

TYPE 183 TELEPHONE SET  
INSTALLATION AND FIELD MAINTENANCE

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1. GENERAL

1.01 This section provides installation and field maintenance procedures for the Type 183 SPACE-MAKER® Telephone Set equipped with a rotary dial (Figure 1).

1.02 This section provides information for NB-830 Series telephones (manufacture discontinued, 1973) having a potted, self-compensating network and a 4-1/2 foot handset cord, and ND-830 Series telephones (currently manufactured) having a printed-wiring-card self-compensating network and a 6-foot or 12-foot handset cord for desk and wall telephones, respectively. Additional information is provided for the earlier Type 183 telephones equipped with a manually-adjustable rheostat for loop compensation.

1.03 The NB-830 Series and ND-830 Series telephones are equipped with a potted transmission network having screw terminals (Figure 2). The ND-830 Series telephones manufactured after 1980

are equipped with a printed-wiring-card-mounted transmission network having spanish terminals (Figure 2).

1.04 The Type 183 telephone is designed for mounting on a vertical surface. The telephone can be adapted to any one of a variety of installation locations by changing the position of the dial assembly and/or the handset hook. The dial assembly can be rotated 360 degrees and can be secured in any position along that rotation. The handset hook can be moved along a 180-degree arc around the front of the telephone and can be secured in any one of seven positions.

1.05 The Type 183 (Series ND-830) telephone with an ABC dial or a B SATT dial, or without a dial is available in black, beige, green, ivory, turquoise, gold, pink, and white.

1.06 If a ringer is required, a Type 33 ringer unit should be installed as outlined in Section 473-810-201.

1.07 This section is reissued to include information on the HB-1055-A transmission network having spanish terminals. Due to the nature of the changes involved, change indicators are omitted. Remove the previous issue of this section from the binder or microfiche file and replace it with this issue.

1.08 GTE AE practices are used by GTE employees for operating and maintaining the equipment it manufactures and sells. These practices may change or may not be suitable in a specific situation and so are recommended as suggested guidelines only. GTE AE hereby disclaims any responsibility and/or liability for any consequential or inconsequential damages that may result from the use of such practices. GTE AE acknowledges that the customer's special requirements policy/practices may take precedence over those supplied by GTE AE if conflicts develop during installation and ongoing operation.

2. INSTALLATION

2.01 The Type 183 telephone may be mounted on the side of a desk, on a wall, or on other flat vertical surfaces. The baseplate has six cutout holes through which mounting devices can be installed. The front cover of the telephone must be removed to gain access to the cutouts. The cover is secured to the housing by two Phillips-head screws located at the bottom of the cover. At SATT or divided-ringing stations, make a polarity check (see paragraph 3.12) after wire connections have been completed.

Dial Assembly and Handset Hook Positioning

2.02 After the front cover has been removed, but before the telephone has been mounted, the dial assembly and handset hook must be secured in the position required for that particular installation. The final position of the dial assembly and handset

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hook must be the position most convenient for their use at the telephone location. The dial assembly can be rotated 360 degrees when the Phillips-head lock screw beneath the dial assembly ball grip (Figures 3 and 4) is loosened. Tightening the lock screw secures the dial assembly in position. The same lock screw is part of the mechanism that holds the handset hook in position. The handset hook can be moved through an arc of approximately 180 degrees when the lock screw has been loosened sufficiently for the circular-die-cast plate (on which the hookswitch is mounted) to be moved downward about one-eighth inch. By meshing one of the slots in the circular plate with the ridge on the surface over which the edge of the circular plate passes when rotated, and when tightening the lock screw, the handset hook can be secured in position. Seven of the slots in the circular plate will mesh with the ridge.

NOTE: When positioning the dial assembly and/or the handset hook, care must be taken not to damage wires by careless twisting of the dial assembly or hook, or by rotating the dial assembly in one direction through more than one full turn. The lock screw must be firmly tightened to minimize the possibility of wire damage caused by the customer rotating either the dial assembly or the handset hook. The customer should be advised that he is not to reposition the dial and handset hook.

#### Desk-Mounting Instructions

2.03 It will usually be preferable to locate the telephone at the left front corner of the desk.

2.04 The telephone can be attached to the edge of the top of a wood desk or to a special bracket (D-731725-A), installed under the desk-top overhang (Figure 5), by installing No. 8 wood screws through the cutouts in the baseplate (cutouts marked "A" in Figure 6).

2.05 To mount the telephone on a metal desk, holes must be drilled to accommodate No. 8 machine screws. The holes should be drilled in the side of the desk in the pattern shown for holes marked "A" and "B" in Figure 6. A hole must also be drilled to align with the oblong-shaped wire hole. If the run of inside wire is to connect first to the telephone and from there extended to a ringer, then another wire hole must be drilled to align with the circular wire hole (Figure 6). The oblong-shaped wire hole in the baseplate should always be the hole used for incoming wire, which must pass through the baseplate. The circular wire hole should be used only when extending the wire run. The telephone should be attached to the desk with four No. 8 machine screws, lock-washers, and nuts.

#### Wall-Mounting Instructions

2.06 The location (including distance above the floor) of the telephone on a wall must be determined, as far as practicable, according to the needs of the customer. The four cutout holes marked "A" and "B" in Figure 6 must be used to mount the telephone on a wall or other flat surface. To mount the telephone, install one No. 8

screw through either of the holes marked "A." Install a second No. 8 screw through the oblong hole marked "B." Position the telephone so that it is exactly vertical, and install a No. 8 screw in each of the other holes marked "A" and "B." If masonry anchors are required, use the dimensions in Figure 7 to establish the location on the wall at which the anchors will align with holes "A" and "B," and install the anchors accordingly.

2.07 Holes marked "C" in Figure 6 are to be used when the Type 183 telephone is mounted over an electrical outlet box.

#### Connection Instructions for Self-Compensating Telephones Equipped With HB-1055-A Transmission Network

2.08 For self-compensating Type 183 telephones, ND-830 Series and manufactured after 1980, refer to Figure 8 for a schematic and wiring diagram. Station wire must be connected to the transmission network as follows:

- (a) Red (L1) wire to terminal 10.
- (b) Green (L2) wire to terminal 8.
- (c) Yellow (4G) wire to be taped and stored.

