

## SLENDERET® TELEPHONES

(S-C 220A AND S-C 220B HANDSETS, S-C AC2 AND AD2 BASES)

## CONNECTIONS AND MAINTENANCE



HT 1317

Figure 1. S-C AD2 Telephone Base with S-C 220A  
Rotary-Dial Handset Telephone



HT 1318

Figure 2. S-C AC2 Telephone Base with S-C 220B  
Pushbutton-Dial Handset Telephone

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## 1. INTRODUCTION

**1.01** This section contains complete identification, installation, maintenance, and connection information for the Stromberg-Carlson SLENDERET telephones shown in figures 1 and 2. Table 1 lists the various combinations of SLENDERET telephones available.

**1.02** Information in this SCP applies to SLENDERET telephones with AC1 and AD1 bases (manufacture discontinued) as well as AC2 and AD2 bases. The SLENDERET telephones which have the AC2 or AD2 bases will accept the ITT 152 type ringer as well as the S-C P1A ringer.

**1.03** This issue 3 updates issue 2 dated April, 1972. All references to the message-waiting handset cord have been deleted.

## 2. RELATED INFORMATION

## 2.01 General.

A Sales and Instructional Literature Index, which lists the latest publications available from Stromberg-Carlson Corporation, can be obtained from your Stromberg-Carlson sales representative or from Publications Services, Stromberg-Carlson Corporation, 100 Carlson Road, Rochester, New York 14603.

## 2.02 Related Publications.

T-916	Telephones and Components Catalog
T-917	Telephones and Telephone Components Catalog
89-911-70	S-C Type 82 Pushbutton Dial — Installation, Maintenance, Parts Identification and List
89-926-70	S-C 10A Rotary Dial — Maintenance, Parts Identification and List
89-934-70	S-C 1686 Type Ringers — Identification, Installation, Maintenance, and Parts List
89-936-70	S-C P1A Straight-Line Ringers — Maintenance, Parts Identification and List
89-954-70	S-C 4-Party ANI Assemblies — Identification, Installation, and Connections

## 3. DESCRIPTION AND IDENTIFICATION

## 3.01 General.

The SLENDERET telephone consists of two units, the handset and the base. These units are interconnected by a plug-ended handset cord. A dial light is provided for dialing in subdued light. A recall button, located in the handset, enables the user to place consecutive calls without replacing the handset on and

Table 1. S-C SLENDERET Telephones

<i>MODEL AND STOCK NUMBER*</i>	<i>ROTARY DIAL</i>	<i>PUSHBUTTON DIAL</i>	<i>DESK TYPE</i>	<i>WALL TYPE</i>	<i>BASE</i>	<i>HANDSET</i>	<i>S-C PIA RINGER</i>
S-C 220A-AD2-LR 703054-0XX	X		X		X	X	
S-C 220A-AC2-LR 703054-1XX	X			X	X	X	
S-C 220A-AD2-SL 703054-2XX	X		X		X	X	X
S-C 220A-AC2-SL 703054-3XX	X			X	X	X	X
S-C 2220B-AD2-LR 703054-4XX		X	X		X	X	
S-C 2220B-AC2-LR 703054-5XX		X		X	X	X	
S-C 2220B-AD2-SL 703054-6XX		X	X		X	X	X
S-C 2220B-AC2-SL 703054-7XX		X		X	X	X	X
S-C 220A 200737-2XX	X					X	
S-C 2220B 200737-7XX		X				X	
S-C AC2-SL 703052-3XX				X	X		X
S-C AC2-LR 703052-4XX				X	X		
S-C AD2-SL 703052-5XX			X		X		X
S-C AD2-LR 703052-6XX			X		X		

\*XX in stock number refers to color, see T-916 for current colors

off the base between calls. When depressed, the recall button opens the tip and ring, reestablishing dial tone for the next call. A strapping option allows the recall button to also be used for making revertive calls. SLENDERET telephones are available in the following colors.

### 3.02 Handset Unit.

The handset unit consists of a dial, transmitter, receiver, network, dial light, handset cord jack, and pushbutton recall switch, mounted on a deck and covered by the handset shell. It is available with or without a 9-, 13-, or standard 5-foot handset cord.

### 3.03 Base Unit.

The base unit consists of the ringer, terminal board, hookswitch assembly, handset cord jack, volume control lever (wall models only), and line cord jack (desk models only), mounted on the base assembly and covered by a housing containing the hookswitch plunger and the identification plate. The S-C AD2 base can be equipped with either the standard 6-foot plug-ended line cord, or with a 9-, 13-, or 25-foot line cord.

## 4. INSTALLATION AND CONNECTIONS

### 4.01 Installation.

When selecting the location for the telephone, the following should be considered:

- The customers desired location.
- Safety for the customer and maintenance personnel.
- Availability of power outlet (not controlled by a switch) for dial-light transformer.
- Sufficient ringer volume for the particular area.
- Ease of installation.
- Overall appearance.

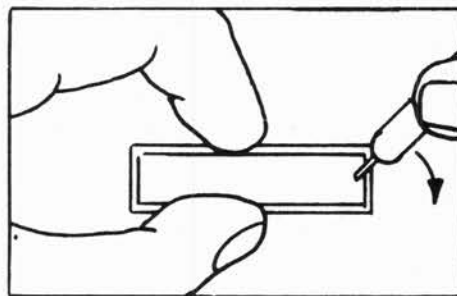
### 4.02 Housing Removal - AC2 Wall Telephone Base.

Prior to installing the wall base, the wall telephone housing must be removed as follows:

- Remove identification plate (fig. 3); use an S-C 200 releaser tool, or equivalent, as shown in figure 4.
- Loosen the two captive screws under the identification plate (fig. 5) and remove housing from the base.

### 4.03 Mounting - AC2 Wall Telephone Base.

The AC2 wall telephone base can be mounted directly on a wall or on a standard electrical wall outlet box, by using either an S-C 155A adapter plate or an SE-182B backboard. The SE-182B backboard should be



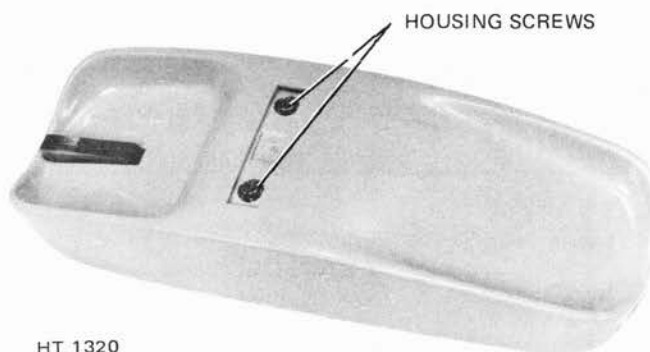
CP 2149

Figure 3. Identification Plate Removal



CP 1725

Figure 4. S-C 200 Release and Bias Adjusting Tool



HT 1320

Figure 5. Housing Removal

used when the wall is uneven, when another wall telephone is being replaced, or on certain wall constructions to prevent distortion of the telephone base. It also provides a good sounding board to improve the ringer volume. Refer to figures 6 and 7 and proceed as follows:

a. Standard Mounting.

1. Using the telephone base as a template, mark mounting hole position on wall and insert screws part way.
2. Place telephone base over screws; align and tighten screws.

b. S-C 155A Adapter Plate Mounting.

1. With the 155A adapter plate in position as shown in figure 6, fasten the plate to the outlet box with two screws.

2. Secure telephone base to adapter plate with two machine screws furnished with the adapter plate.

c. SE-182B Backboard Mounting.

1. When mounting backboard to wall (fig. 7), position backboard on the wall and insert screws part way into the top two holes. Position AC2 base on the screws, insert bottom screw, align telephone base, and tighten all screws.

