

TELEPHONE SETS—MODULAR TYPE

1. GENERAL

1.01 This section provides general information on the modular concept of telephone sets.

1.02 This section is reissued to:

- Revise Tables B, C, D, and F
- Add new Table E
- Add 616W jack
- Add 523B and F-59625 plugs
- Add 248A adapter
- Add M4AR-3 cord
- Delete all wiring diagrams as this information may be found in specific telephone set practices
- Delete and revise appropriate figures to reflect change from 630A6 to 630A4 connecting block.

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



The 630A4 connecting block is now available as replacement for the 630A6, and should be ordered accordingly. After 5-75, the 630A4 connecting block will be manufactured using a different mounting bracket as shown in Fig. 13.

1.03 The modular telephone set is the same as the standard telephone set except the telephone set base and handset are jack equipped to accept a plug-ended mounting cord (desk set) and handset cord (wall and desk sets.) Modular wall sets are equipped with a plug to mount on a 630A6 or 630A4 connecting block.

1.04 Modular and partially modular telephone sets are available assembled (less cords) or as

components (housing, handset, telephone set base, etc.). See Tables A through D.

1.05 This section provides for the installation of connecting blocks, modular telephone sets, and modular components; conversion and/or repair of nonmodular telephone sets and nonmodular components.

1.06 When installing modular telephone sets or converting sets to modular, various items of the following auxiliary apparatus will be required:

(1) **Connecting blocks:**

Note: All connecting blocks will accept modular mounting cords, however, the 630A4 is used primarily for wall sets with 523A-type plug.

- 625A—Surface mounted for new installations (Fig. 7, includes terminal block)
- 625F—Flush-mounted for new installation, replaces existing 47C connecting block and 548A jack (Fig. 8)
- 625B—Includes 625F, 43B bracket, faceplate, and screws (Fig. 9)
- 625C—For conversion of existing 42A connecting blocks (Fig. 8)
- 630A4—(plug-in wall set mounting) (Fig. 10 and 12).

(2) **Test cord:**

- M4AR-3 cord, 15-1/2 inches long with modular plug on one end, spade tips on the other for testing modular jacks and connecting blocks.

(3) **Handset cord jacks (Slip-on):** Used for conversion of telephone bases and telephone set bases.

- 616B jack for TOUCH-TONE® wall set base (Fig. 6)

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- 616C jack for rotary wall set base (Fig. 6)
 - 616D jack for TOUCH-TONE and rotary general purpose desk, single-line, 2-line, and multiline (key) set bases (Fig. 6)
 - 616P jack for TOUCH-TONE sets, rotary PRINCESS® sets, and CALL DIRECTOR® sets (Fig. 6)
 - 616T jack for TRIMLINE desk sets and 6-button wall bases (Fig. 6)
 - 616W jack for G15A handsets equipped with 840402598 cup assembly (Fig. 6).
- (4) **Mounting cord jacks (Fig. 6):** Used for conversion (except 623D3).
- 623D3 jack for TOUCH-TONE sets and rotary general purpose desk sets (factory supplied in 500DM and 2500DM telephone sets and 500D2M and 2500D2M telephone set bases)
 - 623D4 jack for TOUCH-TONE sets and rotary general purpose desk sets
 - 623P4 jack for TOUCH-TONE sets and rotary PRINCESS telephone sets (Fig. 6)
 - 623T4 jack for TRIMLINE desk base (Fig. 6).
- (5) **Plugs for wall sets:**
- 523A3—three conductors
 - 523A4—four conductors (Fig. 6)
 - 523B—for line powered speakerphone and 2960A01M repertory dialer. (Converts desk sets to wall sets.)
- (6) **Adapters for plug-in mounting of nonmodular and modular wall sets** (must be combined with a 523A-type plug):
- 228A adapter for 554-, 555-, 556-, 557-, 558-, 559-type telephone sets (Fig. 22)
 - 229A adapter for 2254-, 2555-, 2558-type telephone sets (Fig. 23)
 - 230A adapter for AC1-type telephone bases (Fig. 24).
- Note:** In modular wall telephone set and telephone set base codes, no distinction is made between apparatus which include adapters and newer apparatus whose base pans do not require adapters. The wiring and function of the two assembled configurations are identical.
- (7) **Tools:**
- 797A tool, used with 788A1 tool (handle), for terminating station wire leads on 630A4 connecting block (Fig. 16)
 - 798A tool for notching nonmodular housings to clear slip-on jacks (Fig. 17)
 - 799A tool (Fig. 18), a template used to determine notching location on housings.
- (8) **Apparatus Blanks (Fig. 19):**
- 123A—fills in jack notch in 500D2 and 2500D2 modular housing when using spade tipped cords, e.g., for amplifier handsets, or multiconductor (6 or more) line cords.
 - 124A—fills in jack notches in 2554B2, 702B2, and 2702B2 modular housings, when using spade tipped cords.
- (9) **Adapters:**
- 224A—D4BU cord to 541-, 551-jacks (Fig. 20)
 - 225A—D4BU cord to 548-, 549-jacks (Fig. 21)
 - 227A—H4DU cord to TRIMLINE handset
 - 231A—H4DU cord to TRIMLINE base
 - 248A—D4BU cord to 2012 transformer (Fig. 25).
- (10) **Plug:**
- F-59625—this is a dummy plug for placing in unused connecting blocks.

2. IDENTIFICATION

- 2.01 Refer to Tables A through D for ordering information.

3. INSTALLATION

- 3.01 Install assembled modular telephone sets and bases as follows:

- (1) Install appropriate connecting block (Part 4) for a desk and/or wall set.
- (2) Plug handset and mounting cords (desk sets) into the handset and telephone set base.
- (3) Plug in telephone set (Fig. 27 and 28) and test for proper operation (wall sets).

Note: When mounting a modular wall set, the first thing that must be done is to guide the plug into the receptacle and it must remain slightly engaged while the studs are being located. This is necessary to prevent damage to the plug caused by bumping against the connecting block. While mounting, it is helpful to view the wall set from the side.

- (4) Provide modular station number card E-6417 for rotary set and E-6418 TOUCH-TONE sets (letter M is located above the area code).

- 3.02 Install and assemble modular telephone sets and components as follows:

- (1) When assembling the following sets, make any required wiring changes (Part 6) before installing housing.
- (2) Install appropriate connecting block if required.
- (3) On 500D2M and 554B2P, install dial parts as required for dial being used.
- (4) Install housing (including faceplate for 2500D2 housing).
- (5) Mount set (wall sets only) on 630A4 connecting block (Fig. 27).

Note: When mounting a modular wall set, the first thing that must be done is to guide the plug into the receptacle and it must remain slightly engaged while the studs are

being located. This is necessary to prevent damage to the plug caused by bumping against the connecting block. While mounting, it is helpful to view the wall set from the side.

- (6) Install handset, handset cord, and mounting cord (desk set only) as shown in Fig. 1 through 5.

Note: When installing H4DU handset cord on AD2 or AC1P telephone bases, it is necessary to use 231A (base) and 227A (hand telephone set) adapters. When installing on an AD3, AC2, or AC2P telephone base, use the 227A adapter only.

- (7) Test for proper operation.
- (8) Provide modular station number card.

Special Purpose Handsets

3.03 Where required, the G15A handset used with these sets can be replaced with other types. Remove handset cord jack and leads from terminals in telephone set or base and install special purpose handset. Refer to Division 501 for connections of these handsets. Except for 554BM telephone sets, installation of handsets with spade-tipped cords will require the use of apparatus blanks (3.05; Fig. 19).

- For shoulder rest—G4
- For impaired hearing—G6
- For weak speech—G7
- For noisy locations—G8 or D-180413

3.04 Special purpose transmitters for use with G15A handset are the KS-16664L3 (high noise level) and KS-20043L2 (low noise level.) For installations requiring 238-, 276-, or 277-type amplifier, install amplifier on G15A handset transmitter cup to terminals shown for handset leads in Section 501-226-100.



When nonmodular components must be replaced during installation or repair visits, refer to Parts 4 and 5.

Apparatus Blanks

3.05 The 123A or 124A apparatus blank (Fig. 19) is a one-piece slip-on blank which is required whenever a modular plan housing (notched for jacks) is used with a spade-tipped handset and/or mounting cord. Refer to 3.03 for usage.

3.06 The 123A apparatus blank slips on the baseplate flange (Fig. 30), and fills the housing notch for handset cord and/or mounting cord in the 500D2 and 2500D2 housings.

3.07 The 124A apparatus blank has two faces. The higher face is used to fill and conceal the notch in the 2554B2 housing (Fig. 32). The lower face fills and conceals the notches in the PRINCESS set housings. The blank is slipped on the housings so that its unused face is inside the housings and the three grooved edges of the used face mate with the edges of the housing hole.

4. INSTALLATION OF CONNECTING BLOCKS

4.01 Connections to both 625- and 630-type connecting blocks are made according to Table E to insure compatibility of service. Wiring changes for party line service are made within the set and not at the connecting block.

4.02 The 625-type connecting block provides a termination for station wire and the mounting cord as follows:

- (a) The 625A is intended for new installations of modular desk sets using a surface mounted connecting block.
- (b) The 625C used to convert existing 42A connecting blocks to accept plug-ended mounting cords. Dress leads as shown in Fig. 7.
- (c) The 625F (Fig. 8) is intended for new installations requiring flush-type connecting block or replacement of 548A jack. Install in same manner as 548A jack (Sections 460-630-100 and 461-630-400).
- (d) The 625B assembly (Fig. 9) includes 625F connecting block, 43B bracket, faceplate, and six screws.

Note: The plug entrances of the 625A and/or 625C connecting blocks should be positioned

facing downward if at all possible or to the right or left, never facing upward, preventing foreign matter and cleaning fluids from entering the jack (Fig. 7).



Check for continuity on each lead by inserting M4AR-3 cord and connecting hand test set.

4.03 The 630A4 connecting block (Fig. 10), includes a 1034A mounting plate, two P-41357 or 800413577 3/16-inch screws, two 840705008 5/16-inch screws, and two P-335582 or 803355825 3/4-inch screws. The 3/4-inch screws are used to attach the connecting block to a box or bracket and either the 3/16-inch or 5/16-inch screws are used to attach the 1034A mounting plate. The connecting block is intended to mount directly to the wall surface (surface mounted) and various brackets as follows:

(1) To mount the connecting block, use the fasteners indicated in Table F. In all cases, the connecting block should be flat against the wall. It may be necessary to break off the rest ears on early production models to achieve this (Fig. 12). If a previous installation used a KS-19407L1 or KS-20502L1 bracket, remove it and install the connecting block over opening.

(2) Plumb connecting block. Tighten screws. In some cases, such as when mounting hardware is underflush, the connecting block will distort if screws are too tight. In such cases tighten screws until just tight enough to make the assembly tight on the wall once mounting plate is attached.



The 630A4 does not protrude into wall and may be used with exposed as well as concealed station wire. Exposed wire should enter from the bottom.

