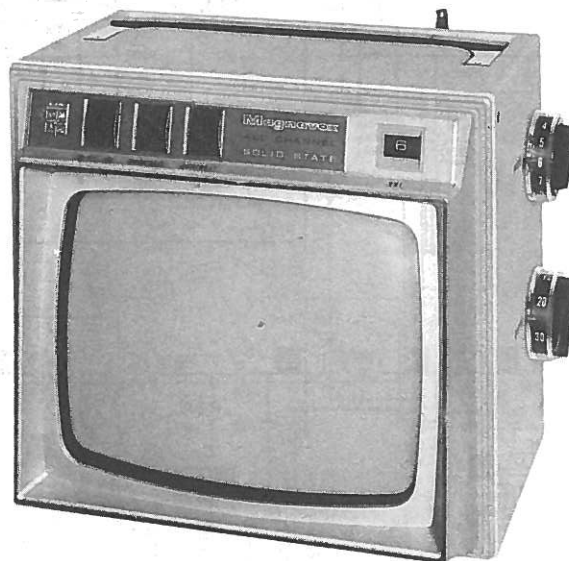


PHOTOFACT® Folder

with CIRCUITRACE™

MAGNAVOX CHASSIS
T921-01-AA

CHASSIS T921-01-AA

TRADE NAME	Magnavox Chassis T921-01-AA
SUPPLIER	For current address, see Annual Index.
TYPE SET	Television Receiver
TUBES	Picture Tube
POWER SUPPLY	110-120 Volts AC, 60 Cycles
TUNING RANGE	Channels 2 thru 13 VHF, 14 thru 83 UHF, Video IF 45.75MC, Sound IF 41.25MC (Intercarrier)
	TRANSISTORS Twenty-Six
	RATING 17 Watts, .150 Amp. @ 117 Volts AC

SERVICING IN THE FIELD

SAFETY GLASS

For picture tube and safety glass cleaning, it is necessary to remove the front. (See "Disassembly Instructions".)

FUSE OR FUSE DEVICE

A .4-amp. fuse is used for AC power supply protection. A 2-amp. fuse is used for low voltage power supply protection. (See "Transistor Placement Chart" for location.)

VHF OSCILLATOR ADJUSTMENT

Set Fine Tuning at the center of its range and adjust oscillator slug (one for each channel) for best sound and picture.

AGC

The AGC may be varied by means of an AGC control.

HORIZONTAL OSCILLATOR FIELD ADJUSTMENT

Adjustment of the Horizontal Hold is accomplished by the proper setting of the Horizontal Frequency and Horizontal Hold controls. (See "Transistor Placement Chart" for location.)

FOCUS

The focus may be varied by means of a Focus control. (See "Transistor Placement Chart" for location.)

CENTERING

Centering is accomplished by 2 magnetic rings located on yoke rear cover.

HOWARD W. SAMS & CO., INC. Indianapolis, Indiana 46206

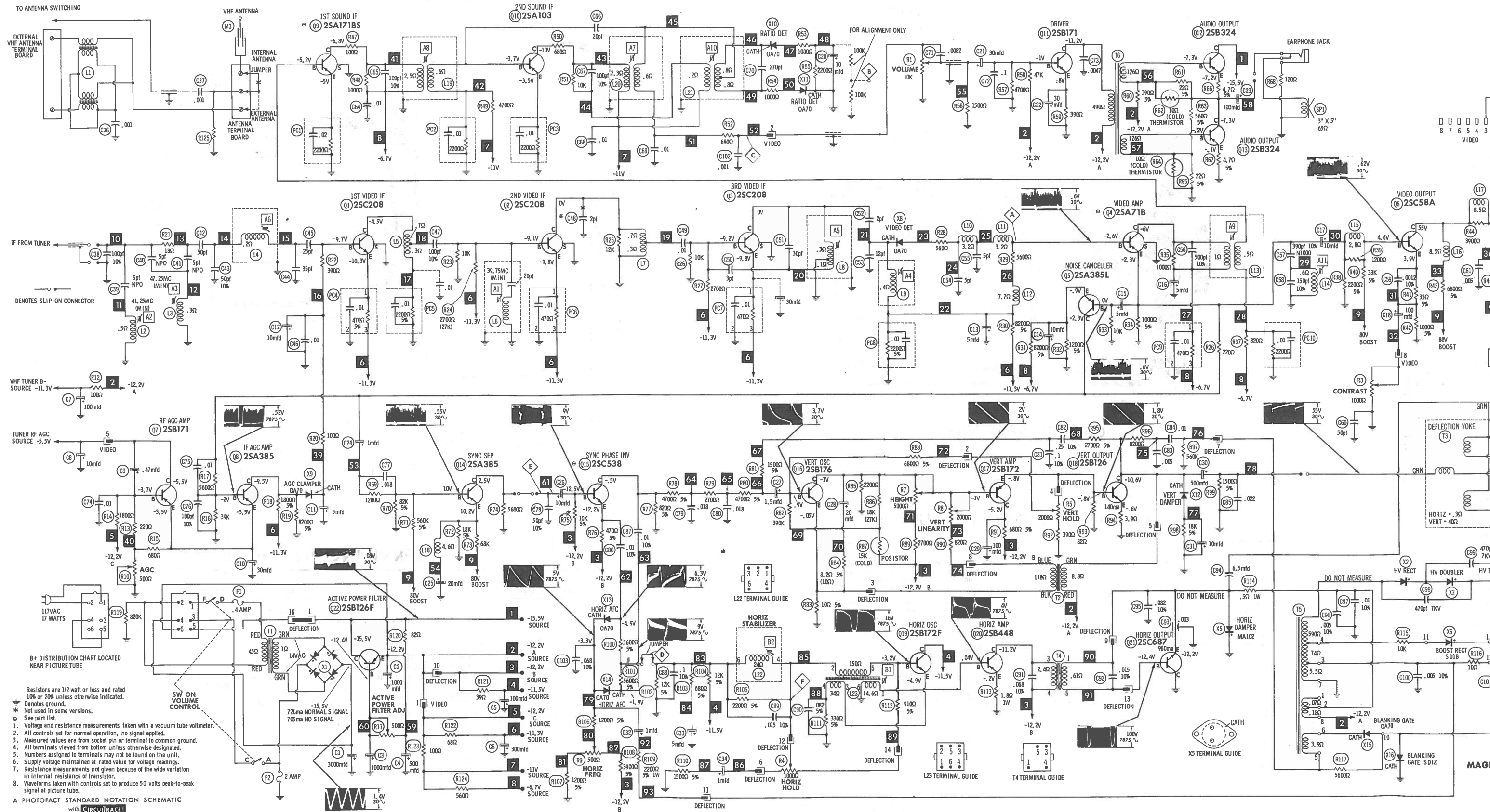
The listing of any available replacement part herein does not constitute in any case a recommendation, warranty or guaranty by Howard W. Sams & Co., Inc., as to the quality and suitability of such replacement part. The numbers of these parts have been compiled from information furnished to Howard W. Sams & Co., Inc., by the manufacturers of the particular type of replacement part listed. SC110



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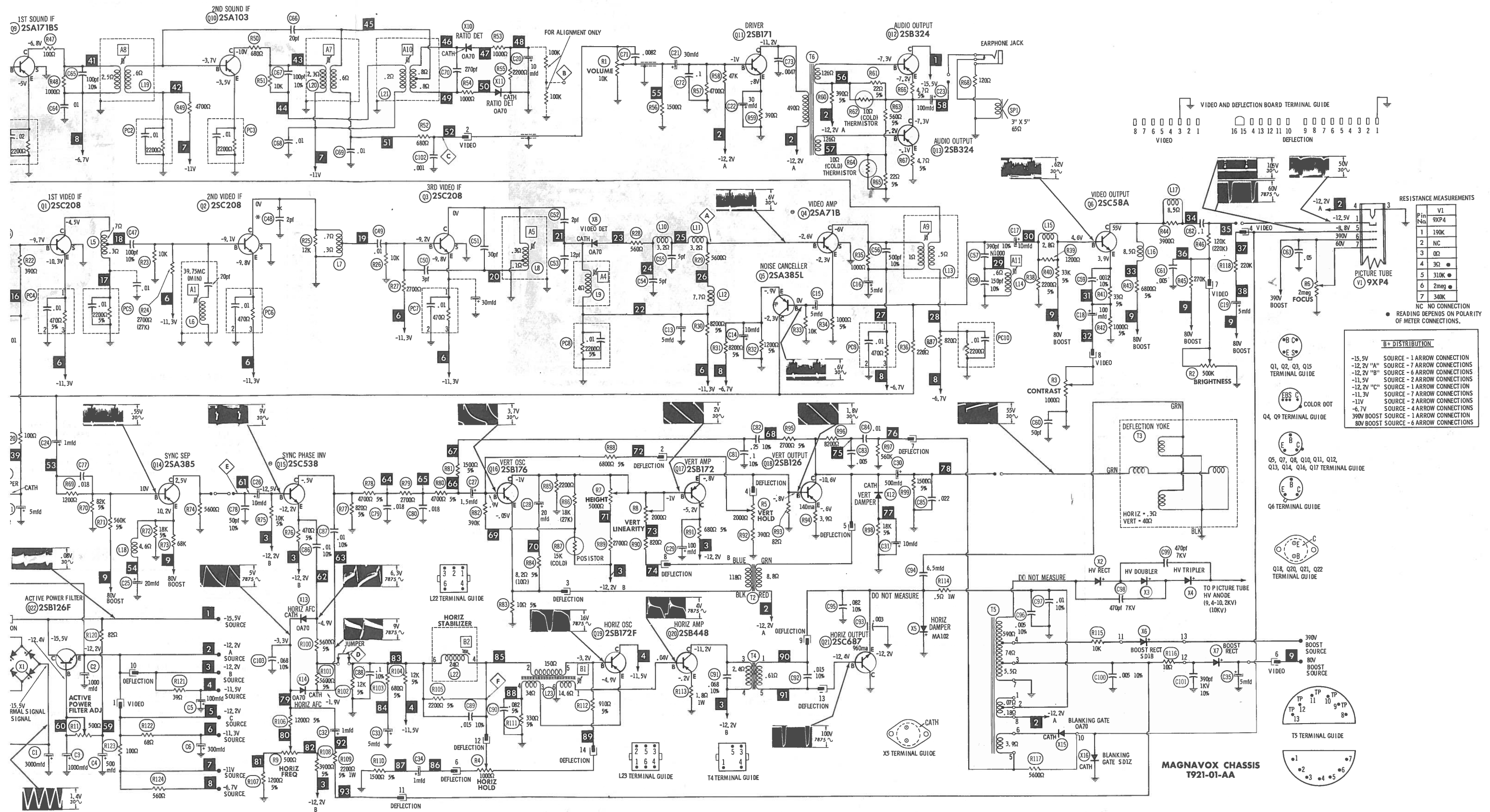
SET 879 FOLDER 2



- Resistors are 1/2 watt or less and rated 10% or 20% unless otherwise indicated. Denotes ground.
- * Not used in some versions. See part list.
1. Voltage and resistance measurements taken with a vacuum tube voltmeter.
 2. All controls set for normal operation, no signal applied.
 3. Measured values are from socket pin or terminal to common ground.
 4. All terminals viewed from bottom unless otherwise designated.
 5. Numbers assigned to terminals may not be found on the unit.
 6. Supply voltage maintained at rated value for voltage readings.
 7. Resistance measurements not given because of the wide variation in internal resistance of transistor.
 8. Waveforms taken with controls set to produce 50 volts peak-to-peak signal at picture tube.

