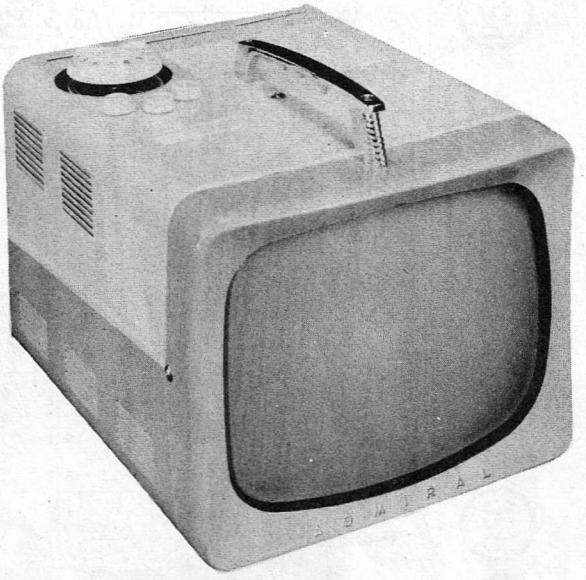
ADMIRAL
CHASSIS 14YP3B, BK, C

DISASSEMBLY INSTRUCTIONS

CHASSIS REMOVAL

1. Remove 5 push-on type control knobs.
2. Remove 2 metal screws. Remove rear cover.
3. Remove 2 metal screws. Remove handle.
4. Remove 2 metal screws. Remove front and safety glass.
5. Remove 1 metal screw from top of cabinet.
6. Remove 6 chassis bolts from bottom of cabinet.
7. Remove chassis from front.
8. Remove 2 speaker leads.
9. Remove 2 metal screws. Remove speaker.



MODEL	CHASSIS
T103	14YP3B

ADMIRAL
CHASSIS 14YP3B, BK, C

SERVICING IN THE FIELD

TUNER OSCILLATOR ADJUSTMENTS

Touch-up adjustment of the VHF tuner oscillator may be accomplished by removing channel selector, fine tuning knobs and escutcheon. The adjustments are accessible, one at a time as channels are changed. Adjust rear slug. Always adjust lowest channel first.

PICTURE TUBE SAFETY GLASS CLEANING

Remove 2 metal screws holding front of cabinet. Using extreme caution, remove front of cabinet and safety glass.

SERVICE ADJUSTMENT LOCATION

See tube placement chart on page 5.

FOCUS

Focus may be varied by placement of strap between pins 6 and 2 or 6 and 10 of picture tube. Readjust ion trap for best focus consistent with maximum brightness.

HORIZONTAL OSCILLATOR FIELD ADJUSTMENT

Adjust horizontal hold until picture synchronizes horizontally.

FUSES

A 10Ω fusible resistor R83 is used for LV power supply protection.

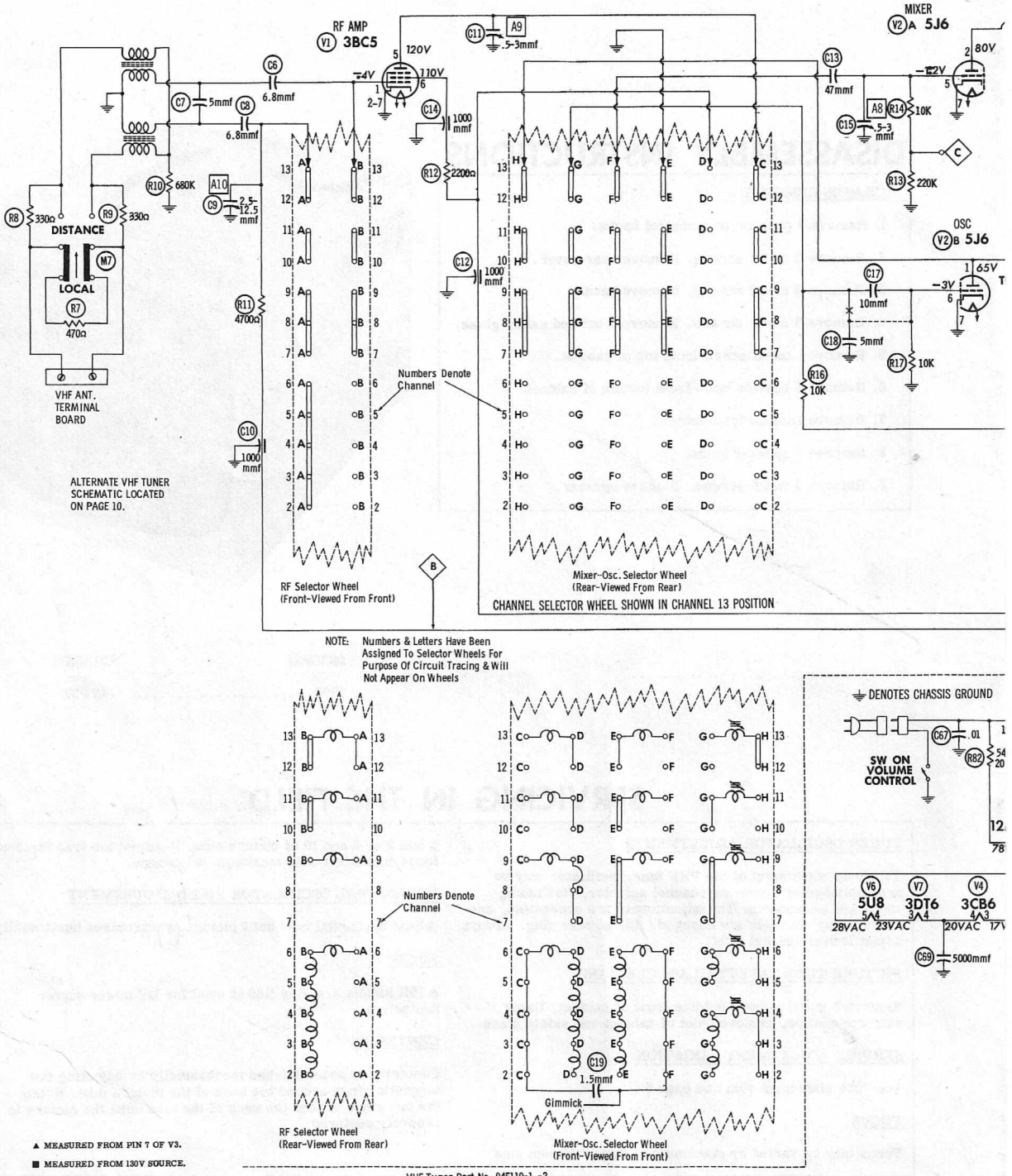
CENTERING

Centering is accomplished mechanically by adjusting two magnetic rings around the neck of the picture tube. Rotate the two rings around the neck of the tube until the picture is properly centered.

HOWARD W. SAMS & CO., INC. • Indianapolis 5, Indiana

G-762

DATE 3-57 SET 350 FOLDER 1



▲ MEASURED FROM PIN 7 OF V3.

■ MEASURED FROM 130V SOURCE.

⊖ SEE PARTS LIST FOR ALTERNATE VALUE OR APPLICATION

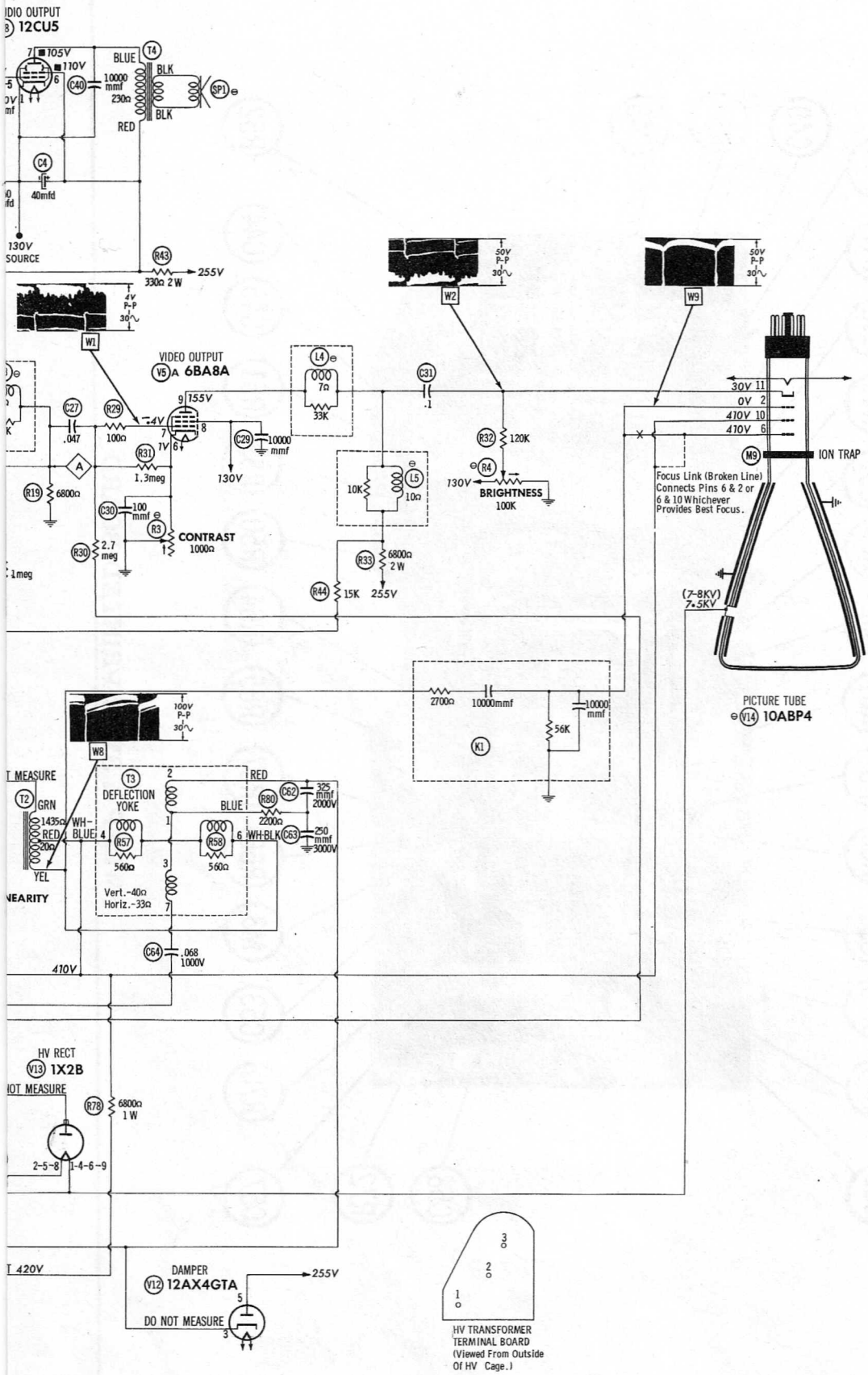
DC COIL RESISTANCE VALUES UNDER ONE OHM NOT SHOWN ON SCHEMATIC DIAGRAM.

