

BELL SYSTEM PRACTICES
Outside Plant Construction
and Maintenance

SECTION G50.636.3
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AT&T Co Standard

CABLE SPLICING—GENERAL

SOLDERED SLEEVE JOINTS—

13-GAUGE CONDUCTORS

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1. GENERAL

1.01 Joints between 13-gauge conductors should be made by means of tinned copper sleeves. Joints between 13-gauge and smaller gauge conductors should be twisted and soldered.

2. SIZES OF SOLDERED SLEEVES

2.01 Tinned copper sleeves are available in the following sizes for use on 13-gauge conductors:

<u>Designation of Sleeve</u>	<u>Type of Joint</u>
13-S	Straight
13-D	Butt
13-D	Bridge

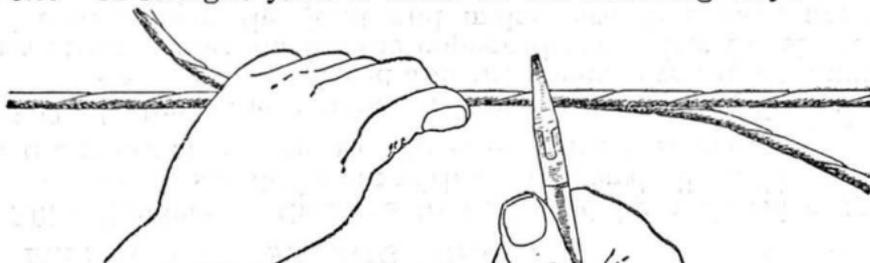
3. METHOD OF MAKING JOINTS

3.01 Conductors that are to be joined by a tinned copper sleeve should be cut with the diagonal pliers. The notch in the pliers should be used to remove the insulation.

3.02 Untwist the conductors sufficiently so that the cotton sleeve can be placed and the conductors can be aligned in a straight position for the copper sleeve. After the sleeve is soldered inspect the joint and make sure that there are no sharp projections.

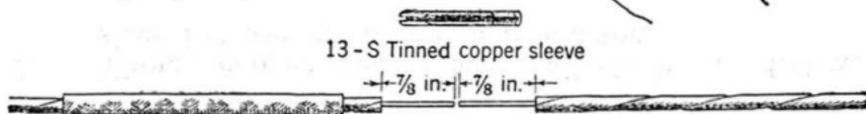
Straight Joint

3.03 A straight joint is made in the following way:



FIRST OPERATION

Lap wires to be spliced, place in desired position, and make a clean cut in both, at right angles to the conductor. If both wires cannot be cut at the same time, mark and cut separately.



13-S Tinned copper sleeve

→ 7/8 in. → 7/8 in. →

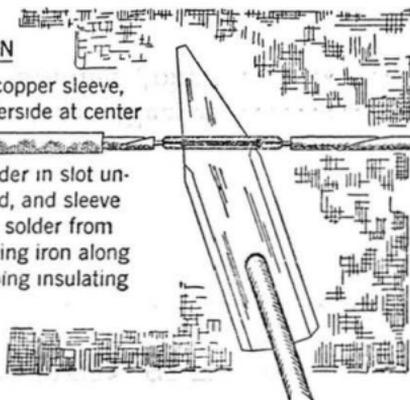
SECOND OPERATION

Remove insulation as shown, and place sleeve.

THIRD OPERATION

Center wires in tinned copper sleeve, hold iron against underside at center

and run rosin core solder in slot until wires are well tinned, and sleeve is full. Remove excess solder from copper sleeve by drawing iron along underside before slipping insulating sleeve in position.

