Charles Fiber Pedlock® OSP Pedestals
BDO203, BDO204, and BDO205 Series
General Description and Installation

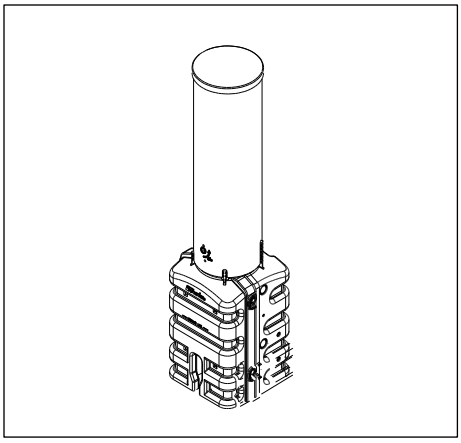


Figure 1 BDO203 with Dome

1. GENERAL INTRODUCTION

1.1. Document Purpose

This document provides general information for the BDO203, BDO204, and BDO205 (BDO2) Series OSP pedestals. Figure 1 shows a pedestal with the dome in place.

1.2. Product Purpose

The Charles BDO2 Pedlock® pedestal provides a superior, protective, nonmetallic enclosure for OSP above-grade splices and terminations of Telco-feed and customer-drop buried fiber cables in Greenfield and Brownfield applications at mid-span or stub-in point. BDO2 pedestals protect against floods, fire, dirt, weather, insects, and impact. The bottom section of the pedestal is a locking two-piece (split) square base featuring expanded capacity. This design allows the base to be taken apart and installed around conduit-fed cable bundles in new/replacement construction, to accept less flexible cables, or to facilitate the repair/rehab of damaged pedestals. The fiber organizer is protected by a flood-proof outer dome. This organizer allows routing and attachment of cables/buffer tubes, as well as a variety of splice trays and splitters, with space to store all fiber splices.

Generally, the larger the pedestal diameter, the more splice trays and the higher the fiber count it can accommodate. Each series offers various bulkhead configurations and tray options

Greenfield Applications. The installation steps in this document describe *fiber* (Greenfield) CO/feed cable installations in loop-through (express), stub-in configurations and *fiber* drop cable installations.

Brownfield Applications. For pedestals used in Brownfield applications (for example, model BDO205-EB), the rear side of the fiber organizer is used to route and terminate copper cables, leaving the front side for all fiber cable terminations. When using an -EB pedestal, the express/stub-in bundle is coiled around the outer perimeter of the fiber basket and secured with cable ties, Loose Buffer Tube (LBT) or D-clips (ribbon).

1.3. Product Mounting and Location

This pedestal fiber organizer Installation Guide assumes the BDO2 pedestal base is properly installed in a hole or trench up to the Ground Line indicator on the base, at the FTTP or FTTH distribution point. The base is shipped with its own installation document. The fiber organizer, where all buffer tube storage, fiber management, splice trays and pigtail routing takes place, mounts to the base. Once all cable connections are complete, the dome is placed on top and attached to the base to protect all cabling and connections. The base contains holes or knock-outs at the rear and both sides. These holes/knock-outs accept an optional, metallic, mounting stake or a pole-mount bracket. If desired, shorter vault mount bases for attaching to a vault cover can be ordered and used in place of the standard height base.

2. SAFETY PRECAUTIONS

— WARNING—

Risk of serious eye damage! Never look into the end of a fiber optic line or use a magnifier in the presence of laser light or radiation. Exercise caution when installing, testing or maintaining live circuits. If eyes are exposed to laser light or radiation occurs, immediately seek treatment by a medical professional.

— WARNING —

Cable and fiber cleaning solvents may contain hazardous or harmful materials. Maintain good housekeeping practices and refer to the SDS when working with cleaning solvents or similar products.

Shards and cleaved glass fibers are very sharp and can easily pierce the skin. Use tweezers to pick up cut glass fibers and place them in a specifically designated container. Do not consume any food products near the cable installation site.

Corrugated metal or armor in feed cables is very sharp when cut or exposed. Exercise extreme caution to prevent personal injury. Use protective work gloves when handling armored cable.

— CAUTION —

Perform all bonding and grounding prior to making any electrical and communications connections.

Be careful not to damage any buried cables or service wires while digging either to expose cables or to prepare a hole or trench, or while driving stakes. Buffer tubes and fibers are sensitive to excessive bending, pulling, and crushing forces. To avoid kinking of buffer tubes and fiber damage or breakage, exercise great care when working with fiber, and do not exceed or violate minimum bend radius requirements for fibers, buffer tubes, and cables.

