

## CABLE BLOCKS AND ASSOCIATED EQUIPMENT

### DESCRIPTION AND USE

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#### 1. GENERAL

1.01 This section describes the types of cable blocks and associated equipment used when placing aerial cable.

1.02 This section is reissued to:

- Include information on the H and J cable blocks and to delete information on superseded cable blocks and block lifters.
- Include information on the K cable block
- Show the J cable block rated manufacture discontinued (MD)
- Update text and illustrations.

Since this is a general revision, arrows ordinarily used to indicate changes have been omitted.

#### 2. PRECAUTIONS

2.01 *To minimize breakage, avoid dropping, throwing, or rough handling of frames and blocks. They should be lowered from a pole with a handline.*

\*\*Reprinted to comply with modified final judgment.

2.02 Before using cable blocks, they should be checked as follows.

- (a) Examine the cable block assembly for broken welds, cracks, or deformations.
- (b) Check that all parts are free of sharp edges and projections (sharp edges, burrs, etc, may be removed with a file).
- (c) Check that threaded parts and sheaves can be turned with the fingers.

#### 3. CABLE BLOCKS

3.01 *E Cable Block:* The E cable block (Fig. 1) is used with B, C, D, E, and F cable block frames. The pulley of the E cable block should be clean and rotate freely. When necessary, remove the pulley from the support, clean the bearings, and lubricate with a light cup grease. Should the neoprene wear off the pulleys, the blocks should be returned for repair in accordance with local instructions.

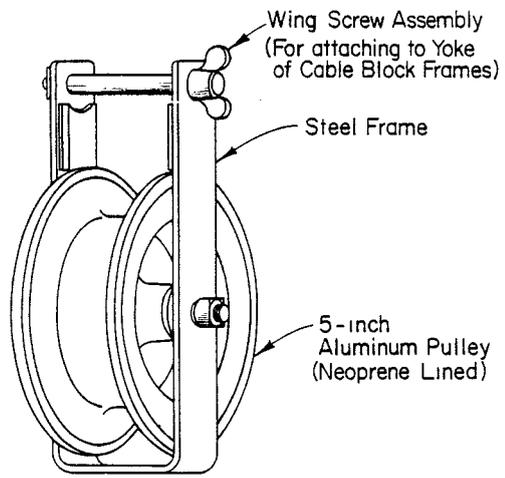


Fig. 1—E Cable Block

3.02 Replacement parts for the E cable block are:

Pulley

Wing Screw

3.03 **H Cable Block:** The H cable block (Fig. 2) supersedes the one-sheave cable block and is used to pull cable toward or away from corner poles and any other location where a single block is required.

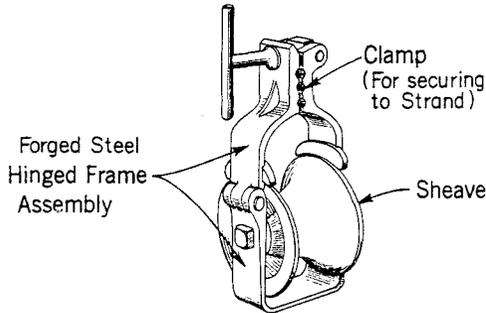


Fig. 2—H Cable Block

3.04 **K Cable Block:** The K cable block (Fig. 3) is a reversible block which supersedes the J cable block and is used for supporting aerial cable prior to lashing an initial or second cable to the strand. This block has two spring loaded cams which are opened manually in the desired direction and held open by a release lever. When the lever is pulled down, either manually or with the D cable block lifter, the cams are wedged against the strand and the strand keeper is engaged preventing the block from becoming disengaged from the strand. The lever lock maintains the keeper in a closed position until released.

**SUPERSEDED CABLE BLOCKS**

3.05 The **F cable blocks** presently in the field may be returned for modification to accommodate 6.6M strand in accordance with local instructions.

