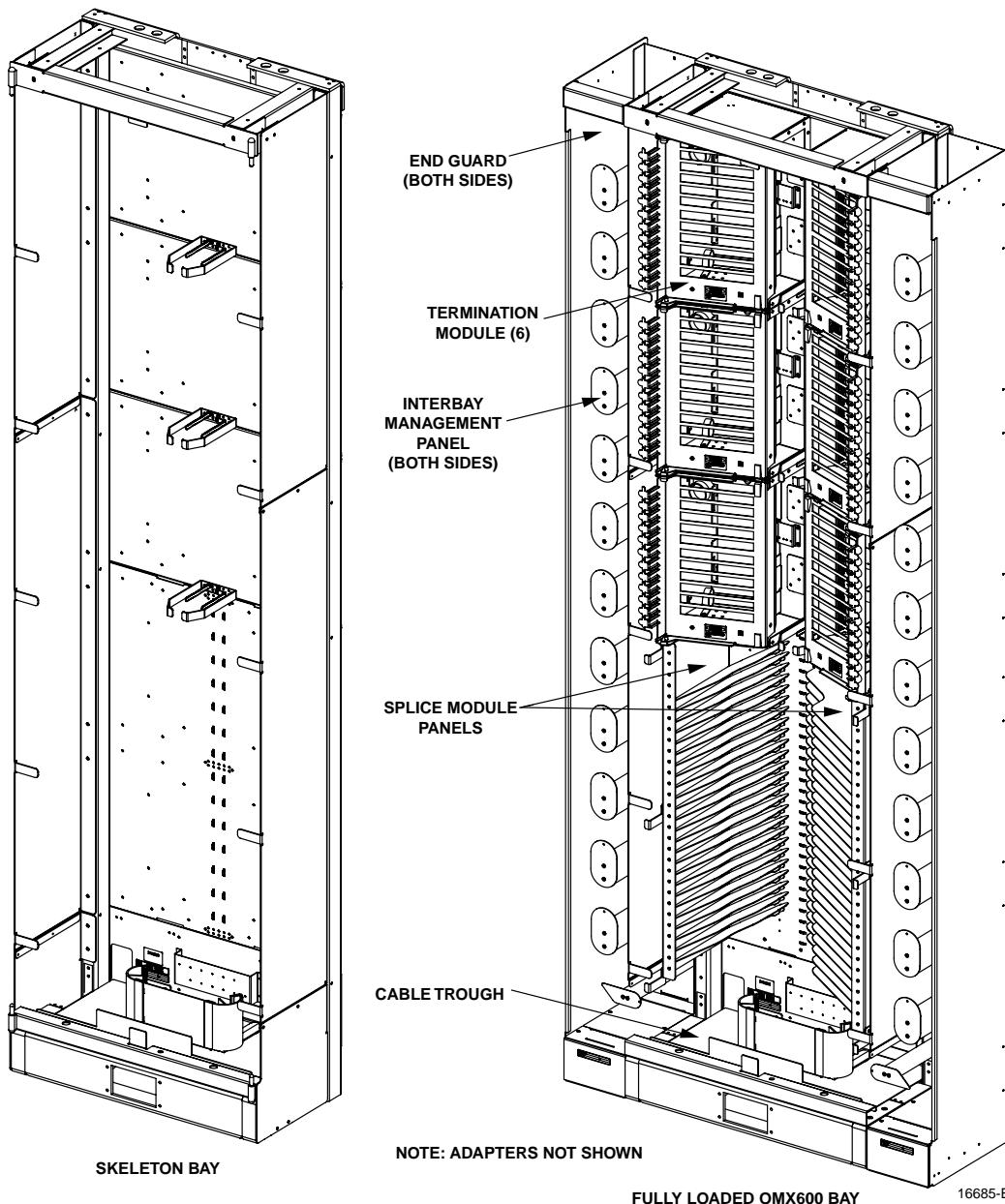
Figure 1. Front View of OMX600 Skeleton and Fully Loaded Bays, Respectively (Doors not Shown)

1.2   Termination Module

The OMX600 termination modules are available with 72, 96, or 144 (LC only) adapters. These modules can be ordered with adapters only or pre-terminated with either intrafacility fiber cables (IFC), outside plant (OSP) cables, or pigtails.

▶   **Note:** Capacities given in this manual are the same for stranded or ribbon cable.

Figure 2 shows the main components of the 72-position and 96-position OMX termination modules (72-position left side termination module shown on left; 96-position left side termination module shown on right).
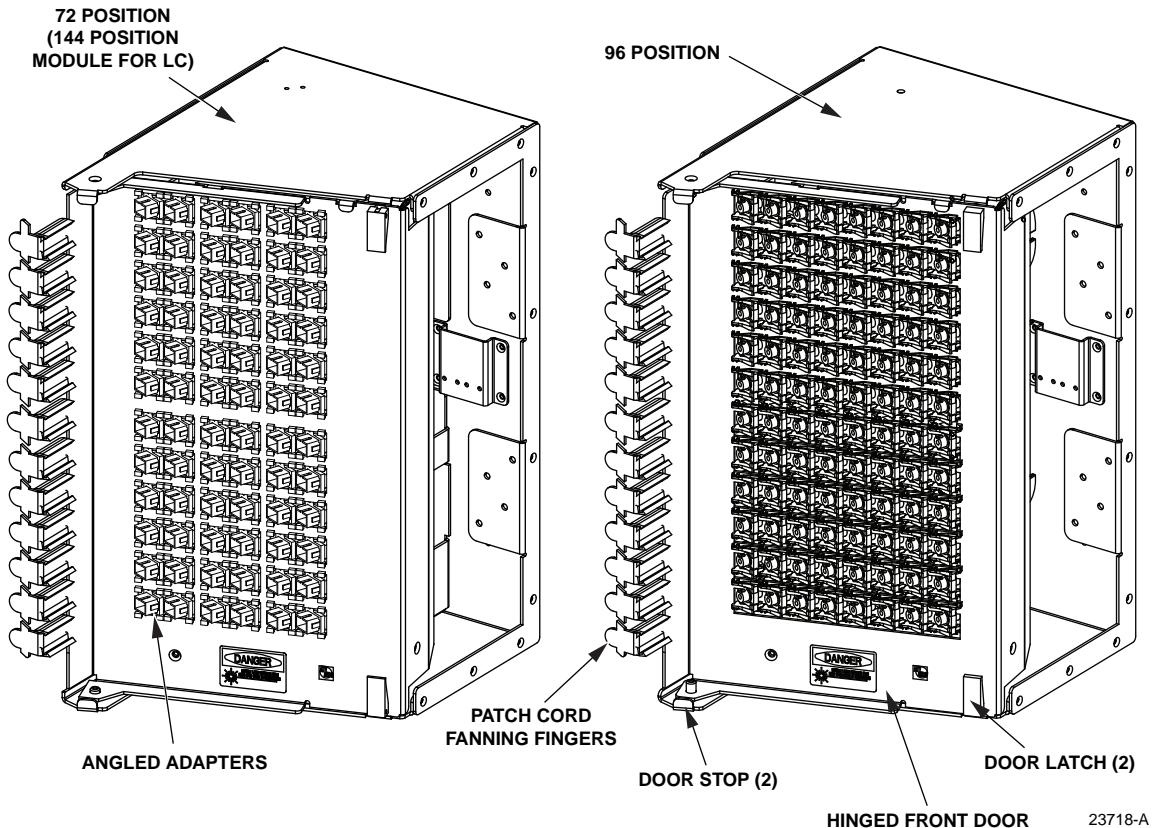
Figure 2. OMX Termination Modules External Components

Figure 3 shows the internal and removable components of the OMX module.
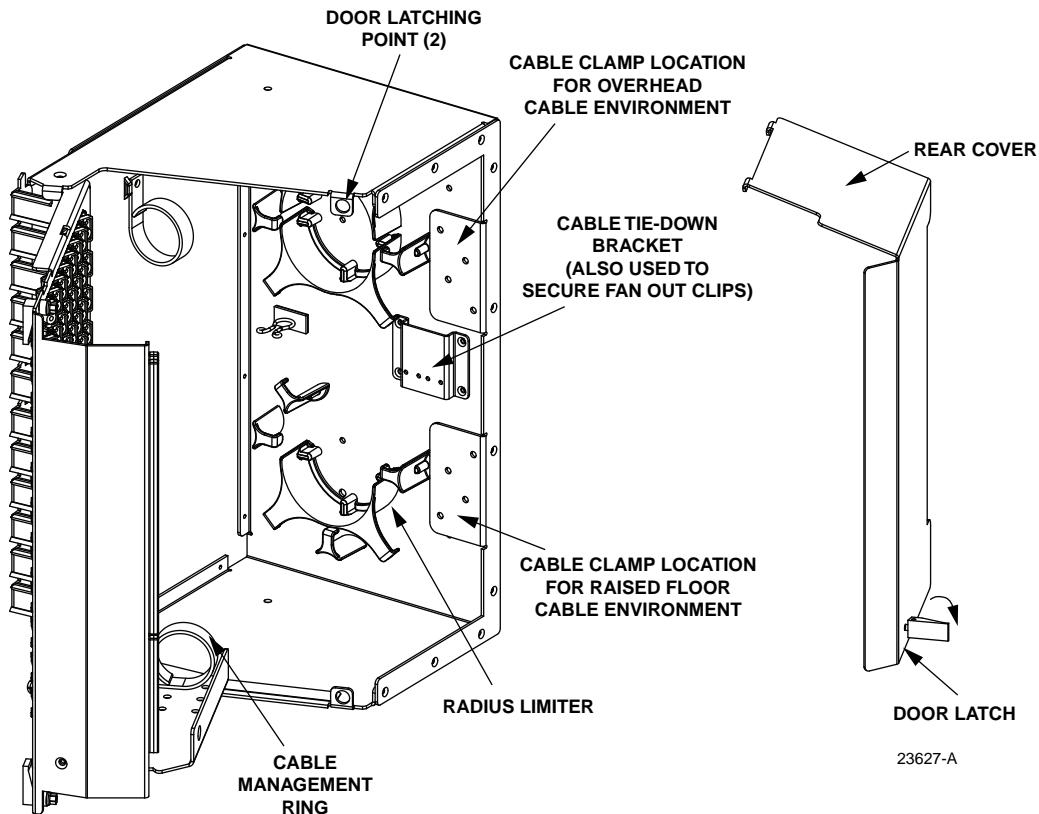
Figure 3. Internal and Removable Components

1.3   Splice Module

The OMX splice module, shown in Figure 4, provides a location for up to 24 round splice trays (ordered separately). There is a left and right side version of the splice module.

▶   **Note:** Splice tray holders are oriented up (shown) for overhead cable entry environments and down for under floor cable entry environments.

CABLE MANAGEMENT
FINGERS (3)

SPLICE TRAY
HOLDERS (24)

CABLE TIE
DOWN LANCES

14316-D

MOUNTING HOLES (7)
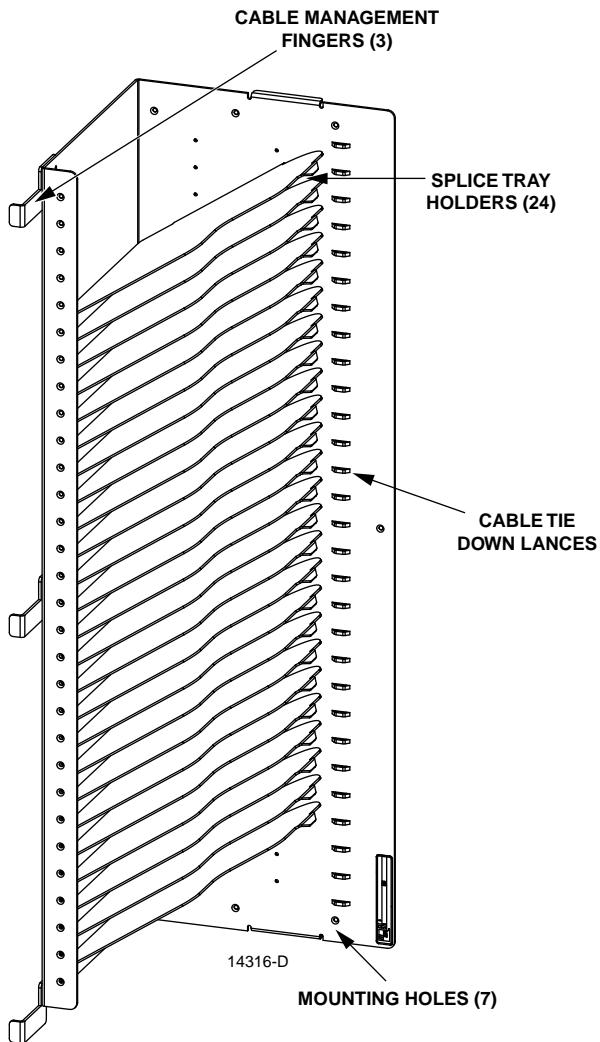
Figure 4. Splice Tray Module (Left Side Module Shown)

1.4   Round Splice Tray

The round splice tray provides cable management, storage, and splicing for multiple fiber optic cables. Figure 5 shows the main components of the round splice tray. The tray can accommodate up to 24 stranded fibers or up to 2 x12 fiber ribbons (though, typically, a single 12-fiber mass fusion ribbon splice is used in each tray).

The tray consists of a top and bottom side for routing and storing fiber cables. The top side of the tray provides storage for splice protectors and excess fiber, while the bottom side is used to reverse the direction of half of the fibers.
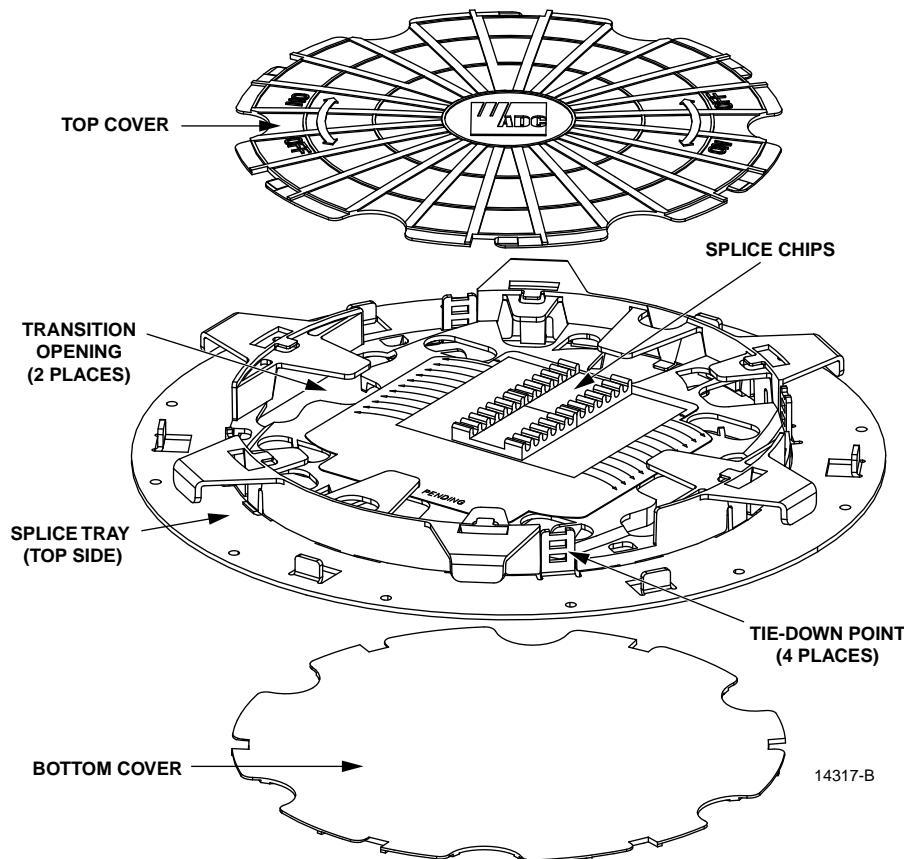
Figure 5. Round Splice Tray Components (12-Fiber Splice Tray Shown)

1.4.1 Round Splice Roll-Up Direction

The cables routed to splice trays installed on the left side of the OMX600 bay (as viewed from the front) are rolled up in a counter-clockwise direction. Cables routed to splice trays installed on the right side of the bay are rolled up in a clockwise direction, as shown in Figure 6.

COUNTER-CLOCKWISE
ROLL-UP

CLOCKWISE
ROLL-UP

14318-B
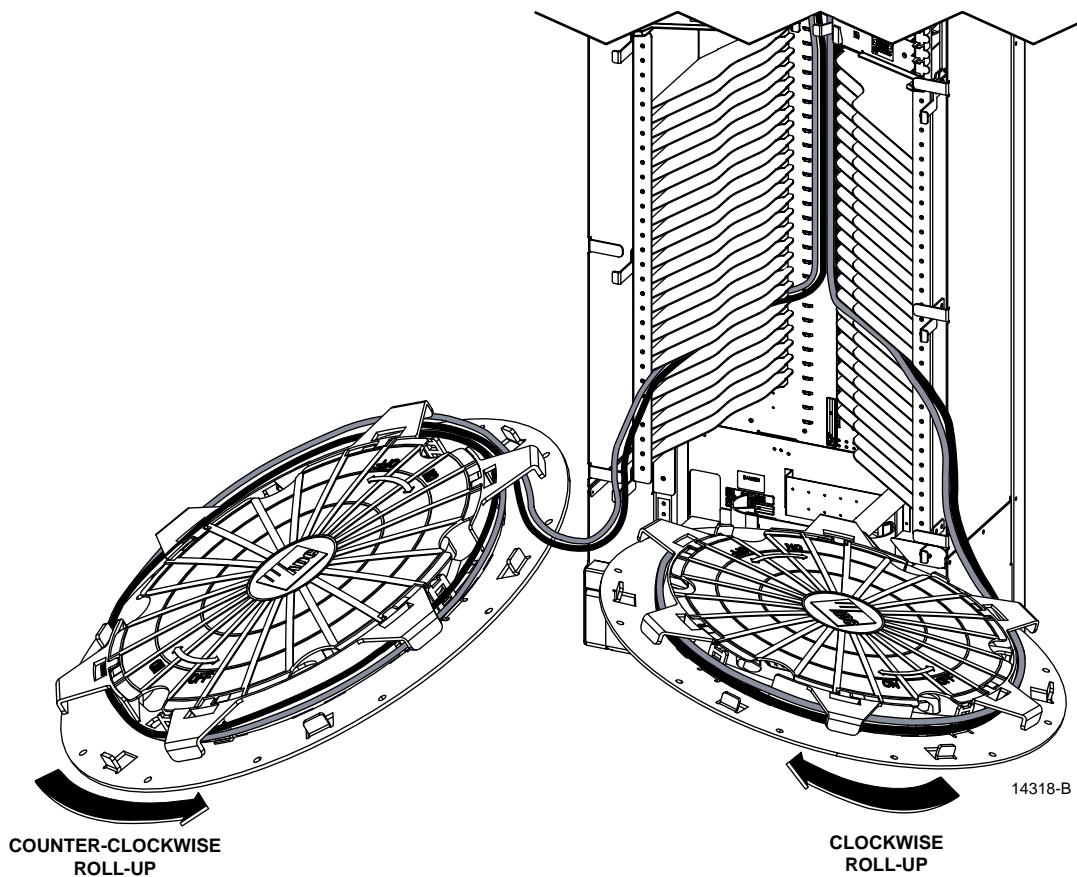
Figure 6. Counter-Clockwise and Clockwise Roll-Up Directions

1.5 Jumper Storage Module

The jumper storage modules provide a location to store jumper cables within a 600 mm frame and are available in either a right side (shipped as right side orientation) or left side orientation. Each jumper storage module occupies the same amount of vertical rack space as one termination module. A maximum of five jumper storage modules can be installed on the inside right or left of the frame. See Figure 7.

NOTE: CABLE FINGERS
ARE REMOVABLE

CABLE FINGER

SPOOL

M3 SCREW

STANDARD
JUMPER STORAGE MODULE
(3-SPOOL)

SPOOL IS DIVIDED TO PROVIDE
CABLE MANAGEMENT FOR CROSS-CONNECT
CABLES (ROUTED AT THE FRONT OF A
TERMINATION MODULE) AND FOT CABLES
(ROUTED AT THE REAR OF A TERMINATION MODULE)

CROSS-CONNECT AND
FOT JUMPER STORAGE MODULE
(2-SPOOL)

NOTE: RIGHT SIDE CABLE FINGER
ORIENTATION SHOWN (AS SHIPPED)

14319-E

Figure 7. Jumper Storage Modules

1.6   Cable Clamps

Figure 8 shows the four main cable clamps used for the OMX600 bay and termination modules.

USED FOR OSP CABLE AT TOP OF BAY

USED FOR OSP, 12-FIBER PIGTAILS, AND 12-FIBER RIBBON (WITH OVAL TUBES). ALSO USED FOR SMALLER DIAMETER UNDER FLOOR ENTRY FIBER CABLES

USED FOR IFC RIBBON AND IFC STRANDED FIBER. ALSO USED FOR LARGER DIAMETER UNDER FLOOR ENTRY FIBER CABLES.

USED TO SECURE FOT PATCH CORDS ROUTED INSIDE TERMINATION MODULES

16686-C
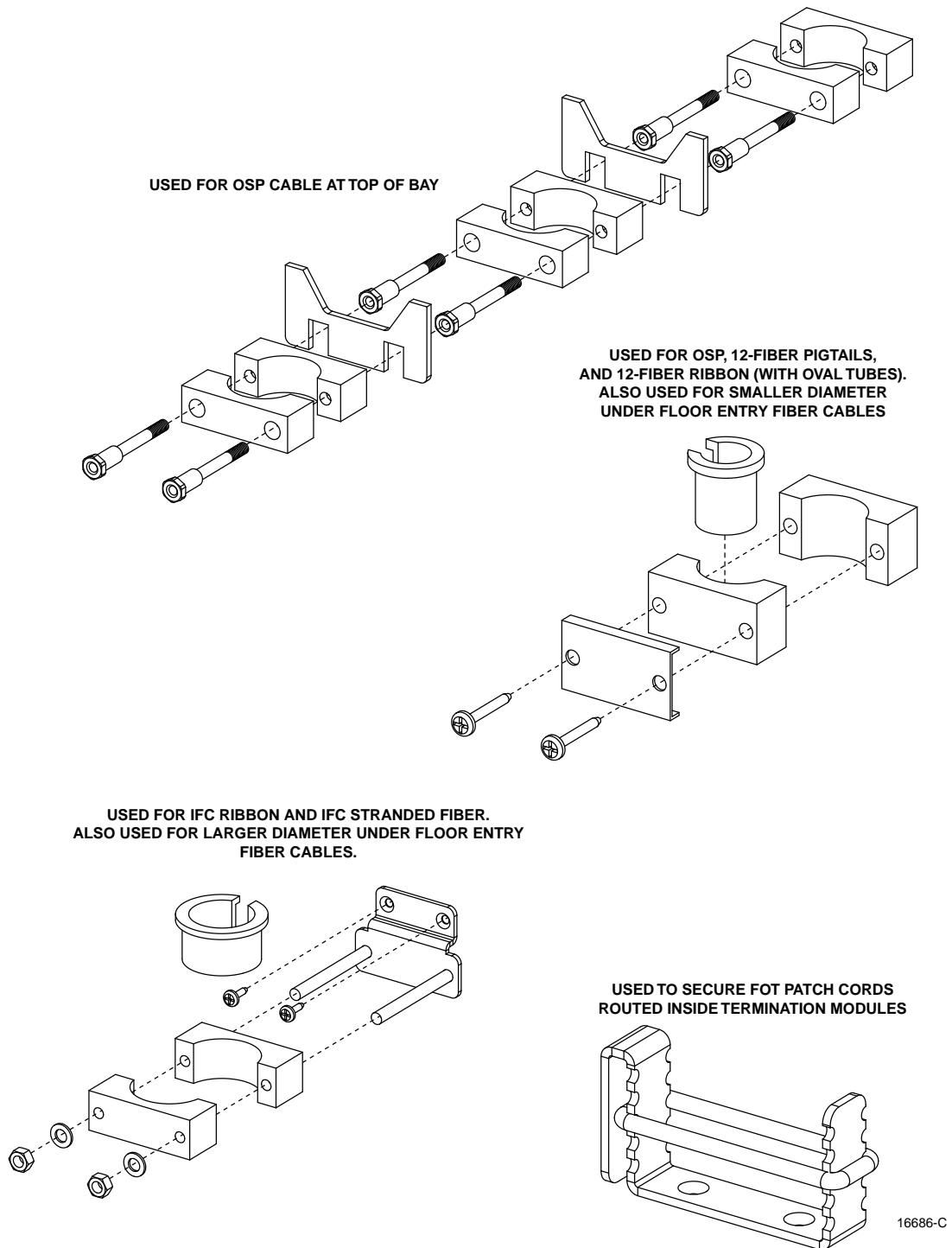
Figure 8. Cable Clamp Types

2   OMX600 BAY CONFIGURATIONS

The OMX600 frame is designed for optimal modularity and can be configured in various ways. This section contains five typical configurations.

2.1   Skeleton Frame

Figure 9 shows the main components of an OMX600 skeleton frame.

**SKELETON BAY
(DOORS NOT SHOWN)**

**SKELETON BAY
(DOORS SHOWN, FRONT VIEW)**

**THESE PANELS ACCOMMODATE
TERMINATION MODULES AND JUMPER
STORAGE MODULES (LEFT AND RIGHT VERSIONS)**

CABLE ENTRANCE

CABLE
MANAGEMENT
RINGS (3)

CABLE
TIE-DOWN
LANCES

CABLE
ENTRANCE

**CABLE
TROUGH
PANEL**

14320-C

**THIS PANEL ACCOMMODATES
TERMINATION MODULES, SPLICE MODULES, AND JUMPER
STORAGE MODULES (LEFT AND RIGHT VERSIONS)**

Figure 9. Skeleton Frame

2.2   576 Termination, 576 Splice Configuration

The OMX600 bay shown in Figure 10 is equipped with six termination modules (576 terminations) and two splice modules (576 splices).

CABLE ENTRANCE
(OVERHEAD CABLE
ENVIRONMENT)

LEFT AND RIGHT SIDE
TERMINATION MODULES
576 TERMINATIONS
(NOTE: ADAPTERS
NOT SHOWN)

LEFT AND RIGHT SIDE
SPLICE MODULES
(576 SPLICES)

CABLE ENTRANCE
(RAISED FLOOR CABLE
ENVIRONMENT)

CABLE TROUGH

14321-B
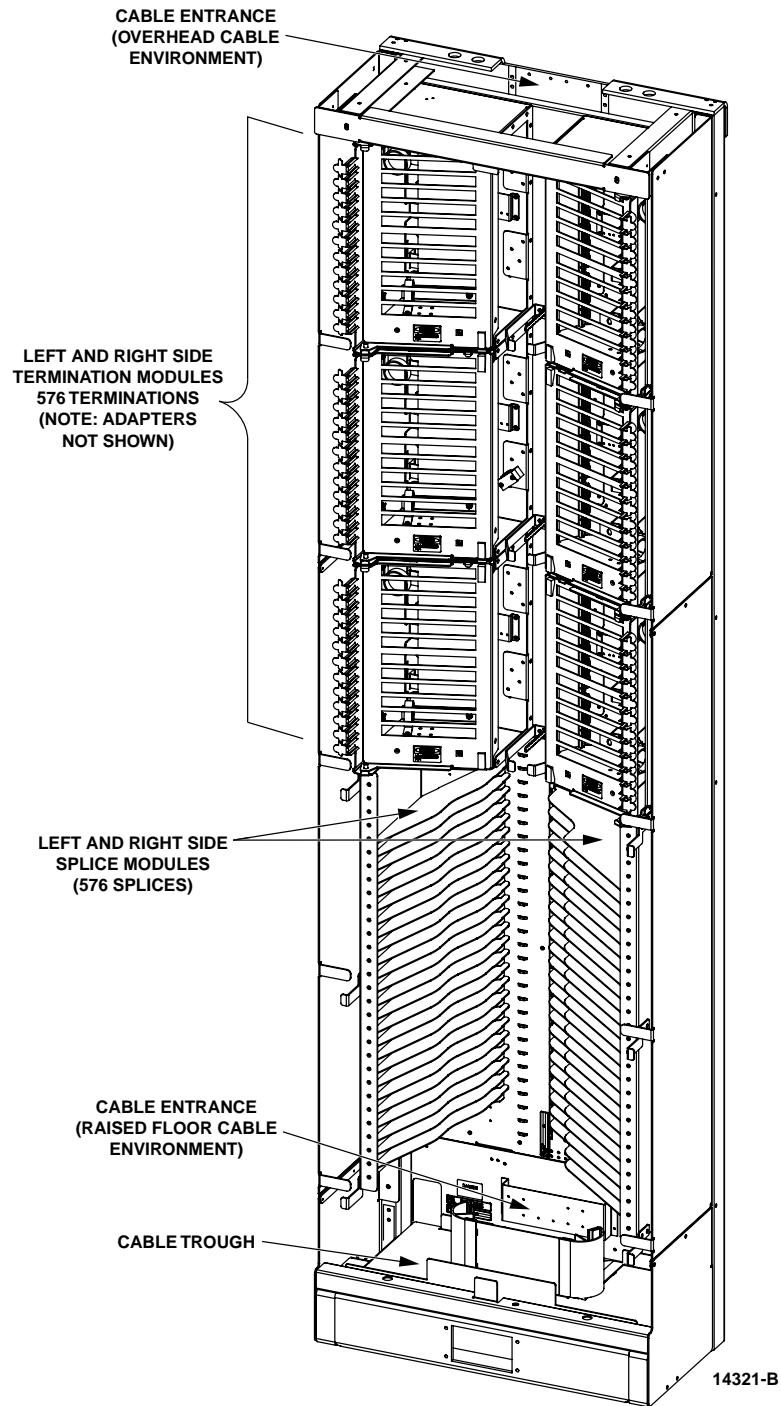
Figure 10. 576 Termination, 576 Splice Configuration

2.3   576 Termination, 288 Splice Configuration

The OMX600 bay shown in Figure 11 is equipped with six termination modules (576 terminations), a left side splice module (288 splices, 12 splices per tray), and two right side jumper storage modules (on-frame jumper storage).

