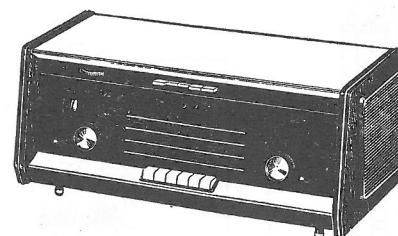


PHILIPS

SERVICE

NOTES



Philips "Hilversum Plano"
Model B5Z97A

WAVERANGE

BC 517—630 kc/s
SW1 3.16—10 mc/s
SW2 13—23.6 mc/s
BS 9.4—12.4 mc/s

LOUDSPEAKER

2 x AD3700AM

VALVES

ECH81, EBF89, ECC83
2 x EL84, EZ80, EM80

I.F.

455 kc/s

ALIGNMENT OF RECEIVER

(See Trimmer Diagram)

ALIGNMENT INSTRUCTIONS

Adjust and Check: Volume Control Max., Output Meter to Right Hand Channel Dummy Load 800 ohms to Left Hand Channel.

Trimming Frequency	Press Button	Adjust Cores for Maximum Output Once Only
455 kc intermediate freq. Gang minimum cap. Connect sig. generator via 10k mmfd capacity to Grid ECH81	Broadcast Right hand top tone button IN, all other tone buttons OUT	Unscrew cores of EBF89 Plate and EBF89 Grid then (1) Diode Coil L21 (2) EBF89 Plate Coil L20 (3) ECH81 Plate Coil L18 (4) EBF89 Grid Coil L19 Remove Signal Generator from Grid ECH81

Connect Signal Generator via Standard Dummy Aerial to Aerial and Earth Socket of Receiver. Turn Gang Condenser to Minimum Capacity and Adjust pointer to left hand arrowhead on dial, then turn gang to maximum capacity against stop and back to minimum capacity again.

Trimming Frequency	Press Button	Adjust Cores and Condensers for Maximum Output
550 kc 1500 kc	Broadcast Broadcast	BC Osc. Coil Core L10-L11; BC Aerial Coil on Rod. L5 BC Osc. Trimmer C24; BC Aerial Trimmer C7. REPEAT ABOVE PROCEDURE
3.4 mc 9.4 mc	Shortwave 1 Shortwave 1	SW1 Osc. Coil Core L13-L14; SW1 Aerial Coil Core L6-L7; SW1 Osc. Trimmer C25; SW1 Aerial Trimmer C8. REPEAT ABOVE PROCEDURE
13 mc 25 mc	Shortwave 2 Shortwave 2	SW2 Osc. Coil Core L16-L17; SW2 Aerial Coil Core L8-L9; SW2 Osc. Trimmer C26; SW2 Aerial Trimmer C10. REPEAT ABOVE PROCEDURE
12 mc	Bandsread	BS Osc. Trimmer C27; BS Aerial Wire Trimmer C6. REPEAT ABOVE PROCEDURE

Seal all Trimmers and I.F. Transformer Cores with Wax

B5Z97A PARTS LIST

C1}	Electrolytic—300v	AC5307/50 + 50
C2}	Electrolytic	AC8129/8
C3}	Tuning Condenser	49-001-94
C6}	Air Trimmer	905/240E + 908/60E
C7}	Air Trimmer 30 pfd	908/30E
C8}	Air Trimmer	908/30E
C9}	Ceramic Condenser $\pm$ 5 pfd	C304GH/L4E7
C10}	Air Trimmer	908/30E
C11}	Ceramic Condenser 10%	C304GH/A22E
C12}	Ceramic Condenser 1%	C304GH/D300E
C13}	Ceramic Condenser 5%	C304GH/B120E
C14}	Ceramic Condenser 10%	C304GH/A220E
C15}	Ceramic Condenser $\pm$ 20%	C322BA/H10K
C16}	Ceramic Condenser $\pm$ 20%	C322BA/H10K
C17}	Ceramic Condenser $\pm$ 5 pfd	C304GB/L4E7
C18}	Ceramic Condenser 10%	C304GH/A470E
C19}	Styroflex Condenser 125v	C285AB/D320E
C20}	Ceramic Condenser 10%	C304GH/A56E
C21}	Ceramic Condenser 2%	C304GH/C68E
C22}	Styroflex Condenser	C285AB/5455E
C23}	Styroflex Condenser 125v 1%	C285AB/D4K7
C24}	Air Trimmer 30 pfd	908/30E
C25}	Air Trimmer 30 pfd	908/30E
C26}	Air Trimmer 30 pfd	908/30E
C27}	Air Trimmer 30 pfd	908/30E
C28}	Styroflex Condenser 125v 1%	C285AB/D210E
C29}	In 1st I.F. Can	195 PFD
C30}		195 PFD
C31}	In 2nd I.F. Can	110 PFD
C32}		195 PFD

