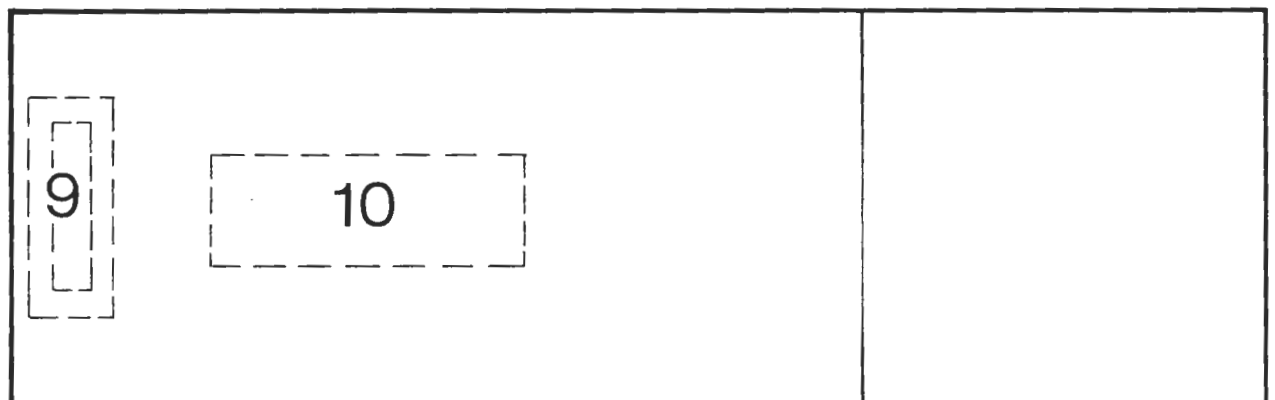
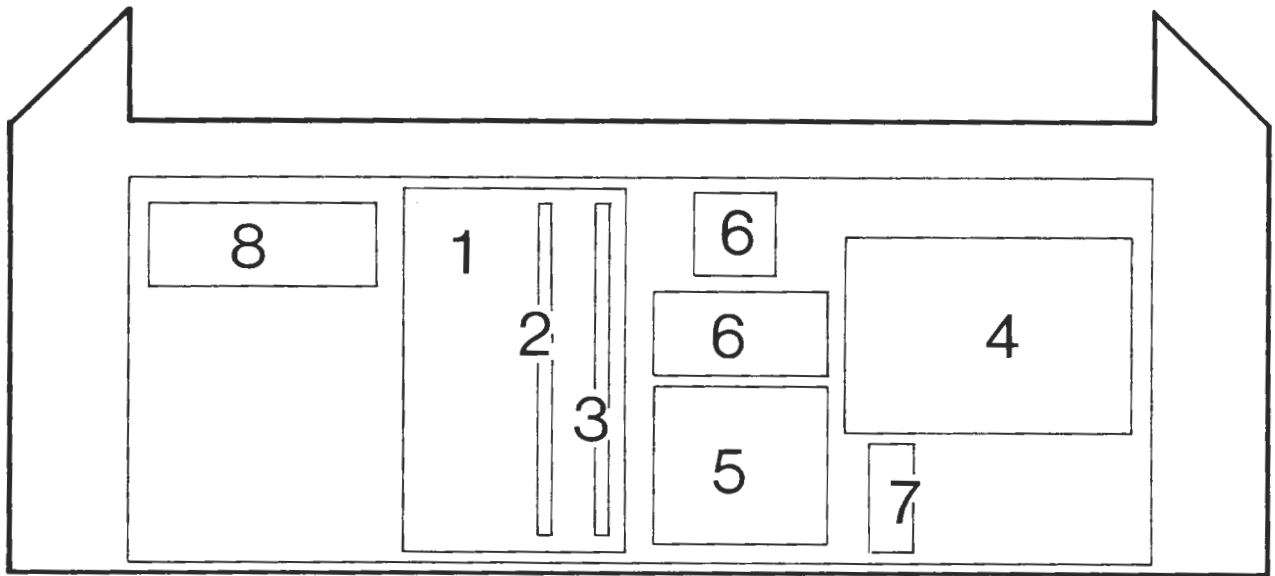
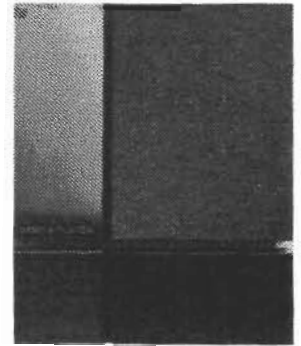
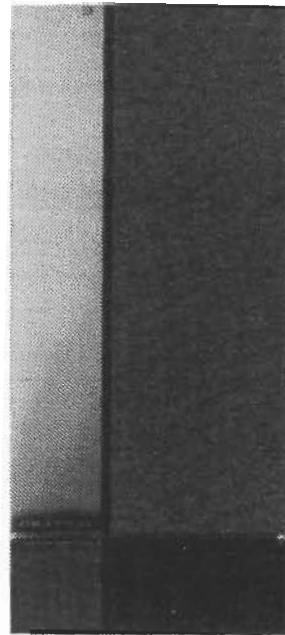


- 1 Power Supply
- 2 System Control
- 3 Microprocessor
- 4 Output Amplifier
- 5 Switch
- 6 Input Socket
- 7 NTC
- 8 Transformer
- 9 Stand by
- 10 Display
- 11 Crossover Network



| TECHNICAL SPECIFICATIONS | BEOVOX 3000 | BEOVOX 5000 |
|-------------------------------|--------------------------|--------------------------|
| Type | 6716 | 6706 |
| Dimensions W x H x D/Weight | 45 x 38 x 8 cm/5 kg | 45 x 85 x 8 cm/11 kg |
| | BEOLAB 3000 | BEOLAB 5000 |
| Type | 6711-6712-6713-6714-6715 | 6701-6702-6703-6704-6705 |
| Dimensions W x H x D/Weight | 45 x 54 x 8 cm/9 kg | 45 x 101 x 8 cm/15 kg |
| Long-term maximum input power | 90 watts | 120 watts |
| Maximum noise power | 45 watts | 60 watts |
| Impedance | 8 ohms | 8 ohms |
| Frequency range +4 -8 dB | 75-20,000 Hz | 60-20,000 Hz |
| Power at 94 dB SPL | 5 watts | 3.2 watts |
| Sensitivity 1 W | 87 dB | 89 dB |
| Distortion 250-6000 Hz | <1% | <0.2% |
| Cabinet principle | Bass Reflex | Bass Reflex |
| Woofers | 5"-13 cm | 2 units 5"-13 cm |
| Tweeter | 1"-2.5 cm | 1"-2.5 cm |
| Crossover frequency | 3500 Hz | 3500 Hz |
| Net. volume | 5.4 litres | 14 litres |

POWER AMPLIFIER

| | | |
|--------------------------------|-----------------------------|-----------------------------|
| Long-term maximum output power | 90 watts | 90 watts |
| Harmonic distortion THD | <0.1%/55 watts 20-20,000 Hz | <0.1%/55 watts 20-20,000 Hz |
| Frequency range +0 -1 dB | 40-20,000 Hz | 40-20,000 Hz |

Signal-to-noise ratio:

| | | |
|-----------------------|--------|--------|
| A-weighted 1W | >80 dB | >80 dB |
| A-weighted max. power | >97 dB | >97 dB |

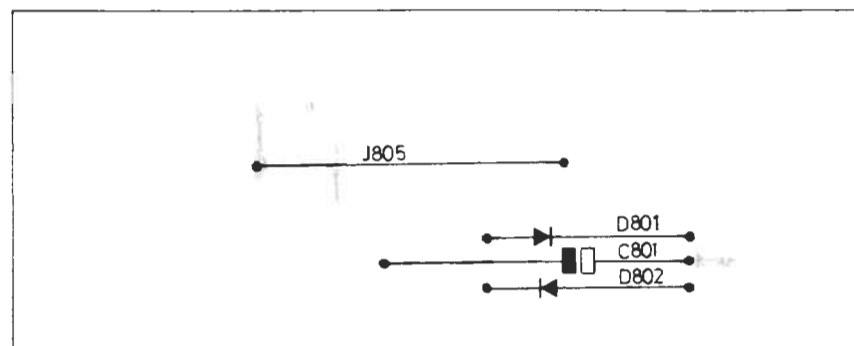
Input sensitivity/impedance:

| | | |
|-------------------------------|----------------------------|----------------------------|
| Power Link sockets | 1 V/47 kohms | 1 V/47 kohms |
| Power Link channel separation | >66 dB | >66 dB |
| Speaker Link socket | 11.3 - 16 - 22 V/>47 kohms | 11.3 - 16 - 22 V/>47 kohms |
| Phono plug | 1 V/33 kohms | 1 V/33 kohms |
| Dynamic Bass Equalizer | 4-0 dB | 4-0 dB |
| Channel switch | L-R | L-R |
| Stand by function | Automatic or Manual ON-OFF | Automatic or Manual ON-OFF |
| Power supply | 220 (100-120-240) volts | 220 (100-120-240) volts |
| Power consumption | Max. 130 watts | Max. 130 watts |
| Stand by | 2.6 watts | 2.6 watts |

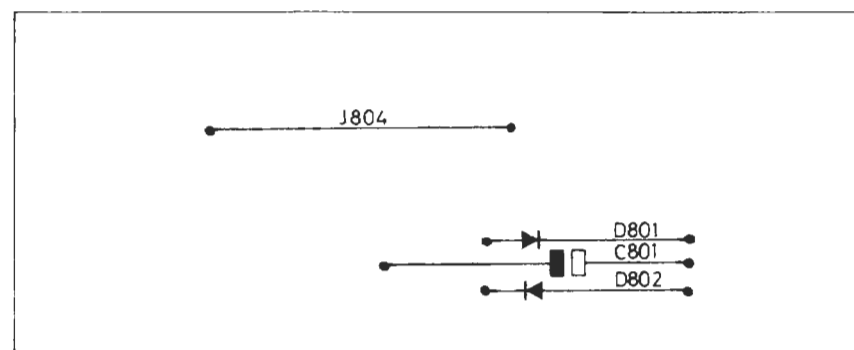
Subject to change without notice

Wiring of Mains Transformer

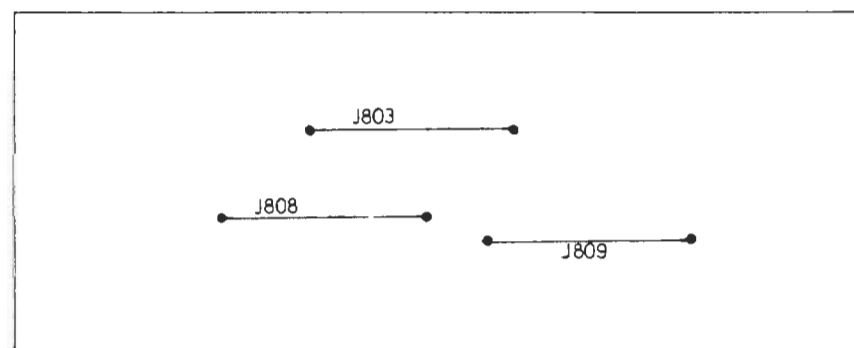
220V
Type 6701-6711



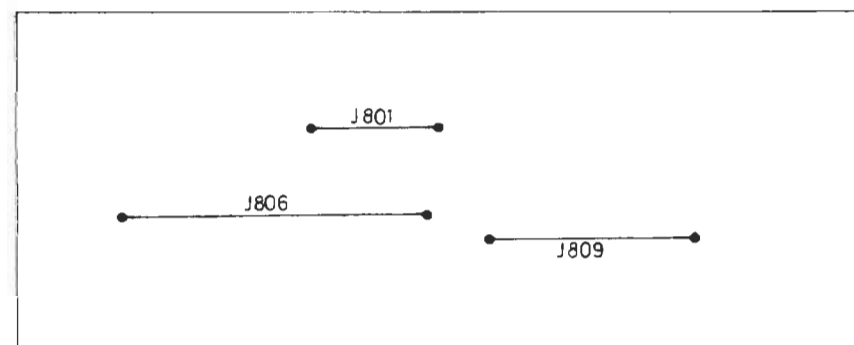
240V
Type 6702-6712 (GB)
Type 6705-6715 (AUS)



