

# P6 Philips 22RW582/15

## MECHANICAL ADJUSTMENTS AND CHECKS OF THE RECORDER SECTION

### Command bracket 88, (Fig. 6)

In position playback bracket 88 should be moved so that it is just in contact with stop A.  
It is adjustable by shifting bracket 312 photograph page 13.  
After this the fixing screws of bracket 312 should be lock-painted.

### Pressure roller lever (Fig. 6)

The force required to pull pressure roller 83, in position "playback" just clear of the capstan should be between 330 and 360 g.  
This force can be adjusted by hooking the end of torsion spring 86 into another hole.  
This adjustment may be carried out only after adjusting the command bracket.  
In position playback the clearance between pressure roller lever 85 and tag B should be approx. 0.3 mm. This can be adjusted by bending cam B of bracket 88.

### Rubber idler wheel 108 (Fig. 1)

First check the adjustment of command bracket 88 and, if necessary, readjust.  
If, when switching on the cassette recorder, pressure roller 83 just touches the capstan, tag C of bracket 88 should be just clear of the cam of bracket 111 (Fig. 6).  
This can be adjusted by inserting two screwdrivers in the slotted holes and bending bracket 88.

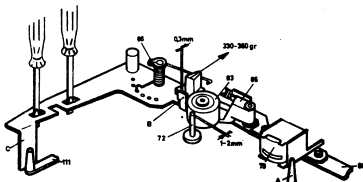


Fig. 6

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### Brake bracket 81 (Fig. 8)

In the playback position the felt on the brake bracket should press against the frontmost turntable with a force of approx. 30 g. This can be adjusted by bending the brake bracket.

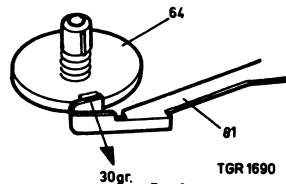


Fig. 8

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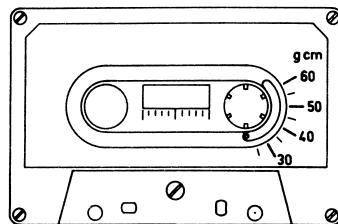
### Winding friction

