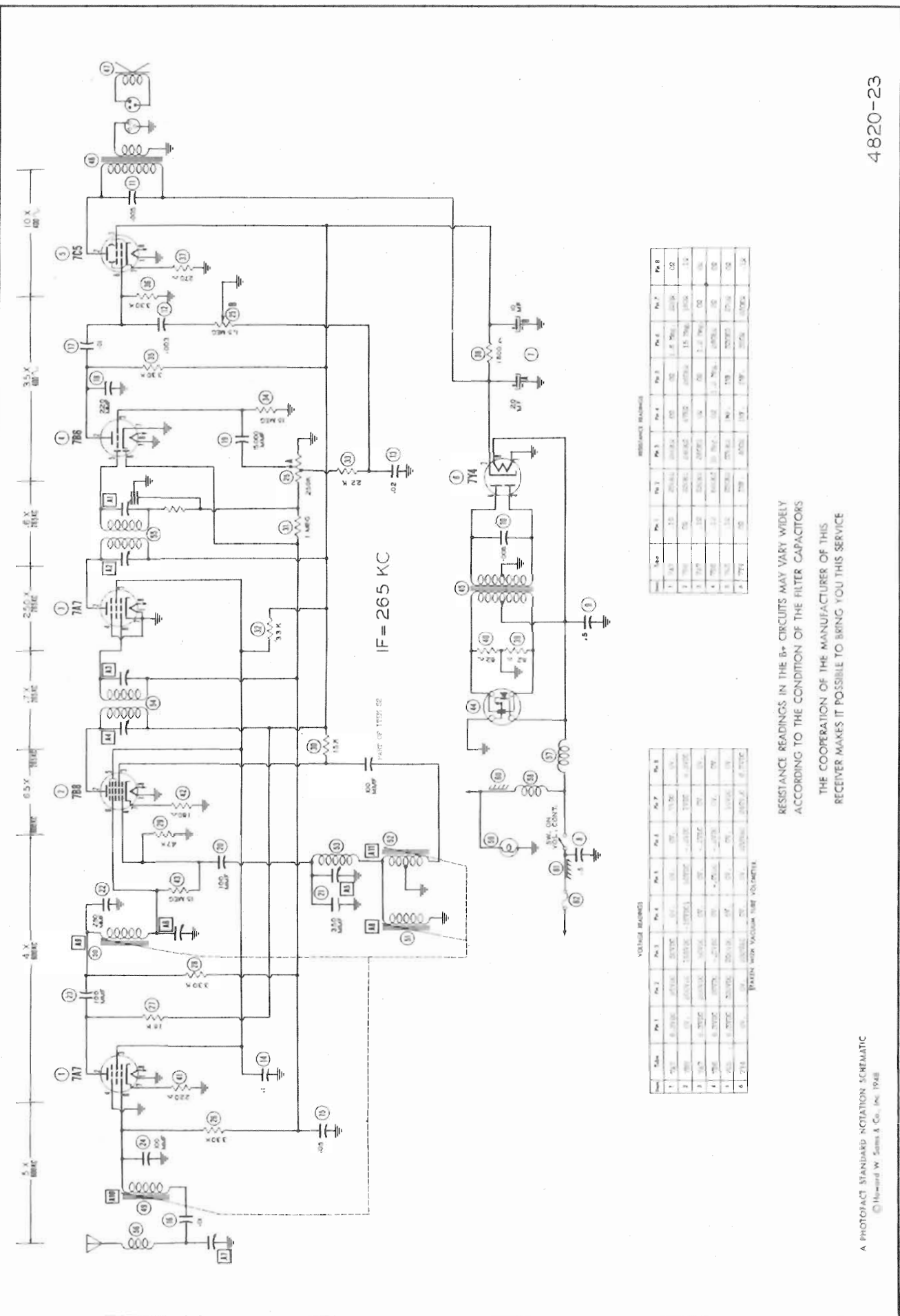


WILLYS-OVERLAND  
MODEL 8030

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MODEL 8030



4820-23

- 1 - DC Voltage measurements are at 20,000 ohms per volt; AC voltage measurements at 1000 ohms per volt.
- 2 - Socket connections are shown as bottom views.
- 3 - Measured values are from socket pin to common negative.
- 4 - Battery voltage maintained at 6.3 volts for voltage readings.
- 5 - Nominal tolerance on component values makes possible a variation of  $\pm 1.5\%$  in voltage and resistance readings.
- 6 - Volume control at maximum, no signal applied for voltage measurements.

