

SERVICE

2565HK AND 2565HKM TELEPHONE SETS

1. GENERAL

1.01 This section provides connection information for the 2565HK and 2565HKM telephone sets.

1.02 Reissued to add information on the 2565HKM (modular) telephone sets, Fig. 1, sheet 3.

2. CONNECTIONS

2.01 These sets are factory-wired for use with 1A1 or 1A2 key telephone systems (KTS), 3-type or 4A speakerphone, and individual or common line ringer. They can be used with 1A KTS by modifying as shown in Fig. 2 and 3.

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

2.03 These sets are factory-equipped with a KS-20419L1 (10 volt AC only) buzzer.

2.04 The H1B ringer leads are factory-wired to terminals RR and RT. When power failure feature is provided in the KTS, common audible signal must be wired with capacitor in series.

2.05 If speakerphone (3-type) 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.

2.06 When a 2565-type set not furnishing speakerphone feature is multiplied with sets furnishing speakerphone feature, certain control leads must be disconnected, insulated and stored (Note 3, Fig. 1) to avoid interference with working circuits.

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

2.08 Use an A20B connector cable when speakerphone and exclusion features are not provided.

2.09 When polarity guard is required in these sets, install 819040528 or P-90D052 guard assembly. Connect as shown in Table C.

2.10 Additional terminating points can be gained when required for auxiliary services such as buzzers, etc. by installing 812559623 or P-25E962 terminal strip assembly.

2.11 Installation of exclusion switch, polarity guard, and auxiliary terminal strip is covered in Section 502-500-120.

2.12 All convertible key positions are supplied as pickup keys. To convert from pickup (locking) to signaling (nonlocking), remove the 811218924 or P-12A892 screw detail from key position involved. Make necessary wiring changes as shown in Table B.

2.13 Lamp in hold position can be furnished but must be separately ordered and installed.

NOTICE

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Bell System except under written agreement

