

LUXORSERVICEANVISNING
HUOLTOOHJE**SKANTIC**

15017531 DIRIGENT 3200

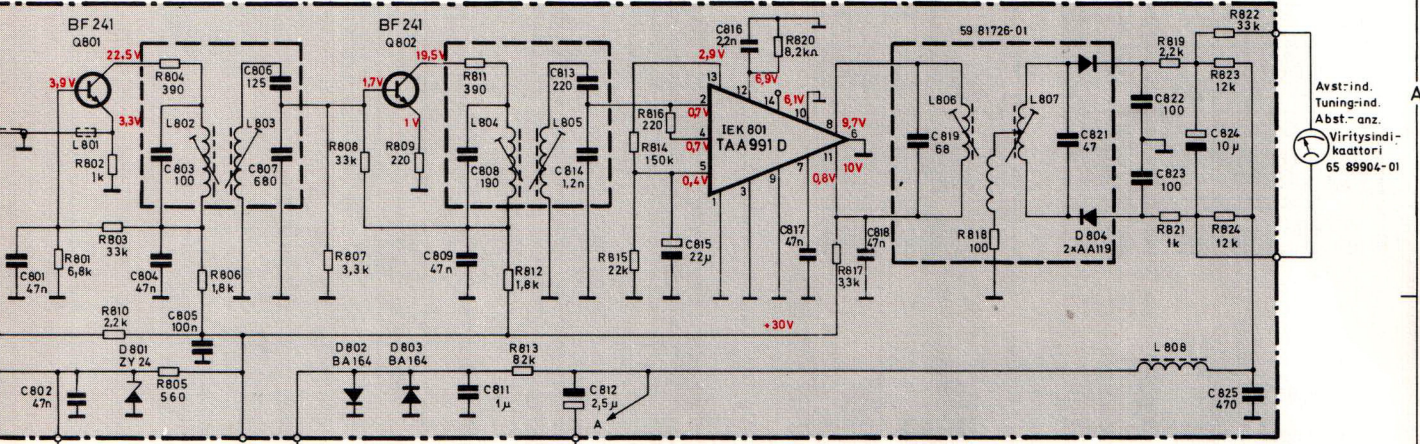
15017532 HARMONI 17SK

(Förstärkarchassi 15 31753-00 serie 1)
(Vahvistinkojeisto 15 31753-00 sarja 1)Upplaga B
Painos BAugusti 1975
Elokuu 1975

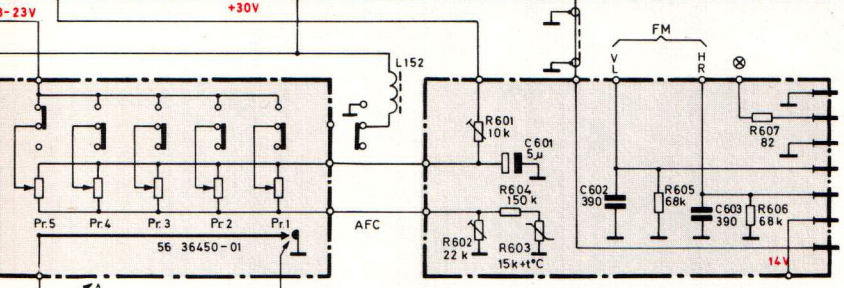
| TEKNISKA DATA FÖRSTÄRKARDELEN | VAHVISTINOSAN TEKNISET TIEDOT |
|---|-------------------------------|
| Driftspänning Käyttöjännite | 220 V 50 Hz |
| Frekvensområde Taaajuusalue | 30-25000 Hz \pm 1,5 dB |
| Effektbandbredd vid 4 ohm Tehokaistaleveys 4 ohmilla | 30-25000 Hz |
| Distorsion 1000 Hz - 17 W | 1,0% |
| Särö 1000 Hz - 15 W | 0,4% |
| 1000 Hz - 6 W | 0,3% |
| Störavstånd nålmikrofon Häiriötäisyys, äänirasia | 58 dB |
| Störavstånd band Häiriötäisyys, nauha | 60 dB |
| Utgångseffekt Lähtöeho | 2 x 17 W |
| Dämpfaktor vid 1000 Hz och 4 ohm Vaimennuskerroin/1000 Hz ja 4 ohmia | 20 |
| Kanalseparation Kanavaerotus | 50 dB |

66 81753-01A

MF - förstärkare
 LF - amplifier
 ZF - förstärker
 VT - varistän

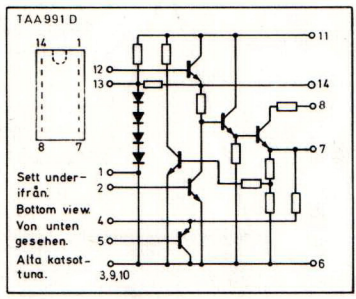


Avst.-ind.
 Tuning-ind.
 Abst.-anz.
 Viritysindikaattori
 65 89904-01



Stereodecoder, se " " , see " " , siehe Stereodekoderi, katso 19 03622-01

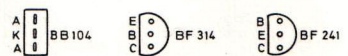
Kortsluter momentant vid omkoppling
 Short-circuiting when changing programme
 Wird beim Umschalten momentan kurzgeschlossen
 Lyhtysulken virityksen aikana.



