

CONNECTING BLOCKS

42A, 44A, AND 47-TYPE

IDENTIFICATION, INSTALLATION, AND WIRING

1. GENERAL

1.01 This section provides information on identification, installation, and wiring of 42A, 44A, and 47-type connecting blocks.

1.02 This section is reissued to:

- Update section to show new apparatus
- Add information on conversion of the 42A connecting block for modular installation.

Since this reissue is a general revision, arrows ordinarily used to indicate changes have been omitted.

2. IDENTIFICATION

2.01 Identification and ordering information for connecting blocks is covered in this section in Fig. 1 through 4 and Tables A and B.

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 damp walls and when the use of a backboard will facilitate installation.

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

Caution: *Avoid pulling the conductor against the terminal screw threads, as the screw, when tightened, may pinch the conductor between the screw and washer.*

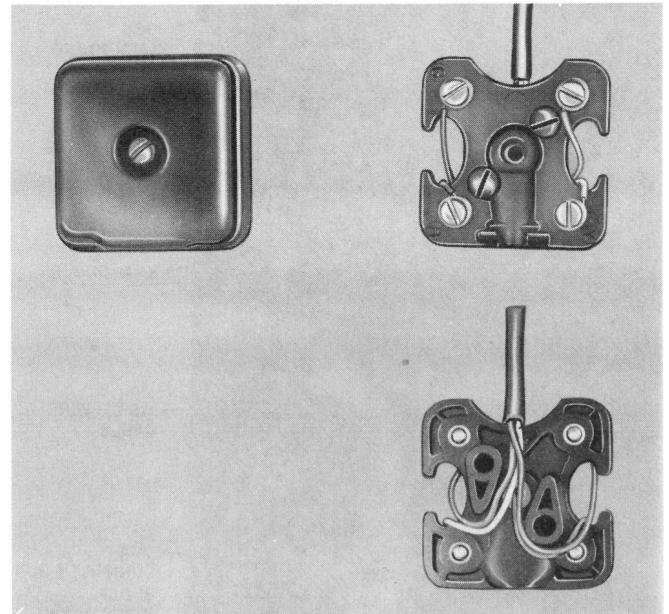


Fig. 1—42A Connecting Block

A. 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 and Fig. 1.

3.04 To attach the D3BU and D4BP mounting cord to the 42A block, make a slight bend in the flat eyelet stay band in the direction of the cord conductors. Place the hole in the stay band

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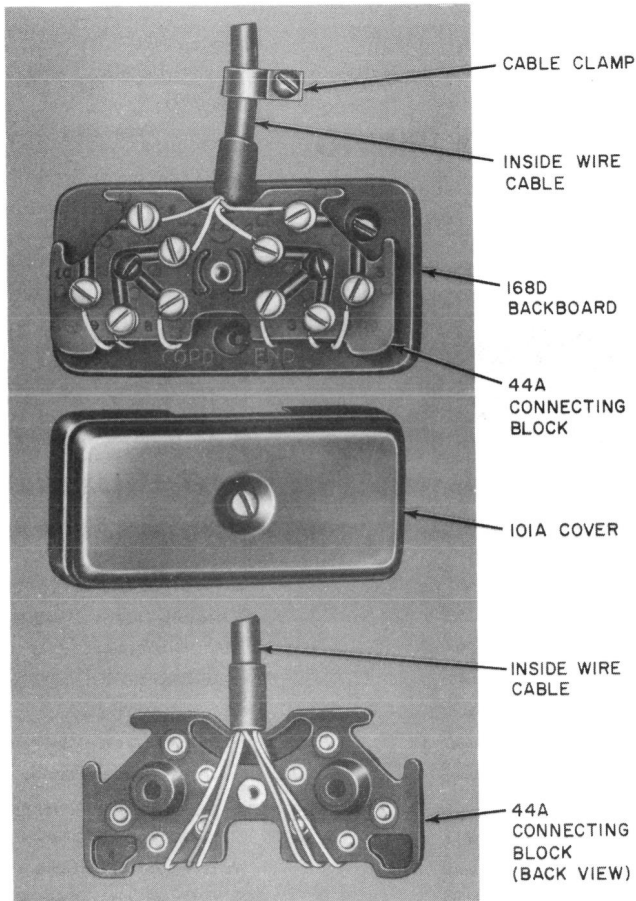


Fig. 2—1044A Connecting Block (44A Connecting Block and 101A Cover) With 168D Backboard

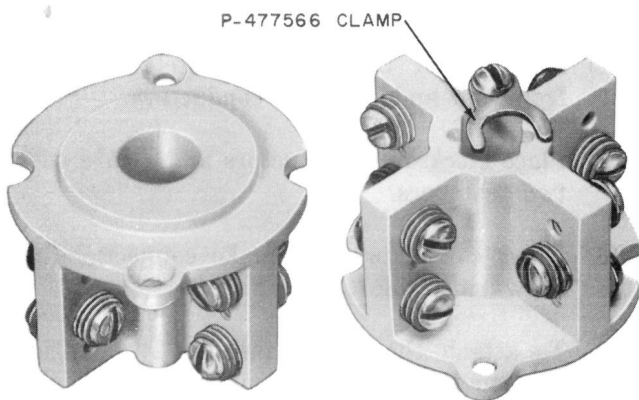


Fig. 3—47E Connecting Block

over the hole in the block into which the cover screw fits (Fig. 6). Position cover onto block with cover screw through the stay band hole; tighten cover screw.

