

## CONNECTING BLOCKS 42A, 44A, AND 47-TYPE IDENTIFICATION, INSTALLATION, AND WIRING

### 1. GENERAL

1.01 This information was formerly contained in Section 461-610-100.

### 2. IDENTIFICATION

2.01 Figures 1 through 4 and Tables A and B provide identification and ordering information for connecting blocks covered in this section.

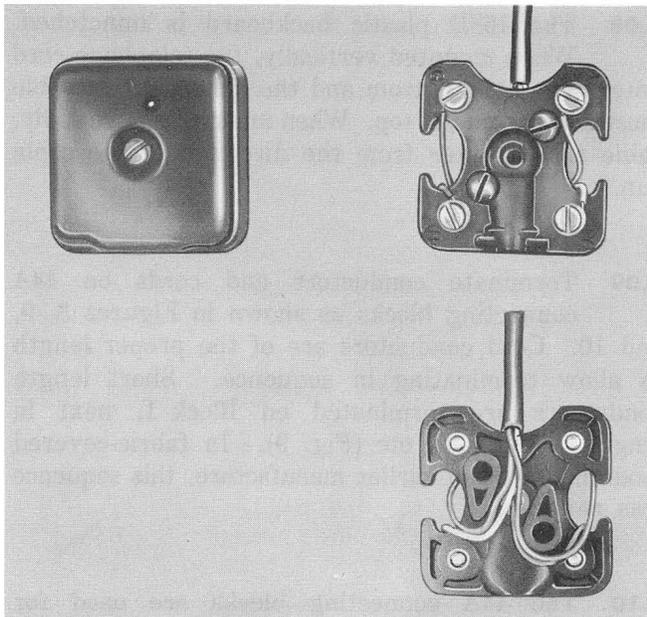


Fig. 1—42A Connecting Block

### 3. INSTALLATION AND WIRING

3.01 The 42A, 44A, and 1044A connecting blocks may be mounted on all types of surfaces. Backboards should be used only when mounting on

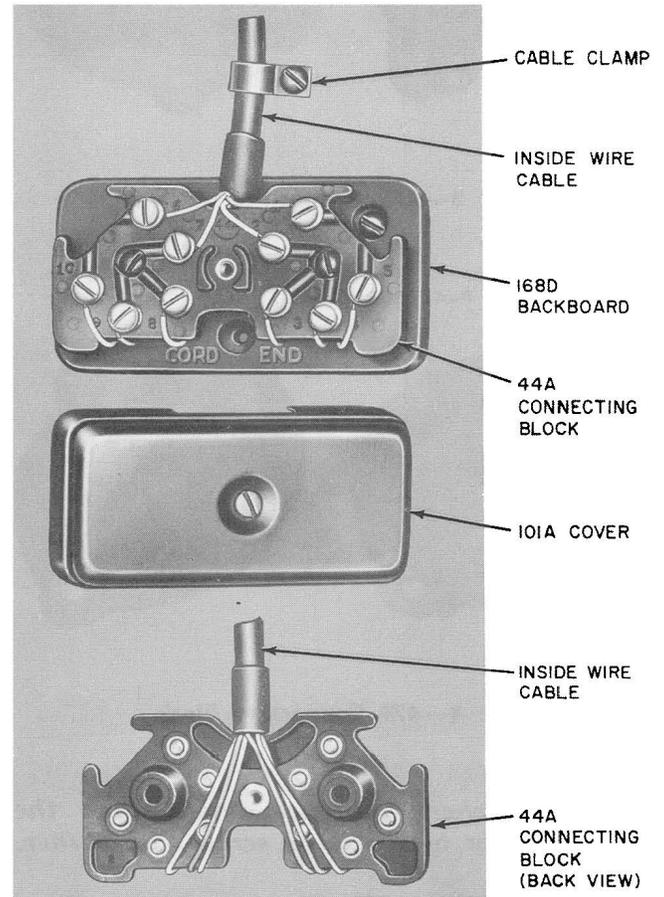


Fig. 2—1044A Connecting Block (44A Connecting Block and 101A Cover) with 168D Backboard

damp walls and when the use of a backboard will without a doubt facilitate installation.

