

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	480KC (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.					

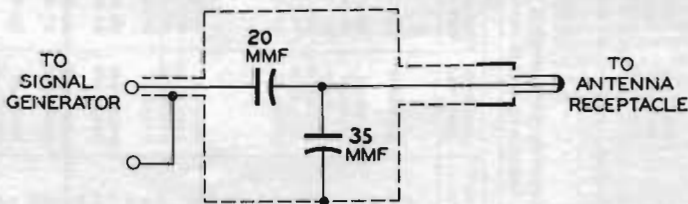


FIG. 1

**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)

# CHASSIS—TOP VIEW

ITEM No.	USE	TYPE	USE	TYPE
V1	RF Amplifier	EF89/6DA6	Det. - AVC - AF Amp.	6BQ5
V2	Mixer-Osc.	EC8B/6AJ8	Output	
V3	IF Amplifier	EF89/6DA6		

Ⓛ 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.	MALLORY PART No.	
C1A	32 385	KO76/24X	BPR50V50	BBR50-25	TC29	R2600 *
C2	32 385	KO742/9n	PR52SV50	BBR50-25	TC29	MT-0250
C3	50 18	KO742/9n	PR52SV50	BBR50-25	TC29	MT-0250
C4	50 15	KO748/9n	PR52SV50	BBR50-25	TC29	MT-0250