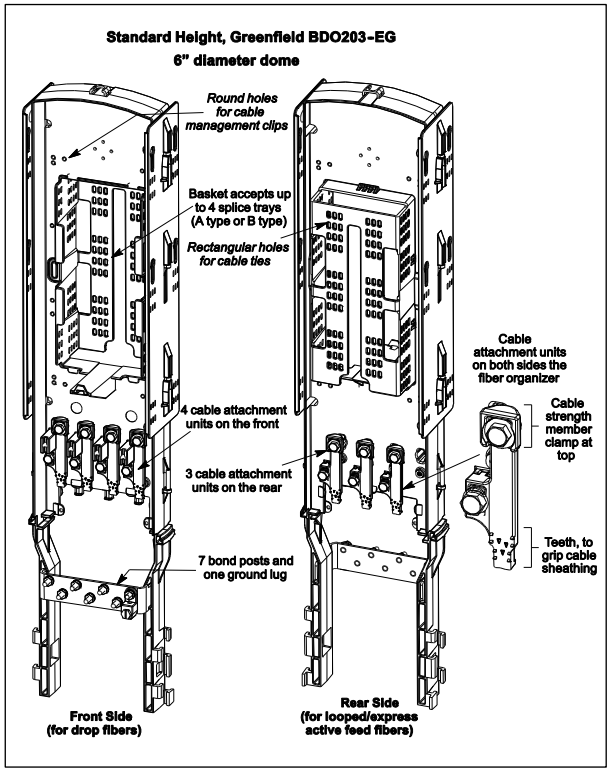


Figure 2 BDO203-EG

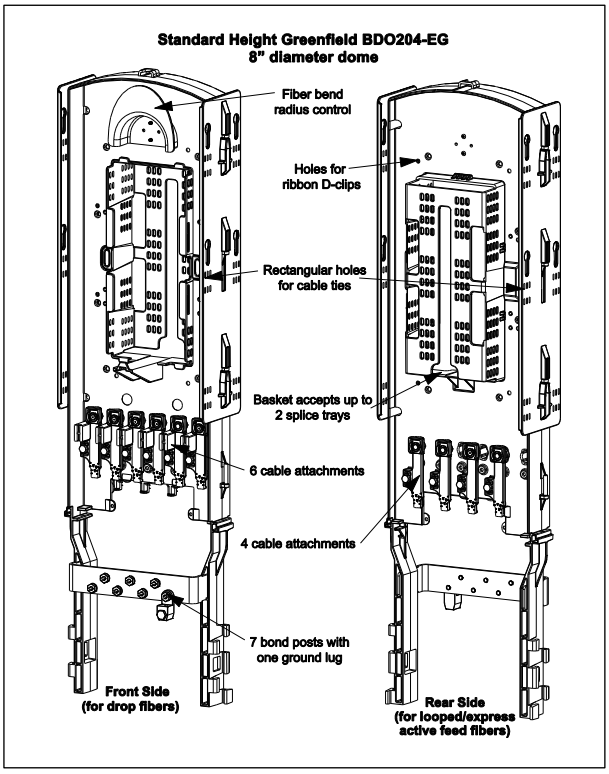


Figure 3 BDO204-EG

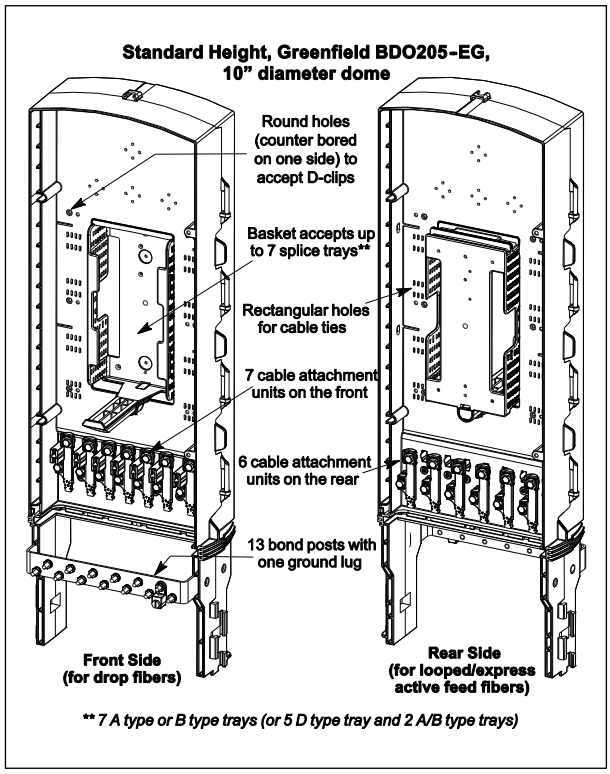


Figure 4 BDO205-EG

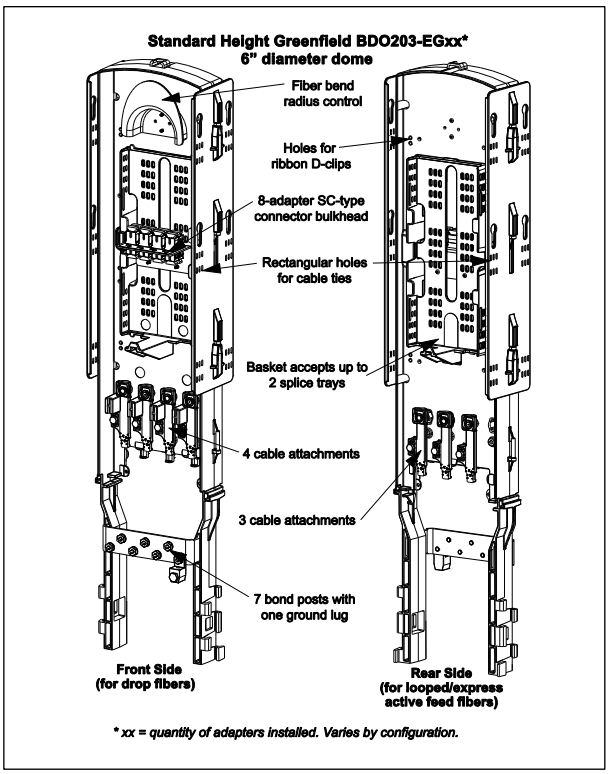


Figure 5 BDO203-EGxx

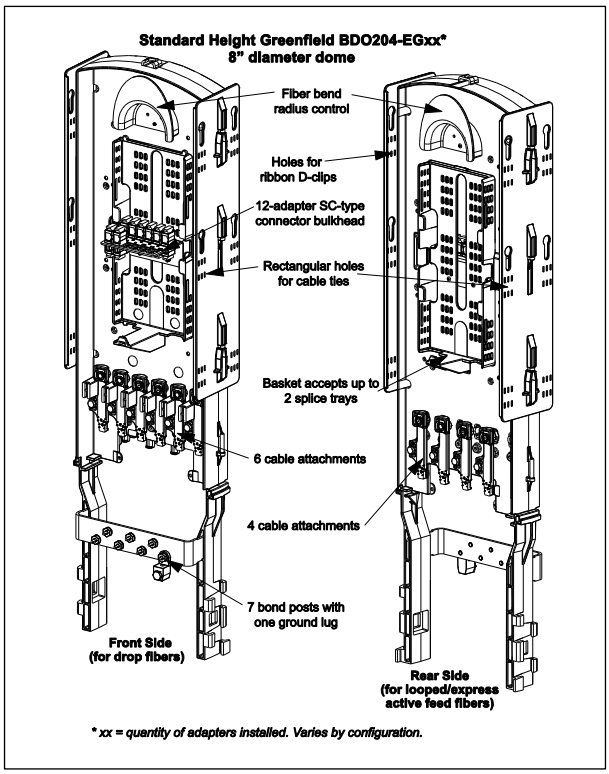


Figure 6 BDO204-EGxx

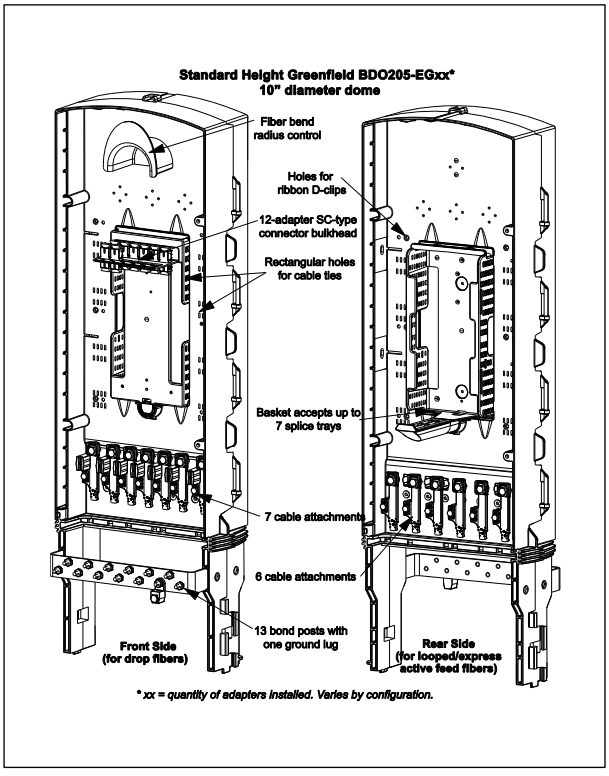


Figure 7 BDO205-EGxx

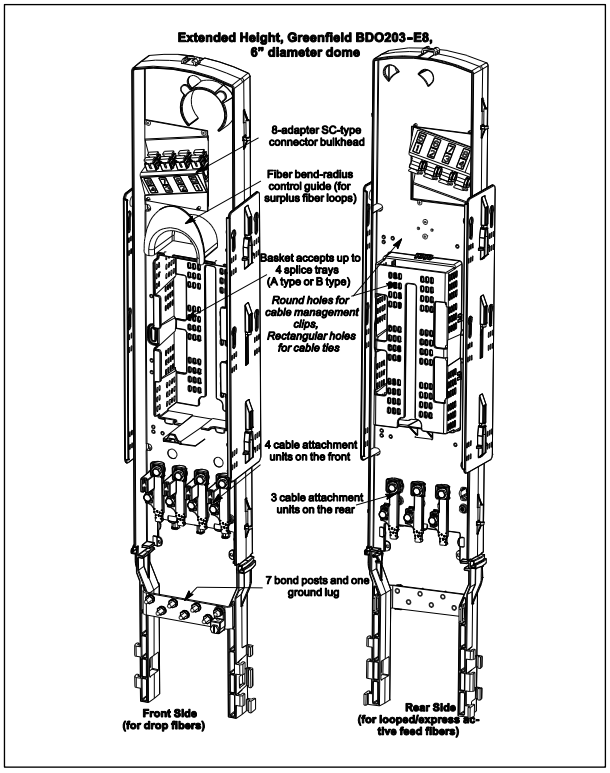


Figure 8 BDO203-Exx

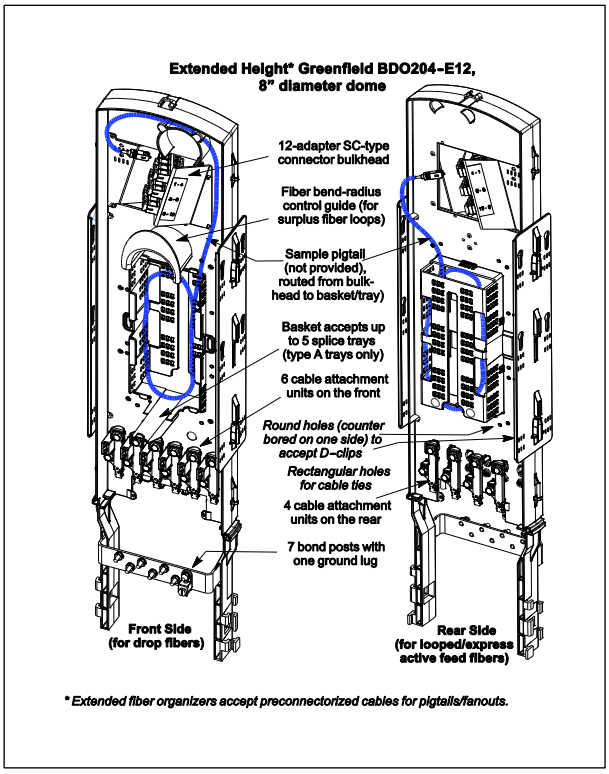


Figure 9 BDO204-Exx

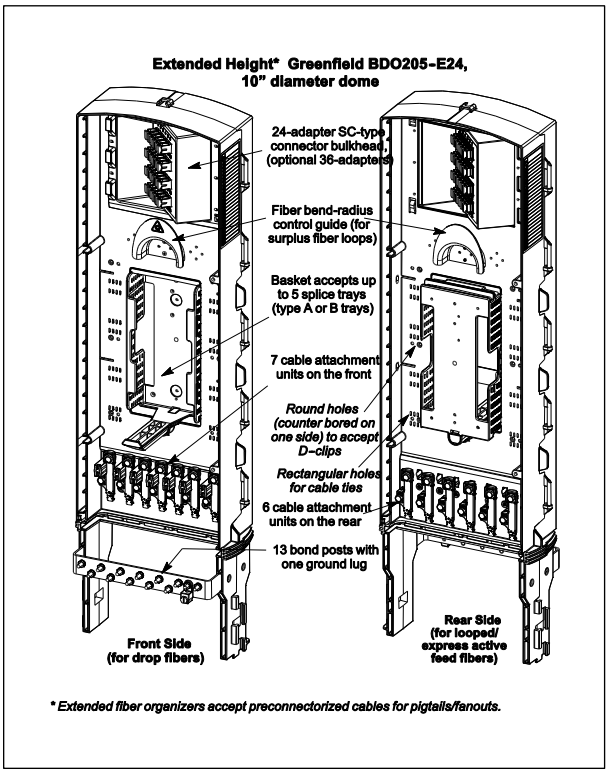


Figure 10 BDO205-Exx

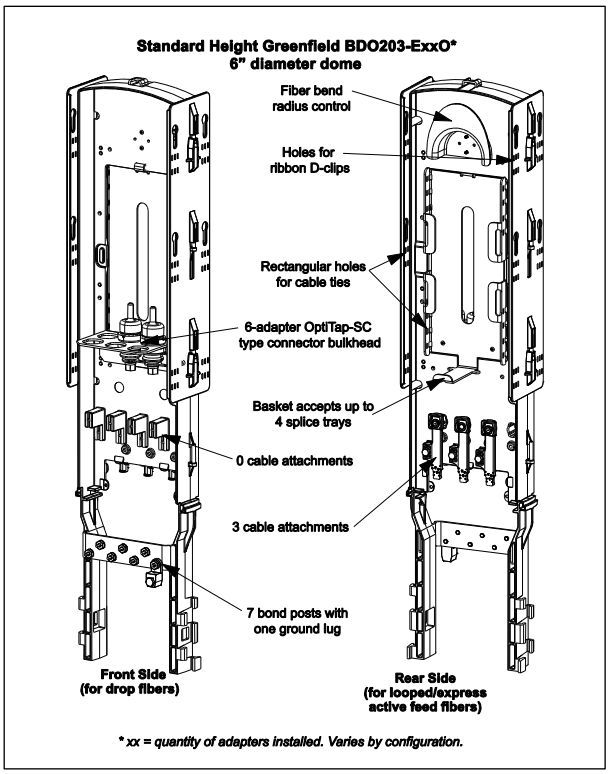


Figure 11 BDO203-ExxO

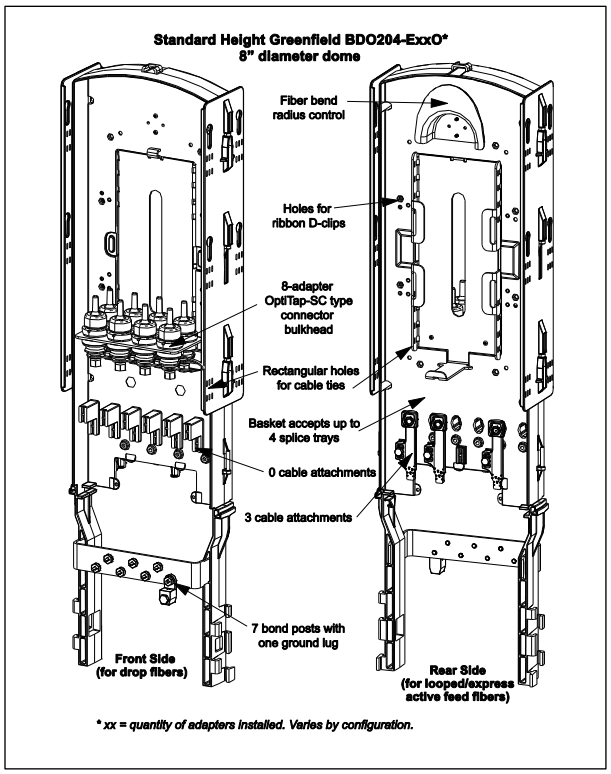


Figure 12 BDO204-ExxO

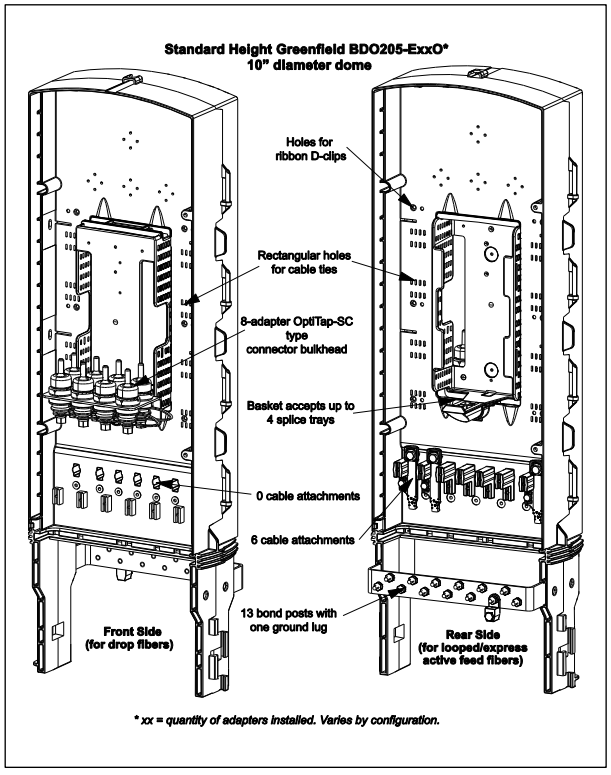


Figure 13 BDO205-ExxO

3. INSTALLATION

3.1. Inspecting the Product

The BDO2 is shipped on a pallet. Unpack the unit, and dispose of the packaging material.

-INSPECTION NOTE-

Visually inspect the unit for damages prior to installation. If the equipment was damaged in transit, immediately report the extent of the damage to the transportation company.

3.2. Following and Using Safety Precautions

Read the following site and safety tips, cautions, and warnings, then proceed with the paragraphs that follow.

- Read all instructions, warnings and cautions on the equipment and in the documentation shipped with the product.
- Do not place this product on weak or unstable surfaces which may allow the product to fall, resulting in potentially serious damage(s) to persons or product.
