

SILVERTONE
MODELS 15, 16, (Ch. 132.884, -1, -2)

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1. DC Voltage measurements are at 20,000 ohms per volt; AC Voltages measured at 1,000 ohms per volt.
2. Socket connections are shown as bottom views.
3. Measured values are from socket pin to common negative.
4. Line voltage maintained at 117 volts for voltage readings.
5. Nominal tolerance on component values makes possible a variation of $\pm 10\%$ in voltage and resistance readings.
6. Volume control at maximum, no signal applied for voltage measurements.

Silvertone Model 15

TRADE NAME	Silvertone, Models 15, 16 (Ch. 132.884, -1, -2)
MANUFACTURER	Sears, Roebuck & Co., 925 S. Homan St., Chicago, Illinois
TYPE SET	AC-DC Operated Superheterodyne Receiver with Loop Antenna
TUBES (SIX)	Types 12SK7GT IF Amp., 12SA7GT Converter, 12SQ7 Det. -AVC-AF, 35A5 or 35L6GT GT Power Output, 35Z5GT Rectifier

POWER SUPPLY	105-125 Volts AC-DC	RATING	.275 Amp. @ 117Volts AC
TUNING RANGE—BROADCAST	540-1600KC		

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-. Loop should be maintained in same relative position to chassis as when receiver is in cabinet. 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.

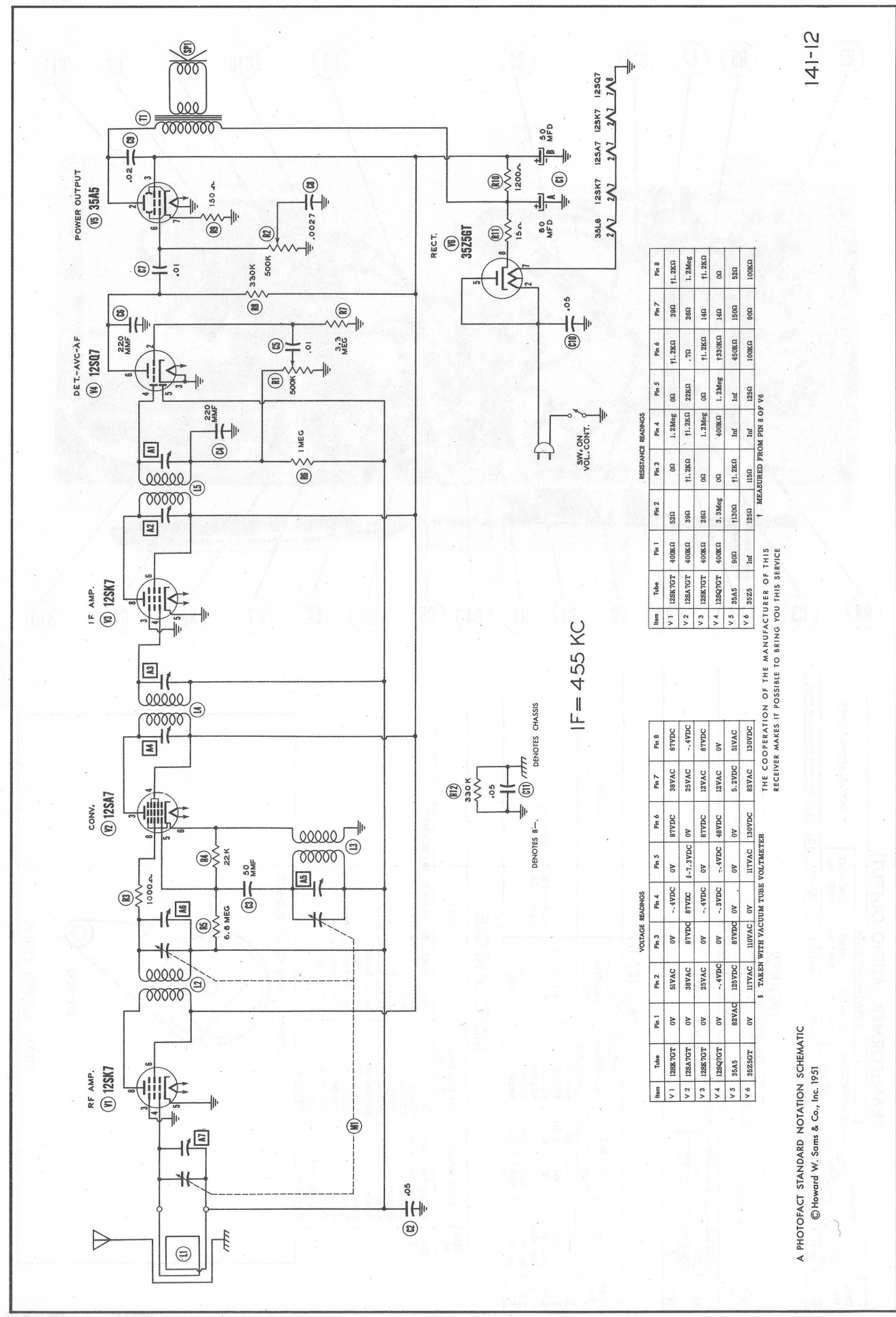
ALIGNMENT INSTRUCTIONS						
DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	OUTPUT METER	ADJUST	REMARKS
1. .05MFD	High side to stator on center section of tuning gang. Low side to B-.	455KC	Tuning gang fully open.	Across voice coil.	A1, A2, A3, A4	Adjust for maximum output.
2.	Loop	1400KC	1400KC	"	A5, A6, A7	Fashion loop of several turns of wire and radiate signal into loop of receiver. Adjust for maximum output.

