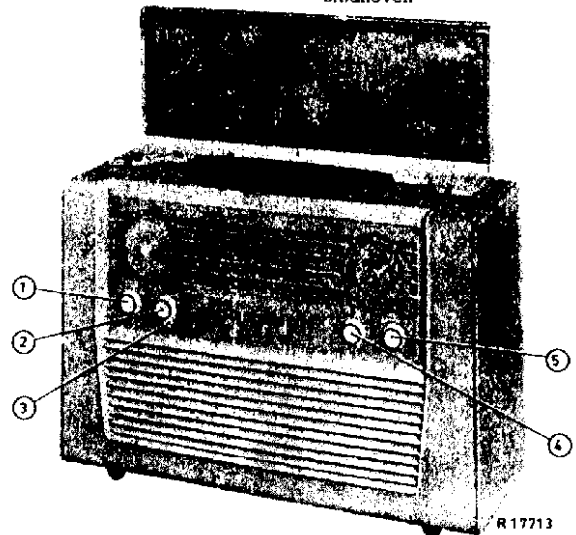


# PHILIPS

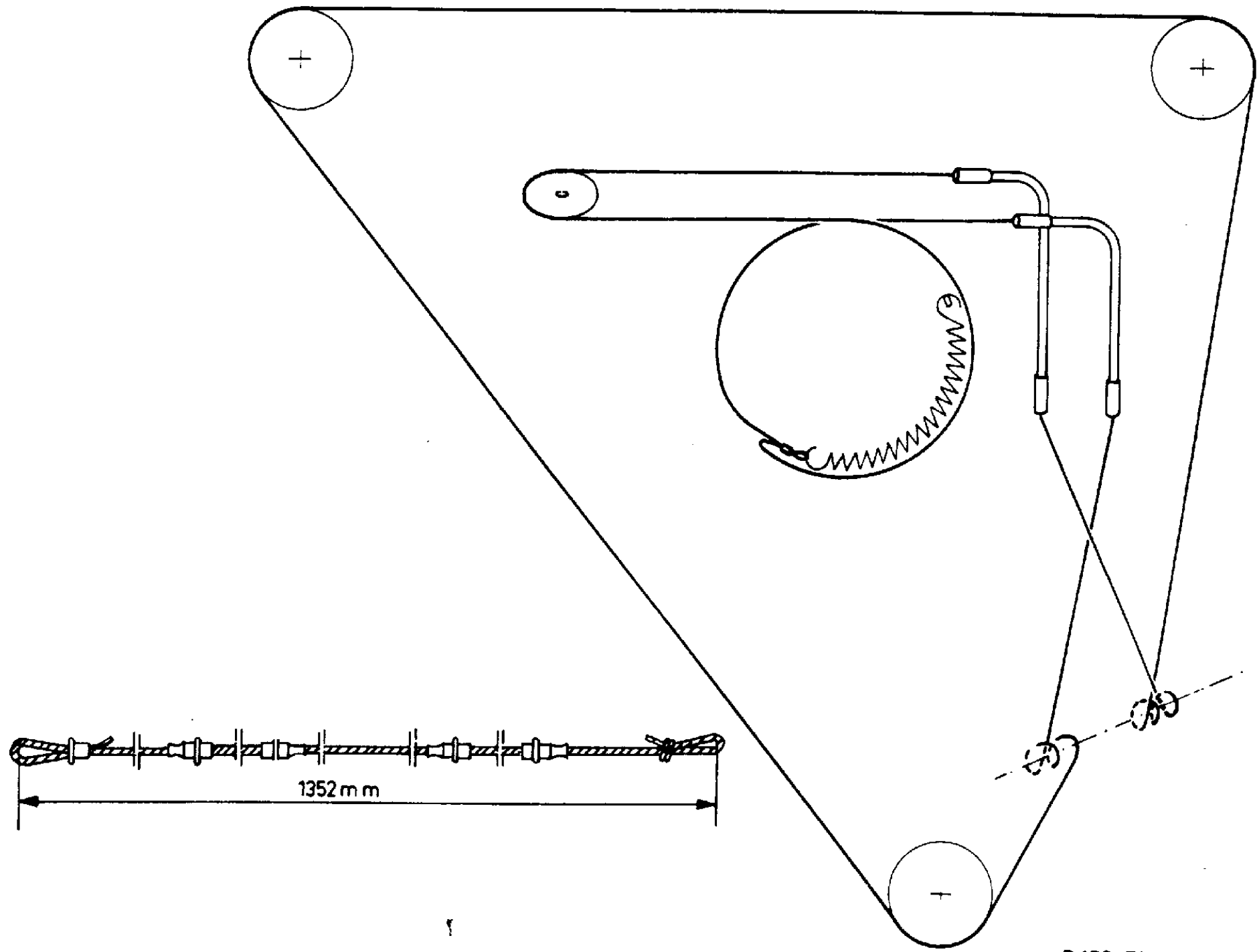
## SERVICE NOTES

### L5X78AB



|  |   |                               |                   |              |                               |                |              |                               |              |              |                           |                 |              |                           |                |              |
|--|---|-------------------------------|-------------------|--------------|-------------------------------|----------------|--------------|-------------------------------|--------------|--------------|---------------------------|-----------------|--------------|---------------------------|----------------|--------------|
| <p><u>Loudspeaker - Luidspreker</u><br/><u>Hautparleur - Altavoz</u><br/><u>AD 3700 Z</u></p> <p><u>I.F. - M.F.</u><br/><u>M.F. - F.I.</u></p> <p>452 kc/s</p> <p><u>Mains voltages - Netspanningen</u><br/><u>Tensions de réseau - Tensiones de red</u></p> <p>90 - 110 - 125 - 145 - 200 - 220 V.</p> <p><u>Batteries - Batterijen</u><br/><u>Baterías - Baterías</u></p> <p>Va - 90 V V<sub>f</sub> - 7 x 1,5 V</p> <p><u>Consumption - Verbruik</u><br/><u>Consumption - Consumo</u></p> <p>20 W ( ) Bat. : ia = 14mA if = 50 mA.</p> <p><u>Dimensions - Afmetingen</u><br/><u>Dimensions - Dimensiones</u></p> <p>437 x 304 x 185 mm.</p> | <p><u>Controls - Bediening</u><br/><u>Organes de commande - Organos de mando</u></p> <ol style="list-style-type: none"> <li>1. Batt. - mains switch - Batt. - netschakelaar<br/>Commutateur batt. réseau - Comutador bat. red.</li> <li>2. Volume control - Volume regelaar -<br/>Contrôle de volume - Control de volumen.</li> <li>3. Tone control - Toonregeling -<br/>Contrôle de tonalité - Regulador de notas.</li> <li>4. Wave range switch - Golfbereik schakelaar -<br/>Commutateur de gammes - Comutador de ondas.</li> <li>5. Tuning - Afstemming,<br/>Sintonisation - Sintonia.</li> </ol> <p><u>Wave ranges - Golfbereiken -</u><br/><u>Gammes d'onde - Gammas de onda.</u></p> <table border="0"> <tr> <td>S.W.1 - K.G.1 - O.C.1 - O.C.1</td> <td>21,9 - 13,95 Mc/s</td> <td>{13,7-21,5m}</td> </tr> <tr> <td>S.W.2 - K.G.2 - O.C.2 - O.C.2</td> <td>14 - 4,95 Mc/s</td> <td>{21,4-60,6m}</td> </tr> <tr> <td>S.W.3 - K.G.3 - O.C.3 - O.C.3</td> <td>5 - 1,6 Mc/s</td> <td>{60 -187,5m}</td> </tr> <tr> <td>M.W. - M.O. - P.O. - O.W.</td> <td>1622 - 550 kc/s</td> <td>{187 -545 m}</td> </tr> <tr> <td>L.W. - L.G. - G.O. - O.L.</td> <td>395 - 150 kc/s</td> <td>{759 -2000m}</td> </tr> </table> | S.W.1 - K.G.1 - O.C.1 - O.C.1 | 21,9 - 13,95 Mc/s | {13,7-21,5m} | S.W.2 - K.G.2 - O.C.2 - O.C.2 | 14 - 4,95 Mc/s | {21,4-60,6m} | S.W.3 - K.G.3 - O.C.3 - O.C.3 | 5 - 1,6 Mc/s | {60 -187,5m} | M.W. - M.O. - P.O. - O.W. | 1622 - 550 kc/s | {187 -545 m} | L.W. - L.G. - G.O. - O.L. | 395 - 150 kc/s | {759 -2000m} |
| S.W.1 - K.G.1 - O.C.1 - O.C.1  | 21,9 - 13,95 Mc/s   | {13,7-21,5m}                  |                   |              |                               |                |              |                               |              |              |                           |                 |              |                           |                |              |
| S.W.2 - K.G.2 - O.C.2 - O.C.2  | 14 - 4,95 Mc/s  | {21,4-60,6m}                  |                   |              |                               |                |              |                               |              |              |                           |                 |              |                           |                |              |
| S.W.3 - K.G.3 - O.C.3 - O.C.3  | 5 - 1,6 Mc/s  | {60 -187,5m}                  |                   |              |                               |                |              |                               |              |              |                           |                 |              |                           |                |              |