- Only authorized trained personnel shall install the BDO2.

3.3. Obtaining Tools and Equipment

Obtain the following recommended or needed items for installing the BDO2.

- 216 tool/can wrench
- Pedestal dome and fiber organizer
- Cable entry tools
- Buffer tube stripper tool
- Cable bond clamps
- Fiber splicing tools and equipment
- Tape measure
- Bag of parts (provided with the pedestal)
- Wrenches or socket set
- Proper lengths of drop cables
- Labels for cables
- Splice tray & tray labels (optional)
- Assorted cable ties

3.4. Mounting the BDO2

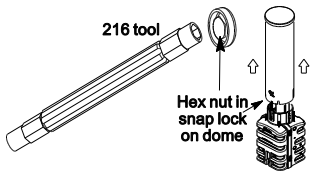
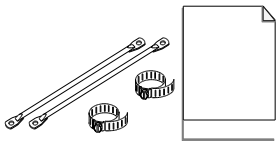
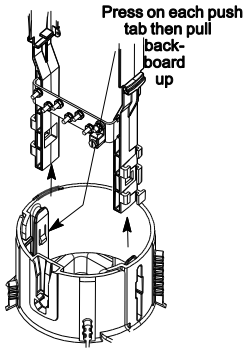
The steps in this section help the cable technician perform all final fiber feed and drop cable preparations, routing, attachments/connections and splicing, and presume the following conditions:

- Cable Architecture/Deployment - The fiber cable deployment is CO/feed cable in a loop-through or stub-in configuration.
- Trench Setup - The trench may be backfilled or open and the CO/feed cable brought into or looped through the pedestal base.
- Equipment Installation - The pedestal's BDO base has been properly installed at the desired field site (for base installation information, see the pedestal base installation document factory attached to the base).
- Feed Cable Type - The CO/feed cable is LBT or central core ribbon fiber.

