

STANDARD TELEPHONES

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TRIBUTE SERIES, SINGLE-LINE, PUSHBUTTON DIAL, DESK TELEPHONES

GENERAL DESCRIPTION

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Figure 1: Tribute Series, Single-Line, Pushbutton Dial, Desk Telephone

1. GENERAL DESCRIPTION

- 1.01** This document covers the Tribute Series, single-line, pushbutton dial, desk telephones. (See Figure 1.) A general description plus information peculiar to the Tribute Series, single-line, pushbutton dial, desk telephones is included.
- 1.02** Whenever this section is reissued, reason for reissue will be listed in this paragraph.
- 1.03** A replacement parts list and an exploded-view drawing for the telephones are contained in Section 50-010-101. Circuit labels are not provided for the telephones. Related documents of the CORTELCO Telephone Apparatus Practices Manual provide information on components.
- 1.04** The Tribute Series telephones are single-line, pushbutton dial, anti-sidetone units that

operate efficiently over a wide range of loop resistances and line impedances. The telephones are compatible with inductively-coupled hearing aid devices.

1.05 The Tribute Series telephones are identified by a coded label affixed to the bottom of the telephone. Refer to ordering information in Table A for an explanation of each code number.

1.06 The Tribute Series telephones are full-modular version telephones. Full-modular version telephones are equipped with a modular handset cord and a modular line cord terminated on each end with modular plugs. This version is designated by the code letter M. (Refer to Table A.)

1.07 The Tribute Series telephones are available as the Model 2010 Basic telephone, the Model 2011 Tel-Flash telephone, the Model 2012 Enhanced telephone, and the Model 2015 Tone/Pulse telephone. These telephones and all available variations are described in the following paragraphs.

TABLE A
ORDERING INFORMATION - TELEPHONES

CODE NUMBERS									
TELEPHONE CODE NUMBERS ARE FORMED IN SIX STEPS AS FOLLOWS:									
(1) Type of Instrument (See Part 1)		2010		44		M		DE	
(2) Color (See Part 2)									20
(3) Version (See Part 3)									M
(4) Ringer (See Part 4)									
(5) Special Feature (See Part 5)									
(6) Dial (See Part 6)									
PART 1 TYPE OF INSTRUMENT									
CODE	DESCRIPTION	COLOR OFFERED	VERSION OFFERED	RINGER OFFERED	FEATURE OFFERED	DIAL OFFERED			
2010	Tribute Basic, Single-Line, Pushbutton Dial, Desk Telephone	44, 47, 62, 63, And 64 (Available On All Models)	M	DE	20	M			
2011	Tribute Tel-Flash, Single-Line, Pushbutton Dial, Desk Telephone		M	DE	27	F			
2012	Tribute Enhanced, Single-Line, Pushbutton Dial, Desk Telephone		M	DE	20	S			
2015	Tribute, Single-Line, Pushbutton Dial, Desk Telephone With Tone/Pulse Switch		M	DE	20	M			
REFER TO INDIVIDUAL UNIT DESCRIPTION FOR COMPLETE DESCRIPTION OF FEATURE COMBINATIONS									
PART 2 COLORS		PART 3 VERSIONS		PART 4 RINGERS		PART 5 SPECIAL FEATURES		PART 6 DIALS	
CODE	COLORS	CODE	VERSIONS	CODE	RINGERS	CODE	SPECIAL FEATURES	CODE	DIAL
44	Light Ash	M	Full-Modular (With Cords)	DE	Electronic	20	Standard Telephone	M	Metropolitan (Letters & Numerals)
47	Cherry Red					27	20 With Message Waiting Lamp	F	Tel-Flash
62	Mauve							S	Auto Dial
63	Dove Gray								
64	Wedgewood Blue								

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MODEL 2010 () 20 (BASIC)**

1.08 The Model 2010** () 20 telephone is a single-line, pushbutton dial, desk telephone equipped with Tone (Tel-Touch) dialing. It provides no special features.

MODEL 2010 () 27 (BASIC)**

1.09 The Model 2010** () 27 telephone (no longer available) is the same as the Model 2010** () 20 telephone with the addition of a message waiting lamp. The lamp is for use in PABX (Private Automatic Branch Exchange) applications to indicate a waiting message for the station user. It also flashes to indicate an incoming call.

MODEL 2010 () 44 (BASIC)**

1.10 The Model 2010** () 44 telephone (no longer available) is the same as the Model 2010** () 20 telephone with the addition of the A-lead control feature. The telephone provides connections through the hookswitch that allow ground on the A1 lead to be applied to key telephone equipment by way of the A lead.

MODEL 2011 () 20 (TEL-FLASH)**

1.11 The Model 2011** () 20 telephone (no longer available) is a single-line, pushbutton dial, desk telephone equipped with Tone (Tel-Touch) dialing, a FLASH button, a RLSE button, and a

directory for recording important numbers. It can be used with a PABX to provide a timed hookswitch flash and a timed line disconnect.

1.12 The hookswitch flash is activated when the station user presses the FLASH button. The line is momentarily disconnected for 600 milliseconds. The line disconnect is activated when the station user presses the RLSE (Release) button. The line is disconnected for 2.0 to 2.5 seconds and dial tone is returned to the station.

MODEL 2011** () 27 (TEL-FLASH)

1.13 The Model 2011** () 27 telephone is the same as the Model 2011** () 20 telephone with the addition of the message waiting lamp. The lamp is for use in PABX applications to indicate a waiting message for the station user. It also flashes to indicate an incoming call.

MODEL 2012** () 20 (ENHANCED)

1.14 The Model 2012** () 20 telephone is a single-line, pushbutton dial, desk telephone equipped with both Tone (Tel-Touch) and Pulse (Tel-Pulse) dialing. It is also equipped with the automatic dialing feature.

1.15 The automatic dialing feature allows the station user to store 9 frequently-used numbers, up to 18 digits each, and to automatically dial any of the numbers upon request.

1.16 A directory is provided for writing the numbers stored in each memory location.

MODEL 2015** () 20 (TONE/PULSE)

1.17 The Model 2015** () 20 telephone is a single-line, pushbutton dial, desk telephone equipped with a Tone/Pulse switch to select Tone (Tel-Touch) or Pulse (Tel-Pulse) dialing.

2. INSTALLATION

2.01 Installation of these telephones consists of inserting the modular line cord plug into an available modular wall jack.

3. MAINTENANCE

3.01 For replacement parts information and for an exploded-view drawing of major assembly groups, refer to Section 50-010-101.

4. OPERATION

A. Automatic Dialing

4.01 Automatic dialing can be performed with the Model 2012 telephone. A number can be stored into the automatic dialing memory directly or as the last number dialed.

4.02 To store a number directly into the automatic dialing memory:

- (a) Leave the handset on-hook.
- (b) Dial the number to be stored (including a pause when required).
- (c) Press the STORE button.
- (d) Press the pushbutton dial digit (1-9) to assign the number to a memory location.

Note: A 4-second pause can be stored as part of a number. To store a pause, press the PAUSE button followed by the rest of the number.

4.03 To store the last number dialed into the automatic dialing memory:

- (a) Leave the handset on-hook.
- (b) Press the STORE button.
- (c) Press the pushbutton dial digit (1-9) to assign the number to a memory location.

4.04 To make a call using automatic dialing:

- (a) Lift the handset and check for dial tone.
- (b) Press the MEMORY button.
- (c) Press the pushbutton dial digit (1-9) that corresponds to the memory location of the desired number.

B. Redial

4.05 The redial feature can be performed with the Model 2011 and 2012 telephones. To automatically redial the last number dialed:

- (a) Lift the handset and check for dial tone.
- (b) Press the REDIAL button.

TRIBUTE SERIES, SINGLE-LINE, PUSHBUTTON DIAL, DESK TELEPHONES REPLACEMENT PARTS

1. GENERAL

1.01 This document covers the Tribute Series, single-line, pushbutton dial, desk telephones. (See Figure 1.) An exploded-view drawing of the telephone with major assembly groups (see Figure 2) and a replacement parts list (see Table A) are included.

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

1.03 For additional information on description and installation of the telephones, refer to Section 50-010-100. Circuit labels are not provided for the

telephones. Related documents of the CORTELCO Telephone Apparatus Practices Manual provide information on components.

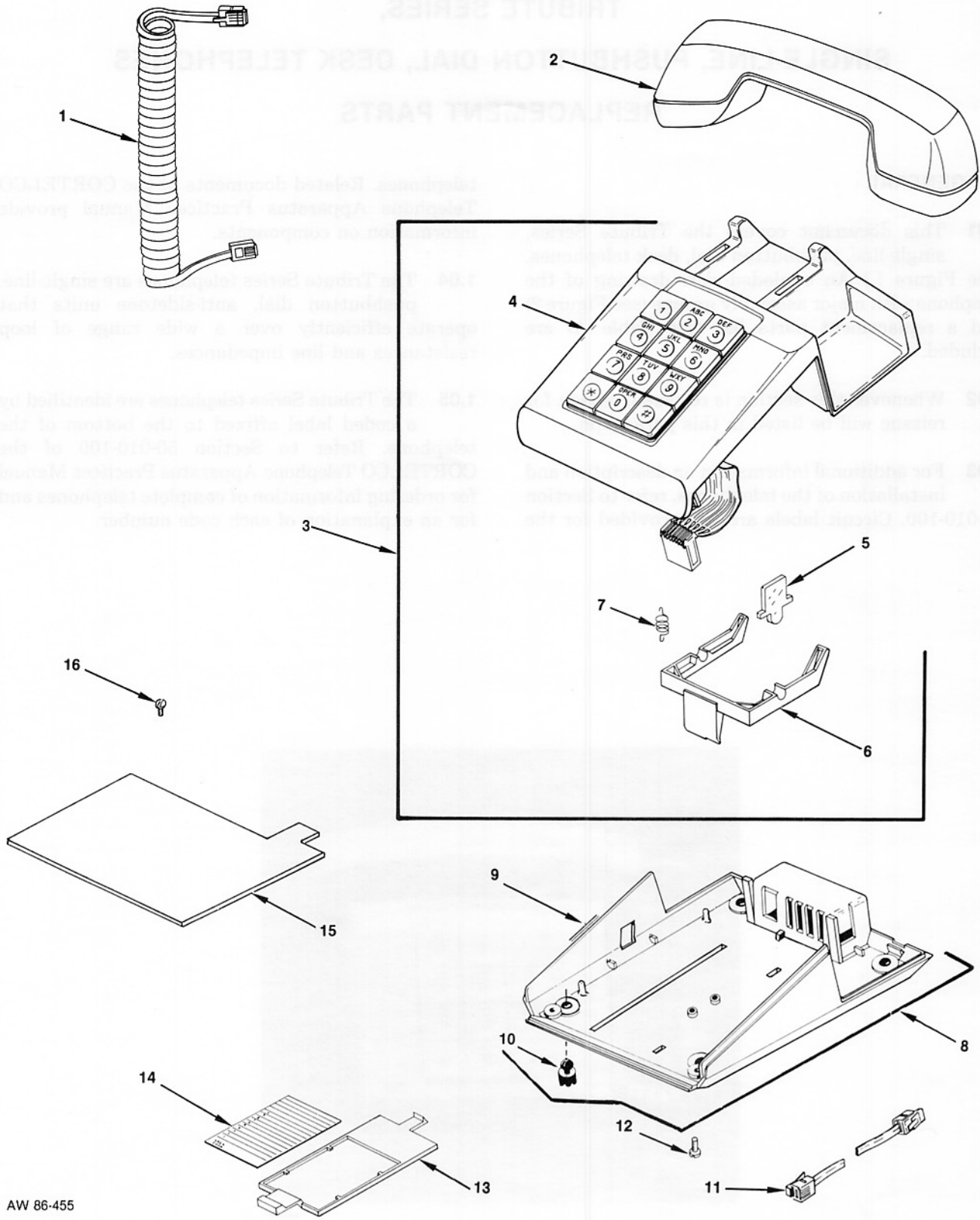
1.04 The Tribute Series telephones are single-line, pushbutton dial, anti-sidetone units that operate efficiently over a wide range of loop resistances and line impedances.

1.05 The Tribute Series telephones are identified by a coded label affixed to the bottom of the telephone. Refer to Section 50-010-100 of the CORTELCO Telephone Apparatus Practices Manual for ordering information of complete telephones and for an explanation of each code number.



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Figure 1: Tribute Series, Single-Line, Pushbutton Dial, Desk Telephone



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Figure 2: Tribute Series, Single-Line, Pushbutton Dial, Desk Telephone, Exploded View

TABLE A
REPLACEMENT PARTS LIST

INDEX NO	PART NUMBER	DESCRIPTION	QUANTITY USED						
			2010/20	2010/27	2010/44	2011/20	2011/27	2012/20	2015/20
		Tribute Series, Single-Line, Pushbutton Dial, Desk Telephone							
1	9018**-072	Cord, Handset	1	1	1	1	1	1	1
2	187402-1**	Handset Assembly ¹	1	1	1	1	1	1	1
2	187863-1**	Handset Assembly ¹	1	1	1	1	1	1	1
3	187317-1**	Cover Assembly	1	—	1	—	—	—	—
3	187317-2**	Cover Assembly	—	—	—	1	—	—	—
3	187317-3**	Cover Assembly	—	—	—	—	—	1	—
3	187317-4**	Cover Assembly	—	1	—	—	—	—	—
3	187317-5**	Cover Assembly	—	—	—	—	1	—	—
3	187317-6**	Cover Assembly	—	—	—	—	—	—	1
4	187318-1**	Cover	1	—	1	1	—	1	1
4	187318-2**	Cover	—	1	—	—	1	—	—
5	600045-619-001	Plunger, Hookswitch	2	2	2	2	2	2	2
6	600046-619-001	Actuator, Hookswitch	1	1	1	1	1	1	1
7	600048-619-001	Spring, Hookswitch	1	1	1	1	1	1	1
	187315-101	Lamp, Message Waiting (Not Shown)	—	1	—	—	1	—	—
8	187405-1**	Base Assembly	1	1	1	1	1	—	—
8	187405-2**	Base Assembly	—	—	—	—	—	1	1
9	604464-602-1**	Base	1	1	1	1	1	—	—
9	604464-602-2**	Base	—	—	—	—	—	1	1
10	184403-101	Foot, Rubber	4	4	4	4	4	4	4
11	182827-084	Cord, Line (Modular)	—	—	1	—	—	—	—
11	600989-540-084	Cord, Line (Modular)	1	1	—	1	1	1	1
12	181145-103	Screw, Pan-Head Type B	2	2	2	2	2	2	2
13	187131-0**	Frame, Directory	—	1	—	1	1	1	—
14	601339-626-001	Card, Directory	—	1	—	1	1	1	—
15	602108-536-101	PCB Assembly ¹	1	—	—	—	—	—	—
15	602108-536-102	PCB Assembly ¹	—	1	1	—	—	—	—
15	602109-536-101	PCB Assembly ¹	—	—	—	—	—	1	—
15	602109-536-102	PCB Assembly ¹	—	—	—	—	—	—	1
15	602110-536-101	PCB Assembly ¹	—	—	—	1	1	—	—
16	600017-204-026	Screw, PCB Mounting	1	1	1	1	1	1	1

NOTES:

**Substitute 2-Digit Color Code When Ordering.

¹ Refer To Component Parts Section Of This Manual For Assembly Parts List.

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CITATION SERIES, SINGLE-LINE, PUSHBUTTON DIAL, DESK/WALL TELEPHONES GENERAL DESCRIPTION

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Figure 1: Citation Series, Single-Line, Pushbutton Dial, Desk/Wall Telephone

1. GENERAL DESCRIPTION

1.01 This document covers the Citation Series, single-line, pushbutton dial, desk/wall telephones. (See Figure 1.) A general description plus information peculiar to the Citation Series, single-line, pushbutton dial, desk/wall telephones is included.

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

1.03 A replacement parts list and an exploded-view drawing for the telephones are contained in Section 50-020-101. Circuit labels are not provided for the telephones. Related documents of the CORTELCO Telephone Apparatus Practices Manual provide information on components.

1.04 The Citation Series telephones are single-line, pushbutton dial, anti-sidetone units that operate efficiently over a wide range of loop resistances and line impedances. The telephones are compatible with inductively-coupled hearing aid devices.

1.05 The Citation Series telephones are identified by a coded label affixed to the bottom of the telephone. Refer to ordering information in Table A for an explanation of each code number.

1.06 The Citation Series telephones are full-modular version telephones. Full-modular version telephones are equipped with a modular handset cord, a modular line cord for desk mounting, and a built-in modular line cord for wall mounting. The modular handset cord and the modular line cord are terminated on each end with modular plugs. The built-in line cord is terminated on one end with a modular plug and on the other end with spade tip connectors. This version is designated by the code letter M. (Refer to Table A.)

1.07 The Citation Series telephones are available as the Model 2020 Basic telephone, the Model 2021 Tel-Flash telephone, the Model 2022 Enhanced telephone, and the Model 2025 Tone/Pulse telephone. These telephones and all available variations are described in the following paragraphs.

TABLE A
ORDERING INFORMATION - TELEPHONES

CODE NUMBERS													
TELEPHONE CODE NUMBERS ARE FORMED IN SIX STEPS AS FOLLOWS:													
		2020		44		M		DE		21		M	
(1)	Type of Instrument (See Part 1)	_____		_____		_____		_____		_____		_____	
(2)	Color (See Part 2)	_____		_____		_____		_____		_____		_____	
(3)	Version (See Part 3)	_____		_____		_____		_____		_____		_____	
(4)	Ringer (See Part 4)	_____		_____		_____		_____		_____		_____	
(5)	Special Feature (See Part 5)	_____		_____		_____		_____		_____		_____	
(6)	Dial (See Part 6)	_____		_____		_____		_____		_____		_____	
PART 1 TYPE OF INSTRUMENT													
CODE	DESCRIPTION	COLOR OFFERED	VERSION OFFERED	RINGER OFFERED	FEATURE OFFERED	DIAL OFFERED							
2020	Citation Basic, Single-Line, Pushbutton Dial, Desk/Wall Telephone	15, 44, 47, 62, 63, And 64 (Available On All Models)	M	DE	21	M							
2021	Citation Tel-Flash, Single-Line, Pushbutton Dial, Desk/Wall Telephone		M	DE	27	F							
2022	Citation Enhanced, Single-Line, Pushbutton Dial, Desk/Wall Telephone		M	DE	21	S							
2025	Citation, Single-Line, Pushbutton Dial, Desk/Wall Telephone With Tone/Pulse Switch		M	DE	21	M							
REFER TO INDIVIDUAL UNIT DESCRIPTION FOR COMPLETE DESCRIPTION OF FEATURE COMBINATIONS													
PART 2 COLORS		PART 3 VERSIONS		PART 4 RINGERS		PART 5 SPECIAL FEATURES		PART 6 DIALS					
CODE	COLORS	CODE	VERSIONS	CODE	RINGERS	CODE	SPECIAL FEATURES	CODE	DIAL				
15	White	M	Full-Modular (With Cords)	DE	Electronic	21	Standard Telephone With 9-Foot Handset Cord	M	Metropolitan (Letters & Numerals)				
44	Light Ash					27	21 With Message Waiting Lamp	F	Tel-Flash				
47	Cherry Red							S	Auto Dial				
62	Mauve												
63	Dove Gray												
64	Wedgewood Blue												

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MODEL 2020 () 21 (BASIC)**

1.08 The Model 2020** () 21 telephone is a single-line, pushbutton dial, desk or wall telephone equipped with Tone (Tel-Touch) dialing and a 9-foot handset cord.

MODEL 2020 () 27 (BASIC)**

1.09 The Model 2020** () 27 telephone (no longer available) is the same as the Model 2020** () 21 telephone with the addition of a

message waiting lamp. The lamp is for use in PABX (Private Automatic Branch Exchange) applications to indicate a waiting message for the station user. It also flashes to indicate an incoming call.

MODEL 2020 () 44 (BASIC)**

1.10 The Model 2020** () 44 telephone (no longer available) is the same as the Model 2020** () 21 telephone with the addition of the A-lead control feature. The telephone provides

connections through the hookswitch that allow ground on the A1 lead to be applied to key telephone equipment by way of the A lead.

MODEL 2021** () 21 (TEL-FLASH)

1.11 The Model 2021** () 21 telephone (no longer available) is a single-line, pushbutton dial, desk or wall telephone equipped with Tone (Tel-Touch) dialing, a FLASH button, a RLSE button, and a directory for recording important numbers. It can be used with a PABX to provide a timed hookswitch flash and a timed line disconnect.

1.12 The hookswitch flash is activated when the station user presses the FLASH button. The line is momentarily disconnected for 600 milliseconds. The line disconnect is activated when the station user presses the RLSE (Release) button. The line is disconnected for 2.0 to 2.5 seconds and dial tone is returned to the station.

MODEL 2021** () 27 (TEL-FLASH)

1.13 The Model 2021** () 27 telephone is the same as the Model 2021** () 21 telephone with the addition of the message waiting lamp. The lamp is for use in PABX applications to indicate a waiting message for the station user. It also flashes to indicate an incoming call.

MODEL 2022** () 21 (ENHANCED)

1.14 The Model 2022** () 21 telephone is a single-line, pushbutton dial, desk or wall telephone equipped with both Tone (Tel-Touch) and Pulse (Tel-Pulse) dialing. It is also equipped with the automatic dialing feature.

1.15 The automatic dialing feature allows the station user to store 9 frequently-used numbers, up to 18 digits each, and to automatically dial any of the numbers upon request.

1.16 A directory is provided for writing the numbers stored in each memory location.

MODEL 2025** () 21 (TONE/PULSE)

1.17 The Model 2025 ** () 21 telephone is a single-line, pushbutton dial, desk/wall

telephone equipped with a Tone/Pulse switch to select Tone (Tel-Touch) or Pulse (Tel-Pulse) dialing.

2. INSTALLATION

2.01 Installation of these telephones consists of inserting the modular line cord plug into an available modular wall jack.

3. MAINTENANCE

3.01 For replacement parts information and for an exploded-view drawing of major assembly groups, refer to Section 50-020-101.

4. OPERATION

A. Automatic Dialing

4.01 Automatic dialing can be performed with the Model 2022 telephone. A number can be stored into the automatic dialing memory directly or as the last number dialed.

4.02 To store a number directly into the automatic dialing memory:

- (a) Leave the handset on-hook.
- (b) Dial the number to be stored (including a pause when required).
- (c) Press the STORE button.
- (d) Press the pushbutton dial digit (1-9) to assign the number to a memory location.

Note: A 4-second pause can be stored as part of a number. To store a pause, press the PAUSE button followed by the rest of the number.

4.03 To store the last number dialed into the automatic dialing memory:

- (a) Leave the handset on-hook.
- (b) Press the STORE button.
- (c) Press the pushbutton dial digit (1-9) to assign the number to a memory location.

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4.04 To make a call using automatic dialing:

- (a) Lift the handset and check for dial tone.
- (b) Press the MEMORY button.
- (c) Press the pushbutton dial digit (1-9) that corresponds to the memory location of the desired stored number.

B. Redial

4.05 The redial feature can be performed with the Model 2021 and 2022 telephones. To automatically redial the last number dialed:

- (a) Lift the handset and check for dial tone.
- (b) Press the REDIAL button.

CITATION SERIES, SINGLE-LINE, PUSHBUTTON DIAL, DESK/WALL TELEPHONES REPLACEMENT PARTS

1. GENERAL

1.01 This document covers the Citation Series, single-line, pushbutton dial, desk/wall telephones. (See Figure 1.) An exploded-view drawing of the telephone with major assembly groups (see Figure 2) and a replacement parts list (see Table A) are included.

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

1.03 For additional information on description and installation of the telephones, refer to Section 50-020-100. Circuit labels are not provided for the

telephones. Related documents of the CORTELCO Telephone Apparatus Practices Manual provide information on components.

1.04 The Citation Series telephones are single-line, pushbutton dial, anti-sidetone units that operate efficiently over a wide range of loop resistances and line impedances.

1.05 The Citation Series telephones are identified by a coded label affixed to the bottom of the telephone. Refer to Section 50-020-100 of the CORTELCO Telephone Apparatus Practices Manual for ordering information of complete telephones and for an explanation of each code number.



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Figure 1: Citation Series, Single-Line, Pushbutton Dial, Desk/Wall Telephone

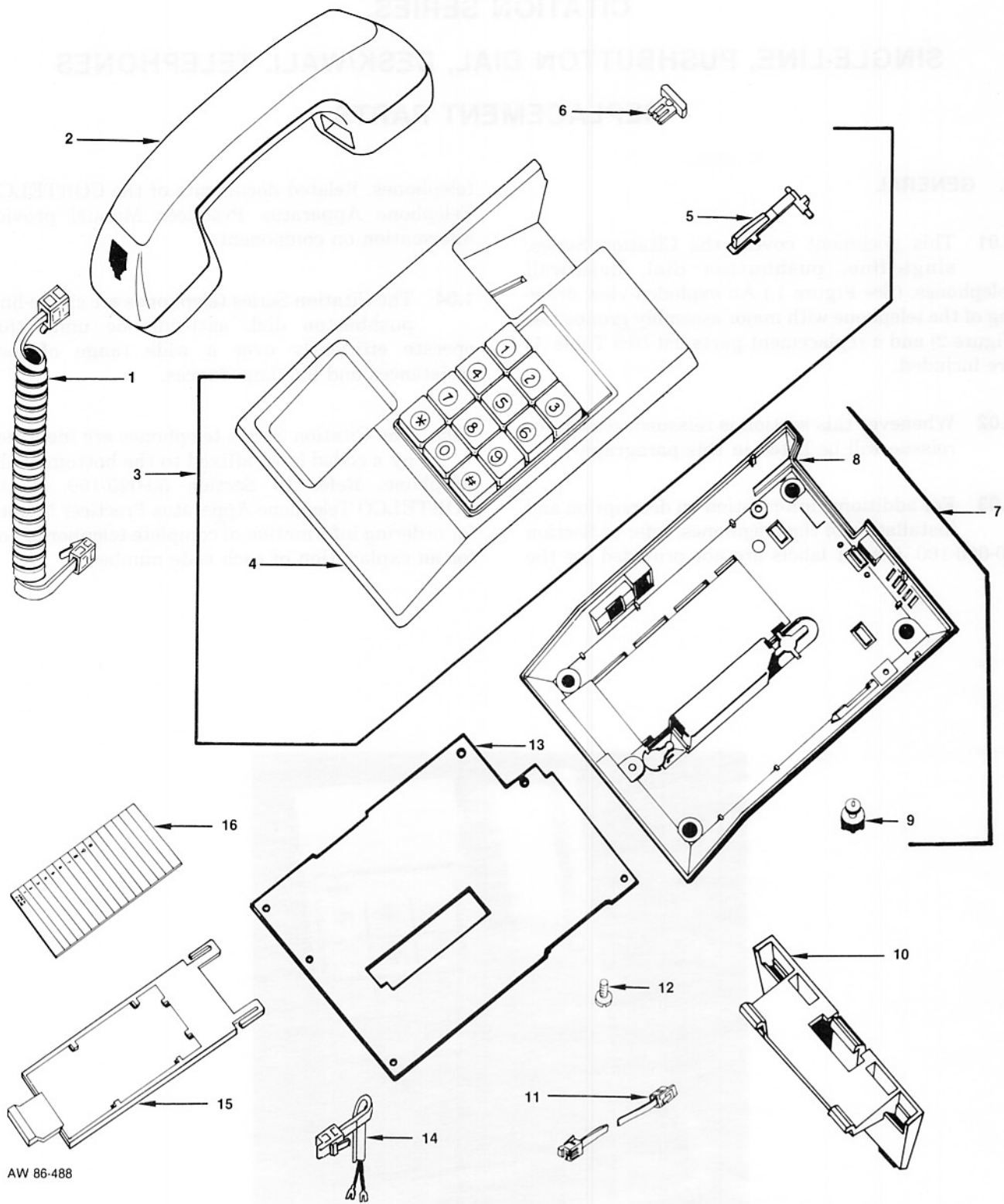


Figure 2: Citation Series, Single-Line, Pushbutton Dial, Desk/Wall Telephone, Exploded View

TABLE A
REPLACEMENT PARTS LIST

INDEX NO	PART NUMBER	DESCRIPTION	QUANTITY USED						
			2020/21	2020/27	2020/44	2021/21	2021/27	2022/21	2025/21
		Citation Series, Single-Line, Pushbutton Dial, Desk/Wall Telephone							
1	9018**-108	Cord, 9-Foot Handset	1	1	1	1	1	1	1
2	187402-1**	Handset Assembly ¹	—	—	—	—	1	1	1
2	187863-1**	Handset Assembly ¹	1	1	1	1	1	1	1
3	187435-1**	Cover Assembly	1	—	1	—	—	—	—
3	187435-2**	Cover Assembly	—	—	—	1	—	—	—
3	187435-3**	Cover Assembly	—	—	—	—	—	1	—
3	187435-4**	Cover Assembly	—	1	—	—	—	—	—
3	187435-5**	Cover Assembly	—	—	—	—	1	—	—
3	187435-6**	Cover Assembly	—	—	—	—	—	—	1
4	187319-5**	Cover	1	—	1	—	—	—	1
4	187319-6**	Cover	—	1	—	—	—	—	—
4	187319-7**	Cover	—	—	—	1	—	1	—
4	187319-8**	Cover	—	—	—	—	1	—	—
5	600044-619-002	Plunger, Hookswitch	1	1	1	1	1	1	1
6	604286-602-001	Tab, Cradle	1	1	1	1	1	1	1
	187315-101	Lamp, Message Waiting (Not Shown)	—	1	—	—	1	—	—
7	187406-3**	Base Assembly	1	1	1	1	1	—	—
7	187406-4**	Base Assembly	—	—	—	—	—	1	1
8	187459-1**	Base	1	1	1	1	1	—	—
8	187459-2**	Base	—	—	—	—	—	1	1
8	187886-1**	Base	1	1	1	1	1	—	—
8	604462-602-1**	Base	1	1	1	1	1	—	—
9	184403-101	Foot, Rubber	4	4	4	4	4	4	4
10	600027-546-0**	Desk Stand Assembly	1	1	1	1	1	1	1
11	182827-084	Cord, 4-Conductor Line (Modular)	—	—	1	—	—	—	—
11	600989-540-084	Cord, 2-Conductor Line (Modular)	1	1	—	1	1	1	1
12	181145-103	Screw, Pan-Head Type B	3	3	3	3	3	3	3
13	602105-536-101	PCB Assembly ¹	1	1	—	—	—	—	—
13	602105-536-102	PCB Assembly ¹	—	—	1	—	—	—	—
13	602106-536-101	PCB Assembly ¹	—	—	—	—	—	1	—
13	602106-536-102	PCB Assembly ¹	—	—	—	—	—	—	1
13	602107-536-101	PCB Assembly ¹	—	—	—	1	1	—	—
14	600976-540-101	Pigtail Cable Assembly (2-Conductor Line Cord)	1	1	—	1	1	1	1
14	600976-540-102	Pigtail Cable Assembly (4-Conductor Line Cord)	—	—	1	—	—	—	—
15	187131-0**	Frame, Directory	—	1	—	1	1	1	—
16	601339-626-001	Card, Directory	—	1	—	1	1	1	—

NOTES:

**Substitute 2-Digit Color Code When Ordering.

¹ Refer To Component Parts Section Of This Manual For Assembly Parts List.

AW88-125

SINGLE-LINE, ELECTRONIC PUSHBUTTON TELEPHONES WITH AUTO DIAL (FASTFONE)

GENERAL DESCRIPTION

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1. GENERAL DESCRIPTION	1
MODEL 2400** ()20	2
2. INSTALLATION	2
3. MAINTENANCE	3
4. OPERATION	3
5. BATTERY REQUIREMENTS	4

1. GENERAL DESCRIPTION

1.01 This document covers the single-line, electronic pushbutton telephones with auto dial. (See Figure 1.) A general description plus information peculiar to the single-line, electronic pushbutton telephones with auto dial is included.



AW 84-131

Figure 1: Single-Line, Electronic Pushbutton Telephone With Auto Dial

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

1.03 For additional information on replacement parts and for an exploded-view drawing for the telephones, refer to Section 50-400-101. The circuit labels appear in Section 50-400-102. Related documents of the ITT Telephone Apparatus Practices Manual provide information on components.

1.04 The Model 2400 desk telephones are single-line, electronic pushbutton telephones with auto dial. With this feature, the station user can record 10 frequently-used numbers, up to 16 digits each. Upon request, the Model 2400 telephone will dial the recorded number automatically. The station user also can automatically redial the last-number-dialed and can predial a number before going off-hook. These telephones are anti-sidetone type units that operate efficiently over a wide range of loop resistances and line impedances.

1.05 The Model 2400 telephones are available as conventional, quarter-modular, or full-modular versions. These versions are designated by a code letter that is placed in front of the ringer code letters in the order number of the telephone. (Refer to Table A.)

1.06 Conventional version desk telephones include a hard-wired handset cord and a hard-wired line cord. This version is designated by the code letter O.

1.07 Quarter-modular version desk telephones include a hard-wired handset cord and a plug-in line cord. The line cord is hard-wired on one end to the telephone base. The line cord is terminated on the other end with a modular plug that can be inserted into a modular wall jack. This version is designated by the code letter Q.

1.08 Full-modular version desk telephones are available with or without a modular handset cord and a modular line cord. However, all full-modular desk telephones are equipped with jacks to accept the plugs of a modular handset cord and a modular line cord. The full-modular version of the telephone with both a modular handset cord and a modular line cord, terminated on each end with modular plugs, is designated by the code letter M. The full-modular version without a modular handset cord and a modular line cord is designated by the code letter F.

TABLE A

ORDERING INFORMATION – TELEPHONES

CODE NUMBERS										
TELEPHONE CODE NUMBERS ARE FORMED IN SIX STEPS AS FOLLOWS:										
(1) Type of Instrument (See Part 1)										
(2) Color (See Part 2)										
(3) Version (See Part 3)										
(4) Ringer (See Part 4)										
(5) Special Feature (See Part 5)										
(6) Dial (See Part 6)										
PART 1 TYPE OF INSTRUMENT										
CODE	DESCRIPTION	COLOR OFFERED	VERSION OFFERED	RINGER OFFERED	FEATURE OFFERED	DIAL OFFERED				
2400	Single-Line, Electronic Pushbutton Telephone With Auto Dial	00, 05, 09, 12, 13, 15, 43, 44, 45, 46, and 47 (Available On All Models)	O, F, M, Q	BA, LR	20	S				
REFER TO INDIVIDUAL UNIT DESCRIPTION FOR COMPLETE DESCRIPTION OF FEATURE COMBINATIONS										
PART 2 COLORS		PART 3 VERSIONS		PART 4 RINGERS		PART 5 SPECIAL FEATURES		PART 6 DIALS		
CODE	COLORS	CODE	VERSIONS	CODE	RINGERS	CODE	SPECIAL FEATURES	CODE	DIAL	
00	Black	O	Conventional	LR	Less Ringer	20	No Special Feature	S	Auto Dial	
05	Moss Green									
09	Ivory	F	Full-Modular	BA	Straight-Line					
12	Aqua Blue									
13	Beige	M	Full-Modular (with cords)							
15	White									
43	Orange	Q	Quarter-Modular							
44	Light Ash									
45	Cocoa Brown									
46	Harvest Gold									
47	Cherry Red									

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1.09 The Model 2400 desk telephones are described in the following paragraphs. The circuit label drawing for these telephones is described in Section 50-400-102.

MODEL 2400 () 20**

1.10 The Model 2400** () 20 is a single-line, electronic pushbutton dial, desk telephone with auto dial feature. The auto dial feature consists of the 186087-101 electronic auto dialer assembly, the 186250-101 AUTO DIAL pushbutton switch, and associated components. It allows the station user to record 10 frequently-used numbers, up to 16

digits each, and dial any one of the recorded numbers on request. The Model 2400 telephone uses the 67-type electronic handset and associated components; this allows reliable operation using less current than other telephones require. The electronic handset will operate only on electronic telephones such as the Model 2400 telephone.

2. INSTALLATION

2.01 Since the modular versions of these telephones are equipped with modular plugs, installation consists of inserting this plug into an available wall jack. Refer to the appropriate circuit label for installation wiring of nonmodular units.

3. MAINTENANCE

3.01 For replacement parts information and for an exploded-view drawing of major assembly groups, refer to Section 50-400-101.

4. OPERATION

4.01 A number can be recorded into auto dial directly or as the last-number-dialed. Either method can be used with the handset on-hook or off-hook. If a misdial occurs while recording a number, start again at the first step.

4.02 To record a number directly into auto dial, perform the following steps:

- (a) Press the AUTO DIAL feature button.
- (b) Press the pushbutton dial * button.
- (c) Press the pushbutton dial number (0-9) button that corresponds to the desired recording location.
- (d) Dial the complete number to be recorded.

Note: Any recorded number can be cleared by going on-hook and performing steps a, b, and c. This action will clear only one recorded number at a time.

4.03 An adhesive-backed directory card is included with the telephone. It can be glued to the telephone handset or housing and used to list each recorded number in the corresponding dial pushbutton (0-9) number location.

4.04 To record the last-number-dialed, perform the following steps:

- (a) Press the AUTO DIAL feature button.
- (b) Press the pushbutton dial * button.
- (c) Press the pushbutton dial number (0-9) that corresponds to the desired recording location.
- (d) Press the AUTO DIAL feature button.
- (e) Press the pushbutton dial # button.

Note: The last-number-dialed memory can be cleared with the handset on-hook by pressing the pushbutton dial * button twice. This action has no effect on recorded numbers.

4.05 Numbers can be recorded in a manner that allows for "stops", with dialing continuing upon request. To record a "stop", press the pushbutton dial # button. As the auto dial feature automatically dials the recorded number and the "stop" is reached, press the pushbutton dial # button, and dialing will continue automatically. When automatic dialing of the recorded number is completed, manual dialing can be continued as desired.

4.06 Three methods of automatic dialing with the auto dial feature are as follows: (a) dial a recorded number, (b) pre-dial a number, or (c) redial the last-number-dialed.

- (a) To dial a recorded number automatically:
 - (1) Go off-hook and check for the presence of dial tone.
 - (2) Press the AUTO DIAL feature button.
 - (3) Press the pushbutton dial number (0-9) button that corresponds to the desired recorded number.
- (b) To pre-dial a number:
 - (1) Dial the desired number.
 - (2) Go off-hook and check for the presence of dial tone.
 - (3) Press the AUTO DIAL feature button two times.
- (c) To redial automatically the last-number-dialed:
 - (1) Go off-hook and check for the presence of dial tone.
 - (2) Press the AUTO DIAL feature button.
 - (3) Press the pushbutton dial # button.

Note: Manual dialing may be used in addition to automatic dialing. For example, a station user can dial a CO (Central Office) access

number manually; then, after receiving CO dial tone, the station user can perform steps 2 and 3 of the automatic dialing operation.

5. BATTERY REQUIREMENTS

5.01 The Model 2400 telephone with the electronic auto dialer assembly must have a battery installed. The battery is not included with the telephone. Any nine-volt alkaline battery is acceptable, and it should be replaced once each year. The battery can be changed without any loss of recorded numbers by going off-hook at the Model 2400 telephone.

5.02 The nine-volt alkaline battery can be installed in the telephone without removing the telephone housing. To install the battery into the telephone perform the following steps:

(a) Remove the dial faceplate from the telephone.

Note: Use a straightened paper clip to push up the retainer clip at the top of the faceplate.

(b) Locate the plastic battery tab near the upper left-hand corner of the electronic auto dialer assembly. This plastic battery tab is attached to the battery bracket and is used to remove the old battery from the telephone.

(c) Locate the battery clip and match the terminals of the battery clip to the terminals of the battery. Push the battery clip onto the battery terminals.

(d) Insert the battery down into the bracket and fold the end of the plastic battery tab over the battery. Push the battery clip wires toward the left side of the telephone housing so they will not interfere with the dial.

(e) Replace the dial faceplate.

SINGLE-LINE, ELECTRONIC PUSHBUTTON TELEPHONES WITH AUTO DIAL (FASTFONE) REPLACEMENT PARTS

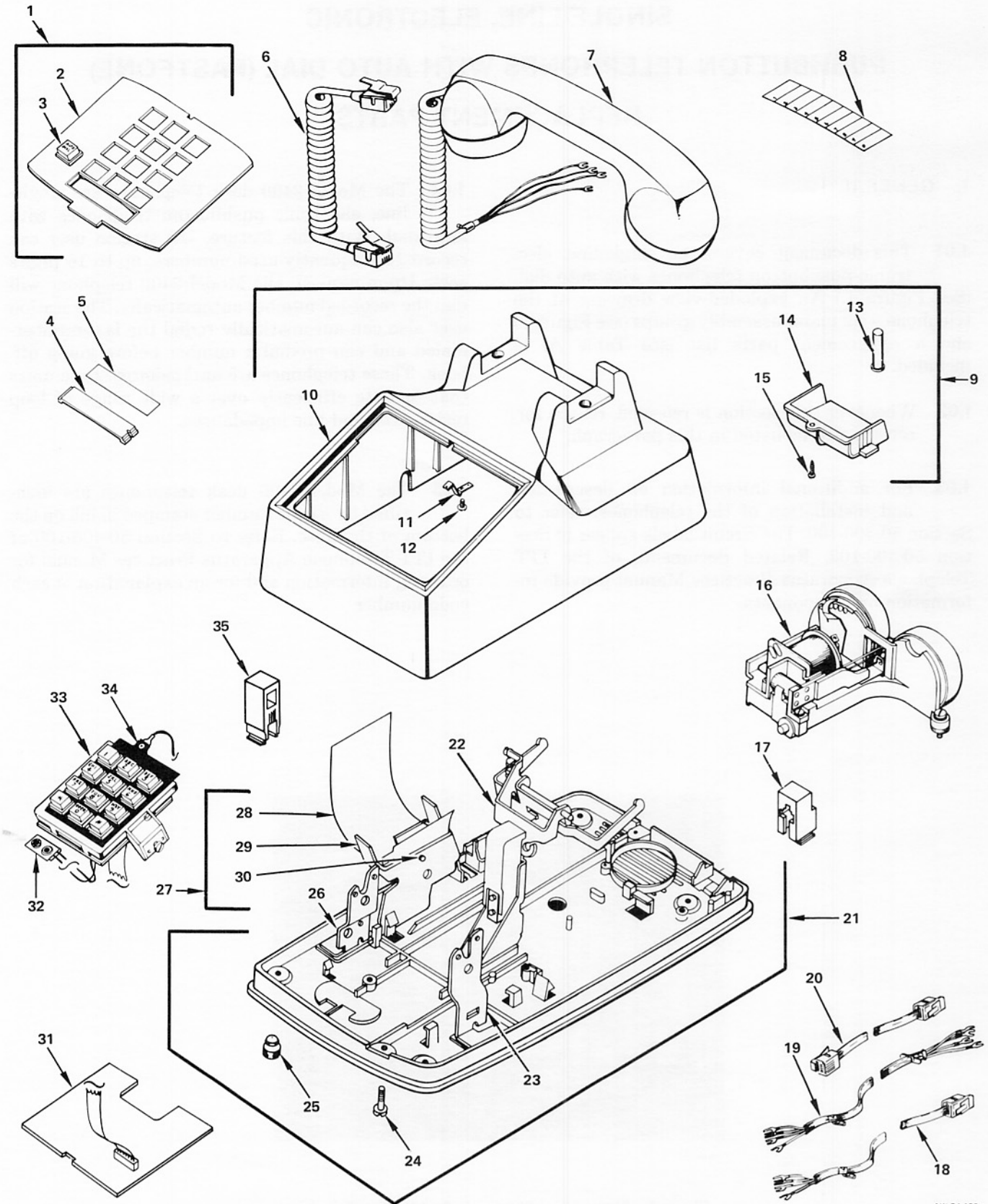
1. GENERAL

- 1.01** This document covers the single-line, electronic pushbutton telephones with auto dial. (See Figure 1.) An exploded-view drawing of the telephone with major assembly groups (see Figure 2) and a replacement parts list (see Table A) is included.
- 1.02** Whenever this section is reissued, reason for reissue will be listed in this paragraph.
- 1.03** For additional information on description and installation of the telephones, refer to Section 50-400-100. The circuit labels appear in Section 50-400-102. Related documents of the ITT Telephone Apparatus Practices Manual provide information on components.
- 1.04** The Model 2400 desk telephones are single-line, electronic pushbutton telephones with auto dial. With this feature, the station user can record 10 frequently-used numbers, up to 16 digits each. Upon request, the Model 2400 telephone will dial the recorded number automatically. The station user also can automatically redial the last-number-dialed and can predial a number before going off-hook. These telephones are anti-sidetone type units that operate efficiently over a wide range of loop resistances and line impedances.
- 1.05** The Model 2400 desk telephones are identified by a code number stamped in ink on the bottom of the base. Refer to Section 50-400-100 of the ITT Telephone Apparatus Practices Manual for ordering information and for an explanation of each code number.



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Figure 1: Single-Line, Electronic Pushbutton Telephone
With Auto Dial



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Figure 2: Single-Line Electronic Pushbutton Telephone With Auto Dial, Exploded View

TABLE A
REPLACEMENT PARTS LIST

INDEX NO.	PART NUMBER	DESCRIPTION	QUANTITY USED
		Single-Line, Electronic Pushbutton Telephone With Auto Dial	2400/20
1	185496-0**	Faceplate Assembly	1
2	185732-0**	Faceplate	1
3	186250-101	Pushbutton, AUTO DIAL	1
4	087514-101	Retainer, Number Card	1
5	087513-101	Card, Number	1
5	087513-102	Card, Number, Strip of 6 (Not Shown) ³	—
6	9018**-072	Cord, Handset (Modular)	1
7	0067**-EC2	Handset Assembly ¹	1
7	0067**-EM2	Handset Assembly (Full-Modular) ¹	1
8	184124-101	Card, Directory	1
9	184408-0**	Housing And Plunger Assembly	1
10	184399-0**	Housing	1
11	086143-101	Clip, Faceplate	1
12	096006-102	Screw, Faceplate Clip	1
13	075406-102	Plunger, Cradle Switch	2
14	075405-0**	Plunger, Retainer	1
15	075407-102	Screw, Plunger Retainer	1
16	000130-0BA	Ringer ¹	1
17	184406-101	Insulator Assembly (Modular Line Cord)	1
18	182852-084	Cord, Mounting (Quarter-Modular)	1
19	182800-084	Cord, Mounting (Conventional)	1
20	182827-084	Cord, Mounting (Full-Modular)	1

TABLE A
REPLACEMENT PARTS LIST (Cont)

INDEX NO	PART NUMBER	DESCRIPTION	QUANTITY USED
		Single-Line, Electronic Pushbutton Telephone With Auto Dial	2400/20
21	184401-103	Base Assembly	1
		Plastic Base ²	1
22	075300-101	Cradle Switch Assembly ¹	1
	075309-101	Spring Nest Assembly (Not Shown)	1
	075308-101	Pin, Pivot (Not Shown)	1
	075302-101	Arm, Operating (Not Shown)	1
	075307-101	Spring, Cradle Return (Not Shown)	1
23	086145-101	Bracket, Dial (R.H.)	1
24	075486-101	Screw, Cabinet Locking	2
25	184403-101	Foot, Rubber	4
26	086146-101	Bracket, Dial (L.H.)	1
27	184112-102	Battery Bracket Assembly	1
28	184111-101	Plastic Tab	1
29	184487-101	Bracket	1
30	190137-108	Rivet	1
31	184293-103	Network PCB Assembly ¹	1
32	184113-101	Clip, Battery	1
33	186087-101	Auto Dialer Assembly ¹	1
34	186129-102	Shield, Electrostatic	1
35	182990-104	Insulator Assembly (Modular Handset Cord)	1

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NOTES:

** Substitute 2-Digit Color Code When Ordering.

¹ Refer To Components Part Section Of This Manual For Assembly Parts List.

² NSS Item (Not Serviced Separately).

³ Must Be Ordered Separately.

SINGLE-LINE, ELECTRONIC PUSHBUTTON TELEPHONES WITH AUTO DIAL (FASTFONE) CIRCUIT LABELS

1. GENERAL

1.01 This document covers the single-line, electronic pushbutton telephones with auto dial. (See Figure 1.) The circuit label for the single-line, electronic pushbutton telephones with auto dial is included. (See Table A.)



AW 84-131

Figure 1: Single-Line, Electronic Pushbutton Telephone With Auto Dial

1.02 This section is reissued to provide the latest issue circuit label for the single-line, electronic pushbutton telephones with auto dial.

1.03 For additional information on description and installation of the telephones, refer to Section 50-400-100. A replacement parts list and an

exploded-view drawing for the telephones are contained in Section 50-400-101. Related documents of the ITT Telephone Apparatus Practices Manual provide information on components.

1.04 The Model 2400 desk telephones are single-line, electronic pushbutton telephones with auto dial. With this feature, the station user can record 10 frequently-used numbers, up to 16 digits each. Upon request, the Model 2400 telephone will dial the recorded number automatically. The station user also can automatically redial the last-number-dialed and can predial a number before going off-hook. These telephones are anti-sidetone type units that operate efficiently over a wide range of loop resistances and line impedances.

1.05 The Model 2400 desk telephones are identified by a code number stamped in ink on the bottom of the base. Refer to Section 50-400-100 of the ITT Telephone Apparatus Practices Manual for ordering information and for an explanation of each code number.

**TABLE A
LIST OF CIRCUIT LABELS**

MODEL NO	TYPE NO	FIGURE NO
2400** OBA	20S	2
2400** QBA	20S	2
2400** FBA	20S	2
2400** MBA	20S	2

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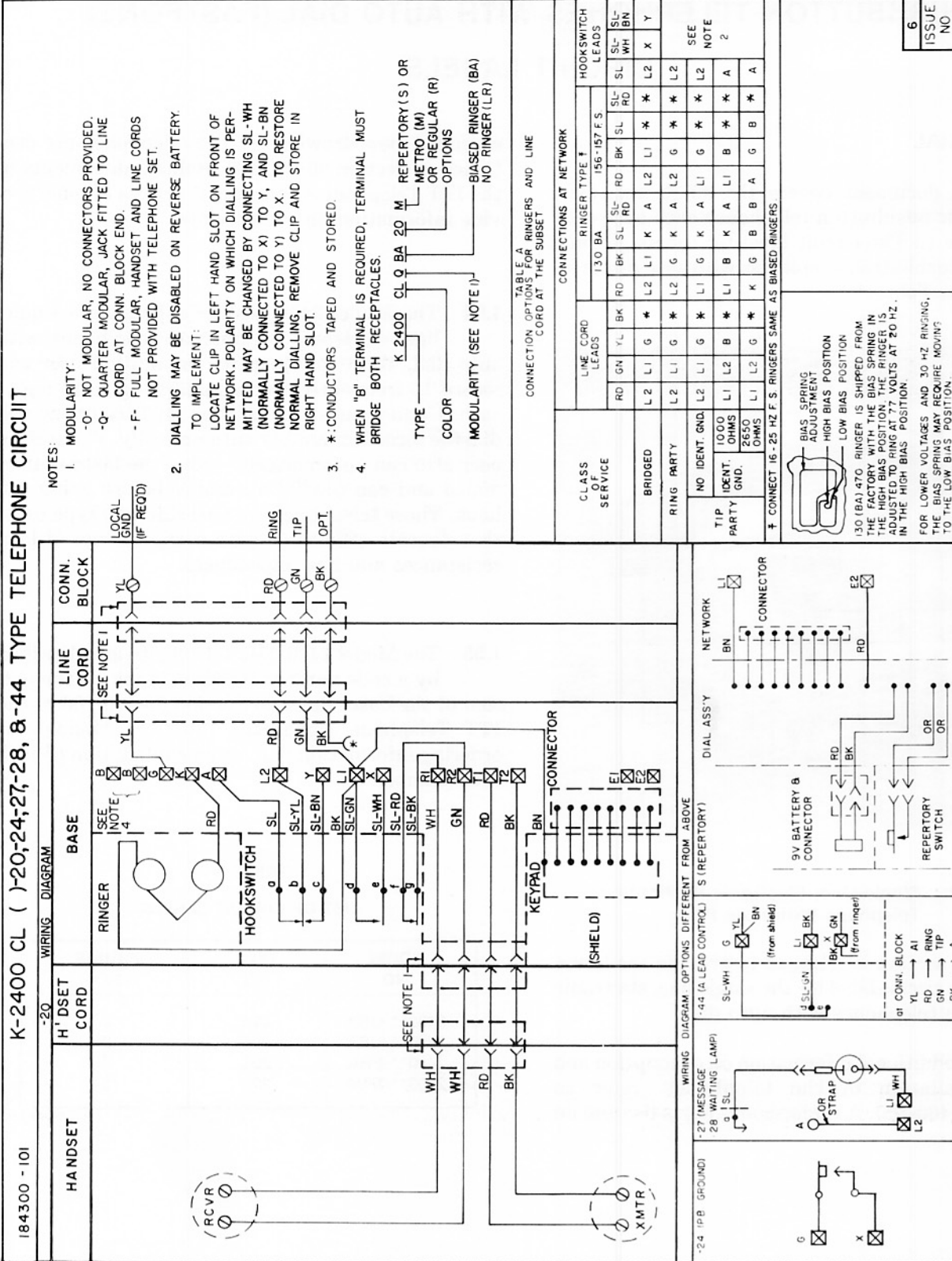


Figure 2: Circuit Label, Model 2400** OBA Type 20S; Model 2400** QBA Type 20S; Model 2400** FBA Type 20S; Model 2400** MBA Type 20S

SINGLE-LINE, ROTARY DIAL, DESK TELEPHONES

GENERAL DESCRIPTION

CONTENTS	PAGE
1. GENERAL DESCRIPTION	1
MODEL 500** () 20	3
MODEL 500** () 21	3
MODEL 500** () 24	3
MODEL 500** () 27/28	3
MODEL 500** () 39	3
MODEL 500** () 44	3
MODEL 502** () 30	3
MODEL 502** () 34	3
2. INSTALLATION	3
3. MAINTENANCE	3

1. GENERAL DESCRIPTION

1.01 This document covers the single-line, rotary dial, desk telephones. (See Figure 1.) A general description as well as information that is peculiar to single-line, rotary dial, desk telephones is included.

1.02 This section is reissued for the following reasons:

(a) Issue 3 adds feature codes 27 and 44 to the full-modular (M) version of the single-line, rotary dial, desk telephones. Quarter-modular (Q) and full-modular (F) versions of the single-line, rotary dial, desk telephones have been manufacturing discontinued as well as the following:

- (1) Feature codes 21, 28, 34, and 39 telephones.
- (2) Color codes 05, 12, 43, and 46.
- (3) Regular (R) dial telephones.
- (4) No (N) dial telephones.



AW82-323

Figure 1: Single-Line, Rotary Dial, Desk Telephone

(b) Issue 2 removed the less ringer (LR) telephones and added various feature codes to the full-modular (M) telephones.

Note: Ordering information for manufacturing discontinued telephones has been removed; however, descriptive information has been retained as a reference for telephones still in service.

1.03 A replacement parts list and an exploded-view drawing for the telephones are contained in Section 50-500-101. The circuit labels appear in Section 50-500-102. Related documents of the CORTELCO Telephone Apparatus Practices Manual provide information on components.

1.04 The Model 500 desk telephones are single-line, rotary dial, anti-sidetone type units that operate efficiently over a wide range of loop resistances and line impedances.

1.05 The Model 500 desk telephones are identified by a coded label affixed to the bottom of the base plate. Refer to ordering information in Table A for an explanation of each code number and a list of available versions and features.

TABLE A
ORDERING INFORMATION - TELEPHONES

CODE NUMBERS															
TELEPHONE CODE NUMBERS ARE FORMED IN SIX STEPS AS FOLLOWS:															
				500		44		O		BA		20		M	
(1)	Type of Instrument	_____		_____		_____		_____		_____		_____		_____	
	(See Part 1)														
(2)	Color (See Part 2)	_____		_____		_____		_____		_____		_____		_____	
(3)	Version (See Part 3)	_____		_____		_____		_____		_____		_____		_____	
(4)	Ringer (See Part 4)	_____		_____		_____		_____		_____		_____		_____	
(5)	Special Feature (See Part 5)	_____		_____		_____		_____		_____		_____		_____	
(6)	Dial (See Part 6)	_____		_____		_____		_____		_____		_____		_____	
PART 1 TYPE OF INSTRUMENT															
CODE	DESCRIPTION	COLOR OFFERED	VERSION OFFERED	RINGER OFFERED	FEATURE OFFERED	DIAL OFFERED									
500	Single-Line, Rotary Dial, Desk Telephone	00, 09, 13, 15, 44, And 45	O	BA	20, 27	M									
500	Single-Line, Rotary Dial, Desk Telephone	(Available On All Models)	M	BA	20, 24, 27, 44	M									
500	Single-Line, Rotary Dial, Desk Telephone	47 Only	M	BA	20	M									
502	Single-Line, Rotary Dial, Desk Telephone W/Exclusion		O	BA	30	M									
REFER TO INDIVIDUAL UNIT DESCRIPTION FOR COMPLETE DESCRIPTION OF FEATURE COMBINATIONS															
PART 2 COLORS		PART 3 VERSIONS		PART 4 RINGERS		PART 5 SPECIAL FEATURES		PART 6 DIALS							
CODE	COLORS	CODE	VERSIONS	CODE	RINGERS	CODE	SPECIAL FEATURES	CODE	DIAL						
00	Black	O	Nonmodular	BA	Straight-Line	20	No Special Feature	M	Metropolitan (Letters & Numerals)						
09	Ivory	M	Full-Modular (With Cords)			24	20 With Grounding Pushbutton								
13	Beige					27	20 With 90-Volt Message Waiting Lamp								
15	White					44	A-Lead Control For Key System Use								
44	Light Ash					30	No Special Feature (Nonmodular)								
45	Cocoa Brown														
47	Cherry Red														

AW86-504

1.06 The Model 500 desk telephones are non-modular, quarter-modular, or full-modular versions. These versions are designated by a code letter in the telephone code number. Available versions are listed in Table A.

1.07 Nonmodular version telephones include a hard-wired handset cord and a hard-wired line cord. This version is designated by the code letter O.

1.08 Quarter-modular version telephones (no longer available) include a hard-wired handset cord and a line cord. The line cord is hard-wired on one end to the telephone base. The line cord is terminated

on the other end with a modular plug that can be inserted into a modular wall jack. This version is designated by the code letter Q.

