

BELL SYSTEM PRACTICES
Outside Plant Construction
and Maintenance

SECTION G61.102
Issue 2, June, 1936
AT&T Co. Standard

TERMINALS

INSTALLATION OF OUTSIDE DISTRIBUTING TERMINALS ON POLES

CONTENTS	Page
General	1
Locating Terminal	1
Mounting F Type Cable Terminal.....	9
Mounting C Type Cable Terminal.....	15
Mounting No. 14 Type Cable Terminal.....	16

1. GENERAL

1.01 This section provides instructions for the installation of outside distributing terminals on poles. The F Type Cable Terminal has been adopted as the standard for this purpose, but in view of the use of repaired C Type and No. 14 Type Cable Terminals, information is also included relative to these terminals.

1.02 The principal change from the previous issue of this section is the inclusion of information concerning the installation of F Type and No. 14 Type Cable Terminals equipped with the stub cable brace which protects this cable during handling of the terminal.

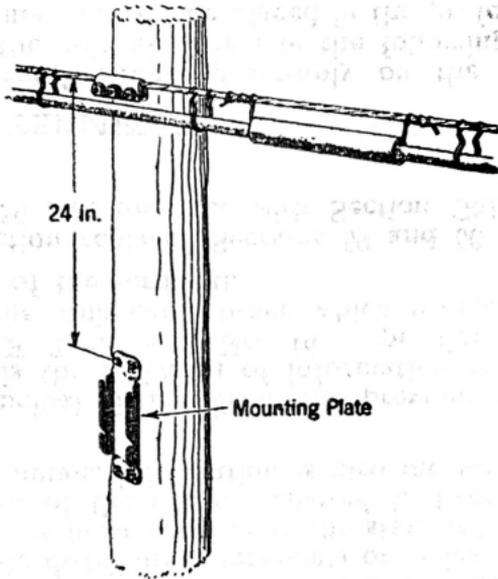
1.03 This section replaces Sections 59 and 60 of Specifications 4950 and together with Section G61.110 replaces Section G61.106.

2. LOCATING TERMINAL

2.01 Locate the terminal preferably on the field (cable) side of the pole as shown in the following illustration. Where the terminal can not be placed in the preferred location due to insufficient clearance or for other reasons, locate it in accordance with Paragraphs 2.02 to 2.05.

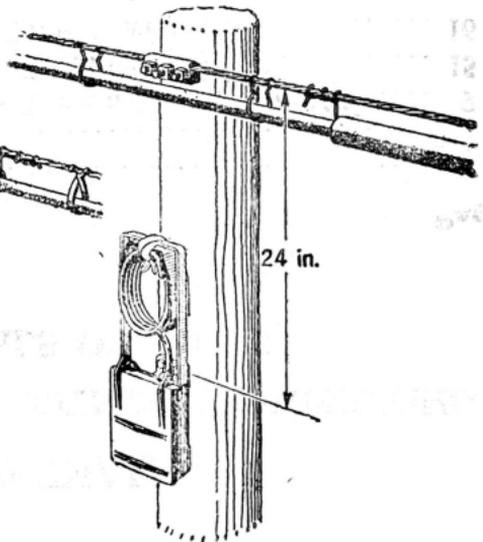
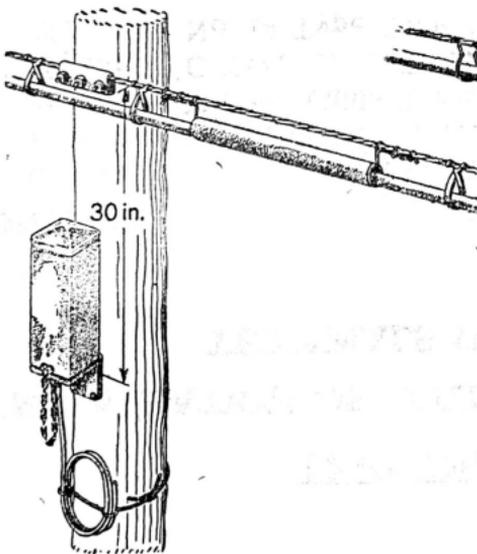
OR 11747
15 11 1947
DISTRICT NO
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F TYPE CABLE TERMINAL