CABLE ENTRANCE (OVERHEAD CABLE ENVIRONMENT)

LEFT AND RIGHT SIDE TERMINATION MODULES (6) (576 TERMINATIONS) (NOTE: ADAPTERS NOT SHOWN)

LEFT SIDE SPLICE MODULE (288 SPLICES)

RIGHT SIDE JUMPER STORAGE MODULE (2)

CABLE ENTRANCE (RAISED FLOOR CABLE ENVIRONMENT)

CABLE TROUGH

14322-C
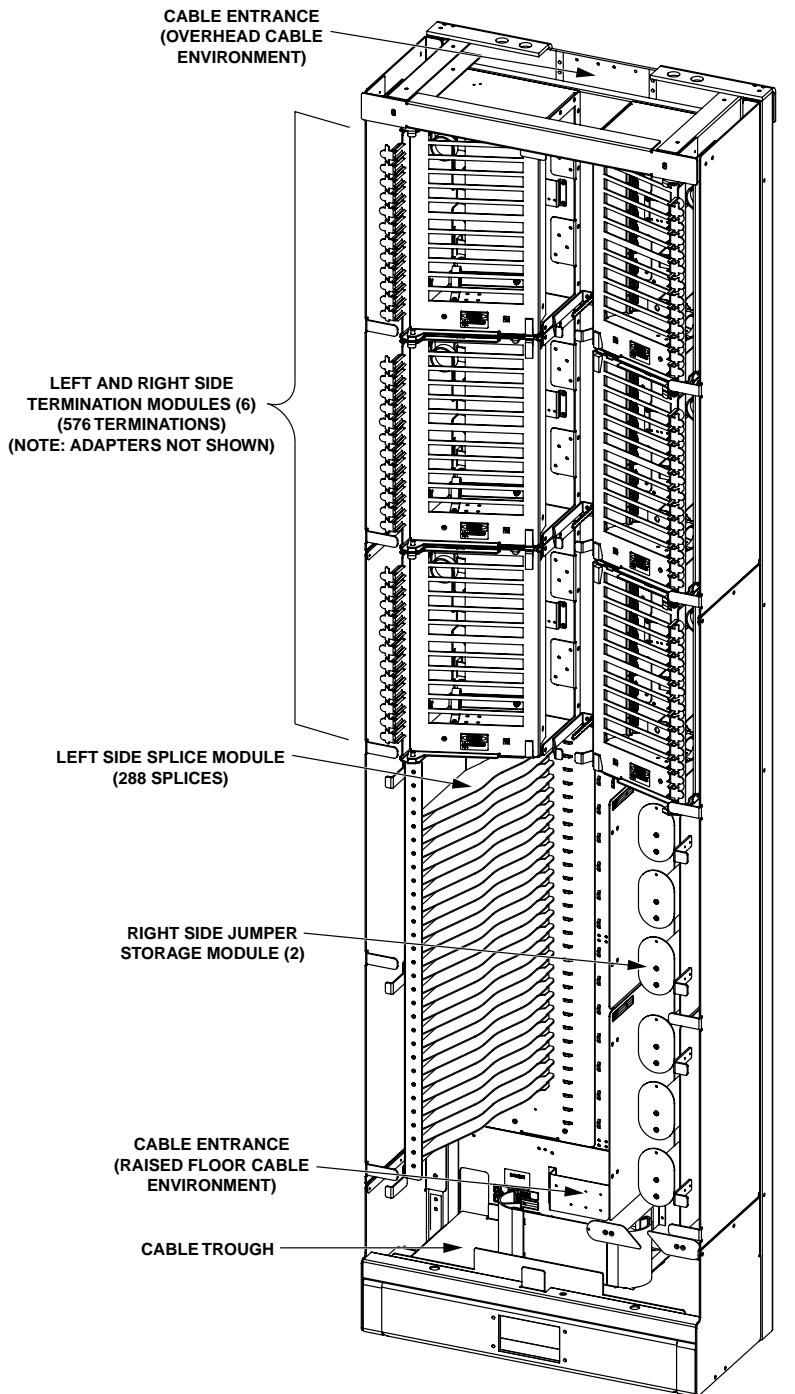
Figure 11. 576 Termination, 288 Splice Configuration

2.4   288 Termination, 288 Splice Configuration

The OMX600 bay shown in Figure 12is equipped with three left-side termination modules (288 terminations), a left side splice module (288 splices), and five right-side jumper storage modules (on-frame jumper storage).
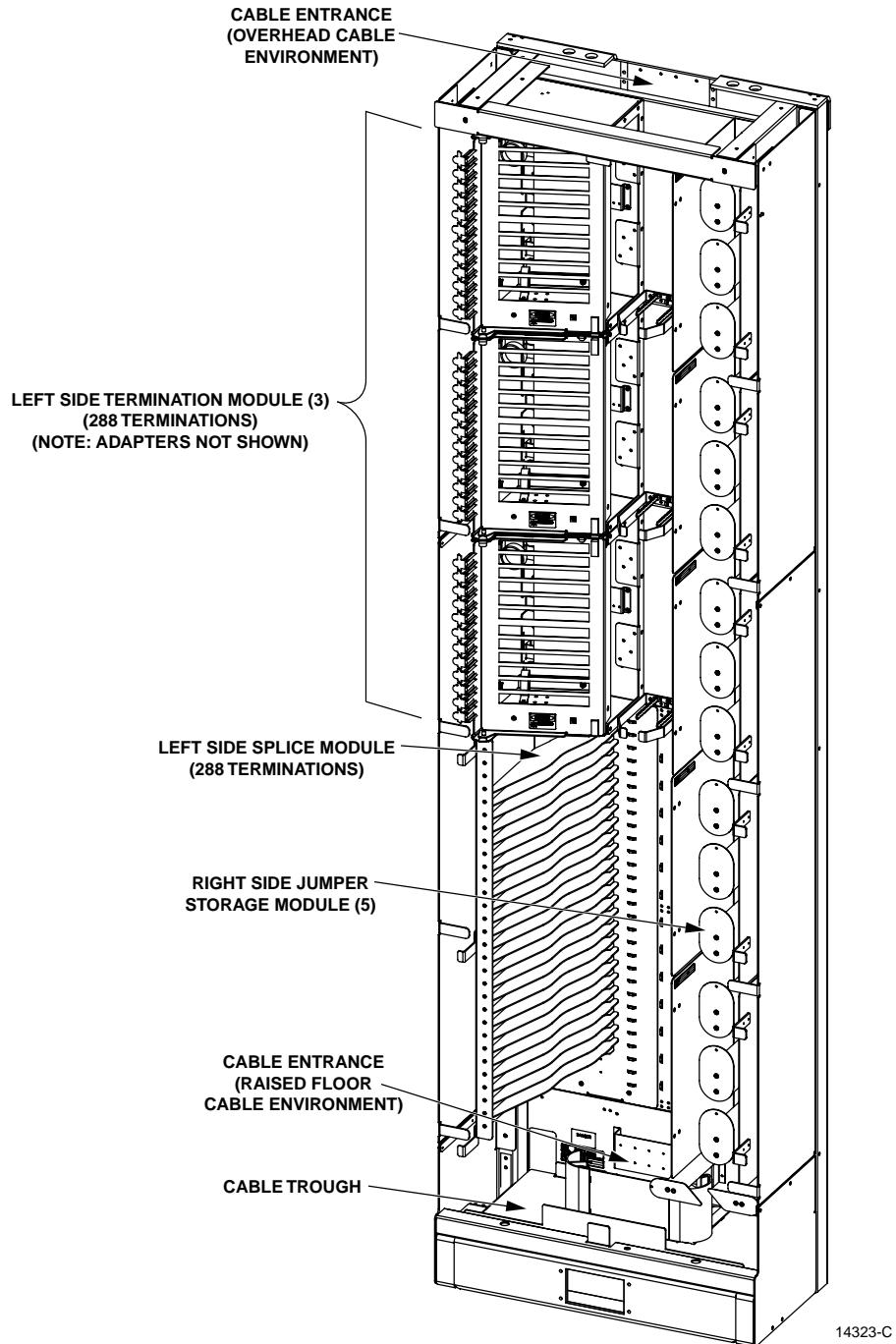
Figure 12. 288 Termination, 288 Splice Configuration

2.5   960 Termination Configuration

The OMX bay shown in Figure 13 is equipped with ten termination modules (five left-side and five right-side). With this configuration, splicing and jumper storage are done off-frame.

CABLE ENTRANCE
(OVERHEAD
CABLE ENVIRONMENT)

LEFT AND RIGHT SIDE
TERMINATION MODULES (10)
(960 TERMINATIONS)
(NOTE: ADAPTERS
NOT SHOWN)

CABLE ENTRANCE
(RAISED FLOOR CABLE
ENVIRONMENT)

CABLE TROUGH

14324-C
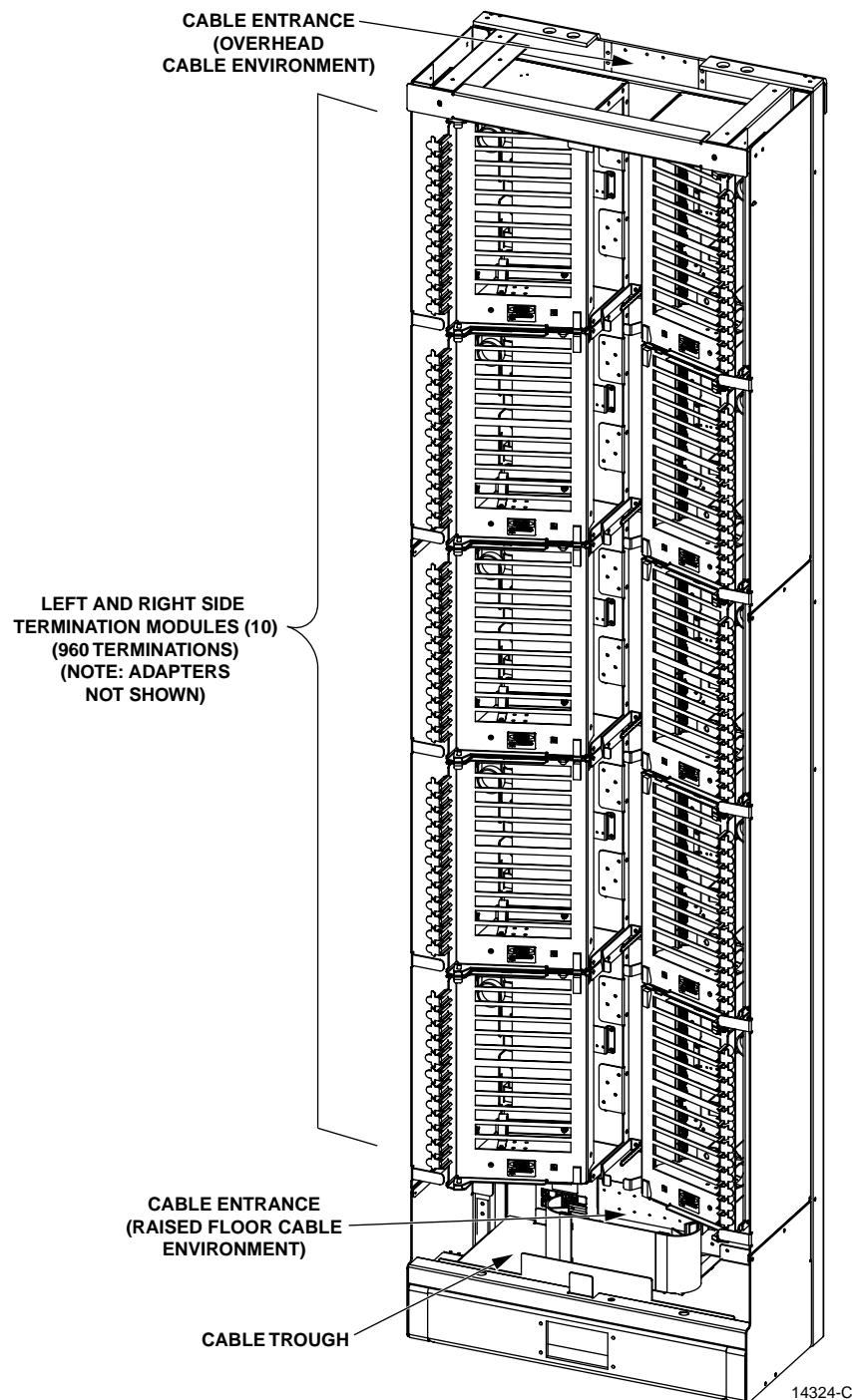
Figure 13. 960 Termination Configuration

3   INSTALLATION

3.1   Termination Module Installation Overview

Overhead Cable Entry Environment

INSTALL TERMINATION MODULES IN ORDER SHOWN

16808-A
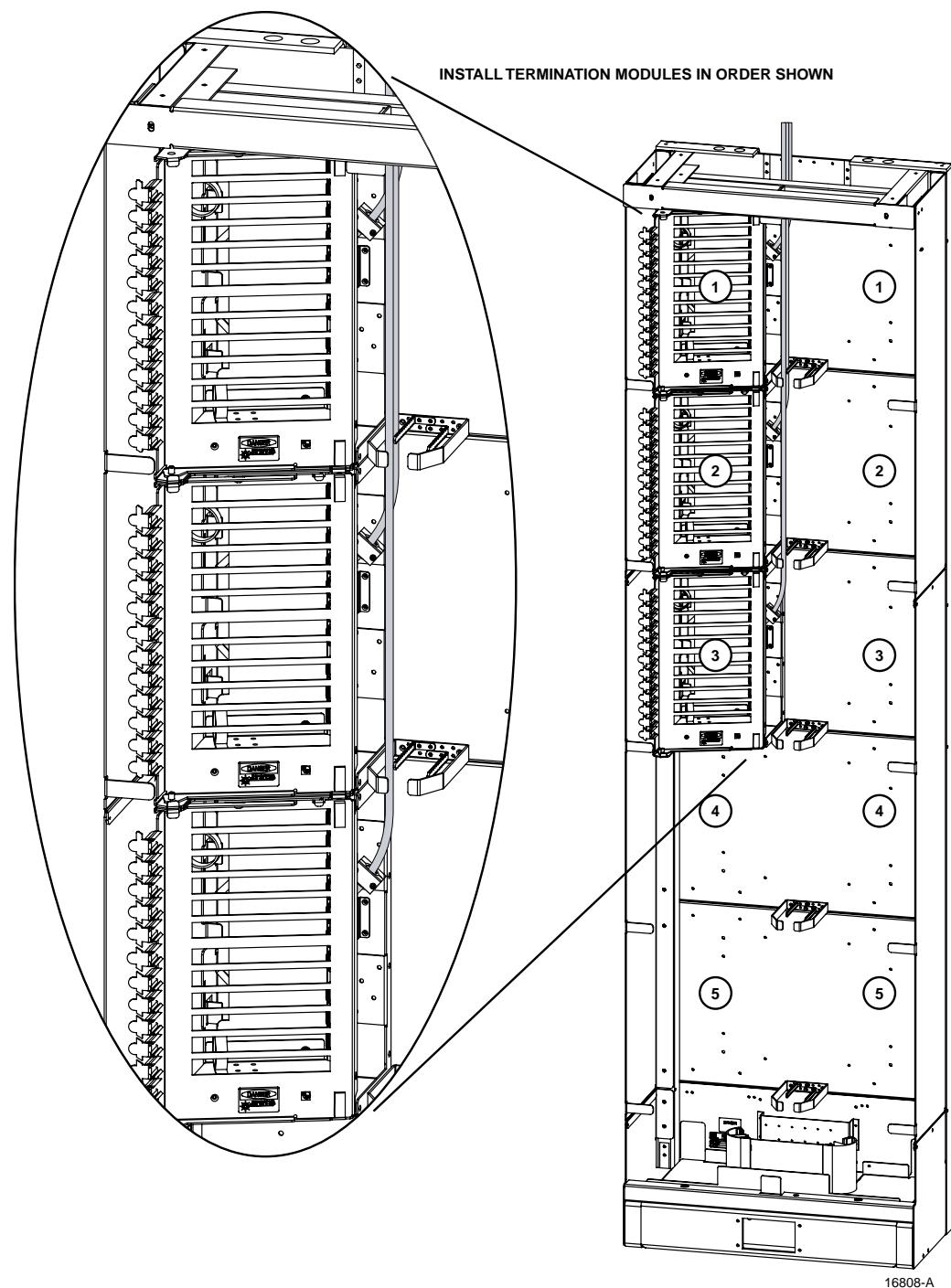
Figure 14. Termination Module Installation Overview

Under Floor Cable Entry Environment

16809-A

INSTALL TERMINATION MODULES IN ORDER SHOWN
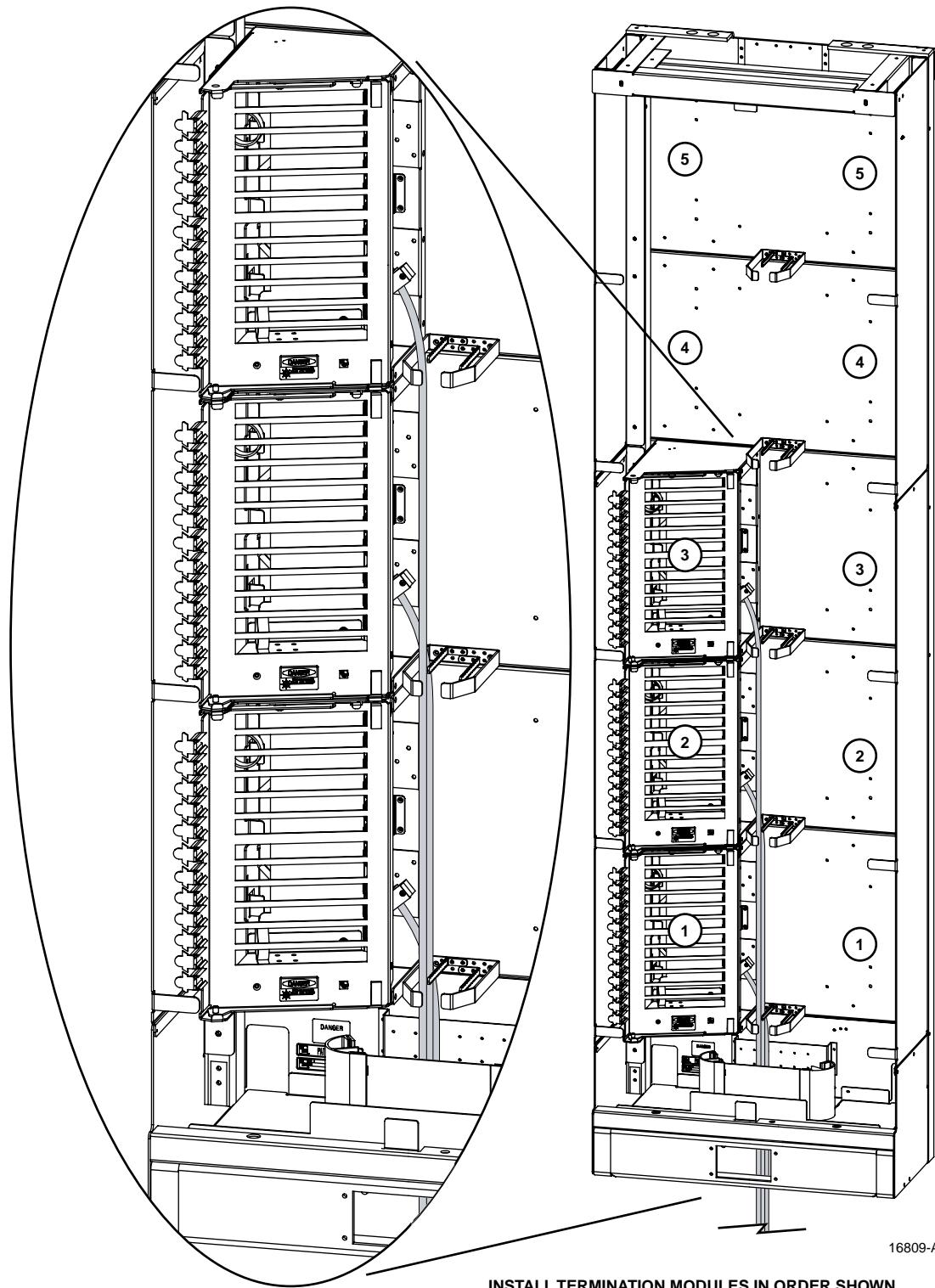
Figure 15. Termination Module Installation Overview

3.2   Termination Module

Remove Inside Covers on Termination Module

1 LIFT TABS (2) OUT 90°

2 SWING DOOR OPEN

3
LIFT TAB OUT 90°

5 COVER REMOVED

23628-A

4 PULL COVER OUT AT BOTTOM TO RELEASE TAB,
THEN UP TO REMOVE FROM PANEL
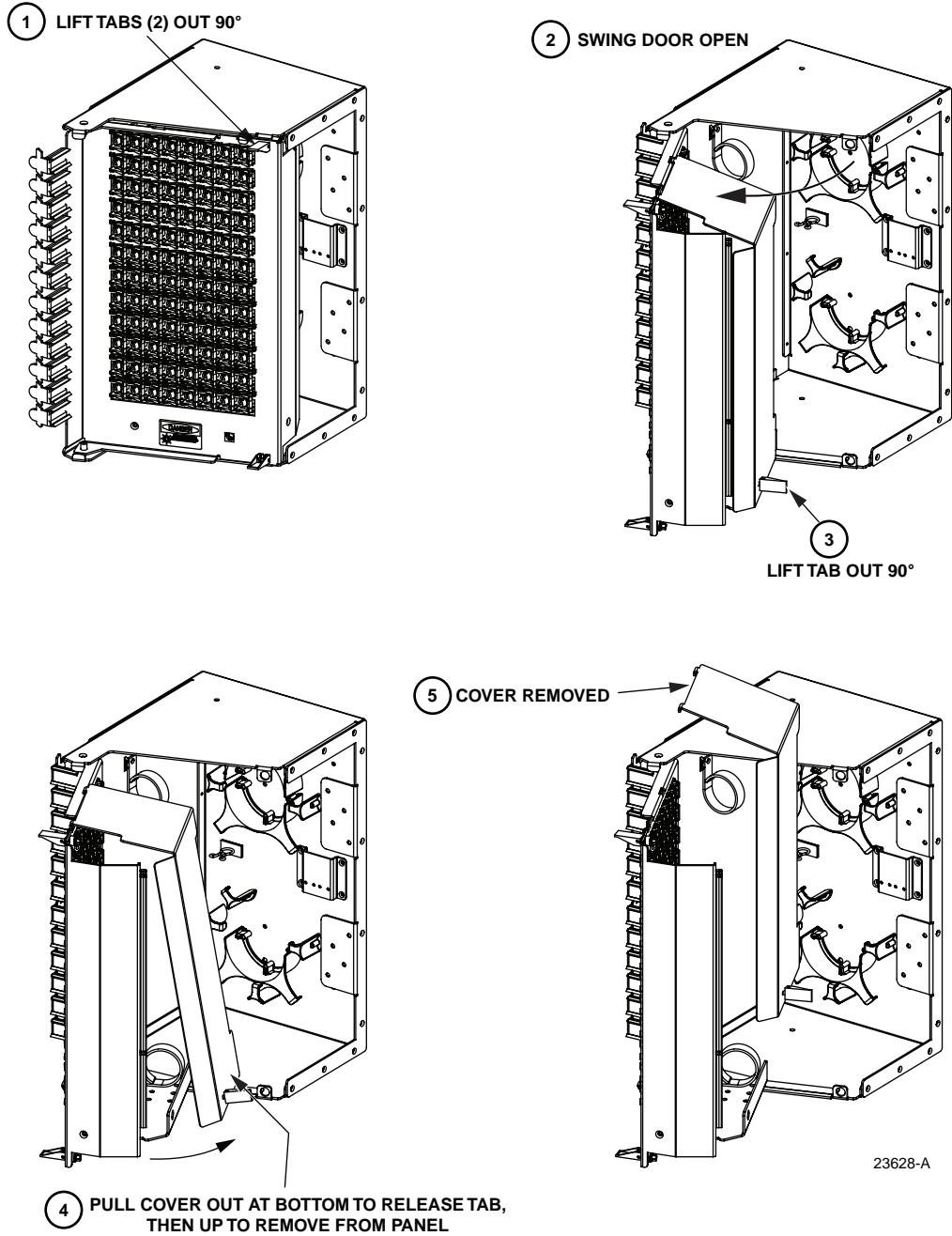
Figure 16. Remove Inside Covers on Termination Module

Install Termination Module on Frame

GUIDE PINS (2)

GUIDE PIN HOLES (2)

MOUNTING HOLES (4)

ALIGN GUIDE PIN HOLES IN TERMINATION PANEL WITH GUIDE PINS ON REAR PANEL OF FRAME

SECURE TO FRAME USING M3 SCREWS (4)

TERMINATION MODULE (STRAIGHT-ON VIEW) FRONT DOOR REMOVED FOR CLARITY

23629-A
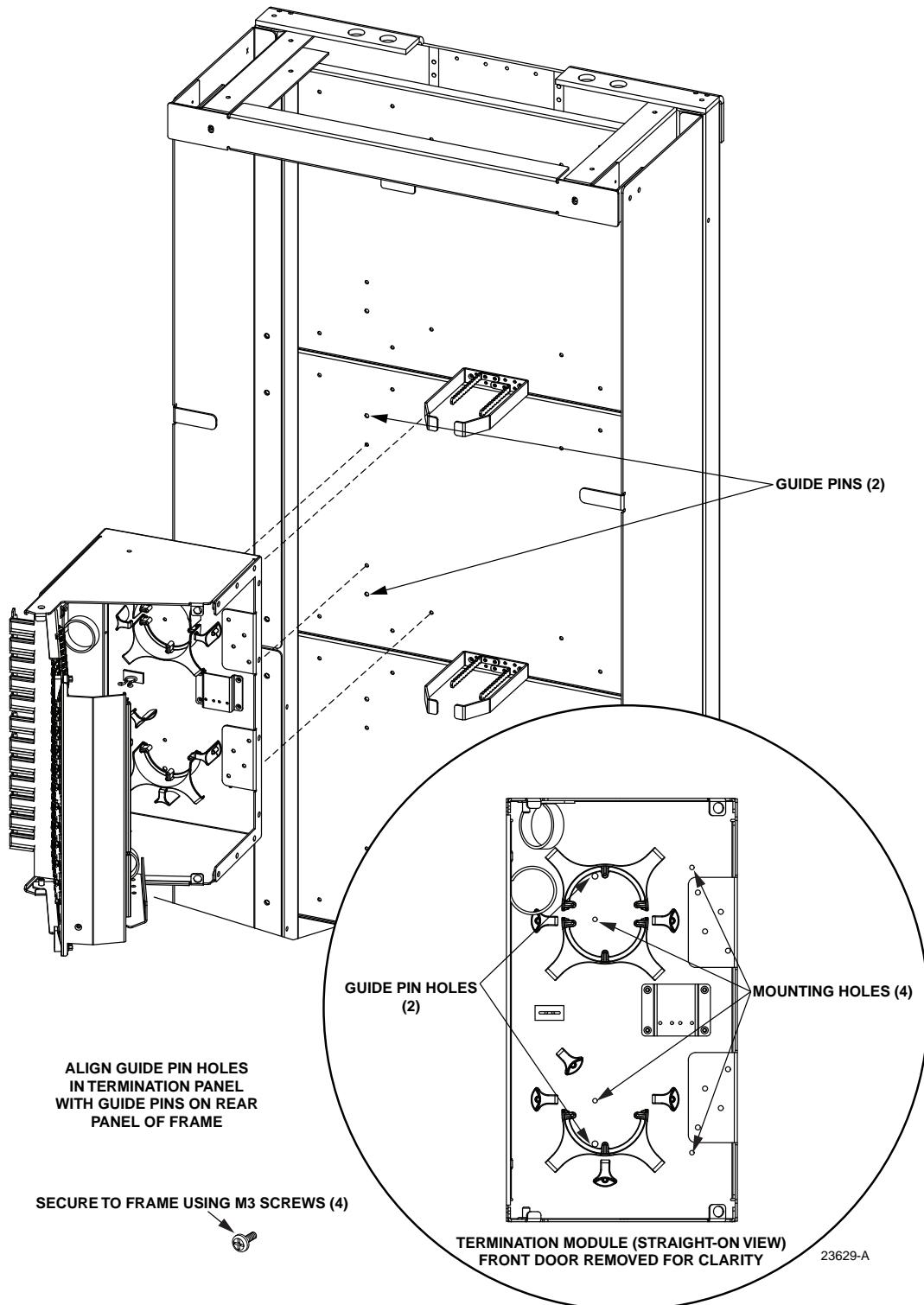
Figure 17. Install Termination Module on Frame (Left-Side Termination Module Shown, Front View)

