# CONNECTING BLOCKS 625-, 630-, AND 635-TYPE

# IDENTIFICATION, INSTALLATION, AND CONNECTIONS

#### 1. GENERAL

1.01 The 625-, 630-, and 635-type connecting blocks are wall-mounted connectors that provide a plug-in type termination for modular type telephone sets equipped with a miniplug-ended mounting cord. The 630-type connecting block also provides for installation of a plug-equipped modular wall telephone set. This allows the customer to move the telephone set to any location equipped with this type connecting block. The 635-type connecting block is designed to place equipment such as exclusion sets, alarm dialers, and automatic dialers in series with the telephone line and equipment when a plug is inserted into its modular jack. The 74D connecting block (Section 461-606-100) is also available for telephone sets requiring 6-conductor mounting cords.

### 1.02 This section is reissued to:

- Provide information on 635B connecting block
- Provide information on 625FS connecting block
- Add Notes for 625-type connecting blocks (Part 3)
- Add Note for 630A4 connecting block (Part 4)
- Update Fig. 6, 7, and 8 (630A4 connecting block)
- Add up-to-date information on 625S and 625T connecting blocks
- Rate the 635A connecting block MD.

#### 2. IDENTIFICATION

#### ORDERING GUIDE

- Backboard, 191B (for use with 630A4, if required)
- Block, Connecting, 625A (Fig. 1)
- Block, Connecting, 625B (Fig. 2)
- Block, Connecting, 625C (Fig. 1)
- Block, Connecting, 625F (Fig. 3)
- Block, Connecting, 625FS (Fig. 4)
- Block, Connecting, 625S (Fig. 5)
- Block, Connecting, 625T4
- Block, Connecting, b30A4 (Fig. 6, 7, 8, and 9)
- Block, Connecting, 635A (MD) (Fig. 10 and 11)
- Block, Connecting, 635B (Fig. 12 and 13)
- Tool, Head, 797A (lead insertion tool head for 630A4)
- Tool, Handle, 788A1 (for 797A tool head).

#### CONNECTING BLOCKS

2.01 The 625-type connecting blocks provide a termination for the D4BU miniplug-ended mounting cord used with the modular telephone sets.

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- 2.02 ♦The 625A connecting block (Fig. 1) is intended for new installations and is surface mounted. It contains a 42A connecting block base assembly which is used to terminate inside wire and spade-tipped leads from the jack in the cover. This connecting block replaces the 42A connecting block and the 549A jack. When mounting the 42A connecting block, leave at least 1/6-inch clearance between the bottom of the cover and the molding, carpet, or floor. •
- 2.03 The 625B connecting block (Fig. 2) includes the 625F connecting block, 43B bracket, faceplate, and six mounting screws. It is intended for new installations or modular replacement of 548A jacks.
- 2.04 The 625C connecting block (Fig. 1) is the same as the 625A connecting block except the 625C does not include the 42A connecting block. The 625C connecting block converts the 42A connecting block in existing installations to modular installation.
- 2.05 The 625F connecting block (Fig. 3) is intended for use in new installations requiring a flush-type connecting block or for modular replacement of 548A jacks. It does not include faceplate or mounting bracket.
- 2.06 The 625FS connecting block (Fig. 4) is similar to the 625F except it has a molded faceplate and a customer-operable spring-loaded cover which protects the interior telephone line contact springs from contamination. It is intended for use in areas subject to high humidity and condensation or locations exposed to spray painting, washing, mopping, or foreign matter.
- 2.07 The 625S connecting block (Fig. 5) is similar to the 625A except it has a customer-operable spring-loaded cover which protects the interior telephone line contact springs from contamination. It is intended for use in areas subject to high humidity and condensation or locations exposed to dripping, washing, mopping, or foreign matter. It contains a 42A block.
- 2.08 THe 625T connecting block is the same as the 625S except it does not contain a 42A base assembly. It is used to convert existing 42A or 625-type connecting blocks where extra protection is needed. ●

