1. GENERAL

1.01 This section provides connection information for strip mounted key telephone units of the 1A Key Telephone System.

1.02 Information in this section was formerly contained in Sections 518-112-430 and 518-112-431 which are hereby canceled.

1.03 For additional information, refer to the following SDs:

- SD-69136-01—Key Telephone system No. 1A, Line and Signaling Circuit
- SD-69199-01—Key Telephone System No. 1A, Intercommunicating Line Circuit with Dial Selection
- SD-69105-01—Key Telephone System No. 1A, Private Line Circuit

2. CONNECTIONS

2.01 When central office or building battery is used and the fuses at the supply are not readily accessible, fuse as shown in Table A.

2.02 Connection Index:

Fig. 1—50-Type Key Telephone Units, Connections

Fig. 2—51A Key Telephone Unit, Schematic

Table A—Fusing Arrangement for Central Office or Building Battery

Fig. 3—52A Key Telephone Unit, Schematic

Fig. 4—53A Key Telephone Unit, Schematic

Fig. 5—54A Key Telephone Unit, Schematic

Fig. 6—55A Key Telephone Unit, Schematic

Fig. 7—56A Key Telephone Unit, Connections

Fig. 8—56A Key Telephone Unit, Schematic

Fig. 9—57A Key Telephone Unit, Schematic
* CONNECTIONS SHOWN ARE FOR J867310, LIST I OR J86731A LIST 4 OR LIST 6 (IOIG) POWER PLANT. IF CENTRAL OFFICE OR BUILDING BATTERY IS USED AND FUSES AT SUPPLY ARE NOT READILY ACCESSIBLE, FUSE AS SHOWN IN TABLE A. IF FUSES AT SUPPLY ARE READILY ACCESSIBLE AND THE MAXIMUM CURRENT DRAIN TO A SYSTEM DOES NOT EXCEED 1.6 AMPERES, NO CIRCUIT FUSES AT EQUIPMENT ARE REQUIRED. WHEN USING TABLE A, REMOVE STRAP ON TS B OF 51A KTU BETWEEN TERMINALS 19 AND 20.

† FOR LINE BUSY LAMP ON INTERCOMMUNICATING LINE, ADD WIRING ON 51A KTU AS FOLLOWS: 3 TOP OF BF RELAY TO I BOTTOM OF SR RELAY 4 TOP OF BF RELAY TO TS A 28 OR H.B. JONES TERMINAL (LP LEAD).

Fig. 1—50-Type Key Telephone Units, Connections (Sheet 1)
Fig. 1—50-Type Key Telephone Units, Connections (Sheet 2)
### TABLE A

**FUSING ARRANGEMENT FOR CENTRAL OFFICE OR BUILDING BATTERY**

<table>
<thead>
<tr>
<th>LEAD DESIGN</th>
<th>FUSE</th>
<th>51A TS A</th>
<th>57A TS B</th>
<th>52A</th>
<th>53A</th>
<th>54A</th>
<th>55A</th>
<th>57A TS A</th>
<th>57A TS B</th>
</tr>
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<tr>
<td>GRD</td>
<td>1†</td>
<td>13</td>
<td>13</td>
<td>13</td>
<td>13</td>
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<td>19</td>
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<td>19</td>
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<tr>
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<td>Misc†</td>
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<tr>
<td>Lamp GRD</td>
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<td>18</td>
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</tr>
<tr>
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<tr>
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</table>

* Do not strap 19 to 20 on 51A KTU TS B.

† One 2-amp fuse per 36 51A lamps; or when lamp battery is 48 volts dc from central office, fuse with 1-1/3 amp fuse.

‡ One 2-amp fuse per circuit.
Fig. 2—51A Key Telephone Unit, Schematic
Fig. 3—52A Key Telephone Unit, Schematic
Fig. 4—53A Key Telephone Unit, Schematic

Fig. 5—54A Key Telephone Unit, Schematic
SECTION 518-112-420

Fig. 6—55A Key Telephone Unit, Schematic
TJ 6 ROLLED

TO STA

TO STA

PICKUP KEY

R STA

RING SUP FOR
AUD SIG AT
CONTROLLED STA

R STA

HAND GEN IF
Provided *

GRD

105V ±

TO AUD SIG AT
MASTER STA

T

R

T

R

T

R

T

R

CR

KEY AT
MASTER KEY
STATIONS 1

CT

TO SIG KEY
AT MASTER KEY STA

14 TO 26
VOLTS DC

BAT.

Fig. 7—56A Key Telephone Unit, Connections

* IF HAND GENERATOR PROVIDED, OMIT RINGING SUPPLY ON 7 AND 9 OF K3 AND THE "S" AND "G" LEADS ON 15 AND 16 OF K2

† IN KEY TEL SETS CONNECT GN-W AND R-W CONDUCTORS TO CT TERMINAL. IN EXTERNAL KEYS STRAP CT AND LR TERMINALS, EXCEPT FOR THE 6040C AND 604IC KEY STRAP THE CT AND ONI.
Fig. 8—56A Key Telephone Unit, Schematic (Sheet 1)
Fig. 8—56A Key Telephone Unit, Schematic (Sheet 2)

Notes:
1. (A) When a key tel set is used at the key station, connect the GR-W and R-W connectors of the key tel set to the CT terminal.
   (B) When a hand tel set with separately mounted keys other than 6040C or 6041C is used at the key station, strap the CT and LN terminals of the key. When a 6040C or 6041C key is used, strap CT and ONI terminals of key.
2. Side-tone balance in accordance with local instructions.
3. Connect ringer and capacitor of key tel set to T and R terminals in set.

Notes:
- A = TS K2
- B = TS K3

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Fig. 9—57A Key Telephone Unit, Schematic