

## DEDICATED PLANT— WIRING ACCESS POINTS

### 1. GENERAL

**1.01** Under the dedicated plant plan, a pair is permanently assigned to a specific residence or non-key business address from a central office. Once dedicated, the pair will remain permanently assigned to a customer's location, whether working or idle.

**1.02** This section is reissued to add information on the:

- UP-1248 cable closure
- B and C bond clamps and WE-1 cable tie
- Restoring previously used *IN* cable pair.

**1.03** Subscriber drop, block, or buried service wires should not be terminated in an access point; they should be terminated in distribution terminals.

**1.04** Access points can be distinguished from control points by:

(a) A green B cable tie placed around the *EXPRESS* cable of a strand-mounted access point (Fig. 2). A red B cable tie identifies a control point (Fig. 4).

(b) A marker with a letter *A* on a green background installed on pole- and wall-mounted closures, building cabinets, and buried closures identify access points. Control points are identified by a letter *C* on a red background.

**1.05** Control points are under administrative control of the engineer of outside plant, and all pair connections in control points are made under engineering work orders.

**1.06** Access points have been designed so that Telephone Company personnel entering an access point will find the *OUT* cable pairs placed through the rear holes of the wiring brackets, and the method of connecting the *IN* and *OUT* pairs

the same regardless of the type of closure. This has been done to facilitate good housekeeping. The closure should always look neat after the workman leaves the job.

**1.07** When piecing-out cable pairs, do not change colors. Always use wire of the same color and gauge as the cable pair being pieced-out.

**1.08** A talk pair is provided for calling testboard and other locations which will reduce test pick damage to the conductors.

### 2. DEFINITIONS

**2.01** *Access Points* provide a means of connecting pairs in distribution cables to spare pairs in main or branch feeder cables. Cables entering access points from the central office or a preceding control point are termed *IN* or *EXPRESS* cables (Fig. 1). Cables leaving access points toward subscribers are termed *OUT* cables. Cables which originate in the access point assume the address of the access point, and the cable pair numbers assigned to the pairs in these cables begin at one (1) and continue up to the total number of pairs originating at this location. *EXPRESS* feeder cables leaving access points do not change designations.

**2.02** *Continuous PIC Sheath Count* provides binder group identification by the use of colored wire ties installed at the time of construction of the access point. Table A lists an example of continuous PIC sheath count in an access point with one or more *IN* and *OUT* cables.

**2.03** A workman visiting the following types of access points will find that the *OUT* cable units have been positioned in the wiring brackets and identified by a continuous PIC sheath count. The access point may have a number of pairs connected or no pairs connected.

(a) *Strand-Mounted Access Point*—The 1B1 closure (Fig. 2) is used as a strand-mounted access point.

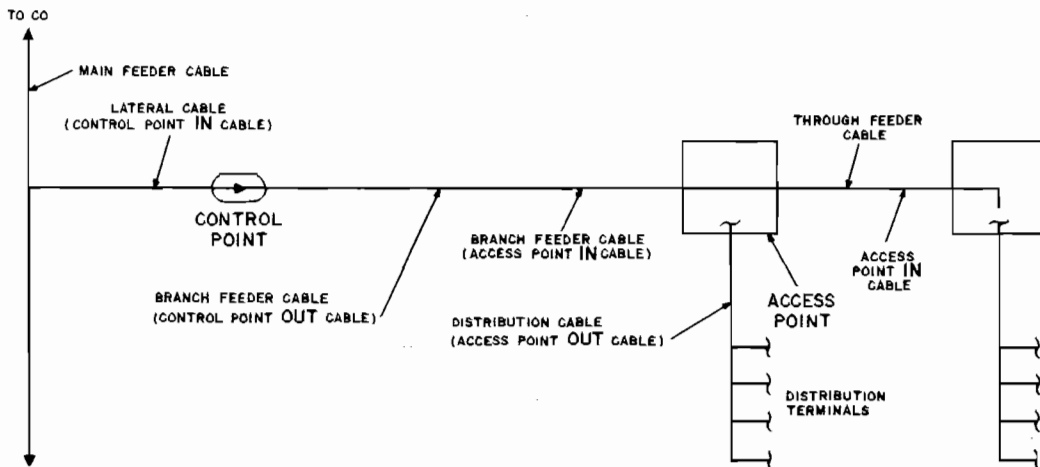


Fig. 1—Simplified Dedicated Plant Distribution System

(b) **Pole- and Wall-Mounted Access Points**—The 5-type closures (Fig. 3) and the 29-type cabinets (Fig. 4) are used to enclose pole- and wall-mounted access points.

(c) **Access Points in Buried Plant**—The L backboard (Fig. 5), the M backboard (Fig. 6), and the N backboard (Fig. 7), used in conjunction with the G, H, UP-1200, and UP-1248 cable closures, respectively, are used for access points in buried plant. The UP-1248 cable closure (Fig. 8) supersedes the UP-1200 cable closure and is used to enclose large PIC cable splices, to house access and control points, and to house CCTV (close circuit television) equipment.

