

LASHED AERIAL CABLE TERMINATING LASHING WIRE

CONTENTS	PAGE
1. GENERAL	1
2. LASHING WIRE GRIP	1
3. CABLE LASHING CLAMPS	2
4. TERMINATING LASHING WIRE USING CABLE LASHING CLAMPS	2
5. TERMINATING LASHING WIRE BY TYING	2
6. JOINING LASHING WIRE	6

1. GENERAL

1.01 This section outlines the methods to be used in terminating lashing wire.

1.02 This section has been revised to add reference to the D Lashing Wire Grip, which is designed for use with all sizes of suspension strand including 6.6M strand, and to delete reference to the C Lashing Wire Grip which is now rated "MD".

1.03 Where termination of the lashing wire is required, it should be done and the supports installed as soon as practical after the cable is placed. At splice locations, temporarily terminate the lashing wire and support the unlashd portion of the cable with friction tape, houseline, or other suitable material. Permanent supports and lashing wire terminations may be made after splicing.

1.04 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 terminating or joining lashing wire.

1.05 Place cable guards to prevent abrasion of the cable sheath where separation is less than 1/2-inch between the cable and suspension clamps.

1.06 Modifications of supporting arrangements required when cable is placed by the prelashing method are covered in Section 627-350-204.

1.07 The preferred method of terminating lashing wire is to use the D Cable Lashing Clamp. The methods given for terminating lashing wire by tying are for use on 2.2M and 25M strand.

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. The lashing wire grip should be placed far enough from where the supports, spacers, and lashing wire clamps are to be installed to avoid having to move the grip before the lashing wire is terminated and the cable supported.

2.02 Position the D Lashing Wire Grip on 065 or 091 lashing wire on all sizes of strand and on 045 lashing wire on 6M, 6.6M, and 10M strand as shown in Fig. 1.

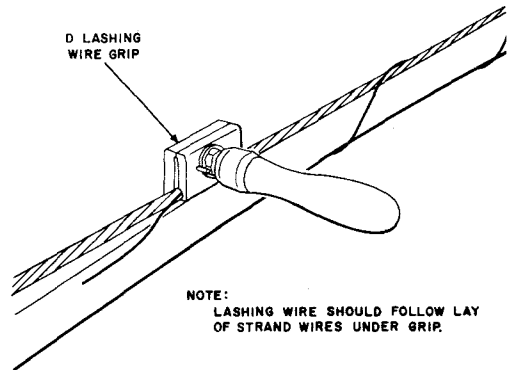


Fig. 1—D Lashing Wire Grip Installed on Strand

**Reprinted to comply with modified final judgment.

2.03 Position the D Lashing Wire Grip on 045 lashing wire on 16M strand as shown in Fig. 2.

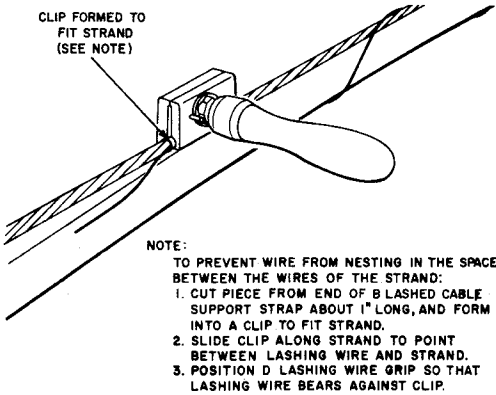


Fig. 2—Terminating 045 Lashing Wire on 16M Strand

3. CABLE LASHING CLAMPS

3.01 The D Cable Lashing Clamp may be used with all sizes of lashing wire and with No. 6 Ground Wire or B Ground Wire on 6M, 6.6M, 10M, and 16M galvanized strand.

3.02 When terminating No. 6 Ground Wire or B Ground Wire on cable lashing clamps, the ground wire should be placed between the washers of the clamp for the best electrical connection.

3.03 The D Cable Lashing Clamp is shown in Fig. 3.

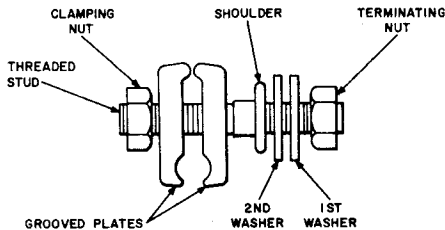


Fig. 3—D Cable Lashing Clamp

3.04 The nuts on the cable lashing clamp are tightened or loosened with a C Socket Wrench or B Ratchet Wrench.

3.05 Cable lashing clamps which are in good condition when removed from plant may be reused.

4. TERMINATING LASHING WIRE USING CABLE LASHING CLAMPS

4.01 The cable lashing clamp should be located 2 inches outside the first lashed cable support or cable suspension clamp. The lashing wire should be wrapped twice around the strand and then terminated on the cable lashing clamp.

