

ALL MEASUREMENTS TAKEN WITH PHONO MOTOR DISCONNECTED  
↑ MEASURED FROM PIN 3 OF V4.  
NC NO CONNECTION  
TP TIE POINT

Pin	V1	V2	V3	V4
No.	12AX7	6BQ5	6BQ5	6CA4
1	1270K	NC	NC	60Ω
2	500K	15K	15K	NC
3	1500Ω	150Ω	150Ω	20K(1M)
4	FIL	FIL	FIL	FIL
5	FIL	FIL	FIL	FIL
6	1270K	NC	NC	NC
7	500K	1780Ω	1780Ω	60Ω
8	1500Ω	NC	NC	TP
9	FIL	11750Ω	11750Ω	NC

A PHOTOFACT STANDARD NOTATION SCHEMATIC  
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1. DC voltage measurements taken with vacuum tube voltmeter; AC voltages measured with 1000 ohm per volt voltmeter.
2. Socket connections are shown as bottom views.
3. Measured values are from socket pin to common ground.
4. Line voltage maintained at 117 volts for voltage readings.
5. Nominal tolerance of component values makes possible a variation of ±15% in voltage and resistance readings.
6. All controls at minimum, proper output load connected.

CASCADE or ULTRATONE  
CHASSIS 6005

FOLDER 6  
SET 619

PHOTOFACT® Folder

CASCADE or ULTRATONE  
CHASSIS 6005

CASCADE or ULTRATONE  
CHASSIS 6005



MODEL 1912

TRADE NAME	Cascade or Ultratone Models 840, 844, 1210, 1212, 1715, 1810, 1814, 1910, 1912 (Ch. 6005)		
MANUFACTURER	Audio Industries, 532 W. 4th Street, Michigan City, Indiana		
TYPE SET	AC Operated 4 Tube Stereo Phono Amplifier With 4 Speed Automatic Record Changer		
POWER SUPPLY	105 - 125 Volts AC, 60 Cycles	RATING	75 Watts, .73 Amp. @117 Volts AC (Less Motor)

FOR SERVICE INFORMATION ON RECORD CHANGER - SEE SIMILAR V-M1223 - PHOTOFACT SET 557 FOLDER 14

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 the particular type of replacement

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DATE 2-63

SET 619 FOLDER 6

CASCADE or ULTRATONE  
CHASSIS 6005

SET 619 FOLDER 6

PARTS LIST AND DESCRIPTION  
 TUBES

• AMPEREX • GENERAL ELECTRIC • RCA • RAYTHEON • SYLVANIA •			
ITEM No.	USE	TYPE	TYPE
V1	Left Channel AF Amp. -	12AX7	6BQ5 6CA4
V2	Right Channel AF Amp. -	6BQ5	

ELECTROLYTIC CAPACITORS

ITEM No.	RATING		REPLACEMENT DATA			
	CAP.	VOLT.	ULTRATONE PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	SPRAGUE PART No.
C1A	.50	350	1037			
C1B	.50	350				
C1C	.50	350				
C1D	.50	25				
C2	.01	25	918	PRB1265	BBR60-25	TVLS-4639.5*
C3	.01	15NP	924	PRB7340	BBR10015	TD-50-25
C4	.01	15NP	924	PRB7340	BBR10015	TCN425

\* Not normally in distributor's stock. Available thru distributor on order to manufacturer.

FIXED CAPACITORS

ITEM No.	RATING	REMARKS	REPLACEMENT DATA			
			AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	SPRAGUE PART No.
C5	.001		BPD-001	DD-102	BYA10D1	SHK-D10
C6	.02		BPD-02	DD-203	BYA682	SHK-S20
C7	.02		BPD-02	DD-203	BYA682	SHK-S20
C8	.0015		BPD-0015	DD-152	BYA10D15	SHK-D15
C9	.005 2000V		BPD-001	DD80-502	HVC20D5	30GA-D50
C10	.01		BPD-01	DD-102	BYA10D1	SHK-D10
C11	.02		BPD-02	DD-203	BYA682	SHK-S20
C12	.02		BPD-02	DD-203	BYA682	SHK-S20
C13	.0015		BPD-0015	DD-152	BYA10D15	SHK-D15
C14	.005 2000V		BPD-0015	DD80-502	HVC20D5	30GA-D50

CONTROLS

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

ITEM No.	USE	RESISTANCE	REPLACEMENT DATA			
			ULTRATONE PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	MALLORY PART No.
R1A	Loudness, Right	2meg	444	B-76 SR-76		FA28A RU28A,
R1B	Loudness, Left	2meg		(AB-76 SR-76, AK-I)		CS-3500
R2A	Balance, Right	2meg	445			FA28A RU28R,
R2B	Balance, Left	2meg				CS-3500
R3A	Treble, Right	2meg	444	B-76 SR-76	AD47-2meg-Z,	FA28A RU28A,
R3B	Treble, Left	2meg		(AB-76 SR-76, AK-I)	XSB-3	CS-3500
R4A	Base, Left	100K	427-B	B-41 SR-41, or (AB-41 SR-41, AK-I)		FA15A RU15A,
R10	Base, Right	100K				CS-3500

RESISTORS

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

ITEM No.	RATING	REPLACEMENT DATA		REMARKS	REPLACEMENT DATA	
		IRC PART No.	WORKMAN PART No.		IRC PART No.	WORKMAN PART No.
R5	270K					
R6	1500Ω					
R7	100K					
R8	15K					
R9	150Ω 1W					
R10	270K					

PARTS LIST AND DESCRIPTION (CONTINUED)  
 TRANSFORMER (POWER)