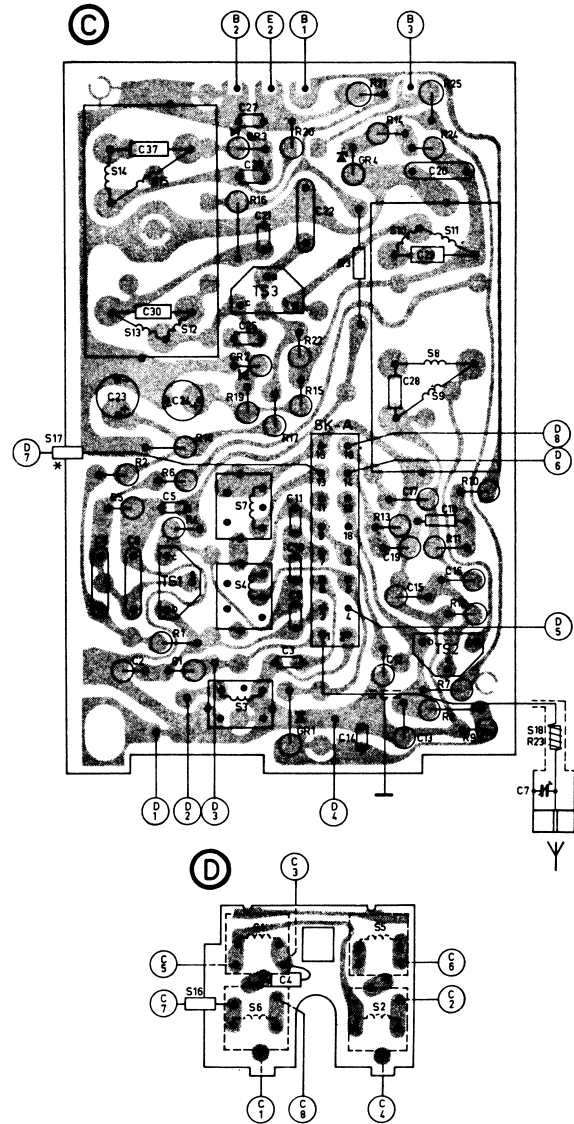
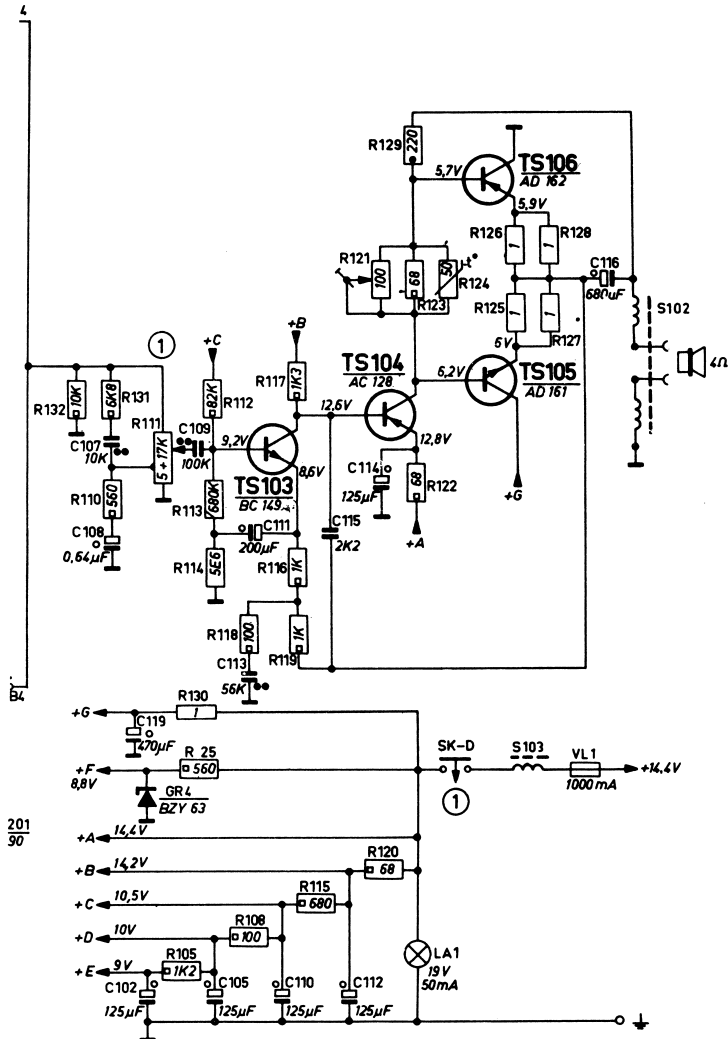
It is possible that the tape is wound into the cassette irregularly or not at all. As a result the tape supplied by the capstan may be damaged.

This may be caused by:

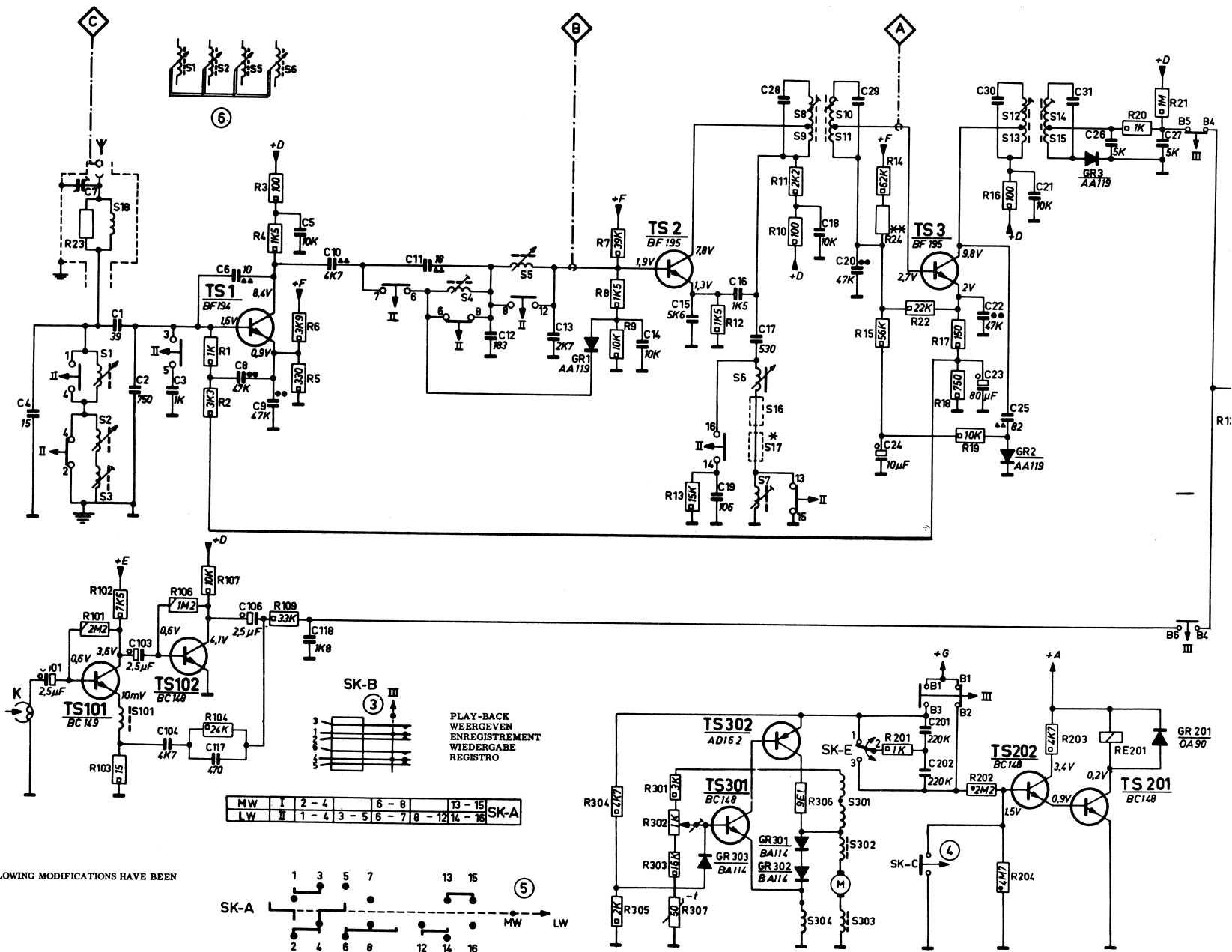
- Insufficient winding friction
  - Excessive winding friction in the cassette.
- To determine the cause of the fault, the torque of the winding friction should first be measured. This is effected as follows: Insert a test cassette (4822 395 80037, Fig. 9) into the recorder. Switch on the recorder and check that the torque of the winding friction is between 40 and 55 g.  
Also check whether slip occurs by blocking the right-hand turntable. In that case idler wheel 108 and the nylon disc of the winding friction 67 should continue to rotate.

If necessary, check whether lever 111 runs heavily. Replace idler and/or winding friction, if required.  
After replacement again check the winding friction.