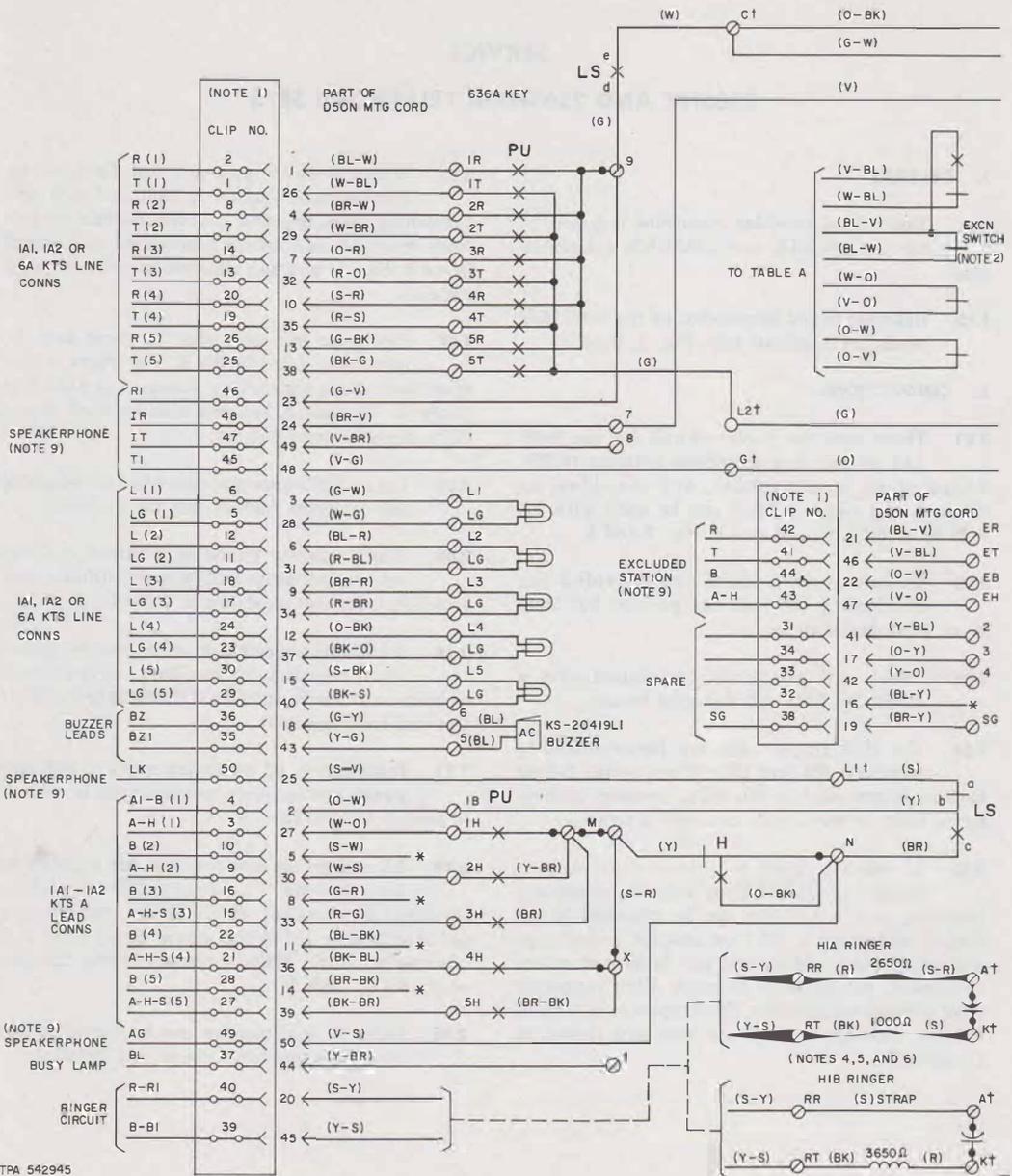


Fig. 1—2565HK or 2565HKM Telephone Set, Factory-Wired for 1A1 or 1A2 KTS and Speakerphone, Connections (Sheet 1 of 3)

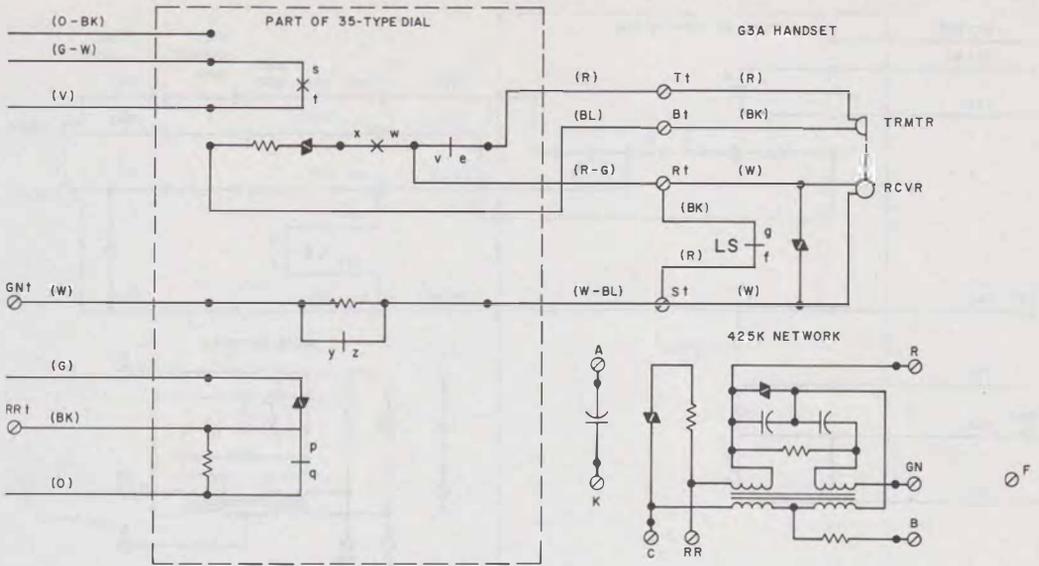
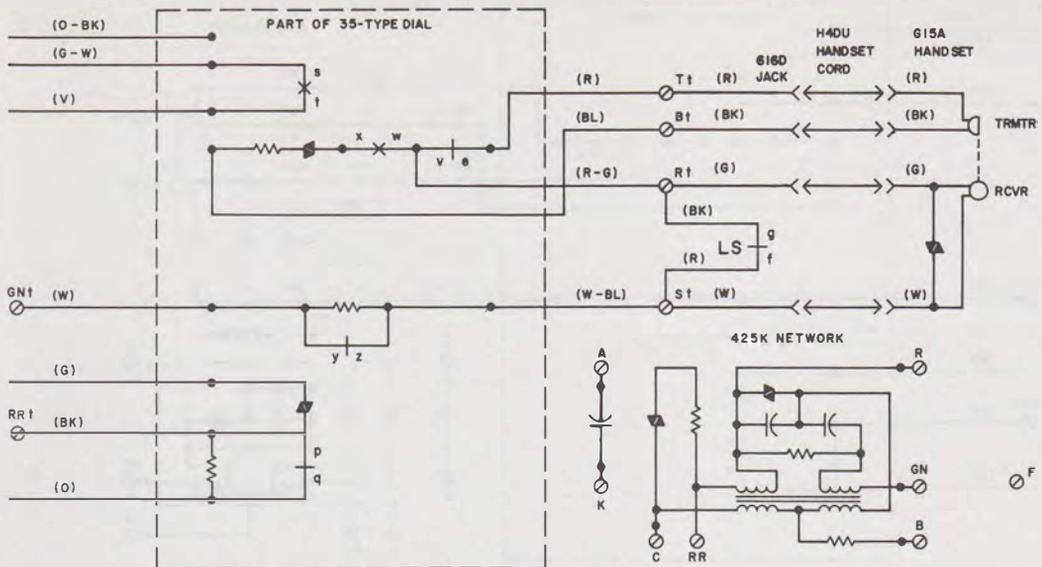