| Mat. | Sp.V | Art.nr | Pos |
|----------|------|-------------|-----|
| Keram. | 63 | 62 21236-01 | B3 |
| Keram. | 40 | 62 21344-01 | B3 |
| Keram. | 40 | 62 21887-01 | A3 |
| Elyt | 35 | 62 21887-01 | B4 |
| Styrol | 160 | 62 21792-01 | A4 |
| Keram. | 40 | 62 21887-01 | A4 |
| Polyest. | 100 | 62 21023-01 | A4 |
| Styrol | 160 | 62 21988-03 | A4 |
| " | 160 | 62 21027-01 | A4 |
| " | 160 | 62 21384-01 | A4 |
| Keram. | 40 | 62 21887-01 | A4 |
| Polyest. | 100 | 62 21001-01 | B4 |
| Elyt | 64 | 62 21101-01 | B5 |
| Styrol | 160 | 62 21470-01 | A5 |
| " | 63 | 62 21978-01 | A5 |
| Tantal | 10 | 62 21163-01 | A5 |
| Keram. | 500 | 62 21139-01 | A5 |
| " | 40 | 62 21187-01 | A5 |
| " | 40 | 62 21187-01 | A5 |
| " | 63 | 62 21247-01 | A5 |
| Keram. | 63 | 62 21245-01 | A6 |
| " | 63 | 62 21371-01 | A6 |
| " | 63 | 62 21371-01 | A6 |
| Tantal | 25 | 62 21167-01 | A6 |
| Styrol | 160 | 62 30008-03 | B6 |

| (L) Spolar Coils Spulen Kelat | | Kärnor Cores Käärne Sydämät | |
|-------------------------------|---------------------|-----------------------------|-----|
| Nr | Typ | Art.nr | Pos |
| 151 | HF-drossel | 59 23229-01 | B3 |
| 152 | HF-drossel | 59 23229-01 | B4 |
| 153 | HF-drossel | 59 23261-01 | B3 |
| 701 | Antennspole UKV | 59 81711-01 | A1 |
| 702 | HF-drossel | 59 27724-01 | A1 |
| 703 | HF-drossel | 59 27725-01 | A1 |
| 704 | HF-drossel | 59 57502-01 | A2 |
| 705 | HF-drossel | 59 27723-01 | A2 |
| 706 | HF-spole UKV | 59 81710-01 | A2 |
| 707 | HF-spole UKV | 59 81710-01 | A2 |
| 708 | HF-drossel | 59 56968-01 | A3 |
| 709 | MF-spole 10,7 MHz | 59 81708-01 | A3 |
| 710 | | | |
| 711 | MF-spole 10,7 MHz | 59 81708-01 | A3 |
| 712 | HF-drossel | 59 57502-01 | A3 |
| 713 | HF-drossel | 59 57502-01 | A3 |
| 714 | Osc-spole UKV | 59 81709-01 | B3 |
| 801 | HF-drossel | 59 56759-01 | A4 |
| 802 | MF-spole 10,7 MHz | 59 81704-01 | A4 |
| 803 | MF-spole 10,7 MHz | 59 81705-01 | A4 |
| 804 | MF-spole 10,7 MHz | 59 81706-01 | A5 |
| 805 | MF-spole 10,7 MHz | 59 81707-01 | A5 |
| 806 | Phm-spole, detektor | 59 81727-01 | A6 |
| 807 | Sek-spole, detektor | 59 81728-01 | B6 |
| 808 | HF-drossel | 59 56969-01 | |

| (D) Deoder Diodes Dioden Diodit | | | |
|--|----------|-------------|-----|
| Nr | Typ | Art nr | Pos |
| 701 | BB 104 | 63 08865-01 | A1 |
| 702 | BB 104 | 63 08865-01 | A2 |
| 703 | BB 104 | 63 08865-01 | A2 |
| 704 | BB 104 | 63 08865-01 | B3 |
| 705 | BA 138 | 63 08865-01 | B3 |
| 801 | ZY 24 | 63 08747-01 | B4 |
| 802 | BA 154 | 63 08844-01 | B4 |
| 803 | BA 154 | 63 08844-01 | B4 |
| 804 | 2AA119 | 63 08603-01 | A6 |
| (Q) Transistorer Transistors Transistorit | | | |
| Nr | Typ | Art nr | Pos |
| 701 | BF 314 | 63 09217-01 | A1 |
| 702 | BF 241 | 63 09216-01 | A3 |
| 703 | BF 241 | 63 09216-01 | B2 |
| 801 | BF 241 | 63 09216-01 | A4 |
| 802 | BF 241 | 63 09216-01 | A4 |
| (IEK) Integrerade elektron. kretsar Integr. Circuits. Integrierte elektr Kreise Integroituja piirjäd | | | |
| Nr | Typ | Art.nr | Pos |
| 801 | TAA 991D | 64 00005-01 | A5 |



Sett underifrån. Bottom view. Von unten gesehen. Alla katsottuna.

Smärre avvikelser från schemat kan förekomma på grund av ändringar företagna under produktion.

