

## TELEPHONE SETS - 3504B/C

### IDENTIFICATION, INSTALLATION, CONNECTIONS, AND MAINTENANCE



Fig. 1—3504-Type Telephone Set

#### 1. GENERAL

1.01 The 3504B/C telephone set (Fig. 1) is intended solely for use with specially engineered lines—**not for general telephone use.**

1.02 This section is reissued to:

- Add the KS-20419 buzzer (optional)
- Add 425K network

Since this reissue covers a general revision, arrows ordinarily used to indicate changes have been omitted.

#### 2. IDENTIFICATION

##### PURPOSE

To provide a desk-type, 16-button TOUCH-TONE® dial telephone set arranged for 2- and 4-wire service.

#### ORDERING GUIDE

Set, Telephone, 3504B-\*

Set, Telephone, 3504C-\*

##### (a) Replaceable Components

- Cord, Mounting, D24E-\*
- Dial, 66A3A (3504B telephone set)
- Dial, 66A4B (3504C telephone set)
- P-80G9\* Faceplate Assembly
  - P-25E803 Card Retainer
  - P-88J8\* Faceplate
- P-82G6\* Housing
- Ringer, NIA
- Set, Hand, G3Y-\*

\* Refer to Table A for color.

##### (b) Replaceable Optional Components

- Buzzer, KS-8109L2 (ac or dc)
- Buzzer, KS-20419 (10 volt ac only)

#### DESIGN FEATURES

- Single line set
- Common ringer
- Exclusion feature
- "A" lead control
- 4-wire service

**TABLE A**  
**COLOR ORDERING GUIDE\***

TEL SET, MTG CORD, HOUSING, HANDSET COLOR	SUFFIX	COORDINATED FACEPLATE COLOR	SUFFIX
Black	-03	Charcoal	-70
Ivory	-50	Muted Ivory	-80
Moss Green	-51	Lt. Green	-71
Red	-53	Muted Red	-69
Pastel Yellow	-56	Lt. Yellow	-72
White	-58	Lt. Gray	-73
Rose Pink	-59	Muted Pink	-74
Lt. Beige	-60	Muted Beige	-75
Lt. Gray	-61	Charcoal	-70
Aqua Blue	-62	Muted Blue	-76
Turquoise	-64	Muted Turquoise	-77

\* Refer to Section 500-120-100 for promoted colors.

- Dial illumination (3504C)
- AC or DC operated buzzer (optional)
- Speakerphone (optional)
- 2-wire service (optional)

### 3. INSTALLATION

**3.01** Install set in accordance with standard installation procedures.

**3.02** Install the KS-8109L2 buzzer (ac or dc), ordered separately, on the P-29E279 bracket assembly located in rear of set close to the network. Using the two nylon screws and washers furnished, mount the buzzer so that its frame is insulated from the metal bracket.

**3.03** Install the KS-20419 buzzer (10 volt ac only), ordered separately, at any convenient location within the telephone set. Provide mounting screw as required or secure buzzer with an existing screw. Refer to appropriate section in Division 501 for detailed information on KS-20419 buzzer.

**3.04** The set mounting cord is plug-ended to mate with the system cabling connector or 66-type connecting block.

**3.05** Cord tip insulators on the D24E mounting cord must be removed to terminate leads for speakerphone, buzzer, and 2-wire service.



*Do not pull insulators off cord tips. Cut insulators off with electrician scissors or diagonal pliers to prevent breaking conductors or stripping of cord tips.*

### 4. CONNECTIONS

**4.01** The 3504B telephone set is factory-wired for 4-wire service. See Table B for conversion to 2-wire service.

#### 4.02 Connection Index



*No wiring changes other than those specified in this section will be made.*

Table B—Conversion To 2-Wire Service

Table C—Connections For Optional Buzzers

Fig. 2—3504B/C Telephone Sets, Connections

Refer to SD-69449-01 for 4-wire system connections

Refer to SD-69542-01 for 2- and 4-wire speakerphone connections

### 5. MAINTENANCE

- (a) **Replaceable Apparatus** (Refer to Ordering Guide)
- (b) Component parts should be maintained in accordance with section covering the item.
- (c) Plungers, operating bracket switch and switch hook shall move freely without binding or squeaking.

- Clean with KS-2423 cloth moistened with KS-7860 petroleum spirits.

- Lubricate plungers and bearing surfaces with No. 2 or softer graphite pencil.

(d) Clean switch hook contacts when required with a 265C tool. Replace set if other trouble exists in the switch hook assembly.