RESISTANCE READINGS

Pin	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8
1	100K	100K	100K	100K	100K	100K	100K	100K
2	100K	100K	100K	100K	100K	100K	100K	100K
3	100K	100K	100K	100K	100K	100K	100K	100K
4	100K	100K	100K	100K	100K	100K	100K	100K
5	100K	100K	100K	100K	100K	100K	100K	100K
6	100K	100K	100K	100K	100K	100K	100K	100K
7	100K	100K	100K	100K	100K	100K	100K	100K
8	100K	100K	100K	100K	100K	100K	100K	100K

RESISTANCE READINGS IN THE B+ CIRCUITS MAY VARY WIDELY  
ACCORDING TO THE CONDITION OF THE FILTER CAPACITORS  
THE COOPERATION OF THE MANUFACTURER OF THIS  
RECEIVER MAKES IT POSSIBLE TO BRING YOU THIS SERVICE

VOLUME READINGS

Pin	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8
1	100K	100K	100K	100K	100K	100K	100K	100K
2	100K	100K	100K	100K	100K	100K	100K	100K
3	100K	100K	100K	100K	100K	100K	100K	100K
4	100K	100K	100K	100K	100K	100K	100K	100K
5	100K	100K	100K	100K	100K	100K	100K	100K
6	100K	100K	100K	100K	100K	100K	100K	100K
7	100K	100K	100K	100K	100K	100K	100K	100K
8	100K	100K	100K	100K	100K	100K	100K	100K

The stage gain measured values listed above are approximate values for an average operative stage, rather than an absolute value. It should be borne in mind that it is possible to introduce some variation into the measurement, such as, for example, the method of measuring, handling, and the actual reading of the meter. The accuracy of the measurement is approximately  $\pm 10\%$ . Connecting negative (-) 3 volts to the AVC line.

A PHOTOFACT STANDARD NOTATION SCHEMATIC  
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WILLYS-OVERLAND MODEL 8030

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	OUTPUT METER	ADJUST	REMARKS
1 .1 MFD.	High side to Pin 6 (grid) of 7B8. Low side to chassis.	265KC	Tuning control fully counter-clockwise	Across voice coil	A1, A2, A3, A4	Adjust for maximum output.
2 See pre-alignment instructions	High side to dummy antenna. Low side to chassis.	1605KC	"	"	A5, A6, A7	" " " "
3	"	1400KC	Tuner carriage 3/8" from high freq. end.	"	A8, A9, A10	Adjust for maximum output. Set dial pointer to 1400KC on dial.
4	"	600KC	Tune for maximum output.	"	All	Rock tuning control and adjust for maximum output. Repeat Steps 2, 3 and 4 until no further improvement can be made.
Follow the procedure outlined below if a core or coil has been replaced.						
5 See pre-alignment instructions	High side to dummy antenna. Low side to chassis.	1675KC	Tuning control fully counter-clockwise	Across voice coil	A5, A6, A7	Turn A5, A6, & A10 completely counter-clockwise. (Do not permit cores to drop out of coil forms). Adjust A5, A6, A7 for maximum output.
6	"	1400KC	Tuner carriage 3/8" from high freq. end.	"	A8, A9, A10	Adjust for maximum output. Set dial pointer to 1400KC on dial.
7	"	600KC	Tune for maximum output.	"	All	Rock tuning control and adjust for maximum output. Repeat Steps 5, 6 & 7 until no further improvement can be made.
8	"	1605KC	Tuning control fully counter-clockwise.	"		Band mechanical stop to limit freq. range to this frequency.

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"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 the particular type of replacement part listed."

