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BELL SYSTEM PRACTICES
Outside Plant Construction and Maintenance

SECTION G50.606.2
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CABLE SPLICING—GENERAL
COAXIAL CABLE

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1. GENERAL

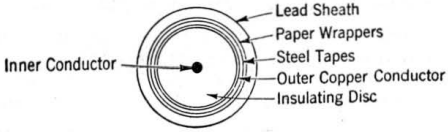
1.01 This section describes longitudinal seam coaxial cables. Coaxials are used to transmit carrier currents for telephone, radio, television and other purposes.

2. COAXIALS

2.01 A coaxial consists of a central copper wire separated from a cylindrical outer copper conductor by means of uniformly spaced insulating discs. The outer conductor has a longitudinal seam. The coaxial is shielded by means of two steel tapes spiraled around the outer conductor. There are two sizes of coaxials, the .27-inch and the .375-inch. These dimensions refer to the inside diameters of the outer copper conductors.

3. SINGLE COAXIAL CABLE

3.01 This cable contains one coaxial wrapped with paper tapes. The cross-section is shown below.



4. MULTIPLE COAXIAL CABLE

4.01 Multiple coaxial cables are available containing 4, 6 and 8 coaxials, each coaxial similar to the one described in Paragraph 2.01. These cables generally contain paper insulated pairs or quads which may be located in the cable as:

(a) A circular unit of conductors in the center of the core.

(b) Individual conductors, pairs or quads in the interstices between the coaxials.

(c) Quads in layer formation outside the coaxials.

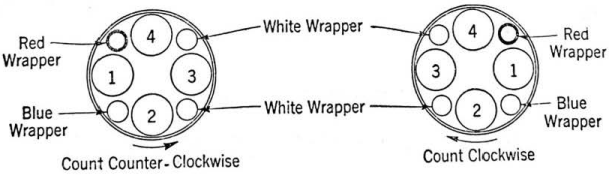
(d) A combination of (a), (b) and (c).

4.02 **Identifying Coaxials:** The individual coaxials are assigned numbers during manufacture depending on their electrical characteristics and are assembled in the cable accordingly. In splicing adjacent lengths, like-numbered coaxials must be spliced together at all times.

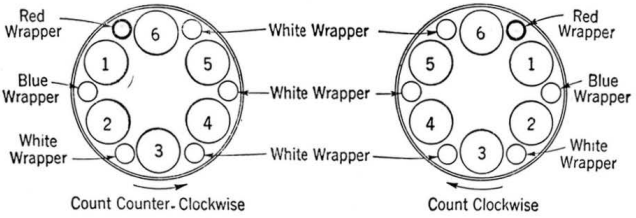
4.03 Generally the successive lengths of coaxial cable are placed so that in looking at the two ends of the cable at a splice, the count of the coaxials is clockwise on one side and counter-clockwise on the other, thus permitting like-numbered coaxials to be joined without a crossover in the splice. Under some conditions, however, a reel of cable is so placed that a crossover will result in joining like-numbered coaxials.

4.04 Identifying .27-inch Coaxials.

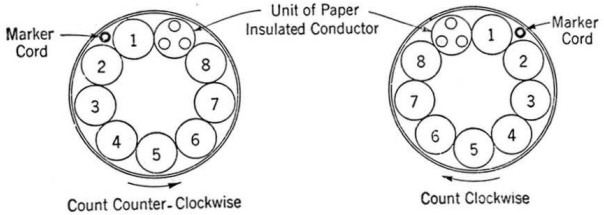
(a) **Four Coaxials with Interstice Conductors.** Start at the Red wrapper and number the coaxials in the direction of the Blue wrapped interstice conductor as illustrated below.



(b) **Six Coaxials with Interstice Conductors.** Start at the Red wrapper and number the coaxials in the direction of the Blue wrapped interstice conductor as illustrated below.

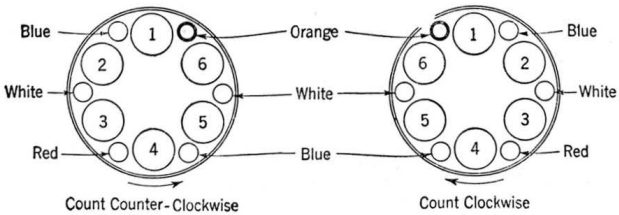


(c) **Eight Coaxials with Paper Insulated Unit.** Start at the unit of paper insulated conductors and number the coaxials in the direction of the marker cord, as illustrated below.



4.05 Identifying .375-inch Coaxials.

(a) **Six Coaxials with Interstice Conductors.** Start at the Orange marker and number the coaxials in the direction of the nearest Blue wrapped interstice conductor, as illustrated below.



(b) **Eight Coaxials with Interstice Conductors.** Start at the Orange marker and number the coaxials in the direction of the nearest Green wrapped interstice conductor, as illustrated below.