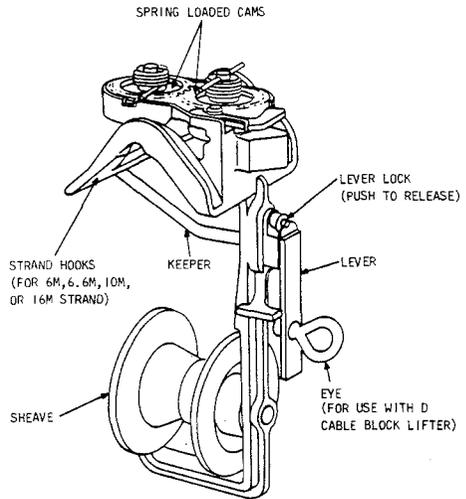


Fig. 3—K Cable Block

3.06 The **J cable block** (Fig. 4) is superseded by the K cable block. The single cam design allows the block to move along the strand in only one direction.

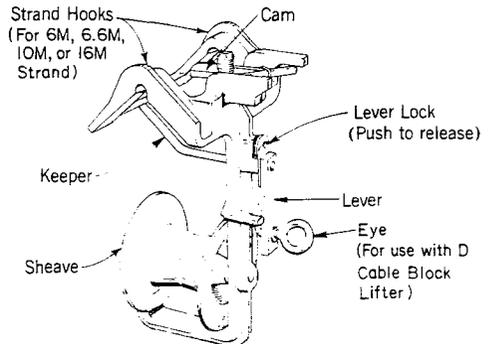


Fig. 4—J Cable Block (MD)

3.07 The *one-sheave cable blocks* presently in the field may be returned for modification to accommodate 6.6M strand in accordance with local instructions.

#### 4. CABLE BLOCK LIFTERS

4.01 *D Cable Block Lifter*: The D cable block lifter, shown in Fig. 5, is used with tree-pruner handle sections to place and lock the K cable block on the suspension strand (Fig. 6).

**Note:** The D cable block lifter shall not be used with more than two small tree-pruner handle extension sections or three large sections (one tapered and two extension).

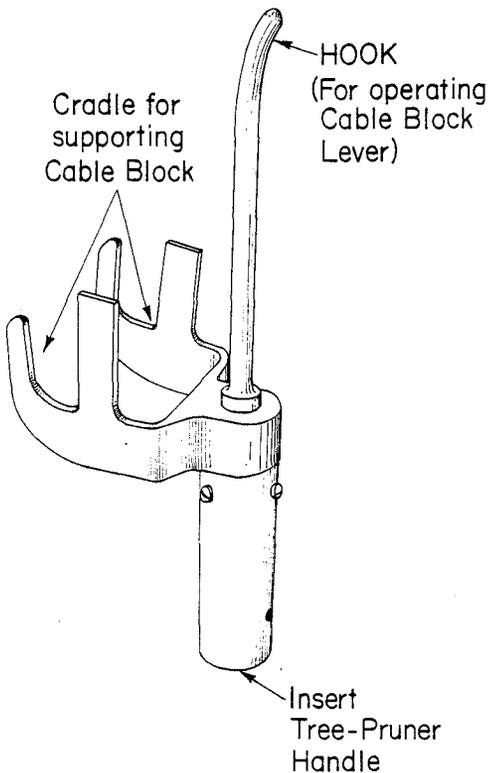


Fig. 5—D Cable Block Lifter

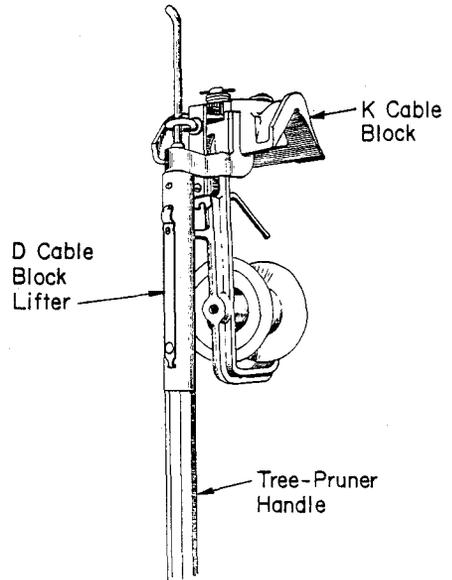


Fig. 6—D Cable Block Lifter (With K Cable Block)