A PHOTOFACT STANDARD NOTATION SCHEMATIC with CIRCUITRACE

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RESISTANCE MEASUREMENTS

Pin No	V1
1	190K
2	NC
3	0Ω
4	3Ω
5	310K
6	2meg
7	340K

NC NO CONNECTION
READING DEPENDS ON POLARITY OF METER CONNECTIONS.

B+ DISTRIBUTION

- 15.5V SOURCE - 1 ARROW CONNECTION
- 12.2V "A" SOURCE - 7 ARROW CONNECTIONS
- 12.2V "B" SOURCE - 6 ARROW CONNECTIONS
- 11.5V SOURCE - 2 ARROW CONNECTIONS
- 12.2V "C" SOURCE - 1 ARROW CONNECTION
- 11.3V SOURCE - 7 ARROW CONNECTIONS
- 11V SOURCE - 2 ARROW CONNECTIONS
- 6.7V SOURCE - 4 ARROW CONNECTIONS
- 390V BOOST SOURCE - 1 ARROW CONNECTION
- 80V BOOST SOURCE - 6 ARROW CONNECTIONS

Q1, Q2, Q3, Q15
TERMINAL GUIDE

Q4, Q9
TERMINAL GUIDE

Q5, Q7, Q8, Q10, Q11, Q12,
Q13, Q14, Q16, Q17
TERMINAL GUIDE

Q6
TERMINAL GUIDE

Q18, Q20, Q21, Q22
TERMINAL GUIDE

Q19
TERMINAL GUIDE

Q23
TERMINAL GUIDE

Q24
TERMINAL GUIDE

Q25
TERMINAL GUIDE

Q26
TERMINAL GUIDE

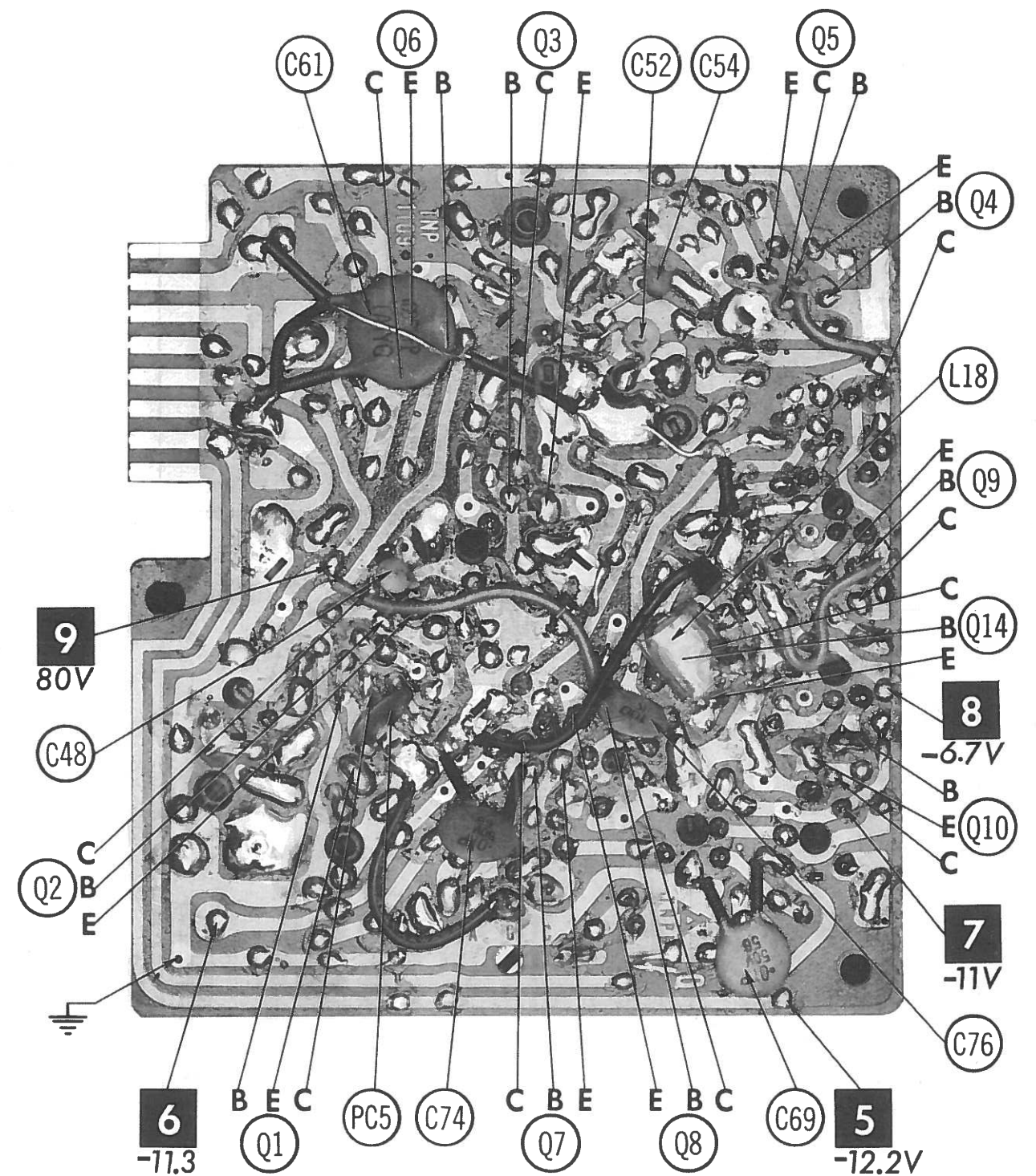
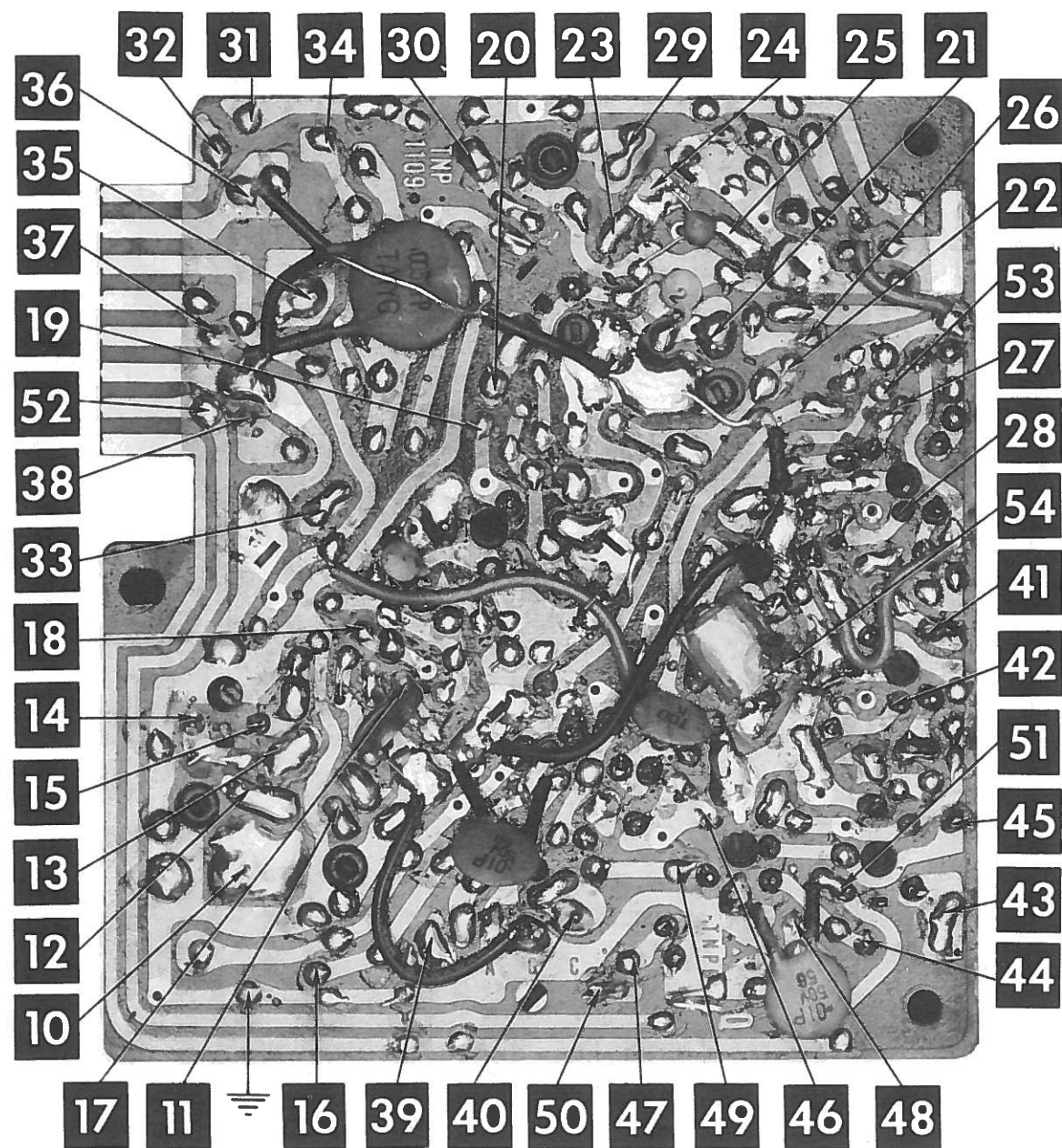
Q27
TERMINAL GUIDE