3.2.1   Termination Module (Pre-Loaded With IFC Cable)

UNPACK TERMINATION MODULE FROM SHIPPING
CONTAINER AND UNWIND IFC CABLE FROM SPOOL

STYROFOAM
PACKING

IFC CABLE

TERMINATION
MODULE

SPOOL

16848-A
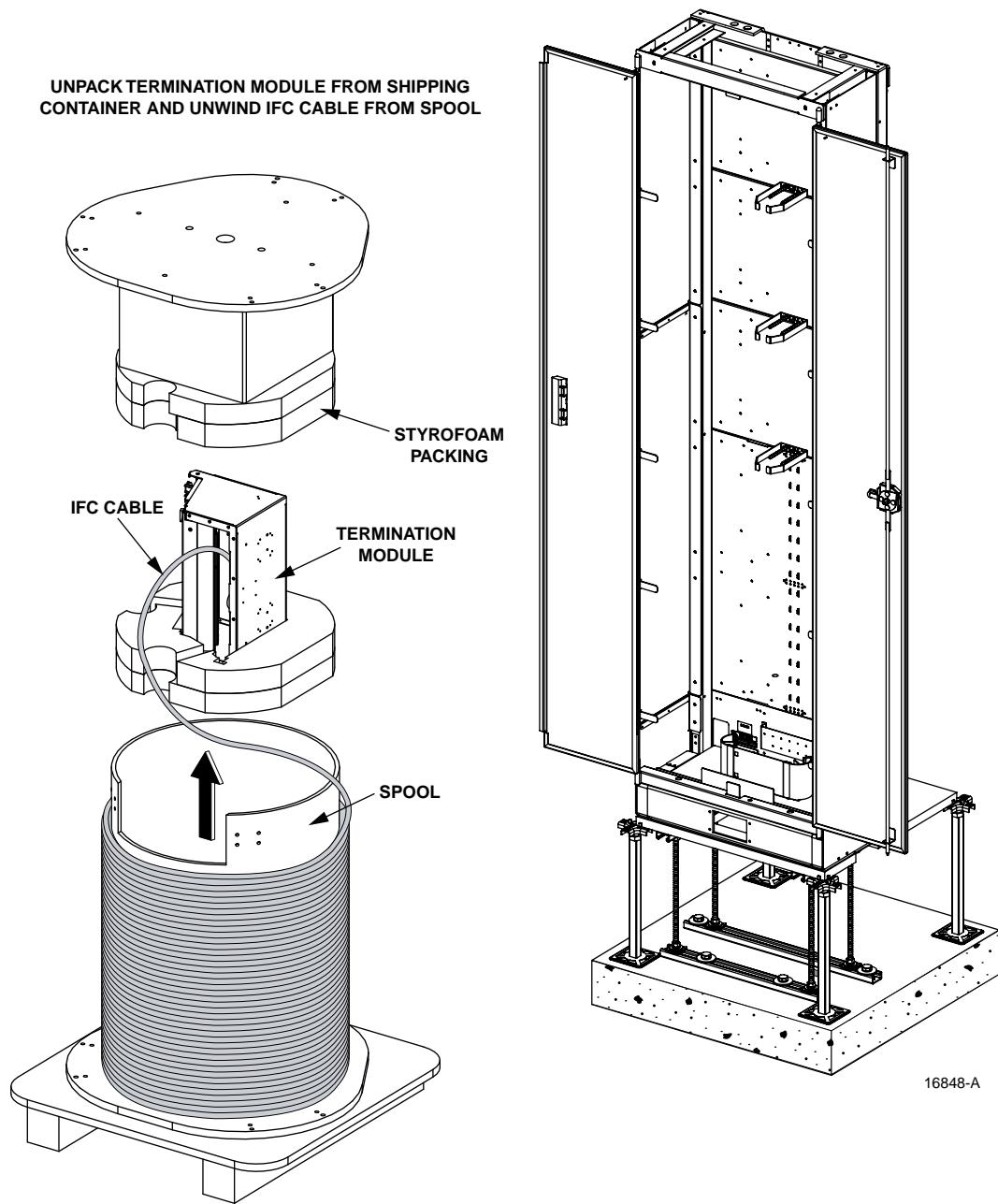
Figure 18. Termination Module With IFC Cable

Overhead Cable Entry Environment

ROUTE IFC CABLE THROUGH OPENING IN
TOP OF RACK AND INTO CABLE MANAGEMENT

23630-A
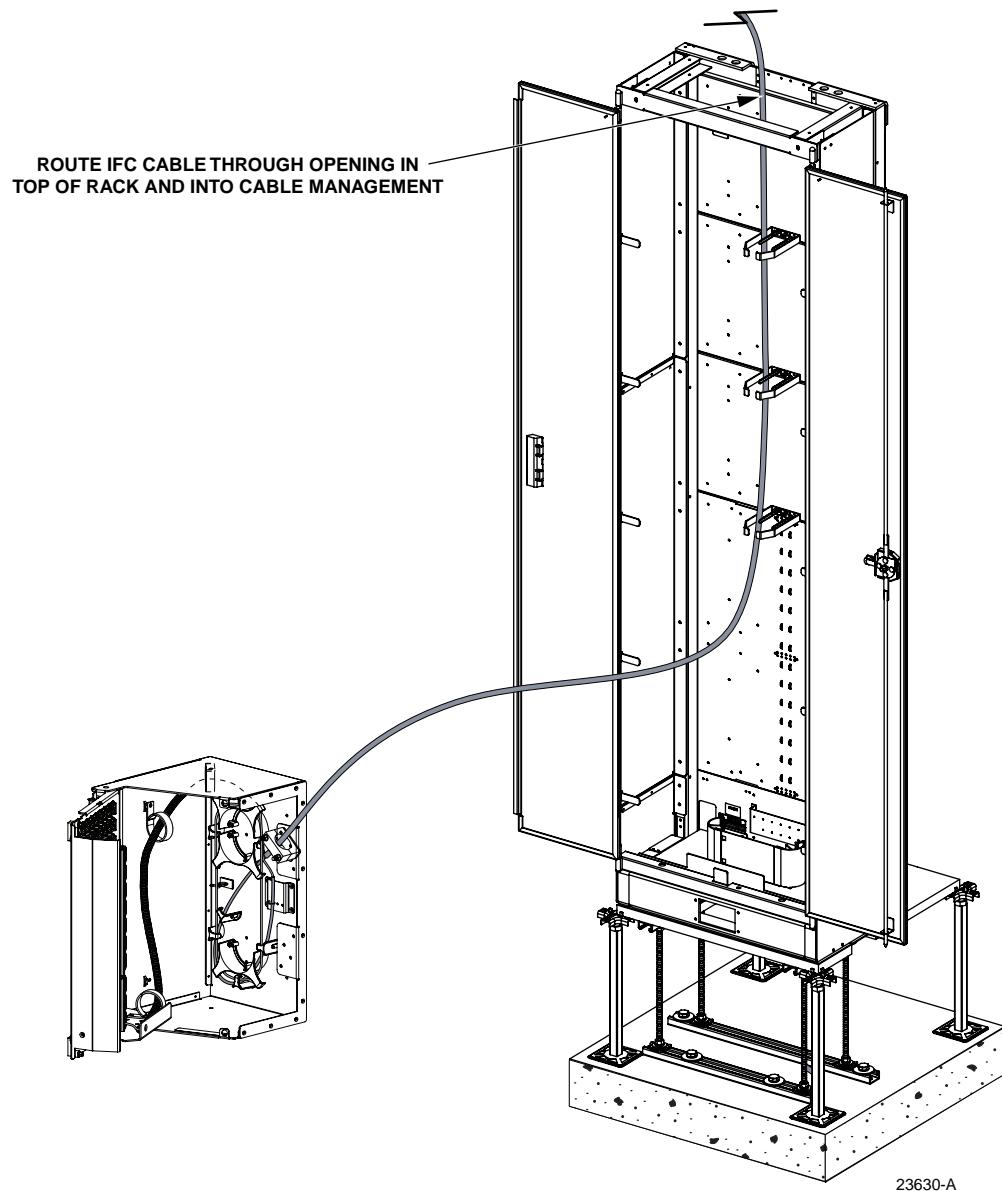
Figure 19. Overhead Cable Entry Environment

Under Floor Cable Entry Environment

NOTE: UNDERFLOOR CABLE ENTRY ENVIRONMENT

**ROUTE IFC CABLE THROUGH OPENING IN
BASE OF RACK AND INTO CABLE MANAGEMENT**

23634-A
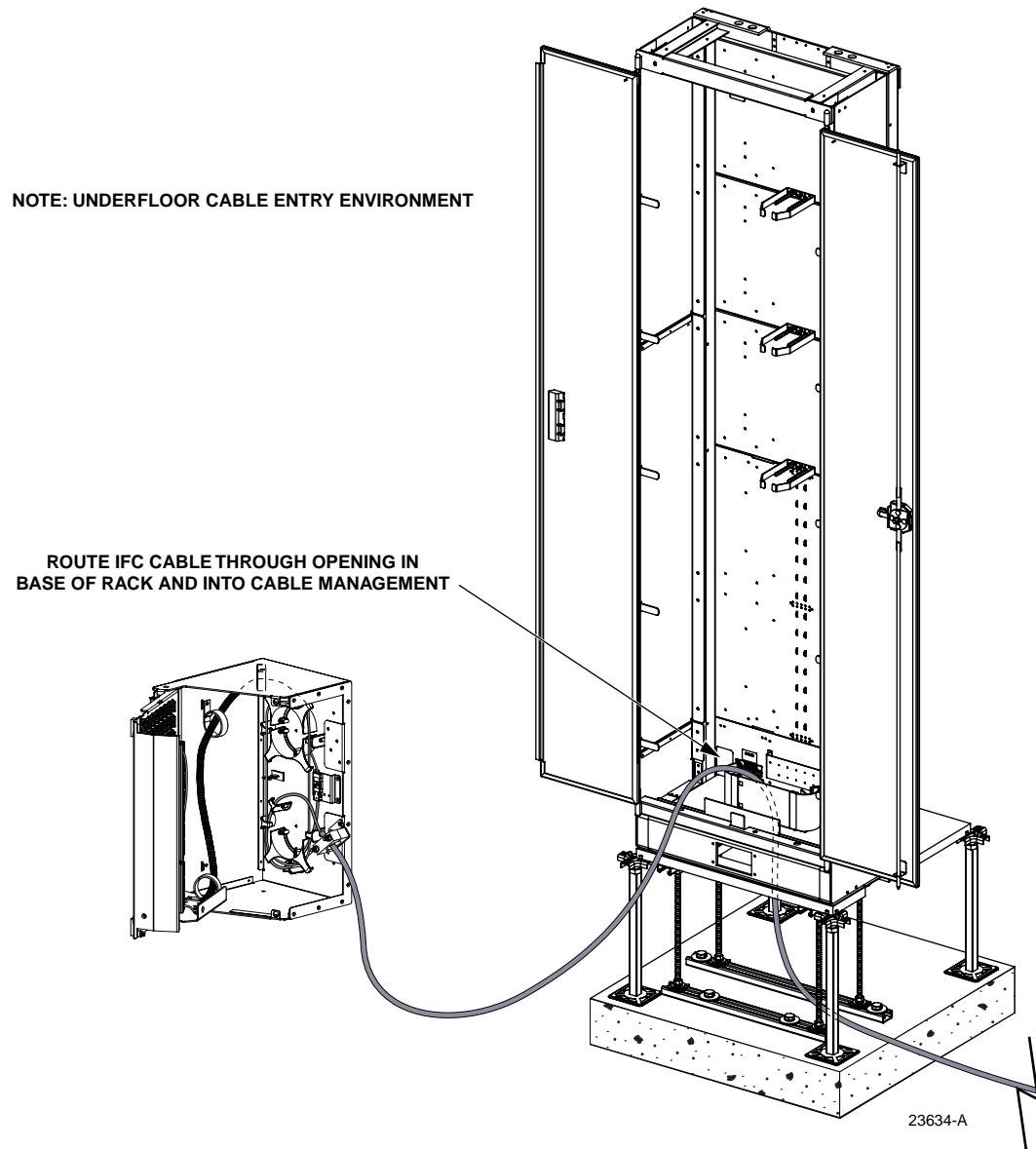
Figure 20. Under Floor Cable Entry Environment

Secure Termination Module on Frame

▶ **Note:** Cable not shown, for clarity.

GUIDE PINS (2)

GUIDE PIN HOLES (2)

MOUNTING HOLES (4)

ALIGN GUIDE PIN HOLES IN TERMINATION PANEL WITH GUIDE PINS ON REAR PANEL OF FRAME

SECURE TO FRAME USING M3 SCREWS (4)

TERMINATION MODULE (STRAIGHT-ON VIEW) FRONT DOOR REMOVED FOR CLARITY

23629-A
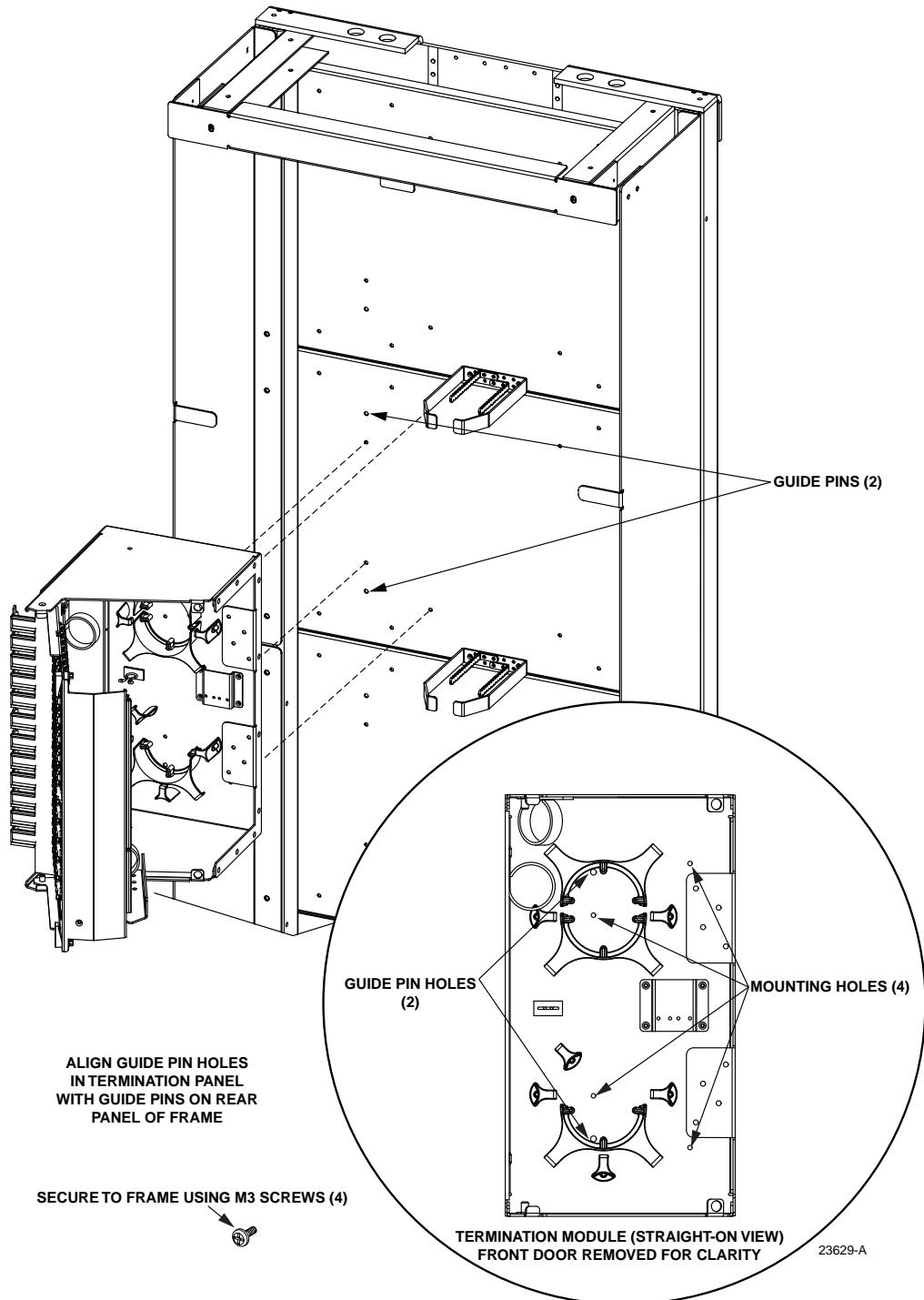
Figure 21. Secure Termination Module on Frame

3.3   Splice Module

NOTE: TRAYS ORIENTED UP FOR OVERHEAD
CABLE ENTRY ENVIRONMENT

M3 SCREW (7)

14327-D

NOTE: TRAYS ARE ORIENTED DOWN FOR UNDER FLOOR CABLE ENTRY ENVIRONMENT
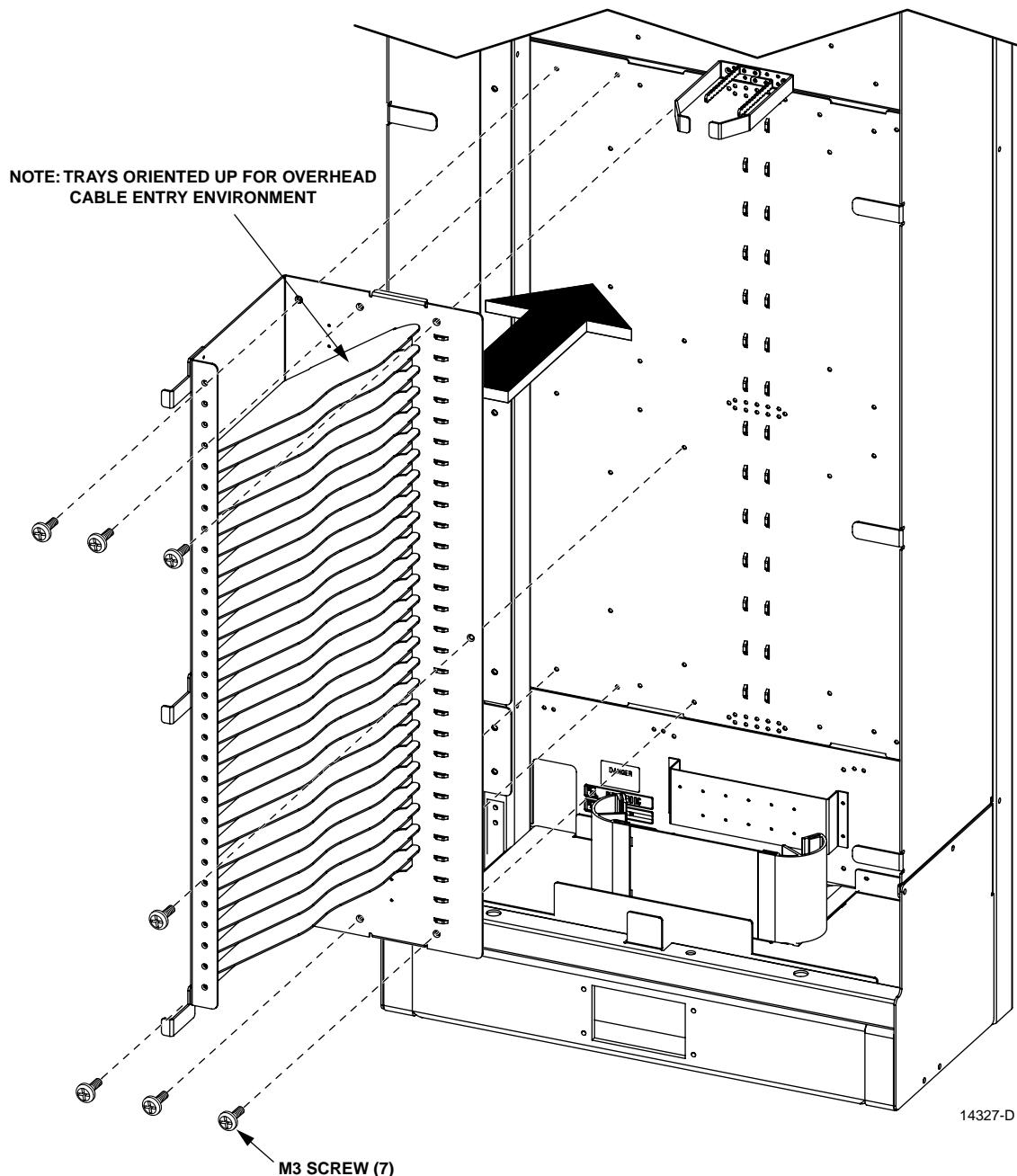
Figure 22. Install Splice Module (Left-Side Module Shown)

3.4   Jumper Storage Module

M3 SCREW (4)

VIEW RE-ORIENTED 180 DEGREES
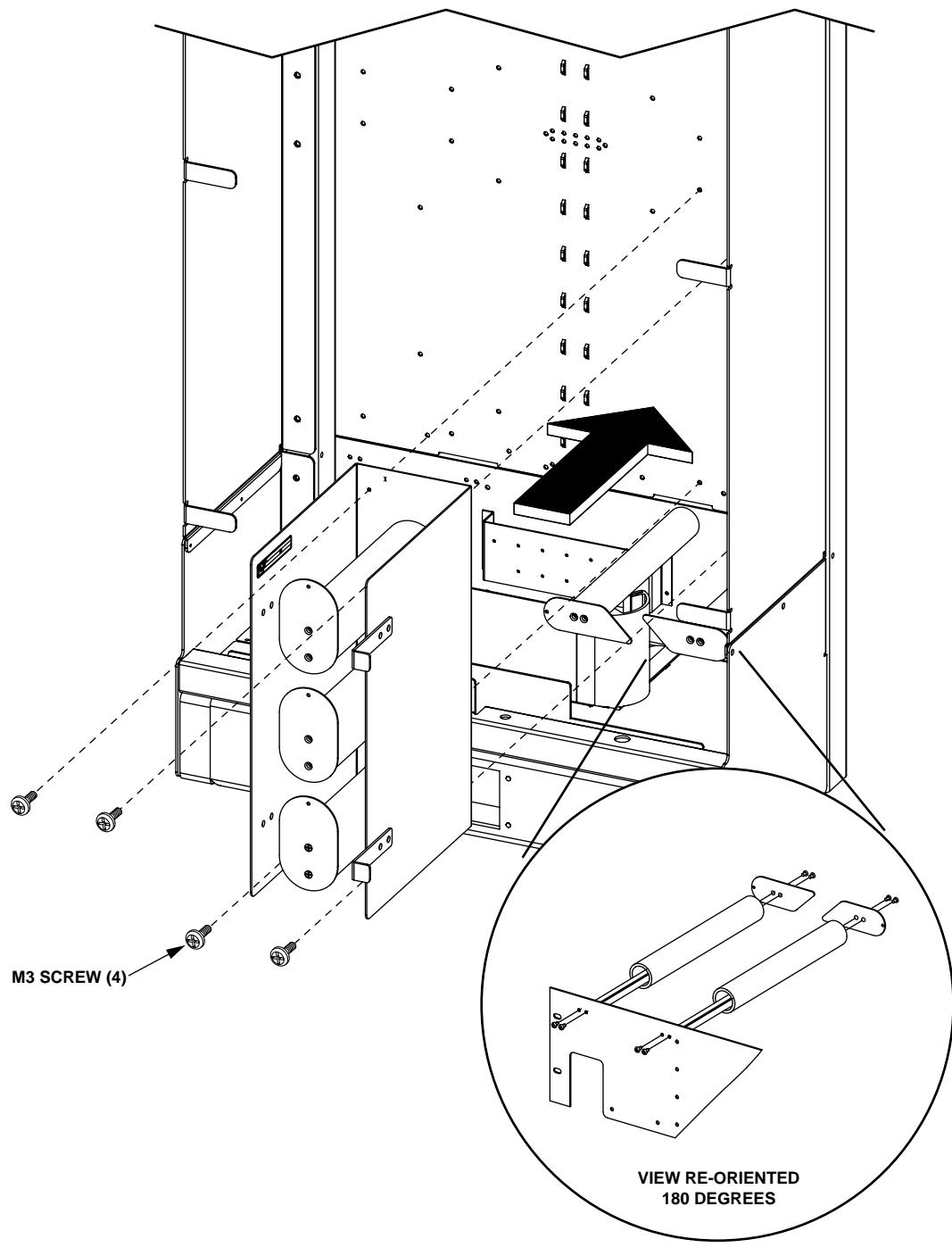
14328-C

Figure 23. Install Jumper Storage Module (Right-Side Module Shown)

3.5   Cable Clamp Installation

Overhead Cable Entry Environment

CABLE CLAMP
YOKE (6)

NOTE: STACKABLE CABLE CLAMP USED
FOR OSP CABLE ONLY

3/8" HEX BOLT (6)

SPACER BRACKET
(2)

STACKABLE CABLE CLAMP
(THREE MAXIMUM, PER SIDE)

14329-C
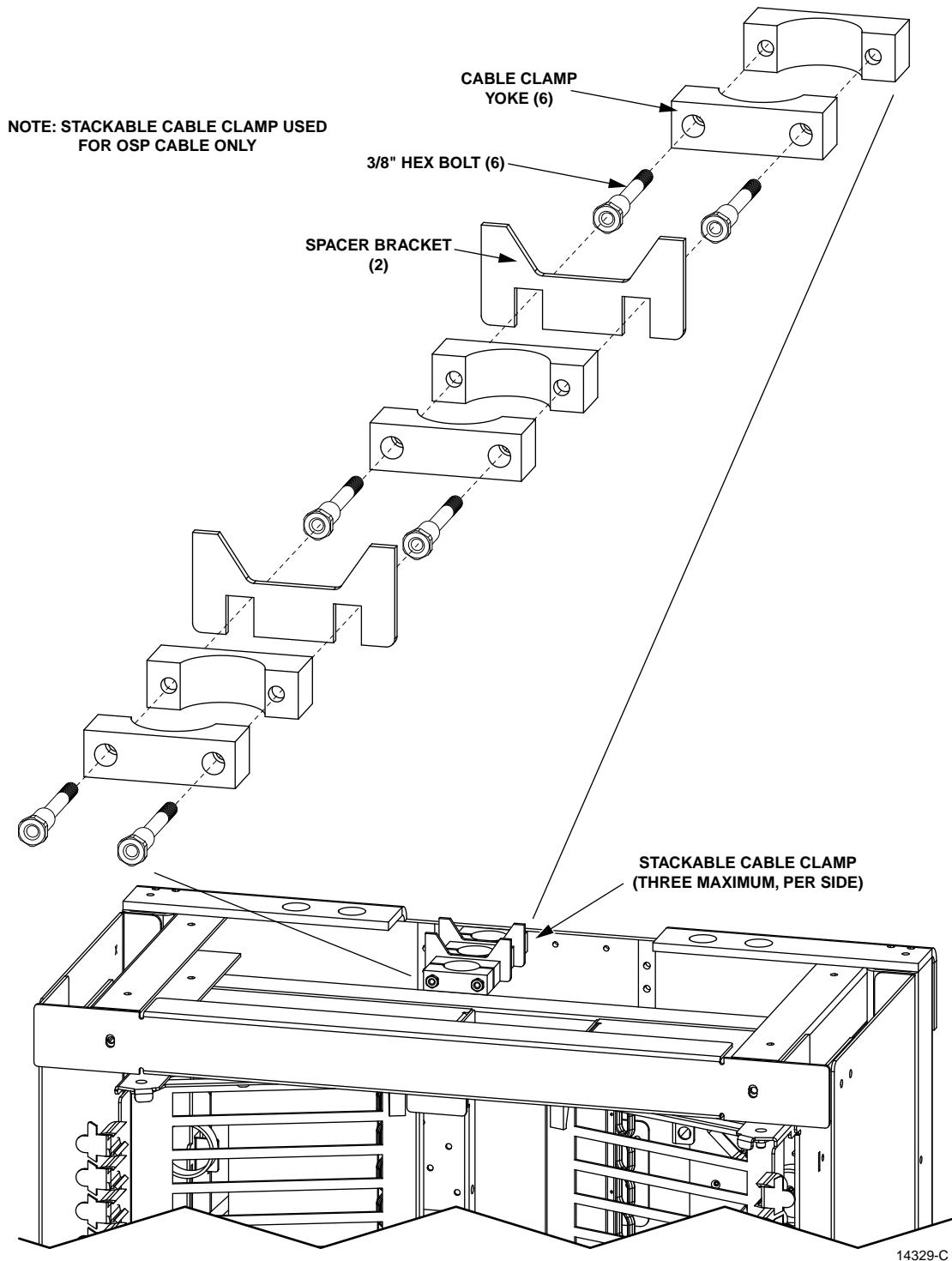
Figure 24. Stackable Cable Clamp

