

CABLE SPLICING—GENERAL
PLASTIC INSULATED CONDUCTOR (PIC) CABLES

DESCRIPTION

CONTENTS	PAGE	DESCRIPTION
1. GENERAL	1	22 and 24 gauge cables, and Section 632-034-102 PE-PVC quadded 22-gauge cables rated manufacture discontinued (Mfr. Disc). The section includes information relative to improved PIC cables and eliminates the listing of aluminum conductor cables.
2. DESCRIPTION	1	
A. Sheath	1	2. DESCRIPTION
B. Air Core PIC Cables	1	A. Sheath
C. Waterproof PIC Cables	1	2.01 Complete information pertaining to sheath construction is contained in Section 626-020-020.
D. Conductors and Insulation	1	B. Air Core PIC Cables
3. COLOR CODE	1	2.02 Complete information pertaining to air core PIC cables is covered in Section 626-101-005.
4. CORE LAY-UP	3	C. Waterproof PIC Cables
A. Unit Makeup	3	2.03 Complete information pertaining to waterproof PIC cables is covered in Section 626-101-010.
B. Binder Group and Multiunit Makeup	4	D. Conductors and Insulation
C. Mirror-Image PIC Multiunits	6	2.04 The conductors of PIC cables are annealed copper of 19, 22, 24, or 26 gauge.
D. Mirror-Image PIC Core Lay-ups	7	
1. GENERAL		3. COLOR CODE
1.01 This section covers the description, color code, and core lay-up of plastic insulated conductor (PIC) cables. The section also includes information related to <i>superseded</i> PIC cables.		3.01 Ten colors of insulation are provided for PIC cables: five are used exclusively for <i>ring</i> and five are used for <i>tip</i> conductors. Table A shows the pair color code for cables of 6 through 25 pairs and for the units comprising the 25-pair binder groups used in the remaining sizes. The pairs in each binder group and the binders are color coded to permit selection of any pair in the cable by color code.

3.02 The insulation of all the pairs in PIC cables are PIC color coded in accordance with the Bell System Cable and Wire Color Code Rule, Form E-4911. This PIC color code is covered in detail in Table A.

TABLE A
COLOR CODE FOR PIC CABLE

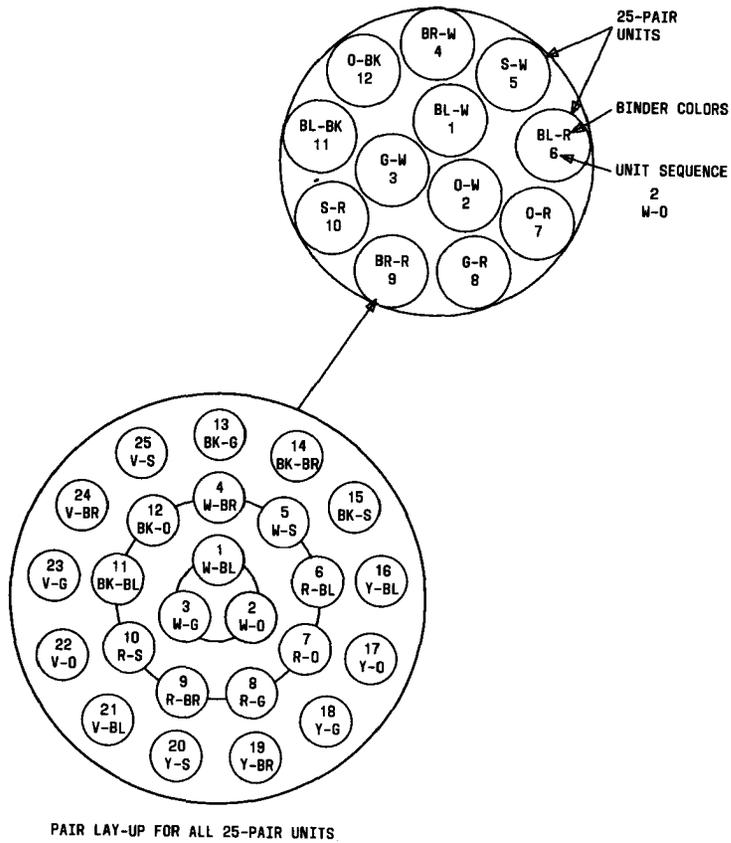
25-PAIR COLOR CODE			BINDER GROUPS		
			STANDARD		SUPERSEDED (NOTE)
PAIR NUMBER SEQUENCE	COLOR CODE		12-13 PAIRS UNITS	25 PAIR UNIT	8-8-9 PAIR UNITS
	TIP	RING			
1	W	BL	↑ 12 ↓	↑ 25 ↓	↑ 8 ↓
2	W	O			
3	W	G			
4	W	BR			
5	W	S			
6	R	BL			
7	R	O			
8	R	G			
9	R	BR	↑ 13 ↓	↑ 25 ↓	↑ 8 ↓
10	R	S			
11	BK	BL			
12	BK	O			
13	BK	G	↑ 13 ↓	↑ 25 ↓	↑ 9 ↓
14	BK	BR			
15	BK	S			
16	Y	BL			
17	Y	O			
18	Y	G			
19	Y	BR			
20	Y	S			
21	V	BL			
22	V	O			
23	V	G			
24	V	BR			
25	V	S			

