

AERIAL CABLE SUPPORTS AND SPACERS DESCRIPTION AND USE

CONTENTS	PAGE
1. GENERAL	1
2. DESCRIPTION	1
3. USE	3
4. INSTALLATION—SINGLE CABLE	4
5. INSTALLATION—MORE THAN ONE CABLE	5
6. INSTALLATION OF B LASHED CABLE SUPPORTS WITH WIRE HANGER	6

1. GENERAL

1.01 This section describes the use of cable supports and cable spacers.

1.02 This section is reissued to include the 2-3/4, 3, and 3-1/4 inch D cable spacers.

1.03 At poles, splices, or other points where the cable is not lashed snugly to the strand, the cable should be formed in a long smooth curve, supported in this position, and kept free from contact with hardware or other obstructions that might cause abrasion.

2. DESCRIPTION

2.01 The B lashed cable support (Fig. 1) is a stainless steel strap 3/4-inch wide with a buckle loop for holding and terminating the wraps of the strap.

2.02 The equivalent of the aerial cable support can be made, if required, by centering a 12-inch, 109 steel tie wire through the aperture of the B lashed cable support and then bending the wire as shown in Fig. 2.

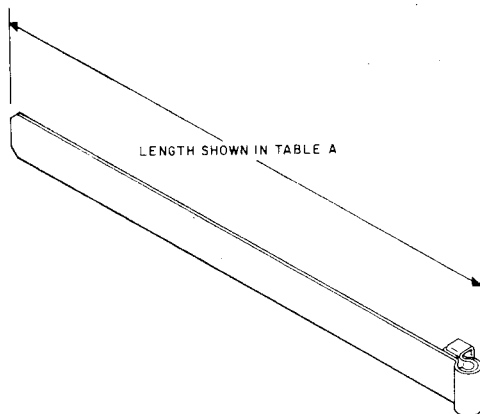


Fig. 1—B Lashed Cable Support

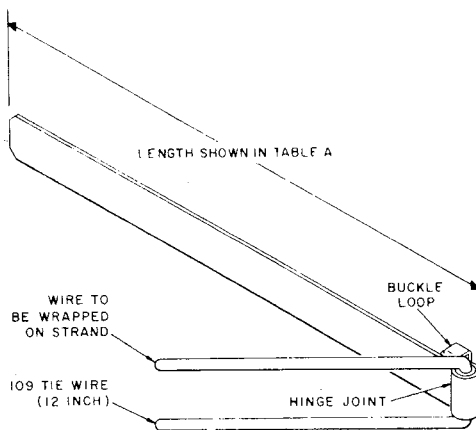


Fig. 2—B Lashed Cable Support With Wire Hanger

**Reprinted to comply with modified final judgment

2.03 The C lashed cable support (Fig. 3) is a black molded nylon strap approximately 5/16 inch wide with a molded ratchet buckle on one end which is self-locking (hand or tool applied) and nonreleasable.

2.04 The length of the lashed cable supports required for use with various combinations of cable and spacer sizes is shown in Table A. If

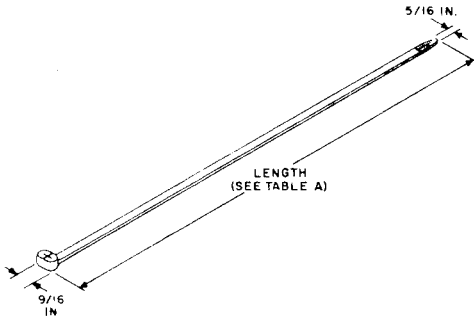


Fig. 3—C Lashed Cable Support

desired where extra length is available the supports may be double wrapped for greater strength.

2.05 The D cable spacer (Fig. 4) is made of black polyethylene and is used with lashed cable supports to maintain the desired separation between strand and cable. D cable spacers are available in 1/4-inch increments from 1/4- through 3-1/4 inch sizes.

