COMMSCOPE®

FOSC-450D

INSTALLATION INSTRUCTION

TC-761-IP
Rev A, Feb 2017
www.commscope.com

Fiber Optic Splice Closure

Content

1 Introduction

The FOSC-450 is an environmentally sealed enclosure for the fiber management system that provides the function of splicing in the external network.

The FOSC-450 has provision for all cable terminations and sealing requirements.
The closure is a single ended design made of a thermoplastic material. The base and dome are sealed with a clamp and O-ring system. For cable sealing , a wrap-around block with 6 ports is used that contains a pre-installed gel profile. One can terminate 6 cables, with a diameter of minimum 9 mm and maximum 25 mm.
It can be opened and closed repeatedly without replacing or changing components.

2 General

2.1 Kit content

- Dome
- Base O-ring system
- Cable attachment plate with tower
- Gel block with trigger
- Clamp
- 2 cable retention devices
- 4 plugs for unused ports
- Silicagel
- Installation instruction
- Spacer

2.2 Tools

FACC-TUBE-STRIPPER-03	to strip loose tube

2.3 Accessories

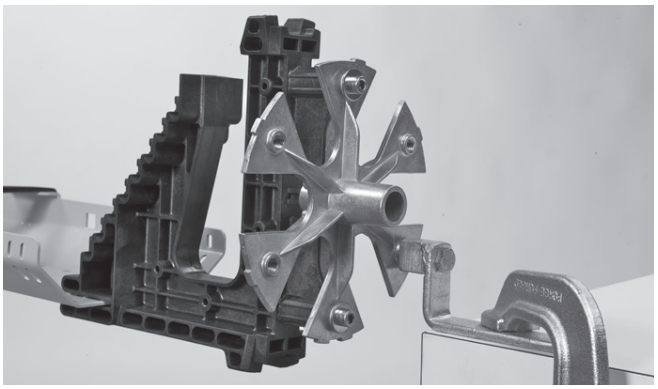
Cable termination kit	See ordering guide
FOSC-D tray	36, 48, 72 or 96
FOSC-D tray	Ribbon 24
FOSC-450-MULTI-4/7	

2.4 Capacity

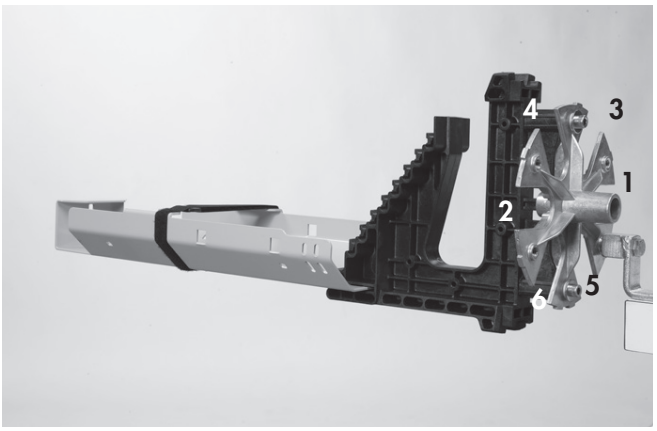
Single tray: max. 6 with basket
Ribbon tray: max. 3 with basket

3 Preparation of the closure

3.1 Open the clamp and remove the dome.

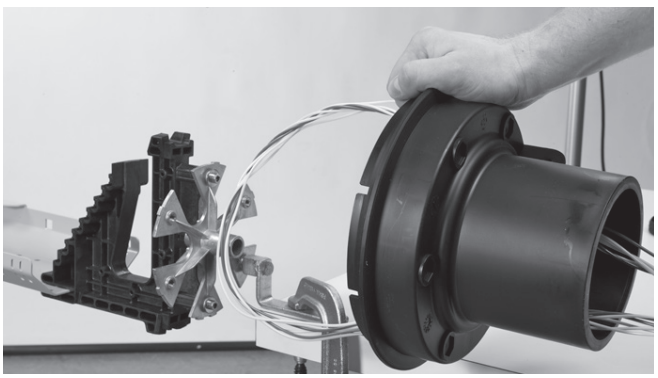


3.2 Position and secure the closure tower properly to the work station.



3.3 Cable entrance positions.
Looped cable only entrance ports 5 and 6.

4 Cable preparation



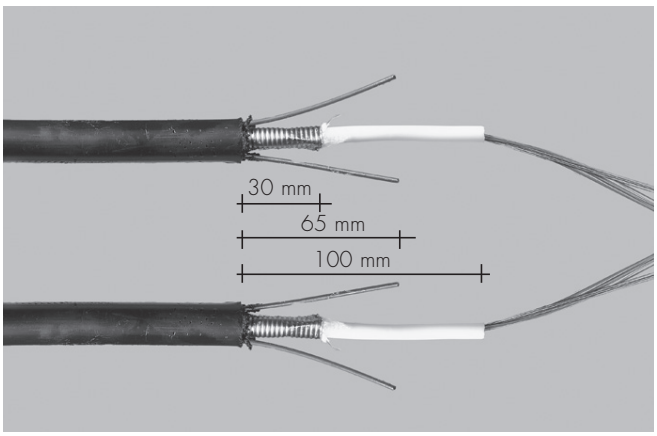
Note: slide the base over all the cables! In case of looped cable: remove the outer jacket first (4.1).

4.1 Looped cable

Loose tube cable

4.1.1 Make a window cut of 3.5 m. Cut the strength member at a distance of 70 mm.

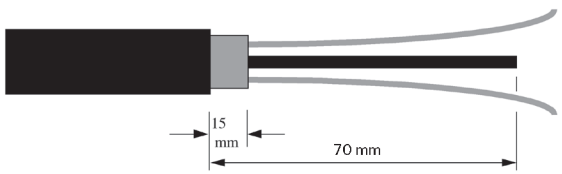
Central core cable



4.1.2 Make a window cut of 4.2 m, cut away the strength member at a distance of 65 mm from the outer jacket. Cut the inner jacket at 100 mm from the outer jacket. For looped cable install the cables in ports 5 and 6 for proper routing to the tray.

