

ARKAY
MODEL A-12ARKAY
MODEL A-12

TRADE NAME	Arkay Model A-12		
MANUFACTURER	Arkay International, Inc., 88-06 Van Wyck Expressway, Jamaica 18, N. Y.		
TYPE SET	AC Operated 5 Tube Audio Amplifier		
POWER SUPPLY	105 - 125 Volts AC, 60 Cycles	RATING	66 Watts, .62 Amp. @117 Volts AC

HOWARD W. SAMS & CO., INC. Indianapolis 6, Indiana

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PARTS LIST AND DESCRIPTIONS

TUBES

GENERAL ELECTRIC			RAYTHEON			SYLVANIA		
ITEM No.	USE	TYPE	ITEM No.	USE	TYPE			
V1	Preamplifier - AF Amp.	6SC7	V4	Output Rectifier	6V6GT			
V2	AF Amp. - Phase Inv.	6SL7GT	V5		5Y3GT			
V3	Output	6V6GT						

ELECTROLYTIC CAPACITORS

ITEM No.	RATING		REPLACEMENT DATA						NOTES
	CAP.	VOLT.	ARKAY PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	PYRAMID PART No.	SPRAGUE PART No.	
C1A	.40	450	1248	AFH3-44	C0350	FP377	TMT-3748	TVL-3787	
B	.40	450							
C	.40	450							
C2	50	50		PRS1350	BR505	TC39	TD-50-50	TVA-1308	Note 1

Note 1. Not used in some versions.

FIXED CAPACITORS

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

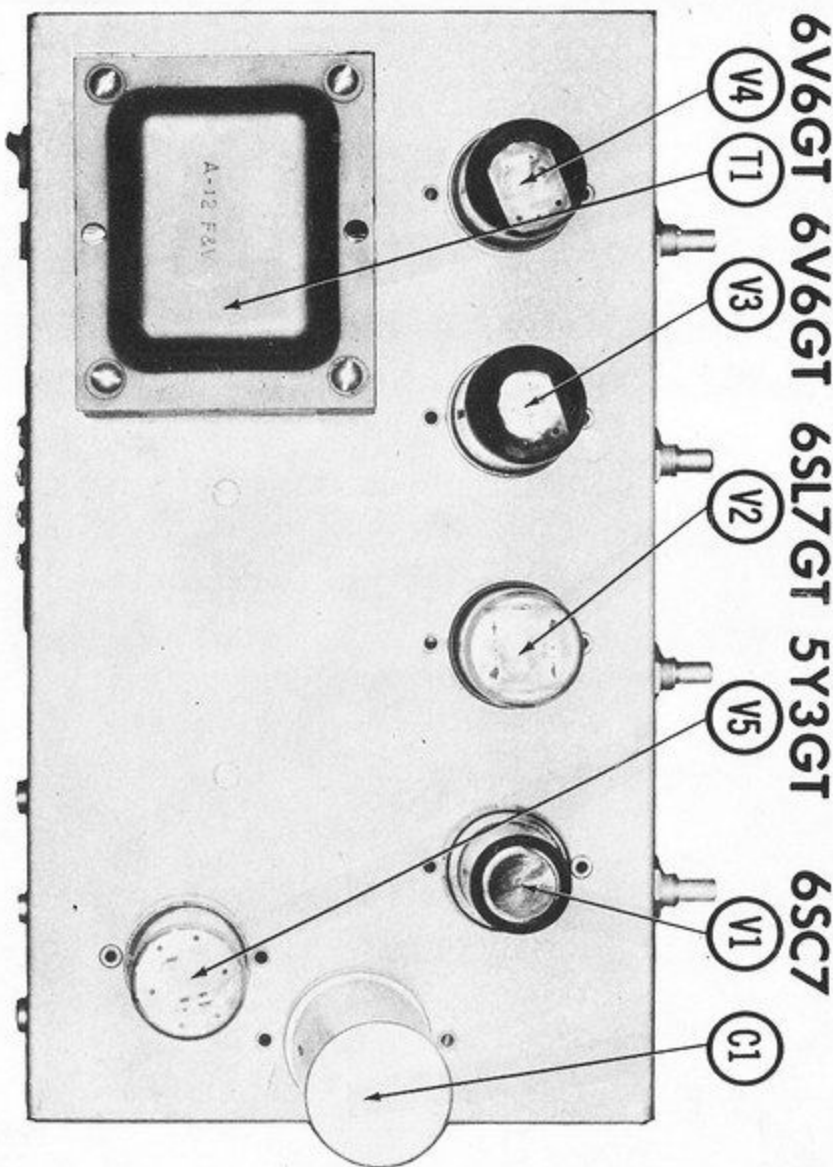
ITEM No.	RATING	REMARKS	REPLACEMENT DATA					
			AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ELMENCO PART No.	MALLORY PART No.	SPRAGUE PART No.
C3	.05 400V	Note 1	P488N-05	DD-503	CUB485	4DP-3-503	GEM-415	4TM-850
C4	.270		D1-270	DD-271	LIOT27	CCD-271	B-327	10TS-T27
C5	.05 400V		P488N-05	DD-503	CUB485	4DP-3-503	GEM-415	4TM-850
C6	.05 400V		P488N-05	DD-503	CUB485	4DP-3-503	GEM-415	4TM-850
C7	.270		D1-270	DD-271	LIOT27	CCD-271	B-327	10TS-T27
C8	.05 400V		P488N-05	DD-503	CUB485	4DP-3-503	GEM-415	4TM-850
C9	.005 400V		P488N-005	D6-502	CUB6D5	6DP-1-502	GEM-625	6TM-D50
C10	.005 400V		P488N-005	D6-502	CUB6D5	6DP-1-502	GEM-625	6TM-D50
C11	.005 400V		P488N-005	D6-502	CUB6D5	6DP-1-502	GEM-625	6TM-D50
C12	.022 400V		P488N-022	DD-203	CUB4822	4DP-2-223	GEM-4122	4TM-S22
C13	.05 400V		P488N-05	DD-503	CUB485	4DP-3-503	GEM-415	4TM-850
C14	.05 400V		P488N-05	DD-503	CUB485	4DP-3-503	GEM-415	4TM-850
C15	.001 600V		P688N-001	D6-102	CUB6D1	6DP-1-102	GEM-621	6TM-D10
C16	.001 600V		P688N-001	D6-102	CUB6D1	6DP-1-102	GEM-621	6TM-D10
C17	.05 400V		P488N-05	DD-503	CUB485	4DP-3-503	GEM-415	4TM-850

