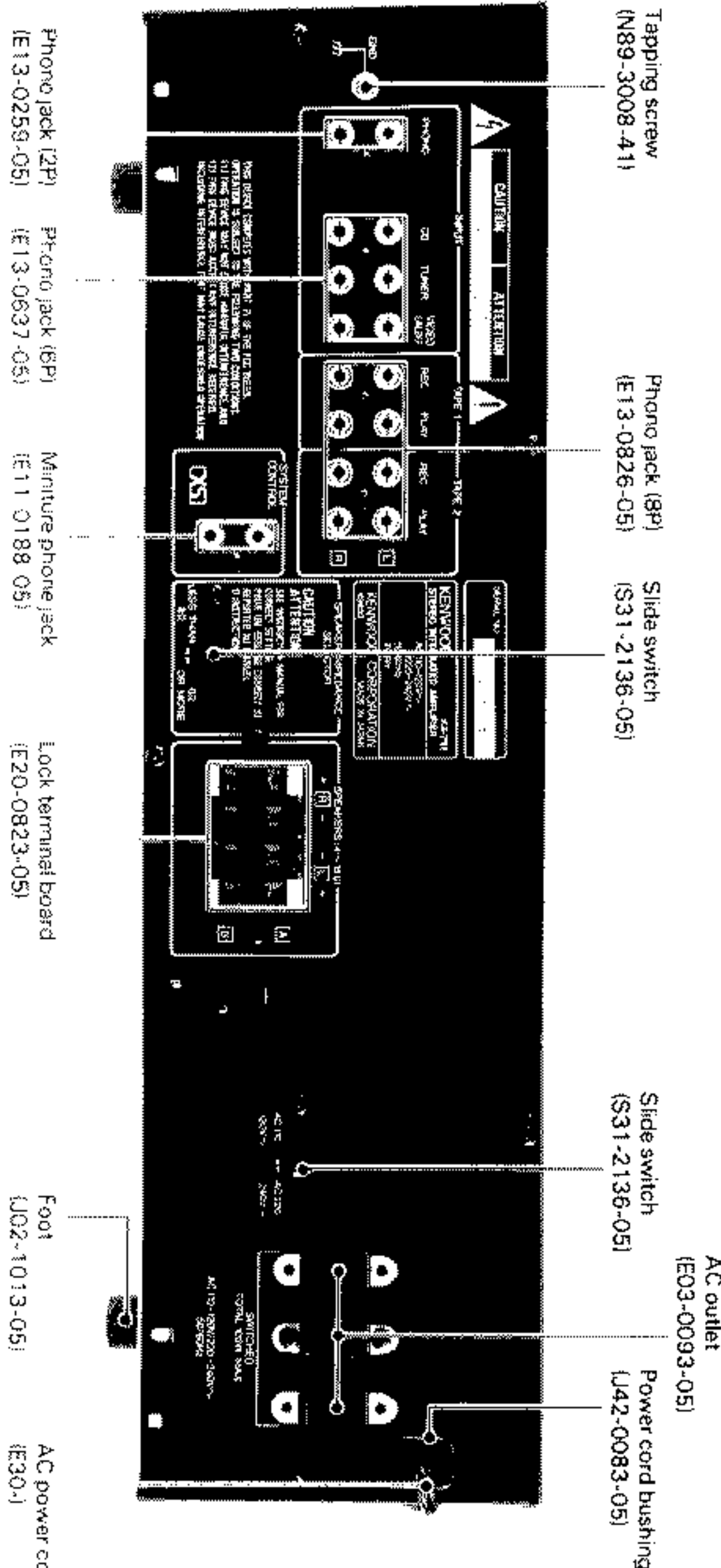
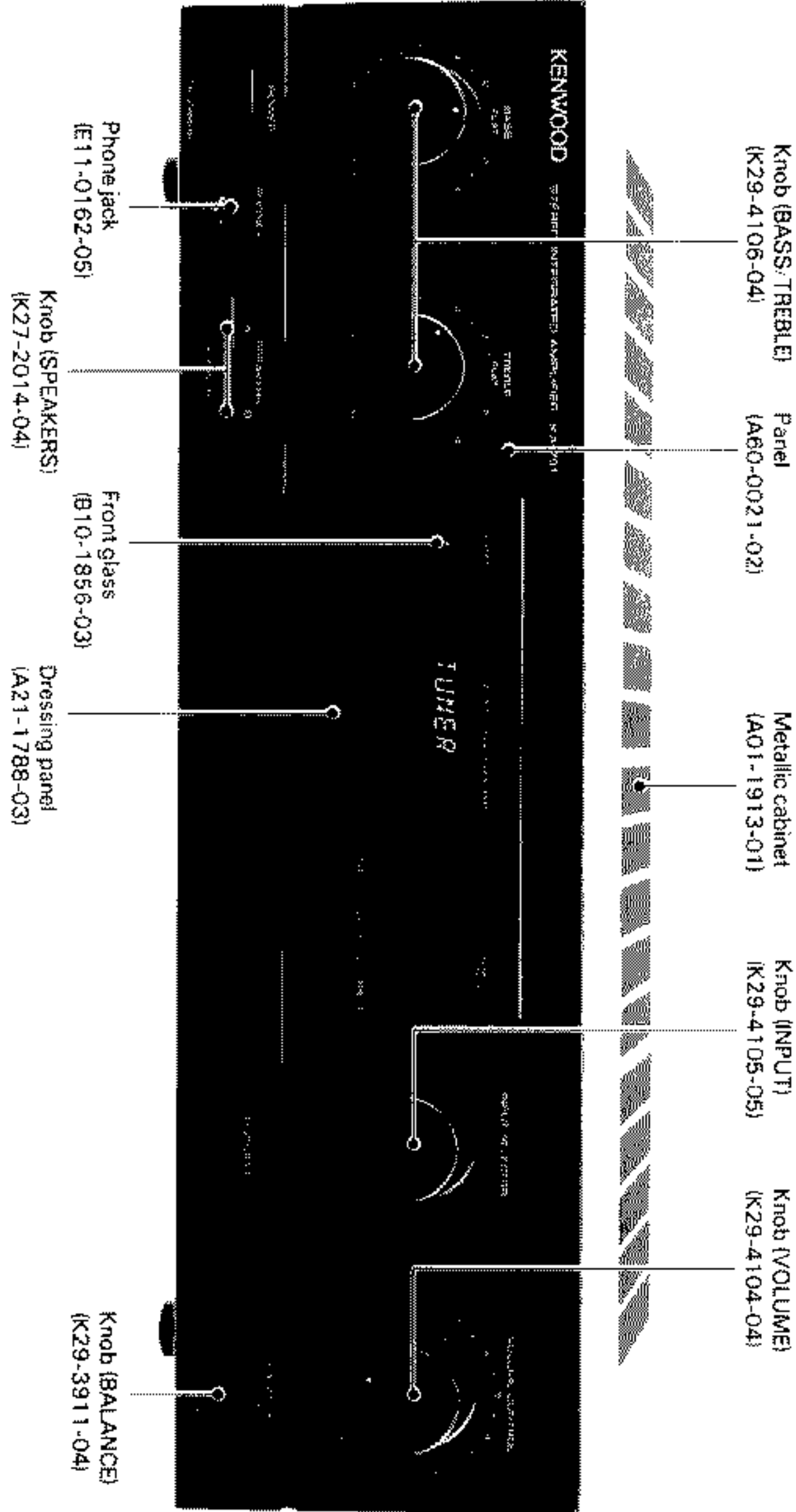


KA-691/791

CONTENTS

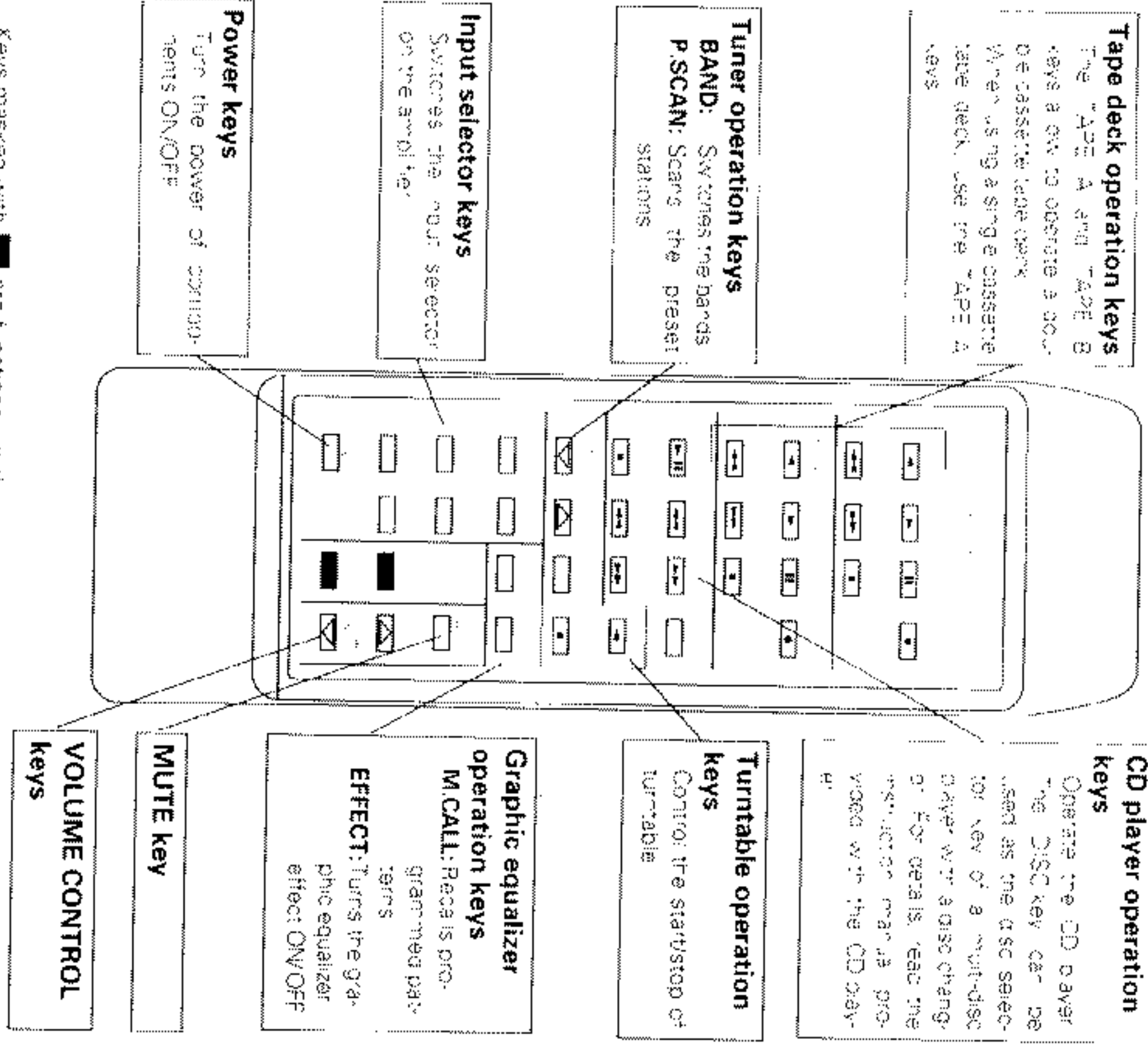
| | | | |
|------------------------------|----|-------------------------|------------|
| CONTROL AND OPERATION | 3 | SCHEMATIC DIAGRAM | 15 |
| DISASSEMBLY FOR REPAIR | 5 | EXPLODED VIEW | 19 |
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| ADJUSTMENT/REGLAGES/ABGLEICH | 9 | SPECIFICATIONS (KA-691) | 27 |
| WIRING DIAGRAM | 10 | SPECIFICATIONS (KA-791) | Back cover |
| PC BOARD | 11 | | |

<KA-791>



CONTROL AND OPERATION

<KA-691>



Keys marked with ■ are functions which are not supported with this product.

<KA-691>

Accessories

Remote control unit (A70-0513-05) 4

Battery ("AA" or "R6") 4

A09-0117-08 Battery cover

AC power adaptor (A09-0117-08) 1

System control cord (E30-1392-05)

<KA-791>

Accessories

Remote control unit (A70-0512-05) 1

Battery ("AAA" or "R03") 4

A09-0117-08 Battery cover


Overhead sheet (A09-0117-08) 1

System control cord (E30-1392-05)

Photo is KA-791M
* Refer to parts list on page 20.

CONTROL AND OPERATION

< KA-791 >

Keys marked with  are functions which are not supported with this product.

LEARN indicator

Blocks of lights steadily during programming procedure

LEARN/USE switch

Normally set to the USE position. Set to the LEARN position when programming remote control signals.

Tape deck/video deck operation keys

The TAPE A and TAPE B keys allow to operate a double cassette tape deck. When using a single cassette tape deck, use the TAPE A keys. A video deck can also be operated by programming the control signals of a video deck in the AUX mode

Numeric keys

When the CD source is selected, these keys can be used as the numeric keys of the CD player. When the TUNER source is selected, they can be used as the numeric keys of the tuner.
How to enter numerals
For 23 press ± 0 twice and ± 3 .
For 40 press ± 10 four times and 0

TUNER operation keys

BAND: Switches the bands
P/SCAN: Scans the preset stations
DIRECT: in conjunction with the numeric keys, tunes stations directly (The DIRECT key cannot be used with the KT 591/S)

Input selector keys

Switches the input selector of the amplifier

POWER keys

Turn the power of components ON/OFF -or the TV and VIDEO keys, specific control signals should be programmed under them

TRANSMIT indicator

Lights up while the remote control signal is being transmitted

MODE switch

Selects the mode to be used.

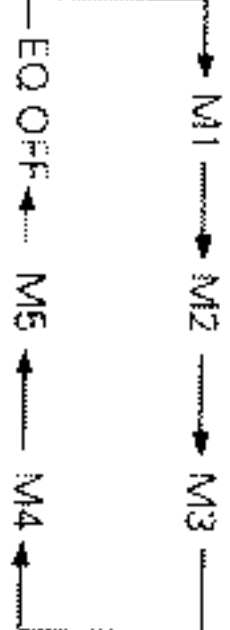
CD player operation keys

Operate the CD player.
DISC: The DISC key can be used as the disc selector key of a multi-disc player with a disc changer. For details, read the instruction manual provided with the CD player

Turntable operation keys

Control the start/stop of turntable.

Amplifier's equalizer operation keys

M/CALL: Recalls programmed patterns

EFFECT: Turns the graphic equalizer effect ON/OFF.