120V
Type 6703-6713 (US)



100V
Type 6704-6714 (JAP)



DIAGRAMFORKLARING

På diagrammerne er der angivet typenumre på transistorer og IC'er. Hvis positionsnummeret er efterfulgt af en stjerne, skal reservedelsnummeret altid benyttes, da denne komponent er specielt udvalgt, f.eks. TR102*.

Styrekredsløb

I visse styrekredsløb er den aktive tilstand angivet med en funktions- eller bogstavsangivelse. Denne kan eksempelvis være ST.BY. = »low« i stand-by-stilling eller ST.BY. = »high« i stand-by-stilling.

Forsyningsspændinger

Alle forsyningsspændinger i diagrammerne er angivet med en pil og en spændingsangivelse.

Eksempel:

Ved siden af spændingsangivelsen står der f.eks. 7 CON. Dette betyder, at den pågældende forsyningsspænding går til 7 steder på den pågældende diagramside (7 CON. = 7 connections).

EXPLANATION OF DIAGRAM

Type numbers of transistors and ICs are indicated on the diagrams. If the position number is followed by an asterisk the spare part number must always be used because the component in question has been specially selected, e.g. TR102*.

Control Circuit

In certain control circuits the active mode is indicated by a function term or by an abbreviation. This may be e.g. ST.BY. = low in the stand-by mode or ST.BY. = high in the stand-by mode.

Supply Voltages

All supply voltages in the diagrams are indicated by an arrow and a voltage indication.

Example:

"7 CON." This means that the supply voltage in question goes to 7 different places on the diagram page in question (7 CON. = 7 connections).

SYMBOL FOR SIKKERHEDSKOMPONENTER



Ved udskiftning af komponenter med dette symbol skal der anvendes komponenter med samme reservedelsnummer. Den nye komponent skal monteres på samme måde som den udskiftede.

MÅLEBETINGELSER

Alle DC-spændinger er målt i forhold til stel med et voltmeter med en indgangsmodstand på 10 Mohm.

DC-spændingerne er opgivet i volt (V), f.eks. 0,7 V.

SYMBOL OF SAFETY COMPONENTS



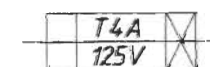
When replacing components with this symbol, components with identical part numbers must be used. The new component must be mounted in the same way as the one replaced.

MEASURING CONDITIONS

All DC voltages have been measured in relation to ground with a voltmeter with an input resistance of 10 Mohms.

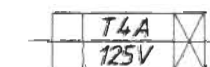
The DC voltages are stated in volts (V), e.g. 0.7 V.

EXPLANATION DE SYMBOLES DU FUSIBLE UTILISES DANS L'APPAREIL



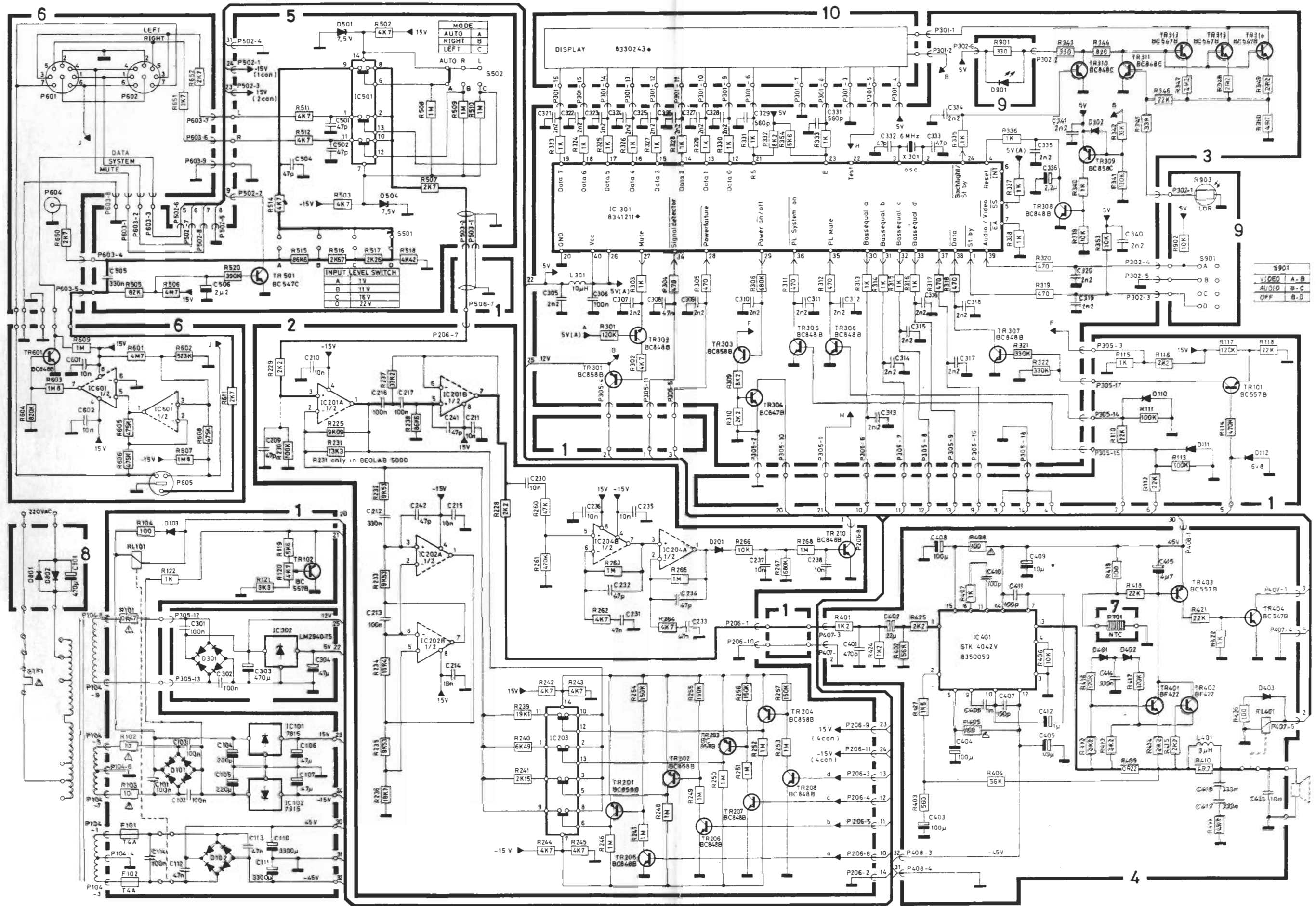
Remplacer par un fusible retardé de la même type et de 4 ampères 125 volts.

EXPLANATION OF THE FUSE SYMBOLS USED IN THE SET

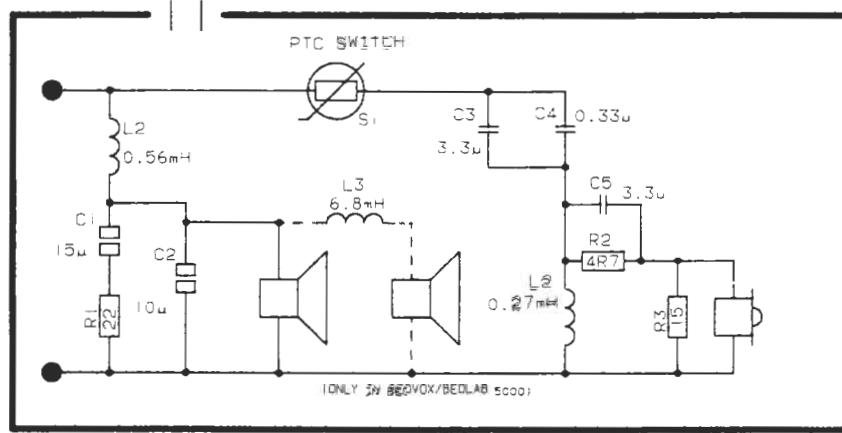


Replace with the same type of 4 amperes 125 volts slow acting fuse.

