

## SERVICE

### AC- AND AD-TYPE TELEPHONE BASES WITH 220-, 226-, 2220-, AND 2226-TYPE HAND TELEPHONE SETS CONNECTIONS

#### 1. GENERAL

**1.01** This section contains information for the AC1 (MD), AC1P, AC2 (MD), AC2P, AC2PH, AD1 (MD), AD2, AD3, and AD3H telephone bases and associated 220A (MD), 220C, 220AL, 220AM, 226A, 2220B (MD), 2220C, 2220BM, 2220BMG, and 2226A hand telephone sets. For additional information on hand telephone sets, refer to Section 502-303-102.



**All AC1 and AD1 telephone bases manufactured prior to 10-1-72 and any base which is opened for any reason should be rewired as shown in Table A before proceeding with connections shown in other tables.**

**1.02** This section is reissued to:

- Delete D6AP mounting cord from Fig. 11
- Revise Table B.



**The 220C, 220AL, 226A, 2220C, and 2226A hand telephone sets are equipped with light emitting diodes (LED) for dial illumination. This type of illumination may not be visible in normal light.**



**Power for all the LED-type hand telephone sets is supplied from the central office battery over the incoming line. No external ac power is required for dial illumination.**



**When an LED-type hand telephone set is provided, instruct the customer that during the time a TOUCH-TONE® button is depressed**

**the dial light will be extinguished and that the rotary-type dial light will flicker during the run down operation of the dial.**



**For tip party with identifying ground when the LED-type hand telephone sets are provided, it will be necessary to open the handset refer to Section 502-303-102. Make connections as shown in Table D.**



**If AC2, AC2P, or AD3 bases are provided and tip party with identifying ground is required, 220A, 220AM, 2220B, 2220BM, and 2220BMG hand telephone set cannot be used.**

**1.03** Refer to Table B for identification of TRIMLINE® components and associated apparatus.

**1.04** If a 2220B or 2220BM hand telephone set is provided and a polarity guard is required, a D-180984 Kit of Parts must be ordered separately and installed. The 2220BMG hand telephone set has a polarity guard installed from the factory. The 2220C and 2226A has a built-in polarity guard.

**1.05** The 220AL, 220AM, and 2220BM hand telephone sets are furnished with a 227D adapter for the H4DU (modular) handset cord.

**1.06** The D-180824 Kit of Parts (for tip party identification) contains a terminal board and 227C adapter. The 227C adapter replaces the 227D adapter in the 220AL hand telephone set. The 227C adapter extends the tip and ring into the hand telephone set and provides two (2) spade-tipped leads to be connected to the network inside the hand telephone set.

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The terminal board mounts inside the telephone base. Refer to Fig. 7 and Table D for connection information. For additional information, refer to Section 502-303-102.

**1.07** The D-180825 Kit of Parts (for tip party identification) contains a terminal board and a 282A (MD) or 282B adapter. The adapter is required in the 220C, 226A, 2226A, and later version of the 2220C hand telephone sets. This adapter provides two (2) additional wire spring contacts which are connected to two (2) spade-tipped leads to be connected to the network inside the hand telephone set. For additional information, refer to Section 502-303-102. The adapter is not required in the early version 2220C hand telephone sets only the terminal board is required. The terminal board is positioned inside the base over the handset cord jack inside the telephone base. Refer to Fig. 6 and Table D for connection information.

**Note:** In the early version 2220C handsets, remove the (W) or (Y) and (BK) spade-tipped leads from their stored location and connect to terminals A and B or 4, respectively.

**1.08** A D-180891 Kit of Parts is available to modify 2220C and 2226A hand telephone sets and associated AC- and AD-type telephone bases for RFI in the on-hook position. Refer to Section 502-303-102 for handset wiring changes and Section 500-150-100 for wiring changes to the bases. Also refer to Section 500-150-100 for RFI in off-hook position.

**1.09** If a D-180036 or 28A ringer isolator is used for ringer isolation or to extend the ringing range of these sets, refer to Sections 501-375-100 and 501-375-101, respectively for connection information.

**1.10** A 603A ringing extender can be used when only the ringing range is to be extended. Refer to Section 501-380-102 for connections.

**1.11** If a dial light transformer is required (220A, 220AM, 2220B, or 2220BM only), use a 2012A or C transformer or equivalent 6-volt supply. For additional transformer information, refer to Section 501-136-100.

**1.12** To silence ringer, rotate dust cover until openings line up with access holes in top of gong and remove stop screw.

**1.13** To provide dial light (220A, 220AM, 2220B, 2220BM, or 2220BMG only) with 1A1, 1A2, 6A, or 6B KTS, a 623T6 jack and D6AM mounting cord must be ordered separately. Only the AD2 and AD3 bases can be wired for this type service. Refer to Fig. 10 and Table G for connections.

**1.14** To provide message waiting and dial light features without KTS (AC1, AC1P, AD1, and AD2 bases only) and 220A or 2220B hand telephone set, refer to Table I.

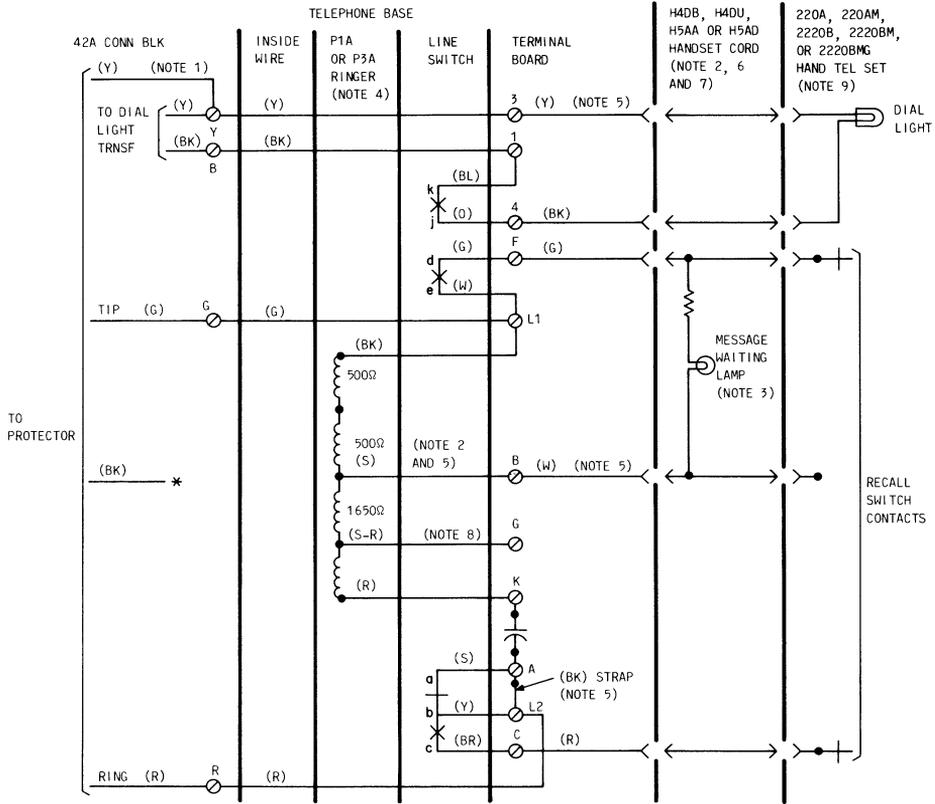
**1.15** The 226A and 2226A hand telephone sets are for customer's with impaired hearing. These handsets provide up to 20 dB of receiver gain in the receiver circuit. For additional information, refer to Section 502-303-102.

**1.16** A D-180719 Kit of Parts is available for use by customers with hearing aids which are equipped with telephone pickup features. The kit of parts provides a supplementary field used by the pickup feature of the hearing aid. This kit is intended for use only with the 220C, 226A, 2220C, and 2226A handsets. For additional information, refer to Section 502-303-102.

**1.17** A D-180697 Kit of Parts [426N (MD) or 813BH diode] is required for 4-party full selective and 8-party semiselective ringing for all type bases. Refer to Table E for connections.

**1.18** Special hospital telephone bases, coded AC2PH (wall) and AD3H (desk) are available for use in critical care areas. These bases are manufactured to meet National Electrical code and National Fire Protection Association Part 76B requirements for hospital sets. For additional information, refer to Section 502-303-101.

