

CABINET—REAR VIEW

HORIZONTAL SWEEP CIRCUIT ADJUSTMENTS

Set the Horizontal Range Control to the center of its range.

Proper adjustment is indicated when it is possible to switch from one channel to another without the picture losing sync.

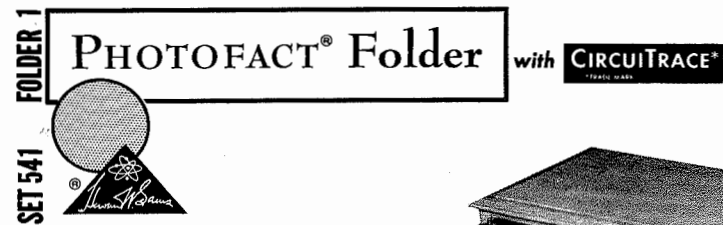
Tune in a TV station and adjust the Horizontal Lock until the picture synchronizes horizontally.

DISASSEMBLY INSTRUCTIONS

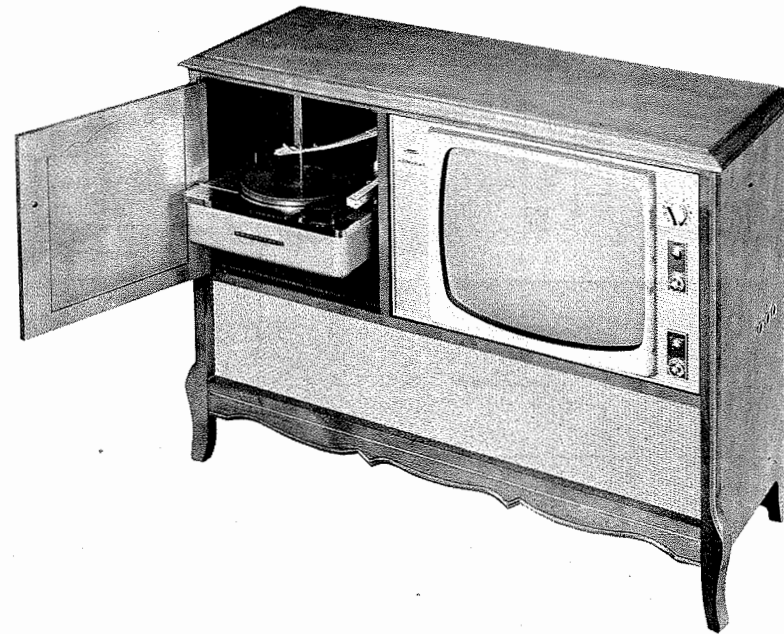
CHASSIS, PICTURE TUBE, FRONT ESCUTCHEON ASSEMBLY REMOVAL

1. Remove antenna leads.
2. Remove 10 wood screws holding rear cover. Remove rear cover.
3. Remove 3 knobs at side of cabinet.
4. Disconnect 2 phono plugs, phono power socket, and speaker socket.
5. Remove 2 bolts (inside top) holding front escutcheon structure.
6. Remove 6 chassis bolts.
7. Tilt top out and pull complete assembly out front.

ADMIRAL
CHASSIS 15H1, 15H1U, 3Y1



ADMIRAL
CHASSIS 15H1, 15H1U, 3Y1



MODEL ST19J169

| TRADE NAME | ADMIRAL | MODELS | TV Chassis | Amp. Chassis | VHF Tuner |
|--------------|--|---|--------------------------|------------------------|-----------|
| | | ST19J151, ST19J152, ST19J153, ST19J169 | 15H1 (Run 10) | 3Y1 (Run 10) | 94E184-11 |
| | | ST19J151U, ST19J152U, ST19J153U, ST19J169U | 15H1U (Run 10) | 3Y1 (Run 10) | 94E164-17 |
| MANUFACTURER | Admiral Sales Corp., Service Division, 903 Morrissey Drive, P.O. Box 845, Bloomington, Illinois | | | | |
| TYPE SET | Television Receiver (With Stereo Audio Amp. Chassis 3Y1 and 4 Speed Automatic Record Changer *) | | | | |
| TUBES | TV and Amp.: VHF - Seventeen | | | | |
| POWER SUPPLY | 110-120 Volts AC, 60 Cycle | | | | |
| RATING | Selector (Function) Switch in TV Position: 175 Watts, 1.6 Amp. @ 117 Volts AC | | | | |
| TUNING RANGE | Selector (Function) Switch in Stereo Position: 120 Watts, 1.1 Amp. @ 117 Volts AC, Less Phono Motor Channels 2 thru 13 VHF, Video IF 45.75MC, Sound IF 41.25MC (Inter-carrier) | | | | |

* FOR SERVICE INFORMATION ON RECORD CHANGER #RC7EOC-17AF OR RC7FOC-17AF - SEE PHOTOFACT SET 529 FOLDER 3

SERVICING IN THE FIELD

SAFETY GLASS REMOVAL

It is necessary to remove chassis and picture tube for safety glass cleaning and removal.

FUSE

A fuse wire is used for filament protection. (For location, see M1 in photo, Page 15.)

FUSE DEVICE

A Circuit Breaker is used for low voltage power supply protection, and may be reset by depressing the reset button. (For location, see "Tube Placement Chart".)

TUNER OSCILLATOR ADJUSTMENT

To touch up VHF Oscillator, remove Channel Selector knob.

AGC

The AGC may be varied by means of an AGC Control. (For location, see "Tube Placement Chart".)

FOCUS

The focus may be varied by connecting the lead from pin 4 of the picture tube to various voltage points. (For location, see photo "Chassis - Top View".)

HORIZONTAL OSCILLATOR FIELD ADJUSTMENT

The Horizontal Lock is used for the Horizontal Hold. (See page 20 for complete horizontal sweep circuit adjustments).

CENTERING

Centering is accomplished by 2 magnetic rings, located behind the yoke, on the neck of the picture tube.

