

## TELEPHONE SETS

### 902A1 AND 2902A1

#### 1. GENERAL

1.01 This section provides identification, installation, and connection information for the 902A1 (Fig. 1) and 2902A1 DESIGN LINE\* telephone (*Sculptura*) sets.

\* Trademark AT&TCo.

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

1.03 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 telephone set.

**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.**

#### 2. IDENTIFICATION

2.01 The 902A1 (rotary dial) and 2902A1 (TOUCH-TONE® dial) equipped telephone sets are new DESIGN LINE telephone sets being made available to the customer. The customer buys the housing and handset from the telephone company and the telephone company retains ownership of the transmission and signaling components.

2.02 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 are not recommended for use on four- and eight-party service.



Fig. 1—2902A1 Telephone Set

2.04 **Optional Component (ordered separately):**

- 819040122 (P-90D012) Guard Assembly.

#### 3. INSTALLATION AND CONNECTIONS

3.01 These telephone sets are furnished from the factory fully assembled and wired for bridged ringing. The P1A ringer is shipped from the factory with the bias spring in the low bias position. To connect the telephone set, plug the mounting cord into a 625-type 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 the 902A1 and 2902A1 telephone sets, for nonkey system use, are shown in Fig. 3 and 4, respectively.

3.03 Connections for 1A KTS do not require any set modifications and are the same as Fig. 3 and 4.

#### NOTICE

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

TABLE A  
ORDERING GUIDE

TEL SET*	MTG CORD	HANDSET CORD	DIAL	NET.	RINGER	TRMTR UNIT	RCVR UNIT	JACK IN HANDSET	HANDSET CORD JACK	MTG CORD JACK
902A1-58	D4BU-29	H4DU-58	8HA-119	4228M	PIA	T1	LB1	616W	616P	623P
902A1-93		H4DU-93								
902A1-104		H4DU-104								
2902A1-58		H4DU-58	35AH3D							
2902A1-93		H4DU-93								
2902A1-104		H4DU-104								

\*Color Code: White (-58), Yellow (-93), and Brown (-104).

**TABLE B**  
**LINE AND RINGER CONNECTIONS**  
**(902A1 TELEPHONE SET)**

WIRE OR LEAD	COLOR	INDIVID. OR BRIDGED	RING PARTY	TIP PARTY		
				NO IDENT GROUND	IDENT GROUND	
					1000Ω	2650Ω
Inside Wire at Conn Blk	R	R	R	R	R	R
	G	G	G	G	G	G
	Y	Y	Y	Y	Y	Y
	BK	B	B	B	B	B
623P4 Line Cord 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	W	F	F	F	B	B
	BL	C	C	C	*	*
	BL-W	A	A	A	*	*
	BR	L2	L2	L2	C	C
	S	L2	L2	L2	A	A

\*Insulated and stored.

**3.04** If these telephone sets are to be used with 1A1 or 1A2 key telephone system the set must be modified by moving the brown (BR) line switch lead from L2 to G of network.

**3.06** When needed a polarity guard can be mounted to the network mounting bracket. Refer to Table D for connections.

#### **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 telephone company-owned components that can be easily removed. Refer to Fig. 2.

(1) Unplug cords from set.

**Note:** When both receiver and transmitter caps are removed the two-piece handset shell falls apart.

(2) Unscrew receiver cap and remove LB1 receiver unit.

(3) Unscrew transmitter cap and remove transmitter unit.

(4) Unscrew two (2) screws from top and six (6) screws from bottom of base housing and separate the two-piece base housing.

(5) Remove line switch.

