BELL SYSTEM PRACTICES
Outside Plant Construction and Maintenance

SECTION G52.125.1
Issue 4, December, 1953
AT&T Co Standard

LASHED AERIAL CABLE
TERMINATING — GENERAL

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1. GENERAL

1.01 The G52.125 group of sections, covering lashing wire terminations and placing lashed cable supports have been revised and rewritten to include information on the location and installation of cable lashing clamps. Section G52.126.1 and previous issues of Sections G52.125.1 to G52.125.5, inclusive, are cancelled.

1.02 Terminate the lashing wire and place the supports as soon as practicable after the cable is placed. At splice locations, temporarily terminate the lashing wire and support the unlashed portion of the cable with loops of lashing wire, houseline, or other suitable material after placing. The necessary permanent supports and lashing wire terminations may be made after splicing.

1.03 In making terminations any measurement marks should be made on the strand rather than on the cable sheath. Exercise care to avoid scoring the cable sheath with the end of the lashing wire when setting up, terminating or joining lashing wire.

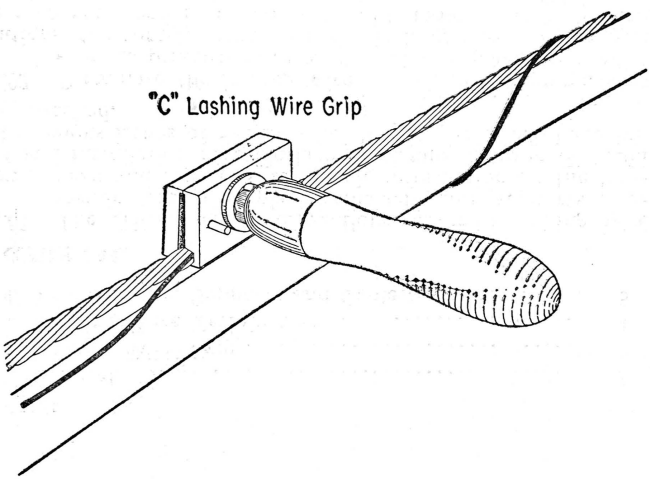
1.04 A separation of at least 1/2 inch between the cable and suspension clamps or other hardware should be obtained. Place cable guards or suspension clamp shields to prevent abrasion of the cable sheath where proper separation can not be obtained.

1.05 Those modifications of the supporting arrangements required when cable is placed by the prelashing method are covered in the sections on prelashing.

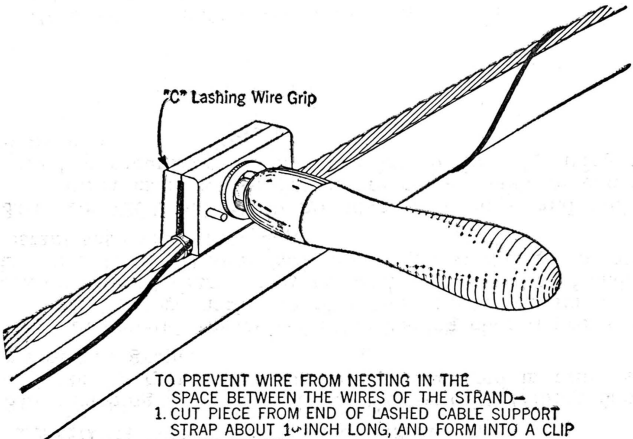
2. LASHING WIRE GRIP

2.01 Before cutting or otherwise releasing tension in the lashing wire, secure the lashing wire to the strand with a lashing wire grip.

2.02 Position the C lashing wire grip on 065C and 091B lashing wire on all sizes of strand and 045C lashing wire on 6000 pound and 10,000 pound strand as shown in the following figure. The lashing wire should follow the groove between strand wires under the grip to minimize scoring of the lashing wire.