2.09 When the self-compensating Type 183 telephone is equipped with a SATT dial, the brown dial wire must be connected to the yellow (4G) wire. Refer to Note 6 in Figure 8.

2.10 Ringer connections are provided in Table 1.

#### Connection Instructions for Self-Compensating Telephones Equipped With D-38387-C Transmission Network

2.11 A self-compensating Type 183 telephone has, stamped on the baseplate, a code number prefixed with the letters NB. A schematic diagram and a wiring diagram of the self-compensating type circuit are shown in Figure 9. Station wire must be connected to the transmission network terminal strip as follows:

- (a) Red wire to terminal 15.
- (b) Green wire to terminal 16.
- (c) Yellow wire (used for SATT or divided ringing only) to terminal 20.

Ringer connections are provided in Table 1.

2.12 When the self-compensating telephone is equipped with a SATT dial, the brown dial wire must be connected to transmission network terminal 20.

#### Connection Instructions for Manually-Adjusted Telephones

2.13 A manually-adjusted Type 183 telephone has, stamped on the baseplate, a code number prefixed with the letter L. A schematic diagram and a wiring diagram of the manually-adjusted telephone are shown in Figure 10. Station wire must be connected to the transmission network terminal strip as follows:



- (a) Red wire to terminal 15.
- (b) Green wire to terminal 16.
- (c) Yellow wire to terminal 17.

Ringer connections are provided in Table 1.

2.14 When a manually-adjusted Type 183 telephone is equipped with a SATT dial, the white hook-switch wire must be removed from transmission network terminal 17 and taped. The brown dial wire must then be connected to terminal 17.

### 3. LOOP COMPENSATION ADJUSTMENT

3.01 The manually-adjusted Type 183 telephone has a rheostat that regulates the conductor loop resistance. The front cover must be removed to gain access to the rheostat. The rheostat is located at the bottom of the telephone. The rheostat setting can be changed by turning the slotted arrow with a small screwdriver. As the arrow is turned counterclockwise from 0 to 4, the rheostat inserts 0 to 400 ohms in series with the loop.

3.02 When the rheostat is at 0, as it should be for long cable loops, a switch operates to add a capacitor and a resistor into the sidetone balancing impedance, to match more nearly the capacitive impedance of a long cable loop.

3.03 On lines in a 48- or 50-volt exchange, except as specified in (a) and (b) below, set the rheostat at 2 if conductor loop resistance is 200 ohms or less. If the conductor loop resistance is over 200 ohms, set the rheostat at 0.

- (a) If the station is connected directly to an open wire section over 200 ohms resistance, set the rheostat midway between 0 and 1.
- (b) If the station is on a loaded customer loop and is less than one loading section (for Type H loading, less than 6,000 feet) from the nearest loading coil, set the rheostat midway between 0 and 1.

#### Party Line and Extension Telephones

3.04 If two or more GTE AE telephones with manually-adjusted loop compensation (Type 80, Type 90, etc) are used on one line with a Type 183 telephone, set the rheostat of each as if it were the only telephone on the line. If the Type 183 telephone is used on the same line with an entirely different make or model of telephone, set the Type 183 rheostat at 0; or, if one of the exceptions described in paragraph 3.03(a) or (b) is applicable, set the rheostat midway between 0 and 1.

#### PABX, PBX, Etc

3.05 In a key system, PBX, or PABX, a Type 183 telephone may receive its transmitter current from either of two different 48- or 50-volt sources. Adjust the rheostat for the current received on a trunk (outside) call as described in (a) through (c) below, except where the telephone is part of a PBX system that has a switchboard equipped with non-relay series lamp-line circuits, in which case the telephone set rheostat must be set at 0 (see paragraph 3.06).

- (a) If the station loop plus trunk resistance is 200 ohms or less, set the rheostat at 2.
- (b) If the station loop plus trunk resistance is over 200 ohms, set the rheostat at 0.
- (c) If long-line equipment or a pulse repeater at the PBX or PABX supplies transmitter current on trunk calls, set the rheostat at 2.

3.06 If the central office or a PBX switchboard operates from 24 volts and has 100 ohms plus 100 ohms battery feed coils, or if it uses non-relay series lamp-line circuits, set the rheostat at 0; otherwise, set the rheostat as described in paragraph 3.05.

#### Line Current Adjustment

3.07 The adjustment procedures described in the preceding paragraphs of this part are adequate for most installations. However, a few installations will require accurate line current adjustment to 60 milliamperes. This more accurate adjustment might be required where there has been a transmission complaint, or where it is suspected that the reason for a customer's difficulty in hearing over the telephone is caused by room noise at the telephone location. If sidetone caused by room noise is the problem, it might be desirable to adjust to a line current of 55 or 50 milliamperes. Adjustment can be made by following one of the methods described in paragraphs 3.08 through 3.11.

3.08 The loop compensation adjustment can be made without central-office assistance by proceeding as follows:

- (a) Remove the front cover of the telephone and disconnect the red wire at transmission network terminal 15.
- (b) Connect a milliammeter between the red lead and terminal 15 so that the milliammeter is in series with the line (Figure 11).
- (c) Take the handset off the hook and vary the loop compensator until the milliammeter reads 60 milliamperes.
- (d) Disconnect the milliammeter, reconnect the red wire to terminal 15, replace the housing, and test transmission.

3.09 When the testboard is equipped for line current measurement through the usual 200 ohms plus 200 ohms battery feed, dial the testboard and request line current measurements. The testboard attendant will announce current measurement readings. Vary the rheostat until the current is 60 milliamperes.

3.10 When the testboard is equipped for a line resistance measurement, dial the testboard and request line resistance measurements. Short-circuit the line while the testboard attendant measures loop resistance. Using the measurement furnished by the testboard attendant, set the loop compensator according to Figure 12.

