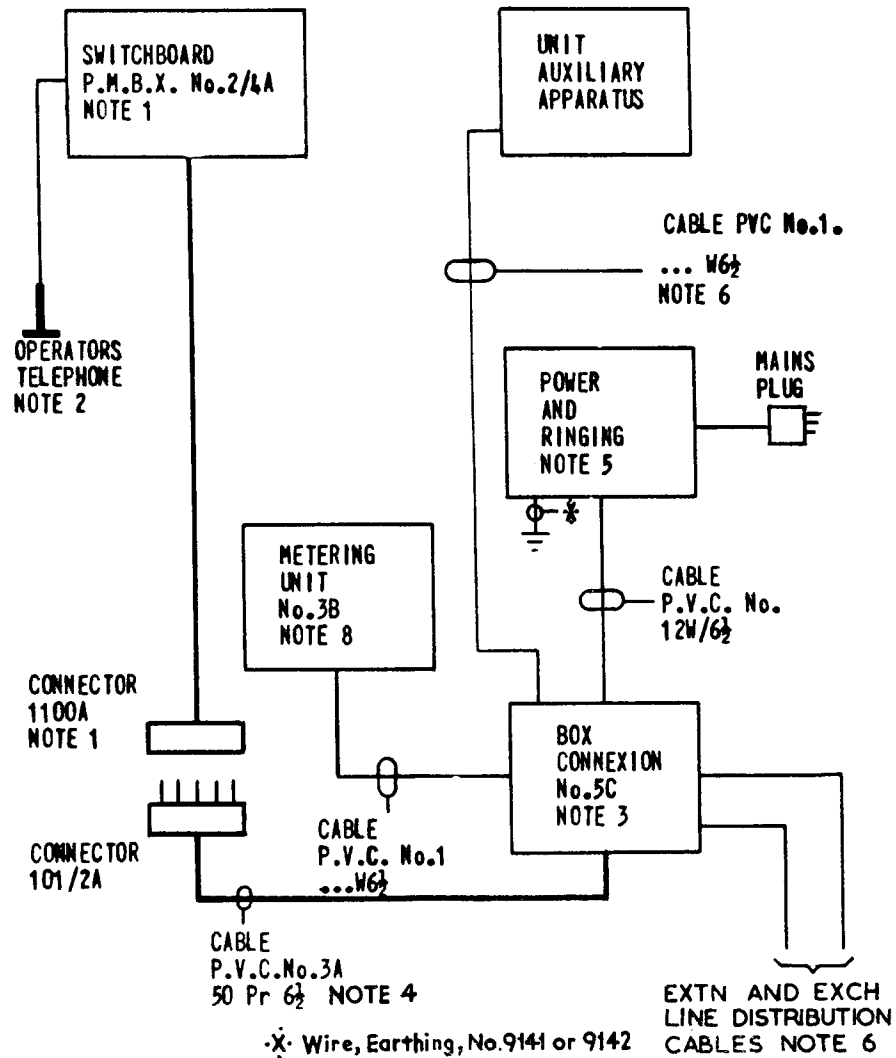


FIG. 1 TYPICAL INSTALLATION AND CABLING



P.O.
TELECOMMS.
HQRS.

PAPER: W
CIRCULATION
GENERAL

| | | |
|--------|--|----------|
| ISSUES | | |
| B | STORES SCHEDULE ADDED. TABLES RENUMBERED AND AMENDED. FIGS. 2 & 3 AMENDED. OTHER MINOR AMENDMENTS. | 21.10.69 |
| A | NEW FORMAT. | 4-7-66 |
| | E.C.C. STEVENS S3/2 | 23-10-62 |

| | | |
|-------|--|---------|
| ISSUE | | |
| C | CHANGES TO OPERATORS TELE. CIRCUIT. MINOR AMENDMENTS. PAGES 9 & 10 MADE YELLOW. MADE 14 PAGES. | 11-2-71 |

TABLE 1.

STORES SCHEDULE

| ITEM | REFERENCE | PROVISION | REMARKS |
|--|------------------------------------|--|--|
| Switchboard P.M.B.X. No. 2/4A. | SAM 71650 | } Per Installation | |
| Telephone No. 746...Grey. Cord Instrument No. 7/13AT Grey 36" or 54" Rectifier Element No. 205. Switch No. 19B-1 | N846 N848 | } Per Installation if required | } Operator's Telephone without Headset. See Figs. 2 & 3 Provided if U.A.A.96A is fitted. See Figs. 2 & 3 |
| Telephone No. 740...Grey. Headset No. 1 Grey. Plug No. 420 Grey with Cord 4/77AB 54". Jack No. 84C Grey. Cord Instrument No. 10/16 AT Grey 36" or 54" | N840 N848 | } Per Installation if required | } Operator's Telephone with Headset. See Figs. 4 & 5 |
| Rectifier Element No. 205. | N849 | } | } |
| Dial Automatic No. 25FA Clear. Cord Instrument No. 2/148E 8 1/2". | | } Per installation if required. | } Provided if Inter-PBX Dialling Circuit is fitted. See Figs. 3 and 5. |
| Power Unit No. 100A/2 Power Unit No. 100A/4 | N700 N700 | } Per installation without standby power | SEE NOTE 5 |
| Power Equipment for standby arrangements. | N2332 | } Per installation with standby power | See Note 5. For schedule of Equipment see Dgm N2332. |
| Box connexion No. 5C. Connector No. 101/2A. | | } Per Installation | |
| Equipment for subscribers Private Metering. | N1005 | } As required | See Note 8. For schedule of Equipment see Dgm. N1005 |
| Unit Auxiliary Apparatus No. 96A. Part 1/DSP/1243 Part 23/DBU/372 Part 13/DBU/372 Part 1/DST/26 | N1113 N1128 N848 N849 | } Per 2 wire extension | For Terminating 2 wire extension circuits. |

TABLE 1.