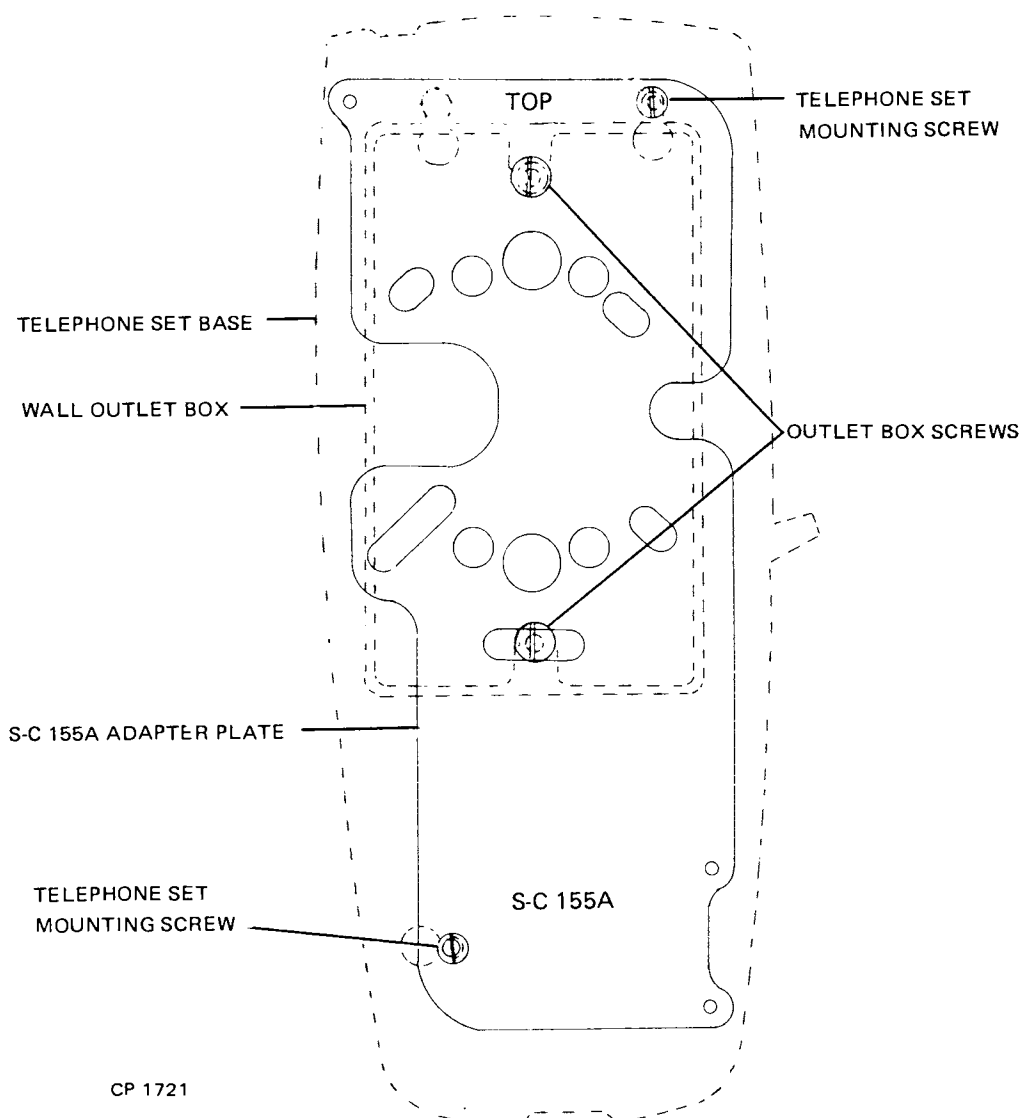
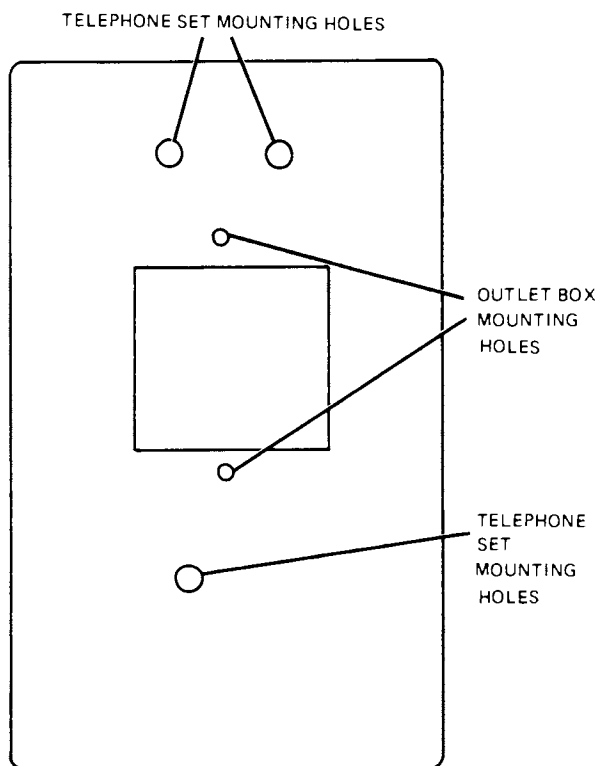


Figure 6. Mounting Instructions, S-C 155A Adapter Plate

2. When mounting backboard on an outlet box, order SE-183 Adapter Set Package Assembly. Place the inserts in the telephone mounting holes and draw into place with screws provided. Then mount the backboard on the standard electric outlet box with the outlet box plate screws. Loosen the backboard telephone base screws and install the AC2 base. Align base and secure with screws.

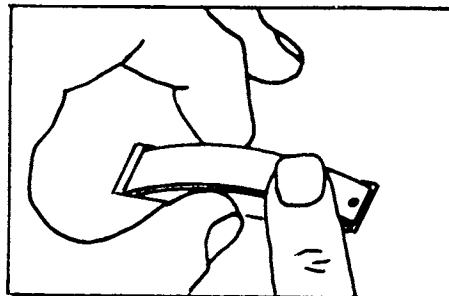
#### 4.04 Housing Replacement, AC2 Wall Telephone Base.

- With the housing upside down so that the hook-switch plunger is exposed, place a finger on the front of the plunger to hold it in place.
- Holding the plunger in place, turn housing right side up and place in position over base plate.
- Release plunger and tighten housing screws.
- Replace identification plate as shown in figure 8.



CP 1722

Figure 7. Mounting Instructions, SE-182B Backboard



CP 2150

Figure 8. Identification Plate Replacement

#### 4.05 Housing Removal and Replacement, AD2 Desk Telephone Base.

- Remove identification plate (fig. 3); use an S-C 200 releaser tool, or equivalent, as shown in figure 4.
- Loosen the two captive screws under the identification plate (fig. 5) and lift housing off base.
- Replacement is accomplished by positioning the housing over the base so that it clears the ears on the base (fig. 9) and then tightening the captive screws in the housing.
- Replace identification plate as shown in figure 8.

#### 4.06 S-C 220A and S-C 2220B Handset Housing Removal and Replacement.

The handset housings consist of a deck and shell as shown in figure 10. Proceed as follows to remove or replace shell.

- Shell Removal.
  - Remove cord.
  - Remove the station card and protector; use an S-C 200 releaser tool, or equivalent, as shown in figure 3.
  - Remove lamp shield.
  - Remove the two exposed assembly screws (fig. 5) and remove shell from handset, exposing the internal parts.



## b. Shell Replacement.

1. Position shell on handset, making sure to hook bottom of shell over lip of handset cord receptacle.
2. Replace assembly screws.
3. Replace lamp shield.
4. Replace station card and protector.

**4.07 Ringer Installation and Connections.**

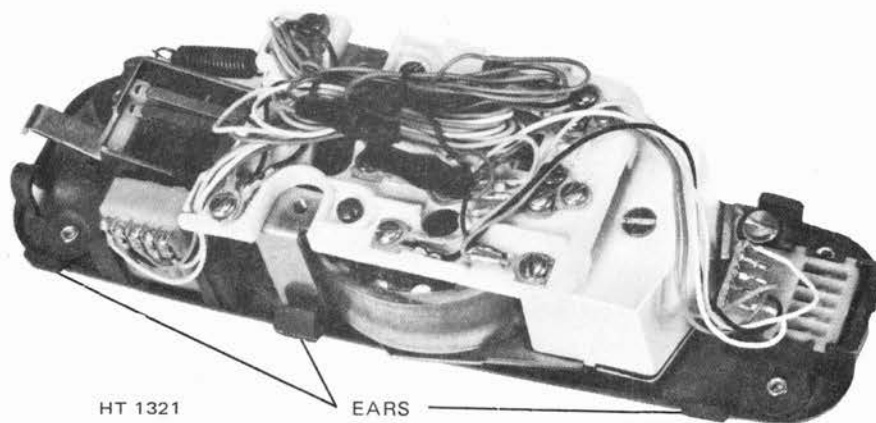
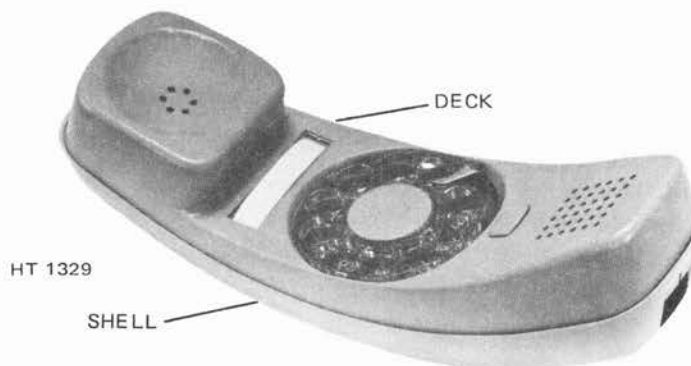
## a. Ringer Installation.

1. Remove housing.
2. Remove terminal board mounting screws.
3. Loosen the tie securing the leads.

4. Raise the terminal board up to the limit of the slack in the wiring and turn to one side of the base.
5. Remove ringer leads from terminal board terminals.
6. Loosen ringer adapter plate mounting screws and lift out adapter plate and resonator assembly.
7. Mount new ringer to adapter plate with the two screws provided (see fig. 11).
8. Orient ringer and adapter plate assembly so that the gong is toward the top of the telephone.

