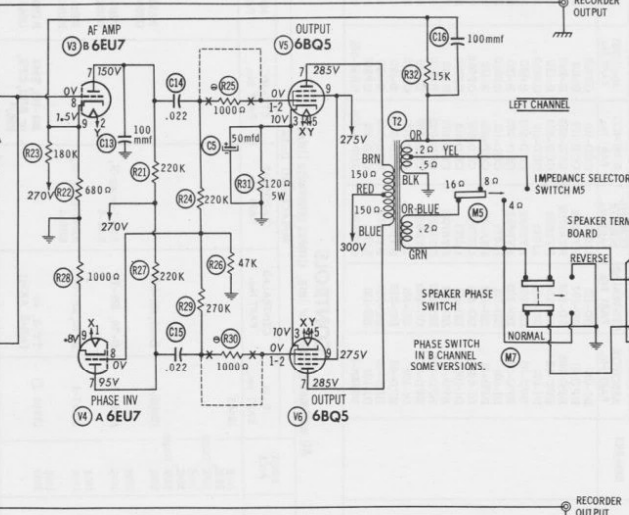
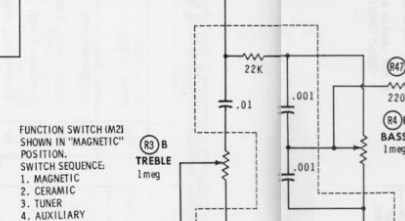
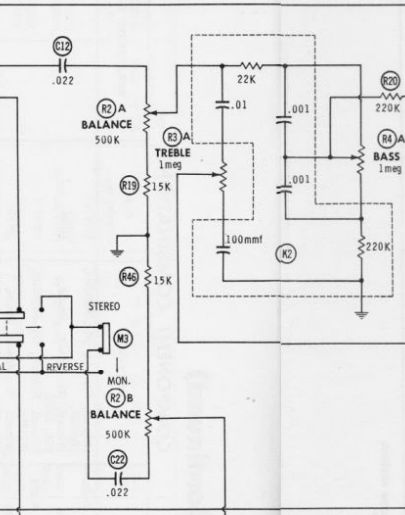
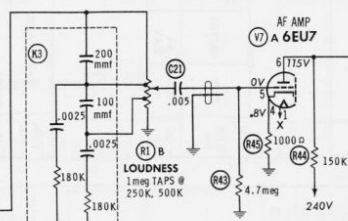
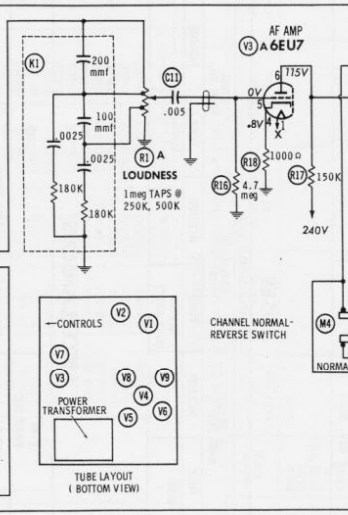
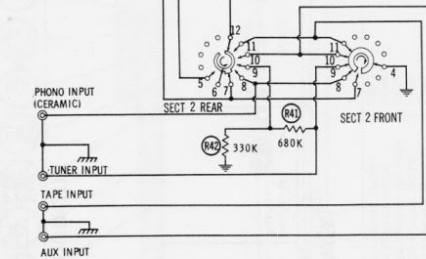
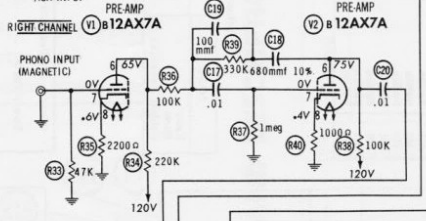
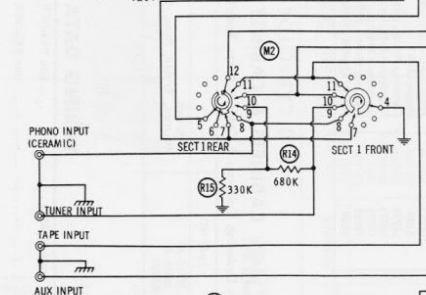
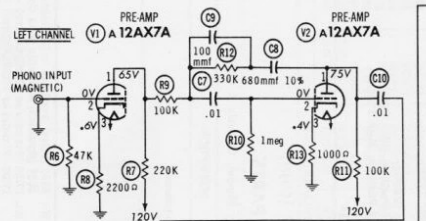


