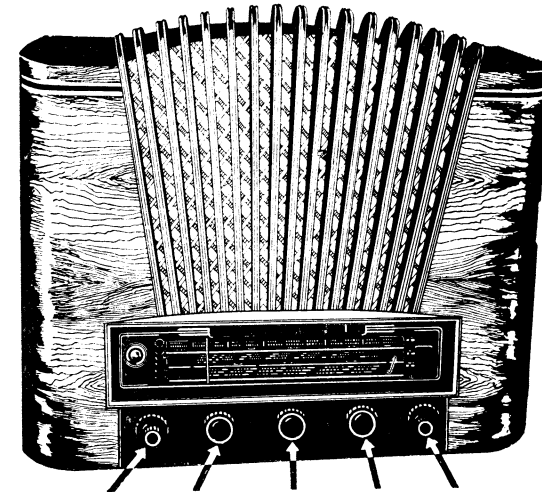


C	Capacitors	Value	Working Voltage D. C.	List No.	Notes
40	Paper	6400 pF $\pm 10\%$	400 V	TC 122 6k4/A	
41	Ceramic	20 pF $\pm 10\%$	350 V	TC 740 20/A	
42	Paper	10000 pF $\pm 10\%$	400 V	TC 122 10k/A	
43	Paper	6400 pF $\pm 10\%$	400 V	TC 122 6k4/A	
44	Paper	25000 pF $\pm 10\%$	600 V	TC 122 25k/A	
45	Paper	0,1 μ F $\pm 10\%$	400 V	TC 122 M1/A	
46	Paper	0,1 μ F $\pm 10\%$	400 V	TC 122 M1/A	
47	Paper	40000 pF $\pm 10\%$	160 V	TC 120 40k/A	
48	Ceramic	10 pF $\pm 10\%$	550 V	TC 742 10/A	
49	Ceramic	500 pF $\pm 10\%$	350 V	TC 740 500/A	
50	Ceramic	16 pF $\pm 10\%$	550 V	TC 742 16/A	

R	Resistors	Value	Load	List No.	Notes
1	Carbon	50000 $\Omega \pm 10\%$	0,25 W	TR 101 50k/A	
2	Carbon	32000 $\Omega \pm 10\%$	1 W	TR 103 32k/A	
3	Carbon	0,5M $\Omega \pm 10\%$	0,25 W	TR 101 M5/A	
4	Carbon	10 $\Omega \pm 5\%$	0,25 W	TR 101 10/B	
5	Carbon	20000 $\Omega \pm 10\%$	2 W	TR 104 20k/A	
6	Carbon	1M $\Omega \pm 10\%$	0,25 W	TR 101 1M/A	
7	Carbon	3200 $\Omega \pm 10\%$	0,25 W	TR 101 3k2/A	
8	Carbon	1M $\Omega \pm 10\%$	0,25 W	TR 101 1M/A	
9	Carbon	0,4 $\Omega \pm 10\%$	0,25 W	TR 101 M4/A	
10	Carbon	0,25M $\Omega \pm 10\%$	0,25 W	TR 101 M25/A	
11	Carbon	8000 $\Omega \pm 10\%$	0,25 W	TR 101 8k/A	
12	Potentiometer	0,25M Ω		WN 696 14M25/G	
13	Carbon	0,25M $\Omega \pm 10\%$	0,25 W	TR 101 M25/A	
14	Carbon	0,25M $\Omega \pm 10\%$	0,25 W	TR 101 M25/A	
15	Wire-wound	7 $\Omega \pm 5\%$	0,5 W	TR 501 7/B	
16	Wire-wound	7 $\Omega \pm 5\%$	0,5 W	TR 501 7/B	
17a	Carbon	32000 $\Omega \pm 10\%$	0,25 W	TR 101 32k/A	
17b	Carbon	50000 $\Omega \pm 10\%$	0,25 W	TR 101 50k/A	
18	Carbon	32000 $\Omega \pm 10\%$	0,25 W	TR 101 32k/A	
19	Carbon	32000 $\Omega \pm 10\%$	0,25 W	TR 101 32k/A	
20	Carbon	2M $\Omega \pm 10\%$	0,25 W	TR 101 2M/A	
21	Carbon	3200 $\Omega \pm 10\%$	2 W	TR 104 3k2/A	
22	Potentiometer	0,5M Ω		WN 697 24M5/N	with switch
23	Carbon	0,5M $\Omega \pm 10\%$	0,5 W	TR 101 M5/A	
24	Carbon	135 $\Omega \pm 10\%$	0,25 W	TR 101 135/A	
25	Carbon	6400 $\Omega \pm 10\%$	1 W	TR 133 6k4/A	
26	Carbon	6400 $\Omega \pm 10\%$	1 W	TR 133 6k4/A	
27	Carbon	64000 $\Omega \pm 10\%$	0,25 W	TR 101 64k/A	
28	Carbon	80000 $\Omega \pm 10\%$	0,25 W	TR 101 80k/A	
29	Carbon	12500 $\Omega \pm 10\%$	0,25 W	TR 101 12k5/A	
30	Carbon	0,5M $\Omega \pm 10\%$	0,25 W	TR 101 M5/A	
31	Carbon	6400 $\Omega \pm 10\%$	0,25 W	TR 101 6k4/A	
32	Carbon	0,1M $\Omega \pm 10\%$	0,25 W	TR 101 M1/A	
33	Carbon	0,1M $\Omega \pm 10\%$	0,25 W	TR 101 M1/A	
34	Carbon	10000 $\Omega \pm 10\%$	0,25 W	TR 101 10k/A	
35	Wire-wound	125 $\Omega \pm 5\%$	2 W	TR 503 125/B	
36	Carbon	1M $\Omega \pm 10\%$	0,25 W	TR 101 1M	
37	Carbon	2M $\Omega \pm 10\%$	0,25 W	TR 101 2M/A	
38	Carbon	10000 $\Omega \pm 10\%$	0,25 W	TR 101 10k/A	

