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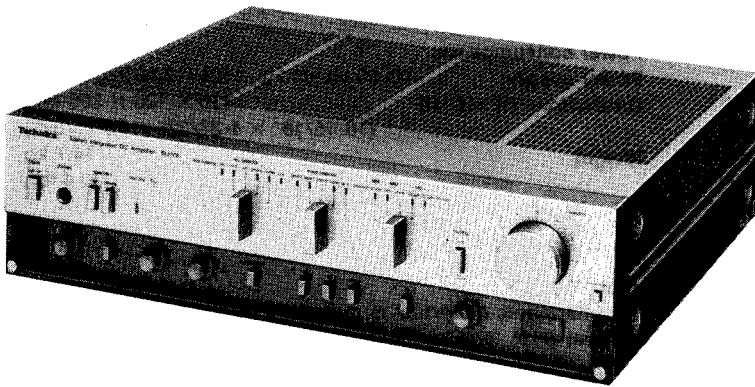
Service Manual

Stereo Integrated Amplifier

SU-V9

[D],[EG],[EK],[EF],[EH],
[EB],[Ei],[EW],[XA],[XL]

SU-V9(K)

[D],[EG],[EK],[EF],
[EH],[Ei],[EW],[XA],[XL]

- * The cabinet and front panel are available in black color and silver types.
- * The black type model is provided with (K) in the Service Manual.

Areas

- * [D] is available in Scandinavia.
- * [EG] is available in F.R. Germany.
- * [EK] is available in United Kingdom.
- * [EF] is available in France.
- * [EH] is available in Holland.
- * [EB] is available in Belgium.
- * [Ei] is available in Italy.
- * [EW] is available in Switzerland.
- * [XA] is available in Southeast Asia, Oceania, Africa, Middle Near East and Central South America.
- * [XL] is available in Australia.

CONTENTS

| | Page |
|--|--------|
| SPECIFICATIONS (English) | 1, 2 |
| TECHNISCHE DATEN (Deutsch) | 2, 3 |
| CARACTERISTIQUES (Français) | 3, 4 |
| ESPECIFICACIONES (Español) | 4 |
| LOCATION OF CONTROLS | 5, 6 |
| DISASSEMBLY INSTRUCTIONS | 6~9 |
| MEASUREMENTS AND ADJUSTMENTS (English) | 9 |
| MESSUNGEN UND JUSTIERUNGEN (Deutsch) | 10 |
| MESURAGES ET REGLAGES (Français) | 10, 11 |
| MEDICIONES Y AJUSTES (Español) | 11 |

English

| | Page |
|---|------------|
| ADJUSTMENT POINTS | 12 |
| REPLACEMENT PARTS LIST | |
| Electric Parts | 13, 14, 33 |
| Cabinet and Chassis Parts | 33, 34 |
| CIRCUIT BOARDS | |
| AND WIRING CONNECTION DIAGRAM | 15~22 |
| BLOCK DIAGRAM | 23~25 |
| SCHEMATIC DIAGRAM | 26~32 |
| EXPLODED VIEWS | 35, 36 |

Specifications (DIN 45 500)

(Specifications are subject to change without notice for further improvement.)

AMPLIFIER SECTION

| | |
|--|--------------------------------|
| 20 Hz~20 kHz continuous power output both channels driven | 2 × 120W (4Ω) 2 × 120W (8Ω) |
| 40 Hz~16 kHz continuous power output both channels driven | 2 × 120W (4Ω) 2 × 120W (8Ω) |
| 1 kHz continuous power output both channels driven | 2 × 120W (4Ω) 2 × 120W (8Ω) |
| Total harmonic distortion | |
| rated power at 20 Hz~20 kHz | 0.007% (4Ω) 0.003% (8Ω) |
| rated power at 40 Hz~16 kHz | 0.007% (4Ω) 0.003% (8Ω) |
| rated power at 1 kHz | 0.007% (4Ω) 0.003% (8Ω) |
| half power at 20 Hz~20 kHz | 0.003% (8Ω) |
| half power at 1 kHz | 0.0007% (8Ω) |
| -26 dB power at 1 kHz | 0.01% (4Ω) |
| 50 mW power at 1 kHz | 0.01% (4Ω) |
| Intermodulation distortion | |
| rated power at 250 Hz: 8 kHz=4:1, 4Ω | 0.01% |
| rated power at 60 Hz: 7 kHz=4:1, SMPTE, 8Ω | 0.007% |

Power bandwidth

both channels driven, -3 dB

5 Hz~70 kHz (4Ω T.H.D 0.03%)

5 Hz~70 kHz (8Ω T.H.D 0.02%)

Residual hum and noise

0.7 mV

Damping factor

40 (4Ω), 80 (8Ω)

Input sensitivity and impedance

PHONO MM

1 mV/47kΩ

2.5 mV/47kΩ

PHONO MC

100 μV/100Ω

250 μV/220Ω

TUNER, AUX

150 mV/33kΩ

TAPE 1 REC/PLAY

170 mV/39kΩ

TAPE 2

150 mV/33kΩ

PHONO maximum input voltage (1 kHz, RMS)

MM (2.5 mV)

170 mV

MC (250 μV)

17 mV

S/N

rated power (4Ω)

PHONO MM (2.5 mV)

79 dB (88 dB, IHF, A)

MC (250 μV)

71 dB (71 dB, IHF, A)

TUNER, AUX, TAPE

91 dB (IHF, A: 103 dB)

-26 dB power (4Ω)

PHONO MM (2.5 mV)

70 dB

MC (250 μV)

68 dB

TUNER, AUX, TAPE

71 dB

Technics

Matsushita Electric Trading Co., Ltd.

P.O. Box 288, Central Osaka Japan

| | | | |
|-------------------------------------|-------------------------------|--|-------------------------------------|
| 50 mW power (4Ω) | | Channel balance, AUX 250 Hz~6,300 Hz | ±1 dB |
| PHONO MM (2.5 mV) | 64 dB | Channel separation, AUX 1 kHz | 55 dB |
| MC (250 μV) | 63 dB | Headphones output level and impedance | 560 mV/330Ω |
| TUNER, AUX, TAPE | 65 dB | Load impedance | |
| Frequency response | | MAIN or REMOTE | 4Ω~16Ω |
| PHONO | RIAA standard curve | MAIN and REMOTE | 8Ω~16Ω |
| | ±0.2 dB (30 Hz~15 kHz) | ■ GENERAL | |
| TUNER, AUX, TAPE | 0.5 Hz~170 kHz (-3 dB) | | |
| | +0 dB, -0.2 dB (20 Hz~20 kHz) | Power consumption | 850W |
| Tone controls | | Power supply | AC 50 Hz/60 Hz, 110V/120V/220V/240V |
| BASS | 50 Hz, +7 dB~ -7 dB | Dimensions (W×H×D) | 430 × 120 × 350 mm |
| TREBLE | 20 kHz, +10 dB~ -10 dB | | (16-15/16" × 4-23/32" × 13-25/32") |
| SUPER BASS | 20 Hz, +0 dB~ +10 dB | Weight | 14.7 kg |
| Subsonic filter | 20 Hz, -12 dB/oct. | | (32.4 lb.) |
| High-cut filter | 7 kHz, -6 dB/oct. | | |
| Loudness control (volume at -30 dB) | 50 Hz, +7 dB | | |
| Muting | -20 dB | | |
| Output voltage and impedance | | Note: | |
| REC OUT | 150 mV | Total harmonic distortion is measured by the digital spectrum analyzer (H.P. 3045 system). | |
| REC/PLAY | 30 mV/82kΩ | | |

Deutsch

TECHNISCHE DATEN (Spezifikationen Können infolge von Verbesserungen ohne Ankündigung geändert werden.) (DIN 45 500)

■ VERSTÄRKERTEIL

| | | | |
|--|--------------------|---|---------------------------------|
| Dauerton-Ausgangsleistung bei 20 Hz ~ 20 kHz | | Maximale TA-Eingangsspannung (1 kHz, eff.) | |
| beide Kanäle angesteuert | 2 × 120W (4 Ω) | magnetisch (MM) (2,5 mV) | 170 mV |
| | 2 × 120W (8 Ω) | dynamisch (MC) (250 μV) | 17 mV |
| Dauerton-Ausgangsleistung bei 40 Hz ~ 16 kHz | | Geräuschabstand | |
| beide Kanäle angesteuert | 2 × 120W (4 Ω) | Nennleistung (4 Ω) | |
| | 2 × 120W (8 Ω) | Phono - magnetisch (PHONO MM) (2,5 mV) | 79 dB (88 dB nach IHF, A) |
| Dauerton-Ausgangsleistung bei 1 kHz | | Phono - dynamisch (PHONO MC) (250 μV) | 71 dB (71 dB nach IHF, A) |
| beide Kanäle angesteuert | 2 × 120W (4 Ω) | Tuner, Aux, Tape | 91 dB (nach IHF, A: 103 dB) |
| | 2 × 120W (8 Ω) | -26 dB Leistung (4 Ω) | |
| Gesamtklirrfaktor | | Phono - magnetisch (PHONO MM) (2,5 mV) | 70 dB |
| Nennleistung bei 20 Hz ~ 20 kHz | 0,007% (4 Ω) | Phono - dynamisch (PHONO MC) (250 μV) | 68 dB |
| | 0,003% (8 Ω) | Tuner, Aux, Tape | 71 dB |
| Nennleistung bei 40 Hz ~ 16 kHz | 0,007% (4 Ω) | 50 mW Leistung (4 Ω) | |
| | 0,003% (8 Ω) | Phono - magnetisch (PHONO MM) (2,5 mV) | 64 dB |
| Nennleistung bei 1 kHz | 0,007% (4 Ω) | Phono - dynamisch (PHONO MC) (250 μV) | 63 dB |
| | 0,003% (8 Ω) | Tuner, Aux, Tape | 65 dB |
| halbe Nennleistung bei 20 Hz ~ 20 kHz | 0,003% (8 Ω) | Frequenzgang | |
| halbe Nennleistung bei 1 kHz | 0,0007% (8 Ω) | Phono | RIAA-Standardkurve |
| -26 dB Leistung bei 1 kHz | 0,01% (4 Ω) | | ±0,2 dB (30 Hz ~ 15 kHz) |
| 50 mW Leistung bei 1 kHz | 0,01% (4 Ω) | Tuner, Aux, Tape | 0,5 Hz ~ 170 kHz (-3 dB) |
| Intermodulationsfaktor | | | +0 dB, -0,2 dB (20 Hz ~ 20 kHz) |
| Nennleistung bei 250 Hz: 8 kHz = 4:1, 4 Ω | 0,01% | Klangregler | |
| Nennleistung bei 60 Hz: 7 kHz = 4:1, nach SMPTE, 8 Ω | 0,007% | Baßregler (BASS) | 50 Hz, +7 dB ~ -7 dB |
| | | Höhenregler (TREBLE) | 20 kHz, +10 dB ~ -10 dB |
| Leistungsbandbreite | | SUPER BASS | 20 Hz, +0 dB ~ +10 dB |
| beide Kanäle angesteuert bei -3 dB | | Tiefenfilter | 20 Hz, -12 dB/Okt. |
| 5 Hz ~ 70 kHz (4 Ω T.H.D 0,03%) | | Rauschfilter | 7 kHz, -6 dB/Okt. |
| 5 Hz ~ 70 kHz (8 Ω T.H.D 0,02%) | | Gehörreichte Lautstärkekorrektur (Loudness) | |
| Restbrumm und Geräusch | 0,7 mV | (bei -30 dB Ausgangsleistung) | 50 Hz, +7 dB |
| Dämpfungsfaktor | 40 (4 Ω), 80 (8 Ω) | Tondämpfung | -20 dB |
| Eingangsempfindlichkeit und -impedanz | | Ausgangsspannung und -impedanz | |
| Phono - magnetisch (PHONO MM) | 1 mV/47 kΩ | Aufnahmeausgang (REC OUT) | 150 mV |
| | 2,5 mV/47 kΩ | Aufnahme/Wiedergabe (REC/PLAY) | 30 mV/82 kΩ |
| Phono - dynamisch (PHONO MC) | 100 μV/100 Ω | Kanalabweichung (Aux, 250 Hz ~ 6300 Hz) | ±1 dB |
| | 250 μV/220 Ω | Übersprechdämpfung (Aux, 1 kHz) | 55 dB |
| Tuner, Aux | 150 mV/33 kΩ | Kopfhörerpegel und -impedanz | 560 mV/330 Ω |
| Tape 1 Aufnahme/Wiedergabe (TAPE 1 REC/PLAY) | 170 mV/39 kΩ | | |
| Tape 2 (TAPE 2) | 150 mV/33 kΩ | | |

Service Manual

Stereo Integrated DC Amplifier

SU-V9

[PA],[PE]

Areas

[PA] is available in far East PX.

[PE] is available in European Military.

Please use this manual together with the service manual for Model No. SU-V9/(K),
Order No. SD81102068C8.

CHANGES

REPLACEMENT PARTS LIST

Note: 1. The "S" mark is service standard parts and may differ from production parts.

| Ref. No. | Change of Part No. | | Part Name & Description | Per Set (Pcs.) | | Remarks |
|---------------------------|-----------------------------|-----------------------|-------------------------|-------------------|--|---------|
| | SU-V9/(K) (SD81102068C8) | → SU-V9 [PA], [PE] | | | | |
| CABINET and CHASSIS PARTS | | | | | | |
| 1 | SGWUV9M ○ | SGWUV9M | Front Panel Ass'y | 1 | | |
| | SGWUV9KE [K] | | | | | |
| 6 | SUB53-2 ○ | SUB53-2 | Hinge, Tinted Glass | 1 | | |
| | SUB53 [K] | | | | | |
| 12 | SGX915 ○ | SGX915 | Ornament, Bottom | 1 | | |
| | SGX915-1 [K] | | | | | |
| 13 | SUB51-2 ○ | SUB51-2 | Hinge, Operation Lever | 1 | | |
| | SUB51 [K] | | | | | |
| 38 | SKC850S1 ○ | SKC850S1 | Cabinet Cover | 1 | | |
| | SKC850B1 [K] | | | | | |
| 49 | SGPUV9E | SGP2850-2A | Rear Panel | 1 | | |
| | SGP2850-4A [D, EW] | | | | | |
| | SGPUV9L [XL] | | | | | |
| | SGP2850-2A [XA] | | | | | |
| 51 | SHR127 | SHR127 | Bushing AC Cord | 1 | | |
| | SHR129 [EK] | | | | | |
| | SHR131 [XL] | | | | | |
| 52 | SJA97 | RJA52Z | AC Cord | 1 | | ⑤ |
| | QFC1205M [EK] | | | | | |
| | SJA111 [EW, XA] | | | | | |
| | QFC1207MA [XL] | | | | | |
| 53 | SJS601-2 [XA] | SJS601-2 | Socket, AC Outlet | 1 | | |
| 64 | RJT202B [XL] | Deletion | ----- | 0 | | |

| Ref. No. | Change of Part No. | | Part Name & Description | Per Set (Pcs.) | | Remarks |
|-------------------------|-----------------------------|---------------------|-----------------------------------|----------------|--|---------|
| | SU-V9/(K) (SD81102068C8) | SU-V9 [PA], [PE] | | | | |
| SCREWS, WASHERS and NUT | | | | | | |
| N15 | XTB4+8BFN ○ | XTB4+8BFZ | Screw, Tapping ⊕ 4×8 | 8 | | Ⓢ |
| | XTB4+8BFZ (K) | | | | | |
| N35 | SNE2083-1 ○ | SNE2083-1 | Screw, Tinted Glass | 2 | | |
| | SNE2083 (K) | | | | | |
| N36 | XWC4BVW [XL] | Deletion | | 0 | | |
| N37 | XSN3+8BNS [XL] | Deletion | | 0 | | |
| N38 | XWA3BFN [XL] | Deletion | | 0 | | |
| N39 | XWC3B [XL] | Deletion | | 0 | | |
| ACCESSORIES | | | | | | |
| A1 | SJP5213-1 [XA] | RJP120ZBS | Plug Adapter, AC Power | 1 | | |
| A2 | SJP5215 [XA] | Deletion | | 0 | | |
| A3 | SQF10995 | SQF10993 | Instructions Book, Printed Matter | 1 | | |
| | SQF10997 [EK, XL] | | | | | |
| | SQF10999 [Ei] | | | | | |
| | SQF11001 [XA] | | | | | |
| | SQF11083 [EG] | | | | | |
| PACKING PARTS | | | | | | |
| P1 | SPP701 ○ | SPP701 | Polyethylene Bag | 1 | | |
| | SPP689 (K) | | | | | |
| P4 | SPG3333 | SPG3333 | Carton Box | 1 | | |
| | SPG3335 [EF] | | | | | |
| P5 | SGK1413 (K) | Deletion | | 0 | | |

| | |
|-----------------------------|--------------------------|
| Lautsprecherimpedanz | |
| MAIN oder REMOTE | 4 Ω ~ 16 Ω |
| MAIN und REMOTE | 8 Ω ~ 16 Ω |

| | |
|----------------------------|--------------------|
| Abmessungen (B×H×T) | 430 × 120 × 350 mm |
| Gewicht | 14,7 kg |

■ ALLGEMEINE DATEN

| | |
|--------------------------|---|
| Leistungsaufnahme | 850 W |
| Netzspannung | Wechselstrom 50 Hz/60 Hz, 110V/120V/220V/240V |

Bemerkung:
Der Gesamtklirrfaktor wurde mit einem digitalen Rauschspektrometer (Anlage H.P. 3045) gemessen.

Français

CARACTERISTIQUES (DIN 45 500)

(Sujet à changement sans préavis.)

■ SECTION AMPLIFICATEUR

| | |
|--|--|
| Puissance de sortie continue de 20 Hz~20 kHz, | |
| les deux canaux en circuit | 2 × 120W (4 Ω) 2 × 120W (8 Ω) |
| Puissance de sortie continue de 40 Hz~16 kHz, | |
| les deux canaux en circuit | 2 × 120W (4 Ω) 2 × 120W (8 Ω) |
| Puissance de sortie continue à 1 kHz | |
| les deux canaux en circuit | 2 × 120W (4 Ω) 2 × 120W (8 Ω) |
| Distorsion harmonique totale | |
| à puissance nominale (20 Hz~20 kHz) | 0,007% (4 Ω) 0,003% (8 Ω) |
| à puissance nominale (40 Hz~16 kHz) | 0,007% (4 Ω) 0,003% (8 Ω) |
| à puissance nominale (1 kHz) | 0,007% (4 Ω) 0,003% (8 Ω) |
| à demi-puissance (20 Hz~20 kHz) | 0,003% (8 Ω) |
| à demi-puissance (1 kHz) | 0,0007% (8 Ω) |
| puissance de -26 dB à 1 kHz | 0,01% (4 Ω) |
| puissance de 50 mW à 1 kHz | 0,01% (4 Ω) |
| Distorsion d'intermodulation | |
| à puissance nominale à 250 Hz: 8 kHz=4:1, 4 Ω | 0,01% |
| à puissance nominale à 60 Hz: 7 kHz=4:1, SMPTE, 8 Ω | 0,007% |

| | |
|--|------------------------------------|
| Réponse de fréquences | |
| les deux canaux en circuit, -3 dB | |
| 5 Hz~70 kHz (4 Ω T.H.D 0,03%) | |
| 5 Hz~70 kHz (8 Ω T.D.D 0,02%) | |
| Bruit et ronflement résiduels | 0,7 mV |
| Coefficient d'amortissement | 40 (4 Ω), 80 (8 Ω) |
| Sensibilité et impédance d'entrée | |

| | |
|--|--|
| PHONO, AIMANT MOBILE (PHONO MM) | 1 mV/47k Ω 2,5 mV/47k Ω |
| PHONO, BOBINE MOBILE (PHONO MC) | 100 μ V/100 Ω 250 μ V/220 Ω |
| SYNTONISATEUR, AUX (TUNER, AUX) | 150 mV/33k Ω |
| BANDE 1, ENREGISTREMENT/LECTURE | |
| (TAPE 1 REC/PLAY) | 170 mV/39k Ω |
| BANDE 2 (TAPE 2) | 150 mV/33k Ω |
| PHONO (tension d'entrée maximum, 1 kHz RMS) | |
| AIMANT MOBILE (MM) (2,5 mV) | 170 mV |
| BOBINE MOBILE (MC) (250 μ V) | 17 mV |

| | |
|--|------------------------|
| Signal/Bruit | |
| à puissance nominale (4 Ω) | |
| PHONO, AIMANT MOBILE (PHONO MM) (2,5 mV) | 79 dB (88 dB, IHF, A) |
| PHONO, BOBINE MOBILE (PHONO MC) (250 μV) | 71 dB (71 dB, IHF, A) |
| SYNTONISATEUR, AUX, BANDE | |
| (TUNER, AUX, TAPE) | 91 dB (IHF, A: 103 dB) |
| puissance de -26 dB (4Ω) | |
| PHONO, AIMANT MOBILE (PHONO MM) (2,5 mV) | 70 dB |

| | |
|--|-------|
| PHONO, BOBINE MOBILE (PHONO MC) (250 μV) | 68 dB |
|--|-------|

| | |
|--|-------|
| SYNTONISATEUR, AUX, BANDE | |
| (TUNER, AUX, TAPE) | 71 dB |
| puissance de 50 mW (4Ω) | |

| | |
|---|-------|
| PHONO, AIMANT MOBILE (PHONO MM) (2,5 mV) | 64 dB |
|---|-------|

| | |
|--|-------|
| PHONO, BOBINE MOBILE (PHONO MC) (250 μV) | 63 dB |
| SYNTONISATEUR, AUX, BANDE | |
| (TUNER, AUX, TAPE) | 65 dB |

| | |
|---|--|
| Réponse de fréquence | |
| PHONO | Courbe nominale RIAA $\pm 0,2$ dB (30 Hz~15 kHz) |
| SYNTONISATEUR, AUX, BANDE (TUNER, AUX, TAPE) | 0,5 Hz~170 kHz (-3 dB) +0 dB, -0,2 dB, (20 Hz~20 kHz) |

| | |
|---|------------------------|
| Régla de la tonalité | |
| BASSES (BASS) | 50 Hz, +7 dB~ -7 dB |
| AIGUS (TREBLE) | 20 kHz, +10 dB~ -10 dB |
| SUPER BASS | 20 Hz, +0 dB~ +10 dB |
| Filtre subsonique | 20 Hz, -12 dB/oct. |
| Filtre coupe-hauts | 7 kHz, -6 dB/oct. |
| Compensateur physiologique (volume à -30 dB) | 50 Hz, +7 dB -20 dB |

| | |
|--|---------------------|
| Régla silencieux | -20 dB |
| Tension de sortie et impédance | |
| SORTIE ENREGISTREMENT (REC OUT) | 150 mV |
| ENREGISTREMENT/LECTURE (REC/PLAY) | 30 mV/82k Ω |
| Equilibrage des canaux, AUX 250 Hz~6 300 Hz | ± 1 dB |
| Séparation des canaux, AUX 1 kHz | 55 dB |
| Niveau de sortie des casques et impédance | 560 mV/330 Ω |
| Impédance de charge | |

| | |
|--|-------------------------|
| PRINCIPALE ou AUXILIAIRE (MAIN or REMOTE) | 4 Ω ~16 Ω |
|--|-------------------------|

| | |
|---|-------------------------|
| PRINCIPALE et AUXILIAIRE (MAIN and REMOTE) | 8 Ω ~16 Ω |
|---|-------------------------|

■ DIVERS

| | |
|----------------------------|-------------------------------------|
| Consommation | 850W |
| Alimentation | CA 50 Hz/60 Hz, 110V/120V/220V/240V |
| Dimensions (L×H×Pr) | 430 × 120 × 350 mm |
| Poids | 14,7 kg |

Nota:

La Société NATIONAL-PANASONIC-FRANCE, importateur du matériel MATSUSHITA-ELECTRIC déclare que cet appareil est conforme aux prescriptions de la directive 76/889/C.E.E. (arrêté 14 Janvier 1980).