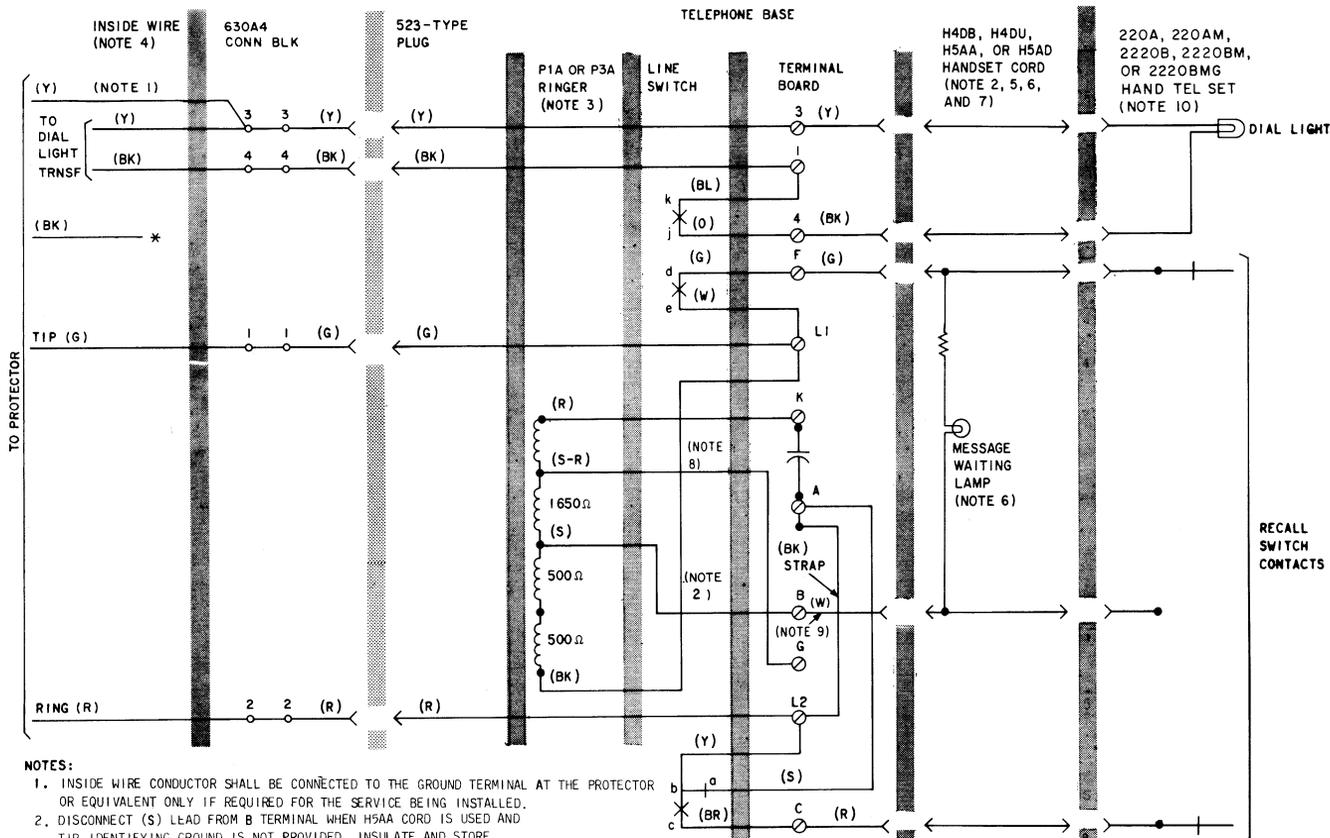
**1.19** Refer to Fig. 11 for AC2PH or AD3H telephone base connections.



NOTES:

1. INSIDE WIRE CONDUCTOR SHALL BE CONNECTED TO THE GROUND TERMINAL AT THE PROTECTOR OR EQUIVALENT ONLY IF REQUIRED FOR THE SERVICE BEING INSTALLED.
2. DISCONNECT (S) LEAD FROM TERMINAL B WHEN H5AA HANDSET CORD IS USED AND TIP PARTY IDENTIFYING GROUND IS NOT PROVIDED, INSULATE AND STORE.
3. LAMP AND RESISTOR ARE PART OF H5AD HANDSET CORD REQUIRED FOR MESSAGE WAITING FEATURE ON AC1 BASE ONLY. IF 220AM OR 2220BM HAND TELEPHONE SET IS PROVIDED, THE 227-TYPE ADAPTER MUST BE REMOVED.
4. SET WIRED FOR INDIVIDUAL OR BRIDGED SERVICE, FOR ALL CLASSES OF SERVICE REFER TO TABLE C.
5. REFER TO READ IN 1,01 AND TABLE A FOR ADDITIONAL INFORMATION ON WIRING ARRANGEMENT AND LEAD COLORS OF AC1 BASES MANUFACTURED PRIOR TO 10-1-72.
6. H4DB OR H4DU HANDSET CORD SHALL BE USED FOR INDIV. OR BRIDGED RINGING, RING PARTY, AND TIP PARTY WITHOUT IDENT. GRD.
7. WHEN H4DU CORD IS PROVIDED A 227D AND 231B ADAPTER IS REQUIRED ON AC1 BUT 227D ADAPTER ONLY IS REQUIRED ON AC2.
8. INSULATED AND STORED ON EARLY VERSION AC1 ONLY.
9. 220AM, 2220BM, AND 2220BMG ARE EQUIPPED FOR H4DU HANDSET CORD.
- \* INSULATED AND STORED

**Fig. 1—AC1 (MD) or AC2 (MD) Telephone Base, Connections, With 220A (MD), 220AM, 2220B (MD), 2220BM, or 2220BMG Hand Telephone Set**

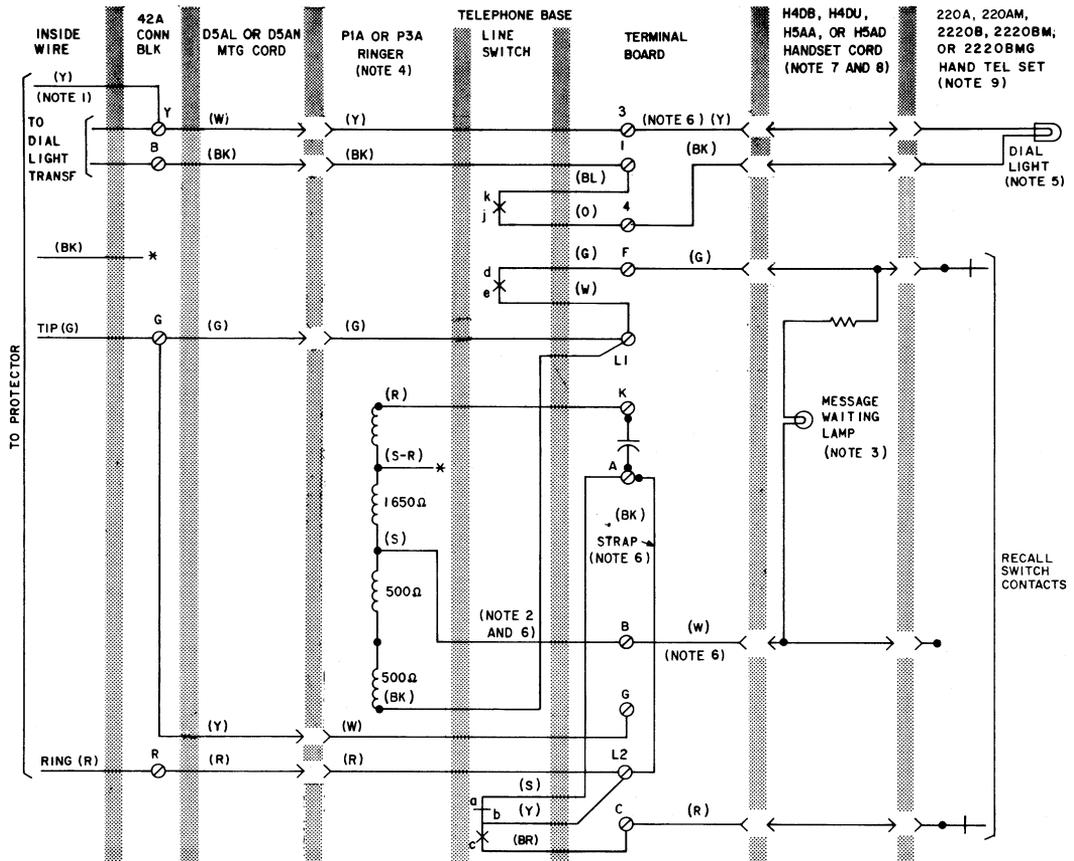


NOTES:

