

PHOTOFACT® Folder

with CIRCUITRACE™

MOTOROLA/QUASAR CHASSIS C19TS-/D19TS-/Y16TS-/Y19TS-/YC19TS-/YD19TS-/16TS-/19TS-620

For Supplier Address See PHOTOFACT Index



| MODEL | CHASSIS |
|-----------|------------|
| XP4553LW | 16TS-620 |
| XP5616LW | 19TS-620 |
| XP5617LW | C19TS-620 |
| XP5618LP | D19TS-620 |
| YXP4553LW | Y16TS-620 |
| YXP5616LW | Y19TS-620 |
| YXP5617LW | YC19TS-620 |
| YXP5618LP | YD19TS-620 |



Model XP5618LP

SAFETY PRECAUTIONS

- | | |
|--|---|
| Make sure line voltage does not exceed rating of set. Check high-voltage regulation and adjust to correct value. | Beware of shock from high voltage or AC line. Discharge high voltage to HV cage only. |
| Be sure shields and rear cover are in place and secure. | Use extreme care when handling picture tube. Do not bump, scratch, or exert undue strain. |

CAUTION: One side of AC line connected to chassis. Use isolation transformer for servicing. Make certain isolation networks are in place and exposed metal is safe to touch before returning set to customer.

INDEX

| | Page | | Page |
|---------------------------------|------|-----------------------------------|-------------|
| Alignment | | Photos (Continued) | |
| TV | 4 | Printed Board | 5,6,7,11,12 |
| Disassembly Instructions | 16 | Resistance Measurements | 14 |
| Miscellaneous Adjustments | 16 | Schematics | |
| Parts List | | TV | 2 |
| TV | 8,9 | UHF Tuner | 14 |
| Photos | | Servicing in the Field | 15 |
| Cabinet-Rear View | 16 | Transistor Placement Chart | 3 |
| Chassis-Bottom View | 10 | Troubleshooting Check Chart | 4 |
| Chassis-Top View | 13 | | |

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



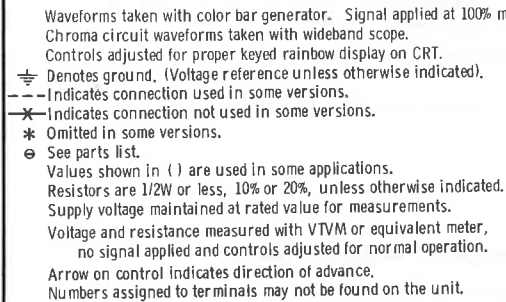
The listing of any available replacement part herein does not constitute in any case a recommendation, warranty or guaranty by Howard W. Sams & Co., Inc., as to the quality and suitability of such replacement part. The numbers of these parts have been compiled from information furnished to Howard W. Sams & Co., Inc., by the manufacturers of the particular type of replacement part listed. 4PC1155

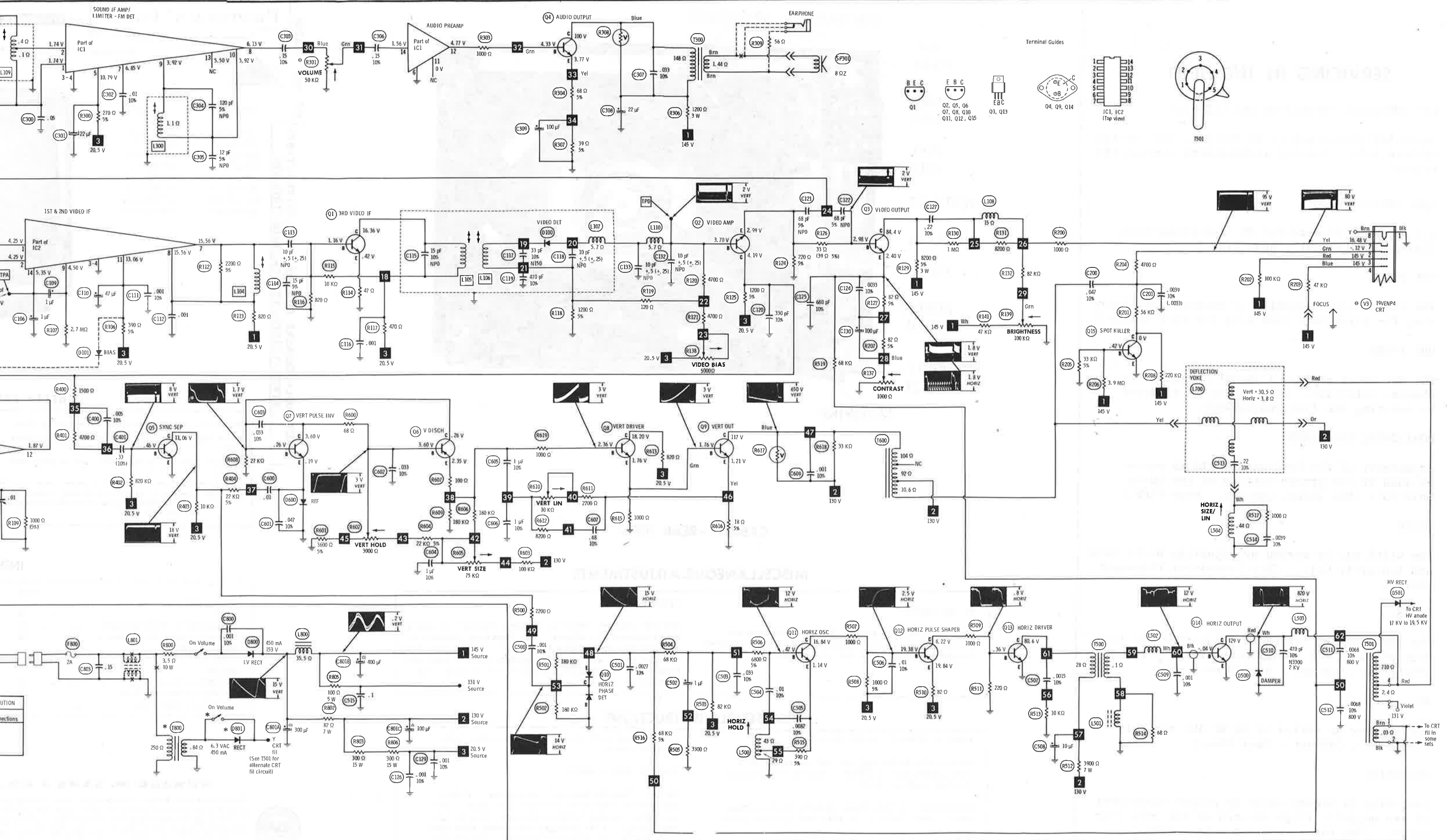
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DATE 2-75