VOLUME CONTROL keys

Adjust the volume. During operation, the VOLUME CONTROL on the front turns and the indicator on the knob blinks at high speed

MUTE key

Press to reduce the volume temporarily. During operation, the indicator on the VOLUME CONTROL knob blinks

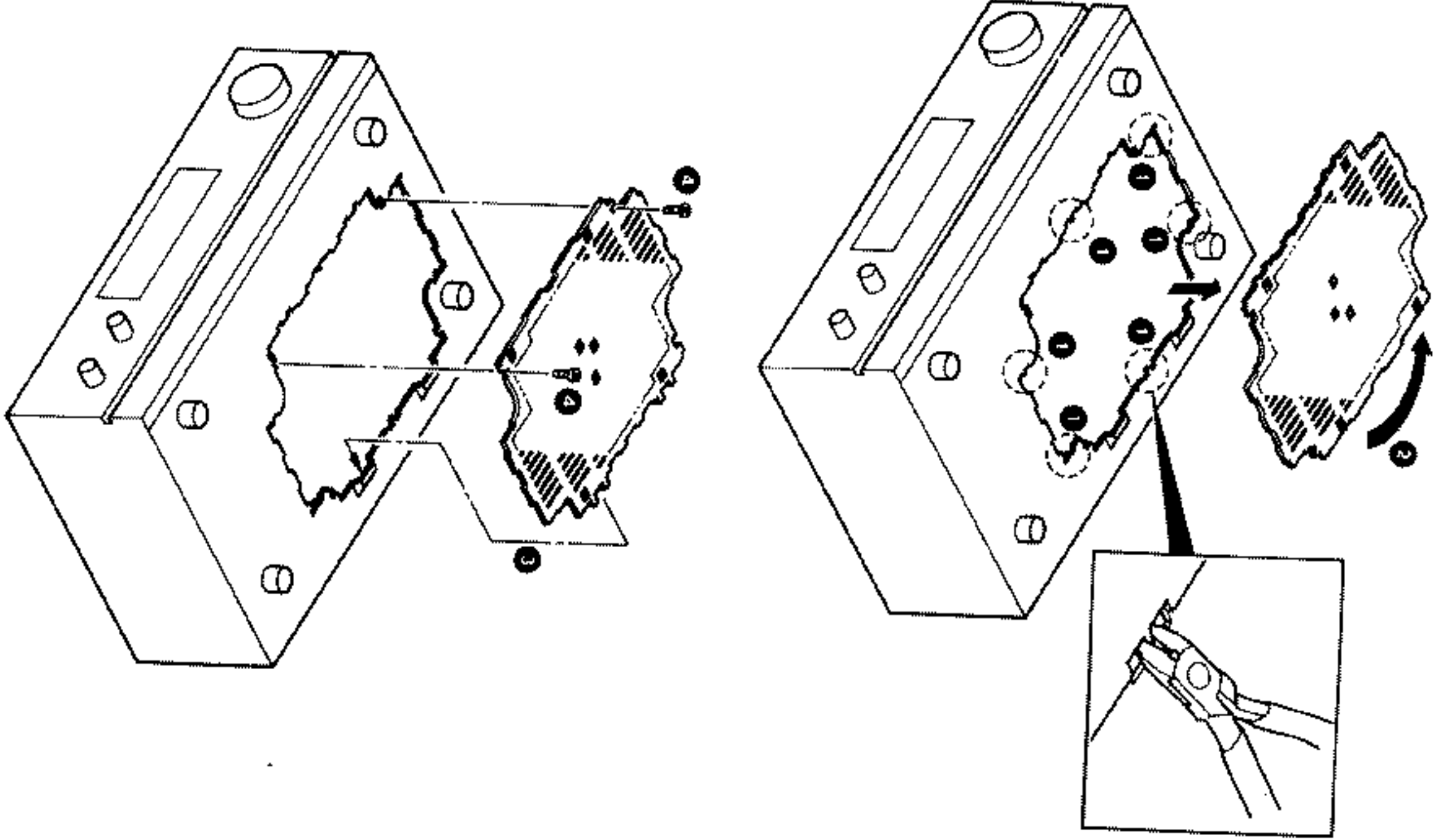
DISASSEMBLY FOR REPAIR

How to remove the repairing chassis

- 1 Cut the 6 parts ① of the repairing chassis. Remove the repairing chassis from main chassis.

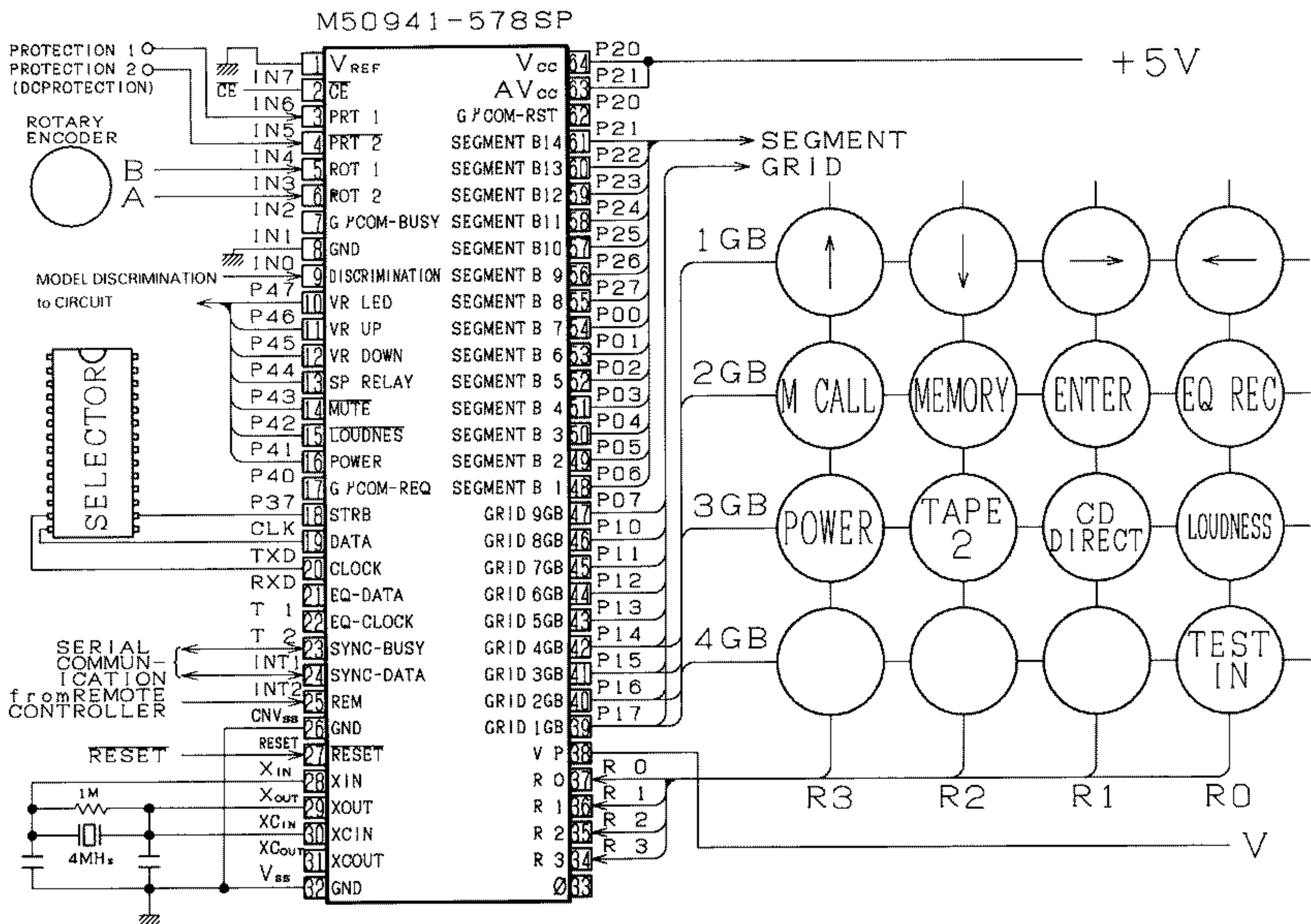
After repair

- 2 Turn the repairing chassis 180 degrees in the arrow direction ②.
- 3 Insert the 2 claws ③ into main chassis.
- 4 Lock to the main chassis by 2 screws (M3 x 6) ④.



Micro processor (M50941-578SP)

Pin description



Pin description

| Pin No. | Pin Name | I/O | Name | Description |
|---------|------------|-----|-------------|--------------------------------|
| 1 | VREF | I | OV | GND |
| 2 | IN 7 | I | CE | Chip enable |
| 3 | IN 6 | I | PRT 1 | Protection |
| 4 | IN 5 | I | PRT 2 | DC protection |
| 5 | IN 4 | I | ROT 1 | Rotary encoder |
| 6 | IN 3 | I | ROT 2 | Rotary encoder |
| 7 | IN 2 | I | G μCOM-BUSY | Display μ-COM busy |
| 8 | IN 1 | I | | |
| 9 | IN 0 | I | | |
| 10 | P4 7 | O | VR LED | Volume LED |
| 11 | P4 6 | O | VR UP | Volume up |
| 12 | P4 5 | O | VR DOWN | Volume down |
| 13 | P4 4 | O | SP RELAY | Speaker relay |
| 14 | P4 3 | O | MUTE | Mute |
| 15 | P4 2 | O | LOUDNESS | Loudness |
| 16 | P4 1 | O | POWER | Power |
| 17 | P4 0 | O | G μCOM-REQ | Display μ-COM request |
| 18 | P3 7 S-ROV | O | STRB | Strobe (Selector) |
| 19 | P3 6 CLK | O | DATA | Data (Selector, Display μ-COM) |
| 20 | P3 5 TXD | O | CLOCK | Clock (Selector Display μ-COM) |
| 21 | P3 4 RXD | O | EQ-DATA | Data for GE |
| 22 | P3 3 T1 | O | EQ-CLOCK | Clock for GE |
| 23 | P3 2 T2 | I/O | SYNC-BUSY | Syncro busy |
| 24 | P3 1 INT1 | I/O | SYNC-DATA | Syncro data |
| 25 | P3 0 INT2 | I | REM | Remote controller input |
| 26 | CNVSS | I | GND | |
| 27 | RESET | I | RESET | Reset |
| 28 | XIN | I | XIN | Clock |
| 29 | XOUT | O | XOUT | Clock |
| 30 | XCIN | I | XCIN | GND |
| 31 | XCOUT | O | XCOUT | |
| 32 | VSS | I | GND | GND |
| 33 | φ | O | φ | Timing output |
| 34 | R3 | I | R3 | Key return input 3 |
| 35 | R2 | I | R2 | Key return input 2 |
| 36 | R1 | I | R1 | Key return input 1 |
| 37 | RO | I | RO | Key return input O |
| 38 | VP | I | VP | Pull-down voltage |
| 39 | P1 7 | O | GRID 1GB | Grid |
| 40 | P1 6 | O | GRID 2GB | Grid |
| 41 | P1 5 | O | GRID 3GB | Grid |
| 42 | P1 4 | O | GRID 4GB | Grid |
| 43 | P1 3 | O | GRID 5GB | Grid |
| 44 | P1 2 | O | GRID 6GB | Grid |

CIRCUIT DIAGRAM

CIRCUIT DESCRIPTION

| Pin No. | Pin Name | I/O | Name | Description |
|---------|----------|-----|-----------------|--------------------------|
| 45 | P1 1 | O | GRID 7G8 | Grid |
| 46 | P1 0 | O | GRID 8G8 | Grid |
| 47 | PO 7 | O | GRID 9G6 | Grid |
| 48 | PO 6 | O | SEGMENT B1 | Segment |
| 49 | PO 5 | O | SEGMENT B2 | Segment |
| 50 | PO 4 | O | SEGMENT B3 | Segment |
| 51 | PO 3 | O | SEGMENT B4 | Segment |
| 52 | PO 2 | O | SEGMENT B5 | Segment |
| 53 | PO 1 | O | SEGMENT B6 | Segment |
| 54 | PO 0 | O | SEGMENT B7 | Segment |
| 55 | P2 7 | O | SEGMENT B8 | Segment |
| 56 | P2 6 | O | SEGMENT B9 | Segment |
| 57 | P2 5 | O | SEGMENT B10 | Segment |
| 58 | P2 4 | O | SEGMENT B11 | Segment |
| 59 | P2 3 | O | SEGMENT B12 | Segment |
| 60 | P2 2 | O | SEGMENT B13 | Segment |
| 61 | P2 1 | O | SEGMENT B14 | Segment |
| 62 | P2 0 | O | G μ COM-RS1 | Display μ -COM reset |
| 63 | P2 1 | O | AVCC | |
| 64 | P2 0 | O | Vcc | Vcc |

TEST mode

1. Setting method

The power supply code is connected AC wall socket while pressing CD DIRECT key.

2. Content

- 2-1 A spectrum analyzer sections except for all FL tube is lighted.
- 2-2 When other key are pushed all illuminations are canceled.
- 2-3 EQ FREQ knob operation
 - A selection of a frequency is carried out similarly with at the time of an ordinarness.

ADJUSTMENT / REGLAGE / ABGLEICH

ADJUSTMENT

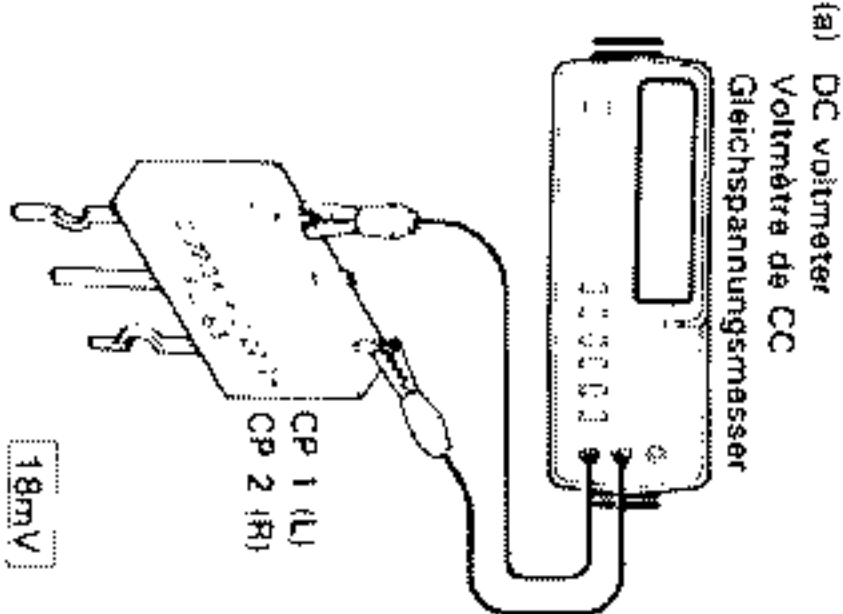
| No. | ITEM | INPUT SETTINGS | OUTPUT SETTINGS | AMPLIFIER SETTING | ALIGNMENT POINTS | ALIGN FOR | FIG. |
|---|--------------|----------------|--|-------------------|------------------------|-----------|------|
| Unless otherwise specified, set the respective switches as follows: POWER ON SPEAKER: B REC OUT: OFF SELECTOR: PHONO | | | | | | | |
| 1 | IDLE CURRENT | | Connect a DC voltmeter across CP1 (L) CP2 (R) (X09-) | VOLUME: 0 | VR1 (L) VR2 (R) (X09-) | 18mV | (a) |

