

## SUSPENSION STRAND FALSE DEADENDING

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### 1. GENERAL

**1.01** This section covers the methods and materials for making false deadends with B guy clamps, Strandvises, B false deadends on suspension strand, and with B false deadends on self-supporting cable.

**1.02** This section is reissued to:

- Include information on 6.6M strand
- Delete information on CR strand and hardware
- Update illustrations
- Make minor changes in the text material and illustrations.

**1.03** False deadends are required at strand diminishing points and at locations where the strand is continuous, and where there is a large difference in strand tension such as the following:

- (a) Where slack span construction is used
- (b) At the junction between copper and aluminum conductor cables
- (c) Where a lead changes from short span to long span construction
- (d) Where a long span falls between adjacent short spans
- (e) At other points indicated on a work order.

**1.04** The type of false deadend used at a given location will depend upon the circumstances at that location. However, in general, false deadends fall into two categories. The first category is covered in Parts 2, 3, and 5 and deals with methods which can be used regardless of the continuity of the strand. The second category is covered in Part 4 and deals with the false deadend strandwise which requires a break in the continuity of the strand (to fit it over the strand).

**1.05** The figures used in this section are representative drawings so far as hardware usage is concerned. Local stocking arrangements and field conditions should be considered in choosing hardware.

1.06 A representative installation of a false deadend and the *proper sequence for tensioning strand at a strand diminishing point* is illustrated in Fig. 1.

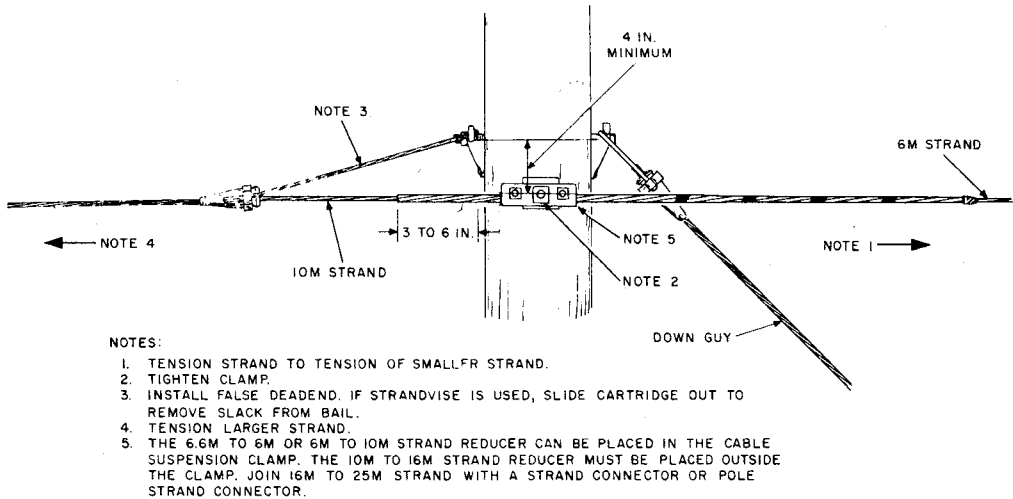


Fig. 1—False Deadend (Strand Diminishing Point)

1.07 A representative installation of a false deadend and the *proper sequence for tensioning strand at a slack span location* is illustrated in Fig. 2.

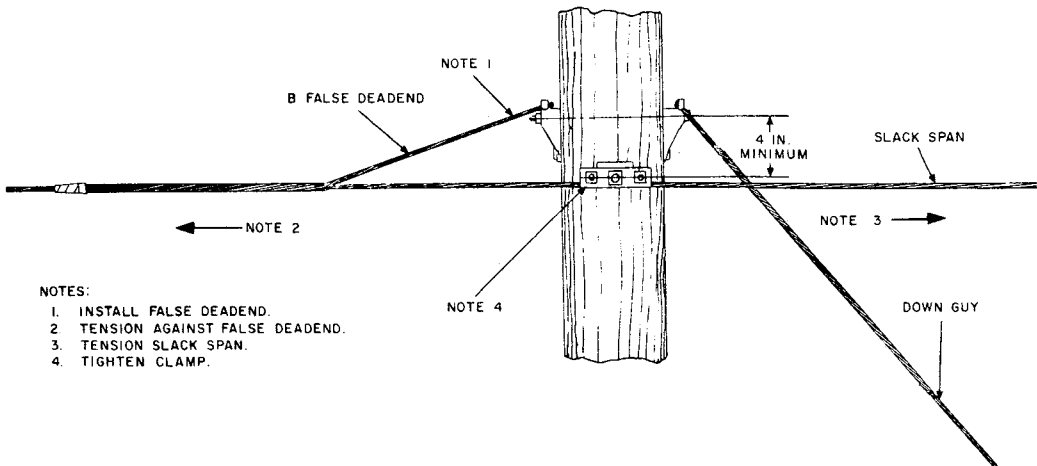


Fig. 2—False Deadend (Slack Span)