Fig. 1—2565HK or 2565HKM Telephone Set, Factory-Wired for 1A1 or 1A2 KTS and Speakerphone Connections (Sheet 2 of 3)†



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. IF EXCLUSION FEATURE IS ADDED, CONNECT SWITCH LEADS PER TABLE A.
3. DISCONNECT T1, R1, IT, IR, AG, AND LK LEADS WHEN SETS NOT EQUIPPED WITH SPEAKERPHONE ARE MULTIPLIED. DISCONNECT AT THE SET.
4. FOR BRIDGED RINGER ON ANY LINE USING HIA RINGER, CONNECT (R) RINGER LEAD TO RING AND (BK) RINGER LEAD TO TIP OF LINE INVOLVED. FOR BRIDGED RINGER ON ANY LINE USING HIB RINGER, REMOVE (S) STRAP LEAD FROM RR (KEY TERMINAL BOARD) AND CONNECT TO RING AND (BK) RINGER LEAD TO TIP OF LINE INVOLVED.
5. IF CAPACITOR IS NOT REQUIRED IN RINGER CIRCUIT, MOVE (S) RINGER LEAD TO A OF NETWORK FOR HIA RINGER AND (R) RINGER LEAD TO A OF NETWORK FOR HIB RINGER.
6. TO SILENCE RINGER PERMANENTLY INSULATE AND STORE (BK) AND (R) RINGER LEADS.
7. LINE SWITCH SEQUENCE - bc MAKES FIRST, bc MAKES BEFORE ab BREAKS, d# MAKES SECOND, fg BREAKS LAST
8. IF HOLD POSITION LAMP IS REQUIRED, USE SPARE PAIR AND SPARE TERMINALS OR D-161488 CONNECTORS.
9. USE AN A20B CONNECTOR CABLE WHEN SPEAKERPHONE AND EXCLUSION FEATURES ARE NOT PROVIDED.