Remarque:

On mesure la distorsion harmonique totale au moyen d'un analyseur de spectre digital (Système H.P. 3045).

ESPECIFICACIONES

(Estas especificaciones están sujetas a cualquier cambio sin previo aviso.)

(DIN 45 500)

■ SECCION AMPLIFICADOR

| | |
|--|--|
| Potencia continua de 20 Hz~20 kHz en ambos canales | 2 × 120W (4Ω) 2 × 120W (8Ω) |
| Potencia continua de 40 Hz~16 kHz en ambos canales | 2 × 120W (4Ω) 2 × 120W (8Ω) |
| Potencia continua de 1 kHz en ambos canales | 2 × 120W (4Ω) 2 × 120W (8Ω) |
| Distorsión armónica total | |
| potencia de régimen a 20 Hz~20 kHz | 0,007% (4Ω) 0,003% (8Ω) |
| potencia de régimen a 40 Hz~16 kHz | 0,007% (4Ω) 0,003% (8Ω) |
| potencia de régimen a 1 kHz | 0,007% (4Ω) 0,003% (8Ω) |
| mitad de potencia a 20 Hz~20 kHz | 0,003% (8Ω) |
| mitad de potencia a 1 kHz | 0,0007% (8Ω) |
| -26 dB de potencia a 1 kHz | 0,01% (4Ω) |
| 50 mW de potencia a 1 kHz | 0,01% (4Ω) |
| Distorsión por intermodulación | |
| potencia de régimen a 250 Hz: 8 kHz=4:1, 4Ω | 0,01% |
| potencia de régimen a 60 Hz: 7 kHz=4:1, SMPTE, 8Ω | 0,007% |
| Ancho de banda de potencia con ambos canales, -3 dB | 5 Hz~70 kHz (4Ω T.H.D 0,03%) 5 Hz~70 kHz (8Ω T.H.D 0,02%) |
| Zumbido residual y ruido | 0,7 mV |
| Factor de amortiguamiento | 40 (4Ω), 80 (8Ω) |
| Sensibilidad e impedancia de entrada | |
| TOCADISC. I. M. (PHONO MM) | 1 mV/47kΩ 2,5 mV/47kΩ |
| TOCADISC. B. M. (PHONO MC) | 100 μV/100Ω 250 μV/220Ω |
| SINTON., AUX. (TUNER, AUX) | 150 mV/33kΩ |
| GRAB. 1 GRAB./REPR. (TAPE 1 REC/PLAY) | 170 mV/39kΩ |
| GRAB. 2 (TAPE 2) | 150 mV/33kΩ |
| Voltaje máximo de entrada de PHONO (1 kHz, RMS) | |
| I. M. (MM) (2,5 mV) | 170 mV |
| B. M. (MC) (250 μV) | 17 mV |
| Relación de señal a ruido | |
| potencia de régimen (4Ω) | |
| TOCADISC. I. M. (PHONO MM) (2,5 mV) | 79 dB (88 dB, IHF, A) |

TOCADISC. B. M. (PHONO MC) (250 μV)

71 dB (71 dB, IHF, A)

SINTON., AUX., GRAB. (TUNER, AUX, TAPE)

91 dB (IHF, A: 103 dB)

-26 dB de potencia (4Ω)

TOCADISC. I. M. (PHONO MM) (2,5 mV)

70 dB

TOCADISC. B. M. (PHONO MC) (250 μV)

68 dB

SINTON., AUX., GRAB. (TUNER, AUX, TAPE)

71 dB

50 mW de potencia (4Ω)

TOCADISC. I. M. (PHONO MM) (2,5 mV)

64 dB

TOCADISC. B. M. (PHONO MC) (250 μV)

63 dB

SINTON., AUX., GRAB. (TUNER, AUX, TAPE)

65 dB

Respuesta de frecuencia

TOCADISC. (PHONO)

curva RIAA estándar

±0,2 dB (30 Hz~15 kHz)

SINTON., AUX., GRAB. (TUNER, AUX, TAPE)

0,5 Hz~170 kHz (-3 dB)

+0 dB, -0,2 dB (20 Hz~20 kHz)

Controles de tono

BAJOS (BASS)

50 Hz, +7 dB~-7 dB

AGUDOS (TREBLE)

20 kHz, +10 dB~-10 dB

SUPER BASS

20 Hz, +0 dB~+10 dB

Filtro subsónico

20 Hz, -12 dB/oct.

Filtro de corte de altos

7 kHz, -6 dB/oct.

Control de sonoridad (volumen a -30 dB)

50 Hz, +7 dB

Silenciamiento

-20 dB

Voltaje e impedancia de salida

SAL. GRAB. (REC OUT)

150 mV

GRAB./REPR. (REC/PLAY)

30 mV/82kΩ

Equilibrio de canales, AUX 250 Hz~6 300 Hz

±1 dB

Separación de canales, AUX 1 kHz

55 dB

Impedancia y nivel de salida de los auriculares

560 mV/330Ω

Impedancia de carga

MAIN o REMOTE

4Ω~16Ω

MAIN y REMOTE

8Ω~16Ω

■ GENERAL

Consumo de energía

850W

Alimentación de energía

CA 50 Hz/60 Hz, 110V/120V/220V/240V

Dimensiones (An.×Al.×Prof.)

430 × 120 × 350 mm

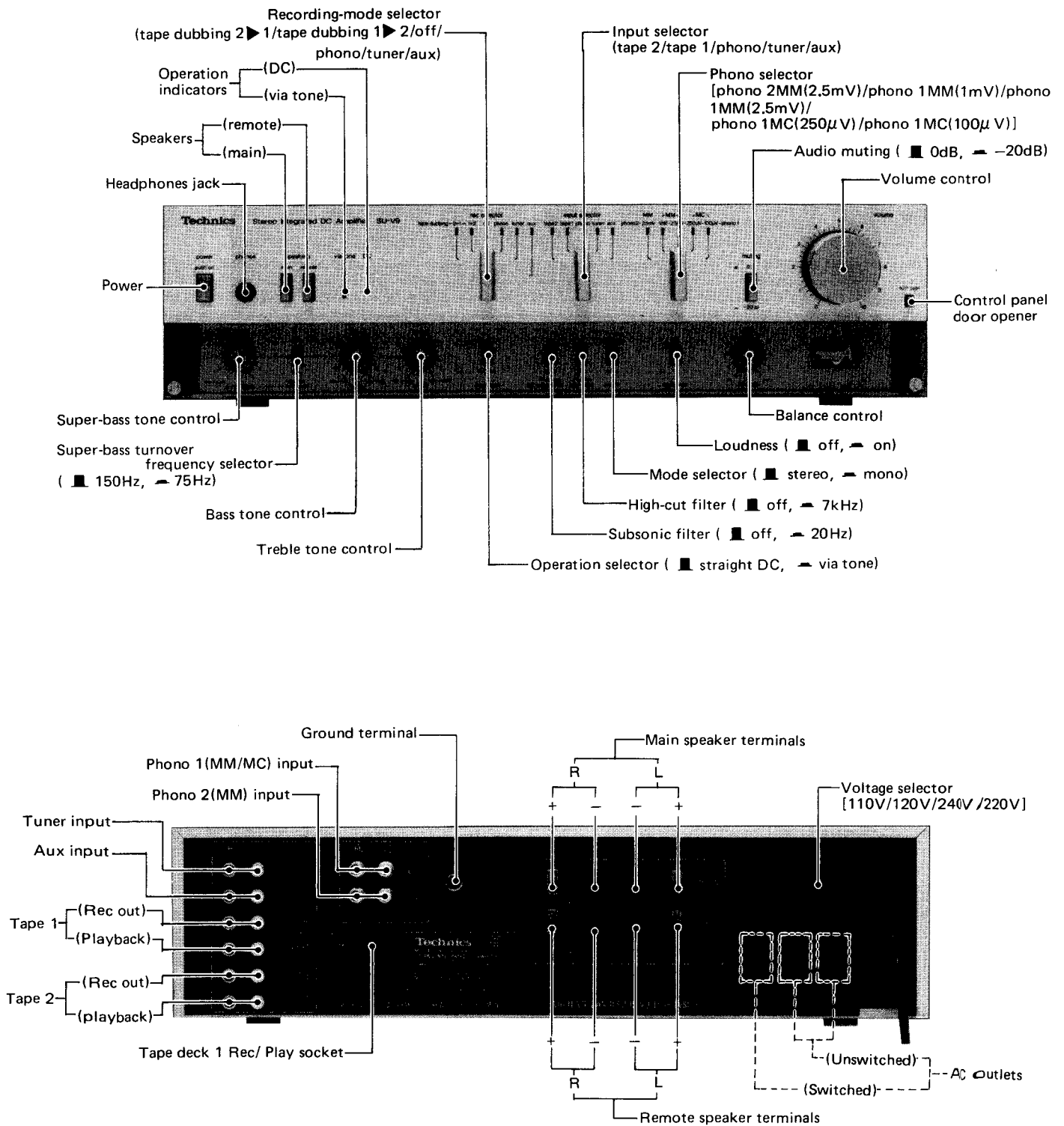
Peso

14,7 kg

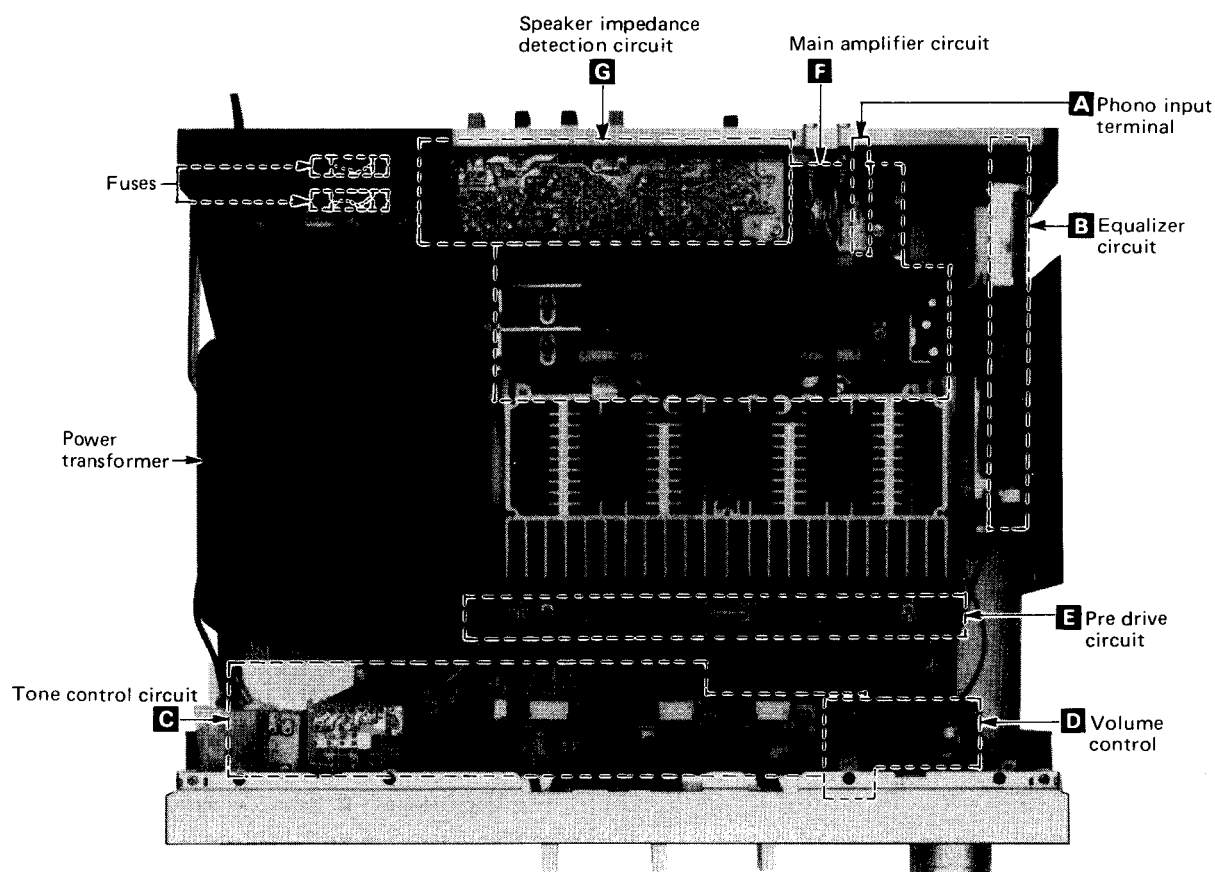
Nota:

La distorsión armónica total se mide con el analizador de espectro digital (sistema H.P. 3045).

LOCATION OF CONTROLS



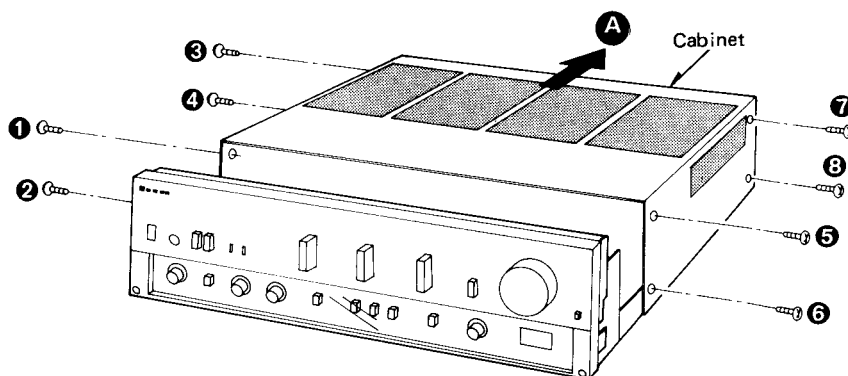
* The product for destination [XA] is equipped with AC outlets.



DISASSEMBLY INSTRUCTIONS

• How to remove the cabinet

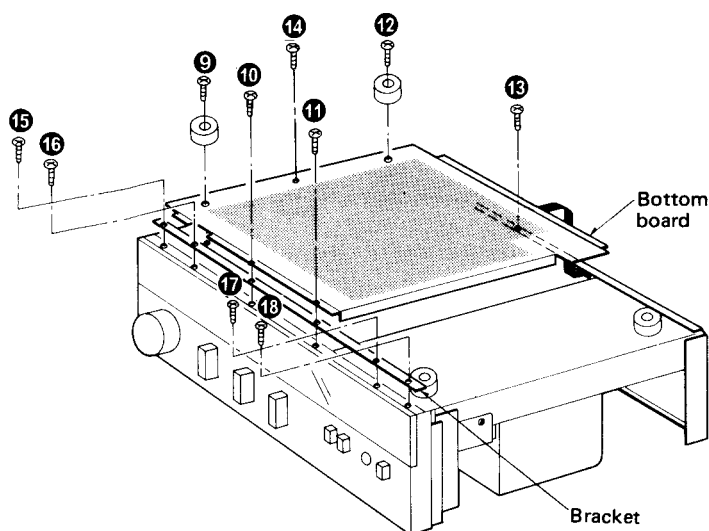
1. Remove the 8 setscrews (Fig. 1: ① ~ ⑧) on the side of the cabinet.
2. Remove the cabinet in the direction of arrow **A** (Fig. 1)



[Fig. 1]

• How to remove the bottom board

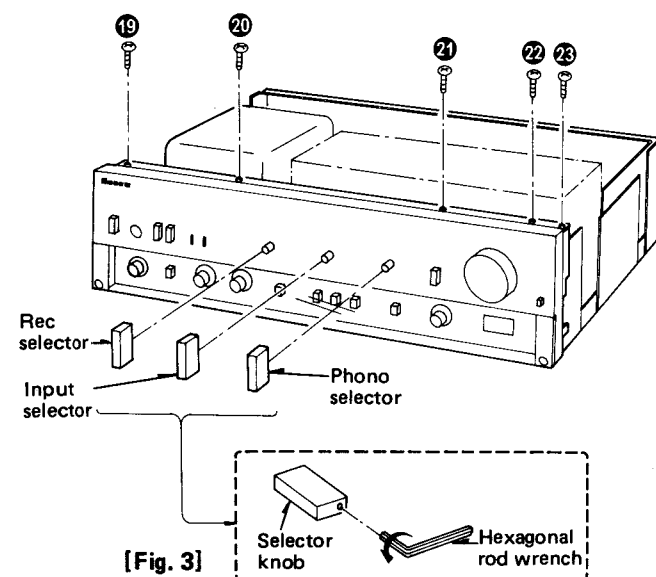
1. Remove the 6 setscrews (Fig. 2: ⑨ ~ ⑭) on the bottom board.



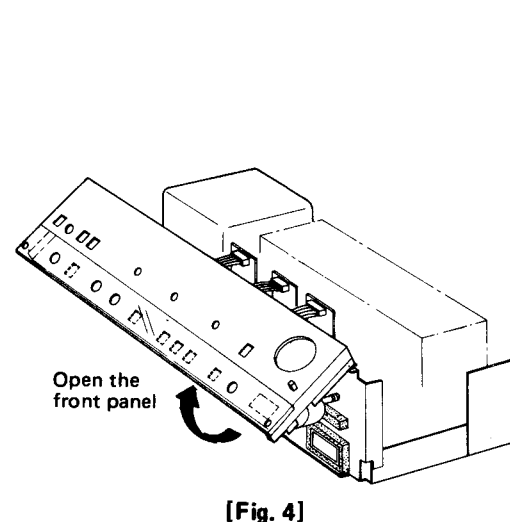
[Fig. 2]

● How to remove the front panel

1. Remove the cabinet and bottom board.
2. Remove the 3 selector knobs. (Use hexagonal rod wrench for M3 screws.) Refer to Fig. 3.

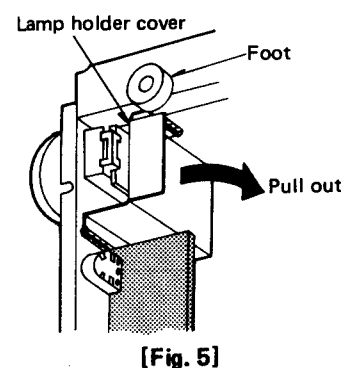


3. Remove the 9 setscrews (Fig. 2 15 ~ 18 and Fig. 3 19 ~ 23) of the front panel.
4. Remove the front panel refer to fig. 4.

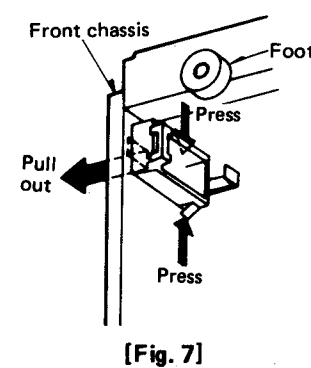
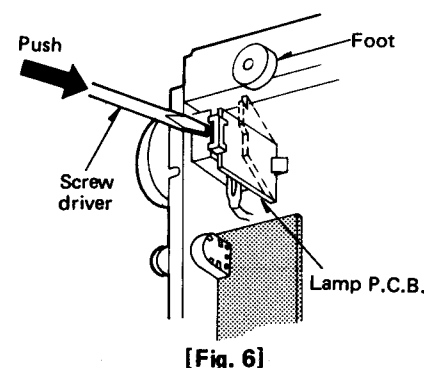


● How to remove the lamp holder of "New Class A"

1. Remove the cabinet.
2. Remove the front panel and bottom board.
3. Remove the lamp holder cover.
4. Remove the lamp P.C.B. by using a screwdriver (See

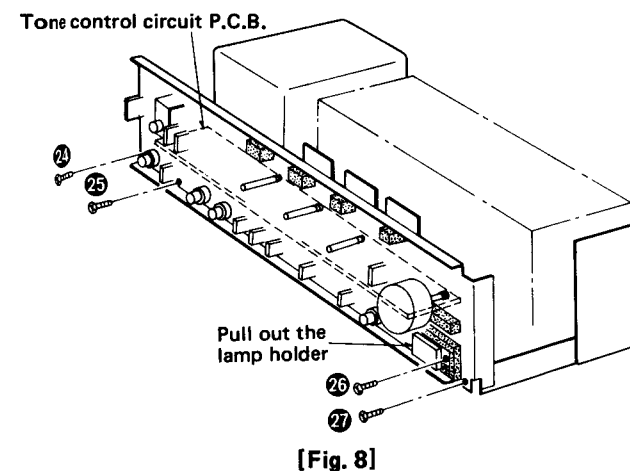


5. Press the lugs and pull out the part from the chassis to provide easy access for a screwdriver (See Fig. 7)

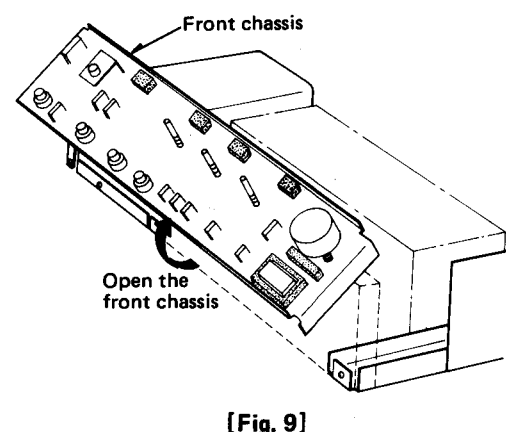


● How to check the tone control circuit P.C.B.

