NOTES:- (FOR PAGES 1 TO 4).

1. FACILITIES:- Elements of the four circuit conditions are shown on Page 2. Note that the release key, unlocks any operated keys and restores the 'Main to Extn.' condition. A simplified circuit of facilities when External Extensions are fitted is given on Page 3.

2. POWER SUPPLY:- The Lamps and Relay 'A' operate from the 10V. unearthed D.C. supplied by a Power Unit No. 53A, (Dgm. N651) which is mains driven and should be fitted as near as conveniently possible to the mains socket-outlet.

3. EXTERNAL EXTENSIONS:- Call the Main, and are rung from the Main, by means of a Converter, Ringing No. 9A (Dgm. N 626) which relies on the 10V. D.C. supply from the Power-unit for its operation.

4. SUPERVISORY SIGNALS:- A small P.D. developed across a low resistance in the line circuit is used to bias a transistor in a common emitter circuit element and the considerable increase in current which occurs in the collector circuit is used to operate supervisory Relay 'A' :-

(a) Speak to Extn., Exch. Held. When the local transmitter energizing current flows, the P.D. across R6 (7 ohms) causes VT1 to conduct and Relay 'A' operates, KH3 is operated and the Red lamp lights via A3.

(b) Extn. to Exch.:- To caier for either direction of current in the Exchange Line two transistors are necessary. The P.D. across either R4 or R5 will cause either VT1 or VT2 to conduct and allow 'A' Relay to operate. As, KE is operated the White lamp lights through A3. RA is also used to limit the current in the Buzzer and therefore has a value different from R5.

5. CORR INST.:- Early supplies provided with Cord Inst. No. 18/2103 had colours connected:-

<table>
<thead>
<tr>
<th>BT1-BLK</th>
<th>BT5-GRN</th>
<th>BT9-YEL</th>
<th>BT13-8RN-WH</th>
<th>BT17-RED-WH</th>
<th>4-WH</th>
<th>6-0R</th>
<th>8-SL</th>
<th>10-BLU-WH</th>
<th>14-8L-WH</th>
<th>18-BLU-OR</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-RED</td>
<td>6-BLU</td>
<td>10-BLU-WH</td>
<td>14-8L-WH</td>
<td>18-BLU-OR</td>
<td>7-8RN</td>
<td>11-0R-WH</td>
<td>15-8L-WH</td>
<td>8-GRN-WH</td>
<td>12-8RN-WH</td>
<td>16-YEL-WH</td>
</tr>
</tbody>
</table>


When failure of the transistor switch (Part 1/DST/445) occurs, modify Plan-set, N625, to Mark 2 by replacing the Part 1/DST/445 as follows:- Table Relay 337A or 337B Wall Relay 337S only.

(a) Disconnect the wiring from Part 1/DST/445.

(b) Remove the Part 1/DST/445 and replace by a Relay 337...

(c) Connect the Plan-set wiring to the Relay 337...as follows:-

BRN to Pin 1.  BLK to Pin 2.
GN (2 wires) to Pin 3.  BL-WH to Pin 4.
SL (2 wires) to Pin 5.  RED from terminal 11 to Pin 5.
RED from XK2 to Pin 9.  (see Dgm. on Page 5).

(d) Clearly mark the Label Dgm. affixed to the base of the Plan-set N625 "Modifed to Mark 2".

If the Plan-set N625 cannot be modified locally, the complete Plan-set should be changed. TI E5 B1103 refers.
COMBINED SWITCHING ELEMENTS: PLAN 107 EXTERNAL
USING PLAN-SET N625 MARK 2 OR 3

NOTES:— (FOR PAGES 5 TO 8)

1. FACILITIES:— Elements of the four circuit conditions are shown on Page 6. Note that the Release Key unlocks any operated Keys and restores the MAIN to EXTN. condition. A simplified circuit of facilities when External Extensions are fitted is shown above.

2. POWER SUPPLY:— (SEE NOTE 9)
   The Lamps and Relay A operate from the 10V Nominal unearthed DC. supplied by a Power-Unit No.53A (DGM 5631) which is mains driven and should be fitted as near as conveniently possible to the mains Socket—outlet.

3. EXTERNAL EXTENSIONS:— Call the Main and are rung from the Main, by means of a Converter, Ringing, No.9A (DGM N626) which relies on the D.C. supply from the Power-Unit for its operation.

4. SUPERVISORY SIGNALS:—
   (a) Speak to Ext'n Exch.Hand. When local Transmitter energising current flows Relay LS operates, LSI operates Relay A, A3 lights the red lamp via KH3.

   (b) Ext'n to Exch. Relay LS operates to the line current, LSI operates Relay A, A3 lights the white light via KE2.

   Relay LS, which is a sensitive Dry- Reed Relay, replaces the transistor common emitter circuit used in the Plan Set N625 Mark I. Early issues of this Relay (Relay 337A Mark I) were conventionally wired and the layout of the components was different.

5. Diodes D7 and D8 were not provided on earlier issues, but an additional orange conductor in the Cable Form 1/N625 was provided and terminated on KE2 Spring 30.

6. The cord conductor colours shown are those for a Cord Inst No.18/09AD...
   The colours shown in brackets refer to the Cord Inst No.18/04AD...

7. On earlier issues Pin 5 of Relay 337 was connected to Terminal 23, the Connexion 20-23 being omitted.

8. Early issues were supplied strapped for Plan 107A (secret) i.e. Terminals 18 & 19 strapped and the B-W conductor terminated on Plan-Set Terminal 25. Later issues are supplied wired for Plan 107 (non-secret). Two links are used between Terminals 6 & 7 in order to provide sufficient straps to allow for field modification to Plan 107A if required.

9. It is essential that each plan set in a multiple installation is provided with an independent power supply. It is thus not possible to "common" the power supply leads of two or more plan sets.

10. For new work the buzzer circuits are connected directly to the Power Unit +W (shown — x — x —). Many existing installations are wired with the buzzer circuit connected via the Extension A Wire (shown — o — o —).