STORES SCHEDULE (CONTD)

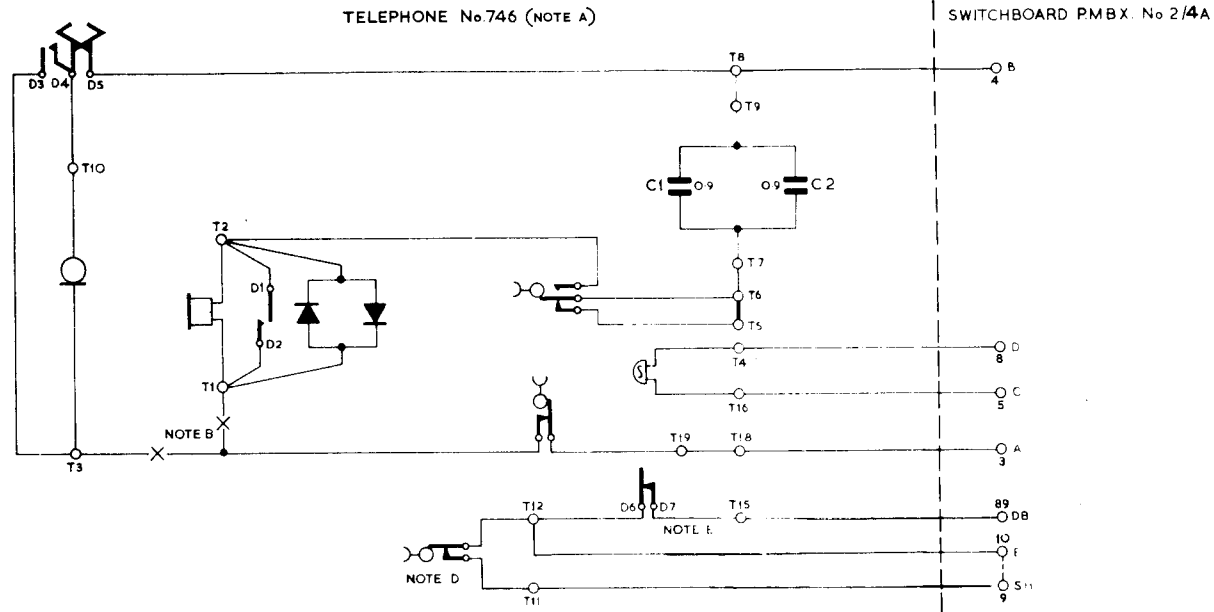
| ITEM | REFERENCE | PROVISION | REMARKS |
|--|-------------------------------|------------------------------------|--|
| Unit Auxiliary Apparatus No. 97. | N1116 N1150-N1153 N1157 | Per Inter-PBX circuit as required. | For Terminating Inter-PBX and Private Circuits A/ME and Genr. Sig. |
| Unit Auxiliary Apparatus No. 98 | N1117 N1154-N1156 | | For Terminating Private and Long Extension circuits G/AC and G/BB Sig. |
| Unit Auxiliary Apparatus No. 99. | N1118 N1158 | | For Terminating Inter-PBX Earth and Loop Dialling Circuits. |
| Unit Auxiliary Apparatus No. 99A. | N1120 N1158 | | As U.A.A. 99 with additional Loop Dialling out G/AC in facility. |
| Unit Auxiliary Apparatus No. 100. | N1119 N1159 | | For Terminating Inter-PBX circuits SCDC Signalling. |
| Relay Set 1/SA7572. Relay Set 1/SA8299 and 2/SA8299 | SAW75721 SAW82990 N762 | | For Terminating Inter-PBX circuits IVF Signalling (SSAC13). |
| Equipment Signalling No.24/... | | | Rack for Mounting IVF Signalling (SSAC13) |

**N1104
PAGE 6
ISSUE C**

SPARE

SUPERSEDES PAGE 9
FOR NEW WORK

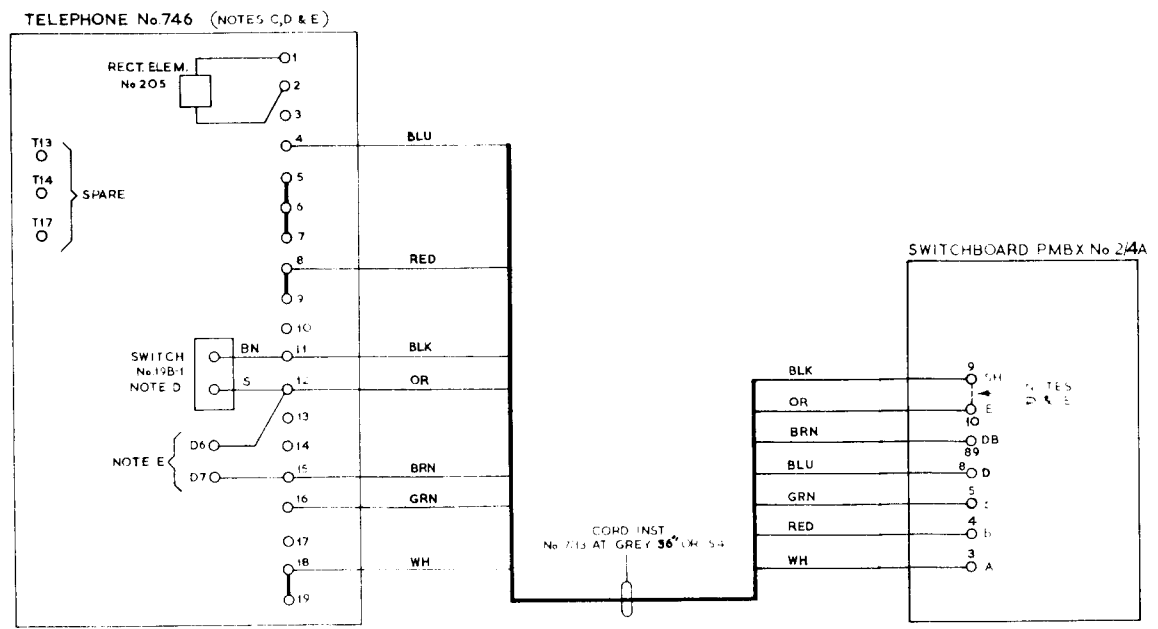
FIG. 2. OPERATORS TELEPHONE WITHOUT HEADSET



