

BLAUPUNKT MODEL
Wolfsburg 9160

TRADE NAME	Blaupunkt Model Wolfsburg 9160 (Serial #G450001 and above)		
IMPORTER	Robert Bosch Corp., 40-25 Crescent Street, Long Island City 1, N. Y.		
TYPE SET	Battery Operated AM Automobile Receiver		
TUBES	Five		
POWER SUPPLY	6 Volt (or) 12 Volt Storage Battery	RATING	4.4 Amp. @ 6.3 Volts DC
TUNING RANGE—BROADCAST	510 - 1600KC		

ALIGNMENT INSTRUCTIONS

ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT

Volume control should be at maximum position. Output of signal generator should be no higher than necessary to obtain an output reading.

Suggested Alignment Tools: A1, A2, A3, A4, A5.....GENERAL CEMENT #8195, 8275, 8728, 8729, 8987, 8988, 8989
 WALSCO #2531, 2532
 A3.....GENERAL CEMENT #5000, 5003, 5004, 5008, 5009, 5066, 8195, 8277, 8290, 8607, 8821, 9105, 9106, 9291
 WALSCO #2515, 2520, 2522, 2523, 2534, 2537, 2538
 A7, A8.....GENERAL CEMENT #5000, 5003, 8271, 8273, 8276, 8288, 8290, 8721, 8722
 WALSCO #2516, 2519, 2525, 2541

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	OUTPUT METER	ADJUST	REMARKS
1. Fig. 1	Thru dummy to antenna receptacle	460KC (400% Mod.)	High frequency end of dial	Across voice coil	A1, A2, A3, A4	Adjust for maximum output.
2. "	"	"	"	"	A5	Adjust for MINIMUM output.
3. "	"	1100KC	Tune to 1100KC signal	"	A6	Adjust for maximum output.
The following step is not necessary unless tuner has been tampered with or associated circuits have been repaired. If necessary, remove dial scale to expose tuning slugs (A7, A8).						
4. Fig. 1	Thru dummy to antenna receptacle	1100KC	Tune to 1100KC signal	Across voice coil	A7, A8	Adjust for maximum output. Repeat step 3.
5.	With radio installed in car and antenna fully extended, tune to a weak station near 1100KC and adjust A6 for maximum output.					

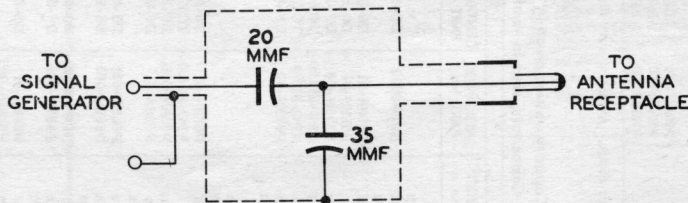


FIG. 1

HOWARD W. SAMS & CO., INC. Indianapolis 6, Indiana

The listing of any available replacement part herein does not constitute in any case a recommendation, warranty or guaranty by Howard W. Sams & Co., Inc., as to the quality and suitability of such replacement part. The numbers of these parts have been compiled from information furnished to Howard W. Sams & Co., Inc., by the manufacturers of H899

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BLAUPUNKT MODEL
Wolfsburg 9160

SET 436 FOLDER 4

PARTS LIST AND DESCRIPTIONS TUBES (GENERAL ELECTRIC, SYLVANIA)

ITEM No.	USE	TYPE	ITEM No.	USE	TYPE
V1	RF Amplifier	EF89/6DA6	V4	Det. - AVC - AF Amp.	EBC91/6AV6
V2	Mixer-Osc.	EC881/6AJ8	V5	Output	EL84/6BQ5
V3	IF Amplifier	EF89/6DA6			

① Domestic type listed may not be directly interchangeable in some instances.

ELECTROLYTIC CAPACITORS

ITEM No.	RATING CAP.	VOLT.	REPLACEMENT DATA				SPRAGUE PART No.	
			BLAUPUNKT PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	PYRAMID PART No.		SANGAMO PART No.
C1A	32	385	KO761/24x	PR25V50	BBR50-25	TC29	MT-0250	R2600 *
C2	32	385	KO742/9n	PR25V50	BBR50-25	TC29	TD-50-25	TVA-1206
C3	50	18	KO742/9n	PR25V50	BBR50-25	TC29	TD-50-25	TVA-1206
C4	50	15	KO748/9n	PR25V50	BBR50-25	TC29	MT-0250	TVA-1206

* Not normally in distributors stock. Available thru distributor on order to manufacturer.