Under Floor Cable Entry Environment

GROMMET

CABLE CLAMP
YOKE (2)

COVER PLATE

M3 SCREW (2)

CABLE CLAMP (6)

DANGER

INSTALL 3 CABLE
CLAMPS IN UPPER ROW

INSTALL 3 CABLE
CLAMPS IN LOWER ROW

14330-B
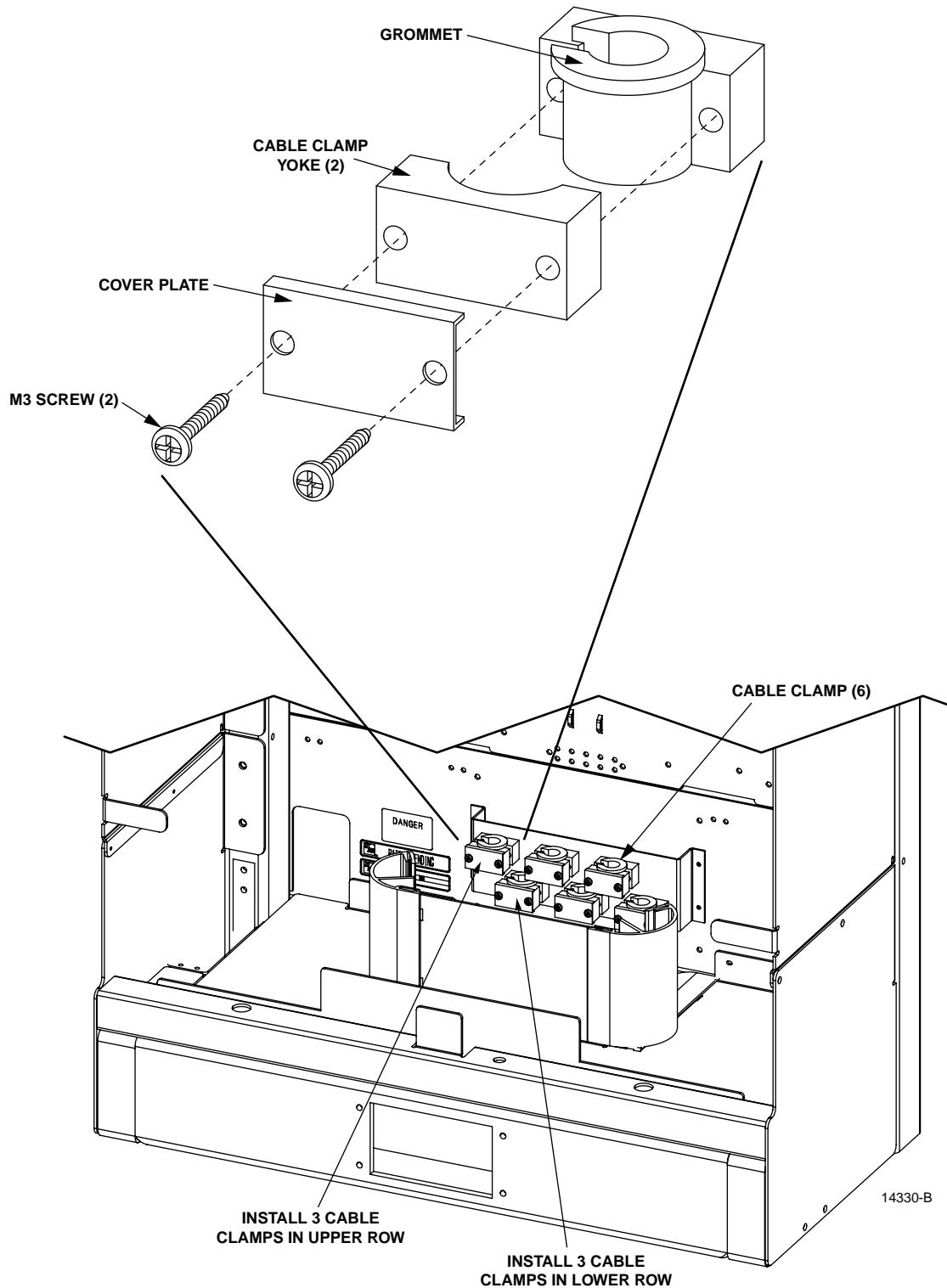
Figure 25. Cable Clamp (Under Floor Cable Entry Environment)

4   CABLE ROUTING

4.1   576 Termination, 576 Splice Configuration

Overhead Cable Entry Environment

OSP CABLE

PIGTAILS   **OSP CABLE**

NOTE: ADAPTERS NOT SHOWN

14331-C

CABLE WAY IS DIVIDED INTO 3 CHANNELS. ROUTE OSP CABLE DOWN CENTER CHANNEL.
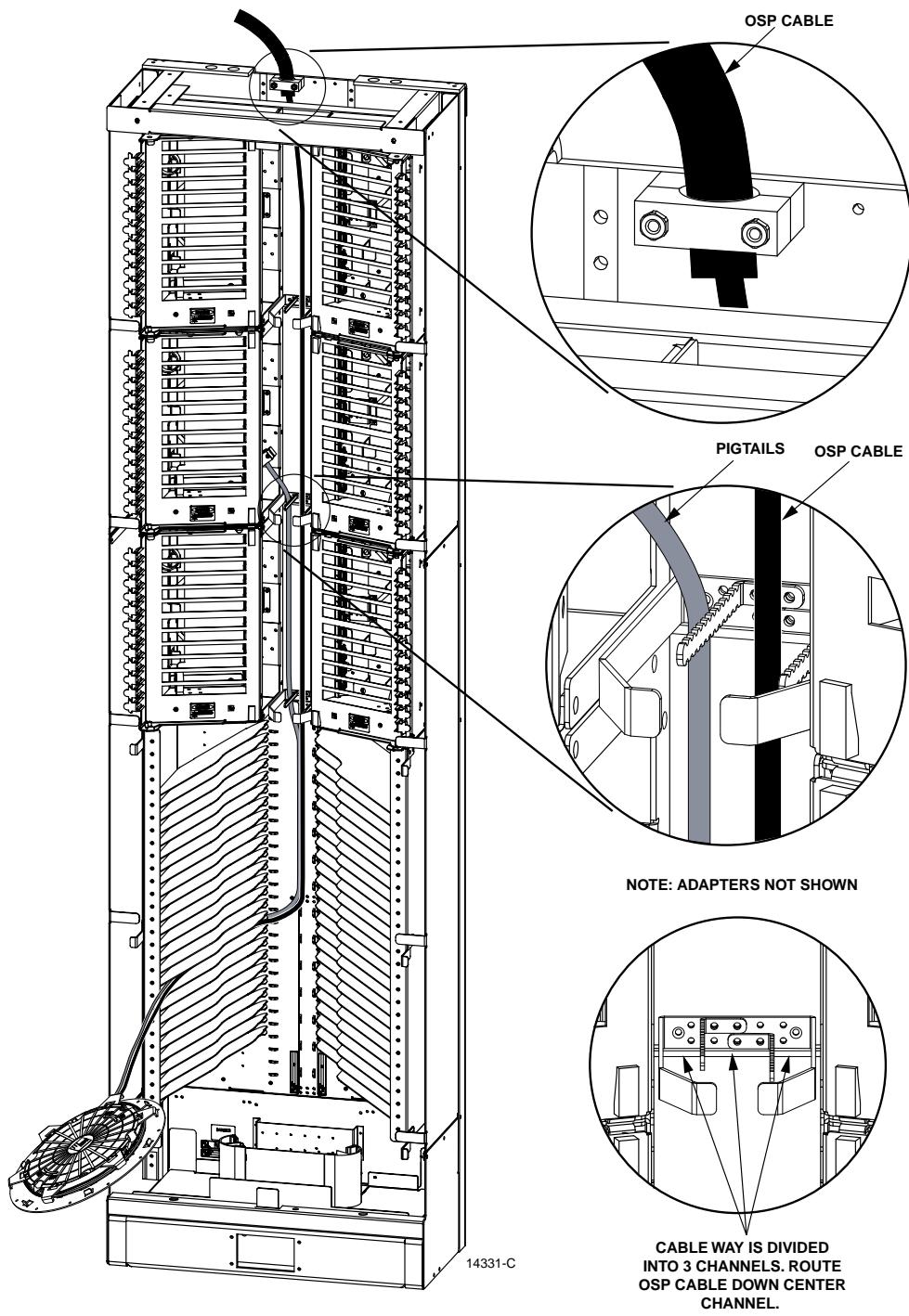
Figure 26. 576 Termination, 576 Splice Configuration

Under Floor Cable Entry Environment

PIGTAILS

OSP CABLE

14332-B
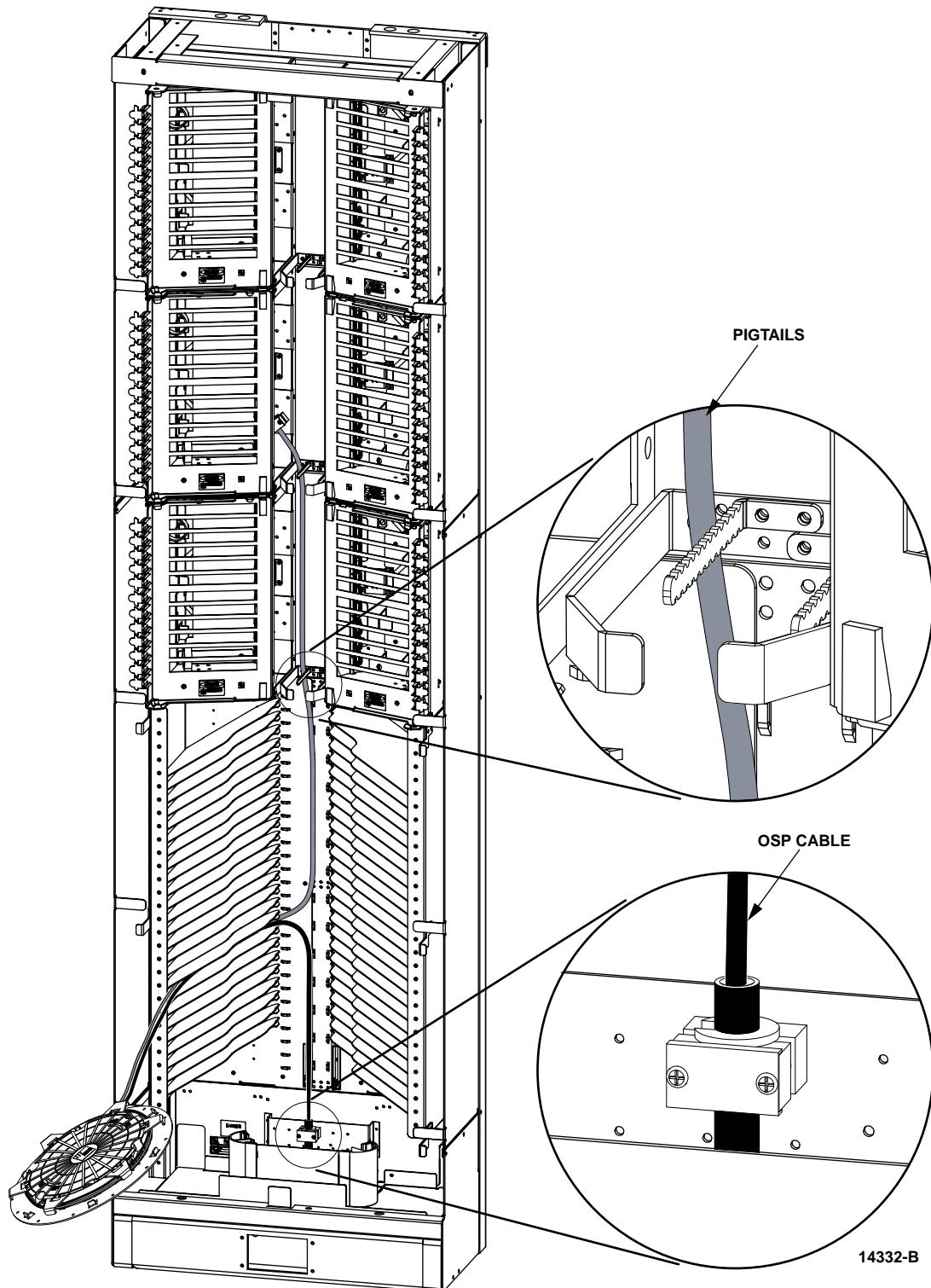
Figure 27. 576 Termination, 576 Splice Configuration

4.2   576 Termination, 288 Splice Configuration

Overhead Cable Entry Environment

OSP CABLE

FOT PATCH CORD

ROUTE AND CLAMP FOT PATCH CORDS TO REAR OF TERMINATION MODULE.

FOT PATCH CORD

PIGTAILS   OSP CABLE

NOTE: ADAPTERS NOT SHOWN
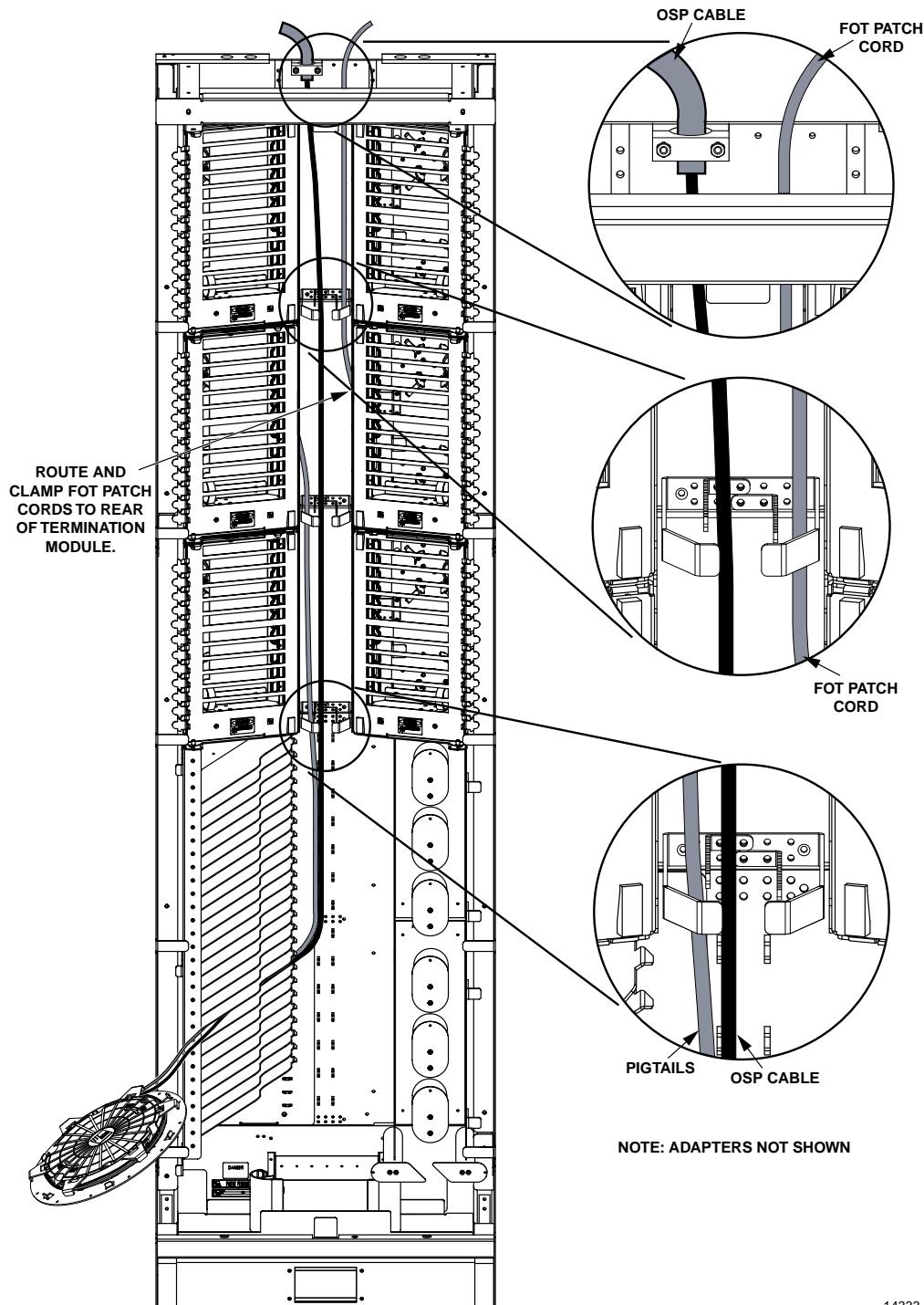
14333-C

Figure 28. 576 Termination, 288 Splice Configuration

Under Floor Cable Entry Environment

NOTE: ADAPTERS NOT SHOWN

PIGTAILS

ROUTE FOT PATCH CORD TO
REAR OF TERMINATION MODULE

PIGTAILS

FOT PATCH
CORD

OSP CABLE

FOT PATCH
CORD

14334-C
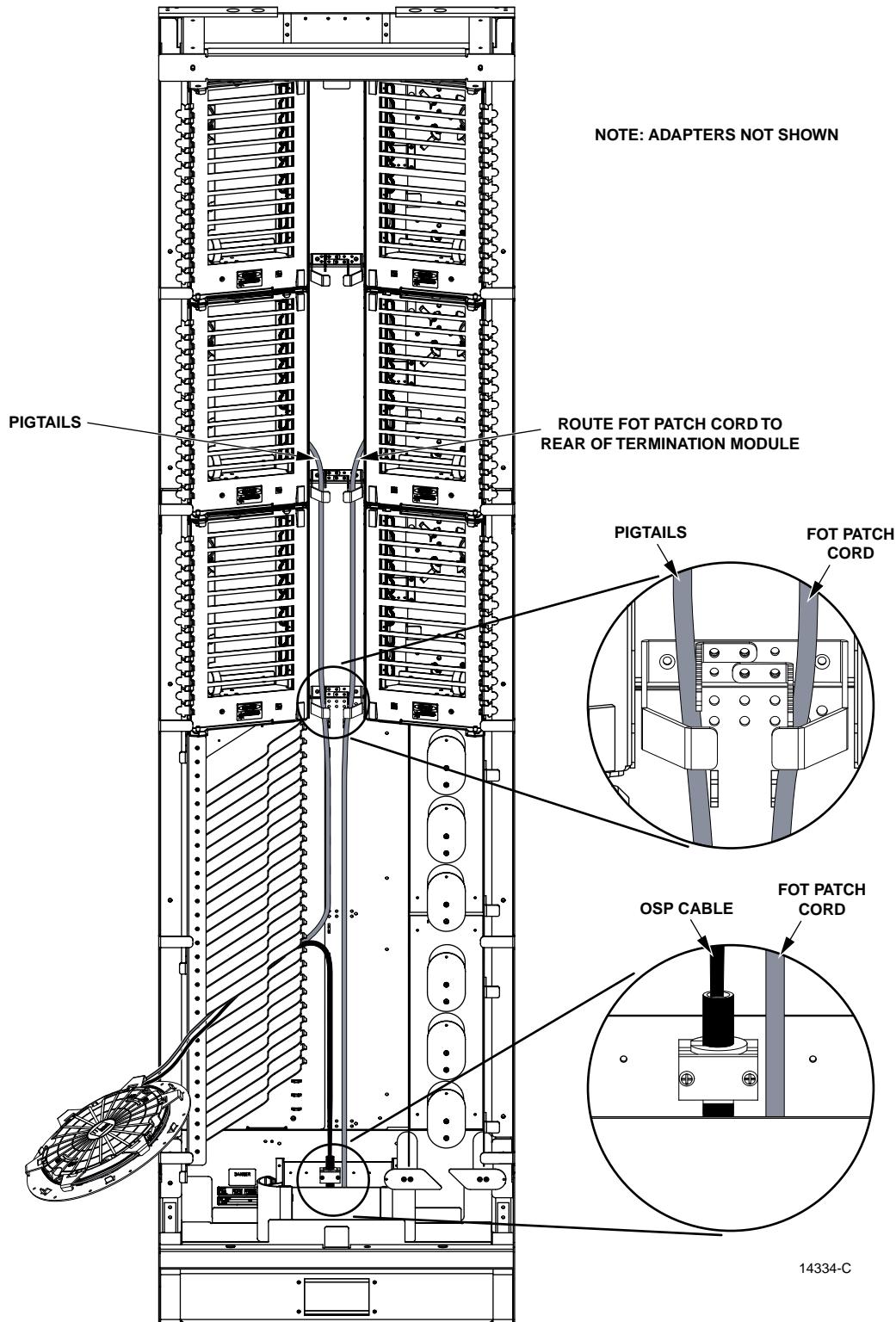
Figure 29. 576 Termination, 288 Splice Configuration

4.3   288 Termination, 288 Splice Configuration

Overhead Cable Entry Environment

OSP CABLE

PIGTAILS

OSP CABLE

NOTE: ADAPTERS NOT SHOWN

14335-C
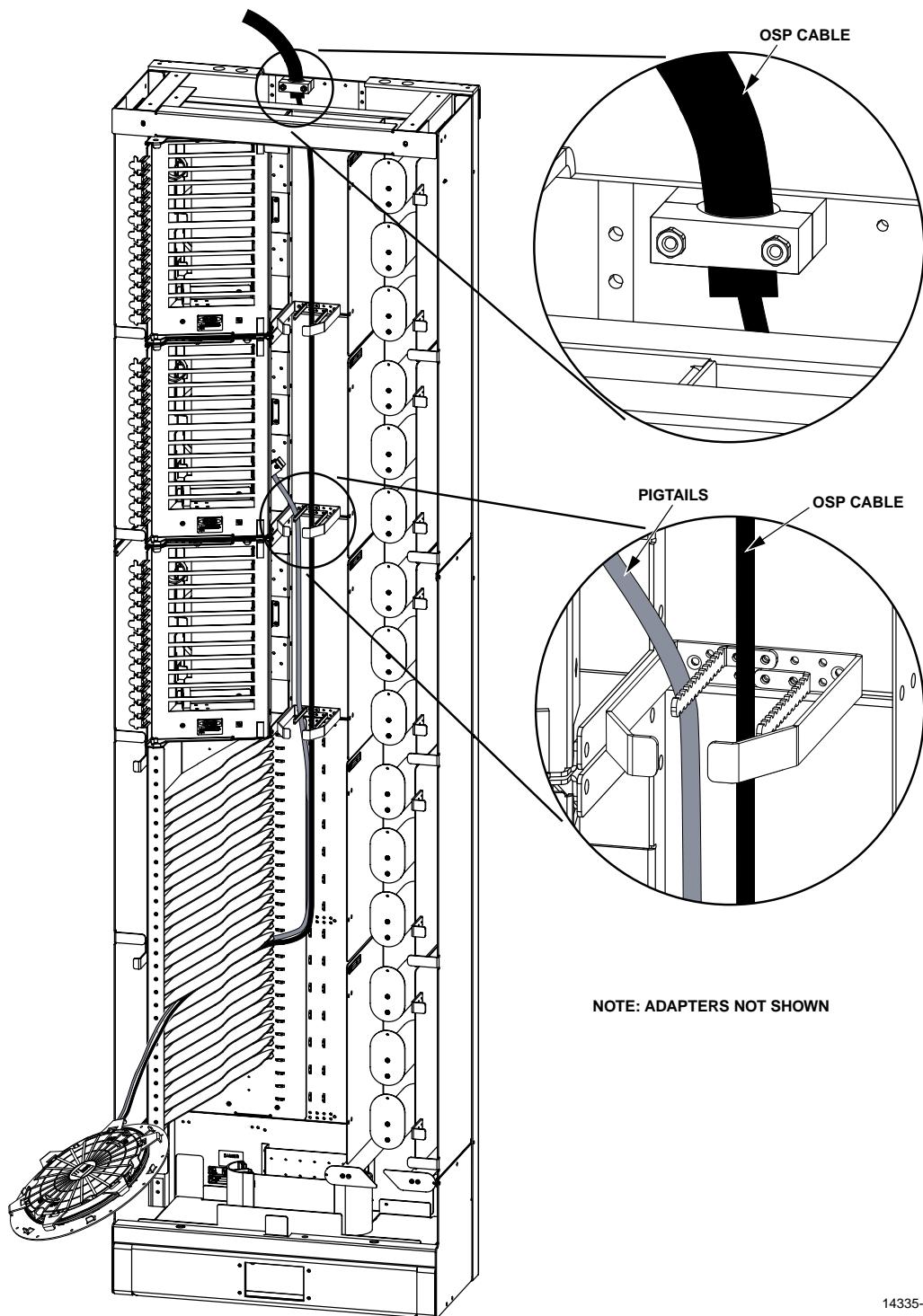
Figure 30. 288 Termination, 288 Splice Configuration

Under Floor Cable Entry Environment

NOTE: ADAPTERS NOT SHOWN

PIGTAILS

OSP CABLE

14336-C
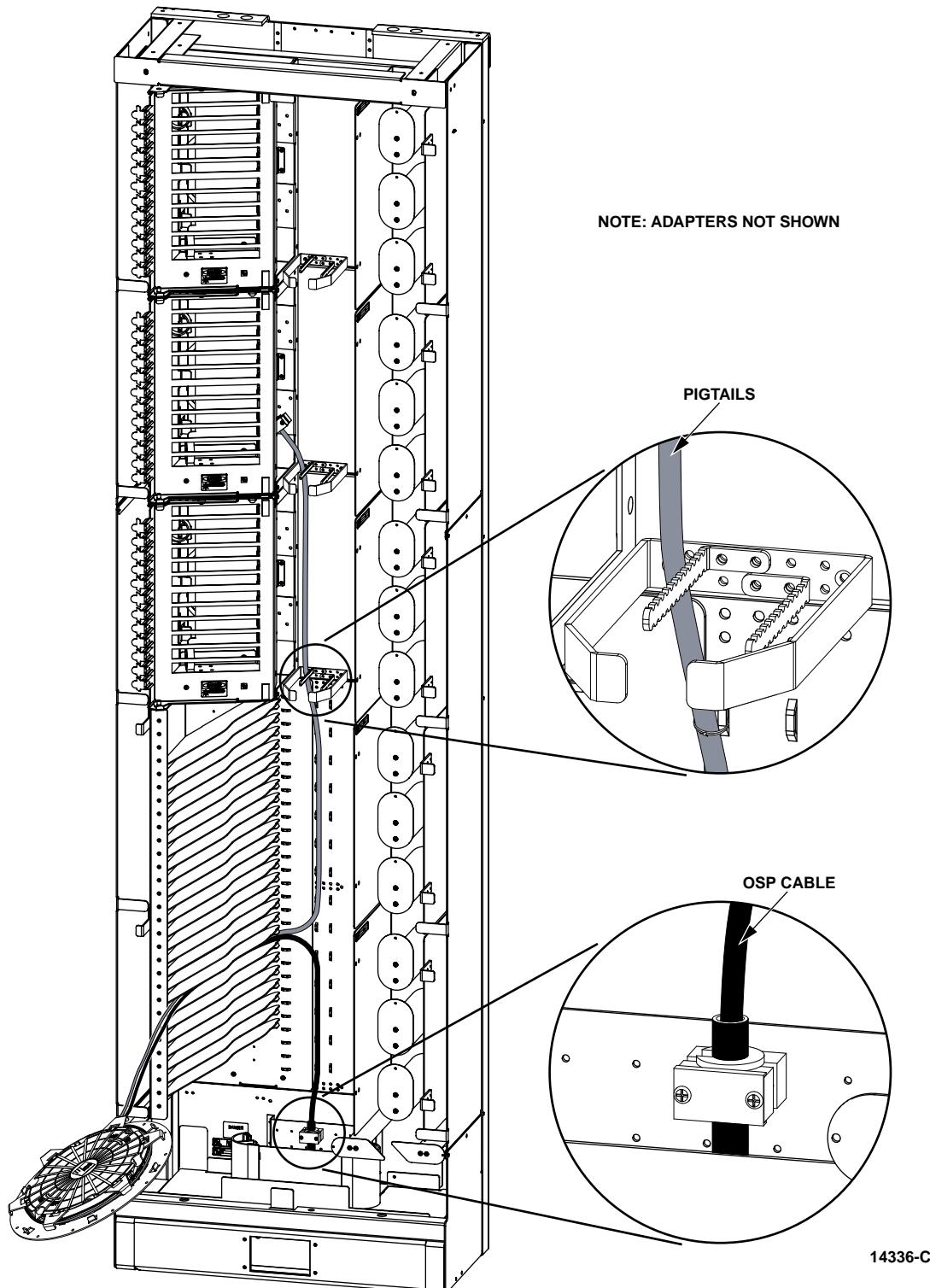
Figure 31. 288 Termination, 288 Splice Configuration

