

16K29 REO INTEGRATED AMPLIFIER A-87/97

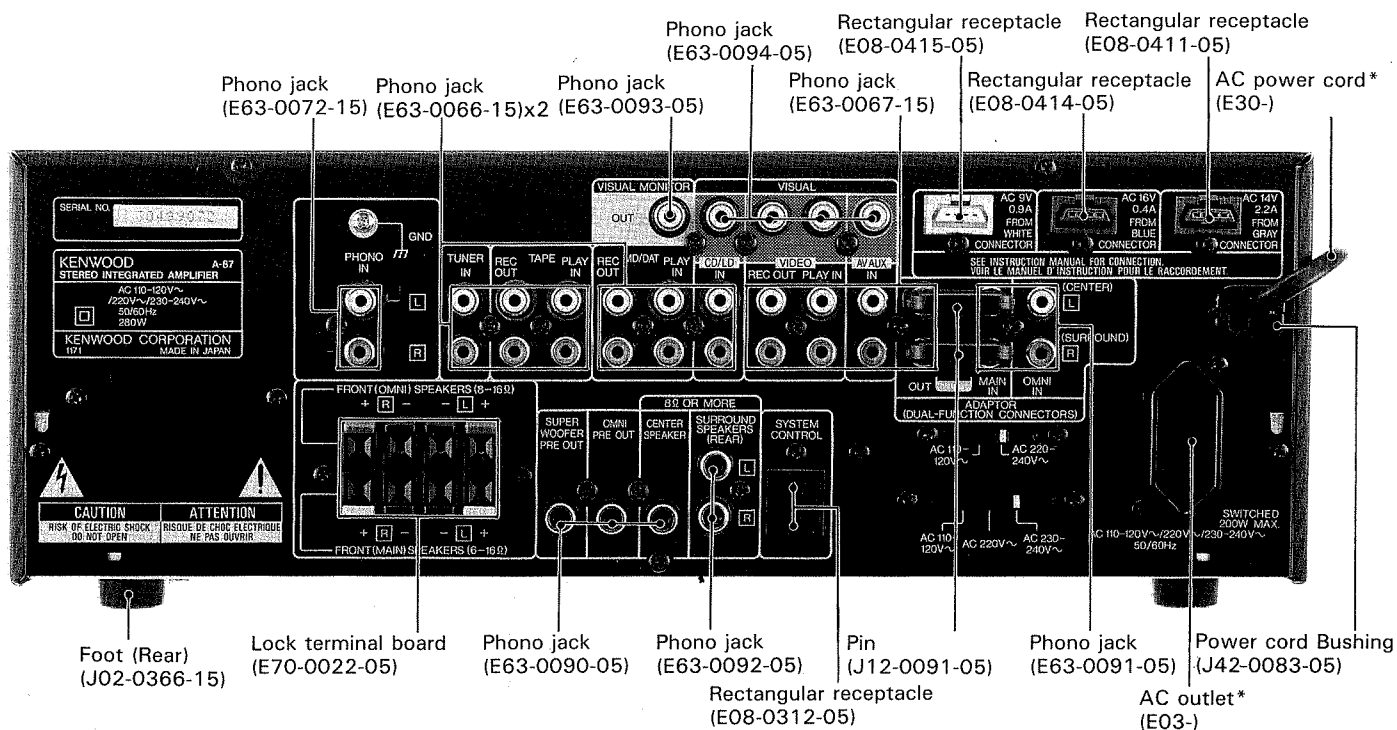
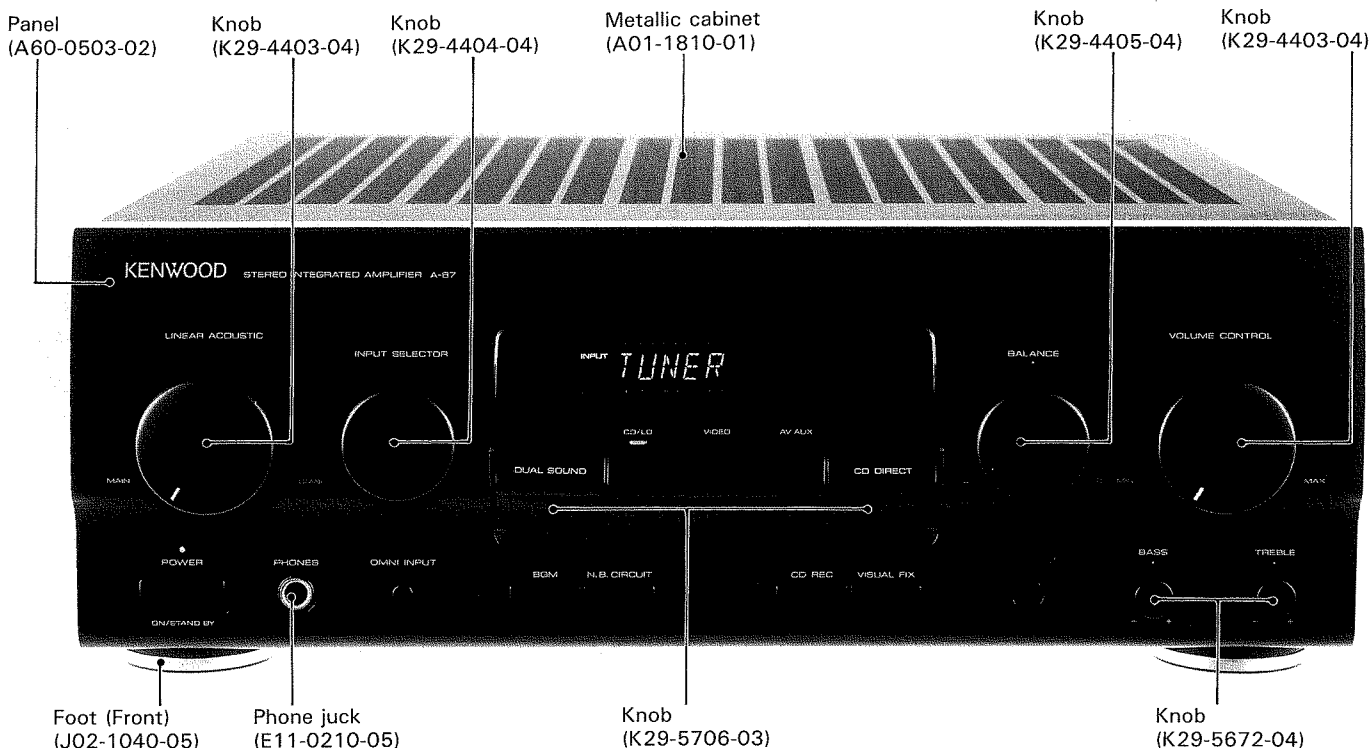
KENWOOD

SERVICE MANUAL (M-97/97M/99LD/99M)

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B51-4735-00 (S) 2318

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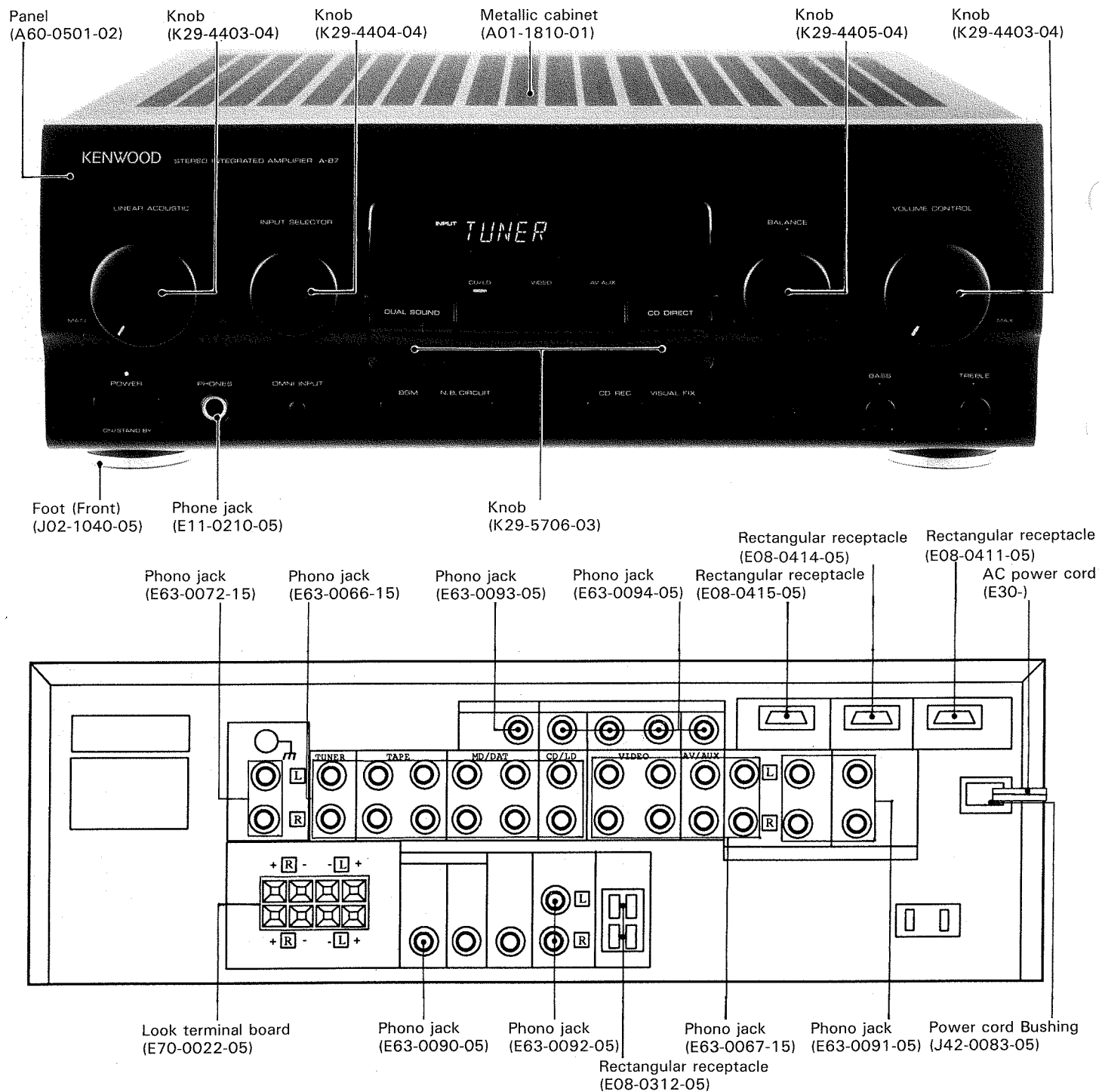
[A-87]



*Refer to parts list on page 22.

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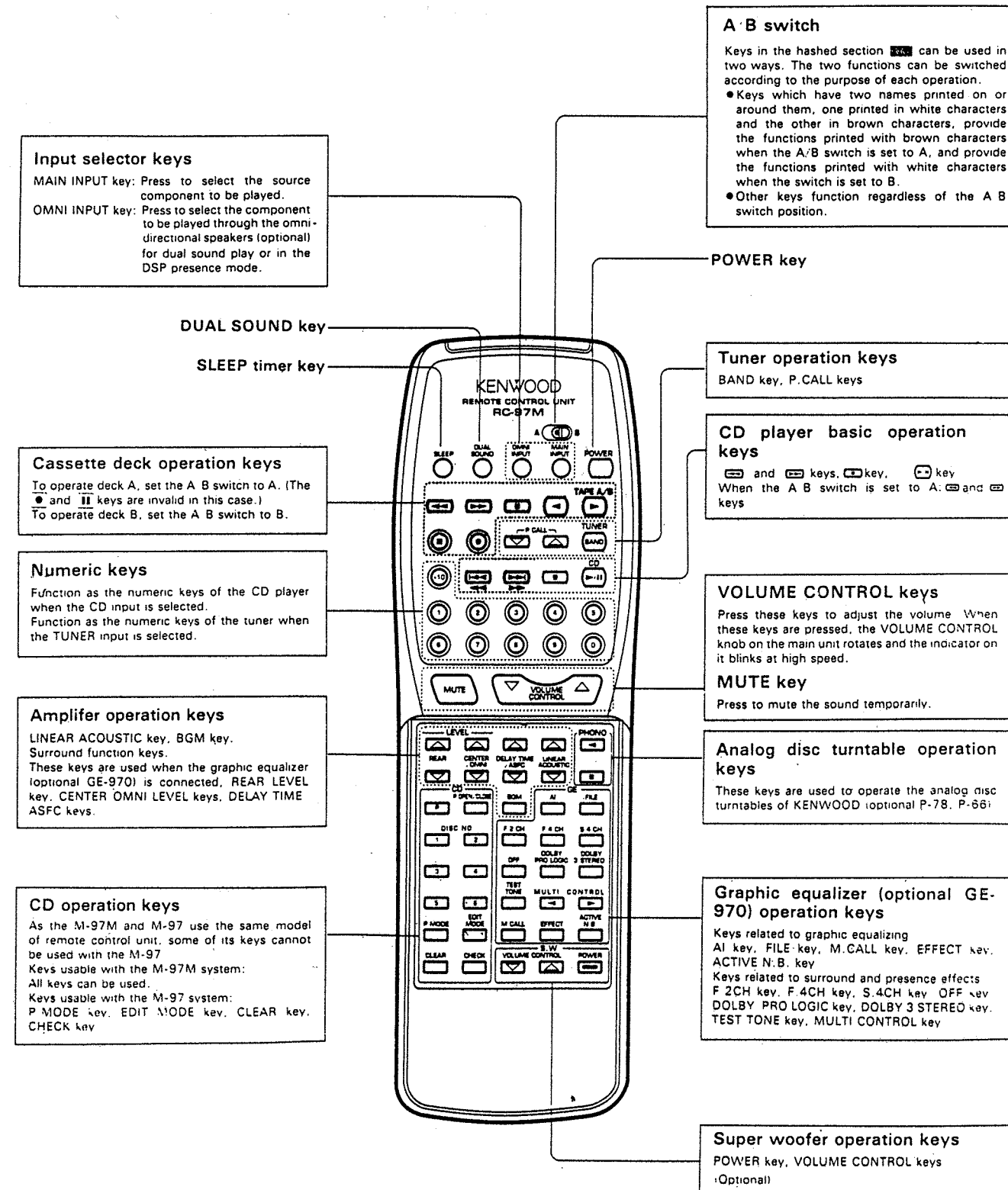