C TYPE CABLE TERMINAL

NO. 14 TYPE CABLE TERMINAL



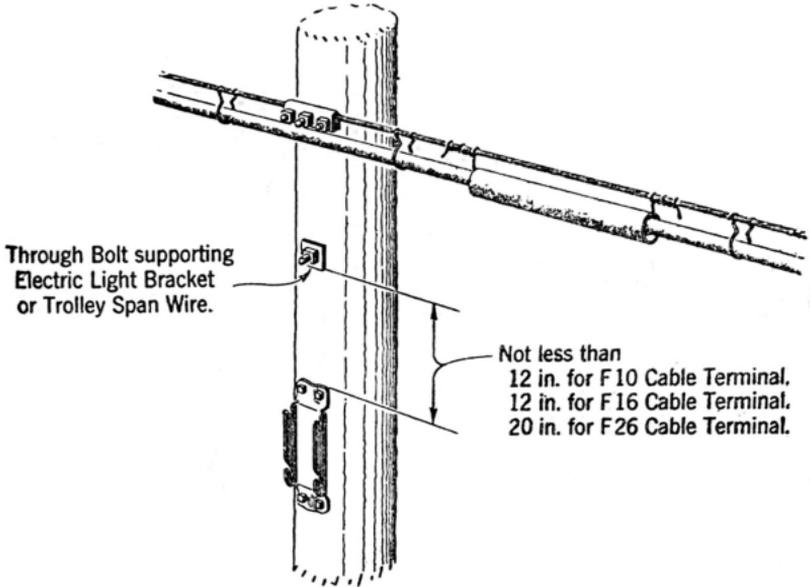
2.02 The terminal may be located higher on the pole in order to provide the required clearance from the electric company's attachments as specified in Section G10.301, provided that the separation between the terminal and the strand will not be less than that given in the following table.

Sizes of Terminals	Minimum Separation Between Strand and Upper Mounting Holes of Terminals		
	F Type	C Type	No. 14 Type
10-Pair	12 in.	24 in.	16 in.
16-Pair	16 in.	24 in.	16 in.
26-Pair	24 in.	30 in.	16 in.

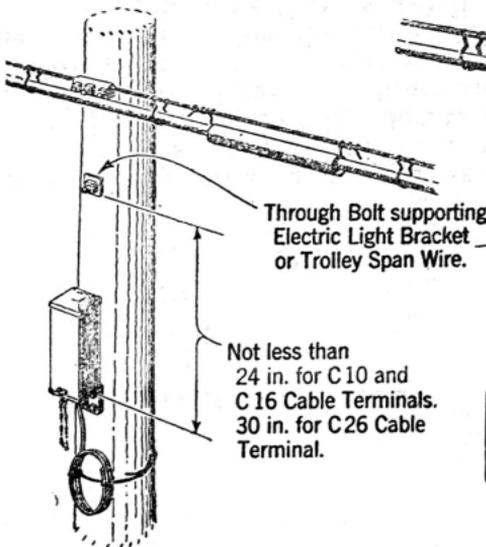
2.03 Where the required clearance from the electric company's attachments can not be obtained by placing the terminal higher on the pole, locate it below such attachments as shown in the following illustration. In general, the upper mounting holes of the terminal should not be located more than 48 inches below the strand. This arrangement may require a longer stub cable than is usually employed and if this is not available, locate the terminal on the face or back of the pole as outlined in the following paragraph.

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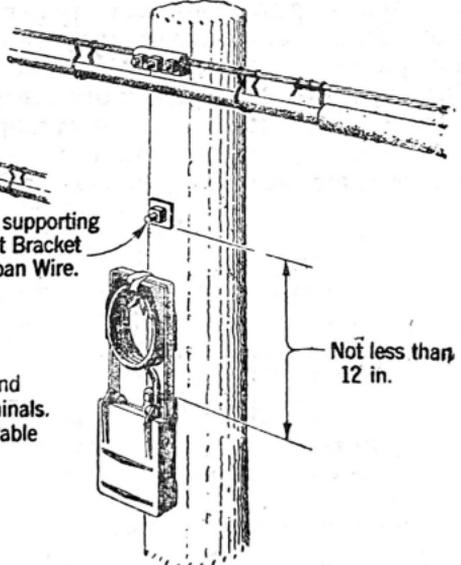
F TYPE CABLE TERMINAL



