

BELL SYSTEM PRACTICES
Station Installation and Maintenance

SECTION C33.545
Issue 8, August, 1954
AT&T Co Standard

CONNECTING BLOCKS

DESCRIPTION AND INSTALLATION

1. GENERAL

1.01 This section covers the installation of the connecting blocks that are used on the subscriber's premises to interconnect station wires, cables, and cords. It is reissued to include cabling and cord terminations for 500-type key telephone sets and to include information relating to connections for the 1A1 key telephone system connections practices, Sections C66.201 through C66.222. Due to the extensive changes made in this section, marginal arrows have been omitted.

2. SUPPLIES

2.01 The connecting blocks and covers shown below are for use in making connections between wires, cords, and cables. Where covers are furnished with blocks (except 11 and 12 type), the color code designation -4 (ivory) or -9 (brown) is part of the code of the block, as for example 42A-4. Separate covers are used with the 44A blocks, as shown. The ivory cover should be used on light surfaces and the brown cover for dark surfaces. Backboards and other associated items used with connecting blocks are included.

2.02 The following list includes supply information on connecting blocks.

Index

Ordering Information and Use

Backboards

Backboard, 168A-4.

Ivory finish. Wood backboard 3-7/8" x 2" for mounting one 11, 12, 40, 42A, or 44A connecting block on masonry or uneven surfaces.

IndexOrdering Information and UseBackboards
(cont'd)**Backboard, 168A-9.**

Brown finish. Wood backboard 3-7/8" x 2" for mounting one 11, 12, 40, 42A, or 44A connecting block on masonry or uneven surfaces.

Backboard, 168B-4.

Ivory finish. Wood backboard 5 1/2" x 3-7/8" for two or three 44A connecting blocks on masonry or uneven surfaces, or over an outlet.*

Backboard, 168B-9.

Brown finish. Wood backboard 5-1/2" x 3-7/8" for two or three 44A connecting blocks on masonry or uneven surfaces, or over an outlet.*

Backboard, 168C-4.

Ivory finish. Wood backboard 7-3/8" x 3-7/8" for four 44A connecting blocks on masonry or uneven surfaces or over an outlet.*

Backboard, 168C-9.

Brown finish. Wood backboard 7-3/8" x 3-7/8" for four 44A connecting blocks on masonry or uneven surfaces or over an outlet.*

Bracket

Bracket, 43A.

Used with 47A or 47B block in a conduit outlet box. Replaces the 37A bracket for this purpose. Screws for attaching block and bracket are furnished with bracket.

Connecting
Blocks**Block, Connecting, 11A.**

2-conductor block without cover.

Block, Connecting, 11B.

2-conductor block with black snap-on cover.

Block, Connecting, 11C.

2-conductor block with black snap-on cover and insulator, P-290178.

Block, Connecting, 12E.

3-conductor block with black snap-on cover.

* Currently manufactured 168B and 168C backboards have two recessed holes to permit mounting on outlet box in lieu of cover. A 1/2" wire or cable entrance hole is also drilled in backboard.

Block, Connecting, 12F.

3-conductor block with black snap-on cover and insulator, P-290179.

Block, Connecting, 42A-4.

Ivory finish. 4-conductor with cover. Replaces 11, 12, and 40A types. Used for 2-, 3-, or 4-conductor cord and wire terminations.

Block, Connecting, 42A-9.

Brown finish. 4-conductor with cover. Replaces 11, 12, and 40A types. Used for 2-, 3-, or 4-conductor cord and wire terminations.

Block, Connecting, 47B-4.

Ivory finish. Flush-type block for mounting in a 1-1/2" hole in baseboards or in a conduit outlet box with a 43A bracket. Replaces 47A.

Block, Connecting, 47B-9.

Brown finish. Flush-type block for mounting in a 1-1/2" hole in baseboards or in a conduit outlet box with a 43A bracket. Replaces 47A.

Block, Connecting, 1044A-4.

Ivory finish. A single 44A block equipped with a cover.

Block, Connecting, 1044A-9.

Brown finish. A single 44A block equipped with a cover.

Block, Connecting, 44A.

10 conductors. Used where more than four conductors are required. Designed so that two, three, or four blocks can be mounted under one cover (see covers).

Covers

Cover, 101A-4.

Ivory finish. Cover for one 44A block. Cover screw included.

Cover, 101A-9.

Brown finish. Cover for one 44A block. Cover screw included.

Cover, 101C-4.

Ivory finish. Cover for two or three 44A blocks when 21 to 30 conductors are needed. Cover screw included.

IndexOrdering Information and UseCovers
(cont'd)**Cover, 101C-9.**

Brown finish. Cover for two or three 44A blocks when 21 to 30 conductors are needed. Cover screw included.

Note: One 101A and one 101C cover should be used on a four-block installation.

Insulators

P-290178, Insulator.

Used with snap-on cover for 11-type connecting block.

P-290179, Insulator.

Used with snap-on cover for 12-type connecting block.

3. SELECTION AND LOCATION OF CONNECTING BLOCK

3.01 For the purpose of making connections between wires, cables, and cords, 11-, 12-, 40-, 42-, 44-, 47-, or 1044-type connecting blocks should be used on desks, tables, baseboards, beams, window or door frames, or other permanent woodwork either in rooms, cellars, or basements. Where necessary, blocks may be located on wall surfaces, but a backboard should be used if the wall is damp, uneven, or is of a type on which the connecting block cannot be mounted readily.

3.02 The 42-type connecting block replaces the 11-, 12-, and 40-type connecting blocks. Older type blocks, however, may be re-used when available.

3.03 The 44-type connecting block is intended for terminating cords having more than four conductors, and for use as a bridging point for lead or inside wiring cables when used in connection with station wiring plans, 1A and 1A1 key telephone systems, or other station systems. The 44A connecting block is arranged so that one, two, three, or four blocks can be mounted under one or two 101-type covers so as to provide for 10, 20, 30, or 40 terminals.

3.04 Many desks are arranged for mounting one or more connecting blocks inside of desk pedestals and bringing set mounting cords out through a slot or hole located near the desk top. Metal desks manufactured in the past have provided only for mounting 11- and 12-type connecting blocks, but new

desks are being arranged to mount the 40-, 42-, and 44-types as well. Use these facilities whenever they are provided; otherwise, locate the connecting blocks on the desk so that the loop of the mounting cord does not reach the floor (when the telephone set is positioned on the desk where it is most generally used), since this is a potential accident hazard. Where the subscriber's needs require that the connecting block be located so that the cord will loop near the floor and present a potential hazard, a retractile cord should be recommended to the subscriber. For multibutton sets and other installations in which the foregoing proposals are not practicable, the cord should be fastened to the desk so that some of the slack is removed from the loop of the cord. A cable clamp or other suitable fastener may be used. The attachment of cords should be kept to a minimum and used only when other methods are impracticable.

3.05 Larger connecting blocks (30 and similar types) ordinarily should be installed in HS-, GA-, GB-, or GC-type cable terminal boxes as covered in the G61 series. Where appearance permits, these cable terminals may be installed on desks, tables, or walls for use in connection with station systems requiring more terminals than can be provided through the use of 44A connecting blocks.

3.06 Avoid placing connecting blocks where installers or repairmen would be liable to injury when making tests or inspections at the blocks. Also avoid placing where blocks and associated wiring are exposed to likely sources of damage. Connecting blocks of plastic material should not be subjected to excessive heat, e.g., installed too close to radiators, exposed steam pipes, etc.

3.07 Insofar as it is practicable, locate connecting blocks where they will be readily accessible for maintenance purposes.

3.08 Figures shown are only typical examples and do not cover all of the satisfactory locations and mounting arrangements for connecting blocks. In general, the figures show the cord leaving the bottom of the block. This is desirable where the cord loops toward the floor, such as at desk locations and where the block is mounted on a wall or wide baseboard. Where, however, narrow baseboards are encountered or where wires are bridged at the block, the block may be placed so that the cord comes out at the side or at the top. Wherever possible, the connecting block should cover the wire entrance hole.

4. INSTALLATION OF SMALL CONNECTING BLOCKS

4.01 In unexposed areas (not requiring a protector), line wires may be terminated on connecting blocks located near the point of entrance to the building, as shown in Fig. 1.