## b. Wall Models.

1. If an ITT 152 type ringer is being installed, remove the existing ringing capacitor between terminal board terminals A and K and replace with

*Figure 9. S-C AD2 Desk Telephone Base**Figure 10. S-C 220A SLENDERET Rotary-Dial Handset Telephone*

capacitor packaged with ringer. Use A and K terminal screws to secure capacitor leads. Place capacitor on top of the terminal board and dress wiring as required to avoid interference.

2. Dress leads through bottom slot of hookswitch bracket toward right-hand side of telephone along with hookswitch leads.

3. Adjust volume control lever and ringer volume control as shown in figures 11 and 12 before inserting ringer assembly in telephone.

4. Insert ringer assembly in place, making sure that the ringer volume control is properly located in the forked slot in the telephone volume control lever as shown in figure 12. Tighten adapter plate mounting screws.

5. Replace terminal board and connect ringer as shown in figure FO-1.

6. Replace housing.

c. Desk Models.

1. ITT 152 type frequency ringers above 25 Hz require a smaller ringing capacitor than the one mounted on the terminal board. Remove the existing capacitor and replace with capacitor packaged with ringer. Use A and K terminal screws to secure capacitor leads. Place capacitor on top of the terminal board and dress wiring as required to avoid interference.

2. Dress ringer leads between terminal board mounting bracket and hookswitch bracket up through the slot in the terminal board at K terminal.

3. Insert gong end of ringer and adapter plate assembly under terminal board as resonator end is raised over handset cord plug. Use care so that green plastic gong cover on the S-C P1A ringer does not catch on terminal board bracket.

4. When installing an S-C P1A ringer, drop resonator end in place and tighten the adapter plate mounting screws.

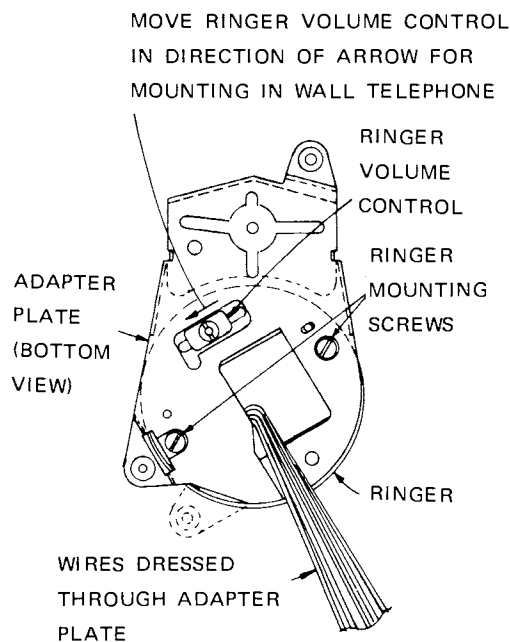
5. When installing an ITT 152 type ringer, loosen the moveable ringer mounting standoff screw on the bottom of the telephone base. Drop the resonator end in place and tighten the adapter plate mounting screws. Retighten the moveable ringer mounting standoff screw.

6. Replace terminal board and connect ringer as shown in figure FO-2.

7. Replace housing.

#### 4.08 Polarity Guard Installation and Connections.

Place polarity guard mounting bracket between ringer mounting screw and ringer grommet as shown in figure 13. Make connections as shown in table 2.



CP 2151

Figure 11. Ringer Mounting



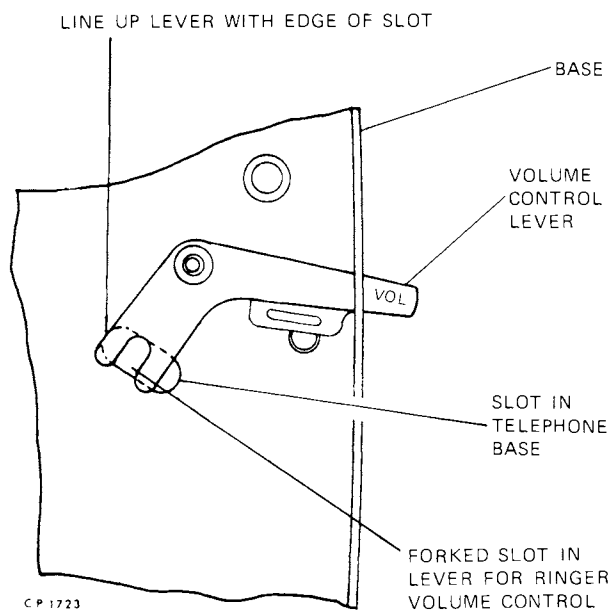


Figure 12. Volume Control Lever Positioning

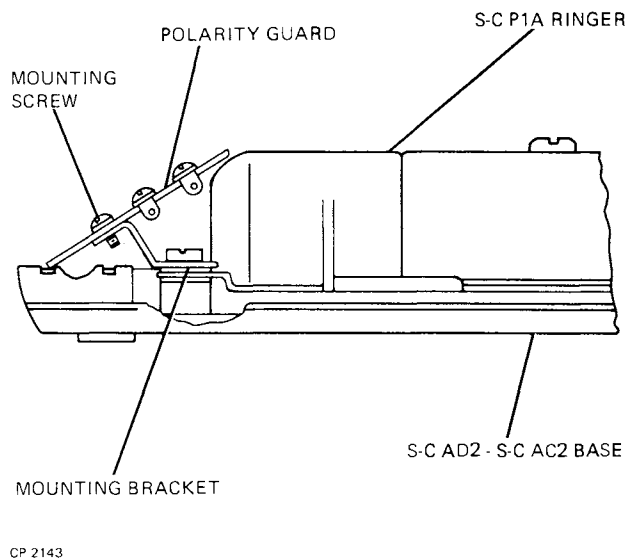


Figure 13. Mounting Instructions, Polarity Guard

Table 2. Polarity Guard Connections

WIRE OR LEAD	COLOR	REMOVE FROM TERMINAL BOARD	CONNECT TO	
			POLARITY GUARD	TERMINAL BOARD
Handset cord jack	RED	C	R	
	GRN	F	T	
Polarity Guard Assy.	RED			C
	GRN			F

#### 4.09 Diode Assembly Installation and Connections.

Four-party full-selective or eight-party semi-selective ringing can be provided in the S-C SLENDERET telephones by installing an S-C 202912-738 diode assembly. Place diode in the opening provided on the terminal board as shown in figure 14. Make connections as shown in figures FO-1 and FO-2.

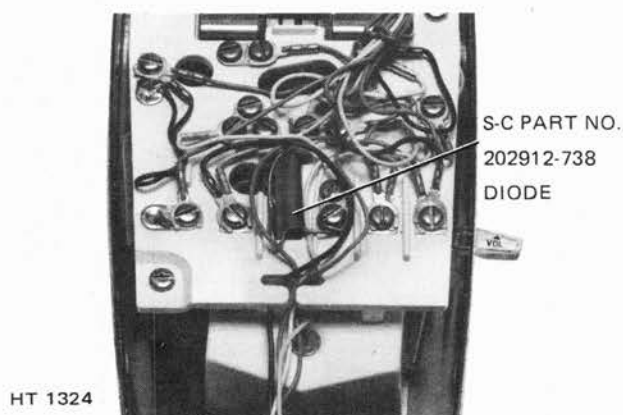


Figure 14. SLENDERET Telephone Base With Diode Installed

#### 4.10 Telephone Connections.

The following paragraphs contain connection information to be used in placing the SLENDERET telephones in operating condition.

#### 4.11 Wall and Desk Type Base Connections.

Connect the S-C AC2 and S-C AD2 telephone bases as shown in figures FO-1 and FO-2, respectively. When "A lead" control is required, connect the SLENDERET telephones as shown in figure 15.