REGLAGES

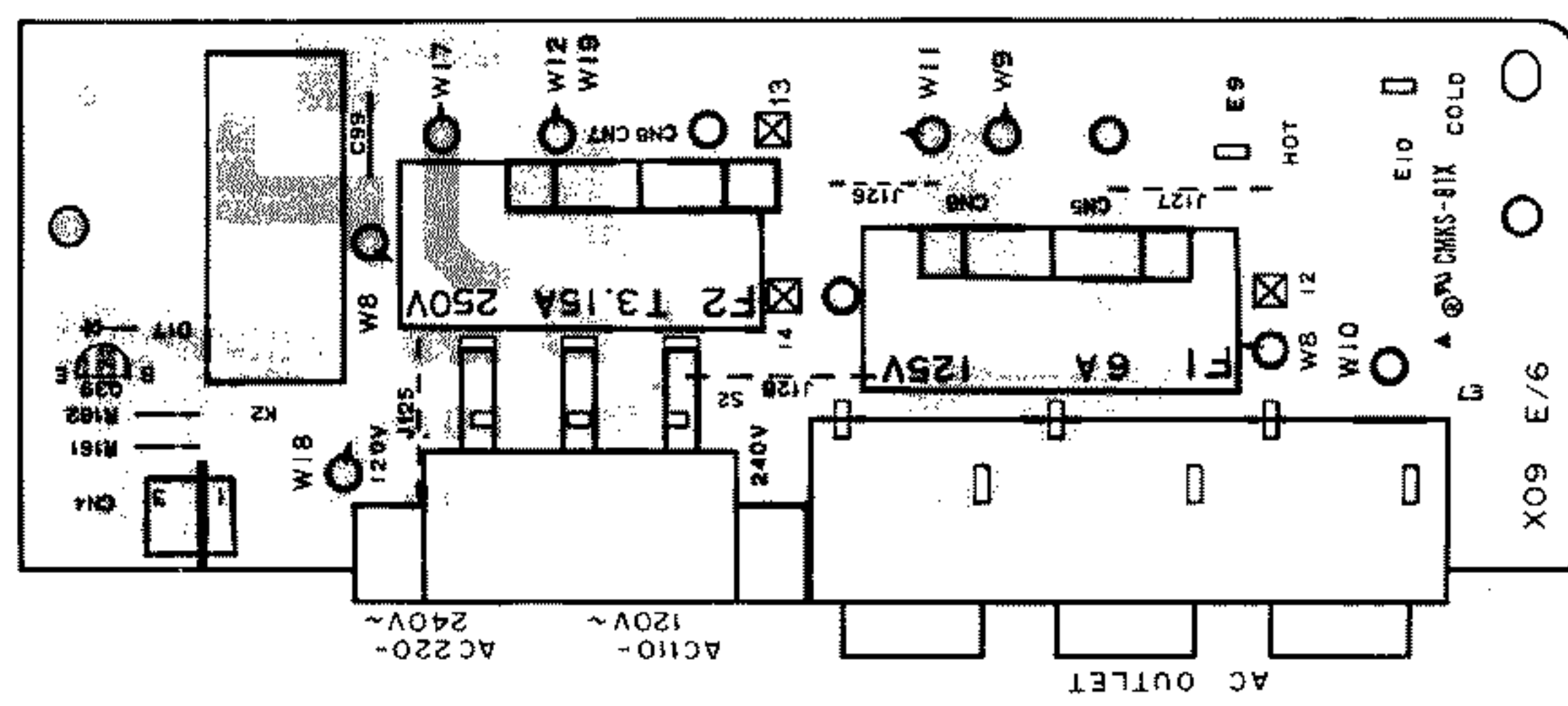
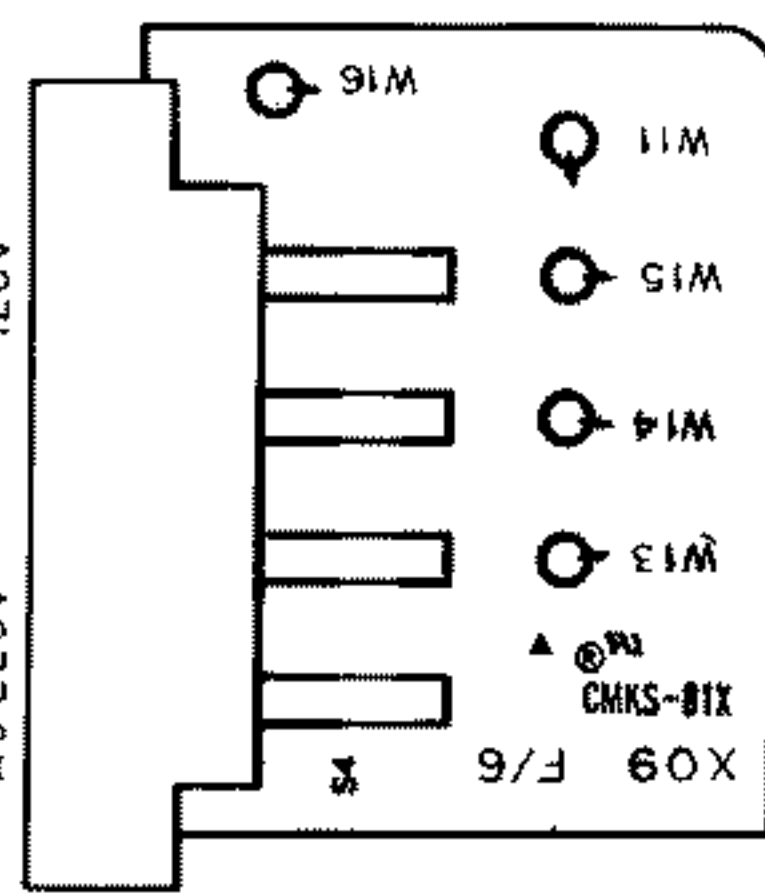
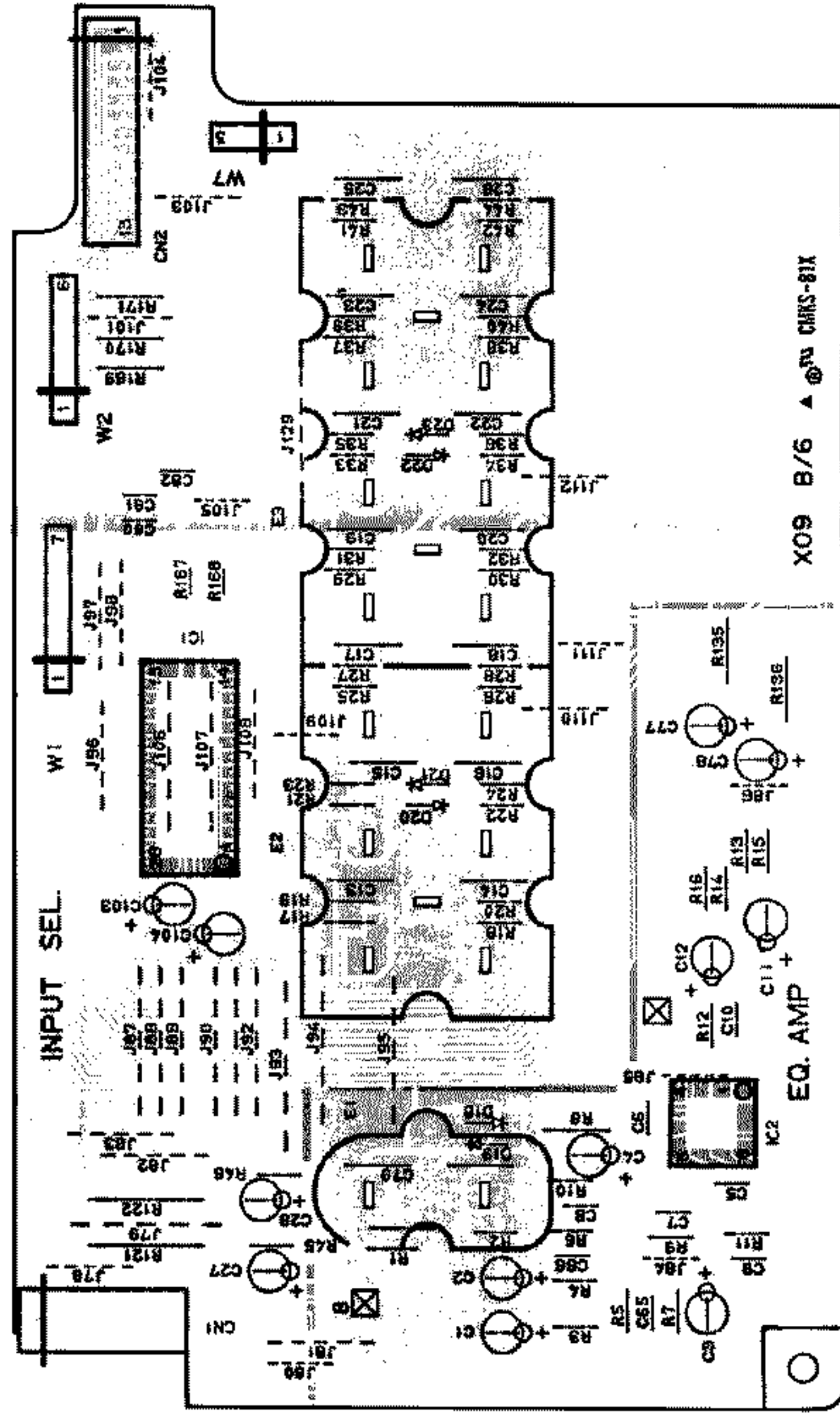
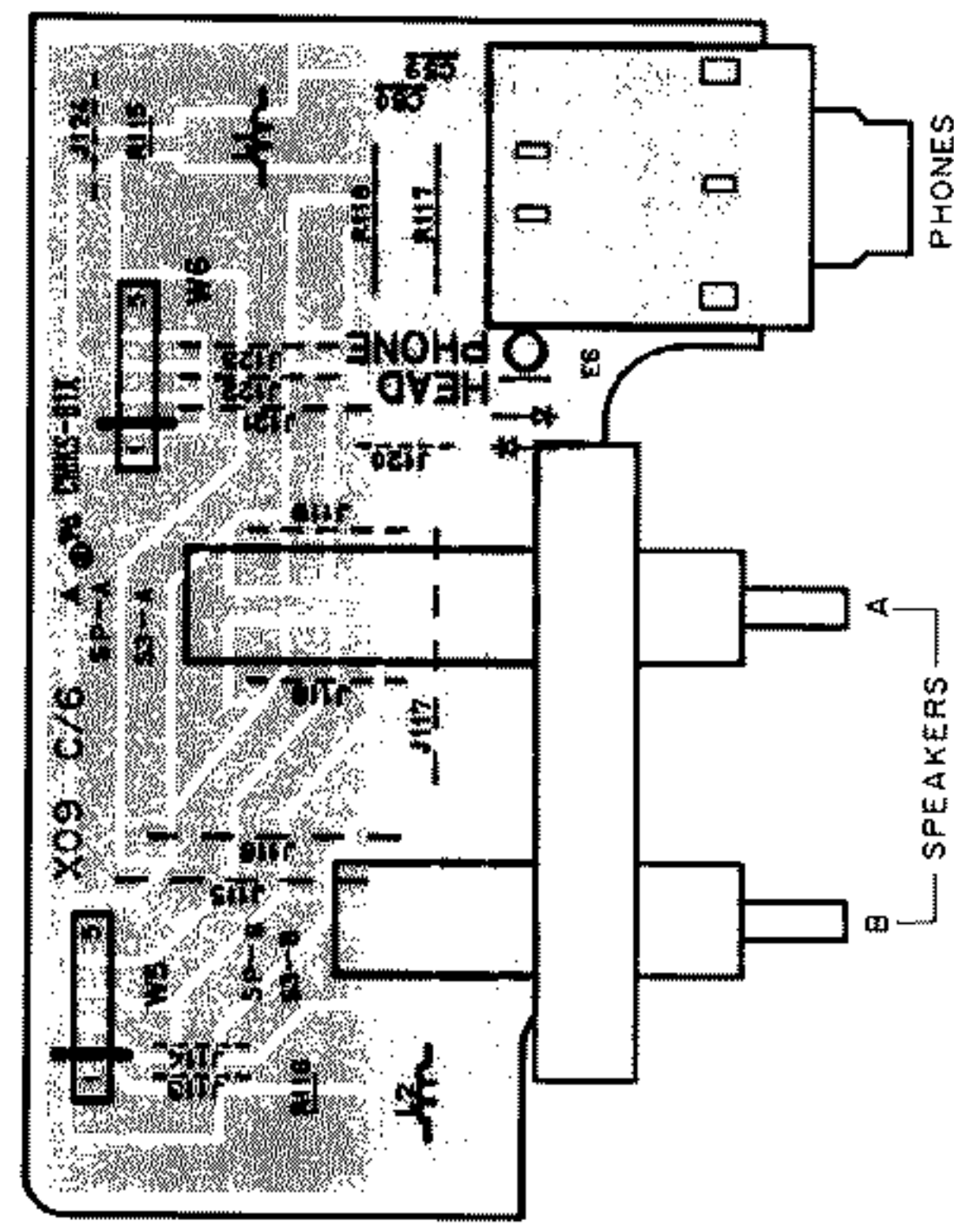
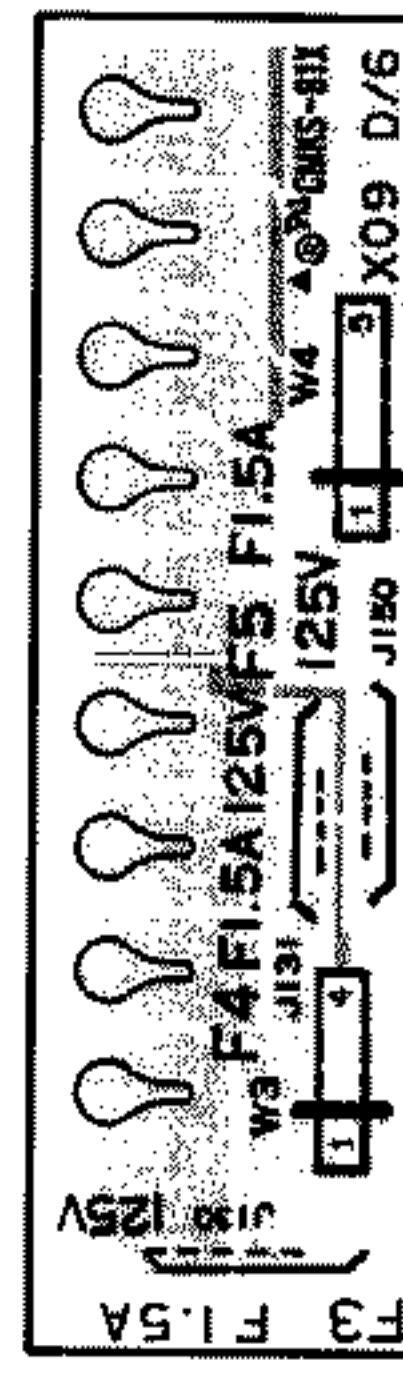
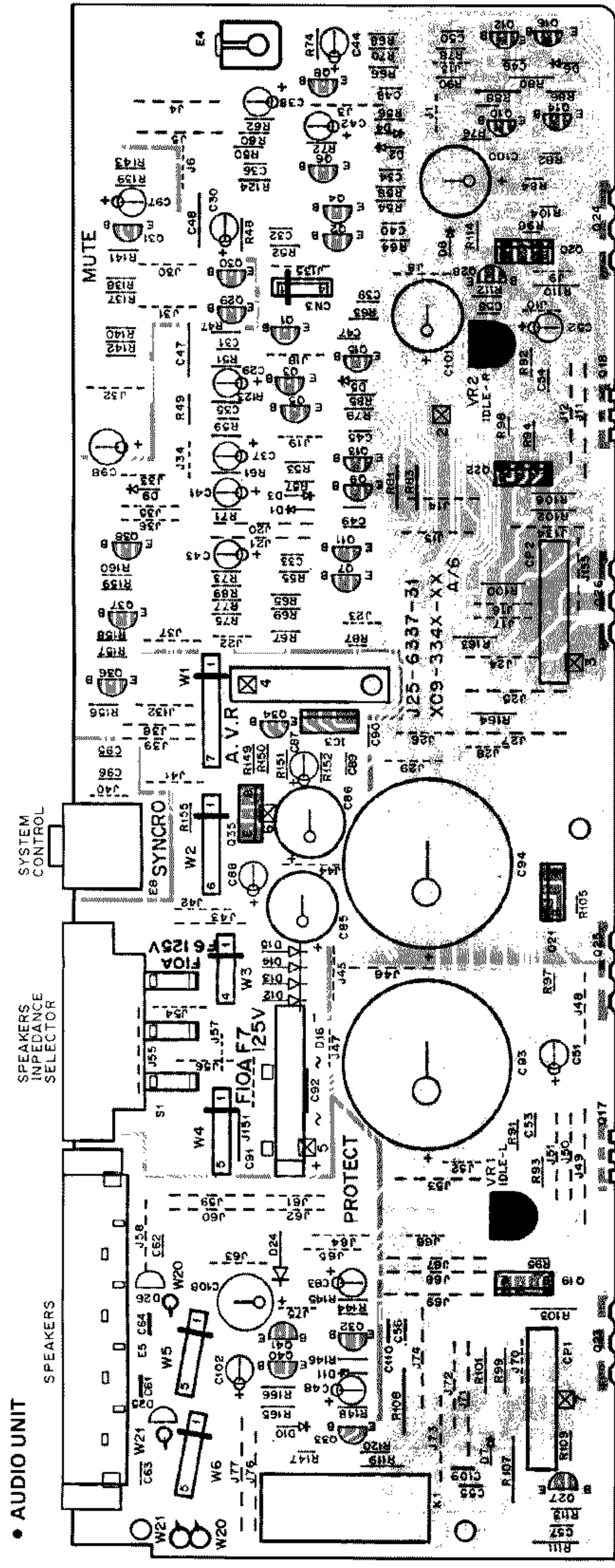
| N° | ITEM | REGLAGE DE L'ENTREE | REGLAGE DE LA SORTIE | REGLAGE DE L'AMPLIFICATEUR | POINTS DE L'ALIGNMENT | ALIGNER POUR | FIG. |
|---|-------------------------|---------------------|---|----------------------------|------------------------|--------------|------|
| Sauf indication contraire, régler comme suit les commandes respectives: POWER ON SPEAKER: B REC OUT: OFF SELECTOR: PHONO | | | | | | | |
| 1 | COLBANT DE POLARISATION | | Connecter un voltmètre de CC SUR CP1 (G) CP2 (D) (X09-) | VOLUME: 0 | VR1 (G) VR2 (D) (X09-) | 18mV | (a) |