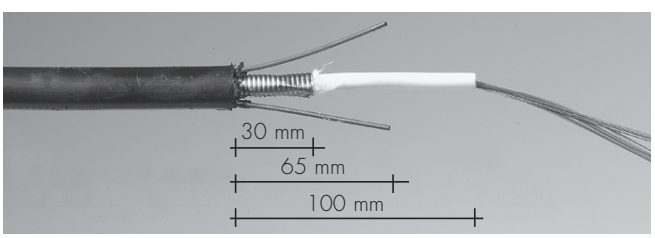
4.2 Drop cable

Loose tube cable



4.2.1 Remove the jacket over a length of 1.4 m, cut the strength member at a distance of 70 mm from the outer jacket.

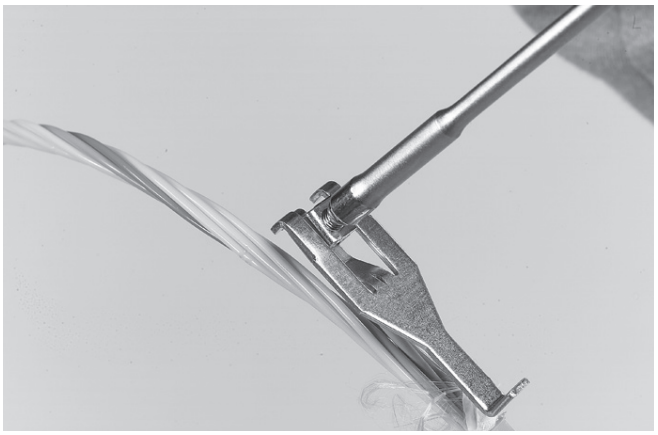
Central core cable



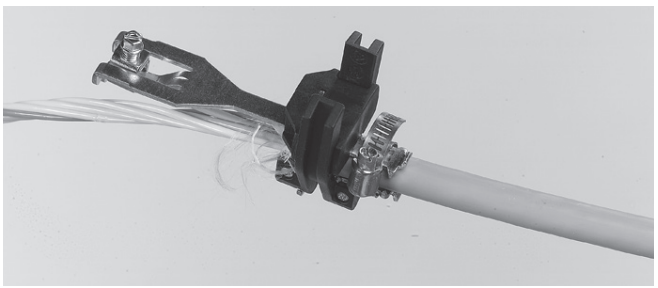
4.2.2 Remove the jacket over a length of 1.4 m, cut the strength members at a distance of 65 mm from the outer jacket. Cut the inner jacket at 100 mm from the outer jacket.

5 Cable termination

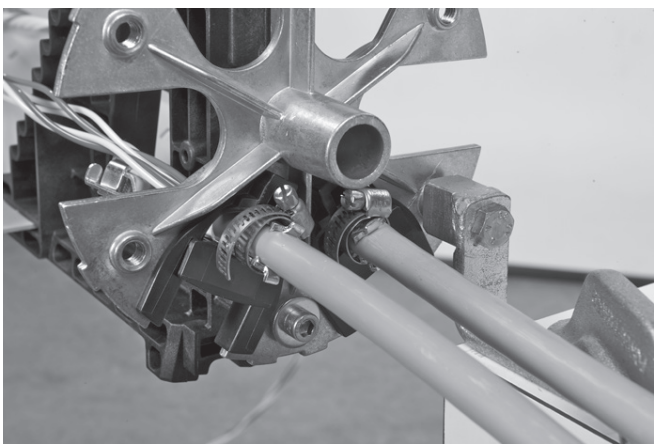
Loose tube cable



5.1 Install the strength member termination plate.

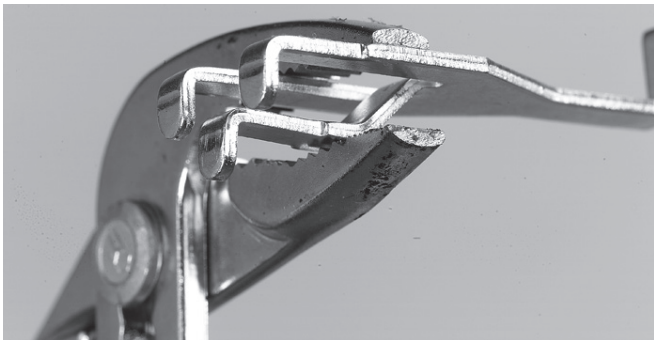


5.2 Install the cable retention device on the cable, tighten the hose clamp.

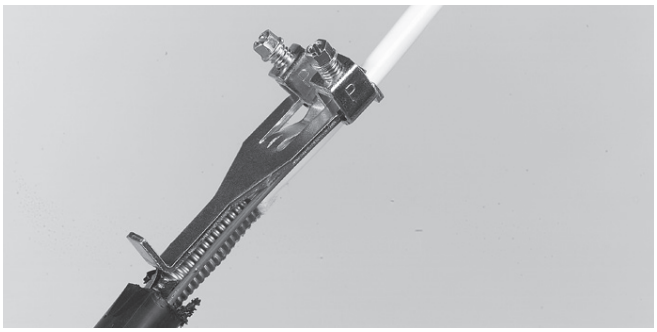


5.3 Slide the cable retention device in the cable termination plate.

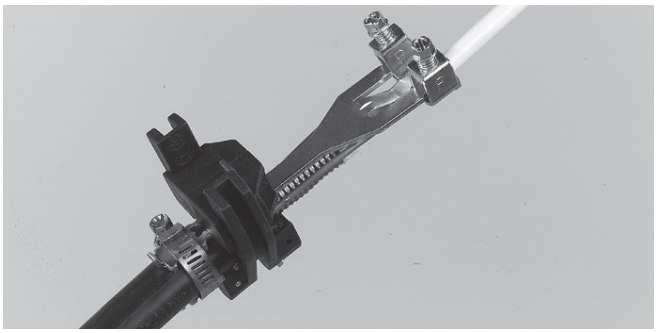
Central core cable



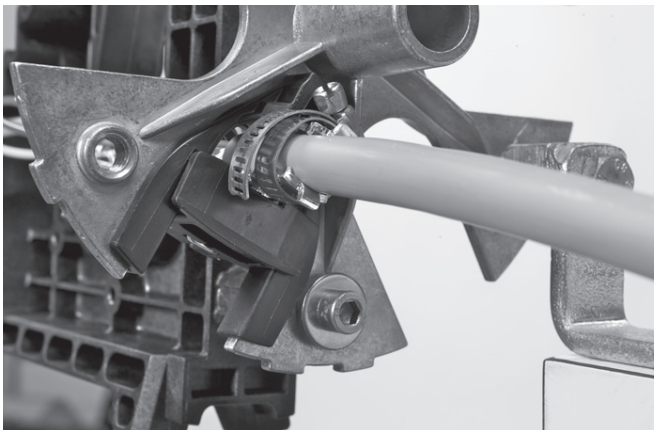
5.4 In case of two strength members, first bend the central plate backwards.