1. Remove the cabinet.
2. Remove the front panel and bottom board.
3. Remove the lamp holder. (Refer to "How to remove lamp holder.")

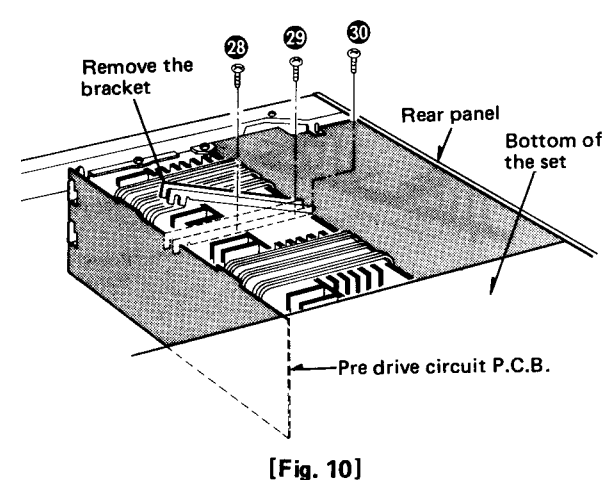


4. Remove the 4 setscrews (Fig. 8: 24 ~ 27)
5. Open the front chassis in the direction of the arrow so that the tone control circuit P.C.B. can be checked. (see Fig. 9)

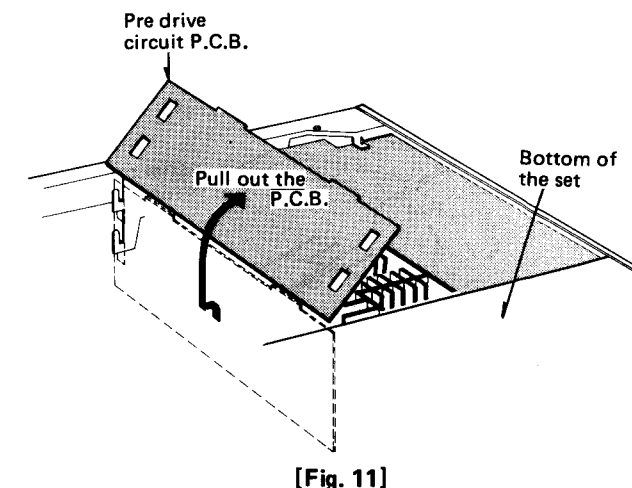


● How to check the pre drive circuit P.C.B.

1. Remove the cabinet and bottom board.
2. Remove the 3 setscrews (Fig. 10: 28 ~ 30) of the bracket.

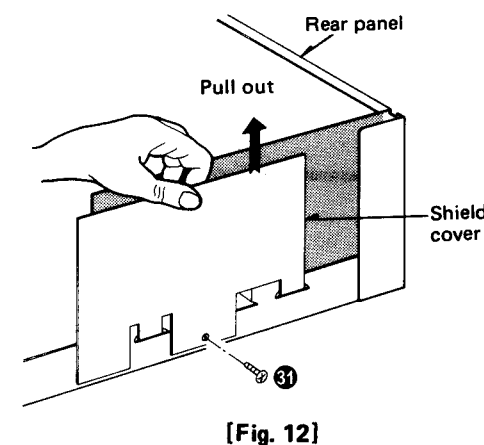


3. Pull out the pre drive circuit P.C.B. in the direction of the arrow (See Fig. 11)

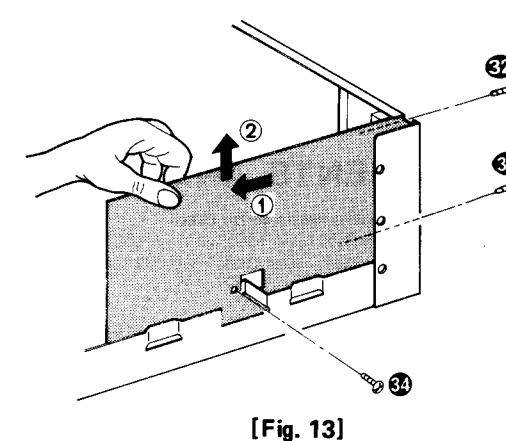


● How to remove the equalizer circuit P.C.B.

1. Remove the cabinet.
2. Remove the setscrew (Fig. 12: 31) of the shield cover.
3. Remove the shield cover.

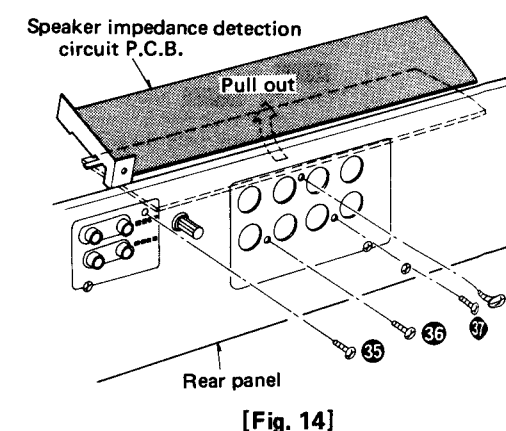


4. Remove the 3 setscrews (Fig. 13: 32 ~ 34) and then pull out the equalizer circuit P.C.B. from rear panel in the direction of the arrows. (See Fig. 13)



● How to remove the speaker impedance detection circuit P.C.B.

1. Remove the cabinet.
2. Remove the 4 setscrews (Fig. 14: 35 ~ 38) of the rear panel.
3. Remove the speaker impedance detection circuit P.C.B. in the direction of the arrow. (See Fig. 14)

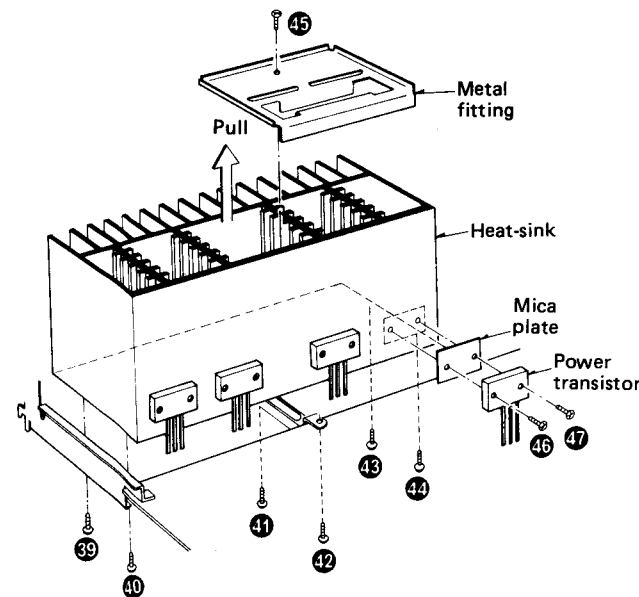


● How to remove the Power transistor

1. Remove the cabinet and bottom board.
2. Unsolder the 4 power transistors as shown in Fig. 15.
3. Remove the 6 setscrew (Fig. 16: 39 ~ 43) of the heat sink.
4. Remove the setscrew (Fig. 16: 45) of the metal fitting.
5. Remove the transistors along with the heat-sink from the printed circuit board.

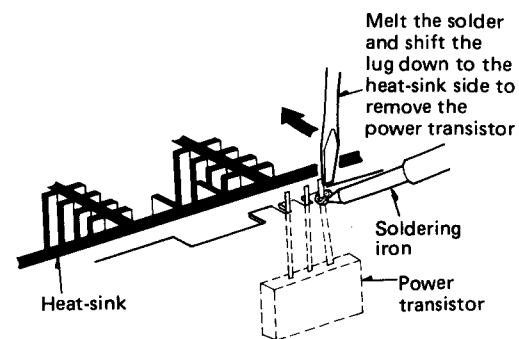
6. Remove the 2 setscrews (Fig. 16: 46, 47) used to secure the power transistors on the heat-sink, and then pull out the power transistor.

7. When installing the power transistor, apply heat diffusing agent (silicon powder, etc.) to both sides of the mica plate, and secure it on the heat-sink with setscrews. Next, secure the heat-sink on the chassis and then solder the power transistor.

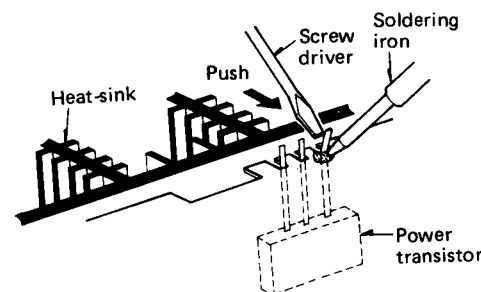


[Fig. 16]

Note: When soldering the power transistor, press the transistor legs against the printed board. (See Fig. 17)



When unsolder the power transistor
[Fig. 15]



When soldering the power transistor
[Fig. 17]

MEASUREMENTS AND ADJUSTMENTS — English

• Setting of controls and instruments to be used.

- Before the adjustment, VR301, VR302 and VR601 should be turned to counter-clockwise direction, VR701 and VR702 should be turned to center position.
- Sound volume ... 0 (minimum)
- Main speaker switch ... on
- Remote speaker switch ... off
- Operation selector ... straight DC
- DC voltmeter (capable to measure 5mV)

| No. | Item | Connection of DC voltmeter | VR adjusted | Adjustment | | | | | | | | | | | | | | | | | | |
|-------------------------|--|---|--|---|------|------------|---------------|--------|------------------|--------------|-------|----------------|---------|------------------|--------------|-------|----------------|-------------------------|------------------|--------------|-------|----------------|
| 1 | Adjustment of load impedance detection circuit | <ul style="list-style-type: none">* Connect a load with 6.5Ω (1/2W, carbon, resistor) or series-connected 3.3Ω and 3.3Ω (1/2W, ±5%) to the "main" speaker terminal. (both L and R channel) (Fig. 18)* Connect a DC voltmeter between TP701 and chassis. (L ch.)* Connect a DC voltmeter between TP702 and chassis. (Rch.)* Connect TP703 and chassis. | VR701 (L channel) VR702 (R channel) | <ol style="list-style-type: none">1. Completely turn VR701 clockwise.2. Adjust VR702 so that the voltage of is -0.1V.3. Adjust VR701 so that the voltage of is 0V. | | | | | | | | | | | | | | | | | | |
| 2 | Supply voltage adjustment & check | <ul style="list-style-type: none">* Connect voltmeter to Q327 (Corrector) and TP502.* Set the speaker selector to "main" when measuring the voltage.* If power supply of the set is ON, changing the load impedance will not cause alteration of supply voltage. So, turn off power supply or shift the speaker selector to other position.* With speaker selector set at main and remote, the voltage at 4 ~ 6Ω is indicated. | VR601 | <ol style="list-style-type: none">1. Connect 8Ω load to speaker terminal.2. Adjust VR601 so that voltage is +54.5V.3. Load resistance to speaker terminal and output voltage at each test point are shown below. <table><thead><tr><th>Load</th><th>Test point</th><th>Specification</th></tr></thead><tbody><tr><td rowspan="2">4~6.5Ω</td><td>Q327 (collector)</td><td>45.0 ~ 46.0V</td></tr><tr><td>TP503</td><td>-45.5 ~ -46.5V</td></tr><tr><td rowspan="2">6.6~16Ω</td><td>Q327 (collector)</td><td>54.0 ~ 55.0V</td></tr><tr><td>TP503</td><td>-54.5 ~ -55.5V</td></tr><tr><td rowspan="2">Speaker switch to "off"</td><td>Q327 (collector)</td><td>54.0 ~ 55.0V</td></tr><tr><td>TP503</td><td>-54.5 ~ -55.5V</td></tr></tbody></table> | Load | Test point | Specification | 4~6.5Ω | Q327 (collector) | 45.0 ~ 46.0V | TP503 | -45.5 ~ -46.5V | 6.6~16Ω | Q327 (collector) | 54.0 ~ 55.0V | TP503 | -54.5 ~ -55.5V | Speaker switch to "off" | Q327 (collector) | 54.0 ~ 55.0V | TP503 | -54.5 ~ -55.5V |
| Load | Test point | Specification | | | | | | | | | | | | | | | | | | | | |
| 4~6.5Ω | Q327 (collector) | 45.0 ~ 46.0V | | | | | | | | | | | | | | | | | | | | |
| | TP503 | -45.5 ~ -46.5V | | | | | | | | | | | | | | | | | | | | |
| 6.6~16Ω | Q327 (collector) | 54.0 ~ 55.0V | | | | | | | | | | | | | | | | | | | | |
| | TP503 | -54.5 ~ -55.5V | | | | | | | | | | | | | | | | | | | | |
| Speaker switch to "off" | Q327 (collector) | 54.0 ~ 55.0V | | | | | | | | | | | | | | | | | | | | |
| | TP503 | -54.5 ~ -55.5V | | | | | | | | | | | | | | | | | | | | |
| 3 | Adjustment of I _{CQ} | (L channel) Between A and B (minus probe) (R channel) Between C and D (minus probe) | VR301 (L channel) VR302 (R channel) | <ol style="list-style-type: none">1. Set the main and remote speaker switches to "off" position.2. Adjust VR301 and VR302 so that the voltage is 1mV about 1 min. after power supply ON. | | | | | | | | | | | | | | | | | | |

MESSUNGEN UND JUSTIERUNGEN — Deutsch

• Einstellungen und verwendete Instrumente

- Vor diesen Einstellungen müssen VR301, VR302 und VR601 entgegen dem Uhrzeigersinn bis zum Anschlag gedreht werden. VR701 und VR702 werden auf die Mittelstellungen gestellt.
- Lautstärke 0 (Minimum)
- Lautsprecher-Wahlschalter main on
remote off
- Betriebsschalter "straight DC"
- Gleichstrom-Voltmeter (zum Messen von 5mV geeignet)

| Nr. | Gegenstand | Anschluß des Voltmeters | Zu justierender Drehwiderstand | Justierung | | | | | | | | | | | | | | | | | | |
|---|--|---|---|---|-----------|-----------|----------|--------|------------------|--------------|-------|----------------|---------|------------------|--------------|-------|----------------|---|------------------|--------------|-------|----------------|
| 1 | Justierung der Belastungs-impedanz-Detectorschaltung | <ul style="list-style-type: none">* Ein Last mit 6,5Ω (1/2W Kohlewiderstand) oder in Serie geschalteten 3,3Ω und 3,3Ω (1/2W, ±5%) an den "main" Lautsprecheranschluß anschließen.* Ein Gleichstromvoltmeter zwischen dem TP701 und Chassis anschließen. (Linker Kanal)* Ein Gleichstromvoltmeter zwischen dem TP702 und Chassis anschließen. (Rechter Kanal)* Dann den Testpunkt TP703 und das Chassis verbinden. | VR701 (Linker Kanal) VR702 (Rechter Kanal) | <ul style="list-style-type: none">* Den VR701 bis zum Anschlag im Uhrzeigersinn drehen.* Den VR702 so einstellen, daß die Spannung des Testpunktes TP702 auf -0,1V gelangt.* Den VR701 so einstellen, daß die Spannung des Testpunktes TP701 auf 0V gelangt. | | | | | | | | | | | | | | | | | | |
| 2 | Justierung & Überprüfung der Versorgungsspannung | <ul style="list-style-type: none">* Das Voltmeter zwischen den Testpunkten Q327 (Kollektor) und TP502 anschließen.* Beim Messen der Spannung den Lautsprecher-Wahlschalter auf "main" einstellen.* Wenn die Stromzufuhr des Gerätes eingeschaltet ist, verursacht die Änderung der Belastungsimpedanz keine Veränderung der Versorgungsspannung. Daher Netzschalter ausschalten oder Lautsprecher-Wahlschalter in eine andere Position stellen.* Bei auf "main and remote" eingestelltem Lautsprecher-Wahlschalter wird die Spannung bei 4~6Ω angezeigt. | VR601 | <ul style="list-style-type: none">* Einen Belastungswiderstand mit 4 Ohm an die Lautsprecherbuchsen anschließen.* Den VR601 so einstellen, daß die Spannung auf +54,5V gelangt.* Die Belastungswiderstandswerte der Lautsprecherbuchsen und Ausgangsspannungen an jedem der Testpunkte werden untenstehend aufgeführt. <table border="1"><thead><tr><th>Belastung</th><th>Prüfpunkt</th><th>Sollwert</th></tr></thead><tbody><tr><td rowspan="2">4~6,5Ω</td><td>Q327 (Kollektor)</td><td>45,0 ~ 46,0V</td></tr><tr><td>TP501</td><td>-45,5 ~ -46,5V</td></tr><tr><td rowspan="2">6,6~16Ω</td><td>Q327 (Kollektor)</td><td>54,0 ~ 55,0V</td></tr><tr><td>TP503</td><td>-54,5 ~ -55,5V</td></tr><tr><td rowspan="2">Den Lautsprecher-Schalter auf die "off"-Position stellen.</td><td>Q327 (Kollektor)</td><td>54,0 ~ 55,0V</td></tr><tr><td>TP502</td><td>-54,5 ~ -55,5V</td></tr></tbody></table> | Belastung | Prüfpunkt | Sollwert | 4~6,5Ω | Q327 (Kollektor) | 45,0 ~ 46,0V | TP501 | -45,5 ~ -46,5V | 6,6~16Ω | Q327 (Kollektor) | 54,0 ~ 55,0V | TP503 | -54,5 ~ -55,5V | Den Lautsprecher-Schalter auf die "off"-Position stellen. | Q327 (Kollektor) | 54,0 ~ 55,0V | TP502 | -54,5 ~ -55,5V |
| Belastung | Prüfpunkt | Sollwert | | | | | | | | | | | | | | | | | | | | |
| 4~6,5Ω | Q327 (Kollektor) | 45,0 ~ 46,0V | | | | | | | | | | | | | | | | | | | | |
| | TP501 | -45,5 ~ -46,5V | | | | | | | | | | | | | | | | | | | | |
| 6,6~16Ω | Q327 (Kollektor) | 54,0 ~ 55,0V | | | | | | | | | | | | | | | | | | | | |
| | TP503 | -54,5 ~ -55,5V | | | | | | | | | | | | | | | | | | | | |
| Den Lautsprecher-Schalter auf die "off"-Position stellen. | Q327 (Kollektor) | 54,0 ~ 55,0V | | | | | | | | | | | | | | | | | | | | |
| | TP502 | -54,5 ~ -55,5V | | | | | | | | | | | | | | | | | | | | |
| 3 | Justierung von I _{CQ} | (Linker Kanal) Voltmeter an A (+) und B (-) anschließen. (Rechter Kanal) Voltmeter an C (+) und D (-) anschließen. | VR301 (Linker Kanal) VR302 (Rechter Kanal) | <ul style="list-style-type: none">* Die Lautsprecherschalter "main" und "remote" auf ihre Ausstellungen (off) stellen.* VR301 (linker Kanal) und VR302 (rechter Kanal) so justieren, daß die Spannung. ca. 1 Minuten nach dem Einschalten der Stromzufuhr. 1mV beträgt. | | | | | | | | | | | | | | | | | | |