INSTRUCTION MANUAL
 B60-1351-00 ENGLISH
 B60-1352-00 SPANISH M
 B60-1353-00 CHINESE M

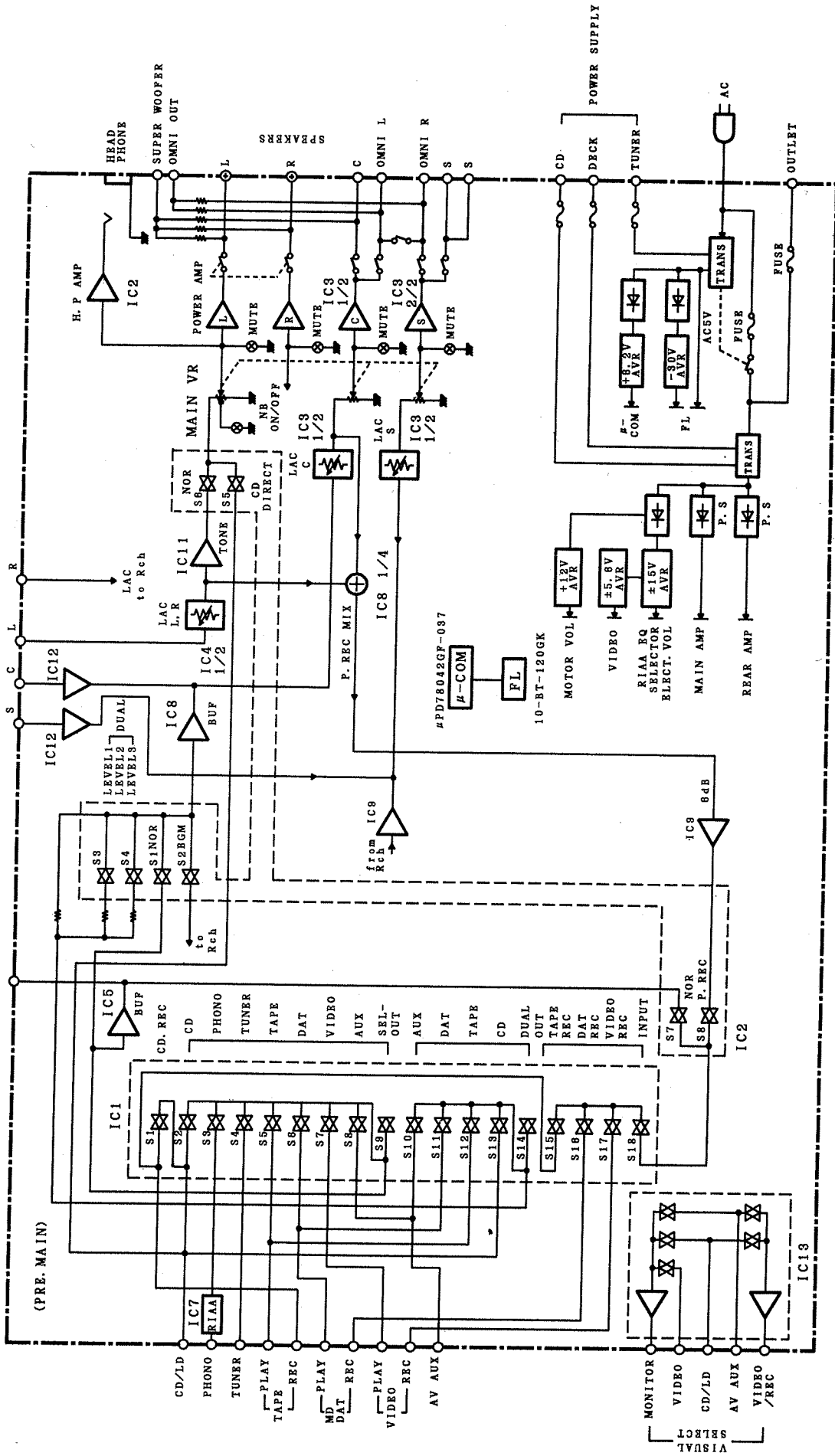
*Refer to parts list on page 22.

REMOTE CONTROL UNIT

REMOTE CONTROL UNIT (X94-1050-11)
 BATTERY COVER (F07-0721-23)



BLOCK DIAGRAM



CIRCUIT DESCRIPTION

CIRCUIT DESCRIPTION

Microprocessor μ PD78042GF-037-3B9 (X11: IC-101)

TEST MODE

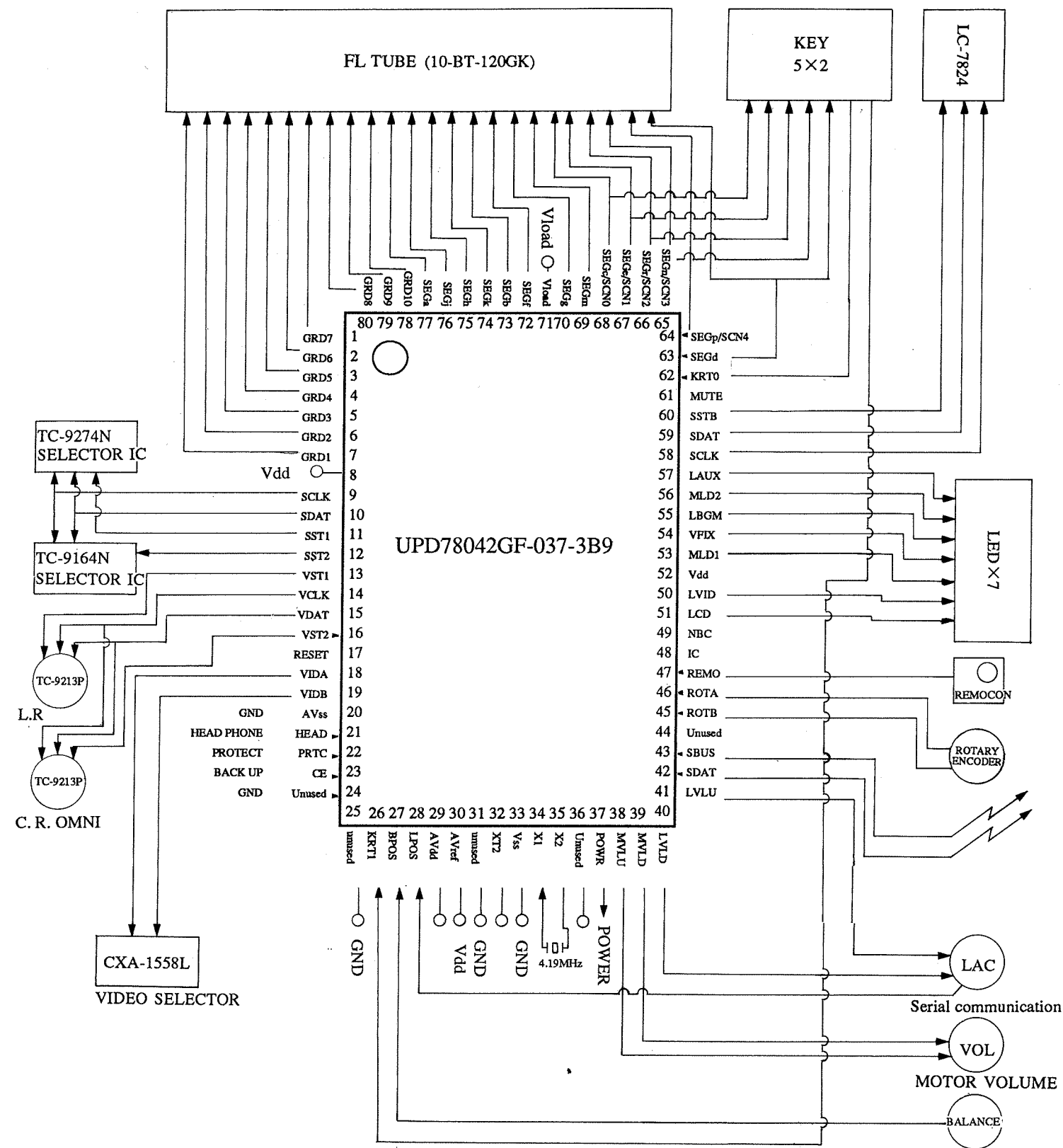
Test mode by means of main unit keys

- (1) Setting method
Plug the power cord in the AC electrical outlet while pressing the CD DIRECT key.
- (2) Cancellation method
The test mode set at the beginning is cancelled when the power cord is unplugged from the AC electrical outlet.
- (3) Contents
 - ① Automatic POWER ON
The POWER turns necessarily ON, and all functions are initialized when the power cord is plugged into the AC electrical outlet while pressing the CD DIRECT KEY.
 - ② ALL LIT mode
All FL and all LED light up without fail when the power cord is plugged into the AC electrical outlet while pressing the CD KEY. After that, the equipment switches to the ordinary indication mode when any key of the main unit is operated.
 - ③ Master/LAC volume automatic motor VR UP/DOWN
The motor VR carries out the following sequence of operations when the CD REC key is operated during the test mode by means of the main unit keys
16-second UP → 16-second DOWN → STOP
The CD REC key is inhibited during these operations.

- ④ Check of the operations of all circuits by means of the main unit keys
The MUTING function, which is carried out only with the remote controller, can be operated also with the N.B key of the main unit during the test mode by means of the main unit keys.
- ⑤ MUTE signal output
Ordinary operation should be carried out during the test mode by means of the main unit keys.

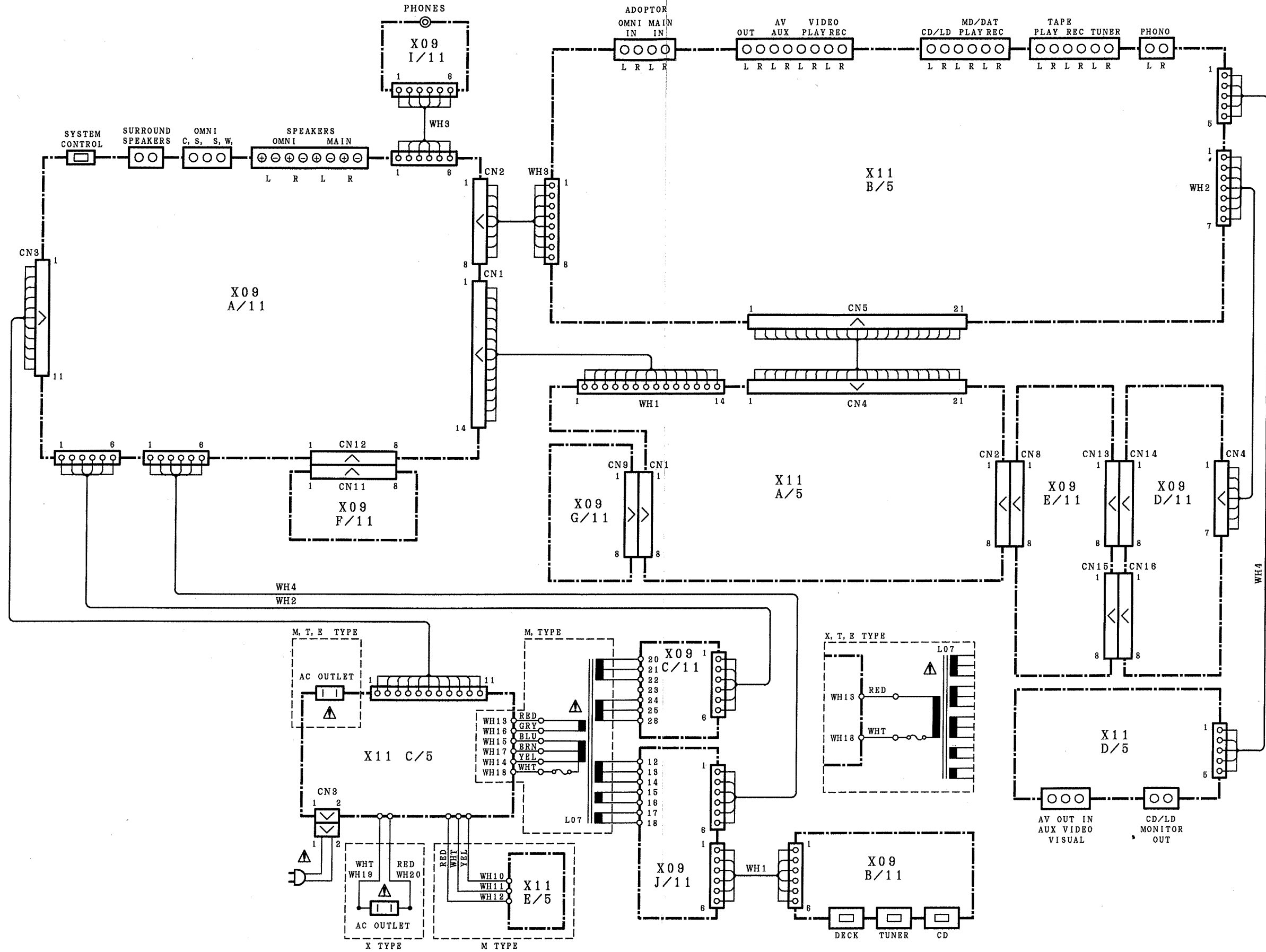
Initialization

- (1) Setting method
 - The equipment is initialized by plugging the power cord in the AC electrical outlet while pressing the POWER key.
 - The equipment is initialized when the power cord is unplugged and then plugged in the AC electrical outlet during the test mode by means of the main unit keys and the test mode by means of serial communication.
- (2) Contents
All functions are initialized. (Including test mode).