ITEM	TUBE	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
V1	12AX7A	130K	47K	2200	12	24	+330K	47K	2200	NC
V2	12AX7A	+210K	1meg	1000	0	12	+210K	1meg	1000	NC
V3	6EU7	FIL	FIL	NC	+1000	4.7meg	+160K	+220K	0.950K	680
V4	6EU7	FIL	FIL	TP	1000	47K	+220K	+220K	47K	1000
V5	6BQ5	267K	267K	120	FIL	FIL	NC	150	TP	+1600
V6	6BQ5	317K	317K	120	FIL	FIL	NC	150	TP	+1600
V7	6EU7	FIL	FIL	TP	1000	4.7meg	+160K	220K	950K	680
V8	6BQ5	267K	267K	120	FIL	FIL	NC	150	TP	+1600
V9	6BQ5	317K	317K	120	FIL	FIL	NC	150	TP	+1600

○ THIS READING WILL VARY, CONTROL SET FOR NORMAL OPERATION.
 † MEASURED FROM OUTPUT OF X1.

TP TIE POINT
 NC NO CONNECTION

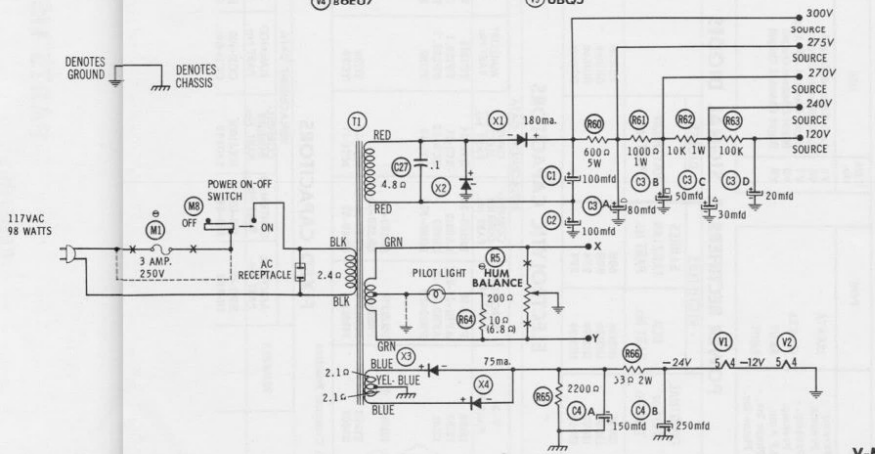
NUMBERS ASSIGNED TO COILS, SWITCHES, PLUGS, SOCKETS, AND TRANSFORMERS ARE TO FACILITATE CIRCUIT TRACING OR COMPONENT REPLACEMENT AND MAY NOT NECESSARILY BE FOUND ON THE UNIT.

SEE PARTS LIST FOR ALTERNATE VALUE OR APPLICATION

- 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 ±1% in voltage and resistance readings.
- All controls at minimum, proper output load connected.

A PHOTOFAC STANDARD NOTATION SCHEMATIC
 © Howard W. Sams & Co., Inc. 1962

DENOTES GROUND
 DENOTES CHASSIS



V-M
 MODEL 1428

PARTS LIST AND DESCRIPTIONS

TUBES

AMPEREX - GENERAL ELECTRIC			RAYTHEON			SYLVANIA		
ITEM No.	USE	TYPE	ITEM No.	USE	TYPE	ITEM No.	USE	TYPE
V1	Left Channel Preamp. - Right Channel Preamp.	12AX7A	V5	Left Channel Output	6BQ5			
V2	Left Channel Preamp. - Right Channel Preamp.	12AX7A	V6	Right Channel Output	6BQ5			
V3	Left Channel AF Amp.	6EU7	V7	Right Channel Output	6BQ5			
V4	Left Channel Phase Inv.	6EU7	V8	Right Channel Output	6BQ5			

