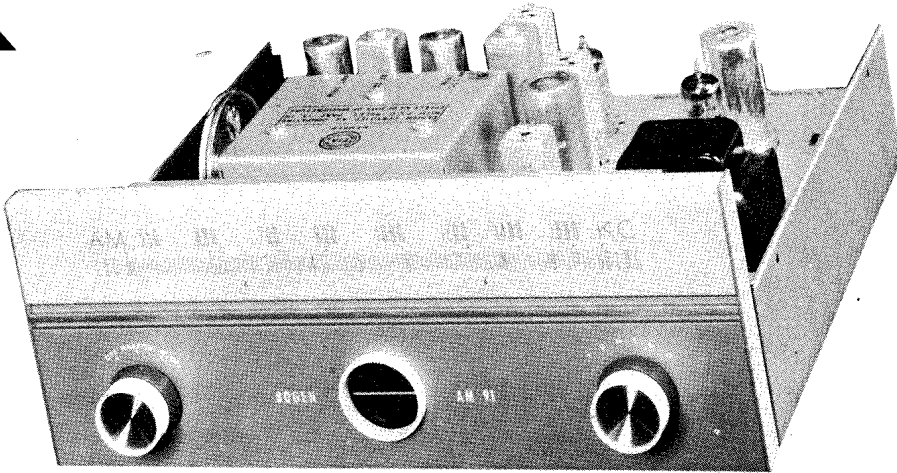




**BOGEN MODEL  
AM91**



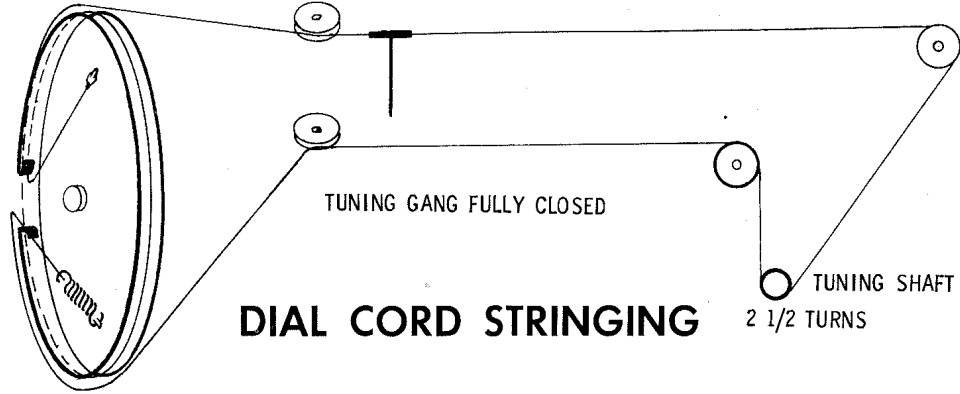
**BOGEN MODEL  
AM91**

TRADE NAME	Bogen Model AM91		
MANUFACTURER	Bogen-Presto Co., A Div. of the Siegler Corp., P. O. Box 500, Paramus, N. J.		
TYPE SET	AC Operated 6 Tube AM Tuner		
POWER SUPPLY	110-120 Volts AC, 60 Cycles	RATING	26 Watts, .28 Amp. @ 117 Volts AC
TUNING RANGE—BROADCAST	520 - 1650KC		

**ALIGNMENT INSTRUCTIONS**

ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT							
Set selector to Wide Band Position.							
Suggested Alignment Tools: A1 thru A4, A10 ..... GENERAL CEMENT #5097, 8727 WALSCO #2515							
A5, A6 ..... GENERAL CEMENT #8282, 8606, 8606L, 9295 WALSCO #2526, 2543, 2544, 2545							
A7, A8, A9 ..... GENERAL CEMENT #5004, 5008, 5009 WALSCO #2520							
	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	RADIO DIAL SETTING	CONNECT SCOPE	ADJUST	REMARKS
1.	High side thru .01mfd to pin 7 (grid) of Converter. Low side to chassis.	455KC (20KC Swp.)	Not used	Tuning gang fully open	Vert. Amp. thru 10K to point A. Low side to chassis.	A1, A2, A3, A4	Adjust for symmetrical flat-top response of maximum amplitude.
2.	High side to antenna terminal. Low side to chassis.	600KC (20KC Swp.)	Not used	600KC	"	A5, A6	"
3.	"	1500KC	Not used	1500KC	"	A7, A8, A9	Adjust for symmetrical flat-top response of maximum amplitude. Repeat steps 2 & 3.
4.	High side to point $\Delta$ . Low side to chassis.	Not used	10KC	Point of non-interference	Use VTVM. AC probe to output jack. Common to chassis.	A10	Adjust for MINIMUM deflection.