PU - PICKUP KEY

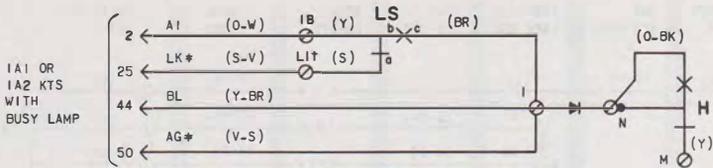
H - HOLD KEY

LS - LINE SWITCH

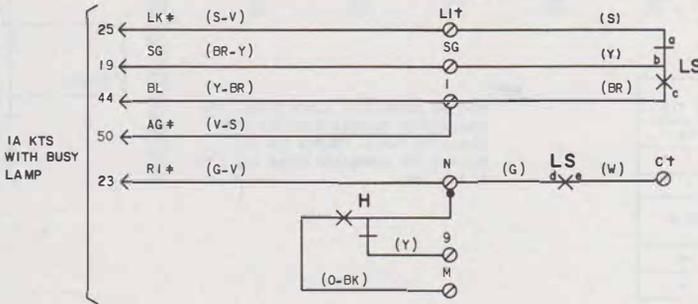
* - INSULATED AND STORED

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

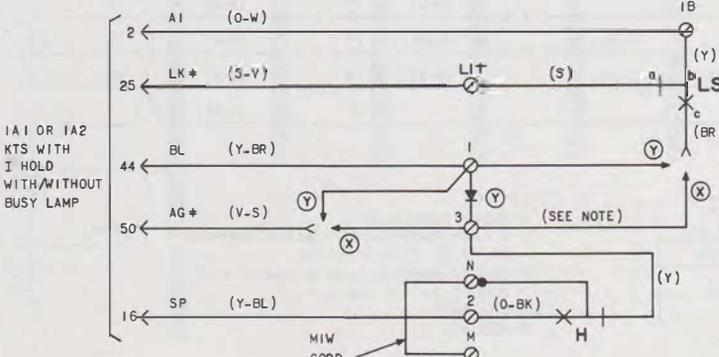
Fig. 1—2565HK or 2565HKM Telephone Set, Factory-Wired for 1A1 or 1A2 KTS and Speakerphone Connections (Sheet 3 of 3)



| MODIFICATION IA1-IA2 KTS | | |
|--------------------------|------|--------|
| LEAD | FROM | TO |
| (BR) | N | I |
| (V-S) | N | I |
| KS-15724L1 DIODE | | I TO N |



| MODIFICATION IA KTS | | |
|---------------------|------|----|
| LEAD | FROM | TO |
| (Y) | IB | SG |
| (BR) | N | I |
| (V-S) | N | I |
| (Y) | M | 9 |
| (O-BK) | N | M |
| (G) | 9 | N |
| (G-V) | 9 | N |



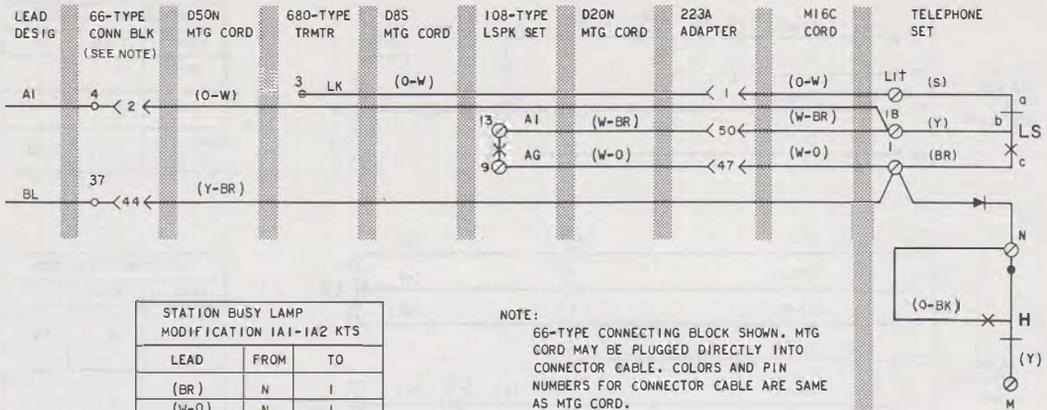
| MODIFICATION I HOLD AND IA1-IA2 KTS | | | |
|-------------------------------------|------------------|------|--------|
| | LEAD | FROM | TO |
| WITH BUSY LAMP (Y) OPTION | (BR) | N | I |
| | (V-S) | N | I |
| | KS-15724L1 DIODE | | I TO 3 |
| | (Y) | M | 3 |
| | (O-BK) | N | 2 |
| WITHOUT BUSY LAMP (X) OPTION | (BR) | N | 3 |
| | (V-S) | N | 3 |
| | (Y) | M | 3 |
| | (O-BK) | N | 2 |
| | MIW CORD | | N TO M |

