

TELEPHONE SETS

950A- AND 2950A-TYPE

1. GENERAL

1.01 This section contains identification, installation, and connection information for the 950A1, A2, A3, and 2950A1, A2, A3 (Fig. 1) DESIGN LINE* wall telephone (*Noteworthy**) sets.

* Trademark of American Telephone and Telegraph Company

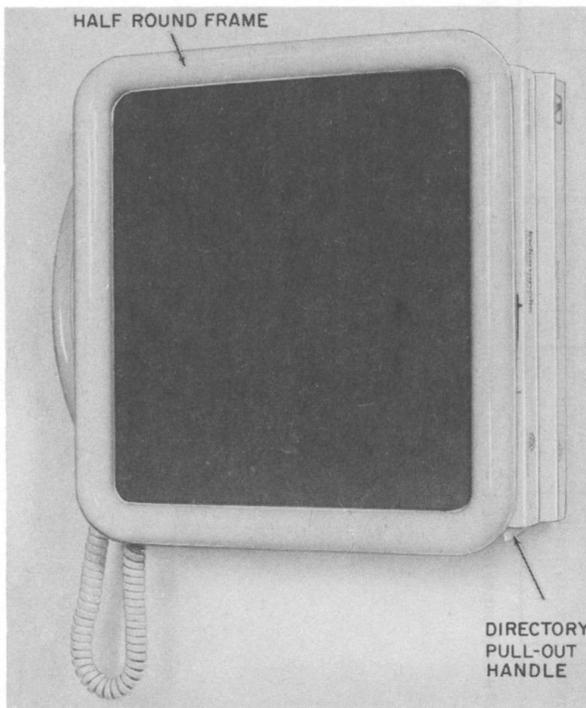


Fig. 1—950A1, 950A2, 2950A1, or 2950A2 Telephone Set Equipped With a Blackboard Front Panel

1.02 Whenever this section is reissued, the reason for reissue will be stated in this paragraph.

Warning: Telephone apparatus or wiring shall not be installed in a location where minimum separation from other wiring as specified in Section 460-300-149 cannot be maintained.

1.03 The customer's premises must be properly wired with an appropriate connecting block or jack to accept the D4BU-29 plug-ended mounting cord.

2. IDENTIFICATION

2.01 Refer to Table A for available codes and ordering information.

2.02 The 950A-type (Rotary dial) and 2950A-type (TOUCH-TONE® dial) equipped telephone sets are new DESIGN LINE telephone sets being made available to the customer. The customer buys the housing from the telephone company and the telephone company retains ownership of the transmission and signaling components which are screwmounted to a bracket located in the housing and in the hand telephone set.

2.03 The set consists of a rectangular housing that has a directory storage space and is designed to have the hand telephone set located on either side.

2.04 The set consists of a wall plate, housing, frame, two panels (blackboard or cork board), hand telephone set, handset cord, mounting cord, ringer, line switch, and jacks (Fig. 2).

2.05 These telephone sets are furnished from the factory wired for bridged ringing. They are intended to be used as single line or two-party

NOTICE

Not for use or disclosure outside the Bell System except under written agreement

TABLE A

TELEPHONE SET AND ASSOCIATED COMPONENTS

TEL SET CODE	HOUSING		FRAME*		HAND TEL SET	HANDSET CORD	MTG CORD†	HANDSET JACK	MTG CORD JACK	RINGER
	CODE	COLOR	TYPE	COLOR						
950A1-124	950AS1-124	Rust	Half RD	Rust	841395932	H4DU-124	D4BU-29	616P	623P4	P1A
950A1-123	950AS1-123	Yellow	Half RD	Yellow	841395924	H4DU-123				
950A2-58	950AS2-58	White	Half RD	Light Oak	841395940	H4DU-58				
950A3-104	950AS3-104	Brown	Sculptured	Traditional Wood Finish	841395916	H4DU-104				
2950A1-124	2950AS1-124	Rust	Half RD	Rust	841395973	H4DU-124				
2950A1-123	2950AS1-123	Yellow	Half RD	Yellow	841395965	H4DU-123				
2950A2-58	2950AS2-58	White	Half RD	Light Oak	841395981	H4DU-58				
2950A3-104	2950AS3-104	Brown	Sculptured	Traditional Wood Finish	841395957	H4DU-104				

* All frames are equipped with a blackboard panel installed and an optional cork board panel is also provided for change out if desired.

† 14 feet long.