**BOGEN MODEL  
AM91**



**DIAL CORD STRINGING**

**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 JH413

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# PARTS LIST AND DESCRIPTIONS TUBES

ITEM No.	USE	TYPE	GENERAL ELECTRIC		RAYTHEON		SYLVANIA	
			ITEM No.	USE	ITEM No.	USE	ITEM No.	TYPE
V1	RF Amplifier	6BA6	V4	Det. - AVC - Cath. Foll. Tuning Indicator				ECC81/2A17
V2	Converter	6BE6	V5	Rectifier				EM84 (EM840) *
V3	IF Amplifier	6BA6	V6					6X4

\* Alternate

## ELECTROLYTIC CAPACITORS

ITEM No.	RATING	REPLACEMENT DATA							
		CAP.	VOIT.	BOGEN PART No.	AEROVOX PART No.	CORNEILL DUBILIER PART No.	MALLORY PART No.	PYRAMID PART No.	SPRAGUE PART No.
C1A	10	250	C-543	AFH3-18	C0140	FP231.3	TMT-18	TYL-3639.8	
B	420	250				TC47			
C	30	250							

## FIXED CAPACITORS

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

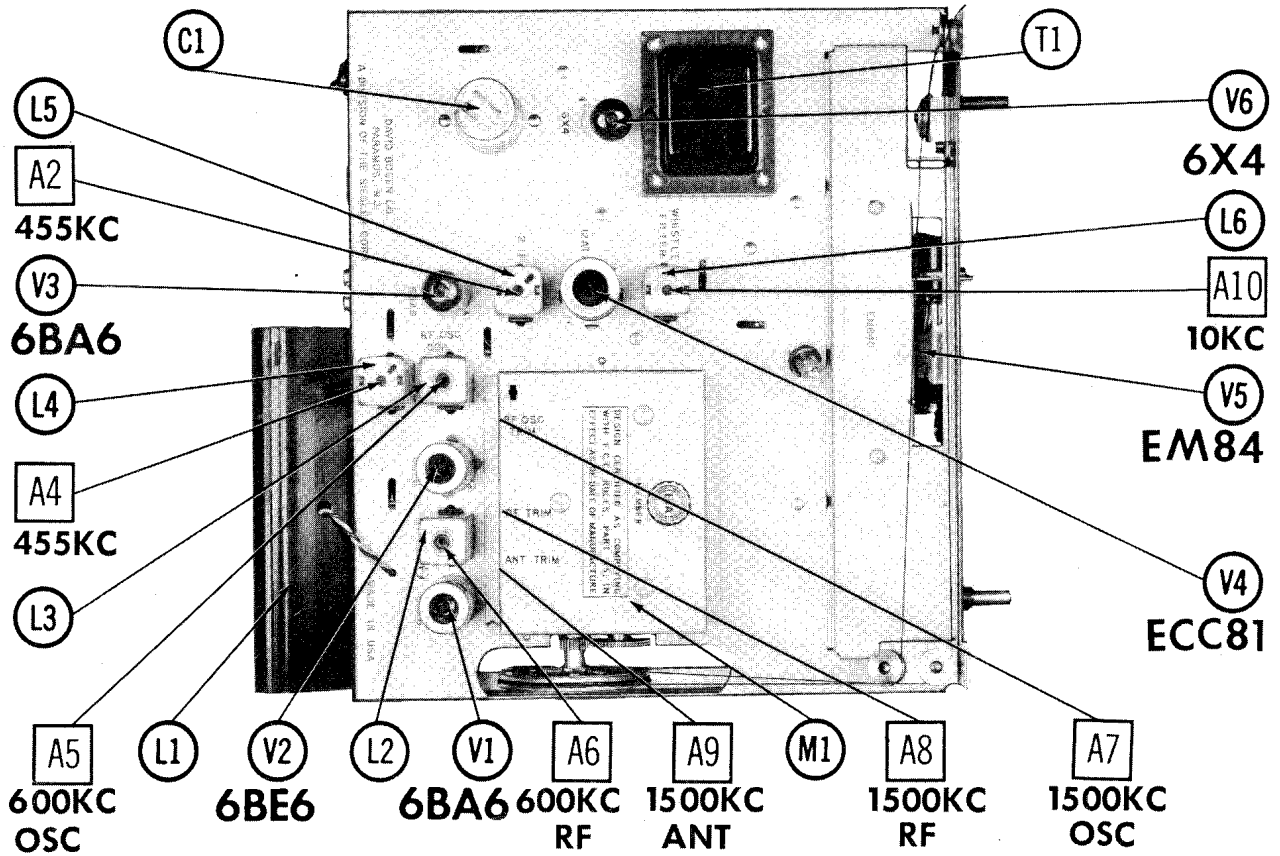
ITEM No.	RATING	REMARKS	REPLACEMENT DATA							
			AEROVOX PART No.	CENTRALAB PART No.	CORNEILL DUBILIER PART No.	ELMENCO PART No.	MALLORY PART No.	SPRAGUE PART No.		
C2	1.2 10%		N750-DI 15	DTN-15	C10Q15U	CCTN-150	CN7-415	10TCC-V12		
C3	15 N750 10%		DI-1000	DD-102	IR6D1	CCS-102	JL-210	10TCC-Q15		
C4	10000 10%		DI-22	DD-220	L10Q22	CCD-220	CNO-422	10TS-D10		