1.09 Full-modular version telephones are available with or without a modular handset cord and a modular line cord. However, all full-modular version telephones are equipped with jacks to accept the plugs of a modular handset cord and a modular line cord. The full-modular version of the telephone with both a modular handset cord and a modular line cord, terminated on each end with modular plugs, is designated by the code letter M. The full-modular

version without a modular handset cord and a modular line cord (no longer available) is designated by the code letter F.

1.10 The Model 500 desk telephones are described in the following paragraphs. The circuit labels for these telephones are contained in Section 50-500-102.

MODEL 500 () 20**

1.11 The Model 500** () 20 is a single-line, rotary dial, desk telephone. It provides no special features.

MODEL 500 () 21**

1.12 The Model 500** () 21 is the same as the Model 500** () 20 except it is equipped with a 9-foot handset cord.

MODEL 500 () 24**

1.13 The Model 500** () 24 is the same as the Model 500** () 20 with the addition of a grounding pushbutton required in some PABX (Private Automatic Branch Exchange) applications for transferring calls, originating calls during a power failure, and other special functions.

MODEL 500 () 27/28**

1.14 The Model 500** () 27/28 is the same as the Model 500** () 20 with the addition of a message waiting lamp. The lamp is for use in PABX applications to indicate a waiting message for the station user. It also flashes for an incoming call. The Model 500** () 27 is equipped with a 90-volt lamp; the Model 500** () 28 is equipped with a 125-volt lamp.

MODEL 500 () 39**

1.15 The Model 500** () 39 is a specially-modified Model 500** () 20 arranged for handsfree application. It is equipped with a special

dial assembly (type 3500-00G) which provides a contact closure to mute the loudspeaker during dialing.

MODEL 500 () 44**

1.16 The Model 500 ** () 44 is a Model 500** () 20 arranged for A-lead control. This telephone provides connections through the hookswitch that allow ground on the A1 lead to be applied to key equipment through the A lead. The Model 500** () 20 may be converted to a Model 500** () 44. Refer to the appropriate circuit label in Section 50-500-102.

MODEL 502 () 30**

1.17 The Model 502** () 30 is a single-line, rotary dial, desk telephone equipped with a manual exclusion switch. The exclusion switch disconnects other telephones on the same line to permit confidential conversations. This is a nonmodular version of the telephone with no special features.

MODEL 502 () 34**

1.18 The Model 502** () 34 is the same as the Model 502** () 30 with the addition of a grounding pushbutton required in some PABX applications for transferring calls, originating calls during a power failure, and other special functions.

2. INSTALLATION

2.01 Installation of the full-modular versions of these telephones consists of inserting the modular line cord plug into an available modular wall jack. Refer to the appropriate circuit label for installation wiring of nonmodular version telephones.

3. MAINTENANCE

3.01 For replacement parts information and for an exploded-view drawing of major assembly groups, refer to Section 50-500-101.

SINGLE-LINE, ROTARY DIAL, DESK TELEPHONES

REPLACEMENT PARTS

1. GENERAL

1.01 This document covers the single-line, rotary dial, desk telephone. (See Figure 1.) An exploded-view drawing of the telephone with the major assembly groups (see Figure 2) and a replacement parts list (Table A) are included.

1.02 This section is reissued for the following reasons:

(a) Issue 3 adds feature codes 27 and 44 to the full-modular (M) version of the single-line, rotary dial, desk telephones. Quarter-modular (Q) and full-modular (F) versions of the single-line, rotary dial, desk telephones have been manufacturing discontinued as well as the following:

- (1) Feature codes 21, 28, 34, and 39 telephones.
- (2) Color codes 05, 12, 43, and 46.
- (3) Regular (R) dial telephones.
- (4) No (N) dial telephones.

(b) Issue 2 removed the less ringer (LR) telephones and added various feature codes to the full-modular (M) telephones.

Note: Information for manufacturing discontinued telephones has been retained as a reference for telephones still in service.

1.03 For additional information on description and installation of the telephones, refer to Section 50-500-100. The circuit labels appear in Section 50-500-102. Related documents of the CORTELCO Telephone Apparatus Practices Manual provide information on components.

1.04 The Model 500 desk telephones are single-line, rotary dial, anti-sidetone type units that operate efficiently over a wide range of loop resistances and line impedances.

1.05 The Model 500 desk telephones are identified by a coded label affixed to the bottom of the base plate. Refer to 50-500-100 of the CORTELCO Telephone Apparatus Practices Manual for ordering information of complete telephones and for an explanation of each code number.



AW82-323

Figure 1: Single-Line, Rotary Dial, Desk Telephone

SINGLE-LINE ROTARY DIAL DESK TELEPHONES

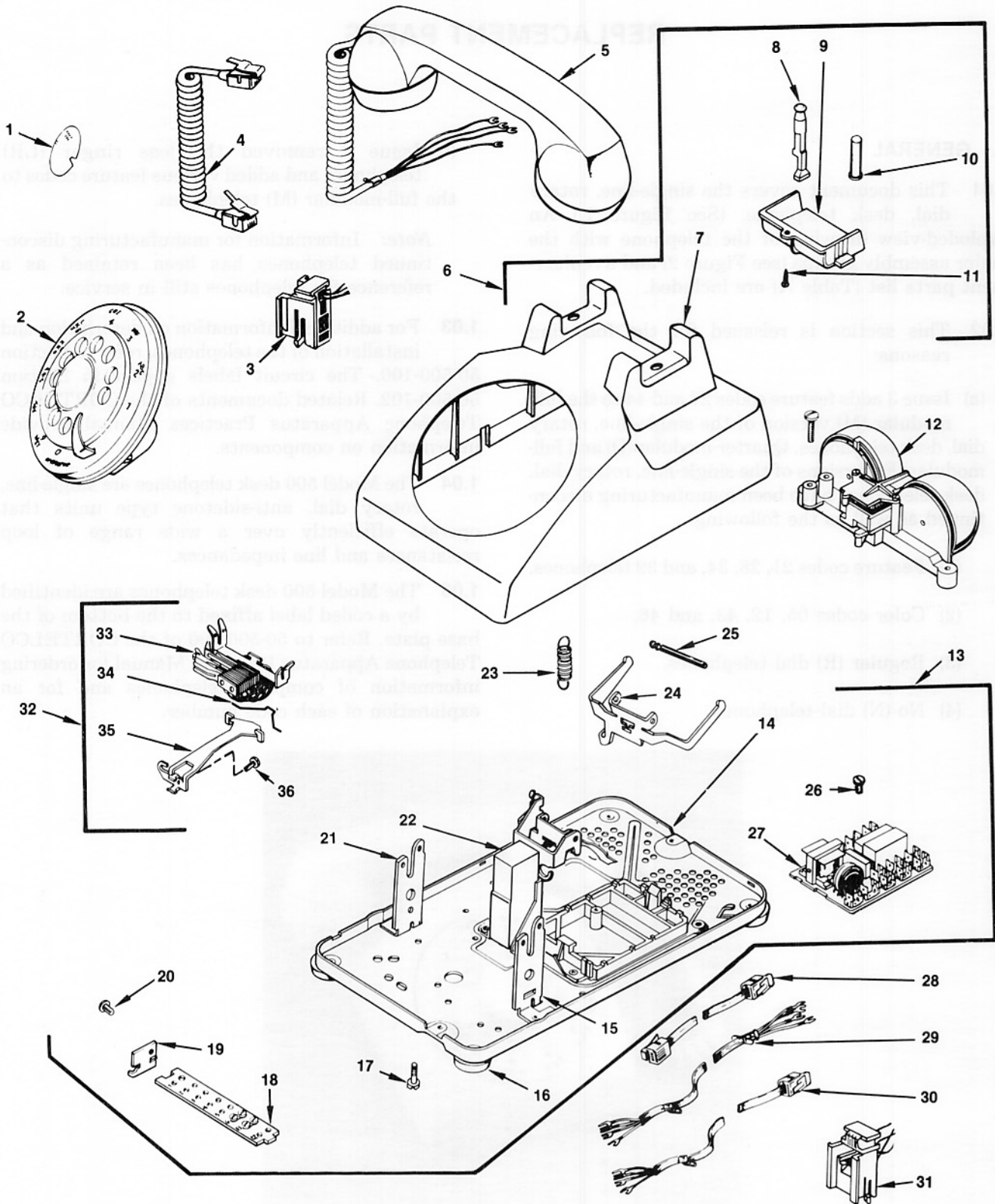


Figure 2: Single-Line, Rotary Dial, Desk Telephone, Exploded View

AW86-665

TABLE A
REPLACEMENT PARTS LIST

INDEX NO	PART NUMBER	DESCRIPTION	QUANTITY USED									
			500/20	500/21	500/24	500/27	500/28	500/39	500/44	502/30	502/34	
		Single-Line, Rotary Dial, Desk Telephone										
1	075415-101	Card, Number (Insert)	1	1	1	1	1	1	1	1	1	1
1	183498-101	Card, Number (Stick-On)	1	1	1	1	1	1	1	1	1	1
2	0030**-00G	Dial Assembly (Metropolitan, Letters And Numerals) ¹	1	1	1	1	1	—	1	1	1	1
2	0030**-00D	Dial Assembly (Regular, Numerals Only) ¹	1	1	1	1	1	—	1	1	1	1
2	0035**-00G	Dial Assembly, Handsfree (Metropolitan, Letters And Numerals) ¹	—	—	—	—	—	1	—	—	—	—
2	0035**-00D	Dial Assembly, Handsfree (Regular, Numerals Only) ¹	—	—	—	—	—	1	1	—	—	—
	181448-0**	Dial, Blank (Not Shown)	1	1	1	1	1	1	1	1	1	1
3	182946-101	Modular Jack Assembly (Handset Cord)	1	—	1	1	1	—	1	—	—	—
4	9018**-072	Cord, Handset (Modular)	1	—	1	1	1	—	1	—	—	—
4	9018**-108	Cord, Handset (Modular)	—	1	—	—	—	—	—	—	—	—
5	0065**-0C2	Handset Assembly (Nonmodular) ¹	1	—	1	1	1	1	1	1	1	1
5	0065**-0C3	Handset Assembly (Nonmodular With 9-Foot Cord) ¹	—	1	—	—	—	—	—	—	—	—
5	0065**-0M2	Handset Assembly (Modular) ¹	1	—	1	1	1	—	1	—	—	—
6	182849-0**	Housing And Plunger Assembly (Full-Modular) ²	1	—	—	—	—	—	1	—	—	—
6	182959-0**	Housing And Plunger Assembly (Full-Modular) ²	—	—	1	—	—	—	—	—	—	—
6	182961-0**	Housing And Plunger Assembly (Full-Modular) ²	—	—	—	1	1	—	—	—	—	—
6	184414-0**	Housing And Plunger Assembly ²	1	1	—	—	—	1	1	—	—	—
6	184415-0**	Housing And Plunger Assembly ²	—	—	—	—	—	—	—	1	—	—
6	184416-0**	Housing And Plunger Assembly ²	—	—	1	—	—	—	—	—	—	—
6	184418-0**	Housing And Plunger Assembly ²	—	—	—	1	1	—	—	—	—	—
6	184420-0**	Housing And Plunger Assembly ²	—	—	—	—	—	—	—	—	—	1
6	187471-0**	Housing And Plunger Assembly	1	1	—	—	—	—	1	—	—	—
6	187476-0**	Housing And Plunger Assembly	—	—	1	—	—	—	—	—	—	—
6	187477-0**	Housing And Plunger Assembly	—	—	—	1	1	—	—	—	—	—
	182412-101	Lamp, 125V Message Waiting (Not Shown)	—	—	—	—	1	—	—	—	—	—
	182412-102	Lamp, 90V Message Waiting (Not Shown)	—	—	—	1	—	—	—	—	—	—
6	187485-0**	Housing And Plunger Assembly	1	1	—	—	—	1	1	—	—	—
6	187486-0**	Housing And Plunger Assembly	—	—	—	—	—	—	—	—	—	1
6	187487-0**	Housing And Plunger Assembly	1	1	—	—	—	1	1	—	—	—
6	187488-0**	Housing And Plunger Assembly	—	—	—	1	1	—	—	—	—	—
6	187490-0**	Housing And Plunger Assembly	—	—	—	—	—	—	—	—	—	1
7	182823-0**	Housing (Full-Modular) ²	1	—	—	—	—	—	1	—	—	—
7	183566-0**	Housing (Full-Modular) ²	—	—	1	—	—	—	—	—	—	—
7	183567-0**	Housing (Full-Modular) ²	—	—	—	1	1	—	—	—	—	—
7	184409-0**	Housing ²	—	—	—	1	1	—	—	—	—	—
7	184410-0**	Housing ²	—	—	1	—	—	—	—	—	—	1
7	184518-0**	Housing ²	1	1	—	—	—	1	1	1	—	—
7	187399-0**	Housing	1	1	—	—	—	—	1	—	—	—
7	187478-0**	Housing	—	—	1	—	—	—	—	—	—	—
7	187479-0**	Housing	—	—	—	1	1	—	—	—	—	—
8	079603-102	Plunger, Exclusion	—	—	—	—	—	—	—	—	1	1
	075405-0**	Plunger, Retainer (Not Shown)	1	1	1	1	1	1	1	—	—	—
9	079606-0**	Plunger, Retainer	—	—	—	—	—	—	—	—	1	1
10	075406-102	Plunger, Cradle Switch	2	2	2	2	2	2	2	—	—	—
10	079101-102	Plunger, Cradle Switch	—	—	—	—	—	—	—	—	1	1
11	075407-102	Screw, Plunger Retainer ²	1	1	1	1	1	1	1	1	1	1
12	000130-0BA	Ringer, 4-Wire (With ANI) ^{1, 2, 3}	1	1	1	1	1	1	1	1	1	1
12	000130-NBA	Ringer, 4-Wire (With ANI) ^{1, 3}	1	1	1	1	1	1	1	1	1	1
12	000130-SBA	Ringer, 2-Wire (Less ANI) ^{1, 2, 4}	1	1	1	1	1	1	1	1	1	1
12	000130-PBA	Ringer, 2-Wire (Less ANI) ^{1, 4}	1	1	1	1	1	1	1	1	1	1
	095992-102	Screw, Ringer Mounting (Not Shown)	2	2	2	2	2	2	2	2	2	2
13	075338-101	Base Assembly (With Metal Base Plate)	1	1	1	—	—	1	1	1	1	1
13	075338-107	Base Assembly (With Metal Base Plate)	—	—	—	1	1	—	—	—	—	—
13	075338-110	Base Assembly (With Metal Base Plate) ²	—	—	—	—	—	1	—	—	—	—
13	187338-101	Base Assembly (With Plastic Base Plate) ²	1	1	1	—	—	—	1	1	1	1
13	187338-107	Base Assembly (With Plastic Base Plate) ²	—	—	—	1	1	—	—	—	—	—
13	187338-110	Base Assembly (With Plastic Base Plate) ²	—	—	—	—	—	1	—	—	—	—

SECTION 50-500-101, ISS 3

TABLE A
REPLACEMENT PARTS LIST (Cont)

INDEX NO	PART NUMBER	DESCRIPTION	QUANTITY USED									
			500/20	500/21	500/24	500/27	500/28	500/39	500/44	502/30	502/34	
		Single-Line, Rotary Dial, Desk Telephone										
14	075327-101	Plate, Metal Base	1	1	1	1	1	1	1	1	1	1
14	184400-101	Plate, Plastic Base ²	1	1	1	1	1	1	1	1	1	1
15	087054-102	Bracket Dial (R.H.)	1	1	1	1	1	1	1	1	1	1
16	182337-101	Foot (For Metal Base)	4	4	4	4	4	4	4	4	4	4
	184403-101	Foot, Rubber (For Plastic Base) (Not Shown) ²	4	4	4	4	4	4	4	4	4	4
	082486-102	Rivet, Foot (Metal Base Plate) (Not Shown)	4	4	4	4	4	4	4	4	4	4
17	075366-101	Screw, Cabinet Locking ²	2	2	2	2	2	2	2	2	2	2
17	075486-101	Screw, Housing To Base	2	2	2	2	2	2	2	2	2	2
18	079467-101	Terminal Board Assembly	—	—	—	—	—	1	—	—	—	—
18	079467-104	Terminal Board Assembly	—	—	—	—	—	—	—	1	1	—
19	086103-101	Plate, Mounting	—	—	—	—	—	1	—	1	1	—
20	180219-101	Screw, B.H.M.	—	—	—	—	—	1	—	1	1	—
21	087054-101	Bracket, Dial (L.H.)	1	1	1	1	1	1	1	1	1	1
22	075300-101	Cradle Switch Assembly	1	1	1	—	—	—	1	1	1	—
22	075300-103	Cradle Switch Assembly	—	—	—	1	1	—	—	—	—	—
22	075300-104	Cradle Switch Assembly	—	—	—	—	—	1	—	—	—	—
	075309-101	Spring Nest Assembly (Not Shown)	1	1	1	—	—	—	1	1	1	—
	075309-102	Spring Nest Assembly (Not Shown)	—	—	—	1	1	—	—	—	—	—
	084764-101	Spring Nest Assembly (Not Shown)	—	—	—	—	—	1	—	—	—	—
23	075307-101	Spring, Cradle Return	1	1	1	1	1	1	1	1	1	1
24	075398-101	Arm, Operating	1	1	1	1	1	1	1	1	1	1
25	075308-101	Pin, Pivot	1	1	1	1	1	1	1	1	1	1
26	096407-103	Screw, Network Mounting	1	1	1	1	1	1	1	1	1	1
27	181427-101	PC Network (#183070-101) ¹	1	1	1	1	1	1	1	1	1	1
	182175-101	Spacer, Network (For Metal Base Plate) (Not Shown) ²	1	1	1	1	1	1	1	1	1	1
	031944-107	Rivet (Metal Base Plate) (Not Shown)	5	5	5	5	5	5	5	5	5	5
28	182827-084	Cord, Line (Full-Modular)	1	1	1	1	1	—	1	—	—	—
29	182800-084	Cord, Line (Nonmodular)	1	1	1	1	1	—	1	—	—	—
29	184358-066	Cord, Line (Nonmodular)	—	—	—	—	—	—	—	1	—	—
29	184359-066	Cord, Line (Nonmodular)	—	—	—	—	—	—	—	—	1	—
29	184366-066	Cord, Line (Nonmodular)	—	—	—	—	—	1	—	—	—	—
30	182852-084	Cord, Line (Quarter-Modular)	1	1	1	1	1	—	1	—	—	—
31	182856-101	Modular Jack Assembly (Line Cord)	1	—	1	1	1	—	1	—	—	—
32	079613-101	Exclusion Switch Assembly	—	—	—	—	—	—	—	1	1	—
33	079614-101	Switch, Exclusion	—	—	—	—	—	—	—	1	1	—
34	079624-101	Retainer	—	—	—	—	—	—	—	1	1	—
35	079605-101	Bracket	—	—	—	—	—	—	—	1	1	—
36	069020-103	Screw, B.H.M.	—	—	—	—	—	—	—	1	1	—
	181971-101	Pushbutton, Grounding (Not Shown)	—	—	1	—	—	—	—	—	—	1

AW89-17

NOTES:

- ** Substitute 2-Digit Color Code When Ordering.
- ¹ Refer To Component Parts Section Of This Manual For Assembly Parts List.
- ² This Product Has Been Manufacturing Discontinued, But Is Included As A Reference For Telephones Still In Service.
- ³ The 000130-NBA Ringer Replaces The 000130-OBA Ringer.
- ⁴ The 000130-PBA Ringer Replaces The 000130-SBA Ringer.

SINGLE-LINE, ROTARY DIAL, DESK TELEPHONES

CIRCUIT LABELS

1. GENERAL

1.01 This document covers the single-line, rotary dial, desk telephones. (See Figure 1.) The circuit labels for the various models of single-line, rotary dial, desk telephones and the associated features available in each are included in this document. (See Table A.)



AW82-323

Figure 1: Single-Line, Rotary Dial, Desk Telephone

1.02 This section has been reissued for the following reasons:

(a) Issue 4 adds the latest issue of circuit labels for the following single-line, rotary dial, desk telephones:

- (1) Model 500** QBA, Types 20, 21, 24, 27, 28, and 44
- (2) Model 500** FBA, Types 20, 24, 27, 28, and 44
- (3) Model 500** MBA, Types 20, 24, 27, 28, and 44
- (4) Model 502** OBA, Types 30 and 34

(b) Issue 3 added the latest available issue of circuit labels for single-line, rotary dial, desk telephones.

(c) Issue 2 added the latest issue circuit label for the Model 500** OBA, Type 44 telephones.

Note: Some versions of telephones have been manufacturing discontinued; however, circuit labels have been retained as a reference for telephones still in service.

1.03 For additional information on description and installation of the telephones, refer to Section 50-500-100. A replacement parts list and an exploded-view drawing for the telephones are contained in Section 50-500-101. Related documents of the CORTELCO Telephone Apparatus Practices Manual provide information on components.

1.04 The Model 500 desk telephones are single-line, rotary dial, anti-sidetone type units that operate efficiently over a wide range of loop resistances and line impedances.

1.05 The Model 500 desk telephones are identified by a coded label affixed to the bottom of the base plate. Refer to Section 50-500-100 of the CORTELCO Telephone Apparatus Practices Manual for ordering information of complete telephones and for an explanation of each code number.

TABLE A
LIST OF CIRCUIT LABELS

MODEL NO.	TYPE NO.	FIGURE NO.
500** OBA	20, 21, 24	2
500** OBA	27, 28	3
500** OBA	39	4
500** OBA	44	5
500** QBA	20, 21, 24, 27, 28, 44	6
500** FBA	20, 24, 27, 28, 44	6
500** MBA	20, 24, 27, 28, 44	6
502** OBA	30, 34	7

AW89-18

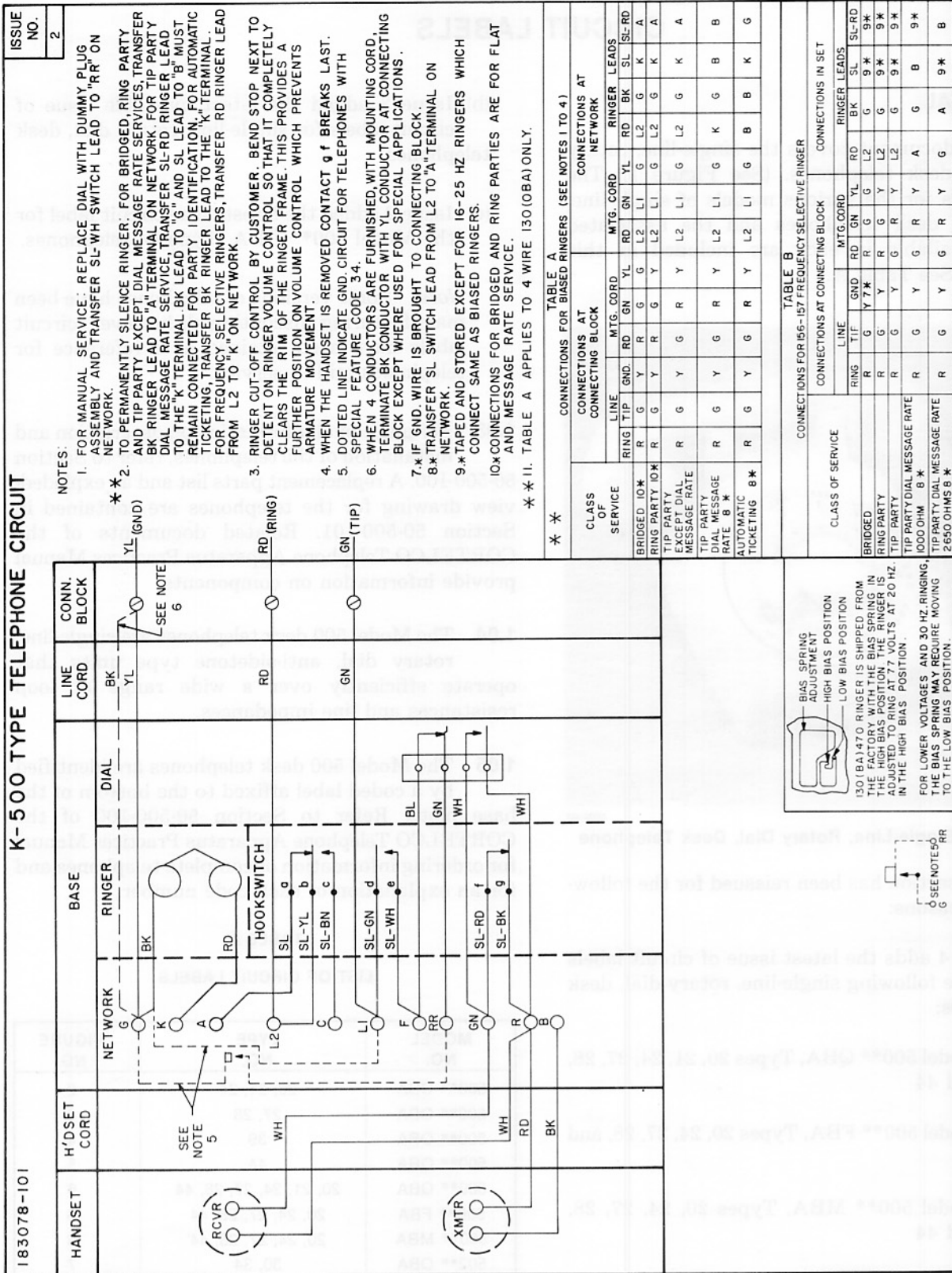


Figure 2: Circuit Label, Model 500** OBA Types 20, 21, 24

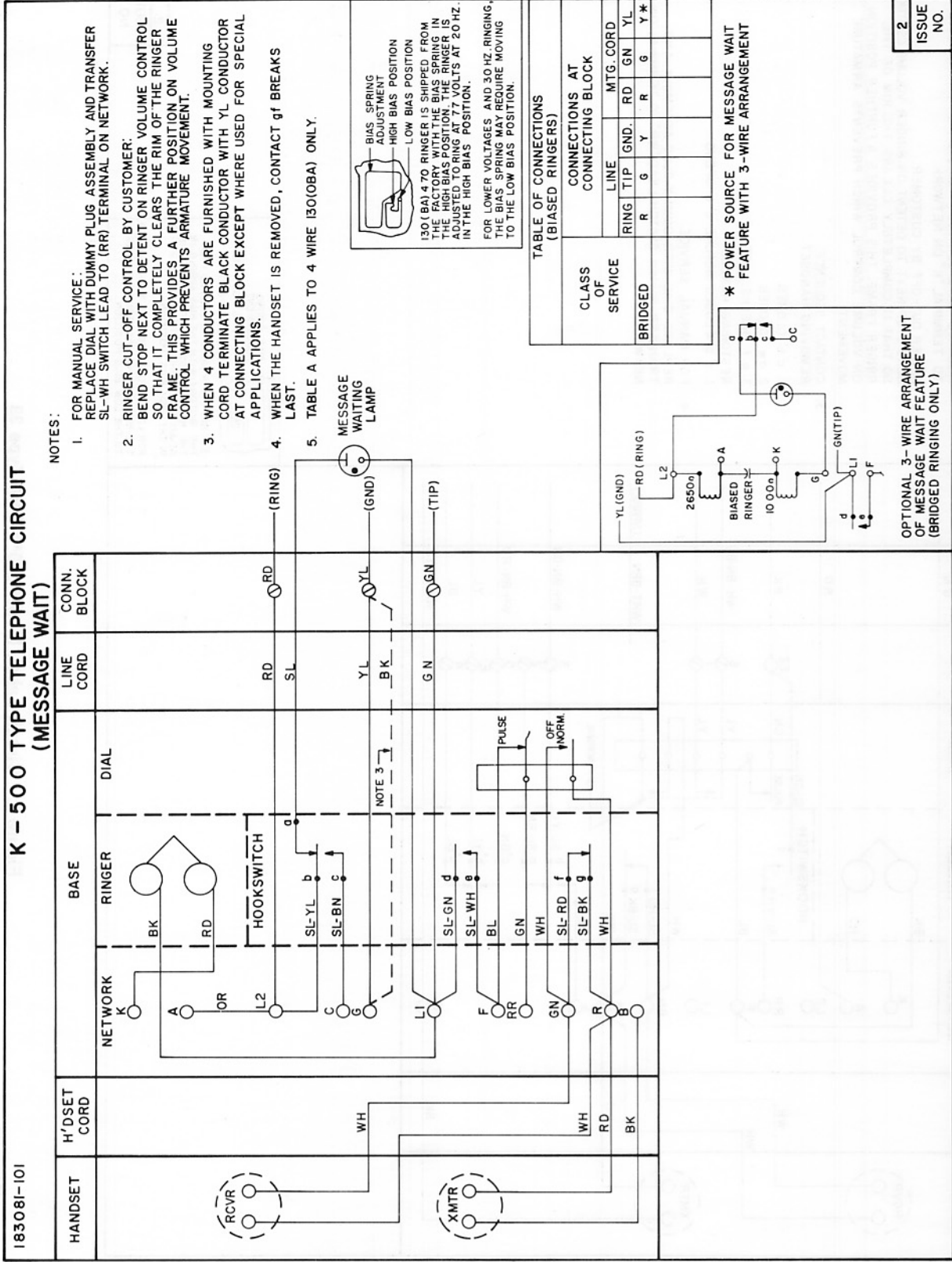
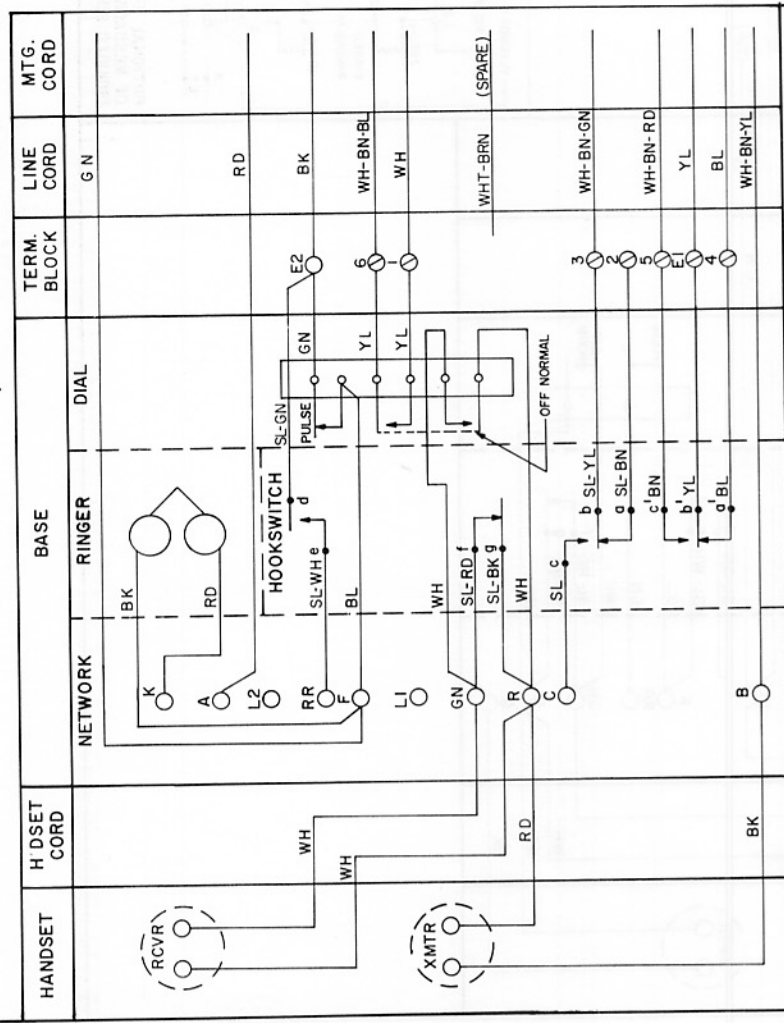


Figure 3: Circuit Label, Model 500** OBA Types 27, 28

K-500 TYPE TELEPHONE CIRCUIT
(FOR K-3A SPEAKER PHONE)

183079-101



- NOTES:
- TO PERMANENTLY SILENCE RINGER: FOR BRIDGED, RING PARTY AND TIP PARTY, EXCEPT DIAL MESSAGE RATE SERVICE, TRANSFER BK RINGER LEAD TO TERMINAL "K" ON NETWORK.
 - RINGER CUT-OFF BY CUSTOMER: BEND STOP NEXT TO DETENT ON RINGER VOLUME CONTROL SO THAT IT COMPLETELY CLEARS THE RIM OF THE RINGER FRAME. THIS PROVIDES A FURTHER POSITION ON VOLUME CONTROL WHICH PREVENTS ARMATURE MOVEMENT.
 - CONTACT SEQUENCE: REMOVING HANDSET
 - c' b' CLOSES
 - d e CLOSES
 - g f BREAKS LAST
 RESTORING HANDSET
 - d' b' CLOSES BEFORE c' b' OPENS
 - FOR MANUAL SERVICE: REPLACE DIAL WITH DUMMY PLUG ASSEMBLY AND TRANSFER SL-WH SWITCH LEAD "RR" TO TERMINAL ON NETWORK.

BIAS SPRING ADJUSTMENT
HIGH BIAS POSITION
LOW BIAS POSITION

100 (BA) 470 RINGER IS SHIPPED FROM THE FACTORY WITH THE BIAS SPRING IN THE HIGH BIAS POSITION. THE RINGER IS ADJUSTED TO RING AT 77 VOLTS AT 20 HZ. IN THE HIGH BIAS POSITION.

FOR LOWER VOLTAGES AND 30 HZ RINGING, THE BIAS SPRING MAY REQUIRE MOVING TO THE LOW BIAS POSITION.

2
ISSUE NO.

Figure 4: Circuit Label, Model 500** OBA Type 39

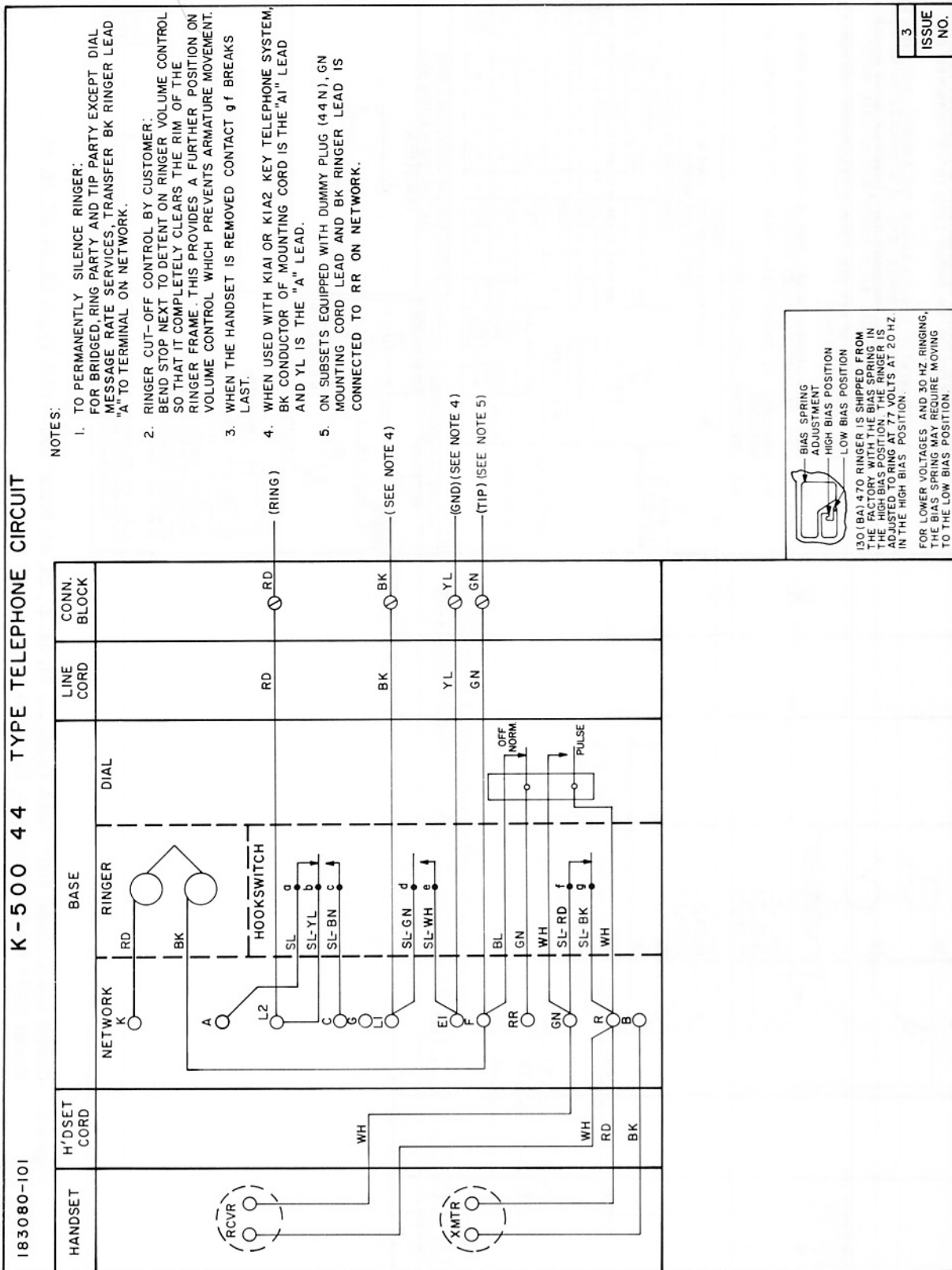


Figure 5: Circuit Label, Model 500** OBA Type 44

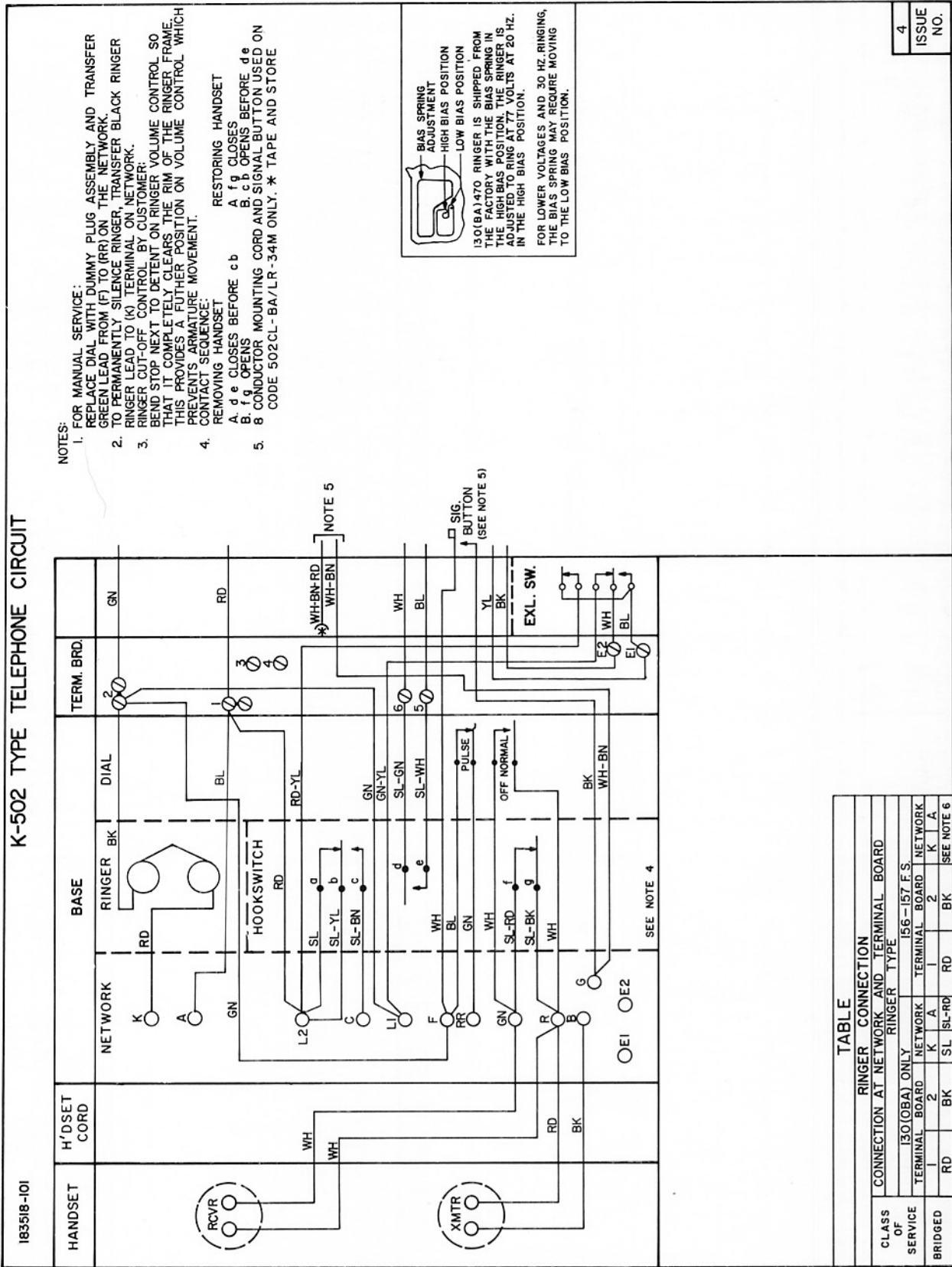


Figure 7: Circuit Label, Model 502** OBA Types 30, 34

SINGLE-LINE, PUSHBUTTON DIAL, DESK TELEPHONES

GENERAL DESCRIPTION

	CONTENTS	PAGE
1.	GENERAL DESCRIPTION	1
	MODEL 2500** () 20	2
	MODEL 2500** () 20H (HOLD)	2
	MODEL 2500** () 20F (TEL-FLASH)	2
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	MODEL 2500** () 27F (TEL-FLASH)	4
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	MODEL 2500** () 39	4
	MODEL 2500** () 44	4
	MODEL 2500** () 50	4
	MODEL 2500** () 57	4
	MODEL 2502** () 30	4
2.	INSTALLATION	4
3.	MAINTENANCE	4

1. GENERAL DESCRIPTION

1.01 This document covers the single-line, pushbutton dial, desk telephones. (See Figure 1.) A general description as well as information that is peculiar to single-line, pushbutton dial, desk telephones is included.

1.02 This section is reissued for the following reasons:

- (a) Issue 3 adds feature codes 50 (data port) and 57 (data port and message waiting) to the modular (M) version of the single-line, pushbutton dial, desk telephone. The feature code 20F and 27F



Figure 1: Single-Line, Pushbutton Dial, Desk Telephone

telephones have been equipped with a centered faceplate. Quarter-modular (Q) and full-modular (F) versions of the single-line, pushbutton dial, desk telephones have been manufacturing discontinued as well as the following:

- (1) Tel-Pulse (T) dial and regular (R) dial telephones.
 - (2) Less ringer (LR) telephones.
 - (3) Hold (H) feature telephones.
 - (4) Color code 05, 12, 43, and 46 telephones.
 - (5) Feature code 28 and 39 telephones.
- (b) Issue 2 added the Model 2500** () 20H, the Model 2500** () 20F, and the Model 2500** () 27F telephones.

Note: Ordering information for manufacturing discontinued telephones has been removed; however, descriptive information has been retained as a reference for telephones still in service.

1.03 A replacement parts list and an exploded-view drawing for the telephones are contained in Section 50-500-104. The circuit labels appear in Section 50-500-105. Related documents of the CORTELCO Telephone Apparatus Practices Manual provide information on components.

1.04 The Model 2500 desk telephones are single-line, pushbutton dial, anti-sidetone type units that operate efficiently over a wide range of loop resistances and line impedances.

1.05 The Model 2500 desk telephones are identified by a coded label affixed to the bottom of the base plate. Refer to ordering information in Table A for an explanation of each code number and a list of available versions and features.

1.06 The Model 2500 desk telephones are nonmodular, quarter-modular, or full-modular versions. These versions are designated by a code letter in the telephone code number. (Refer to Table A.)

1.07 Nonmodular version telephones include a hard-wired handset cord and a hard-wired line cord. This version is designated by the code letter O.

1.08 Quarter-modular version telephones (no longer available) include a hard-wired handset cord and a line cord. The line cord is hard-wired on one end to the telephone base. The line cord is terminated on the other end with a modular plug that can be inserted into a modular wall jack. This version is designated by the code letter Q.

1.09 Full-modular version telephones are available with or without a modular handset cord and a modular line cord. However, all full-modular version telephones are equipped with jacks to accept the plugs of a modular handset cord and a modular line cord. The full-modular version of the telephone with both a modular handset cord and a modular line cord, terminated on each end with modular plugs, is designated by the code letter M. The full-modular version without a modular handset cord and a modular line cord (no longer available) is designated by the code letter F.

1.10 The Model 2500 desk telephones are described in the following paragraphs. The circuit labels for these telephones are contained in Section 50-500-105.

MODEL 2500 () 20**

1.11 The Model 2500** () 20 is a single-line, pushbutton dial, desk telephone. It provides no special features.

MODEL 2500 () 20H (HOLD)**

1.12 The Model 2500** () 20H (no longer available) is the same as the Model 2500** () 20 except for the added hold feature. The hold feature allows the station to place a CO/PABX (Central Office/Private Automatic Branch Exchange) line on hold.

1.13 The hold feature is activated when the station user goes on-hook while pressing the HOLD button. The call is placed on hold and the hold indicator flashes. The hold feature is released and the hold indicator stops flashing when the station user goes off-hook and returns to the call on hold. More than one Model 2500** () 20H telephone can be used as an extension on the same CO/PABX line. The hold indicator flashes only at the extension with the activated hold feature. The hold feature is released and the hold indicator stops flashing when any of the connected extensions go off-hook.

MODEL 2500 () 20F (TEL-FLASH)**

1.14 The Model 2500** () 20F is the same as the Model 2500** () 20 except for the added Tel-Flash feature. The Tel-Flash feature can be used with PABX/Centrex applications to provide a precise time line disconnect (interrupt) for custom call service. The hookswitch provides a positive line disconnect.

1.15 The timed flash is activated when the station user presses the FLASH button. The line is momentarily disconnected for 500 to 700 milliseconds. The hookswitch line disconnect is activated when the station user presses and releases the telephone hookswitch. The line is disconnected for 1.5 to 2.5 seconds.

1.16 Model 2500** () 20F telephones equipped with the centered faceplate can be modified for the A-lead control feature. With A-lead control, the telephone will provide connections through the hookswitch that allow ground on the A-1 lead to be applied to key equipment by way of the A lead. Refer to the appropriate circuit label in Section 50-500-105.

TABLE A
ORDERING INFORMATION - TELEPHONES

CODE NUMBERS									
TELEPHONE CODE NUMBERS ARE FORMED IN SIX STEPS AS FOLLOWS:									
<div style="display: flex; justify-content: space-around; margin-bottom: 10px;"> 2500 44 O BA 20 M </div> <p>(1) Type of Instrument (See Part 1) —————</p> <p>(2) Color (See Part 2) —————</p> <p>(3) Version (See Part 3) —————</p> <p>(4) Ringer (See Part 4) —————</p> <p>(5) Special Feature (See Part 5) —————</p> <p>(6) Dial (See Part 6) —————</p>									
PART 1 TYPE OF INSTRUMENT									
CODE	DESCRIPTION	COLOR OFFERED	VERSION OFFERED	RINGER OFFERED	FEATURE OFFERED	DIAL OFFERED			
2500	Single-Line, Pushbutton Dial, Desk Telephone	00, 09, 13, 15, 44, And 45	O	BA	20, 27	M			
2500	Single-Line, Pushbutton Dial, Desk Telephone	00, 09, 13, 15, 44, And 45	M	BA	20, 24, 27, 44, 50, 57	M			
2500	Single-Line, Pushbutton Dial, Desk Telephone	41, 44, 45, And 75	M	BA	20, 27	F			
2500	Single-Line, Pushbutton Dial, Desk Telephone	47	M	BA	20	M			
2500	Single-Line, Pushbutton Dial, Desk Telephone	41 And 75	M	BA	20, 27, 44	M			
2502	Single-Line, Pushbutton Dial, Desk Telephone W/Exclusion	00, 09, 13, 15, 44, And 45	O	BA	30	M			
REFER TO INDIVIDUAL UNIT DESCRIPTION FOR COMPLETE DESCRIPTION OF FEATURE COMBINATIONS									
PART 2 COLORS		PART 3 VERSIONS		PART 4 RINGERS		PART 5 SPECIAL FEATURES		PART 6 DIALS	
CODE	COLORS	CODE	VERSIONS	CODE	RINGERS	CODE	SPECIAL FEATURES	CODE	DIAL
00	Black	O	Nonmodular	BA	Straight-Line	20	No Special Feature	M	Metropolitan (Letters & Numerals) Tel-Flash Feature (Metropolitan Only)
09	Ivory	M	Full-Modular (With Cords)			24	20 With Grounding Pushbutton	F	
13	Beige					27	20 With 90-Volt Message Waiting Lamp		
15	White					27	20 With 90-Volt Message Waiting Lamp And Tel-Flash Feature		
41	Charcoal Gray					44	A-Lead Control For Key System Use		
44	Light Ash					30	No Special Feature (Nonmodular)		
45	Cocoa Brown					50	20 With Dataport		
47	Cherry Red					57	20 With Dataport And 90-Volt Message Waiting Lamp		
75	Pearl Gray								

AW86-505

SECTION 50-500-103, ISS 3

MODEL 2500** () 21

1.17 The Model 2500** () 21 is the same as the Model 2500** () 20 except it is equipped with a 9-foot handset cord.

MODEL 2500** () 24

1.18 The Model 2500** () 24 is the same as the Model 2500** () 20 with the addition of a grounding pushbutton required in some PABX applications for transferring calls, originating calls during a power failure, and other special functions.

MODEL 2500** () 27F (TEL-FLASH)

1.19 The Model 2500** () 27F is the same as the Model 2500** () 20F with the addition of a 90-volt message waiting lamp. The lamp is for use in PABX applications to indicate a waiting message for the station user. It also flashes for an incoming call.

1.20 Model 2500** () 27F telephones equipped with the centered faceplate are shipped with the message waiting lamp circuit connected across the Tip and Ring (RD/GN) pair. In this configuration the message waiting lamp is off when the handset is off-hook.

1.21 Wiring inside the telephone can be changed to connect the message waiting lamp across the alternate BK/YL pair. In this configuration the message waiting lamp is controlled on and off by the connected equipment. Refer to the appropriate circuit label in Section 50-500-105.

MODEL 2500** () 27/28

1.22 The Model 2500** () 27/28 is the same as the Model 2500** () 20 with the addition of a message waiting lamp. The lamp is for use in PABX applications to indicate a waiting message for the station user. It also flashes for an incoming call. The Model 2500** () 27 is equipped with a 90-volt lamp; the Model 2500** () 28 is equipped with a 125-volt lamp.

MODEL 2500** () 39

1.23 The Model 2500** () 39 is a specially-modified Model 2500** () 20 arranged for handsfree application. It is equipped with a special

dial assembly (type 0046**-0PG) that mutes the speaker during dialing.

MODEL 2500** () 44

1.24 The Model 2500** () 44 is a Model 2500** () 20 arranged for A-lead control. This telephone provides connections through the hookswitch that allow ground on the A1 lead to be applied to key equipment by way of the A lead. The Model 2500** () 20 may be converted to a Model 2500** () 44. Refer to the appropriate circuit label in Section 50-500-105.

MODEL 2500** () 50

1.25 The Model 2500** () 50 is the same as the Model 2500** () 20 with the addition of a parallel modular jack. The parallel modular jack is connected in parallel with the modular line cord jack for use as a data port.

MODEL 2500** () 57

1.26 Model 2500** () 57 is the same as Model 2500** () 50 with the addition of a 90-volt message waiting lamp. The lamp is for use in PABX applications to indicate a waiting message for the station user. It also flashes for an incoming call.

MODEL 2502** () 30

1.27 The Model 2502** () 30 is a single-line, pushbutton dial, desk telephone equipped with a manual exclusion switch. This exclusion switch disconnects any other telephone on the same line to permit confidential conversation. This is a non-modular version of the telephone with no special features.

2. INSTALLATION

2.01 Installation of the full-modular versions of these telephones consists of inserting the modular line cord plug into an available modular wall jack. Refer to the appropriate circuit label for installation wiring of nonmodular version telephones.

3. MAINTENANCE

3.01 For replacement parts information and for an exploded-view drawing of major assembly groups, refer to Section 50-500-104.

SINGLE-LINE, PUSHBUTTON DIAL, DESK TELEPHONES

REPLACEMENT PARTS

1. GENERAL

1.01 This document covers the single-line, pushbutton dial, desk telephones. (See Figure 1.) An exploded-view drawing of the telephone with the major assembly groups (see Figure 2) and a replacement parts list (Table A) are included.

1.02 This section is reissued for the following reasons:

(a) Issue 3 adds feature codes 50M and 57M to the modular (M) version of the single-line, pushbutton dial, desk telephone. The feature code 20F and 27F telephones have been changed to center the faceplate. Quarter-modular (Q) and full-modular (F) versions of the single-line, pushbutton dial, desk telephones have been manufacturing discontinued as well as the following:

- (1) Tel-Pulse (T) dial and regular (R) dial telephones.
- (2) Less ringer (LR) telephones.
- (3) Hold (H) feature telephones.
- (4) Color code 05, 12, 43, and 46 telephones.

(5) Feature code 28 and 39 telephones.

(b) Issue 2 added the Model 2500** () 20H, the Model 2500** () 20F, and the Model 2500** () 27F telephones.

Note: Selected information for manufacturing discontinued telephones has been retained as a reference for telephones still in service.

1.03 For additional information on description and installation of the telephones, refer to Section 50-500-103. The circuit labels appear in Section 50-500-105. Related documents of the CORTELCO Telephone Apparatus Practices Manual provide information on components.

1.04 The Model 2500 desk telephones are single-line, pushbutton dial, anti-sidetone type units that operate efficiently over a wide range of loop resistances and line impedances.

1.05 The Model 2500 desk telephones are identified by a coded label affixed to the bottom of the base plate. Refer to Section 50-500-103 of the CORTELCO Telephone Apparatus Practices Manual for ordering information of complete telephones and for an explanation of each code number.