FIXED CAPACITORS

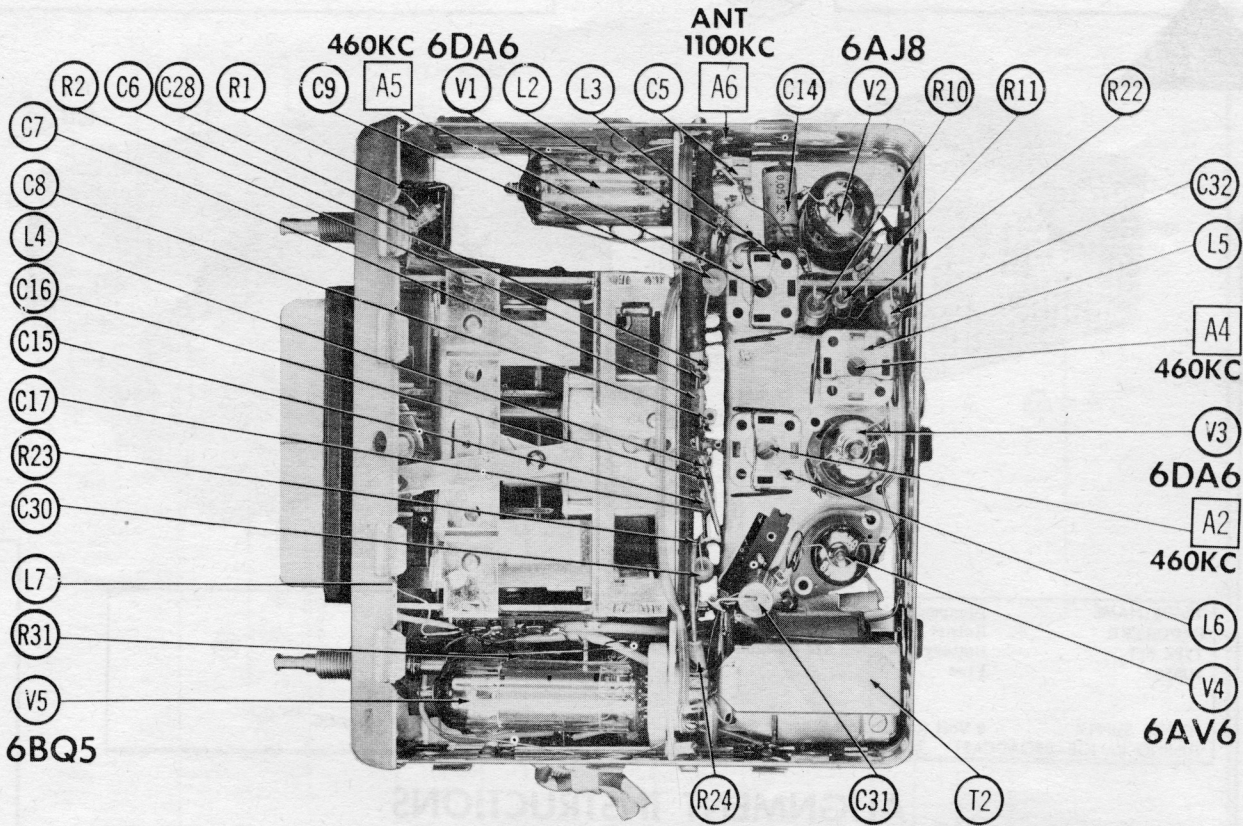
Capacity values given in the rating column are in mfd. for Paper Capacitors, and in mmfd. for Mica and Ceramic Capacitors.

ITEM No.	RATING CAP.	VOLT.	REPLACEMENT DATA				NOTES		
			BLAUPUNKT PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-COBUER PART No.		MALLORY PART No.	SPRAGUE PART No.
C5	10-60		TK6/15x	BPD-0005	DD-501	LI075	UC-535	5GA-T75	2%
C6	40	500	KO842/67n	P688N-01	D6-103	CUB6S1	GEM-611	6TM-S1	2%
C7	500		KO842/73n	P688N-01	D6-103	CUB6S1	GEM-611	6TM-S1	
C8	65	500	KO792/41n	P688N-01	D6-103	CUB6S1	GEM-611	6TM-S1	
C9	.01	500	KO792/41n	P688N-01	D6-103	CUB6S1	GEM-611	6TM-S1	
C10	.01	500	KO792/41n	P688N-01	D6-103	CUB6S1	GEM-611	6TM-S1	
C11	.05	125	KO788/66n	P288N-05	DF-503	CUB2S5	GEM-415	5TCC-T1	5%
C12	.05	125	KO844/74n	NPO-SI 100	TCZ-100	CTA6TC	ZT-531	5TCC-Q5	10%
C13	.05	500	KO845/51n	NPO-SI 50	TCZ-50	CTA6Q5C	ZT-545	5TCC-Q5	10%
C14	.05	500	KO792/41n	P688N-05	DF-503	CUB6S5	GEM-615	6TM-S5	2%
C15	480		KO103/36z						2 1/2%
C16	35	480	KO101/7z						10%
C17	480		KO809/72n						25%
C18	30	500	KO843/50n	P688N-01	D6-103	CUB6S1	GEM-611	6TM-S1	
C19	.01	500	KO792/41n	NPO-SI 1.0	TCZ-1		GEM-625	5TCCB-V1	
C20	.01	500	KO841/2n	P688N-005	D6-502	CUB6D5	GEM-625	6TM-D5	
C21	.005	500	KO792/67n	P688N-01	D6-103	CUB6S1	GEM-611	6TM-S1	
C22	.01	500	KO792/41n	P688N-01	D6-502	CUB6D5	GEM-625	6TM-D5	
C23	.90	500	KO845/57n	P688N-005	D6-502	CUB6D5	GEM-625	6TM-D5	
C24	.005	500	KO792/67n	P688N-005	D6-502	CUB6D5	GEM-625	6TM-D5	
C25	.005	500	KO792/67n	P688N-005	D6-502	CUB6D5	GEM-625	6TM-D5	
C26	.1	125	KO788/69n	P688N-005	D6-502	CUB6D5	GEM-625	6TM-D5	10%
C27	.1	125	KO845/51n	NPO-SI 50	D6-500	LI0Q5	ZT-545	5TCC-Q5	10%
C28	.005	250	KO792/67n	P488N-005	D6-500	CUB6D5	GEM-625	6TM-D5	
C29	.01	500	KO845/57n	P688N-01	D6-103	CUB6S1	GEM-611	6TM-S1	
C30	.01	1000	KO792/41n	P1088N-005	DF-503	CUB10D5	GEM-1025	10TM-D5	
C31	.05	500	KO792/48n	P688N-005	DF-503	CUB6S5	GEM-615	6TM-S5	
C32	.05	500	KO792/48n	P688N-005	DF-503	CUB6S5	GEM-615	6TM-S5	
C33	.05	500	KO792/48n	P688N-005	DF-503	CUB6S5	GEM-615	6TM-S5	
C34	.1	125	KO770/65n	P1088N-025	DF-503	CUB6S5	GEM-201	6TM-S5	
C35	.025	1000	KO802/45n				GEM-201	4TM-S5	10%
C36	.1	125	KO788/69n				GEM-201	4TM-S5	10%
C37	.1	125	KO788/69n				GEM-415	4TM-S5	10%
C38	.05	250		P488N-05	DF-503	CUB4S5			