SET 1462 FOLDER 1

MOTOROLA/QUASAR CHASSIS C19TS-/D19TS-/Y16TS-/Y19TS-/YC19TS-/YD19TS-/16TS-/19TS-620

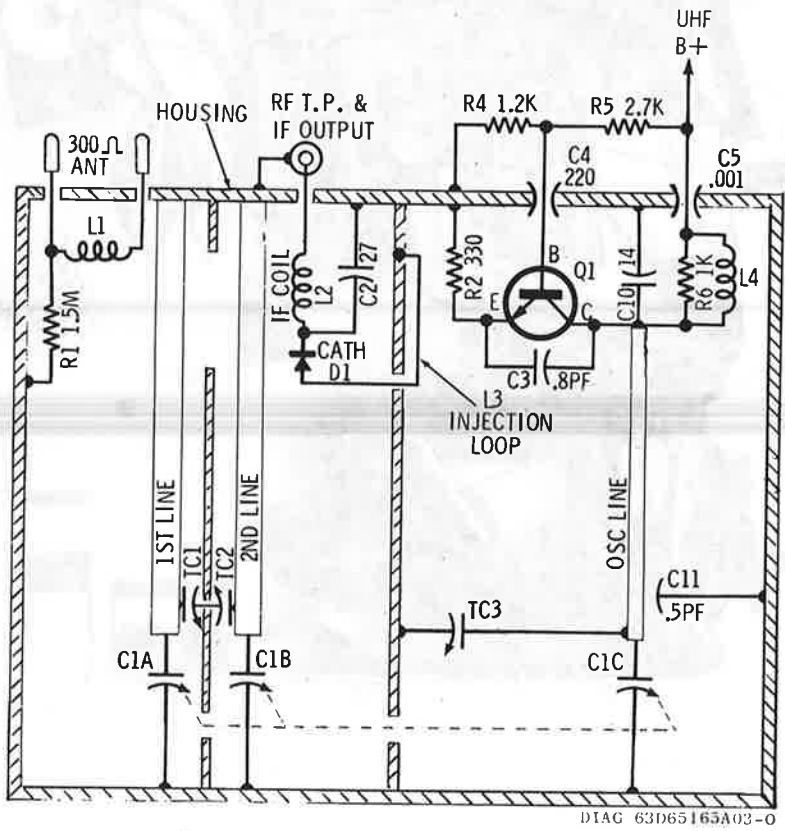




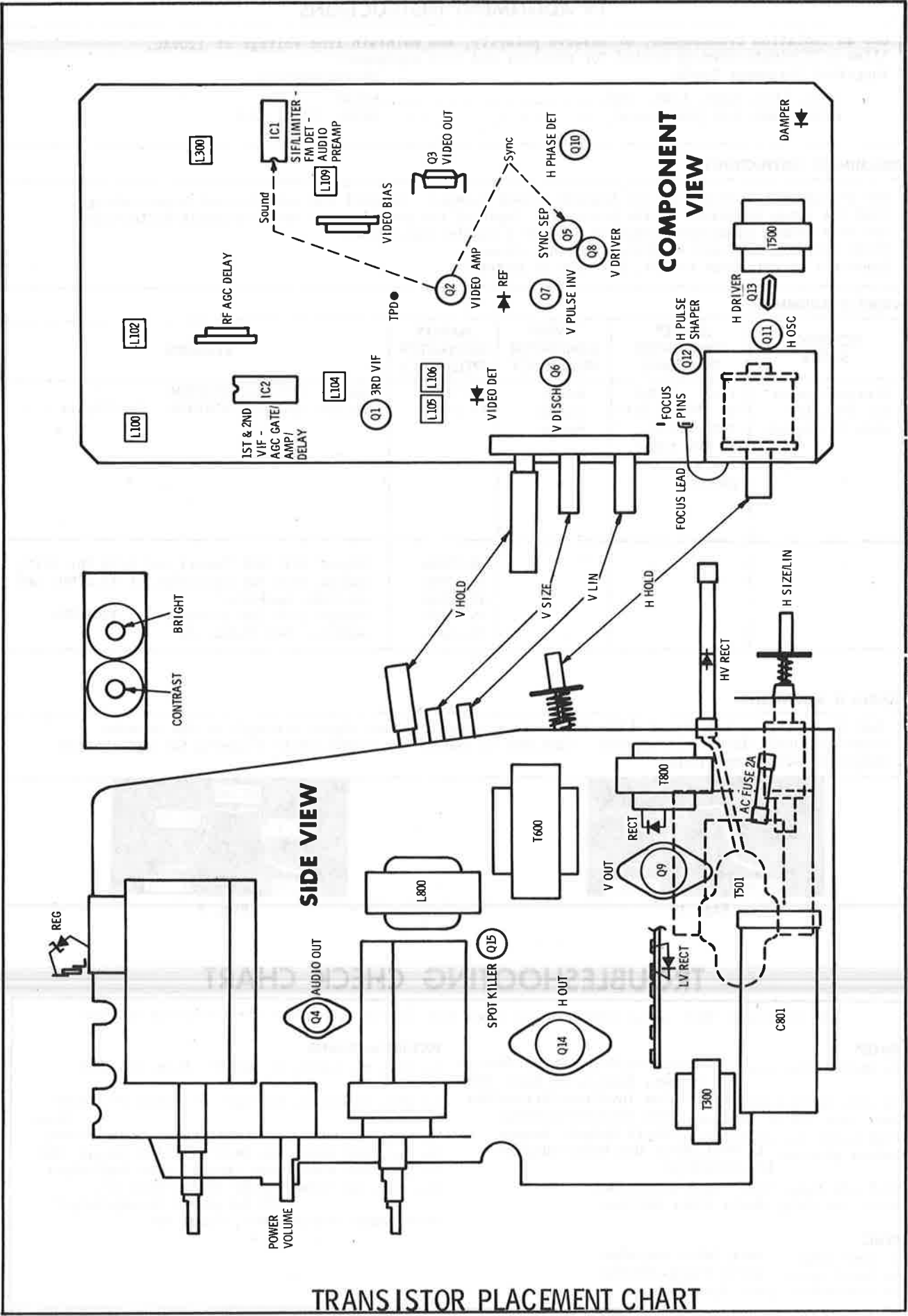
RESISTANCE MEASUREMENTS

| MEASUREMENTS BELOW TAKEN WITH METER HAVING .08V MAX BETWEEN PROBE TIPS | | | | | | | | | | | | | | |
|--|--------|--------|---------|-------|--------|--------|--------|---------|--------|--------|--------|--------|---------|--------|
| ITEM | PIN 1 | PIN 2 | PIN 3 | PIN 4 | PIN 5 | PIN 6 | PIN 7 | PIN 8 | PIN 9 | PIN 10 | PIN 11 | PIN 12 | PIN 13 | PIN 14 |
| V3 | FIL | 300 KΩ | 100 KΩ | 47 KΩ | NC | NC | 85 KΩ | FIL | | | | | | |
| IC1 | 1NF | 1NF | 0 Ω | 0 Ω | 1200 Ω | 0 Ω | 8000 Ω | 1NF | 5700 Ω | 5700 Ω | 1NF | 9000 Ω | 6000 Ω | 85 KΩ |
| IC2 | 7200 Ω | 7200 Ω | 0 Ω | 0 Ω | 2500 Ω | 800 Ω | 1700 Ω | 1700 Ω | 2.7 MΩ | 3000 Ω | 1200 Ω | 6000 Ω | 900 Ω | 1NF |
| ITEM | E | B | C | | ITEM | E | B | C | | ITEM | E | B | C | |
| Q1 | 47 Ω | 800 Ω | 1300 Ω | | Q6 | 100 KΩ | 5000 Ω | 27 KΩ | | Q11 | 420 Ω | 60 KΩ | 3000 Ω | |
| Q2 | 220 Ω | 5000 Ω | 1900 Ω | | Q7 | 1NF ● | 27 KΩ | 5000 Ω | | Q12 | 1000 Ω | 1900 Ω | 1220 Ω | |
| Q3 | 350 Ω | 253 Ω | 10 KΩ ▲ | | Q8 | 1000 Ω | 100 KΩ | 1700 Ω | | Q13 | 0 Ω | 220 Ω | 5500 Ω▲ | |
| Q4 | 107 Ω | 10 KΩ | 3000 Ω▲ | | Q9 | 18 Ω | 1000 Ω | 1700 Ω▲ | | Q14 | 0 Ω | .2 Ω | 1700 Ω▲ | |
| Q5 | 0 Ω | 820KΩ | 11KΩ | | | | | | | Q15 | 0 Ω | 33 KΩ | 220 KΩ | |

▲ THIS READING WILL VARY DEPENDING UPON THE CONDITION OF THE ELECTROLYTIC IN THE CIRCUIT.
● READING DEPENDS UPON POLARITY OF METER CONNECTIONS.