AW82-334

Figure 1: Single-Line, Pushbutton Dial, Desk Telephone

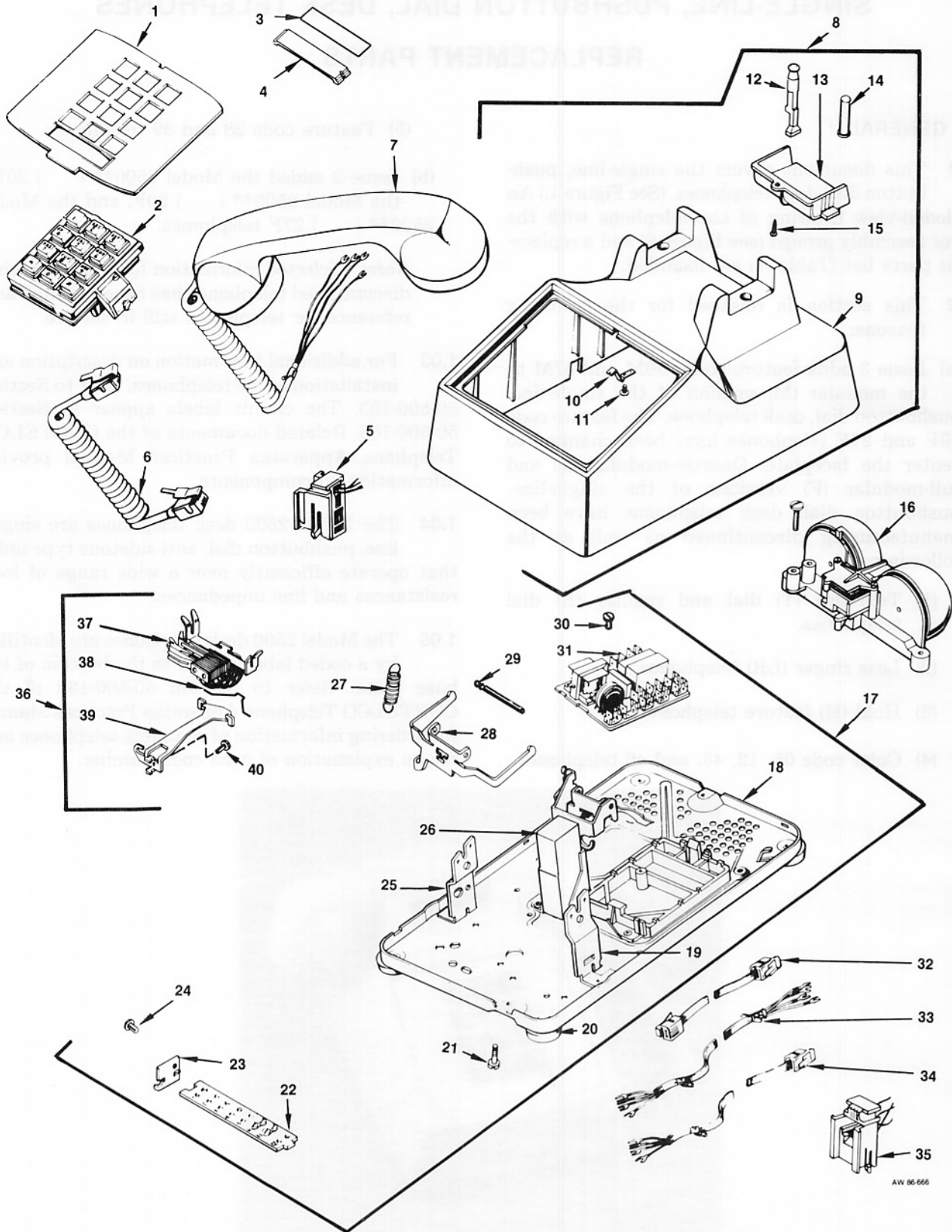


Figure 2: Single-Line, Pushbutton Dial, Desk Telephone, Exploded View

TABLE A
REPLACEMENT PARTS LIST

INDEX NO	PART NUMBER	DESCRIPTION	QUANTITY USED									
			2500/20	2500/21	2500/24	2500/27	2500/28	2500/39	2500/44	2500/50	2500/57	2502/30
		Single-Line, Pushbutton Dial, Desk Telephone										
1	180147-0**	Faceplate	1	1	—	1	1	1	1	1	1	1
1	181490-0**	Faceplate	—	—	1	—	—	—	—	—	—	—
1	188400-0**	Faceplate, 16-Button Dial (20H) (Not Shown)	1	—	—	—	—	—	—	—	—	—
1	188585-101	Faceplate, 16-Button Dial (20F) (Not Shown)	1	—	—	—	—	—	—	—	—	—
1	187439-102	Faceplate	1	—	—	—	—	—	—	—	—	—
1	188321-101	Faceplate, 16-Button Dial (27F) (Not Shown)	—	—	—	1	—	—	—	—	—	—
1	187439-101	Faceplate	—	—	—	1	—	—	—	—	—	—
1	188586-101	Mat, 16-Button Dial Faceplate (20F) (Not Shown)	1	—	—	—	—	—	—	—	—	—
1	188599-102	Mat, Faceplate (20F)	1	—	—	—	—	—	—	—	—	—
1	188323-101	Mat, 16-Button Dial Faceplate (27F) (Not Shown)	—	—	—	1	—	—	—	—	—	—
1	188599-101	Mat, Faceplate (27F) (Not Shown)	—	—	—	1	—	—	—	—	—	—
2	004200-EPG	Dial Assembly, Pushbutton Digital (Metropolitan, Letters And Numerals) ^{1, 4, 9}	1	1	1	1	1	—	1	1	1	1
2	004200-EPD	Dial Assembly, Pushbutton Digital (Regular, Numerals Only) ^{1, 4, 10}	1	1	1	1	1	—	1	—	—	1
2	004200-OPG	Dial Assembly, Pushbutton Digital (Metropolitan, Letters And Numerals) ^{1, 2, 4, 9}	1	1	1	1	1	—	1	—	—	1
2	004200-OPD	Dial Assembly, Pushbutton Digital (Regular, Numerals Only) ^{1, 2, 5, 10}	1	1	1	1	1	—	1	—	—	1
2	003200-OPG	Dial Assembly, Pushbutton Tel-Touch (Metropolitan, Letters and Numerals) ^{1, 2, 4}	—	—	—	—	—	1	—	—	—	—
2	003200-OPD	Dial Assembly, Pushbutton Tel-Touch (Metropolitan, Numerals Only) ^{1, 2, 5}	—	—	—	—	—	1	1	—	—	—
2	006300-OPG	Dial Assembly, Pushbutton Tel-Pulse (Metropolitan, Letters And Numerals) ¹	1	1	—	—	—	—	—	—	—	—
2	007000-OOG	Dial Assembly, Pushbutton Repertory (Metropolitan, Letters And Numerals) (20S) ^{1, 2}	1	—	—	—	—	—	—	—	—	—
2	004600-OPG	Dial Assembly, Pushbutton Digital, Handsfree (Metropolitan, Letters And Numerals) ^{1, 2, 6}	—	—	—	—	—	1	—	—	—	—
2	004600-OPD	Dial Assembly, Pushbutton Digital, Handsfree (Regular, Numerals Only) ^{1, 7}	—	—	—	—	—	1	—	—	—	—
2	003600-OPG	Dial Assembly, Pushbutton Tel-Touch, Handsfree (Metropolitan, Letters And Numerals) ^{1, 2}	—	—	—	—	—	1	—	—	—	—
2	003600-OPD	Dial Assembly, Pushbutton Tel-Touch, Handsfree (Regular, Numerals Only) ^{1, 2}	—	—	—	—	—	1	—	—	—	—
2	188478-101	Dial Assembly, 16-Button, Tel-Touch (Metropolitan, Letters And Numerals) (20H) ¹	1	—	—	—	—	—	—	—	—	—
2	188478-107	Dial Assembly, 16-Button, Tel-Touch (Metropolitan, Letters And Numerals) (27F) ¹	—	—	—	1	—	—	—	—	—	—
2	188256-101	Dial Assembly, Pushbutton Tel-Touch (27F Centered Dial) ¹	—	—	—	1	—	—	—	—	—	—
2	188478-106	Dial Assembly, 16-Button, Tel-Touch (Metropolitan, Letters And Numerals) (20F) ¹	1	—	—	—	—	—	—	—	—	—
2	188256-102	Dial Assembly, Pushbutton Tel-Touch (20F Centered Dial) ¹	1	—	—	—	—	—	—	—	—	—
3	087513-101	Card, Number	1	1	1	1	1	1	1	1	1	1
3	087513-102	Card, Number (Strip Of 6) (Not Shown) ⁸	—	—	—	—	—	—	—	—	—	—
4	087514-101	Retainer, Number Card	1	1	1	1	1	1	1	1	1	1
5	182946-101	Modular Jack Assembly (Handset Cord)	1	1	1	1	1	—	1	1	1	—
6	9018**-072	Cord, Handset (Modular)	1	—	1	1	1	—	1	—	—	—
6	9018**-108	Cord, Handset (9-Foot, Modular)	1	1	1	1	—	—	1	1	1	—
7	0065**-OC2	Handset Assembly (Nonmodular) ¹	1	—	1	1	1	1	1	—	—	1
7	0065**-OC3	Handset Assembly (Nonmodular With 9-Foot Handset Cord) ¹	—	1	—	—	—	—	—	—	—	—
7	0065**-OM2	Handset Assembly (Modular) ¹	1	1	1	1	1	—	1	1	1	—
8	187472-0**	Housing And Plunger Assembly	1	1	1	1	—	1	1	—	—	—
8	187473-0**	Housing And Plunger Assembly	—	—	—	1	1	—	—	—	—	—
8	187474-0**	Housing And Plunger Assembly (Full-Modular)	—	—	—	1	1	—	—	—	—	—
8	187475-0**	Housing And Plunger Assembly (Full-Modular)	1	1	1	1	—	—	1	—	—	—
8	184423-0**	Housing And Plunger Assembly	—	—	—	—	—	—	—	—	—	1

TABLE A
REPLACEMENT PARTS LIST (Cont)

INDEX NO	PART NUMBER	DESCRIPTION	QUANTITY USED										
			2500/20	2500/21	2500/24	2500/27	2500/28	2500/39	2500/44	2500/50	2500/57	2502/30	
		Single-Line, Pushbutton Dial, Desk Telephone											
	186275-101	PC Board (20H) (Not Shown)	1	—	—	—	—	—	—	—	—	—	—
	601959-536	PC Board (20F, 27F) (Not Shown)	1	—	—	1	—	—	—	—	—	—	—
32	182827-084	Cord, Line (Full-Modular)	1	1	1	1	1	—	1	1	1	—	—
33	182800-084	Cord, Line (Nonmodular)	1	1	1	1	1	—	1	—	—	—	—
33	184366-066	Cord, Line (Nonmodular)	—	—	—	—	—	1	—	—	—	—	1
33	184358-066	Cord, Line (Nonmodular)	—	—	—	—	—	—	—	—	—	—	1
34	182852-084	Cord, Line (Quarter-Modular)	1	1	1	1	1	—	1	—	—	—	—
35	182856-101	Modular Jack Assembly (Line Cord)	1	1	1	1	1	—	1	2	2	—	—
36	079613-101	Exclusion Switch Assembly ³	—	—	—	—	—	—	—	—	—	—	1
37	079614-101	Switch, Exclusion	—	—	—	—	—	—	—	—	—	—	1
38	079624-101	Retainer	—	—	—	—	—	—	—	—	—	—	1
39	079605-101	Bracket	—	—	—	—	—	—	—	—	—	—	1
40	069020-103	Screw, B. H. M.	1	—	—	—	—	—	—	—	—	—	—
36	079613-102	Hold Switch Assembly (20S) ²	1	—	—	—	—	—	—	—	—	—	—
37	079614-102	Switch, Hold	1	—	—	—	—	—	—	—	—	—	—
38	079624-101	Retainer	1	—	—	—	—	—	—	—	—	—	—
39	079605-101	Bracket	1	—	—	—	—	—	—	—	—	—	—
40	069020-103	Screw, B. H. M.	1	—	—	—	—	—	—	—	—	—	—
	181971-101	Pushbutton, Grounding (Not Shown)	—	—	1	—	—	—	—	—	—	—	—
	182412-101	Lamp, 125-Volt Message Waiting (Not Shown)	—	—	—	—	1	—	—	—	—	—	—
	182412-102	Lamp, 90-Volt Message Waiting (Not Shown)	—	—	—	1	—	—	—	—	1	—	—

AW89-33

Notes:

** Substitute 2-Digit Color Code When Ordering.

¹ Refer To Component Parts Section Of This Manual For Assembly Parts List.

² These Products Have Been Manufacturing Discontinued, But Are Included As A Reference For Telephones Still In Service.

³ Not Available With The Model 2500 Telephones.

⁴ The 004200-OPG Dial Assembly Replaces The 003200-OPG Dial Assembly.

⁵ The 004200-OPD Dial Assembly Replaces The 003200-OPD Dial Assembly.

⁶ The 004600-OPG Dial Assembly Replaces The 003600-OPG Dial Assembly.

⁷ The 004600-OPD Dial Assembly Replaces The 003600-OPD Dial Assembly.

⁸ Must Be Ordered Separately.

⁹ The 004200-EPG Dial Assembly Replaces The 004200-OPG Dial Assembly.

¹⁰ The 004200-EPD Dial Assembly Replaces The 004200-OPD Dial Assembly.

¹¹ The 000130-NBA Ringer Replaces The 000130-OBA Ringer.

¹² The 000130-PBA Ringer Replaces The 000130-SBA Ringer.

SINGLE-LINE, PUSHBUTTON DIAL, DESK TELEPHONES

CIRCUIT LABELS

1. GENERAL

1.01 This document covers the single-line, pushbutton dial, desk telephone. (See Figure 1.) The circuit labels for the various models of single-line, pushbutton dial, desk telephones and the associated features available in each are included in this document. (See Table A.)



AW82-334

Figure 1: Single-Line, Pushbutton Dial, Desk Telephone

1.02 This section is reissued for the following reasons:

- (a) Issue 4 adds new circuit labels for the Model 2500 telephones with a data port and for Model 2500 telephones with flash and message waiting and modifiable A-Lead control.
- (b) Issue 3 added new circuit labels and provided the latest issue of circuit labels for the Model 2500 telephones with Tel-Touch dials, and provided the latest issue of circuit labels for the Model 2500 telephones with Tel-Pulse dial.
- (c) Issue 2 added circuit labels for the Model 2500, Type 20H and the Model 2500, Types 20F and 27F telephones.

1.03 For additional information on description and installation of the telephones, refer to Section 50-500-103. A replacement parts list and an exploded-view drawing for the telephones are contained in Section 50-500-104. Related documents of the CORTELCO Telephone Apparatus Practices Manual provide information on components.

1.04 The Model 2500 desk telephones are single-line, pushbutton dial, anti-sidetone type units that operate efficiently over a wide range of loop resistances and line impedances.

1.05 The Model 2500 desk telephones are identified by a coded label affixed to the bottom of the base plate. Refer to Section 50-500-103 of the CORTELCO Telephone Apparatus Practices Manual for ordering information of complete telephones and for an explanation of each code number.

TABLE A
LIST OF CIRCUIT LABELS

MODEL NO.	TYPE	FIGURE
2500**OBA	20, 21, 24, 27, 28, 44	2
2500**OBA	39	3
2500**OBA	44	4
2500**QBA	20, 21, 24, 27, 28, 44	5
2500**FBA	20, 24, 27, 28, 44	5
2500**MBA	20, 21, 24, 27, 28, 44	5
2500**OBA	20T, 21T	6
2500**QBA	20T	7
2500**FBA	20T	7
2500**QBA	20S	8
2500**FBA	20S	8
2500**MBA	20S	8
2500**QBA	20F, 27F	9
2500**FBA	20F, 27F	9
2500**MBA	20F, 27F	9
2500**MBA	50M, 57M	10
2500**MBA	20F, 27F	11
2500**OBA	20, 24, 30, 31, 34	12
2500**OBA	27, 28	13
2500**OBA	20F, 27F	14
2500**OBA	20, 24, 27, 28, 44	15
2500**FBA	20, 24, 27, 28, 44	15
2500**MBA	20, 24, 27, 28, 44	15
2502**OBA	30	16

AW89-32

K-2500 20,24,27,28 & 44 TYPE TELEPHONE CIRCUIT

187084-101

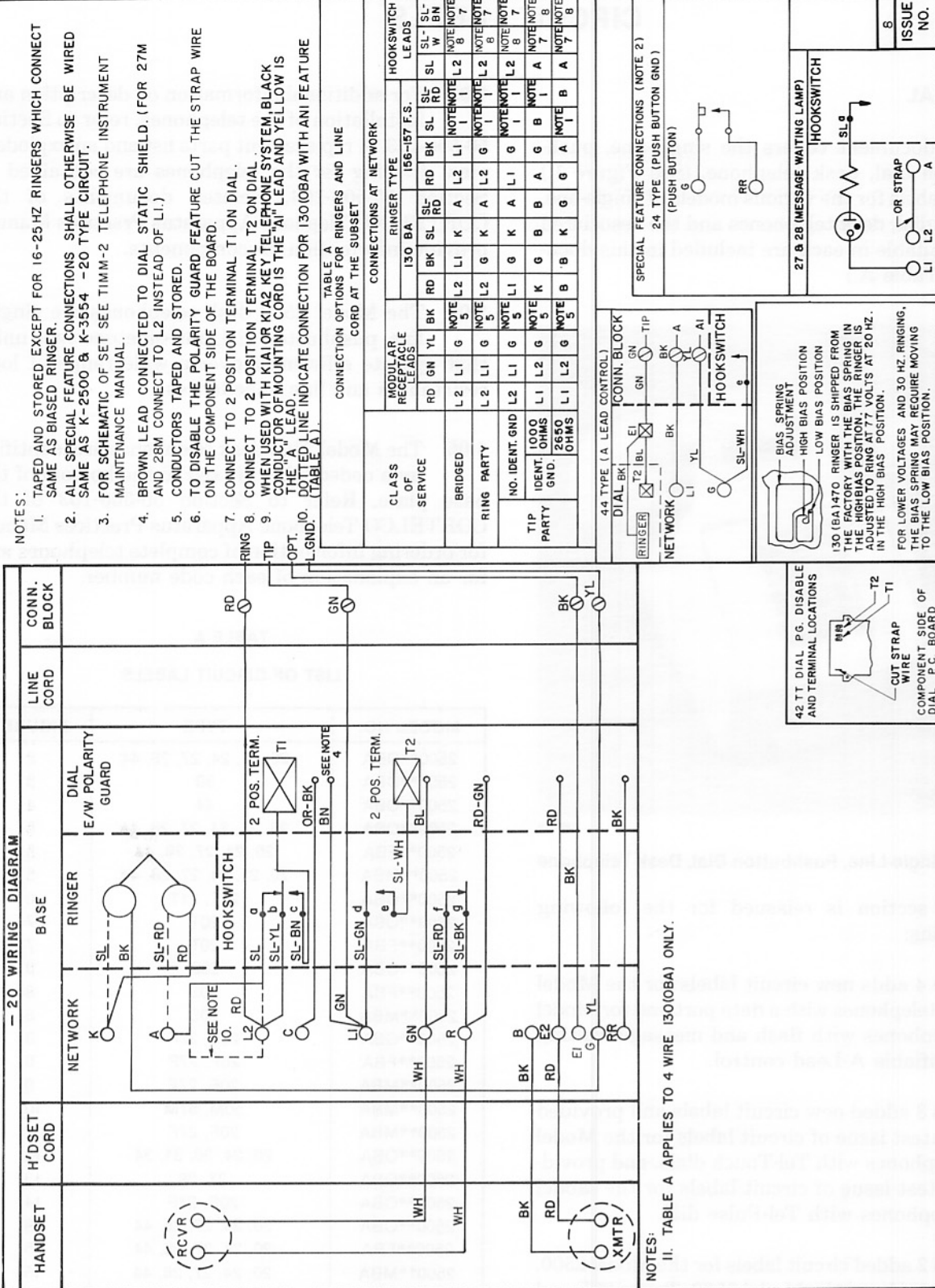
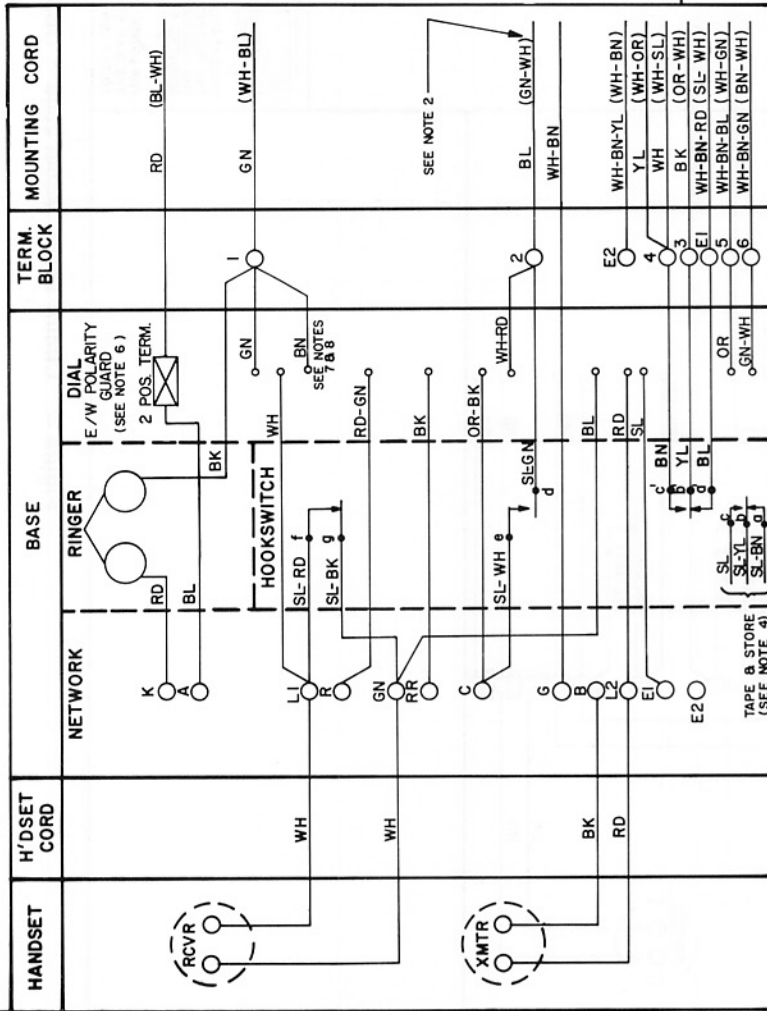


Figure 2: Circuit Label, Model 2500** OBA Types 20, 21, 24, 27, 28, 44

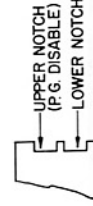
183075-101 2500 () 39 M TYPE TELEPHONE CIRCUIT



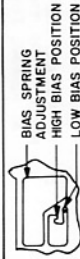
NOTES:

1. RINGER CONNECTED FOR BRIDGED SERVICE FOR RING PARTY MOVE RINGER BK LEAD FROM TERMINAL 1 TO TERMINAL 3. FOR TIP PARTY MOVE RINGER RD LEAD FROM DIAL 2 POS. TERM. TO TERM. 3. FOR 130 OBAR RINGER ONLY.
2. () INDICATES WESTERN ELECTRIC COLOR CODE.
3. WHEN HANDSET IS REMOVED: CONTACTS b'-c' MAKES BEFORE a''-b' BREAKS AND d''-a' MAKES. f-g BREAKS AFTER ALL OTHER OPERATIONS.
4. TAPE & STORE HOOKSWITCH LEADS SL-BN, SL-YL, & SL WHICH CORRESPONDS TO CONTACTS a, b, c WHICH ARE NOT USED ON THIS SUBSET.
5. * DESIGNATES TAPE & STORE.
6. TO DISABLE POLARITY GUARD FEATURE, RECONFIGURE THE DIAL AS FOLLOWS:
 - a. REMOVE THE OPTIONAL CLIP FROM THE STORAGE (LOWER) NOTCH ON THE CIRCUIT BOARD AT THE REAR OF THE DIAL.
 - b. MATCH CLIP IN THE POLARITY GUARD DISABLE NOTCH (UPPER).
7. BROWN LEAD CONNECTED TO DIAL STATIC SHIELD.
8. WHEN SUBSET IS INTERFACED TO A KEY SYSTEM, BN LEAD MUST BE CONNECTED TO KEY SYSTEM GROUND (AI).

46 T-T DIAL P.G. DISABLE



COMPONENT SIDE OF DIAL P. C. BOARD



BIAS SPRING ADJUSTMENT
HIGH BIAS POSITION
LOW BIAS POSITION

130 (BA) 470 RINGER IS SHIPPED FROM THE FACTORY WITH THE BIAS SPRING IN THE HIGH BIAS POSITION. THE RINGER IS ADJUSTED TO RING AT 77 VOLTS AT 20 HZ. IN THE HIGH BIAS POSITION.

FOR LOWER VOLTAGES AND 30 HZ RINGING, THE BIAS SPRING MAY REQUIRE MOVING TO THE LOW BIAS POSITION.

7
ISSUE NO.

Figure 3: Circuit Label, Model 2500** OBA Type 39

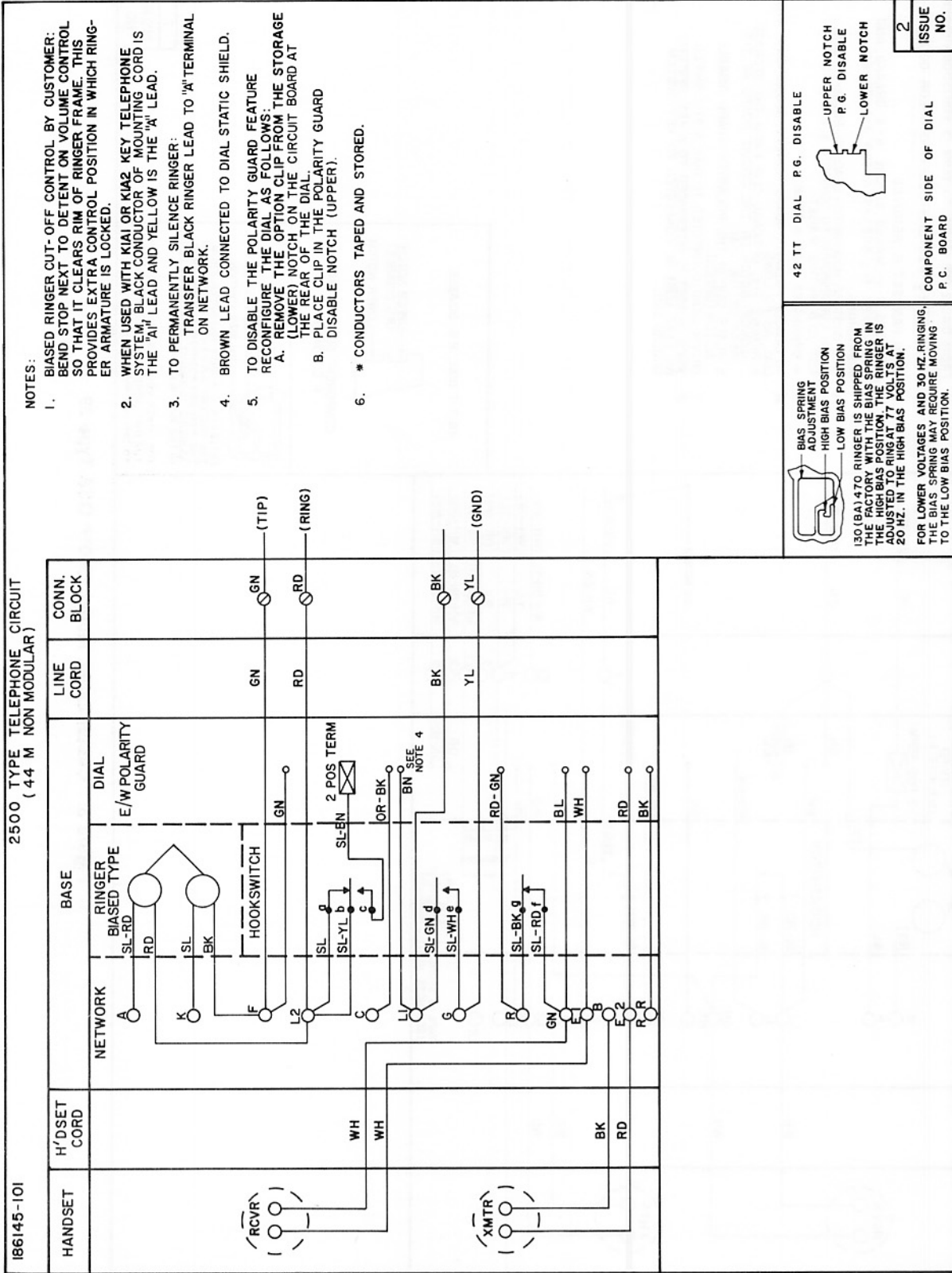


Figure 4: Circuit Label, Model 2500** OBA Type 44

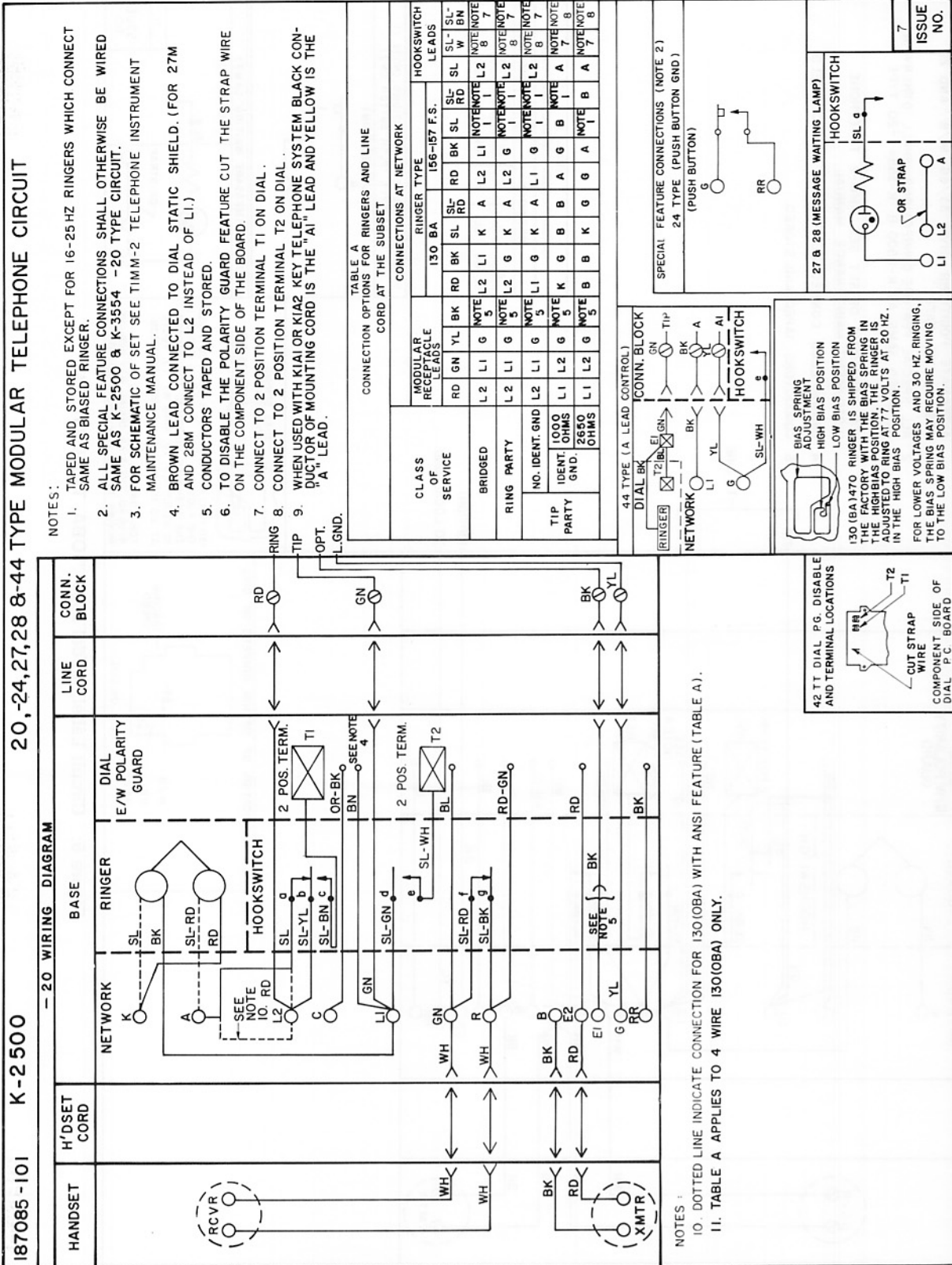


Figure 5: Circuit Label, Model 2500** QBA Types 20, 21, 24, 27, 28, 44; Model 2500** FBA Types 20, 24, 27, 28, 44; Model 2500** MBA Types 20, 21, 24, 27, 28, 44

K-2500 & K-3554 ()-20T, -24T, -27T, -28T, -30T, -31T TYPE TELEPHONE CIRCUIT

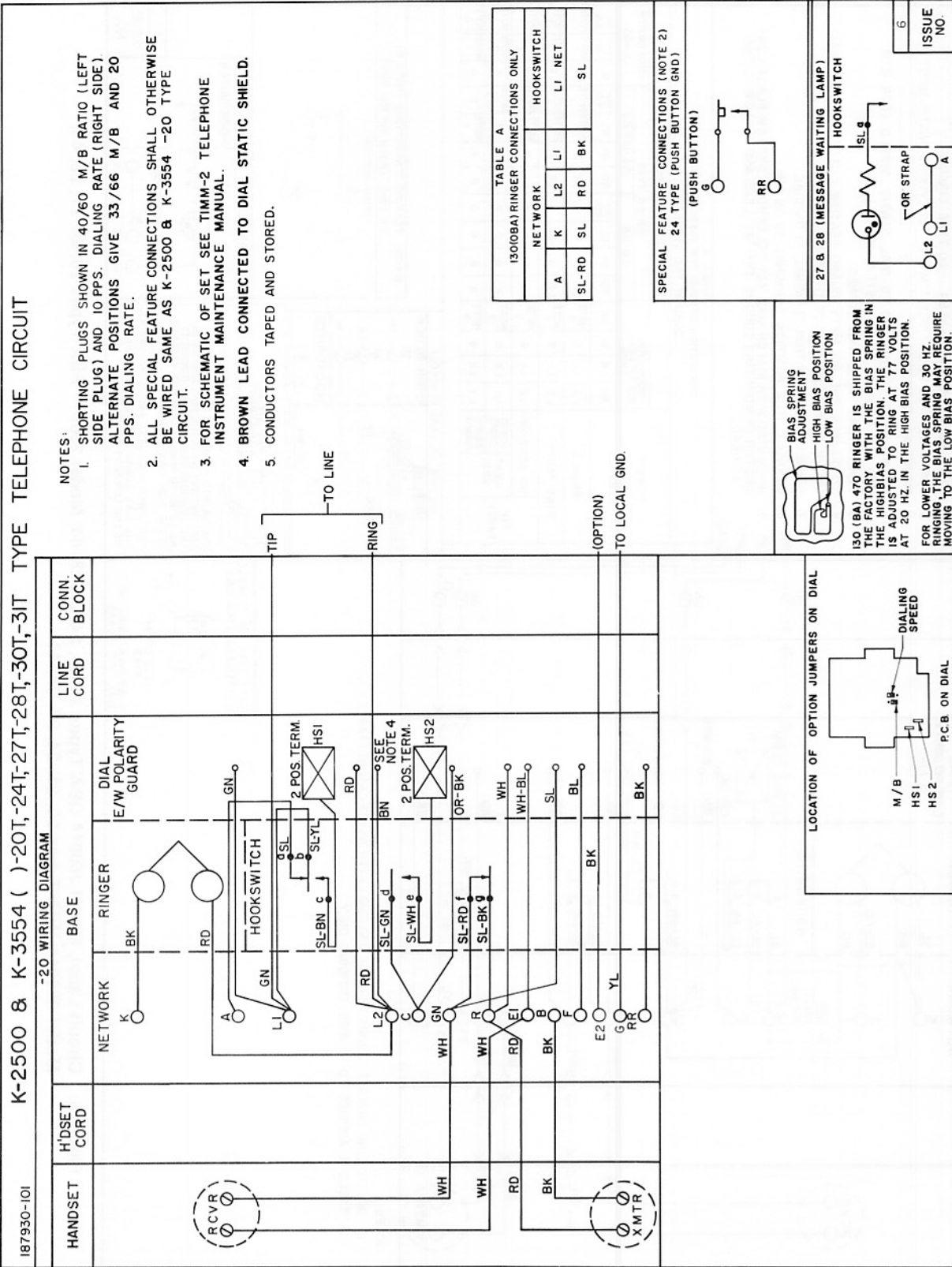


Figure 6: Circuit Label, Model 2500** OBA, Types 20T, 21T

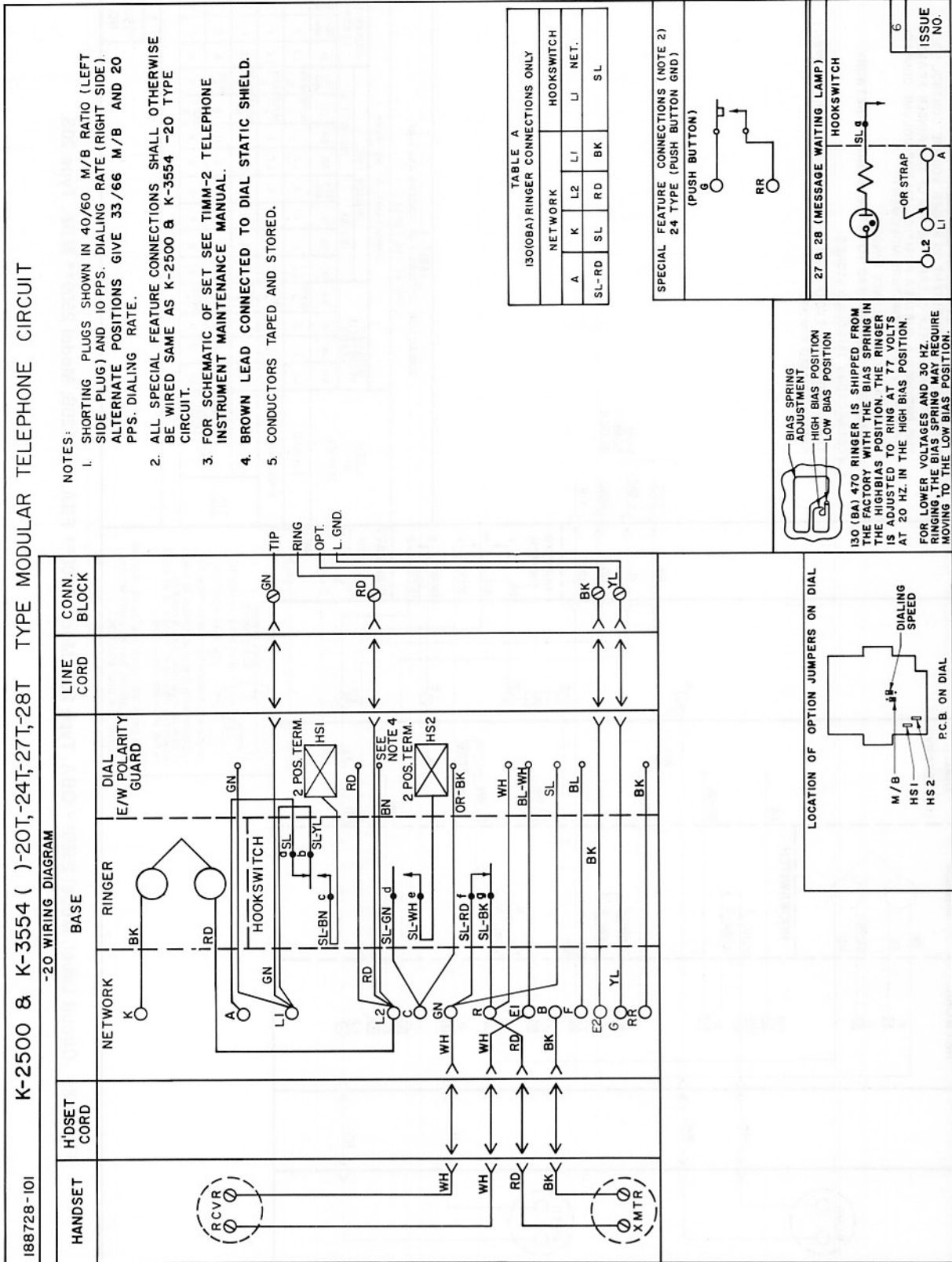
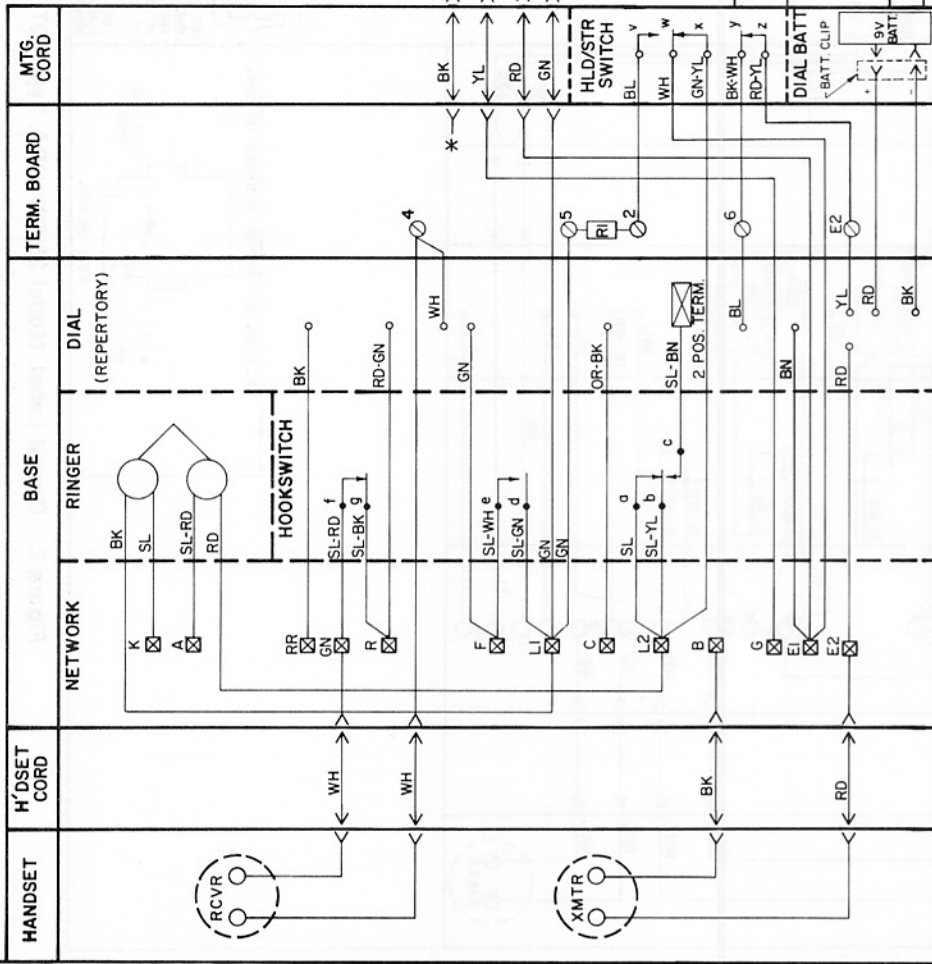


Figure 7: Circuit Label, Model 2500** QBA, Type 20T; Model 2500** FBA, Type 20T

184126-101 2500 CL (BA/LR) 20S TYPE MODULAR TELEPHONE CIRCUIT

- NOTES:
1. WHEN THE HANDSET IS REMOVED FROM CRADLE CONTACT g f BREAKS LAST.
 2. RINGER CUT-OFF CONTROL BY CUSTOMER: BEND STOP NEXT TO DETENT ON RINGER VOLUME CONTROL SO THAT IT COMPLETELY CLEARS THE RIM OF THE RINGER FRAME. THIS PROVIDES A FURTHER POSITION ON THE VOLUME CONTROL WHICH PREVENTS ARMATURE MOVEMENT.
 3. TO PERMANENTLY SILENCE RINGER: TRANSFER RD RINGER LEAD TO "K" TERMINAL ON NETWORK.
 4. * CONNECTORS TAPED AND STORED.
 5. TAPED AND STORED EXCEPT FOR 16-25 HZ RINGERS WHICH CONNECT SAME AS BIASED RINGER.



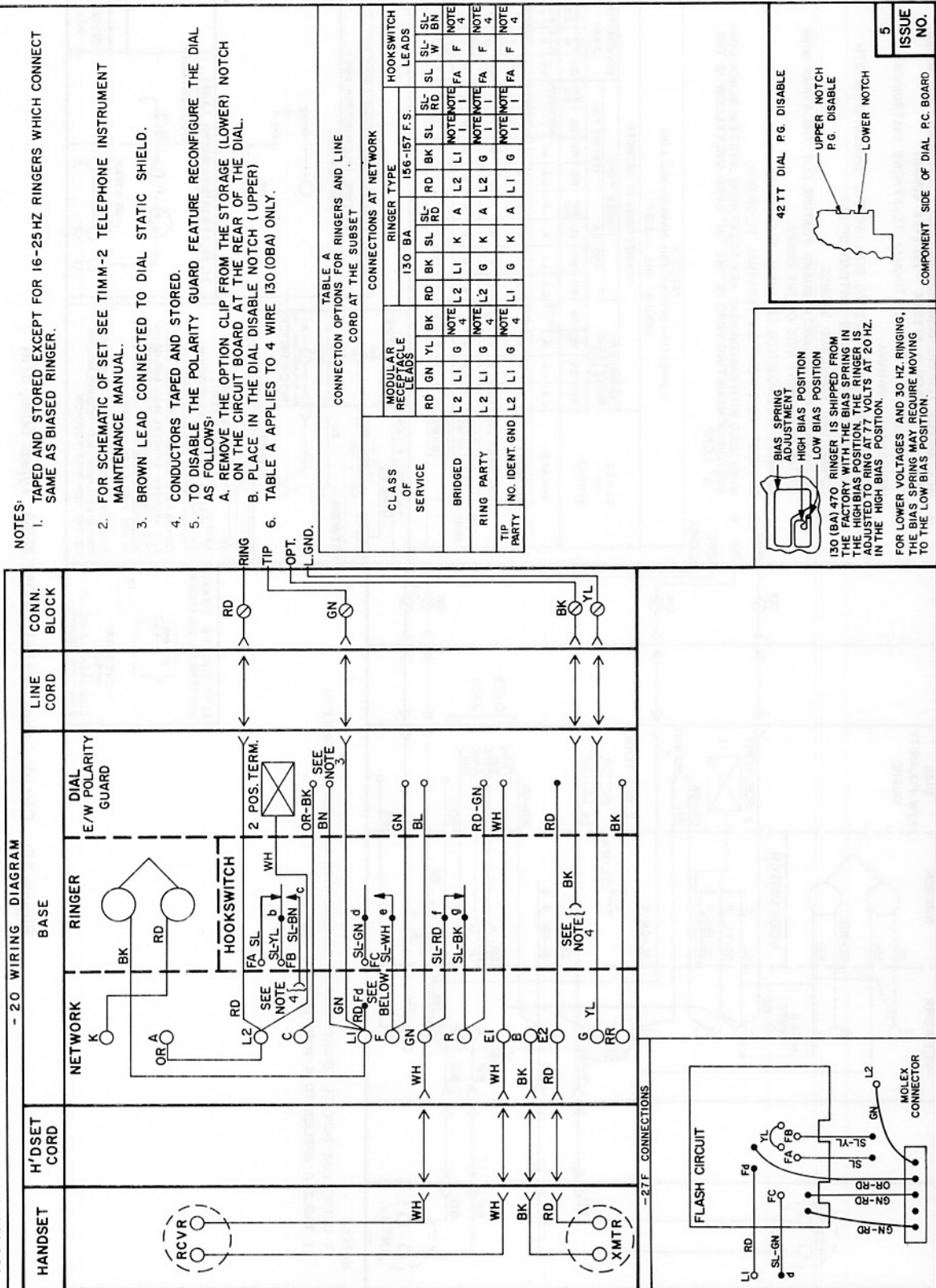
BIAS SPRING ADJUSTMENT
 HIGH BIAS POSITION
 LOW BIAS POSITION
 130 (BA/470) RINGER IS SHIPPED FROM THE FACTORY WITH THE BIAS SPRING IN THE HIGH BIAS POSITION. THE RINGER IS ADJUSTED TO RING AT 77 VOLTS AT 20 HZ. IN THE HIGH BIAS POSITION.
 FOR LOWER VOLTAGES AND 30 HZ. RINGING THE BIAS SPRING MAY REQUIRE MOVING TO THE LOW BIAS POSITION.

TABLE A
 CONNECTION OPTIONS FOR RINGERS AND LINE CORD AT THE SURSET

CLASS OF SERVICE	CONNECTIONS AT NETWORK														
	MODULAR RECEPTACLE LEADS			RINGER TYPE						HOOKSWITCH LEADS					
	RD	GN	YL	BK	RD	BK	SL	RD	BK	SL	RD	SL	SL	WH	BN
BRIDGED	L2	L1	G	NOTE 4	L2	L1	K	A	L2	L1	NOTE 5	L2	F	C	
	L2	L1	G	NOTE 4	L2	G	K	A	L2	G	NOTE 5	L2	F	C	
RING PARTY	L2	L1	G	NOTE 4	L1	G	K	A	L1	G	NOTE 5	L2	F	C	
	L1	L2	G	NOTE 4	K	G	B	A	G	B	NOTE 5	A	C	F	
TIP PARTY	L1	L2	G	NOTE 4	L1	B	K	G	A	NOTE 5	B	A	C	F	
	L2	L1	G	NOTE 4	B	K	G	A	NOTE 5	B	A	C	F		

Figure 8: Circuit Label, Model 2500** QBA, Type 20S; Model 2500** FBA, Type 20S; Model 2500** MBA, Type 20S

188479-101 K2500-20F, -27F MODULAR TELEPHONE CIRCUIT



- NOTES:
1. TAPED AND STORED EXCEPT FOR 16-25 HZ RINGERS WHICH CONNECT SAME AS BIASED RINGER.
 2. FOR SCHEMATIC OF SET SEE TIMM-2 TELEPHONE INSTRUMENT MAINTENANCE MANUAL.
 3. BROWN LEAD CONNECTED TO DIAL STATIC SHIELD.
 4. CONDUCTORS TAPED AND STORED.
 5. TO DISABLE THE POLARITY GUARD FEATURE RECONFIGURE THE DIAL AS FOLLOWS:
 - A. REMOVE THE OPTION CLIP FROM THE STORAGE (LOWER) NOTCH ON THE CIRCUIT BOARD AT THE REAR OF THE DIAL.
 - B. PLACE IN THE DIAL DISABLE NOTCH (UPPER)
 6. TABLE A APPLIES TO 4 WIRE 130 (OBA) ONLY.

TABLE A CONNECTION OPTIONS FOR RINGERS AND LINE CORD AT THE SUBSET

CLASS OF SERVICE	CONNECTIONS AT NETWORK												HOOKSWITCH LEADS			
	MODULAR RECEPTACLE LEADS				RINGER TYPE				156-157 F.S.				SL-BN	SL-W	SL-F	NOTE 4
	RD	GN	YL	BK	RD	BK	SL-RD	SL	RD	BK	SL-RD	SL				
BRIDGED	L2	L1	G	NOTE 4	L2	L1	K	A	L2	L1	NOTE	NOTE	FA	F	NOTE 4	
RING PARTY	L2	L1	G	NOTE 4	L2	L1	G	K	A	L2	G	L1	G	NOTE	NOTE 4	
TIP PARTY	NO. IDENT.	GND	L2	L1	G	L1	G	K	A	L1	G	L1	G	NOTE	NOTE 4	

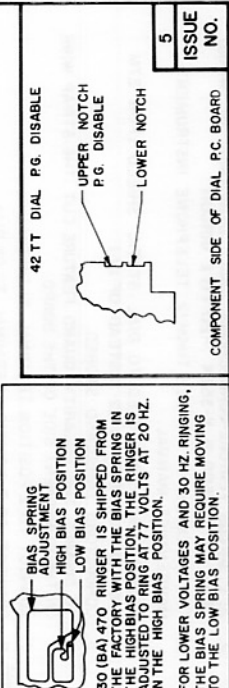


Figure 9: Circuit Label, Model 2500** QBA, Types 20F, 27F; Model 2500** FBA, Types 20F, 27F; Model 2500** MBA, Types 20F, 27F

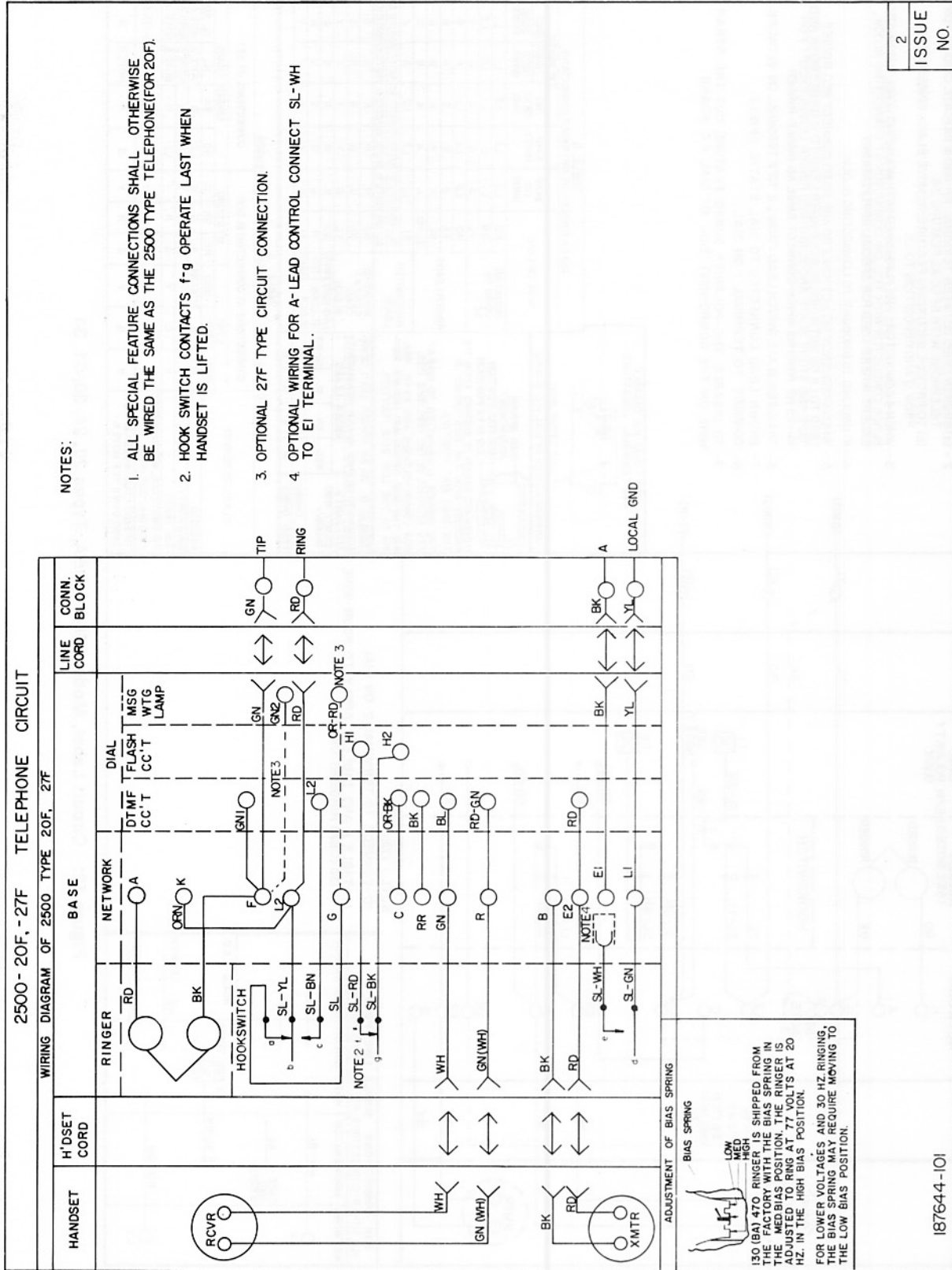


Figure 11: Circuit Label, Model 2500** MBA, Types 20F, 27F

186064 -101 2500/3554() 20, 20H, 24, 30, 31, 34 TYPE TELEPHONE CIRCUIT

ISSUE
8

- NOTES**
- 1 - FOR TIP-PARTY WITH NO IDENTIFYING GROUND MOVE RED RINGER LEAD FROM L2 TO L1 ON NETWORK AS SHOWN IN TABLE A.
 - 2 - (a) BROKEN LINES BETWEEN TERMINAL RR AND G INDICATE CIRCUIT FOR TELEPHONE WITH SPECIAL FEATURE 34.
(b) TO PROVIDE GROUNDING FEATURE, REMOVE BLACK RINGER LEAD FROM G AND REPOSITION TO L1.
 - 3 - WHEN 4 CONDUCTORS ARE FURNISHED WITH MOUNTING CORD, TERMINATE BLACK CONDUCTOR WITH YELLOW CONDUCTOR AT CONNECTING BLOCK, EXCEPT WHERE USED FOR SPECIAL APPLICATIONS.
 - 4 - IF GROUND IS BROUGHT TO CONNECTING BLOCK.
 - 5 - WHEN FREQUENCY SELECT RINGERS ARE USED CONNECT RED RINGER LEAD TO L2 ON NETWORK, BLACK RINGER LEAD TO G ON NETWORK AND TAPE AND STORE SLATE AND SLATE-RED RINGER LEADS, EXCEPT FOR 16-25 HZ. RINGERS WHICH CONNECT SAME AS BIASED RINGER.
 - 6 - TRANSFER SLATE SWITCH LEAD FROM L2 TO "A" TERMINAL ON NETWORK.
 - 7 - BROWN LEAD CONNECTED TO DIAL STATIC SHIELD.
 - 8 - CONNECT TO TERMINAL I ON DIAL.
 - 9 - TO DISABLE THE POLARITY GUARD FEATURE CUT THE STRAP WIRE ON THE COMPONENT SIDE OF DIAL P.C. BOARD.

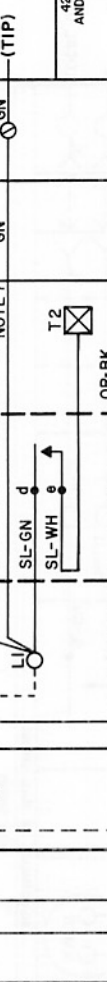
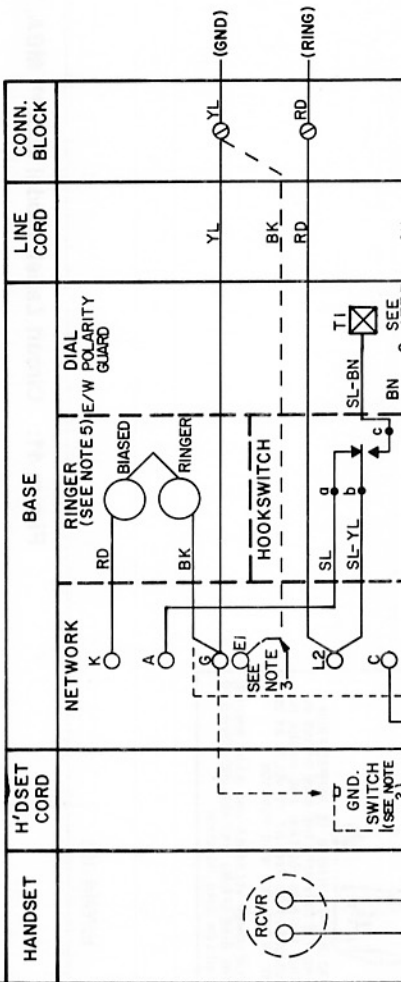


TABLE A
130 BA RINGER LINE AND RINGER CONNECTIONS

WIRE OR LEAD	INDV OR BRDG		RING OR PARTY		TIP PARTY	
	RD	L2	L2	L2	NO IDENT GND.	1000 OHMS
MOUNTING CORD IN SET	GN	L1	L1	L1	L1	L1
RINGER LEADS	YL	G	G	G	G	G
	BK	L2	L2	L2	L2	L2
	SL	K	K	K	K	K
	SL-RD	A	A	A	A	A
HOOKEWITCH LEADS	SL-WH	NOTE 10	NOTE 10	NOTE 10	NOTE 10	NOTE 10
	RD	R	R	R	R	R
	GN	G	G	G	G	G
MOUNTING CORD AT CONN. BLOCK	YL	G	G	G	G	G
LINE WIRE RING	RD	R	R	R	R	R
AT CONN. BLOCK	GN	G	G	G	G	G
	YL	Y	Y	Y	Y	Y

TABLE B 130 BA RINGER LEAD CONNECTIONS TO SLATE RINGER PERMANENTLY IDENTIFYING GROUND

TIP PARTY IDENTIFYING GROUND	RED	BK	SL	SL-RD
1000 OHMS	K	O	B	K
2650 OHMS	B	K	K	G

TABLE C
CONNECTIONS FOR 156-157 FREQUENCY SELECTIVE RINGER

CLASS OF SERVICE	CONNECTIONS AT CONNECTING BLOCK				CONNECTIONS IN SET			
	RING	TIP	GND	MTG. CORD	RD	SL	SL-RD	SL
BRIDGED	R	G	Y	NOTE 4	R	G	L2	G
RING PARTY	R	G	Y	R	R	G	L2	G
TIP PARTY	R	G	Y	R	R	G	L2	G
TIP PARTY DIAL MESSAGE RATE 1000 OHM. SEE NOTE 5	R	G	Y	R	R	G	A	G
TIP PARTY DIAL MESSAGE RATE 2650 OHMS. SEE NOTE 6.	R	G	Y	R	R	G	A	G

- NOTES CONT'D.**
- 10 - CONNECT TO TERMINAL 2 ON DIAL.
 - 11 - TABLE A AND TABLE B APPLY TO FOUR-WIRE 130 (OBA) RINGERS ONLY.