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

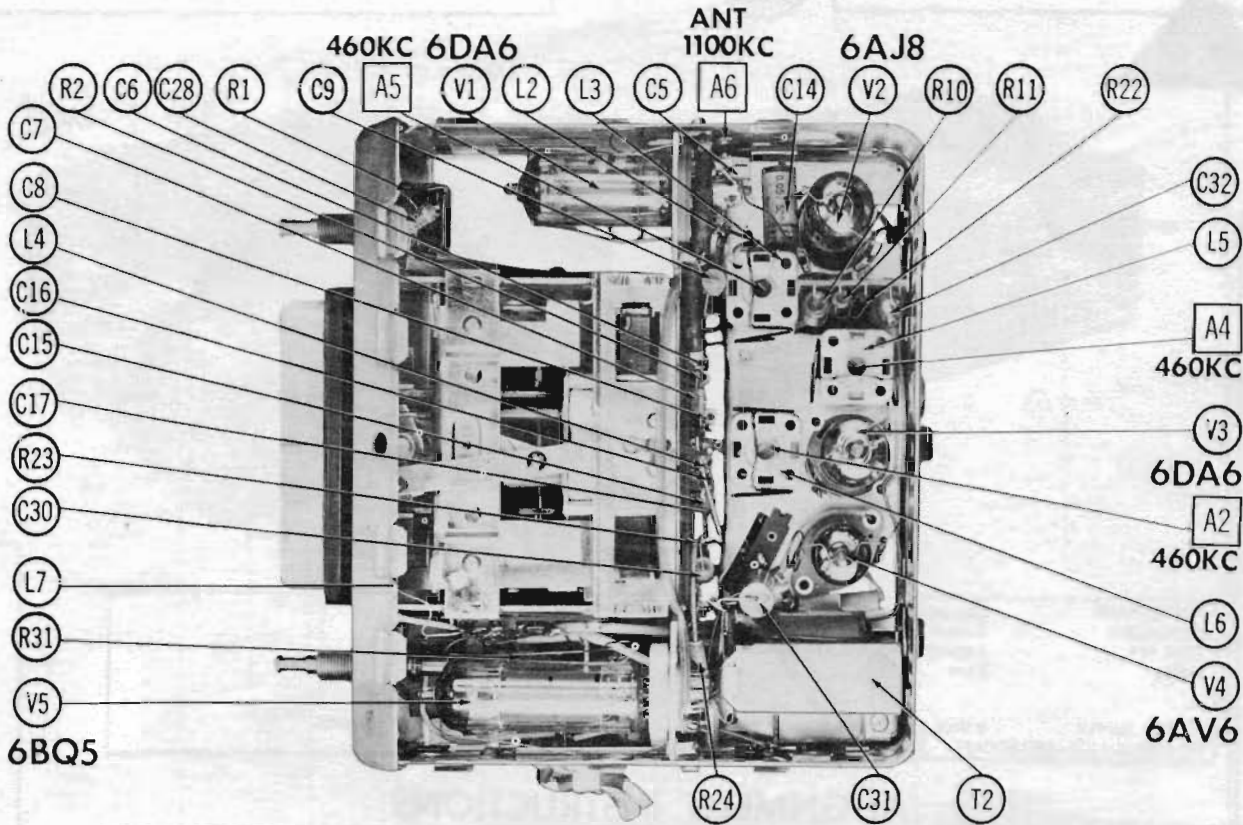
## FIXED CAPACITORS

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.	CORNELL-DUBILIER PART No.	MALLORY PART No.	
C5	10-60	TK6/15X	BPD-0005	DD-501	UC-535	5GA-T5
C6	40	KO842/67n	P868N-01	D6-103	GEM-611	6TM-SI
C7	500	KO842/73n	P868N-01	D6-103	GEM-611	6TM-SI
C8	65	KO792/41n	P868N-01	D6-103	GEM-611	6TM-SI
C9	.01	KO792/41n	P868N-01	D6-103	GEM-611	6TM-SI
C10	.01	KO792/41n	P868N-01	D6-103	GEM-611	6TM-SI
C11	.05	KO788/66n	P288N-05	DF-503	GEM-415	2TM-S5
C12	100	KO844/74n	NPO-SI 100	TCZ-100	CTAWTIC	5TCC-Q1
C13	50	KO845/51n	NPO-SI 50	TCZ-50	CTA6Q5C	5TCC-Q5
C14	.05	KO792/41n	P868N-05	DF-503	GEM-615	6TM-S5
C15	480	KO103/362	P868N-05	DF-503	GEM-615	6TM-S5
C16	35	KO103/72	P868N-05	DF-503	GEM-615	6TM-S5
C17	480	KO809/72n	P868N-05	DF-503	GEM-615	6TM-S5
C18	30	KO843/50n	P868N-05	DF-503	GEM-615	6TM-S5
C19	.01	KO792/41n	NPO-SI 1.0	TCZ-1	GEM-611	6TM-SI
C20	1	KO841/2n	P868N-005	D6-502	GEM-625	5TCCB-V1
C21	.005	KO792/67n	P868N-01	D6-103	GEM-611	6TM-SI
C22	.01	KO845/57n	P868N-005	D6-502	GEM-625	6TM-D5
C23	90	KO792/67n	P868N-005	D6-502	GEM-625	6TM-D5
C24	.005	KO792/67n	P868N-005	D6-502	GEM-625	6TM-D5
C25	.005	KO792/67n	P868N-005	D6-502	GEM-625	6TM-D5
C26	.1	KO845/51n	NPO-SI 50	L10Q5	ZT-545	5TCC-Q5
C27	50	KO845/51n	P488N-005	D6-502	GEM-625	6TM-D5
C28	.005	KO792/67n	P488N-005	D6-502	GEM-625	6TM-D5
C29	90	KO845/57n	P488N-005	D6-502	GEM-625	6TM-D5
C30	.01	KO792/41n	P1088N-005	D6-103	GEM-611	6TM-SI
C31	.005	KO778/66n	P1088N-005	D6-103	GEM-611	6TM-SI
C32	.05	KO792/48n	P868N-05	DF-503	GEM-615	10TM-D5
C33	.05	KO784/48n	P868N-05	DF-503	GEM-615	6TM-S5
C34	.1	KO770/66n	P1088N-025	DF-503	GEM-615	6TM-S5
C35	.025	KO802/49n	P488N-025	DF-503	GEM-201	6TM-S5
C36	.1	KO788/67n	P488N-025	DF-503	GEM-201	6TM-S5
C37	.1	KO788/67n	P488N-025	DF-503	GEM-201	6TM-S5
C38	.05	KO788/67n	P488N-025	DF-503	GEM-415	4TM-S5

## CONTROLS

ITEM No.	RATING RESIST. ANCE	REPLACEMENT DATA				INSTALLATION NOTES
		BLAUPUNKT PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	MALLORY PART No.	
R1A	Watts	WT749/15X				Volume Tone
R1B	Switch					



