

## TELEPHONE SETS

881A100, 881B100, 881C100, 2881A100, 2881B100,  
2881C100, 881A101, 881B101, 881C101, 2881A101,  
2881B101, 2881C101, 881B110, 881C110, 2881B110, AND 2881C110

### 1. GENERAL

1.01 This section provides identification, installation, and connection information for the 881A100 (MD), 881B100 (MD), 881C100, 881A101 (MD), 881B101 (MD), 881C101, 881B110 (MD), 881C110, 2881A100 (MD), 2881B100 (MD), 2881C100, 2881A101 (MD), 2881B101 (MD), 2881C101, 2881B110 (MD), or 2881C110 DESIGNLINE\* telephone (*Chestphone*\*\*\*) sets (Fig. 1 and 2).

\*Trademark American Telephone and Telegraph Company.

\*\*\*Trademark American Telecommunication Corporation.

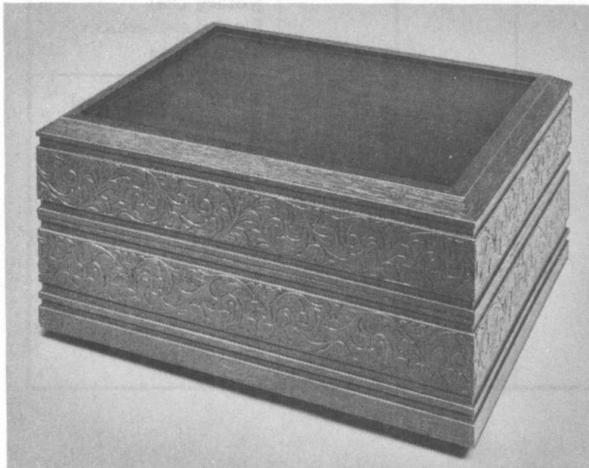


Fig. 1—881A100 or 2881A100 DESIGN LINE Telephone Set With Cover Closed

1.02 This section is reissued to:

- Add 881C100, 2881C100, 881C101, 2881C101, 881C110, and 2881C110



Fig. 2—2881A100 DESIGN LINE Telephone Set

- Add 881B110 and 2881B110 and show (MD)
- Add new line switch information
- Add Fig. 10, 11, 17, and 18
- Revise Tables A through E
- Revise Fig. 13, 14, 15, and 16.

### NOTICE

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

♦TABLE A♦

## AVAILABLE CODES AND ORDERING GUIDE

TEL SET CODE	TEL SET BASE	DIAL	TRMTR UNIT	RCVR UNIT	MTG CORD	HANDSET CORD	DESCRIPTION
881B100*	880CT-60	6U-120 or 6UA-120	T1	U3	D4BU-29	H4DU-60	Rotary Dial Walnut Chestphone
881C100	880GT-60						
2881B100*	2880BT-60	35AH3D					
2881C100	2880CT-60						TOUCH-TONE Dial Walnut Chestphone
881B101*	880CT-03	6U-120 or 6UA-120					
881C101	881GT-03					H4DU-03	Rotary Dial Black Leatherette Chestphone
2881B101*	2880BT-03	35AH3D					TOUCH-TONE Dial Black Leatherette Chestphone
2881C101	2880CT-03						
881A100*	880A-60	6U-120 or 6UA-120					
2881A100*	2880A-60	35Y3D				H4CJ-60	Rotary Dial Walnut Chestphone
							TOUCH-TONE Dial Walnut Chestphone
881A101*	880A-03	6U-120 or 6UA-120				H4CJ-03	Rotary Dial Black Leatherette Chestphone
2881A101*	2880A-03	35Y3D					TOUCH-TONE Dial Black Leatherette Chestphone
881B110*	880ET-58	6TA-41				H4DU-03	Rotary Dial Optique Chestphone
881C110	880FT-58						
2881B110*	2880BT-58	35AH3D					TOUCH-TONE Dial Optique Chestphone
2881C110	2880CT-58						

\* MD

**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 881C100, 881C101, 881C110, 2881C100, 2881C101, and 2881C110 telephone sets are similar to the 881B100, 881B101, 881B110, 2881B100,

2881B101, and 2881B110 sets except that the C codes use a new line switch [identified by two extra (BL and BL-W) leads].

**1.04** The customer's premises must be properly wired with an appropriate connecting block or jack, in order to accept the D4BU-29 plug-ended mounting cord or 225A adapter furnished with each set.

## 2. IDENTIFICATION

**2.01** The 881A100, B100, C100, A101, B101, C101, B110, C110, (rotary dial) and the 2881A100, B100, C100, A101, B101, C101, B110, C110 (TOUCH-TONE® dial) equipped telephone sets are DESIGN LINE telephone sets being made available to the customer. The customer buys the housing and the handset from the telephone company and the telephone company retains ownership of the transmission and signaling components.

**Ordering Guide (Refer to Table A)**

### 2.02 *Basic Telephone Set Ordering Information:*

**Example:** Set, Telephone, 2881B100† is a simulated walnut Chestphone equipped with a TOUCH-TONE dial (Fig. 2).

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

**2.03** These telephone sets are intended to be used as single line or two-party desk sets and not recommended for use on four- and eight-party service.

### 2.04 *Optional Components (order separately):*

- 819040122 (P-90D012) Guard Assembly (polarity guard)
- 814316121 (P-43A612) Screw (for mounting polarity guard)

## 3. INSTALLATION AND CONNECTIONS

**3.01** These telephone sets are furnished from the factory fully assembled and wired for bridged ringing. To connect the telephone set, plug the mounting cord into a 625A connecting block or if the existing jack is a 548A or equivalent, use the 225A adapter furnished with each set.

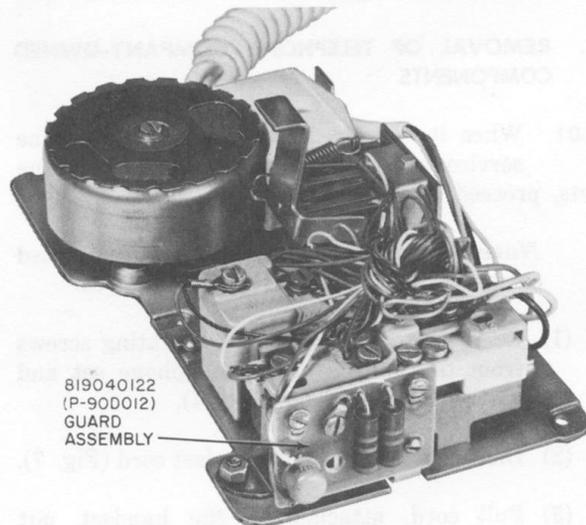
**3.02** The internal connections for these telephone sets, for nonkey system use, are shown in Fig. 13, 14, 17, and 18.

**3.03** Connections for 1A KTS do not require any telephone set modifications and are wired same as Fig. 13, 14, 17, and 18.

**3.04** Connections for use with 1A1 or 1A2 KTS are shown in Fig. 15 and 17 for the rotary dial telephone sets and Fig. 16 and 18 for the TOUCH-TONE dial telephone sets. Table D includes necessary wiring modifications required for 1A1 or 1A2 key telephone system use.

