



SYSTIMAX® 12A1 Cable Clamp Kit Instructions For Crossply-, R/L-, and LXE-Type Cable

General

The **SYSTIMAX®** 12A1 cable clamp kit is used to secure and ground one fiber optic metallic sheath cable. The clamp consists of a mounting bracket, two plastic half-clamps, and suitable grounding hardware.

Ordering information is listed below:

Material ID	Part No.	Description
700025513	12A1 clamp	12A1 cable clamp kit

How to Contact Us

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- For technical assistance:
 - Within the United States, contact your local account representative or technical support at 1-800-344-0223. Outside the United States, contact your local account representative or Authorized Business Partner.
 - Within the United States, report any missing/damaged parts or any other issues to **CommScope** Customer Claims at 1-866-539-2795. Outside the United States, contact your local account representative or Authorized Business Partner.

Tools Required

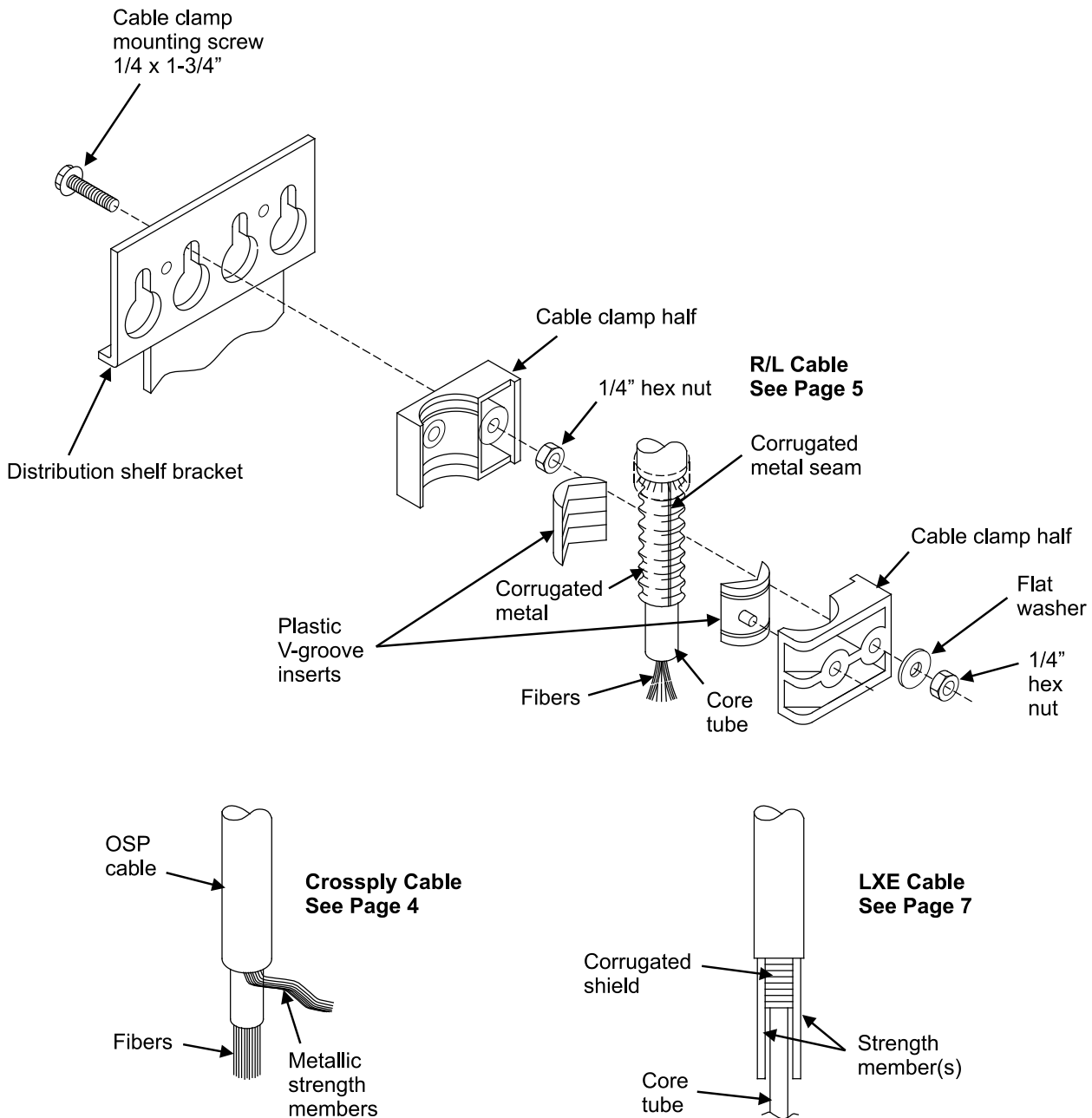
- Flat blade screwdriver
- Adjustable wrench
- 216-type tool