3.02 Termination of cables, wires, and cords is shown in Figure 5 and Tables C, D, and E.

**Caution:** Avoid pulling the conductor against the terminal screw threads, as the

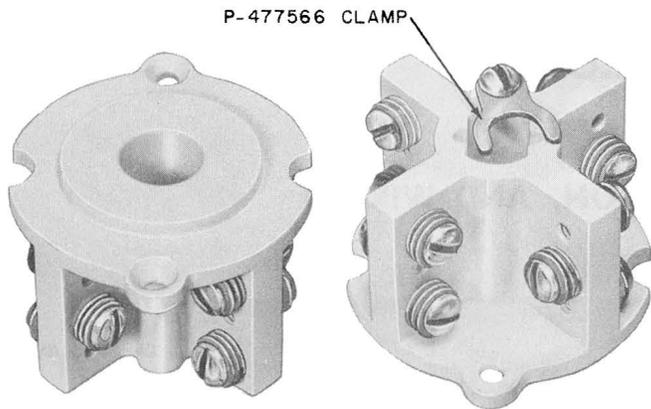


Fig. 3—47E Connecting Block

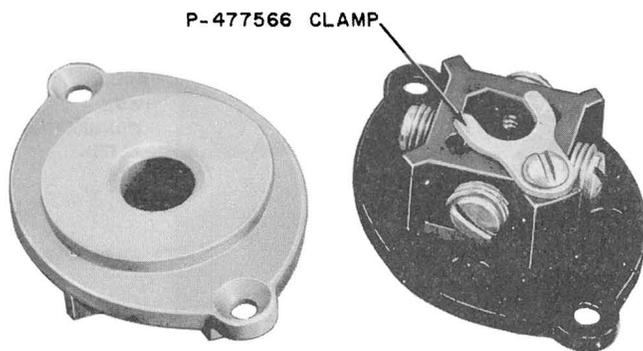


Fig. 4—47F Connecting Block

*screw, when tightened, may pinch the conductor between the screw and washer.*

#### 42A CONNECTING BLOCK (Fig. 1)

**3.03** Install the 42A connecting block as follows:

- (1) Strip jacket back approximately 4 inches from end and separate conductors.
- (2) Place block over conductors and secure with two fasteners.
- (3) Dress conductors and make connections as shown in Table C.

**Note:** To attach the D3BU and D4BP mounting cord to the 42A block, place P-18E457 adapter over the hole in the block into which the cover screw fits (Fig. 6).

#### 44A CONNECTING BLOCK (Fig. 2)

**3.04** When installing 44-type connecting blocks, it may be desirable to use a backboard.

**3.05** For size and type of fasteners used to mount backboards, see Section 463-130-100.

**3.06** Backboards accommodating three and four blocks require four fasteners; backboards accommodating one block require only two fasteners.

**3.07** The 168E and F plastic backboards are notched to permit mounting with both set cord and cable entering from the same end (Fig. 7). Backboards and 44A connecting blocks may be mounted in either a vertical or a horizontal position. When mounted vertically, telephone set cord should always enter from the bottom.

**3.08** The 168D plastic backboard is unnotched. When mounted vertically, the telephone cord enters from the bottom and the inside wiring cable must enter from the top. When mounted horizontally, cable should enter from the direction of the cable run.

**3.09** Terminate conductors and cords on 44A connecting blocks as shown in Figures 8, 9, and 10. Cord conductors are of the proper length to allow terminating in sequence. Short length conductors are terminated on Block 1, next in length on Block 2, etc (Fig. 9). In fabric-covered mounting cords of earlier manufacture, this sequence was reversed.

**3.10** The 44A connecting blocks are used for connecting a maximum of ten conductors as indicated in Table D. At installations requiring a series of 44A connecting blocks, terminate inside wiring cable or connector cable as shown in Table E.

#### 47-TYPE CONNECTING BLOCKS

**3.11** The 47-type connecting block may be flush-mounted in a standard electrical outlet box, on a 63A metal bracket or a KS-19407, List 1 bracket.

**3.12** Install 47-type connecting block in a standard electrical outlet box (Fig. 11 and 12) as follows:

- (1) Mount connecting block on proper 43-type bracket (Table B), using screws furnished with bracket.
- (2) Connect station wire or cable to connecting block as indicated in Table C or D.
- (3) Pass mounting cord through hole in coverplate and connecting block.
- (4) Terminate mounting cord on connecting block.
- (5) Mount block equipped bracket in outlet box using screws furnished with bracket.

- (6) Mount coverplate using screws furnished with coverplate.

**Note:** When using a D3BU or D4BP cord, it is necessary to remove the P-18E457 adapter. Use long-nose and diagonal pliers or equivalent (Fig. 13). After removing adapter, pass cord with stay hook attached through hole of the coverplate and connecting block. The large eye of the stay hook is placed beneath the P-477566 clamp to anchor the mounting cord (Fig. 12).

**3.13** The 63A metal bracket is intended for use as a receptacle for 47-type connecting blocks

**TABLE A**  
**IDENTIFICATION AND ORDERING GUIDE**  
**CONNECTING BLOCKS**  
**42A, 44A, 1044A, AND 47-TYPE**

BLOCK, CONNECTING	NUMBER OF CONDUCTORS	TYPE MOUNTING	FURNISHED WITH	COLOR	DIMENSIONS (APPROX. INCHES)		REMARKS
					DEPTH	DIAMETER OF FRONT BOSS	
42A*	4	Non- flush	Cover	Light Olive Gray (-49) Ivory (-50)			
44A*	10						
1044A*	10		Cover	Light Olive Gray (-49) Ivory (-50)			
47C†	12	Flush		Light Olive Gray (-49)	2	1 1/4	Replaced by 47E
47D†	4			Ivory (-50)	1 3/16		Replaced by 47F
47E*	12				1 3/8		
47F‡	4			Brown (-54)	7/8		

\* Early production equipped with 6-32 size terminal screw; later production will be equipped with 6-40 size terminal screw.