C5	22 10%		BPD-01	DD-103	BYA10S1	CCD-103	B-110	10TS-Q22		
C6	10000		NPO-DI 4.7	DTZ-4R7	C10V47C	CCTO-4R7	CNO-547	5HK-S10		
C7	4.7 NPO 10%		P268N-047	DF-503	CUB2S47	4DP-3-473	GEM-4147	10TCC-Q68		
C8	.047 200V		NPO-DI 6.8	DTZ-6R8	C10V68C	CCTO-6R8	CNO-588	2TM-S47		
C9	6.8 NPO 10%		DI-47	DD-470	L10Q47	CCD-470	CN7-Q47	10TCC-V18		
C10	1.8 10%		N750-DI 15	DTN-15	C10Q15U	CCTN-150	CN7-415	10TS-Q47		
C11	47 10%		BPD-01	DD-103	BYA10S1	CCD-103	B-110	5HK-S10		
C12	15 N750 10%		DI-4700	DD-103	BYA10S1	CCD-103	JL-247	10TS-D47		
C13	10000		BPD-01	DD-103	BYA10S1	CCD-103	B-110	5HK-S10		
C14	4700 10%		BPD-01	DD-103	BYA10S1	CCD-103	JL-247	10TS-D47		
C15	10000		DI-4700	DD-103	BYA10S1	CCD-103	B-110	5HK-S10		
C16	10000		BPD-01	DD-103	BYA10S1	CCD-103	JL-247	10TS-D47		
C17	4700 10%		BPD-01	DD-103	BYA10S1	CCD-103	B-110	5HK-S10		
C18	10000		DI-4700	DD-103	BYA10S1	CCD-103	JL-247	10TS-D47		
C19	10000		BPD-01	DD-103	BYA10S1	CCD-103	B-110	5HK-S10		
C20	4700 10%		DI-1200	DD-122	IR6D12	CCS-122	JL-212	10TS-D12		
C21	1200 10%		P268N-1	DF-104	CUB2P1	4DP-3-104	GEM-201	2TM-P1		
C22	.1 200V		NPO-DI 4.7	DTZ-4R7	C10V47C	4DP-3-473	GEM-4147	2TM-S47		
C23	.047 200V		BPD-01	DD-103	BYA10S1	CCD-103	B-110	5HK-S10		
C24	10000		P688N-047	DF-503	CUB6S47	6DP-3-473	GEM-6147	6TM-S47		
C25	.047 600V									