NOTES:-

- A. For apparatus required see table 1
- B. Internal connexions of telephone No. 746 not shown (see N846).
- C. Telephone No. 746:-
Remove straps T4-T5 & T16-T17
Provide Rectifier Element No. 205 and connect as shown.
- D. When UAA No. 96 or 96A is fitted provide Switch No. 19B-1 and connect as shown.
- E. When Inter-PBX dialling circuits are fitted change dial to Dial Auto No. 25 FA Clear and provide Cord Inst 2/14BE 8 1/2" and connect additional contacts D6-D7 as shown.

FIG. 3. OPERATORS TELEPHONE WITHOUT HEADSET (NOTE A)



SUPERSEDES PAGE 10
FOR NEW WORK

NOTES:—

- A. For apparatus required see Table 1.
- B. Internal connexions of Telephone No 740 not shown (see N840).
- C. Remove the gravity switch operating lever and restoring Spring to make gravity springs permanently operated.
- D. Switchboard:—
Fit Jack No 84C grey in place of the dummy grommet on the base flange on the left-hand side of the switchboard. Wire Jack points to Switchboard Terminal Block (wiring already provided see Dgm. SAW 71640 sheet 1). Strap terminals 15-16 of block terminal.
- E. Telephone No 740:—
See diagrams N840-848-849.
Fit Part 1/DSP/1243 and Part 13/DBU/372 in position B
Fit Part 1/DST/26 and Part 23/DBU/372 in position C
Set latches B & C to setting 1
Set latches X & Y to setting 5.
Remove straps T4-T5, T16-T17 & T17-T18
Connect Part 1/DSP/1243 as shown.
Transfer red conductor of receiver from T1-T11
" blue " " Trans. " T3-T14
" " " dial " T2-T5.
Provide and fit Rectifier Element No 205, connect as shown.
- F. When inter-PBX dialling circuits are fitted change dial to Dial Auto No 25 FA Clear and provide Cord Inst No 2/148E 8½". Connect additional contacts D6-D7 as shown.

FIG.4. OPERATORS TELEPHONE CIRCUIT-WITH HEADSET No.1 (NOTE A)

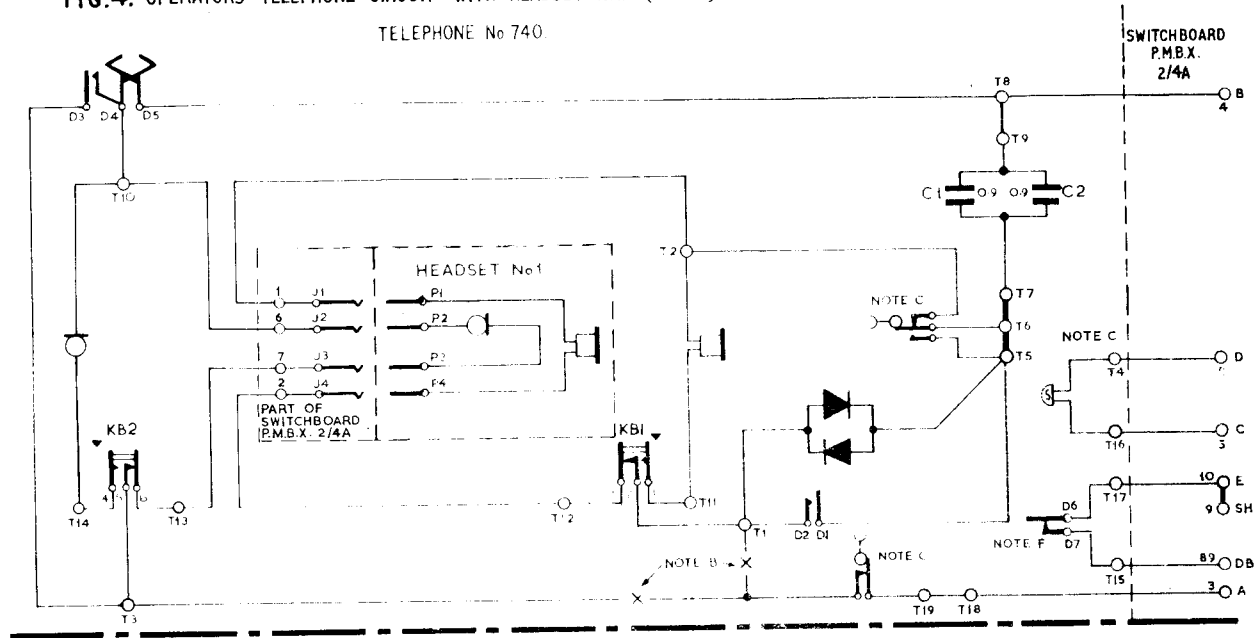
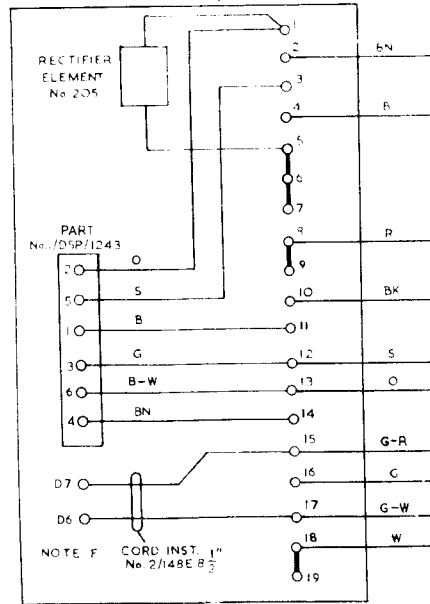
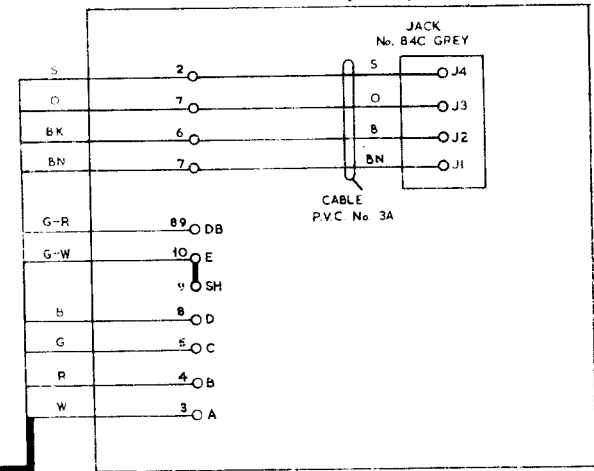