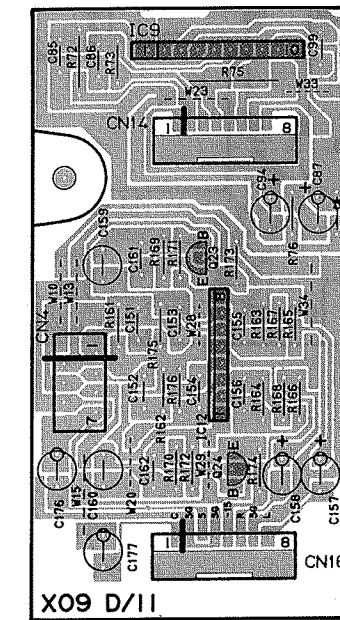
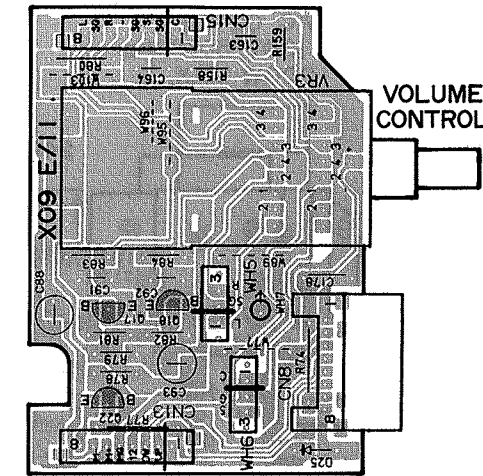
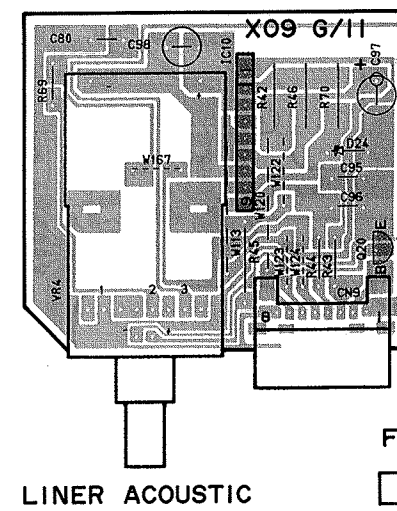
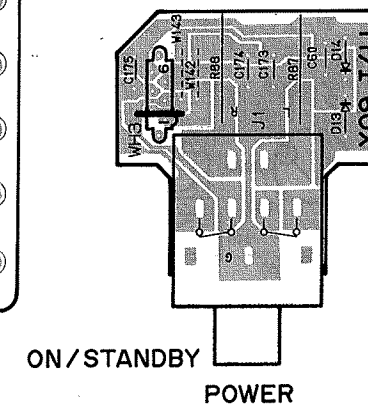
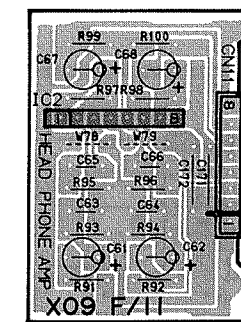
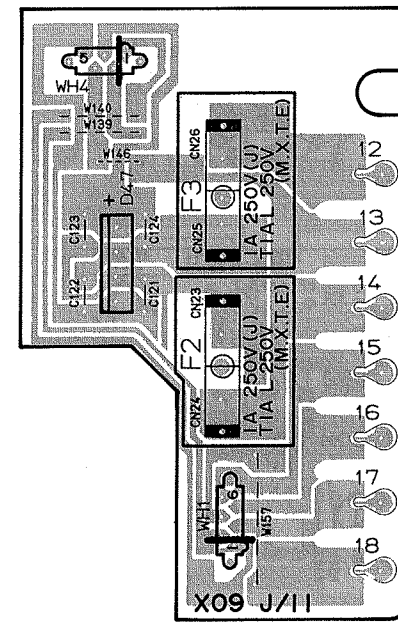
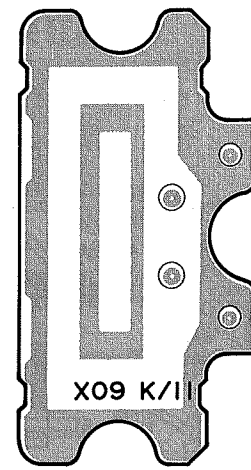
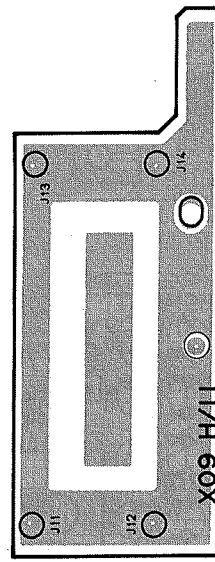
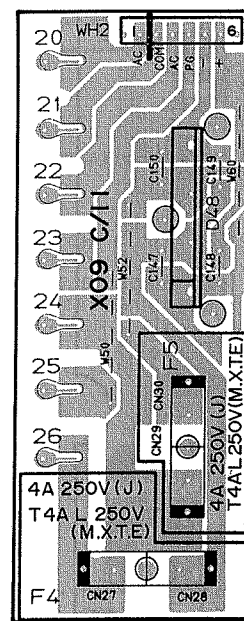
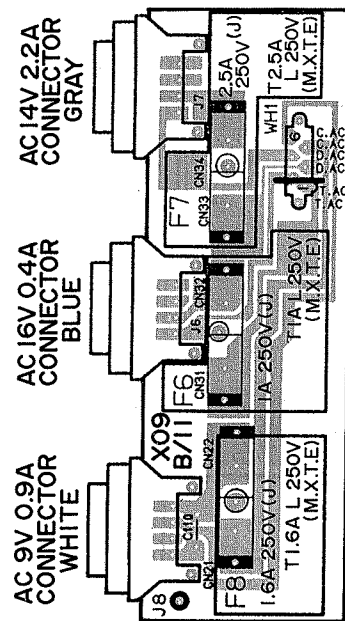
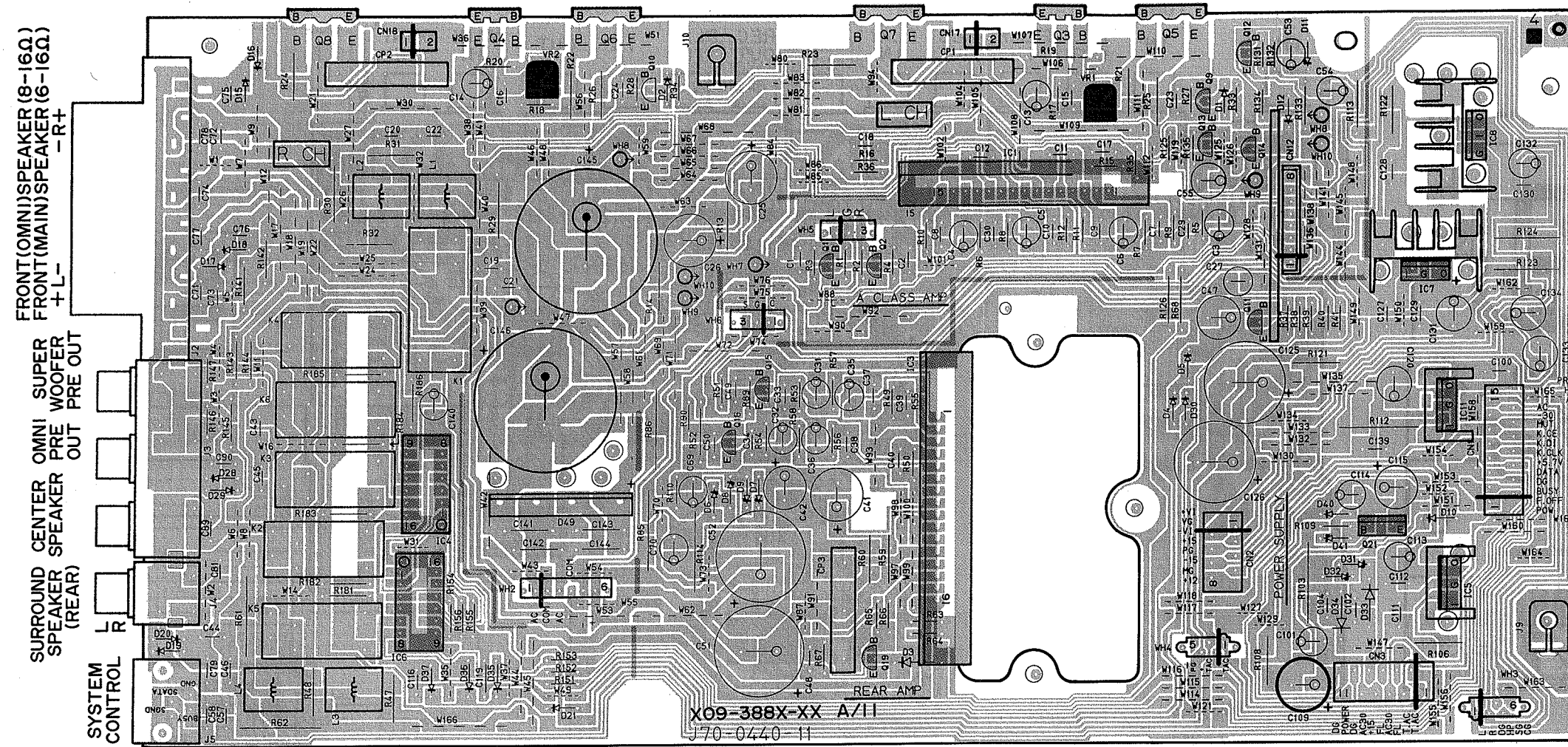