3.11 When the testboard is equipped for a line voltage measurement, dial the testboard and request a line voltage measurement and stay on the line. The testboard will be connected to the calling line through a test distributor or distributing



test shoe, and a voltmeter will be connected across the line. The adjustment procedures for the two most usual exchange situations encountered are as follows:

- (a) Where battery is fed through 200 ohms plus 200 ohms, which is usual in 48- or 50-volt exchanges, vary the loop compensator until the testboard voltmeter reads 24 volts less than the central-office battery voltage.
- (b) Where battery is fed through 100 ohms plus 100 ohms, which is used in many 24-volt exchanges, vary the loop compensator until the testboard voltmeter reads 12 volts less than the central-office battery voltage.

#### Polarity Check

3.12 On manually-adjusted and self-compensating telephones used in SATT installations, it is important to check that the party identity pulse is on the positive line. The polarity can be checked at either the ringer or at the telephone transmission network terminals. A Type 800 hand test telephone can be used to make this test. Set the hand test telephone C/R switch to the "C" position, and clip one test lead to the ground terminal. Listen for a click as you touch the other lead to each line wire. The louder click, sometimes followed by dial tone, indicates the negative line (ring). The positive line (tip) usually will not sound completely dead, but will give a weaker click due to earth potential difference.

3.13 At divided-ringing party-line stations, clip one lead of the hand test telephone to the ground wire. With the other clip, touch each line wire and listen for a click. The louder click indicates the negative line (ring).

### **4. FIELD MAINTENANCE**

4.01 Maintenance of the Type 183 telephone is limited to cleaning and replacing components. The dial, hookswitch and hook assembly, handset, and transmission network can be replaced. The receiver and transmitter in the handset can also be replaced. Refer to Figures 8 through 10 for telephone schematics and wiring diagrams. The transmission network schematic diagrams shown in Figure 8, 9, or 10 can be used for continuity tests or resistance measurements.

#### Number Card Replacement

4.02 To replace the number card and fingerwheel, proceed as follows:

- (a) Locate the small hole in the fingerwheel located near finger hole 6.
- (b) Insert a fingerwheel tool into the small hole, engaging the latching lug (located under the wheel) at the left edge of the hole, and push down until the lug snaps out toward number 6 on the number plate.
- (c) Remove the tool and rotate the fingerwheel clockwise one full turn until the zero (0) hole of the fingerwheel has passed the finger stop and is slightly beyond the zero (0) on the number plate. Remove the fingerwheel from the dial.

NOTE: If this procedure fails to disengage the fingerwheel, rotate the fingerwheel clockwise to the finger stop and insert the tool into the small hole while applying pressure in a clockwise direction on the fingerwheel. Withdraw the dial card from the fingerwheel by pulling the elongated tab.

#### Housing Removal

4.03 To remove the housing, refer to Figure 6 and proceed as follows:

- (a) Remove the two housing securing screws located at the bottom of the telephone.
- (b) Pull the housing forward to separate it from the baseplate assembly.

#### Hookswitch Wire Shield Removal

4.04 To protect the wires and springs of the movable hookswitch, a clear-plastic wire shield is provided. This shield ensures that the wires and springs will not become tangled when the installer changes the hook position. Refer to Figure 13 and perform the following procedure to remove the wire shield:

- (a) Move the top of the wire shield away from the bracket to release the shield studs from the shield slots in the bracket.
- (b) Slide the wire shield up until it is clear of the retaining spring.
- (c) Position the wire shield as shown in Figure 13 and apply pressure simultaneously in directions denoted by arrows A and B. Slide the wire shield out from under the buffer.

#### Rotary Dial Replacement

4.05 To replace the rotary dial assembly, proceed as follows:

- (a) Remove the three dial-mounting screws located at the rear of the dial cup assembly (Figure 6).
- (b) Lift the dial assembly and mounting bracket from the dial cup.
- (c) Remove the red, white, blue, and yellow wires from the dial terminals.
- (d) Remove the three dial-mounting bracket screws (4-36 x 1/4) and remove the mounting bracket (Figure 2).
- (e) Replace the dial and connect the wires to the dial terminals (Figure 8, 9, or 10).
- (f) Install the dial-mounting bracket and the three dial-mounting bracket securing screws.
- (g) Insert the dial and mounting bracket into the dial housing. Position the last finger hole (the one nearest the finger stop) so that it is exactly at the bottom of the dial housing.
- (h) Insert the three dial mounting screws through the rear of the dial housing and tighten to the dial housing.
- (i) To connect the dial assembly leads to the telephone terminals, refer to Figure 8, 9, or 10.

4.06 If the dial is replaced by a dial blank, disconnect the dial wires at the dial assembly and proceed as follows:

- (a) Connect the YEL and BLU dial wires to dial blank terminal 2.
- (b) Connect the RED dial wire to dial blank terminal 1.
- (c) Connect the WHT dial wire to dial blank terminal 3.
- (d) Fasten the dial blank to dial cup.

#### Hookswitch and Hook Assembly Replacement

4.07 To replace the hookswitch and hook assembly, proceed as follows:

- (a) Remove the telephone housing as instructed in paragraph 4.03.
- (b) Disconnect all hookswitch wires from the transmission network terminal strip.
- (c) Loosen the Phillips-head lock screw (Figure 3) sufficiently for the circular die-cast plate (on which the hookswitch is mounted) to be moved downward approximately one-eighth inch.
- (d) Turn the assembly to the left (facing the telephone) until the hookswitch is at a position where further turning is not possible. The circular plate will now be in a position where all of its slots mesh with similar size projections along the edge of the rigid die-cast structure.
- (e) Remove the red, white, blue, and yellow dial wires from the transmission network.
- (f) Carefully withdraw the hookswitch and hook assembly from the telephone.
- (g) Place the hookswitch and hook assembly on the baseplate just above the transmission network (Figure 2). The Phillips-head lock screw (Figure 3) should be loosely installed to allow approximately one-eighth inch clearance before assembly.
- (h) Turn the assembly to the left (facing the telephone) until the hookswitch and hook assembly is at a position where further turning is not possible. The circular plate will now be in a position where all of its slots mesh with similar size projections along the edge of the rigid die-cast structure.
- (i) After the hookswitch and hook assembly engages the slots in the die-cast structure, turn the assembly to the right to the desired orientation.
- (j) Position the opening of the dial housing to the desired orientation. The housing has two degrees of freedom in which to move; it may be tilted backward and forward, and it may be rotated independently of the hookswitch and hook assembly.
- (k) Tighten the Phillips-head lock screw.
- (l) To connect the hookswitch leads to the telephone terminals, refer to Figure 8, 9, or 10.
- (m) Reassemble the telephone housing as instructed in paragraph 4.13.