MESURAGES ET REGLAGES — Français

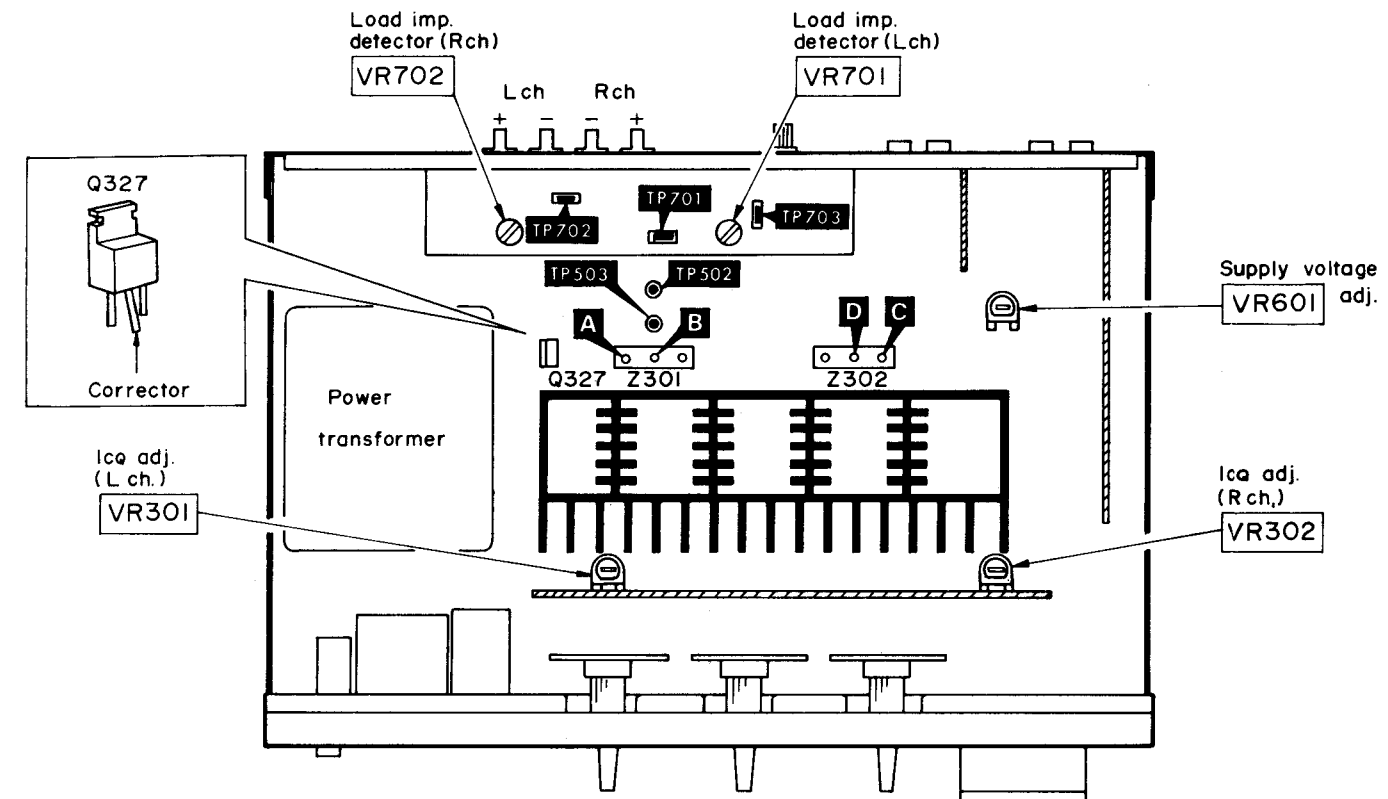
• Réglages et appareils utilisés

- Avant le réglage, VR301, VR302 et VR601 devront être tournés dans le sens inverse des aiguilles d'une montre; VR701 et VR702 devront être tournés vers la position médiane.
- Volume sonore 0 (minimum)
- Sélecteurs des enceintes main on
remote off
- Commutateur de commande C.C. normal (straight DC)
- Voltmètre à C.C. (capable de mesurer 5mV)

| No. | Article | Branchement du voltmètre à C.C. | VR à régler | Réglage |
|-----|---|--|--|--|
| 1 | Réglage du circuit de détection d'impédance de charge | <ul style="list-style-type: none"> * Mettre en circuit une charge avec 6,5Ω (résistance à couche de carbone de 1/2W) ou un montage en série de 3,3Ω (1/2W, ±5%) à la prise du haut-parleur "principal". * Brancher un voltmètre à C.C. entre TP701 et le châssis. (Canal G) * Brancher un voltmètre à C.C. entre TP702 et le châssis. (Canal D) * Raccorder TP703 et le châssis. | VR701 (Canal G) VR702 (Canal D) | <ul style="list-style-type: none"> * Tourner complètement VR701 dans le sens des aiguilles d'une montre. * Ajuster VR702 de façon à ce que la tension de TP702 soit de -0,1V. * Ajuster VR701 de façon à ce que la tension de TP701 soit de 0V. |

ADJUSTMENT POINTS

| No. | Article | Branchement du voltmètre à C.C. | VR à régler | Réglage | | | | | | | | | | | | | | | | | | |
|--|--|--|--|---|--|-----------------|---|--------|-------------------|--------------|-------|----------------|---------|-------------------|--------------|-------|----------------|--|-------------------|--------------|-------|----------------|
| 2 | Vérification et réglage de la tension d'alimentation | <ul style="list-style-type: none">* Brancher le voltmètre à Q327 (Collecteur) et TP502.* Régler le sélecteur de haut-parleurs sur "main" (principal) lorsqu'on mesure la tension.* Si la tension d'alimentation de l'appareil est en marche, le changement d'impédance de charge ne provoquera pas d'altération de la tension d'alimentation. Aussi, couper la tension d'alimentation ou décaler le sélecteur de haut-parleurs sur une autre position.* Avec le sélecteur de haut-parleurs réglé sur "main" (principal) et "remote" (auxiliaire), une tension de 4~6Ω est indiquée. | VR601 | <ul style="list-style-type: none">* Mettre en circuit une charge de 4Ω à la prise de haut-parleurs.* Adjuster VR601 de façon à ce que la tension soit de + 54,5V.* Les résistances de charge raccordées à chaque point mesure sont montrées ci-dessous. <table><tr><th>Charge</th><th>Point de mesure</th><th>Spécification</th></tr><tr><td rowspan="2">4~6,5Ω</td><td>Q327 (Collecteur)</td><td>45.0 ~ 46.0V</td></tr><tr><td>TP502</td><td>-45.5 ~ -46.5V</td></tr><tr><td rowspan="2">6,6~16Ω</td><td>Q327 (Collecteur)</td><td>54.0 ~ 55.0V</td></tr><tr><td>TP503</td><td>-54.5 ~ -55.5V</td></tr><tr><td rowspan="2">Commutateur du haut-parleur sur la position "off" (hors-circuit)</td><td>Q327 (Collecteur)</td><td>54.0 ~ 55.0V</td></tr><tr><td>TP503</td><td>-54.5 ~ -55.5V</td></tr></table> | Charge | Point de mesure | Spécification | 4~6,5Ω | Q327 (Collecteur) | 45.0 ~ 46.0V | TP502 | -45.5 ~ -46.5V | 6,6~16Ω | Q327 (Collecteur) | 54.0 ~ 55.0V | TP503 | -54.5 ~ -55.5V | Commutateur du haut-parleur sur la position "off" (hors-circuit) | Q327 (Collecteur) | 54.0 ~ 55.0V | TP503 | -54.5 ~ -55.5V |
| Charge | Point de mesure | Spécification | | | | | | | | | | | | | | | | | | | | |
| 4~6,5Ω | Q327 (Collecteur) | 45.0 ~ 46.0V | | | | | | | | | | | | | | | | | | | | |
| | TP502 | -45.5 ~ -46.5V | | | | | | | | | | | | | | | | | | | | |
| 6,6~16Ω | Q327 (Collecteur) | 54.0 ~ 55.0V | | | | | | | | | | | | | | | | | | | | |
| | TP503 | -54.5 ~ -55.5V | | | | | | | | | | | | | | | | | | | | |
| Commutateur du haut-parleur sur la position "off" (hors-circuit) | Q327 (Collecteur) | 54.0 ~ 55.0V | | | | | | | | | | | | | | | | | | | | |
| | TP503 | -54.5 ~ -55.5V | | | | | | | | | | | | | | | | | | | | |
| 3 | Réglage de I _{CC} | <table><tr><td>Canal de gauche Brancher le voltmètre à A (+) et à B (-).</td><td>VR301 (Canal G)</td></tr><tr><td>Canal de droite Brancher le voltmètre à C (+) et à D (-).</td><td>VR302 (Canal D)</td></tr></table> | Canal de gauche Brancher le voltmètre à A (+) et à B (-). | VR301 (Canal G) | Canal de droite Brancher le voltmètre à C (+) et à D (-). | VR302 (Canal D) | <ul style="list-style-type: none">* Régler les interrupteurs du haut-parleur principal et des haut-parleurs à distance sur la position "off" (hors-circuit).* Régler VR301 (canal de gauche) et VR302 (canal de droite) de façon à ce que la tension soit de 1mV, environ 1 minute après la mise en marche de la tension d'alimentation. | | | | | | | | | | | | | | | |
| Canal de gauche Brancher le voltmètre à A (+) et à B (-). | VR301 (Canal G) | | | | | | | | | | | | | | | | | | | | | |
| Canal de droite Brancher le voltmètre à C (+) et à D (-). | VR302 (Canal D) | | | | | | | | | | | | | | | | | | | | | |

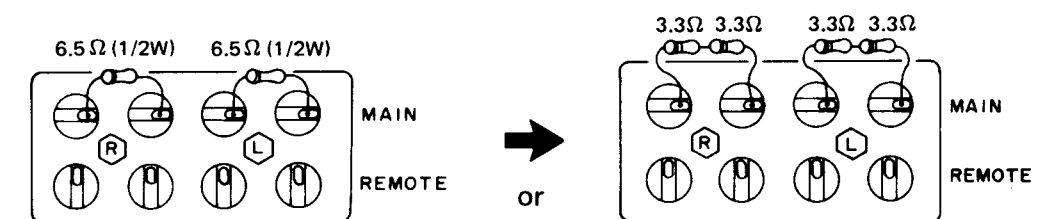


MEDICIONES Y AJUSTE ————— Español —————

• Puesta e instrumentos usados

1. Antes del ajuste, VR301, VR302 y VR601 deben girarse en la dirección a la izquierda, VR701 y VR702 deben girarse a la posición central.
2. Volumen de sonido ... 0 (mínimo)
3. Selectores de altoparlantes
main ... on remote ... off
4. Interruptor de operación ... CC lineal
5. Voltímetro de CC (capaz de medir 5mV)

| Nº | Item | Conexión de voltímetro de CC | RV ajustado | Procedimiento de ajuste | | | | | | | | | | | | | | | | | | |
|--|---|--|--|---|-------|-----------------|----------------|--------|------------------|--------------|-------|----------------|---------|------------------|--------------|-------|----------------|--|------------------|--------------|-------|----------------|
| 1 | Ajuste del circuito de detección de impedancia de carga | <ul style="list-style-type: none">* Conectar una carga con 6,5Ω (resistor de carbón de 1/2W) ó 3,3Ω y 3,3Ω (1/2W, ±5%), conectados en serie, al terminal del altavoz "principal".* Conectar un voltímetro CC entre TP701 y chasis. (Canal I)* Conectar un voltímetro CC TP702 y chasis. (Canal D)* Conectar TP703 y chasis. | VR701 (Canal I) VR702 (Canal D) | <ol style="list-style-type: none">1. Girar VR701 completamente a la derecha.2. Ajustar VR702 de manera que el voltaje de TP702 sea 0,1V.3. Ajustar VR701 de manera que el voltaje de TP701 sea 0V. | | | | | | | | | | | | | | | | | | |
| 2 | Ajuste y comprobación de voltaje de alimentación | <ul style="list-style-type: none">* Conectar voltímetro a Q327 (Collector) y TP502.* Ponga el selector de altavoz en "main" (principal), al medir el voltaje.* Si la fuente de alimentación del aparato está en "ON", cambiando la impedancia de carga no causará alteración de voltaje de alimentación. Por lo tanto, desconecte la fuente de alimentación o cambie el selector de altavoz a otra posición.* Con el selector de altavoz puesto en principal y remoto, se indica el voltaje a 4~6Ω. | VR601 | <ol style="list-style-type: none">1. Conectar carga de 4Ω al terminal de altavoz.2. Ajustar VR601 de manera que el voltaje sea +54,5V.3. Resistencia de carga a terminal de altavoz y voltaje de salida en cada punto de prueba se muestran abajo. <table><tr><th>Carga</th><th>Punto de prueba</th><th>Especificación</th></tr><tr><td rowspan="2">4~6.5Ω</td><td>Q327 (Collector)</td><td>45.0 ~ 46.0V</td></tr><tr><td>TP502</td><td>-45.5 ~ -46.5V</td></tr><tr><td rowspan="2">6.6~16Ω</td><td>Q327 (Collector)</td><td>54.0 ~ 55.0V</td></tr><tr><td>TP503</td><td>-54.5 ~ -55.5V</td></tr><tr><td rowspan="2">Interruptor de altavoz a posición "off".</td><td>Q327 (Collector)</td><td>54.0 ~ 55.0V</td></tr><tr><td>TP503</td><td>-54.5 ~ -55.5V</td></tr></table> | Carga | Punto de prueba | Especificación | 4~6.5Ω | Q327 (Collector) | 45.0 ~ 46.0V | TP502 | -45.5 ~ -46.5V | 6.6~16Ω | Q327 (Collector) | 54.0 ~ 55.0V | TP503 | -54.5 ~ -55.5V | Interruptor de altavoz a posición "off". | Q327 (Collector) | 54.0 ~ 55.0V | TP503 | -54.5 ~ -55.5V |
| Carga | Punto de prueba | Especificación | | | | | | | | | | | | | | | | | | | | |
| 4~6.5Ω | Q327 (Collector) | 45.0 ~ 46.0V | | | | | | | | | | | | | | | | | | | | |
| | TP502 | -45.5 ~ -46.5V | | | | | | | | | | | | | | | | | | | | |
| 6.6~16Ω | Q327 (Collector) | 54.0 ~ 55.0V | | | | | | | | | | | | | | | | | | | | |
| | TP503 | -54.5 ~ -55.5V | | | | | | | | | | | | | | | | | | | | |
| Interruptor de altavoz a posición "off". | Q327 (Collector) | 54.0 ~ 55.0V | | | | | | | | | | | | | | | | | | | | |
| | TP503 | -54.5 ~ -55.5V | | | | | | | | | | | | | | | | | | | | |
| 3 | Ajuste de I _{CC} | (Canal I) Entre A y B (probeta negativa) (Canal D) Entre C y D (probeta negativa) | VR301 (Canal I) VR302 (Canal D) | <ol style="list-style-type: none">1. Poner los interruptores del altavoz principal y remoto en la posición "off".2. Ajustar VR301 y VR302 de manera que el voltaje sea 1mV. aprox. 1 min. después de poner la fuente de alimentación en "ON". | | | | | | | | | | | | | | | | | | |




[Fig. 18]

■ REPLACEMENT PARTS LIST Electric Parts

Notes: 1. Part numbers are indicated on most mechanical parts.
Please use this part number for parts orders.

2. Important safety notice:

Components identified by  mark have special characteristics important for safety.

When replacing any of these components, use only manufacturer's specified parts.

3. Bracketed indications in Ref. No. columns specify the area. Parts without these indications can be used for all areas.

Areas

* [D] is available in Scandinavia.

* [EG] is available in F.R. Germany.

* [EK] is available in United Kingdom.

* [EF] is available in France.

* [EH] is available in Holland.

* [EB] is available in Belgium.

* [Ei] is available in Italy.

* [EW] is available in Switzerland.

* [XA] is available in Southeast Asia, Oceania, Africa, Near East and Central South America.

* [XL] is available in Australia.

| Ref. No. | Part No. | Part Name & Description |
|---|---------------------------------------|---|
| INTEGRATED CIRCUITS | | |
| IC101 IC301, 401, 701 IC501 | SVINJ4559DDM AN6552F SVITA7317P | IC, Equalizer Amplifier IC, DC Servo, Voltage Comparing, IC, Muting |
| TRANSISTORS | | |
| Q101~108 301~304 | 2SK170—GR | Transistor, Differential, Amplifier |
| Q109, 110, 505 507, 602, 701 703, 704 | 2SA1015—Y | Transistor, Switching, Hold, Regulator |
| Q111, 112, 607 613 | 2SA722—S | Transistor, Switching, Regulator |
| Q113~116, 503 504, 506, 702 | 2SC1815—Y | Transistor, Switching, Regulator |
| Q309 ~ 312 | 2SC1980—T | Transistor, Differential |
| Q313 ~ 316 | 2SA921—T | Transistor, Differential |
| Q317, 318 | 2SA1123—R | Transistor, Cascade |
| Q319, 320 | 2SC2631—R | Transistor, Constant Current |
| Q321, 322 | 2SD661—S | Transistor, Bias Control |
| Q323, 324 | 2SC2632—R | Transistor, Driver |
| Q325, 326 | 2SA1124—R | Transistor, Driver |
| Q327, 328 | 2SC2592—R | Transistor, Driver |
| Q329, 330 | 2SA1112—R | Transistor, Driver |
| Q331, 332 | 2SC2774—Y | Transistor, Power |
| Q333, 334 | 2SA1170—Y | Transistor, Power |
| Q501, 502, 603 604, 608, 705 | 2SC1980—T | Transistor, Over Load Detect, Regulator Relay Drive |
| Q601, 707 | 2SA777—Q | Transistor, Regulator |
| Q605 | 2SA921—T | Transistor, Regulator |
| Q606, 706 | 2SC1509FR | Transistor, Regulator |
| Q609, 610 | 2SK34—D1 | Transistor, Regulator |
| Q611 | 2SD381—L | Transistor, Regulator |
| Q612 | 2SB536—L | Transistor, Regulator |
| DIODES | | |
| D101, 102, 105 106, 305, 306 309, 310 327 ~ 330 | MA27A1 | Diode, Switching, Synchronism Bias |
| D103, 104 301~304, 307 308, 311, 312 321, 322 501~505 610~616 701~706 | MA162A | Diode, Switching, Synchronism Bias |
| D313~316 323~326 | 20A90 | Diode, Synchronism Bias |
| D317~320 | SVDMA26—2 | Diode, Bias Supply |
| D601~604 | SVDCR6AM—4 | Diode, Thyristor |
| D605~608, 801 802 | SVDSR1K4 | Rectifier |
| D609 | SVDMZ320B | Diode, 20V Zener |
| D617 | SVDMZ308A1 | Diode, 8V Zener |
| D618 | SVDMZ303B | Diode, 3V Zener |
| D619, 707 | SVDMZ422B | Diode, 22V Zener |
| D620 | SVDMZ318A2 | Diode, 18V Zener |
| D621 | SVTTT202—50 | Diode, Temperature detection thyristor |
| D803~805 | SVDMZ409B | Diode, 9V Zener |
| D806 | LN820WP | Light Emitting Diode, Orange |
| D807 | LN420WP | Light Emitting Diode, Yellow |
| D808~823 | LN833WP | Light Emitting Diode, Orange |
| D824 | SVDSR1K2 | Rectifier |
| D825 | SVDMZ307B | Diode, 7V Zener |

| Ref. No. | | Part No. | Part Name & Description |
|---|---|---|---|
| COILS and TRANSFORMER | | | |
| L101~104 L301, 302 T801 | △ | RLQY75S2 SLQY15G-30 SLT5S57 | Coil, Choke Coil, Choke Transformer, Power Source |
| VARIABLE RESISTORS | | | |
| VR201 VR202 VR301, 302 VR401 VR402 VR403 VR601 VR701, 702 | | EWGGCA067375 EWFNUA041B15 EVNM0AA00B52 EWWKMA06553X EWGGCY067530 EWGGC0067C15 EVNM4AA00B53 EVNKG6AA00B14 | Balance Control, 100kΩ(BH) Volume Control, 100kΩ(B) ICQ Adjustment, 500Ω(B) Super Bass Control, 5kΩ Bass Control, 100kΩ(C) (Center Short) Treble Control, 100kΩ(C) (Center Open) Power Source Voltage Adjustment, 5kΩ(B) Load Detect Adjustment, 10kΩ(B) |
| THERMISTERS | | | |
| TH301, 302 TH303, 304 | | ERTD2ZHL103S ¹ ERTD2ZHL332S | Thermister, Thermal Compensation, 10kΩ Thermister, Thermal Compensation, 3.3kΩ |
| COMPONENT COMBINATIONS | | | |
| Z301, 302 | △ | ERF3GBKR22N | Component Combination, 3W 0.22Ω (x2) |
| LAMPS | | | |
| PL1, 2 | △ | XAMR85S15 | Lamp, 0.05A (14V) |
| FUSES | | | |
| F1, 2 | △ | XBA2C40TRO | Fuse, Power Source, T4A (250V) |
| RELAYS | | | |
| RLY601 | △ | SSY103-1 | Relay, Transformer Tap Select of Secondary |
| RLY701 | △ | SSY99-1 | Relay, Speaker Select |
| SWITCHES | | | |
| S1 S2, 3 S4, 5, 8 S6 S7 S9 S10 S11, 12 S13 S14 | △ △ △ | ESA26523 ESA2682 SSH395-1 SSH1021 SSH165 SSH1037 SSH159 SSH2027-1 ESB90217S ESE37200 | Switch, Phono Selector Switch, Input, Rec Selector Switch, High Filter, Mode, Subsonic Filter Switch, Muting Switch, Loudness Control Switch, Operation Switch, Turn Over Switch, Speaker Selector (Main/Remote) Switch, Power Source Switch, Voltage Adjust |
| RESISTORS | | | |
| R101, 102 R103, 104 R105, 106 R107, 108 R109, 110 R111, 112 R113, 114 R115, 116 R117, 118 R119, 120 R121, 122 | | ERD25FJ150 ERD25TJ473 ERD25FJ221 ERD25FJ101 ERD25TJ683 ERD25TJ223 ERO25CKF2201 ERO25CKF2201 ERD25TJ104 ERD25FJ101 ERD25FJ181 | Carbon, 1/4W, 15Ω, ±5% Carbon, 1/4W, 47kΩ, ±5% Carbon, 1/4W, 220Ω, ±5% Carbon, 1/4W, 100Ω, ±5% Carbon, 1/4W, 68kΩ, ±5% Carbon, 1/4W, 22kΩ, ±5% Metal Film, 1/4W, 2.2kΩ, ±1% Metal Film, 1/4W, 2.2kΩ, ±1% Carbon, 1/4W, 100kΩ, ±5% Carbon, 1/4W, 100Ω, ±5% Carbon, 1/4W, 180Ω, ±5% |