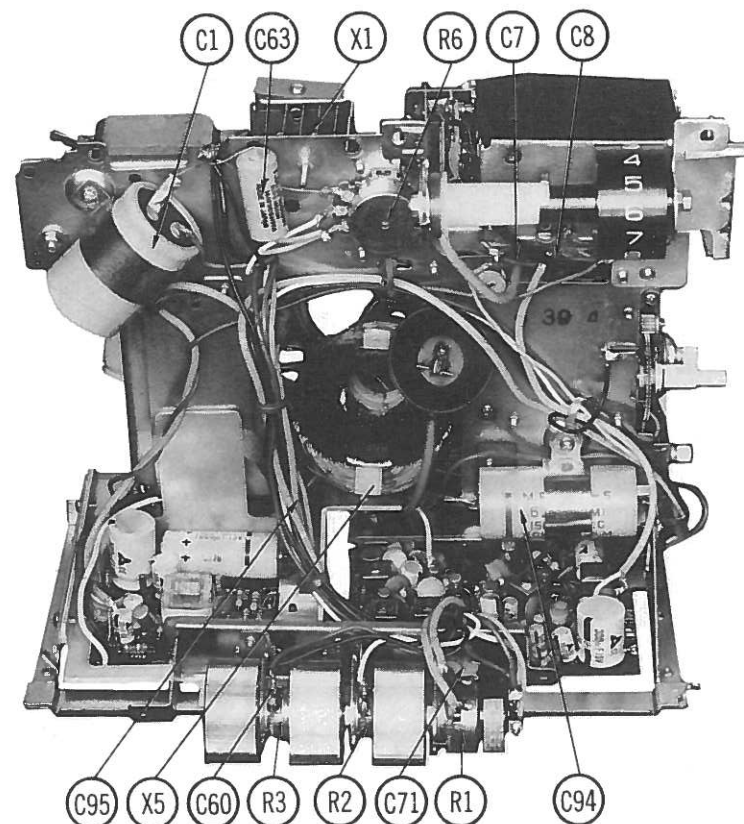
Q28
TERMINAL GUIDE

MAGNAVOX CHASSIS
7921-01-AA

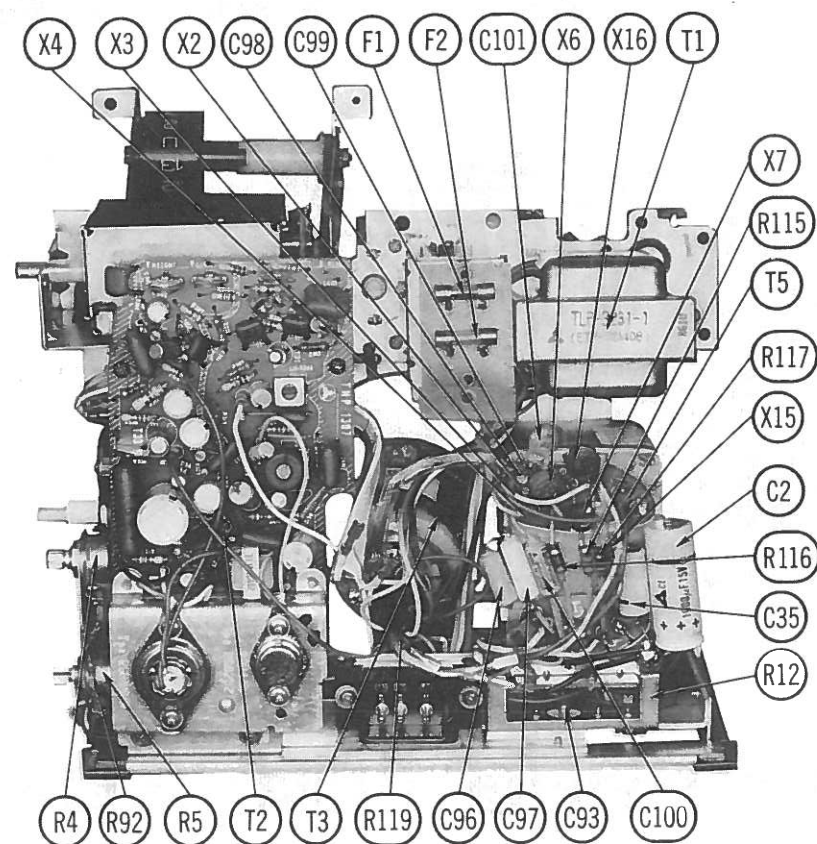
PAGE 18







CHASSIS - FRONT VIEW



CHASSIS - REAR VIEW

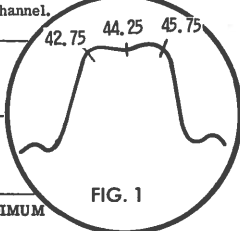
ALIGNMENT INSTRUCTIONS

Use an isolation transformer and maintain voltage at 117 volts. Allow a 20-minute warm-up period for the receiver and test equipment.
Suggested Alignment Tools: A1 thru A11 and Mixer Collector Coil .. GENERAL CEMENT #8606, 8606L .. WALSCO #2544

VIDEO IF ALIGNMENT

Connect the synchronized sweep voltage from the sweep generator to the horizontal input of the oscilloscope for horizontal deflection. Use only enough generator output to provide a usable indication. Note: Response may vary slightly from those shown. Adjust AGC control to obtain a response curve which shows no indication of overload. Set the Channel Selector to any non-interfering channel.

INDICATOR	GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	ADJUST	REMARKS
1. Connect DC probe of a VTVM thru a 47K resistor to point A. Common to ground.	Connect high side thru .001mfd to test point on VHF tuner. Low side to ground.		39.75MC 41.25MC 47.25MC	A1 A2 A3	Adjust for MINIMUM.
2. Connect vertical input of a scope to point A. Low side to ground.	Connect high side thru .001mfd to base of Q3. Low side to ground.	44MC (10MC Sweep)	42.75MC 44.25MC 45.75MC	A4 A5	Adjust for maximum amplitude and MINIMUM tilt with markers as shown in Figure 1.
3. Connect vertical input of a scope to point A. Low side to ground.	Connect high side thru .001mfd to test point on VHF tuner. Low side to ground.	44MC (10MC Sweep)	39.75MC 41.25MC 42.75MC 44.25MC 45.75MC 47.25MC	A6 and Mixer Collector Coil	Adjust for maximum gain and symmetry of response with markers as shown in Figure 2. In order to obtain a proper response, it may be necessary to slightly retouch A 4 and A5.



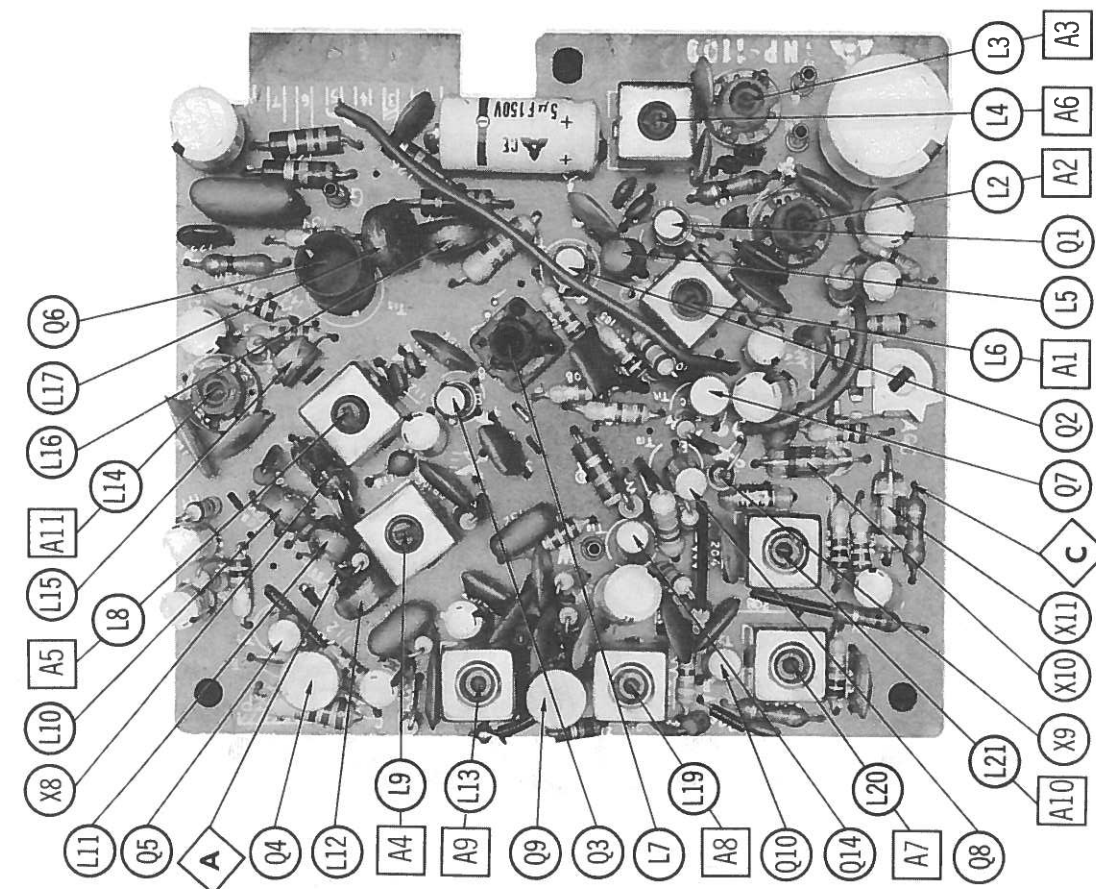
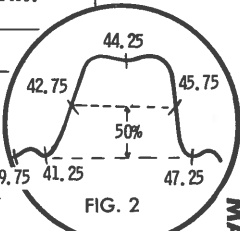
4.5 MC TRAP ALIGNMENT

Tune in a strong TV signal and set the Contrast at maximum. Adjust the Fine Tuning until a beat pattern is visible on the screen. Adjust A11 for MINIMUM beat interference.

SOUND IF ALIGNMENT

NOTE: Connect a pair of Matched 100K Resistors from CircuitTrace #48 to ground. B is the Junction of the resistors.