ABGLEICH

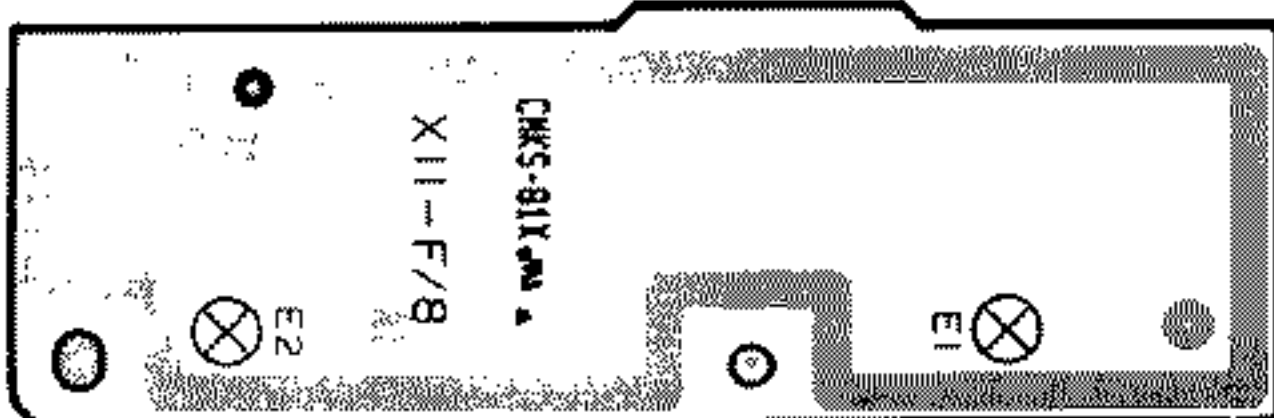
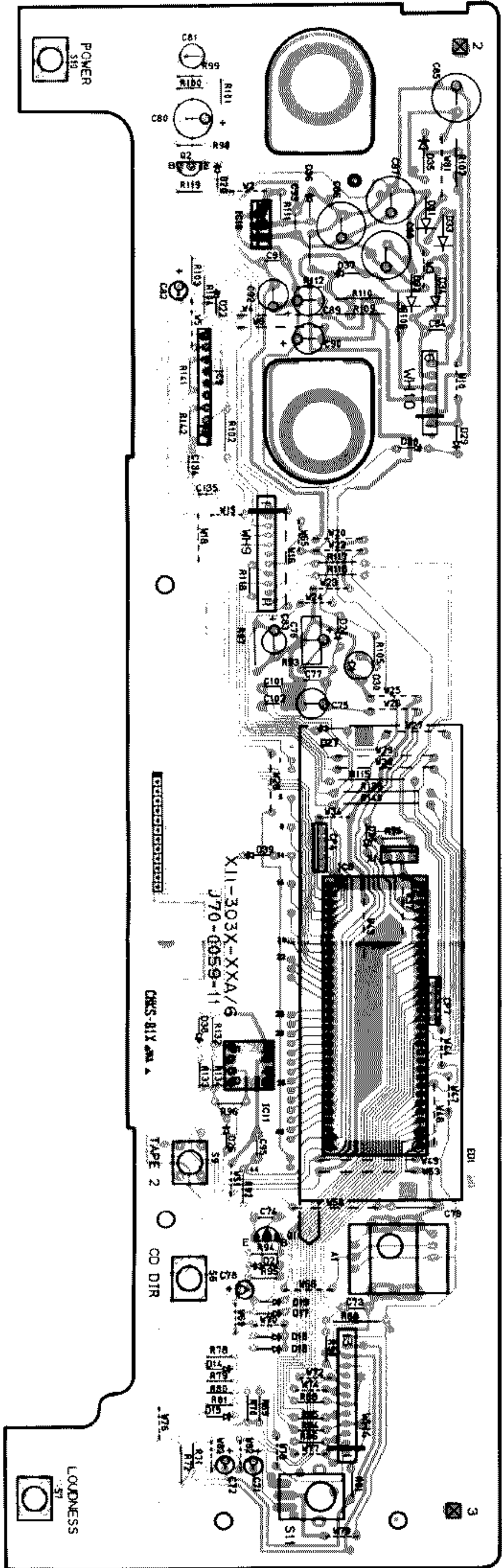
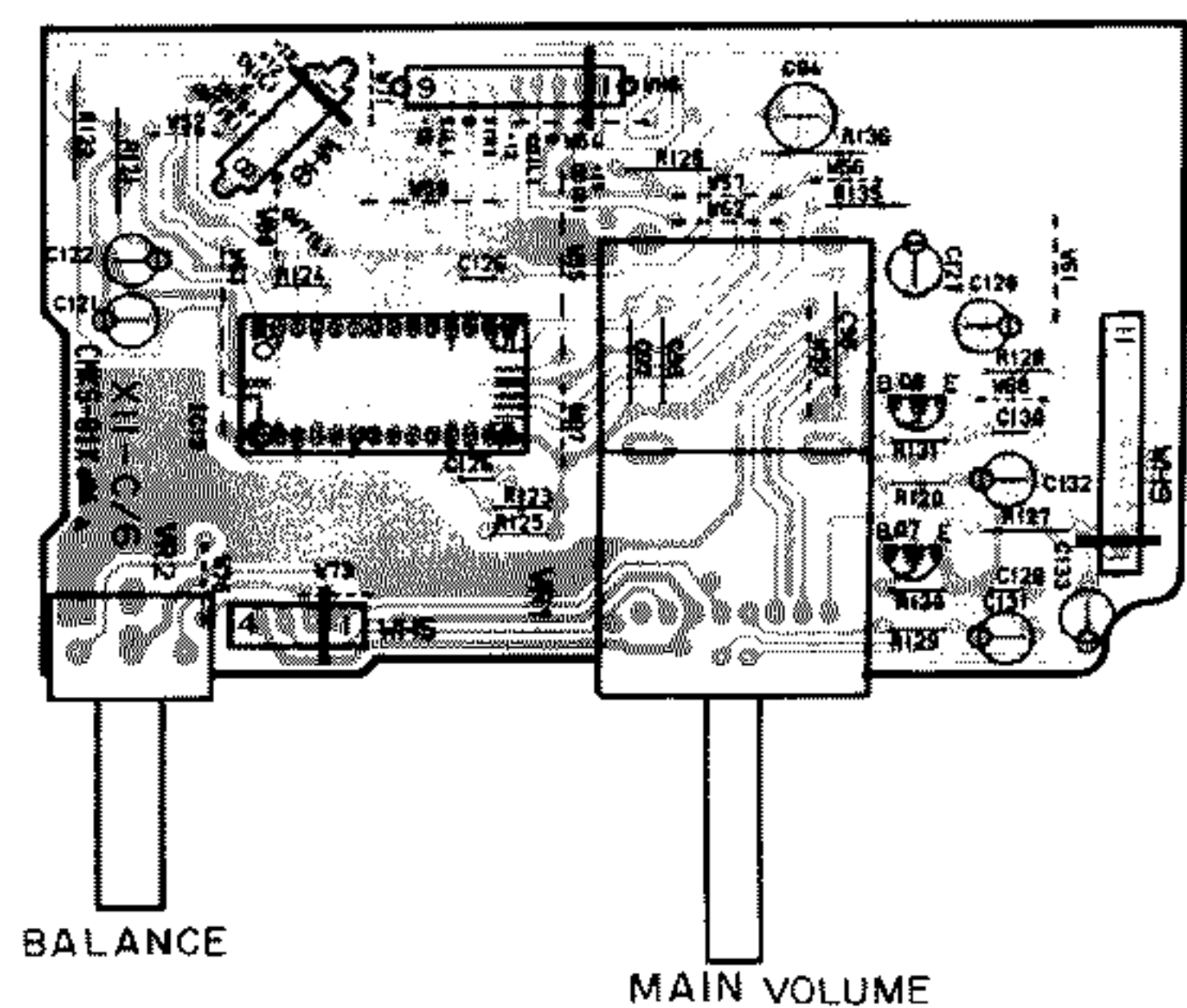
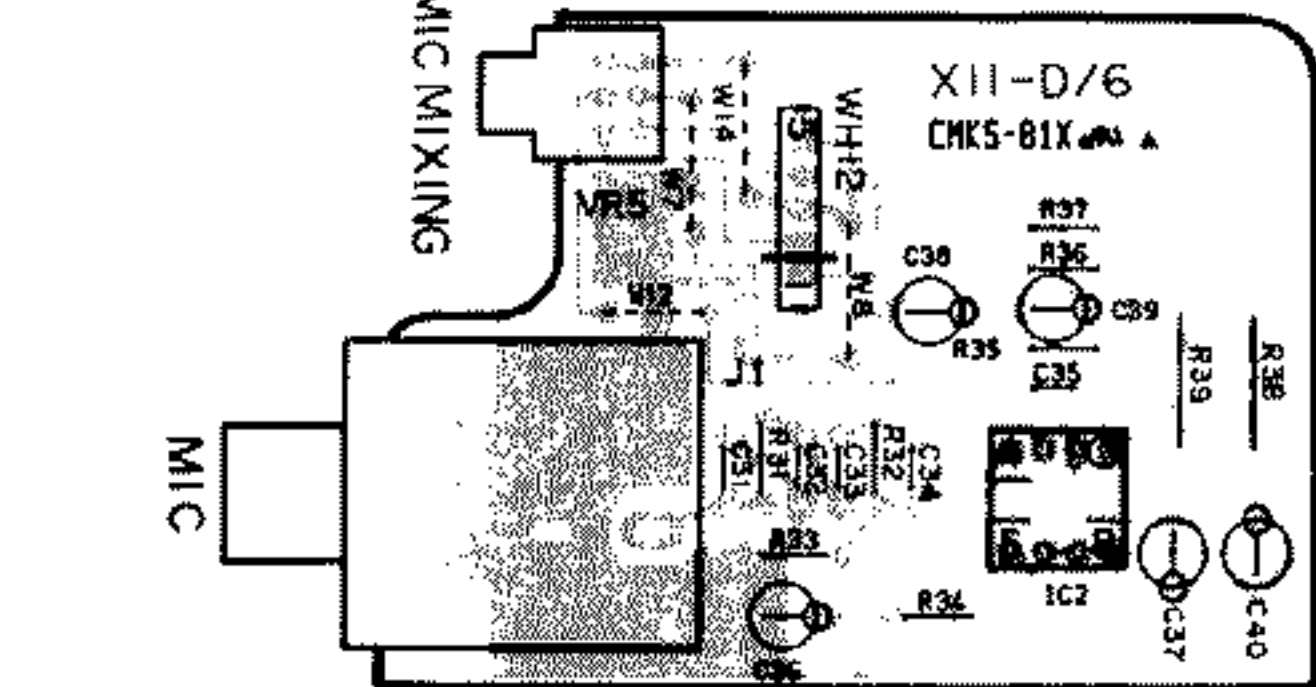
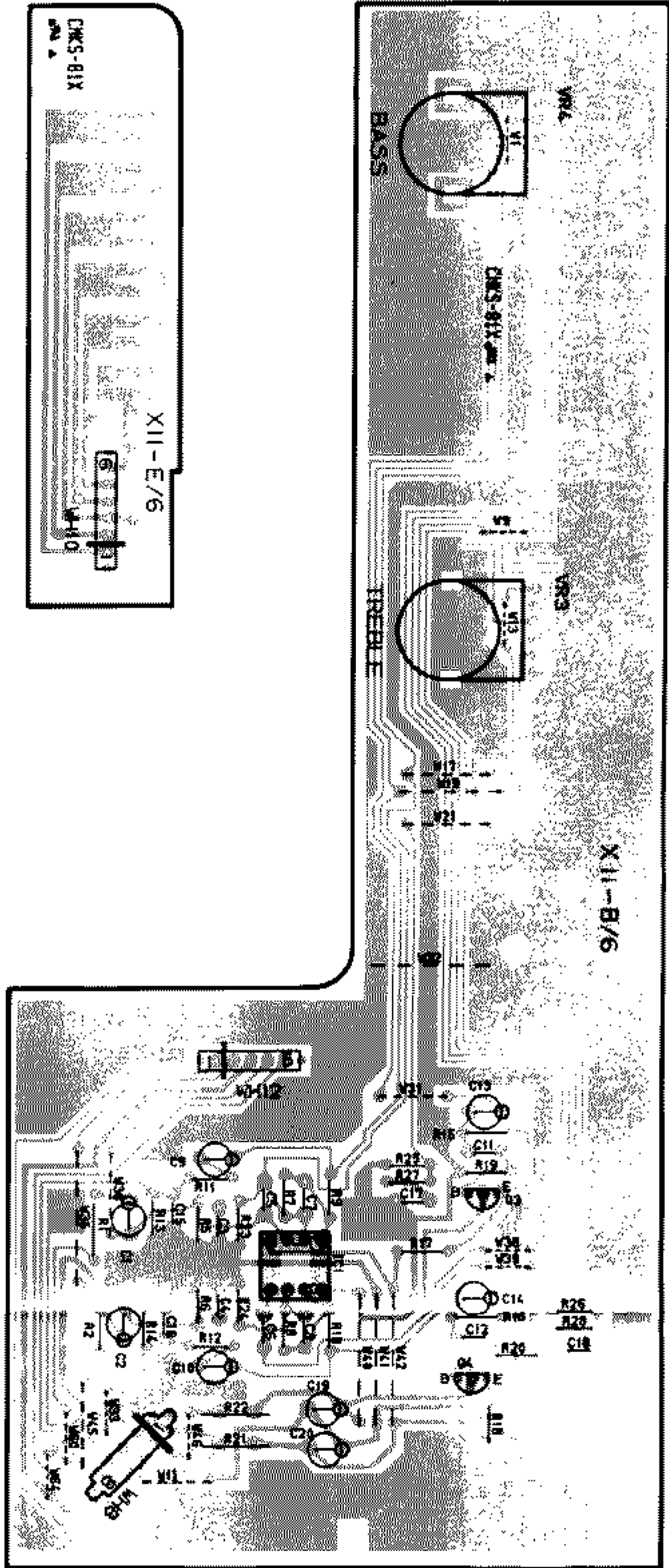
| NR. | GEGENSTAND | EINGANGS-EINSTELLUNG | AUSANG-EINSTELLUNG | VORSTÄRKER-EINSTELLUNG | ABGLEICH-PUNKTE | ABGLEICHEN FÜR | ABB. |
|--|--------------|----------------------|--|------------------------|------------------------|----------------|------|
| Wenn nicht anders angegeben, die einzelnen Schalter wie folgt einstellen: POWER: ON SPEAKER: B REC OUT: OFF SELECTOR: PHONO | | | | | | | |
| 1 | LEERLAUSTRUM | | Einen Gleichspannungsmesser über CP1 (L) CP2 (R) anschließen. (X09-) | VOLUME: 0 | VR1 (L) VR2 (R) (X09-) | 18mV | (a) |



