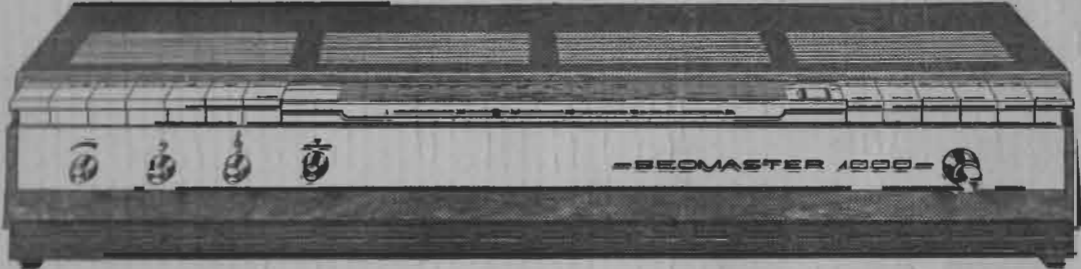


Ryland Huntley
15 OLD BOND STREET, BATH. Tel. 4532
RADIO & TELEVISION

beomaster 1000

SERVICE MANUAL



PRINTED IN DENMARK
1-8 KESPRE-TRYKKERET - STØBER

A/B BANG & OLUFSEN PRODUKTIONSELSKAB

STRUEB-DENMARK Telephone (076) 51122^o • Telex 4289 • Cable Address Bang&Ol

Table of contents

| | Page |
|---|-------|
| Technical Data | 1 |
| IF Transformers | 2 |
| Circuit Diagram | 3 |
| PW Boards | 4 |
| Microphone Pre-amplifier | 5 |
| Parts List | 6-11 |
| Description | 12-15 |
| Alignment, 10,7 Mc/s..... | 15-16 |
| Installing the Multiplex Adaptor | 16 |
| Circuit Diagram of the Multiplex Adaptor..... | 17 |
| Alignment, Multiplex Adaptor | 18 |
| Disassembly | 19 |
| Dial Drive | 20 |

TECHNICAL DATA

Aerial connection: 75-240 ohms, FM aerial.

Channel separation: Better than 34 dB.

Dimensions: 19 ⁷/₈ in. wide, 3 ⁷/₁₆ in. high, 10 in. deep
(505 × 87 × 254 mm).

Frequency response: 30-20000 c/s ±3 dB
 Bass control range +10 dB -14 dB/80 c/s
 Treble control range ±12 dB/10000 c/s
 Needle-talk filter -4 dB/7000 c/s -14 dB/
 20000 c/s
 Rumble filter -2 dB/80 c/s -16 dB/20 c/s

Gramophone input 1: G 42 VF Stereo Record Player or crystal pick-up; sensitivity 15 mV/50 mW.

Gramophone input 2: G 42 V Stereo Record Player (less pre-amplifier). Sensitivity 200 μV/47 KΩ at 50 mW output (C.C.I.R. standards). May be rewired for 200 ohm microphone input, 2004 pre-amplifier, sensitivity 100 μV at full receiver output.

Hum with volume control at minimum: Less than 3 microwatts.

Loudspeaker connection: 3-5 ohms, push-button switching and DIN output sockets for two pairs of stereo speakers; recommended types: M, 19 litres, S, 38 litres, K, 90 litres.

Noise with volume control at minimum: Less than 3 microwatts.

Power consumption, 220 volts AC: approx. 22 watts with volume control at minimum; approx. 25 watts at 100 mW/1000 c/s; approx. 80 watts at maximum output, 1000 c/s.

Power output: 2 × 15 watts, distortion less than 1%.

2 × 20 watts peak power (music watts, according to Electronic Industries Association standard).

Supply voltage: Switchable for operation from 110, 130, 150, 220, 240, and 250 volts AC.

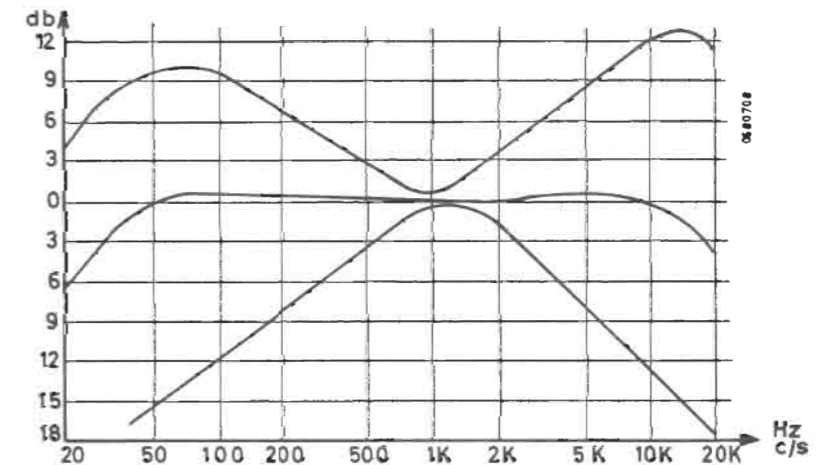
Stereo indicator: Green light for FM stereo reception with built-in decoder, and for gramophone and tape playback.

Tuning indicator: Radiator with mid-scale zero.

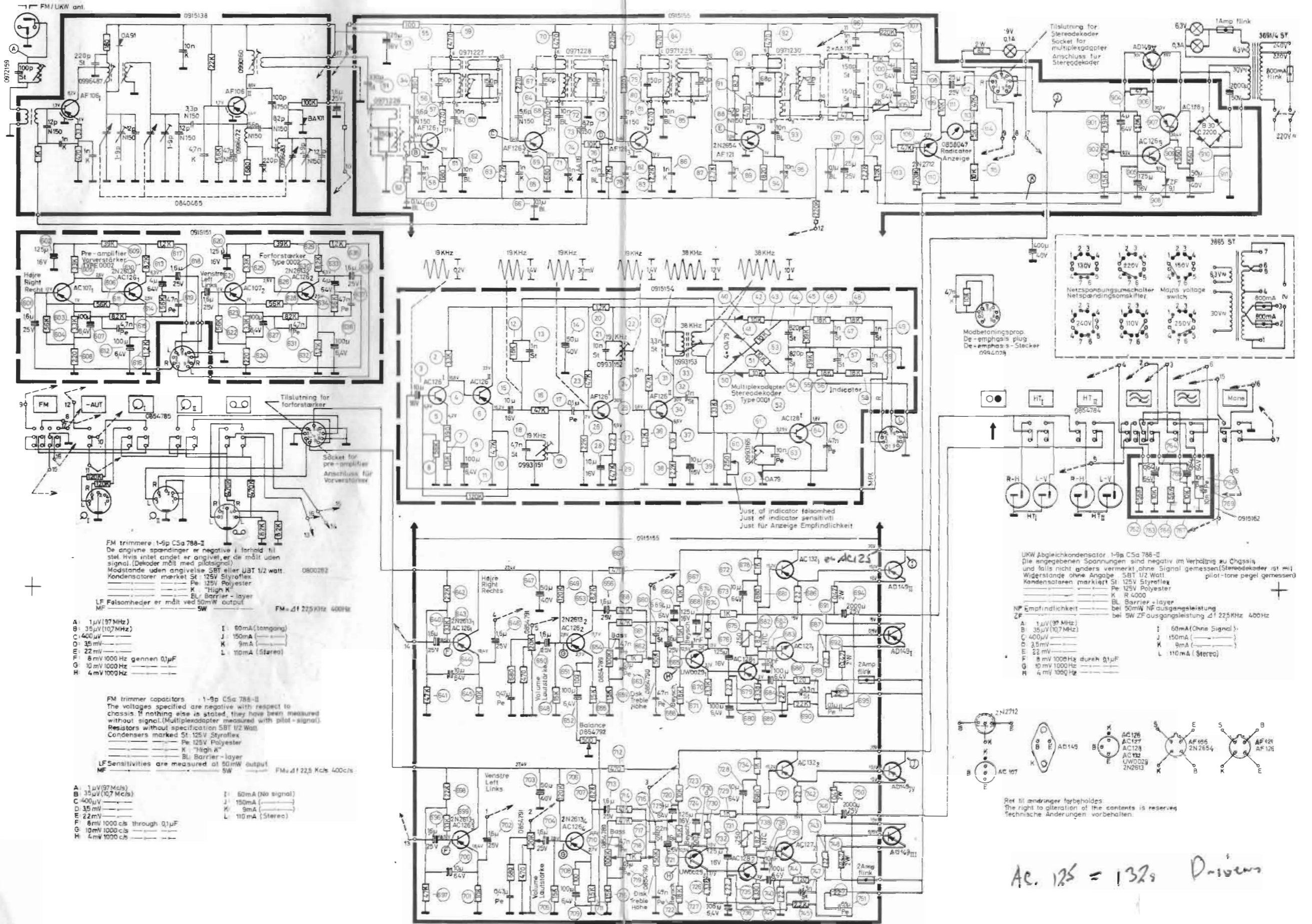
Tape recorder connection: DIN standard, 5-pin.