ITEM No.	RATING		REPLACEMENT DATA				NOTES	
	PRI.	SEC. 1	SEC. 2	ULTRATONE PART No.	MERT PART No.	STANCOR PART No.		THORDARSON PART No.
T1	117VAC ② .75A	520VAC ② 2.8A	② 1.05A	III				

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA					NOTES
	PRI.	SEC. 1	ULTRATONE PART No.	Merit PART No.	Stancor PART No.	Thoradson PART No.	Triod PART No.	
T2	6000Ω	3-4Ω	1217-C					
		SEC. 2						
		200DC Res						
T3	6000Ω	SEC. 1	1217-C					
		3-4Ω						
		SEC. 2						
		200DC Res						

SPEAKER

ITEM No.	TYPE		REPLACEMENT DATA		NOTES
	SIZE	FIELD V. C. IMP.	ULTRATONE PART No.	QUAM PART No.	
SP1	10"	PM	2864*	10A31	* Alternate Part #2871. Some versions may use Part #2850 (8")
SP2	5"	PM	2870	5A1R218	
SP3	4"	PM	2872	4A1R216	
SP4	10"	PM	2864*	10A31	
SP5	5"	PM	2870	5A1R218	
SP6	4"	PM	2872	4A1R216	

PHONO CARTRIDGE & NEEDLES

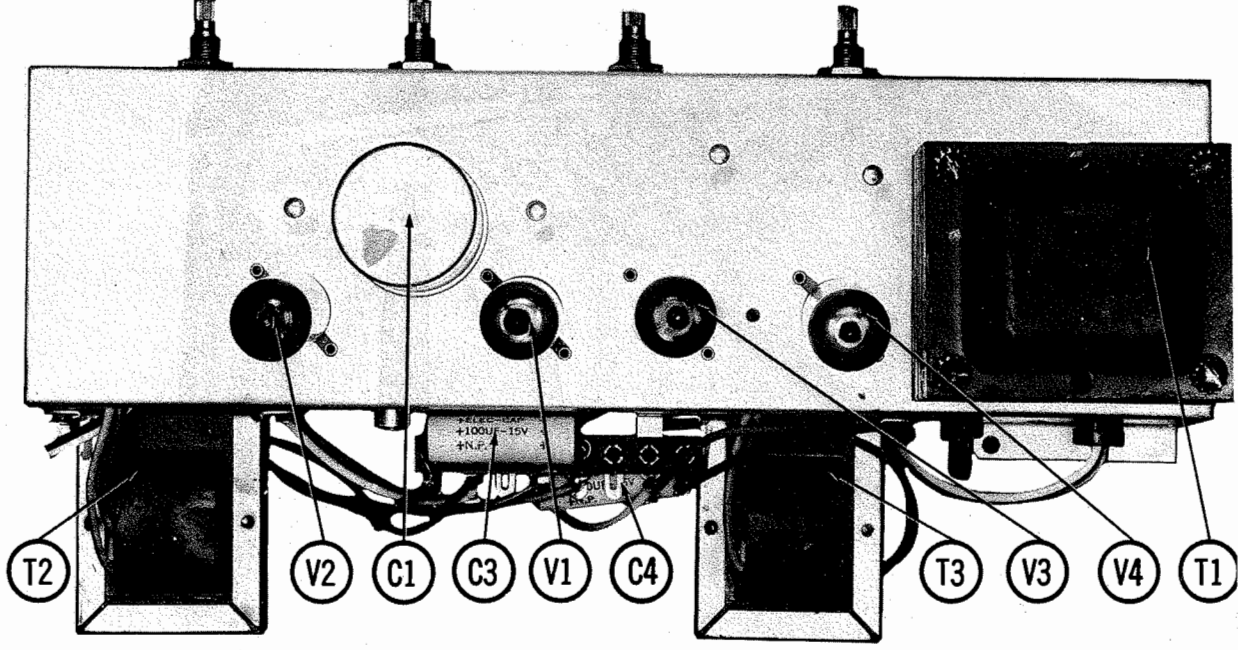
\*NEEDLE LISTINGS SHOWN ARE FOR RESPECTIVE REPLACEMENT CARTRIDGES ONLY.

ITEM No.	REPLACEMENT DATA						NOTES	
	ULTRATONE PART No.		ASTATIC PART No.		ELECTRO-VOICE PART No.			SONOTONE PART No.
	CARTRIDGE	NEEDLE*	CARTRIDGE	NEEDLE*	CARTRIDGE	NEEDLE*		
M1	4008-S	4008-S33* (LP)	807S	N7-7S*	97	300S*	N18T-S*	Cartridge with diamond needle used in some versions.
		4008-S78* (78)		N8-3S*		3008*		
	4008-D	4008-D33* (LP)		N7-7D*		3005D*	N18T-SD*	

WIRING DATA

General-use Unshielded Hook-up Wire	Use BELDEN No. 8530 (Solid) Available in 12 Colors
Power Cord	Use BELDEN No. 8534 (Stranded) Available in 12 Colors
Power Cord (Interlock Type)	Use BELDEN No. 17008 (Plastic) or 17128 (Rubber) - 6 Ft.
Low-Loss Shielded Lead (Interconnecting)	Use BELDEN No. 17008 (Plastic) or 17128 (Rubber) - 9 Ft.
Phono Pick-up Arm Cable	Use BELDEN No. 8430 (Two Conductor-Unshielded) or 8439 (Three Conductor-Shielded)

CHASSIS—TOP VIEW



CHASSIS—BOTTOM VIEW