#### Handset Replacement

4.08 To replace the handset cord, proceed as follows:

- (a) Remove the telephone housing as instructed in paragraph 4.03.
- (b) Disconnect the green and black wires from transmission network terminal number 2.

- (c) Disconnect the red wire from transmission network terminal number 5, and the yellow wire from transmission network terminal number 4.
- (d) Release the handset cord strain relief clamp (Figure 3) from the telephone baseplate. Release the stay cord hook, and pull out the cord through the cord clamp.
- (e) Replace and hook the handset cord strain relief clamp to the telephone baseplate as shown in Figure 3.
- (f) Route the handset cord to the telephone terminals as shown in Figure 2.
- (g) To connect the handset cord leads to the telephone terminals, refer to Figure 8, 9, or 10.
- (h) Reassemble the telephone housing as instructed in paragraph 4.13.

#### Handset Disassembly and Assembly

4.09 To disassemble the handset, refer to Figure 14 and proceed as follows:

- (a) Unscrew the receiver cap and lift the receiver capsule out of the handset shell.
- (b) Disconnect the two leads (yellow and black) from the spanish or screw terminals located on the back of the receiver capsule.

NOTE: Leave the receiver gasket mounted in the receiver cap unless it requires replacement. The receiver gasket is glued to the housing of the handset.

- (c) Unscrew the transmitter cap from the handset and lift out the capsule.
- (d) Lift the transmitter center contact spring out of the handset.
- (e) Disconnect the green lead from the transmitter center contact spring.
- (f) Disconnect the red lead from the transmitter rim contact spring.
- (g) Loosen the strain relief clamp securing screw, which is also in the rim contact spring, and remove the strain relief clamp from under it.
- (h) Pull the handset cord out of the handset shell.
- (i) Lift the transmitter rim contact spring out of the handset transmitter well.

4.10 To assemble the handset, proceed as follows:

- (a) Place the transmitter rim contact spring in the handset transmitter well.
- (b) Insert the end of the handset cord with the longest conductor leads through the hole in the handset shell. Push the yellow and black conductors through the handset shell into the receiver well.
- (c) Engage the handset cord strain relief clamp with the strain relief clamp screw on the transmitter rim contact spring.
- (d) Connect the red handset cord lead to the transmitter rim contact spring.
- (e) Connect the green handset cord lead to the transmitter center contact spring.
- (f) Install the transmitter center contact spring in the handset transmitter shell.
- (g) Place the transmitter capsule into position in the handset transmitter well.

- (h) Place three drops of switch lubricant on the threads of the transmitter cap, and install it on the handset.
- (i) Place the receiver cushion spring into position on the receiver.
- (j) Connect the black and yellow handset cord leads to the terminals on the back of the receiver capsule.
- (k) Place the receiver capsule into position in the handset receiver well. Align the receiver cushion spring with the edges of the receiver well and receiver capsule.
- (l) Place three drops of switch lubricant on the threads of the receiver cap, and install it on the handset shell over the receiver capsule.

#### Transmission Network Replacement

4.11 To replace the D-38387-C transmission network, proceed as follows:

- (a) Remove the telephone housing as instructed in paragraph 4.03.
- (b) Disconnect all wires from the transmission network terminals.
- (c) Remove the transmission network mounting screw from the cable clamp (Figure 3).
- (d) Remove the two transmission network screws.
- (e) Lift the transmission network out of the telephone baseplate.
- (f) Place the new transmission network into position in the telephone baseplate.
- (g) Install the two transmission network securing screws.
- (h) Install the cable clamp mounting screw.
- (i) Connect the wires to the transmission network terminals (Figure 8, 9, or 10).
- (j) Reassemble the telephone housing as instructed in paragraph 4.13.

4.12 To replace the HB-1055-A transmission network, proceed as follows:

- (a) Remove the telephone housing as instructed in paragraph 4.03.
- (b) Disconnect all leads from the transmission network terminals.
- (c) Remove the two transmission network mounting screws.
- (d) Lift the transmission network out of the telephone baseplate.
- (e) Remove the two transmission network standoffs.
- (f) Replace the transmission network, and place the two transmission network standoffs into position over the screw holes in the baseplate (Figure 7).

- (g) Position the transmission network in the baseplate with the screw holes located over the transmission network standoffs.
- (h) Install the two transmission unit screws to secure the transmission network and standoffs to the baseplate.
- (i) Connect the wires to the transmission network terminals (Figure 8, 9, or 10).
- (j) Reassemble the telephone housing as instructed in paragraph 4.13.

NOTE: Kit HH-880121-1 can be used to install the HB-1055-A transmission network into Type 183 telephones equipped with a D-38387-C transmission network.

#### Housing Installation

4.13 To install the housing, proceed as follows:

- (a) Place the housing in position on the telephone baseplate.
- (b) Install the two housing securing screws located on the bottom of the housing (Figure 6).

#### Radio Frequency Suppression

4.14 Effective suppression of radio signals can be obtained by connecting three 0.03-microfarad ceramic capacitors in telephones with a self-compensating network and one 0.03-microfarad capacitor in telephones that are manually adjusted.

