

SERVICE

2565HK TELEPHONE SETS

1. GENERAL

1.01 This section provides maintenance and connection information for the 2565HK telephone sets. Maintenance information was formerly found in Section 502-525-125. Connection information was formerly found in Section 502-525-436 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 dampered 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- or 636-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.

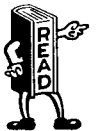
(b) A locking key plunger should not release during downstroke of hold button but should release on the upstroke of the hold button.

(c) When any nonlocking or converted locking plunger is released from its operated position, it should return with a snap to the unoperated position.

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 noise location—G8-type

Refer to Division 501 for connections of these handsets.

3. CONNECTIONS

3.01 These sets are factory-wired for use with 1A1 or 1A2 key telephone systems (KTS), 3-type speakerphone, and individual or common line ringer. They can be used with 1A KTS by modifying as shown in Fig. 3.

3.02 Mounting cord leads are provided for illuminating the hold key position but lamp is not furnished with set.

3.03 The H1A ringer leads are factory-wired to terminals RR and RT. Provision is made for ringer or buzzer. By utilizing spare mounting cord conductors, both may be provided. When power failure feature is provided in the KTS, common audible signal must be wired with capacitor in series.

3.04 If speakerphone control unit is located near telephone set, the necessary mounting cord conductors can be extended to the control unit using a 149-type adapter or 66E-type connecting block. If control unit is located at key equipment, extend leads through A25B connector cable or inside wiring cable. Speakerphone connections for the 2565-type telephone sets are shown in Division 512.

3.05 When a 2565-type set is multipled with other sets furnishing speakerphone feature, certain control leads must be disconnected, insulated and stored to prevent interference with working circuits (Note 4, Fig. 1). Disconnect leads in set or as close as possible to control unit of station furnishing speakerphone to prevent interference with working circuits.

3.06 Exclusion can be added to these sets by installing a D-179935 Kit of Parts which must be ordered separately. Exclusion key can also be used to cutoff a ringer or buzzer in set. Connect as shown in Table A.

3.07 When polarity guard is required in these sets, install a P-90D052 guard assembly. Connect as shown in Table C.

3.08 Additional terminating points can be gained when required for auxiliary services such as buzzers, etc. by installing a P-25E962 terminal strip assembly.

3.09 Installation of exclusion switch, polarity guard, and auxiliary terminal strip is covered in Reference section in Division 502.

(locking) to signaling (nonlocking), remove the P-12A892 screw detail from key position involved. Make necessary wiring changes as shown in Table B.

3.10 All convertible key positions are supplied as pickup keys. To convert from pickup

TABLE A
EXCLUSION KEY CONNECTIONS

EXCLUSION	KEY TEL SYS	EXCLUSION KEY LEADS							
		BL-W	W-BL	O-W	W-O	V-BL	BL-V	V-O	O-V
On Any Line	1A	R*	T*	1B†	H*	ET	ER	EH	EB
	1A1 or 1A2	R*	T*	EB	H*	ET	ER	EH	EB

* Terminal of line involved.

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

TABLE B
PICKUP-SIGNAL KEY CONVERSION

KEY TEL SET	CONVERSION OPTIONS	636A KEY LEADS			
		Y-BR	BR	S-R	BR-BK
2565HK	HPPPPP (Note)	M	M	M	X
	HPPPPS	M	M	M	SG
	HPPSSS	M	M	SG	X
	HPPSSS	M	X	SG	X
	HPPPP*S*	M	M	5H	†
	HPPP*P*S*	M	X	5H	†
	HPP*P*P*S*	X	X	5H	†

* These arrangements use line switch controlled ground for common signal key used with private or intercommunicating lines. Common signal should be used to operate a common signal relay. Do not wire directly to a buzzer.

† Connect to the same terminals as (BR) line switch lead depending on option and KTS required.

Note: To convert from pickup (locking) to signaling (nonlocking) remove the P-12A892 screw detail at the key position being converted.