| M.W. - M.O. - P.O. - O.W.  | 1622 - 550 kc/s   | {187 -545 m}                  |                   |              |                               |                |              |                               |              |              |                           |                 |              |                           |                |              |
| L.W. - L.G. - G.O. - O.L.  | 395 - 150 kc/s  | {759 -2000m}                  |                   |              |                               |                |              |                               |              |              |                           |                 |              |                           |                |              |

|   |   |  |   |  |
|---|---|--|---|--|
| <p>Case<br/>Handle (for case)<br/>Handle fixation<br/>Bush (aerial fixation)</p> <p>Ventilation grill</p> <p>Front<br/>Disc (timer)<br/>Knob (timer)<br/>Knob (1+2+5)<br/>Knob (3)<br/>Knob (4)<br/>Spring (in knobs)</p> <p>Contact plate (battery holder)<br/>Mains switch<br/>Thermometer</p> <p>Flap<br/>Ornamental strip (flap)</p> <p>Loop aerial<br/>Voltage adaptor</p> <p>Dial (N)<br/>Dial (S)<br/>Dial (overseas)</p> <p>To order parts which do not occur in the parts lists consult the catalogue for service spare parts.</p> | <p>Koffer<br/>Handgreep (voor koffer)<br/>Handgreep bevestiging<br/>Lagerbus (antenne bevestiging)<br/>Ventilatie rooster</p> <p>Front<br/>Sohijf (tijdklok)<br/>Knop (tijdklok)<br/>Knop (1+2+5)<br/>Knop (3)<br/>Knop (4)<br/>Veer (in knoppen)</p> <p>Contactplaat (batterijhouder)<br/>Netschakelaar<br/>Thermometer</p> <p>Klap<br/>Sierstrip (klap)</p> <p>Raam antenne<br/>Spanningsomschakelaar</p> <p>Stationnamenschaal (N)<br/>Stationnamenschaal (Z)<br/>Stationnamenschaal (overzee)</p> <p>Voor het bestellen van onderdelen welke niet in de onderdelenlijsten voorkomen raadplege men de catalogus voor service standaard onderdelen.</p> | <p>A3 779 47<br/>P5 220 01/159<br/>P5 280 61/159<br/>P5 172 21/332</p> <p>P5 350 26/159</p> <p>P5 212 00/159<br/>A3 412 57<br/>P4 076 05/417<br/>A3 772 42<br/>P4 077 48/417</p> <p>A3 772 44<br/>A3 522 08</p> <p>A3 665 07</p> <p>O8 529 10<br/>A3 327 76</p> <p>A3 779 20<br/>A3 619 58</p> <p>A3 748 99<br/>A3 229 76</p> <p>A3 925 82<br/>A3 925 85<br/>A3 925 88</p> | <p>Coffret<br/>Poignée (de coffret)<br/>Fixation de poignée<br/>Coussinet (fixation d'antenne)<br/>Grille de ventilation</p> <p>Front<br/>Disque (minuterie)<br/>Bouton (minuterie)<br/>Bouton (1+2+5)<br/>Bouton (3)<br/>Bouton (4)<br/>Ressort (dans les boutons)<br/>Plaque de contact (porte-pile)<br/>Interrupteur de réseau<br/>Thermomètre</p> <p>Clapet<br/>Bande enjoliveuse (clapet)<br/>Antenne à cadre<br/>Carroussel de tension</p> <p>Cadran (N)<br/>Cadran (S)<br/>Cadran (autres-er)</p> <p>Pour la commande des pièces qui ne figurent pas dans les listes de pièces veuillez consulter la catalogue pour pièces de réchange standard.</p> | <p>Maleta<br/>Asa (maleta)<br/>Fijación asa<br/>Cojinete (fijación antena)<br/>Rejilla de ventilación</p> <p>Frente<br/>Disco (reloj)<br/>Botón (reloj)<br/>Botón (1+2+5)<br/>Botón (3)<br/>Botón (4)<br/>Resorte (en botones)</p> <p>Placa de contacto (porta batería)<br/>Interruptor de red<br/>Termómetro</p> <p>Tapa<br/>Faja de adorno (tapa)<br/>Antena de cuadro<br/>Cambiador de tensiones</p> <p>Cuadrante (N)<br/>Cuadrante (S)<br/>Cuadrante (Ultramar)</p> <p>Para las piezas que no figuren en la lista de piezas consúltese el catálogo de piezas de recambio standard.</p> |
|---|---|--|---|--|



R 178 51

If an asterisk is indicated behind the coil or capacitor to be adjusted, the signals should be applied via a coupling winding.

If two asterisks are mentioned, the signals should be applied to the aerial sockets via a normal dummy aerial.

If nothing is indicated, the signals are applied to g1B1 via 33.000 pF.

Indien een sterretje is aangegeven achter de af te regelen spoel of condensator, moeten de signalen via een koppelwinding worden toegevoerd.

Indien twee sterretjes zijn aangegeven moeten de signalen via een normale kunstantenne aan de antennebussen worden toegevoerd.