PC BOARD

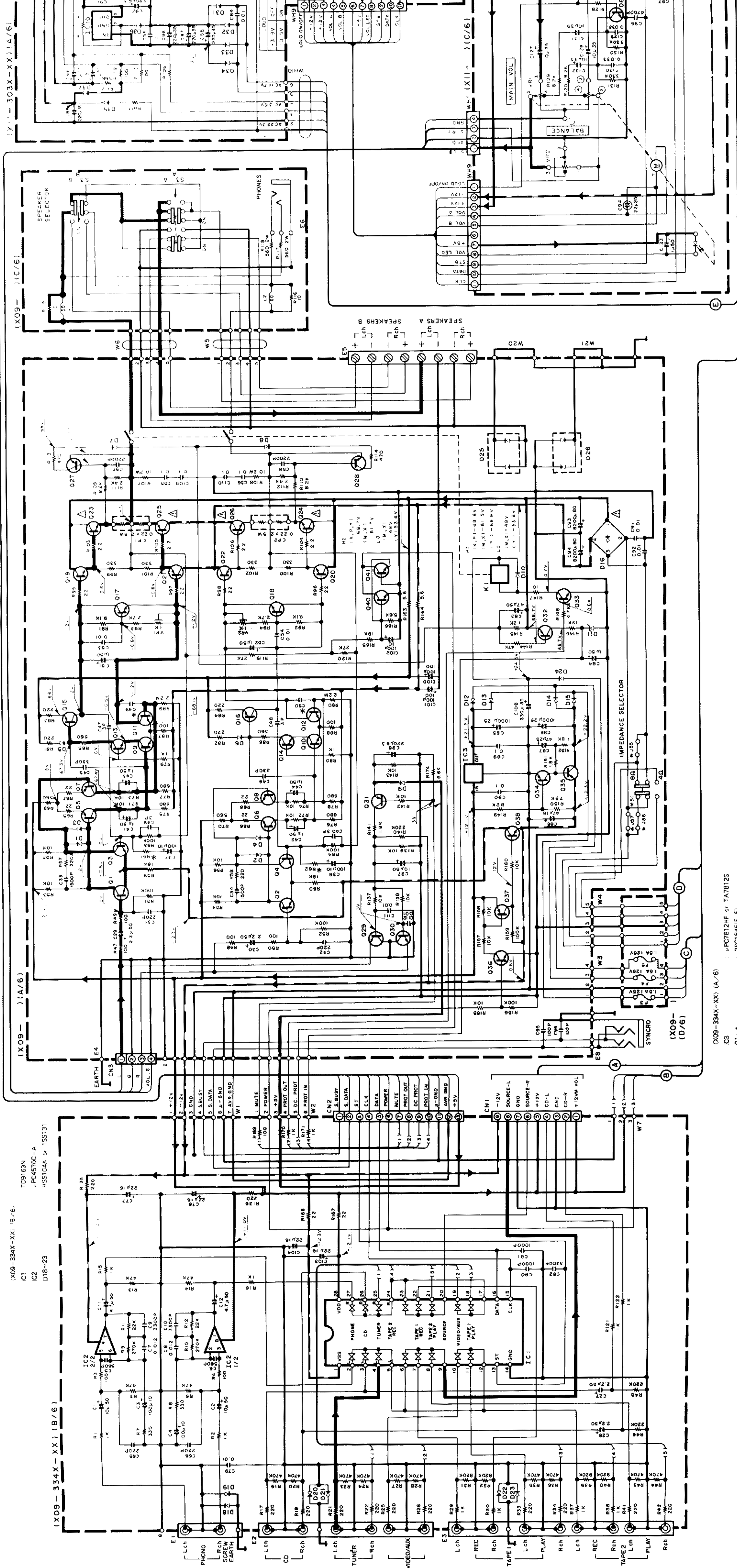


• CONTROL UNIT



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

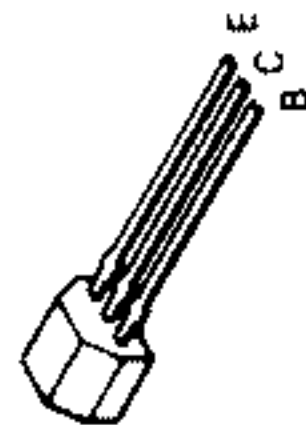
100-333X-XX (A/6)
100-333X-XX (B/6)
100-333X-XX (C/6)
100-333X-XX (D/6)



2SA1123
2SA1124
2SA992
2SC1845
2SC2003
2SC2631
2SC2632
2SC2878



2SA1048
2SA933S
2SC1740S
2SC2458



2SA1215
2SC2921



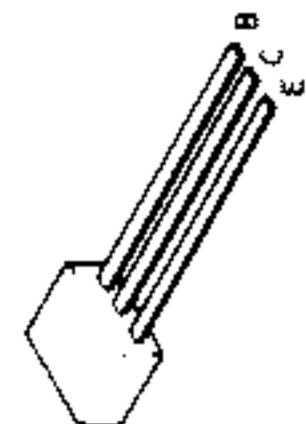
2SC4137



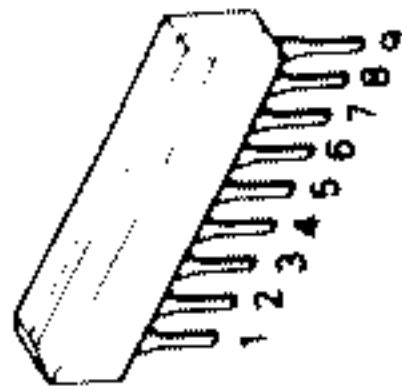
2SA1535
2SB941
2SC3944



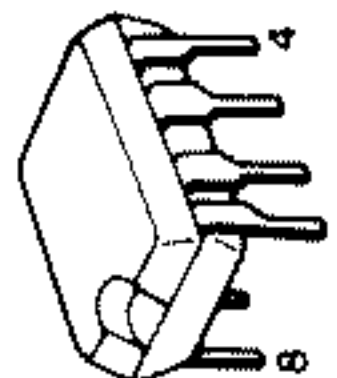
2SA1309A
2SC3311A



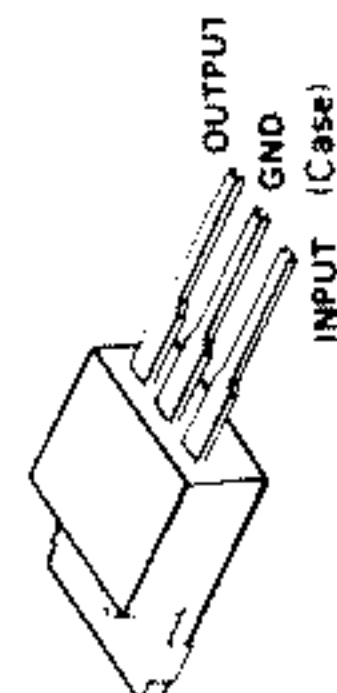
TA8409S

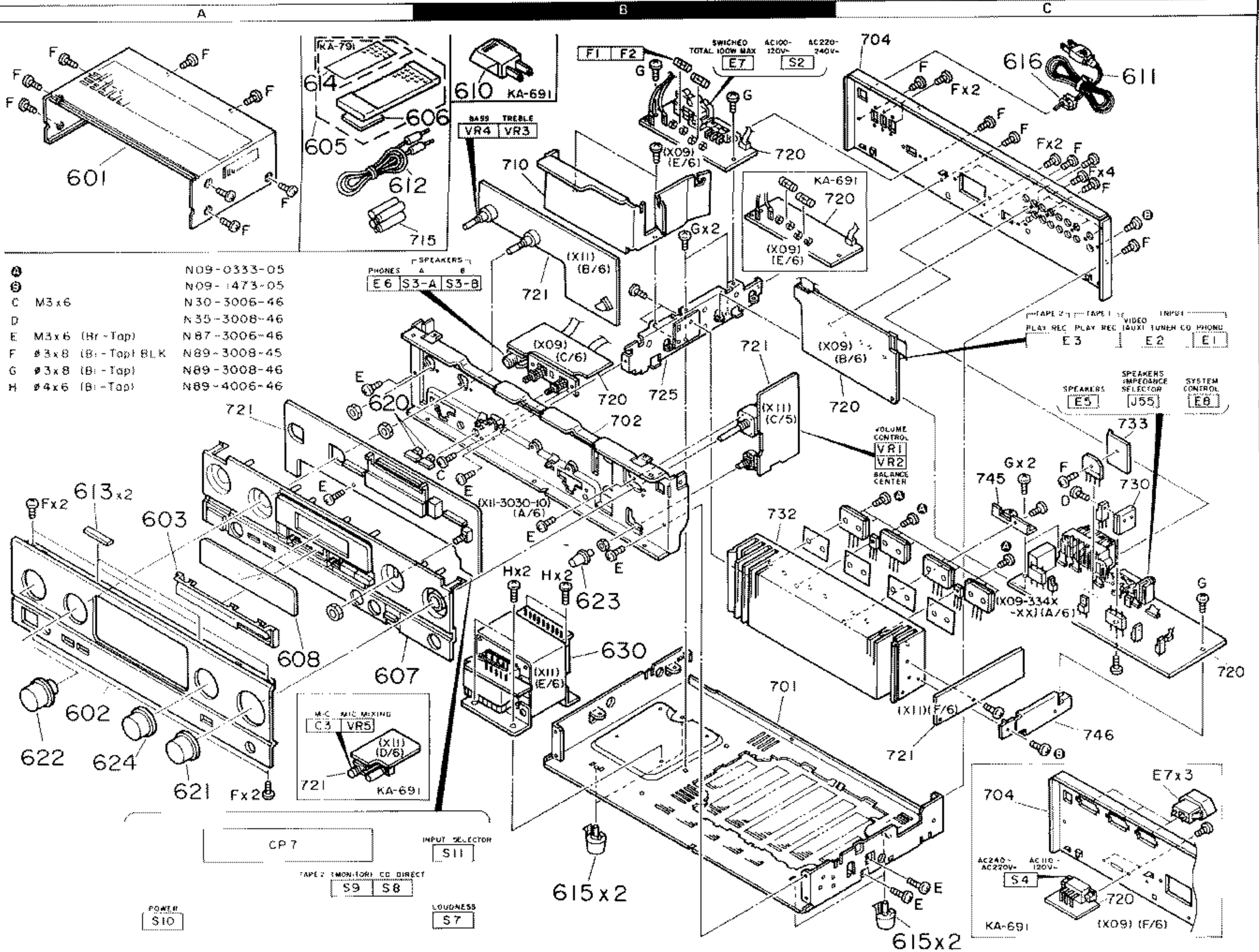


BA10393
UPC4570C-A



UPC7805HF
UPC7812HF





Destination list

| | JAPAN MADE | SINGAPORE MADE | MALAYSIA MADE |
|--------|---------------|----------------|---------------|
| KA-691 | K, P, Y, M, X | K | K |
| KA-791 | K, P, Y | K | K |

Audio unit

| | |
|-------------|------------------------------|
| X09-3340-10 | KA-691K(J), P, KA-791K(J), P |
| X09-3340-11 | KA-691K(S,M), KA-791K(S,M) |
| X09-3340-21 | KA-691M |
| X09-3340-71 | KA-691X |
| X09-3342-91 | KA-691Y, KA-791(Y) |

(J): JAPAN MADE, (S): SINGAPORE MADE, (M): MALAYSIA MADE

Control unit

| | |
|-------------|---------------------------------------|
| X11-3030-10 | KA-691K(J), P, Y, X, KA-791K(J), P, Y |
| X11-3030-11 | KA-691R(S, M), KA-791K(S, M) |
| X11-3030-21 | KA-691M |

Parts without Parts No. are not supplied.
 Les articles sans numéro de pièce ne sont pas fournis.
 Teile ohne Parts No. werden nicht geliefert.