## 2. B GUY CLAMP FALSE DEADEND

2.01 The strand size and number of clamps required to install a guy clamp false deadend are indicated in Table A.

♦ TABLE A ♦

B GUY CLAMPS – FALSE DEADEND

SIZE OF LARGER SUSPENSION STRAND	SIZE OF FALSE DEADEND STRAND	NO. OF CLAMPS ON EACH TAIL OF FALSE DEADEND
6M	6M	1
6.6M	6.6M	1
10M	10M	1
16M	16M	1
25M	6M	2

2.02 A temporary false deadend for holding suspension strand is illustrated in Fig. 3. This method is not suitable for use with 25M strand.

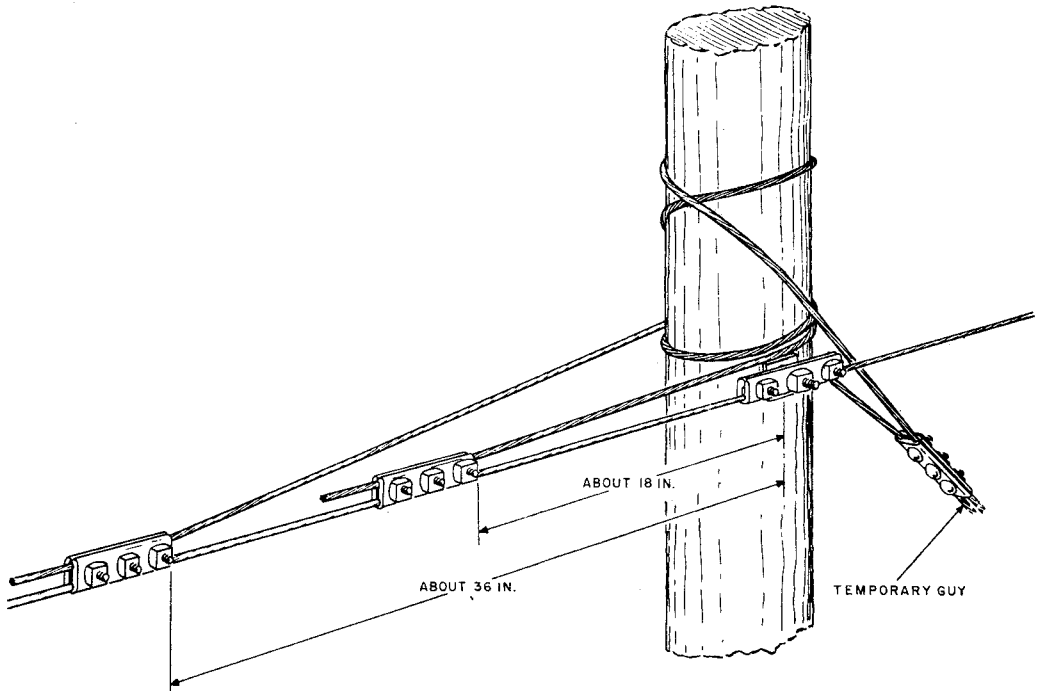


Fig. 3—False Deadend (Temporary)

2.03 Where the strand is supported at a pole with a B cable suspension clamp, install a false deadend as illustrated in Fig. 4 and 5.