SERVICE INSTRUCTIONS FOR TESLA »616 A-2«



Mains switch and
volume control Bandwidth
switch Tone
control Wavechange
switch Tuning
control

DESCRIPTION

• CIRCUIT

6+3 valve superheterodyne of six circuits with bandsread tuning control.

• WAVE RANGES

- Short waves 16.5—51.5 m
(18.1—5.8 Mc/s)
- Medium waves 185—572 m
(1622—524.4 Mc/s)
- Long waves 1000—2000 m
(300—150 kc/s)

• VALVES

- ECH 21 — mixer and oscillator
6 F 31 — I. F. amplifier
6 BC 32 — A. F. amplifier and detector
6 CC 31 — phase inverter
2X 6 L 31 — push-pull
2X 6 Z 31 — full-wave rectifier
EM 11 — cathode-ray tuning indicator

(Three dial lamps 6.3 V/0.3 A)

• POWER SUPPLY

A. C. mains 110, 125, 150, 220, and 245 V, 50 c/s. Protection by thermal fuse.

• INTERMEDIATE FREQUENCY

452 kc/s

• CONSUMPTION

85 W

• OUTPUT

Approx. 6 W at 400 c/s and 10% distortion

• LOUDSPEAKER

Permanent magnet moving coil type, cone diameter 300 mm, speech coil impedance 8 ohms

• DIMENSIONS AND WEIGHTS

	Receiver	Receiver incl. pack.
Width	650 mm	740 mm
Height	540 mm	620 mm
Depth	240 mm (incl. knobs)	340 mm
Weight	16.8 kg	26.3 kg

Item	Mechanical Parts	List No.	Notes
58	Cable	M4 37	
59	Cord	M4 56	
60	Tension spring	V5 Pc 9	
61	Holder for bandsread tuning control	V4 Sn 102	
62	Drive drum for bandsread tuning	V5 Pi 30	
63	Tension spring	V5 Pc 10	
64	Tension spring	V5 Pc 8	
65	Compressing coupling for coil L 12—L 13	V5 PI 192	
65	Iron core for coils L 12—L 13	V5 SI 6	
67	Core adjustment spring for L 12—13	V5 Pc 12	
63	Wavechange indicator, complete	KD 110	
67	Securing ring	3,2 CSN 02 2929.0	
70	Wafer for wavechange switch P1	KD 018	
71	Wafer for wavechange switch P2	KD 017	
72	Wafer for selectivity control P3	KD 055	
73	Mains voltage adjustment plate	V5 Sn 90	
74	Mains voltage adjustment plug	V4 Sn 2/1	
75	Socket strip for mains transformer	V5 Sn 10	
76	Socket plate	01 010 B	
77	Aerial-earth socket plate	PF 521 02	
78	Pick-up socket plate	PF 521 03	
79	Extension speaker socket plate	PF 521 04	
80	Cover for I. F. transformer	V5 PI 62	
81	Fixing wedge for cover	V5 Pp 24	
82	Fixing spring for variable capacitor	V5 PI 163	
83	Mains cord with plug	V4 Cr 1	
84	Lug for mains cord	EK 514 35	
85	Iron core for input coils	NTN 045 M7X 13/A	
86	Iron core for I. F. transformers	NTN 046 M8X 18/D2	
87	Sealing compound	ML 001 74	
88	Thermal fuse	V5 Sv 1	
89	Dial lamp	PN 663 03	
90	Loudspeaker Heco Ø 300 mm		