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

WAVE FORMS TAKEN WITH CONTROLS SET TO PRODUCE 50 VOLTS PEAK-TO-PEAK SIGNAL AT PICTURE TUBE

1. DC voltage measurements taken with vacuum tube voltmeter; AC voltage measured at 1,000 ohms per volt.
2. Pin numbers are counted in a clockwise direction on bottom of socket.
3. Measured values are from socket pin to common negative unless otherwise stated.
4. Line voltage maintained at 117 volts for voltage readings.
5. All controls set for normal operation; no signal applied.

23.8mc
A1
C20
800mmf
C16
10 mmf
R15
8200Ω
FINE TUNING
SOUND IF
V6A 5U8
A6
L6
3Ω
A7
4Ω
3.5Ω
L7
R35
5000 mmf
120Ω
C33
10000 mmf
R34
18K
C32
1000mmf
R36
1000Ω
130V
AUDIO DET
V7 3DT6
C34
1000 mmf
R1
VOLUME
330K
C38
10000 mmf
R41
1.3 meg
C39
330mmf
R42
1.3meg
C36
10000 mmf
C35
5000 mmf
R40
330Ω
R39
8200Ω
A5
L8
3.8Ω
R37
100K
18 mmf
C37
.047
R38
560K
C21
1000 mmf
OR
130V
1ST VIDEO IF
V3 3CB6
L1
A4
R22
150K
R21
150K
68 mmf
R20
5600Ω
R26
68Ω
C25
5000mmf
R25
330Ω
C26
5000 mmf
255V
24.9mc
A2
L2
R24
18K
R23
330Ω
2ND VIDEO IF
V4 3CB6
A3
23.1mc
M4
CATH
1N295
6.8mmf
5 mmf
39mmf
5000 mmf
M6
R28
100Ω
R27
330Ω
R18
W14
RED
WH
C28
.22
C1
100mfd
M2
265V
L10
57Ω
C3
100mfd
M1
C2
100 mfd
R83
0Ω 5W
255V
SOURCE
(Audio Output)
To Pin 1 of V8
130V
SOURCE
V12 AX4GTA 8∧7 VAC
V11 12DQ6 2∧7 66VAC
V8 12CU5 4∧3 54VAC
V10 6CG7 4∧5 42VAC
V5 6BA8A 4∧5 36VAC
V14 10ABP4 1∧12 30VAC
V3 3CB6 4∧3 VAC
C24 1000mmf
V2 5J6 3∧4 14VAC
1000mmf
V1 3BC5 4∧3 9VAC 6VAC
V9 6CM7 4∧5
C22 1000 mmf
C68 5000mmf
C23 800mmf
W3
W4
W5
W6
W7
TAKEN WITH PIN 6 OF VERT. MULT. TUBE (V9A) SHORTED TO GROUND.
SYNC SEP
V5B 6BA8A
SYNC PHASE INV
V6B 5U8
VERT MULT
V9A 6CM7
VERT MULT
VERT OUTPUT
V9B 6CM7
C41
10000 mmf
C42
150 mmf
R45
270K
R46
2.7 meg
R47
47K
R48
330K
R63
47K 2W
R62
3300Ω
R60
6800Ω
R61
3300Ω
C52
.001
C51
.001
R49
15K
R50
15K
4700 mmf
C43
C45
2200mmf
C44
10000 mmf
R51
220K
C48
.047
R2
VERT HOLD
200K
R59
56K
R5
HEIGHT
2.5meg
R53
220K
C50
.001
1600V
C49
.047
R52
15K
C46
.047
R54
2.2 meg
C47
.033
R55
1meg
C3
20 mfd
R6
C5
10 mfd
R56
820Ω
VERT LI
3000Ω
DO NO
C66
10000 mmf
1400V
R84
470K
To Control Panel Brackets, Metal Cabinet, Picture Tube Outer Coating & Picture Tube Mounting Brackets.
HORIZ MULT
V10 6CG7
C53
4700 mmf
R64
100K
R67
470K
R65
100K
R66
4.7meg
C54
.022
C65
.047
R81
33Ω 1W
M3
Red Dot
C56
390mmf
R69
150K
R68
5600Ω
HORIZ HOLD
R71
1800Ω
L9
100Ω
C55
3900mmf
255V
C59
10000 mmf
HORIZ OUTPUT
V11 12DQ6
DO NOT MEASURE
R74
11meg
C58
270mmf
R75
100Ω
R72
5600Ω
R73
330K
R70
100K
C57
330mmf
R76
100Ω
C60
.047
R77
10K 10W
T1
160Ω
25Ω
17.8Ω
BOOS
C61
.1
W11
W10
W12
W13
20V P-P 7875
35V P-P 7875
80V P-P 7875
ON SCHEMATIC
. 1957



ADMIRAL
CHASSIS 14YP3B, BK, C

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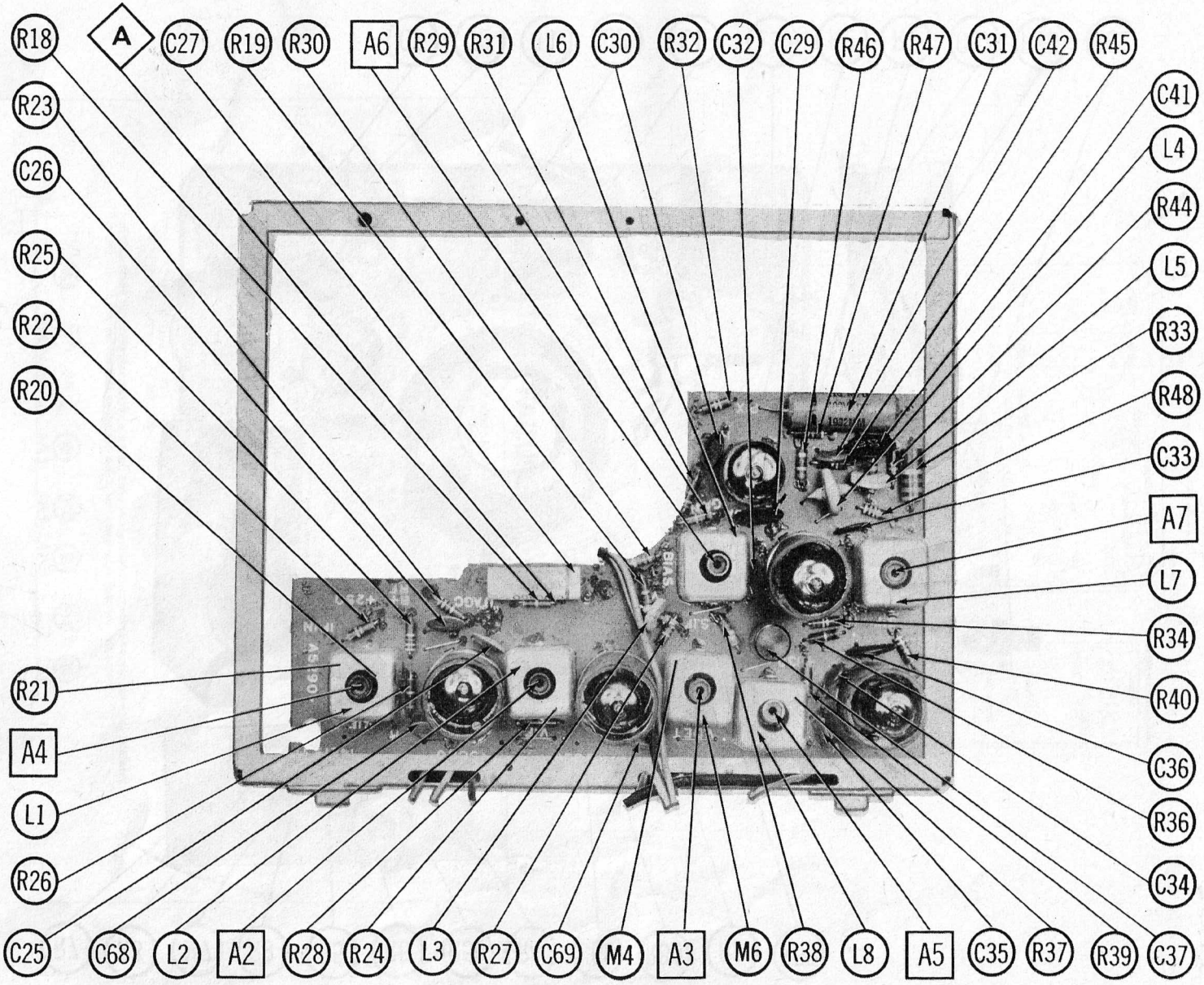
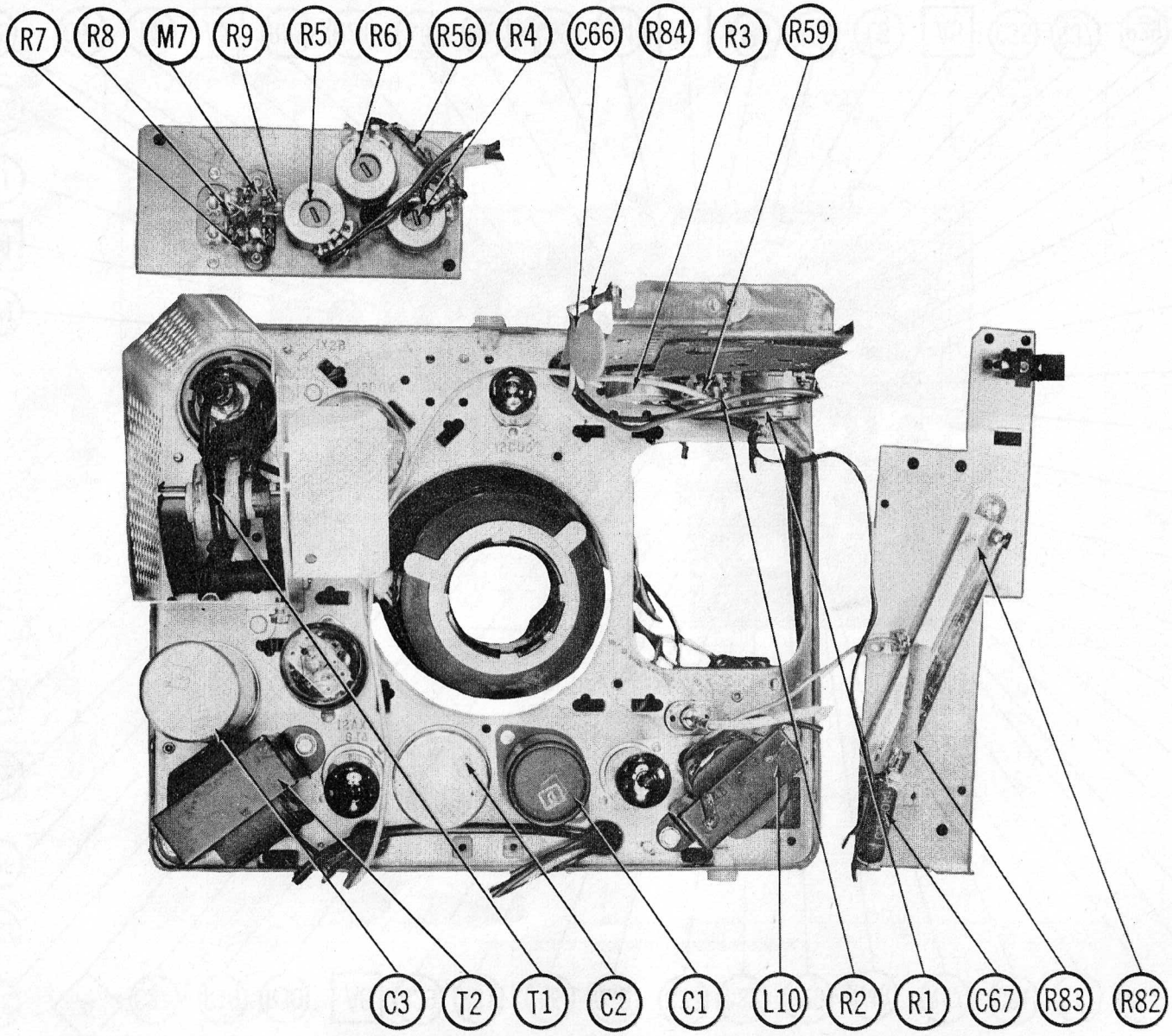
CHASSIS 14YP3B, BK, C