| Ref. No. | | Part No. | Part Name & Description | | | |
|-----------|---|--------------|-------------------------|-------|--------|------|
| R123, 124 | | ERD25TJ123 | Carbon, | 1/4W, | 12kΩ, | ±5% |
| R125, 126 | | ERO25CKF2701 | Metal Film, | 1/4W, | 2.7kΩ, | ±1% |
| R127, 128 | | ERD25FJ102 | Carbon, | 1/4W, | 1kΩ, | ±5% |
| R129, 130 | | ERD25FJ820 | Carbon, | 1/4W, | 82Ω, | ±5% |
| R131, 132 | | ERO25CKF1200 | Metal Film, | 1/4W, | 120Ω, | ±1% |
| R133, 134 | | ERO25CKF13R0 | Metal Film, | 1/4W, | 13Ω, | ±1% |
| R135, 136 | | ERD25FJ4R7 | Carbon, | 1/4W, | 4.7Ω, | ±5% |
| R137, 138 | | ERO25CKF6802 | Metal Film, | 1/4W | 68kΩ, | ±1% |
| R139, 140 | | ERO25CKF5601 | Metal Film, | 1/4W, | 5.6kΩ, | ±1% |
| R141, 142 | | ERD25FJ121 | Carbon, | 1/4W, | 120Ω, | ±5% |
| R143, 144 | | ERD25FJ561 | Carbon, | 1/4W, | 560Ω, | ±5% |
| R145, 146 | | ERD25TJ334 | Carbon, | 1/4W, | 330kΩ, | ±5% |
| R201, 202 | | ERD25TJ824 | Carbon, | 1/4W, | 820kΩ, | ±5% |
| R203, 204 | | ERD25TJ824 | Carbon, | 1/4W, | 820kΩ, | ±5% |
| R205, 206 | | ERD25TJ824 | Carbon, | 1/4W, | 820kΩ, | ±5% |
| R207, 208 | | ERD25TJ824 | Carbon, | 1/4W, | 820kΩ, | ±5% |
| R209, 210 | | ERD25FJ392 | Carbon, | 1/4W, | 3.9kΩ, | ±5% |
| R211, 212 | | ERD25TJ824 | Carbon, | 1/4W, | 820kΩ, | ±5% |
| R213, 214 | | ERD25FJ392 | Carbon, | 1/4W, | 3.9kΩ, | ±5% |
| R215, 216 | | ERD25TJ333 | Carbon, | 1/4W, | 33kΩ, | ±5% |
| R217, 218 | | ERD25FJ392 | Carbon, | 1/4W, | 3.9kΩ, | ±5% |
| R219, 220 | | ERD25TJ183 | Carbon, | 1/4W, | 18kΩ, | ±5% |
| R221, 222 | | ERD25TJ124 | Carbon, | 1/4W, | 120kΩ, | ±5% |
| R223, 224 | | ERD25TJ224 | Carbon, | 1/4W, | 220kΩ, | ±5% |
| R225, 226 | | ERD25FJ102 | Carbon, | 1/4W, | 1kΩ, | ±5% |
| R261, 262 | | ERD25FJ392 | Carbon, | 1/4W, | 3.9kΩ, | ±5% |
| R263, 264 | | ERD25FJ392 | Carbon, | 1/4W, | 3.9kΩ, | ±5% |
| R267, 268 | | ERD25TJ394 | Carbon, | 1/4W, | 390kΩ, | ±5% |
| R303, 304 | | ERD25FJ102 | Carbon, | 1/4W, | 1kΩ, | ±5% |
| R305, 306 | | ERD25FJ101 | Carbon, | 1/4W, | 100Ω, | ±5% |
| R307, 308 | | ERD25FJ562 | Carbon, | 1/4W, | 5.6kΩ, | ±5% |
| R309, 310 | | ERD25FJ562 | Carbon, | 1/4W, | 5.6kΩ, | ±5% |
| R311, 312 | | ERD25TJ183 | Carbon, | 1/4W, | 18kΩ, | ±5% |
| R313, 314 | | ERD25FJ391 | Carbon, | 1/4W, | 390Ω, | ±5% |
| R315, 316 | | ERD25FJ822 | Carbon, | 1/4W, | 8.2kΩ, | ±5% |
| R317, 318 | | ERD25FJ103 | Carbon, | 1/4W, | 10kΩ, | ±5% |
| R319, 320 | △ | ERD25FJ182 | Carbon, | 1/4W, | 1.8kΩ, | ±5% |
| R321, 322 | △ | ERD25FJ221 | Carbon, | 1/4W, | 220Ω, | ±5% |
| R323, 324 | △ | ERD25FJ221 | Carbon, | 1/4W, | 220Ω, | ±5% |
| R325, 326 | | ERD25TJ153 | Carbon, | 1/4W, | 15kΩ, | ±5% |
| R327, 328 | | ERD25FJ272 | Carbon, | 1/4W, | 2.7kΩ, | ±5% |
| R329, 330 | △ | ERD25FJ221 | Carbon, | 1/4W, | 220Ω, | ±5% |
| R331, 332 | △ | ERD25FJ221 | Carbon, | 1/4W, | 220Ω, | ±5% |
| R335, 336 | △ | ERD25FJ182 | Carbon, | 1/4W, | 1.8kΩ, | ±5% |
| R337, 338 | △ | ERD25FJ122 | Carbon, | 1/4W, | 1.2kΩ, | ±5% |
| R339, 340 | △ | ERD25FJ122 | Carbon, | 1/4W, | 1.2kΩ, | ±5% |
| R341, 342 | △ | ERD2FCG101 | Carbon, | 1/4W, | 100Ω, | ±2% |
| R343, 344 | △ | ERD2FCG101 | Carbon, | 1/4W, | 100Ω, | ±2% |
| R345, 346 | | ERD25FJ682 | Carbon, | 1/4W, | 6.8kΩ, | ±5% |
| R347, 348 | △ | ERD25FJ821 | Carbon, | 1/4W, | 820Ω, | ±5% |
| R349, 350 | △ | ERD25FJ102 | Carbon, | 1/4W, | 1kΩ, | ±5% |
| R351, 352 | | ERD25TJ333 | Carbon, | 1/4W, | 33kΩ, | ±5% |
| R353, 354 | | ERD25TJ823 | Carbon, | 1/4W, | 82kΩ, | ±5% |
| R355, 356 | △ | ERD2FCG390 | Carbon, | 1/4W, | 39Ω, | ±2% |
| R357, 358 | △ | ERD2FCG390 | Carbon, | 1/4W, | 39Ω, | ±2% |
| R359, 360 | | ERD25TJ184 | Carbon, | 1/4W, | 180kΩ, | ±5% |
| R361, 362 | | ERD25TJ184 | Carbon, | 1/4W, | 180kΩ, | ±5% |
| R363, 364 | △ | ERD2FCG221 | Carbon, | 1/4W, | 220Ω, | ±2% |
| R365, 366 | | ERD25FJ470 | Carbon, | 1/4W, | 47Ω, | ±5% |
| R367, 368 | △ | ERD25FJ100 | Carbon, | 1/4W, | 10Ω, | ±5% |
| R369, 370 | | ERG2ANJ150 | Metal Oxide, | 2W, | 15Ω, | ±5% |
| R371, 372 | | ERG2ANJ331 | Metal Oxide, | 2W, | 330Ω, | ±5% |
| R373, 374 | | ERD25FJ103 | Carbon, | 1/4W, | 10kΩ, | ±5% |
| R375, 376 | | ERD25TJ104 | Carbon, | 1/4W, | 100kΩ, | ±5% |
| R377, 378 | | ERD25TJ104 | Carbon, | 1/4W, | 100kΩ, | ±5% |
| R379, 380 | | ERD25TJ333 | Carbon, | 1/4W, | 33kΩ, | ±5% |
| R381, 382 | | ERD25FJ102 | Carbon, | 1/4W, | 1kΩ, | ±5% |
| R383, 384 | | ERD25TJ154 | Carbon, | 1/4W, | 150kΩ, | ±5% |
| R385, 386 | | ERD25TJ333 | Carbon, | 1/4W, | 33kΩ, | ±5% |
| R401, 402 | | ERD25FJ102 | Carbon, | 1/4W, | 1kΩ, | ±5% |
| R403, 404 | | ERO25CKF4302 | Metal Film, | 1/4W, | 43kΩ, | ±1% |
| R405, 406 | | ERD25FJ272 | Carbon, | 1/4W, | 2.7kΩ, | ±5% |
| R407, 408 | | ERD25TJ224 | Carbon, | 1/4W, | 220kΩ, | ±5% |
| R409, 410 | | ERD25TJ104 | Carbon, | 1/4W, | 100kΩ, | ±5% |
| R411, 412 | | ERC14GK825 | Solid, | 1/4W, | 8.2MΩ, | ±10% |
| R413, 414 | | ERC14GK825 | Solid, | 1/4W, | 8.2MΩ, | ±10% |
| R415, 416 | | ERD25TJ224 | Carbon, | 1/4W, | 220kΩ, | ±5% |
| R417, 418 | | ERD25TJ393 | Carbon, | 1/4W, | 39kΩ, | ±5% |
| R419, 420 | | ERD25TJ223 | Carbon, | 1/4W, | 22kΩ, | ±5% |
| R421, 422 | | ERD25TJ184 | Carbon, | 1/4W, | 180kΩ, | ±5% |
| R423, 424 | | ERD25TJ563 | Carbon, | 1/4W, | 56kΩ, | ±5% |
| R425, 426 | | ERD25FJ472 | Carbon, | 1/4W, | 4.7kΩ, | ±5% |
| R427, 428 | | ERD25FJ272 | Carbon, | 1/4W, | 2.7kΩ, | ±5% |
| R429, 430 | | ERD25FJ102 | Carbon, | 1/4W, | 1kΩ, | ±5% |

| Ref. No. | | Part No. | Part Name & Description | | |
|--------------|---|--------------|-------------------------|---------|----------------|
| R431, 432 | | ERD25FJ223 | Carbon, | 1/4W, | 22kΩ, ±5% |
| R433, 434 | | ERD25FJ472 | Carbon, | 1/4W, | 4.7kΩ, ±5% |
| R501, 502 | | ERD25TJ683 | Carbon, | 1/4W, | 68kΩ, ±5% |
| R503 | | ERD25TJ823 | Carbon, | 1/4W, | 82kΩ, ±5% |
| R504 | | ERD25FJ822 | Carbon, | 1/4W, | 8.2kΩ, ±5% |
| R505 | | ERD25TJ123 | Carbon, | 1/4W, | 12kΩ, ±5% |
| R506 | | ERD25FJ102 | Carbon, | 1/4W, | 1kΩ, ±5% |
| R507 | | ERD25TJ333 | Carbon, | 1/4W, | 33kΩ, ±5% |
| R508 | | ERD25TJ153 | Carbon, | 1/4W, | 15kΩ, ±5% |
| R509 | | ERD25FJ102 | Carbon, | 1/4W, | 1kΩ, ±5% |
| R510 | | ERD25FJ562 | Carbon, | 1/4W, | 5.6kΩ, ±5% |
| R511 | | ERD25FJ222 | Carbon, | 1/4W, | 2.2kΩ, ±5% |
| R512 | | ERD25TJ224 | Carbon, | 1/4W, | 220kΩ, ±5% |
| R513 | | ERD25FJ822 | Carbon, | 1/4W, | 8.2kΩ, ±5% |
| R514, 515 | | ERD25FJ102 | Carbon, | 1/4W, | 1kΩ, ±5% |
| R516 | | ERD25FJ682 | Carbon, | 1/4W, | 6.8kΩ, ±5% |
| R517, 518 | | ERD25FJ391 | Carbon, | 1/4W, | 390kΩ, ±5% |
| R519, 520 | | ERD25FJ222 | Carbon, | 1/4W, | 2.2kΩ, ±5% |
| R601 | | ERD25FJ562 | Carbon, | 1/4W, | 5.6kΩ, ±5% |
| R602, 603 | Δ | ERD25FJ4R7 | Carbon, | 1/4W, | 4.7Ω, ±5% |
| R604 | | ERD25FJ682 | Carbon, | 1/4W, | 6.8kΩ, ±5% |
| R605 | | ERD25TJ333 | Carbon, | 1/4W, | 33kΩ, ±5% |
| R606 | | ERD25TJ223 | Carbon, | 1/4W, | 22kΩ, ±5% |
| R607 | Δ | ERD25FJ222 | Carbon, | 1/4W, | 2.2kΩ, ±5% |
| R608 | Δ | ERD25FJ101 | Carbon, | 1/4W, | 100Ω, ±5% |
| R609 | Δ | ERD25FJ222 | Carbon, | 1/4W, | 2.2kΩ, ±5% |
| R610 | | ERD25FJ332 | Carbon, | 1/4W, | 3.3kΩ, ±5% |
| R611 | Δ | ERD25FJ100 | Carbon,, | 1/4W, | 10Ω, ±5% |
| R612 | | ERD25TJ104 | Carbon, | 1/4W, | 100kΩ, ±5% |
| R613 | | ERD25TJ183 | Carbon, | 1/4W, | 18kΩ, ±5% |
| R614 | | ERD25FJ562 | Carbon, | 1/4W, | 5.6kΩ, ±5% |
| R615 | | ERD25TJ563 | Carbon, | 1/4W, | 56kΩ, ±5% |
| R616 | | ERD25FJ102 | Carbon, | 1/4W, | 1kΩ, ±5% |
| R617 | | ERD25TJ393 | Carbon, | 1/4W, | 39kΩ, ±5% |
| R618 | | ERD25FJ822 | Carbon, | 1/4W, | 8.2kΩ, ±5% |
| R619 | | ERO25CKF1802 | Metal Film, | 1/4W, | 18kΩ, ±1% |
| R620 | | ERO25CKF3901 | Metal Film, | 1/4W, | 3.9kΩ, ±1% |
| R621 | | ERO25CKF2702 | Metal Film, | 1/4W, | 27kΩ, ±1% |
| R622 | | ERD25TJ393 | Carbon, | 1/4W, | 39kΩ, ±5% |
| R623 | | ERO25CKF2202 | Metal Film, | 1/4W, | 22kΩ, ±1% |
| R624 | | ERD25FJ103 | Carbon, | 1/4W, | 10kΩ, ±5% |
| R625 | | ERD25TJ184 | Carbon, | 1/4W, | 180kΩ, ±5% |
| R626 | | ERG3ANJ681 | Metal Oxide, | 3W, | 680Ω, ±5% |
| R627, 628 | Δ | ERD2FCG121 | Carbon, | 1/4W, | 120Ω, ±2% |
| R629 | | ERO25CKF2152 | Metal Film, | 1/4W, | 21.5kΩ, ±1% |
| R630 | | ERO25CKF2002 | Metal Film, | 1/4W, | 20kΩ, ±1% |
| R631 | | ERO25CKF3902 | Metal Film, | 1/4W, | 39kΩ, ±1% |
| R632 | | ERD25FJ222 | Carbon, | 1/4W, | 2.2kΩ, ±5% |
| R701, 702 | | ERD25FJ332 | Carbon, | 1/4W, | 3.3kΩ, ±5% |
| R703, 704 | | ERD25FJ470 | Carbon, | 1/4W, | 47Ω, ±5% |
| R705, 706 | | ERD25FJ682 | Carbon, | 1/4W, | 6.8kΩ, ±5% |
| R707, 708 | | ERD25FJ562 | Carbon, | 1/4W, | 5.6kΩ, ±5% |
| R709, 710 | | ERD25TJ394 | Carbon, | 1/4W, | 390kΩ, ±5% |
| R711, 712 | | ERD25FJ682 | Carbon, | 1/4W, | 6.8kΩ, ±5% |
| R713, 714 | | ERD25TJ824 | Carbon, | 1/4W, | 820kΩ, ±5% |
| R715, 716 | | ERD25TJ824 | Carbon, | 1/4W, | 820kΩ, ±5% |
| R717, 718 | | ERD25TJ223 | Carbon, | 1/4W, | 22kΩ, ±5% |
| R719 | | ERD25TJ393 | Carbon, | 1/4W, | 39kΩ, ±5% |
| R720 | | ERD25TJ153 | Carbon, | 1/4W, | 15kΩ, ±5% |
| R721 | | ERD25TJ184 | Carbon, | 1/4W, | 180kΩ, ±5% |
| R722 | | ERD25TJ473 | Carbon, | 1/4W, | 47kΩ, ±5% |
| R723, 724 | | ERD25TJ223 | Carbon, | 1/4W, | 22kΩ, ±5% |
| R725 | | ERD25TJ823 | Carbon, | 1/4W, | 82kΩ, ±5% |
| R726 | | ERD25TJ563 | Carbon, | 1/4W, | 56kΩ, ±5% |
| R727, 728 | | ERD25TJ223 | Carbon, | 1/4W, | 22kΩ, ±5% |
| R729 | | ERD25TJ823 | Carbon, | 1/4W, | 82kΩ, ±5% |
| R730, 731 | | ERD25TJ223 | Carbon, | 1/4W, | 22kΩ, ±5% |
| R732 | | ERD25TJ393 | Carbon, | 1/4W, | 39kΩ, ±5% |
| R733 | | ERG3ANJ681 | Metal Oxide, | 3W, | 680Ω, ±5% |
| R734 | | ERD25TJ823 | Carbon, | 1/4W, | 82kΩ, ±5% |
| R801, 802 | Δ | ERD25AJ2R2 | Carbon, | 1/4W, | 2.2Ω, ±5% |
| R803 | | ERG3ANJ661 | Metal Oxide, | 3W, | 560Ω, ±5% |
| R804, 805 | | ERG3ANJ121 | Metal Oxide, | 3W, | 120Ω, ±5% |
| R806 | | ERD25FJ151 | Carbon, | 1/4W, | 150Ω, ±5% |
| R807 | | ERD25FJ390 | Carbon, | 1/4W, | 39Ω, ±5% |
| R808, 809 | | ERD25FJ151 | Carbon, | 1/4W, | 150Ω, ±5% |
| CAPACITORS | | | | | |
| C1 | Δ | ECKDKC103PF | Ceramic, | 400VAC, | 0.01μF, ±100% |
| C2 | Δ | ECQE2A473MW | Polyester, | 250VAC, | 0.047μF, ±20% |
| C2 [EK] only | Δ | ECQU2A473MF | Polyester, | 250VAC, | 0.047μF, ±20% |
| C3, 4 | Δ | ECKDKC472MF | Ceramic, | 400VAC, | 0.0047μF, ±20% |

CIRCUIT BOARDS AND WIRING CONNECTION DIAGRAM

• Terminal guide of transistors, diodes and IC's

| | | |
|------------------|------------------|--|
| SVINJ4559DSM | AN6552 | SVITA7317P |
| | | |
| 2SA1170, 2SC2774 | 2SD661 | 2SK170 |
| | | |
| 2SB536, 2SD381 | LN820WP, LN420WP | 2SA1124, 2SC2632, 2SA1015, 2SC1815, 2SA1123, 2SC2631, 2SA722, 2SA777, 2SC1509, 2SA921, 2SC1980, 2SA721 |
| | | |
| 2SC2592, 2SA1112 | LN833WP | |
| | | |
| 2SK34 | SVDMZ □□□ | |
| | | |
| SVTTT202-50 | SVDCR6AM-4 | |
| | | |

A Phono input terminal

B Equalizer circuit

| | | | |
|---------------------|-----|---|-----|
| Q102, 104, 106, 108 | D | G | S |
| Q102 | 1.5 | 0 | 0.1 |
| Q104 | 1.5 | 0 | 0.1 |
| Q106 | 1.5 | 0 | 0.1 |
| Q108 | 1.5 | 0 | 0.1 |