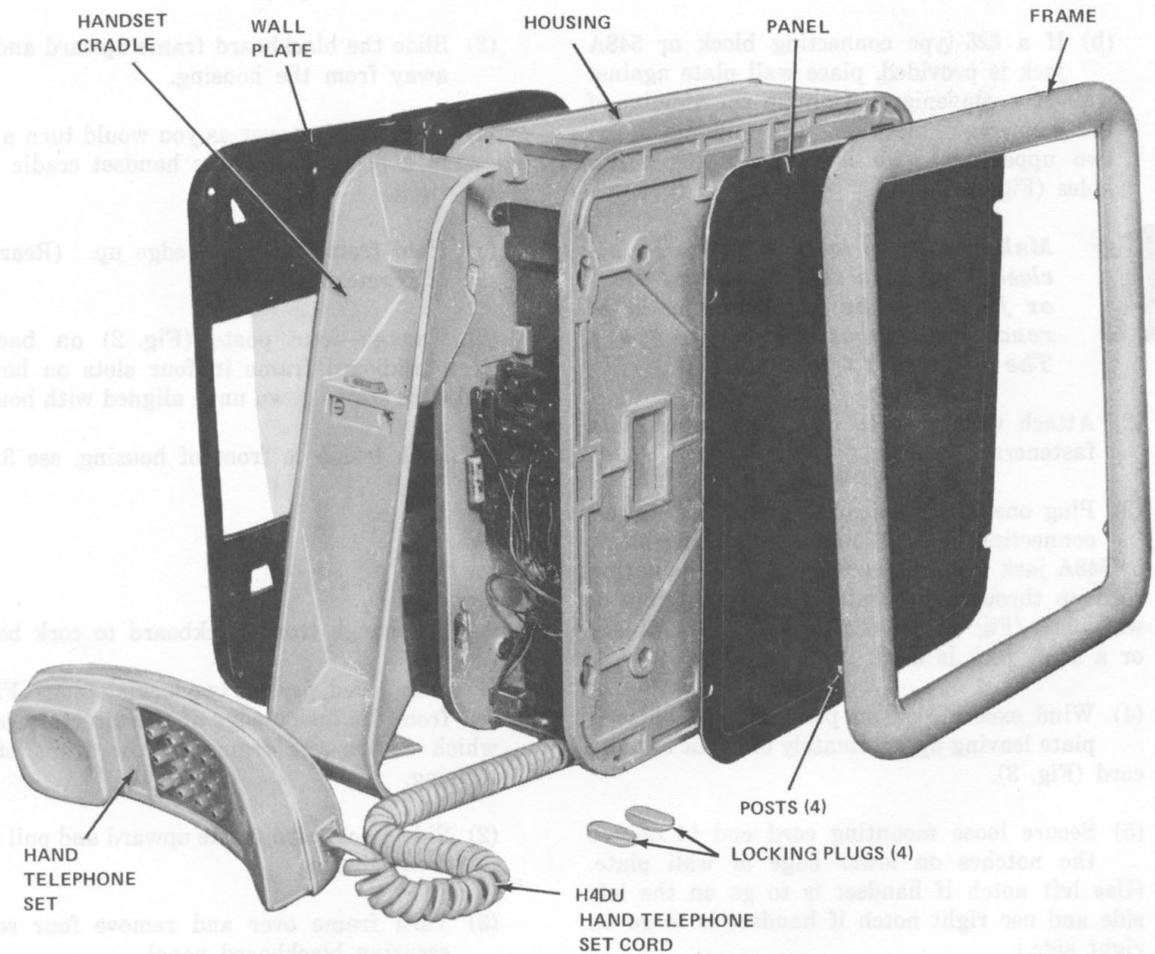


Fig. 2—950A- or 2950A-Type Telephone Set, Assembly

wall sets and cannot be used on four- and eight-party service.

3. INSTALLATION

3.01 To install wall plate and mounting cord.

Warning: Do not install the telephone set over a range, stove, or sink. Do not mount the set adjacent to a wall switch or directly above a wall outlet, avoid plumbing pipes in wall.

Warning: Do not fasten the telephone set to dry-wall material with any device except the four moly-bolts provided; to install the set on walls or other materials, obtain suitable fasteners locally. Mount the set on a rigid, permanent wall only.

- (1) Mark wall plate mounting screw locations by using either method (a) or (b) described below.
 - (a) If 630A4 connecting block is provided, place wall plate over the connecting block

and mark the two upper and two lower mounting screw holes (Fig. 3).