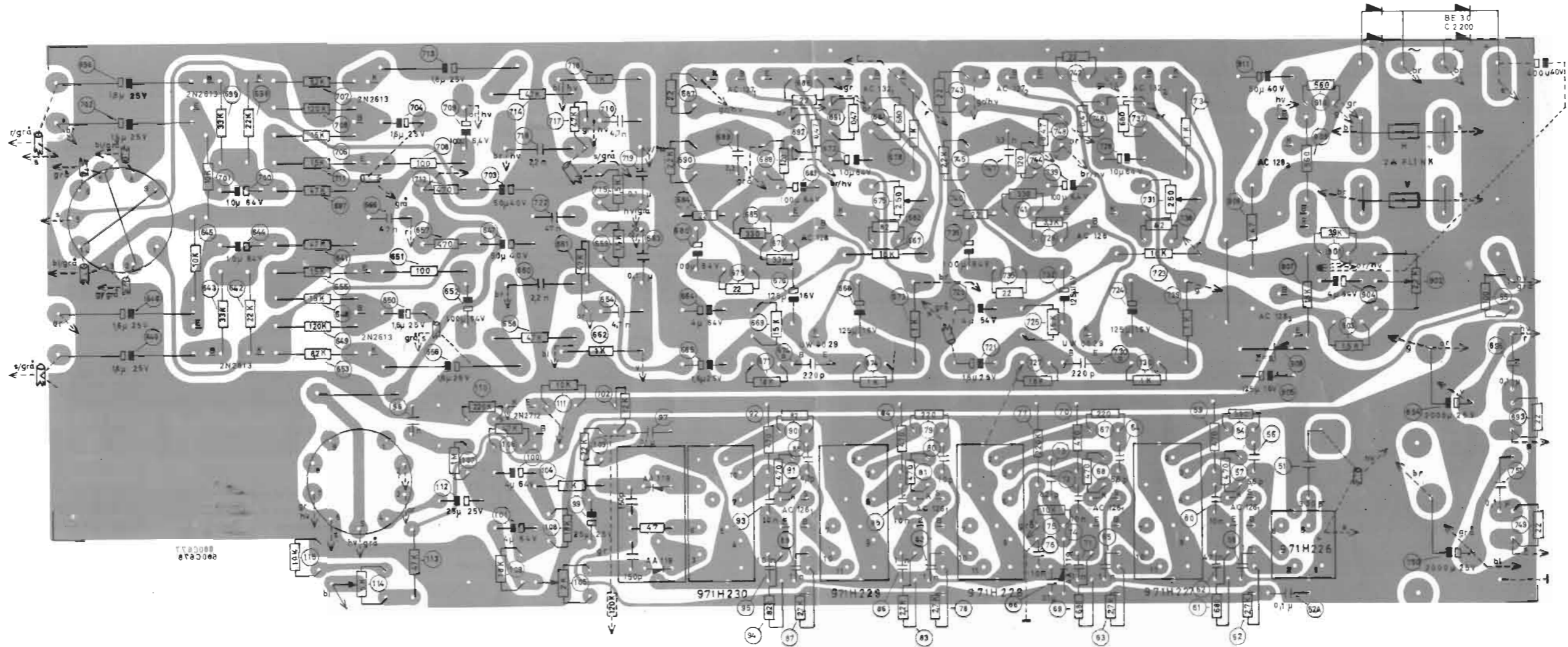
Wave band: FM band, 88-108 Mc/s, tuner with AFC, sensitivity 2 μV for 26 dB signal/noise ratio. Oscillator radiation reduced according to FTZ standards.

Frequency-response curves plotted with volume control at max.



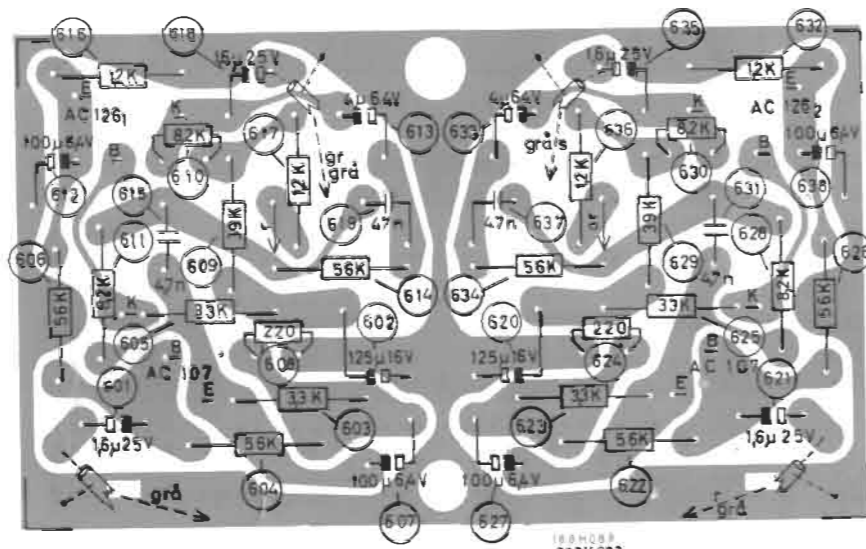
CIRCUIT DIAGRAM OF BEOMASTER 1000





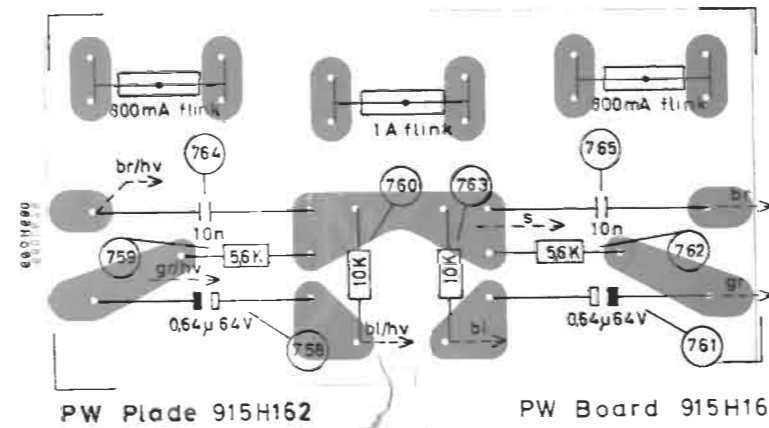
PW PLADE 915H155

PW BOARD 915H155



Grammofon forst. 0002.

Gramophone amp. 0002

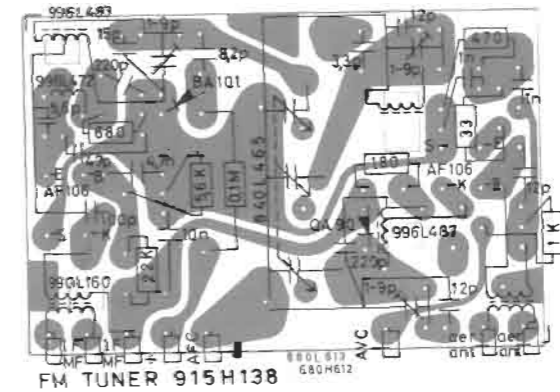


PW Plade 915H162

PW Board 915H162

Corrections:

1. PW board No. 915 H 155 must be 915 H 155 type LO.
2. Discriminator No. 971 H 230 must be 971 H 242.



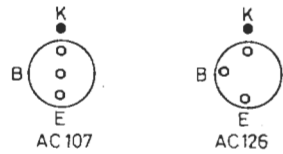
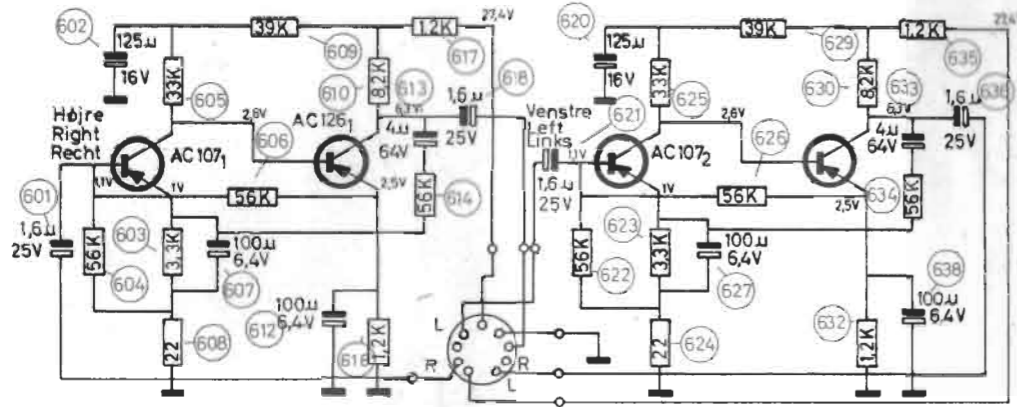
FM TUNER 915H138

Corrections:

1. FM tuner 915 H 138 must be 915 H 142.
2. Parallel capacitor on 15 pF across osc. trimmer has been removed in 915 H 142 (see diagram).
3. Osc. coil 996 L 483 must be 996 L 472.



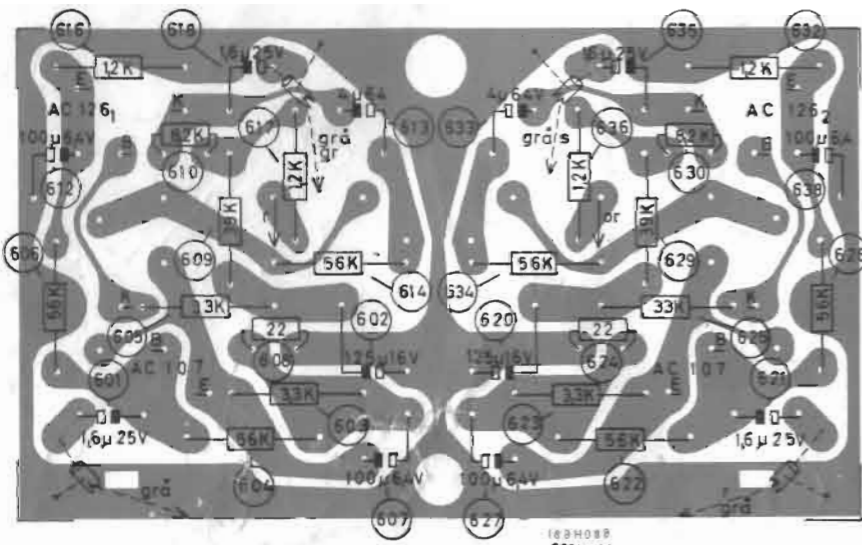
TYPE 2004 MICROPHONE PRE-AMPLIFIER



Alle spændinger er negative i forhold til stel, og målt uden signal.
Modstande er alle SBT 0,5Watt.
Kondensatorer mærket Pe:125V Polyester

The voltages specified are negative with respect to chassis, and measured without signal.
Resistors are SBT 0,5 Watt.
Condensers marked Pe:125V Polyester.