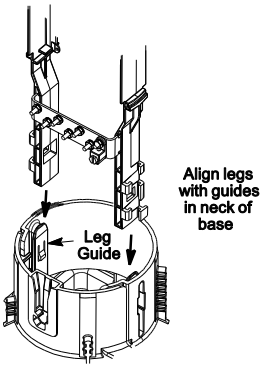
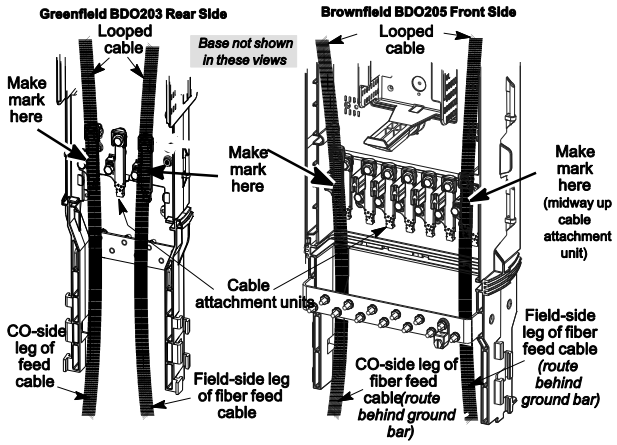
  Note: Fiber organizers are provided with 3/16'' holes that accommodate saddle clips, or D-clips, for ribbon applications. Extra clips are available in kits of various quantities and sizes.

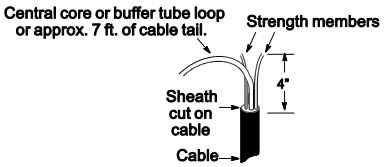
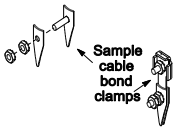
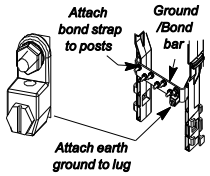
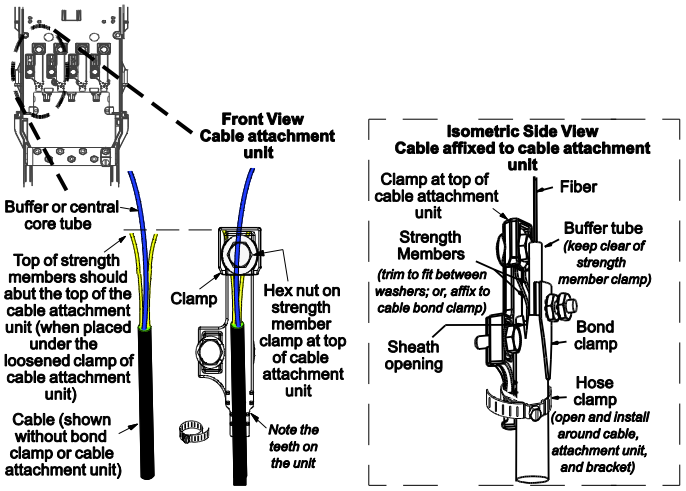
- Drop Cable Design - The drop cables are a flexible central-core ribbon fiber or loose buffer tube.
- Transportation Tubing - protective but flexible transportation tubing is not provided but is recommended in some applications.

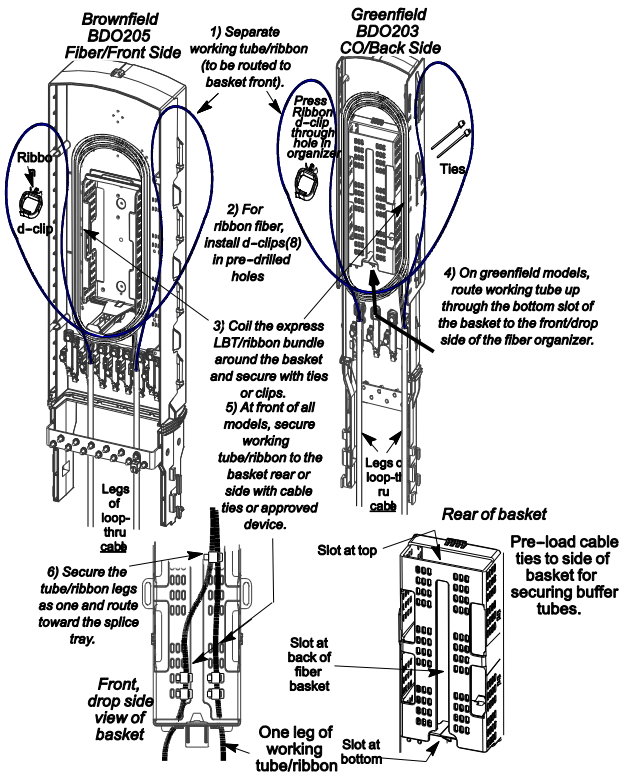
3.4.1. Preparing & Opening the Pre-Installed Empty BDO2 Pedestal

Step Number	Description	
1	Verify the pedestal is properly installed in the ground. Inspect it for damage. Note: See the base installation document for base installation instructions and cable routing into the base.	
2	Remove the dome using a 216 tool/can wrench to turn the dome lock 1/4 turn CCW. Lift the dome and set aside until installation is complete.	
3	Verify that the clear plastic bag, typically attached to the fiber organizer, contains the following: Document 2 bond straps 2 hose clamps 1 tray (optional)	
4	Should it be necessary to remove the organizer for cable sheath marking or earth ground attachment, first push in the release tab on one leg then pull up slightly on this leg. Second, push the release tab on the other leg and pull the organizer up and away from the base. Note: The release tabs can be accessed through a hole in each leg. The tab only requires a slight deflection with one finger to allow the leg to be lifted.	

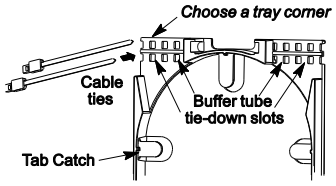
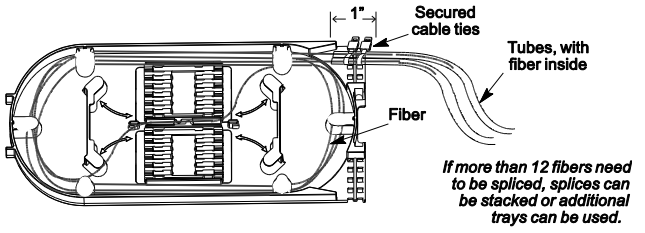
3.4.2. Preparing & Securing the Loop-through Feed Cable

Step Number	Description	
1	Verify approximately 15 feet, ± 2' of looped feed cable, ground line to ground line, is available at the pedestal base to allow the cable to be brought up and out of the base (allow approx. 9' for cable stub-in or tail configurations). Verify the cable is (or will be) at the rear side of the fiber organizer, except in the -EB models (the Charles logo is on the front side of the base).	
2	When installing the organizer, ensure the front of the organizer (drop cable side) faces the front of the base (the side with the Charles logo on it). Note: For -EG pedestals, position all feed cables (loop-through cable, and stub-in tails) at the rear of the organizer. For –EB pedestals, position the cable at the front of the organizer. The audible clicks of the two release tabs indicate that the organizer has been fully inserted.	
3	Per local practice, prepare earth ground as required. Note: Do not connect earth ground to the fiber organizer until it is re-attached to the base. **Always follow local codes and company practice when grounding cables/equipment.**	
4	Remove approximately 12' of cable sheathing from the center of the 15' cable loop for fiber routing, storage, and splicing, with sufficient sheathing. Note: Provided the cable is of small enough diameter, it can be shaped into a short S-curve prior to the placement of the cut mark in order to provide slack in case settling occurs. Pushing cable into the conduit can provide similar slack. Position one side of the cable loop (i.e. the CO side) at the cable attachment unit on the left side of the organizer and mark a cut line on the sheathing midway up the unit. Similarly mark the other side of the loop using the cable attachment unit at the bottom right side of the organizer. Note: Also mark the cable loop's right-side leg (field-side) at a cable attachment unit at the bottom right corner of the fiber organizer. Note: If the loop had been 15 feet in length, there should be 12 feet between the first and second marks.	
5	If desired, remove the fiber organizer (Step 4) to facilitate sheathing removal.	
6	Per local practice, remove the sheathing to expose the components of the cable. Remove any binder string/tape from the buffer tubes/central core tube.	
7	Place the feed cable at the rear/CO side of the fiber organizer, and then re-attach the fiber organizer (Step 2).	