Note 1. Not used in some versions.

CONTROLS

ITEM No.	RATING		REPLACEMENT DATA						INSTALLATION NOTES
	RESISTANCE	WATTS	ARKAY PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.		
RIA	Imeg	1/2	1621	B-69	A47-Imeg-S	Q11-137	U54	Loudness	
B	Shaft			Not Req.	RS-2	Not Req.	Not Req.		
R2A	Imeg	1/2	1621	B-69	A47-Imeg-S	Q11-137	U54	Bass	
B	Shaft			Not Req.	RS-2	Not Req.	Not Req.		
R3A	500K	1/2	1620	B-60-S	A47-500K-Z	Q13-133	U48	Treble	
B	Shaft			Not Req.	RS-2	Not Req.	Not Req.		
C	Switch			Not Req.	SWE-12	76-1	US-26	Power Off-On	

CHASSIS—TOP VIEW



PARTS LIST AND DESCRIPTIONS (Continued)

RESISTORS (IRC or EQUIVALENT)

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

ITEM No.	RATING	REMARKS	ITEM No.	RATING	REMARKS	ITEM No.	RATING	REMARKS
R4	2.2meg		R11	15K		R18	220K	
R5	47K		R12	220K		R19	220K	
R6	3.3meg		R13	220K		R20	250Ω 7W	IRC#PW10-250Ω
R7	220K		R14	2200Ω		R21	100Ω	
R8	10meg		R15	470K		R22	10Ω	
R9	220K		R16	100K		R23	47K 1W	
R10	47K		R17	100K		R24	4700Ω 2W	

TRANSFORMER (POWER)

ITEM No.	RATING			REPLACEMENT DATA					NOTES
	PR1	SEC. 1	SEC. 2	ARKAY PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	Triod PART No.	
T1	117V @ .62A	680VCT @ .080A	5V @ 2A	A-12 F & V ①					
	SEC. 3	SEC. 4	SEC. 5						
	6.3V @ 1.9A								

① Alternate Part #51F1

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA					NOTES
	PR1	SEC.	ARKAY PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	Triod PART No.	
T2	7200Ω CT	16Ω Tap @ 8Ω, 4Ω	55F3			26859		