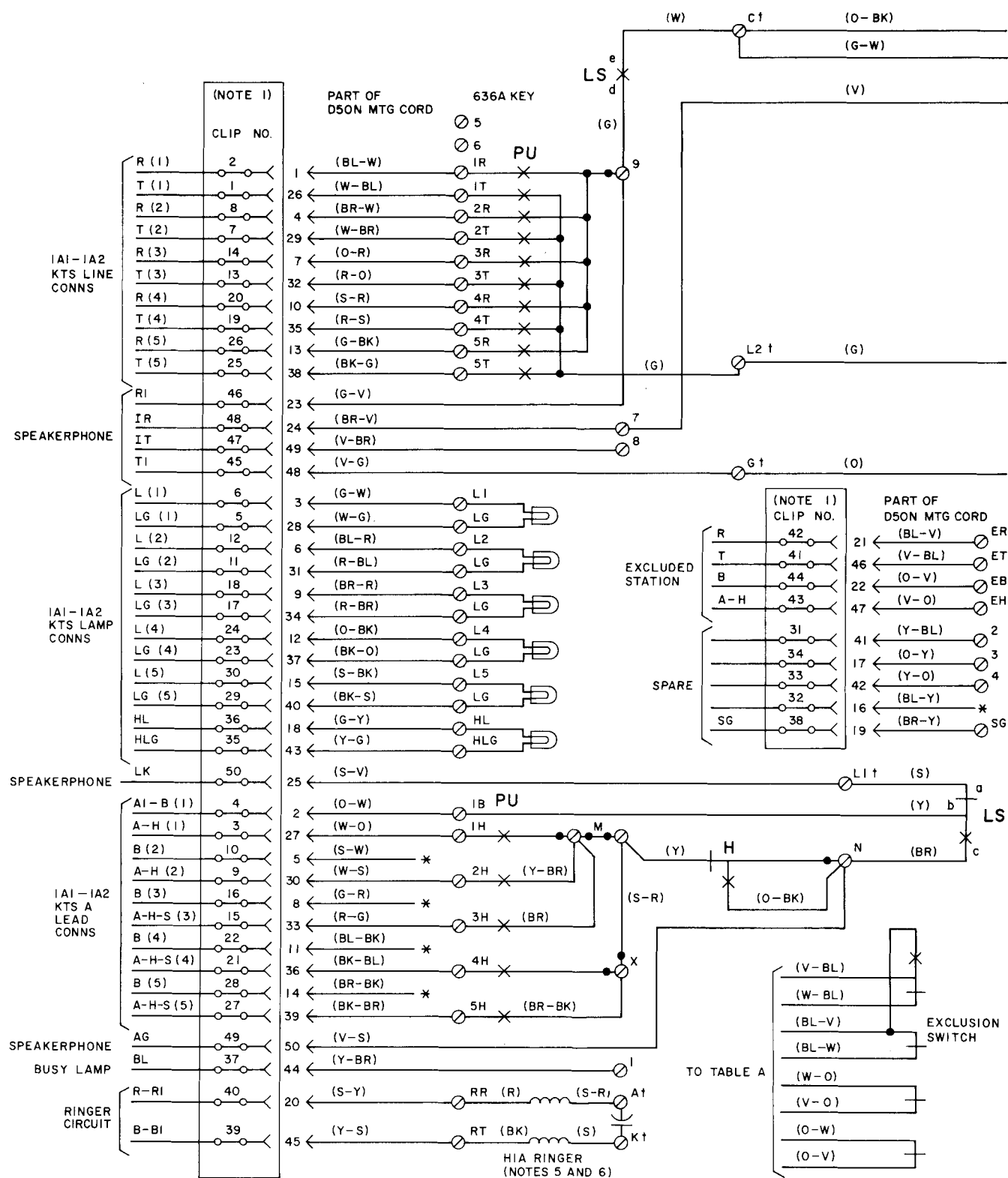