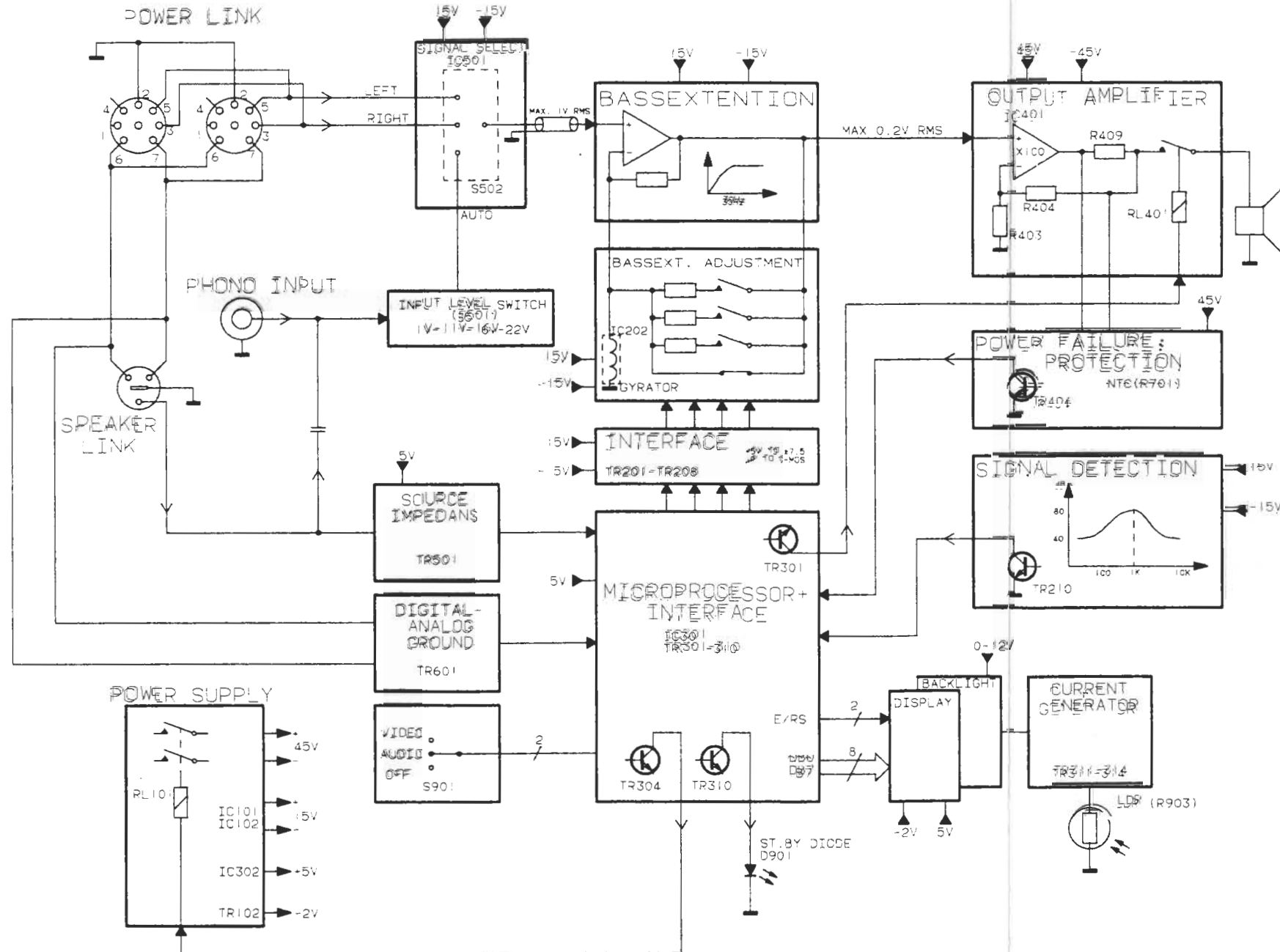
DIAGRAM



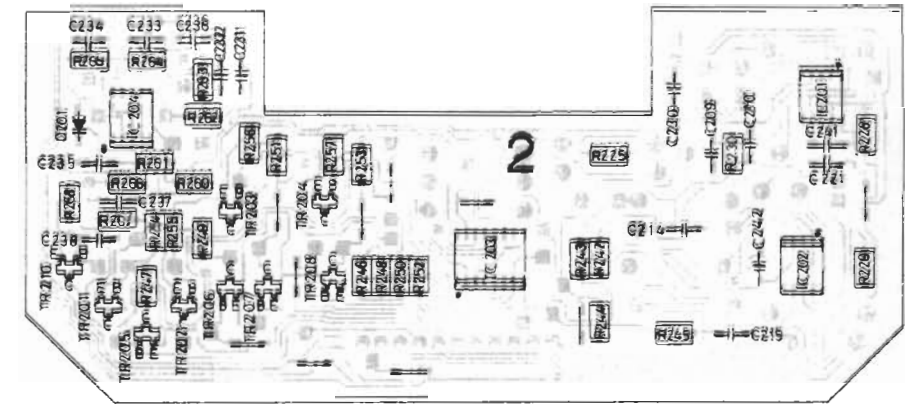
Crossover network



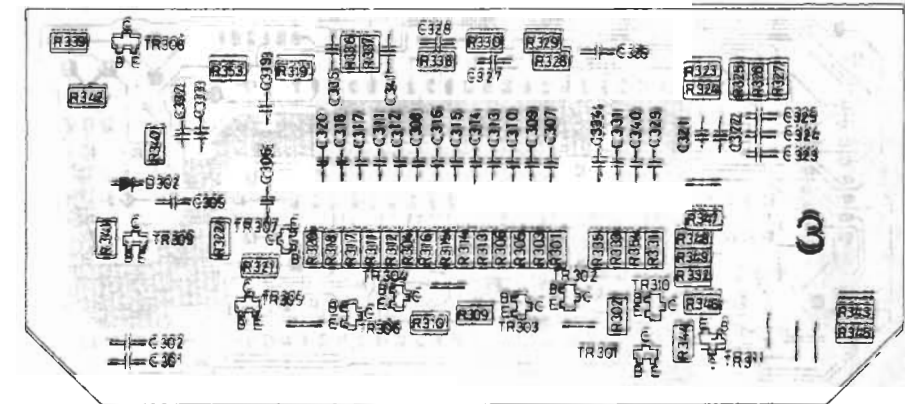
Blockdiagram



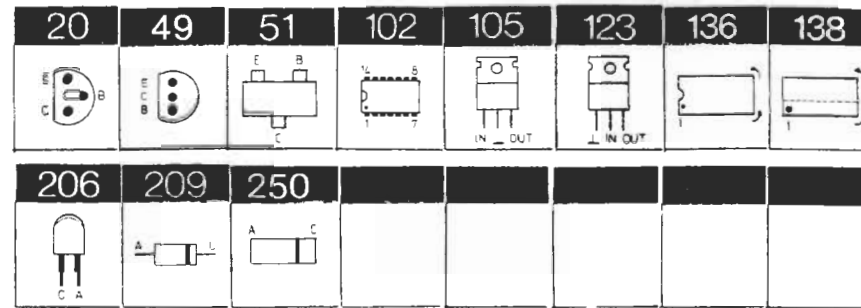
PCB2, System Control



PCB3, Microprocessor



LIST OF ELECTRICAL PARTS



Resistors not referred to are standard, see page 3-2

PCB 1, 8001037 Power Supply

| | | | | | | | |
|-----------|---------|--------|--------------------------------|-------|---------|---------|------------|
| IC101 | 8340064 | 105 | LM 340T-15 | IC102 | 8340240 | 123 | MC 7915 CT |
| TR101-102 | 8320503 | 20 | BC 557B | | | | |
| D101 | 8300466 | B125 | C1500 | D110- | 8300058 | 209 | 1N 4148 |
| D102 | 8300487 | | KBU 6D | D111 | | | |
| D103 | 8300058 | 209 | 1N 4148 | D112 | 8300154 | 209 | ZPD 6.8V |
| R101 | 5020684 | 0.47 Ω | 10% 0.4W | R102- | 5020489 | 10 Ω | 10% 0.3W |
| R103 | | | | R120 | 5370324 | 4.7 kΩ | 20% 0.1W |
| C101-103 | 4130230 | 100 nF | 20% 63V | C110- | 4200799 | 3300 μF | 20% 50V |
| C104- | 4200311 | 220 μF | -10+100% 40V | C111- | 4130087 | 47 nF | 10% 250V |
| C105 | | | | C112- | | | |
| C106- | 4201087 | 47 μF | -10+100% 40V | C113 | | | |
| C107 | | | | C114 | 4130103 | 100 nF | 20% 250V |
| RL101 | 7600069 | | Relay 24V | | | | |
| F101-102 | 6600068 | | Fuse 4AT f/6701-02-05-11-12-15 | | | | |
| F101-102 | 6600094 | | Fuse 4AT f/6703-04-13-14 | | | | |
| | 7200085 | | Socket | | | | |
| P104 | 7220743 | | Plug 9/8 pole | | | | |
| P105 | 7220321 | | Plug 18/18 pole | | | | |
| P106 | 7220250 | | Plug 11/11 pole | | | | |

PCB 2, 8001033 System Control

| | | | | | | | |
|-----------|---------|---------|---------|-------|---------|---------|---------|
| IC201-202 | 8341022 | 138 | 4558 | IC203 | 8341024 | 138 | 4066 |
| | | | | IC204 | 8341022 | 138 | 4558 |
| TR201-204 | 8320616 | 51 | BC 858B | TR210 | 8320615 | 51 | BC 848B |
| TR205-208 | 8320615 | 51 | BC 848B | | | | |
| D201 | 8300482 | 250 | LL 4148 | | | | |
| R225 | 5021023 | 9.09 kΩ | 1% 1/4W | R236 | 5020034 | 18.7 kΩ | 1% 1/4W |
| R231 | 5020095 | 13.3 kΩ | 1% 1/4W | R237 | 5020083 | 33.2 kΩ | 1% 1/4W |
| R232- | 5020229 | 9.53 kΩ | 1% 1/4W | R238 | 5020099 | 86.6 kΩ | 1% 1/4W |
| R233 | | | | R239 | 5020337 | 19.1 kΩ | 1% 1/4W |
| R234 | 5020343 | 15.4 kΩ | 1% 1/4W | R240 | 5020590 | 6.49 kΩ | 1% 1/4W |
| R235 | 5020229 | 9.53 kΩ | 1% 1/4W | R241 | 5020764 | 2.15 kΩ | 1% 1/4W |

| | | | | | | | |
|-------|---------|--------|-------------|-------|---------|-------|-------------|
| C209 | 4000293 | 47 pF | 5% 50V | C230 | 4010176 | 10 nF | -20+80% 50V |
| C210- | 4010176 | 10 nF | -20+80% 50V | C231 | 4010209 | 47 nF | 10% 50V |
| C211 | | | | C232 | 4000293 | 47 pF | 5% 50V |
| C212 | 4130309 | 330 nF | 10% 63V | C233 | 4010209 | 47 nF | 10% 50V |
| C213 | 4130261 | 100 nF | 5% 63V | C234 | 4000293 | 47 pF | 5% 50V |
| C214- | 4010176 | 10 nF | -20-80% 50V | C235- | 4010176 | 10 nF | -20+80% 50V |
| C215 | | | | C238 | | | |
| C216- | 4130261 | 100 nF | 5% 63V | C241- | 4000293 | 47 pF | 5% 50V |
| C217 | | | | C242 | | | |

