

# PHILIPS SERVICE

# 217 U

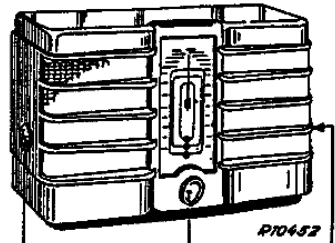
12.5-44.5 m  
44.5-153 m  
185-590 m

9648 Z = 2,5 Ω

110-130 V, 200-225 V.

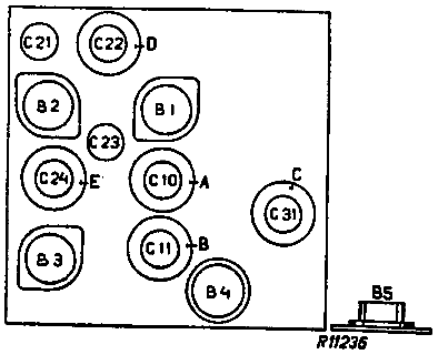
128 kc/s

65 W



~ VOL ~ ~

185-590 m I		185-590 m III		185-590 m V	
VOL	max.	VOL	max.	VOL	max.
128 kc/s-33000 pF-g4B1		C7, C8, C9 + 15°		357 kc/s - Y	
C23-320 pF		1540 kc/s - Y		C7, C8, C9	357 kc/s
C24 max.		C31, C12, C10 max.		350 m	
C25					
C22-330 pF					
C23, C21 max.					
C22					
C21-330 pF					
C22 max.					
C21					



R1	390 Ω	48 426 10/390E	C1	32 μF	28 182 40.0
R3	83 Ω	48 426 10/82E	C2	32 μF	28 182 40.0
R4	0.1 MΩ	48 426 10/100K	C4	0.22 μF	48 751 10/220K
R6	33000 Ω	48 426 10/33K	C5	47000 pF	48 751 10/47K
R7	330 Ω	48 426 10/330E	C6	47000 pF	48 751 10/47K
R8	10000 Ω	48 426 10/10K	C7		
R9	2.2 MΩ	48 427 10/22E2	C8		
R10	0.1 MΩ	49 500 50.0	C9	11-490 pF	28 212 30.0
R11	10000 Ω	48 426 10/10K	C10	30 pF	—
R12	0.68 MΩ	48 425 10/680K	C11	30 pF	—
R14	47 Ω	48 425 10/47E	C12	15 pF	48 406 10/15E
R16	0.15 MΩ	48 426 10/150K	C13	47000 pF	48 751 10/47K
R17	150 Ω	48 448 10/120E	C14	22 pF	48 406 10/22E
R20	0.1 MΩ	48 426 10/100K	C15	12000 pF	48 751 10/12K
R21	83000 Ω	48 426 10/82K	C16	39000 pF	48 751 10/39K
R22	47000 Ω	48 426 10/47K	C17	65 pF	48 406 10/65E
R24	120 Ω	48 467 10/120E	C20	1570 pF	48 429 99/1K675
R25	0.22 MΩ	48 425 10/220K	C21	75-30 pF	28 212 46.0
R26	1.5 MΩ	48 426 10/15E	C22	75-30 pF	—
R27	22000 Ω	48 426 10/22K	C23	75-30 pF	28 212 46.0
R28	0.33 MΩ	48 426 10/330K	C24	75-30 pF	—
R29	47000 Ω	48 426 10/47K	C25	82 pF	48 406 10/82E
			C26	3700 pF	48 751 10/37K
			C27	82 pF	48 406 10/82E
			C28	65 pF	48 406 10/65E
			C29	2200 pF	48 751 20/22K
			C30	30 pF	—
			C31	22000 pF	28 201 65.0
			C32	1000 pF	28 201 63.0
			C33	5000 pF	28 201 50.0
			C34	47000 pF	48 751 10/47K
			C35	47000 pF	48 751 10/47K
			C36	2 pF	28 205 98.0
			C37	2.5 pF	48 406 99/2E9
			C38	0.22 μF	48 751 10/220K
			C39	6.8 pF	48 406 99/6E2