Indien niets is aangegeven worden de signalen via 33.000 pF aan g1B1 toegevoerd.

S'il y a un astérisque derrière la bobine ou le condensateur à ajuster, appliquer les signaux par un enroulement de couplage.

S'il y a deux astérisques, appliquer les signaux aux douilles d'antenne par une antenne fictive normale.

S'il n'a rien indiqué, appliquer les signaux à g1B1 par 33.000 pF.

Si se ha indicado un asterisco detrás de la bobina o del condensador que debe ajustarse, las señales deben aplicarse a través de un arrollamiento de acoplo.

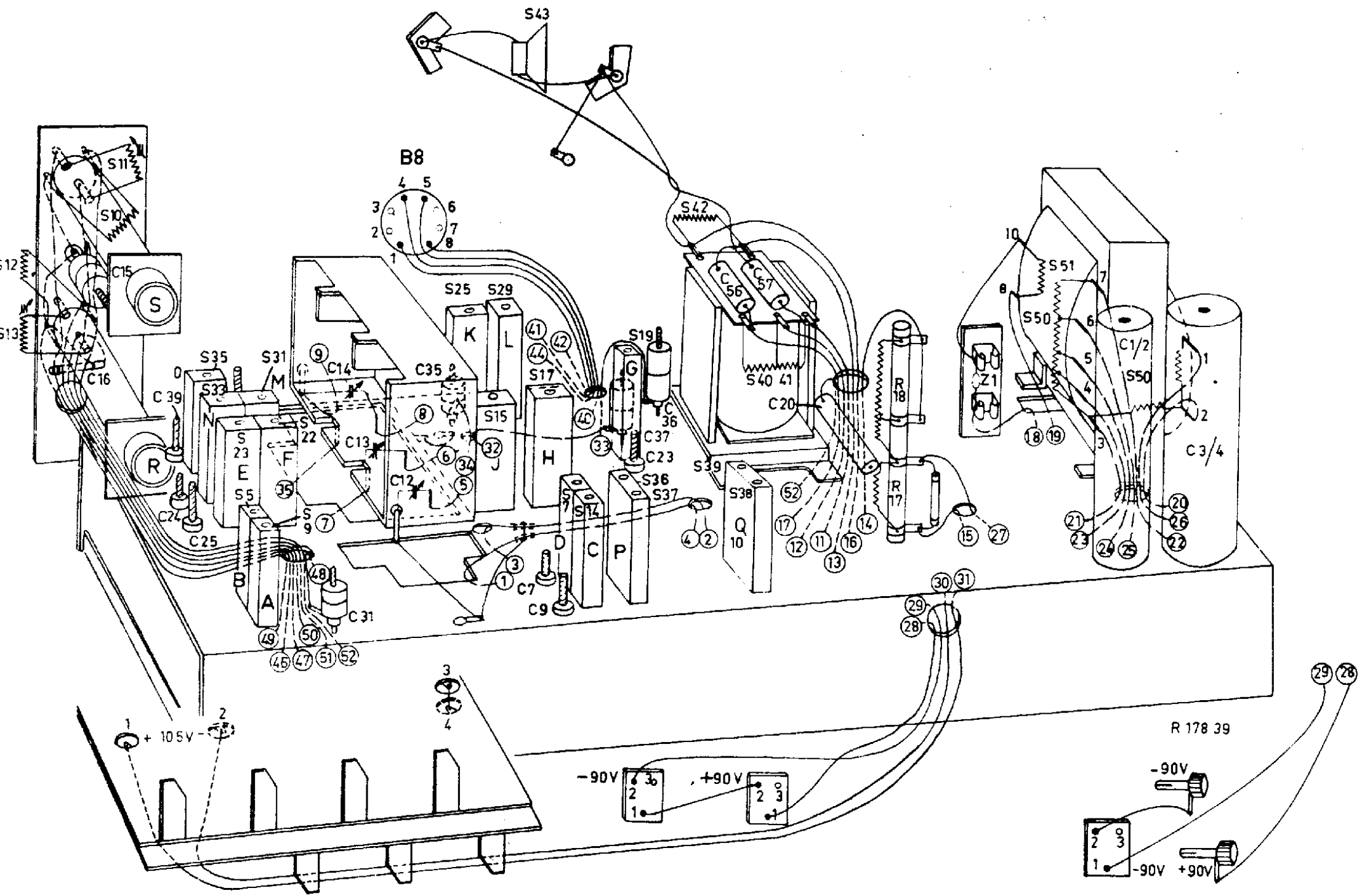
Si se han indicado dos asteriscos, las señales deben aplicarse a las hembrillas de antena, a través de una antena ficticia normal.

Si no se ha mencionado nada, las señales se aplican a g1 de B1 a través de 33.000 pF.

|                                 | Wave range          | Trimming point   | Signal                         | Trim for max. output                 |
|---------------------------------|---------------------|------------------|--------------------------------|--------------------------------------|
|                                 | Golfbereik          | Trimpunt         | Signaal                        | Afregelen op max. uitgangsspanning   |
|                                 | Gamme d'ondes       | Point de réglage | Signal                         | Régler au max. de sortie             |
|                                 | Margen de ondas     | Punto de ajuste  | Señal                          | Ajustese para max. tensión de salida |
| I.F. - M.F. - M.P. - F.I.       | M.W. M.G. P.O. O.N. | 1                | 452 kc/s via<br>33.000 pF-g1B2 | S39, S38, S36<br>S37, S38.           |
| R.F. and oscillator circuits    | L.W. L.G. G.O. O.L. | 3                | 159 kc/s                       | S35, S23, S13*                       |
|                                 |                     | 1                | 400 kc/s                       | C41, C25                             |
| H.F. en oscillatorkringen       | M.W. M.G. P.O. O.N. | 3                | 550 kc/s                       | S33, S21, S11*                       |
|                                 |                     | 1                | 1630 kc/s                      | C39, C24, C15*                       |
| Circuits H.F. et oscillateurs   | S.W.3. K.G.3. O.C.3 | 3                | 1,7 Mc/s                       | S31, S19, S9*                        |
|                                 |                     | 1                | 5,1 Mc/s                       | C37, C23                             |
| Circuitos de H.F. y osciladores | S.W.2. K.G.2. O.C.2 | 3                | 5,25 Mc/s                      | S29, S17, S14*, S5**                 |
|                                 |                     | 1                | 14,2 Mc/s                      | C36, C22, C9*, C31**                 |
|                                 | S.W.1. K.G.1. O.C.1 | 3                | 14,2 Mc/s                      | S25, S7*                             |
|                                 |                     | (*)              | 15,2 Mc/s                      | S15                                  |
| 1                               | 22,2 Mc/s           | C35, C7*         |                                |                                      |