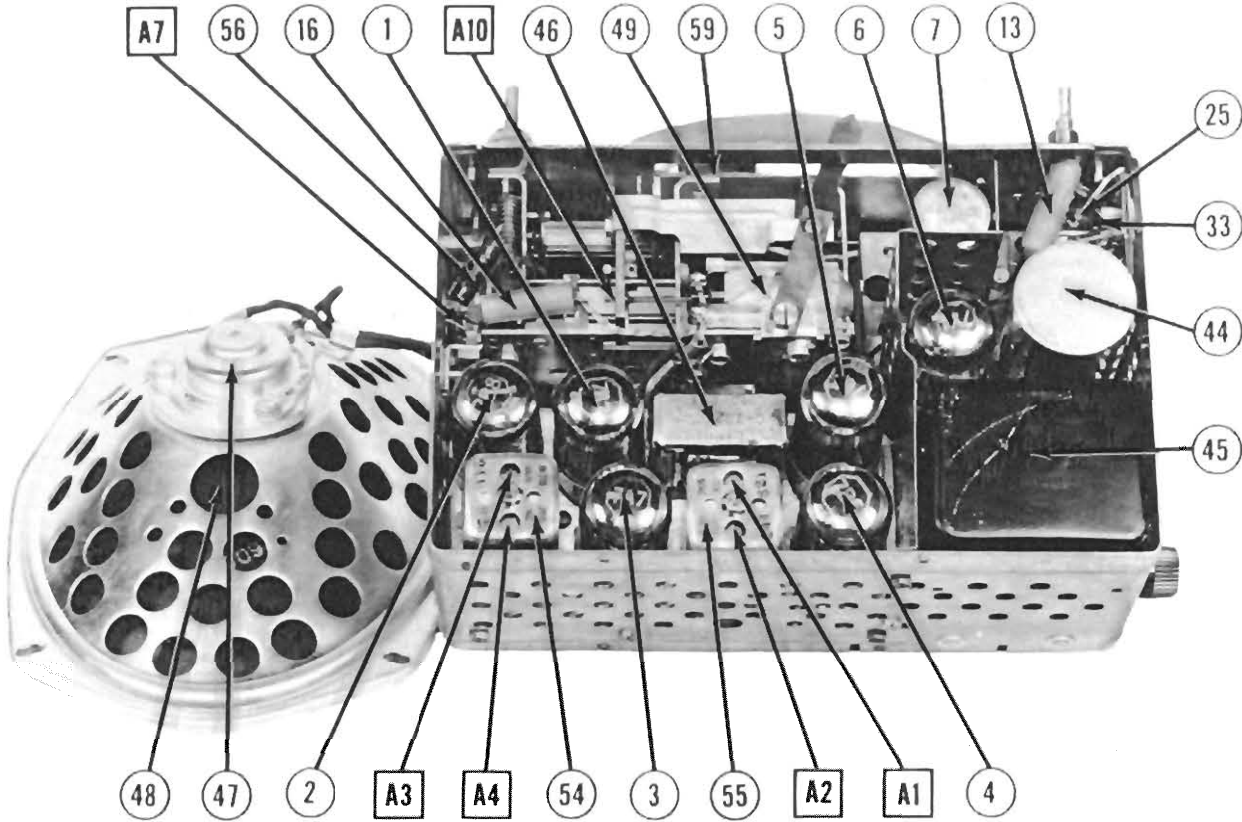
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DATE 11/48-#4810-23 SET #50-FOLDER #23

PARTS LIST AND DESCRIPTIONS  
TUBES (SYLVANIA or Equivalent)

WILLIAMS-OVERLAND  
MODEL 8030

CHASSIS—TOP VIEW



REPLACEMENT DATA				RMA BASE TYPE	INSTALLATION NOTES
ITEM No.	USE	DETROLA PART No.	STANDARD REPLACEMENT		
1	RF Amp.	7A7	7A7	8V	
2	Converter	7B9	7B9	8X	
3	IF Amp.	7A7	7A7	8V	
4	Det.-AFC-AF	7B6	7B6	8W	
5	Power Output	7C5	7C5	6AA	
6	Rectifier	7Y4	7Y4	5AB	

**CAPACITORS**

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

REPLACEMENT DATA				SPRAGUE PART No.	IDENTIFICATION CODES AND INSTALLATION NOTES
ITEM No.	RATING	DETROLA PART No.	AEROVOX PART No.	CORNELL- DUBILIER PART No.	
7A	20 CAP.		AF32K4A	UP111334	EL-2121 Filter
8	350				
9	10				
10	120				
11	100				
12	100				
13	100				
14	100				
15	100				
16	100				
17	100				
18	100				
19	100				
20	100				
21	100				
22	100				
23	100				
24	100				

Note-Items 17 and 35 are combined in one unit.  
\*Parallel sections to obtain desired capacity.  
†-Omit bypass section.