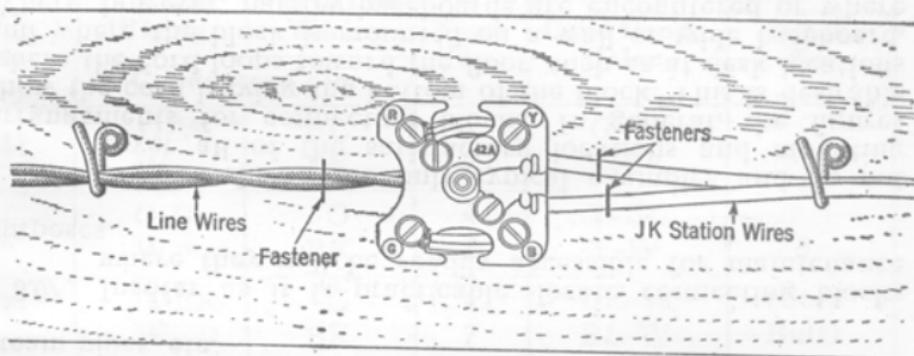
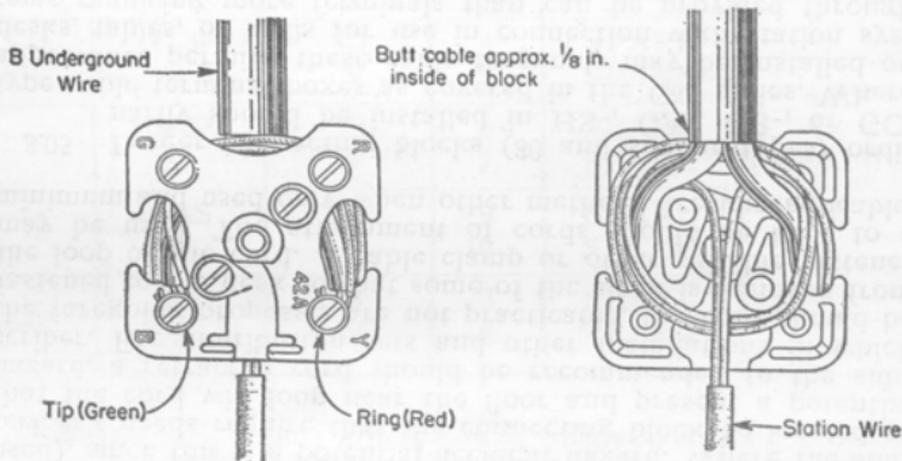


Fig. 1—42-Type Connecting Block on Cellar Beam

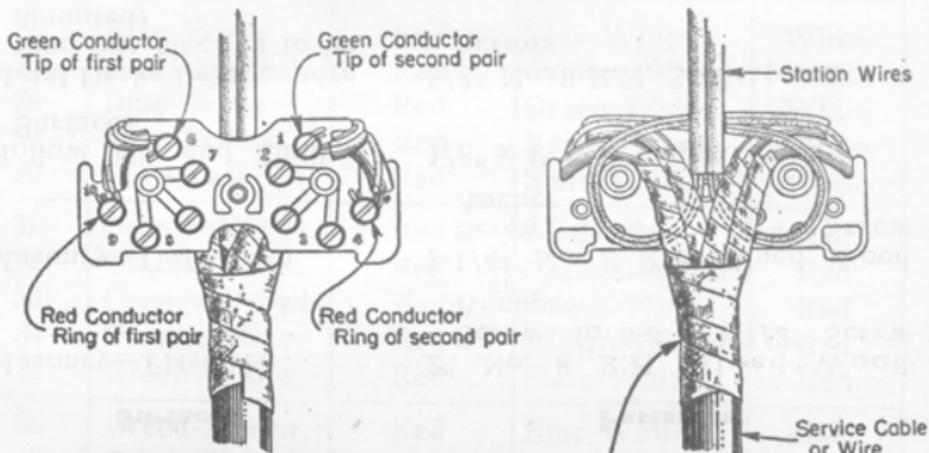
Note: Fig. 1 shows two JK station wires entering from the cord side of the block on a cellar beam. Place the cover so that the larger wire opening in the cover is on the station wire side to avoid pinching station wires. Use suitable fasteners on line and station wires at connecting block to prevent strain on terminals.



1 PAIR B UNDERGROUND WIRE TERMINATED
ON 42A BLOCK

Fig. 2—One Pair B Underground Cable Terminated on 42A Block

4.02 Fig. 2 shows method of terminating one pair B underground wire and JK station wire on a 42A connecting block. One pair LR or JR service cables, when used, may be terminated in similar manner except that the conductors should be wrapped once around the block before terminating to provide needed slack. When terminating JR cable, remove the jute covering to approximately one inch from end of sheath.



Remove jacket and sheath approx. 1 inch from edge of block and wrap each conductor with a single half-lapped layer of $\frac{3}{4}$ in. friction tape for a distance of 2 in. from the butt. Cover junction of conductors and jacket with a reversed half-lapped layer of $\frac{3}{4}$ in. friction tape. Overlap jacket and conductor approx. $\frac{1}{2}$ in.

Fig. 3—Two Pair B Underground Cable Terminated on 44A Block

4.03 Fig. 3 shows method of terminating two pair B underground wire on a 44A connecting block. Two pair LR or JR service cables should be butted inside the edge of the connecting block cover and the conductors wrapped once around the block to provide slack.

- 4.04 Fasteners for use with connecting blocks and backboards are as follows:

CONNECTING BLOCKS

<u>Surface</u>	<u>Fasteners</u>
Hard Wood	3/4" No. 8 R.H. Blued Wood Screws
Backboard	5/8" No. 8 R.H. Blued Wood Screws
All Wood (except above)	1" No. 8 R.H. Blued Wood Screws
Lath and Plaster	2" No. 8 R.H. Blued Wood Screws
Metal (desk or paneling)	5/8" No. 8 R.H. Self-tapping Screws

BACKBOARDS

<u>Surface</u>	<u>Fasteners</u>
Masonry—Plastered	2" No. 8 R.H. Blued Wood Screws in 6-8 x 1-1/2" Screw Anchor
Masonry—Unfinished	1-1/4" No. 8 R.H. Blued Wood Screws in 6-8 x 3/4" Screw Anchor
Hollow Tile and Similar Surfaces	1/8" x 4" B.H. Toggle Bolts
Metal Desks (where more than one block is to be mounted)	5/8" No. 8 R.H. Self-tapping Screws
Outlet Boxes (in lieu of cover)	Use existing cover plate screws (if too short, cut down a 1/8" toggle bolt screw to fit)

4.05 Where wire can be fished from the basement to the first floor location, installation of 47-type connecting block, as shown in Fig. 4, is recommended.

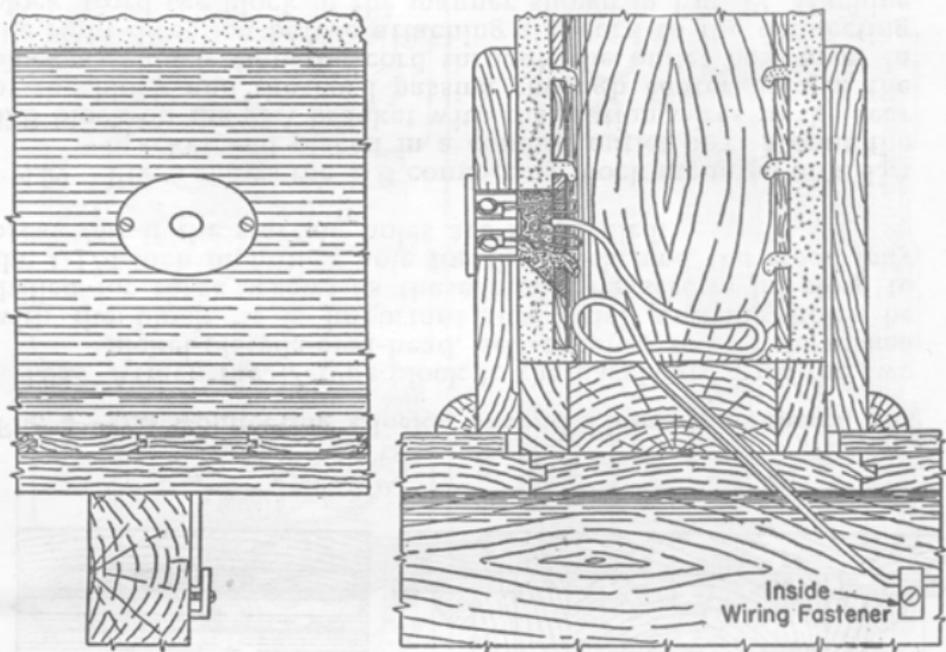


Fig. 4—47B Connecting Block on First Floor or Similar Locations

4.06 Drill hole in baseboard with 1-1/4-inch station bit or approved equivalent.

Caution: Drill a small lead hole through the baseboard before drilling the 1-1/4-inch hole. This will reduce the wedging effect of the lead screw of the 1-1/4-inch station bit.

4.07 At second floor locations, apartments, etc., install 47-type block, as shown in Fig. 5. While this figure shows the connecting block used as a bridging point, the same general arrangement is used at a terminating point.

