## TELEPHONE SETS

564HK AND 564HL

## CONNECTIONS

## 1. GENERAL

1.01 This section contains connection information on the 564 HK and 564 HL telephone sets when used with 1A1, 1A2, or 6A key telephone systems.
1.02 This section is reissued to:

- Revise Fig. 1 to add information on current manufacture.
- Revise Fig. 2 to add connection information for KS-8100 type buzzers.
- Combine information from Table D into Table C and delete Table D.
- Delete Fig. 3.
1.03 The design of these sets does not allow for 7 speakerphone, exclusion, or 1A key telephone system conversion. When these features are required, the 565 HK telephone set should be used. لـ
1.04 The 564HK Manufacture Discontinued (MD) is replaced by 564 HL which differs in the mounting cord used.
1.05 Red and black ringer leads are factory wired to terminals RR and RT. The ringer can be connected in accordance with several options as listed in Table B.


## 2. MAINTENANCE

2.01 The 564HK set with D30C cord may be subject to poor key button illumination in multiple station, long loop situations due to the omission of lamp ground straps on the cord plug.
2.02 When investigating poor key button illumination involving 564 HK telephone sets:
(a) If the station termination is made on a $66 \mathrm{E} 3-25$ or $66 \mathrm{E} 4-25$ connecting block, loopthrough straps can be installed on connecting block clip terminals 5, 11, 17, 23, and 29 to add the necessary lamp ground copper for lamps 2 , 3,4 , and 5 . In all cases, full pairs should be brought to the connecting block from connecting key system apparatus via inside wiring or A-type connector cables.
(b) If station termination is made via A25B connector cable, or at a 3 -way bridging adapter, or equivalent, it is impractical to fieldmodify either the plug of the D30C telephone set cord or its mating connector on the A-type connector cable. Therefore, the 564 HK set should be replaced with a 564HL.

## 3. CONNECTION INDEX

Fig. $1-564 \mathrm{HK}$ and 564 HL Telephone Sets, Connections

Fig. 2 - Buzzer Connections

Table A — Pickup-Signal Key Conversion

Table B - Ringer or Buzzer Connections

Table C - Conductor Assignments Using 66EType Connecting Block or A25B Connector Cable

TABLE A
PICKUP-SIGNAL KEY CONVERSION

| $\begin{aligned} & \text { KEY } \\ & \text { TEL } \\ & \text { SEET } \end{aligned}$ | CONVETIBLEKEYOPTIONs | kEY Leads |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | BR | Y-BR | S-R | вr-вK |
| $\begin{gathered} 564 \mathrm{HK} \\ 564 \mathrm{HL} \end{gathered}$ | HPPPPP | M | M | M | X |
|  | HPPPPP | M | M | M | SG |
|  | HPPPSS | M | M | SG | X |
|  | HPPSSS | X | M | SG | X |
|  | HPPP*P*S* | X | M | 5 H | SG |
|  | HPP*P*P*S* | X | X | 5H | SG |

* These pickup key options are used on private or intercommunicating lines with the signal key common to each line. The signal key will operate the signal circuit of each line when associated pickup key is depressed. Use S lead on 2nd, 3rd, or 4th pickup key as required, and SG lead for common signal ground.

Note 1: All convertible key positions are arranged in the factory as pickup positions. To convert a key position from pickup (locking) to signaling (nonlocking), remove the P-12A892 screw detail from plunger at the key position to be converted. Make necessary connection changes as shown in Table A. To convert a key position from nonlocking to locking, insert P-12A892 screw detail.

Note 2: When keys are converted for signaling, the S lead of key involved provides the signal circuit and SG lead provides the common signal ground.

TABLE B
RINGER OR BUZZER CONNECTIONS

| OPTION |  | LEADS |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | RINGER |  |  |  | buzzer |  |
|  |  | R | BK | 5 | S-R | R | BK |
| Bridged ringer on any line |  | $\mathrm{R}^{*}$ | T* | K | A |  |  |
| Common or private line ringer or buzzer (See Note 2 Fig. 1) | With capacitor | $\mathrm{RR} \dagger$ | RT | K | A |  |  |
|  | Without capacitor | $\mathrm{RR} \dagger$ | RT | A | A | RR | RT |
| Ringer permanently silenced |  | A | K | K | A |  |  |

* Terminal of line involved.
$\dagger R R$ terminal on terminal strip.

