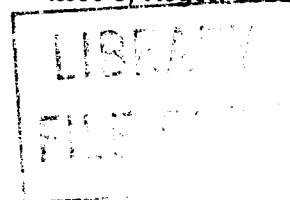


## STRAND PULLERS

### DESCRIPTION AND MAINTENANCE



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#### 1. GENERAL

1.01 This section covers the description and maintenance of strand pullers.

1.02 The reasons for reissuing this section are listed below. Revision arrows are used to emphasize the more significant changes.

- (1) To add reference to modified L strand puller
- (2) To delete reference to 9-pound L strand puller
- (3) To rate B strand puller Mfr Disc.

#### 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 which actuates the movable jaw. They are available in two types and are designated as the L and H strand pullers.

##### MODIFIED L STRAND PULLER

2.02 The modified L strand puller has a radius at opposite ends of the fixed and movable jaws and a date of manufacture of April 1978 or later (Fig. 1). It weighs approximately 6 pounds and is equipped with a single shackle which is on the fixed jaw. A safety chain is permanently attached to the shackle and is equipped with a latch at the free end. The puller may be prevented from falling, should it become disengaged, by passing the chain around the strand and attaching the chain latch to the shackle.

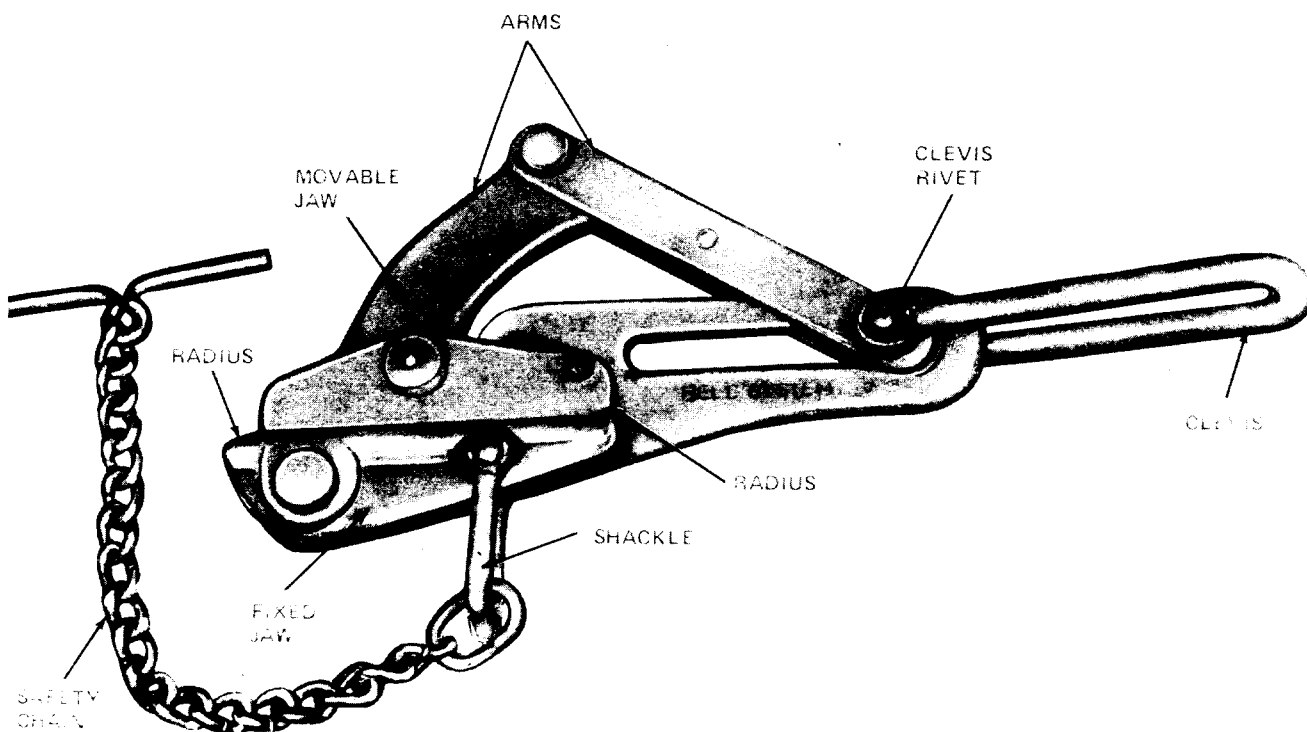


Fig. 1—Modified L Strand Puller

#### NOTICE

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Bell System except under written agreement

**Caution:** Only L strand pullers, with a radius at opposite ends of the fixed and movable jaws and a date of manufacture of April 1978 or later, shall be used to tension self-supporting cable.

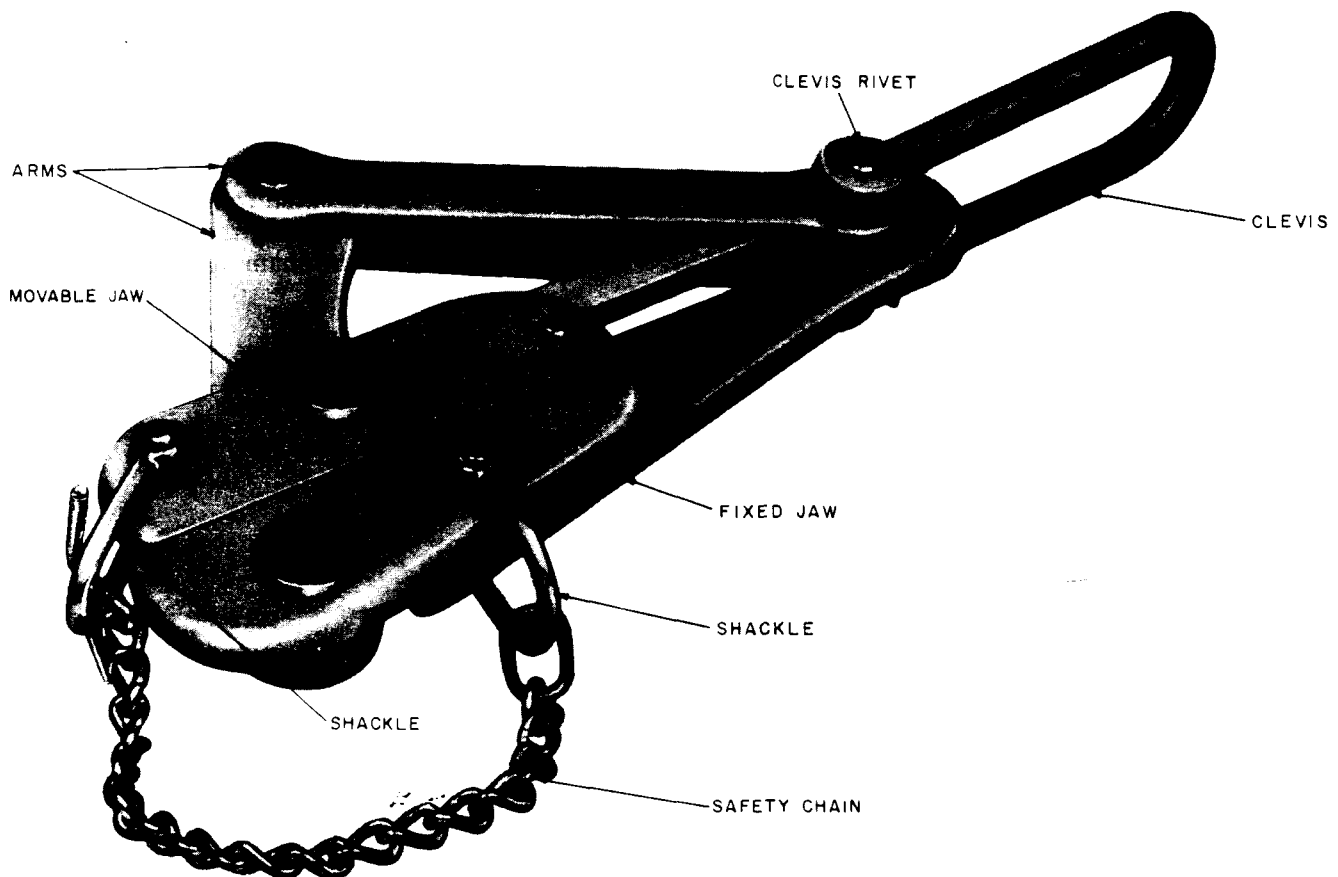
**2.03** ♦The modified L strand puller can be used for tensioning all sizes of standard strand and self-supporting cable to loads not exceeding 5000 pounds.