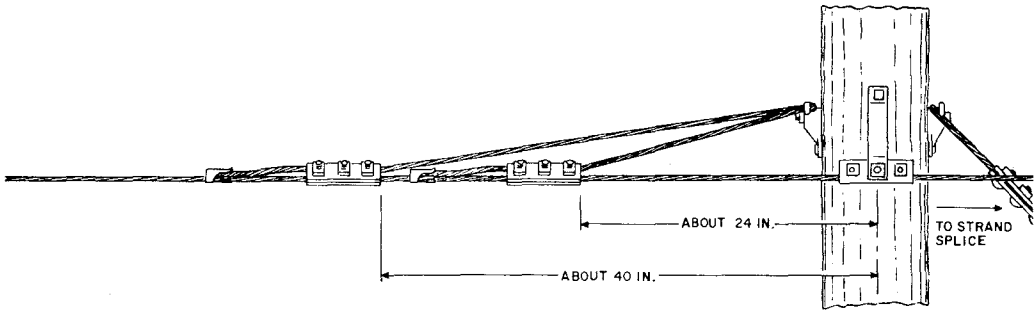


Fig. 4—6, 6.6, 10, and 16M Suspension Strand

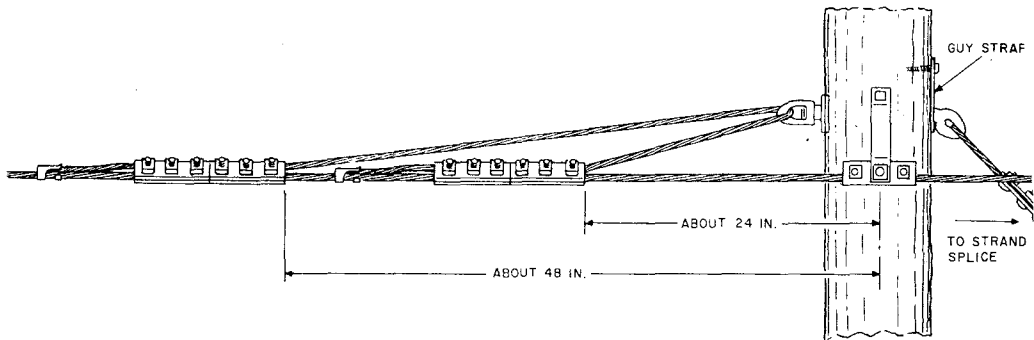
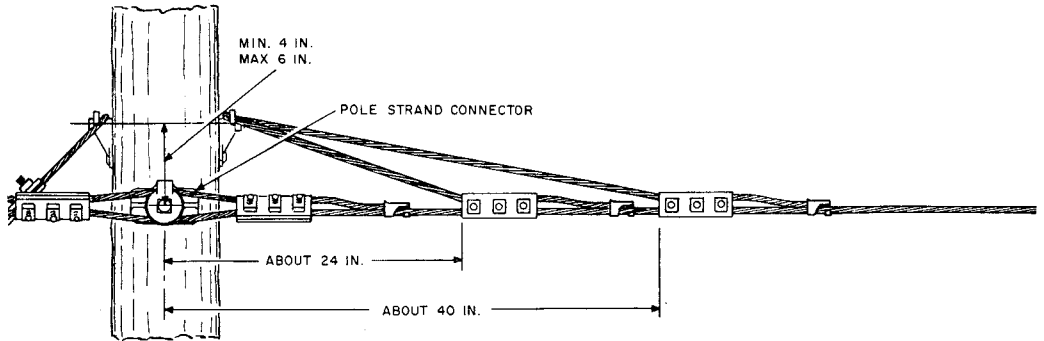
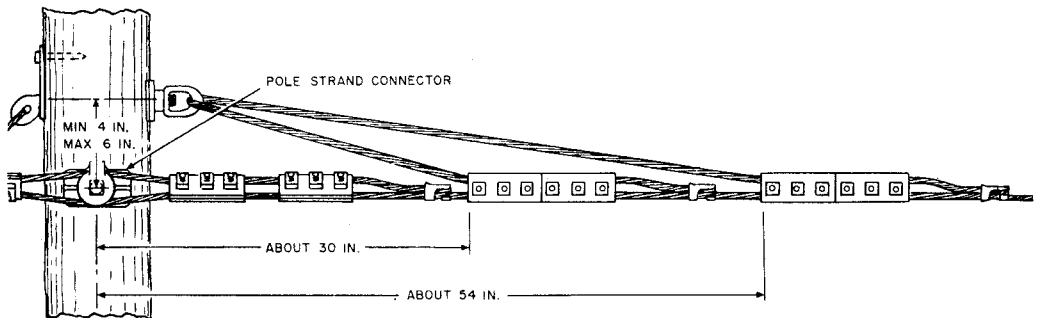


Fig. 5—25M Suspension Strand

**2.04** Where the strand is terminated at a pole on a pole strand connector, install a false deadend as illustrated in Fig. 6 and 7.