† Equipped with 6-32 size terminal screw.

‡ Equipped with 6-40 size terminal screw.

TABLE B

## ASSOCIATED APPARATUS

FOR 42A, 44A, 1044A, AND 47-TYPE CONNECTING BLOCKS

(ORDER SEPARATELY IF REQUIRED)

CONNECTING BLOCK	NONFLUSH MOUNTING			FLUSH MOUNTING				
	BACK-BOARD	COVER	COLOR	IN OUTLET BOX		ON WALL STUD	IN COMPLETED WALL	FACE-PLATE*
				BRACKET	COVER PLATE			
42A	168A (MD) or 168D	Furnished	Light Olive Gray (-49) Ivory (-50)					
1044A		101A						
44A								
Two 44A blocks	168B (MD) or 168E	101C						
Three 44A blocks								
Four 44A blocks	168C (MD) or 168F	101D						
Five 44A blocks			Two 168B (MD) or two 168E	Two 101C				
47C				43A (MD)	P-88C949 (Light Olive Gray) P-88C950 (Ivory) P-88C954 (Brown)	63A (Fig. 14)	KS-19407 List 1 (Fig. 16)	16A
47D				or				
47E				43B				
47F				43B				

\* Furnished in the following colors: Light Olive Gray (-49), Ivory (-50), and Brown (-54). Furnished with ring retainer and mounting screws.

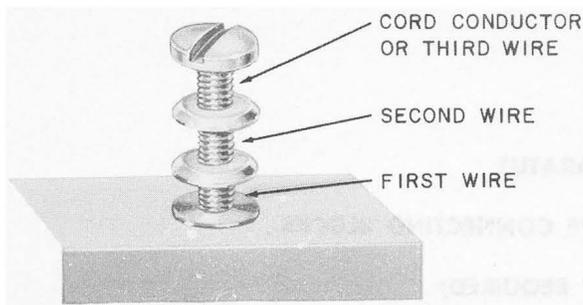


Fig. 5—Connecting Blocks, Terminations

**TABLE C**  
**STATION WIRE CONNECTIONS**

STATION WIRE		CONN BLOCK TERM. DESIG
TYPE	COLOR CONDUCTOR	42A, 47B* (MD), 47D* AND 47F*
Pair	Red Green	R G
Triple	Red Green Yellow	R G Y
Quad	Red Green Yellow Black	R G Y B

\* When terminating more than four conductors, use a 47C or 47E connecting block.

(Fig. 14) and is mounted on the wall stud when homes are prewired.

**3.14** Install 47-type connecting block on 63A bracket (Fig. 15) as follows:

- (1) Mount ring retainer on 63A bracket using screws furnished with faceplate.
- (2) Connect station wire or cable to connecting block as indicated in Table C or D.

**TABLE D**  
**CABLE CONNECTIONS FOR 44A, 47C,  
AND 47E CONNECTING BLOCKS**

INSIDE WIRING CABLE CONDUCTOR COLOR	CONNECTING BLOCK TERMINAL DESIGNATIONS	
	44A	47C OR 47E
BLUE-WHITE WHITE-BLUE ORANGE-WHITE WHITE-ORANGE	1 2 4 5	1 2 3 4
GREEN-WHITE WHITE-GREEN BROWN-WHITE WHITE-BROWN	6 7 9 10	5 6 7 8
SLATE-WHITE WHITE-SLATE BLUE-RED RED-BLUE	3 8	9 10 11 12

\* For E wiring cable, see section on selection of wire and cable.

- (3) Pass mounting cord through hole in 16-type faceplate and connecting block.
- (4) Terminate mounting cord on connecting block. (See note in 3.12.)
- (5) Mount connecting block on ring retainer using screws furnished with faceplate.
- (6) Mount 16-type faceplate on ring retainer. Mounting screws are furnished with faceplate.

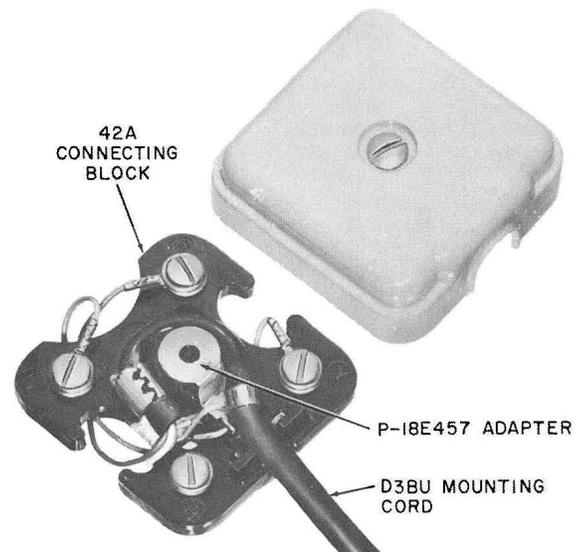
**3.15** The KS-19407, List 1 bracket (Fig. 16) can be used for wall mounting 47-type connecting blocks where the wall material has been applied to the studs. The bracket can be used on wall material up to 1-1/8 inches thick. For thin wall construction, it may be necessary to remove the breakoff portions of the bracket.