C TYPE CABLE TERMINAL

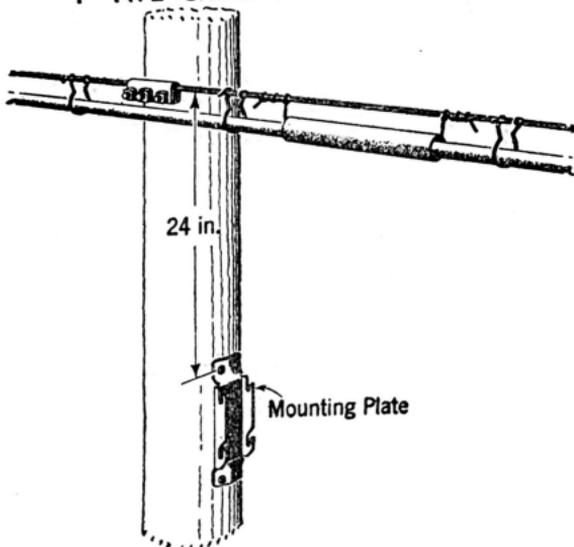


NO. 14 TYPE CABLE TERMINAL

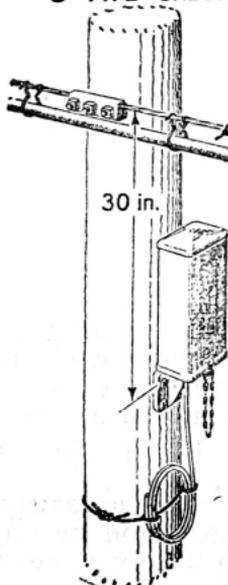


2.04 Where the terminal can not be located on the field (cable) side of the pole as outlined in the preceding paragraphs due to the presence of a lower cable or the electric company's attachments, obtain the approval of your supervisor to locate the terminal on the face or back of the pole as shown in the following illustration. Locate terminal on the right, when viewing pole from cable side, unless an existing splice can be utilized or greater separation can be obtained from electric company's attachments by locating terminal on opposite side of pole. The distance between strand and terminal may be varied to obtain clearance from the electric company's attachments as specified in Section G10.301, except that, in general, the upper mounting holes of the terminal should not be located less than 12 inches or more than 48 inches below the strand