**3.05** To gain access to the interior of these sets for wiring changes, refer to appropriate paragraph in Part 4.

**3.06** If a polarity guard is to be installed in conjunction with the 35-type TOUCH-TONE dial, install Guard Assembly (Polarity Guard), ordered separately using an 814316121 (P-43A612) screw which is also ordered separately. A polarity guard should be used only when specified by local instructions for end-to-end signaling purposes when battery and ground reversals are encountered. Refer to Fig. 3 for installation information and Table E for connections.



**Fig. 3—819040122 (P-90D012) Guard Assembly (Polarity Guard Installed on 2880A Telephone Set Base)**

### 3.07 *Line and Ringer Connections:*

- (1) For single line and two-party service, refer to Table B for the rotary dial sets and to Table C for the TOUCH-TONE dial sets.

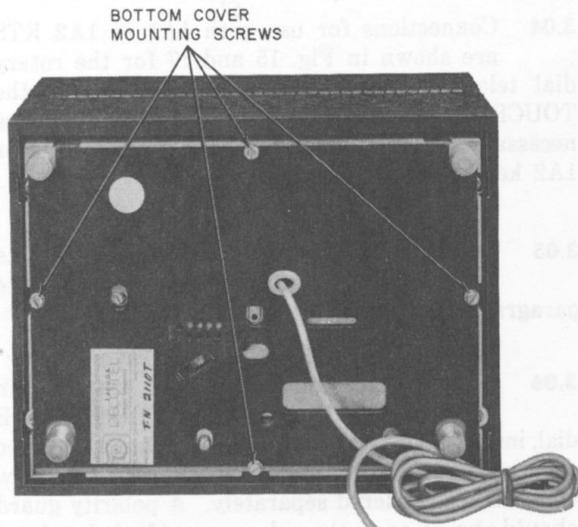


Fig. 4—881A100 or 2881A100 Telephone Set, Bottom View

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

#### 4. REMOVAL OF TELEPHONE COMPANY-OWNED COMPONENTS

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

**Note:** Remove the telephone company-owned components that can be easily removed.

- (1) Remove four bottom cover mounting screws from the bottom of the telephone set and remove the bottom cover (Fig. 4).
- (2) Disconnect base end of handset cord (Fig. 7).
- (3) Pull cord, attached to the handset, out through the top of the telephone set base.
- (4) Remove four telephone set base mounting screws and withdraw the base (Fig. 5).
- (5) Rotary dial equipped set only—remove three dial mounting screws and remove the rotary dial (Fig. 6).

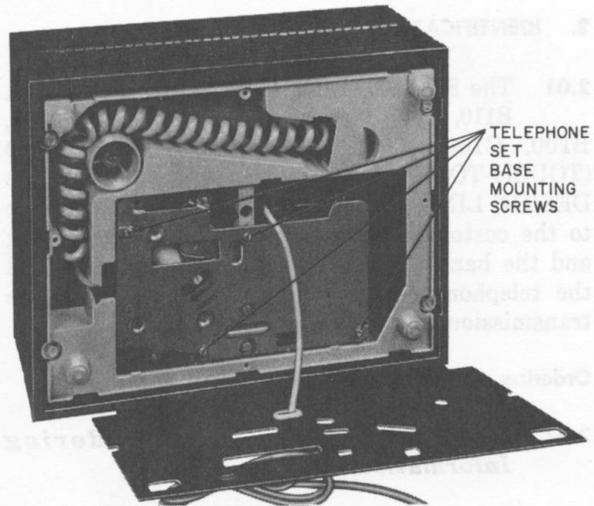


Fig. 5—881A100 or 2881A100 Telephone Set With Bottom Cover Removed

- (6) TOUCH-TONE dial equipped sets only—remove three faceplate mounting screws as shown in Fig. 8 and remove the faceplate. Remove two dial mounting screws and remove the TOUCH-TONE dial (Fig. 9).
- (7) TOUCH-TONE dial equipped sets only—replace faceplate (Fig. 9).
- (8) Open handset by removing two screws (Fig. 10) and remove transmitter and receiver cups. Remove T1 transmitter and U3 receiver units (Fig. 11).
- (9) Disconnect or unplug and remove the cord from the handset (Fig. 12).
- (10) Replace transmitter and receiver cups and restore handset cover.

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

4.03 When it is desired to return a set to Western Electric for repair, it should be packed using the D-180600 Kit of Parts which contains packing materials and instructions.

◆TABLE B◆

**LINE AND RINGER CONNECTIONS (NOTE)**  
**(SETS WITH ROTARY DIAL ONLY)**

WIRE OR LEAD	COLOR	INDIVID. OR BRIDGED	RING PARTY	TIP PARTY		
				NO IDENT GROUND	IDENTIFYING GROUND	
					1000Ω	2650Ω
623P4 Line Jack Assy	R	A	A	L1	F	F
	G	L1	L1	A	L2	L2
	Y	G	G	G	G	G
	BK	L2	L2	L2	*	*
Ringer	R	K	K	K	K	K
	S-R	*	*	*	*	L1
	S	*	*	*	L1	*
	BK	L1	G	G	G	G
Line Switch	Y or BL-W†	A	A	A	L2	L2
	W	F	F	F	B	B

Note: For access to set wiring follow applicable steps in Part 4.

\* Insulated and stored.

† (Y) lead on 881A and B-type sets, (BL-W) lead on 881C-type sets.

◆TABLE C◆

**LINE AND RINGER CONNECTIONS (NOTE)**  
**(SETS WITH TOUCH-TONE DIAL ONLY)**

WIRE OR LEAD	COLOR	INDIVID. OR BRIDGED	RING PARTY	TIP PARTY		
				NO IDENT GROUND	IDENTIFYING GROUND	
					1000Ω	2650Ω
623P4 Line Jack Assy	R	A	A	L1	C	C
	G	L1	L1	A	L2	L2
	Y	G	G	G	G	G
	BK	L2	L2	L2	*	*
Ringer	R	K	K	K	K	K
	S-R	*	*	*	*	L1
	S	*	*	*	L1	*
	BK	L1	G	G	G	G
Line Switch	Y or BL-W†	A	A	A	L2	L2
	W	F	F	C	B	B
	BR	C	C	F	F	F

Note: For access to set wiring follow applicable steps in Part 4.

\* Insulated and stored.

† (Y) lead on 2881A and B-type sets, (BL-W) lead on 2881C-type sets.

