

COILS AND CASES

STUB CABLES—SUPERSEDED VOICE FREQUENCY TOLL LOADING CASES

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1. GENERAL

1.01 This section describes the stub cables and gives the color codes of the conductors used in superseded voice frequency toll loading cases. These cases are no longer manufactured but are occasionally removed from plant and reused.

1.02 The stubs of cases containing PB and M-type units are the same in design as the stubs of cases potting the present standard MF-type units.

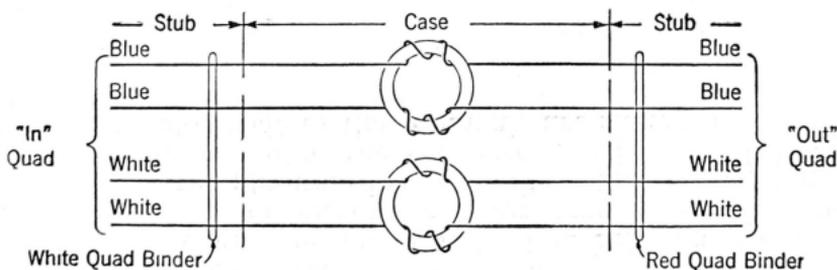
2. TWO-WIRE CIRCUIT LOADING COILS

Paper Insulated Stubs

2.01 **Two-Wire Side Circuit Coils:** The color code of the terminals for coils used to load either non-quadred toll cables or the side circuits of quadred cables is shown below.

SMALL GAUGE COILS FOR LOADING SIDE CIRCUITS

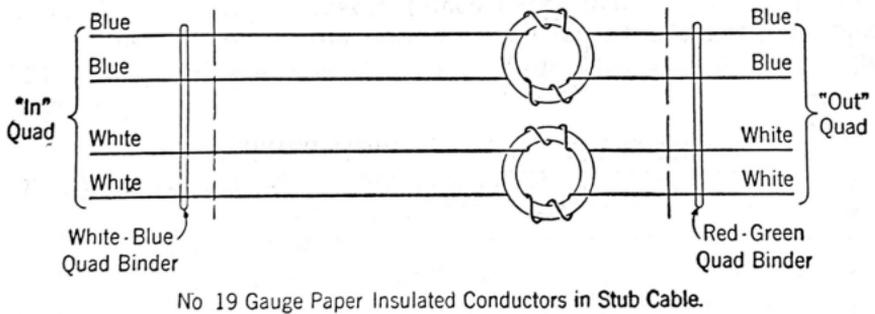
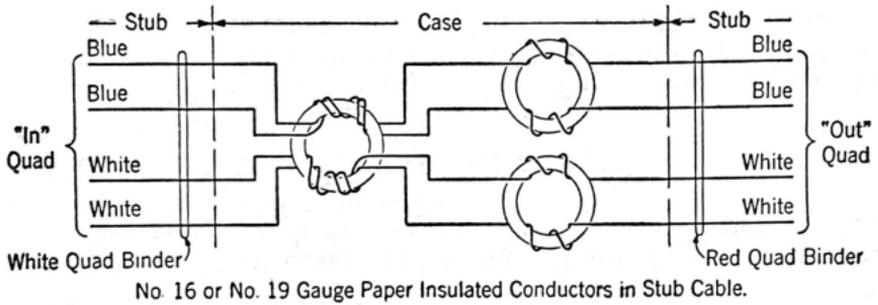
For Multi-Spindle Cases Only



2.02 **Two-Wire Phantom Units and Side Circuit Coils:** In cases containing phantom loading units for loading certain quads and side circuit coils for other quads, the quads connected to the phantom loading units are 16 or 19-gauge and the quads connected to the side circuit coils are of 19-gauge wires. The color code of the terminals are shown in the following sketch.

PHANTOM LOADING UNITS AND SIDE CIRCUIT COILS
IN SAME CASE

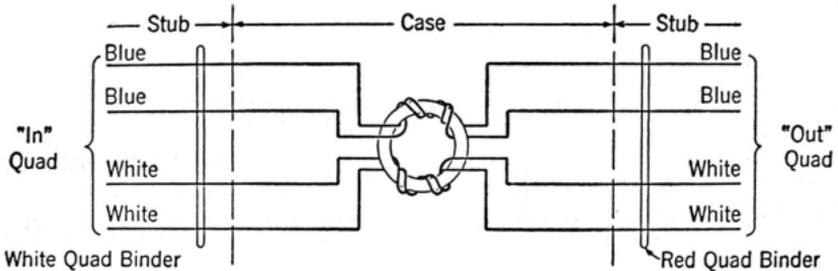
For Multi - Spindle Cases Only



2.03 **Two-Wire Phantom Coils:** The color code of stubs connected to coils for phantom loading only is shown below.