#### H STRAND PULLERS

**2.04** The H strand puller (Fig. 2) weighs approximately 16-1/2 pounds and is equipped with a

chain secured to a shackle on the fixed jaw. There is also a shackle on the movable jaw through which the chain latch may be passed. The puller may be prevented from falling from the strand, should it become disengaged, by passing the chain across the open side of the jaws and attaching the chain latch to the shackle on the movable jaw.

**2.05** The H strand puller is designed for tensioning 10M and larger suspension strands when the load exceeds 5000 pounds.



**Fig. 2—H Strand Puller**

**B STRAND PULLERS (MFR DISC.)**

**2.06** The B strand puller (Fig. 3) weighs approximately 6 pounds. It consists essentially of a forged steel tool having two parallel, semicircular grooved, serpentine jaws between which the jacketed strand of self-supporting cable is gripped. Each puller is equipped with a single shackle which is mounted on the fixed jaw. A safety chain is permanently attached to the shackle and is equipped with a latch at the free end. The puller may be prevented from falling, should it become disengaged, by passing the chain around the self-supporting cable and attaching the chain latch to the shackle.

**2.07** The B strand puller is designed and should be used **only** for tensioning self-supporting cable. It is not designed to perform the work operations of the H and L strand pullers and therefore **should not** be used to tension bare strand.