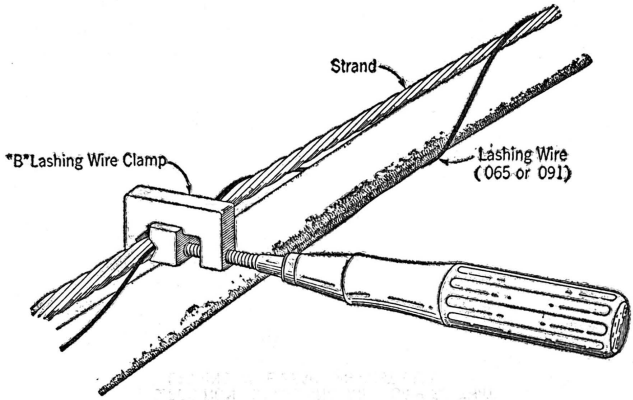
2.03 Position the C lashing wire grip on 045C lashing wire on 16,000 pound strand as shown:



TO PREVENT WIRE FROM NESTING IN THE SPACE BETWEEN THE WIRES OF THE STRAND—

1. CUT PIECE FROM END OF LASHED CABLE SUPPORT STRAP ABOUT 1½ INCH LONG, AND FORM INTO A CLIP TO FIT STRAND.
2. SLIDE CLIP ALONG STRAND TO POINT BETWEEN LASHING WIRE AND STRAND.
3. POSITION "C" LASHING WIRE GRIP SO THAT LASHING WIRE BEARS AGAINST CLIP.

2.04 The B lashing wire clamp, used only with 065C or 091B lashing wire is positioned as shown:



3. LASHING WIRE TERMINATIONS

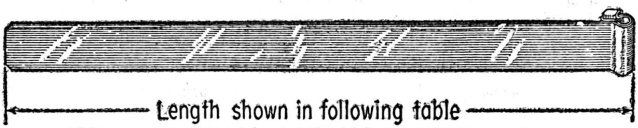
3.01 Lashing wire may be terminated on cable lashing clamps or by tying. Both methods are covered in other sections of this group.

3.02 In general, the use of cable lashing clamps provides a faster termination more readily accessible for future work operations. Clamps may be used with all sizes of lashing wire on 6000, 10,000 and 16,000 pound galvanized or corrosion resistant suspension strand.

3.03 On 2200 and 25,000 pound suspension strand and in other cases where clamps are not available or can not be used, a secure termination can be obtained by tying the lashing wire.

4. LASHED CABLE SUPPORTS AND CABLE SPACERS

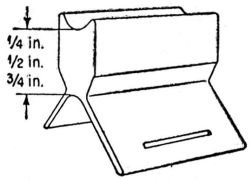
4.01 The following table shows the lengths of the various sizes of lashed cable supports and the approximate maximum sizes of cables or sleeves which they will accommodate using 1/4-, 1/2- and 3/4-inch cable spacers.



Lashed Cable Support	Approximate Maximum Diameter of Cable or Sleeve That Can Be Accommodated When Used With		
Length of Strap (in inches)	1/4-Inch Spacer	1/2-Inch Spacer	3/4-Inch Spacer
16	1-1/16″	15/16″	3/4″
22	1-11/16″	1-1/2″	1-3/8″
28	2-3/8″	2-1/8″	2″
34	2-7/8″	2-3/4″	2-9/16″
45	4″	3-13/16″	2-11/16″
66	4″-6″ Sleeves	—	—
78	6-1/2″ & 7″ Sleeves	—	—