5.5 Install the strength member in the termination plate.



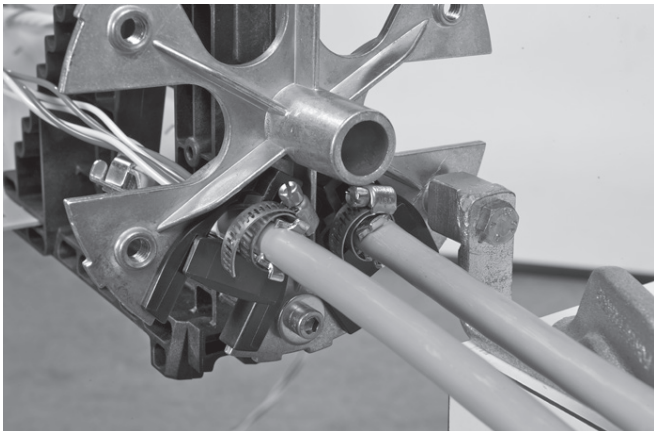
5.6 Install the cable retention device on the cable, tighten the hose clamp.



5.7 Slide the cable retention device in the cable termination plate.

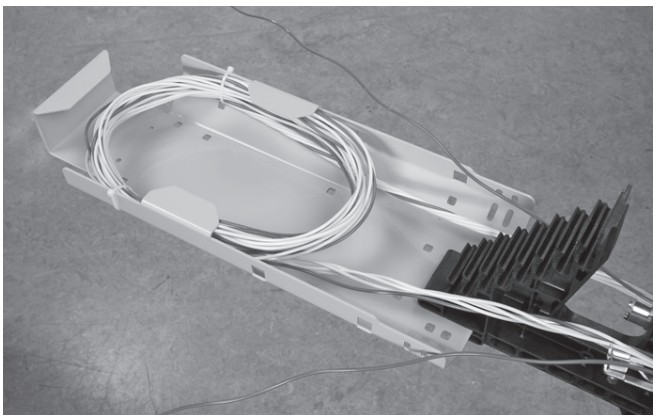
6 Fiber routing

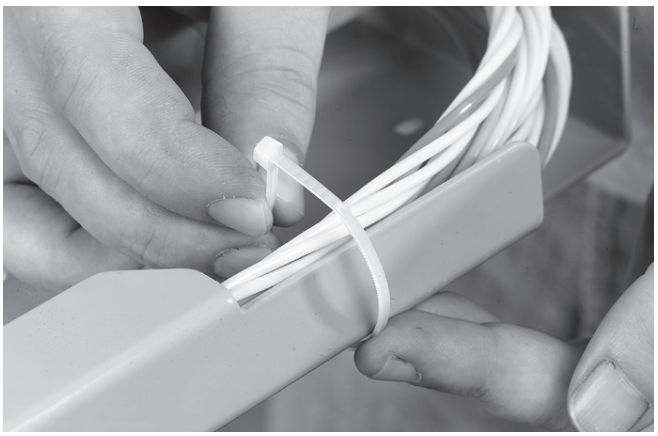
6.1 Fiber routing to the basket



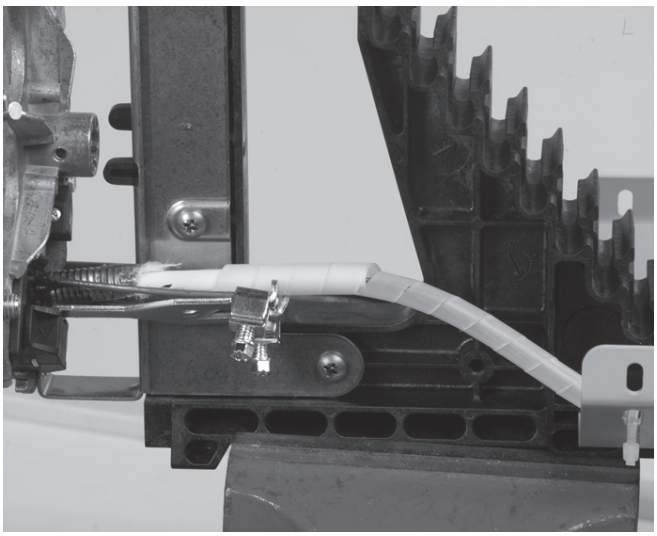
6.1.1 Install the looped cable in ports 5 and 6 for proper routing to the basket of the tray.