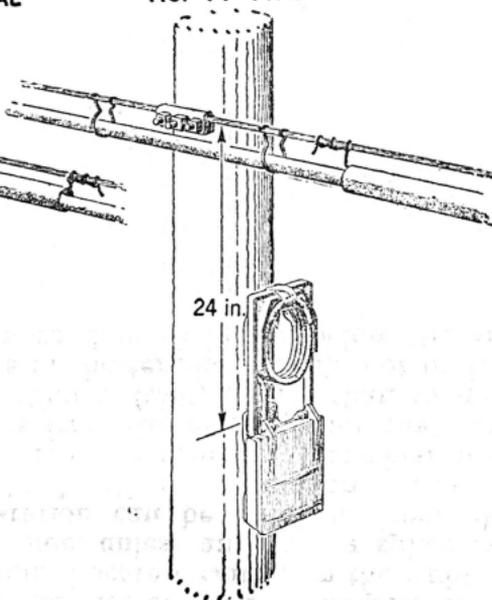
F TYPE CABLE TERMINAL



C TYPE CABLE TERMINAL



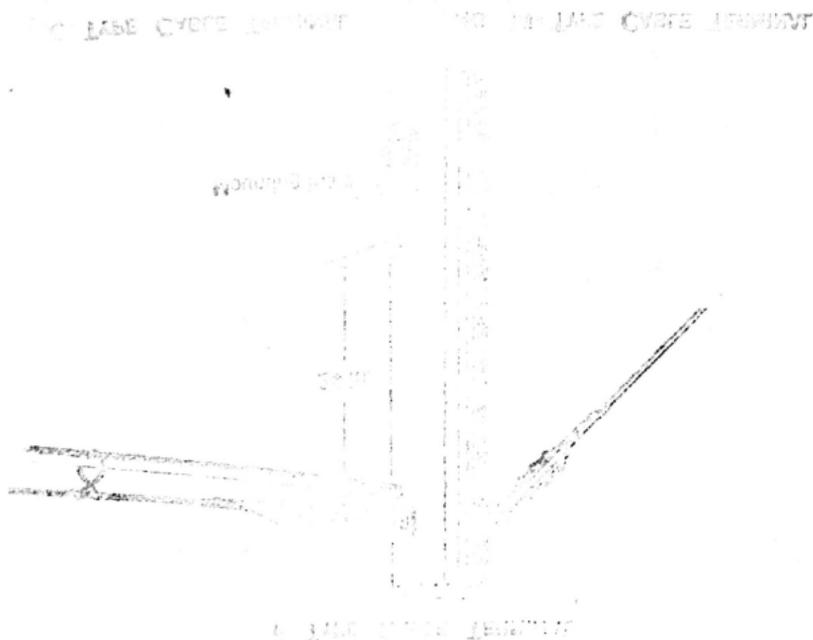
No. 14 TYPE CABLE TERMINAL



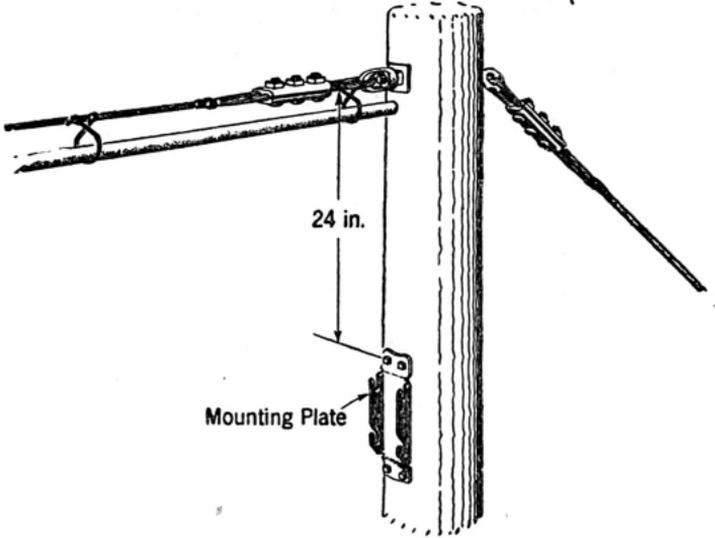
2.05 Where an end pole is raked to such an extent as to make it difficult to work in a terminal located on the field side, obtain the approval of your supervisor to locate the terminal on the face or back of the pole under the cable as shown in the following illustration. The distance between the strand and the terminal may be varied to obtain clearance from the electric company's attachments as specified in Section G10.301, provided that the separation between the terminal and the strand will not be less than that given in the following table. In general, the upper mounting holes of the terminal should not be located more than 48 inches below the strand.

**Minimum Separation Between
Strand and Upper Mounting
Holes of Terminals**

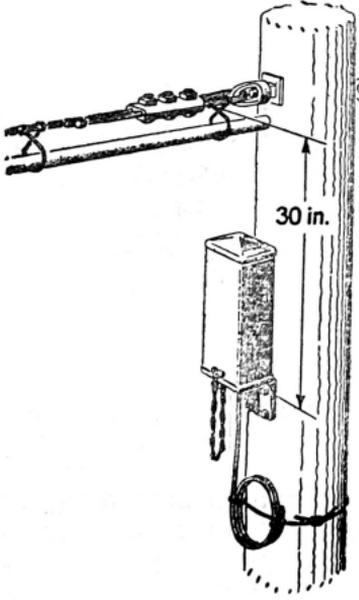
<u>Sizes of Terminals</u>	<u>F Type</u>	<u>C Type</u>	<u>No. 14 Type</u>
10-Pair	12 in.	24 in.	16 in.
16-Pair	16 in.	24 in.	16 in.
26-Pair	24 in.	30 in.	16 in.



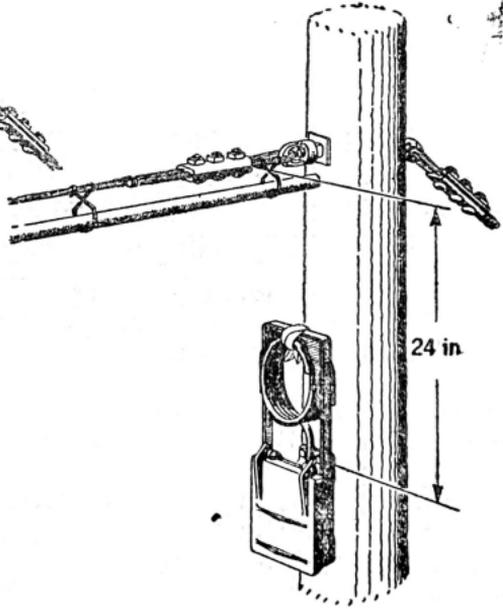
F TYPE CABLE TERMINAL



C TYPE CABLE TERMINAL



NO. 14 TYPE CABLE TERMINAL



2.06 Where an existing terminal on the cable side of a pole interferes with the attachment of a lower cable, obtain the approval of your supervisor to relocate this terminal to the face or back of the pole. The terminal preferably should be moved to a position adjacent to the cable splice, although clearance conditions may require that a new terminal be placed on the opposite side of the pole.

2.07 Where the aerial cable is attached above trolley feeders, locate terminal so that there will not be less than 40 inches separation between the trolley feeders and the lowest wiring ring under the terminal.