#### 5. CABLE BLOCK PUSHER

5.01 *C Cable Block Pusher*: The C cable block pusher (Fig. 7) is used with K cable blocks when lashing an initial cable by placing it on the suspension strand ahead of the cable lasher. The circular flange bears against the strand hook on the cable block and pushes the block along the strand in the direction the lasher is being pulled.

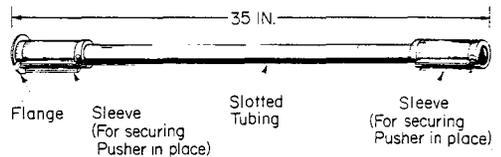


Fig. 7—C Cable Block Pusher

6. CABLE BLOCK FRAMES

6.01 Cable block frames are used with E cable blocks as temporary supports at in-line and corner poles to carry prelashd strand and cable, or self-supporting cable, during the pulling-in operation.

6.02 The *B cable block frame* (Fig. 8) is used at the first and last poles of a pull.

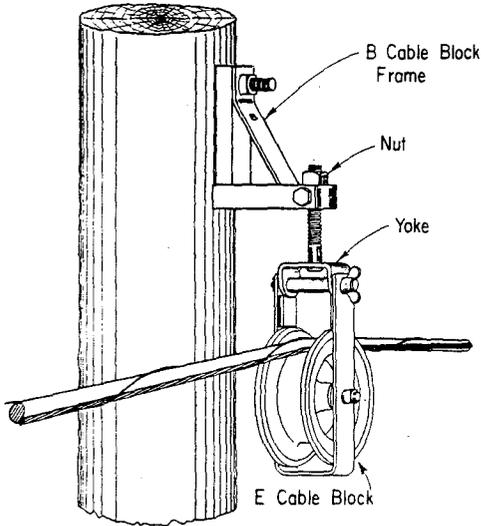


Fig. 8—B Cable Block Frame (With E Cable Block Installed)

6.03 The *C cable block frame* (Fig. 9) is used at in-line poles and corner poles where the pull is less than 3 feet.

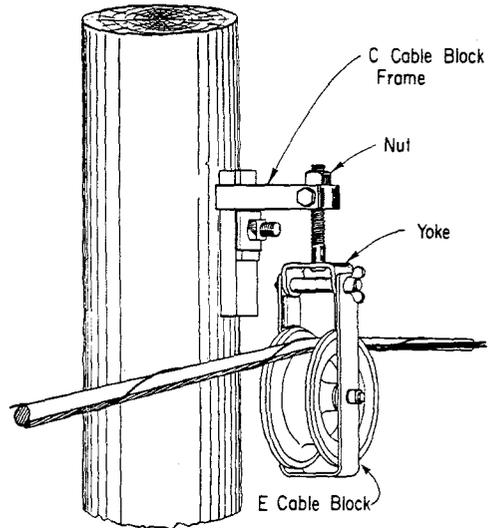


Fig. 9—C Cable Block Frame (With E Cable Block Installed)

6.04 The *D cable block frame* (Fig. 10) is used at inside corners where the pull is more than 3 feet but does not exceed 8 feet.