	B1	B2	B3	B4	B5	
	KK 2	KF 9	CEL 1	CY 1	Cl/C9	
Va	197	197	175			V
Vg2	197	110	187			V
Vg3+S	48	—	—			V
Vk	1,9	2,3	—			V
Is	1,4	6,6	44			mA
Ig2	1,9	2,7	7,1			mA
Ig3+S	1,9	—	—			mA

S1 S2	28 587 06.1	S20, S21, C22	28 573 16.4*
S3	28 544 63.0	S22, S23, S24, C21	28 573 46.0
S6, S7, S8, S9, C10	28 574 21.0*	S25, S26	28 536 37.3
S10, S12, S13, C11	—	S27	28 220 69.0
S14, S15, S16, S17	28 574 23.1	S30, S31	28 587 71.0
S18, S19, C31			

VCl = 210 V.  
VC2 = 197 V.

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Eindhoven  
Printed in Holland

98 951 32.1

LIST OF PARTS AND TOOLS

When ordering parts always state:

1. Code number
2. Type number of the set
3. Description of the part.

Fig.	Pos.	Description	Code number	Price
		Cabinet (colour 041)	23.660.435	
		Loudspeaker cloth	06.601.140	
		Knob of volume control (colour 041)	23.610.880	
		Knob of waveband switch (do.041)	23.611.030	
		Knob for tuning (colour 041)	23.611.063	
		Pointer	28.945.272	
		Spindle of pointer with cogwheel	25.875.470	
		Cover plate behind the station-name dial	28.258.340	
		Pressure spring behind coverplate	28.731.150	
		Glass window	28.340.442	
		Rubber plug behind glass window	28.479.801	
		Station-name dial	41.891.041	
		Drum	23.687.070	
		Spiral spring on drum	28.740.662	
		Lighting lamp holder	08.515.211	
		Rubber tulle	25.655.951	
		Valve hood	28.838.741	
		Valve cap	23.666.650	
		Bracket for pointer	28.827.131	
		Rear panel	28.403.092	
		Setting screw 4 x 8 mm	07.854.080	
		Spring round the pointer-sindle	28.760.251	
		Switch element 1	28.899.460	
		Switch element 2	28.899.470	
		Clamping Ring with incisions for loudspeaker	25.873.410	
		Paperring for loudspeaker	28.452.690	
		Protective cap for loudspeaker	28.257.242	
		Screening cap	28.824.960	
		Plate with plugs	28.898.111	
		Driving spindle	28.621.411	
		Paperscreen of I.F.coilcans	28.244.080	
		Plate for fixing the driving spindle (in front)	28.314.970	

Fig.	Pos.	Description	Code number	Price
		Plate for fixing the driving spindle (back)	28.314.980	
		Mains-plug	08.281.710	
		<u>TOOLS</u>		
		Intermediate transformer	28.522.460	
		Intermediate transformer with maximal switch	28.522.470	

C O N D E N S E R S

	Capacity	Codenumber	Price
C1	32 $\mu$ F	28.182.400	
C2	32 $\mu$ F	28.182.400	
C4	0,2 $\mu$ F	28.199.120	
C5	50000 $\mu$ F	28.199.060	
C6	50000 $\mu$ F	28.199.060	
C7	11-490 $\mu$ F	28.212.300	
C8	11-490 $\mu$ F		
C9	11-490 $\mu$ F		
C10	30 $\mu$ F	See "Coils"	
C11	30 $\mu$ F		
C12	16 $\mu$ F	28.206.360	
C13	50000 $\mu$ F	28.199.060	
C14	20 $\mu$ F	28.206.370	
C15	12500 $\mu$ F	28.199.000	
C16	40000 $\mu$ F	28.199.050	
C17	64 $\mu$ F	28.206.250	
C20	1675 $\mu$ F	49.080.630	
C21	70+30 $\mu$ F	28.212.460	
C22		See "Coils"	
C23	70+30 $\mu$ F	28.212.460	
C24		See "Coils"	
C25	80 $\mu$ F	28.206.260	
C26	2500 $\mu$ F	28.198.930	
C27	80 $\mu$ F	28.206.260	
C29	64 $\mu$ F	28.206.250	
C30	2000 $\mu$ F	28.201.480	
C31	30 $\mu$ F	See "Coils"	
C35	20000 $\mu$ F	28.201.650	
C40	1000 $\mu$ F	28.201.620	
C41	5000 $\mu$ F	28.201.520	
C43	50000 $\mu$ F	28.199.060	
C44	50000 $\mu$ F	28.199.060	
C46	1,6 $\mu$ F	28.205.880	
C47	4 $\mu$ F	28.206.590	
C48	0,2 $\mu$ F	28.199.120	
C49	6,4 $\mu$ F	28.206.320	

