

Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
0Ω	0Ω	†12KΩ	470KΩ	0Ω	.1Ω
.1Ω	†4.9KΩ	†12KΩ	27Ω ■2.5Meg		
0Ω	†1.2KΩ	†34KΩ	47Ω		
0Ω	†1.2KΩ	†34KΩ	82Ω		
.1Ω	0Ω	0Ω	16KΩ		
.1Ω	1.9Meg ■750KΩ	1.9Meg ■750KΩ	†335KΩ		
†210Ω	330KΩ	INF	0Ω	390Ω	
155Ω	INF	145Ω	INF	100KΩ	

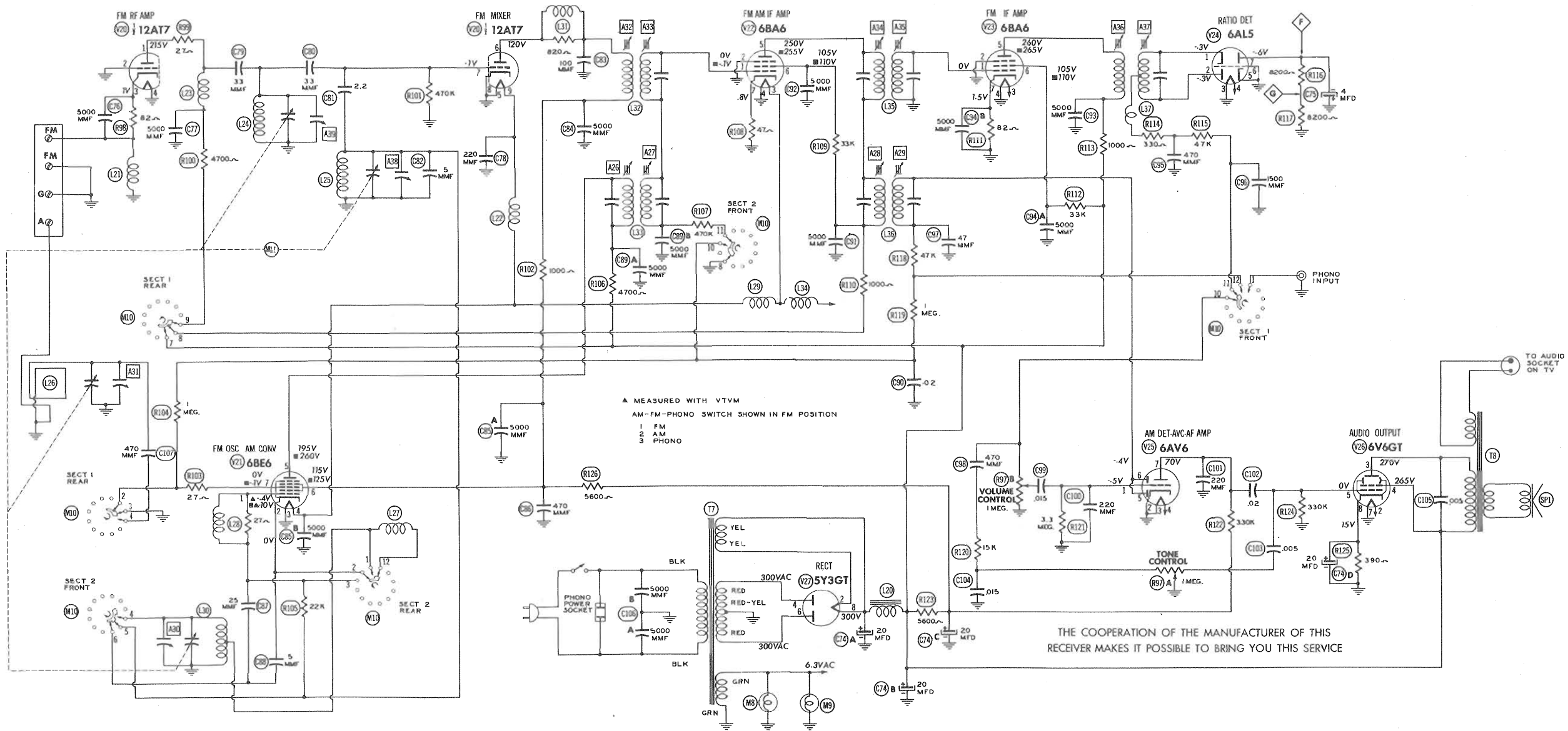
SCHEMATIC



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FOLDER 10



RESISTANCE READINGS

Item	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
V 1	12AT7	†4.9KΩ	0Ω	82Ω	0Ω	0Ω	†12KΩ	470KΩ	0Ω	.1Ω
V 2	6BE6	22KΩ	1Ω	0Ω	.1Ω	†4.9KΩ	†12KΩ	27Ω		
V 3	6BA6	2Meg	470KΩ	0Ω	.1Ω	0Ω	†1.2KΩ	†34KΩ	47Ω	
V 4	6BA6	.6Ω	0Ω	.1Ω	0Ω	†1.2KΩ	†34KΩ	82Ω		
V 5	6AL5	750KΩ	750KΩ	0Ω	.1Ω	0Ω	0Ω	16KΩ		
V 6	6AV6	3.3Meg	0Ω	0Ω	.1Ω	1.9Meg	1.9Meg	†335KΩ		
V 7	6V6GT	INF	.1Ω	†335Ω	†210Ω	330KΩ	INF	0Ω	390Ω	
V 8	5Y3GT	INF	100KΩ	INF	155Ω	INF	145Ω	INF	100KΩ	

ALL MEASUREMENTS TAKEN IN "FM" POSITION UNLESS NOTED
■ MEASURED IN "AM" POSITION
† MEASURED FROM PIN 2 OF V27

A PHOTOFAC STANDARD NOTATION SCHEMATIC
Howard W. Sams & Co., Inc. 1952

MAJESTIC
MODELS 20FP88, 20FP89

RADIO SCHEMATIC

TONE CONTROL
VOLUME CONTROL
ON-OFF SW.
AM-FM
PHONO SELECTOR
TUNING CONTROL

TRADE NAME Ma
MANUFACTURER Ma
TYPE SET TV
TUBES Two

POWER SUPPLY 110-
TUNING RANGE-(TV)

Alignment Instructions

Alignment Instructions

Dial Cord Stringing ..