4.4   960 Termination Configuration

Overhead Cable Entry Environment

FIBERGUIDE

FOT PATCH CORDS

ROUTE PATCH CORDS TO REAR
OF TERMINATION MODULE

NOTE: ADAPTERS NOT SHOWN

14337-C
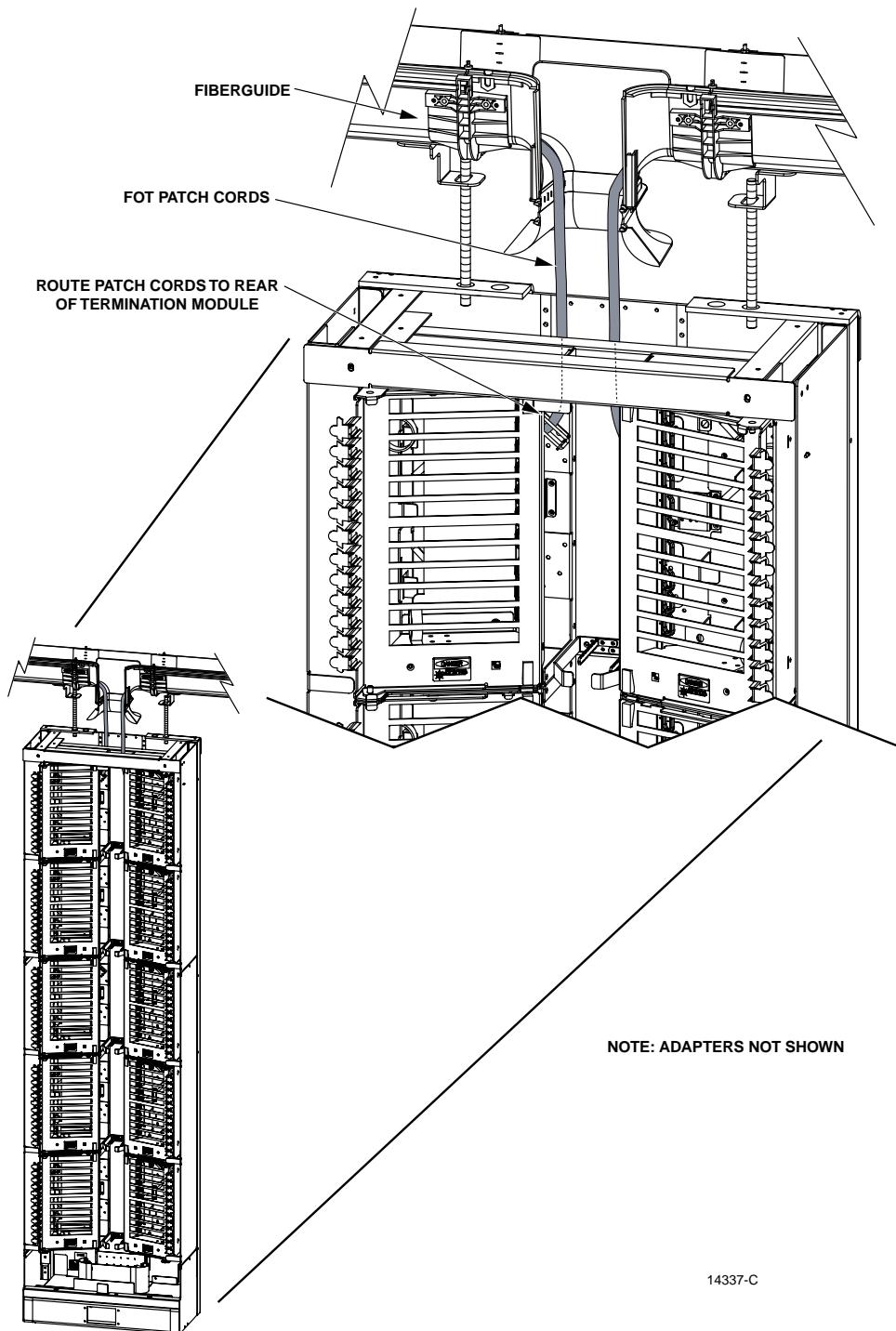
Figure 32. 960 Termination Configuration

Under Floor Cable Entry Environment

NOTE: ADAPTERS NOT SHOWN

ROUTE FOT PATCH CORDS
TO REAR OF TERMINATION MODULE

14338-B
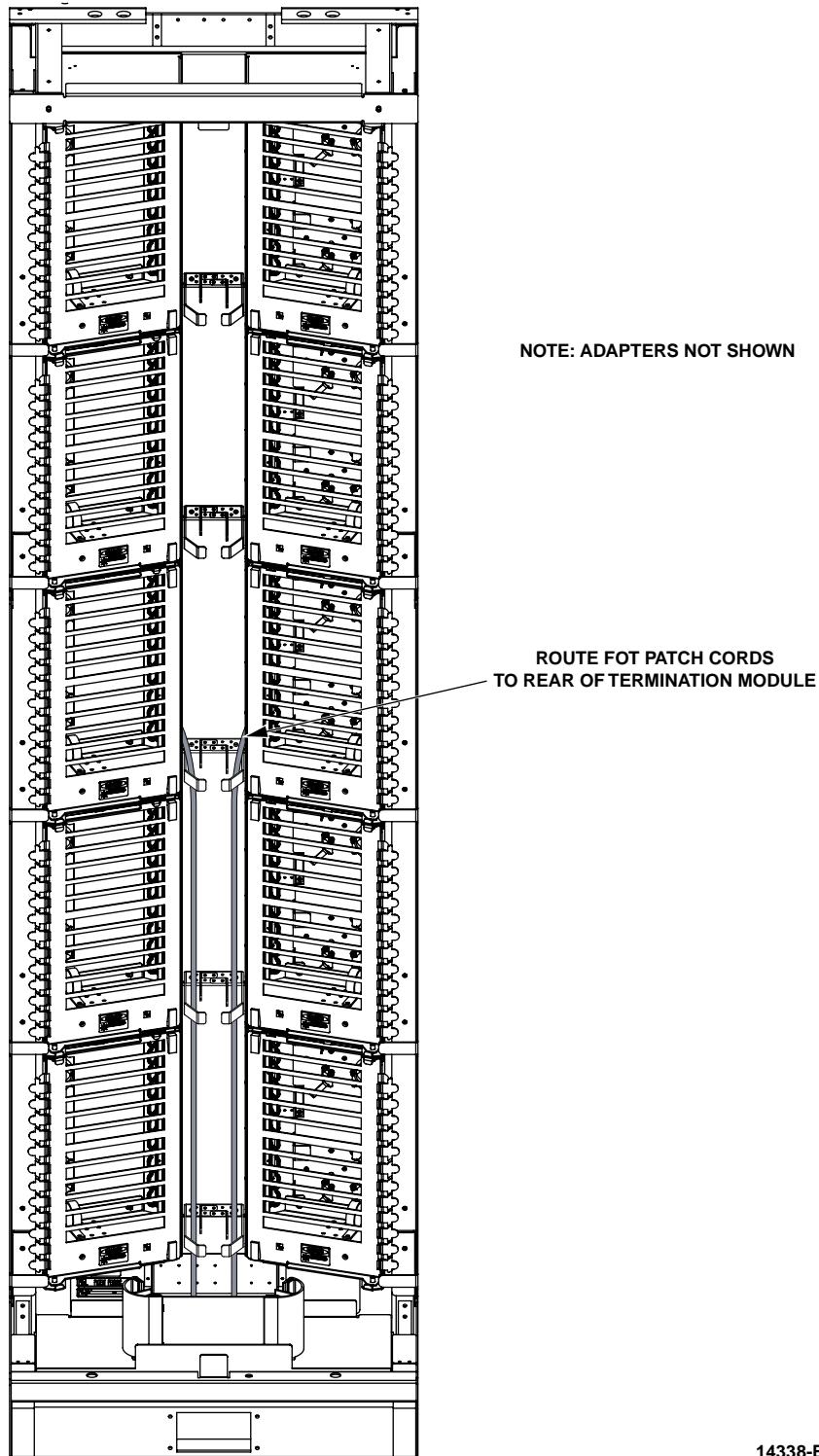
Figure 33. 960 Termination Configuration

4.5   Termination Module Cable Routing

This section provides cable routing instructions for several types of cable configurations in a termination module. Refer to Section 1.6 on Page 8 for cable clamp descriptions. Figure 33 shows connector designations for the 96-and 72-position termination modules (front view). The 96-position is shown configured for 12- and 8-fiber bundles, respectively.
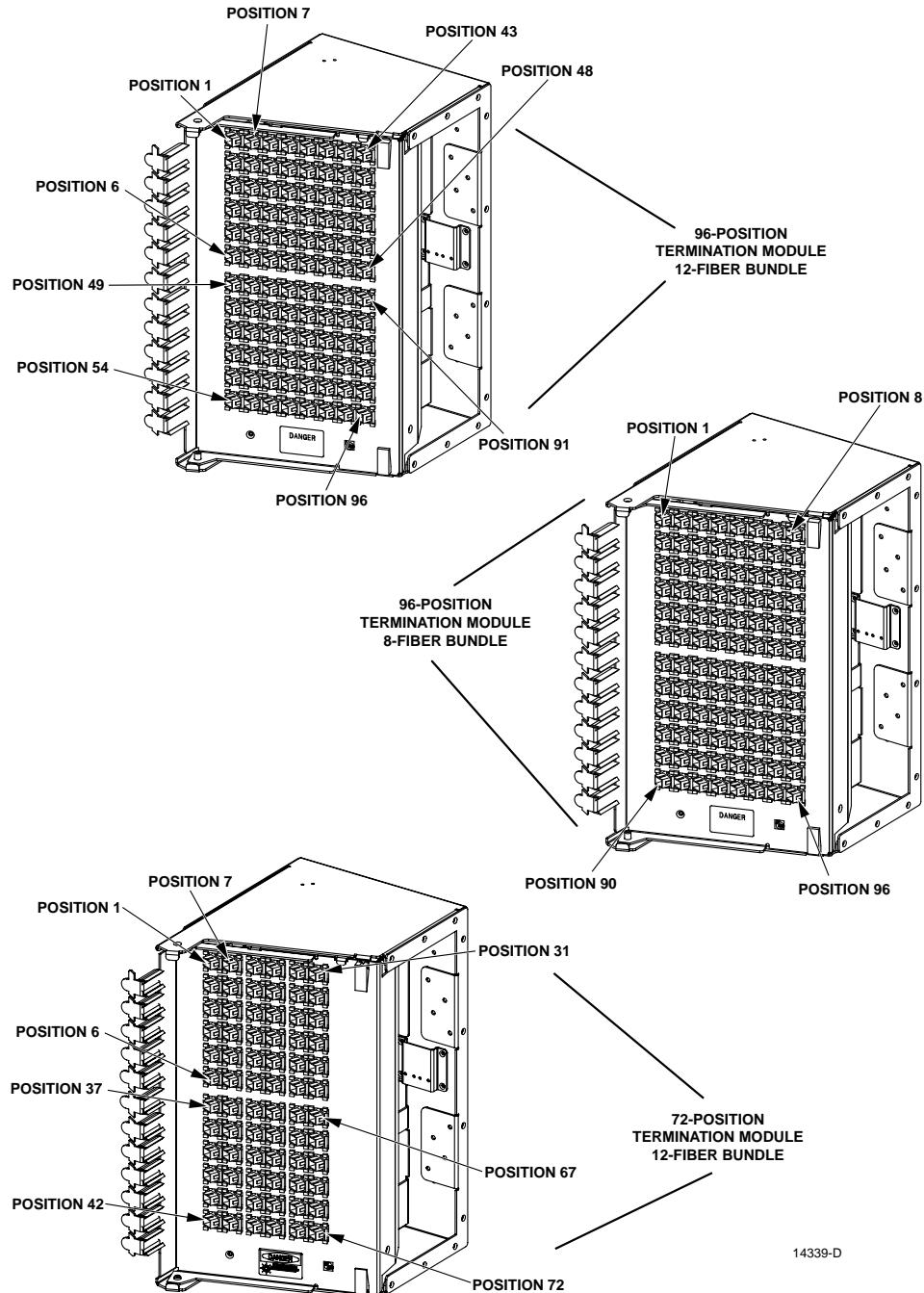
Figure 34. 96- and 72-Position Termination Module Connector Designations

4.5.1 Fiber Optic Terminal (FOT) Jumper Cable Routing

Figure 35 and Figure 36 show the cable routing method for routing FOT jumper cables in an overhead or under floor cable entry environment, respectively.

◆ **Note:** CommScope recommends the use of FOT jumper cables no larger than 2mm.

Overhead Cable Entry Environment
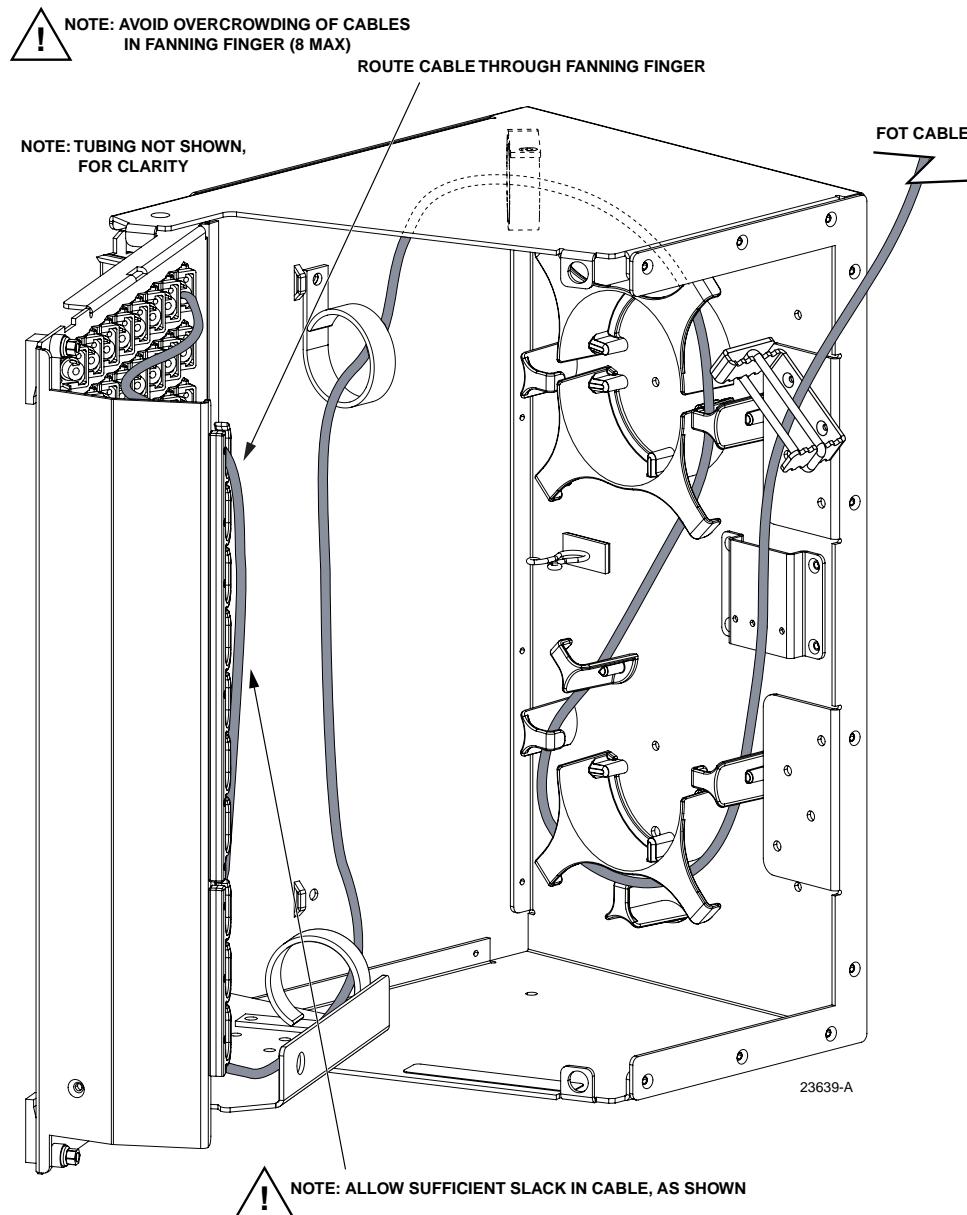
Figure 35. FOT Jumper Cable Routing

Under Floor Cable Entry Environment

▶ **Note:** CommScope recommends the use of FOT jumper cables no larger than 2mm.

⚠ NOTE: AVOID OVERCROWDING OF CABLES
IN FANNING FINGER (8 MAX)

ROUTE CABLE THROUGH FANNING FINGER

NOTE: TUBING NOT SHOWN,
FOR CLARITY

23640-A

FOT CABLE

⚠ NOTE: ALLOW SUFFICIENT SLACK IN CABLE, AS SHOWN
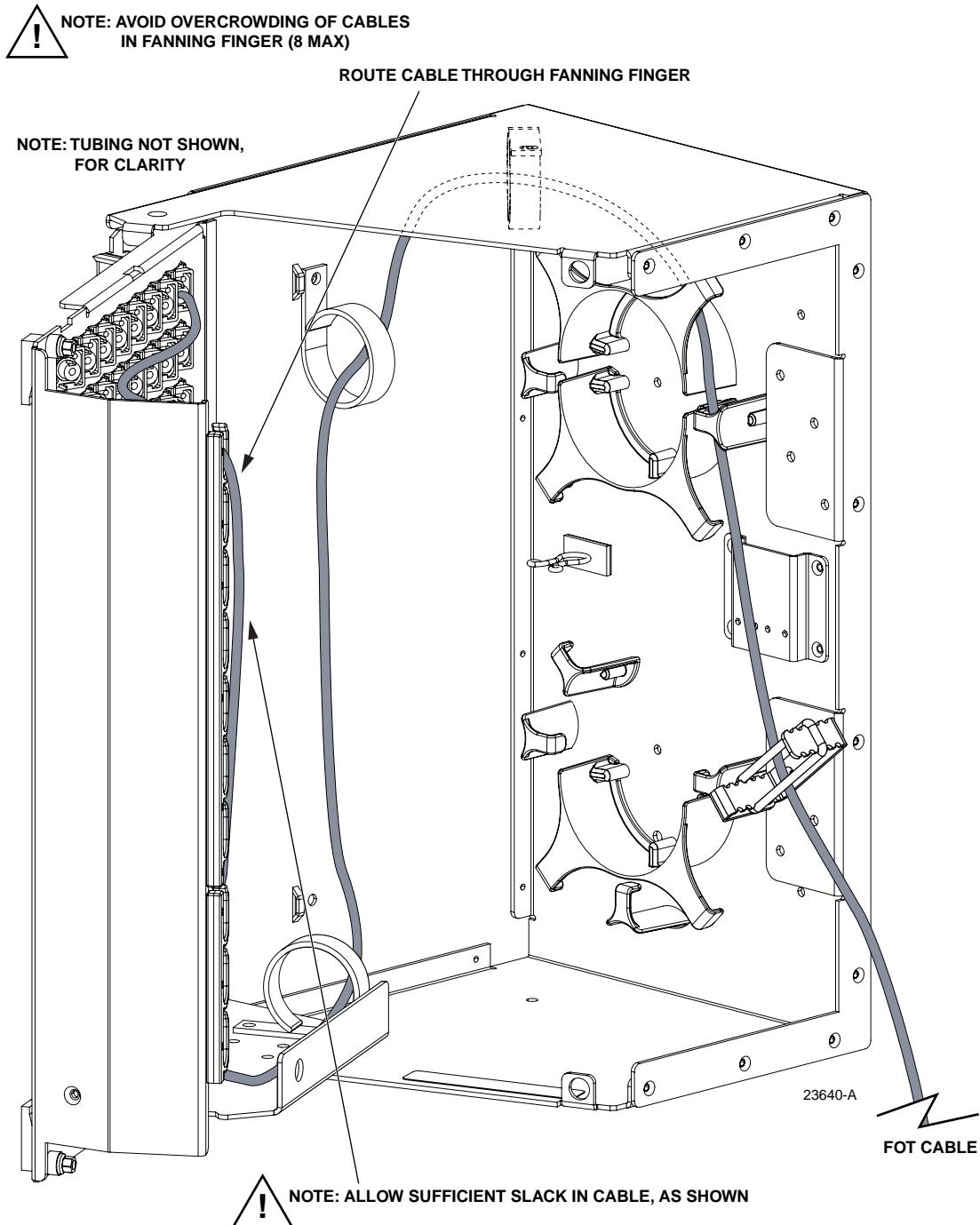
Figure 36. FOT Jumper Cable Routing

4.5.2   IFC Ribbon Cable

Figure 37, Figure 38, and Figure 39 show the cable routing method for IFC ribbon fiber cables in an above or below cable entry environment, respectively.

Overhead Cable Entry Environment (Cables Routed to Top Half of Panel)
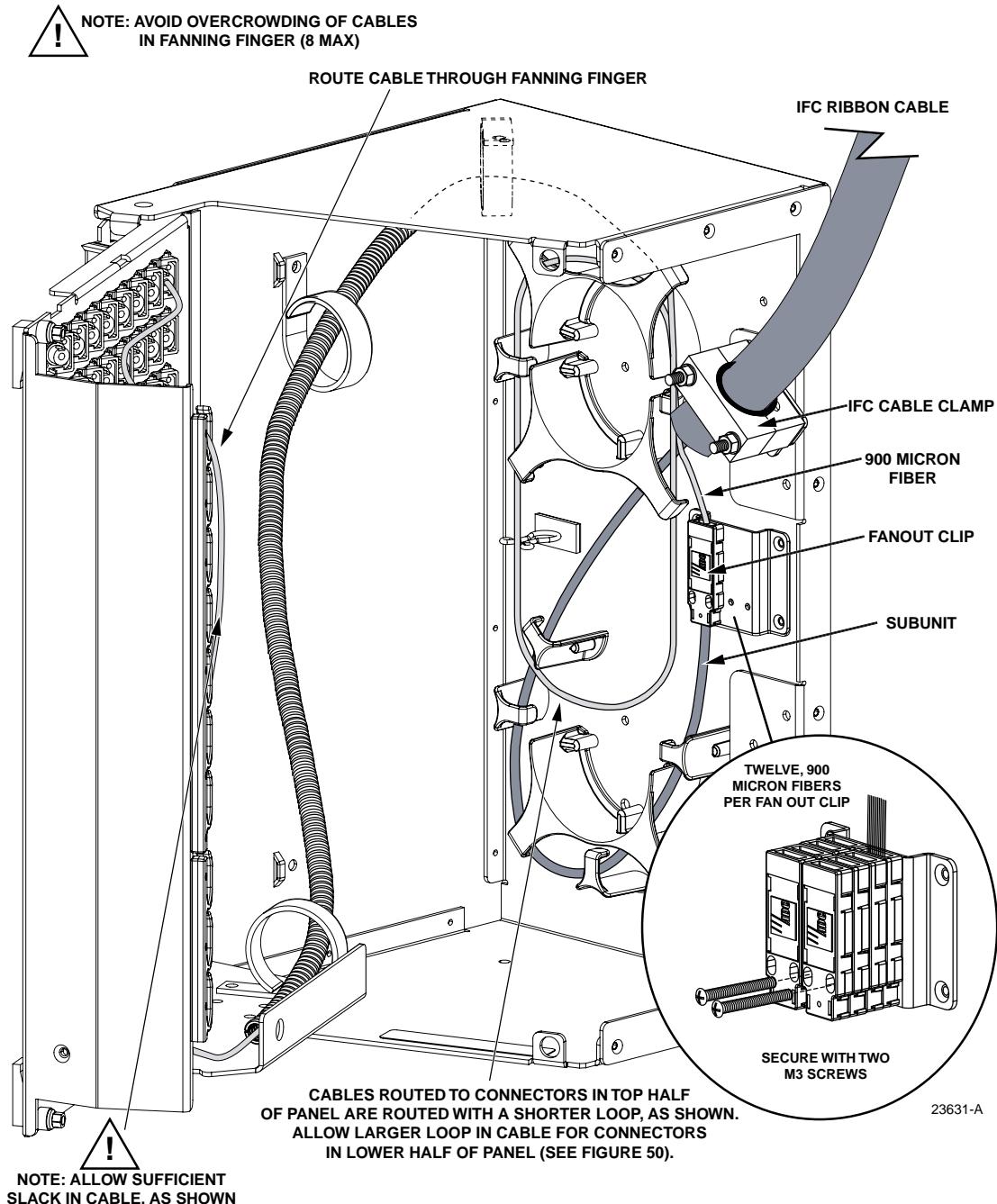
Figure 37. IFC Ribbon Cable Routing (Cables Routed to Top Half of Panel)

Overhead Cable Entry Environment (Cables Routed to Bottom Half of Panel)

⚠️ NOTE: AVOID OVERCROWDING OF CABLES
IN FANNING FINGER (8 MAX)

IFC RIBBON CABLE

IFC CABLE CLAMP

900 MICRON
FIBER

FANOUT CLIP

SUBUNIT

TWELVE, 900
MICRON FIBERS
PER FAN OUT CLIP

SECURE WITH TWO
M3 SCREWS

23632-A

CABLES ROUTED TO CONNECTORS IN LOWER HALF
OF PANEL ARE ROUTED WITH A LARGER LOOP, AS SHOWN.
ALLOW SHORTER LOOP IN CABLE FOR CONNECTORS
IN UPPER HALF OF PANEL.
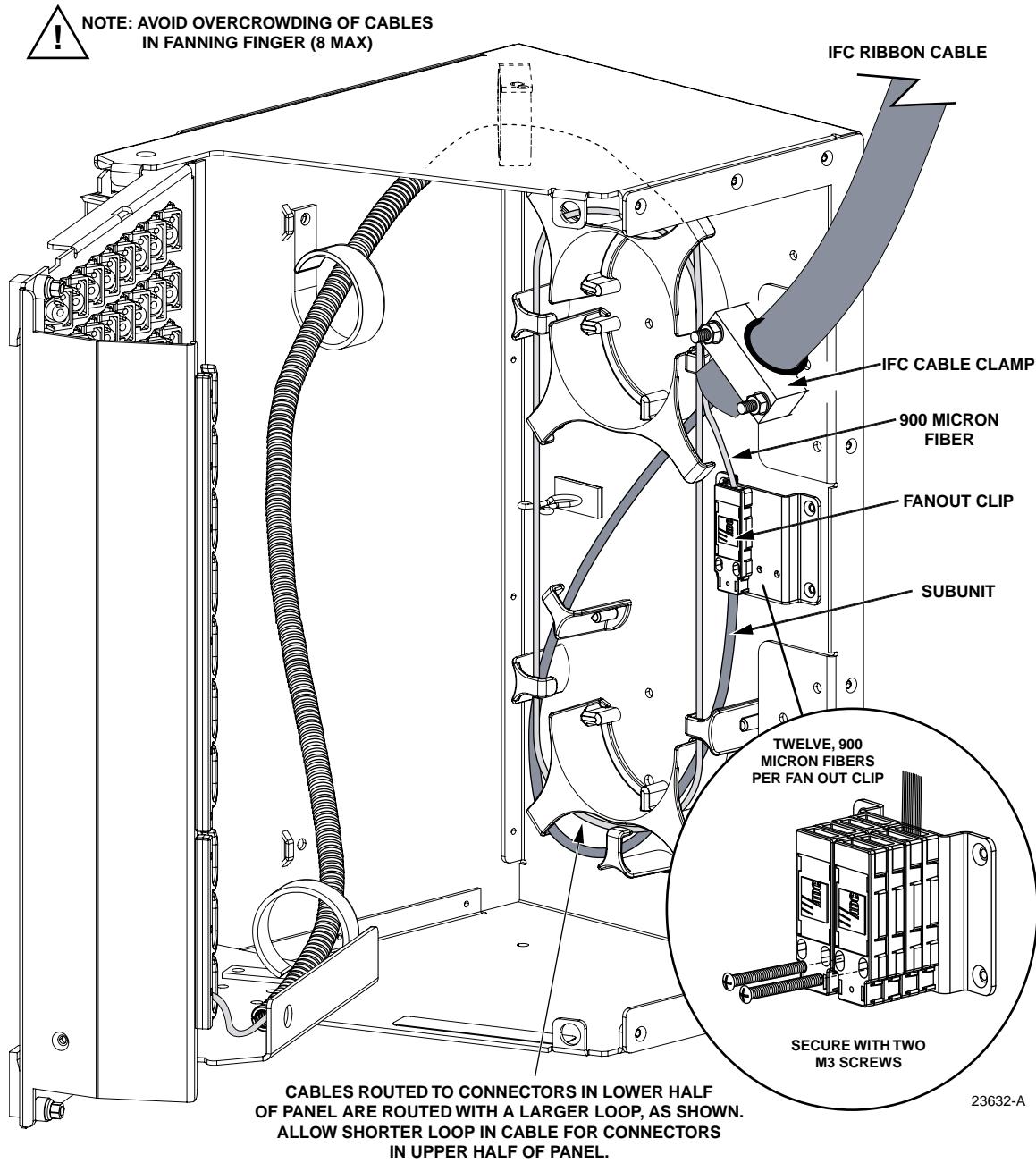
Figure 38. IFC Fiber Routing (Cables Routed to Bottom Half of Panel)

Under Floor Cable Entry Environment

NOTE: AVOID OVERCROWDING OF CABLES IN FANNING FINGER (8 MAX)

TWELVE, 900 MICRON FIBERS PER FAN OUT CLIP

SECURE WITH TWO M3 SCREWS

900 MICRON FIBER

FANOUT CLIP

SUBUNIT

IFC CABLE CLAMP

CABLES ROUTED TO CONNECTORS IN LOWER HALF OF PANEL ARE ROUTED WITH A LARGER LOOP, AS SHOWN. ALLOW SHORTER LOOP IN CABLE FOR CONNECTORS IN UPPER HALF OF PANEL.