Die angegebenen Spannungen sind Negative im Verhältnis zu Chassis, und wird ohne Signal gemessen.
Widerstände ohne Angabe: SBT 0,5 Watt.
Kondensatoren markiert Pe:125V Polyester.



Mikrofon forst. 2004

Microphone amp. 2004



PARTS LIST, BEOMASTER 1000, MODELS 2302 - 2304

| | | |
|-------|--|---------------|
| 1 | Mains plug..... | HM 13 |
| 2 | Bracket..... | 0249273 |
| * 3 | Drive wheel..... | 0312074 |
| * 4 | FM tuner, Model 2302..... | 0915138 |
| * - | - - Model 2304..... | 0915142 |
| * 5 | Potentiometer..... | 2,2 KΩ - P 4 |
| * 6 | Potentiometer..... | 250 Ω - S 50 |
| * 7 | Potentiometer..... | 250 Ω - S 50 |
| 8 | Bracket..... | 0760475 |
| * 9 | Mains transformer..... | ST 3865 |
| | Voltage switch..... | 0854743 |
| 10 | Bearing for flywheel..... | 0402019 |
| * 11 | Potentiometer..... | 5 KΩ - 1-8680 |
| 12 | Socket..... | 199 M 12 |
| * 13 | Cover for push-button switch..... | 0521155 |
| * 14 | Potentiometer, volume..... | 0854791 |
| * 15 | Potentiometer, bass..... | 0854789 |
| * 16 | Potentiometer, treble..... | 0854790 |
| * 17 | Potentiometer, balance..... | 0854792 |
| 18 | Cord pulley..... | 10343-05 |
| 19 | Bracket..... | 0247179 |
| 20 | Bracket, mirror for dial light..... | 0247180 |
| | Insulation for mirror..... | 0530577 |
| 21 | Bracket..... | 0245611 |
| * 22 | Potentiometer..... | 2 KΩ - 1-8680 |
| * 23 | Radiator..... | 0858047 |
| 24 | Drive shaft with flywheel..... | 0760451 |
| 25 | Bearing for flywheel..... | 0402019 |
| 26 | Cover for push-button switch..... | 0521155 |
| 27 | Cord pulley..... | 10343-05 |
| * 28 | Socket for dial lamp..... | 418/2 P |
| 29 | Bracket for dial lamp..... | 0248915 |
| 30 | Shade for dial lamp..... | 0535487 |
| 31 | Bracket for dial lamp..... | 0248915 |
| 32 | Socket for dial lamp..... | 418/2 P |
| 33 | Bushing..... | 0410165 |
| * 34 | Push-button switch, left, with on/off..... | 0854784 |
| * 35 | Push-button switch, right..... | 0854785 |
| 36 | Dial rear wall..... | 0534079 |
| * 36A | Dial rear wall complete with mirror and indicator..... | 0534092 |
| 37 | Mirror for indicator..... | 0537261 |
| * 38 | Push-button..... | 0322199 |
| * 39 | - - | 0322198 |
| * 40 | - - | 0322197 |
| * 41 | - - | 0322195 |
| * 42 | - - | 0322196 |

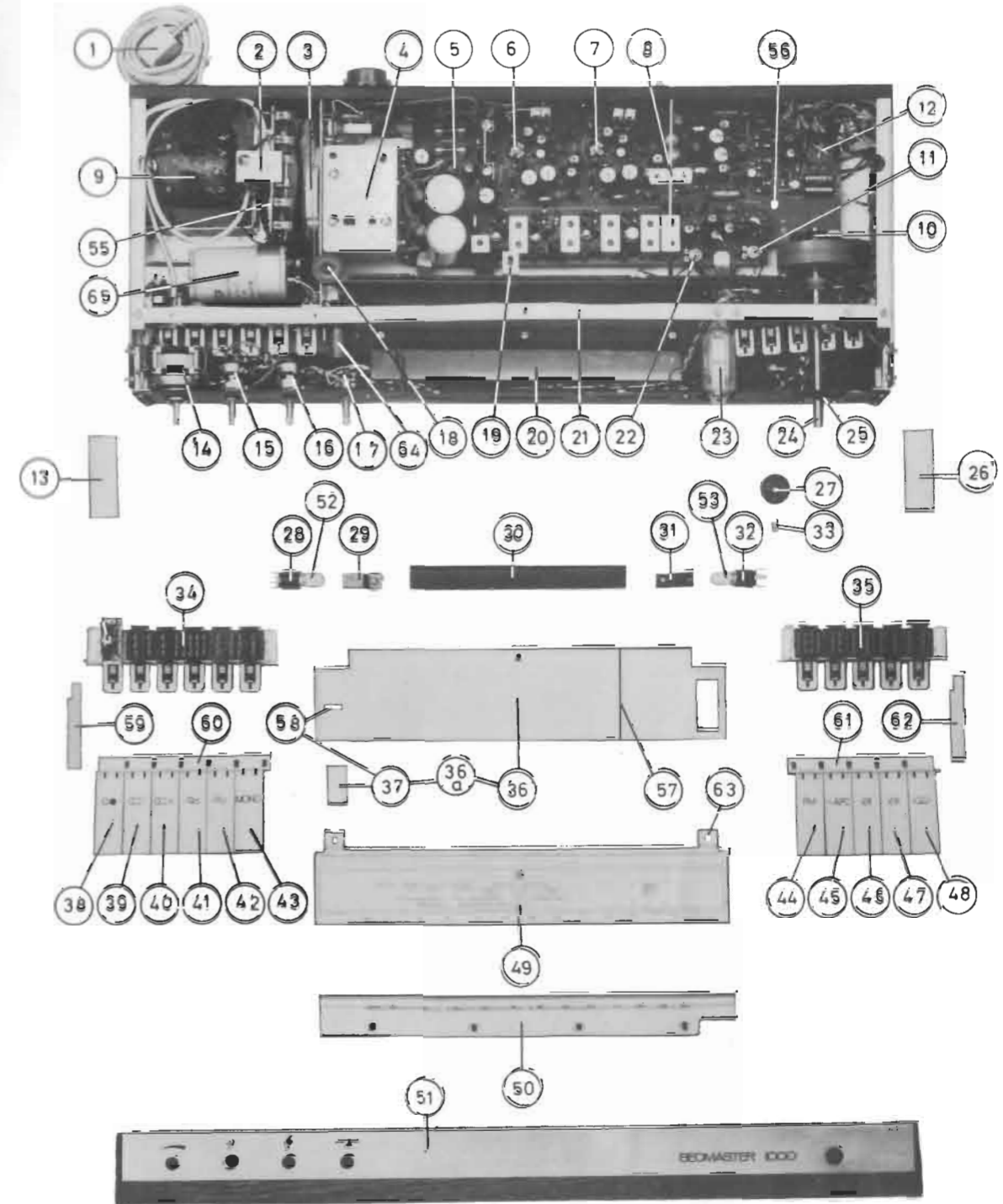
PARTS marked with an * are preferred spare parts.



PARTS LIST, BEOMASTER 1000, MODELS 2302 - 2304

| | | |
|------|--|-----------------------|
| 1 | Mains plug..... | HM 13 |
| 2 | Bracket..... | 0249273 |
| * 3 | Drive wheel..... | 0312074 |
| * 4 | FM tuner, Model 2302..... | 0915138 |
| * | - Model 2304..... | 0915142 |
| * 5 | Potentiometer..... | 2,2 K Ω - P 4 |
| * 6 | Potentiometer..... | 250 Ω - S 50 |
| * 7 | Potentiometer..... | 250 Ω - S 50 |
| 8 | Bracket..... | 0760475 |
| * 9 | Mains transformer..... | ST 3865 |
| | Voltage switch..... | 0854743 |
| 10 | Bearing for flywheel..... | 0402019 |
| *11 | Potentiometer..... | 5 K Ω - 1-8680 |
| 12 | Socket..... | 199 M 12 |
| *13 | Cover for push-button switch..... | 0521155 |
| *14 | Potentiometer, volume..... | 0854791 |
| *15 | Potentiometer, bass..... | 0854789 |
| *16 | Potentiometer, treble..... | 0854790 |
| *17 | Potentiometer, balance..... | 0854792 |
| 18 | Cord pulley..... | 10343-05 |
| 19 | Bracket..... | 0247179 |
| 20 | Bracket, mirror for dial light..... | 0247180 |
| | Insulation for mirror..... | 0530577 |
| 21 | Bracket..... | 0245611 |
| *22 | Potentiometer..... | 2 K Ω - 1-8680 |
| *23 | Radiator..... | 0858047 |
| 24 | Drive shaft with flywheel..... | 0760451 |
| 25 | Bearing for flywheel..... | 0402019 |
| 26 | Cover for push-button switch..... | 0521155 |
| 27 | Cord pulley..... | 10343-05 |
| *28 | Socket for dial lamp..... | 418/2 P |
| 29 | Bracket for dial lamp..... | 0248915 |
| 30 | Shade for dial lamp..... | 0535487 |
| 31 | Bracket for dial lamp..... | 0248915 |
| 32 | Socket for dial lamp..... | 418/2 P |
| 33 | Bushing..... | 0410165 |
| *34 | Push-button switch, left, with on/off..... | 0854784 |
| *35 | Push-button switch, right..... | 0854785 |
| 36 | Dial rear wall..... | 0534079 |
| *36A | Dial rear wall complete with mirror and indicator..... | 0534092 |
| 37 | Mirror for indicator..... | 0537261 |
| *38 | Push-button..... | 0322199 |
| *39 | -..... | 0322198 |
| *40 | -..... | 0322197 |
| *41 | -..... | 0322195 |
| *42 | -..... | 0322196 |

PARTS marked with an * are preferred spare parts.