IF PRINTED BOARD

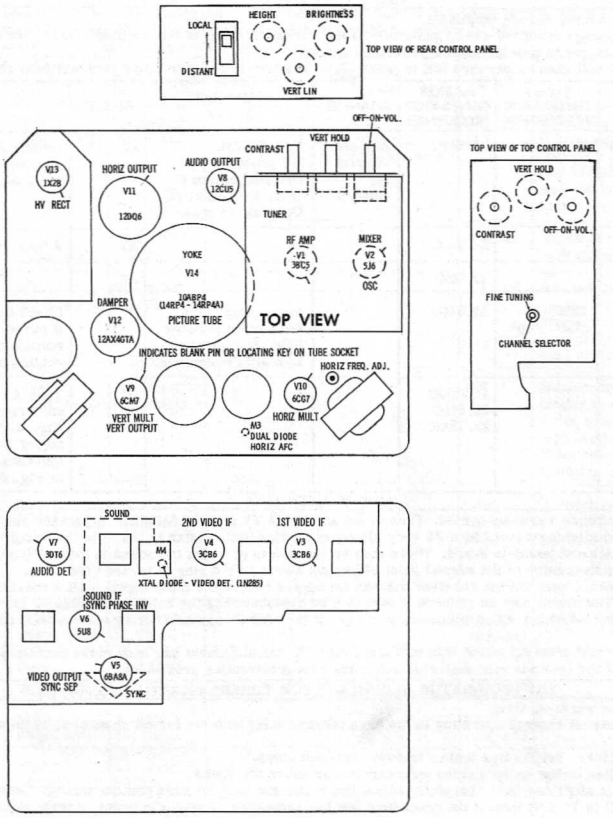
CHASSIS 14YP3B, BK, C

ADMIRAL



CHASSIS TOP VIEW

TUBE PLACEMENT CHART



TUBE FAILURE CHECK CHART

The following chart lists tubes whose failures are most likely to produce the indicated symptoms. Refer to tube placement chart for location and type of tube.

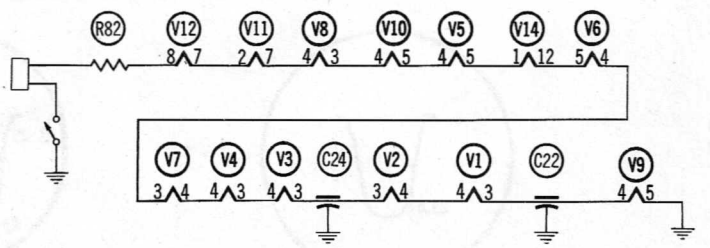
POWER SUPPLY FAILURE
No raster, no sound - Fusible Resistor (R83), Rectifier (M1) or (M2)

LOSS OF PICTURE OR SOUND
No pic, no sound, has raster - V3, V4, Diode (M4), V8
No pic, no sound, has snow - V1, V2
No pic, has sound, has raster - V5, V14
Has pic, no sound - V6, V7, V8

SYNC FAILURE
No vert. sync - V5, V6, V9
No horiz. sync - V5, V6, Diode (M3), V10
No vert. or horiz. sync - V5, V6

SWEEP FAILURE
No raster, has sound - M3, V10, V11, V12, V13, V14
No vertical deflection - V9
Poor vert. linearity or foldover - V9
Poor horiz. linearity or foldover - V10, V11, V12
Narrow picture - V10, V11, V12, M1, M2
Vert. off freq. - V9
Horiz. off freq. - M3, V10

NOTE: Since this receiver employs tubes used in a series filament network, an open filament in any tube in the series will cause the set to be inoperative (See circuit below).



ADMIRAL
CHASSIS 14YP3B, BK, C

ALIGNMENT INSTRUCTIONS

ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT

The high voltage lead should be securely taped and kept away from the chassis.
Use an isolation transformer to protect the test equipment.

VIDEO IF ALIGNMENT

Disconnect antenna and connect a jumper across terminals.
Connect the synchronized sweep voltage from the sweep generator to the horizontal input of the oscilloscope for horizontal deflection.
Use only enough sweep generator output to provide usable pattern on scope.
Connect the negative lead of a 2.5 volt bias supply thru 10K to point (B). Positive to chassis. Turn contrast fully counter clockwise.

	DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
1.	Direct	High side to ungrounded tube shield floating over mixer-osc. tube (V2). Low side to chassis.	Not used	23.8MC	Any non-interfering channel	USE VTVM. DC probe thru decoupling network (Fig. 1) to point (A). Common to chassis.	A1	Detune A4 by turning slug clockwise until slug extends approximately 1/8" out of coil. Adjust A1 for maximum deflection.
2.	"	"	"	24.9MC	"	"	A2	Adjust for maximum deflection.
3.	"	"	"	23.1MC	"	"	A3	"
4.	"	"	23MC (7MC Swp)	23.5MC	"	Vert. Amp. thru decoupling network (Fig. 1) to point (A). Low side to chassis.		Check for response curve similar to Fig. 2. If curve does not resemble Fig. 2 repeat steps 1 thru 3 for correct curve before continuing with step 5.
5.	"	"	"	21.25MC 23.5MC 25.75MC	"	"	A4	Turn A4 counter clockwise to reduce peak and broaden bandwidth of curve to resemble Fig. 3. It may be necessary to alternately adjust A4 and A1 to obtain proper curve with markers located as shown. The dotted line in Fig. 3 shows permissable variation.

SOUND IF ALIGNMENT

1. Turn the set on and allow 15 minutes warm-up period. Tune in the strongest TV signal available. Adjust the set for normal operation.
2. Using a non-metallic hexagonal alignment tool, turn A5 very slowly clockwise until a buzz is heard in the sound. Then turn counter clockwise until the loudest and clearest sound is heard. There may be two points at which the sound is loudest (approximately ½ turn apart). The slug should be set at the center of the second point of loudest sound as the slug is turned clockwise.
3. Using an attenuator between the antenna and the receiver antenna terminals reduce the input signal until a considerable amount of hiss and noise is heard in the sound. The signal may be reduced in strength by disconnecting the antenna and placing the lead near the terminals.
4. Carefully adjust A6 for the clearest sound with a minimum of noise. If the hiss disappears during alignment, reduce the signal still further until the hiss returns.
5. Carefully adjust A7 for loudest and clearest sound with minimum hiss. If this alignment has been made correctly, no further alignment should be necessary. However, if the sound is still distorted and noisy repeat the entire procedure.

VHF OSCILLATOR ALIGNMENT FOR TUNERS #94E119-1 AND #94E119-2

Turn the set on and allow 15 minute warm-up time.
1. Set the channel selector to the lowest channel operating in the area (always start with the lowest channel to be adjusted and the next higher, etc.).
2. Set the control for a normal picture. Set the fine tuning midway between stops.
3. Remove the channel selector, fine tuning knobs and the gold escutcheon under the knobs.
4. Using an 1/8" blade non-metallic alignment tool, carefully adjust the oscillator slug for best picture quality. (When two slugs are visible adjust the one marked REAR SLUG in Fig. 4) Repeat the procedure for the remaining channels in order of their channel number (from lowest channel to highest channel).

VHF OSCILLATOR ALIGNMENT FOR TUNER #94D128-1

Always make channel adjustments on the highest channel to be adjusted first since adjustment on one channel will affect adjustment of the lower channels. Before adjusting see Fig. 5 for location of channel adjustment screws. Adjust as follows:

1. Turn the set on and allow 15 minutes warm-up period.
2. Set the channel selector to the highest VHF channel to be adjusted and adjust the controls for normal picture.
3. Set the fine tuning control at the center of its range by turning in either direction two full turns then one quarter turn in the opposite direction.
4. Remove the channel selector, fine tuning knobs, and the escutcheon under knobs.
5. Using an 1/8" blade non-metallic alignment tool, carefully adjust for best picture. (Note that sound is not loudest at this point.) Repeat this procedure for remaining stations, in order of their channel numbers (starting with the highest channel and proceding to the lowest).

NOTE: If channel adjustment screws for channels 7 to 12 do not have sufficient range, make adjustments using channel 13 slug and then check adjustment of each of the lower channels. If the channel adjustment screws for channels 2 thru 5 do not have sufficient range, make adjustment using channel 6, then check each of the lower channels. If channel 6 or 13 is in operation, use next lower channel to extend adjustment range.

VHF RF AND MIXER ALIGNMENT FOR TUNERS #94E119-1 AND #94E119-2

Connect the negative lead of a 2.5 volt bias supply to point (B). Positive to chassis.
Set the local-distant switch to "Distant" position.
Turn the set on. Allow 15 minutes warm-up period.
Connect the synchronized sweep voltage from the sweep generator to the horizontal input of the oscilloscope for horizontal deflection.
The sweep generator output lead should be terminated with its characteristic impedance, usually 50 ohms.
Use only enough sweep generator output to provide usable pattern on scope.

	DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
6.	Two 120Ω Carbon Resistors	Across antenna terminals with 120Ω in each lead.	201MC (10MC Swp)	199.25MC 203.75MC	11	Vert. Amp. thru 15K to point (C). Low side to chassis.	A8, A9	Alternately adjust A8 and A9 to obtain response curve similar to Fig. 6 with markers as shown.
7.	"	"	85MC (10MC Swp)	83.25MC 87.75MC	6	"	A10	Adjust to obtain response curve similar to Fig. 6 with markers as shown. Check other channels using proper sweep and marker frequencies. If necessary retouch A8 and A9 for correcting high band channels and A10 for low band channels.

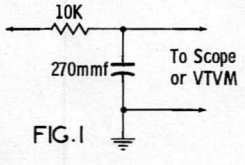


FIG. 1

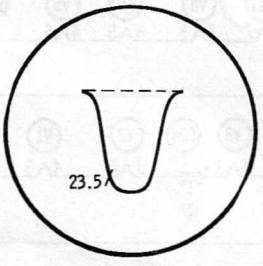


FIG. 2

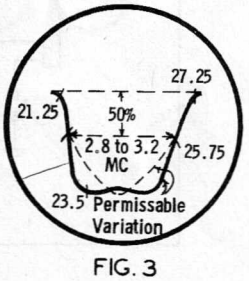


FIG. 3

ALIGNMENT INSTRUCTIONS (cont)

VHF RF AND MIXER ALIGNMENT FOR TUNER #94D128-1

Connect the negative lead of a 3 volt bias supply to point Ⓑ. Positive to chassis.
Set the local-distant switch to "Distant" position.
Allow 15 minute warm-up period for receiver and test equipment.
Connect the synchronized sweep voltage from the sweep generator to the horizontal input of the oscilloscope for horizontal deflection.
The sweep generator output lead should be terminated with its characteristic impedance, usually 50 ohms.
Use only enough sweep generator output to provide usable pattern on scope.

	DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
8.	Two 120Ω Carbon Resistors	Across VHF antenna terminals with 120Ω in each lead.	213MC (10MC Swp)	211.25MC 215.75MC	13	Vert. Amp. thru 10K to point Ⓒ. Low side to chassis.	A11, A12, A13	Check for response curve similar to Fig. 6. If necessary, adjust A11, A12 and A13 alternately to obtain proper response. A12 and A13 are adjusted for proper bandwidth and marker positions. A11 is adjusted for maximum amplitude.
9.	"	"	177MC (10MC Swp)	175.25MC 179.75MC	7	"	A14, A15	Adjust for response curve similar to Fig. 6 with markers as indicated.
10.	"	"	213MC (10MC Swp)	211.25MC 215.75MC	13	"	A13, A16	Retouch A13 if necessary for proper response curve (Fig. 6). If bandwidth is too broad move lead (A16) away from mixer grid ground strap. If too narrow, move lead closer.
11.	"	"	177MC (10MC Swp)	175.25MC 179.75MC	7	"	A17	If bandwidth is too broad move lead (A17) closer to capacitor body. If too narrow move away from capacitor. Check other high band channels using proper frequencies. If necessary, make compromise adjustments of steps 8 thru 11.
12.	"	"	85MC (10MC Swp)	83.25MC 87.75MC	6	"	*A18, *A19, *A20	If required, alternately adjust coils by expanding or compressing coil turns to obtain proper response. Adjust coils whose "A" numbers are preceded by (*) for maximum amplitude. Adjust others for tilt and marker placement.
13.	"	"	79MC (10MC Swp)	77.25MC 81.75MC	5	"	*A26, A22, A23	"
14.	"	"	69MC (10MC Swp)	67.25MC 71.75MC	4	"	*A24, A25, A26	"
15.	"	"	63MC (10MC Swp)	61.25MC 65.75MC	3	"	*A27, A28, A29	"
16.	"	"	57MC (10MC Swp)	55.25MC 59.75MC	2	"	*A30, A31, A32	"

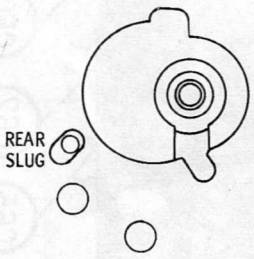


FIG. 4
VHF OSC ADJUSTMENTS

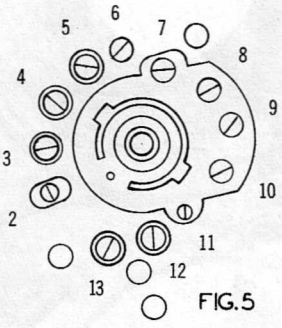


FIG. 5
VHF OSC ADJUSTMENTS

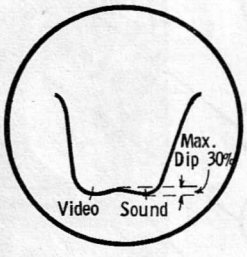
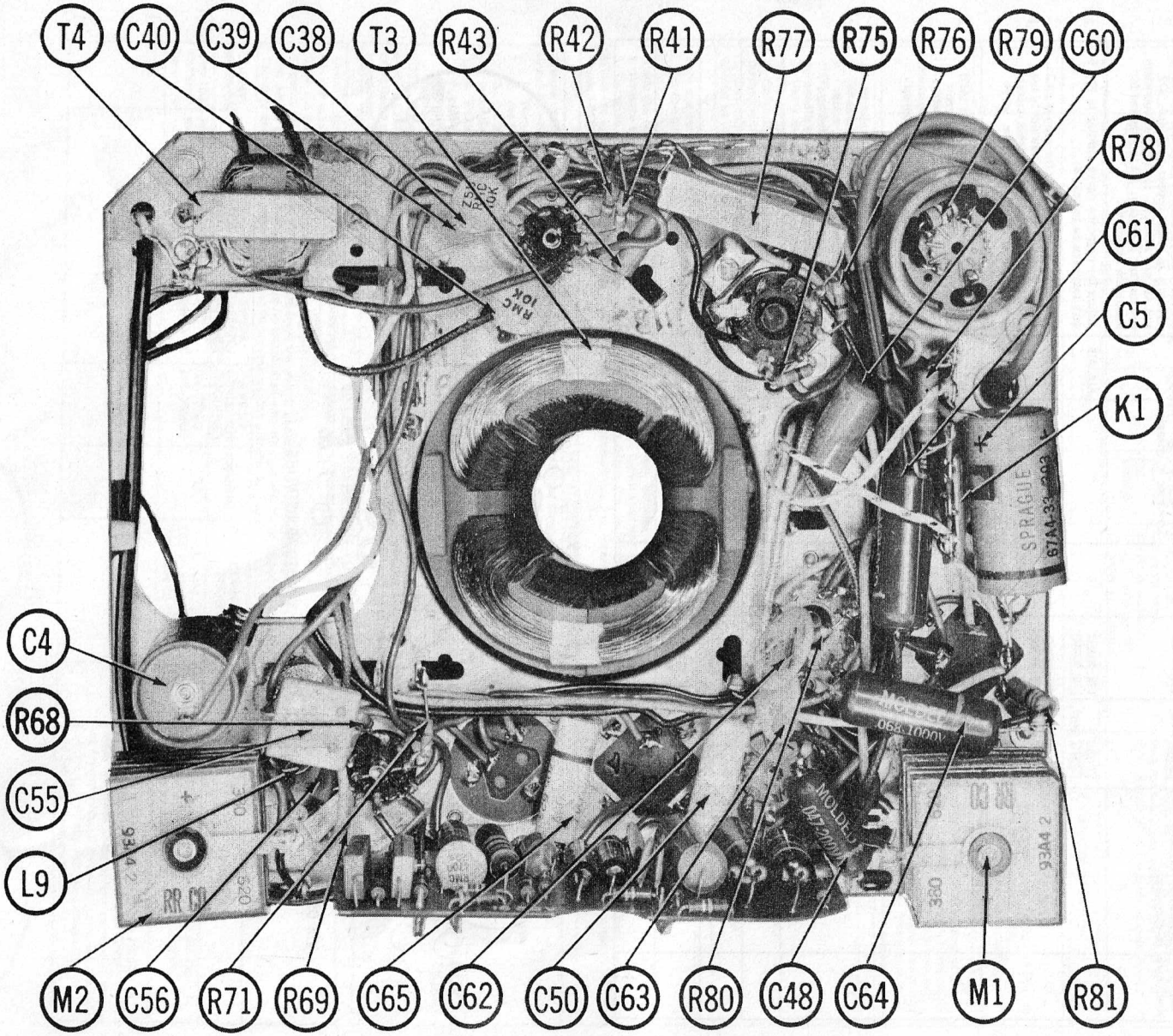
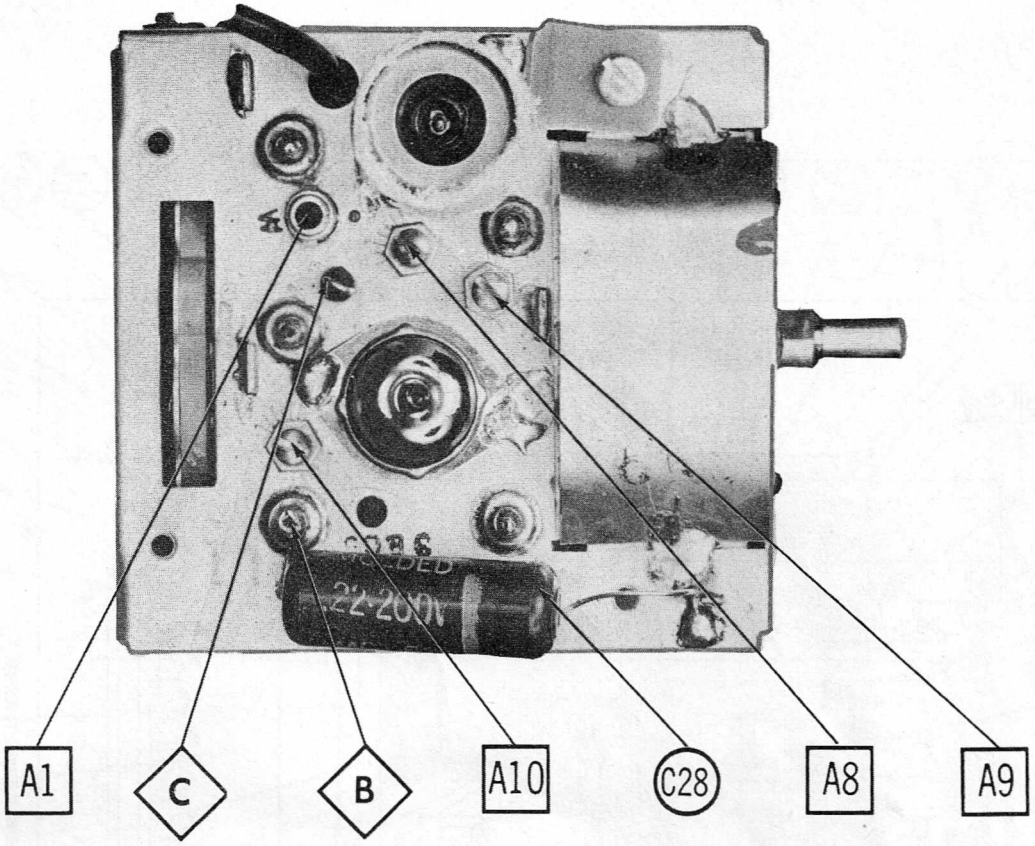


