

Bang & Olufsen

BEOGRAM 3400-1900

TYPE 5703-5701

//100



BANG & OLUFSEN A/S
DK - 7600 STRUER
DENMARK

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CABLE ADDRESS BANGOLUF

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Form. 7246

SERVICE MANUAL



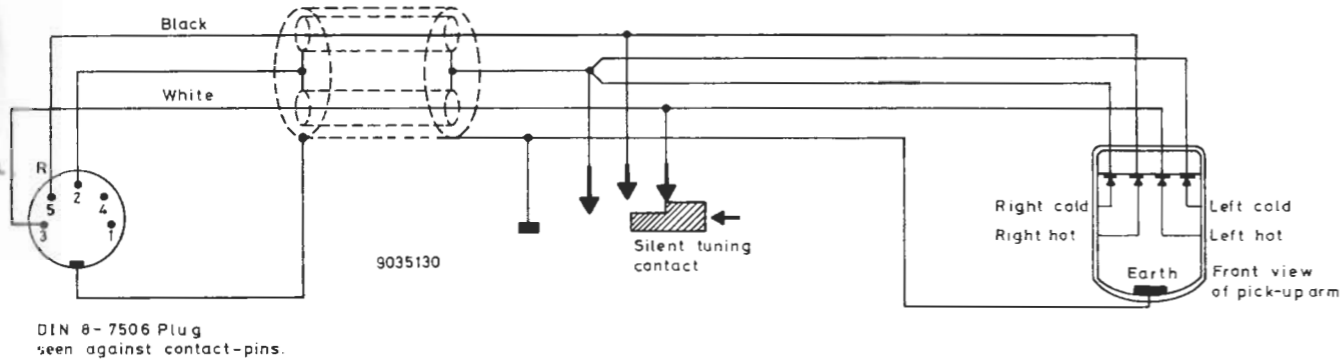
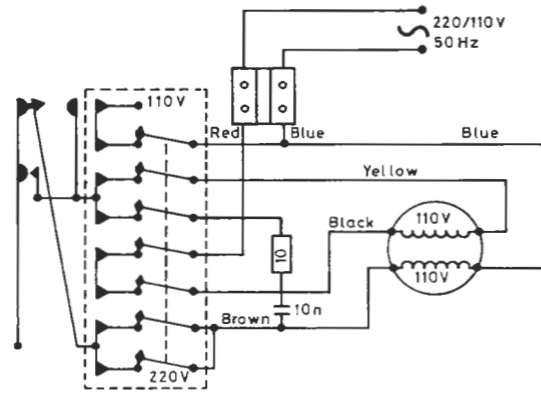
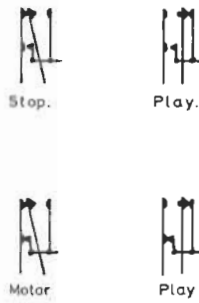
TECHNICAL DATA

	BEOGRAM 3400	BEOGRAM 1900
Type No.	5703	5701
Sound system	Stereo, matrix (CD-4)	Stereo, matrix
Output	2 x 0.6 mV	2 x 0.6 mV
Speeds	33 - 45 rpm	33 - 45 rpm
Tonearm	Radial	Radial
Pickup cartridge	MMC 5000	MMC 4000
Automatic pickup movement	Yes	Yes
Automatic speed selection	Yes	Yes
Wow and flutter, DIN	< ± 0.07%	< ± 0.07%
Wow and flutter, WRMS	< ± 0.035%	< ± 0.035%
Rumble DIN unweighted	> 42 dB	> 42 dB
Rumble DIN weighted	> 62 dB	> 62 dB
Speed deviation	< 0.1%	< 0.1%
Speed control range	> 3%	> 3%
Dial for speed	Stroboscope 120 mm	Stroboscope 120 mm
Stylus pressure range	0 - 2.5 gram	0 - 2.5 gram
Tangential tracking error	0.126° / cm	0.126° / cm
Lift system	Mechanical	Mechanical
Antiskating	Inclined channelling inside bearing	Inclined channelling inside bearing
Motor	Asynchronous	Asynchronous
Drive system	Idler wheel and belt	Idler wheel and belt
Turntable	30 cm 1 kg	30 cm 1 kg
Dust cover	Hinged	Hinged
Power supply	110 - 220 volts	110 - 220 volts
Frequency	50 Hz	50 Hz
Power consumption	10 watts	10 watts
Dimensions W x H x D	44 x 9 x 33 cm	44 x 9 x 33 cm
Weight	6 kg	6 kg
Pickup	MMC 5000	MMC 4000
Stylus	Shibata diamond	Elliptical naked diamond
Radius of curvature	CD-4 quadro	5 x 17 µm
Frequency range	20 - 15.000 Hz ± 2 dB 15 - 45 kHz A-Rating	20 - 25.000 Hz ± 1.5 dB
Channel separation 1000 Hz	> 25 dB	> 25 dB
400 - 10.000 Hz	> 20 dB	> 20 dB
Channel difference	< 1.5 dB	< 1.5 dB
Intermodulation	< 1%	< 1%
Recommended stylus pressure	1.5 gram	1 gram
Compliance	25 x 10 ⁻⁶ cm/dyn	30 x 10 ⁻⁶ cm/dyn
Effective tip mass	0.4 mg	0.4 mg
Output mV/cm/sec.	0.6 mV/47 kohms	0.6 mV/47 kohms