2.08 Where the terminal is to be spliced to buried cable or subsidiary cable in conduit, locate the terminal, equipped with a 12-foot bottom entrance stub cable, preferably at the height that will bring the lower end of the splice approximately 2 feet above the ground. Where terminals are available with a sufficiently long stub cable, locate the terminal at the usual height for terminals associated with aerial cable.

2.09 When a C type or similar type cable terminal is replaced with an F Type or No. 14 Type Cable Terminal and the clearances prescribed in Section G10.301 can be obtained, locate the new terminal 16 inches below the suspension strand in order to avoid stepping rearrangements and piecing out the drop wires. The F26 Cable Terminal, however, should not be located less than 24 inches below the strand where it is to be placed on the same side of the pole as the cable.

2.10 When a C or similar type cable terminal is replaced with a C Type Cable Terminal, locate the new terminal the same distance below the suspension strand as the old terminal, provided that clearances meet the requirements of Section G10.301, in order to avoid stepping rearrangements and piecing out the drop wires

3. MOUNTING F TYPE CABLE TERMINAL

3.01 The F Type Cable Terminal is equipped with a stub cable brace to protect this cable during handling of the terminal. In order to minimize the possibility of sheath damage, the stub cable brace preferably should be left in place until removed by the splicer at the time of splicing. The presence of the brace makes it unnecessary to lash the stub cable temporarily to the pole at the time the terminal is placed. The two machine screws which secure the stub cable brace should be replaced in the terminal casting upon removing the brace.

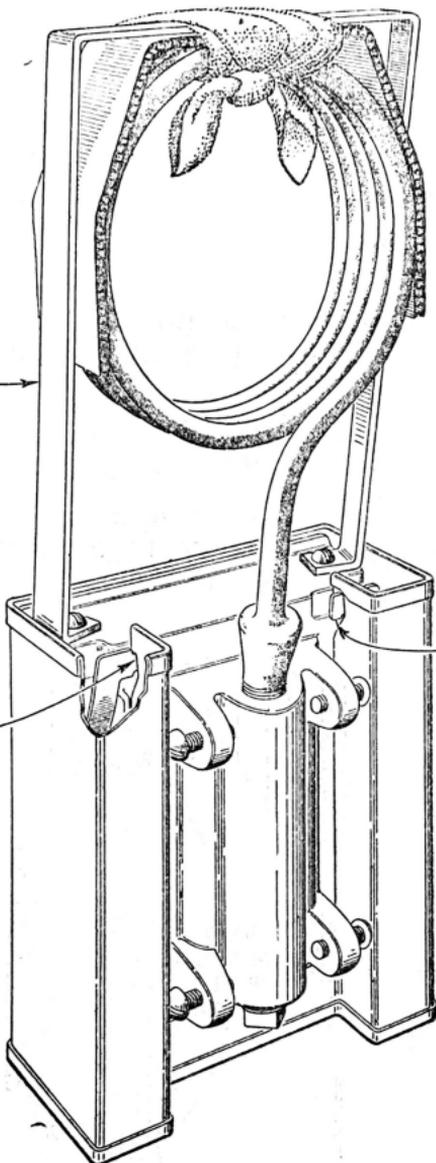
3.02 The use of the stub cable brace requires that the cover be placed on the terminal from the end opposite the stub cable. The spring catches of top and bottom stub terminals are assembled in their proper locations for supporting the cover in the raised position. Before raising the top stub terminal to the mounting plate, the cover should be fully closed and the spring catches engaged with the cover notches to ensure that the cover will not fall. The cover of the bottom stub terminal is fastened in the closed position with a temporary tie which should not be removed until after the terminal has been placed on the mounting plate.

3.03 A top stub F Type Cable Terminal equipped with a stub cable brace is shown in the following illustration.

Stub Cable Brace

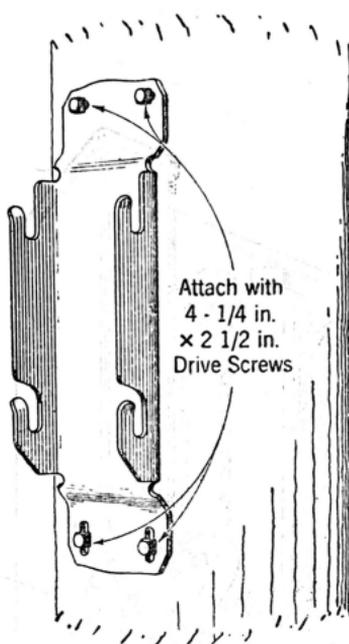
Spring Catch engaged with cover notch

Spring Catch engaged with cover notch



3.04 Mount F Type Cable Terminal on the pole as follows:

(1) Attach mounting plate as illustrated:

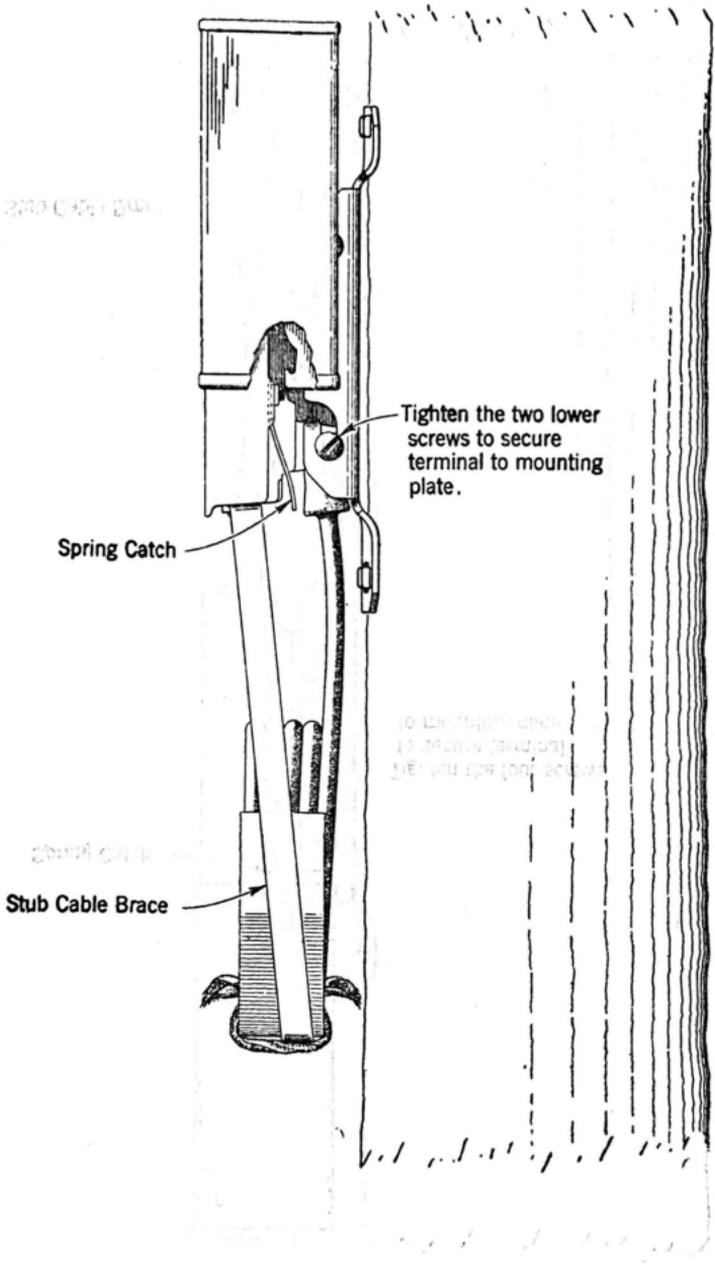


(2) Place top and bottom stub terminals on mounting plate with stub cable coiled within brace at bottom as shown in the following illustrations.

(3) Raise cover and tighten locking screws to secure terminal to mounting plate as shown in the following illustrations.

(a) Top Stub Terminal. The terminal should be reversed and the stub cable brace removed at the time of splicing.