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

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RESISTANCE READINGS							
Item	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6
V 1	12SK7GT	400KΩ	50Ω	0Ω	1.2MΩ	0Ω	11.2KΩ
V 2	12SA7GT	400KΩ	50Ω	11.2KΩ	11.2KΩ	22KΩ	1.2MΩ
V 3	12SK7GT	400KΩ	20Ω	0Ω	1.2MΩ	0Ω	11.2KΩ
V 4	12SQ7GT	400KΩ	3.3MΩ	0Ω	400KΩ	1.2MΩ	130KΩ
V 5	35A5	0Ω	11.2KΩ	11.2KΩ	Inf	Inf	450KΩ
V 6	35Z5GT	Inf	12KΩ	11KΩ	12KΩ	100KΩ	100KΩ

† MEASURED FROM PIN 8 OF V6

VOLTAGE READINGS							
Item	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6
V 1	12SK7GT	0V	8VDC	0V	8VDC	0V	8VDC
V 2	12SA7GT	0V	8VDC	0V	8VDC	0V	8VDC
V 3	12SK7GT	0V	8VDC	0V	8VDC	0V	8VDC
V 4	12SQ7GT	0V	8VDC	0V	8VDC	0V	8VDC
V 5	35A5	8VDC	8VDC	8VDC	8VDC	8VDC	8VDC
V 6	35Z5GT	0V	8VDC	8VDC	8VDC	8VDC	8VDC