PCB 3, 8001032 Microprocessor

| | | | | | | | |
|---------|---------|-----|---------|--------|---------|-----|-------------|
| IC301*Δ | 8341211 | 136 | 80C50 | IC302 | 8341163 | 105 | LM 2940CT-5 |
| | 3302423 | | Screen | | | | |
| TR301 | 8320616 | 51 | BC 858B | TR309 | 8320778 | 51 | BC 858C |
| TR302 | 8320615 | 51 | BC 848B | TR310- | 8320747 | 51 | BC 848C |
| TR303 | 8320616 | 51 | BC 858B | | 311 | | |
| TR304 | 8320755 | 51 | BC 847B | TR312- | 8320497 | 20 | BC 547B |
| TR305- | 8320615 | 51 | BC 848B | | 314 | | |

| | | | |
|------|---------|------|---------|
| D301 | 8300466 | B125 | C1500 |
| D302 | 8300482 | 250 | LL 4148 |

| | | | | | | | |
|-------|---------|--------|--------------|-------|---------|--------|---------|
| C301- | 4010166 | 100 nF | -20+80% 50V | C329 | 4000325 | 560 pF | 5% 50V |
| C302 | | | | C331 | 4000325 | 560 pF | 5% 50V |
| C303 | 4200522 | 470 μF | -20+50% 16V | C332- | 4000293 | 47 pF | 5% 50V |
| C304 | 4201087 | 47 μF | -10+100% 40V | | 333 | | |
| C305 | 4010170 | 2.2 nF | 10% 50V | C334- | 4010170 | 2.2 nF | 10% 50V |
| C306 | 4010166 | 100 nF | -20+80% 50V | | 335 | | |
| C307 | 4010170 | 2.2 nF | 10% 50V | C336 | 4200517 | 2.2 μF | 20% 50V |
| C308 | 4010209 | 47 nF | 10% 50V | C340- | 4010170 | 2.2 nF | 10% 50V |
| C309- | 4010170 | 2.2 nF | 10% 50V | | 341 | | |

| | | | |
|------|---------|------|-----------|
| L301 | 8020552 | Coil | 10 μH 10% |
|------|---------|------|-----------|

| | | | |
|------|---------|---------|---------|
| X301 | 8090009 | Crystal | 6.0 MHz |
|------|---------|---------|---------|

| | | | | | | | |
|------|---------|--------|---------|------|---------|--------|------------|
| P301 | 7210723 | Socket | 16 pole | P305 | 7210110 | Socket | 11/11 pole |
| P302 | 7220470 | Plug | 6 pole | P315 | 7210289 | Socket | 7/7 pole |

| | | |
|-------|---------|----------|
| IC401 | 8350059 | STK4042V |
|-------|---------|----------|

| | | | | | | | |
|--------|---------|----|--------|-------|---------|----|---------|
| TR401- | 8320505 | 49 | BF 422 | TR403 | 8320503 | 20 | BC 557B |
| TR402 | | | | TR404 | 8320497 | 20 | BC 547B |

| | | | |
|-------|---------|-----|---------|
| D401- | 8300058 | 209 | 1N 4148 |
| D403 | | | |

| | | | | | | | |
|------|---------|--------|----------|-------|---------|-------|---------|
| R405 | 5020159 | 100 Ω | 10% 0.3W | R410- | 5010765 | 4.7 Ω | 5% 1/2W |
| R408 | 5020159 | 100 Ω | 10% 0.3W | | 411 | | |
| R409 | 5100302 | 0.22 Ω | 10% 2W | | | | |

| | | | | | | | |
|------|---------|--------|--------------|-------|---------|--------|----------|
| C401 | 4010128 | 470 pF | 10% 63V | C410 | 4000243 | 100 pF | 5% 63V |
| C402 | 4200672 | 22 μF | 20% 16V | C411 | 4000292 | 100 pF | 5% 50V |
| C403 | 4200129 | 100 μF | -20+50% 16V | C412 | 4200512 | 1 μF | 20% 50V |
| C404 | 4200368 | 100 μF | -10+100% 63V | C414 | 4130236 | 330 nF | 20% 63V |
| C405 | 4000342 | 10 μF | -10+50% 63V | C415 | 4200515 | 4.7 μF | 20% 25V |
| C406 | 4010132 | 1 nF | 10% 50V | C416- | 4130233 | 220 nF | 20% 63V |
| C407 | 4000292 | 100 pF | 5% 50V | | 417 | | |
| C408 | 4200368 | 100 μF | -10+100% 63V | C420 | 4130109 | 10 nF | 10% 250V |
| C409 | 4200342 | 10 μF | -10+50% 63V | | | | |

| | | | |
|------|---------|------|------|
| L401 | 6850165 | Coil | 3 μH |
|------|---------|------|------|

| | | | |
|-------|---------|-------|-----|
| RL401 | 7600095 | Relay | 12V |
|-------|---------|-------|-----|

| | | | | | | | |
|------|---------|------|--------|------|---------|------|----------|
| P407 | 7220469 | Plug | 5 pole | P408 | 7220793 | Plug | 4/3 pole |
|------|---------|------|--------|------|---------|------|----------|

Δ indicates that static electricity may destroy the component

*Specially selected or adapted sample

PCB 5, 8001039 Switch

| | | | | | | | |
|----------|---------|-------------|--------------|------|---------|---------------|----------|
| IC501Δ | 8340202 | 102 | MC 14066 BCP | | | | |
| TR501 | 8320679 | 20 | BC 548C | | | | |
| D501 | 8300496 | 209 | ZPD 7.5V | D504 | 8300496 | 209 | ZPD 7.5V |
| R515 | 5020099 | 86.6 kΩ | 1% 1/4W | R517 | 5020923 | 2.26 kΩ | 1% 1/4W |
| R516 | 5020203 | 2.67 kΩ | 1% 1/4W | R518 | 5020770 | 4.42 kΩ | 1% 1/4W |
| C501-502 | 4000137 | 47 pF | 5% 63V | C505 | 4130309 | 330 nF | 10% 63V |
| C504 | 4000137 | 47 pF | 5% 63V | C506 | 4200847 | 2.2 μF | 20% 50V |
| S501 | 7400371 | Switch | | S502 | 7400372 | Switch | |
| P502 | 7220700 | Plug 8 pole | | P503 | 7220134 | Plug 2/2 pole | |

PCB 6, 8001041 Input Socket

| | | | | | | | |
|----------|---------|-------------------|------------|------|---------|--------------------------|---------|
| IC601 | 8340996 | 138 | LM 1458 | | | | |
| TR601 | 8320615 | 51 | BC 848B | | | | |
| R602 | 5011733 | 523 kΩ | 1% 1/8W | R603 | 5011732 | 475 kΩ | 1% 1/8W |
| R605 | 5011732 | 475 kΩ | 1% 1/8W | | | | |
| C601-602 | 4010176 | 10 nF | 20±80% 50V | | | | |
| P601-602 | 7210695 | DIN-socket 8 pole | | P604 | 7210306 | Phonosocket | |
| P603 | 7220702 | Plug 9 pole | | P605 | 7210521 | Loudspeakersocket 4 pole | |

PCB 7, 8001038 NTC

| | | | | | | | |
|----------|---------|--------------------------|--------------|--|--|--|--|
| R701 | 5220036 | NTC 330 kΩ | 10% 1/2W | | | | |
| D801-802 | 8300023 | 209 | 1N 4002 | | | | |
| C801 | 4200677 | 470 μF | -10+50% 6.3V | | | | |
| | 7530101 | Contact pin | | | | | |
| TF1 | 6609034 | Thermofuse | | | | | |
| | 6609024 | Thermofuse only f/Canada | | | | | |

PCB 9, 8001067 Stand by

| | | | | | | | |
|------|---------|------------|------------------|--|--|--|--|
| D901 | 8330001 | 206 | CQV 10-5 LED red | | | | |
| R903 | 5210006 | LDR 3.3 kΩ | 33% | | | | |

PCB 10, 8330243 Display

| | | | | | | | |
|----|---------|-------------|---------|----|---------|---------|---------|
| R1 | 5100368 | 22 Ω | 5% 6W | R3 | 5100349 | 15 Ω | 5% 3W |
| R2 | 5100350 | 4.7 Ω | 5% 3W | | | | |
| C1 | 4200679 | 15 μF | 10% 35V | C4 | 4130426 | 0.33 μF | 5% 100V |
| C2 | 4200687 | 10 μF | 10% 35V | C5 | 4130425 | 3.3 μF | 5% 100V |
| C3 | 4130425 | 3.3 μF | 5% 100V | | | | |
| S1 | 6609027 | PTC switch | | | | | |
| | 7500124 | Contact pin | | | | | |

Δ indicates that static electricity may destroy the component

| | | | | | | | |
|------|---------|-------------|--|--|--|--|--|
| 90L3 | 6850186 | Coil 6.8 mH | | | | | |
|------|---------|-------------|--|--|--|--|--|

Standard Resistors: Resistors 5% 1/4 W

| | x1 | x10 | x100 | x1K | x10K | x100K | x1M | x10M |
|-----|---------|---------|---------|---------|---------|---------|---------|---------|
| 1.0 | 5010599 | 5010506 | 5010065 | 5010040 | 5010059 | 5010049 | 5010054 | 5010038 |
| 1.2 | | 5010595 | 5010128 | 5010153 | 5010046 | 5010047 | 5010069 | |
| 1.5 | 5011348 | 5010468 | 5010057 | 5010247 | 5010053 | 5010063 | 5010093 | |
| 1.8 | | 5010822 | 5010362 | 5010006 | 5010135 | 5010072 | 5010791 | |
| 2.2 | 5010682 | 5010448 | 5010092 | 5010064 | 5010079 | 5010120 | 5010245 | |
| 2.7 | 5010925 | 5010403 | 5010000 | 5010298 | 5010141 | 5010083 | 5010431 | |
| 3.3 | | 5010253 | 5010044 | 5010076 | 5010075 | 5010117 | 5010848 | |
| 3.9 | 5011377 | 5010622 | 5010070 | 5010069 | 5010060 | 5010073 | 5010714 | |
| 4.7 | 5010888 | 5010411 | 5010058 | 5010048 | 5010045 | 5010077 | 5011513 | |
| 5.6 | 5010706 | 5010151 | 5010067 | 5010041 | 5010041 | 5010071 | 5010658 | |
| 6.8 | 5010904 | 5010039 | 5010144 | 5010052 | 5010049 | 5010074 | | |
| 8.2 | 5010880 | 5010056 | 5010068 | 5010154 | 5010091 | 5010505 | | |

Resistors 5% 1/8 W

| | x1 | x10 | x100 | x1K | x10K | x100K | x1M | x10M |
|-----|---------|---------|---------|---------|---------|---------|---------|---------|
| 1.0 | | 5011464 | 5011357 | 5010816 | 5010935 | 5011440 | 5011459 | 5020875 |
| 1.2 | | 5011351 | 5011084 | 5011442 | 5011338 | 5011341 | 5011175 | |
| 1.5 | | 5011463 | 5011443 | 5011178 | 5011364 | 5011398 | 5011460 | |
| 1.8 | | | 5011350 | 5011361 | 5011344 | 5011468 | | |
| 2.2 | 5011632 | 5011376 | 5010886 | 5011353 | 5010833 | 5011369 | 5011342 | |
| 2.7 | | 5011471 | 5011355 | 5011362 | 5011362 | 5011370 | 5011478 | |
| 3.3 | | | 5011337 | 5010827 | 5011346 | 5011371 | 5011462 | |
| 3.9 | | 5011438 | | 5011157 | 5011457 | 5011372 | 5020876 | |
| 4.7 | 5011363 | 5011036 | 5011441 | 5011363 | 5010937 | 5011343 | 5011611 | |
| 5.6 | | 5011412 | 5011358 | 5010885 | 5011166 | 5011340 | | |
| 6.8 | | 5011356 | 5011336 | 5010839 | 5011367 | 5011458 | | |
| 8.2 | | 5011466 | 5011354 | 5011339 | 5011368 | 5011373 | | |