ELECTRICAL PARTS

L	Coils	Resistance	List No.	Notes
1	I. F. rejector circuit	4 Ω	CV—005	
2	Input SW	< 1 Ω	V4—Sc 48	
2'		< 1 Ω		
3	Input MW	3 Ω	CV—007	
3'		2,5 Ω		
4	Input LW	3 Ω	CV—008	
4'		35 Ω		
5	Oscillator SW	< 1 Ω	V4—Sc 43	
5'		< 1 Ω		
6	Oscillator MW	< 1 Ω	CV—010	
6'		3 Ω		
7	Oscillator LW	< 1 Ω	CV—032	
7'		3 Ω		
8	Primary of 1st I. F. transformer	1,5 Ω	CV—021	
8'		< 1 Ω		
9	Secondary of 1st I. F. transformer	1,5 Ω	CV—022	
10	Primary of 2nd I. F. transformer	1,5 Ω	CV—022	
11	Secondary of 2nd I. F. transformer	1,5 Ω	CV—022	
12	Bandsread tuning	< 1 Ω	V5—Sc 42	
13		< 1 Ω		

L	Coils	Resistance	List No.	Notes
16	Output transformer	250 Ω	KC—033	
17		250 Ω		
18		< 1 Ω		
19	Mains choke	200 Ω	KC—188	
20		15 Ω		
21		< 1 Ω		
22		150 Ω		
23		150 Ω		
	1st I. F. transformer, complete		KC—047	
	2nd I. F. transformer, complete		KC—048	
	Coil assembly, complete		KC—161	

C	Capacitors	Value	Working Voltage D. C.	List No.	Notes
1, 2	Variable	2×500 pF		PN 705 05	
3	Trimmer	3—30 pF		PN 703 01	
4	Trimmer	3—55 pF		1PK 700 01	
5	Mica	110 pF ± 2%	500 V	TC 200 110 C	
6	Trimmer	3—30 pF		PN 703 01	
7	Trimmer	3—30 pF		PN 703 01	
8	Mica	250 pF ± 5%	500 V	PN 201 250/B	
9	Mica	538 pF ± 1%	500 V	TC 201 538/D	
10a	Mica	220 pF ± 1%	500 V	TC 201 220/D	
10b	Wire-wound	3—55 pF		1PK 700 01	
11	Mica	294 pF ± 1%	500 V	TC 201 294/D	
12	Mica	395 pF ± 1%	500 V	WK 714 07 395/D	
13	Mica	395 pF ± 1%	500 V	WK 714 07 395/D	
14	Mica	395 pF ± 1%	500 V	WK 714 07 395/D	
15	Mica	395 pF ± 1%	500 V	WK 714 07 395/D	
16	Ceramic	16 pF ± 10%	550 V	TC 742 16/A	
17	Paper	64000 pF ± 10%	160 V	TC 120 64k/A	
18a	Paper	4000 pF ± 10%	1000 V	TC 124 4k/A	
18b	Paper	4000 pF ± 10%	1000 V	TC 124 4k/A	
19	Paper	1000 pF ± 10%	400 V	TC 122 1k/A	
20	Paper	6400 pF ± 10%	400 V	TC 122 6k4/A	
21	Ceramic	50 pF ± 10%	350 V	TC 740 50/A	
22	Electrolytic	2×32 μF ± 50%	450 V	TC 521 32/32M	
23		— 20%			
24	Paper	0,1 μF ± 10%	400 V	TC 122 M1/A	
25a	Paper	0,1 μF ± 10%	400 V	TC 122 M1/A	
25b	Paper	0,1 μF ± 10%	400 V	TC 122 M1/A	
26	Paper	0,1 μF ± 10%	160 V	TC 120 M1/A	
27	Paper	40000 pF ± 10%	400 V	TC 122 40k/A	
28	Paper	0,1 μF ± 10%	400 V	TC 122 M1/A	
29	Ceramic	200 pF ± 10%	350 V	TC 740 200/A	
30	Ceramic	100 pF ± 10%	350 V	TC 740 100/A	
32	Electrolytic	50 μF ± 50%	12 V	TC 591 50M	
		— 20%			
33	Paper	10000 pF ± 10%	160 V	TC 120 10k/A	
34	Paper	10000 pF ± 20%	160 V	TC 120 10k	
35	Paper	0,4 μF ± 20%	160 V	TC 120 M4	
36	Ceramic	100 pF ± 10%	350 V	TC 740 100/A	
37	Ceramic	500 pF ± 10%	350 V	TC 740 500/A	
38	Ceramic	16 pF ± 10%	550 V	TC 742 16/A	
39	Electrolytic	16 μF ± 50%	450 V	TC 529 16M	
		— 20%			

