BELL SYSTEM PRACTICES
Outside Plant Construction and Maintenance

SECTION G61.622.1
Issue 1, July, 1955
AT&TCo Prov. Standard

49A CABLE TERMINAL INSTALLATION

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1. GENERAL

1.01 This section describes the installation of the 49A Cable Terminal, including the splicing and terminating operations, on aerial polyethylene insulated conductor cable up to 1.2 inch outside diameter.

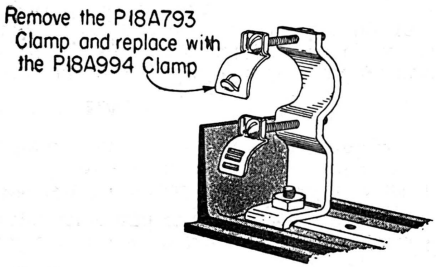
1.02 Refer to other sections of the Practices for the sheath preparation and other details.

1.03 The 49A Terminal should **NOT** be used at or within 100 feet of the junction splice between paper insulated and polyethylene insulated conductor cables.

2. MOUNTING BASE

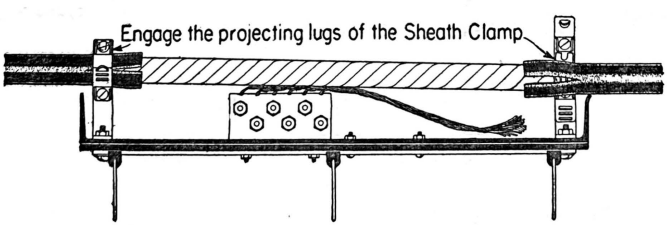
2.01 After preparing the sheath opening, remove the base assembly from the carton. It comes with the outer sheath clamp assembly used for cables up to and including 1 inch outside diameter cable.

2.02 If the cable is above 1 inch O.D. remove the top machine screw. The end of the screw is rolled to keep the nut in place but the nut can be forced off. Holding the nut securely turn the screw with a screwdriver. Remove the P18A793 Clamp and place the P18A994 Clamp, as shown.



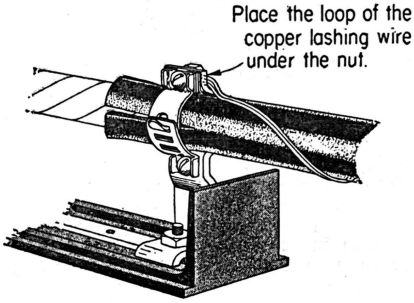
2.03 Hold the base assembly so that the embossed numbers on the neoprene base progress from left to right, odd numbers on the side of the cable facing away from the pole.

2.04 At a straight splice, slip the cable ends through the clamp assemblies. Where the cable is not cut, lift the lower grooved clamp off the upper tongued clamp, place the cable between the clamping details. Engage the projecting lugs of the inner sheath clamp on the top machine screw as shown.

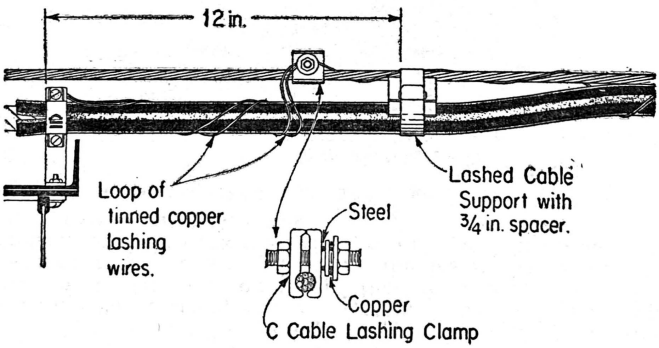


2.05 Engage the tongue of the upper clamp in the proper groove of the lower clamp.

2.06 Form a loop from 3 feet of copper lashing wire and place the loop under the nut of the top sheath clamp, which is farthest from the pole, as shown, and tighten the top screws securely.