SMALL GAUGE COILS FOR LOADING
PHANTOM CIRCUITS EXCLUSIVELY

For Multi - Spindle Cases Only

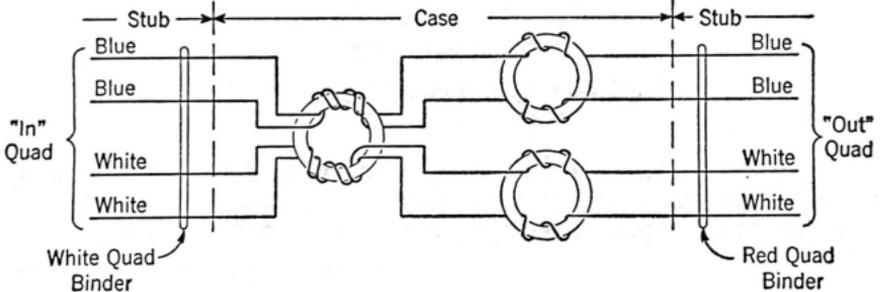


No. 19 Gauge Paper Insulated Conductors in Stub Cable.

2.04 **Two-Wire Phantom Units:** The color code of stubs for cases containing phantom loading units is shown below.

PHANTOM COILS AND SIDE CIRCUIT COILS
USED ON 2 - WIRE CIRCUITS AS PHANTOM LOADING UNITS

For Single - Spindle and Multi - Spindle Cases



Paper Insulation used on Conductors in Stub Cable.

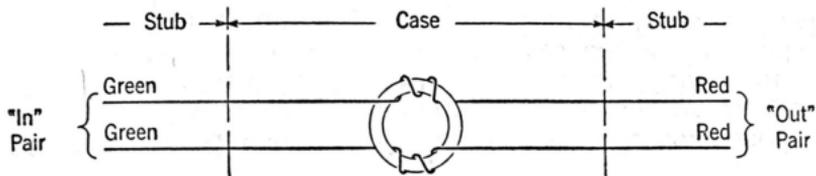
No. 19 Gauge Conductors in Stub Cable with Small Gauge Coils.

No. 13 Gauge Conductors in Stub Cable with Large Gauge Coils.

2.05 **Odd, or Extra Side Circuit Coils:** The color code for the pairs in the stub connected to odd or extra side circuit coils is shown in the following sketch. This color code applies to extra side circuit coils in cases containing coils for loading both side circuits and phantom circuits of quadded cables or for an odd coil in cases containing an odd number of side circuit coils. The pairs in the stub cable connected to the odd coil are not quadded.

ODD OR EXTRA SIDE CIRCUIT LOADING COILS

For Single - Spindle and Multi - Spindle Cases



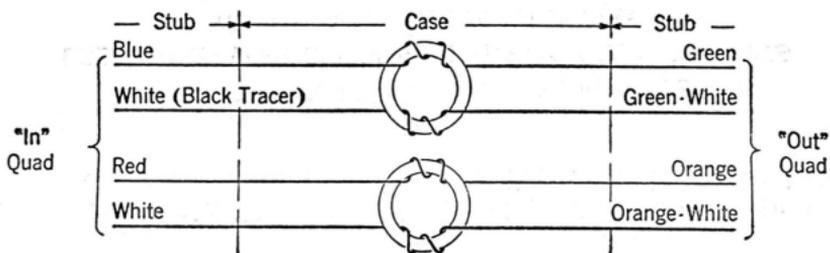
No. 19 Gauge Paper Insulated Conductors in Stub Cable.

Textile Insulated Stubs

2.06 **Two-Wire Side Circuit Coils:** The color code of stubs used on cases for loading non-quadded toll cable or the side circuits of quadded cable is shown below.

