SERVICE

2565LK TELEPHONE SETS

1. GENERAL

1.01 This section provides maintenance and connection information for the 2565LK telephone sets. Maintenance information was formerly found in Section 502-525-125. Connection information was formerly found in Section 502-525-437 which is hereby canceled.

2. MAINTENANCE

Replaceable Components

2.01 Field replaceable items are listed under Ordering Guide in the appropriate Reference section in Division 502.

Loose Card Retainers

- 2.02 Current production sets are equipped with P-25E803 and P-269561 card retainers, which cannot be adjusted.
- 2.03 If P-25E785 (MD) card retainer becomes so loose on the faceplate that the number card or designation strip slips, they can be tightened as follows:
 - (1) Remove faceplate from set.
 - (2) Remove card retainer from faceplate.
 - (3) Bend the four arms of the retainer so that more pressure will be applied to the number card and designation strip. The bends should be made approximately 1/2-inch in from the tabs on the ends of the arms and in the opposite direction from the factory bent tabs.
 - (4) Install the card retainer on the faceplate and insert the number card and designation strip.
 - (5) Install faceplate on telephone set.

Note: If adjusting the arms of the retainer does not result in sufficient holding power, replace the card retainer.

Housing

2.04 When removing or replacing housing, guide lower front of housing over pushbuttons. On sets equipped with exclusion, pull exclusion plunger up to its operated position before removing housing. Plunger should also be in upper position when replacing housing. With housing in place, operate plunger several times to insure proper operation.

Lamps and Pushbuttons

- 2.05 Replace cracked pushbuttons or collar assemblies. Plastic parts may be cleaned with a water dampened cloth. *DO NOT USE SOLVENTS*. Lamps should be near associated pushbutton with contact surfaces aligned for maximum illumination.
- **2.06** To replace defective lamp.
 - (1) Remove button and collar assembly.
 - (2) Gently pry lamp from socket with KS-6320 orange stick.
 - (3) Replace lamp, making sure that contact surface on lamp and socket meet.
 - (4) Replace button and collar assembly.

Keys-589-Type

- **2.07** Key contacts may be cleaned using a 265C tool, or adjusted using a 363 tool. When adjusting springs:
 - (a) There should be a minimum clearance of 1/64-inch between contact springs and those parts of the key which do not make contact.

- (b) Normally open contacts should make with perceptible follow on locking keys before key plunger reaches locked position.
- **2.08** Replace key if the following requirements cannot be met:
 - (a) Any locking plunger, when depressed, should on its downstroke release any previously locked plunger.
 - (b) A locking key plunger should not release during downstroke of hold button but should release on the upstroke of the hold button.
 - (c) When any nonlocking or converted locking plunger is released from its operated position, it should return with a snap to the unoperated position.
 - (d) A turnbutton operated plunger, when rotated 90 degrees clockwise, should remain operated. When rotated back counterclockwise, it should be self-restoring the last 30 degrees of rotation to its unoperated position.

Dial

- 2.09 The 35C3A dial will function only when the green lead is positive (+) and the orange-black lead is negative (-). If no tones are heard when a dial button is depressed, check line polarity.
- 2.10 Certain switching functions may require installation of a polarity guard to ensure proper battery polarity to the dial. Install guard as outlined in Reference section in Division 502.



Do not attempt repair of TOUCH-TONE
dials in the field.

Handsets

- **2.11** Where conditions warrant, the G3AR handset supplied with these sets can be replaced with other types as follows:
 - For impaired hearing—G6-type
 - ●For weak speech—G7A
 - ●For noisy location—G8-type

Refer to section in Division 501 for connections of these handsets.

3. CONNECTIONS

- 3.01 These sets are factory-wired for 1A1 or 1A2 KTS, 3-type speakerphone, and individual or common line ringer. They are equipped with hold key and cutoff key. Mounting cord conductors are provided for illuminating the hold key lamp, but the lamp is not provided with the set.
- **3.02** When used with 1A KTS, the set must be modified as shown in Fig. 3.
- 3.03 The H1A ringer leads are wired to terminals RR and RT. Provision is made for mounting ringer or buzzer. By utilizing spare mounting cord conductors, both may be provided. When power failure feature is provided in the KTS, the common audible signal must be wired with capacitor in series.
- 3.04 If speakerphone control unit is located near the telephone set, the mounting cord conductors can be extended to the control unit by using a 149-type adapter or 66E-type connecting block. If control unit is located at key equipment, extend leads through an A25B connector cable or inside wiring cable. Speakerphone connections for the 2565-type telephone sets are shown in Division 512.
- 3.05 When a 2565LK telephone set is multipled with other sets furnishing speakerphone feature, certain control leads must be disconnected, insulated and stored to prevent interference with working circuits. Disconnect either at the telephone set (Fig. 1) or as near the control unit as practicable.
- 3.06 Exclusion can be provided with these sets by the addition of a D-179935 Kit of Parts which must be ordered separately. Exclusion switch can also be used to cutoff ringer or buzzer in set. Connect as shown in Table A.
- 3.07 Cutoff of extension stations, ringers, or buzzer can also be made using the cutoff key on the 589AJ key.
- 3.08 A polarity guard is used only when specified by local instruction for end-to-end signaling installation when battery and ground reversals may be encountered.