Resistors SMD 2% 1/8 W SMD 5% 1/8 W

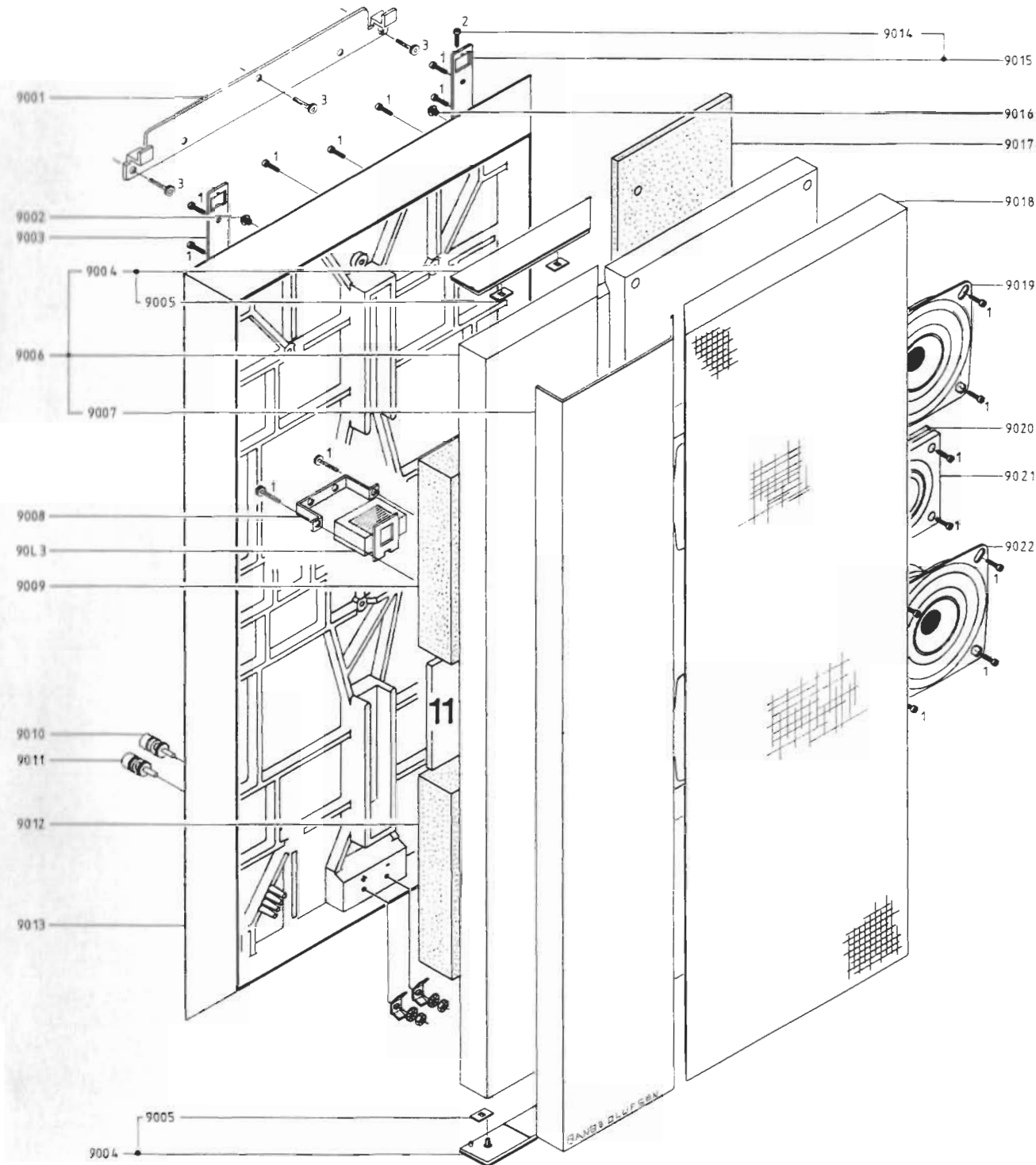
| | 5% | 2% | 2% | 2% | 2% | 2% | 5% | 5% |
|-----|---------|---------|---------|---------|---------|---------|---------|---------|
| | x1 | x10 | x100 | x1K | x10K | x100K | x1M | x10M |
| 1.0 | 5011623 | 5011647 | 5011218 | 5011227 | 5011241 | 5011256 | 5011267 | 5011730 |
| 1.1 | 5011624 | 5011648 | 5011660 | 5011681 | 5011689 | 5011694 | 5011707 | |
| 1.2 | 5011625 | 5011649 | 5011219 | 5011682 | 5011490 | 5011257 | 5011708 | |
| 1.3 | 5011626 | 5011650 | 5011670 | 5011683 | 5011242 | 5011258 | 5011709 | |
| 1.5 | 5011627 | 5011651 | 5011220 | 5011228 | 5011243 | 5011259 | 5011710 | |
| 1.6 | 5011628 | 5011652 | 5011671 | 5011684 | 5011690 | 5011695 | 5011711 | |
| 1.8 | 5011629 | 5011653 | 5011672 | 5011229 | 5011244 | 5011260 | 5011712 | |
| 2.0 | 5011630 | 5011654 | 5011673 | 5011685 | 5011691 | 5011696 | 5011713 | |
| 2.2 | 5011216 | 5011655 | 5011674 | 5011230 | 5011245 | 5011261 | 5011714 | |
| 2.4 | 5011634 | 5011656 | 5011675 | 5011586 | 5011246 | 5011697 | 5011715 | |
| 2.7 | 5011635 | 5011657 | 5011497 | 5011231 | 5011247 | 5011262 | 5011716 | |
| 3.0 | 5011731 | 5011658 | 5011499 | 5011500 | 5011692 | 5011698 | 5011717 | |
| 3.3 | 5011217 | 5011659 | 5011676 | 5011232 | 5011248 | 5011263 | 5011718 | |
| 3.6 | 5011636 | 5011660 | 5011677 | 5011687 | 5011249 | 5011264 | 5011719 | |
| 3.9 | 5011637 | 5011661 | 5011221 | 5011233 | 5011491 | 5011699 | 5011720 | |
| 4.3 | 5011638 | 5011662 | 5011498 | 5011688 | 5011492 | 5011700 | 5011721 | |
| 4.7 | 5011639 | 5011269 | 5011222 | 5011234 | 5011250 | 5011265 | 5011722 | |
| 5.1 | 5011640 | 5011663 | 5011678 | 5011235 | 5011453 | 5011701 | 5011723 | |
| 5.6 | 5011641 | 5011664 | 5011223 | 5011236 | 5011251 | 5011702 | 5011724 | |
| 6.2 | 5011642 | 5011665 | 5011224 | 5011237 | 5011693 | 5011703 | 5011725 | |
| 6.8 | 5011643 | 5011666 | 5011225 | 5011238 | 5011252 | 5011704 | 5011726 | |
| 7.5 | 5011644 | 5011667 | 5011679 | 5011239 | 5011253 | 5011705 | 5011727 | |
| 8.2 | 5011645 | 5011270 | 5011226 | 5011240 | 5011254 | 5011266 | 5011728 | |
| 9.1 | 5011646 | 5011668 | 5011680 | 5011489 | 5011255 | 5011706 | 5011729 | |

(Give dpts. approx. 200, part no. 3181932).

LIST OF MECHANICAL PARTS

Beovox/Beolab 5000

The illustration shows the left loudspeaker



Beovox/Beolab 5000

11 Modul8006030 Crossover Network

| | | |
|------|---------|--------------------------------------|
| 9001 | 3031198 | Wall bracket |
| 9002 | 3035032 | Rubber foot |
| 9003 | 3031199 | Fitting |
| 9004 | 3456184 | End pieces, top-bottom |
| 9005 | 2395019 | Spring leaf |
| 9006 | 3440113 | Baffle w/cover and end pieces, left |
| | 3440112 | Baffle w/cover and end pieces, right |
| 9007 | 3302454 | Cover, left |
| | 3302451 | Cover, right |
| 9008 | 2510151 | Clamp |
| 9009 | 3922042 | Damping material |
| 9010 | 7210596 | Terminal screw, black |
| 9011 | 7210595 | Terminal screw, red |
| 9012 | 3922042 | Damping material |
| 9013 | 3430419 | Cabinet |
| 9014 | 2042036 | Screw 4x16 mm |
| 9015 | 3031199 | Fitting w/screw |
| 9016 | 3035032 | Rubber foot |
| 9017 | 3922033 | Damping material |
| 9018 | 3450792 | Cloth front, blue |
| | 3450916 | Cloth front, grey |
| | 2391083 | Locking piece, rubber |
| 9019 | 8480211 | Woofers 5" |
| 9020 | 3340051 | Packing |
| 9021 | 8480209 | Tweeter 1" |
| 9022 | 8480211 | Woofers 5" |

90L3 6850186 Coil 6.8 mH

6276089 Wires, assembled

Survey of screws

| | | |
|---|---------|----------------------------|
| 1 | 2019018 | Screw 4x16 mm |
| 2 | 2042036 | Screw 4x16 mm |
| 3 | 2018000 | Screw 4.2x25 mm |
| | 3390373 | Bag w/screws and Rawlplugs |

Beovox/Beolab 3000

11 Modul8006030 Crossover Network

| | | |
|------|---------|--------------------------------------|
| 9030 | 3031198 | Wall bracket |
| 9031 | 3035032 | Rubber foot |
| 9032 | 3031199 | Fitting |
| 9033 | 3456184 | End pieces, top-bottom |
| 9034 | 2395019 | Spring leaf |
| 9035 | 7210596 | Terminal screw, black |
| 9036 | 7210595 | Terminal screw, red |
| 9037 | 3922041 | Damping material |
| 9038 | 3430420 | Cabinet |
| 9039 | 3922041 | Damping material |
| 9040 | 3440115 | Baffle w/cover and end pieces, left |
| | 3440114 | Baffle w/cover and end pieces, right |
| 9041 | 3302455 | Cover, left |
| | 3302452 | Cover, right |
| 9042 | 2042036 | Screw 4x16 mm |
| 9043 | 3031199 | Fitting w/screw |
| 9044 | 3035032 | Rubber foot |
| 9045 | 3458646 | Woofers port |
| 9046 | 3922033 | Damping material |
| 9047 | 8480210 | Woofers 5" |
| 9048 | 3340076 | Packing |
| 9049 | 3014083 | Adaptor |
| 9050 | 3340051 | Packing |
| 9051 | 8480209 | Tweeter 1" |
| 9052 | 3450793 | Cloth front, blue |
| | 3450915 | Cloth front, grey |
| | 2391083 | Locking piece, rubber |

