

DECO-TEL SPECIALTY MODELS
SHOP PROCEDURE

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	Transmitter Assembly Disassembly	20	1.	GENERAL
	Housing and Column	20		1.01 This section is for repair shop use, and presents dis-
	Disassembly of Base Assembly	20		assembly and assembly procedures, maintenance informa-
	Platform Removal	20		tion, adjustment procedures, and replacement parts listed
	Earpiece and Line Cords	20		for the DECO-TEL specialty telephones manufactured by
	Dial and Suppressor Assembly	20		American Telecommunications Corporation. The models
	Hookswitch Assembly	20		are the Cradlephone, Chestphone, Candlestick, and Mickey
	Ringer	20		Mouse telephones.
	Transmission Unit	20		1.02 The disassembly and assembly procedures are for
7.	CANDLESTICK ASSEMBLY	20		complete disassembly and assembly. For partial disassembly
	Transmission Unit	20		and assembly, follow only those steps that are necessary.
	Ringer	21		1.03 As an aid, the disassembly and assembly procedures,
	Hookswitch Assembly	21		parts lists, and exploded views are keyed together in that
	Dial and Suppressor Assembly	21		

the item numbers in the parts lists, and the callouts in the exploded views are the same.

CAUTION: Care is to be taken during disassembly and assembly to avoid damage to the decor items.

1.04 The assembly and disassembly procedures are written for the present D series (Figures 1 through 8 and Tables 1 through 8) of the telephones. An exploded view and parts list (Figures 9 and 10, Tables 9 and 10) are provided for the earlier G series (date coded earlier than 142000).

1.05 This section is reissued to include maintenance information for the Mickey Mouse Telephone and also the Type 151 Mini Ringer. Due to the extensive changes involved, marginal arrows are omitted. Remove the previous issue of this section from the binder or microfiche file and replace it with this issue.

2. CRADLEPHONE DISASSEMBLY

2.01 For disassembly of the base, hookswitch actuator, and removal of the apparatus assembly and dial, refer to Figure 1 and Table 1. Use Figure 2 and Table 2 for disassembly of the apparatus assembly. An exploded view and parts list of the handset are shown in Figure 3 and Table 3.

Base Decor

2.02 Remove the base decor (3) as follows:

- (a) With the dial forward, place the cradlephone on its back.
- (b) Remove the bottom cover (1) by removing the four hex-head screws (2) and the handset cord grommet (25) from the notch in the bottom cover.
- (c) Remove a wooden base decor by removing the four Phillips head screws (4) and washers (5), or a decorative frame and inserts by removing the four screws (4).

Apparatus Assembly Removal

2.03 Remove the apparatus assembly (6) by removing the four screws (7) that hold the base plate (Figure 2, Item 1) and carefully lifting the assembly out of the base and dial plate assembly (8). Be careful, the dial leads are attached. Disassembly of the apparatus assembly is covered in paragraph 2.07.

Hookswitch Actuator

2.04 The hookswitch actuator is disassembled as shown in Figure 1 as follows:

- (a) Remove the coil spring (9).
- (b) Remove the actuator spreader (10) by removing the two screws (11) and slipping it loose from the actuator assembly (12) by moving it to the left and down.

- (c) Remove the actuator assembly (12) from the base by unsnapping it from the ribs in the base.
- (d) Set the telephone upright.
- (e) Loosen the two nuts (14) and lift out the hanger assembly (13).

2.05 Remove the hanger bracket decor by lifting off the two O-rings (16), the hanger guide bracket (18), and the two guide sleeves (19). Complete the disassembly of the hanger assembly by removing the grommets (17), bushings (15), nuts (14), and the decor from the bracket.

Dial

2.06 To remove the dial (20), disconnect the dial leads from the transmission unit, and remove the three screws (21). Lift out the dial spacer (22).

Apparatus Plate Assembly

2.07 Disassemble the apparatus plate assembly (6) as shown in Figure 2 as follows:

- (a) Carefully cut the cable tie.
- (b) Remove the hookswitch (2) by removing the two screws (3) and disconnecting the leads from the transmission unit (6).
- (c) Remove the ringer (4) by disconnecting the leads from the transmission unit and removing the three screws (5 and 3).
- (d) Disconnect the remaining leads from the transmission unit, remove the three screws (3) and unsnap the spacer (7) from the transmission unit.
- (e) Release the strain relief clamp of the line cord (8) and handset cord (Figure 3) from the baseplate (1).

Handset

2.08 Figure 3 and Table 3 are used for the disassembly of the handset. Remove the handset cord (1) as follows:

- (a) Unscrew the receiver cap (2) and disconnect the white leads from the receiver unit (3).
- (b) Unscrew the transmitter cap (4) and disconnect the leads (25 and 26) from the transmitter unit (5).
- (c) Remove the cotton from the transmitter and receiver shells.
- (d) Remove the three screws (7) from the lower transmitter shell (6).
- (e) Slide the insulators (9) off the midspan connectors (8) and disconnect the leads.
- (f) Remove the cord retaining screw (10) and pull the cord out.

2.09 Complete the disassembly of the handset as follows:

- (a) Remove the horn (11) from the lower transmitter shell (6) by removing the pal nut (12).
- (b) Remove the upper transmitter shell (13) from the

- transmitter tube assembly (14) by removing the pal nut (12).
- (c) Remove the receiver shell (15) from the receiver tube assembly (16) by removing the pal nut (17) or the screws (18) and washer (19).
- (d) Remove the decorative nuts (20) and screw (21), and pull the tube assemblies out from the handle (22).

3. CRADLEPHONE ASSEMBLY

Handset

3.01 Assemble the handset (23, Figure 1) as follows (Figure 3 and Table 3):

- (a) Assemble the upper transmitter shell (13) to the transmitter tube assembly (14) with the pal nut (12).
- (b) Assemble the receiver shell (15) to the receiver tube assembly (16) using the pal nut (17) or the washer (19) and two screws (18).
- (c) Place plastic tubing over the long white (receiver) leads of the handset cord (1).
- (d) Insert the RED and BLK leads of the handset cord into the transmitter tube assembly and down through the "view-port".
- (e) Insert the WHT leads through the transmitter tube assembly, handle (22), and receiver tube (16). Push the wires down through the "view-port".
- (f) Insert and tighten the cord retaining screw (10).
- (g) Assemble the receiver tube assembly, handle, and transmitter tube assembly; and secure with the screw (21).
- (h) If necessary assemble the gaskets (23 and 24) into transmitter cap (4) and receiver cap (2), respectively.
- (i) Complete the receiver end by connecting the white leads to the receiver (3), inserting cotton into the cord entry cavity, and screwing on the receiver cap (2).
- (j) Assemble the lower transmitter shell (6) to the horn (11) with the pal nut (12).
- (k) Snap the transmitter ring wires (25 and 26) onto the transmitter (5) and pass the leads up through the horn.
- (l) Slip the insulators (9) over the leads, and using the midspan connectors (8), join the leads from the transmitter to the leads from the handset cord. Slide the insulators over the connectors.
- (m) Screw the transmitter cap (4) onto the horn and join the transmitter shells together using three screws (7).
- (n) Screw the nuts (20) over the "view-ports."

Apparatus Plate Component Assembly

3.02 Using Figure 2 and Table 2, assemble the transmission unit (6) to the baseplate (1) as follows:

- (a) Snap the support spacer (7) onto the transmission unit.

- (b) Secure the transmission unit to the baseplate (1) with two screws (3).

3.03 Install the handset cord as follows:

- (a) Hook the handset cord strain relief clamp to the baseplate.
- (b) Connect the leads to the transmission unit as follows:

- (1) RED to terminal 5.
- (2) BLK to terminal 23.
- (3) WHT leads to terminals 23 and 4.

3.04 Install the line cord (8) as follows:

- (a) Pass the line cord up through the large hole in the baseplate (1) and through the hole in the bracket.
- (b) Hook the strain relief clamp to the baseplate.
- (c) Connect the leads to the transmission unit as follows:

- (1) RED to terminal 10.
- (2) GRN to terminal 8.
- (3) YEL to terminal 9.

3.05 Install the ringer (4) as follows:

- (a) Fold the taped BLU and BLK leads under the ringer.
- (b) Fasten the ringer to the baseplate with three screws, two (5) and one (3).
- (c) Connect the leads to the transmission unit as follows:

- (1) RED to terminal 15.
- (2) GRN to terminal 16.

(d) Connect the capacitor between terminals 9 and 16.

3.06 Install the hookswitch (2) as follows:

- (a) Connect the leads to the transmission unit as follows:

- (1) ORN to terminal 6.
- (2) WHT to terminal 8.
- (3) RED to terminal 2.
- (4) BLK to terminal 11.
- (5) YEL to terminal 10.
- (6) GRN to terminal 13.
- (7) BRN to terminal 23.

- (b) Secure the hookswitch to the bracket with two screws (3).

Dial

3.07 For the remainder of the assembly procedure, use Figure 1 and Table 1. Place the dial spacer (22) and the dial

(20) into the base and dial plate assembly (8) and secure with the three screws (21). The connections are made as part of the final assembly (paragraph 3.09).

Hookswitch Actuator Assembly

3.08 Assemble the hookswitch actuator assembly as follows (Figure 1):

(a) On each actuator rod of the hanger assembly (13), place the following:

- (1) Hanger guide nut (14).
- (2) Nut bushing (15).
- (3) Grommet (17).

(b) Assemble the following onto the aluminum tubes of the base and dial plate assembly (8):

- (1) Guide sleeve (19).
- (2) Guide bracket (18).
- (3) O-ring (16).

(c) Place the hanger assembly (13) into the aluminum tubes and tighten the nuts (14).

(d) Snap the actuator assembly (12) into place in the base and dial plate assembly.

(e) Hook the actuator spreader (10) to the actuator assembly.

(f) Attach the actuator spreader to the actuator rods with the screws (11), and insert the coil spring (9).

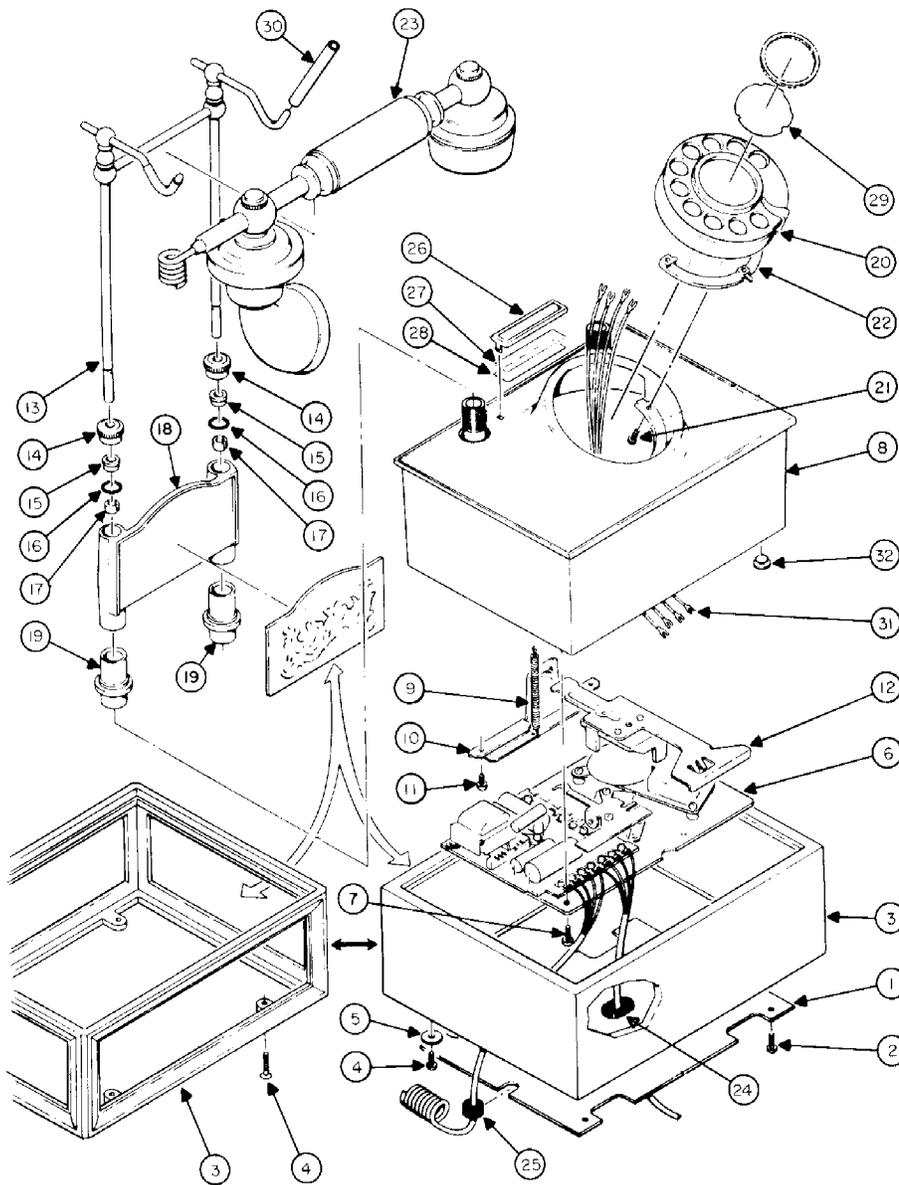


Figure 1. Cradlephone.

Table 1. Cradlephone Parts List.

ITEM NO.	DESCRIPTION	PART NUMBER	QTY
1	Bottom Cover	1155	1
2	Screw, HH Slotted, 6 x 1/4	7100	4
3	Decor	See Table 6	1
4	Screw, HWH Slotted, 7-19 x 3/8	7136	4
5	Washer	7111	4
6	Apparatus Assembly	2188- See Table 2	1
7	Screw, PH, 4-40 x 5/16	7121	4
8	Base and Dial Plate Assembly		1
	Black	1180-B	
	White	1180-W	
9	Coil Spring	1158	1
10	Actuator Spreader	1150	1
11	Screw, PH Phillips, 4-40 x 5/16	7127	2
12	Actuator Assembly	1156	1
13	Hanger Assembly	1008-4	1
14	Hanger Guide Nut	1006	2
15	Hanger Guide Nut Bushing	1063	2
16	"O" Ring	7205	2
17	Actuator Rod Grommet	1064	2
18	Hanger Guide Bracket		1
	Black	1032-B	
	White	1032-W	
19	Guide Sleeve	1007	2
20	Dial	D-84870-C	1
21	Screw, PH, 4-36 x 3/8	7114	3
22	Dial Spacer	1051	1
23	Handset		1
	Black	1010-1B	
	White	1010-1W	
24	Rubber Grommet	7204	1
25	Rubber Grommet	7207	1
26	Number Card Holder	1030	1
27	Number Card Window	1031	1
28	Number Card	1018	1
29	Dial Insert Card		1
	White	2201-1	
	Black	2201-2	
30	Hanger Assembly Tubing	2204	2
31	Harness Assembly	2199	1
32	Rubber Foot	2212	4

Final Assembly

3.09 Connect the dial leads to the transmission unit as follows:

- (a) YEL to terminal 11.
- (b) BLU to terminal 1.
- (c) RED to terminal 4.
- (d) WHT to terminal 2.

3.10 Secure the apparatus assembly (6) to the base and dial plate assembly (8) with four screws (7).

3.11 Attach a wood decor to the base and dial plate with four washers (5) and screws (4). Attach a decorative frame and inserts to the base and dial plate with four screws (4).

3.12 Complete the assembling of the cradlephone as follows:

- (a) Pass the line cord through the grommet (24) in the bottom cover (1), and slide the grommet (25) on the handset cord into the slot on the left side of the bottom cover.
- (b) Attach the bottom cover to the base plate with four screws (2).