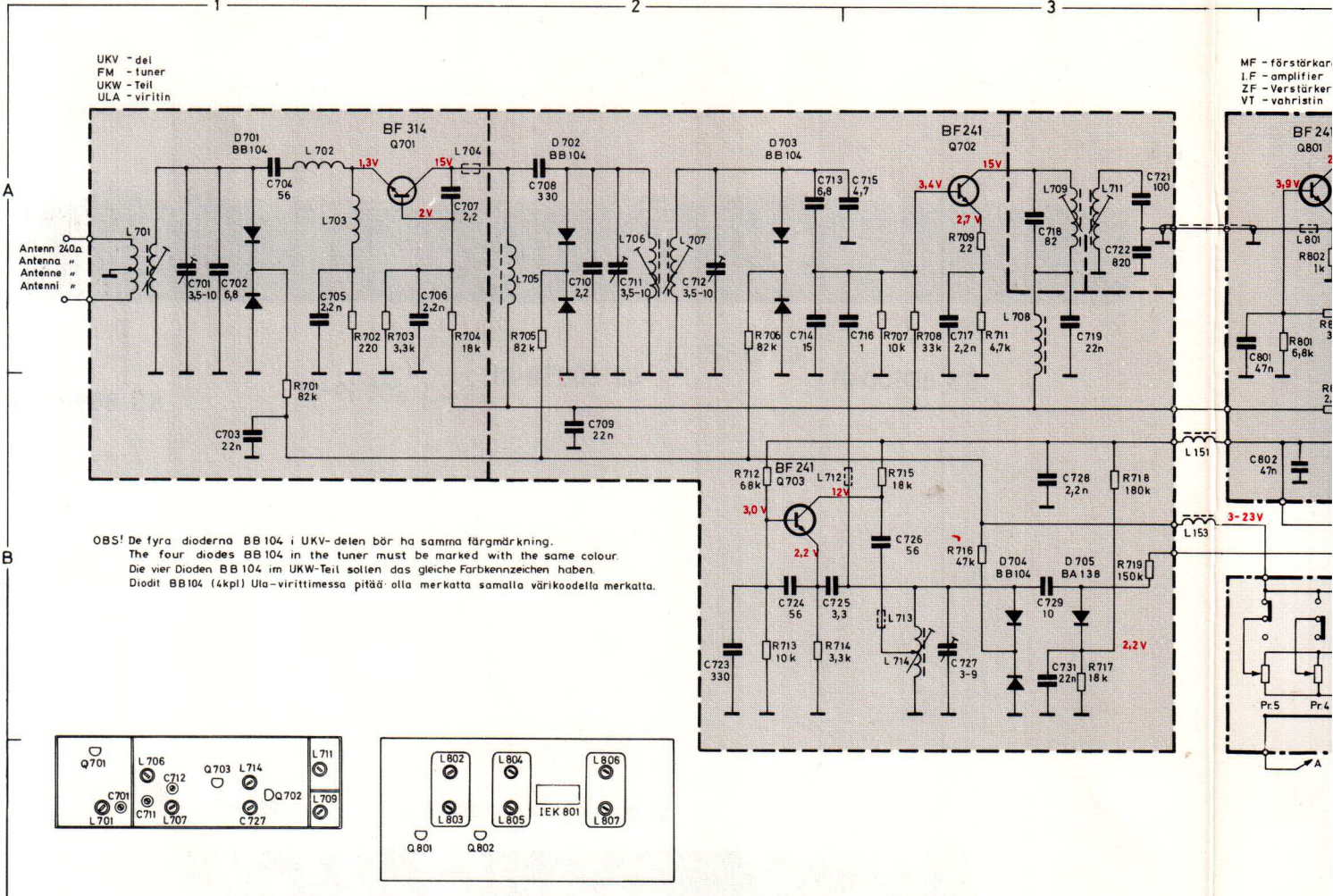
Kytikkaavassa saattaa ilmetä joitakin poikkeuksia johtuen valmistuksen aikana tehdyistä muutoksista.

Minor deviations from the circuit diagram may occur due to alterations during production.

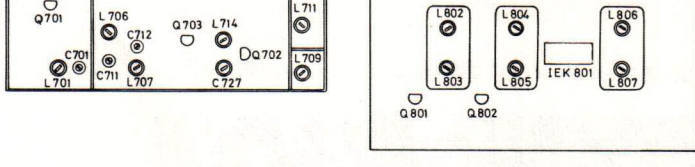
Kleine Abweichungen dieses Schalt-schemas können auf grund von Änderungen während der Produktion vorkommen.

KOPPLINGSSCHEMA KYTKINKAAVA

RADIODEL RADIO-OSA



OBS! De fyra dioderna BB104 i UKV-delen bör ha samma färgmärkning.
 The four diodes BB104 in the tuner must be marked with the same colour.
 Die vier Dioden BB104 im UKW-Teil sollten das gleiche Farbkennzeichen haben.
 Diodit BB104 (4kpl) Ula-virtittimassa pitää olla merkattua samalla värikkoodella merkattua.



