

# PHILIPS

# SERVICE

# NOTES



Philips "Aristona Plano"  
Model F7Z17A

### WAVERANGE

BC 517—1630 kc/s  
SW1 3.16—10 mc/s  
SW2 13—23.6 mc/s  
BS 9.4—12.4 mc/s

### LOUDSPEAKERS

2 x AD 3690 AM

### VALVES

#### (Main Chassis)

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

#### Reverberation Amplifier

2 x ECC83  
1 x EF80

#### 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.

<i>Trimming Frequency</i>	<i>Press Button</i>	<i>Adjust Cores for Maximum Output Once Only</i>
455 kc intermediate freq. Gang minimum cap. Connect sig. generator via 10k mmfd capacity to Grid ECH81	B r o a d c a s t 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.

<i>Trimming Frequency</i>	<i>Press Button</i>	<i>Adjust Cores and Condensers for Maximum Output</i>
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

PHILIPS "ARISTONA PLANO"—F7Z17A

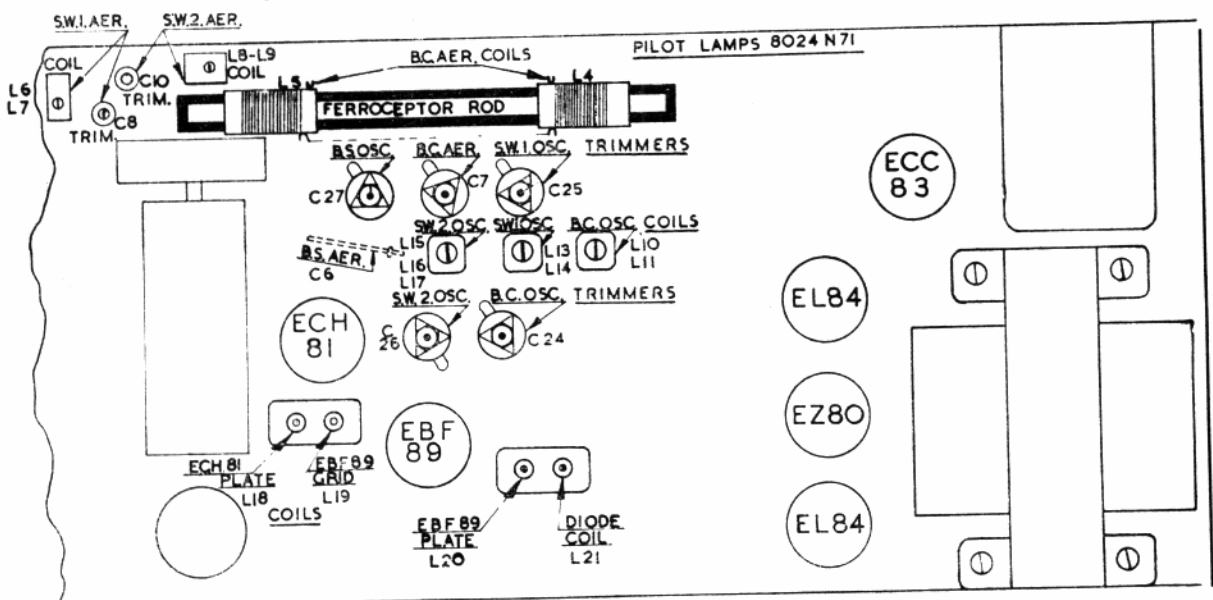
C1}	Electrolytic—300v	AC5307/50 + 50	C21	Ceramic Condenser 2%	C304GH/C68E
C2}			C24	Air Trimmer 30 pfd	908/30E
C3	Electrolytic	AC8129/8	C25	Air Trimmer 30 pfd	908/30E
C4}	Tuning Condenser	49-001-94	C26	Air Trimmer 30 pfd	908/30E
C5}			C27	Air Trimmer 30 pfd	908/30E
C6	Air Trimmer	905/240E + 908/60E	C55	Paper 1300v 20%	C101CD/P2K2
C7	Air Trimmer 30 pfd	908/30E	C56	Paper 1300v 20%	C101CD/P2K2
C8	Air Trimmer	908/30E	C63	Electrolytic 16v	C426AN/E200
C10	Air Trimmer	908/30E			
C12	Ceramic Condenser 1%	C304GH/D300E			
R1	Carbon 2w Special	E001AK/A56E	R47	Carbon 1w Special	E001AG/B1K8
R8	Carbon .25w Special	E001AC/A2K2	R48	Carbon 1w Special	E001AG/B1K8
R16	Carbon Pot. Linear	E098AG00B18	R49	Carbon 1w Special	E001AG/B100E
R19}			R50	Carbon .5w Special	E001AD/B10K
R20}	Tandem Carbon Pot.	E091CG/00B17	R53	Carbon Pot.	E098AG/00/B15
R21}					
R22}					
L1}			L15}		
L2}	Mains Transformer	EN631-21	L16}	S.W.2 & B.S. Oscillator Coil	A3-125-50
L3}			L17}		
L4}	Rod Aerial Assy. M.W.	A3-116-92	L18}	1st I.F. Filter	A3-127-72
L5}			L19}		
L6}	S.W.1 Aerial Coil	A3-802-52	L20}	2nd I.F. Filter	A3-126-84
L7}			L21}		
L8}	S.W.2 & B.S. Aerial Coil	A3-118-40	L22}	Output Transformer	A3-154-21
L9}			L23}		
L10}	B.C. Oscillator Coil	A3-125-72.1	L24}		
L11}			L25}	Output Transformers	A3-154-21
L13}	S.W.1 Oscillator Coil	EN471-71	L26}		
L14}			L27}		
			L28}	Coupling Coil	A3-803-61

