

BELL SYSTEM PRACTICES
Outside Plant Construction
and Maintenance

SECTION G32.138.1
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AT&TCo Standard

DROP AND BLOCK WIRE

MULTIPLE DROP WIRE

DESCRIPTION

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1. GENERAL

1.01 The section has been reissued to include information on the new color code of the insulation of C Multiple Drop Wire. The color code has been changed to conform to the new **even count cable plan** used with PIC cable.

1.02 Multiple drop wire is used for making multiple drop connections where fuseless type or no station protection is required.

1.03 Information for B Multiple Drop Wire and C Multiple Drop Wire of earlier design is included.

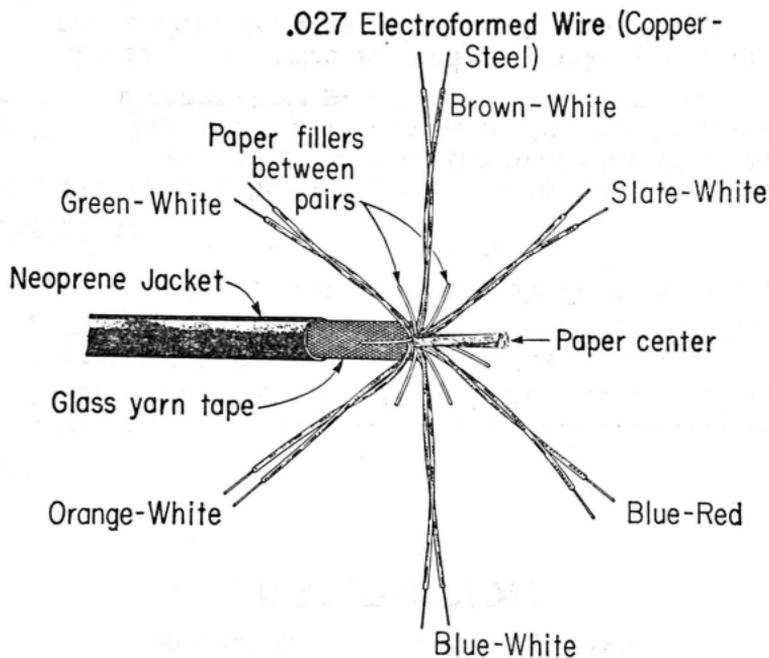
2. DESCRIPTION OF MULTIPLE DROP WIRE

2.01 Multiple drop wire consists of six twisted pairs of conductors. Each conductor is rubber insulated and neoprene jacketed. The insulation of one conductor of each pair is of a distinctively different color to provide ring and tip identification, as well as pair identification. The six pairs are cabled together, and wrapped with glass yarn tape into a tight core. The assembly is encased in a black neoprene jacket.

2.02 The following table indicates the color identification of the C Multiple Drop Wire now being supplied.

<u>Pair No.</u>	<u>Tip</u>	<u>Ring</u>
1	White	Blue
2	White	Orange
3	White	Green
4	White	Brown
5	White	Slate
6	Red	Blue

2.03 The following illustration covers the details of the new wire.

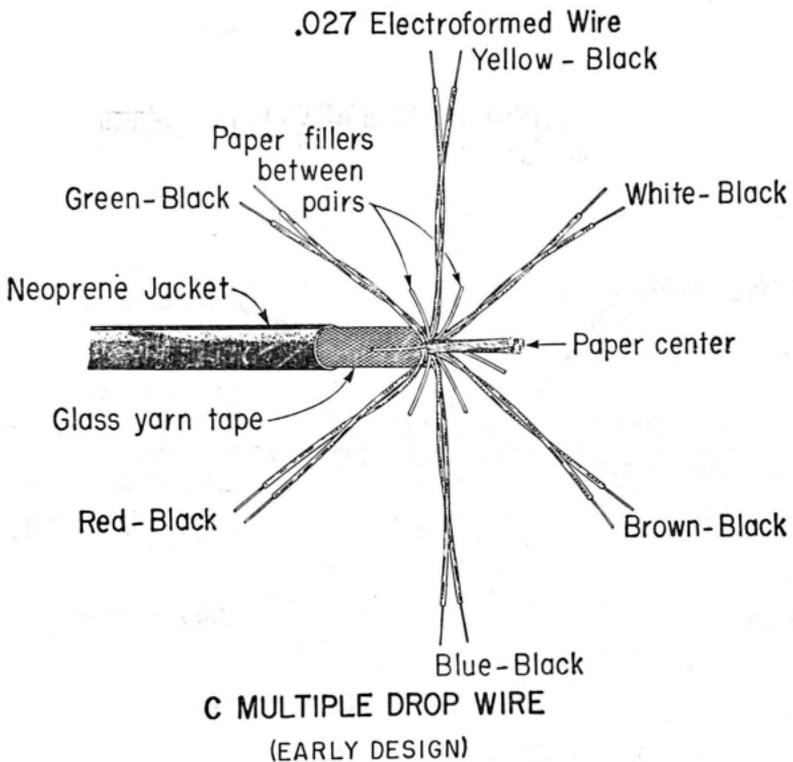


C MULTIPLE DROP WIRE
(PRESENT DESIGN)