(d) **B or C Bond Clamp (Fig. 9 and 10)**: Used to bond the metallic shield of PIC cables to the ground bracket of the closure (Fig. 11).

(e) **WE-1 Cable Tie (Fig. 11)**: Used to secure the cables to the ground bracket assembly.¶

### 3. IDENTIFYING SPECIAL CIRCUITS

**3.01** When cable pairs are used for special services, it will be necessary to identify the circuits at the time the pairs are connected by wrapping a red warning marker tape around each B wire connector as shown in Fig. 3.

**3.02** When disconnecting the special service pairs, remove the red warning marker tape from the B wire connectors.

### 4. CONNECTING

**4.01** The procedures for connecting the **IN** and **OUT** cable pairs in an access point are the same in each type of closure and are designed to eliminate unnecessary handling of pairs once they are connected, promote good housekeeping, and provide easy identification; therefore, it is important that the procedures outlined in this section be followed.

#### Cable End Location or Locations Fed by Stub Cable

**4.02** Loosen the B cable tie and select the assigned **IN** pair.

**4.03** Cut the assigned **IN** pair as close to the acetate container as possible.

**Note:** If the wrong pair is cut, splice with same color wire and insert each conductor in a B wire connector and press. Replace the pair within its binder group.

**4.04** Pull the assigned **IN** pair from the binder group and place in the **front** wiring bracket

**TABLE A**  
**EXAMPLE OF A CONTINUOUS PIC SHEATH COUNT IN AN ACCESS POINT**

OUT CABLES <sup>1</sup>					IN CABLES <sup>2</sup>				
CABLE NO.	CABLE PIC SHEATH COUNT	BINDER GROUP	CONTS PIC SHEATH COUNT	COLOR OF WIRE ON CONTS GREEN BINDER	CABLE NO.	CABLE PIC SHEATH COUNT	BINDER GROUP	CONTS PIC SHEATH COUNT	COLOR OF WIRE ON CONTS GREEN BINDER
1	1-25	BL-W	1-25	BL-W	1	1-25	BL-W	1-25	BL-W
1	26-50	O-W	26-50	O-W	1	26-50	O-W	26-50	O-W
1	51-75	G-W	51-75	G-W	1	51-75	G-W	51-75	G-W
1	76-100	BR-W	76-100	BR-W	1	76-100	BR-W	76-100	BR-W
2	1-25	BL-W	101-125	S-W	1	101-125	S-W	101-125	S-W
2	26-50	O-W	126-150	BL-R	1	126-150	BL-R	126-150	BL-R
2	51-75	G-W	151-175	O-R	1	151-175	O-R	151-175	O-R
2	76-100	BR-W	176-200	G-R	1	176-200	G-R	176-200	G-R
3	1-25	BL-W	201-225	BR-R	2	1-25	BL-W	201-225	BR-R
3	26-50	O-W	226-250	S-R	2	26-50	O-W	226-250	S-R
4	1-25	BL-W	251-275	BL-BK	2	51-75	G-W	251-275	BL-BK
4	26-50	O-W	276-300	O-BK	2	76-100	BR-W	276-300	O-BK
					2	101-125	S-W	301-325	G-BK
					2	126-150	BL-R	326-350	BR-BK
					2	151-175	O-R	351-375	S-BK
					2	176-200	G-R	376-400	BL-Y

**Notes 1:** *OUT* cable number and pairs are: (1)100-pair, (2)100-pair, (3)50-pair, (4)50-pair.

**2:** *IN* cable number and pairs are: (1)200-pair and (2)200-pair.

hole (Fig. 12) corresponding to the assigned *OUT* cable pair to which it is to be connected. **Do not remove the *OUT* cable pair from the rear hole of the wiring bracket.**

**4.05** Remove the *OUT* cable pair from the single wire tie.

**4.06** Cut the assigned *IN* pair to the same length as the assigned *OUT* pair and connect with a B wire connector. If for any reason the *IN* pair is shorter than the *OUT* pair, piece out the *IN* pair (Part 5). Do not cut the *OUT* pair. Use only a B connector presser or pneumatic presser for crimping the B wire connectors.

**4.07** Tighten the single wire tie on the remaining unconnected pairs of the *OUT* binder groups.

**4.08** Secure the capped spare binder groups to the bottom of the closure by tightening the B cable tie.

#### Loop-Through Locations and Strand-Mounted Closures

**4.09** Select the *IN* cable pair from the preferred count and cut the pair at the butt of the cable **away** from the central office side of the closure.

