CORNING

RPX[®] Gel-Free Ribbon Cable and FlexNAP[™] System RPX[®] Cable Mechanical Wedge Dead-end Clamp Instructions

P/N 005-103 Issue 3



1. General

1.1 This procedure provides general instructions for the Mechanical Wedge Dead-end Clamp (p/n RPD-DEADEND-E1) for RPX[®] Gel-Free Ribbon and FlexNAP[™] System RPX Cables used in a self-supporting aerial installation (Figure 1).

1.2 This procedure assumes that the installer is familiar with aerial cable placement and all relevant safety practices. Refer to the FlexNAP System RPX Cable Assembly Placing-Self-supporting Aerial SRP (005-081) for tensioning RPX Cable. The maximum rated installation tension for the RPX Cable and mechanical wedge dead-end clamp is 1550N. The RPX Wedge Dead-end is designed to break away from the pole when the tension exceeds 1000 lb (4450 N). It is recommended to install the RPX Wedge Dead-end on a rounded 1/2-in (13 mm) or larger diameter anchor. Installing an anchor that is smaller or has sharp edges can lead to unexpected damage.

Precautions

CAUTION: The use of cut-resistant gloves during this procedure is strongly recommended. One surface of the shim component of this dead-end clamp has exposed edges to aid in cable strain-relief. The use of safety gloves for hand protection can reduce the risk of personal injury when handling the shim.

3. Tools and Materials

In addition to the wedge dead-end clamp, the following tools and materials are required to complete this procedure:

• Linesman's wrench (or other heavy tool)



- **Step 1:** Disassemble the factory pre-assembled dead-end clamp by sliding out the inner wedge/bail assembly and removing the shim (Figure 2).
- **Step 2:** If the pole hardware has a closed eye as seen in Figure 4, skip to Step 3. If the pole support is an open-hook, hang the bail over the hook.
- **Step 3:** If the pole hardware you are using has a closed eye, the bail must first be opened (Figure 3):
 - a. Open the bail by pushing one of the bail ferrules out of its smaller bail retaining hole in the inner wedge.
 - b. With the ferrule removed from the bail retaining hole, slide the bail over to the larger bail release hole.

c. Pull the ferrule through the release hole to open the end of the bail.





Figure 3

- **Step 4:** Once the free-end of the bail is threaded through the closed-eye hardware, reverse the operations in Step 3 to re-secure the bail (Figure 4).
- Step 5: Apply tension to the cable. Refer to the FlexNAP[™] System RPX[®] Cable Assembly Placing-Self-supporting Aerial SRP (005-090) for tensioning RPX Cable. The maximum rated installation tension for the RPX Cable and mechanical wedge dead-end clamp is 1550N.



Figure 4

- **NOTE:** It is preferable to initially tension the cable slightly tighter and with less sag than desired. After dead-end clamp installation, sag may drop slightly as the dead-end clamp seats in.
- **Step 6:** With the cable tensioned, hold the shell around the cable about 30cm (12 in) (the approximate length of the bail) from the tip of the pole hardware as shown in Figure 5. The cable should be lying flat inside the shell.



Step 7: Place the shim on top of the cable with the punched perforations facing down on top of the cable. The tabs of the shim should be outside the shell on each side (Figure 6).



Step 2: Slide the inner wedge into the shell on top of the cable and shim. Slide the shell/shim away from the pole as you slide the wedge toward the pole (Figure 7).



Figure 7

- **NOTE:** Try to keep the bail taut as you assemble the clamp so that the cable sag does not drastically increase as the tensioning device is released.
- Step 3: Holding the outer shell with a gloved hand, strike the end of the inner wedge with a heavy tool such as a linesman's wrench to seat the wedge into the shell. One or two heavy taps should be sufficient (Figure 8).
- Step 4: Release the tensioning device.



Figure 8

5. Disassembly

If removal of the dead-end clamp from the RPX® Cable is required, tension the cable to release tension on the bail. Then, holding the outer shell with a gloved-hand, carefully tap the bail-securing end of the inner wedge with a linesman's wrench or other heavy tool (Figure 9). The number and force of the taps will depend on the amount of tension applied to the dead-end clamp.



Figure 9

Corning Optical Communications LLC • PO Box 489 • Hickory, NC 28603-0489 USA 800-743-2675 • FAX: 828-325-5060 • International: +1-828-901-5000 • www.corning.com/opcomm

Corning Optical Communications reserves the right to improve, enhance, and modify the features and specifications of Corning Optical Communications products without prior notification. A complete listing of the trademarks of Corning Optical Communications is available at www.corning.com/opcomm/trademarks. All other trademarks are the properties of their respective owners. Corning Optical Communications is ISO 9001 certified. © 2011, 2019 Corning Optical Communications. All rights reserved.