C33}	Ceramic Condenser 10%	C318BA/A6K8
C34}	Ceramic Condenser $\pm$ 20%	C322BA/H10K
C35}	Ceramic Condenser 10%	C304GH/A100E
C36}	Ceramic Condenser 10%	C304GH/A270E
C37}	Ceramic Condenser $\pm$ 20%	C322BA/H10K
C39}	Polyester Condenser 125v 10%	C296AA/A22K
C40}	Polyester Condenser 125v 10%	C296AA/A22K
C41}	Ceramic Condenser $\pm$ 20%	C322BA/H10K
C42}	Ceramic Condenser $\pm$ 20%	C322BA/H10K
C43}	Ceramic Condenser 20%	C322BA/H150E
C44}	Ceramic Condenser 20%	C322BA/P150K
C45}	Ceramic Condenser $\pm$ 20%	C322BA/H10K
C46}	Ceramic Condenser $\pm$ 20%	C322BA/H10K
C47}	Polyester Condenser 125v 10%	C296AA/A68K
C48}	Polyester 125v 10%	C296AA/A68K
C49}	Ceramic 10%	C304GH/A560E
C50}	Ceramic 10%	C304GH/A560E
C51}	Ceramic $\pm$ 20%	C322BA/A6K8
C52}	Ceramic $\pm$ 20%	C322BA/H6K8
C53}	Polyester 125v 10%	C296AA/A27K
C54}	Polyester 125v 10%	C296AA/A27K
C55}	Paper 1300v 20%	C101CD/P2K2
C56}	Paper 1300v 20%	C101CD/P2K2
C57}	Polyester 125v 10%	C296AA/A82K
C58}	Polyester 125v 10%	C296AA/A82K
C59}	Ceramic 10%	C304GH/A390E
C60}	Ceramic 10%	C304GH/A390E
C61}	Polyester 125v 10%	C296AA/A680K
C62}	Polyester 125v 10%	C296AA/A680K
C63}	Electrolytic 16v	C426AN/E200
C64}	Styroflex 5%	C285AB/B3K3

B5Z97A PARTS LIST

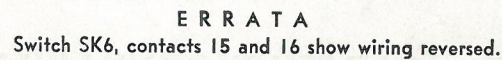
R1}	Carbon 2w Special	E001AK/A56E
R2}	Carbon .5w	B8-30506B/1M
R3}	Carbon 1w	B8-30507B/33K
R4}	Carbon 1w	B8-30507B/22K
R5}	Carbon .5w	B8-30506B/33K
R6}	Carbon .5w	B8-305-06B/47E
R7}	Carbon .5w	B8-305-06B/2M2
R8}	Carbon .25w Special	E001AC/A2K2
R9}	Carbon 1w	B8-305-07B/68K
R10}	Carbon .5w	B8-305-06B/470K
R11}	Carbon .5w	B8-305-06B/220K
R12}	Carbon .5w	B8-305-06B/180K
R13}	Carbon .5w	B8-305-06B/10E
R14}	Carbon .5w	B8-305-06B/100K
R15}	Carbon .5w	B8-305-06B/100K
R16}	Carbon Pot. Linear	E098AG00B18
R17}	Carbon .5w	B8-305-06B/10K
R18}	Carbon .5w	B8-305-06B/10K
R19}		
R20}	Tandem Carbon Pot.	E091CG/00B17
R21}		
R22}		
R23}	Carbon .5w	B8-305-06B/10M
R24}	Carbon .5w	B8-305-06B/10M
R25}	Carbon .5w	B8-305-06B/100E
R26}	Carbon .5w	B8-305-06B/100E
L1}		
L2}	Mains Transformer	EN631-21
L3}		
L4}	Rod Aerial Assy. M.W.	A3-116-92
L5}		
L6}	S.W.1 Aerial Coil	A3-802-52
L7}		
L8}	S.W.2 & B.S. Aerial Coil	A3-118-40
L9}		
L10}	B.C. Oscillator Coil	A3-125-72.1
L11}		
L13}	S.W.1 Oscillator Coil	EN471-71
L14}		