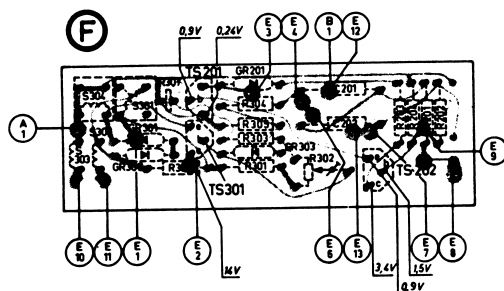
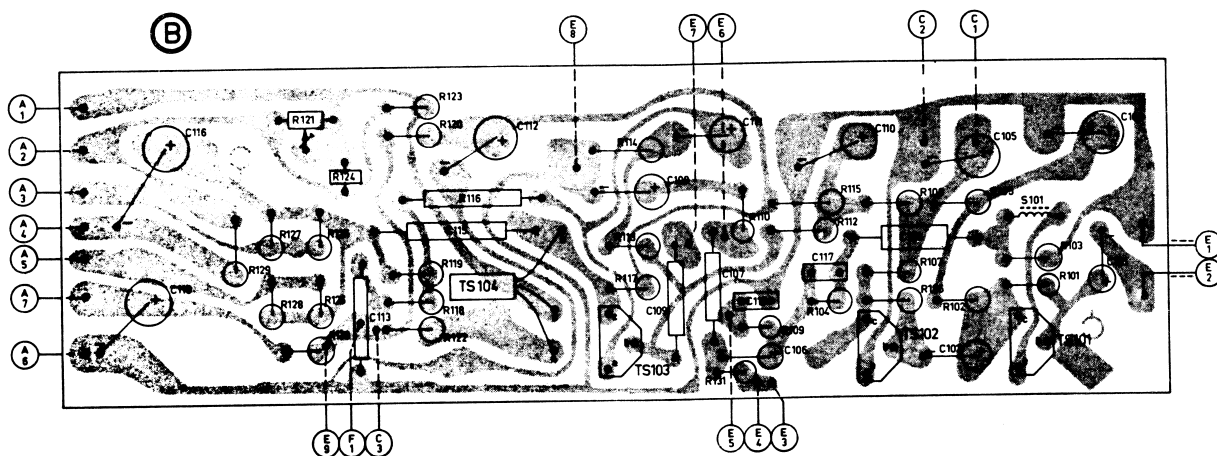
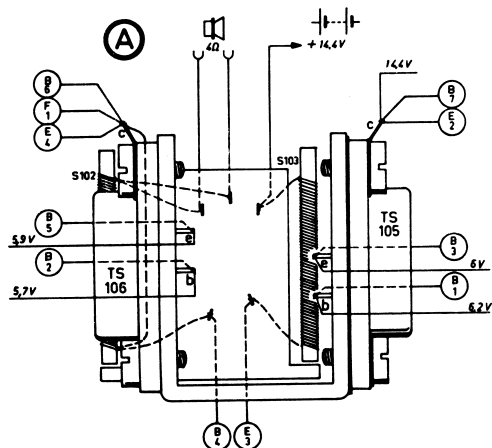