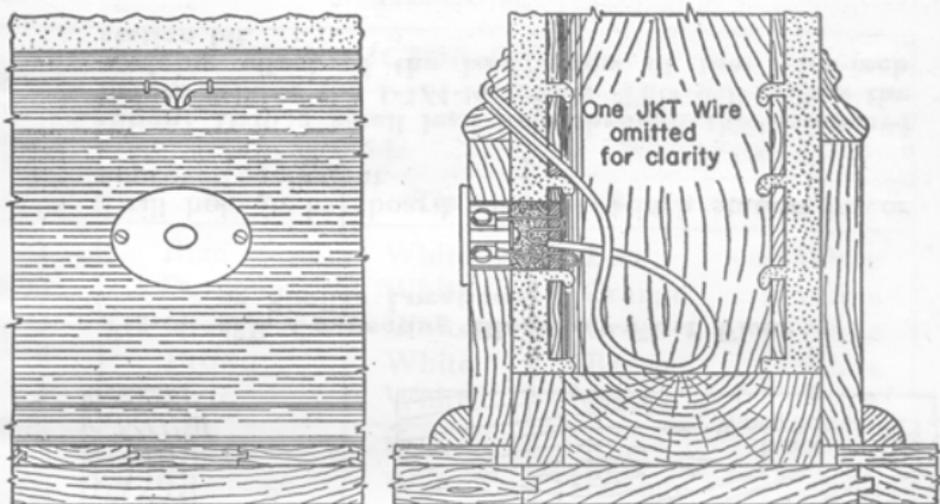
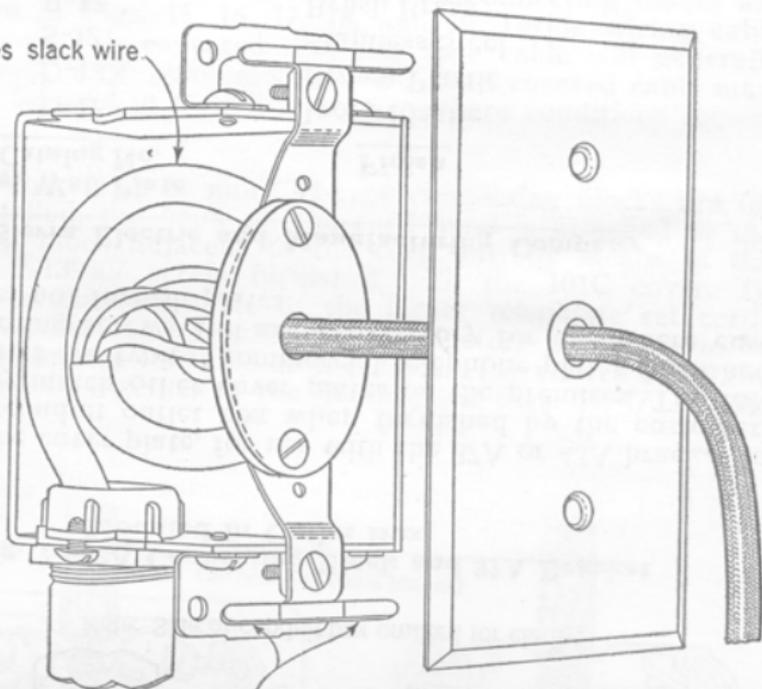


Fig. 5—47B Connecting Blocks, Second Floor Apartments, etc.

4.08 Attach the 47-type block to the baseboard with the two nickel-plated, oval-head, self-tapping screws furnished with the block. It is important that small starting holes be drilled for these screws as these mounting screws lie close to the 1-1/4-inch mounting hole for the block, and the wood may break out if the starting holes are not drilled.

4.09 Fig. 6 shows the 47B connecting block mounted on a 43A bracket and placed in a conduit outlet box. Mount the 47B block on the 43A bracket with the station wires in the rear of the block and the cord passing through center hole in the block as shown. Slip the cord through the outlet box cover in the right direction before attaching the cord to the connecting block. Cord the block in the manner shown in Fig. 19. Machine screws for attaching bracket to outlet box and block to bracket are furnished with the bracket.

6 to 8 inches slack wire

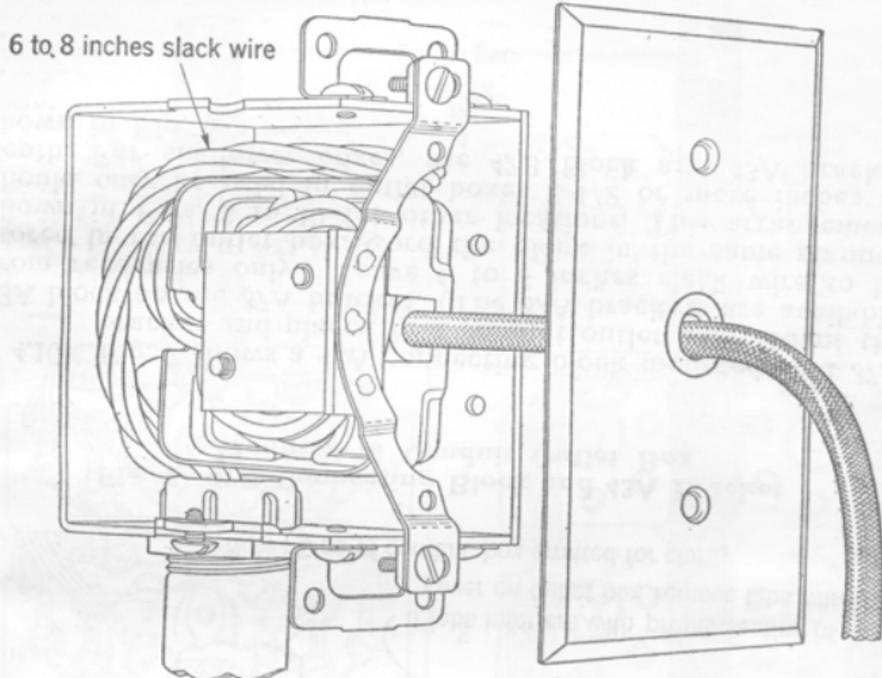


If tabs interfere with proper seating of cover on outlet box remove tabs with pliers

Note : Side of conduit box omitted for clarity

Fig. 6—47B Connecting Block and 43A Bracket Mounted in Conduit Outlet Box

4.10 Fig. 7 shows a 42A connecting block mounted on a 37A bracket and placed in a conduit outlet box. Mount the 42A block on the 37A bracket. (The 37A brackets are available from recoveries only.) Leave 6 to 8 inches slack wire to be stored in the outlet box. Cord the block in the same manner shown in Figs. 8 to 10 for other locations. This arrangement should only be used in outlet boxes 2-1/2 or more inches in depth. For shallower boxes, use 47B block and 43A bracket shown in Fig. 6.



Note: Side of conduit box omitted for clarity.

Fig. 7—42A Connecting Block and 37A Bracket Mounted in Outlet Box

4.11 The cover plate, for use with the 37A or 43A bracket in a conduit outlet box when furnished by the customer, will usually match other commercial plates on the premises. The following plates are typical commercial telephone plates furnished with mounting screws and are satisfactory for use where customer does not furnish plates.

Sierra Electric and Manufacturing Company

Tel Wall Plate
Catalog No.

Finish

D-12

Ivory Plastic

D-12X

Brown Plastic

S-12

Stainless Steel

B-12

Brush Brass

Bryant Electric Company

Catalog No.