TABLE 84

(LINE AND BINDER CONNECTIONS (NOTE)  
(SET WITH ROTARY DIAL ONLY)

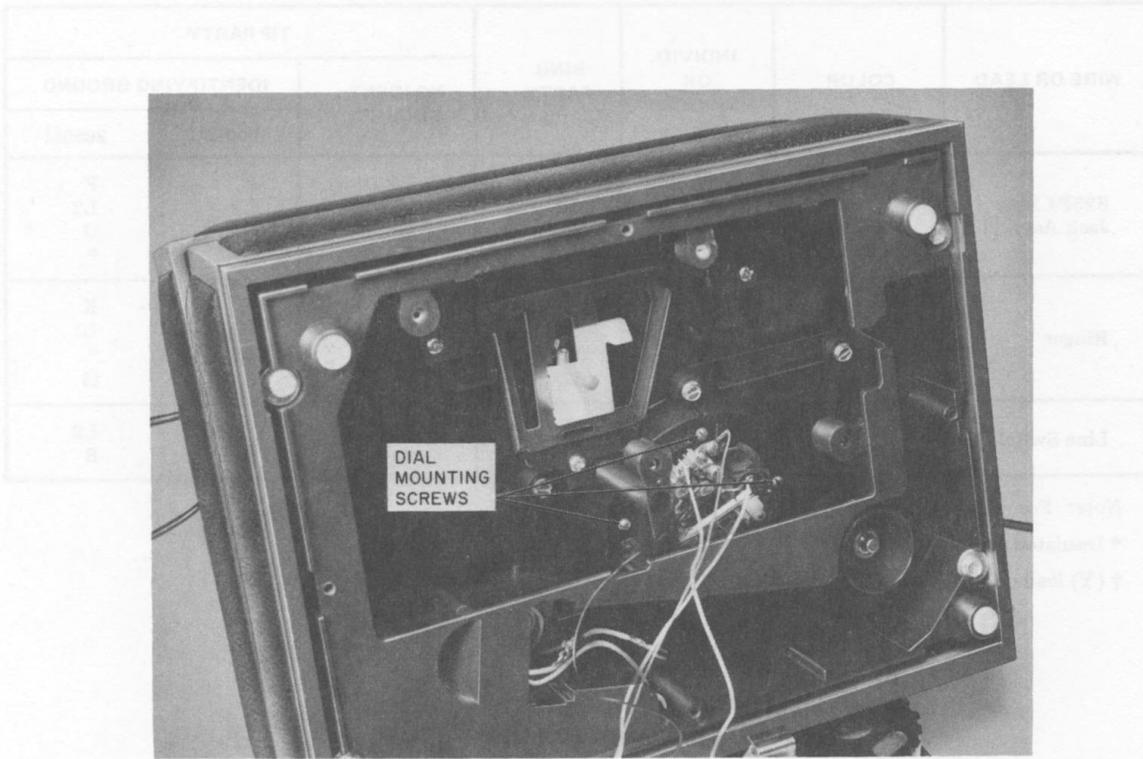


Fig. 6—Removing Rotary Dial

WIRE OR LEAD	COLOR	BRIDGED	WIRE	NO IDENT	IDENTIFYING GROUPING
Y	Y or BL-W	A	A	LI	C
W	W	B	B	LI	C
BL	BL	C	C	LI	C
BR	BR	D	D	LI	C
GR	GR	E	E	LI	C
OR	OR	F	F	LI	C
PK	PK	G	G	LI	C
RD	RD	H	H	LI	C
BL-W	BL-W	I	I	LI	C
Y	Y	J	J	LI	C
W	W	K	K	LI	C
BL	BL	L	L	LI	C
BR	BR	M	M	LI	C
GR	GR	N	N	LI	C
OR	OR	O	O	LI	C
PK	PK	P	P	LI	C
RD	RD	Q	Q	LI	C
BL-W	BL-W	R	R	LI	C
Y	Y	S	S	LI	C
W	W	T	T	LI	C
BL	BL	U	U	LI	C
BR	BR	V	V	LI	C
GR	GR	W	W	LI	C
OR	OR	X	X	LI	C
PK	PK	Y	Y	LI	C
RD	RD	Z	Z	LI	C
BL-W	BL-W	AA	AA	LI	C
Y	Y	AB	AB	LI	C
W	W	AC	AC	LI	C
BL	BL	AD	AD	LI	C
BR	BR	AE	AE	LI	C
GR	GR	AF	AF	LI	C
OR	OR	AG	AG	LI	C
PK	PK	AH	AH	LI	C
RD	RD	AI	AI	LI	C
BL-W	BL-W	AJ	AJ	LI	C
Y	Y	AK	AK	LI	C
W	W	AL	AL	LI	C
BL	BL	AM	AM	LI	C
BR	BR	AN	AN	LI	C
GR	GR	AO	AO	LI	C
OR	OR	AP	AP	LI	C
PK	PK	AQ	AQ	LI	C
RD	RD	AR	AR	LI	C
BL-W	BL-W	AS	AS	LI	C
Y	Y	AT	AT	LI	C
W	W	AU	AU	LI	C
BL	BL	AV	AV	LI	C
BR	BR	AW	AW	LI	C
GR	GR	AX	AX	LI	C
OR	OR	AY	AY	LI	C
PK	PK	AZ	AZ	LI	C
RD	RD	BA	BA	LI	C
BL-W	BL-W	BB	BB	LI	C
Y	Y	BC	BC	LI	C
W	W	BD	BD	LI	C
BL	BL	BE	BE	LI	C
BR	BR	BF	BF	LI	C
GR	GR	BG	BG	LI	C
OR	OR	BH	BH	LI	C
PK	PK	BI	BI	LI	C
RD	RD	BJ	BJ	LI	C
BL-W	BL-W	BK	BK	LI	C
Y	Y	BL	BL	LI	C
W	W	BM	BM	LI	C
BL	BL	BN	BN	LI	C
BR	BR	BO	BO	LI	C
GR	GR	BP	BP	LI	C
OR	OR	BQ	BQ	LI	C
PK	PK	BR	BR	LI	C
RD	RD	BS	BS	LI	C
BL-W	BL-W	BT	BT	LI	C
Y	Y	BU	BU	LI	C
W	W	BV	BV	LI	C
BL	BL	BW	BW	LI	C
BR	BR	BX	BX	LI	C
GR	GR	BY	BY	LI	C
OR	OR	BZ	BZ	LI	C
PK	PK	CA	CA	LI	C
RD	RD	CB	CB	LI	C
BL-W	BL-W	CC	CC	LI	C
Y	Y	CD	CD	LI	C
W	W	CE	CE	LI	C
BL	BL	CF	CF	LI	C
BR	BR	CG	CG	LI	C
GR	GR	CH	CH	LI	C
OR	OR	CI	CI	LI	C
PK	PK	CK	CK	LI	C
RD	RD	CL	CL	LI	C
BL-W	BL-W	CM	CM	LI	C
Y	Y	CN	CN	LI	C
W	W	CO	CO	LI	C
BL	BL	CP	CP	LI	C
BR	BR	CQ	CQ	LI	C
GR	GR	CR	CR	LI	C
OR	OR	CS	CS	LI	C
PK	PK	CT	CT	LI	C
RD	RD	CU	CU	LI	C
BL-W	BL-W	CV	CV	LI	C
Y	Y	CW	CW	LI	C
W	W	CX	CX	LI	C
BL	BL	CY	CY	LI	C
BR	BR	CZ	CZ	LI	C
GR	GR	DA	DA	LI	C
OR	OR	DB	DB	LI	C
PK	PK	DC	DC	LI	C
RD	RD	DD	DD	LI	C
BL-W	BL-W	DE	DE	LI	C
Y	Y	DF	DF	LI	C
W	W	DG	DG	LI	C
BL	BL	DH	DH	LI	C
BR	BR	DI	DI	LI	C
GR	GR	DJ	DJ	LI	C
OR	OR	DK	DK	LI	C
PK	PK	DL	DL	LI	C
RD	RD	DM	DM	LI	C
BL-W	BL-W	DN	DN	LI	C
Y	Y	DO	DO	LI	C
W	W	DP	DP	LI	C
BL	BL	DQ	DQ	LI	C
