



COYOTE® Defender

Protection for COYOTE splice cases (6.5", 8" and 9.5" sizes) up to 28" long, COYOTE closures (RUNT, PUP 6.0" and 8.5" sizes) and COYOTE Dome Closures.

This procedure explains the application of Defender Kit #8003491 for COYOTE Splice Cases, Defender Kit #8003492 for COYOTE PUP 6" and 8" Closures, Defender Kit #800011916 for COYOTE RUNT Closures and Defender Kit #800012162 for COYOTE Dome Closures.

Be sure to read and completely understand this procedure before applying product. Be sure to select the proper PREFORMED™ product before application.

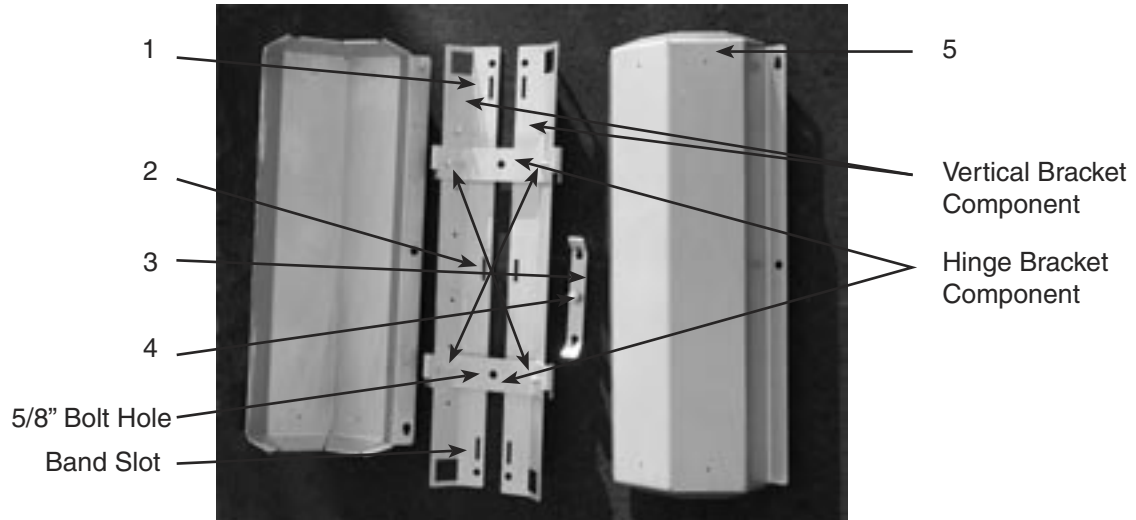


FIGURE 1 - BASIC COMPONENTS AND NOMENCLATURE

1.00 COYOTE DEFENDER NOMENCLATURE

- 1) **Mounting Frame Assembly:** The mounting frame consists of two vertical bracket components and two horizontal hinge bracket components that are factory assembled with self tapping screws (item 2). The mounting frame assembly can be bolted or banded to a structure. Slots in the frame will accept any size band up to 1.5" (38 mm) wide and the bolt holes accept standard 5/8" (16 mm) diameter bolts.
- 2) **Hex Head Self-Tapping Screws, 5/16" x 1"** (8 mm x 25 mm) long: These screws are used throughout the assembly for various functions, including mounting frame component connection, door engagement, door keeper, and adjustable horizontal bracket attachment.
- 3) **Adjustable Horizontal Bracket:** This horizontal bracket can be adjusted to accommodate the various size closures and splice cases. This bracket is not required for 28" long (711 mm) splice cases. The bracket is fastened to the frame using self-tapping screws.
- 4) **Hex Head Bolt: 5/8"-11 x 1.5"** long: These bolts are used to attach the splice case and closure vertical mounting brackets to the **Defender Mounting Frame** for banded applications. Also, one hex head bolt accompanies the adjustable horizontal bracket (item 2), if required to attach

Splice Case and COYOTE Closure Vertical Mounting Brackets.