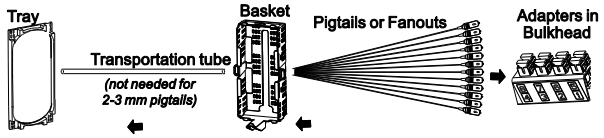
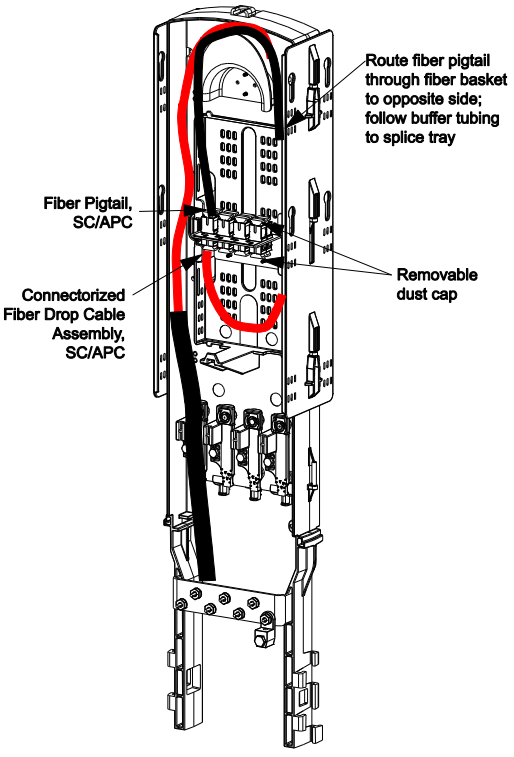
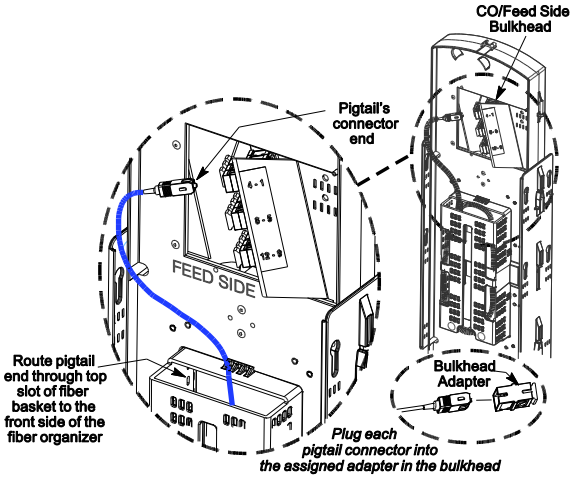
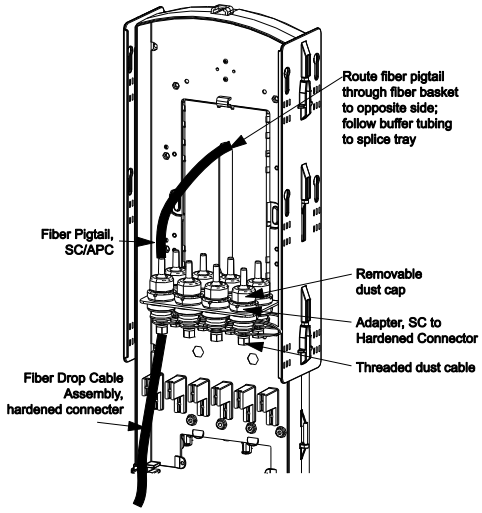
8	Trim the cable strength member(s) to be approximately 4" longer than the cable sheathing, cut so 4 inches remain. In Step 12, these will be cut to length.	
9	Cut the central core tube 3 to 4 inches longer than the sheathing opening. Note: When the tube is cut at four inches or less, the ribbon fiber can be routed to the D-clips more efficiently (see illustration in Step 15).	
10	Attach an approved cable clamp to the cable shield at the sheathing cut. Follow clamp manufactures' instructions and local practice when attaching a bond clamp.	
11	Per local codes/practices, install an earth ground wire to the pedestal at the ground lug on the bond bar located at the base of the organizer.	
12	If the cable has strength members that were not terminated in an optional cable bond clamp, (Step 10), loosen the bolt in the clamp at the top of the cable attachment unit. Trim the strength members to fit between the two washers under the top bolt (See illustration). Tighten the hex bolt. Provided that the procedures shown in Step 9 for the sheathing removal were followed, the sheathing should be positioned at the small teeth located at the base of the cable attachment unit. Secure the cable to the cable attachment unit with the provided hose clamp. Do not over tighten. Repeat this procedure on the second leg of an expressed cable.	
13	Attach a bond strap (two provided) from the cable bond clamp post to a post on the bond bar (for expressed cable, one strap for each leg of the loop).	
14	At the front of the fiber organizer, loosen the Velcro strap(s) and remove the splice tray to access the front of the basket.	

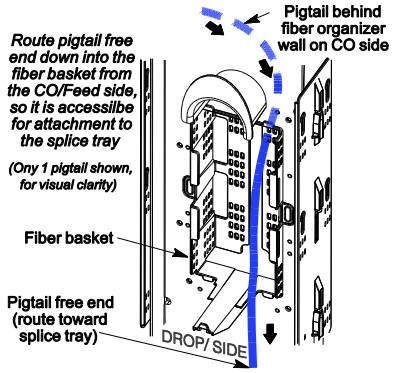
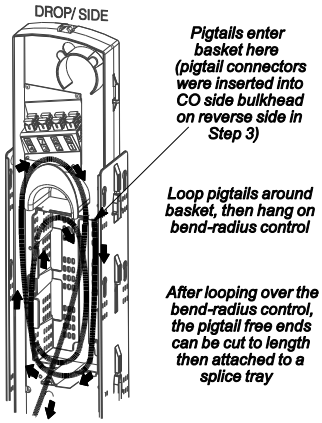
15	Separate the assigned tube/ribbon from the bundle prior to securing the express tubes or ribbons to the basket or organizer. To facilitate attachment of the tubes to the basket, pre-load the basket with cable ties on the CO side (rear) of the basket. Place the cable ties at regular intervals around the basket. Coil the tubes around the basket (approx. 3 loops) and secure the bundle to the outside of the basket. If the expressed fiber bundle or tail is ribbon fiber, ribbon clips are provided to secure the ribbon to the fiber organizer. Install eight (8) ribbon clips into the counter-bored holes around the basket on the CO side of the organizer. Note: The ribbon clips are to be used for ribbon fiber only. Use cable ties for buffer.	