Q114, 116

2SC1815

Q112

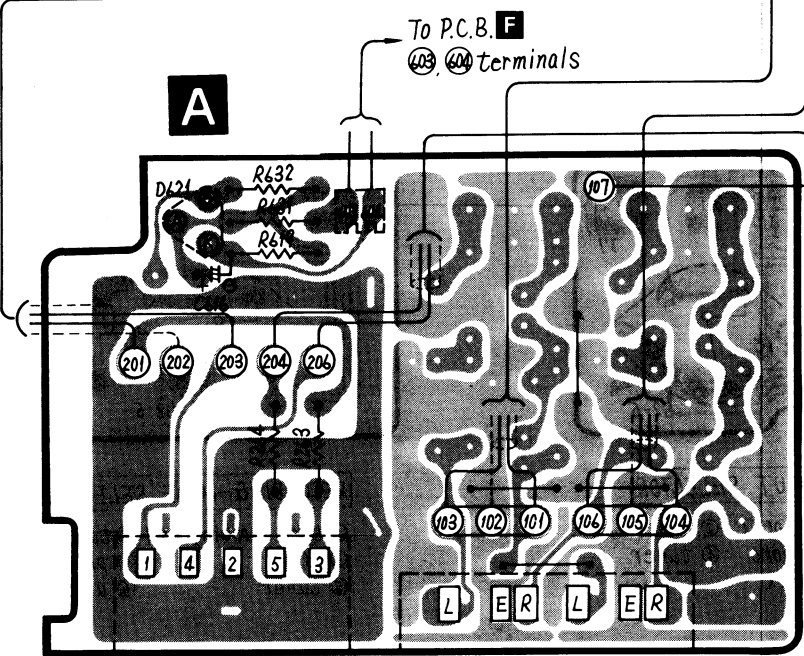
2SA721

Q110

2SA1015

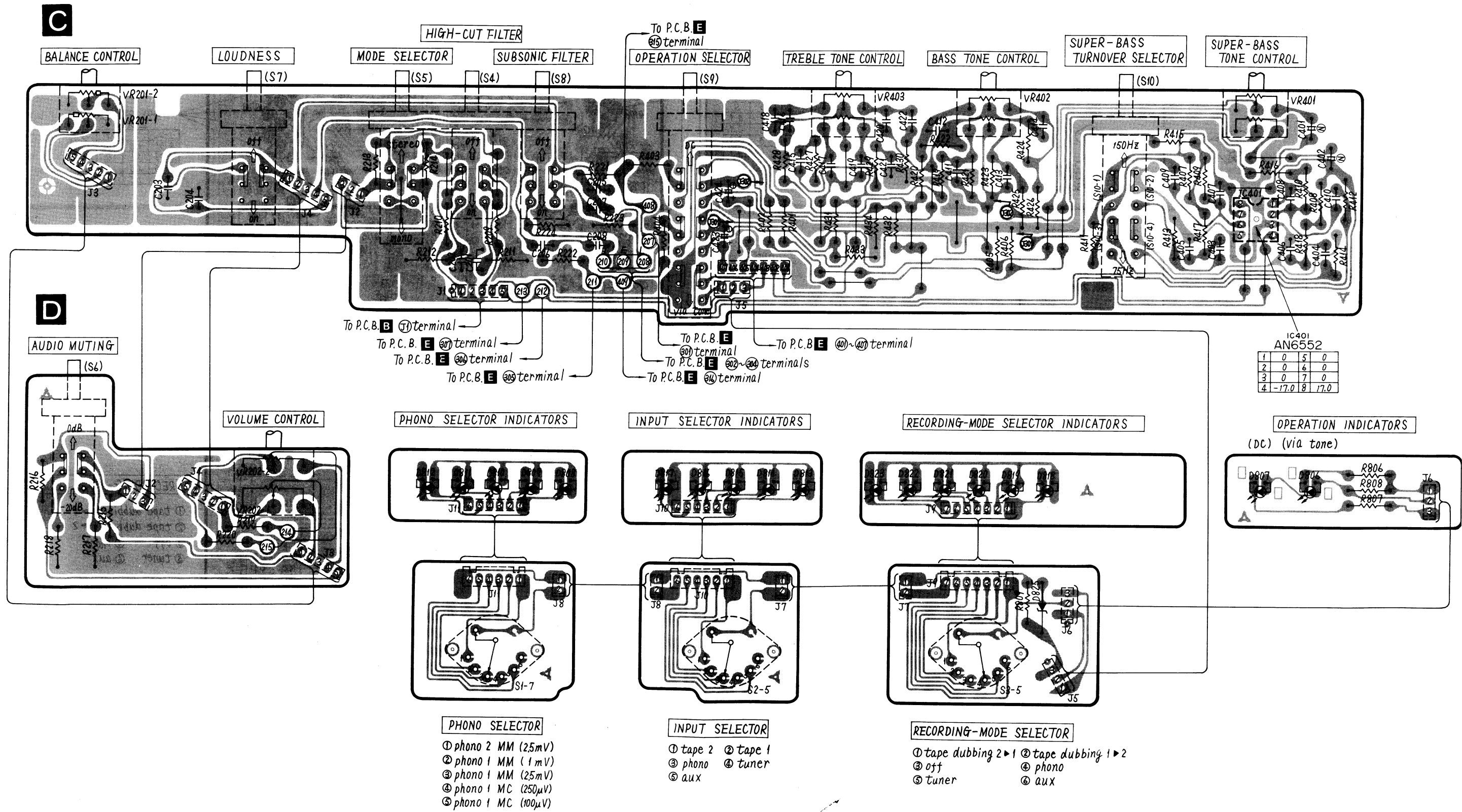
| | | | |
|--------------|---|-------|---|
| IC101 | D | G | S |
| SVINJ4559DSM | 1 | 0 | 5 |
| | 2 | 9.8 | 6 |
| | 3 | 9.8 | 7 |
| | 4 | -17.0 | 8 |

Ground (Earth) lines

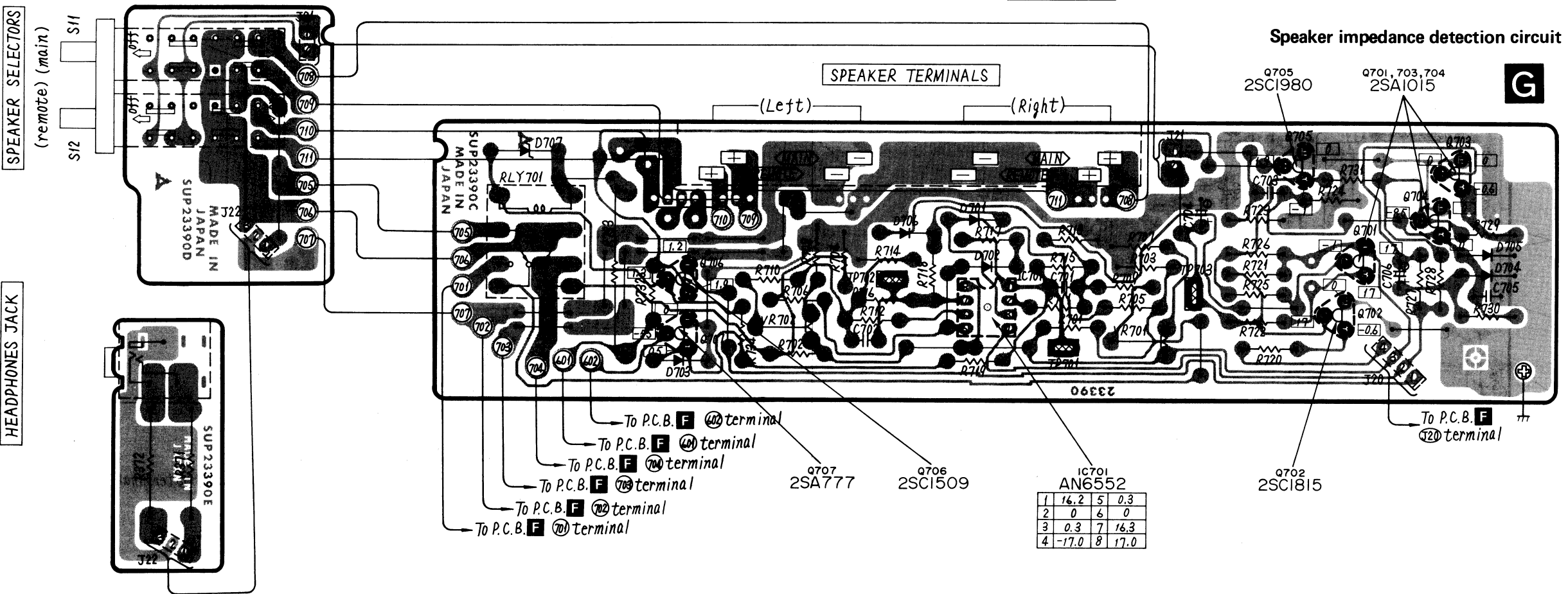
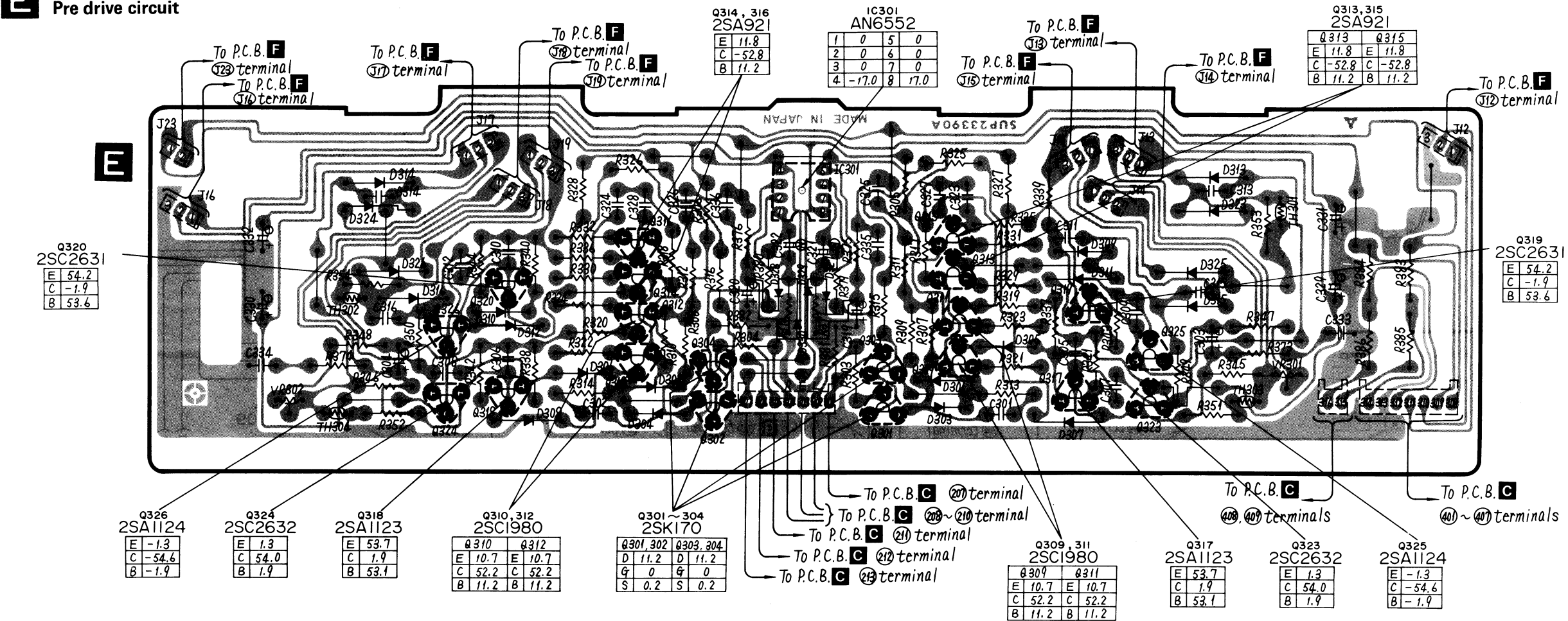


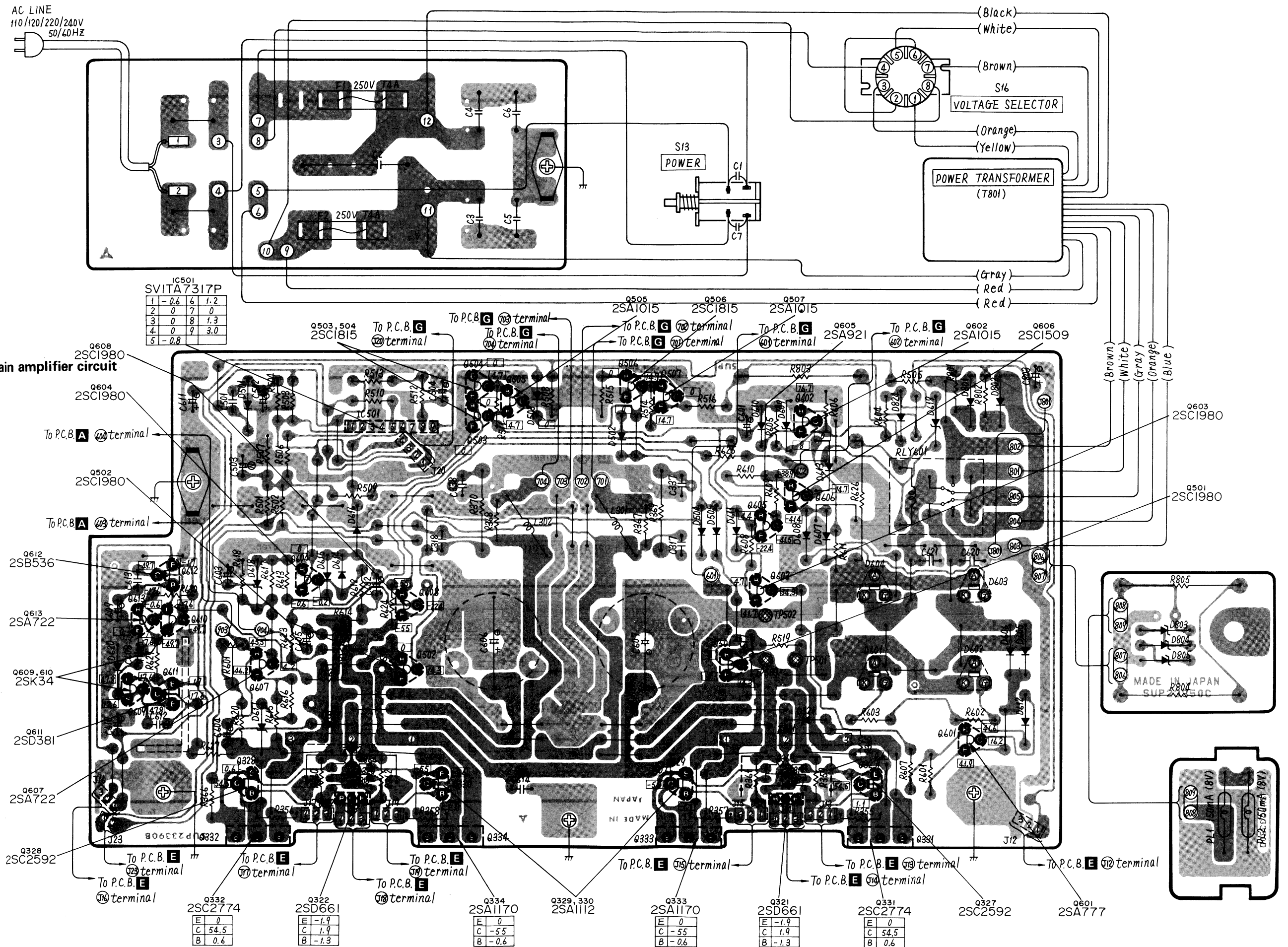
C Tone control circuit

D Volume control circuit

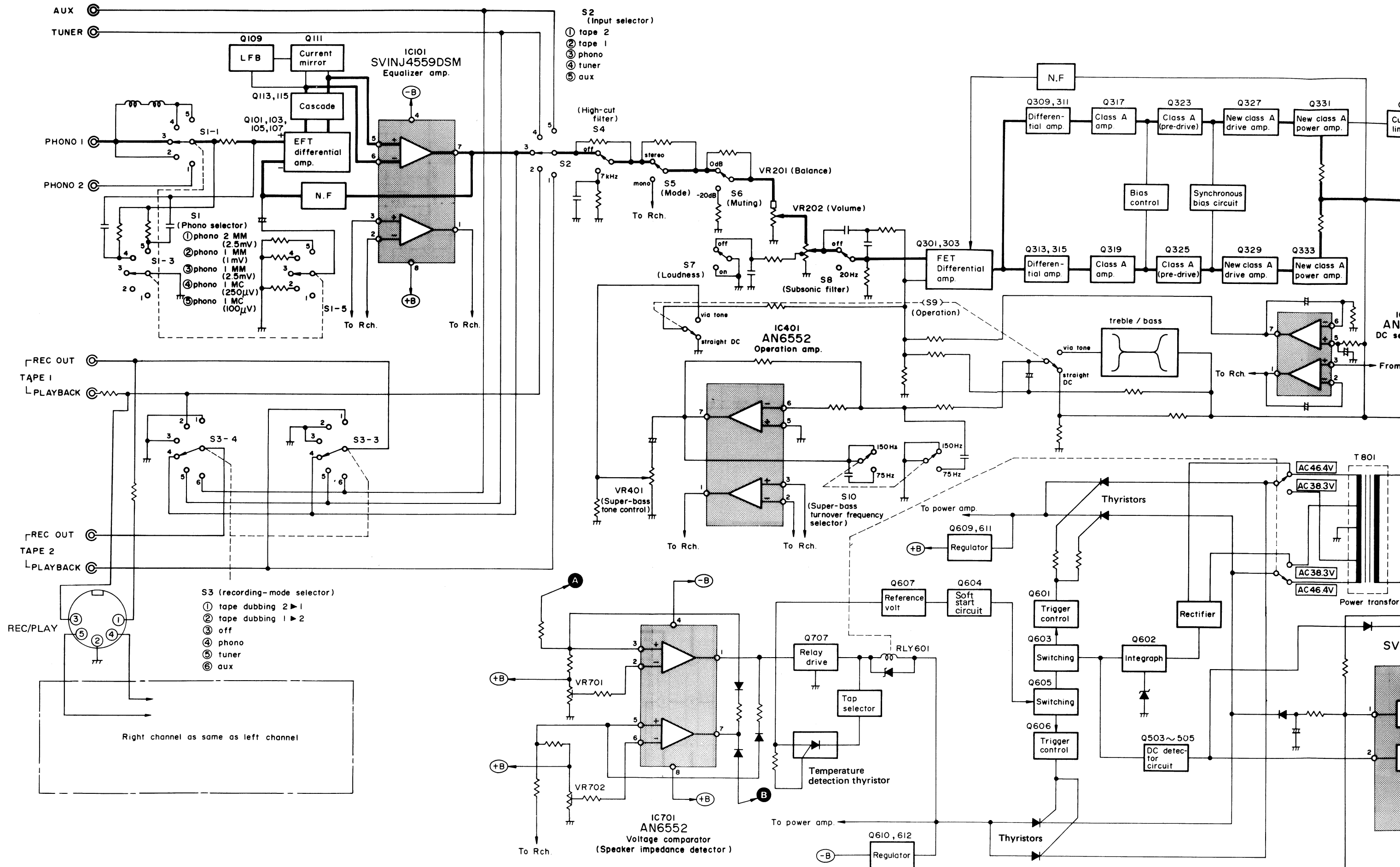


E Pre drive circuit





BLOCK DIAGRAM





SCHEMATIC DIAGRAM

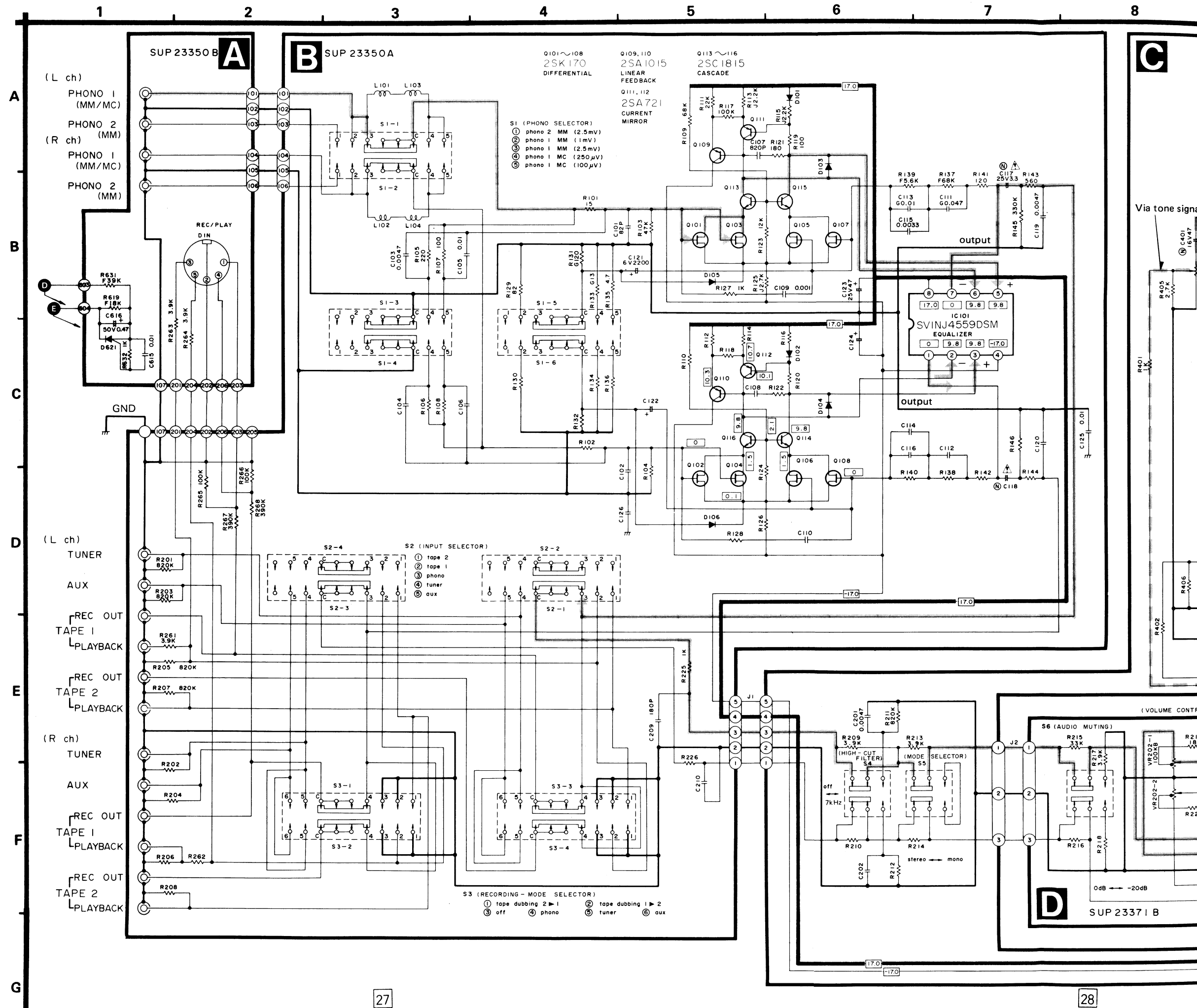
(This schematic diagram may be modified at any time with the development of new technology.)

