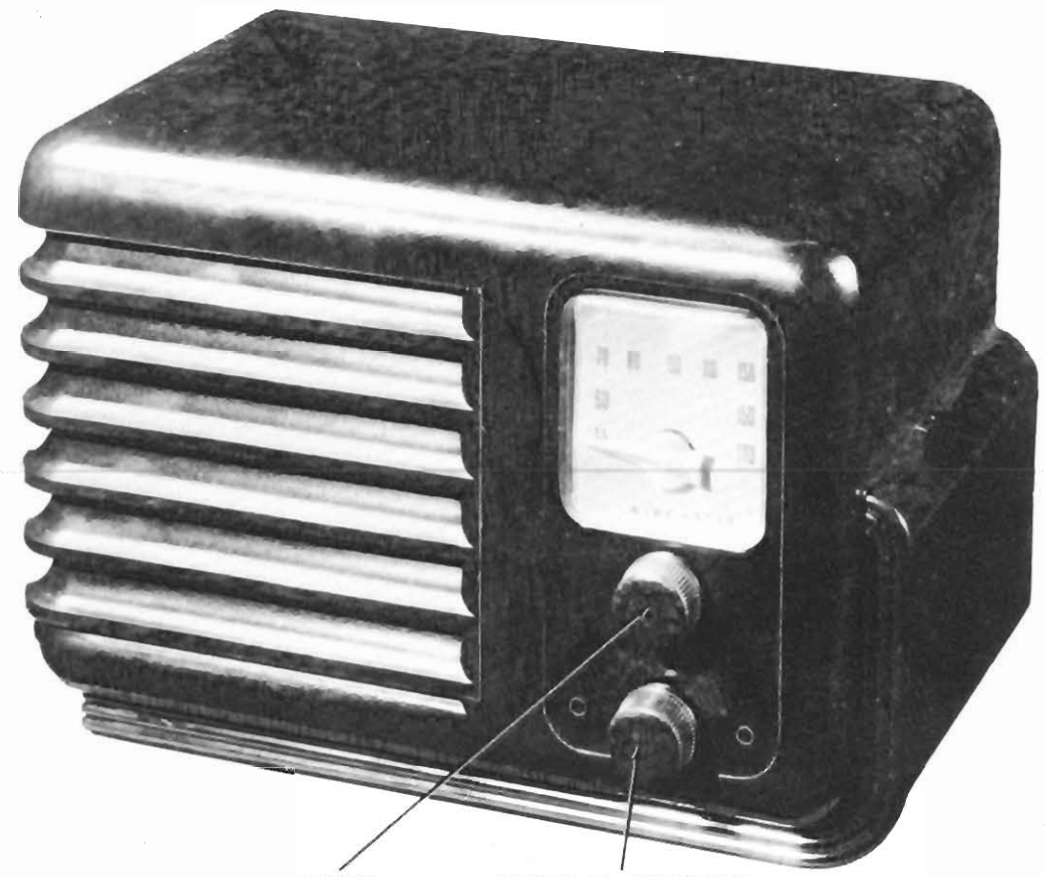




AIRCATTLE
MODELS 227I, 227W



TUNING CONTROL
VOLUME CONTROL
ON OFF SWITCH

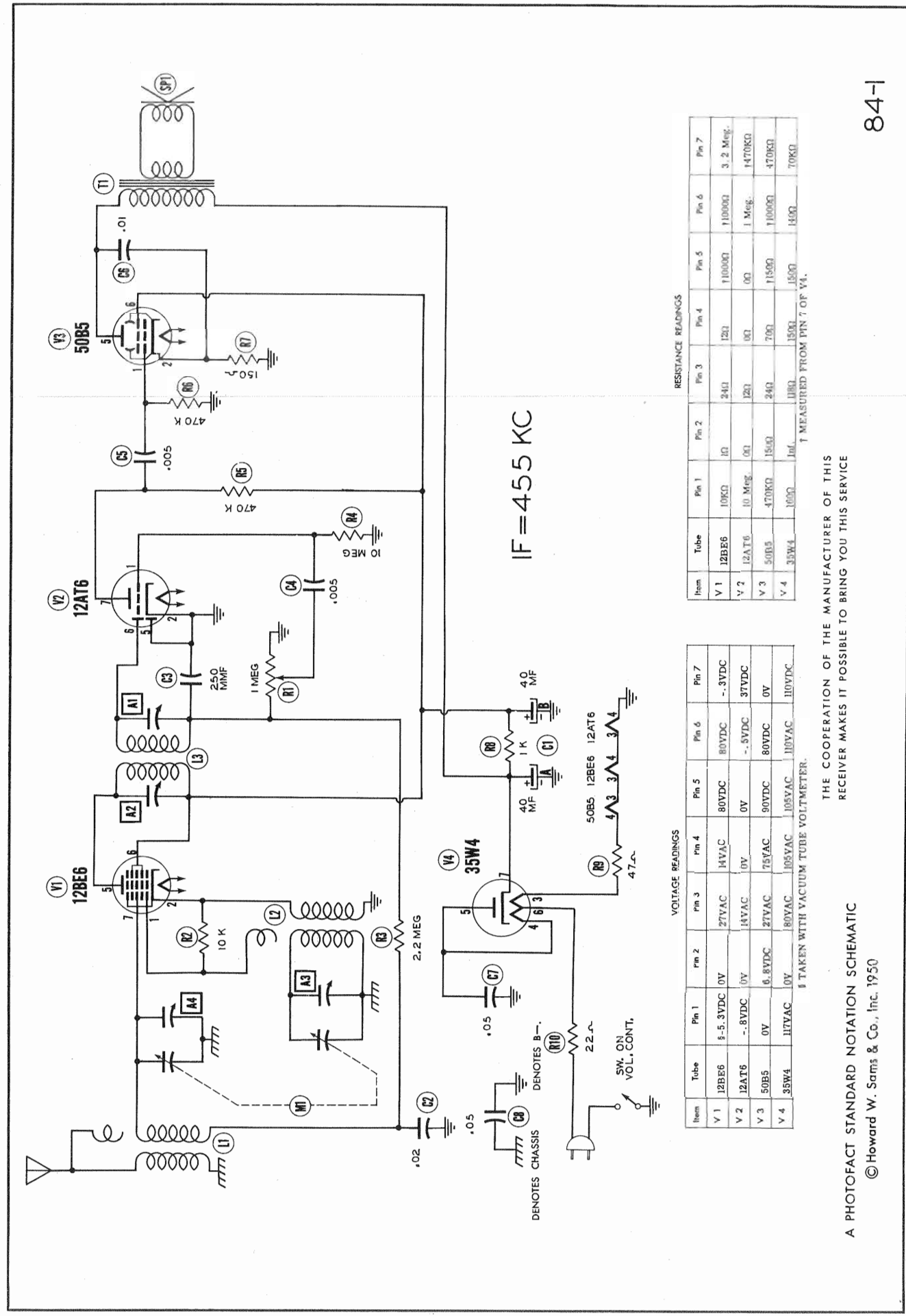
AIRCATTLE
MODELS 227I, 227W

TRADE NAME	Aircastle, Models 227I, 227W					
SUPPLIER	Spiegel, Inc., 1061 W. 35th St., Chicago, Illinois					
TYPE SET	AC-DC Operated Superheterodyne Receiver					
TUBES (FOUR)	Types 12BE6 Converter, 12AT6 or 12AV6 DET-AVC-AF, 50B5 Power Output, 35W5 Rectifier					
POWER SUPPLY	105-125 Volts AC-DC			RATING: .27 Amp. at 117 Volts AC		
TUNING RANGE—BROADCAST	540-1700KC					
ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT						
To set pointer turn tuning cap fully closed and set pointer parallel with base of dial. Use isolation transformer if available. If not connect a .1MFD capacitor in series with low side of signal generator and B-.						
Volume control should be at maximum position. Output of signal generator should be no higher than necessary to obtain an output reading. Use an insulated alignment screwdriver for adjusting.						
DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	OUTPUT METER	ADJUST	REMARKS
1. .05MFD	High side to stator on ant. section of tuning gang. Low side to B-.	455KC (400 ~ Mod.)	Tuning gang fully open	Across voice coil	A1, A2	Adjust for maximum output. If isolation transformer is not used, reduce dummy antenna to .001MFD to reduce hum modulation.
2. .05MFD	"	1720KC	"	"	A3	"
3. 50MMF	High side to ant. terminal on ant. coil. Low side to B-.	1400KC	Tune for max. output	"	A4	Adjust for maximum output.