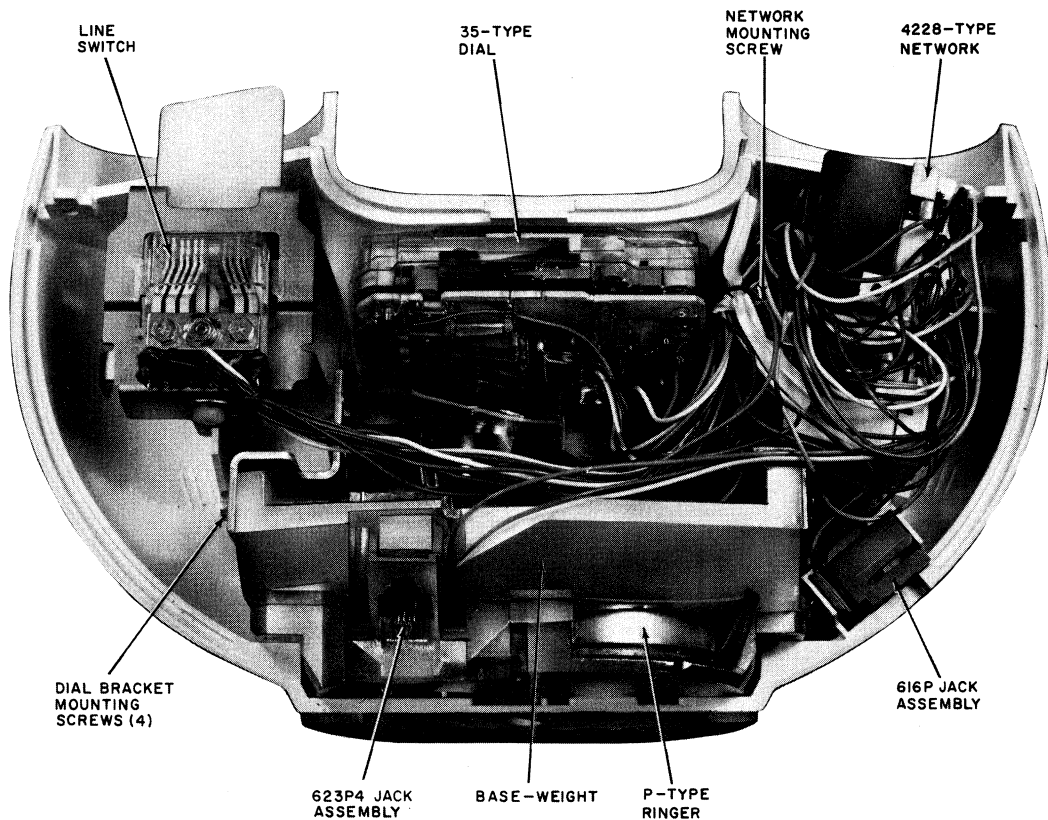
TABLE C

**LINE AND RINGER CONNECTIONS  
2902A1 TELEPHONE SET**

WIRE OR LEAD	COLOR	INDIVID. OR BRIDGED	RING PARTY	TIP PARTY		
				NO IDENT GROUND	IDENT GROUND	
					1000Ω	2650Ω
Inside Wire at Conn Blk	R	R	R	R	R	R
	G	G	G	G	G	G
	Y	Y	Y	Y	Y	Y
	BK	B	B	B	B	B
623P4 Line Cord 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	W	F	F	F	B	B
	G	L1	L1	A	L1	L1
	BL	C	C	C	*	*
	BL-W	A	A	L1	*	*
	BR	L2	L2	L2	F	F
S	L2	L2	L2	L2	A	A

\*Insulated and stored.

- |  |  |
|--|--|
| <p>(6) Unscrew one (1) network mounting bracket screw and remove 4228-type network.</p> <p>(7) Unscrew four (4) dial bracket mounting screws and take out base-weight.</p> <p>(8) Unscrew two (2) ringer mounting screws and remove P1A ringer.</p> <p>(9) Loosen two (2) dial mounting screws and remove dial from dial brackets.</p> | <p>(10) Reassemble two-piece base housing and replace two top and six bottom screws.</p> <p>(11) Reassemble two-piece handset shell and screw on the receiver and transmitter caps.</p> <p><b>4.02</b> Follow local procedures for returning telephone company-owned components.</p> <p><b>4.03</b> When it is desired to return a set to Western Electric for repair, it should be packed using D-180600 Kit of Parts which contains packing material and instructions.</p> |
|--|--|



