BELL SYSTEM PRACTICES
Outside Plant Construction and Maintenance

SECTION G50.607.1
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AT&T Co Standard

CABLE SPLICING — GENERAL
PIC CABLES—SUPERSEDED TYPES DESCRIPTION AND COLOR CODE

Contents **Page**

1. GENERAL

1.01 This section covers the core make-up and color code of polyethylene insulated conductor cables furnished under Drawings CA-1814 (19-gauge 083 mf.) and CA-1813 (22-gauge 083 mf.) which were superseded by the coded PIC cables. Issue 2 is replaced.

1.02 The section also covers the make-up and color code of cables furnished under superseded Drawing CA-1741 (19-gauge 083 mf.).

1.03 This section has been revised to make a correction in the color code of the superseded 51-pair 22-gauge cable and to delete information on the CA-1727 cables, which is now covered in a separate section.

2. DESCRIPTION

2.01 These cables consist of copper conductors having solid polyethylene insulation, paired and arranged in layers or units depending on the size and type of cable involved.

2.02 The core of the cable has a rubber wrapper that is applied lengthwise with an overlap or a polyethylene and paper wrapper which was used in cables of earlier manufacture.

3. 19-GAUGE 083 MF CA-1814 AND 22-GAUGE CA-1813

3.01 **Individual Pair Color Code:** The 6, 11, 16, and 26-pair sizes and units of 12, 16, 17, 25 and 26 pairs in cables made with units have an individual pair color code to facilitate splicing and terminal installation.

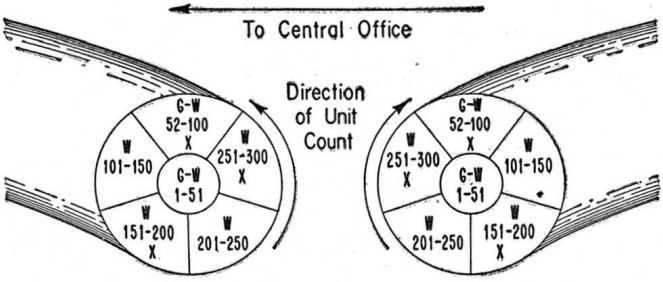
3.02 For uniformity, the color code and the associated color sequence numbers shown below should be used in layer cables and units having the individual pair color code.

Color Sequence No.	Color Code		Color Sequence No.	Color Code	
	Tip	Ring		Tip	Ring
1	Green	Red	14	Red	Natural
2	Green	Blue	15	Red	Black
3	Green	White	16	Brown	Natural
4	Green	Brown	17	Green	Black
5	Green	Natural	18	Green	Yellow
6	Blue	White	19	Natural	Black
7	Blue	Brown	20	Red	Yellow
8	Blue	Natural	21	White	Brown
9	Red	Blue	22	White	Natural
10	Red	White	23	White	Black
11	Red	Brown	24	Brown	Black
12	Blue	Black	25	Brown	Yellow
13	Blue	Yellow	26	White	Yellow

3.03 Each pair color represents a certain twist length and for transmission reasons the pairs are not assembled in the same order in the different sizes of cable and units.

3.04 **Unit Cables:** In a unit type cable, the above color sequence applies to each unit in the cable.

3.05 The selection of the units for counting purposes in the unit cables is illustrated below. The marker unit in each layer of units is the starting unit; the unit count then progresses around the core **Counter-clockwise, Looking Toward the Central Office** and **Clockwise, Looking Away From the Central Office.**



G-W-Green-White Unit Binder
W-White Unit Binder

3.06 **Layer Cables and 50 and 51-Pair Units. These do not have an individual pair color code and are therefore not suitable for pair identification without testing.** The pair layup and number of pairs in each layer are indicated below.

Cable Size	Number of Pairs in Layers					
	Center	1st Layer	2nd Layer	3rd Layer	4th Layer	5th Layer
31 (19 ga.)	1	5	10	15		
51 (19 ga.)	1	5	10	15	20	
50 (22 ga.)	2	6	10	14	18	
51 (22 ga.)	2	6	10	14	19	
76 (19 ga.)	1	5	10	15	20	25
76 (22 ga.)	1	4	10	16	20	25
101 (19 ga.)	3	9	14	20	25	30
101 (22 ga.)	2	8	14	20	26	31

3.07 **In CA-1814 Type** 19-gauge cables the center and each layer contain a tracer and as many as 5 distinctively colored pairs which repeat if necessary. Adjacent layers have different colors of insulation. The following sketch of a 51-pair cable illustrates the arrangement.

51 Pair, 19 Ga. Layer
Cable CA-1814

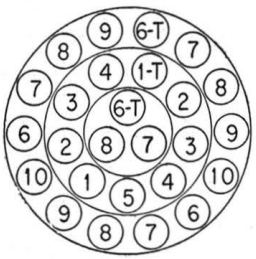
Pair Reference	Color Code Tip	Ring
1	Green	- Red
2	Green	- Blue
3	Green	- White
4	Green	- Brown
5	Green	- Natural
6	Blue	- White
7	Blue	- Brown
8	Blue	- Natural
9	Blue	- Black
10	Blue	- Yellow
Tracer 27T	Yellow	- Natural
Tracer 28T	Yellow	- Black

3.08 **In CA-1813 Type** 22-gauge cables each layer has as many as 4 distinctively colored pairs which repeat, if necessary. Adajcent layers have different colors of insulation. Only one or two tracers are included.

4. SUPERSEDED 19-GAUGE 083 MF CA-1741

4.01 **These cables do not have an individual pair color code.** Instead, 12 distinctively colored pairs (2 being tracers) are used. The outer layer contains a tracer and as many as 5 distinctively colored pairs, which repeat if necessary. The adjacent layer has a different tracer and a different set of pairs. The center of the core consists of a tracer, or a tracer and two other pairs, depending on the size of the cable.

4.02 The following sketch of a 26-pair cable illustrates the arrangement of pairs in these cables.



	Pair Reference	Color Code Tip	Ring
	1	Red	Green
	2	Red	Blue
	3	Red	White
	4	Red	Brown
	5	Red	Black
Tracer	1-T	Green	White
	6	Natural	Green
	7	Natural	Blue
	8	Natural	White
	9	Natural	Brown
	10	Natural	Black
Tracer	6-T	Green	Blue

4.03 The pair layup and number of pairs in each layer of the various size cables are indicated below.

Cable Size	Number of Pairs in Layers: Center	1st Layer	2nd Layer	3rd Layer	4th Layer	5th Layer
6	1	5				
11	3	8				
16	1	5	10			
26	3	9	14			
31	1	5	10	15		
51	1	5	10	15	20	
76	1	5	10	15	20	25
101	3	9	14	20	25	30