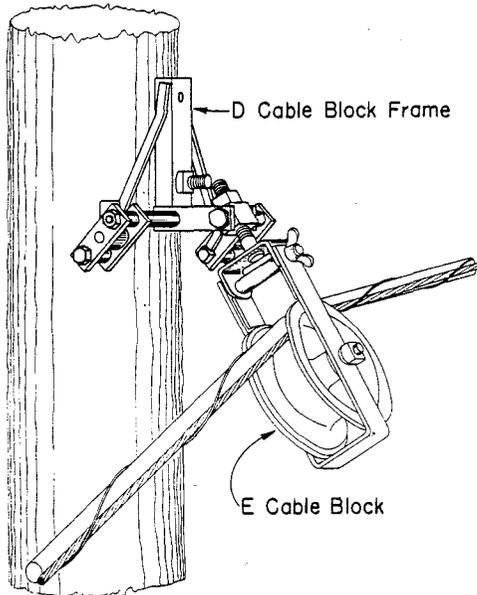


Fig. 10—D Cable Block Frame (With E Cable Block Installed)

6.05 A typical *E cable block frame* (Fig. 11) is used at inside corners where the pull is greater than 8 feet but does not exceed 50 feet. The frame construction may be welded steel tubing as shown or aluminum alloy casting.

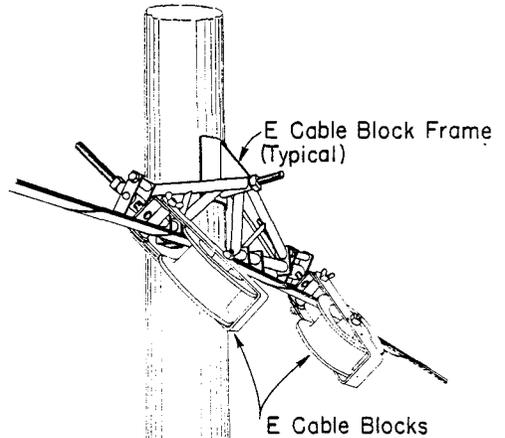


Fig. 11—E Cable Block Frame (With E Cable Block Installed)

6.06 The *F cable block frame* (Fig. 12) is used at outside corners. Use one E cable block where the pull is at least 3 feet but does not exceed 8 feet. Use two E cable blocks where the pull is greater than 8 feet but does not exceed 50 feet.

6.07 Replacement parts for cable block frames are:

Yoke (with nut)

Nut

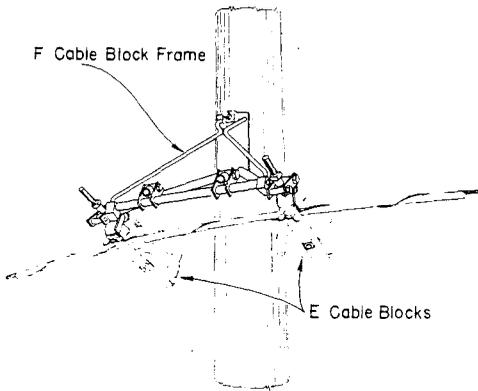


Fig. 12—F Cable Block Frame (With Two E Cable Blocks Installed)

## 7. STRAND SHIFTERS

7.01 Strand shifters are used in conjunction with cable block frames to facilitate the transfer of preashed cable from temporary roller supports to the cable suspension clamps.

7.02 The *D strand shifter* (Fig. 13) consists of an upper and lower frame, an adjusting screw, two flexible chains each with a hook at one end, and a ratchet wrench (not shown). The adjusting screw is captive mounted in the lower frame and threaded into the upper frame. The flexible chains, as shown in the figure, pass through holes in the lower frame and are secured to the ends of the upper frame. Turning the adjusting screw lowers or raises the upper frame, thus lowering or raising the hooks.

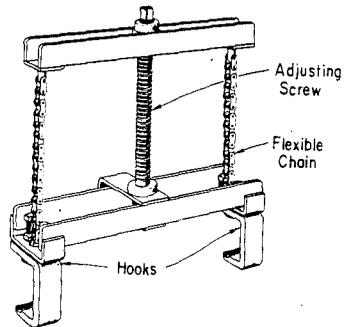


Fig. 13—D Strand Shifter

7.03 The D strand shifter is used only with the C cable block frame, at in-line poles, to lift the cable and suspension strand vertically for attachment to the cable suspension clamp as shown in Fig. 14.

