

Figure 1. 12A1 Cable Clamp

12A1 CABLE CLAMP PARTS LIST

ITEM	QTY	ITEM	QTY
B1 BOND CLAMP	1	CLAMP BRACKET	1
B2 BOND CLAMP	1	BONDING LUG	1
SCREW 1/4-20 X 1 3/4"	1	BOND CLIP SM.	1
NUT HEX 1/4-20	2	BOND CLIP LG.	1
CABLE CLAMP HALF	2	WASHER FLAT #10	1
"V" GROOVE INSERT	2	WASHER FLAT 1/4"	1
SCREW (AB) #8 X 1/2"	2	WASHER LOCK #12 ET	1
GROUND WIRE ASSY.	1	NUT HEX 10-24	1
GROUNDING LUG	1	SCREW #10-24 X 1/2"	2
SPLIT LUG CONNECTOR	1	SCREW TAPTITE #12-24	1
INSTRUCTION SHEET	1		

12A1 CABLE CLAMP INSTALLATION FOR CROSSPLY TYPE CABLE

* Refer to Figure. 1 (Page 1)

** Refer to Figure. 2

1.* When installing 12A1 Clamp directly to Fiber Optic Termination Shelf Bracket, proceed to Step 4. When installing clamp on 100A or 200A LIU backboard, proceed to Step 2.

2.* Insert 1/4-20 by 1-3/4 inch mounting screw through center hole in clamp bracket and one cable clamp half. Install nut in clamp half and tighten screw.

3.* Install clamp bracket to LIU backboard using two No. 8 by 1/2 inch screws, proceed to Step 5.

4.* Insert 1/4-20 by 1-3/4 inch mounting screw through clamp mounting hole in termination shelf bracket and one cable clamp half. Install nut in clamp half and tighten screw.

5.* Install two plastic V-groove inserts into halves of cable clamp.

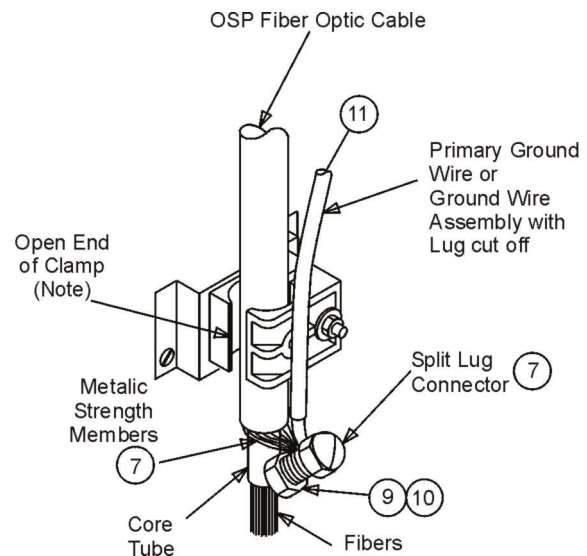


Figure 2. 12A1 Cable Clamp Installation For Crossply Type Cable

Note: First OSP cable clamped to any LGX® shelf bracket should have open end of cable clamp facing front of frame. Second cable clamped to that position would have clamp facing opposite direction.

6.* Place OSP (outside plant) cable into cable clamps. Install cable clamp retaining washer and nut. Using 216-type tool, tighten nut.

DANGER: Use care in handling cable strength members to avoid personal injury.

7.** Twist cable strength members together into single strand. Install split-lug connector on strength members. Do not tighten split-lug connector at this time.

8.** When cable strength members are to be grounded to LGX® frame, proceed to Step 10. When strength members are to be grounded to

primary ground, proceed to Step 9.

9.** Insert primary ground wire (obtained locally) into split-lug connector with cable strength members. Tighten connector securely. (End of installation procedure when using primary ground wire).

10.** When grounding to frame flange, cut one connector lug off ground wire assembly and insert end into split-lug connector with cable strength members. Optionally, wire portion of ground wire assembly (behind lug) may be inserted into split-lug connector w/o cutting off lug. Tighten connector securely.

11.** Good metal-to-metal contact of ground wire connector lug and LGX® flange is required. Completely remove paint from where ground wire terminates. Install connector lug to frame flange using No. 12 tap-tite screw (screw taps thru lug hole) and No. 12 external tooth washer.