CONTROLS

ITEM No.	RATING RESIST-ANCE	WATTS	REPLACEMENT DATA			INSTALLATION NOTES
			BLAUPUNKT PART No.	CENTRALAB PART No.	IRC PART No.	
RIA	1meg	1/4	WT749/15x			Volume Tone
B	Switch					

CHASSIS—TOP VIEW



PARTS LIST AND DESCRIPTIONS (Continued)

RESISTORS

All wattages 1/2 watt, or less, unless otherwise listed.

ITEM No.	RATING		BLAUPUNKT PART No.	NOTES	ITEM No.	RATING		BLAUPUNKT PART No.	NOTES
	OHMS	WATT				OHMS	WATT		
R2	100K		W1782/70n		R17	5meg		W1782/64n	
R3	1Meg		W1782/85n		R18	1meg		W1782/65n	
R4	100K		W1782/70n		R19	500K		W1782/80n	
R5	5000G		W1782/50n		R20	500K		W1782/60n	
R6	1Meg		W1782/85n		R21	250K		W1782/71n	
R7	30K		W1782/62n		R22	50K		W1782/65n	
R8	50K		W1782/65n		R23	500K		W1782/80n	
R9	1000G		W1782/40n		R24	1000G		W1782/40n	
R10	30K	2	W1812/62n		R25	30G		W1792/17n	
R11	5000G	1	W1802/50n		R26	100G		W1792/25n	
R12	100K		W1782/70n		R27	80G		W1795/24n	
R13	5000G		W1802/50n		R28	500G	2	W1840/28n	
R14	100K	1	W1782/70n		R29	200G	1	W1802/29n	
R15	250K		W1782/77n		R30	200G	1	W1802/29n	
R16	1Meg		W1782/85n		R31	40G	2	W1858/17n	

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA				ITEM No.	NOTES
		BLAUPUNKT PART No.	Meissner PART No.	Merit PART No.	Miller PART No.		
L1	Antenna Coll	WC2199/2z					
L2	Antenna Coll	WC2204/2z					
L3A	IF Trap	ZF725/1z					
L4	RF Choke	WC2205/2z					
L5	Osc. Coil	ZF721/1z					
L6	Input IF	ZF721/2z					
L7	IF Choke	WC2115/1z					
L8	"A" Lead Choke	ED706/1z					

TRANSFORMER (POWER)

ITEM No.	RATING	REPLACEMENT DATA					
		BLAUPUNKT PART No.		Merit PART No.		Stancor PART No.	
		Haldorson PART No.	Merit PART No.	Ram PART No.	Thordarson PART No.	Triad PART No.	
T1	6V 240V ③ .045A	TF722/10z					

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	TURNS RATIO	REPLACEMENT DATA					
		BLAUPUNKT PART No.		Merit PART No.		Stancor PART No.	
		Haldorson PART No.	Merit PART No.	Ram PART No.	Thordarson PART No.	Triad PART No.	
T2	30 : 1	TF27/52z					