(R) Motstånd Resistors Widerstände Vastukset

| Nr | Värde | Tol.±% | Mat. | Bel.W | Art.nr | Pos |
|-----|--------|--------|----------|-------|-------------|-----|
| 601 | 10 kΩ | Lin. | Pot. | 0.10 | 61 17981-01 | B4 |
| 602 | 22 kΩ | Lin. | " | 0.10 | 61 17704-01 | B4 |
| 603 | 15 kΩ | 20 | PTC | " | 61 29666-01 | B5 |
| 604 | 150 kΩ | 5 | Kolskikt | 0.33 | 61 29275-01 | B5 |
| 605 | 68 kΩ | 5 | " | 0.33 | 61 29273-01 | B5 |
| 606 | 68 kΩ | 5 | " | 0.33 | 61 29273-01 | B5 |
| 607 | 82 Ω | 5 | " | 0.33 | 61 29696-01 | B5 |
| 608 | 33 kΩ | 5 | " | 0.33 | 61 29270-01 | B5 |
| 609 | 33 kΩ | 5 | " | 0.33 | 61 29270-01 | B6 |
| 610 | | | | | | |
| 611 | 39 kΩ | 5 | Kolskikt | 0.33 | 61 29271-01 | B6 |
| 612 | 39 kΩ | 5 | " | 0.33 | 61 29271-01 | B6 |
| 701 | 82 kΩ | 5 | Kolskikt | 0.33 | 61 29298-01 | B1 |
| 702 | 220 Ω | 5 | " | 0.33 | 61 29252-01 | A1 |
| 703 | 33 kΩ | 5 | " | 0.33 | 61 29262-01 | A1 |
| 704 | 18 kΩ | 5 | " | 0.33 | 61 29267-01 | A2 |
| 705 | 82 kΩ | 5 | " | 0.33 | 61 29298-01 | A2 |
| 706 | 82 kΩ | 5 | " | 0.33 | 61 29298-01 | A2 |
| 707 | 10 kΩ | 5 | " | 0.33 | 61 29265-01 | B3 |
| 708 | 33 kΩ | 5 | " | 0.33 | 61 29270-01 | B3 |
| 709 | 22 Ω | 5 | " | 0.33 | 61 29247-01 | B3 |
| 710 | | | | | | |
| 711 | 4.7 kΩ | 5 | Kolskikt | 0.33 | 61 29263-01 | A3 |
| 712 | 68 kΩ | 5 | " | 0.33 | 61 29273-01 | B2 |
| 713 | 10 kΩ | 5 | " | 0.33 | 61 29265-01 | B2 |
| 714 | 3.3 kΩ | 5 | " | 0.33 | 61 29262-01 | B2 |
| 715 | 18 kΩ | 5 | " | 0.33 | 61 29267-01 | B2 |
| 716 | 4.7 kΩ | 5 | " | 0.33 | 61 29272-01 | B3 |
| 717 | 18 kΩ | 5 | " | 0.33 | 61 29267-01 | B3 |
| 718 | 180 kΩ | 5 | " | 0.33 | 61 29276-01 | B3 |
| 719 | 150 kΩ | 5 | " | 0.33 | 61 29275-01 | B3 |
| 720 | | | | | | |

(R) Motstånd Resistors Widerstände Vastukset

| Nr | Värde | Tol.±% | Mat. | Bel.W | Art.nr | Pos |
|-----|--------|--------|----------|-------|-------------|-----|
| 801 | 6.8 kΩ | 5 | Kolskikt | 0.33 | 61 29264-01 | A4 |
| 802 | 1 kΩ | 5 | " | 0.33 | 61 29258-01 | A4 |
| 803 | 33 kΩ | 5 | " | 0.33 | 61 29270-01 | A4 |
| 804 | 390 Ω | 5 | " | 0.33 | 61 29255-01 | A4 |
| 805 | 560 kΩ | 5 | " | 0.33 | 61 29300-01 | B4 |
| 806 | 4.8 kΩ | 5 | " | 0.33 | 61 29676-01 | A4 |
| 807 | 33 kΩ | 5 | " | 0.33 | 61 29262-01 | A4 |
| 808 | 33 kΩ | 5 | " | 0.33 | 61 29270-01 | A4 |
| 809 | 220 Ω | 5 | " | 0.33 | 61 29252-01 | A4 |
| 810 | 2.2 kΩ | 5 | " | 0.33 | 61 29260-01 | B4 |
| 811 | 390 Ω | 5 | " | 0.33 | 61 29255-01 | A4 |
| 812 | 1.8 kΩ | 5 | " | 0.33 | 61 29676-01 | A5 |
| 813 | 82 kΩ | 5 | " | 0.33 | 61 29298-01 | B5 |
| 814 | 150 kΩ | 5 | " | 0.33 | 61 29275-01 | A5 |
| 815 | 2.2 kΩ | 5 | " | 0.33 | 61 29268-01 | A5 |
| 816 | 220 Ω | 5 | " | 0.33 | 61 29252-01 | A5 |
| 817 | 33 kΩ | 5 | " | 0.33 | 61 29262-01 | A5 |
| 818 | 100 Ω | 5 | " | 0.33 | 61 29250-01 | A6 |
| 819 | 2.2 kΩ | 5 | " | 0.33 | 61 29260-01 | A6 |
| 820 | 8.2 kΩ | 5 | " | 0.33 | 61 29282-01 | A5 |
| 821 | 1 kΩ | 5 | Kolskikt | 0.33 | 61 29258-01 | A6 |
| 822 | 33 kΩ | 5 | " | 0.33 | 61 29270-01 | A6 |
| 823 | 12 kΩ | 5 | " | 0.33 | 61 29266-01 | A6 |
| 824 | 12 kΩ | 5 | " | 0.33 | 61 29266-01 | A6 |