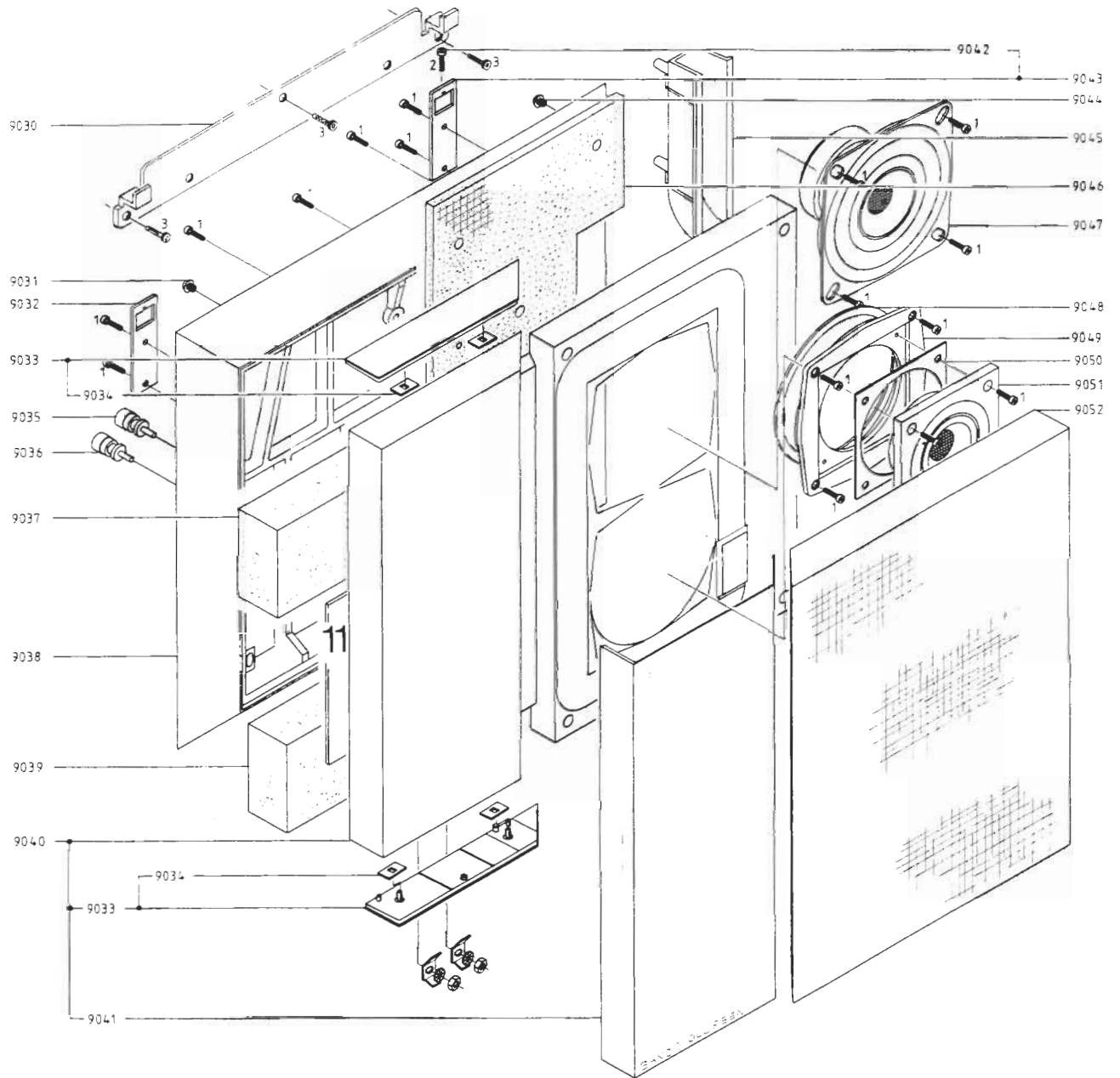
6276088 Wires, assembled

Survey of screws

| | | |
|---|---------|----------------------------|
| 1 | 2019018 | Screw 4x16 mm |
| 2 | 2042036 | Screw 4x16 mm |
| 3 | 2018000 | Screw 4.2x25 mm |
| | 3390373 | Bag w/screws and Rawlplugs |

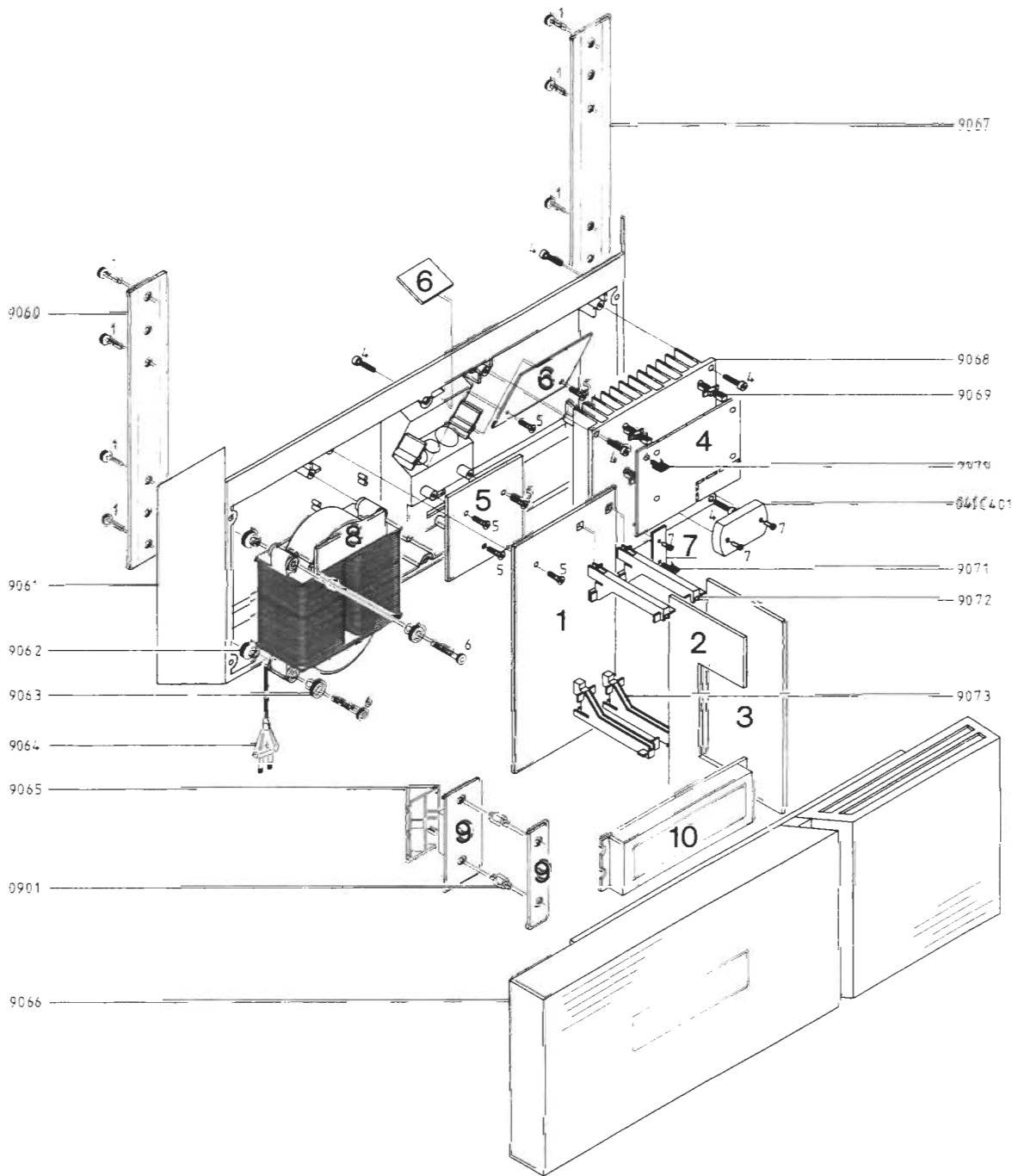
Beovox/Beolab 3000

The illustration shows the left loudspeaker



Power Amplifier

The illustration shows the right Power Amplifier



Power Amplifier

01Modul 8001037 PCB1, Power Supply

02Modul 8001033 PCB2, System Control

03Modul 8001032 PCB3, Microprocessor

04Modul 8001034 PCB4, Output Amplifier
041C401 8350059 STK 4042V

05Modul 8001039 PCB5, Switch

06Modul 8001041 PCB6, Input Socket

07Modul 8001038 PCB7, NTC

08Modul 8013445 PCB8, Transformer

09Modul 8001067 PCB9, Stand-by
0901 3152537 Spacer

10Modul 8330243 PCB10, Display

| | | |
|------|---------|--------------------------------|
| 9060 | 3031197 | Fitting |
| 9061 | 3452626 | Rear part, right |
| | 3452627 | Rear part, left |
| 9062 | 2938154 | Bushing |
| 9063 | 2938154 | Bushing |
| 9064 | 6270425 | Mains cable type 6701-02-11-12 |
| | 6270424 | Mains cable type 6703-13 |
| | 6270423 | Mains cable type 6704-14 |
| | 6270426 | Mains cable type 6705-15 |
| 9065 | 2776150 | Switch cover, right |
| | 2776151 | Switch cover, left |
| 9066 | 3458698 | Front panel, assembled |
| 9067 | 3031197 | Fitting |
| 9068 | 3358239 | Heat sink |
| 9069 | 3152638 | Spacer |
| 9070 | 3152561 | Cable holder |
| 9071 | 3152561 | Cable holder |
| 9072 | 3152254 | Holder f/PCB |
| 9073 | 3152254 | Holder f/PCB |

| | | |
|---------|---------|-------------|
| To P302 | 6275985 | Wire bundle |
| To P407 | 6275872 | Wire bundle |
| To P408 | 6275879 | Wire bundle |
| To P502 | 6275871 | Wire bundle |
| To P503 | 6275892 | Wire bundle |
| To P603 | 6275870 | Wire bundle |

Survey of screws

| | | |
|---|---------|-----------------|
| 1 | 2019018 | Screw 4x16 mm |
| 4 | 2015133 | Screw 3.5x16 mm |
| 5 | 2015134 | Screw 3.5x10 mm |
| 6 | 2015135 | Screw 3.5x30 mm |
| 7 | 2013157 | Screw 2.9x16 mm |

PACKING

Beovox 3000

3397672 Foam end pieces, top
 3397672 Foam end pieces, bottom
 3390363 Foam foil
 3397059 Outer carton

Beolab 3000

3397672 Foam end pieces, top
 3397672 Foam end pieces, bottom
 3390362 Foam foil
 3392058 Outer carton

Beovox 5000

3397672 Foam end pieces, top
 3397672 Foam end pieces, bottom
 3397671 Middle section, top-bottom
 3397692 Foam insert
 3392104 Cardboard insert
 3390361 Foam foil
 3392057 Outer carton

Beolab 5000

3397672 Foam end pieces, top
 3397672 Foam end pieces, bottom
 3397671 Middle section, top-bottom
 3392104 Cardboard insert
 3390360 Foam foil
 3392056 Outer carton

OWNER'S MANUALS

Beovox 3000/5000

3506155 Danish
~~3506156~~ Swedish
~~3506157~~ Finnish
~~3506158~~ English
~~3506159~~ German
~~3506160~~ Dutch
~~3506161~~ French
~~3506162~~ Italian
 3506163 Spanish

Beolab 3000/5000

3506135 Danish
 3506136 Swedish
 3506137 Finnish
 3506138 English
 3506139 German
 3506140 Dutch
 3506141 French
 3506143 Italian
 3506144 Spanish

ACCESSORIES

6270167 2-pin DIN speaker cable - 5 m
 6270336 4-pin DIN shielded speaker cable - 5 m
 6270352 4-pin DIN shielded speaker cable - 10 m
 6270417 8-pin DIN Power Link cable - 2.5 m
 6270418 8-pin DIN Power Link cable - 5 m
 6270419 8-pin DIN Power Link cable - 10 m
 6270350 2-pin DIN shielded speaker cable - 5 m
 8960318 BLC 150, blue line cord
 8960329 GLC 150, grey line cord
 7229075 Adaptor for Power Link - 8-pin DIN female to 8-pin DIN female
 8960280 Cable Cover 5000 metal finish - 0.85 m
 8960290 Cable Cover 3000 metal finish - 1.30 m
 2560232 Plastic cable cover 8x18 mm - 2.10 m
 2560202 Plastic cable cover 10x46 mm - 2.10 m

JUSTERING

Display

DC voltmeter tilsluttes ben 5 på stik P301.
 Med 1R120 justeres til 1,9V ±0,1V.