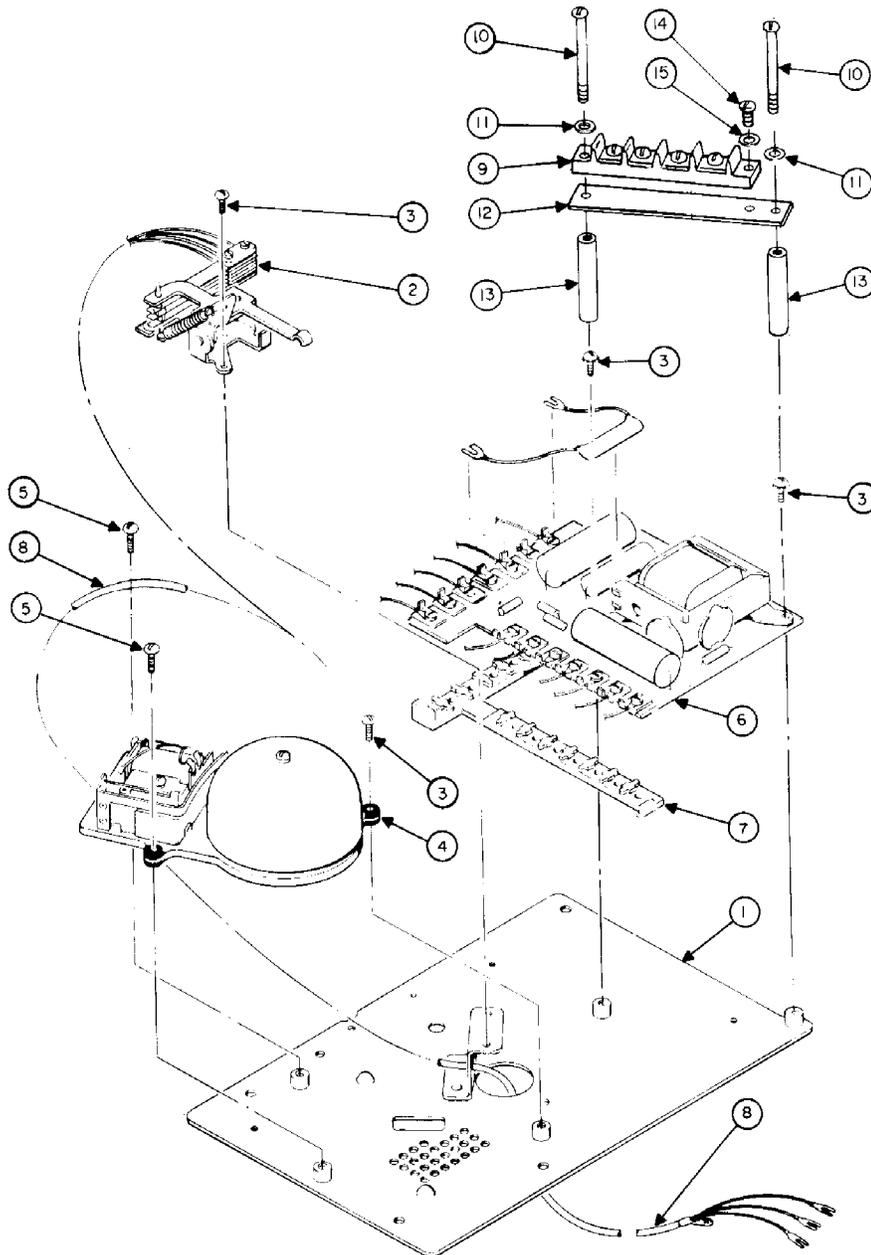


Figure 2. Apparatus Assembly.

Table 2. Apparatus Assembly Parts List.

ITEM NO.	DESCRIPTION	PART NUMBER	QTY
1	Baseplate DAG Models other DA Models	2185-1 2185-2	1
2	Hookswitch	D-735584-A	1
3	Screw, RH, 6-40 x 5/16	7118	5 [†]
4	Ringer with Capacitor	D-56626-ASLR	1
5	Screw, RH, 6-40 x 7/16	7117	2
6	Transmission Unit	WA-1154-A**	1
7	Support Spacer	D-65573-A	1
8	Line Cord Black Beige White	7024-1 7024-2 7024-3	1
9	Terminal Strip *	7027	1
10	Screw, PHM, 6-40 x 1-3/4 *	7160	2
11	Lockwasher, No. 6 *	7147	6
12	Mounting Plate *	2224	1
13	Spacer *	7158	2
14	Screw, PHM, 4-40 x 1/2 *	7162	1
15	Lockwasher, No. 4 *	7161	1

NOTES: * Touch Calling version only.

** For Touch Calling version, use WA-1155-A or WA-1154-A
with the D-68849-A capacitor removed.

† Quantity of three for Touch Calling version.

Table 3. Cradlephone Handset Parts List.

ITEM NO.	DESCRIPTION	PART NUMBER	QTY
1	Cord Black White	7023-1 7023-3	1
2	Receiver Cap Black White	1025-B 1025-W	1
3	Receiver	7022	1
4	Transmitter Cap	1012	1
5	Transmitter	7021	1
6	Lower Transmitter Shell	1013	1
7	Screw, Fil H Brass, 4-40 x1/4	7129	3
8	Connector	2169	2
9	Insulator	2203	2
10	Screw, Type F, 8 x 3/16	7132	1
11	Horn Black White	1011-B 1011-W	1
12	Pal Nut	7130	2
13	Upper Transmitter Shell	1014	1
14	Transmitter Tube Assembly	1019	1
15	Receiver Shell	1024	1
16	Receiver Tube Assembly	1022	1
17	Pal Nut	7133	1
18	Screw, Fil Hd, 4 x 5/16	7128	2
19	Washer	1040	1
20	Nut	1017	2
21	Screw, Fil Hd, 4 x 5/16	7128	1
22	Handle Black White	1021-B 1021-W	1
23	Transmitter Gasket	1052	1
24	Receiver Gasket	1065	1
25	Transmitter Ring Assembly	2197	1
26	Transmitter Ring Assembly	2198	1

4. CHESTPHONE DISASSEMBLY

4.01 For disassembly of the chest, hookswitch actuator, base, apparatus assembly, dial, or Touch Calling unit, refer to Table 4 and Figure 4. Use Figure 2 and Table 2 for the disassembly of the apparatus assembly. Figure 5 and Table 5 are used in disassembling the handset.

Chest Disassembly

4.02 Remove the chest as follows:

- (a) Remove the four screws (2) which hold on the bottom cover (1), and lift the bottom cover off the legs.
- (b) Remove the four screws (4) and washers (5) which secure the chest (3), and lift the rest of the telephone set out of the chest.

4.03 Disassemble the chest (3) as follows:

- (a) Remove the liner (32) from the cover of the chest (3).
- (b) Remove the hinge from the cover and the base of the chest by removing the 10 screws. See Figure 6 and Table 6.
- (c) If necessary, remove the leather panels.

Apparatus Assembly Removal

4.04 Remove the apparatus assembly (6) by removing the four screws (7) which hold the baseplate (1, Figure 2), and carefully lifting the assembly out of the base frame (8). Be careful, the dial or Touch Calling leads are connected. The apparatus plate for the dial version is disassembled as described in paragraph 2.07. The Touch Calling version is disassembled as described in paragraph 4.09.

Hookswitch Actuator

4.05 Disassemble the hookswitch actuator assembly as follows:

- (a) Remove the two actuator stops (9) by removing the screw (10) from each stop.
- (b) Remove the actuator lever stop (11) by removing the screw (10).
- (c) Release the coil spring (12) from the actuator lever assembly (13).
- (d) Lift out the actuator lever assembly (13), the coil spring (12), and the two actuator caps (14).

Dial Assembly Removal

4.06 If the Chestphone is equipped with a dial, remove the dial (15) as follows:

- (a) Disconnect the dial leads from the transmission unit.
- (b) Remove the dial support plate (16) from the base

cover (20) by removing three screws (2) and pushing the dial support plate out of the base cover (20).

- (c) Remove the dial (15) and dial spacer (18) from the dial support plate by removing the three screws (17).
- (d) The number insert (19) peels off of the dial support plate.

Touch Calling Unit Removal

4.07 If the Chestphone is equipped with a Touch Calling unit, remove the Touch Calling unit (35) as follows:

- (a) Disconnect the Touch Calling unit leads from the transmission unit and terminal strip.
- (b) Remove the Touch Calling unit support plate (36) by removing the three screws (2) pushing the support plate out of the base cover (20).
- (c) Remove the Touch Calling unit (35) from the support plate (36) by removing the four screws (37).
- (d) Remove the brackets (38) from the Touch Calling unit by removing the screws (39).

Base

4.08 To remove the base cover (20) from the base frame (8), remove the screw (21), and press in on the hooks that hold the cover to the frame. Release the cord outlet wheel (22) from its retainer in the base, and the cord wheel (23) by removing the pal nut (24).

4.09 Disassemble the Touch Calling apparatus plate assembly as shown in Figure 2 as follows:

- (a) Carefully cut the cable tie.
- (b) Remove the hookswitch (2) by removing the two screws (3) and disconnecting the leads from the transmission unit (6) and terminal strip (9).
- (c) Remove the ringer (4) by disconnecting the leads from the transmission unit and removing the three screws, one (3) and two (5).
- (d) Disconnect the remaining leads from the transmission unit and terminal strip.
- (e) Remove the two screws (10) and washers (11) which mount the terminal strip (9), mounting plate (12), spacers (13) and transmission unit (6). Unsnap the spacer (7) from the transmission unit.
- (f) Release the strain relief clamp of the line cord (8) and handset cord from the baseplate (1).

Handset

4.10 Disassemble the handset (25, Figure 4) as follows:

- (a) Remove the two screws (2, Figure 5) to release the cover (1).
- (b) Remove the three screws (4) and the receiver cover (3).
- (c) Disconnect the handset cord white leads from the receiver (5).
- (d) Disconnect the red and black leads from the connectors (6).

- (e) Remove the three screws (4) and the transmitter cover (7).
- (f) Lift out the transmitter (8) and disconnect the leads (9 and 10).

4.11 If it is necessary, the handset cord (11) may be removed from the transmitter cover (7), the O-rings (12 and 13) from the base (14), and the gaskets (15) from the transmitter and receiver.

5. CHESTPHONE ASSEMBLY

5.01 For assembly of the base, dial or Touch Calling unit, hookswitch actuator, and the final assembly, refer to Figure 4 and Table 4. For assembly of the handset, refer to Figure 5 and Table 5. Use Figure 2 and Table 2 for assembling the apparatus assembly.

Base

5.02 Assemble the base as follows:

- (a) Place the cord wheel (23) on its axle and secure with the pal nut (24).
- (b) Engage the cord outlet wheel (22) in its retainers.
- (c) Set the base cover (20) over the base frame (8), and press them together.
- (d) Secure the frame and cover together with the screw (21).

Handset

5.03 To completely assemble the handset, proceed as follows (see Figure 5):

- (a) Place the O-rings (12 and 13) into the base (14).
- (b) Snap the leads (9 and 10) onto the transmitter (8), and place the transmitter in the base.
- (c) Place the gasket (15) over the transmitter, place some cotton alongside the transmitter, and install the transmitter cover (7) with three screws (4).
- (d) Connect the transmitter leads to the red and black leads of the handset cord using the connectors (6).
- (e) Place the gasket (15) over the receiver (5), place some cotton alongside the receiver, and connect the white leads of the handset cord to the receiver. Place the receiver in the base.
- (f) Install the receiver cover (3) with three screws (4), and run the leads as shown by markings in the base.
- (g) Place the cover (1) on the base and secure with the two screws (2).

Apparatus Plate Assembly

5.04 The assembly of the dial version apparatus plate (6) is as described in paragraphs 3.02 through 3.06. The only change is that it is necessary to insert the handset cord through the hole in the base cover (20) before attaching the cord to the baseplate.

5.05 Using Figure 2 and Table 2, assemble the Touch Calling transmission unit (6) to the baseplate (1) as follows:

- (a) Snap support spacer (7) onto the transmission unit work.
- (b) Assemble the following on the two screws (10):
 - (1) Washers (11).
 - (2) Terminal strip (9).
 - (3) Mounting Plate (12).
 - (4) Spacers (13).
- (c) Place the assembly to step (2) over the induction coil of the transmission unit and secure the transmission unit to the baseplate with the screws.
- (d) Insert the screw (14) and washer (15) to secure the terminal strip.

5.06 Install the handset cord of a Touch Calling set as follows:

- (a) Pass the handset cord through the hole in the base cover (20).
- (b) Hook the handset cord strain relief clamp to the baseplate.
- (c) Connect the leads as follows:
 - (1) RED to transmission unit terminal 5.
 - (2) BLK to terminal strip terminal A.
 - (3) WHT leads to transmission unit terminal 2 and terminal strip terminal B.

5.07 Install the line cord (8) as follows:

- (a) Pass the line cord up through the large hole in the baseplate (1) and through the hole in the bracket.
- (b) Hook the strain relief clamp to the baseplate.
- (c) Connect the leads to the transmission unit as follows:
 - (1) RED to terminal 10.
 - (2) GRN to terminal 8.
 - (3) YEL to terminal 9.

5.08 Install the ringer (4) as follows:

- (a) Fold the taped BLU and BLK leads under the ringer.
- (b) Fasten the ringer to the baseplate with three screws, two (5) and one (3).
- (c) Connect the leads to the transmission unit as follows:
 - (1) RED to terminal 15.
 - (2) GRN to terminal 16.
- (d) Connect the capacitor between terminals 9 and 16.

5.09 Install the hookswitch (2) as follows:

(a) Connect the leads to the transmission unit as follows:

- (1) ORN to terminal 6.
- (2) WHT to terminal 8.
- (3) YEL to terminal 10.
- (4) GRN to terminal 13.
- (5) BRN to terminal 23.

(b) Connect the leads to the terminal strip as follows:

- (1) RED to terminal C.
- (2) BLK to terminal D.

(c) Secure the hookswitch to the bracket with two screws (3).

Dial

5.10 If the Chestphone is equipped with a dial, assemble the dial assembly as follows (see Figure 4):

- (a) Attach a number insert (19) to the dial support plate (16).
- (b) Place the dial spacer (18) and dial (15) into the dial support plate (16), and secure with three screws (2).
- (c) Insert the dial support plate (16) into the base cover (20) and secure with three screws (2).
- (d) The dial leads are connected as part of the final assembly (paragraph 5.13).

Touch Calling Unit

5.11 If the Chestphone is equipped with a Touch Calling unit (35), assemble the Touch Calling unit assembly as follows:

- (a) Attach the brackets (38) to the Touch Calling unit (35) with the two screws (39).
- (b) Attach the Touch Calling unit and brackets to the Touch Calling unit support plate (36) with four screws (37).
- (c) Insert the support plate (36) into the base cover (20) and secure with three screws (2).
- (d) Connect the Touch Calling unit leads as part of the final assembly (paragraph 5.14).

Hookswitch Actuator

5.12 Assemble the hookswitch actuator as follows:

- (a) Place the actuator caps (14) into the base cover (20).
- (b) Hook the coil spring (12) to the post and then to the actuator lever assembly (13).
- (c) Position the actuator lever assembly, and secure with the actuator lever stop (11) and screw (10).
- (d) Install the actuator stops (9) and secure the screws (10).

Final Assembly

5.13 Connect the dial leads to the transmission unit as follows:

- (a) YEL lead to terminal 11.
- (b) BLU lead to terminal 1.
- (c) RED lead to terminal 4.
- (d) WHT lead to terminal 2.

5.14 If a Touch Calling unit is installed, connect the leads as follows:

(a) Connect the following leads to the terminal strip:

- (1) PINK to terminal A.
- (2) SL to terminal B.
- (3) BRN to terminal C.
- (4) RED to terminal D.