IFC RIBBON CABLE

23633-A
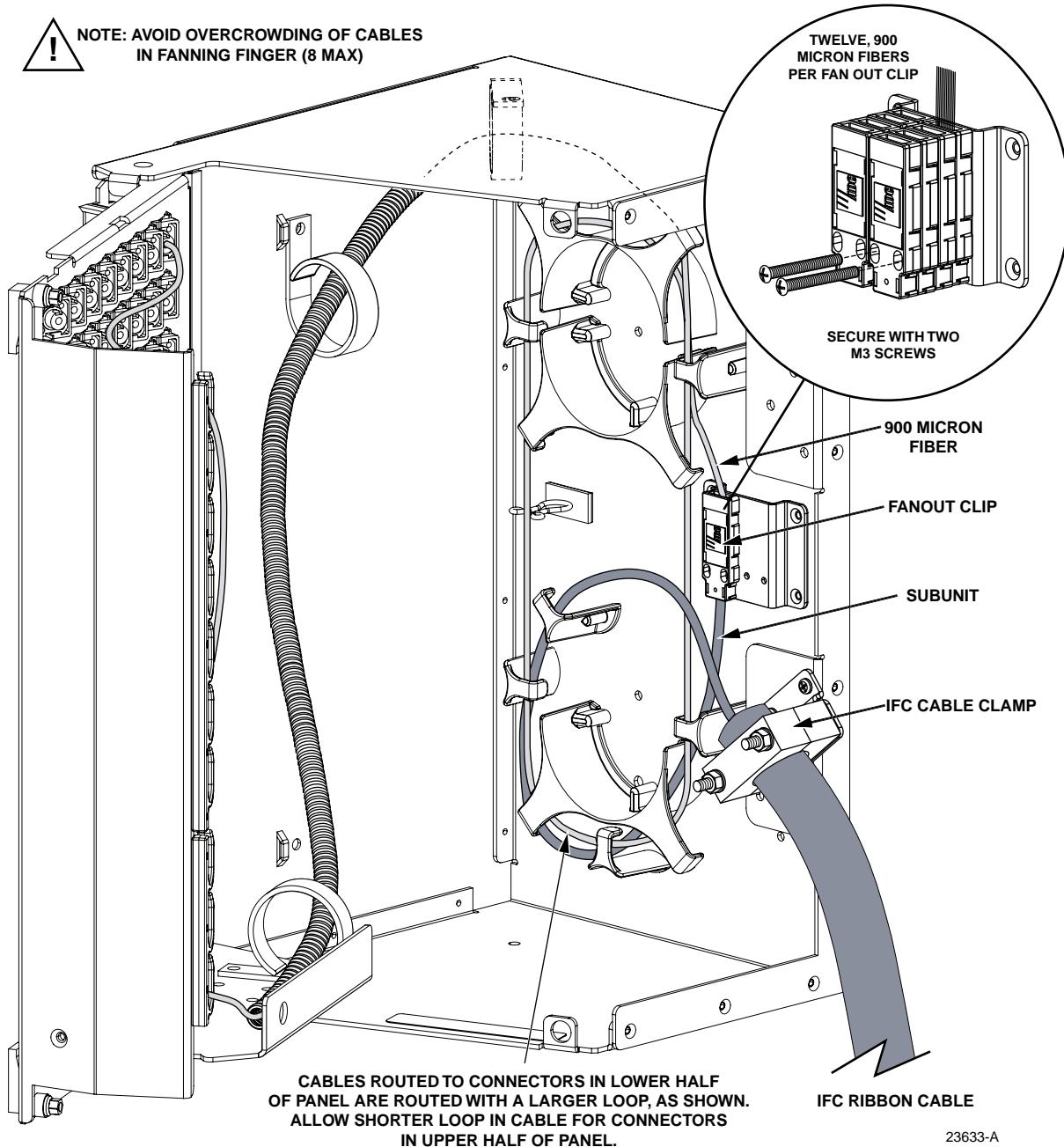
Figure 39. IFC Ribbon Cable (Under Floor Cable Entry Environment)

4.5.3   IFC Stranded Fiber Cable

Figure 40 and Figure 41 show the cable routing method for IFC stranded fiber cables in an above or below cable entry environment, respectively.

Overhead Cable Entry Environment
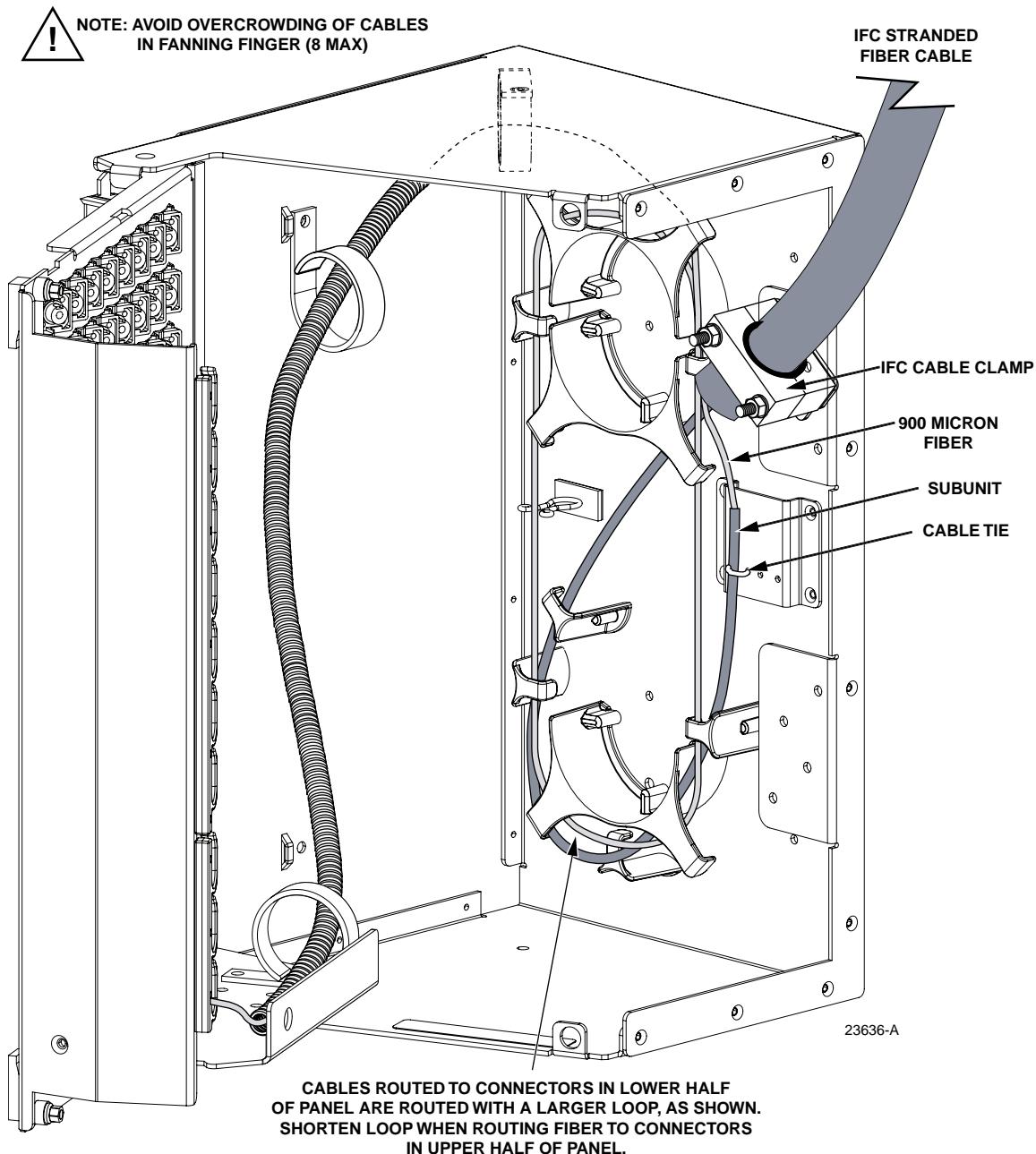
Figure 40. IFC Stranded Fiber Routing (Overhead Cable Entry Environment)

Under Floor Cable Entry Environment

⚠ **NOTE: AVOID OVERCROWDING OF CABLES IN FANNING FINGER (8 MAX)**

900 MICRON FIBER

SUBUNIT

CABLE TIE

IFC CABLE CLAMP

CABLES ROUTED TO CONNECTORS IN LOWER HALF OF PANEL ARE ROUTED WITH A LARGER LOOP, AS SHOWN. SHORTEN LOOP WHEN ROUTING FIBER TO CONNECTORS IN UPPER HALF OF PANEL.

IFC STRANDED FIBER CABLE

23635-A
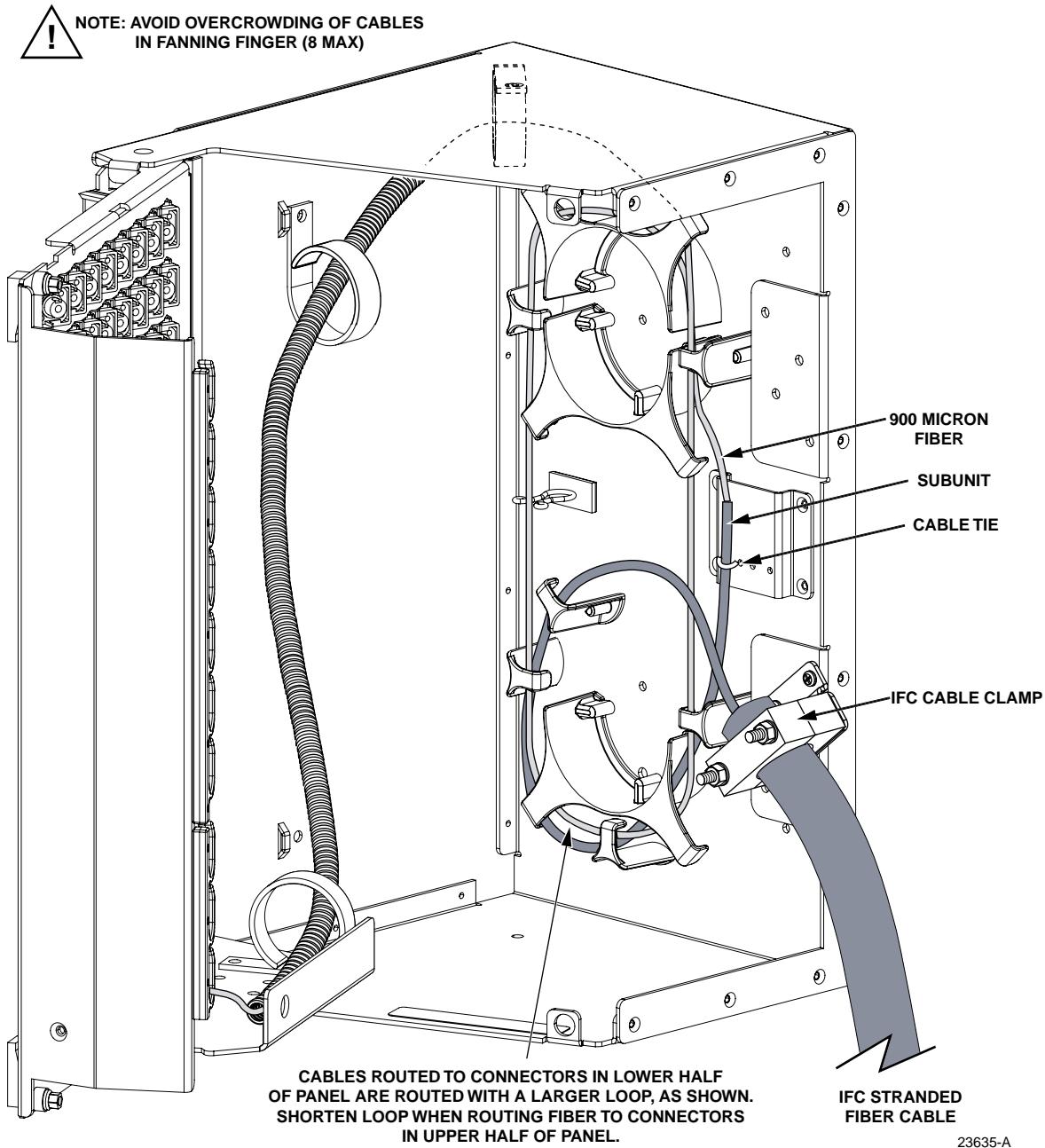
Figure 41. IFC Stranded Fiber Routing (Under Floor Cable Entry Environment)

4.5.4   12-Fiber IFC Pigtails With Oval Tubes

Figure 42 shows the cable routing method for 12-fiber ribbon IFC pigtails with oval tubes. An oval tube is placed over each 12-fiber ribbon. The oval tube protects the ribbon fibers between the splice tray panel and the termination module.

⚠ NOTE: AVOID OVERCROWDING OF CABLES IN FANNING FINGER (8 MAX)

TWELVE, 250 MICRON FIBERS PER FAN OUT CLIP

SECURE WITH TWO M3 SCREWS

250 MICRON FIBER (1 FIBER SHOWN FOR CLARITY

FANOUT CLIP

SUBUNIT

23638-A

CABLES ROUTED TO CONNECTORS IN LOWER HALF OF PANEL ARE ROUTED WITH A LARGER LOOP, AS SHOWN. ALLOW SHORTER LOOP IN CABLE FOR CONNECTORS IN UPPER HALF OF PANEL.

12-FIBER RIBBON WITH OVAL TUBES

Figure 42. 12-Fiber IFC Pigtails With Oval Tubes

4.5.5   12-Fiber Pigtails

Figure 43 shows the cable routing procedure for 12-fiber pigtails.

⚠ NOTE: AVOID OVERCROWDING OF CABLES
IN FANNING FINGER (8 MAX)

900 MICRON
FIBER

SUBUNIT

CABLE TIE

CABLES ROUTED TO CONNECTORS IN LOWER HALF
OF PANEL ARE ROUTED WITH A LARGER LOOP, AS SHOWN.
SHORTEN LOOP WHEN ROUTING FIBER TO CONNECTORS
IN UPPER HALF OF PANEL.

12-FIBER PIGTAILS

23637-A
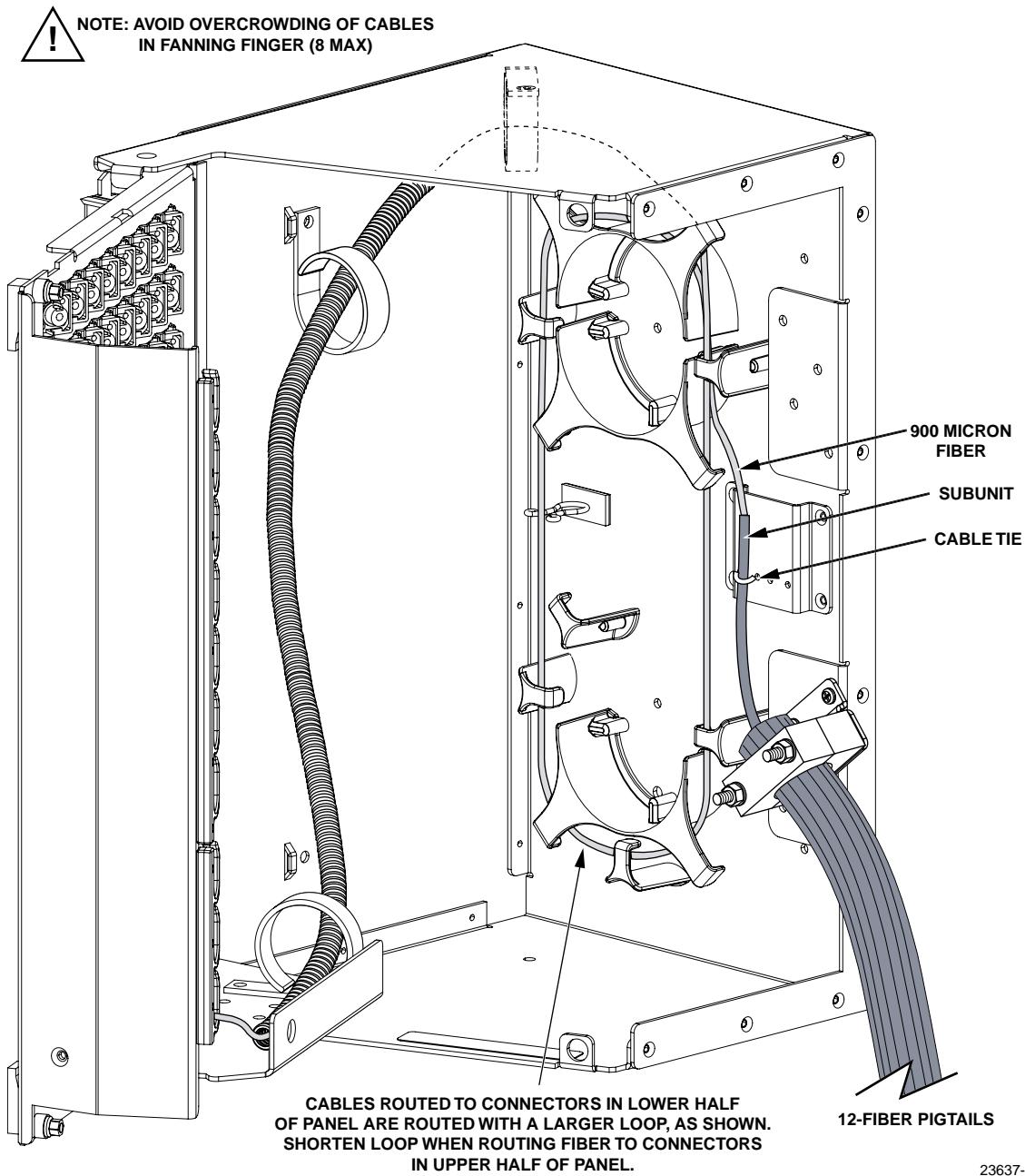
Figure 43. 12-Fiber Pigtails

5   JUMPER CABLE ROUTING

This section provides jumper cable routing instructions for cross-connect and interconnect configurations (overhead and under floor cable entry environments) in single and multiple bay lineups. Refer to Table 1 for jumper cable length.

Table 1. Jumper Cable Length

NUMBER OF BAYS (CABLE TROUGHS)	JUMPER CABLE LENGTH (M)
1	6
2	7
3	7
4	8
5	8

5.1   Cross-Connect Jumper Cable Routing

Figure 44, Figure 45, and Figure 46 show the procedure for routing cross-connect jumper cables in an OMX bay.

1

CONNECT ONE END
OF JUMPER CABLE
TO DESIRED CIRCUIT

2

ROUTE CABLE THROUGH
RESPECTIVE CABLE
FINGER AND DOWN
TO BOTTOM RACK, VIA
VERTICAL CABLE
GUIDE

VERTICAL CABLE
GUIDE

14348-C
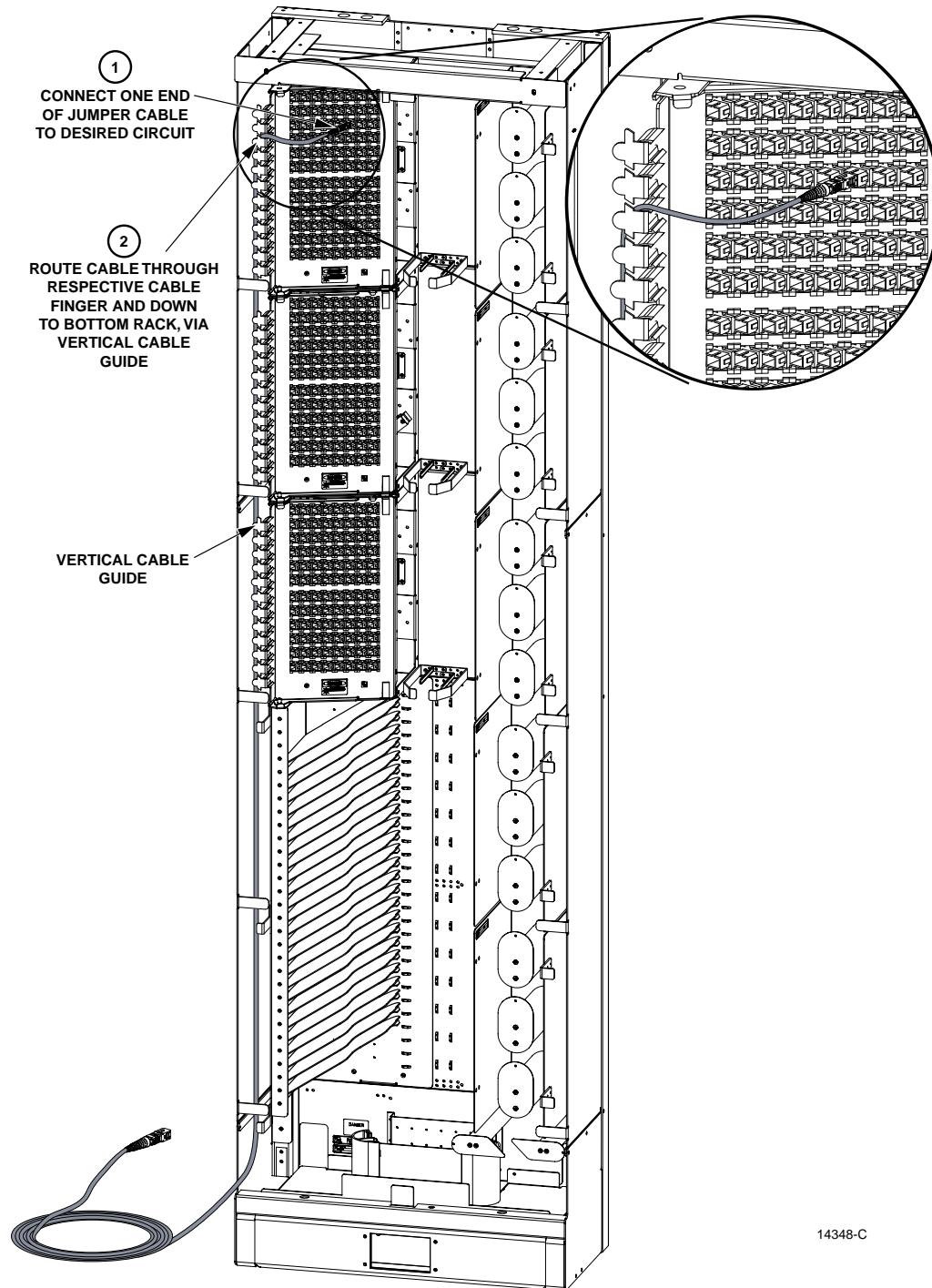
Figure 44. Cross-Connect Jumper Cable Routing (Steps 1 and 2)

Cross-Connect Jumper Cable Routing, Continued (Steps 3 and 4)

VERTICAL CABLE
GUIDE

(3)

CONNECT OTHER END
OF JUMPER CABLE
TO DESIRED CIRCUIT

(4)

ROUTE CABLE THROUGH
RESPECTIVE CABLE
FINGER AND DOWN
TO BOTTOM OF RACK,
VIA VERTICAL CABLE
GUIDE

14349-C
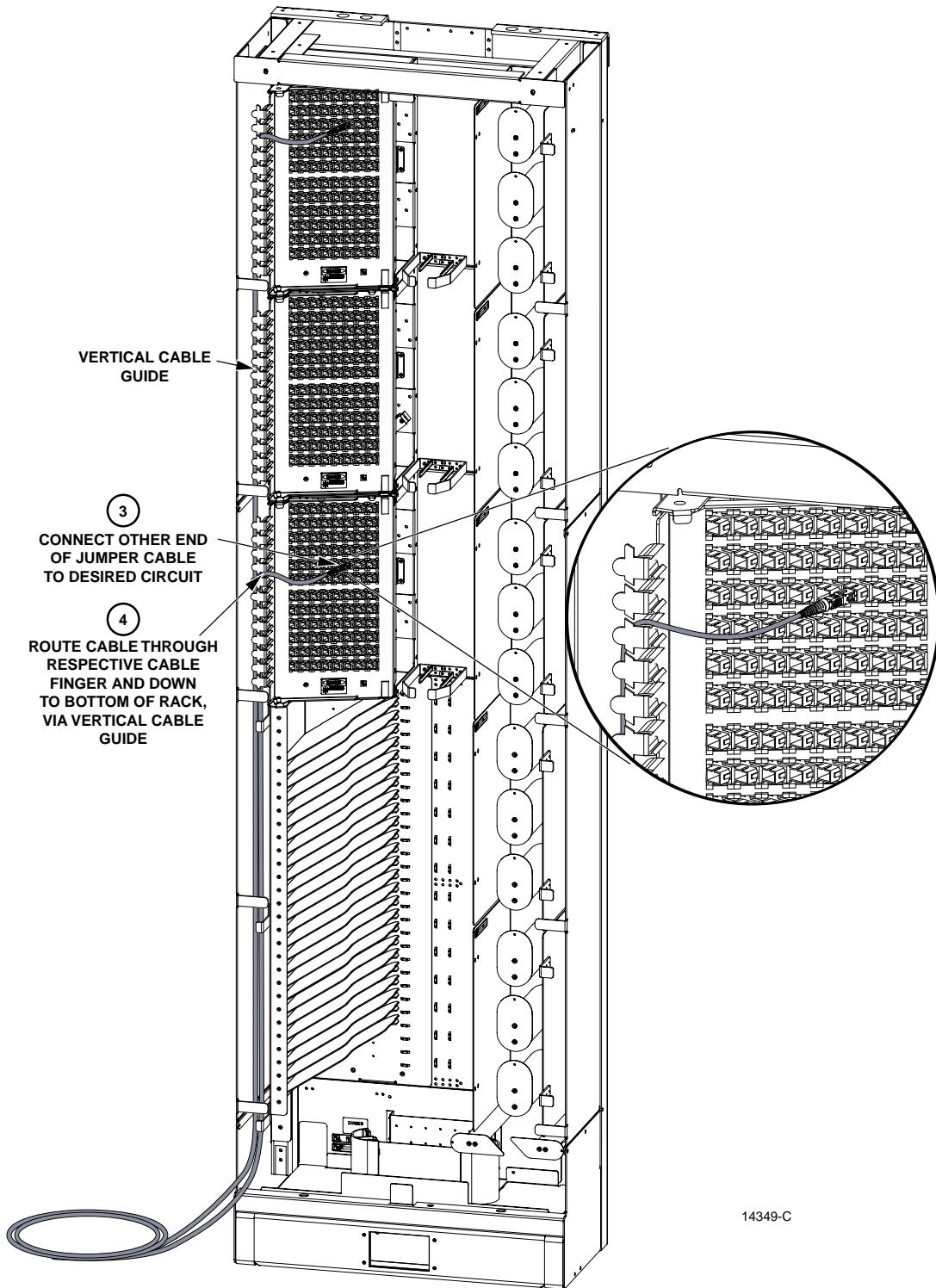
**Figure 45. Cross-Connect Jumper Cable Routing (Steps 3 and 4)**

Cross-Connect Jumper Cable Routing, Continued (Step 5)