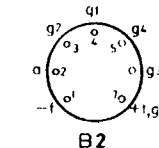
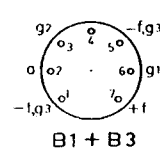
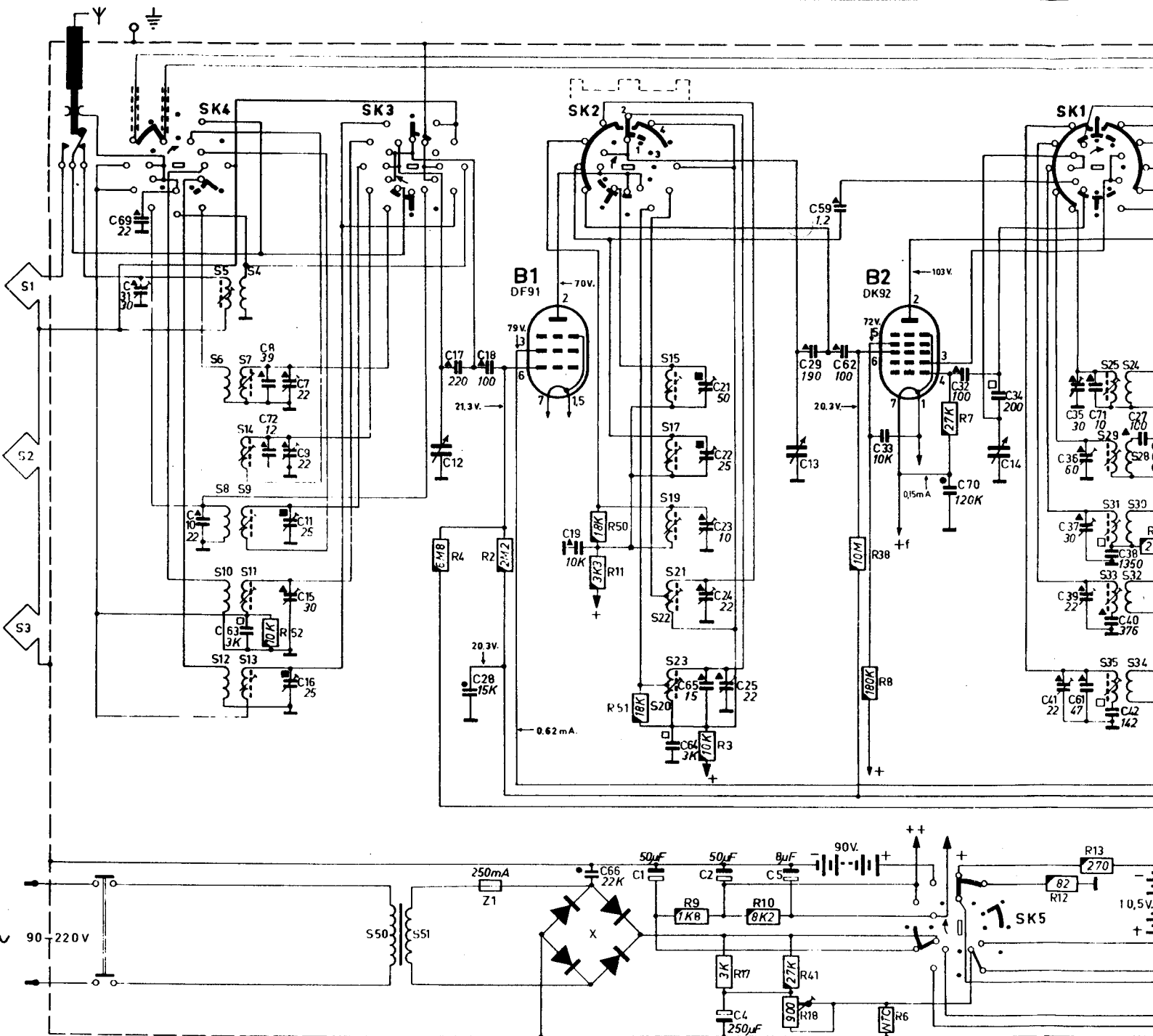
(\*) means: apparatus to be tuned to 15,2 Mc/s  
 (\*) betekent: apparaat afstemmen op 15,2 Mc/s  
 (\*) signifie: accorder l'appareil à 15,2 Mc/s  
 (\*) significa: sintonice el aparato a 15,2 Mc/s.

|      |            |       |            |      |                |       |                |
|------|------------|-------|------------|------|----------------|-------|----------------|
| S4)  | A3 127 10  | S19 ) | 924/20     | S32) | 9230/185-590M  | S50)  | A3 141 95      |
| S5)  |            | S19a) |            | S33) |                | S51)  | SR 250B/100    |
| S6)  | 921/13-21M | S21)  | A3 125 48  | S34) | 9230/780-2000M | X1    | 974/250        |
| S7)  |            | S22)  |            | S35) |                | Z1    | 920/3x498      |
| S8)  | A3 127 11  | S23)  | A3 125 49  | S36) |                | C12)  |                |
| S9)  |            | S20)  |            | S37) | 925/452        | C13)  |                |
| S10) | A3 117 04  | S24)  | 923/10-20M | C43) |                | C14)  |                |
| S11) |            | S25)  |            | C44) |                | R6    | 46 379 67      |
| S12) | A3 117 69  | S27)  | A3 118 45  | S38) |                | R17)  |                |
| S13) |            | S28)  |            | S39) | 925/452        | R18)  | 48 417 13      |
| S14) | A3 127 12  | S29)  | 923/32-60M | C45) |                | R25 ) |                |
| S15) | 924/05     | S30)  | A3 125 69  | C46) |                | R25a) |                |
| S17) | 924/2      | S31)  |            | S40) |                | R26 ) |                |
|      |            |       |            | S41) | A3 153 75      | R26a) | E099BG/AE14-14 |
|      |            |       |            | S42) |                |       |                |