Note: Do not use wire that is larger than 22 gauge or heavily insulated as it may cause difficulty in installation and/or damage to the connecting block.

(3) Make connections as shown in Table E using the following procedure:

- (a) Do not strip conductors.

- (b) Dress the conductors in such a way that they will not be crossed over each other and/or pinched.
- (c) Insert conductors snugly into bottom of slots with the lead insertion tool (Fig. 14 and 16). Do not twist or rock the tool, and allow generous slack. Do not insert more than one conductor in each slot.
- (d) Trim (not on looping terminations) and dress leads as shown in Fig. 14. Bare conductor ends must not contact mounting plate.

Note: The connecting block has four quick-connect terminals, each providing three station wire terminations. Access test points on each terminal are also provided (Fig. 12).

- (4) Attach the mounting plate (Fig. 10). The mounting plate is easier to install with 5/16-inch screws, but in some cases of surface mounting they protrude into the wall behind the connecting block when fully tightened. When they cannot be completely tightened due to interference with the wall, the 3/16-inch screws should be used.
- (5) Check for continuity on each lead by inserting M4AR-3 cord and connecting hand test set.

191B Backboard

4.04 The 191B backboard (Fig. 15) is installed by snapping over 630A4 connecting block (optional, for decor purposes).

Adapters

4.05 224A and 225A adapters are intended for use when it is not desirable to replace existing jacks.

- (a) The 224A adapter (Fig. 20) is used to adapt D4BU mounting cord to the 541A and 551A jacks (12 pin jack).
- (b) The 225A adapter (Fig. 21) is used to adapt D4BU mounting cord to 404B (MD), 493A (MD), 497A (MD), 548A, and 549A jacks (4 pin).

Note: 541A, 548A, 549A, and 551A jacks should not be mixed with 625-type connecting

blocks where portable telephone service is required.

4.06 The 248A adapter attaches to a 2012B transformer (Fig. 26) and has a jack that accepts one end of a modular mounting cord. The other end of the cord would plug into an unused 625- or 630-type connecting block to provide power for dial/night lights at other locations.

5. CONVERSION

5.01 Convert telephone set as follows:

- (1) Remove housing, handset, spade-tipped handset cord. If wall set, disconnect inside wire. If desk set, remove spade-tipped mounting cord.

Note: If a current version of the G3 handset is being used (modular type cord opening in handset), it may be converted to a G15 handset per Section 501-210-103, Issue 6.

- (2) On rotary dial sets requiring housing color change, remove fingerwheel, finger stop, and dial number plate.
- (3) On 7-type dials, remove the protrusion of the finger stop support (part of the dial frame) in such a manner that the remaining stop surface shall not project above the lip of the frame. Install the universal number plate, dust ring, and 840161285 finger stop. Provide modular station number card and install fingerwheel.
- (4) For sets equipped with 9C-type dial, install universal number plate, finger stop, and P-11E297 lock ring. For sets equipped with 9CA-type dial, install universal number plate and 840158372 finger stop—lock ring not required. Install P-17A422 or 811714229 ring assembly over edge of number plate. Provide modular station number card and install fingerwheel.
- (5) For wall telephone set, inspect base pan of telephone set. If there is an opening for a 523A plug, install as follows:
 - (a) The end of the plug marked "TOP" shall be oriented toward the top of the base pan. One side of the plug should be engaged in the track first. Then the plug should be

rolled in toward the pan to snap in the opposite side.

(6) If base pan of wall set does not have the previous feature, install and connect the correct adapter (228, 229, or 230) and the 523A-type plug (Fig. 22, 23, and 24). Install handset cord jack per Table B or C.

(7) For desk telephone sets, modify base pan of telephone set base where required and install handset and/or mounting cord jacks per Fig. 34 through 43.

(8) Connect plug and/or jack leads per specific telephone set practices. Insulate and store unused conductors. Dress all leads to avoid ringer gongs, moving parts of ringer and line switch, and interference with other components when set is assembled.

(9) On sets requiring no housing change, install notched housing. If a notched housing is not available, punch housing per Fig. 44, 45, and 46, except for AC- and AD-type telephone bases which require no housing modification.

(10) Mount the wall telephone set base on the 630A4 connecting block (Fig. 27).

(11) Install handset, handset cord, and (desk set only) mounting cord.

(12) Provide modular station number card E-6417 and/or E-6418.

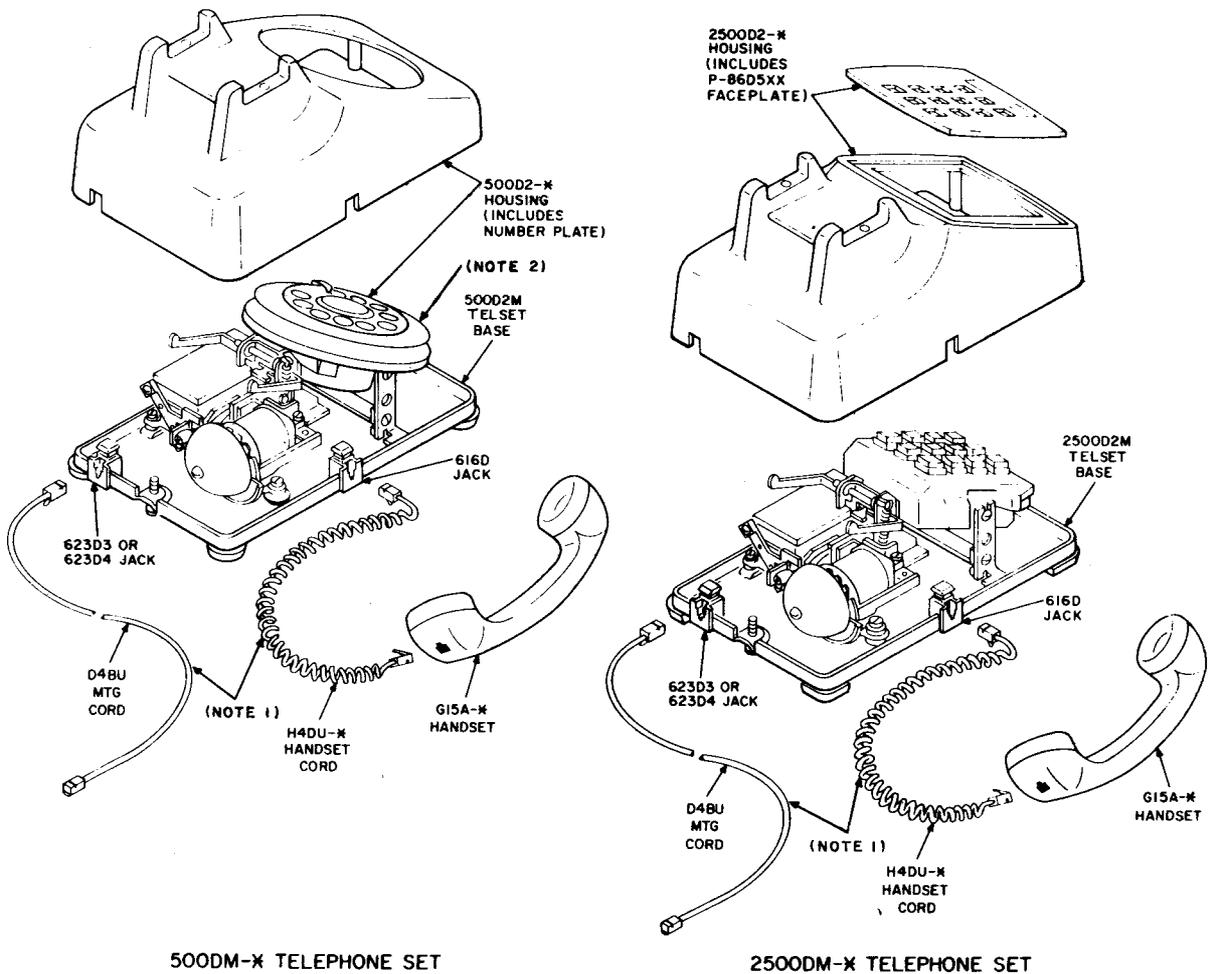
6. CONNECTIONS

6.01 Bridged Ringing Standard: All modular telephone sets will be supplied connected for bridged ringing.

6.02 Polarity Guards: Refer to appropriate reference section in Division 502 for ordering and installation information.

7. MAINTENANCE

7.01 Replaceable Items: Standard replaceable items such as ringers, dials, receiver units, etc. can be replaced or maintained in accordance with sections covering the particular item.

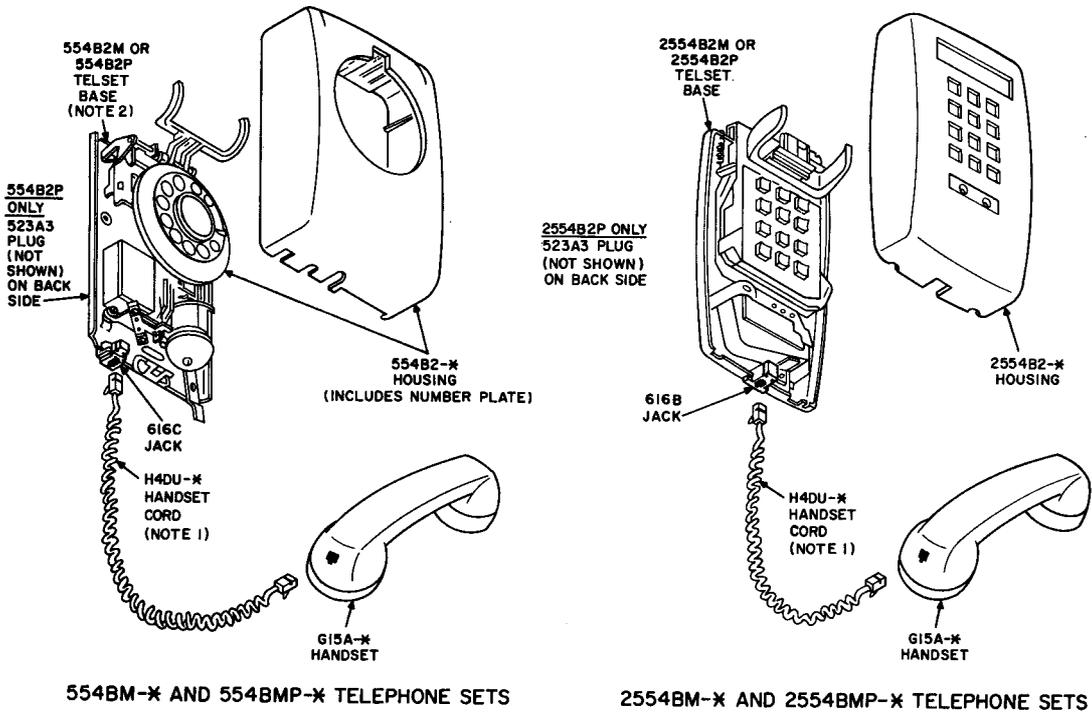


* ADD TWO DIGIT COLOR CODE.