(b) If a 625-type connecting block or 548A jack is provided, place wall plate against wall at a convenient height in the vicinity of the connecting block or jack and mark the two upper and two lower mounting screw holes (Fig. 3).



Make sure you install the wall plate close enough to the connecting block or jack for the mounting cord to reach with about one foot to spare. The cord is 14 feet long.

- (2) Attach wall plate to wall with appropriate fasteners.
- (3) Plug one end of mounting cord into 630A4 connecting block, 625-type connecting block, or 548A jack using 1A converter. Run mounting cord up through the center notch at bottom of wall plate (Fig. 3) if a 625-type connecting block or a 548A jack is used.
- (4) Wind excess cord on plastic hooks on wall plate leaving approximately one foot of loose cord (Fig. 3).
- (5) Secure loose mounting cord end in one of the notches on lower edge of wall plate. (Use left notch if handset is to go on the left side and use right notch if handset is to go on right side.)

OPTIONAL FEATURES

Note: Set is shipped from the factory with the blackboard panel installed and arranged for the handset to be located on the left side. It is recommended that customer be advised of cork panel option and option to change handset from left to right side prior to installation.

Handset Location

3.02 To change handset from left to right side.

- (1) If required, pry out two locking plugs (Fig. 2) from the inside edge of directory pocket which secure the frame to the front of the housing.

- (2) Place housing on a table with blackboard frame on top and handset cradle on left.

- (3) Slide the blackboard frame upward and pull away from the housing.

- (4) Turn housing over as you would turn a page in a book so that the handset cradle is on the right.

- (5) Hold frame with top edge up. (Rear side of frame is marked.)

- (6) Engage four posts (Fig. 2) on back of blackboard frame in four slots on housing and slide frame down until aligned with housing.

- (7) Lock frame to front of housing, see 3.04.

Panel

3.03 To change from blackboard to cork board.

- (1) If required, pry out two locking plugs (Fig. 2) from the inside edge of the directory pocket which secure the frame to the front of the housing.

- (2) Slide blackboard frame upward and pull away from housing.

- (3) Turn frame over and remove four screws securing blackboard panel.

- (4) Lift out the blackboard panel.

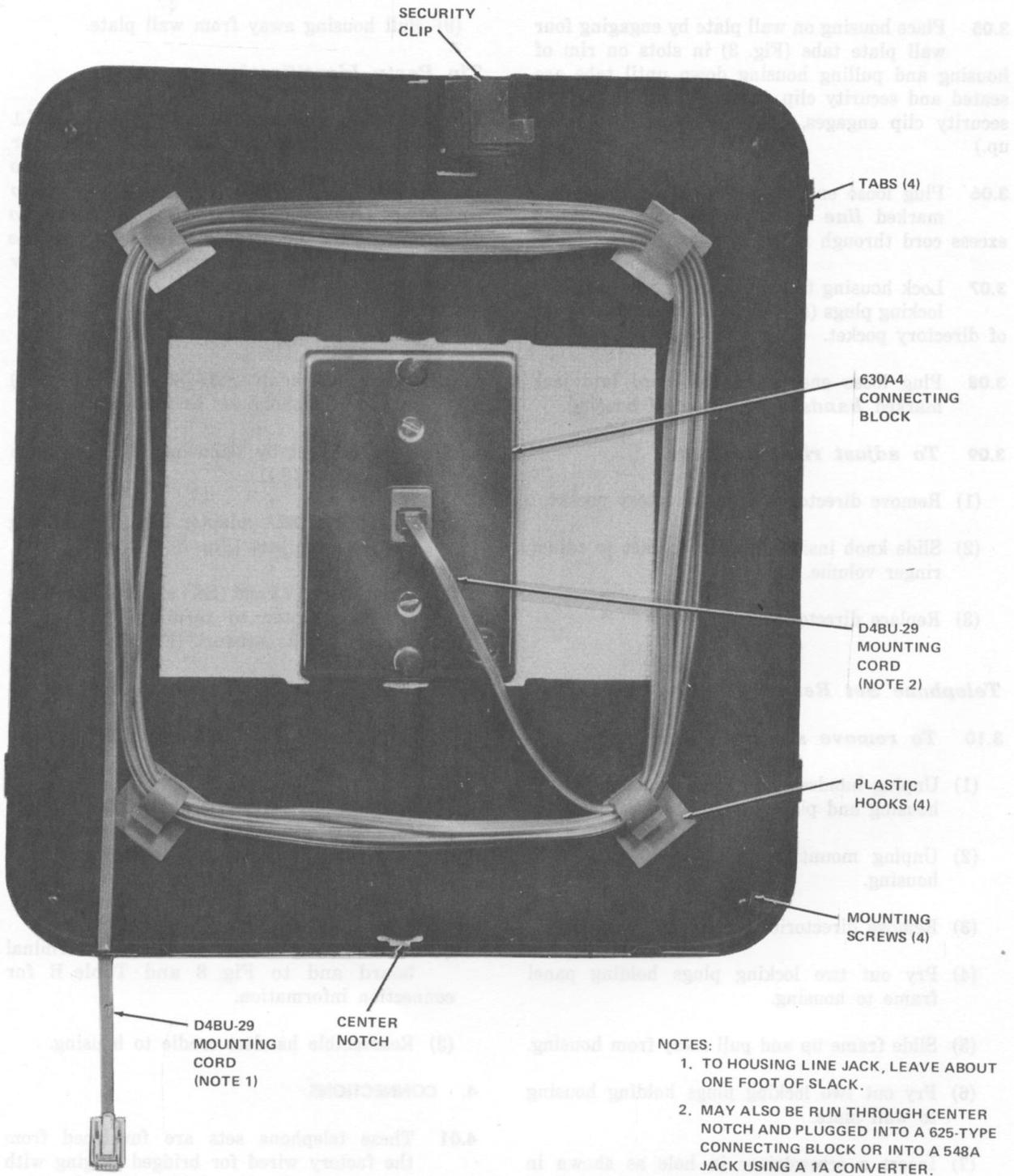
- (5) Insert cork board panel with the cutout towards top of frame.

