FieldSmart

Fiber Scalability Center (FSC)

Installation Manual

Mid Span Opening Feed Thru Plate
Ribbon Cable Slack Sleeving

Part #: 016848
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CLEARFIELD

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Proprietary Notice

About FieldSmart Product Line Application

Its purpose is to provide the user with adequately detailed documentation to efficiently install the equipment supplied. Every effort has been made to keep the information contained in this document current and accurate as of the date of publication or revision.

However, no guarantee is given or implied that the document is error free or that it is accurate with regard to any specification.

Technical Support

Clearfield, Inc. can be contacted for any issues that arise with the supplied product.

If you need to return the supplied product, you must contact the Clearfield, Inc. Customer Service Department to request a Returned Materials Authorization (RMA) number.

Clearfield, Inc.
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Standard Warranty

Clearfield warrants to the original purchaser of the Product sold hereunder is free from defects in material and workmanship under normal use and service, subject to exceptions stated herein. Product purchased is warranted as follows: Clearfield designed and branded Products are warranted for five (5) years: Products manufactured by Clearfield to customer prints and/or specifications are warranted for one (1) year; and any Product Clearfield acquires from or through a third-party manufacturer or distributor and resells to Customer as the original customer will carry the manufacturer's pass-through warranty, if any. In all cases, the warranty period commences on the date of shipment to the original purchaser.

Warranty Claim Procedure

If any Product purchased from Clearfield is found defective under the above warranty, the following basic procedure must be followed:

1) Customer must contact Clearfield and obtain a Return Materials Authorization
2) Following authorization, the Customer ships the product-freight collect-to Clearfield's manufacturing facility
3) Clearfield shall repair or replace the defective Product at its sole option and discretion, and return the repaired or replacement Product to Customer's site, freight prepaid

Note: *If the Product is not found to be defective at Clearfield, the product will be returned to the Customer and the customer billed for freight in both directions.*

Limitations of Warranty

Correction of defects by repair or replacement, at the option of Clearfield Inc, shall constitute the exclusive sole remedy for a breach of this limited warranty. Clearfield shall not be liable under any circumstances for any special, consequential, incidental, punitive, or exemplary damages arising out of or in any way connected with the product or with agreement to sell product to buyer, including, but not limited to damages for lost profits, loss of use, or for any damages or sums paid by buyer to third parties. The foregoing limitation of liability shall apply whether the claim is based upon principles of contract, warranty, negligence or other tort, breach of statutory duty, principles of indemnity or contribution, the failure of any limited or exclusive remedy to achieve its essential purpose, or otherwise.

Clearfield will not be responsible for any labor or materials costs associated with installation or incorporation of Clearfield products at customer sites, including any costs of alteration, replacement or defective product, or any field repairs.

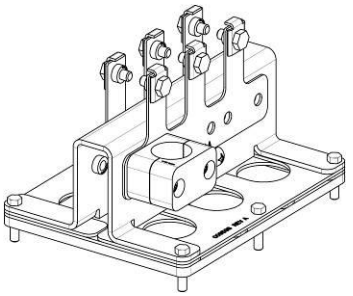
Other Limitations

Clearfield assumes no warranty liability regarding defects caused by:

1) Customer's modification of Product, excepting installation activities described in Clearfield documentation
2) Customer re-packaging of Product for shipment to third parties or destinations other than those originally shipped to by Clearfield, or any defects suffered during shipping where the Product has been re-packaged
3) Customer's installation or maintenance, excepting activities described in and performed in accordance with Clearfield documentation
4) Customer's improper or negligent use or application of Product

Other causes external to the Product, including but not limited to accidents, catastrophe, acts of God, government action, war, riot, strikes, civil commotion, sovereign conduct, or the acts or conduct of any person or persons not party to or associated with Clearfield.

Mid-Span Opening Feed Thru Plate



Application

The FSC Mid-Span Opening, Feed-through Plate Kit provides the ability to ring cut a fiber cable in an OSP cabinet.

Description

The FSC Mid-Span Opening, Feed-through Plate Kit, specifically designed for the Clearfield FieldSmart Fiber Scalability Centers (FSC) provides the hardware components to the ability to confidently secure the ring cut/mid span a fiber optic cable in an OSP cabinet. This kit utilizes the existing cable entry / exit ports in the Clearfield OSP cabinets.