4.02 Terminate one lashing wire using a D Cable Lashing Clamp as shown in Fig. 4.

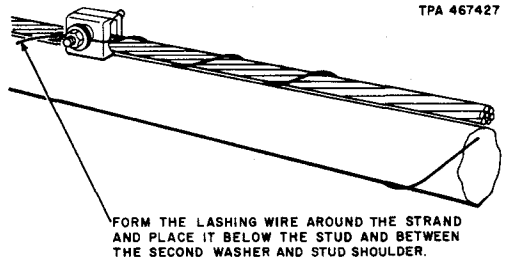


FIG. 4A - FORMING LASHING WIRE AROUND STRAND

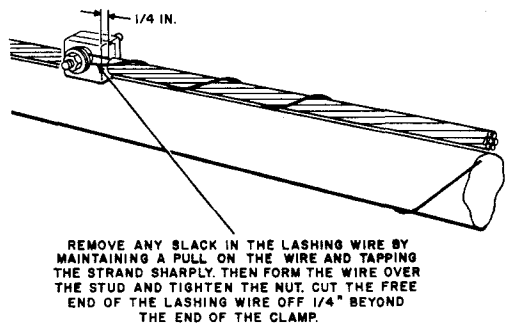


FIG. 4B - FORMING WIRE OVER STUD OF CLAMP

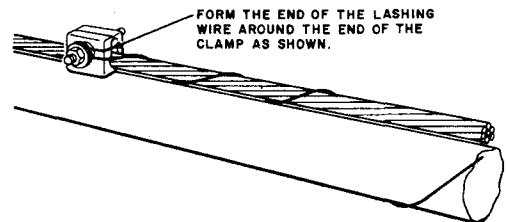
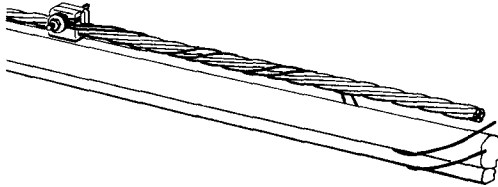


Fig. 4—Steps in Terminating Lashing Wire

4.03 Terminate a second lashing wire using a D Cable Lashing Clamp as shown in Fig. 5.



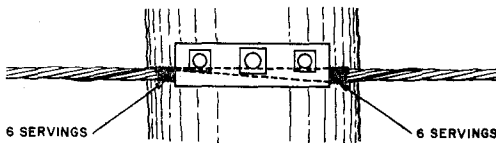
CAUTION - TEMPORARILY CLAMP THE FIRST (EXISTING) LASHING WIRE USING A D LASHING WIRE GRIP. (SEE FIG. 1 & 2). LOOSEN THE NUT AND TERMINATE THE SECOND LASHING WIRE BETWEEN THE FIRST AND SECOND WASHERS. THE COMPLETED JOB SHOULD APPEAR AS SHOWN ABOVE.

Fig. 5—Terminating Two Lashing Wires on Single Cable Lashing Clamp

5. TERMINATING LASHING WIRE BY TYING

5.01 The use of a cable lashing clamp provides faster terminations and greater adaptability in future rearrangements and repairs; however, on 2.2M and 25M strand and in other cases where clamps are not available or suitable, a secure termination can be obtained by tying the lashing wire.

5.02 Terminate 065 and 091 lashing wire at the pole by taking it behind the suspension clamp and under the nut. Make six servings around the strand at the far end of the clamp as shown in Fig. 6.



TERMINATE THE LASHING WIRE FROM THE SPLICE SPAN LAST.

Fig. 6—Terminating 065 and 091 Lashing Wire at Pole

5.03 At dead-ends and strand connectors, take the lashing wire to the end of the clamp nearest the pole or connector and make six servings around the strand as shown in Fig. 7.

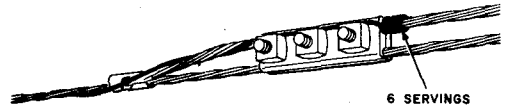


Fig. 7—Terminating 065 and 091 Lashing Wire at Deadends and Strand Connectors

5.04 At crossovers or pull-off attachments, take the lashing wire to the far side of the clamp and make six servings around the strand.