Loose tube

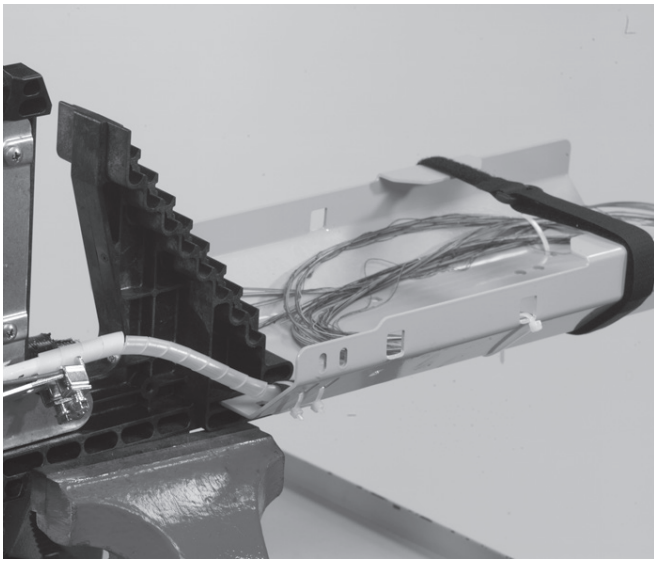




6.1.2 Secure the loop onto the basket with tie-wraps.

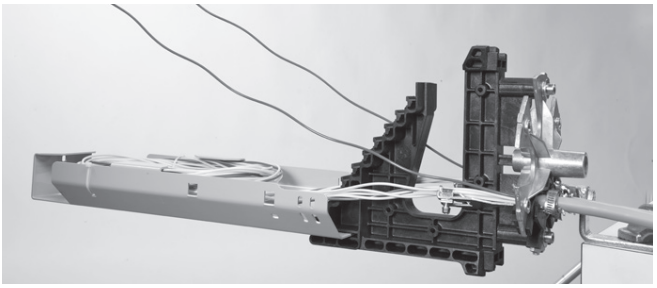


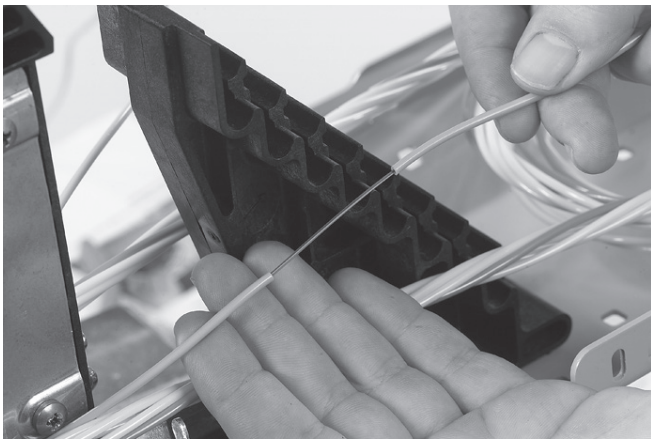
6.1.3 Install the spiral tube of 200 mm on the cable. Fix the spiral tube with the foame on the basket.



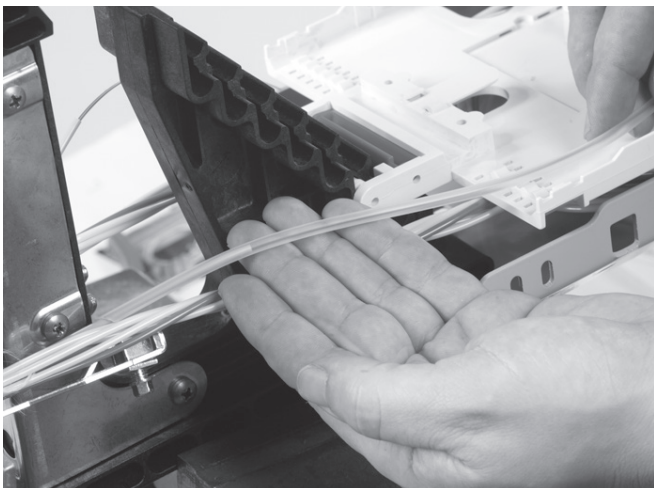
6.1.4 Keep the bare fibers in place using tie-wraps.

6.2 Fiber routing to the tray

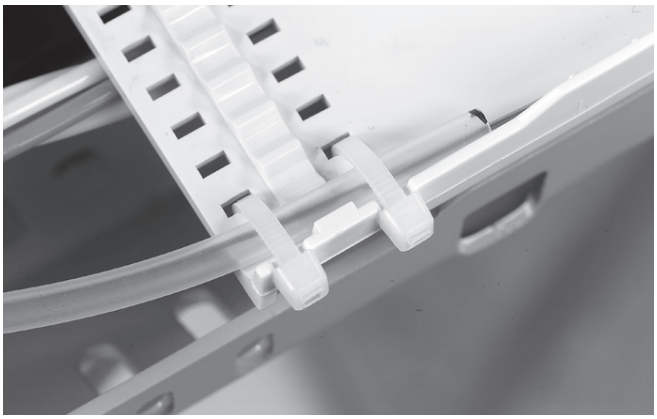




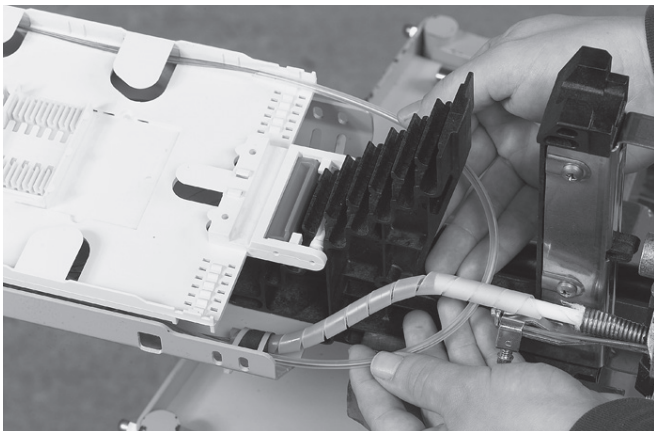
6.2.1 Select a tube and strip the loose tube up to 200 mm from the outer cable jacket.



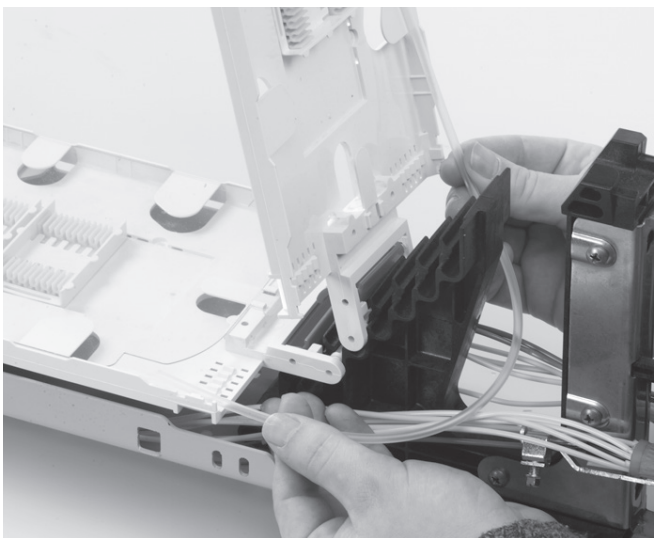
6.2.2 Install a transportation tube over the fibers and the loose tube.