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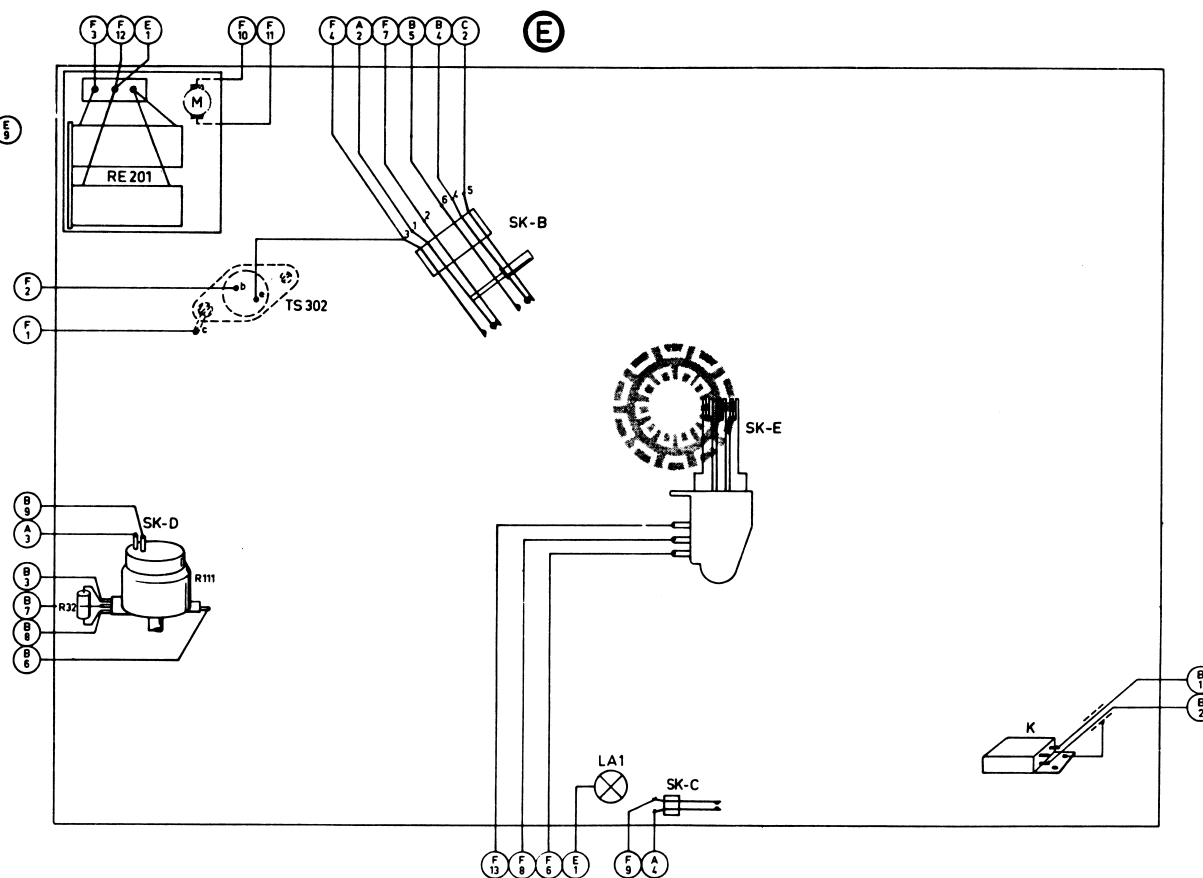
\* THE FOLLOWING MODIFICATIONS HAVE BEEN

\* SEE ADJUSTING INSTRUCTIONS



Wiring example

: Wire (1) (mentioned under unit A) leads to unit D and is then mentioned (A)



## REPAIR HINTS OF THE RECORDER SECTION

Since with bracket 320 the cassette compartment can be adjusted and this adjustment should be effected very accurately, it is recommended NEVER to remove this bracket for repair purposes. This bracket may, however, be removed together with brackets 301 and 317 as one unit.

**1. Replacing the cords**

- When fitting the new cord, ensure that it remains free of grease.
- After fitting, readjust the axial plus of flywheel 72 to 0.1 mm. This is possible with the aid of screw 75, which should be lock-painted after the adjustment.

**2. Replacing flywheel 72**

- After replacing the flywheel, degrease the capstan and adjust the axial plug of the flywheel to 0.1 mm.
- Next, lock-paint screw 75.
- Check oil seal 109.

**3. Replacing drive roller 93 and idler bracket 97**

- Remove tension spring 53 and remove cord 104.
- Remove circlip 12.
- Remove bracket 319 from plastic pin 42.
- Remove bracket 101 with drive roller 93.
- Remove circlip 68 and replace the drive roller.
- Bracket 97 can then also be replaced.

**4. Replacing rubber idler wheel 108**

- Remove the flywheel (see point 2).
- Remove circlip 3, fixing lever 111.
- Lever 111 can then be removed together with bracket 110 and idler wheel 108.
- Next, remove ring 124. The idler wheel can then be replaced.