V A L V E S

L1	L2	L3	L4	L5	L6
EK 2	EF 9	CBL 1	CY 1	C1 or C9	8092D-07

R E S I S T A N C E

	Resistance	Codenumber	Price
R1	400 ohm	28.770.210	
R3	80 ohm	28.770.140	
R4	0,1 .ohm	28.770.450	
R6	32000 ohm	28.770.400	
R7	320 ohm	28.770.200	
R8	10.000 ohm	28.770.350	
R9	2 M.ohm	28.771.230	
R10	0.5 M.ohm	49.500.500	
R11	10000 ohm	28.770.350	
R12	0,64 M.ohm	28.773.980	
R14	50 ohm	28.773.570	
R16	0.16 M.ohm	28.770.470	
R17	125 ohm	28.802.540	
R20	0.1 M.ohm	28.770.450	
R21	80000 ohm	28.770.440	
R22	50000 ohm	28.770.420	
R24	125 ohm	28.804.170	
R25	0.2 M.ohm	28.773.930	
R26	1.6 M.ohm	28.770.570	
R27	20000 ohm	28.770.380	
R28	0.32 M.ohm	28.770.500	
R29	50000 ohm 2	28.770.420	

CURRENTS AND TENSIONS

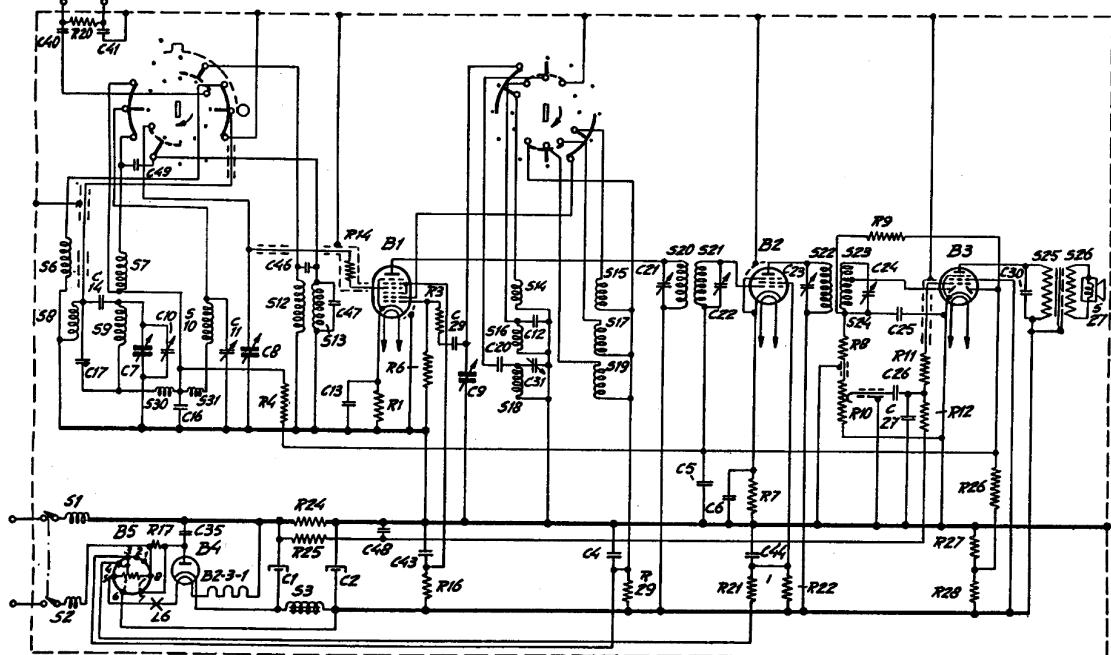
	L1(EK2)	L2(EF9)	L3(CBL1)
Va (V)	197	197	175
Vg2(V)	197	110	187
Vg3,5 (V)	48	-	-
Vcath. (V)	1.9	2.3	-
Ia (mA)	1.4	6.6	44
Ig2 (mA)	1.9	1.7	7.1
Ig3,5(mA)	1.0	-	-

VC1 = 210 V. Measured with a mains tension of 220 V  
VC2 = 197 V. (a.c.) Primary consumption 65 W.  
I Mains = 313 mA.