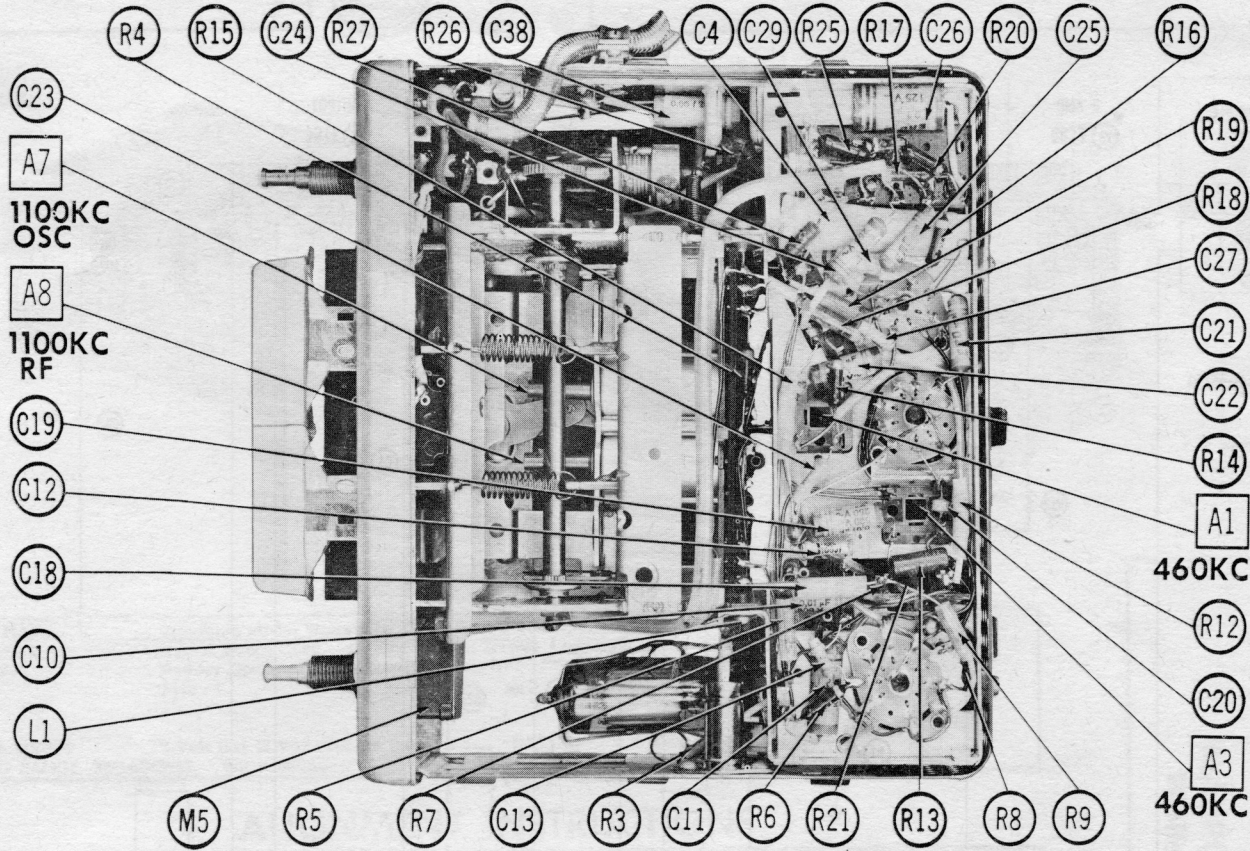
VIBRATOR

ITEM No.	TYPE	INPUT VOLTS/FREQUENCY	REPLACEMENT DATA			NOTES
			BLAUPUNKT PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	
M1	Interrupter	6V 12V	115V 115V	SM702/1z SM702/2z ①		① For 12 Volt versions

SELENIUM RECTIFIER

ITEM No.	RATING	REPLACEMENT DATA			NOTES
		BLAUPUNKT PART No.	FEDERAL PART No.	SARVES INTERNATIONAL PART No.	
M2	.045A	XZ757/2x	61-1345	D-64 ① ②	① Silicon Type ② Connect series resistor, 100 ohm.

CHASSIS—BOTTOM VIEW



PARTS LIST AND DESCRIPTIONS (Continued)

FUSES

ITEM No.	TYPE	RATING	REPLACEMENT DATA			
			BLAU/PUNKT PART No.	LITTE/FUSE PART No.	BUSS PART No.	
M3		8A 6V	SG704/1N*	FA74V/9n		
* Part #SG704/3n used in 12 Volt versions.						

MISCELLANEOUS

ITEM No.	PART NAME	BLAU/PUNKT PART No.	NOTES
M4	Lamp	GL701/1x	TV, 1.1A (6 Volt Versions)
	Lamp Switch	GL701/2x	14V, 0.1A (12 Volt Versions)
	Plug	SH825/1x	Power On-Off
	Socket	SE718/1x	Connecting Cable
	Printed Board	FA74V/1x	Connecting Cable
		PT402L/1z	