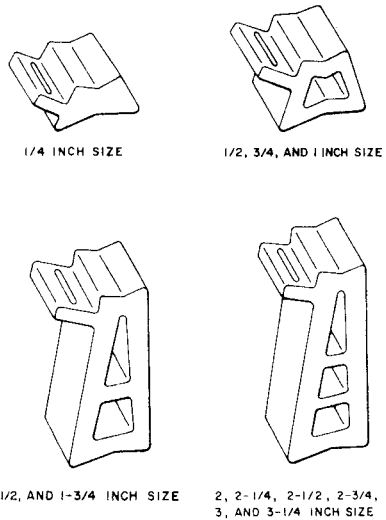


Fig. 4—D Cable Spacers

TABLE A
LENGTH OF CABLE SUPPORT TO BE USED
WITH VARIOUS SIZES OF CABLE AND SPACERS

CABLE OR SLEEVE DIAMETER (INCHES)	LENGTH OF CABLE SUPPORT (INCHES)												WHEN USED WITH WIRE HANGER
	SPACER SIZE (INCHES)												
	1/4, 1/2		3/4, 1		1 1/4, 1 1/2		1 3/4, 2		2 1/4, 2 1/2		2 3/4, 3, 3 1/4		
	B SUPPORT	C SUPPORT	B SUPPORT	C SUPPORT	B SUPPORT	C SUPPORT	B SUPPORT	C SUPPORT	B SUPPORT	C SUPPORT	B SUPPORT	C SUPPORT	
Up to 1/8	16	13 1/2	16	13 1/2	22	13 1/2	22	13 1/2	28	13 1/2	28	13 1/2	16
1/8	16	13 1/2	22	13 1/2	22	13 1/2	28	13 1/2	28	13 1/2	34	13 1/2	16
1/4	22	13 1/2	22	13 1/2	28	13 1/2	34	13 1/2	34	13 1/2	34	13 1/2	16
1/4	22	13 1/2	28	13 1/2	34	13 1/2	34	13 1/2	34	13 1/2	45	13 1/2	22
1/2	28	13 1/2	34	13 1/2	45	27 1/2	45	27 1/2	45	27 1/2	45	27 1/2	22
2 1/4	34	13 1/2	45	27 1/2	45	27 1/2	45	27 1/2	45	27 1/2	45	27 1/2	28
3	15												34
3 1/2	45												45
6	66												
7	78												

3. USE

3.01 Lashed cable supports with cable spacers shall be used where it is necessary to support the cable and where the separation between the strand and the cable sheath is not more than 3-1/4 inches. Separation between the strand and cable sheath is measured as shown in Fig. 5.

Note: The C lashed cable support should not be used on sleeves greater than $2\ 1/2$ inches in diameter or on cables heavier than 8 pounds per foot.

3.02 B lashed cable supports with wire hangers (2.02) are used instead of lashed cable supports and spacers where supporting of aerial cable is required and the separation between the strand and the cable sheath is more than 3-1/4 inches.

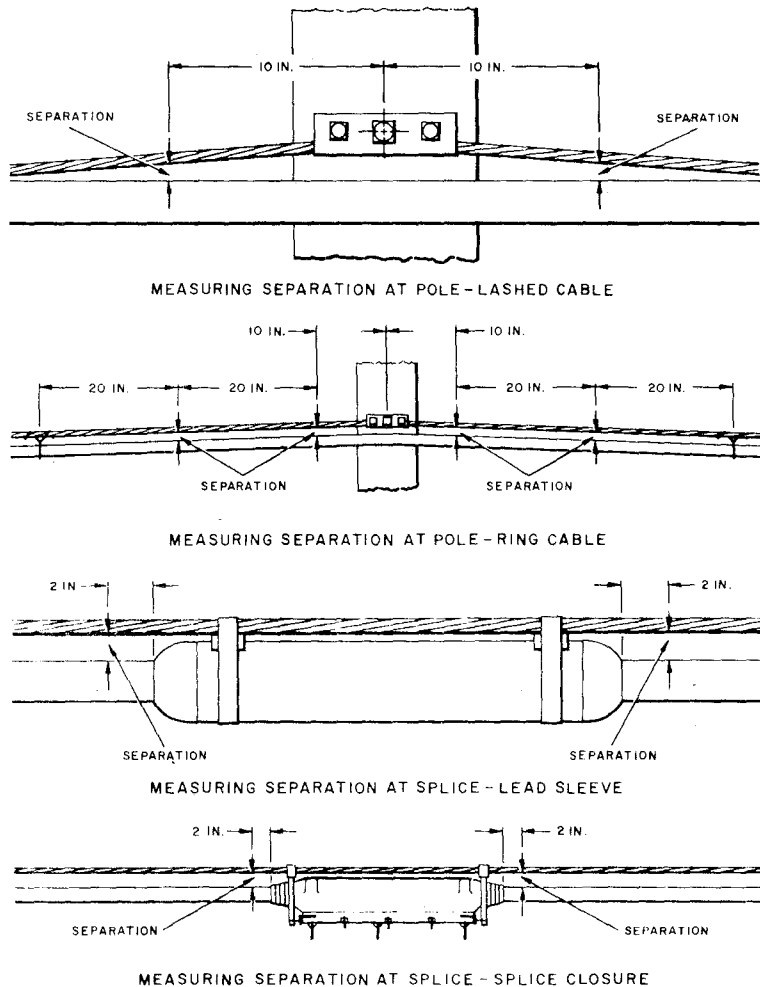


Fig. 5—Measuring Separation Between Strand and Cable Sheath

4. INSTALLATION—SINGLE CABLE

4.01 Cable lashing clamps should be positioned and lashing wire terminated 2 inches outside of the farthest lashed cable support and spacer as shown in Fig. 6.