(b) Connect the following leads to the transmission unit:

- (1) BLU to terminal 4.
- (2) GRN to terminal 23.
- (3) WHT to terminal 1.

5.15 Insert the apparatus assembly (6) into the base frame (8), and secure with four screws (7).

5.16 If it is necessary to assemble the chest, join the cover and the base of the chest together using the hinge and 10 screws. Attach the liner (32).

5.17 Assemble the chest (3) to the telephone as follows:

- (a) Place the base frame (8) into the base of the chest.
- (b) Secure the chest to the base frame with the four screws (4) and washers (5).
- (c) Arrange the handset cord in its channel in the base frame.
- (d) Place the bottom cover (1) on, and secure with four screws (2).

6. CANDLESTICK DISASSEMBLY

6.01 For disassembly of the candlestick telephone refer to Figures 7 and 8 and Tables 7 and 8.

Base Assembly Removal

6.02 Using Figure 7 and Table 7, remove the base assembly (1) from the housing (3) by removing the four screws (2) from the perimeter of the base assembly.

Earpiece Disassembly

6.03 Complete disassembly of the earpiece is as follows:

- (a) Unscrew the earpiece cap (4) from the earpiece housing (5).

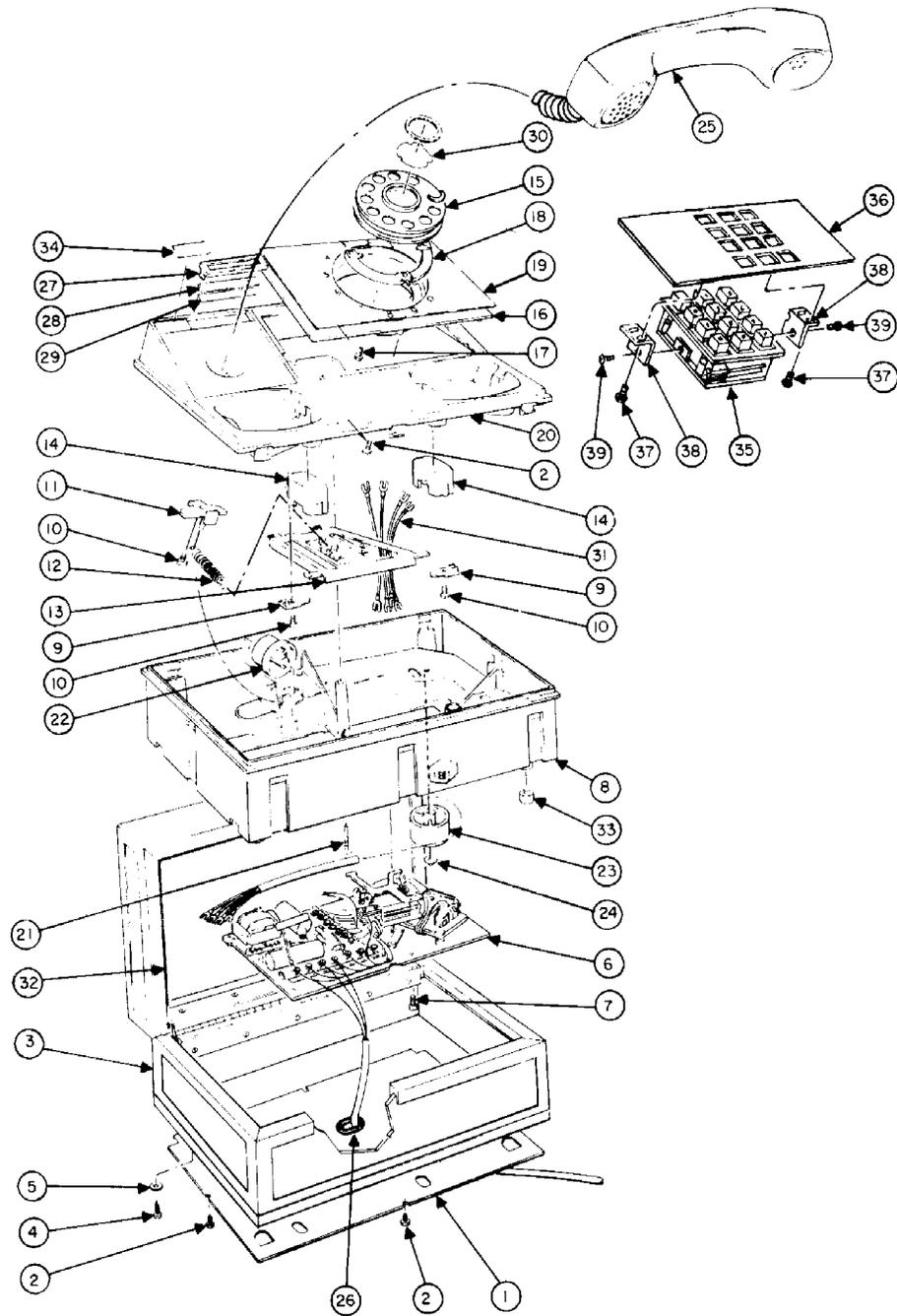


Figure 4. Chestphone.

Table 4. Chestphone Parts List.

ITEM NO.	DESCRIPTION	PART NUMBER	QTY
1	Bottom Cover	2182	1
2	Screw, HWH Slotted, 7-19 x 3/8	7136	7
3	Chest	See Table 6	1
4	Screw, HWH Slotted, 7-19 x 3/8	7136	4
5	Washer	7111	4
6	Apparatus Assembly	2188-1	1
7	Screw, PH, 4-40 x 5/16	7121	4
8	Base Frame	2101	1
9	Actuator Stop	2172	2
10	Screw, PH Phillips, 7-19 x 3/8	7137	3
11	Stop, Actuator Lever	2171	1
12	Coil Spring	2187	1
13	Actuator Lever Assembly	2186	1
14	Actuator Cap	2105	2
15	Dial †	D-84870-C	1
16	Dial Support Plate †	2140	1
17	Screw, PH, 4-36 x 3/8 †	7114	3
18	Dial Spacer †	1051	1
19	Number Insert	2006-2	1
20	Base Cover	2102	1
21	Screw, FHW, 6 x 2	7112	1
22	Cord Outlet Wheel	2165	1
23	Cord Wheel	2017	1
24	Pal Nut	7124	1
25	Handset	2074-2	1
26	Grommet	7204	1
27	Number Card Holder	1030	1
28	Number Card Window	1031	1
29	Number Card	1018	1
30	Dial Insert †		1
	Black	2201-2	
	Tan	2201-3	
31	Harness	2199	1
32	Liner	2180	1
33	Rubber Foot	2212	4
34	Insignia	2039-2	1
35	Touch Calling Unit (7020) *	D-840000-AR	1
36	Touch Calling Support Plate *	2106	1
37	Screw, PHM, 4-40 x 3/16 *	7109	4
38	Bracket *	2170	2
39	Screw *	D-762046-A	2

NOTES: * Touch Calling version only.
† Rotary dial version only.

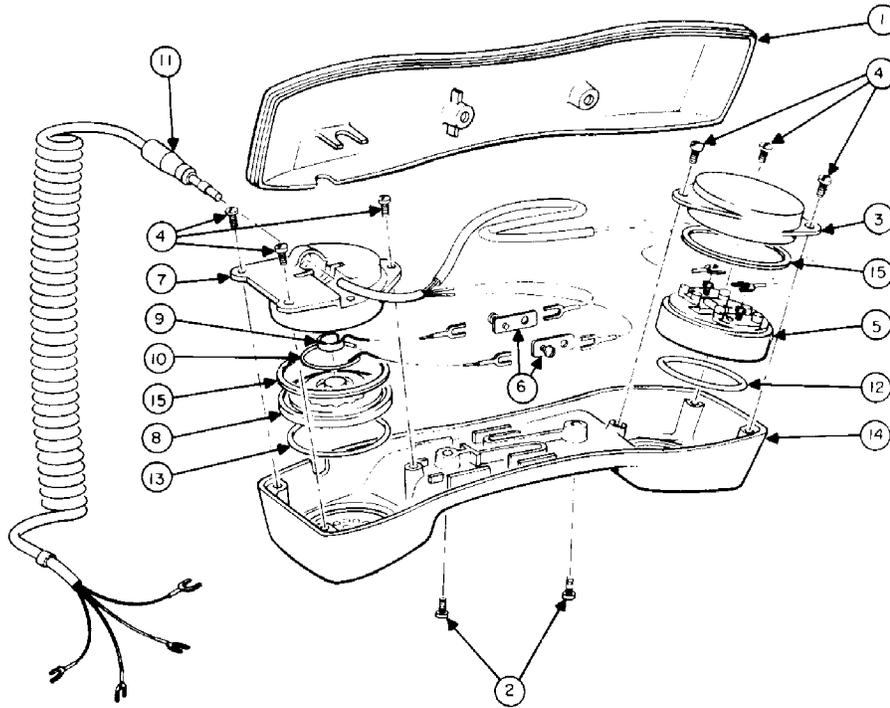


Figure 5. Chestphone Handset.

Table 5. Chestphone Handset Parts List.

ITEM NO.	DESCRIPTION	PART NUMBER	QTY
1	Cover	2010	1
2	Screw, Fil Hd, 6-32 x 7/16	7110	2
3	Receiver Cover	2032	1
4	Screw, PH, 4-40 x 3/16	7109	6
5	Receiver	2022	1
6	Connector	2196	2
7	Transmitter Cover	2031	1
8	Transmitter	7021	1
9	Transmitter Lead	2198	1
10	Transmitter Lead	2197	1
11	Cord		1
	Tan	7023-2	
	Black	7023-1	
12	"O" Ring	7203	1
13	"O" Ring	7202	1
14	Base	2009	1
15	Gasket	2075	2

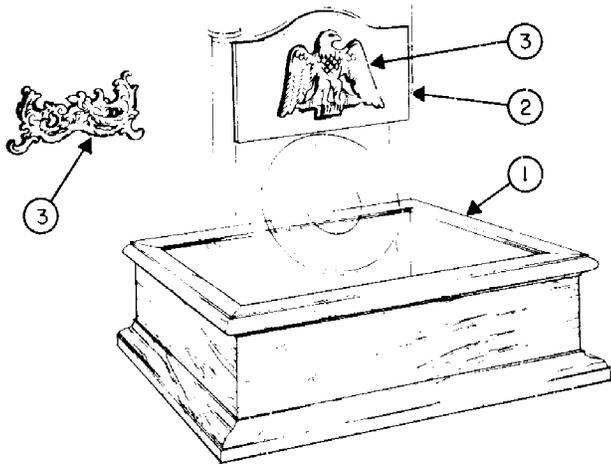


Figure 6a. Antique White and Maple.

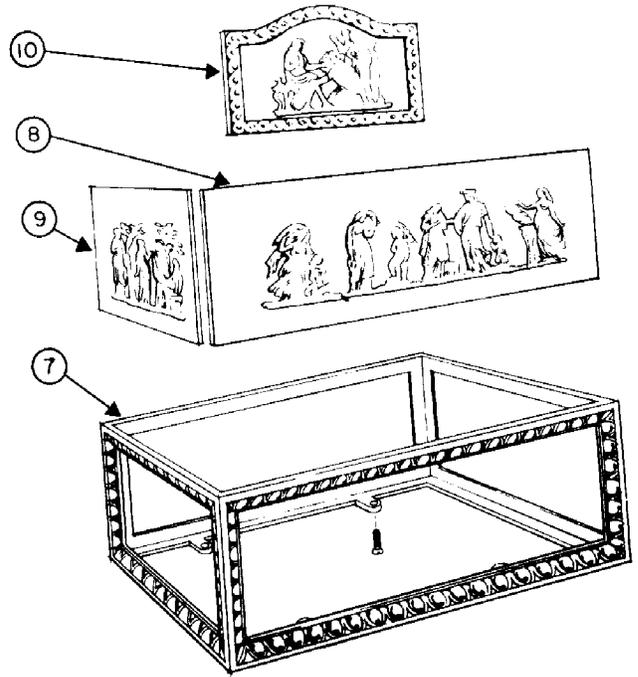


Figure 6c. White and Gold.

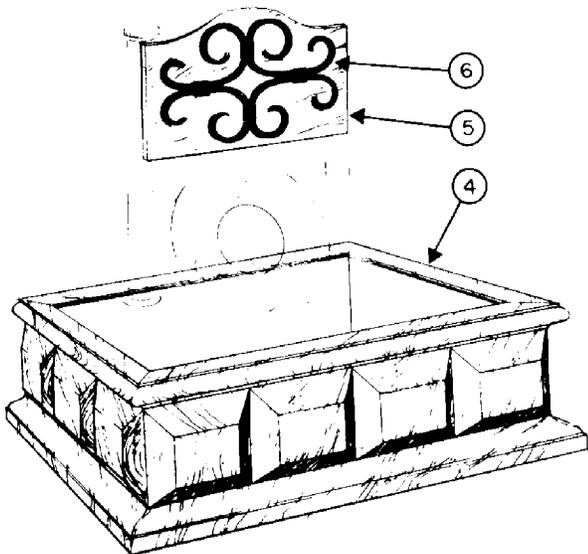


Figure 6b. Mediterranean.

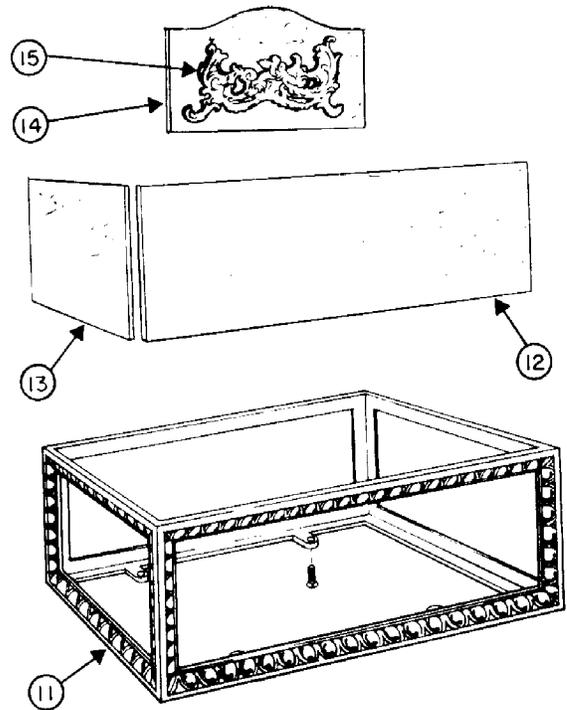


Figure 6d. Brocade.

Figure 6. Decors.

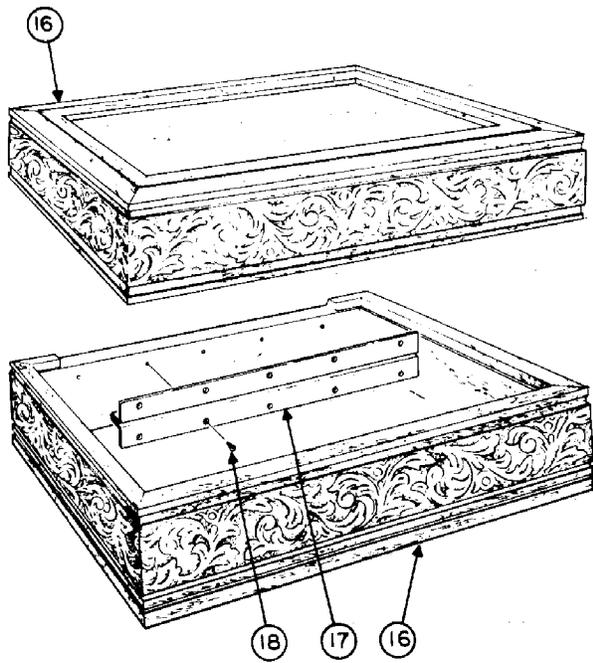


Figure 6e. Carved Walnut.