SMALL GAUGE COILS FOR LOADING SIDE CIRCUITS

For Single - Spindle Cases Only

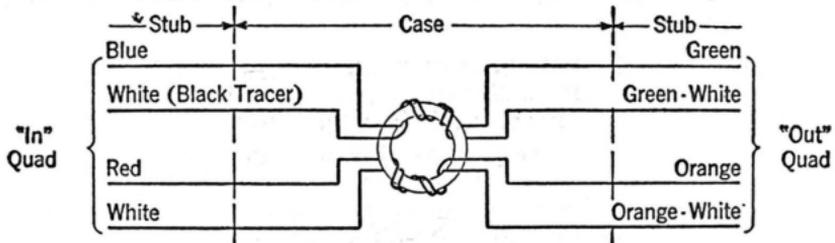


No. 19 Gauge Silk and Cotton Insulated Conductors in Stub Cable.

2.07 **Two-Wire Phantom Coils:** The color code of stubs used for loading phantom circuits only is as indicated in the following diagram.

SMALL GAUGE COILS FOR LOADING PHANTOM CIRCUITS EXCLUSIVELY

For Single - Spindle Cases Only

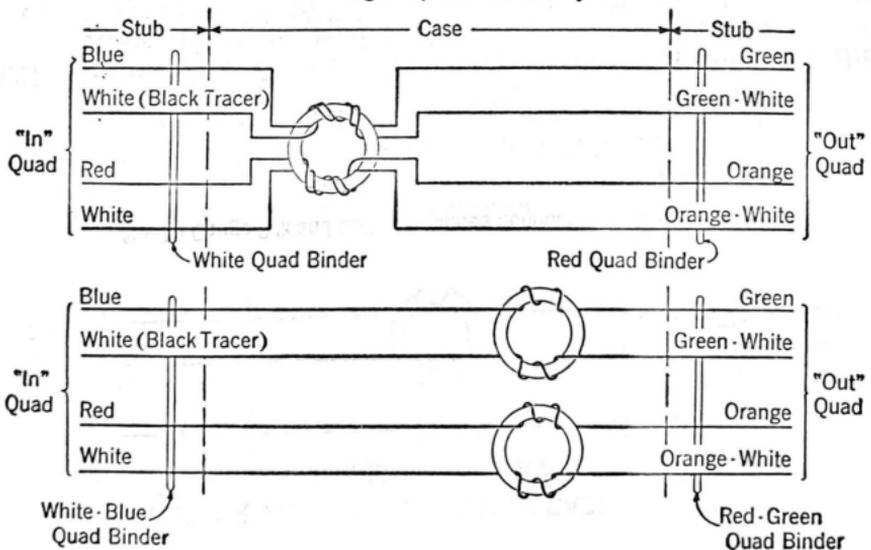


No. 19 Gauge Silk and Cotton Insulated Conductors in Stub Cable.

2.08 **Two-Wire Phantom Coils and Side Circuit Coils:** In cases containing units for loading the phantom circuits of some quads and coils for the side circuits of others, the color code of the stub is as indicated in the sketch.

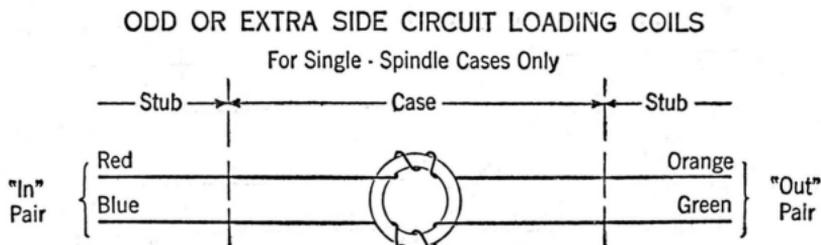
DISSOCIATED PHANTOM AND SIDE CIRCUIT COILS IN SAME CASE

For Single - Spindle Cases Only



Silk and Cotton Insulation used on Conductors in Stub Cable.
No. 19 Gauge Conductors in Stub Cable with Small Gauge Coils.
No. 13 Gauge Conductors in Stub Cable with Large Gauge Coils.

A case containing both side circuit coils and phantom units may contain an odd number of side circuit coils. The color code of the terminals for the odd coil is as shown below.

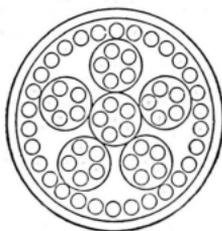


No. 19 Gauge Silk and Cotton Insulated Conductors in Stub Cable.