**4.10** Repeat 4.04 and 4.06 for placing and connecting the assigned *IN* cable pair.

#### 5. PIECING-OUT

##### *OUT* Cable Pair

**5.01** If for any reason the *OUT* cable pair is too short to reach an assigned wiring bracket hole, piece out the conductor as follows. Use wire

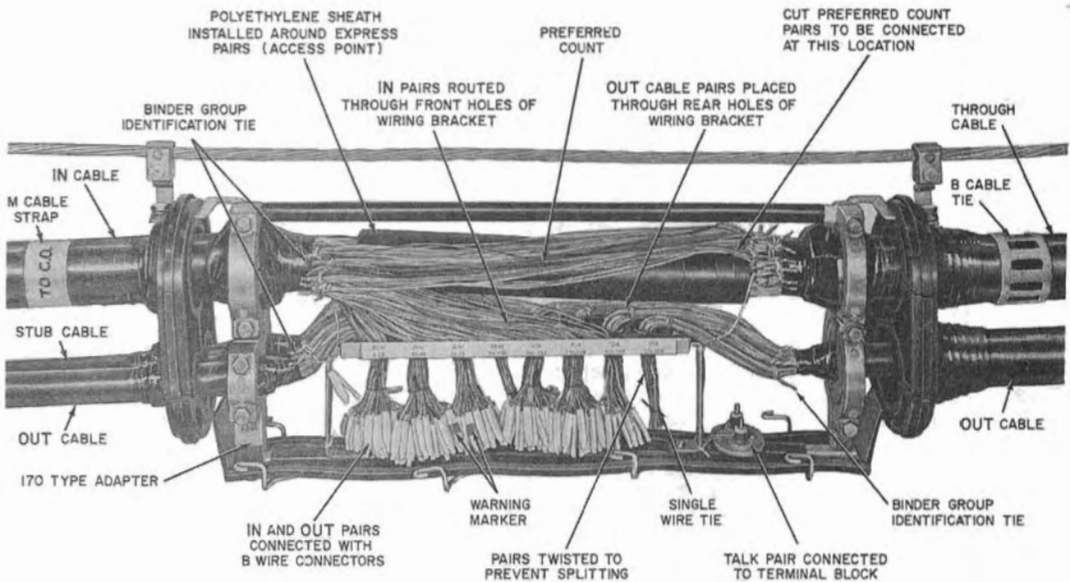


Fig. 2—1B1 Closure

having the same colored insulation and gauge as the cable pair.

- (a) Cut the *OUT* cable pairs even.
- (b) Insert the tip conductor and the like-colored piecing-out wire in a B wire connector and press.
- (c) Insert the ring conductor and the like-colored piecing-out wire in a B wire connector and press.
- (d) Route the *OUT* cable pair through the assigned rear hole of the wiring bracket and apply from four to six tight twists as close to the bottom of the wiring bracket as possible. This prevents pair splitting.
- (e) Cut the piecing-out wire to the same length as the other unconnected pairs of the binder group.

#### *IN* Cable Pair

**5.02** The procedures for piecing-out the *IN* cable pair are identical to the procedures outlined in 5.01, except cross-connecting wire may be used as the piecing-out wire if no wire having the same colored insulation or gauge as the *IN* cable pair is available. ***Never use an odd-colored wire.***

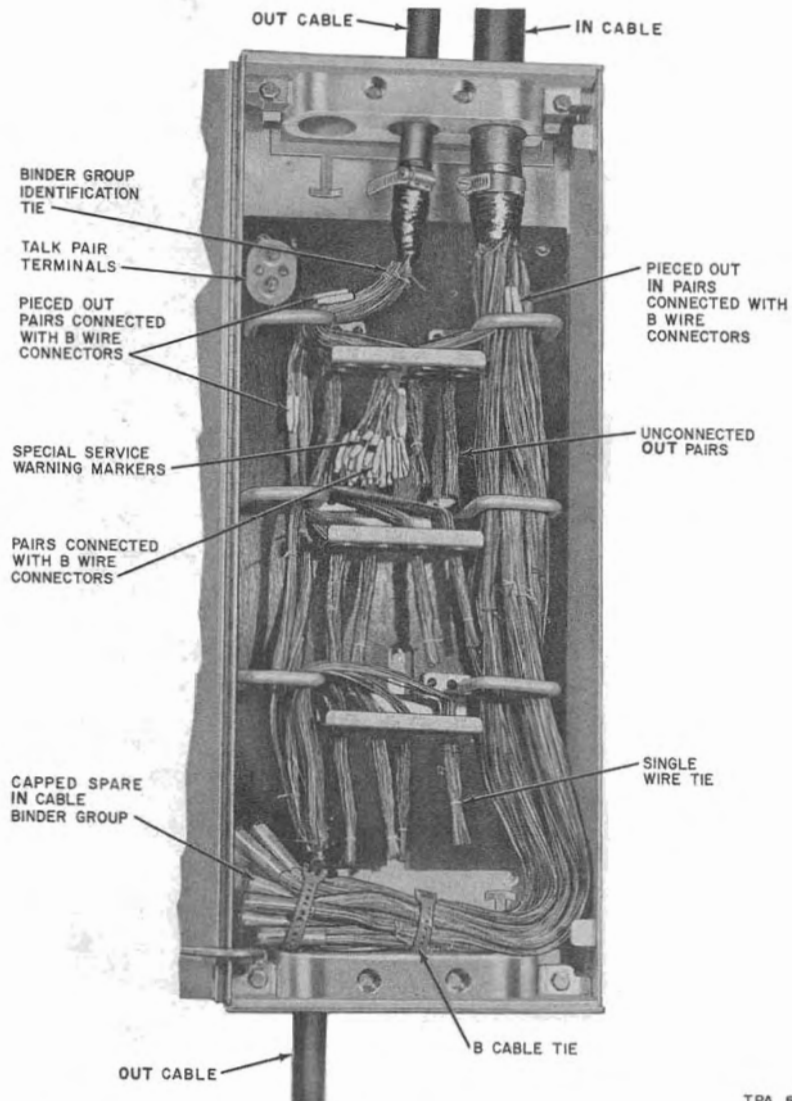
**5.03** Route the pieced-out wire through the distributing rings, binder group identification tie, and the front hole of the wiring bracket corresponding to the assigned *OUT* cable pair.