NOTES:

1. CORDS SHOWN ARE NOT INCLUDED WITH TELEPHONE SETS AND MUST BE ORDERED SEPARATELY.
2. DIAL NOT FULLY ASSEMBLED ON SEPARATE TELEPHONE BASES.

Fig. 1—500DM and 2500DM Telephone Sets



554BM-x AND 554BMP-x TELEPHONE SETS

2554BM-x AND 2554BMP-x TELEPHONE SETS

* ADD TWO DIGIT COLOR CODE.

NOTES:

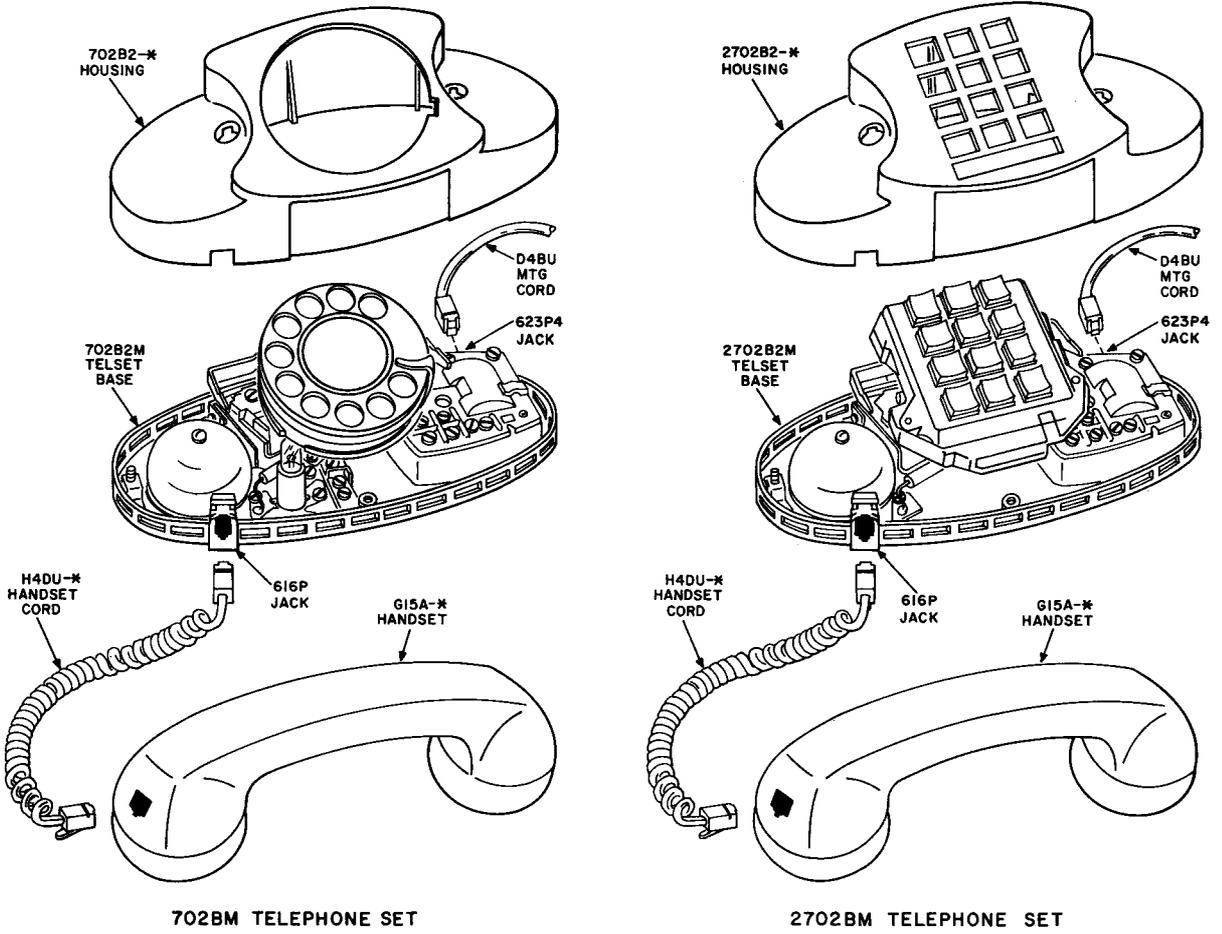
1. H4DU-x CORDS MUST BE ORDERED SEPARATELY.
2. DIAL NOT FULLY ASSEMBLED ON SEPARATE TELEPHONE BASES

Fig. 2—554BM, 554BMP, 2554BM, and 2554BMP Telephone Sets

TABLE A
COLOR ORDERING GUIDE

TEL SET, HOUSING, HANDSET, AND HANDSET CORD		COORDINATED FACEPLATE* TOUCH-TONE DIAL		UNIVERSAL NUMBER PLATE ROTARY DIAL*	
Black	-03	Charcoal	-70	840200034	-03
Ivory	-50	Muted Ivory	-80	840200505	-50
Green	-51	Light Green	-71	840200513	-51
Red	-53	Muted Red	-69	840200539	-53
Yellow	-56	Light Yellow	-72	840200562	-56
White	-58	Light Gray	-73	840200588	-58
Beige	-60	Muted Beige	-75	840200604	-60
Aqua Blue	-62	Muted Blue	-76	840200620	-62

*Faceplates same color as housing are MD.



* ADD TWO DIGIT COLOR CODE.

NOTE:

CORDS SHOWN ARE NOT INCLUDED WITH TELEPHONE SETS AND MUST BE ORDERED SEPARATELY.

Fig. 3—702BM and 2702BM Telephone Sets

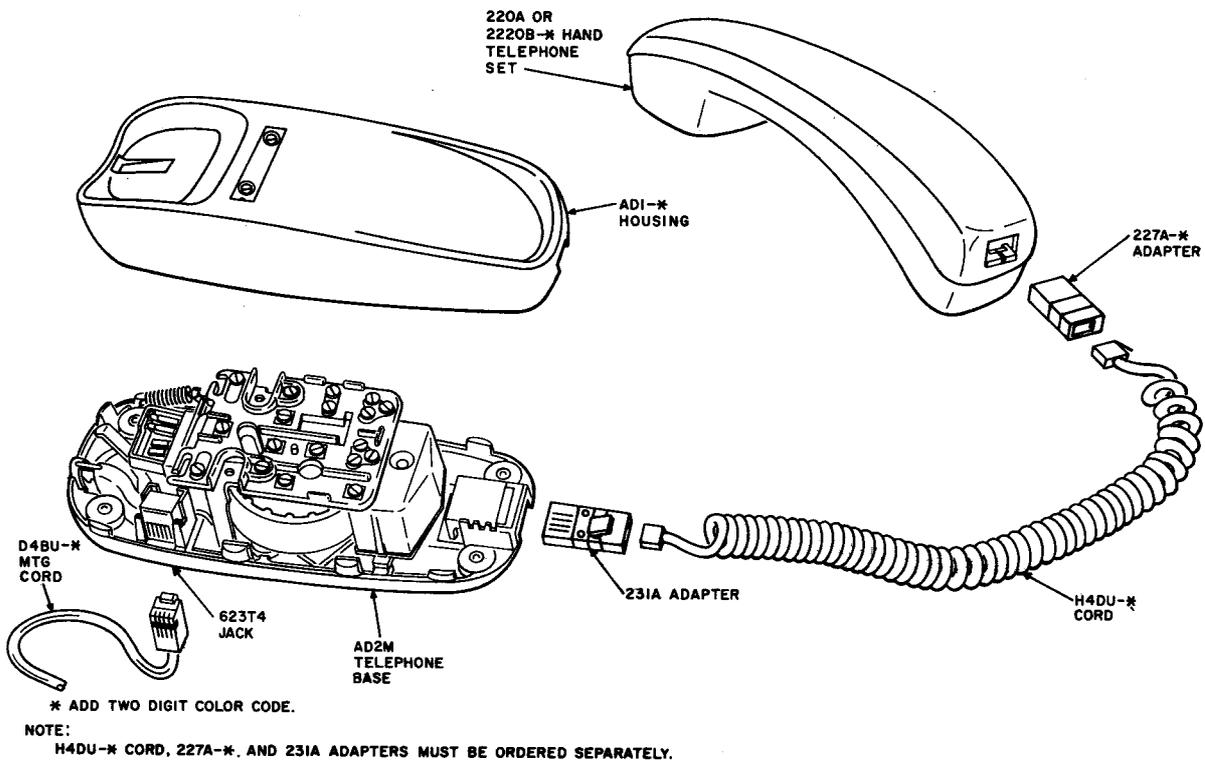
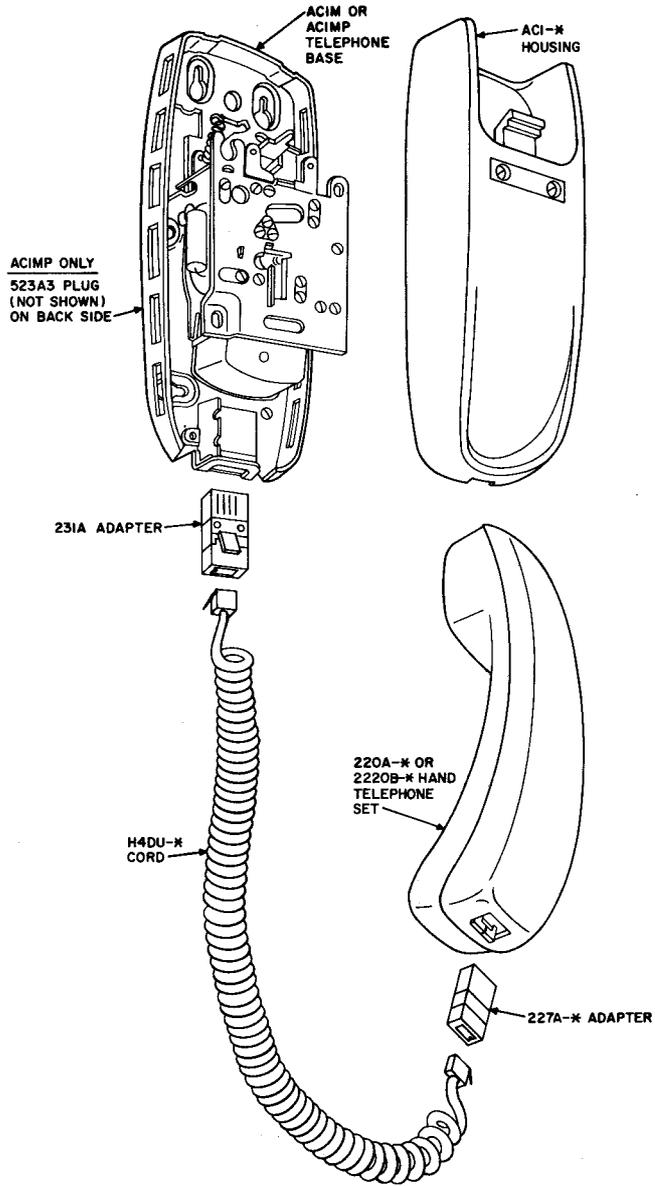


Fig. 4—AD2 Telephone Base With 220A or 2220B Hand Telephone Set



* ADD TWO DIGIT COLOR CODE.