- 2.09 The 630A4 connecting block (Fig. 9) is a plug-in wall set mounting and will also accept a modular type mounting cord. It consists of a connecting block (Fig. 8) and 1034A mounting plate (Fig. 9). Two 3/16-inch 800413577 (P-41357) cover mounting screws, two 5/16-inch 840705008 and two 3/4-inch 803355825 (P-335582) flathead machine screws are included in a fastener package. The 630A4 connecting block is now available as a replacement for the 630A6 and should be ordered accordingly. The 630A4 connecting block is now being manufactured using a different mounting bracket as shown in Fig. 6, 7, and 8.
- 2.10 ◆The 797A insertion tool head mounts on the 788A1 tool handle and is used to terminate leads on the 630A4 connecting block.◆
- 2.11 The 635A (MD) connecting block contains a 650-type, 8-contact modular jack which is wired to eight screw terminals (Fig. 10). The series equipment is plugged into the modular jack, and the line and control station connections are made at the screw terminals. When a plug is not inserted, lead 1 is shorted to lead 4, and lead 5 to lead 8. Insertion of the plug removes the shorts and puts leads 1 and 4 and 5 and 8 in series with the series or exclusion equipment (Fig. 11). In this mode, continuity to the downstream equipment must be maintained through the series or exclusion equipment.
- 2.12 The 635B connecting block (replaces the 635A connecting block) is used to permit company-owned and customer-provided equipment using the D8AA mounting cord to be placed in series with telephone company equipment. This connecting block is equipped with a 651A series-bridged jack and a 10-position terminal board (Fig. 12 and 13).
- 2.13 The 635B connecting block has an optional feature which provides the field installation of a 652A jack. This jack is used to provide plug-in arrangements for the E1-type ringer, 153AM1, and 153BM1 adapters (Fig. 12 and 13).
- 2.14 When a plug is not inserted in the 651A jack, lead 1 is shorted to lead 4, and lead 5 to 8. Insertion of an 8-position plug removes the shorts and puts leads 1 and 4 and 5 and 8 in series with the series or excluded equipment (Fig. 13). In this mode, continuity to the downstream equipment must be maintained through the series

or excluded equipment. If a 4- or 6-position plug is inserted, the short is not removed and the cord picks up tip and ring on a bridged basis.

#### 3. INSTALLATION

3.01 625A Connecting Block: Mount the terminal block on a wall or baseboard so that the miniplug connector is on the bottom wherever possible. Otherwise, connector should face to left or right side but never to the top to protect against contamination. Terminate the station wire and dress leads as shown in Fig. 1. Terminals on the connecting block are lettered G, R, Y, and B as shown in Table A.



-PLUG ENTRANCE



625A CONNECTING BLOCK

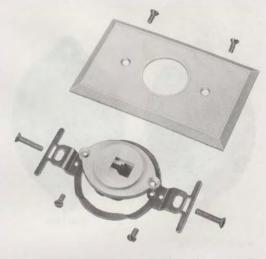
625C CONNECTING BLOCK

## Fig. 1-625A- and 625C-Type Connecting Blocks

♦ Note: If the 625A connecting block is mounted on a baseboard with the plug opening down, assure there is adequate clearance to allow easy insertion of the mounting cord plug. On narrow baseboards, it may be necessary to mount the connecting block with the plug opening to the right or left for proper insertion of mounting cord plug. ●

3.02 625B Connecting Block: Mount the bracket on a standard electrical outlet box or directly to the wall (must have recessed area)

using the mounting screws supplied (see Fig. 2). Feed the station wire through the center mounting hole of the bracket and terminate the leads on the connecting block as shown in Table A. Mount the connecting block on bracket and fasten with the two screws supplied. Attach faceplate with the two screws supplied.



- 4 CONTACTS
- FLUSH MOUNTED: FOR USE IN STANDARD ELECTRICAL OUTLET BOX NOTE: MOUNTING SCREWS, BRACKET, AND FACEPLATE PROVIDED
- . MATES WITH D4BU MOUNTING CORD PLUG
- FOR NEW INSTALLATIONS OR MODULAR REPLACEMENT OF 548-TYPE JACKS

Fig. 2—625B Connecting Block (Includes Mounting Hardware)

3.03 625C Connecting Block: Remove cover from existing 42A connecting block. Connect leads from miniplug connector in 625C connecting block to terminals on 42A connecting block. Dress leads as shown in Fig. 1; terminate leads of connecting block as shown in Table A. Attach the connecting block cover to the block using center captive screw in cover. Orient cover in same manner as 625A (see 3.01).

3.04 625F Connecting Block: Connect station wire to terminals on rear of 625F connecting

block as shown in Table A. Mount 625F connecting block on bracket and attach faceplate (Fig. 3).