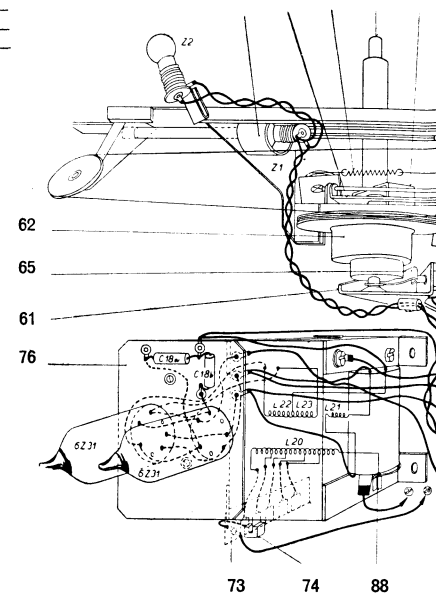
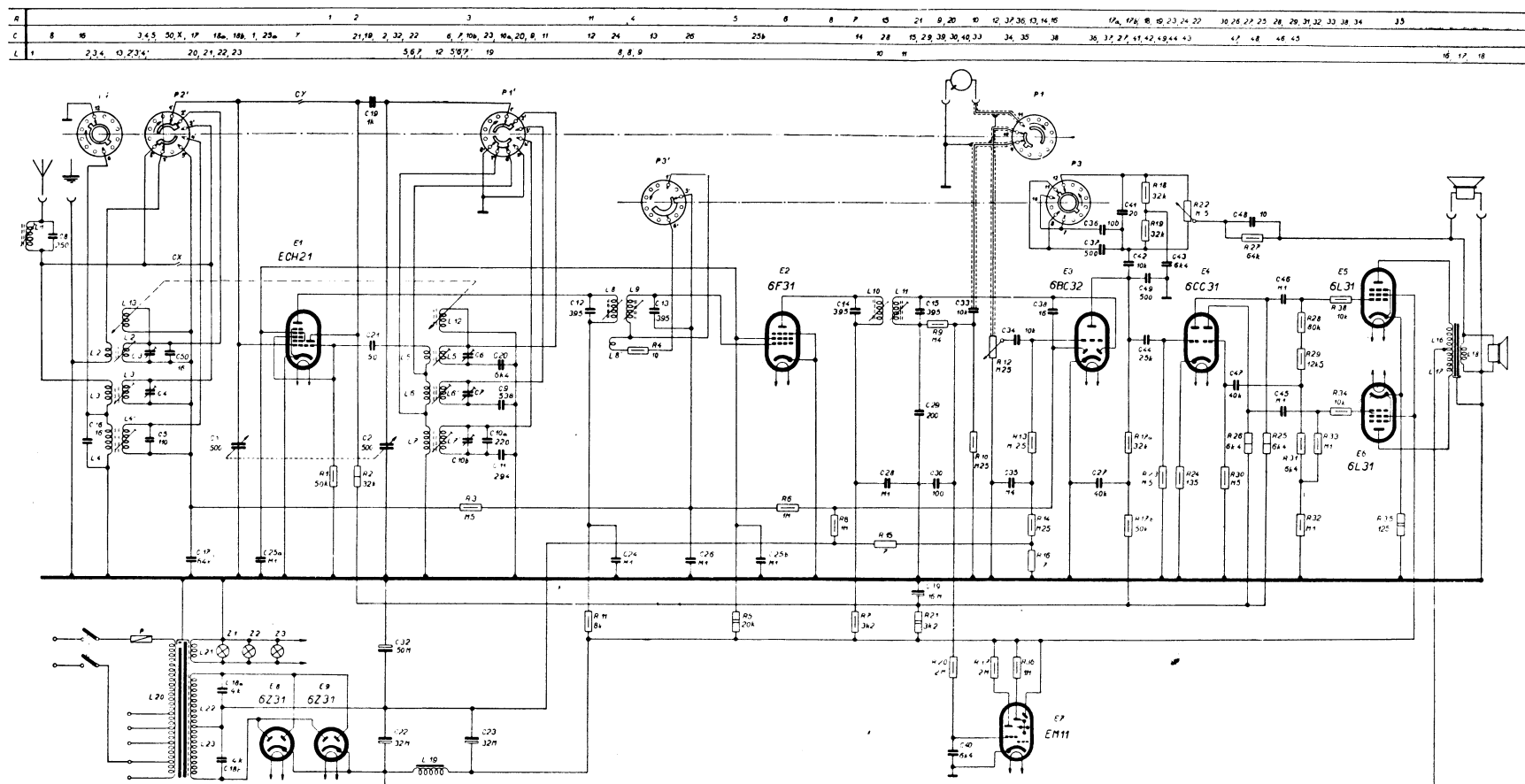
SPARE PARTS