**3.16** Install KS-19407, List 1 bracket as follows:

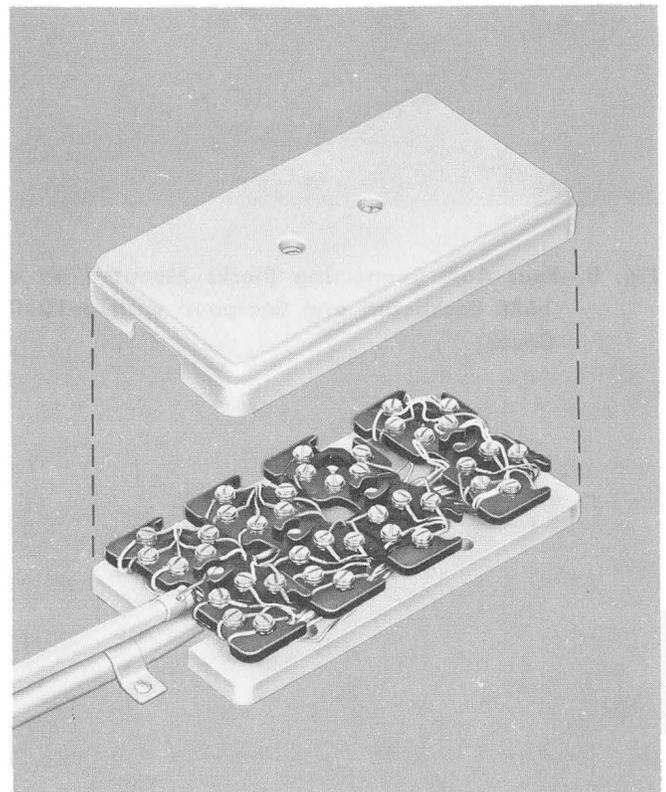
- (1) Drill a 2-1/4 inch hole in wall surface.

**TABLE E**  
**CABLE TERMINATIONS**

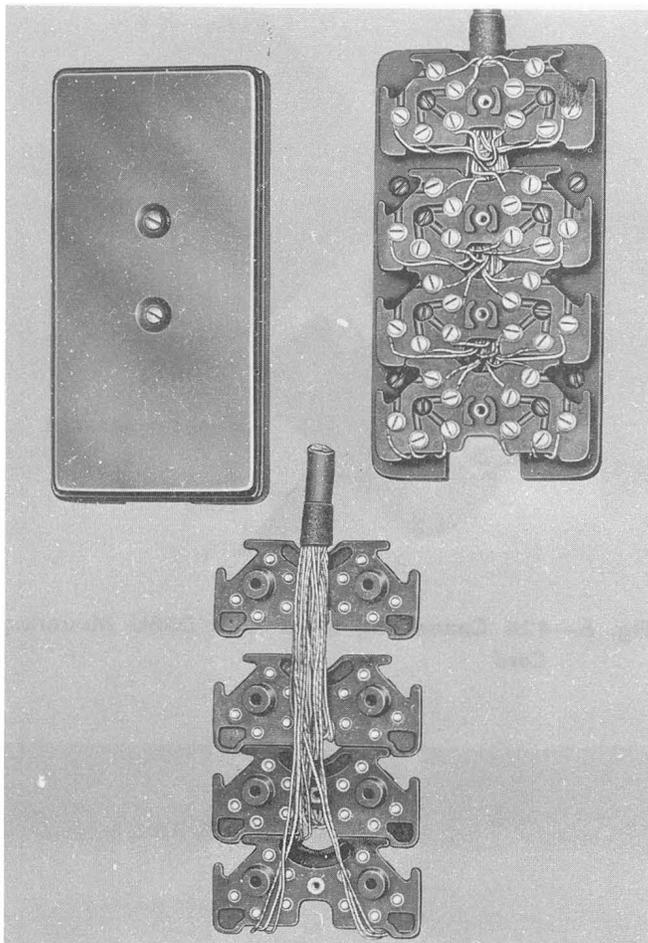
COLOR	BLOCK NO.	TERMINAL
BL-W	1	1
W-BL		2
O-W		4
W-O		5
G-W		6
W-G		7
BR-W		9
W-BR		10
S-W		3
W-S		8
BL-R	2	1
R-BL		2
O-R		4
R-O		5
G-R		6
R-G		7
BR-R		9
R-BR		10
S-R		3
R-S		8
BL-BK	3	1
BK-BL		2
O-BK		4
BK-O		5
G-BK		6
BK-G		7
BR-BK		9
BK-BR		10
S-BK		3
BK-S		8
BL-Y	4	1
Y-BL		2
O-Y		4
Y-O		5
G-Y		6
Y-G		7
BR-Y		9
Y-BR		10
S-Y		3
Y-S		8
BL-V	5	1
V-BL		2
O-V		4
V-O		5
G-V		6
V-G		7
BR-V		9
V-BR		10
S-V		3
V-S		8



