

CABLE SPLICING—AERIAL

SLACK PULLERS

USE

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1. GENERAL			
1.01	This section outlines the use of slack pullers for deflecting suspension strand temporarily to obtain sufficient slack in aerial cable to facilitate splicing and maintenance operations.		2.03 In setting up lashed cable, avoid sharp bends between the wiped joints and the point where the cable comes in contact with the strand. This will minimize damage to the cable sheath as the result of expansion and contraction.
1.02	This section is reissued to delete information pertaining to 6.6M strand.		2.04 <i>Do not use slack pullers on rusty or pitted strand as the added tension may cause the strand to break.</i> Where slack is required in cable supported by rusty, pitted strand, split cable grips should be used with a tension jack or chain hoist to pull slack in the cable.
1.03	Description and maintenance procedures for the F slack puller as well as for superseded pullers are found in Section 081-020-115.		2.05 <i>Do not use two slack pullers at any given location due to the possibility of overloading the slack pullers or the strand.</i>
1.04	Information is included on use of slack pullers in various splicing and repairing operations on cable supported by 6M, 6.6M, 10M, or 16M strand. These pullers may be used in operations involving lashed or ring supported cables at lead sleeves, splice closures, and cable terminals whether working from either an aerial platform or ladder platform.		2.06 Slack pullers should not be left at full tension overnight. Some tension may be needed, however, to prevent damage to the splice which could result from a temperature change.
1.05	While the methods of operation and use outlined are for the F slack puller, the same instructions may be followed in using a superseded-type puller.		2.07 At splices where the puller is used on the strand for several days, its position on the strand should be shifted each time it is tightened to prevent weakening of the strand at any one point as a result of repeated bending.
2. PRECAUTIONS			2.08 In raising or lowering slack pullers, always attach the hook of the handline to the frame of the slack puller; <i>never</i> to the handle.
2.01	Safety precautions pertaining to aerial operations are found in Division 620 of the Bell System Practices and should be referred to and followed during these operations.		2.09 Exercise care to avoid scoring the lead cable sheath with the end of the lashing wire when setting up or terminating lashing wire.
2.02	<i>Do not use slack pullers on 2.2M strand or on any strand forming a part of self-supporting type cable.</i>		
	<small>*Reprinted to comply with modified final judgment.</small>		3. USE
			3.01 In making a repair opening in cable that is not cut, the slack puller is used to provide sufficient slack to test, identify, and repair the conductors.
			3.02 The procedure for obtaining slack is as follows:

(a) Mark the location of the proposed sheath opening with B paper tape (Fig. 1). *Never* score the lead sheath. If the air temperature is 60°F or above, make the distance between the marks $\frac{3}{8}$ -inch greater than the standard splice opening. If the temperature is less than 60°F, make the distance between the marks $\frac{3}{4}$ -inch greater than the standard opening. In maintenance operations when a sleeve must be removed, place two rings of tape 36 inches apart, one on each side of the sleeve. This distance should be measured again before rewiping the joints to assure that the original tension is maintained.

(b) On lashed cable, place lashing wire grips about 3 feet from each end of the proposed splice. On ring supported cable, place grade clamps to prevent slipping of the cable through the rings while the slack puller is being used. Section 627-300-211 describes the method of placing grade clamps.

(c) Cut the lashing wire and turn the ends back or remove the cable rings. Lower and support the cable as shown in Fig. 2.