Notes:

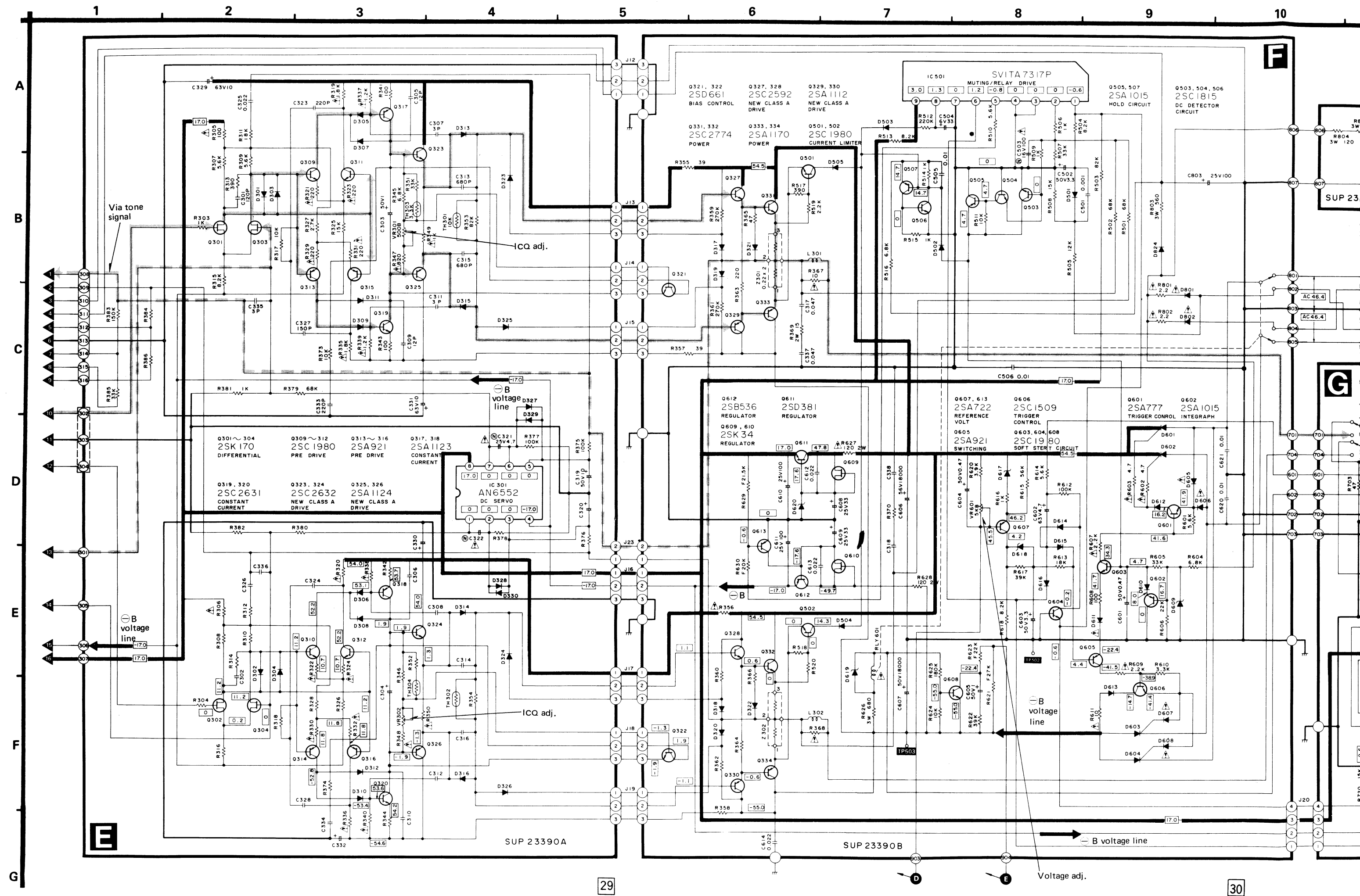
- S1-1~S1-6:** Phono selector switch in "phono 1 MM (2.5 mV)" position.
① phono 2 MM (2.5mV) ↔ ② phono 1 MM (1mV) ↔ ③ phono 1 MM (2.5mV) ↔ ④ phono 1 MC (250μV) ↔ ⑤ phono 1 MC (100μV)
- S2-1~S2-4:** Input selector switch in "phono" position.
① tape 2 ↔ ② tape 1 ↔ ③ phono ↔ ④ tuner ↔ ⑤ aux
- S3-1~S3-4:** Recording-mode selector switch in "off" position.
① tape dubbing 2 ▶ 1 ↔ ② tape dubbing 1 ▶ 2 ↔ ③ off ↔ ④ phono ↔ ⑤ tuner ↔ ⑥ aux
- S4:** High-cut filter switch in "off" position.
7kHz ↔ off
- S5:** Mode selector switch in "stereo" position.
stereo ↔ mono
- S6:** Audio muting switch in "0dB" position.
0dB ↔ -20dB
- S7:** Loudness switch in "off" position.
on ↔ off
- S8:** Subsonic filter switch in "off" position.
off ↔ 20Hz
- S9:** Operation selector switch in "straight DC" position.
straight DC ↔ via tone
- S10:** Super-bass turnover selector switch in "150Hz" position.
150Hz ↔ 75Hz
- S11:** Main speaker switch in "on" position.
- S12:** Remote speaker switch in "off" position.
- S13:** Power switch in "on" position.
- S14:** Voltage selector switch in "220V" position.
110V ↔ 120V ↔ 240V ↔ 220V.
- Same circuit is used for both L and R channels. For the resistance and capacity of R channel (bottom of circuit diagram), refer to L channel. For the voltage value, refer to R channel.
- Indicated voltage values are the standard values for the DC electronic circuit tester (high impedance) with the chassis taken as standard. Therefore, there may exist some errors in the voltage values, depending on the internal impedance of the DC circuit tester.
- The voltage values in are those obtained with speaker selector set at "main" and load impedance at "8Ω".
- The parenthesized voltage values are those obtained with speaker selector at "main" and load impedance at "4Ω".
- Phono signal lines of left channel
- Positive (+B) voltage lines.
- Important safety notice:
Components identified by mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.

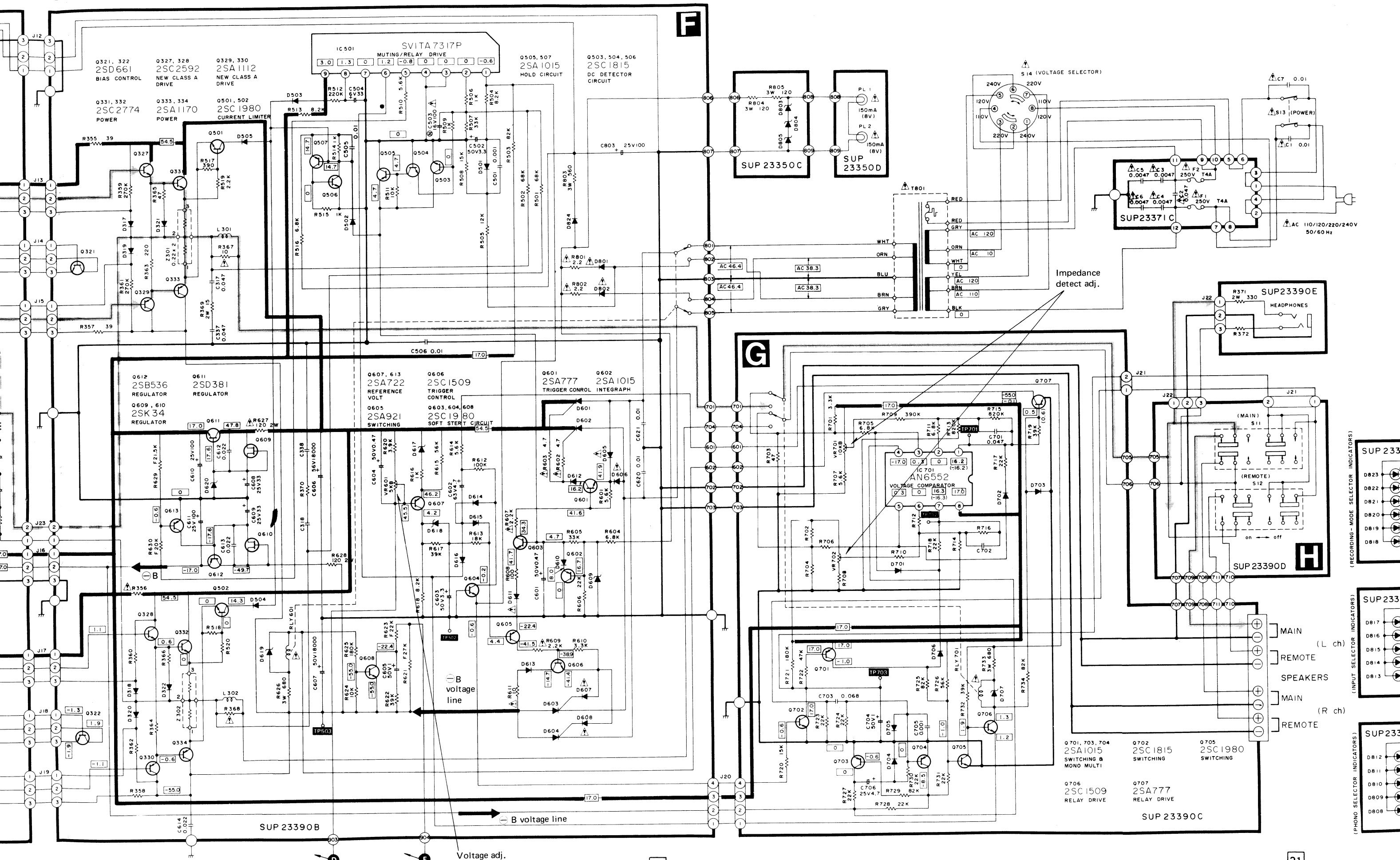
• Part number of diode

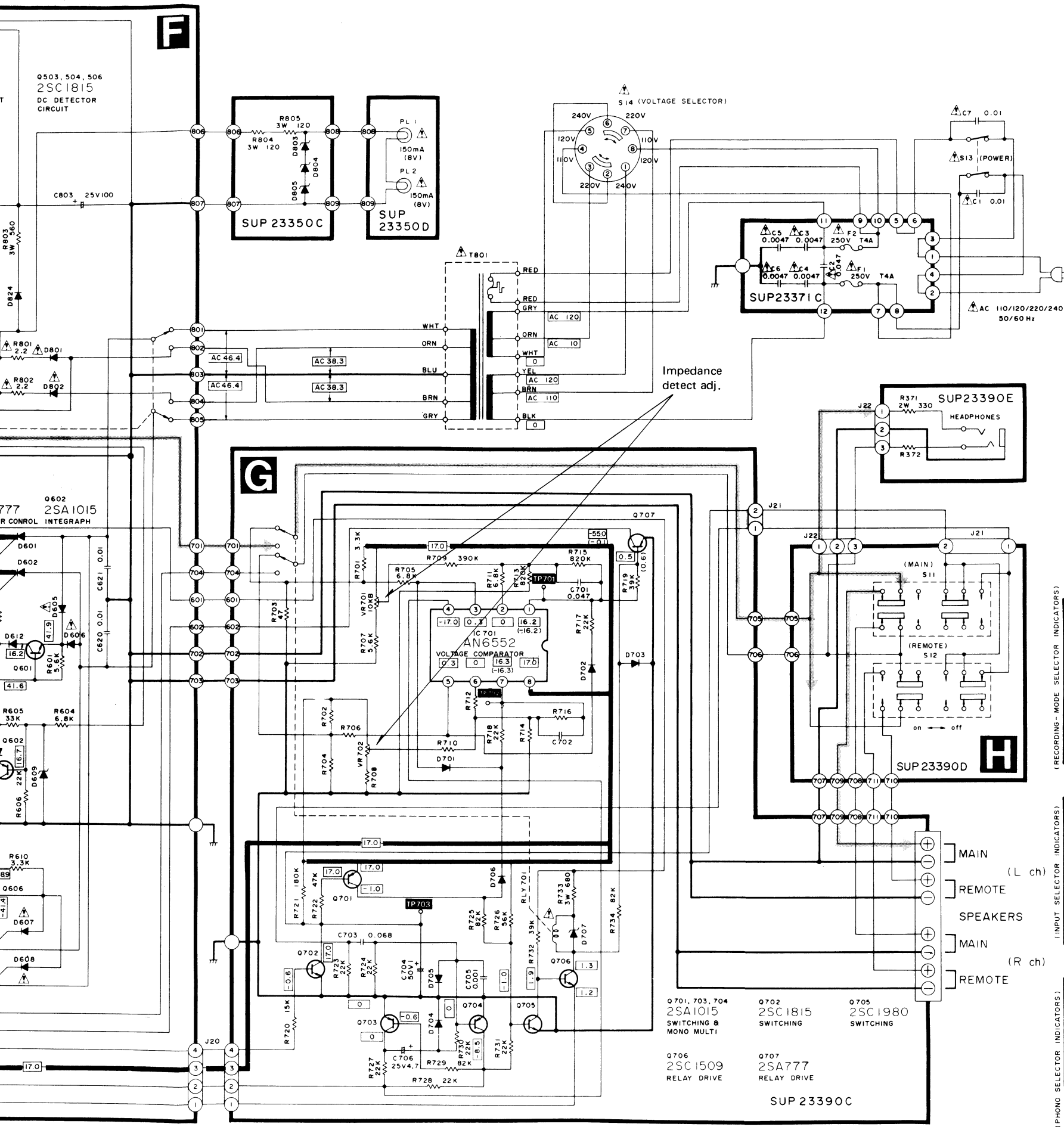
| Diode Ref. No. | Production Part No. | Standardized Part No. |
|---------------------|---------------------|-----------------------|
| D101, 102, 105, 106 | SVDMA26-1 | MA27A1 |
| D103, 104 | MA150 | MA162A |
| D621 | SVTTT202-50 | |



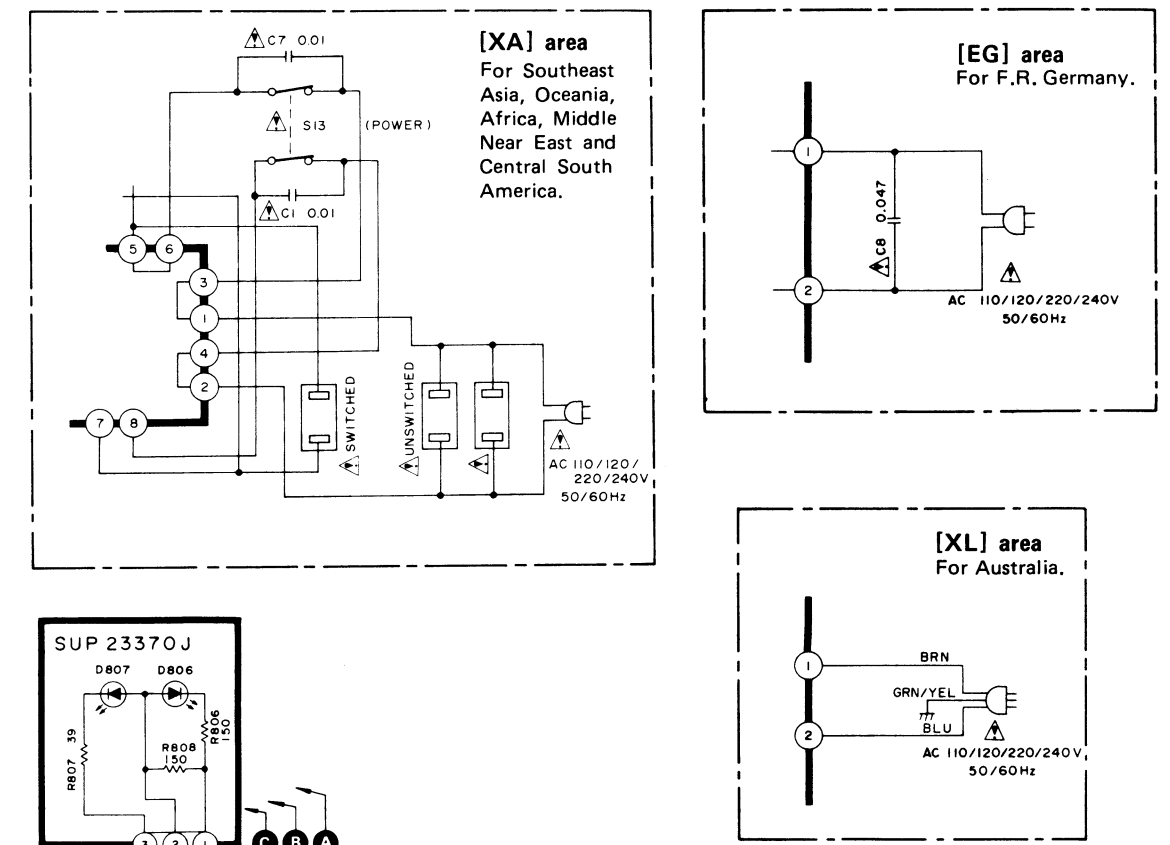








• Power source circuit for [XA], [EG] and [XL] areas only.



• Part number of diode

| Diode Ref. No. | Production Part No. | Standardized Part No. |
|--------------------------------|---------------------|-----------------------|
| D301 ~ 304, 502, 503 | MA150 | MA162A |
| D305, 306, 309, 310, 327 ~ 330 | SVDMA26-1 | MA27A1 |
| D307, 308, 311, 312 | MA162A | ← |
| D313 ~ 316, 323 ~ 326 | 0A90 | 20A90 |
| D317 ~ 320 | SVDMA26-2 | ← |
| D321, 322 | MA150 | MA162A |
| D501, 504, 505 | MA162A | ← |
| D601 ~ 604 | SVDCR6AM-4 | ← |
| D605 ~ 608, 801, 802 | SVDSRIK4 | ← |
| D609 | SVDMZ320B | ← |
| D610, 611, 614, 615 | MA150 | MA162A |
| D612, 613, 616 | MA162A | ← |
| D617 | SVDMZ308A1 | ← |
| D618 | SVDMZ303B | ← |
| D619, 707 | SVDMZ422B | ← |
| D620 | SVDMZ318A2 | ← |
| D701 ~ 706 | MA150 | MA162A |
| D803 ~ 805 | SVDMZ409B | ← |
| D806 | LN820WP | ← |
| D807 | LN420WP | ← |
| D808 ~ 823 | LN833WP | ← |
| D824 | SVDSRIK2 | ← |
| D825 | SVDMZ307B | ← |

Continued from page 14.

| Ref. No. | | Part No. | Part Name & Description |
|-----------------------|---|----------------------------|---|
| C5, 6 C8 [EG] only | △ | ECKDKC472MF ECQE2A473MW | Ceramic, 400VAC, 0.0047μF, ±20% Polyester, 250VAC, 0.047μF, ±20% |
| C101, 102 | △ | ECDD1H820K | Ceramic, 50V, 820pF, ±10% |
| C103, 104 | | ECKD1H472ZF | Ceramic, 50V, 0.0047μF, ±10% |
| C105, 106 | | ECKD1H103ZF | Ceramic, 50V, 0.01μF, ±10% |
| C107, 108 | | ECKD1H821KB | Ceramic, 50V, 820pF, ±10% |
| C109, 110 | | ECKD1H102ZF | Ceramic, 50V, 0.001μF, ±10% |
| C111, 112 | | ECQP1473GZ | Polypropylene, 100V, 0.047μF, ±2% |
| C113, 114 | | ECQP1103GZ | Polypropylene, 100V, 0.01μF, ±2% |
| C115, 116 | △ | ECQM1H332JZ | Polyester, 50V, 0.0033μF, ±5% |
| C117, 118 | | ECEA1EN3R3S | Non-Polar Electrolytic, 25V, 3.3μF |
| C119, 120 | | ECQM1H472JZ | Polyester, 50V, 0.0047μF, ±5% |
| C121, 122 | | ECEA0JS222 | Electrolytic, 6.3V, 2200μF |
| C123, 124 | | ECEA1ES470 | Electrolytic, 25V, 47μF |
| C125, 126 | | ECKD1H103ZF | Ceramic, 50V, 0.01μF, ±10% |
| C201, 202 | | ECQM1H472JZ | Polyester, 50V, 0.0047μF, ±10% |
| C203, 204 | | ECQM1H153JZ | Polyester, 50V, 0.015μF, ±10% |
| C205, 206 | | ECQM1H683JZ | Polyester, 50V, 0.068μF, ±10% |
| C207, 208 | | ECQM1H333JZ | Polyester, 50V, 0.033μF, ±10% |
| C209, 210 | | ECDD1H181K | Ceramic, 50V, 180pF, ±10% |
| C301, 302 | | ECDD1H121K | Ceramic, 50V, 120pF, ±10% |
| C303, 304 | | ECEA50Z1 | Electrolytic, 50V, 1μF |
| C305, 306 | | ECDD2H120K | Ceramic, 500V, 12pF, ±10% |
| C307, 308 | | ECDD2H030C | Ceramic, 500V, 3pF, ±0.25pF |
| C309, 310 | | ECDD2H120K | Ceramic, 500V, 12pF, ±10% |
| C311, 312 | | ECDD2H030C | Ceramic, 500V, 3pF, ±0.25pF |
| C313, 314 | | ECKD1H681KB | Ceramic, 50V, 680pF, ±10% |
| C315, 316 | | ECKD1H681KB | Ceramic, 50V, 680pF, ±10% |
| C317, 318 | | ECKD1H473ZF | Ceramic, 50V, 0.047μF, ±10% |
| C319, 320 | △ | ECEA1HS100 | Electrolytic, 50V, 10μF |
| C321, 322 | | ECEA25N4R7 | Non-Polar Electrolytic, 25V, 4.7μF |
| C323, 324 | | ECKD1H221KB | Ceramic, 50V, 220pF, ±10% |
| C325, 326 | | ECQM1H223JZ | Polyester, 50V, 0.022μF, ±10% |
| C327, 328 | | ECDD2H151KC | Ceramic, 500V, 150pF, ±10% |
| C329, 330 | | ECEA1JS100 | Electrolytic, 63V, 10μF |
| C331, 332 | | ECEA1JS100 | Electrolytic, 63V, 10μF |
| C333, 334 | | ECKD1H221KB | Ceramic, 50V, 220pF, ±10% |
| C335, 336 | | ECDD2H030C | Ceramic, 500V, 3pF, ±0.25pF |
| C337, 338 | | ECKD1H473ZF | Ceramic, 50V, 0.047μF, ±10% |