No 1

| Ref. No. | Address | Parts No. | Description | Desti- nation | Re- marks |
|----------------------------|---------|-------------|---------------------------------|------------------|--------------|
| 参照番号 | 位置 | 部品番号 | 部品名 / 規格 | 仕向 | 備考 |
| KA-691 (JAPAN MADE) | | | | | |
| 601 | 1A | A01-1913-01 | METALLIC CABINET | KPYX | |
| 602 | 2A | A60-0023-02 | PANEL | M | |
| 603 | 2A | A60-0024-02 | PANEL | | |
| 604 | 2A | A21-1788-03 | BRESSING PANEL | | |
| 605 | 1A, 1B | A70-0513-05 | REMOTE CONTROLLER ASSY | | |
| 606 | 1A | A09-0112-00 | BATTERY COVER | | |
| 607 | 1A, 2A | B01-0481-01 | PANEL ESCUTCHEON | | |
| 608 | 2A | B10-1856-03 | FRONT GLASS | | |
| - | - | B46-0092-03 | WARRANTY CARD | K | |
| - | - | B46-0094-03 | WARRANTY CARD | Y | |
| - | - | B46-0095-03 | WARRANTY CARD | | |
| - | - | B46-0096-23 | WARRANTY CARD | X | |
| - | - | B46-0121-03 | WARRANTY CARD | P | |
| - | - | B50-0513-04 | CAUTION CARD (PRESET220-240) | Y | |
| - | - | B60-0346-00 | INSTRUCTION MANUAL (ENGLISH) | | |
| - | - | B60-0534-00 | INSTRUCTION MANUAL (FRENCH) | | |
| - | - | B60-0535-00 | INSTRUCTION MANUAL (SP, AR, CH) | M | |
| 610 | 1B | E03-0115-05 | AC PLUG ADAPTER | M | |
| 611 | 1C | E10-0459-05 | AC POWER CORD | M | |
| 612 | 1C | E10-0812-05 | AC POWER CORD | Y | |
| 613 | 1C | E10-0974-05 | AC POWER CORD | KP | |
| 614 | 1C | E10-1341-05 | AC POWER CORD | X | |
| 615 | 1A | E10-1392-05 | CORD WITH PLUG | | |
| 616 | 1B | E10-0855-05 | AC OUTLET | M | |
| 617 | 1B | E10-0814-05 | AC OUTLET | X | |
| 618 | 2A | G11-0155-14 | SMPT TAPE (40X9X2) | | |
| 619 | - | H00-0352-04 | ITEM CARTON CASE | | |
| 620 | - | H10-0093-02 | POLYSTYRENE FOAMED FIXTURE | | |
| 621 | - | H10-0394-02 | POLYSTYRENE FOAMED FIXTURE | | |
| 622 | - | H25-0223-04 | PROTECTION BAG (750X350X0.03) | | |
| 623 | - | H25-0232-04 | PROTECTION BAG (235X350X0.03) | | |
| 624 | 2B, 2C | J02-1313-05 | POST | | |
| 625 | 1C | J42-0083-05 | POWER CORD BUSHING | | |
| 626 | - | J61-0307-05 | WIRE BAND | | |
| 627 | 1A, 1B | K27-2314-04 | KNOB SPEAKERS | | |
| 628 | 2A | K29-4104-04 | KNOB VOLUME | | |
| 629 | 2A | K29-4106-04 | KNOB BASS, TREBLE | | |
| 630 | 2B | K29-3911-04 | KNOB BALANCE | | |
| 631 | 2A | K29-4105-04 | KNOB INPUT SELECTOR | | |
| 632 | 2B | L07-0054-05 | POWER TRANSFORMER | K | |
| 633 | 2B | L07-0055-05 | POWER TRANSFORMER | P | |
| 634 | 2B | L07-0056-05 | POWER TRANSFORMER | Y | |
| 635 | 2B | L07-0057-05 | POWER TRANSFORMER | M | |
| 636 | 2B | L07-0058-05 | POWER TRANSFORMER | X | |
| 637 | 1C | N89-3008-41 | TAPPING SCREW (M3X8) | | |
| 638 | 1B | N30-3006-46 | PAN HEAD MACHIN SCREW | | |
| 639 | 1A, 2B | N87-3006-46 | BRAZIER HEAD TAPTITE SCREW | | |
| 640 | 1A, 1B | N89-3008-45 | BINDING HEAD TAPTITE SCREW | | |
| 641 | 1B, 2C | N89-3008-46 | BINDING HEAD TAPTITE SCREW | | |
| 642 | 2B | N89-4006-46 | BINDING HEAD TAPTITE SCREW | | |

E Scandinavia & Europe K USA
 Y PX (Far East, Hawaii) 1 England
 Y AAFES (Europe) X Australia

P Canada
 M Other Areas

△ indicates safety critical components.

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 2

| Ref. No. | Address | New Parts | Parts No. | Description | Destination | Remarks |
|-------------------------|---------|-----------|-------------|-------------------------------|-------------|---------|
| 参照番号 | 位置 | 新部品 | 部品番号 | 部品名/規格 | 仕向 | 備考 |
| KA-691 (SINGAPORE MADE) | | | | | | |
| 601 | 1A | * | A01-1913-01 | METALLIC CABINET | | |
| 602 | 2A | * | A60-0023-02 | PANEL | | |
| 603 | 2A | * | A21-1788-03 | DRESSING PANEL | | |
| 605 | 1A, 1B | * | A70-0512-05 | REMOTE CONTROLLER ASSY | | |
| 606 | 1A | * | A09-0112-08 | BATTERY COVER | | |
| 607 | 1A, 2A | * | B01-0481-01 | PANEL ESCUTCHEON | | |
| 608 | 2A | * | B10-1856-03 | FRONT GLASS | | |
| - | - | * | B46-0092-03 | WARRANTY CARD | | |
| - | - | * | B60-0346-00 | INSTRUCTION MANUAL (ENGLISH) | | |
| 611 | 1C | | E30-2209-05 | AC POWER CORD | | |
| 612 | 1A | | E30-1392-05 | CORD WITH PLUG | | |
| 613 | 2A | | G11-0155-14 | SOFT TAPE (40X9X2) | | |
| - | - | * | H50-0020-04 | ITEM CARTON CASE | | |
| - | - | * | H10-5091-02 | POLYSTYRENE FOAMED FIXTURE | | |
| - | - | * | H10-5092-02 | POLYSTYRENE FOAMED FIXTURE | | |
| - | - | * | H25-0223-04 | PROTECTION BAG (750X350X0.03) | | |
| - | - | * | H25-0232-04 | PROTECTION BAG (235X350X0.03) | | |
| 615 | 2B, 2C | | J02-1013-05 | FOOT | | |
| 616 | 1C | | J42-0083-05 | POWER CORD BUSHING | | |
| - | - | | J61-0307-05 | WIRE BAND | | |
| 620 | 1A, 1B | * | K27-2014-04 | KNOB SPEAKERS | | |
| 621 | 2A | * | K29-4104-04 | KNOB VOLUME | | |
| 622 | 2A | * | K29-4106-04 | KNOB BASS, TREBLE | | |
| 623 | 2B | * | K29-3911-04 | KNOB BALANCE | | |
| 624 | 2A | * | K29-4105-04 | KNOB INPUT SELECTOR | | |
| 630 | 2B | | L07-0054-05 | POWER TRANSFORMER | | |
| B | 1C | | N89-3008-41 | TAPPING SCREW (M3X8) | | |
| C | 1B | | N30-3006-46 | PAN HEAD MACHIN SCREW | | |
| E | 1A, 2B | | N87-3006-46 | BRAZIER HEAD TAPTITE SCREW | | |
| F | 1A, 1B | | N89-3008-45 | BINDING HEAD TAPTITE SCREW | | |
| G | 1B, 2C | | N89-3008-46 | BINDING HEAD TAPTITE SCREW | | |
| H | 2B | | N89-4006-46 | BINDING HEAD TAPTITE SCREW | | |
| KA-691 (MALAYSIA MADE) | | | | | | |
| 601 | 1A | * | A01-1913-01 | METALLIC CABINET | | |
| 602 | 2A | * | A60-0023-02 | PANEL | | |
| 603 | 2A | * | A21-1788-03 | DRESSING PANEL | | |
| 605 | 1A, 1B | * | A70-0512-05 | REMOTE CONTROLLER ASSY | | |
| 606 | 1A | * | A09-0112-08 | BATTERY COVER | | |
| 607 | 1A, 2A | * | B01-0481-01 | PANEL ESCUTCHEON | | |
| 608 | 2A | * | B10-1856-03 | FRONT GLASS | | |
| - | - | * | B46-0092-03 | WARRANTY CARD | | |
| - | - | * | B60-0346-00 | INSTRUCTION MANUAL (ENGLISH) | | |
| 611 | 1C | | E30-2209-05 | AC POWER CORD | | |
| 612 | 1A | | E30-1392-05 | CORD WITH PLUG | | |
| 613 | 2A | | G11-0155-14 | SOFT TAPE (40X9X2) | | |
| - | - | * | H50-0099-04 | ITEM CARTON CASE | | |
| - | - | * | H10-5119-02 | POLYSTYRENE FOAMED FIXTURE | | |
| - | - | * | H10-5120-02 | POLYSTYRENE FOAMED FIXTURE | | |
| - | - | * | H25-0223-04 | PROTECTION BAG (750X350X0.03) | | |
| - | - | * | H25-0232-04 | PROTECTION BAG (235X350X0.03) | | |

E: Scandinavia & Europe K: USA P: Canada
Y: PX (Far East, Hawaii) T: England M: Other Areas
Y: AAFES (Europe) X: Australia

△ indicates safety critical components.

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 3

| Ref. No. | Address | New Parts | Parts No. | Description | Destination | Remarks |
|---------------------|---------|-----------|-------------|-------------------------------|-------------|---------|
| 参照番号 | 位置 | 新部品 | 部品番号 | 部品名/規格 | 仕向 | 備考 |
| - | - | | H25-0232-04 | PROTECTION BAG (235X350X0.03) | | |
| 615 | 2B, 2C | | J02-1013-05 | FOOT | | |
| 616 | 1C | | J42-0083-05 | POWER CORD BUSHING | | |
| - | - | | J61-0307-05 | WIRE BAND | | |
| 620 | 1A, 1B | * | K27-2014-04 | KNOB SPEAKERS | | |
| 621 | 2A | * | K29-4104-04 | KNOB VOLUME | | |
| 622 | 2A | * | K29-4106-04 | KNOB BASS, TREBLE | | |
| 623 | 2B | * | K29-3911-04 | KNOB BALANCE | | |
| 624 | 2A | * | K29-4105-04 | KNOB INPUT SELECTOR | | |
| 630 | 2B | | L07-0054-05 | POWER TRANSFORMER | | |
| B | 1C | | N89-3008-41 | TAPPING SCREW (M3X8) | | |
| C | 1B | | N30-3006-46 | PAN HEAD MACHIN SCREW | | |
| E | 1A, 2B | | N87-3006-46 | BRAZIER HEAD TAPTITE SCREW | | |
| F | 1A, 1B | | N89-3008-45 | BINDING HEAD TAPTITE SCREW | | |
| G | 1B, 2C | | N89-3008-46 | BINDING HEAD TAPTITE SCREW | | |
| H | 2B | | N89-4006-46 | BINDING HEAD TAPTITE SCREW | | |
| KA-791 (JAPAN MADE) | | | | | | |
| 601 | 1A | * | A01-1913-01 | METALLIC CABINET | | |
| 602 | 2A | * | A60-0021-02 | PANEL | | |
| 603 | 2A | * | A21-1788-03 | DRESSING PANEL | | |
| 605 | 1A, 1B | * | A70-0512-05 | REMOTE CONTROLLER ASSY | | |
| 606 | 1A | * | A09-0111-08 | BATTERY COVER | | |
| 607 | 1A, 2A | * | B01-0481-01 | PANEL ESCUTCHEON | | |
| 608 | 2A | * | B10-1856-03 | FRONT GLASS | | |
| - | - | * | B46-0092-03 | WARRANTY CARD | | |
| - | - | * | B46-0094-03 | WARRANTY CARD | | |
| - | - | * | B46-0095-03 | WARRANTY CARD | | |
| - | - | * | B46-0121-03 | WARRANTY CARD | | |
| - | - | * | B58-0513-04 | CAUTION CARD (PRESET220-240) | | |
| - | - | * | B60-0344-00 | INSTRUCTION MANUAL (ENGLISH) | | |
| - | - | * | B60-0345-00 | INSTRUCTION MANUAL (FRENCH) | | |
| 611 | 1C | | E30-0812-05 | AC POWER CORD | | |
| 612 | 1C | | E30-0974-05 | AC POWER CORD | | |
| 613 | 1A | | E30-1392-05 | CORD WITH PLUG | | |
| 613 | 2A | | G11-0155-14 | SOFT TAPE (40X9X2) | | |
| 614 | 1A | | G16-0772-08 | REMOTE CONTROLLER ENTRY SHEET | | |
| - | - | * | H50-0051-04 | ITEM CARTON CASE | | |
| - | - | * | H10-5093-02 | POLYSTYRENE FOAMED FIXTURE | | |
| - | - | * | H10-5094-02 | POLYSTYRENE FOAMED FIXTURE | | |
| - | - | * | H25-0223-04 | PROTECTION BAG (750X350X0.03) | | |
| - | - | * | H25-0232-04 | PROTECTION BAG (235X350X0.03) | | |
| 615 | 2B, 2C | | J02-1013-05 | FOOT | | |
| 616 | 1C | | J42-0083-05 | POWER CORD BUSHING | | |
| - | - | | J61-0307-05 | WIRE BAND | | |
| 620 | 1A, 1B | * | K27-2014-04 | KNOB SPEAKERS | | |
| 621 | 2A | * | K29-4104-04 | KNOB VOLUME | | |
| 622 | 2A | * | K29-4106-04 | KNOB BASS, TREBLE | | |
| 623 | 2B | * | K29-3911-04 | KNOB BALANCE | | |
| 624 | 2A | * | K29-4105-04 | KNOB INPUT SELECTOR | | |
| 630 | 2B | | L07-0054-05 | POWER TRANSFORMER | | |
| 630 | 2B | | L07-0055-05 | POWER TRANSFORMER | | |

E: Scandinavia & Europe K: USA P: Canada
Y: PX (Far East, Hawaii) T: England M: Other Areas
Y: AAFES (Europe) X: Australia

△ indicates safety critical components.