NOTE:

ADAPTERS AND CORD SHOWN ARE NOT INCLUDED WITH EITHER HAND TELEPHONE SET OR TELEPHONE BASE AND MUST BE ORDERED SEPARATELY.

Fig. 5—ACI or ACIP Telephone Base With 220A or 2220B Hand Telephone Set



Fig. 6—Modular Jacks

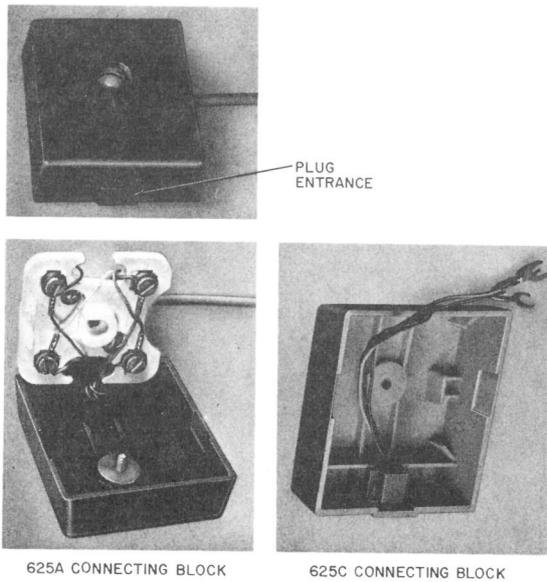
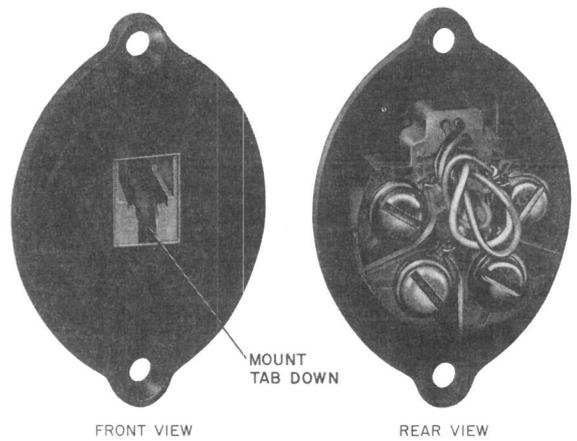
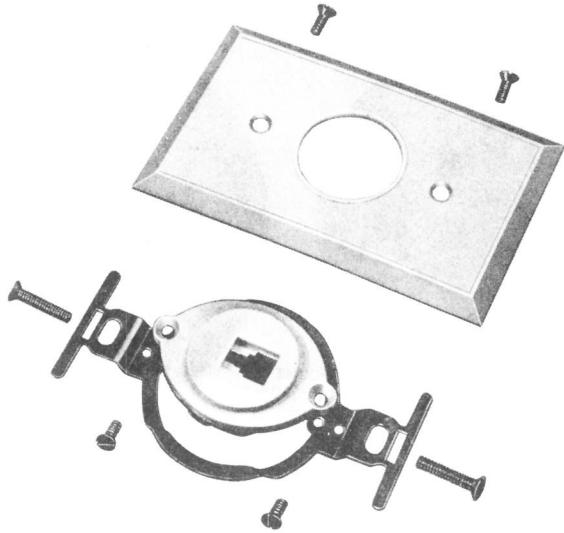


Fig. 7—Modular Wall Connecting Blocks



- 4 CONTACTS
- FLUSH MOUNTED:
USING 63A OR KS-20502,L2 BRACKET
AND I6A FACEPLATE OR IN STANDARD
ELECTRICAL OUTLET BOX USING 43B
BRACKET OR IN WOODWORK USING
1-1/4 INCH HOLE
- MATES WITH D4BU MOUNTING CORD PLUG
- MOUNTING SCREWS SUPPLIED
- FOR NEW INSTALLATIONS OR MODULAR
REPLACEMENT OF 548-TYPE JACKS

Fig. 8—625F Connecting Block



- 4 CONTACTS
- FLUSH MOUNTED:
FOR USE IN STANDARD ELECTRICAL
OUTLET BOX USING 43B BRACKET AND
I6A FACEPLATE
- MATES WITH D4BU MOUNTING CORD PLUG
- MOUNTING SCREWS SUPPLIED
- FOR NEW INSTALLATIONS OR MODULAR
REPLACEMENT OF 548-TYPE JACKS

Fig. 9—625B Connecting Block Assembly

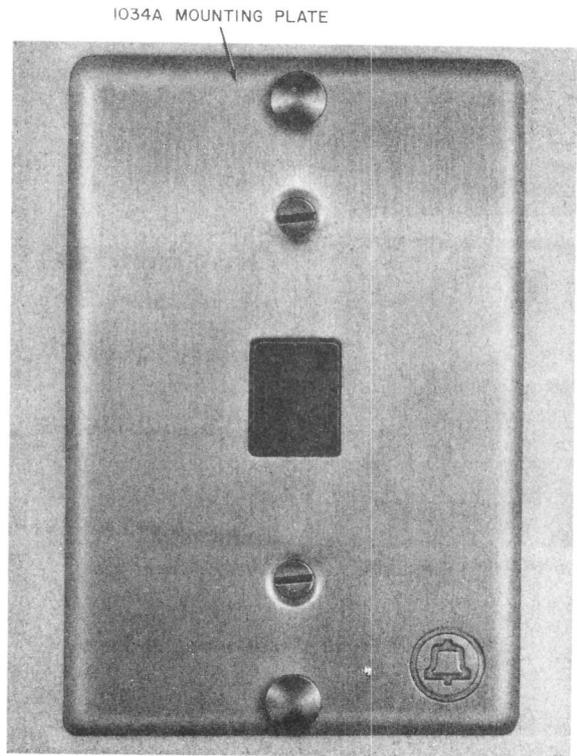
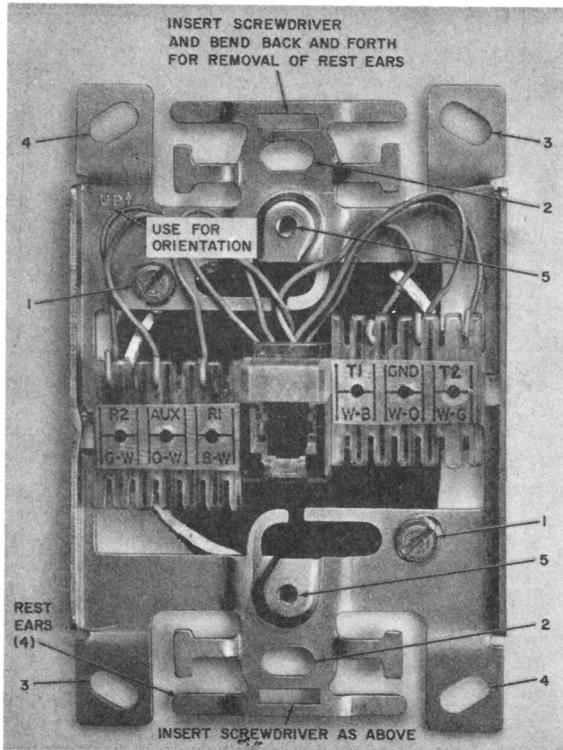
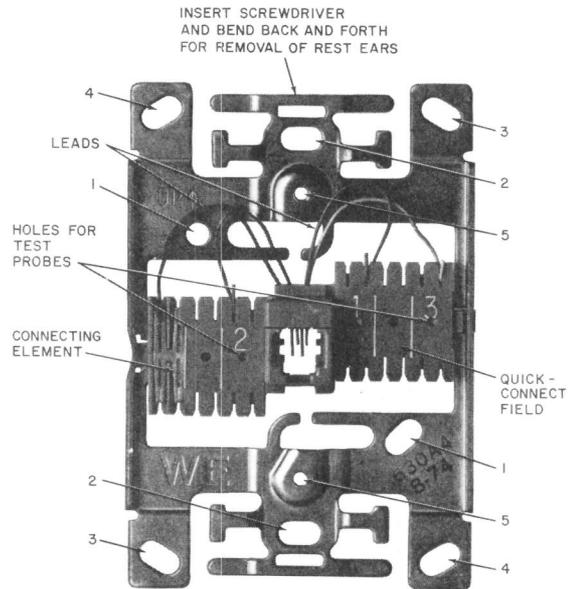


Fig. 10—630A4 Connecting Block



MOUNTING HOLE PAIR USES:
 1-63A BRACKET
 2-DEVICE BOX, NORMAL WALL SURFACE, PLASTER RING
 3 OR 4-WEAK WALLS (OVERSIZE WIRING HOLE,
 LOCAL DAMAGE, ETC.)
 NOTE:
 IF MORE THAN 2 FASTENERS ARE USED,
 USE ADDITIONAL HOLES AS REQUIRED
 5-1034A MOUNTING PLATE

Fig. 11—630A6 Connecting Block Mounting Arrangement



MOUNTING HOLES PAIR USES (SEE NOTE)
 (1) 63A BRACKET, KS-20502, L2 OR KS-19407, L1 (MD)
 (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 USED, USE ADDITIONAL
 MOUNTING HOLES AS REQUIRED.

Fig. 12—630A4 Connecting Block With Cutaway Section Showing Connecting Element (Early Production Model)

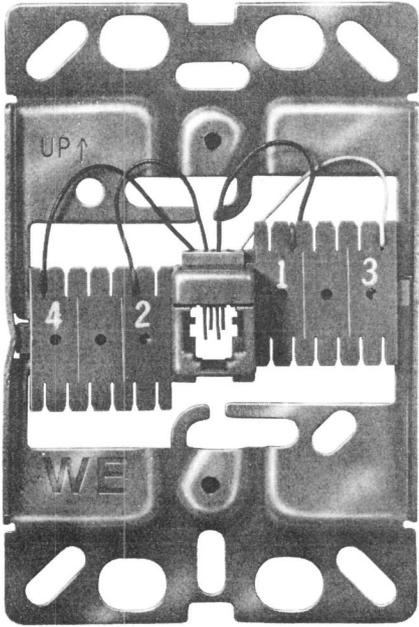


Fig. 13—630A4 Connecting Block Showing New Bracket (Current Production Model) Refer to Fig. 12 for Mounting Instructions