- (6) Replace four screws.

- (7) Hold frame with top edge up and engage four posts (Fig. 2) on back of cork board frame in four slots on housing and slide frame down until aligned with housing.

- (8) Lock frame to front of housing, see 3.04.

3.04 Lock blackboard or cork board panel and frame to front of housing by inserting two locking plugs (Fig. 2) in holes on the inside edge of directory pocket.



- NOTES:
1. TO HOUSING LINE JACK, LEAVE ABOUT ONE FOOT OF SLACK.
 2. MAY ALSO BE RUN THROUGH CENTER NOTCH AND PLUGGED INTO A 625-TYPE CONNECTING BLOCK OR INTO A 548A JACK USING A 1A CONVERTER.

Fig. 3—950A- or 2950A-Type Telephone Set, Mounting Cord Arrangement

3.05 Place housing on wall plate by engaging four wall plate tabs (Fig. 3) in slots on rim of housing and pulling housing down until tabs are seated and security clip engages housing. (When security clip engages, housing cannot be pushed up.)

3.06 Plug loose end of mounting cord into jack marked *line* in bottom of housing. Push excess cord through notch into wall plate.

3.07 Lock housing to wall plate by inserting two locking plugs (Fig. 2) in holes on inside edge of directory pocket.

3.08 Plug loose end of handset cord into jack marked *handset* in bottom of housing.

3.09 *To adjust ringer volume.*

- (1) Remove directories from directory pocket.
- (2) Slide knob inside directory pocket to adjust ringer volume.
- (3) Replace directories.

Telephone Set Removal

3.10 *To remove set from wall plate:*

- (1) Unplug handset cord from handset jack in housing and place handset and cord aside.
- (2) Unplug mounting cord from line jack in housing.
- (3) Remove directories from set.
- (4) Pry out two locking plugs holding panel frame to housing.
- (5) Slide frame up and pull away from housing.
- (6) Pry out two locking plugs holding housing to wall plate.
- (7) Insert a screwdriver in hole as shown in Fig. 4, and pass screwdriver through directory compartment to press against security clip.
- (8) Slide housing up while pressing screwdriver against security clip.

- (9) Pull housing away from wall plate.

Tip Party Identification

3.11 To open the handset use a KS-21107L1 releaser or equivalent to remove the cover located above the dial. ***Be careful not to insert the tip of the releaser too deep or mar the plastic deck. Under no circumstances should a screwdriver be used.*** Remove the two screws which are now exposed, and lift the shell off.

D-180825 Kit of Parts

3.12 Install 282A adapter (D-180825 Kit of Parts) in hand telephone set as follows.

- (1) Open handset by removing the shell from the handset (3.11).
- (2) Install the 282A adapter onto the existing handset cord jack (Fig. 5).
- (3) Connect the (Y) and (BK) spade-tipped leads of the adapter to terminals A and 4, respectively, of the network (Fig. 5).
- (4) Reassemble shell to hand telephone set.