**Fig. 6—42A Connecting Block with D3BU Mounting Cord**



**Fig. 7—Four 42A Connecting Blocks Mounted on 168F Backboard with Cable and Cord Entering Same End**



**Fig. 8—Four 44A Connecting Blocks Mounted on a 168F Backboard and Equipped with a 101D Cover**

(2) Loosen inner clamps. Insert clamps and bracket into hole until outer flange bears against wall surface.

(3) Realign inner clamps and tighten screws until clamps are tight against inner surface of wall.

**3.17** Install 47-type connecting block on KS-19407, List 1 bracket as follows:

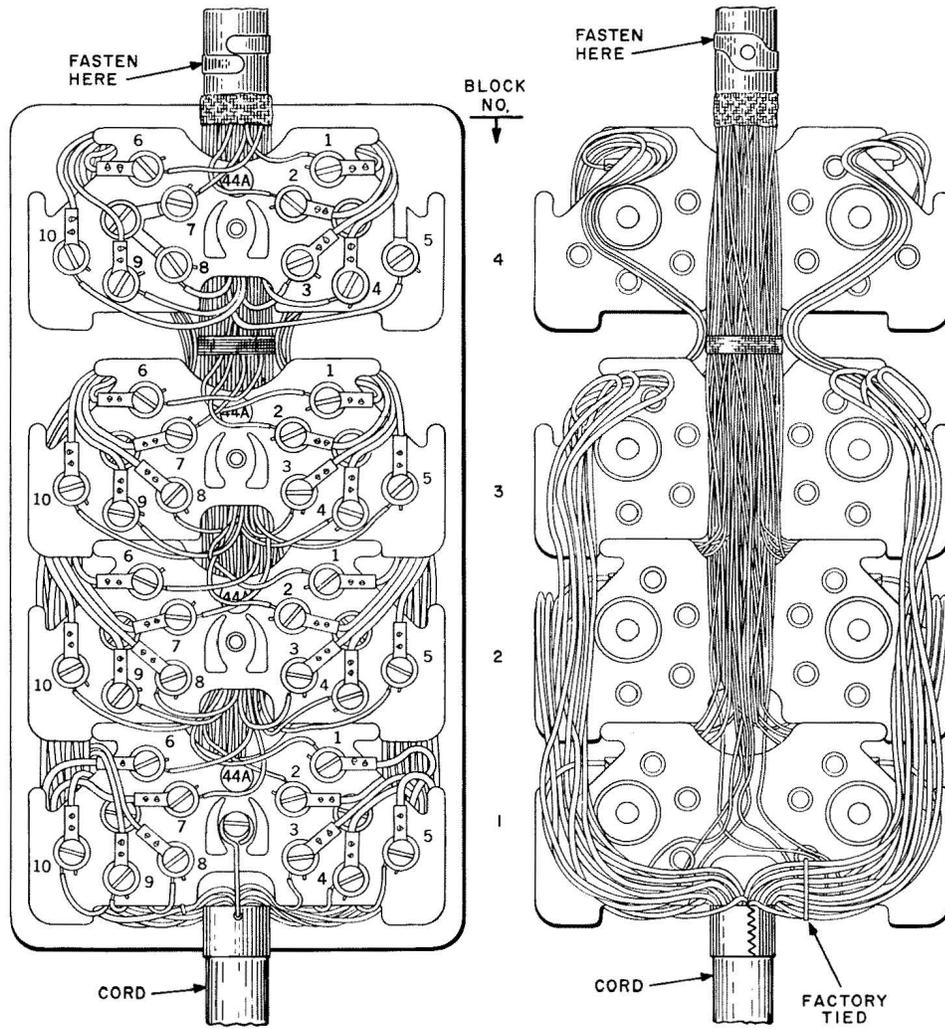
(1) Connect station wire or cable to connecting block as indicated in Table C or D.

(2) Pass mounting cord through hole in 16-type faceplate and connecting block.

(3) Terminate mounting cord on connecting block. (See note in 3.12.)

(4) Mount connecting block on bracket using screws furnished with faceplate.

(5) Mount 16-type faceplate on bracket using screws furnished with faceplate.