#### 4.12 Handset Cord Connections.

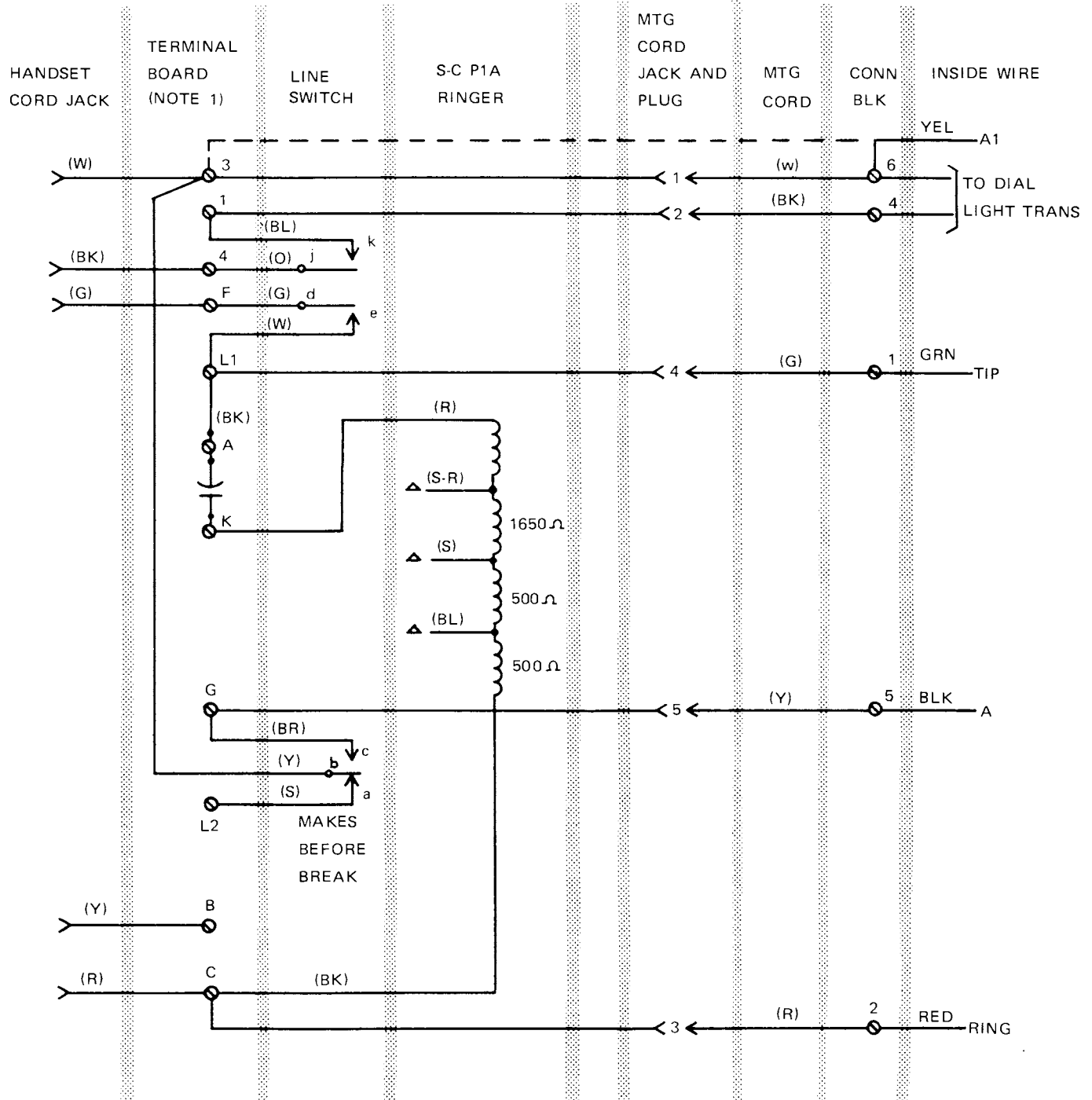
- a. The only connection required between the SLENDERET base and handset is the plug-ended handset cord.
- b. The standard (H5AA) handset cord need only to be plugged into the base and handset. Handset wiring diagrams are shown in figures 16 and 17.

*Note: The handset cord plugs are polarized and can only be inserted in the handset or base as applicable.*

#### 4.13 Revertive Calls.

To provide revertive call by using the recall button on the handset, connect the BLK strap in the telephone base from terminal board terminal A to terminal C.

*Note: This feature cannot be used when tip party identification with ringer is used.*



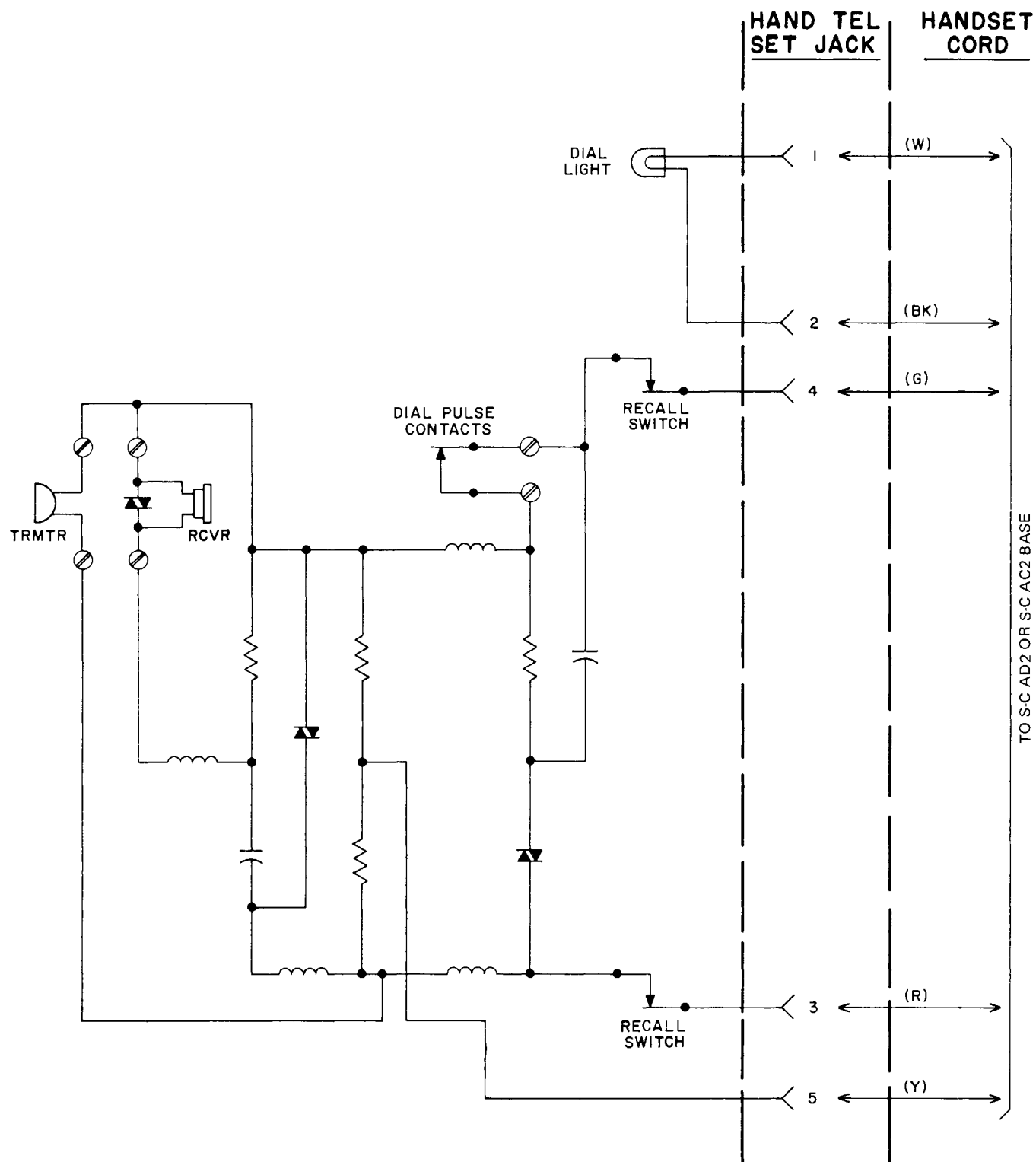
## NOTES:

1 RUN INSIDE WIRE DIRECTLY TO TERMINAL BOARD WHEN AC2 BASE IS USED AND TO CONNECTING BLOCK WHEN AD2 BASE IS USED.

2  $\triangle$  INSULATED AND STORED.

CP 2152

Figure 15. S-C AD2 Telephone Bases, Connections for "A" Lead Control



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Figure 16. S-C 220A Handset, Wiring Diagram

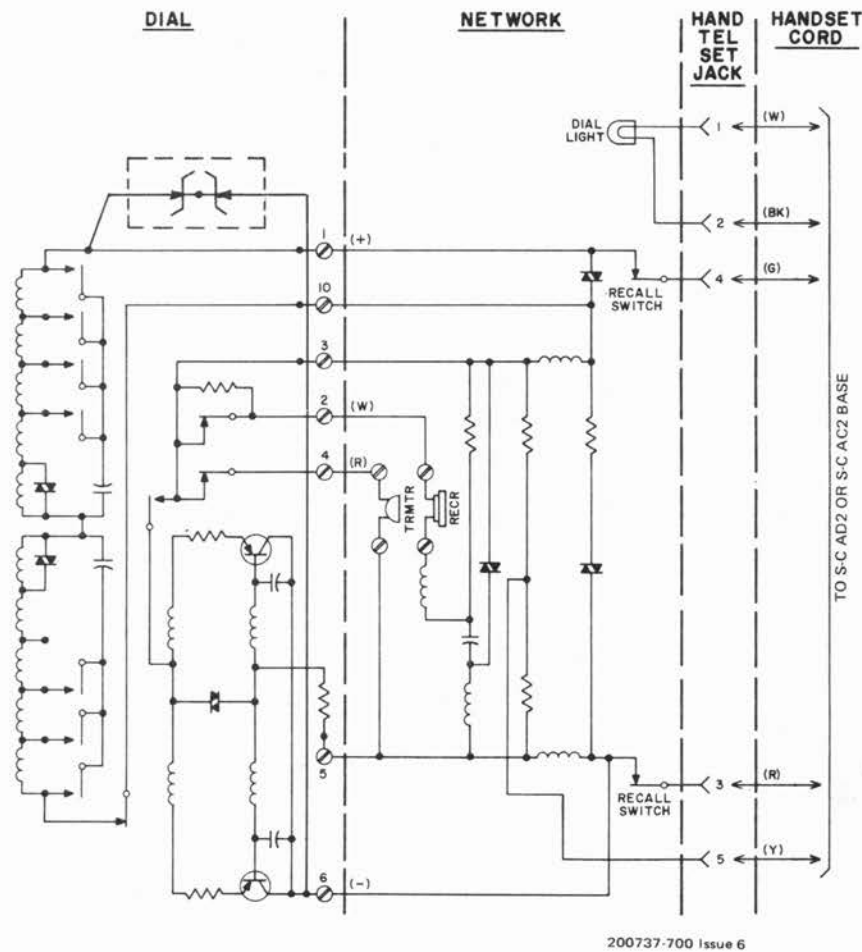


Figure 17. S-C 2220B Handset, Wiring Diagram

## 5. MAINTENANCE

### 5.01 Bias Spring Adjustment.

The bias spring in the S-C P1A ringer is set in the high position at the factory. To set in low position, insert the hook end of an S-C 200 releaser tool or a bent paper clip through the access slot in the gong (fig. 18) and disengage bias spring from high position notch and move to low position.