TABLE C
CONDUCTOR ASSIGNMENTS USING 66E-TYPE CONNECTING BLOCK OR A25B CONNECTOR CABLE

| $\begin{aligned} & \text { LEAD } \\ & \text { DESIG } \end{aligned}$ | mTG CORD |  |  | 258 CONN CABLE |  |  | 66E-TYPE CONN BLOCK |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { CORD } \\ \text { CONDUCTOR } \end{gathered}$ | tel set TERM. | $\begin{aligned} & \text { PIN } \\ & \text { NO. } \end{aligned}$ | $\begin{aligned} & \text { CONN } \\ & \text { CABLE } \\ & \text { PAIR NO. } \end{aligned}$ | CONDUCTOR COLOR | PIN NO. | $\begin{gathered} \text { CLIP } \\ \text { TERM. } \\ \text { NO. } \end{gathered}$ | $\begin{aligned} & \text { BLOCK } \\ & \text { NO. } \end{aligned}$ |
| T | W-BL | 1 T | 26 | 1 | W-BL | 26 | 1 | 1 |
| R | BL-W | 1 R | 1 |  | BL-W | 1 | 2 |  |
| A | W-O | 1H | 27 | 2 | W-O | 27 | 3 |  |
| A1 | O-W | 1B | 2 |  | O-W | 2 | 4 |  |
| LG | W-G | LG | 28 | 3 | W-G | 28 | 5 |  |
| L1 | G-W | L1 | 3 |  | G-W | 3 | 6 |  |
| T | W-BR | 2 T | 29 | 4 | W-BR | 29 | 7 |  |
| R | BR-W | 2R | 4 |  | BR-W | 4 | 8 |  |
| A, S, or S1 | W-S | 2 H | 30 | 5 | W-S | 30 | 9 |  |
|  |  |  | 5 |  | S-W | 5 | 10 |  |
|  |  |  | 31 | 6 | R-BL | 31 | 11 | 2 |
| L2 | BL-R | L2 | 6 |  | BL-R | 6 | 12 |  |
| T | R-0 | 3 T | 32 | 7 | R-0 | 32 | 13 |  |
| R. | O-R | 3R | 7 |  | O-R | 7 | 14 |  |
| A, S, or S1 | R-G | 3 H | 33 | 8 | R-G | 33 | 15 |  |
|  |  |  | 8 |  | G-R | 8 | 16 |  |
|  |  |  | 34 | 9 | R-BR | 34 | 17 |  |
| L3 | BR-R | L3 | 9 |  | BR-R | 9 | 18 |  |
| T | R-S | 4 T | 35 | 10 | R-S | 35 | 19 |  |
| R. | S-R | 4R | 10 |  | S-R | 10 | 20 |  |
| A, S, or S1 | BK-BL | 4H | 36 | 11 | BK-BL | 36 | 21 | 3 |
|  |  |  | 11 |  | BL-BK | 11 | 22 |  |
|  |  |  | 37 | 12 | BK-O | 37 | 23 |  |
| L4 | O-BK | L4 | 12 |  | O-BK | 12 | 24 |  |
| T | BK-G | 5 T | 38 | 13 | BK-G | 38 | 25 |  |
| R | G-BK | 5 R | 13 |  | G-BK | 13 | 26 |  |
| A, S, or S1 | BK-BR | 5H | 39 | 14 | BK-BR | 39 | 27 |  |
|  |  |  | 14 |  | BR-BK | 14 | 28 |  |
|  |  |  | 40 | 15 | BK-S | 40 | 29 |  |
| L5 | S-BK | L5 | 15 |  | S-BK | 15 | 30 |  |
|  |  |  | 41 | 16 | Y-BL | 41 | 31 | 4 |
|  |  |  | 16 |  | BL-Y | 16 | 32 |  |
| BZ1 | Y-O | 6 | 42 | 17 | Y-O | 42 | 33 |  |
| BZ | O-Y | 5 | 17 |  | O-Y | 17 | 34 |  |
| Spare | Y-G | 4 | 43 | 18 | Y-G | 43 | 35 |  |
| Spare | G-Y | 3 | 18 |  | G-Y | 18 | 36 |  |
| BL | Y-BR | 1 * | 44 | 19 | Y-BR | 44 | 37 |  |
| SG | BR-Y | SG | 19 |  | BR-Y | 19 | 38 |  |
| B1 | Y-S | RT | 45 | 20 | Y-S | 45 | 39 |  |
| R1 | S-Y | RR | 20 |  | S-Y | 20 | 40 |  |
|  |  |  | 46 | 21 | V-BL | 46 | 41 | 5 |
|  |  |  | 21 |  | BL-V | 21 | 42 |  |
|  |  |  | 47 | 22 | V-O | 47 | 43 |  |
|  |  |  | 22 |  | O-V | 22 | 44 |  |
|  |  |  | 48 | 23 | V-G | 48 | 45 |  |
|  |  |  | 23 |  | G-V | 23 | 46 |  |
|  |  |  | 49 | 24 | V-BR | 49 | 47 |  |
|  |  |  | 24 |  | BR-V | 24 | 48 |  |
|  |  |  | 50 | 25 | V-S | 50 | 49 |  |
|  |  |  | 25 |  | S-V | 25 | 50 |  |

* BL lead connected to L2 of network in later model telephone sets.



Fig. 2 - Buzzer Connections