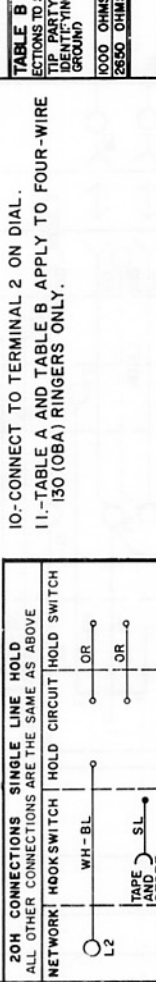


Figure 12: Circuit Label, Model 2500** OBA, Types 20, 24, 30, 31, 34

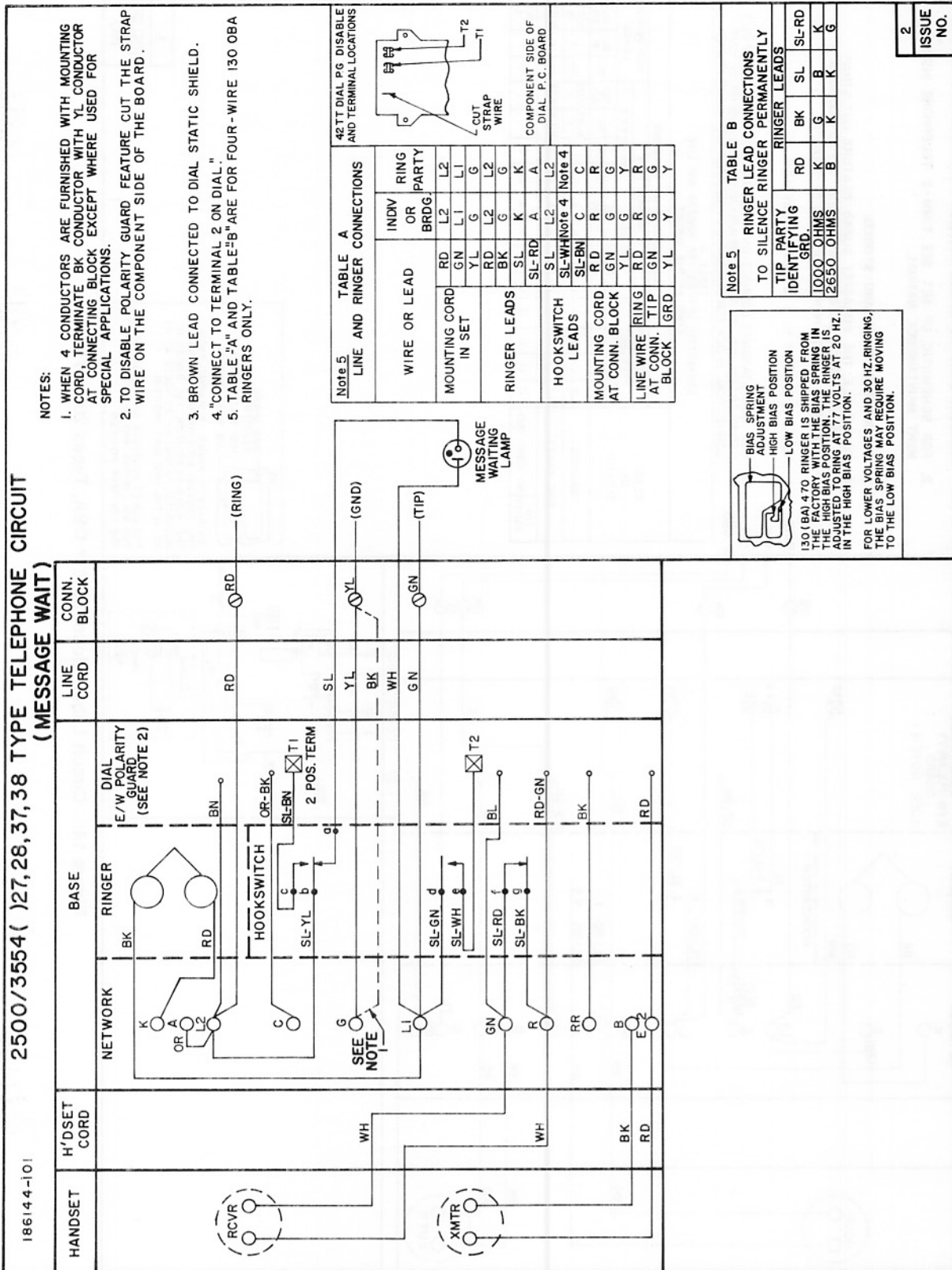
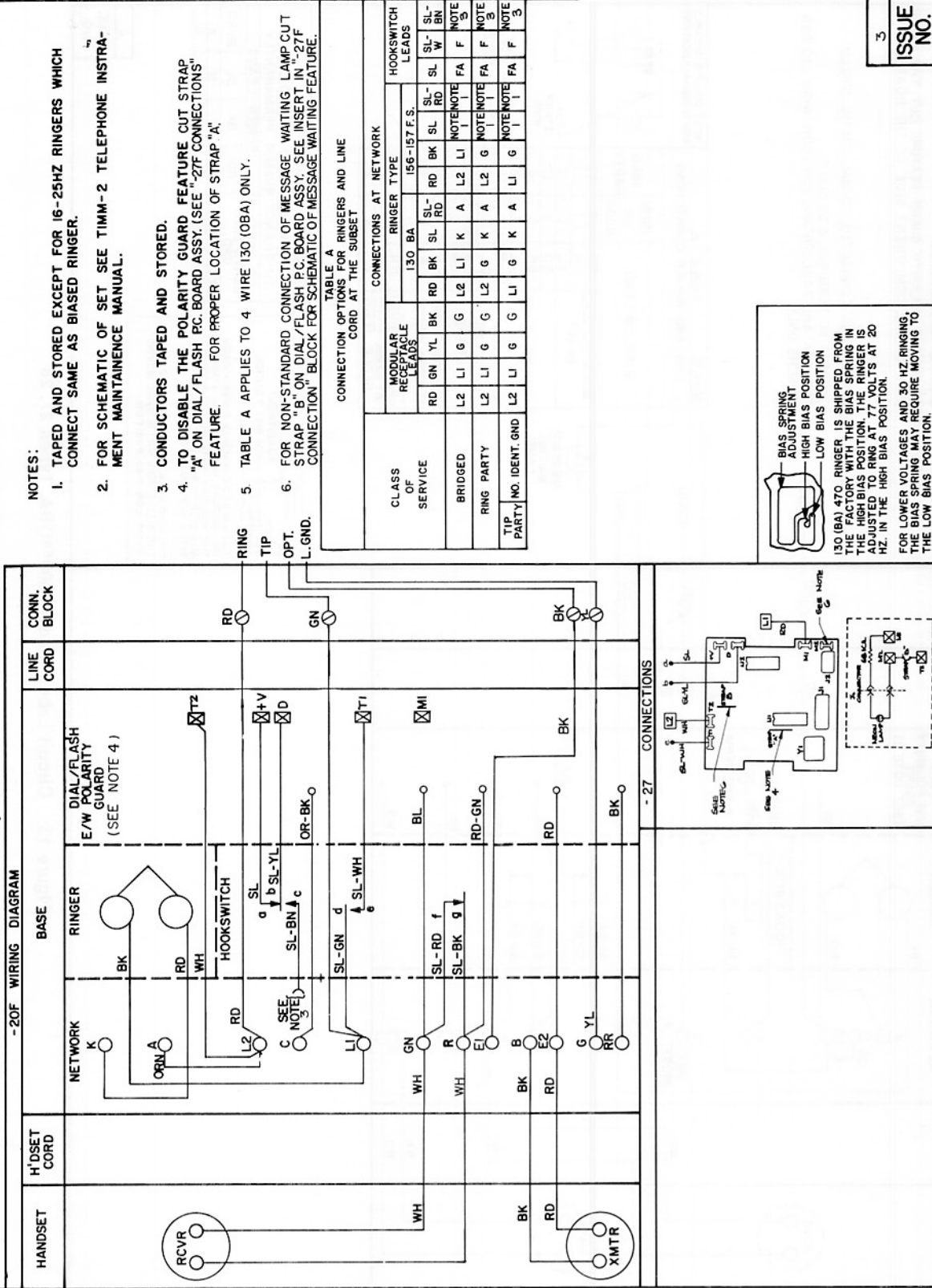


Figure 13: Circuit Label, Model 2500**OBA, Types 27, 28

TELEPHONE CIRCUIT

K2500 - 20F, -27F

1B7129 - 101



- NOTES:
1. TAPED AND STORED EXCEPT FOR 16-25HZ RINGERS WHICH CONNECT SAME AS BIASED RINGER.
 2. FOR SCHEMATIC OF SET SEE TIMM-2 TELEPHONE INSTRUMENT MAINTENANCE MANUAL.
 3. CONDUCTORS TAPED AND STORED.
 4. TO DISABLE THE POLARITY GUARD FEATURE CUT STRAP "A" ON DIAL/FLASH P.C. BOARD ASSY. (SEE "-27F CONNECTIONS" FEATURE FOR PROPER LOCATION OF STRAP "A".)
 5. TABLE A APPLIES TO 4 WIRE 130 (OBA) ONLY.
 6. FOR NON-STANDARD CONNECTION OF MESSAGE WAITING LAMP CUT STRAP "B" ON DIAL/FLASH P.C. BOARD ASSY. SEE INSERT IN "-27F CONNECTION" BLOCK FOR SCHEMATIC OF MESSAGE WAITING FEATURE.

TABLE A
CONNECTION OPTIONS FOR RINGERS AND LINE CORD AT THE SUBSET

CLASS OF SERVICE	CONNECTIONS AT NETWORK												HOOKSWITCH LEADS			
	MODULAR RECEPTACLE LEADS			RINGER TYPE						156-157 F.S.			SL-W	SL-F	SL-N	
	RD	GN	YL	BK	RD	BK	SL	SL	RD	BK	SL	SL	RD	SL	RD	SL
BRIDGED	L2	L1	G	G	L2	L1	K	A	L2	L1	NOTE	NOTE	FA	FA	NOTE	NOTE
RING PARTY	L2	L1	G	G	L2	G	K	A	L2	G	NOTE	NOTE	FA	FA	NOTE	NOTE
TIP PARTY	L2	L1	G	G	L1	G	K	A	L1	G	NOTE	NOTE	FA	FA	NOTE	NOTE

BIAS SPRING ADJUSTMENT
HIGH BIAS POSITION
LOW BIAS POSITION

130 (BA) 470 RINGER IS SHIPPED FROM THE FACTORY WITH THE BIAS SPRING IN THE HIGH BIAS POSITION. THE RINGER IS ADJUSTED FOR 77 VOLTS AT 20 HZ IN THE HIGH BIAS POSITION.

FOR LOWER VOLTAGES AND 30 HZ RINGING, THE BIAS SPRING MAY REQUIRE MOVING TO THE LOW BIAS POSITION.

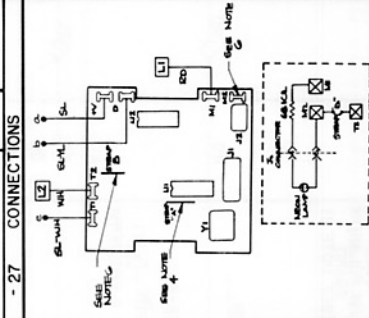


Figure 14: Circuit Label, Model 2500** OBA, Types 20F, 27F

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ISSUE NO.

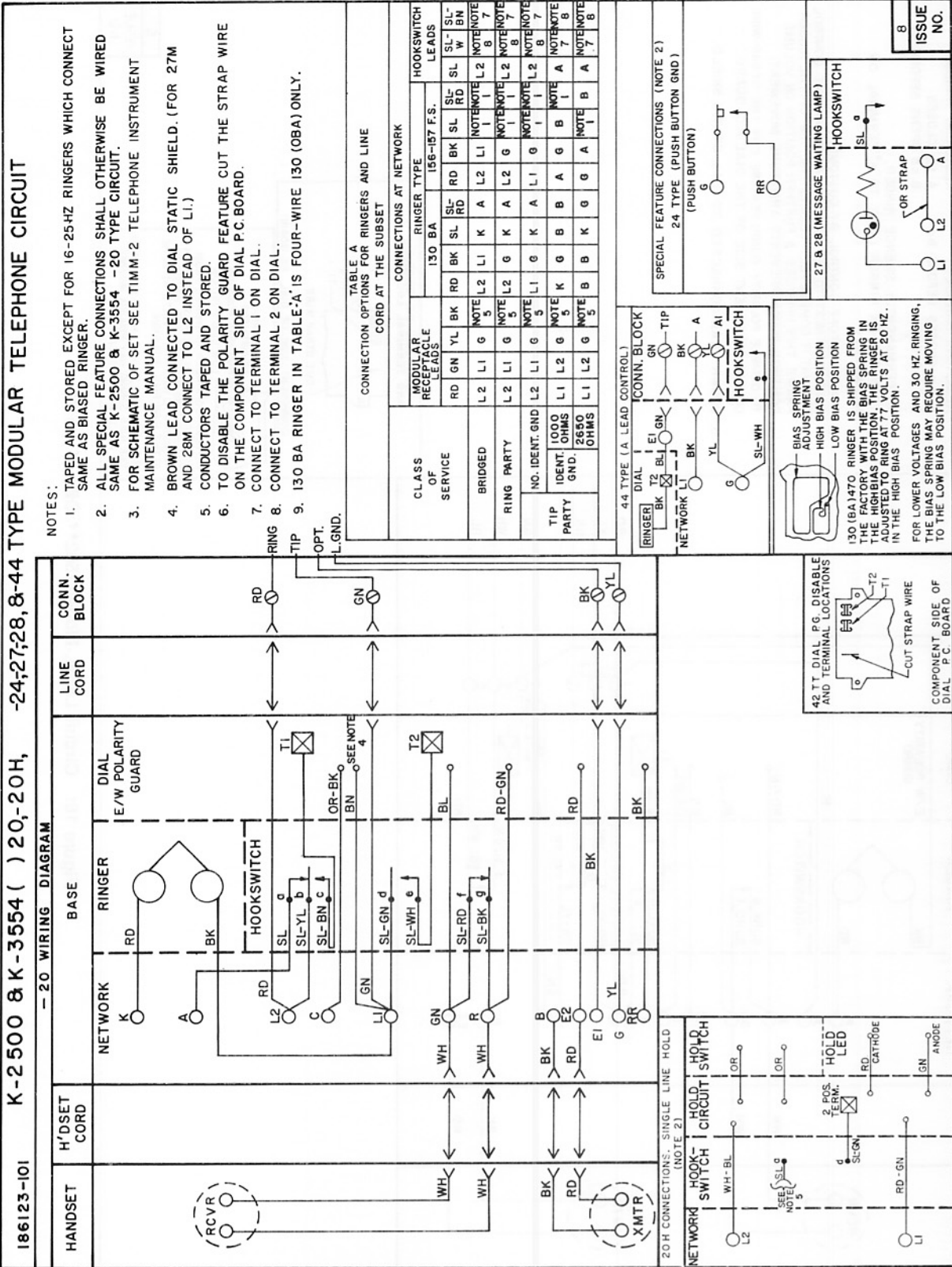
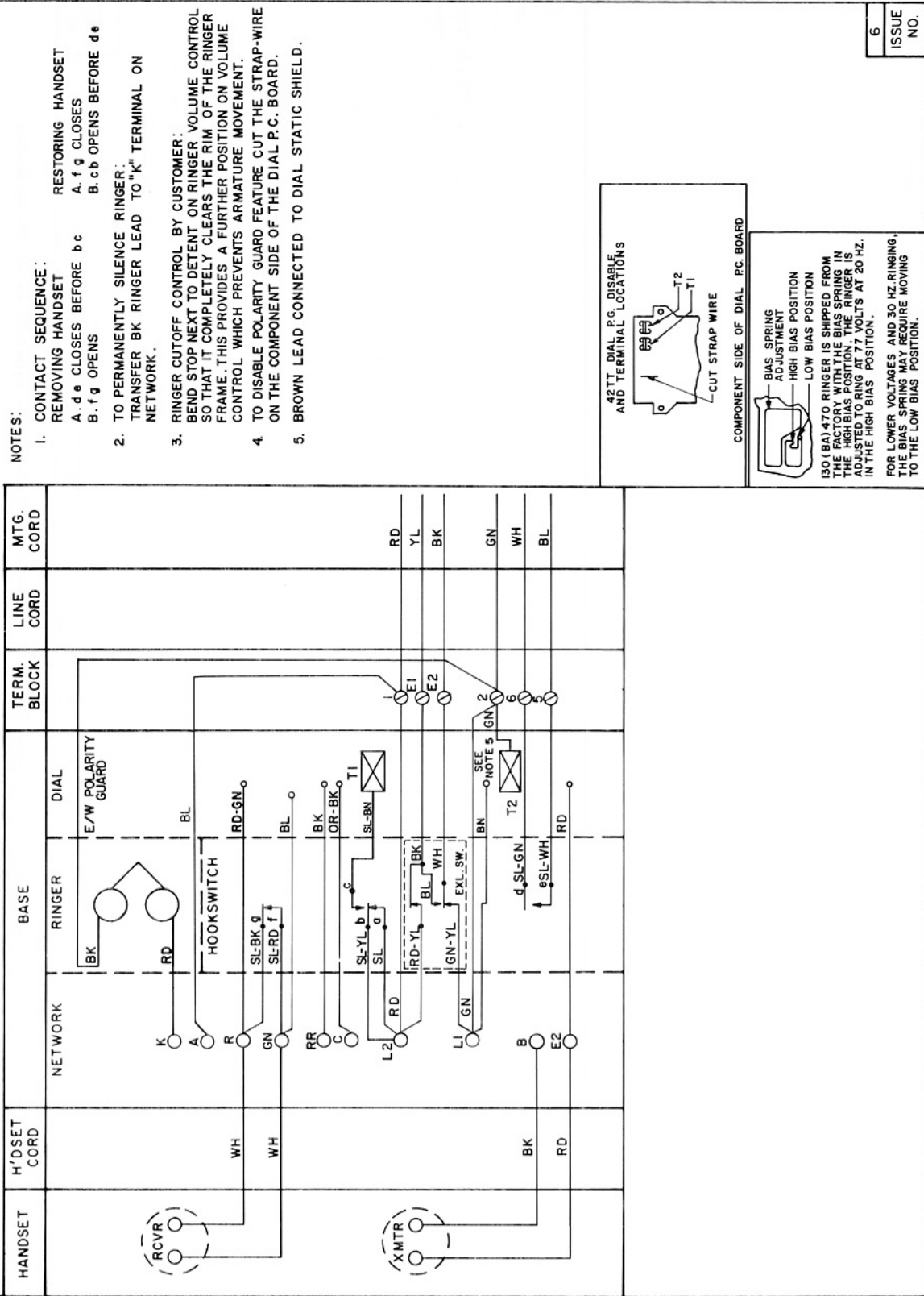


Figure 15: Circuit Label, Model 2500** OBA, Types 20, 24, 27, 28, 44; Model 2500** FBA, Types 20, 24, 27, 28, 44; Model 2500** MBA, Types 20, 24, 27, 28, 44

2502 () 30 TYPE TELEPHONE CIRCUIT

186148-101



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Figure 16: Circuit Label, Model 2502** OBA, Type 30

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2502B

FOR USE WITH 30A COUPLER

WIRE OR LEAD		REMOVE TERM ST.	FROM NET	CONNECT TERM ST.	TO NET
MTG. CORD	Y	E1		6	RR
	BK	E2		5	
	W	6		E2	
	BL	5			
EXCL.* KEY	BL	E1			C
	Y STRAP	BL LEAD END	L2	E1 11 (4)	
HANDSET	R	11 (4)		E1	

() ITT TELEPHONES

* CURRENT COLOR CODE IS SHOWN M.D. CODE IS BELOW

CURRENT	M.D.
BL	BL
WH	WH
BK	GN-YW.
Y	RD-YW.

NOTE: W AND BL MTG. CORD LEADS ARE FOR THE COUPLER.
 Y AND BK MTG. CORD LEADS ARE FOR "A" LEAD CONTROL.

SINGLE-LINE, PUSHBUTTON DIAL, DESK TELEPHONES WITH TONE/PULSE SWITCHABLE DIALING

GENERAL DESCRIPTION

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2. INSTALLATION	1
3. MAINTENANCE	1

1. GENERAL DESCRIPTION

1.01 This document covers the single-line, pushbutton dial, desk telephones equipped with a tone/pulse switch. (See Figure 1.) A general description as well as information that is peculiar to single-line, pushbutton dial, desk telephones with tone/pulse switchable dialing is included.



Figure 1: Model 8525, Single-Line, Pushbutton Dial, Desk Telephone With Tone/Pulse Switch

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

1.03 A replacement parts list and an exploded-view drawing for the telephones are contained in

Section 50-525-101. Circuit labels are not provided for the telephones. Related documents of the CORTELCO Telephone Apparatus Practices Manual provide information on components.

1.04 The Model 8525 desk telephones are single-line, pushbutton dial, anti-sidetone units that operate efficiently over a wide range of loop resistances and line impedances.

1.05 The Model 8525 desk telephones are identified by a coded label affixed to the bottom of the base plate. Refer to the ordering information in Table A for an explanation of each code number and a list of available versions and features.

1.06 The Model 8525 desk telephones are full-modular version telephones. Full-modular version telephones are equipped with jacks to accept the plugs of a modular handset cord and a modular line cord. The full-modular version of the telephone furnished with both a modular handset cord and a modular line cord, terminated on each end with modular plugs, is designated by the code letter M. (See Table A.)

1.07 The Model 8525 desk telephones are described in the following paragraphs.

MODEL 8525** () 20

1.08 The Model 8525** () 20 is a single-line, pushbutton dial, desk telephone equipped with a T/P (Tone/Pulse) switch. The T/P switch is used to change from Pulse (Tel-Pulse) to Tone (Tel-Touch) dialing.

2. INSTALLATION

2.01 Installation of these full-modular telephones consists of inserting the modular line cord plug into an available modular wall jack.

3. MAINTENANCE

3.01 For replacement parts information and for an exploded-view drawing of major assembly groups, refer to Section 50-525-101.

TABLE A
ORDERING INFORMATION - TELEPHONES

CODE NUMBERS									
TELEPHONE CODE NUMBERS ARE FORMED IN SIX STEPS AS FOLLOWS:									
				8525	44	M	BA	20	M
(1)	Type of Instrument (See Part 1)								
(2)	Color (See Part 2)								
(3)	Version (See Part 3)								
(4)	Ringer (See Part 4)								
(5)	Special Feature (See Part 5)								
(6)	Dial (See Part 6)								
PART 1 TYPE OF INSTRUMENT									
CODE	DESCRIPTION	COLOR OFFERED	VERSION OFFERED	RINGER OFFERED	FEATURE OFFERED	DIAL OFFERED			
8525	Single-Line, Pushbutton Dial, Desk Telephone With Tone/Pulse Switchable Dialing	00, 09, 13, 15, 44, 45, 47, 62, 63, And 64	M	BA	20	M			
REFER TO INDIVIDUAL UNIT DESCRIPTION FOR COMPLETE DESCRIPTION OF FEATURE COMBINATIONS									
PART 2 COLORS		PART 3 VERSIONS		PART 4 RINGERS		PART 5 SPECIAL FEATURES		PART 6 DIALS	
CODE	COLORS	CODE	VERSIONS	CODE	RINGERS	CODE	SPECIAL FEATURES	CODE	DIAL
00	Black	M	Full-Modular (With Cords)	BA	Straight-Line	20	No Special Features	M	Metropolitan (Letters And Numerals)
09	Ivory								
13	Beige								
15	White								
44	Light Ash/Almond								
45	Cocoa Brown								
47	Cherry Red								
62	Mauve								
63	Dove Gray								
64	Wedgewood Blue								

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1.10 For Model 554 wall telephones, feature codes 20, 21, 24, 27, and 44 pertain to modular units, while feature codes 30, 31, and 37 pertain to nonmodular units.

1.11 The Model 554 wall telephones are described in the following paragraphs. The circuit label drawings for these telephones are included in Section 50-554-102.

MODEL 554 () 20**

1.12 The Model 554** () 20 is a single-line, rotary dial, wall telephone. It provides no additional outstanding features.

MODEL 554 () 21**

1.13 The Model 554** () 21 is the same as the Model 554** () 20 with the addition of a nine-foot handset cord.

MODEL 554 () 24**

1.14 The Model 554** () 24 is the same as the Model 554** () 20 with the addition of a grounding pushbutton switch required in some PBX applications for transferring calls, originating calls during a power failure, and other special functions.

MODEL 554 () 27/28**

1.15 The Model 554** () 27/28 is the same as the Model 554** () 20 with the addition of a message waiting lamp. The lamp is used in PBX applications to indicate that the station user should contact the message center. The Model 554** () 27 is equipped with a 90-volt indicator. The Model 554** () 28 is equipped with a 125-volt indicator.

MODEL 554 () 30**

1.16 The Model 554** () 30 is a single-line, rotary dial, wall telephone. This model provides no additional outstanding features.

MODEL 554 () 31**

1.17 The Model 554** () 31 is the same as the Model 554** () 30 with the addition of a nine-foot handset cord.

MODEL 554 () 34**

1.18 The Model 554** () 34 is the same as the Model 554** () 30 with the addition of a grounding pushbutton switch required in some PBX applications for transferring calls, originating calls during a power failure, and other special functions.

MODEL 554 () 37/38**

1.19 The Model 554** () 37/38 is the same as the Model 554** () 30 with the addition of a message waiting lamp. The lamp is used in PBX applications to indicate that the station user should contact the message center. The Model 554** () 37 is equipped with a 90-volt indicator. The Model 554** () 38 is equipped with a 125-volt indicator.

MODEL 554 () 44**

1.20 The Model 554** () 44 is a single-line telephone, such as the Model 554** () 20, wired for use in a key system. The telephone provides connections through the hookswitch that allow ground on the A1 lead to be applied to key equipment by way of the A lead. The Model 554** () 20 may be converted to a Model 554** () 44 as follows:

- (a) Remove the line cord of the telephone by disconnecting the leads from the network.
- (b) Connect a four-conductor line cord in the following manner.
 - (1) Connect the RD (Ring) lead to network terminal L2.
 - (2) Connect the GN (Tip) lead to network terminal F.
 - (3) Connect the BK (A) lead to network terminal L1.
 - (4) Connect the YL (A1) lead to network terminal G.
- (c) Move the BK ringer lead from network terminal G to network terminal F.

SINGLE-LINE, PUSHBUTTON DIAL, DESK TELEPHONES WITH TONE/PULSE SWITCHABLE DIALING REPLACEMENT PARTS

1. GENERAL

1.01 This document covers the single-line, pushbutton dial, desk telephones equipped with a tone/pulse switch. (See Figure 1.) An exploded-view drawing of the telephone with the major assembly groups (see Figure 2) and a replacement parts list (see Table A) are included.

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

1.03 For additional information on description and installation of the telephones, refer to Section 50-525-100. Circuit labels are not provided for the

telephones. Related documents of the CORTELCO Telephone Apparatus Practices Manual provide information on components.

1.04 The Model 8525 desk telephones are single-line, pushbutton dial, anti-sidetone type units that operate efficiently over a wide range of loop resistances and line impedances.

1.05 The Model 8525 desk telephones are identified by a coded label affixed to the bottom of the base plate. Refer to Section 50-525-100 of the CORTELCO Telephone Apparatus Practices Manual for ordering information of complete telephones and for an explanation of each code number.



Figure 1: Single-Line, Pushbutton Dial, Desk Telephone

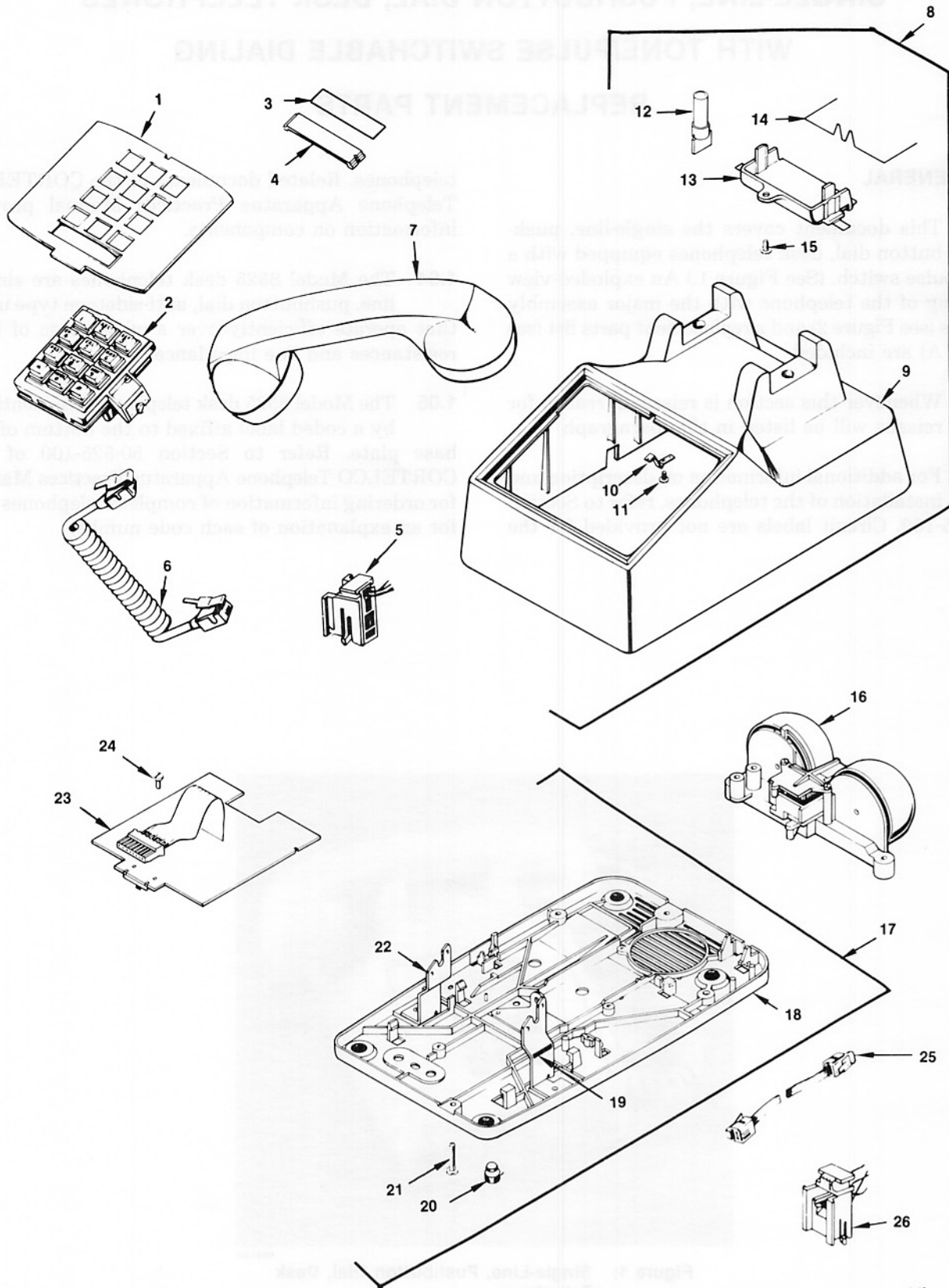


Figure 2: Single-Line, Pushbutton Dial, Desk Telephone, Exploded View

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TABLE A
REPLACEMENT PARTS LIST

INDEX NO	PART NUMBER	DESCRIPTION	QUANTITY USED
		Single-Line, Pushbutton Dial, Desk Telephone With Tone/Pulse Switchable Dialing	8525/20
1	180147-0**	Faceplate	1
2	184475-101	Dial Assembly, Pushbutton Dial (Metropolitan, Letters And Numerals) ¹	1
3	087513-101	Card, Number	1
4	087514-101	Retainer, Card, Number	1
5	182946-101	Modular Jack Assembly (Handset Cord)	1
6	9018**-072	Cord, Handset (Modular)	1
7	0065**-0M2	Handset Assembly (Modular) ¹	1
8	187286-0**	Housing And Plunger Assembly (Full-Modular)	1
9	187279-0**	Housing	1
10	086143-101	Clip, Faceplate	1
11	096006-102	Screw, Faceplate Clip	1
12	187276-101	Plunger, Cradle Switch	2
13	187275-0**	Hookswitch Assembly	1
14	187287-101	Spring, Plunger	1
15	075407-102	Screw, Hookswitch Assembly Retainer	1
16	000130-PBA	Ringer, 2-Wire (Less ANI) ^{1, 2}	1
16	000130-SBA	Ringer, 2-Wire (Less ANI) ^{1, 2}	1
17	187202-101	Base Assembly	1
18	184400-101	Base Plate	1
19	086145-101	Bracket, Dial (R. H.)	1
20	184403-101	Foot, Rubber	4
21	186046-102	Screw, Mounting	4
22	086146-101	Bracket, Dial (L. H.)	1
	031944-107	Rivets (Not Shown)	4
	187283-101	Bracket, Ringer (Not Shown)	1
23	187390-102	PC Board Assembly	1
24	096407-103	Screw, PC Board Mounting	1
25	600989-540-084	Cord, Line (Full-Modular)	1
26	182856-101	Modular Jack Assembly (Line Cord)	1

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Notes:

** Substitute 2-Digit Color Code When Ordering.

¹ Refer To Component Parts Section Of This Manual For Assembly Parts List.² The 000130-PBA Ringer Replaces The 000130-SBA Ringer.

CLASSIC, SINGLE-LINE, PUSHBUTTON DIAL, DESK/WALL TELEPHONES

GENERAL DESCRIPTION

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2. INSTALLATION	2
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4. OPERATION	3

1. GENERAL DESCRIPTION

1.01 This document covers the classic, single-line, pushbutton dial, desk/wall telephone with tone/pulse switchable dialing, flash, and redial. (See Figure 1.) A general description as well as information peculiar to the single-line, pushbutton dial, desk/wall telephones is included.



Figure 1: Classic, Single-Line, Pushbutton Dial, Desk/Wall Telephone

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

1.03 A replacement parts list and an exploded-view drawing for the telephones are contained in Section 50-525-103. Circuit labels are not provided for the telephones. Related documents of the CORTELCO Telephone Apparatus Practices Manual provide information on components.

1.04 The Model 4525 telephones are classic, pushbutton dial, anti-sidetone units that operate efficiently over a wide range of loop resistances and line impedances. The telephones are compatible with inductively-coupled hearing aid devices.

1.05 The Model 4525 telephones are identified by a coded label affixed to the bottom of the telephone. Refer to ordering information in Table A for an explanation of each code number and available features.

1.06 The classic 4525 telephones are available in full-modular versions. Full-modular version telephones are equipped with a modular handset cord, a modular line cord for desk mounting, and a built-in modular line cord for wall mounting. The modular handset cord and the modular line cord are terminated on each end with modular plugs. The built-in line cord is terminated on one end with a modular plug and on the other end with spade tip connectors. This version is designated by the code letter M. (Refer to Table A.)

1.07 The Model 4525 telephone is described in the following paragraphs.

MODEL 4525** () 21

1.08 The Model 4525 telephone is a single-line, pushbutton dial, desk/wall telephone equipped with tone/pulse switchable dialing, redial, and timed hookswitch flash.

1.09 The Tone/Pulse switch is used to change from Pulse (Tel-Pulse) to Tone (Tel-Touch) dialing. The switch can be set to T for tone dialing or to P for pulse dialing.

TABLE A
ORDERING INFORMATION - TELEPHONES

CODE NUMBERS									
TELEPHONE CODE NUMBERS ARE FORMED IN SIX STEPS AS FOLLOWS:									
(1) Type of Instrument (See Part 1)	4525	44	M	BA	21	F			
(2) Color (See Part 2)									
(3) Version (See Part 3)									
(4) Ringer (See Part 4)									
(5) Special Feature (See Part 5)									
(6) Dial (See Part 6)									
PART 1 TYPE OF INSTRUMENT									
CODE	DESCRIPTION	COLOR OFFERED	VERSION OFFERED	RINGER OFFERED	FEATURE OFFERED	DIAL OFFERED			
4525	Classic, Single-Line, Pushbutton Dial, Desk/Wall Telephone With Tone/Pulse Switchable Dialing, Flash, and Redial	44, 64, 75, And 80	M	BA	21	F			
REFER TO INDIVIDUAL UNIT DESCRIPTION FOR COMPLETE DESCRIPTION OF FEATURE COMBINATIONS									
PART 2 COLORS		PART 3 VERSIONS		PART 4 RINGERS		PART 5 SPECIAL FEATURES		PART 6 DIALS	
CODE	COLORS	CODE	VERSIONS	CODE	RINGERS	CODE	SPECIAL FEATURES	CODE	DIAL
44 64 75 80	Light Ash Wedgewood Blue Pearl Gray Taupe	M	Full-Modular (With Cords)	BA	Straight-Line	21	Standard Telephone Equipped With 9-Foot, Coiled Handset Cord	F	Tel-Flash

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1.10 The FLASH button is used to send a timed line disconnect (interrupt) during an active call and access custom calling features provided by the telephone company. The line is momentarily disconnected for 600 milliseconds.

1.11 The REDIAL button is used to automatically redial the last number dialed. The redial memory stores a maximum of 31 digits.

2. INSTALLATION

2.01 The Model 4525 telephone can be installed as a desk telephone or as a wall telephone.

2.02 To install as a desk telephone:

- (a) Insert a modular plug of the long line cord into the modular jack in the bottom of the telephone base.

- (b) Insert the plug on the other end of the line cord into a standard modular telephone jack.

- (c) Route the line cord through the channel in the bottom of the telephone base (see Figure 2), and press under the two tabs at the top of the channel.

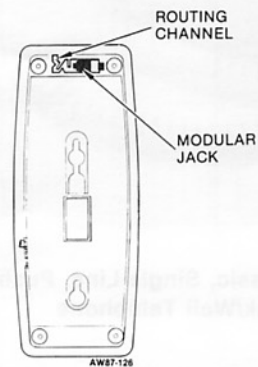


Figure 2: Line Cord Connecting Diagram Desk Telephone

2.03 To install as a wall telephone:

- (a) Remove the modular plug of the short line cord from its storage area in the bottom of the telephone base. (See Figure 3.)

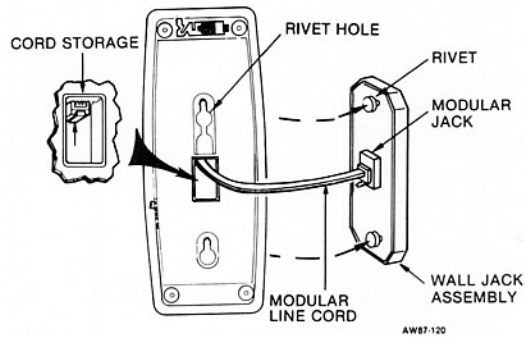


Figure 3: Installation Diagram - Wall Telephone

- (b) Insert the modular plug into the modular jack of the wall jack assembly. Fold the excess cord into the storage area.

- (c) Note the two mounting rivets on the wall jack assembly. Align the base so that the two mounting rivets are inserted into the two mounting holes in the bottom of the telephone. Slide the base downward until it snaps into position.

3. MAINTENANCE

- 3.01** For replacement parts information and for an exploded-view drawing of major assembly groups, refer to Section 50-525-103.

4. OPERATION

- 4.01** To automatically redial the last number dialed:

- (a) Lift the handset and check for dial tone.
- (b) Press the REDIAL button.

- 4.02** To send a flash during an active call, press and release the FLASH button. The results depend on the connected telephone service.

CLASSIC, SINGLE-LINE, PUSHBUTTON DIAL, DESK/WALL TELEPHONES

REPLACEMENT PARTS

1. GENERAL

1.01 This document covers the classic, single-line, pushbutton dial, desk/wall telephone. (See Figure 1.) An exploded-view drawing of the telephone with the major assembly groups (see Figure 2) and a replacement parts list (see Table A) are included.

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

1.03 For additional information on description and installation of the telephones, refer to Section 50-525-102. Circuit labels are not provided for the telephones. Related documents of the CORTELCO

Telephone Apparatus Practices Manual provide information on components.

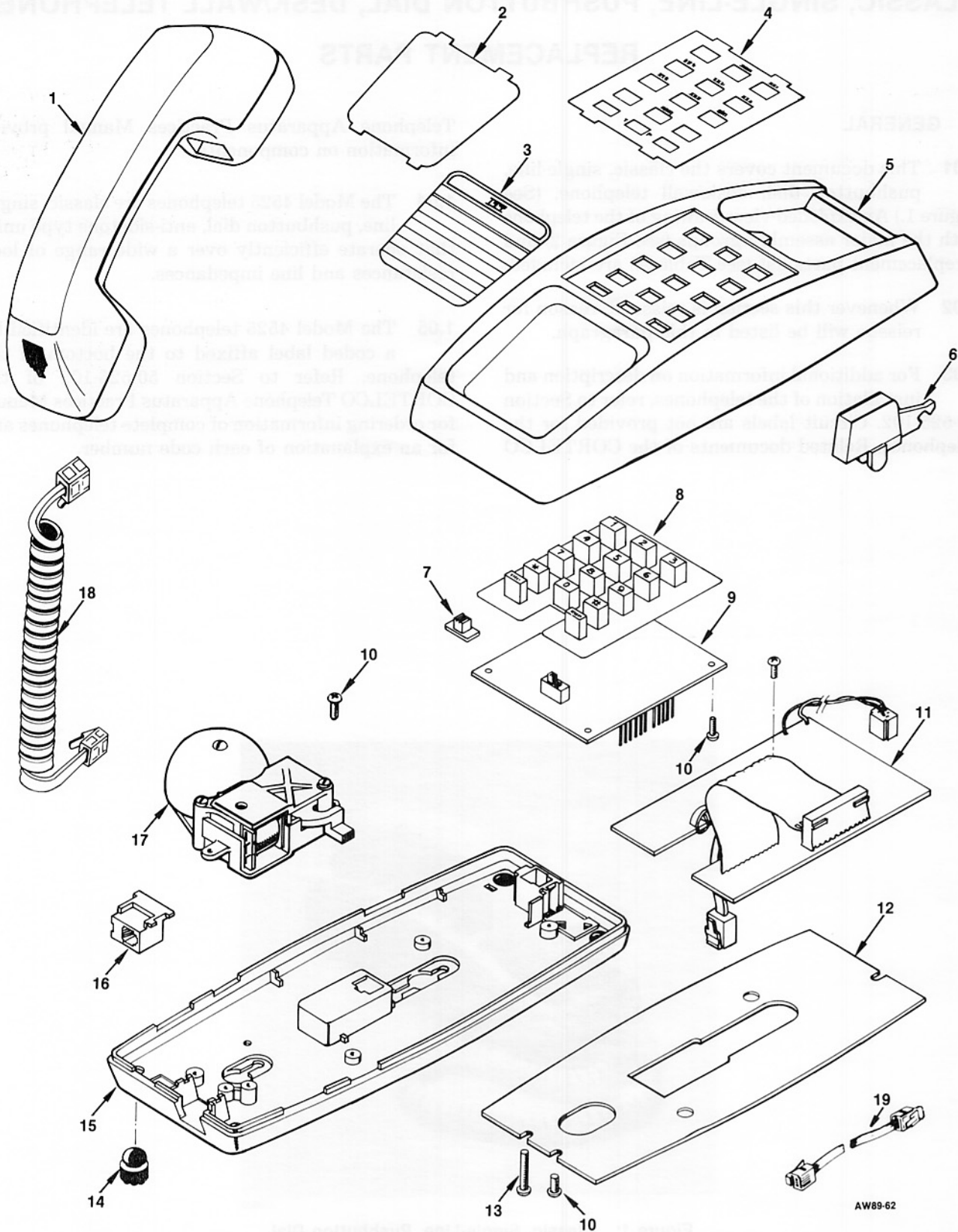
1.04 The Model 4525 telephones are classic, single-line, pushbutton dial, anti-sidetone type units that operate efficiently over a wide range of loop resistances and line impedances.

1.05 The Model 4525 telephones are identified by a coded label affixed to the bottom of the telephone. Refer to Section 50-525-102 of the CORTELCO Telephone Apparatus Practices Manual for ordering information of complete telephones and for an explanation of each code number.



AW69-52

Figure 1: Classic, Single-Line, Pushbutton Dial, Desk/Wall Telephone



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Figure 2: Single-Line, Pushbutton Dial, Desk/Wall Telephone, Exploded View

TABLE A
REPLACEMENT PARTS LIST

INDEX NO	PART NUMBER	DESCRIPTION	QUANTITY USED
		Classic, Single-Line, Pushbutton Dial, Desk/Wall Telephone	4525/21
1	187766-0**	Handset	1
	187785-0**	Base Assembly	1
2	187769-101	Cover, Directory	1
3	187775-101	Card, Directory	1
4	187749-101	Faceplate	1
5	187745-0**	Housing	1
6	187739-101	Plunger	1
7	187767-101	Actuator, T-P	1
8	187760-101	Dial, Pushbutton	1
9	187747-101	Switchplate	1
10	600017-204-002	Screw	8
11	187740-101	PCB, Assembly	1
12	187501-101	Base Plate	1
13	600017-204-006	Screw	2
14	184403-101	Foot	4
15	187500-101	Base	1
16	182988-101	Jack, Modular	1
17	000150-PBA	Ringer ¹	1
18	9018**-108	Cord, Coiled	1
19	600989-540-084	Cord, Line	1

AW89-75

Notes:

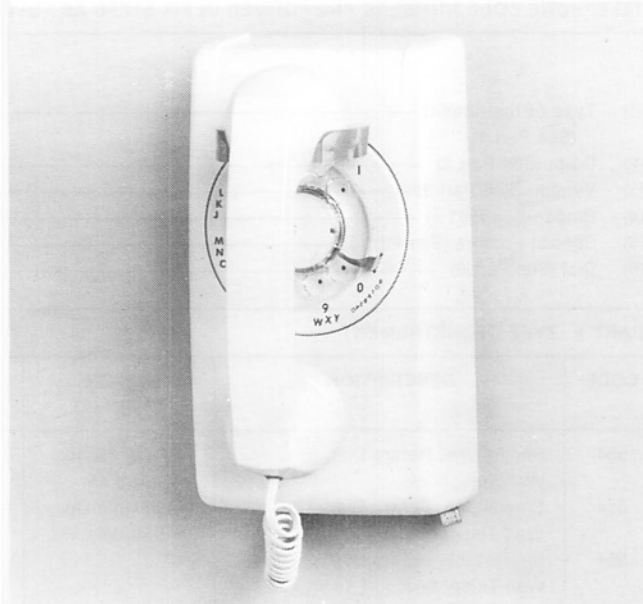
** Substitute 2-Digit Color Code When Ordering.

¹ Refer To Component Parts Section Of This Manual For Assembly Parts List.

SINGLE-LINE, ROTARY DIAL, WALL TELEPHONES

GENERAL DESCRIPTION

	CONTENTS	PAGE
1.	GENERAL DESCRIPTION	1
	MODEL 554** () 20	3
	MODEL 554** () 21	3
	MODEL 554** () 24	3
	MODEL 554** () 27/28	3
	MODEL 554** () 30	3
	MODEL 554** () 31	3
	MODEL 554** () 34	3
	MODEL 554** () 37/38	3
	MODEL 554** () 44	3
2.	INSTALLATION	4
3.	MAINTENANCE	4



AW86-387

Figure 1: Single-Line, Rotary Dial, Wall Telephone

1. GENERAL DESCRIPTION

1.01 This document covers the single-line, rotary dial, wall telephone. (See Figure 1.) A general description as well as information that is peculiar to single-line, rotary dial, wall telephones is included.

1.02 This section is reissued for the following reasons:

(a) Issue 3 adds feature codes 27 and 44 to the full-modular (M) version of the single-line, rotary dial, standard size, wall telephones. Quarter-modular (Q) and full-modular (F) versions of the single-line, rotary dial, standard size, wall telephones have been manufacturing discontinued as well as the following:

- (1) Feature codes 24, 28, 34, and 38 telephones.
- (2) Color codes 05, 12, 43, and 46.
- (3) Regular (R) dial telephones.
- (4) No dial (N) telephones.

(b) Issue 2 corrected errors in the initial issue.

Note: Ordering information for manufacturing discontinued telephones has been removed; however, descriptive information has been retained as a reference for telephones still in service.

1.03 A replacement parts list and an exploded-view drawing for the telephones are contained in Section 50-554-101. Circuit labels appear in Section 50-554-102. Related documents of the CORTELCO Telephone Apparatus Practices Manual provide information on components.

1.04 The Model 554 wall telephones are single-line, rotary dial, anti-sidetone type units that operate efficiently over a wide range of loop resistances and impedances.

1.05 The Model 554 wall telephones are identified by a coded label affixed to the bottom of the base plate. Refer to ordering information in Table A for an explanation of each code number.

1.06 The Model 554 wall telephones are non-modular, quarter-modular, or full-modular

TABLE A
ORDERING INFORMATION - TELEPHONES

CODE NUMBERS										
TELEPHONE CODE NUMBERS ARE FORMED IN SIX STEPS AS FOLLOWS:										
					554	15	O	BA	30	M
(1)	Type of Instrument (See Part 1)									
(2)	Color (See Part 2)									
(3)	Version (See Part 3)									
(4)	Ringer (See Part 4)									
(5)	Special Feature (See Part 5)									
(6)	Dial (See Part 6)									
PART 1 TYPE OF INSTRUMENT										
CODE	DESCRIPTION	COLOR OFFERED	VERSION OFFERED	RINGER OFFERED	FEATURE OFFERED	DIAL OFFERED				
554	Single-Line, Rotary Dial, Wall Telephone	00, 09, 13, 15, 44, And 45	O	BA	30, 31, 37	M				
554	Single-Line, Rotary Dial, Wall Telephone	(Available On All Models)	M	BA	20, 21, 24, 27, 44	M				
554	Single-Line, Rotary Dial, Wall Telephone	47	M	BA	20	M				
REFER TO INDIVIDUAL UNIT DESCRIPTION FOR COMPLETE DESCRIPTION OF FEATURE COMBINATIONS										
PART 2 COLORS		PART 3 VERSIONS		PART 4 RINGERS		PART 5 SPECIAL FEATURES		PART 6 DIALS		
CODE	COLORS	CODE	VERSIONS	CODE	RINGERS	CODE	SPECIAL FEATURES	CODE	DIAL	
00	Black	O	Nonmodular	BA	Straight-Line	30	No Special Feature (Nonmodular Units)	M	Metropolitan (Letters & Numerals)	
09	Ivory	M	Full-Modular (With Handset Cord)			31	30 Combined With 9-Foot Handset Cord			
13	Beige					37	30 Combined With 90-Volt Message Waiting Lamp			
15	White					44	Wired For Use In A Key System (A-Lead Control)			
44	Light Ash					20	No Special Feature (Modular Units)			
45	Cocoa Brown					21	20 Combined With 9-Foot Handset Cord			
47	Cherry Red					24	20 Combined With Push-button For Grounding			
						27	20 Combined With 90-Volt Message Waiting Lamp			

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versions. These versions are designated by a code letter in the telephone order number. (Refer to Table A.)

1.07 Nonmodular wall telephones include a hard-wired handset cord. This version is designated by the code letter O.

1.08 Quarter-modular version telephones (no longer available) include a hard-wired handset cord, and a modular plug is provided as part of the base assembly for inserting into a modular wall jack. This version is designated by the code letter Q.

1.09 Full-modular version telephones are available with or without a modular handset cord. However, all full-modular version telephones are equipped with jacks to accept the plugs of a modular handset cord, and a modular plug is provided as part of the base assembly for inserting into a modular wall jack. The full-modular version of the telephone with a modular handset cord, terminated on each end with modular plugs, is designated by the code letter M. The full-modular version without a modular handset cord (no longer available) is designated by the code letter F.

SECTION 50-554-100, ISS 3

(d) Move the SL-WH hookswitch lead from network terminal F to network terminal G.

2. INSTALLATION

2.01 Since the modular versions of these telephones are equipped with modular plugs, installation consists of inserting this plug into an available wall

jack. Refer to the appropriate circuit label for installation wiring of nonmodular units.

3. MAINTENANCE

3.01 For replacement parts information and for an exploded-view drawing of major assembly groups, refer to Section 50-554-101.

SINGLE-LINE, ROTARY DIAL, WALL TELEPHONES

REPLACEMENT PARTS

1. GENERAL

1.01 This document covers the single-line, rotary dial, wall telephone. (See Figure 1.) An exploded-view drawing of the telephone with the major assembly groups (see Figure 2) and a replacement parts list (see Table A) are included.

1.02 This section is reissued for the following reasons:

(a) Issue 3 adds feature codes 27 and 44 to the full-modular (M) version of the single-line, rotary dial, wall telephones. Quarter-modular (Q) and full-modular (F) versions of the single-line, rotary dial, wall telephones have been manufacturing discontinued as well as the following:

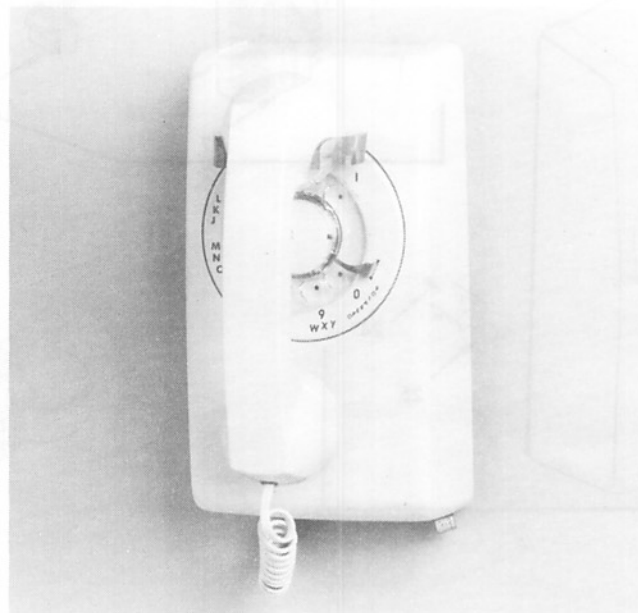
- (1) Feature codes 24, 28, 34, and 38 telephones.
- (2) Color codes 05, 12, 43, and 46.
- (3) Regular (R) dial telephones.

(4) No (N) dial telephones.

1.03 For additional information on description and installation of the telephones, refer to Section 50-554-100. The circuit labels appear in Section 50-554-102. Related documents of the CORTELCO Telephone Apparatus Practices Manual provide information on components.

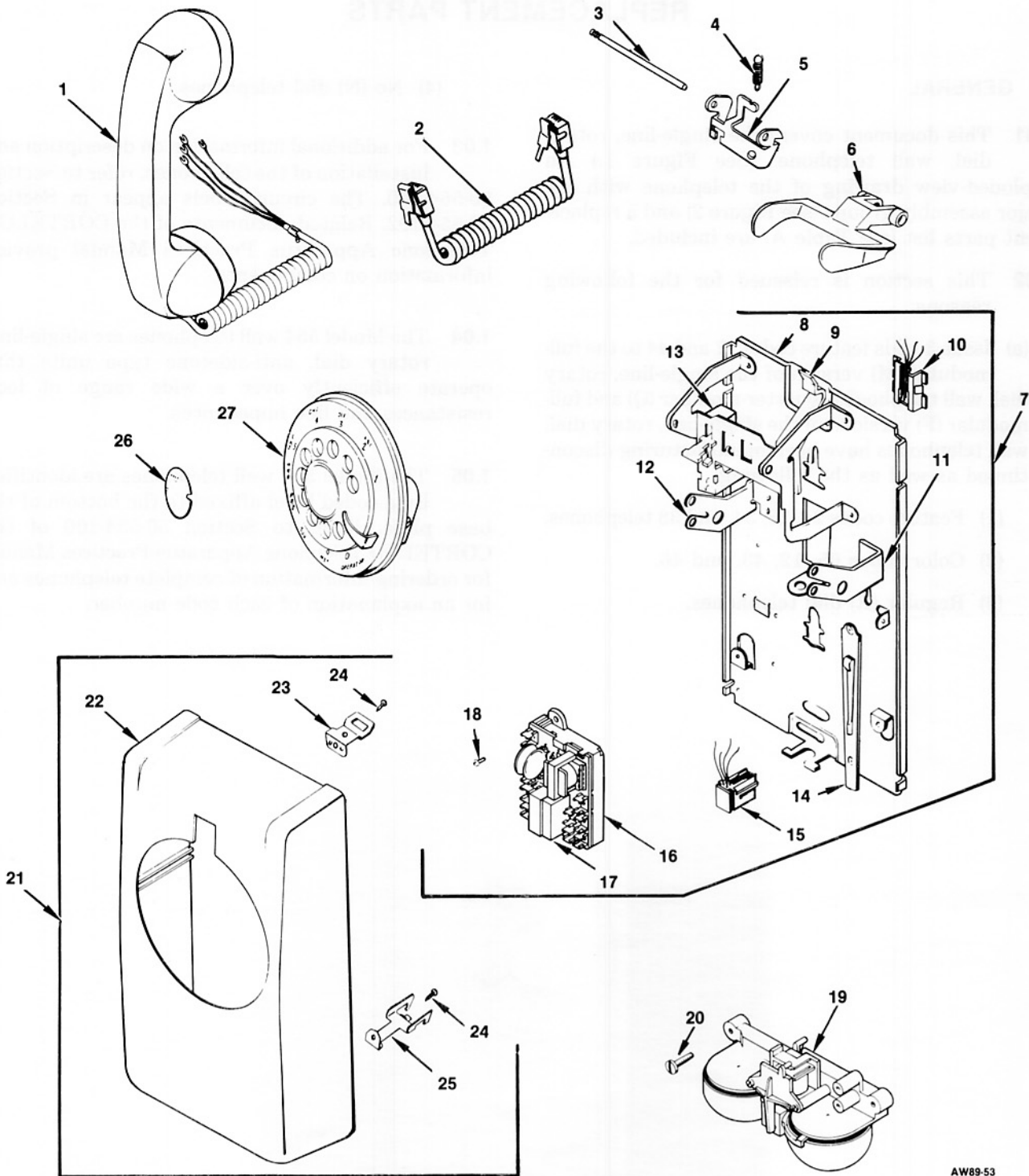
1.04 The Model 554 wall telephones are single-line, rotary dial, anti-sidetone type units that operate efficiently over a wide range of loop resistances and line impedances.

1.05 The Model 554 wall telephones are identified by a coded label affixed to the bottom of the base plate. Refer to Section 50-554-100 of the CORTELCO Telephone Apparatus Practices Manual for ordering information of complete telephones and for an explanation of each code number.