3.05 To convert the 42A block for modular installations, a 625C connecting block (Fig. 7) must be connected as follows:

- (1) Remove cover from existing 42A block.
- (2) Connect leads from miniplug connector in 625C connecting block to terminals on 42A connecting block.
- (3) Dress leads as shown in Fig. 7.
- (4) Terminate leads of connecting block as shown in Table F.
- (5) Attach the connecting block cover to the block using center captive screw in cover.

Note: It is recommended that surface-mounted connecting blocks be mounted 12 inches or more above the floor (electrical outlet height) to prevent contamination by rug fibers, rug cleaning agents, and insect sprays.

B. 44A Connecting Block (Fig. 2)

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

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

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

3.09 The 168E and F plastic backboards are notched to permit mounting with both set cord and cable entering from the same end (Fig. 8). 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.

3.10 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,

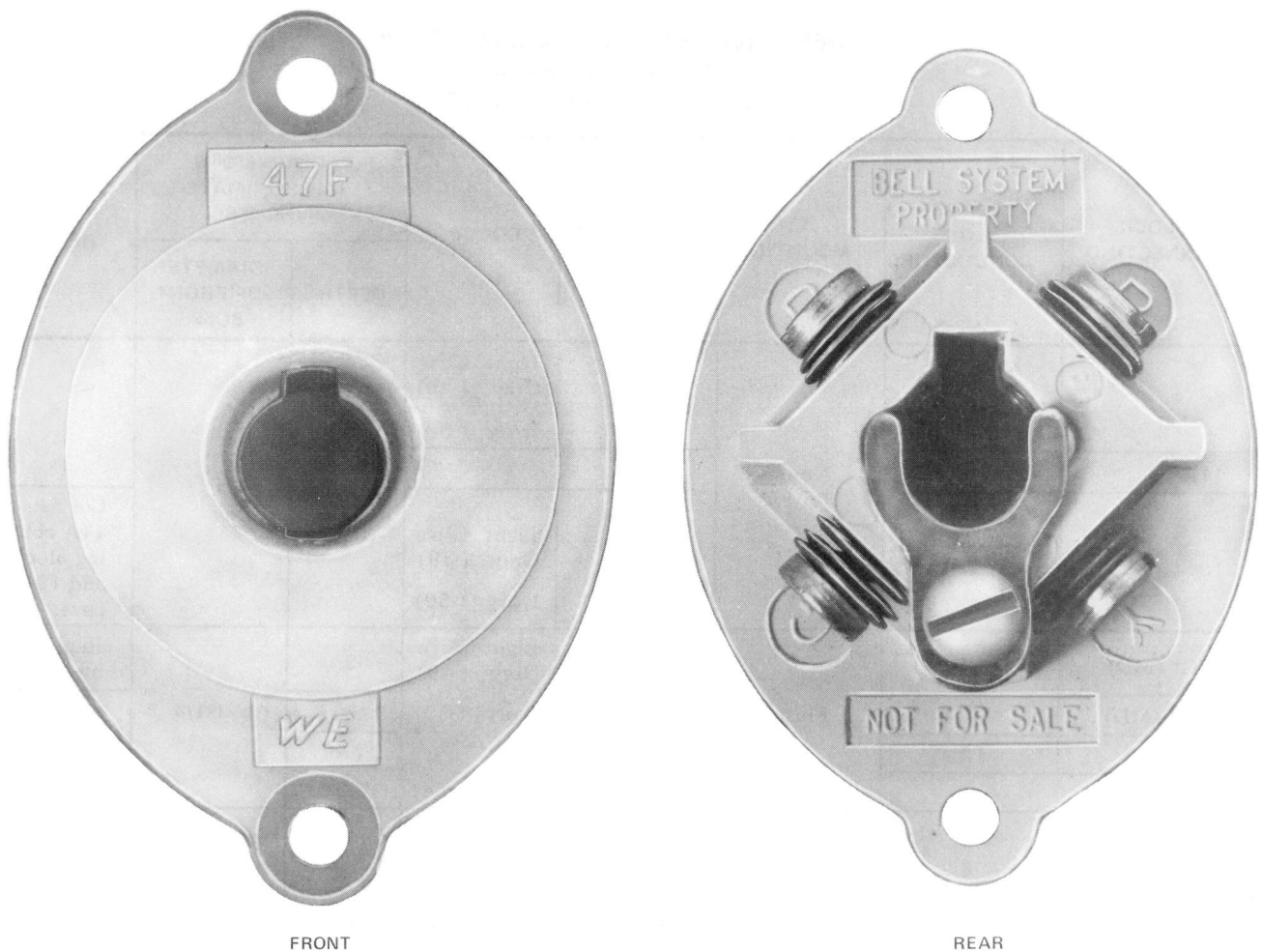


Fig. 4—47F Connecting Block

cable should enter from the direction of the cable run.

