BELL SYSTEM PRACTICES
Outside Plant Construction and Maintenance

SECTION G52.123.2
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AT&T Co Standard

PRELASHING
PLACING TEMPORARY ROLLERS AND WINCH LINE

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1. GENERAL

1.01 This section outlines the preparatory work along the line. It covers placing the temporary rollers, the pulling-in line, and the winch line.

2. PRECAUTIONS

2.01 **The recommendations outlined in the Clearance Practices with respect to locating strand attachments on poles, and obtaining proper clearances and separations in the span and at the pole shall be observed.**

2.02 When checking clearances and separations in the span and locating strand attachments keep in mind that **four different sag conditions** occur when pulling in the winch line and later the prelashed cable and strand. These are:

(a) Winch line sag when pulling-in the winch line. Sag may be very great or very little depending on the tension in the winch line.

(b) Winch line sag when pulling in the prelashed cable and strand. In this case, winch line tension is greater than in (a), therefore, sag will be small.

(c) Sag of prelashed cable and strand during the pulling-in operation. Because of the weight of this assembly, sag is greater than in (b).

(d) Sag during the final tensioning operation. Sag of the prelashed cable and strand will be less than in (c). If the winch line is used to bring the suspension strand to final tension, winch line sag will be less than in (b) because of the higher tension.

3. PLACING TEMPORARY ROLLERS

3.01 Select the proper cable block frame for the line conditions at the particular pole, for example:

(a) The B cable block frame is for use at the first and last pole in the length being worked.

(b) The C cable block frame is for use at all in-line poles and corners of less than 3 feet pull.

(c) The D cable block frame is used at corners where there is a pull **away** from the pole of from 3 to 8 feet, inclusive.

(d) The E cable block frame is used at corners where the pull **away** from the pole is over 8 feet and does not exceed 50 feet.

(e) The F cable block frame is used at all corners where the pull **against** the pole is 3 feet or over, and does not exceed 50 feet. Pulls of from 3 to 8 feet require only one E cable block for proper operation. Greater pulls require two blocks.

(f) At corners where the pull exceeds 50 feet, dead-end the strand.

3.02 The operations required when placing a temporary roller are as follows:

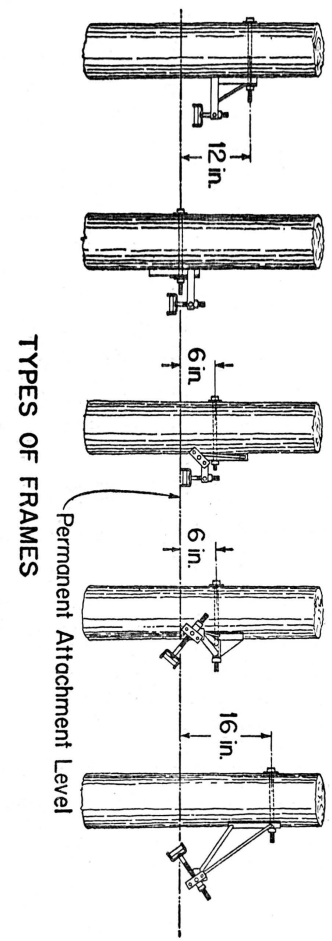
(1) Bore a hole for a 5/8 or 3/4-inch A cable suspension bolt perpendicular to the line and at or above the permanent attachment level depending on the type of frame being mounted (see Paragraph 3.03). For all except the C frame, the permanent attachment hole may be bored at this time or during the transferring operations.

(2) Place a square washer on an A cable suspension bolt which is of sufficient length to extend at least 4 inches beyond the pole surface and insert the bolt in the hole.

(3) For all cable block frames except the C, mount the frame on the bolt, place a nut on the bolt and tighten the frame securely to the pole. For the C cable block frame, place a square washer and nut on the bolt and run the nut up a few turns. Mount the C frame on the bolt between the pole and the washer and tighten it securely against the pole.

(4) Place one or two E cable blocks in the frame as required.

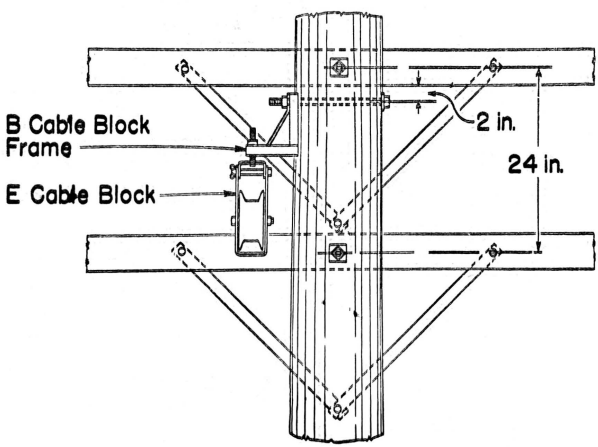
3.03 The following figures show the approximate locations of the cable suspension bolts for mounting the cable block frames with respect to the permanent attachment level.



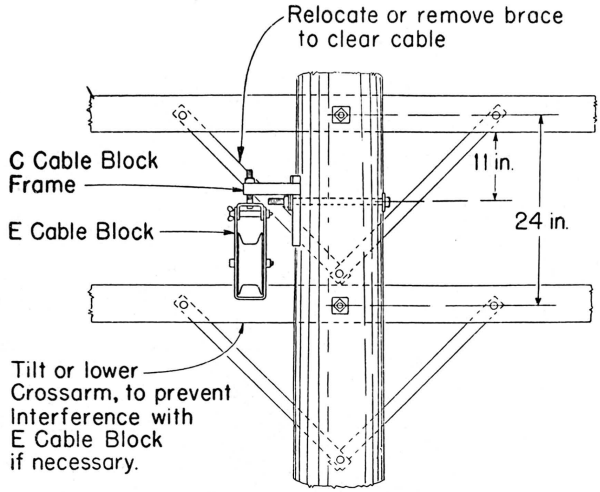
3.04 Rig each temporary roller after it is placed so that the winch line can be pulled in later. Manila rope (1/4-inch or larger) set up on a wire payout reel can be used to rig the rollers and later as the pulling line for the winch line, or a short length of handline, rope, or houseline can be placed in each roller. The ends of these rigging ropes should be accessible from the ground and tied securely to the pole high enough so that pedestrians will not interfere with them. Observe the precautions in Paragraph 4.01.