ADMIRAL
CHASSIS 15H1, 15H1U, 3Y1

SET 541 FOLDER 1

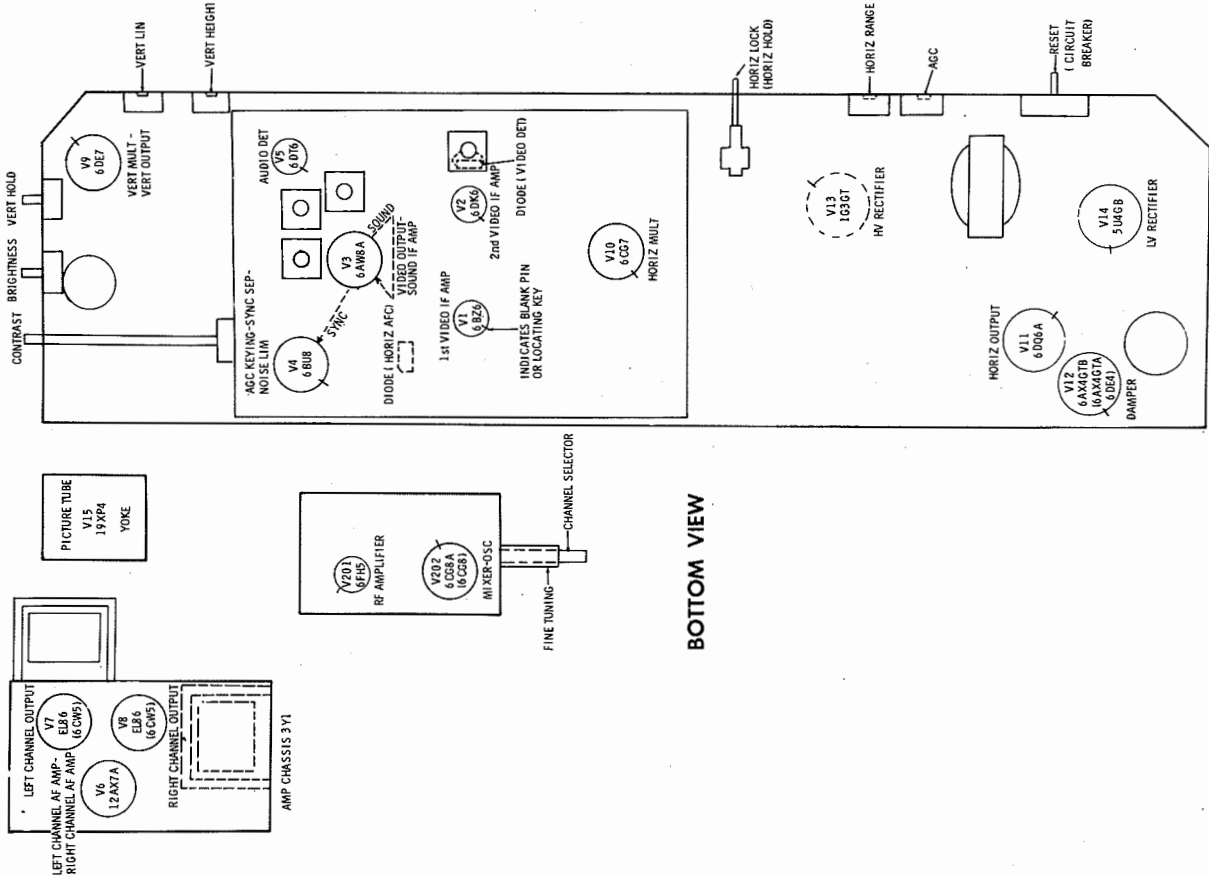


HOWARD W. SAMS & CO., INC. Indianapolis 6, Indiana

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TUBE PLACEMENT CHART

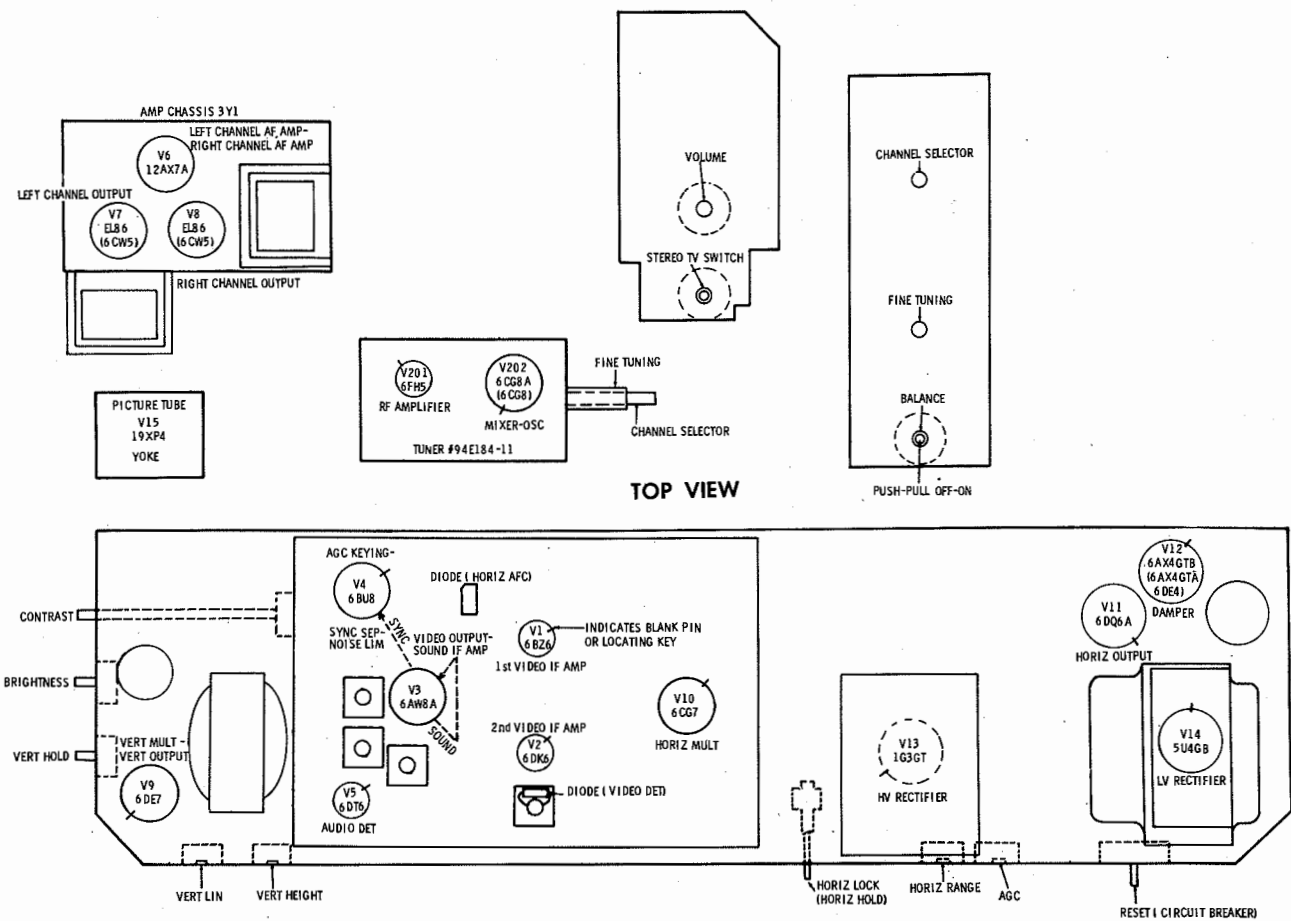


RESISTANCE MEASUREMENTS

| ITEM | TUBE | Pin 1 | Pin 2 | Pin 3 | Pin 4 | Pin 5 | Pin 6 | Pin 7 | Pin 8 | Pin 9 |
|------|---------|-------|---------------|--------------------------|-------|--------|---------|--------|-------|---------|
| V1 | 6BZ6 | 155K | 43Ω | FIL | FIL | 3900Ω | 3900Ω | 0Ω | | |
| V2 | 6DK6 | 150Ω | 150Ω | FIL | FIL | 470Ω | 470Ω | 0Ω | | |
| V3 | 6AW8A | 0Ω | 100K | 50K | FIL | FIL | 0Ω | 4700Ω | 7000Ω | 4500Ω |
| V4 | 6B8 | 0Ω | 7100Ω | 1.9meg | FIL | FIL | 25K | 1meg | 47K | 12meg |
| V5 | 6D76 | 16Ω | 560Ω | FIL | FIL | 1280K | 8200Ω | 560K | | |
| V6 | 12AX7A | 470K | 3.3meg | 1800Ω | FIL | FIL | 470K | 3.3meg | 1800Ω | FIL |
| V7 | EL86 | NC | 470K | 150Ω | FIL | FIL | NC | 125Ω | NC | 0Ω |
| V8 | EL86 | NC | 500K | 7000Ω | FIL | FIL | NC | 395Ω | NC | 270Ω |
| V9 | 6DE7 | 1350Ω | NC | 1.5meg | FIL | FIL | 12.2meg | 1meg | 300K | 700Ω |
| V10 | 6CG7 | 12K | 2.2meg | 1200Ω | FIL | FIL | 182K | 35K | 1200Ω | 0Ω |
| V11 | 6DQ6A | NC | FIL | NC | 15K | 1meg | TP | FIL | 0Ω | TOP CAP |
| V12 | 6AX4GTB | TP | NC | 700K | NC | 150Ω | NC | FIL | FIL | 10Ω |
| V13 | 1G3GT | | PINS 1 THRU 8 | HAVE INFINITE RESISTANCE | | | | | | TOP CAP |
| V14 | 5U4GB | NC | 15K | NC | 16Ω | NC | 19Ω | NC | 15K | 380Ω |
| V15 | 19XP4 | FIL | 39K | 2.9meg | 100K | NC | NC | 200K | FIL | |
| V201 | 6FH5 | 47Ω | 5meg | FIL | FIL | 19500Ω | 0Ω | 47Ω | | |
| V202 | 6CG8A | 4700Ω | 5700Ω | 0Ω | FIL | FIL | 2000Ω | 1000Ω | 0Ω | 225K |

ALL MEASUREMENTS MADE IN "TV" POSITION UNLESS OTHERWISE DESIGNATED.
THIS READING WILL VARY DEPENDING UPON THE CONDITION OF THE ELECTROLYTIC IN THE CIRCUIT.
• MEASURED IN "STEREO" POSITION.
+ MEASURED FROM PIN 1 OF POWER SOCKET.
NC NO CONNECTION
TP TIE POINT

TUBE PLACEMENT CHART



TUBE FAILURE CHECK CHART

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

POWER SUPPLY FAILURE
No raster, no sound Circuit Breaker, V14, V8

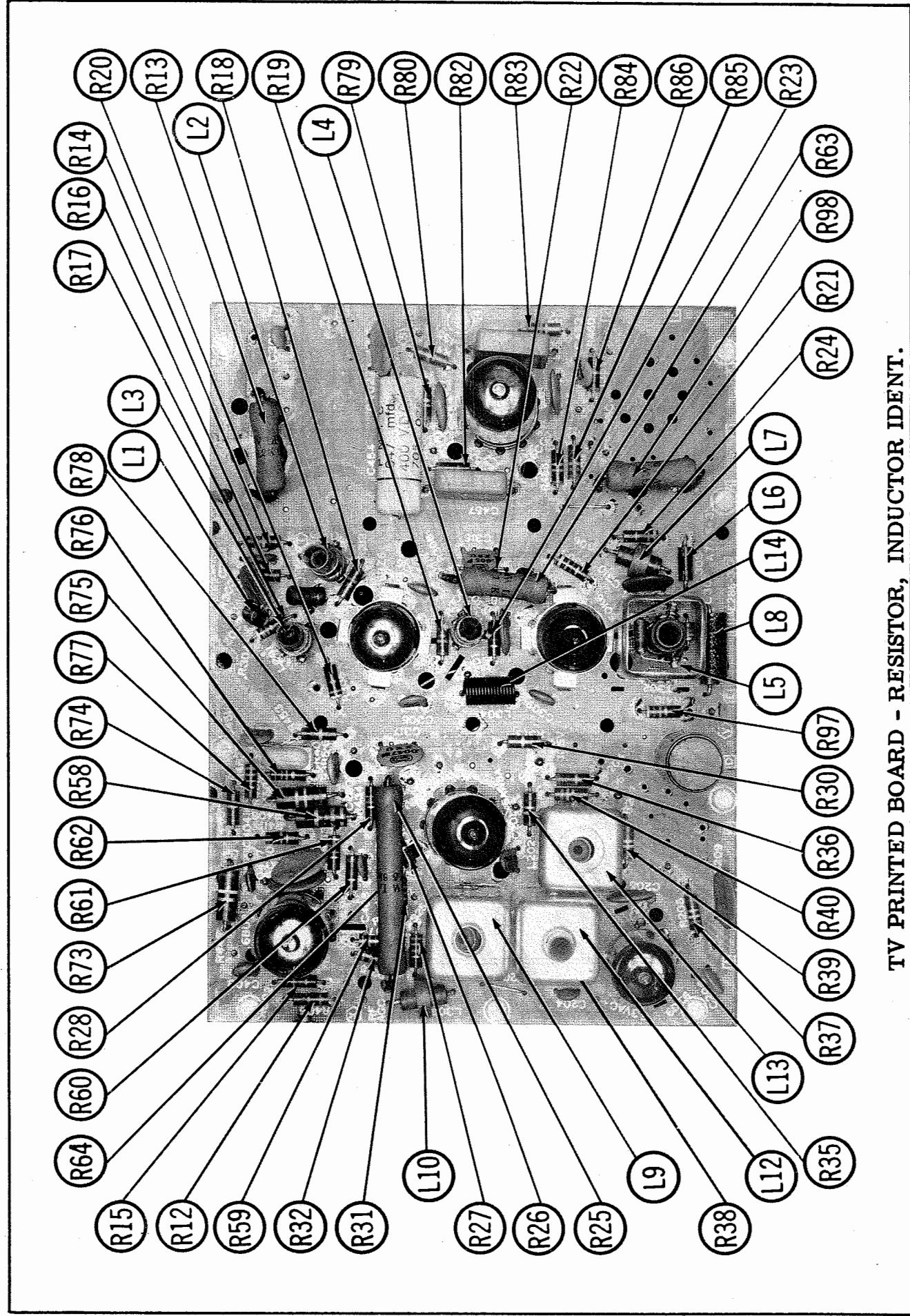
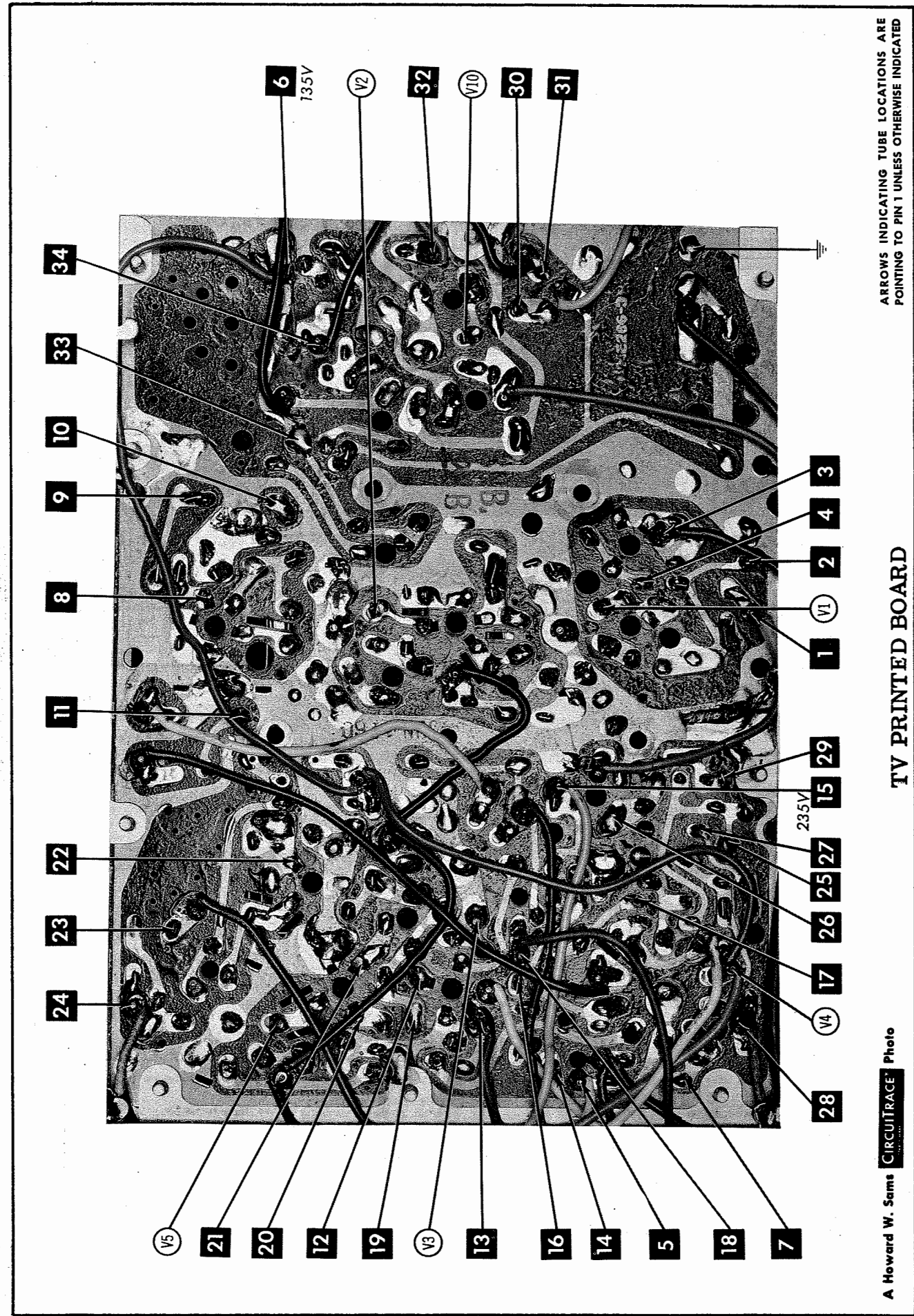
SWEEP FAILURE
No raster, has sound V10, V11, V12, V13, V15
No vertical deflection V9
Poor vert. linearity or foldover V9
Poor horiz. linearity or foldover V10, V11, V12
Narrow picture V10, V11, V12, V14
Vert. off freq. V9
Horiz. off freq. Diodes (Horiz. AFC), V10