5.05 Due to the springiness of 045 lashing wire, it cannot be terminated and served like the larger sizes of lashing wire. Terminate and serve 045 lashing wire as shown in Fig. 8.

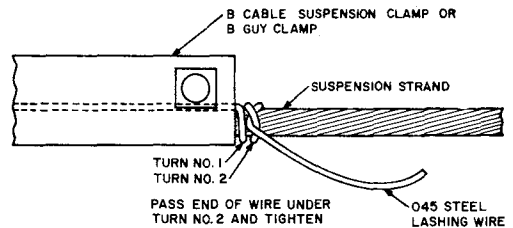


FIG. 8A - FIRST TWO TURNS

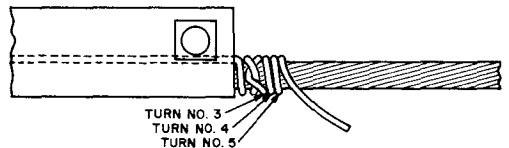
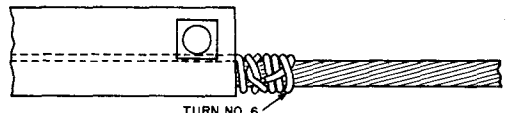


FIG. 8B - NEXT THREE TURNS



TURN NO. 6
PASS END OF WIRE UNDER TURN NO. 6 TIGHTEN, AND CUT OFF EXCESS LENGTH

FIG. 8C - COMPLETED TERMINATION

Fig. 8—Terminating 045 Lashing Wire

5.06 Before securing the ends of lashing wire either permanently or temporarily, *tap the strand sharply a few times while maintaining a pull on the wire to remove any slack* which may have been introduced in the lashing wire.

5.07 Where no splice is present, the lashing wire (between the point where the outermost support is to be placed and the pole or strand connector) should be lashed around the strand only with a lay approximating that of the individual wires of the strand.

5.08 Where there is to be a splice, the lashing wire should be lashed around the strand only for about a distance of 24 inches from the suspension bolt. Sufficient excess wire should be left to permit permanent termination after splicing work is completed. See Fig. 11.

5.09 Figures 9 through 12 show the position of the lashing wire and the location of the ties under various conditions frequently encountered in the field.