Parts List

Verify parts against the parts list below:

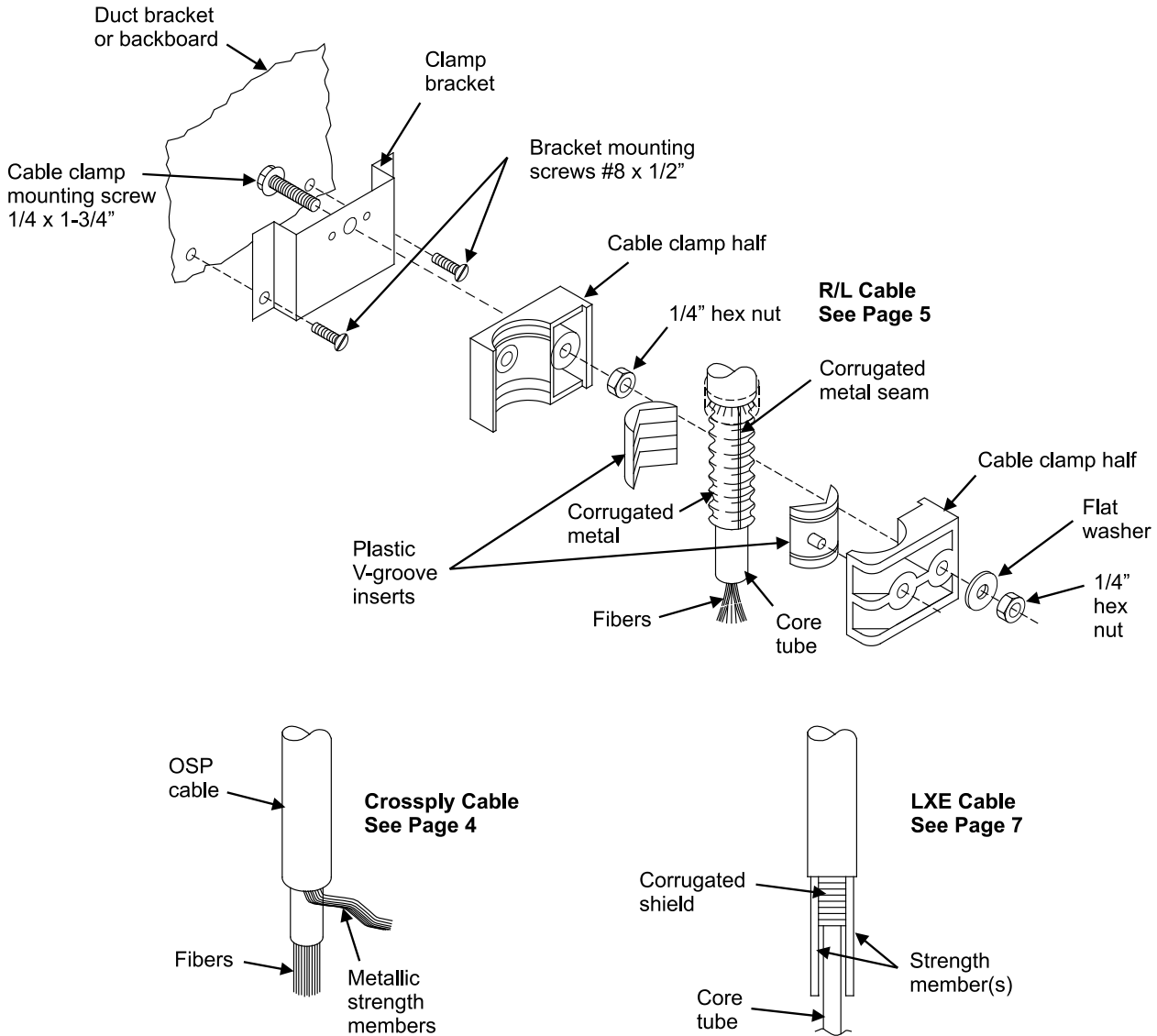
Quantity	Description	Quantity	Description
1	B1 Bond clamp	1	Clamp bracket
1	B2 Bond clamp	1	Bonding lug
1	Screw 1/4-20 x 1 3/4"	1	Bond clip small
2	Hex nut 1/4-20	1	Bond clip large
2	Cable clamp half	1	Flat washer #10
2	"V" Groove insert	1	Flat washer 1/4"
2	Screw (AB) # 8 X 1/2"	1	Lock washer #12 external teeth
1	Ground wire assy.	1	Hex nut 10-24
1	Grounding lug	2	Screw #10-24 X 1/2"
1	Slit lug connector	1	Screw Taptite #12-24
1	Instruction sheet		