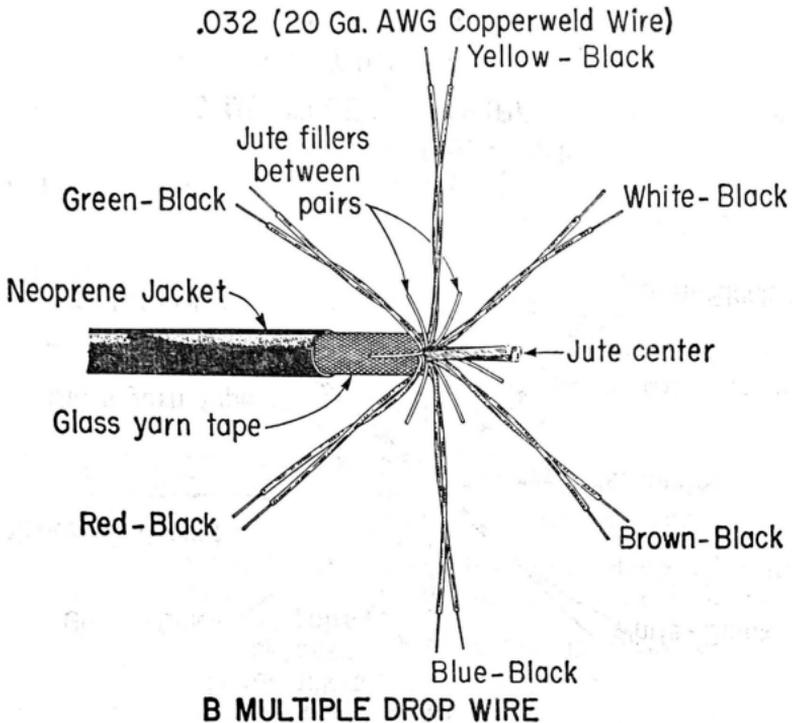
2.04 The following table indicates the color identification of the C Multiple Drop Wire of earlier manufacture.

<u>Pair No.</u>	<u>Tip</u>	<u>Ring</u>
1	Black	Blue
2	Black	Red
3	Black	Green
4	Black	Brown
5	Black	White
6	Black	Yellow

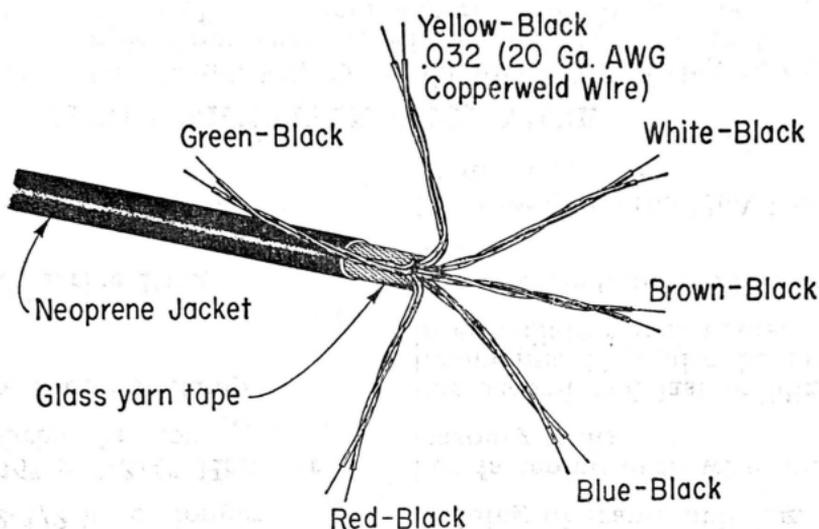
2.05 The following illustration covers the details of the wire.



2.06 The following illustration covers the details of B Multiple Drop Wire which was superseded by the C Multiple Drop Wire.



2.07 The B Multiple Drop Wire supplied during the early production period differs from the present standard in that five pairs were cabled around a center pair. The details of this wire are shown in the following illustration.



B MULTIPLE DROP WIRE
(Early Design)

2.08 Multiple drop wire is a self-supporting type of wire which can be supported by means of D drop wire clamps in spans up to 300 ft. in length in the three storm loading areas. The approximate breaking strength of C Multiple and B Multiple Wire (early design) is 1200 pounds, while the B Multiple (later design) is 1700 pounds. However, the stringing sags remain common to all types as outlined in Section G32.138.3. The C and B wire (early design) weigh approximately 14 pounds per hundred feet, while B wire (later design) weighs approximately 16 pounds per hundred feet. Multiple drop wire is designed to be handled in the same manner as single-pair drop wire.