12A1 CABLE CLAMP INSTALLATION FOR R/L TYPE CABLE

* Refer to Figure. 1 (Page 1)

** Refer to Figures. 5-6

1.* When installing 12A1 Clamp directly to Fiber Optic Termination Shelf Bracket, proceed to Step 4. When installing clamp on 100A or 200A LIU backboard, proceed to Step 2.

2.* Insert 1/4-20 by 1-3/4 inch mounting screw through center hole in clamp bracket and one cable clamp half. Install nut in clamp half and tighten screw.

3.* Install clamp bracket to LGX duct bracket using two 6-32 by 3/16 inch screws or to LIU backboard using two No. 8 by 1/2 inch screws. Proceed to Step 5.

4.* Insert 1/4-20 by 1-3/4 inch mounting screw through clamp mounting hole in termination shelf bracket and one cable clamp half. Install nut in clamp half and tighten screw.

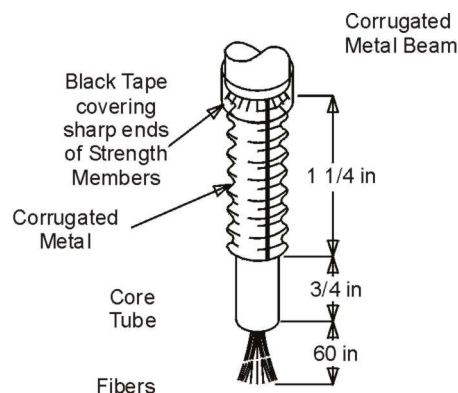


Figure 3. Corrugated Metal Beam

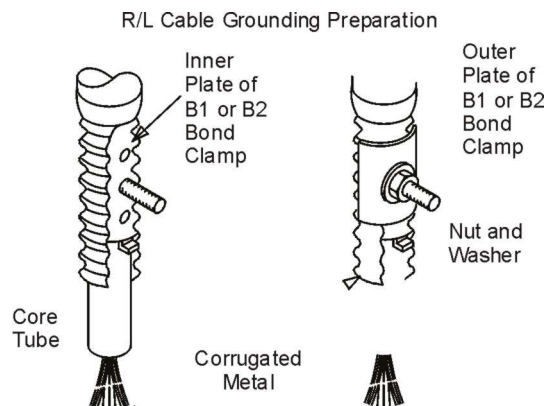


Figure 4. R/L Grounding Preparation

PREPARE R/L CABLE AS PER FIG. 3 COMPLETE R/L GROUNDING PREP. AS PER FIG. 4

5.* Install two plastic V-groove inserts into halves of cable clamp.

6.* Place OSP (outside plant) cable into cable

clamps. Install cable clamp retaining washer and nut. Using 216-type tool, tighten nut.

7.** When R/L shield is to be grounded to primary ground, use remaining bond clamp nut and washer to install terminal ground lug to bond clamp stud. Tighten with 216-type tool. 8.** Insert primary ground wire (obtained locally) into ground lug and secure. (End of installation procedure when using primary ground).

9.** When R/L shield is to be grounded to frame flange, use remaining bond clamp nut and washer to install one end of ground wire assembly to bond clamp stud. Optionally, one lug of ground wire assembly may be cut off and that end inserted into the terminal lug.

Good metal-to-metal contact of ground wire connector lug and LGX frame flange is required, completely remove paint from where ground wire terminates. Install connector lug of ground wire assembly to frame flange using No. 12 tap-tite screw (screw taps thru lug hole) and No. 12 external tooth washer.

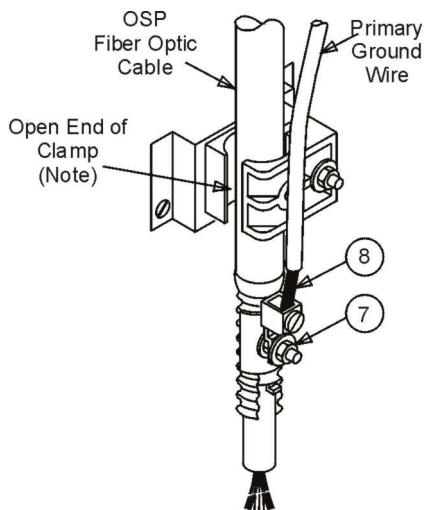


Figure 5. Install Primary Ground Wire

Note: First OSP cable clamped to any LGX shelf bracket should have open end of cable clamp facing

front of frame. Second cable clamped to that position would have clamp facing opposite direction.