5

TAKE UP SLACK IN CABLE
BY PLACING CABLE OVER
RESPECTIVE SPOOL ON
JUMPER STORAGE
MODULE

NOTE: CABLE ROUTING SHOWN FOR
REFERENCE. SLIDE CABLE TO BACK
OF JUMPER STORAGE MODULE

ROUTE CABLE ACROSS
CABLE TROUGH

14350-C
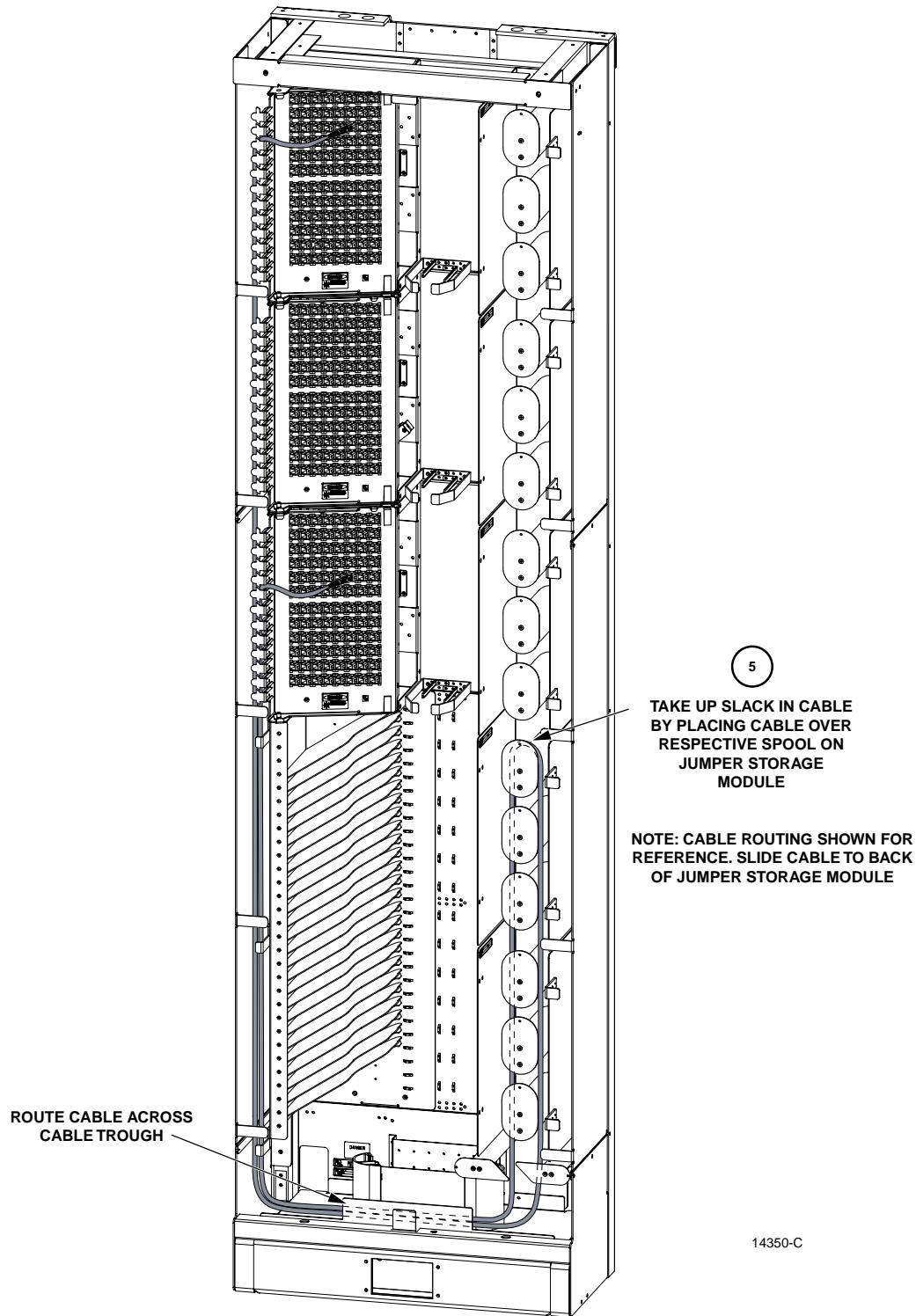
Figure 46. Cross-Connect Jumper Cable Routing (Step 5)

5.2   Interconnect Jumper Cable Routing

5.2.1   Overhead Cable Entry Environment (Steps 1 and 2)
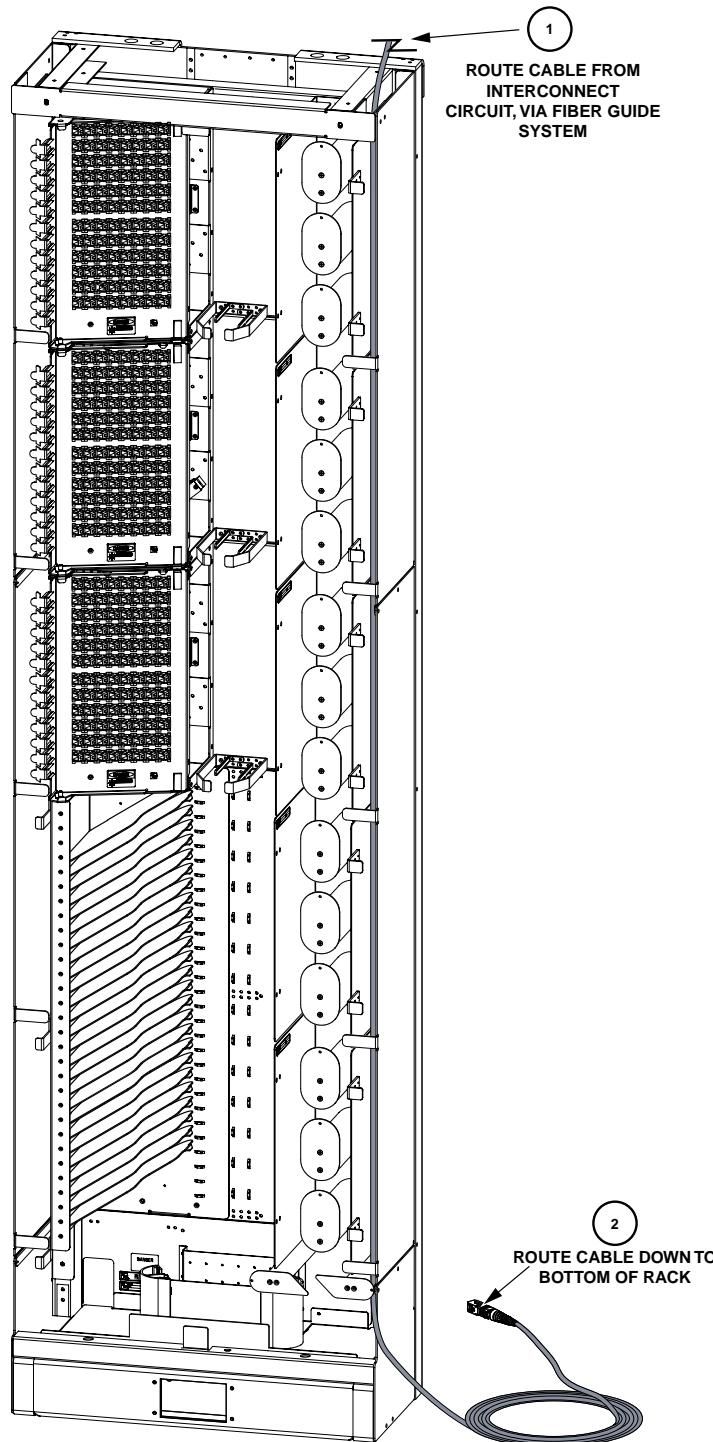
Figure 47. Interconnect Jumper Cable Routing (Steps 1 and 2)

Overhead Cable Entry Environment, Continued (Step 3)

3

CONNECT END OF JUMPER
CABLE AND ROUTE DOWN
SIDE OF FRAME, VIA
VERTICAL CABLE GUIDE

VERTICAL CABLE GUIDE

NOTE: ROUTE CABLE
ACROSS CABLE TROUGH

16806-A
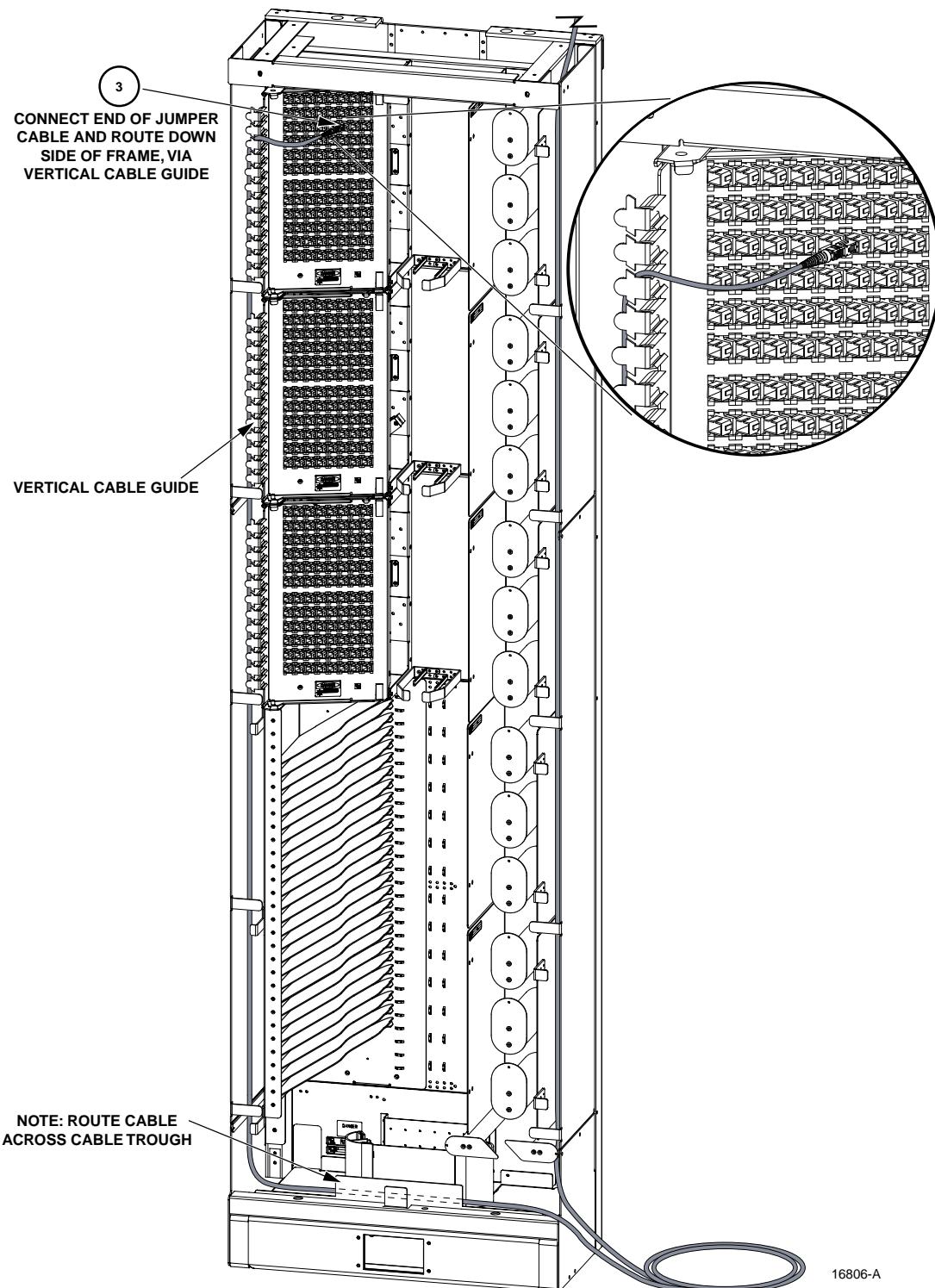
Figure 48. Interconnect Jumper Cable Routing (Step 3)

Overhead Cable Entry Environment, Continued (Steps 4 and 5)

4

**TAKE UP SLACK IN CABLE
BY PLACING CABLE OVER
RESPECTIVE SPOOL ON
JUMPER STORAGE
MODULE**

**NOTE: CABLE ROUTING SHOWN FOR
REFERENCE. SLIDE CABLE TO BACK
OF JUMPER STORAGE MODULE**

**NOTE: ROUTE CABLE UNDER
RADIUS LIMITER AND UP
THROUGH VERTICAL
CABLE GUIDE**

16807-A
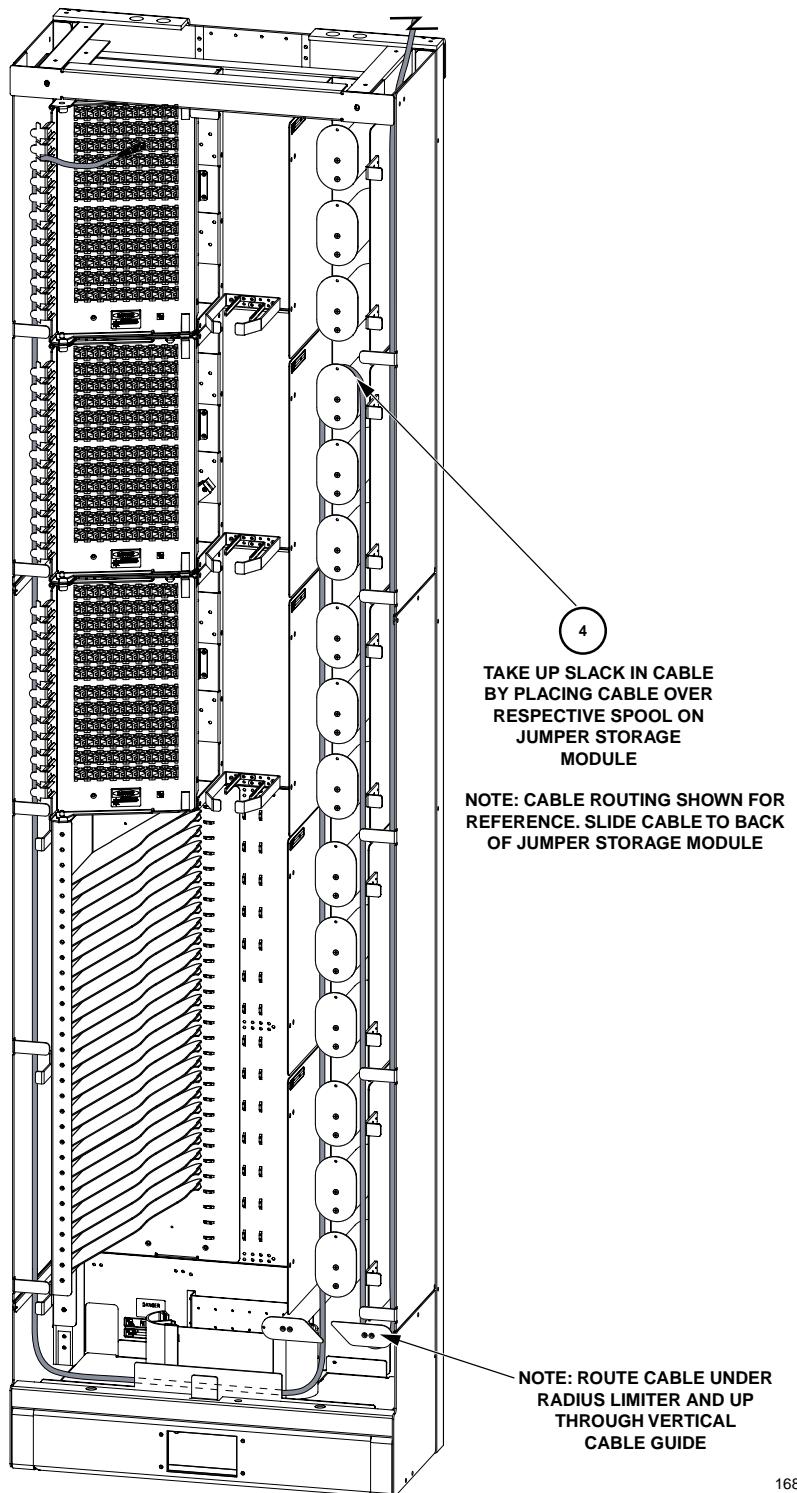
Figure 49. Interconnect Jumper Cable Routing (Steps 4 and 5)

5.2.2   Under Floor Cable Entry Environment (Option 1)

2

**CONNECT END OF JUMPER
CABLE AND ROUTE DOWN
SIDE OF FRAME, VIA
VERTICAL CABLE GUIDE**

VERTICAL CABLE GUIDE

4

**TAKE UP SLACK IN CABLE
BY PLACING CABLE OVER
RESPECTIVE SPOOL ON
JUMPER STORAGE
MODULE**

**NOTE: CABLE ROUTING SHOWN FOR
REFERENCE. SLIDE CABLE TO BACK
OF JUMPER STORAGE MODULE**

**NOTE: ROUTE CABLE TO
OUTSIDE OF SPOOL ON JUMPER
STORAGE MODULE**

3

**ROUTE CABLE ACROSS
CABLE TROUGH**

1

**ROUTE CABLE FROM INTERCONNECT
CIRCUIT, VIA OPENING IN BASE
OF FRAME**

14352-D

Figure 50. Interconnect Jumper Cable Routing (Option 1)

5.2.3   Under Floor Cable Entry Environment (Option 2)

2

**CONNECT END OF JUMPER
CABLE AND ROUTE DOWN
SIDE OF FRAME, VIA
VERTICAL CABLE GUIDE**

VERTICAL CABLE GUIDE

4

**TAKE UP SLACK IN CABLE
BY PLACING CABLE OVER
RESPECTIVE SPOOL ON
JUMPER STORAGE
MODULE**

**NOTE: CABLE ROUTING SHOWN FOR
REFERENCE. SLIDE CABLE TO BACK
OF JUMPER STORAGE MODULE**

**NOTE: REMOVE LOWER SIDE PANEL AND
PLATE TO ACCESS OPENING FOR CABLE
ENTRANCE/EXIT IN FRAME**

**LOWER
SIDE PANEL**

PLATE

3

**ROUTE CABLE ACROSS
CABLE TROUGH**

1

**ROUTE CABLE FROM
INTERCONNECT
CIRCUIT**

14353-D

Figure 51. Interconnect Jumper Cable Routing (Option 2)

### 5.2.4 Interconnect Jumper Cable Routing (Single Bay With External IMP)

1 ROUTE CABLE FROM INTERCONNECT CIRCUIT, VIA FIBER GUIDE SYSTEM

4 CONNECT END OF JUMPER CABLE AND ROUTE DOWN, VIA VERTICAL CABLE GUIDE

5 TAKE UP SLACK IN CABLE BY PLACING CABLE OVER RESPECTIVE SPOOL ON IMP

VERTICAL CABLE GUIDE

NOTE: LOWER OUTSIDE IMP MUST BE REMOVED TO FIT END GUARD

16851-A

2 ROUTE CABLE DOWN, VIA VERTICAL CABLE GUIDE

3 ROUTE CABLE ACROSS CABLE TROUGH
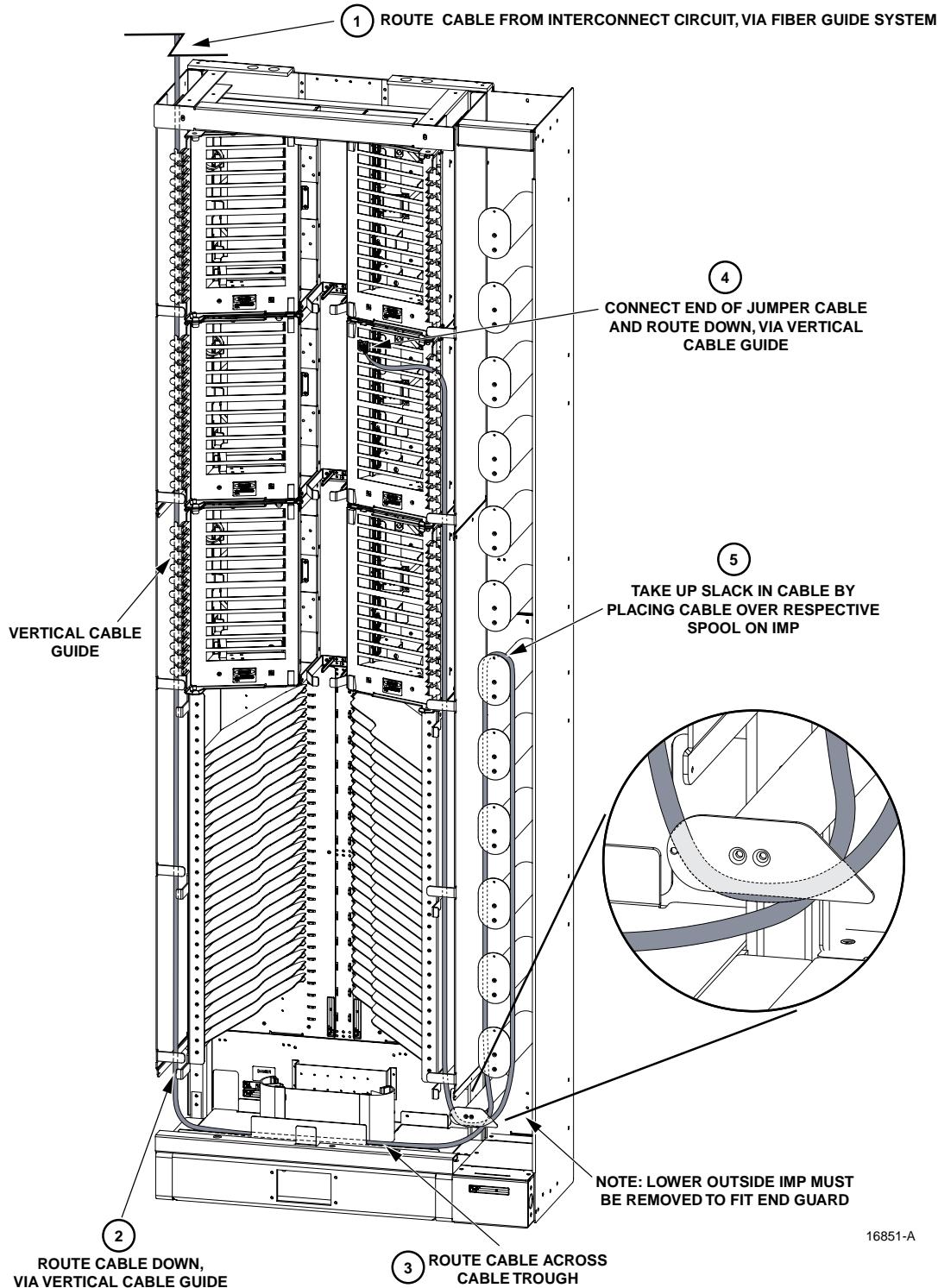
Figure 52. Jumper Cable Routing (Single Bay With External IMP)

5.2.5   Interconnect Jumper Cable Routing (Multiple Bay Lineup)
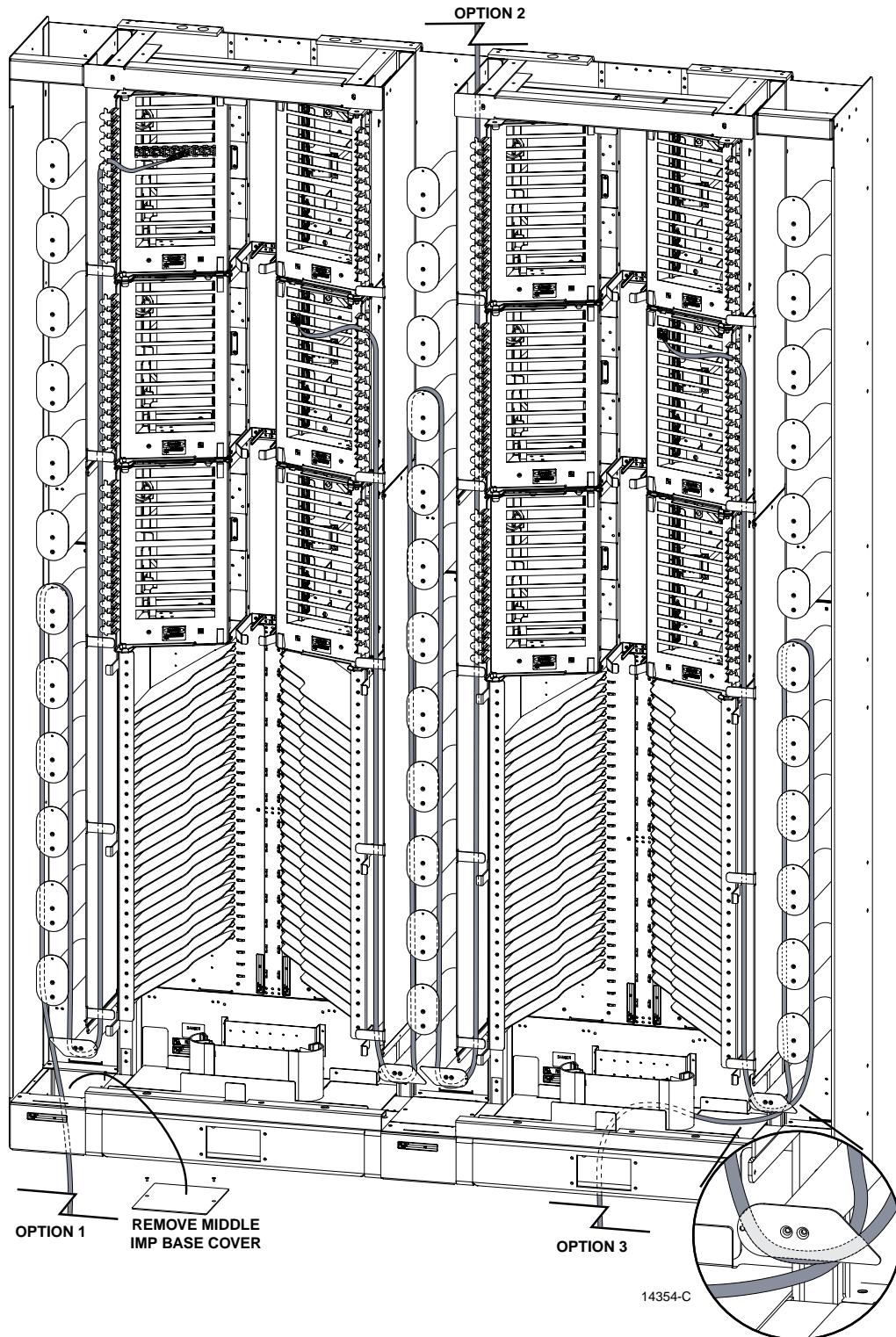

Figure 53. Interconnect Cable Routing (Multiple Bay Lineup)

6   GROUND CONNECTION

Figure 54 shows the ground connection for an overhead cable entry environment (top view) and an under floor cable entry environment (bottom view).

▶   **Note:** Remove tape to expose bare metal in grounding location. Apply bonding compound to bare metal.
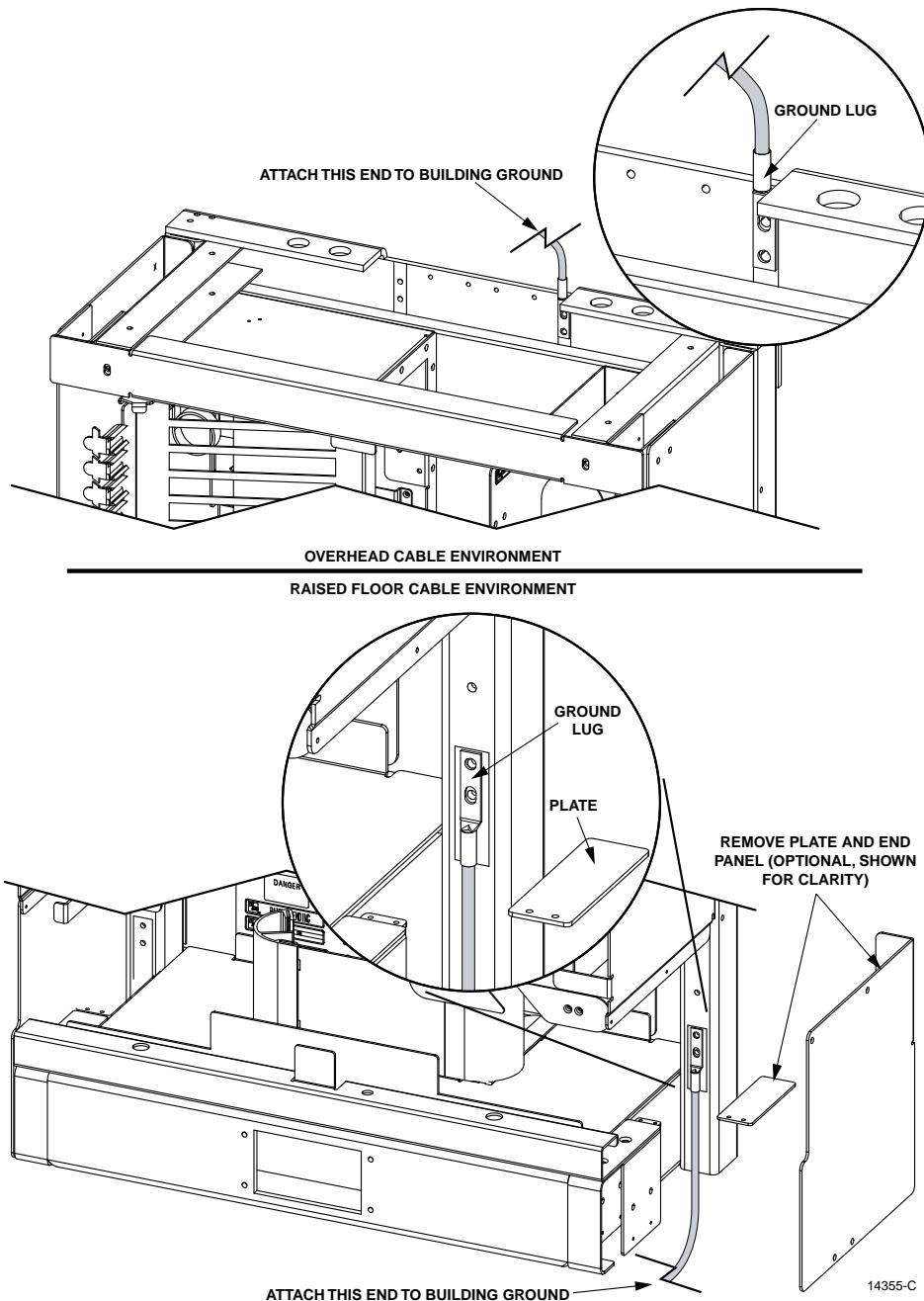
Figure 54. Rack Grounding Procedure

7   INTERBAY MANAGEMENT PANEL (IMP) MODULE INSTALLATION

Figure 55 shows the main components of the OMX IMP module.