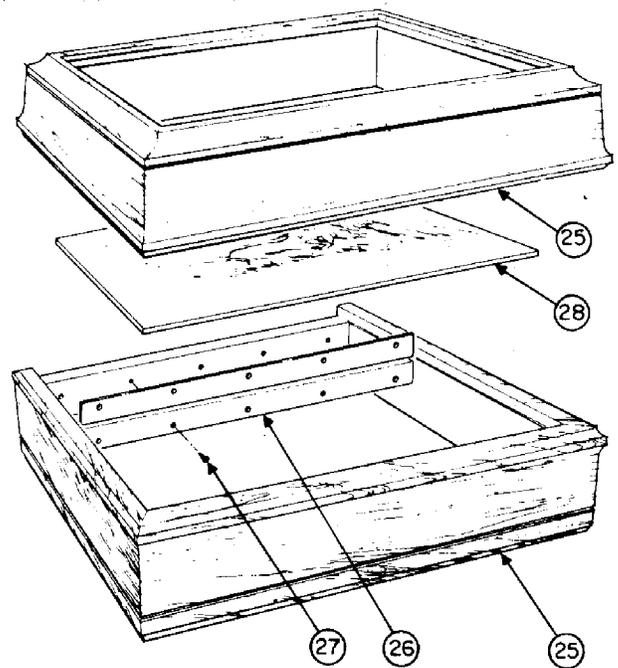


Figure 6g. Hunting Scene.

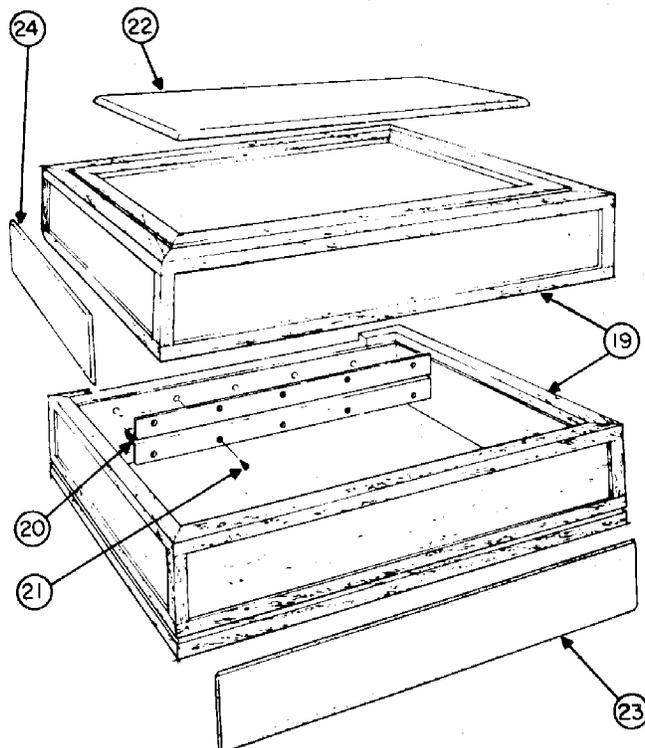


Figure 6f. Walnut with Leather Panels.

Figure 6. Decors (Continued).

Table 6. Decors.

FIG.	ITEM NO.	DESCRIPTION	PART NUMBER	QTY
6a	1	Base Maple Antique White	1310-1 1320-1	1
	2	Insert Maple Antique White	1310-2 1320-2	1
	3	Insignia American Eagle Decorative	1310-3 1320-3	1
6b	4	Base Mediterranean	1330-1	1
	5	Insert	1330-2	1
	6	Insignia	1330-3	1
6c	7	Frame Series G White Series D White Series D Gold	1000-2 1145-W 1145-G	1
	8	Panel, Front/Rear Series G White Series D White Series D Gold	1111-4 1069-1111 1069-1211	2
	9	Panel, Side Series G White Series D White Series D Gold	1111-5 1070-1111 1070-1211	2
	10	Insert Series G White Series D White Series D Gold	1111-2 1071-1111 1071-1211	1
6d	11	Frame Series G Series D	1000-1 1145-G	1
	12	Panel, Front/Rear Red/Red Brocade Green/Blue Brocade Gold/Sand Brocade	1440-2 1441-2 1442-2	2

Table 6. Decors (Continued).

FIG.	ITEM NO.	DESCRIPTION	PART NUMBER	QTY
6d	13	Panel, Side Red/Red Brocade Green/Blue Brocade Gold/Sand Brocade	1440-3 1441-3 1442-3	2
	14	Insert Red/Red Brocade Green/Blue Brocade Gold/Sand Brocade	1440-4 1441-4 1442-4	1
	15	Insignia	1320-3	1
6e	16	Chest Series G Series D	2110-1 2177-2110	1
	17	Hinge	2178	1
	18	Screw, FH, 6 x 3/8	7106	10
6f	19	Chest Series G Series D Base Only Series G	2131-6 2177-2131 3131-3	1
	20	Hinge	2178	1
	21	Screw, FH, 6 x 3/8	7106	10
	22	Panel, Top	2131-5	1
	23	Panel, Front/Rear	2131-4	4
	24	Panel, Side	2131-3	4
6g	25	Chest Series G Series D	2150-3 2177-2150	1
	26	Hinge	2178	1
	27	Screw, FH, 6 x 3/8	7106	10
	28	Plaque	2150-2	1

- (b) Lift out the receiver (6) and disconnect the two leads (9).
- (c) Unscrew the hook fitting (7) from the earpiece housing.
- (d) Remove the strain relief (8) from the earpiece (hand-set) cord (9), and pull the cord out of the earpiece housing (5) and hook fitting (7).
- (e) Unscrew the lower ferrule (10) from the earpiece housing (5).

Transmitter Assembly Disassembly

6.04 Disassemble the transmitter assembly as follows:

- (a) Unscrew the transmitter cap assembly (11) from the transmitter housing (12).

NOTE: Do not grasp the horn on the transmitter cap assembly when unscrewing the transmitter cap assembly from the transmitter housing.

- (b) Lift out the transmitter (13) and remove the snap terminal (14) and ring terminal (15). Disconnect the leads from the terminals in the base. To get to the terminals, remove the platform from the base (paragraph 6.07).
- (c) To remove the transmitter housing (12), remove screw (16) and pull out the hinge pin assembly (17) and upper fitting spring (18).
- (d) If necessary, remove the gasket (19) from the transmitter cap assembly.

Housing and Column

6.05 Disassemble the housing (3) and column assembly as follows:

- (a) Remove the two nuts (20), lockwasher (21), and housing washer (22). Be careful, it is spring loaded by the actuator spring (23). Lift off the housing (3).
- (b) Remove the actuator sleeve (24) from inside the column (25).
- (c) Remove the lower column fitting (26) from the column (25) and slide the column from the upper column fitting (27).
- (d) Remove the hook support (28) and hook (29) from the top of the column.
- (e) Lift out the actuator guide tube (30) from the upper column fitting (27).

Disassembly of Base Assembly

6.06 For disassembly of the base assembly, refer to Figure 8 and Table 8.

Platform Removal

6.07 To remove the platform (2) from the base (1), remove screw (3) from the bottom of the base and screw (4)

from the top of the platform. Remove the dial and hook-switch leads from the terminals in the base.

Earpiece and Line Cords

6.08 To remove the earpiece cord (Figures 7 and 9) and line cord (5), unhook the strain relief clamps from the post on the base and disconnect the leads from the terminals in the base.

Dial and Suppressor Assembly

6.09 Remove the dial (6) and suppressor assembly (7) as follows:

- (a) Carefully cut the cable ties (8).
- (b) Remove the two screws (3).
- (c) Disconnect the suppressor assembly (7) and dial harness (9) from the terminals on the rear of the dial.

Hookswitch Assembly

6.10 Remove the hookswitch assembly (10) as follows:

- (a) Carefully cut cable ties (8).
- (b) Remove screw (11) and washer (12), and lift the hookswitch buffer (13) and buffer return spring (14) from the pin on the platform.
- (c) Remove screws (15 and 17) and washers (12 and 16), and lift off the hookswitch assembly (10).

Ringer

6.11 To remove the ringer (18), disconnect the RED and GRN leads from the terminals on the base and remove the three screws (19 and 20). Remove the capacitor from the terminals.

Transmission Unit

6.12 Remove the transmission unit (21) as follows:

- (a) Disconnect the leads from the terminals in the base.
- (b) Remove the two screws (15) that hold the transmission unit to the base.
- (c) Remove the insulator (22) from the bottom of the transmission unit.

7. CANDLESTICK ASSEMBLY

7.01 To assemble those components that mount on the base, refer to Figure 8 and Table 8. To assemble the housing, transmitter, and earpiece, refer to Figure 7 and Table 7.

Transmission Unit

7.02 Assemble the transmission unit (21) to the base (1) as follows:

- (a) Tape the terminals of the BLU and BLK leads.

- (b) Place the insulator (22) on the bottom of the transmission unit.
- (c) Fold the leads of transmission unit under the unit and tape the leads and insulator in place.
- (d) Mount the transmission unit to the base with the two screws (15).
- (e) Connect the leads to the terminals in the base as follows:
 - (1) PINK to 1.
 - (2) WHT to 2.
 - (3) RED to 3.
 - (4) YEL to 4.
 - (5) GRN to 5.

Ringer

- 7.03 To install the ringer (18), proceed as follows:
- (a) Tape the terminals of the BLK and BLU leads.
 - (b) Mount the ringer in the base using two (19) and one (20) screws.
 - (c) Connect the RED lead to terminal 10 and the GRN lead to terminal 16.
 - (d) Connect the capacitor between terminals 16 and 9.
 - (e) Wind the BLU, BLK and excess GRN lead around the platform mounting post.

Hookswitch Assembly

- 7.04 Assemble the hookswitch assembly on the platform (2) as follows:
- (a) Place the hookswitch assembly (10) over the small pillar in the base and fasten with screws (15 and 17) and washers (12 and 16).
 - (b) Place on the pin on the platform the buffer return spring (14) and hookswitch buffer (13). Secure with washer (12) and screw (11).

Dial and Suppressor Assembly

- 7.05 Assemble the dial (6) and suppressor assembly (7) as follows:
- (a) Connect one end of the leads of the dial harness (9), and the suppressor assembly (7), to the terminals on the rear of the dial per Figure 14.
 - (b) Mount the dial (6) to the platform (2) with two screws (3).
 - (c) On the right edge of the platform, position the suppressor assembly, and fasten it and the hookswitch leads with the cable tie (8).
 - (d) Bring the dial and hookswitch leads over the left edge of the platform and fasten with a cable tie (8).
- 7.06 Assembly of the base assembly is complete with the exception of making the connections to the terminals and mounting the platform on the base (1). These are covered in paragraphs 7.10 through 7.15.

Housing and Column

- 7.07 To assemble the housing and column, proceed as follows (Figure 7 and Table 7):
- (a) Insert the actuator guide tube (30) into the upper column fitting (27).
 - (b) Fit the hook (29) and hook support (28) together and insert into the top of the column (25). Slide this assembly over the actuator guide tube.
 - (c) Place the lower column fitting (26) on the column (25).
 - (d) Position the actuator sleeve (24) inside the column (25).
 - (e) Insert the actuator spring (23) into the actuator sleeve (24).
 - (f) Position the housing (3) on the lower column fitting (26).
 - (g) Position the housing washer (22) inside the housing, and secure the whole column assembly with the lockwasher (21) and two nuts (20).

Transmitter Assembly

- 7.08 Assemble the transmitter assembly as follows:
- (a) Insert the ring terminal (15) and snap terminal (14) leads through the transmitter housing (12) and down through the actuator guide tube (30).
 - (b) Position the transmitter housing (12) onto the upper column fitting (27), insert the upper fitting spring (18) and hinge pin assembly (17) into the upper column fitting, and secure with screw (16).
 - (c) Terminate the snap terminal (14) and ring terminal (15) onto the transmitter (13).
 - (d) If necessary, place gasket (19) inside transmitter cap assembly (11).
 - (e) Position transmitter (13) into transmitter housing (12) and screw on transmitter cap assembly (11).

NOTE: Do not grasp horn of transmitter cap assembly when screwing the transmitter cap assembly into the transmitter housing.

Earpiece Assembly

- 7.09 Assemble the earpiece assembly as follows:
- (a) Screw the lower ferrule (10) onto the earpiece housing (5).
 - (b) Insert the leads of the earpiece cord (9) into the hook fitting (7), and put the strain relief (8) on the cord.
 - (c) Screw the hook fitting (7) onto the earpiece housing (5).
 - (d) Tape the terminals of the RED and BLK leads and connect WHT leads (9) to the terminals on the receiver (6).
 - (e) Insert the receiver (6) into the earpiece housing (5) and screw on the earpiece cap (4).

Connections

7.10 Connect the hookswitch leads to the base terminals as follows:

- (a) YEL to terminal 10.
- (b) BLK to terminal 11.
- (c) RED to terminal 2.
- (d) WHT to terminal 8.
- (e) ORN to terminal 6.
- (f) BRN to terminal 4.
- (g) GRN to terminal 3.

7.11 Connect the dial leads as follows:

- (a) YEL to terminal 11.

- (b) BLU to terminal 1.
- (c) WHT to terminal 2.

7.12 Connect the transmitter leads as follows:

- (a) RED to terminal 3.
- (b) BLK to terminal 5.

7.13 Install the line cord (Figure 8, 5) as follows:

(a) Connect the leads to the terminals in the base as follows:

- (1) RED to 10.
- (2) GRN to 8.
- (3) YEL to 9.

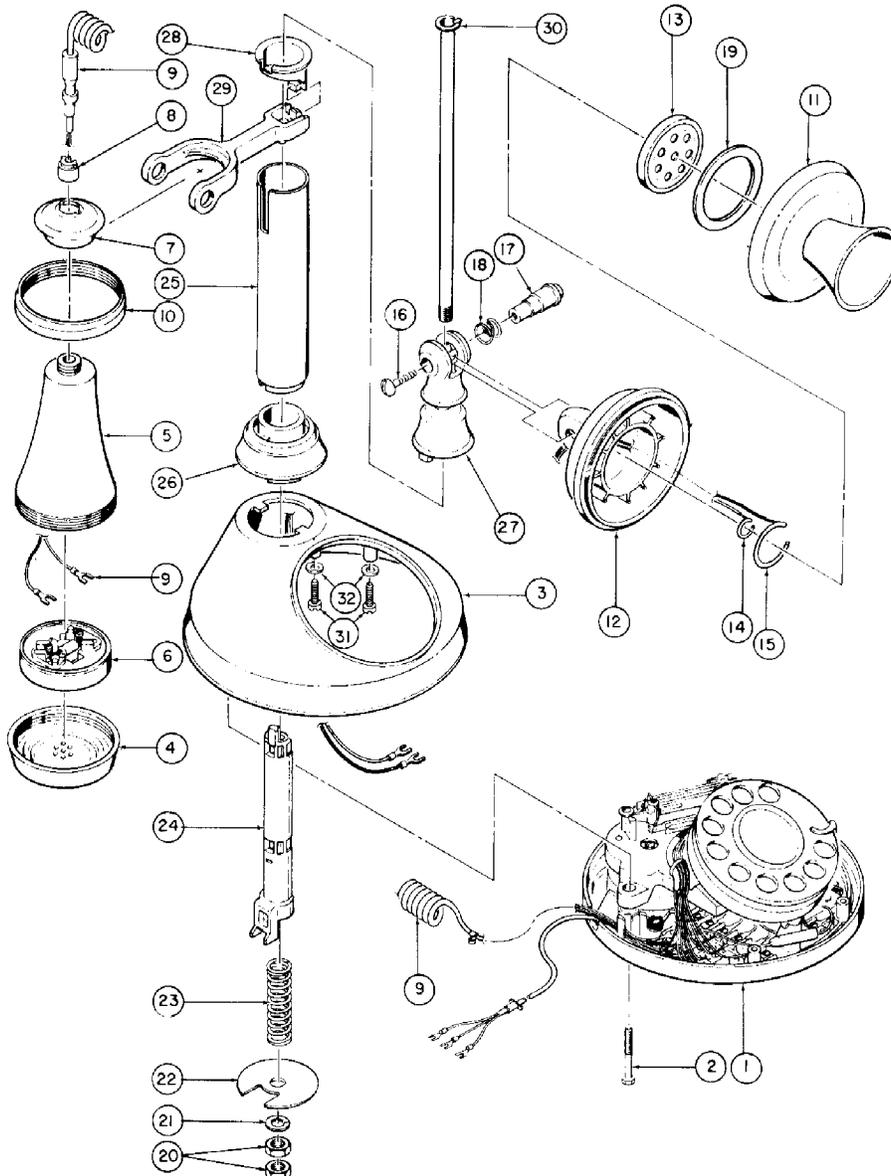


Figure 7. Candlestick Telephone.