3.11 Terminate conductors and cords on 44A connecting blocks as shown in Fig. 9, 10, and 11. 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. 10). In fabric-covered mounting cords of earlier manufacture, this sequence was reversed.

3.12 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.

C. 47-Type Connecting Blocks

3.13 The 47-type connecting block may be flush-mounted in a standard electrical outlet box, on a 63B metal bracket (Fig. 12), or a KS-20502, List 2 bracket (Fig. 13).

3.14 Install 47-type connecting block in a standard electrical outlet box as follows:

- (1) Mount connecting block on bracket using screws furnished with bracket (Fig. 14).
- (2) Connect station wire or cable to connecting block as indicated in Table C or D.

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 (APPROXIMATE 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)			Consists of 44A connect- ing block and 101A cover
47C† (MD)	12	Flush		Light Olive Gray (-49)	2	1-1/4	Replaced by 47E
47D† (MD)	4			Ivory (-50)	1-3/16		Replaced by 47F
47E*	12				1-3/8		
47F‡	4			Brown (-54)	7/8		
625C	4	Non- flush					Converts 42A block for modular installation

* 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.

- (3) Pass mounting cord through hole in faceplate 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 faceplate using screws furnished with faceplate (Fig. 14).

3.15 The 63B metal bracket is intended for use as a receptacle for 47-type connecting blocks (Fig. 12) and is mounted on the wall stud when homes are prewired.

3.16 Install 47-type connecting block on 63B bracket (Fig. 15) as follows:

- (1) Mount ring retainer on 63B bracket using screws furnished with faceplate.
- (2) Connect station wire or cable to connecting block as indicated in Table C or D.
- (3) Pass mounting cord through hole in 16-type faceplate and connecting block.
- (4) Terminate mounting cord on connecting block.

TABLE B

**ASSOCIATED APPARATUS
FOR 42A, 44A, 1044A, AND 47-TYPE CONNECTING BLOCKS
(ORDER SEPARATELY IF REQUIRED)**

CONNECTING BLOCK	NONFLUSH MOUNTING			FLUSH MOUNTING										
	BACKBOARD	COVER	COLOR	IN OUTLET BOX		ON WALL STUD	IN COMPLETED WALL	FACEPLATE*						
				BRACKET	COVER PLATE	BRACKET								
42A	168A (MD) or 168D	Furnished	Light Olive Gray (-49) Ivory (-50)											
1044A														
44A		101A												
625C†														
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 (MD)				43A (MD) or 43B	P-88C949 (Light Olive Gray) P-88C950 (Ivory) P-88C954 (Brown)	63B (Fig. 12)	KS-20502, List 2 (Fig. 13)	16A						
47D (MD)														
47E														
47F				43B										

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

† Converts 42A block to modular installation.

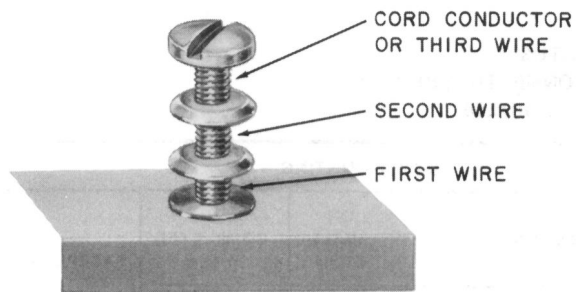


Fig. 5—Connecting Blocks, Terminations

TABLE C
STATION WIRE CONNECTIONS

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

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

- (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.

3.17 The KS-20502, List 2 bracket (Fig. 13) can be used for wall mounting 47-type connecting blocks where the wall material has already 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.

3.18 Install KS-20502, List 2 bracket as follows:

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

TABLE D

**CABLE CONNECTIONS FOR 44A, 47C (MD),
AND 47E CONNECTING BLOCKS**

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

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

- (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.

3.19 Install 47-type connecting block on KS-20502, List 2 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.
- (4) Mount connecting block on bracket using screws furnished with faceplate.
- (5) Mount 16-type faceplate on bracket using screws furnished with faceplate.