3.13 Install terminal board (D-180825 Kit of Parts) in housing as follows.

- (1) Remove two screws located under number card and one screw located at bottom of handset cradle and remove handset cradle from housing (Fig. 4) by lifting up and then out. Tabs at the top of the cradle must be disengaged.
- (2) Refer to Fig. 6 for mounting of terminal board and to Fig. 8 and Table B for connection information.
- (3) Reassemble handset cradle to housing.

4. CONNECTIONS

4.01 These telephone sets are furnished from the factory wired for bridged ringing with the ringer bias spring in the low bias position. To connect the telephone set, plug the mounting cord into a 630A4 or 625-type connecting block or if a 548A jack is provided make connection by using the 1A converter.

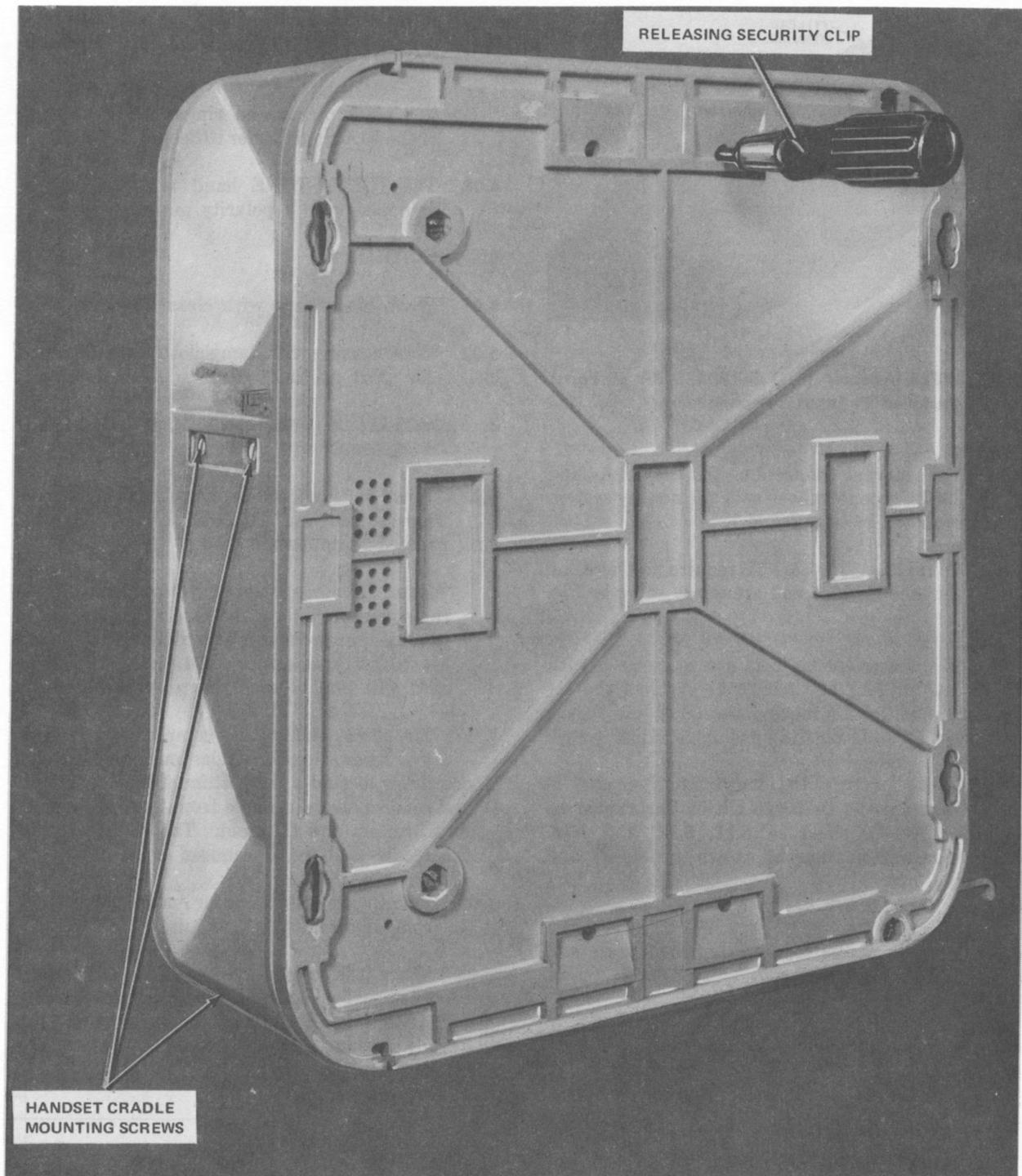


Fig. 4—950A- or 2950A-Type Telephone Set With Front Panel and Frame Removed

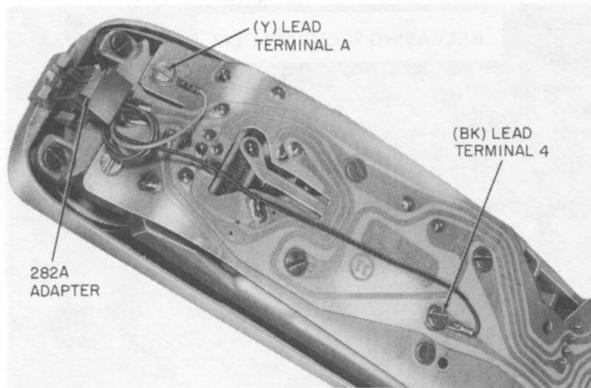


Fig. 5—282A Adapter (P/O D-180825 Kit of Parts) Installed in Hand Telephone Set

4.02 The internal connections for the 950A- and 2950A-type telephone sets, for nonkey system use, are shown in Fig. 7 and 8.