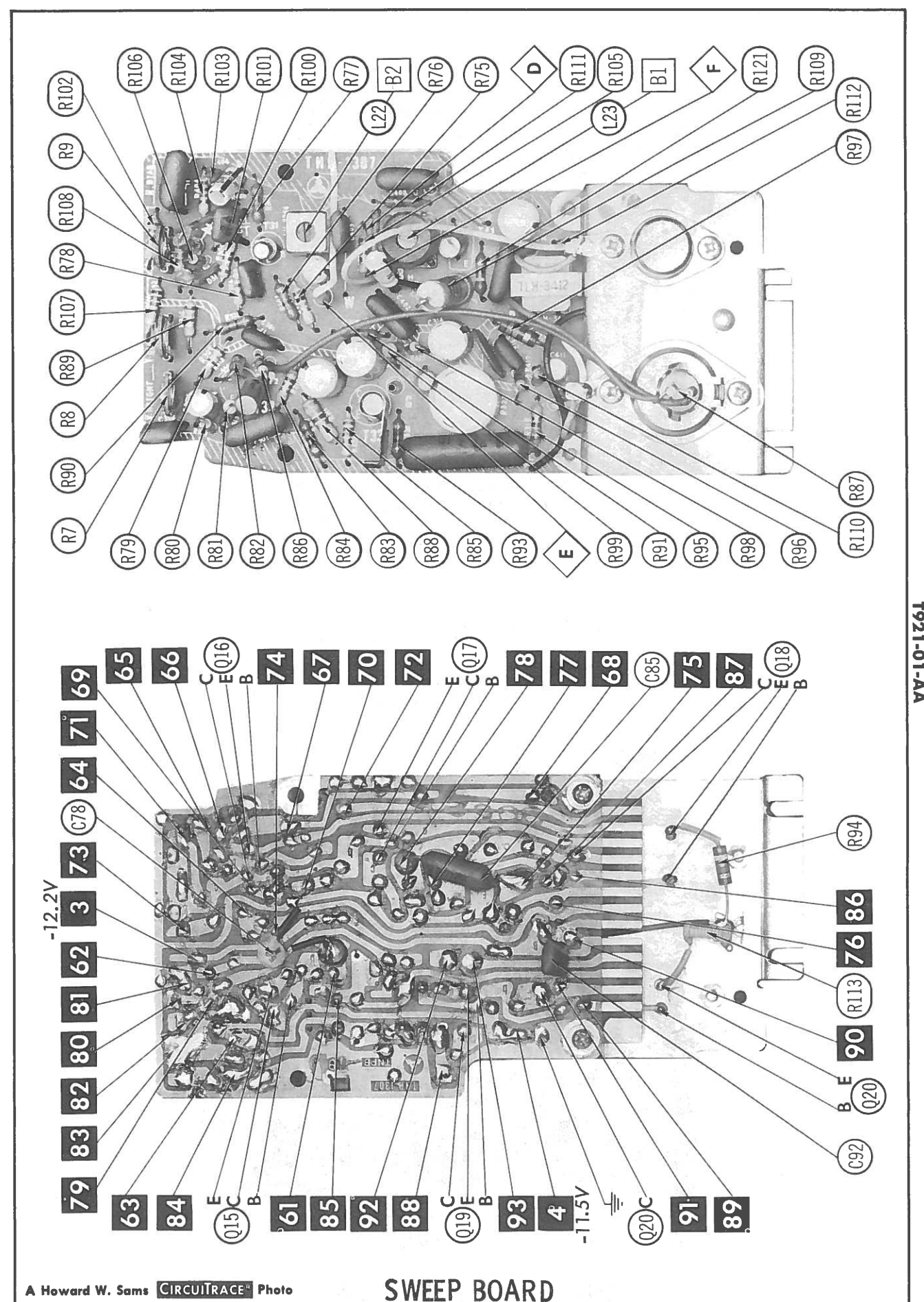
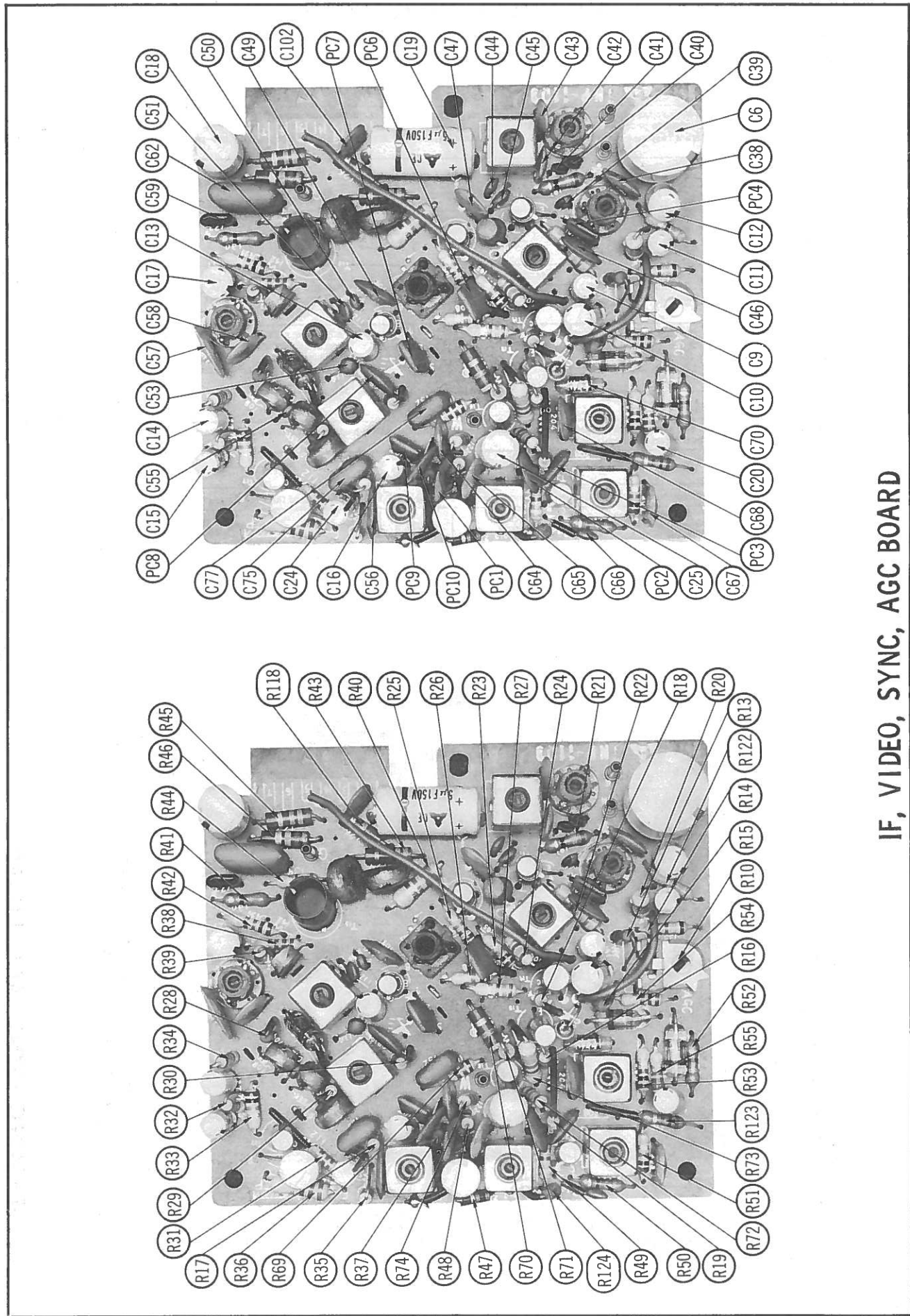
SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS
4. High side thru .001 mfd to point A. Low side to ground.	4.5 MC (Unmod.)		DC probe to point B. Low side to ground.	A7, A8, A9	Adjust for maximum.
5. "	"		DC probe to point B. Low side to point C.	A10	Adjust for zero. A positive or negative indication will be obtained on either side of correct setting.



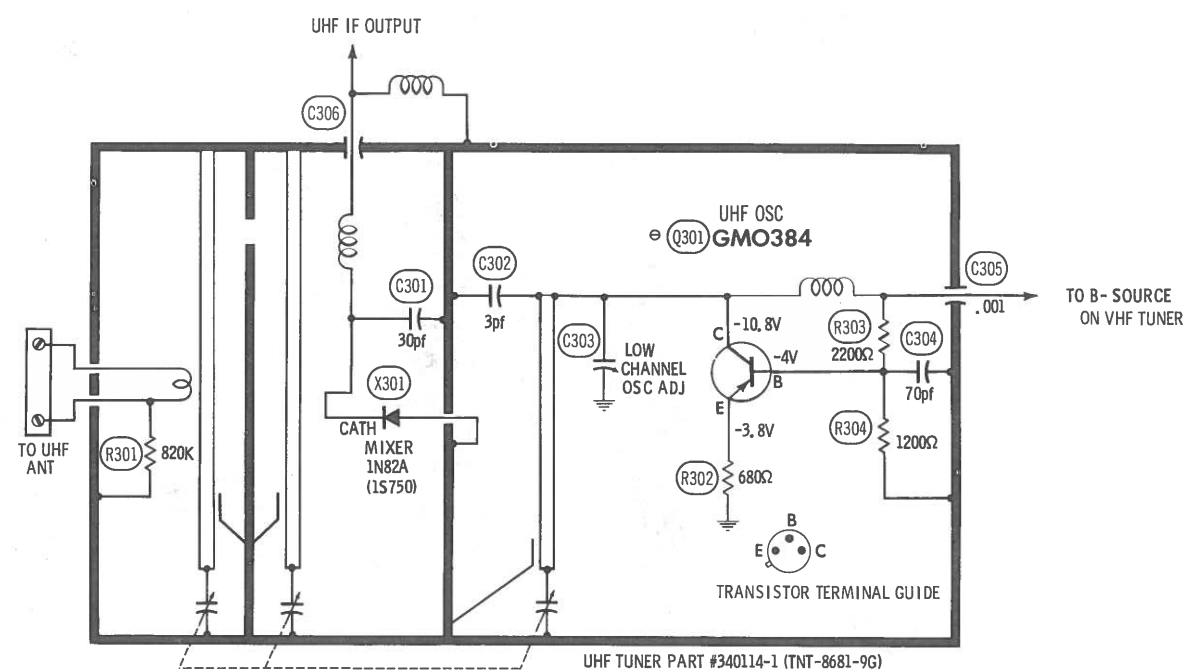
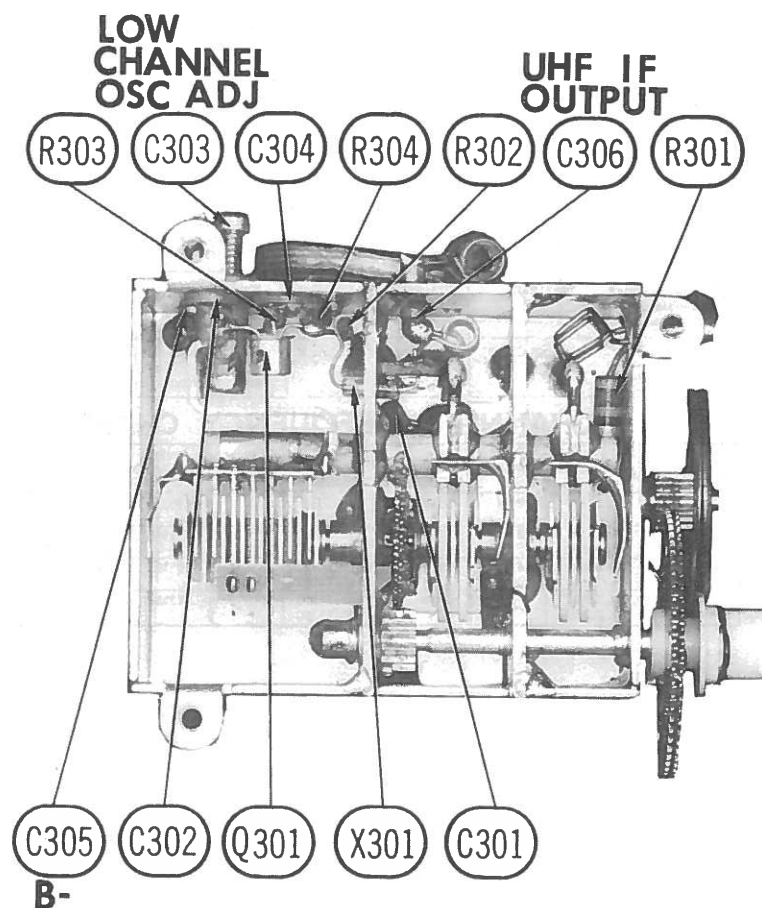
MAGNAVOX CHASSIS
T921-01-AA