**Fig. 6—6.6. 10. and 16M Suspension Strand on Pole Strand Connector**



**Fig. 7—25M Suspension Strand on Pole Strand Connector**

2.05 Where the strand is supported on a cable extension arm, install the false deadend as illustrated in Fig. 8.

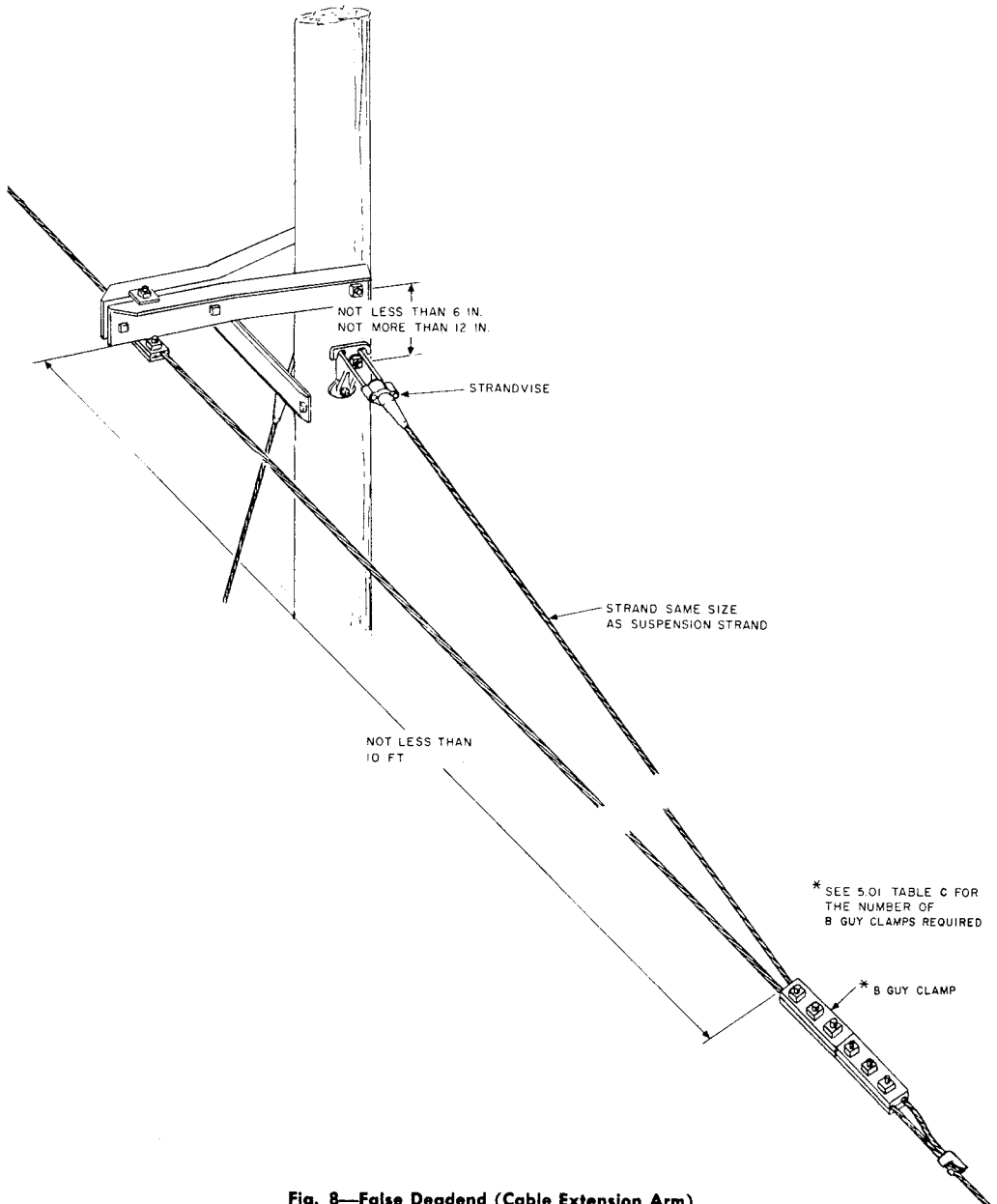
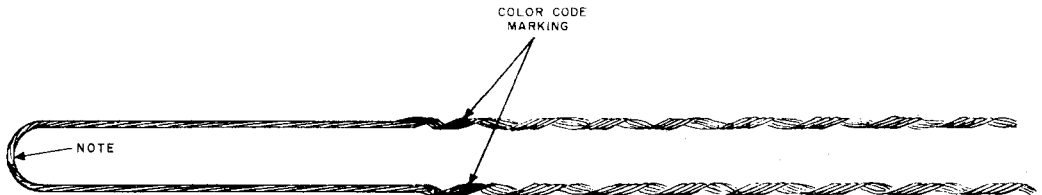


Fig. 8—False Deadend (Cable Extension Arm)

### 3. B FALSE DEADEND

3.01 The B false deadend, illustrated in Fig. 9, is a wrap-type device which is used for making false deadends on Class A or Class C galvanized strand, and on the support strand of self-supporting cable.



NOTE:  
ADDITIONAL MARKING HERE ON CR DEADENDS ONLY.

Fig. 9—B False Deadend

3.02 B false deadends are available in sizes corresponding to standard suspension strand presently in use. The false deadend is color coded with a paint marking on each side of the loop at the starting or crossover point as shown in Fig. 9. The inner surfaces of the wires are coated with

grit to increase the holding power and the legs are of unequal length to facilitate unwrapping.