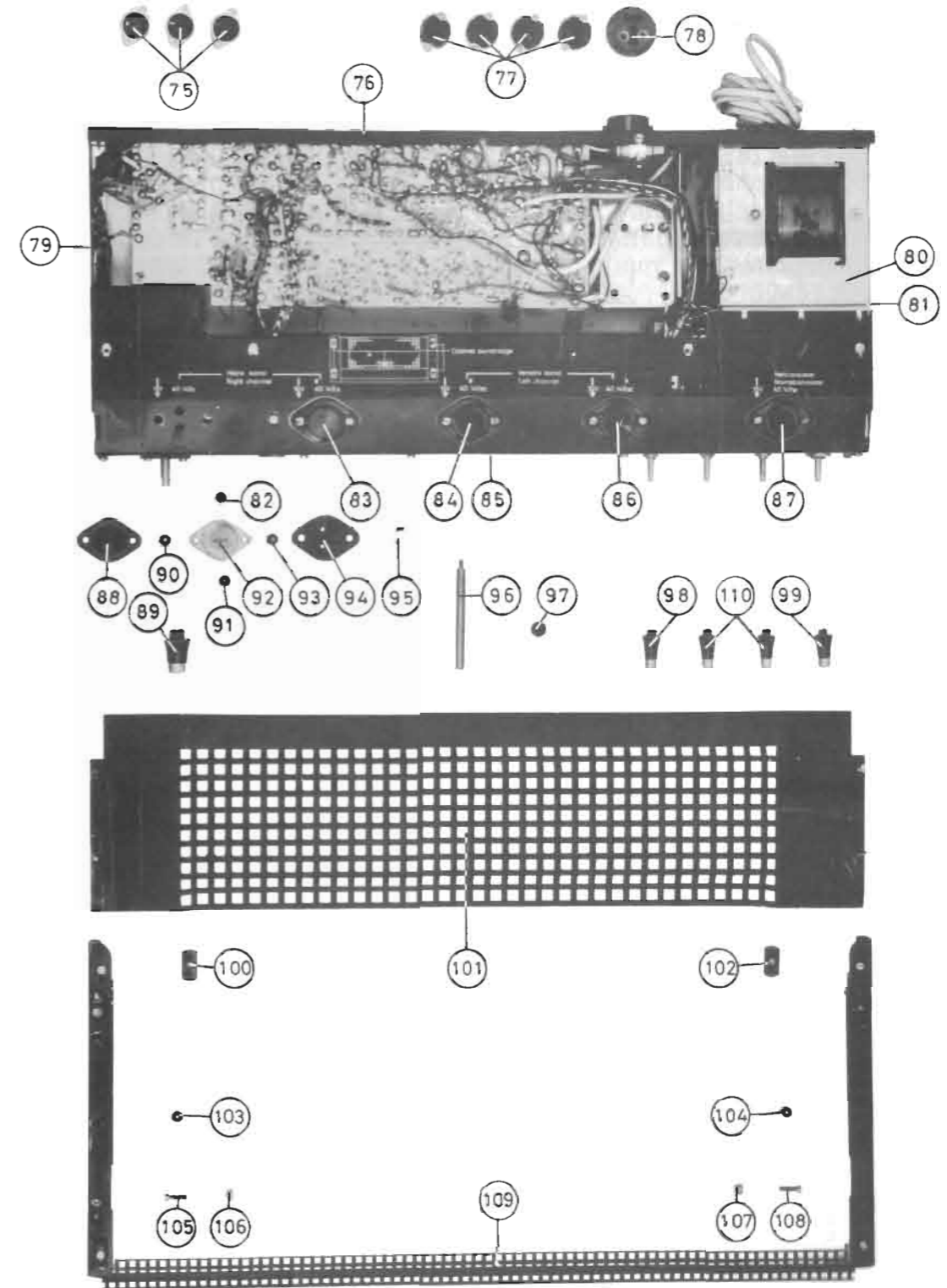




See photo on page 7

| | | |
|-----|--|------------------------------|
| *43 | Push-button..... | 0322194 |
| *44 | - - | 0322193 |
| *45 | - - | 0322192 |
| *46 | - - | 0322191 |
| *47 | - - | 0322190 |
| *48 | - - | 0322189 |
| *49 | Dial, Model 2302 | 0566162 |
| * | Dial, Model 2304 | 0566169 |
| *50 | Dial complete with front strip, Model 2302..... | 0280458 |
| * | Dial complete with front edge strip Model 2304..... | 0280459 |
| *51 | Cabinet front section..... | 0532691 teak/rose- wood |
| 52 | Dial lamp | 8024 D |
| *53 | Dial lamp | 8024 D |
| 55 | PW unit, complete with filter and fuse... | 0915162 |
| | Fuse holders | 5965 |
| * | Fuse (two)..... | 800 mA Flink 1 Amp. Flink |
| 56 | PW unit, IF-AF section complete, Model 2302..... | 0915155 |
| | PW unit, IF-AF section complete, Model 2304..... | 0915155 LO |
| | Diodes (three) | AA 119 |
| | Rectifier | B 30 C 2200 |
| | Electrolytic capacitors | 2000µF/25 V-KPI 144 |
| | Sockets for electrolytic capacitor, small .. | 0506101 |
| | - - - large.. | 0506116 |
| | Heat sink for transistors..... | 0760417 |
| | Coupling coil, 10.7 Mc/s..... | 0971226 |
| * | Resistors..... | 0.47Ω - 16.018 U |
| * | Resistors, NTC..... | 82Ω - B 8.320.01 P/82 E |
| | Clamp for transistor holder | 0291029 |
| | Coil, 10.7 Mc/s series trap..... | 0972159 |
| | Fuse holders | 5965 |
| * | Fuses..... | 2 Amp. Flink |
| | Transistor holders | 0240274 |
| | Transformer, 1st IF | 0971227 |
| | - 2nd IF | 0971228 |
| | - 3rd IF | 0971229 |
| | - detector, Model 2302 | 0971230 |
| | - detector, Model 2304 | 0971242 |

PARTS marked with an * are preferred spare parts.





| | | |
|------|---|----------------|
| * | Transistors (one)..... | AC 126 |
| * | - (three)..... | AC 128 |
| * | - pair (two)..... | AC 127/AC 132 |
| * | - (one)..... | AF 121 |
| * | - (three)..... | AF 126 |
| * | - (four)..... | 2N2613 |
| * | - (one)..... | 2N2712 |
| * | - (two)..... | UW 0029 |
| * | Zener diode..... | ZF 9,1 |
| | Plug for de-emphasis..... | 0994028 |
| * 57 | Dial pointer..... | 0760502 |
| 58 | Stereo indicator..... | 0521147 |
| 59 | Lever for push-button switch..... | 0387328 |
| 60 | Bracket for push-button switch, left..... | 0245613 |
| 61 | - - - - - right..... | 0245614 |
| 62 | Lever for push-button switch..... | 0387328 |
| 63 | Bracket for dial..... | 0248993 |
| * 64 | Dial lamp for indicator..... | 8097 D/71 |
| | Tube for dial lamp..... | 0430204 |
| | Resistor for dial lamp..... | 82Ω - 04032 |
| 65 | Electrolytic capacitor..... | 2000μF/50 V-KI |

See photo on page 9

| | | |
|------|---------------------------------|-----------|
| * 75 | Sockets, 5-contact..... | BN 51 |
| 76 | Bracket, rear section..... | 0248916 |
| * 77 | Sockets, loudspeaker..... | LUN 2 |
| 78 | Socket, aerial..... | 0962091 |
| 79 | End section..... | 0248982 |
| 80 | Bracket..... | 0248986 |
| 81 | End section..... | 0248983 |
| 82 | Washer, fibre..... | 0376436 |
| * 83 | Transistor..... | AD 149 |
| 84 | Transistor..... | AD 149 |
| 85 | Chassis..... | 0504306 |
| 86 | Transistor..... | AD 149 |
| 87 | Transistor..... | AD 149 |
| * 88 | Cover plate for transistor..... | 0525042 |
| * 89 | Knob, tuning..... | 0928154 |
| * 90 | Insulating bushing..... | 26201 A |
| 91 | Washer, fibre..... | 0376436 |
| 92 | Transistor..... | AD 149 |
| 93 | Insulating bushing..... | 26201 A |
| * 94 | Mica insert..... | 26201 A |
| * 95 | Contact pin..... | 15,5-0,35 |
| * 96 | Screw for cabinet..... | 0104087 |
| * 97 | Plug..... | 0585018 |
| * 98 | Knob, balance..... | 0928155 |
| * 99 | Knob, volume..... | 0928155 |
| *100 | Slide shoe..... | 0585028 |
| 101 | Bottom..... | 0508154 |
| 102 | Slide shoe..... | 0585028 |

PARTS marked with an * are preferred spare parts.



See photo on page 9

| | | |
|------|---|------------------------|
| 103 | Bushing..... | 411268 |
| 104 | Bushing..... | 411268 |
| 105 | Screw..... | AM 3 × 12 DIN 84 |
| 106 | Rubber tubing..... | 0286206 |
| 107 | Rubber tubing..... | 0286206 |
| 108 | Screw..... | AM 3 × 12 DIN 84 |
| 109 | Bottom frame..... | 0760452 |
| *110 | Knobs, bass and treble, series 286..... | 0928157 |
| | Other series..... | 0928155 |
| | Cabinet..... | 0532672 teak/rose-wood |
| | Clamps for cabinet..... | 0291029 |
| | Springs for cabinet, front section..... | 0335177 |

Extra accessories

| | | |
|---|-------------------------------|---|
| * | Gramophone pre-amplifier..... | 0002 |
| * | Microphone pre-amplifier..... | 2004 |
| | Multiplex adaptor..... | 0001 |
| * | Dipole aerial..... | 2017 |
| * | Plug, FM aerial..... | B. A. S. 4 or Type Z twin plug with flat prongs |
| * | Plug, 5-pin DIN (three)..... | 8-7506 |
| * | Plug, loudspeaker (four)..... | S. 34 |



DESCRIPTION

The BEOMASTER 1000 is an all-transistor hi-fi stereo amplifier and FM receiver.