**MISCELLANEOUS**

Push Button Unit	A3-298-22	Aerial/Earth	} Plug-Aerial 978/1X4AF; Earth 978/1X4AA } Socket - 979/2X19
Tone Push Button Assembly	A3-792-52	Extension Speaker	
Knob Balance}	A3-783-74	Tape Recorder	} Plug - AE505-92 } Socket - A3-788-88
Knob Reverb. }		Record Player	
Knob Tuning }	A3-782-68		
Knob Volume }			
Push Button Escutcheon	A3-822-15		
Dial Glass	EN852-90		

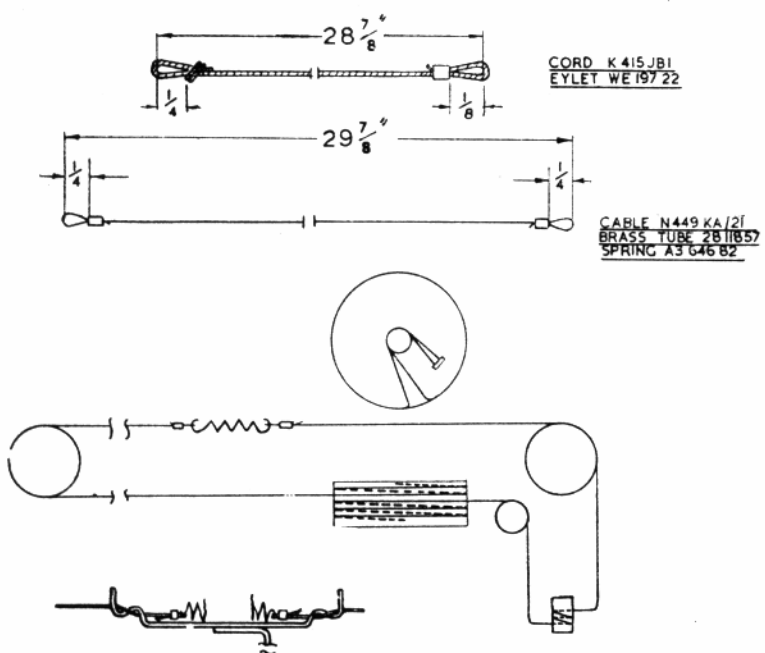
**RECORD CHANGER**

The record changer (AG1014) used in the early production of this radiogram was replaced with the AG1024 at approximately serial number 18099. If changer spares are ordered it will be necessary to quote the model number of the changer to avoid the possibility of incorrect spares being supplied.