Item	Mechanical Parts	List No.	Notes
1	Cabinet, complete	KC 053	
2	Cabinet	07 058	
3	Board with brocade	KD 090	
4	Baffle	KD 089	
5	Ornamental lattice	07 059	
6	Window for dial	KD 091	
7	Back panel	07 064	
8	Screw for back panel	PA 081 05	
9	Fixing bracket for back panel	V5 PI 53	
10	Rubber pad (under chassis)	PA 225 00	
11	Rubber pad (under screw)	1PA 230 02	
12	Bush with small hole	PA 357 00	
13	Bush with large hole	PA 357 01	
14	Knob for volume control	KD 181	
15	Knob for tone control	KD 182	
16	Knob for wavechange switch	KD 183	
17	Knob for tuning control (large)	2QF 243 09	
18	Knob for bandspread tuning control (small)	KD 184	
22	Dial pointer, small	PF 166 07	
23	Guiding rod for pointer (small)	PA 713 02	
24	Dial pointer, large	PF 166 04	
25	Guiding rod for pointer (large)	PA 713 01	
26	Screen	PA 544 05	
27	Frame for screen complete	1PF 147 02	
28	Dial lamp holder	1PF 498 01	
29	Valve socket for ECH 21	PK 497 01	
30	Lug for valve sockets	V5 PI 142	
31	Valve socket for EM 11	PK 497 04	
32	Miniature valve socket, bakelite	1PF 497 02	
33	Fixing ring for valve socket	1PA 024 01	
34	Miniature valve socket, ceramic	WK 497 01	
35	Tension spring for EM 11	V5 Pc1	
36	Pulley for bandspread tuning	V5 Pi 28	
37	Pulley for main tuning	V5 PI 4	
38	Pulley for wavechange indicator	PA 670 09	
39	Pulley	KD 146	
40	Spindle for wavechange switch	KD 135	
41	Securing ring for spindle	3CSN 02 2929.0	
42	Flat spindle for wavechange switch	V5 PI 156	
43	Bronze spring	V5 PI 150	
44	Locking spring level	V5 PI 162	
45	Locking spring	V5 PI 161	
46	Spindle for selectivity control	KD 072	
47	Spindle for bandspread tuning	02 075 A	
48	Spindle for main tuning	KD 301	
49	Bush bracket for tuning spindles	PF 806 66	
50	Lever for stop	V4 Sn 101	
51	Flat packing spring	V5 PI 191	
52	Spiral spring for stop	V5 Pc 13	
53	Lever	PA 186 01	
54	Spiral spring	V5 Pc 11	
55	Pawl disc, complete	V5 Sn 91/1	
56	Geared drum	V5 Sn 77	
57	Drive drum	V3 Pi 25	

Item	Mechanical Parts	List No.	Notes
58	Cable	M4 37	
59	Cord	M4 56	
60	Tension spring	V5 Pc 9	
61	Holder for bandspread tuning control	V4 Sn 102	
62	Drive drum for bandspread tuning	V5 Pi 30	
63	Tension spring	V5 Pc 10	
64	Tension spring	V5 Pc 8	
65	Compressing coupling for coil L 12—L 13	V5 PI 192	
66	Iron core for coils L 12—L 13	V5 SI 6	
67	Core adjustment spring for L 12—13	V5 Pc 12	
68	Wavechange indicator, complete	KD 110	
69	Securing ring	3,2 CSN 02 2929.0	
70	Wafer for wavechange switch P1	KD 018	
71	Wafer for wavechange switch P2	KD 017	
72	Wafer for selectivity control P3	KD 055	
73	Mains voltage adjustment plate	V5 Sn 90	
74	Mains voltage adjustment plug	V4 Sn 2/1	
75	Socket strip for mains transformer	V5 Sn 10	
76	Socket plate	01 010 B	
77	Aerial-earth socket plate	PF 521 02	
78	Pick-up socket plate	PF 521 03	
79	Extension speaker socket plate	PF 521 04	
80	Cover for I. F. transformer	V5 PI 62	
81	Fixing wedge for cover	V5 Pp 24	
82	Fixing spring for variable capacitor	V5 PI 163	
83	Mains cord with plug	V4 Cr 1	
84	Lug for mains cord	EK 514 35	
85	Iron core for input coils	NTN 045 M7X 13/A	
86	Iron core for I. F. transformers	NTN 046 M8X 18/D2	
87	Sealing compound	ML 001 74	
88	Thermal fuse	V5 Sv 1	
89	Dial lamp	PN 663 03	
90	Loudspeaker Heco Ø 300 mm		

ELECTRICAL PARTS

L	Coils	Resistance	List No.	Notes
1	I. F. rejector circuit	4 Ω	CV—005	
2	Input SW	< 1 Ω	V4—Sc 48	
2'		< 1 Ω		
3	Input MW	3 Ω	CV—007	
3'		2.5 Ω		
4	Input LW	3 Ω	CV—008	
4'		35 Ω		
5	Oscillator SW	< 1 Ω	V4—Sc 43	
5'		< 1 Ω		
6	Oscillator MW	< 1 Ω	CV—010	
6'		3 Ω		
7	Oscillator LW	< 1 Ω	CV—032	
7'		3 Ω		
8	Primary of 1st I. F. transformer	1.5 Ω	CV—021	
8'		< 1 Ω		
9	Secondary of 1st I. F. transformer	1.5 Ω	CV—022	
10	Primary of 2nd I. F. transformer	1.5 Ω	CV—022	
11	Secondary of 2nd I. F. transformer	1.5 Ω	CV—022	
12	Bandspread tuning	< 1 Ω	V5—Sc 42	
13		< 1 Ω		



100		100 pF		Q25 W
10k		10000 pF		Q5 W
1M		1 μF		1 W
100		100 Ω		2 W
10k		10000 Ω		3 W
1M		1 MΩ		4 W