The set consists of two sections: FM tuner and one PW board.

PW board 0915155 comprises power-supply section, IF section, and AF amplifier.

Unit 0915138 comprises: FM-RF section and tuning capacitor.

FM-RF and IF

Signals from the aerial are fed via the aerial transformer to the AF 106₁ RF amplifier. The amplified signals are applied to the emitter of the AF 106₂ self-excited mixer.

A BA 101 AFC-diode in the oscillator circuit is controlled directly from the FM detector.

The output of the FM tuner is fed via coupling coil 0971226 to the base of the AF 126₁ IF amplifier. Other IF amplifiers are AF 126₂, AF 126₃, and 2N2654. The signal rectifier consists of two AA 119's, one series resistor of which is variable so that a perfectly symmetrical curveform may be obtained. All IF transistors receive fixed bias voltage (-1.4 volts) from a voltage divider consisting of 12K Ω and 2.2K Ω resistors (Nos. 103 and 104 in the circuit diagram). AF 106₁ in the tuner receiver AVC bias from an AA 119 diode (No. 74).

Accurate tuning indication is provided by taking a signal off at the discriminator and amplifying it in the 2N2712 transistor ahead of the radiator, which is of the mid-scale zero type.

FM Stereo

The BEOMASTER 1000, Model 2304, is prepared for broadcasts according to the FCC multiplex system. A multiplex adaptor may be connected after removal of de-emphasis plug 0994028. Model 2302 is mounted with a multiplex adaptor.

The stereo indicator lamp will show light on reception of the 19 kc/s pilot frequency.

AF

The AF signal is fed through switch 0854785 to the two AF amplifiers, which use DC coupling in the driver and output stages. Signal transfer to the loudspeakers is capacitive. With the MONO button released, the stereo indicator lamp will show light during playback of stereo gramophone records and stereo tapes.

Switch 0854784 cuts in a needle-talk and rumble filter.

Power Supply Section

The power supply incorporates a voltage stabilization circuit to compensate for the load fluctuations imposed by the output stage. An AD 149 power transistor controlled by a Zener diode and two transistors provides stabilization as well as effective filtration of the ripple frequency. The four output transistors and the mains transistor are insulated from the chassis plate by means of a cover plate, a mica insert, and bushings. If this insulation is missing or defective, one or more transistors and resistors will burn out.



Loudspeakers

The receiver is designed for operation with two pairs of stereo speakers. Each pair of speakers is individually push-button controlled. If it is desired to connect more speakers, parallel connection must not be used as the load impedance presented to the output stages will then be too low.

Short-circuiting the output will immediately cause the current through the AD 149 output transistors to rise to a high value that will blow the 2-amp. fuse (left or right channel).

A combination of series and parallel connection is recommended so that the load impedance will be between 3 and 5 ohms.

The use of speakers of higher impedance, for instance 8 ohms, will not harm the receiver, but the available power output will be reduced (to approx. 7 watts in this example). Also, the use of only one speaker will not result in damage to the unused channel since only the no-signal current will flow through the transistors. It is therefore unnecessary to use a dummy-load resistor for the unused channel.

Users are advised against connecting a speaker that is also connected to the output stage of another receiver, for example a TV receiver.

Moreover, the left and right speakers must not have a common return lead, such as is practice in TV-radiogram stereo combinations.

Connecting a Gramophone

G 42 VF and BEOGRAM 1000 VF stereo players, and crystal pick-ups, may be used with the BEOMASTER 1000 without requiring any modification of the latter. The GR I push-button should be depressed.

Use of a G 42 V or a BEOGRAM 1000 V player requires that a pre-amplifier is installed in the receiver. The pre-amplifier is connected by means of a 9-pin miniature plug. The GR II push-button should be depressed.

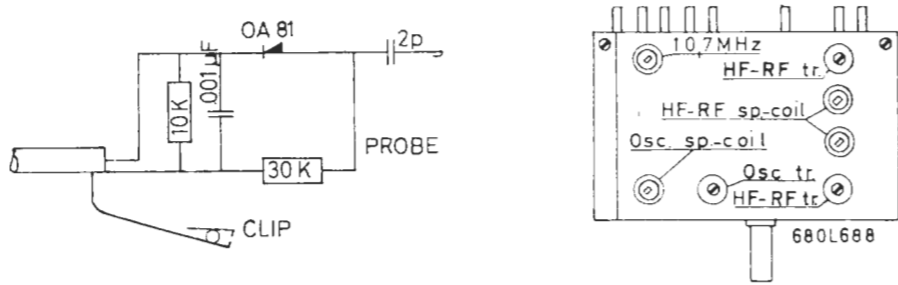
The gramophone pre-amplifier is supplied complete under the designation 0002.

Low-impedance pick-ups of other makes may be used with the BEOMASTER 1000, but no directions can be given as to their connection to the set and the performance that may be expected from them.

Connecting a Microphone

By incorporating a Type 2004 pre-amplifier instead of the 0002 gramophone pre-amplifier, a microphone having an impedance of 200 ohms and equipped with a DIN plug, such as an MD 8 or a BM 5, may be connected to the BEOMASTER 1000. However, the MD 8 must first be fitted with a 5-contact DIN plug in which a 220-ohm SBT resistor has been installed between pin 4 and pin 5. This is necessary to prevent noise from the right channel.

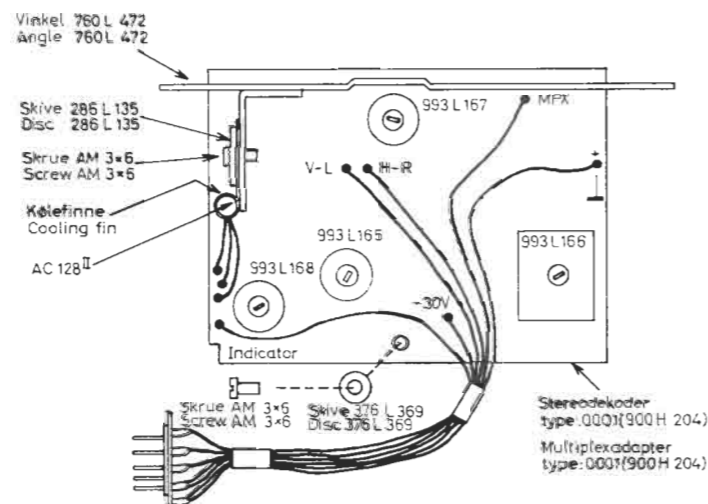
The microphone pre-amplifier is supplied complete under the designation 2004.



Oscillator and RF trimmers should be aligned at 106 Mc/s; oscillator and RF coil cores should be aligned at 89 Mc/s. Sensitivity at 92 Mc/s: 1,6µV EMF for 5W power output with bass and treble controls at maximum. 18dB signal-noise ratio at 2,8µV EMF, measured with bass and treble controls at maximum.

INSTALLING THE B&O TYPE 0001 MULTIPLEX ADAPTOR IN MODEL 2304.

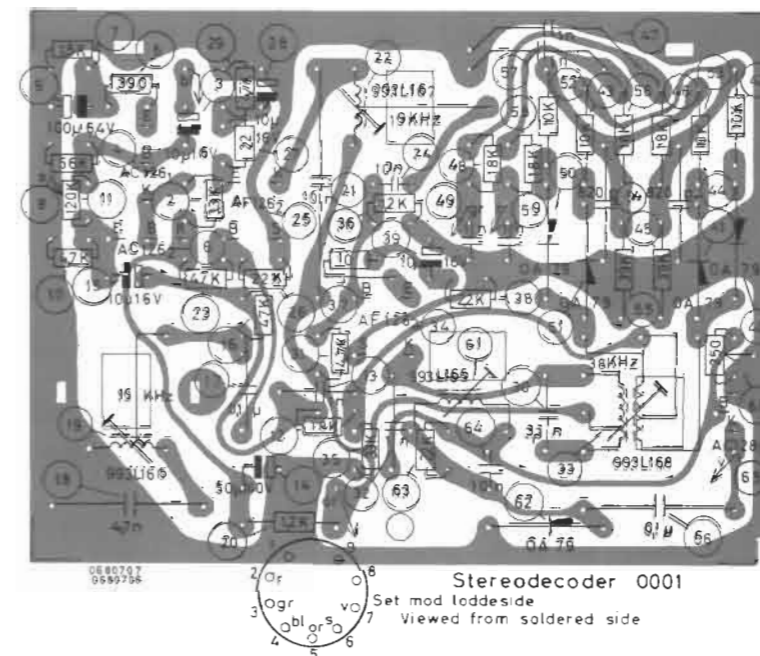
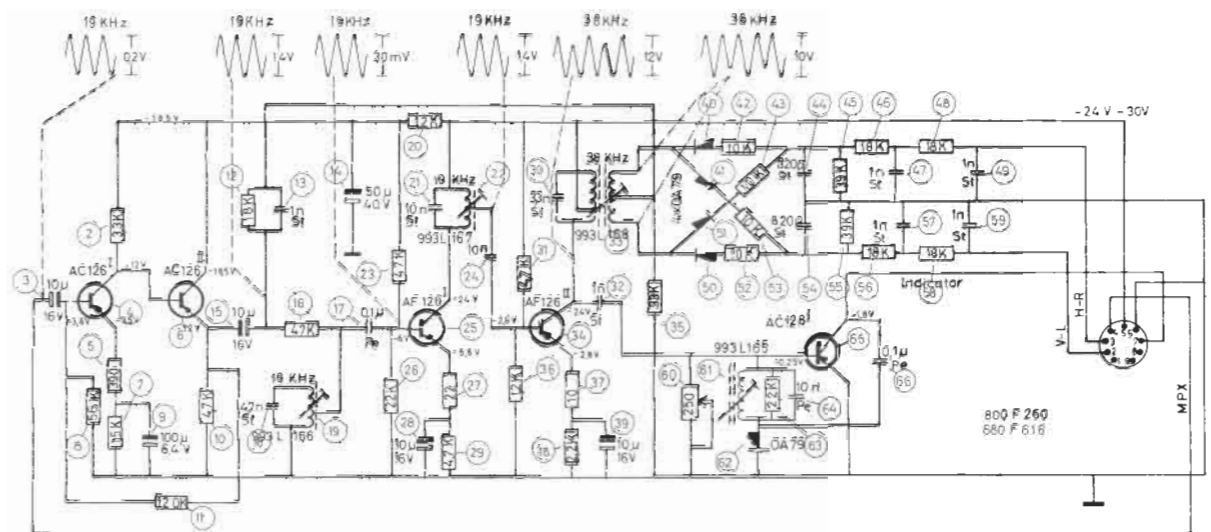
The bracket (760 L 472) for installing the Type 0001 multiplex adaptor (900 H 204) in the BEOMASTER 1000 should be soldered on to the PW board, in the two free 2 × 5 mm holes on the PW board. The heat sink of the AC 128₁ indicator transistor should be taken off and turned over 180 degrees before being screwed on to the bracket, using a screw (AM 3 × 6) and a washer (286 L 135); see sketch. Unscrew the Type 0002 pre-amplifier (if one is installed) and slide it clear of the chassis. Remove the de-emphasis plug (0994028) from the multiplex adaptor socket (adjacent to the dial flywheel). Next, the wiring harness with the multiplex adaptor plug should be pulled out from the place of the adaptor and in below the rail (for mounting the PW boards) and forwards to the multiplex adaptor socket. Insert the plug in the socket. Thereafter slide the adaptor into position and secure it with a screw (AM 3 × 6) and a fibre washer (376 L 369). When installing the multiplex adaptor in the BEOMASTER 1000, this item should be omitted: One self-tapping screw (BZ 2,9 × 6,5).