CGY - CNY5 - OEDIA - FI

FOLDER 2

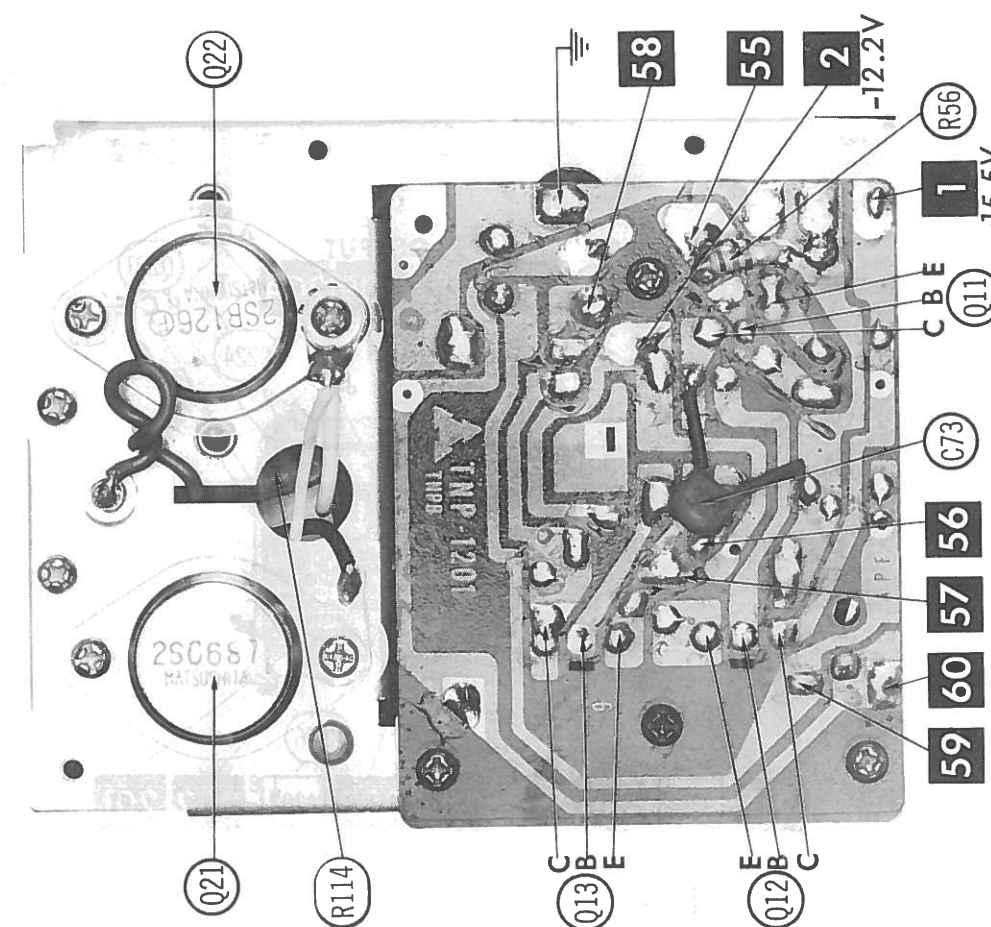
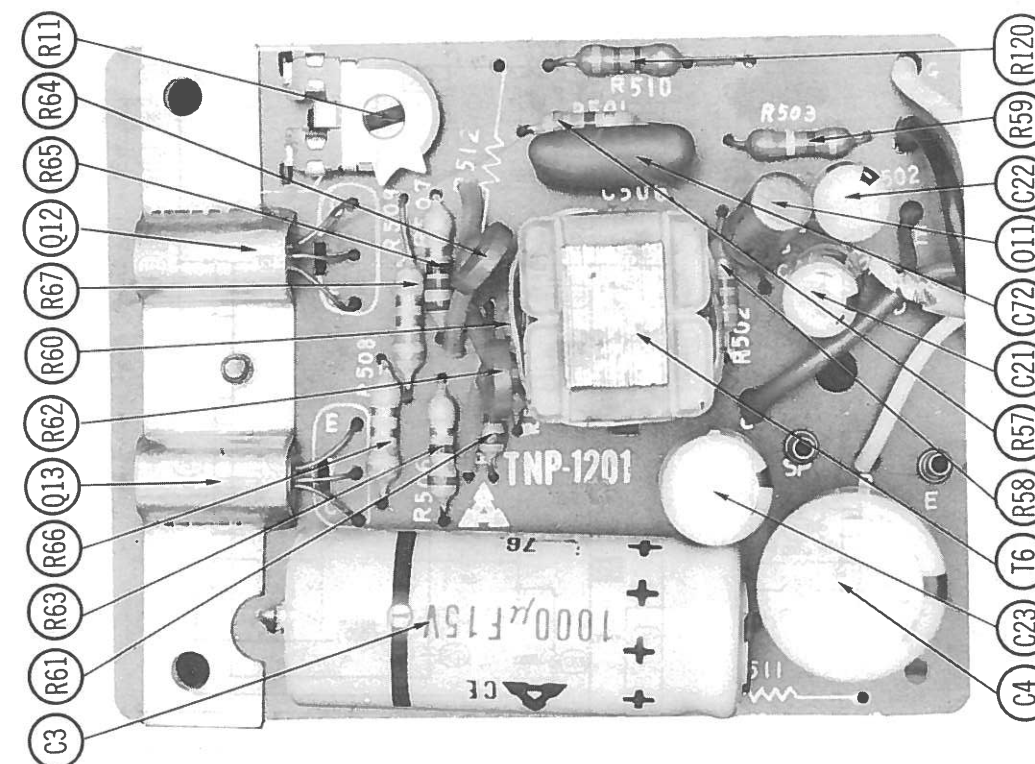


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A PHOTOFAC STANDARD NOTATION SCHEMATIC
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UHF TUNER 340114-1

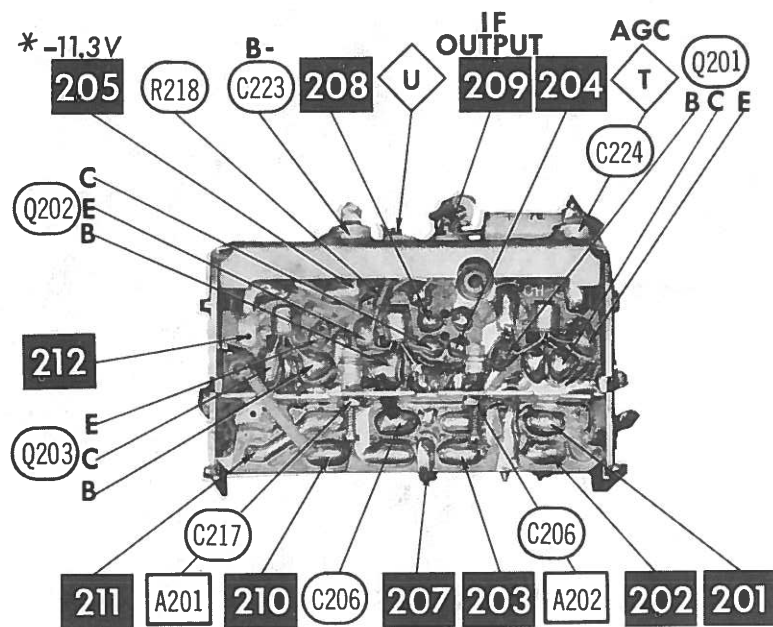
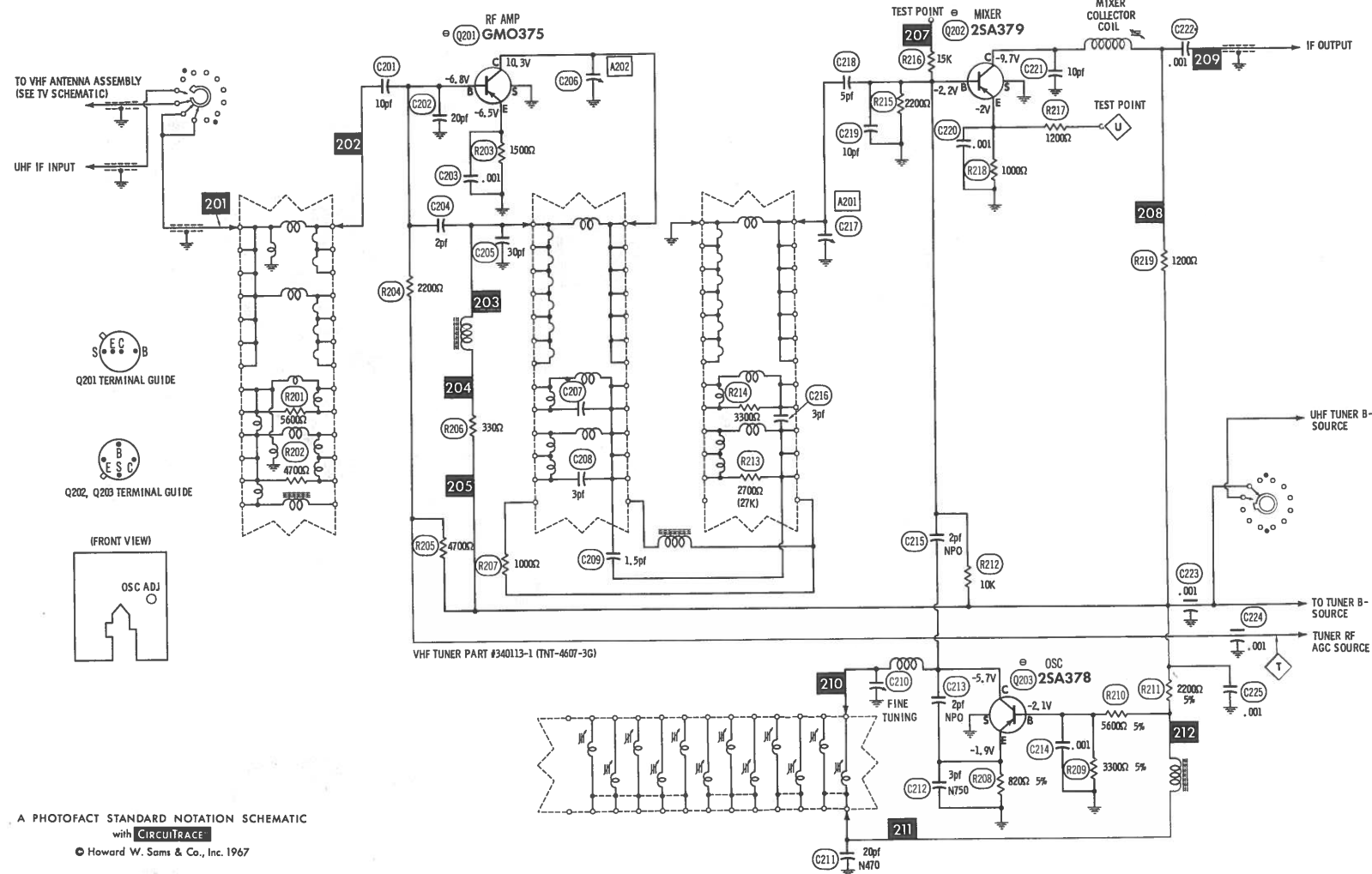


AUDIO BOARD

MAGNAVOX CHASSIS
T921-01-AA

A Howard W. Sams PHOTO CIRCUITRACE

FOLDER 2



* SOURCE VOLTAGE

A Howard W. Sams CIRCUITTRACE Photo

VHF TUNER 340113-1

VHF TUNER ALIGNMENT INSTRUCTIONS

OSCILLATOR ADJUSTMENTS

The individual oscillator slugs are accessible through a hole in the front of the tuner. Set the fine tuning to the center of its range. Starting with the highest channel in the area, adjust the appropriate oscillator slugs in descending order for best picture and sound.