Table 7. Candlestic Parts List.

ITEM NO.	DESCRIPTION	PART NO.	QUANTITY
1	Base Assy.	4125-1**	1
2	Screw	4189	4
3	Housing	4123*	1
4	Earpiece Cap	4113*	1
5	Earpiece Housing	4112*	1
6	Receiver	7022	1
7	Hook Fitting	4114*	1
8	Strain Relief	4167*	1
9	Earpiece Cord	7023*	1
10	Lower Ferrule	4144	1
11	Transmitter Cap Assy.	4193*	1
12	Transmitter Housing	4109*	1
13	Transmitter	7021	1
14	Snap Terminal	2217	1
15	Ring Terminal	2218	1
16	Screw, Truss Head	7139	1
17	Hinge Pin Assy.	4168	1
18	Upper Fitting Spring	4162	1
19	Gasket	4138	1
20	Nut, 3/8 x 32	7143	2
21	Lockwasher, 3/8	7145	1
22	Housing Washer	4122	1
23	Actuator Spring	4119	1
24	Actuator Sleeve	4117	1
25	Column	4105*	1
26	Lower Column Fitting	4107	1
27	Upper Column Fitting	4106	1
28	Hook Support	4155	1
29	Hook	4116*	1
30	Actuator Guide Tube	4120	1
31	Screw, 4 x 1/4	7148	2
32	Washer, No. 6	7146	2

NOTES: * Specify Color: B-Black - R-Red - W-White.

** Specify Color: B-Black - W-White.

Table 8. Candlestick Base Parts List.

ITEM NO.		PART NO.	QUANTITY
1	Base	4172*	1
2	Platform	4143	1
3	Screw, 4-36 x 3/8	7114	3
4	Screw, 6 x 7/8	7149	1
5	Line Cord	7024**	1
6	Dial (7000)	D-84870-N	1
7	Suppressor Assy.	2216	1
8	Cable Tie	7211	2
9	Dial Harness	2199	1
10	Hookswitch (7006)	D-735514-C	1
11	Screw, 4 x 1/4	7148	1
12	Washer, No. 6	7146	2
13	Hookswitch Buffer	4153	1
14	Buffer Return Spring	4177	1
15	Screw, 4-40 x 5/16	7121	15
16	Lockwasher	7151	2
17	Screw, 4-40 x 3/16	7109	1
18	Ringer with Capacitor (7004)	D-56626-ASLR	1
19	Screw, 6-40 x 7/16	7117	2
20	Screw, 6-40 x 3/8	7120	1
21	Transmission Unit (7005)	WA-1194-A	1
22	Insulator	2225	1
23	Nut, 4 - 40	7140	1
24	Dial Insert	2201**	1
25	Foot	2212	5
26	Decal	2221	1
27	Decal	2223	1

NOTES: * Specify Color: B-Black - W-White.

** Specify Color: B-Black - R-Red - W-White.

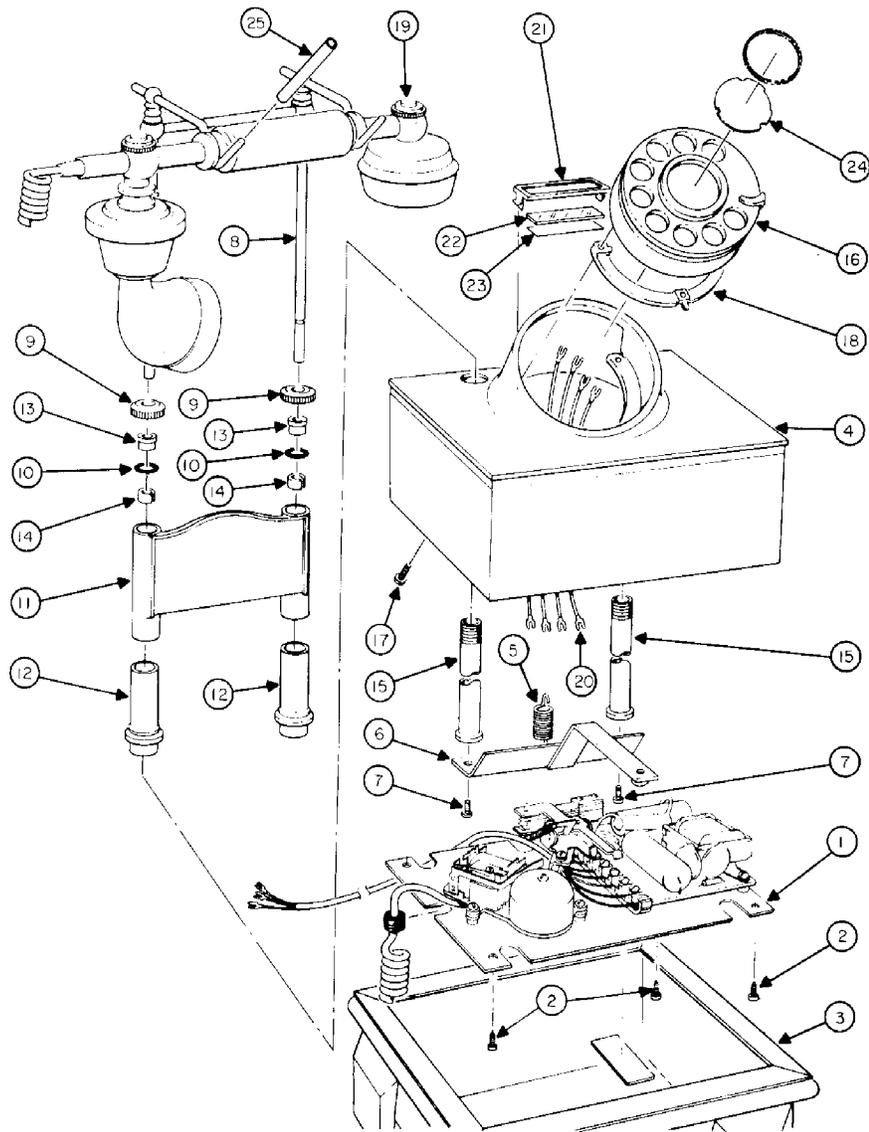


Figure 9. G Series Cradlephone.

Table 9. G Series Cradlephone Parts List.

ITEM NO.	DESCRIPTION	PART NUMBER	QTY
1	Apparatus Assembly	1081-2	1
2	Screw, HH, 6-32 x 5/16	7135	4
3	Decor	See Table 6	1
4	Base and Dial Plate	1080	1
5	Coil Spring	2200	1
6	Actuator Assembly	1004	1
7	Screw, PH, 4-40 x 1/4	7127	2
8	Hanger Assembly	1008-4	1
9	Nut	1006	2
10	O-Ring	7205	2
11	Guide Bracket	1032	1
12	Guide Sleeve	1007	2
13	Bushing	1063	2
14	Grommet	1064	2
15	Guide Tube	1005	2
16	Dial	D-84870-N	1
17	Screw, PH, 4-36 x 3/8	7114	3
18	Dial Spacer	1051	1
19	Handset	1010-2	1
20	Harness Assembly	2199	1
21	Number Card Holder	1030G	1
22	Number Card Window	1031	1
23	Number Card	1018	1
24	Insert White Black Blue	2201-1 2202-2 2201-4	1
25	Sleeve	2204	1

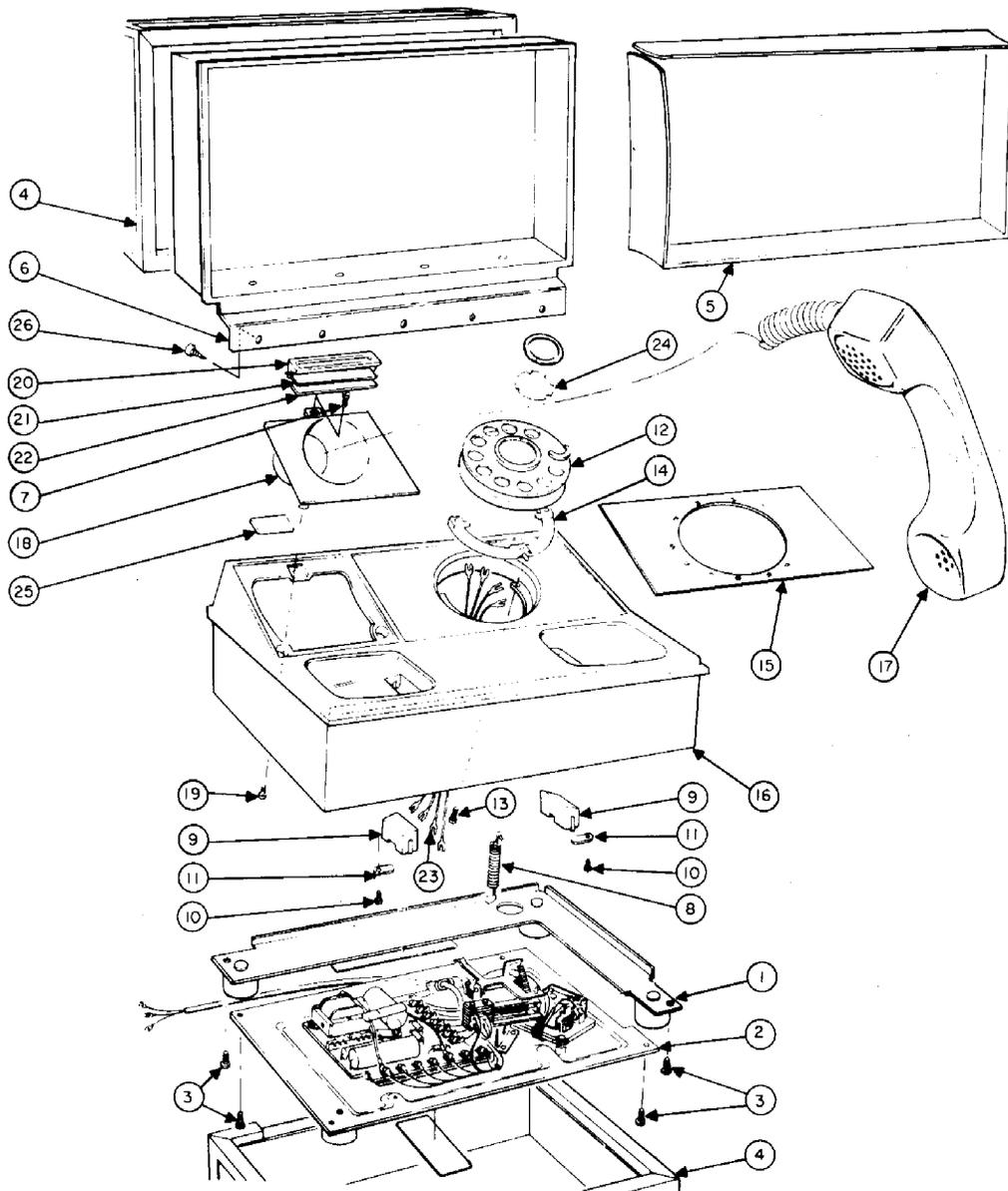


Figure 10. G Series Chestphone.

Table 10. G Series Chestphone Parts List.

ITEM NO.	DESCRIPTION	PART NUMBER	QTY
1	Base Plate Assembly	2011-2	1
2	Chassis Assembly	2083-2	1
3	Screw, HH, 6-32 x 5/16	7135	6
4	Chest	See Table 6	1
5	Liner		1
	Tan	2046	
	Charcoal	2047	
6	Lid and Hinge Assembly	2081	1
7	Screw, FH Phillips, 6-3/8	7115	6
8	Coil Spring	2209	1
9	Actuator Cap	2005	2
10	Screw, PH Phillips, 7-19 x 3/8	7137	2
11	Actuator Stop	2035	2
12	Dial	D-84870-C	1
13	Screw, PH, 4-36 x 3/8	7114	3
14	Spacer	1051	1
15	Insert	2006-2	1
16	Base and Dial Plate Assembly	1080	1
17	Handset	1010-2	1
18	Cord Outlet	2003	1
19	Screw, HH, 7-19 x 3/8	7136	1
20	Number Card Holder	1030C	1
21	Number Card Window	1031	1
22	Number Card	1018	1
23	Harness Assembly	2199	1
24	Insert		1
	Black	2201-2	
	Tan	2201-3	
25	Insignia	2039-2	1

8. MICKEY MOUSE TELEPHONE DISASSEMBLY AND REASSEMBLY

8.01 The plastic components of the Mickey Mouse telephone, such as the figure back, figure front, figure shoes, etc, are the property of and are maintained by the customer. The telephone components, such as the transmission unit, ringer, hookswitch, etc, are the property of and maintained by the telephone company. In the disassembly process, it will be necessary to remove some of the customer-maintained components to access the telephone-company-maintained components. Refer to Tables 11, 12 and 13, and Figures 11, 12, and 13. The figures show the various components in disassembly order; the various components are numbered. The tables complement the figures and give the order numbers for the various components. The component numbers in the figures correspond to the item numbers in the tables.

Base Assembly Replacement

8.02 Remove the base assembly as follows (refer to Table 12 and Figure 12):

- (a) Remove the handset from the actuator lever hand and lay the Mickey Mouse figure on its back.
- (b) Loosen the four captive screws securing the base assembly to the housing.
- (c) Carefully separate the housing assembly from the base assembly.
- (d) To reassemble, reverse steps a through c. Be certain that the pilot pins on the base assembly engage with the pilot holes in the housing assembly before tightening the securing screws.

Handset Cord Replacement

8.03 Replace the handset cord as follows (refer to Tables 11 and 12 and Figures 11 and 12):

- (a) Unscrew the receiver cap (2 in Table 11). Remove the receiver (3 in Table 11) from the handset housing (1 in Table 11). Detach the white receiver leads from the receiver.
- (b) Unscrew the transmitter cap (5 in Table 11). Remove the transmitter (6 in Table 11) and the transmitter cup (7 in Table 11) from the handset housing (1 in Table 11). Detach the red and black transmitter leads from the transmitter cup.
- (c) Remove the cotton ball (4 in Table 11) and work the handset cord (8 in Table 11) free from the handset housing (1 in Table 11).
- (d) Separate the housing assembly from the base assembly as described in paragraph 8.02.
- (e) Loosen the screw (4 in Table 12) and free the handset cord (8) from the handset cord clamp (3 in Table 12).
- (f) Disengage the J-hook on the handset cord (8 in Table 11) from the cord restraint bracket (30 in Table 12).