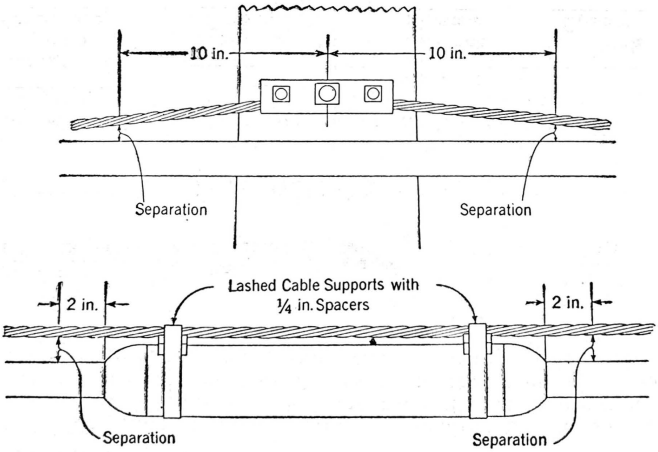
Note: To accommodate stubs (cable, terminal, load coil case, etc.) of not more than 26 pairs, add 1/8 inch to the main cable diameter when determining the size of lashed cable support to use. For larger stubs or for more than one cable, the size of lashed cable support required can be determined by measuring with a piece of string or a woven measuring tape.

4.02 Cable spacers are available in 1/4-, 1/2- and 3/4-inch sizes for use with lashed cable supports to maintain the desired separation between strand and cable where the cable is not lashed.

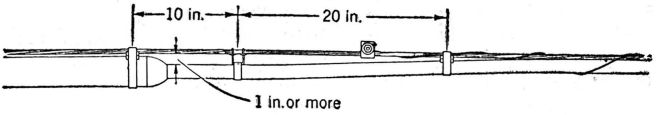


4.03 At poles, splices or other points where the cable is not lashed snugly to the strand, the cable should be formed in a long smooth curve, supported in this position and kept free from contact with hardware or other points of interference that might cause abrasion. Lashed cable supports with cable spacers shall be used where the separation between the strand and the sheath is less than 1 inch. To obtain a long smooth curve where this separation is 1 inch or more, aerial cable supports shall be used.

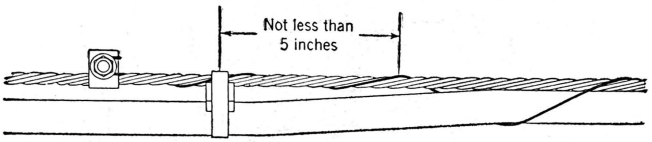
(a) Separation between strand and sheath is measured as shown:



(b) Where the separation between strand and cable is 1 inch or more use an aerial cable support in place of a lashed cable support and place a lashed cable support with 1/4-inch cable spacer at 20 inches as shown.



(c) Arrangement of lashing wire at lashed cable supports.



4.04 The procedure in placing lashed cable supports and cable spacers on a single cable or sleeve is as follows:

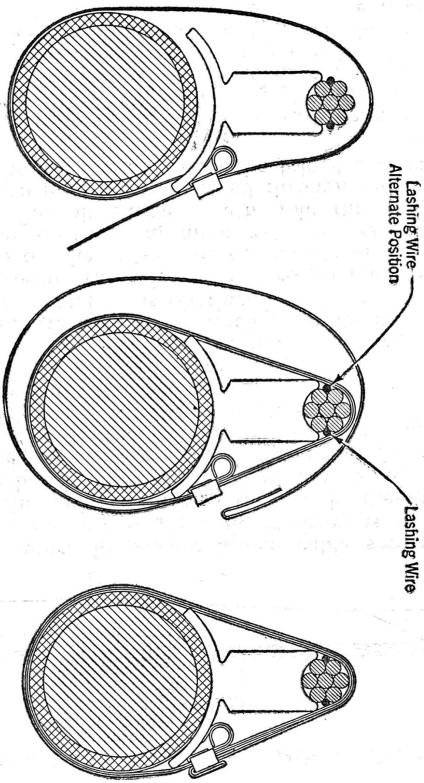
(1) Thread the support through the slot in the spacer so that the buckle loop is on top of the flange.

(2) Place the spacer between the strand and the cable or sleeve at the desired location and see that the lashing wire is positioned at the side of the strand. The wire should not be between the strand and the spacer.

(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 tight so that a snug fit is obtained.