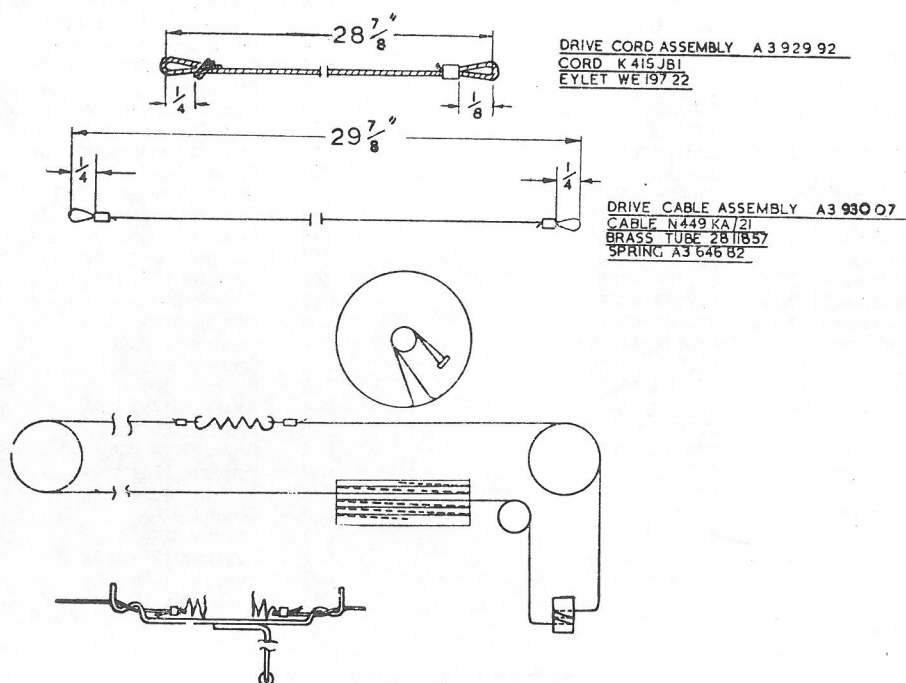
R27}	Carbon .5w	B8-305-06B/100K
R28}	Carbon .5w	B8-305-06B/100K
R29}	Carbon .5w	B8-305-06B/27E
R30}	Carbon .5w	B8-305-06B/27E
R31}	Carbon .5w	B8-305-06B/220K
R32}	Carbon .5w	B8-305-06B/220K
R33}	Carbon .5w	B8-305-06B/100K
R34}	Carbon .5w	B8-305-06B/100K
R35}	Carbon .5w	B8-305-06B/27K
R36}	Carbon .5w	B8-305-06B/27K
R37}	Carbon .5w	B8-305-06B/820K
R38}	Carbon .5w	B8-305-06B/820K
R39}	Carbon .5w	B8-305-06B/1K
R40}	Carbon .5w	B8-305-06B/1K
R41}	Carbon .5w	B8-305-06B/5K6
R42}	Carbon .5w	B8-305-06B/5K6
R43}	Carbon .5w	B8-305-06B/5K6
R44}	Carbon .5w	B8-305-06B/5K6
R45}	Carbon .5w	B8-305-06B/27K
R46}	Carbon .5w	B8-305-06B/27K
R47}	Carbon 1w Special	E001AG/B1K8
R48}	Carbon 1w Special	E001AG/B1K8
R49}	Carbon 1w Special	E001AG/B100E
R50}	Carbon .5w Special	E001AD/B10K
R51}	Carbon .5w	B8-305-06B/2M2
R52}	Carbon .5w	B8-305-06B/2M2
L15}		
L16}	S.W.2 & B.S. Oscillator Coil	A3-125-50
L17}		
L18}	1st I.F. Filter	A3-127-72
L19}		
L20}	2nd I.F. Filter	A3-126-84
L21}		
L22}		
L23}	Output Transformer	A3-154-21
L24}		
L25}		
L26}	Output Transformer	A3-154-21
L27}		
L28}	Coupling Coil	A3-803-61