3.4.3. Preparing Working Buffer Tube/Ribbon and Exposed Feed Fibers

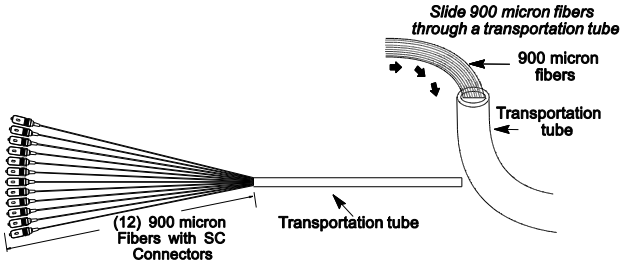
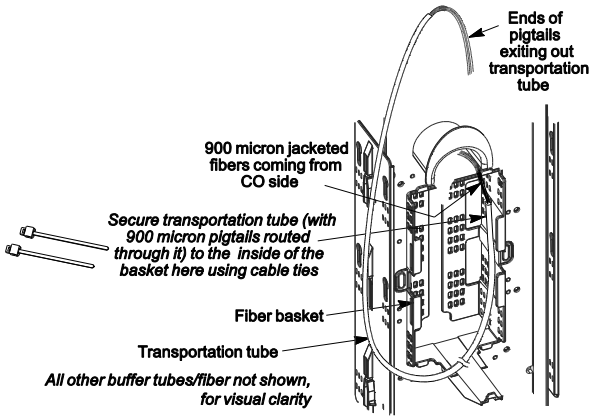
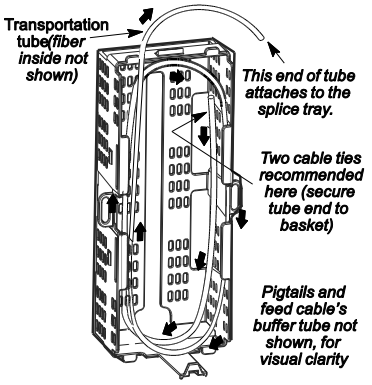
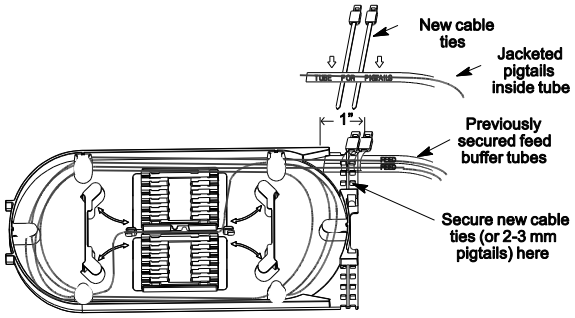
Step Number	Description
1	Route the working fiber buffer tube/ribbon to the front side of the fiber organizer through either the bottom, back, or top slot in the fiber basket (the basket slot used can vary per company practice or type of cable). Use the slot that works best for the position of the tube/ribbon. Secure the tube or ribbon to the rear wall of the basket at a point about 1-2" past the ribbon/tube's basket entrance point. Use cable ties when securing buffer tubes to the inside of the basket (as shown in Section 3.4.2, Step 15). For ribbon fiber, use a short piece of ribbon tubing (or other approved tubing) made specifically for ribbon.
2	Once each tube is secured to the rear of the basket, join both tubes together at short intervals to make one tube group. Do not join the last 28-32 inches of tubing, since this is the fiber, with tubing removed, that will be placed in the tray and fusion spliced. See Step 3. Note: Whether loose tube or ribbon cable is used, it may be advantageous to bundle the tubes/ribbon so that the CO and field portions of the working cable are attached to the tray at the same corner. The CO and field tubes can be marked so that the drop cable is spliced to the correct side of the loop. When the drop buffer tube is secured to the same corner of the splice tray as the CO and field tubes, the tubes can be coiled, routed, and stored as if they were one tube. Note: Only slack fiber from the basket to the tray is stored inside the basket. Note: If splicing is not to be performed at this time, the tubes/ribbon can be temporarily stored inside the basket until the drop cable is prepared and routed to the tray.
3	To determine if there is sufficient buffer tube slack from the basket to the tray, and also in the tray for splicing, coil the spacing tube(s) 1-2 times inside the basket. The remaining length must be adequate to perform splicing operations. Hold the tubes to the corner of the tray and mark the tube for removal at a point 1 inch inward of the buffer tube tie down slots. Note: 12 feet of exposed buffer tube nominally provide 24 inches of slack tube to the tray and 25-30 inches of slack fiber inside the tray for splicing.
4	Using company approved or local procedures, score and slit the tube at the marks and remove the buffer tube.
5	Per company practice, clean the fibers.
6	If splicing of the working fibers is performed at this time, cut only the assigned fibers to the appropriate length (cut only the desired working fibers mid-span between the cut tube ends). Do not cut any expressed fibers. If splicing will not be performed at this time (per company practice), it may be desirable to leave the fibers uncut until the drop cables are prepared. In either case, proceed to the next step to attach the buffer tubes to the splice tray.
7	Prepare a splice tray (one provided) by removing the cover and starting two cable ties at a top tray corner, using the inner tie-down slots. Note: A tray can accommodate up to 12 pigtails. 
8	Attach both feed tubes to the splice tray as a group. Overlap both buffer tube ends onto a splice tray corner (see Step 9, overlap about 1", enough to ensure the tube ends are under the installed tray cover), then affix both tube ends to the tray with cable ties. Manage and label any dead fibers per company practice. Store uncut express fibers in the splice tray. A ribbon fiber tube, or other approved tubing, must be used to attach a ribbon to the tray.
9	Per company practice, wrap and store the fibers in the splice tray for later splicing. Attach the cover by first sliding it under 2-3 tab catches on one end and side of the tray. Then lift the tray at one hole and flex the cover underneath the remaining catches. Use a second tray if more than 12 fibers are spliced.  *Tray can hold 24 splices if splices are stacked; follow company practice. See also the Charles splice tray documentation for fiber routing within the tray.*
10	Install drop cables, pigtails, or store tray. Go to Section 3.4.6, Step 1 if drop cables are to be installed now. If drop cables are to be installed at a later time, secure the splice tray to the basket and close the pedestal. For -ELXX (w/bulkhead) pedestals where pigtails are to be used go to Section 3.4.4, Step 7.

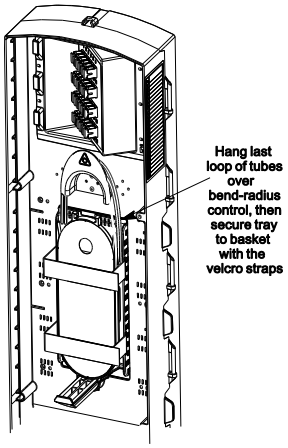
3.4.4. Installing CO Fiber Pigtails on Models with Bulkhead (Between Splice Tray & Bulkhead)

Step Number	Description	
1	Connectorized fiber assemblies, either fiber pigtails or fiber fanouts, are used in bulkhead equipped pedestals and extend from the splice tray to the bulkhead adapters. Fiber pigtails are individual fibers connectorized on one end, available with many jacket options, from 900µm to 3mm. Fanouts are connectorized multi-fiber assemblies with a loose-tube or ribbon stubbed end. If using 900µm fiber pigtails or ribbon fiber fanout, proceed to Step 6.	
2	If using 900µm jacketed pigtails, proceed to Section 3.4.5. For 2-3mm pigtails proceed to next step.	
3	To ensure efficient fiber management when using 2-3mm pigtails, connect one pigtail to the CO side of the bulkhead adapter panel and route it into the basket. Depending on desired slack, coil the pigtail inside the basket 2-3 times. Allow for the proper bend radius inside the basket. 3a. For pedestals equipped with hardened (OptiTap) bulkhead adapters; route pigtails as shown in the second image at right. 3b. For pedestals equipped with an SC bulkhead bracket affixed to the fiber basket; route pigtails per the image below.  (3b)	  (3a)

4	Using this first pigtail as a guide, mark the remainder of the pigtails then cut each to the desired length. (Follow instructions in Sec. 3.4.3, Step 3 to cut pigtails to the desired length.) The pigtails will be attached to the upper corner of the splice tray. Verify that there are 24--30 inches of jacketed fiber to the tray and the equivalent amount in the tray.	
5	Bundle the pigtails (2-3mm only) using cable ties or company approved devices.	
6	Before securing the bundled pigtails (2-3mm only) to the corner of the splice tray, verify that enough pigtail length exists to allow the tray (with the pigtails attached to it) to reach the splicing equipment. Secure the pigtail bundle to the splice tray corner, per company practice.	
7	The 2-3 mm pigtails were connected to the CO side bulkhead (in Step 3) and routed to the drop side via the slot at the top of the fiber basket (Step 4). Next, as shown on the right, the pigtails are then looped inside the basket 1-2 times, then routed over the lower bend-radius control and attached to the tray. The slack pigtail length to the tray and length of fiber to be placed in the tray can be determined using this procedure.	
8	Before securing the bundled group of 2-3mm pigtail ends to the corner of the splice tray, verify that enough pigtail length exists to allow the tray (with the pigtails attached to it) to reach the splicing equipment. Secure the pigtail bundle to the splice tray corner, per company practice.	