- 5) **Door:** Each door has open slots to slide onto the hinges of the mounting frame (item 1). Self-tapping bolts (mounted through the frame) are used to keep the doors on the hinges.
- Items listed below not shown in Figure 1.**
- 6) **Vertical Mounting Bracket for Splice Cases:** Defender kit #8003491 includes a Vertical Mounting Bracket that attaches a COYOTE Splice Case to the mounting frame (item 1). (Figure 2)
 - 7) **Adaptor Bracket for COYOTE Closures & COYOTE PUP 6.0 & 8.5:** Defender kit #8003492 includes an Adapter Bracket that attaches a COYOTE Closure to the mounting frame (item 1). (Figure 13)
 - 8) **Vertical Mounting Bracket for COYOTE RUNT:** Defender Kit #800011916 includes mounting bracket kit #8003571 with 5/8"-11" x 6" long bolt, nuts and lock washers to mount on the adjustable horizontal bracket. (Figure 19)
 - 9) **Vertical Mounting Bracket for COYOTE Dome:** Defender Kit #800012162 includes Mounting Bracket Kit #8003512 and Dome Vertical Mounting Bracket Kit #8003702. (Figure 26)

2.00 COYOTE DEFENDER APPLICATIONS FOR COYOTE SPLICE CASE KIT #8003491

2.01 During the assembly of the splice case, install the splice case vertical mounting bracket #8003472 according to application procedure #SP2901 included with the kit. The vertical mounting bracket kit accommodates 6.5", 8", and 9.5" diameter splice cases. (Figure 2)



FIGURE 2 - SPLICE CASE VERTICAL MOUNTING BRACKETS

2.02 For 22" long splice cases, install the adjustable horizontal bracket onto the mounting frame in the appropriate position. (Figure 3) This bracket is not required for 28" long splice cases.

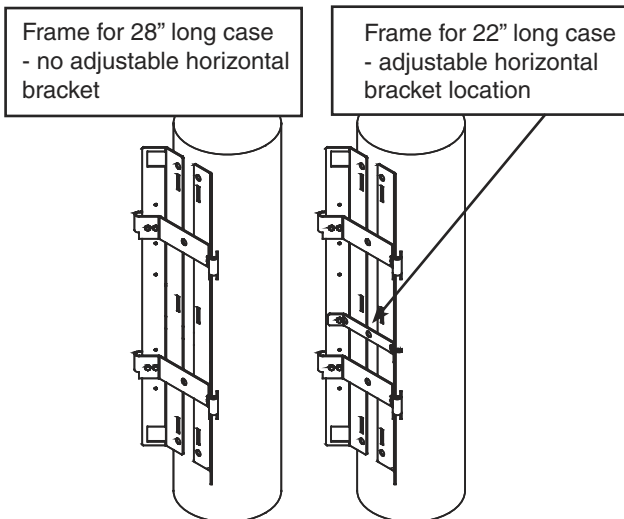


FIGURE 3 - FRAME CONFIGURATION FOR SPLICE CASES

2.03 Attach the Mounting Frame to the structure via banding (see A below) or 5/8" bolts (see B below).

A) Banding: Bands are fed through the frame slots and then tightened against the pole. (Figure 4) Install the short 5/8" hex head bolts for attachment to the splice case vertical mounting bracket. (Figure 5)