FIG.5. OPERATORS TELEPHONE CIRCUIT-WITH HEADSET No.1 (NOTE A)

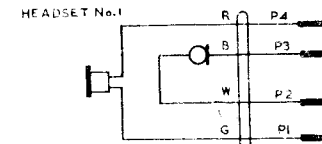
TELEPHONE No. 740 (NOTES C, E & F)



SWITCHBOARD P.M.B.X 2/4A (NOTE D)



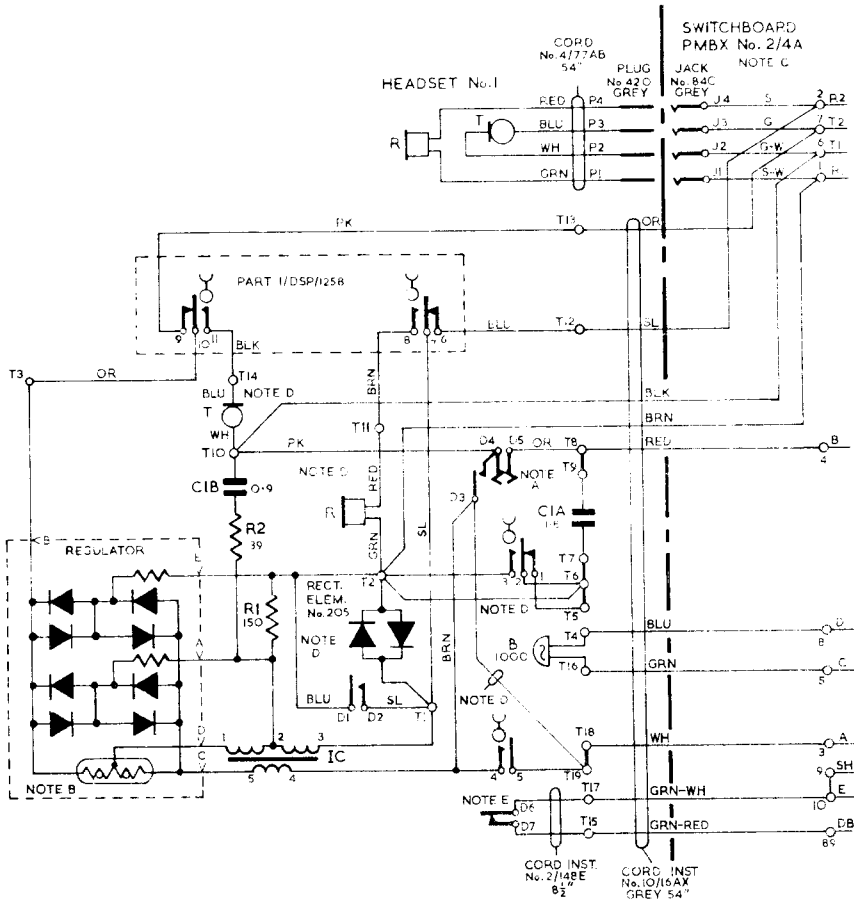
CORD INST. No. 1/16 AT GREY 36" OR 54"



CORD No. 1/77AB 54" WITH PLUG No. 420 GREY

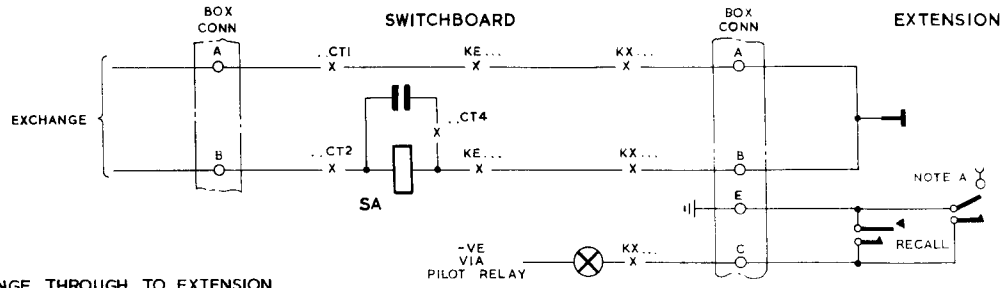
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FIG.7. OPERATORS TELEPHONE CCT. WITH HEADSET No.1.