RF AND MIXER ALIGNMENT

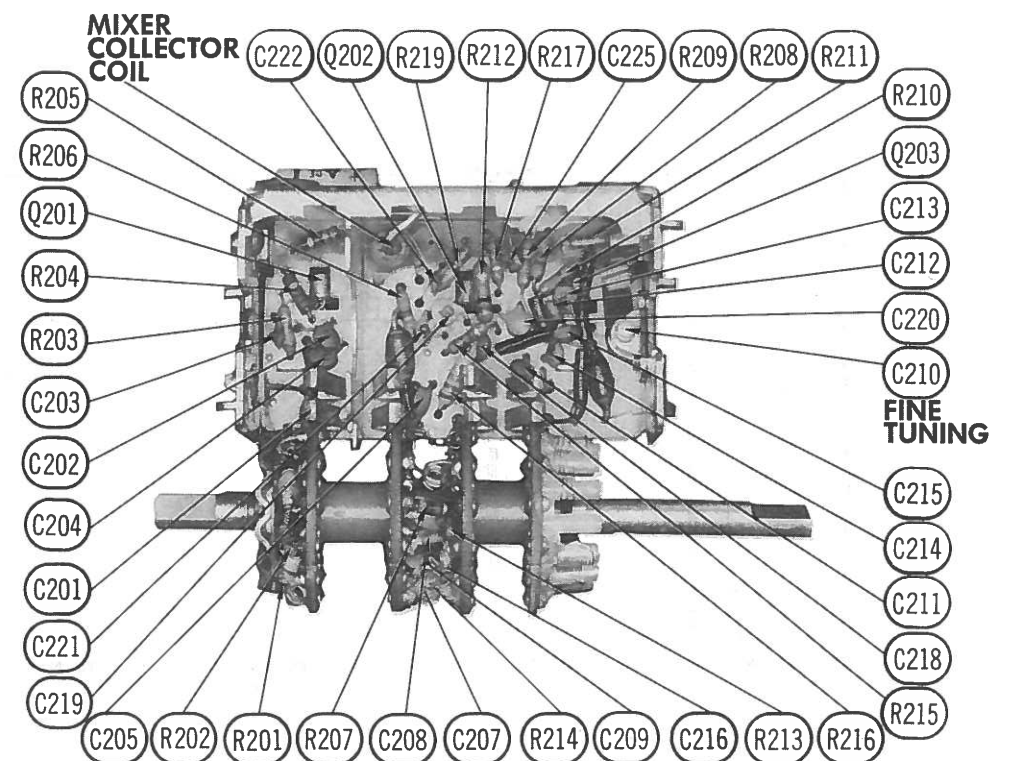
Connect the synchronized sweep voltage from the sweep generator to the horizontal input of the oscilloscope for horizontal deflection. Use 10MC sweep unless otherwise noted. Connect a variable bias to the RF AGC line at point T. Adjust bias to obtain response curve which shows no indication of overloading.

SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
1. Across antenna terminals with 120Ω in each lead.	213MC	211.25MC 215.75MC	13	Vert. Input to Point U, low side to ground	A201, A202	Adjust for maximum gain and symmetry of response similar to Fig. 201 with markers as shown.
2. "	See Chart	See Chart	12 thru 2	Vert. Input to Point U, low side to ground		Check all channels for response similar to Fig. 201. If necessary, make compromise adjustments of A201 and A202.

CHANNEL & FREQUENCY CHART

SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	SOUND	VIDEO
57MC	55.25MC 59.75MC	2	65MC	63.25MC 67.75MC	6	195MC	193.25MC 197.75MC	10		
63MC	61.25MC 65.75MC	3	177MC	175.25MC 179.75MC	7	201MC	199.25MC 203.75MC	11		
69MC	67.25MC 71.75MC	4	183MC	181.25MC 185.75MC	8	207MC	205.25MC 209.75MC	12		
79MC	77.25MC 81.75MC	5	189MC	187.25MC 191.75MC	9	213MC	211.25MC 215.75MC	13		

FIG. 201



VHF TUNER PARTS LIST

VHF TUNER 340113-1

TRANSISTORS

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA				NOTES
			DELCO PART No.	GENERAL ELECTRIC PART No.	INTERNATIONAL RECTIFIER PART No.	RCA PART No.	
Q201	GM0375 (T1XM05)	RF Amp.					PNP
Q202	2SA379	Mixer					PNP
Q203	2SA378	Oscillator					PNP

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.
C201	10		NPO-DI 10	DTZ-10	CZ601CG100J	CCTO-100	CNO410	10TCC-Q10
C202	20		NPO-DI 20			CCTO-200	CNO420	10TCC-Q20
C203	.001	50V	DI-1000	DM-102	JBS601YP102K	CCD-102	SM210	5GAB-D10
C204	2			TCZ-30				
C205	30					CCTO-200		10TCC-Q30
C206								
C207								
C208	3		NPO-DI 3					10TCC-V30
C209	1.5		NPO-DI 1.5	DTZ-1R5			CNO615	10TCC-V15
C210								
C211	20	N470				*	*	
C212	3	N750				*	*	
C213	2	NPO						
C214	.001		DI-1000	DM-102	JBS601YP102K	CCD-102	SM210	5GAB-D10
C215	2	NPO						
C216	3		NPO-DI 3					10TCC-V30
C217								
C218	5							
C219	10		NPO-DI 10	DTZ-10	CZ601CG100J	CCTO-100	CNO410	10TCC-Q10
C220	.001		DI-1000	DM-102	JBS601YP102K	CCD-102	SM210	5GAB-D10
C221	10		NPO-DI 10	DTZ-10	CZ601CG100J	CCTO-100	CNO410	10TCC-Q10
C222	.001		DI-1000	DM-102	JBS601YP102K	CCD-102	SM210	5GAB-D10
C223	.001		EF-001	MFT-1000		CCF-102	CT280A	
C224	.001	50V	EF-001	MFT-1000		CCF-102	CT280A	
C225	.001	50V	DI-1000	DM-102	JBS601YP102K	CCD-102	SM210	5GAB-D10

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

UHF TUNER PARTS LIST

TRANSISTORS

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA				NOTES
			DELCO PART No.	GENERAL ELECTRIC PART No.	INTERNATIONAL RECTIFIER PART No.	RCA PART No.	
Q301	GM0384 (GM-380)	UHF Oscillator					PNP

POWER RECTIFIERS & SIGNAL DIODES

ITEM No.	MEASURED CURRENT	ORIGINAL Part or Type No.	RECTIFIERS & DIODES		RECTIFIERS		
			GENERAL ELECTRIC PART No.	INTERNATIONAL RECTIFIER PART No.	MALLORY PART No.	RCA PART No.	SARKES TARZIAN PART No.
X301		1N82A (1S750)	1N82A	1N82AG			

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.
C301	30			TCZ-30		CCTO-300		10TCC-Q30
C302	3							10TCC-V30
C303								
C304	70							
C305	.001		EF-001	MFT-1000		CCF-102	CT280A	
C306								

PARTS LIST AND DESCRIPTION

(When ordering parts, state Model, Part Number, and Description.)

Replacement parts shown may be superseded by the availability of newly introduced replacements. Have your local distributor check Sams COUNTER FACTS for the most up-to-date replacement.

WIRING DATA

High Voltage Lead	Use BELDEN No. 8889 (17KV) or 8868 (25KV)
Shielded Hook-up Wire	Use BELDEN No. 8885 (Single Conductor) 8738 (Two Conductor)
General-use Unshielded Hook-up Wire	Use BELDEN No. 8530 (Solid) Available in 12 Colors 8524 (Stranded) Available in 12 Colors
Power Cord (Interlock Type)	Use BELDEN No. 8874 (Rubber) or 8895 (Plastic)
300Ω Tuner Input Lead	Use BELDEN No. 8235
300Ω Antenna Lead-In	Use BELDEN No. 8230 or 8275
Antenna Rotor Cable	Use BELDEN No. 8464 (Flat) or 8484 (Round) - 4 Conductor 8485 (Round) - 5 Conductor 8488 (Round) - 8 Conductor

PICTURE TUBE

ITEM No.	REPLACEMENT DATA				NOTES
	MAGNAVOX PART No.	GENERAL ELECTRIC PART No.	RCA PART No.	SYLVANIA PART No.	
V1	9XP4				

TRANSISTORS

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA				NOTES	ALTERNATE ORIG. TYPE
			DELCO PART No.	GENERAL ELECTRIC PART No.	INTERNATIONAL RECTIFIER PART No.	RCA PART No.		
Q301	GM0384	UHF Oscillator					PNP	
Q201	GM0375	RF Amp.					PNP	
Q202	2SA379	Mixer					PNP	
Q203	2SA378	Oscillator					PNP	
Q1	2SC208	1st Video IF					NPN	
Q2	2SC208	2nd Video IF					NPN	
Q3	2SC208	3rd Video IF					NPN	
Q4	2SA71B	1st Video Amp.	DS-56	GE-9	TR-17	SK-3006	PNP	(2SA324B)
Q5	2SA385L	Noise Canceller	DS-25	GE-1	TR-07	SK-3005	PNP	
Q6	2SC58A	Video Output					NPN	
Q7	2SB171	RF AGC Amp.	DS-26	GE-2	TR-14	SK-3004	PNP	
Q8	2SA385	IF AGC Amp.	DS-26	GE-2	TR-14	SK-3004	PNP	
Q9	2SA71BS	1st Sound IF	DS-56	GE-9	TR-17	SK-3006	PNP	(2SA324B)
Q10	2SA103	2nd Sound IF	DS-56	GE-9	TR-17	SK-3006	PNP	
Q11	2SB171	Driver	DS-26	GE-2	TR-14	SK-3004	PNP	
Q12	2SB324	Audio Output	DS-26	GE-2	TR-14	SK-3004	PNP	
Q13	2SB324	Audio Output	DS-26	GE-2	TR-14	SK-3004	PNP	
Q14	2SA385	Sync Separator	DS-25	GE-1	TR-18	SK-3005	PNP	
Q15	2SC538	Sync Phase Inverter	DS-26	GE-10	TR-21	SK-3020	NPN	(2SC324H)
Q16	2SB176	Vert. Oscillator	DS-26	GE-2	TR-05	SK-3004	PNP	
Q17	2SB172	Vert. Amp.					PNP	
Q18	2SB126	Vert. Output					PNP ①	
Q19	2SB172F	Horiz. Osc.	DS-26	GE-2	TR-05	SK-3004	PNP	
Q20	2SB448	Horiz. Driver					PNP ①	
Q21	2SC687	Horiz. Output					NPN ①	
Q22	2SB126F	Active Power Filter	DS-520	GE-3	TR-01	SK-3009	PNP ①	

① When replacing, apply silicone grease to both sides of insulator. Tighten mounting screws securely.