3. ASSOCIATED MATERIALS AND APPARATUS

3.01 Materials and apparatus required in connection with the installation of Multiple Drop Wire as covered in these practices are listed below:

<u>Material or Apparatus</u>	<u>Use</u>
D Drop Wire Clamp	For supporting the wire at span attachments.
Multiple Drop Wire Puller	For pulling the wire to proper tension and snubbing it.
116A Protector	A 6-pair fuseless station protector for inside or outside mounting.
104 Type Wire Terminal	A 6-pair wire terminal similar to the 116A Protector but without protectors.
B Drive Hook	Pole attachment.
Drop Wire Hook	First building attachment.
#18 RH Galv. Wood Screw 2-1/2 in. or longer	For fastening drop wire hook to studding of frame building.
5/16" x 1-3/4" Hammer Drive Anchor	For fastening drop wire hook on masonry walls.
No. 9 Cable Clamp	For second and last building attachments. May also be used as intermediate attachments.
5/8" Drive Ring	For intermediate building attachments.
No. 10 Ground Wire	For grounding the 116A Protector to water pipe.

4. CUTTING MULTIPLE DROP WIRE

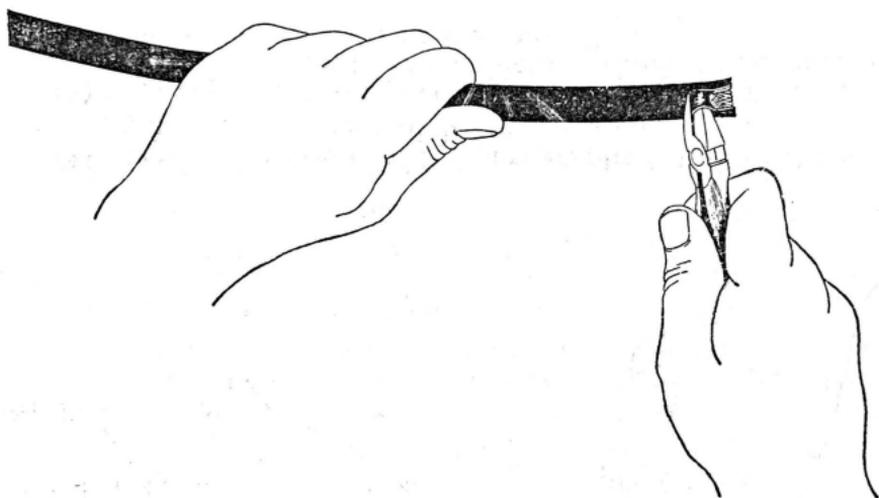
4.01 Use 6-inch SW Diagonal Pliers for cutting across multiple drop wire. It will be necessary to make several cuts with the pliers to complete the operation. Make an initial cut in the wire with the points of the pliers and bend the wire back at the cut so as to expose the inside conductors. Then proceed to cut a few conductors at a time until the cut is completed.

4.02 Eight-inch side cutting pliers can also be used for cutting multiple wire. It may require several presses of the pliers to cut through the wire.

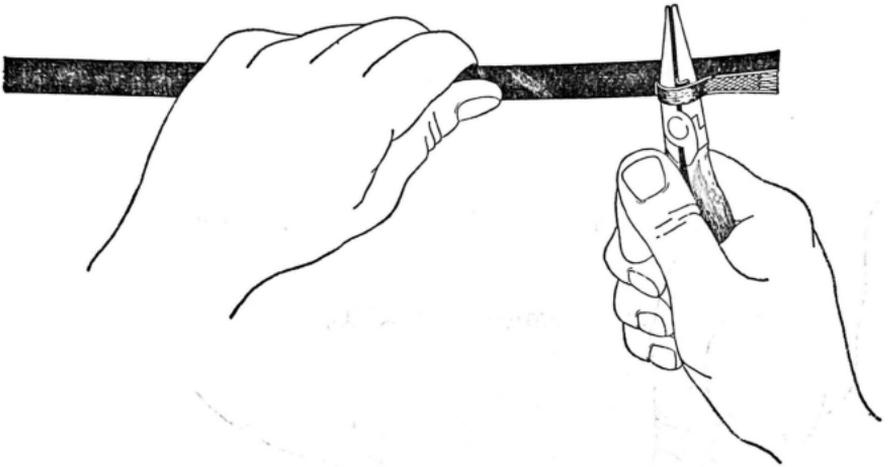
5. REMOVING OUTER JACKET ON MULTIPLE DROP WIRE

5.01 In terminating multiple drop wire at terminals and protectors it is necessary to remove the outer jacket in order that the pairs can be fanned out. Strip the jacket as follows:

- (1) Make two longitudinal cuts opposite each other on the multiple drop wire by means of the large groove of the C Braid Stripper.
- (2) Grip the jacket at the wire end with diagonal pliers and roll the jacket back on itself as illustrated:



- (3) Release the rolled back portion of jacket and grip it again with long nose pliers. Again roll the jacket back on itself until it pulls free of the glass yarn tape, then pull off the jacket with a strong steady pull over the required distance from the wire end.



- (4) Repeat operations of Subparagraphs (2) and (3) for the remaining segment of jacket.
- (5) Unwrap the glass yarn tape around the wire core and fan out the pairs for conductor skinning and terminating. Cut off excess yarn tape and filler.