## RESISTORS

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

ITEM No.	RATING	REMARKS	ITEM No.	RATING	REMARKS	ITEM No.	RATING	REMARKS
R1	1meg		R9	3.3meg		R17	1meg	
R2	1200Ω		R10	330K		R18	2.2meg	
R3	3.3meg		R11	100K		R19	470K	
R4	22K		R12	470K		R20	1000Ω 7W	
R5	1500Ω		R13	1000Ω		R21	1500Ω 7W	
R6	220Ω		R14	1000Ω		R22	68Ω	
R7	330Ω		R15	10K				
R8	100Ω		R16	10K				

## CHASSIS—TOP VIEW



# PARTS LIST AND DESCRIPTIONS (Continued)

## COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA						NOTES
		BOGEN PART No.	Gramer PART No.	Meissner PART No.	Merit PART No.	Miller PART No.	Ram PART No.	
L1	Loopstick	H668						
L2	RF Trans	H469	14-1410	14-1410				
L3	Osc. Coil	H454	14-1412	14-1412				
L4	Input IF	H368						
L5	Output IF	H368						
L6	10KC Filter	H627						

## TRANSFORMER (POWER)

ITEM No.	RATING	REPLACEMENT DATA					
		BOGEN PART No.	Halderson PART No.	Merit PART No.	Ram PART No.	Stancor PART No.	Triod PART No.
T1	PRI. SEC. 1 SEC. 2 117V 430VCT 6.3V @ .28A @ .095A @ 2.1A	83-511-000					

## COMPONENT COMBINATIONS

ITEM No.	USE	DESCRIPTION	BOGEN PART No.	REPLACEMENT DATA
K1	Detector RF Filter	100mmf, 100mmf, 47K	C325	Aerovox PA-97 Centralab PC-50 Cornell-Dubilier IITMI Sprague D-1