Step 1 – Install 12A1 Clamp to Distribution Shelf Bracket



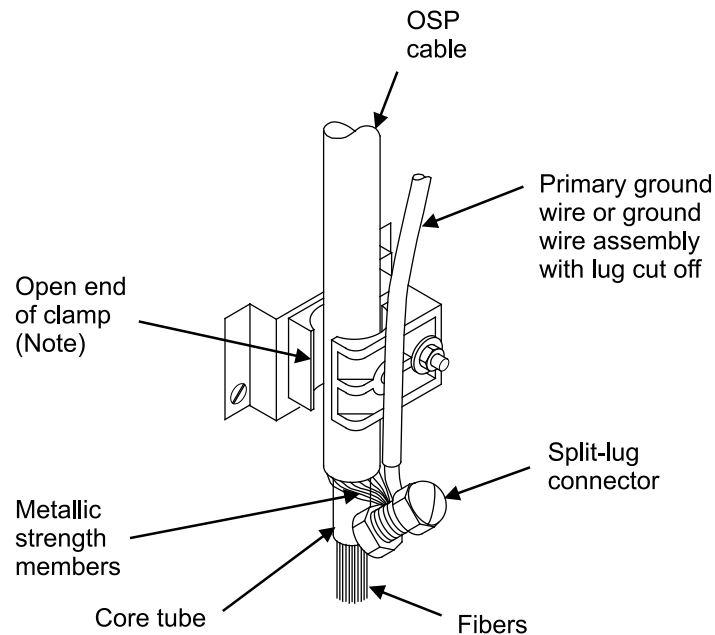
1. Insert 1/4-20 x 1-3/4" cable clamp mounting screw through clamp mounting hole in distribution shelf bracket and one cable clamp half. Install 1/4" hex nut in clamp half and tighten screw.
2. Install two plastic V-groove inserts into halves of cable clamp.
3. Place outside plant (OSP) cable into cable clamps. Install cable clamp flat washer and 1/4" hex nut. Using 216-type tool, tighten nut.

Step 2A – Install 12A1 Clamp to Lightguide Interconnection Unit (LIU) Backboard



1. Insert 1/4-20 x 1-3/4" cable mounting screw through center hole in clamp bracket and one cable clamp half. Install 1/4" hex nut in clamp half and tighten screw.
2. Install clamp bracket to backboard using two #8 x 1/2" screws.
3. Install two plastic V-groove inserts into halves of cable clamp.
4. Place OSP cable into cable clamps. Install cable clamp flat washer and 1/4" hex nut. Using 216-type tool, tighten nut.

Step 2B – Install 12A1 Cable Clamp on 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.

DANGER

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

1. Using instructions from pages 2 or 3 install 12A1 cable clamp and place crossply-type cable into clamp. See figure above and follow grounding instructions.
2. Twist cable strength members together into single strand. Install split-lug connector on strength members. Do not tighten split-lug connector at this time.
3. When cable strength members are to be grounded to **LGX**[®] frame, proceed to Step 4. When strength members are to be grounded to primary ground, proceed to Step 5.
4. 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.**
5. When grounding to frame flange, cut off one connector lug 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 without cutting off lug. Tighten connector securely.
6. 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 using #12-24 tap-tite screw (screw taps thru lug hole) and #12 external tooth lock washer.