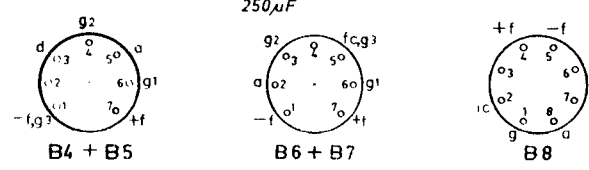
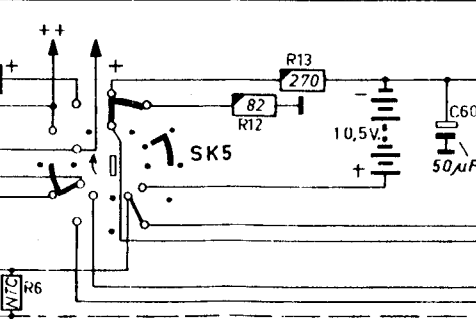
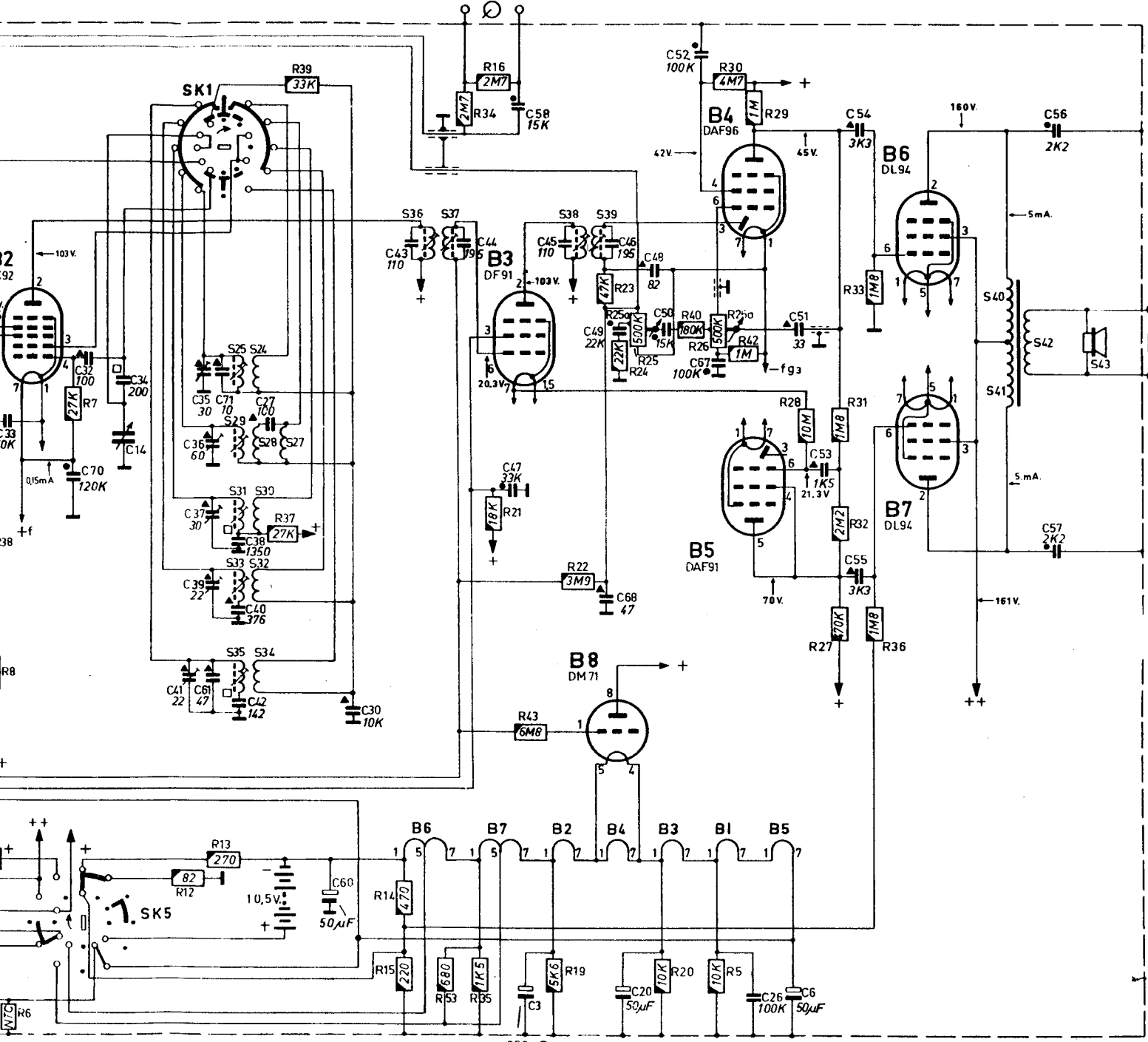
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|   |          |                            |                            |                               |  |
|---|----------|----------------------------|----------------------------|-------------------------------|--|
| S | 1 2 3    | 4 6 8 10 12 5 7 14 9 11 13 | 50 51                      | 15 17 19 21 22 23 20          | 18 27 24 28 30 32 34 2                         |
| C | 69 31 19 | 63                         | 7 9 8 11 15 16 12 17 28 18 | 19 66 1 64 2 4 21 22 23 24 13 | 65 13 25 5 29 59 62 70 33 32 34 14 30 27 38 40 |
| R |          | 52                         | 4 2                        | 50 11 51 9 17 3 10 41 18      | 38 8 6 7 37 12 13 37                           |



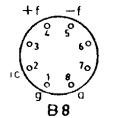
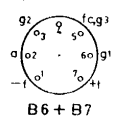
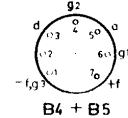
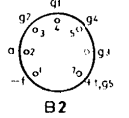
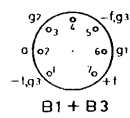
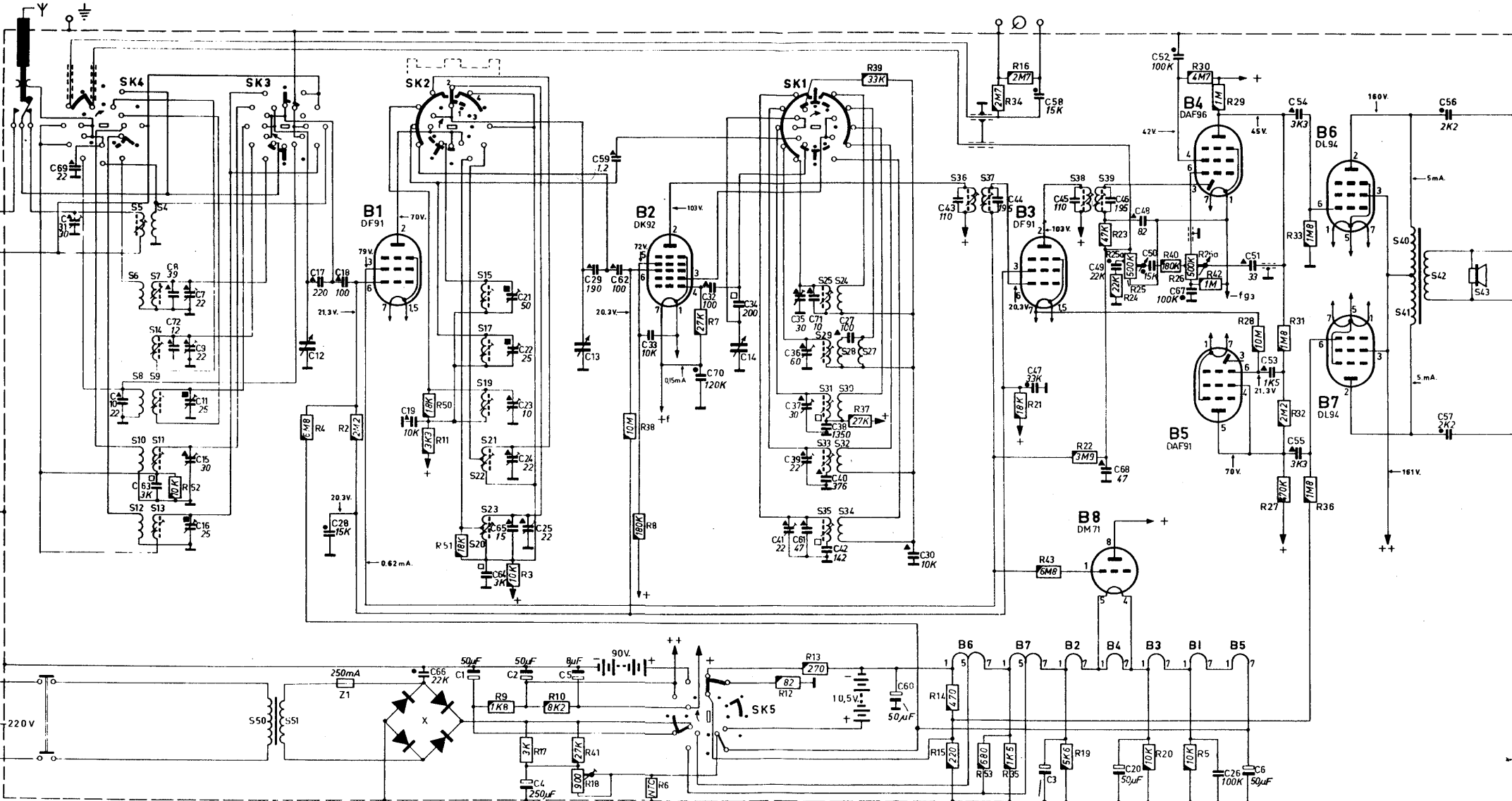
# L5X78AB