1. INSIDE WIRE CONDUCTOR SHALL BE CONNECTED TO THE GROUND TERMINAL AT THE PROTECTOR OR EQUIVALENT ONLY IF REQUIRED FOR THE SERVICE BEING INSTALLED.
2. DISCONNECT (S) LEAD FROM B TERMINAL WHEN H5AA CORD IS USED AND TIP IDENTIFYING GROUND IS NOT PROVIDED, INSULATE AND STORE.
3. SET WIRED FOR BRIDGED RINGING. FOR ALL CLASSES OF SERVICE REFER TO TABLE C.
4. INSIDE WIRING CABLE MAY BE USED IN PLACE OF "J" STATION WIRE.
5. H4DB OR H4DU HANDSET CORD SHALL BE USED FOR INDIV. OR BRIDGED RINGING, RING PARTY, AND TIP PARTY WITHOUT IDENT. GRD.
6. LAMP AND RESISTOR ARE PART OF H5AD HANDSET CORD REQUIRED FOR MESSAGE WAITING FEATURE ON AC1P BASE ONLY. IF 220AM OR 2220BM HAND TELEPHONE SET IS PROVIDED, THE 227-TYPE ADAPTER MUST BE REMOVED.
7. WHEN H4DU CORD IS PROVIDED A 227D AND 231B ADAPTER IS REQUIRED FOR AC1P BUT ONLY 227D ADAPTER IS REQUIRED FOR AC2P.
8. INSULATED AND STORED ON EARLY VERSION AC1P ONLY.
9. (W) LEAD PROVIDED IN AC1P BASE ONLY.
10. 220AM, 2220BM, AND 2220BMG ARE EQUIPPED FOR H4DU HANDSET CORD.

\* INSULATED AND STORED.

**Fig. 2—AC1P or AC2P Telephone Base, Connections With 220A (MD), 220AM, 2220B (MD), 2220BM, or 2220BMG Hand Telephone Set**

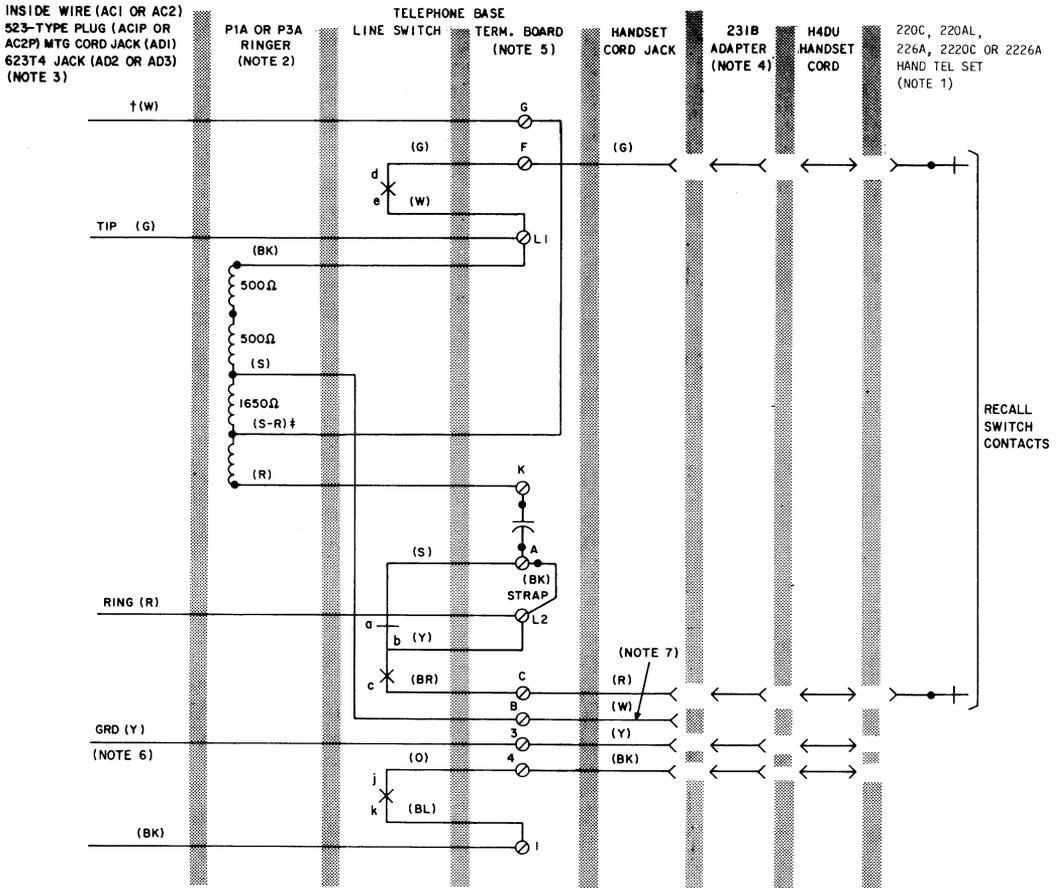


## NOTES:

1. INSIDE WIRE CONDUCTOR SHALL BE CONNECTED TO THE GROUND TERMINAL AT THE PROTECTOR OR EQUIVALENT ONLY IF REQUIRED FOR THE SERVICE BEING INSTALLED.
  2. DISCONNECT (S) LEAD FROM TERMINAL B WHEN H5AA HANDSET CORD IS USED AND TIP PARTY IDENTIFYING GROUND IS NOT PROVIDED, INSULATE AND STORE.
  3. LAMP AND RESISTOR ARE PART OF H5AD HANDSET CORD REQUIRED FOR MESSAGE WAITING FEATURE. IF 220AM OR 2220 BM HAND TELEPHONE SET IS PROVIDED, THE 227-TYPE ADAPTER MUST BE REMOVED.
  4. SET WIRED FOR INDIVIDUAL OR BRIDGED SERVICE, FOR ALL CLASSES OF SERVICE REFER TO TABLE C.
  5. CHANGE TO 53A LAMP IF COMBINED LENGTH OF HAND TELEPHONE SET CORD AND (AD1 BASE) MOUNTING CORD EXCEEDS 15 FEET.
  6. REFER TO READ IN 1.01 AND TABLE A FOR ADDITIONAL INFORMATION OR WIRING ARRANGEMENT AND LEAD COLORS OF AD1 BASES MANUFACTURED PRIOR TO 10-1-72.
  7. H4DB OR H4DU CORD SHALL BE USED FOR INDIVIDUAL OR BRIDGED RINGING, RING PARTY AND TIP PARTY WITHOUT IDENT. GRD.
  8. WHEN H4DU CORD IS PROVIDED A 227D AND 231B ADAPTER IS REQUIRED.
  9. 220AM, 2220BM, AND 2220BMG ARE EQUIPPED FOR H4DU HANDSET CORD.
- \* INSULATED AND STORED