3.05 When the prelashed cable is to be placed between the crossarms of an existing open wire line or close to the lower crossarm of such a line, the following figures should serve as a guide for the necessary clearances and plant rearrangements required when mounting the temporary roller and placing the prelashed cable.

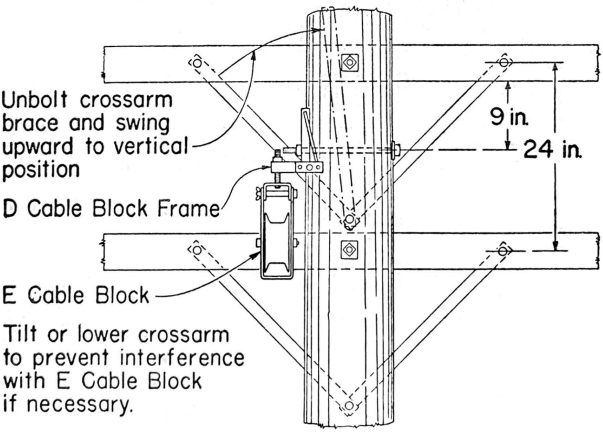
FIRST AND LAST POLES OF A PULL



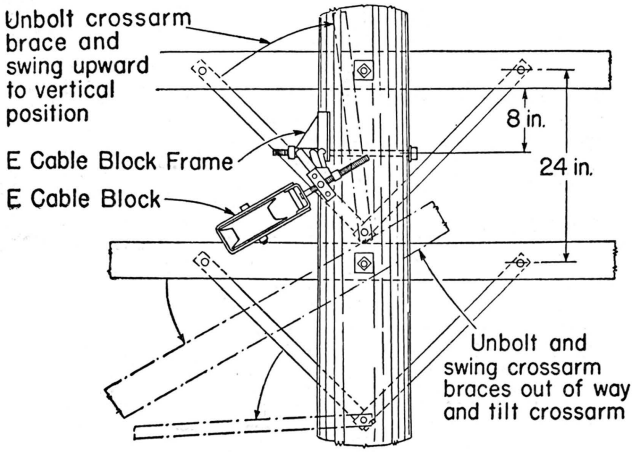
IN LINE - MAX. PULL 3 FEET



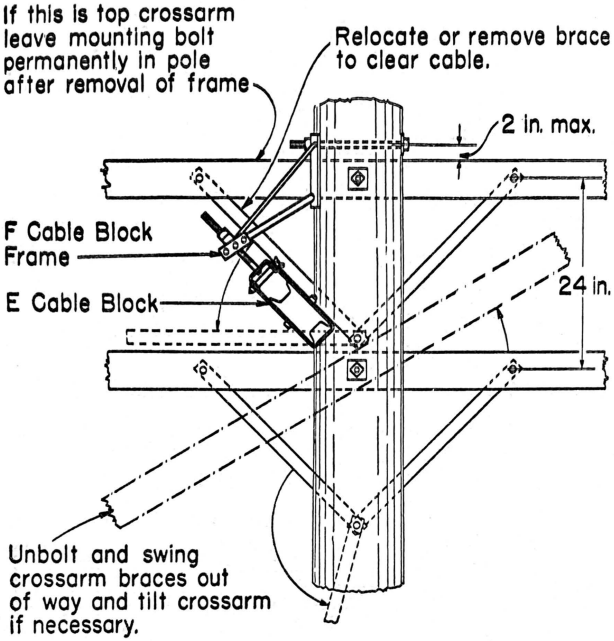
LIGHT CORNER PULL AWAY



HEAVY CORNER PULL AWAY



HEAVY CORNER PULL AGAINST



4. PLACING WINCH LINE

4.01 When the manila rope or winch line is being pulled in, observe the following precautions:

(a) Place warning signs (and additional warning devices if necessary) at all streets, alleys, and thoroughfares that will be crossed by the rope or winch line.

(b) In spans in which supply service drops will pass under the winch line, place supporting manila rope equipped with suitable wire loops, one-sheave cable blocks or rings from pole to pole. In spans over busy thoroughfares, manila rope or strand equipped with one-sheave cable blocks may be used. Thread a handline or other rope through the supports so that the pulling line and the winch line can be pulled through.

(c) At infrequently used thoroughfares, station a flagman to caution traffic. He should also be provided with a wire raising tool and tree pruner handles.

(d) Avoid direct contact with a winch line being pulled in by hand if there is power exposure such as in joint pole line construction or where there are power crossings. Attach a 50 to 100-foot length of 3/4-inch or larger manila rope to the eye of the winch line. The other end of this 3/4-inch rope should be used as the pulling end, and attached to the short rigging ropes previously placed.

4.02 In paying out the winch line from the truck, a slight drag shall be maintained on the winch drum by means of the winch drum brake to prevent overrunning of the winch line.

4.03 Before attaching the winch line to the cable leader, check the entire length of winch line along the route to be sure that it is not in contact with power wires. Attach the winch line to the cable leader with a 1/2-inch connecting link and take up on the winch line to remove slack.