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

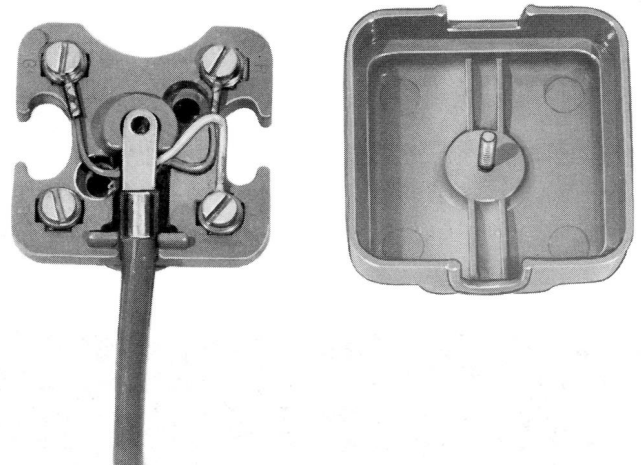


Fig. 6—42A Connecting Block With D3BU Mounting Cord

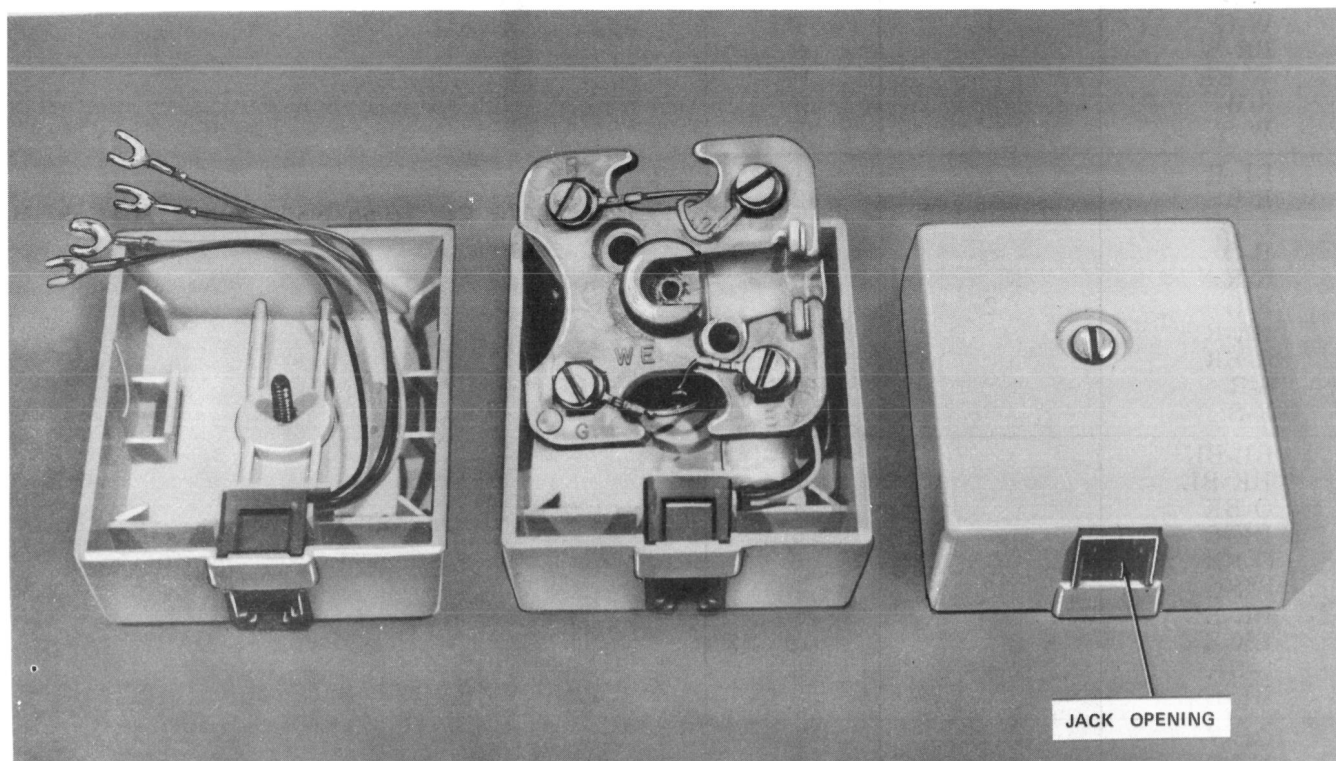


Fig. 7—625C Connecting Block

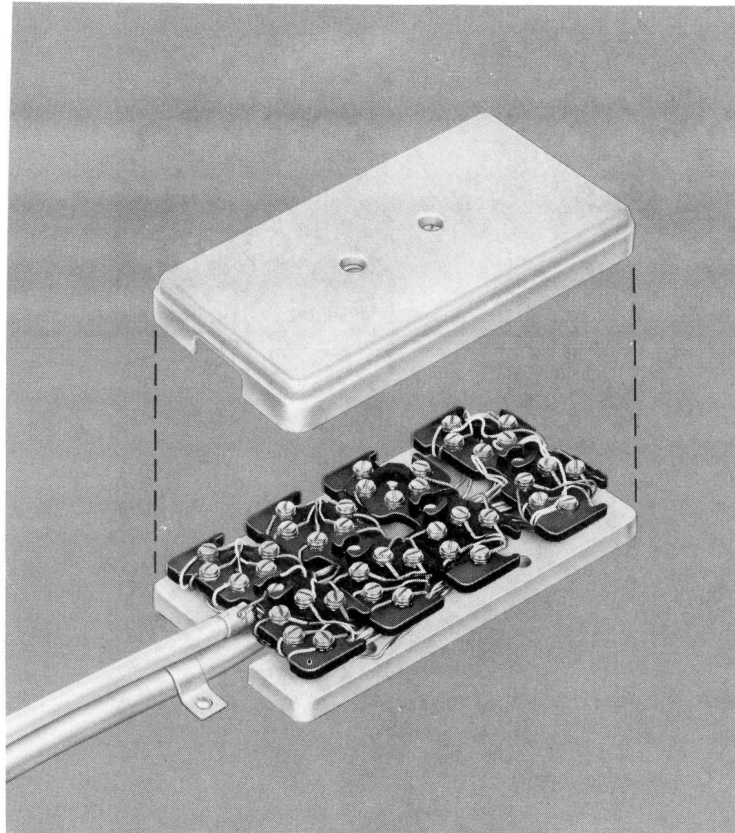