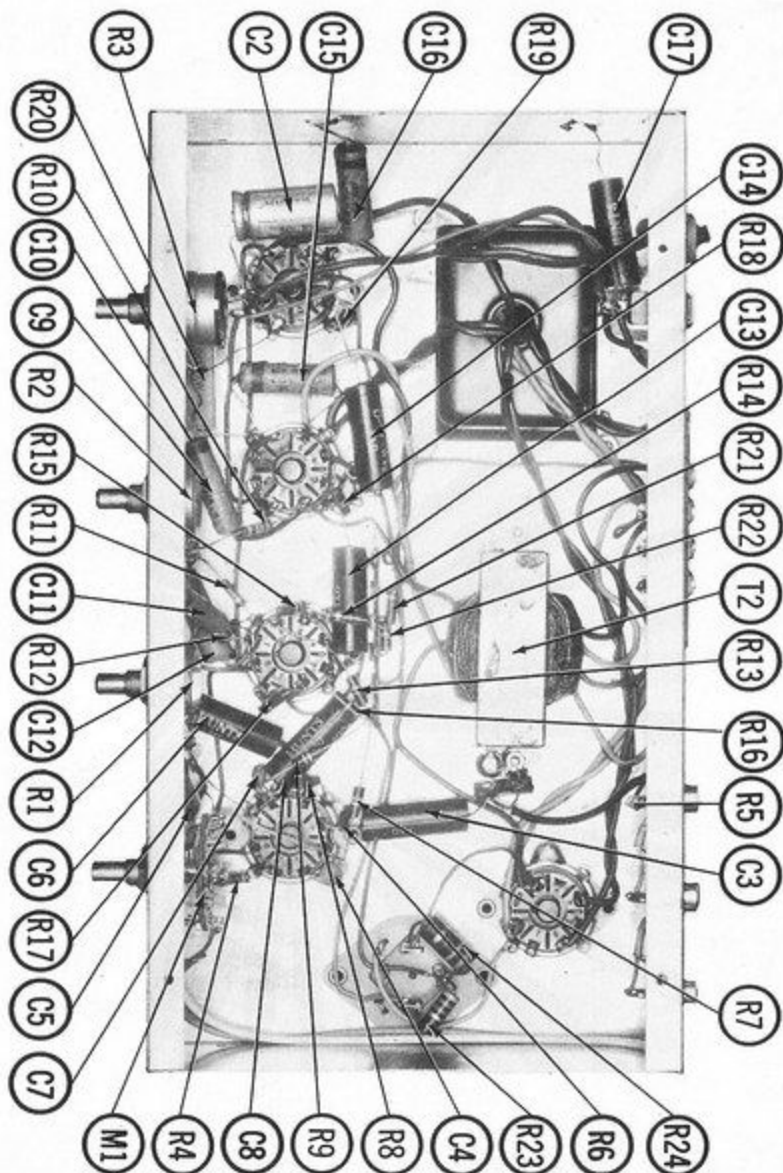
MISCELLANEOUS

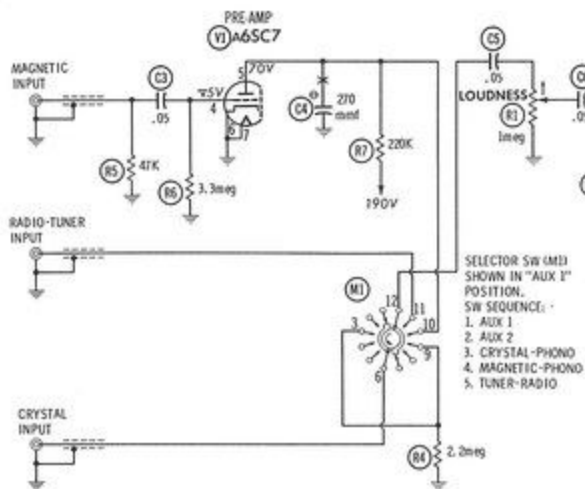
ITEM No.	PART NAME	ARKAY PART No.	NOTES
M1	Switch		Function Selector

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





- DC voltage measurements taken with vacuum tube voltmeter; AC voltages measured with 1000 ohm per volt voltmeter.
- Socket connections are shown as bottom views.
- Measured values are from socket pin to common ground.
- Line voltage maintained at 117 volts for voltage readings.
- Nominal tolerance of component values makes possible a variation of $\pm 15\%$ in voltage and resistance readings.
- All controls at minimum; proper output load connected.

SEE PARTS LIST FOR ALTERNATE VALUE OR APPLICATION

DC COIL RESISTANCE VALUES UNDER ONE OHM NOT SHOWN ON SCHEMATIC DIAGRAM

ARROWS ON CONTROLS INDICATE CLOCKWISE ROTATION (CONTROL VIEWED FROM SHAFT END)

RESISTANCE READINGS

ITEM	TUBE	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8
V1	6SC7	0 Ω	1.270K	10meg	3.3meg	1.270K	0 Ω	0 Ω	.1 Ω
V2	6SL7GT	15K	1.270K	2200 Ω	1.270K	1.150K	300K	0 Ω	.1 Ω
V3	6V6GT	NC	.1 Ω	1.225 Ω	1.4700 Ω	220K	TP	0 Ω	250 Ω
V4	6V6GT	NC	.1 Ω	1.280 Ω	1.4700 Ω	220K	NC	0 Ω	250 Ω
V5	5Y3GT	NC	1	NC	140 Ω	NC	130 Ω	NC	1

- 1 THIS READING WILL VARY DEPENDING UPON THE CONDITION OF THE ELECTROLYTIC IN THE CIRCUIT.
 1 MEASURED FROM PIN 2 OF V5. NC NO CONNECTION TP THE POINT