POWER RECTIFIERS & SIGNAL DIODES

ITEM No.	CURRENT RATING (Measured)	RECTIFIERS		DIODES		NOTES
		ORIGINAL Part or Type No.	SARKES RCA PART No.	RAYTHEON PART No.		
X1	150A	12B06	IN3194	60H	Silicon	
X2	150A	12B06	IN3194	60H	Silicon	
X3	.075A	12B02	IN3194	2F4	Silicon	
X4	.075A	12B02	IN3194	2F4	Silicon	

ELECTROLYTIC CAPACITORS

ITEM No.	RATING CAP. VOLT.	V-M PART No.	AEROVOX PART No.	CORNBELL-DUBILIER PART No.	REPLACEMENT DATA	SPRAGUE PART No.
C1	100	12192	PR81595	BR000-350	QTI-24	TC1265
C2	100	200	AFH1-31-25	XA0312	XCI-14	TYL-1445
C3A	30	12193	AFH2-45-10	C0200	XC3-53	TYL-1535
C3B	30	12191	PR82430	BR60-350	QTI-16	TYL-1535
C4	30	350				TYA-1710
C4A	150	50	PR81370	BR150-50	MTI-17	TYA-1906
C5	25	23002	PR81265	BR150-25	MTI-17	TYA-1906
C6	50	23002	PR81265	BR150-25	MTI-17	TYA-1906

① Common Positive

FIXED CAPACITORS

ITEM No.	RATING	REMARKS	AEROVOX PART No.	CORNBELL-DUBILIER PART No.	REPLACEMENT DATA	SPRAGUE PART No.
C7	.01		BD-501	BYA1081	CCD-108	5HK-500
C8	600 10% 1000 10%		DI-600	LI0708	CCD-600	1075-100

RESISTORS

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

ITEM No.	RATING	REPLACEMENT DATA		ITEM No.	RATING	REPLACEMENT DATA	
		WORKMAN PART No.	REMARKS			WORKMAN PART No.	REMARKS
R6	47K			R37	100K		
R7	220K			R38	330K		
R8	220K			R39	330K		
R9	100K			R40	600K		
R10	100K			R41	600K		
R11	100K			R42	330K		
R12	330K			R43	4.7meg		
R13	1000Ω			R44	150K		
R14	900K			R45	150K		
R15	100K			R46	150K		
R16	4.7meg			R47	220K		
R17	150K			R48	220K		
R18	1000Ω			R49	600K		
R19	15K			R50	100K		
R20	220K			R51	100K		
R21	220K			R52	1000Ω		
R22	180K			R53	47K		
R23	220K			R54	220K		
R24	220K			R55	1000Ω		
R25	1000Ω			R56	220K		
R26	220K			R57	220K		
R27	220K			R58	1200 5W	PWS-120	
R28	1000Ω			R59	15K	PWS-120	
R29	270K			R60	600Ω 5W	PWS-600	
R30	1000Ω			R61	1000Ω 1W	5W-SQ-400	
R31	120Ω 5W			R62	100K 1W		
R32	220K			R63	100K		
R33	47K			R64	100		
R34	220K			R65	2200Ω		
R35	2200Ω			R66	3312 2W		
R36	100K						

* Alternate Value.

Note 1. Not used in some versions.

TRANSFORMER (POWER)

ITEM No.	RATING	REPLACEMENT DATA			NOTES
		V-M PART No.	Merit PART No.	Stancor PART No.	
T1	SEC. 1 117V @ .680A	12B05-4			
	SEC. 2 44VCT @ .150A				
	SEC. 3 6.3V @ 3.85A				
	SEC. 4 SEC. 5				

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE	REPLACEMENT DATA			NOTES
		V-M PART No.	Merit PART No.	Stancor PART No.	
T2	6000Ω CT	12B94			
T3	6000Ω CT	12B94			

FIXED CAPACITORS (cont)