Fig. 8—Four 44A Connecting Blocks Mounted on 168F Backboard With Cable and Cord Entering Same End

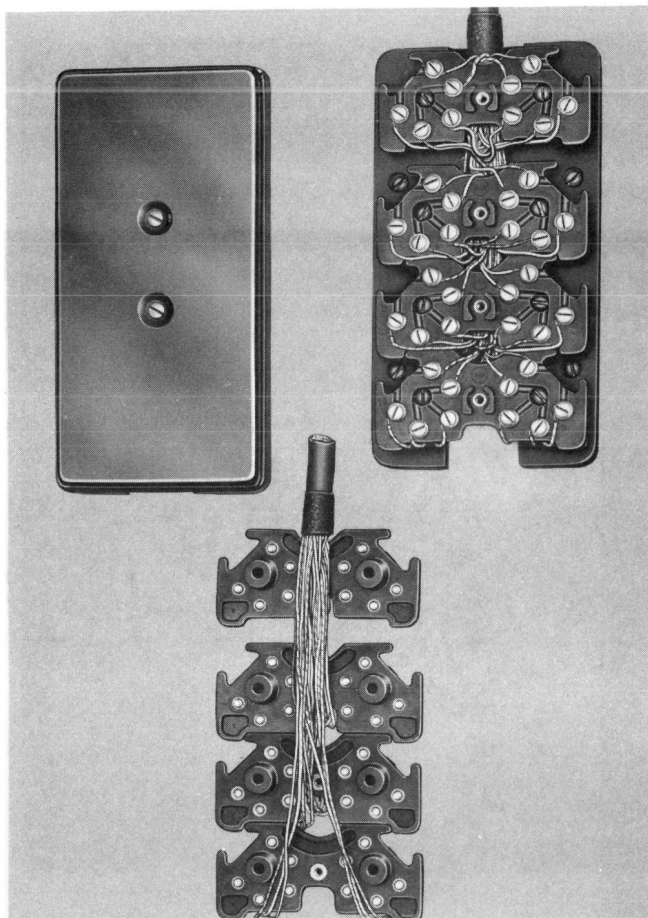


Fig. 9—Four 44A Connecting Blocks Mounted on a 168F Backboard and Equipped With 101D Cover