3.03 The color codes shown in Table B, indicate the size of B false deadend to be used with Class A or Class C galvanized suspension strand.

TABLE B  
FALSE DEADEND FOR GALVANIZED  
STEEL STRAND

STRAND SIZE	STRAND DIAMETER	COLOR CODE
6M	5/16	Black
6.6M	1/4	Yellow
10M	3/8	Orange
16M	7/16	Green
25M	1/2	Blue

3.04 *The false deadend must not be reused after its initial installation.*

3.05 Install the B false deadend on suspension strand as outlined in the following.

(1) Attach the closed end of the false deadend to the pole attachment. Starting at the paint mark, **apply one half of the leg which is nearest the strand first.** Bend the leg out and away from the strand as it is applied. The application of the first leg is illustrated in Fig. 10.

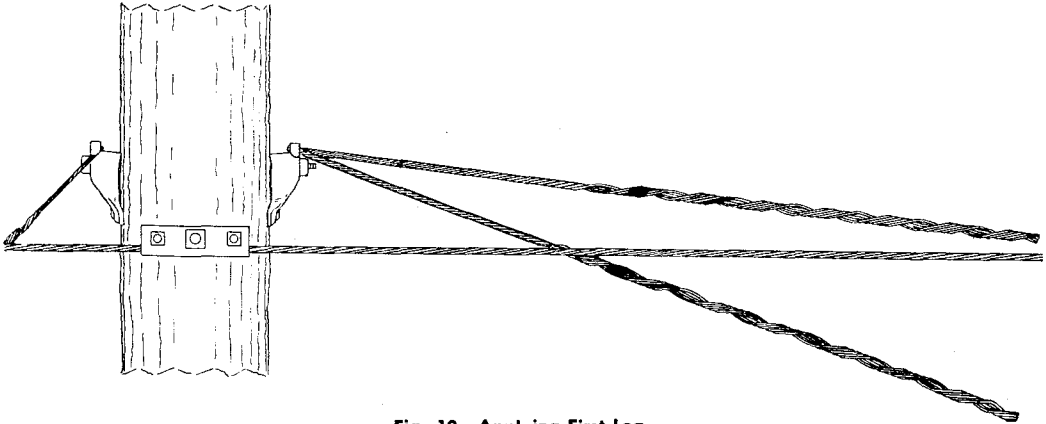


Fig. 10—Applying First Leg

(2) Apply one half of the second leg in the same manner as the first leg. The application at this point is illustrated in Fig. 11.

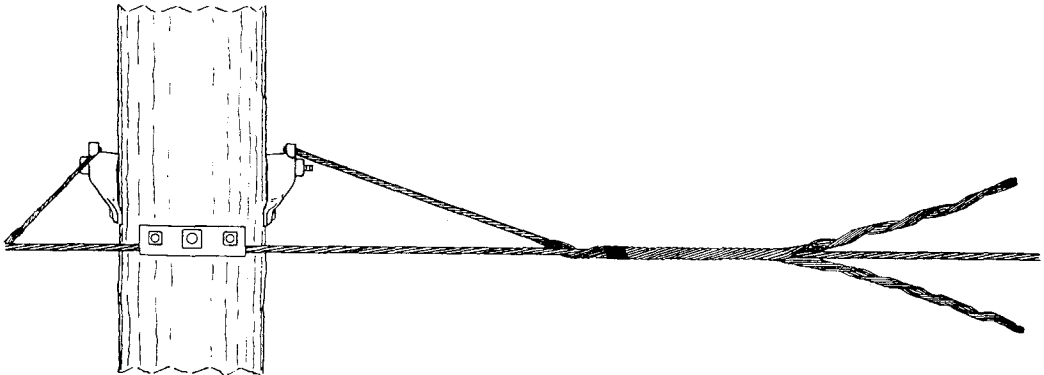


Fig. 11—Applying Second Leg



- (3) Finish applying the ends of the two legs, making sure to snap the ends into place. In most cases it will be desirable to split the legs for one or two pitches as illustrated in Fig. 12.