ITEM No.	RATING	REMARKS	AEROVOX PART No.	CENTRALAB PART No.	CORNBELL-DUBILIER PART No.	ELMCO PART No.	MALLOY PART No.	SPRAGUE PART No.
C9	100		DI-100	DD-101	LI0711	CCD-101	GP310	1075-T10
C10	.01		BD-501	DD-502	BYA1081	CCD-103	B-110	5HK-510
C11	.005		BD-505	DD-503	BYA1081	CCD-103	B-250	5HK-1060
C12	.022		BD-502	DD-504	BYA1081	CCD-103	B-250	5HK-520
C13	.022		BD-503	DD-505	BYA1081	CCD-103	B-250	5HK-520
C14	.022		BD-504	DD-506	BYA1081	CCD-103	B-250	5HK-520
C15	.022		BD-505	DD-507	BYA1081	CCD-103	B-250	5HK-520
C16	100		DI-100	DD-101	LI0711	CCD-101	GP310	1075-T10
C17	600 10%		BD-601	DD-602	BYA1081	CCD-103	B-110	5HK-580
C18	600 10%		BD-602	DD-603	BYA1081	CCD-103	B-110	5HK-580
C19	.01		BD-603	DD-604	BYA1081	CCD-103	B-110	5HK-580
C20	.01		BD-604	DD-605	BYA1081	CCD-103	B-110	5HK-580
C21	.005		BD-605	DD-606	BYA1081	CCD-103	B-110	5HK-580
C22	.022		BD-606	DD-607	BYA1081	CCD-103	B-110	5HK-580
C23	100		DI-100	DD-101	LI0711	CCD-101	GP310	1075-T10
C24	.022		BD-607	DD-608	BYA1081	CCD-103	B-110	5HK-580
C25	.022		BD-608	DD-609	BYA1081	CCD-103	B-110	5HK-580
C26	100		DI-100	DD-101	LI0711	CCD-101	GP310	1075-T10
C27	.1 600V		PR88N-1	CUB8P1		6DP-4-104	GEM-601	6TM-P10

CONTROLS

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

ITEM No.	USE	RESISTANCE	V-M PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLOY PART No.
R1A	Loudness, Left	1meg	12465				
B	Loudness, Right	500K Tap					
R2A	Balance, Left	500K Tap	12466-1	B-40, SR-413			FAS5A, RU58R, CS3500
B	Balance, Right	500K					
R3A	Treble, Left	1meg	12467-1	B-70, SR-70	AD47-1meg-Z, KS-3		FB5A, RU5A, CS3500
B	Treble, Right	1meg					
R4A	Bass, Left	1meg	12467-1	B-70, SR-70	AD47-1meg-Z, KS-3		FB5A, RU5A, CS3500
B	Bass, Right	1meg					
R5	Hum Balance	200Ω	12345 ①	TT-2, or (AB-2, AK-1)		BU-201, TM4 or BU1, CF2, SS8)*	RU22L, SL37, CS437

① Not used in some versions.

* "SNAPTROL"

PARTS LIST AND DESCRIPTIONS (Continued)

COMPONENT COMBINATIONS

ITEM No.	USE	DESCRIPTION	V-M PART No.	REPLACEMENT DATA
K1	Loudness Comp., Left	100mmf, 200mmf, (2) .0025mf, (2) 180K, 12697-2		
K2	Tone Comp., Left	100mmf, (2) .001mf, .01mf, 12698		
K3	Loudness Comp., Right	100mmf, 200mmf, (2) .0025mf, (2) 180K, 12697-2		
K4	Tone Comp., Right	100mmf, (2) .001mf, .01mf, 22K, 220K, 12698		

FUSES

ITEM No.	RATING	REPLACEMENT DATA		
		V-M PART No.	UTTELFUSE PART No.	BUSS PART No.
M1	3AG	FUSE	FUSE	FUSE
	3A	8635	318003	GV3
	250V		(3AG 250V)	

MISCELLANEOUS

ITEM No.	PART NAME	V-M PART No.	NOTES
M2	Switch	14237	Function (Rotary Water Type)
M3	Switch	8220	Phono (SPST)
M4	Switch	14235	Phono (SPST) - Rev (DPDT)
M5	Switch	14235	Impedance Selector (3 Position, Slide Type)
M6	Switch	14235	Impedance Selector (3 Position, Slide Type)
M7	Switch	14233	Speaker Phase (DPDT)
M8	Switch	8220	Power On-Off (SPST)