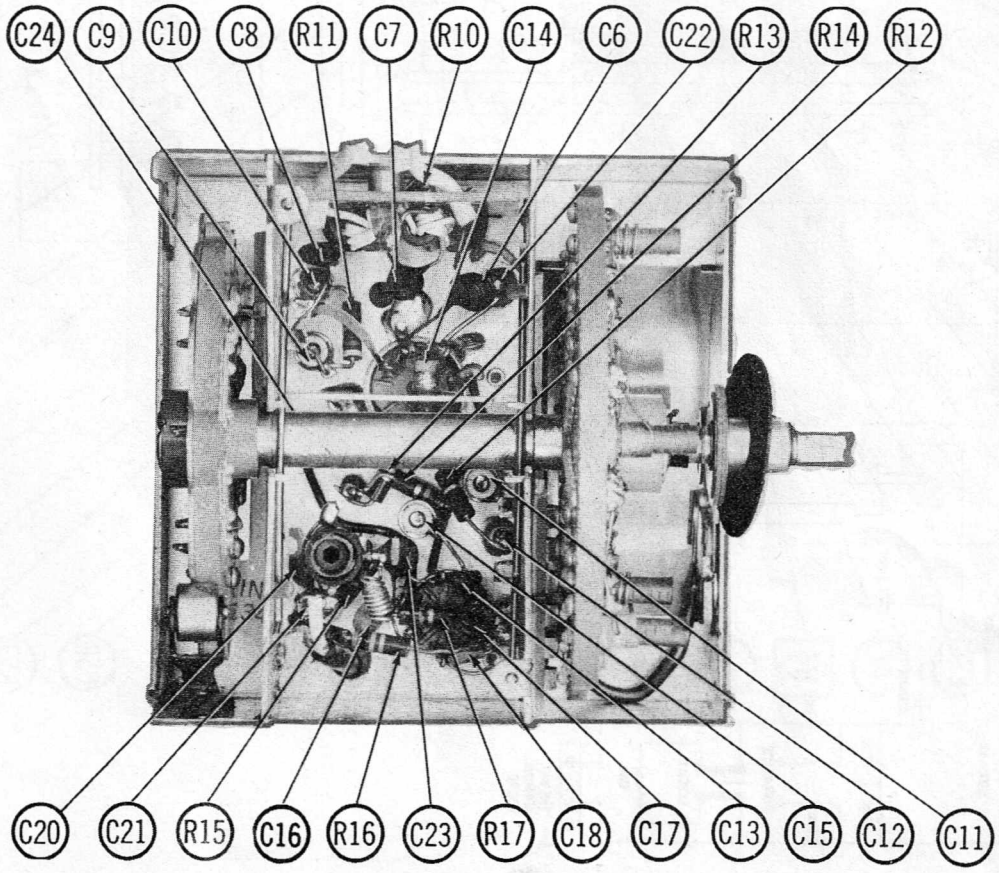
FIG. 6



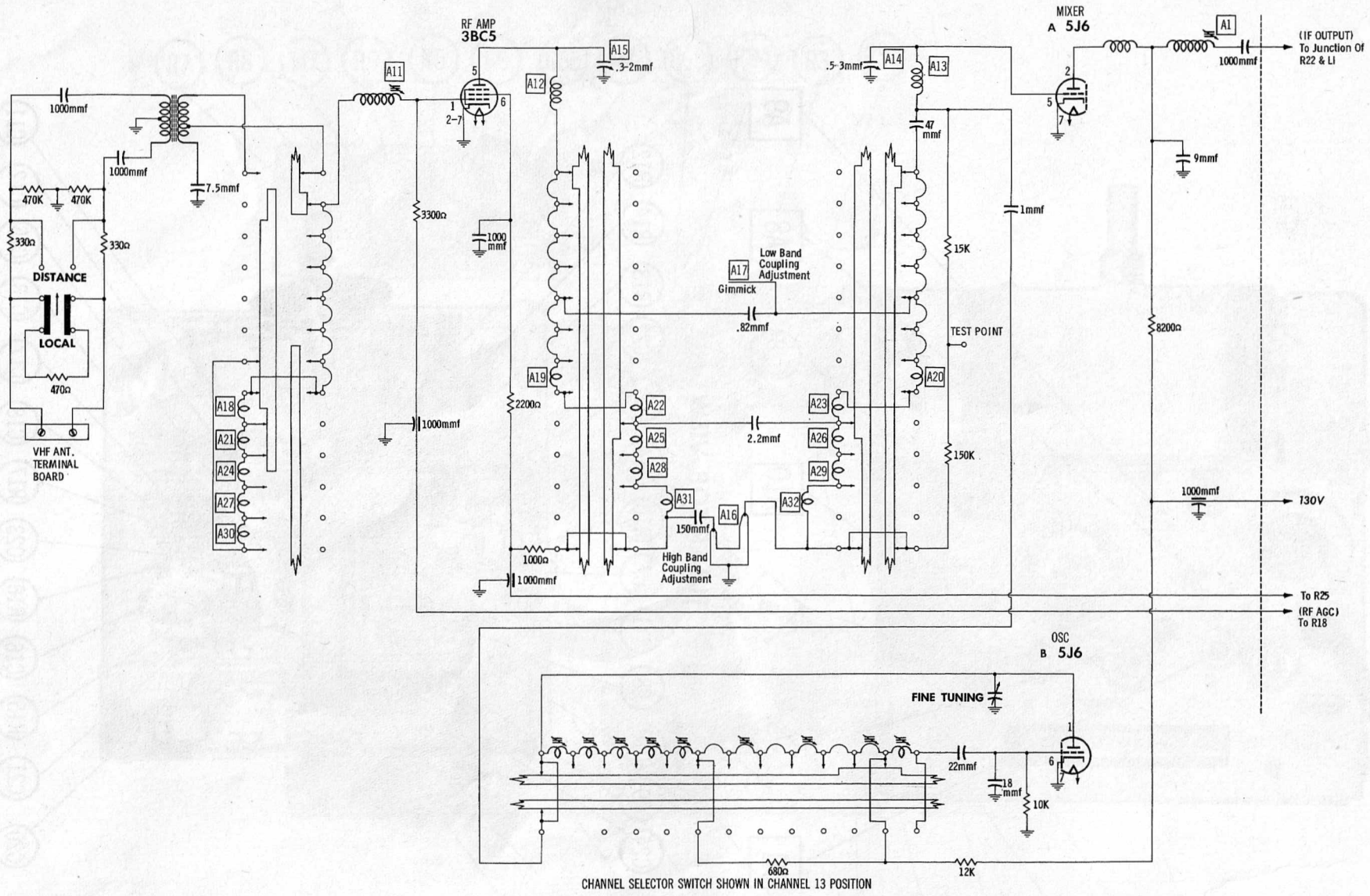
CHASSIS-BOTTOM VIEW



TUNER-TOP VIEW



TUNER-BOTTOM VIEW



CHANNEL SELECTOR SWITCH SHOWN IN CHANNEL 13 POSITION

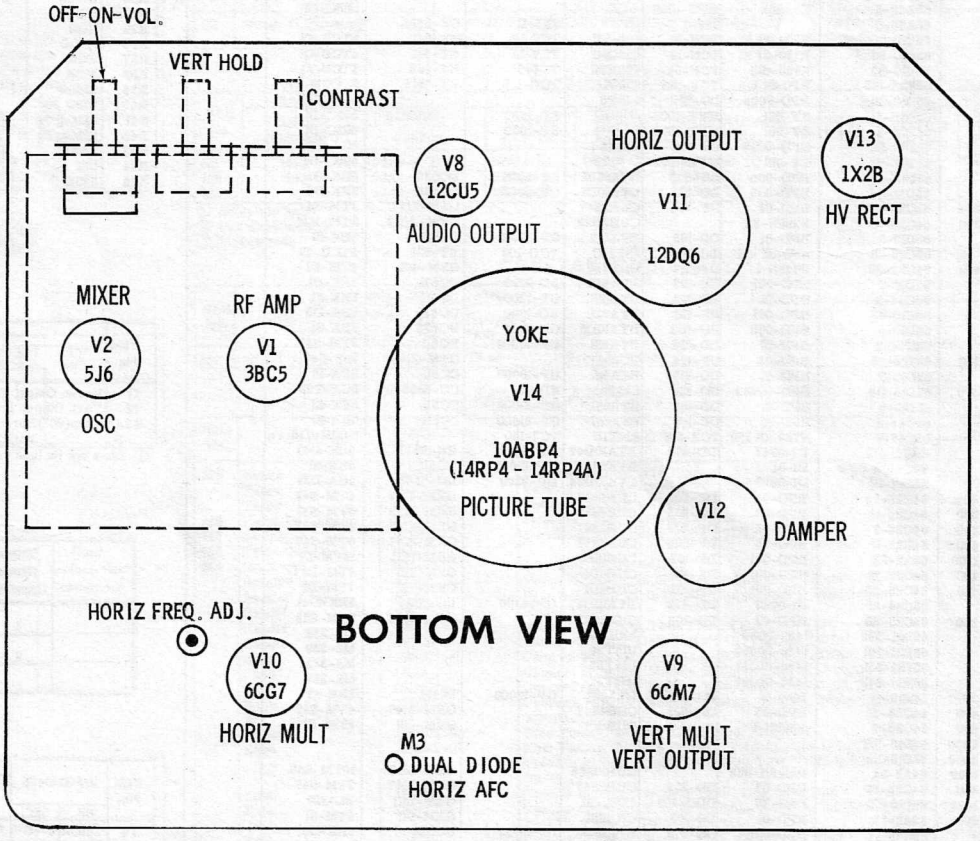
VHF Tuner Part No. 94D128-1

ALTERNATE VHF TUNER SCHEMATIC

RESISTANCE MEASUREMENTS

ITEM	TUBE	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
V1	3BC5	1Meg	0Ω	1.5Ω	2.2Ω	▲330Ω	▲2.5K	0Ω		
V2	5J6	■ 10K	■ 8200Ω	3.5Ω	2.2Ω	230K	10K	0Ω		
V3	3CB6	▲5600Ω	▲ 68Ω	3.5Ω	4.4Ω	† 330Ω	† 330Ω	70K		
V4	3CB6	.4Ω	100Ω	4.4Ω	5.2Ω	■ 330Ω	■ 330Ω	0Ω		
V5	6BA8A	0Ω	2.7Meg	† 330K	9Ω	8Ω	● 150Ω	1.2Meg	100K	
V6	5U8	† 10K	3Ω	■ 20K	6Ω	7Ω	■ 1000Ω	120Ω	3300Ω	43K
V7	3DT6	3.5Ω	330Ω	6Ω	5.2Ω	† 330K	■ 8200Ω	560K		
V8	12CU5	100K	560K	10Ω	12Ω	560K	† 330Ω	† 560Ω		
V9	6CM7	‡7500Ω	NC	● 90K	1.5Ω	0Ω	● ‡2.5Meg	220K	1Meg	● 1900Ω
V10	6CG7	† 5600Ω	5.2Meg	1800Ω	10Ω	9Ω	† 100K	150K	1800Ω	0Ω
V11	12DQ6	NC	13.5Ω	TP	† 10K	330K	TP	12Ω	0Ω	TOP CAP ‡25Ω
V12	12AX4GTA	TP	TP	110K	NC	57Ω	TP	13.5Ω	15Ω	
V13	1X2B	PINS 1 THRU 9 HAVE INFINITE RESISTANCE								TOP CAP ‡185Ω
V14	10ABP4	8Ω	56K	Pin 6 56K	Pin 10 ‡6800Ω	Pin 11 ■ 200K	Pin 12 7Ω			