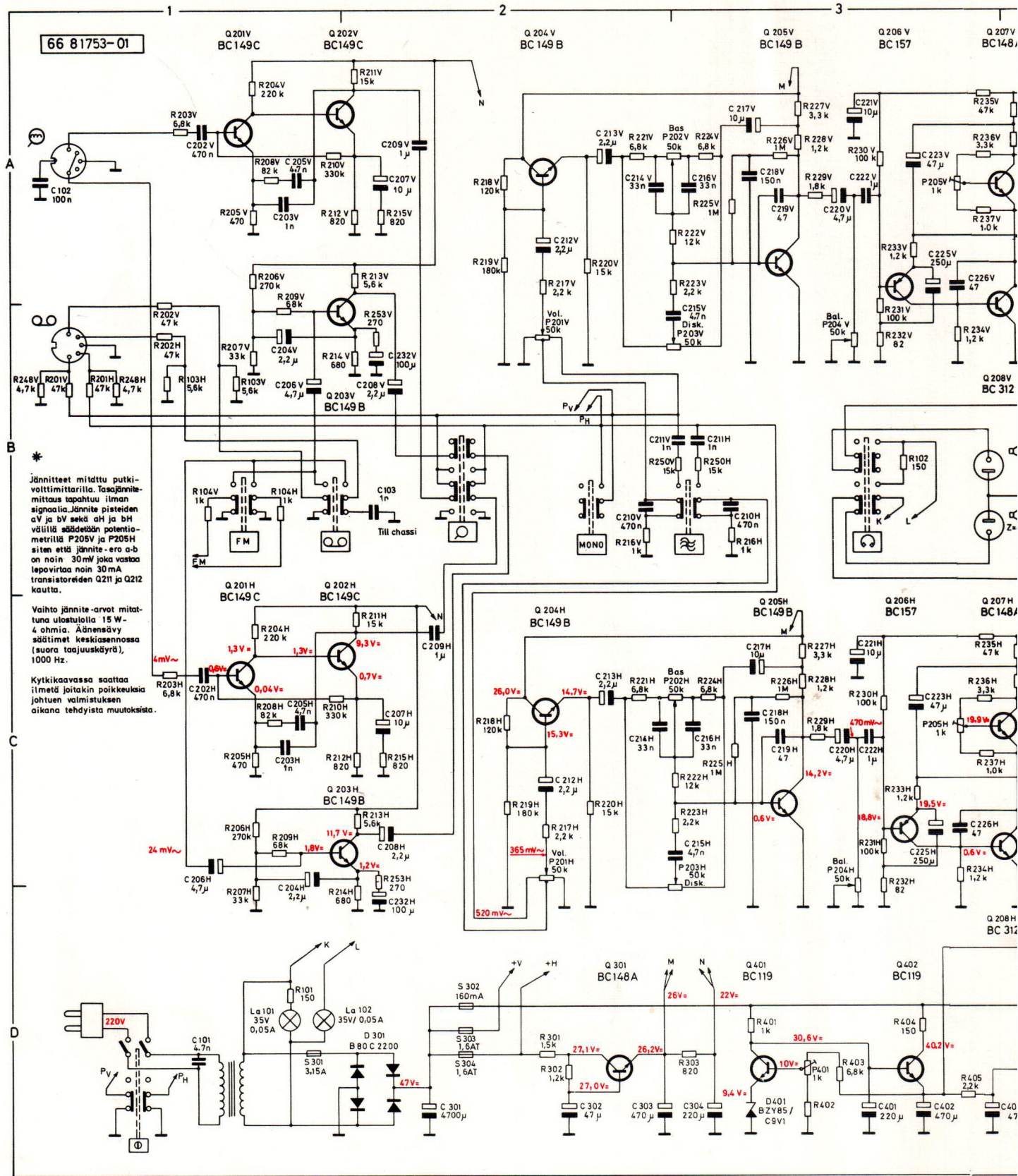
(C) Kondensatorer Capacitors Kondensatoren Kondensadtorit

| Nr | Värde | Tol.±% | Mat. | Sp.V | Art.nr | Pos |
|-----|-----------|---------|----------|------|-------------|-----|
| 601 | 5 µF | +50-20 | Elyt | 35 | 62 21172-01 | B5 |
| 602 | 390 pF | 2.5 | Styrol | 630 | 62 21260-01 | B5 |
| 603 | 390 pF | 2.5 | " | 630 | 62 21260-01 | B5 |
| 604 | 82 nF | 10 | Polyest. | 400 | 62 12674-01 | B6 |
| 701 | 3.5-10 pF | " | Trimmer | 63 | 62 21382-01 | A1 |
| 702 | 6.8 pF | 0.25 pF | Keram. | 63 | 62 21234-01 | A1 |
| 703 | 22 nF | +100-20 | " | 40 | 62 21344-01 | B1 |
| 704 | 56 pF | 2 | " | 63 | 62 21246-01 | A1 |
| 705 | 2.2 nF | +40-20 | " | 500 | 62 21139-01 | A1 |
| 706 | 2.2 nF | +40-20 | " | 500 | 62 21139-01 | A1 |
| 707 | 2.2 pF | 0.25 pF | " | 63 | 62 21425-03 | A2 |
| 708 | 330 pF | 10 | " | 100 | 62 21375-01 | A2 |
| 709 | 22 nF | +100-20 | " | 40 | 62 21344-01 | B2 |
| 710 | 2.2 pF | 0.25 pF | " | 63 | 62 21425-03 | A2 |
| 711 | 3.5-10 pF | " | Trimmer | 63 | 62 21382-01 | A2 |
| 712 | 3.5-10 pF | " | " | 63 | 62 21382-01 | A2 |
| 713 | 6.8 pF | 0.25 pF | Keram. | 63 | 62 21234-01 | A2 |
| 714 | 15 pF | 2 | " | 63 | 62 21238-01 | A2 |
| 715 | 4.7 pF | 0.25 pF | " | 63 | 62 21232-01 | A3 |
| 716 | 1 pF | 0.25 pF | " | 63 | 62 21400-01 | A3 |
| 717 | 2.2 nF | +40-20 | " | 500 | 62 21139-01 | A3 |
| 718 | 6.2 pF | 2 | " | 63 | 62 21248-01 | A3 |
| 719 | 22 nF | +100-20 | " | 40 | 62 21344-01 | A3 |
| 720 | | | | | | |
| 721 | 100 pF | 2 | Keram. | 63 | 62 21371-01 | A3 |
| 722 | 820 pF | 10 | " | 100 | 62 21379-01 | A3 |
| 723 | 330 pF | 10 | " | 100 | 62 21375-01 | B2 |
| 724 | 56 pF | 2 | " | 63 | 62 21256-01 | B2 |
| 725 | 33 pF | 0.5 pF | " | 500 | 62 21230-01 | B2 |
| 726 | 56 pF | 2 | " | 63 | 62 21246-01 | B3 |
| 727 | 3-9 pF | " | Trimmer | 160 | 62 21381-01 | B3 |
| 728 | 2.2 nF | +40-20 | Keram. | 500 | 62 21139-01 | B3 |