Disassembly Instructi

Horizontal Sweep Circ

Parts List & Descripti

Parts List & Descripti

Photographs

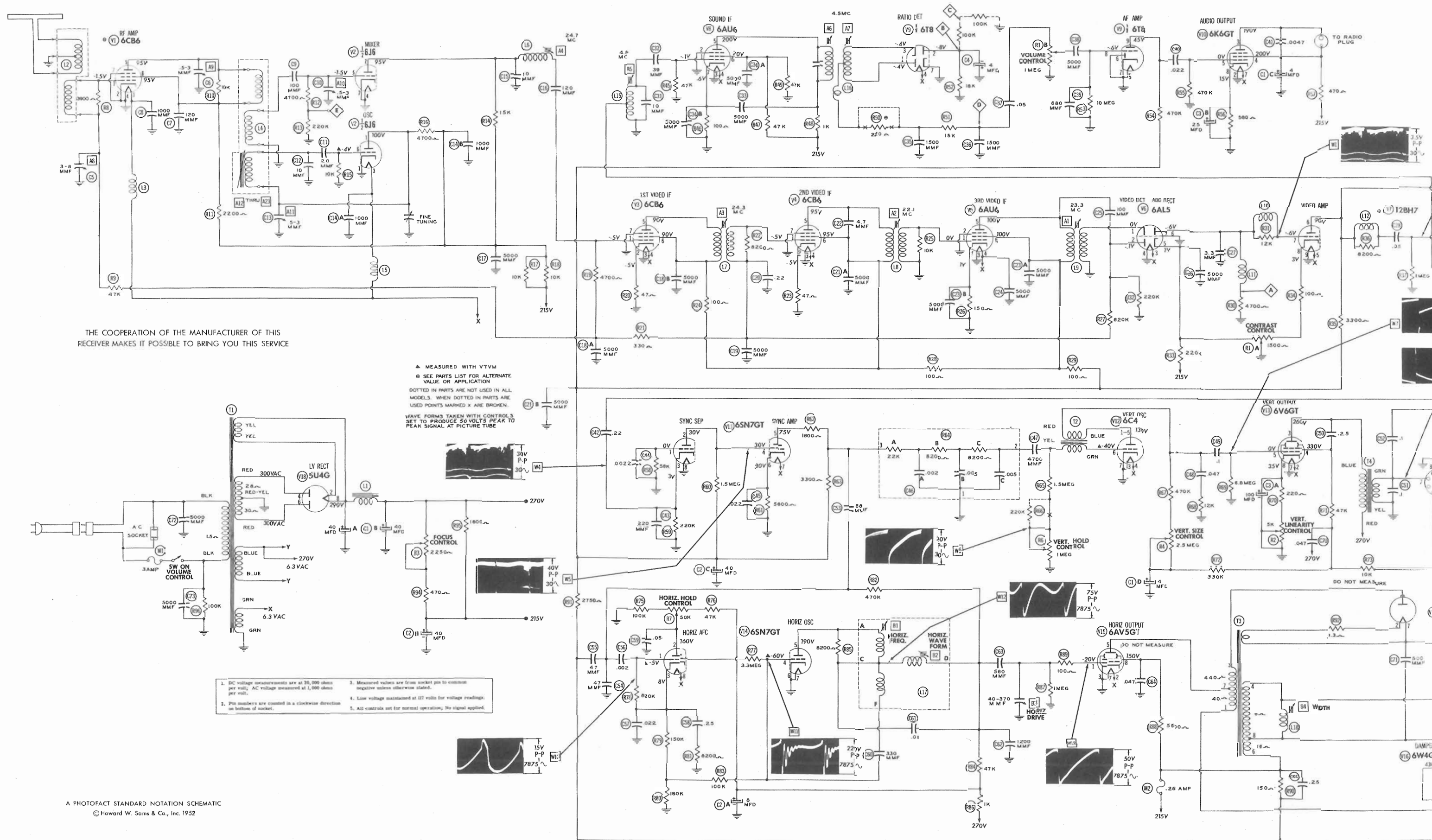
Cabinet - Rear V

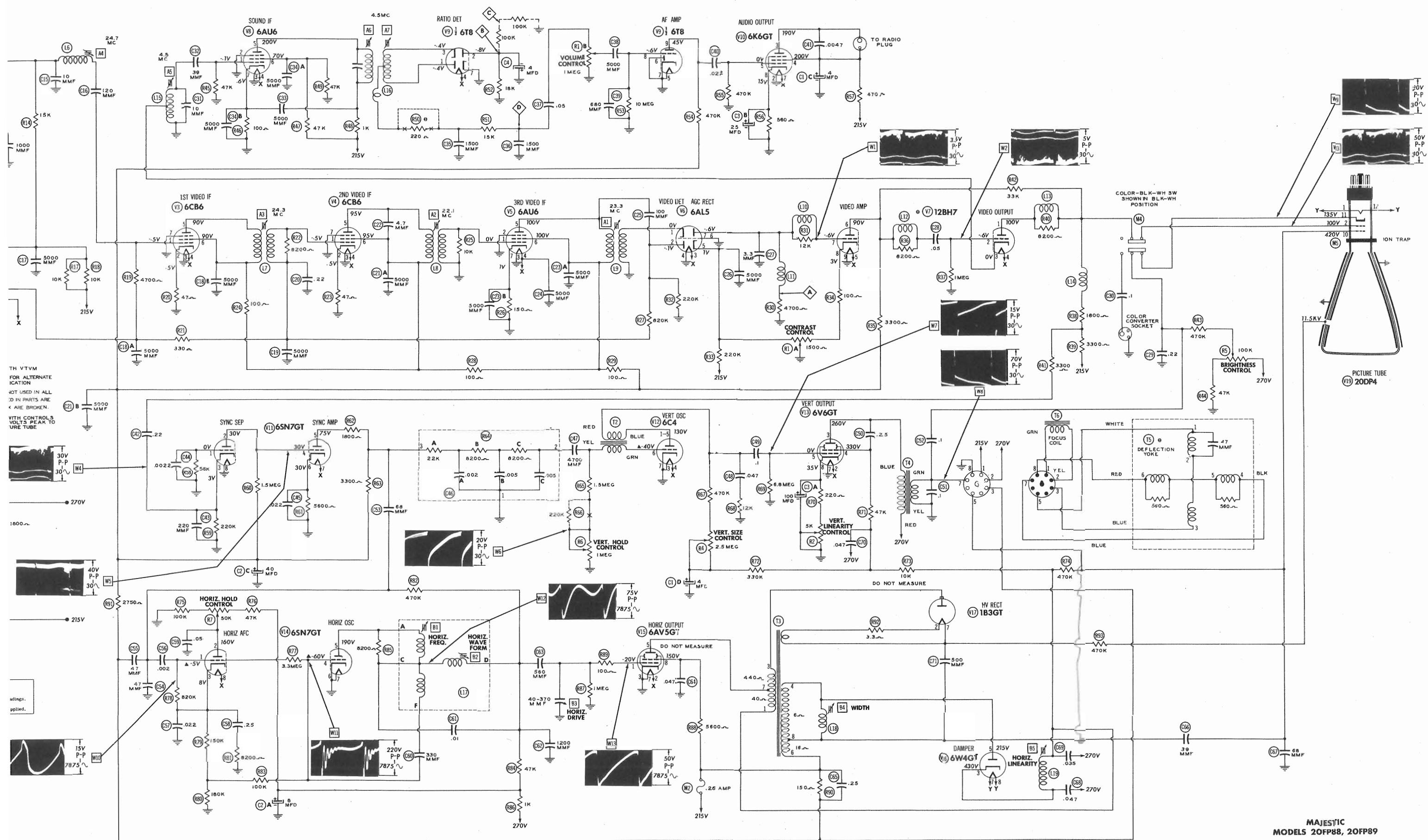
Capacitor & Align

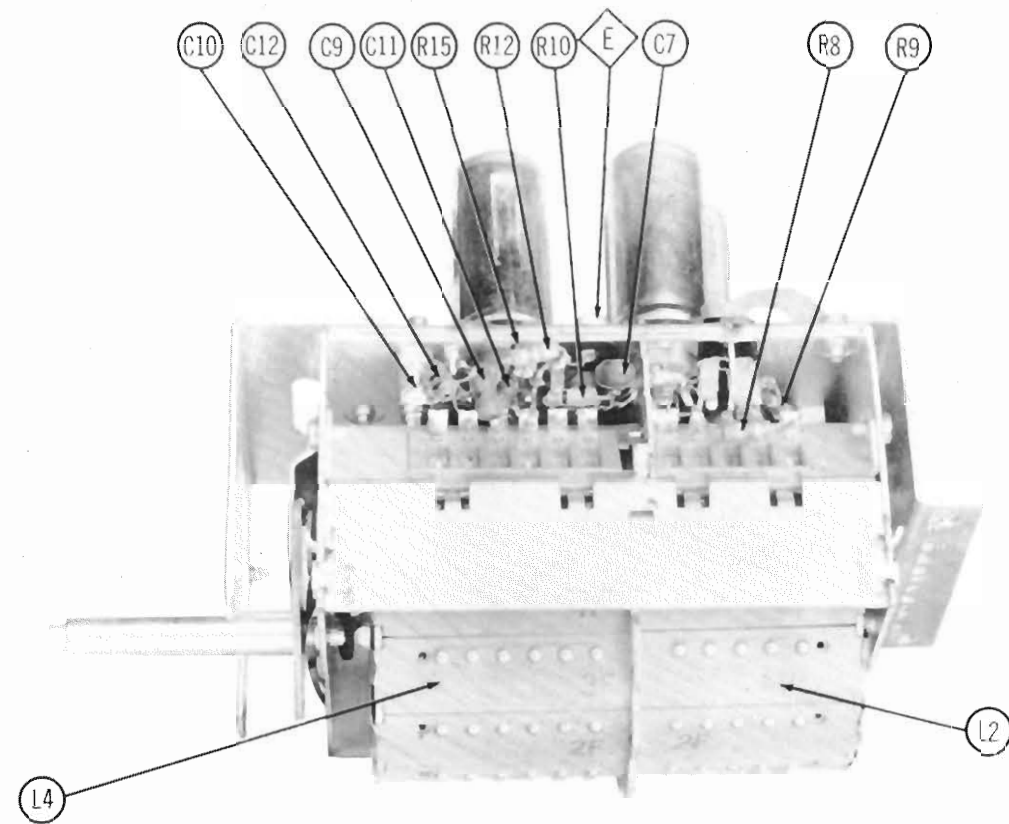
Chassis (Radio)

FOR SERVICE INFORM

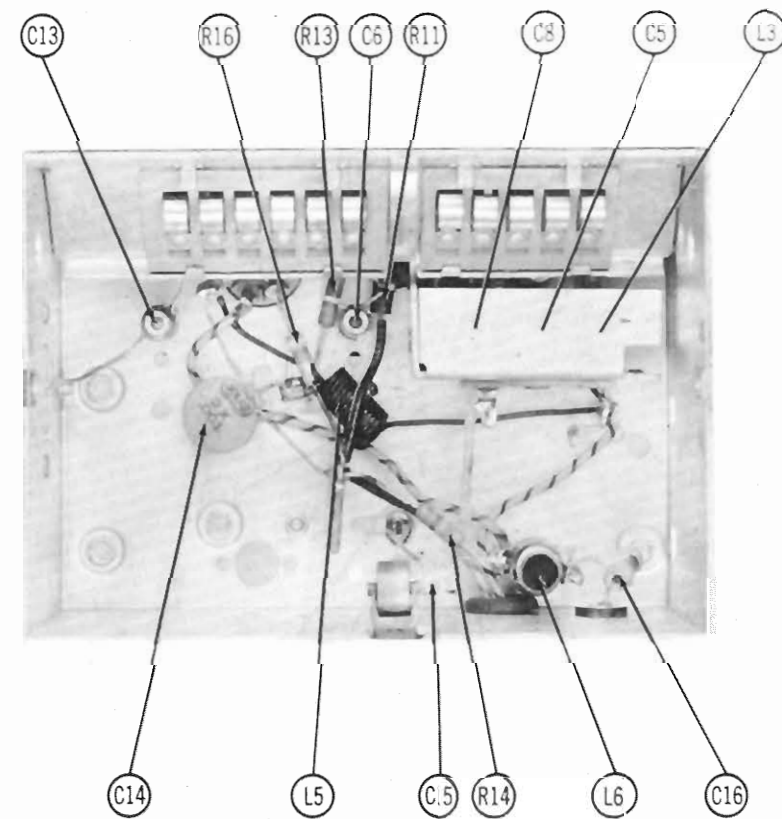
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as to the quality and suitability
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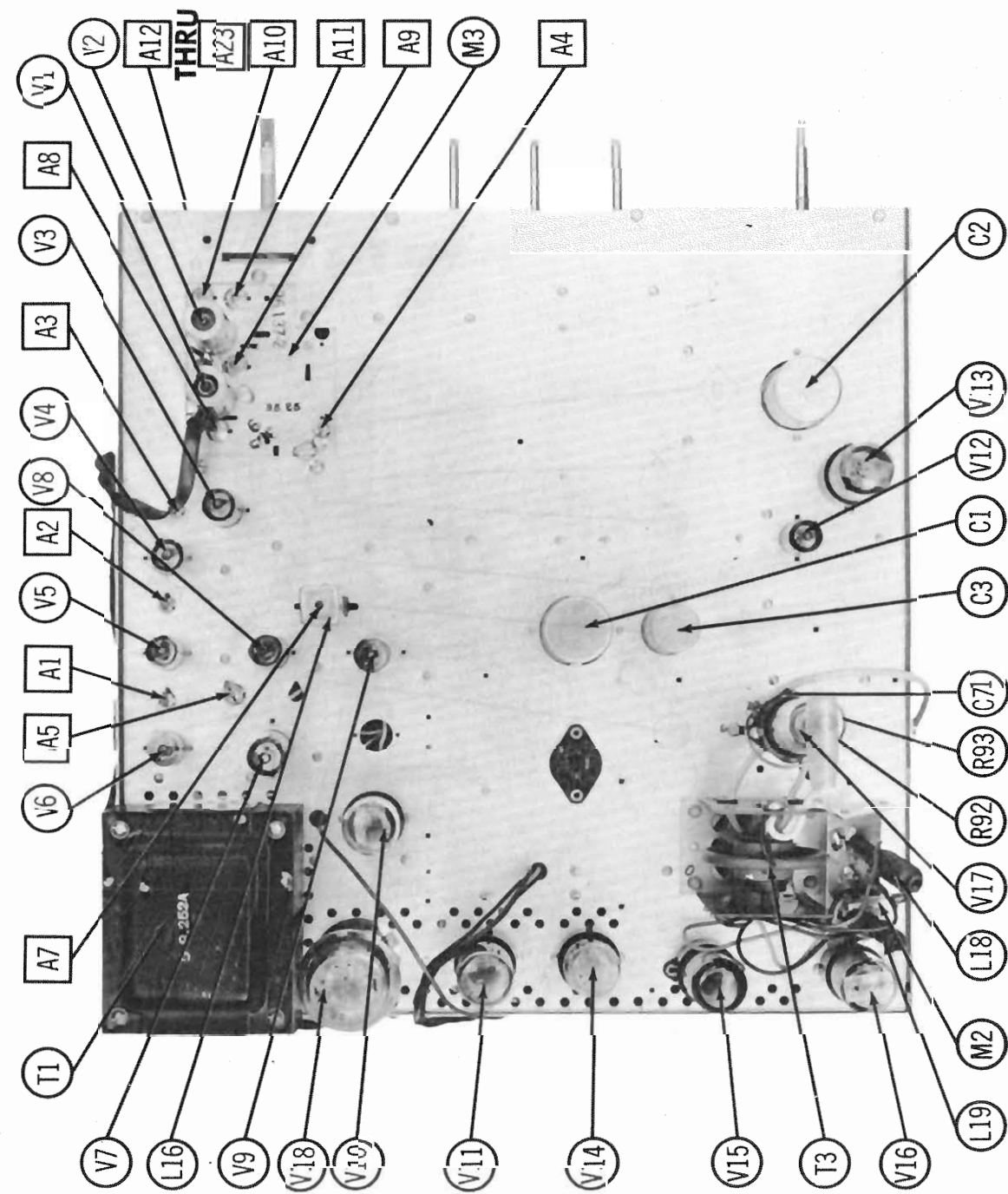




RF TUNER-RIGHT SIDE



RF TUNER-BOTTOM VIEW



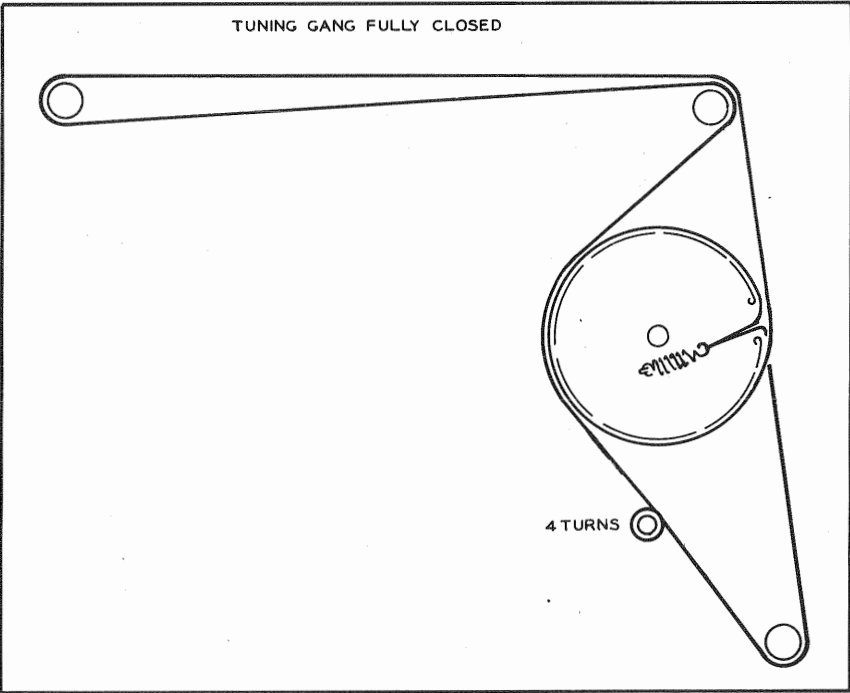
MAJESTIC
MODELS 20FP88, 20FP 89
CHASSIS TOP VIEW