**Fig. 3—AD1 (MD) Telephone Base, Connections With 220A (MD), 220AM, 2220B (MD), 2220BM, or 2220BMG Hand Telephone Set**





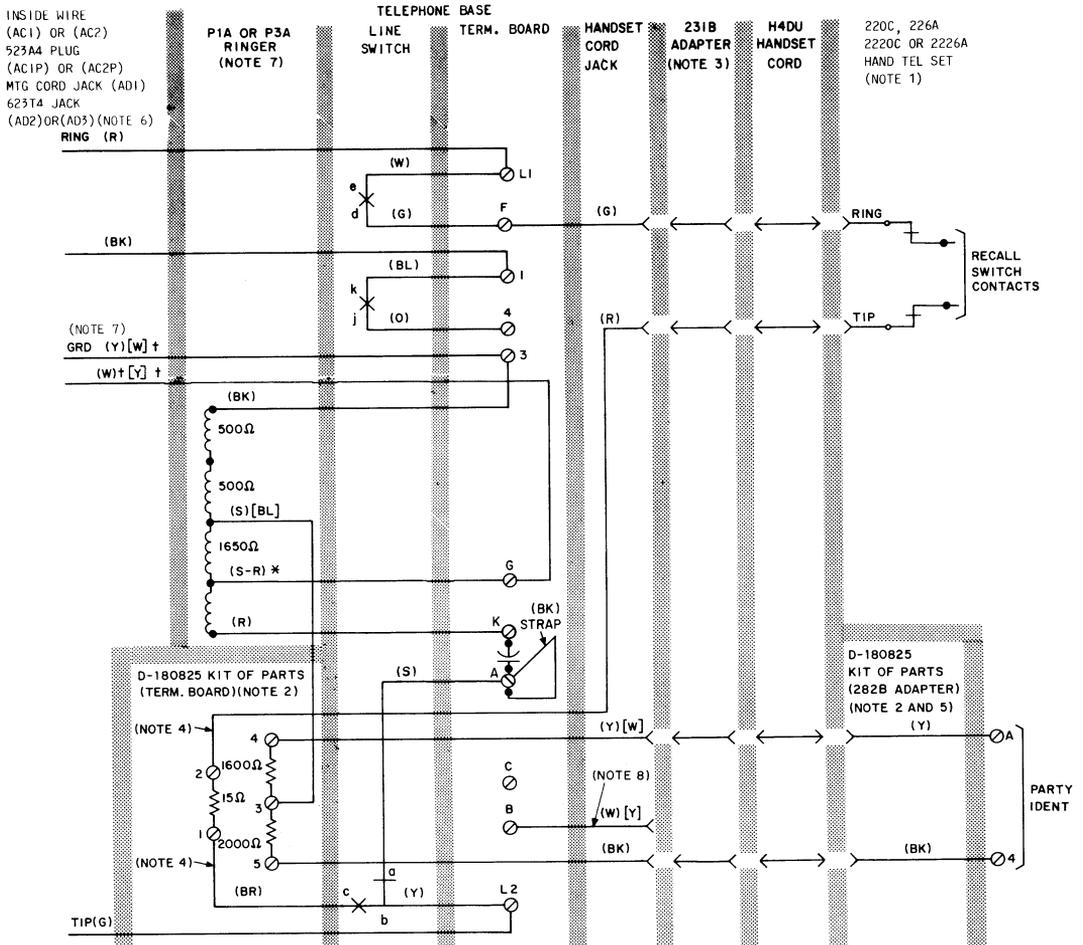
NOTES:

1. DIAL LIGHT TRANSF 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 D.
3. FOR CONNECTING BLOCK INFORMATION REFER TO APPROPRIATE TABLE.
4. 231B ADAPTER NOT REQUIRED ON AC2, AC2P, OR AD3 BASES.

5. REFER TO READ IN 1,01 AND TABLE A FOR ADDITIONAL INFORMATION ON WIRING ARRANGEMENT AND LEAD COLORS OF AC1 AND AD1 BASES MANUFACTURED PRIOR TO 10-1-72.
6. INSIDE WIRE CONDUCTOR SHALL BE CONNECTED TO THE GROUND TERMINAL AT THE PROTECTOR OR EQUIVALENT ONLY IF REQUIRED FOR THE SERVICE BEING INSTALLED.
7. (w) LEAD PROVIDED IN AC1(MD), AC2(MD), AC1P, AD1(MD), AND AD2 BASES ONLY.
- † AD1 BASE ONLY
- ‡ INSULATE AND STORE ON AD1 ONLY

**Fig. 5—AC1 (MD), AC2 (MD), AC1P, AC2P, AD1 (MD), AD2, or AD3 Telephone Base, Connections With 220C, 220AL, 226A, 2220C, or 2226A Hand Telephone Set, Wired for Individual or Bridged Ringing**

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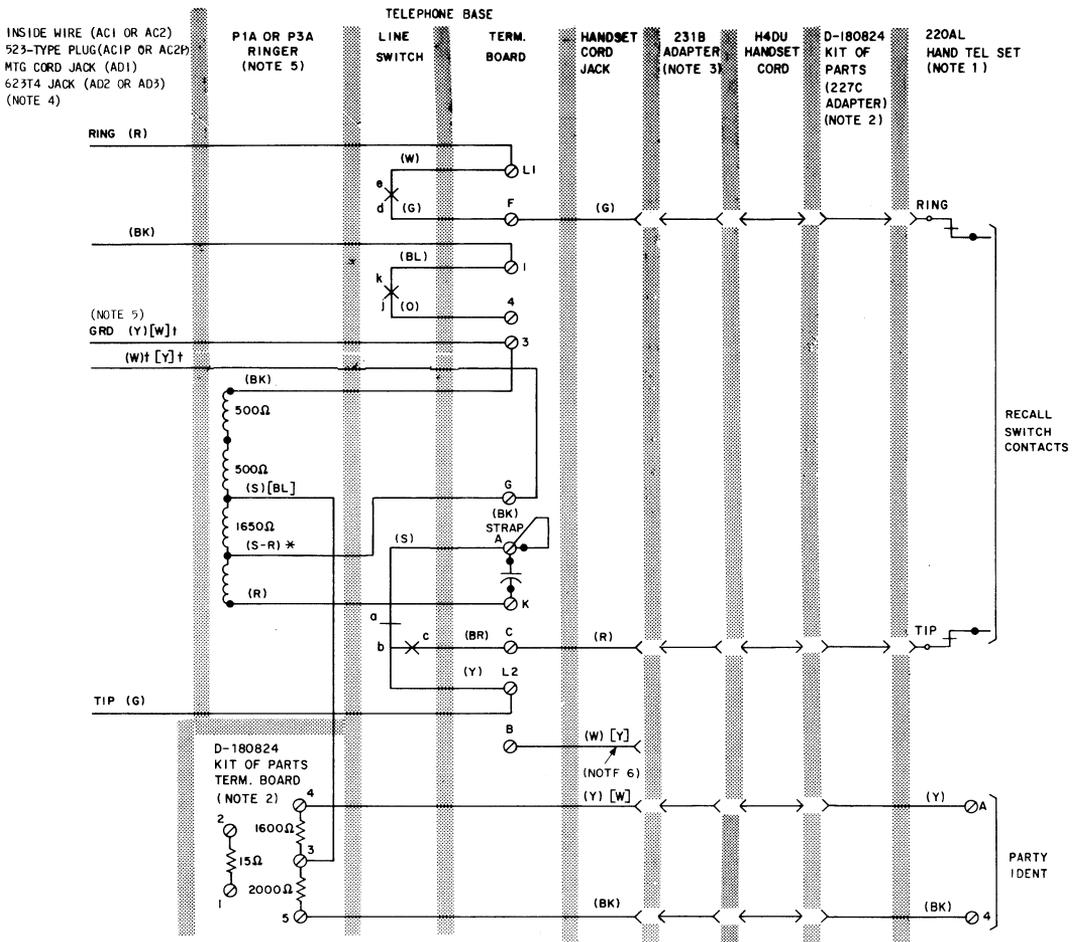
- ( ) CURRENT COLOR CODE
- [ ] EARLY COLOR CODE
- \* INSULATED AND STORED (AD1 ONLY)
- † AD1 ONLY

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. REQUIRES OPENING HANDSET AND BASE TO ADD D-180825 KIT OF PARTS.

3. 231B ADAPTER NOT REQUIRED WHEN AC2, AC2P OR AD3 BASES ARE PROVIDED.
4. THESE CONNECTIONS ARE REQUIRED ONLY WHEN THE 2220C OR 2226A HAND TELEPHONE SET IS PROVIDED.
5. IF A 2220C (EARLY VERSION) IS PROVIDED THE TERMINAL BOARD ONLY OF THE D-180825 KIT OF PARTS IS REQUIRED.
6. REFER TO TABLE D FOR CONNECTING BLOCK AND OTHER CLASSES OF SERVICE CONNECTIONS.
7. INSIDE WIRE CONDUCTOR SHALL BE CONNECTED TO THE GROUND TERMINAL AT THE PROTECTOR OR EQUIVALENT ONLY IF REQUIRED FOR THE SERVICE BEING INSTALLED.
8. (W) [Y] LEAD NOT PROVIDED IN AC2P AND AD3 BASES.