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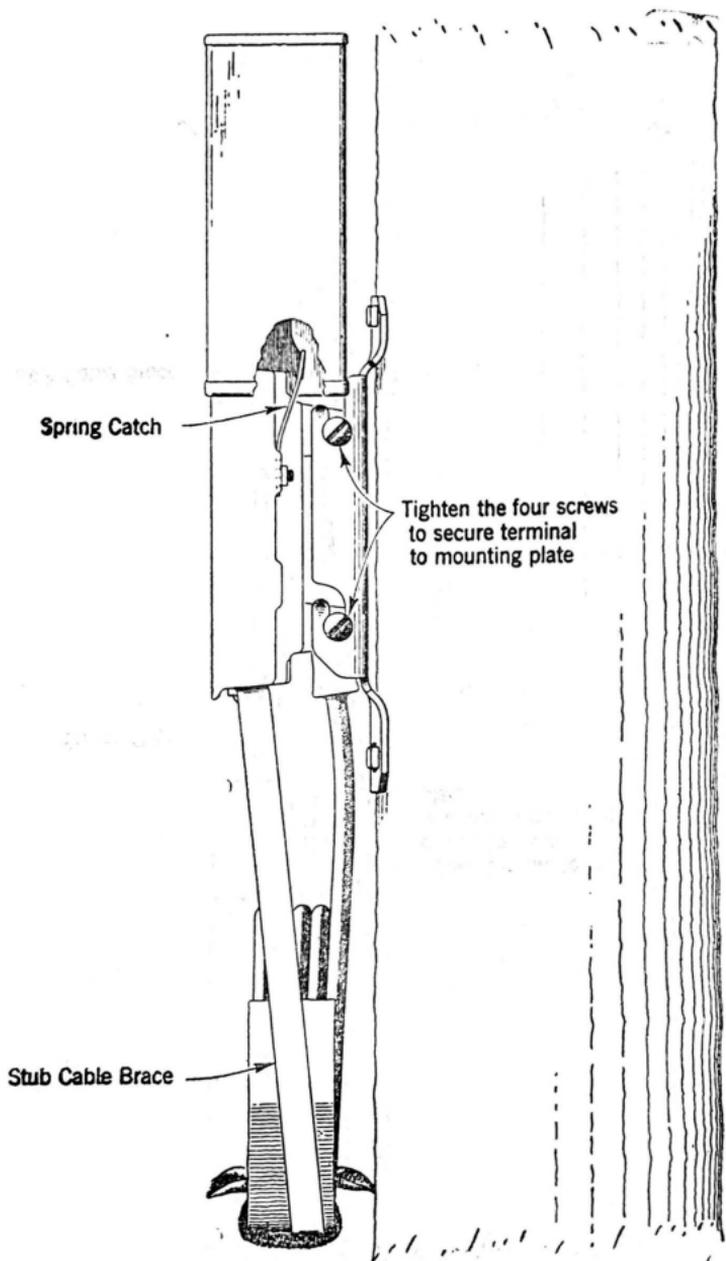
Tighten the two lower screws to secure terminal to mounting plate.

Spring Catch

Stub Cable Brace

TO THE POINT OF THE
TERMINAL BRACE
THE CABLE IS TO BE

(b) Bottom Stub Terminal. The stub cable brace should be removed at the time of splicing.



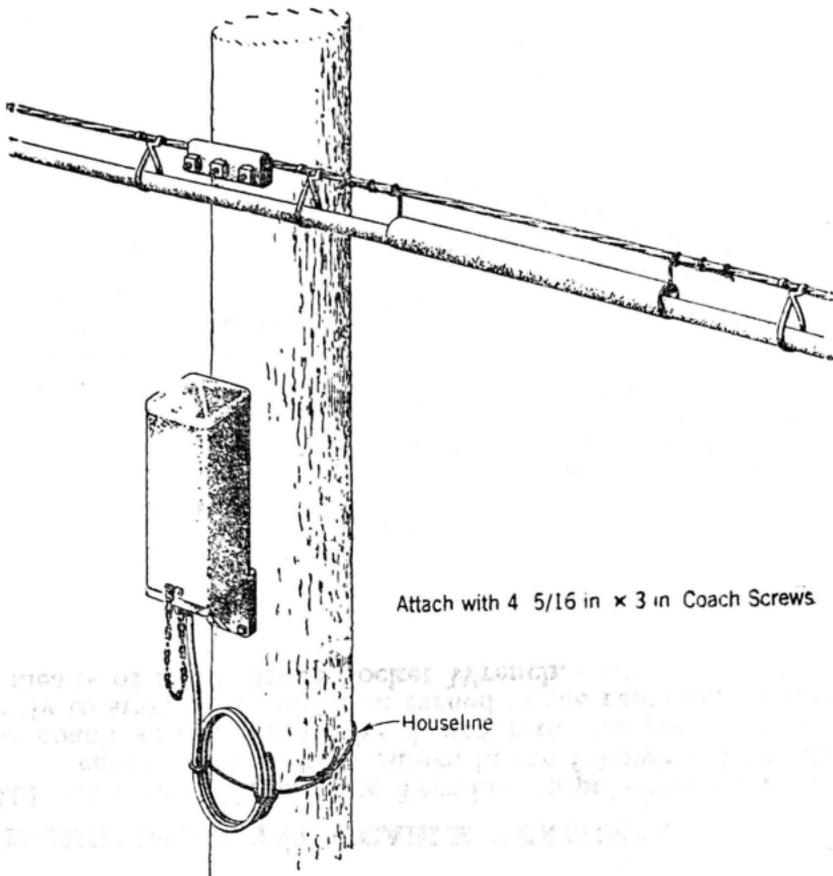
(4) Lower cover. Where spring catches are located adjacent to stub cable as illustrated in (3)(a), make sure that they engage the cover notches.