3. FOUR-WIRE CIRCUIT LOADING UNITS

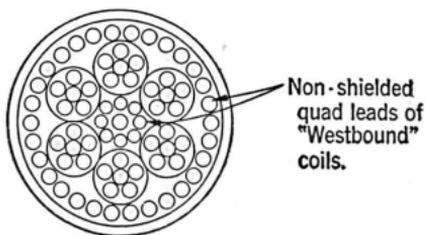
Paper Insulated Stubs

3.01 **Four-Wire Phantom Loading Units:** The quads in the stubs of cases used to load four-wire voice frequency cables are separated into "East" and "West" groups. The groups are shielded by means of metal tapes around the "East" group or groups. In some stubs the terminals of the "East" group are in unit cables, the unit cables being shielded by wrappings of brass tapes. The leads of the "West" group are generally brought out in layer formation around a core of the shielded unit cables of the "East" group as shown below.



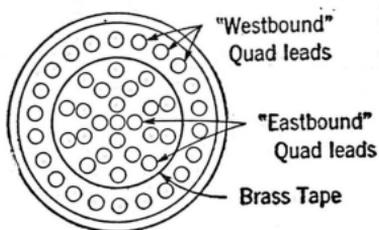
- Represents a quad lead.
- ⊙ Represents a shielded unit cable containing quad leads of "Eastbound" coil group.

3.02 In some stubs several leads of the "West" group are brought out in a non-shielded unit cable. This has been done in order to obtain a good cable layout. The cross-section of such a stub is shown below.



- Represents a quad lead.
- Represents a shielded unit cable containing quad leads of "Eastbound" coil group.

3.03 In the larger cases, the stub is made up as shown in the following diagram. When the case contains an odd number of units, the leads of the odd unit are brought out in the shielded portion of the stub.



- Represents a quad lead.

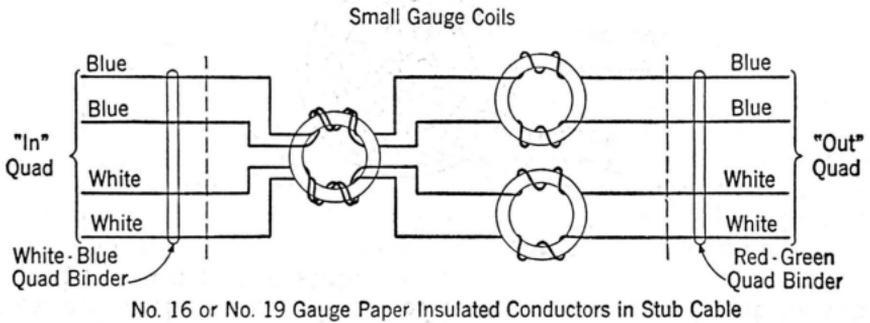
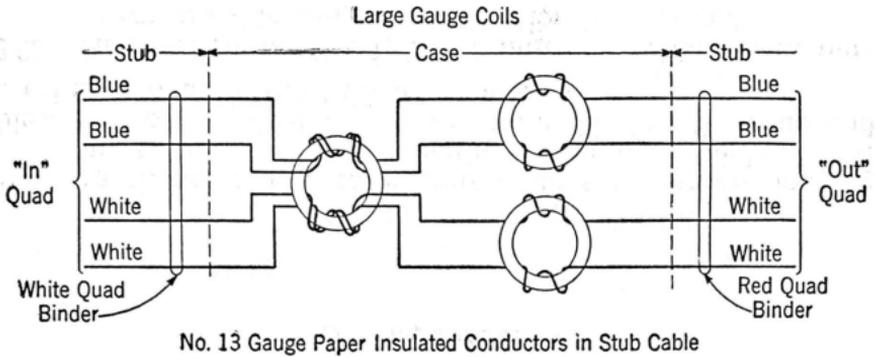
3.04 In single-spindle cases containing six phantom loading units, the leads are brought out in four shielded unit cables. Two of the shielded units contain the "East" group and the other two units the "West" group.

3.05 In cases containing 1, 2 or 3 units for replacement purposes, no shielding or segregation is provided.

3.06 In cases containing phantom units for 13-gauge quads and other phantom units for 16-gauge quads, the color code of the terminals of the units for loading larger and smaller gauge conductors is as shown in the following diagram.