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RESISTANCE READINGS

Item	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7
V 1	12BE6	10KΩ	10	240	120	1000Ω	1000Ω	3.2 Meg.
V 2	12AT6	10 Meg.	10	120	10	1 Meg.	1470KΩ	
V 3	50B5	470KΩ	150Ω	240	70Ω	115Ω	1000Ω	470KΩ
V 4	35W4	100Ω	100Ω	100Ω	150Ω	150Ω	150Ω	70KΩ

1 MEASURED FROM PIN 7 OF V4.

VOLTAGE READINGS

Item	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7
V 1	12BE6	5-5.3VDC	0V	27VAC	14VAC	80VDC	80VDC	-3VDC
V 2	12AT6	-8VDC	0V	14VAC	0V	-5VDC	37VDC	
V 3	50B5	0V	6.8VDC	27VAC	75VAC	90VDC	80VDC	0V
V 4	35W4	HTVAC	10V	80VAC	105VAC	105VAC	110VAC	110VDC

1 TAKEN WITH VACUUM TUBE VOLTMETER.

THE COOPERATION OF THE MANUFACTURER OF THIS
RECEIVER MAKES IT POSSIBLE TO BRING YOU THIS SERVICE

A PHOTOFACT STANDARD NOTATION SCHEMATIC
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ITEM No.	USE	REPLACEMENT DATA			RMA BASE TYPE	INSTALLATION NOTES
		AIRCRAFTLE PART No.	STANDARD REPLACEMENT			
V1	Converter	12BE6	12BE6		7CH	
V2A	DET.-AVC-AF	12AT6	12AT6		7BT	
V3	DET.-AVC-AF	12AV6	12AV6		7BZ	
V4	Power Output	50B5	50B5		3BQ	
V4	Rectifier	35W4	35W4			

CAPACITORS

Capacity values given in the rating column are in mfd. for Electrolytic and Paper Capacitors, and in mmfd. for Mica and Ceramic Capacitors.						
ITEM No.	RATING CAP. VOLT	REPLACEMENT DATA			ERIE PART No.	IDENTIFICATION CODES AND INSTALLATION NOTES
		AIRCRAFTLE PART No.	AEROVOX PART No.	CORNEIL DUBILIER PART No.		
C1A	40		PR8150/40-40	EDL4415	TA-440	Filter Red, See Note
C2	40					Filter Red, See Note
C3	.02					AVC Filter
C4	250		1488-00025	GT282	TM-12	Diode R F Filter
C5	.005		CP-2502	GT6D5	GP2K-250	Audio Coupling
C6	.01		CP-14103	GT6S1	GP2M-005	Output Plate Bypass
C7	.05		CP-12503	GT285	GP2-335-01	Line Filter
C8	.05		CP-12503	GT285	GP2-335-01	Line Filter

Note. Some models may use 30/20 MFD capacitor part #CL-10017.

CONTROLS

ITEM No.	RATING RESIST. WATTS	REPLACEMENT DATA			CLAROSTAT PART No.	INSTALLATION NOTES
		AIRCRAFTLE PART No.	IRC PART No.			
R1A	1 Meg.	VC-12100-E	Q15-137			Volume control
R2	Switch	Not Req.	76-1			Attach to R1A per instructions

RESISTORS

ITEM No.	RATING RESISTANCE WATTS	REPLACEMENT DATA			IDENTIFICATION CODES
		AIRCRAFTLE PART No.	IRC PART No.		
R2	10KΩ	RC-21002	BTS-2002		Osc. Grid
R3	2.2 Meg.	RC-22204	BTS-2.2 Meg.		AVC Network
R4	10 Meg.	RC-21005	BTS-10 Meg.		AF Grid
R5	470KΩ	RC-24703	BTS-470K		AF Plate
R6	470KΩ	RC-24703	BTS-470K		Output Grid
R7	150Ω	RC-21500	BW-1-150		Output Cathode
R8	1000Ω	RC-21001	BTS-1000		Filter
R9	470	RC-44700	BW-1-47		Filament Dropping
R10	220	RC-40220	BW-1-22		Line Dropping

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	RATINGS WATTS	REPLACEMENT DATA			INSTALLATION NOTES
		AIRCRAFTLE PART No.	S'ANCOR PART No.	MERIT PART No.	
T1	24000 3 40 10000 .50	TO-10000	A-3332	A-3025	RO-2 † † Drill one new mounting hole.