|  |        |  |   |   |
|--|--------|--|---|---|
| 18, 27, 24, 28, 30, 32, 34, 25, 29, 31, 33, 35 | 36, 37 | 38, 39   | 40, 41  | 42, 43  |
| 59, 62, 70, 33, 32                             | 34, 14 | 30, 27, 38, 40, 42, 71, 60, 41, 35, 36, 37, 39, 61, 43 | 44, 47, 58, 3, 4, 5, 68, 68, 4, 9, 20, 46, 48, 50, 52, 67, 26 | 6, 51, 53, 54, 55   |
| 6  | 7, 37  | 12, 13, 37   | 39  | 14, 15, 53, 34, 16, 21, 35, 43, 19, 22, 24, 23, 25, 25, 20, 40, 26, 26, 30, 42, 5, 29, 28, 31, 32, 27, 33, 36 |

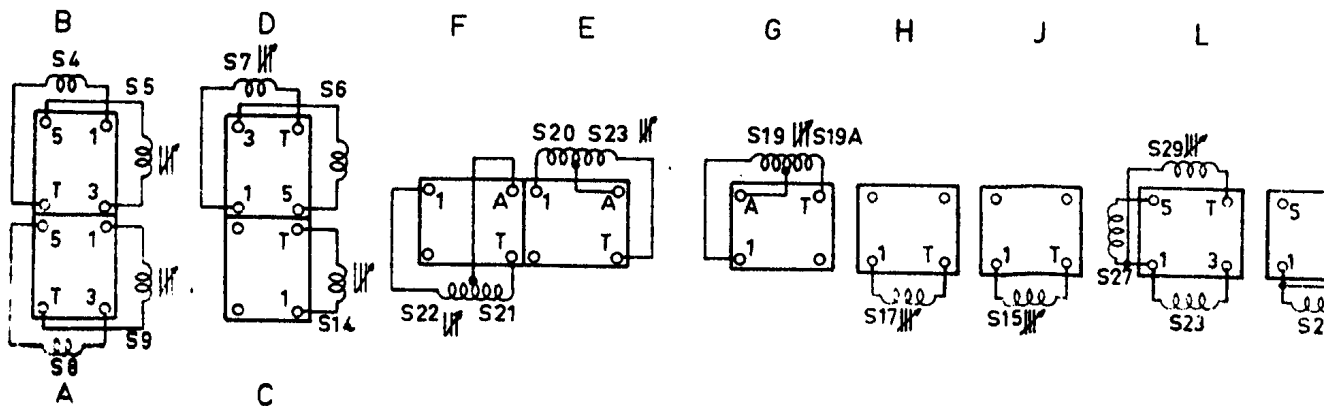
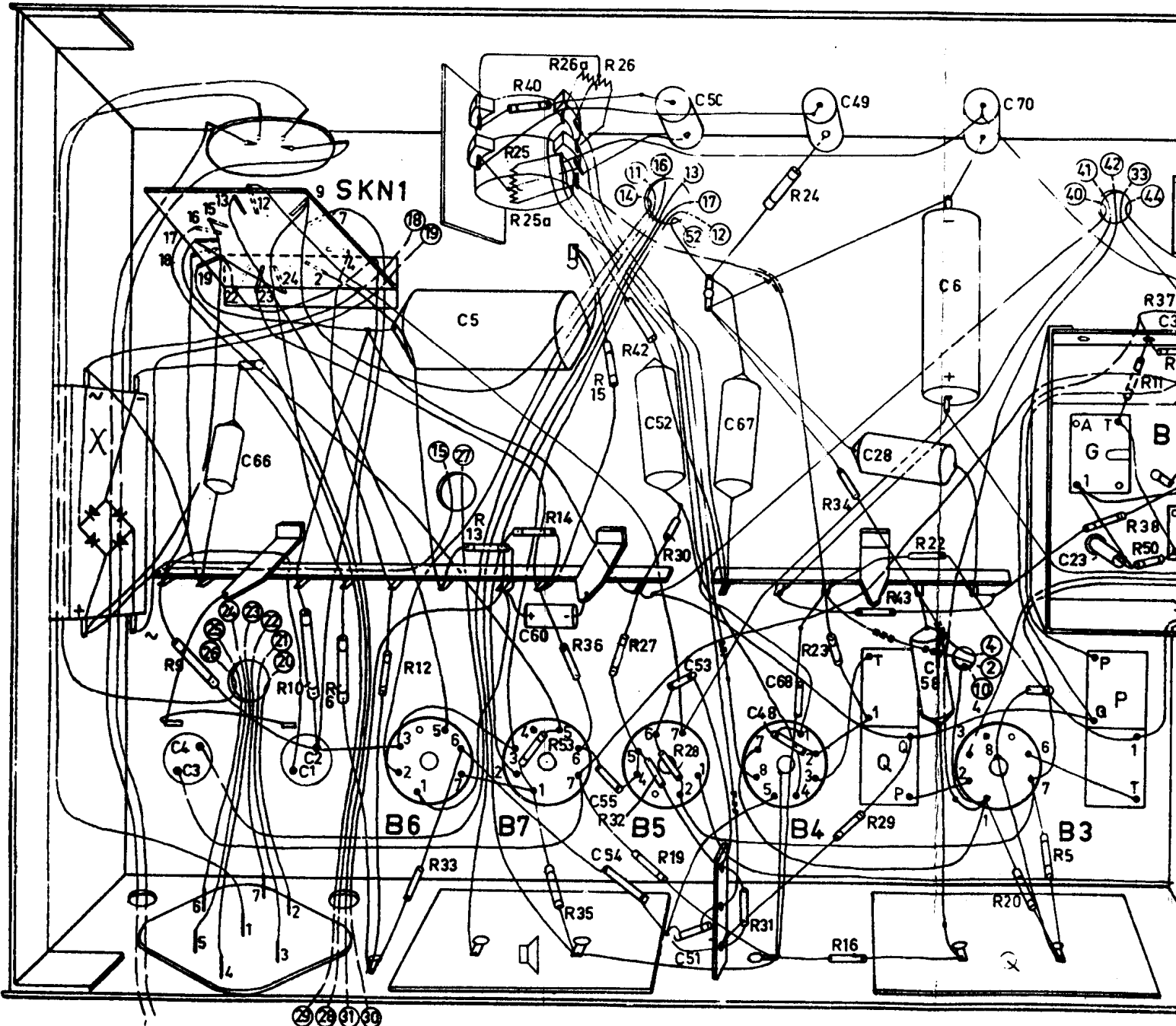