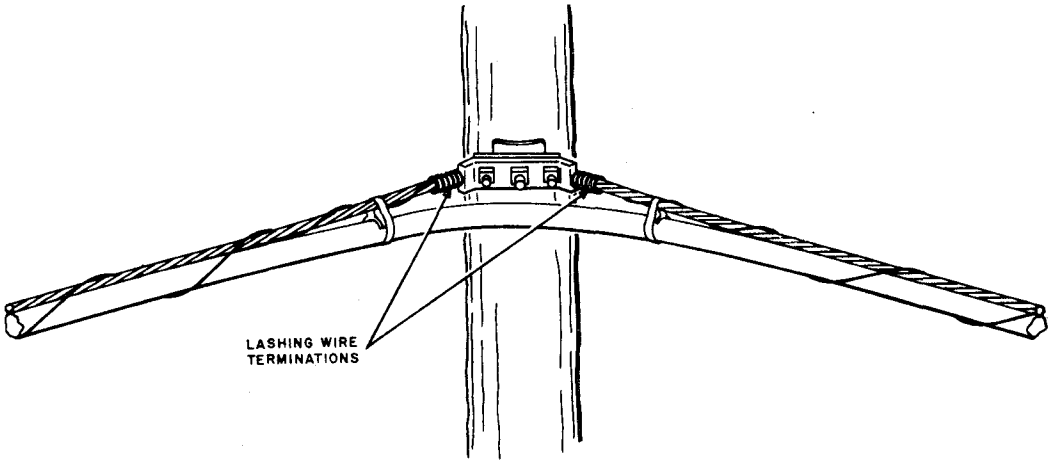


Fig. 9—Lashing Wire Terminations at Poles Where Strand is Continuous

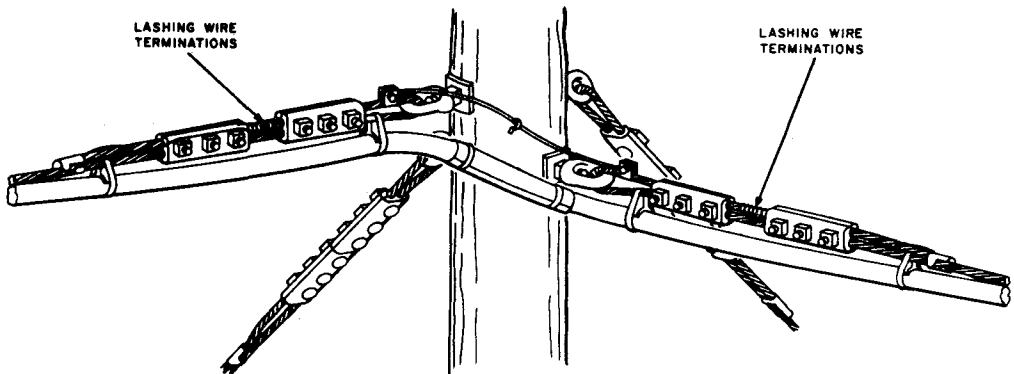


Fig. 10—Lashing Wire Terminations at Strand Deadends

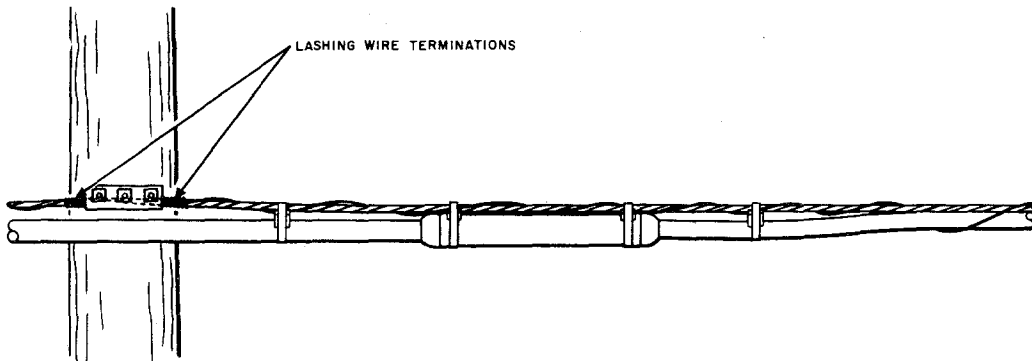


Fig. 11—Lashing Wire Terminations at Splice Locations

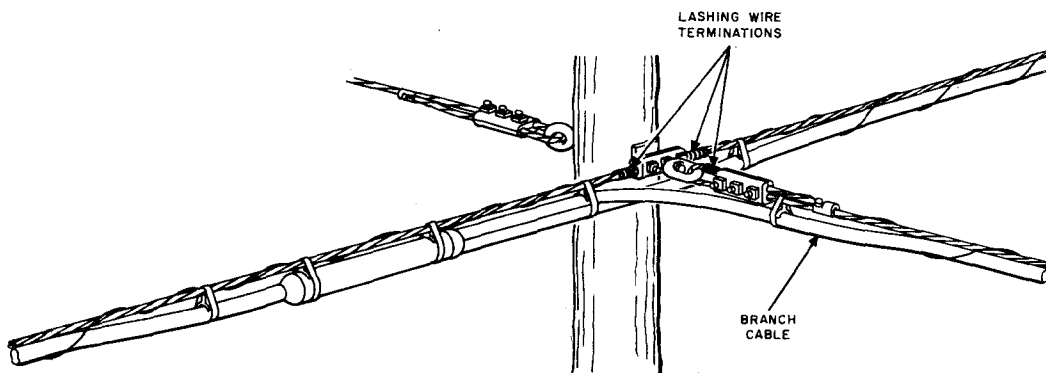


Fig. 12—Lashing Wire Terminations at Branch Cables

6. JOINING LASHING WIRE

6.01 Wherever practical, avoid lashing wire splices.

6.02 The D Cable Lashing Clamp may be used to join two lashing wires, as shown in Fig. 13. This method should not be used in spans where it will interfere with the lashing of a second cable.

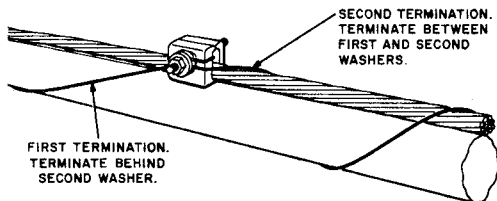


Fig. 13—Cable Lashing Clamp Used to Join Two Lashing wires

6.03 For 045 lashing wire, a *square knot* pulled taut and formed so that it will bear against the strand as shown in Fig. 14 may be used.



Fig. 14—Joining 045 Lashing Wire

6.04 Where necessary to join the ends of 065 or 091 lashing wire, make a pigtail joint. Locate the joint so that it will bear against the strand as shown in Fig. 15 and not against the cable.



Fig. 15—Pigtail Joint