NOTES:-

- A. CB Tele. has no dial. The Pink and Orange Conductors are joined together.
- B. When reversed in jack the Regulator connects 'B', 'C' & 'D' together and is rendered inoperative.
- C. Switchboard
Fit Jack No. 84C Grey in place of the Dummy Grommet on the Base Flange on the left hand side of Swbd.
Wire Jack Points to Swbd. Terminal Block (wiring already provided see Dgm. SAW 71650 Sheet. 1.)
Strap Terminals 9-10.
- D. Transfer Red Conductor of Rec. from T1 to T11.
" Blue " " Trans. " T3 " T14.
Provide Strap T2-6.
Remove Straps T4-5, T16-17 and T17-18.
Connect Terminals D3 and T19 using Cord Inst. No. 1/42E Brn. 10 1/2".
Provide and fit Rect. Element No. 205 across T1 and T2.
- E. When Inter-PBX Drilling Circuit is fitted change Dial to Dial Auto No. 25FA clear and provide
Cord Inst. No. 2/148E, 8 1/2" between D6-T17 and D7-T15.



- NOTES
- A SPRINGSET, AUXILIARY GRAVITY SWITCH SHOWN WITH HANDSET OFF.
 - B RELAY D IS DIFFERENTIALLY CONNECTED
 - C CONTACTS OF RELAYS LL, LS & S ARE SHOWN IN OPERATED CONDITION