4.02 Place B lashed cable supports and cable spacers on a single cable or sleeve as follows (Fig. 7):

- (1) Thread the support through the slot in the spacer so that the buckle loop is on top of the flange.
- (2) Place the spacer on the cable or sleeve at the desired location.
- (3) Make three wraps of the strap around the strand and the cable or sleeve, passing the end of the strap through the buckle loop in each wrap. Each wrap should be pulled snug.
- (4) Before passing the third wrap through the buckle loop, lay the strap on the outside of the loop and pull the strap snug. Mark a point on the strap about 1-1/2 inches beyond the buckle loop and cut off the excess with scissors. Fold the strap under itself and then pass the folded end through the loop, thus completing the third wrap.
- (5) Pull tight with pliers and bend the folded end back over the buckle loop.

Caution: To avoid the possibility of cutting gloves or hands, do not attempt to pull the support tight without the use of pliers.

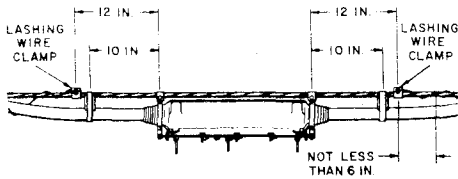
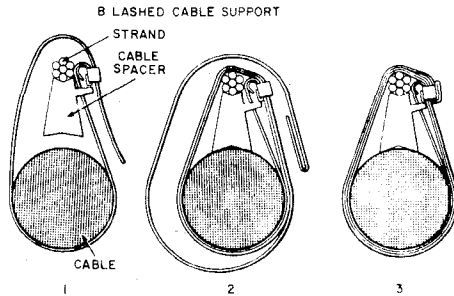


Fig. 6—Arrangement and Termination of Lashing Wire at Lashed Cable Supports



THE ILLUSTRATIONS SHOW THE INSTALLATION OF THE B LASHED CABLE SUPPORT. THE BUCKLE OF THE SUPPORT SHOULD BE IN APPROXIMATELY THE POSITION SHOWN, AND THE STRAP SHOULD FIRST PASS UNDER THE CABLE, NOT OVER THE STRAND.

Fig. 7—Installation of B Lashed Cable Support and Cable Spacer

4.03 Place C lashed cable support and cable spacers on a single cable or sleeve as follows (Fig. 8):

- (1) Thread the plastic support through the slot in the spacer so that the buckle loop is on top.
- (2) Place the spacer on the cable at the desired location.
- (3) Make one wrap around the cable and strand, pass the end of the strap through the buckle, pull up tight with side cutters by pulling the tail straight through the buckle. **Pass the end back through the slot in the spacer and cut off the excess.**

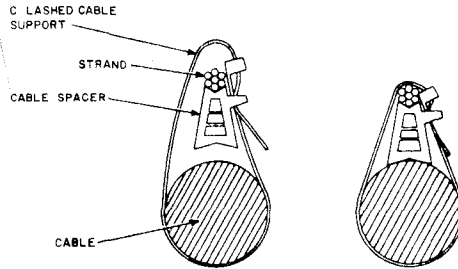


Fig. 8—Installation of C Lashed Cable Support and Cable Spacer

5. INSTALLATION—MORE THAN ONE CABLE

5.01 When placing supports where more than one cable or a terminal stub is involved, follow the procedure described in 4.02 and 4.03 with the following exceptions for B lashed cable support:

(a) Where the terminal stub is placed below the main cable, the first two wraps of the support are made around the strand and the main cable and the third wrap is made around the strand, main cable, and terminal stub as shown in Fig. 9.