**Fig. 6—AC1 (MD), AC2 (MD), AC1P, AC2P, AD1 (MD), AD2, or AD3 Telephone Base With 220C, 226A, 2220C, or 2226A Hand Telephone Set and D-180825 Kit of Parts (Tip Party Identification)**



( ) CURRENT COLOR CODE  
 [ ] EARLY COLOR CODE  
 \* INSULATED AND STORED (AD1 ONLY)  
 † AD1 BASE ONLY

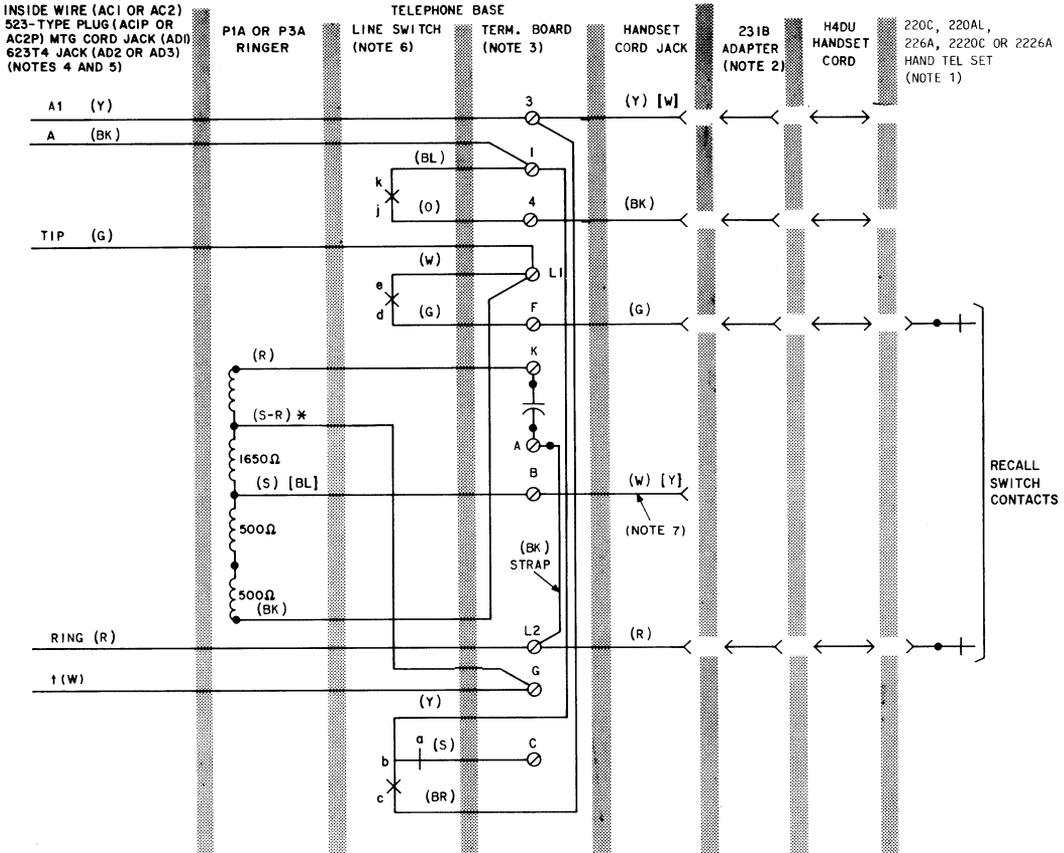
NOTES:

1. DIAL LIGHT TRNSF NOT REQUIRED. DIAL LIGHTING IS PROVIDED BY LIGHT EMITTING DIODES (LED) IN THE HAND TEL SET WHICH IS POWERED BY C O BATTERY OVER THE INCOMING LINE.
2. REQUIRES OPENING HANDSET AND BASE TO ADD D-180824 KIT OF PARTS.

3. 231B ADAPTER NOT REQUIRED WHEN AC2, AC2P OR AD3 BASES ARE PROVIDED.
4. REFER TO TABLE D FOR CONNECTING BLOCK AND OTHER CLASSES OF SERVICE CONNECTIONS.
5. INSIDE WIRE CONDUCTOR SHALL BE CONNECTED TO THE GROUND TERMINAL AT THE PROTECTOR OR EQUIVALENT ONLY IF REQUIRED FOR THE SERVICE BEING INSTALLED.
6. (w) [Y] LEAD NOT PROVIDED IN AC2P AND AD3 BASES.

**Fig. 7—AC1 (MD), AC2 (MD), AC1P, AC2P, AD1 (MD), AD2, or AD3 Telephone Base With 220AL Hand Telephone Set and D-180824 Kit of Parts (Tip Party Identification)**

