## SERVICE <br> 565LDR TELEPHONE SETS

## 1. GENERAL

1.01 This section provides maintenance and connection information for the 565LDR (MD) telephone set previously contained in Sections 502-525-200 and 502-525-406.

## 2. MAINTENANCE

## Components

2.01 Maintenance of handsets, dials, and ringers is outlined in sections covering these components.

## Removing and Replacing Housing

2.02 To remove housing, pull up exclusion plunger to its operated position, loosen captive screws in base of set, and lift housing up and toward the front of set.
2.03 To replace housing, guide lower front portion of housing over pushbuttons, align housing with base of set, and gently press housing in place. Depress exclusion plunger, with slight pressure it should snap into its unoperated position. Operate exclusion plunger several times to insure proper operation. Tighten captive screws in base of set.

## Exclusion Switch

2.04 Perform no field maintenance on exclusion switch and plunger other than cleaning contacts with a 265 C tool.
2.05 Replace set or exclusion switch assembly if any of the following exclusion switch requirements cannot be met:
(a) Exclusion plunger should remain in the operated position when pulled up to the full extent of its stroke.
(b) The plunger should return to the fully depressed position when handset is replaced.
(c) With housing removed, normally closed contacts of the exclusion switch should have perceptible follow when operated manually.
(d) With housing removed, open contacts of the exclusion switch should have minimum separation of $1 / 64$-inch; gauge by eye.

## Mounting Cords

2.06 Replace mounting cords of early manufacture (Fig. 1) as follows:
(1) Remove dial from its mounting bracket.
(2) Remove terminal screws.
(3) Disconnect spade-tipped conductors and wafer sections.
(4) Disengage cord stay hook from right leg of dial mounting bracket.


Fig. 1—Nonslotted Wafer Strip End of Mounting Cord, Early Type
2.07 Mounting cords of later manufacture feature a slotted wafer strip (Fig. 2) to facilitate replacement.


Fig. 2—Slotted Wafer Strip End of Mounting Cord, Later Type

## Lamps and Pushbuttons

2.08 Replace cracked pushbuttons or collars. Remove accumulated dirt or film from lamps, collars, and pushbuttons with a water dampened cloth. DO NOT USE SOLVENTS OF ANY $K I N D$. If cleaning does not correct binding of pushbuttons, replace button and collar assembly.
2.09 To replace defective lamp:
(1) Remove dial from mounting bracket and lay to one side. Leads need not be disconnected.
(2) Lift lamp from socket with KS-6320 orange stick.
(3) Align lamp contact surfaces when placing new lamp in socket.
(4) Remount dial.
2.10 The button and collar assembly should be carefully aligned to avoid interference with removal or replacement of housing.

## 589-Type Key

2.11 Field maintenance of the 589-type key (Fig. 3 and 4) consists of:
(a) Cleaning contacts with a 265 C tool or adjusting contacts with a 363 tool.
(b) Replacing loose or missing damper studs with P-18A859 vibration damper sleeves (Fig. 4). Later 589-type keys do not require this vibration damper.


Fig. 3-589-Type Key, Top View
2.12 Contact follow and separation is obtained by using a 363 tool at a point adjacent to contact spring pile-up (Fig. 4). When adjusting springs:
(a) There should be a minimum spring clearance of $1 / 64$-inch between contact springs and those parts of the key which do not make contact with springs (Fig. 4).
(b) Normally open contacts should make with perceptible follow on locking keys before key plunger assumes locked position.


Fig. 4-589-Type Key, Bottom View
2.13 Replace set if the following requirements cannot be met:
(a) When depressed, locking plunger should release any previously locked plunger on its downstroke.
(b) When any pushbutton plunger is released from its original position, it should return with a snap to its nonoperated position.
(c) An operated key plunger should not release during downstroke of hold button.
(d) An operated key plunger should release from its operated position on the upstroke of the hold button.
2.14 The 565LDR (MD) telephone set features a two position turn key as part of the 6 -button key. This key, containing two sets of transfer contacts, may be used in any application requiring circuit connection, cutoff, or transfer.

## 3. CONNECTIONS

3.01 When a 565LDR (MD) telephone set is not used as a speakerphone set and is multipled with any other set capable of furnishing speakerphone feature, speakerphone leads must be disconnected, insulated, and stored either at the telephone set or at the multipling point. If not disconnected, the speakerphone leads will provide a common connection between the circuits of the multipled telephone sets. The lead designations of leads to be removed at the telephone set are as follows: T1, P3, P4, LK, AG, R1, T, R, A or H, and B.

## table A <br> LINE EXCLUSION

| EXCLUSION | KEY <br> TEL <br> SYS | EXCLUSION KEY LEADS |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | R.Y | G-Y | BR-R | BK.W |
| On Any <br> Line | 1 A | $\mathrm{R}^{*}$ | $\mathrm{~T}^{*}$ | $1 \mathrm{~B} \dagger$ | $\mathrm{H}^{*}$ |
|  | 1A1 | $\mathrm{R}^{*}$ | $\mathrm{~T}^{*}$ | EB | $\mathrm{H}^{*}$ |

* Terminal of line involved.
* When other than line 1 is excluded, remove $0 . W$ mounting cord conductor from terminal 1B; insulate and store. Connect balance lead cord conductor of line involved to terminal 1B.

TABLE B
PICKUP SIGNAL KEY CONVERSION

| CONVERTIBLE KEY OPTIONS | KEY LEAD S-BR |
| :---: | :---: |
| HPPPPC | M |
| HPPPSC | SG |

Note: When using convertible keys for signaling, use A-H lead of key involved for signal circuit and G lead for common signal ground.


Fig. 5-565LDR (MD) Telephone Set-Connections


A- WIRED FOR IA WITH BUSY LAMP OPTION


B-IAI-IAZ KTS WIRED FOR BUSY LAMP OPTION
t-network terminals-undesignated terminals are on KEY TERMINAL BOARD.
\# LEADS INVOLVED IN MODIFICATION
H-HOLD KEY
PU-PICKUP KEY
LS-line switch

Fig. 6-565LDR (MD) Telephone Set-Optional Features