FIG. 8. EXCHANGE THROUGH TO EXTENSION

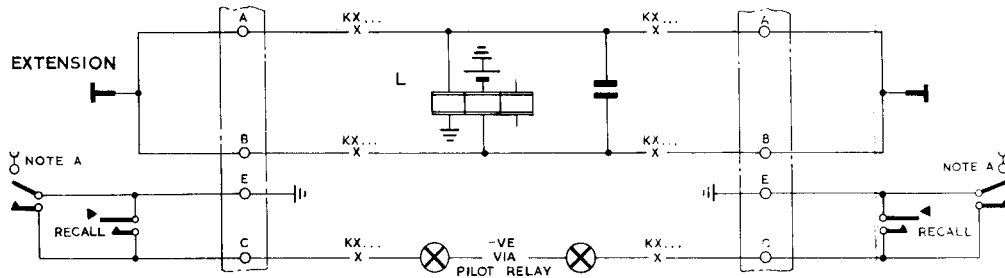


FIG. 9. EXTENSION THROUGH TO EXTENSION

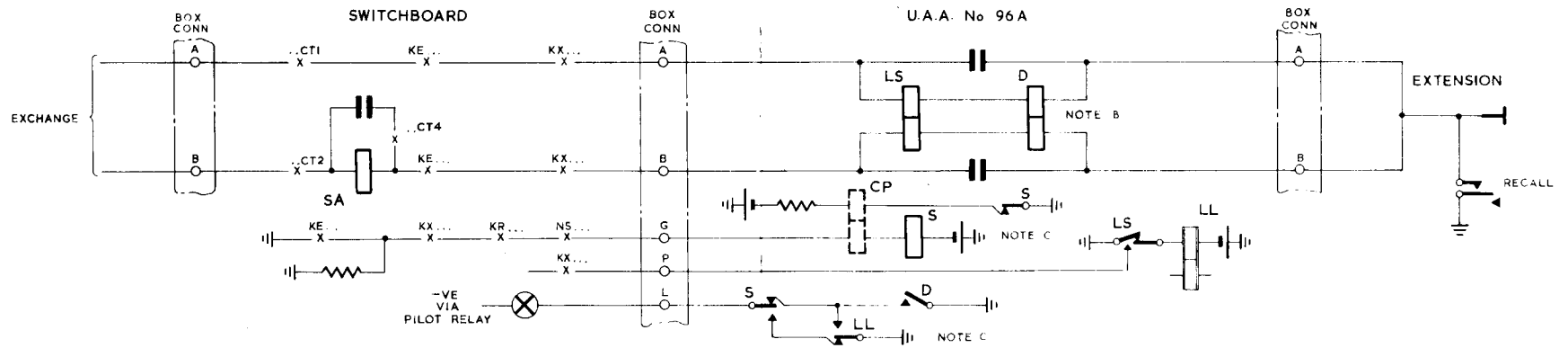


FIG. 10. EXCHANGE THROUGH TO EXTENSION WITH U.A.A. No. 96A

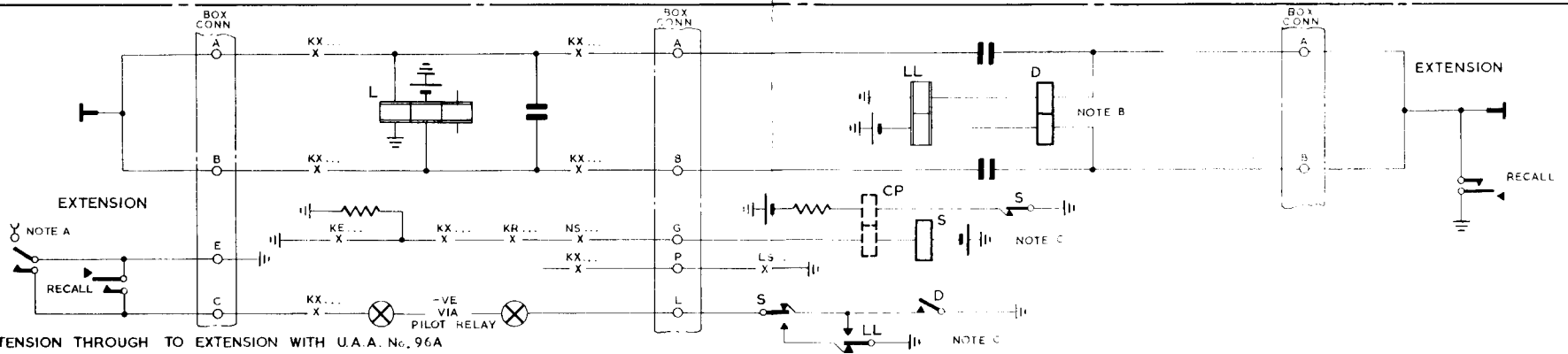
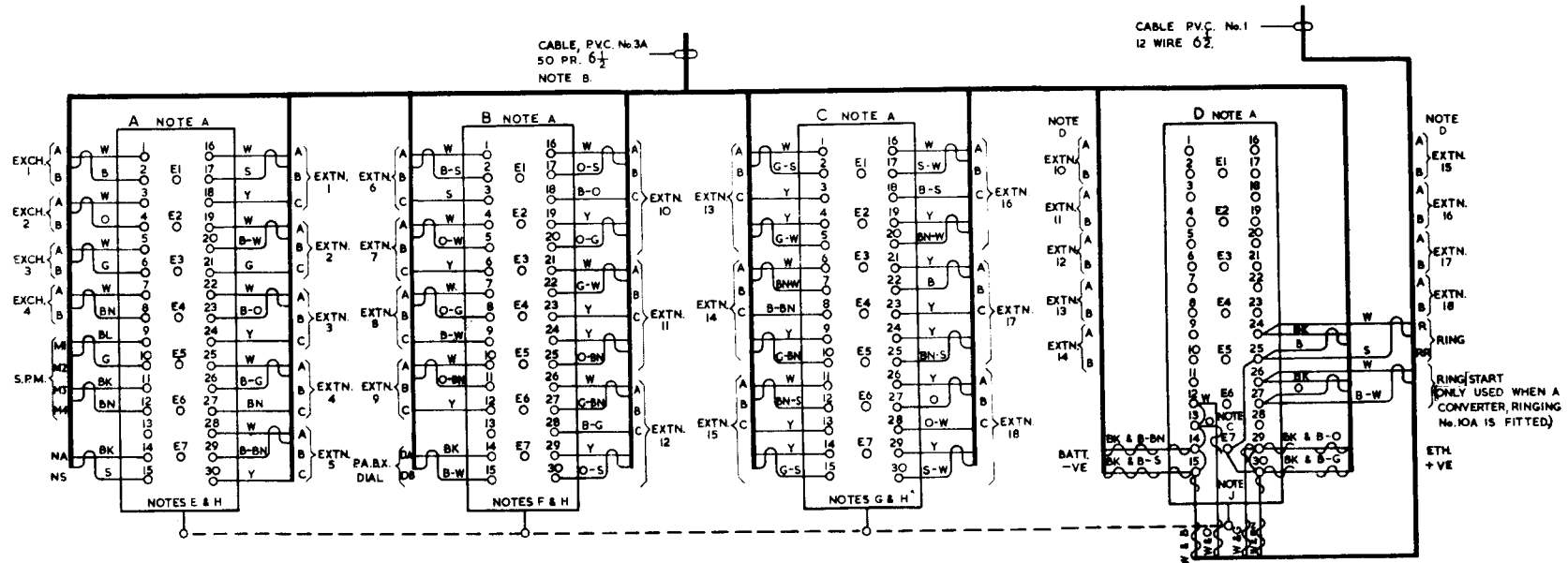


FIG. 11. EXTENSION THROUGH TO EXTENSION WITH U.A.A. No. 96A

FIG.12. CABLING, BOX CONNEXION No. 5C



NOTES :-

- A. TO ASSIST INSTALLATION THE TERMINAL BLOCKS IN THE BOX, CONN. No. 5C HAVE BEEN DESIGNATED A, B, C & D.
- B. TERMINATED ON THE SOLDERED CONNEXIONS OF THE BOX, CONN. No. 5C.
- C. A SLEEVED B.T.C. STRAP TO BE PROVIDED BETWEEN TERMINALS D25-E7-D30.
- D. TERMINALS 1-10 & 16-23 ON BLOCK 'D' TO BE USED FOR THE CONNEXION OF INCOMING LINES TO U.A.A. (S).
- E. EXTN. SIGNALLING EARTHS ON BLOCK 'A' ALLOCATED AS FOLLOWS :-
EXTN.1-E1, EXTN.2-E3, EXTN.3-E4, EXTN.4-E6, EXTN.5-E7.
- F. EXTN. SIGNALLING EARTHS ON BLOCK 'B' ALLOCATED AS FOLLOWS :-
EXTN.6-E1, EXTN.7-E3, EXTN.8-E5, EXTN.9-E6, EXTN.10-E2, EXTN.11-E4, EXTN.12-E7.
- G. EXTN. SIGNALLING EARTHS ON BLOCK 'C' ALLOCATED AS FOLLOWS :-
EXTN.13-E1, EXTN.14-E3, EXTN.15-E6, EXTN.16-E2, EXTN.17-E4, EXTN.18-E7.

- H. ON ALL SPARE EXTN. CCTS. THE 'C' TERMINAL SHOULD BE CONNECTED TO THE EARTH TERMINALS AS SHOWN IN NOTES E, F & G.
- J. WHEN A P.U. No. 52A IS FITTED BUNCH THE W & G PR. WITH THE W & BN PR. AND CONNECT TO THE +VE OF THE P.U., PROVIDE STRAP D29-D30 IN THE BOX CONN., BUNCH THE W & B PR. WITH THE W & O PR. AND CONNECT TO DISTRIBUTION -1 (-VE) IN THE P.U. CHANGE THE FUSE No. 36/1 TO 36/2. PROVIDE STRAPS D12-D15 IN THE BOX CONN.
WHEN U.A.A. (S) ARE FITTED A P.U. No. 52A IS REQUIRED, BUNCH THE W & G PR. WITH THE W & BN PR. AND CONNECT TO THE +VE OF THE P.U., PROVIDE STRAP D29-D30. BUNCH THE W & B PR. AND CONNECT TO DISTRIBUTION -1 (2AMP) IN THE P.U. No. 52A. CONNECT THE W OF THE W-O PR. TO DISTRIBUTION -2 (1AMP) AND THE O WIRE TO DISTRIBUTION -3 (1AMP) PROVIDE STRAP D14-D15 IN THE BOX CONN. TERMINALS D12 & D13 SHOULD BE USED FOR THE -VE POWER SUPPLY TO U.A.A. TO AVOID CONGESTION OF WIRING AT TERMINALS IN THE BOX CONN. THE -VE & +VE POWER SUPPLY FOR U.A.A.'S SHOULD BE TEED BETWEEN UNITS. UP TO 6 UNITS MAY BE SUPPLIED FROM EACH OF THE TWO -VE 1AMP. SUPPLIES.