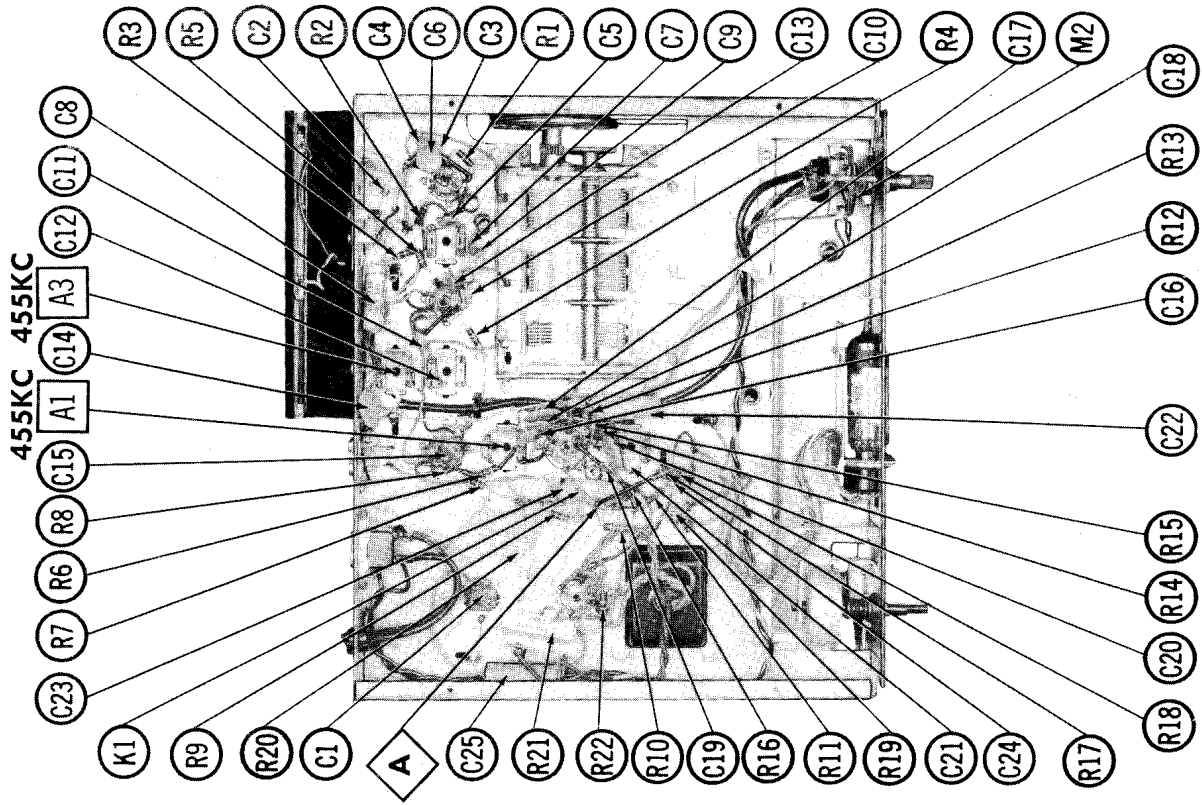
## MISCELLANEOUS

ITEM No.	PART NAME	BOGEN PART No.	NOTES
M1	Tuning Cap	C653	3 Gang (Ant. 20-542mmf, RF 20-542mmf, Osc. 22-195mmf) Off-AM Narrow Band-AM Wide Band
M2	Switch	S 635	