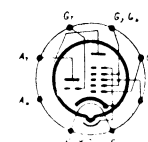
Waveband switch

Wave range	Wafer P 2	Wafer P 1
16.5— 51.5 m	—	1'-2', 7'-8'
185 — 572 m	6-12	1'-3'
1000 —2000 m	—	1'-4'
pickup	—	1'-5'

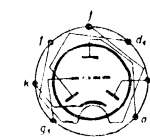
Circuit diagram of TESLA "616 A-2"

Bandwidth

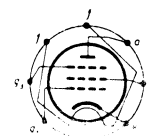
Pos.	Wafer P 3	
	1'-3'	—
	1'-3'	7-12
	1'-3'	8-12
	3'-6'	—
	3'-6'	10-12
	3'-6'	11-12



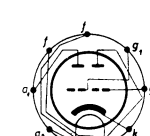
ECH 21



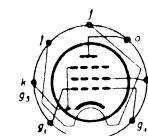
6BC 32



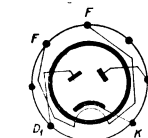
6F 31



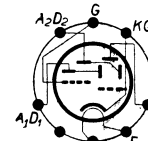
6CC 31



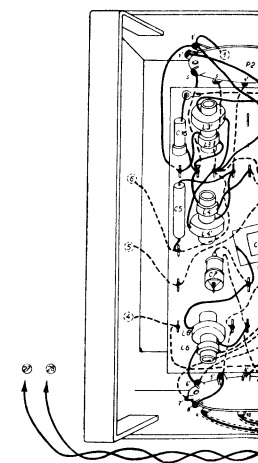
6L 31

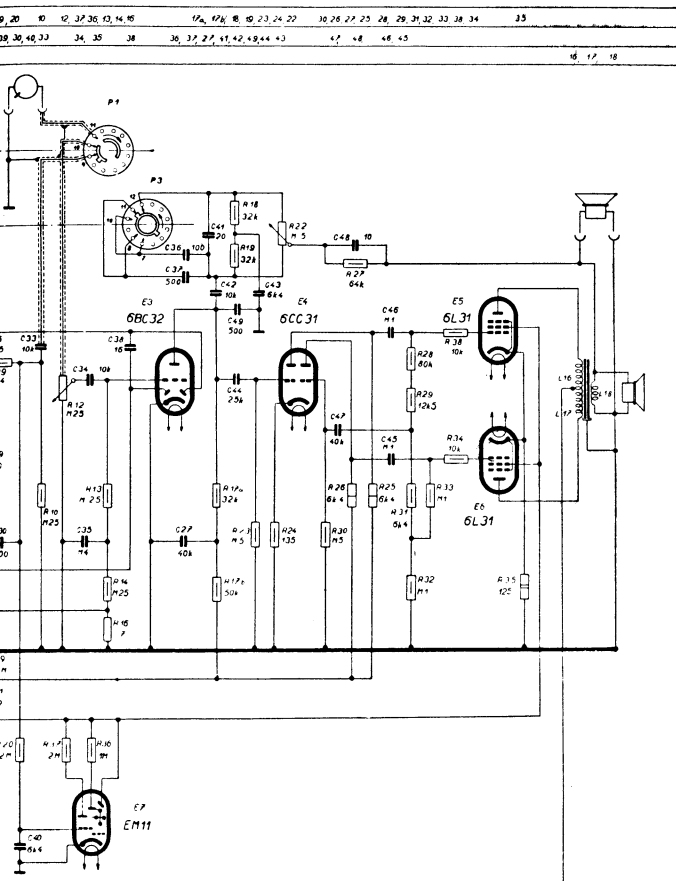


6Z 31

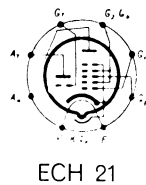


EM 11

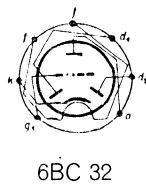




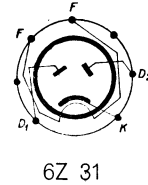
SLA "616 A-2"