CABINETS & CABINET PARTS

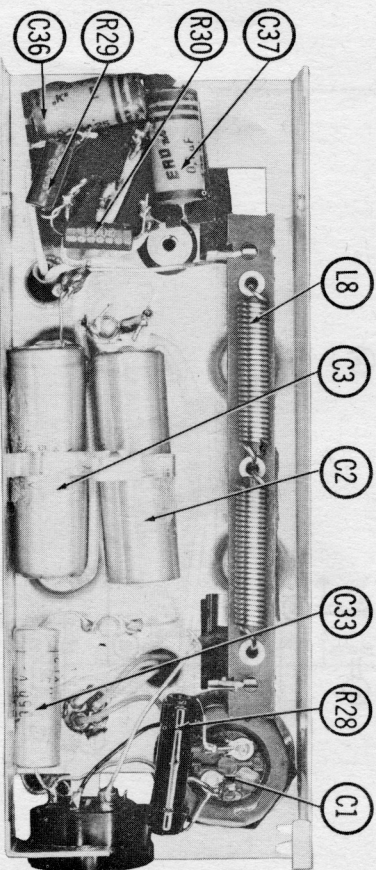
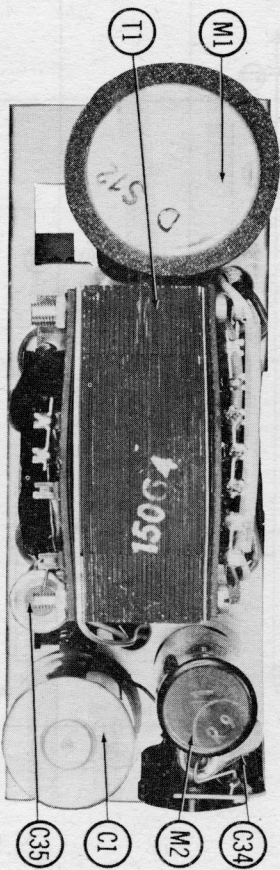
(When Ordering Cabinets & Cabinet Parts, Specify Model, Chassis & Color)

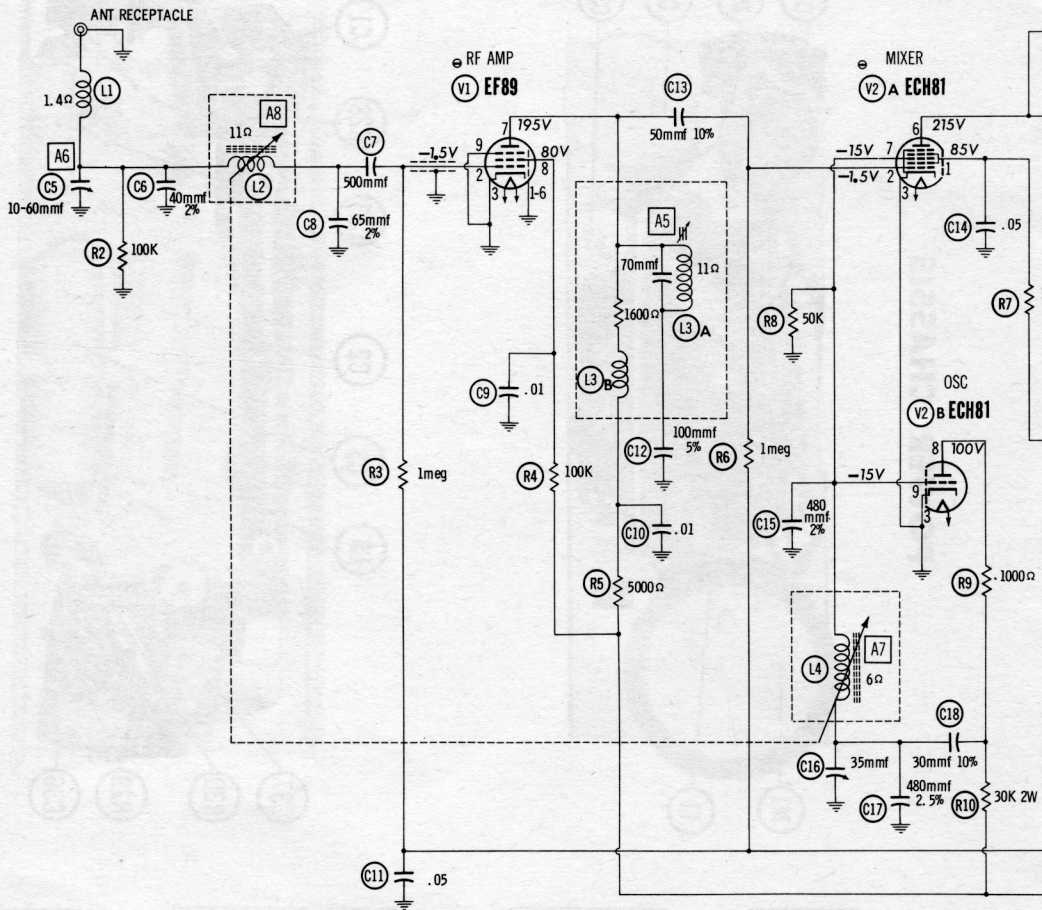
NAME	PART NO.	DESCRIPTION
Pushbutton	KE7192/6z	On, Includes Rubber Gasket
Pushbutton	KE7192/5z	Off, Includes Rubber Gasket
Pushbutton Set	EY756/16z	
Cabinet	MG330/1z	Power Supply
Cabinet Casting	MG340/3z	Radio, Includes Bushing Type Capacitor
Cover	MG331/2x	Power Supply
Front Plate	MG310/3z	Radio
Top Plate	MG320/3x	Radio
Bottom Plate	MG791/11x	Radio
Dial Pointer	SZ2186/5x	Includes Reflector
Dial	SQ2180/9z	