BR	BR	DR	DR	LI	C
GR	GR	DS	DS	LI	C
OR	OR	DT	DT	LI	C
PK	PK	DU	DU	LI	C
RD	RD	DV	DV	LI	C
BL-W	BL-W	DW	DW	LI	C
Y	Y	DX	DX	LI	C
W	W	DY	DY	LI	C
BL	BL	DZ	DZ	LI	C
BR	BR	EA	EA	LI	C
GR	GR	EB	EB	LI	C
OR	OR	EC	EC	LI	C
PK	PK	ED	ED	LI	C
RD	RD	EE	EE	LI	C
BL-W	BL-W	EF	EF	LI	C
Y	Y	EG	EG	LI	C
W	W	EH	EH	LI	C
BL	BL	EI	EI	LI	C
BR	BR	EJ	EJ	LI	C
GR	GR	EK	EK	LI	C
OR	OR	EL	EL	LI	C
PK	PK	EM	EM	LI	C
RD	RD	EN	EN	LI	C
BL-W	BL-W	EO	EO	LI	C
Y	Y	EP	EP	LI	C
W	W	EQ	EQ	LI	C
BL	BL	ER	ER	LI	C
BR	BR	ES	ES	LI	C
GR	GR	ET	ET	LI	C
OR	OR	EU	EU	LI	C
PK	PK	EV	EV	LI	C
RD	RD	EW	EW	LI	C
BL-W	BL-W	EX	EX	LI	C
Y	Y	EY	EY	LI	C
W	W	EZ	EZ	LI	C
BL	BL	FA	FA	LI	C
BR	BR	FB	FB	LI	C
GR	GR	FC	FC	LI	C
OR	OR	FD	FD	LI	C
PK	PK	FE	FE	LI	C
RD	RD	FF	FF	LI	C
BL-W	BL-W	FG	FG	LI	C
Y	Y	FH	FH	LI	C
W	W	FI	FI	LI	C
BL	BL	FJ	FJ	LI	C
BR	BR	FK	FK	LI	C
GR	GR	FL	FL	LI	C
OR	OR	FM	FM	LI	C
PK	PK	FN	FN	LI	C
RD	RD	FO	FO	LI	C
BL-W	BL-W	FP	FP	LI	C
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BR	BR	FT	FT	LI	C
GR	GR	FU	FU	LI	C
OR	OR	FV	FV	LI	C
PK	PK	FW	FW	LI	C
RD	RD	FX	FX	LI	C
BL-W	BL-W	FY	FY	LI	C
Y	Y	FZ	FZ	LI	C
W	W	GA	GA	LI	C
BL	BL	GB	GB	LI	C
BR	BR	GC	GC	LI	C
GR	GR	GD	GD	LI	C
OR	OR	GE	GE	LI	C
PK	PK	GF	GF	LI	C
RD	RD	GG	GG	LI	C
BL-W	BL-W	GH	GH	LI	C
Y	Y	GI	GI	LI	C
W	W	GO	GO	LI	C
BL	BL	GP	GP	LI	C
BR	BR	GQ	GQ	LI	C
GR	GR	GR	GR	LI	C
OR	OR	GS	GS	LI	C
PK	PK	GT	GT	LI	C
RD	RD	GU	GU	LI	C
BL-W	BL-W	GV	GV	LI	C
Y	Y	GW	GW	LI	C
W	W	GX	GX	LI	C
BL	BL	GY	GY	LI	C
BR	BR	GZ	GZ	LI	C
GR	GR	HA	HA	LI	C
OR	OR	HB	HB	LI	C
PK	PK	HC	HC	LI	C
RD	RD	HD	HD	LI	C
BL-W	BL-W	HE	HE	LI	C
Y	Y	HF	HF	LI	C
W	W	HG	HG	LI	C
BL	BL	HH	HH	LI	C
BR	BR	HI	HI	LI	C
GR	GR	HJ	HJ	LI	C
OR	OR	HK	HK	LI	C
PK	PK	HL	HL	LI	C
RD	RD	HM	HM	LI	C
BL-W	BL-W	HN	HN	LI	C
Y	Y	HO	HO	LI	C
W	W	HP	HP	LI	C
BL	BL	HQ	HQ	LI	C
BR	BR	HR	HR	LI	C
GR	GR	HS	HS	LI	C
OR	OR	HT	HT	LI	C
PK	PK	HU	HU	LI	C
RD	RD	HV	HV	LI	C
BL-W	BL-W	HW	HW	LI	C
Y	Y	HX	HX	LI	C
W	W	HY	HY	LI	C
BL	BL	HZ	HZ	LI	C
BR	BR	IA	IA	LI	C
GR	GR	IB	IB	LI	C
OR	OR	IC	IC	LI	C
PK	PK	ID	ID	LI	C
RD	RD	IE	IE	LI	C
BL-W	BL-W	IF	IF	LI	C
Y	Y	IG	IG	LI	C
W	W	IH	IH	LI	C
BL	BL	II	II	LI	C
BR	BR	IJ	IJ	LI	C
GR	GR	IK	IK	LI	C
OR	OR	IL	IL	LI	C
PK	PK	IM	IM	LI	C
RD	RD	IN	IN	LI	C
BL-W	BL-W	IO	IO	LI	C
Y	Y	IP	IP	LI	C
W	W	IQ	IQ	LI	C
BL	BL	IR	IR	LI	C
BR	BR	IS	IS	LI	C
GR	GR	IT	IT	LI	C
OR	OR	IU	IU	LI	C
PK	PK				