† MEASURED FROM OUTPUT OF M2.
● THIS READING WILL VARY, CONTROL SET FOR NORMAL OPERATION.
▲ MEASURED FROM PIN 7 OF V3.
‡ MEASURED FROM PIN 3 OF V12.
■ MEASURED FROM 130V SOURCE.
NC NO CONNECTION
TP TIE POINT



TUBE PLACEMENT CHART

SET 350 FOLDER 1

TUBES (GENERAL ELECTRIC, SYLVANIA)

ITEM No.	USE	TYPE	NOTES
V1	RF Amplifier	3BC5	
V2	Mixer-Oscillator	5J6	
V3	1st Video IF Amplifier	3CB6	
V4	2nd Video IF Amplifier	3CB6	
V5	Video Output-Sync Sep.	6BA8A	
V6	Sound IF Amp. - Sync Phase Inverter	5U8	

ITEM No.	USE	TYPE	NOTES
V7	Audio Detector	3DT6	
V8	Audio Output	12CU5	
V9	Vert. Mult. -Vert. Output	6CM7	
V10	Horiz. Mult.	6CG7	
V11	Horiz. Output	12DQ6	
V12	Damper	12AX4GTA	
V13	HV Rectifier	1X2B	

PICTURE TUBE

ITEM No.	REPLACEMENT DATA				NOTES
	ADMIRAL PART No.	CBS PART No.	GENERAL ELECTRIC PART No.	SYLVANIA PART No.	
V14	10ABP4			10ABP4B	① Aluminized
	14RP4		14RP4	14RP4	② Silver Screen 85
	14RP4A		14RP4A ①	14RP4A ②	

ELECTROLYTIC CAPACITORS

ITEM No.	RATING		REPLACEMENT DATA						
	CAP.	VOLT.	ADMIRAL PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	PYRAMID PART No.	SANGAMO PART No.	SPRAGUE PART No.
C1	100	150	67D15-183	AFHS1-22	XA0241	FP116	TMS-22	D-070	TVL-1423
C2	100	300	67D15-134	AFHS1-36-05	BO260	FP138 & TC65			TVL-2576
C3A	▲100	300	67D15-135	AFH4-114-90		FP835		T-375	R2367 †
B	■60	150							
C	▲20	50							
C4	40	200	67A25-2	PRS250V40	BR4025	TC58	TD-40-250	FM-2540	TVA-1511
C5	10	475	67A4-22 (Note 1)	PRS500V10	BR1250	TC82	TD-10-500	MT-4710	TVA-1802

Note 1. A 10MFD ② 500V (Part #67A4-34) may be used in some versions.
† Non-catalog item.

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		REPLACEMENT DATA							NOTES
	CAP.	VOLT	ADMIRAL PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ERIE PART No.	MALLORY PART No.	SPRAGUE PART No.	
C6	6.8		65D10-26	NP0-SI6.8	TCZ-6R8	C10V68C	TCO-6.8	ZT-5568	5TCCB-V68	
C7	5		65D10-108	NP0-SI5	TCZ-4R7	C10V5C	TCO-5	ZT-555	5TCCB-V47	
C8	6.8		65D10-26	NP0-SI6.8	TCZ-6R8	C10V68C	TCO-6.8	ZT-5568	5TCCB-V68	
C9	2.5-12.5		66A38-5							
C10	1000		65B26-5	EF-001	MFT-1000				503C-D1	
C11	.5-3		66A38-6		829-3		3115-D	CT-565A		
C12	1000		65B26-5	EF-001	MFT-1000				503C-D1	
C13	47		65D10-73							
C14	1000		65B26-5	EF-001	MFT-1000				503C-D1	
C15	.5-3		66A38-6		829-3		3115-D	CT-565A		
C16	10		65D10-50	N750-SI 10	TCN-10	C10Q1U	TCT-10	NT-541	5TCU-Q1	
C17	10		65D10-50	N750-SI 10	TCN-10	C10Q1U	TCT-10	NT-541	5TCU-Q1	
C18	5		65D10-22	N750-SI5	TCN-5	C10V5U	TCT-5	NT-555	5TCU-V5	
C19	1.5		65B28-015	NP0-SI 1.5	TCZ-1R5	C10V15C	TCO-1.5	ZT-5515	5TCCB-V15	
C20	800		65D10-20	BPD-0008	DD-801	L10T8			5GA-T8	
C21	1000		65B26-5	EF-001	MFT-1000		ED-1000		503C-D1	
C22	1000		65B26-5	EF-001	MFT-1000		ED-1000		503C-D1	
C23	800		65D10-20	BPD-0008	DD-801	L10T8			5GA-T8	
C24	1000		65B26-5	EF-001	MFT-1000				503C-D1	
C25	5000		65D10-5	BPD-005	DD-502	BYA10D5	GP-5000	DC525	5HK-D5	
C26	5000		65D10-5	BPD-005	DD-502	BYA10D5	GP-5000	DC525	5HK-D5	
C27	.047	200	65C25-59	BPD-05	DF-503	CUB2S47		GEM-2147	2TM-S47	
C28	.22	200	64C25-80	P288N-22		CUB2P22		GEM-2022	2TM-P22	
C29	10000		65D10-3	BPD-01	DD-103	BYA6S1	GP-10000	DC511	5HK-S1	
C30	100		65C44-13	NP0-SI 100	TCZ-100	C10T1C	TCO-100	ZT-531	5TCC-T1	
C31	.1	400	64C25-32	P488N-1	DF-104	CUB4P1		GEM-401	4TM-P1	
C32	1000		65D10-6	BPD-001	DD-102	BYA6D1	ED-1000	DC521	5HK-D1	
C33	10000		65C44-2	BPD-01	DD-103	BYA6S1	GP-10000	DC511	5HK-S1	
C34	1000		65C10-53	BPD-001	DD-102	BYA6D1	ED-1000	DC521	5HK-D5	
C35	5000		65D10-5	BPD-005	DD-502	BYA10D5	GP-5000	DC525	5HK-S1	
C36	10000		65C44-2	BPD-01	DD-103	BYA6S1	GP-10000	DC511	2TM-S47	
C37	.047	200	64B16-55	BPD-05	DF-104	BC2S47J		GEM-2147	2SE-S47	
C38	10000		65D10-3	BPD-01	DD-103	BYA6S1	GP-10000	DC511	5HK-S1	
C39	330		65D10-118	BPD-00033	DD-331	L10T33	ED-330	UC-5333	5GA-T33	
C40	10000		65D10-3	BPD-01	DD-103	BYA6S1	GP-10000	DC511	5HK-S1	
C41	10000		65C44-2	BPD-01	DD-103	BYA6S1	GP-10000	DC511	5HK-S1	
C42	150		65C44-9	N750-DI 150	TCZ-150	L10T15	TCT-150		5TCU-T15	
C43	4700		65D10-112	DI-0047	DD-472	BYA10D47	GP-4700	UC-5247	5HK-D47	
C44	10000		65C44-2	DI-01		BYA6S1	GP-10000	DC511	5HK-S1	
C45	2200		65D10-111	DI-0022		BYA10D22	GP-2200	UC-5222	5GA-D22	
C46	.047	400	64C25-34	BPD-05	DF-503	CUB4S47		GEM-4147	4TM-S47	
C47	.033	600	64C24-10	BPD-03	DF-303	CUB6S33		GEM-6133	6TM-S33	
C48	.047	200	64C24-9	BPD-05	DF-503	CUB2S47		GEM-2147	2TM-S47	
C49	.047	600	64C25-9	BPD-05	DF-503	CUB2S47		GEM-6147	6TM-S47	
C50	.001	1600	64A2-28	BPD-001	DF-102	CUB16D1		GEM-1621	16TM-D1	
C51	.001	400	64C25-20	BPD-001	DF-102	CUB4D1		GEM-421	4TM-D1	
C52	.001	400	64C25-20	BPD-001	DF-102	CUB4D1		GEM-421	4TM-D1	
C53	4700		65C44-21	DI-0047	DD-472	BYA10D47	GP-4700	UC-5247	5HK-D47	
C54	.022	200	64C25-86	BPD-02	DD-203	CUB2S22		GEM-2122	2TM-S22	
C55	3900		65B21-392	1467-0039		5R1D39			MS-239	
C56	390		65B21-391	1468-00039		1R5T39			MS-339	
C57	330		65B21-331	1464-00033		1R5T33			MS-333	
C58	270		65B21-271	1468-00027		1R5T27			MS-327	
C59	10000		65D10-41	BPD-01	DD-103	BYA6S1	GP-10000	DC511	5HK-S1	
C60	.047	400	64C25-34	BPD-05	DF-503	CUB4S47		GEM-4147	4TM-S47	
C61	.1	600	64C25-7	P688N-1		CUB6P1		GEM-601	6TM-P1	
C62	325	2000	65D10-115							
C63	250	3000	65D10-114							
C64	.068	1000	64A2-34	P1088N-068		CUB10S68		GEM-10168	10TM-S68	
C65	.047	200	64C25-59	BPD-05	DD-503	CUB2S47		GEM-2147	2TM-S47	
C66	10000	1400	65D10-65	DAC-27	DD16-103	CUB16S1		GEM-1611	BL-S10	
C67	.01	600	64A2-35	BPD-01	DD-103	CUB6S1		GEM-611	6TM-S1	
C68	5000		65C44-1	BPD-005	DD-502	BYA10D5	GP-5000	DC525	5HK-D5	
C69	5000		65C44-1	BPD-005	DD-502	BYA10D5	GP-5000	DC525	5HK-D5	

PARTS LIST AN
CONTI

ITEM No.	RATING		REPLACEMENT		
	RESISTANCE	WATTS	ADMIRAL PART No.	CENTRALAB PART No.	CLAROSTA PART No
R1A	330K	½	75C1-77 ①		A47-500K-2
B	Shaft				KSS-3
C	Switch				SWE-12
R2A	200K	½	75C20-45②	AB-46	A47-200K-S
B	Shaft			AK-4	KSS-3
R3A	1000Ω	½	75C13-76③	AB-505	
B	Shaft			AK-4	
R4A	100K	½	75C20-44 ④	AB-40	
B	Shaft			AK-19	
R5A	2.5Meg	½	75C20-41	AB-83	
B	Shaft			AK-19	
R6A	3000Ω	½	75C20-42	AB-8	
B	Shaft			AK-19	

① Part #75C1-81 used in chassis 14YP3C.
② Alternate part #75C13-77 used in chassis 14YP3B, BK; Part #7
③ Part #75C13-78 used in chassis 14YP3C.
④ Alternate part #75C20-43.