TABLE 3

TERMINATION OF 50 PAIR CABLE IN
BOX, CONNEXION No. 5C. (NOTE A)

| WIRE | COLOUR | TERM. | WIRE | COLOUR | TERM. | WIRE | COLOUR | TERM. |
|------|--------|-------|------|--------|-------|------|--------|-------|
| 1 | W | A1 | 41 | Y | C21 | 81 | BK | D24 |
| 2 | B | A2 | 42 | B | C22 | 82 | B | D25 |
| 3 | W | A3 | 43 | Y | C26 | 83 | BK | D26 |
| 4 | O | A4 | 44 | O | C27 | 84 | O | D27 |
| 5 | W | A5 | 45 | Y | A1B | 85 | BK | A9 |
| 6 | G | A6 | 46 | G | A21 | 86 | G | A10 |
| 7 | W | A7 | 47 | Y | A24 | 87 | BK | A11 |
| 8 | BN | A8 | 48 | BN | A27 | 88 | BN | A12 |
| 9 | W | A16 | 49 | Y | A30 | 89 | BK | A14 |
| 10 | S | A17 | 50 | S | B3 | 90 | S | A15 |
| 11 | W | A19 | 51 | Y | B6 | 91 | BK | B14 |
| 12 | B-W | A20 | 52 | B-W | B9 | 92 | B-W | B15 |
| 13 | W | A22 | 53 | Y | B12 | 93 | BK | D29 |
| 14 | B-O | A23 | 54 | B-O | B18 | 94 | B-O | |
| 15 | W | A25 | 55 | Y | B23 | 95 | BK | D14 |
| 16 | B-G | A26 | 56 | B-G | B28 | 96 | B-G | |
| 17 | W | A28 | 57 | Y | C3 | 97 | BK | D15 |
| 18 | B-BN | A29 | 58 | B-BN | C8 | 98 | B-BN | |
| 19 | W | B1 | 59 | Y | C13 | 99 | BK | D15 |
| 20 | B-S | B2 | 60 | B-S | C18 | 100 | B-S | |
| 21 | W | B4 | 61 | Y | C23 | | | |
| 22 | O-W | B5 | 62 | O-W | C28 | | | |
| 23 | W | B7 | 63 | Y | B19 | | | |
| 24 | O-G | B8 | 64 | O-G | B20 | | | |
| 25 | W | B10 | 65 | Y | B24 | | | |
| 26 | O-BN | B11 | 66 | O-BN | B25 | | | |
| 27 | W | B16 | 67 | Y | B29 | | | |
| 28 | O-S | B17 | 68 | O-S | B30 | | | |
| 29 | W | B21 | 69 | Y | C4 | | | |
| 30 | G-W | B22 | 70 | G-W | C5 | | | |
| 31 | W | B26 | 71 | Y | C9 | | | |
| 32 | G-BN | B27 | 72 | G-BN | C10 | | | |
| 33 | W | C1 | 73 | Y | C14 | | | |
| 34 | G-S | C2 | 74 | G-S | C15 | | | |
| 35 | W | C6 | 75 | Y | C19 | | | |
| 36 | BN-W | C7 | 76 | BN-W | C20 | | | |
| 37 | W | C11 | 77 | Y | C24 | | | |
| 38 | BN-S | C12 | 78 | BN-S | C25 | | | |
| 39 | W | C16 | 79 | Y | C29 | | | |
| 40 | S-W | C17 | 80 | S-W | C30 | | | |

NOTES :-

A. LOOSE TIES SHOULD BE USED AND NOT A CABLE FORM AS THE WIRES ARE NOT TERMINATED IN A COLOUR CODE SEQUENCE THROUGHOUT AND EXTN. C WIRES USE SPLIT PAIRS.