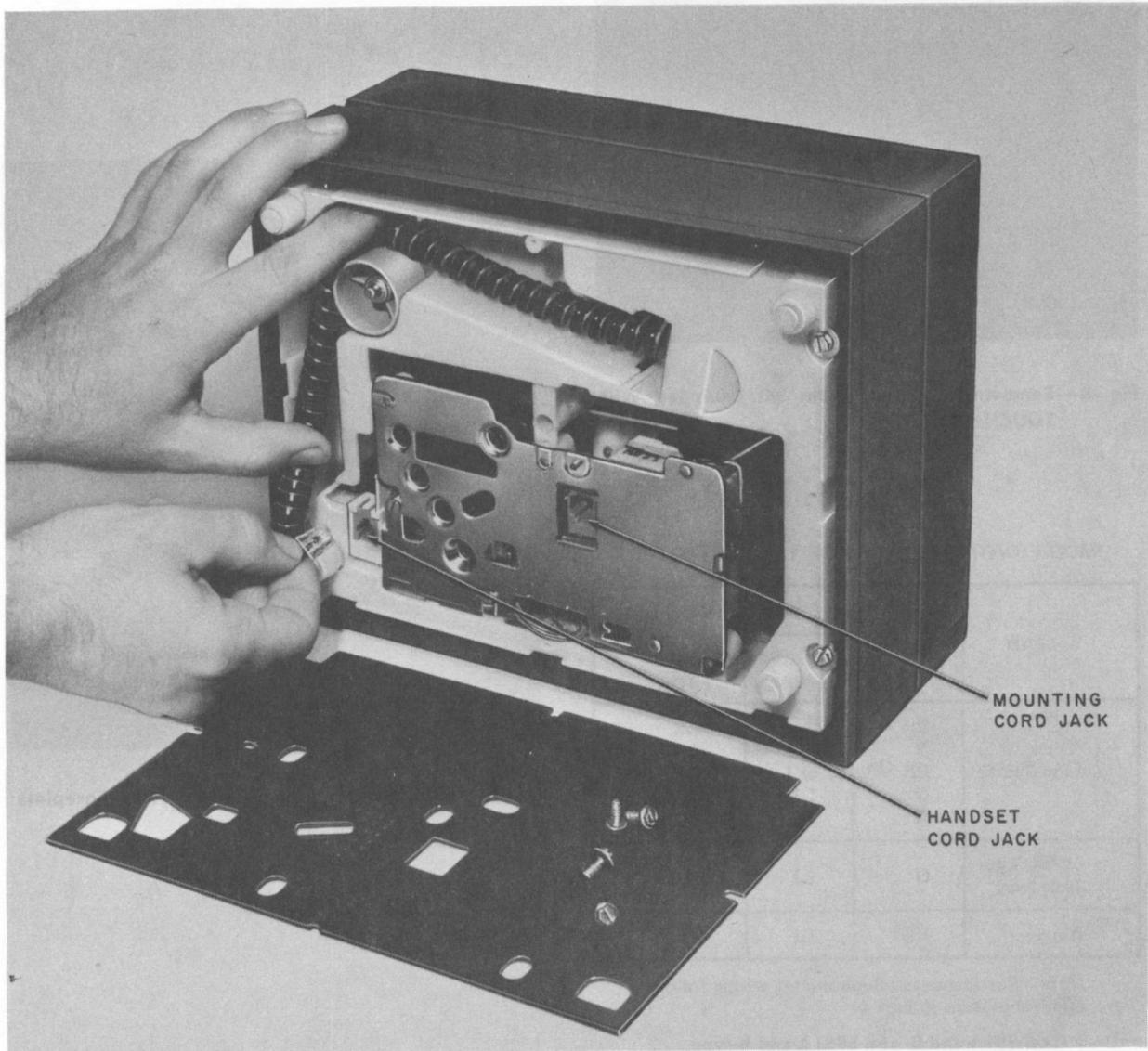


Fig. 7—881B100 or 2881B100 Telephone Set With Bottom Cover Removed

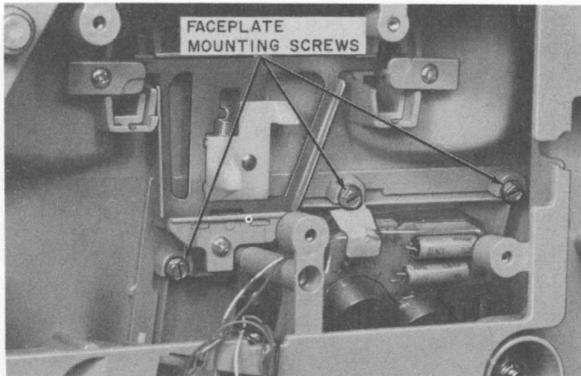


Fig. 8—Removing Faceplate from Set Equipped With TOUCH-TONE Dial

◆TABLE D◆

MODIFICATION FOR 1A1 OR 1A2 KTS (NOTE)

LEAD	COLOR	NETWORK TERMINAL	
		REMOVE FROM	CONNECT TO
Line Switch	S	A	L2
	Y	A	L2
	BR	C or L2*	G
	G	L1	A
	W	F	C
623P4 Line Jack Assy	G	L1	F
Ringer	BK	L1	F

Note: For access to telephone set wiring follow applicable steps in Part 4.

\* C on 881A-and B- and 2881A-and B-type sets, L2 on 881C- and 2881C-type sets.