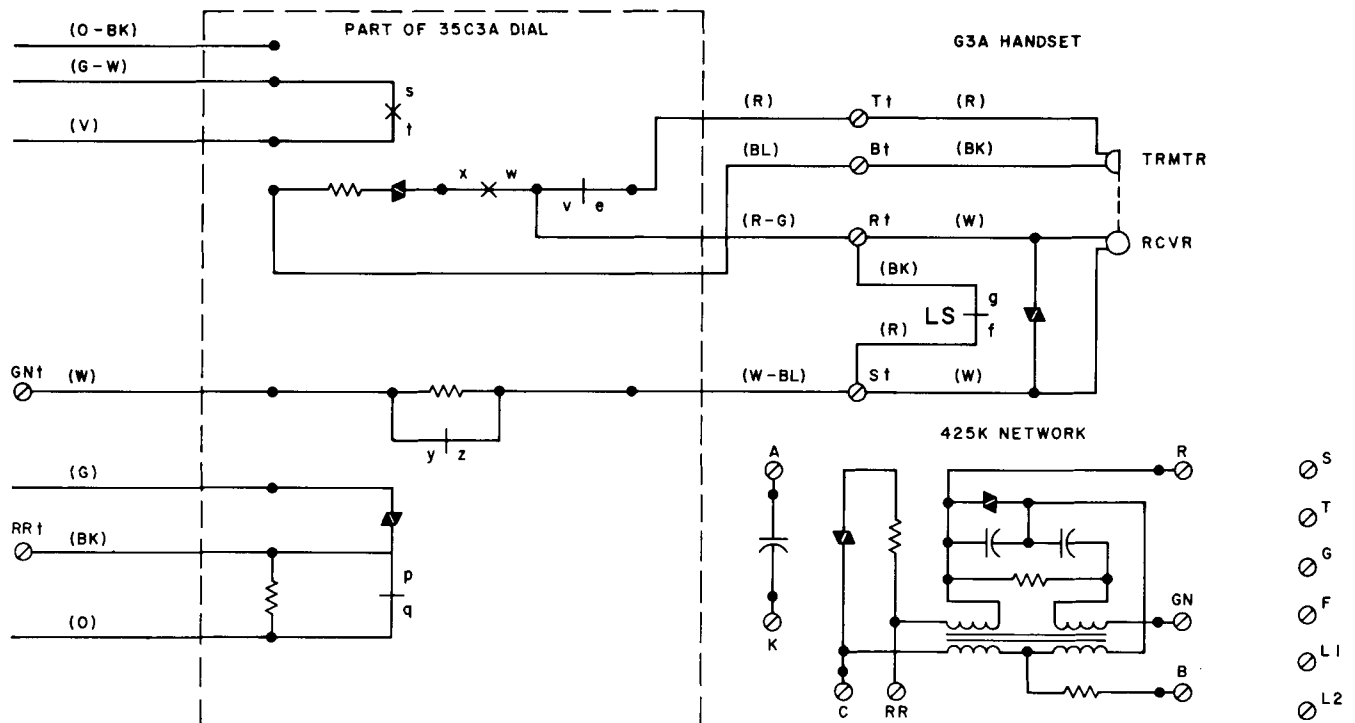