ABBREVIATIONS

BL — Blue	W — White
O — Orange	R — Red
G — Green	BK — Black
BR — Brown	Y — Yellow
S — Slate	V — Violet

Note: These units were Manufacture Discontinued in 1964.

NOTICE
Not for use or disclosure outside the Bell System except under written agreement



PAIR LAY-UP FOR ALL 25-PAIR UNITS

Fig. 3—300-Pair Multiunit—4200-Pair DUCTPIC Cable

C. Mirror-Image PIC Multiunits

4.03 Cables with more than 900 pairs follow the "mirror-image PIC" color code. The building block for these cables is a 100-pair multiunit

consisting of four 25-pair units. Each 25-pair unit has a different color binder, taken in the standard sequence of blue, orange, green, and brown (Fig. 4). Pairs within each 25-pair unit follow the standard PIC color code.

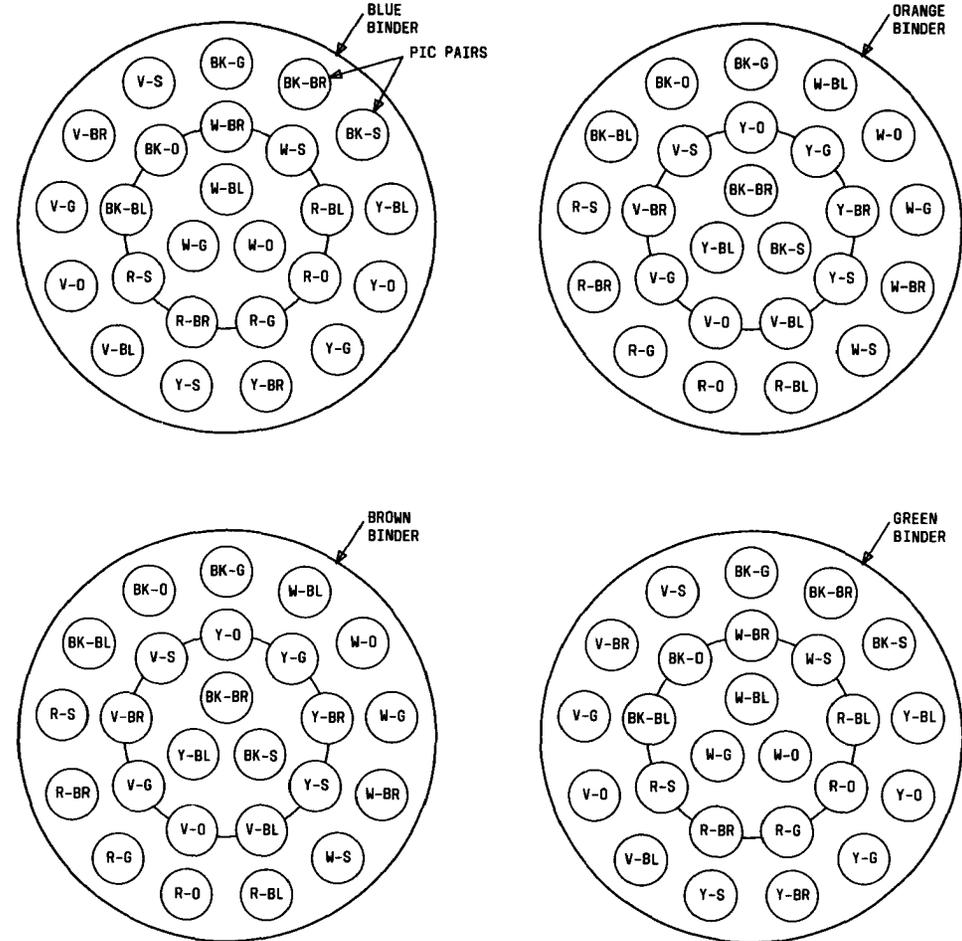


Fig. 4—100-Pair Multiunit—PIC Cable

D. Mirror-Image PIC Core Lay-ups

4.04 Each 100-pair multiunit is wrapped with a two-color binder. One unit in each layer has a green binder, indicating the marker multiunit. This 100-pair unit is flanked by multiunits with,