4.15 For self-compensating transmission networks having spanish terminals (Figure 7), connect the capacitors between terminals 23 and 4, 2 and 5 and 5 and 1.

4.16 For self-compensating transmission networks having screw terminals (Figure 9), connect the capacitors between terminals 2 and 4, 3, and 5 and 5 and 1.

4.17 For manually-adjusted telephones (Figure 10), connect a 0.03-microfarad capacitor across terminals 6 and 9 or across the transmitter terminals in the handset, whichever is more convenient.

4.18 A suitable capacitor is the D-68782-AU ceramic 0.03-microfarad ( $\pm 20$  per cent) 500 WV. The leads should be insulated to within one-half inch of the ends with 0.042-inch I.D. sleeving (D-542410-A).



TABLE 1. RINGER CONNECTIONS.

TYPE OF RINGING OPTION	TYPE OF DIAL	TRANSMISSION NETWORK TERMINALS					
		RINGER LEADS				CAPACITOR LEADS	
		RED	GRN	BLK	BLU		
		2,200 OHMS					
Metallic (Bridged) Ringing	Standard	10	6	NC	NC	8	6
Grounded (Divided) Ringing L2 (+Tip) to Ground	Standard	8	*	NC	NC	8	6
Ground (Divided) Ringing L1 (-Ring) to Ground	Standard and SATT	10	6	NC	NC	*	6
Metallic Bridged Ringing	SATT	10	6	NC	NC	8	6
Grounded (Divided) Ringing L2 (+Tip) to Ground	SATT	8	6	NC	NC	*	6
ANI Service Tip Party		6	*	21	NC	8	6

\* When any connections are made to ground, use an HD-150047 Dracon connector.

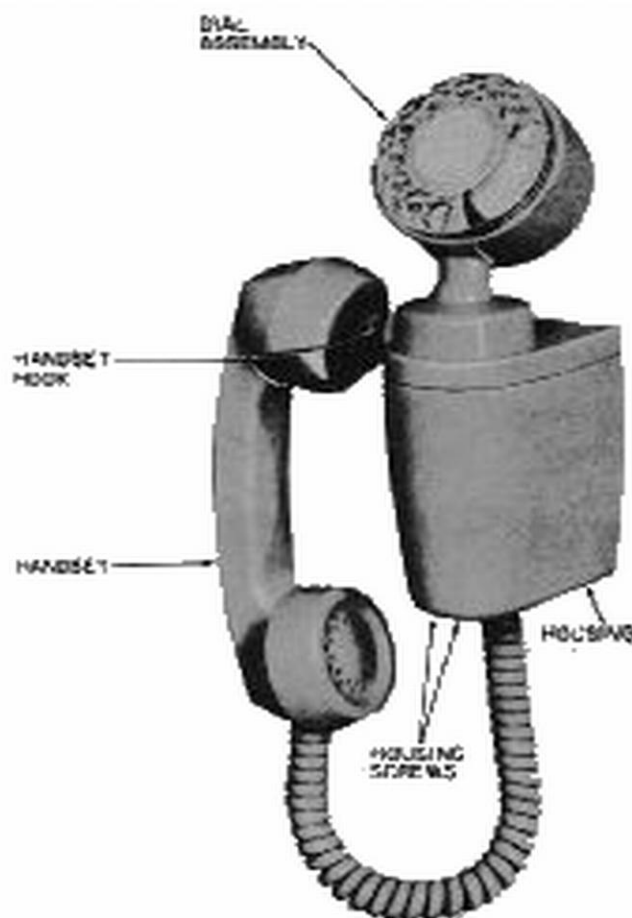


Figure 1. Type 183 Telephone.

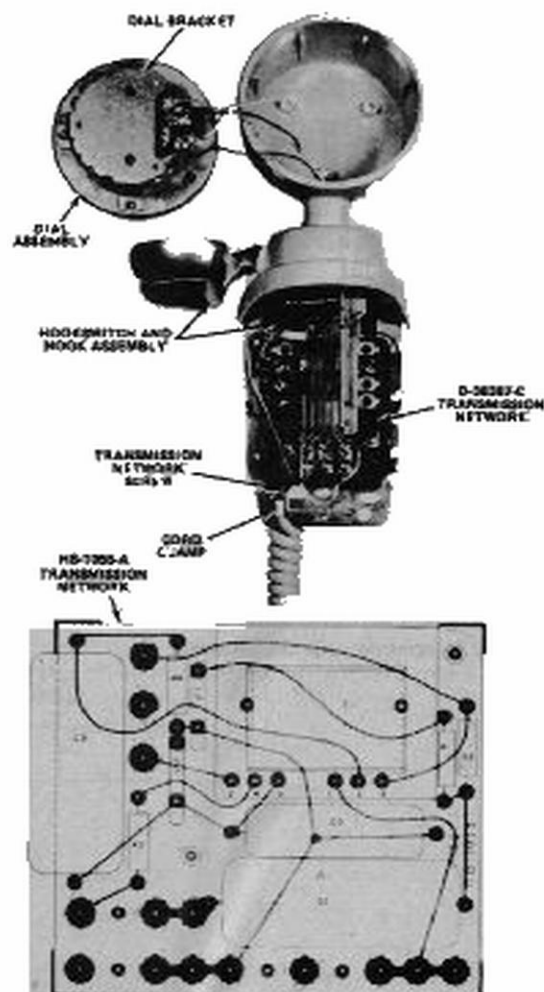


Figure 2. Front View of Type 183 Telephone With Dial Assembly and Housing Removed.