**Fig. 2—2902A1 Telephone Set With Two-Piece Housing Separated**

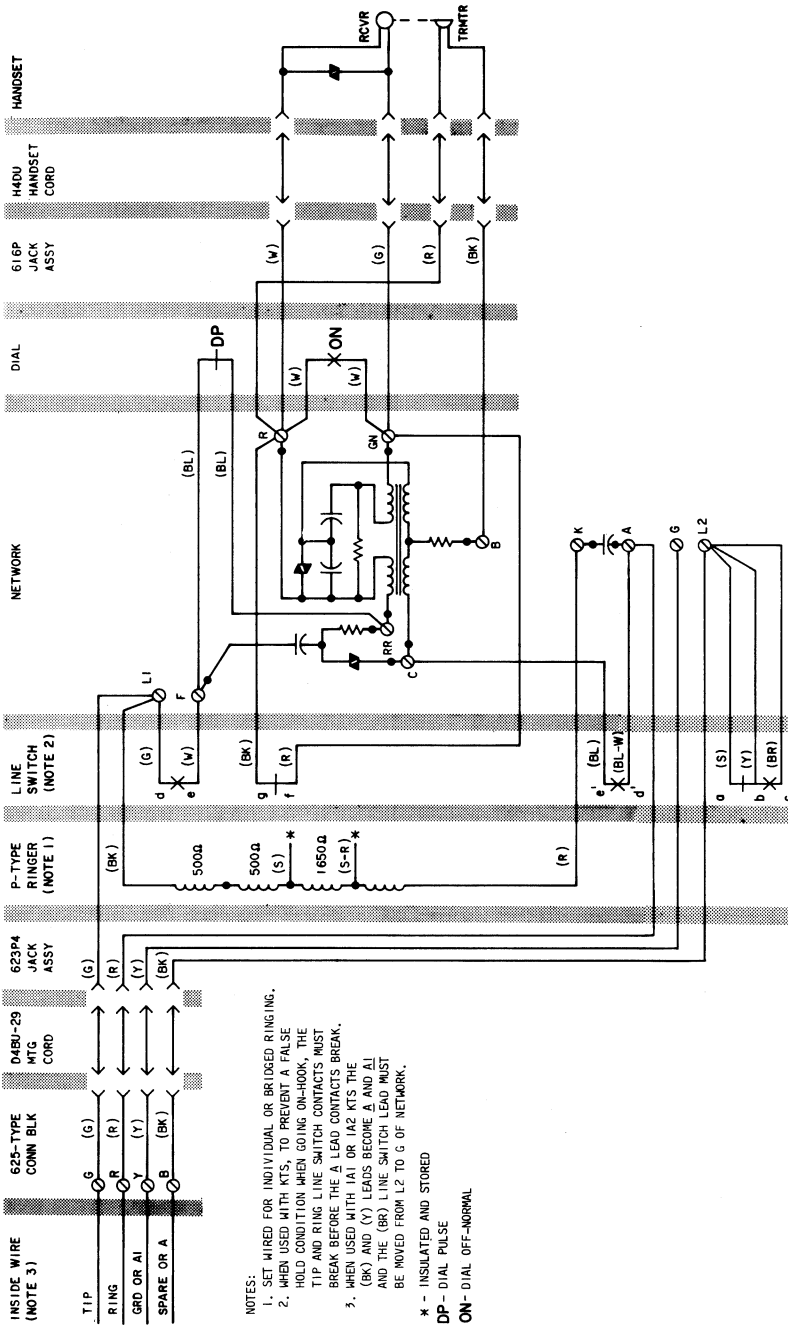
TABLE D

POLARITY GUARD CONNECTIONS  
 FOR 2902A1 TELEPHONE SET  
 819040122 (P-90D012) GUARD ASSEMBLY

LEAD	COLOR	DIS- CON- NECT FROM	CONNECT TO	
			NET.	POLARITY GUARD
Dial	BK	RR		T
Line Switch	BL (Note 1)	C		S
623P4 Line Cord Jack Assy.	R (Note 2)			
Polarity Guard	G		RR	
	W		C	

Notes:

1. If wired for bridged service, ring party, tip party with no identification ground, or 1A1 or 1A2 KTS.
2. If wired for tip party with identification ground.