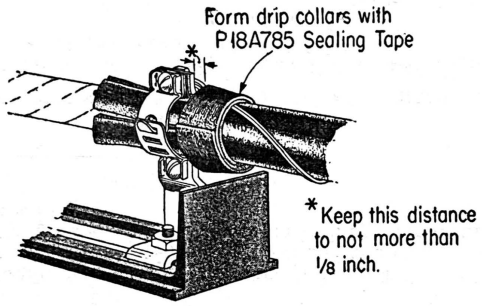
2.07 Complete the strand to sheath bond by spiralling the loop of copper lashing wire around the cable and fasten the ends around the bolt of the cable lashing clamp, under the shoulder as shown.



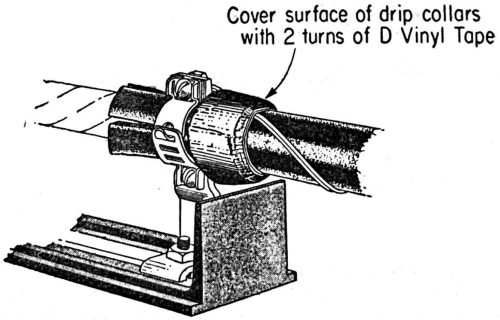
2.08 Tighten the lower clamp screws. **DO NOT** tighten excessively, this will result in bending the tongue of the upper clamp.

2.09 Remove the temporary bonding across the sheath opening. Remove the B Paper Tape Markers.

2.10 On the cable sheath at each end just outside the hangers form drip collars, as follows. Remove a strip of sealing tape from the treated paper which encloses it, and form the collar starting at the top of the cable by building up layers of the tape one on top of the other, using the entire length of tape. At the end where the lashing wire loop is fastened, carefully work the first layer of tape tight around the lashing wire before proceeding.

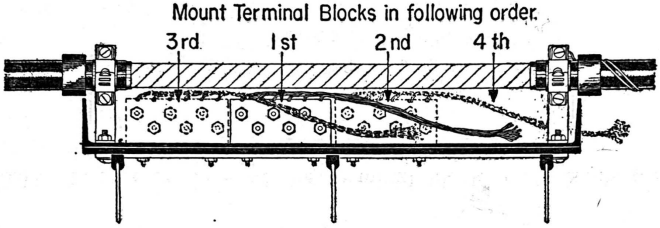


2.11 Place 2 turns of D Vinyl Tape over drip collars to prevent cover from adhering to sealing tape.



3. SPLICING PAIRS

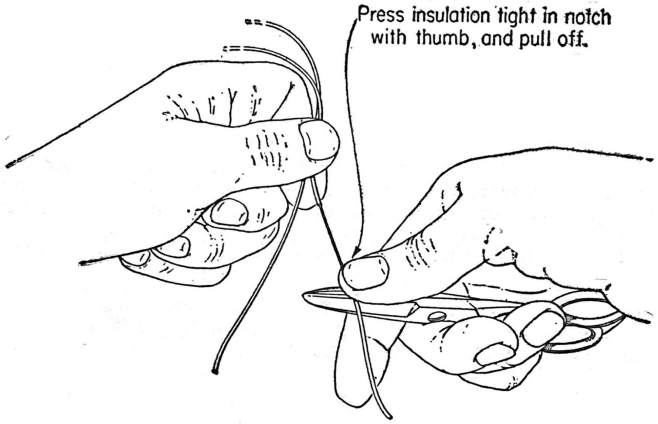
3.01 A P18A782 Terminal Block is furnished with the 49A Terminal and mounted in the 2nd block position beside drop wire entry holes 7 to 12. If more than six pairs are called for on the construction print or work order, mount the additional terminal block(s) on the terminal base in the order shown below.