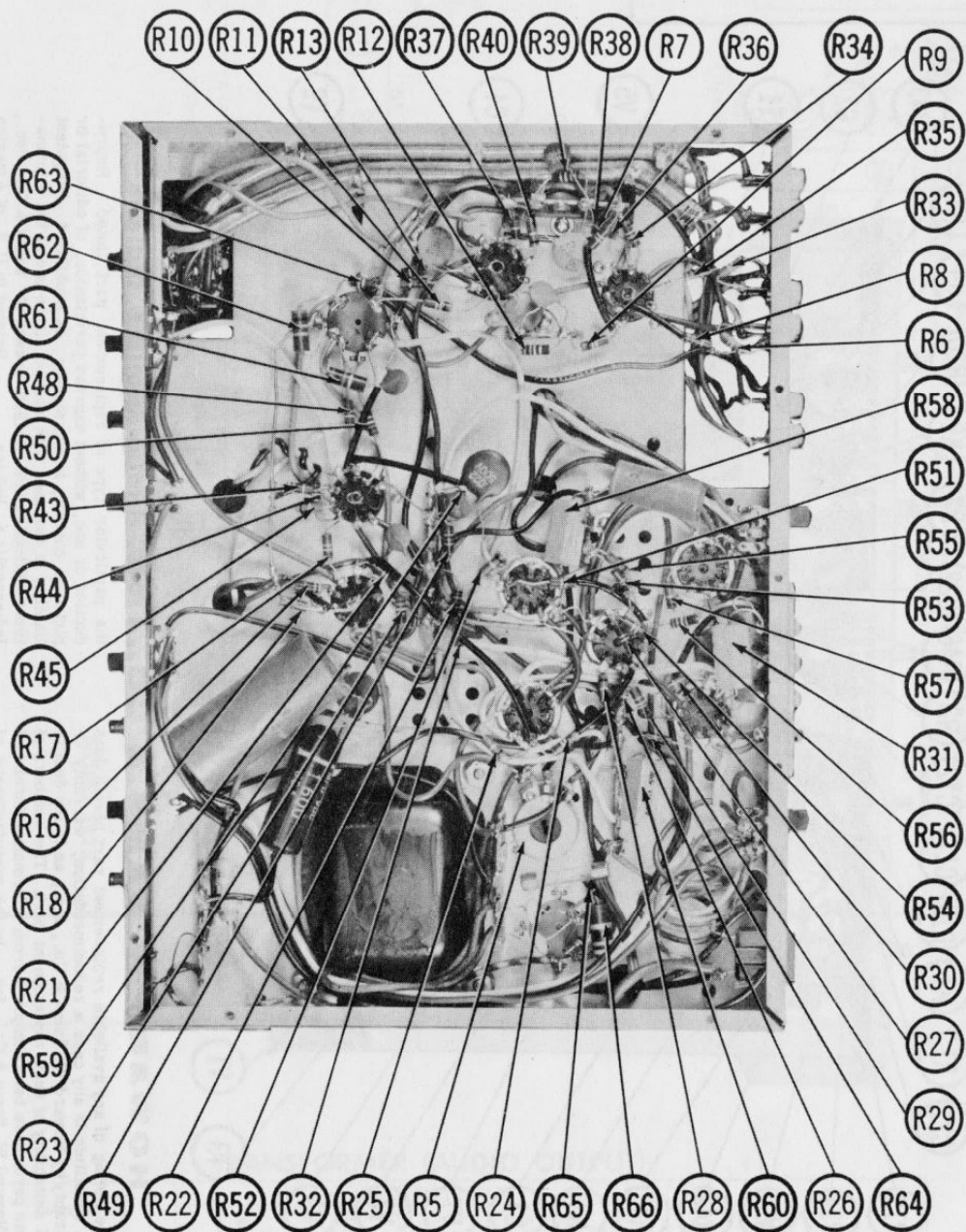
CABINETS & CABINET PARTS

(When Ordering Cabinets & Cabinet Parts, Specify Model, Chassis & Color)