UHF TUNER TT661



TRANSISTOR PLACEMENT CHART

TV ALIGNMENT INSTRUCTIONS

Use an isolation transformer, or observe polarity, and maintain line voltage at 120VAC. Allow a 20-minute warm-up period for receiver and test equipment.
Suggested Alignment Tools: GC ELECTRONICS
L100, L102, L104, L105, L106#9440
L109, L300, L24 (VHF Tuner)#9296, 9297, 9300

PRELIMINARY INSTRUCTIONS

Set the channel selector to the highest unused channel. 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 that shown.
Connect a +4 volt bias to TPA, low side to ground.

VIDEO IF ALIGNMENT

| CONNECT SCOPE | SWEEP GENERATOR COUPLING | SWEEP GENERATOR FREQUENCY | MARKER GENERATOR FREQUENCY | REMARKS |
|--|--|---------------------------|--|---|
| Vertical input to TPD, low side to ground. | Thru .001uF to Mixer Base test point on VHF tuner, low side to ground. | 44MHz (10MHz Sweep) | 39.75MHz 47.25MHz | Adjust L100 for MINIMUM. Adjust L102 for MINIMUM. See Figure 1. |
| " | " | " | 39.75MHz 42.17MHz 44.00MHz 45.75MHz 47.25MHz | Adjust L24 (VHF Tuner) and L104 for Tilt. Adjust L106 for placement of 42.17MHz and 45.75MHz markers. Adjust L105 for placement of 42.17MHz marker. See Figure 2. |

SOUND IF ALIGNMENT

Tune in a station and adjust L300 for maximum sound. Reduce signal strength at the antenna terminals until distortion appears. Continue to reduce the signal while aligning for undistorted output by adjusting L109.



Fig. 1

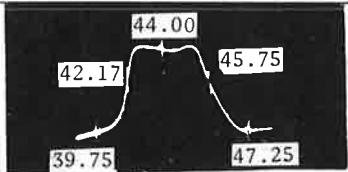


Fig. 2

TROUBLESHOOTING CHECK CHART

The following chart lists component failures most likely to produce the indicated symptom.

SWEEP

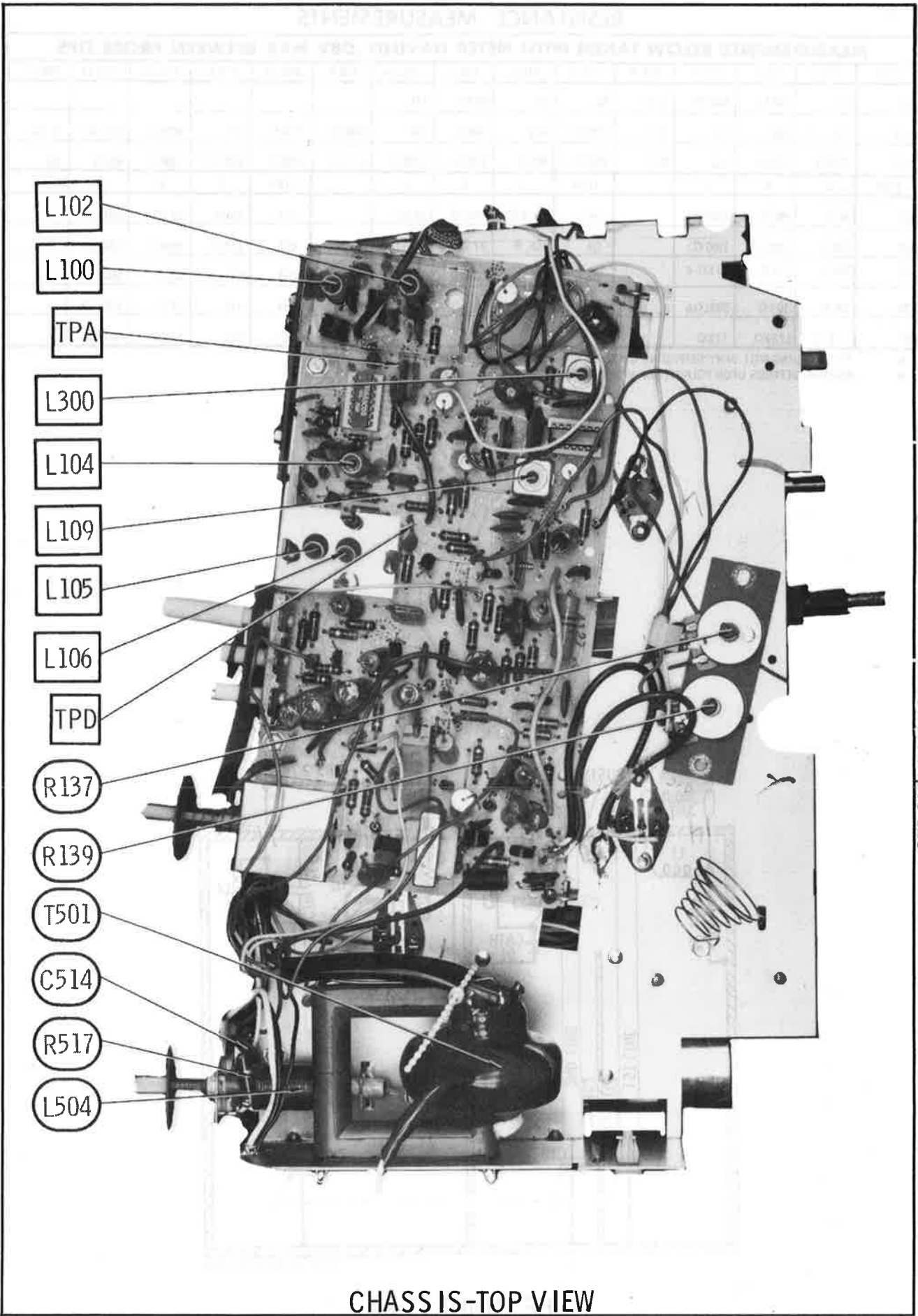
No raster, has sound: Horiz Osc/Pulse Shaper/Driver Output, Damper, HV Rect. CRT
No vert deflection: Vert Pulse Inv/Disch/Driver/Out
Poor vert lin or foldover: Vert Disch/Driver/Out
Poor horiz lin or foldover: Horiz Output, Damper
Narrow picture: LV Rect, Horiz Osc/Pulse Shaper/Driver/Output
Vert off freq: Vert Disch/Driver/Out
Horiz off freq: Horiz Phase Det/Osc