Subject to change without notice

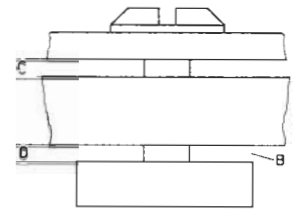
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DIAGRAM/SCHALTBILD

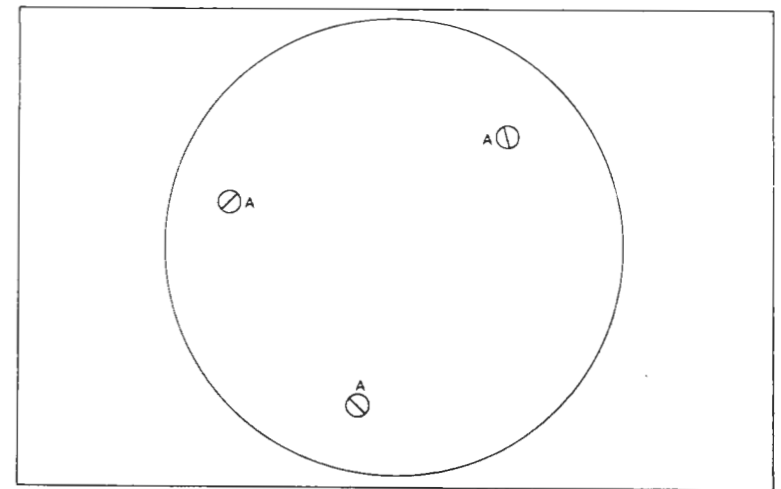


ADJUSTMENTS

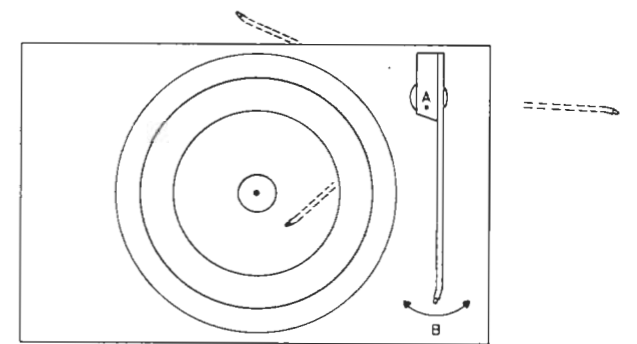
Motor height



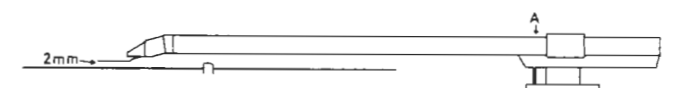
Put the turntable and two LP records of normal weight (approx. 900 g) on the motor. The motor should then come loose from all three transit bushings (see points B). The turntable should likewise be parallel with the chassis deck, and on removing the two LP records from the turntable, distances C and D should be approximately equal. Adjustments are performed with the screws A.



Pickup height



Put a record on the turntable. Carefully turn the pickup arm first in the direction of the arrow B until the end stops are reached. Thereafter place the pickup above a run-off groove. Adjust screw A so that the separation between stylus and record is 2 mm (see sketch). Perform adjustment with counterbalance weight inserted.