4.03 Connections for 1A KTS require no telephone set modifications and are wired same as Fig. 7 or 8.

4.04 If these telephone sets are to be used with 1A1 or 1A2 key telephone systems the set must be modified by moving the (BR) line switch lead from L2 to G on the housing terminal board.

4.05 If tip party with identification ground is required the D-180825 Kit of Parts must be installed as described in 3.11, 3.12, and 3.13. Connection information is shown in Fig. 8 and Table B.

4.06 To gain access to the interior of these sets for wiring changes, refer to 6.01(1).

4.07 *Line and ringer connections.*

(1) Refer to Table B for single line and two-party service for the 950A- or 2950A-type telephone sets.

(2) For adjustments and ringer cutoff feature of the P1A ringer, refer to Section 501-259-101.

4.08 The TOUCH-TONE hand telephone set is equipped with a polarity guard.

5. MAINTENANCE

5.01 Wash blackboard with clear water only.

5.02 Wipe housing with damp cloth and mild soap. *Do Not* use detergents to clean housing.

6. REMOVAL OF TELEPHONE COMPANY-OWNED COMPONENTS

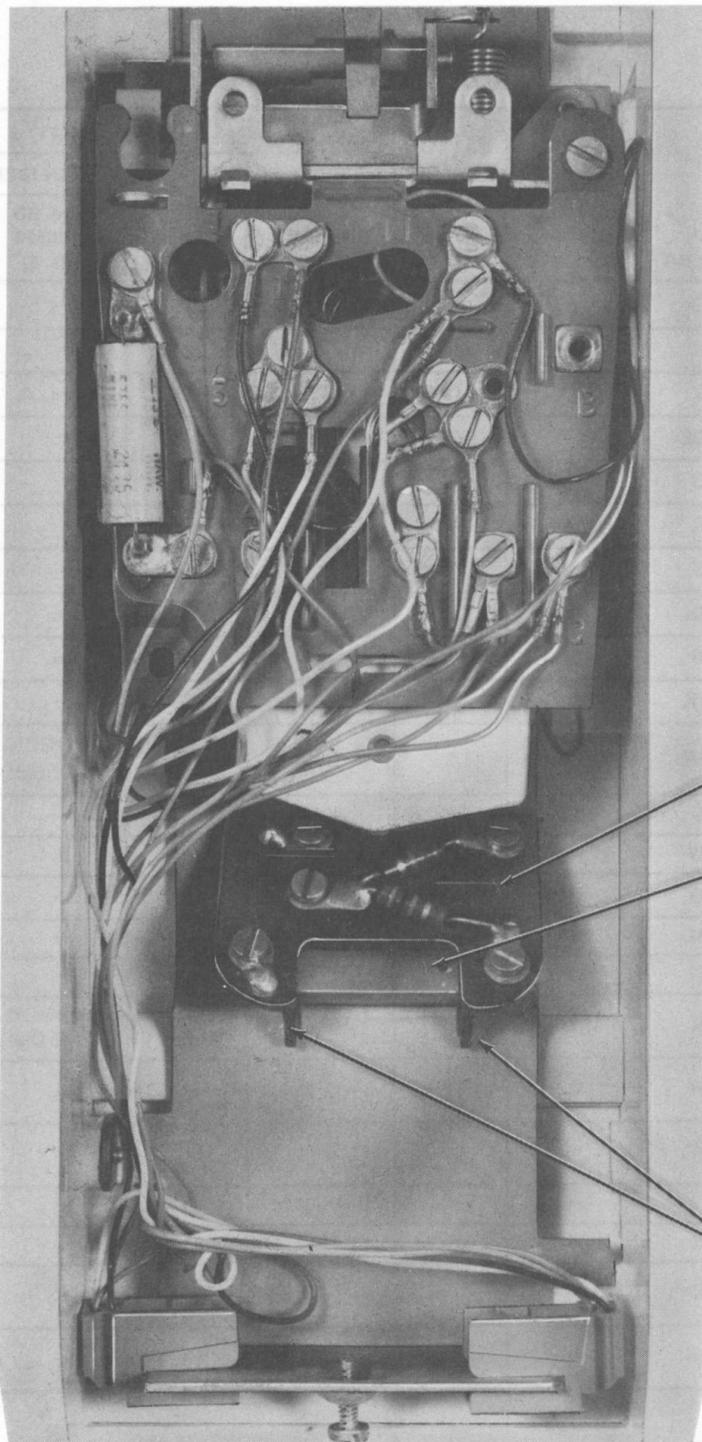
6.01 When it is desired to discontinue telephone service of these DESIGN LINE telephone sets, proceed as follows.