**Fig. 9—Arrangement of Four 44A Connecting Blocks Used with 500 Series Key Telephone Sets Equipped with Vinyl-Jacketed Mounting Cord**

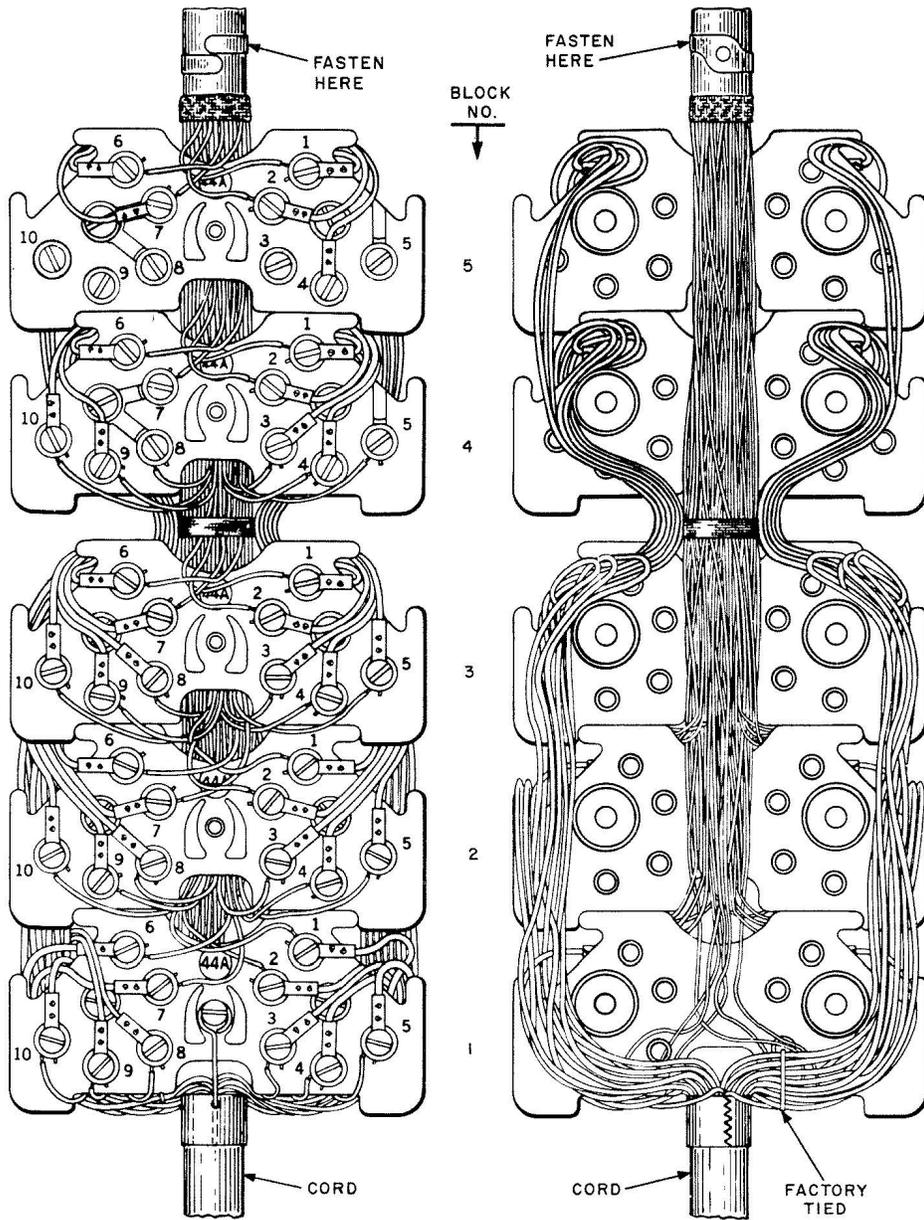


Fig. 10—Arrangement of Five 44A Connecting Blocks Used with 565 Key Telephone Sets for 3A Speakerphone System