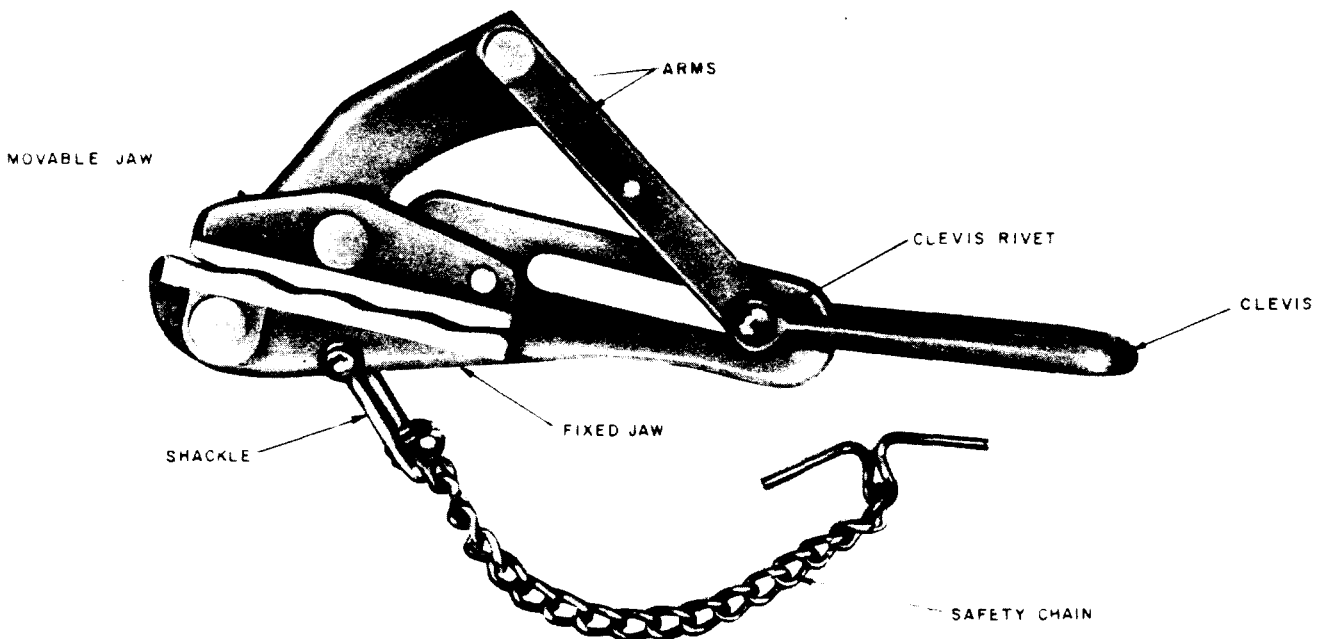
**3. INSPECTION AND MAINTENANCE**

**DANGER:** To avoid excessive inhalation of fumes, B cleaning fluid should only be used out of doors or in a well ventilated area.

**3.01** Strand pullers should be examined and cleaned each time before they are used to ensure that the grooves are free from grease, paraffin, oil, flooding compound, or particles of galvanizing. To minimize any slipping tendency, clean the grooves of the L and H strand puller jaws and the strand with a clean cloth saturated with B cleaning fluid and then wipe the strand and the tool dry before mounting the tool on the strand.

**3.02** To remove deposits of galvanizing that are collected in the grooves of the puller jaws, proceed as follows:

- (1) Place the end of the fixed jaw against the scuff plate of the truck or some other solid support and push back on the clevis until the jaws are completely open.
- (2) With the tool in this position, remove the galvanizing by rubbing the grooves with abrasive cloth. This operation may be facilitated by folding the cloth over the tip of a screwdriver blade or similar tool.
- (3) Clean the jaws with B cleaning fluid as outlined in paragraph 3.01.



**Fig. 3—B Strand Puller**

**3.03** The moving parts of all strand pullers must move freely. When holding a B or L strand puller by the clevis in a vertical plane with the jaws uppermost, release of the movable jaw from its fully opened position shall cause the jaws to snap shut. In the case of the L strand puller, the jaws shall make contact along their entire length. This requirement shall be met by an H strand puller when held in a horizontal position with the movable jaw uppermost. If contact is not made between the jaws, inspect the puller for bent or deformed parts. If the tool appears to be in good condition, flush the pivot points with B cleaning fluid and repeat the test. If contact is still not made, the strand puller is defective and should not be used.

**3.04** A detailed inspection of each strand puller shall be made at least every 3 months, paying particular attention to the following:

- (a) Cracks or splits in the various parts.
- (b) Broken or weak spring.
- (c) Alignment of jaws or deformed parts that prevent the jaws from closing tightly.

(d) Free movement of the large clevis rivet in the long straight slot. (Set the puller on its side with the jaws down. Mark the location of the edge of the arm on the jaw frame on the clevis side. With the jaw frame fixed, move the clevis so that the clevis rivet goes from side to side across the long straight slot. The arm should move at least 1/16 inch from the marked location.)

(e) Excessive wear of the rivets or the grooves of the jaw. (The grooves in the jaws of the L and H strand pullers are V-shaped. The grooves in the serpentine jaws of the B strand puller are semicircular.)

(f) Chain worn excessively or missing.

**3.05** If any of the conditions outlined in paragraph 3.04 are found to exist or if the condition of the strand puller is such that there is any doubt as to its serviceability, it should be marked defective and exchanged at once for one in good condition.