Fig. 1—2565HK Telephone Set, Factory-Wired for 1A1 or 1A2 KTS and 3-Type Speakerphone, Connections (Sheet 1 of 2)



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 T1, R1, IT, IR, AG, AND LK LEADS WHEN SETS NOT EQUIPPED WITH SPEAKERPHONE ARE MULTIPLIED. DISCONNECT EITHER AT THE SET OR MULTIPLYING 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 REQUIRED 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
bc	MAKES BEFORE ab BREAKS
de	MAKES SECOND
fg	BREAKS LAST

PU - PICKUP KEY

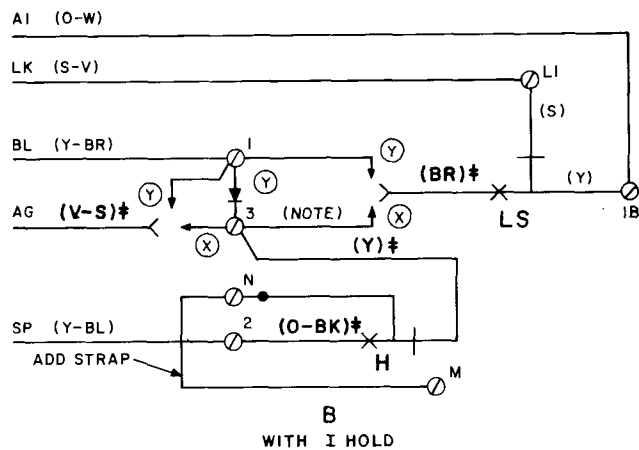
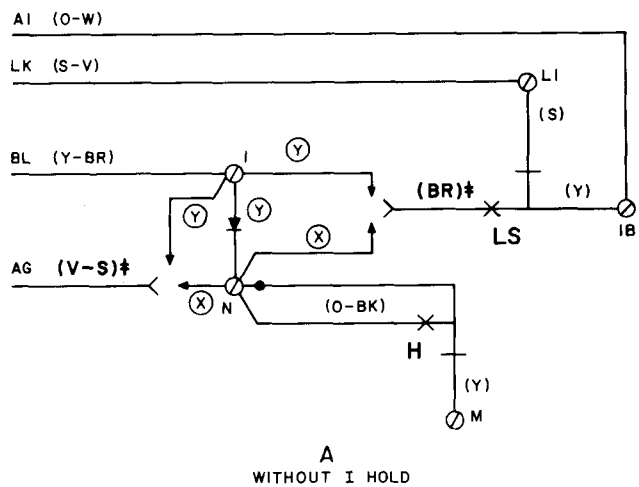
H - HOLD KEY

LS - LINE SWITCH

* - INSULATED AND STORED

† - NETWORK TERMINAL- UNDESIGNATED TERMINALS ARE ON KEY TERMINAL BOARD.

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

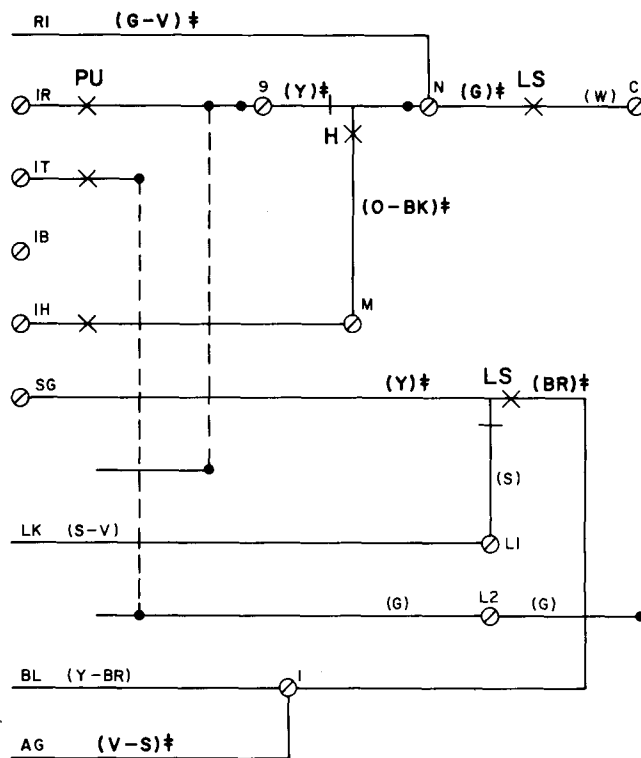


NOTE:
REMOVE (O-Y) LEAD FROM KEY
TERMINAL 3, INSULATE AND STORE.

LS LINE SWITCH
H HOLD KEY

(X) WITHOUT BUSY LAMP
(Y) WITH BUSY LAMP
† LEADS INVOLVED IN
MODIFICATION

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



† LEADS INVOLVED
IN MODIFICATION
LS LINE SWITCH
H HOLD KEY

Fig. 3—2565HK Telephone Set Converted for 1A
KTS—with or without Busy Lamp or
Speakerphone

TABLE C
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	C		S
Polarity Guard	G		RR	
	W		C	