AW86-387

Figure 1: Single-Line, Rotary Dial, Wall Telephone



AW89-53

Figure 2: Single-Line, Rotary Dial, Wall Telephone, Exploded View

TABLE A
REPLACEMENT PARTS LIST

INDEX NO	PART NUMBER	DESCRIPTION	QUANTITY USED										
			554/20	554/21	554/24	554/27	554/28	554/30	554/31	554/34	554/37	554/38	554/44
		Single-Line, Rotary Dial, Wall Telephone											
1	0065**-0C2	Handset Assembly, Nonmodular ¹	1	—	1	1	1	1	1	1	1	1	1
1	0065**-0C3	Handset Assembly, Nonmodular With 9-Foot Cord ¹	—	1	—	—	—	—	—	1	—	—	—
1	0065**-0M2	Handset Assembly, Modular ¹	1	1	1	1	1	—	—	—	—	—	1
2	9018**-072	Cord, Handset, Modular	1	—	1	1	1	—	—	—	—	—	—
2	9018**-108	Cord, Handset, 9-Foot Modular	—	1	—	—	—	—	—	—	—	—	—
3	079304-101	Shaft, Handset Cradle	1	1	1	1	1	1	1	1	1	1	1
4	075307-101	Spring	1	1	1	1	1	1	1	1	1	1	1
5	079307-101	Bracket, Pivot	1	1	1	1	1	1	1	1	1	1	1
6	184511-101	Cradle, Handset	1	1	1	1	1	1	1	1	1	1	1
7	182940-111	Base Assembly, Nonmodular	—	—	—	—	—	—	1	1	1	—	1
7	182940-112	Base Assembly, Nonmodular	—	—	—	—	—	—	—	—	1	1	—
7	182940-113	Base Assembly, Full-Modular And Quarter-Modular	1	1	1	—	—	—	—	—	—	—	1
7	182940-114	Base Assembly, Full-Modular And Quarter-Modular	—	—	—	1	1	—	—	—	—	—	—
8	182870-101	Plate, Base	1	1	1	1	1	1	1	1	1	1	1
9	182865-101	Hook, Latch	1	1	1	1	1	1	1	1	1	1	1
10	182948-101	Plug Assembly, Wall Modular	1	1	1	1	1	—	—	—	—	—	1
11	087055-102	Bracket, Dial (R. H.)	1	1	1	1	1	1	1	1	1	1	1
12	087055-101	Bracket, Dial (L. H.)	1	1	1	1	1	1	1	1	1	1	1
13	079399-101	Cradle Switch Assembly ¹	1	1	1	—	—	1	1	1	—	—	1
13	079399-102	Cradle Switch Assembly ¹	—	—	—	1	1	—	—	—	1	1	—
	079399-103	Spring Nest Assembly (Not Shown)	1	1	1	—	—	1	1	1	—	—	1
	079399-104	Spring Nest Assembly (Not Shown)	—	—	—	1	1	—	—	—	1	1	—
14	079308-101	Arm, Volume Control	1	1	1	1	1	1	1	1	1	1	1
15	182945-101	Jack Assembly, Handset, Modular	1	1	1	1	1	—	—	—	—	—	1
	182947-101	Jack Assembly, Modular Handset (Not Shown) ³	—	—	—	—	—	—	—	—	—	—	—
	182946-101	Jack Assembly, Modular Handset Cord To Base (Not Shown) ³	—	—	—	—	—	—	—	—	—	—	—
16	182175-101	Spacer, Network	1	1	1	1	1	1	1	1	1	1	1
17	181427-105	PC Network (#183070-106) ¹	—	—	—	—	—	—	1	1	1	1	1
17	181427-101	PC Network (#183070-101) ¹	1	1	1	1	1	—	—	—	—	—	1
17	181427-107	PC Network, Tel-Touch Dial ³	—	—	—	—	—	—	—	—	—	—	—
18	096407-103	Screw, Network Mounting	1	1	1	1	1	1	1	1	1	1	1
	182606-101	Rivet (Not Shown)	9	9	9	9	9	9	9	9	9	9	9
	031944-108	Rivet (Not Shown)	2	2	2	2	2	2	2	2	2	2	2
	075303-101	Grommet (Not Shown)	1	1	1	1	1	1	1	1	1	1	1
19	000130-OBA	Ringer, 4-Wire (With ANI) ^{1, 2, 4}	1	1	1	1	1	1	1	1	1	1	1
19	000130-NBA	Ringer, 4-Wire (With ANI) ^{1, 4}	1	1	1	1	1	1	1	1	1	1	1
19	000130-SBA	Ringer, 2-Wire (Less ANI) ^{1, 2, 5}	1	1	1	1	1	1	1	1	1	1	1
19	000130-PBA	Ringer, 2-Wire (Less ANI) ^{1, 5}	1	1	1	1	1	1	1	1	1	1	1
20	095992-102	Screw, Mounting	2	2	2	2	2	2	2	2	2	2	2
	075366-101	Screw, Mounting (Not Shown) ²	2	2	2	2	2	2	2	2	2	2	2
21	079406-0**	Housing Assembly ³	—	—	—	—	—	—	—	—	—	—	—
21	182965-0**	Housing Assembly	1	1	—	—	—	—	1	1	—	—	1
21	180248-0**	Housing Assembly	—	—	1	—	—	—	—	1	—	—	—
21	182985-0**	Housing Assembly	—	—	—	1	1	—	—	—	1	1	—
21	182986-0**	Housing Assembly, Full-Modular	—	—	1	—	—	—	—	—	—	—	—
22	180247-0**	Housing	—	—	1	—	—	—	—	1	—	—	—
22	183560-0**	Housing	—	—	—	1	1	—	—	—	1	1	—
22	182964-0**	Housing	1	1	—	—	—	1	1	—	—	—	1
22	183561-0**	Housing, Full-Modular	—	—	1	—	—	—	—	—	—	—	—
23	079305-101	Bracket, Latch	1	1	1	1	1	1	1	1	1	1	1
24	079407-102	Screw, Latch Bracket And Catch	2	2	2	2	2	2	2	2	2	2	2
25	079397-101	Catch	1	1	1	1	1	1	1	1	1	1	1
26	075415-101	Card, Number ²	1	1	1	1	1	1	1	1	1	1	1
	183498-101	Card, Number, Stick-On (Not Shown)	1	1	1	1	1	—	—	—	—	—	1

SECTION 50-554-101, ISS 3

TABLE A
REPLACEMENT PARTS LIST (Cont)

INDEX NO	PART NUMBER	DESCRIPTION	QUANTITY USED										
			554/20	554/21	554/24	554/27	554/28	554/30	554/31	554/34	554/37	554/38	554/44
		Single-Line, Rotary Dial, Wall Telephone											
27	0030**-00G	Dial Assembly, Metropolitan (Letters And Numerals) ¹	1	1	1	1	1	1	1	1	1	1	1
27	0030**-00D	Dial Assembly, Regular (Numerals Only) ^{1, 3}	1	—	1	1	1	1	1	1	1	—	1
	181971-102	Pushbutton, Grounding (Not Shown)	—	—	1	—	—	—	—	1	—	—	—
	182412-101	Lamp, Message Waiting (125 Volts) (Not Shown)	—	—	—	—	1	—	—	—	—	1	—
	182412-102	Lamp, Message Waiting (90 Volts) (Not Shown)	—	—	—	1	—	—	—	—	1	—	—
	181448-0**	Dummy Plug Assembly (Not Shown)	1	1	1	1	1	1	1	1	1	1	1

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Notes:

** Substitute 2-Digit Color Code When Ordering.

¹ Refer To Components Parts Section Of This Manual For Assembly Parts List.

² This Product Has Been Discontinued, But Is Included To Provide A Source Of Information For Telephones Still In Service.

³ This Part Must Be Ordered Separately.

⁴ The 000130-NBA Ringer Replaces The 000130-OBA Ringer.

⁵ The 000130-PBA Ringer Replaces The 000130-SBA Ringer.

SINGLE-LINE, ROTARY DIAL, WALL TELEPHONES

CIRCUIT LABELS

1. GENERAL

1.01 This document covers the single-line, rotary dial, wall telephones. (See Figure 1.) The circuit labels for the various models of single-line, rotary dial, wall telephones and the associated features available in each are included in this document. (See Table A.)

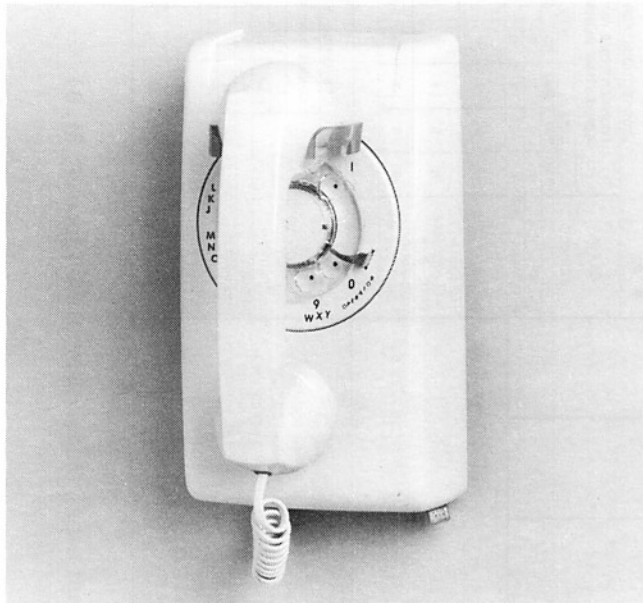


Figure 1: Single-Line, Rotary Dial, (Standard Size) Wall Telephone

1.02 This section is reissued for the following reasons:

- (a) Issue 4 provides the latest issue circuit labels for the Model 554 telephones with message waiting and modifiable A-Lead control.
- (b) Issue 3 added new circuit labels and provided the latest issue of circuit labels for the Model 554 telephones.

(c) Issue 2 provided the latest issue circuit label for the Model 554, Type 44 telephone.

Note: Some versions of telephones have been manufacturing discontinued; however, circuit labels have been retained as a reference for telephones still in service.

1.03 For additional information on description and installation of the telephones, refer to Section 50-554-100. A replacement parts list and an exploded-view drawing for the telephones are contained in Section 50-554-101. Related documents of the CORTELCO Telephone Apparatus Practices Manual provide information on components.

1.04 The Model 554 wall telephones are single-line, rotary dial, anti-sidetone type units that operate efficiently over a wide range of loop resistances and line impedances.

1.05 The Model 554 wall telephones are identified by a coded label affixed to the bottom of the base plate. Refer to Section 50-554-100 of the CORTELCO Telephone Apparatus Practices Manual for ordering information and for an explanation of each code number.

TABLE A
LIST OF CIRCUIT LABELS

MODEL NO	TYPE NO	FIGURE NO
554**OBA	30, 31, 34	2
554**OBA	37, 38	3
554**OBA	44	4
554**FBA	20, 24, 27, 28, 44	5
554**QBA	20, 21, 24, 27, 28, 44	5
554**MBA	20, 21, 24, 27, 28, 44	5

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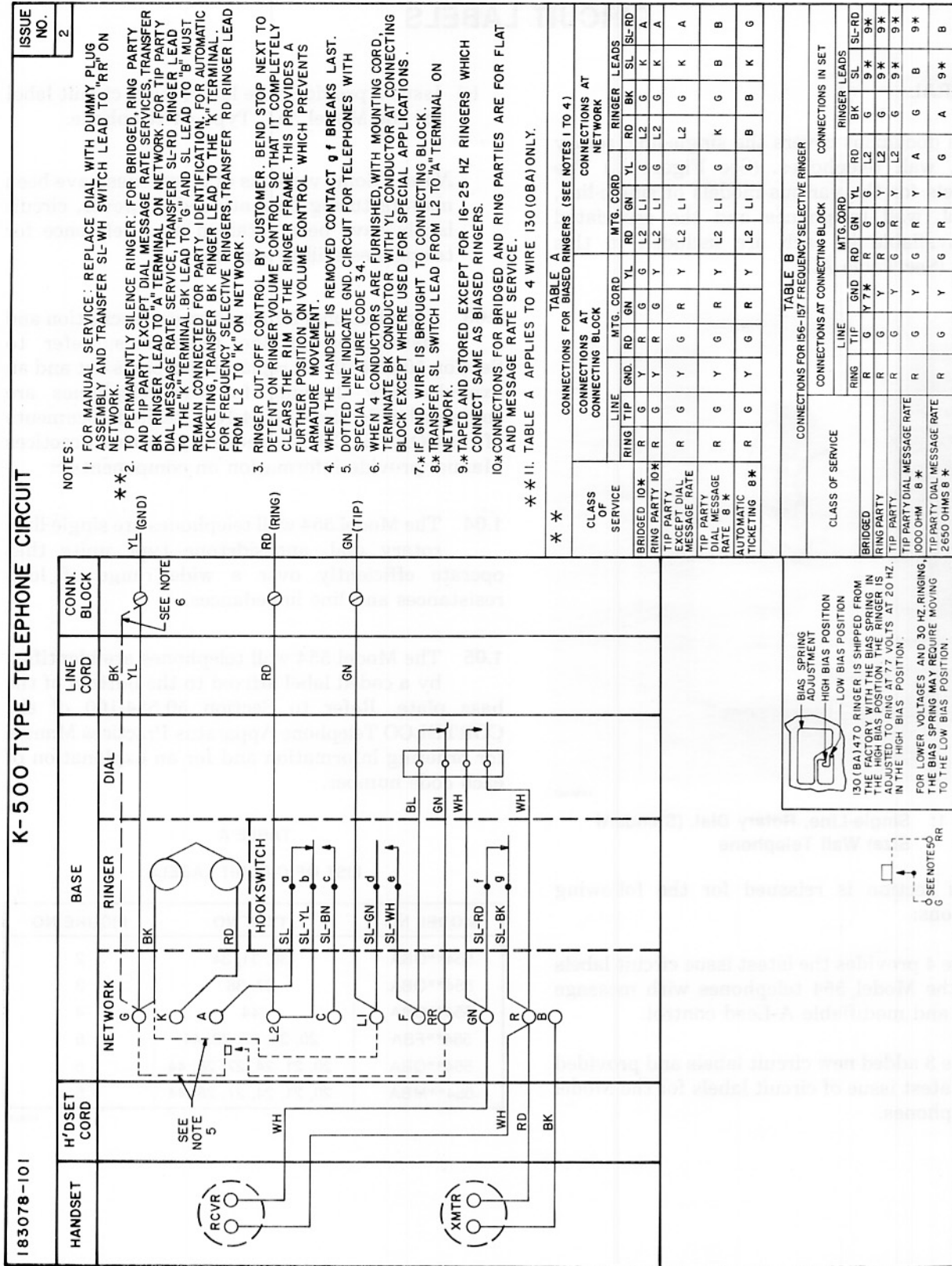


Figure 2: Circuit Label, Model 554** OBA Types 30, 31, 34

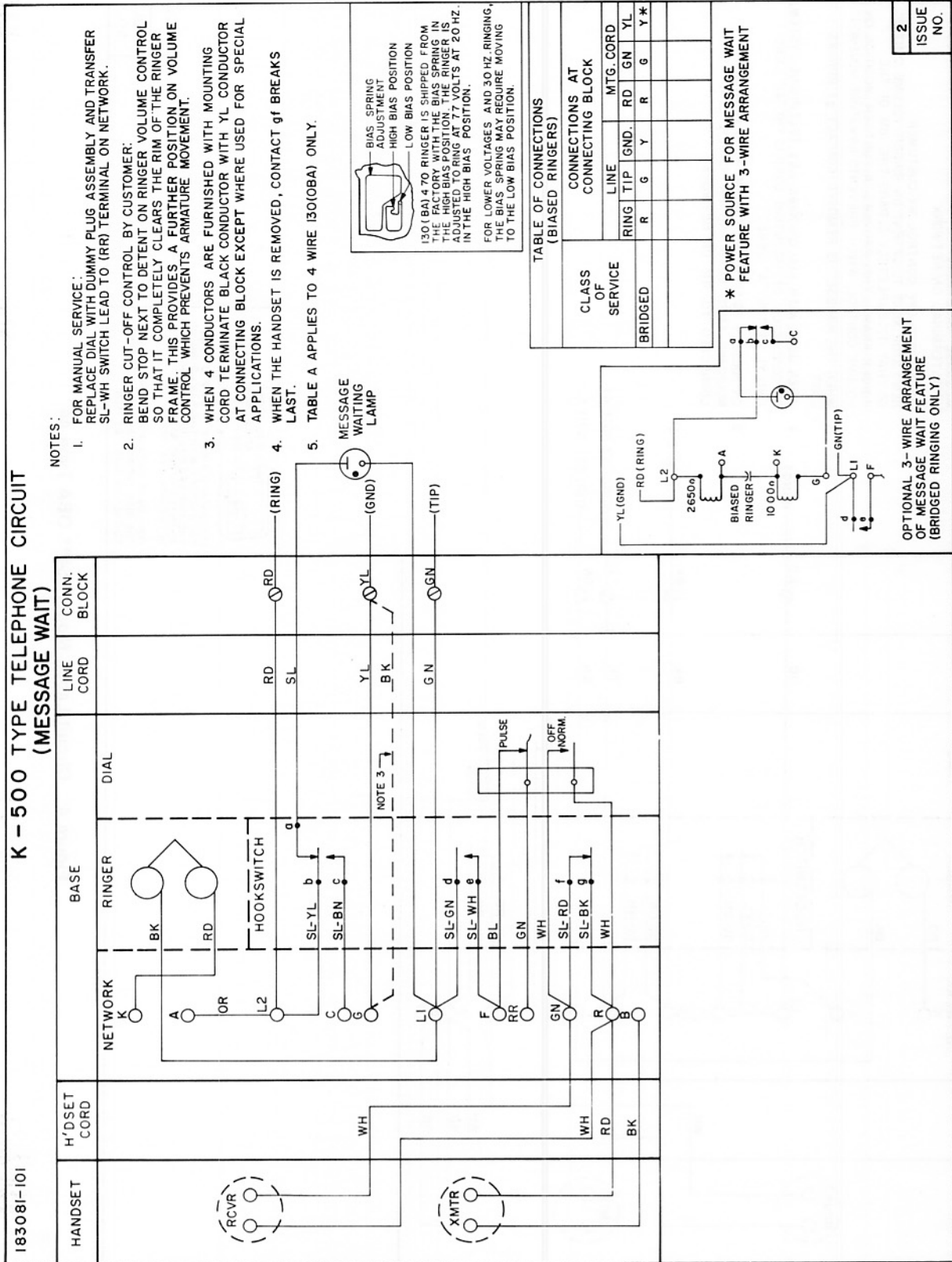
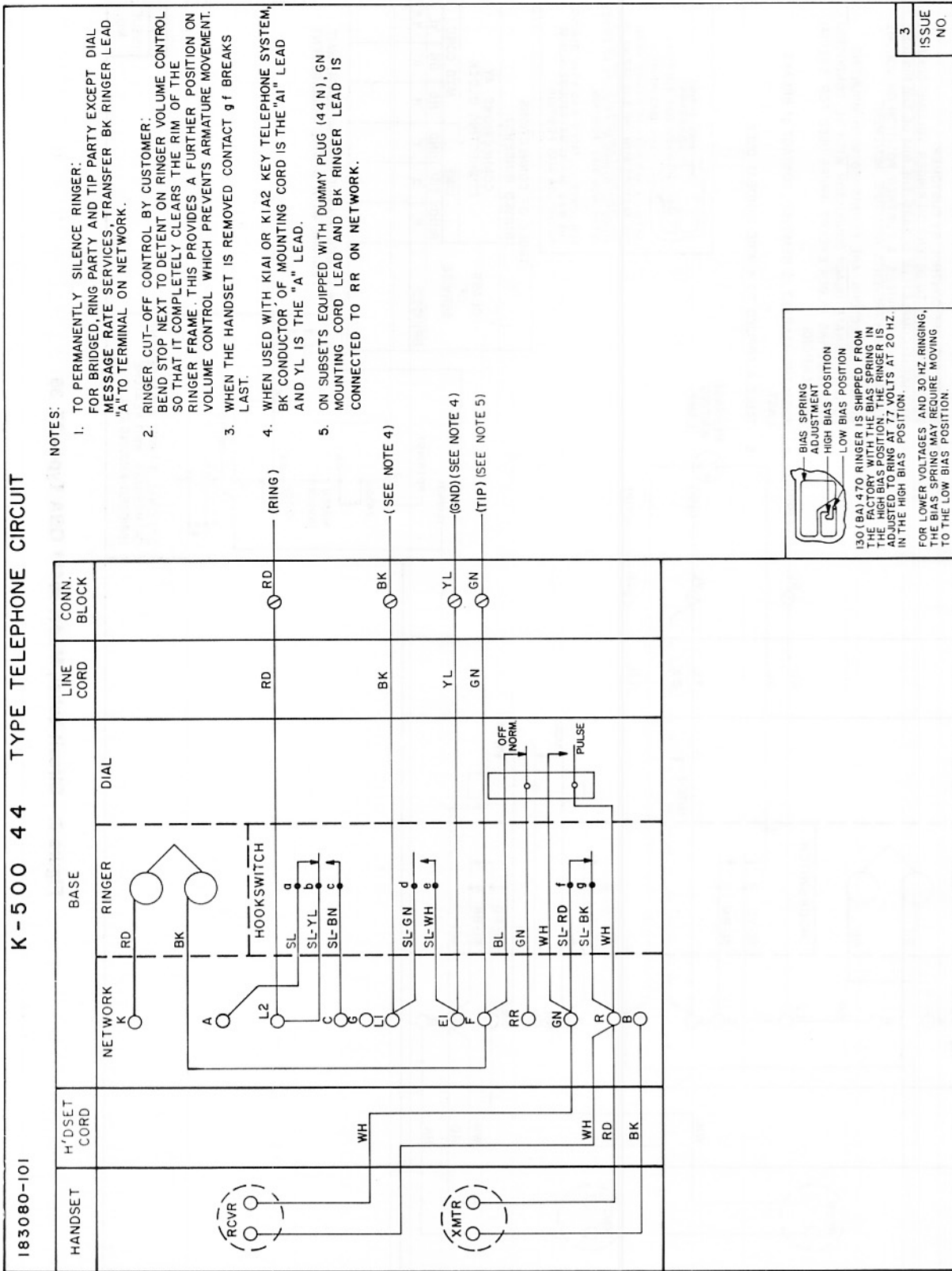


Figure 3: Circuit Label, Model 554** OBA Types 37, 38

K-500 44 TYPE TELEPHONE CIRCUIT



3
ISSUE
NO

Figure 4: Circuit Label, Model 554** OBA Type 44

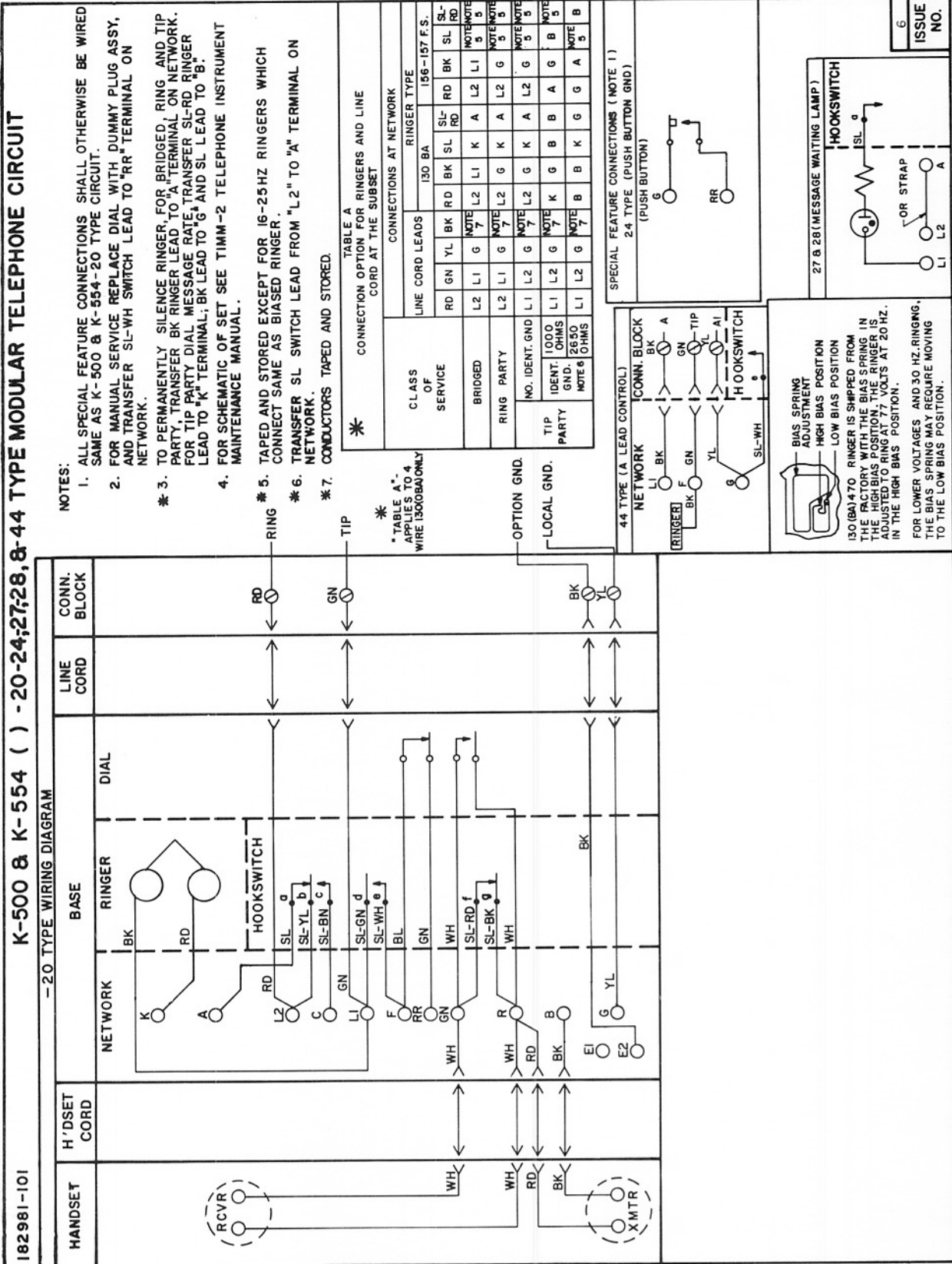


Figure 5: Circuit Label, Model 554** FBA Types 20, 24, 27, 28, 44; Model 554** QBA Types 20, 21, 24, 27, 28, 44; Model 554** MBA Types 20, 21, 24, 27, 28, 44

SINGLE-LINE, PUSHBUTTON DIAL, WALL TELEPHONES (STANDARD SIZE)

GENERAL DESCRIPTION

CONTENTS	PAGE
1. GENERAL DESCRIPTION	1
MODEL 3554** () 20	3
MODEL 3554** () 21	3
MODEL 3554** () 27/28	3
MODEL 3554** () 30	3
MODEL 3554** () 31	3
MODEL 3554** () 37/38	3
2. INSTALLATION	3
3. MAINTENANCE	3

1. GENERAL DESCRIPTION

1.01 This document covers the single-line, pushbutton dial, standard size, wall telephone. (See Figure 1.) A general description as well as information that is peculiar to single-line, pushbutton dial, standard size, wall telephones is included.

1.02 This section is reissued for the following reasons:

(a) Issue 3 adds feature code 27 to the full-modular (M) version of the single-line, pushbutton dial, standard size, wall telephones. Quarter-modular (Q) and full-modular (F) versions of the single-line, pushbutton dial, standard size, wall telephones have been manufacturing discontinued as well as the following:

- (1) Feature codes 28 and 38 telephones.
- (2) Color codes 05, 12, 43, 46, and 47.
- (3) Regular (R) dial telephones.
- (4) Tel-Pulse (T) dial telephones.



AW96-388

Figure 1: Single-Line, Pushbutton Dial, Wall Telephone

(b) Issue 2 corrected errors in the initial issue.

Note: Ordering information for manufacturing discontinued telephones has been removed; however, descriptive information has been retained as a reference for telephones still in service.

1.03 A replacement parts list and an exploded-view drawing for the telephones are contained in Section 50-554-104. Circuit labels appear in Section 50-554-105. Related documents of the CORTELCO Telephone Apparatus Practices Manual provide information on components.

1.04 The Model 3554 wall telephones are single-line, pushbutton dial, anti-sidetone type units that operate efficiently over a wide range of loop resistances and line impedances.

1.05 The Model 3554 wall telephones are identified by a coded label affixed to the bottom of the base plate. Refer to ordering information in Table A for an explanation of each code number.

TABLE A
ORDERING INFORMATION - TELEPHONES

CODE NUMBERS									
TELEPHONE CODE NUMBERS ARE FORMED IN SIX STEPS AS FOLLOWS:									
(1) Type of Instrument (See Part 1)									
(2) Color (See Part 2)									
(3) Version (See Part 3)									
(4) Ringer (See Part 4)									
(5) Special Feature (See Part 5)									
(6) Dial (See Part 6)									
PART 1 TYPE OF INSTRUMENT									
CODE	DESCRIPTION	COLOR OFFERED	VERSION OFFERED	RINGER OFFERED	FEATURE OFFERED	DIAL OFFERED			
3554	Single-Line, Pushbutton Dial, Standard Size, Wall Telephone	00, 09, 13, 15, 44, And 45	O	BA	30, 31, 37	M			
3554	Single-Line, Pushbutton Dial, Standard Size, Wall Telephone	(Available On All Models)	M	BA	20, 21, 27	M			
REFER TO INDIVIDUAL UNIT DESCRIPTION FOR COMPLETE DESCRIPTION OF FEATURE COMBINATIONS									
PART 2 COLORS		PART 3 VERSIONS		PART 4 RINGERS		PART 5 SPECIAL FEATURES		PART 6 DIALS	
CODE	COLORS	CODE	VERSIONS	CODE	RINGERS	CODE	SPECIAL FEATURES	CODE	DIAL
00	Black	O	Nonmodular	BA	Straight-Line	30	No Special Feature (Nonmodular)	M	Metropolitan (Letters & Numerals)
09	Ivory	M	Full-Modular						
13	Beige		(With Handset Cord)	31		30 With 9-Foot Handset Cord			
15	White			37		30 With 90-Volt Message Waiting Lamp			
44	Light Ash			20		No Special Feature (Full-Modular)			
45	Cocoa Brown			21		20 With 9-Foot Handset Cord			
				27		20 With 90-Volt Message Waiting Lamp			

AW96-508

1.06 The Model 3554 wall telephones are non-modular, quarter-modular, or full-modular versions. These versions are designated by a code letter in the telephone order number. (Refer to Table A.)

1.07 Nonmodular wall telephones include a hard-wired handset cord. This version is designated by the code letter O.

1.08 Quarter-modular version telephones (no longer available) include a hard-wired handset cord, and a modular plug is provided as part of the base assembly for inserting into a modular wall jack. This version is designated by the code letter Q.

1.09 Full-modular version telephones are available with or without a modular handset cord. However, all full-modular version telephones are equipped with jacks to accept the plugs of a modular handset cord, and a modular plug is provided as part of the base assembly for inserting into a modular wall jack. The full-modular version of the telephone with a modular handset cord, terminated on each end with modular plugs, is designated by the code letter M. The full-modular version without a modular handset cord (no longer available) is designated by the code letter F.

1.10 For Model 3354 wall telephones, feature codes 20, 21, and 27 pertain to modular units, while

feature codes 30, 31, and 37 pertain to nonmodular units.

1.11 The Model 3554 wall telephones are described in the following paragraphs. The circuit label drawings for these telephones are included in Section 50-554-105.

MODEL 3554 () 20**

1.12 The Model 3554** () 20 is a single-line, pushbutton dial, standard size, wall telephone. It provides no additional outstanding features.

MODEL 3554 () 21**

1.13 The Model 3554** () 21 is the same as the Model 3554** () 20 with the addition of a nine-foot handset cord.

MODEL 3554 () 27/28**

1.14 The Model 3554** () 27/28 is the same as the Model 3554** () 20 with the addition of a message waiting lamp. The lamp is used in PBX applications to indicate that the station user should contact the message center. The Model 3554** () 27 is equipped with a 90-volt indicator. The Model 3554** () 28 is equipped with a 125-volt indicator.

MODEL 3554 () 30**

1.15 The Model 3354** () 30 is a single-line pushbutton dial, standard size, wall telephone. This model provides no additional outstanding features.

MODEL 3554 () 31**

1.16 The Model 3554** () 31 is the same as the Model 3554** () 30 with the addition of a nine-foot handset cord.

MODEL 3554 () 37/38**

1.17 The Model 3554** () 37/38 is the same as the Model 3554** () 30 with the addition of a message waiting lamp. The lamp is used in PBX

applications to indicate that the station user should contact the message center. The Model 3554** () 37 is equipped with a 90-volt indicator. The Model 3554** () 38 is equipped with a 125-volt indicator.

1.18 Single-line wall telephones, such as the Model 3554** () 20, may be wired for use in a key system. This telephone provides connections through the hookswitch that allow ground on the A1 lead to be applied to key equipment by way of the A lead. The Model 3554** () 20 may be converted to A-lead control as follows:

- (a) Remove the line cord of the telephone by disconnecting the leads from the network.
- (b) Connect a four-conductor line cord in the following manner.
 - (1) Connect the RD (Ring) lead to network terminal L2.
 - (2) Connect the GN (Tip) lead to network terminal F.
 - (3) Connect the BK (A) lead to network terminal L1.
 - (4) Connect the YL (A1) lead to network terminal G.
- (c) Move the BK ringer lead from network terminal G to network terminal F.
- (d) Move the SL-WH hookswitch lead from network terminal F to network terminal G.

2. INSTALLATION

2.01 Since the modular versions of these telephones are equipped with modular plugs, installation consists of inserting this plug into an available wall jack. Refer to the appropriate circuit label for installation wiring of nonmodular units.

3. MAINTENANCE

3.01 For replacement parts information and for an exploded-view drawing of major assembly groups, refer to Section 50-554-104.

SINGLE-LINE, PUSHBUTTON DIAL, WALL TELEPHONES (STANDARD SIZE) REPLACEMENT PARTS

1. GENERAL

1.01 This document covers the single-line, pushbutton dial, standard size, wall telephone. (See Figure 1.) An exploded-view drawing of the telephone with the major assembly groups (see Figure 2) and a replacement parts list (see Table A) are included.

1.02 This section is reissued for the following reasons:

(a) Issue 3 adds feature code 27 with the Metropolitan (M) dial to the full-modular version of the single-line, pushbutton dial, standard size, wall telephone. Quarter-modular (Q) and full-modular (F) versions of the single-line, pushbutton dial, standard size, wall telephones have been manufacturing discontinued as well as the following:

- (1) Feature code 28 and 38 telephones.
- (2) Color codes 05, 12, 43, 46, and 47.
- (3) Regular (R) dial telephones.

(4) Tel-Pulse (T) dial telephones.

(b) Issue 2 corrected errors in the initial issue.

Note: Selected information for manufacturing discontinued telephones has been retained as a reference for telephones still in service.

1.03 For additional information on description and installation of the telephones, refer to Section 50-554-103. The circuit labels appear in Section 50-554-105. Related documents of the CORTELCO Telephone Apparatus Practices Manual provide information on components.

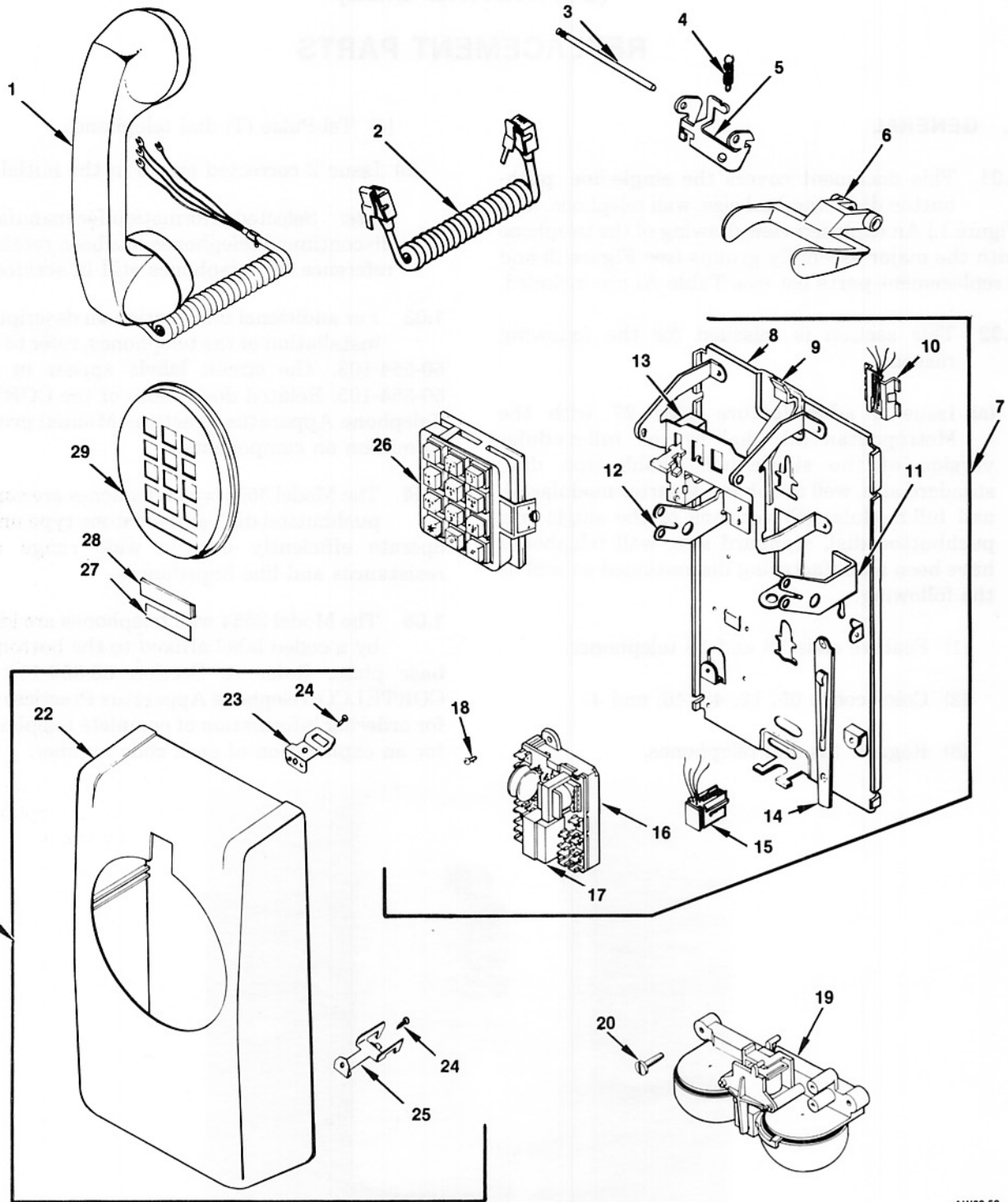
1.04 The Model 3554 wall telephones are single-line, pushbutton dial, anti-sidetone type units that operate efficiently over a wide range of loop resistances and line impedances.

1.05 The Model 3554 wall telephones are identified by a coded label affixed to the bottom of the base plate. Refer to Section 50-554-103 of the CORTELCO Telephone Apparatus Practices Manual for ordering information of complete telephones and for an explanation of each code number.



AW86-388

Figure 1: Single-Line, Pushbutton Dial, (Standard Size) Wall Telephone



AW89-59

Figure 2: Single-Line, Pushbutton Dial, Wall Telephone, Exploded View

TABLE A
REPLACEMENT PARTS LIST

INDEX NO	PART NUMBER	DESCRIPTION	QUANTITY USED							
			3554/20	3554/21	3554/27	3554/28	3554/30	3554/31	3554/37	3554/38
		Single-Line, Pushbutton Dial, Standard Size, Wall Telephone								
1	0065**-0C2	Handset Assembly, Nonmodular ¹	1	—	1	1	1	—	1	1
1	0065**-0C3	Handset Assembly, Nonmodular With 9-Foot Cord ¹	—	1	—	—	—	1	—	—
1	0065**-0M2	Handset Assembly, Modular ¹	1	1	1	1	—	—	—	—
2	9018**-072	Cord, Handset, Modular	1	—	1	1	—	—	—	—
2	9018**-108	Cord, Handset, Modular 9-Foot	—	1	—	—	—	—	—	—
3	079304-101	Shaft, Handset Cradle	1	1	1	1	1	1	1	1
4	075307-101	Spring	1	1	1	1	1	1	1	1
5	079307-101	Bracket, Pivot	1	1	1	1	1	1	1	1
6	184511-101	Cradle, Handset	1	1	1	1	1	1	1	1
7	182940-105	Base Assembly	1	1	—	—	—	—	—	—
7	182940-106	Base Assembly	—	—	1	1	—	—	—	—
7	182940-107	Base Assembly	—	—	—	—	1	1	—	—
7	182940-108	Base Assembly	—	—	—	—	—	—	1	1
8	182870-101	Plate, Base	1	1	1	1	1	1	1	1
9	182865-101	Hook, Latch	1	1	1	1	1	1	1	1
10	182948-101	Plug Assembly, Wall, Modular	1	1	1	1	—	—	—	—
11	180029-102	Bracket, Dial (R. H.)	1	1	1	1	1	1	1	1
12	180029-101	Bracket, Dial (L. H.)	1	1	1	1	1	1	1	1
13	079399-101	Cradle Switch Assembly ¹	1	1	—	—	1	1	—	—
13	079399-102	Cradle Switch Assembly ¹	—	—	1	1	—	—	1	1
	079399-103	Spring Nest Assembly (Not Shown)	1	1	—	—	1	1	—	—
	079399-104	Spring Nest Assembly (Not Shown)	—	—	1	1	—	—	1	1
14	079308-101	Arm, Volume Control	1	1	1	1	1	1	1	1
15	182945-101	Jack Assembly, Handset Cord, Modular	1	1	1	1	—	—	—	—
16	182175-101	Spacer, Network	1	1	1	1	1	1	1	1
17	181427-106	PC Network (#183070-107) ¹	—	—	—	—	1	1	1	1
17	181427-102	PC Network (#183070-102) ¹	1	1	1	1	—	—	—	—
18	096407-103	Screw, Network Mounting	1	1	1	1	1	1	1	1
	075303-101	Grommet (Not Shown)	1	1	1	1	1	1	1	1
	031944-108	Rivet (Not Shown)	2	2	2	2	2	2	2	2
	182606-101	Rivet (Not Shown)	11	11	11	11	11	11	11	11
19	000130-OBA	Ringer, 4-Wire (With ANI) ^{1, 4, 5}	1	1	1	1	1	1	1	1
19	000130-NBA	Ringer, 4-Wire (With ANI) ^{1, 5}	1	1	1	1	1	1	1	1
19	000130-SBA	Ringer, 2-Wire (Less ANI) ^{1, 4, 6}	1	1	1	1	1	1	1	1
19	000130-PBA	Ringer, 2-Wire (Less ANI) ^{1, 5}	1	1	1	1	1	1	1	1
20	095992-102	Screw, Mounting	2	2	2	2	2	2	2	2
	075366-101	Screw, Mounting (Not Shown)	2	2	2	2	2	2	2	2
21	182965-0**	Housing Assembly	1	1	—	—	1	1	—	—
21	181393-0**	Housing Assembly	—	—	1	1	—	—	1	1
21	182985-0**	Housing Assembly, Full-Modular	—	—	1	1	—	—	—	—
22	182964-0**	Housing	1	1	—	—	1	1	—	—
22	183565-0**	Housing	—	—	1	1	—	—	1	1
22	183560-0**	Housing, Full-Modular	—	—	1	1	—	—	—	—
23	079305-101	Bracket, Latch	1	1	1	1	1	1	1	1
24	075407-102	Screw, Latch Bracket And Catch	2	2	2	2	2	2	2	2
25	079397-101	Catch	1	1	1	1	1	1	1	1
	079467-105	Terminal Board Assembly (Not Shown)	1	1	—	—	1	1	—	—
	086103-101	Plate, Terminal Board Mounting (Not Shown)	1	1	—	—	1	1	—	—
	182068-101	Screw, Mounting Plate (Not Shown)	1	1	—	—	1	1	—	—
26	004200-EPG	Dial Assembly, Pushbutton Digital, Metropolitan (Letters And Numerals) ¹	1	1	1	1	1	1	1	1
26	004200-EPD	Dial Assembly, Pushbutton Digital, Regular (Numerals Only) ^{1, 2}	1	—	—	—	1	—	—	—
26	003200-OPD	Dial Assembly, Pushbutton Tel-Touch, Regular (Numerals Only) ^{1, 4}	1	—	1	1	1	1	1	1
26	006300-OPG	Dial Assembly, Tel-Pulse, Metropolitan (Letters And Numerals) ¹	1	1	—	—	1	1	—	—

TABLE A
REPLACEMENT PARTS LIST (Cont)

INDEX NO	PART NUMBER	DESCRIPTION	QUANTITY USED							
			3554/20	3554/21	3554/27	3554/28	3554/30	3554/31	3554/37	3554/38
		Single-Line, Pushbutton Dial, Standard Size, Wall Telephone								
27	087513-101	Card, Number	1	1	1	1	1	1	1	1
	087513-102	Card, Number, Strip Of 6 (Not Shown) ³	—	—	—	—	—	—	—	—
28	087514-101	Retainer, Number Card	1	1	1	1	1	1	1	1
29	180028-0**	Faceplate	1	1	1	1	1	1	1	1
	075474-102	Gasket (Not Shown)	1	1	1	1	1	1	1	1
	182412-101	Lamp, Message Waiting (125 Volts) (Not Shown) ⁴	—	—	—	1	—	—	—	1
	182412-102	Lamp, Message Waiting (90 Volts) (Not Shown)	—	—	1	—	—	—	1	—

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Notes:

- ** Substitute 2-Digit Color Code When Ordering.
- ¹ Refer To Components Parts Section Of This Manual For Assembly Parts List.
- ² The 004200-EPD Dial Replaces The 003200-OPD Dial.
- ³ This Product Must Be Ordered Separately.
- ⁴ This Product Has Been Manufacturing Discontinued, But Is Included As A Reference For Telephones Still In Service.
- ⁵ The 000130-NBA Ringer Replaces The 000130-0BA Ringer.
- ⁶ The 000130-PBA Ringer Replaces The 000130-SBA Ringer.

SINGLE-LINE, PUSHBUTTON DIAL, WALL TELEPHONES

(STANDARD SIZE)

CIRCUIT LABELS

1. GENERAL

1.01 This document covers the single-line, pushbutton dial, standard size, wall telephone. (See Figure 1.) The circuit labels for the various models of single-line, pushbutton dial, standard size, wall telephones and the associated features available in each are included in this document. (See Table A.)



AW96-388

Figure 1: Single-Line, Pushbutton Dial, (Standard Size) Wall Telephone

1.02 This section is reissued for the following reasons:

- (a) Issue 4 provides the latest issue of circuit labels for the Model 3554 telephones.
- (b) Issue 3 provided the latest issue of circuit labels for the Model 3554 telephones.
- (c) Issue 2 added a circuit label for the Model 3554, Types 20T and 21T telephones and

provided the latest issue circuit labels for the Model 3554 telephones.

Note: Some versions of telephones have been manufacturing discontinued; however, circuit labels have been retained as a reference for telephones still in service.

1.03 For additional information on description and installation of the telephones, refer to Section 50-554-103. A replacement parts list and an exploded-view drawing for the telephones are contained in Section 50-554-104. Related documents of the CORTELCO Telephone Apparatus Practices Manual provide information on components.

1.04 The Model 3554 wall telephones are single-line, pushbutton dial, anti-sidetone type units that operate efficiently over a wide range of loop resistances and line impedances.

1.05 The Model 3554 wall telephones are identified by a coded label affixed to the bottom of the base plate. Refer to Section 50-554-103 of the CORTELCO Telephone Apparatus Practices Manual for ordering information of complete telephones and for an explanation of each code number.

TABLE A
LIST OF CIRCUIT LABELS

MODEL NO	TYPE NO	FIGURE NO
3554**QBA	20, 21, 27, 28	2
3554**FBA	27, 28	2
3554**MBA	20, 21, 27, 28	2
3554**OBA	30, 31	3
3554**QBA	20	3
3554**FBA	20	3
3554**OBA	30T, 31T	4
3554**QBA	20T	5
3554**FBA	20T	5
3554**MBA	20T, 21T	5
3554**OBA	37, 38	6

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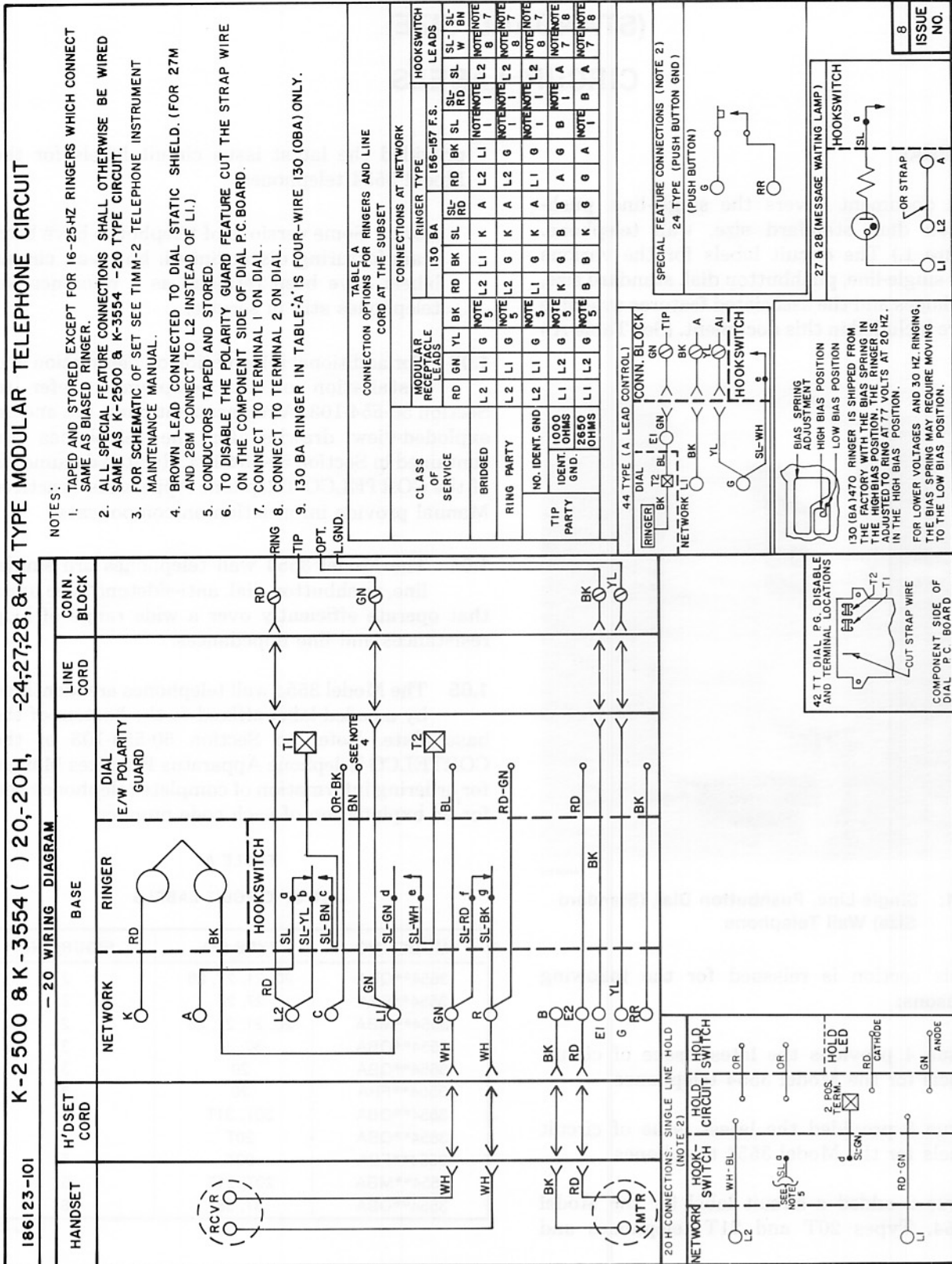
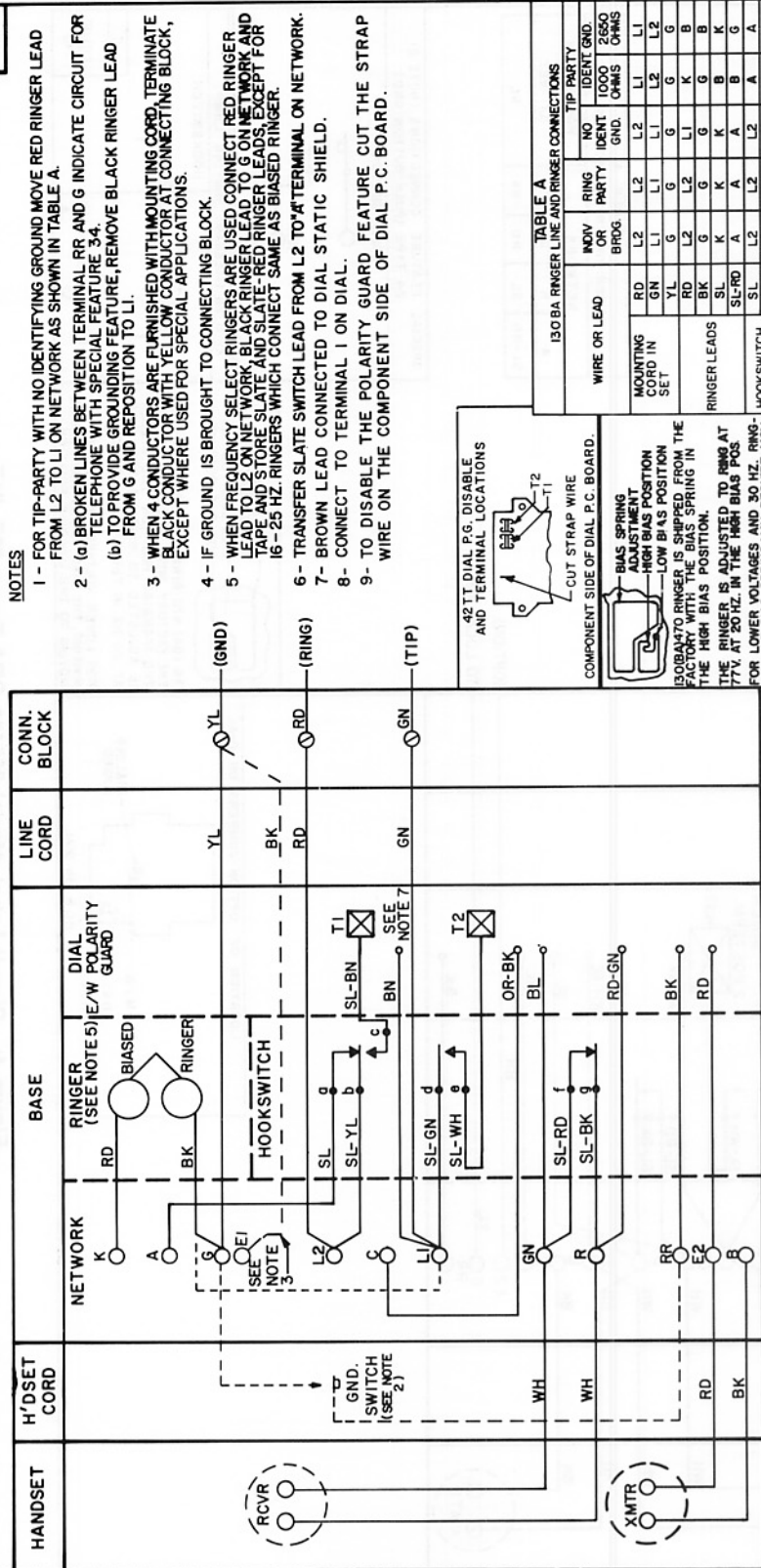


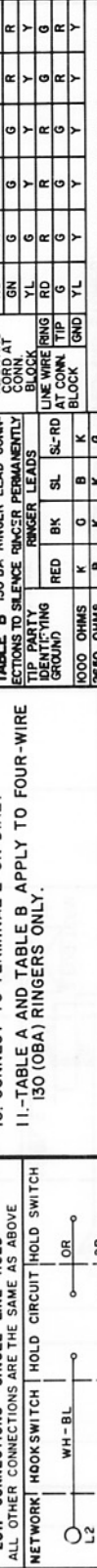
Figure 2: Circuit Label, Model 3554** QBA Types 20, 21, 27, 28; Model 3554** MBA Types 20, 21, 27, 28; Model 3554** FBA Types 27, 28; Model 3554** MBA Types 20, 21, 27, 28

186064 -101 2500/3554() 20, 20H, 24, 30, 31, 34 TYPE TELEPHONE CIRCUIT

ISSUE
8



NOTES
 1- FOR TIP-PARTY WITH NO IDENTIFYING GROUND MOVE RED RINGER LEAD FROM L2 TO L1 ON NETWORK AS SHOWN IN TABLE A.
 2- (G) BROKEN LINES BETWEEN TERMINAL RR AND G INDICATE CIRCUIT FOR TELEPHONE WITH SPECIAL FEATURE 34.
 (b) TO PROVIDE GROUNDING FEATURE, REMOVE BLACK RINGER LEAD FROM G AND REPOSITION TO L1.
 3- WHEN 4 CONDUCTORS ARE FURNISHED WITH MOUNTING CORD, TERMINATE BLACK CONDUCTOR WITH YELLOW CONDUCTOR AT CONNECTING BLOCK, EXCEPT WHERE USED FOR SPECIAL APPLICATIONS.
 4- IF GROUND IS BROUGHT TO CONNECTING BLOCK.
 5- WHEN FREQUENCY SELECT RINGERS ARE USED CONNECT RED RINGER LEAD TO L2 ON NETWORK, BLACK RINGER LEAD TO G ON NETWORK AND TAPE AND STORE SLATE AND SLATE-RED RINGER LEADS, EXCEPT FOR 16-25 HZ. RINGERS WHICH CONNECT SAME AS BIASED RINGER.
 6- TRANSFER SLATE SWITCH LEAD FROM L2 TO *A* TERMINAL ON NETWORK.
 7- BROWN LEAD CONNECTED TO DIAL STATIC SHIELD.
 8- CONNECT TO TERMINAL I ON DIAL.
 9- TO DISABLE THE POLARITY GUARD FEATURE CUT THE STRAP WIRE ON THE COMPONENT SIDE OF DIAL P.C. BOARD.