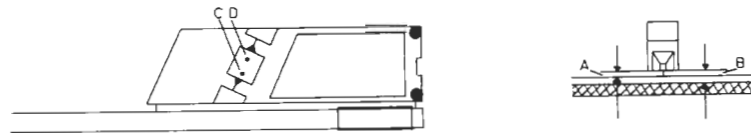


Pickup arm balance



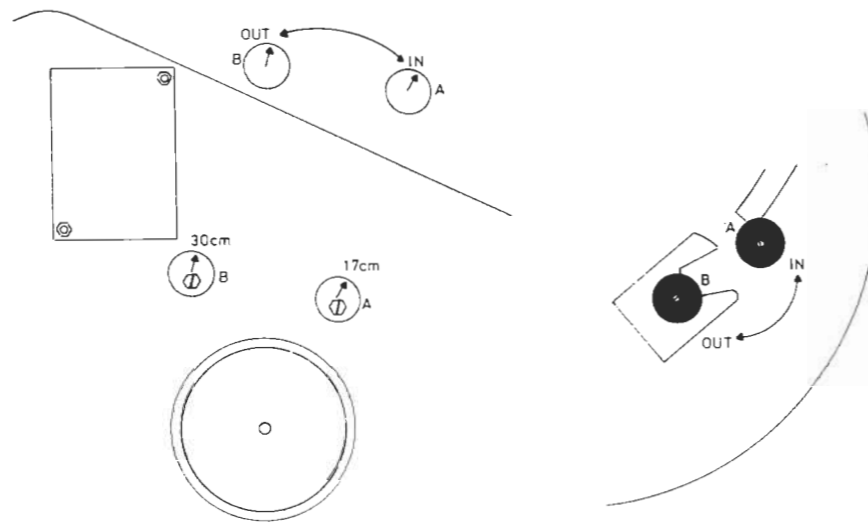
Set the stylus-force adjustment slider to the 0 position.
 Adjust screw A so that the pickup arm is exactly in balance. Thereafter adjust stylus force to 1.5 grams (1 gram for Beogram 1900).

Pickup parallelism

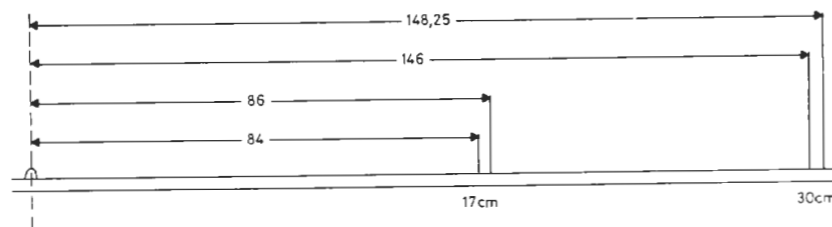


Adjust screws C and D so that distances A and B are identical and the plane portion of the pickup is parallel with the top side of the record. Perform adjustment with counterbalance weight inserted.