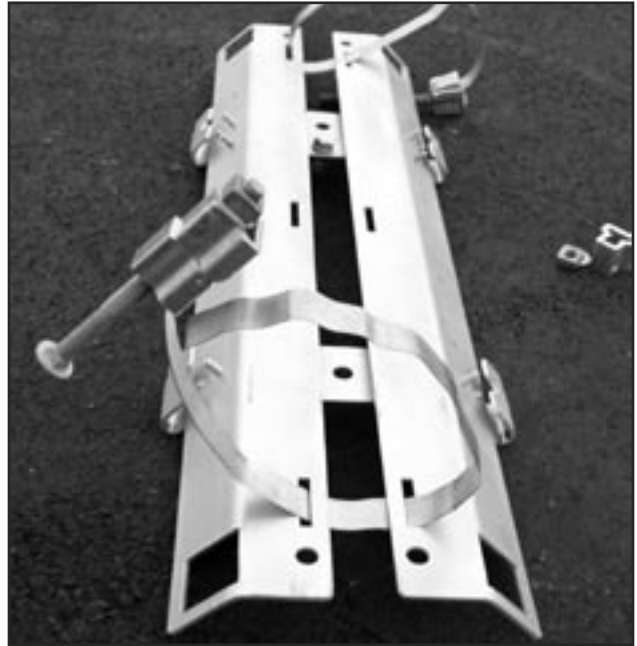


FIGURE 4 - THREAD BANDS THROUGH FRAME SLOTS

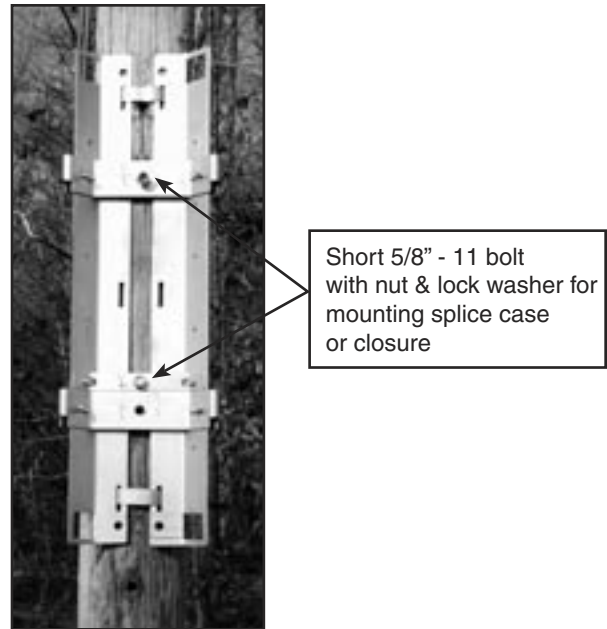


FIGURE 5 - BAND MOUNT REQUIRES BOTH 5/8" x 1.5" (16 mm x 38 mm) LONG BOLTS FOR SPLICE CASE OR CLOSURE MOUNTS

B) Through Bolting: Use the mounting frame as a template and drill holes through the structure to accommodate 5/8" (16 mm) diameter bolts. Slide the through bolts through the holes on the horizontal hinge brackets. Hang the mounting frame against the structure using the through bolts and capture loosely with washer, lock washer and nut.

Double-arm Bolting: Double-arm bolts may be used instead of through bolts. The through bolt may extend no more than 1.5" (38 mm) beyond the surface of the horizontal hinge bracket. This avoids interference with the splice case body. Optional mounting holes are provided on the vertical bracket components of the mounting frame. (Figures 6 & 7)



FIGURE 6 - SLIDE BOLTS THROUGH HINGE BRACKETS



FIGURE 7 - HANG FRAME ON POLE

2.04 Hang the splice case with vertical mounting bracket onto the appropriate 5/8" (16 mm) bolts. Tighten nuts to secure assembly. (Figure 8)

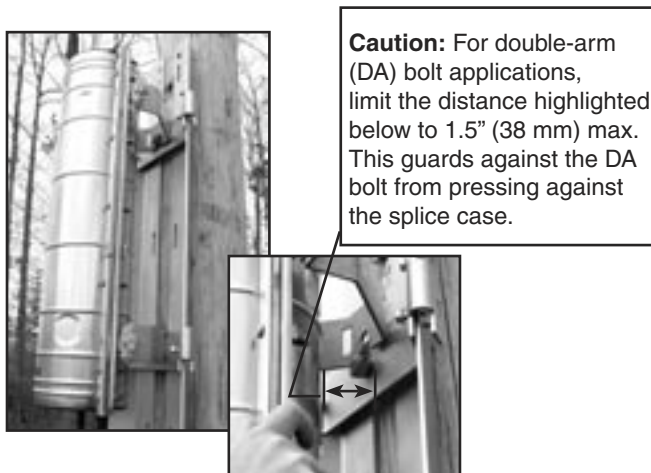


FIGURE 8 - VERTICAL MOUNTING BRACKET HANGS ON THROUGH BOLT

2.05 Partially unscrew the "door keeper" self-tapping screws on the hinge brackets of the mounting frame. This allows the doors to slide on. (Figure 9)