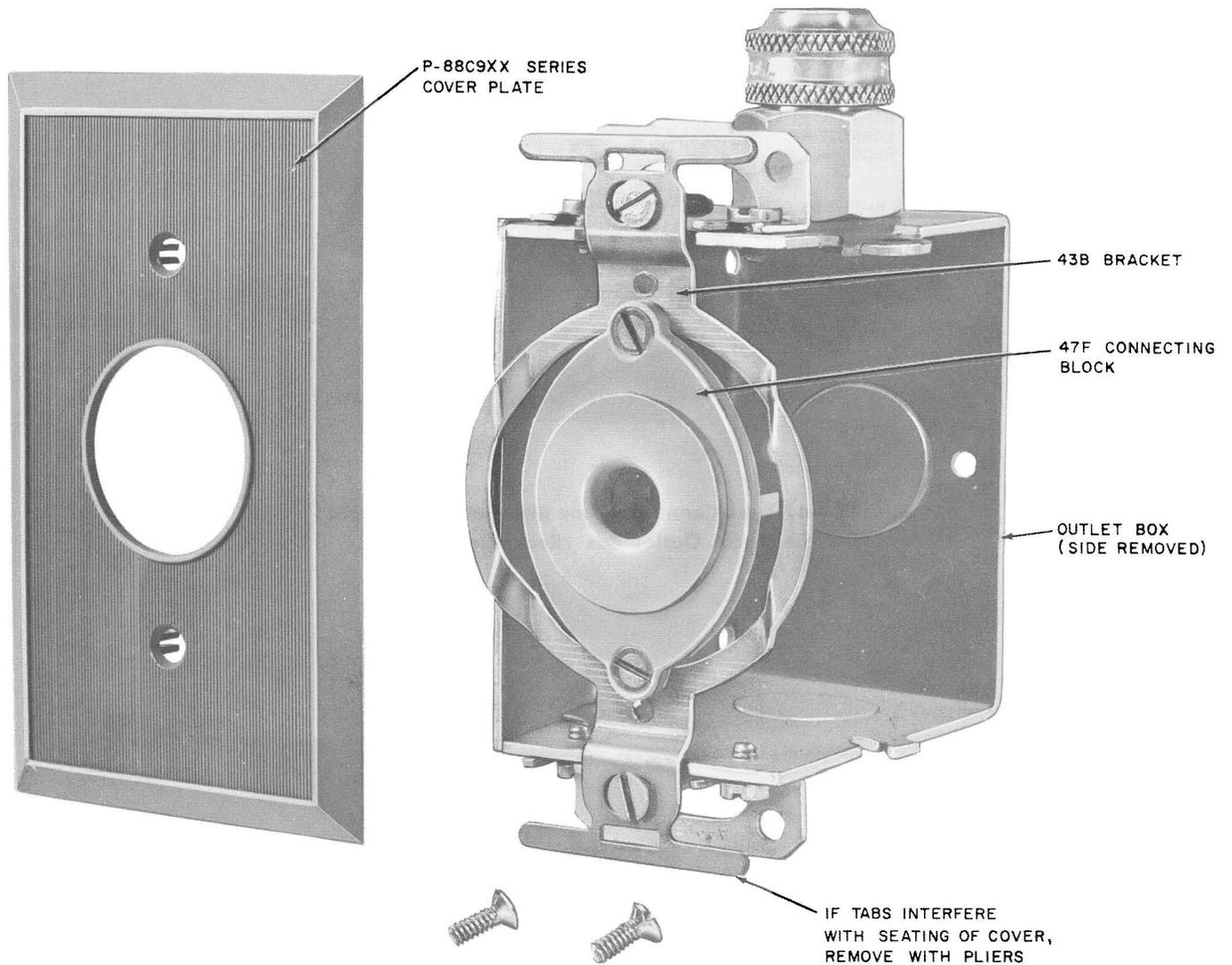


Fig. 11—47-Type Connecting Block Mounted in Standard Electrical Outlet Box (Front View)

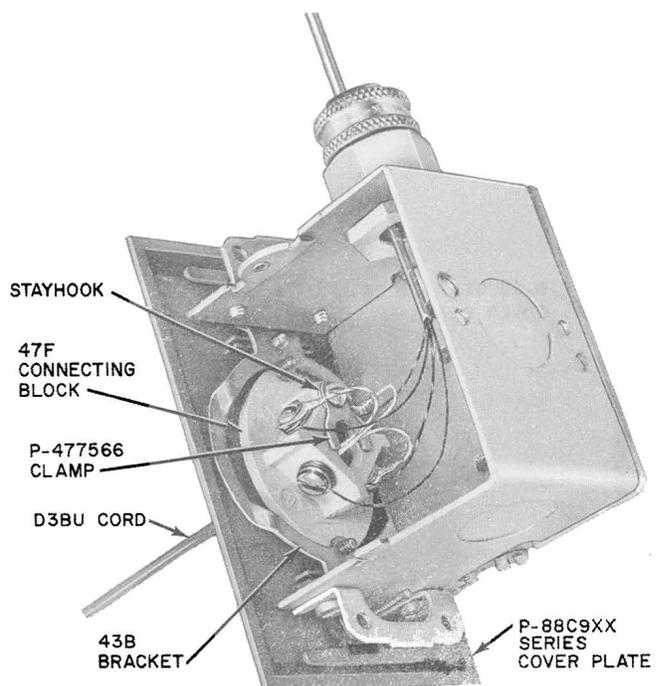


Fig. 12—47-Type Connecting Box Mounted in Standard Electrical Outlet Box (Rear View)