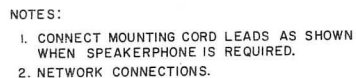
**TABLE B**  
**CONVERSION TO 2-WIRE SERVICE**

LEAD	COLOR	REMOVE FROM TB2	CONNECT TO NET.	INSULATE AND STORE
Line Switch	BK	8	GN	
Dial	W-BL	1	R	
Mtg Cord	Y-BR BR-Y	8 1		• •

**TABLE C**  
**CONNECTIONS FOR OPTIONAL BUZZERS**

BUZZER*	OPERATION	MTG. CORD LEAD	CONNECT MTG CORD LEAD TO
KS-8109L2	AC	BL-V V-BL	Terminal A of buzzer Terminal C of buzzer
	DC	BL-V V-BL	Buzzer frame Terminal C of buzzer
KS-20419	AC	BL-V V-BL	Two spare screw terminals, terminate BUZZER LEADS TO same terminals or use D-161488 connectors

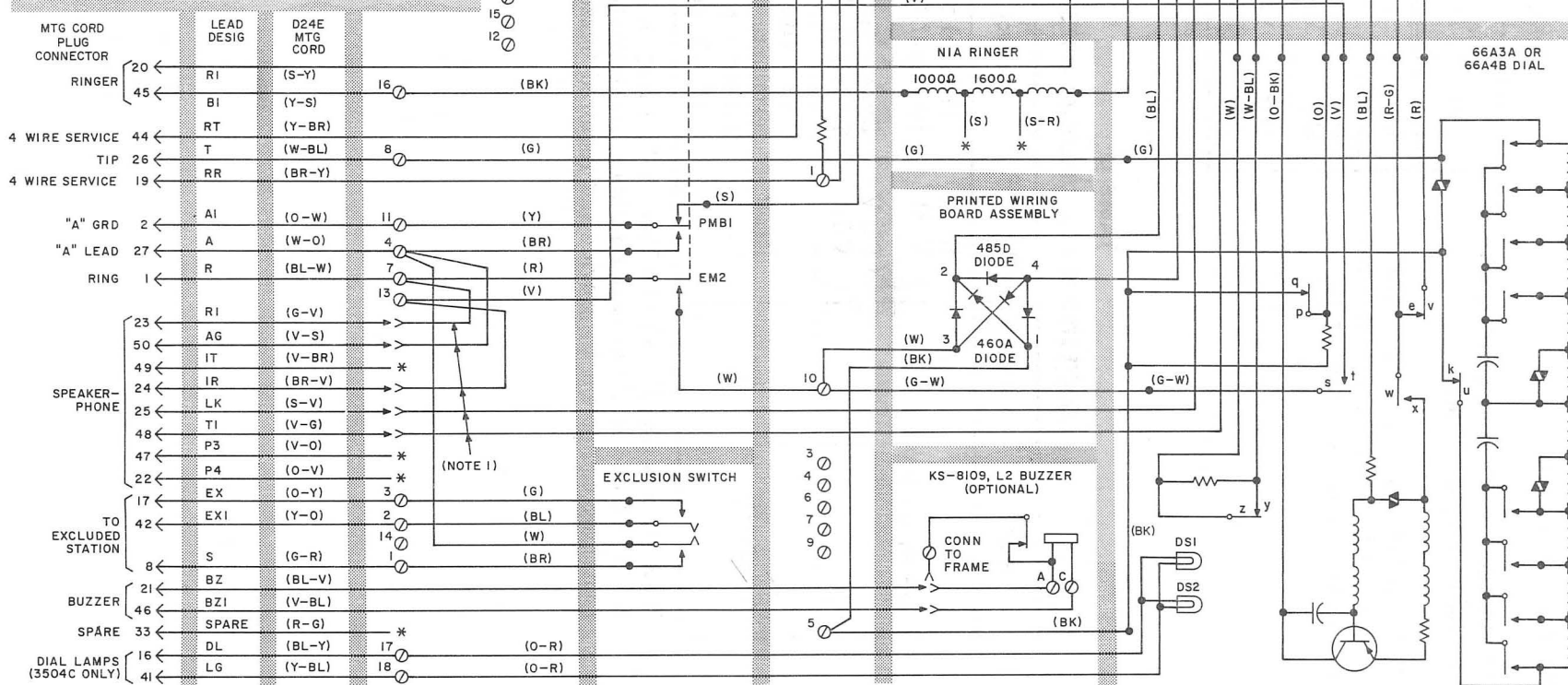
\* Buzzer leads BZ (BL-V) and BZ1 (V-BL) may be connected to the R, R1, or BZ and B, B1 or BZ1 terminals, respectively, at the associated switching equipment to provide the required buzzer operation.



LEAD	COLOR	425G	425K†
LINE SWITCH	(G)	9 ON TB2	T ON NETWORK
DIAL	(R)		
	(W-BL)	1 ON TB2	
	(R-G)	R ON NETWORK	S ON NETWORK

† ADD (W-BL) STRAP FROM S TOR ON NETWORK.

\* INSULATED AND STORED



### Fig. 2—3504B/C Telephone Sets, Connections