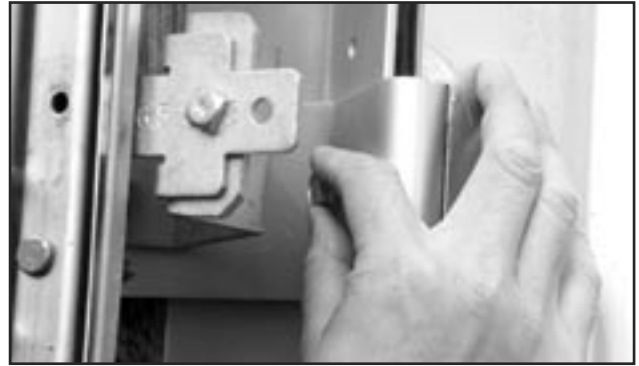


FIGURE 9 - LOOSEN SCREW ON HINGE BRACKET

2.06 Install one door onto the hinges, and then screw the self-tapping screws tight against the frame to keep the door on the frame. Repeat this for the other door. (Figures 10 & 11)

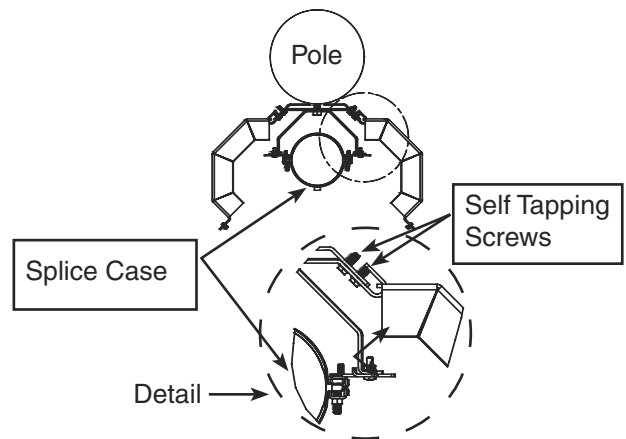


FIGURE 10 - TOP VIEW OF DEFENDER & SPLICE CASE



FIGURE 11 - INSTALL DOOR

2.07 Near the top and bottom of the self-tapping screws, couple the doors together to keep them in a closed position. Bring the doors near to the closed position and slightly lift up one door to engage the screw heads into the door holes provided. (Figures 12 and 18) There is a hole midway between the top and bottom for locking or tying the two doors together.



FIGURE 12 - LIFT ONE DOOR TO ENGAGE SCREW INTO OTHER DOOR

3.00 COYOTE DEFENDER APPLICATION FOR COYOTE CLOSURE KIT #8003492

3.01 Install the closure adapter brackets (item 7 on pg 1) onto the grounding studs of the closure. (Figure 13)



FIGURE 13 - INSTALL ADAPTER BRACKETS FOR CLOSURE

3.02 Install the adjustable horizontal bracket onto the mounting frame in the position described below. (Figure 14)

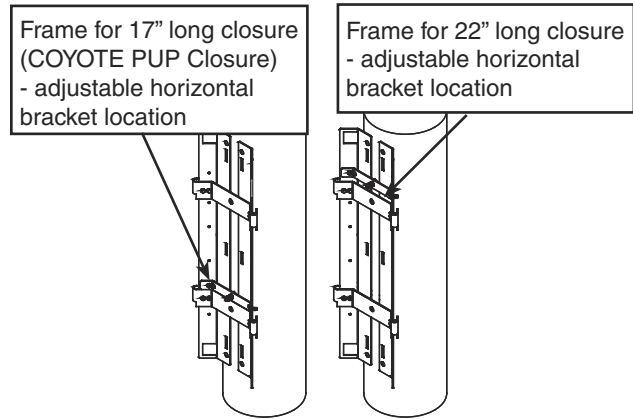


FIGURE 14 - FRAME CONFIGURATION FOR CLOSURES

3.03 Attach the mounting frame to the structure via banding or 5/8" (16 mm) bolts.

A) Banding: Bands are fed through the frame slots and then tightened against the pole (Figure 4). Install the short 5/8" x 1.5" (16 mm x 38 mm long) hex head bolts in the appropriate position (Figure 5) for attachment to the closure adapter brackets.

B) Through Bolting: Use the mounting frame as a template and drill holes through the structure to accommodate 5/8" (16 mm) diameter bolts. Through bolts can be slid through the holes on the horizontal hinge brackets (Figures 6 & 7). Hang the mounting frame against the structure using the through bolts and capture loosely with washer, lock washer and nut.