SYNC

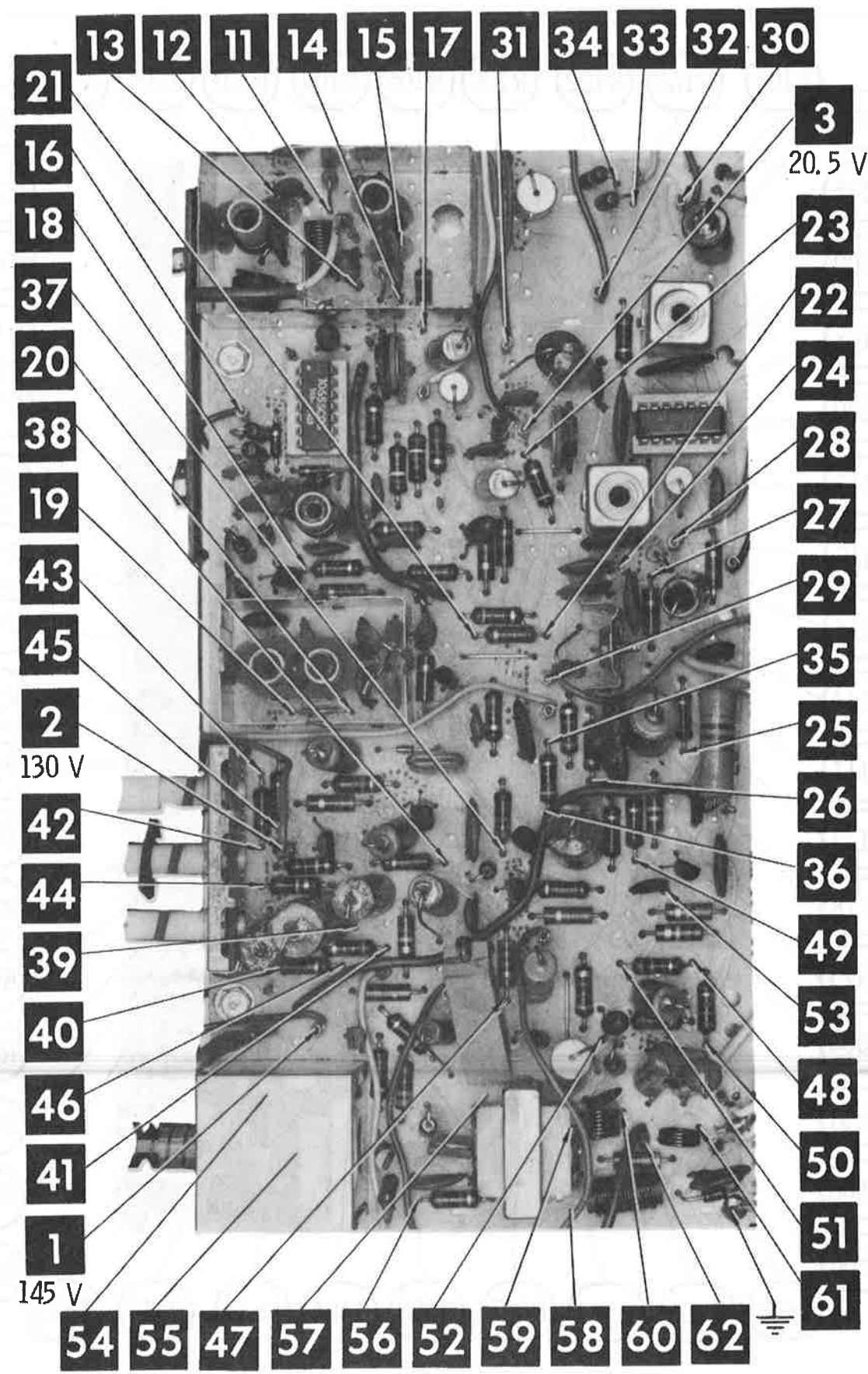
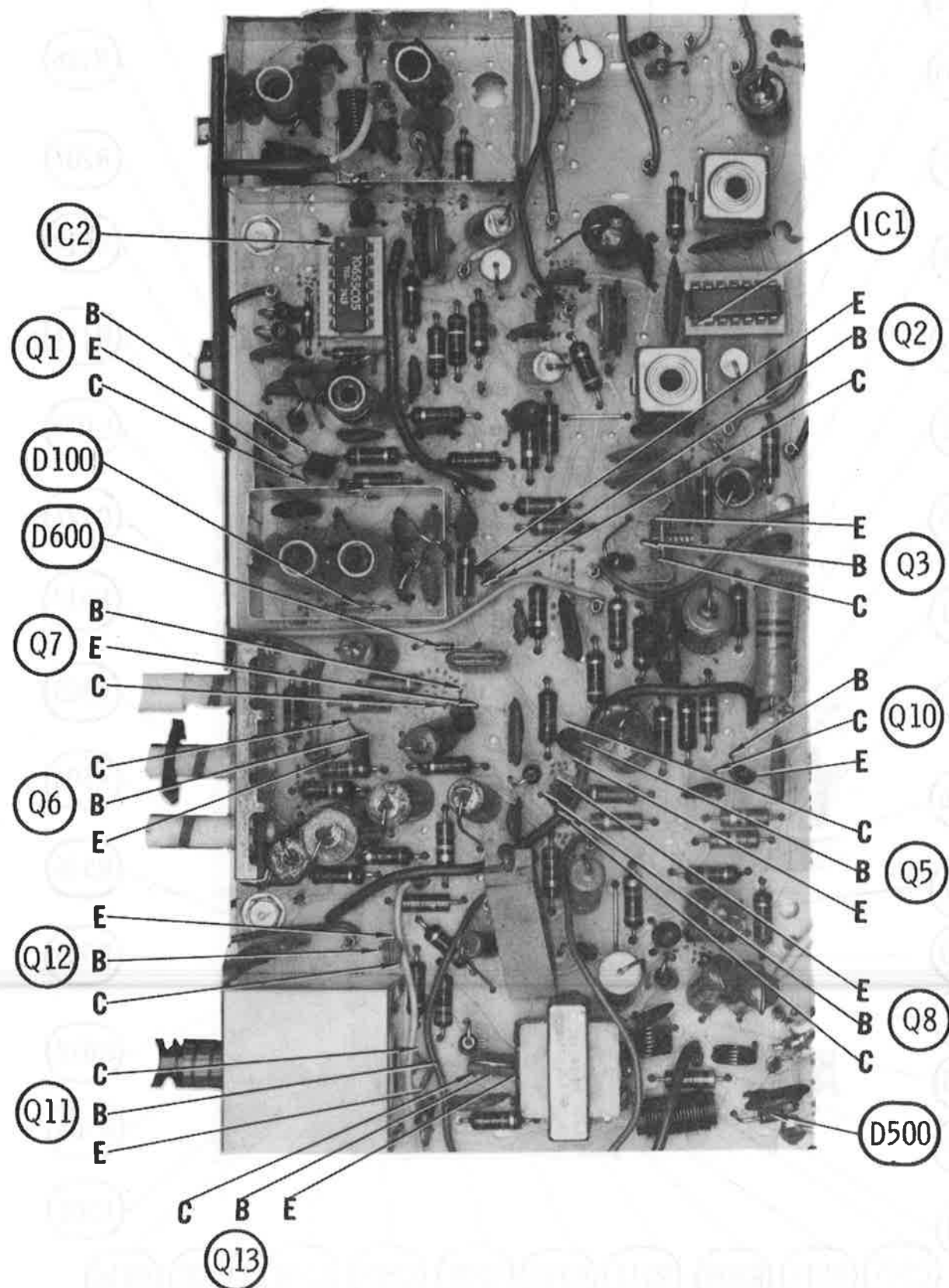
No vert sync: Vert Pulse Inv/Disch
No horiz sync: Horiz Phase Det/Osc
No vert/horiz sync: Sync Sep