(C) Kondensatorer Capacitors Kondensatoren

| Nr | Värde | Tol.±% | Mat. | Sp.V | Art.nr | Pos |
|-----|---------|---------|----------|------|-------------|-----|
| 729 | 10 pF | 0.25 pF | Keram. | 63 | 62 21260-01 | B5 |
| 730 | | | | | | |
| 731 | 22 nF | +100-25 | Keram. | 40 | 62 21344-01 | B5 |
| 801 | 4.7 nF | +80-20 | Keram. | 40 | 62 21344-01 | B5 |
| 802 | 4.7 nF | +50-20 | Elyt | 35 | 62 21172-01 | B5 |
| 803 | 100 pF | 5 | Styrol | 160 | 62 21375-01 | B5 |
| 804 | 4.7 nF | +80-20 | Keram. | 40 | 62 21344-01 | B5 |
| 805 | 100 nF | 10 | Polyest. | 100 | 62 12674-01 | B6 |
| 806 | 1.25 pF | 5 | Styrol | 160 | 62 21375-01 | B5 |
| 807 | 680 pF | 5 | " | 160 | 62 21375-01 | B5 |
| 808 | 190 pF | 5 | " | 160 | 62 21375-01 | B5 |
| 809 | 4.7 nF | +80-20 | Keram. | 40 | 62 21344-01 | B5 |
| 810 | | | | | | |
| 811 | 1 µF | 20 | Polyest. | 100 | 62 12674-01 | B6 |
| 812 | 2.5 µF | +50-10 | Elyt | 64 | 62 21172-01 | B5 |
| 813 | 220 pF | 2.5 | Styrol | 160 | 62 21375-01 | B5 |
| 814 | 1.2 nF | 2.5 | " | 63 | 62 21238-01 | A2 |
| 815 | 2.2 µF | +50-20 | Tantal | 10 | 62 21230-01 | B2 |
| 816 | 2.2 nF | +40-20 | Keram. | 500 | 62 21139-01 | A1 |
| 817 | 4.7 nF | +80-20 | " | 40 | 62 21344-01 | B5 |
| 818 | 4.7 nF | +80-20 | " | 40 | 62 21344-01 | B5 |
| 819 | 68 pF | 2 | " | 63 | 62 21234-01 | A2 |
| 820 | | | | | | |
| 821 | 4.7 pF | 2 | Keram. | 63 | 62 21371-01 | A3 |
| 822 | 100 pF | 2 | " | 63 | 62 21375-01 | B2 |
| 823 | 100 pF | 2 | " | 63 | 62 21375-01 | B2 |
| 824 | 10 pF | 2 | " | 63 | 62 21238-01 | A2 |
| 825 | 470 pF | 2.5 | Styrol | 25 | 62 21260-01 | B5 |