**5.04** Connect the assigned *IN* cable pair and the *OUT* cable pair using B wire connectors.

#### **PIECING-OUT AND RESTORING PREVIOUSLY USED *IN* CABLE PAIR WITHIN BINDER GROUP FOR FUTURE USE**

**5.05** Remove the disconnected *IN* cable pair from the *front* hole of the wiring bracket.

**5.06** Obtain a length of piecing-out wire having the same colored insulation and gauge as the disconnected *IN* cable pair. ***If no wire with the same colored insulation or gauge as the *IN****



TPA 506028

**Fig. 3—5-Type Closure (Pole Mounted)**

TPA 470373

OUT CABLE

IN CABLE

TALK PAIR  
TERMINALS

OUT CABLE PAIRS ROUTED  
THROUGH REAR HOLES OF  
WIRING BRACKET

IN CABLE PAIRS ROUTED  
THROUGH FRONT HOLES  
OF WIRING BRACKET

IN AND OUT CABLE PAIRS  
CONNECTED WITH  
B WIRE CONNECTORS

CAPPED UNASSIGNED  
IN CABLE BINDER GROUPS

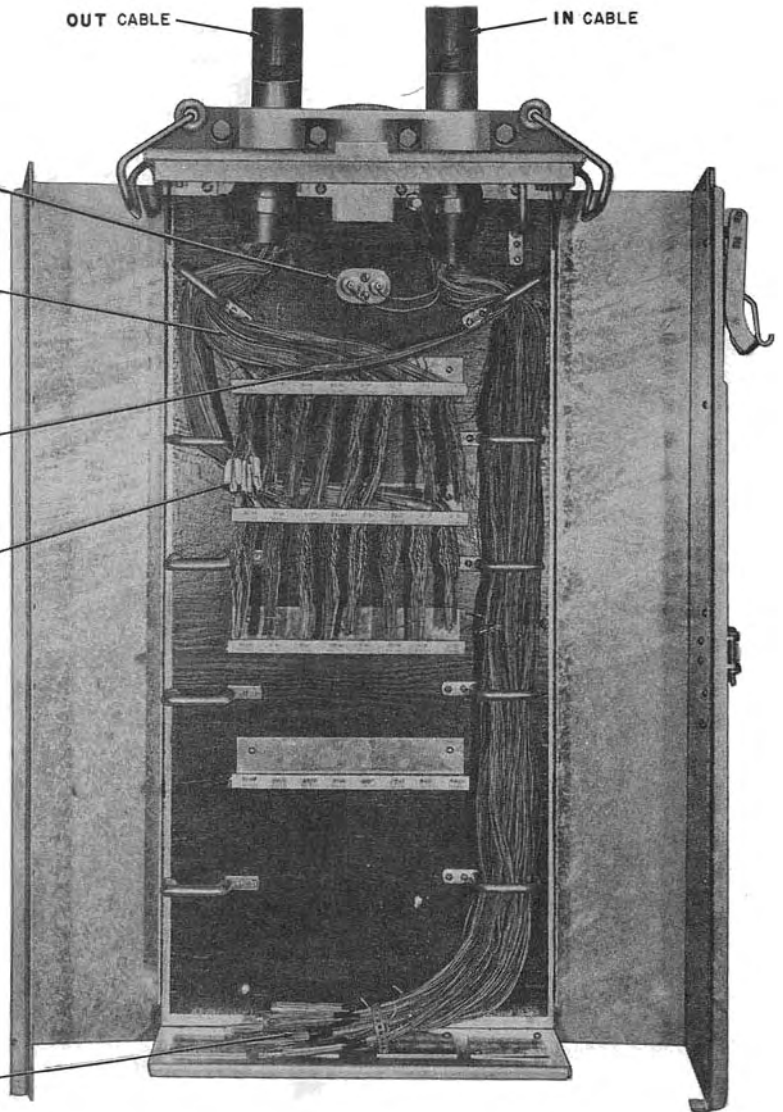


Fig. 4—29-Type Cabinet (Wall Mounted)