POWER RECTIFIERS & SIGNAL DIODES

ITEM No.	MEASURED CURRENT	ORIGINAL Part or Type No.	RECTIFIERS & DIODES		RECTIFIERS		
			GENERAL ELECTRIC PART No.	INTERNATIONAL RECTIFIER PART No.	MALLORY PART No.	RCA PART No.	SARKES TARZIAN PART No.
X1	.720A	530124-3	GE-504A ①② or GE-505 ①②	10DB2A ② or 8D4 ①②	FW50 ② or A50 ①②	SK-3016 ①② or SK-3017A ①②	S-5959 ② or 40C ①②
X2		530124-2 (HS9/1)					
X3		530124-2 (HS9/1)					
X4		530124-2 (HS9/1)					
X5	.200A	MA102					
X6		530123-3 (SD-1B)		8D8 or 5A8-D	A800 or T800X	SK-3016 or SK-3017A	80C or F-8
X7		530123-4 (FT1N)	GE-504A or GE-505	8D4 or 5A4-D	1N2069 or 1N538	SK-3016 or SK-3017A	40C or F-4
X8		530123-1 (OA70)	1N60	1N60			
X9		530123-1 (OA70)	1N60	1N60			
X10		530123-1 (OA70)	1N60	1N60			
X11		530123-1 (OA70)	1N60	1N60			
X12		530124-1	GE-504A or GE-505	8D4 or 5A4-D	1N2069 or 1N538	SK-3016 or SK-3017A	40C or F-4
X13		530123-1 (OA70)	1N60	1N60			
X14		530123-1 (OA70)	1N60	1N60			
X15		530123-1 (OA70)	1N60	1N60			
X16		530123-5 (SD1Z)	GE-504A or GE-505	8D4 or 5A4-D	1N2069 or 1N538	SK-3016 or SK-3017A	40C or F-4

① Four (4) required.

② When replacing, apply silicone grease to both sides of insulator. Tighten mounting screws securely.

ELECTROLYTIC CAPACITORS							
ITEM No.	RATING		REPLACEMENT DATA				
	CAP.	VOLT.	MAGNAVOX PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	MALLORY PART No.
C1	3000	20	270102-5	AFPH1-04-50			
C2	1000	15	270082-430	PRSI230	BR1000-15	QTI-32	TC1501
C3	1000	15	270082-430	PRSI230	BR1000-15	QTI-32	TC1501
C4	500	15	270068-428	BCD15500	BR500-15	QTI-30	TC1505
C5	100	15	270068-419	BCD15100	NLW100-15	MTI-19	TT15X100
C6	300	15	270068-423	BCD15X300100	BR300-150	QTI-30	TC499
C7	100	15	270082-417	CRE473A	NLW100-15	MTI-19	TT15X100
C8	10	15	270082-425	CRE487A	NLW10-15	MTI-5	TT15X10
C9	.47	25	270102-3	BCD6025	NLW30-6	MTI-1	TT25X1
C10	30	6	270068-210	BCD15005	NLW30-6	MTI-13	TT25X30
C11	5	15	270068-403	BCD15005	NLW5-15	MTI-3	TT15X5
C12	10	15	270068-405	BCD15010	NLW10-15	MTI-5	PET1760
C13	5	15	270068-403	BCD15005	NLW5-15	MTI-3	TT15X5
C14	10	6	270068-205	BCD6010	NLW10-6	MTI-5	PET1340
C15	5	15	270068-403	BCD15005	NLW5-15	MTI-3	TT15X5
C16	5	15	270068-403	BCD15005	NLW5-15	MTI-3	TT15X5
C17	10	15	270068-405	BCD15010	NLW10-15	MTI-5	PET1760
C18	100	10	270068-419	BCD10100	NLW100-12	MTI-19	PET1400
C19	5	150	270102-1	CRE954A	NLW5-150	MTI-4	TT150X5
C20	10	6	270068-205	BCD6010	NLW10-6	MTI-5	PET1340
C21	30	6	270068-210	BCD6025	NLW30-6	MTI-13	TT25X30
C22	30	6	270068-210	BCD6025	NLW30-6	MTI-13	TT25X30
C23	100	10	270068-419	BCD10100	NLW100-12	MTI-19	PET1400
C24	1	25	270102-2	BCD25001	NLW1-50	MTI-1	TT25X1
C25	20	15	270068-408	BCD15025	NLW20-15	MTI-10	PET1570
C26	10	15	270068-405	BCD15010	NLW10-15	MTI-5	PET1760
C27	1.5	50	270102-4	BCD50001	NLW1-50	MTI-1	TT50X1
C28	20	25	270068-608	BCD25020	NLW20-25	MTI-11	TT25X20
C29	100	10	270068-419	BCD10100	NLW100-12	MTI-19	PET1400
C30	500	15	270068-428	BCD15500	BR500-15	QTI-30	TC1505
C31	10	50	270068-705	BCD50010	NLW10-50	MTI-6	TT50X10
C32	1	25	270102-2	BCD25001	NLW1-50	MTI-1	TT25X1
C33	5	15	270068-403	BCD15005	NLW5-15	MTI-3	TT15X5
C34	1	25	270102-2	BCD25001	NLW1-50	MTI-1	TT25X1
C35	5	150	270102-1	CRE954A	NLW5-150	MTI-4	TT150X5

① Do not use 100mfd section.

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.
C36	.001		DI-1000	DD-102	JBS601Y P102K	CCD-102	GP210	10TS-D10
C37	.001		DI-1000	DD-102	JBS601Y P102K	CCD-102	GP210	10TS-D10
C38	100	10%	DI-1000	DD-101	JBZ601Y P101K	CCD-101	GP310	10TS-T10
C39	5	NPO	NPO-DI 5.0	DTZ-4R7	CZ601CH5R0D	CCTO-050	CNO647	10TCC-V50
C40	5	NPO	NPO-DI 5.0	DTZ-4R7	CZ601CH5R0D	CCTO-050	CNO647	10TCC-V50
C41	5	NPO	NPO-DI 5.0	DTZ-4R7	CZ601CH5R0D	CCTO-050	CNO647	10TCC-V50
C42	50	10%	DI-500	DD-500	JBZ601Y P500K	CCD-500	GP450	10TS-Q50
C43	50	10%	DI-500	DD-500	JBZ601Y P500K	CCD-500	GP450	10TS-Q50
C44	35							
C45	25		DI-25	DD-250		CCD-250	GP425	10TS-Q25
C46	.01	50V	TTD-01	CK-103	HOY101AV103P	CCD-103	TA110	TG-S10
C47	100	10%	DI-100	DD-101	JBZ601Y P101K	CCD-101	GP310	10TS-T10
C48	2							
C49	.01	50V	TTD-01	CK-103	HOY101ZV103P	CCD-103	TA110	TG-S10
C50	3		NPO-DI 3					10TCC-V30
C51	30		DI-30	DD-300		CCD-300	GP430	10TS-Q30
C52	2							
C53	12		DI-12	DD-120		CCD-120	GP412	10TS-Q12
C54	5		NPO-DI 5.0	DTZ-4R7	CZ601CH5R0D	CCTO-050	CNO647	10TCC-V50
C55	5		NPO-DI 5.0	DTZ-4R7	CZ601CH5R0D	CCTO-050	CNO647	10TCC-V50
C56	500	10%	DI-500	DD-501	JBZ601Y P501K	CCD-501	GP350	10TS-T50
C57	390 N1000 50V 10%							
C58	150	10%	DI-150	DD-151	CD19F122J500	CCD-151	GP315	10TS-T15
C59	.0012	10%	ADM-20-122	CPR-1200J	JBZ601Y P500K	CCD-500	GP450	10TS-Q50
C60	50		DI-500	DD-502	JBZ601Y P502K	CCD-502	GP250	10TS-D50
C61	.005		DMF1 P1			1DP-2-104	PVC101	
C62	.1	50V						
C63	.05	1000V						
C64	.01	50V	TTD-01	CK-103	HOY101ZV103P	CCD-103	TA110	TG-S10
C65	100	10%	DI-100	DD-101	JBZ601Y P101K	CCD-101	GP310	10TS-T10
C66	20		DI-200	DD-200		CCD-200	GP420	10TS-Q20
C67	100	10%	DI-100	DD-101	JBZ601Y P101K	CCD-101	GP310	10TS-T10
C68	.01	50V	TTD-01	CK-103	HOY101ZV103P	CCD-103	TA110	TG-S10
C69	.01	50V	TTD-01	CK-103	HOY101ZV103P	CCD-103	TA110	TG-S10
C70	.270	25V	DMF1 P1					
C71	.0082	50V	CPR-270J	DD-822	CD15 F271J500	CCD-822	B282	30GA-D82
C72	.1	50V						
C73	.0047		DMF1 P1			1DP-2-104	PVC101	
C74	.01	50V	TTD-01	CK-103	HOY101ZV103P	CCD-103	TA110	TG-S10
C75	.01		DBE4S1	CPR-10000J	DMF2S1	4DP-1-103	PVC211	2TM-S10
C76	100	10%	DI-100	DD-101	JBZ601Y P101K	CCD-101	GP310	10TS-T10
C77	.018		DBE6S18					
C78	50	10%	DI-50	DD-500	JBZ601Y P500K	CCD-500	GP450	10TS-Q50
C79	.018		DBE6S18					
C80	.018		DBE6S18					
C81	.1	50V 10%						
C82	.25	100V 10%						
C83	.005		DI-5000	DD-502	JBZ601Y P502K	CCD-502	GP250	10TS-D50
C84	.01		DBE4S1	CPR-10000J	DMF2S1	4DP-1-103	PVC211	2TM-S10
C85	.022	400V	DBE4S22					
C86	.01	10%	DBE4S1	CPR-10000J	DMF2S1	4DP-1-103	PVC211	2TM-S10
C87	.01	10%	DBE4S1	CPR-10000J	DMF2S1	4DP-1-103	PVC211	2TM-S10
C88	.1	50V 10%						
C89	.015	10%	DBE4S15					
C90	.082	50V 5%	DBE6S82					
C91	.068	50V 10%	DBE4S68					
C92	.015	10%	DBE4S15					
C93	.003							
C94	6.5mfd 150V							
C95	.082	400V 10%	DBE6S82					
C96	.005	600V 10%	DBE6D5	CPR-5000J	DPMS6D5	6DP-1-502	PVC625	6PS-D50
C97	.01	600V 10%	DBE6S1	CPR-10000J	DMF5S1	6DP-1-103	PVC611	6PS-S10
C98	470	7KV						
C99	470	7KV						
C100	.005	600V 10%	DBE6D5	CPR-5000J	DPMS6D5	6DP-1-502	PVC625	6PS-D50
C101	.390	1KV 10%	DI-390	DD-391		CCD-391	GP339	10TS-T39
C102	.001		DI-1000	DD-102	JBS601Y P102K	CCD-102	GP210	10TS-D10
C103	.068	50V 10%	DBE4S68		DMF4S68	4DP-3-683	PVC6168	4PS-S68

Magnavox Part Number

PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

Replacement parts shown may be superseded by the availability of newly introduced replacements. Have your local distributor check Sams COUNTER FACTS® for the most up-to-date replacement.