A-87/97 A-87/97

WIRING DIAGRAM



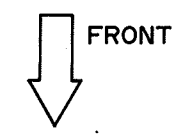
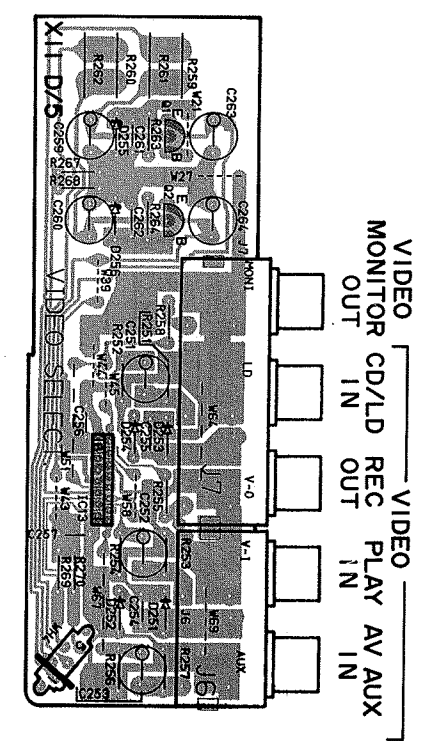
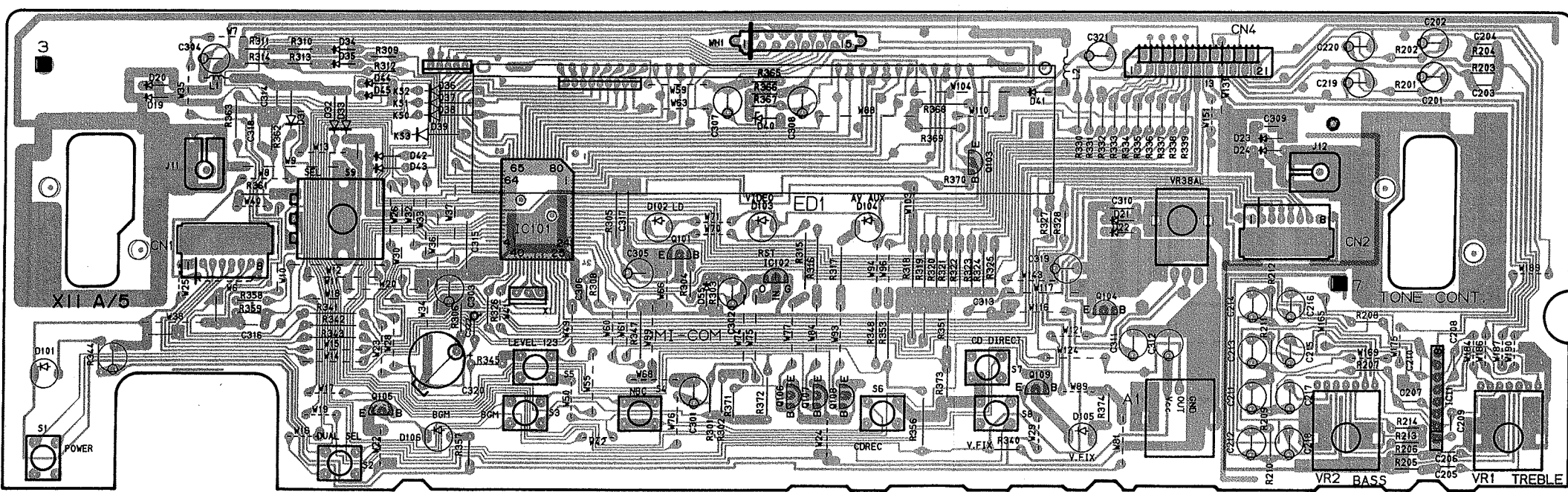
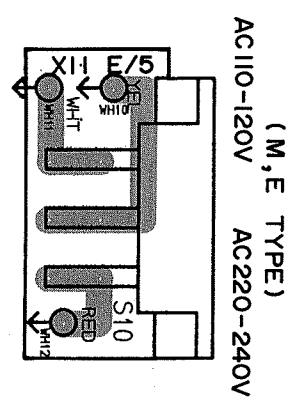
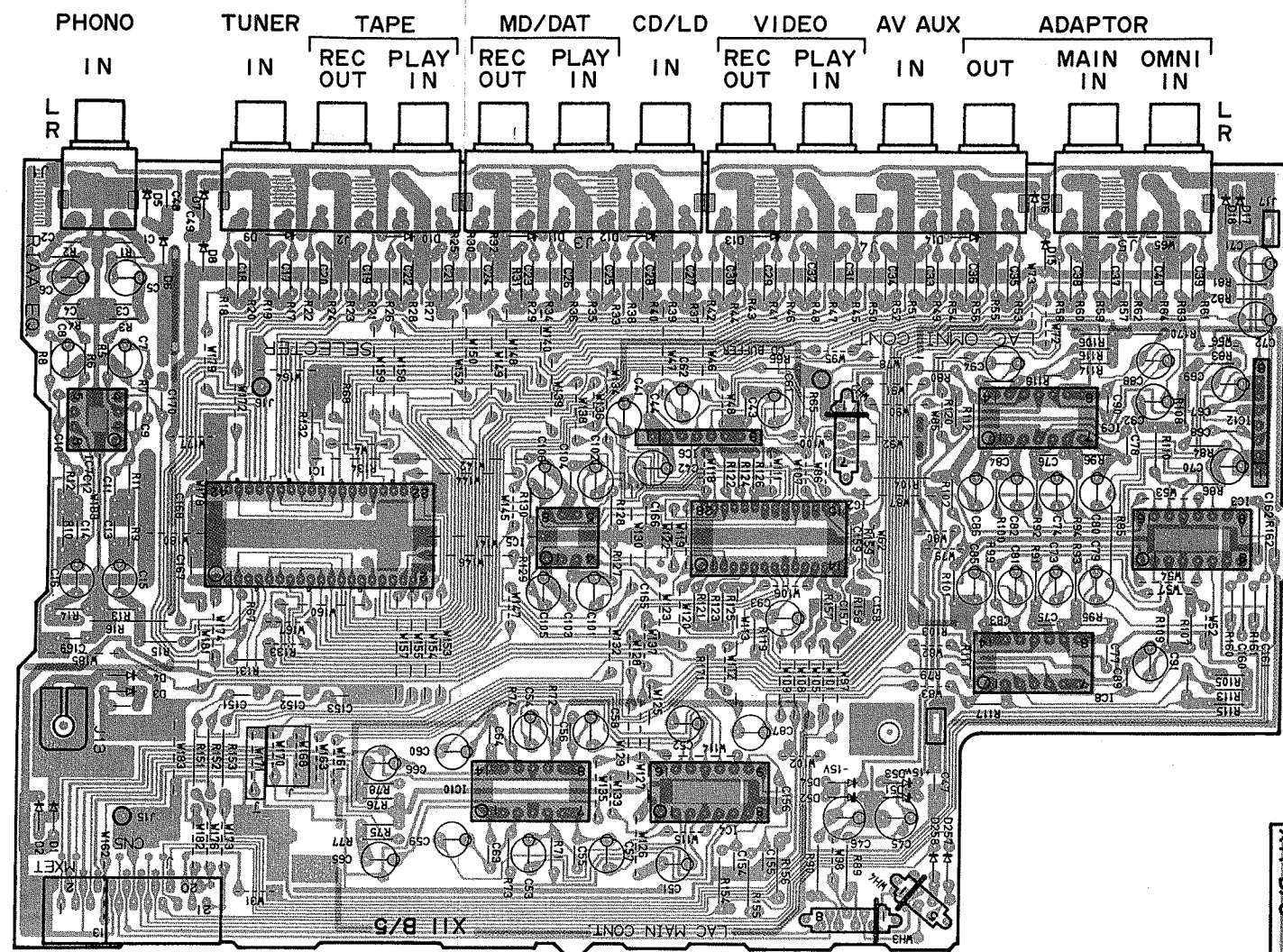
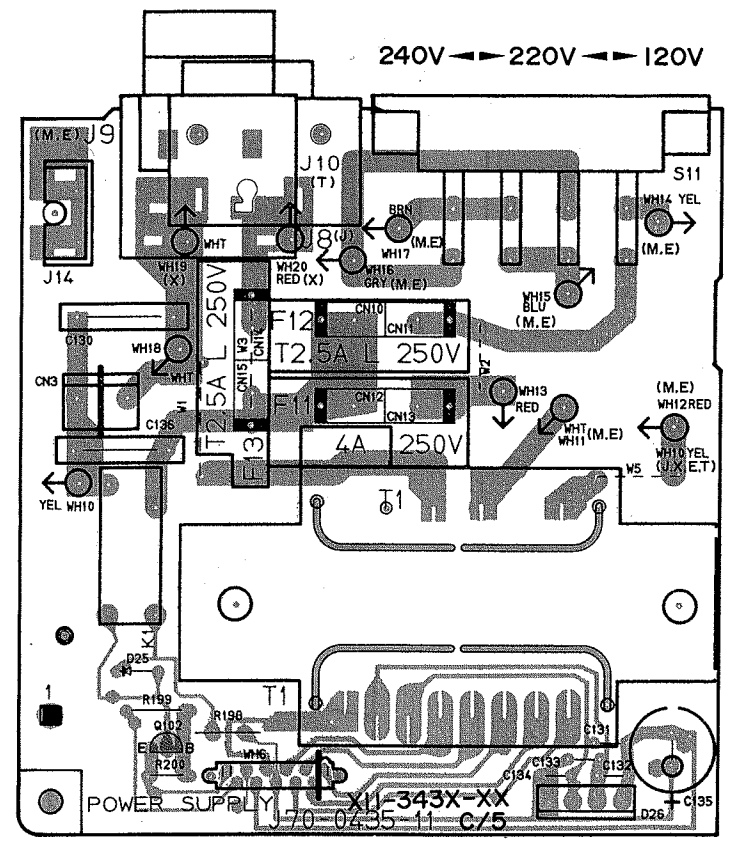
PC BOARD (Component side view) AUDIO UNIT (X09-388X-XX)



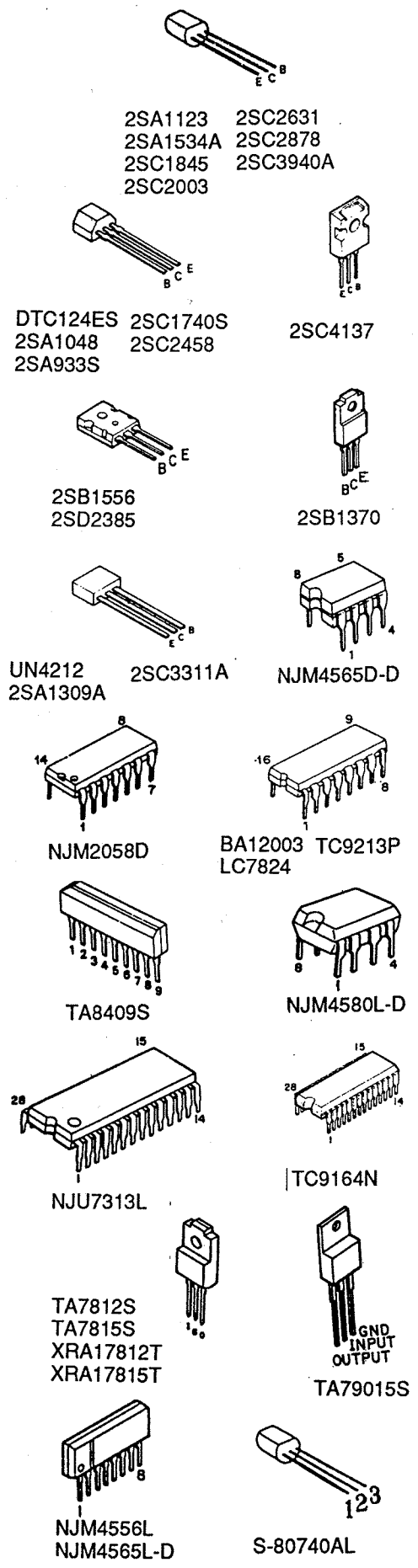
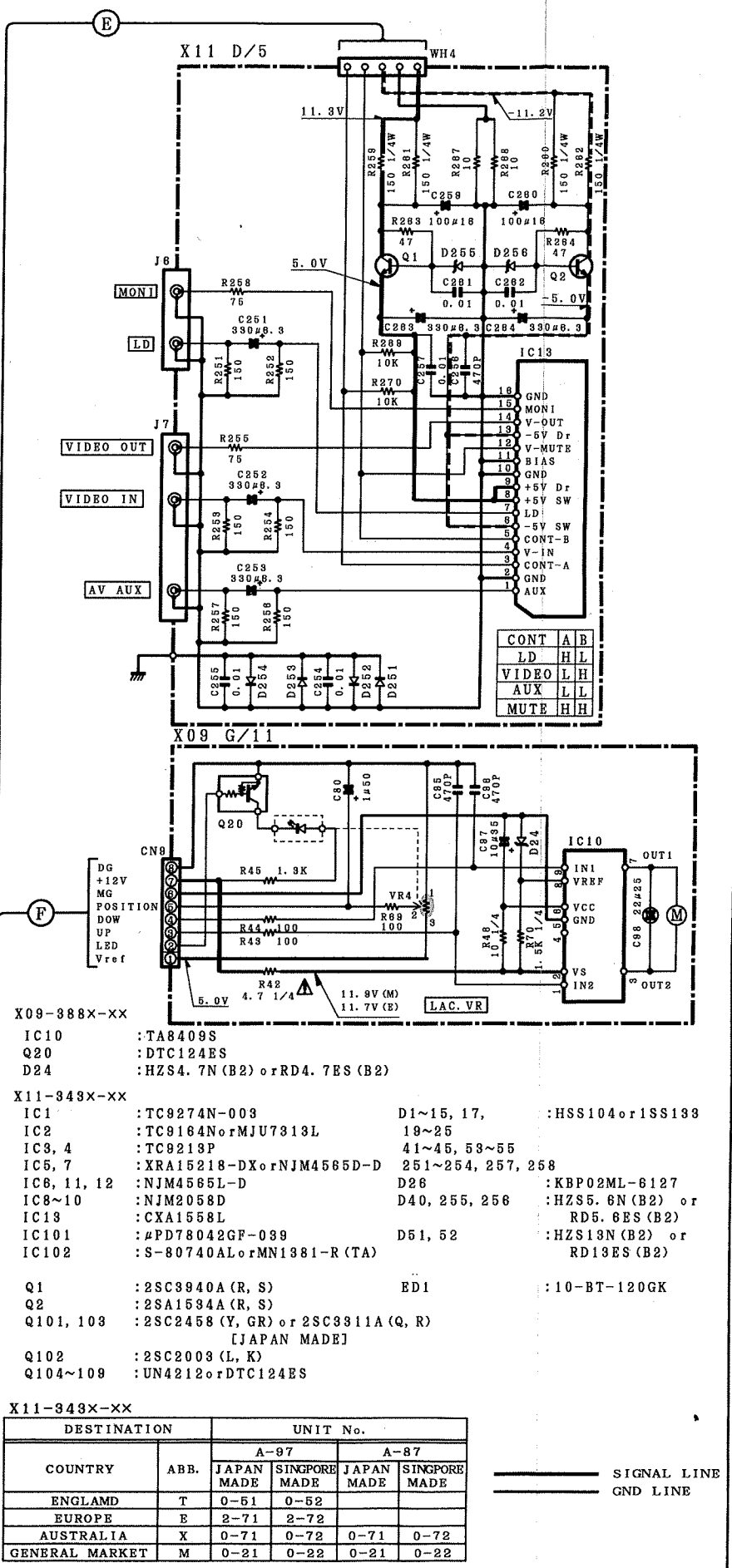
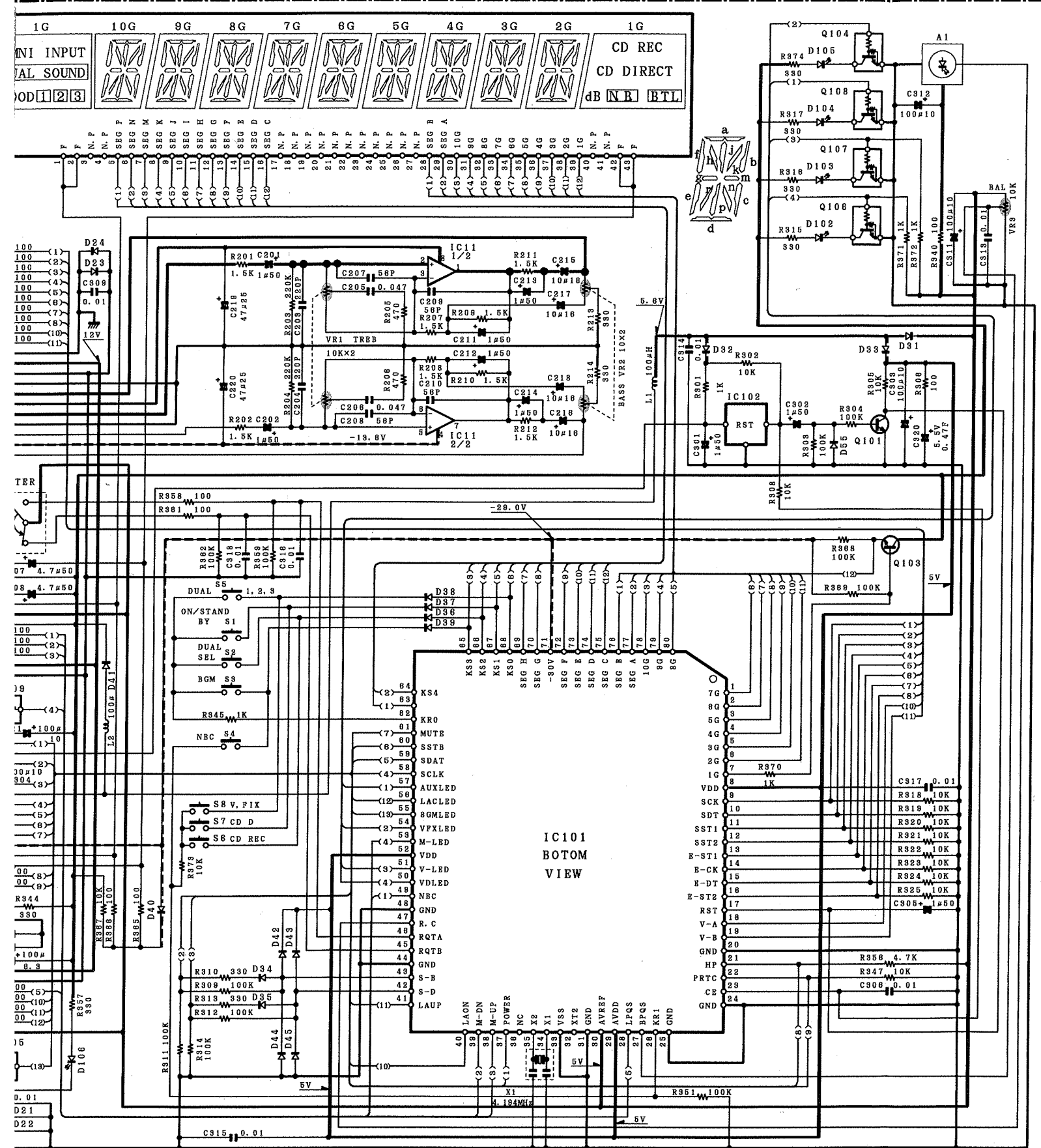
Refer to the schematic diagram for the values of resistors and capacitors.