♦ Note: The 625A, B, C, and F connecting blocks are provided with a protective gummed label which is to be attached over the jack entrance if the connecting block is not in use. •



- 4 CONTACTS
- FLUSH MOUNTED: USING 63-TYPE OR KS-20502,L2 BRACKET AND 16A FACEPLATE OR IN STANDARD ELECTRICAL OUTLET BOX USING 43B BRACKET OR IN WOODWORK USING I-1/4 INCH HOLE
- MATES WITH D4BU MOUNTING CORD PLUG
- MOUNTING SCREWS SUPPLIED
- FOR NEW INSTALLATIONS OR MODULAR REPLACEMENT OF 548-TYPE JACKS

Fig. 3—625F Connecting Block (Without Mounting Hardware)

- 3.05 \(\phi 625FS\) Connecting Block: Connect station wire to terminals on rear of connecting block as shown in Table A. Mount the block as shown in Fig. 4.
- 3.06 625S Connecting Block: Mount the 42A connecting block on the wall or baseboard so that the 625S connecting block cover is positioned as shown in Fig. 5.
- 3.07 625T Connecting Block: This connecting block is the same as the 625S except it does not contain a 42A connecting block. This connecting block is to be positioned over existing 42A connecting blocks as shown in Fig. 5.♠
- 3.08 630A4 Connecting Block: This block may be flush mounted on a 63-type bracket or electrical type outlet box or surface mounted on a wall. In all cases, the block should lie flat against the wall.
  - (a) A fastener package is provided with the 630A4 connecting block consisting of two 3/16-inch 800413577 (P-41357) cover mounting screws, two 5/16-inch 840705008 and two 3/4-inch 803355825 (P-335582) flathead machine screws. Depending on mounting arrangement, select proper fasteners from Table B and mount connecting block using holes designated in Fig. 8. The connecting block should be straight before tightening screws. When installing on an underflush outlet box or plaster ring, the connecting block bracket should be tightened just enough so that the assembly is tight on the wall once mounting plate is attached and tightened down. Further tightening will distort the bracket excessively.
  - (b) When placing the connecting block in an existing installation using the KS-19407 (MD) or KS-20502 bracket, it will be necessary to remove the KS-coded bracket for a flush fit and install the connecting block over the opening. The 191B or 191C backboard snaps over the 630A4 to cover wall imperfections when necessary.

TABLE A

MODULAR CONNECTING BLOCK CONNECTIONS

	INSIDE	CONNECTING BLOCK				
1A1 OR 1A2 KTS	ONE-LINE SERVICE		TWO-LINE	TERMINAL		LEAD
	NO DIAL LIGHT	DIAL LIGHT	SERVICE	625-TYPE	630A4	COLOR
Tip	Tip	Tip	Line 1 Tip	G	1	Green
Ring	Ring	Ring	Line 1 Ring	R	2	Red
A		TRNSF	Line 2 Tip	В	4	Black
A1	Ground*	TRNSF	Line 2 Ring	Y	3	Yellow

<sup>\*</sup> Supply ground for all single-line installations.

- (c) The 630A4 connecting block with the old and new bracket now contains an item called the spring block assembly 840696678 (not shown). This spring block assembly is inserted into the jack and is connected to the station wire by the quick-connect field. ◆The four wires of the assembly have been placed in small slots (combs) to prevent shorting.◆
- 3.09 \\$\int 635A (MD) Connecting Block: Remove the cover from the block by loosening the screw in the center. Mount the block on a suitable vertical surface. Connect the line and control station leads (Fig. 11) to the screw terminals. Replace the cover. Connection of the series or exclusion equipment is to be made by inserting the plug into the series jack.
- 3.10 635B Connecting Block: Remove the cover from the block by loosening the screw in the center. Mount the block on a suitable vertical surface. Connect the line and control station leads to the screw terminals (Fig. 13). If the optional 652A jack is to be installed, connect as shown in Fig. 13.●

#### 4. CONNECTIONS

#### 630A4 Connecting Block

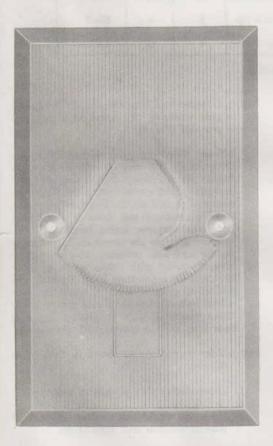
4.01 The 630A4 may be used with exposed or concealed station wire. Each quick-connect terminal (total of four) provides three station wire

terminations per lead. One termination is required for the jack conductor. An access for a test point is also provided (Fig. 8).