Features & Benefits

- Saves the customer time and money by allowing them to only splice the required fiber counts into the cabinet

Pre-configured Part Numbers

Part Number	Description
009692	FieldSmart Mid-Span Feed Thru Plate Kit, for Cables up to 1" OD. Includes Strength Member Tie Off Clamp - 016757
016741	FieldSmart Mid-Span Feed Thru Plate Kit, for Cables up to 1.25" OD. Includes Strength Member Tie Off Clamp - 016757
016757	Strength Member Tie Off Clamp Kit For Retro Fit or Older Version of 009692

Mid Span Cable Prep

Step 1: Determine the desired cable entrance location and mark the cable jacket where the cable passes through the floor of the cabinet (**Figure 1**).

Note: *When measuring the cable entrance location, be sure to account for at least 3" to 4" of cable sheath above the cabinet floor.*

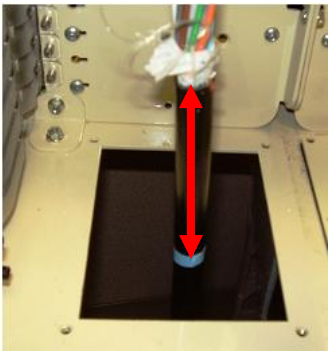


Figure 1

Step 2: Locate the green clamp shells and corresponding ¼-20 mounting screws from the ship-along hardware (**Figure 2**).

Note: *The clamp shells are used in same-size pairs. Avoid using a clamp that is too small and does not easily close around the cable.*

Use the next larger clamp and grommet tape. Grommet tape should be applied to the green clamp shell prior to installation.

Figure 2

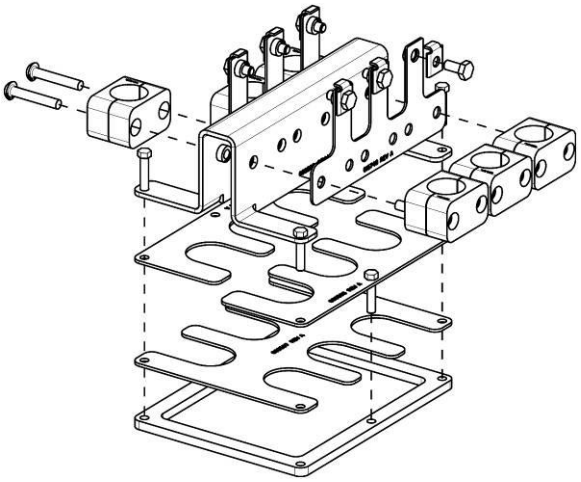
Step 3: Wrap grommet tape around the cable at the mark, until you have an overall outside diameter of 1-3/4 inches (**Figure 3**).

Use a cable sheath cutter to remove thirteen (13) feet of the outer cable jacket. Once the jacket has been removed, clean the cable if gel filled.

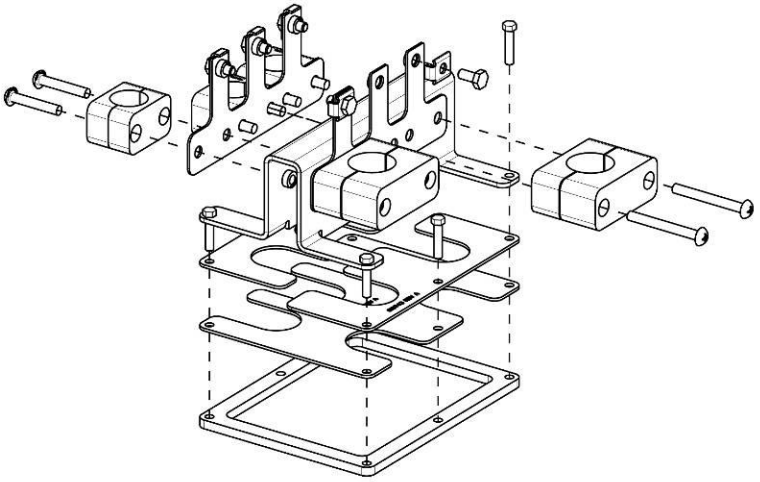
Figure 3

Mid Span Plate Installation

Installation Diagrams



Part Number	Description
009692	FieldSmart Mid-Span Feed Thru Plate Kit, for Cables up to 1" OD.



Part Number	Description
016741	FieldSmart Mid-Span Feed Thru Plate Kit, for Cables up to 1.25" OD.