- (g) Detach the handset cord lugs from the terminal board (22 in Table 12) connections and pull the handset cord free of the base (1 in Table 12).
- (h) Discard the handset cord.
- (i) Install the replacement handset cord by reversing steps a through i. Be certain that the transmitter cup (7 in Table 11) notch engages the handset cord restriction when reinstalling the handset transmitter parts. Connect the handset cord leads according to the wiring diagram shown in Figures 15 and 16.

Line Cord Replacement

8.04 Replace the line cord as follows (refer to Table 12 and Figure 12):

- (a) Separate the housing assembly from the base assembly as described in paragraph 8.02.
- (b) Work the line cord (5) free from the retainer clip on the base (1) and detach the line cord lead lugs from the terminal board (22) connections.
- (c) Disengage the J-hook on the line cord (5) from the cord restraint bracket (30).
- (d) Discard the line cord.
- (e) Install the replacement line cord by reversing steps a through c. Connect the cord leads according to the wiring diagram shown in Figures 15 and 16.

Rotary Dial Replacement

8.05 Replace the rotary dial as follows (refer to Table 12 and Figure 12):

- (a) Separate the housing assembly from the base assembly as described in paragraph 8.02.
- (b) Remove the four screws (8) securing the dial mounting platform (7) to the dial mounting bracket (6) and separate the dial mounting platform from the dial mounting bracket.
- (c) Detach the dial harness (17) lead lugs from the dial (9) electrical terminals.
- (d) Remove the three screws (11) that secure the dial (9) to the dial mounting platform (7) and separate the dial from the dial mounting platform. Set aside the dial spacer (10) and dial mounting platform.
- (e) Discard the rotary dial.
- (f) Install the replacement dial by reversing steps a through d. Locate the dial spacer (10) pilot pins in the dial mounting platform (7) pilot holes. Connect the dial harness according to the wiring diagram shown in Figure 15.

Touch Calling Unit Replacement

8.06 Replace the Touch Calling unit as follows (refer to Table 12 and Figure 12):

- (a) Separate the housing assembly from the base assembly as described in paragraph 8.02.
- (b) Remove the two screws (31) securing the dial (9) to

the dial mounting bracket (6). Separate the dial from the dial mounting bracket.

- (c) Detach the dial (17) harness lead lugs from the terminal board assembly (22) electrical terminals.
- (d) Discard the Touch Calling dial.
- (e) Install the replacement dial by reversing steps a through c. Connect the dial harness leads according to the wiring diagram shown in Figure 16.

Hookswitch Replacement

8.07 Replace the hookswitch as follows (refer to Table 12 and Figure 12):

- (a) Separate the housing assembly from the base assembly as described in paragraph 8.02.
- (b) Detach the hookswitch (23) leads from the terminal board (22) connections.
- (c) Remove the two screws (13) securing the hookswitch to the hookswitch platform (28).
- (d) Discard the hookswitch.
- (e) Install the replacement hookswitch by reversing steps a through c. Connect the hookswitch according to the wiring diagrams shown in Figures 15 and 16.

Ringer Replacement

8.08 Replace the ringer as follows (refer to Table 12 and Figure 12):

- (a) Separate the housing assembly from the base assembly as described in paragraph 8.02.
- (b) Detach the ringer (21) leads from the terminal board (22) connections.
- (c) Remove the two screws securing the ringer to the base assembly (1).
- (d) Discard the ringer.
- (e) Install the replacement ringer by reversing steps (a) through (c). Connect the ringer leads according to the wiring diagrams shown in Figures 15 and 16.

Transmission Unit Replacement

8.09 Replace the transmission unit as follows (refer to Table 12 and Figure 12):

- (a) Separate the housing assembly from the base assembly as described in paragraph 8.02.
- (b) Detach the unit (24) leads from the terminal board (22) connections.
- (c) Remove the two nuts (27) securing the unit.

NOTE: Leave the unit insulator in place.

- (d) Discard the unit.
- (e) Install the replacement unit by reversing steps a

through c. Connect the unit leads according to the wiring diagrams shown in Figures 15 and 16.

Mickey Mouse Figure Replacement

8.10 Replace the Mickey Mouse figure as follows (refer to Table 13 and Figure 13):

- (a) Remove the handset (6) from the actuator lever (15) (hand of the Mickey Mouse figure).
- (b) Remove the two ear screws (2) and two body screws (3) securing the Mickey Mouse figure back (1) to the Mickey Mouse figure front (4).
- (c) Pry the Mickey Mouse figure back (1) from the Mickey Mouse figure front (4) and lift the Mickey Mouse figure back from the Mickey Mouse figure shoes (5).
- (d) Lift the Mickey Mouse figure front (4) from the Mickey Mouse figure shoes (5).
- (e) Press the locking fingers of the actuator lever pivot (13) downward to expose the pivot pin (16). With a small-diameter rod, press the pivot pin free and remove the actuator lever (15).
- (f) Remove the screw (14) securing the actuator lever pivot (13) to the column (9). Remove the actuator lever pivot.
- (g) Work the Mickey Mouse figure shoes (5) upward and free of the column (9).
- (h) Reinstall the Mickey Mouse figure by reversing steps (a) through (h). Be certain that the Mickey Mouse figure shoes (5) pilot pin engages the pilot hole in the decor panel (10). Engage the catch on the actuator lever pivot (13) before installing the screw (14) and locate the actuator lever (15) tab in the column (9) cutout before installing the pivot pin (16).

Actuator Sleeve Replacement

8.11 Replace the actuator sleeve as follows (refer to Table 13 and Figure 13):

- (a) Separate housing assembly from the base assembly as described in paragraph 8.02.
- (b) Remove the two jam nuts (22), bowed washer (24), and housing washer (21).
- (c) Remove the actuator sleeve (19) through the lower end of the column (9).
- (d) Remove the actuator sleeve spring (20) through the lower end of the actuator sleeve (19).
- (e) Reinstall the actuator sleeve (19) by reversing steps a through d.

Dial Panel Replacement

8.12 Replace the dial panel as follows (refer to Table 13 and Figure 13):

Table 11. Mickey Mouse Telephone Handset Parts List.

ITEM NO. (FIG. 3)	DESCRIPTION	ATC PART NO.	UNITS/ASSY
1	Handset Housing	7237-Y	1
2	Receiver Cap	7238-Y	1
3	Receiver	7022	1
4	Cotton Ball	784060-01	1
5	Transmitter Cap	7239-Y	1
6	Transmitter	7021	1
7	Transmitter Cup	7240	1
8	Handset Cord	7023-W	1

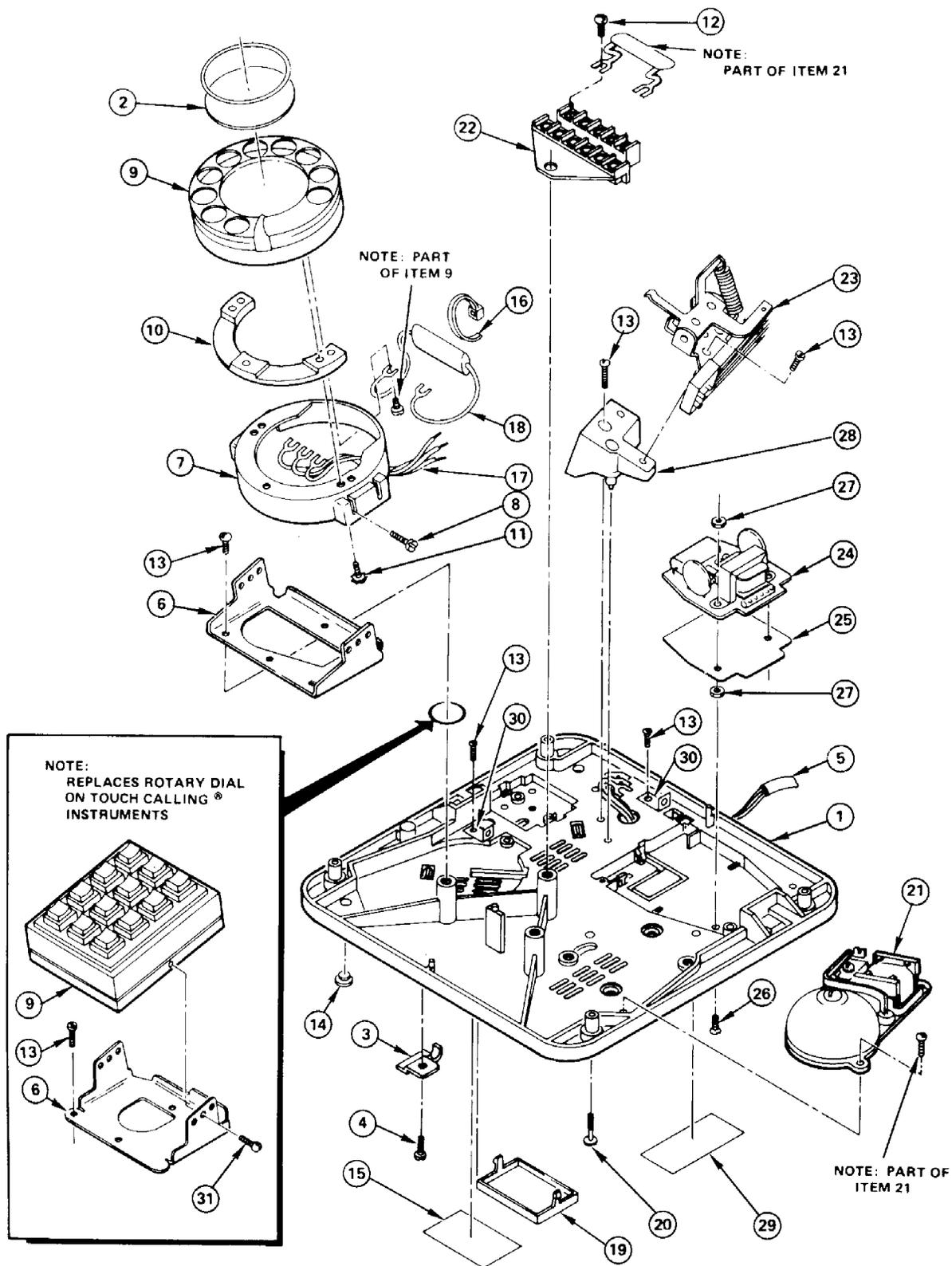


Figure 12. Mickey Mouse Telephone Base Assembly.

Table 12. Mickey Mouse Telephone Base Assembly Parts List.

ITEM NO. (FIG. 5)	DESCRIPTION	ATC PART NO.	UNITS/ASSY
1	Base Assy	201104-01	1
2	Dial Insert (rotary dial only)	2201-5	1
3	Handset Cord Clamp	1202-1W	1
4	Screw, PHSMS, 4-24 x 5/16	75192-05	1
5	Line Cord, 6-foot, white Phonemart Cord	7024-W 201209-01	1 1
6	Dial Mounting Bracket, Rotary Dial Dial Mounting Bracket, Touch Calling Dial	201105-01 201106-01	1 1
7	Dial Platform (rotary dial only)	201109-01	1
8	Screw, PHMS, 4-40 x 1/4 (rotary dial only)	752109-04	4
9	Dial, Rotary Dial, Touch Calling	7000 7020-1	1 1
10	Dial Spacer (rotary dial only)	5212	1
11	Screw, PHMS, 4-36 x 3/8 (rotary dial only)	752114-06	3
12	Screw, PHMS, 4-40 x 5/16	752109-05	11
13	Screw, PHSMS, 4-24 x 3/8	752192-06	8
14	Feet, Dart Plug	2212	4
15	Label, Model No.	201199-01	1
16	Tyrap	7211	2
17	Dial Harness Assy (rotary dial only)	2199	1
18	Suppressor (rotary dial only)	2216	1
19	Hookswitch Mounting Cover	4186-W	1
20	Screw, Shank, 6-32 x 5/8	4189	4

Table 12. Mickey Mouse Telephone Base Assembly Parts List (Continued).

ITEM NO. (FIG. 5)	DESCRIPTION	ATC PART NO.	UNITS/ASSY
21	Ringer	7004	1
22	Terminal Board Assy	5215	1
23	Hookswitch	7003	1
24	Network	7005	1
25	Network Insulator	2225	1
26	Screw, FHMS, 4-40 x 3/8	752122-06	2
27	Nut, Hex, No. 4-40	751400-09	4
28	Hookswitch Platform	201107-01	1
29	Identification Plate	201198-01	1
30	Cord Restraint Bracket	2241	2
31	Screw, PHMS, 5-40 x 5/16 (Touch Calling dial only)	752153-05	2

Table 13. Mickey Mouse Telephone Parts List.

ITEM NO. (FIG. 4)	DESCRIPTION	ATC PART NO.	UNITS/ASSY
1	Figure Back	201190-01	1
2	Screw, PHSMS, 4-24 x 5/16	752116-05	2
3	Screw, PHSMS, 4-24 x 5/8	752116-10	2
4	Figure Front and Nose Assy	201192-01	1
5	Figure Shoes	201195-01	1
6	Handset Assy (see Figure 11 for details)	201279-01	1
7	Base Assy, Rotary Dial (see Figure 12 for details)	201197-01	1
	Base Assy, Touch Calling Dial (see Figure 12 for details)	201210-01	1
8	Panel, Rotary Dial	201102-01	1
	Panel, Touch Calling Dial	201101-01	1
9	Column Assy	201220-01	1
10	Decor Panel	201097-01	1
11	Screw, FHMS, 4-40 x 1/4	752109-04	2
12	Nut, Hex, 4-40	751400-02	2
13	Actuator Lever Pivot	201094-01	1
14	Screw, PHSMS, 4-24 x 3/8	752192-06	1
15	Actuator Lever Assy	201186-01	1
16	Pivot Pin	201158-01	1
17	Base Housing Assy	201187-01	1
18	Actuator Guide Tube	201212-01	1
19	Actuator Sleeve	201095-01	1
20	Actuator Spring	201108-01	1
21	Housing Washer	4122	1
22	Jam Nut, 3/8-32	751143-01	2

Table 13. Mickey Mouse Telephone Parts List (Continued).

ITEM NO. (FIG. 4)	DESCRIPTION	ATC PART NO.	UNITS/ASSY
23	Actuator Button	201103-01	1
24	Washer, Bowed, 3/8	7145	1
25	Number Window (Touch Calling dial only)	140120-1	1
26	Number Card (Touch Calling dial only)	1018	1
	<u>FOLLOWING ITEMS NOT SHOWN IN FIGURE 13</u>		
	Shipping Carton End Cap, RH	201200-01	1
	Shipping Carton End Cap, LH	201200-02	1
	Shipping Carton	201201-01	1

9. CLEANING AND REPAIRWood Decor

9.01 The wooden parts can be cleaned with a soap-solution-treated cloth. After cleaning, dry thoroughly and apply a light coat of lemon-oil-base furniture polish.

9.02 Minor scratches in a walnut or maple finish can be touched-up by using stains such as WADCO maple stain or dark walnut oil finish. Care should be taken to observe the shade and finish relationship between the hanger bracket and housing of a cradlephone between the top and bottom of the chest of a chestphone. The antique white finish cannot be touched up with commercially available stains. Experimentation with gray-white paint is suggested. In cases of severe gouging, decor replacement is suggested.

Inlay Decor

9.03 Current versions of the blue cameo and gold inlay inserts are injected molded and can be cleaned using Magnolia Glayzit Telephone Refinisher. The inserts are dimensionally stable and can be freely intermixed. Earlier versions of the blue cameo inserts cannot be cleaned and should be replaced with the new versions.

9.04 The brocade inserts contain a fabric that is not readily cleanable. Stains, spots, or marks on the brocade insert panels require panel changeout.