# PARTS LIST AND DESCRIPTIONS (Continued)

## RESISTORS

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

ITEM No.	RATING		BLAUPUNKT PART No.	NOTES	BLAUPUNKT PART No.	NOTES
	OHMS	WATT				
R2	100K		W1782/70n		W1782/64n	
R3	100K		W1782/65n		W1782/85n	
R4	100K		W1782/70n		W1782/80n	
R5	5000Ω		W1782/90n		W1782/80n	
R6	100K		W1782/65n		W1782/77n	
R7	30K		W1782/62n		W1782/65n	
R8	50K		W1782/65n		W1782/60n	
R9	1000Ω		W1782/40n		W1782/40n	
R10	30K	2	W1812/62n		W1782/17n	
R11	5000Ω	1	W1802/50n		W1793/24n	
R12	100K	1	W1782/70n		W1782/25n	
R13	5000Ω	1	W1802/50n		W1793/24n	
R14	100K		W1782/70n		W1802/29n	
R15	250K		W1782/77n		W1802/29n	
R16	100K		W1782/85n		W1858/17n	

## COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA			NOTES
		BLAUPUNKT PART No.	Meissner PART No.	Miller PART No.	
L1	Antenna Coil	WC2199/2z			
L2	Antenna Coil	WC2204/2z			
L3A	IF Trap	ZF723/1z			
L4	RF Choke	WC2205/2z			
L5	Osc. Coil	ZF721/1z			
L6	Input IF	ZF721/1z			
L7	Output IF	WC2115/1z			
L8	IF Choke	ED706/1z			
	"A" Lead Choke				

## TRANSFORMER (POWER)

ITEM No.	RATING	REPLACEMENT DATA			NOTES
		BLAUPUNKT PART No.	Hallidorton PART No.	Meritt PART No.	
T1	8V 240V ③ LA ④ .045A	TF722/10z			

## TRANSFORMER (AUDIO OUTPUT)

ITEM No.	TURNS RATIO	REPLACEMENT DATA			NOTES
		BLAUPUNKT PART No.	Hallidorton PART No.	Meritt PART No.	
T2	30 : 1	TF27/62z			