PICTURE or SOUND

No pic, no sound, no raster: Fuse, LV Rect
No pic, no sound, has raster: Video IFs, Tuner Mixer
No pic, no sound, has snow: Tuner RF/Mixer/Osc
No pic, has sound, no raster: Video Output, CRT
No pic, has sound, has raster: Video Amp/Output
Has pic, no sound: Sound IF Amp/Limiter, FM Det, Audio Preamp/Output
Overloaded picture: AGC, Video Det



CHASSIS-TOP VIEW

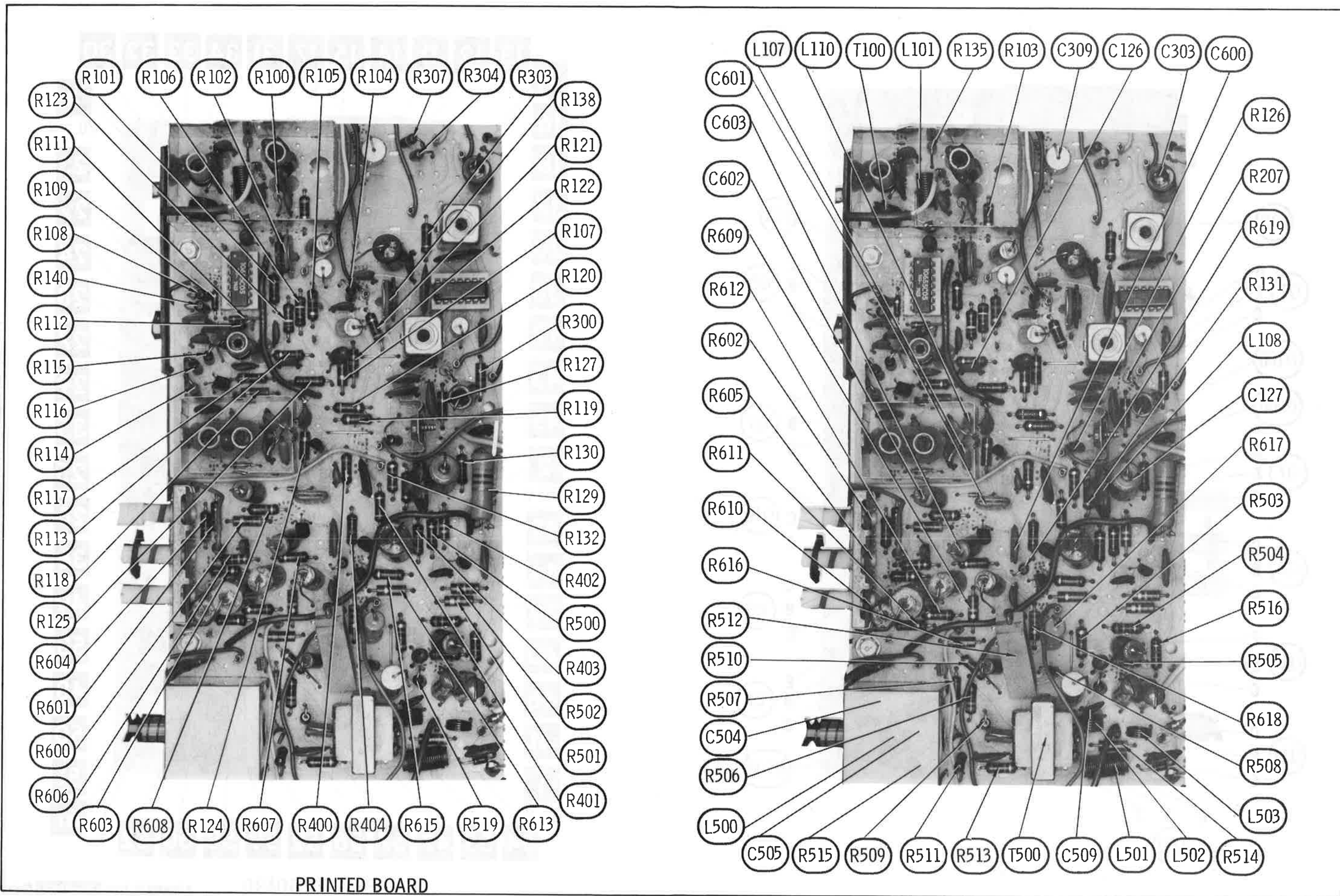


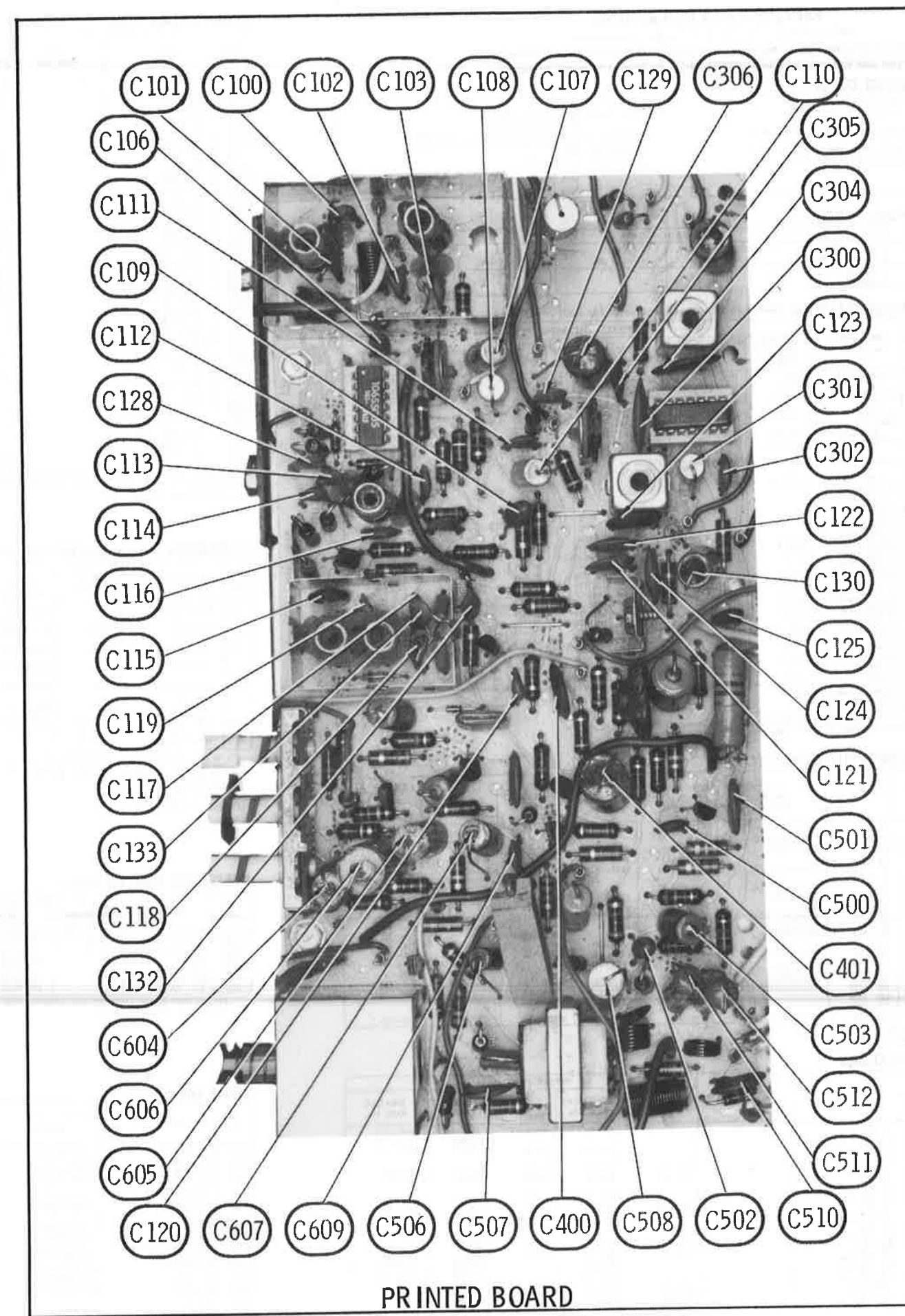
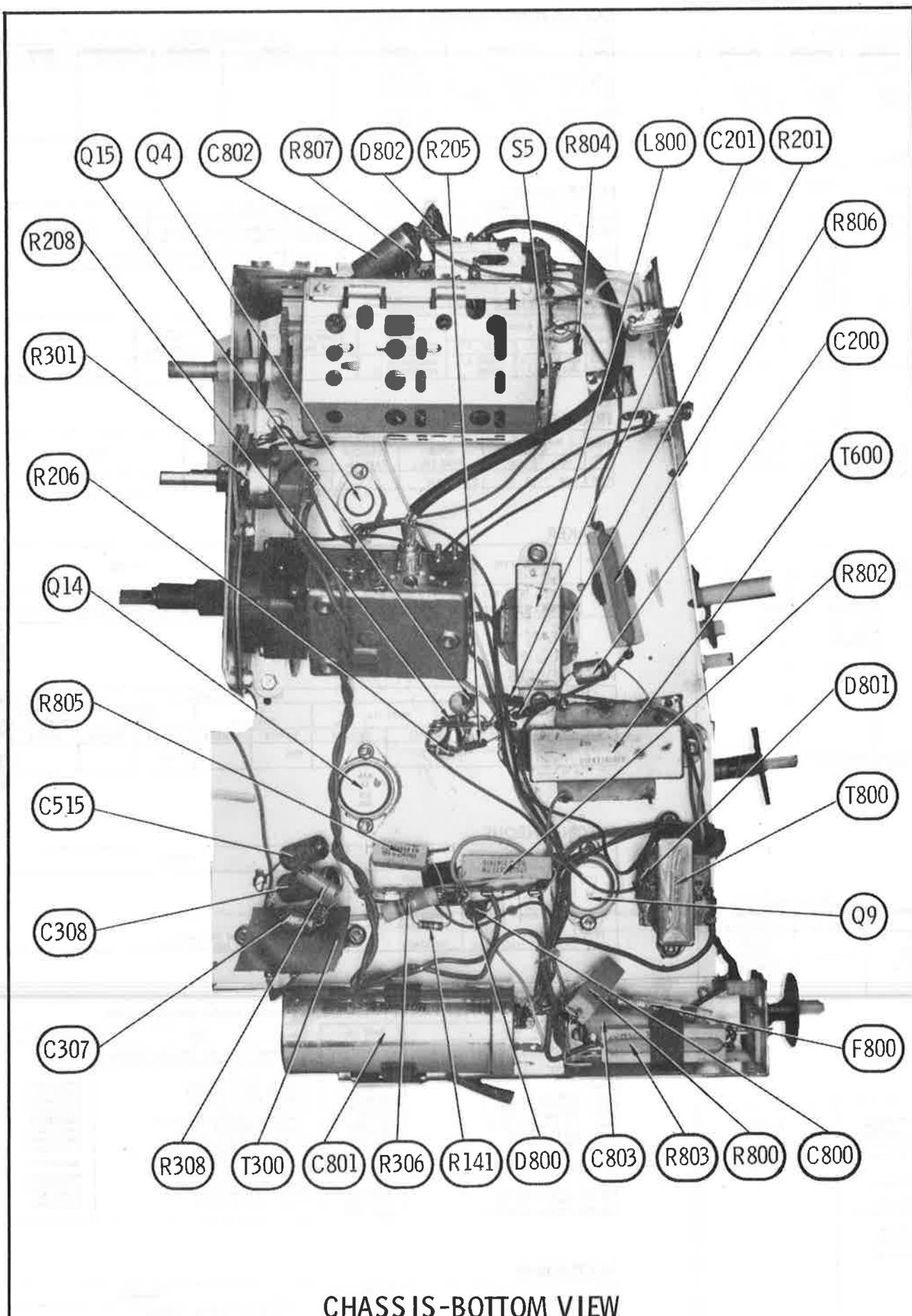
PRINTED BOARD

A Howard W. Sams CIRCUITRACE Photo

MOTOROLA/GUASAR CHASSIS C19TS-/D19TS-/Y16TS-/Y19TS-/YC19TS-/YD19TS-/16TS-/19TS-620

FOLDER 1





MOTOROLA/QUASAR CHASSIS C19TS-/D19TS-/Y16TS-/Y19TS-/YC19TS-/YD19TS-/16TS-/19TS-620

FOLDER 1

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

8868 (25Kv)

| | |
|---|---|
| High Voltage Lead | Use BELDEN No. 8885 (Single Conductor) |
| Shielded Hook-up Wire | Use BELDEN No. 8738 (Two Conductor) |
| General-Use Unshielded Hook-up Wire | Use BELDEN No. 8530 (Solid) Available in 12 Colors |
| 300-Ohm Tuner Input Lead | Use BELDEN No. 8524 (Stranded) Available in 12 Colors |
| 300-Ohm Antenna Lead-In | Use BELDEN No. 8225 |
| Antenna Rotor Cable | Use BELDEN No. 8230 or 8275 |
| | 8464 (Flat) or 8484 (Round) - 4 Conductor |
| | 8485 (Round) - 5 Conductor |
| | 8488 (Round) - 8 Conductor |

PICTURE TUBE

| ITEM No. | REPLACEMENT DATA | | | | NOTES |
|----------|----------------------|---------------------------|--------------|-------------------|---|
| | MFGR. PART No. | GENERAL ELECTRIC PART No. | RCA PART No. | SYLVANIA PART No. | |
| V3 | 19VENP4 16VBUP4 * | | | | *Used in Chassis 16TS-620, Y16TS-620 |