ADJUSTMENT

Display

Connect DC voltmeter to pin 5 on plug P301.
 Adjust with 1R120 to 1.9V ±0.1V.

REPARATIONSTIPS

Sådan sættes omskifterne i den rigtige stilling

Nederst på bagsiden af Beolab 3000/5000 er der to knapper:

Indgangseffekt-knappen (den største af de to med 4 indstillingsmuligheder).

Mode-knappen (den mindste af de to med 3 indstillingsmuligheder).

Indgangseffekt-knappen

Sæt indgangseffekt-knappen i en stilling, der passer til radioens eller TV'ets udgangseffekt.

POWER LINK STIKDÅSE

Hvis Beolab 3000/5000 er tilsluttet via POWER LINK stikdåsen, er det lige meget, hvilken stilling indgangseffekt-knappen står i, da højttalerens lydniveau ikke påvirkes af knappens stilling.

SPEAKER LINK STIKDÅSE

| Knappens stilling | Radioens/TV'ets udgangseffekt | |
|-------------------|-------------------------------|---------|
| | 4 ohm | 8 ohm |
| — | -40 W | -20 W |
| ≡ | 40-80 W | 20-40 W |
| ≡≡ | 80- W | 40- W |

LINE IN STIKDÅSE

Sæt knappen i stilling N.

Mode-knappen

Når Beolab 3000/5000 er tilsluttet lysnettet, er den i stand-by-stilling. Stand-by-stillingen indikeres af et lille rødt lys ved siden af displayet. Højttaleren tændes automatisk, når den modtager et signal, med mindre AUDIO/VIDEO/OFF-knappen står i stilling OFF.

Sæt mode-knappen i stilling A, R (højre) eller L (venstre):

| Stikdåse | Mode-knappen |
|--------------|--|
| LINE IN | A |
| SPEAKER LINK | A |
| POWER LINK | L Venstre højttaler R Højre højttaler |

Når det TV/den radio, som Beolab 3000/5000 er tilsluttet, går i stand-by, slukkes højttaleren automatisk - d.v.s. den går også i stand-by. Dette sker øjeblikkeligt, hvis højttaleren er tilsluttet ved hjælp af et Power Link kabel eller en skærmet 4-polet DIN højttalerledning. I alle andre tilfælde går Beolab 3000/5000 i stand-by efter ca. 3 minutter.

REPAIR TIPS

Setting the switches on the rear

On the lower rear side of the Beolab 3000/5000 there are two switches:

The input level switch (the longer of the two - 4 settings).

The mode switch (the shorter of the two - 3 settings).

Input level switch

Set the input level switch to the position required to match the output of receiver or TV set.

POWER LINK SOCKET

If you have connected a Beolab 3000/5000 via the POWER LINK socket, there are no requirements as to the setting of the input level switch, because the acoustic level is independent of the setting of the switch.

SPEAKER LINK SOCKET

| Switch position | Receiver/TV output | |
|-----------------|--------------------|---------|
| | 4 ohm | 8 ohm |
| — | -40 W | -20 W |
| ≡ | 40-80 W | 20-40 W |
| ≡≡ | 80- W | 40- W |

LINE IN SOCKET

Set the switch to N.

Mode switch

Once connected to the mains supply, the Beolab 3000/5000 is in the stand-by mode. The stand-by mode is indicated by a red light next to the display. The speaker switches on automatically when it receives a signal, unless, of course the AUDIO/VIDEO/OFF switch is set to OFF.

Set the mode switch to either A, R (Right) or L (Left):

| Sockets | Mode switch |
|--------------|-----------------------------------|
| LINE IN | A |
| SPEAKER LINK | A |
| POWER LINK | L Left speaker R Right speaker |

When the TV set/receiver to which the Beolab 3000/5000 is connected goes into stand-by, the loudspeaker automatically switches itself off - i.e. reverts to the stand-by mode. This happens instantly if you have connected the speaker using a Power Link cable or a screened 4-pin DIN speaker cable. In all other cases the Beolab 3000/5000 goes into stand-by after a delay of approx. 3 minutes.

AUDIO/VIDEO/OFF-omskifter

For at opnå den rigtige status-udlæsning i displayet på højttaleren, skal AUDIO/VIDEO/OFF-omskifteren sættes i den rigtige stilling:

| | |
|-------|--|
| AUDIO | hvis Beolab 3000/5000 er tilsluttet en Beomaster, et Beocenter eller en MCL2A/2AV. |
| VIDEO | hvis Beolab 3000/5000 er tilsluttet et Beovision. |
| OFF | slukket. |

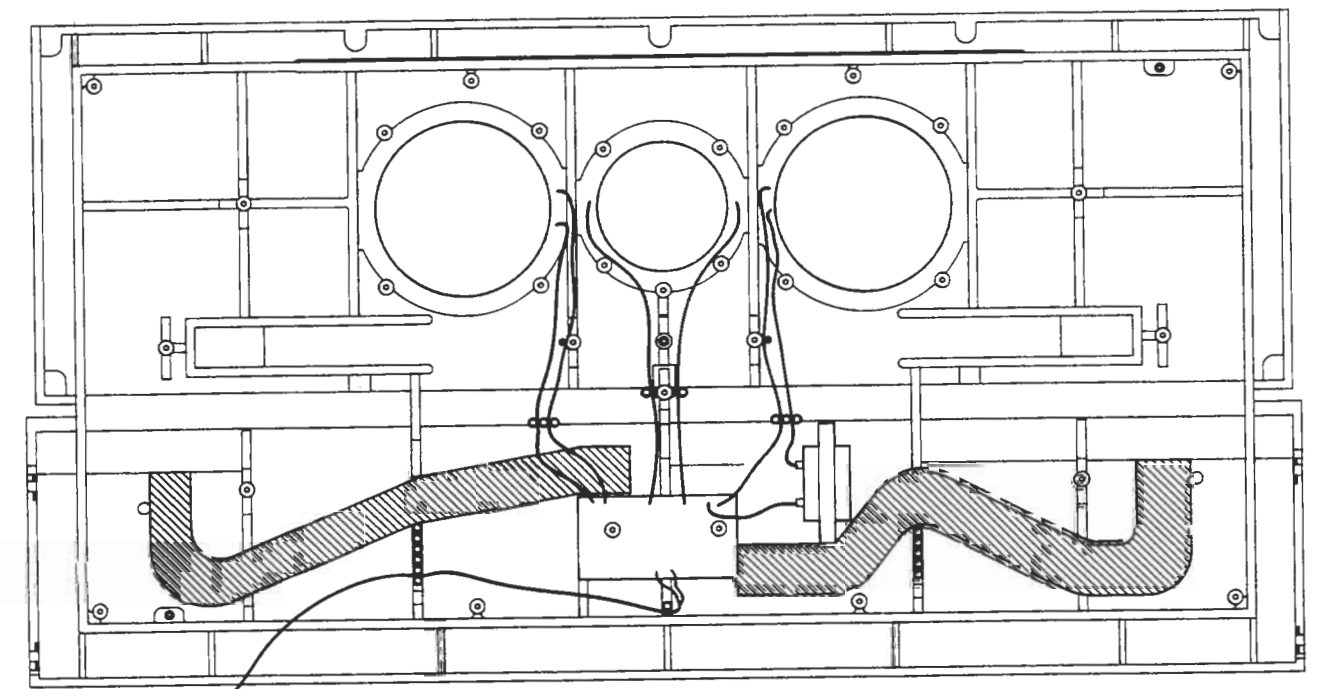
AUDIO/VIDEO/OFF switch

In order to obtain the right status reading from the display, the AUDIO/VIDEO/OFF switch must be set to the correct position:

| | |
|-------|--|
| AUDIO | if the Beolab 3000/5000 is connected to a Beomaster, Beocenter or MCL2A/2AV. |
| VIDEO | if the Beolab 3000/5000 is connected to a Beovision. |
| OFF | off position. |

Placering af dæmpemateriale og ledningsføring

Placement of damping material and wiring



Diskant-højttaler

NB! Vær opmærksom på at diskant-højttaleren let kan beskadiges, hvis højttaleren placeres med fronten nedad uden at stoframmen er monteret.

Tweeter

NB! Please note that the tweeter may easily be damaged, if you place the speaker with the front facing downwards and without the cloth front being fitted.

ISOLATIONSTEST

Ethvert apparat skal isolationstestes, efter at det har været adskilt. Testen udføres, når apparatet er samlet igen og er klar til udlevering til kunden.

Der må ikke forekomme overslag under testen!

Isolationstesten udføres på følgende måde:

De to stikben på netstikket kortsluttes og tilsluttes den ene af terminalerne på isolationstesteren. Den anden terminal tilsluttes stel på phono bøsningen (LINE IN).

OBS!

For at undgå beskadigelser af apparatet er det vigtigt, at begge terminaler på isolationstesteren har virkelig god kontakt.

Spændingsreguleringen på isolationstesteren drejes langsomt op, indtil en spænding på 1,5-2 kV er opnået. Her skal den holdes i ét sekund, hvorefter der langsomt drejes ned for spændingen igen.

INSULATION TEST

Each set must be insulation tested after having been dismantled. Make the test when the set has been reassembled and is ready to be returned to the customer.

Flashovers must not occur during the testing procedure!

Make the insulation test as follows:

Short-circuit the two pins of the mains plug and connect them to one of the terminals of the insulation tester. Connect the other terminal to ground in phono socket (LINE IN).

NOTE!

To avoid damaging the set it is essential that both terminals of the insulation tester have good contact.

Slowly turn the voltage control of the insulation tester until a voltage of 1.5-2 kV is obtained. Maintain that voltage for one second, then slowly turn it down again.