LOSS OF PICTURE OR SOUND
No pic, no sound, has raster V1, V2, Diode (Video Det.), V3
No pic, no sound, has snow V201, V202
No pic, has sound, has raster V3, V15
Has pic, no sound V3, V5, V8, V8
Overloaded picture V4

SYNC FAILURE
No vert. sync V4
No horiz. sync V4, Diodes (AFC)
No vert. or horiz. sync V4

ADMIRAL
CHASSIS 15H1, 15H1U, 3Y1

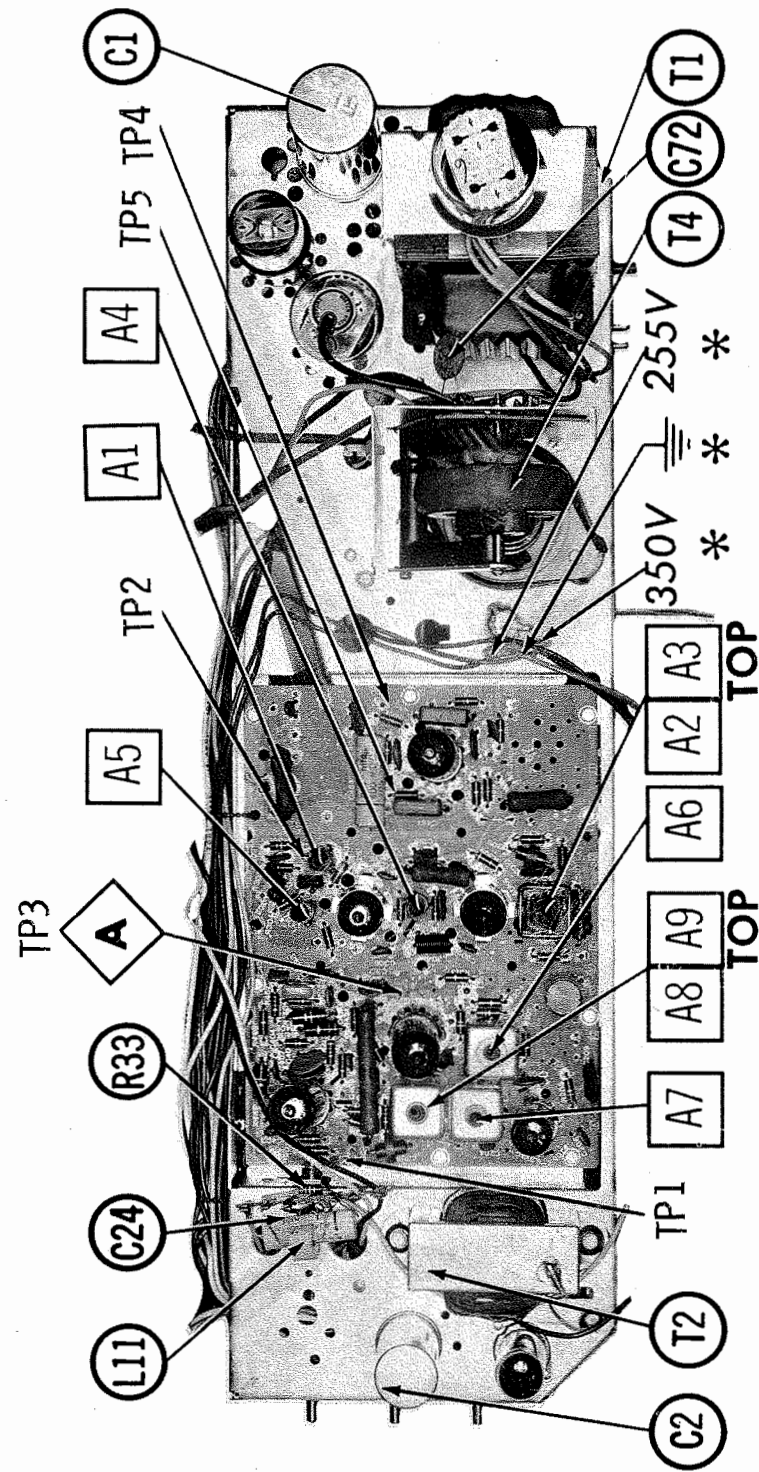
FOLDER 1



TP1 .9V RF AGC TP3 -.7V VIDEO OUTPUT GRID

TP2 -.7V IF AGC TP4 235V HORIZ LOCK COIL

TP5 -.2V HORIZ AFC GRID



* FOCUS POINTS

TV CHASSIS - TOP VIEW

ALIGNMENT INSTRUCTIONS

PRE-ALIGNMENT INSTRUCTIONS

The High Voltage lead should be securely taped and kept away from the chassis.
Allow a 20 minute warm-up period for the receiver and test equipment.
Suggested Alignment Tools: A1 GENERAL CEMENT #5004, 5008, 5009
WALSCO #2520
A2 thru A9 GENERAL CEMENT #8282, 8606, 8606L, 9295
WALSCO #2526, 2543, 2544, 2545
Mixer Plate Coil GENERAL CEMENT #9296, 9297
WALSCO #2546, 2547

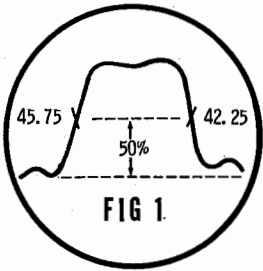
VIDEO IF ALIGNMENT

Connect the synchronized sweep voltage from the sweep generator to the horizontal input of the oscilloscope for horizontal deflection.
The generator output lead should be terminated with its characteristic impedance, usually 50 ohms.
Use only enough generator output to provide a usable indication on VTVM.
Connect variable bias to IF AGC line. 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. High side to ungrounded tube shield floating over Mixer-Osc. (V202). Low side to chassis. | Not used | 47.25MC (Unmod.) | Any non-interfering channel | USE VTVM DC probe thru 47K to point A. Common to chassis. (Across Video Det. load) | A1 | Adjust for MINIMUM deflection. |
| 2. " | " | 44.2MC | " | " | A2 | Adjust for maximum deflection. |
| 3. " | " | 42.7MC | " | " | A3 | " |
| 4. " | " | 44.3MC | " | " | A4 | " |
| 5. " | " | 43.3MC | " | " | A5 | " |
| 6. " | " | 44.8MC | " | " | Mixer Plate Coil | " |
| 7. " | 44.0MC (10MC Swp.) | 42.25MC 45.75MC | " | Vert. Amp. thru 47K to point A. Low side to chassis. | | Check for response similar to Fig. 1. If necessary, retouch SLIGHTLY A2 thru A5 and Mixer Plate Coil for desired response. |