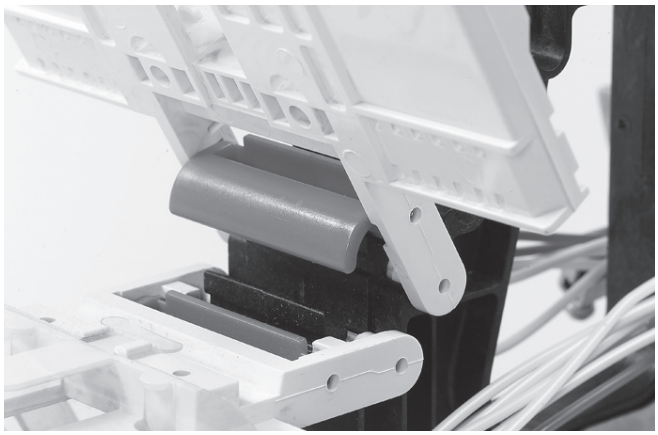
6.2.3 Cut off the excess length of the transportation tube and secure with tie wraps on the tray.



6.2.4 In case of central core route a transportation tube from the basket behind the tower to the tray.



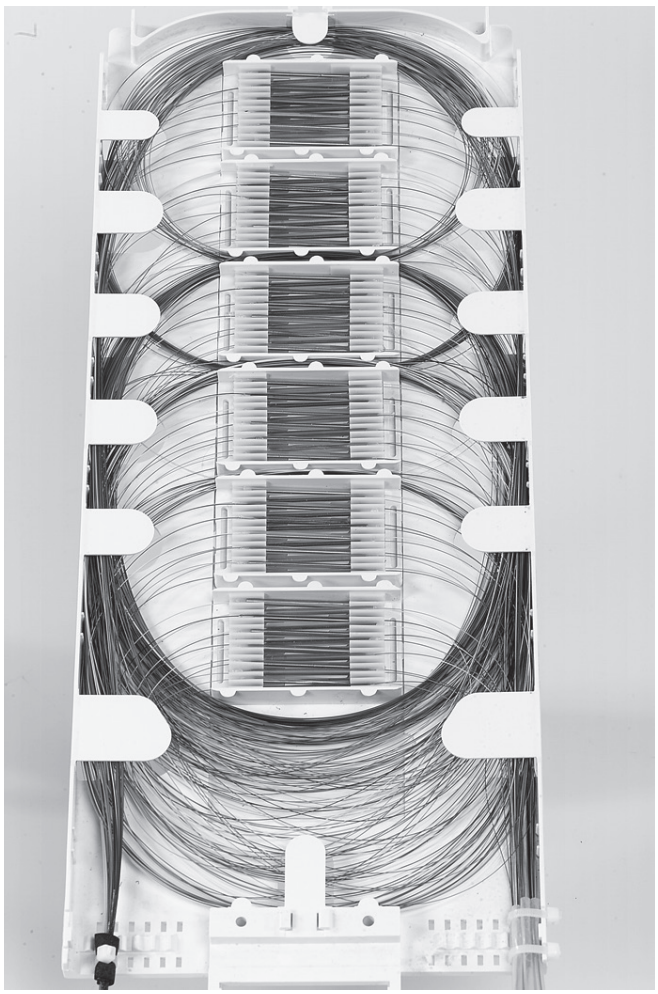
6.2.5 Inter tray jumping.
Route the transportation tube from the bottom tray, behind the tower, over the already installed loose tubes to the allocated tray.



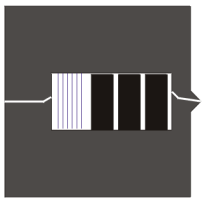
6.2.6 The tray can be blocked with the tray wedge. Turn the wedge to the shown position.

6.3 Fiber routing on the tray

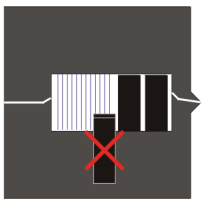
A Single fiber



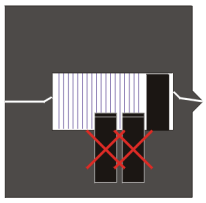
6.3.1 For single fiber.



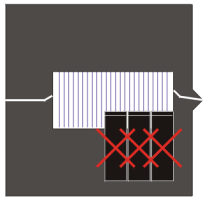
1 - 6xR12



7 - 12xR12
(X cut away)



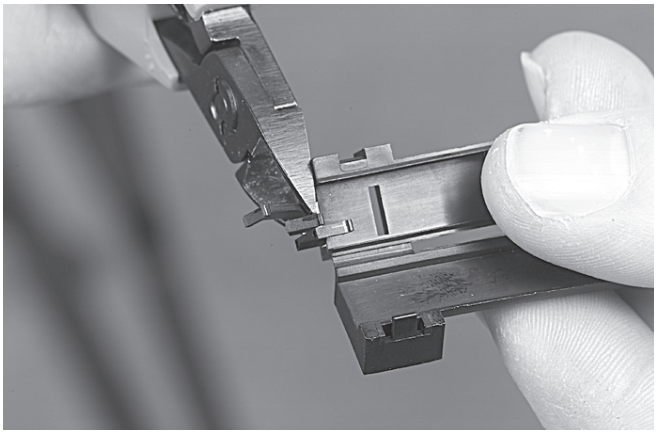
13 - 18xR12
(X cut away)