**5. Replacing command bracket 88**

- Remove cover plates 57 and 58.
- Remove circlip 8 and spring 87.
- Remove guide 60. The bracket assy. can then be removed from the recorder, when the cassette compartment is pressed down.
- For adjusting the new bracket, see under "Mechanical adjustments and checks".

**6. Replacing brake spring 81**

- Remove the command bracket assy. 88 from the recorder (see point 5).
- Cut the old and the new brake spring as shown in Fig. 4.
- The new brake spring has been provided with two holes. Fit the new brake spring onto the old one in such a way that the two holes coincide exactly.
- The new and the old spring can then be soldered onto each other.

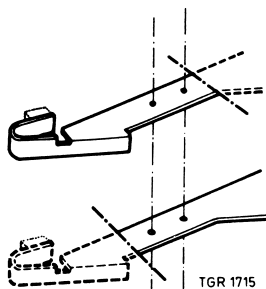


Fig. 4

**7. Replacing items 45, 44, 43 or 42**

- Remove the plastic pressure bracket 21, spring 40 and circlip 3.
- Replace front bracket 24.
- Mind the cord and the connection wires to LA1 and SK-C.
- The above-mentioned parts can now be replaced. However, to replace 42 circlip 3 should first be removed.

**8. Replacing volume control 136 (R111)**

- Remove spring 40, circlip 3 and hexagonal nut of volume control.
- The volume control can then be removed after unsoldering the wires.

**9. Replacing turntable 64**

- Remove cover plates 57 and 58.
- Do not remove connection bracket 320.
- Remove cap 66.
- The turntable can then be replaced.

**10. Replacing turntable 67**

- Remove cover plate 57, dust cover 137, switch SK-E and cap 66.
- The turntable can then be replaced.

**11. Replacing flywheel bearing 90**

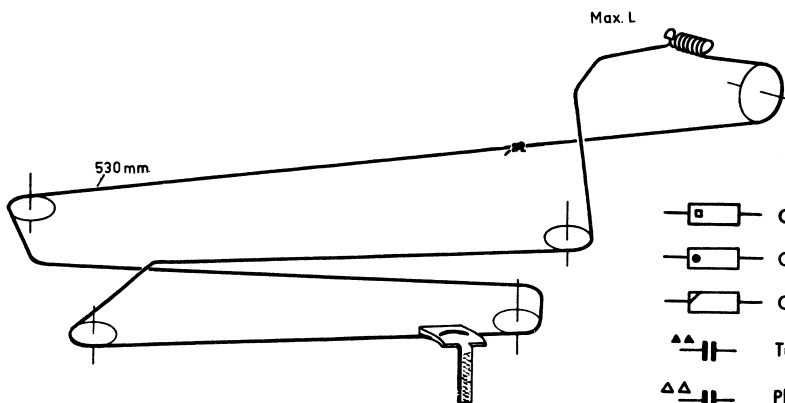
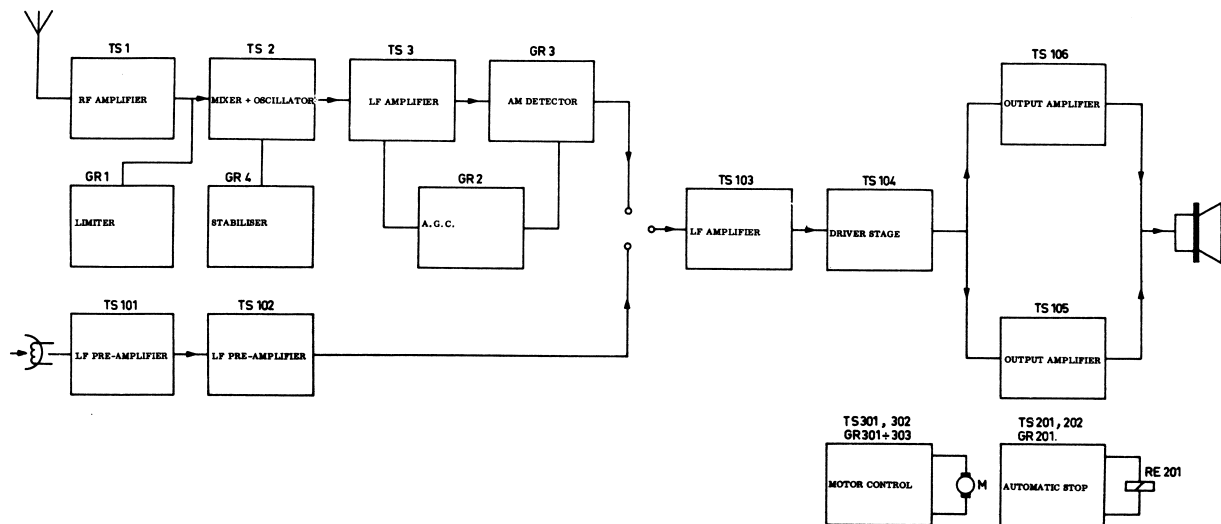
- Remove the flywheel (see point 2).
- Loosen screws 89 and 7.
- The bearing can then be replaced.
- For adjustment of the bearing, see under "Mechanical adjustments and checks".