Bang & Olufsen

Beolab 4500

Type 6721, 6722, 6723, 6724, 6725

09-91 3538793 Indklæbes i serviceanvisningen Beovox 5 (3538717)
Paste into service manual Beovox 5 (3538717)

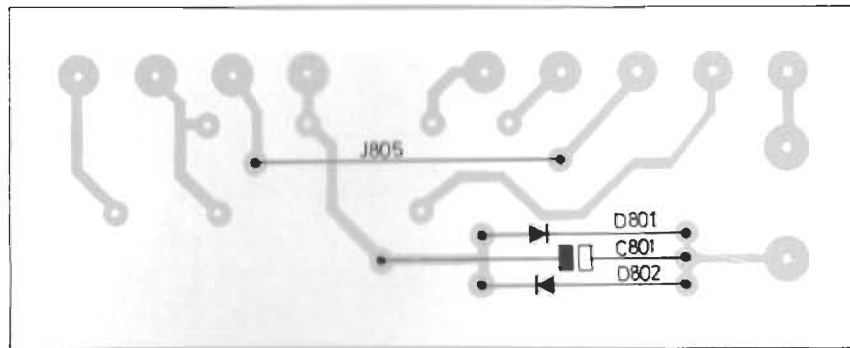


Technical specifications

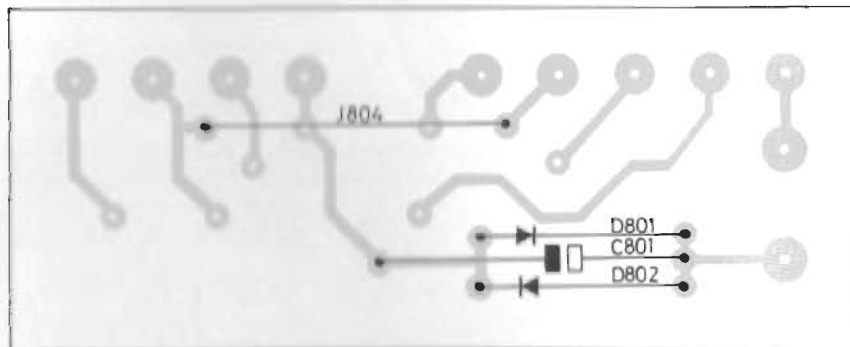
Se side 1-2 under Beolab 3000
See page 1-2 for Beolab 3000

Wiring of Mains Transformer

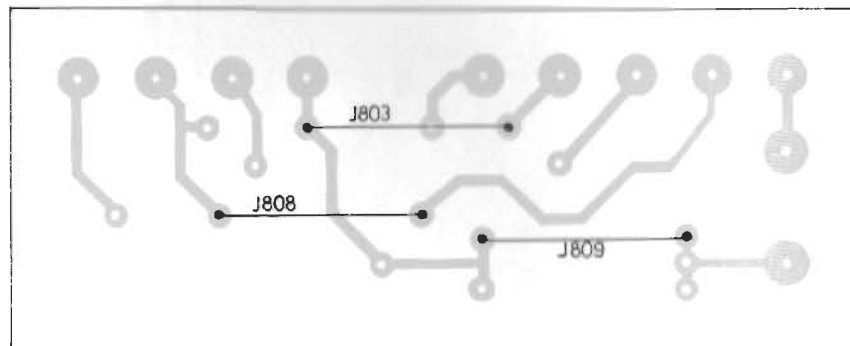
230V
Type 6721



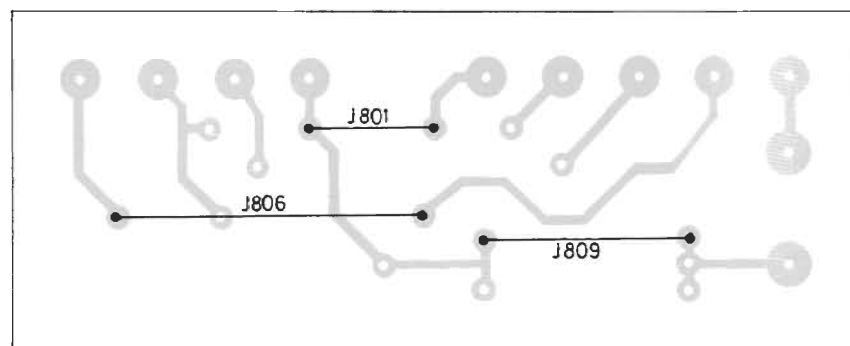
240V
Type 6722 (GB)
Type 6725 (AUS)



120V
Type 6723 (US)



100V
Type 6724 (JAP)



DIAGRAMFORKLARING

På diagrammerne er der angivet typenumre på transistorer og IC'er. Hvis positionsnummeret er efterfulgt af en stjerne, skal reservedelsnummeret altid benyttes, da denne komponent er specielt udvalgt, f.eks. TR102*.

Styrekredsløb

I visse styrekredsløb er den aktive tilstand angivet med en funktions- eller bogstavsangivelse. Denne kan eksempelvis være $\overline{ST.BY.}$ = »low« i stand-by-stilling eller ST.BY. = »high« i stand-by-stilling.

Forsyningsspændinger

Alle forsyningsspændinger i diagrammerne er angivet med en pil og en spændingsangivelse.

Eksempel:

Ved siden af spændingsangivelsen står der f.eks. 7 CON. Dette betyder, at den pågældende forsyningsspænding går til 7 steder på den pågældende diagramside (7 CON. = 7 connections).

SYMBOL FOR SIKKERHEDSKOMPONENTER



Ved udskiftning af komponenter med dette symbol skal der anvendes komponenter med samme reservedelsnummer. Den nye komponent skal monteres på samme måde som den udskiftede.

MÅLEBETINGELSER

Alle DC-spændinger er målt i forhold til stel med et voltmeter med en indgangsmodstand på 10 Mohm.

DC-spændingerne er opgivet i volt (V), f.eks. 0,7 V.

EXPLANATION OF DIAGRAM

Type numbers of transistors and ICs are indicated on the diagrams.

If the position number is followed by an asterisk the spare part number must always be used because the component in question has been specially selected, e.g. TR102*.

Control Circuit

In certain control circuits the active mode is indicated by a function term or by an abbreviation. This may be e.g. $\overline{ST.BY.}$ = low in the stand-by mode or ST.BY. = high in the stand-by mode.

Supply Voltages

All supply voltages in the diagrams are indicated by an arrow and a voltage indication.

Example:

"7 CON." This means that the supply voltage in question goes to 7 different places on the diagram page in question (7 CON. = 7 connections).

SYMBOL OF SAFETY COMPONENTS



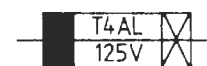
When replacing components with this symbol, components with identical part numbers must be used. The new component must be mounted in the same way as the one replaced.

MEASURING CONDITIONS

All DC voltages have been measured in relation to ground with a voltmeter with an input resistance of 10 Mohms.

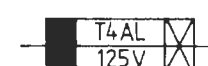
The DC voltages are stated in volts (V), e.g. 0.7 V.

EXPLANATION DE SYMBOLES DU FUSIBLE UTILISES DANS L'APPAREIL

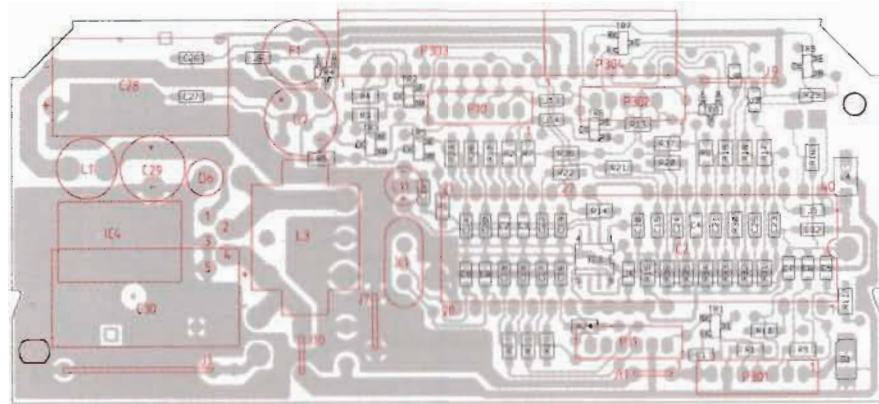


Remplacer par un fusible retardé de la même type et de 4 ampères 125 volts.

EXPLANATION OF THE FUSE SYMBOLS USED IN THE SET



Replace with the same type of 4 amperes 125 volts slow acting fuse.



LIST OF ELECTRICAL PARTS

| 51 | 122 | 136 | 156 | 209 | 250 | | |
|----|-----|-----|-----|-----|-----|--|--|
| | | | | | | | |

Resistors not referred to are standard, see page 3-2
 Δ Indicates that static electricity may destroy the component
 * Specially selected or adapted sample

PCB3, 800/524
 Microprocessor

| | | | | | | | |
|-------|---------|-----|-------------------|------|---------|-----|-------------------|
| IC2*Ω | 8341771 | 136 | μP 80C52 | IC4 | 8341770 | 122 | LM2575-50 |
| IC3 | 8341612 | 156 | TL7705 | | | | |
| TR1 | 8320615 | 051 | BC848B | TR5- | 8320615 | 051 | BC848B |
| TR2 | 8320755 | 051 | BC847B | TR9 | | | |
| TR3- | 8320616 | 051 | BC858B | | | | |
| TR4 | | | | | | | |
| D1 | 8300557 | 250 | BYM10 | D7 | 8300466 | | 125V 1.5A |
| D6 | 8300795 | 209 | 1N5822 | | | | |
| R39* | 5012142 | | 60MΩ | | | | |
| C1- | 4010132 | | 1nF 10% 50V | C14- | 4000370 | | 2.2nF 5% 50V |
| C2 | | | | C21 | | | |
| C3- | 4000370 | | 2.2nF 5% 50V | C22 | 4010209 | | 47nF 10% 50V |
| C4 | | | | C23- | 4000370 | | 2.2nF 5% 50V |
| C5- | 4000241 | | 100pF 5% 50V | C25 | | | |
| C7 | | | | C26- | 4010166 | | 100nF -20+80% 50V |
| C8- | 4000278 | | 27pF 5% 50V | C27 | | | |
| C9 | | | | C29 | 4200952 | | 47μF -20+50% 25V |
| C10 | 4010166 | | 100nF -20+80% 50V | C30 | 4201116 | | 330μF 20% 25V |
| C11 | 4200512 | | 1μF 20% 50V | C31 | 4200974 | | 6.8μF 20% 6.3V |
| C12- | 4000287 | | 220nF -20+80% 25V | C32 | 4000287 | | 220nF -20+80% 25V |
| C13 | | | | | | | |
| L1 | 8020912 | | Coil 100μH 10% | L4 | 8020599 | | Coil 10μH |
| L3 | 8020914 | | Coil 470μH | | | | |
| F1 | 6600096 | | Fuse 400mAT | | | | |
| X1 | 8090075 | | Crystal 12MHz | | | | |
| P301 | 7220714 | | Plug 7 pole | P303 | 7210110 | | Socket 11 pole |
| P302 | 7220713 | | Plug 6 pole | P304 | 7210274 | | Socket 7 pole |

All other electrical parts are identical with Beolab 3000

DIAGRAM