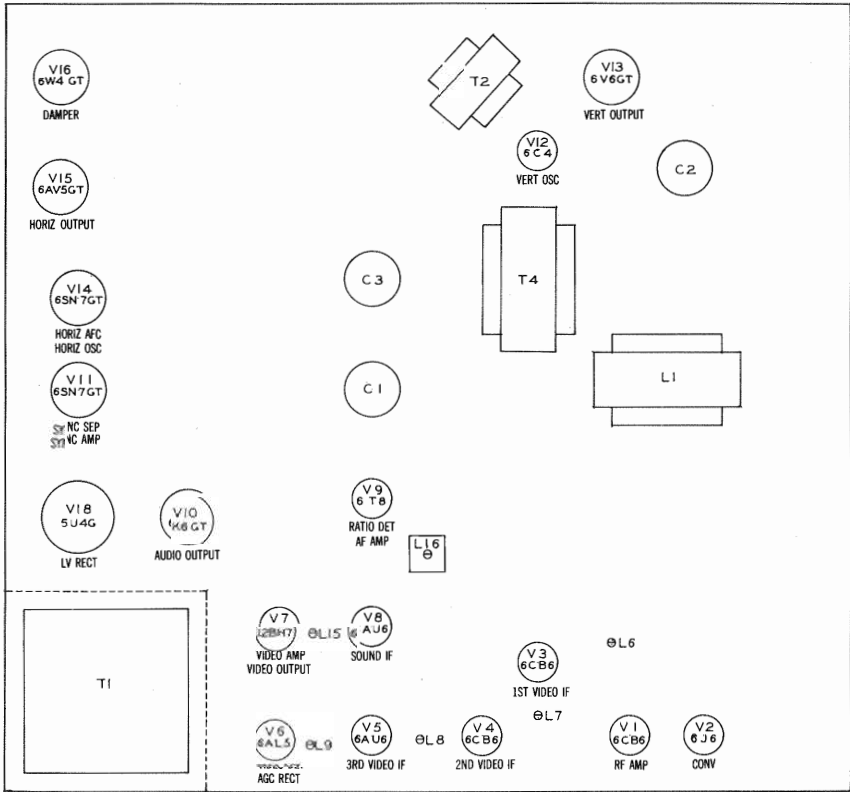
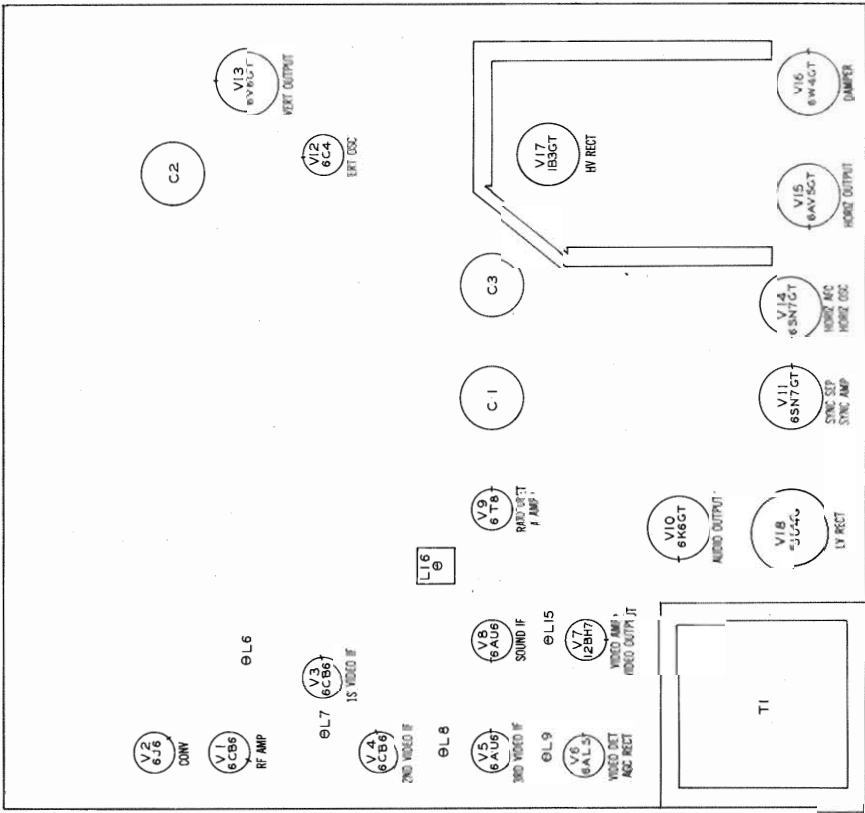
RESISTANCE MEASUREMENTS

Item	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
V 1	6CB6	1.1Meg	0Ω	.1Ω	0Ω	7.5KΩ	7.5KΩ	0Ω		
V 2	6J6	10KΩ	20KΩ	.1Ω	0Ω	220KΩ	10KΩ	0Ω		
V 3	6CB6	1Meg	47Ω	0Ω	.1Ω	†3.5KΩ	†3.5KΩ	0Ω		
V 4	6CB6	1Meg	47Ω	0Ω	.1Ω	†3.4KΩ	†3.4KΩ	0Ω		
V 5	6AU6	.3Ω	0Ω	0Ω	.1Ω	†3.3KΩ	†3.3KΩ	150Ω		
V 6	6AL5	.3Ω	220KΩ	.1Ω	0Ω	1.1KΩ	0Ω	4.7KΩ		
V 7	12BH7	†5.4KΩ	1Meg	1.2Ω	.1Ω	.1Ω	16.5KΩ	4.7KΩ	500Ω	0Ω
V 8	6AU6	47KΩ	0Ω	0Ω	.1Ω	†1.3KΩ	25KΩ	100Ω		
V 9	6T8	INF	18KΩ	INF	.1Ω	0Ω	0Ω	0Ω	10Meg	†470KΩ
V 10	6K6GT	INF	0Ω	11.3KΩ	†800Ω	470KΩ	†470KΩ	.1Ω	500Ω	
V 11	6SN7GT	56KΩ	†1.5Meg	220KΩ	†1.5Meg	†8.1KΩ	5.6KΩ	.1Ω	0Ω	
V 12	6C4	#1.1Meg	0Ω	0Ω	.1Ω	#1.1Meg	1.9Meg	0Ω		
V 13	6V6GT	INF	.1Ω	†780Ω	#57KΩ	6.8Meg	2.9KΩ	0Ω	3.1KΩ	
V 14	6SN7GT	1.1Meg	†40KΩ	330KΩ	280KΩ	†48KΩ	0Ω	0Ω	.1Ω	
V 15	6AV5GT	1Meg	.1Ω	0Ω	INF	#61Ω	INF	0Ω	†5.9KΩ	
V 16	6W4GT	†300Ω	INF	850KΩ	INF	†300Ω	#0Ω	#0Ω	#.1Ω	
V 17	1B3GT	PINS 1 THRU 8 HAVE INF RESISTANCE								TOP CAP #501Ω
V 18	5U4G	INF	20KΩ	INF	28Ω	†72Ω	39Ω	†72Ω	20KΩ	
V 19	20DP4	#0Ω	†5.1KΩ	#47KΩ	†480KΩ	#.1Ω				

ALL CONTROLS SET FOR NORMAL OPERATION, NO SIGNAL APPLIED
† MEASURED FROM PIN 8 OF V18
MEASURED FROM PIN 3 OF V16
■ MEASURED FROM 270 VDC LINE



DIAL CORD STRINGING



TUBE PLACEMENT CHART

MAJESTIC
MODELS 20FP88, 20FP89

TV ALIGNMENT INSTRUCTIONS

ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT

The high voltage lead should be securely taped and kept away from the chassis.
Do not remove the horizontal oscillator tube to disable the high voltage.

VIDEO IF ALIGNMENT

Remove the converter tube (V2) from its socket and replace with a 6J6 which has had pin 1 removed. This will disable the local oscillator and reduce the possibility of erroneous indications.
Connect the negative lead of a 3 volt battery to the ungrounded side of C18A. Connect the positive lead to chassis. Set the contrast control fully clockwise.

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS
Direct	High side to an ungrounded tube shield floating over dummy converter tube (V2). Low side to chassis.	23.3MC (unmod.)	Any	DC probe to Point A Common to chassis.	A1	Adjust for maximum deflection. Attenuate generator to maintain 1.5 Volts reading.
"	"	22.1MC	"	"	A2	Adjust for maximum deflection
"	"	24.3MC	"	"	A3	"
"	"	24.7MC	"	"	A4	"

OVERALL VIDEO IF RESPONSE CHECK

Connect the synchronized sweep voltage from the signal generator to the horizontal input of the oscilloscope for horizontal deflection.

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	SWEEP GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
Direct	High side to an ungrounded tube shield floating over dummy converter tube. Low side to chassis.	24MC (10MC Swp)	20.25MC 22 MC 24.75MC	Any	Vert. amp. to point A Low side to chassis.		Check for response curve as per fig. 1. If necessary retouch A1, through A4 for proper response.

SOUND IF ALIGNMENT USING AM SIGNAL GENERATOR AND VTVM

Connect two matched 100KΩ (±1%) resistors in series from point B to chassis. The junction of these two resistors is alignment point C as shown on the schematic.

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS
.0015MFD	High side to Point A Low side to chassis.	4.5MC (unmod.)	Any	DC probe to Point B Common to chassis.	A5, A6	Adjust for maximum deflection.
"	"	"	"	DC probe to Point D Common to Point C.	A7	Adjust for zero reading. A positive and negative reading will be obtained on either side of the correct setting.

SOUND IF ALIGNMENT USING FM SIGNAL GENERATOR AND OSCILLOSCOPE

Use frequency modulated signal with 60% modulation and 450KC sweep. Use 120V sawtooth voltage in scope for horizontal deflection.

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
.0015MFD	High side to Point A Low side to chassis.	4.5MC	4.5MC	Any	Vert. amp. to Point D Low side to chassis.	A5, A6	Disconnect stabilizer capacitor C4. Adjust for maximum amplitude and symmetry as per Fig. 2.
"	"	"	"	"	Vert. amp. to Point D Low side to chassis.	A7	Reconnect capacitor C4. Adjust A7 so that 4.5MC occurs at the center of crossover lines as per Fig. 3. SLIGHTLY retouch A6 for maximum amplitude and straightness of crossover lines.

RF AND MIXER ALIGNMENT (STANDARD COIL TUNER)

Remove bias battery used in Video IF Alignment and connect a short across C18A.
The sweep generator output lead should be terminated with its characteristic impedance, usually 50 ohms.