- **3.09** When polarity guard is required with these sets, install a P-90D052 guard assembly. Connect as shown in Table B.
- **3.10** A P-13E313 terminal strip assembly is available when additional terminating points are required for auxiliary services such as buzzers, lamp, etc. Assembly must be ordered separately.
- 3.11 Installation instructions for the exclusion switch, polarity guard, and auxiliary terminal strip are given in Reference section in Division 502.
- 3.12 The 4th key position is convertible from line pickup (locking) to signaling (nonlocking) by removal of the P-12A892 screw detail. Arrange wiring as shown in Table C.

TABLE A

EXCLUSION SWITCH CONNECTIONS

EXCLUSION	KEY TEL SYS	EXCLUSION KEY LEADS							
		BL-W	W-BL	o-w	w-o	V-BL	BL-V	v-0	0-V
On Any Line	1A	R*	T*	1B†	H*	ET	ER	ЕН	EB
	1A1 or 1A2	R*	Т*	EB	H*	ET	ER	ЕН	EB

^{*} Terminal of line involved.

TABLE B
POLARITY GUARD CONNECTIONS
(P-90D052 GUARD ASSEMBLY)

LEAD		REMOVE FROM	CONNECT TO			
		NET.	NET.	POLARITY GUARD		
Dial	BK	RR		T		
	G-W	C		S		
Line Switch	W	С		S		
Polarity Guard	G		RR			
	W		С			

TABLE C
PICKUP-SIGNAL KEY CONVERSION

KEY OPTIONS	BR-BK KEY LEAD			
НРРРРС	M			
HPPPSC	SG			

[†] When other than line 1 is excluded on 1A KTS, disconnect, insulate, and store O-W mounting cord conductor from terminal 1B; connect balance lead conductor from line involved to 1B.

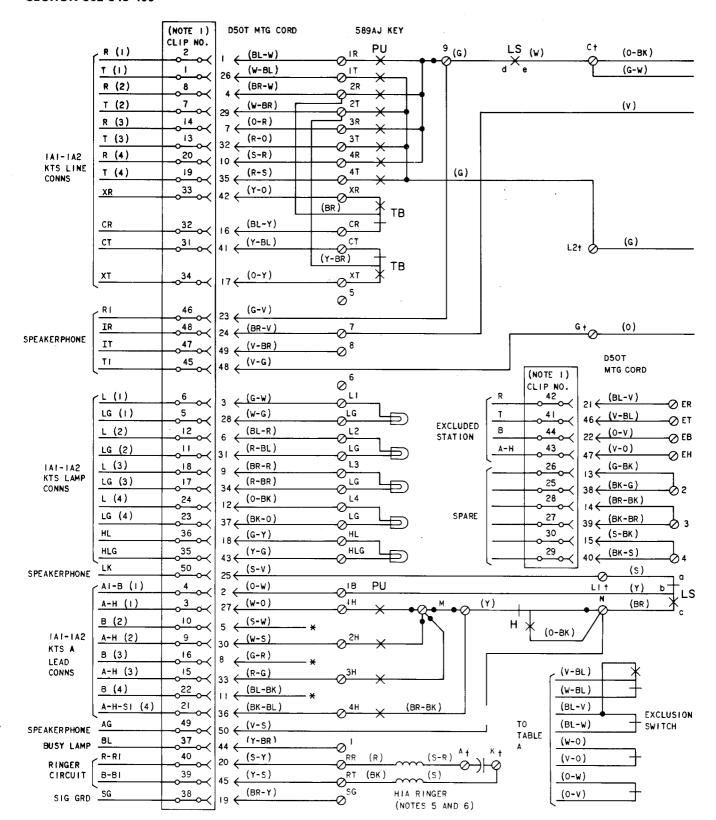
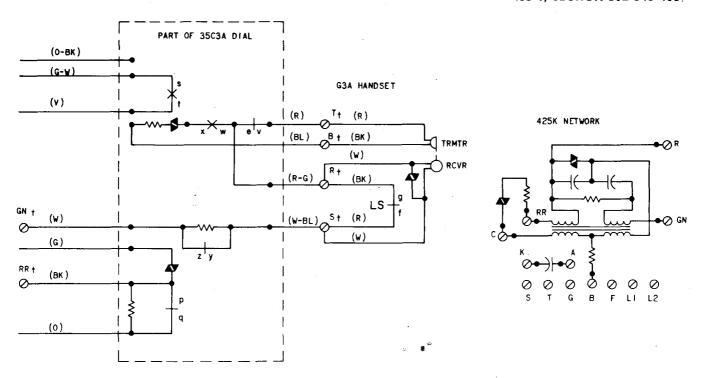