PC BOARD (Component side view) CONTROL UNIT (X11-343X-XX)

AC OUTLET
AC 100V 50/60Hz
200W MAX.



Refer to the schematic diagram for the values of resistors and capacitors.



impedance voltme- lightly due to varia- f units.

Les tensions c.c. doivent être mesurées avec un voltmètre à haute impédance sans signal d'entrée. Les valeurs peuvent différer légèrement du fait des variations inhérentes aux appareils et aux instruments de mesure individuels.

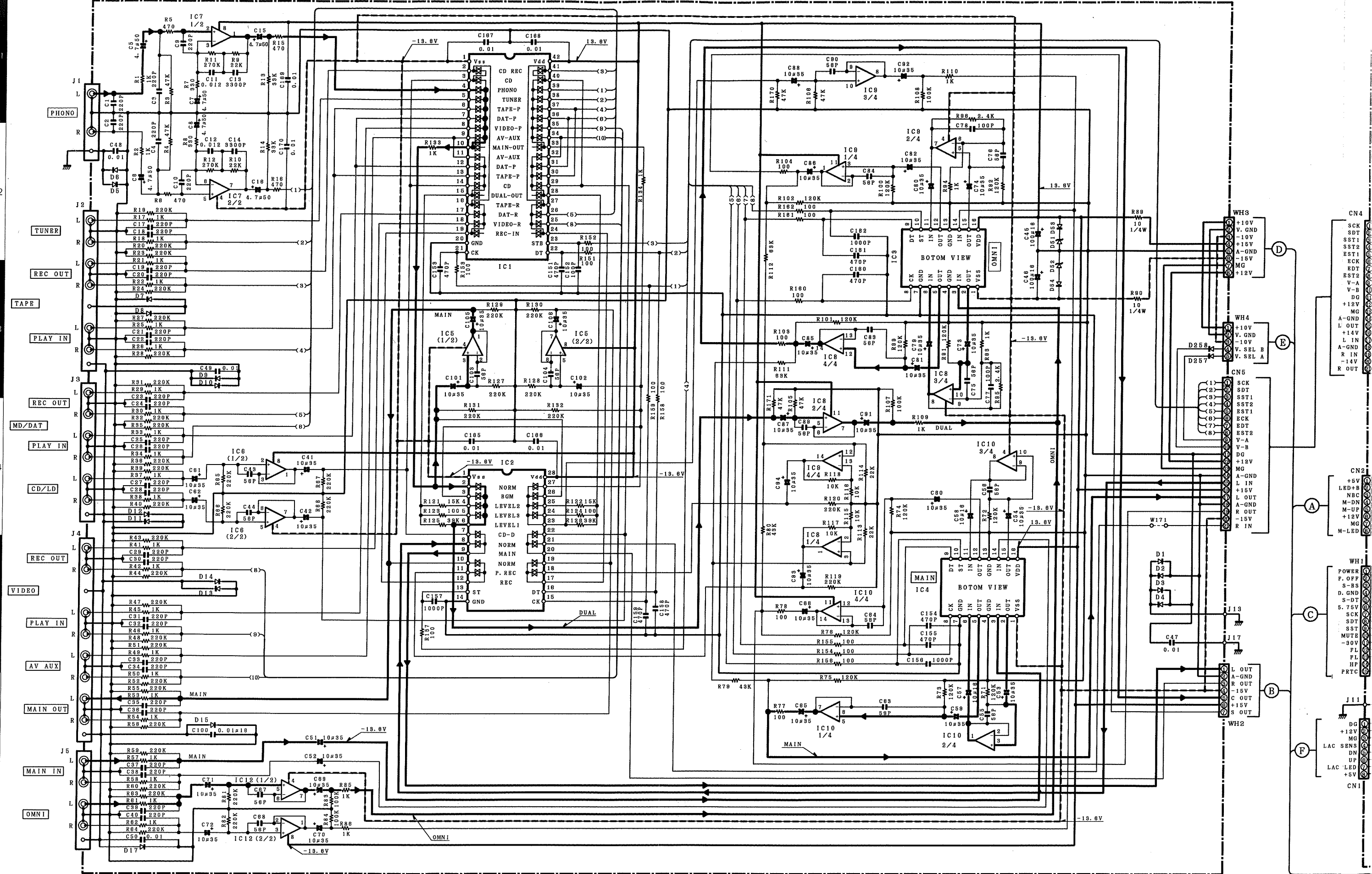
Die angegebenen Gleichspannungswerte wurden mit einem hochohmigen Spannungsmesser ohne Eingangssignal gemessen. Dabei schwanken die Meßwerte aufgrund von Unterschieden zwischen einzelnen Instrumenten oder Geräten u. U. geringfügig.

CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). **⚠** Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

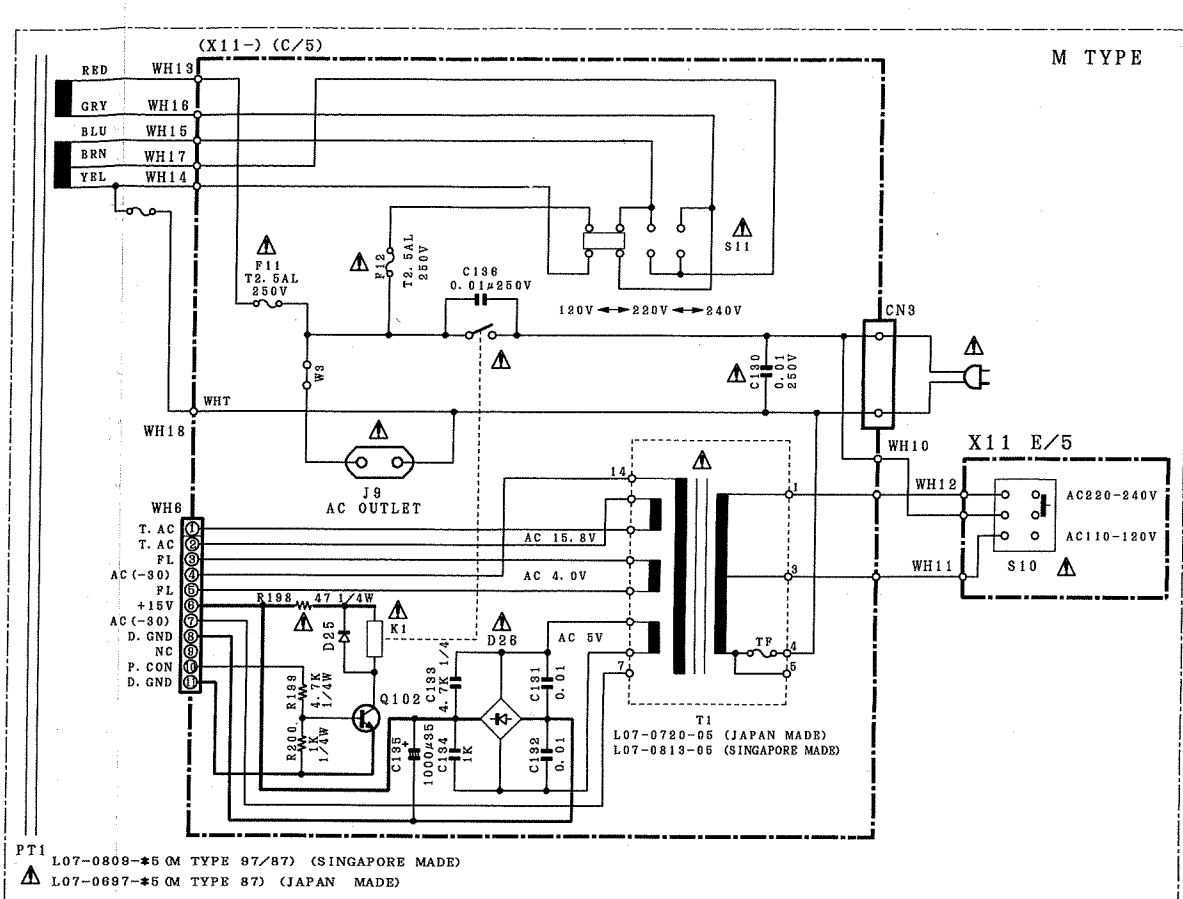
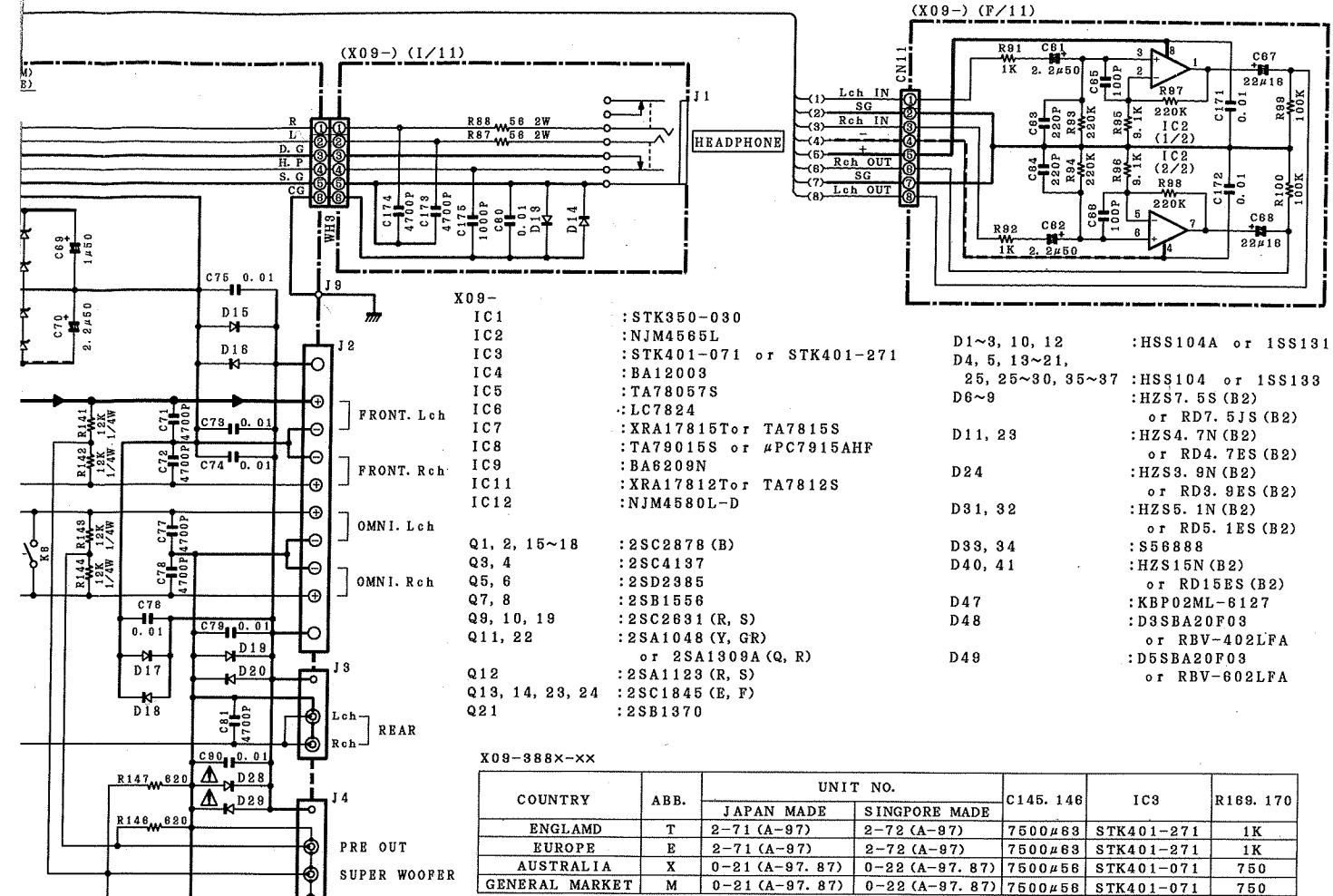
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Y08-4860-21