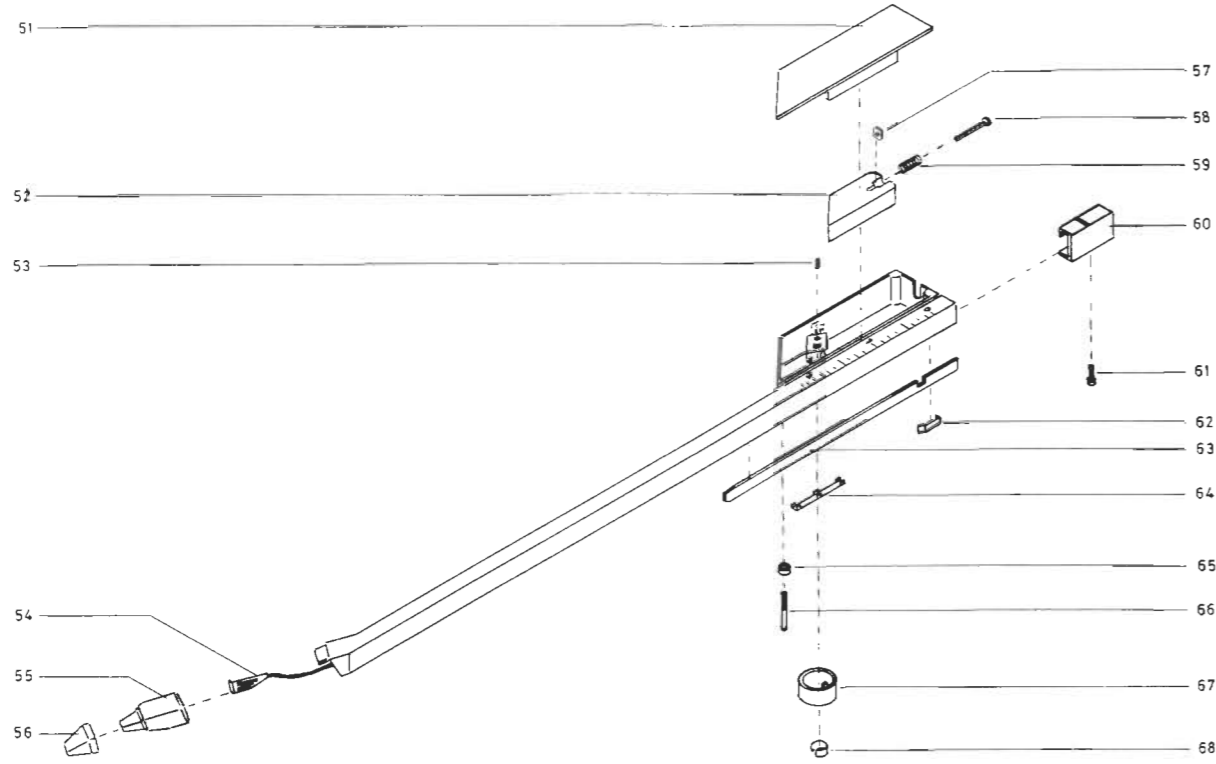
Pickup arm touch-down



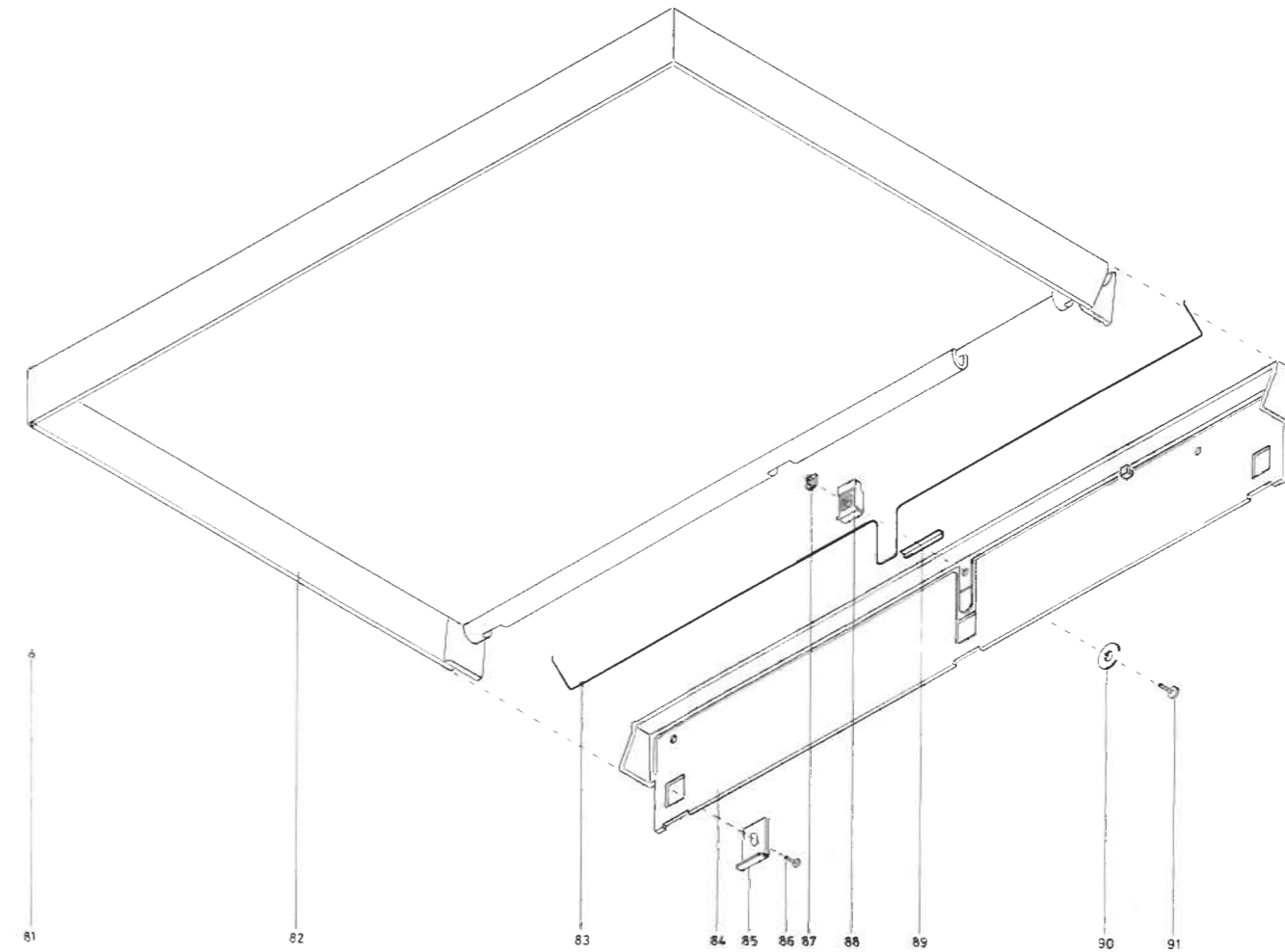
With "45" activated adjust eccentric A so that the pickup during automatic cueing will lower inside the field marked 17 cm in the sketch. Adjust eccentric B so that the pickup lowers into the field marked 30 cm with "33" activated.