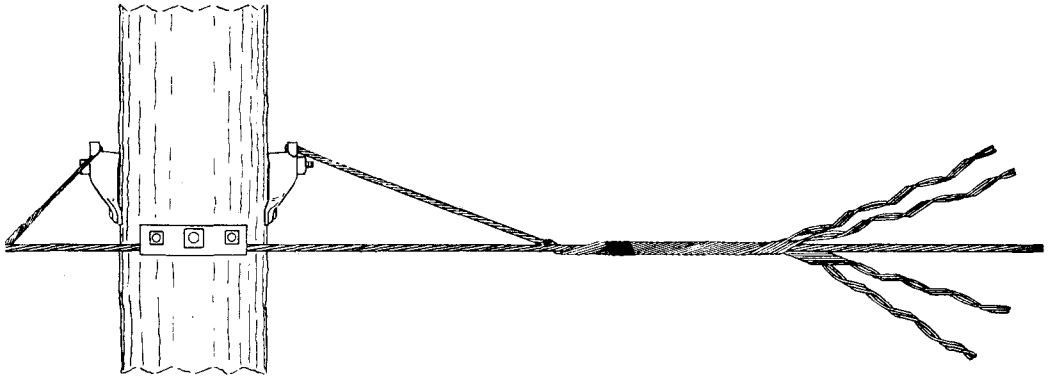


Fig. 12—Legs Split

- (4) Apply two layers of vinyl tape to the end of the deadend, as illustrated in Fig. 13, to prevent damage by sliding construction apparatus.

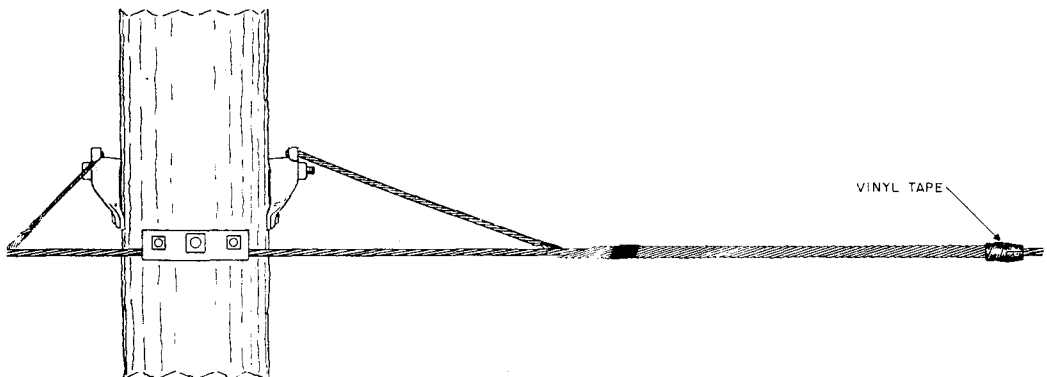
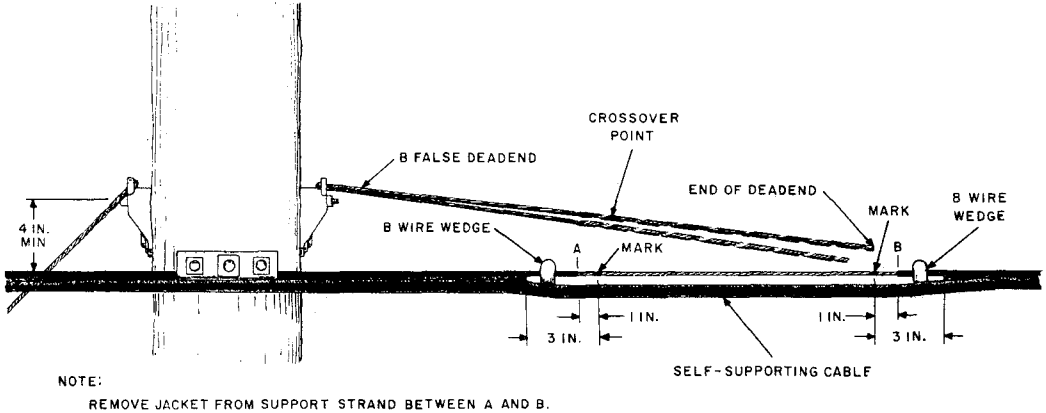


Fig. 13—Complete Installation

- 3.06 When applying B false deadends to previously tensioned strand, remove as much slack as possible from the loop of the false deadend before applying the second leg.
- 3.07 Install the B false deadend to self-supporting cable as follows.

- (1) Place the loop of B false deadend over the B guy hook or through the thimble eye nut and lay the legs along the cable away from the deadend attachment (see Fig. 14).



**Fig. 14—Preparing Self-Supporting Cable for B False Deadend**

- (2) Mark the support strand at the crossover point and at the end of the deadend (see Fig. 14).
  - (3) Measure and slit the webbing about 3 inches beyond each of the marks made in (2), (see Fig. 14).
  - (4) Measure about 1 inch beyond each of the marks made in (2), and remove the polyethylene jacket from the support strand between these points.
  - (5) Insert a B wire wedge between the cable and support strand at each end of the slit in the web (see Fig. 14).
  - (6) Install the B false deadend on the bare support strand as outlined in 3.05. It is not necessary to remove the flooding compound.
- 3.08 Vinyl tape is not required on the end of the B false deadend when used on self-supporting cable.