HT 1358

Figure 18. Adjusting Bias Spring in P1A Ringer

### 5.02 Handset and Line Cord Replacement.

#### a. Handset Cord.

1. To remove the handset cord from either an S-C AC2 (wall) or S-C AD2 (desk) telephone base, use an S-C 200 releaser tool, or equivalent, to release the spring clip.
2. Place the tool in the space provided and apply pressure against the spring clip toward the plug. With the spring clip depressed, pull the cord out of the jack. (Refer to figure 19.)

3. To replace, insert plug into jack, making sure that the spring clip snaps into place.

b. Line Cord for S-C AD2 Desk Base.

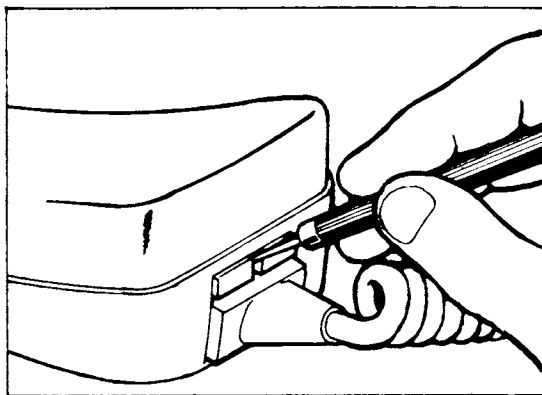
1. To remove the line cord from the telephone base, use an S-C 200 releaser tool, or equivalent, to slide the cord retainer from the channel. (Refer to figure 19.)
2. Insert the releaser tool into the slot provided and apply pressure against the clip. With the spring clip depressed, pull the cord out of the jack.
3. To replace, insert plug into jack, making sure the spring clip snaps into place. Lay cord into channel and slide cord retainer over cord. Make sure cord retainer locks into place.

5.03 S-C 220A Handset, Transmitter and Receiver Replacement.

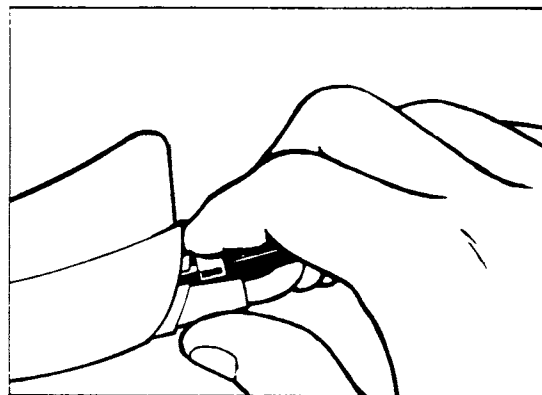
a. Transmitter Replacement (fig. 20).

Replace transmitter assembly as follows:

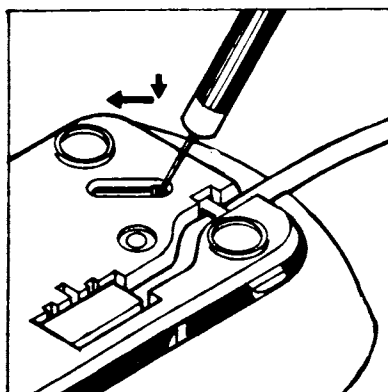
1. Remove shell.
2. Remove transmitter cup retainer brackets, screws, and recall switch mounting screw.
3. Lift network assembly up and remove transmitter assembly.
4. Make sure rubber gasket is in place; then position and insert new transmitter assembly.
5. Place network assembly and transmitter cup over transmitter.



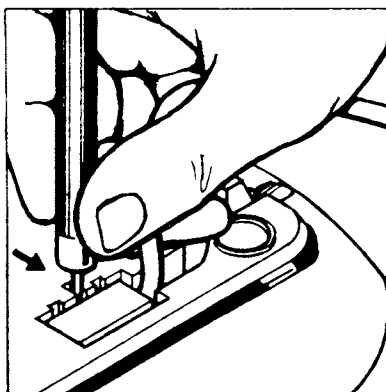
DEPRESS SPRING CLIP



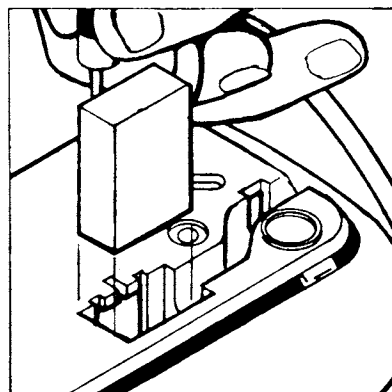
UNPLUG HANDSET CORD



RELEASE THE CORD RETAINER



DEPRESS SPRING CLIP, GRASP CORD



PULL PLUG FROM BASE

CP 3094

Figure 19. Cord Removal



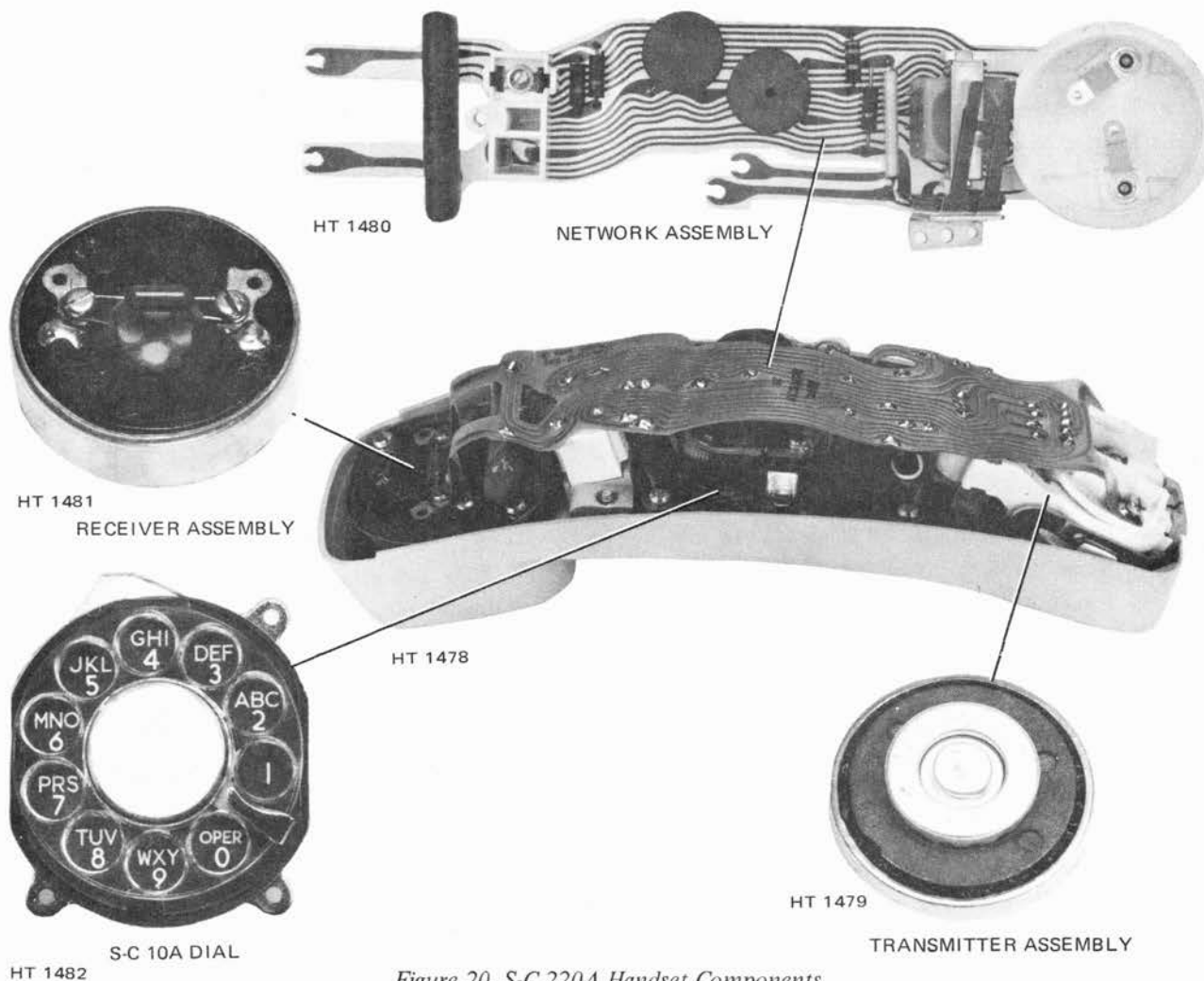


Figure 20. S-C 220A Handset Components

6. Align recall switch contact springs properly then replace mounting screw.
  7. Replace transmitter cup retainer brackets. Make sure that the bracket lip is engaged in the slot at the rear of the deck before inserting mounting screws.
  8. Replace shell.
- b. Receiver Replacement (fig. 20).  
Replace receiver assembly as follows:
1. Remove shell.
  2. Loosen screws and disconnect network from receiver assembly.
  3. Remove receiver assembly adapter plate mounting screws and remove plate.
  4. Remove receiver assembly.
  5. Make sure rubber gasket is in place then position and insert new receiver assembly.
- Caution. Do not tighten receiver adapter plate mounting screws too tightly. Possible warping of deck could result.*
6. Replace adapter plate and tighten mounting screws.
  7. Replace network assembly and tighten screws.
  8. Replace shell.