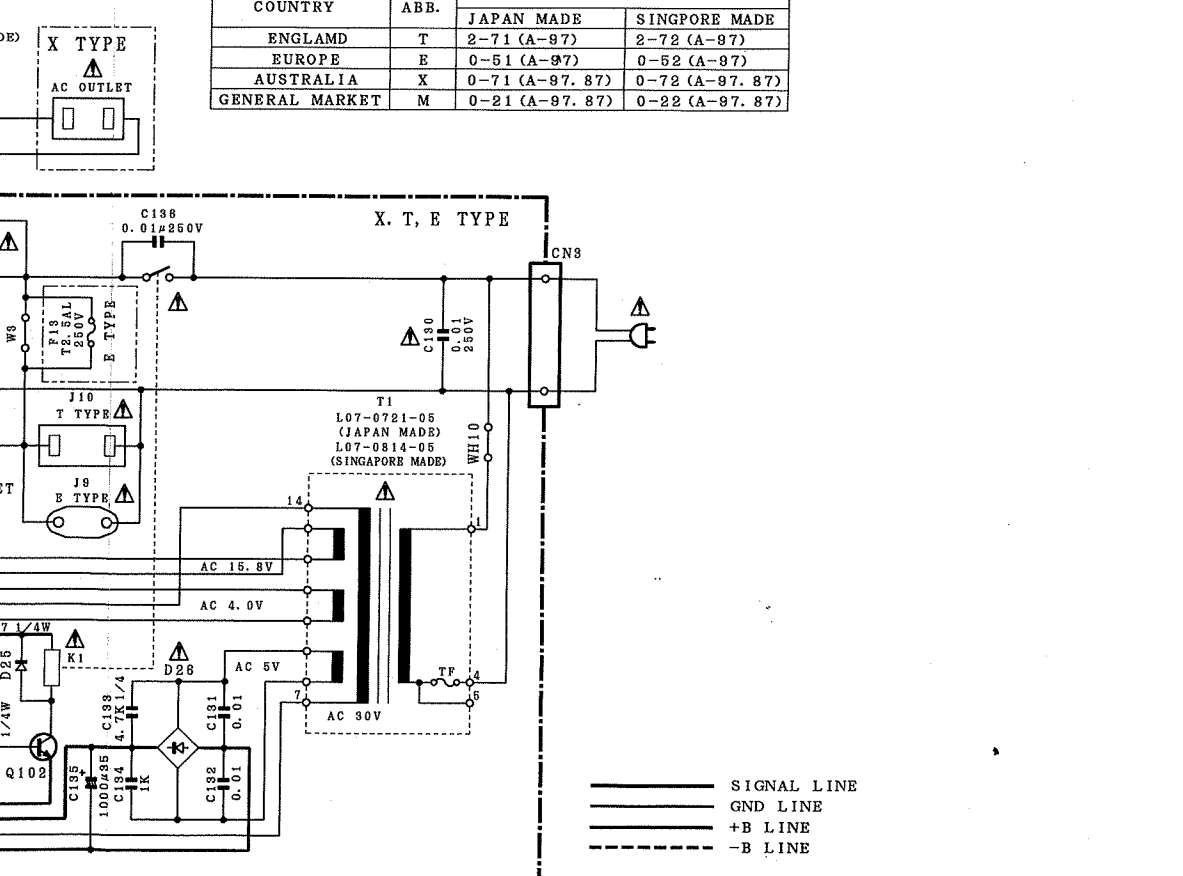
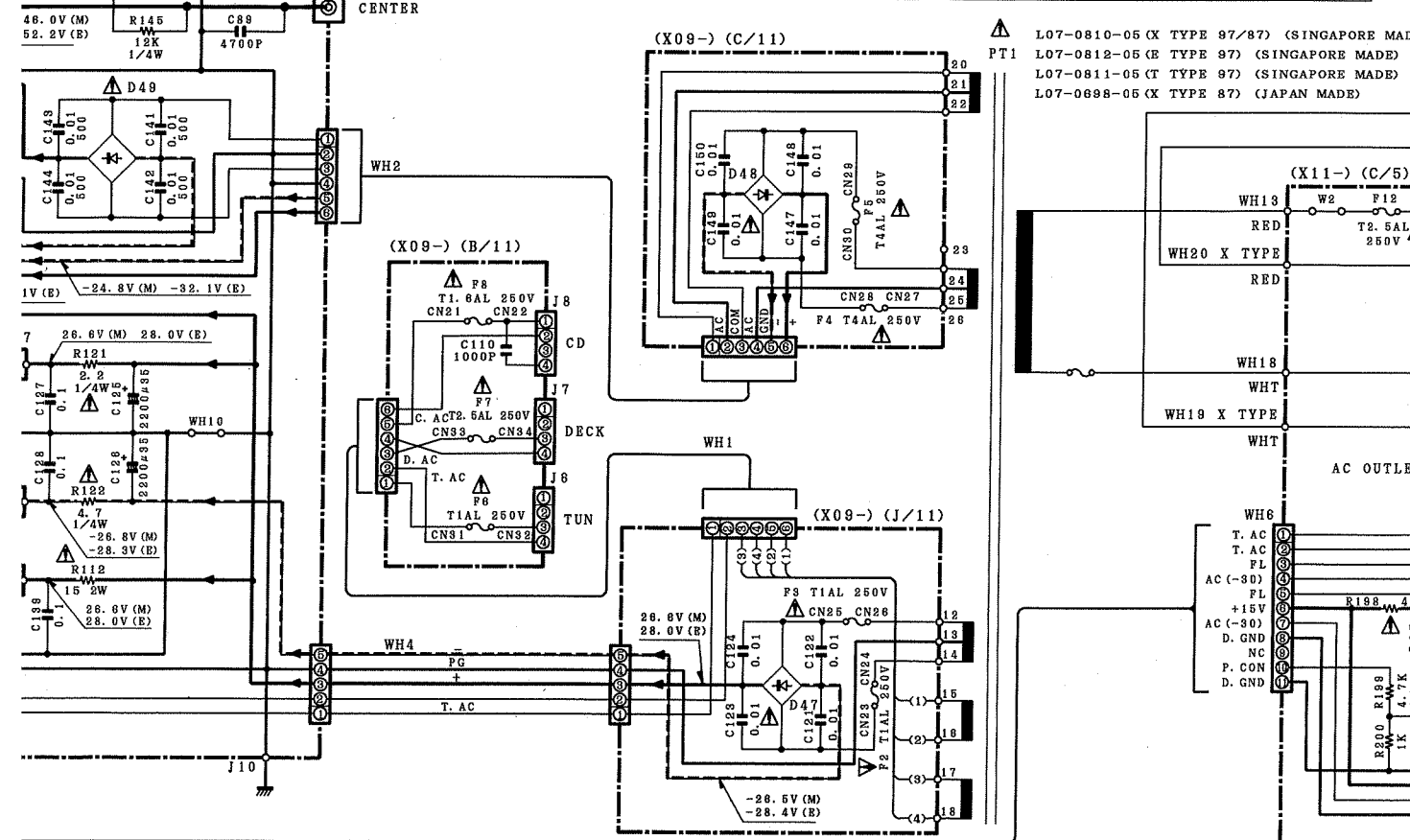
DC voltages are as measured with
 ter with no signal input. Values m
 tions between individual instrum



X11-343X-XX

| COUNTRY | ABB. | UNIT NO. | |
|----------------|------|-----------------|-----------------|
| | | JAPAN MADE | SINGAPORE MADE |
| ENGLAND | T | 2-71 (A-97) | 2-72 (A-97) |
| EUROPE | E | 0-51 (A-97) | 0-52 (A-97) |
| AUSTRALIA | X | 0-71 (A-97. 87) | 0-72 (A-97. 87) |
| GENERAL MARKET | M | 0-21 (A-97. 87) | 0-22 (A-97. 87) |

X11- Q102 : 2SC2003 (L, K)



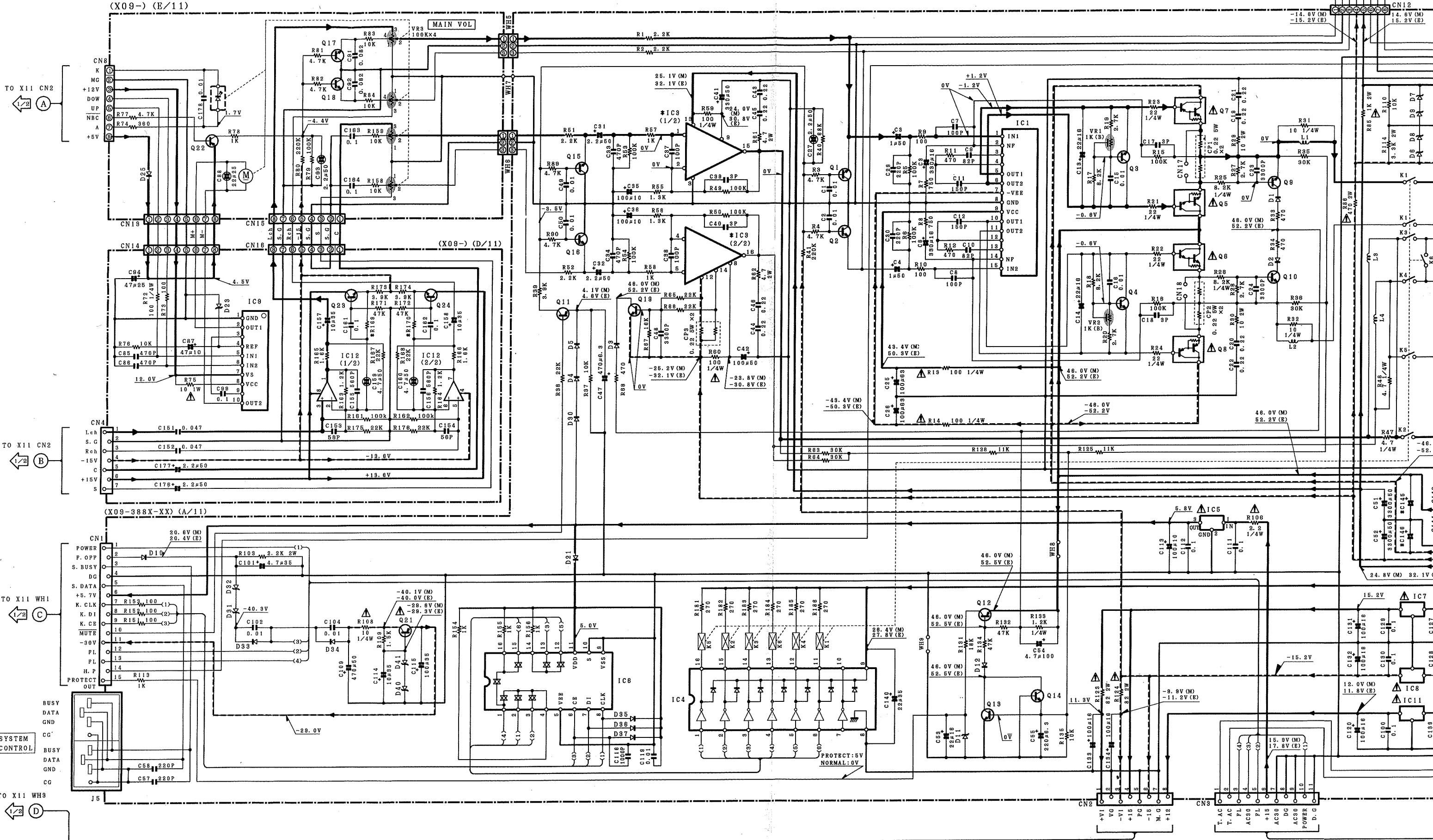
— SIGNAL LINE
— GND LINE
— +B LINE
- - -B LINE

DC voltages are as measured with a high impedance voltmeter with no signal input. Values may vary slightly due to variations between individual instruments or/and units.

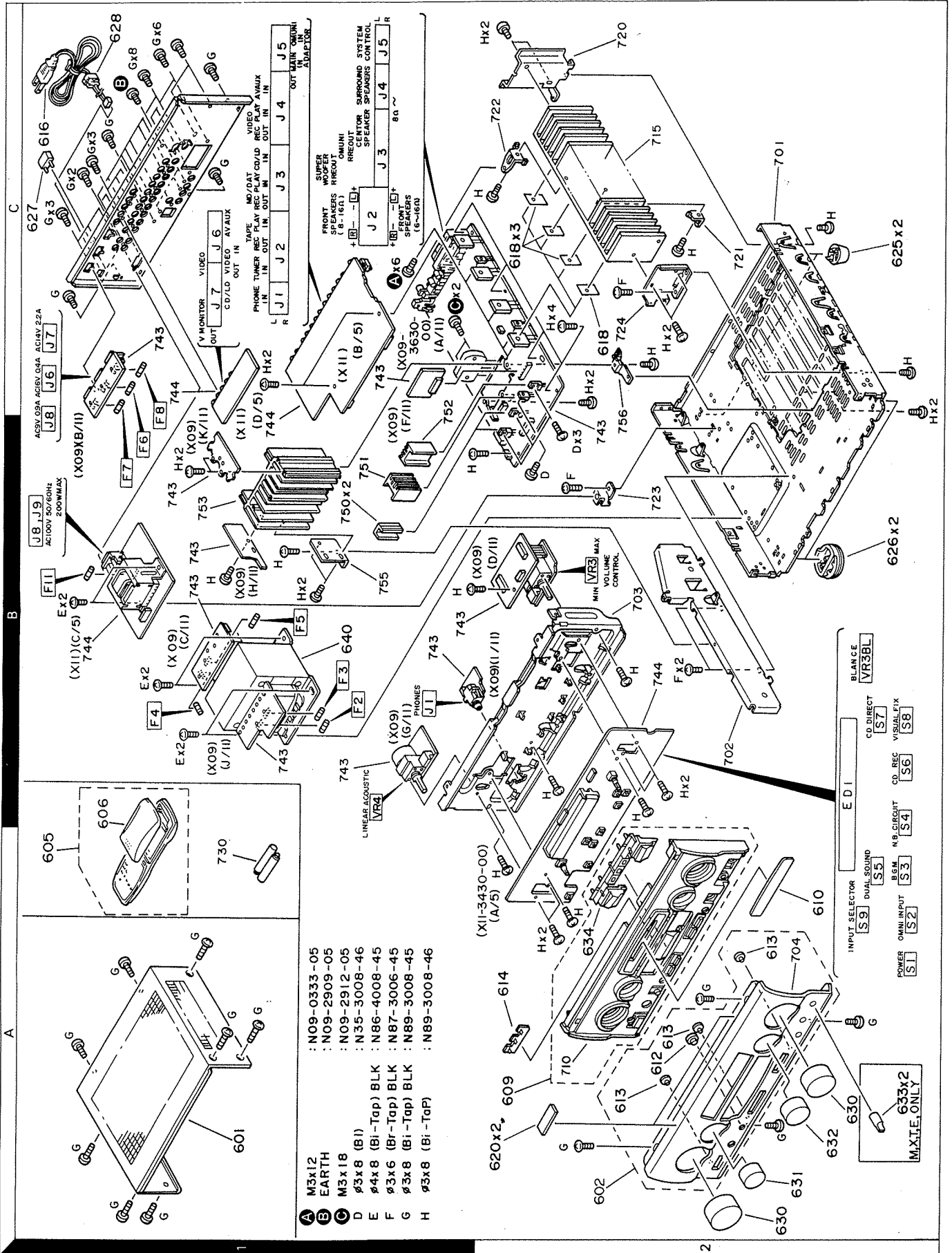
Les tensions c.c. doivent être mesurées avec un voltmètre à haute impédance sans signal d'entrée. Les valeurs peuvent différer légèrement du fait des variations inhérentes aux appareils et aux instruments de mesure individuels.