Spread corrugated metal at seam and slide inner plate of B1 or B2 Bond Clamp under metal with Bond Clamp Stud protruding from seam. Place outer plate of B1 or B2 Bond Clamp on Bond Clamp Stud and secure with washer and nut.

Note:

Use B1 Bond Clamp for cable up to approximate .75 O.D.

Use B2 Bond Clamp for cables over .75 O.D.

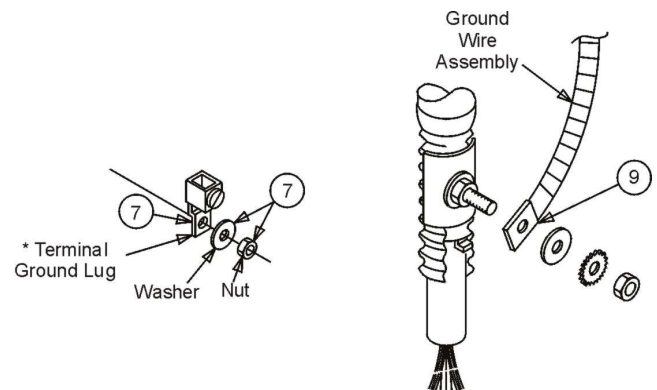


Figure 6. Install Ground Wire Assembly

12A1 CABLE CLAMP INSTALLATION FOR LXE TYPE CABLE

*** Refer to Figure 1 (Page 1)**

1.* When installing 12A1 clamp directly to Fiber Optic Termination shelf bracket, proceed to Step 4. When installing clamp on 100A or 200A LIU backboard, proceed to Step 2.

2.* Insert 1/4-20 by 1-3/4 inch mounting screw through center hole in clamp bracket and one cable clamp half. Install nut in clamp half and tighten screw.

3.* Install clamp bracket to LGX duct bracket using two 6-32 by 3/16 inch screws or to LIU backboard using two no. 8 by 1/2 inch screws. Proceed to Step 5.

4.* Insert 1/4-20 by 1-3/4 inch mounting screw through clamp mounting hole in termination shelf bracket and one cable clamp half. Install nut in clamp half and tighten screw.

5. Prepare LXE cable as per Figure 7.

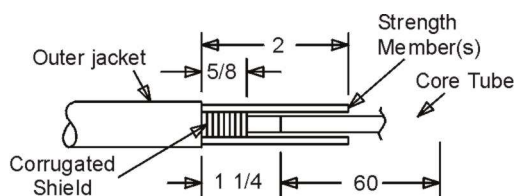


Figure 7. LXE Cable Preparation

Note: Core Tube shall not be Ring-Cut until after bonding hardware is installed and strength members are trimmed.

6. Install bonding lug and clip as per Figures. 8 and 9.

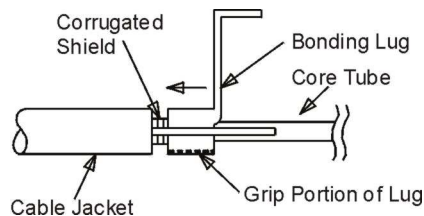


Figure 8. Install Bonding Lug

Remove plastic coating on corrugated shield with either knife or carding brush. Slide Bonding Lug under strength members and over shield. The grip portion of lug must be opened up somewhat for use on LXE Cables larger than 48 fibers. Push Bonding Lug tightly against end of jacket and squeeze lightly with pliers to make snug fit on shield.

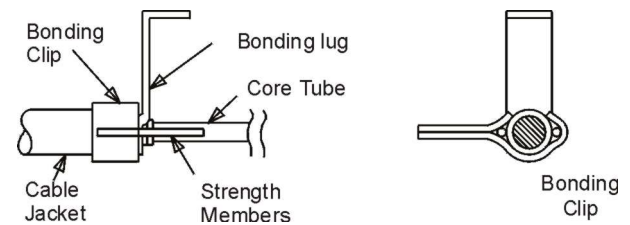


Figure 9. Install Bonding Clip

Select correct size Bonding Clip - Smaller "B" for up to 48 fibers. Larger "D" for over 48 fibers and place over strength members and Bonding Lug Press Clip closed with pliers.