Brass- and Gold-Plated Parts

9.05 The brass and brass-plated parts may be cleaned by applying a light film of Plug Polish directly on the surface to be cleaned and polished. Wipe clean with a dry cheesecloth. After cleaning, additional luster can be achieved by applying Glayzit Telephone Refinisher to a cheesecloth and wiping the required parts.

9.06 Portions of the decorative telephone contain brass parts that are gold plated. Should refinishing of these parts be required, they should be refinished in accordance with the following: strike of copper, 0.0002 inch bright nickel, and 0.00010 inch 23 karat hard gold, hand or automatic buffed. Replating of the plastic parts that are gold finished is not recommended. These parts should be replaced.

Plastic Molded Parts

9.07 The plastic molded parts are Cylolac T, Marbon Chemical. Repair and cleaning of these parts may be done similarly to standard telephone set plastic repair. Cleaning dirt and foreign material from the plastic parts can be accomplished using Glayzit Telephone Refinisher applied sparingly. Polish by rubbing lightly when the refinisher coat begins to turn cloudy. The base and dial-plate assembly can be buffed or repainted. If the cradlephone is repainted, care should be taken to protect the threads on the aluminum tubes from damage and paint buildup.

9.08 The line cord and handset cord can be cleaned by applying a small amount of Plastic Cord Cleaner directly to the cord surface. Remove and polish by rubbing briskly with a clean dry cheesecloth.

10. ADJUSTMENTS

Dial and Touch Calling Unit

10.01 The dial is a Type 51A and is to be adjusted and repaired in accordance with the instructions in the 997-300 subdivision of GTE Practices. The Touch Calling unit is covered in Section 997-306-500.

Ringer

10.02 The ringer is a Type 46 and is to be adjusted and repaired in accordance with the instructions in the 997-308 subdivision of GTE Practices.

Hookswitch

NOTE: For purposes of definition, break springs are closed with the hookswitch in the ring position, and make springs are closed with the hookswitch in the talk position.

10.03 The hookswitch should be adjusted to meet the following requirements:

- (a) Break springs shall follow a minimum of 0.010 inch when the tension of the associated lever spring is removed from it. Back spring need only have perceptible follow.
- (b) The lever spring of the break-make combination shall follow only perceptibly when the tension of the first make combination armature spring is removed from the actuating bar.
- (c) The lever spring of the break-make combination shall follow only perceptibly when the tension of the second make combination armature spring is removed from the actuating bar.
- (d) With the hookswitch in either the talk or ring position, there shall be 0.010 inch minimum clearance between the springs not designed to make contact.
- (e) At the time the make springs of the break-make combination just close, there shall be a minimum of 0.010 inch clearance between the contact of the single make combinations.
- (f) At the time the break springs of the break-make combination first open, there shall be 0.010 inch minimum contact separation between the lever spring and the make spring.

10.04 The contacts of the hookswitch shall operate in the following order when the hookswitch is operated from the talk to ring position:

- (a) Second pair of single make springs shall open first.
- (b) Make of break-make opens.
- (c) Break of break-make closes.
- (d) First pair of single make shall open at any time.

10.05 The restoring spring shall cause the pileup to be actuated fully in the talk position, but not allow the handset to float free when in the ring position.

11. WIRING DIAGRAMS

11.01 Figures 16 through 18 are typical wiring diagrams of the specialty telephones equipped with GTE Automatic Electric components.

12. FREQUENCY SELECTIVE RINGER

12.01 The straight line ringer used in the Cradlephone or Chestphone can be replaced by a Type 151 Frequency Selective Ringer manufactured by ITT. This ringer may be used in telephones having either the GTE Automatic Electric or Stromberg-Carlson chassis.

Modification Kit

12.02 The components which comprise the modification kit (425137) used for the replacement are listed in Table 14.

Modification Procedure

12.03 Install the Type 151 ringer as follows:

- (a) Remove the existing ringer from the telephone chassis and save the mounting screws for (c) below.
- (b) Using the three 6-40 X 5/16 screws (for a GTE AE chassis) or the two 4-40 X 1/4 screws (for a Stromberg-Carlson chassis), mount the 2089 adapter plate to the telephone chassis where the ringer was located. See Figure 19 for correct positioning of parts.

NOTE: The handset cord clamp may have to be pressed flush to the telephone chassis to allow the adapter plate to lie flat.

- (c) With the original ringer screws from (a), mount the Type 151 ringer to the adapter plate.
- (d) Using Table 15 and Figures 20 and 21 as a guide, connect the Type 151 ringer to either the Stromberg-Carlson or GTE AE unit.
- (e) Make certain that all ringer leads are routed or taped, if necessary, to prevent them from interfering with the hookswitch actuator mechanism or the ringer clapper movement.

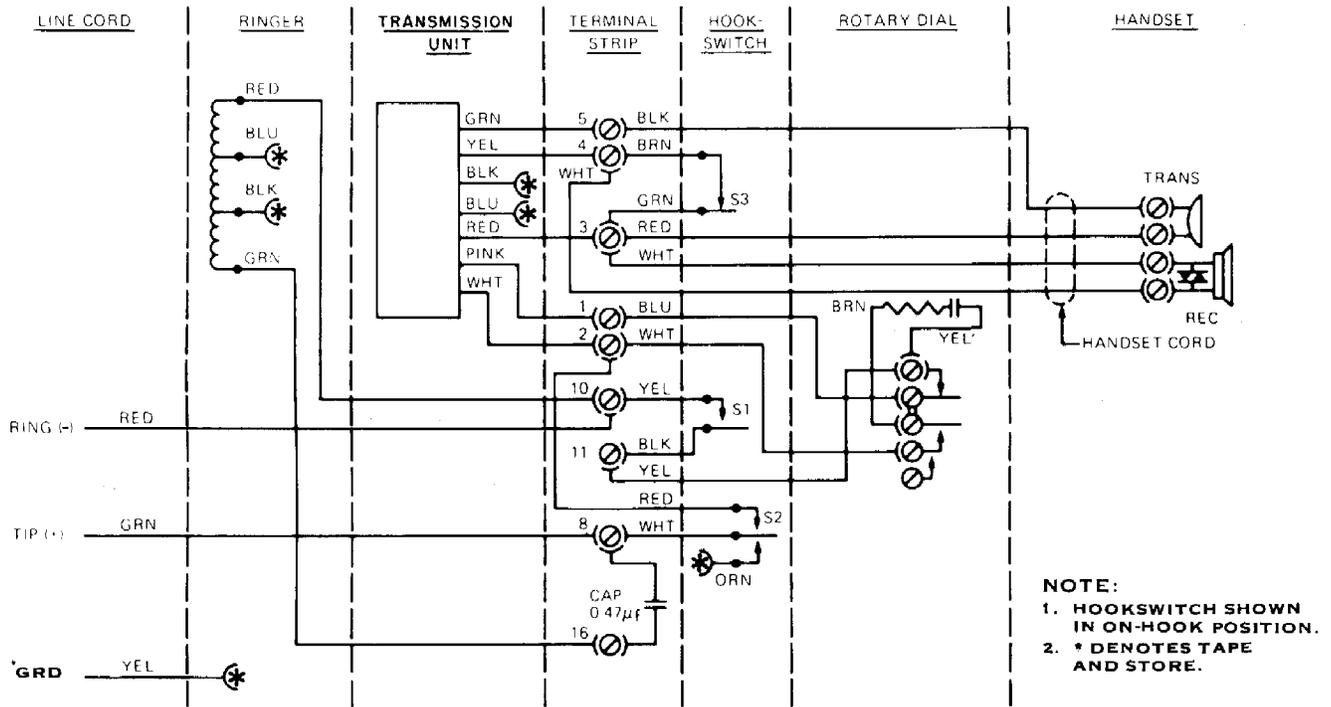


Figure 14. Rotary Dial Wiring Diagram.

Table 14. Modification Kit Components.

ITEM	AMERICAN TELECOMMUNICATIONS (ATC) ORDERING NUMBER	QUANTITY
ATC Universal Adapter Plate	2089	1
Screw with Lockwasher (6-40 x 5/16)	7118	3*
Screw, 4-40 X 5/16	7121	2**
Lockwasher No. 4	7151	2

* Used with GTE Automatic Electric chassis only.

** Used with Stromberg-Carlson chassis only.

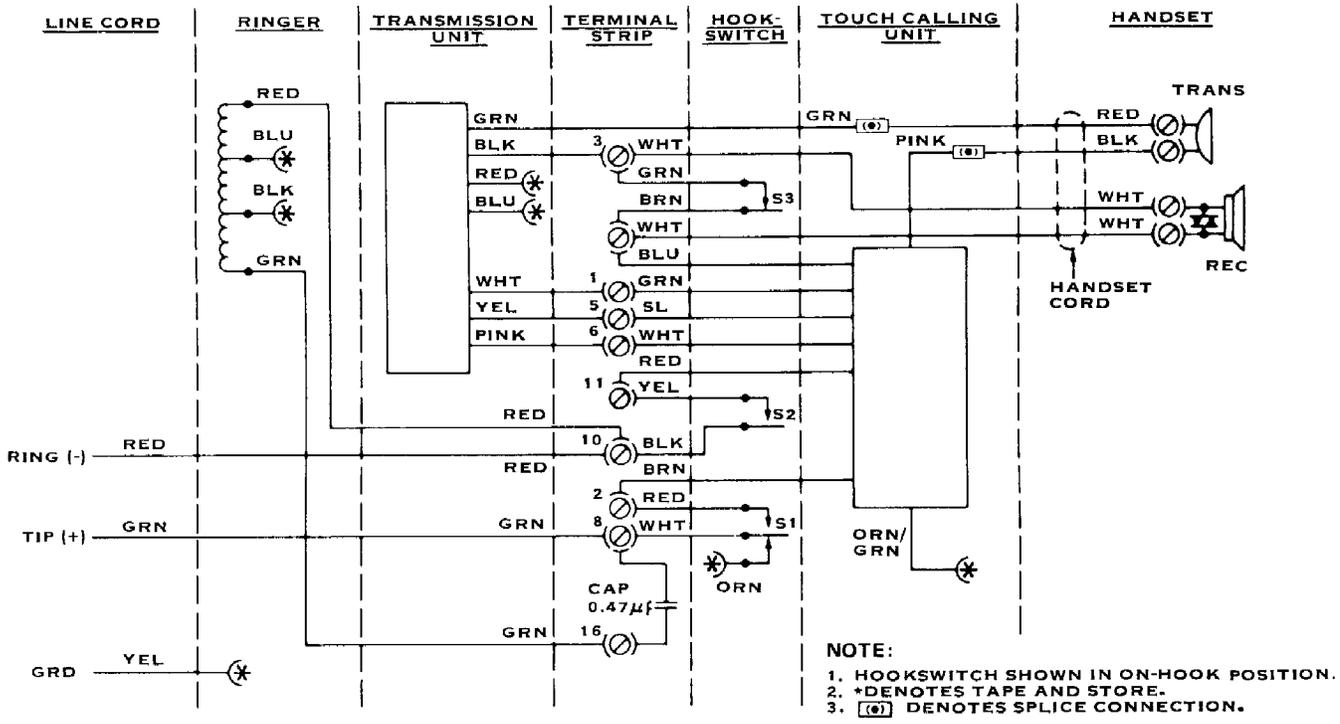


Figure 15. Touch Calling Wiring Diagram.

Table 15. Ringer Unit Interconnections.

UNIT TYPE	151 OR 152 RINGER LEAD COLOR	INDIV. OR BRIDGD.	CONNECT RINGER LEADS TO THE UNIT TERMINALS BELOW			
			RING PARTY	TIP PARTY IDENTIFICATION TO GROUND		
				NONE	1000-OHM	2650-OHM
Stromberg-Carlson (Note 1)	Black	G	G	G	G	G
	Blue	*	*	*	*	*
	Slate	*	*	*	T	*
	S1-Red	*	*	*	*	T
	Red	K	K	K	K	K
GTE Automatic Electric (Note 2)	Red	15	15	15	N.A.	9
	Blue	*	*	*	N.A.	*
	Black	*	*	*	N.A.	21
	Green	16	16	16	N.A.	16

*Tape and store

N.A. (Not Applicable)

NOTES:

1. For all frequencies above 25 Hz, disconnect the slate hookswitch lead from unit terminal A and connect it instead to one end of the capacitor (supplied with ringer) using an ATC 7173 spade connector or equivalent. Now, connect the other end of the capacitor to unit terminal K.
2. With GTE AE unit, an external capacitor (supplied with ringer) must be used for all frequencies. For a 2,650-ohm tip party circuit, connect the capacitor between unit terminals 6 and 16. For all other circuits, connect the capacitor between unit terminals 9 and 16.

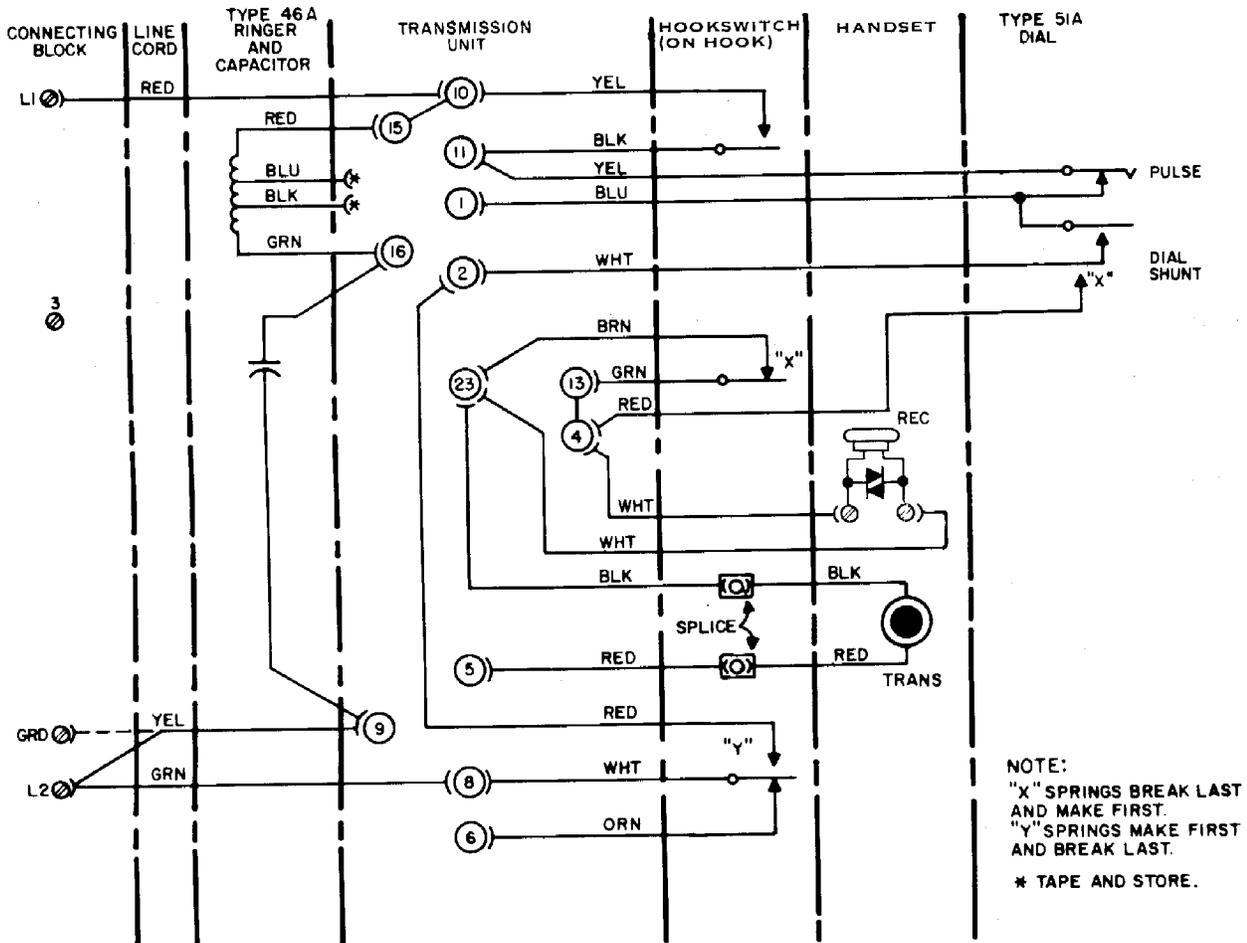


Figure 16. Typical Wiring Diagram of Specialty Telephone Equipped with GTE Automatic Electric Components.