CAUTION

Do not tip the multiplex adaptor too far backwards with power applied to the set as the multiplex adaptor may then short-circuit resistor No. 746 (0,47Ω), causing the output transistors to burn out.

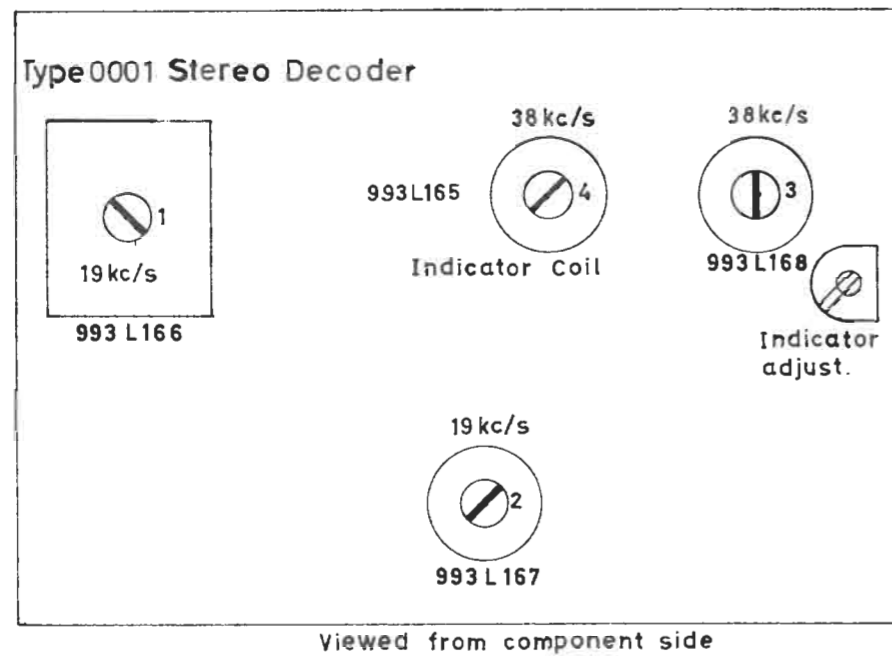
CIRCUIT DIAGRAM OF TYPE 0001 MULTIPLEX ADAPTOR





Alignment of the 0001 Multiplex Adaptor

The adaptor may be aligned by means of a test transmission from an FM stereo broadcasting station and an oscillograph. Proceed as follows: Tune in the station. Switch on the AFC. Connect the oscillograph to the collector of AF 126₂. Adjust cores 1, 2, and 3 for maximum response (the cores may be loosened with a few drops of cellulose thinner).



Now transfer the oscillograph to the AF output of the channel on which no signal is being received. Adjust the channel separation by rotating core 1 for minimum curve height.

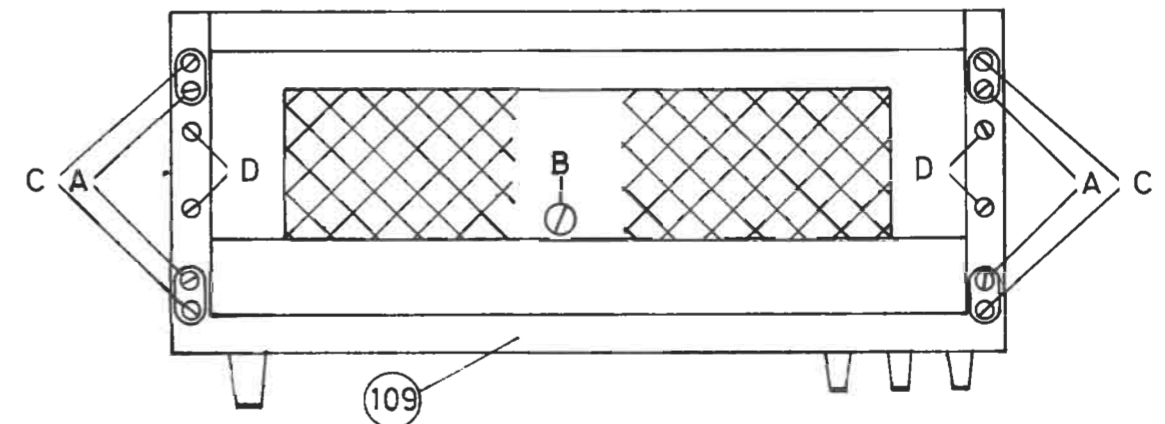
To adjust the indicator circuit, connect the oscillograph to the collector of AC 128₁ and adjust core 4 for maximum response.

The 250Ω potentiometer should be adjusted so that the indicator lamp will not be switched on by inter-station noise.

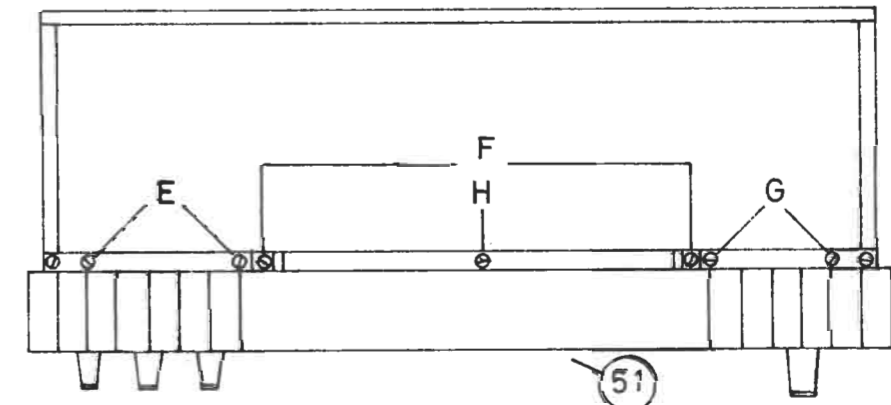


DISASSEMBLING THE BEOMASTER 1000

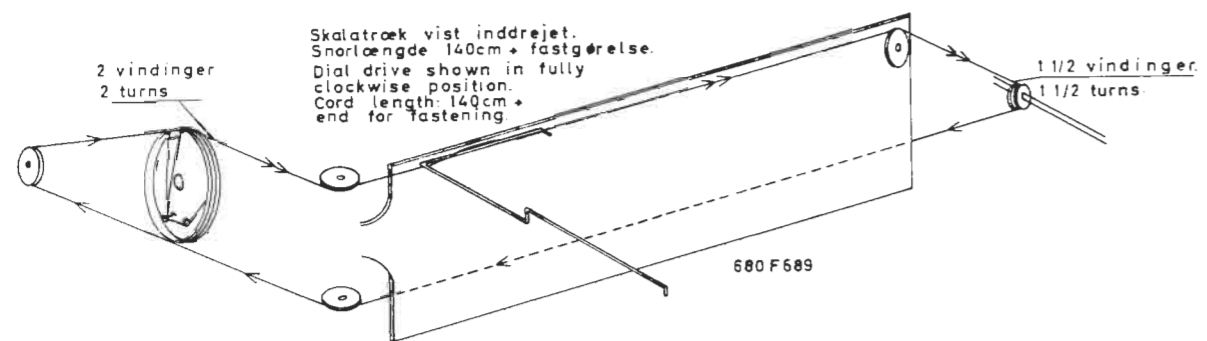
To take off the top section of the cabinet, remove screws A and B. To remove the frame (109), loosen screws C. The bottom is secured by screws D.