BIAS SPRING ADJUSTMENT - HIGH BIAS POSITION - LOW BIAS POSITION
 (BOBARTO RINGER IS SHIPPED FROM THE FACTORY WITH THE BIAS SPRING IN THE HIGH BIAS POSITION.)
 THE RINGER IS ADJUSTED TO RING AT 77V. AT 20 HZ. IN THE HIGH BIAS POS. FOR LOWER VOLTAGES AND 30 HZ. RINGING THE BIAS SPRING REQUIRE MOVING TO THE LOW BIAS POSITION.

TABLE A
130 BA RINGER LINE AND RINGER CONNECTIONS

WIRE OR LEAD	INDV OR BRDG	RING PARTY	TIP PARTY	
			NO IDENT GND	2650 OHMS
MOUNTING CORD IN SET	RD	L2	L2	L1
	GN	L1	L1	L2
	YL	G	G	G
RINGER LEADS	RD	L2	L1	K
	BK	G	G	B
	SL	K	K	B
	SL-RD	A	A	B
	SL	L2	L2	A
HOOKEWITCH LEADS	SL-WH	NOTE 10	NOTE 10	NOTE 10
	SL-BN	NOTE 8	NOTE 8	NOTE 10
MOUNTING CORD AT BLOCK	RD	R	R	G
	GN	G	G	R
	YL	G	Y	Y
LINE WIRE RING AT CONN. TIP BLOCK	RD	R	R	G
	GN	G	G	R
	YL	Y	Y	Y

TABLE B
130 BA RINGER LEAD CONNECTIONS TO SLATE RINGER PERMANENTLY IDENTIFYING RINGER LEADS

TIP PARTY IDENTIFYING GROUND	RED	BK	SL	SL-RD	K	B	K	G
1000 OHMS	K	G	B	K	G			
2650 OHMS	B	K	K	K	G			

TABLE C
CONNECTIONS FOR 156-157 FREQUENCY SELECTIVE RINGER

CLASS OF SERVICE	CONNECTIONS AT CONNECTING BLOCK				CONNECTIONS IN SET			
	RING	TIP	GN	YL	RD	BK	SL	SL-RD
BRIDGED	R	G	Y	NOTE 4	R	G	L2	G
RING PARTY	R	G	Y	R	G	Y	L2	G
TIP PARTY	R	G	Y	G	R	Y	L2	G
TIP PARTY DIAL MESSAGE RATE 1000 OHM SEE NOTE	R	G	Y	G	R	Y	A	G
TIP PARTY DIAL MESSAGE RATE 2650 OHMS SEE NOTE 6.	R	G	Y	G	R	Y	G	A

Figure 3: Circuit Label, Model 3554** OBA Types 30, 31; Model 3554** QBA Type 20; Model 3554** FBA Type 20

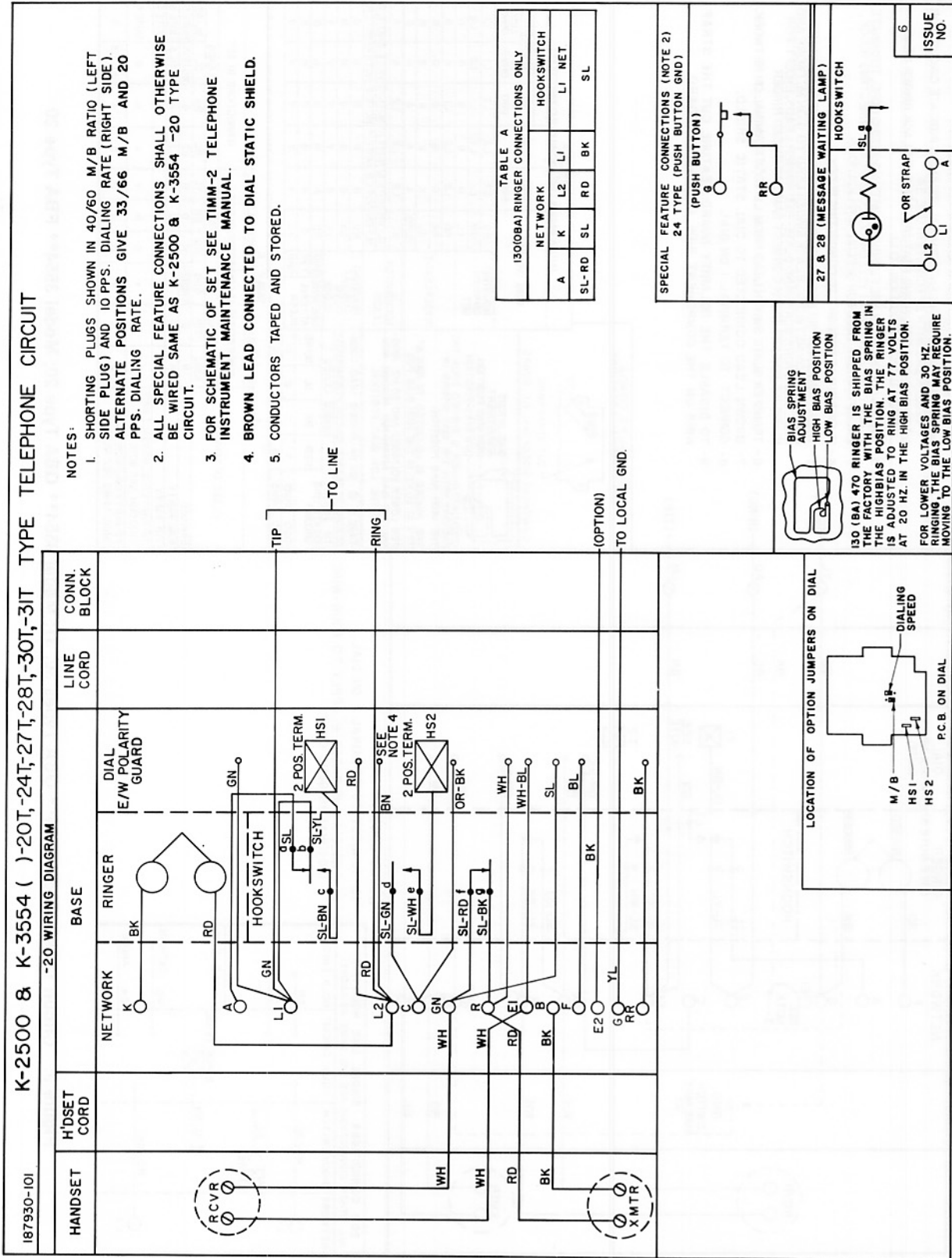


Figure 4: Circuit Label, Model 3554** OBA Types 30T, 31T

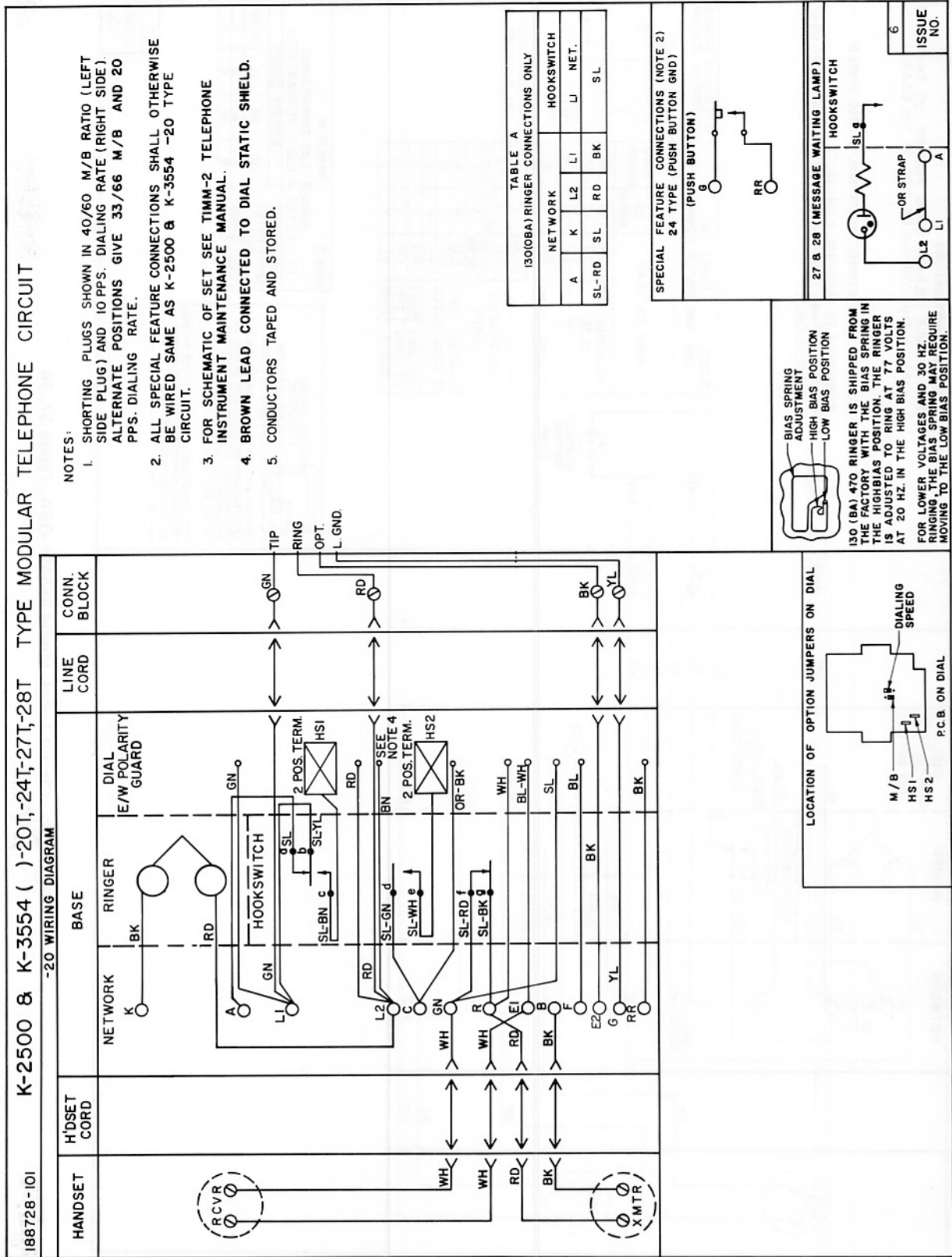
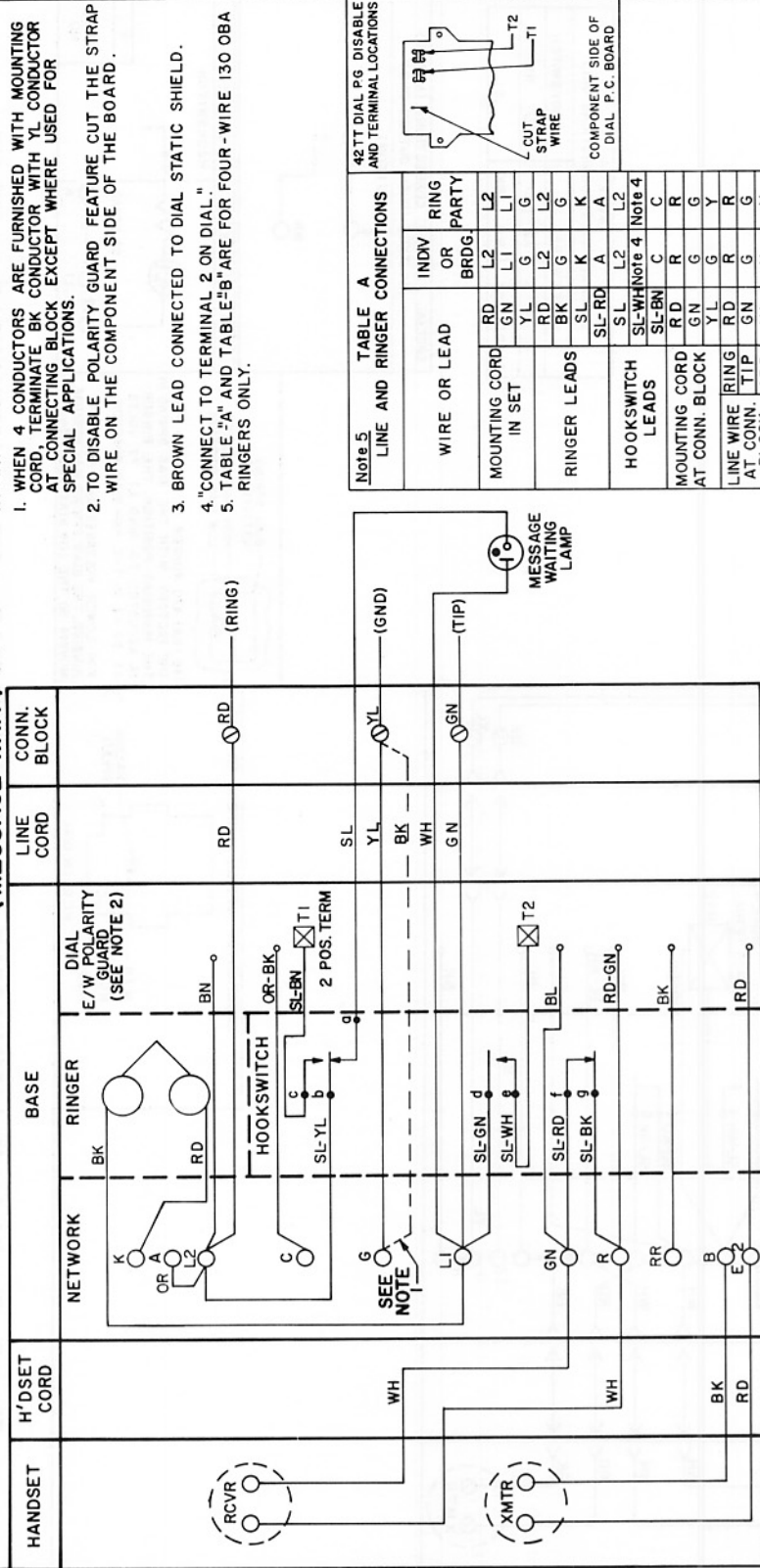


Figure 5: Circuit Label, Model 3554** QBA Type 20T; Model 3554** FBA Type 20T; Model 3554** MBA Types 20T, 21T

2500/3554 (27,28,37,38 TYPE TELEPHONE CIRCUIT (MESSAGE WAIT)

186144-101

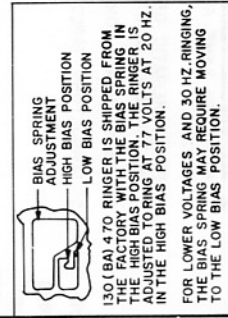


NOTES:

1. WHEN 4 CONDUCTORS ARE FURNISHED WITH MOUNTING CORD, TERMINATE BK CONDUCTOR WITH YL CONDUCTOR AT CONNECTING BLOCK EXCEPT WHERE USED FOR SPECIAL APPLICATIONS.
2. TO DISABLE POLARITY GUARD FEATURE CUT THE STRAP WIRE ON THE COMPONENT SIDE OF THE BOARD.
3. BROWN LEAD CONNECTED TO DIAL STATIC SHIELD.
4. *CONNECT TO TERMINAL 2 ON DIAL *
5. TABLE "A" AND TABLE "B" ARE FOR FOUR-WIRE 130 OBA RINGERS ONLY.

42TT DIAL P.G. DISABLE AND TERMINAL LOCATIONS

TABLE A		TABLE B	
LINE AND RINGER CONNECTIONS		RINGER LEAD CONNECTIONS	
WIRE OR LEAD	INDV OR BRD G.	TIP PARTY IDENTIFYING GRD.	RINGER LEADS
MOUNTING CORD IN SET	RD L2 GN L1 YL G	RD BK GN G	RD BK SL L2 RD L1 GN G
RINGER LEADS	SL L2 SL-RD A SL-RD L2	RD BK GN G YL G GN G YL G	RD BK SL L2 RD L1 GN G YL G
HOOKSWITCH LEADS	SL-RD L2 SL-RD C RD R GN G YL G RD R RD R	RD BK GN G YL G GN G YL G	RD BK SL L2 RD L1 GN G YL G
MOUNTING CORD AT CONN. BLOCK	RD L2 GN L1 YL G	RD BK GN G YL G GN G YL G	RD BK SL L2 RD L1 GN G YL G
LINE WIRE AT CONN. BLOCK	RD L2 GN L1 YL G	RD BK GN G YL G GN G YL G	RD BK SL L2 RD L1 GN G YL G



Note 5

TABLE A		TABLE B	
LINE AND RINGER CONNECTIONS		RINGER LEAD CONNECTIONS	
WIRE OR LEAD	INDV OR BRD G.	TIP PARTY IDENTIFYING GRD.	RINGER LEADS
MOUNTING CORD IN SET	RD L2 GN L1 YL G	RD BK GN G	RD BK SL L2 RD L1 GN G
RINGER LEADS	SL L2 SL-RD A SL-RD L2	RD BK GN G YL G GN G YL G	RD BK SL L2 RD L1 GN G YL G
HOOKSWITCH LEADS	SL-RD L2 SL-RD C RD R GN G YL G RD R RD R	RD BK GN G YL G GN G YL G	RD BK SL L2 RD L1 GN G YL G
MOUNTING CORD AT CONN. BLOCK	RD L2 GN L1 YL G	RD BK GN G YL G GN G YL G	RD BK SL L2 RD L1 GN G YL G
LINE WIRE AT CONN. BLOCK	RD L2 GN L1 YL G	RD BK GN G YL G GN G YL G	RD BK SL L2 RD L1 GN G YL G

2
ISSUE NO.

Figure 6: Circuit Label, Model 3554** OBA, Types 37, 38

SINGLE-LINE, PUSHBUTTON DIAL, WALL TELEPHONES (MINIATURE SIZE)

GENERAL DESCRIPTION

	CONTENTS	PAGE
1.	GENERAL DESCRIPTION	1
	MODEL 2554** () 20	3
	MODEL 2554** () 20F (TEL-FLASH)	3
	MODEL 2554** () 21	3
	MODEL 2554** () 24	3
	MODEL 2554** () 27	3
	MODEL 2554** () 27F	3
	MODEL 2554** () 30	3
	MODEL 2554** () 31	4
	MODEL 2554** () 34	4
	MODEL 2554** () 44	4
2.	INSTALLATION	4
3.	MAINTENANCE	4

1. GENERAL DESCRIPTION

1.01 This document covers the single-line, pushbutton dial, miniature size, wall telephones. (See Figure 1.) A general description as well as information that is peculiar to single-line, pushbutton dial, miniature size, wall telephones is included.

1.02 This section is reissued for the following reasons:

- (a) Issue 3 adds feature code 44, as well as feature codes 20 or 27 with the Tel-Flash (F) or Metropolitan (M) dial, to the full-modular (M) version of the single-line, pushbutton dial, miniature size, wall telephones. Quarter-modular (Q) and full-modular (F) versions of the single-line,

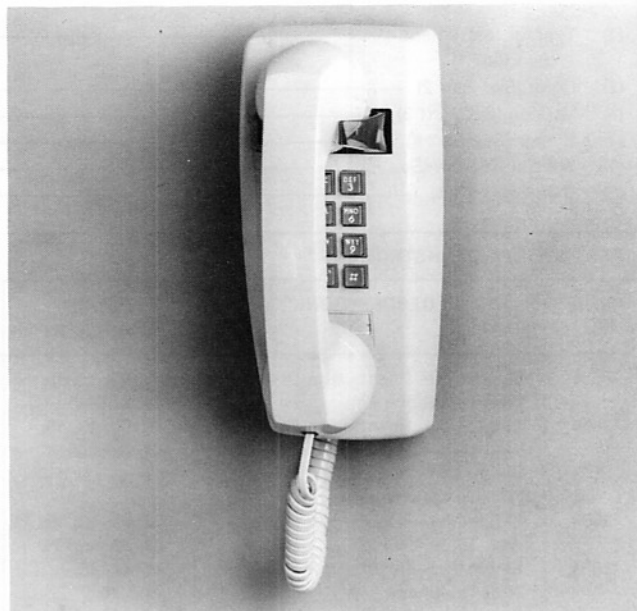


Figure 1: Single-Line, Pushbutton Dial, Wall Telephone

pushbutton dial, miniature size, wall telephones have been manufacturing discontinued as well as the following:

- (1) Feature code 34 telephones.
 - (2) Color codes 05, 12, 43, and 46.
 - (3) Regular (R) dial telephones.
 - (4) Tel-Pulse (T) dial telephones.
- (b) Issue 2 corrected errors in the initial issue.

Note: Ordering information for manufacturing discontinued telephones has been removed; however, descriptive information has been retained as a reference for telephones still in service.

1.03 A replacement parts list and an exploded-view drawing for the telephones are contained in

TABLE A
ORDERING INFORMATION - TELEPHONES

CODE NUMBERS									
TELEPHONE CODE NUMBERS ARE FORMED IN SIX STEPS AS FOLLOWS:									
(1) Type of Instrument (See Part 1)	2554	15	O	BA	30	M			
(2) Color (See Part 2)									
(3) Version (See Part 3)									
(4) Ringer (See Part 4)									
(5) Special Feature (See Part 5)									
(6) Dial (See Part 6)									
PART 1 TYPE OF INSTRUMENT									
CODE	DESCRIPTION	COLOR OFFERED	VERSION OFFERED	RINGER OFFERED	FEATURE OFFERED	DIAL OFFERED			
2554	Single-Line, Pushbutton Dial, Wall Telephone	00, 09, 13, 15, 44, And 45	O	BA	30, 31	M			
2554	Single-Line, Pushbutton Dial, Wall Telephone	00, 09, 13, 15, 44, And 45	M	BA	20, 24, 44	M			
2554	Single-Line, Pushbutton Dial, Wall Telephone	47	M	BA	20	M			
2554	Single-Line, Pushbutton Dial, Wall Telephone	00, 09, 13, 15, 41, 44, 45 And 75	M	BA	20, 27, 44	M			
2554	Single-Line, Pushbutton Dial, Wall Telephone	41, 44, 45, And 75	M	BA	20, 27	F			
REFER TO INDIVIDUAL UNIT DESCRIPTION FOR COMPLETE DESCRIPTION OF FEATURE COMBINATIONS									
PART 2 COLORS		PART 3 VERSIONS		PART 4 RINGERS		PART 5 SPECIAL FEATURES		PART 6 DIALS	
CODE	COLORS	CODE	VERSIONS	CODE	RINGERS	CODE	SPECIAL FEATURES	CODE	DIAL
00	Black	O	Nonmodular	BA	Straight-Line	30	No Special Feature	M	Metropolitan (Letters & Numerals)
09	Ivory					31	30 Combined With 9-Foot Handset Cord		
13	Beige	M	Full-Modular (With Handset Cord)			44	Wired For Use In A Key System (A-Lead Control)	F	Tel-Flash
15	White					20	No Special Feature (Modular Units)		
41	Charcoal Gray					24	20 Combined With Pushbutton For Grounding		
44	Light Ash					27	20 Combined With 90-Volt Message Waiting Lamp		
45	Cocoa Brown								
47	Cherry Red								
75	Pearl Gray								

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Section 50-554-107. The circuit labels appear in Section 50-554-108. Related documents of the CORTELCO Telephone Apparatus Practices Manual provide information on components.

1.04 The Model 2554 wall telephones are single-line, pushbutton dial, anti-sidetone type units that operate efficiently over a wide range of loop resistances and line impedances.

1.05 The Model 2554 wall telephones are identified by a coded label affixed to the bottom of the base plate. Refer to ordering information in Table A for an explanation of each code number.

1.06 The Model 2554 wall telephones are non-modular, quarter-modular, or full-modular versions. These versions are designated by a code letter in the telephone order number. (Refer to Table A.)

1.07 Nonmodular wall telephones include a hard-wired handset cord. It is required that a line cord be hard-wired to the terminals provided in the telephone. This version is designated by the code letter O.

1.08 Quarter-modular version telephones (no longer available) include a hard-wired handset cord,

and a modular plug is provided as part of the base assembly for inserting into a modular wall jack. This version is designated by the code letter Q.

1.09 Full-modular version telephones are available with or without a modular handset cord. However, all full-modular version telephones are equipped with jacks to accept the plugs of a modular handset cord, and a modular plug is provided as part of the base assembly for inserting into a modular wall jack. The full-modular version of the telephone with a modular handset cord, terminated on each end with modular plugs, is designated by the code letter M. The full-modular version without a modular handset cord (no longer available) is designated by the code letter F.

1.10 For Model 2554 wall telephones, feature codes 20, 24, 27, and 44 pertain to modular units, while feature codes 30 and 31 pertain to nonmodular units.

1.11 The Model 2554 wall telephones are described in the following paragraphs. The circuit labels for these telephones are contained in Section 50-554-108.

MODEL 2554 () 20**

1.12 The Model 2554** () 20 is a single-line, pushbutton dial, miniature size, wall telephone. It provides no additional outstanding features.

MODEL 2554 () 20F (TEL-FLASH)**

1.13 The Model 2554** () 20F is the same as the Model 2554** () 20 except for the added Tel-Flash feature. The Tel-Flash feature is used in PABX/Centrex applications to provide a timed line disconnect (interrupt) for custom calling features. The hookswitch provides a positive line disconnect.

1.14 The timed flash is activated when the station user presses the FLASH button. The line is momentarily disconnected for 500 to 700 milliseconds. The hookswitch line disconnect is activated when the station user presses and releases the telephone hookswitch. The line is disconnected for 1.5 to 2.5 seconds.

1.15 Wiring inside the Model 2554** () 20F telephones can be modified for the A-lead control feature. With A-lead control, the telephone will provide connections through the hookswitch that

allow ground on the A-1 lead to be applied to key equipment by way of the A lead. Refer to the appropriate circuit label in Section 50-554-108.

MODEL 2554 () 21**

1.16 The Model 2554** () 21 is the same as the Model 2554** () 20 with the addition of a nine-foot handset cord.

MODEL 2554 () 24**

1.17 The Model 2554** () 24 is the same as the Model 2554** () 20 with the addition of a grounding pushbutton switch required in some PBX applications for transferring calls, originating calls during a power failure, and other special functions.

MODEL 2554 () 27**

1.18 The Model 2554** () 27 is the same as the Model 2554** () 20 with the addition of a 90-volt message lamp located at the top left side of the housing. The lamp is used in PBX applications to indicate that the station user should contact the message center.

1.19 The telephone is shipped with the message waiting lamp circuit connected across the Tip and Ring (RD/GN) pair. In this configuration the message waiting lamp is off when the handset is off-hook.

1.20 Wiring inside the telephone can be changed to connect the message waiting lamp across the alternate BK/YL pair. In this configuration the message waiting lamp is controlled on and off by the connected equipment. Refer to the appropriate circuit label in Section 50-554-108.

MODEL 2554 () 27F**

1.21 The Model 2554** () 27F is the same as the Model 2554** () 20F with the addition of the message waiting lamp located below the pushbutton dial which provides the features available with the Model 2554** () 27.

MODEL 2554 () 30**

1.22 The Model 2554** () 30 is a single-line pushbutton dial, miniature size, wall telephone. This model provides no additional outstanding features.

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MODEL 2554** () 31

1.23 The Model 2554** () 31 is the same as the Model 2554** () 30 with the addition of a nine-foot handset cord.

MODEL 2554** () 34

1.24 The Model 2554 ** () 34 is the same as the Model 2554** () 30 with the addition of a grounding pushbutton switch required in some PBX applications for transferring calls, originating calls during a power failure, and other special functions.

MODEL 2554** () 44

1.25 The Model 2554** () 44 is a single-line telephone, such as the Model 2554** () 30, wired for use in a key system. This telephone provides connections through the hookswitch that allow ground on the A1 lead to be applied to key equipment by way of the A lead. The Model 2554** () 30 may be converted to a Model 2554** () 44 as follows:

- (a) Remove the line cord of the telephone by disconnecting the leads from network terminals L1, L2, and A.
- (b) Move the BK ringer lead and the BN lead of the dial static shield from network terminal L2 to network terminal G.
- (c) Move the SL-WH hookswitch lead from network terminal G to network terminal L1.

(d) Connect a four-conductor line cord in the following manner:

- (1) Connect the RD (Ring) lead to network terminal A.
- (2) Connect the GN (Tip) lead to network terminal G.
- (3) Connect the BK (A) lead to network terminal L2.
- (4) Connect the YL (A1) lead to network terminal L1.

Note: Modification of full-modular versions of this telephone such as the Model 2554** () 20 requires that the GN lead of the modular plug be moved from network terminal L2 to network terminal G, and that the taped and stored BK lead of the modular plug be connected to network terminal L2.

2. INSTALLATION

2.01 Since the modular versions of these telephones are equipped with modular plugs, installation consists of inserting this plug into an available wall jack. Refer to the appropriate circuit label for installation wiring of nonmodular units.

3. MAINTENANCE

3.01 For replacement parts information and for an exploded-view drawing of major assembly groups, refer to Section 50-554-107.

SINGLE-LINE, PUSHBUTTON DIAL, WALL TELEPHONES (MINIATURE SIZE) REPLACEMENT PARTS

1. GENERAL

1.01 This document covers the single-line, pushbutton dial, miniature size, wall telephone. (See Figure 1.) An exploded-view drawing of the telephone with the major assembly groups (see Figure 2) and a replacement parts list (see Table A) are included.

1.02 This section is reissued for the following reasons:

(a) Issue 3 adds feature code 44, as well as feature codes 20 or 27 with the Tel-Flash (F) or Metropolitan (M) dial, to the full-modular (M) version of the single-line, pushbutton dial, miniature size, wall telephone. Quarter-modular (Q) and full-modular (F) versions of the single-line, pushbutton dial, miniature size, wall telephones have been manufacturing discontinued as well as the following:

- (1) Feature code 34 telephones.
- (2) Color codes 05, 12, 43, and 46.
- (3) Regular (R) dial telephones.
- (4) Tel-Pulse (T) dial telephones.

(b) Issue 2 corrected errors in the initial issue.

Note: Selected information for manufacturing discontinued telephones has been retained as a reference for telephones still in service.

1.03 For additional information on description and installation of the telephones, refer to Section 50-554-106. The circuit labels appear in Section 50-554-108. Related documents of the CORTELCO Telephone Apparatus Practices Manual provide information on components.

1.04 The Model 2554 wall telephones are single-line, pushbutton dial, anti-sidetone type units that operate efficiently over a wide range of loop resistances and line impedances.

1.05 The Model 2554 wall telephones are identified by a coded label affixed to the bottom of the base plate. Refer to 50-554-106 of the CORTELCO Telephone Apparatus Practices Manual for ordering information of complete telephones and for an explanation of each code number.

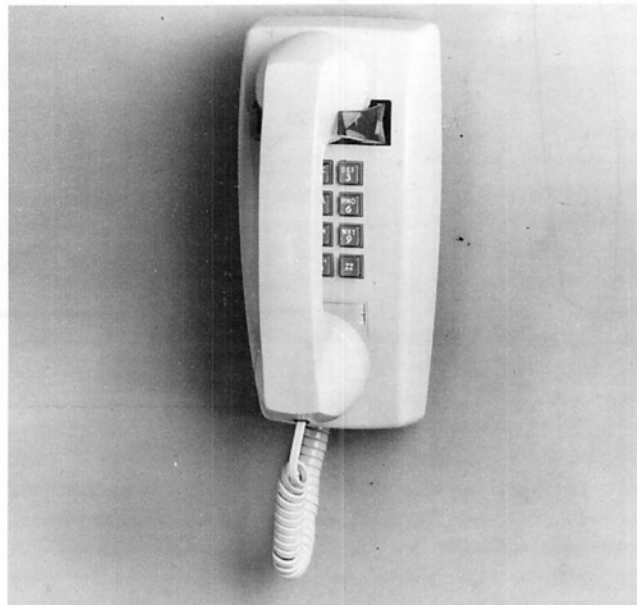


Figure 1: Single-Line, Pushbutton Dial, Wall Telephone

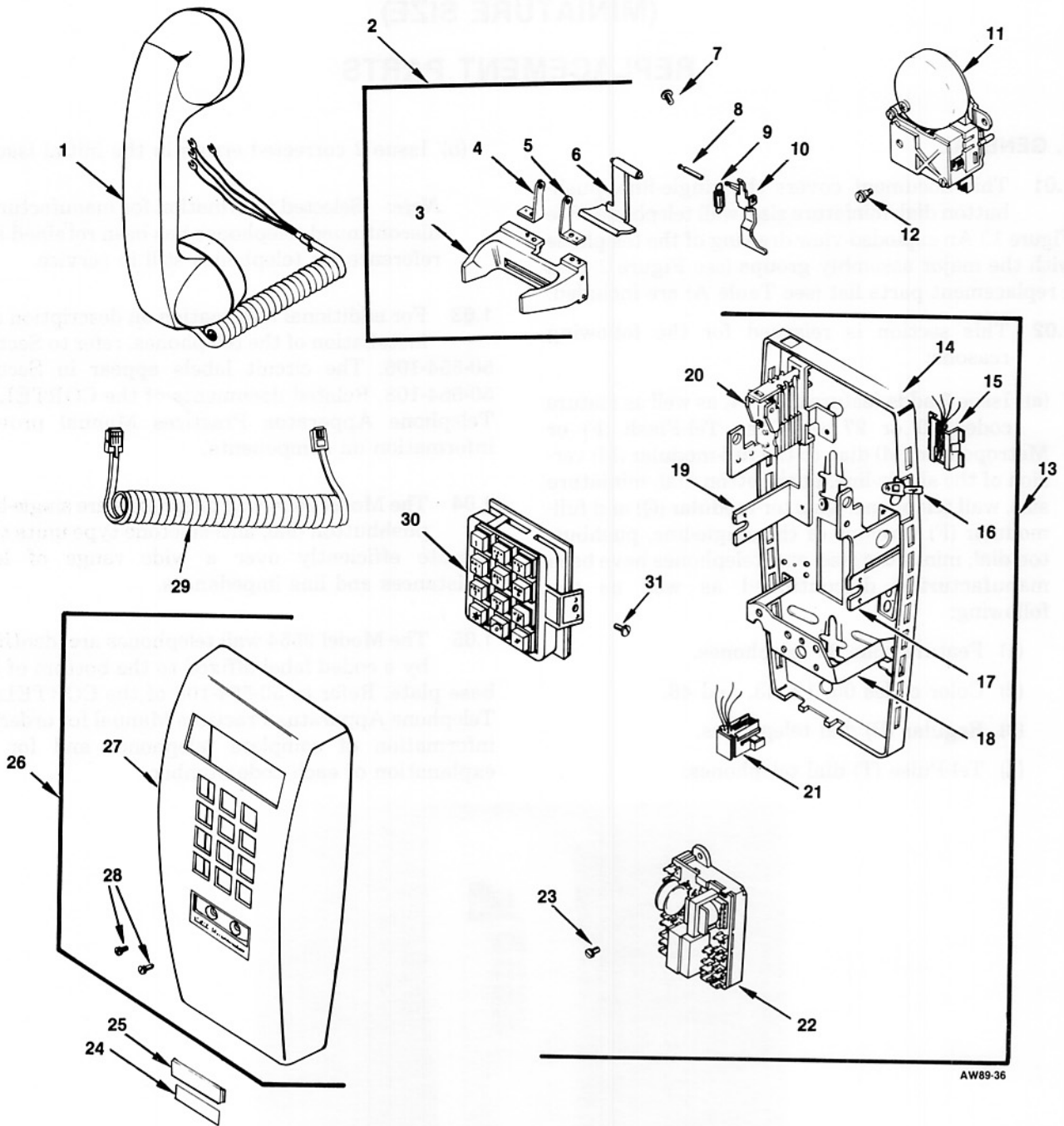


Figure 2: Single-Line, Pushbutton Dial, Wall Telephone, Exploded View

TABLE A
REPLACEMENT PARTS LIST

INDEX NO	PART NUMBER	DESCRIPTION	QUANTITY USED							
			2554/20	2554/21	2554/24	2554/27	2554/30	2554/31	2554/34	2554/44
		Single-Line, Pushbutton Dial, Miniature Size, Wall Telephone								
1	0065**0C2	Handset Assembly, Nonmodular ¹	1	—	1	—	1	—	1	1
1	0065**0C3	Handset Assembly, Nonmodular With 9-Foot Cord ¹	—	1	—	—	—	1	—	—
1	0065**0M2	Handset Assembly, Modular ¹	1	1	1	1	—	—	—	1
2	187629-0**	Handset Cradle Assembly	1	—	1	1	1	1	1	1
3	185482-101	Cradle, Handset ⁴	1	1	1	—	1	1	1	1
3	187629-0**	Cradle, Handset	1	—	1	1	1	1	1	1
4	088150-103	Bracket, Cradle Plunger (L. H.)	1	1	1	1	1	1	1	1
5	088159-104	Bracket, Cradle Plunger (R. H.)	1	1	1	1	1	1	1	1
6	088154-101	Plunger, Cradle Switch	1	1	1	1	1	1	1	1
7	096407-102	Screw, Handset Cradle ⁴	2	2	2	—	2	2	2	2
7	185620-101	Screw, Handset Cradle	2	—	2	2	2	2	2	2
8	184389-101	Pin, Pivot	1	1	1	1	1	1	1	1
9	075307-102	Spring, Cradle Switch	1	1	1	1	1	1	1	1
10	184386-101	Arm, Lever	1	1	1	1	1	1	1	1
11	000148-ABA	Ringer, 2-Wire (Less ANI) ^{1, 4}	1	1	1	1	1	1	1	1
11	000148-NBA	Ringer, 4-Wire (With ANI) ¹	1	1	1	1	1	1	1	1
11	000148-SBA	Ringer, 2-Wire (Less ANI) ^{1, 4, 5}	1	1	1	1	1	1	1	1
11	000148-PBA	Ringer, 2-Wire (Less ANI) ^{1, 6}	1	1	1	1	1	1	1	1
12	079485-102	Screw	2	—	—	2	—	—	—	—
13	182941-101	Base Assembly, Full-Modular	1	1	1	1	—	—	—	1
13	182941-103	Base Assembly, Nonmodular	—	—	—	—	1	1	1	1
13	182941-106	Base Assembly, Full-Modular	1	—	—	1	—	—	—	—
14	182871-101	Plate, Base	1	1	1	1	1	1	1	1
15	182948-101	Plug Assembly, Wall, Modular	1	1	1	1	—	—	—	1
16	182968-101	Lever, Volume Control	1	1	1	1	1	1	1	1
17	088158-101	Bracket, Dial (R. H.)	1	1	1	1	1	1	1	1
17	188654-101	Bracket, Dial (R. H.)	1	—	—	1	—	—	—	—
18	088156-101	Bracket, Terminal Board	1	1	1	1	1	1	1	1
18	088156-102	Bracket, Terminal Board	1	—	—	1	—	—	—	—
19	088157-101	Bracket, Dial (L. H.)	1	1	1	1	1	1	1	1
19	188653-101	Bracket, Dial (L. H.)	1	—	—	1	—	—	—	—
20	184392-101	Cradle Switch Assembly ^{1, 4}	—	1	1	—	1	1	1	1
	184391-101	Spring Nest Assembly (Not Shown)	1	1	1	1	1	1	1	1
21	182944-101	Jack Assembly, Handset Modular	1	1	1	1	—	—	—	1
22	183070-109	Network And Spacer Assembly	1	—	1	1	—	—	—	1
	182175-101	Spacer, Network (Not Shown) ⁴	—	1	1	—	—	—	—	1
	182931-101	Spacer, Network (Not Shown) ⁴	—	—	—	—	1	1	1	1
	181427-102	PC Network (#183070-102) Full-Modular (Not Shown) ^{1, 4}	1	1	1	—	—	—	—	1
	181427-107	PC Network (#183070-108) Nonmodular (Not Shown) ^{1, 4}	—	—	—	—	1	1	1	1
23	096407-103	Screw, Network Mounting	1	1	1	—	1	1	1	1
	190137-113	Rivet (Not Shown)	2	—	2	2	2	2	2	2
	190137-102	Rivet (Not Shown)	3	—	3	3	3	3	3	3
	095965-101	Fastener (Not Shown)	2	—	2	2	2	2	2	2
	190137-110	Rivet (Not Shown)	6	—	6	6	6	6	6	6
24	087513-101	Card, Number	1	1	1	1	1	1	1	1
	087513-102	Card, Number, Strip Of 6 (Not Shown) ²	—	—	—	—	—	—	—	—
25	087514-101	Retainer, Number Card	1	1	1	1	1	1	1	1
26	181975-0**	Housing Assembly	—	—	1	—	—	—	1	—
26	182967-0**	Housing Assembly, Full-Modular ⁴	—	1	—	—	—	—	—	1
26	182984-0**	Housing Assembly, Full-Modular	—	—	1	—	—	—	—	—
26	183164-0**	Housing Assembly	1	1	—	—	1	1	—	1
27	183163-0**	Housing	1	1	—	—	1	1	—	1
27	181974-0**	Housing	—	—	1	—	—	—	1	—
27	182966-0**	Housing, Full-Modular	1	1	—	—	—	—	—	1
27	183569-0**	Housing, Full-Modular	—	—	1	—	—	—	—	—

TABLE A
REPLACEMENT PARTS LIST (Cont)

INDEX NO	PART NUMBER	DESCRIPTION	QUANTITY USED							
			2554/20	2554/21	2554/24	2554/27	2554/30	2554/31	2554/34	2554/44
		Single-Line, Pushbutton Dial, Miniature Size, Wall Telephone								
27	188660-0**	Housing, Full-Modular (With Cords)	1	—	—	—	—	—	—	—
27	187950-0**	Housing, Modular	1	—	—	—	—	—	—	—
27	188598-0**	Housing	1	—	—	—	—	—	—	—
	188652-0**	Housing And Lens Assembly (Not Shown)	1	—	—	1	—	—	—	—
	187659-0**	Housing, Full-Modular (With Cords) (Not Shown)	1	—	—	1	—	—	—	—
	188651-101	Lens (Not Shown)	1	—	—	1	—	—	—	—
	188112-0**	Housing Assembly (Not Shown)	—	—	—	1	—	—	—	—
	188113-101	Housing (Not Shown)	—	—	—	1	—	—	—	—
	187315-103	Lamp Assembly, Message Waiting (Not Shown)	—	—	—	1	—	—	—	—
	187315-101	Lamp Assembly, Message Waiting (Not Shown)	—	—	—	1	—	—	—	—
28	095992-102	Screw	2	2	2	2	2	2	2	2
29	9018**-072	Cord, Handset, Modular	1	—	1	—	—	—	—	—
	9018**-108	Cord, Handset, 9-Foot Modular (Not Shown)	1	1	1	1	—	—	—	1
30	004200-EPG	Dial Assembly, Pushbutton Digital, Metropolitan (Letters And Numerals) ¹	1	1	1	1	1	1	1	1
30	004200-EPD	Dial Assembly, Pushbutton Digital, Regular (Numerals Only) ^{1, 3}	1	—	1	—	1	1	1	1
30	004200-EPA	Dial Assembly, Pushbutton Digital, Tel-Touch ¹	1	—	—	—	1	—	—	—
30	003200-OPD	Dial Assembly, Pushbutton Tel-Touch, Regular (Numerals Only) ^{1, 4}	1	—	1	—	1	1	1	1
30	006300-OPG	Dial Assembly, Tel-Pulse, Metropolitan (Letters And Numerals) ¹	1	1	—	—	1	1	—	—
30	188478-101	Dial Assembly, Tel-Touch (Hold) ¹	1	—	—	—	—	—	—	—
30	188658-102	Dial Assembly, Pushbutton Digital, Metropolitan (Letters And Numerals) ¹	1	—	—	—	—	—	—	—
30	188658-101	Dial Assembly, Pushbutton Digital, Metropolitan, With Message Waiting (Letters And Numerals) ¹	1	—	—	1	—	—	—	—
	186268-103	Foam Tape (Not Shown)	1	—	—	—	—	—	—	—
	187995-101	PCB Assembly, Hold Circuit (Not Shown)	1	—	—	—	—	—	—	—
31	187891-101	Screw	2	—	—	2	—	—	—	—
	181971-103	Pushbutton, Grounding (Not Shown)	—	—	1	—	—	—	1	—

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Notes:

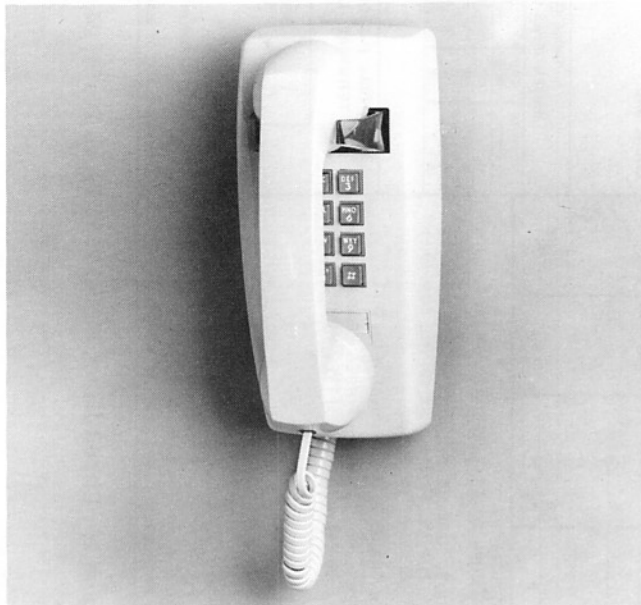
** Substitute 2-Digit Color Code When Ordering.

¹ Refer To Components Parts Section Of This Manual For Assembly Parts List.² This product must be ordered separately.³ The 004200-EPD Dial Replaces The 003200-OPD Dial.⁴ This Product Has Been Manufacturing Discontinued, But Is Included As A Reference For Telephones Still In Service.⁵ The 000148-SBA Ringer Replaces The 000148-ABA Ringer.⁶ The 000148-PBA Ringer Replaces The 000148-SBA Ringer.

SINGLE-LINE, PUSHBUTTON DIAL, WALL TELEPHONES (MINIATURE SIZE) CIRCUIT LABELS

1. GENERAL

1.01 This document covers the single-line, pushbutton dial, miniature size, wall telephone. (See Figure 1.) The circuit labels for the various models of single-line, pushbutton dial, miniature size, wall telephones and the associated features available in each are included in this document. (See Table A.)



AW86-389

Figure 1: Single-Line, Pushbutton Dial, (Miniature Size) Wall Telephone

1.02 This section is reissued for the following reasons:

(a) Issue 4 adds new circuit labels for the Model 2554 telephones with Tel-Pulse dials and for Model 2554 telephones with flash and message waiting and modifiable A-Lead control.

(b) Issue 3 provided the latest issue of circuit labels for the Model 2554, Types 20, 21, 24, and 44; 30, 31, 34, and 44; and 30T and 31T telephones.

(c) Issue 2 provided the latest issue circuit labels for the Model 2554, Types 30T and 31T telephones.

1.03 For additional information on description and installation of the telephones, refer to Section 50-554-106. A replacement parts list and an exploded-view drawing for the telephones are contained in Section 50-554-107. Related documents of the CORTELCO Telephone Apparatus Practices Manual provide information on components.

1.04 The Model 2554 wall telephones are single-line, pushbutton dial, anti-sidetone type units that operate efficiently over a wide range of loop resistances and line impedances.

1.05 The Model 2554 wall telephones are identified by a coded label affixed to the bottom of the base plate. Refer to Section 50-554-106 of the CORTELCO Telephone Apparatus Practices Manual for ordering information of complete telephones and for an explanation of each code number.

TABLE A

LIST OF CIRCUIT LABELS

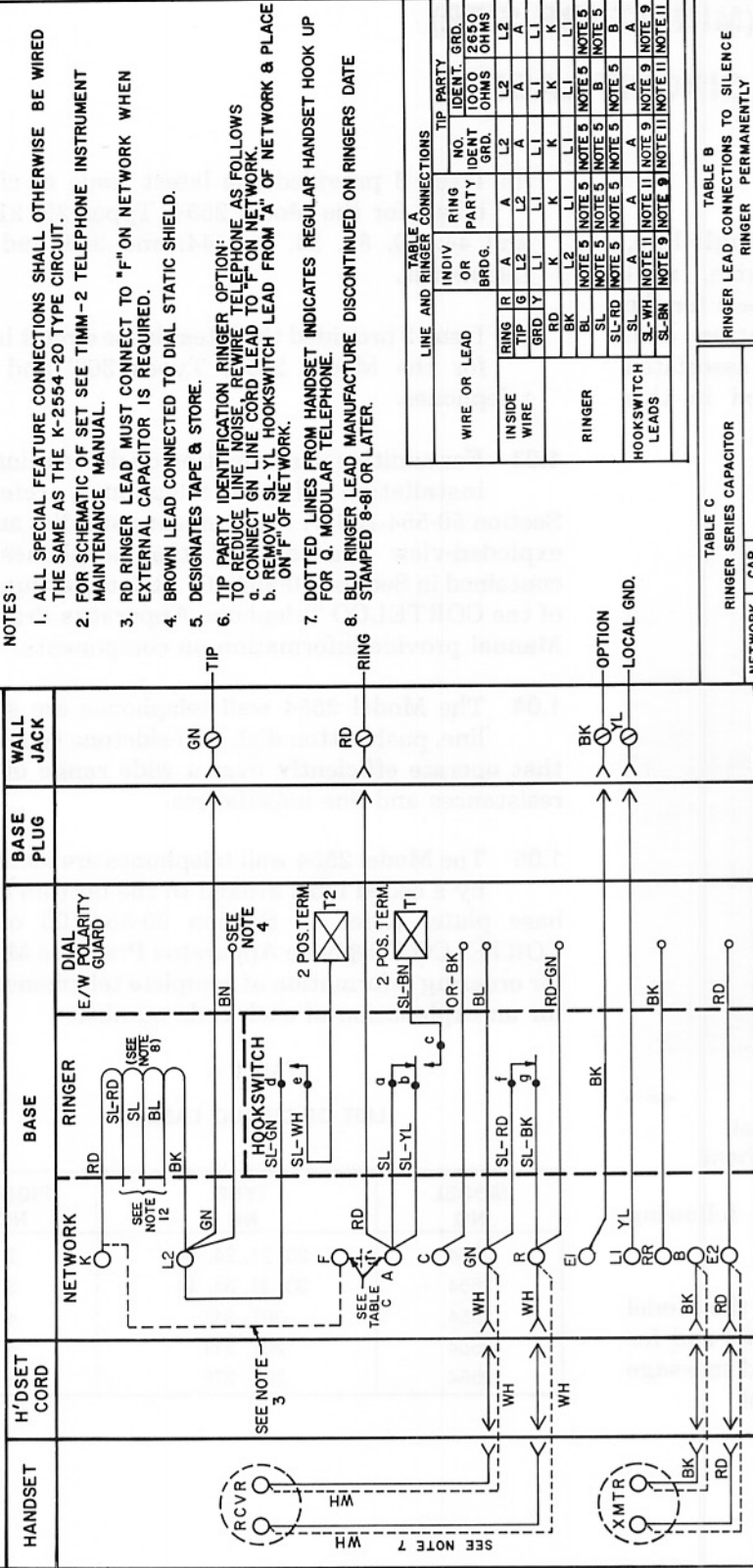
MODEL NO	TYPE NO	FIGURE NO
2554	20, 21, 24, 44	2
2554	30, 31, 34, 44	3
2554	30T, 31T	4
2554	20T, 21T	5
2554	20F, 27F	6

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K-2554 () -20,24,8-44 TYPE MODULAR TELEPHONE CIRCUIT

186125-101

- 20 TYPE WIRING DIAGRAM



NOTES:

1. ALL SPECIAL FEATURE CONNECTIONS SHALL OTHERWISE BE WIRED THE SAME AS THE K-2554-20 TYPE CIRCUIT.
2. FOR SCHEMATIC OF SET SEE TIMM-2 TELEPHONE INSTRUMENT MAINTENANCE MANUAL.
3. RD RINGER LEAD MUST CONNECT TO "F" ON NETWORK WHEN EXTERNAL CAPACITOR IS REQUIRED.
4. BROWN LEAD CONNECTED TO DIAL STATIC SHIELD.
5. DESIGNATES TAPE & STORE.
6. TIP PARTY IDENTIFICATION RINGER OPTION: TO REDUCE LINE NOISE, REWIRE TELEPHONE AS FOLLOWS: a. REMOVE GN LINE CORD LEAD TO "F" ON NETWORK. b. REMOVE SL-YL HOOKSWITCH LEAD FROM "A" OF NETWORK & PLACE ON "F" OF NETWORK.
7. DOTTED LINES FROM HANDSET INDICATES REGULAR HANDSET HOOK UP FOR C. MODULAR TELEPHONE.
8. BLU RINGER LEAD MANUFACTURE DISCONTINUED ON RINGERS DATE STAMPED 8-81 OR LATER.

TABLE A
LINE AND RINGER CONNECTIONS

WIRE OR LEAD	INDIV OR PARTY BRDG.		RING PARTY		TIP PARTY	
	R	G	L2	L1	L2	L1
INSIDE WIRE	L2	L1	L2	L1	L2	L1
RINGER	L2	L1	L2	L1	L2	L1
HOOKSWITCH LEADS	SL-RD	SL	SL-RD	SL	SL-RD	SL
OPTION LOCAL GND.	SL-WH	SL	SL-WH	SL	SL-WH	SL
	SL-BN	SL	SL-BN	SL	SL-BN	SL

TABLE B
RINGER LEAD CONNECTIONS TO SILENCE RINGER PERMANENTLY

NETWORK TERMS	RINGER SERIES CAPACITOR	CODE SERIES	TIP PARTY IDENTIFYING GRD.	RINGER LEADS
A-K	.47	H4A,H4B,H4C,H4D	RD	B K SL SL-RD
A-F	.25	H4I,H4J,H4K	NOTE 5	L1 B NOTE 5
A-F	.15	H4L,H4M	NOTE 5	L1 B NOTE 5
A-F	.08	H4N,H4O,H4P,H4Q,H4R,H4S	NOTE 5	L1 B NOTE 5

SPECIAL FEATURE CONNECTIONS (NOTE 1)
24 TYPE TELEPHONE CIRCUIT
PUSH BUTTON GND

NETWORK
LI - PUSH BUTTON
RR -

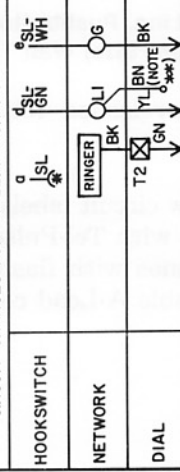
TABLE C
RINGER SERIES CAPACITOR

NETWORK TERMS	CAP	CODE SERIES
A-K	.47	H4A,H4B,H4C,H4D
A-F	.25	H4I,H4J,H4K
A-F	.15	H4L,H4M
A-F	.08	H4N,H4O,H4P,H4Q,H4R,H4S

NOTES (cont):

9. CONNECT TO TERMINAL 1 ON DIAL.
10. TO DISABLE POLARITY GUARD FEATURE CUT THE STRAP WIRE ON THE COMPONENT SIDE OF THE BOARD.
11. CONNECT TO TERMINAL 2 ON DIAL.
12. SL-RD, SL AND BL RINGER LEADS OFFERED ON 148 (ABA) AND 151 TYPE RINGERS ONLY.

TABLE D (44 FEATURE)
CIRCUIT CHANGES FOR "A" LEAD CONTROL

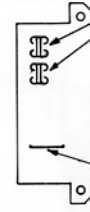


TO PREVENT FALSE HOLD CONDITION WHEN HANDSET IS RESTORED, HOOKSWITCH CONTACTS MUST BREAK BEFORE db.

** BROWN LEAD CONNECTED TO DIAL STATIC SHIELD.

* DESIGNATES INSULATE & STORE.

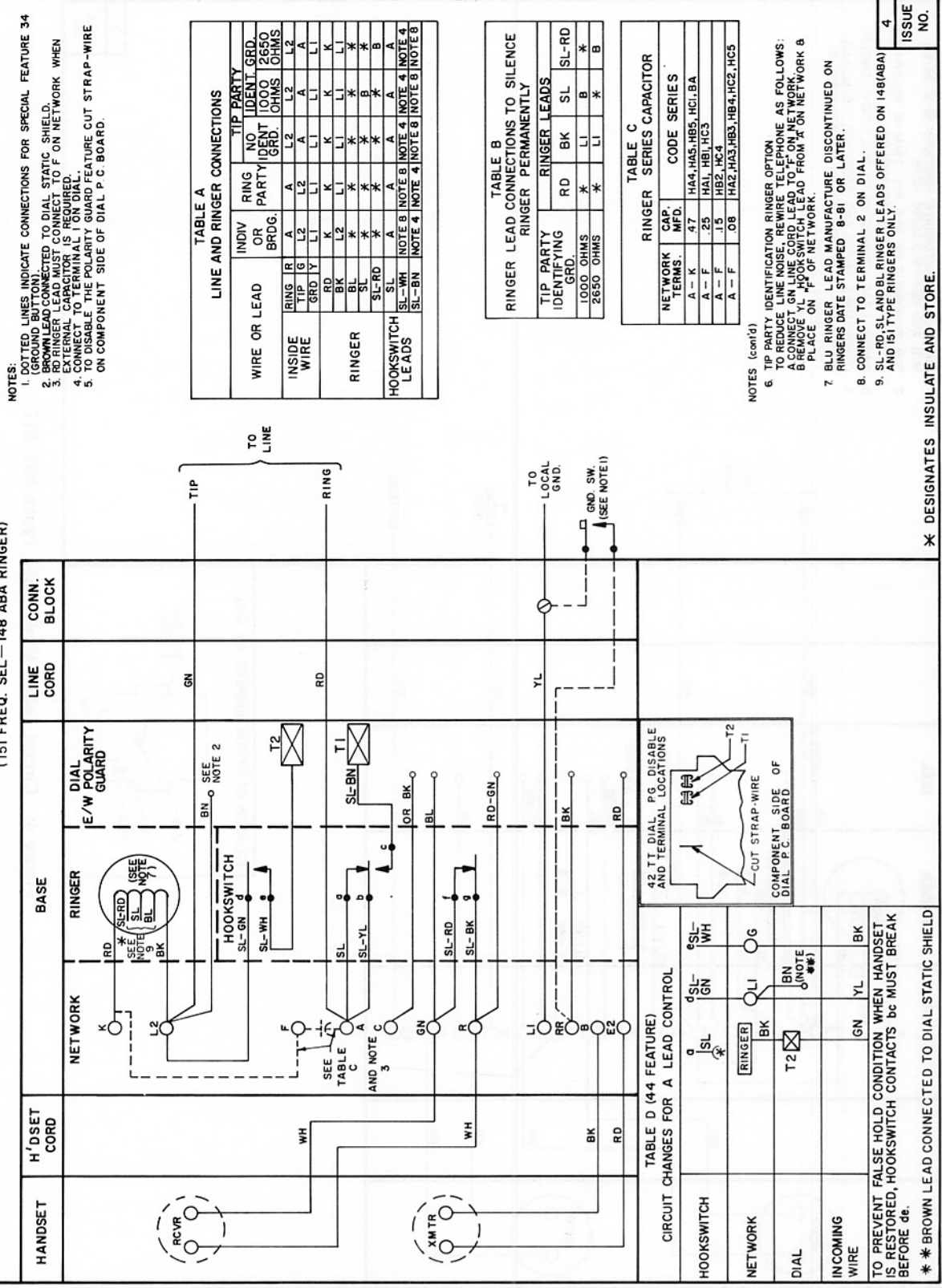
42 TT DIAL P.G. DISABLE AND TERMINAL LOCATIONS



COMPONENT SIDE OF DIAL PC BOARD

Figure 2: Circuit Label, Model 2554 Types 20, 21, 24, 44

18 6124-101
2554 () 30,31,34,44 TYPE TELEPHONE CIRCUIT
 (151 FREQ. SEL-148 ABA RINGER)



- NOTES:**
1. DOTTED LINES INDICATE CONNECTIONS FOR SPECIAL FEATURE 34
 2. DO NOT DISCONNECT TO DIAL STATIC SHIELD.
 3. BROWN LEAD CONNECTED TO DIAL STATIC SHIELD.
 4. EXTERNAL CAPACITOR IS REQUIRED.
 5. TO DISABLE THE POLARITY GUARD FEATURE CUT STRAP-WIRE ON COMPONENT SIDE OF DIAL P. C. BOARD.