Double-arm Bolting: Double-arm bolts may be used instead of through bolts. The through bolt may extend no more than 1.5" (38 mm) beyond the surface of the horizontal hinge bracket. This avoids interference with the COYOTE Closure body. Optional mounting holes are provided on the vertical bracket components of the mounting frame. (Figure 6)

3.04 Hang the closure with the adapter bracket onto the 5/8" (16 mm) bolts. Tighten the nuts to secure assembly. (Figure 15)



FIGURE 15 - HANG CLOSURE ONTO THROUGH BOLT.

3.05 Partially unscrew the “door keeper” self-tapping screws located on the hinge brackets of the mounting frame (Similar to Figure 9). This allows the doors to slide on.

3.06 Install one door onto the hinges (Similar to Figure 11), and then screw the self-tapping screws tight against the frame to keep the door on the frame (Figure 16). Repeat this for the other door. (Figure 17)

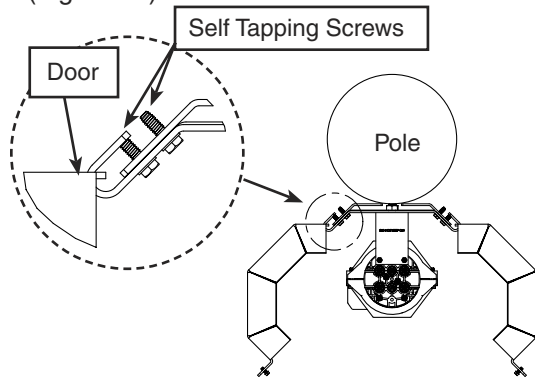


FIGURE 16 - TOP VIEW OF DEFENDER & CLOSURE



FIGURE 17 - DOORS INSTALLED

3.07 Near the top and bottom of self-tapping screws, couple the doors together to keep them in a closed position. Bring the doors near to the closed position and slightly lift up one door to engage the screw heads into the door holes provided (Figures 12 & 18). There is a hole midway between the top and bottom for locking or tying the two doors together.



FIGURE 18: DOORS ENGAGED WITH SCREW

4.00 COYOTE DEFENDER APPLICATIONS FOR COYOTE RUNT KIT #800011916

Note: Because the COYOTE RUNT Closure mounts to the adjustable horizontal bracket, the COYOTE Defender frame and doors can be completely assembled and tightened against the structure before COYOTE RUNT installation

4.01 The COYOTE RUNT closure requires the vertical mounting bracket and 5/8”-11 fastener hardware to secure the closure onto the COYOTE Defender mounting frame. (Figure 19)



FIGURE 19 - VERTICAL MOUNTING BRACKET & 5/8” FASTENER HARDWARE

4.02 Install the adjustable horizontal bracket onto the 5/8”-11 x 6” bolt. (Figure 20) This prepares the bracket connection between the vertical mounting bracket and COYOTE Defender Frame.



FIGURE 20: - PREPARE ADJUSTABLE HORIZONTAL BRACKET CONNECTION

4.03 Attach the adjustable horizontal bracket onto the frame with the 5/16” self tapping screws. Position above the middle banding slots of the frame and below the upper hinge bracket. (Figure 21)



FIGURE 21 - INSTALL BRACKET CONNECTION ONTO FRAME

- 4.04 Install the vertical mounting bracket onto the 5/8"-11 x 6" bolt. Rest the vertical mounting bracket keyhole slot onto the bolt and secure between two 5/8" nuts and lock washer. (Figure 22)



FIGURE 22: INSTALL VERTICAL MOUNTING BRACKET

CAUTION: Limit exposed thread to 3/4" (19 mm) maximum beyond the last nut. (Figure 23). This prevents interference with the COYOTE RUNT Closure.