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|   |          |                            |                            |                      |                                     |                              |       |                         |                   |  |               |       |       |                |          |   |
|---|----------|----------------------------|----------------------------|----------------------|-------------------------------------|------------------------------|-------|-------------------------|-------------------|--|---------------|-------|-------|----------------|----------|---|
| S | 1 2 3    | 4 6 8 10 12 5 7 14 9 11 13 | 50 51                      | 15 17 19 21 22 23 20 | 18 27 24 28 30 32 34 25 29 31 33 35 | 36 37                        | 38 39 | 40 41                   | 42 43             |  |               |       |       |                |          |   |
| C | 69 31 10 | 63                         | 7 9 8 11 15 16 12 17 28 18 | 19 66                | 1 64 2 4 21 22 23 24 13             | 65 13 25 5 29 59 62 70 33 32 | 34 14 | 30 27 38 40 42 71 60 41 | 35 36 37 39 61 43 | 44 47 58 3 4 5 68 68 4 9 20 46 4 8 50 52 67 26 | 6 51 53 54 55 | 56 57 |       |                |          |   |
| R |          |                            | 52                         | 4                    | 2                                   | 50 11 51                     | 9 17  | 3 10 41 18              | 38 8 6            | 7 37   | 12 13 37      | 39    | 14 15 | 53 34 16 21 35 | 43 19 22 | 24 23 25 20 25 20 40 26 26 30 42 5 29 28 31 32 27 33 36 |

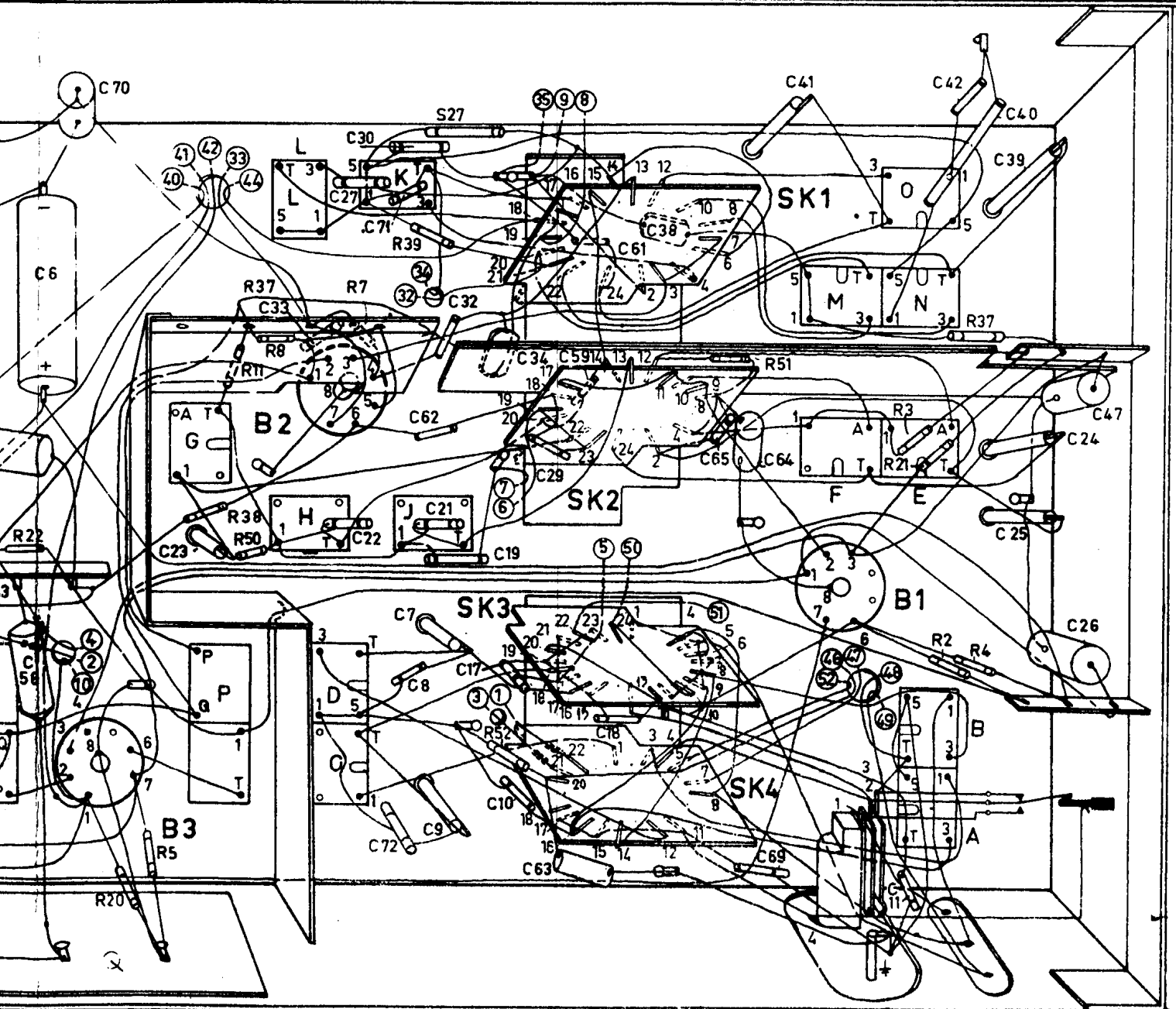


|   |        |     |      |    |    |    |    |    |    |     |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |     |    |    |
|---|--------|-----|------|----|----|----|----|----|----|-----|----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---|----|-----|----|----|
| S |        |     |      |    |    |    |    |    |    |     |    |     |    |    |    |    |    |    |    |    |    |    |    | Q  | G  | P  |    |    |    |    |    |   |    |     |    |    |
| C | 3,4,66 | 1,2 | 60,5 | 6  | 50 | 55 | 52 | 54 | 53 | 51  | 60 | 48  | 68 | 67 | 49 | 28 | 6  | 58 | 50 | 70 | 23 |    |    |    |    |    |    |    |    |    |    |   |    |     |    |    |
| R | 3,9    | 10  | 6    | 12 | 33 | 13 | 53 | 40 | 25 | 25a | 26 | 25a | 14 | 19 | 36 | 5  | 35 | 27 | 22 | 30 | 28 | 24 | 31 | 23 | 16 | 34 | 29 | 43 | 22 | 42 | 20 | 5 | 25 | 25a | 38 | 11 |