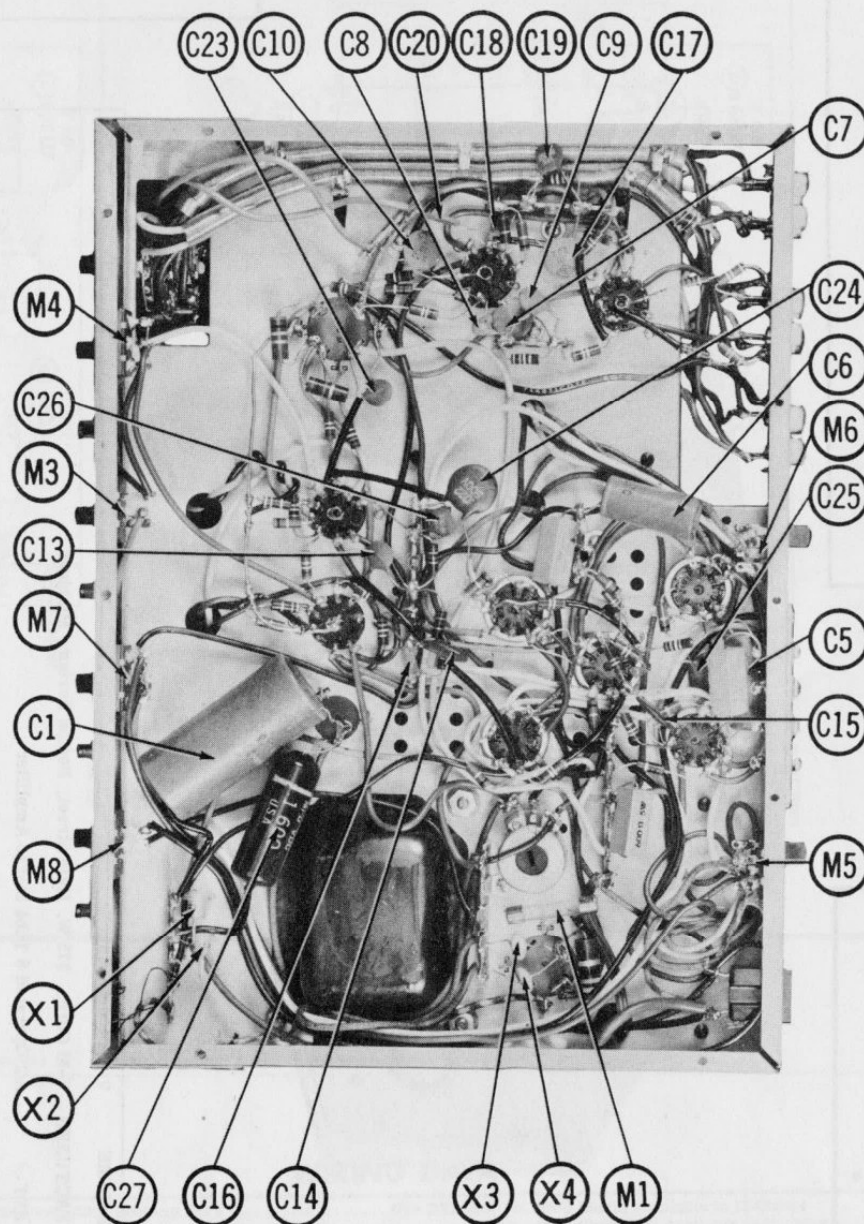
NAME	PART NO.	DESCRIPTION
Knob	JB317-A	Function
Knob	JB318-A	Balance, Treble, Bass, Loudness
Cabinet Assembly	14240	

WIRING DATA

General-use Unshielded Hook-up Wire Use BELDEN No. 8530 (Solid) Available in 12 Colors
 Shielded Hook-up Wire Use BELDEN No. 17008 (Plastic) or 17128 (Rubber) - 6 Ft.
 Power Cord Use BELDEN No. 17008 (Plastic) or 17128 (Rubber) - 6 Ft.
 Power Cord (Interlock Type) Use BELDEN No. 8874 (Rubber) or 8895 (Plastic)
 Low-Loss Shielded Lead Interconnecting) Use BELDEN No. 8401 or 8421
 Phono Pick-up Arm Cable Use BELDEN No. 8430 (Two Conductor-Unshielded)
 8429 (Two Conductor-Shielded)
 8419 (Three Conductor-Shielded)



CHASSIS BOTTOM VIEW — RESISTOR IDENT.



CHASSIS BOTTOM VIEW
CAPACITOR & MISC. IDENT.