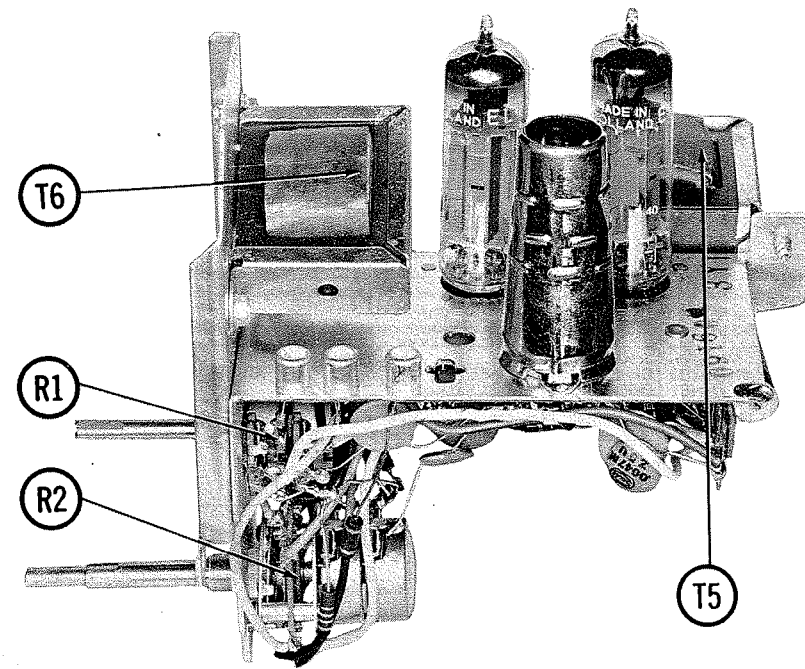
SOUND IF ALIGNMENT

Tune in a strong TV signal and adjust controls for normal operation.
Turn A6 slowly counterclockwise until a buzz is heard in the sound. Turn counterclockwise for maximum undistorted sound. Reduce the signal at the antenna terminals (by use of an adjustable attenuator or disconnecting antenna) until a strong hiss similar to super-regeneration is heard in the sound.
Carefully adjust A7 for maximum undistorted sound with MINIMUM hiss. If the hiss disappears during alignment, further reduce signal until hiss returns and retouch A7.
Carefully adjust A8 for MINIMUM 4.5MC beat interference in picture.
Carefully adjust A9 for maximum undistorted sound with MINIMUM hiss. If the hiss disappears, further reduce signal until hiss returns and retouch A9.

