PHILIPS Service notes

MODEL RL080

SPECIFICATIONS

Tuning Range	*520 KHz–1620 KHz*
Intermediate Frequency	*455 KHz*
Batteries	*2 x No.1015 or equivalent*
Battery Consumption	*less than 20 mA*

MECHANICAL & ELECTRICAL PARTS LIST

MECHANICAL

Description	Code No.
Antenna Bar Holder	CS.236.420
Battery Holder	CS.236.421
Cabinet Front Assy.	CR.570.833
Cabinet Back Assy.	CR.570.834
Carrying Case	CS.462.509
Dial Indicator	CS.410.031
Jack Socket	CZ.367.037
Knob, Dial	CS.610.048
Knob, Volume	CS.610.049
Screw, Dial Knob to Gang	4822.502.10092
Screw, Volume Knob to Potentiometer	4822.502.10025
Screw, P.W. Board Fixing	CS.261.898
Screw, P.W. Board Fixing (Self Tap)	CS.261.899

RESISTORS

R. No.	Description	W.	Tol±%	Replacement Type or Code No.
1	1K8 Carbon	1/8	5	B8.031.04NB/1K8
2	100K Carbon	1/8	5	B8.031.04NB/100K
3	100K Carbon	1/8	5	B8.031.04NB/100K
4	1K8 Carbon	1/8	5	B8.031.04NB/1K8
6	68K Carbon	1/8	5	B8.031.04NB/68K
7	3K3 Carbon	1/8	5	B8.031.04NB/3K3
8	82K Carbon	1/8	5	B8.031.04NB/82K
9	5K Carbon Pot. (Volume)			CZ.034.175
10	150K Carbon	1/8	5	B8.031.04NB/150K
11	1K Carbon	1/8	5	B8.031.04NB/1K
12	470E Carbon Pot.			E.086.BC/470E
13	1E Carbon	1/8	5	B8.031.04NB/1E
14	100E Carbon	1/2	10	B8.031.06A/100E

CAPACITORS

C. No	Description	V.W.	Tol±%	Replacement Type or Code No.
1,2,3,4	Tuning Capcitor			CZ.107.611
5	22K Ceramic	6	+100–20	C.330.BA/R22K
6	3K6 Styroflex	125	5	C.295.AA/B3K6
7	47K Ceramic	6	+100–20	C.330.BA/R47K
8	150E Ceramic	40	2	C.333.CH/C150E
9	47K Ceramic	6	+100–20	C.330.BA/R47K
10	47K Ceramic	6	+100–20	C.330.BA/R47K
11	150E Ceramic	40	2	C.333.CH/C150E
12	4K7 Ceramic	40	+100–20	C.331.AA/R4K7
13	4K7 Ceramic	40	+100–20	C.331.AA/R4K7
14	2M2 Electrolytic	3		CZ.099.220
15	20M Tantalum	6		CZ.100.702
16	100K Ceramic	6	+100–20	C.330.BA/R100K
17	1M Electrolytic	3		CZ.098.001
18	22K Ceramic	6	+100–20	C.330.BA/R22K
19	82E Ceramic	40	2	C.333.CH/C82E

