BELL SYSTEM PRACTICES
Outside Plant Construction and Maintenance

SECTION G50.647.3
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AT&T Co Standard

CABLE SPLICING—GENERAL
BUNCH SPLICE

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1. GENERAL

1.01 In a bunch splice, the conductors are identified to determine whether they should be included or excluded from the desired bunch.

1.02 It is generally necessary to pick out the defective conductors in the cable in advance of bunching.

1.03 In a dead cable the bunches are found by grounding them or applying battery or tone to the bunches at one end, and picking them up at the splice by metallic contact with the conductors.

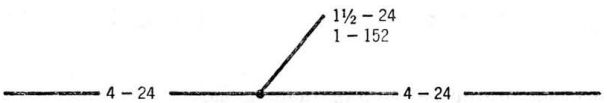
1.04 In a working cable the bunches are found by sending tone on them at one end and identifying the pairs at the splice in the same manner as working conductors.

2. TYPICAL EXAMPLES

2.01 The use of bunch splicing can be illustrated through a number of typical examples.

To Obtain Part of a Complement in a Dead Cable

2.02 Bunch splicing may be desirable where part of a color group or unit must be identified, as required in the following case in which a 152 pair branch is being connected to a 404 pair cable:



2.03 The splicing arrangement, assuming multiple unit cables, would be as follows:

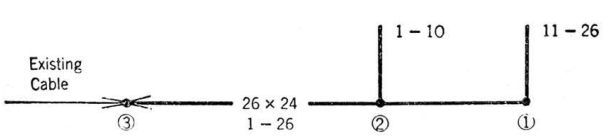
Number of Pairs	Color of Pairs	Count		Count	Color of Pairs	Number of Pairs
			Branch Cable	1 – 50	WG	50
				51 – 100	WR	50
				101	BR	1
				102 – 151	WR	50
				152	BR	1
100	WG	1 – 100		1 – 100	WR	100
1	BR	101		101	BR	1
100	WR	102 – 201		102 – 201	WR	100
1	BR	202		202	BR	1
100	WB	203 – 302		203 – 302	WB	100
1	BR	303		303	BR	1
100	WR	304 – 403		304 – 403	WR	100
1	BR	404		404	BR	1

2.04 If the 50-pair units in the 152-pair branch cable are to have their correct pair counts, it is necessary that the first two 100-pair units in the feeder cable be divided into 50-pair bunches. If the feeder cable is terminated, the bunching can be done at the terminal. If the cable is not terminated the bunching can be done at the splice nearest the central office.

2.05 The procedure is to strap or bunch pairs 1 to 50 inclusive, and send tone on the bunch from the termination or splice nearest the office. At the branch splice all pairs having tone are identified and set aside for random splicing to the first 50-pair unit in the branch cable. Count the pairs to make sure that all of the required pairs have been found. Repeat the process to select the other bunches.

To Select Non-Multiple Terminal Counts in Small Cables

2.06 In small cables having a few non-multiple terminals, bunch splicing may be used, as in the following example:



2.07 The procedure is as follows:

(1) Clear the end of the new cable at Splice 3.

(2) Make Splice 1 at random, selecting the pairs from the outside.

(3) Ground all pairs in the terminal at Splice 1 by wrapping a wire around the binding posts and connecting it to the sheath.

(4) At Splice 2, test the pairs and set aside all pairs that test grounded. Splice the terminal at random to the non-grounded pairs.

(5) Clear the binding posts at Terminal 1, and make Splice 3 by boarding the new cable from the new terminals and test splicing to the existing cable.

To Select the Pairs of a Small Split Complement

2.08 In order to save time it may be desirable first to identify pairs as a bunch and then to identify them individually as in the following example:

2.09 If the pairs are all spare it may be helpful to bunch all the required pairs at the cross-box or central office, and to send tone on the bunch. At the splice all pairs having tone are set aside and then tested individually to determine the pair numbers.