#### 5.04 S-C 2220B Handset, Transmitter and Receiver Replacement.

- a. Transmitter Replacement (fig. 21 and 22).  
Replace transmitter assembly as follows:
  1. Remove shell.
  2. Remove screws 2, 3, and 5 (fig. 22).
  3. Carefully lay back network assembly, exposing pushbutton assembly mounting screws.
  4. Remove screws 4 and 6.
  5. Remove the pushbutton assembly.
  6. Remove screws 7 and transmitter cup retainer brackets.
  7. Remove entire network assembly.
  8. Remove transmitter capsule.
10. Place network assembly (with transmitter cup attached) over transmitter assembly.
11. Replace transmitter cup retainer brackets. Make sure that the bracket lip is engaged in the slot at the rear of the deck before inserting mounting screws 7.
12. Replace pushbutton assembly and secure with screws 4 and 6.
13. Carefully lay the loose end of the network assembly back over the pushbutton assembly.

*Caution. Make sure that the insulating sheet between the printed board of the network assembly and the pushbutton assembly does not catch on solder points.*

14. Replace screws 2, 3, and 5.

15. Replace shell.

- b. Receiver Replacement (fig. 21 and 22).  
Replace the receiver assembly as follows:

1. Remove shell.
2. Remove screws 2, 3, and 5 (fig. 22).
3. Carefully lay back the network assembly.
4. Remove screws 1 and lift off receiver cup.
5. Replace receiver assembly.

*Note. Do not lose gaskets.*

6. Make sure gasket is in place; then position and insert new receiver assembly.
7. Make sure thin gasket is in place on top of receiver capsule; then replace receiver cup.

*Caution. Make sure receiver cup is lined correctly. Do not force on.*

8. Replace screws 1, 2, 3, and 5.
9. Replace shell.

#### 5.05 Dial Replacement.

- a. Rotary Dial (fig. 20).  
Replace rotary dial assembly as follows:
  1. Remove shell.
  2. Loosen screws and lift network from receiver assembly.
  3. Remove lamp block assembly mounting screws.
  4. Loosen screws and disconnect network from dial.
  5. Remove the three dial mounting screws.
  6. Remove dial and replace with new one.
  7. Replace three dial mounting screws.

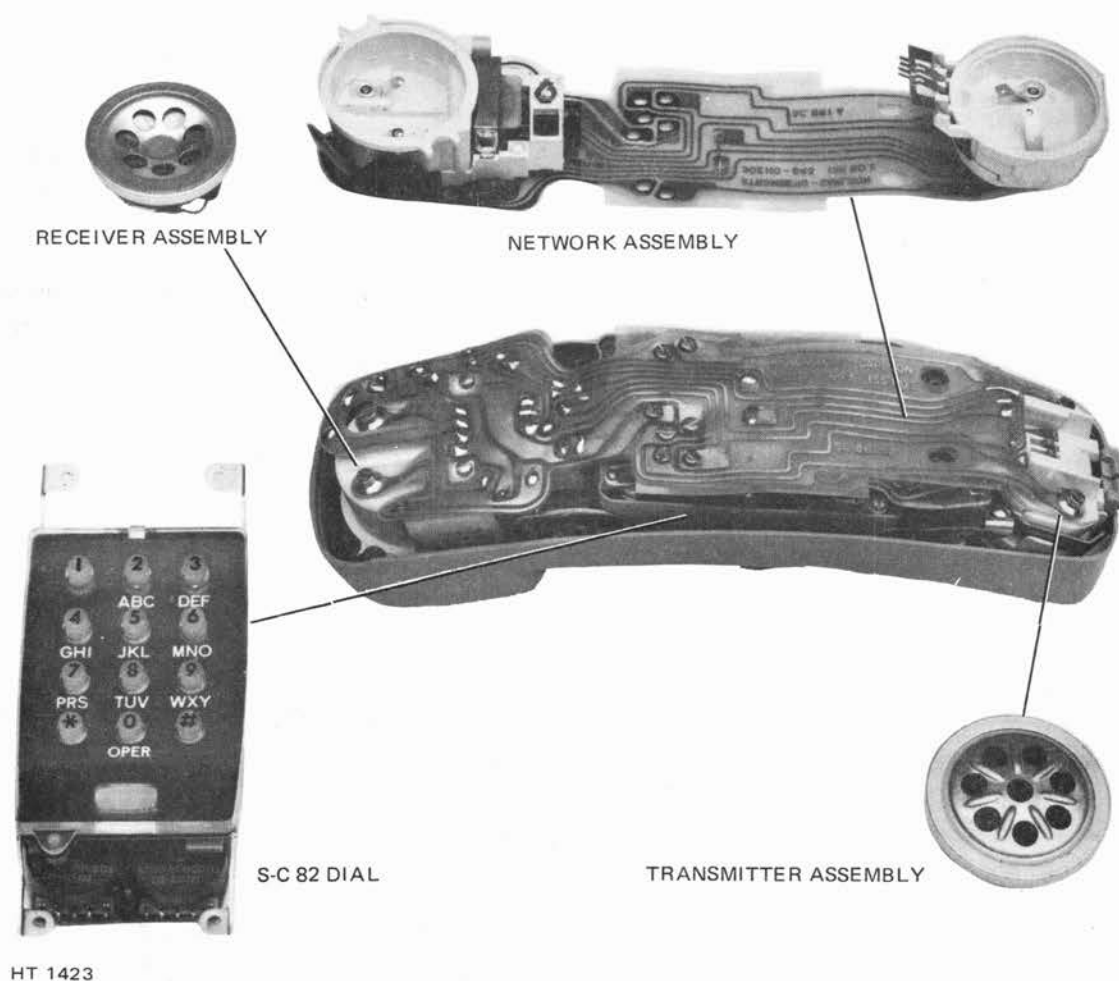


Figure 21. S-C 2220B Handset Components

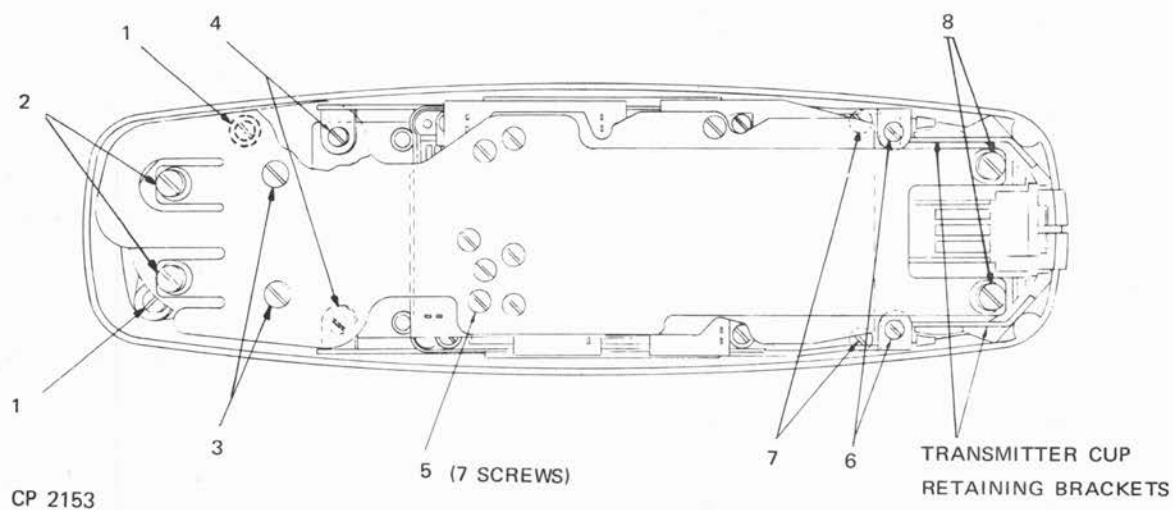


Figure 22. Assembly Diagram, S-C 2220B Handset

8. Replace network and tighten screws.
9. Replace lamp block assembly mounting screws.
10. Place network on receiver assembly and tighten screws.
11. Replace shell.