1	Screw (3x10)	4822 502 10041	78	Self-tapping screw (2x3/8")	4822 502 30064
2	Screw (2x8)	4822 502 10681	79	Playback head	4822 249 10041
3	Circlip (3 mm Ø)	4822 530 70115	80	Ring	4822 532 50663
4	Ring	4822 532 10215	81	Brake spring with felt	4822 403 10095
5	Circlip (5 mm Ø)	4822 530 70117	82	Switch SK-E	4822 278 90229
6	Countersunk screw (2x6)	4822 502 10089	83	Pressure roller	4822 528 70185
7	Screw	4822 502 10681	84	Ring (1,5 mm Ø)	4822 532 50648
8	Circlip (4 mm Ø)	4822 530 70115	85	Pressure roller lever	4822 403 40029
9	Circlip (6 mm Ø)	4822 530 70118	86	Torsion spring for pressure roller lever	4822 492 40268
10	Screw (3x10)	4822 502 10012	87	Torsion spring	4822 492 40267
11	Nut (M3)	4822 505 10005	88	Lever	4822 403 40031
12	Circlip (2,3 mm Ø)	4822 530 70043	89	Set screw for flywheel (2,5x4)	4822 502 10816
13	Spring in knob	4822 492 61155	90	Flywheel bearing	4822 520 10226
14	Spring in knob	4822 492 60752	91	Tension spring	4822 492 30375
15	Spindle	4822 535 90575	92	Screw	4822 535 90586
16	Ring	4822 530 80081	93	Drive roller	4822 528 80305
17	Pin	4822 529 50038	94	Screw	4822 502 10845
18	Scale background with lamp holder	4822 410 20687	95	Ring (2,6 mm Ø)	4822 532 10456
19	Guide bracket	4822 404 20087	96	Idler wheel	4822 528 70184
20	Coupling piece	4822 466 80353	97	Bracket	4822 403 20027
21	Guide bracket	4822 466 70158	98	Screw	4822 500 10123
22	Tension spring	4822 492 30671	99	Pressure spring	4822 492 50619
23	Screw	4822 502 10902	101	Bracket	4822 403 20086
24	Front plate with threaded bushes	4822 404 20086	102	Screw (2x5)	4822 502 10026
25	Screw (2,5x6)	4822 502 10813	103	Tension spring	4822 492 30594
26	D.c. relay	4822 280 80308	105	Lever	4822 403 50436
27	Tension spring	4822 492 30597	106	Torsion spring	4822 492 40269
28	Rubber grommet	4822 532 70078	107	Lever	4822 403 50435
29	Motor	4822 361 20038	108	Idler wheel	4822 528 70186
30	Drive cord	4822 358 30137	109	Ring (2 mm Ø)	4822 532 50705
31	Spacer for cover	4822 462 70486	110	Bracket	4822 403 20029
32	Screw (2,5x4)	4822 502 10812	111	Lever	4822 403 20031
33	Nut (M10)	4822 505 10042	112	Nut	4822 505 10382
34	Knob	4822 413 40391	113	Nut	4822 505 10381
35	Knob	4822 411 20117	114	Screw (2,5x10)	4822 502 10828
36	Cap	4822 331 20026	115	Bracket	4822 492 61217
37	Ornamental screw	4822 502 10885	116	Screw	4822 502 10832