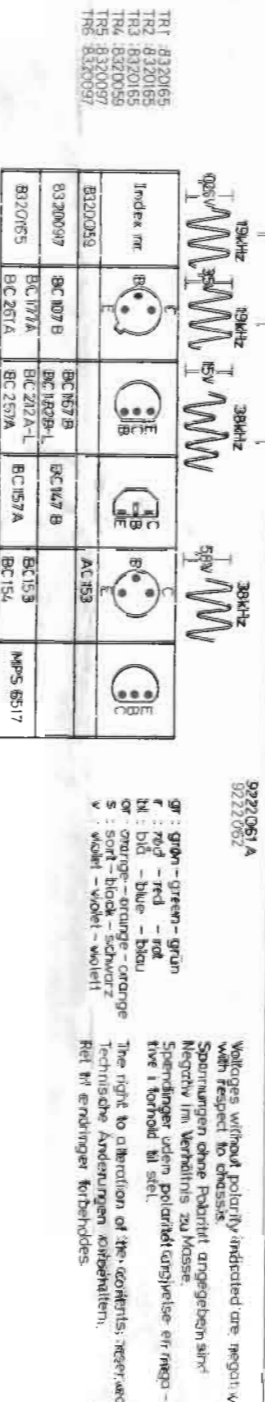
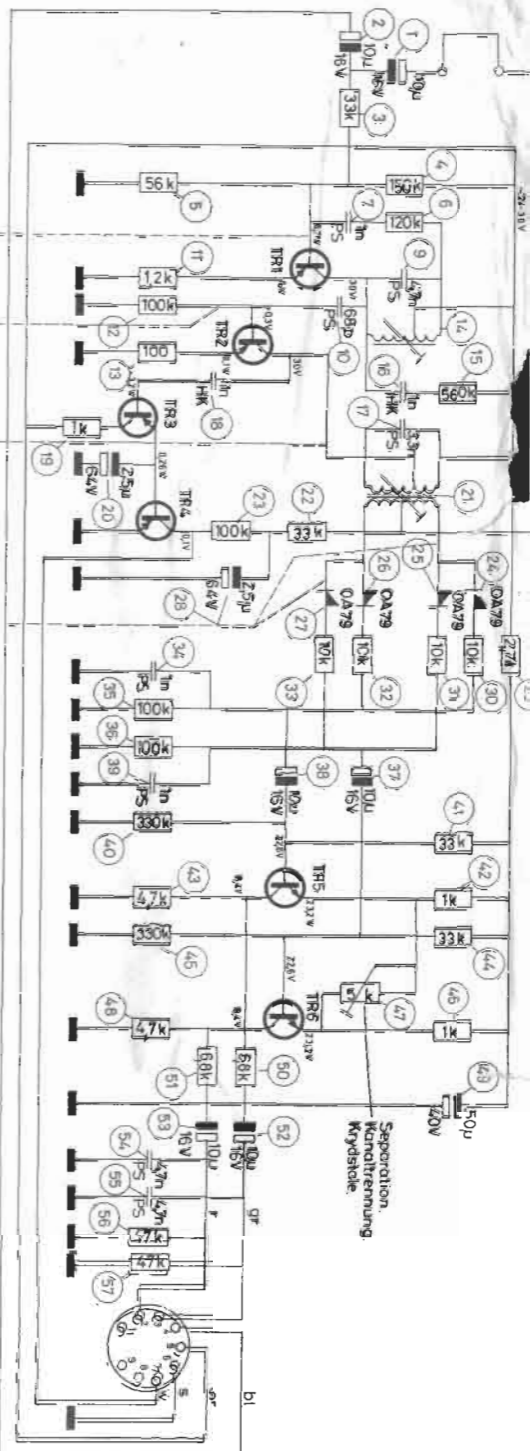


If measurements on the output and mains transistors are required, it is necessary to remove push-buttons (E) and (G), dial (F), dial rear wall (H) and mirror (No. 20 in parts list). The front section (51) may be taken off after removal of the two screws on either side and the two retainer springs on the inner side of the chassis.



DIAL DRIVE





| | | | | | |
|-----|---------|--------|--------|--------|--------|
| TR1 | 8320165 | BC107B | BC167B | BC167B | BC167B |
| TR2 | 8320165 | BC107B | BC167B | BC167B | BC167B |
| TR3 | 8320165 | BC107B | BC167B | BC167B | BC167B |
| TR4 | 8320059 | BC107B | BC167B | BC167B | BC167B |
| TR5 | 8320059 | BC107B | BC167B | BC167B | BC167B |
| TR6 | 8320057 | BC107B | BC167B | BC167B | BC167B |
| TR6 | 8320057 | BC107B | BC167B | BC167B | BC167B |

9922061A
9222052A

Wolleges without polarity indicated are negative with respect to chassis.

Spanningen er negativ angegneben sine.

Negativ im Verhältnis zu Masse.

Spanninger uden polaritet angegneben er negativ i forhold til stel.

The right to alteration of the contents, reserved.

Technische Änderungen vorbehalten.

Ret til ændringer forbeholdes.

Modbetrøningsproppen (0994027) i decoderfærlingen (ved siden af stereofinforlængningen) fjernes.

Decoderens ledningbundt med strikprop trækkes under skinnen for fastspænding af PW-pladerne og stikket sættes i færlingen. Samtidig med, at man sætter decoderen på plads, trækker TR 4 med kølefinerne med og ud gennem chassiset (lovet indvendig HT stikdåse) og kølefinerne skrues fast udvendig på chassiset med selvkerende skruer (2012900) og skive (0286135).

Decoderen skrues fast på skinnen med skruer (2038007) og fiberskive (0376369) og fastholdes på vinklens to tappere, vinkel (0760472) og 1 skruer (2038007) anvendes ikke.

Decoderen er forjustet og afprøvet under fabrikationen. For at opnå den bedst mulige kanalseparation må det anbefales, at forretage en finjustering af decoderen er monteret i modtageren. Justeringen foretages med en stereogenerator (evt. FM stereoudsendelse med testtoner) og der indstilles til modulation i den ene kanal. Der lyttes eller måles output fra den anden umodulerede kanal og kernen i 19 KHz spolen (14) justeres til minimum output og limes.

Eventuel justering af de øvrige kredse samt modtagerens MF- og detektor foretages som omtalt i serviceanvisningen.

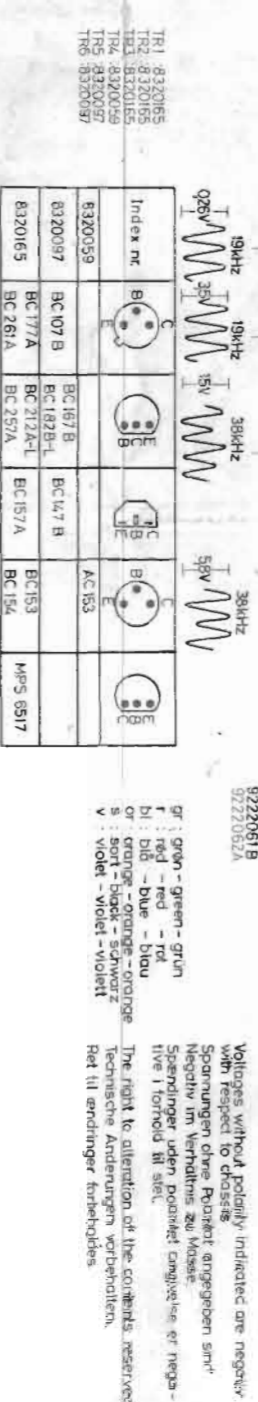
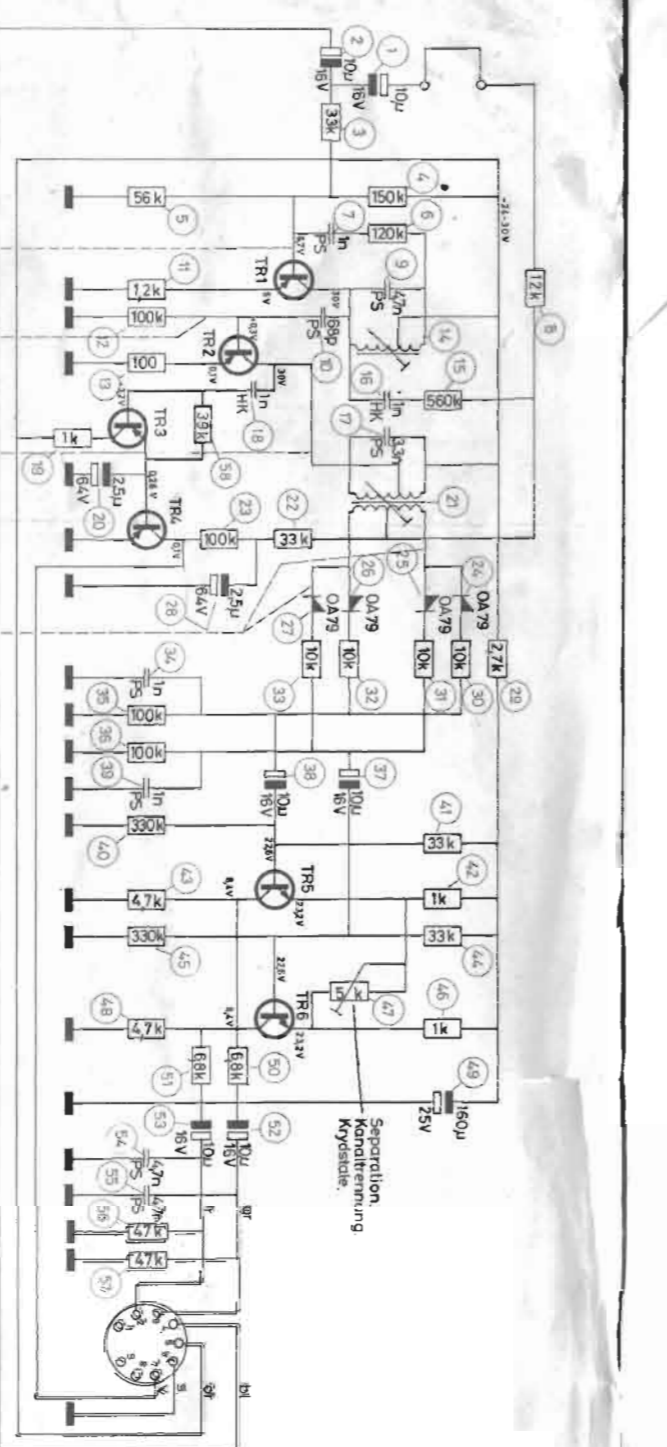
Remove the de-emphasis plug (0994027) from the decoder socket (adjacent to the stereo indicator lamp).