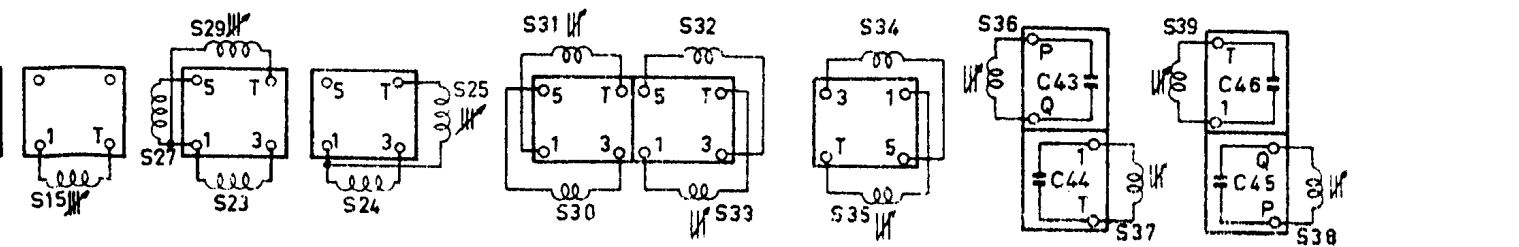


|                    |  |                                   |        |                     |                                 |
|--------------------|--|-----------------------------------|--------|---------------------|---------------------------------|
| Q                  | G P  | LDCH                              | K 27 J | M F                 | ENOBA                           |
| 28. 6. 58. 50. 70. | 23. 33. 72 27. 71. 22. 30. 8. 21. 62. 32.                      | 7. 9. 19. 34. 17. 18. 29. 61. 59. | 63. 38 | 65. 56. 69. 18. 41. | 11. 42. 40. 25. 24. 39. 47. 26. |
| 3. 22. 42.         | 20. 5. 25. 25a. 38. 11. 37. 50. 8. 39. 7. 26. 26a. 40. 39. 52. |                                   |        | 51.                 | 3. 21. 2. 4. 37.                |

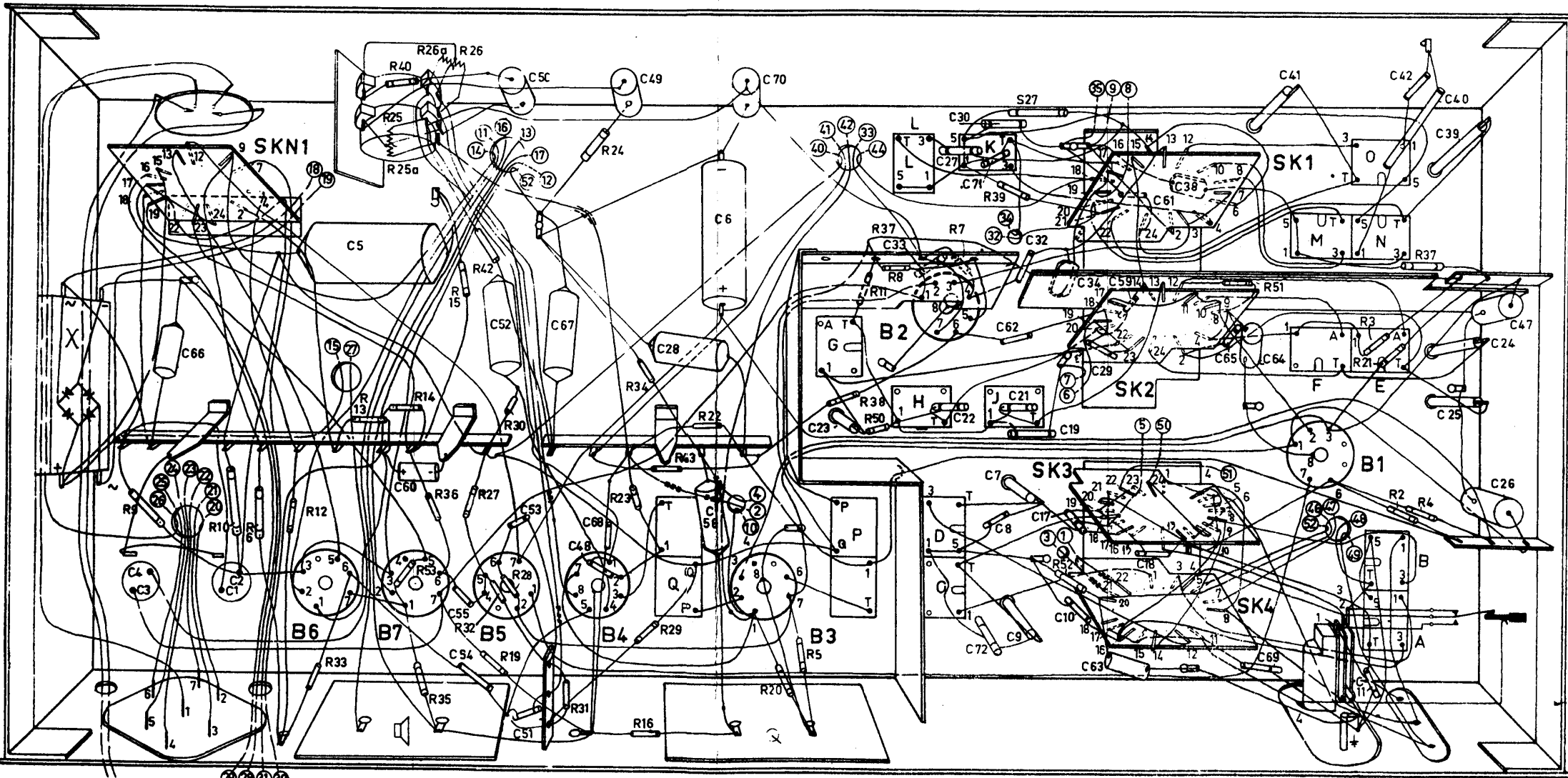


R 178 4C

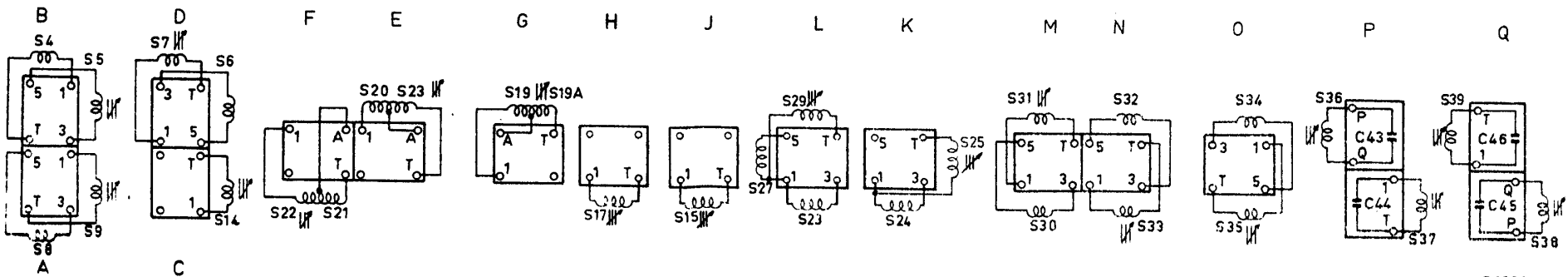
J L K M N O P Q



R 16261



R 178 40



R 16261