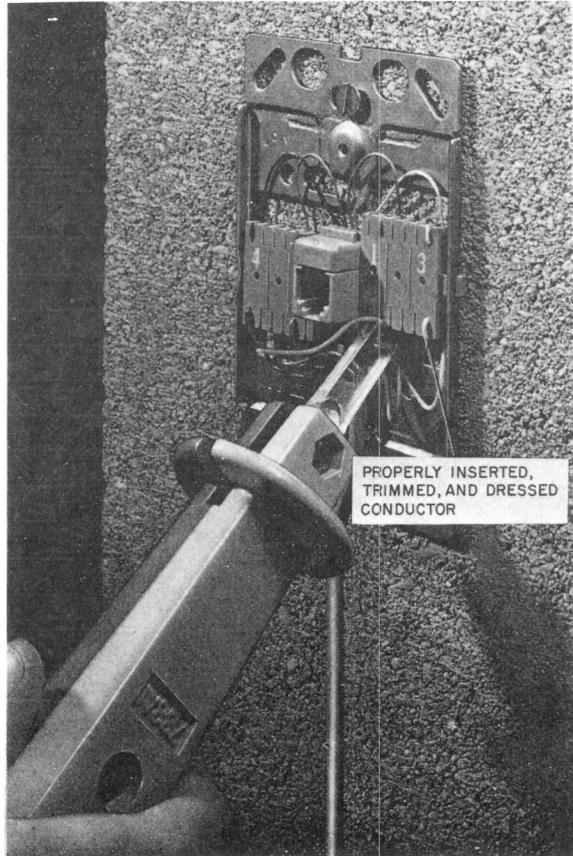


Fig. 14—Connecting Wire With Lead Insertion Tool

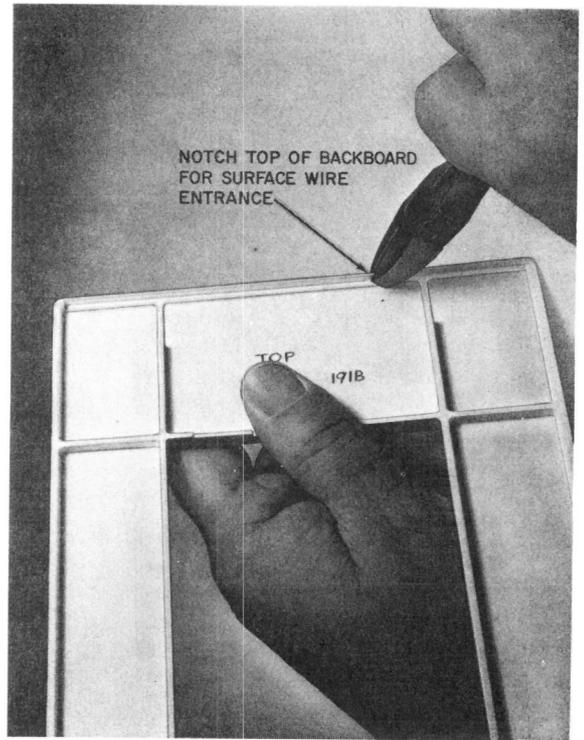
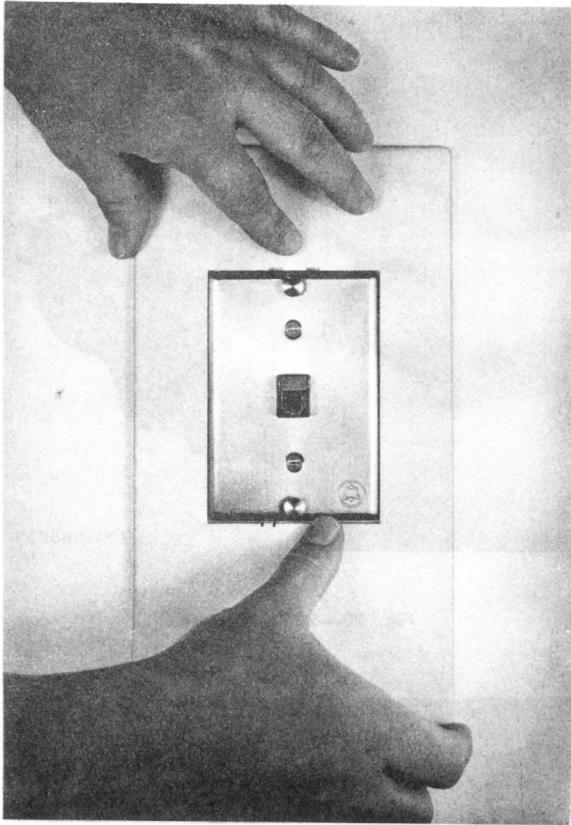


Fig. 15—191B Backboard

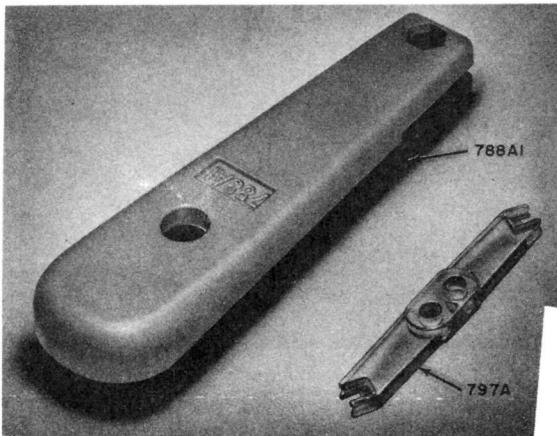


Fig. 16—Lead Insertion Tool

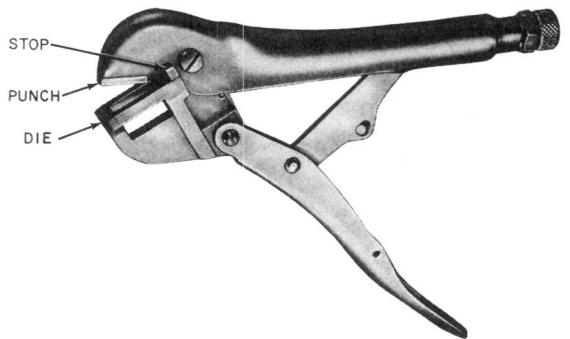


Fig. 17—Notching Tool

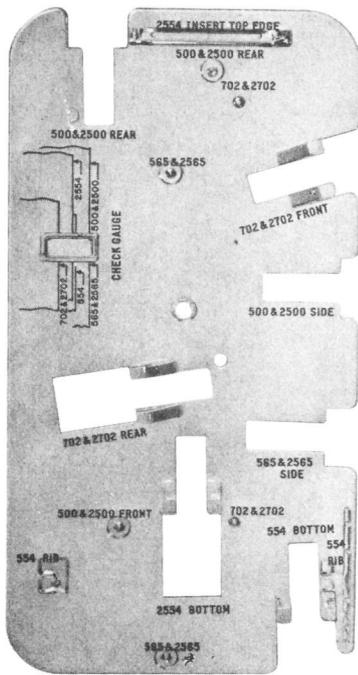


Fig. 18—799A Template

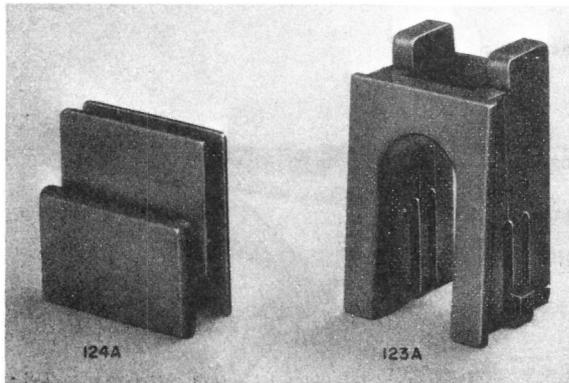
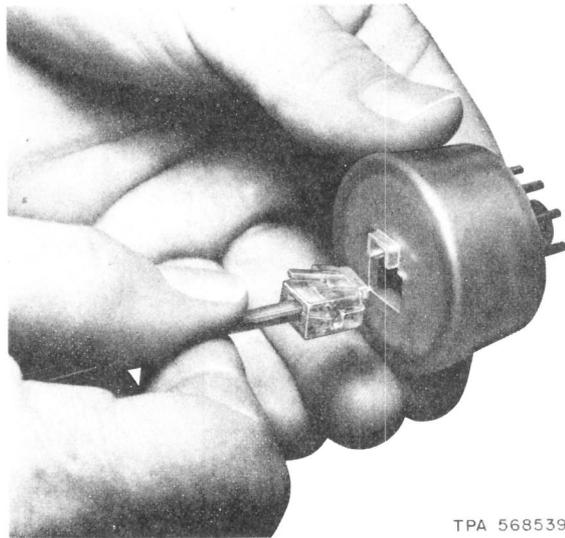