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
Two 120Ω Carbon Resistors	Across antenna terminals with 120Ω in each lead.	207MC (10MC Swp)	205.25MC 209.75MC	12	Vert. Amp. thru 10KΩ A8, A9, to point E Low side to chassis.	A8, A9, A10	Adjust for response curve similar to fig. 4 with markers at not less than 70%.
"	"	213MC (10MC Swp) 207MC (10MC Swp) 201MC (10MC Swp) 195MC (10MC Swp) 189MC (10MC Swp) 183MC (10MC Swp) 177MC (10MC Swp) 85MC (10MC Swp) 79MC (10MC Swp) 69MC (10MC Swp) 63MC (10MC Swp) 57MC (10MC Swp)	211.25MC 215.75MC 199.25MC 203.75MC 193.25MC 197.75MC 187.25MC 191.75MC 181.25MC 185.75MC 175.25MC 179.75MC 83.25MC 87.75MC 77.25MC 81.75MC 67.25MC 71.75MC 61.25MC 65.75MC 55.25MC 59.75MC	13 11 10 9 8 7 6 5 4 3 2	"	"	Check all channels for proper marker placement. If markers fall below 70% on any channel make slight compromise adjustment of A8, A9, and A10 with channel selector set for that channel. Recheck all channels to see that they have not been seriously affected.

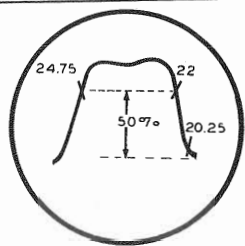


FIG. 1

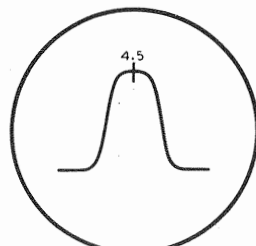


FIG. 2

TV ALIGNMENT INSTRUCTIONS (CONT.)

OSCILLATOR ALIGNMENT (STANDARD COIL TUNER)											
Complete oscillator alignment may not be necessary. If the oscillator seems to be off frequency approximately the same amount for a majority of the channels, it may be possible to correct them in one step using A11. It should be noted that this is an all channel oscillator circuit adjustment and should not be adjusted for any individual channel. If adjustment of A11 will not bring all channels well within the range of the fine tuning control it will be necessary to adjust the channel strip adjustment for each channel that is off frequency. The channel adjustment screws are reached through a hole just to the right of the channel switch shaft. The correct adjustment screw is accessible through this hole as the channel selector switch is turned to each channel. Remove the dummy converter tube and replace the original 6J6 in its socket. Set the fine tuning control to the mid-position of its range.											
DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	SWEEP GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS				
Two 120Ω carbon resistors	Across antenna terminals with 120Ω in each lead.	213MC (10MC swp.)	211.25MC 215.75MC	13	Vert. amp. to Point A Low side to chassis.	A12	Adjust to place sound marker as shown in Fig. 5. The video marker should be at 50% response.				
		207MC (10MC swp.)	205.25MC 209.75MC	12		A13					
		201MC (10MC swp.)	199.25MC 203.75MC	11		A14					
		195MC (10MC swp.)	193.25MC 197.75MC	10		A15					
		189MC (10MC swp.)	187.25MC 191.75MC	9		A16					
		183MC (10MC swp.)	181.25MC 185.75MC	8		A17					
		177MC (10MC swp.)	175.25MC 179.75MC	7		A18					
		85MC (10MC swp.)	83.25MC 87.75MC	6		A19					
		79MC (10MC swp.)	77.25MC 81.75MC	5		A20					
		69MC (10MC swp.)	67.25MC 71.75MC	4		A21					
		63MC (10MC swp.)	61.25MC 65.75MC	3		A22					
		57MC (10MC swp.)	55.25MC 59.75MC	2		A23					
		OSCILLATOR ALIGNMENT (SARKES TARZIAN TUNER)									
		DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY		MARKER GENERATOR FREQUENCY		CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
		Two 120Ω Carbon Resistors	Across antenna terminals with 120Ω in each lead.	213 MC (10MC Swp)		211.25MC 215.75MC		13	Vert. amp. to point A Low side to chassis.	A24	Adjust to place sound marker as shown in fig. 5. The video marker should be at 50% response.
"	"	207MC (10MC Swp) 201MC (10MC Swp) 195MC (10MC Swp) 189MC (10MC Swp) 183MC (10MC Swp) 177MC (10MC Swp)	205.25MC 209.75MC 199.25MC 203.75MC 193.25MC 197.75MC 187.25MC 191.75MC 181.25MC 185.75MC 175.25MC 179.75MC	12 11 10 9 8 7	"		Check all high band channel to see if markers can be properly placed well within the range of the fine tuning control. If not, a compromise adjustment of A24 may be necessary.				
"	"	85MC (10MC swp.)	83.25MC 87.75MC	6	"	A25	Adjust to place sound marker as shown in fig. 5. The video marker should be at 50% response.				
"	"	79MC (10MC swp.) 69MC (10MC swp.) 63MC (10MC swp.) 57MC (10 MC swp.)	77.25MC 81.75MC 67.25MC 71.75MC 61.25MC 65.75MC 55.25MC 59.75MC	5 4 3 2	"		Check all low band channels to see if markers can be properly placed well within the range of the fine tuning control. If not, a compromise adjustment of A25 may be necessary.				
THE RF SECTION OF THIS TUNER HAS BEEN PROPERLY ALIGNED AT THE FACTORY AND IS VERY STABLE. ALIGNMENT SHOULD NORMALLY NOT BE REQUIRED IN THE FIELD.											

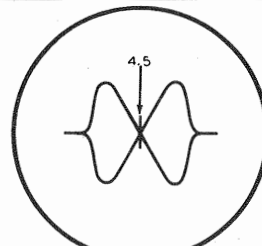


FIG. 3

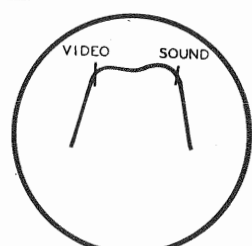


FIG. 4

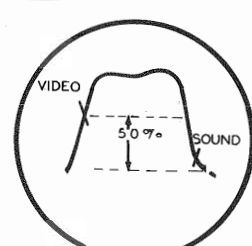
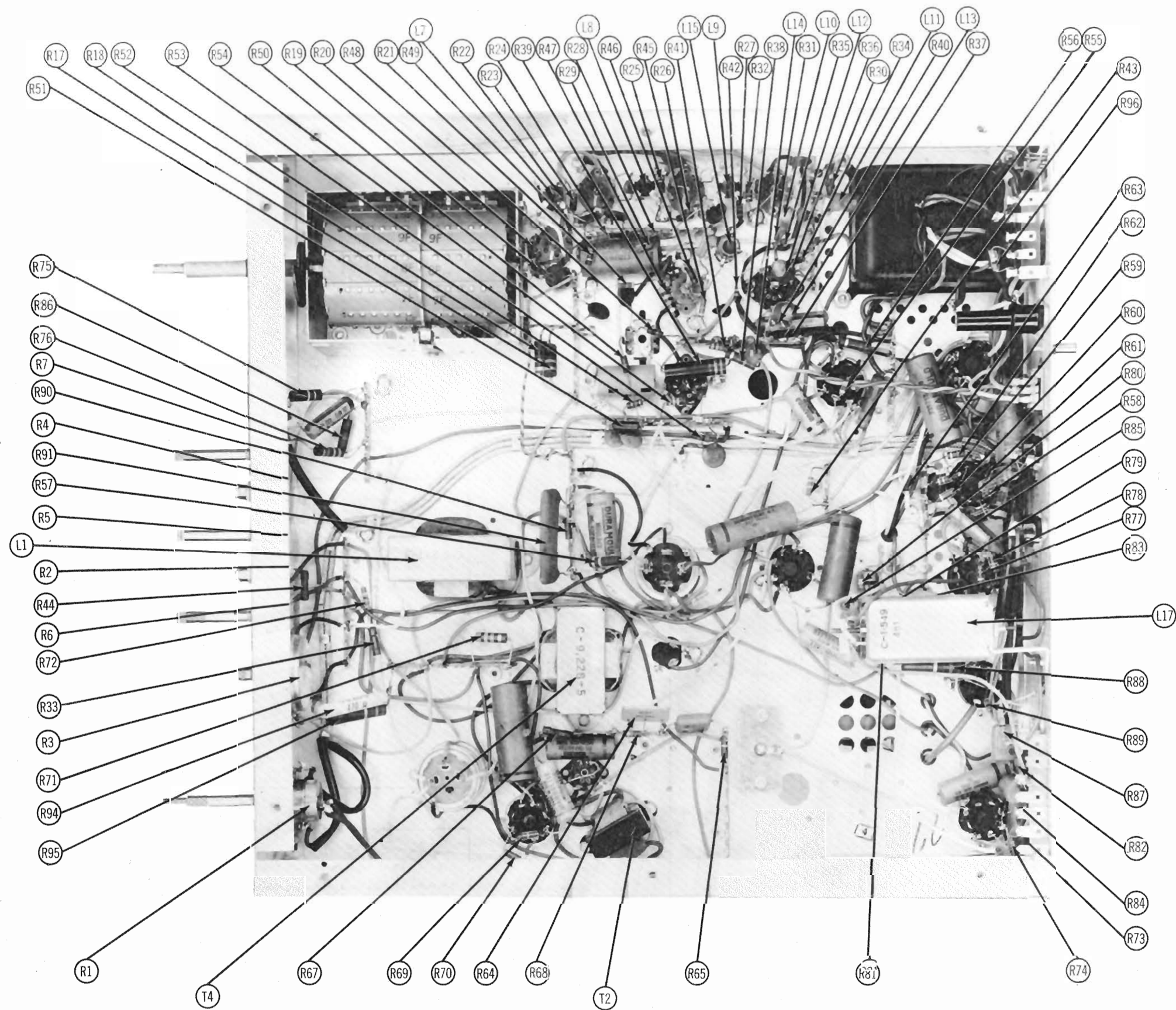


FIG. 5

MAJESTIC
MODELS 20FP88, 20FP89



CHASSIS BOTTOM VIEW-RESISTOR AND INDUCTOR IDENTIFICATION

RADIO ALIGNMENT INSTRUCTIONS

ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT							
Turn the tuning gang fully open and set the pointer to coincide with the last mark at the high frequency end of the dial.							
AM ALIGNMENT							
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	BAND SWITCH POS.	RADIO DIAL SETTING	OUTPUT METER	ADJUST	REMARKS
13. .005MFD	High side to stator plates of rear broadcast section of tuning gang. Low side to chassis.	455KC (400% mod.)	AM (1st. pos. clockwise)	Tuning gang fully open.	Across voice coil.	A26, A27, A28, A29	Adjust for maximum output.
14. "	"	1650KC	"	"	"	A30	"
15. Direct	Loop	1500KC	"	1500KC	"	A31	"
FM IF ALIGNMENT USING AM SIGNAL GENERATOR AND VTVM							
DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	BAND SWITCH POS.	RADIO DIAL SETTING	CONNECT VTVM	ADJUST	REMARKS
16. .005MFD	High side to Pin 7 (grid) of 12AT7 (V20). Low side to chassis.	10.7MC (unmod.)	FM (fully counter clockwise).	Tuning gang fully open.	DC probe to Point F. Common to chassis.	A32, A33, A34, A35, A36	Adjust for maximum deflection. Attenuate generator to maintain 2 volts reading or less.
17. "	"	"	"	"	DC probe to Point G. Common to Point F.	A37	Adjust for zero reading. A positive and negative reading will be obtained on either side of the correct setting.
FM IF ALIGNMENT USING FM SIGNAL GENERATOR AND OSCILLOSCOPE							
Use frequency modulated signal with 60% modulation and 450KC sweep. Use 120% sawtooth voltage in scope for horizontal deflection.							
DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	BAND SWITCH POS.	RADIO DIAL SETTING	CONNECT SCOPE	ADJUST	REMARKS
16. .005MFD	High side to Pin 7 (grid) of 12AT7 (V20). Low side to chassis.	10.7MC (450KC swp)	FM	Tuning gang fully open	Vert. amp. to Point F. Low side to chassis.	A32, A33, A34, A35, A36	Disconnect stabilizer capacitor C75. Adjust for maximum amplitude and symmetry as per Fig. 6.
17. "	"	"	"	"	Vert. amp. to Point H. Low side to chassis.	A37	Reconnect capacitor C75. Adjust so that 10.7MC occurs at center of crossover lines per as Fig. 7. SLIGHTLY retouch A36 for maximum amplitude and straightness of crossover lines.
FM RF ALIGNMENT							
The signal generator output lead should be terminated with its characteristic impedance, usually 50 ohms.							
DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	BAND SWITCH POS.	RADIO DIAL SETTING	CONNECT VTVM	ADJUST	REMARKS
18. Two 120Ω carbon resistors	Across FM antenna terminals with 120Ω in each lead.	108.5MC (unmod.)	FM	Tuning gang fully open.	DC probe to Point G. Common to chassis.	A38	Adjust for maximum deflection.
19. "	"	105MC	"	105MC	"	A39	"