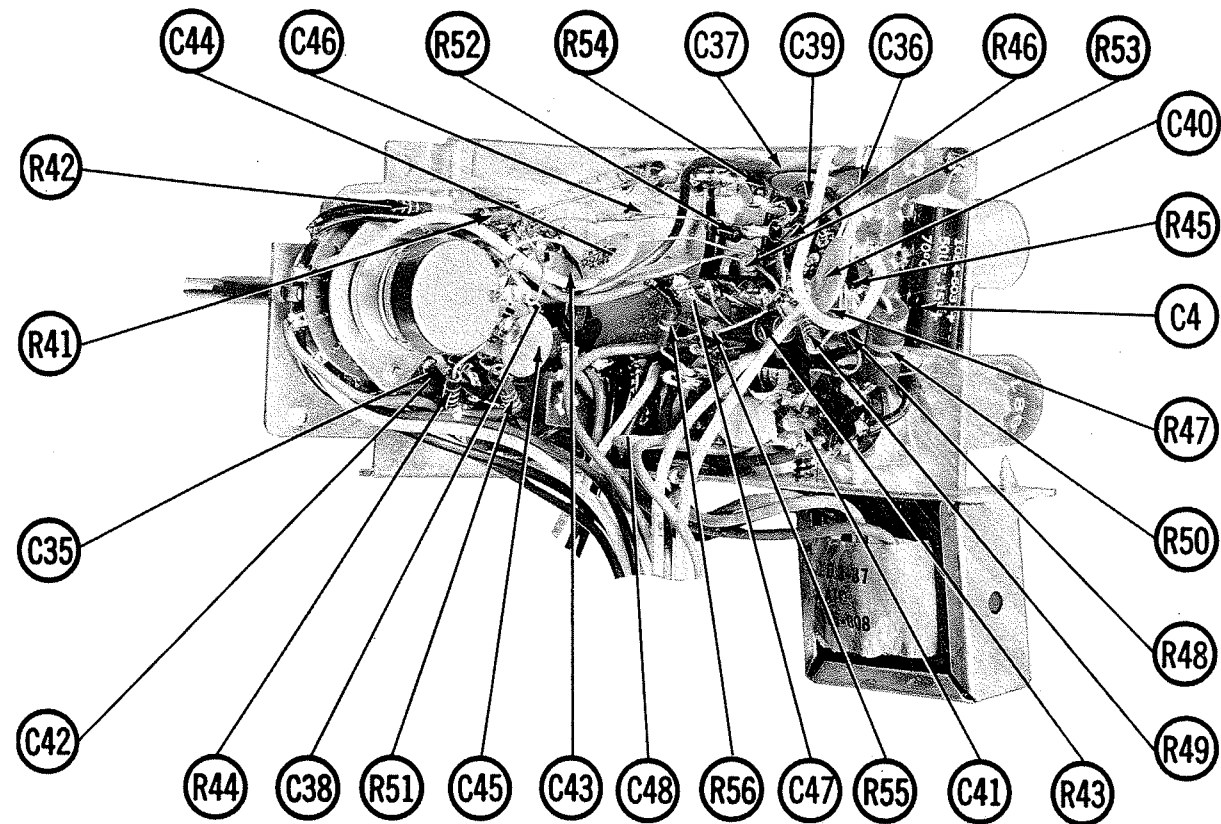


ADMIRAL
CHASSIS 15H1, 15HIU, 3Y1

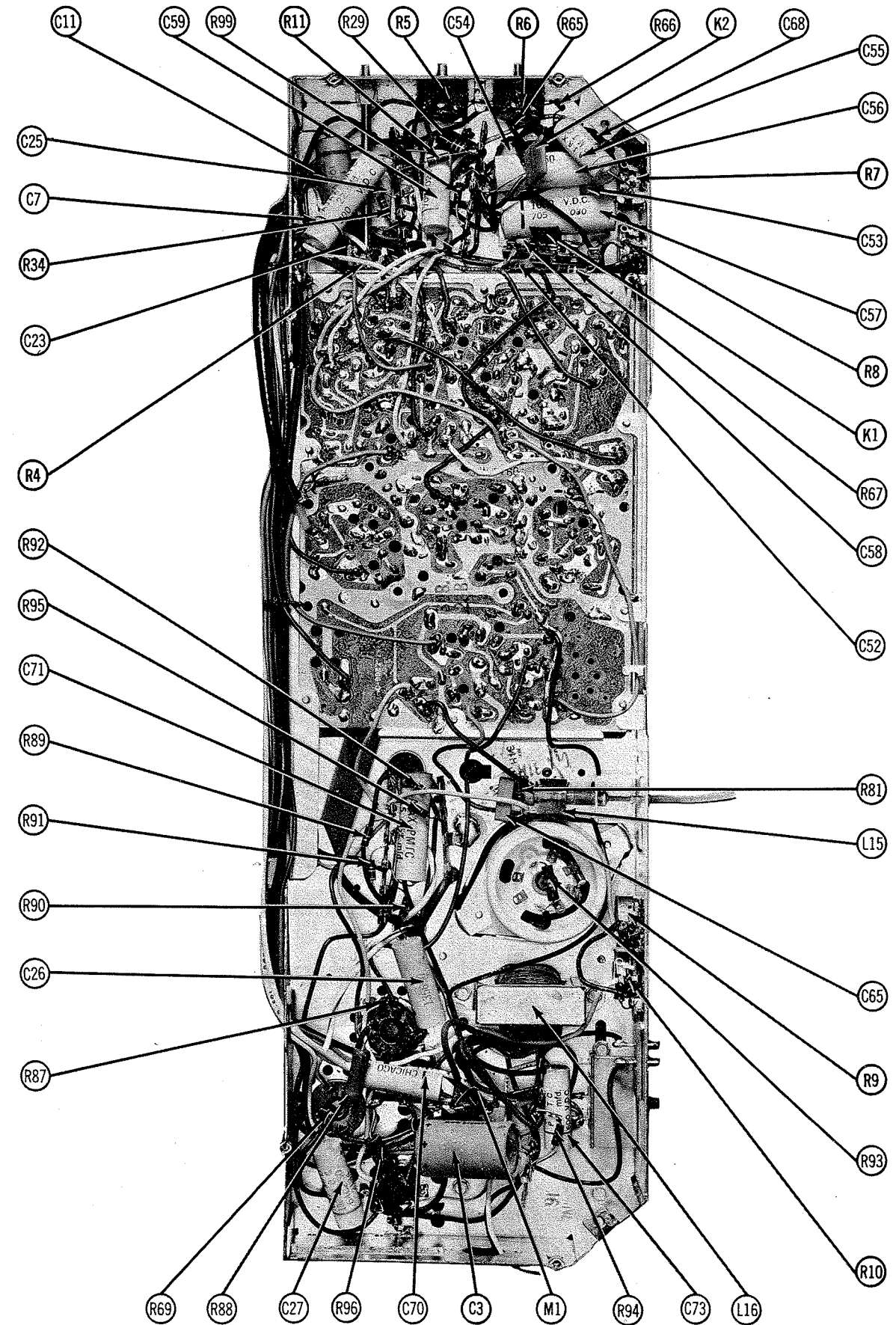
FOLDER 1



AMP CHASSIS 3Y1 - TOP VIEW



AMP CHASSIS 3Y1 - BOTTOM VIEW

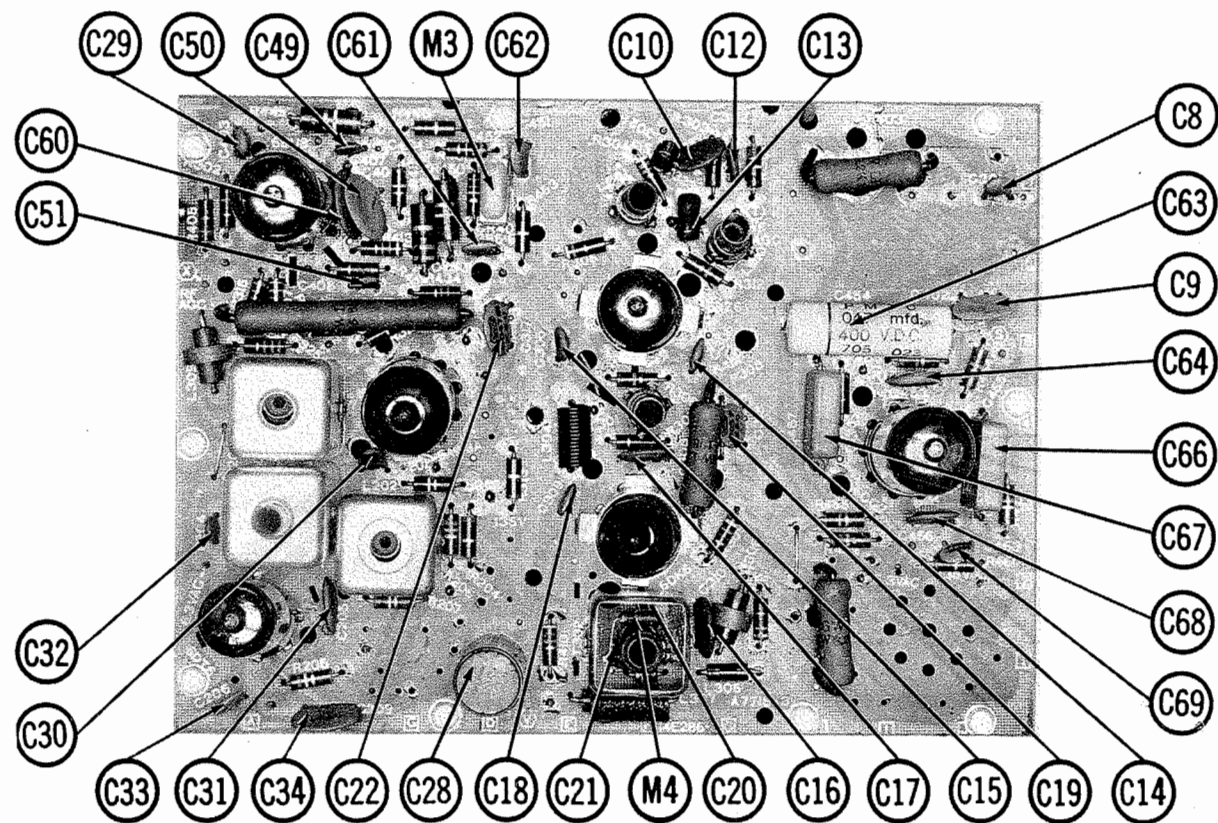
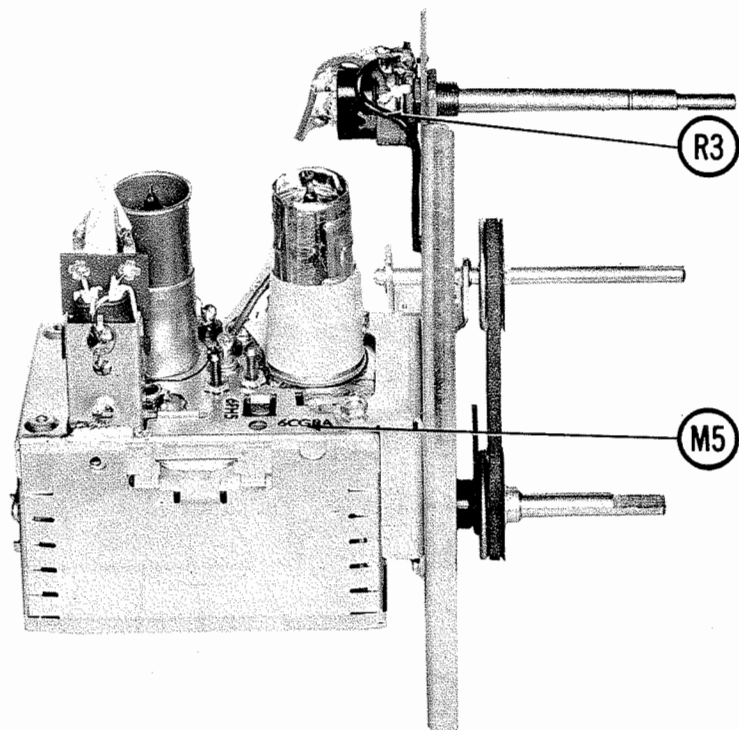