C O D E S

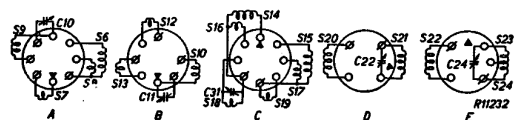
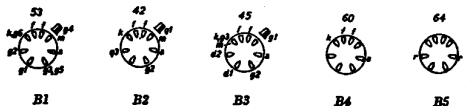
Nr.	Resistance	Codenummer	Price
S1	4.5 ohm	28.587.060	
S2	4.5 ohm		
S3	140 ohm		
S6	<1 ohm	28.574.210 -	
S7	<1 ohm		
S8	<1 ohm		
S9	<1 ohm		
C10	30 uuF		
S10	<1 ohm	28.574.220 -	
S12	3 ohm		
S13	<1 ohm		
C11	30 uuF		
S14	<1 ohm	28.574.231 -	
S15	<1 ohm		
S16	<1 ohm		
S17	<1 ohm		
S18	10 ohm		
S19	<1 ohm		
C31	30 uuF		
S20	120 ohm	28.573.164 .	
S21	120 ohm		
C22	70+30 uuF		
S22	120 ohm	28.573.460	
S23	30 ohm		
S24	90 ohm		
C21	70+21 uuF		
S25	300 ohm	28.536.373	
S26	<1 ohm		
S27	2.5 ohm	28.220.690	
S30	<1 ohm	28.587.710	
S31	<1 ohm		

5: 6, 8, 12, 7, 9, 30, 31, 10	12, 3, 13	14, 16, 18, 15, 17, 19, 20, 21	22	23, 24	25, 26, 27
C: 40, 14, 17, 41, 49, 71, 10, 16, 35, 11	8, 1, 46, 13, 2, 47, 48, 43	9, 29, 20, 12, 31	4	21, 5, 6, 22, 44, 28	24, 25, 26, 27, 30
R: 20	17	4, 24, 14, 25, 1	3, 6, 16	29	21, 22, 7, 8, 9, 10, 11, 12, 26, 27, 29