CONTROLS

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

ITEM No.	USE	RESISTANCE	REPLACEMENT DATA				
			MAGNAVOX PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.
R1	Volume/Switch	10K	220235-1	F2-10K ①, SSK-010, KR-2	A47-10K-Z ①, KSS-3, SWE-20 or (NP-10K-Z ①, UP-C-400, NWE-20)	Q13-116 ①, 76-2 or (BU1 ①, CF61, SS6, WF) *	RU14A, SL36, SL3250, US42 or (UA14A ①, SK750, US42) or (U18 ①, US27)
R2	Brightness	500K	220235-3				
R3	Contrast	1000Ω	220235-2				
R4	Horiz. Hold	1000Ω	220235-5				
R5	Vert. Hold	2000Ω	220235-4				
R6	Focus	2meg		F1-2meg, SNK012, AK-38	B47-2meg-S or (NP-2meg-S, NML-A-300, TT-2)	B11-139, TM4 or (BU11, CF19, SS6) *	PTA26L or (RU26L, SL37, SN1000) or (UA26L ①, SN1000)
R7	Height	5000Ω	220234-2			X201R502B	MTC53L1
R8	Vert. Linearity	2000Ω	220234-3			X201R252B	MTC23L1
R9	Horiz. Frequency	500Ω	220234-1			X201R501B	MTC52L1
R10	AGC	500Ω	220234-1			X201R501B ②	MTC52L1 ②
R11	Active Power Filter Adjustment	500Ω	220234-1			X201R501B ②	MTC52L1 ②

① Enlarge mounting hole.

② For horizontal mount, bend terminals to fabricate wiring to "PC" board.

* "SNAPTROL"

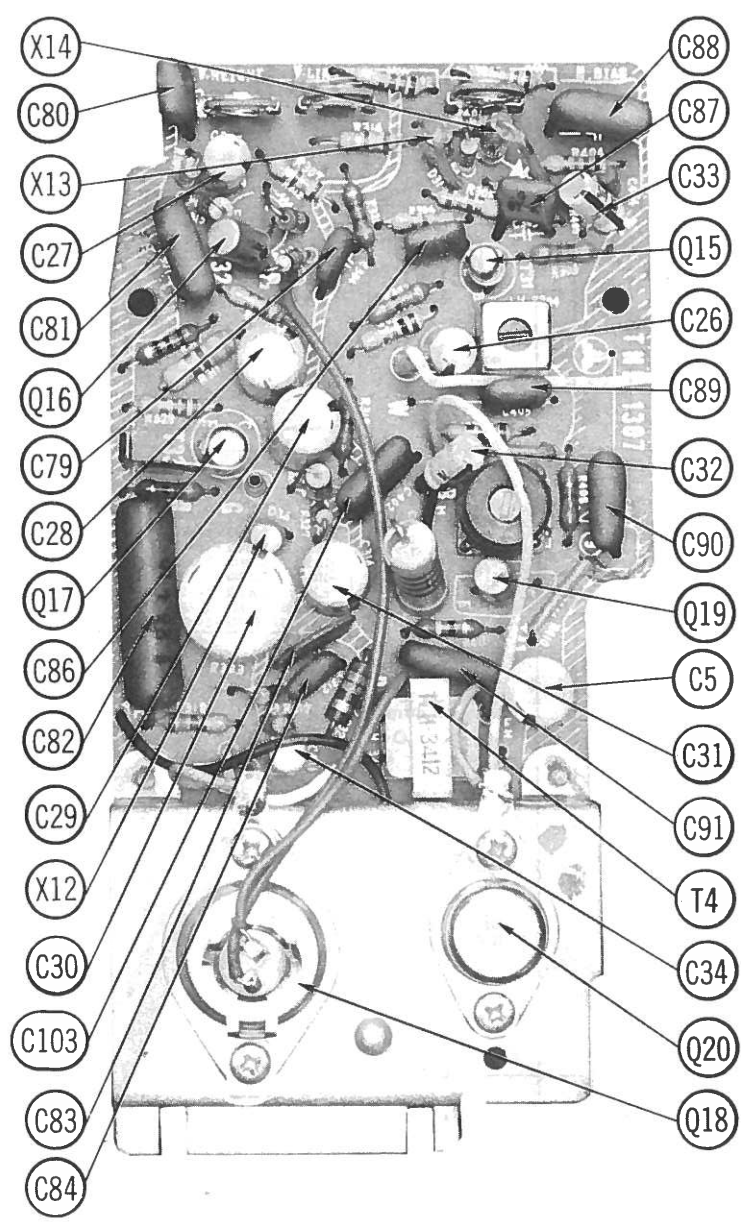
RESISTORS (Power and Special)

ITEM No.	RATING	REPLACEMENT DATA			ITEM No.	RATING	REPLACEMENT DATA		
		IRC PART No.	WORKMAN PART No.	MAGNAVOX PART No.			IRC PART No.	WORKMAN PART No.	MAGNAVOX PART No.
R62	Thermistor (10Ω Cold)				R87	Posistor (15K Cold)			
R64	Thermistor (10Ω Cold)								

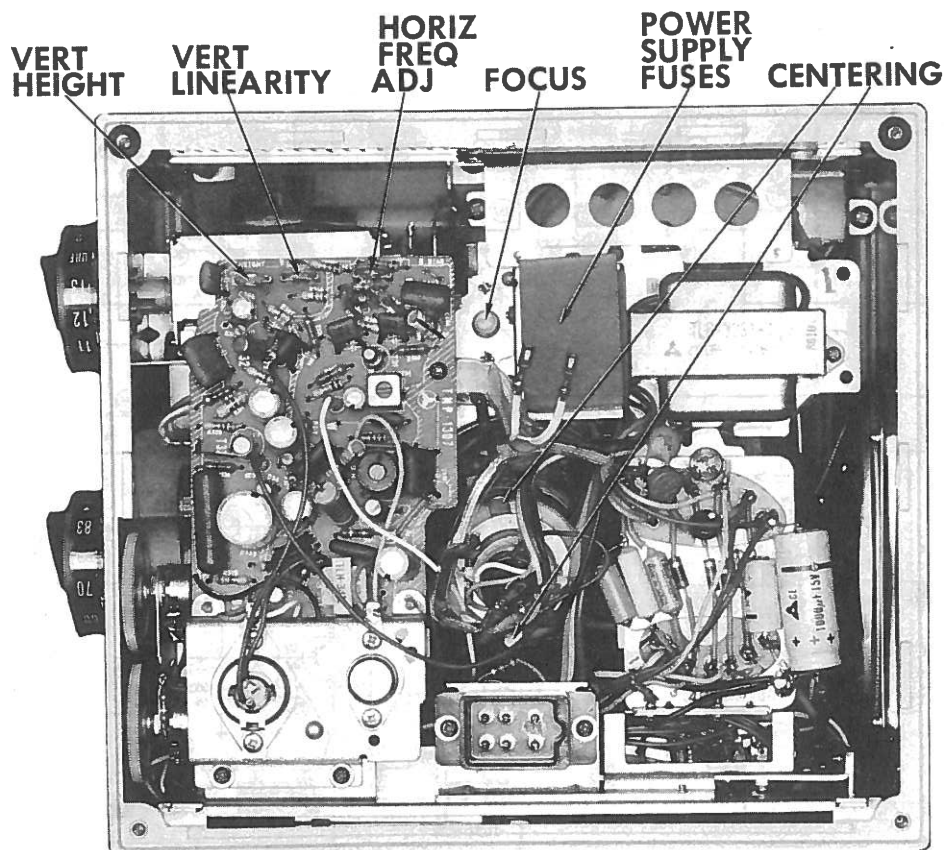
COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA				
		MAGNAVOX PART No.	MEISSNER PART No.	MERIT PART No.	MILLER PART No.	WORKMAN PART No.
L1	Balun					
L2	41.25MC Trap	361271-5 (TLI-33052)			23A336RPC ▲	
L3	47.25MC Trap	361271-1 (TLI-33051)			23A106RPC ▲	
L4	1st Video IF	361272-2 (TLI-31770M)				
L5	2nd Video IF	361271-4 (TLI-38403)				
L6	39.75MC Trap	361271-8 (TLI-33056M)				
L7	3rd Video IF	361271-6 (TLI-31769M)				
L8	4th Video IF, Primary	361272-3 (TLI-31768M)				
L9	4th Video IF, Secondary	361272-4 (TLI-31760M)				
L10	RF Choke (25uh)	361273-1 (TLD-02501-5)	19-6022	BC-662	72F275AP	T336
L11	RF Choke (25uh)	361273-1 (TLD-02501-5)	19-6022	BC-662	72F275AP	T336
L12	Peaking (125uh)	361273-2 (TLD-12501-5)	19-3125	BC-670	6153	T342
L13	Sound Take-off	361271-9 (TLS-34201)				
L14	4.5MC Trap	361271-7 (TLS-34703-1)			23A336RPC ▲	
L15	RF Choke (2.8uh)	361273-3 (TLD-02891-5)	19-2011	BC-563	74F276AP	TB-293
L16	Peaking (150uh)	361273-4 (TLD-15001-5)	19-2026	TV-196	72F154AP	T308
L17	Peaking (150uh)	361273-4 (TLD-15001-5)	19-2026	TV-196	72F154AP	T308
L18	Peaking (50uh)	361273-5 (TLD-05001-5)	19-3060	TV-193	72F475AP	TG248
L19	Sound Interstage	361272-5 (TLS-32202)				
L20	Ratio Detector, Primary	361272-6 (TLS-33201)				
L21	Ratio Detector, Secondary	361272-7 (TLS-33202)				

▲ Clip unused pin.



SWEEP BOARD



CABINET—REAR VIEW

HORIZONTAL SWEEP CIRCUIT ADJUSTMENTS

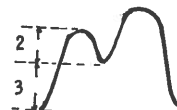


FIG. 3

Unsolder connection at point \odot on sweep board (located between R100, R101 and C88. Disconnect sync lead (white wire) from point \odot (on sweep board).

Tune in a TV station. Adjust the Horizontal Hold control to the mechanical center of its rotation. Connect the vertical input of a scope to point \odot (on sweep board).

Adjust Horizontal Oscillator Transformer, L23, slug B1 until picture floats across the screen. Adjust Horizontal Stabilizer coil, L22, slug

B2 and Horizontal Oscillator Transformer, B1, to produce waveform shown in Fig. 3. Turn set off. Disconnect scope. Resolder connection at point \odot . Turn set on. Adjust Horizontal Frequency control, R9, until picture floats across the screen.

Reconnect sync lead (white wire) to point \odot . Check range of Horizontal Hold control, R4. Picture should fall out of sync at either end of control. If necessary, readjust Horizontal Oscillator Transformer, B1, for proper range of Horizontal Hold control. (Do not turn B1 more than 45° .) If necessary, repeat above procedure.

DISASSEMBLY INSTRUCTIONS

TV CHASSIS REMOVAL

1. Remove 4 screws holding back cover and remove back cover. Disconnect antenna leads and remove channel selector knobs.
2. Remove yoke, picture tube socket, ground strap, and HV anode lead.
3. Remove 4 screws near the edge of front trim strip, lift front assembly off with picture tube attached, and remove 2 screws holding control bracket to the front assembly.
4. Remove 2 screws located behind the VHF fine tuning knob, 2 screws located on the bottom of the cabinet and 2 screws holding the chassis to the handle mounting plate inside cabinet.

5. Remove the 4 screws holding the speaker and its mounting plate to the cabinet. Unplug the speaker and remove speaker.

6. Remove earphone jack. The chassis can now be removed from the front of the cabinet.

PICTURE TUBE REMOVAL

1. Follow "Chassis Removal" procedure — Steps 1 and 2. Lay front assembly face down on a soft protective surface.
2. Remove 4 nuts holding picture tube bracket and lift out picture tube. Do not lift out by the neck of the tube.

NOTE: Picture tube may be removed without pulling chassis.