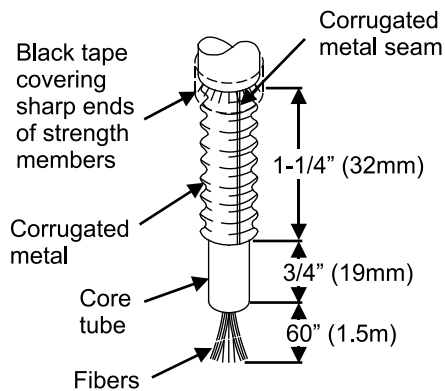
Step 2C – Install 12A1 Cable Clamp to R/L-Type Cable

Figure R/L-A

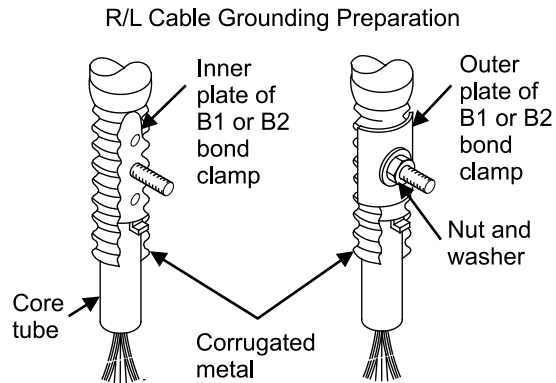
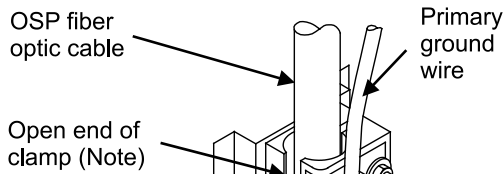


Figure R/L-B

1. Using instructions from pages 2 or 3 install first half of 12A1 cable clamp.
2. Prepare R/L cable per Figure R/L-A above.
3. Spread corrugated metal at seam and slide inner plate of B1 or B2 bond clamp under metal with bond clamp stud protruding from seam per Figure R/L-B above. Place outer plate of B1 or B2 bond clamp on bond clamp stud and secure with washer and nut.

Step 2C – Install 12A1 Cable Clamp to R/L-Type Cable (Continued)



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.

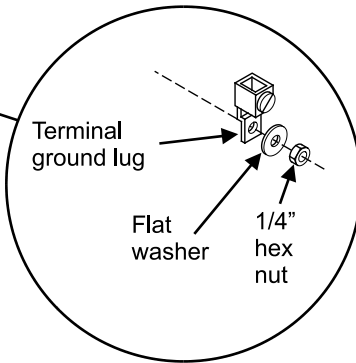


Figure R/L-C

Note: Use B1 bond clamp for cable up to approximate 0.75" O.D. (19mm). Use B2 bond clamp for cables over 0.75" O.D. (19mm).

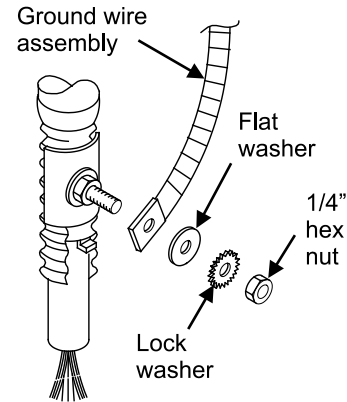
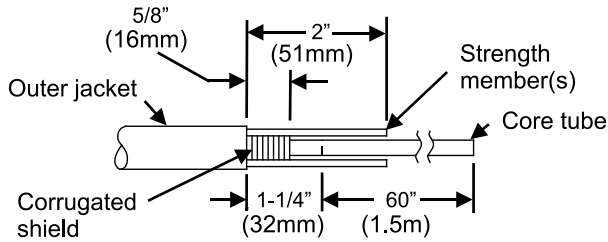


Figure R/L-D

4. Complete 12A1 cable clamp installation (page 2 or 3) by installing plastic V-groove inserts into halves of cable clamp.
5. Place OSP cable into cable clamps as shown above directing attention to position of cable clamp opening. Install cable clamp flat washer and 1/4" hex nut. Using 216-type tool, tighten nut.
6. When RL shield is to be grounded to primary ground, use remaining bond clamp nut and washer to install terminal ground lug to bond clamp stud (Figure R/L-C). Tighten with 216-type tool.
7. Insert primary ground wire (obtained locally) into ground lug and secure (Figure R/L-C). **End of installation procedure when using primary ground.**
8. 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 (Figure R/L-D). 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 #12-24 tap-tite screw (screw taps thru lug hole) and #12 external tooth lock washer.