RESIST

All wattages 1/2 watt, or less,

ITEM No.	RATING		REPLACEMENT DATA		NOTES
	OHMS	WATT	ADMIRAL PART No.	IRC PART No.	
R7	470Ω		60B8-471	BTS-470	
R8	330Ω		60B8-331	BTS-330	
R9	330Ω		60B8-331	BTS-330	
R10	680K		60B8-684	BTS-680K	
R11	4700Ω		60B8-472	BTS-4700	
R12	2200Ω		60B8-222	BTS-2200	
R13	220K		60B8-224	BTS-220K	
R14	10K		60B8-103	BTS-10K	
R15	8200Ω 5%		60B7-822	BTS-8200 5%	
R16	10K		60B8-103	BTS-10K	
R17	10K		60B8-103	BTS-10K	
R18	1Meg		60B8-105	BTS-1Meg	
R19	6800Ω		60B8-682	BTS-6800	
R20	5600Ω		60B8-562		
R21	150K 5%		60B7-154		
R22	150K 5%		60B7-154		
R23	330Ω 5%		60B7-331	BTS-330 5%	
R24	18K 5%		60B7-183		
R25	330Ω		60B8-331		
R26	68Ω		60B28-44	BTS-68	
R27	330Ω		60B8-331	BTS-330	
R28	100Ω		60B8-101	BTS-100	
R29	100Ω		60B8-101	BTS-100	
R30	2.7Meg		60B8-275	BTS-2.7Meg	
R31	1.3Meg 5%		60B7-135	BTS-1.3Meg 5%	
R32	120K		60B8-124	BTS-120K	
R33	6800Ω	2	60B20-682	BTB-6800	
R34	18K		60B8-183	BTS-18K	
R35	120Ω		60B8-121	BTS-120	
R36	1000Ω		60B8-102	BTS-1000	
R37	100K		60B8-104	BTS-100K	Note 1
R38	560K		60B8-564	BTS-560K	
R39	8200Ω		60B8-822	BTS-8200	
R40	330Ω 5%		60B8-331	BTS-330	
R41	1.3Meg 5%		60B7-135	BTS-1.3Meg 5%	
R42	1.3Meg 5%		60B7-135	BTS-1.3Meg 5%	
R43	330Ω	2	60B20-331	BTB-330	
R44	15K		60B8-153	BTS-15K	
R45	270K		60B8-274	BTS-270K	

Note 1: Not used in early product
Note 2: A 4700Ω (part #60B8-472
Note 3: A 39K (Part #60B8-393)
Note 4: A 470K (Part #60B8-474)

TRANSFORMERS (S

ITEM No.	USE	ADMIRAL PART No.	Halldorson PART No.	Merit PART N
T1	Horiz. Output Trans.	79B70-1		
T2	Vert. Output Trans.	79B71-1		
T3A	Yoke(90°)Horiz(19MH)	94D117-1 ①		
B	Vert(35MH)			

① Does not include yoke rear cover and centering device.

*HORIZONTAL OUTPUT TRAN

Use Original Width Coil Unle

	ORIGINAL TERMINAL CONNECTIONS	Halldorson Replacement Connections	Merit Replacement Connections	RCA Replacem Connecti
	3			
	2			
	1			

TRANSFORMER (A

ITEM No.	IMPEDANCE		REPLACEMENT DA			
	PRI.	SEC.	ADMIRAL PART No.	Halldorson PART No.	Merit PART No.	St PA
T4	2800Ω	3-4Ω	79D33-13	Z1105①②	A-3025	A-

D DESCRIPTIONS

ROLS

DATA			
T	IRC PART No.	MALLORY PART No.	INSTALLATION NOTES
	Q13-132	U48	Volume
	Not Req.	Not Req.	
	76-1	US-26	
	Q11-129	U43	Vertical Hold
	Not Req.	Not Req.	
	Q17-108	U3	Contrast
	Not Req.	Not Req.	
	Q11-128	PTA15L	Brightness
	TQ	Not Req.	
	Q11-239	SU-565	Height
	TQ	Not Req.	
	Q11-112	SU-8	Vertical Linearity
	TQ	Not Req.	

5C13-79 used in chassis 14YP3C.

ORS

unless otherwise listed.

ITEM No.	RATING		REPLACEMENT DATA		NOTES
	OHMS	WATT	ADMIRAL PART No.	IRC PART No.	
R46	2.7Meg		60B8-275	BTS-2.7Meg	
R47	47K		60B8-473	BTS-47K	
R48	330K		60B8-334	BTS-330K	
R49	15K		60B8-153	BTS-15K	
R50	15K		60B8-153	BTS-15K	
R51	220K		60B8-224	BTS-220K	
R52	15K		60B8-153	BTS-15K	
R53	220K		60B8-224	BTS-220K	
R54	2.2Meg		60B8-225	BTS-2.2Meg	
R55	1Meg		60B8-105	BTS-1Meg	
R56	820Ω		60B8-821	BTS-820	
R57	560Ω		60B8-561		
R58	560Ω		60B8-561		
R59	56K		60B8-563	BTS-56K	
R60	6800Ω		60B8-682		
R61	3300Ω		60B8-332		Note 2
R62	3300Ω		60B8-332		Note 2
R63	47K	2	60B20-473		Note 3
R64	100K 5%		60B7-104		
R65	100K 5%		60B7-104		
R66	4.7Meg		60B8-475		
R67	470K		60B8-474		
R68	5600Ω		60B8-562		
R69	150K		60B8-154		
R70	100K		60B8-104		
R71	1800Ω		60B8-182		
R72	5600Ω		60B8-562		
R73	330K		60B8-334		Note 4
R74	11Meg 5%		60B7-116		
R75	100Ω		60B8-101	BTS-100	
R76	100Ω		60B8-101	BTS-100	
R77	10K	10	61B20-3	PW10-10K	
R78	6800Ω	1	60B14-682	BTA-6800	
R79	3.9Ω		60B28-53	BW½-3.9	
R80	2200Ω		60B8-222	BTS-2200	
R81	33Ω	1	60B14-330	BTA-33	
R82	54Ω	20	61B3-27		
R83	10Ω	5	61A-22	PW7-10	
R84	470K		60B8-474	BTS-470	

ion versions.
) used in early production versions.
used in early production versions.
used in early production versions.

WEEP CIRCUITS)

REPLACEMENT DATA					
o.	RCA TYPE No.	Ram PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.
			HO-265*		

ISFORMER CONNECTION DATA

ss Replacement Type Is Listed

ent ons	Ram Replacement Connections	Stancor Replacement Connections	Thordarson Replacement Connections	Triad Replacement Connections
		3		
		2		
		1		

UDIO OUTPUT)

TA			
ancor RT No.	Thordarson PART No.	Triad PART No.	NOTES
3332	22S46 ①	S-12X	① Drill one new mtg. hole. ② Do not use taps on primary winding.

SPEAKER

ITEM No.	TYPE			REPLACEMENT DATA		NOTES
	SIZE	FIELD	V. C. IMP.	ADMIRAL PART No.	QUAM PART No.	
SP1	3½"	PM	3-4Ω	78B120-1 ①②	3A07	
	4"	PM	3-4Ω	78B122-1 ③		

① Alternate part #78B120.
② Used in chassis 14YP3B, BK.
③ Used in chassis 14YP3C.

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA				NOTES
		ADMIRAL PART No.	MEISSNER PART No.	MERIT PART No.	MILLER PART No.	
L1	1st Video IF	72C132-17				
L2	2nd Video IF	72C132-8				
L3	Series Peaking Coil	73B5-32 ①	19-3180■	TV-184■	6180■	188 Microhenries-Wound on 18K resistor.
L4	Series Peaking Coil	73B5-22 ②	19-3256♦	TV-185♦	6130♦	278 Microhenries-Wound on 33K resistor.
L5	Shunt Peaking Coil	73B5-21 ③	19-4400▲	TV-190▲	6134▲	370 Microhenries-Wound on 10K resistor.
L6	4.5MC Coil	72C132-20				
L7	Sound IF	72C132-19				
L8	Quadrature Coil	72C132-18				

■ Parallel with 18K resistor.
♦ Parallel with 33K resistor.
▲ Parallel with 10K resistor.
① Alternate part #73B5-8 used in later versions. Wound on 22K resistor.
② Alternate part #73B25-9 used in later versions.
③ Alternate part #73B11-1 used in later versions.

TRANSFORMER (HORIZ. OSC.)

ITEM No.	DC RES.		REPLACEMENT DATA							NOTES
	PRI.	SEC.	ADMIRAL PART No.	MEISSNER PART No.	MERIT PART No.	MILLER PART No.	RCA TYPE No.	Ram PART No.	Thordarson PART No.	
L9	100Ω		94C17-7	19-1576	TV-163	6210			HS-5	

FILTER CHOKE

ITEM No.	RATINGS			REPLACEMENT DATA						
	TOTAL DIRECT CURRENT	D.C. RESISTANCE	INDUCTANCE (0 CURRENT 1000 ∿)	ADMIRAL PART No.	Halldorson PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.	
L10	.150A	57Ω	1.4HY	74B18-19	C5040	C-2994	C-2327	26C41	C-21X ①	

① Drill one new mounting hole.

