## TELEPHONE SETS

## 564HDR

## COMMON BATTERY - CONNECTIONS

### 1.00 GENERAL

1.01 This section is reissued to:

- Show the black and red ringer leads wired to the RR and RT terminals.
- Change Table B.
- Include information identifying the 565 HDR telephone sets wired with the ringer leads on the RR and RT terminals. $\downarrow$
1.02 The 564 HDR telephone set is equivalent to the 564 HBR telephone set but is equipped with a plug-ended (D30B) mounting cord.
1.03 The 6-button F-53149 telephone set was a predecessor, in limited quantities, of the 564 HDR set.


Due to extensive mounting cord connection changes in the 564HDR telephone set as compared with the F-53149 telephone set, the two sets are not electrically interchangeable unless the A25B connector cable pairs are rearranged at the relay equipment or distribution terminals (see Tables D and E).
1.04 The 564HDR telephone set is arranged so that cabling connections are made in sequence by cable pair and color code. Features are provided on a per-button basis: tip, ring, A1 (or balance), A (or hold), lamp ground and + ground for lines 1 through 5, with miscellaneous circuits following at the end of the cable-pair count (see Table E).
1.05 Telephone sets wired with the black and 7 red ringer leads on the RT and RR terminals will have a ( + ) sign after the code number on the base of the set.

### 2.00 CONNECTIONS

2.01 The 564 HDR telephone set is shop-wired for use with 1A1 key systems. Conversion tables used in conjunction with Fig. 1 are for rearrangement for various applications. The information notes should be used in determining the methods of connection.
2.02 Where external services are required at' $\urcorner$ 564 HDR set locations and access to cable pair leads supplying such auxiliary service at the connector is desired, a 148A or 149A adapter may be employed. See C Sections covering 148A and 149A adapters.

TABLE A OF FIG. 1, 101, AND 102

| IA and 1 A1 System Conversion - Station Busy-Signal Connections - Connection of Hold Key and Switch Leads - See Note 5 and Fig. 101 and 102 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Option | Key Tel Sys | Switchhook Leads |  |  | Hold Key |  | MIW Cord |
|  |  | SL-W | SL-GN | SL.-Y | $\mathbf{Y}$ | Y-BK |  |
| No Station Busy Lamp | 1A | 1B | 1B | N | R | M |  |
|  | 1A1 | 1B | N | R | M | N |  |
| With Station Busy Lamp (See Note 5) | 1A | SG | L2* | N | R | M |  |
|  | 1A1 | 1B | L2* | R | M | N | $\mathrm{G}^{*}$ to N |

* Terminal on network.

TABLE B OF FIG. 1

| Ringer or Buzzer Connections |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Option |  | Ringer or Buzzer Lead |  |  |  |
|  |  | SL-R | SL | BK | R |
| When used as bridged ringer on any one line $\dagger$ |  | A | K | RT | RR |
| When used as private line, common sig, or other use (See Note 3) | with capacitor | A | K |  |  |
|  | without capacitor | A | A |  |  |
| Set ringer not used $\ddagger$ |  | A | K |  |  |

$\dagger$ Connect cable pair associated with the ringer leads to the desired line at distribution terminal.
$\ddagger$ Do not terminate associated cable pair at distribution terminal when ringer is not used.

TABLE C OF FIG. 1

| Convert from Locking to Nonlocking or Vice Versa - <br> See Note 1 and Change Leads as Follows: |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total Number of Keys |  |  |  |  |  |  | Key Leads |  |  |  |
| Pickup <br> Keys | Sig Keys <br> Converted from <br> Pickup Keys | Private and <br> Inercommunicating <br> Lines with Common <br> Sig Key | Y-BR | BR | SL-BR | BK-BR |  |  |  |  |  |
| 5 |  |  | M | M | M | X |  |  |  |  |  |
| 4 | 1 |  | M | M | M | SG |  |  |  |  |  |
| 3 | 2 |  | M | M | SG | X |  |  |  |  |  |
| 2 | 3 |  | M | X | SG | X |  |  |  |  |  |
| 4 | 1 | 2 | M | X | 5 H | SG |  |  |  |  |  |
| 4 | 1 | 3 | X | X | 5 H | SG |  |  |  |  |  |