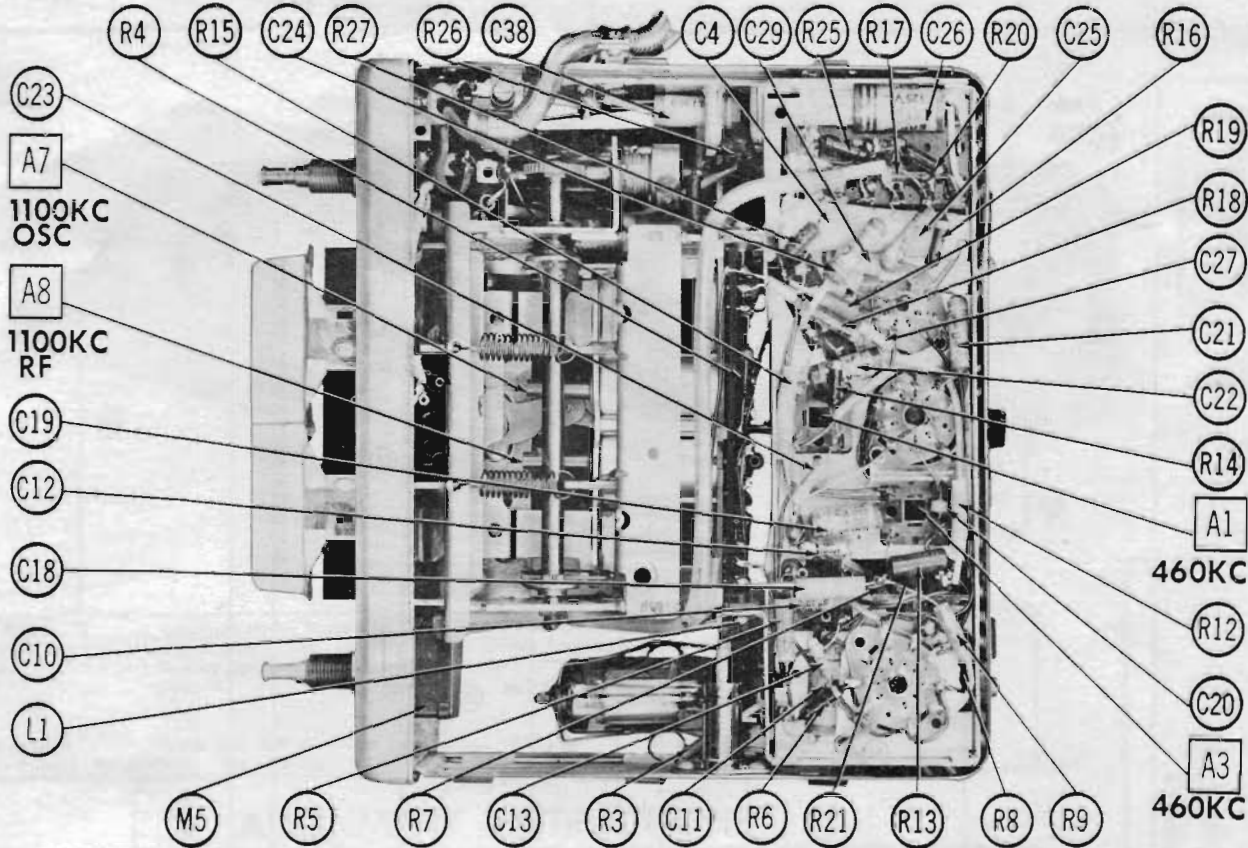
## VIBRATOR

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

## SELENIUM RECTIFIER

ITEM No.	RATING CURRENT (Measured)	REPLACEMENT DATA		NOTES
		BLAUPUNKT PART No.	SARKES INTERNATIONAL PART No.	
M2	.045A	XZ737/2z	61-1345	

# CHASSIS—BOTTOM VIEW



# PARTS LIST AND DESCRIPTIONS (Continued)

## FUSES

ITEM No.	TYPE	RATING	REPLACEMENT DATA			
			BLAUDPUNKT PART No.	LITTELFUSE PART No.	BUSS PART No.	HOLDER
M3		8A, 6V	SG704/1X *	FAT41/9n		
* Part #SG704/3n used in 12 Volt versions.						

## MISCELLANEOUS

ITEM No.	PART NAME	BLAUDPUNKT PART No.	NOTES
M4	Lamp	GL701/1x	TV, 1.1A (6 Volt Versions)
	Switch	GL701/2x	14V, 0.1A (12 Volt Versions)
M5	Plug Socket	SH825/1x	Power On-Off
		SE718/1x	Connecting Cable
	Printed Board	FAT1V/1x	Connecting Cable
		PT4021/1z	

## CABINETS & CABINET PARTS

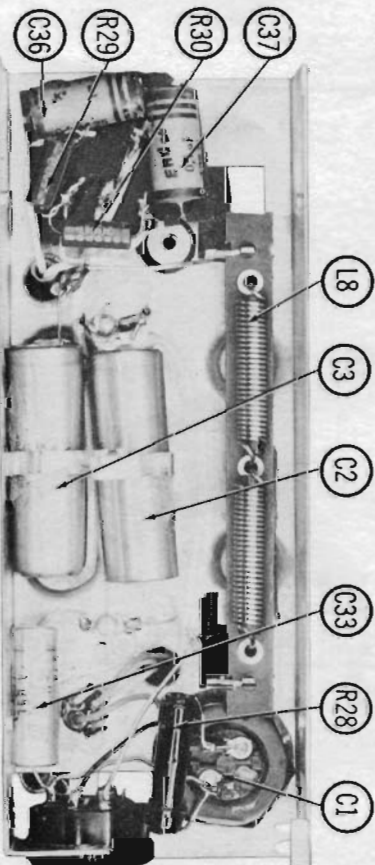
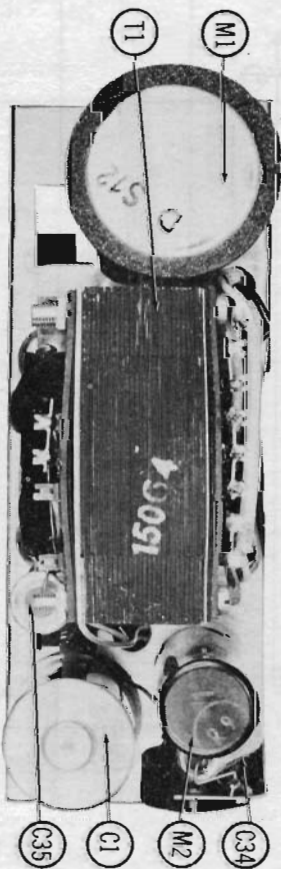
(When Ordering Cabinets & Cabinet Parts, Specify Model, Chassis & Color)