TV CHASSIS - BOTTOM VIEW

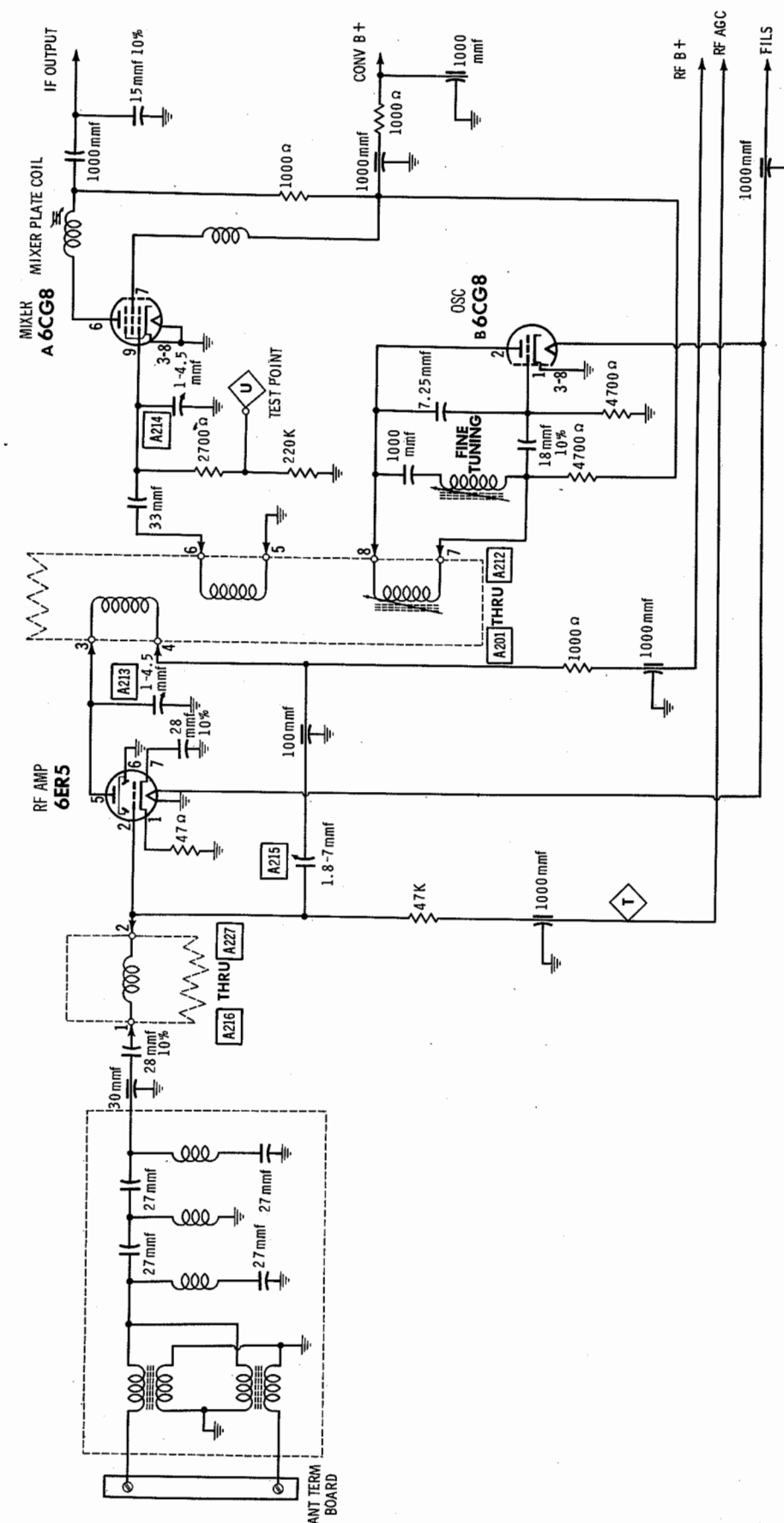
ADMIRAL
CHASSIS 15H1, 151U, 3Y1

FOLDER 1

CONTROL PANEL
VHF TUNER 94E184-11

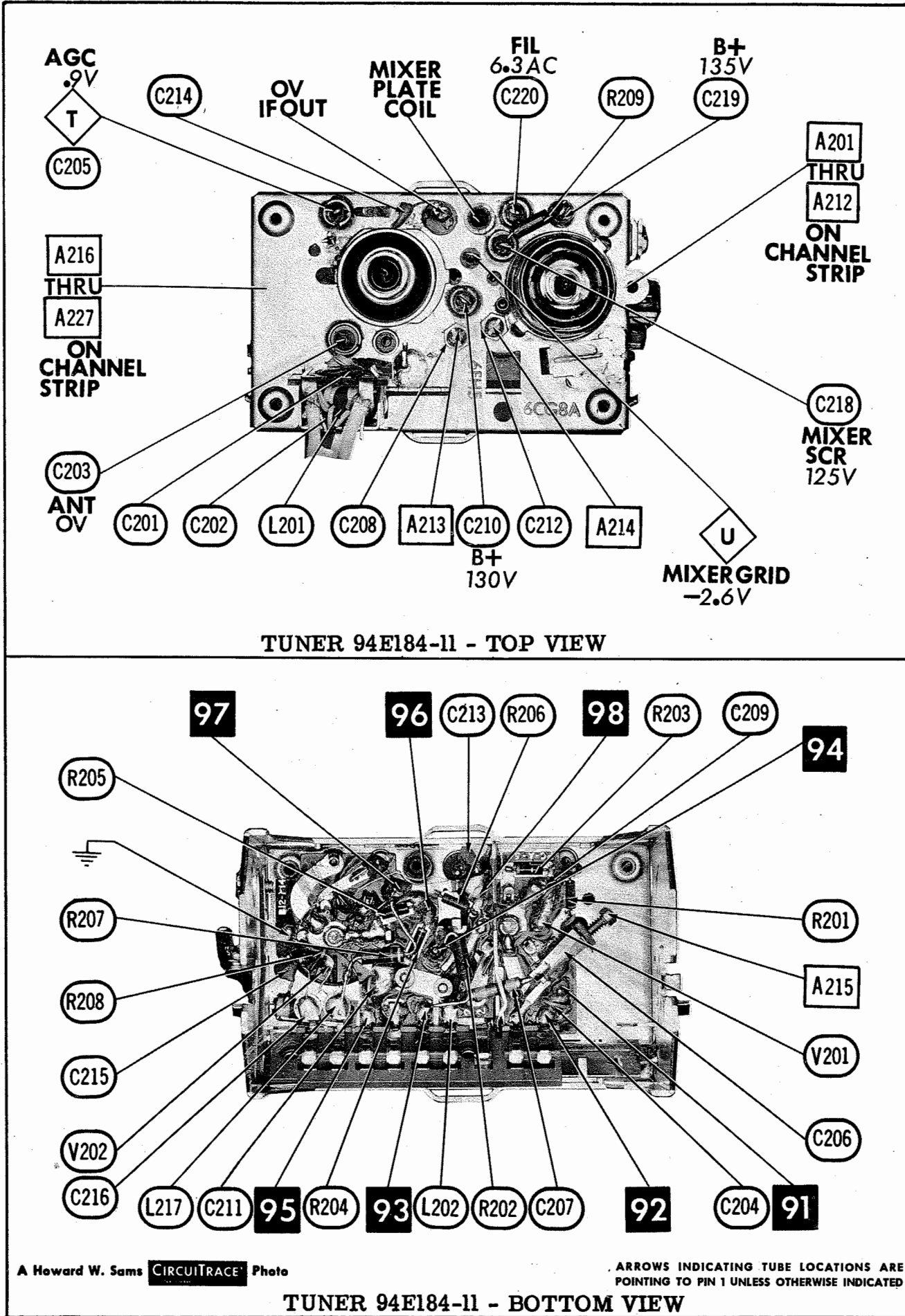
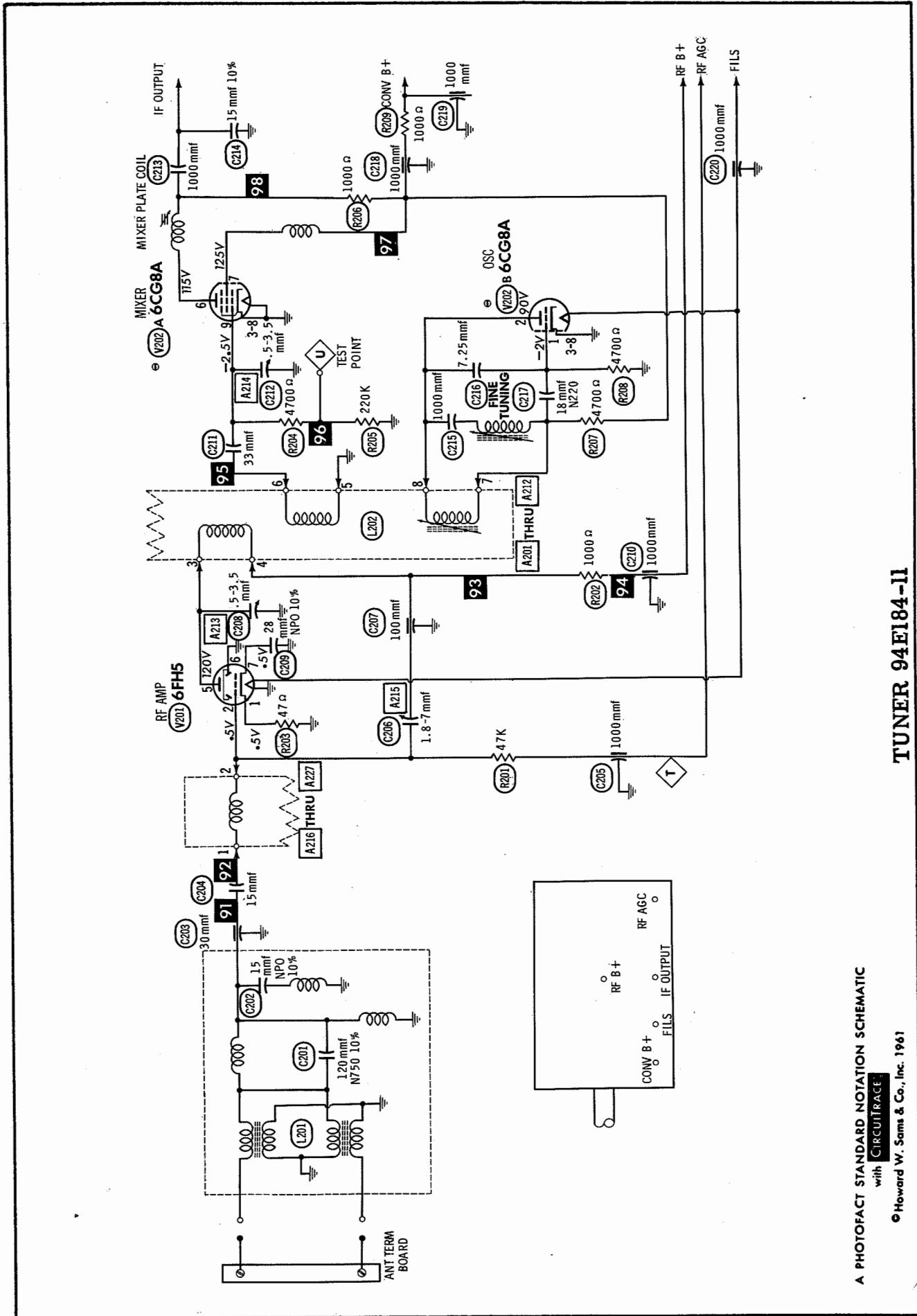


TV PRINTED BOARD CAPACITOR, MISC. IDENT.



A PHOTOFACT STANDARD NOTATION SCHEMATIC
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ADMIRAL
CHASSIS 15H1, 151U, 3Y1
TUNER 94E164-17



ADMIRAL
CHASSIS 15H1, 151U, 3Y1

FOLDER 1

PARTS LIST AND DESCRIPTIONS (Continued)
MISCELLANEOUS

| ITEM No. | PART NAME | ADMIRAL PART No. | NOTES |
|----------|-----------------|------------------|---|
| M5 | Tuner | 94E184-11 | VHF, STANDARD COIL REPLACEMENT #GG-4220-A * |
| M6 | Tuner | 94E184-17 | VHF with UHF Provisions |
| M7 | Circuit Breaker | 84A17-1 | |
| | Motor | 407C34-1 | Phono Drive (Changer #RC7EOC-17AF) |
| | Motor | 407C33-1 | Phono Drive (Changer #RC7FOC-17AF) |

* Use original shafts and front mounting cover.

CABINETS & CABINET PARTS

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

WIRING DATA

| | |
|---|--|
| High Voltage Lead | Use BELDEN No. 8869 |
| 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 Ten Colors |
| | 8524 (Stranded) Available in Ten Colors |
| Power Cord (Interlock Type) | Use BELDEN No. 8874 |
| 300Ω Tuner Input Lead | Use BELDEN No. 8225 |
| 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 |

VHF TUNER PARTS LIST AND DESCRIPTIONS

94E184-11
TUBES

| GENERAL ELECTRIC | | | RAYTHEON | | | SYLVANIA | | |
|------------------|---------|------|----------|--------------|----------------|----------|-----|------|
| ITEM No. | USE | TYPE | ITEM No. | USE | TYPE | ITEM No. | USE | TYPE |
| V201 | RF Amp. | 6FH5 | V202 | Mixer - Osc. | 6CG8A (6CG8) * | | | |

* Alternate

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 | REMARKS | REPLACEMENT DATA | | | | | |
|----------|--------------|---------|------------------|--------------------|---------------------------|------------------|------------------|------------------|
| | | | AEROVOX PART No. | CENTRALAB PART No. | CORNELL-DUBILIER PART No. | ELMENDO PART No. | MALLORY PART No. | SPRAGUE PART No. |
| C201 | 120 N750 10% | | NPO-DI 15 | TCN-120 | C10T12U | CCTN-121 | CNT-312 | 10TCU-T12 |
| C202 | 15 NPO 10% | | | DTZ-15 | C10Q15C | CCTO-150 | CNO-415 | 10TCC-Q15 |
| C203 | 30 | | | | | | | |
| C204 | 15 | | NPO-DI 15 | DTZ-15 | C10Q15C | CCTO-150 | CNO-415 | 10TCC-Q15 |
| C205 | 1000 | | EF-001 | MFT-102 | | CCF-102 | CT280A | |
| C206 | 1.8-7 | | | 829-7 | | | | |
| C207 | 100 | | EF-0001 | MFT-100 | | | | |
| C208 | 5-3.5 | | | | | | | |
| C209 | 28 NPO 10% | | | TCZ-27 | C10Q27C | CCTO-270 | CNO-427 | 10TCC-Q27 |
| C210 | 1000 | | EF-001 | MFT-102 | | CCF-102 | CT280A | |
| C211 | 33 | | NPO-DI 33 | DTZ-33 | C10Q33C | CCTO-330 | CNO-433 | 10TCC-Q33 |
| C212 | 5-3.5 | | | | | | | |
| C213 | 1000 | | EF-001 | DD-102 | BYA10DI | CCD-102 | B-210 | 5HK-D10 |
| C214 | 15 10% | | NPO-DI 15 | DTZ-15 | C10Q15C | CCTO-150 | CNO-415 | 10TCC-Q15 |
| C215 | 1000 | | BPD-001 | DD-102 | BYA10DI | CCD-102 | B-210 | 5HK-D10 |
| C216 | 7.25 | | | | | | | |
| C217 | 18 N220 | | | | | | | 10TCR-Q18 |
| C218 | 1000 | | EF-001 | MFT-1000 | | CCF-102 | CT280A | |
| C219 | 1000 | | EF-001 | MFT-1000 | | CCF-102 | CT280A | |
| C220 | 1000 | | EF-001 | MFT-1000 | | CCF-102 | CT280A | |

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

RESISTORS

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

| ITEM No. | RATING | REPLACEMENT DATA | | | ITEM No. | RATING | REPLACEMENT DATA | | |
|----------|--------|------------------|---------------------|---------|----------|--------|------------------|---------------------|---------|
| | | IRC PART No. | WORKMAN TV PART No. | REMARKS | | | IRC PART No. | WORKMAN TV PART No. | REMARKS |
| R201 | 47K | | | | R206 | 1000Ω | | | |
| R202 | 1000Ω | | | | R207 | 4700Ω | | | |
| R203 | 47Ω | | | | R208 | 4700Ω | | | |
| R204 | 4700Ω | | | | R209 | 1000Ω | | | |
| R205 | 220K | | | | | | | | |

COILS (RF-IF)

| ITEM No. | USE | ADMIRAL PART No. | NOTES | ITEM No. | USE | ADMIRAL PART No. | NOTES |
|----------|------------------------|------------------|-----------|----------|------------------------|------------------|------------|
| L201 | Ant. Trans. | 700B169 | | L202G | Ant., RF, Mixer & Osc. | 94E184-58 | Channel 8 |
| L202A | Ant., RF, Mixer & Osc. | 94E184-52 | Channel 2 | H | " | 94E184-59 | Channel 9 |
| B | " | 94E184-53 | Channel 3 | J | " | 94E184-60 | Channel 10 |
| C | " | 94E184-54 | Channel 4 | K | " | 94E184-61 | Channel 11 |
| D | " | 94E184-55 | Channel 5 | L | " | 94E184-62 | Channel 12 |
| E | " | 94E184-56 | Channel 6 | M | " | 94E184-63 | Channel 13 |
| F | " | 94E184-57 | Channel 7 | | | | |