**TRIMMER LOCATION DIAGRAM**

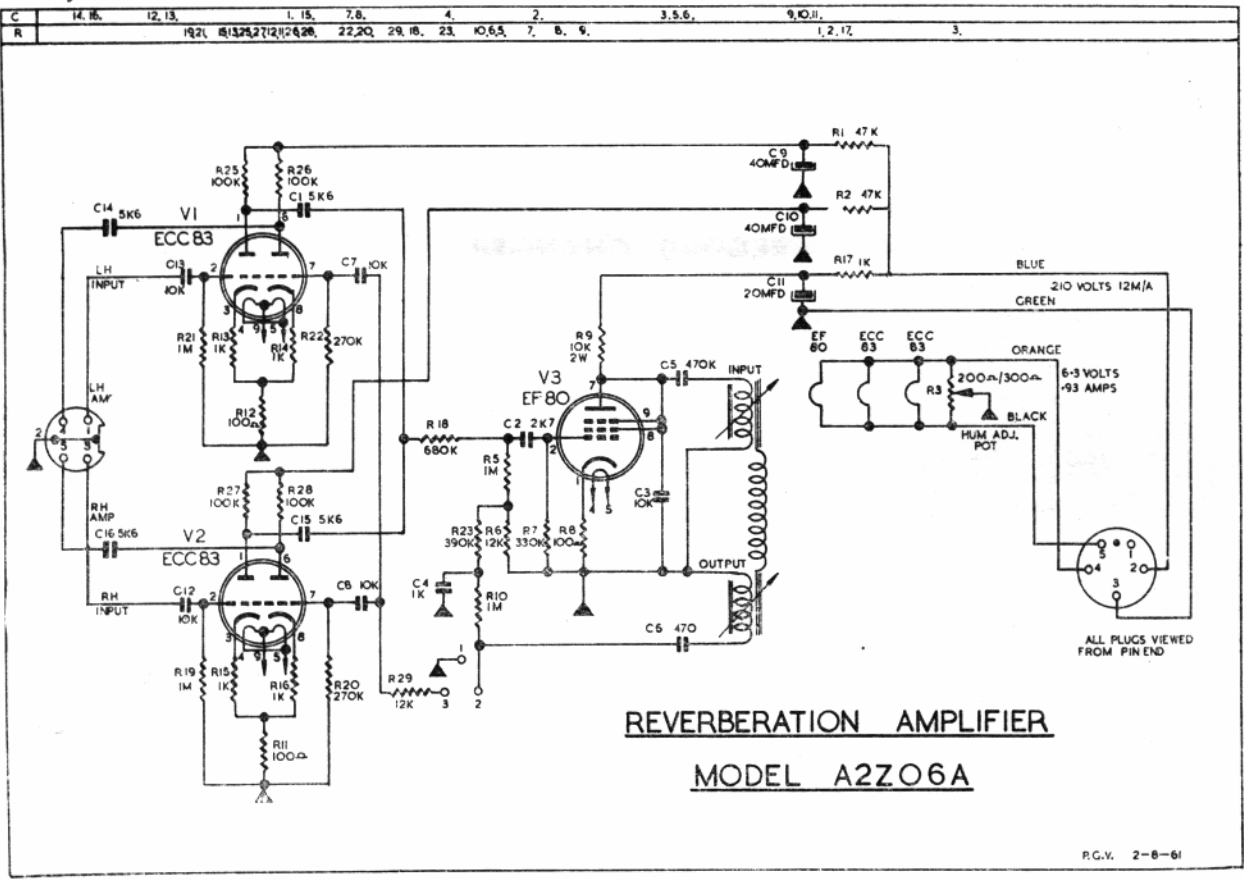
NOVEMBER, 1961



**DIAL CORD DIAGRAM**

**PARTS FOR REVERB. AMP.**

- C9 } Electrolytic—350v
- C10 } VK190-30
- C11 }
- R4 Carbon Pot.
- E098CG/00B15