| Ref. No. | | Part No. | Part Name & Description |
|-----------|---|-------------|------------------------------------|
| C401, 402 | △ | ECEA1CN470S | Non-Polar Electrolytic, 16V, 47μF |
| C403, 404 | | ECQM1H153JZ | Polyester, 50V, 0.015μF, ±10% |
| C405, 406 | | ECQM1H153JZ | Polyester, 50V, 0.015μF, ±10% |
| C407, 408 | | ECQM1H152JZ | Polyester, 50V, 0.0015μF, ±10% |
| C409, 410 | | ECQM1H152JZ | Polyester, 50V, 0.0015μF, ±10% |
| C411, 412 | | ECQM1H153JZ | Polyester, 50V, 0.015μF, ±10% |
| C413, 414 | | ECQM1H683JZ | Polyester, 50V, 0.068μF, ±10% |
| C415, 416 | | ECQM1H392JZ | Polyester, 50V, 0.0039μF, ±10% |
| C417, 418 | | ECDD1H121K | Ceramic, 50V, 120pF, ±10% |
| C419, 420 | | ECQS1821JZ | Polyethylene, 125V, 820pF, ±5% |
| C421, 422 | | ECQM1H223JZ | Polyester, 50V, 0.022μF, ±10% |
| C423, 424 | | ECEA50Z4R7 | Electrolytic, 50V, 4.7μF |
| C501 | | ECKD1H102ZF | Ceramic, 50V, 0.001μF, ±10% |
| C502 | | ECEA50Z3R3 | Electrolytic, 50V, 3.3μF |
| C503 | △ | ECEA1CN101S | Non-Polar Electrolytic, 16V, 100μF |
| C504 | | ECEA1CS330 | Electrolytic, 16V, 33μF |
| C505 | | ECKD1H103ZF | Ceramic, 50V, 0.01μF, ±10% |
| C506 | | ECKD1H103ZF | Ceramic, 50V, 0.01μF, ±10% |
| C601 | | ECEA50Z4R7 | Electrolytic, 50V, 0.47μF |
| C602 | | ECEA1JS4R7 | Electrolytic, 63V, 4.7μF |
| C603 | | ECEA50Z3R3 | Electrolytic, 50V, 3.3μF |
| C604 | | ECEA50Z4R7 | Electrolytic, 50V, 0.47μF |
| C605 | | ECEA50Z1 | Electrolytic, 50V, 1μF |
| C606, 607 | | ECET56V183Z | Electrolytic, 56V, 18000μF, ±10% |
| C608, 609 | | ECEA1VS330 | Electrolytic, 35V, 33μF |
| C610, 611 | | ECEA1ES101 | Electrolytic, 25V, 100μF |
| C612, 613 | | ECKD1H223ZF | Ceramic, 50V, 0.022μF, ±10% |
| C614 | | ECKD1H223ZF | Ceramic, 50V, 0.022μF, ±10% |
| C616 | | ECEA50Z4R7 | Electrolytic, 50V, 0.47μF |
| C620, 621 | | ECKD2H103ZE | Ceramic, 500V, 0.01μF, ±10% |
| C701, 702 | | ECQM1H473JZ | Polyester, 50V, 0.047μF, ±10% |
| C703 | | ECQM1H683JZ | Polyester, 50V, 0.068μF, ±10% |
| C704 | | ECEA50Z1 | Electrolytic, 50V, 1μF |
| C705 | | ECKD1H102ZF | Ceramic, 50V, 0.001μF, ±10% |
| C706 | | ECEA25Z4R7 | Electrolytic, 25V, 4.7μF |
| C803 | | ECEA1ES101 | Electrolytic, 25V, 100μF |

| Ref. No. | | Part No. | Part Name & Description |
|--------------------------|---|--------------|-------------------------------------|
| 33 | | ESA3397B | Remote Control, Input Selector (S2) |
| 34 | | ESA3396B | Remote Control, Rec Selector (S3) |
| 35 | | SBC337 | Button, Power |
| 36 | | XCJ6P21B-A1 | Jack, Headphone |
| 37 | | SUW1847 | Bracket, Headphone Jack |
| 38 | ○ | SKC850S1 | Cabinet Cover |
| 38 | ⊗ | SKC850B1 | Cabinet Cover (Black) |
| 39 | | SML107-3 | Bracket, Power Transformer |
| 40 | | SMC947 | Shield Cover |
| 41 | | SUW1851-1 | Bracket, Heat Sink |
| 42 | | SUW1857 | Bracket, Heat Sink |
| 43 | | SUW1851 | Bracket, Heat Sink |
| 44 | | SMX513 | Spacer, Transistor |
| 45 | | SUW1855 | Bracket, Electrolytic Capacitor |
| 46 | | SUW1975 | Bracket, PCB Holder |
| 47 | | SHG6087-1 | Rubber, Power Transformer |
| 48 | | SMX507 | Shield Cover |
| 49 | | SGPUV9E | Rear Panel |
| 49 [D, EW] only | | SGP2850-4A | Rear Panel |
| 49 [XL] only | | SGPUV9L | Rear Panel |
| 49 [XA] only | | SGP2850-2A | Rear Panel |
| 50 | | SMX387 | Spacer, Rear Panel |
| 51 | | SHR127 | Bushing, AC Cord |
| 51 [EK] only | | SHR129 | Bushing, AC Cord |
| 51 [XL] only | | SHR131 | Bushing, AC Cord |
| 52 | △ | SJA97 | AC Cord |
| 52 [EK] only | △ | SJA1205M | AC Cord |
| 52 [EW, XA] only | △ | QFC1111 | AC Cord |
| 52 [XL] only | △ | QFC1207MA | AC Cord |
| 53 [XA] only | △ | SJS601-2 | Socket, AC Outlet |
| 54 | | SJF4101 | Terminal, GND |
| 55 | | SJF4813-2 | Terminal Board, Speaker |
| 56 | | SUW1853 | Bracket, PCB Holder |
| 57 | | SJF3431-6SA | Terminal Board, Input (Phono) |
| 58 | | SJF3049-2N | Terminal Board, Input and Output |
| 59 | | SKU8990-1 | Bottom Board |
| 60 | | SKL227-2 | Foot |
| 61 | | SMC939-1 | Shield Plate |
| 62 | | SHG6229 | Rubber, Right Side |
| 63 | | SMZ307 | Cover, Lamp |
| 64 [XL] only | | RJT202B | Terminal |
| 65 | | SJS6513 | Socket, Rec/Play |
| 66 | | SHR301 | Lead Clamper |
| SCREWS, NUTS and WASHERS | | | |
| N1 | | XTB3+58FZ | Screw, Tapping ⊕ 3x5 |
| N2 | | XTB3+88BFN | Screw, Tapping ⊕ 3x8 |
| N3 | | XTBS3+88BFZ1 | Screw, Tapping with Detent ⊕ 3x8 |
| N4 | | XXE4D5FZ | Screw, Knob (Selector Switch) |
| N5 | | XSN3+6S | Screw, ⊕ 3x6 |
| N6 | | XWA3B | Washer, Spring φ3 |
| N7 | | XTB3+88FZ | Screw, Tapping ⊕ 3x8 |
| N8 | | XUC3FT | Circlip, φ3 |

| Ref. No. | | Part No. | Part Name & Description |
|------------------|---|--------------|-----------------------------------|
| N9 | | SNE4021 | Nut, (Volume and Switch) |
| N10 | | XTBS3+88BFZ1 | Screw, Tapping with Detent ⊕ 3x8 |
| N11 | | XSN3+6S | Screw, ⊕ 3x6 |
| N12 | | XWA3B | Washer, Spring φ3 |
| N13 | | SNE59-1 | Washer, Wave |
| N14 | | XNS12 | Nut, φ12 |
| N15 | ○ | XTB4+88BFN | Screw, Tapping ⊕ 4x8 |
| N15 | ⊗ | XTB4+88BFZ | Screw, Tapping ⊕ 4x8 |
| N16 | | XTB4+108BFN | Screw, Tapping ⊕ 4x10 |
| N18 | | XWG3 | Washer, Plain φ3 |
| N19 | | XTN3+10BFZ | Screw, Tapping ⊕ 3x10 |
| N20 | | XWG3FZ | Washer, Plain φ3 |
| N21 | | XTBS3+88BFZ1 | Screw, Tapping with Detent ⊕ 3x8 |
| N22 | | XTN3+10B | Screw, Tapping ⊕ 3x10 |
| N23 | | XWG3 | Washer, Plain φ3 |
| N24 | | XTBS3+88BFZ1 | Screw, Tapping with Detent ⊕ 3x8 |
| N25 | | XTN3+12BFZ | Screw, Tapping ⊕ 3x12 |
| N26 | | XWG3FZ | Washer, Plain φ3 |
| N27 | | XSN3+10BNS | Screw, ⊕ 3x10 |
| N28 | | XWA3BFN | Washer, Spring φ3 |
| N29 | | XWG3FN | Washer, Plain φ3 |
| N30 | | XWC6B | Washer, External Toothed Lock φ6 |
| N31 | | XNG6E | Nut, φ6 |
| N32 | | XTB3+108FZ | Screw, Tapping ⊕ 3x10 |
| N33 | | XTBS3+88BFZ1 | Screw, Tapping with Detent ⊕ 3x8 |
| N34 | | XTB3+12BFZ | Screw, Tapping ⊕ 3x12 |
| N35 | ○ | SNE2083-1 | Screw, Tinted Class |
| N35 | ⊗ | SNE2083 | Screw, Tinted Class |
| N36 [XL] only | | XWC4BVW | Washer, External Toothed Lock φ4 |
| N37 [XL] only | | XSN3+8BNS | Screw, ⊕ 3x8 |
| N38 [XL] only | | XWA3BFN | Washer, Spring φ3 |
| N39 [XL] only | | XWC3B | Washer, External Toothead Lock φ3 |
| N40 | | XWA3BFZ | Washer, Spring φ3 |
| N41 | | XSN3+6BVS | Screw, ⊕ 3x6 |
| ACCESSORIES | | | |
| A1 [XA] only | △ | SJP5213-1 | Plug Adapter, AC Power |
| A2 [XA] only | △ | SJP5215 | Plug Adapter, AC Power |
| A3 | | SQF10995 | Instructions Book, Printed Matter |
| A3 [EK, XL] only | | SQF10997 | Instructions Book, Printed Matter |
| A3 [Ei] only | | SQF10999 | Instructions Book, Printed Matter |
| A3 [XA] only | | SQF11001 | Instructions Book, Printed Matter |
| A3 [EG] only | | SQF11083 | Instructions Book, Printed Matter |
| PACKING PARTS | | | |
| P1 | ○ | SPP701 | Polyethylene Bag |
| P1 | ⊗ | SPP689 | Polyethylene Bag |
| P2 | | SPS3327 | Pad, Left Side |
| P3 | | SPS3329 | Pad, Right Side |
| P4 | | SPG3333 | Carton Box |
| P4 [EF] only | | SPG3335 | Carton Box |
| P5 | ⊗ | SGK1413 | Label, Carton Box (Black) |

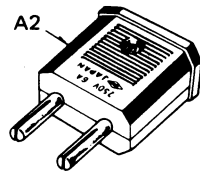
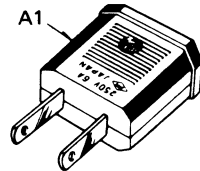
REPLACEMENT PARTS LIST Cabinet and chassis Parts

- Notes:**
- Part numbers are indicated on most mechanical parts. Please use this part number for parts orders.
 - Important safety notice:
Components identified by △ mark have special characteristics important for safety.
When replacing any of these components, use only manufacturer's specified parts.
 - ⊗-marked parts are used for black only, while ○-marked parts are for silver type only.

- Parts other than ⊗ and ○-marked are used for both black and silver types.
- Bracketed indications in Ref. No. columns specify the area. Parts without these indications can be used for all areas.

Black type model No.: SU-V9(K)

Accessories



Areas

- * [D] is available in Scandinavia.
- * [EG] is available in F.R. Germany.
- * [EK] is available in United Kingdom.
- * [EF] is available in France.
- * [EH] is available in Holland.
- * [EB] is available in Belgium.
- * [Ei] is available in Italy.
- * [EW] is available in Switzerland.
- * [XA] is available in Southeast Asia, Oceania, Africa, Middle Near East and Central South America.
- * [XL] is available in Australia.

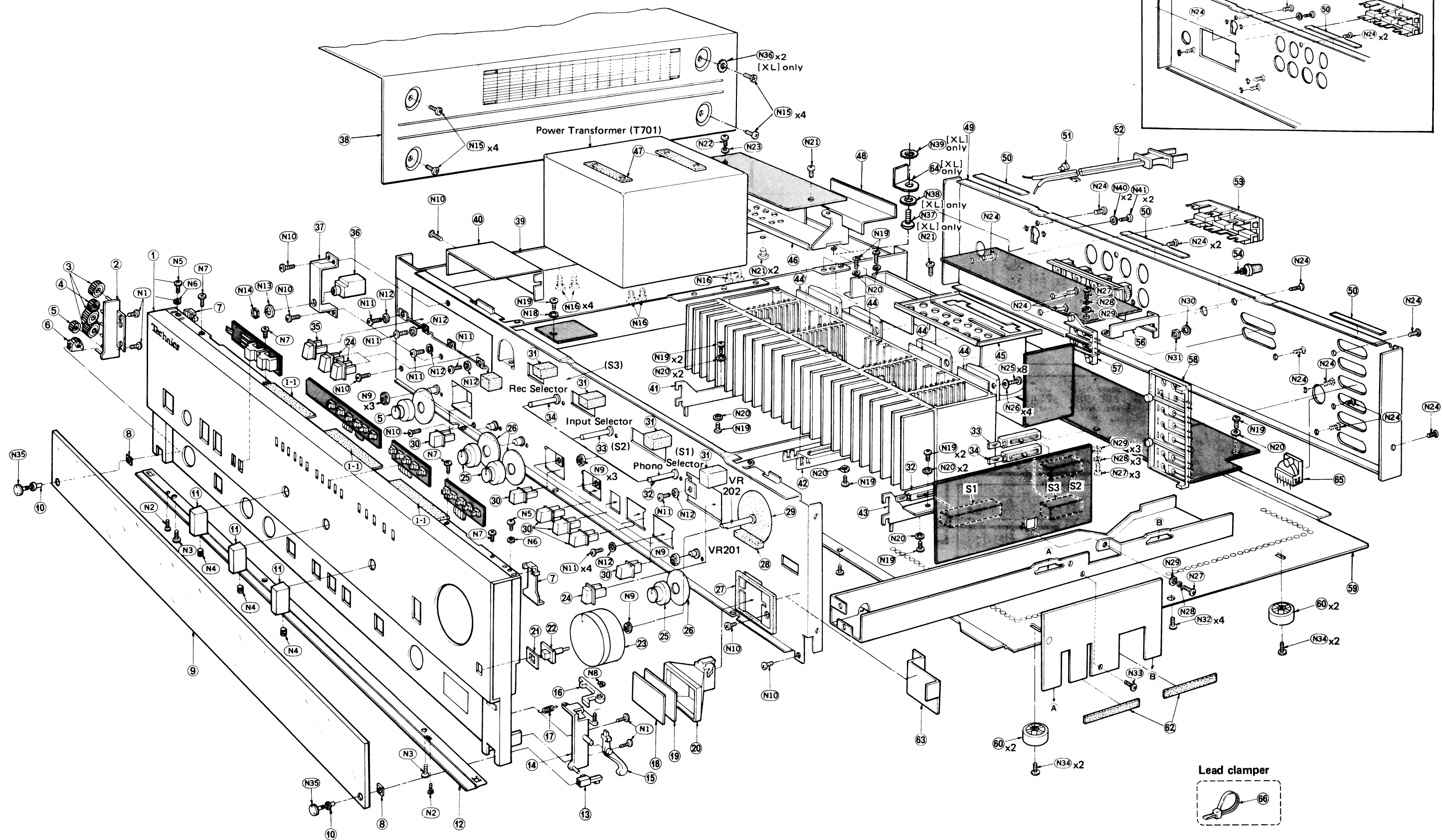
EXPLODED VIEWS

This detailed exploded view diagram illustrates the assembly of a Technics stereo receiver chassis. The diagram shows the front panel (38) with speaker grilles and controls, the main chassis (39) with various electronic components, and the rear panel (40) with the power transformer (T701) and ventilation slots. Key components and their callouts include:

- Front Panel (38):** Features speaker grilles, a volume knob, and various input buttons. Callouts include N15 x4, N1, N22, N23, N36 x2 [XL], and N1.
- Chassis (39):** The main body of the receiver, housing the power transformer (T701), tuning eye (47), and various electronic components. Callouts include N10, N11, N12, N13, N14, N16, N18, N19, N20, N21 x2, N22, N23, N24, N25, N26, N27, N28, N29, N30, N31, N32, N33, N34, N35, N36 x2 [XL], N37, N38, N39, N40, N41, N42, N43, N44, N45, N46, N47, N48, N49, N50, N51, N52, N53, N54, N55, N56, N57, N58, N59, N60, N61, N62, N63, N64, N65, N66, N67, N68, N69, N70, N71, N72, N73, N74, N75, N76, N77, N78, N79, N80, N81, N82, N83, N84, N85, N86, N87, N88, N89, N90, N91, N92, N93, N94, N95, N96, N97, N98, N99, N100, N101, N102, N103, N104, N105, N106, N107, N108, N109, N110, N111, N112, N113, N114, N115, N116, N117, N118, N119, N120, N121, N122, N123, N124, N125, N126, N127, N128, N129, N130, N131, N132, N133, N134, N135, N136, N137, N138, N139, N140, N141, N142, N143, N144, N145, N146, N147, N148, N149, N150, N151, N152, N153, N154, N155, N156, N157, N158, N159, N160, N161, N162, N163, N164, N165, N166, N167, N168, N169, N170, N171, N172, N173, N174, N175, N176, N177, N178, N179, N180, N181, N182, N183, N184, N185, N186, N187, N188, N189, N190, N191, N192, N193, N194, N195, N196, N197, N198, N199, N200, N201, N202, N203, N204, N205, N206, N207, N208, N209, N210, N211, N212, N213, N214, N215, N216, N217, N218, N219, N220, N221, N222, N223, N224, N225, N226, N227, N228, N229, N230, N231, N232, N233, N234, N235, N236, N237, N238, N239, N240, N241, N242, N243, N244, N245, N246, N247, N248, N249, N250, N251, N252, N253, N254, N255, N256, N257, N258, N259, N260, N261, N262, N263, N264, N265, N266, N267, N268, N269, N270, N271, N272, N273, N274, N275, N276, N277, N278, N279, N280, N281, N282, N283, N284, N285, N286, N287, N288, N289, N290, N291, N292, N293, N294, N295, N296, N297, N298, N299, N300, N301, N302, N303, N304, N305, N306, N307, N308, N309, N310, N311, N312, N313, N314, N315, N316, N317, N318, N319, N320, N321, N322, N323, N324, N325, N326, N327, N328, N329, N330, N331, N332, N333, N334, N335, N336, N337, N338, N339, N340, N341, N342, N343, N344, N345, N346, N347, N348, N349, N350, N351, N352, N353, N354, N355, N356, N357, N358, N359, N360, N361, N362, N363, N364, N365, N366, N367, N368, N369, N370, N371, N372, N373, N374, N375, N376, N377, N378, N379, N380, N381, N382, N383, N384, N385, N386, N387, N388, N389, N390, N391, N392, N393, N394, N395, N396, N397, N398, N399, N400, N401, N402, N403, N404, N405, N406, N407, N408, N409, N410, N411, N412, N413, N414, N415, N416, N417, N418, N419, N420, N421, N422, N423, N424, N425, N426, N427, N428, N429, N430, N431, N432, N433, N434, N435, N436, N437, N438, N439, N440, N441, N442, N443, N444, N445, N446, N447, N448, N449, N450, N451, N452, N453, N454, N455, N456, N457, N458, N459, N460, N461, N462, N463, N464, N465, N466, N467, N468, N469, N470, N471, N472, N473, N474, N475, N476, N477, N478, N479, N480, N481, N482, N483, N484, N485, N486, N487, N488, N489, N490, N491, N492, N493, N494, N495, N496, N497, N498, N499, N500, N501, N502, N503, N504, N505, N506, N507, N508, N509, N510, N511, N512, N513, N514, N515, N516, N517, N518, N519, N520, N521, N522, N523, N524, N525, N526, N527, N528, N529, N530, N531, N532, N533, N534, N535, N536, N537, N538, N539, N540, N541, N542, N543, N544, N545, N546, N547, N548, N549, N550, N551, N552, N553, N554, N555, N556, N557, N558, N559, N560, N561, N562, N563, N564, N565, N566, N567, N568, N569, N570, N571, N572, N573, N574, N575, N576, N577, N578, N579, N580, N581, N582, N583, N584, N585, N586, N587, N588, N589, N590, N591, N592, N593, N594, N595, N596, N597, N598, N599, N600, N601, N602, N603, N604, N605, N606, N607, N608, N609, N610, N611, N612, N613, N614, N615, N616, N617, N618, N619, N620, N621, N622, N623, N624, N625, N626, N627, N628, N629, N630, N631, N632, N633, N634, N635, N636, N637, N638, N639, N640, N641, N642, N643, N644, N645, N646, N647, N648, N649, N650, N651, N652, N653, N654, N655, N656, N657, N658, N659, N660, N661, N662, N663, N664, N665, N666, N667, N668, N669, N670, N671, N672, N673, N674, N675, N676, N677, N678, N679, N680, N681, N682, N683, N684, N685, N686, N687, N688, N689, N690, N691, N692, N693, N694, N695, N696, N697, N698, N699, N700, N701, N702, N703, N704, N705, N706, N707, N708, N709, N710, N711, N712, N713, N714, N715, N716, N717, N718, N719, N720, N721, N722, N723, N724, N725, N726, N727, N728, N729, N730, N731, N732, N733, N734, N735, N736, N737, N738, N739, N740, N741, N742, N743, N744, N745, N746, N747, N748, N749, N750, N751, N752, N753, N754, N755, N756, N757, N758, N759, N760, N761, N762, N763, N764, N765, N766, N767, N768, N769, N770, N771, N772, N773, N774, N775, N776, N777, N778, N779, N780, N781, N782, N783, N784, N785, N786, N787, N788, N789, N790, N791, N792, N793, N794, N795, N796, N797, N798, N799, N800, N801, N802, N803, N804,

EXPLODED VIEWS

Rear Panel and AC Outlet. . . for [XA] area



Lead clamping