WIRING DATA

General-use Unshielded Hook-up Wire Use BELDEN No. 8530 (Solid) Available in Ten Colors
 Shielded Hook-up Wire Use BELDEN No. 8854 (Stranded) Available in Ten Colors
 Bonding Strap Use BELDEN No. 8861

POWER CHASSIS





RESISTANCE READINGS

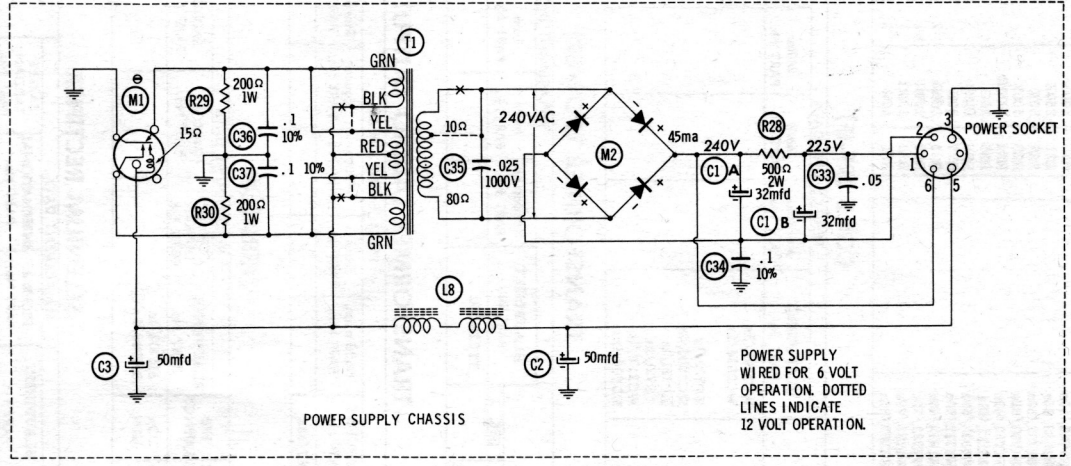
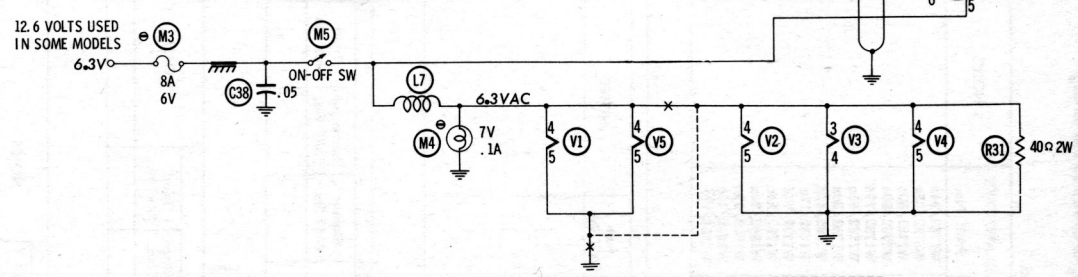
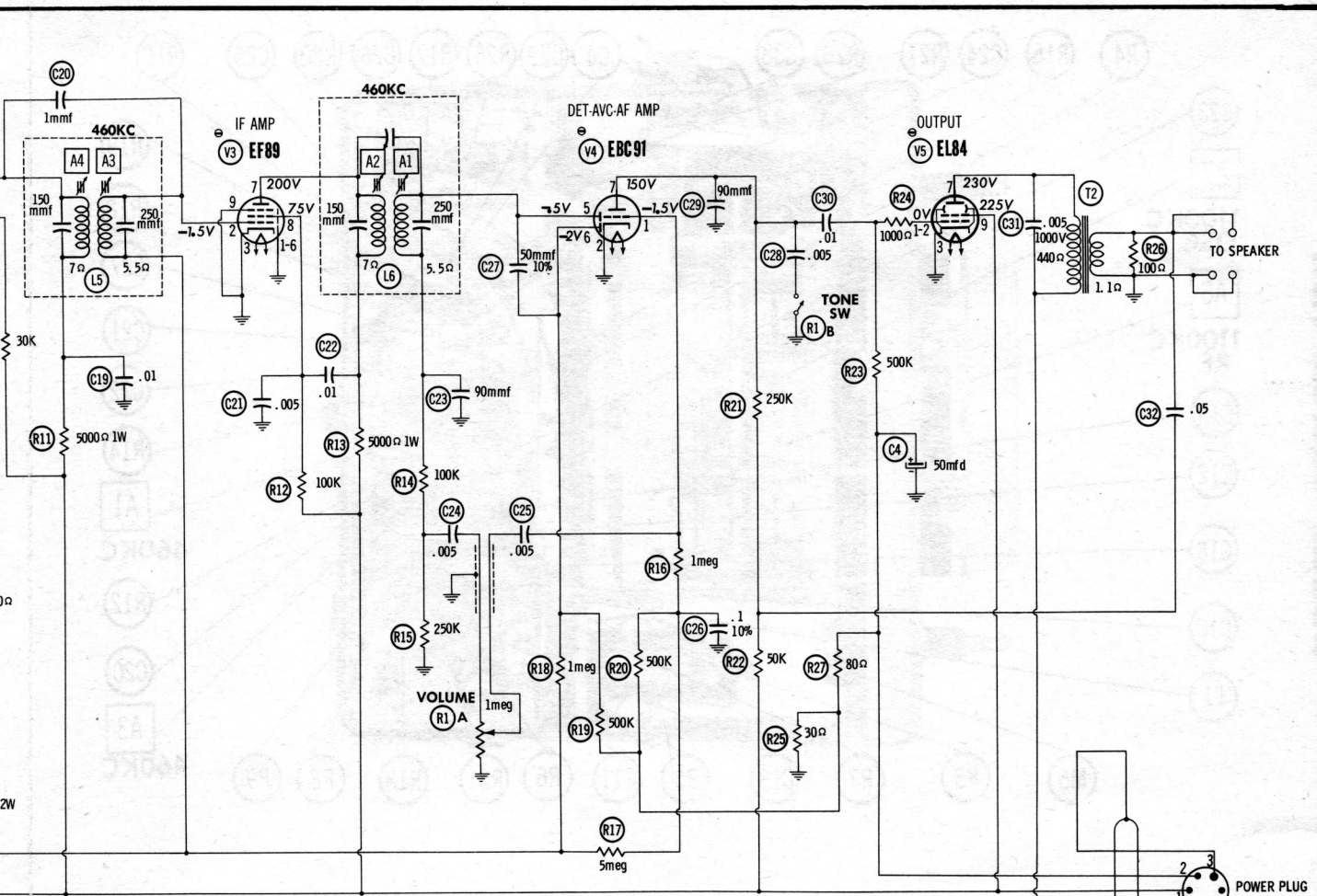
ITEM	TUBE	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
V1	EF89	0Ω	2.3meg	0Ω	.5Ω	0Ω	0Ω	†7100Ω	†100K	0Ω
V2	ECH81	†30K	2.3meg	0Ω	.5Ω	0Ω	†5500Ω	50K	†31K	50K
V3	EF89	0Ω	1.3meg	0Ω	.5Ω	0Ω	0Ω	†5500Ω	†100K	0Ω
V4	EBC91	1.5meg	0Ω	.5Ω	0Ω	350K	500K	†300K		
V5	EL84	500K	500K	0Ω	.5Ω	0Ω	NC	†440Ω	NC	†500Ω