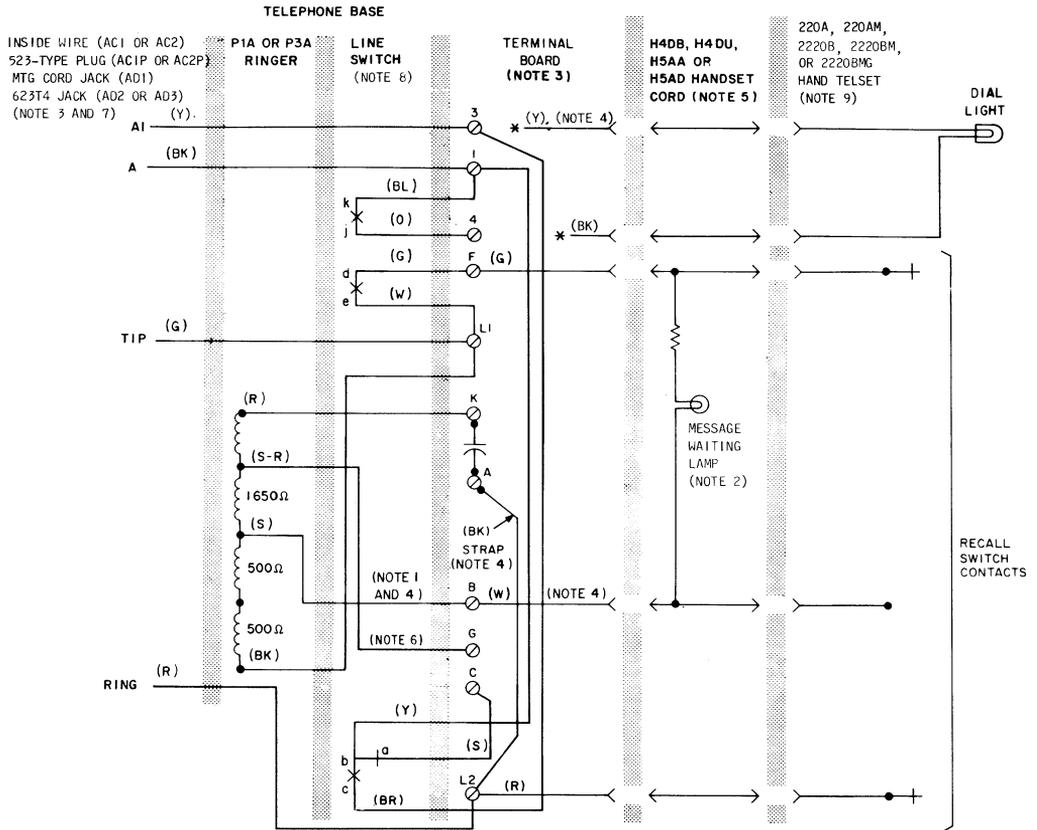
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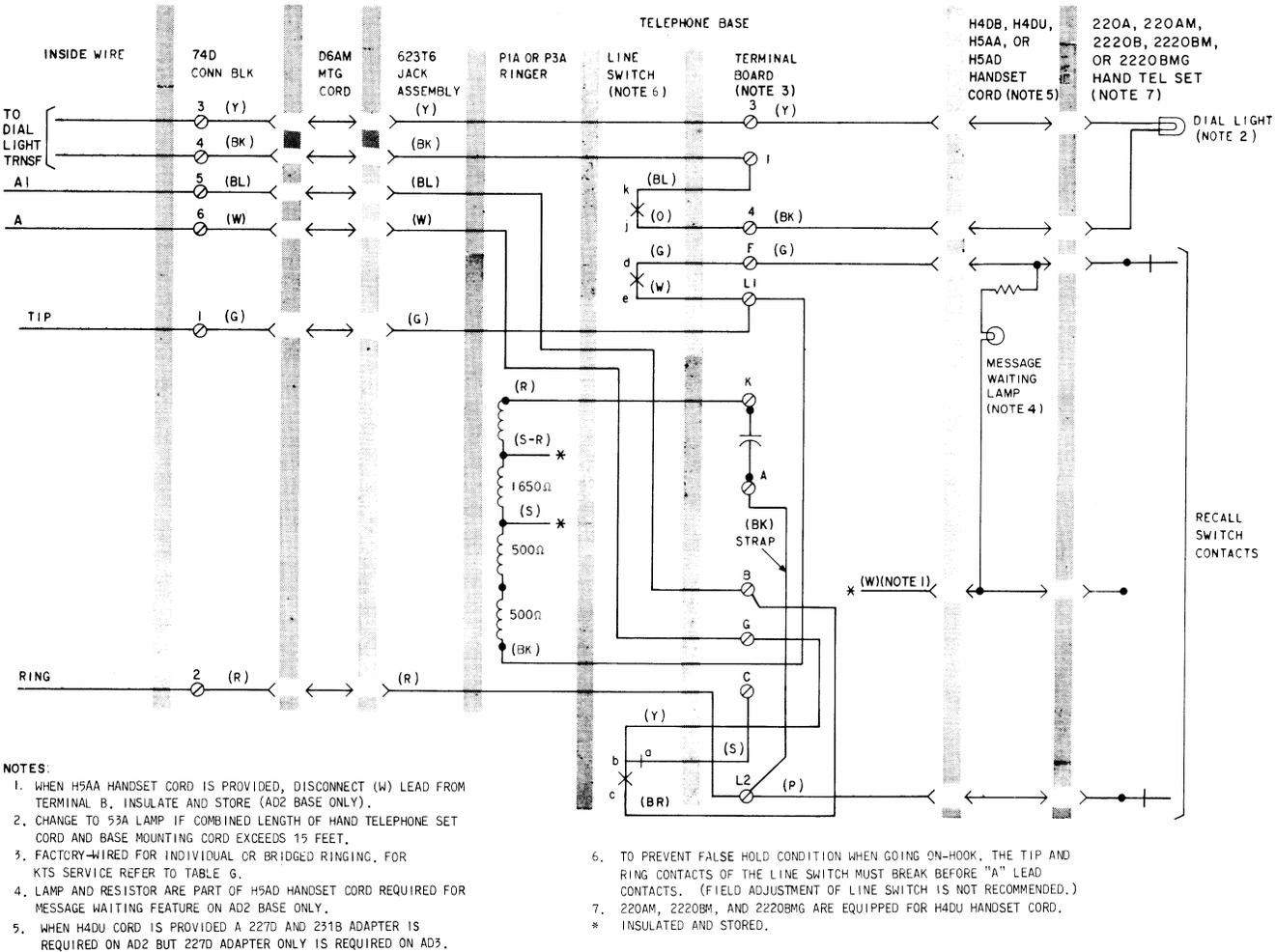
NOTES:

1. DIAL LIGHT TRANSFORMER NOT REQUIRED. DIAL LIGHTING IS PROVIDED BY LIGHT EMITTING DIODES (LED) IN THE HAND TELEPHONE SET WHICH IS POWERED BY C.O BATTERY OVER THE INCOMING LINE.
2. THE 231B ADAPTER NOT REQUIRED ON AC2, AC2P, OR AD3 BASE.
3. SET FACTORY WIRED FOR INDIVIDUAL OR BRIDGED SERVICE. FOR KTS SERVICE REFER TO TABLE H.
4. REFER TO READ IN 1,01 AND TABLE A FOR ADDITIONAL INFORMATION ON WIRING ARRANGEMENT AND LEAD COLORS OF AC1 AND AD1 BASES MANUFACTURED PRIOR TO 10-1-72.
5. FOR CONNECTING BLOCK INFORMATION, REFER TO TABLE D.
6. 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 NOT RECOMMENDED).
7. (w) [y] LEAD NOT PROVIDED IN AC2P AND AD3 BASES.  
 ( ) CURRENT COLOR CODE  
 [ ] EARLY COLOR CODE  
 \* INSULATED AND STORED (AD1 ONLY).  
 † AD1 BASE ONLY

**Fig. 8—AC1 (MD), AC2 (MD), AC1P, AC2P, AD1 (MD), AD2, or AD3 Telephone Base, Connections Wired for 1A1, 1A2, 6A, or 6B KTS With 220C, 220AL, 226A, 2220C, or 2226A Hand Telephone Set**



**Fig. 9—AC1 (MD), AC2 (MD), AC1P, AC2P, AD1 (MD), AD2, or AD3 Telephone Base Wired for 1A1, 1A2, 6A, or 6B KTS Without Dial Light Using 220A (MD), 220AM, 2220B (MD), 2220BM, or 2220BMG Hand Telephone Set**



**Fig. 10—AD2 or AD3 Telephone Base Wired for 1A1, 1A2, 6A, or 6B KTS With Dial Light Using 220A (MD), 220AM, 2220B (MD), 2220BM, or 2220BMG Hand Telephone Set**

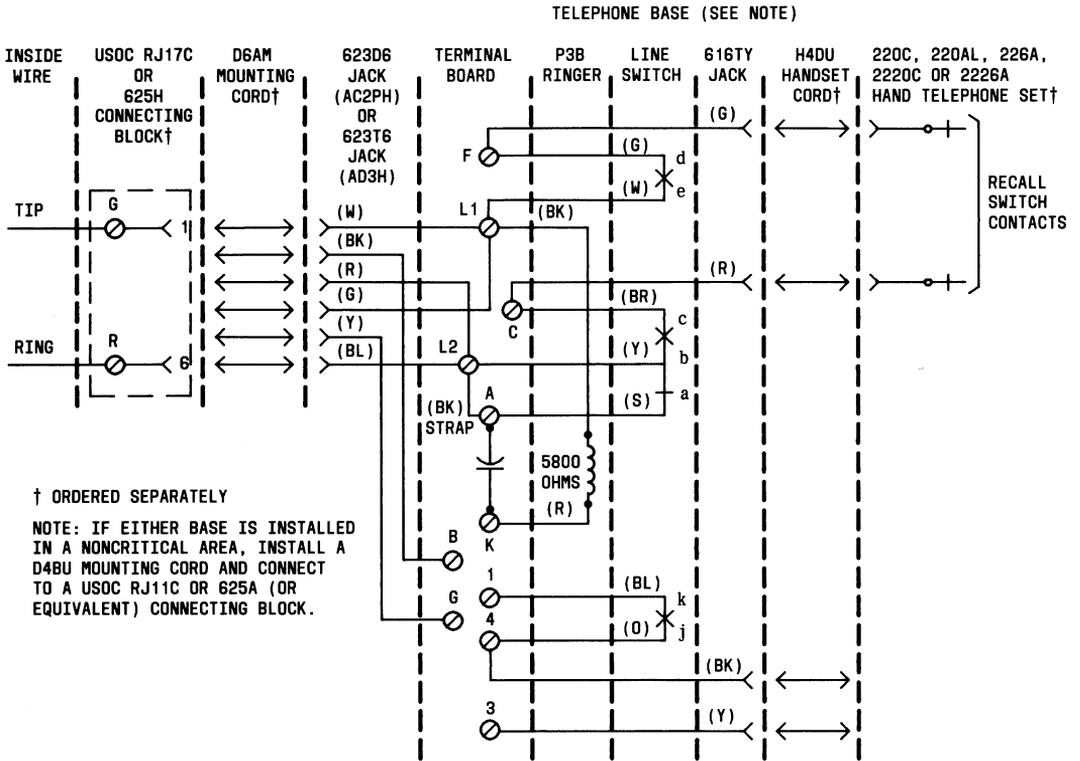


Fig. 11—AC2PH or AD3H Telephone Base, Connections With 220C, 220AL, 226A, 2220C, or 2226A Hand Telephone Set

TABLE A

**CONVERSION OF EARLY AC1 AND AD1  
TELEPHONE BASES  
MANUFACTURED PRIOR TO 10-1-72  
(SEE READ IN PARAGRAPH 1.01)**

WIRE OR LEAD (SEE NOTE)	COLOR	REMOVE FROM	CONNECT TO
Ringer Lead	BL	B	*
	S	*	B
	BK†	G	L1
Strap from A	BK	A	L2

*Note:* Early model AC1 and AD1 bases, the leads from pins 1 and 5 of the mounting and handset cord jacks are (W) and (Y), respectively. In current model, the leads from pins 1 and 5 are (Y) and (W), respectively.