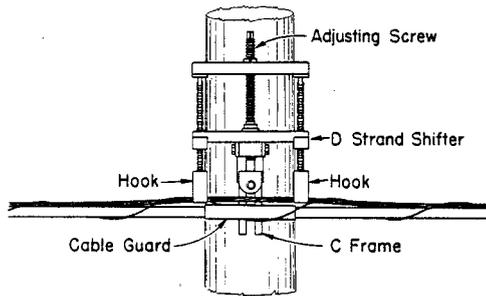


Fig. 14—D Strand Shifter Installed on C Cable Block Frame

7.04 The *E strand shifter* (Fig. 15) consists of two hook assemblies, a socket wrench, and a ratchet wrench.

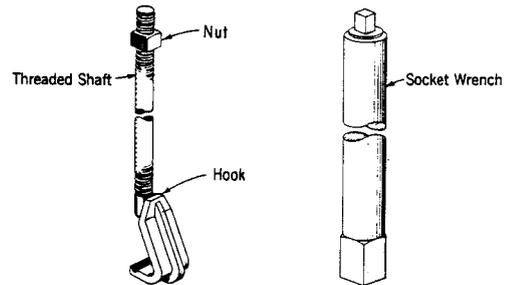


Fig. 15—E Strand Shifter

7.05 The E strand shifter is used with the D, E, and F cable block frames at inside and outside corners to move prelash cable and strand into position for attachment to the suspension clamp. The method of installing the E strand shifter on the D, E, and F cable block frames is shown in Fig. 16, 17, and 18, respectively.

7.06 Replacement parts for D and E strand shifters are:

Wrench, Socket

Wrench, Ratchet

Nut (for E Strand Shifter)

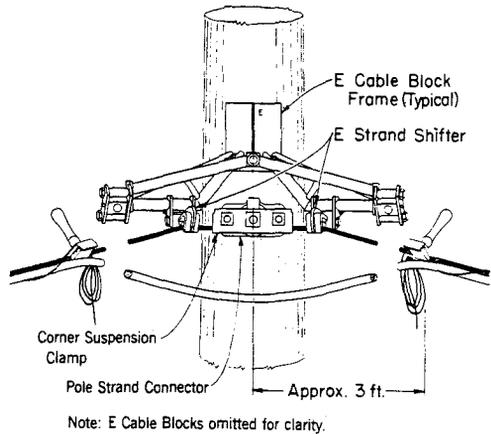


Fig. 17—E Strand Shifter installed on Typical E Cable Block Frame

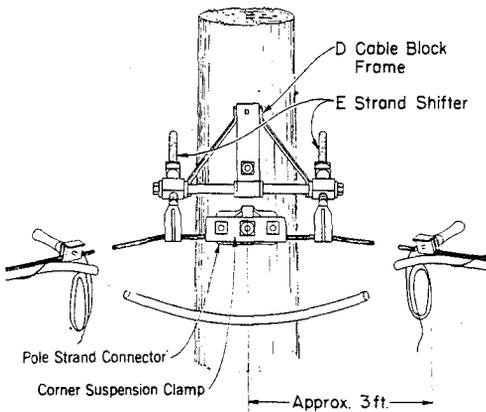


Fig. 16—E Strand Shifter Installed on D Cable Block Frame

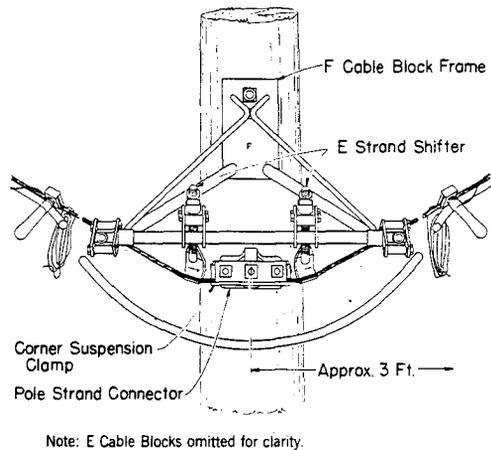


Fig. 18—E Strand Shifter Installed on F Cable Block Frame