FIGURE 23 - LIMIT EXPOSED THREAD LENGTH

- 4.05 Attach the COYOTE RUNT Closure via the exterior mounting holes – refer to Application Procedure #SP2927 for details about the vertical mounting bracket (aka universal mounting bracket). Capture the closure with appropriate lock washer nut. Tighten nuts until lock washers flatten. (Figures 24 and 25)



FIGURE 24 - INSTALL COYOTE RUNT ONTO VERTICAL MOUNTING BRACKET



FIGURE 25 - COYOTE RUNT INSTALLED

5.00 COYOTE® DEFENDER APPLICATION FOR COYOTE DOME CLOSURE KIT #800012162

- 5.01 The COYOTE Dome requires the COYOTE Dome Vertical Mounting Bracket to secure the Dome onto the mounting frame. (Figure 26)

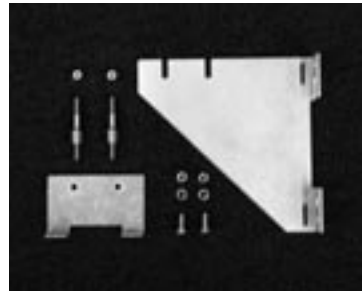


FIGURE 26 - VERTICAL MOUNTING BRACKET KIT

- 5.02 Remove the cover from the end plate assembly. (Figure 27)

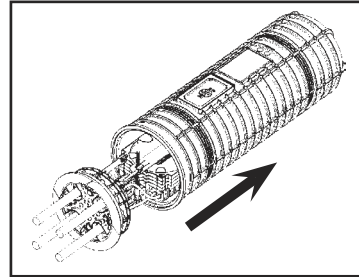


FIGURE 27

- 5.03 Remove the two end plate bolts that are opposite of each other and replace them with the two stainless steel studs provided with the COYOTE Dome Vertical Mounting kit. Make sure that the shorter threaded end of each stud is facing outside of the end plate and that the O-ring of each stud is in place. (Figure 28)

NOTE: When securing the stainless steel studs to the end plate, use the flange nuts from the end plate bolts and not the lock nuts provided in the mounting kit.

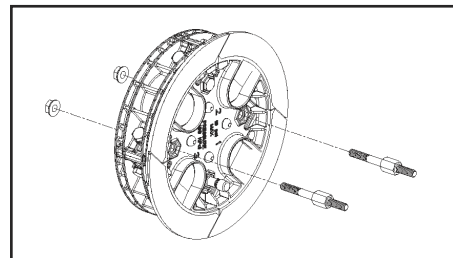


FIGURE 28

- 5.04 Re-install the cover over the end plate assembly. (Figure 29)

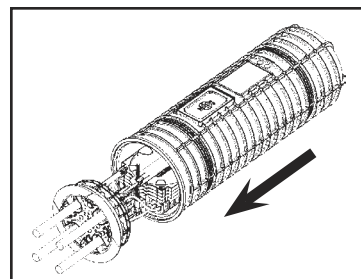


FIGURE 29

- 5.05 Secure the adapter bracket to the stainless steel studs with the lock nuts provided with the mounting kit. (Figure 30)

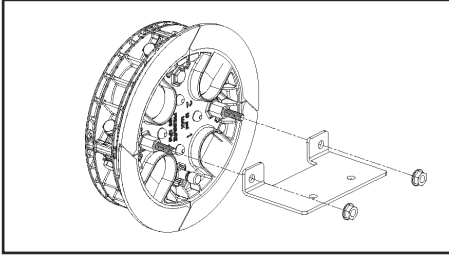


FIGURE 30

- 5.06 Secure the adapter bracket to the pole mounting bracket. (Figure 31)

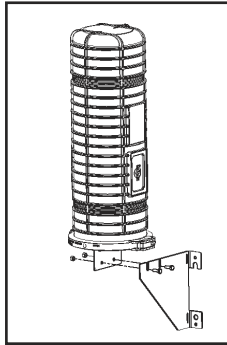


FIGURE 31

- 5.07 Install the adjustable horizontal bracket onto the mounting frame. (Figure 32)

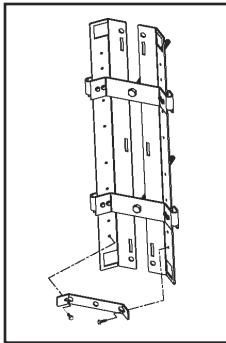


FIGURE 32

- 5.08 Secure the pole mounting bracket to the bottom horizontal hinge bracket of the mounting frame and the adjustable horizontal bracket with 5/8" (16 mm) bolts. (Figure 33)