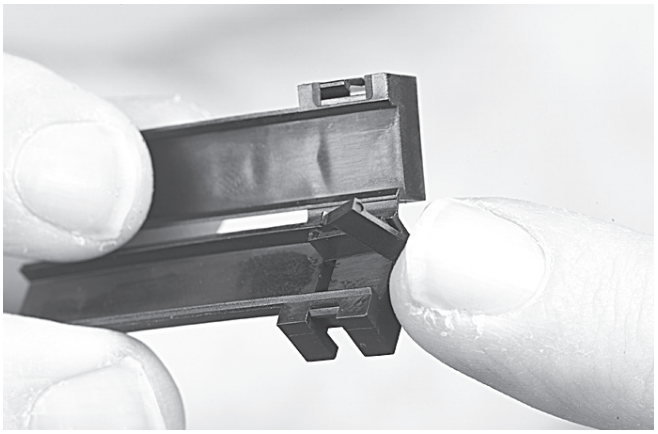
19 - 24xR12
(X cut away)

Max. - 12xR24
(X cut away)

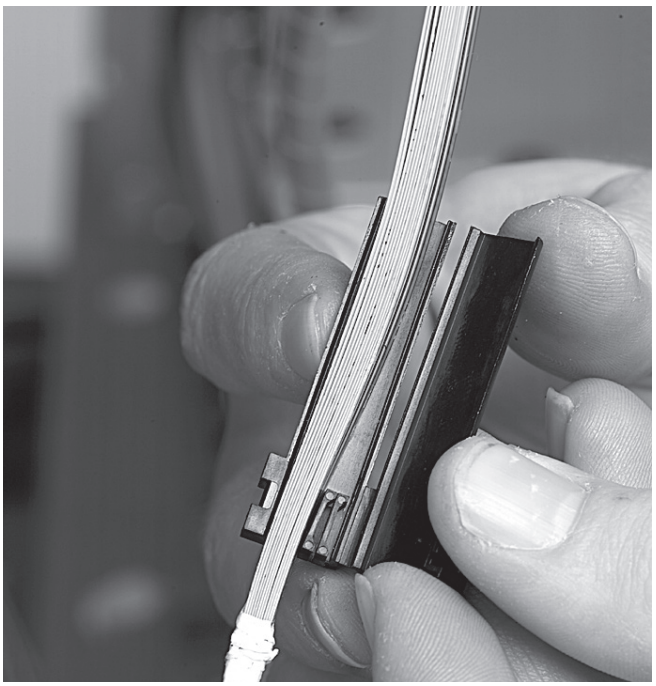
6.3.2 How to use fiber aligner.
In case of
6R12 - Bend all plates inside the aligner and position 1-6 ribbon 12 next to them as shown at drawing 1.
12R12 - First remove plate and bend the two remaining plates into the aligner. Position the 7-12 ribbon 12 next to them as shown at drawing 2.
18R12 - Remove plate 1 and 2, bend plate 3 into the aligner. Position the 13-18 ribbon 12 next to the plate as shown at drawing 3.
24R12 - Remove all plates and place 19-24 ribbon 12 as shown at drawing 4.
R24 - Remove all plates and place maximum 12 ribbon 24 as shown at drawing 5.



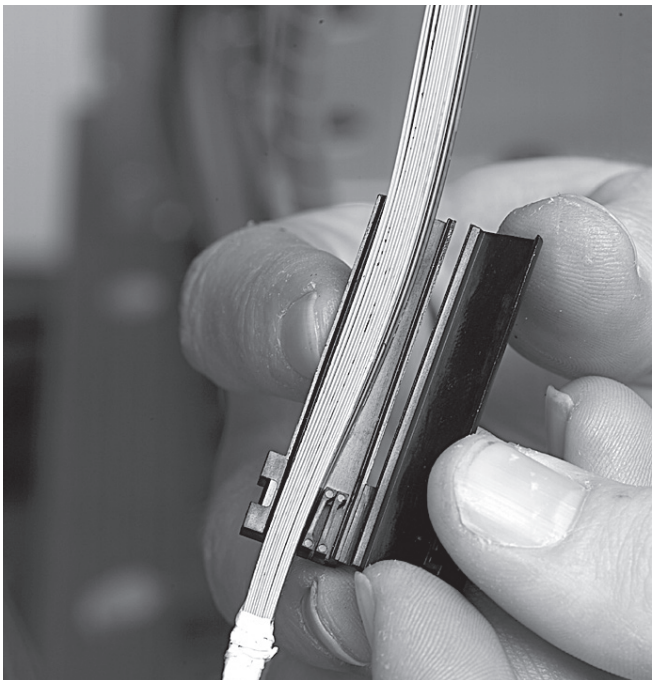
6.3.3 Cut the appropriate number of plates.



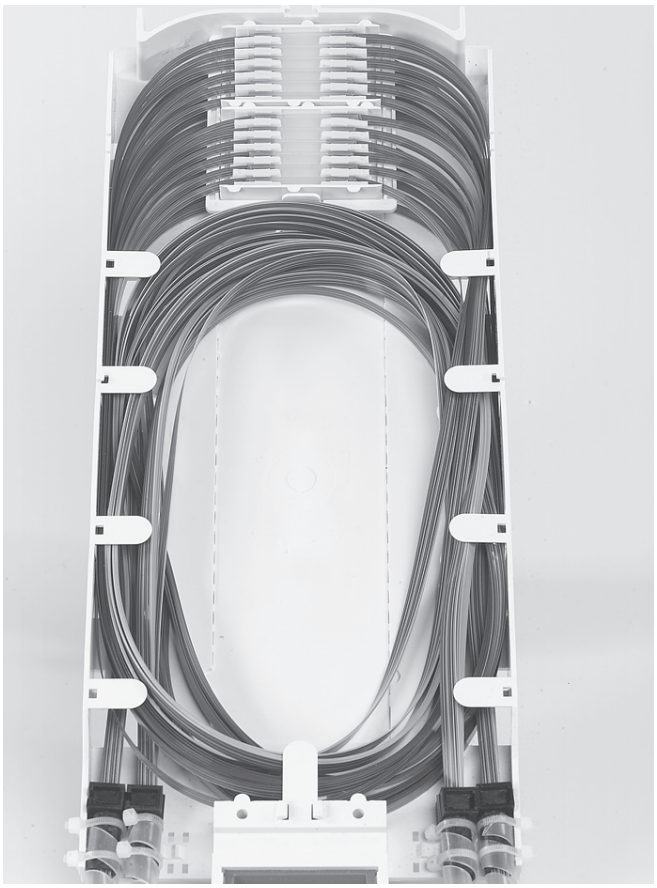
6.3.4 Bend the remaining plates to the inside and click them into the slot.