- 3.09 A B false deadend installed on self-supporting cable is illustrated in Fig. 15.

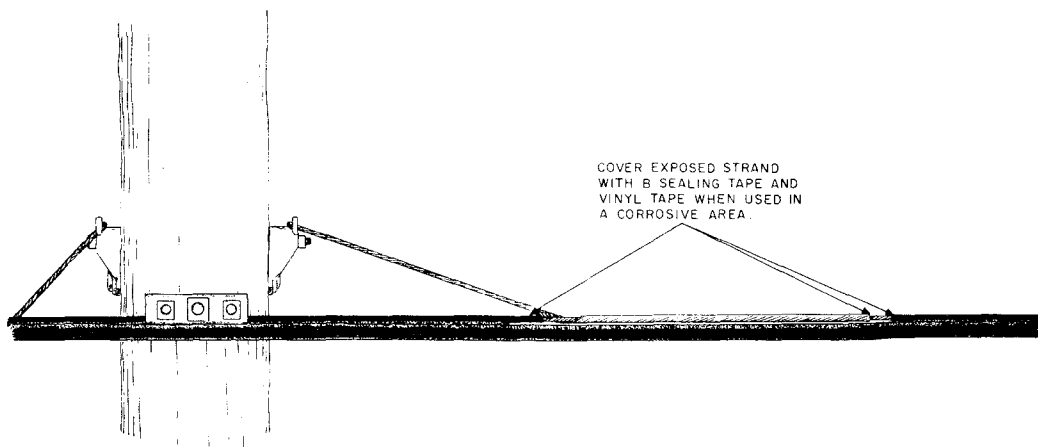


Fig. 15—B False Deadend Installed on Self-Supporting Cable

- 3.10 *Do not* use guy clamp false deadends on self-supporting cable.

#### 4. FALSE DEADEND STRANDWISE

4.01 The false deadend strandwise consists of a cartridge, a yoke, and a strand-type bail. Due to its construction, the strandwise cannot be used at locations where the strand is continuous. Figure 16 illustrates a false deadend strandwise.

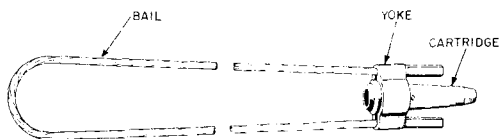


Fig. 16—False Deadend Strandwise

4.02 The cartridge is a tapered shell containing a spring-loaded three-jaw chuck for gripping the strand. A pilot cup at the outer end of the chuck prevents spreading of the strand wires and facilitates insertion of the strand into the cartridge.

4.03 The cartridge for the strandwise is available as a replacement part and *shall not* be reused. The bail and yoke are reusable and may be used with a new cartridge.

4.04 The following sizes are available.

- (a) 5/16 inch for use on 5/16-inch 6M galvanized strand
- (b) 1/4 inch for use on 1/4 inch 6.6M galvanized strand
- (c) 3/8 inch for use on 10M galvanized strand.

4.05 *Do not use* a false deadend strandwise in seacoast locations where extreme conditions of salt spray and salt fog may be encountered.

4.06 Corroded strand which has been inspected and is to remain in plant may in some instances be false deadended with a strandwise. *Before inserting the strand into a strandwise, loose rust and scale should be removed (with emery cloth) from the strand end up to and including the area in which the chuck will grip the strand. Strand on which no galvanizing remains shall be considered unsafe for use in a strandwise.*

4.07 To install a false deadend strandwise, proceed as follows.

- (1) Check the strand end. If it is not straight or cut off squarely, or if it is deformed or

untwisted, cut off a length sufficient to ensure that strand in good condition will be placed in the strandvise. Before cutting, straighten the strand to remove coil curvature and tape it (on the part to be inserted in the strandvise) about 1/2 inch from where it is to be cut to prevent unraveling.

**Note:** On strand larger than 6M, tape the strand 1/2 inch on each side of the proposed cut. Tape the strand in two separate places. **Do not tape across the area to be cut.**

- (2) Disassemble the strandvise cartridge, bail, and yoke.
- (3) Place the yoke on the strand and the bail in the thimble eye nut or over the guy hook, and reassemble the bail and yoke.
- (4) Thread the strand through the yoke. Insert the strand into the pilot cup of the cartridge

and remove the tape holding the wires together. The operation at this point is illustrated in Fig. 17.