Pass the plug-terminated wiring harness from the decoder, under the PW-board mounting strip and insert the plug in the decoder socket. While mounting the decoder in position, pass the cooling fin equipped TR 4 down and out through the chassis (above internal speaker socket) and screw it into place on the out side of the chassis using a self-tapping screw (2012900) and washer (0286135).

Screw the decoder into place on the mounting strip using screw (2038007) and fib or washer (0376369), and solder it to the two studs on the bracket. Omit bracket (076472) and 1 screw 2038007.

This stereo decoder has been pre-adjusted and tested during manufacturing. To secure optimum channel separation, it is recommended to fine adjust when the decoder has been mounted in the receiver. The adjustment is undertaken by a stereo generator (FM stereobroadcast by test tones) and the one channel is set to modulation. The output from the other, unmodulated channel is estimated or measured and the iron core in the 19 KHz coil (14) is set to minimum output and sealed.

Adjustment of the other circuits and the receiver's IF and detector should be made as mentioned in the service manual.



| | | | | | |
|-----|---------|--------|--------|--------|--------|
| TR1 | 8320165 | BC107B | BC167B | BC167B | BC167B |
| TR2 | 8320165 | BC107B | BC167B | BC167B | BC167B |
| TR3 | 8320165 | BC107B | BC167B | BC167B | BC167B |
| TR4 | 8320059 | BC107B | BC167B | BC167B | BC167B |
| TR5 | 8320059 | BC107B | BC167B | BC167B | BC167B |
| TR6 | 8320057 | BC107B | BC167B | BC167B | BC167B |

9222061B
9222052A

Wolleges without polarity indicated are negative with respect to chassis.

Spanningen er positiv angegneben sine.

Negativ im Verhältnis zu Masse.

Spanninger uden polaritet angegneben er negativ i forhold til stel.

The right to alteration of the contents, reserved.

Technische Änderungen vorbehalten.

Ret til ændringer forbeholdes.

Vinklen (0760472) fastholdes i decoderens 2 X 5 mm huller som vist på tegningen. Kølefinerne på TR 4 afmonteres og vendes 180° inden den skrues fast på vinklen med skruer (2038007) og skive (0286135) se tegningen.

Modbetrøningsproppen (0994028) som sidder i decoderfærlingen (ved siden af skalavindhullet) fjernes.

Decoderens ledningbundt med strikprop trækkes under skinnen for fastspænding af decoderen og stikket sættes i færlingen. Decoderen "skydes" på plads, og skrues fast med skruer (2038007) og fiberskive (0376369); selvkerende skruer (2012900) anvendes ikke.

Decoderen er forjustet og afprøvet under fabrikationen. For at opnå den bedst mulige kanalseparation må det anbefales at foretage en finjustering af decoderen er monteret i modtageren. Justeringen foretages med en stereogenerator (evt. FM stereoudsendelse med testtoner) og der indstilles til modulation i den ene kanal. Der lyttes eller måles output fra den anden umodulerede kanal og kernen i 19 KHz spolen (14) justeres til minimum output og limes.

Eventuel justering af de øvrige kredse samt modtagerens MF- og detektor foretages som omtalt i serviceanvisningen.

Solder bracket (0760472) on to the PW board, in the two free 2 X 5 mm holes as shown on figure.

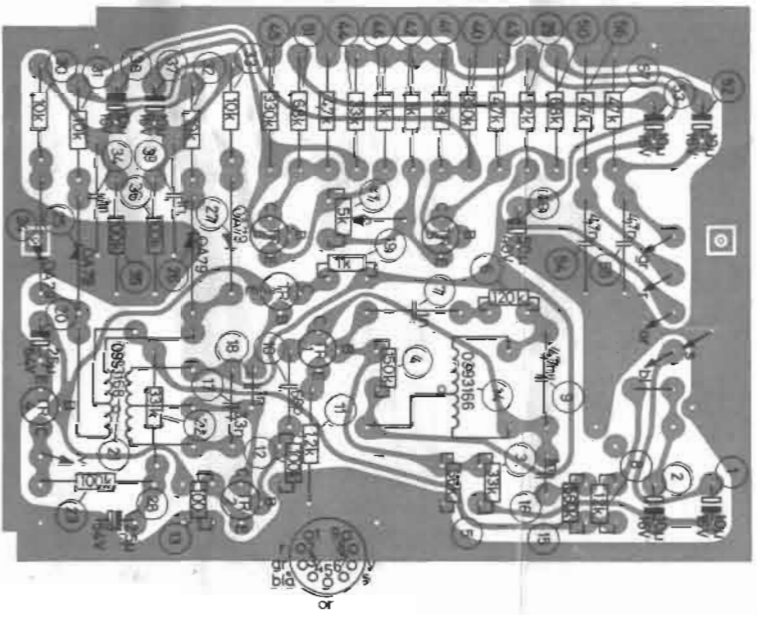
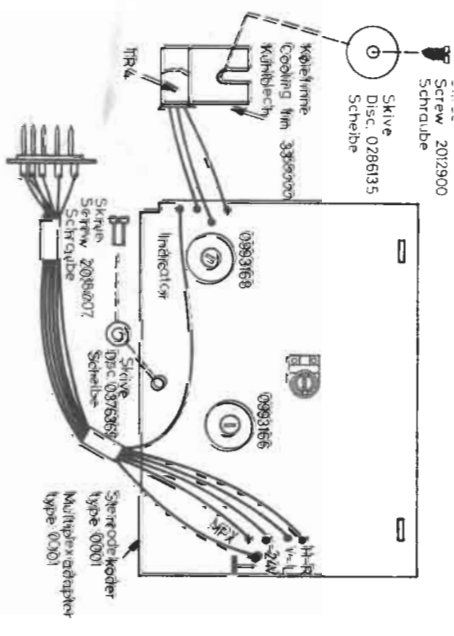
The cooling fin of the TR 4 transistor is to be removed and turned over 180° before being screwed on to the bracket using screw (2038007) and washer (0286135) see figure.

Pass the plug terminated wiring harness from the decoder, under the PW-board mounting strip and insert the plug in the decoder socket.

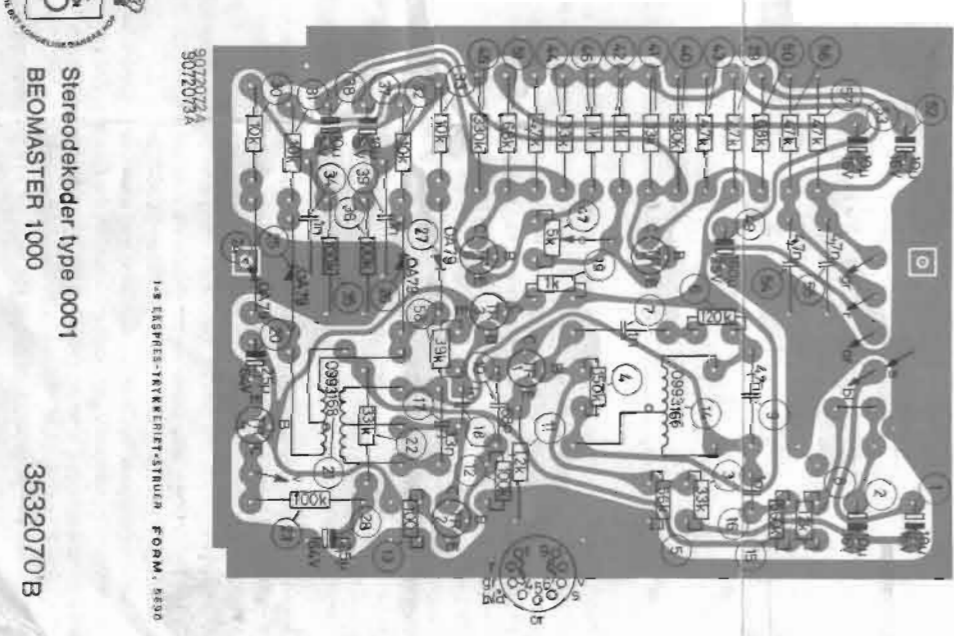
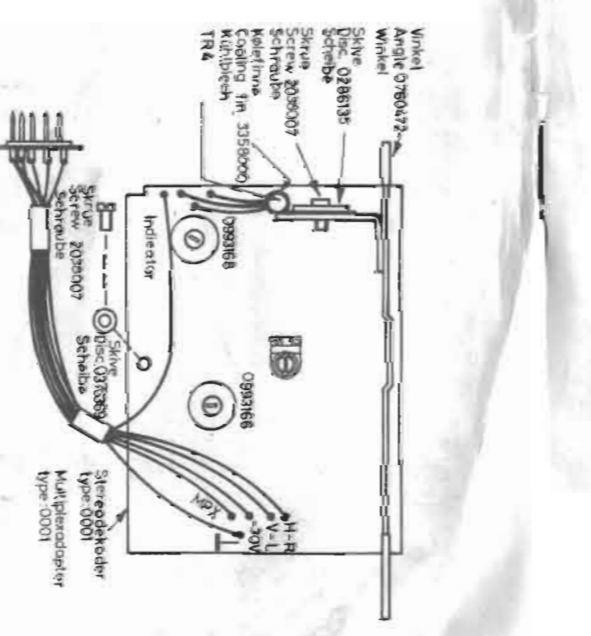
"Slide" the decoder into position and mount it with screw (2038007) and fibre washer (0376369) Omit self-tapping screw (2012900).

This stereo decoder has been pre-adjusted and tested during manufacturing. To secure optimum channel separation, it is recommended to fine adjust when the decoder has been mounted in the receiver. The adjustment is undertaken by a stereo generator (FM stereobroadcast by test tones) and the one channel is set to modulation. The output from the other, unmodulated channel is estimated or measured and the iron core in the 19 KHz coil (14) is set to minimum output and sealed.

Adjustment of the other circuits and the receiver's IF and detector should be made as mentioned in the service manual.



Stereodekoder, type 0001
BEOMASTER 1000



Stereodekoder, type 0001
BEOMASTER 1000
3532070B