Finish

0G41

Brush Brass (Standard)

0G41

Sand Blast Antique (Special)

91181

Brown Plastic—"Uniline"

92181

Ivory Plastic—"Uniline"

5. TERMINATING WIRES AND CORDS

5.01 Terminate wires and cords on connecting blocks as shown in the following figures.

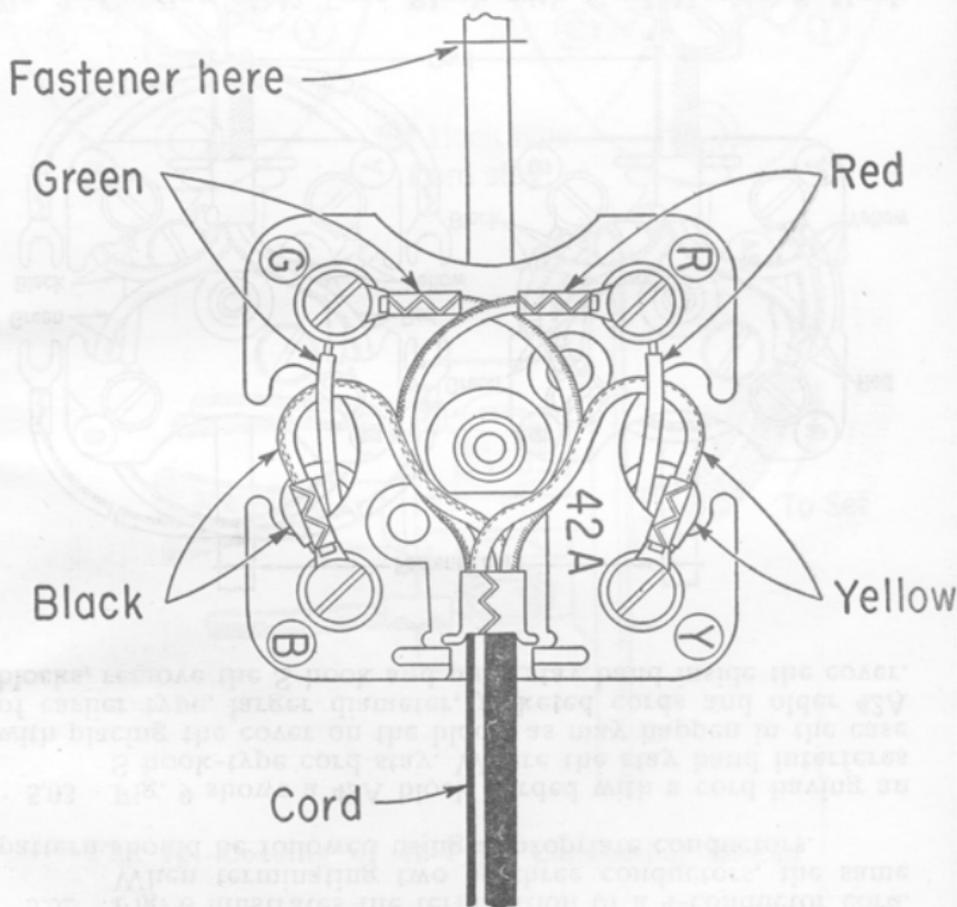


Fig. 8—Terminating 4-Conductor Cord on a 42-Type Block

5.02 Fig. 8 illustrates the termination of a 4-conductor cord. When terminating two or three conductors, the same pattern should be followed using appropriate conductors.

5.03 Fig. 9 shows a 42A block cored with a cord having an S hook-type cord stay. Where the stay band interferes with placing the cover on the block, as may happen in the case of earlier type, larger diameter, jacketed cords and older 42A blocks, remove the S hook and push stay band inside the cover.

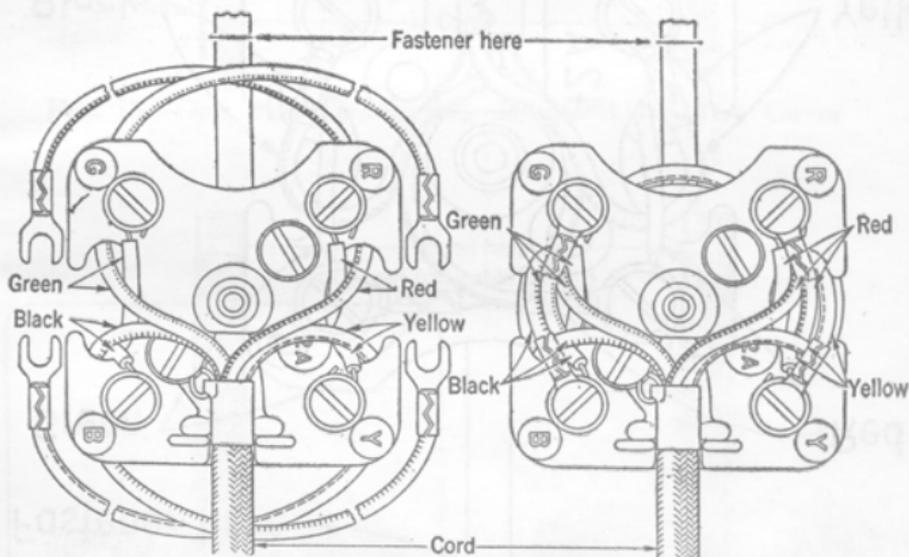


Fig. 9—Cording of 42-Type Block with Cord Having S Hook

Caution: Wires shall be wound around the block and through the C-shaped notches in the sides of the block in such a manner that they cannot be damaged by the connecting block cover. Do not allow cord conductors to lie directly over the screw terminals or the center post of the block, nor to project out beyond the edge of the block.

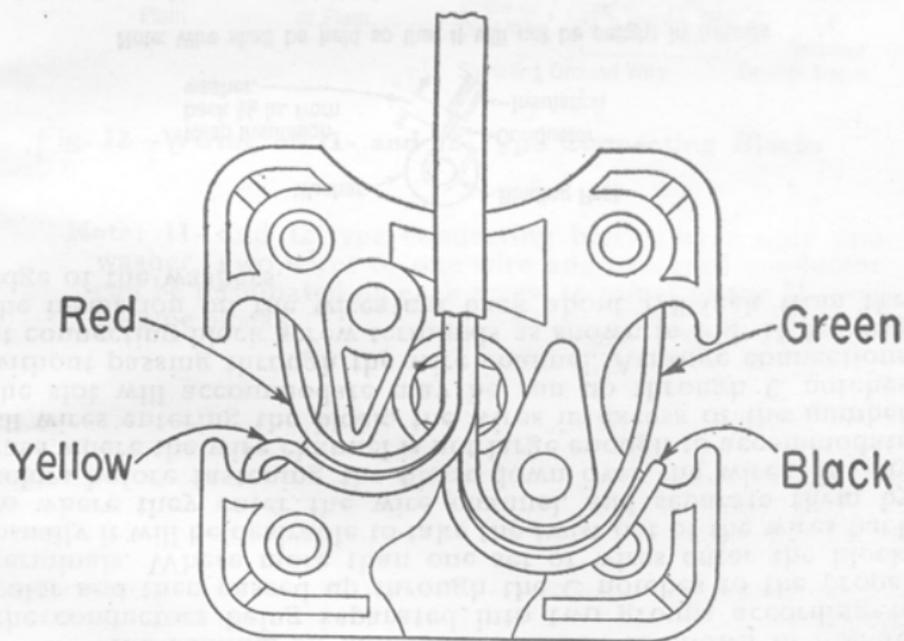
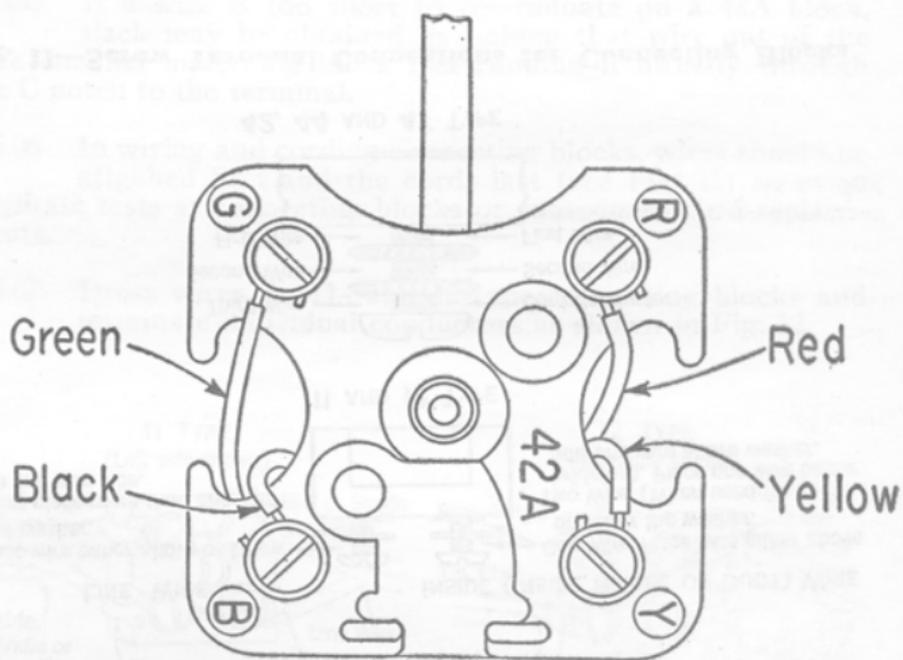
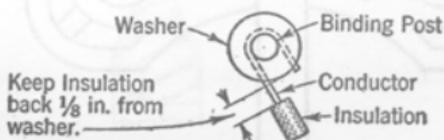


Fig. 10—Wiring of 42A Block Using JK-Type Wire

5.04 Station wires when fastened down shall pass through the channel on underside of block as shown in Fig. 10, the conductors being separated into two groups according to color and then passed up through the C notches to the proper terminals. Where more than one set of wires enter the block, usually it will be desirable to take the twist out of the wires back to where they enter the wire channel, and separate them by colors before fastening the block down over the wires. In any case where the wire channel is not large enough to accommodate all wires entering the block, the wires in excess of the number the slot will accommodate may be run up through C notches without passing through the wire channel. Arrange connections at connecting block screw terminals as shown in Fig. 11, leaving the insulation on the wires cut back about 1/8 inch from the edge of the washers.