† MEASURED FROM OUTPUT OF M1
 NC NO CONNECTION

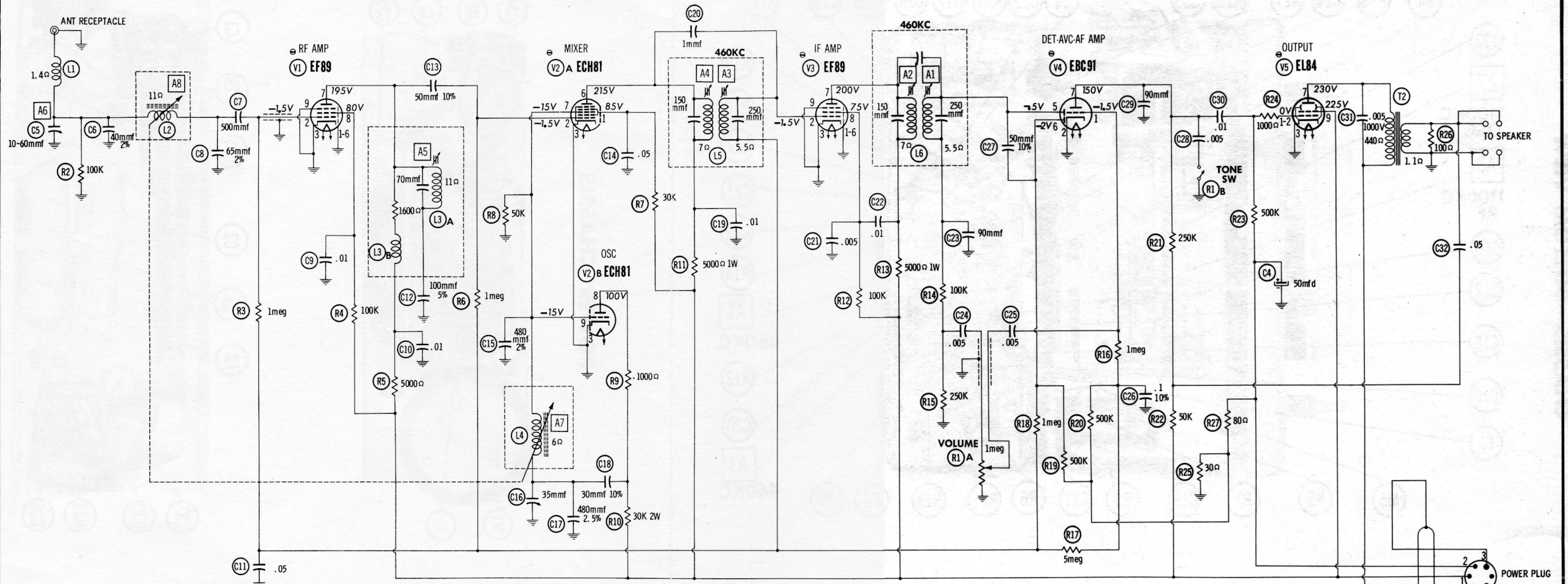
- DC voltage measurements taken with vacuum tube voltmeter; AC voltages measured at 1000 ohms per volt.
- Socket connections shown as bottom views.
- Measured values are from socket pin to common negative.
- Battery voltage maintained at 6.3 volts for voltage readings.
- Nominal tolerance on component values makes possible a variation of ±15% in voltage and resistance readings.
- Volume control at maximum, no signal applied for voltage measurements.