EK2 EF9 CBL1 CY1 C1, C9

R11237



R11232

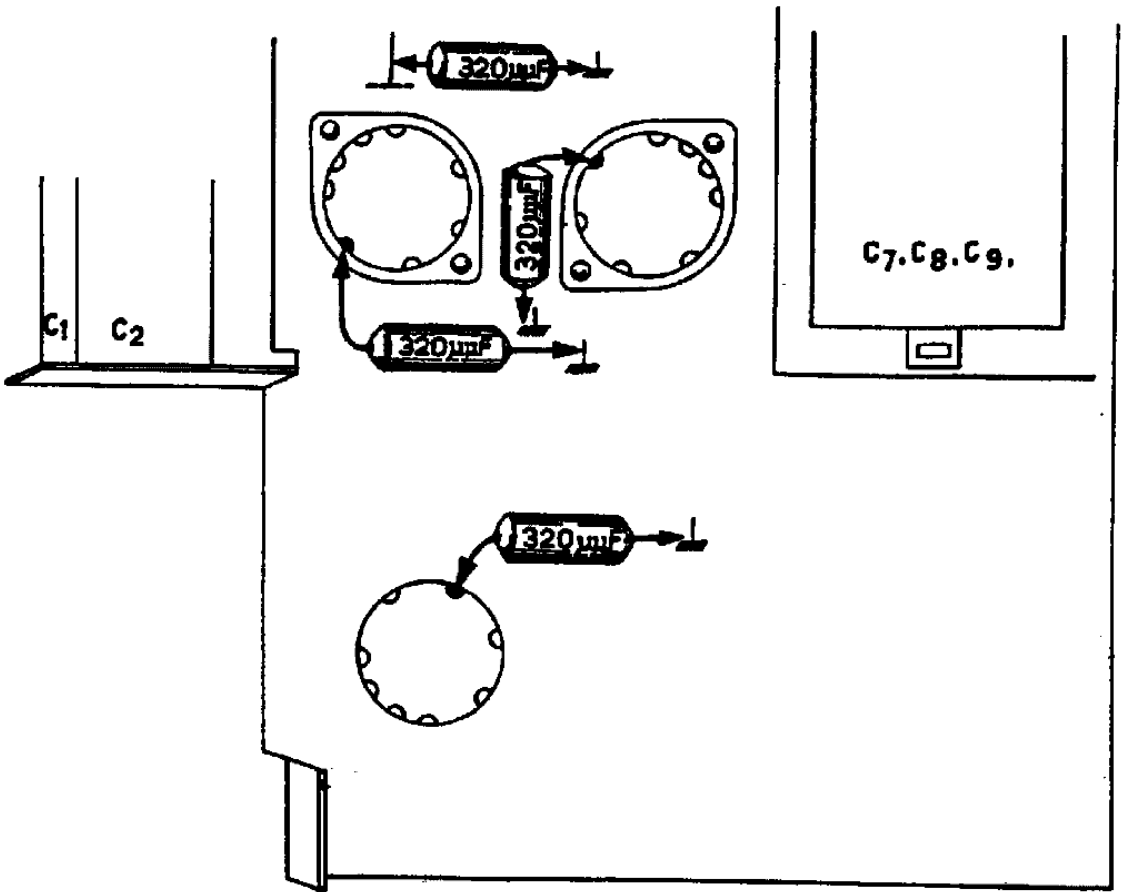


FIG. 4.

DJ282

C	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
C	1, 2, 3, 4, 5, 6, 7, 8, 9, 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	1, 2, 3, 4, 5, 6, 7, 8, 9, 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
R	1, 2, 3, 4, 5, 6, 7, 8, 9, 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	1, 2, 3, 4, 5, 6, 7, 8, 9, 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