INDUCTORS

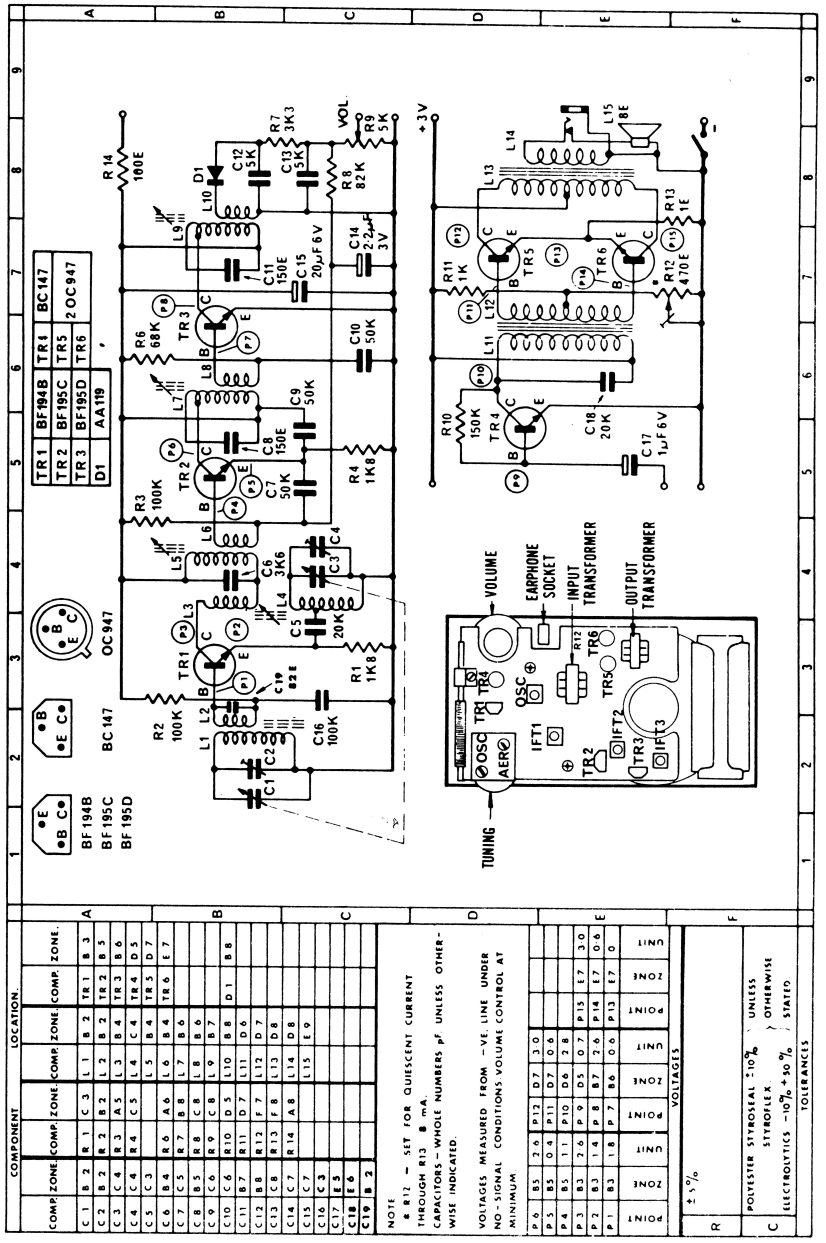
L. No.	Description	Code No.
1,2	Aerial Coil (Less Ferrite Bar)	CZ.323.436
	Aerial Ferrite Bar	CZ.000.562
3,4	Oscillator coil	CZ.652.013
5,6	1st I.F.T.	CZ.651.004
7,8	2nd I.F.T.	CZ.651.010
9,10	3rd I.F.T.	CZ.651.009
11,12	Input Transformer	CZ.345.620
13,14	Output Transformer	CZ.344.824
15	Speaker 2¼" 8 ohm	CZ.161.039
	or MSP 225 HB/8	CZ.161.037
16	Earphone 8 ohm, with cord & plug	CZ.165.255

ACCESS FOR SERVICE. Remove rear cover by inserting coin in coin-slot provided on the end of the case and twisting. Removal of the printed wiring board assembly is effected by unscrewing the two mounting screws (see diagram overleaf).

ALIGNMENT. The location of the trimming points used in alignment is shown on the circuit diagram.

I.F. AND R.F. ALIGNMENT. Connect a signal generator via a coupling loop around the rod aerial assembly. Put volume control to maximum. Apply a signal at 455 KHz and peak I.F.T. cores in the order IFT.1, IFT.2, IFT.3.

Fully close tuning capacitor and set oscillator and aerial trimmers to mid-position. Apply a signal at 520 KHz and peak oscillator coil core. Fully open tuning capacitor and apply a signal at 1620 KHz. Peak oscillator trimmer. Repeat until band end-setting is correct. Tune to 600 KHz and adjust aerial coil for maximum output. Tune to 1500 KHz and adjust aerial trimmer for maximum output. Repeat these two operations for correct tracking. Seal aerial coil to rod.