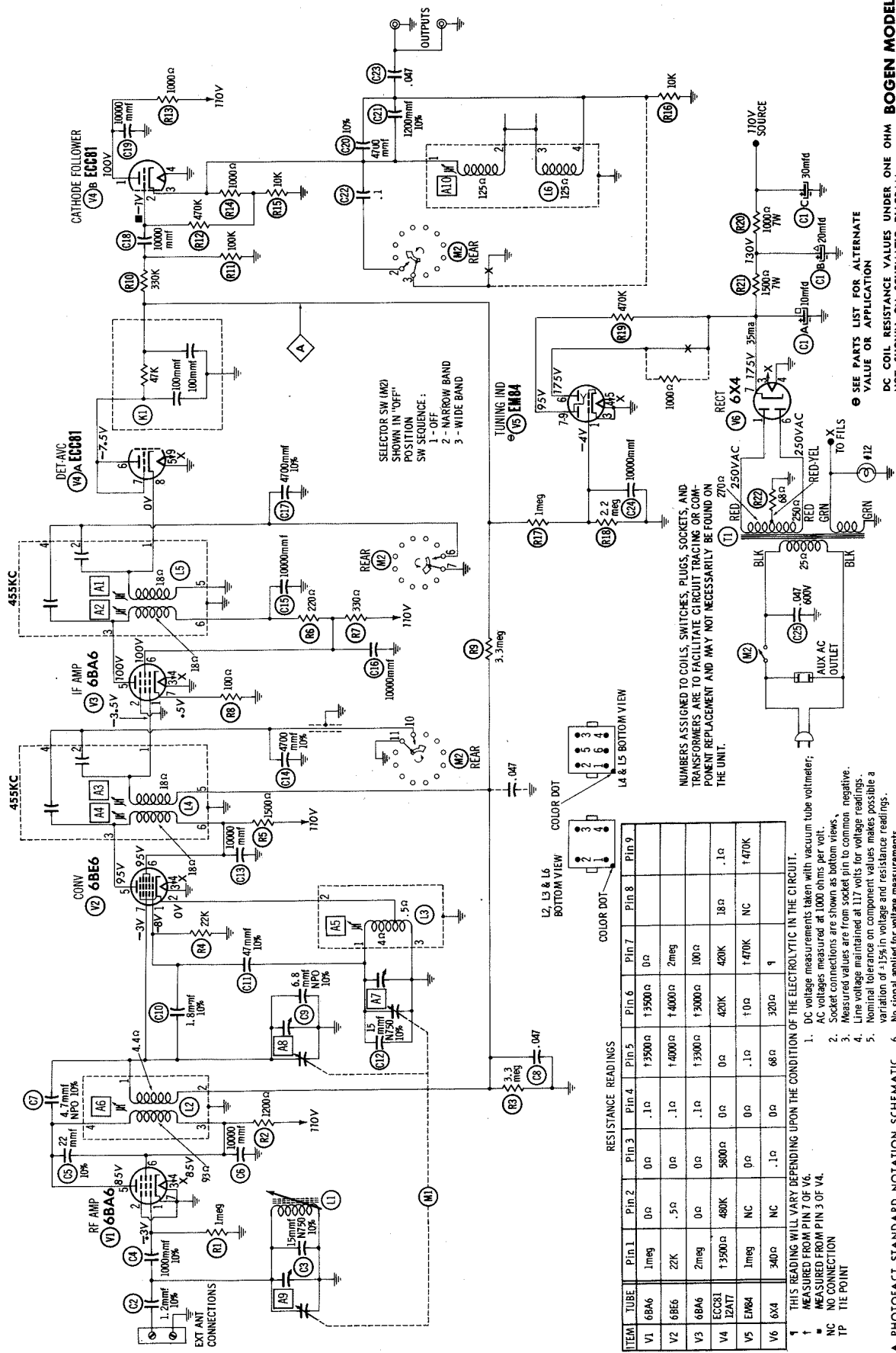
## WIRING DATA

General-use Unshielded Hook-up Wire ..... Use BELDEN No. 8530 (Solid) Available in Ten Colors  
 8524 (Stranded) Available in Ten Colors  
 Power Cord ..... Use BELDEN No. 1765-B (6 Ft. Length)  
 1725-K (7½ Ft. Length)

# CHASSIS BOTTOM VIEW



**BOGEN MODEL AM91**



RESISTANCE READINGS

ITEM	TUBE	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
V1	6BA6	1meg	0Ω	0Ω	.1Ω	13500Ω	13500Ω	0Ω		
V2	6BE6	22K	.5Ω	0Ω	.1Ω	14000Ω	14000Ω	2meg		
V3	6BA6	2meg	0Ω	0Ω	.1Ω	13500Ω	13000Ω	100Ω		
V4	ECC81	13500Ω	480K	5800Ω	0Ω	420K	420K	18Ω	.1Ω	
V5	6BA6	1meg	NC	0Ω	0Ω	.1Ω	1470K	NC	1470K	
V6	6X4	340Ω	NC	.1Ω	0Ω	68Ω	320Ω	Ω		

- THIS READING WILL VARY DEPENDING UPON THE CONDITION OF THE ELECTROLYTIC IN THE CIRCUIT.
- DC voltage measurements taken with vacuum tube voltmeter;
- AC voltages measured at 1000 ohms per volt.
- Socket connections are shown as bottom views.
- Measured values are from socket pin to common negative.
- Line voltage maintained at 117 volts for voltage readings.
- Nominal tolerance on component values makes possible a variation of ±1% in voltage and resistance readings.
- No signal applied for voltage measurements.

A PHOTOFACT STANDARD NOTATION SCHEMATIC  
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SEE PARTS LIST FOR ALTERNATE VALUE OR APPLICATION NOT SHOWN ON SCHEMATIC DIAGRAM

NUMBERS ASSIGNED TO COILS, SWITCHES, PLUGS, SOCKETS, AND TRANSFORMERS ARE TO FACILITATE CIRCUIT TRACING OR COMPONENT REPLACEMENT AND MAY NOT NECESSARILY BE FOUND ON THE UNIT.

SELECTOR SW (M2) SHOWN IN "OFF" POSITION SW SEQUENCE: 1 - OFF 2 - NARROW BAND 3 - WIDE BAND

L2, L3 & L6 BOTTOM VIEW COLOR DOT

L4 & L5 BOTTOM VIEW COLOR DOT

DC COIL RESISTANCE VALUES UNDER ONE OHM BOGEN MODEL AM91