- (5) Push the cartridge onto the strand. Do not twist the cartridge or strand or stop the forward motion of the cartridge until the strand end is completely through it. This prevents the strand wires from becoming disengaged from the pilot cup and fouling the jaws of the chuck.
- (6) Push the cartridge along the strand to the desired position and place it in the yoke. When positioning the cartridge, consideration should be given to the location of the strand splice. It is desirable to locate the splice on the opposite side of the pole from the strandvise. However, in the case of an extension of an existing strand, it may be necessary to locate the splice between the suspension clamp and the false deadend strandvise. Figure 18 illustrates a completed false deadend using a strandvise.

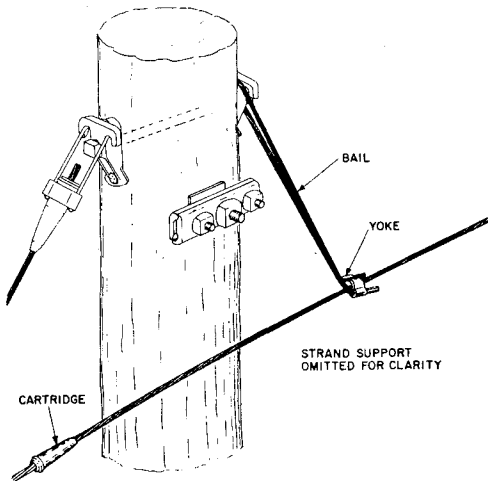


Fig. 17—Installing Strandvise

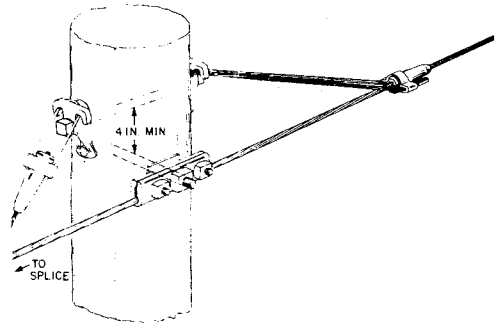


Fig. 18—False Deadend Using Strandvise

## 5. STRANDWISE AND GUY CLAMP FALSE DEADEND

5.01 The method of installing a false deadend using a strandwise and guy clamps is illustrated in Fig. 19. This method may be used where the strand is continuous. See Table C for the number of B guy clamps required.

## 6. TERMINALS AT FALSE DEADEND LOCATIONS

6.01 It is desirable to locate terminals and splice cases on the side of the pole opposite the

false deadend. The possible location of a terminal or splice case should be considered when making a strand splice at this location.

6.02 Where it is necessary to place a false deadend on an existing strand and there is a terminal or splice case present which may interfere with the placing of other types of false deadends, use a guy clamp false deadend and vary the spacing of the guy clamps, as necessary, to clear the terminal or splice case.

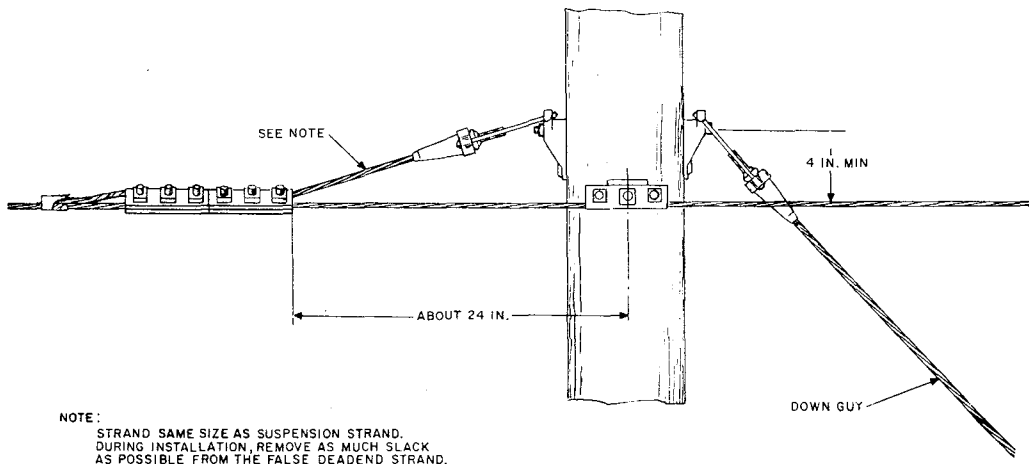


Fig. 19—False Deadend (Strandwise and B Cable Suspension Clamp)

♦TABLE C♦

B GUY CLAMPS

SUSPENSION STRAND SIZE	FALSE DEADEND STRAND SIZE	NUMBER OF B GUY CLAMPS REQUIRED
6M	6M	2
6.6M	6.6M	2
10M	10M	3
16M	16M	4