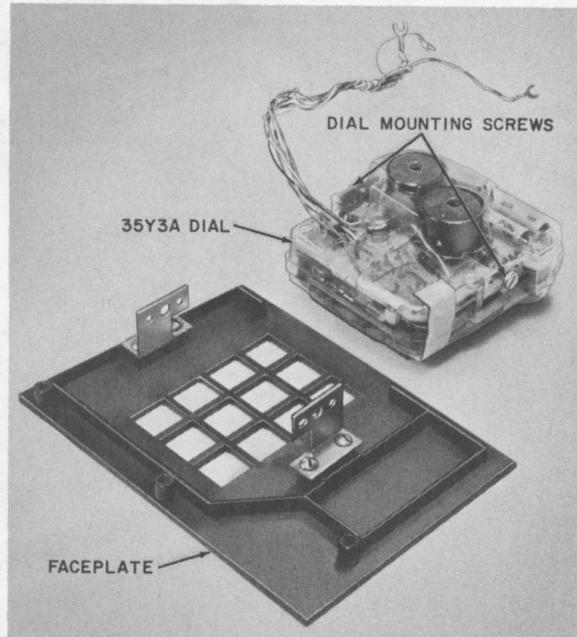


Fig. 9—TOUCH-TONE Dial Removed From Faceplate

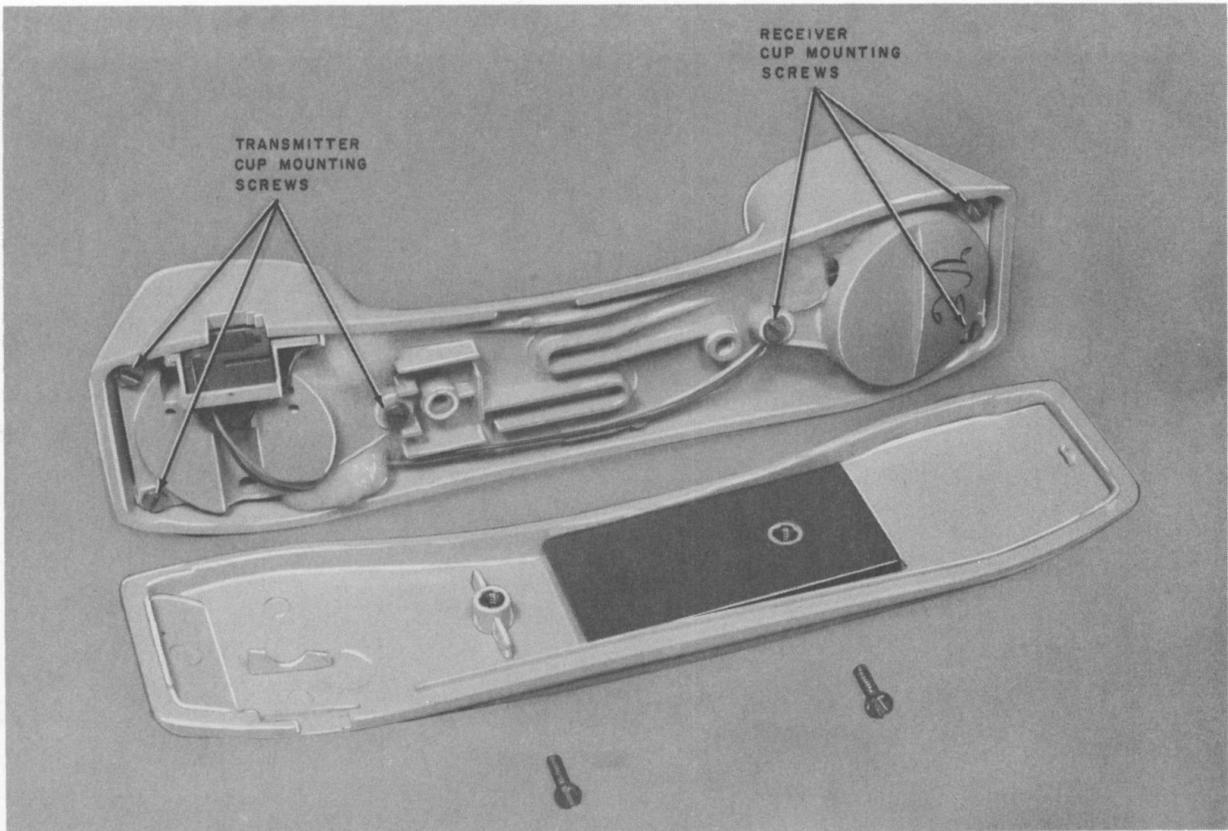


Fig. 10—Removing Transmitter and Receiver Cups From Handset (A Code Sets Only)

Fig. 11—Removing Transmitter and Receiver Units from Handset (A Code Sets Only)

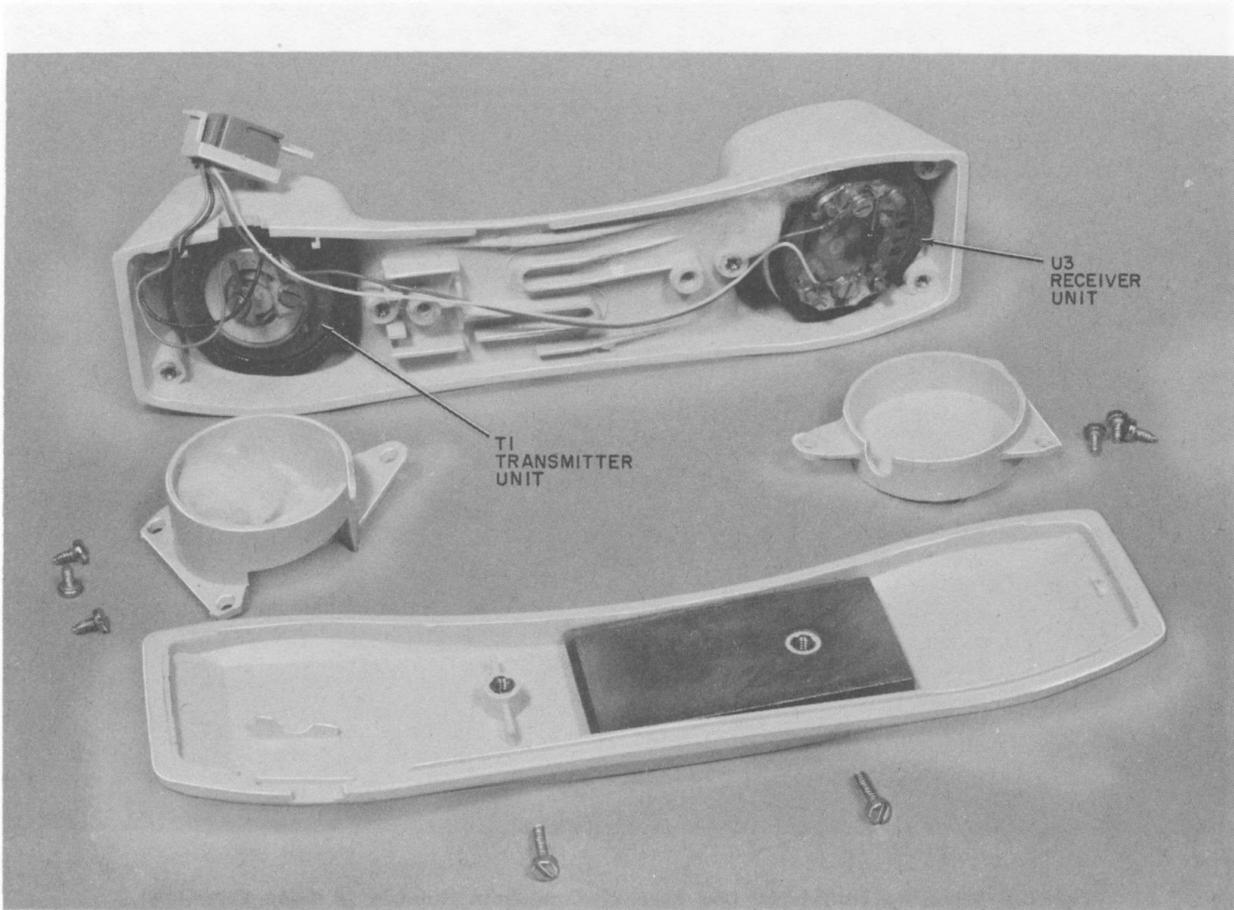


Fig. 11—Removing Transmitter and Receiver Units From Handset (A Code Sets Only)



Fig. 12—881B100 Telephone Set—Removing Handset Cord From Handset

◆TABLE E◆

## POLARITY GUARD CONNECTIONS (NOTE)

LEAD	COLOR	DISCONNECT FROM	CONNECT TO	
		NET.	NET.	POLARITY GUARD
Dial	BK	RR		T
Line Switch	BR or BL* § W†	C		S
623P4 Line Jack Assy	R‡			
Polarity Guard	G W		RR C	

*Note:* For access to telephone set wiring follow applicable steps in part 4.

\* If wired for bridged service or ring party.

† If wired for tip party with no identification ground, 1A1, or 1A2 KTS.

‡ If wired for tip party with identification ground.

§ (BR) lead on 2881A and B-type sets, (BL) lead on 2881C-type sets.