TABLE A
 LINE AND RINGER CONNECTIONS

WIRE OR LEAD	RING IDENTIFYING GRD.	INDIV OR BRDG.	RING PARTY		TIP PARTY	
			IR	L2	NO IDENT. GRD.	IDENT. GRD.
INSIDE WIRE	G	A	A	L2	A	L2
	Y	L1	L1	L1	A	L1
	R	K	K	K	K	K
	BK	L2	L1	L1	L1	L1
	BL	*	*	*	*	*
	SL	*	*	*	*	*
	SL-RD	*	*	*	*	*
	SL	A	A	A	A	A
HOOKEWITCH LEADS	SL-WH	NOTE 4	NOTE 4	NOTE 4	NOTE 4	NOTE 4
	SL-BN	NOTE 4	NOTE 4	NOTE 4	NOTE 4	NOTE 4

TABLE B
 RINGER LEAD CONNECTIONS TO SILENCE RINGER PERMANENTLY

TIP PARTY IDENTIFYING GRD.	RINGER LEADS	
	RD	SL
1000 OHMS	*	L1
2650 OHMS	*	L1
	*	L1
	*	B

TABLE C
 RINGER SERIES CAPACITOR

NETWORK TERMS.	CAP. MPD.	CODE SERIES
A - K	47	HA4, HA5, HB5, HC1, BA
A - F	25	HA1, HB1, HC3
A - F	.15	HB2, HC4
A - F	.08	HA2, HA3, HB3, HB4, HC2, HC5

- NOTES (cont'd)**
6. TIP PARTY IDENTIFICATION RINGER OPTION TO REDUCE LINE NOISE. REMOVE TELEPHONE AS FOLLOWS:
 A. REMOVE YL HOOKSWITCH LEAD FROM NETWORK & PLACE ON "F" OF NETWORK.
 B. REMOVE YL HOOKSWITCH LEAD FROM "A" ON NETWORK & PLACE ON "F" OF NETWORK.
 7. BLU RINGER LEAD MANUFACTURE DISCONTINUED ON RINGERS DATE STAMPED 8-81 OR LATER.
 8. CONNECT TO TERMINAL 2 ON DIAL.
 9. SL-RD, SL AND BL RINGER LEADS OFFERED ON 148(A)BA AND 151 TYPE RINGERS ONLY.

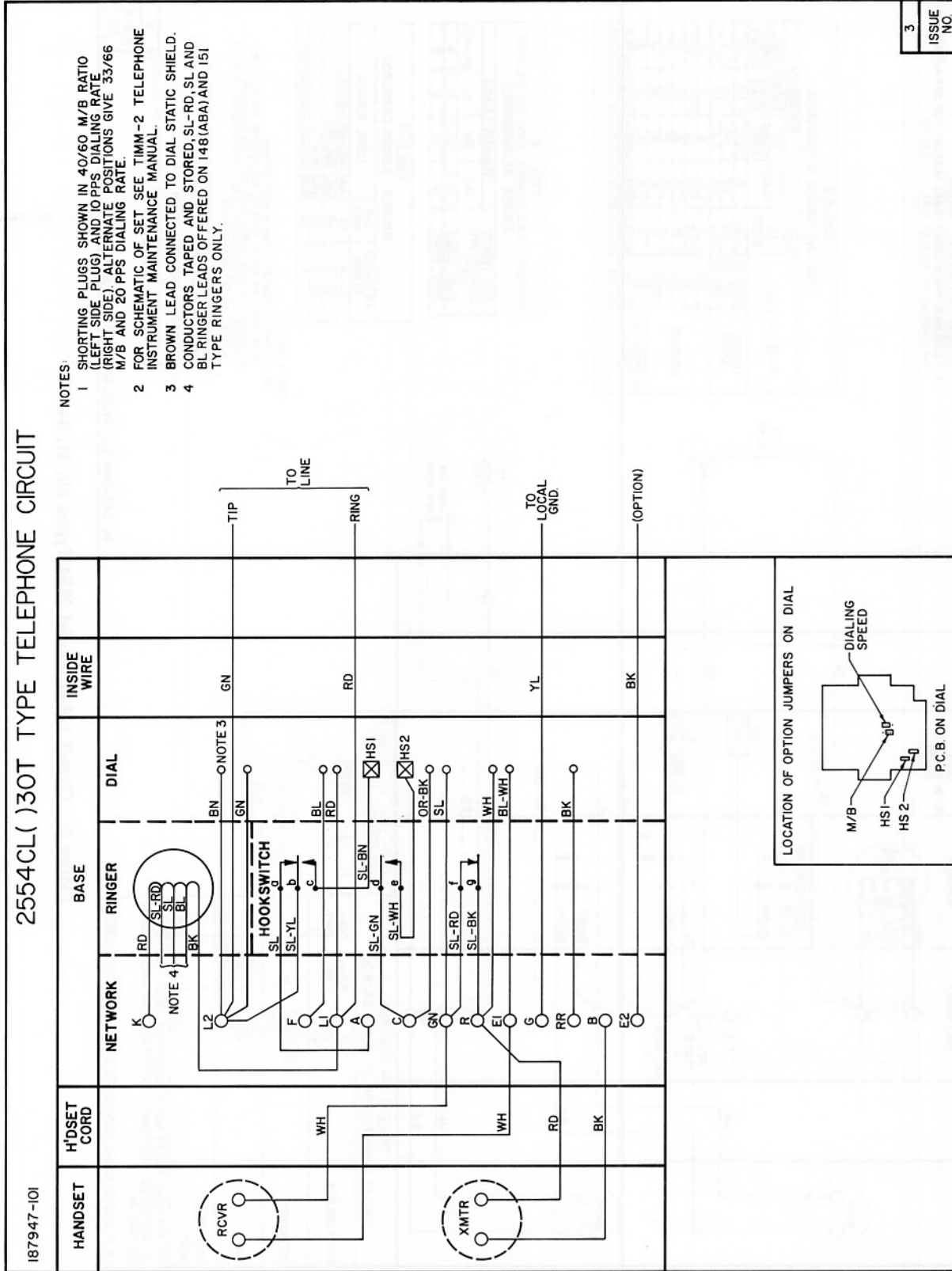
TABLE D (44 FEATURE)
 CIRCUIT CHANGES FOR A LEAD CONTROL

HOOKEWITCH	NETWORK	DIAL	INCOMING WIRE
SL (RINGER)	LI	BN (NOTE ***)	GN
SL-GN	LI	YL	BK
SL-WH	LI	BK	BK

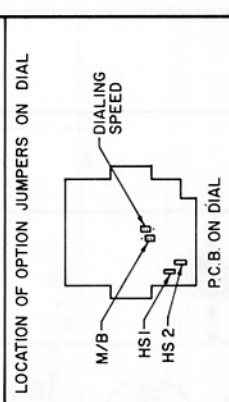
TO PREVENT FALSE HOLD CONDITION WHEN HANDSET IS RESTORED, HOOKEWITCH CONTACTS bc MUST BREAK BEFORE dc.
 ** BROWN LEAD CONNECTED TO DIAL STATIC SHIELD

Figure 3: Circuit Label, Model 2554 Types 30, 31, 34, 44

2554CL()30T TYPE TELEPHONE CIRCUIT



- NOTES:
- 1 SHORTING PLUGS SHOWN IN 40/60 M/B RATIO (LEFT SIDE PLUG) AND 10 PPS DIALING RATE (RIGHT SIDE) ALTERNATE POSITIONS GIVE 33/66 M/B AND 20 PPS DIALING RATE.
 - 2 FOR SCHEMATIC OF SET SEE TIMM-2 TELEPHONE INSTRUMENT MAINTENANCE MANUAL.
 - 3 BROWN LEAD CONNECTED TO DIAL STATIC SHIELD.
 - 4 CONDUCTORS TAPED AND STORED, SL-RD, SL AND BL RINGER LEADS OFFERED ON 148 (ABA) AND 151 TYPE RINGERS ONLY.



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NO.

Figure 4: Circuit Label, Model 2554 Types 30T, 31T

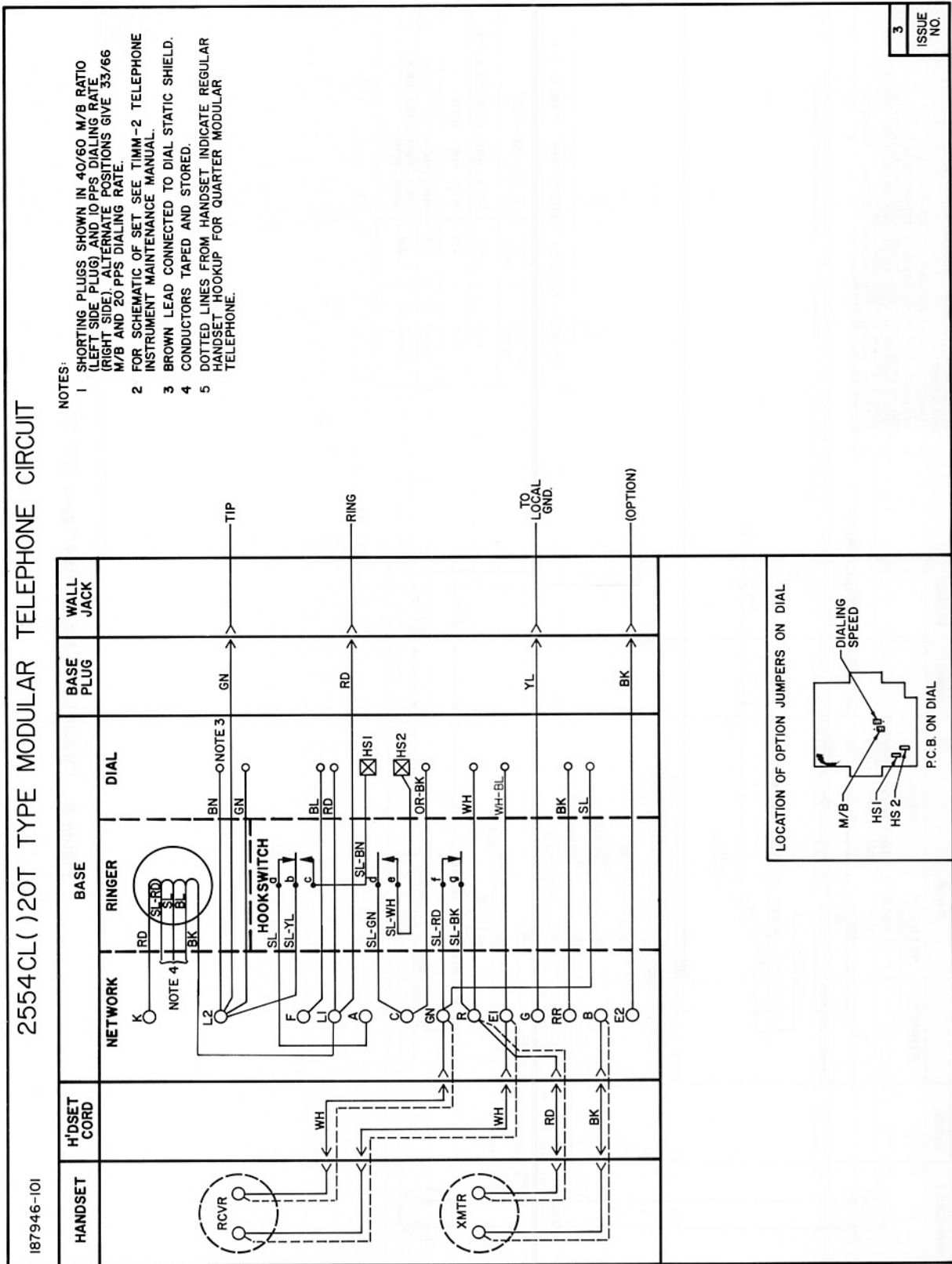


Figure 5: Circuit Label, Model 2554 Types 20T, 21T

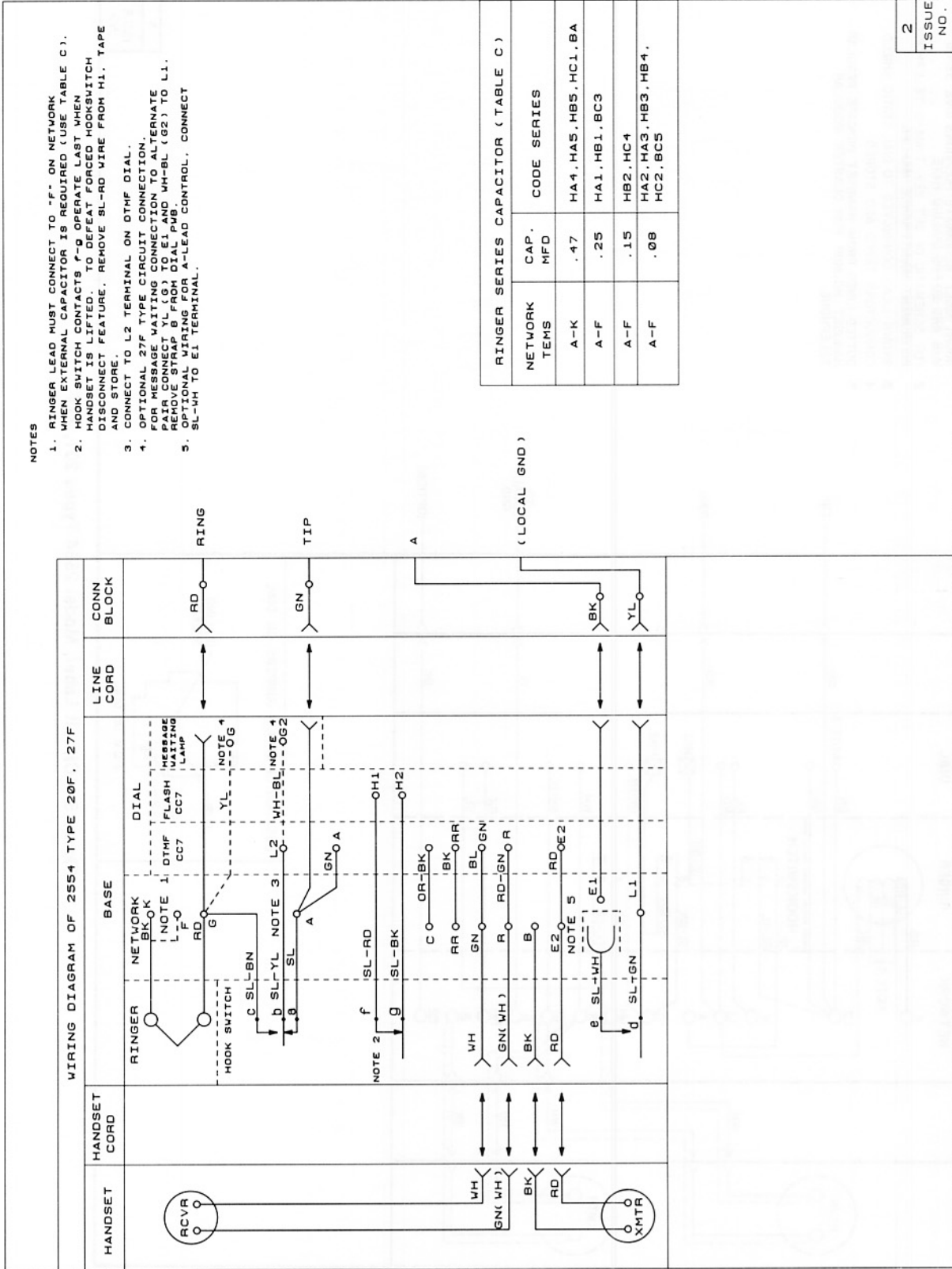


Figure 6: Circuit Label, Model 2554 Types 20F, 27F

2-LINE, ROTARY DIAL, WALL TELEPHONES

GENERAL DESCRIPTION

CONTENTS	PAGE
1. GENERAL DESCRIPTION	1
MODEL 555** () 30	2
MODEL 555** () 60	2
2. INSTALLATION	3
3. MAINTENANCE	3

1. GENERAL DESCRIPTION

1.01 This document covers the 2-line, rotary dial, wall telephones. (See Figure 1.) A general description as well as information that is peculiar to 2-line, rotary dial, wall telephones is included.

1.02 This section is reissued to add the full-modular (M) version of the 2-line, rotary dial, wall telephones. Nonmodular (O), quarter-modular (Q), and full-modular (F) versions of the 2-line, rotary dial, wall telephones have been manufacturing discontinued as well as the following:

- (a) Less ringer (LR) telephones.
- (b) Regular (R) dial and no (N) dial telephones.
- (c) Feature code 30 telephones.
- (d) Color code 05 and 43 telephones.

Note: Ordering information for manufacturing discontinued telephones has been removed; however, descriptive information has been retained as a reference for telephones still in service.

1.03 A replacement parts list and an exploded-view drawing for the telephones are contained in Section 50-555-101. The circuit labels appear in Section 50-555-102. Related documents of the CORTELCO Telephone Apparatus Practices Manual provide information on components.

1.04 The Model 555 wall telephones are 2-line, rotary dial, anti-sidetone type units that

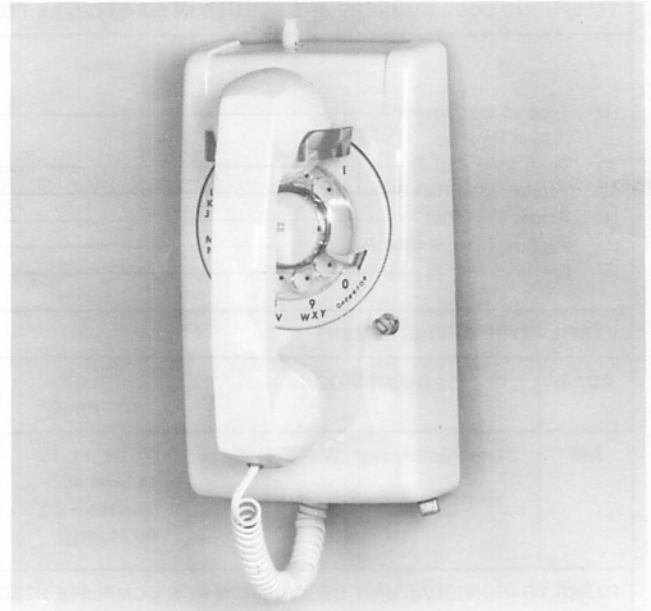


Figure 1: 2-Line, Rotary Dial, Wall Telephone

operate efficiently over a wide range of loop resistances and line impedances. These telephones are equipped with a turn-and-push key (located on the front of the housing) that permits either of two lines to be selected by turning the key from one position to the other. The push feature of the key provides a set of normally-open contacts for signaling if required. These telephones are also equipped with a hold switch (located in the plunger assembly extending through the top of the housing) that permits either of the two lines to be placed on hold by pressing on the plunger. Pulling up on the plunger or restoring the handset to the cradle will release the hold switch. The ringer is connected to line 1; a separate ringer must be provided if signaling is required for line 2.

1.05 The Model 555 wall telephones are identified by a coded label affixed to the bottom of the base plate. Refer to ordering information in Table A for an explanation of each code number and a list of available versions and features.

1.06 The Model 555 wall telephones are nonmodular, quarter-modular, or full-modular versions. These versions are designated by a code letter in the telephone code number. (Refer to Table A.)

TABLE A
ORDERING INFORMATION - TELEPHONES

CODE NUMBERS									
TELEPHONE CODE NUMBERS ARE FORMED IN SIX STEPS AS FOLLOWS:									
(1) Type of Instrument (See Part 1)									
(2) Color (See Part 2)									
(3) Version (See Part 3)									
(4) Ringer (See Part 4)									
(5) Special Feature (See Part 5)									
(6) Dial (See Part 6)									
PART 1 TYPE OF INSTRUMENT									
CODE	DESCRIPTION	COLOR OFFERED	VERSION OFFERED	RINGER OFFERED	FEATURE OFFERED	DIAL OFFERED			
555	2-Line, Rotary Dial, Wall Telephone	00, 09, 13, 15, 44, And 45 (Available On All Models)	M	BA	60	M			
REFER TO INDIVIDUAL UNIT DESCRIPTION FOR COMPLETE DESCRIPTION OF FEATURE COMBINATIONS									
PART 2 COLORS		PART 3 VERSIONS		PART 4 RINGERS		PART 5 SPECIAL FEATURES		PART 6 DIALS	
CODE	COLORS	CODE	VERSIONS	CODE	RINGERS	CODE	SPECIAL FEATURES	CODE	DIAL
00	Black	M	Full-Modular (With Handset Cord)	BA	Straight-Line	60	No Special Feature (6-Conductor Modular Plug)	M	Metropolitan (Letters & Numerals)
09	Ivory								
13	Beige								
15	White								
44	Light Ash								
45	Cocoa Brown								

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1.07 Nonmodular version telephones (no longer available) include a hard-wired handset cord. It is required that a line cord be hard-wired to the terminals provided in the telephone. This version is designated by the code letter O.

1.08 Quarter-modular version telephones (no longer available) include a hard-wired handset cord, and a modular plug is provided as part of the base assembly for inserting into a modular wall jack. This version is designated by the code letter Q.

1.09 Full-modular version telephones are available with or without a modular handset cord. However, all full-modular version telephones are equipped with jacks to accept the plugs of a modular handset cord, and a modular plug is provided as part of the base assembly for inserting into a modular wall jack. The full-modular version of the telephone with a modular handset cord, terminated on both ends with modular plugs, is designated by the code letter

M. The full-modular version without a modular handset cord (no longer available) is designated by the code letter F.

1.10 The Model 555** () 30 telephones are described in the following paragraphs. The circuit labels for these telephones are contained in Section 50-555-102.

MODEL 555 () 30**

1.11 The Model 555** () 30 is a 2-line, rotary dial, wall telephone. It provides no special features and is a nonmodular unit.

MODEL 555 () 60**

1.12 The Model 555** () 60 is a 2-line, rotary dial, wall telephone. It provides no special features and is a full-modular unit.

2. INSTALLATION

2.01 Installation of the full-modular versions of these telephones consists of inserting the modular plug, located on the telephone base, into an available modular wall jack. Refer to the appropriate circuit label for installation wiring of nonmodular version telephones.

Note: Installation of the telephones requires the use of 6-conductor line cord.

3. MAINTENANCE

3.01 For replacement parts information and for an exploded-view drawing of major assembly groups, refer to Section 50-555-101.

2-LINE, ROTARY DIAL, WALL TELEPHONES

REPLACEMENT PARTS

1. GENERAL

1.01 This document covers the 2-line, rotary dial, wall telephone. (See Figure 1.) An exploded-view drawing of the telephone with the major assembly groups (see Figure 2) and a replacement parts list (see Table A) are included.

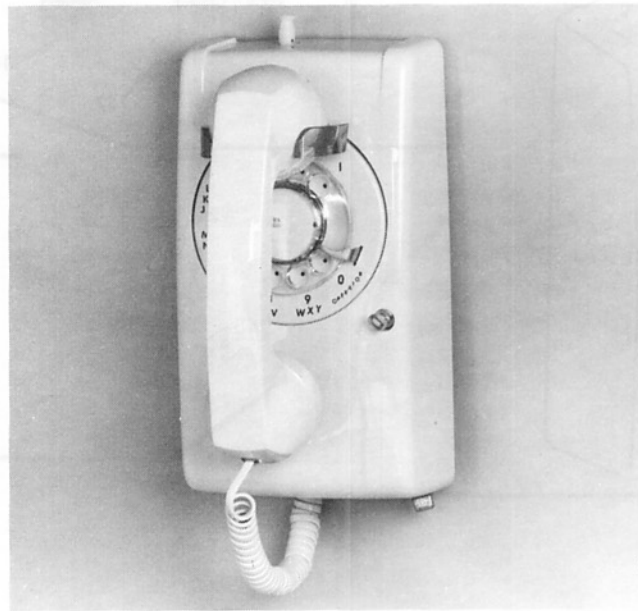
1.02 This section is reissued for the following reasons:

- (a) Issue 3 adds replacement parts for the full-modular (M) version of the 2-line, rotary dial, wall telephone.
- (b) Issue 2 corrected errors in the original issue.

1.03 For additional information on description and installation of the telephones, refer to Section 50-555-100. The circuit labels appear in Section 50-555-102. Related documents of the CORTELCO Telephone Apparatus Practices Manual provide information on components.

1.04 The Model 555 wall telephones are 2-line, rotary dial, anti-sidetone type units that operate efficiently over a wide range of loop resistances and line impedances.

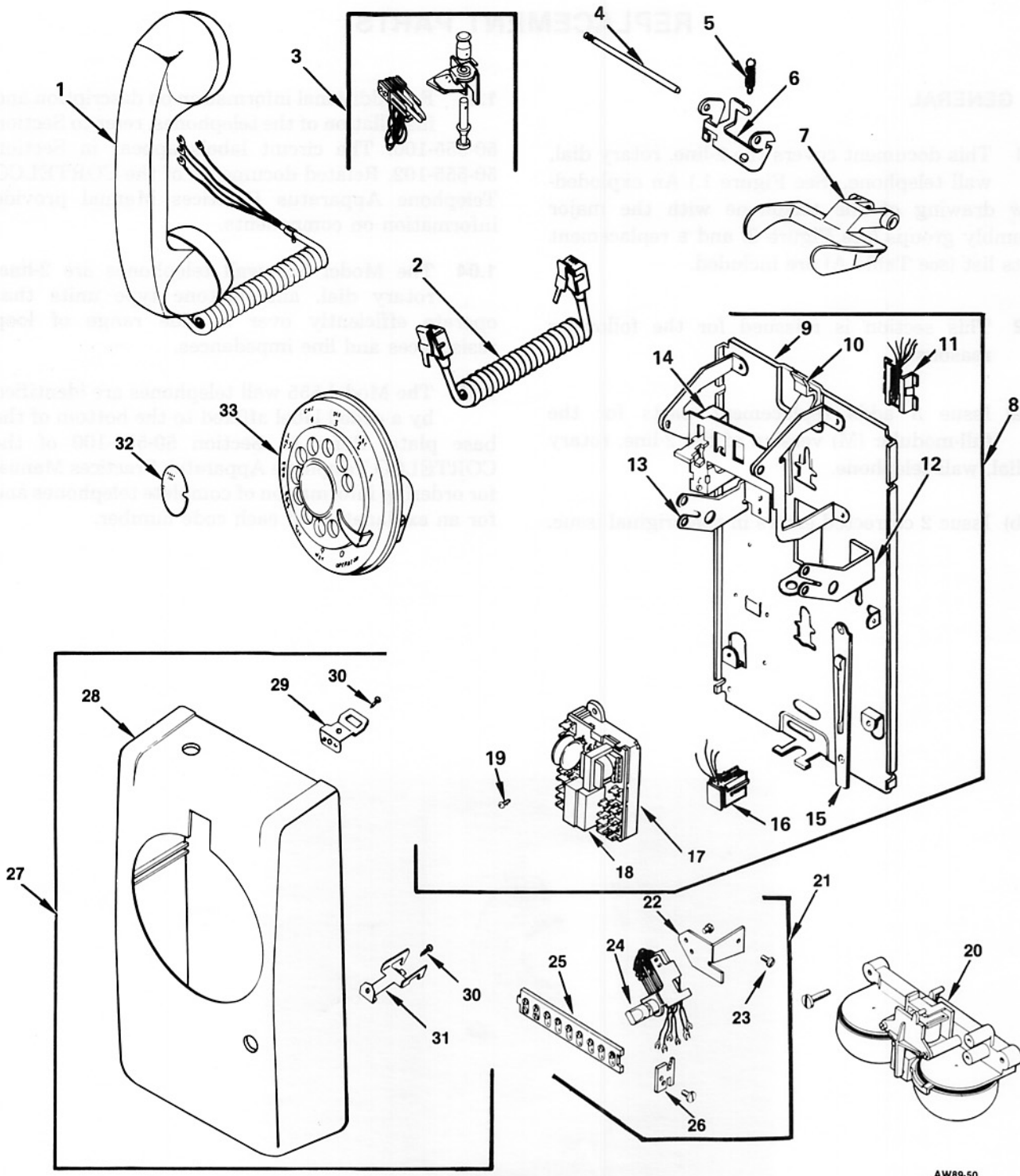
1.05 The Model 555 wall telephones are identified by a coded label affixed to the bottom of the base plate. Refer to Section 50-555-100 of the CORTELCO Telephone Apparatus Practices Manual for ordering information of complete telephones and for an explanation of each code number.



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Figure 1: 2-Line, Rotary Dial, Wall Telephone

2-LINE ROTARY DIAL WALL TELEPHONES



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Figure 2: 2-Line, Rotary Dial, Wall Telephone, Exploded View

TABLE A
REPLACEMENT PARTS LIST

INDEX NO	PART NUMBER	DESCRIPTION	QUANTITY USED	
			555/30	555/60
		2-Line, Rotary Dial, Wall Telephone		
1	0065**-0C2	Handset Assembly, Nonmodular ¹ , ²	1	1
1	0065**-0M2	Handset Assembly, Modular ¹	—	1
2	9018**-072	Cord, Handset, Modular	—	1
3	084522-101	Hold Switch Assembly ¹	1	1
4	079304-101	Shaft, Handset Cradle	1	1
5	075307-101	Spring	1	1
6	079307-101	Bracket, Pivot Pin	1	1
7	184511-101	Cradle, Handset	1	1
8	182940-113	Base Assembly	1	1
9	182870-101	Plate, Base	1	1
10	182865-101	Hook Latch	1	1
11	183185-101	Plug Assembly, Wall, Modular	—	1
12	087055-102	Bracket, Dial (R. H.)	1	1
13	087055-101	Bracket, Dial (L. H.)	1	1
14	079399-101	Cradle Switch Assembly ¹	1	1
	079399-103	Spring Nest Assembly (Not Shown)	1	1
15	079308-101	Arm, Volume Control	1	1
16	182945-101	Jack Assembly, Handset Cord, Modular	—	1
17	182175-101	Spacer, Network	1	1
18	181427-101	PC Network (#183070-101) ¹	1	1
19	096407-103	Screw, Network Mounting	1	1
	031944-108	Rivet (Not Shown)	2	2
	182606-101	Rivet (Not Shown)	9	9
20	000130-OBA	Ringer, 4-Wire (With ANI) ¹ , ² , ³	1	1
20	000130-NBA	Ringer, 4-Wire (With ANI) ¹ , ³	1	1
20	000130-SBA	Ringer, 2-Wire (Less ANI) ¹ , ² , ⁴	1	1
20	000130-PBA	Ringer, 2-Wire (Less ANI) ¹ , ⁴	1	1
	095992-102	Screw (Not Shown)	2	2
21	079453-107	Key Assembly, Turn-And-Push	1	1
22	079920-101	Bracket, Pushkey	1	1
23	075366-101	Screw, Mounting	2	2
24	079453-101	Push And Turn Switch	1	1
25	079467-107	Terminal Board	1	1
26	086103-101	Plate, Mounting	1	1
27	180665-0**	Housing Assembly	1	1
27	183929-0**	Housing Assembly, Full-Modular	—	1
28	084521-0**	Housing	1	1
28	183928-0**	Housing, Full-Modular	—	1
29	079305-101	Bracket, Latch	1	1
30	075407-102	Screw, Latch Bracket And Catch	2	2
31	079397-101	Catch	1	1
32	075415-101	Card, Number	1	1
	183498-101	Card, Number, Stick-On (Not Shown)	—	1
33	0030**-00G	Dial Assembly, Metropolitan (Letters And Numerals) ¹	1	1
33	0030**-00D	Dial Assembly, Regular (Numerals Only) ¹	1	—

Notes:

** Substitute 2-Digit Color Code When Ordering.

¹ Refer To Components Parts Section Of This Manual For Assembly Parts List.

² This Product Has Been Discontinued, But Is Included To Provide A Source Of Information For Telephones Still In Service.

³ The 000130-NBA Ringer Replaces The 000130-OBA Ringer.

⁴ The 000130-PBA Ringer Replaces The 000130-SBA Ringer.

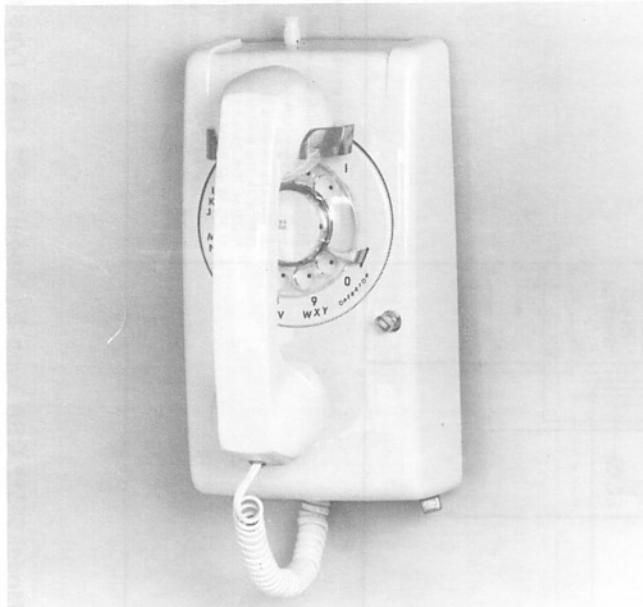
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2-LINE, ROTARY DIAL, WALL TELEPHONES

CIRCUIT LABELS

1. GENERAL

1.01 This document covers the 2-line, rotary dial, wall telephones. (See Figure 1.) The circuit labels for the various models of 2-line, rotary dial, wall telephones and the associated features available in each are included in this document. (See Table A.)



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Figure 1: 2-Line, Rotary Dial, Wall Telephone

1.02 This section is reissued to conform to the CORTELCO Practices format. Issue 2 provided the latest issue of circuit labels for 2-line, rotary dial, wall telephones.

Note: Some versions of telephones have been manufacturing discontinued; however, circuit labels have been retained as a reference for telephones still in service.

1.03 For additional information on description and installation of the telephones, refer to Section 50-555-100. A replacement parts list and an exploded-view drawing for the telephones are contained in Section 50-555-101. Related documents of the CORTELCO Telephone Apparatus Practices Manual provide information on components.

1.04 The Model 555 wall telephones are 2-line, rotary dial, anti-sidetone type units that operate efficiently over a wide range of loop resistances and line impedances.

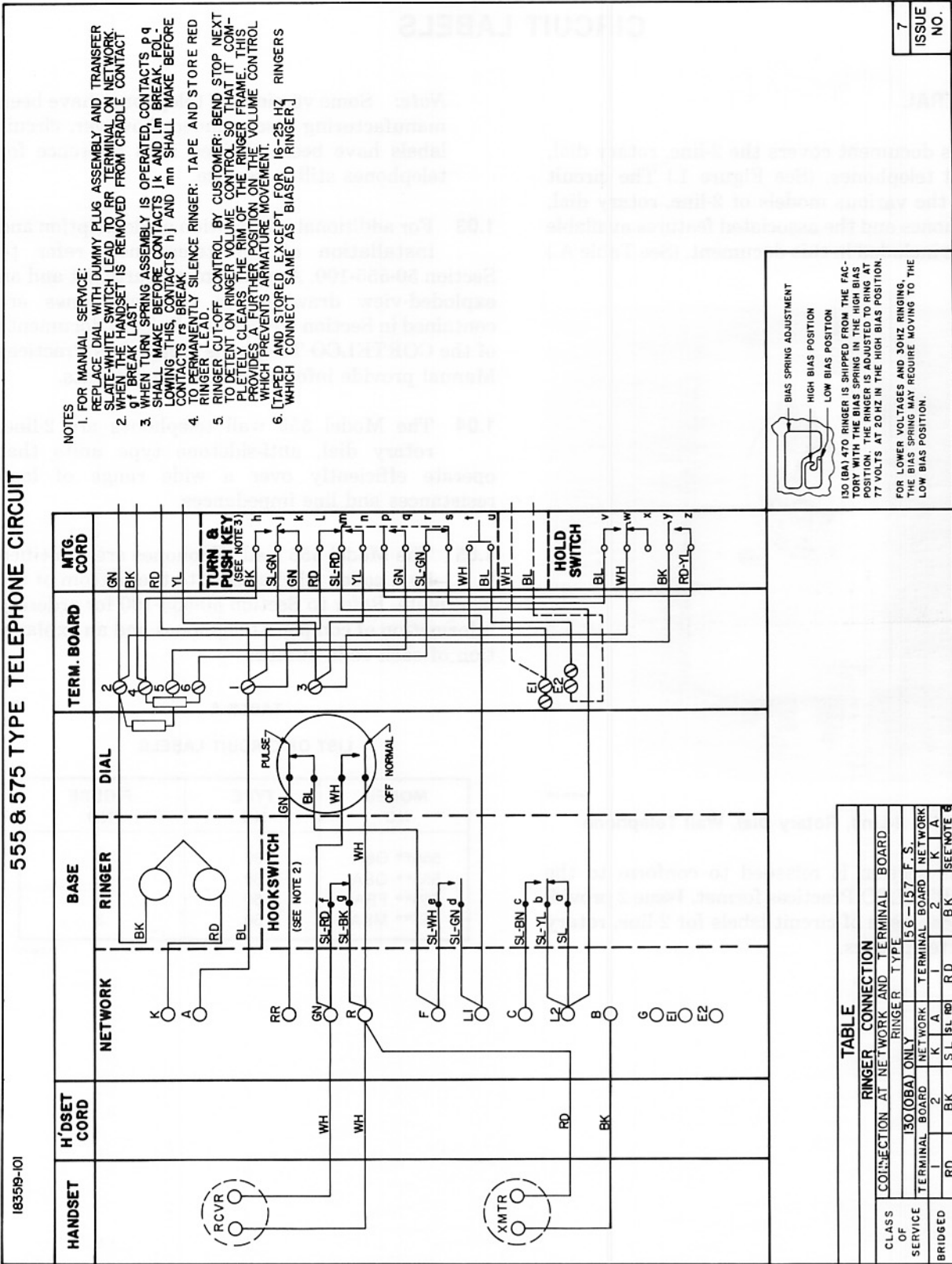
1.05 The Model 555 wall telephones are identified by a coded label affixed to the bottom of the base plate. Refer to Section 50-555-100 for ordering information of complete telephones and an explanation of each code number.

TABLE A
LIST OF CIRCUIT LABELS

MODEL NO	TYPE NO	FIGURE NO
555** OBA	30	2
555** QBA	60	2
555** FBA	60	3
555** MBA	60	3

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555 & 575 TYPE TELEPHONE CIRCUIT



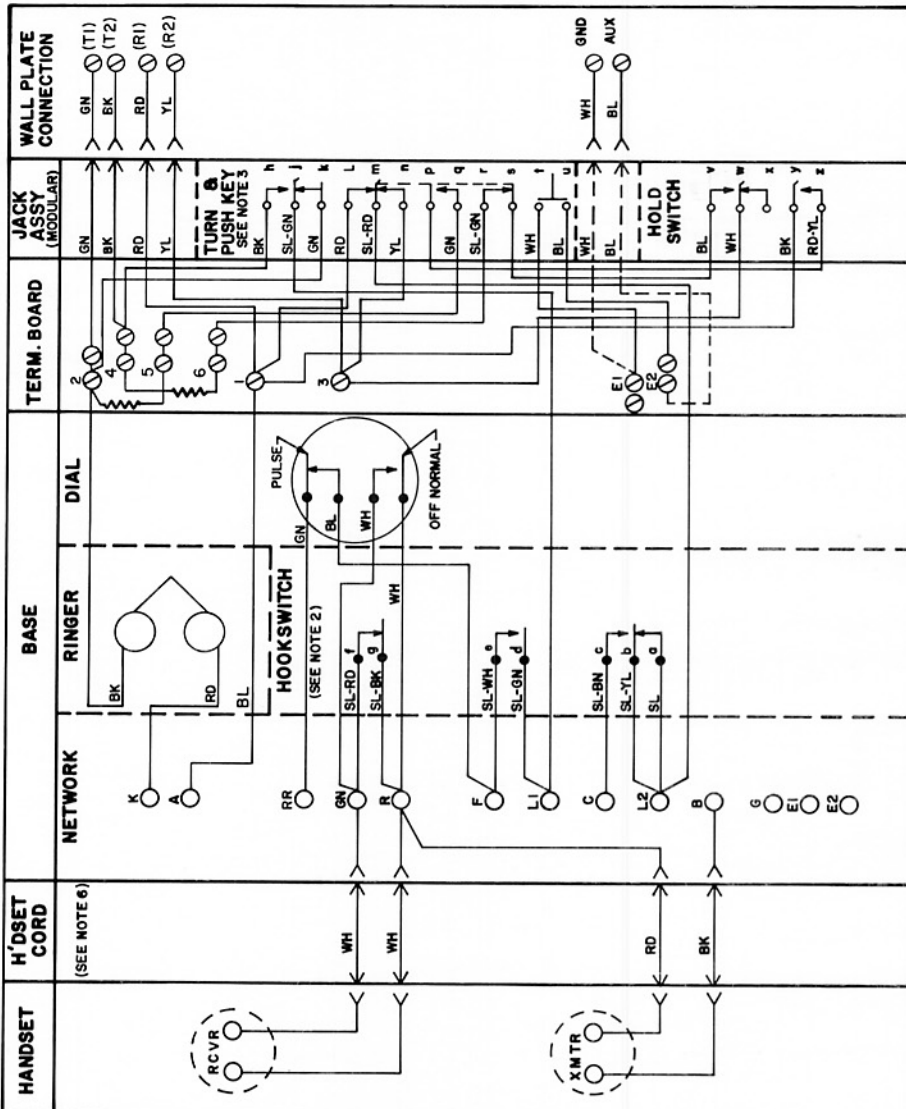
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TABLE		CONNECTION AT NETWORK AND TERMINAL BOARD	
RINGER		RINGER TYPE	
CLASS OF SERVICE	130 (OBA) ONLY	15.6 - 157 F.S.	
BRIDGED	RD	SL	RD
	BK	SL	BK
	2	K	A
	1	A	2
	RD	BK	SEE NOTE B

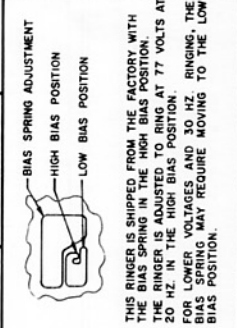
Figure 2: Circuit Label, Model 555** OBA Type 30; Model 555** QBA Type 60

555 & 575 TYPE MODULAR TELEPHONE CIRCUIT

183930-101



- NOTES
1. FOR MANUAL SERVICE: REPLACE DIAL WITH DUMMY PLUG ASSEMBLY AND TRANSFER SLATE-WHITE SWITCH LEAD TO RR TERMINAL ON NETWORK. WHEN THE HANDSET IS REMOVED FROM CRADLE CONTACT OF BREAK LAST.
 2. WHEN TURN SPRING ASSEMBLY IS OPERATED, CONTACTS p q SHALL MAKE BEFORE CONTACTS j k AND l m BREAK. FOLLOWING THIS, CONTACTS h j AND m n SHALL MAKE BEFORE CONTACTS r s BREAK.
 3. PERMANENTLY SILENCE RINGER: TAPE AND STORE RED RINGER LEAD OFF CONTROL BY CUSTOMER. BEND STOP NEXT TO DETENT ON RINGER VOLUME CONTROL SO THAT IT COMPLETELY CLEARS THE ARM OF THE RINGER FRAME. THIS PROVIDES A FURTHER POSITION ON THE VOLUME CONTROL WHICH PREVENTS ARMATURE MOVEMENT.
 4. FOR QTR MODULAR TELEPHONE HANDSET AND ONE END OF DESK STAND CORD IS HARD WIRED TO TELEPHONE BASE.
 5. TAPED & STORED EXCEPT FOR 16-25 HZ RINGERS WHICH CONNECT SAME AS BIASED RINGER.



THIS RINGER IS SHIPPED FROM THE FACTORY WITH THE BIAS SPRING IN THE HIGH BIAS POSITION. THE RINGER IS ADJUSTED TO RING AT 77 VOLTS AT 20 HZ. IN THE HIGH BIAS POSITION. OPERATING VOLTAGES AND 30 HZ. RINGING, THE BIAS SPRING MAY REQUIRE MOVING TO THE LOW BIAS POSITION.

RINGER CONNECTION			
CONNECTIONS AT NETWORK AND TERMINAL BOARD			
RINGER TYPE		156-157 F. S.	
TERMINAL BOARD	NETWORK	TERMINAL BOARD	NETWORK
1	2	K	A
RD	BK	SL	SL RD
		RD	BK

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Figure 3: Circuit Label, Model 555** FBA Type 60; Model 555** MBA Type 60

2-LINE, ROTARY DIAL, DESK TELEPHONES

GENERAL DESCRIPTION

	CONTENTS	PAGE
1.	GENERAL DESCRIPTION	1
	MODEL 575** () 30	2
	MODEL 575** () 60	2
2.	INSTALLATION	2
3.	MAINTENANCE	3

1. GENERAL DESCRIPTION

1.01 This document covers the 2-line, rotary dial, desk telephones. (See Figure 1.) A general description as well as information that is peculiar to 2-line, rotary dial, desk telephones is included.

1.02 This section is reissued to remove manufacturing discontinued versions of the telephone and to add feature codes for the full-modular (M) version telephones.

Note: Ordering information for manufacturing discontinued telephones has been removed; however, descriptive information has been retained as a reference for telephones still in service.

1.03 A replacement parts list and an exploded-view drawing for the telephones are contained in Section 50-575-101. The circuit labels appear in Section 50-575-102. Related documents of the CORTELCO Telephone Apparatus Practices Manual provide information on components.

1.04 The Model 575 desk telephones are 2-line, rotary dial, anti-sidetone type units that operate efficiently over a wide range of loop resistances and line impedances. These instruments are equipped with a turn-and-push key (located on the front of the housing) that permits either of two lines to be selected by turning the key from one position to the other. The push feature of the key provides for signaling if required. These telephones are also equipped with a hold switch (located in the left-hand



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Figure 1: 2-Line, Rotary Dial, Desk Telephone

cradle plunger) that permits either of the two lines to be placed on hold by pulling up on the left-hand cradle plunger. Restoring the handset to the cradle will release the hold switch. The ringer is connected to line 1; a separate ringer must be provided if signaling is required for line 2.

1.05 The Model 575 desk telephones are identified by a coded label affixed to the bottom of the base plate. Refer to ordering information in Table A for an explanation of each code number and a list of available versions and features.

1.06 Two-line telephones are manufactured as conventional, quarter-modular, or full-modular. These versions are designated by a code letter that is placed in front of the ringer code letters in the order number of the telephone. (Refer to Table A.)

1.07 Conventional telephones (no longer available) include a hard-wired handset cord and a hard-wired line cord. This version is designated by the code letter O.

TABLE A
ORDERING INFORMATION - TELEPHONES

CODE NUMBERS									
TELEPHONE CODE NUMBERS ARE FORMED IN SIX STEPS AS FOLLOWS:									
				575	15	M	BA	60	M
(1) Type of Instrument (See Part 1)	_____								
(2) Color (See Part 2)	_____								
(3) Version (See Part 3)	_____								
(4) Ringer (See Part 4)	_____								
(5) Special Feature (See Part 5)	_____								
(6) Dial (See Part 6)	_____								
PART 1 TYPE OF INSTRUMENT									
CODE	DESCRIPTION			COLOR OFFERED	VERSION OFFERED	RINGER OFFERED	FEATURE OFFERED	DIAL OFFERED	
575	2-Line Rotary Dial			00, 09, 13, 15, 44, And 45	M	BA	60	M	
REFER TO INDIVIDUAL UNIT DESCRIPTION FOR COMPLETE DESCRIPTION OF FEATURE COMBINATIONS									
PART 2 COLORS		PART 3 VERSIONS		PART 4 RINGERS		PART 5 SPECIAL FEATURES		PART 6 DIALS	
CODE	COLORS	CODE	VERSIONS	CODE	RINGERS	CODE	SPECIAL FEATURES	CODE	DIAL
00	Black	M	Modular	BA	Straight-Line	60	Equipped With A 6-Conductor, Silver Satin Modular Line Cord	M	Metropolitan (Letters & Numerals)
09	Ivory								
13	Beige								
15	White								
44	Light Ash								
45	Cocoa Brown								

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1.08 Quarter-modular versions (no longer available) include a hard-wired handset cord and a line cord hard-wired to the base and terminated in a modular plug for connection to a modular jack. This version is designated by the code letter Q.

1.09 Full-modular version telephones are available with or without a modular handset cord and a modular line cord. However, all full-modular version telephones are equipped with jacks to accept the plugs of a modular handset cord and a modular line cord. The full-modular version of the telephone with both a modular handset cord and a modular line cord, terminated on each end with modular plugs, is designated by the code letter M. The full-modular version without a modular handset cord and a modular line cord (no longer available) is designated by the code letter F.

1.10 Variations of the Model 575 desk telephones are briefly described below. Circuit label

drawings for these telephones are contained in Section 50-575-102.

MODEL 575 () 30**

1.11 The Model 575** () 30 is a 2-line, rotary dial, desk telephone. It provides no additional outstanding features and is equipped with a 6-conductor line cord.

MODEL 575 () 60**

1.12 The Model 575** () 60 is the same as the Model 575** () 30 with the exception that it is a modular version telephone.

2. INSTALLATION

2.01 Since modular versions of these telephones are equipped with modular plugs, installation

consists of inserting this plug into an available wall jack. Refer to the appropriate circuit label for installation wiring of non-modular units and to the general installation section of the CORTELCO Telephone Apparatus Practices Manual.

3. MAINTENANCE

3.01 For general maintenance information, refer to the general maintenance section of the CORTELCO Telephone Apparatus Practices Manual. For a pictorial view and parts list, refer to Section 50-575-101.

2-LINE, ROTARY DIAL, DESK TELEPHONES

REPLACEMENT PARTS

1. GENERAL

1.01 This document covers the 2-line, rotary dial, desk telephone. (See Figure 1.) An exploded-view drawing of the telephone with the major assembly groups (see Figure 2) and a replacement parts list (see Table A) are included.

1.02 This section is reissued for the following reasons:

(a) Issue 3 adds feature codes for the full-modular (M) version of the 2-line, rotary dial, desk telephones. Conventional (O), quarter-modular (Q), and full-modular (F) versions of the 2-line, rotary dial, desk telephones have been manufacturing discontinued as well as the following:

- (1) Feature code 30 telephones.
- (2) Color codes 05 and 43.
- (3) Regular (R) dial telephones.
- (4) Less ringer (LR) telephones.

(b) Issue 2 corrected errors in the original issue.

1.03 For additional information on description and installation of the telephones, refer to Section

50-575-100. The circuit labels appear in Section 50-575-102. Related documents of the CORTELCO Telephone Apparatus Practices Manual provide information on components.

1.04 The Model 575 desk telephones are 2-line rotary dial, anti-sidetone type units that operate efficiently over a wide range of loop resistances and line impedances. A turn-and-push key permits either of two lines to be selected by turning the key from one position to the other. The push feature of the key provides a set of normally-open contacts for signaling if required. These telephones are also equipped with a hold switch (located in the left-hand cradle plunger) which permits either of the two lines to be placed on hold by pulling up on the left-hand cradle plunger. Restoring the handset to the cradle will release the hold switch. The ringer is connected to line 1; a separate ringer must be provided if signaling is required for line 2.

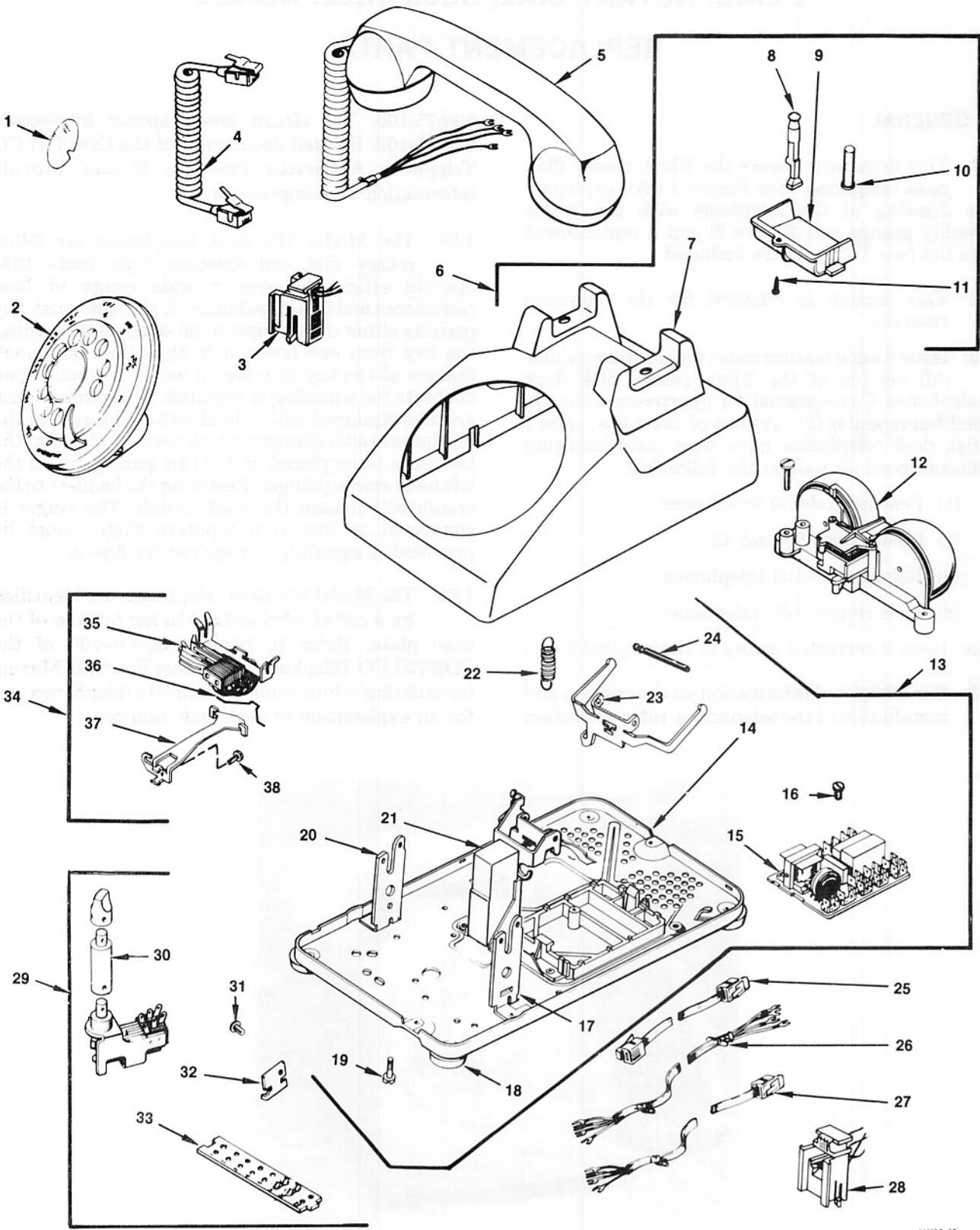
1.05 The Model 575 desk telephones are identified by a coded label affixed to the bottom of the base plate. Refer to Section 50-575-100 of the CORTELCO Telephone Apparatus Practices Manual for ordering information of complete telephones and for an explanation of each code number.