Note: Wire shall be held so that it will not be caught in threads

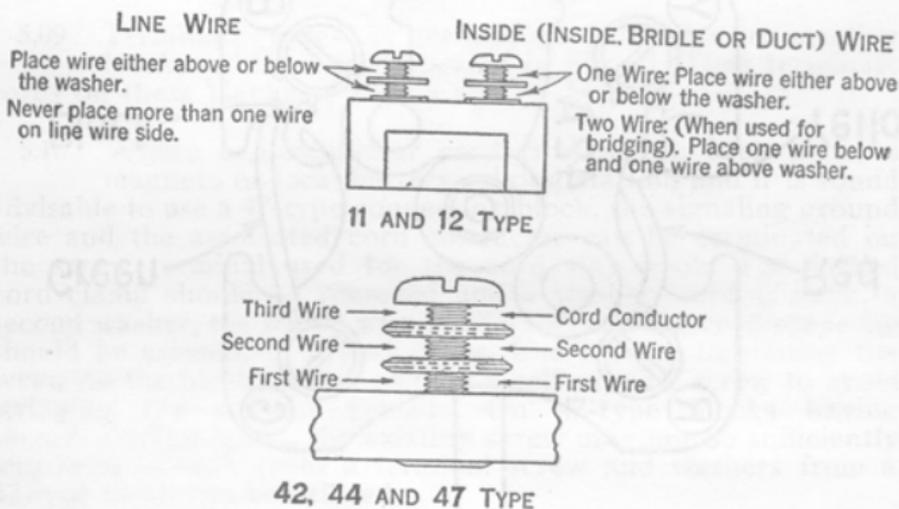


Fig. 11—Screw Terminal Connections for Connecting Blocks

5.05 If a wire is too short to reterminate on a 42A block, slack may be obtained by pulling that wire out of the wire channel under the block and running it directly through the C notch to the terminal.

5.06 In wiring and cording connecting blocks, wires should be attached first and the cords last (see Fig. 11) so as to facilitate tests at connecting blocks or subsequent cord replacements.

5.07 Dress wires on 11- and 12-type connecting blocks and terminate individual conductors as shown in Fig. 12.

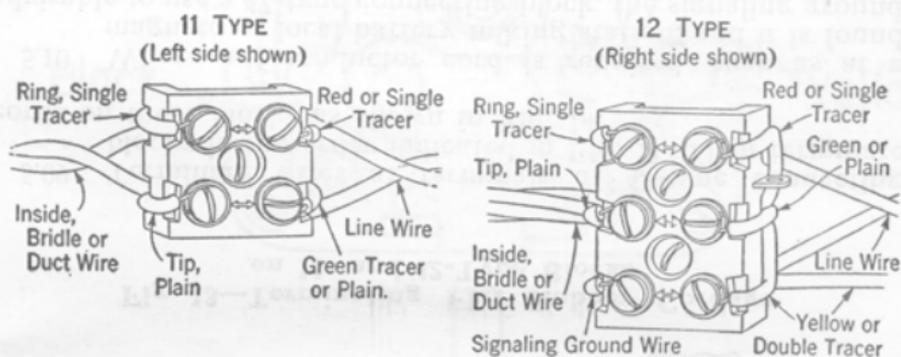


Fig. 12—Wiring of 11- and 12-Type Connecting Blocks

Note: 11- and 12-type connecting blocks have only one washer. Two wires or one wire and one cord conductor can be terminated on each screw terminal of the 11- and 12-type blocks.

5.08 Terminate flat rubber cordage on connecting blocks as shown in Fig. 13.

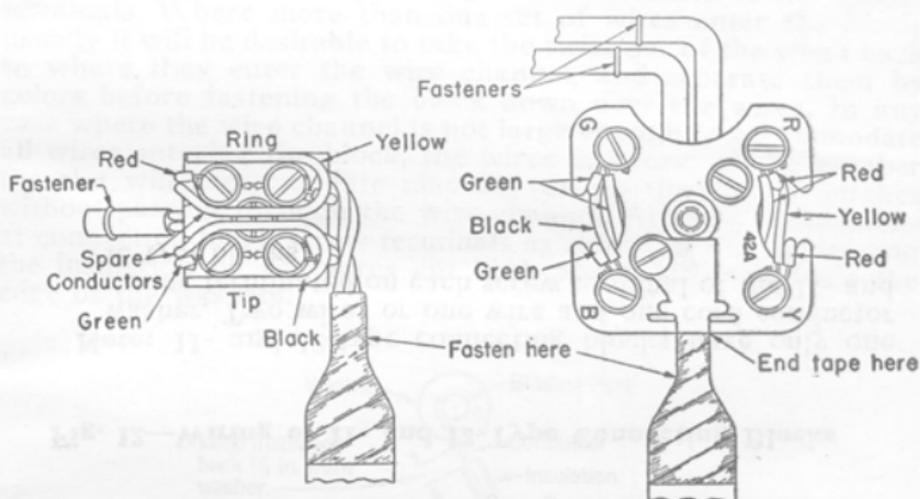


Fig. 13—Terminating Flat Rubber Cordage on 11- and 42-Type Blocks

5.09 Terminate wires at terminals of 47-type connecting blocks in the order indicated in Fig. 11. Then terminate cords on these blocks as shown in Fig. 14.

5.10 Where a 5-conductor cord is required, such as at a magneto or local battery talking station, and it is found advisable to use a 47-type connecting block, the signaling ground wire and the associated cord conductor can be terminated on the screw terminal used for the cord stay hook. The forked cord clamp should be removed and a washer, cord S hook, a second washer, the inside wire conductor, and the cord spade tip should be assembled in that order. Use care in tightening the screw on the blocks which employ a self-tapping screw to avoid stripping the self-cut threads. On 47-type blocks having threaded metal insert, the existing screw may not be sufficiently long, and in such cases a terminal screw and washers from a 42-type block can be utilized.