6.3.5 Place the ribbon bundle into the ribbon aligner and close it.

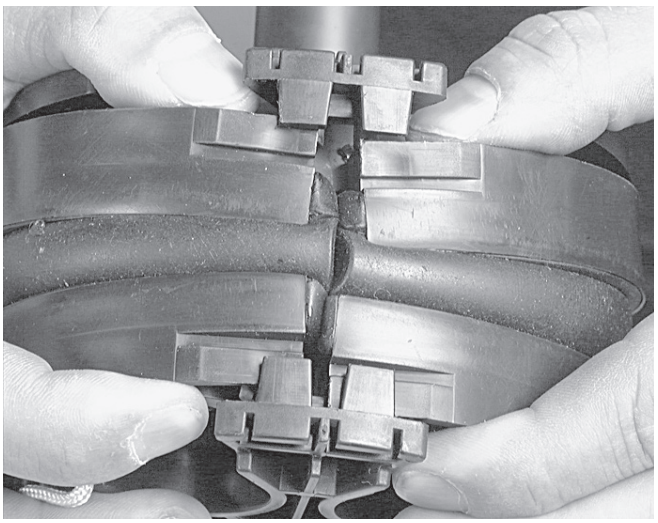


6.3.6 Push the ribbon aligner into the spiral tube.



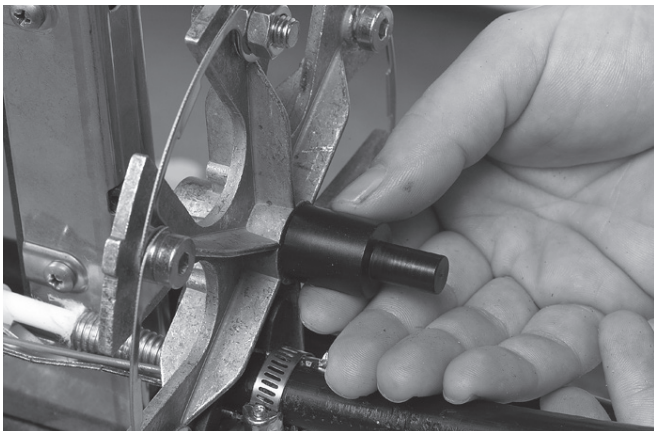
6.3..7 Install the aligner into the tray.

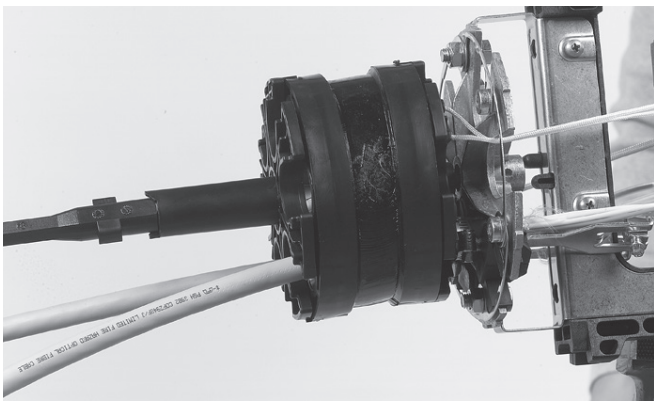
7 Installation of the gel block



7.1 Remove the protection foil from the gel block and open the gel block.

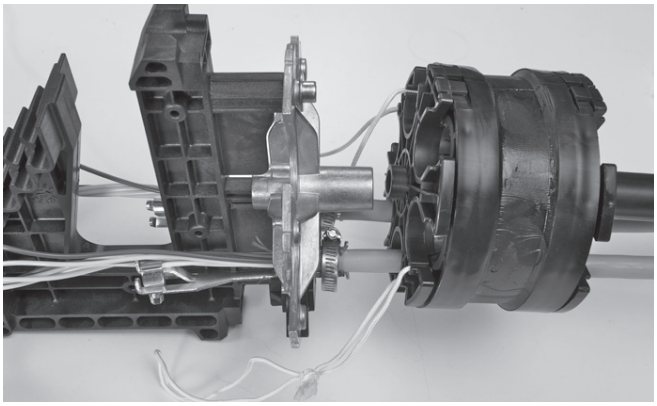
A Old termination plate with lockers





7.2 Position the open gel block between the cables.
Leave ± 20 mm between the gel block and the cable attachment plate by using the spacer.

B New termination plate



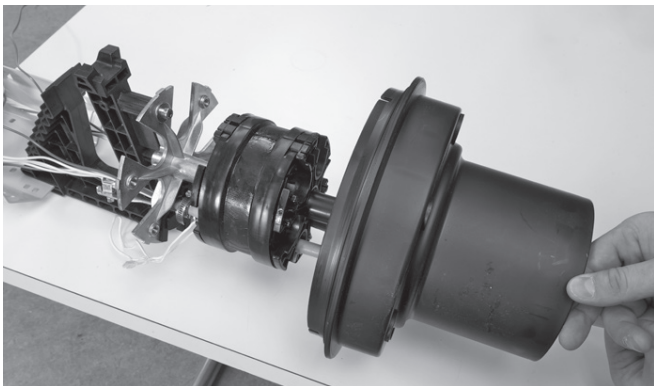
7.3 Position the open block between the cables.

8 Grounding

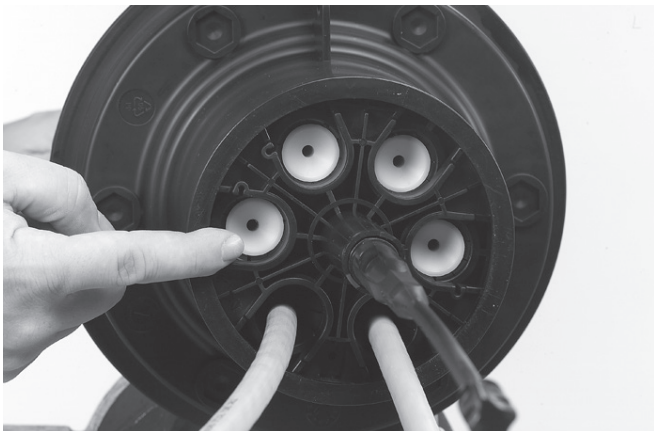
8.1 In case of grounding, mount grounding wire on the grouding bolt.