\* Insulate and store.

† AD1 base only.

TABLE B

## IDENTIFICATION OF TRIMLINE COMPONENTS AND ASSOCIATED APPARATUS (NOTE 1)

HAND TEL SET CODE	METHOD OF IDENT	TEL BASE CODE	WALL JACK OR MTG CORD CODE	HANDSET CORD CODE	BASE HANDSET JACK ADAPTER CODE	HAND TEL SET JACK ADAPTER CODE	METHOD OF PROVIDING TIP PARTY IDENT. GRD
220A or 2220B	Large Handset Cord Jack With Code Stenciled Inside on Shell	AC1, AC1P	630A (AC1P)	H4DB	None	None	H5AA Cord
		AD1	D5AL				
		AD2	D4BU				
				AC2, AC2P	630A (AC2P)	H4DU	231B (AD2)
		AD2, AD3	D4BU				
220AM or 2220BM	227D Adapter in Handset Jack of a 220A or 2220B	AC1, AC1P	630A (AC1P)	H4DU	None	227D†	(Note 4)
		AD1	D5AL				
		AD2	D4BU				
		AC2, AC2P	630A (AC2P)				
		AD2, AD3	D4BU		None	227D†	None (Note 3)
2220BMG	The Adapter for the Handset Cord is Stamped With a "G"	AC1, AC1P	630A (AC1P)	H4DU	None	None (Note 5)	None (Note 3)
		AD1	D5AL				
		AD2	D4BU				
		AC2, AC2P	630A (AC2P)				
		AD2, AD3	D4BU				
220AL	LED Printed Under Fingertop. 227D Adapter in Handset Jack	AC1, AC1P	630A (AC1P)	H4DU	None	227D*	D-180824 Kit of Parts
		AD1	D5AL				
		AD2	D4BU				
		AC2, AC2P	630A (AC2P)				
		AD2, AD3	D4BU				
		AC2PH, AD3H	D6AM				
2220C (Early Version)	(4) Wire Springs in Handset Jack Square Buttons (2220C) (Mini-modular)	AC1, AC1P	630A (AC1P)	H4DU	None	None	D-180825 Kit of Parts (Note 2)
		AD1	D5AL				
		AD2	D4BU				
		AC2, AC2P	630A (AC2P)				
		AD2, AD3	D4BU				
AC2PH, AD3H	D6AM						
220C, 226A, 2220C (Late Version) or 2226A	LED Printed under Fingertop (220C and 226A) Square Buttons on Dial (2220C and 2226A) Mini-modular	AC1, AC1P	630A (AC1P)	H4DU	None	None	D-180825 Kit of Parts (Note 2)
		AD1	D5AL				
		AD2	D4BU				
		AC2, AC2P	630A (AC2P)				
		AD2, AD3	D4BU				
		AC2PH, AD3H	D6AM				
					None (Note 3)		

Note 1. All TRIMLINE components and apparatus are ordered separately.

Note 2. The 2220C (early version) does not require the 282B adapter provided in the D-180825 Kit of Parts.

Note 3. This combination of components can not be wired for tip party identification.

Note 4. 227D and 231B adapters must be removed for tip party identification and H5AA handset cord provided.

Note 5. This adapter is part of polarity guard assembly.

\* Factory installed.

† Field or service center installed.

**TABLE C**  
**CONNECTIONS FOR INDIVIDUAL AND 2-PARTY SERVICE WITH 220A, 220AM, 2220B, 2220BM, AND 2220BMG**  
**HAND TELEPHONE SETS (SEE READ PARAGRAPH 1.01) (NOTE 2) (SEE TABLE B)**

WIRE OR LEAD	LEAD DESIG	COLOR	INDIV OR BRIDGED (NOTE 1)	RING PARTY (NOTE 1)	TIP PARTY	
					NO IDENT GRD (NOTE 1)	WITH IDENT GRD*
Inside Wire at 42A or 625-Type Conn. Block (AD1, AD2, or AD3)	Tip	G	G	G	G	G
	Ring	R	R	R	R	R
	STA GRD and TRNSF	Y	Y	Y	Y	Y
	TRNSF	BK	B	B	B	B
Inside Wire at 630A Conn. Block (AC1P or AC2P)	Tip	G	1	1	1	1
	Ring	R	2	2	2	2
	STA GRD and TRNSF	Y	3	3	3	3
	TRNSF	BK	4	4	4	4
Inside Wire at Term. Board (AC1 or AC2)	Tip	G	L1	L1	L2	L2
	Ring	R	L2	L2	L1	L1
	STA GRD and TRNSF	Y	3	3	3	3
	TRNSF	BK	1	1	1	1
Mtg Cord Jack or 523-Type Plug Leads at Term. Board (AD1, AD2, AD3, AC1P, or AC2P)	Tip	G	L1	L1	L2	L2
	Ring	R	L2	L2	L1	L1
	TRNSF	Y	3	3	3	3
	TRNSF	BK	1	1	1	1
Ringer (Note 1)	—	BK	L1	3	3	3
Strap from A of Term. Bd.	—	BK	L2	L2	L2	A
Handset Cord Jack Leads in Base (2220B and 2220BM only)	Tip	G	F	F	C	C
	Ring	R	C	C	F	F
	TRNSF	Y	3	3	3	3
	TRNSF	BK	4	4	4	4

*Note 1:* Disconnect, insulate and store (S) lead from terminal B when H5AA handset cord is used and tip party identifying ground is not provided.

*Note 2:* AC2, AC2P, and AD3 telephone bases can not be used with 220A, 220AM, 2220B, 2220BM, and 2220BMG hand telephone sets for this service.

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

\* 220AM, 2220BM, and 2220BMG handsets cannot be used for tip party with identifying ground.

TABLE D

CONNECTIONS FOR INDIVIDUAL AND 2-PARTY SERVICE WITH 220C, 220AL, 226A, 2220C, AND 2226A  
HAND TELEPHONE SETS (SEE READ PARAGRAPH 1.01) (SEE TABLE B)

WIRE OR LEAD (NOTE 1)	LEAD DESIG	COLOR	INDIV OR BRIDGED	RING PARTY	TIP PARTY			
					NO IDENT GRD	WITH IDENT GRD		
						BASE TERM BD.	TERM. BD. D-180824 (FIG. 7) D-180825 (FIG. 6)	HANDSET TERM. (NOTES 2, 4, 5 AND 6)
Inside Wire at 42A or 625-Type Conn. Blk. (AD1, AD2, or AD3)	Tip	G	G	G	G	G†	—	—
	Ring	R	R	R	R	R†	—	—
	GRD	Y	Y	Y	Y	Y†	—	—
	—	BK	B	B	B	B†	—	—
Inside Wire at 630A Conn Blk (AC1P or AC2P)	Tip	G	1	1	1	1†	—	—
	Ring	R	2	2	2	2†	—	—
	GRD	Y	3	3	3	3†	—	—
	—	BK	4	4	4	4†	—	—
Inside Wire at Term. Board (AC1 or AC2)	Tip	G	L1	L1	L2	L2	—	—
	Ring	R	L2	L2	L1	L1	—	—
	GRD	Y	3	3	3	3	—	—
	—	BK	1	1	1	1	—	—
Mtg Cord Jack or 523-Type Plug Leads at Term. Board (AD1, AD2, AD3, AC1P, AC2P)	Tip	G	L1	L1	L2	L2	—	—
	Ring	R	L2	L2	L1	L1	—	—
	GRD	Y	3	3	3	3	—	—
	—	BK	1	1	1	1	—	—
Ringer	—	S or BL (Note 2)	B	B	B	—	3	—
		BK	L1	3	3	3	—	—
Line Switch	—	BR	C	C	C	C <sup>(220C)</sup> C <sup>(220AL)</sup> (226A)	1 <sup>(2220C)</sup> (2226A)	—
Handset Cord, Jack Leads in Base	Tip	G	F	F	F	F	—	—
	Ring	R	C	C	C	C <sup>(220C)</sup> C <sup>(220AL)</sup> (226A)	2 <sup>(2220C)</sup> (2226A)	—
	PTY Ident	Y or W (Note 2)	3	3	3	—	4	—
	PTY Ident	BK	4	4	4	—	5	—
Strap From A of Term. Bd.	Strap	BK	L2	L2	L2	A	—	—