alternately, red and blue binders. Marker multiunits are situated radially over each other, following the unit coloring scheme used in pulp cable. The second multiunit binder color indicates layer: yellow for the outside layer; then, alternately, black and yellow. Figure 5 illustrates the available pair sizes and core lay-ups of these cables.

4.05 Mirror-Image PIC—Pair Count: This count starts with the centermost marker multiunit. Then, with the back of the observer to the central office (for trunk cable, the back of the observer should be toward the **reference** central office), the count proceeds clockwise through other center units. The count continues with the same rules through the first layer, second layer, etc. Again, this counting procedure is like that used in pulp cables.

the outer layer interstices, and the number of good spare pairs will equal or exceed the number of defective pairs. The color code of **extra pairs** is derived from the **tip** series of the PIC color code as shown in Table A for extra pairs 1 through 10. For extra pairs 11 through 15, the **ring** series is used as shown in Table A.

4.07 Mirror-Image PIC—Missing or Defective Pairs: These pairs are identified by multiunit number, primary unit binder color, and pair color. This information is marked on the tag attached at each end of the shipped cable.

4.06 Mirror-Image PIC—Extra Pairs: PIC cable having more than 900 pairs contain spare pairs. These extra pairs are positioned in

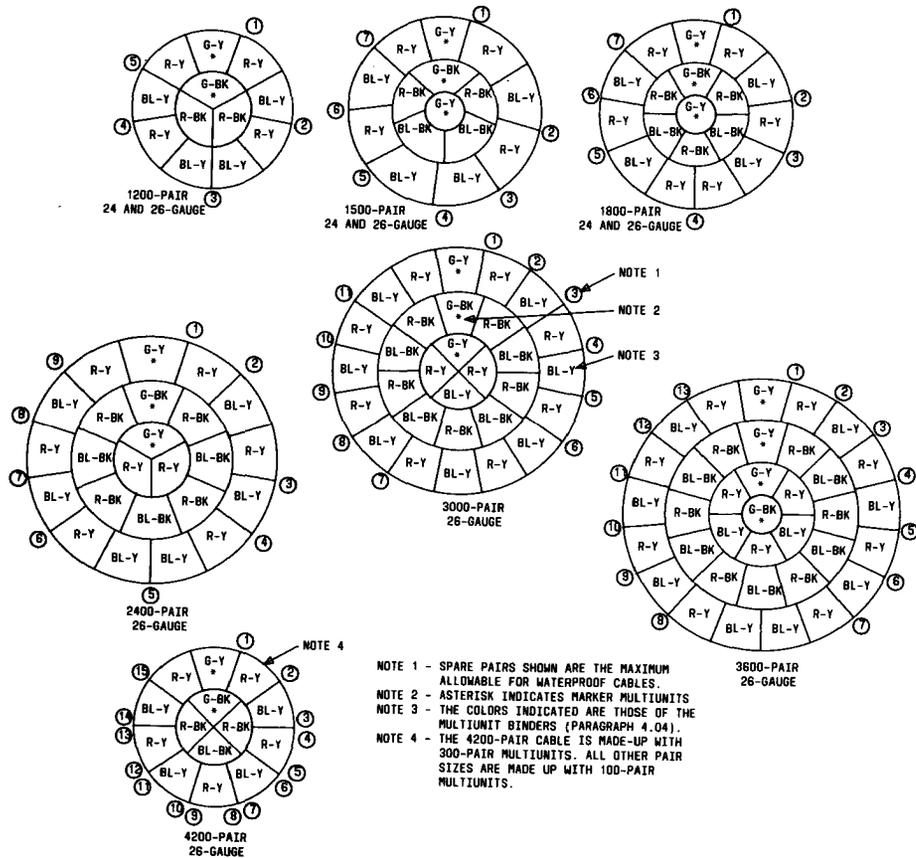


Fig. 5—Core Make-Up—1200- Through 4200-Pair PIC Cables