*Note. Clicks during dialing are normal due to the absence of off-normal dial contacts. This should not bother the subscriber because the dial is located in the handset.*

- b. Pushbutton Dial (fig. 21 and 22).  
Replace pushbutton dial as follows:

1. Remove shell.
2. Remove screws 2, 3, and 5 (fig. 22).
3. Carefully lay back the network assembly.
4. Remove screws 4 and 6.
5. Lift pushbutton dial up and forward.

*Caution. When replacing the dial, be careful not to damage recall switch contacts.*

6. Position and insert new pushbutton dial and replace screws 4 and 6.
7. Carefully lay the network assembly back over the pushbutton dial.

*Caution. Make sure the insulating sheet between the printed board of the network assembly and the pushbutton dial does not catch on the solder points.*

8. Replace screws 2, 3, and 5.
9. Replace shell.

*Note. Repair of the pushbutton dial is not recommended without proper test and repair equipment. Return dial to factory for repair or replacement.*

### 5.06 Dial Fingerwheel Replacement (fig. 23).

Replace the dial fingerwheel as follows:

- a. Use an S-C 200 releaser tool, or equivalent, to remove the hub cover in the center of the fingerwheel.
- b. Remove retaining ring and rotate the fingerwheel clamp on the hub until the bars of the clamp align with the slots of the fingerwheel.
- c. Replace fingerwheel.
- d. Replace fingerwheel clamp and rotate until secure.
- e. Replace hub cover.

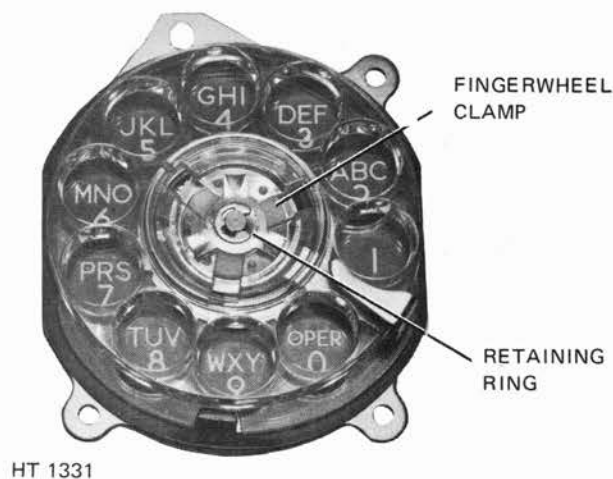


Figure 23. Fingerwheel Replacement

### 5.07 Dial Lamp Replacement.

Proceed as follows to replace dial lamp:

- a. Remove station number card protector and card with an S-C 200 releaser tool, or equivalent.
- b. Remove dial lamp shield.
- c. Using an S-C switchboard lamp extractor, (or equivalent), remove lamp.
- d. Insert new lamp into socket. Make sure lamp is seated properly.

- e. Replace lamp shield. Indent in lamp shield must be over lamp. If shield does not have an indent, replace with new one. The indent prevents the lamp from riding up in the socket.

#### 5.08 Network Assembly Replacement.

##### a. S-C 220A Handset (fig. 20).

Replace the network assembly as follows:

1. Remove shell.
2. Loosen screws and lift network from receiver assembly.
3. Remove lamp block assembly mounting screw.
4. Loosen screws and disconnect network from dial assembly.
5. Remove recall switch mounting screws.
6. Remove transmitter cup retainer brackets and mounting screws.
7. Remove network assembly and replace with new assembly.
8. Replace screws.
9. Replace shell.

##### b. S-C 2220B Handset (fig. 21 and 22).

Replace the network assembly as follows:

1. Remove shell.

2. Remove screws 2, 3, and 5 and carefully lay back the network assembly.
  3. Remove screws 4 and 6.
  4. Remove pushbutton dial.
  5. Remove screws 7 and transmitter cup retaining brackets.
  6. Remove network assembly.
  7. Place new network assembly (with transmitter cup attached) over transmitter capsule.
  8. Replace transmitter cup retainer brackets. Make sure that bracket lip is engaged in the slot at the rear of the deck before inserting mounting screws 7.
  9. Replace pushbutton dial and secure with screws 4 and 6.
  10. Carefully lay the loose end of the network assembly back over the pushbutton dial.
- Caution. Make sure the insulating sheet between the printed board of the network assembly and the pushbutton dial does not catch on the solder points.*
11. Replace screws 2, 3, and 5.
  12. Replace shell.





SC-AC2(WALL) TELEPHONE BASE CONNECTIONS

WIRE OR LEAD		INDIVIDUAL OR BRIDGED	RING PARTY	TIP PARTY	
				NO IDENT GROUND	1000 OR 2650 OHM (NOTE 1)
INSIDE WIRE	RING	R	L2	L2	L1
	TIP	G	L1	L1	L2
	GRD	Y	3	3	3
RINGER LEADS (NOTE 3)	TRANS	BK	I	I	I
	R	K	K	K	K
	BK	L1	3	3	3
HANDSET CORD JACK (SC-2220B ONLY)	BL				B
	R	C	C	F	F
	G	F	F	C	C

- NOTES:
- FOR TIP PARTY IDENTIFYING GROUND- 1000 OHMS OR 2650 OHMS, CONNECT BLUE RINGER LEAD TO 'B'
  - GROUND MAY BE OMITTED IF NOT REQUIRED FOR SERVICE; NOT REQUIRED FOR PROTECTION OF DIAL LIGHT TRANSFORMER.
  - TO PERMANENTLY SILENCE RINGER; MOVE (R) RINGER LEAD FROM K TO G ON TERMINAL BOARD. FOR TIP PARTY IDENT. (BK) RINGER LEAD MUST BE ON 3 OF TERMINAL BOARD.
  - SOME NON S-C PIA RINGERS WILL INTERFERE WITH THE CAPACITOR MOUNTED BETWEEN A AND K TERMINALS. CUT THE CAPACITOR OFF AND MOUNT A LOOSE CAPACITOR (FURNISHED WITH RINGER) AS REQUIRED.

Δ INSULATED AND STORED

CONNECTIONS FOR 4-PARTY FULL SELECTIVE OR 8-PARTY SEMISELECTIVE RINGING USING 202912-738 DIODE

PARTY	INSIDE WIRE AT TERMINAL BOARD			DIAL LT TRANS LEADS		202912-738 DIODE		RINGER LEADS					STRAP FROM A	LINE SWITCH
	RING	TIP	GRD			YEL. CODED	PLAIN	BK	R	S	S-R	BL		
LEADS	R	G	Y	1	2	①	②	BK	R	S	S-R	BL	BK	
- RING	L2	L1	3	3	1	L2	G	K	3	INSULATED AND STORED	G	INSULATED AND STORED	3	DISCONNECT (S) LEAD INSULATE AND STORE
- TIP	L1	L2	3	3	1	L2	G	K	3		G		3	
+ RING	L2	L1	3	3	1	3	G	K	L2		G		L2	
+ TIP	L1	L2	3	3	1	3	G	K	L2		G		L2	
											G		L2	