3.05 When it is necessary to convert a top stub F Type Cable Terminal to a bottom stub terminal, or the reverse, the following rearrangements should be made before the terminal is raised to its position on the mounting plate.

- (1) Remove cover, depressing spring catches at rear of sealed chamber to clear cover notches.
- (2) Remove spring catches and reattach them in the diagonally opposite positions.
- (3) Replace cover from the end opposite the stub cable, depressing spring catches to clear end of cover. Before raising terminal see that spring catches of top stub terminal engage cover notches and tie cover of bottom stub terminal in closed position to ensure that cover will not fall.

4. MOUNTING C TYPE CABLE TERMINAL

4.01 Attach C Type Cable Terminal to pole and secure stub cable temporarily as shown in the following illustration. The coach screws should be driven into the pole only sufficiently to start them and then turned in the remaining distance by means of a Bit Brace Socket Wrench.



Attach with 4 5/16 in x 3 in Coach Screws.

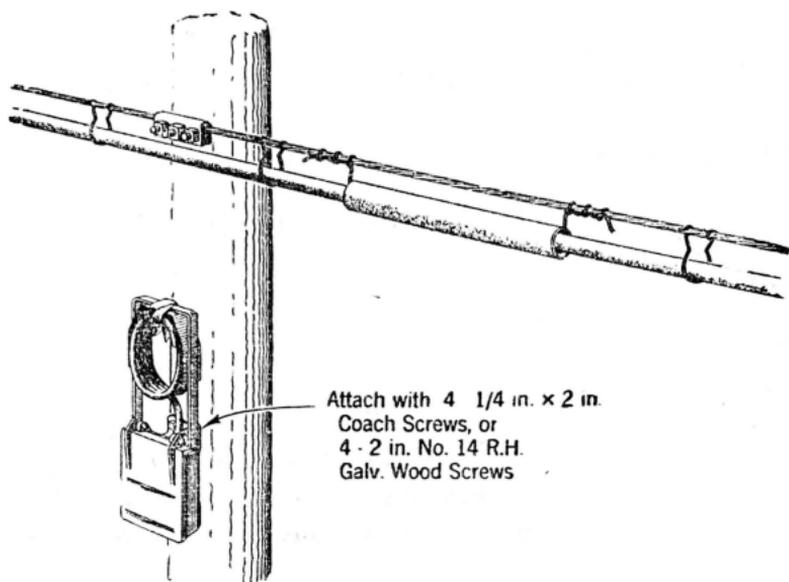
Houseline

5. MOUNTING NO. 14 TYPE CABLE TERMINAL

5.01 Repaired No. 14 Type Cable Terminals generally are equipped with a stub cable brace to protect this cable during handling of the terminal. In order to minimize the possibility of sheath damage, the stub cable brace preferably should be left in place until removed at the time of splicing. When installing a top stub slip cover equipped terminal, however, the brace should be removed immediately after the terminal has been attached to the pole. The stub cable should then be uncoiled and lashed temporarily to the pole by means of Houseline and the slip cover should be removed and replaced on the terminal from the top. The two machine screws which secure the stub cable brace should be replaced in the terminal casting upon removing the brace.

5.02 Attach No. 14 Type Cable Terminal to pole as shown in the following illustration. The screws should be

driven into the pole only sufficiently to start them and then turned in the remaining distance by means of a Bit Brace Socket Wrench or Screwdriver. When it is difficult to turn in the wood screws, coat the threads with wax or other lubricant.



5.03 Paragraphs 3.02 and 3.05 outline the precautions to be followed in securing the slip covers of F Type Cable Terminals before raising the terminal and these precautions should also be observed when installing repaired No. 14 Type Cable Terminals which are equipped with slip covers.

5.04 When it is necessary to convert a top stub slip cover equipped No. 14 Type Cable Terminal to a bottom stub terminal or the reverse, the following rearrangements should be made immediately after the terminal has been attached to the pole with the stub cable in the proper position for splicing

- (1) Remove cover, depressing spring catch at rear of sealed chamber to clear cover notches.
- (2) Remove spring catch and reattach it at the vacant wire entrance holes which will bring top of catch the same distance (approximately 1/2 inch) beyond opposite end of terminal.
- (3) Replace cover on bottom stub terminal from end opposite stub cable, depressing spring catch to clear end of cover. Replace cover on top stub terminal after stub cable has been uncoiled. Upon removing stub cable brace, replace two machine screws, which secured it to terminal