TABLE D (Contd)

**CONNECTIONS FOR INDIVIDUAL AND 2-PARTY SERVICE WITH 220C, 220AL, 226A, 2220C, AND 2226A  
HAND TELEPHONE SETS (SEE READ PARAGRAPH 1.01) (SEE TABLE B)**

WIRE OR LEAD (NOTE 1)	LEAD DESIG	COLOR	INDIV OR BRIDGED	RING PARTY	TIP PARTY			
					NO IDENT GRD	WITH IDENT GRD		
						BASE TERM BD.	TERM. BD. D-180824 (FIG. 7) D-180825 (FIG. 6)	HANDSET TERM. (NOTES 2, 4, 5 AND 6)
Handset Cord Jack Leads in Handset (Note 2)	Tip	G	—	—	—	—	—	—
	Ring	R	—	—	—	—	—	—
	PTY Ident	Y or W	*	*	*	—	—	A
	PTY Ident	BK	*	*	*	—	—	B or 4

Note 1. If AC1, AC1P, AD1 or AD2 bases are provided, a 231B adapter is required (ordered separately).

Note 2. Handsets must be opened to wire for tip party with identifying ground, refer to Section 502-303-102.

Note 3. For bases dated prior to 10-1-72 see READ in 1.01 and note under Table A.

Note 4. The D-180824 Kit of Parts (ordered separately) is used with the 220AL hand telephone set only.

Note 5. The terminal board only of the D-180825 Kit of Parts (ordered separately) is used with the early version 2220C hand telephone sets.

Note 6. The 282B adapter and terminal board of the D-180825 Kit of Parts is required for the 220C, 226A, 2226A, and later version of 2220C hand telephone sets.

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

\* Insulated and stored, 2220C (early version only).

† Connecting block terminals.

TABLE E

**CONNECTIONS FOR 4-PARTY FULL SELECTIVE OR 8-PARTY SEMISELECTIVE RINGING USING  
D-180697 KIT OF PARTS (SEE READ IN PARAGRAPH 1.01)**

WIRE OR LEAD		LEAD DESIG	COLOR	-RING	-TIP	+RING	+TIP
Inside Wire at 42A or 625-Type Conn Blk (AD1, AD2, AD3)		Tip	G	G	G	G	G
		Ring	R	R	R	R	R
		STA GRD and/or TRNSF	Y	Y	Y	Y	Y
		TRNSF or Spare	BK	B	B	B	B
Inside Wire at 630A Conn Blk (AC1P, AC2P)		Tip	G	1	1	1	1
		Ring	R	2	2	2	2
		STA GRD and/or TRNSF	Y	3	3	3	3
		TRNSF or Spare	BK	4	4	4	4
Inside Wire at Term. Board (AC1, AC2)		Tip	G	L1	L1	L1	L1
		Ring	R	L2	L2	L2	L2
		TRNSF or STA GRD	Y [W]	3	3	3	3
		TRNSF or Spare	BK	1	1	1	1
Mtg Cord Jack or 523-Type Plug Leads at Term. Board (AD1, AD2, AD3, AC1P, AC2P)		Tip	G	L1	L1	L1	L1
		Ring	R	L2	L2	L2	L2
		TRNSF or STA GRD	Y [W]	3	3	3	3
		TRNSF or Spare	BK	1	1	1	1
Ringer			R	3	3	L2	L1
			BK	K	K	K	K
			S	B	B	B	B
			S-R	G	G	G	G
D-180697 Kit of Parts	426N Diode (MD)	†		L2	L1	3	3
		‡		G	G	G	G
	813BH Diode	Unstriped End		L2	L1	3	3
		Striped End		G	G	G	G
Strap From A			BK	3	3	L2	L1
Line Switch			S	*	*	*	*

*Caution: Do not store spade tipped leads under terminal board mounting screws*

[ ] early model bases (Dated prior to 10-1-72)

\* Insulate and store.

† Lead on Flanged (Gold) base end.

‡ Lead on Knob end (housing tip).

**TABLE F**  
**CONVERSION FOR 1A1, 1A2, 6A, AND 6B KTS**  
**WITHOUT DIAL LIGHT USING 220A, 220AM, 2220B,**  
**2220BM OR 2220BMG HAND TELEPHONE SET (FIG.**  
**9) (SEE READ IN PARAGRAPH 1.01)**

WIRE OR LEAD	COLOR	TERMINAL BOARD	
		REMOVE FROM	CONNECT TO
Line Switch	BR	C	3
	S	A	C
	Y	L2	1
Hand Tel Set Cord Jack in Base	R	C	L2
	Y	3	*
	BK	4	*

\* Insulate and store.

**TABLE G**  
**CONVERSION OF AD2 OR AD3 BASES FOR 1A1, 1A2, 6A OR 6B KTS**  
**WITH DIAL LIGHT USING 220A, 220AM, 2220B, 2220BM OR 2220BMG**  
**HAND TELEPHONE SET (FIG. 10) (SEE READ IN PARAGRAPH 1.01)**

WIRE OR LEAD	LEAD DESIG	COLOR	74D CONN BLK TERM. BD	BASE TERM. BOARD	
				REMOVE FROM	CONNECT TO
Inside Wire at 74D Conn Blk	Tip		1		
	Ring		2		
	TRNSF		3		
	TRNSF		4		
	A		6		
	A1		5		
623T6 Jack (Note)		R			L2
		G			L1
		Y			3
		BK			1
		BL			B
		W			G
Line Switch	A1	BR		C	B
	A	Y		L2	G
		S		A	C
Ringer		S		B	*
		S-R		G	*
Strap		BK		A	L2
Handset Cord Jack in Base		R		C	L2
		W		B	†

*Note:* The 623T6 jack and D6AM mounting cord must be ordered separately.

\* Insulate and store.

† Insulate and store (AD2 only).

**TABLE H**  
**CONVERSION FOR 1A1, 1A2, 6A AND 6B KTS**  
**USING 220C, 220AL, 226A, 2220C,**  
**OR 2226A HAND TELEPHONE SET (FIG. 8 )**  
**(SEE READ IN PARAGRAPH 1.01)**

WIRE OR LEAD	COLOR	TERMINAL BOARD	
		REMOVE FROM	CONNECT TO
Line Switch	BR	C	3
	S	A	C
	Y	L2	1
Handset Cord Jack in Base	R	C	L2

**TABLE I**  
**CONNECTIONS FOR MESSAGE WAITING**  
**LAMP AND DIAL LIGHT FEATURES FOR**  
**NONKEY SYSTEM APPLICATION**  
**(220A AND 2220B ONLY)**  
**(SEE READ IN PARAGRAPH 1.01)**

WIRE OR LEAD	COLOR	TERMINAL BOARD	
		REMOVE FROM	CONNECT TO
Handset Cord Jack Leads (Note)	G	F	L1
	W	B	L2

*Note:* Install H5AD handset cord in AC1, AC1P, AD1, or AD2.

**TABLE J**  
**CONVERSION FOR DATA APPLICATIONS FOR**  
**220A, 220AM, 2220B, 2220BM, AND 2220BMG**  
**HAND TELEPHONE SETS**  
**(SEE READ IN PARAGRAPH 1.01)**

WIRE OR LEAD	COLOR	TERMINAL BOARD	
		REMOVE FROM	CONNECT TO
Handset Cord Jack Leads	Y	3	*
	BK	4	*

\* Insulate and store.