Fig. 19—Apparatus Blanks



TPA 568539

Fig. 20—224A Adapter

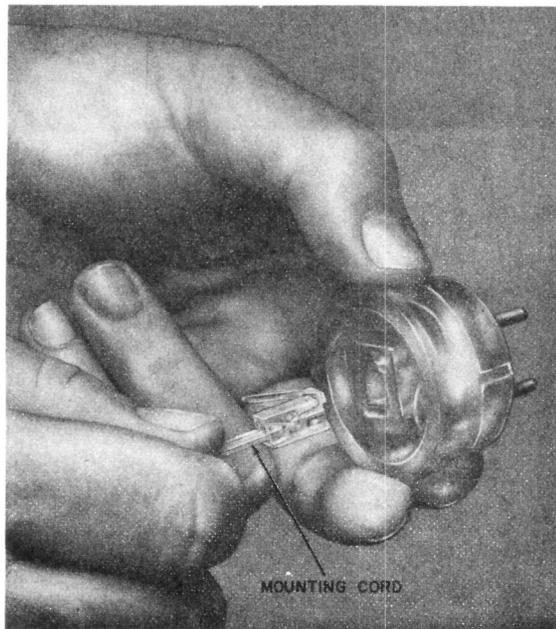


Fig. 21—225A Adapter

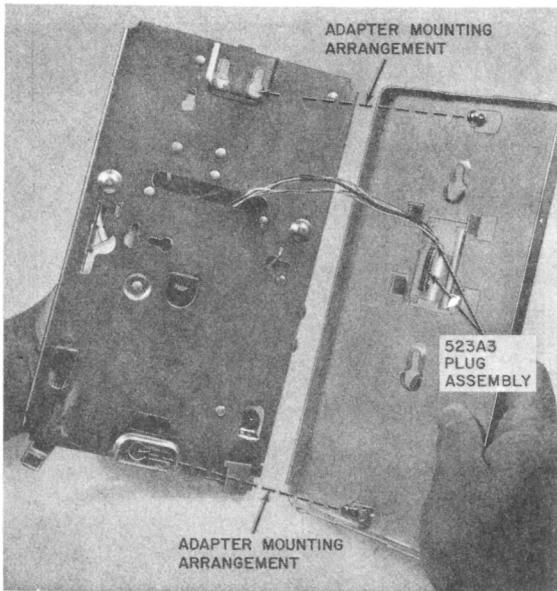


Fig. 22—554B2M Telephone Set Base, 228A Adapter, and 523A Plug

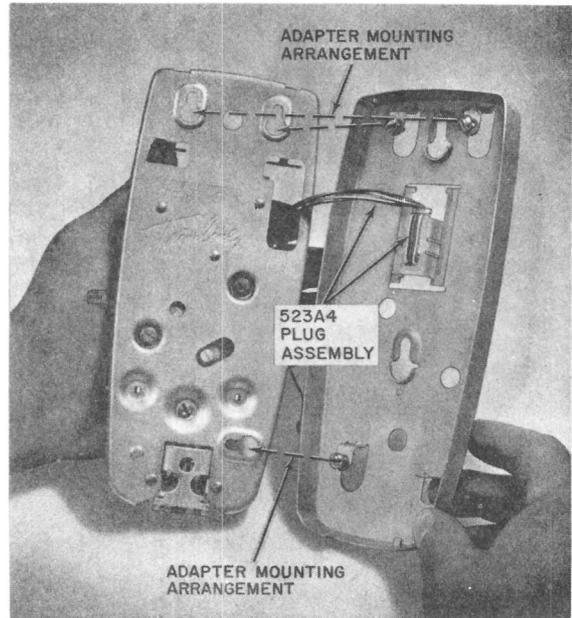


Fig. 24—AC1M Telephone Base, 230A Adapter, and 523A Plug



Fig. 23—2254B2M Telephone Set Base, 229A Adapter, and 523A Plug

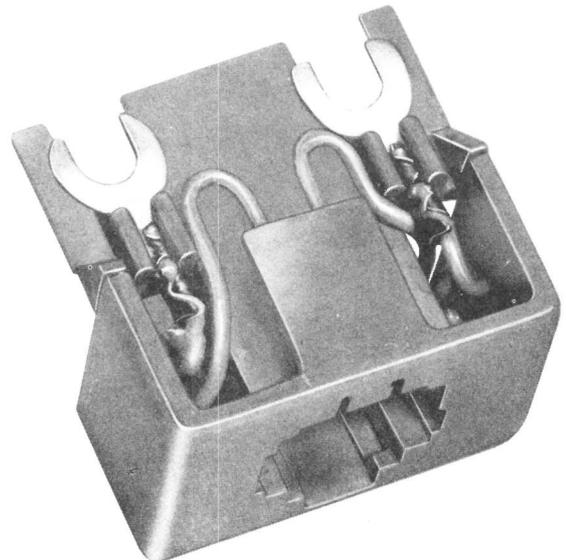


Fig. 25—248A Adapter

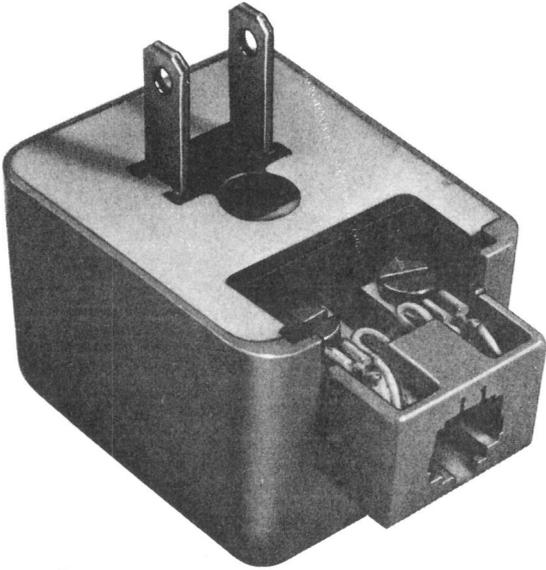
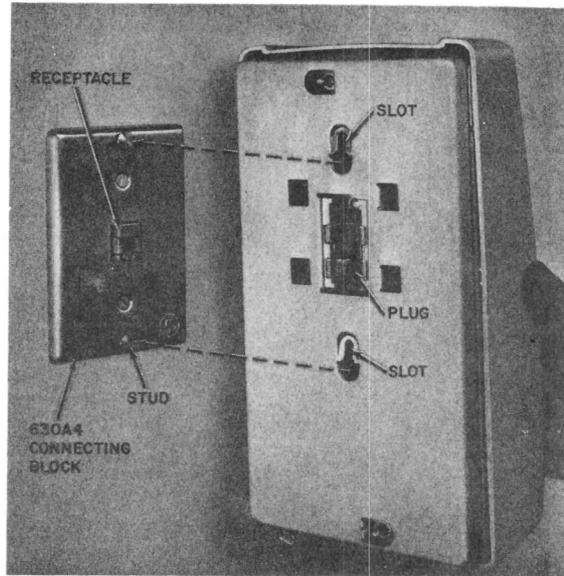


Fig. 26—248A Adapter as Used With 2012 Transformer



MOUNTING WALL SETS ON 630A4

- (1)—BEGIN WITH SLIGHT ENGAGEMENT OF PLUG IN RECEPTACLE
- (2)—RAISE SET (WITH PLUG SLIGHTLY ENGAGED) AND PUSH TOWARD WALL TO ENGAGE STUDS IN CORRESPONDING SLOTS OF WALL SET ADAPTER OR BASE PAN. (THE PLUG WILL SLIDE UP AND DOWN IN THE BACK OF THE WALL SET).
- (3)—PULL SET DOWNWARD UNTIL FIRMLY SEATED.