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No 4

| Ref. No. | Address | New Parts | Parts No. | Description | Destination | Remarks |
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| 参照番号 | 位置 | 新部品 | 部品番号 | 部品名/規格 | 仕向 | 備考 |
| 630 | 2B | | L07-0056-05 | POWER TRANSFORMER | | |
| B | 1C | | N89-3008-41 | TAPPING SCREW (M3X8 RPT) | | |
| C | 1B | | N30-3006-46 | PAN HEAD MACHIN SCREW | | |
| E | 1A, 2B | | N87-3006-46 | BRAZIER HEAD TAPTITE SCREW | | |
| F | 1A, 1B | | N89-3008-45 | BINDING HEAD TAPTITE SCREW | | |
| G | 1B, 2C | | N89-3008-46 | BINDING HEAD TAPTITE SCREW | | |
| H | 2B | | N89-4006-46 | BINDING HEAD TAPTITE SCREW | | |
| KA-791 (SINGAPORE MADE) | | | | | | |
| 601 | 1A | * | A01-1913-01 | METALLIC CABINET | | |
| 602 | 2A | * | A60-0021-02 | PANEL | | |
| 603 | 2A | * | A21-1788-03 | DRESSING PANEL | | |
| 605 | 1A, 1B | * | A70-0512-05 | REMOTE CONTROLLER ASSY | | |
| 606 | 1A | * | A09-0111-08 | BATTERY COVER | | |
| 607 | 1A, 2A | * | B01-0481-01 | PANEL ESCUTCHEON | | |
| 608 | 2A | * | B10-1856-03 | FRONT GLASS | | |
| - | - | * | B46-0092-03 | WARRANTY CARD | | |
| - | - | * | B60-0344-00 | INSTRUCTION MANUAL (ENGLISH) | | |
| 611 | 1C | | E30-2209-05 | AC POWER CORD | | |
| 612 | 1A | | E30-1392-05 | CORD WITH PLUG | | |
| 613 | 2A | | G11-0155-14 | SOFT TAPE (40X9X2) | | |
| 614 | 1A | | G16-0772-08 | REMOTE CONTROLLER ENTRY SHEET | | |
| - | - | * | H50-0019-04 | ITEM CARTON CASE | | |
| - | - | * | H10-5091-02 | POLYSTYRENE FOAMED FIXTURE | | |
| - | - | * | H10-5092-02 | POLYSTYRENE FOAMED FIXTURE | | |
| - | - | * | H25-0223-04 | PROTECTION BAG (750X350X0.03) | | |
| - | - | * | H25-0232-04 | PROTECTION BAG (235X350X0.03) | | |
| 615 | 2B, 2C | | J02-1013-05 | FOOT | | |
| 616 | 1C | | J42-0083-05 | POWER CORD BUSHING | | |
| - | - | | J61-0307-05 | WIRE BAND | | |
| 620 | 1A, 1B | * | K27-2014-04 | KNOB SPEAKERS | | |
| 621 | 2A | * | K29-4104-04 | KNOB VOLUME | | |
| 622 | 2A | * | K29-4106-04 | KNOB BASS, TREBLE | | |
| 623 | 2B | * | K29-3911-04 | KNOB BALANCE | | |
| 624 | 2A | * | K29-4105-04 | KNOB INPUT SELECTOR | | |
| 630 | 2B | | L07-0054-05 | POWER TRANSFORMER | | |
| B | 1C | | N89-3008-41 | TAPPING SCREW (M3X8 RPT) | | |
| C | 1B | | N30-3006-46 | PAN HEAD MACHIN SCREW | | |
| E | 1A, 2B | | N87-3006-46 | BRAZIER HEAD TAPTITE SCREW | | |
| F | 1A, 1B | | N89-3008-45 | BINDING HEAD TAPTITE SCREW | | |
| G | 1B, 2C | | N89-3008-46 | BINDING HEAD TAPTITE SCREW | | |
| H | 2B | | N89-4006-46 | BINDING HEAD TAPTITE SCREW | | |
| KA-791 (MALAYSIA MADE) | | | | | | |
| 601 | 1A | * | A01-1913-01 | METALLIC CABINET | | |
| 602 | 2A | * | A60-0021-02 | PANEL | | |
| 603 | 2A | * | A21-1788-03 | DRESSING PANEL | | |
| 605 | 1A, 1B | * | A70-0512-05 | REMOTE CONTROLLER ASSY | | |
| 606 | 1A | * | A09-0111-08 | BATTERY COVER | | |
| 607 | 1A, 2A | * | B01-0481-01 | PANEL ESCUTCHEON | | |
| 608 | 2A | * | B10-1856-03 | FRONT GLASS | | |
| - | - | * | B46-0092-03 | WARRANTY CARD | | |
| - | - | * | B60-0344-00 | INSTRUCTION MANUAL (ENGLISH) | | |

E: Scandinavia & Europe K: USA P: Canada
Y: PX (Far East, Hawaii) T: England M: Other Areas
Y: AAFES (Europe) X: Australia

△ indicates safety critical components.

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

No 5

| Ref. No. | Address | New Parts | Parts No. | Description | Destination | Remarks |
|--------------------------|---------|-----------|---------------|-------------------------------|-------------|---------|
| 参照番号 | 位置 | 新部品 | 部品番号 | 部品名/規格 | 仕向 | 備考 |
| 611 | 1C | | E30-2209-05 | AC POWER CORD | | |
| 612 | 1A | | E30-1392-05 | CORD WITH PLUG | | |
| 613 | 2A | | G11-0155-14 | SOFT TAPE (40X9X2) | | |
| 614 | 1A | | G16-0772-08 | REMOTE CONTROLLER ENTRY SHEET | | |
| - | | * | H50-0098-04 | ITEM CARTON CASE | | |
| - | | * | H10-5119-02 | POLYSTYRENE FOAMED FIXTURE | | |
| - | | * | H10-5120-02 | POLYSTYRENE FOAMED FIXTURE | | |
| - | | * | H25-0223-04 | PROTECTION BAG (750X350X0.03) | | |
| - | | * | H25-0232-04 | PROTECTION BAG (235X350X0.03) | | |
| 615 | 2B, 2C | | J02-1013-05 | FOOT | | |
| 616 | 1C | | J42-0083-05 | POWER CORD BUSHING | | |
| - | | | J61-0307-05 | WIRE BAND | | |
| 620 | 1A, 1B | * | K27-2014-04 | KNOB SPEAKERS | | |
| 621 | 2A | * | K29-4104-04 | KNOB VOLUME | | |
| 622 | 2A | * | K29-4106-04 | KNOB BASS, TREBLE | | |
| 623 | 2B | * | K29-3911-04 | KNOB BALANCE | | |
| 624 | 2A | * | K29-4105-04 | KNOB INPUT SELECTOR | | |
| 630 | 2B | | L07-0054-05 | POWER TRANSFORMER | | |
| B | 1C | | N89-3008-41 | TAPPING SCREW (M3X8 RPT) | | |
| C | 1B | | N30-3006-46 | PAN HEAD MACHIN SCREW | | |
| E | 1A, 2B | | N87-3006-46 | BRAZIER HEAD TAPTITE SCREW | | |
| F | 1A, 1B | | N89-3008-45 | BINDING HEAD TAPTITE SCREW | | |
| G | 1B, 2C | | N89-3008-46 | BINDING HEAD TAPTITE SCREW | | |
| H | 2B | | N89-4006-46 | BINDING HEAD TAPTITE SCREW | | |
| AUDIO UNIT (X09-334X-XX) | | | | | | |
| C1, 2 | | | CE04KWI1H100M | ELECTRO | 10UF | 50V |
| C1, 2 | | | CE04LWI1H100M | ELECTRO | 10UF | 50V |
| C3, 4 | | | CE04KWI1A101M | ELECTRO | 100UF | 10V |
| C3, 4 | | | CE04LWI1A101M | ELECTRO | 100UF | 10V |
| C5, 6 | | | CK45FB1H561K | CERAMIC | 560PF | K |
| C7, 8 | | * | CQ92FM1H123J | MYLAR | 0.012UF | J |
| C9, 10 | | * | CQ92FM1H332J | MYLAR | 3300PF | J |
| C11, 12 | | | CE04KWI1H4R7M | ELECTRO | 4.7UF | 50V |
| C11, 12 | | | CE04LWI1H4R7M | ELECTRO | 4.7UF | 50V |
| C27, 30 | | | CE04KWI1H2R7M | ELECTRO | 2.2UF | 50V |
| C27, 30 | | | CE04LWI1H2R7M | ELECTRO | 2.2UF | 50V |
| C31, 32 | | | CC45FSL1H221J | CERAMIC | 220PF | J |
| C33, 34 | | | CQ92FM1H152J | MYLAR | 1500PF | J |
| C37, 38 | | | CE04KWI1A101M | ELECTRO | 100UF | 10V |
| C37, 38 | | | CE04LWI1A101M | ELECTRO | 100UF | 10V |
| C39, 40 | | | CC45FSL1H030C | CERAMIC | 3.0PF | C |
| C41, 44 | | | CE04KWI1H010M | ELECTRO | 1.0UF | 50V |
| C41, 44 | | | CE04LWI1H010M | ELECTRO | 1.0UF | 50V |
| C45, 46 | | | CC45FSL1H331J | CERAMIC | 330PF | J |
| C47, 48 | | | CC45FSL1H030C | CERAMIC | 3.0PF | C |
| C49, 50 | | | CC45FSL1H220J | CERAMIC | 22PF | J |
| C49, 50 | | | CC45FSL1H330J | CERAMIC | 33PF | J |
| C51, 52 | | | CE04KWI1H010M | ELECTRO | 1.0UF | 50V |
| C51, 52 | | | CE04LWI1H010M | ELECTRO | 1.0UF | 50V |
| C53, 54 | | | CK45FF1H103Z | CERAMIC | 0.010UF | Z |
| C55, 56 | | | CF92FV1H104J | MF | 0.10UF | J |
| C57, 58 | | | CQ92FM1H222J | MYLAR | 2200PF | J |
| | | | | | | MX |

SPECIFICATIONS

Rated Power Output

120 watts per channel minimum RMS, both channels driven, at 8 Ω from 20 Hz to 20,000 Hz with no more than 0.03% total harmonic distortion. (FTC)

Total Harmonic Distortion LINE input to SPEAKER output

20 Hz to 20,000 Hz..... 0.03% at rated power into 8 Ω
Frequency Response..... 10 Hz to 50 kHz, +0 dB, -3 dB
Input Sensitivity/Impedance

Phono..... 2.5 mV/47 kΩ
Tuner/Tape/CD/VIDEO..... 200 mV/47 kΩ

Signal-to-noise Ratio (IHF-A)

Phono..... 75 dB for 2.5 mV input
Tuner/Tape/CD/VIDEO..... 100 dB
Phono Maximum Input Level..... 80 mV, T.H.D. 0.5% at 1 kHz

Output Level/Impedance

Tape REC (Pin)..... 200 mV/3.3 kΩ
Phono Frequency Response..... RIAA standard curve ±0.5 dB (20 Hz to 20,000 Hz)

Tone control

Bass..... ±10 dB (at 100 Hz)
Treble..... ±10 dB (at 10 kHz)
Loudness Control..... +8 dB at 100 Hz (at -30 dB VOLUME Level)

General

Power Consumption..... 2.8 A (U.S.A. & Canada models)

AC outlets

SWITCHED..... For U.S.A. and Canada: 3; (Total 100 W, 0.8 A max.)

Dimensions

W: 440 mm (17-5/8")
H: 133 mm (5-1/4")
D: 281 mm (11-1/16")
Weight (Net)..... 9.1 kg (20.1 lb)

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

Note:

Component and circuitry are subject to modification to insure best operation under differing local conditions. This manual is based on the U.S.A. (K1) 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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350 Oak Drive, Northridge, CA 91324, U.S.A.
KENWOOD ELECTRONICS CANADA INC.
P.O. Box 107, 940 Garsden Road, Mississauga, Ontario, Canada L4V 1A7
TRIO-KENWOOD U.K. LIMITED
Kenwood House, Doughty Road, Watford, Herts, WD1 8EB, United Kingdom
KENWOOD ELECTRONICS BENELUX N.V.
Torenweg 47A, 6-4200 Zaltbommel, Belgium
KENWOOD ELECTRONICS DEUTSCHLAND GMBH
Bismarckstr. 15, 4055 Weidenfeld, Germany
TRIO-KENWOOD FRANCE S.A.
71 Boulevard des Capucines, 75008 Paris, France
KENWOOD LINEAR S.p.A.
2625 Via Aldo Moro, 41013 Modena, Italy
KENWOOD ELECTRONICS AUSTRALIA PTY LTD
P.O. Box 554, 6 Eighth Drive, Australia Centre, Hornsby NSW 2140, Australia
KENWOOD & LEE ELECTRONICS LTD
Ward Kee Building, 4th Floor, 15/F, Cornhill Road, Central, Hong Kong

PARTS LIST

| Ref. No. | Part No. | Description | Part No. | Description | Ref. No. | Part No. | Description |
|----------|----------|-------------------------|-------------|-------------------------|----------|----------|--------------|
| L1 | 12 | PHASE-COMPENSATION COIL | L39-0085-05 | PHASE-COMPENSATION COIL | A | 2C | N09-0333-05 |
| | | | | | F | 1C | N89-3008-45 |
| | | | | | G | 1B, 2C | N89-3008-46 |
| | | | | | CPL | | R90-0187-05 |
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| | | | | | | | R01-4082E22J |
| | | | | | | | R01-4082E22J |
| | | | | | | | R01-4 |