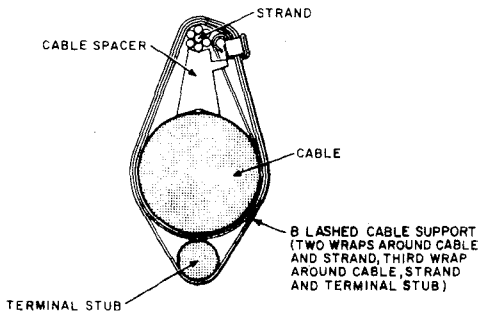


Fig. 9—Supporting Terminal Stub Below the Main Cable

(b) Where two cables of unequal size are being supported or where the terminal stub is above the main cable, the smaller cable or terminal stub is positioned along the side of the cable spacer and all three wraps are made around the strand and both cables. Position the support so that the buckle loop is on the opposite side of the strand from the small cable or terminal stub as shown in Fig. 10.

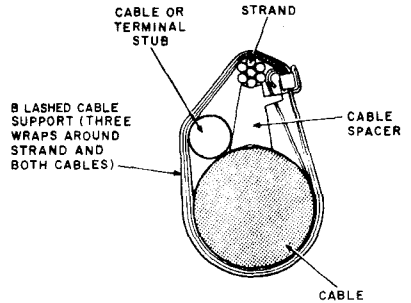


Fig. 10—Supporting Terminal Stub Above the Main Cable

(c) At pole mounted terminal locations, place a spacer on the cable in which the terminal splice occurs. Position the other cables along the side of the spacer and place the terminal stub as shown in Fig. 11. Place two wraps of the lashed cable support around the cables and strand, and place the third wrap around the cables, strand, and terminal stub.

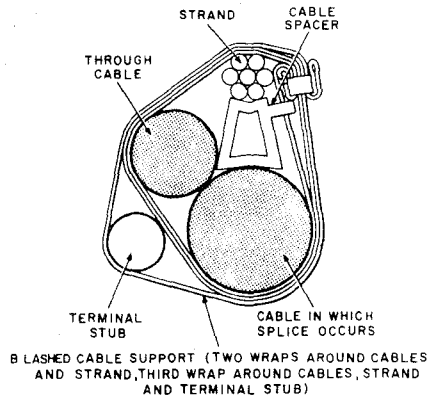


Fig. 11—Supporting Two Cables and Terminal Stub

5.02 At the sleeve place a 1/4-inch cable spacer on the sleeve and position the cable along the side of the cable spacer. Install the B lashed cable support as shown in Fig. 12.

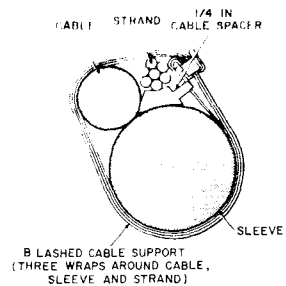


Fig. 12—Supporting Additional Cable at a Sleeve

5.03 At sheath-mounted terminal locations, place 3/4-inch cable spacers on the cable in which the terminal splice occurs and remount the terminal. Position the other cable along the side of the spacers and support them with two B lashed cable supports positioned outside of and as close as practical to the terminal mountings as shown in Fig. 13.

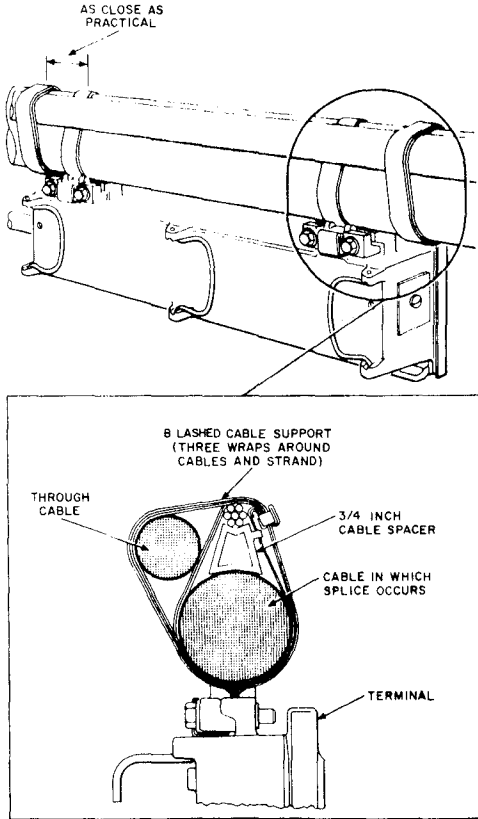


Fig. 13—Supporting Additional Cable at Sheath-Mounted Terminal

6. INSTALLATION OF LASHED CABLE SUPPORTS WITH WIRE HANGER

6.01 Arrange the cable under the strand at the same level as it is supported by adjacent supports. At a pole, splice, or similar location where clearances must be maintained, arrange the cable in a long smooth curve.