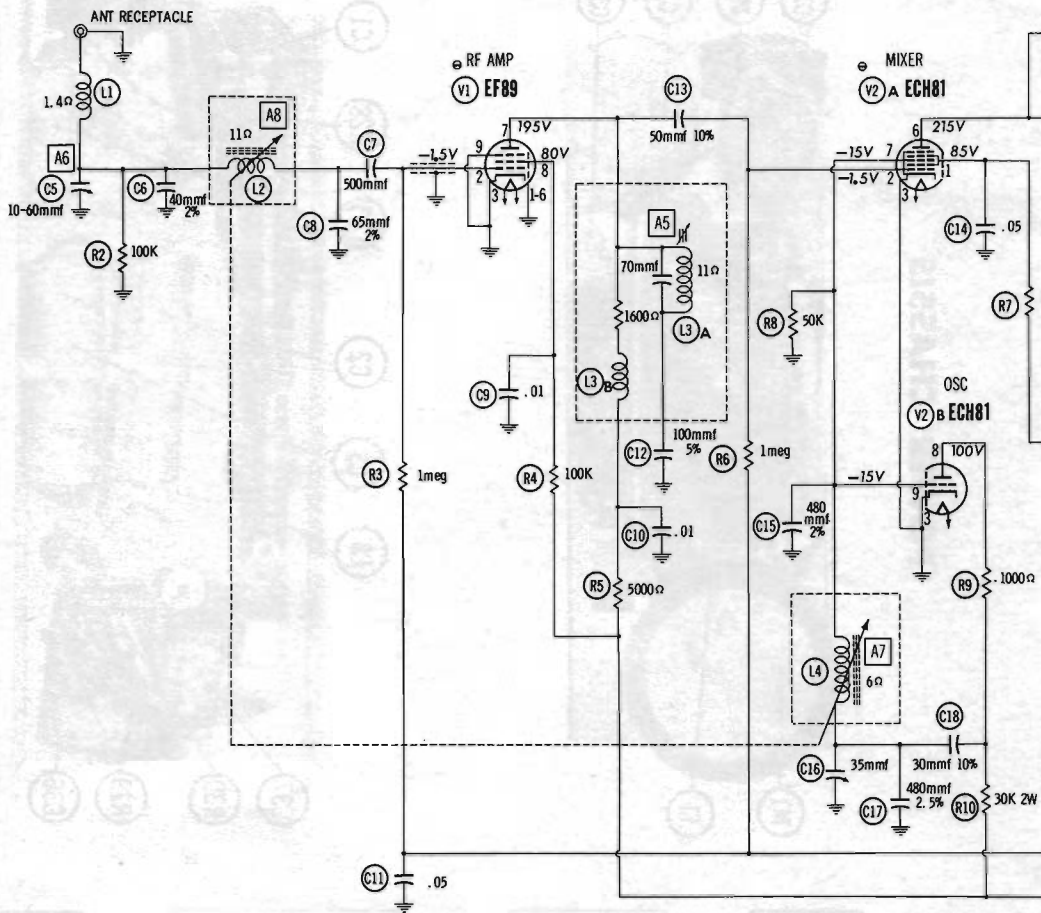
NAME	PART NO.	DESCRIPTION
Pushbutton	KF792/6z	On, Includes Rubber Gasket
Pushbutton	KF792/5z	Off, Includes Rubber Gasket
Pushbutton Set	EY156/18z	
Cabinet	MG830/1z	Power Supply
Cabinet Casing	MG840/3z	Radio, Includes Bussing Type Capacitor
Cover	MG831/2x	Power Supply
Front Plate	MG819/3z	Radio
Top Plate	MG820/3x	Radio
Bottom Plate	MG791/11x	Radio
Dial	SZ2186/3x	
Dial	SO2180/9z	Includes Reflector

## WIRING DATA

General-use Unshielded Hook-up Wire ..... Use Belden No. 8530 (Solid) Available in Ten Colors  
 Shielded Hook-up Wire ..... Use Belden No. 8524 (Stranded) Available in Ten Colors  
 Bonding Strap ..... Use Belden No. 9881