Die angegebenen Gleichspannungswerte wurden mit einem hochohmigen Spannungsmesser ohne Eingangssignal gemessen. Dabei schwanken die Meßwerte aufgrund von Unterschieden zwischen einzelnen Instrumenten oder Geräten u. U. geringfügig.

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EXPLODED VIEW (MAIN UNIT)



- A M3x12 : N09-0333-05
- B EARTH : N09-2909-05
- C M3x18 : N09-2912-05
- D ø3x8 (B1) : N35-3008-46
- E ø4x8 (Bi-Tap) BLK : N86-4008-45
- F ø3x6 (Br-Tap) BLK : N87-3006-45
- G ø3x8 (Bi-Tap) BLK : N89-3008-45
- H ø3x8 (Bi-Tap) : N89-3008-46

- INPUT SELECTOR [S1] [S2] [S3] [S4] [S5] [S6] [S7] [S8]
- POWER OMNI INPUT BGM N.B. CIRCUIT CD. REC. VISUAL FIX
- DUAL SOUND CD DIRECT
- ED I BLANCE VR3BL

Parts with the exploded numbers larger than 700 are not supplied.

PARTS LIST

UNIT LIST(A-87)

| DESTINATION | | AUDIO UNIT | CONTROL UNIT |
|-------------------|---|-------------|--------------|
| JAPAN MADE | M | X09-3880-21 | X11-3430-21 |
| | X | X09-3880-21 | X11-3430-71 |
| SINGAPORE MADE | M | X09-3880-22 | X11-3430-22 |
| | X | X09-3880-22 | X11-3430-72 |

A-97

| DESTINATION | | AUDIO UNIT | CONTROL UNIT |
|-------------------|---|-------------|--------------|
| JAPAN MADE | J | X09-3880-00 | X11-3430-00 |
| | M | X09-3880-21 | X11-3430-21 |
| | X | X09-3880-21 | X11-3430-71 |
| | T | X09-3882-71 | X11-3430-51 |
| | E | X09-3882-71 | X11-3432-71 |
| SINGAPORE MADE | M | X09-3880-22 | X11-3430-22 |
| | X | X09-3882-22 | X11-3430-72 |
| | T | X09-3882-72 | X11-3430-52 |
| | E | X09-3882-72 | X11-3432-72 |

PARTS LIST

PARTS LIST

* New Parts
Parts without Parts No. are not supplied.
Les articles non mentionnés dans le Parts No. ne sont pas fournis.
Teile ohne Parts No. werden nicht geliefert.

NO.1

Table with columns: Ref. No., Address, New Parts, Parts No., Description, Destination marks. Includes sub-sections for A-87 (JAPAN MADE) and A-97 (SINGAPORE MADE).

L:Scandinavia Y:PX(Far East, Hawaii) Y:AAFE(S/Europe) K:USA T:England X:Australia P:Canada E:Europe M:Other Areas

* New Parts
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NO.2

Table with columns: Ref. No., Address, New Parts, Parts No., Description, Destination marks. Includes sub-sections for A-97 (JAPAN MADE) and A-97 (SINGAPORE MADE).

L:Scandinavia Y:PX(Far East, Hawaii) Y:AAFE(S/Europe) K:USA T:England X:Australia P:Canada E:Europe M:Other Areas

indicates safety critical components.

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NO.3

Table with columns: Ref. No., Address, New Parts, Parts No., Description, Destination marks. Includes sub-sections for A-97 (SINGAPORE MADE) and A-97 (SINGAPORE MADE).

L:Scandinavia Y:PX(Far East, Hawaii) Y:AAFE(S/Europe) K:USA T:England X:Australia P:Canada E:Europe M:Other Areas

* New Parts
Parts without Parts No. are not supplied.
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Teile ohne Parts No. werden nicht geliefert.

NO.4

Table with columns: Ref. No., Address, New Parts, Parts No., Description, Destination marks. Includes sub-sections for A-97 (SINGAPORE MADE) and A-97 (SINGAPORE MADE).

L:Scandinavia Y:PX(Far East, Hawaii) Y:AAFE(S/Europe) K:USA T:England X:Australia P:Canada E:Europe M:Other Areas

indicates safety critical components.

PARTS LIST

NO.6

* New Parts
Parts without Parts No. are not supplied.
Les articles non mentionnés dans le Parts No. ne sont pas fournis.
Telle que Parts No. werden nicht geliefert.

Table with columns: Ref. No., Address, Parts No., Description, Destination. Includes parts like resistors, capacitors, and diodes.

L:Scandinavia
Y:PX(Far East, Hawaii)
T:England
Y:AFES(Europe)
X:Australia
M:Other Areas
J: JAPAN MADE
S: SINGAPORE MADE
8: A-87
9: A-97
indicates safety critical components.

NO.5

* New Parts
Parts without Parts No. are not supplied.
Les articles non mentionnés dans le Parts No. ne sont pas fournis.
Telle que Parts No. werden nicht geliefert.

Table with columns: Ref. No., Address, Parts No., Description, Destination. Includes parts like transformers, screws, and audio unit components.

L:Scandinavia
Y:PX(Far East, Hawaii)
T:England
Y:AFES(Europe)
X:Australia
M:Other Areas
J: JAPAN MADE
S: SINGAPORE MADE
8: A-87
9: A-97
indicates safety critical components.

PARTS LIST

NO.8

* New Parts
Parts without Parts No. are not supplied.
Les articles non mentionnés dans le Parts No. ne sont pas fournis.
Telle que Parts No. werden nicht geliefert.

Table with columns: Ref. No., Address, Parts No., Description, Destination. Includes parts like resistors, capacitors, and diodes.

L:Scandinavia
Y:PX(Far East, Hawaii)
T:England
Y:AFES(Europe)
X:Australia
M:Other Areas
J: JAPAN MADE
S: SINGAPORE MADE
8: A-87
9: A-97
indicates safety critical components.

NO.7

* New Parts
Parts without Parts No. are not supplied.
Les articles non mentionnés dans le Parts No. ne sont pas fournis.
Telle que Parts No. werden nicht geliefert.

Table with columns: Ref. No., Address, Parts No., Description, Destination. Includes parts like fuses, capacitors, and audio unit components.

L:Scandinavia
Y:PX(Far East, Hawaii)
T:England
Y:AFES(Europe)
X:Australia
M:Other Areas
J: JAPAN MADE
S: SINGAPORE MADE
8: A-87
9: A-97
indicates safety critical components.

PARTS LIST

x New Parts
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 Les articles non mentionnés dans le Parts No. ne sont pas fournis.
 Teile ohne Parts No. werden nicht geliefert.

NO.10

| Ref. No. 参照番号 | Address 位置 | New Parts 新 | Parts No. 部品番号 | Description 部品名 / 規格 | Desti- nation 仕 | Re- marks 備考 |
|------------------|---------------|----------------|-------------------|-------------------------|-----------------------|--------------------|
| C45, 46 | | | CE04LW1C101M | ELECTR0 | | S |
| C48, 49 | | | CK45FE1H103Z | CERAMIC | 16WV | |
| C50 | | | C91-0769-05 | ELECTR0 | Z | |
| C51-54 | | | CE04KW1V100M | ELECTR0 | K | J S |
| C55, 56 | | | CC45FSL1H560J | ELECTR0 | 10UF | |
| C57, 58 | | | C90-3225-05 | CERAMIC | J | J J S |
| C59-62 | | | CE04KW1V100M | ELECTR0 | 10UF | |
| C63, 64 | | | CC45FSL1H560J | CERAMIC | J | J S |
| C65, 66 | | | CE04KW1V100M | ELECTR0 | 10UF | |
| C67, 68 | | | CC45FSL1H560J | CERAMIC | 56PF | J S |
| C69-74 | | | CE04KW1V100M | ELECTR0 | 10UF | |
| C75, 76 | | | CC45FSL1H560J | CERAMIC | 56PF | J S |
| C77, 78 | | | CE04KW1V100M | ELECTR0 | 10UF | |
| C79, 82 | | | CE04KW1V100M | ELECTR0 | 10UF | J S |
| C73, 82 | | | CE04KW1V100M | ELECTR0 | 10UF | |
| C85, 84 | | | CC45FSL1H560J | CERAMIC | 56PF | J S |
| C85-88 | | | CE04KW1V100M | ELECTR0 | 10UF | |
| C89, 90 | | | CC45FSL1H560J | CERAMIC | 56PF | J S |
| C91-94 | | | CE04KW1V100M | ELECTR0 | 10UF | J S |
| C100 | | | C91-0769-05 | CERAMIC | K | J S |
| C101, 102 | | | CE04KW1V100M | ELECTR0 | 0.01UF | |
| C103, 104 | | | CC45FSL1H560J | CERAMIC | 10UF | J S |
| C105, 106 | | | CE04KW1V100M | ELECTR0 | 56PF | J |
| C130-134 | | | CE04LW1V100M | ELECTR0 | 10UF | S |
| C135 | | | CK45FE1H103Z | CERAMIC | 0.01UF | |
| C136 | | | CE04LW1V100M | ELECTR0 | 0.010UF | |
| C137 | | | CE04KW1V100M | ELECTR0 | 1000UF | S J |
| C152 | | | C91-1439-05 | FILM | 0.01UF | |
| C156, 157 | | | CK45FE1H471K | CERAMIC | 470PF | |
| C158 | | | CK45FE1H102K | CERAMIC | 1000PF | |
| C159-161 | | | CK45FE1H102K | CERAMIC | 1000PF | |
| C162 | | | CK45FE1H471K | CERAMIC | 470PF | |
| C165-168 | | | CK45FE1H103Z | CERAMIC | 1000PF | |
| C169, 170 | | | CF92FV1H103J | MF | 0.010UF | |
| C201, 202 | | | CE04KW1H101M | ELECTR0 | 1.0UF | J S |
| C203, 204 | | | CC45FSL1H221J | CERAMIC | 220PF | |
| C205, 206 | | | CF92FV1H473J | MF | 0.047UF | |
| C207-210 | | | CC45FSL1H560J | CERAMIC | 56PF | J |
| C211-214 | | | CE04KW1H101M | ELECTR0 | 1.0UF | J S |
| C215-218 | | | CE04LW1H101M | ELECTR0 | 1.0UF | J S |
| C219, 220 | | | C90-3225-05 | ELECTR0 | 16WV | |
| C219, 220 | | | CE04KW1S470M | ELECTR0 | 47UF | J S |
| C219, 220 | | | CE04LW1E470M | ELECTR0 | 25WV | J S |

x New Parts
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NO.9

| Ref. No. 参照番号 | Address 位置 | New Parts 新 | Parts No. 部品番号 | Description 部品名 / 規格 | Desti- nation 仕 | Re- marks 備考 |
|-----------------------------------|---------------|----------------|-------------------|--------------------------------|-----------------------|--------------------|
| IC1 | | * | STK350-030 | IC(CAF DRIVER AMP) | | |
| IC2 | | * | NJM4556L | IC(COP AMP) | | 9 |
| IC3 | | * | STK401-071 | IC(CAF POWER AMP/40HX2) | | 8 |
| IC3 | | * | STK401-071 | IC(CAF POWER AMP/40HX2) | | 8 |
| IC3 | | * | STK401-271 | IC(CAF POWER AMP/40HX2) | | 9 |
| IC4 | | | BA12003 | IC(TRANSISTOR ARRAY) | | |
| IC5 | | | TA76057S | IC(VOLTAJE REGULATORY/ +5.75V) | | |
| IC6 | | * | LC78225 | IC(CANALOG SW) | | |
| IC7 | | | TA7815S | IC(VOLTAJE REGULATORY/ +15V) | | |
| IC7 | | * | XRA17815T | IC(VOLTAJE REGULATORY/ +15V) | | |
| IC8 | | | TA79015S | IC(VOLTAJE REGULATORY/ -15V) | | |
| IC8 | | | UPC7915AHF | IC(VOLTAJE REGULATORY/ -15V) | | |
| IC9 | | | BA6209N | IC(MOTOR DRIVER) | | |
| IC10 | | | TAB409S | IC(MOTOR CONTROL) | | |
| IC11 | | | TA7812S | IC(VOLTAJE REGULATORY/ +12V) | | |
| IC11 | | * | XRA17812T | IC(VOLTAJE REGULATORY/ +12V) | | |
| IC12 | | | NJM4580L-D | IC(COP AMP X2) | | |
| Q1 | | | 25C2878(B) | TRANSISTOR | | |
| Q3, 4 | | | 25C4137 | TRANSISTOR | | |
| Q5, 6 | | * | 25D2385 | TRANSISTOR | | |
| Q7, 8 | | * | 25B1556 | TRANSISTOR | | |
| Q9, 10 | | * | 25C2631(R, S) | TRANSISTOR | | J S |
| Q11 | | | 25A1048(V, GR) | TRANSISTOR | | J S |
| Q11 | | | 25A1175(F, E) | TRANSISTOR | | J S |
| Q11 | | | 25A1309A(Q, R) | TRANSISTOR | | J S |
| Q11 | | | 25A933S(G, B) | TRANSISTOR | | S |
| Q12 | | | 25A1123(K, S) | TRANSISTOR | | |
| Q13, 14 | | | 25C1845(K, E) | TRANSISTOR | | |
| Q15-18 | | | 25C2626(E, E) | TRANSISTOR | | |
| Q19 | | | 25C2676(B) | TRANSISTOR | | |
| Q20 | | | 25C2631(R, S) | TRANSISTOR | | |
| Q20 | | | DTC124BS | DIGITAL TRANSISTOR | | |
| Q21 | | | 25B1370 | TRANSISTOR | | |
| Q22 | | | 25A1048(V, GR) | TRANSISTOR | | J S |
| Q22 | | | 25A1175(F, E) | TRANSISTOR | | J S |
| Q22 | | | 25A1309A(Q, R) | TRANSISTOR | | J S |
| Q22 | | | 25A933S(G, R) | TRANSISTOR | | S |
| Q23, 24 | | | 25C1845(F, E) | TRANSISTOR | | |
| CONTROL UNIT (X11-343X-XX) | | | | | | |
| D101-106 | | | B30-1291-05 | LED(LN21CPSLX(V)-(TA4)) | | |
| C1-4 | | | CC45FSL1H221J | CERAMIC | 220PF | J |
| C5, 6 | | | CE04KW1H4R7M | ELECTR0 | 4.7UF | J S |
| C5, 6 | | | CE04LW1H4R7M | ELECTR0 | 50WV | J S |
| C7, 8 | | | CE04KW1H4R7M | ELECTR0 | 4.7UF | J S |
| C7, 8 | | | CE04LW1H4R7M | ELECTR0 | 50WV | J S |
| C9, 10 | | | CC45FSL1H221J | CERAMIC | 220PF | J |
| C11, 12 | | | CF92FV1H123J | MF | 0.012UF | |
| C13, 14 | | | CF92FV1H352J | MF | 3300PF | |
| C15, 16 | | | CE04KW1H4R7M | ELECTR0 | 4.7UF | J S |
| C15, 16 | | | CE04LW1H4R7M | ELECTR0 | 50WV | J S |
| C17-40 | | | C91-0749-05 | CERAMIC | 220PF | K |
| C41, 42 | | | CE04KW1V100M | ELECTR0 | 10UF | J S |
| C43, 44 | | | CE04LW1V100M | ELECTR0 | 10UF | J S |
| C43, 44 | | | CC45FSL1H560J | CERAMIC | 56PF | J |
| C45, 46 | | | CE04KW1C101M | ELECTR0 | 100UF | J |

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△ indicates safety critical components.