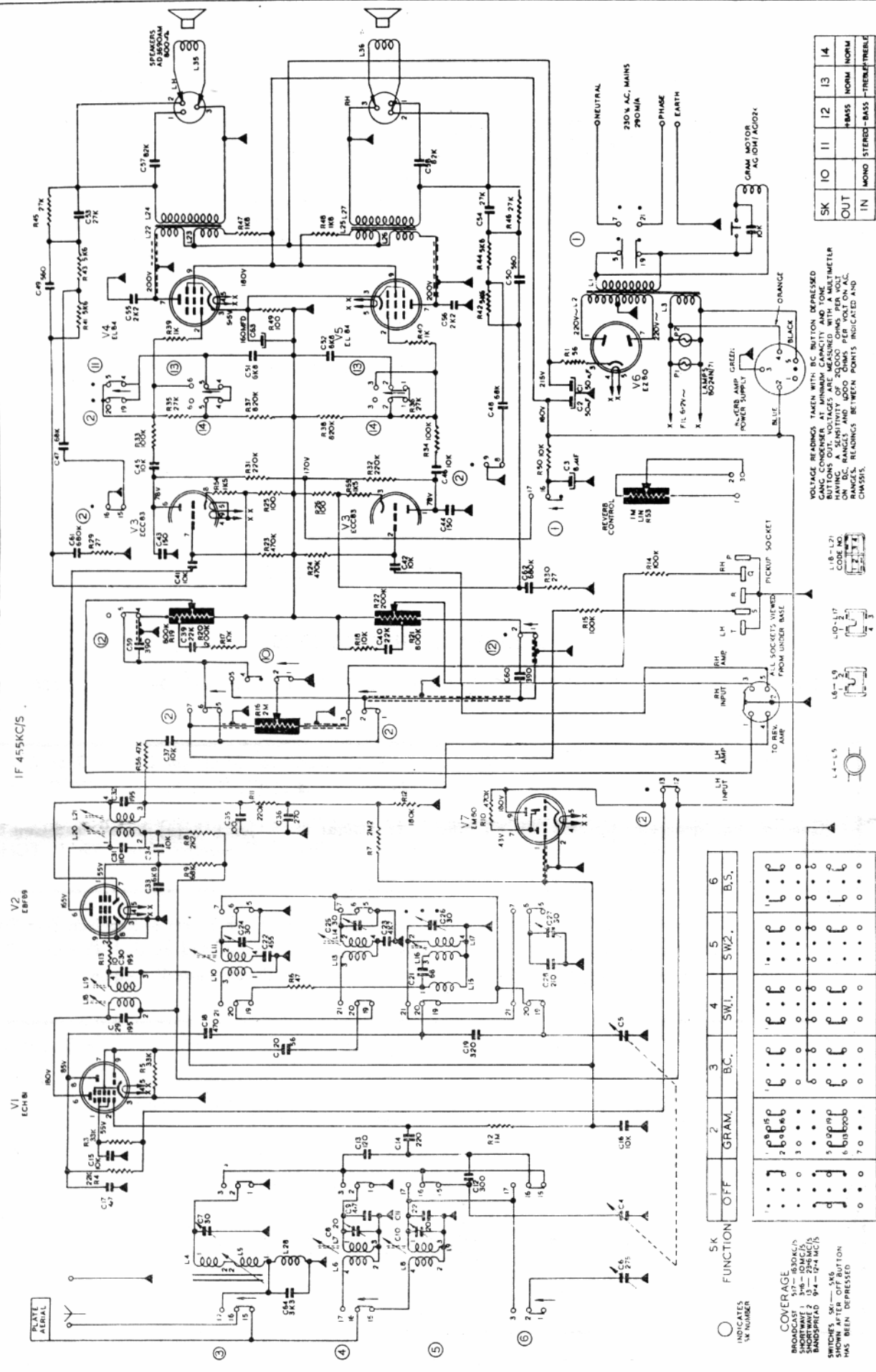


**REVERBERATION AMPLIFIER**  
**MODEL A2Z06A**

P.C.V. 2-8-61

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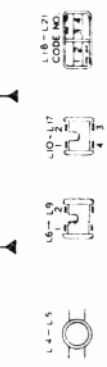
6	8, 6, 4, 2B, 3, 7	46, 10, 10A, 15, 6, 7, 1A, 14	20, 21	3	2, 1	22, 23, 24, 13, 16, 21, 13, 16	C1-25
C1-25	5, 10, 20, 50	22, 21, 24, 26, 27	30	48	49	51, 52, 63, 55, 49, 52, 56	C1-25
C2-25	4, 3, 2	20, 28, 30, 13, 26, 27, 33, 31, 34, 35, 32, 36	37	60	61, 62, 63, 64, 63, 64, 65, 66	53, 54, 57, 68	C1-25
R1-25	5	6, 6	7	8	9, 7, 6	10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100	R1-25
R2-25							R2-25



SK	10	11	12	13	14
OUT					
IN					
MONO					
STEREO					
BASS					
NORM					
TREBLE					

# Model F7Z17A

VOLTAGE READINGS TAKEN WITH RC NETWORK DEPRESSED GANG CONDENSER AT MINIMUM CAPACITY AND TONE BUTTONS OFF. VOLTAGES ARE MEASURED WITH A MULTIMETER ON DC RANGES AND AC RANGES AND VOLTS ON ALL RANGES. READINGS BETWEEN POINTS INDICATED AND CHASSIS.



SK	FUNCTION	OFF	GRAM.	B.C.	SW.1.	SW.2.	B.S.
1		•••	•••	•••	•••	•••	•••
2		•••	•••	•••	•••	•••	•••
3		•••	•••	•••	•••	•••	•••
4		•••	•••	•••	•••	•••	•••
5		•••	•••	•••	•••	•••	•••
6		•••	•••	•••	•••	•••	•••

COVERAGE  
 BROADCAST 517-1650KC/5  
 SHORTWAVE 13-2250KC/5  
 BANDSPREAD 94-174 KC/5  
 SWITCHES SK-5 SK6  
 SHOWN AFTER OFF BUTTON  
 HAS BEEN DEPRESSED