EQUIPPING CROSSARMS

GENERAL

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1. GENERAL

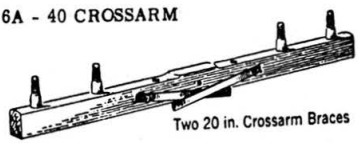
1.01 This section gives general information on equipping crossarms. It modifies the use of steel pins.

1.02 Place only the pins and transposition brackets required for the wire being placed unless otherwise specified in the detail plans.

2. CROSSARM BRACES

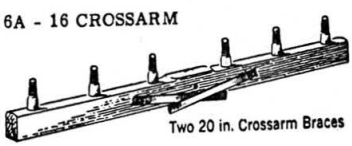
2.01 Equip crossarms with crossarm braces as illustrated. Attach braces to crossarms by means of 3/8 in. by 4 in. carriage bolts.

6A - 40 CROSSARM

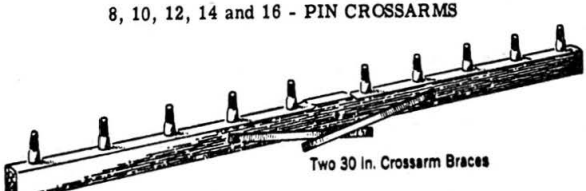


Note: Four pin (LS-246) recovered crossarms may have either one or two 30-inch crossarm braces on nonjointly used poles. On jointly used poles two 30-inch crossarm braces shall be used.

6A - 16 CROSSARM

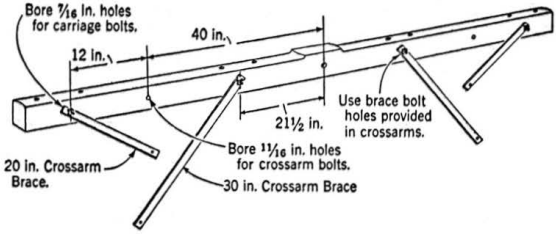


8, 10, 12, 14 and 16 - PIN CROSSARMS



2.02 Crossarms which are placed on H fixtures shall be equipped with crossarm braces as shown in the following sketch. Bore 7/16-inch holes and use 3/8-inch x 4-inch carriage bolts.

TEN FOOT CROSSARMS ALL TYPES
TO BE INSTALLED ON H FIXTURES



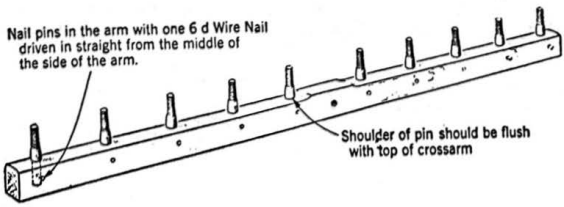
3. WOODEN INSULATOR PINS

3.01 Crossarms shall be equipped with 8-inch wooden insulator pins except when steel pins or point or tandem transposition brackets are required.

3.02 When placing wooden pins proceed as follows:

(a) Push wooden pins into the pin holes of the crossarm until the shoulder of the pin is flush with the top of the crossarm. Tap the pin lightly if necessary being careful not to damage the threads.

(b) Drive a 6d wire nail into the pin through the side of the crossarm, midway between top and bottom of the crossarm.



4. STEEL INSULATOR PINS

4.01 Steel pins shall be used in crossarms as indicated in the following:

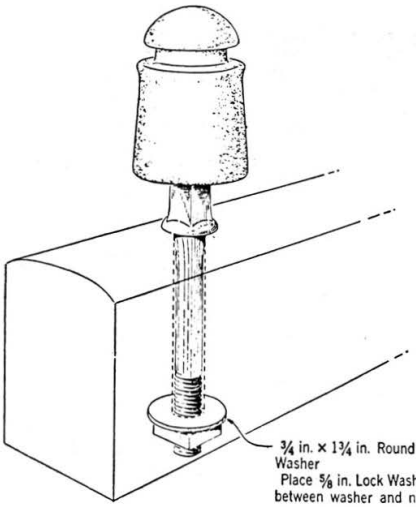
(a) Type CS steel pins shall be used in crossarms when the CS type insulators are specified.

(b) Other location if specified in the detail plans.

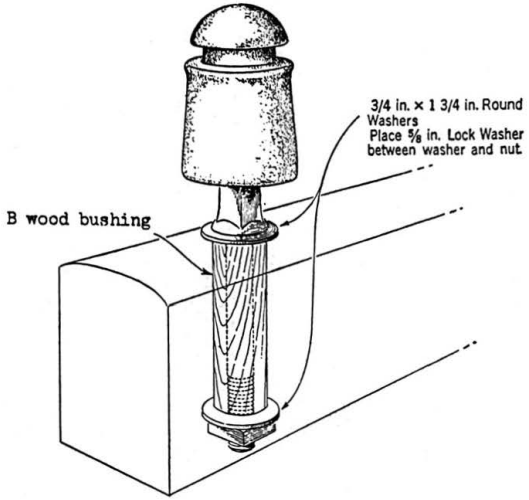
Note: See the section on Tandem Transposition Brackets for use of Hubbard steel pins on double arms.