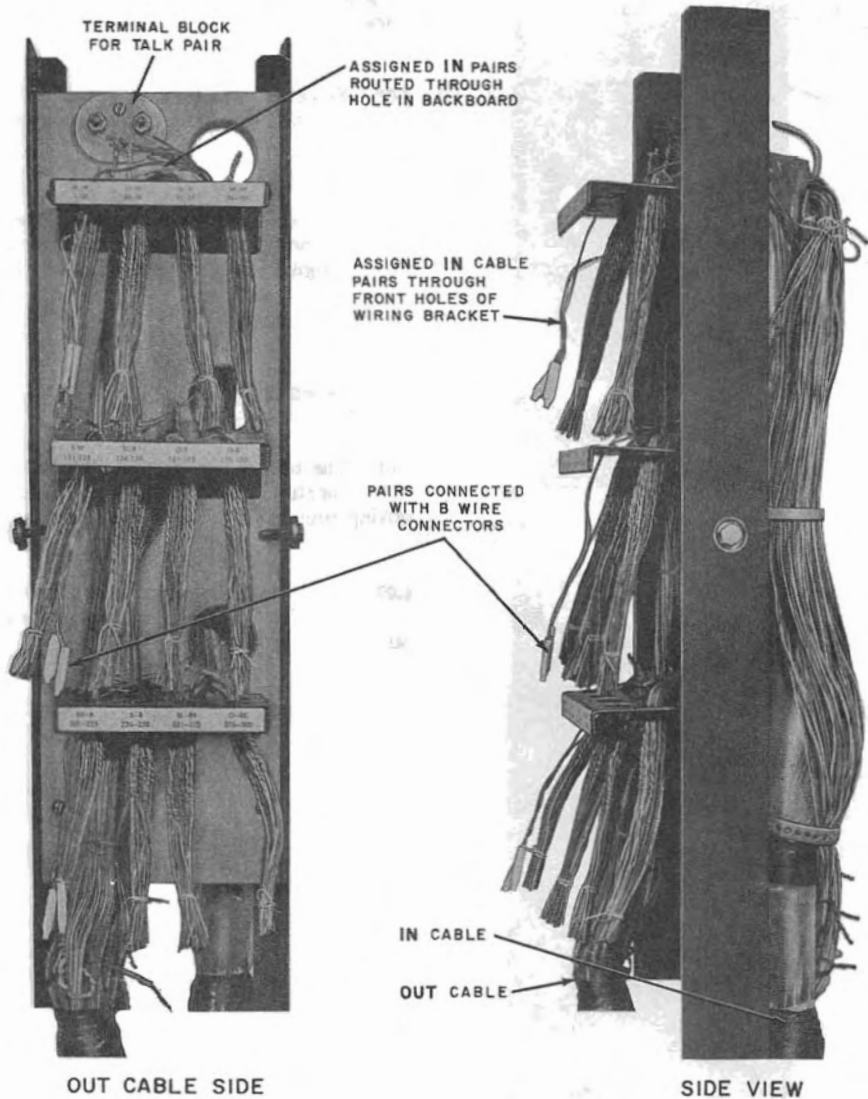


Fig. 5—L-Backboard

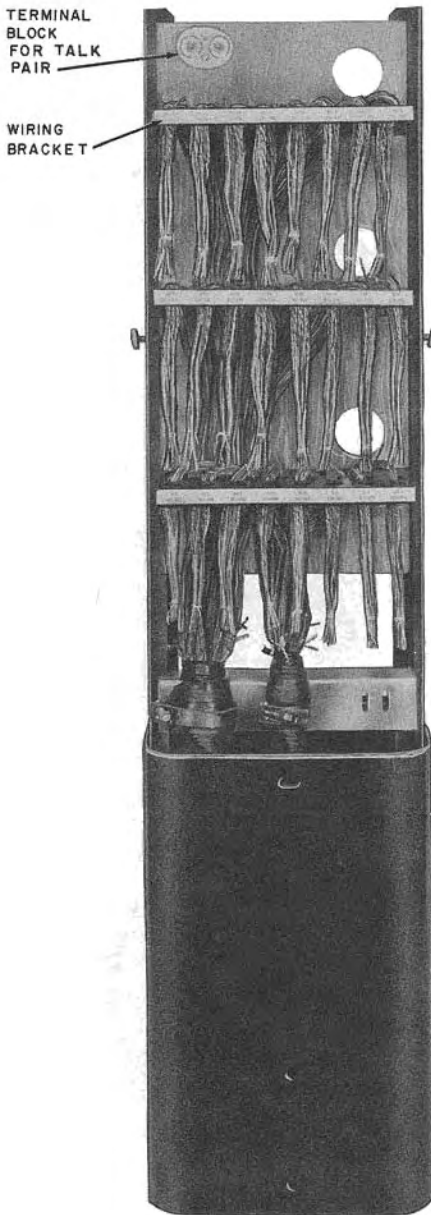


Fig. 6—M-Backboard

*cable pair is available, use cross-connecting wire for piecing out. Do not substitute an odd-colored wire.*