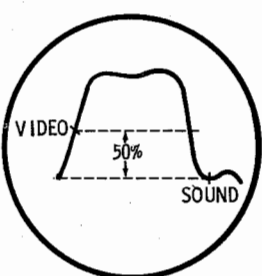
TUNER ALIGNMENT INSTRUCTIONS

PRE-ALIGNMENT INSTRUCTIONS

The High Voltage lead should be securely taped and kept away from the chassis.
Allow a 20 minute warm-up period for the receiver and test equipment.
Suggested Alignment Tools: A201 thru A212 GENERAL CEMENT #5009, 8195, 8274, 8275, 8728, 8729, 8987, 8988, 8989
WALSCO #2515, 2531, 2532
A213, A214, A215 GENERAL CEMENT #5000, 5003, 5066, 8276, 8280, 9087, 9089
WALSCO #2512, 2525, 2528

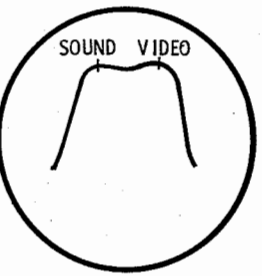
OSCILLATOR ALIGNMENT

Connect the synchronized sweep voltage from the sweep generator to the horizontal input of the oscilloscope for horizontal deflection.
The generator output lead should be terminated with its characteristic impedance, usually 50 ohms.
Set the Fine Tuning to the center of its range.
Use only enough sweep generator output to provide a usable pattern on scope.
Connect variable bias to IF AGC line. 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. Amp. thru 47K across Video Det. load | A201 | Adjust to place sound marker in trap notch as in Fig. 201. Video marker should fall at 50%.  |
| | 207MC | 205. 25MC 209. 75MC | 12 | | A202 | |
| | 201MC | 199. 25MC 203. 75MC | 11 | | A203 | |
| | 195MC | 193. 25MC 197. 75MC | 10 | | A204 | |
| | 189MC | 187. 25MC 191. 75MC | 9 | | A205 | |
| | 183MC | 181. 25MC 185. 75MC | 8 | | A206 | |
| | 177MC | 175. 25MC 179. 75MC | 7 | | A207 | |
| | 85MC | 83. 25MC 87. 75MC | 6 | | A208 | |
| | 79MC | 77. 25MC 81. 75MC | 5 | | A209 | |
| | 69MC | 67. 25MC 71. 75MC | 4 | | A210 | |
| | 63MC | 61. 25MC 65. 75MC | 3 | | A211 | |
| | 57MC | 55. 25MC 59. 75MC | 2 | | A212 | |

RF AND MIXER ALIGNMENT

Connect the negative lead of a variable bias supply to point Ⓢ. Positive to chassis. Set bias for 2.5 volts.
Connect the synchronized sweep voltage from the sweep generator to the horizontal input of the oscilloscope for horizontal deflection.
The generator output lead should be terminated with its characteristic impedance, usually 50 ohms.
Use only enough sweep generator output to provide a usable pattern on scope.

| SWEEP GENERATOR COUPLING | SWEEP GENERATOR FREQUENCY | MARKER GENERATOR FREQUENCY | CHANNEL | CONNECT SCOPE | ADJUST | REMARKS |
|---|---------------------------|----------------------------|---------|--|------------------|---|
| 2. Across antenna terminals with 120Ω in each lead. | 195MC | 193. 25MC 197. 75MC | 10 | Vert. Amp. thru 10K to point Ⓢ. Common to chassis. | A213, A214, A215 | Adjust A213 and A214 for maximum amplitude and symmetry with markers as shown in Fig. 202. Increase bias for MINIMUM amplitude of response curve. Without changing the bias adjust A215 to obtain MINIMUM response on the scope.  |
| | 213MC | 211. 25MC 215. 75MC | 13 | | A216 | |
| | 207MC | 205. 25MC 209. 75MC | 12 | | A217 | |
| | 201MC | 199. 25MC 203. 75MC | 11 | | A218 | |
| | 195MC | 193. 25MC 197. 75MC | 10 | | A219 | |
| | 189MC | 187. 25MC 191. 75MC | 9 | | A220 | |
| | 183MC | 181. 25MC 185. 75MC | 8 | | A221 | |
| | 177MC | 175. 25MC 179. 75MC | 7 | | A222 | |
| | 85MC | 83. 25MC 87. 75MC | 6 | | A223 | |
| | 79MC | 77. 25MC 81. 75MC | 5 | | A224 | |
| | 69MC | 67. 25MC 71. 75MC | 4 | | A225 | |
| | 63MC | 61. 25MC 65. 75MC | 3 | | A226 | |
| | 57MC | 55. 25MC 59. 75MC | 2 | | A227 | |

ADMIRAL
CHASSIS 15H1, 151U, 3Y1

FOLDER 1

PARTS LIST AND DESCRIPTIONS

FIXED CAPACITORS (cont)

| ITEM No. | RATING | REMARKS | REPLACEMENT DATA | | | | | |
|----------|---------------------|------------|------------------|--------------------|---------------------------|-----------------|------------------|------------------|
| | | | AEROVOX PART No. | CENTRALAB PART No. | CORNELL-DUBILIER PART No. | ELMENCOPART No. | MALLORY PART No. | SPRAGUE PART No. |
| C72 | 100 4000V N1500 10% | #65D10-212 | P888N-047 | DD-503 | CUB6847 | 8DP-3-473 | GEM-8147 | 8TM-847 |
| C73 | .047 600V | | | | | | | |

* Admiral Part Number † Alternate Value
* Not normally in distributor's stock. Available thru distributor on order to manufacturer.

CONTROLS

| ITEM No. | RATING | | REPLACEMENT DATA | | | | | INSTALLATION NOTES |
|----------|-------------|---------------|------------------|--------------------|--------------------|------------------|------------------|-----------------------|
| | RESIST-ANCE | WATTS | ADMIRAL PART No. | CENTRALAB PART No. | CLAROSTAT PART No. | CTS-IRC PART No. | MALLORY PART No. | |
| R1A | 3meg | $\frac{1}{2}$ | 75D57-6 | | | | | Volume, Left Channel |
| B | 900K Tap | $\frac{1}{2}$ | | | | | | Volume, Right Channel |
| R2A | 3meg | $\frac{1}{2}$ | 75D49-4 | | | | | Selector |
| B | 900K Tap | $\frac{1}{2}$ | | | | | | Tone, Left Channel |
| R2A | Switch | $\frac{1}{2}$ | | | | | | Tone, Right Channel |
| B | 4meg | $\frac{1}{2}$ | | | | | | Balance |
| R3A | 4meg | $\frac{1}{2}$ | 75B45-6 | F1-40 | | | | Push-Pull Off-On |
| B | 500K | $\frac{1}{2}$ | | RPL-41 | | | | Contrast |
| R4 | Switch | $\frac{1}{2}$ | 75B70-1 | | | | | |
| B | 25K | $\frac{1}{2}$ | | | | | | |
| R5A | 15K Tap | $\frac{1}{2}$ | 75D20-133 | | A47-100K-S | B11-128 | U41 | Brightness |
| B | 100K | $\frac{1}{2}$ | | | RS-3/16 | SK9 | DS-37 | |
| R6A | Shaft | $\frac{1}{2}$ | 75D20-132 | | A47-300K-S | B11-131 | U46 | Vert. Hold |
| B | 300K | $\frac{1}{2}$ | | | RS-3/16 | SK9 | DS-37 | |
| R7A | Shaft | $\frac{1}{2}$ | 75D20-124 | TT-411 | B47-750-S | B11-105 | PTA1751L | Vert. Linearity |
| B | 750K | $\frac{1}{2}$ | | Not Req. | Not Req. | TM4 | Not Req. | |
| R8 | 5meg | $\frac{1}{2}$ | 75D20-119 | TT-87 | B47-5meg-S | HLC-5 | PTA56L | Height |
| B | 45K | $\frac{1}{2}$ | 75D20-131 | TT-31 | B47-50K-S | B11-123 | PTA54L | Horiz. Range |
| R9A | Shaft | $\frac{1}{2}$ | | Not Req. | Not Req. | TM4 | Not Req. | |
| B | 100K | $\frac{1}{2}$ | 75D20-118 | AB-36 | B47-100K-S | B17-128 | PTA15L | AGC |
| R10A | Shaft | $\frac{1}{2}$ | | AK-1 | Not Req. | TM4 | Not Req. | |

† "STA-LOC" Equivalent: FA55L, RUP16A, OS2500.

RESISTORS

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

| ITEM No. | RATING | REMARKS | REPLACEMENT DATA | | | ITEM No. | RATING | REMARKS | REPLACEMENT DATA | | |
|----------|----------|---------|------------------|---------------------|--|----------|-------------|---------|------------------|---------------------|--|
| | | | IRC PART No. | WORKMAN TV PART No. | | | | | IRC PART No. | WORKMAN TV PART No. | |
| R11 | 15meg | | | | | R56 | 220K | | | | |
| R12 | 5.6meg | | | | | R57 | 1meg | | | | |
| R13 | 8200K 3W | | PW3-8200 | 3G-8200 | | R58 | 6800K 1W | | | | |
| R14 | 150K | | | | | R59 | 33K | | | | |
| R15 | 1.8meg | | | | | R60 | 1meg | | | | |
| R16 | 1000K | | | | | R61 | 47K | | | | |
| R17 | 43K | | | | | R62 | 12meg | | | | |
| R18 | 15K | | | | | R63 | 10K 3W | | | | |
| R19 | 12K | | | | | R64 | 100K | | | | |
| R20 | 43K | | | | | R65 | 1.2meg | | | | |
| R21 | 470K | | | | | R66 | 68K | | | | |
| R22 | 3900K | | | | | R67 | 82K 1W | | | | |
| R23 | 150K | | | | | R68 | 390K 1W | | | | |
| R24 | 4700K | | | | | R69 | 100K | | | | |
| R25 | 5800K 1W | | PW7-5600 | 10W-SQ-5600 | | R70 | 100K | | | | |
| R26 | 8200K | | | | | R71 | 100K | | | | |
| R27 | 33K | | | | | R72 | 3.8K (Cold) | | | | |
| R28 | 56K | | | | | R73 | 120K | | | | |
| R29 | 33K 1W | | | | | R74 | 2.2meg | | | | |
| R30 | 8200K | | | | | R75 | 100K 1W | | | | |
| R31 | 56K | | | | | R76 | 680K | | | | |
| R32 | 33K | | | | | R77 | 680K | | | | |
| R33 | 180K | | | | | R78 | 1meg | | | | |
| R34 | 39K | | | | | R79 | 82K | | | | |
| R35 | 100K | | | | | R80 | 12K | | | | |
| R36 | 8200K | | | | | R81 | 56K | | | | |
| R37 | 270K | | | | | R82 | 1200K | | | | |
| R38 | 560K | | | | | R83 | 22K | | | | |
| R39 | 100K | | | | | R84 | 82K | | | | |
| R40 | 560K | | | | | R85 | 18K | | | | |
| R41 | 8.2meg | | | | | R86 | 1meg | | | | |
| R42 | 330K | | | | | R87 | 100K | | | | |
| R43 | 220K 2W | | | | | R88 | 15K 3W | | | | |
| R44 | 68K | | | | | R89 | 220K | | | | |
| R45 | 3.3meg | | | | | R90 | 2.7meg | | | | |
| R46 | 470K | | | | | R91 | 470K | | | | |
| R47 | 1800K | | | | | R92 | 470K | | | | |
| R48 | 220K | | | | | R93 | 1.0K | | | | |
| R49 | 470K | | | | | R94 | 330K | | | | |
| R50 | 150K 2W | | | | | R95 | 12K | | | | |
| R51 | 68K | | | | | R96 | 270K 2W | | | | |
| R52 | 3.3meg | | | | | R97 | 47K | | | | |
| R53 | 470K | | | | | R98 | 8200K 3W | | | | |
| R54 | 1800K | | | | | R99 | 1.2meg | | | | |
| R55 | 1meg | | | | | | | | | | |