PARTS LIST AND DESCRIPTIONS (Continued)

SPEAKER

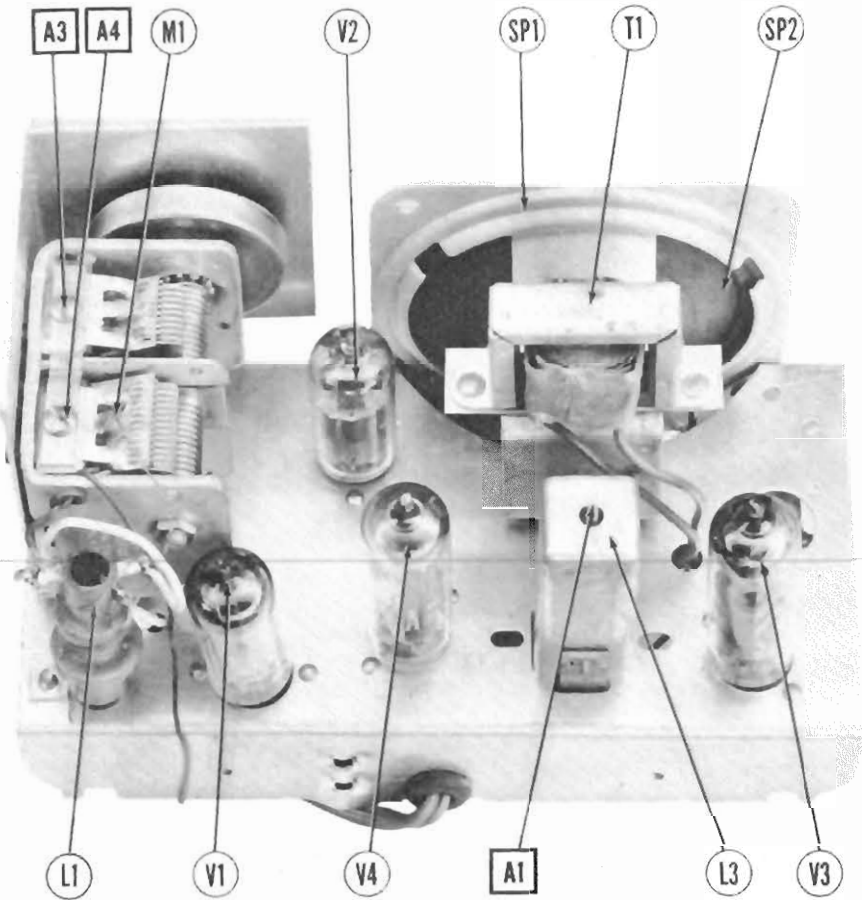
ITEM No.	RATINGS	REPLACEMENT DATA			INSTALLATION NOTES
		AIRCRAFTLE PART No.	JENSEN PART No.	QUAM PART No.	
SP1	FIELD 3.4" DIA. 3 1/4" V. C. IMP. 3.4" V. C. DIA. 9/16"			3407 *	* Remount output transformer.
SP2					

R F COILS

ITEM No.	USE	REPLACEMENT DATA			INSTALLATION NOTES
		DC RES. PRI. SEC.	AIRCRAFTLE PART No.	MEISSNER PART No.	
L1	Ant. 1 Trans.	384 3.4" V. C. IMP. 3.4" V. C. DIA. 9/16"	TRF 100 18		
L2	Osc. Coil	.80 50	TRC 100 15	14 1060 #	# Add 50MMMF from high side of tuning cap to Osc. Grid.
L3	J F Trans.	190 220	TS-10 039	16 6678	

MISCELLANEOUS

ITEM No.	PART NAME	AIRCRAFTLE PART No.	NOTES
M1	2 Gang. Var. Cap.	CV-10010	24-464MMMF, 20-208MMMF



CHASSIS--BOTTOM VIEW