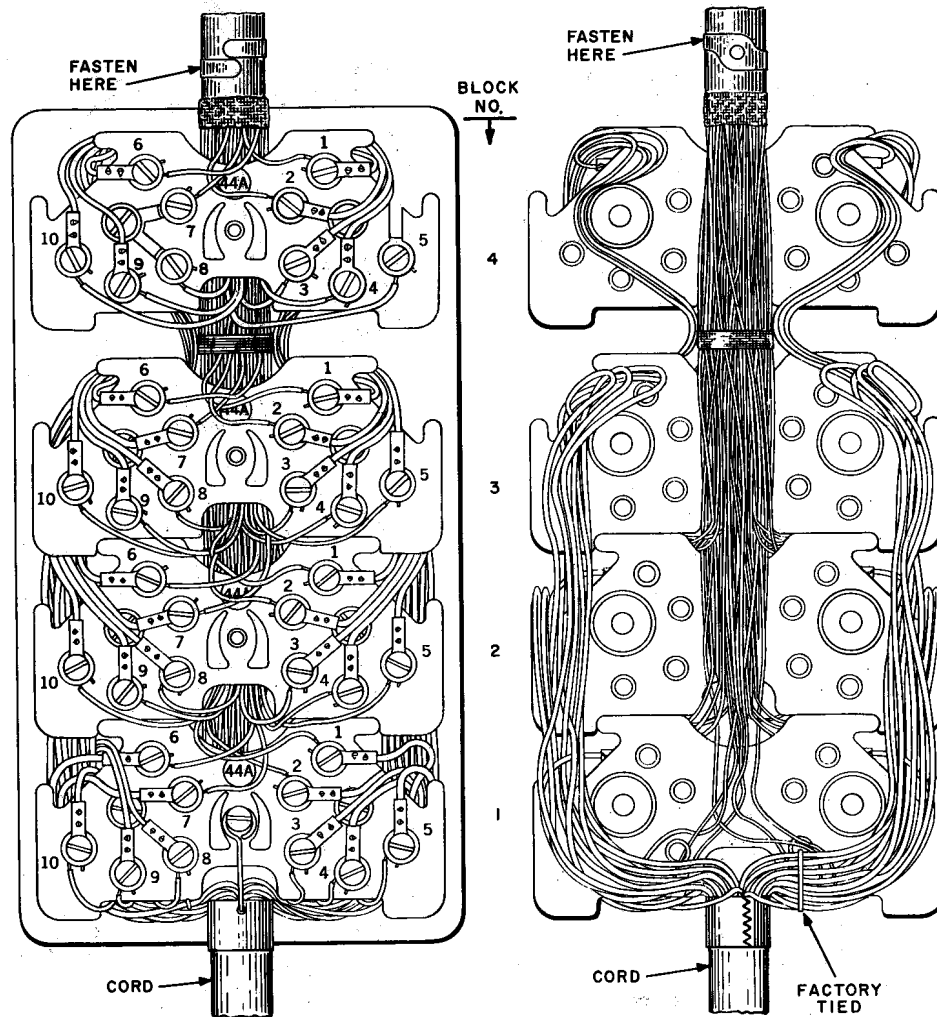


Fig. 10—Arrangement of Four 44A Connecting Blocks Used With 500 Series Key Telephone Sets Equipped With Vinyl-Jacketed Mounting Cord

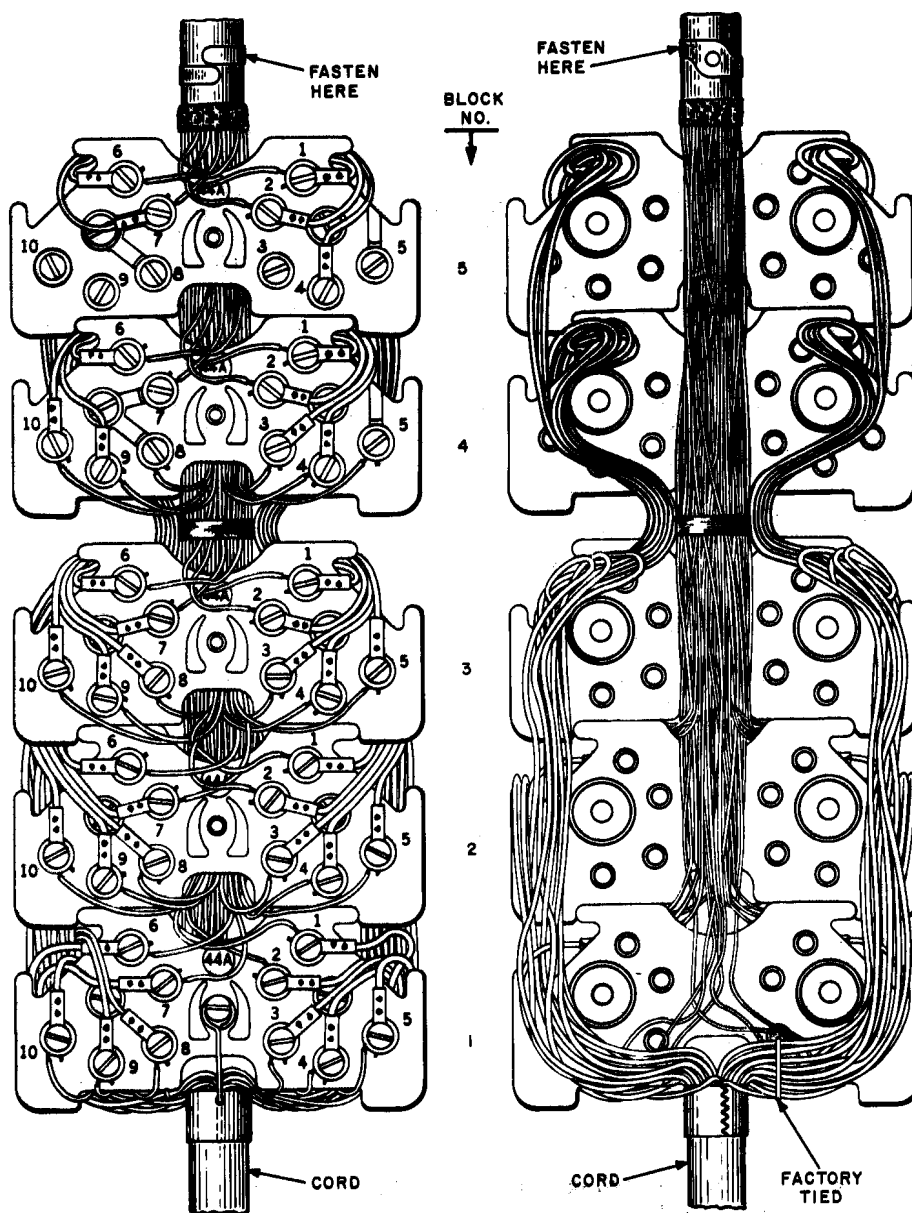


Fig. 11—Arrangement of Five 44A Connecting Blocks Used With 565 Key Telephone Sets for 3A Speakerphone System