§ TAKEN WITH VACUUM TUBE VOLTMETER

141-12

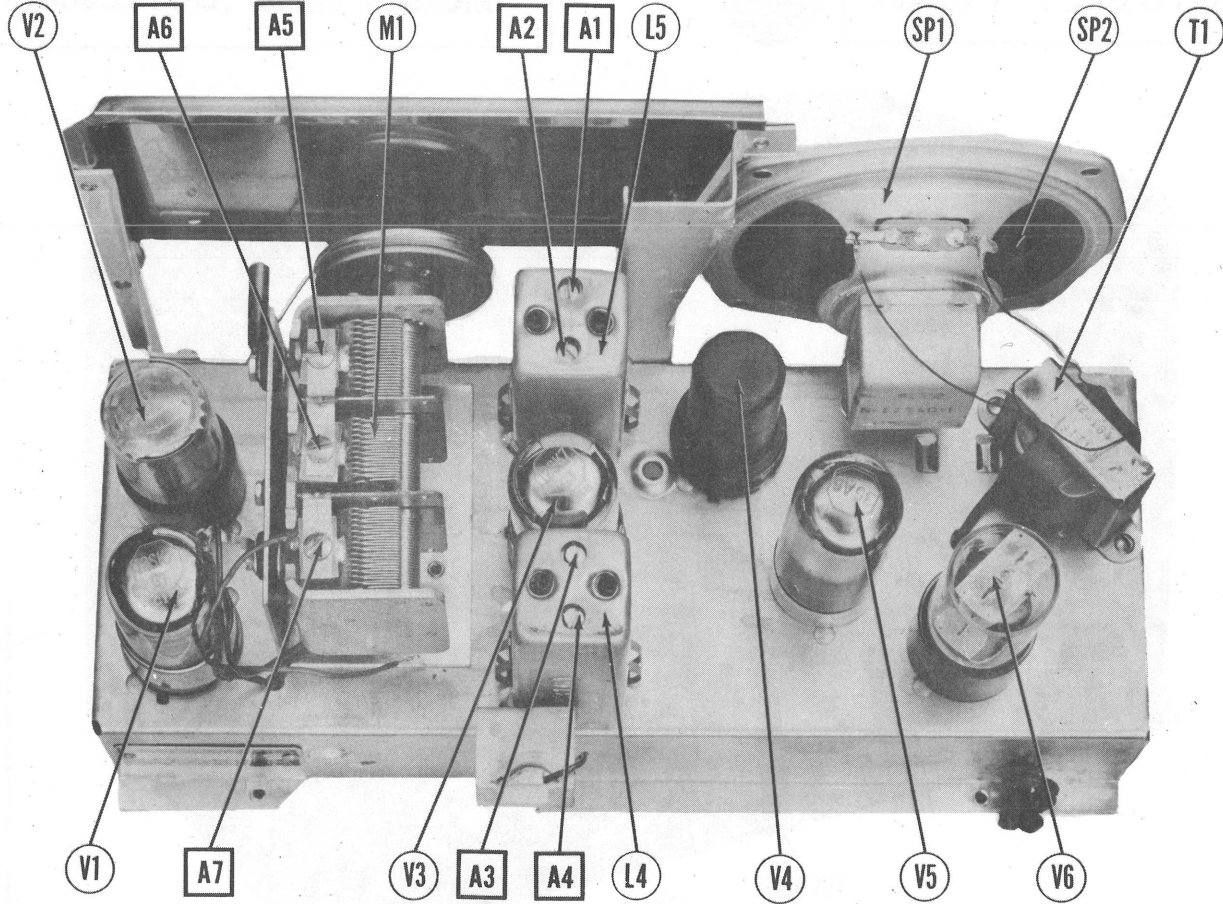
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PARTS LIST AND DESCRIPTIONS
 TUBES (SYLVANIA or Equivalent)

SILVERTONE
 MODEL 15

ITEM No.	USE	REPLACEMENT DATA		RMA BASE TYPE	INSTALLATION NOTES
		SILVERTONE PART No.	STANDARD REPLACEMENT		
V1	RF Amplifier	12SK7GT	12SK7GT	8N	Used in Ch. 132.884-2
V2	Converter	12SA7GT	12SA7GT	8AP	
V3	IF Amplifier	12SK7GT	12SK7GT	8N	
V4	Det.-AVC-AF	12SQ7	12SQ7	8Q	
V5A	Power Output	35A5	35A5	6AA	
V5B	Power Output	35L6GT	35L6GT	7AC	
V6	Rectifier	35Z5	35Z5	6AD	

CHASSIS—TOP VIEW



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				IDENTIFICATION CODES AND INSTALLATION NOTES
			SILVERTONE PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	
C1A	80	150	N24249	PRS150/50-50		BRD8415A	Filter
B	50	150		P288-05	DF-503	PTE4S5	2TM-S5
C2	.05	200		1469-00005		5RQ5	MS-45
C3	50	500		S1220	D6-221	5RT25	5GA-T22
C4	220	400		P488-01	D6-103	PTE4S1	5GA-T22
C5	.01	400		S1220	D6-221	5RT25	5GA-T22
C6	.220	400		P488-01	D6-103	PTE4S1	5GA-T22
C7	.01	400		P688-003	D6-272	PTE4D3	4TM-D3
C8	.0027	600		P488-02	DF-203	PTE4S2	4TM-S2
C9	.02	400		P488-05	DF-503	PTE4S5	4TM-S5
C10	.05	400		P488-05	DF-503	PTE4S5	4TM-S5
C11	.05	400		P488-05	DF-503	PTE4S5	4TM-S5

† Ch. 132.884, -1 uses .003MFD 600V Capacitor in this application.