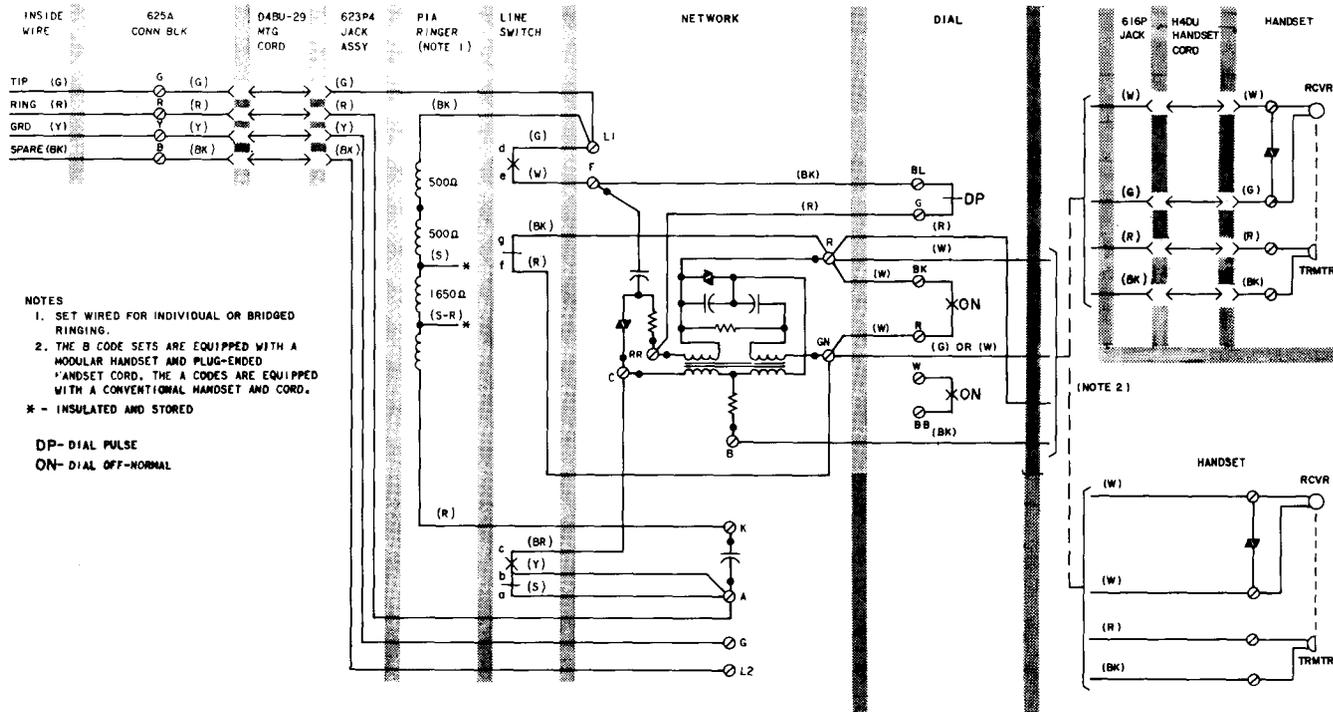


Fig. 13—881A100, 881B100, 881A101, 881B101, or 881B110 Telephone Set, Connections

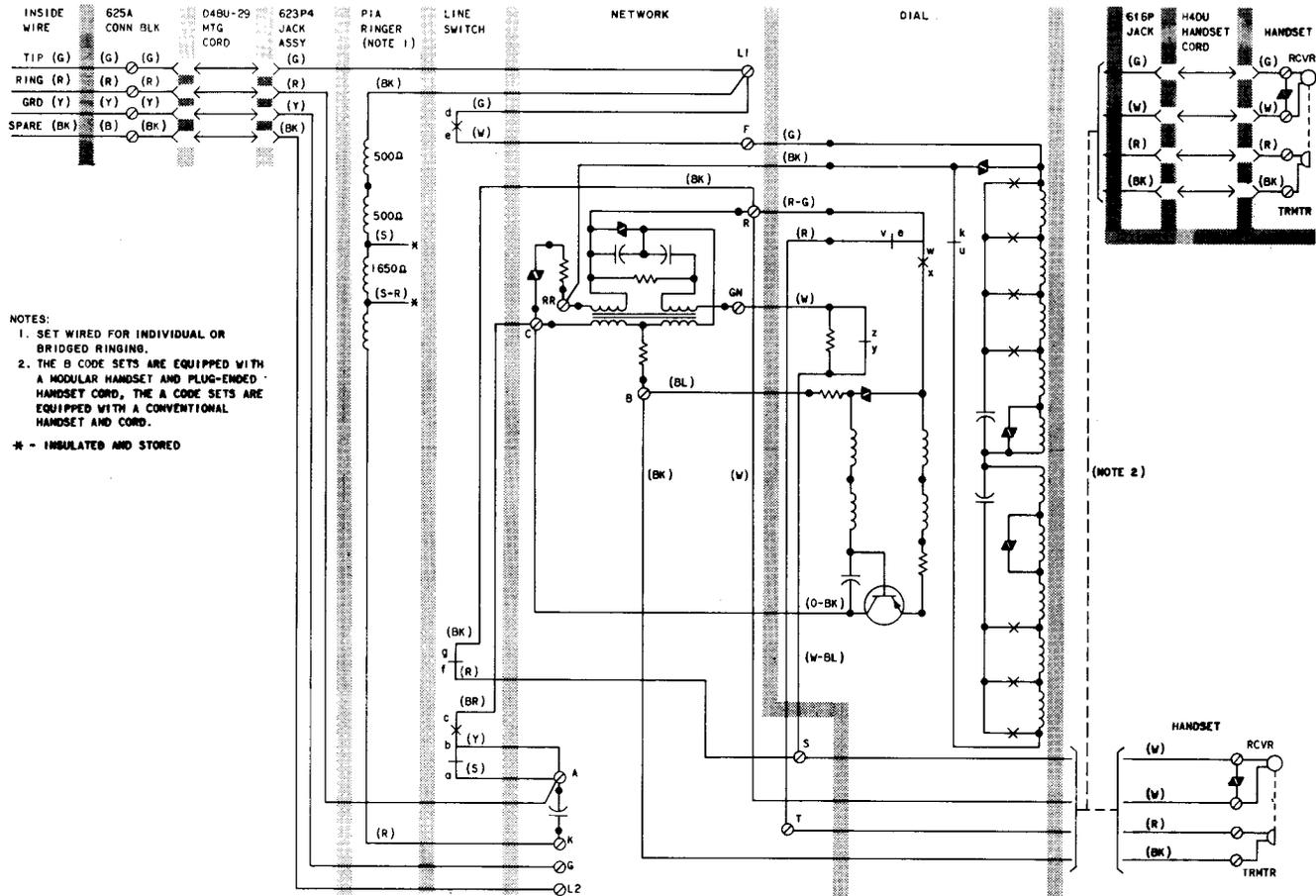


Fig. 14—2881A100, 2881B100, 2881A101, 2881B101, or 2881B110 Telephone Set, Connections