(4) Before passing the third wrap through the buckle, lay the strap on the outside of the buckle and pull snug. Locate a point on the strap about 1-1/2 inches beyond the buckle loop. Cut off excess length, fold the strap under itself, and then pass the folded end through the loop, thus completing the third wrap. Bend the folded end back over the buckle.

Note: An alternative method to that described above is as follows: After completing the third wrap, bend the free end of the strap back over the buckle and cut it off so as to leave about a 1-inch tail. Bend the tail under, tuck the end down behind the buckle and flatten the loop thus formed against the wrapping so as to leave no sharp edges exposed.



These illustrations show the installation of the 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.

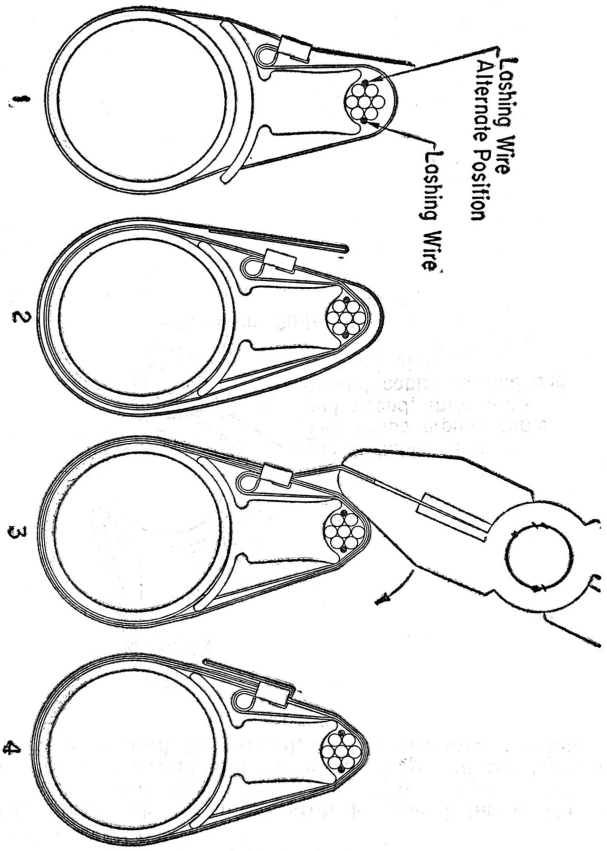
4.05 As an alternative, the lashed cable support and spacer may be placed as follows:

(1) Thread the support through the slot in the spacer leaving sufficient strap length so that the strap can be positioned over the strand with the buckle on the opposite side of the spacer from the slot as shown.

(2) Make three wraps of the strap around the strand and cut and form the end of the strap as described previously.

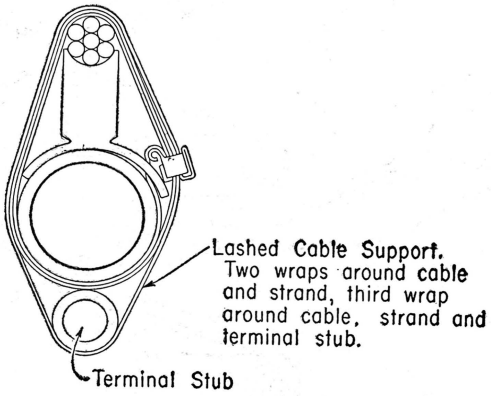
(3) Pass the folded strap end through the buckle loop and grasp it with a pliers. Tighten the strap using the pliers as a lever over the strand.

(4) Bend the folded end back over the buckle.



4.06 When placing supports where a terminal stub is involved, the procedure as outlined in 4.04 should be followed except that:

(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.



(b) Where the terminal stub is above an existing main cable, it is positioned along the side of the cable spacer on top of the flange and all three wraps are made around the strand, main cable and the terminal stub. Position the support so that the buckle loop is on the opposite side of the strand from the terminal stub.