Fig. 1 - Key Telephone Sets,

## INFORMATION NOTES

1. All convertible key positions are arranged in the shop as pickup posi tions. To convert a key position from pickup (locking) to signal (nonlocking), remove the screw detail (P-12A892) and store the removed screw (or screws) in notches furnished on the edge of the 589 H key in the set for this purpose. Make the necessary connection changes as shown in Table C of Fig. 1. To convert a key position from nonlocking to locking, reverse the above procedure
2. When using the arrangement for a common-signaling key for two or three private or intercommunicating lines as provided in Table C of Fig. 1, the 6th key is converted to nonlocking and is used as the signaling key. The signaling is directed to the $S$ or $S 1$ lead of the 2nd, 3rd, or 4th line, as required, through the cross connections shown in Table C for Fig. 1. The automatic-cutoff feature of Key Telephone System No. 1A cannot be used on a line connected to the common-signaling key.
3. The ringer should be connected without capacitor for private, common, or intercommunicating line signals except where local instructions or intercommun
4. For manual service, replace the dial of the set with a 95B apparatus blank and transfer the green key lead from terminal $F$ to terminal RR on the network to obtain the manual set.
5. To provide for a station busy lamp, the necessary connection changes should be made as shown in Table A. When provided for station busyterminals to prevent it from touching the can
6. Any unused pickup key shall be blocked in the nonoperated position by inserting blocking ring P-12A858 under pushbutton.
$\stackrel{\leftarrow}{\text { Soe }}$ Notes

| TABLE D <br> D3OB (MOUNTING) CORD TERMINATION |  |  |  |
| :---: | :---: | :---: | :---: |
| $\begin{gathered} \text { Lead } \\ \text { designation } \end{gathered}$ | $\begin{aligned} & \text { TERM. } \\ & \text { STRRP } \\ & \text { ON KEY } \\ & \text { ASSEM } \end{aligned}$ | CORD COLOR | Plug |
| R | IR | R | 1 |
| T | $1 T$ | 6N | 26 |
| A1-B | 18 | Y | 2 |
| A-H | IH | BK | 27 |
| L | 1 | SL-Y | 3 |
| 16 | LG | SL-8K | $28^{*}$ |
| R | 2 R | BL | 4 |
| T | 21 | W | 29 |
| - | + | BR-R | 5 |
| A-H | ${ }^{2}$ | BR-GN | 30 |
| L | 2 | SL-BL | 6 |
| vacant |  |  | $31^{*}$ |
| R | 3 R | BR-Y | 7 |
| $T$ | ${ }^{3}$ | BR-8K | 32 |
| B | + | BR-BL | 8 |
| A-H | $3{ }^{3}$ | BR-W | 33 |
| L | 3 | SL-W | 9 |
| VACANT |  |  | 34* |
| R | 4 R | R-G | 10 |
| $\uparrow$ | 47 | R-Y | 35 |
| 8 | $\dagger$ | R-BK | 11 |
| A-H | $4{ }^{4}$ | R-EL | 36 |
| L | 4 | SL-BR | 12 |
| VACANT |  |  | $37^{*}$ |
| R | 5 R | R-W | 13 |
| T | 51 | GN-Y | 38 |
| B | $\dagger$ | $6 \mathrm{~N}-\mathrm{BK}$ | 14 |
| A-H | ${ }_{5} 5$ | $6 \mathrm{~N}-\mathrm{BL}$ | 39 |
| L | . | 日R | 15 |
| vacant |  |  | $40^{*}$ |
|  |  |  | $\frac{16}{41}$ |
|  |  |  | 17 |
|  |  |  | 42 |
|  |  |  | 18 |
|  |  |  | 43 |
| 56 | 56 | GN-W | 19 |
| BL | L2t | Y-BK | 44 |
| R-R1 | RR | Y-BL | 20 |
| B-BI | RT | Y-W | 45 |
| vacant |  |  | 21 |
|  |  |  | 46 |
|  |  |  | 22 |
|  |  |  | 47 |
|  |  |  | 48 |
|  |  |  | 24 |
|  |  |  | 49 |
|  |  |  | 50 |

- TERMINALS 28, 31, 34, 37, AND 40
- LEADS TAPED and stored under
$\pm$ terminal on network.


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