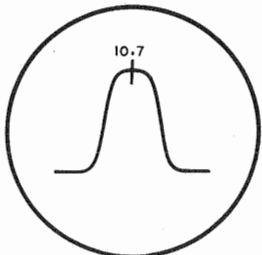


FIG. 6

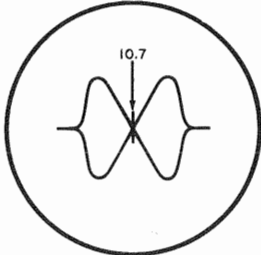
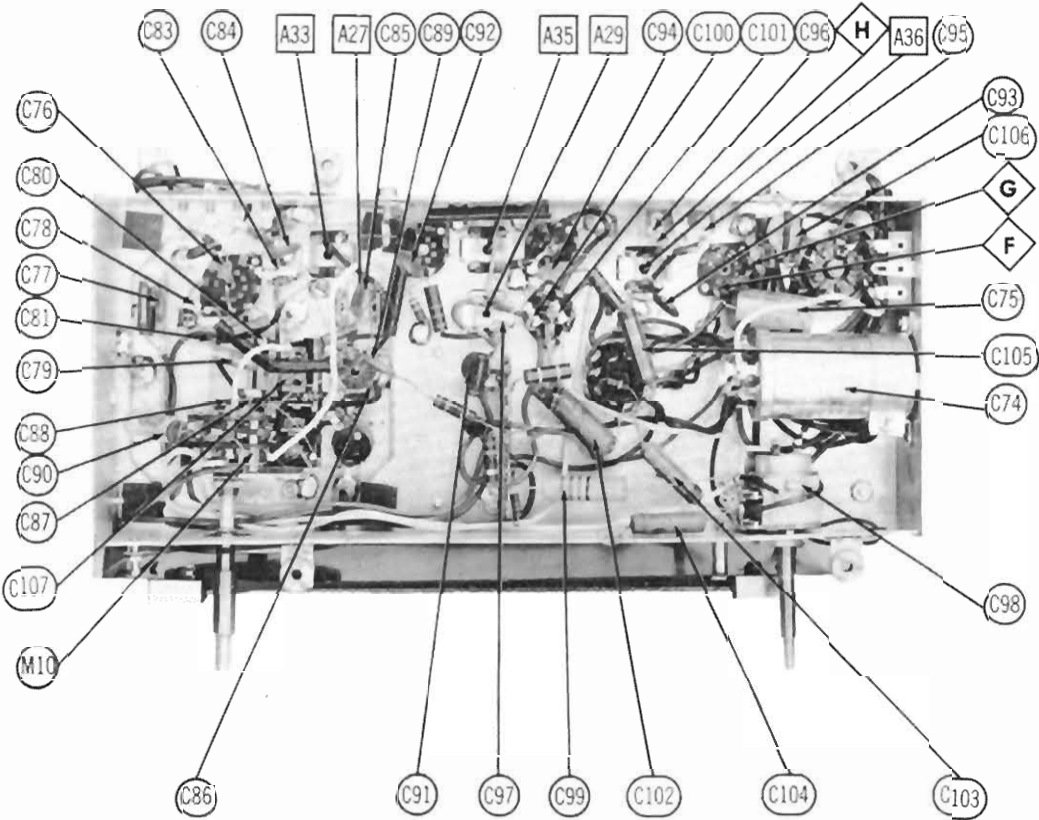
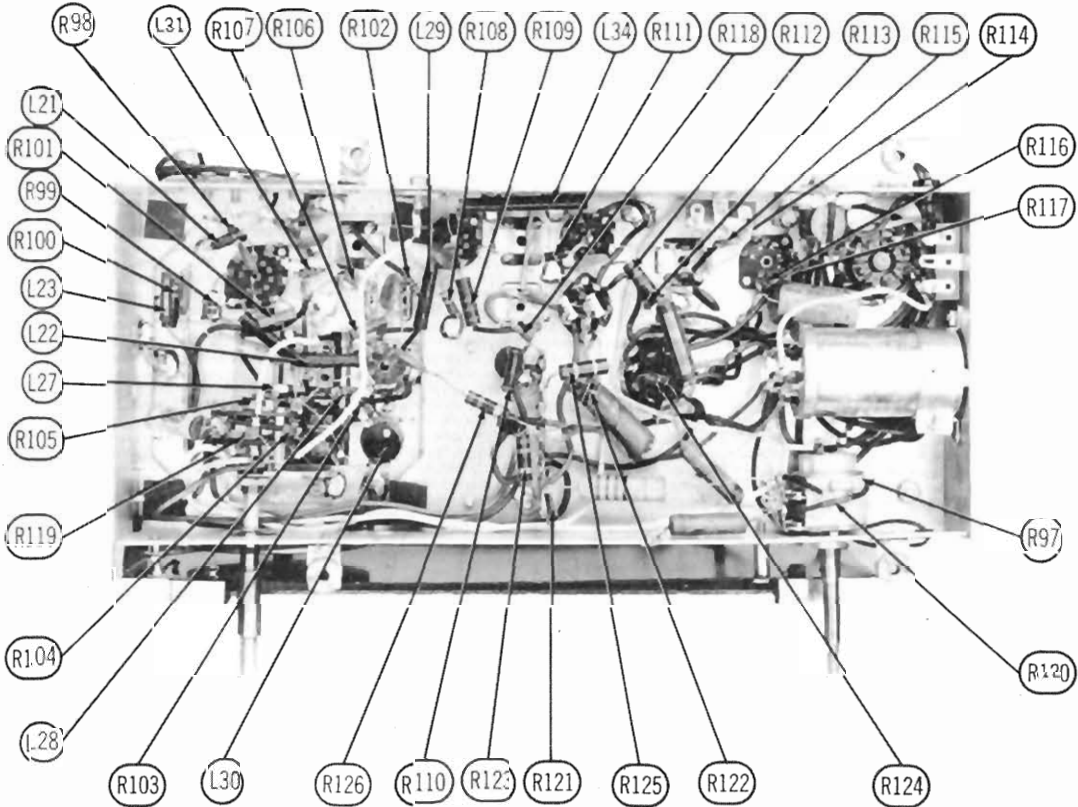


FIG. 7

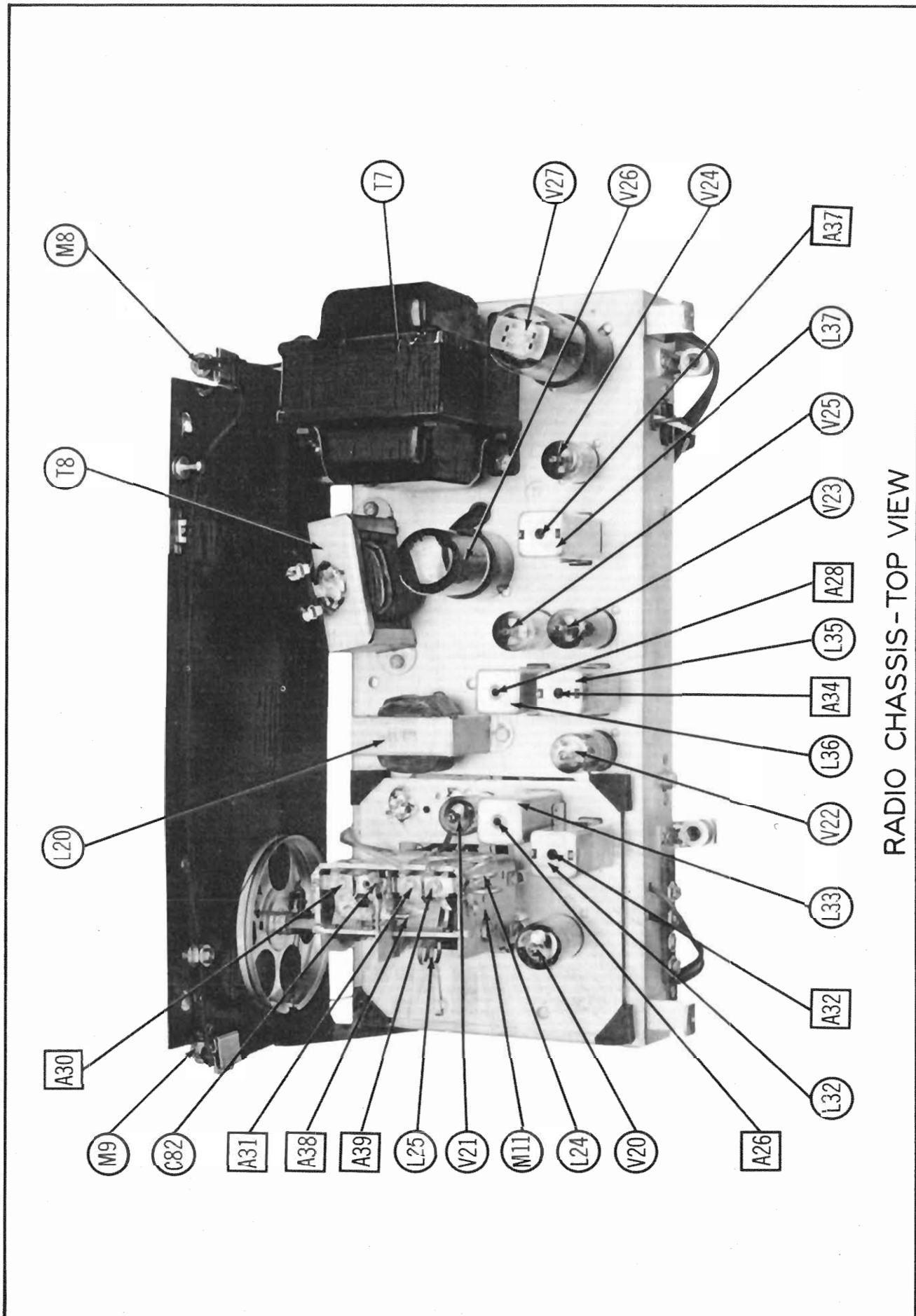


RADIO CHASSIS-BOTTOM VIEW



RADIO CHASSIS-BOTTOM VIEW

MAJESTIC
MODELS 20FP88, 20FP89



RADIO CHASSIS-TOP VIEW

RADIO PARTS LIST AND DESCRIPTIONS (Continued)

RESISTORS (CONT.)