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

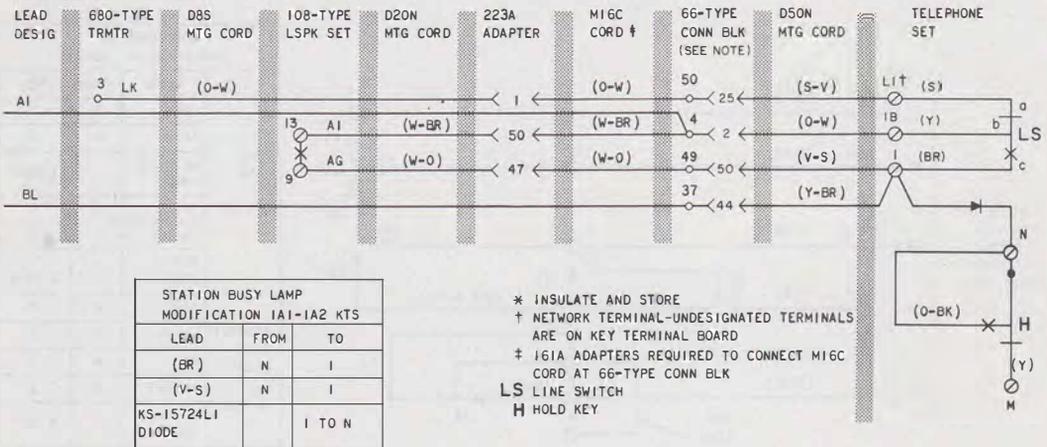
† NETWORK TERMINALS. UNDESIGNATED TERMINALS ARE ON KEY TERMINAL BOARD
 * 3-TYPE SPEAKERPHONE LEAD
 LS- LINE SWITCH
 H- HOLD KEY