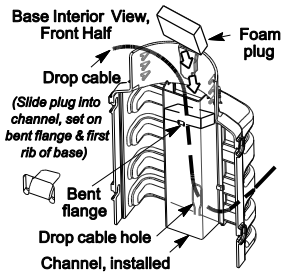
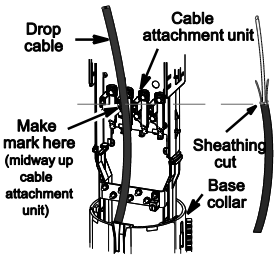
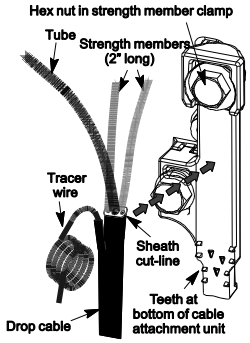
3.4.5. Installing 900 micron Pigtails In Transportation Tube

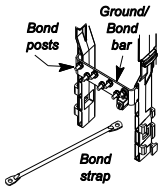
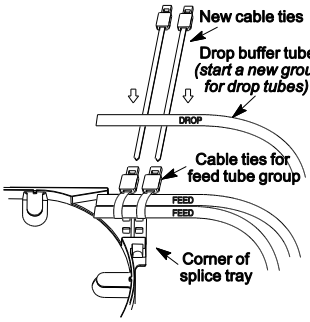
Step Number	Description	
1	900 micron pigtails cannot be secured with cable ties. It is recommended that the provided transportation tube be used to route the pigtails to the tray. Insert the 900 micron pigtails into the transportation tube. Note: Securing the tube to both the basket and splice tray prevents the pigtails from being pulled accidently from the bulkhead adapters.	
2	Attach one end of the transportation tube (end closest to the connectors) to the top inside wall of the fiber basket with two cable ties.	
3	After attaching one end of the transport tube to the inside of the basket, coil it inside the basket. The transport tube will run alongside and in the same direction as the CO fiber tube. Note: It may be necessary to trim the transport tube so that only one loop is stored inside the basket. The other end of the tube should protrude approximately 6 inches out of the top of the basket.	
4	Again prepare the splice tray for tube attachment, starting two new cable ties in the tray corner, at the tie-down slots. Overlap the transportation tube onto the tray corner about 1" (alongside the feed tubes), then secure the tube to the tray with the two cable ties If splicing is not performed at this time, wrap the jacketed fiber in the tray per company and tray manufacturer instructions and proceed to the next step. For splicing at this time, go to Section 3.4.8, Step 1.	
5	Trim the fibers to allow for 24-32" of fiber in the splice tray.	
6	Per company practice, label all tubes and pigtails. Complete any splice tray labels.	

7	Keep tubes neat and free of kinks. Per company practice, tie or bundle tubes together at short intervals. Loop and store the tube group (or any 2-3mm pigtails) inside the fiber basket, rotating the tray to avoid kinking of the buffer tubes. For --EL0X models, hang the last loop over the bend control. -EG and -EB fiber organizers do not have a radius control above the basket.	

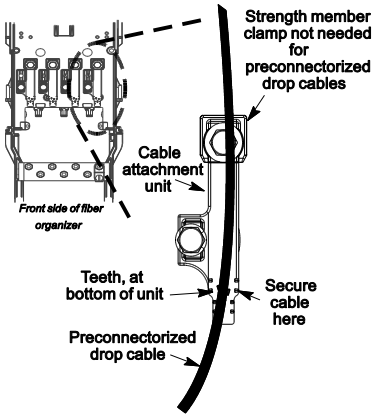
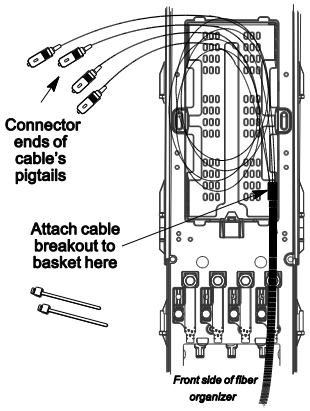
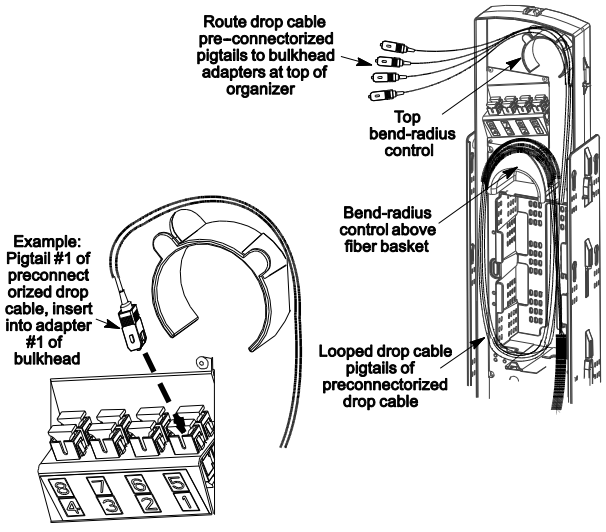
3.4.6. Installing Stub-End Fiber Drop Cables in the BD02 Pedestal

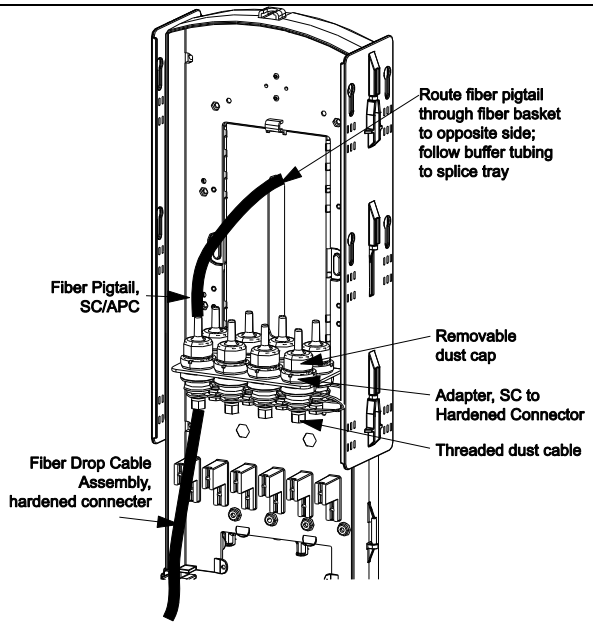
If using preconnectorized drop cables, go to Section 3.4.7, Step 1.

1	Per company practice, prepare a trench to run the drop cable from the customer premises to the pedestal. Clear soil from the front of the pedestal base to expose the drop cable access port.	
2	Lay the drop cable in the trench from the premises to the pedestal base. For stubbed cable, verify that 9 feet of cable is available above the ground line.	
3	Per company practice, route the drop cable up into the base through the innerduct, conduit or drop channel. If the drop channel is used, remove the foam plug (rodent and insect deterrent) prior to routing the cable, and then replace it after all drop cables have been installed. If the drop channel is not used, it can be kept in place and filled with pea gravel as a rodent deterrent. To reinstall the plug, cut into the plug so that it can slide over the drop cables. The foam plug rests on the top rib of the base and a small tab near the top of the drop channel. Note: If the drop channel is conduit--fed, it is recommended that the optional drop hole cover kit be installed (P/N 97-DRPHOLCVRKIT). In all situations, it is important to seal off the drop cable access port with the channel or cover.	
4	Verify a minimum of 9 feet of drop cable will extend up past the ground line indicator on the base, then, per local company practice, measure and cut the drop cable to the desired length.	
5	In removing the sheathing, enough must remain for the attachment of the cable to the cable attachment unit. Note: Providing the cable is of small enough diameter, it can be shaped into a short S-curve prior to placement of the cut mark. This provides slack in case settling occurs. Pushing cable into the conduit can provide similar slack. Place the cable next to the attachment unit and mark the cable midway up the unit.	
6	Per local practice, remove the cable sheathing to expose the strength members and buffer tubes.	
7	Trim and secure strength members. If the cable contains strength members, trim to fit under the Strength member clamp. Fit the members between the two washers under the top bolt. The sheathing should be positioned in the small teeth at the base of the cable attachment unit. Use a cable tie to secure the cable for flat drop cables and a hose clamp for round drop or branch cables. Do not over tighten the hose clamp.	