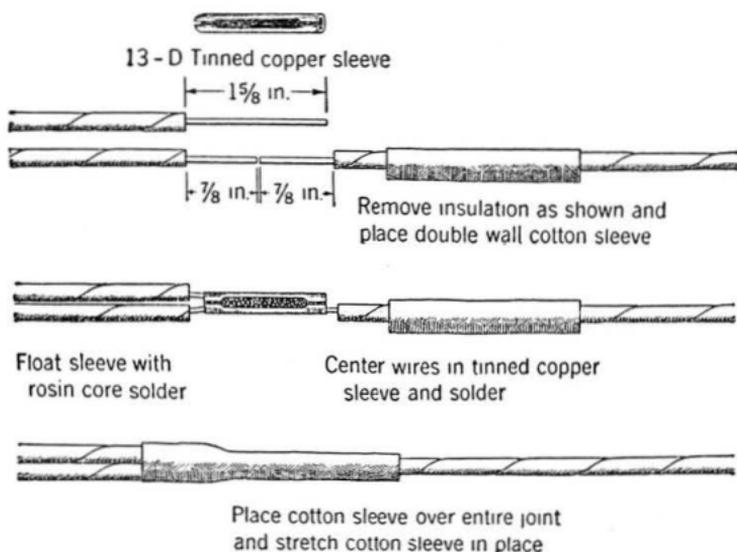


FOURTH OPERATION

Center sleeve accurately over joint. Do not allow insulation to unfurl.

Bridge Joint—New Splice

3.04 When both the main cable and the branch cable are to be spliced at the same time the joint is made in the following way:

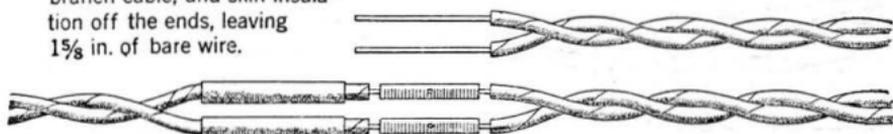


Bridge Joint—Existing Splice

3.05 Where there is an existing splice in the main cable the branch cable should be bridged as shown below:

FIRST OPERATION

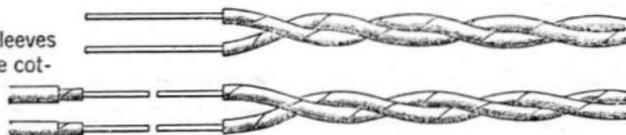
Cut off ends of wires of pair in branch cable, and skin insulation off the ends, leaving 1 5/8 in. of bare wire.



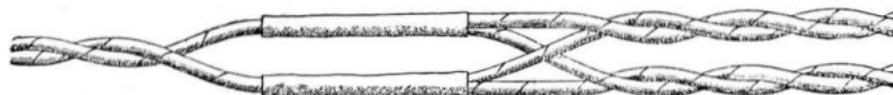
Slip sleeves back so as to uncover existing joint

SECOND OPERATION

Unsoldier tinned copper sleeves and remove them. Place cotton sleeves for new bridge joint.



THIRD OPERATION

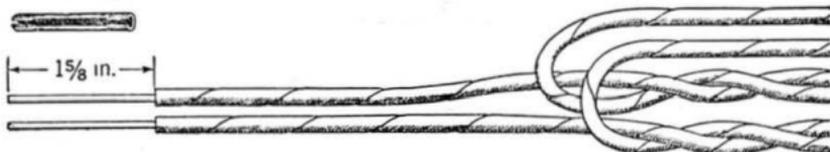


Make soldered sleeve bridge joint

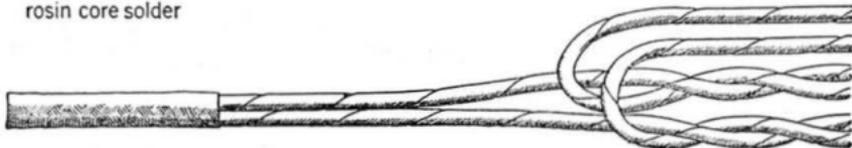
Butt Joint

3.06 Butt joints are made as follows:

13 - D Tinned copper sleeve



Float sleeve with
rosin core solder



Cotton sleeve