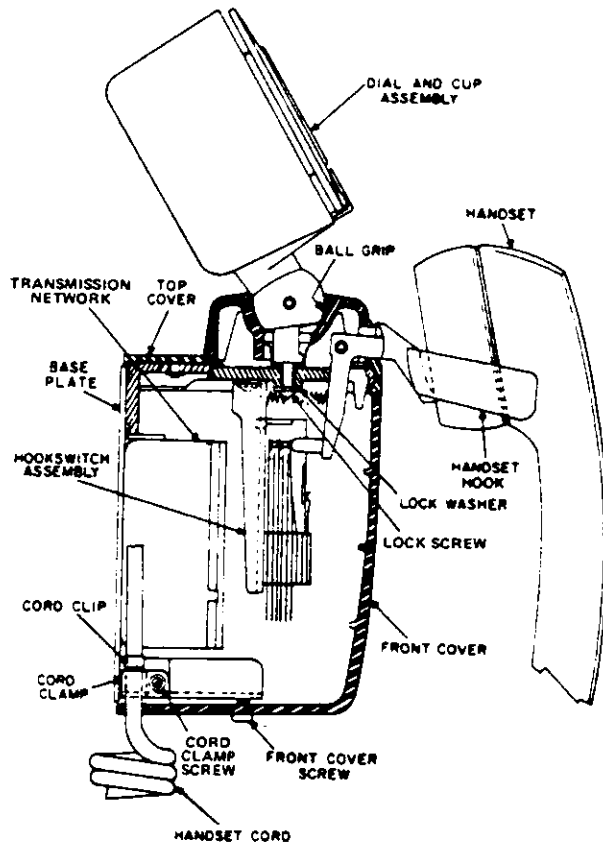


Figure 3. Potted Self-Compensating Type 183 Telephone – Cross Section.

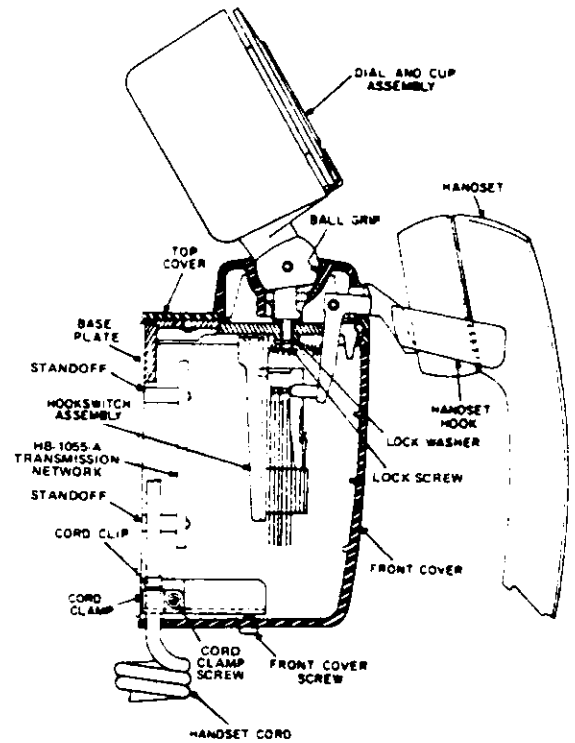


Figure 4. Mounted Self-Compensating Type 183 Telephone – Cross Section.

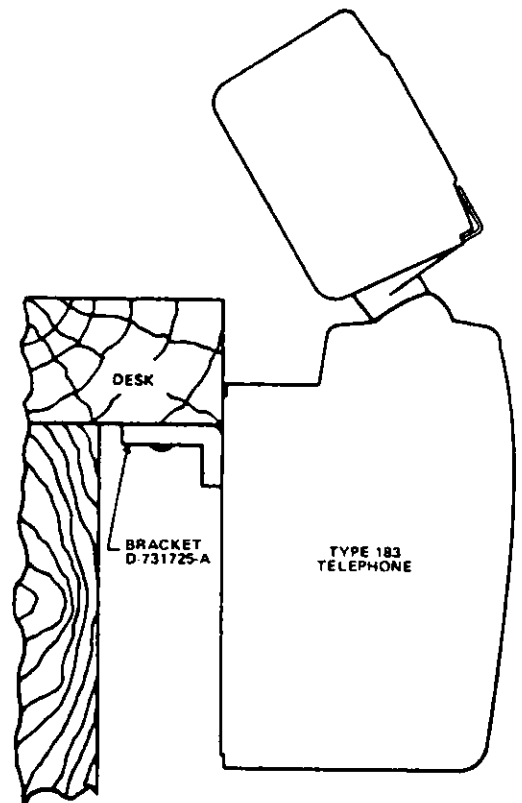


Figure 5. Special Desk-Top Mounting.



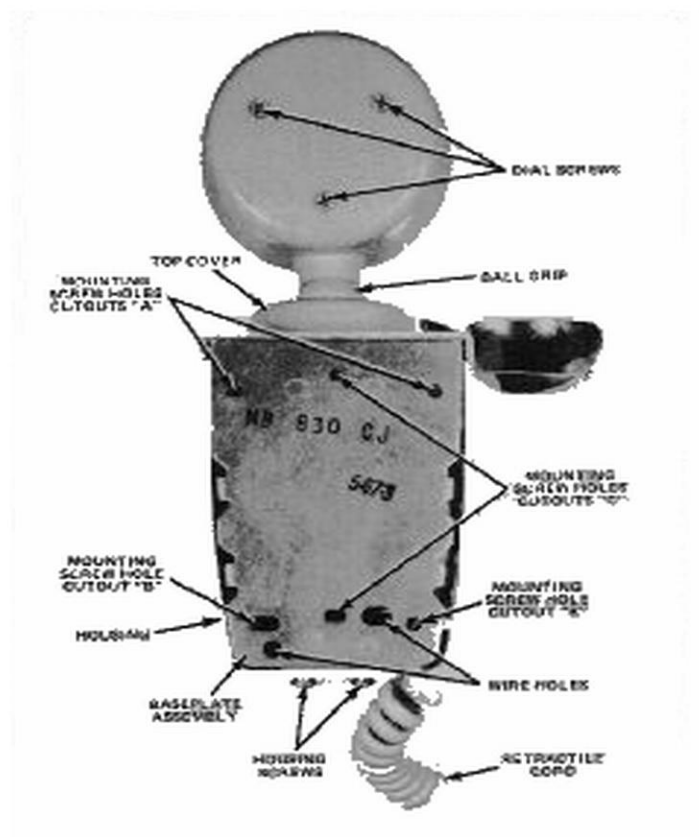


Figure 6. Rear View of Type 183 Telephone.