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 8

| Ref. No. | Address | New Parts | Parts No. | Description | Destination | Remarks |
|------------|---------|-----------|----------------|-------------|-------------|---------|
| 参照番号 | 位置 | 新部品 | 部品番号 | 部品名 / 規格 | 仕向 | 備考 |
| Q1, -4 | | | 2SC1845(F,E) | TRANSISTOR | | |
| Q5, -9 | | | 2SA992(F,E) | TRANSISTOR | | |
| Q9, -14 | | | 2SC2672(Q,R,S) | TRANSISTOR | | |
| Q15, -16 | | | 2SA1124(Q,R,S) | TRANSISTOR | | |
| Q17, -18 | | | 2SC4137 | TRANSISTOR | | |
| Q19, -20 | | | 2SC3944(Q,R,S) | TRANSISTOR | | |
| Q21, -22 | | | 2SA1535(Q,R,S) | TRANSISTOR | | |
| Q23, -24 | | | 2SC3921 | TRANSISTOR | | |
| Q25, -26 | | | 2SA1215 | TRANSISTOR | | |
| Q27, -28 | | | 2SC2631(H,S) | TRANSISTOR | | |
| Q29, -30 | | | 2SC2878(B) | TRANSISTOR | | |
| Q31, -32 | | | 2SA1048(Y,GR) | TRANSISTOR | | |
| Q33, -34 | | | 2SA1309A(Q,R) | TRANSISTOR | | |
| Q35, -36 | | | 2SA933S(Q,R) | TRANSISTOR | | |
| Q37, -38 | | | 2SA1123(P,S) | TRANSISTOR | | |
| Q39, -40 | | | 2SC2003(L,R) | TRANSISTOR | | |
| Q41, -42 | | | 2SA1048(Y,GR) | TRANSISTOR | | |
| Q43, -44 | | | 2SA1309A(Q,R) | TRANSISTOR | | |
| Q45, -46 | | | 2SA933S(Q,R) | TRANSISTOR | | |
| Q47, -48 | | | 2SB941 | TRANSISTOR | | |
| Q49, -50 | | | 2SC1740S(Q,R) | TRANSISTOR | | |
| Q51, -52 | | | 2SC2458(Y,GR) | TRANSISTOR | | |
| Q53, -54 | | | 2SC3311A(Q,R) | TRANSISTOR | | |
| Q55, -56 | | | 2SA1048(Y,GR) | TRANSISTOR | | |
| Q57, -58 | | | 2SC2458(Y,GR) | TRANSISTOR | | |
| Q59, -60 | | | 2SC3311A(Q,R) | TRANSISTOR | | |
| Q61, -62 | | | 2SC2003(L,R) | TRANSISTOR | | |
| Q63, -64 | | | 2SA1048(Y,GR) | TRANSISTOR | | |
| Q65, -66 | | | 2SA1309A(Q,R) | TRANSISTOR | | |
| Q67, -68 | | | 2SA933S(Q,R) | TRANSISTOR | | |
| Q69, -70 | | | 2SB941 | TRANSISTOR | | |
| Q71, -72 | | | 2SC1740S(Q,R) | TRANSISTOR | | |
| Q73, -74 | | | 2SC2458(Y,GR) | TRANSISTOR | | |
| Q75, -76 | | | 2SC3311A(Q,R) | TRANSISTOR | | |
| Q77, -78 | | | 2SA1048(Y,GR) | TRANSISTOR | | |
| Q79, -80 | | | 2SA1309A(Q,R) | TRANSISTOR | | |
| Q81, -82 | | | 2SA933S(Q,R) | TRANSISTOR | | |
| Q83, -84 | | | 2SB941 | TRANSISTOR | | |
| Q85, -86 | | | 2SC1740S(Q,R) | TRANSISTOR | | |
| Q87, -88 | | | 2SC2458(Y,GR) | TRANSISTOR | | |
| Q89, -90 | | | 2SC3311A(Q,R) | TRANSISTOR | | |
| Q91, -92 | | | 2SA1048(Y,GR) | TRANSISTOR | | |
| Q93, -94 | | | 2SA1309A(Q,R) | TRANSISTOR | | |
| Q95, -96 | | | 2SA933S(Q,R) | TRANSISTOR | | |
| Q97, -98 | | | 2SB941 | TRANSISTOR | | |
| Q99, -100 | | | 2SC1740S(Q,R) | TRANSISTOR | | |
| Q101, -102 | | | 2SC2458(Y,GR) | TRANSISTOR | | |
| Q103, -104 | | | 2SC3311A(Q,R) | TRANSISTOR | | |
| Q105, -106 | | | 2SA1048(Y,GR) | TRANSISTOR | | |
| Q107, -108 | | | 2SA1309A(Q,R) | TRANSISTOR | | |
| Q109, -110 | | | 2SA933S(Q,R) | TRANSISTOR | | |
| Q111, -112 | | | 2SB941 | TRANSISTOR | | |
| Q113, -114 | | | 2SC1740S(Q,R) | TRANSISTOR | | |
| Q115, -116 | | | 2SC2458(Y,GR) | TRANSISTOR | | |
| Q117, -118 | | | 2SC3311A(Q,R) | TRANSISTOR | | |
| Q119, -120 | | | 2SA1048(Y,GR) | TRANSISTOR | | |
| Q121, -122 | | | 2SA1309A(Q,R) | TRANSISTOR | | |
| Q123, -124 | | | 2SA933S(Q,R) | TRANSISTOR | | |
| Q125, -126 | | | 2SB941 | TRANSISTOR | | |
| Q127, -128 | | | 2SC1740S(Q,R) | TRANSISTOR | | |
| Q129, -130 | | | 2SC2458(Y,GR) | TRANSISTOR | | |
| Q131, -132 | | | 2SC3311A(Q,R) | TRANSISTOR | | |
| Q133, -134 | | | 2SA1048(Y,GR) | TRANSISTOR | | |
| Q135, -136 | | | 2SA1309A(Q,R) | TRANSISTOR | | |
| Q137, -138 | | | 2SA933S(Q,R) | TRANSISTOR | | |
| Q139, -140 | | | 2SB941 | TRANSISTOR | | |
| Q141, -142 | | | 2SC1740S(Q,R) | TRANSISTOR | | |
| Q143, -144 | | | 2SC2458(Y,GR) | TRANSISTOR | | |
| Q145, -146 | | | 2SC3311A(Q,R) | TRANSISTOR | | |
| Q147, -148 | | | 2SA1048(Y,GR) | TRANSISTOR | | |
| Q149, -150 | | | 2SA1309A(Q,R) | TRANSISTOR | | |
| Q151, -152 | | | 2SA933S(Q,R) | TRANSISTOR | | |
| Q153, -154 | | | 2SB941 | TRANSISTOR | | |
| Q155, -156 | | | 2SC1740S(Q,R) | TRANSISTOR | | |
| Q157, -158 | | | 2SC2458(Y,GR) | TRANSISTOR | | |
| Q159, -160 | | | 2SC3311A(Q,R) | TRANSISTOR | | |
| Q161, -162 | | | 2SA1048(Y,GR) | TRANSISTOR | | |
| Q163, -164 | | | 2SA1309A(Q,R) | TRANSISTOR | | |
| Q165, -166 | | | 2SA933S(Q,R) | TRANSISTOR | | |
| Q167, -168 | | | 2SB941 | TRANSISTOR | | |
| Q169, -170 | | | 2SC1740S(Q,R) | TRANSISTOR | | |
| Q171, -172 | | | 2SC2458(Y,GR) | TRANSISTOR | | |
| Q173, -174 | | | 2SC3311A(Q,R) | TRANSISTOR | | |
| Q175, -176 | | | 2SA1048(Y,GR) | TRANSISTOR | | |
| Q177, -178 | | | 2SA1309A(Q,R) | TRANSISTOR | | |
| Q179, -180 | | | 2SA933S(Q,R) | TRANSISTOR | | |
| Q181, -182 | | | 2SB941 | TRANSISTOR | | |
| Q183, -184 | | | 2SC1740S(Q,R) | TRANSISTOR | | |
| Q185, -186 | | | 2SC2458(Y,GR) | TRANSISTOR | | |
| Q187, -188 | | | 2SC3311A(Q,R) | TRANSISTOR | | |
| Q189, -190 | | | 2SA1048(Y,GR) | TRANSISTOR | | |
| Q191, -192 | | | 2SA1309A(Q,R) | TRANSISTOR | | |
| Q193, -194 | | | 2SA933S(Q,R) | TRANSISTOR | | |
| Q195, -196 | | | 2SB941 | TRANSISTOR | | |
| Q197, -198 | | | 2SC1740S(Q,R) | TRANSISTOR | | |
| Q199, -200 | | | 2SC2458(Y,GR) | TRANSISTOR | | |
| Q201, -202 | | | 2SC3311A(Q,R) | TRANSISTOR | | |
| Q203, -204 | | | 2SA1048(Y,GR) | TRANSISTOR | | |
| Q205, -206 | | | 2SA1309A(Q,R) | TRANSISTOR | | |
| Q207, -208 | | | 2SA933S(Q,R) | TRANSISTOR | | |
| Q209, -210 | | | 2SB941 | TRANSISTOR | | |
| Q211, -212 | | | 2SC1740S(Q,R) | TRANSISTOR | | |
| Q213, -214 | | | 2SC2458(Y,GR) | TRANSISTOR | | |
| Q215, -216 | | | 2SC3311A(Q,R) | TRANSISTOR | | |
| Q217, -218 | | | 2SA1048(Y,GR) | TRANSISTOR | | |
| Q219, -220 | | | 2SA1309A(Q,R) | TRANSISTOR | | |
| Q221, -222 | | | 2SA933S(Q,R) | TRANSISTOR | | |
| Q223, -224 | | | 2SB941 | TRANSISTOR | | |
| Q225, -226 | | | 2SC1740S(Q,R) | TRANSISTOR | | |
| Q227, -228 | | | 2SC2458(Y,GR) | TRANSISTOR | | |
| Q229, -230 | | | 2SC3311A(Q,R) | TRANSISTOR | | |
| Q231, -232 | | | 2SA1048(Y,GR) | TRANSISTOR | | |
| Q233, -234 | | | 2SA1309A(Q,R) | TRANSISTOR | | |
| Q235, -236 | | | 2SA933S(Q,R) | TRANSISTOR | | |
| Q237, -238 | | | 2SB941 | TRANSISTOR | | |
| Q239, -240 | | | 2SC1740S(Q,R) | TRANSISTOR | | |
| Q241, -242 | | | 2SC2458(Y,GR) | TRANSISTOR | | |
| Q243, -244 | | | 2SC3311A(Q,R) | TRANSISTOR | | |
| Q245, -246 | | | 2SA1048(Y,GR) | TRANSISTOR | | |
| Q247, -248 | | | 2SA1309A(Q,R) | TRANSISTOR | | |
| Q249, -250 | | | 2SA933S(Q,R) | TRANSISTOR | | |
| Q251, -252 | | | 2SB941 | TRANSISTOR | | |
| Q253, -254 | | | 2SC1740S(Q,R) | TRANSISTOR | | |
| Q255, -256 | | | 2SC2458(Y,GR) | TRANSISTOR | | |
| Q257, -258 | | | 2SC3311A(Q,R) | TRANSISTOR | | |
| Q259, -260 | | | 2SA1048(Y,GR) | TRANSISTOR | | |
| Q261, -262 | | | 2SA1309A(Q,R) | TRANSISTOR | | |
| Q263, -264 | | | 2SA933S(Q,R) | TRANSISTOR | | |
| Q265, -266 | | | 2SB941 | TRANSISTOR | | |
| Q267, -268 | | | 2SC1740S(Q,R) | TRANSISTOR | | |
| Q269, -270 | | | 2SC2458(Y,GR) | TRANSISTOR | | |
| Q271, -272 | | | 2SC3311A(Q,R) | TRANSISTOR | | |
| Q273, -274 | | | 2SA1048(Y,GR) | TRANSISTOR | | |
| Q275, -276 | | | 2SA1309A(Q,R) | TRANSISTOR | | |
| Q277, -278 | | | 2SA933S(Q,R) | TRANSISTOR | | |
| Q279, -280 | | | 2SB941 | TRANSISTOR | | |
| Q281, -282 | | | 2SC1740S(Q,R) | TRANSISTOR | | |
| Q283, -284 | | | 2SC2458(Y,GR) | TRANSISTOR | | |
| Q285, -286 | | | 2SC3311A(Q,R) | TRANSISTOR | | |
| Q287, -288 | | | 2SA1048(Y,GR) | TRANSISTOR | | |
| Q289, -290 | | | 2SA1309A(Q,R) | TRANSISTOR | | |
| Q291, -292 | | | 2SA933S(Q,R) | TRANSISTOR | | |
| Q293, -294 | | | 2SB941 | TRANSISTOR | | |
| Q295, -296 | | | 2SC1740S(Q,R) | TRANSISTOR | | |
| Q297, -298 | | | 2SC2458(Y,GR) | TRANSISTOR | | |
| Q299, -300 | | | 2SC3311A(Q,R) | TRANSISTOR | | |
| Q301, -302 | | | 2SA1048(Y,GR) | TRANSISTOR | | |
| Q303, -304 | | | 2SA1309A(Q,R) | TRANSISTOR | | |
| Q305, -306 | | | 2SA933S(Q,R) | TRANSISTOR | | |
| Q307, -308 | | | 2SB941 | TRANSISTOR | | |
| Q309, -310 | | | 2SC1740S(Q,R) | TRANSISTOR | | |
| Q311, -312 | | | 2SC2458(Y,GR) | TRANSISTOR | | |
| Q313, -314 | | | 2SC3311A(Q,R) | TRANSISTOR | | |
| Q315, -316 | | | 2SA1048(Y,GR) | TRANSISTOR | | |
| Q317, -318 | | | 2SA1309A(Q,R) | TRANSISTOR | | |
| Q319, -320 | | | 2SA933S(Q,R) | TRANSISTOR | | |
| Q321, -322 | | | 2SB941 | TRANSISTOR | | |
| Q323, -324 | | | 2SC1740S(Q,R) | TRANSISTOR | | |
| Q325, -326 | | | 2SC2458(Y,GR) | TRANSISTOR | | |
| Q327, -328 | | | 2SC3311A(Q,R) | TRANSISTOR | | |
| Q329, -330 | | | 2SA1048(Y,GR) | TRANSISTOR | | |
| Q331, -332 | | | 2SA1309A(Q,R) | TRANSISTOR | | |
| Q333, -334 | | | 2SA933S(Q,R) | TRANSISTOR | | |
| Q335, -336 | | | 2SB941 | TRANSISTOR | | |
| Q337, -338 | | | 2SC1740S(Q,R) | TRANSISTOR | | |
| Q339, -340 | | | 2SC2458(Y,GR) | TRANSISTOR | | |
| Q341, -342 | | | 2SC3311A(Q,R) | TRANSISTOR | | |
| Q343, -344 | | | 2SA1048(Y,GR) | TRANSISTOR | | |
| Q345, -346 | | | 2SA1309A(Q,R) | TRANSISTOR | | |
| Q347, -348 | | | 2SA933S(Q,R) | TRANSISTOR | | |
| Q349, -350 | | | 2SB941 | TRANSISTOR | | |
| Q351, -352 | | | 2SC1740S(Q,R) | TRANSISTOR | | |
| Q353, -354 | | | 2SC2458(Y,GR) | TRANSISTOR | | |
| Q355, -356 | | | 2SC3311A(Q,R) | TRANSISTOR | | |
| Q357, -358 | | | 2SA1048(Y,GR) | TRANSISTOR | | |
| Q359, -360 | | | 2SA1309A(Q,R) | TRANSISTOR | | |
| Q361, -362 | | | 2SA933S(Q,R) | TRANSISTOR | | |
| Q363, -364 | | | 2SB941 | TRANSISTOR | | |
| Q365, -366 | | | 2SC1740S(Q,R) | TRANSISTOR | | |
| Q367, -368 | | | 2SC2458(Y,GR) | TRANSISTOR | | |
| Q369, -370 | | | 2SC3311A(Q,R) | TRANSISTOR | | |
| Q371, -372 | | | 2SA1048(Y,GR) | TRANSISTOR | | |
| Q373, -374 | | | 2SA1309A(Q,R) | TRANSISTOR | | |
| Q375, -376 | | | 2SA933S(Q,R) | TRANSISTOR | | |
| Q377, -378 | | | 2SB941 | TRANSISTOR | | |
| Q379, -380 | | | 2SC1740S(Q,R) | TRANSISTOR | | |
| Q381, -382 | | | 2SC2458(Y,GR) | TRANSISTOR | | |
| Q383, -384 | | | 2SC3311A(Q,R) | TRANSISTOR | | |
| Q385, -386 | | | 2SA1048(Y,GR) | TRANSISTOR | | |
| Q387, -388 | | | 2SA1309A(Q,R) | TRANSISTOR | | |
| Q389, -390 | | | 2SA933S(Q,R) | TRANSISTOR | | |
| Q391, -392 | | | 2SB941 | TRANSISTOR | | |
| Q393, -394 | | | 2SC1740S(Q,R) | TRANSISTOR | | |
| Q395, -396 | | | 2SC2458(Y,GR) | TRANSISTOR | | |
| Q397, -398 | | | 2SC3311A(Q,R) | TRANSISTOR | | |
| Q399, -400 | | | 2SA1048(Y,GR) | TRANSISTOR | | |
| Q401, -402 | | | 2SA1309A(Q,R) | TRANSISTOR | | |
| Q403, -404 | | | 2SA933S(Q,R) | TRANSISTOR | | |
| Q405, -406 | | | 2SB941 | TRANSISTOR | | |
| Q407, -408 | | | 2SC1740S(Q,R) | TRANSISTOR | | |
| Q409, -410 | | | 2SC2458(Y,GR) | TRANSISTOR | | |
| Q411, -412 | | | 2SC3311A(Q,R) | TRANSISTOR | | |
| Q413, -414 | | | 2SA1048(Y,GR) | TRANSISTOR | | |
| Q415, -416 | | | 2SA1309A(Q,R) | TRANSISTOR | | |
| Q417, -418 | | | 2SA933S(Q,R) | TRANSISTOR | | |
| Q419, -420 | | | 2SB941 | TRANSISTOR | | |
| Q421, -422 | | | 2SC1740S(Q,R) | TRANSISTOR | | |
| Q423, -424 | | | 2SC2458(Y,GR) | TRANSISTOR | | |
| Q425, -426 | | | 2SC3311A(Q,R) | TRANSISTOR | | |
| Q427, -428 | | | 2SA1048(Y,GR) | TRANSISTOR | | |
| Q429, -430 | | | 2SA1309A(Q,R) | TRANSISTOR | | |
| Q431, -432 | | | 2SA933S(Q,R) | TRANSISTOR | | |
| Q433, -434 | | | 2SB941 | TRANSISTOR | | |
| Q435, -436 | | | | | | |