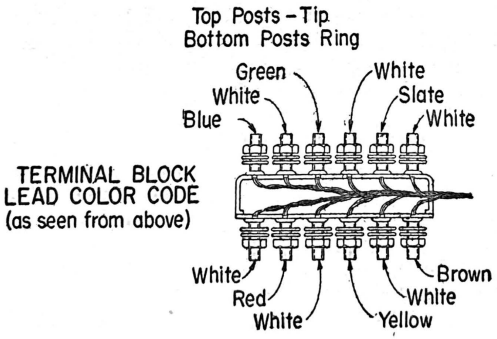
3.02 In mounting the terminal block, pierce the neoprene base visible in the mounting holes, before working the studs of the block into the holes. Fasten securely with the nuts provided.

3.03 Remove the core wrapper from the sheath opening. On color coded cable having more than one unit place collars of D Vinyl Tape around each unit before removing the unit binders, so that the sequence of the units can be determined at later visits to the terminal.

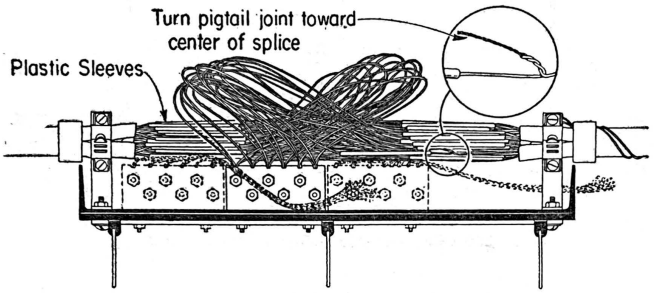
3.04 Since each binding post has two wires terminated, it is unnecessary to piece out the cable wires in splicing. Place plastic sleeves over each terminal block wire, skin the insulation from the terminal block wires with the notched splicers scissors as shown.



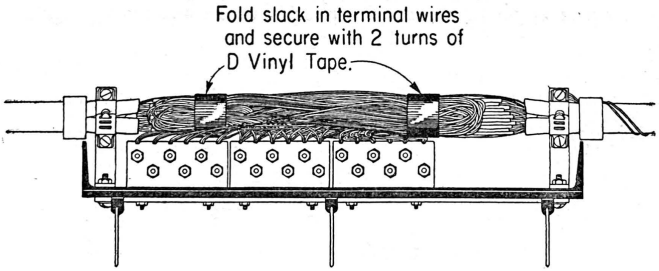
3.05 The color code of the terminal block leads is shown below.



3.06 Refer to Section G50.699.1 for information on splicing polyethylene insulated conductors including the pair sequences of the fully color coded unit type cables. Identify each cable pair and cut and splice each wire of the pair to the associated binding post leads in the usual manner, turning the pigtails towards the center of the splice, as shown.



3.07 Leave all the slack in the cable wires and the terminal block leads, folding the slack parallel to the completed splice. Secure the folds around the splice with two turns of D Vinyl Tape as shown.

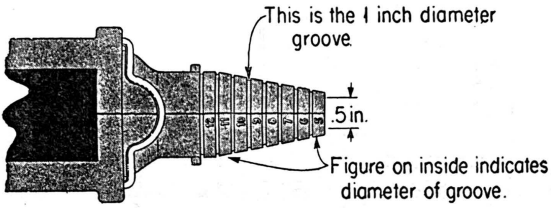


3.08 A straight splice is made in the usual manner. Where there will be no distribution from the splice the Terminal Block may be removed before commencing the splice.

3.09 The Splice bundle requires no wrapping, and is ready for the terminal cover.

4. FITTING THE COVER

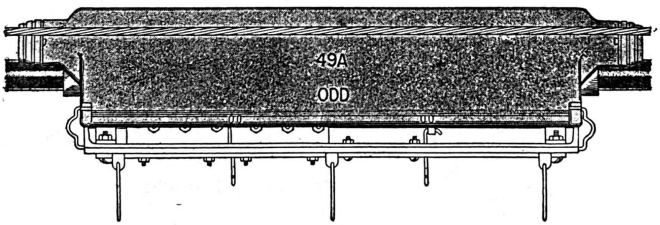
4.01 The tapered ends of the cover are grooved and the diameter of the grooves are marked alongside, as shown.