**5.07** Splice the piecing-out wires to the disconnected *IN* cable pair using B wire connectors.

**5.08** Clear ends of pieced-out pair using B wire connectors, then restore the pieced-out pair within its original binder group and secure within the unassigned *IN* cable pairs with a B cable tie.¶

## 6. TALKING CIRCUIT

**6.01** The terminal block, installed at the time of construction, provides the workman with a talking circuit for calling the test desk, etc.

**6.02** Detailed instructions covering the use of specific types of handsets are covered in other sections.



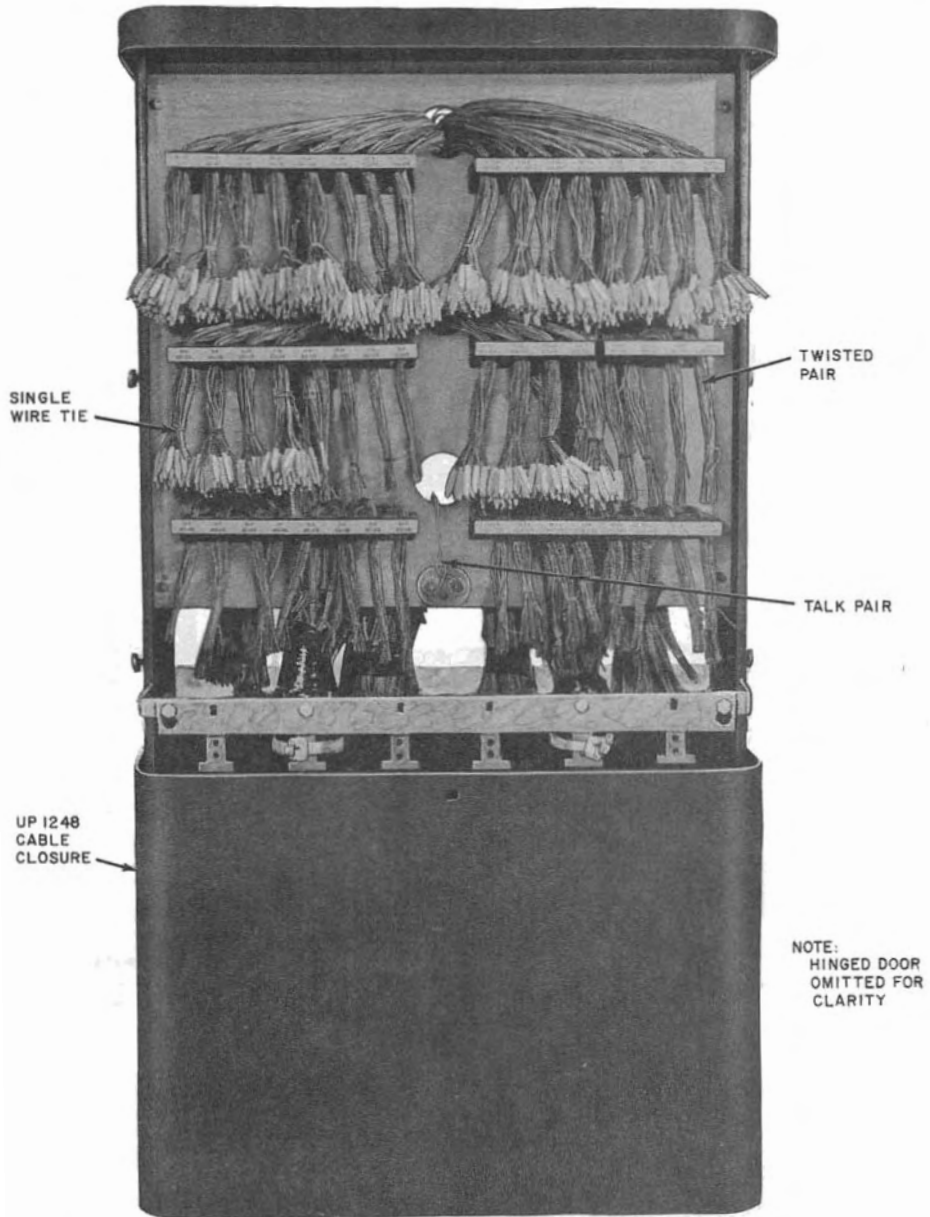


Fig. 7—N-Backboard

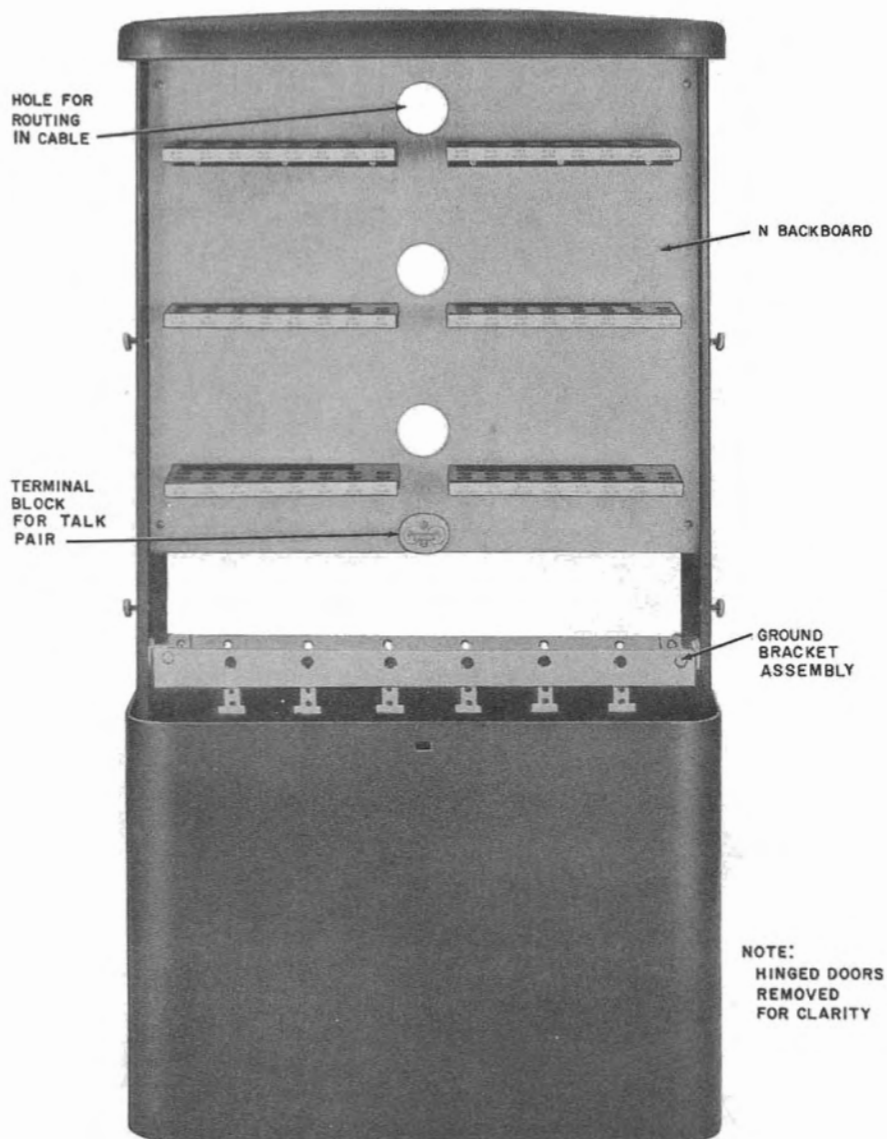
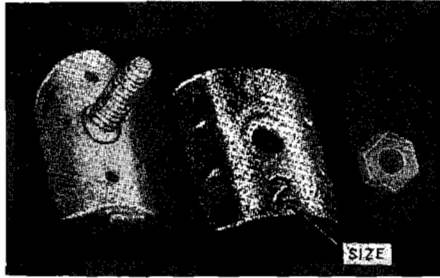
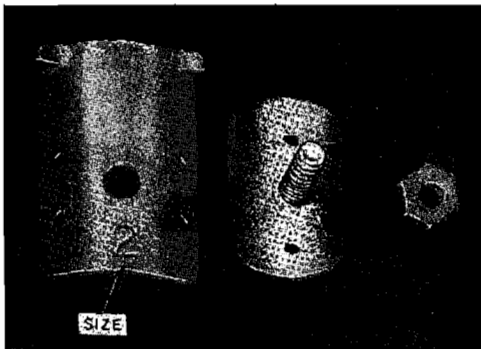