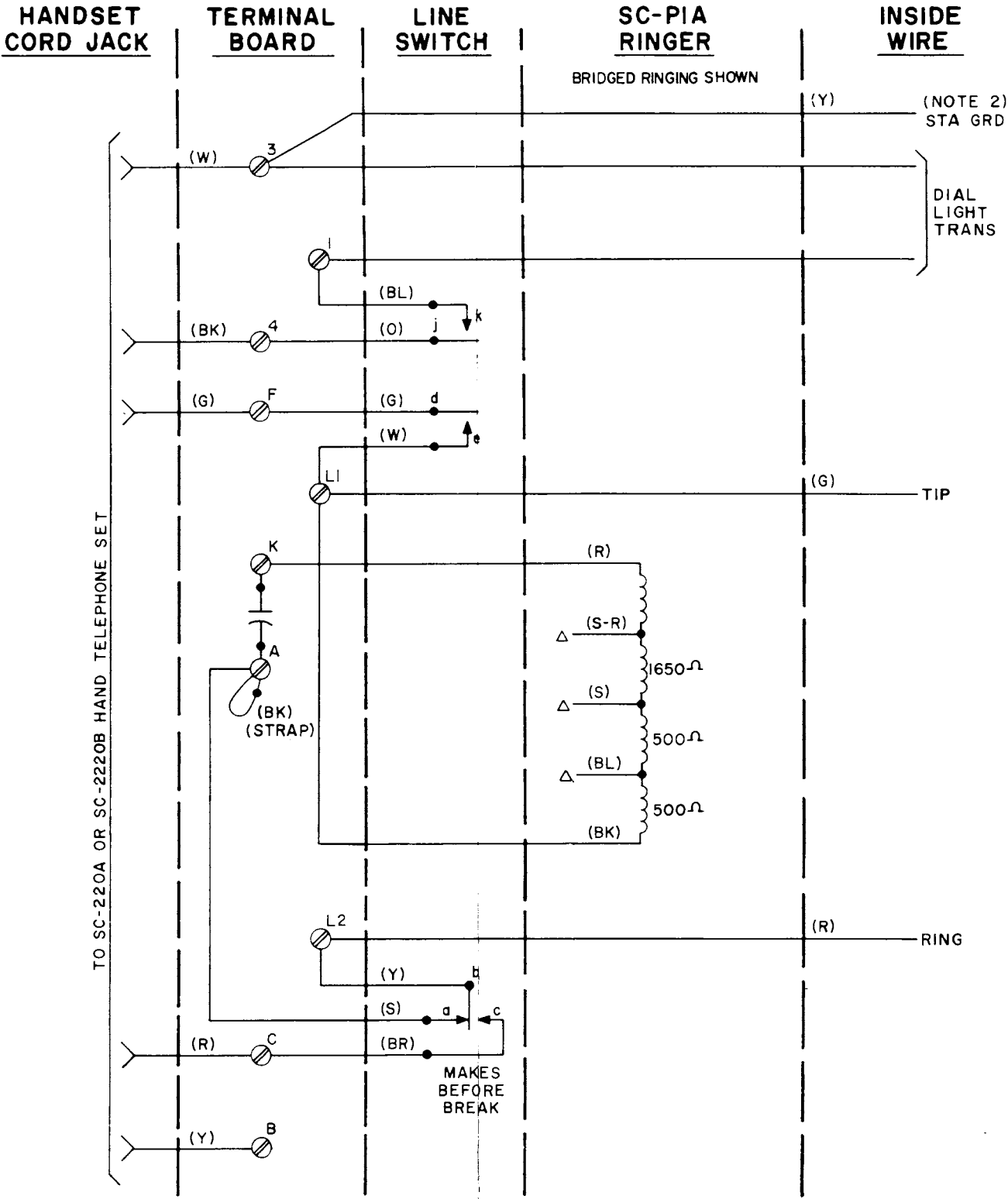


Figure FO-1 S-CAC2 Base, Wiring Diagram.

SC-AD2 (DESK) TELEPHONE BASE CONNECTIONS

WIRE OR LEAD		INDIVIDUAL OR BRIDGED	RING PARTY	TIP PARTY	
				NO IDENT GROUND	1000 OR 2650 OHM (NOTE 1)
INSIDE WIRE AT CONNECTING BLOCK (NOTE 2)	RING	R	R	R	R
	TIP	G	G	G	G
	GRD	Y	Y	Y	Y
	TRANS	R	Y	Y	Y
MOUNTING CORD AT CONNECTING BLOCK		G	B	B	B
		R	R	R	G
		G	G	G	R
		Y	G	Y	Y
MOUNTING CORD IN TELEPHONE BASE	BK	B	B	B	B
	W	Y	Y	Y	Y
	R	L2	L2	L2	L2
	G	L1	L1	L1	L1
RINGER LEADS (NOTE 3)	Y	G	G	G	G
	BK	I	I	I	I
	W	3	3	3	3
	R	K	K	K	K
HAND SET CORD JACK (SC-2220B ONLY)	BK	G	G	G	G
	BL				B
	R	C	C	F	F
	G	F	F	C	C

- NOTES:
1. FOR TIP PARTY IDENTIFYING GROUND- 1000 OHMS OR 2650 OHMS, CONNECT BLUE RINGER LEAD TO 'B'.
  2. GROUND MAY BE OMITTED IF NOT REQUIRED FOR SERVICE; NOT REQUIRED FOR PROTECTION OF DIAL LIGHT TRANSFORMER.
  3. TO PERMANENTLY SILENCE RINGER; MOVE (R) RINGER LEAD FROM K TO G ON TERMINAL BOARD. FOR TIP PARTY IDENT. (BK) RINGER LEAD MUST BE ON 3 OF TERMINAL BOARD.
- Δ INSULATED AND STORED

CONNECTIONS FOR 4-PARTY FULL SELECTIVE OR 8-PARTY SEMISELECTIVE RINGING USING 202912-738 DIODE

PARTY	LINE WIRE CONNECTIONS AT CONN BLOCK			DIAL LT TRANS LEADS		MOUNTING CORD AT CONNECTING BLOCK					MOUNTING CORD AT TERMINAL BOARD					202912-738		RINGER LEADS					STRAP FROM A	LINE SWITCH	
	RING	TIP	GRD													DIODE	YEL. CODED								PLAIN
LEADS	R	G	Y	I	2	R	G	Y	W	BK	R	G	Y	W	BK	①	➡	②	BK	R	S	S-R	BL	BK	DISCONNECT (S) LEAD INSULATE AND STORE
-RING	R	G	Y	Y	B	R	G	Y	Y	B	L2	L1	3	3	I	L2	G	K	3	INSULATED AND STORED	G	INSULATED AND STORED	3		
-TIP	R	G	Y	Y	B	G	R	Y	Y	B	L2	L1	3	3	I	L2	G	K	3		G		3		
+RING	R	G	Y	Y	B	R	G	Y	Y	B	L2	L1	3	3	I	3	G	K	L2		G		L2		
+TIP	R	G	Y	Y	B	G	R	Y	Y	B	L2	L1	3	3	I	3	G	K	L2		G		L2		

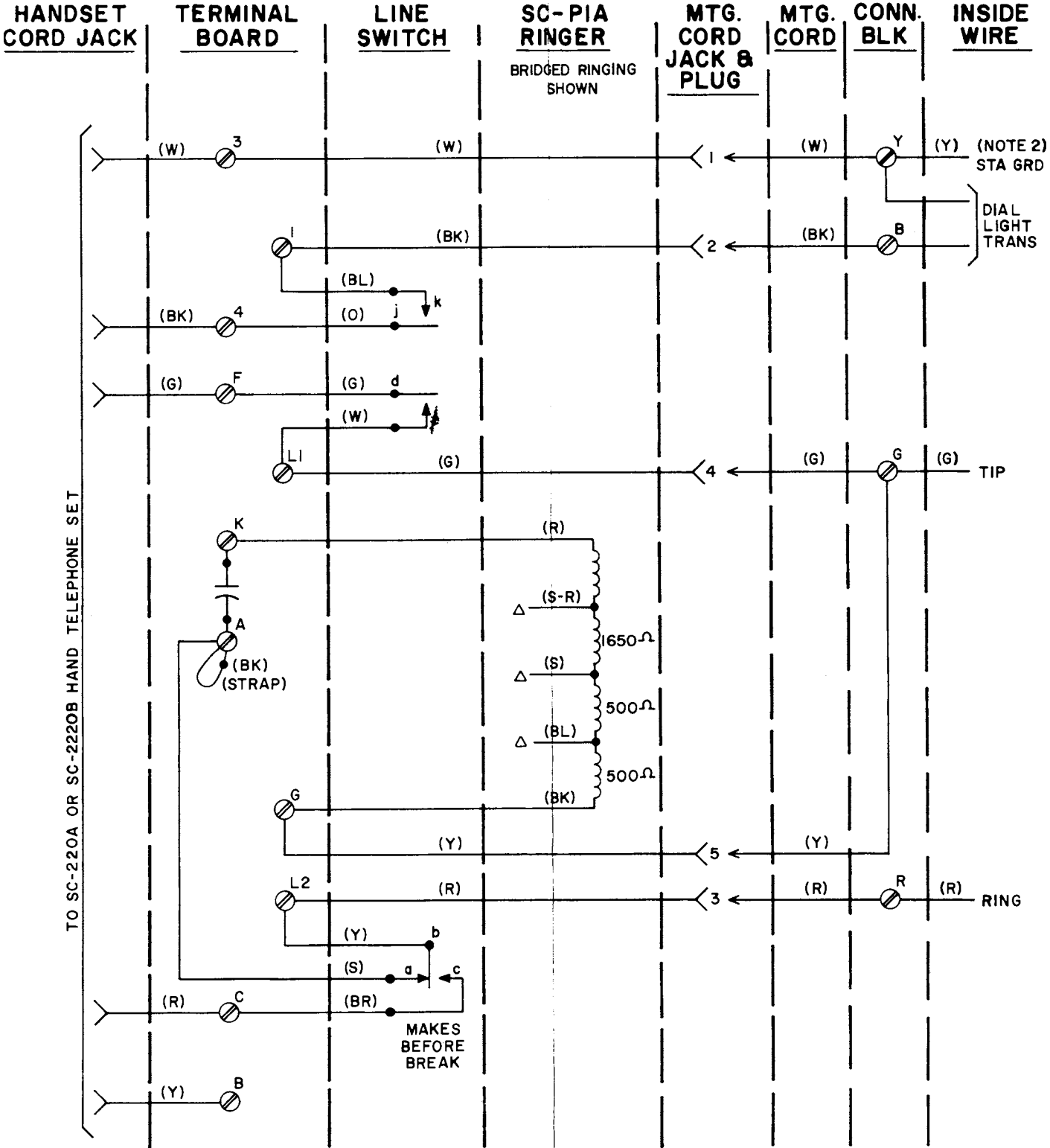


Figure FO-2 S-CAD2 Base, Wiring Diagram.