ITEM No.	RATING		REPLACEMENT DATA		IDENTIFICATION CODES
	RESISTANCE	WATTS	MAJESTIC PART No.	IRC PART No.	
R118	47K			BTS-47K	Diode Filter
R119	1Meg			BTS-1Meg	AVC Network
R120	15K			BTS-15K	Tone Compensation
R121	3.3Meg			BTS-3.3Meg	AF Amp. Grid
R122	330K			BTS-330K	AF Amp. Plate
R123	5600			BTA-5600	Decoupling
R124	330K			BTS-330K	Output Grid
R125	3900			BTA-3900	Output Cathode
R126	5600			BTA-5600	Decoupling

TRANSFORMER (POWER)

ITEM No.	RATING				REPLACEMENT DATA			
	PRI.	SEC. 1	SEC. 2	SEC. 3	MAJESTIC PART No.	STANCOR PART No.	MERIT PART No.	CHICAGO PART No.
T7	117VAC @ .750A	600VCT @ .087 ADC	5VAC 2A	6.3VAC @ 2.25A	D-9.248A	PC8409 ①	P-3153 ① ③	PV-120 ③

① Add series Resistor to reduce plate voltage
③ Drill new mounting holes

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	RATING		REPLACEMENT DATA				INSTALLATION NOTES
	IMPEDANCE	DC RES.	MAJESTIC PART No.	STANCOR PART No.	MERIT PART No.	CHICAGO PART No.	
T8	8K	3.6	5300				
	Pri. #2 4.5K		Pri. #2 12.5	C-9.256			

FILTER CHOKE

ITEM No.	RATINGS			REPLACEMENT DATA				INSTALLATION NOTES
	TOTAL DIRECT CURRENT	D. C. RESISTANCE	INDUCTANCE (0 CURRENT 1000 μ)	MAJESTIC PART No.	STANCOR PART No.	MERIT PART No.	CHICAGO PART No.	
L20	.097ADC	2100	4.5 Hy.	C-9.255A		C-2993 ①	R-885 ①	① Drill one new mtg. hole

COILS (RF-IF)

ITEM No.	USE	DC RES.		REPLACEMENT DATA		NOTES
		PRI.	SEC.	MAJESTIC PART No.	MERIT PART No.	
L21	FM Ant. Coil	0		B-1.445-3		Wound on 270 Resistor
L22	Fil. Choke	0		B-1.501		
L23	RF Choke	.8		B-1.512		
L24	FM RF Coil	0		B-1.539		
L25	FM Osc. Coil	0		B-1.526		
L26	AM Loop Ant.	1.2		D-1.540		
L27	RF Choke	.3		B-1.535-1		
L28	Parasitic Supp.	0		B-1.536-2		
L29	Fil. Choke	0		B-1.501		
L30	AM Osc. Coil	6		C-1.436-2	BC-881	
L31	Parasitic Supp.	0		B-1.536-1		Tap @ .4
L32	1st FM IF	.5	.5	C-1.446-2	*FM-254	
L33	1st AM IF	14.3	13.9	C-1.445-3	BC-352	Wound on 820 Resistor
L34	Fil. Choke	0		B-1.501		
L35	2nd FM IF	.6	.6	C-1.446-3	FM-254	Can height 1 5/16" Tap @ .8
L36	2nd AM IF	14	14	C-1.445-3	BC-353	
L37A	Ratio Det.	1.6	.8	C-1.542-1	FM-255	
L37B	Ratio Det.			C-1.524		Can height 2 1/4"

* Remove 100MMF cap.

DIAL LIGHTS

ITEM No.	BASE TYPE	VOLTS	AMPS.	BEAD COLOR	REPLACEMENT DATA		NOTES
					MAJESTIC PART No.		
M8	Bayonet	6-8	.25	Blue			Type #44
M9	Bayonet	6-8	.25	Blue			Type #44

MISCELLANEOUS

ITEM No.	PART NAME	MAJESTIC PART No.	NOTES
M10	Switch	C-11.227-1	AM-FM-Phono
M11	Tuning Cap	C-2.222	28-536MMF-24-206MMF
A38	Trimmer	B-4.118	.7-3.5MMF (FM Osc.)

MAJESTIC
MODELS 20FP88, 20FP89

RADIO PARTS LIST AND DESCRIPTIONS

TUBES (SYLVANIA or Equivalent)

ITEM No.	USE	REPLACEMENT DATA		RMA BASE TYPE	NOTES
		MAJESTIC PART No.	STANDARD REPLACEMENT		
V20	FM RF Amplifier - FM Mixer	12AT7	12AT7	9A	
V21	FM Oscillator - AM Converter	6BE6	6BE6	7CH	
V22	FM AM IF Amp.	6BA6	6BA6	7BK	
V23	FM IF Amplifier	6BA6	6BA6	7BK	
V24	Ratio Detector	6AL5	6AL5	6BT	
V25	AM Detector-AVC-AF Amplifier	6AV6	6AV6	7BT	
V26	Audio Output	6V6GT	6V6GT	7AC	
V27	Rectifier	5Y3GT	5Y3GT	5T	

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		REPLACEMENT DATA						IDENTIFICATION CODES AND INSTALLATION NOTES
	CAP.	VOLT	MAJESTIC PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ERIE PART No.	SPRAGUE PART No.	
C74A	20	450	C-5.421-7	AFH4-67		UP22245C		TVL-4667	Filter
B	20	450							Filter
C	20	450							Decoupling
D	20	25							Audio Output Cathode
C75	4	50	C-5.430-1	PRSI50/4		BR550		TVA-303	Stabilizing Cap.
C76	5000		B-4.115-1	BPD-005	DD-502	TM5D5	811-005	5HK-D5	FM RF Amp. Cathode
C77	5000		B-4.115-1	BPD-005	DD-502	TM5D5	811-005	5HK-D5	FM RF Amp. Dec.
C78	220			SI220	D6-221	5W5T25	GP2K-221	5GA-T22	FM RF Amp. Fil.
C79	33			SI33	D6-330		GP1K-330	5GA-Q33	FM RF Coupling
C80	33			SI33	D6-330		GP1K-330	5GA-Q33	FM RF Coupling
C81	2.2				TCZ-2.2		NP0K-2R2		FM Osc. Coupling
C82	5			SI5NP0	TCZ-4.7		NP0K-050		Fixed Trimmer
C83	100			SI100	D6-101	TM5T1	GP1K-101	5GA-T1	Fixed Trimmer
C84	5000		B-4.115-1	BPD-005	DD-502	TM5D5	811-005	5HK-D5	FM Mixer Plate
C85A	5000		B-4.125-1	BPD-005	DD-2-502	TM5D5	811-005	5HK-2D47	Conv. Fil. Bypass
B	5000			BPD-005		TM5D5	811-005		Osc. Anode Bypass
C86	470			SI470	D6-470	5W5T5	GP2K-471	5GA-T47	Osc. Anode Bypass
C87	25			SI25	D6-250	5W5Q25	GP1K-250	5GA-Q25	Osc. Grid Cap.
C88	5			SI5NP0	TCZ-4.7		NP0K-050		Osc. Feedback
C89A	5000		B-4.125-1	BPD-005	DD-2-502	TM5D5	811-005	5HK-2D47	Conv. Plate Dec.
B	5000			BPD-005		TM5D5	811-005		AVC Filter
C90	.02	200		P488-02	DF-203	PJ282		2TM-S2	AVC Filter
C91	5000		B-4.115-1	BPD-005	DD-502	TM5D5	811-005	5HK-D5	IF Amp. Plate Dec.
C92	5000		B-4.115-1	BPD-005	DD-502	TM5D5	811-005	5HK-D5	IF Amp. Screen Bypass
C93	5000		B-4.115-1	BPD-005	DD-502	TM5D5	811-005	5HK-D5	FM IF Amp. Plate
C94A	5000		B-4.125-1	BPD-005	DD-2-502	TM5D5	811-005	5HK-2D47	FM IF Amp. Screen
B	5000			BPD-005		TM5D5	811-005		FM IF Amp. Cathode
C95	470			SI470	D6-470	5W5T5	GP2K-471	5GA-T47	Diode Load Cap.
C96	1500			SI1500	D6-152	5W5D15	GP2L-152	5HK-D15	De-Emphasis
C97	47			SI47	D6-470	5W5Q5	GP1K-470	5GA-Q47	Diode RF Filter
C98	470			SI470	D6-471	5W5T5	GP2K-471	5GA-T47	Tone Comp.
C99	.015	600		P668-015	D6-221	5W5T25	GP2K-221	5GA-S15	Audio Coupling
C100	220			SI220	D6-221	5W5T25	GP2K-221	5GA-T22	AF Amp. Grid Filter
C101	220			SI220	D6-221	5W5T25	GP2K-221	5GA-T22	AF Amp. Plate Bypass
C102	.02	600		P668-02	DF-203	PJ282		2TM-S2	Audio Coupling
C103	.005	600		P668-005	D6-502	PTE6D5	GP2-333-502	6TM-D5	Tone Comp.
C104	.015	200		P288-015	D6-502	PTE6D5	GP2-333-502	6TM-D5	Tone Comp.
C105	.005	600		P668-005	D6-502	PTE6D5	GP2-333-502	6TM-D5	Audio Output Plate
C106A	5000		B-4.125-1	BPD-005	DD-2-502	TM5D5	811-005	5HK-2D47	Line Filter
B	5000			BPD-005		TM5D5	811-005		Line Filter
C107	470			SI470	D6-471	5W5T5	GP2K-471	5GA-T47	AM RF Coupling

CONTROLS

ITEM No.	RATING		REPLACEMENT DATA				INSTALLATION NOTES
	RESISTANCE	WATTS	MAJESTIC PART No.	IRC PART No.	CLAROSTAT PART No.	CENTRALAB PART No.	
R97A	1Meg		C-8.218-2	QJ-179 *			Tone Control - Panel
B	1Meg						Volume Control & Sw. - Tapped @ 500KΩ - Rear

*CONCENTRIK EQUIVALENT - KIT K-2, BASE ELEMENTS & SHAFTS B11-137 & P2-218, (Panel), B19-137X & R1-304 (Rear) & SWITCH 76-1.

RESISTORS

ITEM No.	RATING		REPLACEMENT DATA		IDENTIFICATION CODES
	RESISTANCE	WATTS	MAJESTIC PART No.	IRC PART No.	
R98	82Ω			BTS-82	FM RF Amp. Cathode
R99	27Ω			BTA-4700	Parasitic Suppressor
R100	4700Ω				FM RF Amp. Plate Decoupling
R101	470KΩ				FM Mixer Grid
R102	1000Ω			BTS-1000	FM Mixer Plate Decoupling
R103	27Ω				Parasitic Suppressor
R104	1Meg			BTS-1Meg	AM Converter Grid
R105	22KΩ				FM Osc. Grid
R106	4700Ω			BTS-4700	AM Converter Plate Decoupling
R107	470KΩ			BTS-470K	AVC Network
R108	47Ω				1st. IF Amp. Cathode
R109	33KΩ				1st. IF Amp. Screen
R110	1000Ω			BTS-1000	1st. IF Amp. Decoupling
R111	42Ω			BTS-82	2nd. IF Amp. Cathode
R112	33KΩ				2nd. IF Amp. Screen
R113	1000Ω			BTS-1000	2nd. IF Amp. Plate Decoupling
R114	330Ω			BTS-330	De-emphasis
R115	47KΩ			BTS-47K	Ratio Det. Diode Load
R116	8200Ω			BTS-8200	Ratio Det. Diode Load
R117	8200			BTS-8200	Ratio Det. Diode Load

TV PARTS LIST AND DESCRIPTIONS

TUBES (SYLVANIA or Equivalent)

ITEM No.	USE	REPLACEMENT DATA		RMA BASE TYPE	NOTES
		MAJESTIC PART No.	STANDARD REPLACEMENT		
V1A	RF Amplifier	6CB6	6CB6	7CH	
B	RF Amplifier	6BC5	6BC5	7BD	
C	RF Amplifier	6AG5	6AG5	7BD	
V2	Converter	5J6	5J6	7BP	
V3	1st. Video IF Amp.	5CB6	6CB6	7CH	
V4	2nd. Video IF Amp.	5CB6	6CB6	7CH	
V5	3rd. Video IF Amp.	6AU6	6AU6	7BK	
V6	Video Detector	6AL5	6AL5	6BT	
V7A	AGC Rectifier				
B	Video Amplifier - Video Output	12BH7	12BH7	9A	
V8	Video Amplifier - Video Output	12AU7	12AU7	9A	
V9	Sound IF Amp.	6AU6	6AU6	7BK	
V10	Ratio Detector	6T8	6T8	9E	
V11	AF Amplifier	6K6GT	6K6GT	7S	
V12	Audio Output				
V13	Sync. Separator - Sync. Amplifier	6SN7GT	6SN7GT	8BD	
V14	Vert. Oscillator	5C4	6C4	6BG	
V15	Vert. Output	6V6GT	6V6GT	7AC	
V16	Horiz. AFC-Horiz. Oscillator	6SN7GT	6SN7GT	8BD	
V17	Horiz. Output	6AV6GT	6AV6GT	6CK	
V18	Damper	6W4GT	6W4GT	4CG	
	HV Rectifier	1B3GT	1B3GT	3C	
	LV Rectifier	5U4G	5U4G	5T	