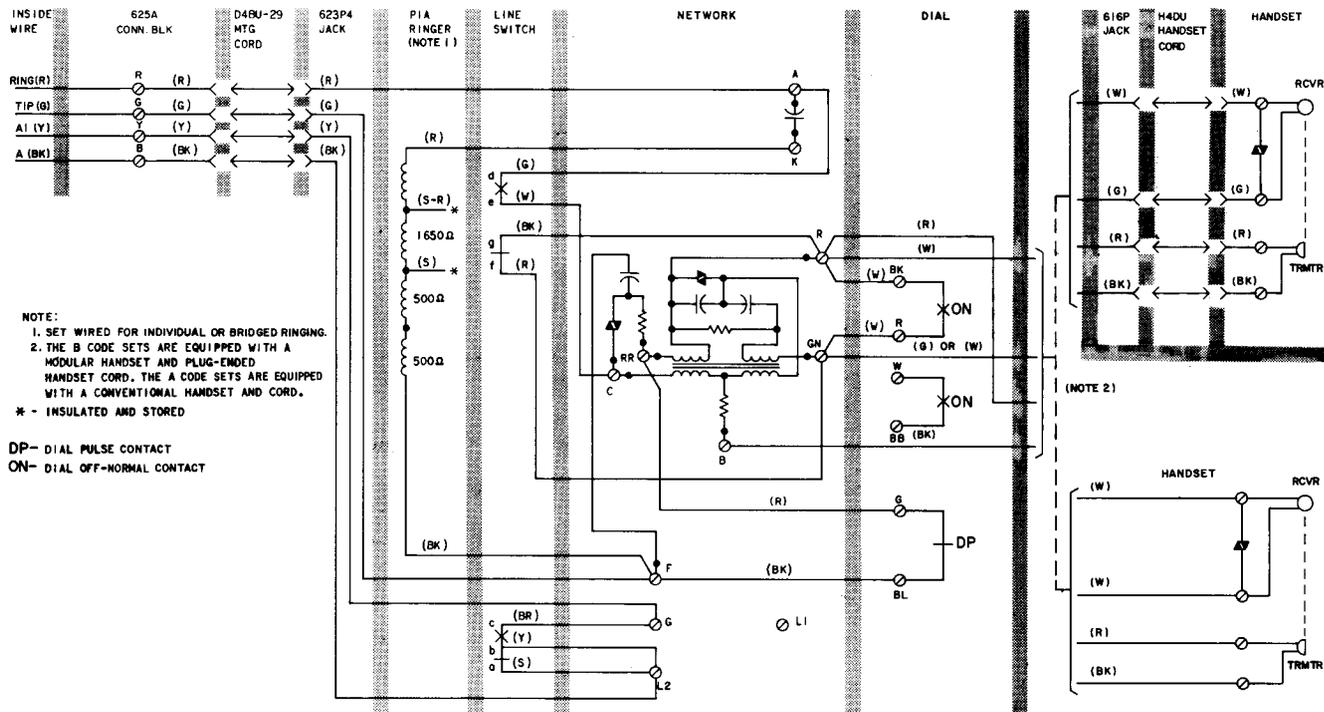
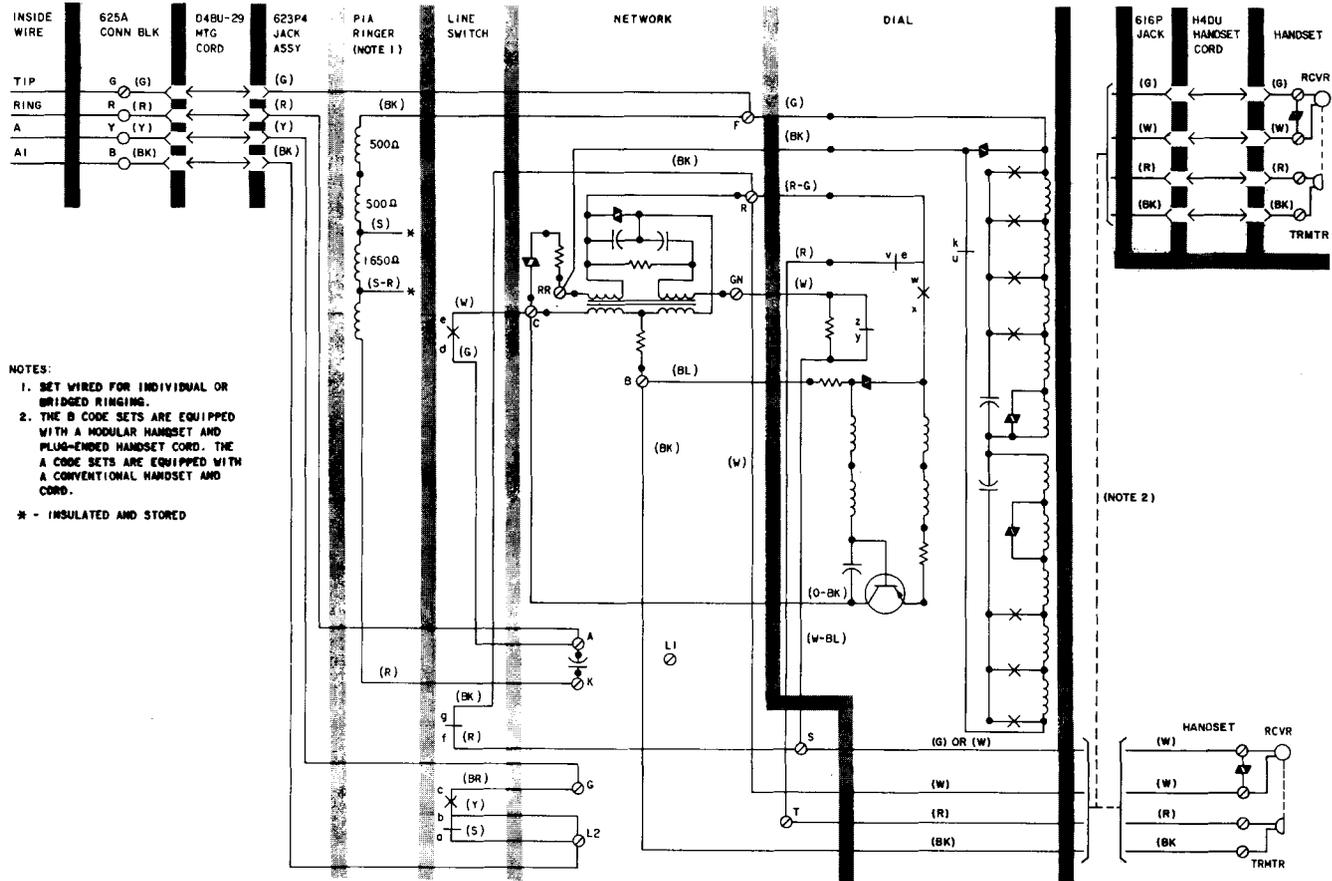


Fig. 15—881A100, 881B100, 881A101, 881B101, or 881B110 Telephone Set Wired for 1A1 or 1A2 KTS



- NOTES:
1. SET WIRED FOR INDIVIDUAL OR BRIDGED RINGING.
  2. THE B CODE SETS ARE EQUIPPED WITH A MODULAR HANDSET AND PLUG-ENDED HANDSET CORD. THE A CODE SETS ARE EQUIPPED WITH A CONVENTIONAL HANDSET AND CORD.
- \* - INSULATED AND STORED

(NOTE 2)

Fig. 16—2881A100, 2881B100, 2881A101, 2881B101, or 2881B110 Telephone Set Wired for 1A1 or 1A2 KTS