## POWER CHASSIS





RESISTANCE READINGS

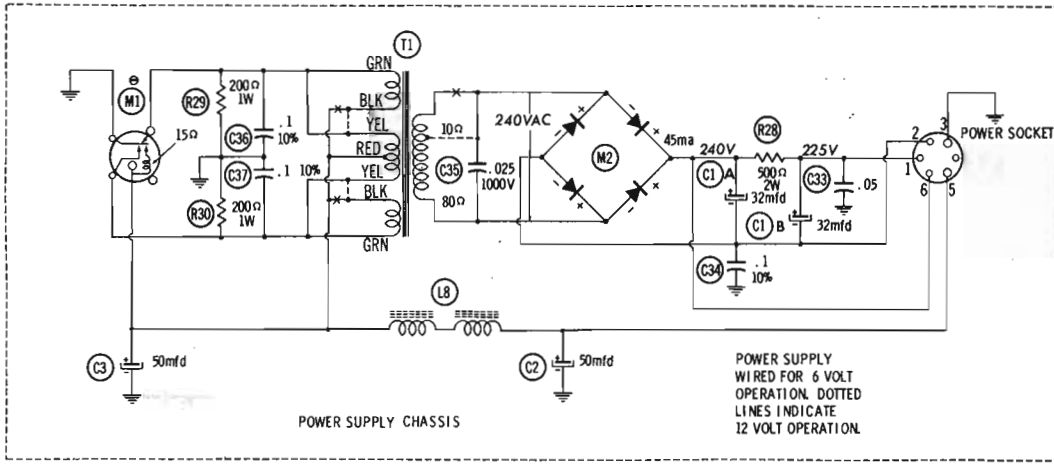
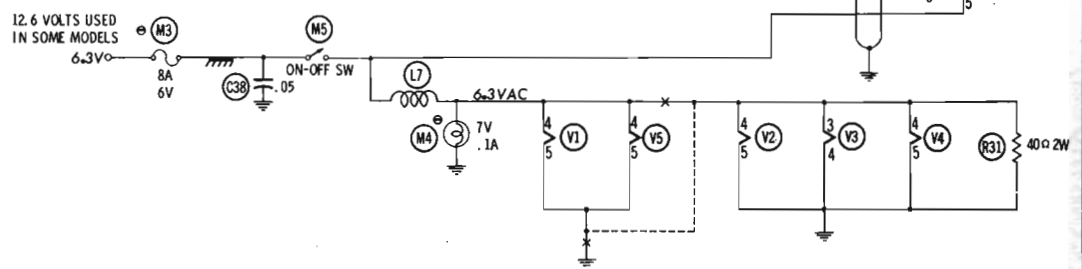
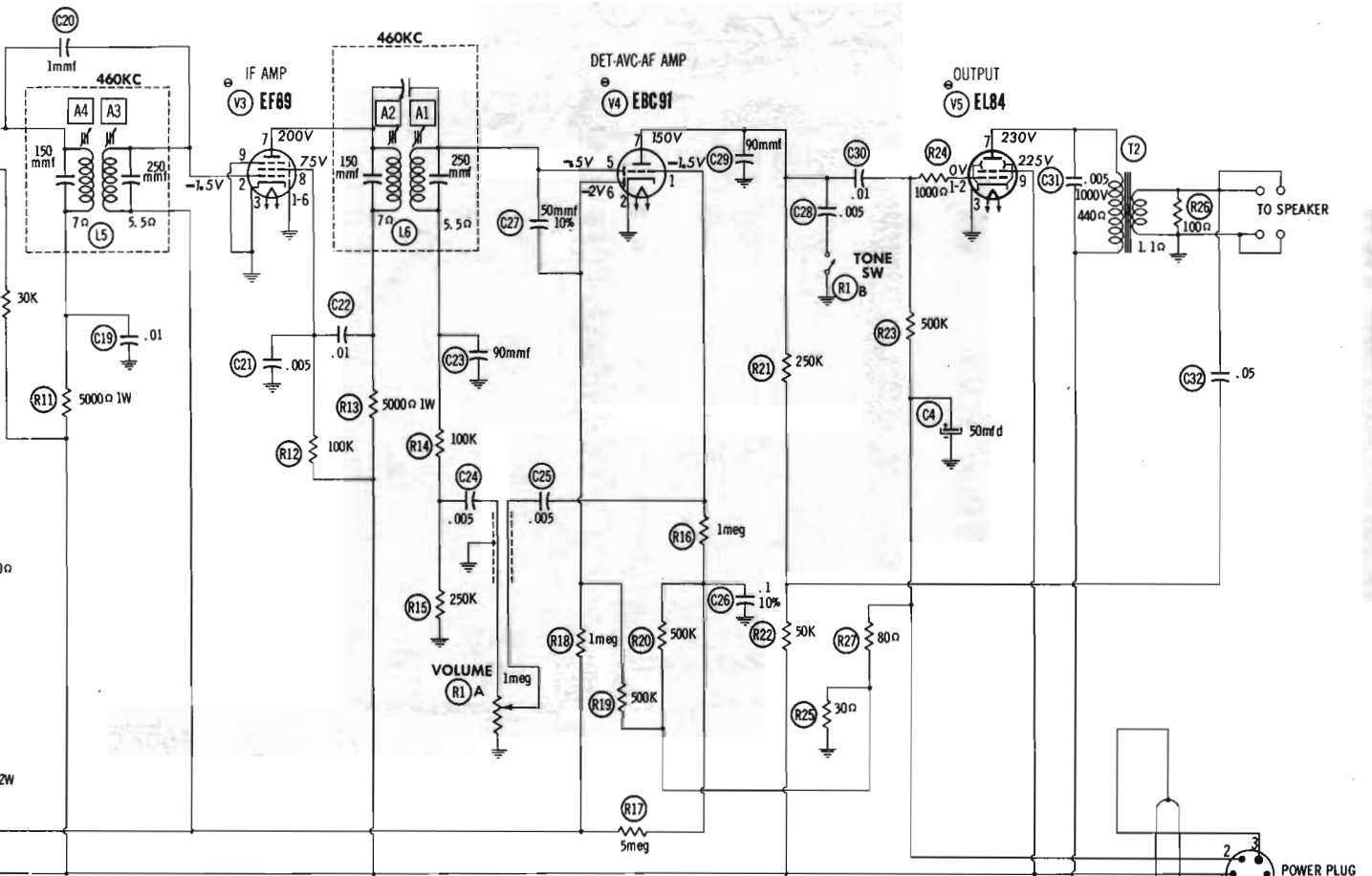
ITEM	TUBE	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
V1	EF89	0Ω	2.3meg	0Ω	.5Ω	0Ω	0Ω	†7100Ω	†100K	0Ω
V2	ECH81	†30K	2.3meg	0Ω	.5Ω	0Ω	†5500Ω	50K	†31K	50K
V3	EF89	0Ω	1.3meg	0Ω	.5Ω	0Ω	0Ω	†5500Ω	†100K	0Ω
V4	EBC91	1.5meg	0Ω	.5Ω	0Ω	350K	500K	†300K		
V5	EL84	500K	500K	0Ω	.5Ω	0Ω	NC	†440Ω	NC	†500Ω