Installation Procedure

Step 1: Once the cable has been prepped, make sure to install the mid span feed through plate gasket into the base of the cabinet before installing the cable.

Then, place the cable into the required slot using feed through plate A (**Figure 1**).

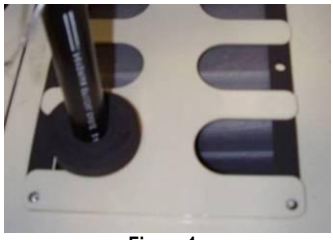


Figure 1

Step 2: Next, slide feed through plate B over the cable, followed by the cable clamp bracket (**Figure 2**).

Note: *All four pieces can now be pinned together by using four (4) of the mounting bolts.*

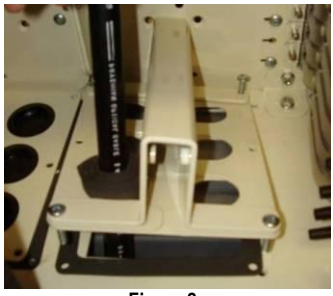


Figure 2

Step 3: Attach the kit to the base of the cabinet using the six (6) mounting bolts (**Figure 3**).

Note: *Tighten the bolts evenly to avoid warping the plates.*

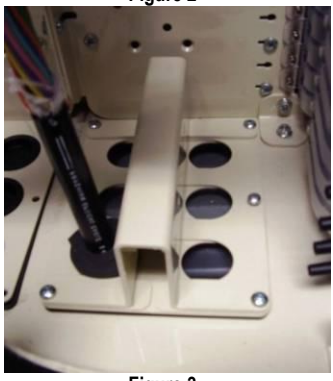


Figure 3

Step 4: Attach the cable clamps to the bracket using the clamp mounting screws (**Figure 4**).

Note: *Use the included grommet tape to build up the cable diameter when the closest cable clamp size is larger than the cable diameter.*

Note: When using the 1-1/4" clamp shell, install the milled half against the back plate.

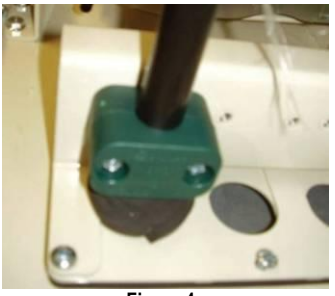


Figure 4

Step 5: Plug the unused holes with the included foam plugs by squeezing and compressing the foam until they are able to fit into the hole. Once installed, the foam will then expand and seal the hole (**Figure 5**).

Figure 5

Ribbon Cable Slack Management Sleeving

Part Number	Description
015807	Split Sleeving, 1/2 inch Black
015497	Split Sleeving, 1/4 inch Black

Step 1: Mark the ribbon cables to be spliced ten (10) feet from the outer jacket. Stagger the marks 1" longer for each ribbon being spliced into the next cassette.

Group the bare ribbon, then slide the ½" woven split mesh sleeve over the ribbon (**Figure 1**).

Figure 1

Step 2: Once the fiber has been fully inserted into the mesh sleeve, tape the sleeve to the OSP cable central tubing (**Figure 2**)

Note: *This will help to control the bundle while routing and storing.*

Figure 2

Step 3: Route the ribbon cables from the mesh sleeving to each cassette and splice following industry practice for ribbon cables (**Figure 3**).

Figure 3

Step 4: Measure the distance from the cassette boot to the ½ mesh sleeving, then cut the ¼ inch mesh sleeving to length. Place the bare ribbon inside (**Figure 4**).

Note: *When measuring make sure to add 1 inch to cover the cassette boot and another 1-2 inches to slide into the ½ inch mesh sleeving.*

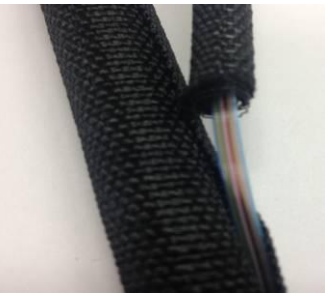


Figure 4

Step 5: Place the ¼ inch mesh sleeving into the ½ inch sleeving (**Figure 5**).

Note: *The two mesh sleevings can be glued together at this point, but be careful not to glue the ribbon to the sleeving.*

Figure 5

Step 6: Slide the ¼ inch mesh sleeving over the cassette boot and secure using electrical tape (**Figure 6**) or a zip tie (**Figure 7**).

Figure 6

Figure 7