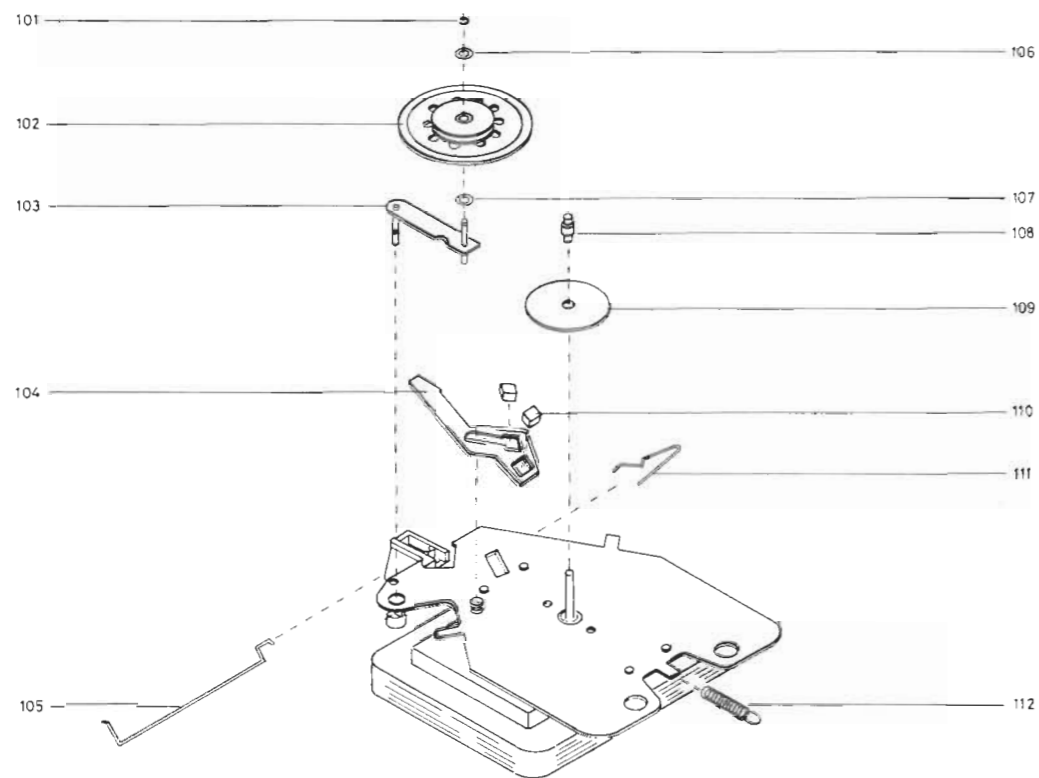
A series of horizontal lines for taking notes, spanning the right side of the page.