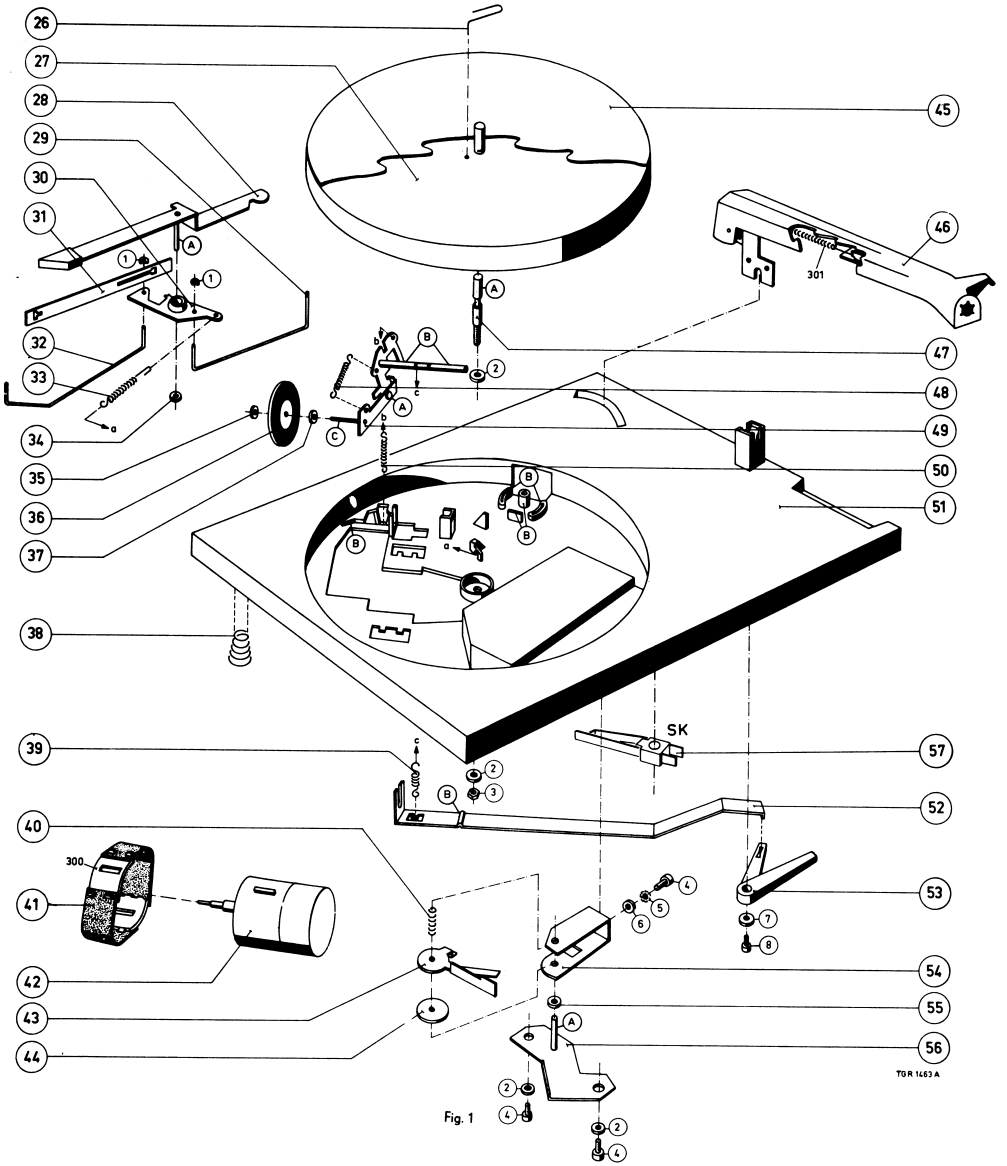

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Fig. 1