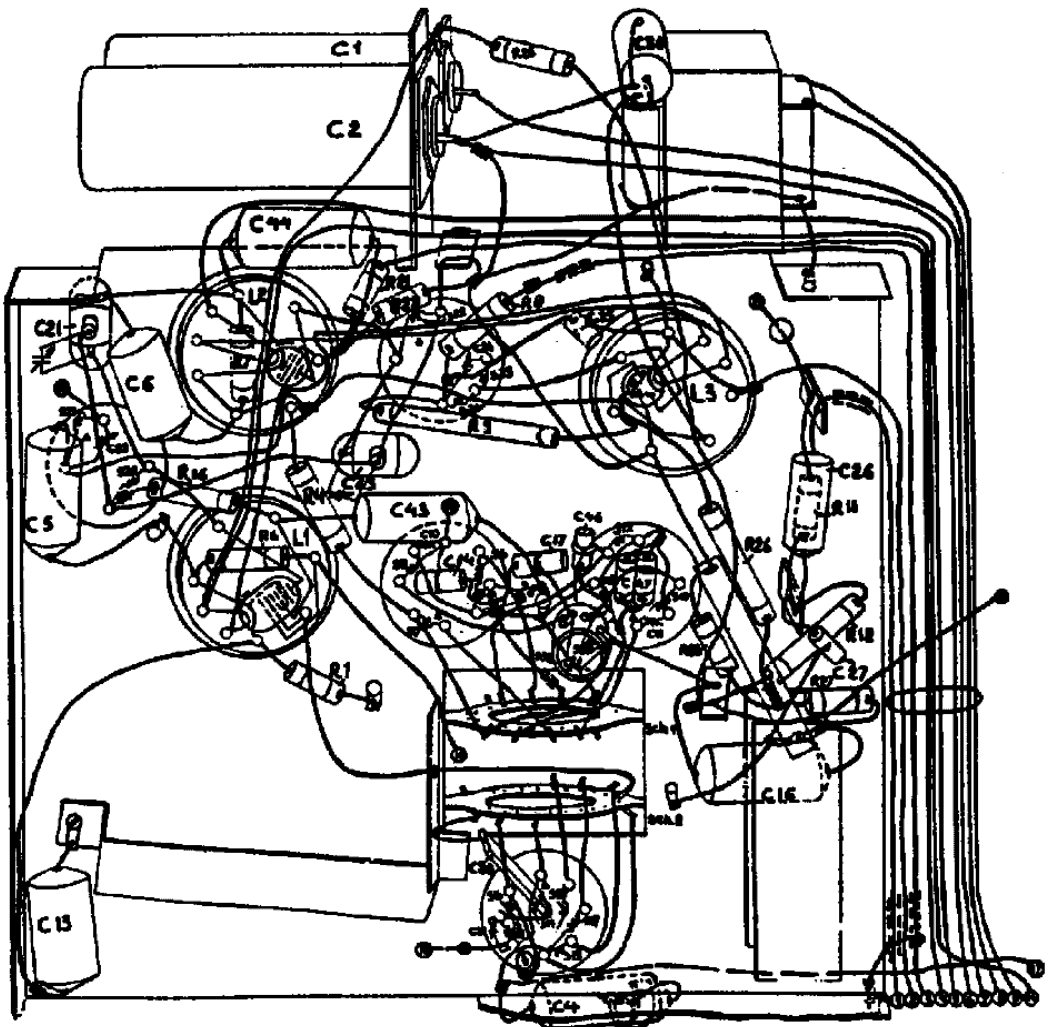
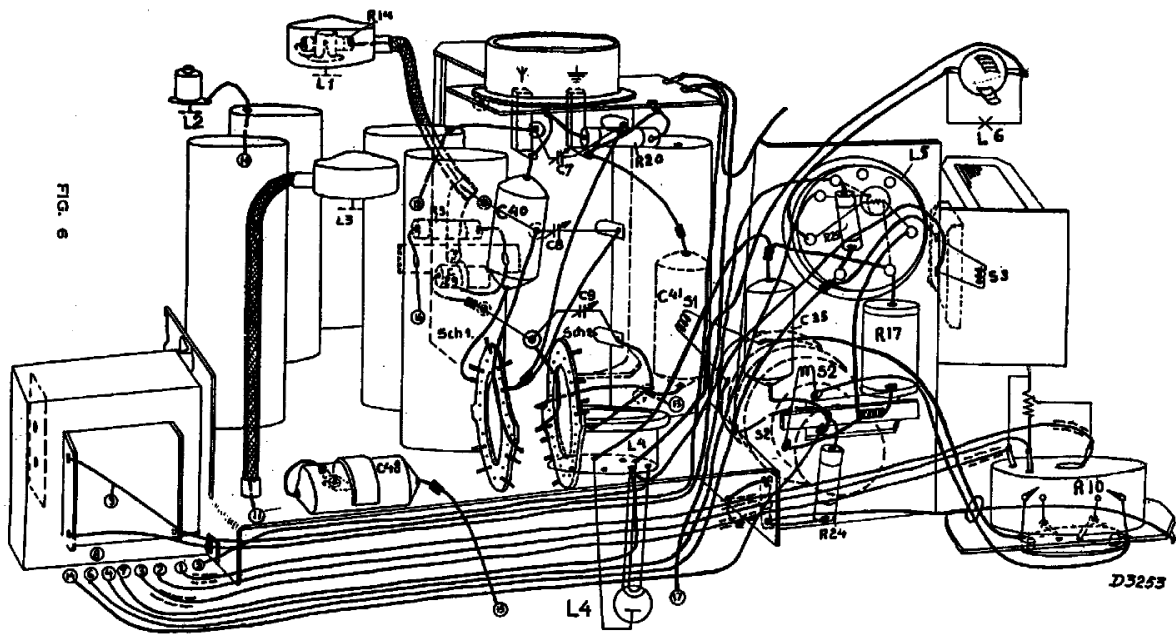


FIG. 5

DJ284



FIG. 6



D3253