* Alternate Value

* Admiral Part Number

COILS (RF-IF)

| ITEM No. | USE | REPLACEMENT DATA | | | | | NOTES |
|----------|-------------------|------------------|----------------|-----------------|------------------|---------------------|-------|
| | | ADMIRAL PART No. | Merit PART No. | Miller PART No. | Stancor PART No. | Workman TV PART No. | |
| L1 | RF Choke | 73B37-8 | | | | | |
| L2 | 47.25MFC Trap | 72C132-44 | | | | TE299 | |
| L3 | 1st Video IF | 72C132-41 | | | | TA293 | |
| L4 | 2nd Video IF | 72C132-42 | | | | TA294 | |
| L5 | 3rd Video IF | 72B207-2 | | | | | |
| L6 | RF Choke (12uh) | 73B31-4 | BC-566 | 4622 | RTC-8523 | T861 | |
| L7 | Peaking (150uh) | 73C5-20 | TV-188 | 6174 | RTC-8592 | T324 | |
| L8 | RF Choke (28uh) | 73B31-3 | TV-192 | 4626 | RTC-8525 | T984 | |
| L9A | 4.5MFC Trap | 72C185-2 | | | | T277 | |
| B | 1st Sound IF | 73C5-34 | TV-208 | 6157 | RTC-8589 | T383 | |
| L10 | Peaking (900uh) | 73C5-40 | TV-197 | 6154 | RTC-8597 | T312 | |
| L11 | Peaking (150uh) | 72B208-1 | | | | TB248 | |
| L12 | 2nd Sound IF | 72B132-37 | | | | | |
| L13 | Quadrature | 73B37-2 | | | | | |
| L14 | Fl. Choke (1.4uh) | | BC-562 | 4604 | RTC-8516 | T856 | |

† Wound on 12K Resistor.
‡ Parallel with 12K Resistor.

COILS (SWEEP CIRCUITS)

| ITEM No. | USE | REPLACEMENT DATA | | | | | | | |
|----------|-------------------|------------------|----------------|-----------------|-----------------|------------------|---------------------|----------------|---------------------|
| | | ADMIRAL PART No. | Merit PART No. | Miller PART No. | Rogers PART No. | Stancor PART No. | Thordarson PART No. | Triod PART No. | Workman TV PART No. |
| L15 | Horiz. Stabilizer | 94C17-7 | TV-163 | 6210 | RCU10 | RTC-8622 | HS-5 | WLC-25 | T103 |

FILTER CHOKE

| ITEM No. | CURRENT (Measured) | DC RES. | INDUCTANCE (0 CURRENT 1000 Hz) | REPLACEMENT DATA | | | | | NOTES |
|----------|--------------------|---------|--------------------------------|------------------|----------------|------------------|---------------------|----------------|-------------------------------|
| | | | | ADMIRAL PART No. | Merit PART No. | Stancor PART No. | Thordarson PART No. | Triod PART No. | |
| L16 | .240A | 50K | 1 H. | 74C18-38 | | C-2343 | 28C44 ① | C-28X | ① Drill new mounting hole(s). |

TRANSFORMER (POWER)

| ITEM No. | RATING | REPLACEMENT DATA | | | | | NOTES |
|----------|--|------------------|--------|--------|------------------|----------------|-------|
| | | PR1 | SEC. 1 | SEC. 2 | ADMIRAL PART No. | Merit PART No. | |
| T1 | 117V @ 1.6A 540VCT @ .240A DC 5V @ 3A SEC. 3 8.3V @ 8.5A | | | | 80D73-3 | P-2882 | |

TRANSFORMERS (SWEEP CIRCUITS)

| ITEM No. | USE | REPLACEMENT DATA | | | | | | NOTES |
|----------|---|------------------|----------------|-----------------|------------------|---------------------|----------------|-------|
| | | ADMIRAL PART No. | Merit PART No. | Rogers PART No. | Stancor PART No. | Thordarson PART No. | Triod PART No. | |
| T2 | Vert. Output Yoke (Horiz. 18MH) | 79C43-20 | | | | | | |
| T3 | (1149) (Vert. 12MB) | 94D183-3 † | | | DY-27A ① | Y-52 ① | A-140X | |
| T4 | Rear Cover and Centering Device Horiz. Output | 79D83-4 | | | | FLY-174 | D-203 | |

† Less Rear Cover and Centering Device.

① Use original yoke damping network if necessary. Requires new rear cover and centering device.

TRANSFORMER (AUDIO OUTPUT)

| ITEM No. | IMPEDANCE | REPLACEMENT DATA | | | | | NOTES |
|----------|-----------|------------------|------|------------------|----------------|------------------|-------|
| | | PR1 | SEC. | ADMIRAL PART No. | Merit PART No. | Stancor PART No. | |
| T5 | 2500K | | | | | | |
| T6 | 2500K | | | | | | |

SPEAKER

| ITEM No. | TYPE | REPLACEMENT DATA | | NOTES |
|----------|-----------|------------------|---------------|-------|
| | | ADMIRAL PART No. | QUAM PART No. | |
| SP1 | 6" PM | 78D162-4 | 6A1 | |
| SP2 | 3 1/2" PM | 78C148-7 | 3A15T24 | |
| SP3 | 3 1/2" PM | 78D162-4 | 6A1 | |
| SP4 | 3 1/2" PM | 78C148-7 | 3A15T24 | |

COMPONENT COMBINATIONS

| ITEM No. | USE | DESCRIPTION | ADMIRAL PART No. | REPLACEMENT DATA |
|----------|---------------------------|-------------------------------------|------------------|------------------|
| | | | | |
| K1 | Vert. Integrator | .001mfd, 33K, 270K | 63D6-21 Note 1 | |
| K2 | Vert. Output Grid & Plate | .0022mfd, 12K, 100K, 2.2meg, 2.7meg | 63D6-22 Note 1 | |

Note 1. Some versions may use individual components in this application.

FUSES

| ITEM No. | TYPE | RATING | REPLACEMENT DATA | | | |
|----------|--------|--------------------|------------------|---------------------|---------------|--|
| | | | ADMIRAL PART No. | LUITTEFUSE PART No. | BUSS PART No. | |
| M1 | 1 1/2" | length of #28 wire | | | | |

PHONO CARTRIDGE & NEEDLES

* NEEDLE LISTINGS SHOWN ARE FOR RESPECTIVE REPLACEMENT CARTRIDGES ONLY.

| ITEM No. | REPLACEMENT DATA | | | | | | NOTES |
|----------|------------------|------------------|------------------------|-------------------|-----|--------|-------|
| | ADMIRAL PART No. | ASTATIC PART No. | ELECTRO-VOICE PART No. | SONOTONE PART No. | | | |
| M2 | 409B33-2-1 | 98C15-102 * (LP) | 13TBX | Not Req. | 28T | SI-1 * | |
| | | 98C15-101 * (78) | | | | SI-3 * | |

SIGNAL DIODES

| ITEM No. | ORIG. TYPE | REPLACEMENT DATA | | | | NOTES |
|----------|-----------------|------------------|---------------------------|-------------------|-------------------|---|
| | | ADMIRAL PART No. | GENERAL ELECTRIC PART No. | RAYTHEON PART No. | SYLVANIA PART No. | |
| M3 | | 93B5-6 * | 6GC1 * | | | |
| M4 | 1N87 † or 1N87A | | | 1N87 † 1N87A | 1N87 † 1N87A | * AFC Diode, Dual Selenium, Common Cathode Type † Video Detector (Pigtail) |

TUBES

| GENERAL ELECTRIC | | | RAYTHEON | | | SYLVANIA | | |
|------------------|--|--------|----------|----------------------------|---------------------------|----------|-----|------|
| ITEM No. | USE | TYPE | ITEM No. | USE | TYPE | ITEM No. | USE | TYPE |
| V1 | 1st Video IF Amp. | 6BZ8 | V7 | Left Channel Output | EL88 (6CW5) * | | | |
| V2 | 2nd Video IF Amp. | 6D88 | V8 | Right Channel Output | EL88 (6CW5) * | | | |
| V3 | Video Output - Sound IF Amp. | 6AW8A | V9 | Vert. Mult. - Vert. Output | 6DE7 | | | |
| V4 | AGC Keying - Sync Sep. - Noise Limiter | 6B8U | V10 | Horiz. Mult. | 6CG7 | | | |
| V5 | Audio Detector | 6DT8 | V11 | Horiz. Output | 6DQ8A | | | |
| V6 | Left Channel AF Amp. - Right Channel AF Amp. | 12AX7A | V12 | Damper | 6AX4GTB (6AX4GTA, 6DE4) * | | | |
| | | | V13 | BV Rectifier | 1G3GT | | | |
| | | | V14 | LV Rectifier | 5U4GB | | | |

* Alternate

PICTURE TUBE

| ITEM No. | REPLACEMENT DATA | | | | NOTES |
|----------|------------------|---------------------------|--------------|-------------------|--------------------------------------|
| | ADMIRAL PART No. | GENERAL ELECTRIC PART No. | RCA PART No. | RAYTHEON PART No. | |
| V16 | 19XP4 | | 19XP4 ① | | ① Aluminized ② Silver Screen "85" |

ELECTROLYTIC CAPACITORS

| ITEM No. | RATING | CAP. |
|----------|--------|------|
|----------|--------|------|