CONTROLS

REPLACEMENT DATA				INSTALLATION NOTES
ITEM No.	RATING	DETROLA PART No.	CLAROSTAT PART No.	
25A	250W	B55532-1		Volume Control & Sw. tapped @ 100KΩ

Note-This is a dual control with a concentric shaft.

RESISTORS

REPLACEMENT DATA				IDENTIFICATION CODES
ITEM No.	RATING	DETROLA PART No.	IRC PART No.	
26	500KΩ		RTS-330K	Or.-Or.-V1. RF Grid
27	18KΩ		RTS-18K	Br.-Gray-Or. RF Plate Load
28	500KΩ		RTS-330K	Br.-Gray-V1. Conv. Grid
29	47KΩ		RTS-47K	V1.-Or.-V1. Sec. Grid
30	15KΩ		RTS-15K	Br.-Or.-Or. Sec. Grid Load
31	1 Meg.		RTS-1 Meg.	Br.-Blk.-Or. AVC Network
32	22KΩ		RTS-22K	Or.-Or.-Or. Screen Dropping
33	22KΩ		RTS-22K	Red-Red-Or. Tone Comp.
34	15 Meg.		RTS-15 Meg.	Br.-Orn.-Blue AF Grid
35	500KΩ		RTS-330K	Or.-Or.-V1. AF Plate Load-See Note
36	500KΩ		RTS-330K	Or.-Or.-V1. Output Grid
37	270Ω		BM-1-270	Red-V1.-Br. Output Cathode
38	180Ω		BM-1-180	Br.-Gray-Red-Blk. Hash Suppressor
39	82Ω		BM-1-82	Gray-Red-Blk. Hash Suppressor
40	82Ω		BM-1-82	Gray-Red-Blk. Hash Suppressor
41	220Ω		BM-1-220	Red-Red-Br. RF Cathode
42	180Ω		BM-1-180	Br.-Gray-Br. Conv. Cathode
43	15 Meg.		RTS-15 Meg.	Br.-Orn.-Blue Conv. Grid

Note-Items 35 & 17 are combined in one unit.

PARTS LIST AND DESCRIPTIONS (Continued)  
VIBRATOR

REPLACEMENT DATA				INSTALLATION NOTES
ITEM No.	TYPE	INPUT VOLTS/SEC.	RADIART PART No.	
44	Interrupter	6.3V 115V DC	B-70347 5301	

TRANSFORMER (VIBRATOR)

ITEM No.	RATING				REPLACEMENT DATA			
	PRI.	SEC. 1	SEC. 2	SEC. 3	DETROLA PART No.	STANCOR PART No.	THORADSON PART No.	MERIT PART No.
45	6.3V DC	400V CT			DC-70287-C			

TRANSFORMER (OUTPUT)

RATING				REPLACEMENT DATA			INSTALLATION NOTES
ITEM No.	IMPEDANCE PRI. SEC.	DC RES. PRI. SEC.	DC RES. PRI. SEC.	DETROLA PART No.	STANCOR PART No.	THORADSON PART No.	
46	5500Ω 13.2Ω	500Ω 500Ω	500Ω 500Ω	DC-70284 A-3856*	T22846*	A-3856*	*Bend mounting tabs down.