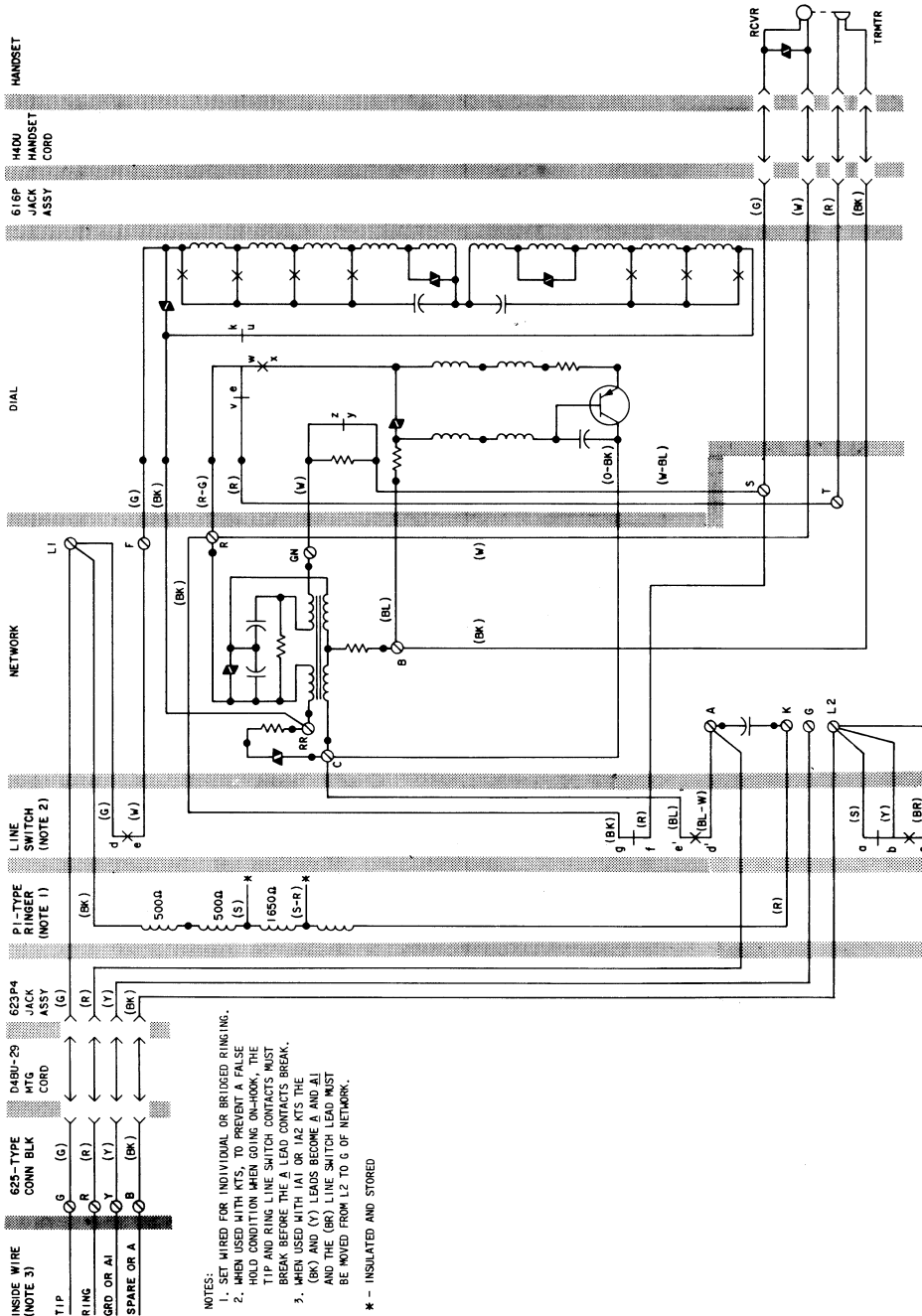
- NOTES:
1. SET WIRED FOR INDIVIDUAL OR BRIDGED RINGING.
  2. WHEN USED WITH KTS. TO PREVENT A FALSE HOLD CONDITION WHEN GOING ON-HOOK, THE TIP AND RING LINE SWITCH CONTACTS MUST BREAK BEFORE THE  $\Delta$  LEAD CONTACTS BREAK.
  3. WHEN USED WITH HAI OR IRE KTS THE (BK) AND (Y) LEADS BECOME  $\Delta$  AND  $\Delta$  AND THE (GR) LINE SWITCH LEAD MUST BE MOVED FROM L2 TO G OF NETWORK.

\* - INSULATED AND STORED

DP - DIAL PULSE

ON - DIAL OFF-NORMAL

Fig. 3—902A1 Telephone Set, Connections



- NOTES:
1. SET WIRED FOR INDIVIDUAL OR BRIDGED RINGING.
  2. WHEN USED WITH KTS, TO PREVENT A FALSE HOLD CONDITION WHEN GOING ON-HOOK, THE TIP AND RING LINE SWITCH CONTACTS MUST BREAK BEFORE THE A LEAD CONTACTS BREAK.
  3. WHEN USED WITH 1A1 OR 1A2 KTS THE (BK) AND (Y) LEADS BECOME A AND I AND THE (BR) LINE SWITCH LEAD MUST BE MOVED FROM L2 TO G OF NETWORK.

\* - INSULATED AND STORED

Fig. 4—2902A1 Telephone Set, Connections