38	Switch SK-C	4822 278 90226	117	Screw (1,6x3)	4822 502 10831
39	Tension spring	4822 492 30595	118	Set screw	4822 502 10831
40	Lever	4822 403 20032	119	Buffer	4822 462 40191
41	Slide	4822 403 50433	120	Ring (4 mm Ø)	4822 532 10202
42	Pressure spring	4822 492 50621	121	Guide bracket	4822 466 70157
43	Disc	4822 413 40356	124	Ring	4822 532 50719
44	Pipe	4822 520 30175	125	Bearing block	4822 520 10243
45	Guide pin	4822 535 90511	126	Ring	4822 532 50718
46	Ring (2,2 mm Ø)	4822 532 50043	127	Tuner (without IF board)	4822 210 10125
47	Ring (1,85 mm Ø)	4822 532 50286	128	Spring for worm shaft (tuning)	4822 492 61339
48	Tension spring	4822 492 30592	129	Pressure spring	4822 492 61286
49	Pressure spring	4822 492 50622	130	Ring	4822 532 10479
50	Screw	4822 502 10844	131	Ring (1,55 mm Ø)	4822 532 50704
51	Ejector button	4822 410 20687	132	Pressure spring	4822 492 50659
52	Tension spring	4822 492 30593	134	Countersunk screw	4822 502 10861
53	Countersunk screw (2,5x4)	4822 502 10816	135	Ring (2,5 mm Ø)	4822 532 10476
54	Countersunk screw (2,5x6)	4822 502 10815	136	Volume control	4822 101 50095
55	Lid for cassette housing	4822 466 90473	137	Cover	4822 443 60276
56	Lid	4822 466 90484			
57	Screw	4822 502 10868			
58	Guide	4822 462 70485			
59	Cam	4822 403 20033			
60	Tension spring	4822 492 30596			
61	Ring	4822 532 10201			
62	Turntable	4822 528 10166			
63	Cam for switch	4822 535 90509			
64	Cap for turntable	4822 462 70485			
65	Turntable	4822 528 10193			
66	Ring (1,2 mm Ø)	4822 532 50262			
67	Switch SK-B	4822 278 90228			
68	Nut	4822 505 10003			
69	Pulley	4822 528 80352			
70	Flywheel	4822 520 60048			
71	Thrust bearing	4822 520 10227			
72	Pressure spring	4822 492 50312			
73	Screw (2,5x10)	4822 502 10814			
74	Support	4822 401 10474			
75	Tape guide	4822 403 50434			

## LUBRICATING INSTRUCTIONS

Lubricate the spindles with Shell Tellus 33, 4822 390 10006  
Lubricate the contact surface with Lubricant 10, 4822 390 10003

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	Carbon resistor E24 series	0.125 W		5%
	Carbon resistor E12 series	0.25 W	< 1 MΩ	5%
	Carbon resistor E24 series	0.5 W	> 1 MΩ	10%
	Tubular ceramic capacitor	700 V	< 10 MΩ	1%
	Plate ceramic capacitor		> 10 MΩ	2%
	Flat-foil polyester capacitor			
	Miniature electrolytic capacitor			