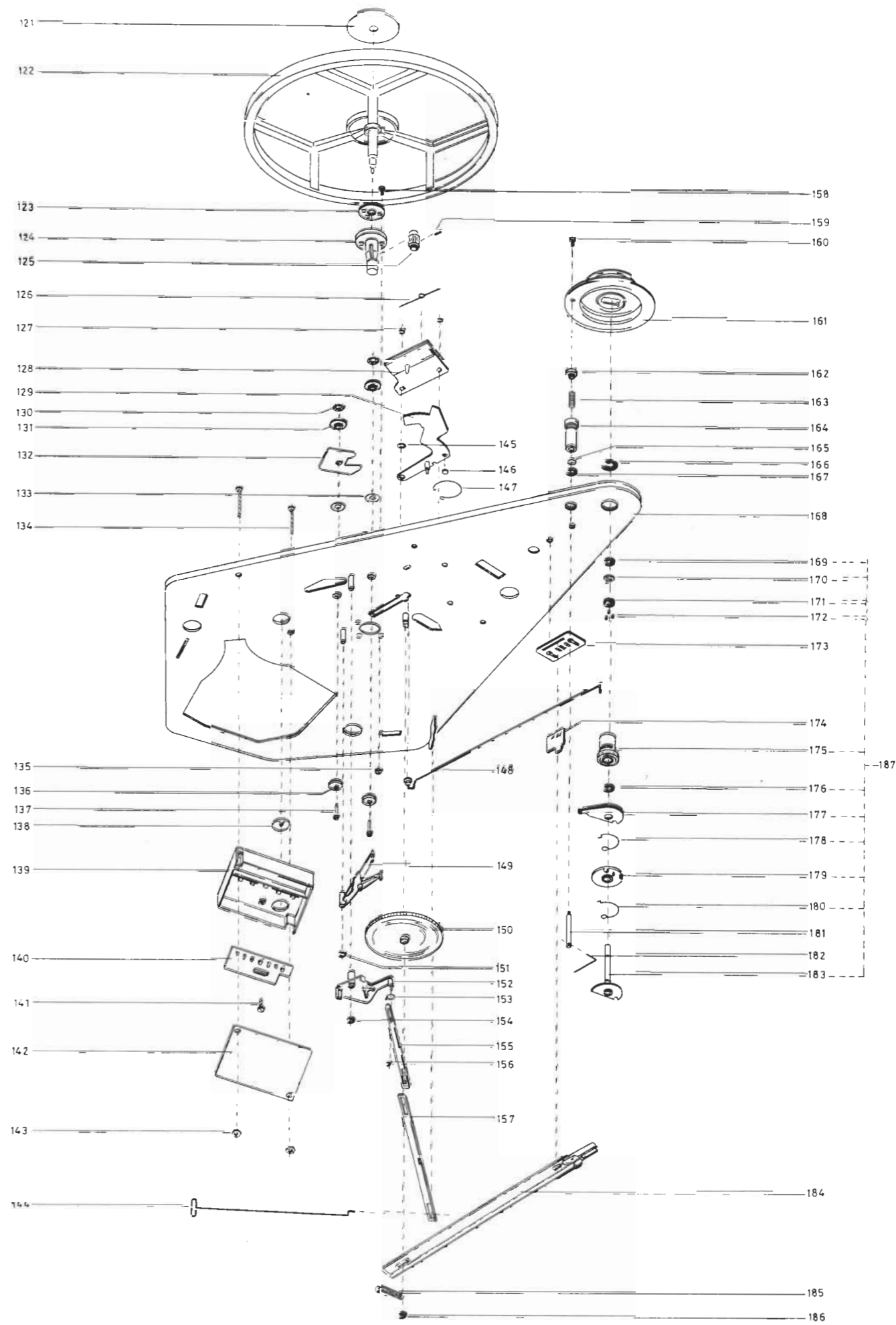
- 51 3162093 Cover
- 52 3342032 Counterweight
- 53 2070400 Threaded pin M 2 x 3
- 54 6300063 PC board with leads
- 55 8954420 Pickup unit
- 56 3302230 Cap for pickup
- 57 2380068 Square nut M2
- 58 2034913 Screw AM 2 x 16 DIN 84
- 59 2812072 Spring
- 60 3190049 Pointer
- 61 2034205 Screw AM 2 x 5 DIN 84
- 62 2815009 Spring
- 63 3342024 Counterweight
- 64 2568276 Guide rail for counterweight
- 65 2938096 Bushing
- 66 2072924 Adjustment screw
- 67 2938101 Bushing
- 68 2815010 Spring



- 81 3010007 Stop
- 82 3164236 Dust cover
- 83 2819110 Spring
- 84 3452231 Back plate
- 85 2530312 Bracket
- 86 2038258 Screw AM 3 x 5 DIN 84
- 87 2380103 Square nut
- 88 2572020 Friction piece
- 89 2530328 Bracket
- 90 2624034 Clamp
- 91 2042946 Screw M 4 x 10 DIN 963
- 3164208 Dust cover complete



- 101 2390002 Locking ring
- 102 2804034 Idler wheel
- 103 2851089 Arm
- 104 2854047 Arm
- 105 2570053 Arm
- 106 2620060 Washer
- 107 2620060 Washer
- 108 2804035 Stepped pulley
- 109 2622241 Washer
- 110 3356030 Magnet
- 111 2819115 Spring
- 112 2810079 Spring



