

BELL SYSTEM PRACTICES
Outside Plant Construction
and Maintenance

SECTION G51.116.1
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AT&T Co Standard

STRAND PULLERS
USE

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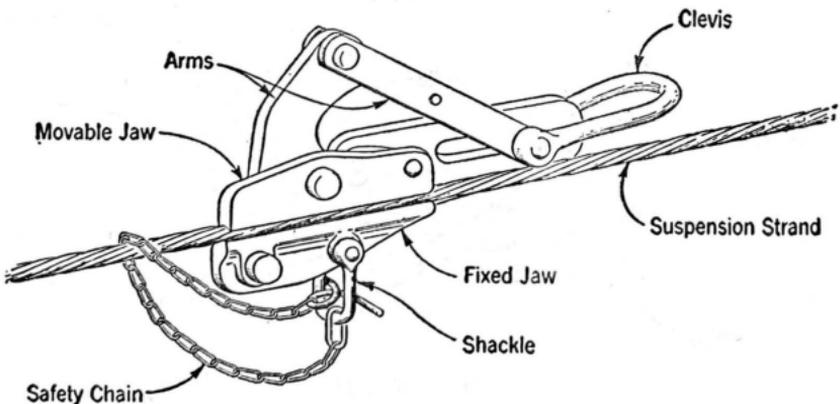
1. GENERAL

1.01 This section covers the use of Strand Pullers. It replaces Section G51.116.1, Issue 1. It is reissued to specify use of KS-16302 Cleaner instead of KS-8372 Stabilized Trichloroethylene.

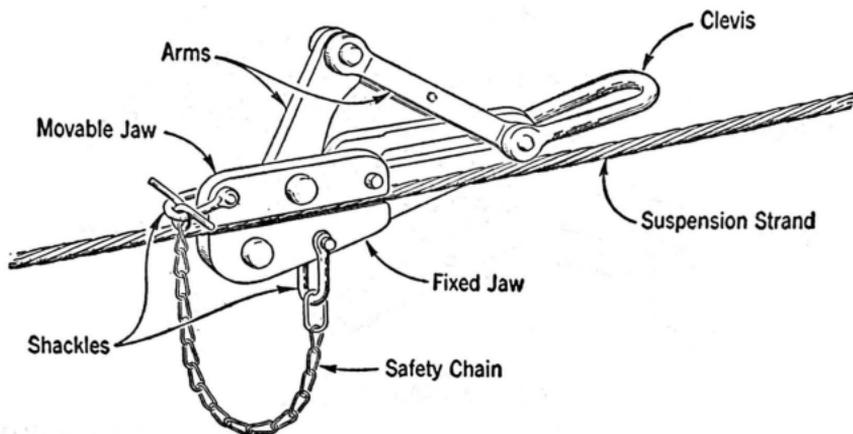
2. DESCRIPTION

2.01 Strand Pullers are forged steel tools, consisting of a fixed and a movable jaw designed to grip the strand when a pull is applied to the clevis on the movable jaw. They are available in two sizes and are designated as the "L" and "H" Strand Pullers.

L STRAND PULLER



H STRAND PULLER



3. USE

3.01 The "L" Strand Puller is not as strong as the "H" Puller and, therefore, can not be used for pulling as heavy loads. The "L" Puller is designed for tensioning all the standard sizes of strand, provided that the pulling loads do not exceed 5000 pounds. It shall, therefore, be used only under the following conditions :

- (a) Pulling 2200 or 6000 pound strand under all conditions.
- (b) Pulling 10,000 or 16,000 pound strand preliminary to placing the cable.
- (c) Pulling 10,000 or 16,000 pound guys provided that no wire or suspension strand attachments have yet been made to the pole.

3.02 The "H" Strand Puller is designed for tensioning 10,000 pound and larger strands when the loads exceed 5000 pounds. It shall, therefore, be used under the following conditions :

- (a) Pulling 10,000 or 16,000 pound strand for all conditions other than those covered by Paragraphs 3.01 (b) and 3.01 (c).
- (b) Pulling 25,000 pound strand under all conditions. If desired, however, it may also be used for lighter loads, such as mentioned in Paragraph 3.01.

3.03 The gripping power of the Strand Puller is materially reduced if the grooves of the jaw are coated with oil, grease, paraffin or galvanizing. Oily strand also reduces the gripping power of the Strand Puller. It has been found that

even clean strand, handled with perspiring hands, has sufficient oil deposited on it to permit slippage during the pulling operation. In view of this, and the conditions under which these tools are used, both the strand at the point of attachment of the puller and the grooves of the puller jaws should be cleaned thoroughly with KS-16302 Cleaner before the tool is attached to the strand. Galvanizing may be removed by rubbing the groove of each jaw with Abrasive Cloth. The cleaning procedure is outlined completely in the section on Strand Puller maintenance.

3.04 Always secure the safety chain before engaging the Strand Puller on the strand.

3.05 To engage the Strand Puller on the strand, hold the fixed jaw with one hand and with the other apply pressure to the clevis attached to the movable jaw. This operation opens the jaws so that the strand may be inserted between them. When the pressure against the clevis is released, the spring action closes the jaws. A sustained pull on the clevis will lock the jaws on the strand.

3.06 After the Strand Puller has been attached to the strand, secure the hook of the pulling apparatus to the clevis of the Strand Puller. Apply tension slowly. When tension is first applied, a slight amount of slippage may occur. If this slippage exceeds 1/2 inch, however, stop the pulling operations, remove the Strand Puller and clean the jaws again. If excess slippage is observed when the Strand Puller is again attached to the strand, the tool shall be removed from service, marked as defective and exchanged for one in good condition.

3.07 To facilitate the removal of the Strand Puller, attach a hand line to the shackle on the fixed jaw. When a pull is applied to the hand line, in the same direction as the pull of the winch line or the chain hoist, the grip of the jaws will be released and the puller can be moved along the strand. Where it is necessary to move the Strand Puller in the opposite direction on the strand, the hand line should be attached to the shackle on the movable jaw. Where there is no shackle on the movable jaw the hand line may be attached to the arm of the puller.