Fig. 27—554BMP Telephone Set With 630A-Type Connecting Block

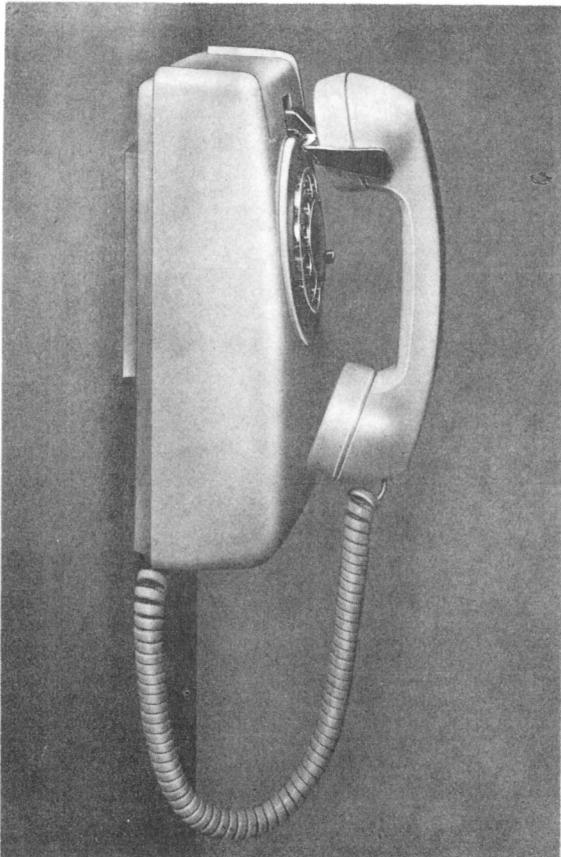


Fig. 28—554BMP Telephone Set on 630A-Type Connecting Block

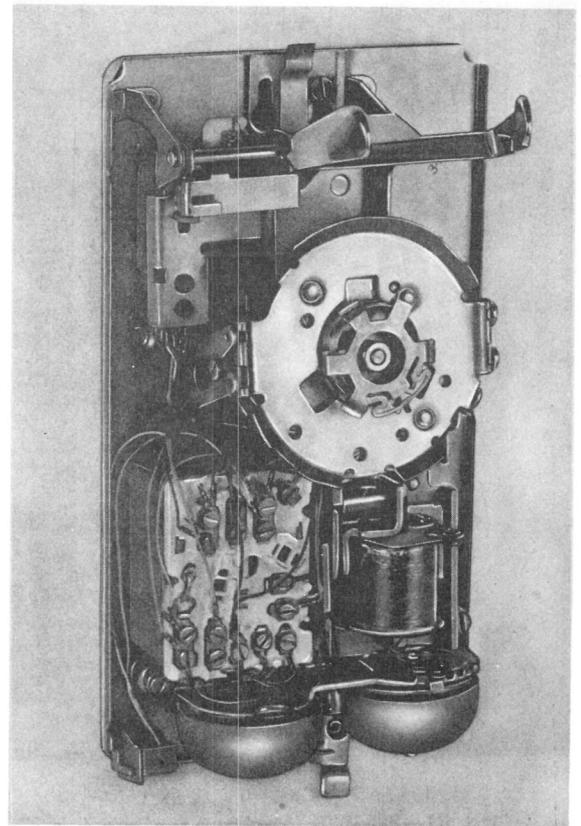


Fig. 29—554B2P Telephone Set Base

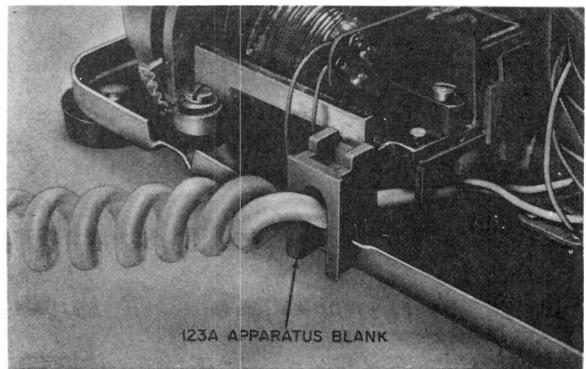


Fig. 30—123A Apparatus Blank Installed on 2500D1M Telephone Set Base

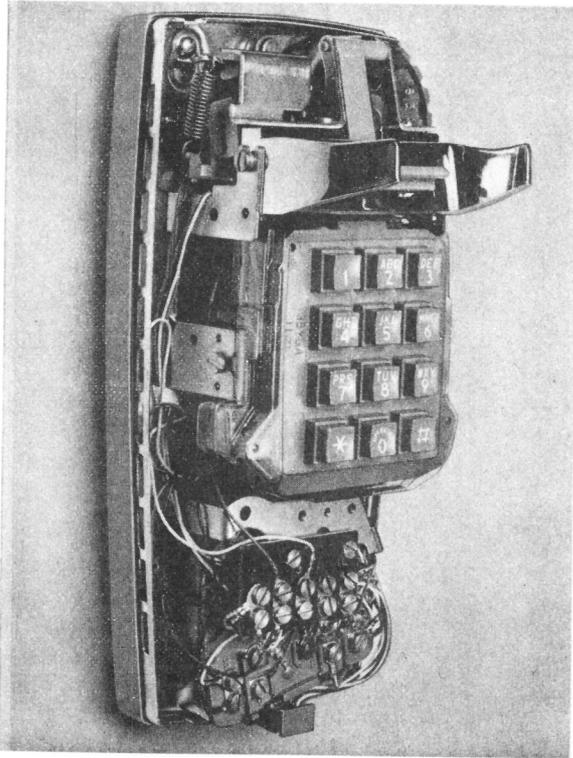


Fig. 31—2554B2P Telephone Set Base

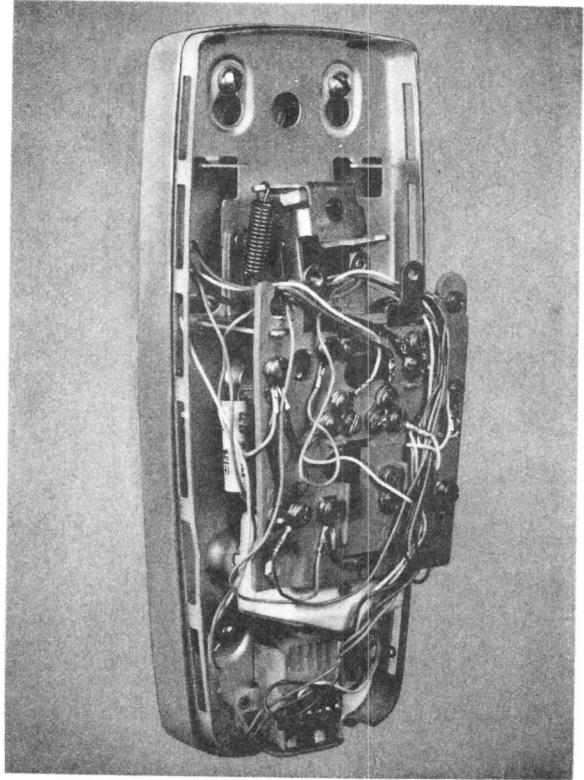


Fig. 33—AC1MP Telephone Base

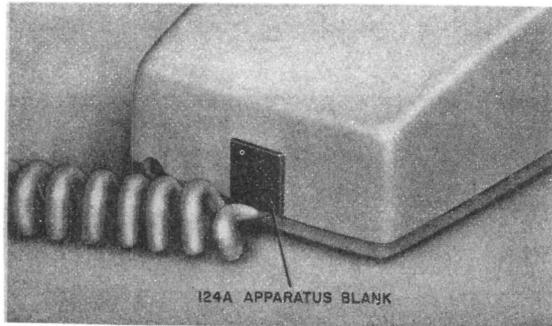


Fig. 32—Apparatus Blank Installed on 2554BM Telephone Set

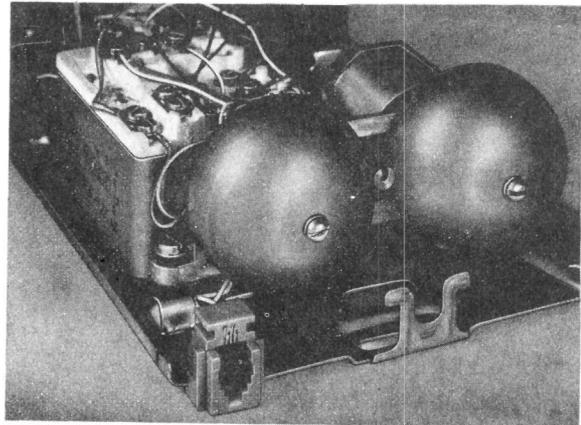


Fig. 34—554B2P Telephone Set Base With Handset Cord Jack Installed

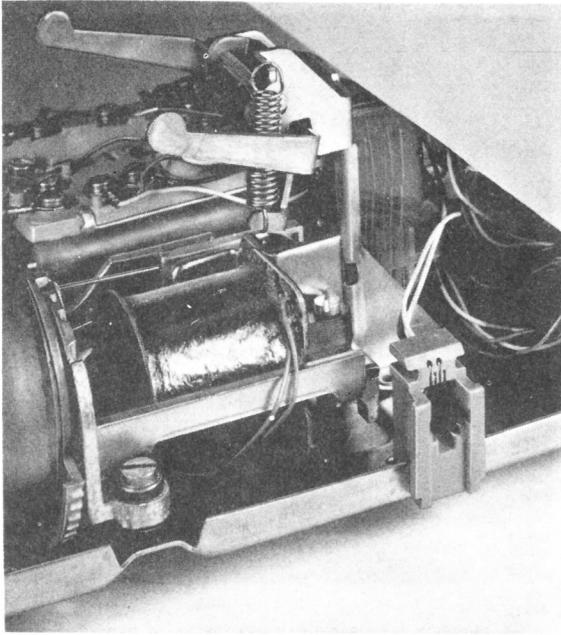


Fig. 35—500D2M or 2500D2M Telephone Set Base With Handset Cord Jack Installed

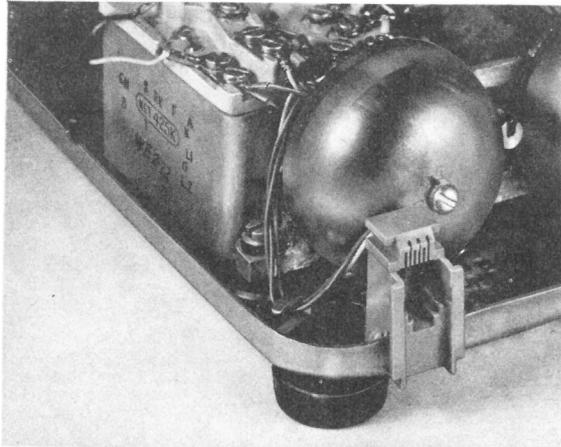


Fig. 36—2500D2M Telephone Set Base With Mounting Cord Jack Installed (500D2M Telephone Set Base is Similar)

NOTE:

ALL PRODUCT MANUFACTURED BEFORE 12-72 REQUIRES THIS MODIFICATION. CHECK FIT OF 623P4 JACK BEFORE REMOVING TAB IN PRODUCT MANUFACTURED BETWEEN 12-72 AND 3-73. PRODUCT MANUFACTURED 4-73 OR AFTER DOES NOT REQUIRE MODIFICATION.

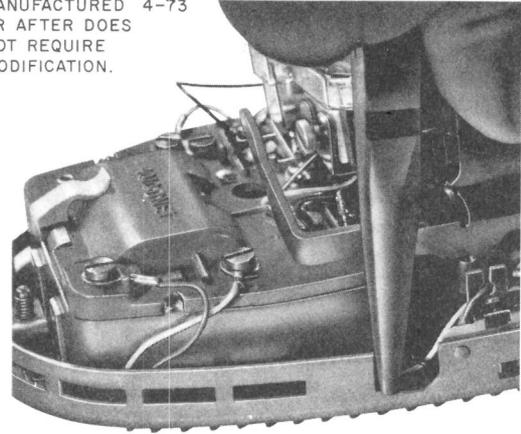


Fig. 37—Modifying PRINCESS Telephone Set Base to Accommodate Mounting Cord Jack

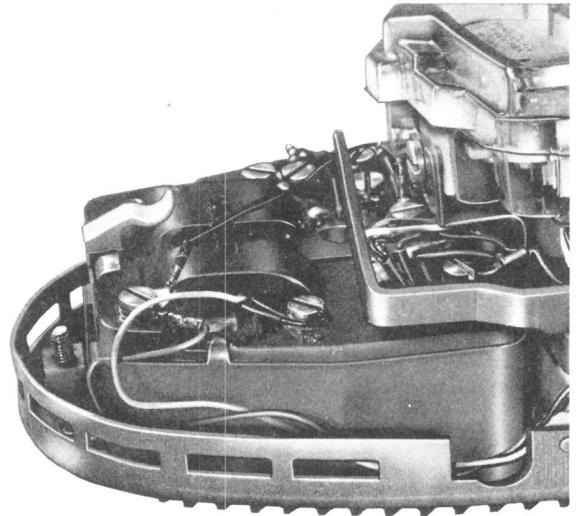
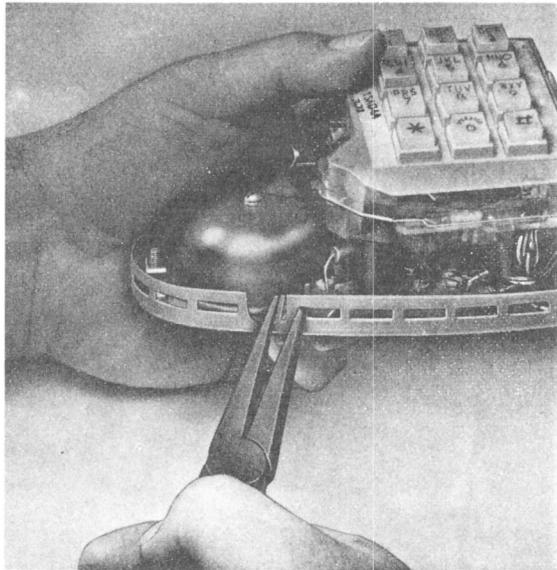


Fig. 38—PRINCESS Telephone Set Base Modified to Accommodate Mounting Cord Jack



Fig. 39—PRINCESS Telephone Set Base With Mounting Cord Jack Installed



NOTE:

ALL PRODUCT MANUFACTURED BEFORE 12-72 REQUIRES THIS MODIFICATION. CHECK FIT OF 616P JACK BEFORE BENDING TAB IN PRODUCT MANUFACTURED BETWEEN 12-72 AND 3-73. PRODUCT MANUFACTURED 4-73 OR AFTER DOES NOT REQUIRE THIS MODIFICATION.