Fig. 2—Optional Features with 3-Type Speakerphone

SECTION 502-543-405

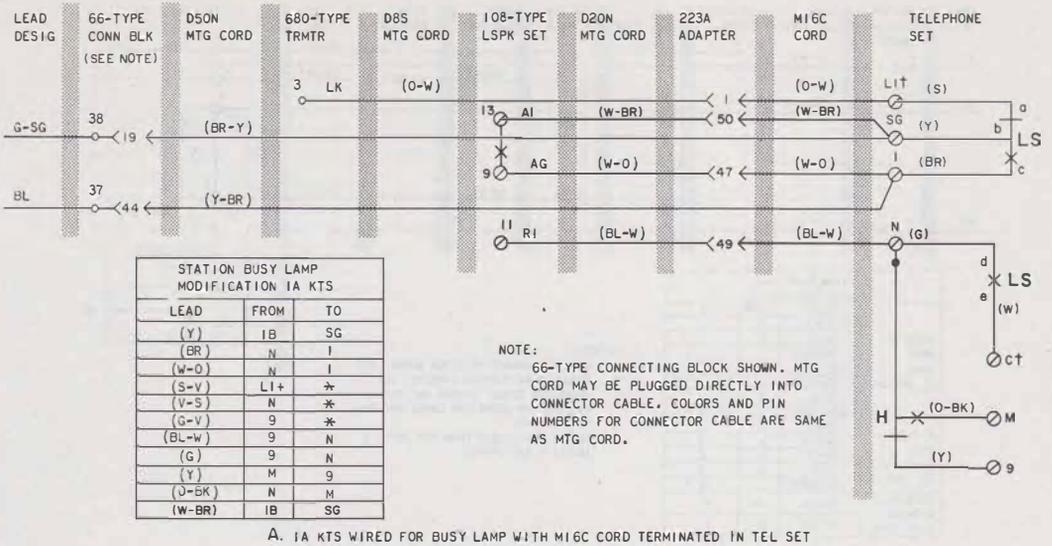


A. 1A1-1A2 KTS WIRED FOR BUSY LAMP WITH M16C CORD TERMINATED IN TEL SET

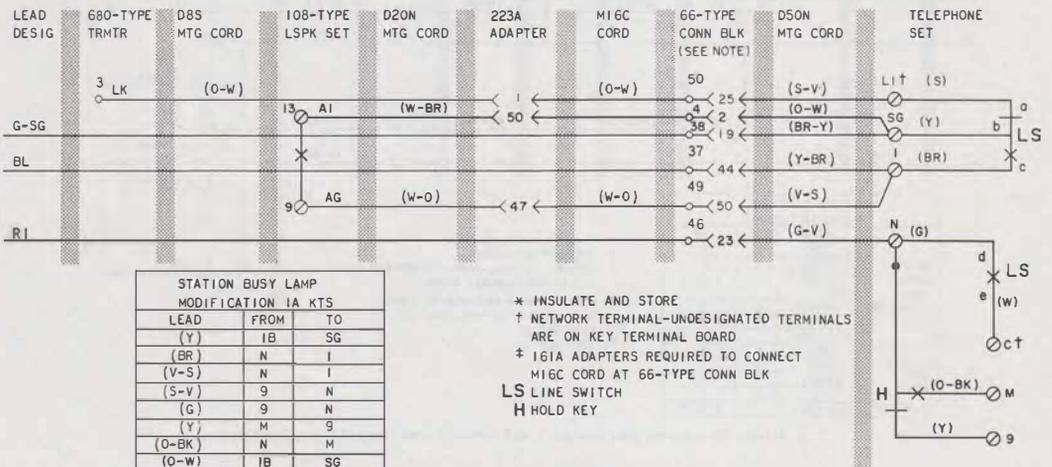


B. 1A1-1A2 KTS WIRED FOR BUSY LAMP WITH M16C CORD TERMINATED AT 66-TYPE CONN BLK

Fig. 3—Optional Features with 4A Speakerphone (Sheet 1 of 3)



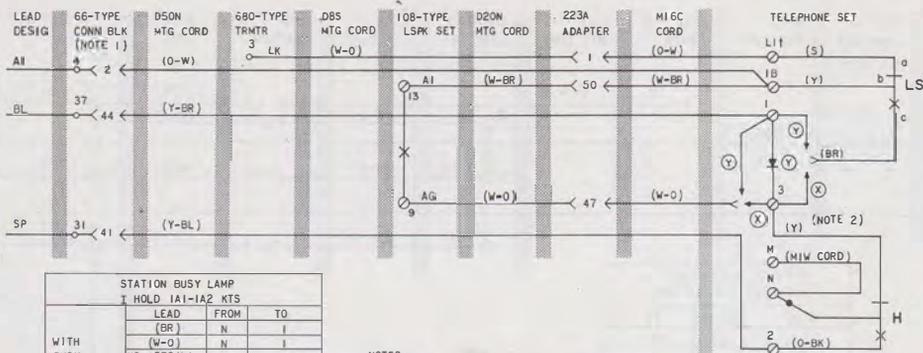
A. IA KTS WIRED FOR BUSY LAMP WITH M16C CORD TERMINATED IN TEL SET



B. IA KTS WIRED FOR BUSY LAMP WITH M16C CORD TERMINATED AT 66-TYPE CONN BLK

Fig. 3—Optional Features with 4A Speakerphone (Sheet 2 of 3)