SEMICONDUCTORS (Select replacement transistor for best results)

| ITEM No. | TYPE / MFGR. No. / PART No. | REPLACEMENT DATA | | | | | | |
|----------|-----------------------------|---------------------------|----------------------------------|------------------|-------------------|------------------|------------------|--------------------|
| | | GENERAL ELECTRIC PART No. | INTERNATIONAL RECTIFIER PART No. | MALLORY PART No. | MOTOROLA PART No. | RCA PART No. | SPRAGUE PART No. | SYLVANIA PART No. |
| D100 | D4R/48S137299 | 1N60 | 1N60 | PTC206 | HEP135 | SK3088 | | ECG 109 |
| D101 | 48067120A11 | 1N34AS | 1N34A | PTC207 | HEP134 | SK3087 | | ECG 109 |
| D500 | DBM/48S137551 | GE-511 | D172 | PTC216 | HEPR3012 | SK3130 | | ECG 506 |
| D501 | D2Y/48S137114 | GE-7 | | PTC213 | | SK3108 | | ECG 505 |
| D600 | H386C102Y | GE-300 | D200 | PTC214 | HEPRO602 | SK3100 | | ECG 177 |
| D800 | 91A05/48S191A05 | GE-504A | 8D4 or 5A4D | PTC201 or PTC202 | HEPRO053 | SK3016 or SK3031 | RT218 or RT215 | ECG 116 or ECG 117 |
| D801 | 91A08/48S191A08 | GE-504A | 8D4 or 5A4D | PTC201 or PTC202 | HEPRO052 | SK3030 or SK3031 | RT213 or RT214 | ECG 116 or ECG 117 |
| D802 | DEU/48S137442 | GE2D-22 | | ZB22 | HEP20422 | | RT248 | ECG 5080 |
| TC1 | 21 V Zener 51S10655B13 | | | | | | | |
| IC2 | 51S10655C05 | | | | | | | |
| | 1065SC05 | | | | | | | |
| Q1 | A1U/48S134932 | GE-60 | TR-24 | PTC121 | HEP56 | SK3018 | RT113 | ECG 108 |
| Q2 | AGH/48S137171 | GE-18 | TR-24 | PTC123 | HEP728 | SK3124 | RT102 | ECG 123A |
| Q3 | B1E/48S137476 | GE-27 | TR-74 | | HEP33021 | | RT111 | ECG 191 |
| Q4 | B1Z/48S137535 | GE-20 | TR-23 | PTC104 | HEP241 | SK3538 | RT128 | ECG 124 |
| Q5 | AEJ/48S137172 | GE-20 | TR-30 | PTC136 | HEP738 | SK3040 | RT107 | ECG 123A |
| Q6 | P1J/48S134943 | GE-21 | TR-30 | PTC103 | HEP716 | SK3025 | RT115 | ECG 159 |
| Q7 | ASN/48S137108 | GE-20 | TR-24 | PTC121 | HEP728 | SK3018 | RT102 | ECG 199 |
| Q8 | A3K/48S134997 (3) | GE-20 | TR-24 | PTC136 | HEP737 | SK3024 | RT107 | ECG 162 |
| Q9 | B2N/48S137548 | GE-35 | TR-61 | PTC118 | HEP707 | SK3079 | RT102 | ECG 113 |
| Q10 | D1C/48S134917 | GE-20 | TR-24 | PTC121 | HEP738 | SK3018 | RT102 | ECG 159 |
| Q11 | AEK/48S137174 | GE-20 | TR-24 | PTC103 | HEP715 | SK3114 | RT115 | ECG 191 |
| Q12 | P2S/48S137127 | GE-21 | TR-30 | PTC103 | HEP53021 | SK3111 | RT111 | ECG 163 |
| Q13 | B1E/48S137476 | GE-27 | TR-74 | | | | | |
| Q14 | B2N/48S137539 | GE-36 | TR-61 | PTC129 | HEP707 | SK3111 | | |
| Q15 | B1K/48S137498 | GE-20 | TR-24 | PTC121 | HEPS0005 | SK3018 | RT102 | ECG 123A |

(1) Not used in some versions.

(2) Number on unit.

(3) Two required - select matched pair.

(4) Use Part Number 48S137109 when ordering from manufacturer.

(5) Use Part Number 48S191A07 when ordering from manufacturer.

ELECTROLYTIC CAPACITORS

| ITEM No. | RATING | REPLACEMENT DATA | | | | | |
|----------|----------|------------------|---------------|--------------------|---------------------------|------------------|------------------|
| | | MFGR. PART No. | ARCO PART No. | CENTRALAB PART No. | CORNELL-DUBILIER PART No. | MALLORY PART No. | SPRAGUE PART No. |
| C106 | 1 16V | 23S10229A07 (2) | | | | TDCT10SM035EL | SD35-19 |
| C107 | 1 15V | 23S10255A80 | | | | TDCT10SM035EL | SD35-19 |
| C108 | 47 16V | | ME-3-F-050 | EA15-50 | WBR50-25 | MTA50E15 | TVA-1150 |
| | 10 16V | | ME-1-E-010 | EA15-10 | WBR10-25 | MTA10035 | TVA-1145 |
| | 10 15V | 23S10255A98 (2) | ME-1-E-010 | EA15-10 | WBR10-25 | MTA10035 | TVA-1145 |
| C109 | 1 16V | 23S10229A07 (2) | | | | TDCT10SM035EL | SD35-19 |
| | 1 15V | 23S10255A80 | | | | TDCT10SM035EL | SD35-19 |
| C110 | 47 16V | | ME-3-F-050 | EA15-50 | WBR50-25 | MTA50E15 | TVA-1150 |
| C130 | 100 16V | 23S187A23 (2) | ME-4-E-100 | EA15-100 | WBR100-16 | MTA100E10 | TVA-1130 |
| | 100 10V | | ME-4-D-100 | EA15-100 | WBR100-16 | MTA100E10 | TVA-1130 |
| C301 | 22 25V | 23S187A26 | ME-3-G-020 | EA30-25 | WBR25-25 | MTV20C850 | EV-1324 |
| C308 | 22 160V | 23S1025A74 | CTA-1325 | | WBR25-500 | TC558 | TVA-1442.2 |
| C309 | 100 16V | | ME-4-E-100 | EA15-100 | WBR100-16 | MTA100E10 | TVA-1130 |
| | 100 10V | 23S187A23 (2) | ME-4-D-100 | EA15-100 | WBR100-16 | MTA100E10 | SD35-19 |
| C502 | 1 16V | 23S10229A07 (2) | | | | TDCT10SM035EL | SD35-19 |
| | 1 15V | 23S10255B33 | | | | TDCT10SM035EL | SD35-19 |
| C508 | 10 100V | 23S6529A07 | | | | MTA100E10 | TVA-1130 |
| C601A | 300 175V | 23S10255B33 | ME-4-M-010 | EA150-10 | WBR10-150 | DD0018.4A (1) | TVA-1337 |
| B | 400 175V | | | | | | |
| C | 100 175V | | | | | | |
| C802 | 220 25V | 23S10255B20 | ME-6200 | EA30-250 | WBR250-25 | MTA200F25 | TVA-1207.7 |

(1) Do not use 200uF section.