Fig. 8—UP-1248 Cable Closure Equipped With N Backboard



B BOND CLAMP



C BOND CLAMP

Fig. 9—B and C Bond Clamp

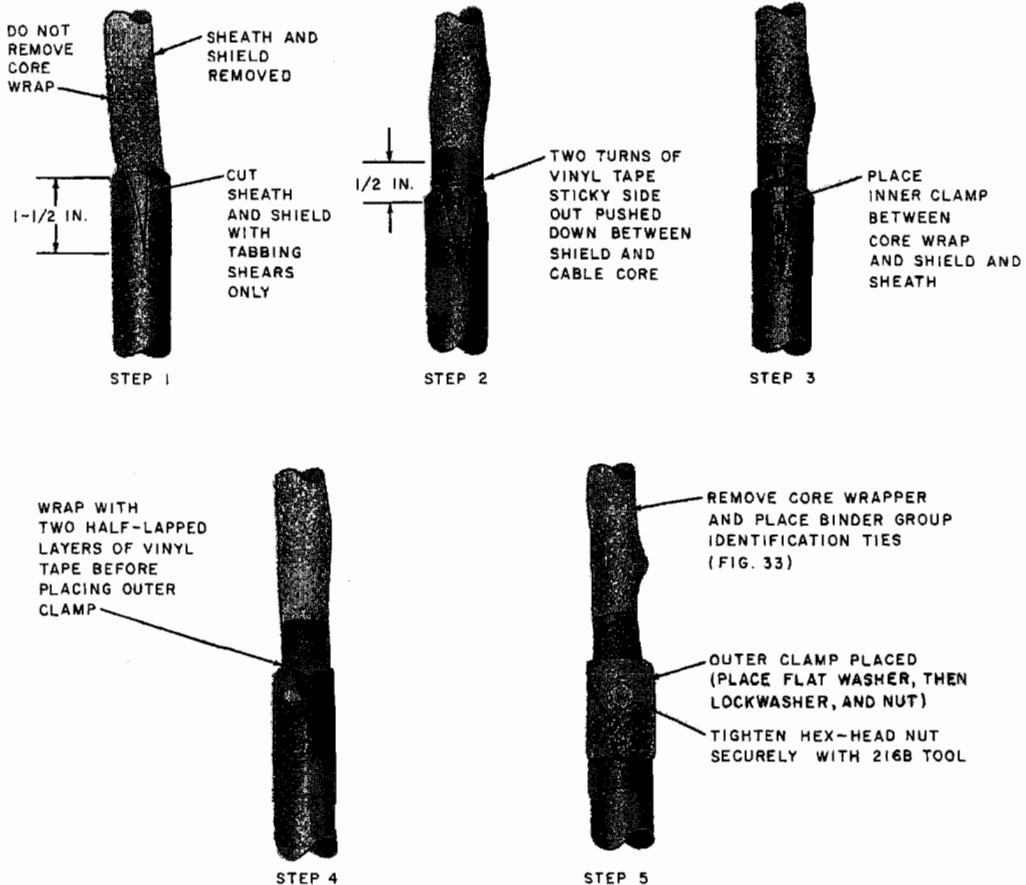


Fig. 10—Placing Bond Clamp

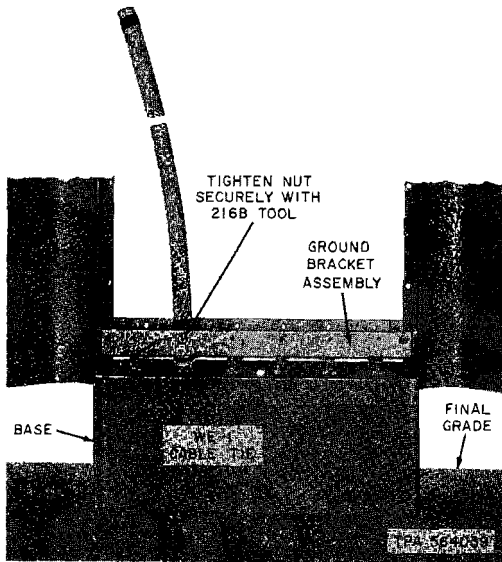


Fig. 11—Cable Installed in Closure

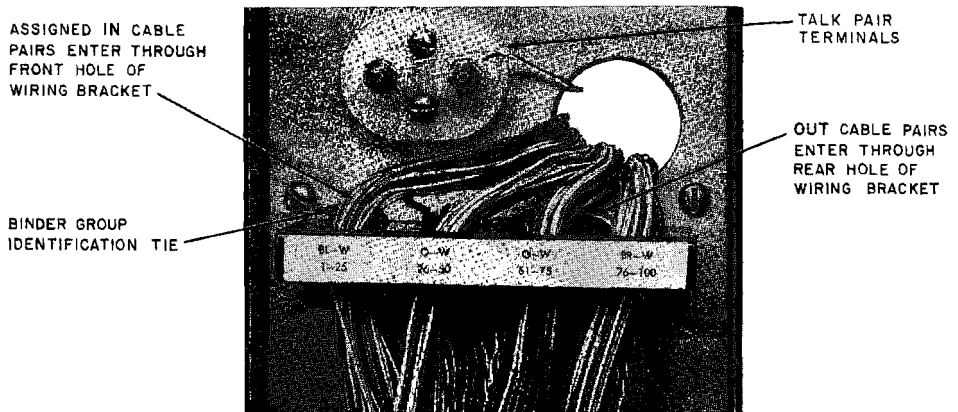


Fig. 12—Assigned *N* Cable Pair Routed Through Front Holes of Wiring Bracket