KOPPLINGSSCHEMA KYTKINKAAVA FÖRSTÄRKARDEL VÄHVISTIN

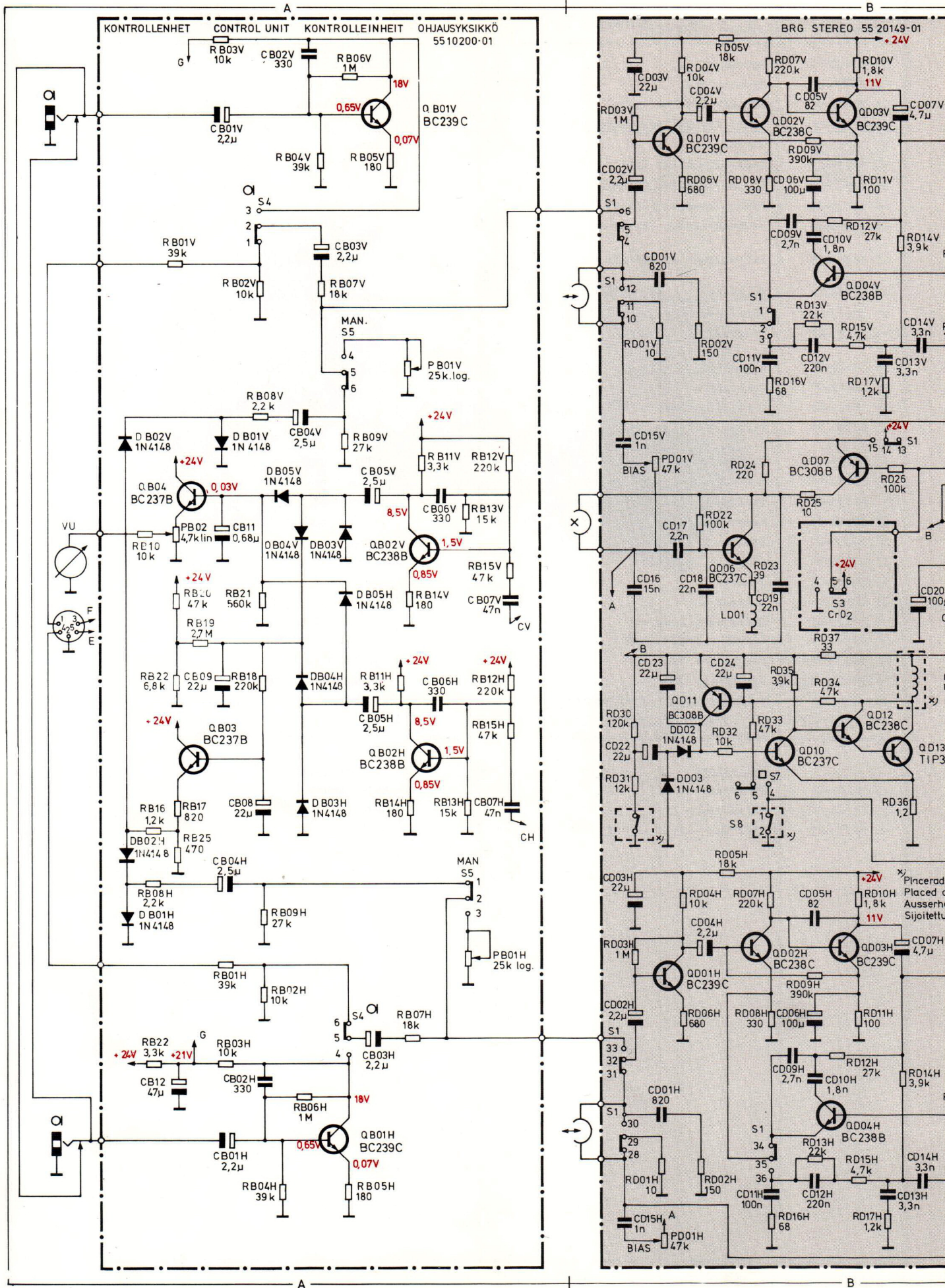


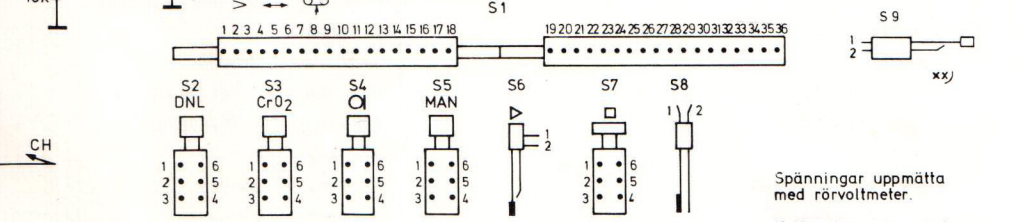
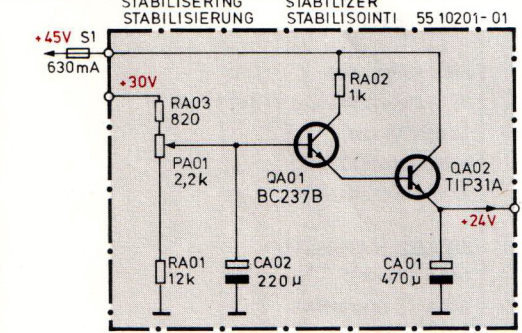
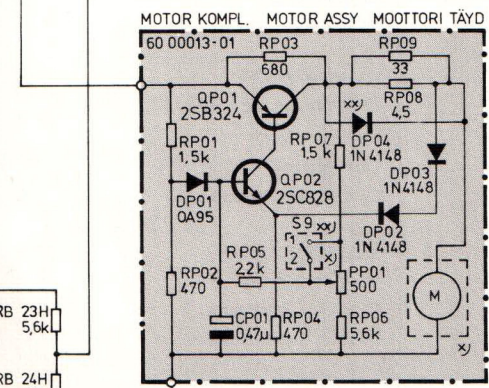
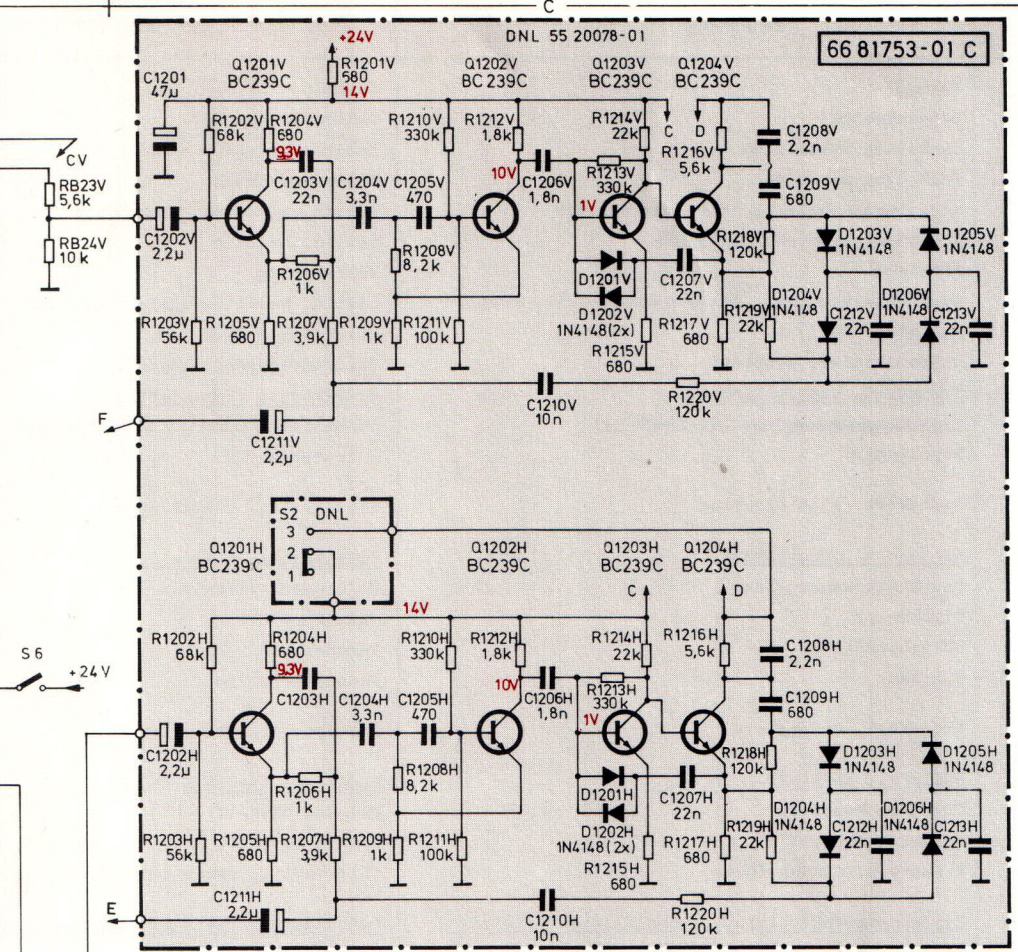
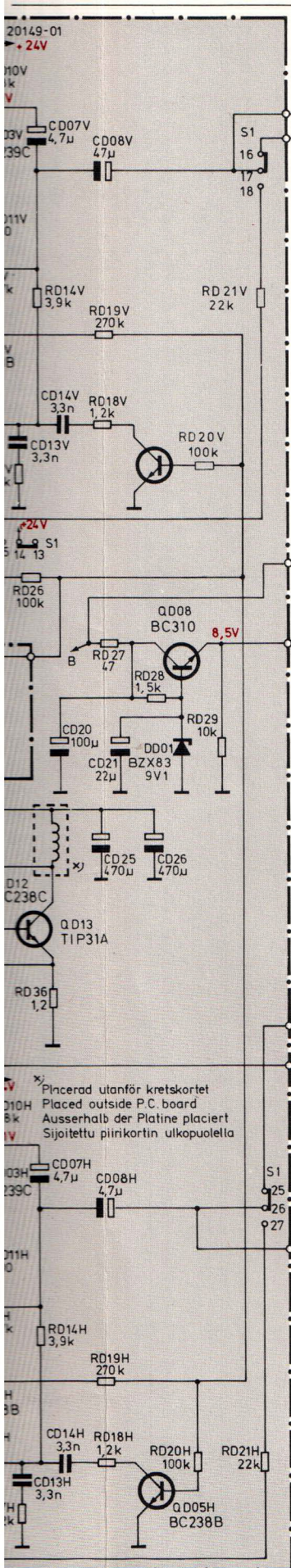
Jännitteet mitattu putkivolttimittarilla. Tasaajännittemittaus tapahtuu ilman signaalia. Jännite pisteiden aV ja bV sekä aH ja bH välillä säädetään potentio-metrillä P205V ja P205H siten että jännite-ero a-b on noin 30mV joka vastaa lepovirtaa noin 30mA transistorien Q211 ja Q212 kautta.

Vaihto jännite-arvot mitatuna ulostulolla 15W-4 ohmia. Äänensävyy säätimet keski-asennossa (suora taajuuskäyrä), 1000 Hz.

Kytäkkaavassa saattaa ilmetä jotakin poikkeuksia johtuen valmistuksen aikana tehdyistä muutoksista.

KOPPLINGSSCHEMA KYTKINKAAVA KASSETTDEL KASSETTIOISA





Om ritade i läge avspelning normalband, ej DNL. Omk S4 och S5 i läge ej intryckt.

Switch shown in position playback standard tape, no DNL. Switches S4 and S5 in not depressed positions.

Umschalter gezeichnet in Lage wiedergabe Normalband, nicht DNL. Umschalter S4 und S5 in Lage nicht eingedrückt.

Yliheittimet asenossa taisto normaalinahna, ilman DNL. Yliheittin S4 ja S5 asenossa ei painettu.

Inför i senare produktion. Später in der Produktion eingeführt.

Smärre avvikelser från schemat kan förekomma på grund av ändringar företagna under produktionen.

Minor deviations from the circuit diagram may occur due to alterations during production.

Kleine Abweichungen dieses Schalt-schemas können aufgrund von Änderungen während der Produktion vorkommen.

Kytäkäivassa saattaa ilmetä jaitakin poikkeuksia johtuen valmistuksen aikana tehdyistä muutoksista.

Otetu käyttöön myöhempään valmistukseen.

Spänningar uppmätta med rörvoltmeter.

Voltage are measured with an electronic voltmeter.

Spannungen mit Röhren-voltmeter gemessen.

Mittaukset tehty putkivoltmittarilla.