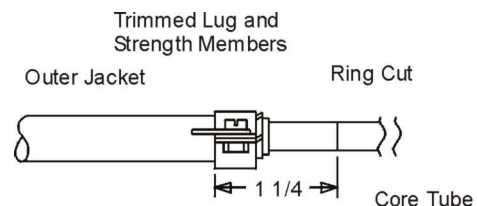


Figure 10. Trimmed Lug And Strength Members

7. Cut off strength member and Ground Lug Tab flush with Bonding Clip. Using R4366 Tool, Ring-Cut Core Tube 1-1/4 inch from end of outer jacket. Flex Core Tube to break it at Ring-Cut and slide tube off fibers.

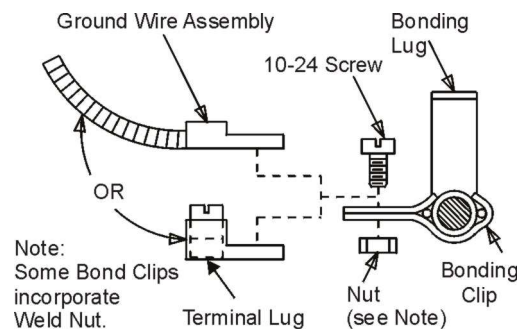


Figure 11. End View

8. Depending on ground wire to be used, place either Ground Wire Assembly (crimped) Lug or Terminal Lug on the Bonding Clip (position to bypass Cable Clamp above) and secure Lug and Clip together on shield with 10-24 by 1/2 inch screw and 10-24 nut. An Optional Method of connecting Ground Wire Assembly to cable is to cut off the lug on that end of the assembly. Install the cut end of the Ground Wire Assembly into the Terminal Lug and tighten the screw.

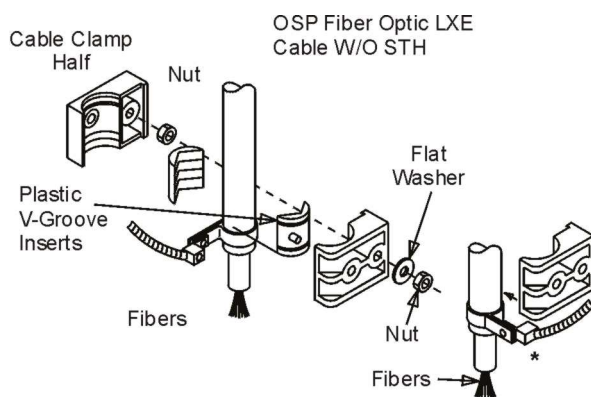


Figure 12. Figure Caption

* **Note:** Recommend opening tabs of clip under clamp so not to interfere with adjacent clamp.

9. Place cable into mounted cable clamp half e/w V-Groove insert.
Install second V-Groove insert into other cable clamp half, place over cable and secure with 1/4 washer and 1/4-20 nut using 216-Type Tool.
Locate clamp as close to Bonding Clip as possible.

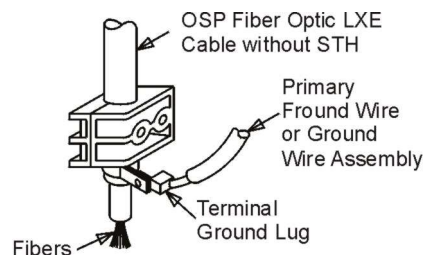


Figure 13. Figure Caption

Note: First OSP Cable clamped to any LGX Shelf Bracket should have open end of cable clamp facing front of frame. Second Cable clamped to that position would have clamp facing opposite direction or rear.

10. When cable is ground to "Primary Ground", install Primary Ground Wire into Terminal Lug and tighten screw securely (End of installation when Primary Ground Wire is used). When cable is ground to LGX Frame, the remaining end of Ground Wire Assembly must be secured to frame. Good metal-to-metal contact of Wire Lug and frame is required. Completely remove paint from frame where lug will terminate. Install remaining Ground Wire Lug to frame using either 12-24 screw and washer or 10-24 screw and washer.