MISCELLANEOUS

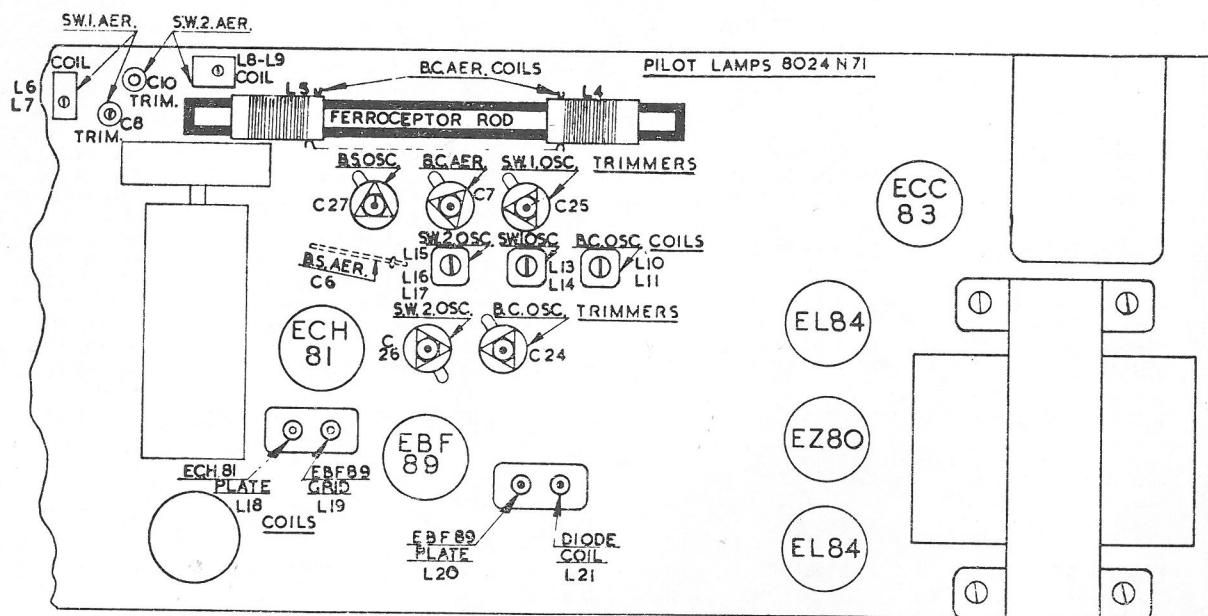
Push Button Unit	A3-298-22
Tone Push Button Assembly	A3-792-52
Balance Control Knob	A3-783-74
Control Knob Assembly	A3-782-68
Dial Glass	EN852-81
Push Button Escutcheon	A3-354-13

Aerial/Earth	Plug — Aerial 978/1X4AF; Earth 978/1X4AA
	Socket — 979/2X19
Extension Speaker	Plug — 978/3X7
	Socket — A3-410-65
Tape Recorder	Plug — AE505-92
	Socket — A3-788-88
Record Player	Plug — 978/M5X1
	Socket — 979/F5X1





DIAL CORD DIAGRAM



TRIMMER LOCATION DIAGRAM

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