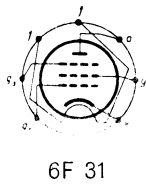
6L 31



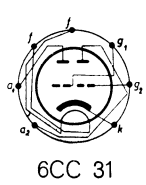
6BC 32



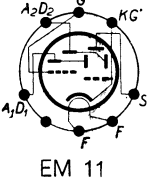
6Z 31



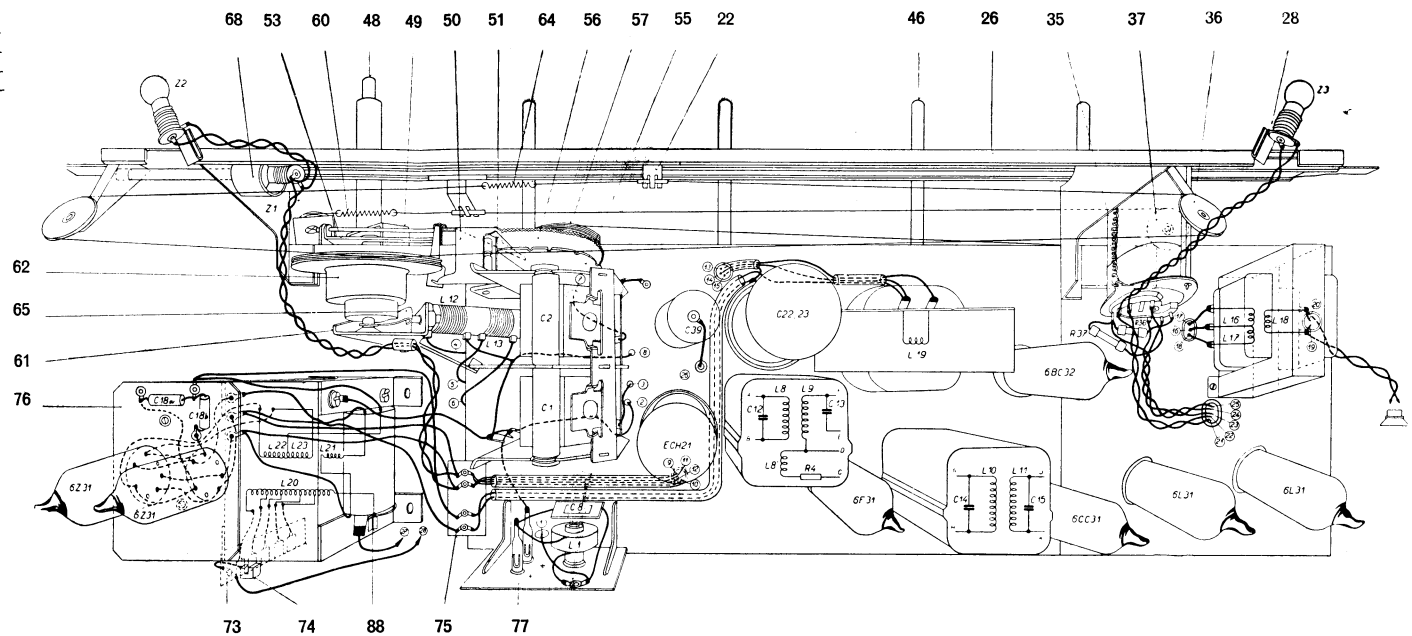
6F 31



6CC 31

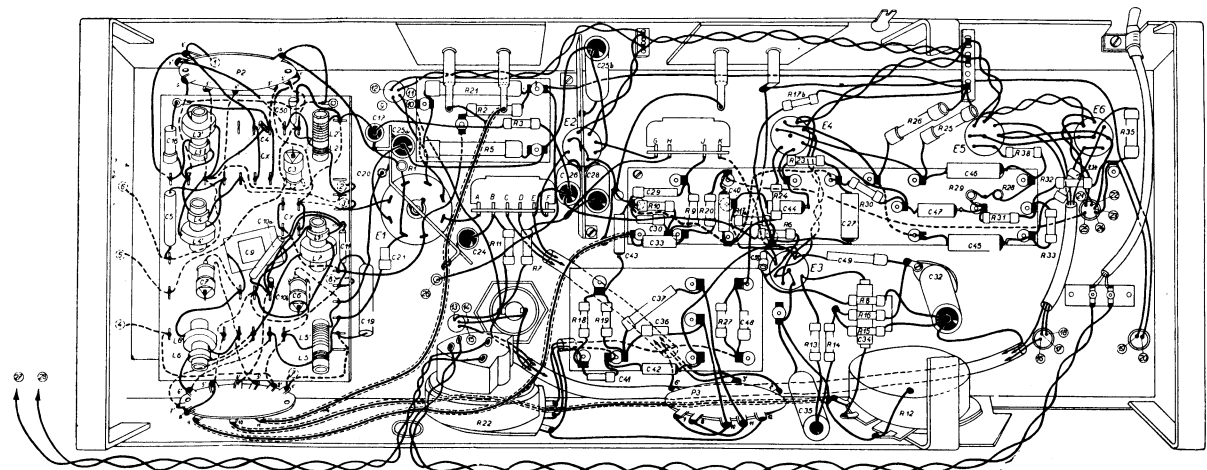


EM 11



Top view of chassis

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
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Underside view of chassis wiring

VOLTAGES AND CURRENTS

Valves		Va V	Ia mA	Vg2 V	Ig2 mA	Vf V
ECH 21	heptode	226	2,1	90	5,5	6.3
	triode	110	2,4	—	—	
6F 31	pentode	230	7,6	90	2,6	6.3
6BC 32	duodiode triode	120	0,8	—	—	6.3
6CC 31	double triode	145	8	—	—	6.3
		145	8			
6L 31	pentode	260	41	255	4,5	6.3
6L 31	pentode	260	41	255	4,5	6.3
EM 11	cathode-ray tuning indicator	255	0,4	1st. deflect. plate 14V 2nd. deflect. plate 22V		6.3
6Z 31	full-wave rectifier	2×250	165	Voltage on C23 265V Voltage on C22 255V		6.3

Voltages were measured against chassis with a 1000 Ω/V meter. Deviations less than 10% do not indicate any fault of receiver. Receiver switched to medium waves, variable capacitor and volume control turned to minimum.