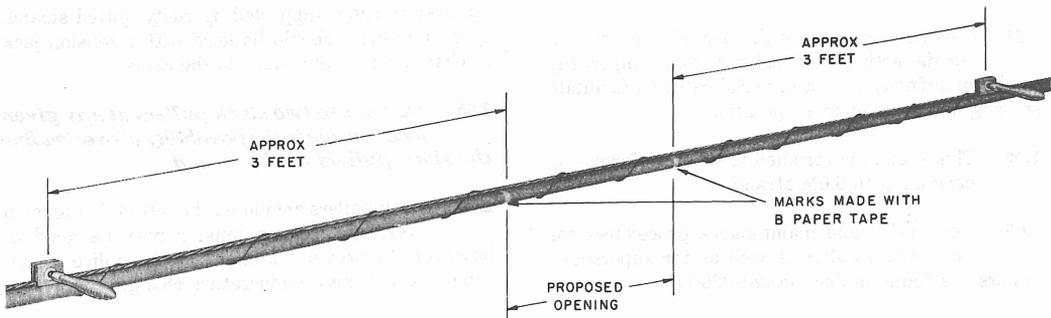


Fig. 1—Proposed Opening on Existing Cable—Lashing Wire Not Cut

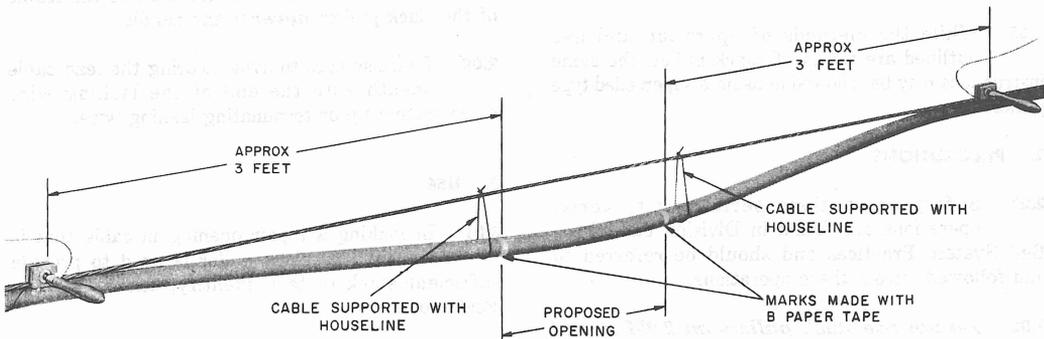


Fig. 2—Lashing Wire Cut

(d) When working from an aerial platform, place the slack puller on the strand (Fig. 3) about 6 inches from either end of the opening. When working from a ladder platform, place the puller outside the clamps of the ladder support, allowing space for ladder tent clamps in the event it may become necessary to install a tent.

(e) Position the ratchet control lever for right-hand operation and turn the screw sleeve clockwise, deflecting the strand until the standard splice opening is obtained.

(f) Complete and cover the splice in an approved manner. Remove the puller by positioning the ratchet control lever for left-hand operation and turn the screw sleeve counterclockwise. Terminate the lashing wire and place supports as directed in Division 627.

3.03 It is often necessary to leave a splice before it is completed. Ordinarily, some slack will be lost overnight through contraction of the cable caused by a lowering of the air temperature. Overnight, maintain only enough slack to protect the conductors. To prevent loss of slack in lashed cable, rubber bandage may be used in the following manner:

(a) After the splice is protected in accordance with standard procedures, place the rubber bandage at least 1 foot out from each side of the splice opening.

(b) Wrap the strand and cable together for a distance of about 3 or 4 feet on each side of the splice. This length of wrap will ordinarily provide sufficient holding power.

NOTE :

THIS DISTANCE SHOULD BE ABOUT 6 INCHES WHEN WORKING FROM AN AERIAL PLATFORM. WHEN WORKING FROM A LADDER PLATFORM, THE DISTANCE SHOULD BE INCREASED TO ALLOW FOR THE LADDER SUPPORT CLAMPS AND TENT CLAMPS IF A TENT IS USED.

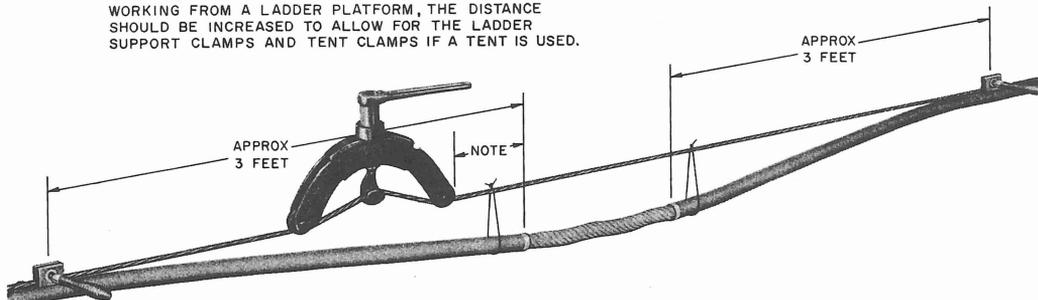


Fig. 3—Sheath Removed, Slack Puller Placed, and Strand Tensioned