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121	2805019	Washer
122	2794064	Flywheel
123	2905060	Washer
124	3150037	Bearing bushing
125	2700014	Gear-wheel
126	2819114	Friction spring
127	2390002	Locking ring
128	3014025	Friction plate
129	3014031	Arm positioning guide
130	2395030	Locking ring
131	2938088	Washer
132	3014033	Arm positioning guide
133	2622198	Washer
134	2038268	Screw AM 3 x 25 DIN 84
135	2380013	Nut M3
136	2803005	Eccentric
137	2992048	Pin
138	2770168	Knob for mains-voltage switch
139	3131128	Housing for contact
140	7536030	Tagstrip
	5001001	Resistor 10 ohms 10% 1/2W
	4010050	Capacitor 10 nF / 265 V
141	2038208	Screw AM 3 x 5 DIN 84
142	3162097	Cover
143	2380013	Nut M3
144	2570057	Arm
145	2622136	Washer
146	3035020	Plastic foot
147	2819075	Spring
148	2850057	Arm
149	2853046	Hammer, complete
150	3017011	Cam-lifting wheel
151	2390002	Locking ring
152	2853050	Release
153	2620060	Washer
154	2390002	Locking ring
155	2852034	Arm
156	2390066	Locking ring
157	2852033	Arm
158	2038220	Screw AM 3 x 12 DIN 84
159	2361019	Locking pin
160	2038208	Screw AM 3 x 5 DIN 84
161	2623030	Lifting ring
162	2389041	Nut
163	2812063	Spring
164	3130054	Lifting device
165	2938103	Ring
166	2390069	Locking ring
167	2390065	Locking ring
168	3110007	Chassis
169	2390033	Locking ring
170	3152186	Ball holder
171	2938114	Bushing
172	2917017	Ball
173	7459014	Contact (silent)
	7530072	Solder tag
174	7459015	Contact (slide valve)
175	2938115	Pile bearing
176	2390033	Locking ring
177	2851088	Arm
178	2819106	Spring
179	2750018	Clutch disc
180	2819107	Spring
181	2850083	Lifting bar
182	2530326	Bracket
183	2938116	Pile
184	2852032	Lifting arm
185	2810082	Spring
186	2390002	Locking ring
187	2938111	Pickup bearing complete

PARTS NOT SHOWN

6270182	Pickup lead mounted
6271047	Mains lead
3152171	Transit protection device for pickup arm
3391463	Outer earthen
3391464	Top/bottom insert
3397251	Foam packing
3397252	Foam packing, lid insert