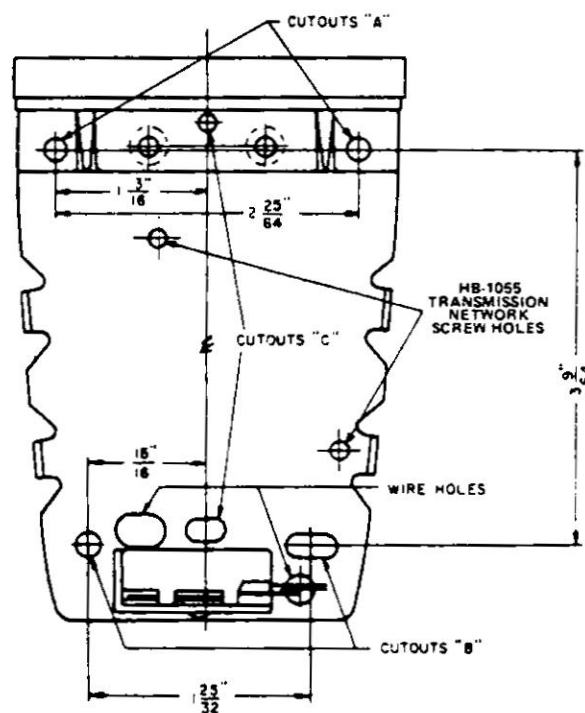


Figure 7. Baseplate Diagram.



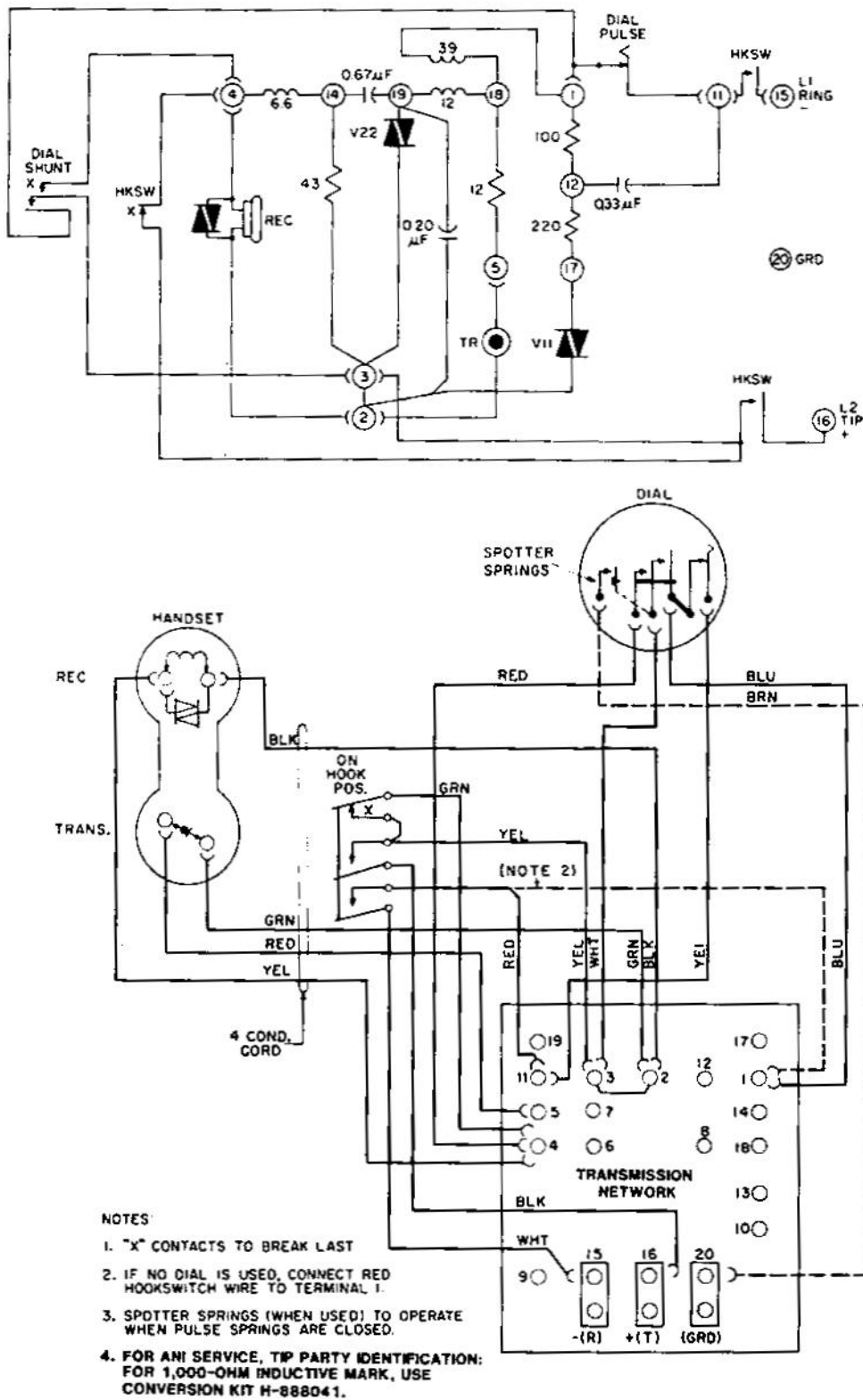


Figure 9. Schematic and Wiring Diagram for Self-Compensating Type 183 Telephone Equipped With D-38387-C Transmission Network.