COMPONENT COMBINATIONS

ITEM No.	USE	DESCRIPTION	ADMIRAL PART No.	REPLACEMENT DATA	
K1	Vertical Blanking	10000MMF, 10000MMF, 2700Ω 56000Ω	63C6-12	Aerovox Sprague	PA-282 102C12

RECTIFIERS

ITEM No.	RATING	REPLACEMENT DATA						
	CURRENT (Measured)	ADMIRAL PART No.	FEDERAL PART No.	GENERAL ELECTRIC PART No.	INTERNATIONAL PART No.	MALLORY PART No.	RADIO RECEPTOR PART No.	SARKES TARZIAN PART No.
M1	.150A	93A4-2 ①	1090A ①	1N1005 ②	RS300SL ①	6S200 ①	6Q4 ①	300 ①
M2	.150A	93A4-2 ①	1090A ①	1N1005 ②	RS300SL ①	6S200 ①	6Q4 ①	300 ①
M3		93A5-2 ①	1215 ①③		1T1 ①③			

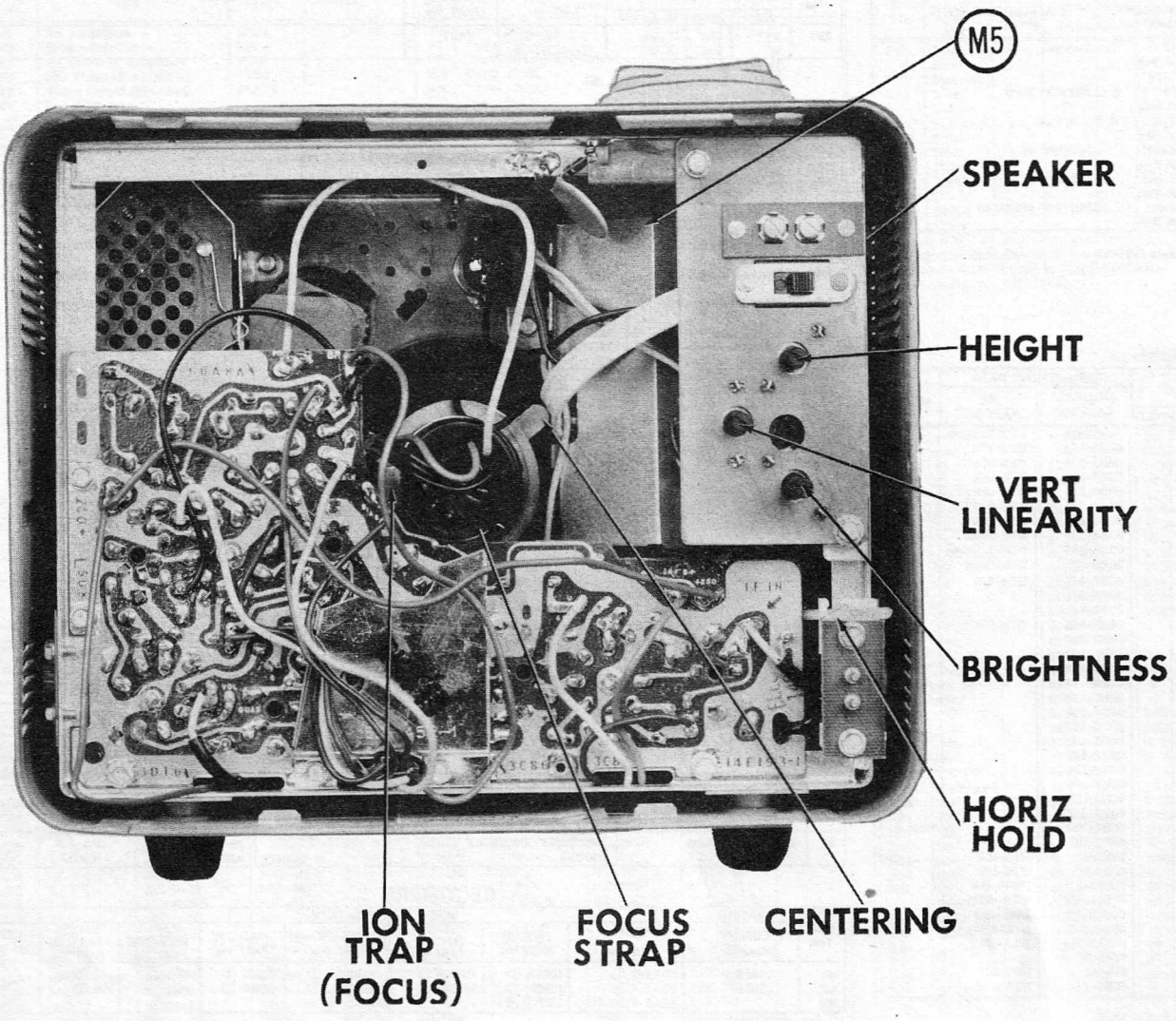
① Selenium type.
② Germanium type.
③ 2 required.

CRYSTAL DIODES

ITEM No.	ORIG. TYPE	REPLACEMENT DATA		NOTES
		ADMIRAL PART No.	SYLVANIA PART No.	
M4	1N295		1N60	Video Detector

MISCELLANEOUS

ITEM No.	PART NAME	ADMIRAL PART No.	NOTES
M5	Tuner	94E119-1	Used in Chassis 14YP3B.
	Tuner	94D128-1	Used in Chassis 14YP3BK.
	Tuner	94E119-2	Used in Chassis 14YP3C.
M6	Video Det. Ass'y.	72C176-3	Includes Coils, Caps. and M4.
M7	Switch	77B59-3	Local-Distant, (Slide Type, 2PDT)
M8	Centering Device	94A116-1	
M9	Ion Trap	94A15-5	Alternate part #94B15-5.
	Printed Board	A5290	Video IF, Includes All Components Except Tubes.
	Printed Board	A5291	Sync & Sweep, Includes All Components Except Tubes.
	Handle	37C141-3	Model T1010.
	Handle	37C141-1	Models T141, T142, T143, T1410, T102, T103, T104.
	Handle	37C141-2	Models T144AL, T145AL, T105AL, T106AL, T107AL
	Knob	33D202-31	Channel Selector, Models T1010, T140, T141, T101.
	Knob	33D202-11	Channel Selector, Models T1011AL, T1012AL, T1013AL.
	Knob	33D202-33	Channel Selector, Models T142, T143, T1410, T102, T103, T104.
	Knob	33D202-32	Channel Selector, Models T144AL, T145AL, T105AL, T106AL, T107AL.
	Knob	33D202-14	Fine Tuning, Models T1010, T140, T141, T101.
	Knob	33D202-15	Fine Tuning, Models T1011AL, T1012AL, T1013AL, T142, T143, T144AL, T145AL, T1410, T102, T103, T104, T105AL, T106AL, T107AL.
	Knob	33A175-2	Control (3 used), Models T1010, T140, T141, T101.
	Knob	33A175-4	Control (3 used), Models T1011AL, T1012AL, T1013AL, T144AL, T145AL, T105AL, T106AL, T107AL.
	Knob	33A175-3	Control (3 used), Models T142, T143, T1410, T102, T103, T104.
	Safety Glass	21D88-1	Model T101.
	Safety Glass	21D88-2	Models T102, T103, T104, T105AL, T106AL, T107AL, T1010, T1011AL, T1012AL, T1013AL.
	Safety Glass	21D90-1	Models T140, T141, T1410.
	Safety Glass	21D90-2	Models T142, T143, T144AL, T145AL.



CABINET—REAR VIEW

HORIZONTAL SWEEP CIRCUIT ADJUSTMENTS

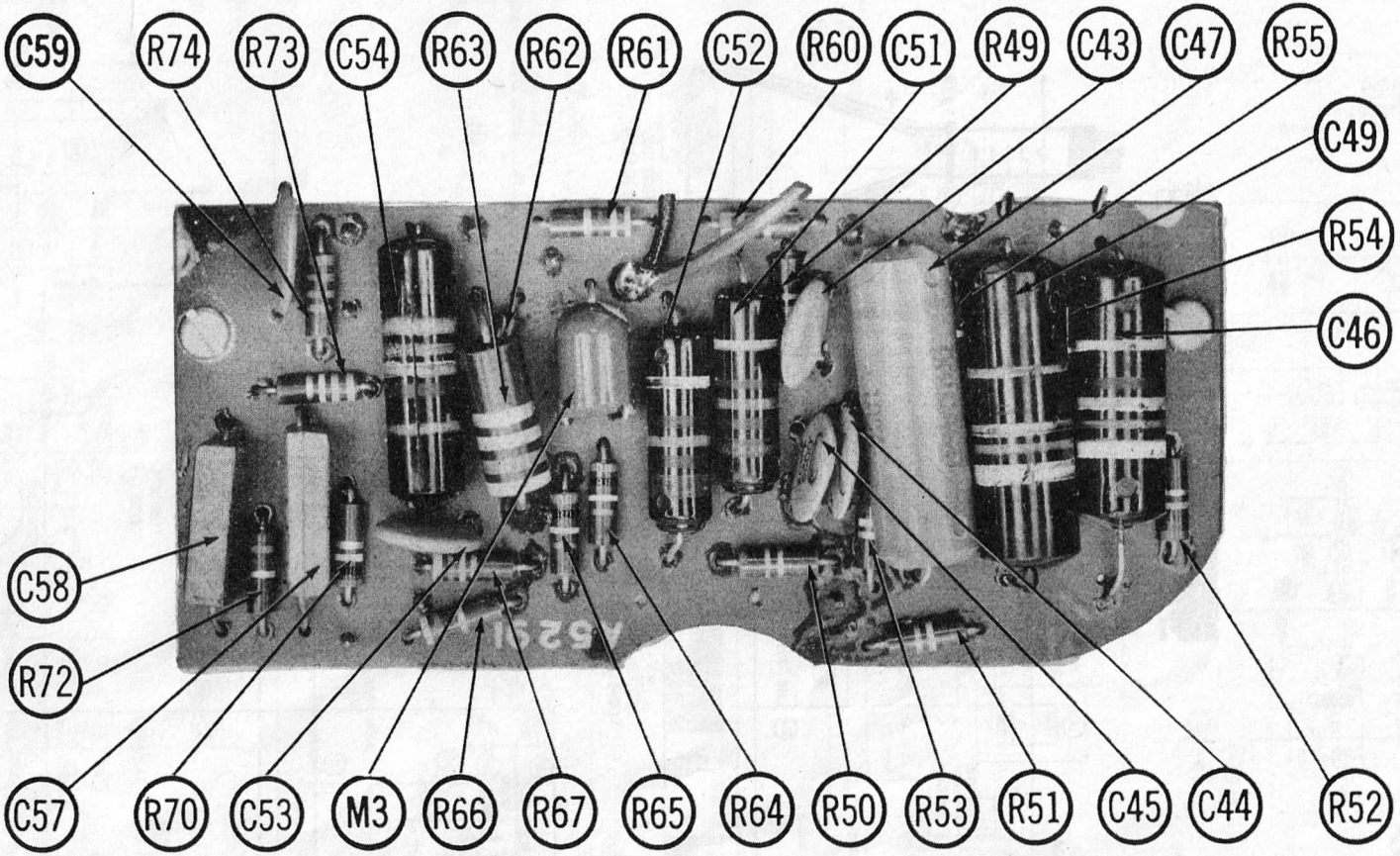
Turn the set on and tune in a TV station, preferably with a test pattern.

Set the brightness and contrast controls for a normal picture.

Turn the horizontal hold clockwise until the picture loses sync.

It may be necessary to switch off channel and back again for picture to lose sync.

Turn the horizontal hold slowly counter clockwise until the picture just falls into sync.



SWEEP & SYNC PRINTED BOARD