IMP FRAME ASSEMBLY(UPPER)

SPOOL ASSEMBLY
(12)

IMP FRAME ASSEMBLY (LOWER)

CABLE
MANAGEMENT
SPOOL (2)

END IMP
BASE COVER (2)

MIDDLE IMP
BASE COVER

GUARD BOX

14356-B
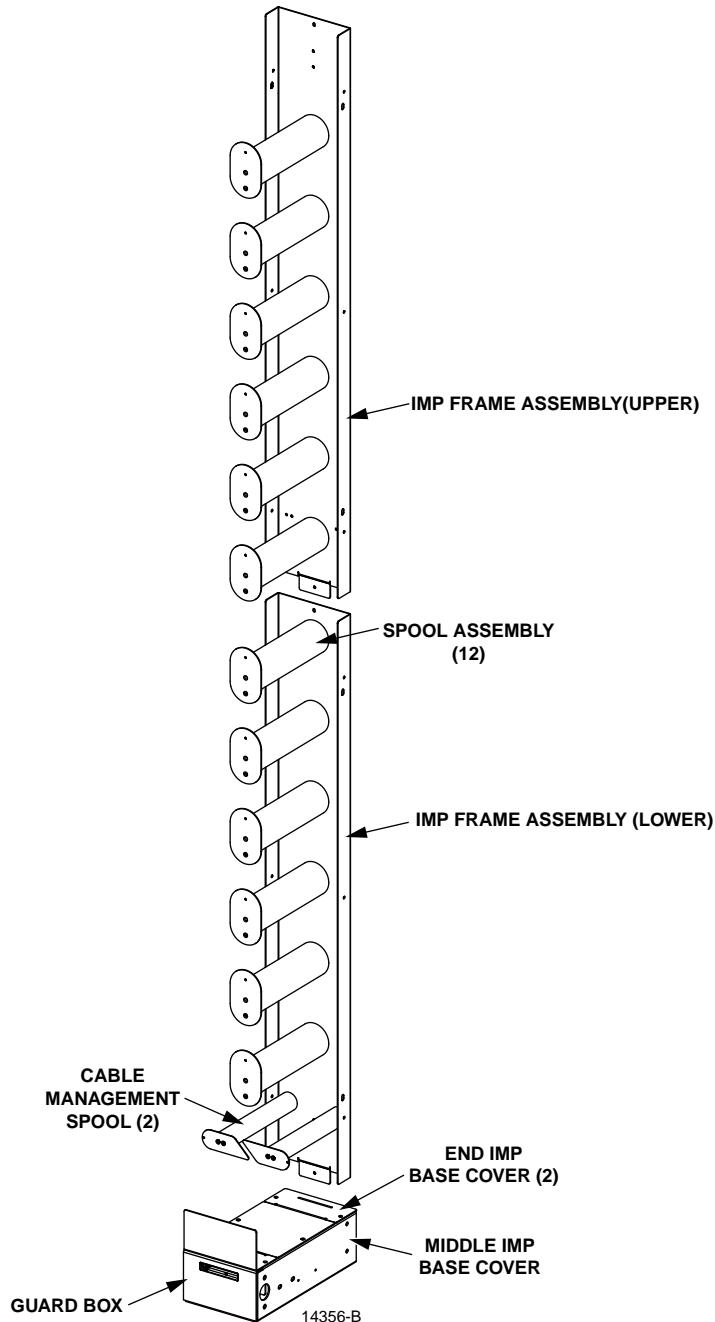
Figure 55. IMP Module Main Components

Use the following procedure.

1. Remove lower-most side panels from bay to allow for cable routing (save panels for future use), as shown Figure 56.

REMOVE LOWER SECTION OF END PANEL (2)

16688-A
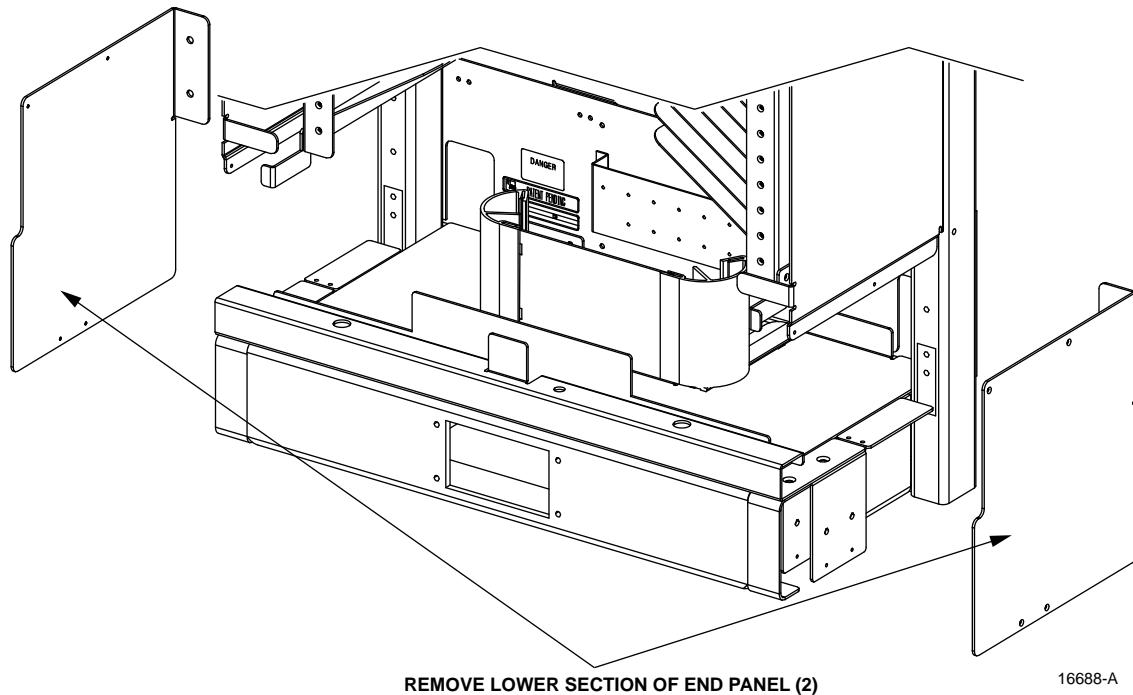
Figure 56. Remove Side Panels From Bay

2. Remove the IMP middle base cover and IMP end base cover from guard box to access the two mounting holes as shown in Figure 56.

IMP MIDDLE BASE COVER

MOUNTING HOLE LOCATIONS

GUARD BOX

14357-B
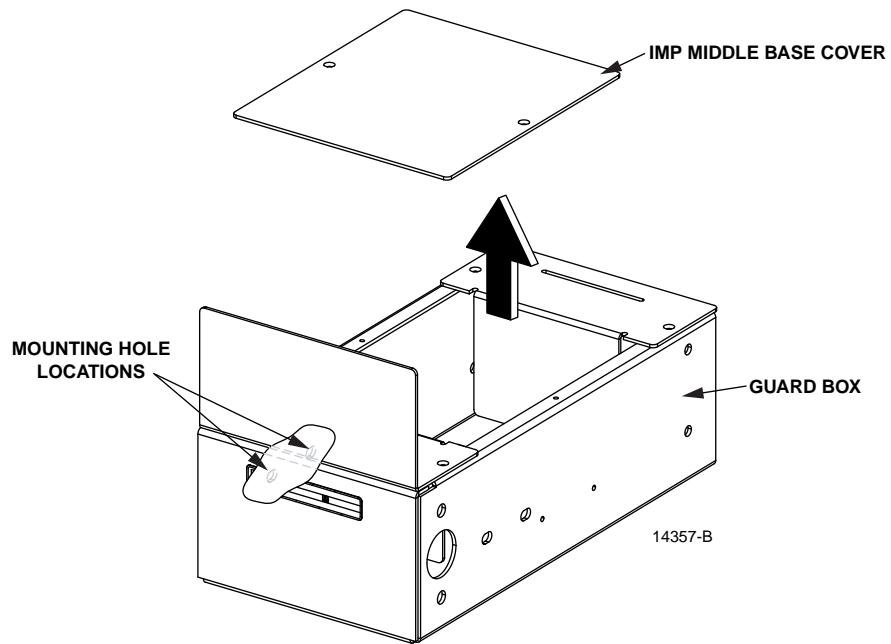
Figure 57. Remove Covers to Access Mounting

3. Attach guard box to filler panel on base of frame using two M6 screws (provided) as shown in Figure 58 (top view). Re-attach IMP middle base cover and IMP end base cover as shown in the bottom view of Figure 58.

FILLER PANEL

GUARD BOX

M6 SCREW (2)

ALIGN HOLES IN GUARD BOX
WITH HOLES IN FILLER PANEL

RE-ATTACH MIDDLE IMP
BASE COVER AND END
IMP BASE COVER
(IF REMOVED)

14358-C
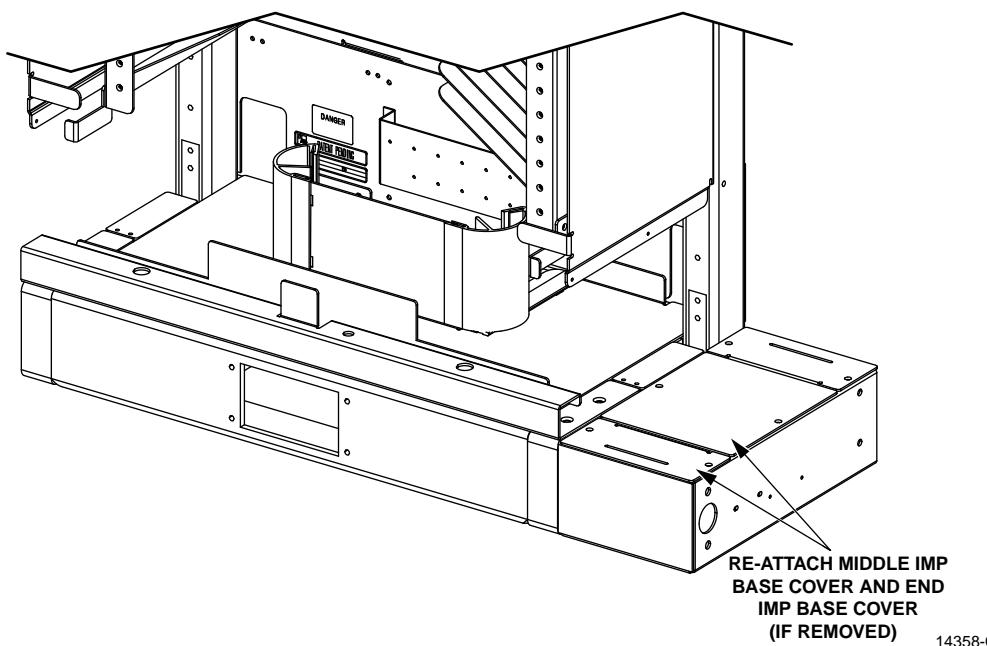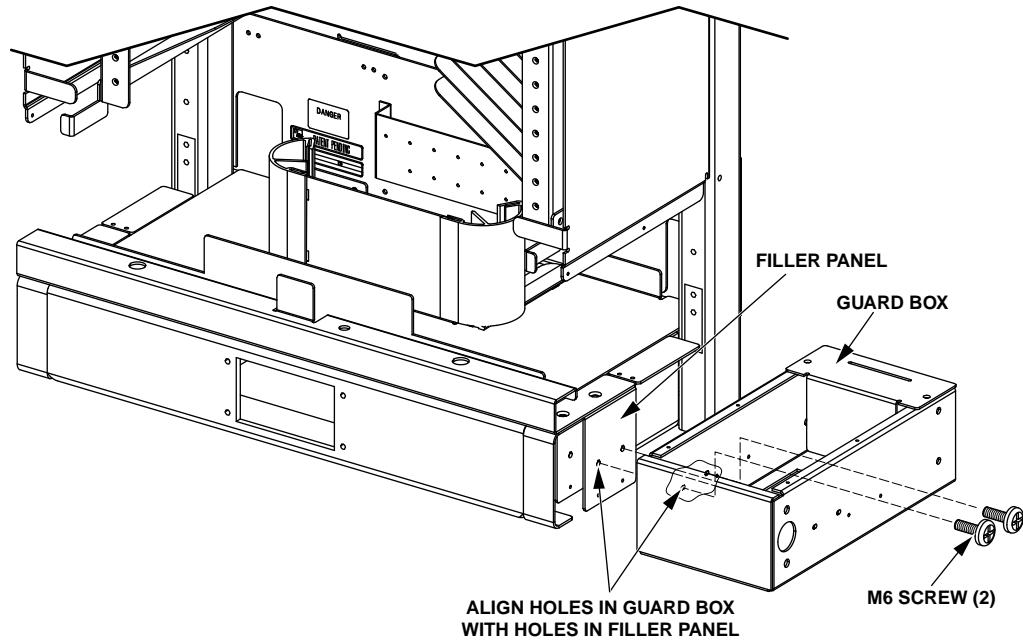
Figure 58. Attach Guard Box to Filler Panel;
Reattach IMP Middle Base Cover and IMP Base Cover

4. Place the lower IMP frame assembly into the slot in the IMP end base cover and attach to the frame using M6 screws (provided) as shown in Figure 59.

**LOWER IMP
ASSEMBLY**

**M6 SCREW (2)
(PROVIDED)**

**INSERT LOWER IMP
INTO SLOT IN IMP
END BASE COVER**
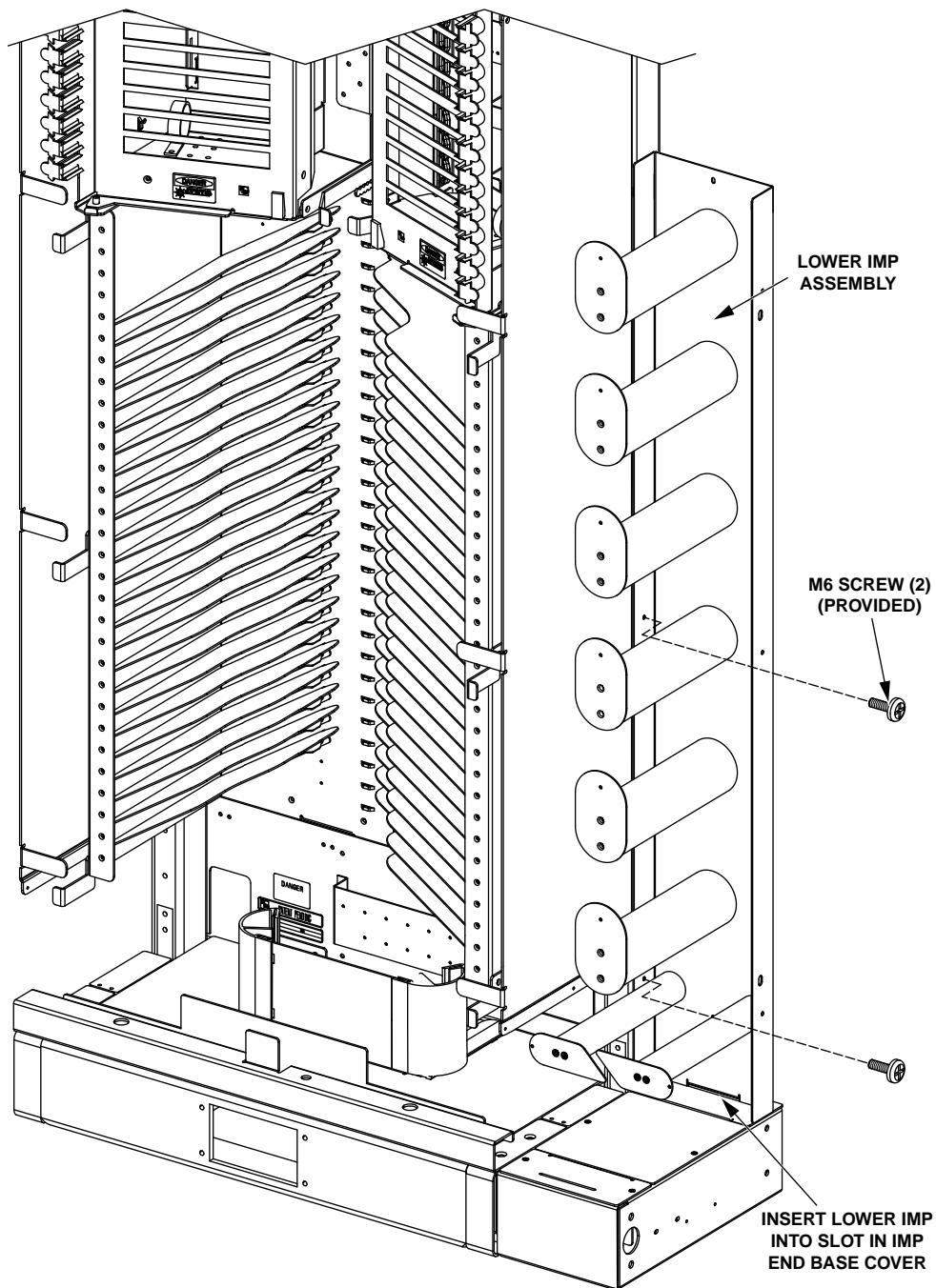
14359-D

Figure 59. Assemble Lower IMP Assembly

5. Place upper IMP assembly above lower IMP assembly and attach with M3 screw (provided). Attach upper IMP to frame using M6 screws (provided) as shown in Figure 60.

▶ **Note:** Left side IMP assembly is installed in the same manner.
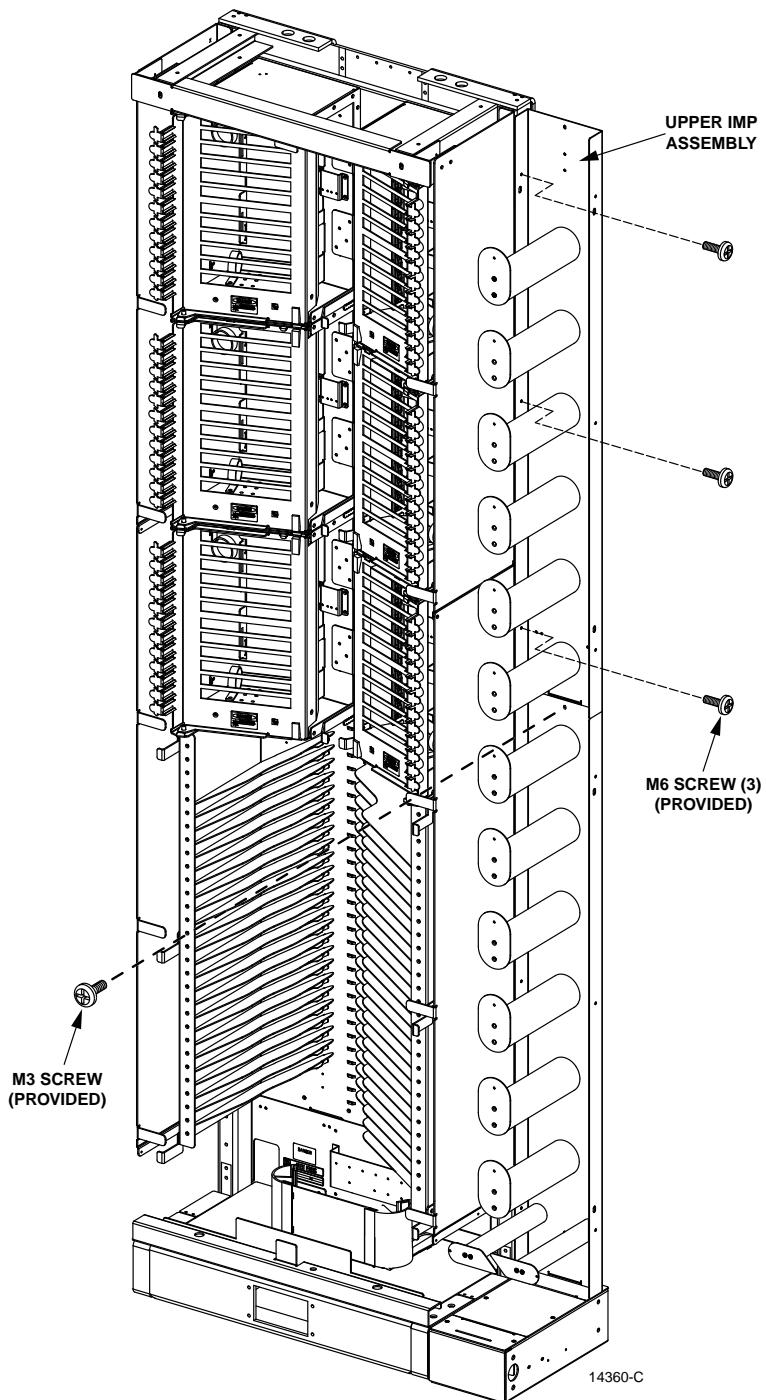

Figure 60. Attach Upper IMP Assembly

8   END GUARD ASSEMBLY

Install the end guard (right side end guard shown) as shown in Figure 61.

▶ **Note:** Left side end guard is installed in the same manner.
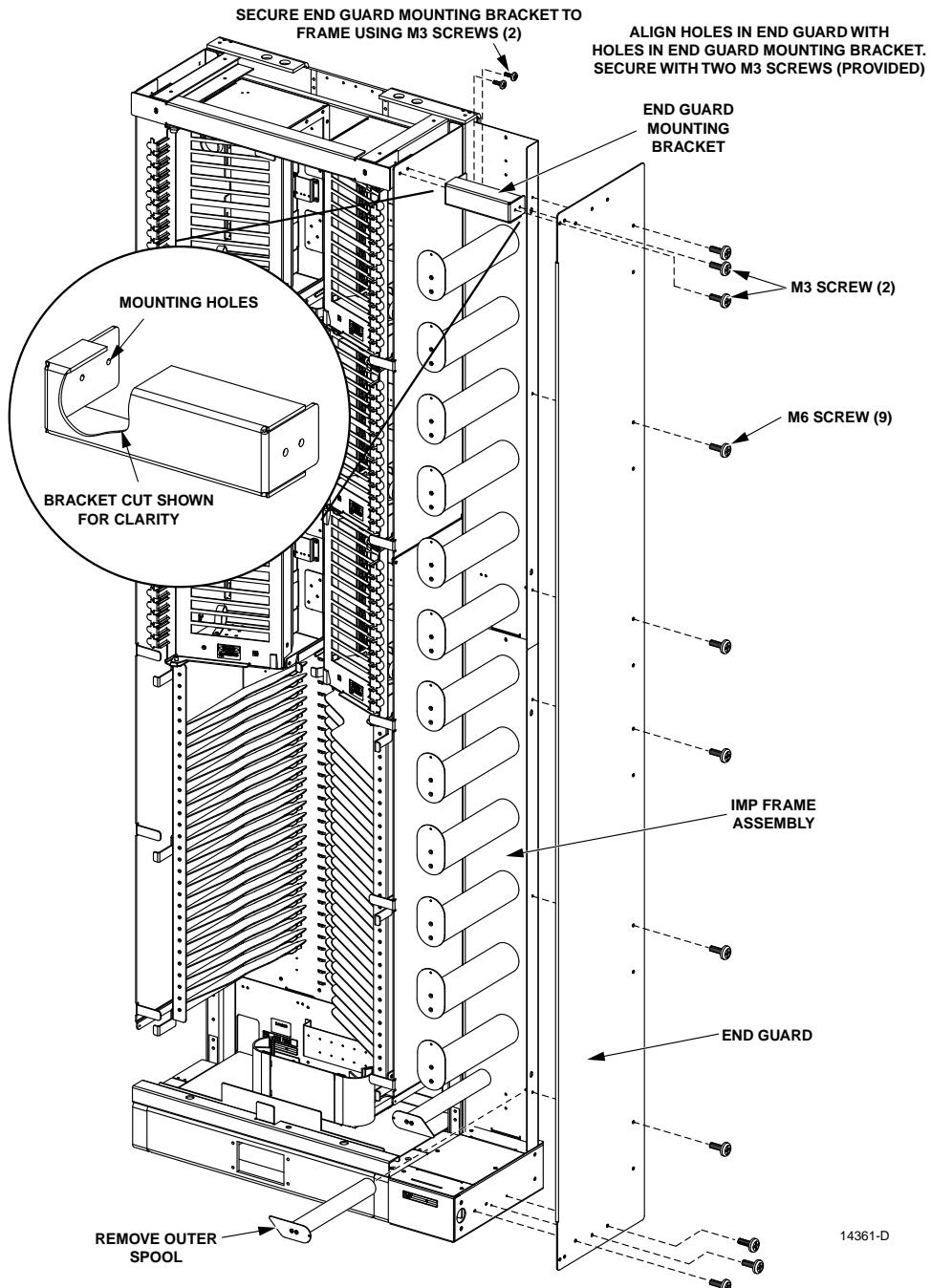
Figure 61. Right Side End Guard Assembly Installation

9   TOP COVER ASSEMBLY (ACCESSORY)

**NOTE: USE PAN HEAD SCREWS (8, PROVIDED)
TO SECURE BRUSHES TO PLATE**

BRUSHES (3)

PLATE

**NOTE: USE COUNTER SINK
SCREWS (4, PROVIDED) TO
SECURE PLATE TO FRAME**

16689-D
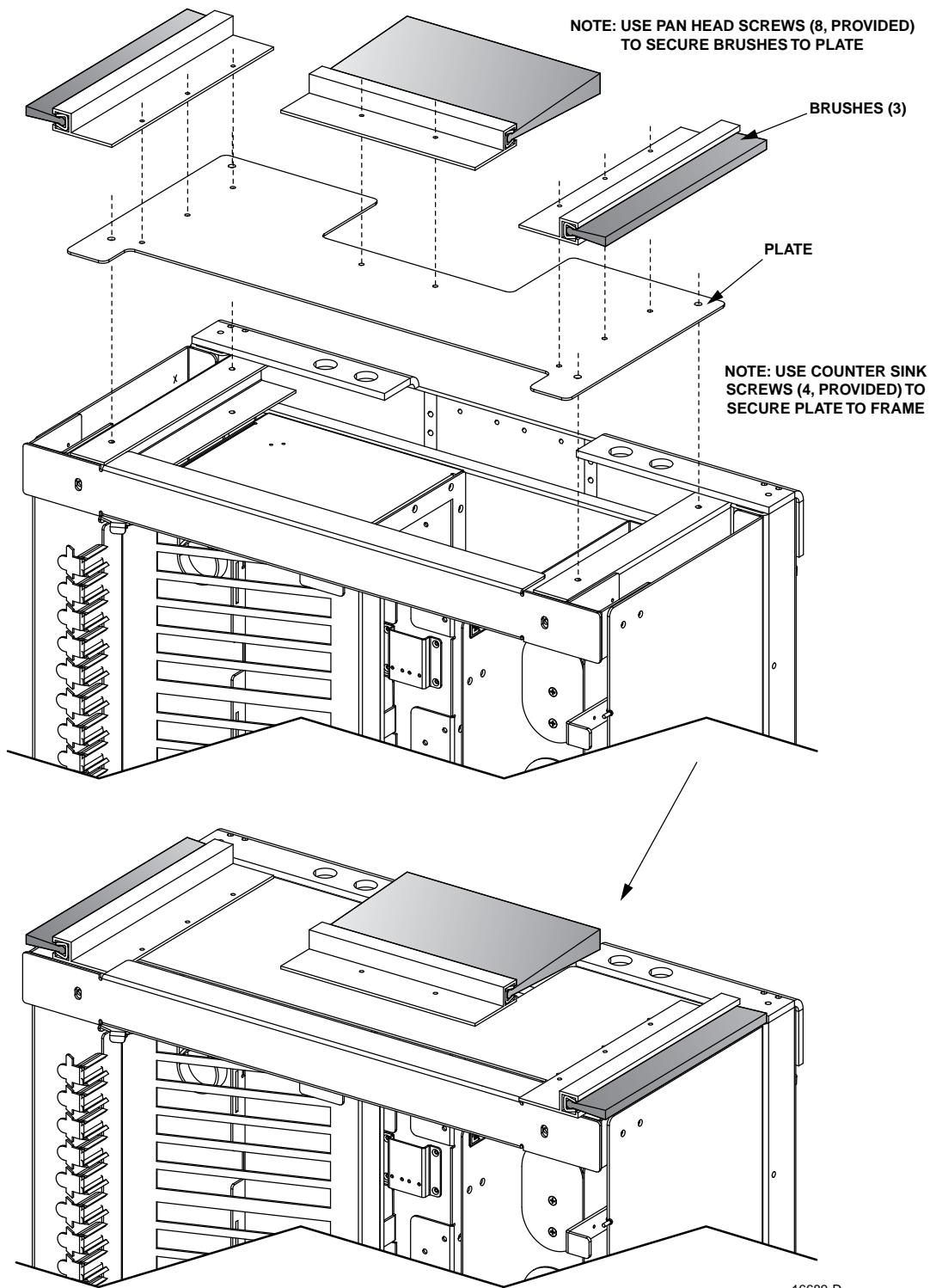
Figure 62. Top Cover Assembly (Accessory)

10 CUSTOMER INFORMATION AND ASSISTANCE

For information on products refer to:
http://www.commscope.com

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http://www.commscope.com/Support Center

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