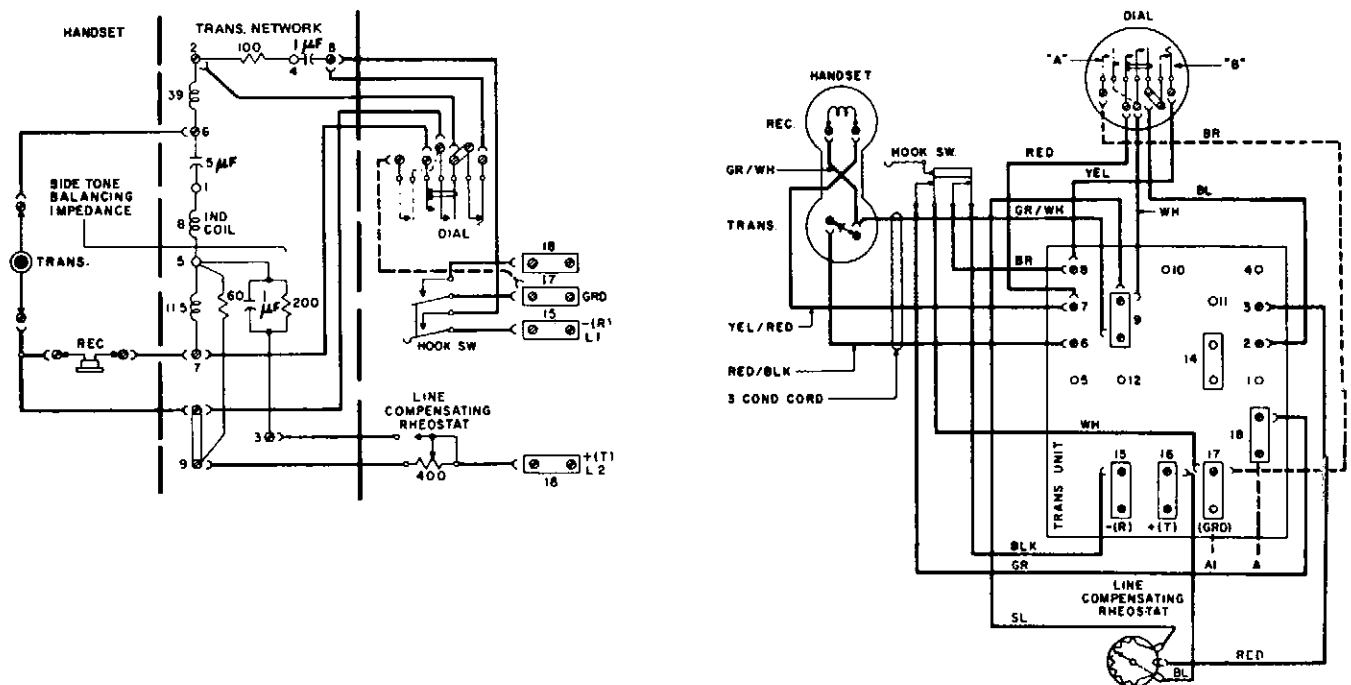


Figure 10. Schematic and Wiring Diagram for Manually-Adjusted Type 183 Telephone.

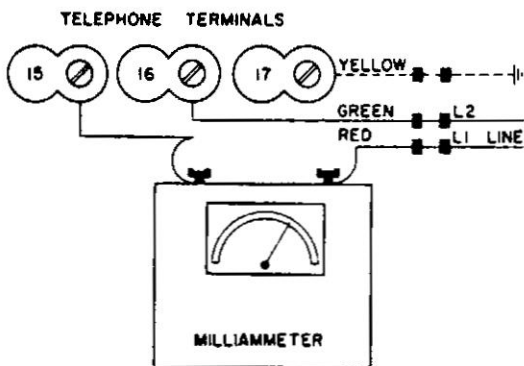


Figure 11. Milliammeter Connection.

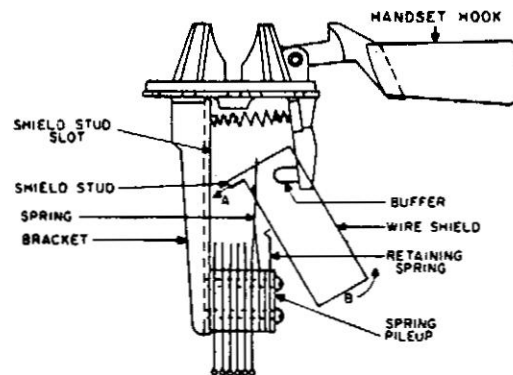


Figure 13. Hookswitch Wire Shield Removal.

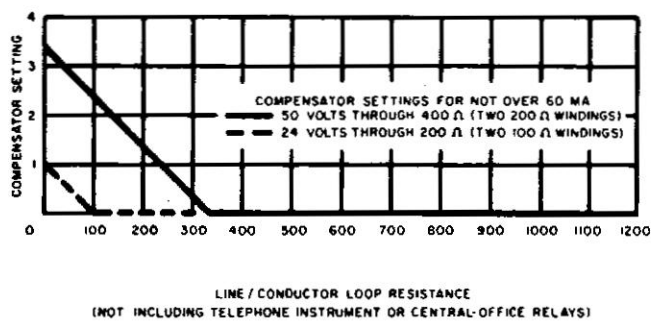


Figure 12. Line/Conductor Loop Resistance.

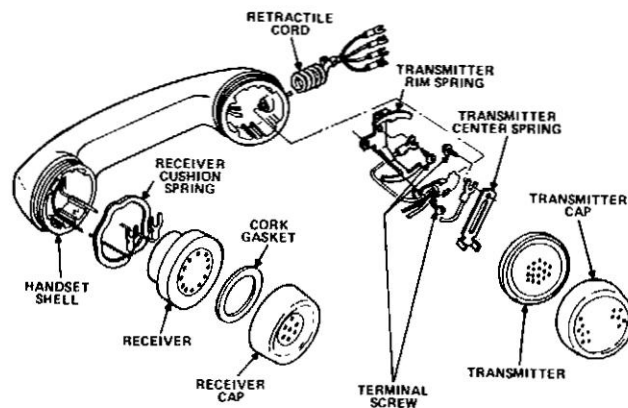


Figure 14. Exploded View of Handset.