SPEAKER

RATINGS				REPLACEMENT DATA			INSTALLATION NOTES
ITEM No.	FIELD	VC IMP.	VC DIA.	DETROLA PART No.	JENSEN PART No.	QUAM PART No.	
47	PM	8.2Ω				69A3	
48	6" x 9"	3/4"					

R F COILS

USE				REPLACEMENT DATA			INSTALLATION NOTES
ITEM No.	DC RES.	PRI.	SEC.	DETROLA PART No.	MEISSNER PART No.		
49	Ant. Coil						Item 49, 50 & 51 are ganged together and are slug tuned.
50	Sec. Coil						
51	Sec. Shunt						
52	Sec. Coil						
53	Sec. Series						
54	Input IF	63Q	64Q				
55	Output IF	63Q	64Q				
56	Vib. Choke	1Q	1Q				
57	Vib. Choke	1Q	1Q				
58	Hash Choke	1Q	1Q				

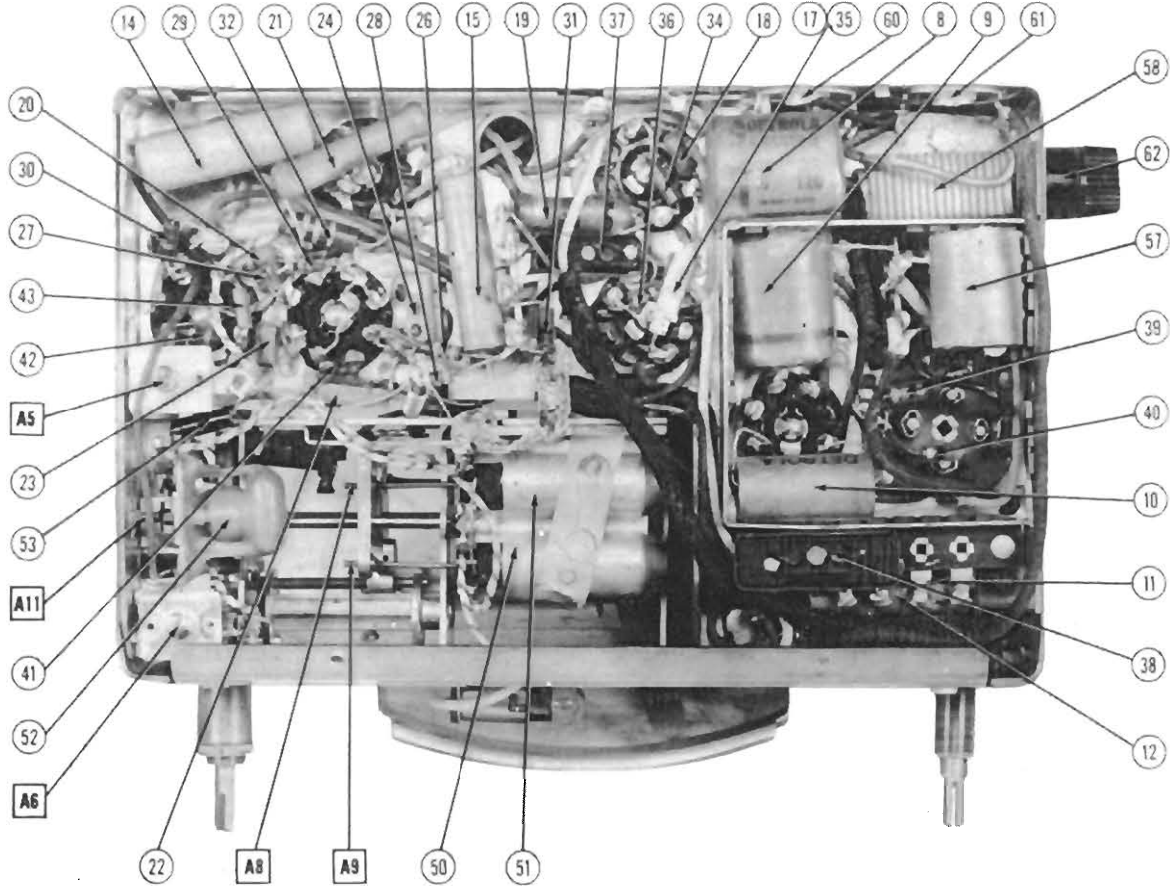
DIAL LIGHT

REPLACEMENT DATA				INSTALLATION NOTES
ITEM No.	BASE TYPE	VOLTS	AMPS.	
59	Bayonet	7.5	0.2	White Type 51

MISCELLANEOUS

ITEM No.	PART NAME	DETROLA PART No.	NOTES
60	Spark Plate		
61	Fuse		9 Amp.
62			

CHASSIS—BOTTOM VIEW



0809 TACOM  
ANTHEM-SATM