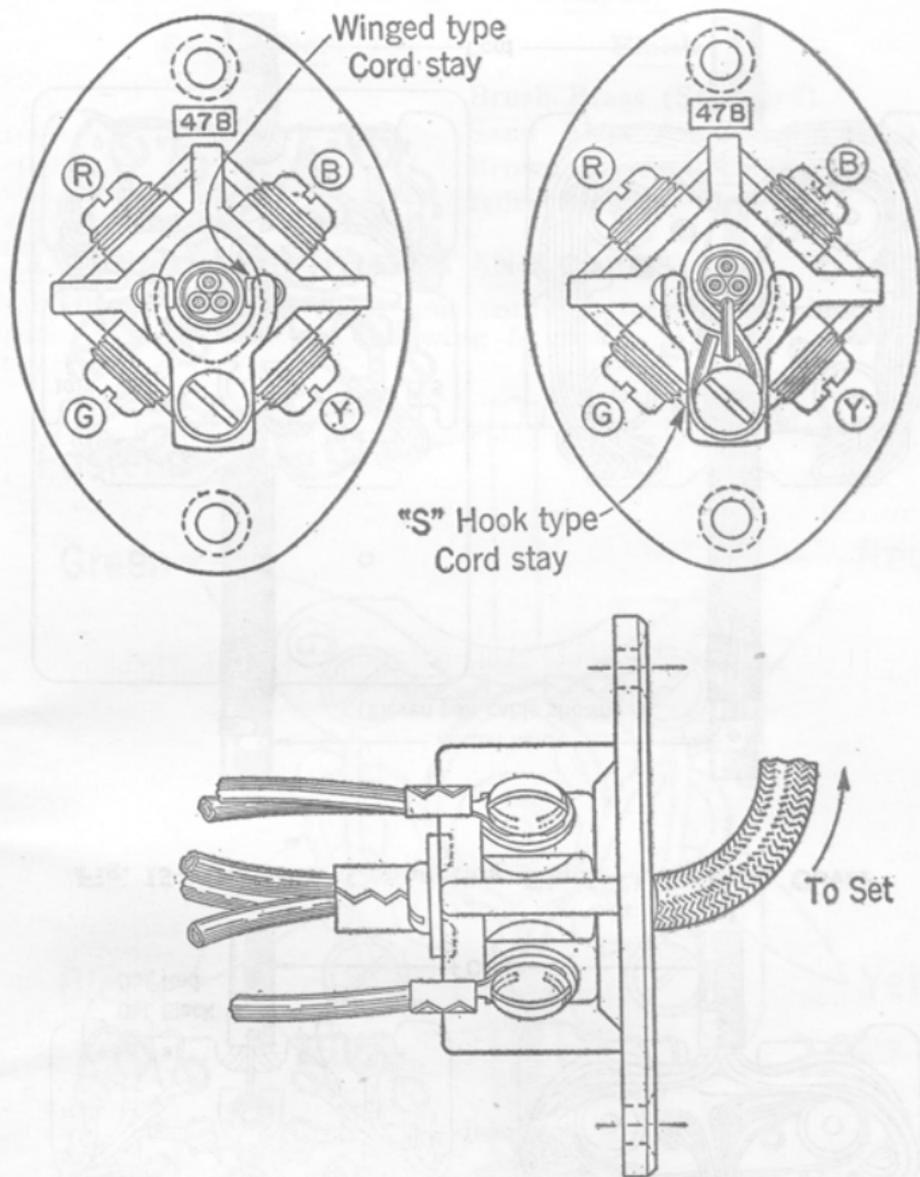


Fig. 14—Cording of 47-Type Connecting Blocks

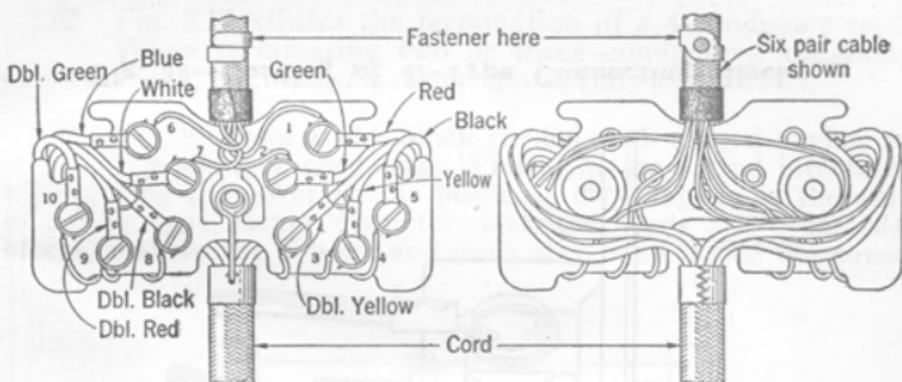


Fig. 15—One 44A Connecting Block—Use 101A Cover

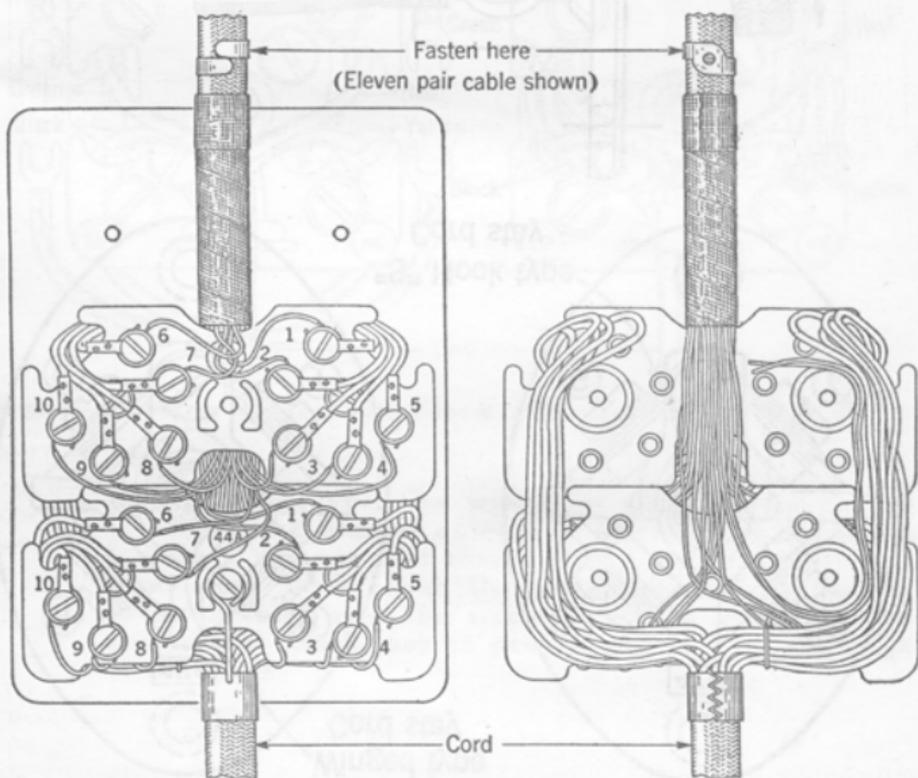


Fig. 16—Two 44A Connecting Blocks—Use 101C Cover

5.11 The wiring and cording of 44A connecting blocks are shown in Figs. 15, 16, 17, 18, and 19. Inside wiring cable is shown, as it is expected that this type cable will generally be used with these connecting blocks. Lead covered cable may, however, be used in a similar manner where conditions require it.

5.12 Where two or more 44-type connecting blocks are installed, the hook on the cord band is attached to the connecting block adjacent to the cord butt by means of the separate P-139807 screw furnished with the 101C cover. To facilitate terminating some of the larger telephone set cords on 44-type connecting blocks, cord conductors which are to be terminated on the left side of the blocks (as viewed from the front) are tied together at the factory, see Figs. 16, 17, 18, and 19 (right).