CATHODE-RAY TUBE

ITEM No.	REPLACEMENT DATA		RTMA BASE TYPE	NOTES
	MAJESTIC PART No.	SYLVANIA PART No.		
V19	20DP4	20DP4 20CP4 20CP4A	12D 12D 12D	3/8" Shorter 3/8" Shorter. Make circuit changes and add outer coating grounding spring. Make circuit changes and add outer coating grounding spring. Make circuit changes and add outer coating grounding spring.
		20DP4A	12D	
		20HP4 20HP4A	12C 12C	

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		REPLACEMENT DATA						IDENTIFICATION CODES AND INSTALLATION NOTES							
	CAP.	VOLT	MAJESTIC PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ERIE PART No.	SPRAGUE PART No.								
C1A	40	450	C-5.435-3	E4D415		UPT420		TVL-3785 TVA-1702	▲ Filter	↑						
B	40	450							■ Filter	↑						
C	4	450							▲ Audio Output Dec. ‡							
D	4	450							Decoupling ‡							
C2A	8	450	C-5.435-4	AFH3-43		UPT44145		TVL-3785	▲ Horiz. Osc. Dec. ‡							
B	40	450							■ Decoupling ‡							
C	40	450							▲ Decoupling ‡							
D	40	450							■ Vert. Output Cathode							
C3A	100	50	C-5.435-2	AFH3-12		UPT205		TVL-3780 TVA-303 TVA-303	▲ Audio Output Cathode							
B	25	50														
C4	4	50	C-5.430-1	PRSI50/4		BR550			Stabilizing Cap.							
C5	3-8															
C6	.5-3				829-10				Variable Trimmer							
C7	120			SI120	D6-121	TM5T12	GP2K-121	5GA-121	Variable Trimmer							
C8	1000			SI1000	D6-102	TM5D1	CP2L-102	5HK-101	RF Amp. Decoupling							
C9	100			SI100	D6-101	TM5T1	CP1K-101	5GA-101	RF Amp. Fil. Bypass							
C10	.5-3			SI20NP0	TCZ-20		NP0K-200		Variable Trimmer							
C11	20			SI10N750	TCN-10		N750K-100	5TCU-Q1	Osc. Grid Cap.							
C12	10				829-3				Fixed Trimmer							
C13	.5-3				829-3				Variable Trimmer							
C14A	1000		B-4.115-1 B-4.125-1	BPD-2X001	DD-2-102	TM5DD1	822-001	5HK-101	Conv. Fil. Bypass							
B	1000															
C15	10									SI10NP0	TCZ-10		NP0K-100	5TCC-Q1	RF Bypass	
C16	120	500													Fixed Trimmer	
C17	5000		B-4.115-1 B-4.125-1	BPD-005	DD-502	TM5D5	811-005	5HK-b5	IF Coupling							
C18A	5000									DD-2-502	TM5D5	811-005	5HK-2D47	RF Bypass		
B	5000									TM5D5	811-005			AGC Filter		
C19	5000									DD-502	TM5D5	811-005	5HK-D5	1st. Video IF Dec.		
C20	.22	400	D-3.105-23 B-4.125-1	P488-22	DD-2-502	PTE4P22	811-005	4TM-P22	AGC Filter							
C21A	5000									DD-2-502	TM5D5	811-005	5HK-2D47	AGC Filter		
B	5000									TM5D5	811-005			2nd. Video IF Dec.		
C22	4.7									SI5NP0	TCZ-4.7		NP0K-4R7	RF Bypass		
C23A	5000		B-4.125-1	BPD-005	DD-2-502	TM5D5	811-005	5HK-2D47	Fixed Trimmer							
B	5000									DD-2-502	TM5D5	811-005	5HK-2D47	3rd. Video IF Dec.		
C24	5000									DD-502	TM5D5	811-005	5HK-D5	3rd. Video IF Cathode		
C25	100									SI100	D6-101	TM5T1	GP1K-101	5GA-T1	3rd. Video IF Fil.	
C26	5000		B-4.115-1	BPD-005	DD-502	TM5D5	811-005	5HK-D5	IF Coupling							
C27	3.3									DD-502	TM5D5	811-005	5HK-D5	RF Bypass		
C28	.05	400								SI13NP0	TCZ-3.3		NP0K-3R3	Video Det. Filter		
C29	.22	400								P488-05	DF-503	PTE4S5		4TM-S5	Video Coupling	
C30	.1	600	D-3.105-23	P488-22	DF-503	PTE4P22		4TM-P22	Picture Tube Cathode							
C31	10		D-3.105-36	P488-1	DF-104	PTE6P1		6TM-P1	Video Coupling							
C32	39	500	C-4.109-16	SI10NP0	TCZ-10		NP0K-100	5TCC-Q1	Fixed Trimmer							
C33	5000		D-4.104-21	1469-00004	DD-502	5R5Q4		NS-44	Sound IF Coupling							
C34A	5000		B-4.115-1	BPD-005	DD-502	TM5D5	811-005	5HK-D5	Sound IF Plate Dec.							
B	5000		B-4.125-1	BPD-005	DD-2-502	TM5D5	811-005	5HK-2D47	Sound IF Screen							
C35	1500			BPD-005		TM5D5	811-005		Sound IF Cathode							
C36	1500		D-4.108-12	BPD-0015	DD-152	TM5D15	801-0015	5HK-D15	Mode Load Cap.							
C37	.05	400	D-4.108-12	BPD-0015	DD-152	TM5D15	801-0015	5HK-D15	Re-Emphasis							
C38	5000		D-3.105-19	P488-05	DF-503	PTE4S5		4TM-S5	Audio Coupling							
C39	680		B-4.115-1	BPD-005	DD-502	TM5D5	811-005	5HK-D5	Audio Coupling							
C40	.022	400	C-4.109-5	SI1680	D6-681		GP2K-681	5GA-T68	Audio Coupling							
C41	.0047	600	D-3.105-17	P488-022		PTE4S22		4TM-S22	4F Amp. Grid Filter							
C42	.22	400	B-4.115-1	P668-0047	D6-472	PTE6D47	GP2-333-472	8TM-D47	Audio Output Plate							
			D-3.105-22	P488-22		PTE4P22		4TM-P22	Sync. Coupling							

TV PARTS LIST AND DESCRIPTIONS (Continued)

RESISTORS (CONT.)

ITEM No.	RATING	REPLACEMENT DATA		IDENTIFICATION CODES AND INSTALLATION NOTES
		MAJESTIC PART No.	IRC PART No.	
R51	15KΩ	D-7.101-66	BTS-15K	De-emphasis
R52	18KΩ	D-7.101-69	BTS-18K	Ratio Det. Diode Load
R53	10MΩ 20%	D-7.101-152	BTS-10MΩ	AF Amp. Grid
R54	470KΩ 20%	D-7.101-129	BTS-470K	AF Amp. Plate
R55	470KΩ 20%	D-7.101-129	BTS-470K	Output Grid
R56	560Ω	D-7.102-13	BTA-560	Output Cathode
R57	470Ω 20%	D-7.102-10	BTA-470	Output Decoupling
R58	56KΩ	D-7.101-90	BTS-56K	Syn. Separator Grid
R59	220KΩ	D-7.101-114	BTS-220K	Syn. Separator Cathode
R60	1.5Meg	D-7.101-148	BTS-1.5Meg	Syn. Separator Plate
R61	560Ω	D-7.101-48	BTS-560Ω	Syn. Amp. Cathode
R62	180Ω	D-7.101-27	BTS-180	Syn. Amp. Plate
R63	330Ω 20%	D-7.101-38	BTS-330	Syn. Amp. Plate
R64A	22KΩ	D-7.101-148	BTS-22K	Integrator Network
R65	1.5Meg	D-7.101-148	BTS-1.5Meg	Integrator Network
R66	220KΩ	D-7.101-115	BTS-220K	Vert. Osc. Grid
R67	470KΩ	D-7.101-129	BTS-470K	Vert. Osc. Plate
R68	22KΩ	D-7.101-129	BTS-22K	Vert. Osc. Plate
R69	6.8Meg 20%	D-7.101-185	BTS-6.8Meg	Vert. Peakings
R70	220Ω 20%	D-7.101-234	BTS-220	Vert. Output Grid
R71	47KΩ	D-7.102-94	BTA-47K	Vert. Output Cathode
R72	330KΩ 20%	D-7.101-122	BTS-330K	Decoupling
R73	10KΩ	D-7.101-59	BTS-10K	Decoupling
R74	470KΩ	D-7.101-129	BTS-470K	ACC Anode Load
R75	100KΩ	D-7.102-108	BTA-100K	Voltage Divider
R76	47KΩ	D-7.102-94	BTA-47K	Voltage Divider
R77	3.3Meg	D-7.101-171	BTS-3.3Meg	Voltage Divider
R78	820KΩ	D-7.101-138	BTS-820K	Horiz. AFC Grid
R79	150KΩ	D-7.101-107	BTS-150K	Horiz. AFC Cathode
R80	180KΩ	D-7.101-111	BTS-180K	Horiz. AFC Cathode
R81	820Ω	D-7.101-55	BTS-820	Horiz. AFC Filter
R82	470KΩ	D-7.101-129	BTS-470K	Horiz. AFC Feedback
R83	100KΩ 5%	D-7.101-99	BTS-100K 5%	Horiz. Osc. Grid
R84	47KΩ	D-7.102-94	BTA-47K	Horiz. Osc. Plate
R85	820Ω	D-7.101-55	BTS-820	Horiz. Osc. Transformer Shunt
R86	100Ω 20%	D-7.102-24	BTA-100	Horiz. Osc. Decoupling
R87	1Meg 20%	D-7.101-142	BTS-1Meg	Horiz. Output Grid
R88	560Ω	D-7.103-118	BTS-560	Horiz. Output Screen
R89	100Ω 20%	D-7.101-226	BTS-100	Parasitic Suppressor
R90	150Ω	D-7.101-204	BTS-150	Horiz. Feedback
R91	275Ω	D-7.101-204	BTS-275	Decoupling - Wire Wound
R92	3.3Ω	D-7.101-204	BTS-3.3	RV Rectifier Filament - Wire Wound
R93	470KΩ	D-7.102-137	BTS-470K	RV Filter
R94	470Ω	D-7.101-55	BTS-470	Focus Control Shunt - Wire Wound
R95	100Ω	D-7.103-97	BTS-100	Focus Control Shunt - Wire Wound
R96	100KΩ 5%	D-7.101-160	BTS-100K 5%	Line Isolation

Note 1. Not used in all Models
* Items R64A, R64B, R64C, C46A, C46B, C46C are combined in one unit

TRANSFORMER (POWER)

ITEM No.	RATING		REPLACEMENT DATA			
	PRI.	SEC. 1	SEC. 2	SEC. 3	MAJESTIC PART No.	CHICAGO PART No.
T1	117VAC ① 1.65A	600VCT ② 220ADC	5VAC 3A	6.3VAC 1.8A SEC. 4 6.3VAC 6A	D-9.252A D-9.252 ②	P-3070 TP-370 ①

① Add series Resistor to reduce plate voltage
② Alternate Power Trans.