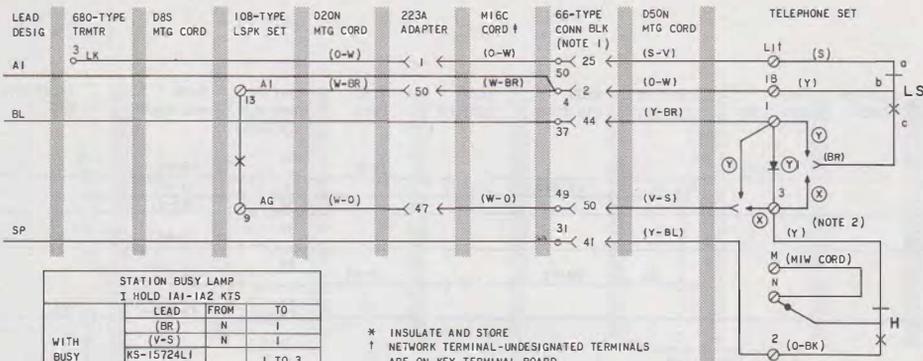
SECTION 502-543-405



| STATION BUSY LAMP | | | |
|---------------------------|------------|------|--------|
| I HOLD IA1-IA2 KTS | | | |
| WITH BUSY LAMP | LEAD | FROM | TO |
| | OPTION (Y) | (BR) | N |
| (W-O) | | N | I |
| KS-15724LI DIODE | | | I TO 3 |
| (O-BK) | | N | 2 |
| (Y) | | M | 3 |
| WITHOUT BUSY LAMP | (BR) | N | 3 |
| | (W-O) | N | 3 |
| | (O-BK) | N | 2 |
| OPTION (X) | (Y) | M | 3 |
| | M1W CORD | N | TO M |
| WITH OR WITHOUT BUSY LAMP | (S-V) | LI+ | * |
| | (V-S) | N | * |

- NOTES:
- 66-TYPE CONNECTING BLOCK SHOWN. MTG CORD MAY BE PLUGGED DIRECTLY INTO CONNECTOR CABLE. COLORS AND PIN NUMBERS FOR CONNECTOR CABLE ARE SAME AS MTG CORD.
 - REMOVE (O-Y) LEAD FROM KEY TERM. 3 INSULATE AND STORE.

A. IA1-IA2 KTS WIRED FOR BUSY LAMP AND I HOLD WITH M16C CORD TERMINATED IN TEL SET



| STATION BUSY LAMP | | | |
|--------------------|------------|------|--------|
| I HOLD IA1-IA2 KTS | | | |
| WITH BUSY LAMP | LEAD | FROM | TO |
| | OPTION (Y) | (BR) | N |
| (V-S) | | N | I |
| KS-15724LI DIODE | | | I TO 3 |
| (O-BK) | | N | 2 |
| (Y) | | M | 3 |
| WITHOUT BUSY LAMP | (BR) | N | 3 |
| | (V-S) | N | 3 |
| | (O-BK) | N | 2 |
| OPTION (X) | (Y) | M | 3 |
| | M1W CORD | N | TO M |

- * INSULATE AND STORE
 † NETWORK TERMINAL-UNDESIGNATED TERMINALS ARE ON KEY TERMINAL BOARD
 ‡ 161A ADAPTERS REQUIRED TO CONNECT M16C CORD AT 66-TYPE CONN BLK
 LS LINE SWITCH
 H HOLD KEY

B. IA1-IA2 KTS WIRED FOR BUSY LAMP AND I HOLD WITH M16C CORD TERMINATED AT 66-TYPE CONN BLK

Fig. 3—Optional Features with 4A Speakerphone (Sheet 3 of 3)

TABLE A
EXCLUSION KEY CONNECTIONS

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

*Terminal of line to be excluded

† 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.

TABLE B
PICKUP-SIGNAL KEY CONVERSION

| KEY TEL SET | CONVERSION OPTIONS | 636A KEY LEADS | | | |
|-------------------------|--------------------|----------------|----|-----|-------|
| | | V-BR | BR | S-R | BR-BK |
| 2565HK or 2565HKM | HPPPPP (Note) | M | M | M | X |
| | HPPPPS | M | M | M | SG |
| | HPPSSS | M | M | SG | X |
| | HPPSSS | M | X | SG | X |
| | HPPpp*G* | 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 811218924 or P-12A892 screw detail at the key position being converted.

TABLE C
POLARITY GUARD CONNECTIONS

(819040528 OR 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 | |