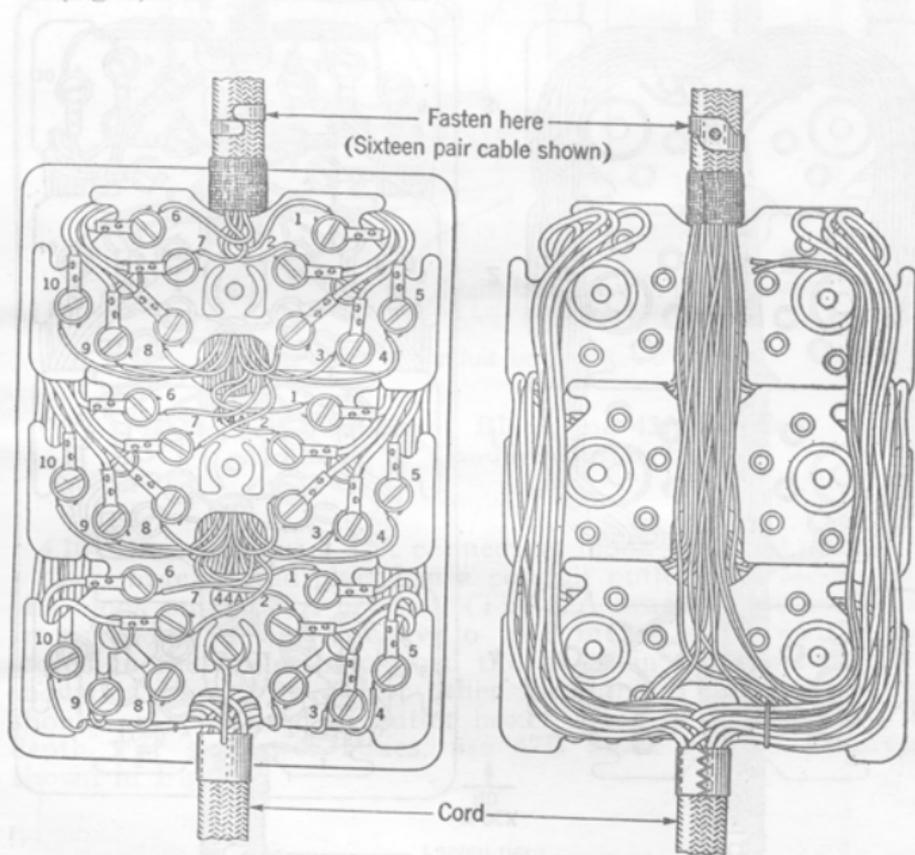


Fig. 17—Three 44A Connecting Blocks—Use 101C Cover

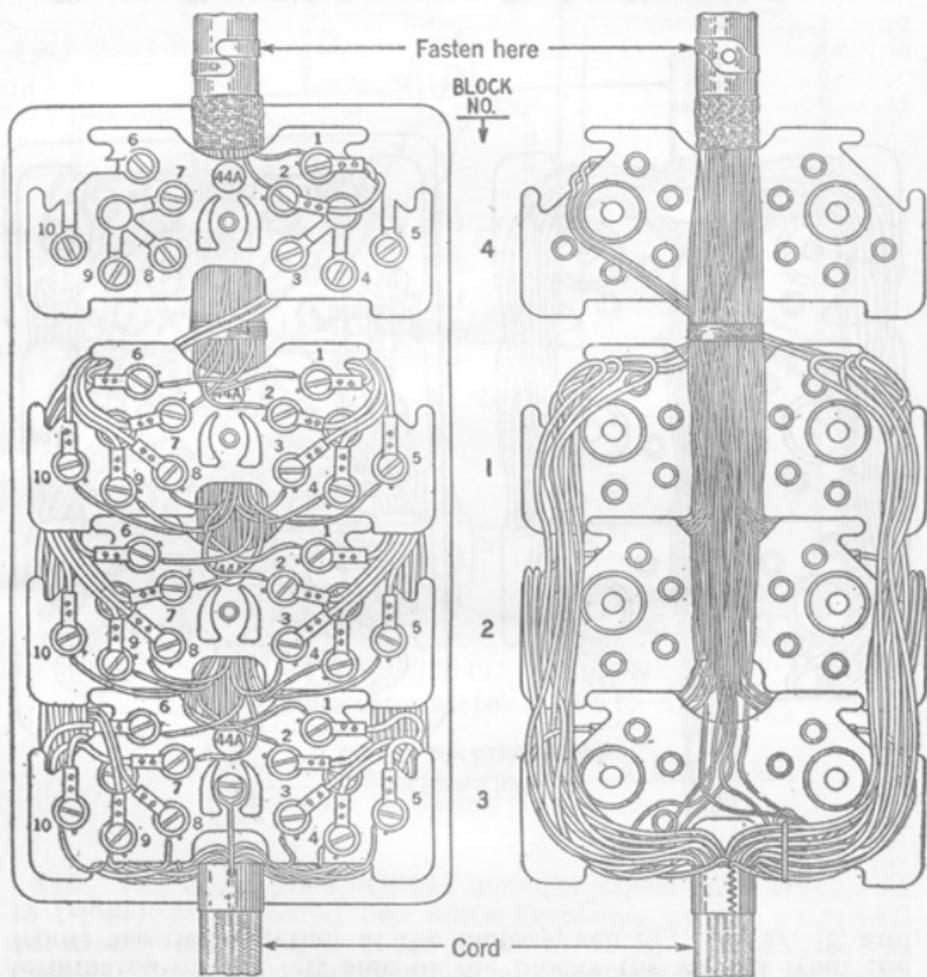


Fig. 18—Four 44A Connecting Blocks Used with 460-Series Key Telephone Sets—Use a 101C and a 101A Cover

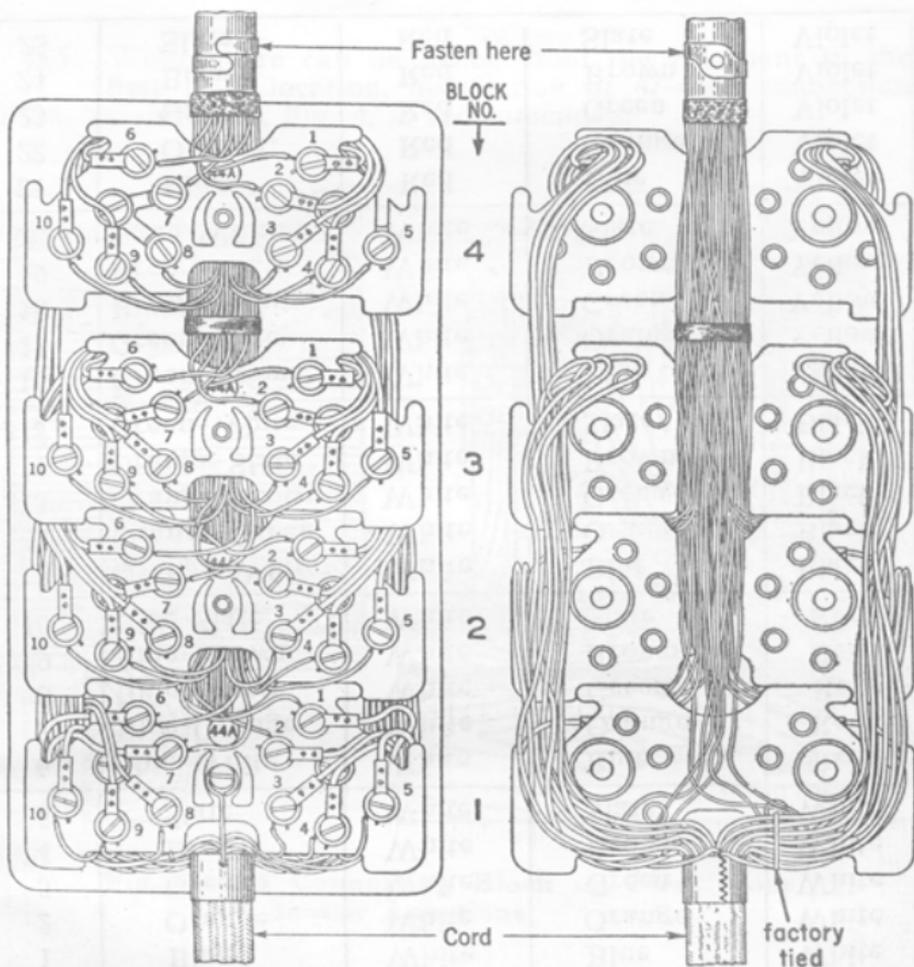


Fig. 19—Four 44A Connecting Blocks Used with 560-Series Key Telephone Sets—Use a 101C and a 101A Cover

5.13 D inside wiring cable supersedes C inside wiring cable.

Both cables are similar in construction except that the conductor insulation of the D inside wiring cable is thermoplastic, replacing the enamel and textile insulation of the C inside wiring cable. The moisture resistant quality of the D inside wiring cable permits its usage in damp locations. A 0.015 steel wire has been inserted between the core and the jacket of the D inside wiring cable to facilitate slitting the jacket. By grasping the slitting wire with long-nose pliers and pulling the wire against the jacket, the jacket may be slit to any desired length.

5.14 **Color Codes:** A new color code arrangement is used to identify conductors of D inside wiring cable. These colors and the corresponding conductor colors of C inside wiring cable are shown in Table A.

TABLE A

CONDUCTOR COLORS				
Cable Pair No.	C Inside Wiring Cable		D Inside Wiring Cable	
	Ring	Tip	Ring	Tip
1	Blue	White	Blue	White
2	Orange	White	Orange	White
3	Green	White	Green	White
4	Brown	White	Brown	White
5	Slate	White	Slate	White
6	Blue-White	White	Blue	Red
7	Blue-Orange	White	Orange	Red
8	Blue-Green	White	Green	Red
9	Blue-Brown	White	Brown	Red
10	Blue-Slate	White	Slate	Red
11	Orange-White	White	Blue	Black
12	Orange-Green	White	Orange	Black
13	Orange-Brown	White	Green	Black
14	Orange-Slate	White	Brown	Black
15	Green-White	White	Slate	Black
16	Green-Brown	White	Blue	Yellow
17	Green-Slate	White	Orange	Yellow
18	Brown-White	White	Green	Yellow
19	Brown-Slate	White	Brown	Yellow
20	Slate-White	White	Slate	Yellow
21	Blue	Red	Blue	Violet
22	Orange	Red	Orange	Violet
23	Green	Red	Green	Violet
24	Brown	Red	Brown	Violet
25	Slate	Red	Slate	Violet

TABLE A (cont'd)

CONDUCTOR COLORS				
Cable Pair No.	C Inside Wiring Cable		D Inside Wiring Cable	
	Ring	Tip	Ring	Tip
26	Blue-White	Red	Blue-White	White
27	Blue-Orange	Red	Orange-White	White
28	Blue-Green	Red	Green-White	White
29	Blue-Brown	Red	Brown-White	White
30	Blue-Slate	Red	Slate-White	White
31	Orange-White	Red	Blue-White	Red
32	Orange-Green	Red	Orange-White	Red
33	Orange-Brown	Red	Green-White	Red
34	Orange-Slate	Red	Brown-White	Red
35	Green-White	Red	Slate-White	Red
36	Green-Brown	Red	Blue-White	Black
37	Green-Slate	Red	Orange-White	Black
38	Brown-White	Red	Green-White	Black
39	Brown-Slate	Red	Brown-White	Black
40	Slate-White	Red	Slate-White	Black
41	Blue	Black	Blue-White	Yellow
42	Orange	Black	Orange-White	Yellow
43	Green	Black	Green-White	Yellow
44	Brown	Black	Brown-White	Yellow
45	Slate	Black	Slate-White	Yellow
46	Blue-White	Black	Blue-White	Violet
47	Blue-Orange	Black	Orange-White	Violet
48	Blue-Green	Black	Green-White	Violet
49	Blue-Brown	Black	Brown-White	Violet
50	Blue-Slate	Black	Slate-White	Violet