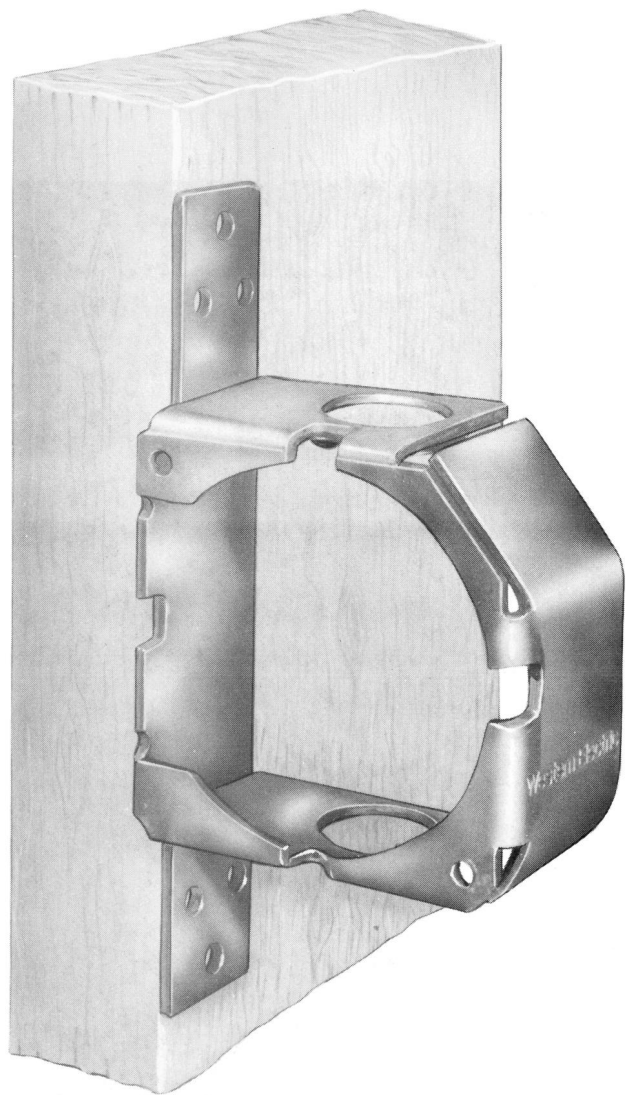


Fig. 12—63B Bracket

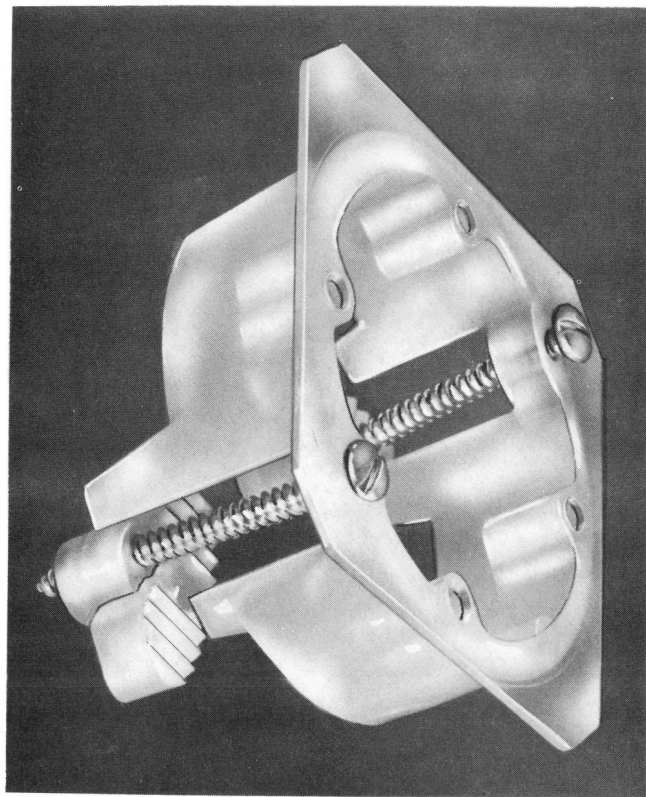


Fig. 13—KS-20502, List 2 Bracket

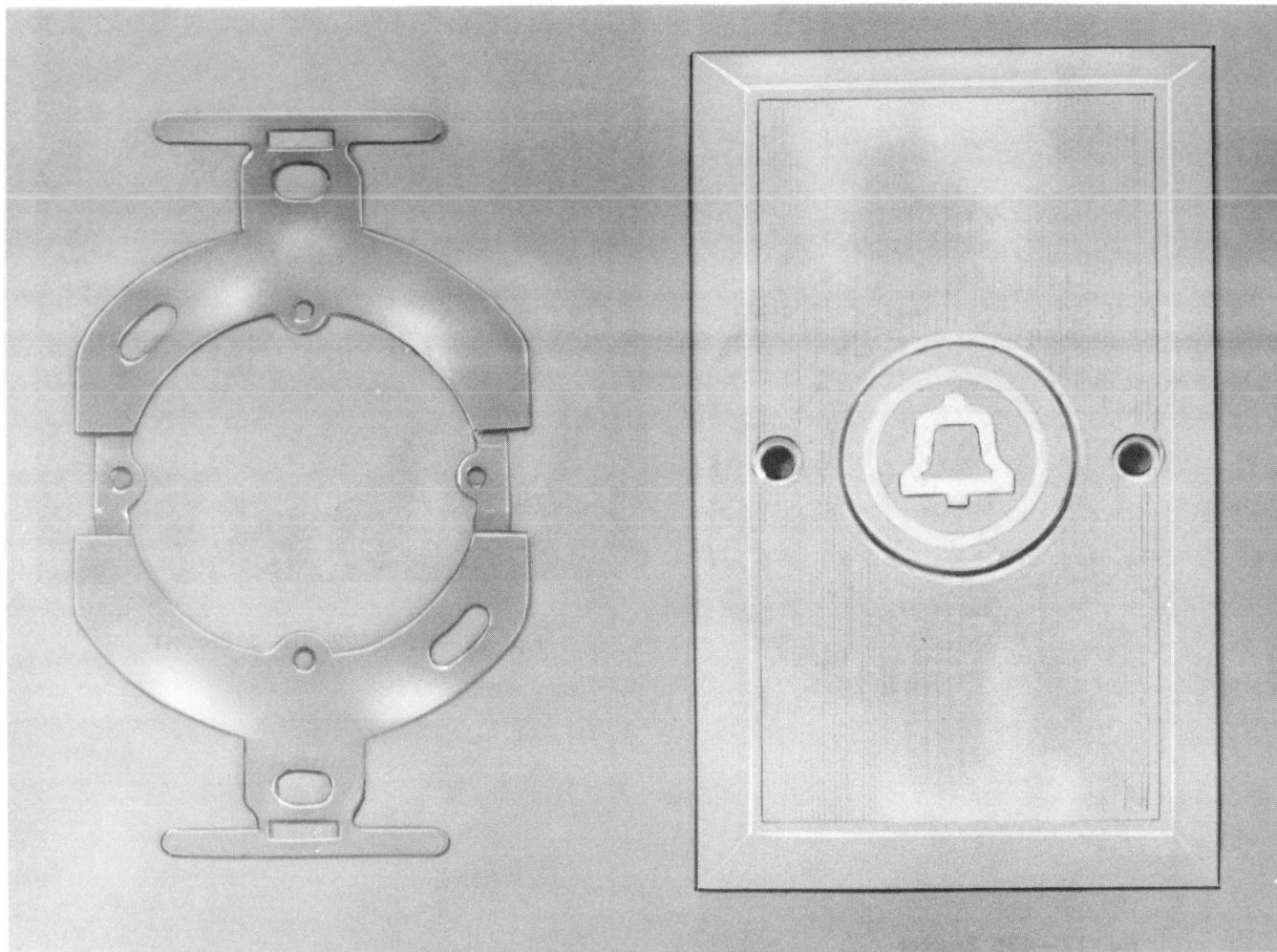


Fig. 14—65A Faceplate

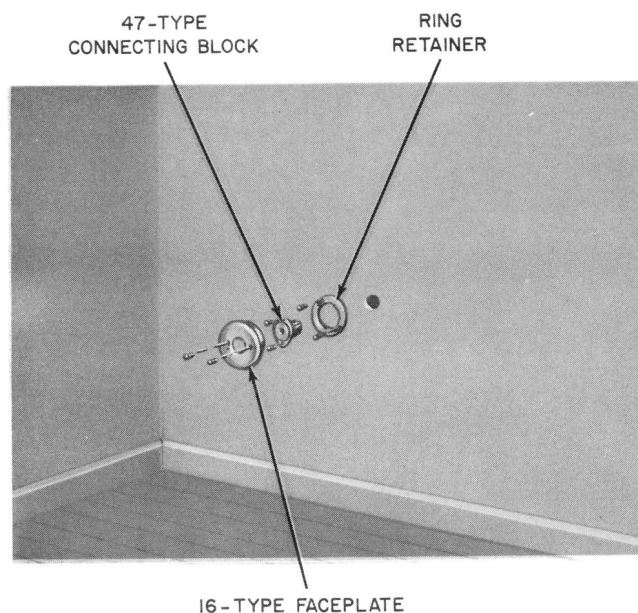


Fig. 15—Faceplate, Connecting Block, and Ring Retainer Associated With 63B Bracket

TABLE F

MODULAR CONNECTING BLOCK CONNECTIONS

1A1 OR 1A2 KTS	INSIDE WIRE			CONNECTING BLOCK	
	ONE-LINE SERVICE		TWO-LINE SERVICE	TERMINAL	LEAD COLOR
	NO DIAL LIGHT	DIAL LIGHT		625-TYPE	
Tip	Tip	Tip	Line 1 Tip	G	Green
Ring	Ring	Ring	Line 1 Ring	R	Red
A		TRNSF	Line 2 Tip	B	Black
A1		TRNSF	Line 2 Ring	Y	Yellow