⊖ SEE PARTS LIST FOR ALTERNATE VALUE OR APPLICATION

DC COIL RESISTANCE VALUES UNDER ONE OHM NOT SHOWN ON SCHEMATIC DIAGRAM



**BLAUPUNKT MODEL
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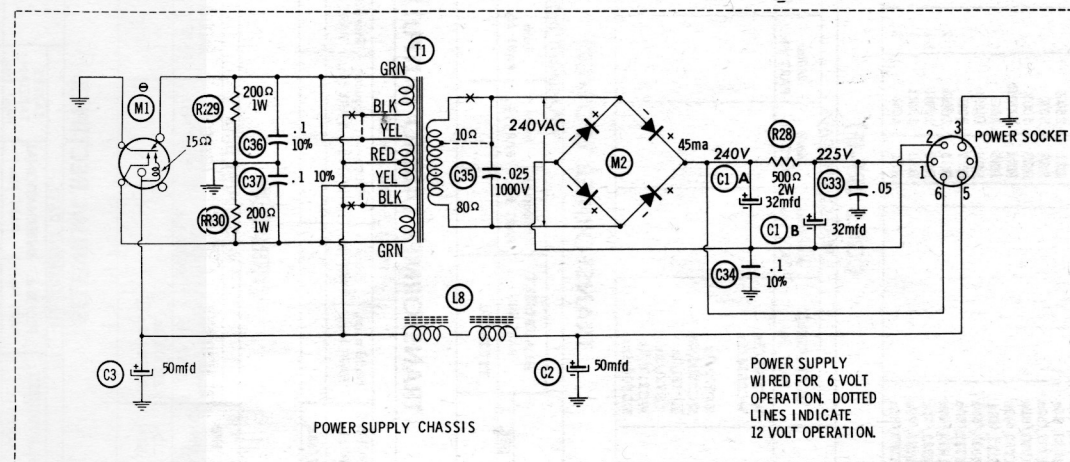
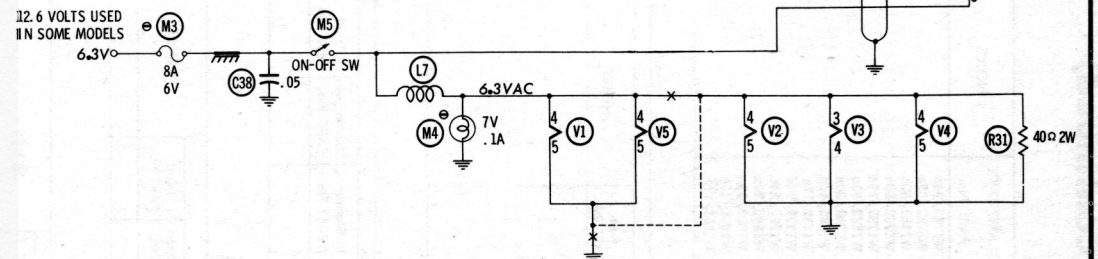


RESISTANCE READINGS

ITEM	TUBE	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
V1	EF89	0Ω	2.3meg	0Ω	.5Ω	0Ω	0Ω	†7100Ω	†100K	0Ω
V2	ECH81	†30K	2.3meg	0Ω	.5Ω	0Ω	†5500Ω	50K	†31K	50K
V3	EF89	0Ω	1.3meg	0Ω	.5Ω	0Ω	0Ω	†5500Ω	†100K	0Ω
V4	EBC91	1.5meg	0Ω	.5Ω	0Ω	350K	500K	†300K		
V5	EL84	500K	500K	0Ω	.5Ω	0Ω	NC	†440Ω	NC	†500Ω

† MEASURED FROM OUTPUT OF M1
 NC NO CONNECTION

- DC voltage measurements taken with vacuum tube voltmeter; AC voltages measured at 1000 ohms per volt.
- Socket connections shown as bottom views.
- Measured values are from socket pin to common negative.
- Battery voltage maintained at 6.3 volts for voltage readings.
- Nominal tolerance on component values makes possible a variation of ±15% in voltage and resistance readings.
- Volume control at maximum, no signal applied for voltage measurements.



POWER SUPPLY
 WIRED FOR 6 VOLT
 OPERATION. DOTTED
 LINES INDICATE
 12 VOLT OPERATION.

SEE PARTS LIST FOR ALTERNATE
 VALUE OR APPLICATION

DC COIL RESISTANCE VALUES UNDER ONE OHM
 NOT SHOWN ON SCHEMATIC DIAGRAM