Fig. 40—Modifying PRINCESS Telephone Set Base to Accommodate Handset Cord Jack

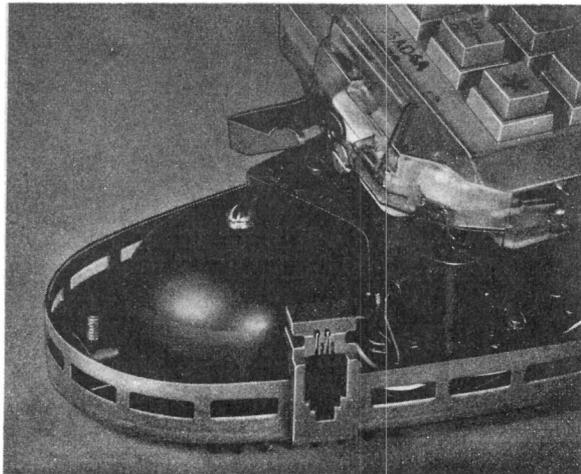


Fig. 41—PRINCESS Telephone Set Base With Handset Cord Jack Installed

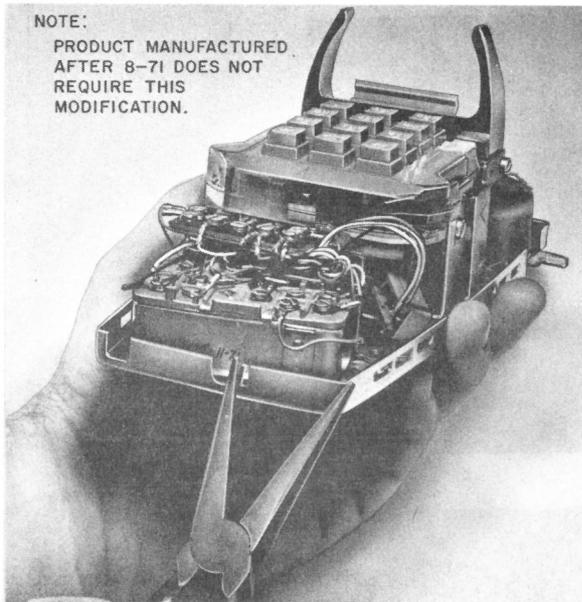


Fig. 42—Modifying 2554B1M Telephone Set Base to Accommodate Handset Cord Jack

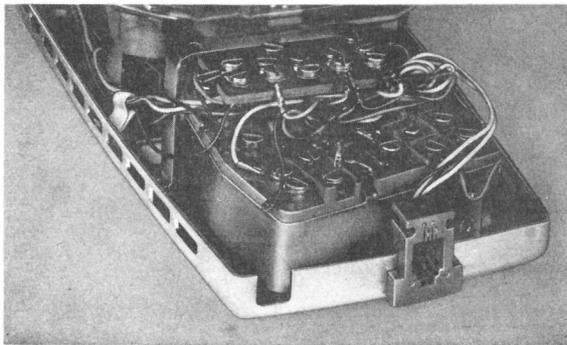
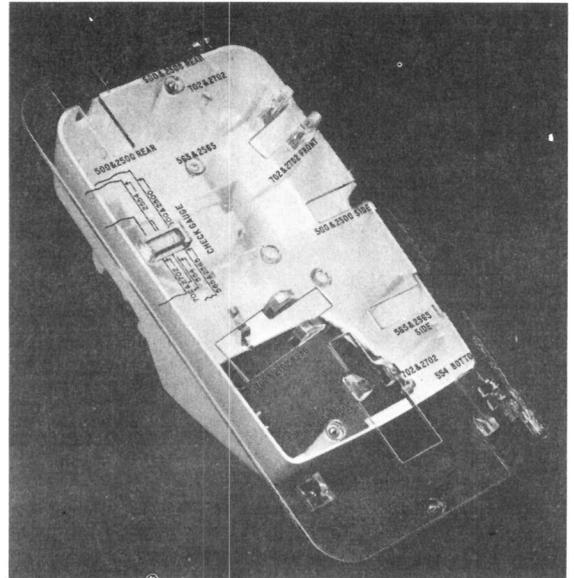


Fig. 43—2554B2M Telephone Set Base With Handset Cord Jack Installed



NOTE:
ON SOME HOUSINGS IT WILL BE NECESSARY TO REMOVE ANY HOUSING RIBS THAT INTERFERE WITH PUNCHING TOOL. RIBS SHOULD BE CLIPPED OUT WITH DIAGONAL CUT PLIERS. ON THICK HOUSINGS IT MAY BE NECESSARY TO PUNCH HOUSING USING SUCCESSIVE BITES WITH HOUSING PUNCH.

Fig. 44—2500D1 Housing on Template

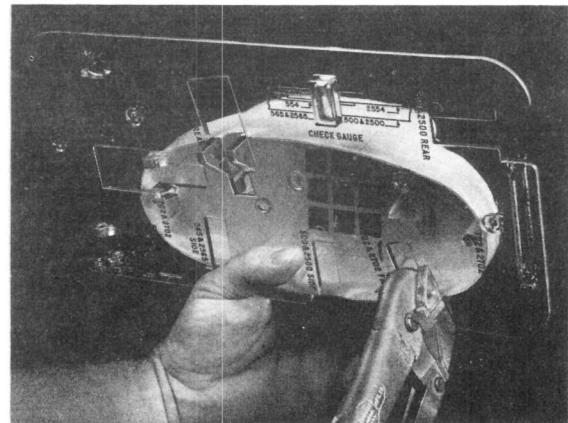


Fig. 45—Positioning Notching Tool (2702B1 Housing on Template)

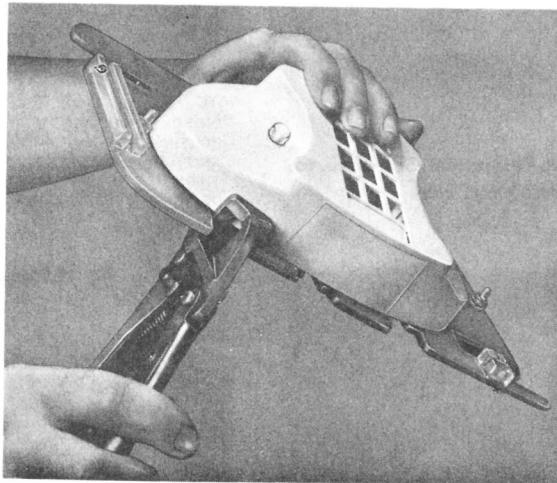
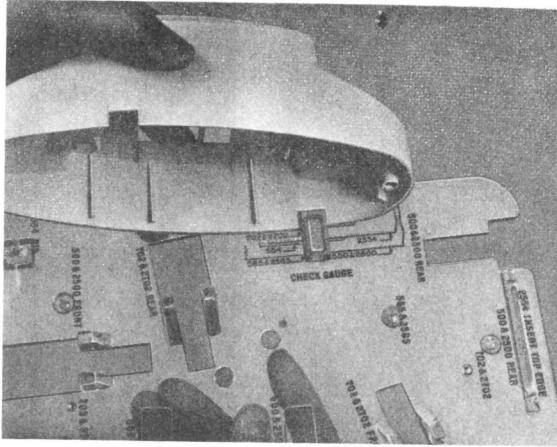


Fig. 46—Notching 2702B1 Housing and Using Check Gauge

TABLE B
MODULAR AND PARTIALLY MODULAR TELEPHONE SETS

TELEPHONE SET*†	TELEPHONE SET COMPONENTS			CORDS		TELEPHONE SET BASE FEATURES					
	HOUSING†	HANDSET†	TEL SET BASE	HANDSET† CORD	MTG CORD	PLUG	MTG CORD JACK	HANDSET CORD JACK	RINGER	NET.	DIAL
500DM	500D2§	G15A	500D2M	H4DU	D4BU		623D-3¶	616D	C4A	425E or 4228A	7-type or 9-type**
2500DM	2500D2		2500D2M							425K or 4228B	35A3A 35Y3A 35Y3D
554BM‡	554B2§		554B2M§							425E or 4228A	7-type or 9-type**
554BMP	554B2§		554B2P		425E or 4228A						
2554BM‡	2554B2		2554B2M§		616C	P1A	4010D or 4228K	35A3A 35Y3A 35Y3D			
2554BMP	2554B2		2554B2P				4010D or 4228K				
702BM	702B2		702B2M		616B	M1A	4010B or 4228F	8A			
2702BM	2702B2		2702B2M				4010D or 4228G	35E4A			
702DM	‡‡		None §§				4010B or 4228F	8A			
2702DM	‡‡	4010D or 4228G		35E4A							

* Modular and partially modular telephone sets are supplied without cords. Cords must be ordered separately.

† Color suffix applies; see Table A.

‡ Partially modular; handset cord jack only — Line conductors wired directly to set terminals.

§ Includes universal dial number plate.

¶ Factory-equipped with 623D3 jack; converted or repaired with 623D4 jack.

** Assembled sets equipped with fully-assembled dials; separate telephone set bases equipped with dial mechanisms and dial adapter keys. (No color-sensitive parts.)

†† Factory-equipped with 523A3 plug; converted or repaired with 523A4 plug.

‡‡ To order housings refer to specific set practice for comcode numbers.

§§ Only assembled sets available.

TABLE C
TRIMLINE® TELEPHONE BASES

TEL BASE WITH HOUSING*	TEL BASE COMPONENTS		HAND TEL SETS*	CORDS		TELEPHONE BASE FEATURES			
	HOUSING*	TEL BASE LESS HOUSING		HAND TEL SET	MTG	PLUG	MTG CORD JACK	HAND TEL SET CORD JACK	RINGER
AC1P**	AC1	AC1MP	220A or 2220B†	H4DB OR H5AA		523A4		‡	P1A
AC2**		AC2MP		H4DU				616T	
AC2P		AC2P				523A4			
AD2**	AD1	AD2M		H4DB OR H5AA	D4BU		623T4	‡	
AD3		AD3M		H4DU				616T	

* Color suffix applies; see Table A.

† 220A or 2220B hand telephone set requires 227A adapter for use with H4DU cord.

‡ Standard TRIMLINE jack assembly; 231A adapter required for use with H4DU cord.

Note: H4DU cord and adapters must be ordered separately.

TABLE D

TELEPHONE SETS THAT MAY BE CONVERTED USING MODULAR COMPONENTS

TELEPHONE SET*	HANDSET CORD JACK	MTG CORD JACK	ADAPTER (WALL SETS)	PLUG (WALL SETS)	TELEPHONE SET*	HANDSET CORD JACK ONLY
500C/D 500E/F 500L/M† 500W/Y 501C/D/F 510A/B† 515B† †† 2500D 2500M 2500Y 2515† ††	616D	623E4			500AD 500R/S 502A/B 503B/C 510E/F 511F/H 513B 514B 529B 2500S 2502B 2503C 2504B 2510F 2511F/N 2514B¶	616D
702B 702D 2702B 2702D	616P	623P4			558F/DRW	616C
554A/B/F‡ 555B‡ †† 556AR/BR‡ 557 (MD) 559 (MD) 593BRW (MD)	616C		228A‡	523A§	2558D	616B
2554B‡ 2555B‡ ††	616B		229A‡	523A§	564HC, 565GK/HK 2564HC, 2565GK/HK	616D**

* Housing must be notched to clear any jack installed.

† Mounting cord jack leads must be at least 9 inches. Use D-161488 connectors and M1W straps to extend conductors if necessary.

‡ Adapter not required if baspan has two keyhole shaped ramps along vertical centerline with rectangular plug track in between.

§ Use any type 523A plug with at least the conductors needed to provide the desired service.

¶ Dress jack leads down back of jack frame to avoid hand telephone set key mounting bracket.

** Push top of jack under terminal board. Do not pinch leads.

†† Signaling feature from m-n contacts cannot be provided simultaneously with 2-line service in these telephone sets.

TABLE E

MODULAR CONNECTING BLOCK CONNECTIONS

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

*Supply ground for all one-line installations

TABLE F
FASTENERS FOR 630A4 CONNECTING BLOCK (NOTE 1)

TO FASTEN BLK TO	USE TWO (2) EACH OF FASTENERS INDICATED				
	FLAT HEAD NO. 6-32 MACHINE SCREW		B WALL ANCHOR SIZE 4 OR 6	D PLASTIC ANCHOR SIZE 10	NO. 8-15 BY 1 IN. FLAT HEAD TAPPING SCREW, TYPE AB (NOTE 3)
	3/16" OR 5/16"	3/4"			
1034A Mtg Plate	X				
63A Bracket, Device Box, Plaster Ring		X			
Stucco or Plaster on Wood Lath					X
Plaster on Metal Lath, Paneling on Furring Strips, or Plasterboard on Studs			*(Note 2)		X
Hollow Masonry			X(Note 2)		
Solid Masonry				X	X

* Alternate Fasteners

Notes:

1. If connecting block is not securely fastened to the wall with the recommended number of fasteners, additional fasteners should be used.
2. Use size 4 anchors for walls up to 5/8-inch thick and size 6 anchors for wall from 5/8-inch to 1-1/4 inch thick.
3. Or other available screw of equivalent (or greater) size, and thread engagement.