4.02 Install type CS steel pin as shown in the following:

(a) When the crossarm is bored for steel pins.



(b) When crossarms is bored for wooden pins.

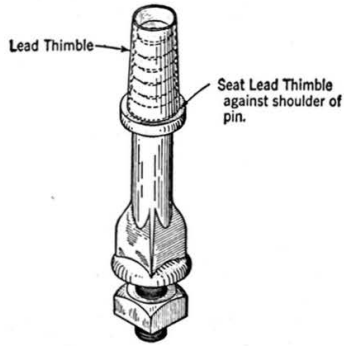


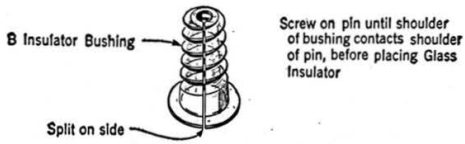
5. INSULATORS

5.01 The type of insulators to be used will generally be specified in the detail plans or other instructions.

5.02 Insulators are screwed onto wooden insulator pins until just tight and then given a slight "extra" twist.

5.03 Steel insulator pins having steel insulator threads shall be equipped with a lead thimble or a B insulator bushing before placing the insulator.

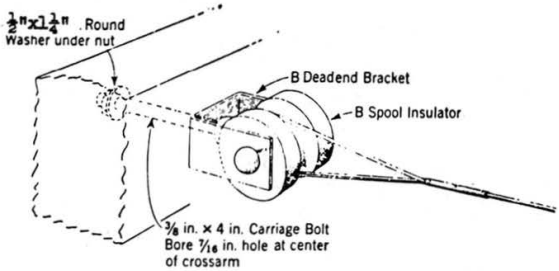




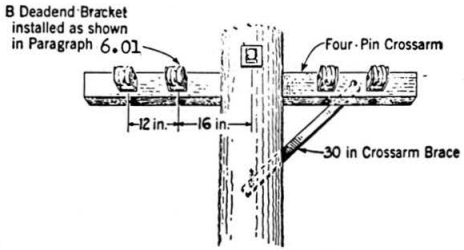
5.04 When a lead thimble is used, screw the insulator on firmly but do not give it the "extra" twist that is usually given an insulator on a wooden pin.

6. DEAD-END BRACKETS

6.01 Crossarms on which six or more wires are to be dead-ended from one direction shall be equipped with B dead-end brackets placed at the normal pin spacing for the arm involved. Climbing space and all clearances shall conform with the instructions in Section G10.301-S.



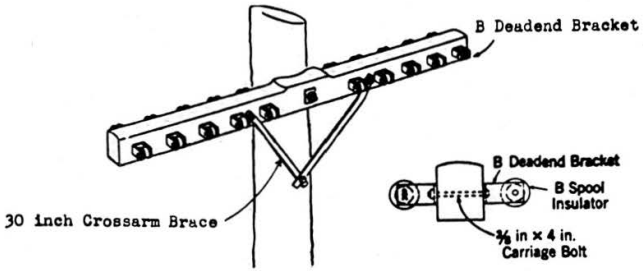
6.02 Crossarms on which four wires are to be dead-ended shall be equipped with B dead-end brackets. Double 6A-40 crossarms with 20 inch braces shall be used for this purpose and the regular wire spacing of these arms shall be maintained when placing the brackets. Recovered 4 pin crossarms per Dwg. LS-246 may be equipped with one 30 in. brace on nonjoint poles, but shall be equipped with two 30 in. braces on joint poles. These recovered 4 pin arms may be used as a single arm dead-end on the back side of the pole where the span is less than 450 ft. When so used they should be equipped as shown below.



6.03 Thirty-inch crossarm braces shall be used for supporting all standard crossarms except the 6A type crossarms. Thirty-inch braces may be used for the 6A type crossarm, if 20-inch braces are not readily available. Attach the braces with a 3/8-in. x 4-in. carriage bolt with the nut on the brace side.

6.04 Crossarms on which wires are dead ended from opposite directions shall be equipped with B deadend brackets placed at the normal pin spacing for the line involved. Climbing space and all clearances shall conform with the instructions in Section G10.301-S.

Note: Where a division of feed is involved in an open wire line, deadend the wires on TW insulators attached to wooden pins on the top of the crossarm. This arrangement will permit placing 101A terminals as required.



6.05 Use 10 ft. double crossarms and place B deadend brackets (see Section G22.110.2-S) so as to maintain the normal wire spacings:

Where H fixture is used for deadending;

Where the crossarms are to support such equipment as junction filter supports and loading coil cases.

6.06 Remove insulator pin and associated 6d wire nail whenever hole bored for carriage bolt for B deadend bracket would pass through insulator pin.