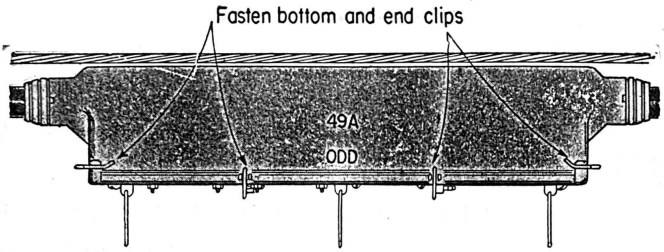
4.02 Select the groove for the diameter of cable and cut off the outside portion of the tapered ends.

4.03 The cover has **odd** and **even** embossed on its sides. Match the **odd** side of cover with the odd numbers on the base, then from the rear of the splice work the cover between the strand and the splice bundle. Slide the cover down over the splice as shown.

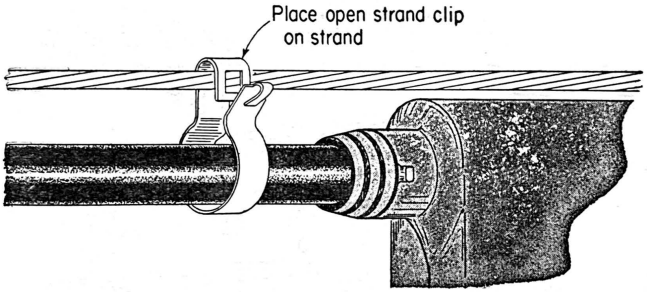
Place cover under strand and over base and splice



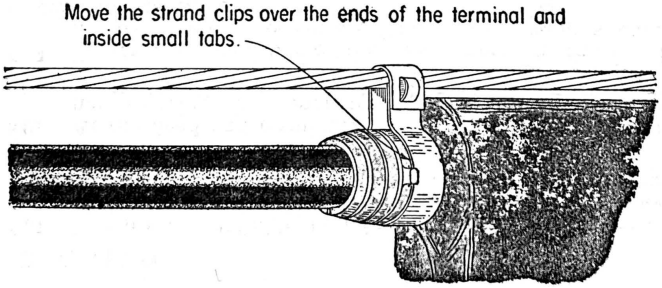
4.04 The interior of the bottom of the cover is grooved. **Work the bottom of the cover over the edge of the base, so that the base is completely seated in this groove.** Then clip in place with the two bottom and the two end clips as shown.



4.05 Ensure that the tapered ends of the cover fit snugly around the cable. **Work the end with the fingers until the slit in the cover is tightly closed.** Open the strand clips and place around the strand and cable as shown.



4.06 Move the strand clips over the taper ends until they are inside the small tabs projecting on the sides of the ends, as shown.

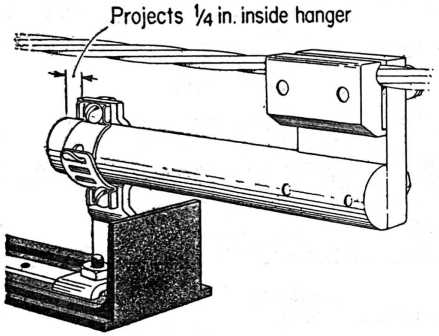


5. DEAD END

5.01 When the 49A Cable Terminal is used at the end of the cable, the 50A Bracket is used in the dead end to close the opening in the cover and to provide an anchor for the terminal and cable.

5.02 At the dead end terminate the cable in the usual manner, sleeving the conductors that are not terminated on the terminal block in the manner shown in Section G50.633.2.

5.03 Fasten the round bar of the 50A Bracket in the terminal base hanger as shown. The strand clamp anchors the terminal and cable.



50A BRACKET ASSEMBLED

5.04 Complete the installation in the usual manner, placing the drip collar on the bar of the 50A Bracket before closing the cover.

6. ADDITIONS OR REARRANGEMENTS

6.01 When additions or rearrangements are necessary, remove the strand clips, free the four clips holding the cover to the base, and remove the cover.

6.02 Make the necessary additions or changes and replace the cover.