Fig. 1—2565LK Telephone Set, Factory-Wire for 1A1 or 1A2 KTS and 3-Type Speakerphone Connections (Sheet 1 of 2)

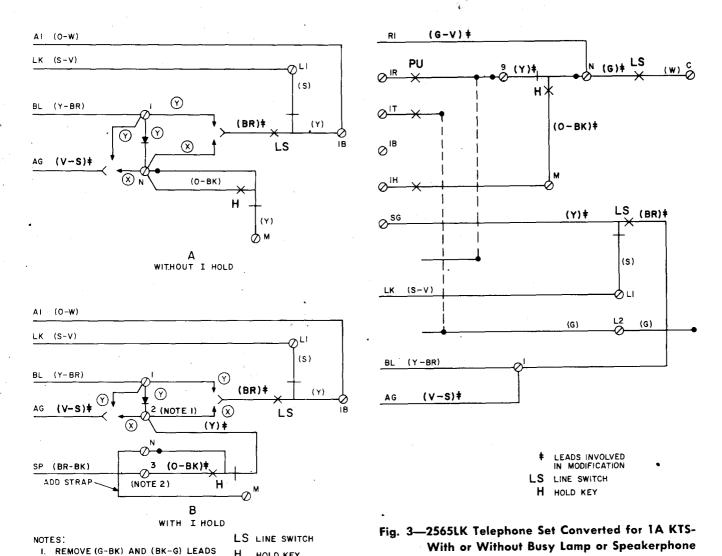


NOTES:

- 1. 66E-TYPE CONNECTING BLOCK SHOWN. MOUNTING CORD MAY BE PLUGGED DIRECTLY INTO CONNECTOR CABLE. COLORS AND PIN NUMBERS FOR CONNECTOR CABLE ARE SAME AS MOUNTING CORD.
- 2. AUXILIARY BUZZER MAY BE INSTALLED. USE SPARE LEADS AND TERMINALS TO CONNECT TO EQUIPMENT.
- 3. IF EXCLUSION FEATURE IS ADDED, CONNECT SWITCH LEADS PER TABLE A.
- 4. DISCONNECT TI, RI, IT, IR, AG, AND LK LEADS WHEN SETS NOT EQUIPPED WITH SPEAKERPHONE ARE MULTIPLED. DISCONNECT EITHER AT THE SET OR MULTIPLING POINT.
- 5. FOR BRIDGED RINGER ON ANY LINE CONNECT (R) RINGER LEAD TO RING AND (BK) RINGER LEAD TO TIP OF LINE INVOLVED. CONNECT (S) RINGER LEAD TO K AND (S-R) RINGER LEAD TO A OF NETWORK.
- 6. IF CAPACITOR IS NOT RETURNED IN RINGER CIRCUIT, MOVE (S) RINGER LEAD TO A OF NETWORK.
- 7. TO SILENCE RINGER PERMANENTLY CONNECT (R) AND (S-R) RINGER LEADS TO A OF NETWORK AND (BK) AND (S) RINGER LEADS TO K OF NETWORK.
- 8. LINE SWITCH SEQUENCE: bc MAKES FIRST

 - be MAKES BEFORE ab BREAKS
 - de MAKES SECOND
 - fg BREAKS LAST
- 9. TURNBUTTON SHOWN WIRED AS CUTOFF OF LINE 2. CAN BE REWIRED AS CUTOFF OF OTHER LINES, EXT RINGER, RINGER IN SET, ETC. CONNECT AS REQUIRED.
- TB TURNBUTTON (CUTOFF)
- PU PICKUP KEY
- H HOLD KEY
- LS LINE SWITCH
 - INSULATED AND STORED
 - NETWORK TERMINAL-UNDESIGNATED TERMINALS ARE ON KEY TERMINAL BOARD

Fig. 1—2565LK Telephone Set, Factory-Wired for 1A1 or 1A2 KTS and 3-Type Speakerphone Connections (Sheet 2 of 2)



REMOVE (G-BK) AND (BK-G) LEADS H HOLD KEY

FROM KEY TERMINAL 2, INSULATE AND STORE.

REMOVE (BK-BR) LEAD FROM KEY

WITHOUT BUSY LAMP

WITH BUSY LAMP

LEADS INVOLVED IN MODIFICATION

Fig. 2—1A1 or 1A2 KTS-I Hold and/or Station Busy Lamp Modification

TERMINAL 3, INSULATE AND STORE.