CONTROLS

ITEM No.	RATING RESISTANCE	WATTS	REPLACEMENT DATA			INSTALLATION NOTES
			SILVERTONE PART No.	IRC PART No.	CENTRALAB PART No.	
R1A	500KΩ	1/2	N22963	Q13-133	AG-60-Z	Volume Control
B	Shaft		Not Req	Not Req	FS-3	Attach to R1A Per Instructions
C	Switch		Not Req	76-1	SWB	Attach to R1A Per Instructions
R2A	500KΩ	1/2	N23156	Q13-133	AG-60-Z	Tone Control
B	Shaft		Not Req	Not Req	FS-3	Attach to R2A Per Instructions

RESISTORS

ITEM No.	RATING RESISTANCE	WATTS	REPLACEMENT DATA		IDENTIFICATION CODES
			SILVERTONE PART No.	IRC PART No.	
R3	1000Ω				Parasitic Suppressor
R4	22KΩ			BTS-22K	Osc. Grid
R5	6.8Meg			BTS-6.8Meg	AVC Network
R6	1 Meg			BTS-1Meg	AVC Network
R7	3.3Meg			BTS-3.3Meg	AF Amp. Grid
R8	330KΩ			BTS-330K	AF Amp. Plate
R9	150Ω			BTS-150	Output Cathode
R10	1200Ω			BTB-1200	Filter
R11	15Ω			BTS-330K	Surge Limiter
R12	330KΩ				Isolation

PARTS LIST AND DESCRIPTIONS (Continued)

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	RATING				REPLACEMENT DATA				INSTALLATION NOTES
	IMPEDANCE		DC RES.		SILVERTONE PART No.	STANCOR PART No.	MERIT PART No.	CHICAGO PART No.	
	PRI.	SEC.	PRI.	SEC.					
T1	3.1KΩ	3.5Ω	110Ω	.32	N23164	A-3877	A-2930	R0-90	① Drill one new mounting hole.

SPEAKER

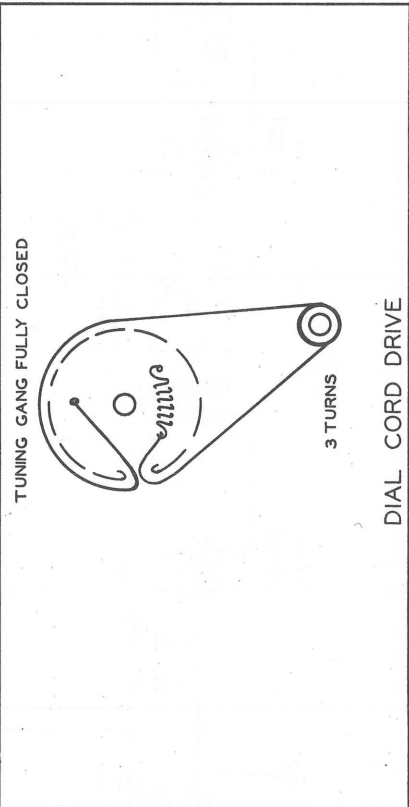
ITEM No.	RATINGS	REPLACEMENT DATA			INSTALLATION NOTES
		SILVERTONE PART No.	JENSEN PART No.	QUAM PART No.	
SP1	FIELD PM CONE DIA. 4 1/4"		N22760-1	ST105 Mod. P5-X	5A1
SP2	V.C. IMP. 3.5Ω V.C. DIA. 9/16"				

COILS (RF-IF)

ITEM No.	USE	DC RES.	REPLACEMENT DATA		NOTES
			SILVERTONE PART No.	WEISSNER PART No.	
L1	Loop Ant.				
L2	RF Coil	.3Ω	N23150	14-1072	Used in Ch. 132.884-1, -2
L3A	Osc. Coil	.4Ω	N23153	14-1073	Used in Ch. 132.884
L4	Osc. Coil	.7Ω	N23751		
L5	1st IF	25Ω	N23161	16-6668	
	2nd IF	25Ω	N23162	16-6667	

MISCELLANEOUS

ITEM No.	PART NAME	SILVERTONE PART No.	NOTES
M1A	3 Gang Var. Cap.	N23743	(39-507MMF, 28-358MMF, 26-193MMF)
B	3 Gang Var. Cap.	N23155	Used in Ch. 132.884
	Cabinet	N22823-2	Model 15
	Cabinet	N22823-1	Model 16
	Knob	N22804-5A	On-Off Volume, Brown
	Knob	N22804-5B	Tone, Brown
	Knob	N22804-5C	Tuning, Brown
	Knob	N22804-3A	On-Off Volume, Ivory
	Knob	N22804-3D	Tone, Ivory
	Knob	N22804-3C	Tuning, Ivory
	Dial Pointer	N22956	
	Dial Scale	N22954-2	



CHASSIS—BOTTOM VIEW