AW86-344

Figure 1: 2-Line, Rotary Dial, Desk Telephone

2-LINE ROTARY DIAL DESK TELEPHONE



AW89-40

Figure 2: 2-Line, Rotary Dial, Desk Telephone, Exploded View

TABLE A
REPLACEMENT PARTS LIST

INDEX NO	PART NUMBER	DESCRIPTION	QUANTITY USED	
			575/30	575/60
		2-Line, Rotary Dial, Desk Telephone		
1	075415-101	Card, Number	1	1
	183498-101	Card, Number, Stick-On (Not Shown)	—	1
2	0030**-00G	Dial Assembly, Metropolitan (Letters And Numerals) ¹	1	1
2	0030**-00D	Dial Assembly, Regular (Numerals Only) ¹	1	—
	79456**	Dial Assembly, Blank (Not Shown) ³	1	1
3	182946-101	Jack Assembly, Handset Cord, Modular	—	1
4	9018**-072	Cord, Handset, Modular	—	1
5	0065**-0C2	Handset Assembly, Nonmodular ¹	1	1
5	0065**-0M2	Handset Assembly, Modular ¹	—	1
6	187489-0**	Housing And Plunger Assembly	1	—
6	187481-0**	Housing And Plunger Assembly	—	1
6	184419-0**	Housing And Plunger Assembly ²	1	1
6	183932-0**	Housing And Plunger Assembly, Full Modular ²	—	1
7	187480-0**	Housing	—	1
7	184411-0**	Housing	1	1
7	187484-0**	Housing	1	—
7	183931-0**	Housing, Full-Modular	—	1
8	079101-101	Plunger	1	—
8	079101-102	Plunger, Hold Switch	1	1
9	079606-102	Plunger, Retainer	—	1
9	079606-0**	Plunger, Retainer	1	1
10	079603-102	Plunger, Cradle Switch	1	1
11	075407-102	Screw, Plunger Retainer	1	1
12	000130-OBA	Ringer, 4-Wire (With ANI) ^{1, 2, 4}	1	1
12	000130-NBA	Ringer, 4-Wire (With ANI) ^{1, 4}	1	1
12	000130-SBA	Ringer, 2-Wire (Less ANI) ^{1, 2, 5}	1	1
12	000130-PBA	Ringer, 2-Wire (Less ANI) ^{1, 5}	1	1
	075366-101	Screw (Not Shown) ²	2	2
	095992-102	Screw (Not Shown)	2	2
13	075338-101	Base Assembly	1	1
14	075327-101	Plate, Base	1	1
15	181472-101	PC Network (#1873070-101) ¹	1	1
	031944-108	Rivet, Network Mounting (Not Shown)	2	2
16	096407-103	Screw, Network Mounting	1	1
17	087054-101	Bracket, Dial (R. H.)	1	1
18	182337-101	Foot	4	4
	082486-102	Rivet, Foot (Not Shown)	4	4
19	075486-101	Screw, Cabinet Locking	2	2
20	087054-102	Bracket, Dial (L. H.)	1	1
21	075300-101	Cradle Switch Assembly ¹	1	1
	075309-101	Spring Nest Assembly (Not Shown)	1	1
22	075307-101	Spring, Cradle Return	1	1
23	079602-101	Arm, Operating	1	1
24	075308-101	Pin, Pivot	1	1
	182606-101	Rivet, Hardware Mounting (Not Shown)	5	5
25	183438-084	Cord, Mounting, Full-Modular	—	1
26	184358-066	Cord, Mounting, Nonmodular ²	1	—
27	183940-084	Cord, Mounting, Quarter-Modular ²	—	1
28	182856-102	Jack Assembly, Line Cord, Modular	—	1
29	079453-108	Key Assembly, Turn-And-Push	1	1
30	079453-101	Key, Turn-And-Push	1	1
31	180219-101	Screw, Plate Mounting	1	1
32	086103-101	Plate, Mounting	1	1

TABLE A
REPLACEMENT PARTS LIST

INDEX NO	PART NUMBER	DESCRIPTION	QUANTITY USED	
			575/30	575/60
		2-Line, Rotary Dial, Desk Telephone		
33	079467-101	Terminal Board ²	1	1
33	079467-107	Terminal Board	1	1
	079474-101	Screw, Assembly Mounting (Not Shown)	2	2
34	082577-101	Hold Switch Assembly ²	1	1
35	082581-101	Spring Assembly	1	1
36	079624-101	Spring, Retainer	1	1
37	079625-101	Bracket	1	1
38	069020-103	Screw, B. H. M.	1	1

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Notes:

** Substitute 2-Digit Color Code When Ordering.

¹ Refer To Components Parts Section Of This Manual For Assembly Parts List.

² These Products Have Been Discontinued, But Are Listed To Provide Information For Telephones Still In Service.

³ This Part Must Be Ordered Separately.

⁴ The 000130-NBA Ringer Replaces The 000130-OBA Ringer.

⁵ The 000130-PBA Ringer Replaces The 000130-SBA Ringer.

2-LINE, ROTARY DIAL, DESK TELEPHONES

CIRCUIT LABELS

1. GENERAL

1.01 This document covers the 2-line, rotary dial, desk telephones. (See Figure 1.) The circuit labels for the various models of 2-line, rotary dial, desk telephones and the associated features available in each are included in this document. (See Table A.)



AW86-344

Figure 1: 2-Line, Rotary Dial, Desk Telephone

1.02 This section is reissued to conform to the CORTELCO Practices format. Issue 2 provided the latest issue of circuit labels for the 2-line, rotary dial, desk telephones.

Note: Some versions of telephones have been manufacturing discontinued; however, circuit labels have been retained as a reference for telephones still in service.

1.03 For additional information on description and installation of the telephones, refer to Section 50-575-100. A replacement parts list and an exploded-view drawing for the telephones are contained in Section 50-575-101. Related documents of the CORTELCO Telephone Apparatus Practices Manual provide information on components.

1.04 The Model 575 desk telephones are 2-line, rotary dial, anti-sidetone type units that operate efficiently over a wide range of loop resistances and line impedances.

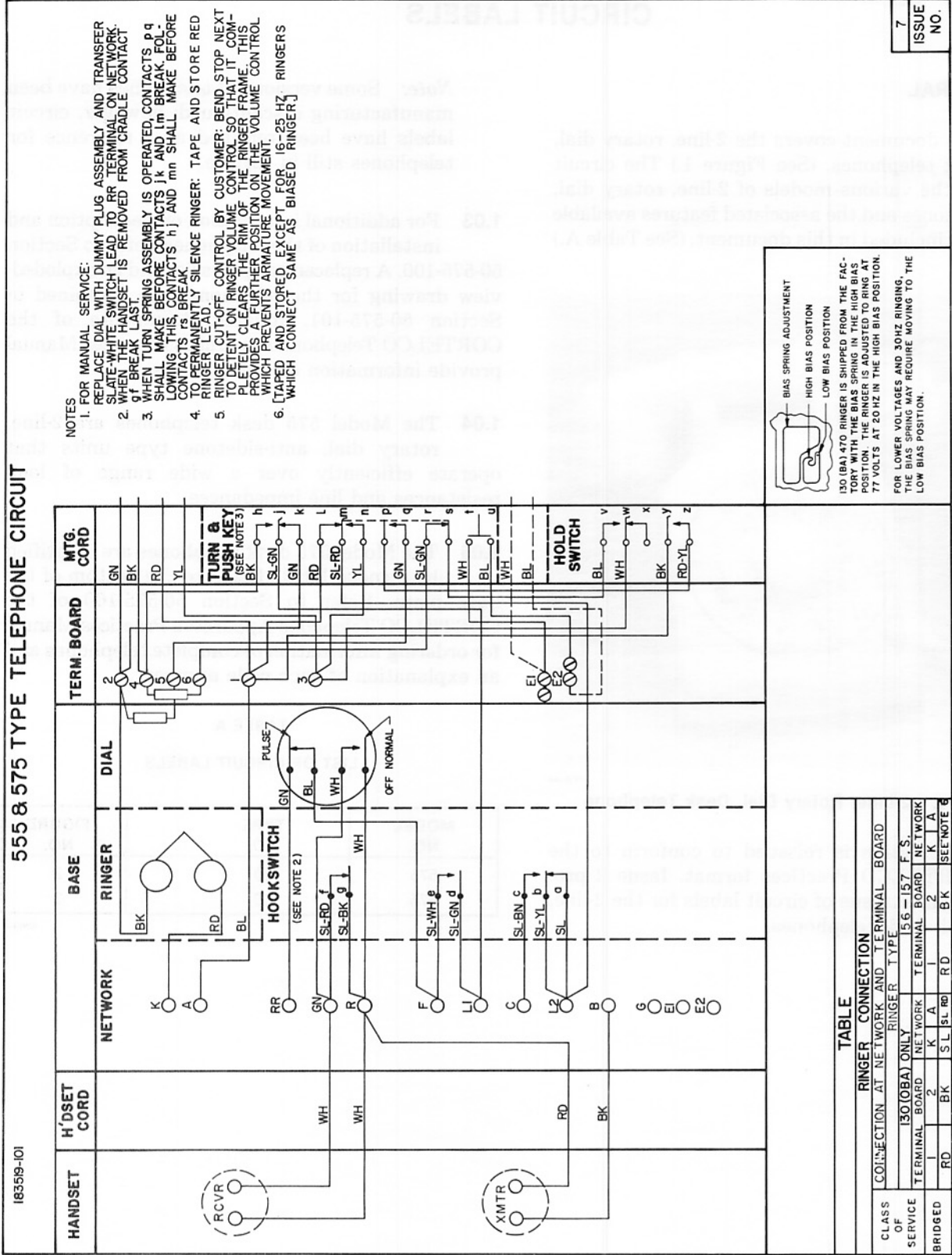
1.05 The Model 575 desk telephones are identified by a coded label affixed to the bottom of the base plate. Refer to Section 50-575-100 of the CORTELCO Telephone Apparatus Practices Manual for ordering information of complete telephones and an explanation of each code number.

TABLE A
LIST OF CIRCUIT LABELS

MODEL NO.	TYPE NO.	FIGURE NO.
575	30	2
575	60	3

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555 & 575 TYPE TELEPHONE CIRCUIT



7
ISSUE
NO.

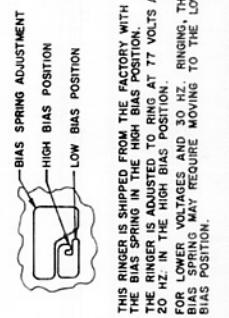
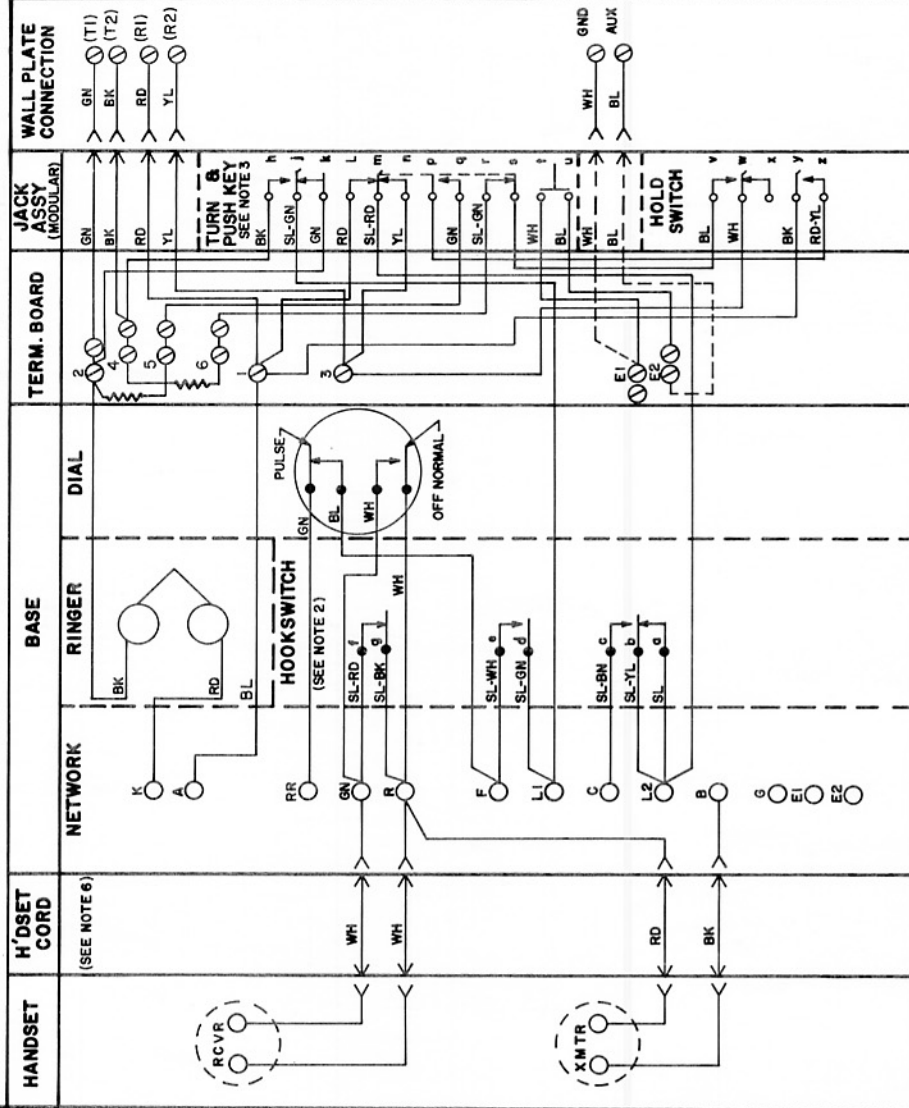
CLASS OF SERVICE	RINGER CONNECTION			
	COLLECTION AT NETWORK AND TERMINAL BOARD		RINGER TYPE	
BRIDGED	1	2	1	2
	RD	BK	SL	RD
				SEE NOTE 6

Figure 2: Circuit Label, Model 575 Type 30

555 & 575 TYPE MODULAR TELEPHONE CIRCUIT

183930-101

- NOTES
1. FOR MANUAL SERVICE: REPLACE DIAL WITH DUMMY PLUG ASSEMBLY AND TRANSFER SLATE-WHITE SWITCH LEAD TO RR TERMINAL ON NETWORK. WHEN HANDSET IS REMOVED FROM CRADLE CONTACT BREAK.
 2. WHEN TURN SPRING ASSEMBLY IS OPERATED, CONTACTS p4 SHALL MAKE BEFORE CONTACTS jk AND lm BREAK. FOLLOWING THIS, BREAKS h'j AND mn SHALL MAKE BEFORE CONTACTS BREAK.
 3. TO PERMANENTLY SILENCE RINGER: TAPE AND STORE RED RINGER LEAD.
 4. RINGER CUT-OFF CONTROL BY CUSTOMER: BEND STOP NEXT TO DETENT ON RINGER VOLUME CONTROL SO THAT IT COMPLETELY CLEARS THE RIM OF THE RINGER FRAME. THIS PROVIDES A FURTHER POSITION ON THE VOLUME CONTROL WHICH PREVENTS ARMATURE MOVEMENT.
 5. FOR QTR MODULAR TELEPHONE, HANDSET AND ONE END OF DESK STAND CORD IS HARD WIRED TO TELEPHONE BASE.
 6. TAPED & STORED EXCEPT FOR 16-25 HZ RINGERS WHICH CONNECT SAME AS BIASED RINGER.



THIS RINGER IS SHIPPED FROM THE FACTORY WITH THE BIAS SPRING IN THE HIGH BIAS POSITION. THE RINGER IS ADJUSTED TO RING AT 77 VOLTS AT 20 HZ IN THE HIGH BIAS POSITION. FOR LOWER VOLTAGES AND 30 HZ RINGING, THE BIAS SPRING MAY REQUIRE MOVING TO THE LOW BIAS POSITION.

RINGER CONNECTION			
CONNECTIONS AT NETWORK AND TERMINAL BOARD			
RINGER TYPE		156-157 F. S.	
TERMINAL BOARD	NETWORK	TERMINAL BOARD	NETWORK
1	2	K	A
RD	BK	SL	RD
		RD	BK

7
ISSUE NO.

Figure 3: Circuit Label, Model 575 Type 60

2-LINE, PUSHBUTTON DIAL, DESK TELEPHONES

GENERAL DESCRIPTION

	CONTENTS	PAGE
1.	GENERAL DESCRIPTION	1
	MODEL 2575** () 30	2
	MODEL 2575** () 60	2
2.	INSTALLATION	2
3.	MAINTENANCE	3

1. GENERAL DESCRIPTION

1.01 This document covers the 2-line, pushbutton dial, desk telephones. (See Figure 1.) A general description as well as information that is peculiar to 2-line, pushbutton dial, desk telephones is included.

1.02 This section is reissued to remove manufacturing discontinued versions of the telephone and to add feature codes for the full-modular (M) version telephones.

Note: Ordering information for manufacturing discontinued telephones has been removed; however, descriptive information has been retained as a reference for telephones still in service.

1.03 A replacement parts list and an exploded-view drawing for the telephones are contained in Section 50-575-104. The circuit labels appear in Section 50-575-105. Related documents of the CORTELCO Telephone Apparatus Practices Manual provide information on components.

1.04 The Model 2575 desk telephones are 2-line, pushbutton dial, anti-sidetone type units that operate efficiently over a wide range of loop resistances and line impedances. These instruments are equipped with a turn-and-push key (located on the front of the housing) that permits either of two lines to be selected by turning the key from one position to the other. The push feature of the key provides for signaling if required. These telephones are also equipped with a hold switch (located in the left-hand



Figure 1: 2-Line, Pushbutton Dial, Desk Telephone

cradle plunger) that permits either of the two lines to be placed on hold by pulling up on the left-hand cradle plunger. Restoring the handset to the cradle will release the hold switch. The ringer is connected to line 1; a separate ringer must be provided if signaling is required for line 2.

1.05 The Model 2575 desk telephones are identified by a coded label affixed to the bottom of the base plate. Refer to ordering information in Table A for an explanation of each code number and a list of available versions and features.

1.06 Two-line telephones are manufactured as conventional, quarter-modular, or full-modular. These versions are designated by a code letter that is placed in front of the ringer code letters in the order number of the telephone. (Refer to Table A.)

1.07 Conventional telephones (no longer available) include a hard-wired handset cord and a hard-wired line cord. This version is designated by the code letter O.

TABLE A
ORDERING INFORMATION - TELEPHONES

CODE NUMBERS									
TELEPHONE CODE NUMBERS ARE FORMED IN SIX STEPS AS FOLLOWS:									
(1) Type of Instrument (See Part 1)	2575	15	M	BA	60	M			
(2) Color (See Part 2)									
(3) Version (See Part 3)									
(4) Ringer (See Part 4)									
(5) Special Feature (See Part 5)									
(6) Dial (See Part 6)									
PART 1 TYPE OF INSTRUMENT									
CODE	DESCRIPTION	COLOR OFFERED	VERSION OFFERED	RINGER OFFERED	FEATURE OFFERED	DIAL OFFERED			
2575	2-Line Pushbutton Dial	00, 09, 13, 15, 44, And 45	M	BA	60	M			
REFER TO INDIVIDUAL UNIT DESCRIPTION FOR COMPLETE DESCRIPTION OF FEATURE COMBINATIONS									
PART 2 COLORS		PART 3 VERSIONS		PART 4 RINGERS		PART 5 SPECIAL FEATURES		PART 6 DIALS	
CODE	COLORS	CODE	VERSIONS	CODE	RINGERS	CODE	SPECIAL FEATURES	CODE	DIAL
00	Black	M	Modular	BA	Straight-Line	60	Equipped With A 6-Conductor, Silver Satin Modular Line Cord	M	Metropolitan (Letters & Numerals)
09	Ivory								
13	Beige								
15	White								
44	Light Ash								
45	Cocoa Brown								

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1.08 Quarter-modular versions (no longer available) include a hard-wired handset cord and a line cord hard-wired to the base and terminated in a modular plug for connection to a modular jack. This version is designated by the code letter Q.

1.09 Full-modular version telephones are available with or without a modular handset cord and a modular line cord. However, all full-modular version telephones are equipped with jacks to accept the plugs of a modular handset cord and a modular line cord. The full-modular version of the telephone with both a modular handset cord and a modular line cord, terminated on each end with modular plugs, is designated by the code letter M. The full-modular version without a modular handset cord and a modular line cord (no longer available) is designated by the code letter F.

1.10 Variations of the Model 2575 desk telephones are described in the following paragraphs.

Circuit label drawings for these telephones are contained in Section 50-575-105.

MODEL 2575 () 30**

1.11 The Model 2575** () 30 is a 2-line, rotary dial, desk telephone. It provides no additional outstanding features and is equipped with a 6-conductor line cord.

MODEL 2575 () 60**

1.12 The Model 2575** () 60 is the same as the Model 2575** () 30 with the exception that it is a modular version telephone.

2. INSTALLATION

2.01 Since modular versions of these telephones are equipped with modular plugs, installation

consists of inserting this plug into an available wall jack. Refer to the appropriate circuit label for installation wiring of non-modular units and to the general installation section of the CORTELCO Telephone Apparatus Practices Manual.

3. MAINTENANCE

3.01 For general maintenance information, refer to the general maintenance section of the CORTELCO Telephone Apparatus Practices Manual. For a pictorial view and parts list, refer to Section 50-575-104.

2-LINE, PUSHBUTTON DIAL, DESK TELEPHONES

REPLACEMENT PARTS

1. GENERAL

1.01 This document covers the 2-line, pushbutton dial, desk telephone. (See Figure 1.) An exploded-view drawing of the telephone with the major assembly groups (see Figure 2) and a replacement parts list (see Table A) are included.

1.02 This section is reissued for the following reasons:

(a) Issue 3 adds feature codes for the full-modular (M) version of the 2-line, pushbutton dial, desk telephones. Conventional (O), quarter-modular (Q), and full-modular (F) versions of the 2-line, pushbutton dial, desk telephones have been manufacturing discontinued as well as the following:

- (1) Feature code 30 telephones.
- (2) Color codes 05 and 43.
- (3) Regular (R) dial telephones.
- (4) Less ringer (LR) telephones.

(b) Issue 2 corrected errors in the original issue.

1.03 For additional information on description and installation of the telephones, refer to Section

50-575-103. The circuit labels appear in Section 50-575-105. Related documents of the CORTELCO Telephone Apparatus Practices Manual provide information on components.

1.04 The Model 2575 desk telephones are 2-line, pushbutton dial, anti-sidetone type units that operate efficiently over a wide range of loop resistances and line impedances. A turn-and-push key permits either of two lines to be selected by turning the key from one position to the other. The push feature of the key provides a set of normally-open contacts for signaling if required. These telephones are also equipped with a hold switch (located in the left-hand cradle plunger) which permits either of the two lines to be placed on hold by pulling up on the left-hand cradle plunger. Restoring the handset to the cradle will release the hold switch. The ringer is connected to line 1; a separate ringer must be provided if signaling is required for line 2.

1.05 The Model 2575 desk telephones are identified by a coded label affixed to the bottom of the base plate. Refer to Section 50-575-103 of the CORTELCO Telephone Apparatus Practices Manual for ordering information of complete telephones and for an explanation of each code number.



Figure 1: 2-Line, Pushbutton Dial, Desk Telephone

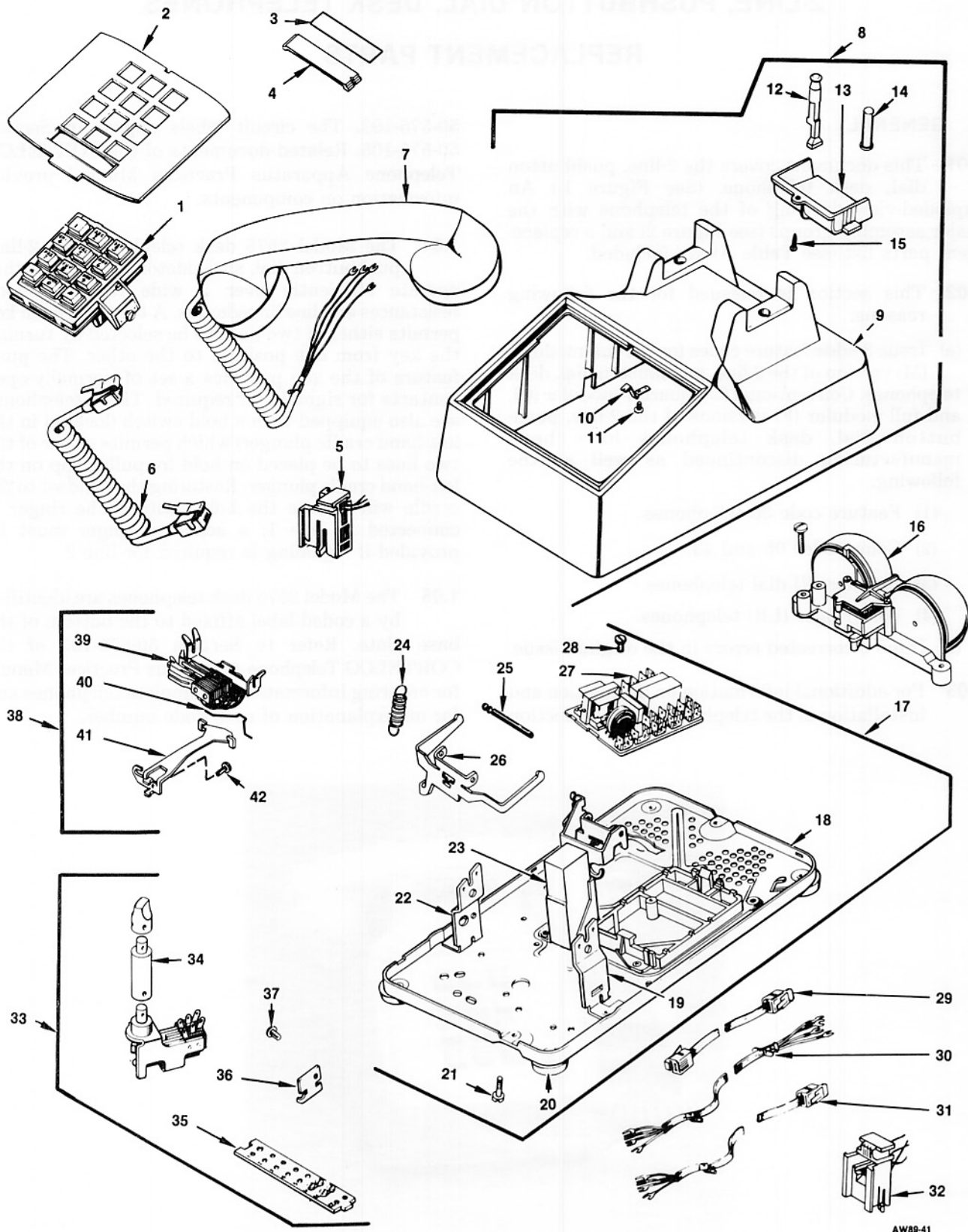


Figure 2: 2-Line, Pushbutton Dial, Desk Telephone, Exploded View

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TABLE A
REPLACEMENT PARTS LIST

INDEX NO	PART NUMBER	DESCRIPTION	QUANTITY USED	
			2575/30	2575/60
		2-Line, Pushbutton Dial, Desk Telephone		
1	004200-EPG	Dial Assembly, Pushbutton Digital, Metropolitan (Letters And Numerals) ^{1, 5}	—	1
1	004200-OPG	Dial Assembly, Pushbutton Digital, Metropolitan (Letters And Numerals) ¹	1	1
1	004200-OPD	Dial Assembly, Pushbutton Digital, Regular (Numerals Only) ^{1, 2}	1	—
1	003200-OPD	Dial Assembly, Pushbutton Tel-Touch, Regular (Numerals Only) ^{1, 3}	1	—
2	183139-0**	Faceplate	1	1
3	087514-101	Retainer, Number Card	1	1
4	087513-101	Card, Number	1	1
	087513-102	Card, Number, Strip Of 6 (Not Shown) ⁴	—	—
5	182946-101	Jack Assembly, Handset Cord, Modular	—	1
6	9018**-072	Cord, Handset, Modular	—	1
7	0065**-0C2	Handset Assembly, Nonmodular ^{1, 3}	1	1
7	0065**-0M2	Handset Assembly, Modular ¹	—	1
8	184423-0**	Housing And Plunger Assembly	1	1
8	183925-0**	Housing And Plunger Assembly, Full-Modular	—	1
9	184399-0**	Housing	1	1
9	182825-0**	Housing, Full-Modular	—	1
10	086143-101	Clip, Faceplate	1	1
11	096006-102	Screw, Faceplate Clip	1	1
12	079101-102	Plunger, Hold Switch	1	1
13	079606-0**	Plunger, Retainer	1	1
14	079603-102	Plunger, Cradle Switch	1	1
15	075407-102	Screw, Plunger Retainer	1	1
16	000130-OBA	Ringer, 4-Wire (With ANI) ^{1, 3, 6}	1	1
16	000130-NBA	Ringer, 4-Wire (With ANI) ^{1, 6}	—	1
16	000130-SBA	Ringer, 2-Wire (Less ANI) ^{1, 3, 7}	1	1
16	000130-PBA	Ringer, 2-Wire (Less ANI) ^{1, 7}	1	1
	095992-102	Screw, Ringer Mounting	2	2
17	075338-116	Base Assembly	1	1
18	075327-101	Plate, Base	1	1
19	086145-101	Bracket, Dial (R. H.)	1	1
20	182337-101	Foot	4	4
	082486-102	Rivet, Foot (Not Shown)	4	4
21	075486-101	Screw, Cabinet Locking	2	2
22	086146-101	Bracket, Dial (L. H.)	1	1
23	075300-101	Cradle Switch Assembly ¹	1	1
	075309-101	Spring Nest Assembly (Not Shown)	1	1
24	075307-101	Spring, Cradle Return	1	1
25	075308-101	Pin, Pivot	1	1
26	079602-101	Arm, Operating	1	1
27	181427-102	PC Network (#183070-102) ¹	1	1
28	096407-103	Screw, Network Mounting	1	1
29	183438-084	Cord, Mounting, Full-Modular	—	1
30	184358-066	Cord, Mounting, Nonmodular ⁴	1	—
31	183940-084	Cord, Mounting, Quarter-Modular ⁴	—	1
32	182856-102	Jack Assembly, Line Cord, Modular	—	1

TABLE A
REPLACEMENT PARTS LIST (Cont)

INDEX NO	PART NUMBER	DESCRIPTION	QUANTITY USED	
			2575/30	2575/60
		2-Line, Pushbutton Dial, Desk Telephone		
33	079453-112	Key, Switch And Terminal Board Assembly	1	1
34	079453-112	Key Assembly, Turn-And-Push	1	1
35	079467-107	Terminal Board	1	1
36	086103-101	Plate, Mounting	1	1
37	180219-101	Screw, Mounting Plate	1	1
38	082577-101	Hold Switch Assembly	1	1
39	082581-101	Spring Assembly	1	1
40	079624-101	Spring, Retainer	1	1
41	079605-101	Bracket, Mounting	1	1
42	069020-103	Screw, B. H. M.	1	1

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Notes:

** Substitute 2-Digit Color Code When Ordering.

¹ Refer To Components Parts Section Of This Manual For Assembly Parts List.

² The 004200-OPD Dial Replaces The 003200-OPD Dial.

³ This Product Has Been Discontinued, But Is Included To Provide A Source Of Information For Telephones Still In Service.

⁴ This Part Must Be Ordered Separately.

⁵ This 004200-EPG Dial Replaces The 004200-OPG Dial.

⁶ The 000130-NBA Ringer Replaces The 000130-OBA Ringer.

⁷ The 000130-PBA Ringer Replaces The 000130-SBA Ringer.

2-LINE, PUSHBUTTON DIAL, DESK TELEPHONES

CIRCUIT LABELS

1. GENERAL

1.01 This document covers the 2-line, pushbutton dial, desk telephones. (See Figure 1.) The circuit labels for the various models of 2-line, pushbutton dial, desk telephones and the associated features available in each are included in this document. (See Table A.)



AW86-345

Figure 1: 2-Line, Pushbutton Dial, Desk Telephone

1.02 This section is reissued to conform to the CORTELCO Practices format. Issue 2 provided the latest issue of circuit labels for the 2-line, pushbutton dial, desk telephones.

Note: Some versions of telephones have been manufacturing discontinued; however, circuit labels have been retained as a reference for telephones still in service.

1.03 For additional information on description and installation of the telephones, refer to Section 50-575-103. A replacement parts list and an exploded-view drawing for the telephones are contained in Section 50-575-104. Related documents of the CORTELCO Telephone Apparatus Practices Manual provide information on components.

1.04 The Model 2575 desk telephones are 2-line, pushbutton dial, anti-sidetone type units that operate efficiently over a wide range of loop resistances and line impedances.

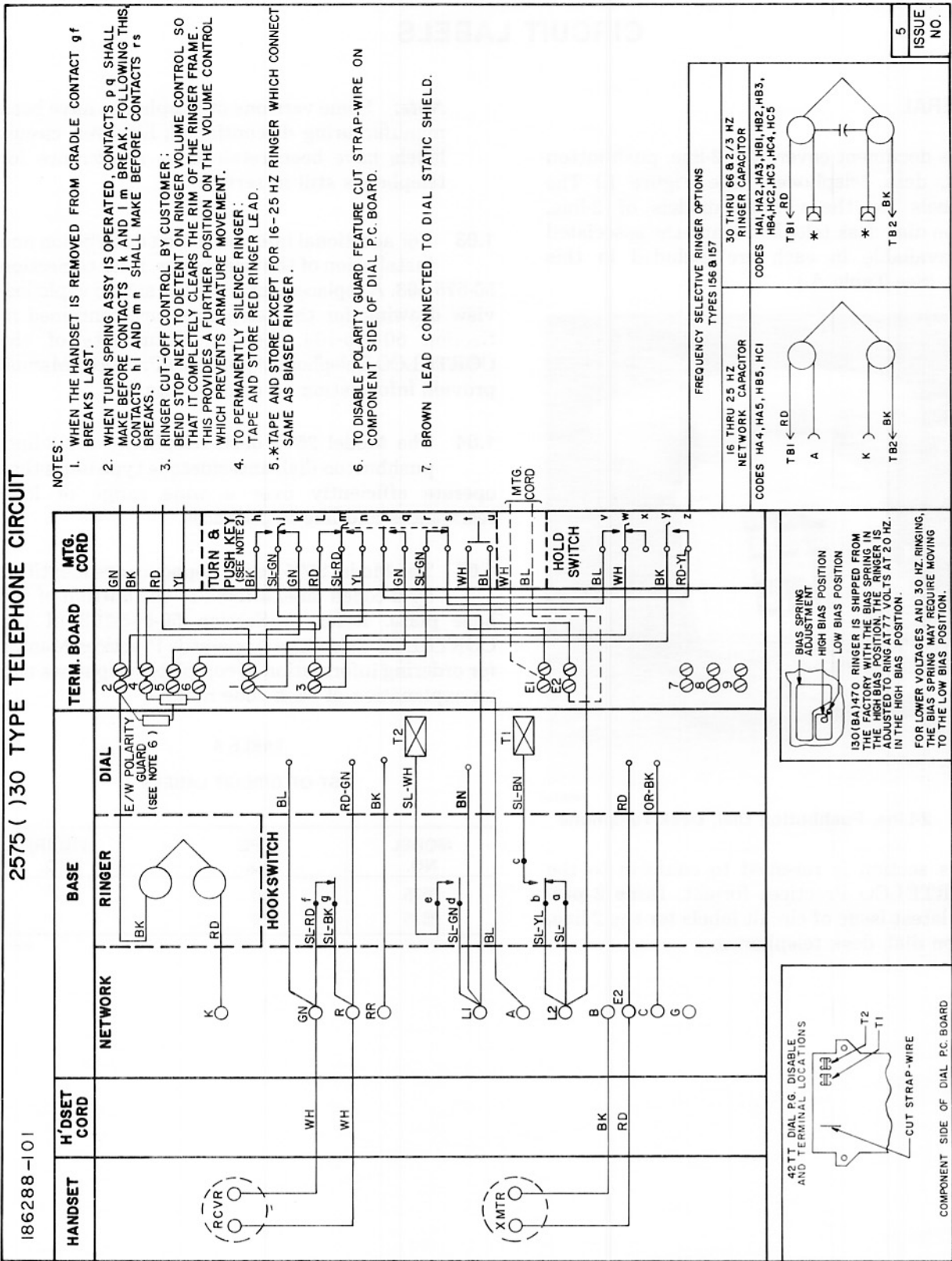
1.05 The Model 2575 desk telephones are identified by a coded label affixed to the bottom of the base plate. Refer to Section 50-575-103 of the CORTELCO Telephone Apparatus Practices Manual for ordering information of complete telephones and an explanation of each code number.

TABLE A
LIST OF CIRCUIT LABELS

MODEL NO.	TYPE NO.	FIGURE NO.
2575	30	2
2575	60	3

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2575 () 30 TYPE TELEPHONE CIRCUIT



- NOTES:
1. WHEN THE HANDSET IS REMOVED FROM CRADLE CONTACT q f BREAKS LAST.
 2. WHEN TURN SPRING ASSY IS OPERATED, CONTACTS p q SHALL MAKE BEFORE CONTACTS j k AND l m BREAK. FOLLOWING THIS CONTACTS h i AND m n SHALL MAKE BEFORE CONTACTS r s BREAKS.
 3. RINGER CUT-OFF CONTROL BY CUSTOMER: BEND STOP NEXT TO DETENT ON RINGER VOLUME CONTROL SO THAT IT COMPLETELY CLEARS THE RIM OF THE RINGER FRAME. THIS PROVIDES A FURTHER POSITION ON THE VOLUME CONTROL WHICH PREVENTS ARMATURE MOVEMENT.
 4. TO PERMANENTLY SILENCE RINGER: TAPE AND STORE RED RINGER LEAD.
 5. *TAPE AND STORE EXCEPT FOR 16-25 HZ RINGER WHICH CONNECT SAME AS BIASED RINGER.
 6. TO DISABLE POLARITY GUARD FEATURE CUT STRAP-WIRE ON COMPONENT SIDE OF DIAL P.C. BOARD.
 7. BROWN LEAD CONNECTED TO DIAL STATIC SHIELD.

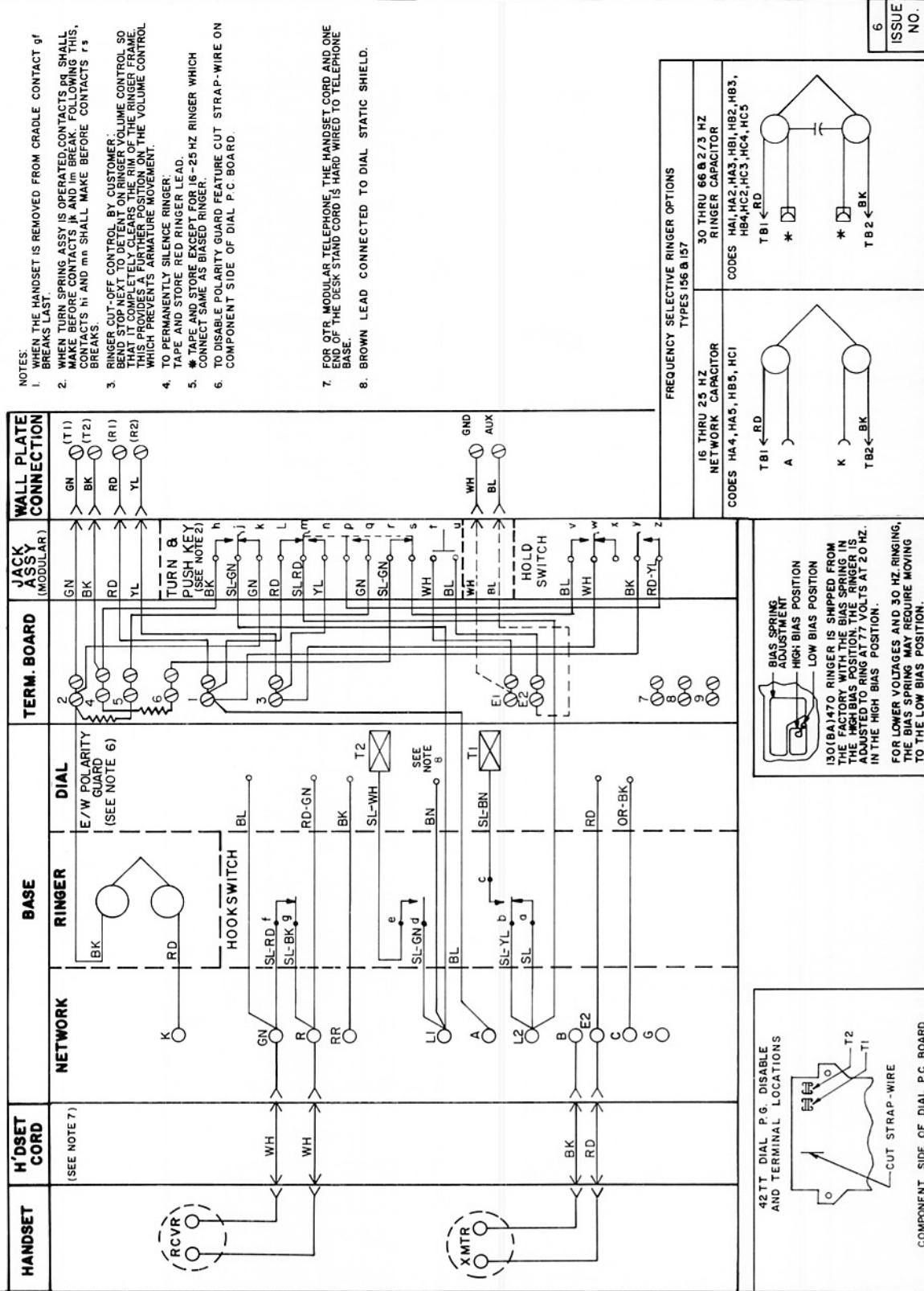
FREQUENCY SELECTIVE RINGER OPTIONS	
16 THRU 25 HZ NETWORK CAPACITOR CODES HA4, HA5, HB5, HC1	
30 THRU 66 & 2/3 HZ RINGER CAPACITOR CODES HA1, HA2, HA3, HB1, HB2, HB3, HB4, HC2, HC3, HC4, HC5	

5
ISSUE NO.

Figure 2: Circuit Label, Model 2575 Type 30

2575 TYPE MODULAR TELEPHONE CIRCUIT

186287-101



- NOTES:
1. WHEN THE HANDSET IS REMOVED FROM CRADLE CONTACT OF BREAKS LAST.
 2. WHEN TURN SPRING ASSY IS OPERATED CONTACTS AS SHALL MAKE BEFORE CONTACTS *h* AND *m* BREAK. FOLLOWING THIS, CONTACTS *h* AND *m* SHALL MAKE BEFORE CONTACTS *r* & *s* BREAKS.
 3. RINGER CUT-OFF CONTROL BY CUSTOMER. BEND STOP NEXT TO DETENT ON RINGER VOLUME CONTROL SO THAT IT COMPLETELY CLEARS THE RIM OF THE RINGER FRAME. THIS PROVIDES FURTHER POSITION ON THE VOLUME CONTROL WHICH PREVENTS AN UNDESIRABLE MOVEMENT.
 4. TO PERMANENTLY SILENCE RINGER. TAPE AND STORE RED RINGER LEAD.
 5. * TAPE AND STORE EXCEPT FOR 16-25 HZ RINGER WHICH CONNECT SAME AS BIASED RINGER.
 6. TO DISABLE POLARITY GUARD FEATURE CUT STRAP-WIRE ON COMPONENT SIDE OF DIAL P.C BOARD.
 7. FOR OTR. MODULAR TELEPHONE, THE HANDSET CORD AND ONE END OF THE DESK STAND CORD IS HARD WIRED TO TELEPHONE BASE.
 8. BROWN LEAD CONNECTED TO DIAL STATIC SHIELD.

BIAS SPRING ADJUSTMENT
 HIGH BIAS POSITION
 LOW BIAS POSITION
 1301BA1470 RINGER IS SHIPPED FROM THE FACTORY WITH THE BIAS SPRING IN THE HIGH BIAS POSITION. THE RINGER IS ADJUSTED TO RING AT 77 VOLTS AT 20 HZ. IN THE HIGH BIAS POSITION.
 FOR LOWER VOLTAGES AND 30 HZ RINGING, THE BIAS SPRING MAY REQUIRE MOVING TO THE LOW BIAS POSITION.

42 TT DIAL P.G. DISABLE AND TERMINAL LOCATIONS
 T1
 T2
 CUT STRAP-WIRE
 COMPONENT SIDE OF DIAL P.C. BOARD

FREQUENCY SELECTIVE RINGER OPTIONS	
16 THRU 25 HZ NETWORK CAPACITOR	30 THRU 66 Hz RINGER CAPACITOR
CODES HA4, HA5, HB5, HC1	CODES HA1, HA2, HA3, HB1, HB2, HB3, HB4, HC2, HC3, HC4, HC5
TBI ← RD A	TBI ← RD *
K	* T B2 ← BK
T B2 ← BK	

6
ISSUE NO.

Figure 3: Circuit Label, Model 2575 Type 60

TEL-TREX, SINGLE-LINE, PUSHBUTTON DIAL, DESK/WALL TELEPHONES WITH TONE/PULSE SWITCHABLE DIALING, MEMORY, AND LOCAL HOLD

GENERAL DESCRIPTION

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3. MAINTENANCE	3
4. OPERATION	3
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B. Local Hold	3
C. DIP Switches	3

1. GENERAL DESCRIPTION

1.01 This document covers the Tel-Trex, single-line, pushbutton dial, desk/wall telephones. (See Figure 1.) A general description as well as information peculiar to the Tel-Trex, single-line, pushbutton dial, desk/wall telephones is included.

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

1.03 A replacement parts list and an exploded-view drawing for the telephones are contained in Section 50-980-101. Circuit labels are not provided for the telephones. Related documents of the CORTELCO Telephone Apparatus Practices Manual provide information on components.

1.04 The Tel-Trex desk/wall telephones are single-line, pushbutton dial, anti-sidetone units that operate efficiently over a wide range of loop resistances and line impedances. The telephones are compatible with inductively-coupled hearing aid devices. The telephones can be used in Centrex/PABX applications.

1.05 The Tel-Trex telephones are identified by a coded label affixed to the bottom of the telephone. Refer to ordering information in Table A for an explanation of each code number and available features.



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Figure 1: Tel-Trex, Single-Line, Pushbutton Dial, Desk/Wall Telephone

1.06 The Tel-Trex telephones are full-modular version telephones. Full-modular version telephones are equipped with a modular handset cord and a modular line cord for desk mounting. The modular handset cord and the modular line cord are terminated on each end with modular plugs. This version is designated by the code letter M. (Refer to Table A.)

1.07 A Tel-Trex telephone can be wall mounted using the optional Wall Mounting Kit 600006-546-002. Related documents of the CORTELCO Telephone Apparatus Practices Manual provide information on the wall mounting kit.

1.08 The Model 2980 Tel-Trex telephone is described in the following paragraphs.

MODEL 2980** () 27

1.09 The Model 2980 is a single-line, pushbutton dial, desk/wall telephone equipped with

TABLE A
ORDERING INFORMATION - TELEPHONES

CODE NUMBERS									
TELEPHONE CODE NUMBERS ARE FORMED IN SIX STEPS AS FOLLOWS:									
(1) Type of Instrument (See Part 1)	2980	75	M	OE	27	S			
(2) Color (See Part 2)									
(3) Version (See Part 3)									
(4) Ringer (See Part 4)									
(5) Special Feature (See Part 5)									
(6) Dial (See Part 6)									
PART 1 TYPE OF INSTRUMENT									
CODE	DESCRIPTION	COLOR OFFERED	VERSION OFFERED	RINGER OFFERED	FEATURE OFFERED	DIAL OFFERED			
2980	Tel-Trex, Single-Line, Pushbutton Dial, Desk/Wall Telephone With Tone/Pulse Switchable Dialing, Memory, And Local Hold	75	M	OE	27	S			
REFER TO INDIVIDUAL UNIT DESCRIPTION FOR COMPLETE DESCRIPTION OF FEATURE COMBINATIONS									
PART 2 COLORS		PART 3 VERSIONS		PART 4 RINGERS		PART 5 SPECIAL FEATURES		PART 6 DIALS	
CODE	COLORS	CODE	VERSIONS	CODE	RINGERS	CODE	SPECIAL FEATURES	CODE	DIAL
75	Pearl Gray	M	Full-Modular (With Cords)	OE	Electronic Ringer	27	Standard With 90-Volt Message Waiting Lamp	S	Repertory (Metropolitan Only)

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Tone/Pulse switchable dialing, timed hookswitch flash, timed line disconnect, automatic dialing, local hold, and message waiting features.

1.10 The TONE button is used to change from Pulse (Tel-Pulse) to Tone (Tel-Touch) dialing.

1.11 The FLASH button is used in PABX/Centrex applications to provide a timed hookswitch flash. The timed hookswitch flash is activated when the station user presses the FLASH button. The line is momentarily disconnected for 600 milliseconds.

1.12 The RLSE button is used to provide a timed line disconnect. The timed line disconnect is activated when the station user presses and releases the RLSE button. The line is disconnected and dial tone is returned to the station. Line disconnect duration is determined by DIP switch settings.

1.13 The 20 memory location buttons (1-16 and A-D) are used to store programmed numbers

or functions. The Model 2980 telephones are equipped with a long-life lithium battery to protect memory location numbers or functions.

1.14 When storing a number for automatic dialing, the PAUSE button is used to store a 4-second pause, and the FLASH button is used to store a 600-millisecond line disconnect. The REDIAL button is used to automatically redial the last number dialed.

1.15 The HOLD button is used to put a call on local hold to be retrieved with other single-line telephones in parallel. The hold feature is activated after the station user presses the HOLD button and goes on-hook. The call is placed on local hold and the HOLD indicator will be on.

1.16 The message waiting feature uses a 90-volt lamp. The lamp is for use in PABX/Centrex applications to indicate a waiting message for the station user. It also flashes to indicate an incoming call.

1.17 DIP switches are used to select desired feature options. Feature options controlled by the DIP switches include: timed line disconnect duration for the RLSE button; timed release hookswitch operation; dialing type; and ringer tone. See DIP SWITCHES explanation included in this section.

2. INSTALLATION

2.01 Installation of these telephones consists of inserting the modular line cord plug into an available modular wall jack.

3. MAINTENANCE

3.01 For replacement parts information and for an exploded-view drawing of major assembly groups, refer to Section 50-980-101.

4. OPERATION

A. Automatic Dialing

4.01 A number or function can be stored for automatic dialing and assigned to one of the 20 memory location buttons (1-16 and A-D). To store a number or function for automatic dialing:

- (a) Lift the handset and check for dial tone.
- (b) Press the STORE button.
- (c) Dial the desired number or function (17 digits maximum).
- (d) If desired, store the following functions:
 - (1) Press the FLASH button for a timed hookswitch flash.
 - (2) Press the PAUSE button for a pause.
 - (3) Press the TONE button to change from Pulse to Tone dialing.
- (e) Press a memory location button (1-16 or A-D).
- (f) Place the handset on-hook. To continue storing numbers, press the STORE button and return to step (c).

4.02 To access a stored number or function:

- (a) Lift the handset and check for dial tone.

- (b) Press the desired memory location button (1-16 or A-D).

4.03 To automatically redial the last number dialed:

- (a) Lift the handset and check for dial tone.
- (b) Press the REDIAL button.

B. Local Hold

4.04 To place a call on local hold:

- (a) Remain off-hook with an active call.
- (b) Press the HOLD button. The call remains active.
- (c) Place the handset on-hook. The HOLD button indicator is on. The call is on local hold.

4.05 To return to a call on local hold, lift the handset. The HOLD button indicator will be off.

C. DIP Switches

4.06 The six DIP switches located on the side of the telephone are used to select desired feature options. (See Table B for required settings.) Each switch can be moved up to the on position or down to the off position by using a ball point pen.

**TABLE B
DIP SWITCH SETTINGS**

FEATURE	DESIRED OPTION	REQUIRED SETTING	
Timed Line Disconnect (Release Button)	3 Seconds	Switch 1 Off	Switch 2 Off
	1 Second	On	Off
	900 Milliseconds	On	On
	2 Seconds	Off	On
Hookswitch Operation	Timed Release	Switch 3 On	
	Normal	Off	
Dialing Type	Tone	Switch 4 On	
	Pulse	Off	
Ringer Tone Frequency	High	Switch 5 On	Switch 6 Off
	Medium	Off	On
	Low	Off	Off

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TEL-TREX, SINGLE-LINE, PUSHBUTTON DIAL, DESK/WALL TELEPHONES WITH TONE/PULSE SWITCH, MEMORY, AND LOCAL HOLD REPLACEMENT PARTS

1. GENERAL

1.01 This document covers the Tel-Trex, single-line, pushbutton dial, desk/wall telephones. (See Figure 1.) An exploded-view drawing of the telephone with major assembly groups (see Figure 2) and a replacement parts list (see Table A) are included.

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

1.03 For additional information on description and installation of the telephones, refer to Section 50-980-100. Circuit labels are not provided for the telephones. Related documents of the CORTELCO Telephone Apparatus Practices Manual provide information on components.

1.04 The Tel-Trex desk/wall telephones are single-line, pushbutton dial, anti-sidetone units that operate efficiently over a wide range of loop resistances and line impedances. The telephones are compatible with inductively-coupled hearing aid devices. The telephones can be used in Centrex/PABX applications.

1.05 The Tel-Trex telephones are identified by a coded label affixed to the bottom of the telephone. Refer to Section 50-980-100 of the CORTELCO Telephone Apparatus Practices Manual for ordering information of complete telephones and for an explanation of each code number.



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Figure 1: Tel-Trex, Single-Line, Pushbutton Dial, Desk/Wall Telephone

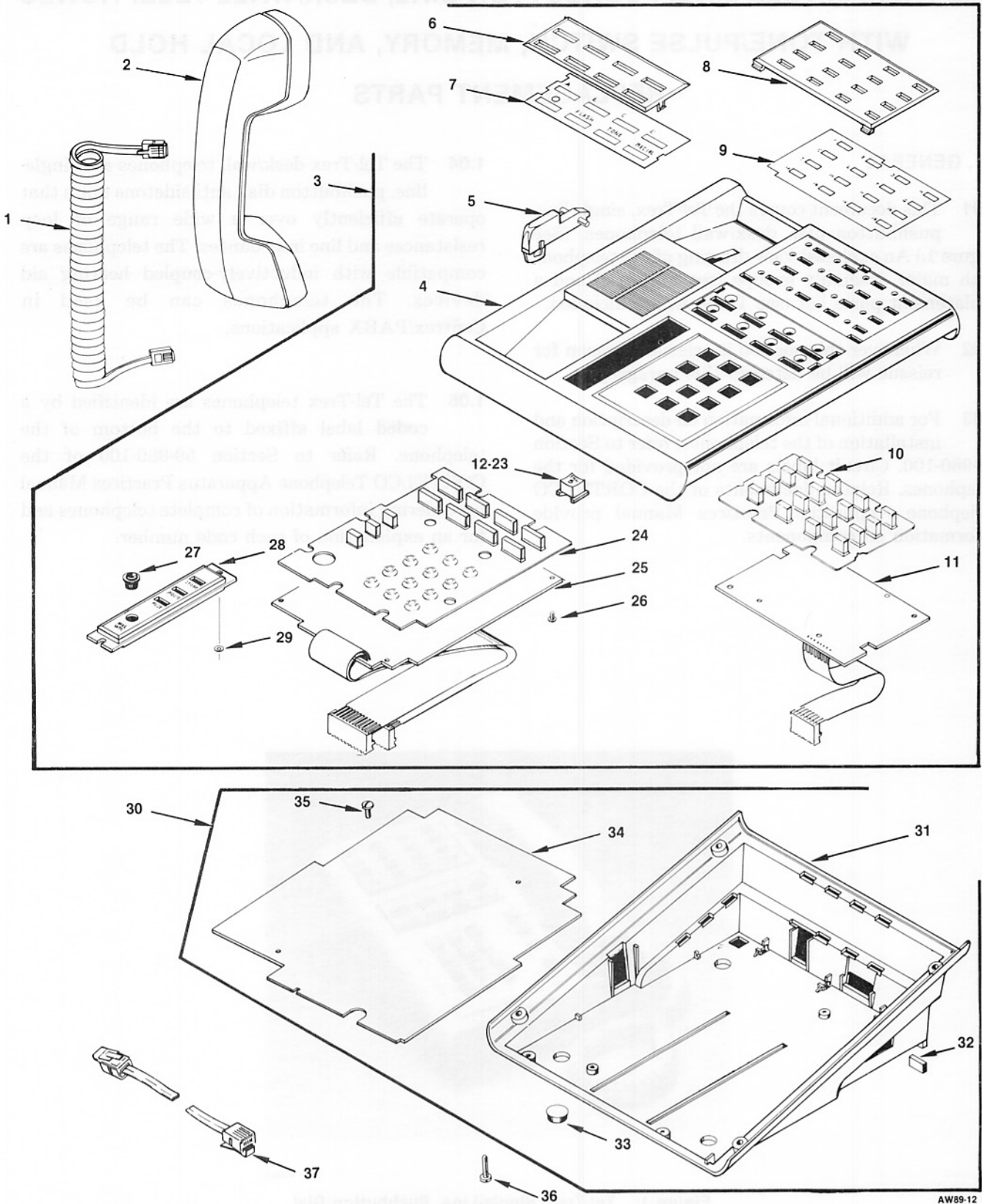


Figure 2: Tel-Trex, Single-Line, Pushbutton Dial, Desk/Wall Telephone, Exploded View

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TABLE A
REPLACEMENT PARTS LIST

INDEX NO.	PART NUMBER	DESCRIPTION	QUANTITY USED
		Tel-Trex, Single-Line, Pushbutton Dial, Desk/Wall Telephone With Tone/Pulse Switch, Memory, and Local Hold	2980/27
1	9018**-108	Cord, 9-Foot Handset	1
2	187402-1**	Handset Assembly ¹	1
3	187573-0**	Cover Assembly	1
4	604284-602-3**	Cover	1
5	600041-619-002	Plunger, Hookswitch	1
6	187577-101	Lens, 8-Button	1
7	187578-101	Button Label, 8-Button	1
8	600900-612-001	Cover, 16-Button	1
9	187417-101	Button Label, 16-Button	1
10	600087-643-002	Silicone Switchplate, 16-Button	1
11	187620-101	PCB Assembly, 16-Button Keypad	1
12	184476-101	Button ("1")	1
13	184476-102	Button ("2")	1
14	184476-103	Button ("3")	1
15	184476-104	Button ("4")	1
16	184476-105	Button ("5")	1
17	184476-106	Button ("6")	1
18	184476-107	Button ("7")	1
19	184476-108	Button ("8")	1
20	184476-109	Button ("9")	1
21	184476-110	Button ("*")	1
22	184476-111	Button ("0")	1
23	184476-112	Button ("#")	1
24	187413-101	Silicone Switchplate, Keypad	1
25	187615-101	PCB Assembly, Keypad	1
26	96407-103	Screw, Pan-Head Type B	14
27	187676-101	Assembly, Lens Indicator	1
28	187570-102	Bezel	1
29	600125-212-002	Fastener, Clip "Push-On"	2
30	600015-546-007	Base Assembly	1
31	187572-101	Base	1
32	604480-602-001	Foot, Rubber	2
33	184549-101	Foot, Rubber	2
34	187610-101	PCB Assembly, Voice/Data	1
35	181145-101	Screw, Pan-Head Type B	2
36	181145-105	Screw, Pan-Head Type B	4
37	182827-084	Cord, 4-Conductor Line (Modular)	1

NOTES:

**Substitute 2-Digit Color Code When Ordering.

¹ Refer to Component Parts Section Of This Manual For Assembly Parts List.

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