- ♦ Note: 630A4 connecting blocks manufactured after March 1977 will be received from the factory with a plastic protective wrapper folded around the quick-connect terminals. To connect station wire, fold out the front and side flaps, make connections and dress leads (Fig. 7), and refold wrapper across terminals. This wrapper protects the terminals from foreign matter and also prevents wire ends from making contact with 1034A mounting plate. If a 630A4 connecting block without this protective wrapper is used, insulating tape should be applied to the inside surface of the 1034A mounting plate to prevent any wire ends from making contact with the plate. ■
- 4.02 Make connections as shown in Table A as follows:
  - (1) Leave station wire conductors unstripped.
  - (2) Dress the conductors so they will not be pinched or cross over each other.
  - (3) Use the 797A lead insertion tool to seat conductors in bottom of slots (Fig. 7). Do not twist or rock insertion tool and allow sufficient slack. Do not insert more than one conductor in each slot. Prim the terminated leads

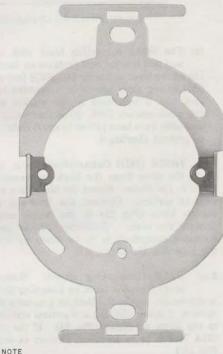
approximately 1/4 of an inch from the connecting surface and bend downward in such a manner that the conductor tips do not make contact with the mounting plate.

- (4) Attach mounting plate (Fig. 9) using the two 3/16-inch 800413577 (P-41357) cover mounting screws or two 5/16-inch 840705008 flathead machine screws from the fastener package.
- (5) Check for continuity on each lead by inserting 523A4 plug and connecting test set.



Note: Use of heavy gauge (greater than No. 22 AWG), such as JKT station wire or heavily insulated GS-type station (MD) wire, may cause difficulty in installation and/or damage to the connecting block. Such wire should be used only where it is impossible to provide appropriate types (D or G station wire or E inside wire). Do not strip insulation from conductors.

BRACKET (PROVIDED WITH 625S CONNECTING BLOCK)



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BRACKET IS USED TO MOUNT 625FS TO GEM
BOX, 63A, OR 63B MOUNTING BRACKET.

Fig. 4-\$625FS Connecting Block\$

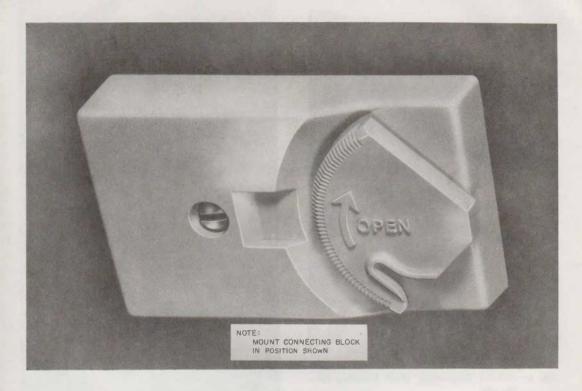


Fig. 5-\$625\$ Connecting Block\$

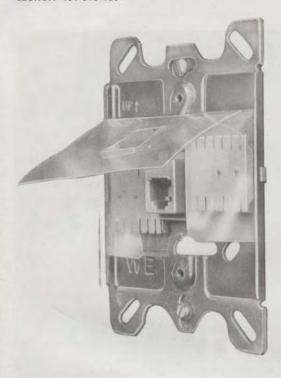


Fig. 6—\$630A4 Connecting Block Showing New Bracket\$

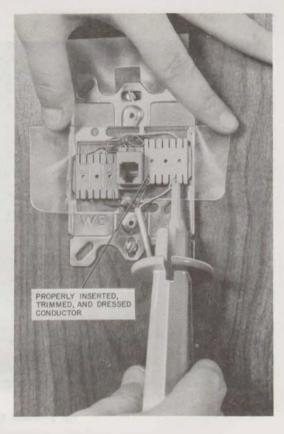


Fig. 7—♦Terminating Wire With Lead Insertion Tool in 630A4 (With New Bracket)♦

- (I) 63 TYPE, KS-20502, L2 OR KS-19407, LI (MD) BRACKET
- (2) GEM BOX AND NORMAL WALL SURFACE
- (3) OR (4) WEAK WALLS, OVER SIZE WIRING HOLE, LOCAL DAMAGE, ETC.
- (5) 1034A MOUNTING PLATE

NOTE:

IF MORE THAN 2 FASTENERS ARE NECESSARY, USE ADDITIONAL MOUNTING HOLES AS REQUIRED

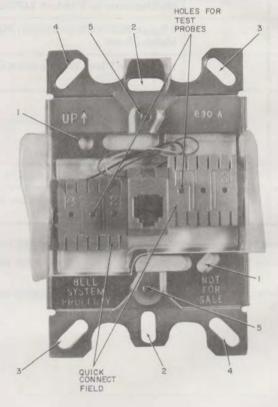


Fig. 8—\$630A4 Connecting Block Mounting Arrangement®

TABLE B FASTENERS FOR MOUNTING 630A4 CONNECTING BLOCK

TO FASTEN CONN BLK TO	QUANTITY*	TYPE OF FASTENERS		
1034A Mtg. Plate	2	3/16-Inch 800413577 (P-41357) Flathead (#6-32) Machine Screw or 5/16-Inch 840705008		
63-Type Bracket or Gem Box	2	3/4-Inch 803355825 (P-335582) Flathead (#6-32) Machine Screw		
Stucco or Plaster on Wood Lath	2	No. 8-15 by 1-Inch Tapping Screw (840502744), Type AB †		
Plaster on Metal Lath, Paneling on Furring Strips, or Plaster Board on Studs	2	No. 8-15 by 1-Inch Tapping Screw, Type AB ‡, or B Wall Screw Anchor, Size 4 or 6 †		
Hollow Masonry	2	B Wall Screw Anchor, Size 4 or 6 †		
Solid Masonry 2		Size 10 D Plastic Anchor with No. 8-15 by 1-Inch Tappin Screw, Type AB †		

<sup>\*</sup> If connecting block is not securely fastened, additional fasteners should be used.

 $<sup>\</sup>dagger$  Use size 4 anchors for walls up to 5/8-inch thick and use size 6 anchors for walls from 5/8-inch to 1-1/4 inch thick.

<sup>†</sup> Equivalent size and thread engagement or greater. Tapping screws must always be sunk into lath, furring strips, or studs.

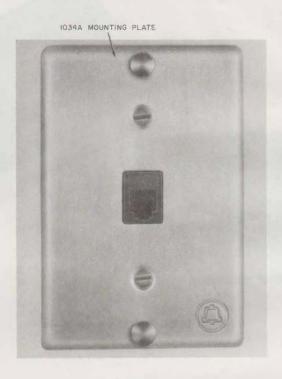


Fig. 9—630A4 Connecting Block (Includes Mounting Plate)

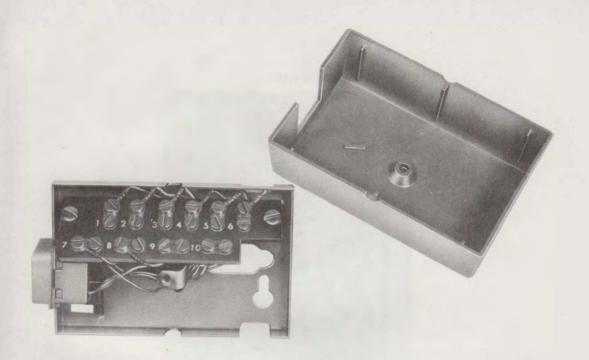


Fig. 10-\$635A (MD) Connecting Block\$

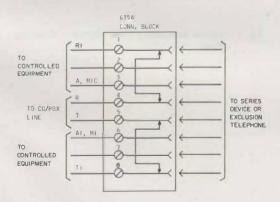


Fig. 11—Schematic Diagram, 635A (MD) Connecting Block



Fig. 12-\$635B Connecting Block

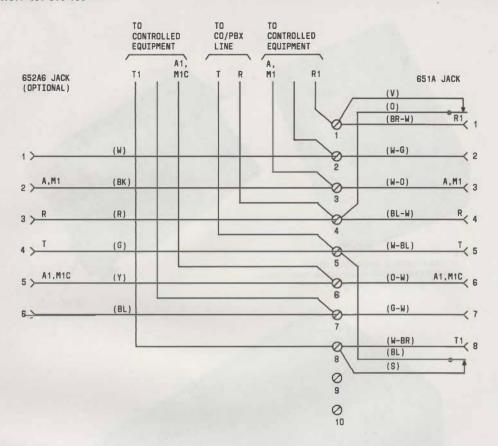


Fig. 13—♥Schematic Diagram, 635B Connecting Block♥