Note: Remove telephone company-owned components that can be easily removed. To provide the appearance of a complete telephone set, components such as the dial and handset cord will remain with the telephone set.

(1) To access telephone components remove two screws located under number card and one screw located at the bottom of handset cradle and remove handset cradle from housing (Fig. 4) by lifting up and then out. Tabs at the top of the cradle must be disengaged.

6.02 Follow local procedures for returning telephone company-owned components.

6.03 When it is desired to return a set to Western Electric for repair, it should be packed using the (D-180866) kit of parts which contains packing materials and instructions.



TERMINAL BOARD
(D-180825
KIT OF PARTS)

COMPONENT PLATE

RIBS ON TERMINAL
BOARD FIT INTO SLOTS
IN COMPONENT PLATE

Fig. 6—Terminal Board (P/O D-180825 Kit of Parts) Installed in Housing

TABLE B

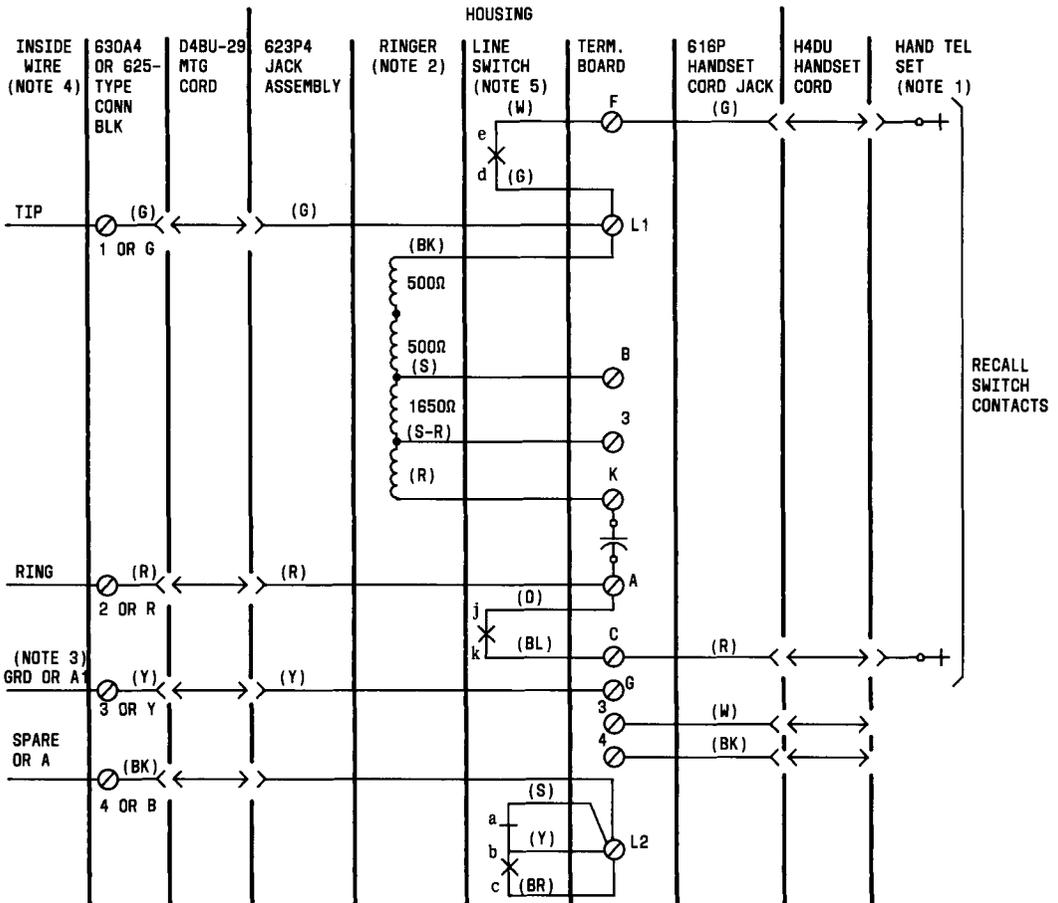
LINE AND RINGER CONNECTIONS

WIRE OR LEAD (NOTE 1)	LEAD DESIG	COLOR	INDIV OR BRIDGED	RING PARTY	TIP PARTY			
					NO IDENT GRD	WITH IDENT GRD		
						HOUSING TERM BD.	TERM. BD D-180825 (FIG. 8)	HANDSET TERM. (NOTES 1 AND 2)
625-Type Conn Blk or 548A Jack or 630A4 Conn Blk	Tip	G	1/G	1/G	1/G	1/G	—	—
	Ring	R	2/R	2/R	2/R	2/R	—	—
	GRD	Y	3/Y	3/Y	3/Y	3/Y	—	—
	—	BK	4/B	4/B	4/B	4/B	—	—
Mtg Cord Jack or Leads in Housing	Tip	G	L1	L1	A	L2	—	—
	Ring	R	A	A	L1	F	—	—
	GRD	Y	G	G	G	G	—	—
	—	BK	L2	L2	L2	1	—	—
Ringer	—	S	B	B	B	—	L1	—
	—	BK	L1	G	G	G	—	—