6.02 Install the B lashed cable support on the cable as follows:

- (1) Place the hinge joint directly under the suspension strand and place three wraps of the steel strap around the cable or sleeve, passing the end of the strap through the buckle loop at the hinge joint when completing each wrap. Draw each wrap snug as shown in Fig. 14.

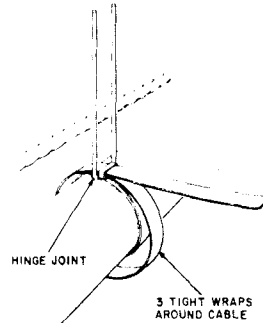


Fig. 14—Wrapping Support Around Cable

- (2) Complete the installation as outlined in 4.02 (4) and (5) and as shown in Fig. 15.

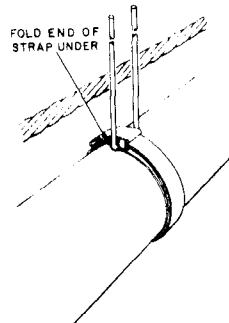


Fig. 15—Terminating Support Wraps

6.03 Complete the installation by attaching the wire hanger to the strand as follows:

- (1) Place a 134-S steel sleeve on top of the strand against the wire hanger and cut off any excess wire even with the sleeve as shown in Fig. 16, or measure up from the top of the strand 2-5/16 inches and cut off the excess wire.

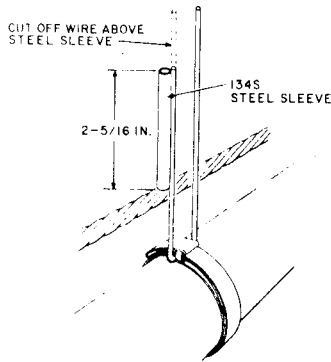


Fig. 16—Measurement and Cutting of Wire Hanger

- (2) Using a steel sleeve or a C socket wrench, bend the wires around the strand and inside the vertical portion of the wire, as shown in Fig. 17, and tighten the loop.

Caution: Exercise extreme care in bending and forming the wire loop to avoid damage to the cable sheath.

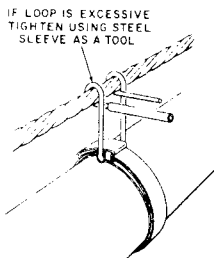


Fig. 17—Bending Wire Around Strand

- (3) Complete the installation by wrapping the wire around the vertical section as shown in Fig. 18 and 19.

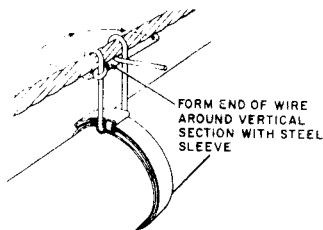


Fig. 18—Forming Wire Around the Vertical Section

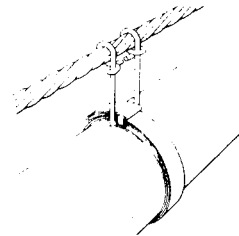


Fig. 19—Completed Installation of B Lashed Cable Support With Wire Hanger

- 6.04 An alternate method of attaching the wire hanger to the strand requires the wires be bent around the strand and outside of the vertical portion of the wires as shown in Fig. 20.

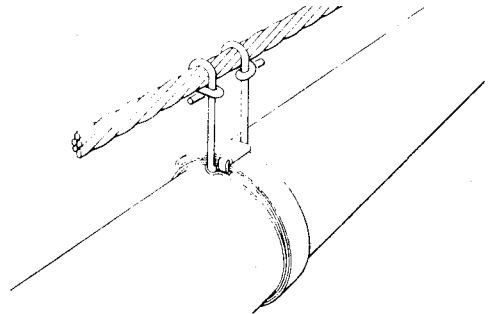


Fig. 20—Alternate Method of Attaching Wire Hanger

- 6.05 When a B lashed cable support with wire hanger is used to support two or more cables, the installation is performed as described in 6.02 with three wraps of the strap around the cables as shown in Fig. 21.

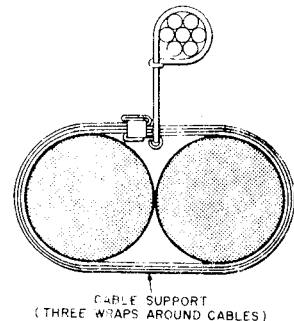


Fig. 21—B Lashed Cable Support With Wire Hanger Used to Support Two or More Cables