Step 2E – Install 12A1 Cable Clamp to LXE Type Cable

LXE Cable Prep



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

Figure LXE-A

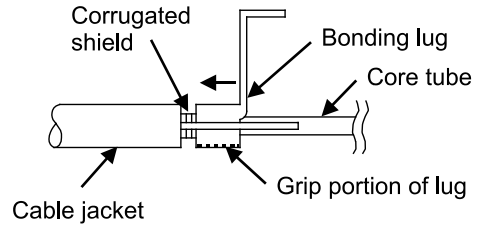


Figure LXE-B

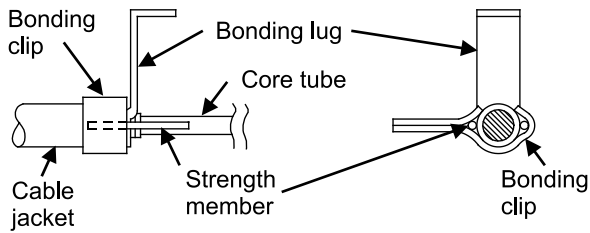


Figure LXE-C

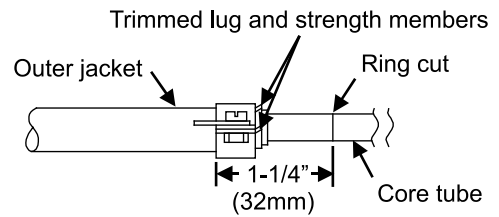


Figure LXE-D

1. Using instructions from pages 2 or 3 install first half of 12A1 cable clamp.
2. Prepare LXE cable per Figure LXE-A.
3. Install bonding lug and clip per Figures LXE-B and LXE-C.
4. Cut off strength member and ground lug tab flush with bonding clip. Using R4366 tool, ring cut core tube 1-1/4" (32mm) from end of outer jacket. Flex core tube to break it at ring cut and slide tube off fibers (Figure LXE-D).

Step 2E – Install 12A1 Cable Clamp to LXE Type Cable (Continued)

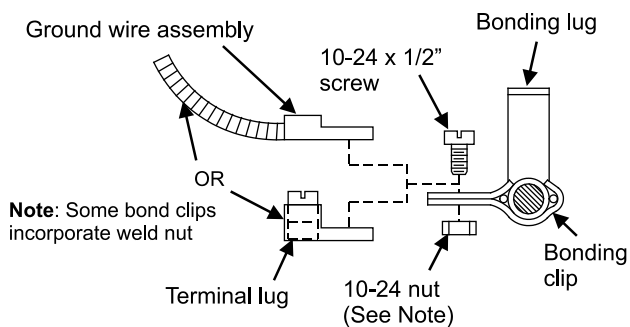
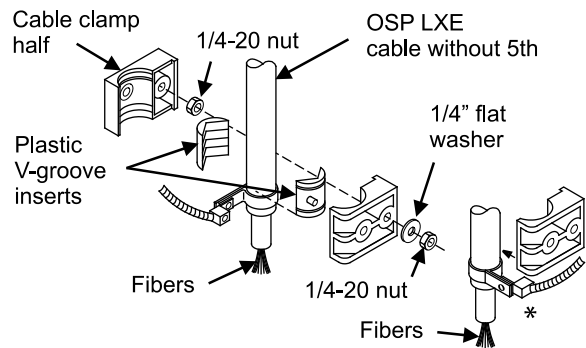


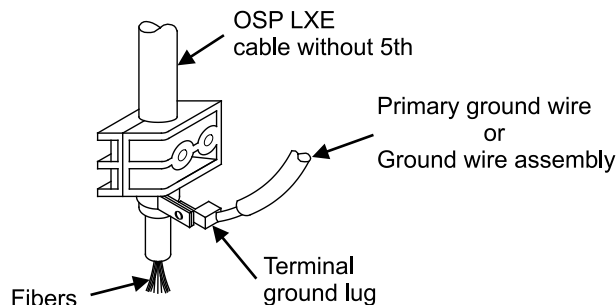
Figure LXE-E



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

Figure LXE-F

- Depending on ground wire to be used, place either ground wire assembly (crimped) lug or terminal lug on the bonding clip (position to by-pass cable clamp above) and secure lug and clip together on shield with 10-24 x 1/2" 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 LXE-E).
- Place cable into mounted cable clamp half equipped with V-Groove insert. Install second V-Groove insert into other cable clamp half, place over cable and secure with 1/4" flat washer and 1/4-20 nut using 216-type tool. Locate clamp as close to bonding clip as possible (Figure LXE-F).



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.

Figure LXE-G

- 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 the 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 be terminated. Install remaining ground wire lug to frame using either 12-24 screw and washer or 10-24 screw and wash