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PARTS LIST

NO.12

| Ref. No. 参照番号 | Address 位置 | Parts No. 部品番号 | Description 部品名 / 規格 | Desti- nation 仕 | Re- marks 備考 |
|------------------|---------------|-------------------|---------------------------------|-----------------------|--------------------|
| T1 | | L07-0814-05 | POWER TRANSFORMER | XTE | 9 S |
| T1 | | L07-0814-05 | POWER TRANSFORMER | X | 8 S |
| X1 | | L78-0267-05 | RESONATOR 4.194MHZ | | S |
| R198 | | RD14NB2E470J | RD 47. J 1/4W | | |
| R259-262 | | RD14NB2E151J | RD 150. J 1/4W | | |
| VR1, 2 | | R10-3954-05 | POTENTIOMETER(10K) BASS, TREBLE | | |
| VR3 | | R05-3037-05 | POTENTIOMETER(10K) BALANCE | | |
| K1 | | S76-0002-05 | MAGNETIC RELAY | | |
| S10 | | S60-1064-05 | PUSH SWITCH KEY BOARD | | |
| S11 | | S52-0001-05 | SLIDE SWITCH VOLTAGE SELECTOR | M | |
| | | S31-2322-05 | SLIDE SWITCH VOLTAGE SELECTOR | M | |
| S9 | | T99-0530-05 | ROTARY ENCODER INPUT SELECTOR | | |
| D1 -15 | | HSS104 | DIODE | | |
| D1 -15 | | HSS133 | DIODE | | |
| D17 | | HSS133 | DIODE | | |
| D17 | | HSS133 | DIODE | | |
| D19 -25 | | HSS104 | DIODE | | |
| D19 -25 | | HSS133 | DIODE | | |
| D19 -25 | | HSS133 | DIODE | | |
| D26 | | KBPO2ML-6127 | DIODE | | |
| D31 -39 | | HSS104 | DIODE | | |
| D31 -39 | | HSS133 | DIODE | | |
| D40 | | HZSS5.6N(B2) | ZENER DIODE | | |
| D40 | | R05.6ES(B2) | ZENER DIODE | | |
| D41 -45 | | HSS104 | DIODE | | |
| D41 -45 | | HSS133 | DIODE | | |
| D51 .52 | | HZS13N(B2) | ZENER DIODE | | |
| D51 .52 | | RD13ES(B2) | ZENER DIODE | | |
| D53 -55 | | HSS104 | DIODE | | |
| D53 -55 | | HSS133 | DIODE | | |
| D251-254 | | HSS104 | DIODE | | |
| D251-254 | | HSS133 | DIODE | | |
| D255,256 | | HZSS5.6N(B2) | ZENER DIODE | | |
| D255,256 | | R05.6ES(B2) | ZENER DIODE | | |
| D257,258 | | HSS104 | DIODE | | |
| D257,258 | | HSS133 | DIODE | | |
| ED1 | | 10-BT-120GK | INDICATOR TUBE | | |
| IC1 | | TC9274N-003 | IC(ANALOG SWITCH) | | |
| IC2 | | NJU7313L | IC(ANALOG SWITCH) | | |
| IC2 | | IC9164N | IC(16CH BILATERAL SELECTOR SW) | | |
| IC3 | | IC9213P | IC(2CH ELECTRONIC VOLUME) | | |
| IC3 .4 | | NM4565D-D | IC(OP AMP X2) | | |
| IC5 | | XRA15218-DX | IC(OP AMP X2) | | |
| IC6 | | NM4565L-D | IC(OP AMP X2) | | |
| IC7 | | NM4565L-D | IC(OP AMP X2) | | |
| IC7 | | YR115058-D | IC(OP AMP X2) | | |
| IC8 -10 | | NM2058B-DX | IC(OP AMP X2) | | |
| IC8 -10 | | NM2058B-D | IC(OP AMP X2) | | |
| IC11,12 | | NM4565L-D | IC(OP AMP X2) | | |
| IC13 | | CXA1558L | IC(MICROPROCESSOR) | | |
| IC101 | | UPD78042QF-039 | IC(VOLTAGE DETECT) | | |
| IC102 | | MN1381-R(TA) | IC(VOLTAGE DETECTOR) | | |
| IC102 | | S-80740AL | IC(VOLTAGE DETECTOR) | | |
| Q1 | | 25C3940A(R,S) | TRANSISTOR | | |
| Q2 | | 2SA1534A(R,S) | TRANSISTOR | | |

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NO.11

NO.11

| Ref. No. 参照番号 | Address 位置 | Parts No. 部品番号 | Description 部品名 / 規格 | Desti- nation 仕 | Re- marks 備考 |
|------------------|---------------|-------------------|-----------------------------------|-----------------------|--------------------|
| C251-253 | | CE04KW0331M | ELECTR0 330UF 6.3KV | J S | |
| C251-253 | | CE04LW0331M | ELECTR0 330UF 6.3KV | | |
| C254,255 | | CK45FF1H103Z | CERAMIC 0.010UF Z | | |
| C256 | | CK45FF1H103Z | CERAMIC 0.010UF Z | | |
| C257 | | CK45FF1H103Z | CERAMIC 0.010UF Z | | |
| C259,260 | | CE04KW1010M | ELECTR0 100UF 16KV | J S | |
| C261,262 | | CE04LW1010M | ELECTR0 100UF 16KV | | |
| C263,264 | | CK45FF1H103Z | CERAMIC 0.010UF Z | | |
| C263,264 | | CK45FF1H103Z | CERAMIC 0.010UF Z | | |
| C301,302 | | C90-3253-05 | ELECTR0 1UF 50WV | J S | |
| C303,304 | | CE04KW1A101M | ELECTR0 100UF 10WV | | |
| C303,304 | | CE04LW1A101M | ELECTR0 100UF 10WV | | |
| C305 | | C90-3253-05 | ELECTR0 1UF 50WV | | |
| C306 | | CK45FF1H103Z | CERAMIC 0.010UF Z | | |
| C307,308 | | C90-3256-05 | ELECTR0 4.7UF 50WV | | |
| C309 | | CK45FF1H103Z | CERAMIC 0.010UF Z | | |
| C310 | | C91-0769-05 | CERAMIC 0.01UF K | | |
| C311,312 | | CE04KW1A101M | ELECTR0 100UF 10WV | | |
| C311,312 | | CE04LW1A101M | ELECTR0 100UF 10WV | | |
| C313,314 | | CK45FF1H103Z | CERAMIC 0.010UF Z | | |
| C315 | | C91-0769-05 | CERAMIC 0.01UF K | | |
| C316 | | CK45FF1H103Z | CERAMIC 0.010UF Z | | |
| C317 | | C91-0769-05 | CERAMIC 0.01UF K | | |
| C318 | | CK45FF1H103Z | CERAMIC 0.010UF Z | | |
| C319 | | C90-3214-05 | ELECTR0 100UF 6.3KV | | |
| C320 | | C90-1827-05 | BACKUP 0.047F 5.5WV | | |
| C321 | | CE04KW1A101M | ELECTR0 100UF 10WV | | |
| C321 | | CE04LW1A101M | ELECTR0 100UF 10WV | | |
| CN4 | 2B | E40-4161-05 | FLAT CABLE CONNECTOR | | |
| CN5 | 1C | E40-4201-05 | FLAT CABLE CONNECTOR | | |
| J1 | | E63-0072-15 | PHONO JACK TUNER, TAPE, MD, CD | | |
| J2 | | E63-0072-15 | PHONO JACK TUNER, TAPE, MD, CD | | |
| J4 | | E63-0067-15 | PHONO JACK VIDEO, AV/AUX, ADAPTER | | |
| J5 | | E63-0091-05 | PHONO JACK ADAPTER/1N, 0MMI | | |
| J6 | | E63-0093-05 | PHONO JACK VISUAL MONITOR | | |
| J7 | | E63-0094-05 | PHONO JACK VIDEO IN/OUT, AV AUX | | |
| J9 | | E03-0108-05 | AC OUTLET | M 8 | |
| J9 | | E03-0108-05 | AC OUTLET | M 8 | |
| J10 | | E03-0109-05 | AC OUTLET | T 9 | |
| F11,12 | | F05-2525-05 | FUSE (SEM0) (250V T2.5A) | M | |
| F12 | | F05-2525-05 | FUSE (SEM0) (250V T2.5A) | X X | |
| F12,13 | | F05-2525-05 | FUSE (SEM0) (250V T2.5A) | X X | |
| F17 | | F10-0937-03 | SHIELDING PLATE | TE | |
| CN10-13 | | J13-0075-05 | FUSE CLIP | M XTE | |
| CN10,11 | | J13-0075-05 | FUSE CLIP | X X | |
| CN10,11 | | J13-0075-05 | FUSE CLIP | X X | |
| CN14,15 | | J13-0075-05 | FUSE CLIP | TE | |
| L1 | | L40-1011-17 | SMALL FIXED INDUCTOR(100UH,K) | | |
| T1 | | L07-0720-05 | POWER TRANSFORMER | M | |
| T1 | | L07-0721-05 | POWER TRANSFORMER | XTE | |
| T1 | | L07-0721-05 | POWER TRANSFORMER | X X | |
| T1 | | L07-0813-05 | POWER TRANSFORMER | M | |

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PARTS LIST

NO.13

| Ref. No. 参照番号 | Address 位置 | Parts No. 部品番号 | Description 部品名 / 規格 | Desti- nation 仕 | Re- marks 備考 |
|------------------|---------------|-------------------|-------------------------|-----------------------|--------------------|
| Q101 | | 2SC1740S(Q,R) | TRANSISTOR | | S |
| Q101 | | 2SC2458(Y,GR) | TRANSISTOR | | S |
| Q101 | | 2SC2785(F,E) | TRANSISTOR | | S |
| Q102 | | 2SC3311A(Q,R) | TRANSISTOR | | |
| Q102 | | 2SC2003(L,K) | TRANSISTOR | | |
| Q103 | | 2SC1740S(Q,R) | TRANSISTOR | | S |
| Q103 | | 2SC2458(Y,GR) | TRANSISTOR | | S |
| Q103 | | 2SC2785(F,E) | TRANSISTOR | | S |
| Q103 | | 2SC3311A(Q,R) | TRANSISTOR | | |
| Q104-109 | | DTC124ES | DIGITAL TRANSISTOR | | |
| Q104-109 | | UN4212 | DIGITAL TRANSISTOR | | |
| A1 | | W02-1174-05 | ELECTRIC CIRCUIT MODULE | | |
| | | X25-5470-11 | REMOTE CONTROL UNIT | | 8 |

* New Parts
Parts without Parts No. are not supplied.
Les articles non mentionnes dans le Parts No. ne sont pas fournis.
Teile ohne Parts No. werden nicht geliefert.

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Y:PX(Far East, Hawaii) T:England E:Europe
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J : JAPAN MADE
S : SINGAPORE MADE
8 : A-87
9 : A-97
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SPECIFICATIONS

Rated power output at the STEREO operation
(IEC/NF) from 63 Hz to 12,500Hz, 0.7% T.H.D.
at 8Ω 85W+85W
(DIN) 1,000Hz at 8Ω 85W+85W

Power output at the Surround operation
Front (1kHz, 0.08% T.H.D. at 8Ω) 85W+85W
Omni (1kHz, 0.5% T.H.D. at 8Ω) 25W+25W
Center (1kHz, 0.5% T.H.D. at 8Ω) 25W
Rear (1kHz, 0.5% T.H.D. at 8Ω) 25W+25W

Total harmonic distortion (1kHz, 8Ω) 0.02% at 40W

Signal to noise ratio (IHF '66)
PHONO (MM) 72dB
CD/LD, TAPE 90dB

Signal to noise ratio (DIN weighted at 50mW output)
PHONO (MM) 56dB
CD/LD, TAPE 57dB

Input sensitivity/impedance
PHONO (MM) 2.5mV/47kΩ
CD/LD, TAPE 200mV/47kΩ

Tone controls
BASS ±10dB (at 100Hz)
TREBLE ±10dB (at 10kHz)

VIDEO inputs/outputs
(composite) 1Vp-p/75Ω

General
Power consumption 280W
Dimensions W : 360 mm
H : 129 mm
D : 378 mm
Weight (net) 11.3kg
AC outlets (switched) 1 (Total 200W max)

Kenwood follows a policy of continuous advancements in development.
For this reason specifications may be changed without notice.

Kenwood poursuit une politique de progrès constants en ce qui concerne le développement.
Pour cette raison, les spécifications sont sujettes à modifications sans préavis.

Kenwood strebt ständige Verbesserungen in der Entwicklung an.
Daher bleiben Änderungen der technischen Daten jederzeit vorbehalten.

Note:

Component and circuitry are subject to modification to insure the best operation under differing local conditions. This manual is based on the U.S.A. (K) standard, and provides information on regional circuit modification through use of alternate schematic diagrams, and information on regional component variations through use of parts list.

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