9 Closing the closure

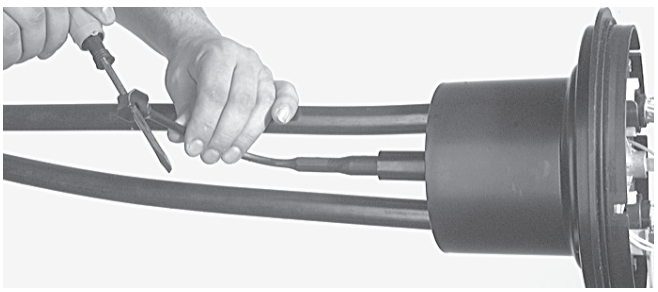
9.1 Place the hook and loop fastener around the trays and basket, with the hook and loop fastener eye on top of the trays. Silicagel can be placed underneath.

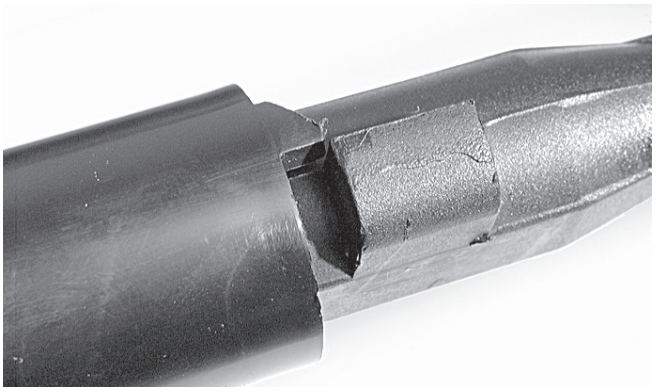


9.2 Slide the base over the Gel block and insert the frame into the base (check proper position).

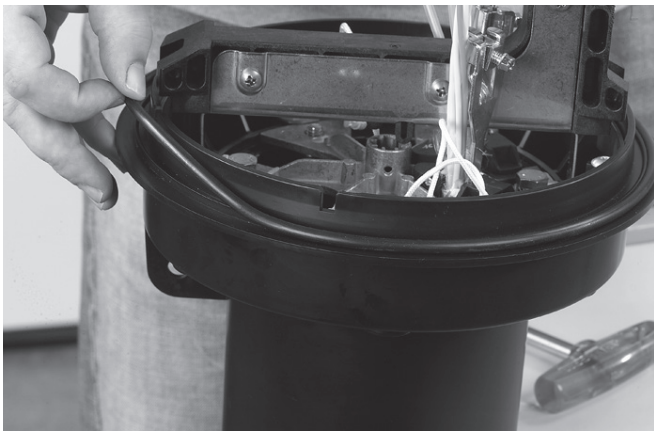


9.3 Insert the plugs in the unused ports.
Remark: when installing the plugs be sure not to bend the crowns in the gel block.

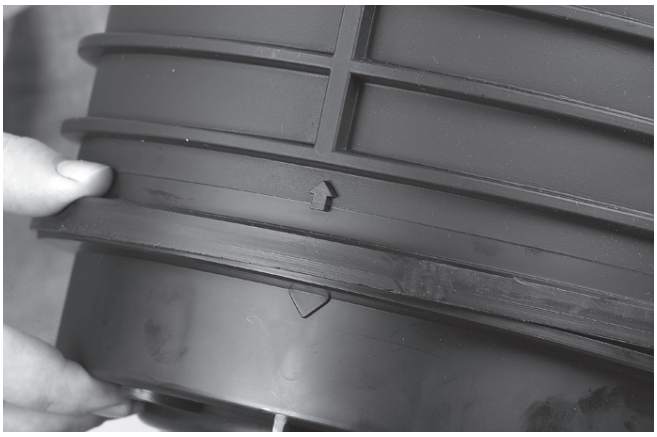




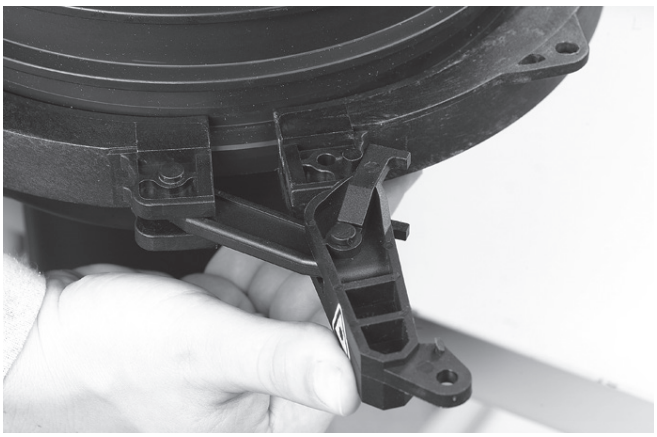
9.4 Tighten the trigger until it butts. If necessary, use wrench to tighten the trigger.

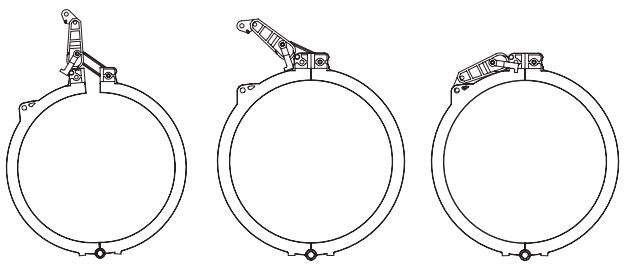


9.5 Place the O-ring back on a clean base.



9.6 Slide the dome onto the base. Make sure that the arrows match. Use the clamp to seal dome and base.





9.7 Close the clamp.

To find out more about CommScope® products, visit us on the web at www.commscope.com

For technical assistance, customer service, or to report any missing/damaged parts, visit us at:
http://www.commscope.com/SupportCenter