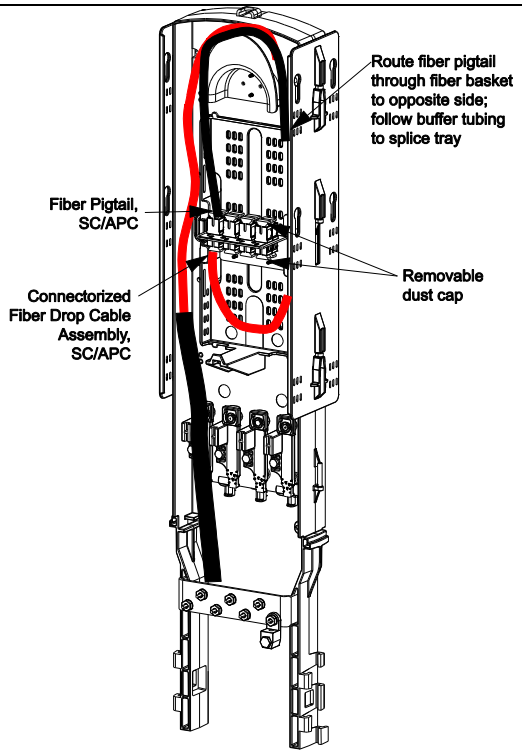
8	If bonding and grounding the cable is a requirement or local practice, follow the procedure as shown in Section 3.4.2, Steps 10 to 13.	
9	Label the/all drop cable tray(s), per company practice.	
10	Remove the splice from the basket and prepare to attach the drop buffer tubes to the tray.	
11	Use one cable tie to secure the drop tube at the lower corner of the basket. If there is sufficient slack, store 1-2 coils of drop buffer tube inside the basket or approximately the same length as the feed tube(s), affixing it to the feed buffer tube(s) with cable ties at regular intervals. Leave at least 32 inches of unsecured buffer tube to allow routing of fiber inside the tray.	
12	Once the Drop and Feed buffer tubes are secured, mark the buffer tube where it overlaps the tray 1” and mark the buffer tube for removal. See Section 3.4.3, Step 4.	
13	Score the buffer tube at cut line and remove the buffer tube. Verify that the drop tube is approximately the same length as the feed tube(s). There should be approximately 32” of fiber to be stored in the tray. Clean fibers per company practice.	
14	Per splice tray manufacturer instructions, secure the drop buffer tube to the tray. Note: It is recommended that the installer use the same corner of tray for the feed and drop buffer tubes. Attach the drop tube adjacent to the feed cable buffer tubes. Using two cable ties, attach the drop tube to the tray. As more drops are added, maintain the integrity of the drop tubes by securing them as a group. New cable ties can be added one at a time so that the drop tubes are always secured with at least one cable tie.	
15	If splicing is not performed at this time, wrap the fibers in the tray, per company practice and attach the tray cover.	
16	Label the tube/fibers, per company practice.	
17	Repeat Steps 1-16 for any additional customer drop cables ready for installation and connection at this time.	
18	If splicing is to be performed go to Section 3.4.8, Step 1. If splicing is not to be performed, store fiber, tubes and tray and close pedestal. Loop and store the tube group inside the fiber basket, rotating the tray to avoid kinking of the buffer tubes. Perform Steps 6-7 in Section 3.4.8 to close up pedestal.	

3.4.7. Installing Preconnectorized Drop Cables in the BDO2 Pedestal

1	If the drop cable coming into the pedestal is a preconnectorized type that does not require any cable opening and fiber splicing, first perform the applicable Steps 1-4 in Section 3.4.6 to bring the preconnectorized cable into the pedestal. Note: Verify that there is a minimum of 5' of pre- terminated cable above the ground line.	
2	Bring sufficient cable inside the pedestal to allow the cable breakout to be attached to the organizer. With the break-out at its approximate affixed location against the fiber basket, hold the drop cable in place against the cable attachment unit.	
3	Place the cable at the preferred height and attach it to the cable attachment unit with a cable tie (dielectric) or a hose clamp (armored). Follow local practices.	
4	Secure the cable breakout to the lower inner wall of the basket.	
5	Loop and hang the pigtail assembly over the bend control, then route the connectors to the assigned bulkhead adapters. Attach each connector per company practice. 5a. For pedestals equipped with hardened (OptiTap) bulkhead adapters; remove threaded dust cap and thread drop cable connector to the appropriate port. Connector and adapter are keyed to ensure proper connection. 5b. For pedestals equipped with SC bulkhead bracket affixed to fiber basket; route connectorized fiber pigtail per the diagram.	

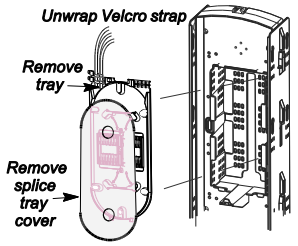

Route fiber pigtail through fiber basket to opposite side; follow buffer tubing to splice tray
Fiber Pigtail, SC/APC
Removable dust cap
Adapter, SC to Hardened Connector
Threaded dust cable
Fiber Drop Cable Assembly, hardened connecter

(5a)


Route fiber pigtail through fiber basket to opposite side; follow buffer tubing to splice tray
Fiber Pigtail, SC/APC
Removable dust cap
Connectorized Fiber Drop Cable Assembly, SC/APC

(5b)

3.4.8. Splicing Fibers at the BDO2 Pedestal

Step Number	Description	
1	Prepare to splice fibers and review cautions and warning listed before at the beginning of this document.	
2	After removing the outer dome, loosen the Velcro straps and remove the tray from the organizer. Detach the cover by pulling up on the two cover holes.	
3	Perform splicing per company practice and coil/wrap the fibers following the tray manufacturer's recommended procedures. Note: First install the spliced fibers and then the expressed fibers. This will permit access to the fibers that were not spliced for future additions, rework or test without disturbing the working fibers.	
4	Per company practice, install the tray label and identify the splices. To replace the cover, first insert it under the tabs on one side of the tray. Then flex the tray using one of the holes in the cover, and slide the cover under the remaining tabs. Perform this at both ends. Note: Do not push the splice tray cover on top of the tabs, as the tabs may bend. If a tab becomes bent, it can be straightened with a small screw driver or lineman's knife.	
5	Coil all buffer tube slack attached to the tray into the basket. Rest the tray against the tabs on the edge of the basket and secure the tray with the supplied Velcro straps.	
6	To allow proper dome placement, verify all cabling/tubing is neat and not kinked and verify no cables, cable ties, or tubes protrude beyond the fiber organizer walls.	
7	Lower the dome and rotate it so that the lock lines up with the base latch. Push down on the dome to activate the locking mechanism. Verify that the dome is securely attached by pulling up on it after the latch clicks into position.	

4. TECHNICAL ASSISTANCE AND REPAIR SERVICE

For questions on product repair or if technical assistance is required, contact Charles Technical Support.

847-806-8500
techserv@charlesindustries.com (email)
http://www.charlesindustries.com/techserv.htm

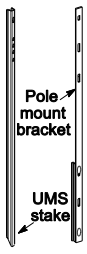
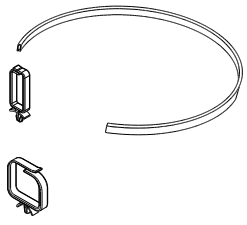
5. SPECIFICATIONS

5.1. Physical Specifications

Feature	BDO203	BDO204	BDO205
Height, overall	42.75 in.	42.75 in.	45 in.
Height, base only, incl. collar	18 in.	18 in.	18 in.
Height, dome only	28.5 in.	28.5 in.	30 in.
Height, dome only, extended version *	35 in.	35 in.	34 in.
Height, base bottom to ground line	8.5 in.	8.5 in	8.5 in
Height, dome top to ground line	34.25 in.	34.25 in	36.5 in
Height, dome top to ground line, extended version *	41.5 in.	41.5 in	40.5 in
Depth, base (front to back)	9.75 in.	10.8 in.	12.75 in.
Width, base (side to side)	10.25 in.	11.75 in.	12.75 in.
Diameter, base collar, O.D. (Outside Diameter)	6.6 in.	8.1 in.	10.75 in.
Diameter, base collar, I.D. (Inside Diameter)	6.2 in.	7.7 in.	10.25 in.
Diameter, dome, O.D. (not the cap)	7.1 in.	8.6 in.	11.25 in.
Diameter, dome, I.D.	6.7 in.	8.2 in.	10.88 in.
Weight	18 lbs.	21 lbs.	29 lbs.

** Part numbers BDO203-EXX, BDO204-EXX, and BDO205-EXX have a top bulkhead area.*

5.2. Ordering Information

Part Number	Description	
97-SCU12LF3M	Loose tube fiber fanout w/ 12 SC/UPC connectors, 3 m. long	
97-SCU12RF3M	Ribbon fiber fanout w/ 12 SC/UPC connectors, 3 m. long	
97-SCA12LF3M	Loose tube fiber fanout w/ 12 SC/APC connectors, 3 m. long	
97-SCA12RF3M	Ribbon fiber fanout w/ 12 SC/APC connectors, 3 m. long	
97-FIBR24TRAY	Splice tray kit, with one 12/24 Fiber tray	
UMS36-STD	36” universal metal mounting-stake, galvanized, with hardware to attach the BDO base to the stake.	
UMS42-STD	Same as above, but 42” long.	
UMB102A	24” universal metal pole-mount bracket, galvanized, with mounting hardware to attach the base to the bracket.	
97-RIBNTUBEKIT	3M® ribbon transportation tube kit, 3 ft., 10 each.	
97-RIBNCLIPKIT *(for BDO203)*	Ribbon saddle clip kit, holds up to 144 fibers, 40 ea.	
97-RIBNCLIPLG *(for BDO204 & BDO205)*	Ribbon saddle clip kit, large, holds up to 288 fibers, 40 ea.	