LARGE AND SMALL GAUGE PHANTOM LOADING UNITS IN SAME CASE

For Multi - Spindle Cases Only

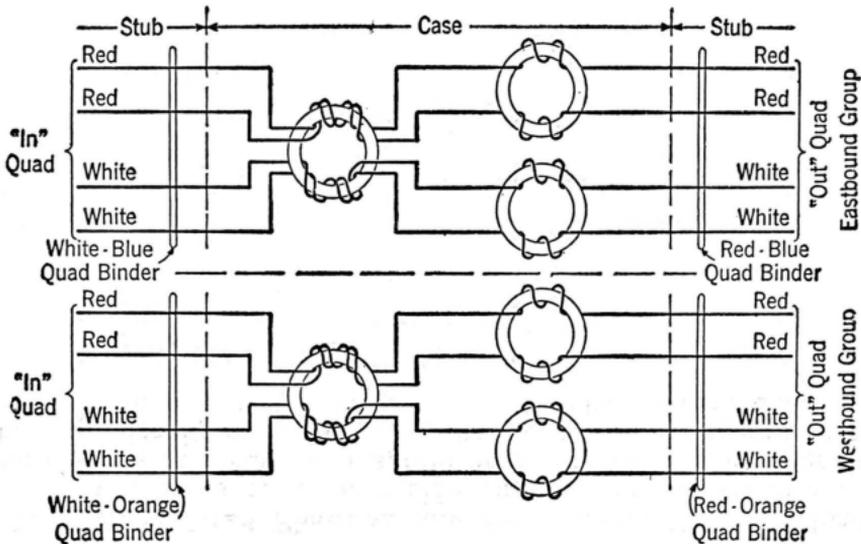


3.07 In cases containing 2 or 3 types of loading units, the color code of the stub is as shown below, to facilitate identification of the units.

PHANTOM LOADING UNITS OF TWO OR THREE TYPES IN THE SAME CASE

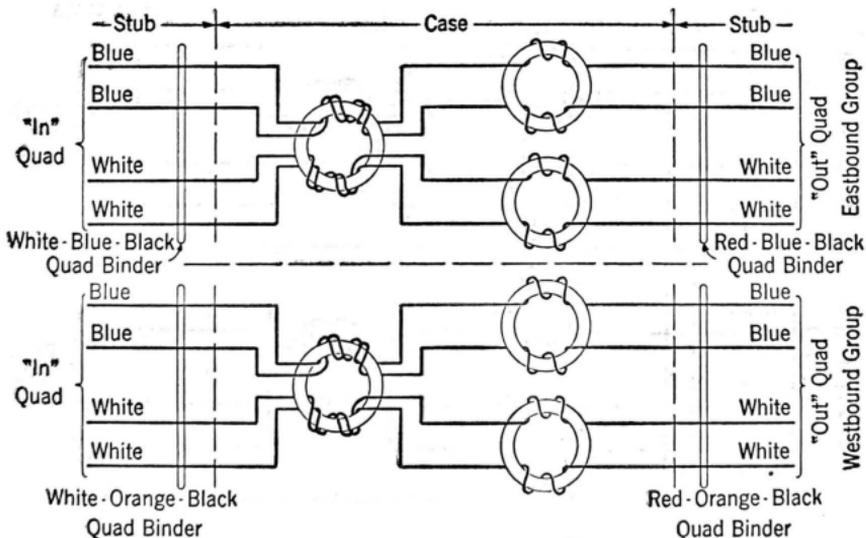
For Single - Spindle and Multi - Spindle Cases.

Type 1



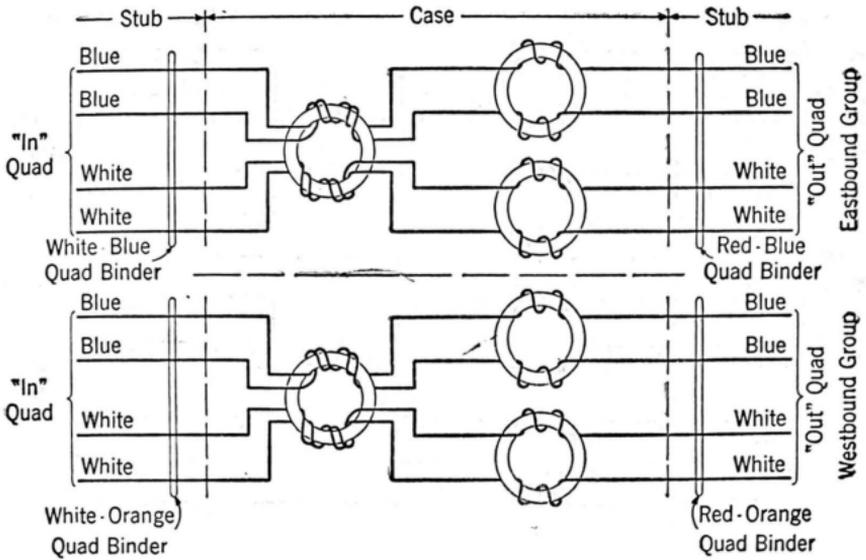
No. 19 or No. 22 Gauge Paper Insulated Conductors in Stub Cable.