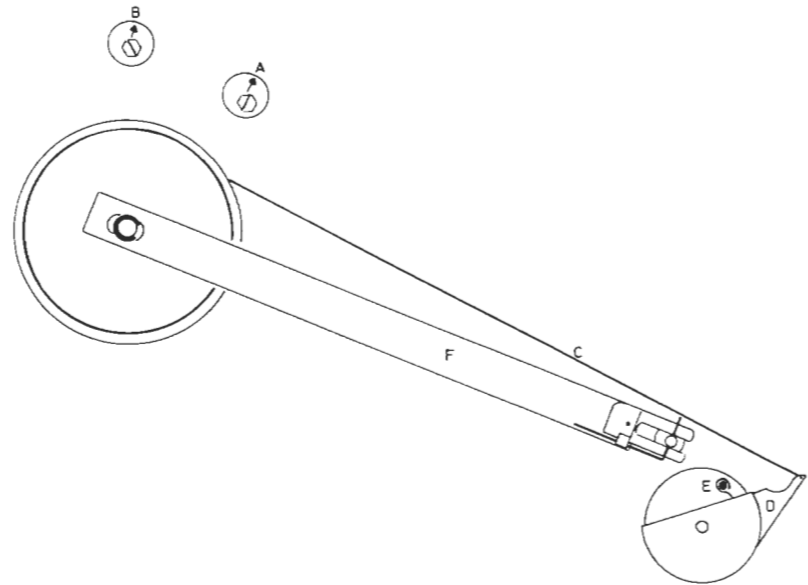
PARTS LIST FOR BEOGRAM 1900, TYPE 5701

3	3458161	Top plate, complete
4	3412264	Cabinet, oak
55	8954410	Pickup unit

Other parts as for Beogram 3400

SERVICE TIPS

Pickup arm mounting

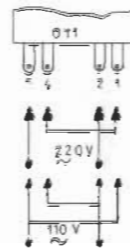
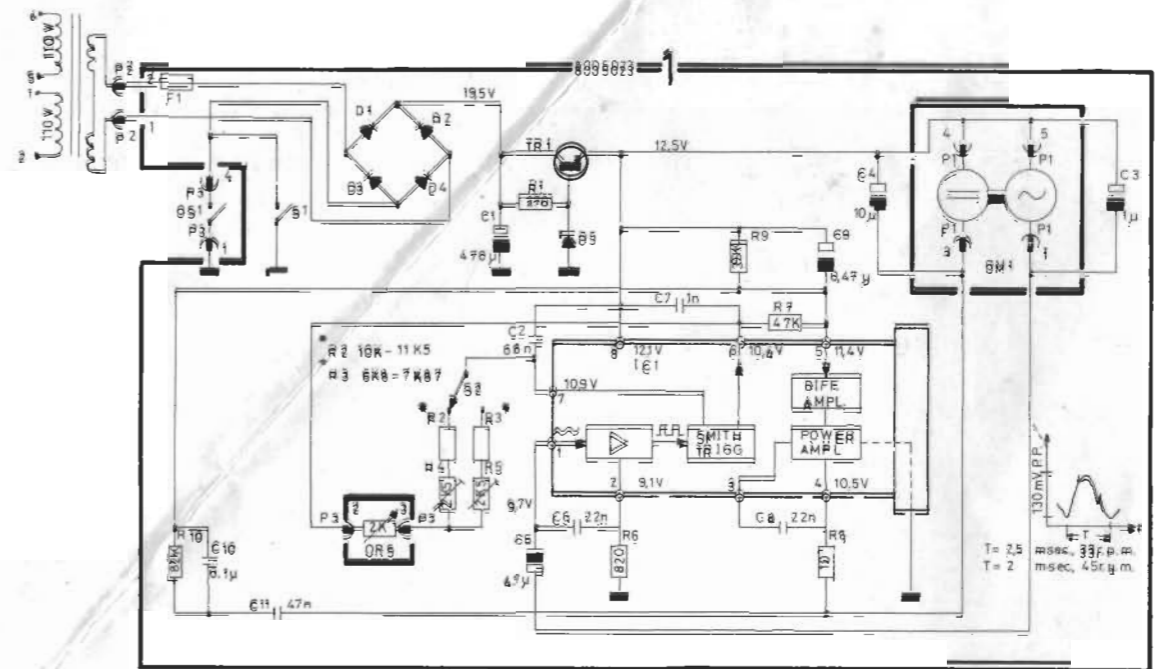


Set eccentric screws A and B so that the arrows are at right angles to arm F, as shown in the sketch.
Activate "45".

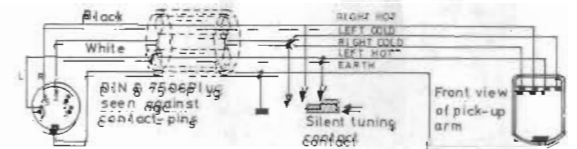
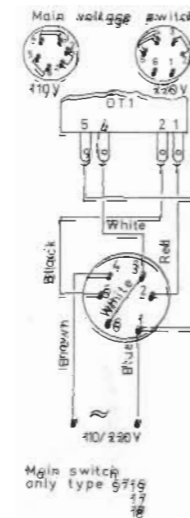
Rotate the turntable until clutch D stops its travel. Hold the cueing arm C in this position. Move the pickup arm in to the touch-down position for 17 cm records, and clamp the pickup arm.

Coarse adjustment of pickup touch-down can be made by turning eccentric pin E, using a pair of flat-nose pliers.

Fine adjustment is performed as described above, with eccentric screws A and B.



571X



3538433 TO PASTE IN SERVICE MANUAL FOR BEOGRAM 1102 - 1902

BEOGRAM 1500, TYPE 5714

1	2726113	Plattentaster	Turntable
3	3458205	Topplade komplet	Top plate complete
22a	2722026	Riemenscheibe	Top plate comp. pulley
24a	8954640	Tonabnehmer MMC 20S (replacement)	Pick-up MMC 20S (replacement)
37	8013201	Netztransformator	Main transformer
76	2853057	Axloser	Release
136	3164317	Støvlag	Dust cover

Ovrige dele som Beogram 1102, type 5715 Other parts as Beogram 1102, type 5715

1	2726113	Plattentaster	Turntable
3	3458205	Abdeckplade komplet	Top plate complete
22a	2722026	Riemenscheibe	Top plate comp. pulley
24a	8954640	Tonabnehmer MMC 20S (replacement)	Pick-up MMC 20S (replacement)
37	8013201	Netztransformator	Main transformer
76	2853057	Axloser	Release
136	3164317	Abdeckhaube	Dust cover

Øvrige Teile wie Beogram 1102, Type 5715