TABLE A (cont'd)

CONDUCTOR COLORS				
Cable Pair No.	C Inside Wiring Cable		D Inside Wiring Cable	
	Ring	Tip	Ring	Tip
51	Orange-White	Black	Blue-Red	White
52	Orange-Green	Black	Orange-Red	White
53	Orange-Brown	Black	Green-Red	White
54	Orange-Slate	Black	Brown-Red	White
55	Green-White	Black	Slate-Red	White
56	Green-Brown	Black	Blue-Red	Red
57	Green-Slate	Black	Orange-Red	Red
58	Brown-White	Black	Green-Red	Red
59	Brown-Slate	Black	Brown-Red	Red
60	Slate-White	Black	Slate-Red	Red
61	Blue	Red-White	Blue-Red	Black
62	Orange	Red-White	Orange-Red	Black
63	Green	Red-White	Green-Red	Black
64	Brown	Red-White	Brown-Red	Black
65	Slate	Red-White	Slate-Red	Black
66	Blue-White	Red-White	Blue-Red	Yellow
67	Blue-Orange	Red-White	Orange-Red	Yellow
68	Blue-Green	Red-White	Green-Red	Yellow
69	Blue-Brown	Red-White	Brown-Red	Yellow
70	Blue-Slate	Red-White	Slate-Red	Yellow
71	Orange-White	Red-White	Blue-Red	Violet
72	Orange-Green	Red-White	Orange-Red	Violet
73	Orange-Brown	Red-White	Green-Red	Violet
74	Orange-Slate	Red-White	Brown-Red	Violet
75	Green-White	Red-White	Slate-Red	Violet
*76	Red	White	Red	White

* The last pair in each cable is the same as pair 76.

5.15 **Wire and Cord Termination—1A Key Telephone System:** Table B indicates the 44A connecting block terminations for C and D inside wiring cable and the cord terminations for the 400-series key telephone sets used with the 1A key telephone systems.

TABLE B

Pair No.	Key Cable		Connecting Block		
	C Inside Wiring	D Inside Wiring	Term No.	Cord Cond. Color	Block No.
	Conductor Color				
1	BL	BL	1	R	1 (See 5.16)
	W	W	2	G	
2	O	O	4	Y	
	W	W	5	BK	
3	G	G	6	BL	
	W	W	7	W	
4	BR	BR	9	*BR-R	
	W	W	10	*BR-G	
5	S	S	3	*BR-Y	
	W	W	8	*BR-BK	
6	BL-W	BL	1	BR-BL	2
	W	R	2	BR-W	
7	BL-O	O	4	R-G	
	W	R	5	R-Y	
8	BL-G	G	6	R-BK	
	W	R	7	R-BL	
9	BL-BR	BR	9	R-W	
	W	R	10	G-Y	
10	BL-S	S	3	G-BK	
	W	R	8	G-BL	

TABLE B (cont'd)

TABLE B (cont'd)

Pair No.	Key Cable		Connecting Block		
	C Inside Wiring	D Inside Wiring	Term No.	Cord Cond. Color	Block No.
	Conductor Color				
11	O-W	BL	1	G-W	3 (Cord Butt)
	W	BK	2	Y-BK	
12	O-G	O	4	Y-BL	
	W	BK	5	Y-W	
13	O-BR	G	6	BK-W	
	W	BK	7	BL-W	
14	O-S	BR	9	BK-BL	
	W	BK	10	S	
15	G-W	S	3	S-BR	
	W	BK	8	S-R	
16	G-BR	BL	1	S-G	4 (See 5.16)
	W	Y	2	S-Y	
17	G-S	O	4	SPARE	
	W	Y	5	SPARE	
18	BR-W	G	6	SPARE	
	W	Y	7	SPARE	
19	BR-S	BR	9	SPARE	
	W	Y	10	SPARE	
20	S-W	S	3	SPARE	
	W	Y	8	SPARE	

* Double red, double green, double yellow, and double black in cords with rubber insulated conductors. These conductors have ribs to distinguish them from the others in the cord.

5.16 In Table B, the first box is for the first connecting block (one nearest the butt of the cable) on two and three block installations. Where a fourth block is added as shown in Fig. 18, the fourth block is placed above block No. 1. The cord attaches to the last block as shown in Figs. 16, 17, and 18.

5.17 Where 44A blocks are used as a bridging point, the running (or through) cable should ordinarily be terminated in accordance with Table B. Both the leg of this cable entering and the leg leaving the block should be brought in on the cable side of the block. The cord side of the block, or blocks, may be used for a cord or a cable from the block to some other point, such as a desk, where another connecting block will be provided for connecting a telephone set mounting cord. When a cable enters at the cord side of the block, the individual conductors should be left long enough so that any conductor could be terminated on any terminal on the block. This slack and any spare conductors should be stored under the sides of the block. Two layers of friction tape wound around the slack or spare conductors will assist in keeping these conductors in place. At the telephone set end of this cable, the conductors should be terminated on a connecting block in the order given in Table B or C.

5.18 **Wire and Cord Termination—1A1 Key Telephone System:** Table C indicates the 44A connecting block terminations for C and D inside wiring cable and the cord terminations for the 500-series key telephone sets used with the 1A1 key telephone systems. The first block shown in Table C is the block nearest to the cord butt. The fourth block is the block nearest to the cable butt (see Fig. 19).

S	M	W	M	C	D
O					
	M	C	D	S	C
	BF				

TABLE C

Key Cable			Connecting Block		
Pair No.	C Inside Wiring	D Inside Wiring	Term No.	Cord Cond. Color	Block No.
	Conductor Color				
1	BL	BL	1	R	1 (Cord Butt)
	W	W	2	G	
2	O	O	4	Y	
	W	W	5	BK	
3	G	G	6	BL	
	W	W	7	W	
4	BR	BR	9	BR-R	
	W	W	10	BR-G	
5	S	S	3	BR-Y	
	W	W	8	BR-BK	
6	BL-W	BL	1	BR-BL	2
	W	R	2	BR-W	
7	BL-O	O	4	R-G	
	W	R	5	R-Y	
8	BL-G	G	6	R-BK	
	W	R	7	R-BL	
9	BL-BR	BR	9	R-W	
	W	R	10	G-Y	
10	BL-S	S	3	G-BK	
	W	R	8	G-BL	

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TABLE C (cont'd)

Key Cable			Connecting Block		
Pair No.	C Inside Wiring	D Inside Wiring	Term No.	Cord Cond. Color	Block No.
	Conductor Color				
11	O-W	BL	1	G-W	3
	W	BK	2	Y-BK	
12	O-G	O	4	Y-BL	
	W	BK	5	Y-W	
13	O-BR	G	6	BK-BL	
	W	BK	7	BK-W	
14	O-S	BR	9	BL-W	
	W	BK	10	S	
15	G-W	S	3	S-R	
	W	BK	8	S-G	
16	G-BR	BL	1	S-Y	4 (Cable Butt)
	W	Y	2	S-BK	
17	G-S	O	4	S-BL	
	W	Y	5	—	
18	BR-W	G	6	S-W	
	W	Y	7	—	
19	BR-S	BR	9	S-BR	
	W	Y	10	—	
20	S-W	S	3	BR	
	W	Y	8	—	

6. INSTALLATION OF 6-, 30-, AND 31-TYPE CONNECTING BLOCKS

6.01 Where these connecting blocks are required, they should be installed in HS-, GA-, GB-, or GC-type cable terminal boxes as covered in the G61 series, and the wires terminated on the blocks in accordance with Section C24.191, Terminating Wires at Distributing Terminals.

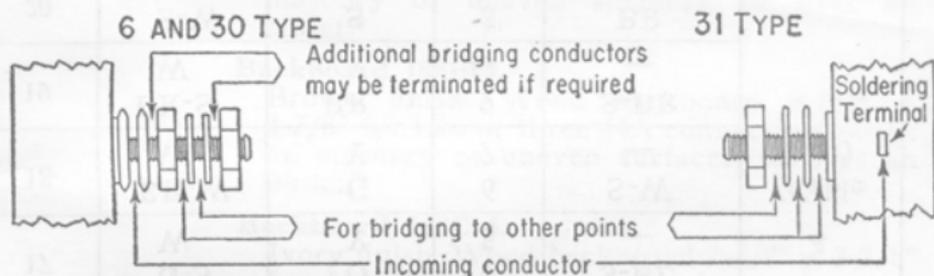


Fig. 20—Terminating Wires at Binding Post-Type Connecting Blocks