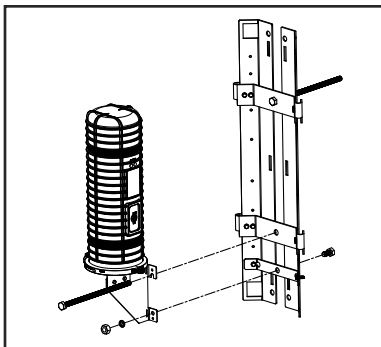


FIGURE 33

6.00 FIBERLIGN® CABLE STORAGE ACCESSORIES FOR COYOTE DEFENDER

- 6.01 **Quad Spool / Double Arm Configuration:** FIBERLIGN® Cable Storage Assembly Kit #8003569 can be installed into the rectangular holes at the top and bottom of the COYOTE Defender frame. Before installing both spools on the cross-arm of the cable storage assembly, slide the arm through the rectangular slots with the flat of the cross-arm channel facing the splice case or closure (away from the structure). (Figure 34)



FIGURE 34 - RECTANGULAR FRAME HOLE ACCEPTS CROSS-ARM

- 6.02 Assemble the spools.
6.03 The arms are retained from excess shifting with two self tapping screws. (Figure 35)



FIGURE 35 - SCREWS RETAIN CROSS-ARM

- 6.04 Wrap the excess cable onto the storage spools. (Figure 36)



FIGURE 36 - QUAD SPOOL DOUBLE ARM CONFIGURATION

6.05 Triple Spool / Single Arm Configuration: One FIBERLIGN Cable Storage Assembly Kit #8003493 and one FIBERLIGN Cable Storage Spool #8003503 make up this configuration. (Figure 37) If banding is required, use one FIBERLIGN Cable Storage Spool with Banding Bracket Kit #8003503B1. Install the cross-arm of the Cable Storage Assembly Kit into the rectangular holes at the top of the COYOTE Defender frame. Before installing 2 spools on the cross-arm of the cable storage assembly, slide the arm through the rectangular slots with the flat of the cross-arm channel facing the splice case or closure (or away from the structure).

6.06 Assemble the spools.

6.07 The cross-arm is retained from excess shifting with two self tapping screws. (Figure 35)

6.08 The FIBERLIGN Cable Storage Spool is mounted with 5/8" through bolt or DA bolt. Drill a hole below the COYOTE Defender in a position that allows for drip loop clearance and proper cable bend radius. (Figure 37)

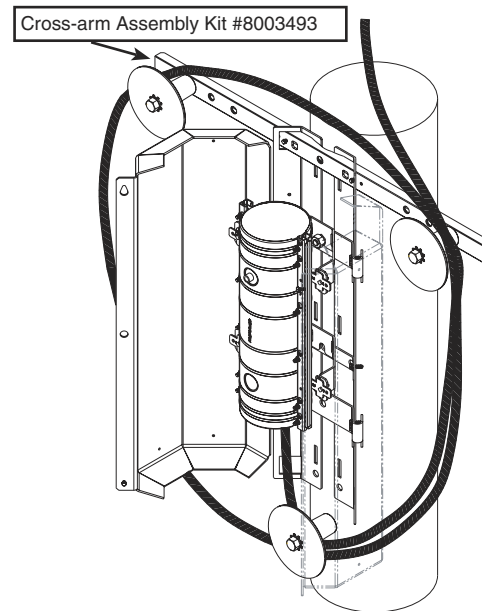


FIGURE 37 - TRIPLE SPOOL / SINGLE ARM CONFIGURATION

6.09 The FIBERLIGN Cable Storage Spool with banding bracket can be mounted with 3/4" metal banding (not supplied with kit). The spool is retained to the banding bracket with a 5/8"-11 fully threaded bolt.

SAFETY CONSIDERATIONS

This application procedure is not intended to supersede any company construction or safety standards. This procedure is offered only to illustrate safe application for the individual.
FAILURE TO FOLLOW THESE PROCEDURES MAY RESULT IN PERSONAL INJURY OR DEATH.

Do not modify this product under any circumstances.

This product is intended for use by trained technicians only. **This product should not be used by anyone who is not familiar with, and not trained to use it.**

When working in the area of energized lines, extra care should be taken to prevent accidental electrical contact.

For proper performance and personal safety, be sure to select the proper size PREFORMED™ product before application.

PREFORMED products are precision devices. To insure proper performance, they should be stored in cartons under cover and handled carefully.



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