TABLE 4

TERMINATION OF CORD AND CABLE
ON SWITCHBOARD CONNECTORS

| CONNECTOR POINT (NOTE C) | SWBD TERM. No. | CORD & CABLE COLOUR (NOTE A) | USED FOR | CONNECTOR POINT (NOTE C) | SWBD TERM. No. | CORD & CABLE COLOUR (NOTE A) | USED FOR | CONNECTOR POINT (NOTE C) | SWBD TERM. No. | CORD & CABLE COLOUR (NOTE A) | USED FOR | | | |
|--------------------------|----------------|------------------------------|----------|--------------------------|----------------|------------------------------|----------|--------------------------|----------------|------------------------------|----------|-------------------------|---------|--------------|
| 1 | 76 | W | A | EXCH LINE 1 | 41 | 156 | Y | A | EXTN. 17 | 81 | 82 | BK | RA | RINGING |
| 2 | 77 | B | B | | 42 | 157 | B | B | | 82 | 83 | B | RB | |
| 3 | 66 | W | A | EXCH LINE 2 | 43 | 166 | Y | A | EXTN. 18 | 83 | 87 | BK | RC | RING START |
| 4 | 67 | O | B | | 44 | 167 | O | B | | 84 | 88 | O | RD | |
| 5 | 56 | W | A | EXCH LINE 3 | 45 | 80 | Y | C | EXTN. 1 | 85 | 41 | BK | HI | S.T.D. METER |
| 6 | 57 | G | B | | 46 | 75 | G | C | | EXTN. 2 | 86 | 42 | G | |
| 7 | 46 | W | A | EXCH LINE 4 | 47 | 70 | Y | C | EXTN. 3 | 87 | 36 | BK | HO | |
| 8 | 47 | BN | B | | 48 | 65 | BN | C | | EXTN. 4 | 88 | 37 | BN | |
| 9 | 78 | W | A | EXTN. 1 | 49 | 60 | Y | C | EXTN. 5 | 89 | 179 | BK | NA | BATTERY |
| 10 | 79 | S | B | | 50 | 55 | S | C | | EXTN. 6 | 90 | 180 | S | |
| 11 | 73 | W | A | EXTN. 2 | 51 | 50 | Y | C | EXTN. 7 | 91 | 84 | BK | DA | |
| 12 | 74 | B-W | B | | 52 | 45 | B-W | C | | EXTN. 8 | 92 | 89 | B-W | |
| 13 | 68 | W | A | EXTN. 3 | 53 | 40 | Y | C | EXTN. 9 | 93 | 85 | BK | EARTH | |
| 14 | 69 | B-O | B | | 54 | 28 | B-O | C | | EXTN. 10 | 94 | 90 | | |
| 15 | 63 | W | A | EXTN. 4 | 55 | 13 | Y | C | EXTN. 11 | 95 | 90 | BK | | |
| 16 | 64 | B-G | B | | 56 | 93 | B-G | C | | EXTN. 12 | 96 | 90 | | |
| 17 | 58 | W | A | EXTN. 5 | 57 | 108 | Y | C | EXTN. 13 | 97 | 81 | BK | BATTERY | |
| 18 | 59 | B-BN | B | | 58 | 118 | B-BN | C | | EXTN. 14 | 98 | 81 | | |
| 19 | 53 | W | A | EXTN. 6 | 59 | 133 | Y | C | EXTN. 15 | 99 | 81 | BK | | |
| 20 | 54 | B-S | B | | 60 | 143 | B-S | C | | EXTN. 16 | 100 | 86 | | B-S |
| 21 | 48 | W | A | EXTN. 7 | 61 | 158 | Y | C | EXTN. 17 | 81 | 82 | BK | BATTERY | |
| 22 | 49 | O-W | B | | 62 | 168 | O-W | C | | EXTN. 18 | 82 | 83 | | B |
| 23 | 43 | W | A | EXTN. 8 | 63 | 21 | Y | CONTROL EXTN. 10 NOTE B | 64 | 22 | O-G | CONTROL EXTN. 11 NOTE B | | |
| 24 | 44 | O-G | B | | 65 | 24 | Y | | 66 | 25 | O-BN | | | |
| 25 | 38 | W | A | EXTN. 9 | 66 | 25 | O-BN | CONTROL EXTN. 12 NOTE B | 67 | 101 | Y | CONTROL EXTN. 13 NOTE B | | |
| 26 | 39 | O-BN | B | | 67 | 101 | Y | | 68 | 102 | O-S | | | |
| 27 | 26 | W | A | EXTN. 10 | 68 | 102 | O-S | CONTROL EXTN. 14 NOTE B | 69 | 104 | Y | CONTROL EXTN. 15 NOTE B | | |
| 28 | 27 | O-S | B | | 69 | 104 | Y | | 70 | 105 | G-W | | | |
| 29 | 11 | W | A | EXTN. 11 | 70 | 105 | G-W | CONTROL EXTN. 16 NOTE B | 71 | 126 | Y | CONTROL EXTN. 17 NOTE B | | |
| 30 | 12 | G-W | B | | 71 | 126 | Y | | 72 | 127 | G-BN | | | |
| 31 | 91 | W | A | EXTN. 12 | 72 | 127 | G-BN | CONTROL EXTN. 18 NOTE B | 73 | 129 | Y | CONTROL EXTN. 19 NOTE B | | |
| 32 | 92 | G-BN | B | | 73 | 129 | Y | | 74 | 130 | G-S | | | |
| 33 | 106 | W | A | EXTN. 13 | 74 | 130 | G-S | CONTROL EXTN. 20 NOTE B | 75 | 151 | Y | CONTROL EXTN. 21 NOTE B | | |
| 34 | 107 | G-S | B | | 75 | 151 | Y | | 76 | 152 | BN-W | | | |
| 35 | 116 | W | A | EXTN. 14 | 76 | 152 | BN-W | CONTROL EXTN. 22 NOTE B | 77 | 154 | Y | CONTROL EXTN. 23 NOTE B | | |
| 36 | 117 | BN-W | B | | 77 | 154 | Y | | 78 | 155 | BN-S | | | |
| 37 | 131 | W | A | EXTN. 15 | 78 | 155 | BN-S | CONTROL EXTN. 24 NOTE B | 79 | 176 | Y | CONTROL EXTN. 25 NOTE B | | |
| 38 | 132 | BN-S | B | | 79 | 176 | Y | | 80 | 177 | S-W | | | |
| 39 | 141 | W | A | EXTN. 16 | 80 | 177 | S-W | CONTROL EXTN. 26 NOTE B | 81 | 82 | BK | RINGING | | |
| 40 | 142 | S-W | B | | 82 | 83 | B | | 83 | 87 | BK | | RC | RING START |

NOTES :-

- A. CORD PAIRS ARE SLEEVED TO ASSIST IDENTIFICATION.
- B. THESE CONDUCTORS ARE PROVIDED FOR USE WITH U.A. AND ARE CONNECTED TO SPARE TERMINALS AS SHOWN.
- C. ON CONNECTORS THE COLOUR CODE SEQUENCE IS FOLLOWED THROUGHOUT. CONNECTOR POINTS 1-40 ARE PROVIDED IN THE WHITE, 41-80 (NUMBERED 1-40) ARE PROVIDED IN THE YELLOW & 81-100 (NUMBERED 1-20) IN THE BLACK MOULDINGS OF THE CONNECTOR 101/2A. FOR THE METHOD OF TERMINATING THE CABLE ON THE CONNECTOR SEE DRG. 50113.