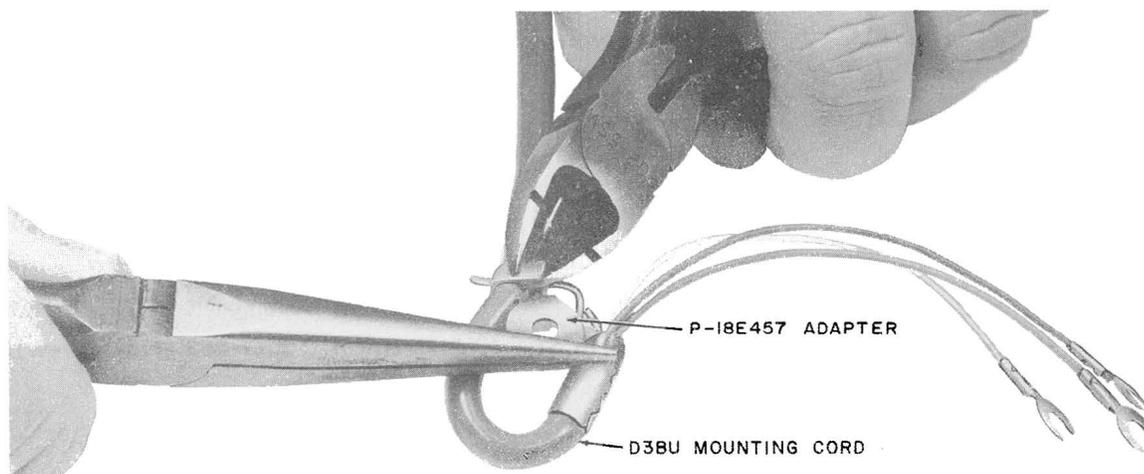
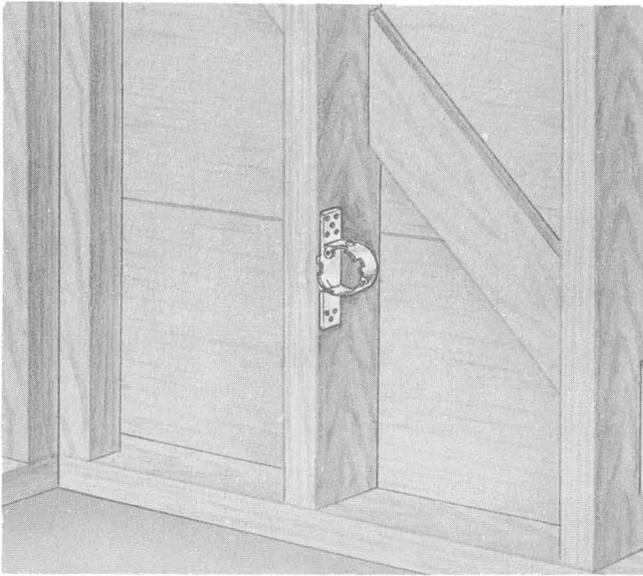
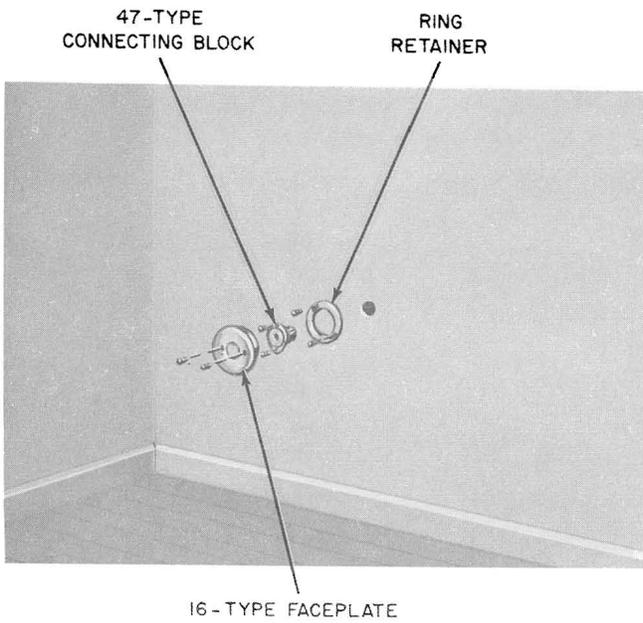


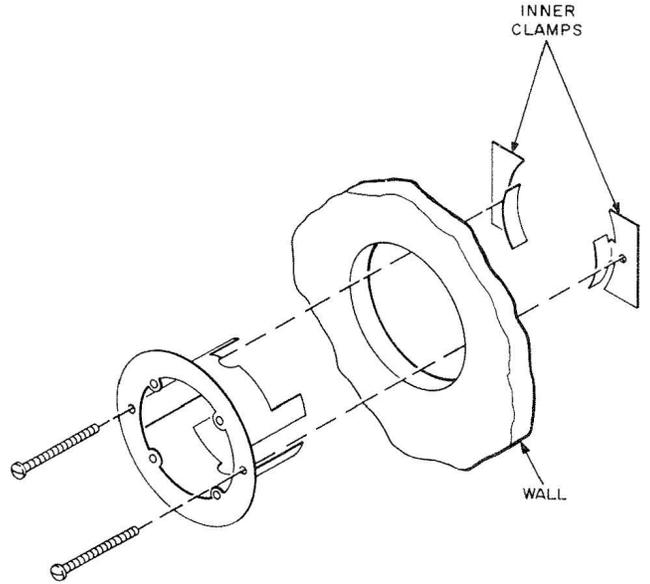
Fig. 13—Removing Adapter from D3BU or D4BP Mounting Cord



**Fig. 14—Stud-Mounted 63A Bracket**



**Fig. 15—Faceplate, Connecting Block, and Ring Retainer Associated with 63A Bracket**



**Fig. 16—KS-19407, L1 Bracket**