Line Switch	—	BR	L2	L2	L2	C (Rotary)	1 (TOUCH- TONE Dial)	—
	—	S	L2	L2	L2	A	—	—
	—	W	F	F	F	—	3	—
	—	O	A	A	A	4	—	—
	—	BL	C	C	C	4	—	—
Handset Cord, Jack Leads in Housing	Tip	G	F	F	F	—	—	—
	Ring	R	C	C	C	C (Rotary)	2 (TOUCH- TONE Dial)	—
	PTY Ident	W	1	1	1	—	4	—
	PTY Ident	BK	4	4	4	—	5	—
Handset Cord Jack Leads in Handset (Note 1)	Tip	G	—	—	—	—	—	—
	Ring	R	—	—	—	—	—	—
	PTY Ident	Y	—	—	—	—	—	A
	PTY Ident	BK	—	—	—	—	—	4

Notes:

1. Hand telephone sets must be opened to wire for tip party with identifying ground.
2. Leads for these connections are provided by the 282A adapter furnished as part of the D-180825 Kits of Part.

Caution: Do not store spade-tipped leads under terminal board mounting screw.



NOTES:

1. DIAL LIGHT TRNSF NOT REQUIRED. DIAL LIGHTING IS PROVIDED BY LIGHT EMITTING DIODES (LED) IN THE HAND TEL SET WHICH IS POWERED BY CO BATTERY OVER THE INCOMING LINE.
2. WIRED FOR INDIVIDUAL OR BRIDGED RINGING. FOR ALL CLASSES OF SERVICE REFER TO TABLE B.
3. STATION GROUND SHALL BE PROVIDED FOR ALL INSTALLATIONS EVEN WHEN NOT REQUIRED FOR THE SERVICE INITIALLY PROVIDED
4. WHEN USED WITH 1A1 OR 1A2 KTS THE (BK) AND (Y) LEADS BECOME A AND A1 AND THE (BR) LINE SWITCH LEAD MUST BE MOVED FROM L2 TO G ON THE HOUSING TERMINAL BOARD.
5. TO PREVENT FALSE HOLD CONDITION WHEN GOING ON-HOOK THE TIP AND RING CONTACTS OF THE LINE SWITCH MUST BREAK BEFORE A LEAD CONTACTS. FIELD ADJUSTMENT OF LINE SWITCH IS NOT RECOMMENDED.

Fig. 7—950A- or 2950A-Type Telephone Set Wired for Individual or Bridged Ringing