TRANSFORMER (SWEEP CIRCUITS)

ITEM No.	RATING		REPLACEMENT DATA				NOTES
	DC RESISTANCE	WATTS	MAJESTIC PART No.	STANCOR PART No.	MERIT PART No.	CHICAGO PART No.	
T2	100Ω	1.3KΩ	C-9.230-4	A8130	HV07 ③	TBO-2 ④	Vert. Osc. Trans.
T3	400Ω	22Ω Tap	C-9.253-2				Horiz. Output Trans.
T4	700Ω	7.5Ω	C-9.228-5	A-8112	A-3036	TSO-5 ④	Vert. Output Trans.
T5	20Ω		C-9.254-3 ⑤	DY9	MDF70		Horiz. Deflection Coils
T6	60Ω		C-9.234-4	FC-10	MF-3		Focus Coil

③ Drill new mtg. hole
④ Drill one new mtg. hole
⑤ Alternate Deflection Yoke

SPEAKER

ITEM No.	RATINGS		REPLACEMENT DATA			NOTES
	FIELD RES.	V. C. IMP.	MAJESTIC PART No.	JENSEN PART No.	QUAM PART No.	
SP1A	P. M.	3.6Ω	C30.328		10A4A	
SP1B	10"	1"				

FILTER CHOKE

ITEM No.	RATINGS		REPLACEMENT DATA				INSTALLATION NOTES	
	TOTAL DIRECT CURRENT	D. C. RESISTANCE	INDUCTANCE (0 CURRENT 1000 μ)	MAJESTIC PART No.	STANCOR PART No.	MERIT PART No.		CHICAGO PART No.
L1	.220ADC	72Ω	2.5 Henries	C-9.237-3	C-2325 ①	C2991	TR 3300 ①	① Drill one new mounting hole

COILS (RF-IF)

ITEM No.	USE	DC RES.		REPLACEMENT DATA		NOTES
		PRI.	SEC.	MAJESTIC PART No.	MERIT PART No.	
L2	Ant. Coil	0Ω	0Ω	B-36.141-2		Channel 2
L3	File. Choke	0Ω				
L4	RF, Mixer Grid & Osc. Coils	0Ω		B-36.141-102		Channel 2
L5	File. Choke	0Ω				
L6	1st. Video IF	.8Ω	.3Ω	C-1.476		
L7	2nd. Video IF	.3Ω	.3Ω	C-1.476		
L8	3rd. Video IF	.3Ω	.3Ω	C-1.476		
L9	4th. Video IF	.3Ω	.3Ω	C-1.476		
L10	Peaking Coil	3.6Ω		C-1.522-4	TV-184	
L11	Peaking Coil	7.5Ω		C-1.522-3		
L12	Peaking Coil	3.6Ω		C-1.522-4		
L13	Peaking Coil	3.6Ω		C-1.522-4		
L14	Peaking Coil	3.6Ω		C-1.522-4		
L15	Sound IF	3.4Ω	1.2Ω	C-1.529-2	* TV-110	Tap @ 1.2Ω
L16A	Ratio Det.	4Ω		C-1.528-1		Used when R50 is in set. Tap @ 1.2Ω
L17	Ratio Det.	110Ω	34Ω	C-1.528-1	* TV-162	Used when R50 is not in set
L18A	Horiz. Osc.	34Ω		B-1.549		Tap @ 3.4Ω
L18B	Horiz. Size			B-1.533-1		Alternate
L19	Horiz. Lin.	21Ω		B-1.531	MWC-1	

* Drill one new mtg. hole
* Drill new mtg. holes

FUSES

ITEM No.	TYPE	RATING	REPLACEMENT DATA			
			MAJESTIC PART No.	LITTELFUSE PART No.	BUSS PART No.	
			FUSE	HOLDER	FUSE	HOLDER
M1	3AG	1A. 250V.	B36.131	312003	341001	AGC3
M2	3AG	1/4A. 250V.		318.250		GJV 1/4

MISCELLANEOUS

ITEM No.	PART NAME	MAJESTIC PART No.	NOTES
M3A	RF Tuner	D-36.137-2	Standard
M3B	RF Tuner	E-36.143	Starkey's Alternate
M4	Switch		3 & W - Color
M5	Ion Trap	C-36.144-2	
M6	Trimmer	B-4.119-2	Horiz. Drive (40-370MMF)
M7	Ant. Coils	B-36.141-3	Channel #3
M8	Ant. Coils	B-36.141-4	Channel #4
M9	Ant. Coils	B-36.141-5	Channel #5
M10	Ant. Coils	B-36.141-6	Channel #6
M11	Ant. Coils	B-36.141-7	Channel #7
M12	Ant. Coils	B-36.141-8	Channel #8
M13	Ant. Coils	B-36.141-9	Channel #9
M14	Ant. Coils	B-36.141-10	Channel #10
M15	Ant. Coils	B-36.141-11	Channel #11
M16	Ant. Coils	B-36.141-12	Channel #12
M17	Ant. Coils	B-36.141-13	Channel #13
M18	RF, Mixer Grid & Osc. Coil	B-36.141-103	Channel #3
M19	RF, Mixer Grid & Osc. Coil	B-36.141-104	Channel #4
M20	RF, Mixer Grid & Osc. Coil	B-36.141-105	Channel #5
M21	RF, Mixer Grid & Osc. Coil	B-36.141-106	Channel #6
M22	RF, Mixer Grid & Osc. Coil	B-36.141-107	Channel #7
M23	RF, Mixer Grid & Osc. Coil	B-36.141-108	Channel #8
M24	RF, Mixer Grid & Osc. Coil	B-36.141-109	Channel #9
M25	RF, Mixer Grid & Osc. Coil	B-36.141-110	Channel #10
M26	RF, Mixer Grid & Osc. Coil	B-36.141-111	Channel #11
M27	RF, Mixer Grid & Osc. Coil	B-36.141-112	Channel #12
M28	RF, Mixer Grid & Osc. Coil	B-36.141-113	Channel #13

PHONO CARTRIDGE and NEEDLE

ITEM No.	MAJESTIC PART No.	REPLACEMENT DATA		REMARKS
		ASTATIC PART No.	SHURE PART No.	
		CARTIDGE	NEEDLE	
M6		LQD-17	Q-33	96

ASTATIC AND ELECTRO VOICE NEEDLE LISTINGS SHOWN ABOVE ARE SPECIFIED FOR THE RESPECTIVE REPLACEMENT CARTRIDGES LISTED. FOR ORIGINAL CARTRIDGE NEEDLE REPLACEMENTS SEE BELOW:

PHONO NEEDLE

(FOR REPLACEMENT IN ORIGINAL EQUIPMENT CARTRIDGE)

ITEM No.	REPLACEMENT DATA		REMARKS
	MAJESTIC PART No.	WALCO PART No.	
M7		W-2A or W-2S and W-2MCA or W-2MGS	A-80 or A-81 and A-80LP or A-81LP

CAPACITORS (CONT.)

ITEM No.	RATING	REPLACEMENT DATA						IDENTIFICATION CODES AND INSTALLATION NOTES
		MAJESTIC PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ERIE PART No.	SPRAGUE PART No.	
C43	220	C-4.109-11	SI220	D6-221	PTK6D22	GP2K-221	5GA-T22	Syn. Sep. Cathode
C44	.0022	D-3.105-12	P688-0022	D6-222	PTK6D22	GP2-333-222	6TM-D22	Syn. Sep. Grid
C45	.022	D-3.105-17	P688-022		PTK6S22		4TM-S22	Syn. Amp. Cathode
C46A	.002		P688-002		PTK6D22	GP2-333-202		Vert. Integrator Net.
C46B	.005		P688-005		PTK6D5	GP2-333-502	*10IC1	Vert. Integrator Net.
C46C	.005		P688-005		PTK6D5	GP2-333-502		Vert. Integrator Net.
C47	4700	D-4.105-24	1464-005		DRS45		MS-25	Vert. Osc. Grid Cap.
C48	.047	D-3.105-34	P688-047		PTK6S47		6TM-S47	Vert. Discharge
C49	.1	D-3.105-21	P488-1	DF-104	PTK4P1		4TM-P1	Vert. Sweep Coupling
C50	.25	D-3.100-32	684-25		PTK6P25		6TM-P25	Vert. Output Plate
C51	.1	D-3.105-21	P488-1	DF-104	PTK4P1		4TM-P1	Fixed Trimmer
C52	.1	D-3.105-36	P688-1	DF-104	PTK6P1		6TM-P1	Vert. Sweep Coupling
C53	68	D-4.104-93	1469-00007		SR5Q7		MS-47	Horiz. Syn. Coupling
C54	47	D-4.109-14		TCZ-47		NP0L-470	STCC-Q47	Voltage Divider
C55	47	D-4.109-12	SI47	D6-407	SR5Q5	GP1K-470	5GA-Q47	Horiz. Feedback
C56	.002	D-3.105-26	P688-002	D6-202	PTK6D2	GP2-333-202		Horiz. Syn. Coupling
C57	.022	D-3.105-17	P488-022		PTK6S22			Horiz. AFC Filter
C58	.25	D-3.100-30	P488-25		PJ2P25		4TM-S22	Horiz. AFC Filter
C59	.05	D-3.109-19	P688-05	DF-503	PTK6S5		6TM-S5	Horiz. AFC Plate
C60	330	D-4.104-59	1469-00035					Horiz. Osc. Grid Cap.
C61	.01	D-3.106-1	P688-01		PTK6S1		6TM-S1	Fixed Trimmer
C62	1200	D-4.105-9						Horiz. Discharge
C63	560	D-4.104-70						Horiz. Sweep Coupling
C64	.047	D-3.105-34	P688-047	DF-503	PTK6S47		6TM-S47	Horiz. Output Screen
C65	.25	D-3.100-30	P488-25		PJ2P25		6TM-P25	Horiz. Sweep Coupling
C66	39	D-4.129-2						Blanking Net.
C67	68	D-4.124-4						Blanking Net.
C68	.047	D-3.105-34	P688-047		PTK6S47		6TM-S47	Damper Filter
C69	.035	D-3.100-46	P688-047		PTK6S47		6TM-S47	Damper Filter
C70	.047	D-3.105-34	P688-047		PTK6S47		6TM-S47	RV Bypass
C71	500	D-4.123	HV20C	TV3-502	MM-C20T5	811-005	5HK-D5	HF Filter
C72	5000	D-4.115-1	BPD-005	DD-502	TM5D5	811-005	5HK-D5	Line Filter
C73	5000	D-4.115-1	BPD-005	DD-502	TM5D5	811-005	5HK-D5	Line Filter

* Items C46A, C46B, C46C, R64A, R64B, R64C are combined in one unit.

† Some models combine C1A, C1B, C3A in one unit (Part #5.435-1)

‡ Some models combine C2A, C2B, C2C, C3B in one unit (Part #5.435-2)

§ C1C and C1D are single units in some models (Part #5.418)

CONTROLS

ITEM No.	RATING		REPLACEMENT DATA			CENTRALAB PART No.	INSTALLATION NOTES
	RESIST-ANCE	WATTS	MAJESTIC PART No.	IRC PART No.	CLAROSTAT PART No.		
R1A	1500Ω	1/2	C-8.230-1	QJ-9 *	RTV-233		Contrast Control - Panel
B	1Meg	1/2					Volume Control & SW - Rear
R2	5000Ω	2	C-8.206-6	W-5000	43-5000	VK-135	Vert. Linearity Control - Wire Wound
R3	2250Ω	4	C-8.221		RTV-319		Focus Control - Wire Wound
R4A	2.5Meg	1/2	C-8.219-5	Q11-239	AG-84-S	AN-83	Vert. Size Control
B	Shaft		Res Req.	RQ	YKS-1/4	AG-1	Attach to R4A per instructions
R5A	100KΩ	1/2	C-8.229-9	Q11-128	AG-49-S	B-40	Brightness Control
B	Shaft		Not Req.		RS-2	Not Req.	Attach to R5A per instructions
R6A	1Meg	1/2	C-8.229-8	Q13-137	AG-63-Z	B-50	Vert. Hold Control
B	Shaft		Not Req.		RS-2	Not Req.	Attach to R6A per instructions
R7A	50KΩ	1/2	C-8.229-7	Q13-123	AG-46-Z	B-32	Horiz. Hold Control
B	Shaft		Not Req.		RS-2	Not Req.	Attach to R7A per instructions