Type 2



No. 19 or No. 22 Gauge Paper Insulated Conductors in Stub Cable.

Type 3

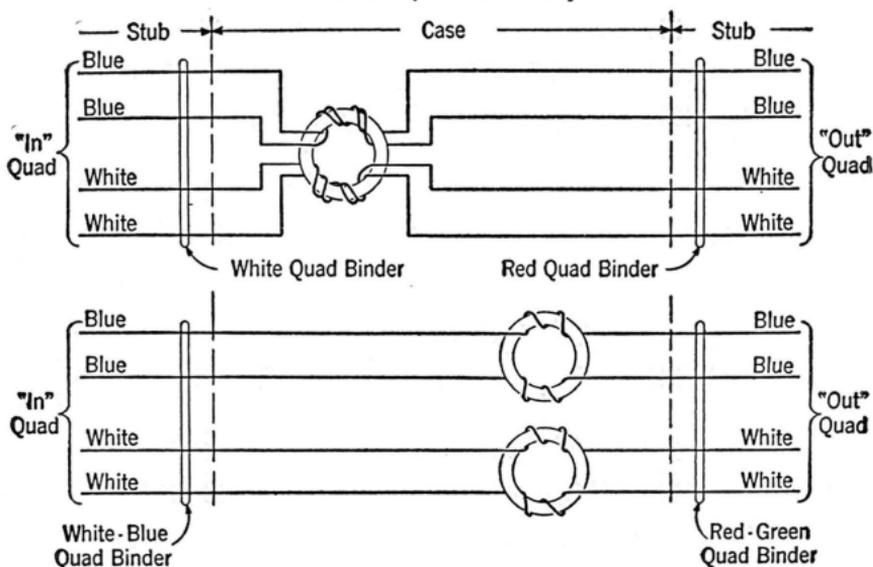


No. 19 or No. 22 Gauge Paper Insulated Conductors in Stub Cable.

3.08 Dissociated Phantom and Side Circuit Coils: In load-
 ing cases containing side circuit coils for loading the
 side circuits of certain quads, and phantom coils for loading the
 phantom circuits of other quads, the color code of the stub cable
 is as shown below. The pairs in these stubs are quaddled.

DISSOCIATED PHANTOM AND SIDE CIRCUIT COILS IN SAME CASE

For Multi - Spindle Cases Only



Paper Insulation used on Conductors in Stub Cable.

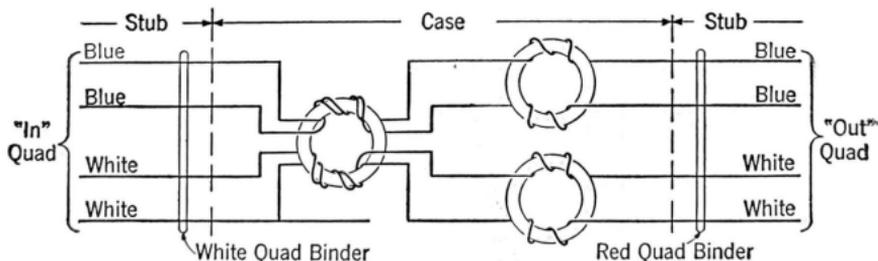
No. 19 Gauge Conductors in Stub Cable with Small Gauge Coils

No. 13 Gauge Conductors in Stub Cable with Large Gauge Coils

3.09 **Replacement Units:** The color code of stubs for 1, 2 or 3 unit replacement cases is as shown in the following diagram.

PHANTOM LOADING UNITS

For Single - Spindle Cases Only



No. 19 Gauge Paper Insulated Conductors in Stub Cable.