RECEIVER ALIGNMENT

- **General**

1. Before alignment the receiver should be mechanically and electrically adjusted and the valves which will be used in the receiver have to be inserted.
2. During alignment the receiver should be normally heated and the bottom cover removed.
3. The local oscillator frequency is on all wave ranges higher by the intermediate frequency than the signal frequency.
4. The iron cores are adjusted by an insulated screw-driver (List No. PA 100 00). The iron cores of R. F. and local oscillator coils should be, if possible, in the lower part of the coils and the cores of I. F. coils approx. at the upper rim of the coils. If this cannot be obtained, parallel capacitors should be adjusted.
5. The capacitors C 3, C 4, C 6, C 7 and C 10, are adjusted by a special insulated screwdriver.
6. In aligning the R. F. circuits always use a weak signal and rotating the tuning knob slightly clockwise and counter-clockwise, see whether the oscillator circuit does not get detuned. The found deviations should be immediately corrected by adjusting the oscillator.
7. After aligning the receiver, all adjustable components (iron cores of coils and capacitors) should be fixed by applying sealing compound.

8. Connect the signal generator (TESLA TM 534 B) as indicated in the alignment chart, earth the receiver, turn volume control to maximum, turn tone control to second position from left (narrow band), set bandspread pointer to dial mark 47 and connect output meter (impedance 8 ohms) to sockets of extension speaker.

- **Mechanical Adjustment of Tuning Drive**

Adjust toothed segment-wheel so that it comes up against its stop just when the edges of the rotor plates of the tuning capacitors are flush with those of the stator, and secure it in this position. (The movement of the tuning capacitor must never be limited by its own stops, these should not come into action at all.) Without changing the position of the segment-wheel, set the dial pointer precisely to the centre of the two triangular marks at the righthand edge of the dial.

- **Adjustment of Ratchet-Wheel** (to be carried out after alignment has been completed).

Apply modulated signal of 6.1 Mc/s via dummy aerial to the aerial socket, set the bandsread tuning pointer to the centre of the dial, i. e. dial mark 47 (marked by triangle), and tune the receiver to the incoming signal by means of the tuning knob. Now adjust the ratchet-wheel so that the corresponding notch engages with catch, secure the ratchet-wheel in this position and make sure, whether the catch stops the tuning capacitor correctly at the other short-wave bands as well.

ALIGNMENT CHART

ALIGNMENT CHART

Steps	Circuit aligned	Signal generator		Receiver		Output meter deflection	
		Connection to	Frequency	Wavechange switch set to	Main dial pointer set to		
1						iron core L 11 †	
2	I. F. amplifier	signal grid of ECH 21 or stator of C 1 via 30 000 pF capacitor	452 kc/s	MW	beginning of MW range (approx. 250 m)	iron core L 10	
3						iron core L 9 †	
4						iron core L 8	
†	Coil cores marked † are accessible through upper holes of covers, the others through bottom holes.						
5	I. F. rejector circuit	aerial socket via standard dummy aerial	452 kc/s	MW	beginning of MW range (approx. 250 m)	core of coil L 1	
6	bandspread tuning	aerial socket via SW dummy aerial (400 Ω)	6 Mc/s	SW 16.5 - 51.5 m	incoming signal	adjust reed 65 (see diagram) so that variation of bandspread tuning pointer is between 270 - 300 kc/s*	
•	If the frequency variation is lower than 270 kc/s, pull out the coil cores a little by bending the reed 65 to get larger detuning. If detuning is too large, reserve the procedure.						
7	SW (16.5 - 51.5 m)	aerial socket via SW dummy aerial (400 Ω)	6 Mc/s	SW 16.5 - 51.5 m	50 m aligning mark	cores of coils L 5' and L 2'	
8			15.3 Mc/s		19.61 m aligning mark	capacitors C 6 and C 3	
9	Repeat steps 7 and 8 as long as both the output and the position of incoming signal on the dial are constant.						
10	MW (185 - 572 m)		600 kc/s	MW 185 - 572 m	500 m aligning mark	cores of coils L 6' and L 3'	
11			1300 kc/s		230 m aligning mark	capacitors C 7 and C 4	
12	Repeat steps 10 and 11 as long as both the output and the position of incoming signal on the dial are constant.						
13	LW (1000 - 2000 m)	aerial socket via standard dummy aerial	160 kc/s	LW 1000 - 2000 m	1875 m aligning mark	cores of coils L 7' and L 4'	
14			280 kc/s		1071 m aligning mark	capacitors C 10b and C 5	
15	Repeat steps 13 and 14 as long as both the output and the position of incoming signal on the dial are constant.						