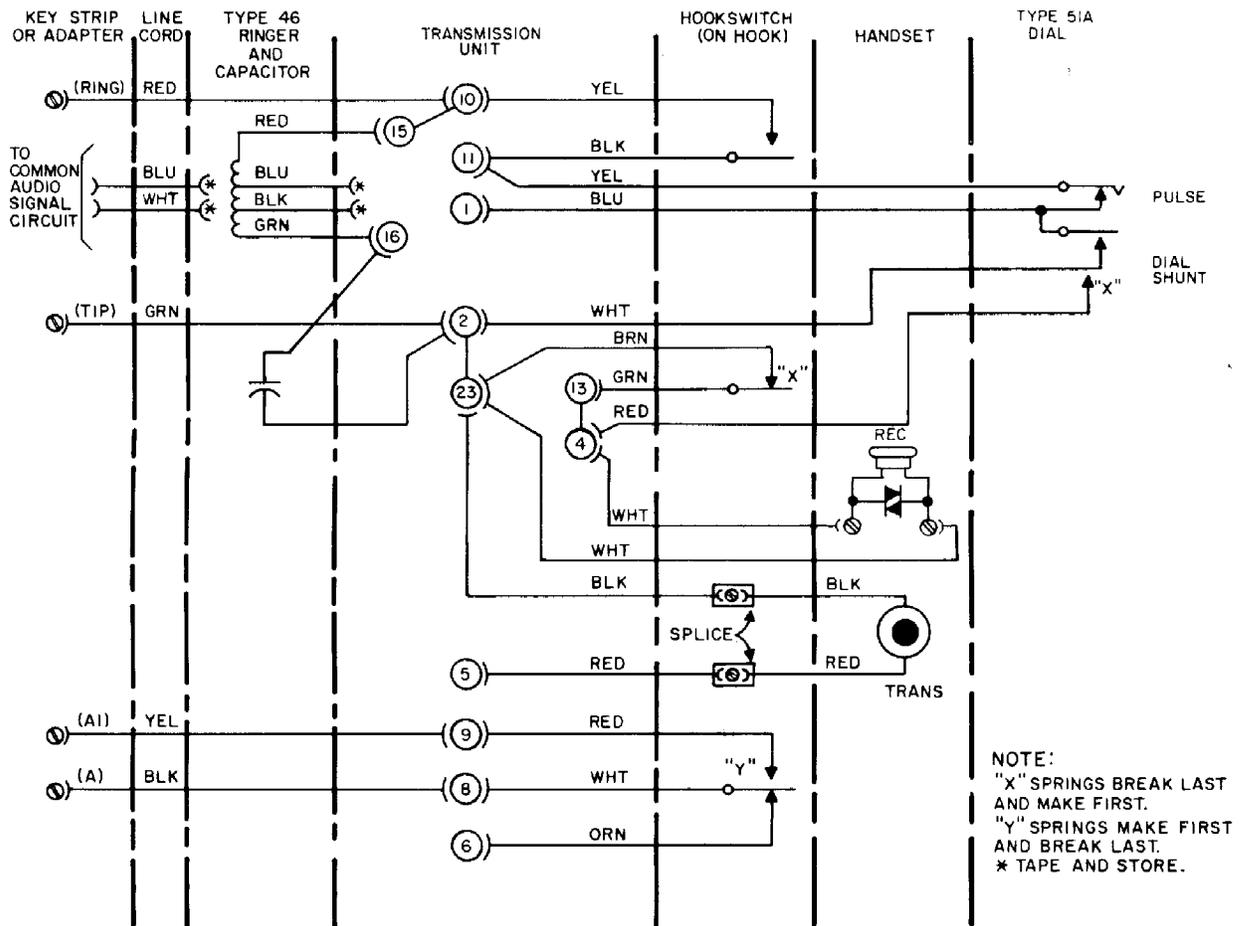


Figure 17. Typical Wiring Diagram of Specialty Telephone Equipped with GTE Automatic Electric Components and Wired for Use in a Key Telephone System.

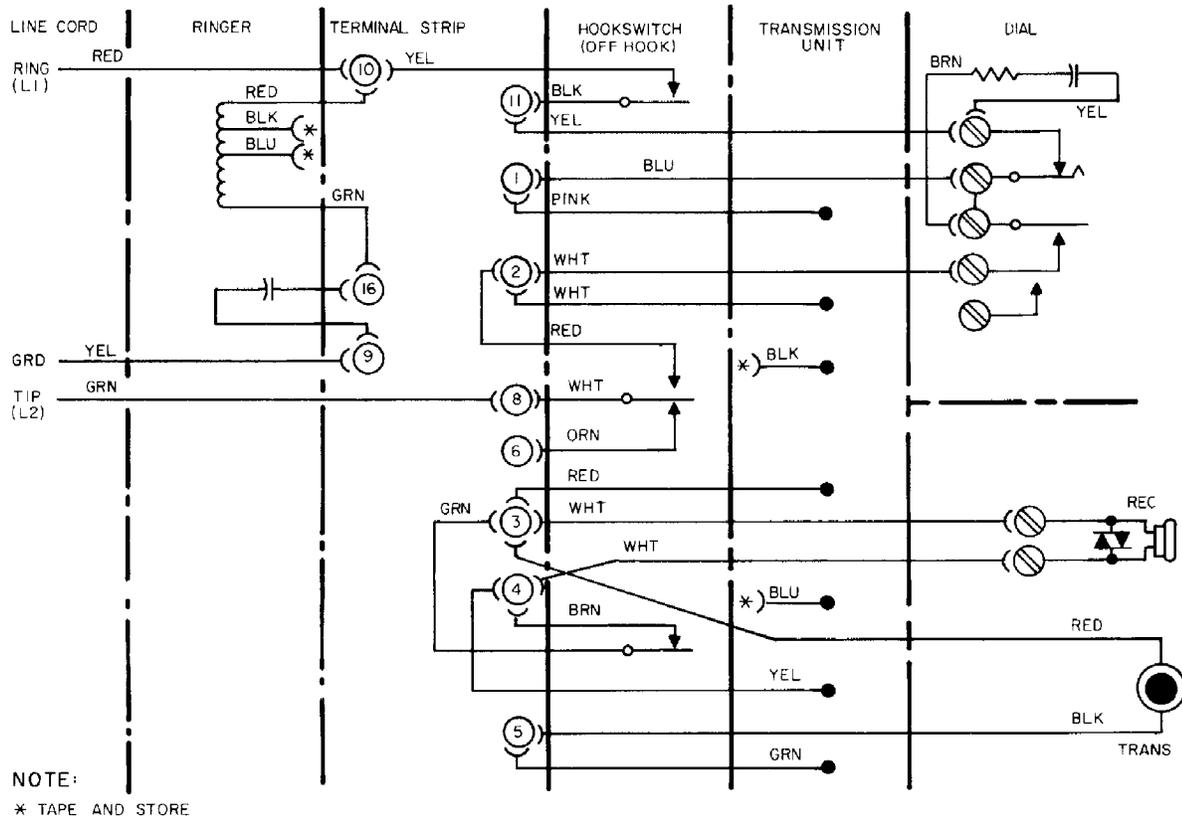


Figure 18. Typical Wiring Diagram of Candlestick Telephone.

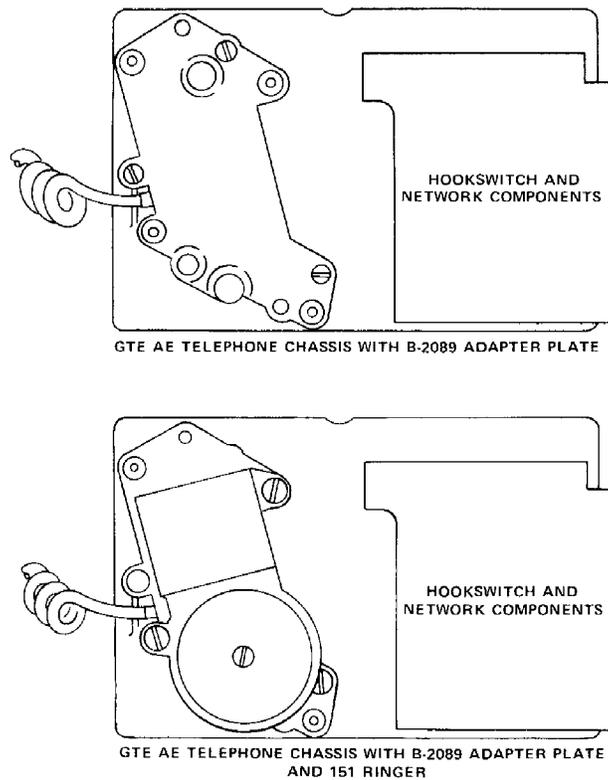


Figure 19. Adapter Plate and Ringer Location.

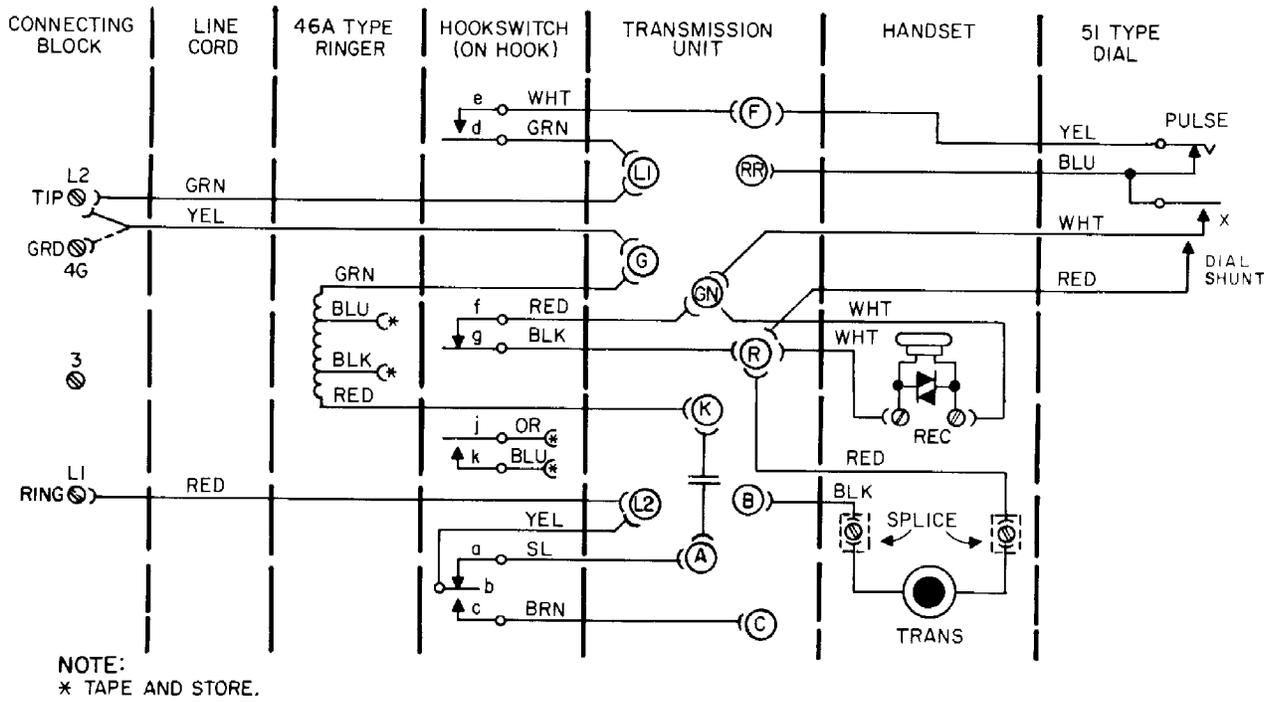


Figure 20. Wiring Diagram for GTE Automatic Electric Unit.

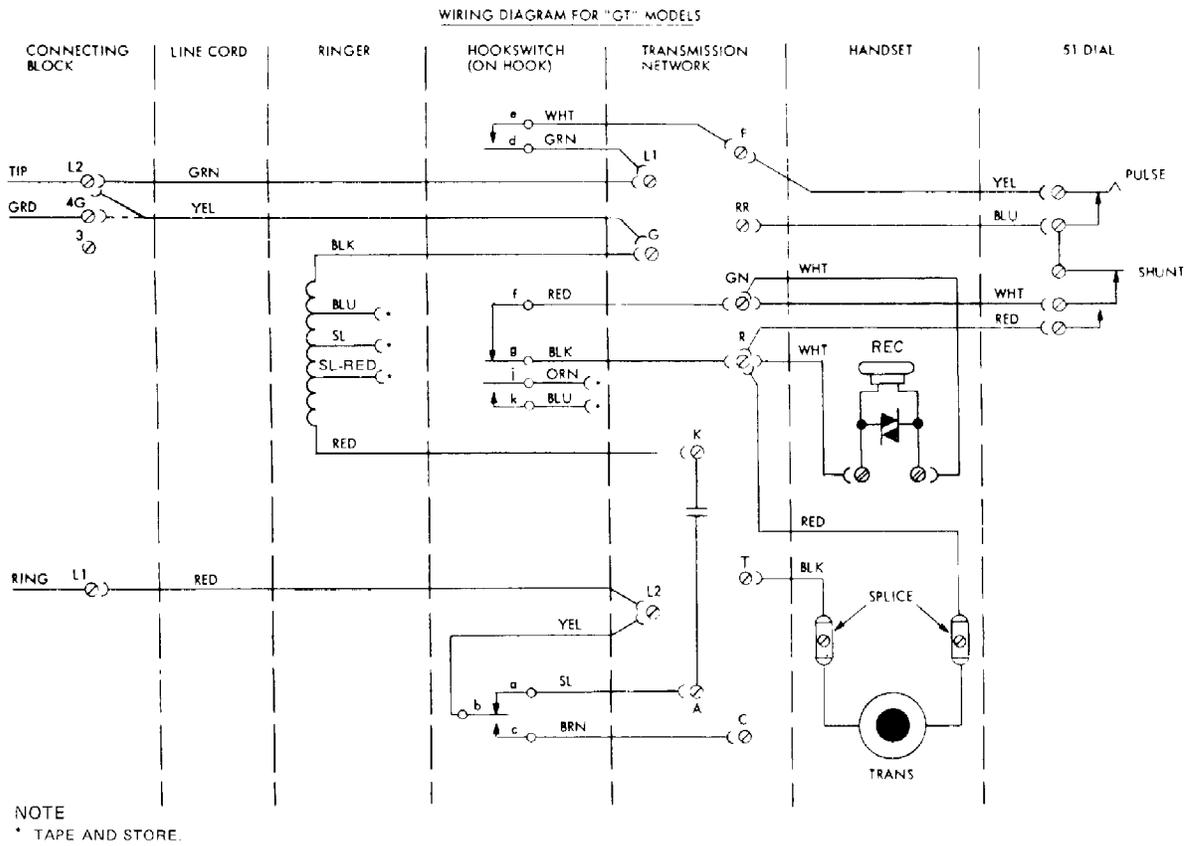


Figure 21. Wiring Diagram for Stromberg-Carlson Unit.