† MEASURED FROM OUTPUT OF M1  
 NC NO CONNECTION

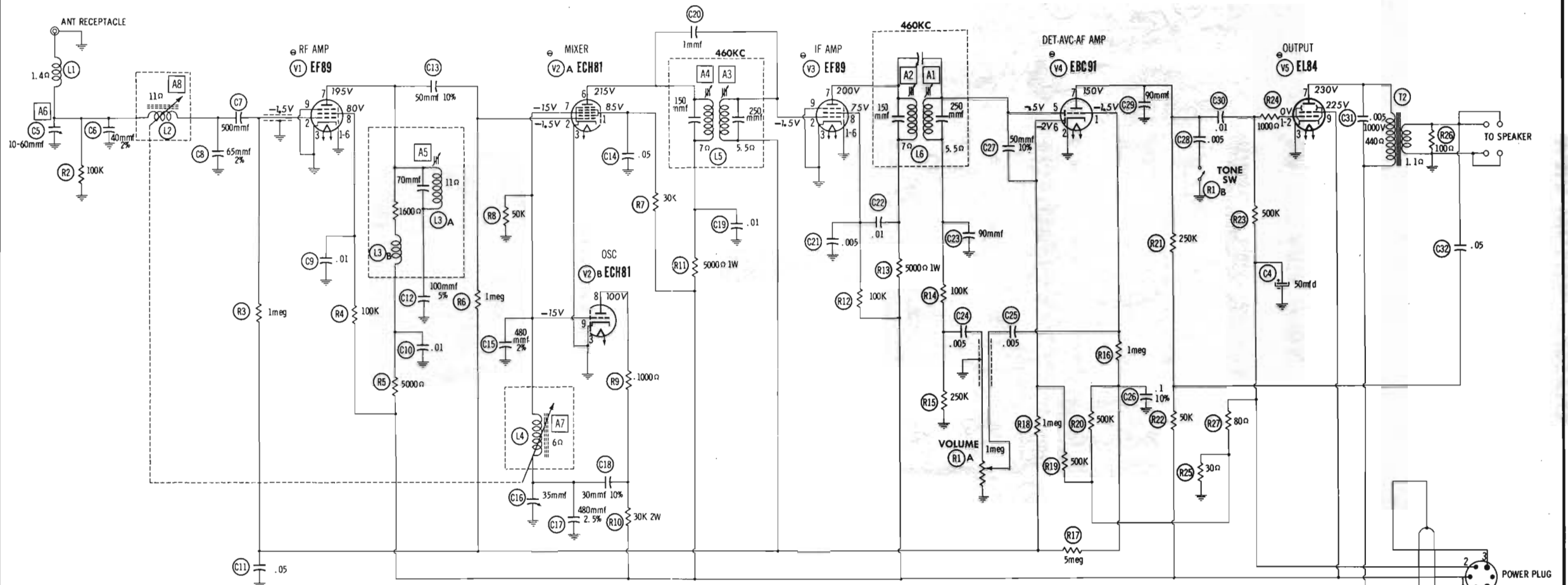
- DC voltage measurements taken with vacuum tube voltmeter ; AC voltages measured at 1000 ohms per volt.
- Socket connections shown as bottom views.
- Measured values are from socket pin to common negative.
- Battery voltage maintained at 6.3 volts for voltage readings.
- Nominal tolerance on component values makes possible a variation of ±1.5% 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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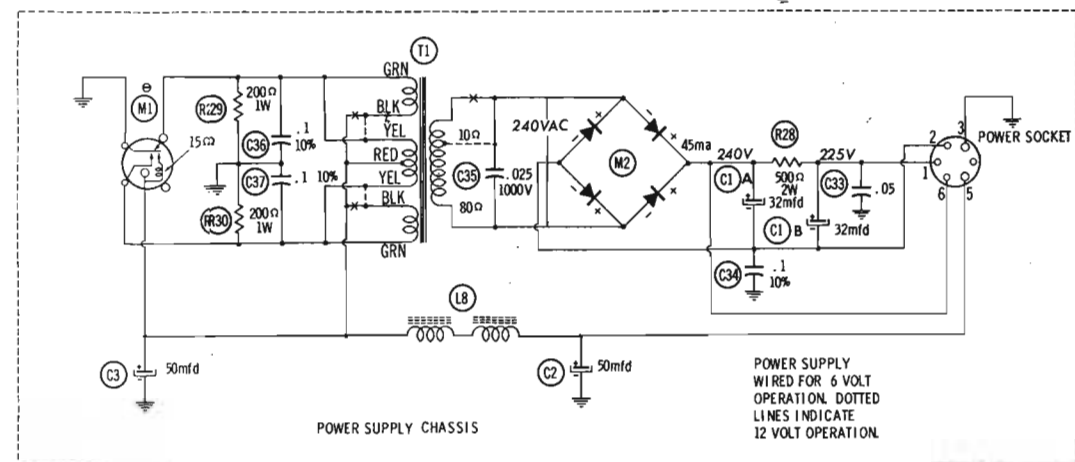
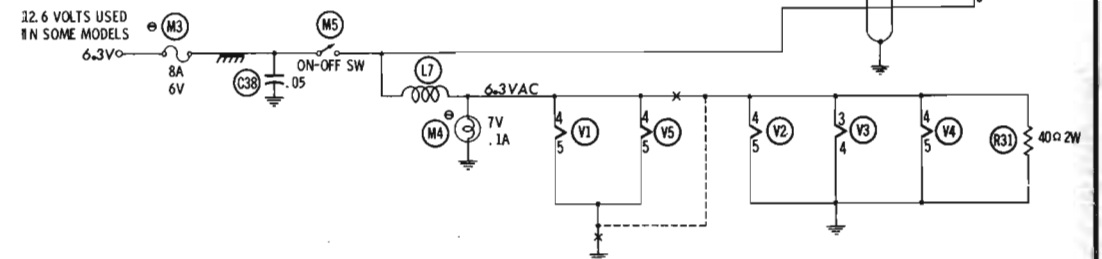


RESISTANCE READINGS

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	17100Ω	1100K	0Ω
V2	ECH81	130K	2.3meg	0Ω	.5Ω	0Ω	15500Ω	50K	131K	50K
V3	EF89	0Ω	1.3meg	0Ω	.5Ω	0Ω	0Ω	15500Ω	1100K	0Ω
V4	EBC91	1.5meg	0Ω	.5Ω	0Ω	350K	500K	1300K		
V5	EL84	500K	500K	0Ω	.5Ω	0Ω	NC	1440Ω	NC	1500Ω

† 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