(2) Used in some versions.

CAPACITORS

| ITEM No. | RATING | MFGR. PART No. | REPLACEMENT DATA | | | | |
|----------|--------------|----------------|-----------------------|--------------------|---------------------------|------------------|------------------|
| | | | ARCO/ELMENC0 PART No. | CENTRALAB PART No. | CORNELL-DUBILIER PART No. | MALLORY PART No. | SPRAGUE PART No. |
| C100 | 15 NPO 5% | | | DTZ-15 | NP015 | CN0415 | 10TCC-Q15 |
| C101 | 27 NPO 5% | | | DTZ-1R5 | NP01P5 | CN0427 | 10TCC-Q27 |
| C102 | 1.5 NPO ±.25 | | | | | CN0515 | 10TCC-V15 |
| C103 | 3.4 NPO ±.25 | | | | | | |
| C111 | .001 10% | | | CCD-102 | GP1000 | GP1000 | 10TS-D10 |
| C112 | .001 | | | CCD-102 | GP1000 | GP1000 | 10TS-D10 |
| C113 | 10 NPO ±.5 | | | | | | |
| C114 | 15 NPO 5% | | | DTZ-15 | NP015 | CN0415 | 10TCC-Q15 |
| C115 | 15 NPO 10% | | | DTZ-15 | NP015 | CN0415 | 10TCC-Q15 |
| C116 | .001 | | | CCD-102 | GP1000 | GP1000 | 10TS-D10 |
| C117 | 33 N150 10% | | | | | | |
| C118 | 10 NPO ±.5 | | | | | | |
| C119 | 470 10% | | | CCD-471 | GP470 | GP470 | 10TS-T47 |
| C120 | 330 10% | | | CCD-331 | GP330 | GP330 | 10TS-T33 |
| C121 | 68 NPO 5% | | | | | CN0468 | 10TCC-Q68 |
| C122 | 68 NPO 5% | | | | | CN0468 | 10TCC-Q68 |
| C123 | 150 NPO 5% | | | | | CN0315 | 10TCC-T15 |
| C124 | .0033 10% | | | CCD-332 | GP3300 | GP3300 | 10TS-T68 |
| C125 | 680 10% | | | CCD-681 | GP680 | GP680 | 10TS-T68 |
| C126 | .001 10% | | | CCD-102 | GP1000 | GP1000 | 10TS-D10 |

CAPACITORS (cont)

| ITEM No. | RATING | MFGR. PART No. | REPLACEMENT DATA | | | | |
|----------|-------------------|----------------|-----------------------|--------------------|---------------------------|------------------|------------------|
| | | | ARCO/ELMENC0 PART No. | CENTRALAB PART No. | CORNELL-DUBILIER PART No. | MALLORY PART No. | SPRAGUE PART No. |
| C127 | .22 160V 10% | | | | | | |
| C128 | .01 | | | | | | |
| C129 | .001 10% | | | | | | |
| C131 | .05 100V | | | | | | |
| C132 | 10 NPO ±.5 | | | | | | |
| C133 | 10 NPO ±.5 | | | | | | |
| C200 | .047 160V 10% | | | | | | |
| C201 | .0039 10% | | | | | | |
| C300 | .05 | | | | | | |
| C302 | .01 10% | | | | | | |
| C303 | .15 100V 10% | | | | | | |
| C304 | 120 NPO 5% | | | | | | |
| C305 | 12 NPO 5% | | | | | | |
| C306 | .15 100V 10% | | | | | | |
| C307 | .033 160V 10% | | | | | | |
| C400 | .005 10% | | | | | | |
| C401 | .33 100V 10% | | | | | | |
| C500 | .001 10% | | | | | | |
| C501 | .0027 10% | | | | | | |
| C503 | .033 160V 10% | | | | | | |
| C504 | .01 160V 10% | | | | | | |
| C505 | .0082 10% | | | | | | |
| C506 | .01 160V 10% | | | | | | |
| C507 | .0015 10% | | | | | | |
| C509 | .001 10% | | | | | | |
| C510 | 470 2KV N3300 10% | | | | | | |
| C511 | .0068 800V 10% | | | | | | |
| C512 | .0068 800V 10% | | | | | | |
| C513 | .22 400V 10% | | | | | | |
| C514 | .0039 10% | | | | | | |
| C515 | .1 400V | | | | | | |
| C600 | .01 | | | | | | |
| C601 | .047 250V 10% | | | | | | |
| C602 | .033 160V 10% | | | | | | |
| C603 | .033 160V 10% | | | | | | |
| C604 | 1 uF 250V 10% | | | | | | |
| C605 | 1 uF 250V 10% | | | | | | |
| C606 | 1 uF 400V 10% | | | | | | |
| C607 | .68 250V 10% | | | | | | |
| C609 | .001 10% | | | | | | |
| C600 | .001 10% | | | | | | |
| C803 | 15 400V | | | | | | |

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

(1) Used in some versions.

CONTROLS (All wattages 1/2 watt, or less, unless listed)

| ITEM No. | FUNCTION | RESIST-ANCE | REPLACEMENT DATA | | | | |
|----------|-----------------|-------------|------------------|-----------------------|---------------------------|-----------------------|------------------|
| | | | MFGR. PART No. | CENTRALAB PART No. | CLAROSTAT PART No. | CTS-IRC PART No. | MALLORY PART No. |
| R102 | RF AGC Delay | 500 | 18D66401A45 | TSV-500 or T-500 | C-501 | X201R501B | MTCS2L1 |
| R137 | Contrast | 1000 | 18D70385A06 | F5-1000, SN100, AK40 | NP-1000-V, UP-N-012 | BUI, CF37, S56A, DC2 | TRS152R |
| R138 | Video Bias | 5000 | 18D66401A60 | TSV-5K or T-5000 | C-502 | X201R502B | MTCS3L1 |
| R139 | Brightness | 100K | 18D70385A07 | F3-100K, SN100, AK-40 | NP-100K-5, UP-N-012, TT-3 | BUI1, CF94, S55A, DC2 | |
| R301 | Volume/Switch | 50K | 18D68021A42 | | | | |
| | Volume/Switch | 50K | 18D68021A43 | | | | |
| R602 | Vert. Hold | 3000 "A" | 18D67878A19 | | | | |
| R605 | Vert. Size | 75K "B" | (7) (19) | | | | |
| R610 | Vert. Linearity | 10K "C" | | | | | |

(7) To establish section identification of side-by-side controls, view controls with shaft ends facing you, terminals down. On 3-section controls, left-hand section is "A", middle section is "B", right-hand section is "C".

On 2-section controls, left-hand section is "A", right-hand section is "B".

(9) Switch must be CTS type 080.

(18) Used in Chassis 19TS620.

(19) Includes R602, R605 and R610.

RESISTORS (Power and Special)

| ITEM No. | RATING | REPLACEMENT DATA | | ITEM No. | RATING | REPLACEMENT DATA | |
|----------|--------------|------------------|-----------------|----------|------------|------------------|----------------|
| | | WORKMAN PART No. | MFGR. PART No. | | | WORKMAN PART No. | MFGR. PART No. |
| R129 | 8200 3W Film | 3G-8.2K | 17610426A19 (1) | R802 | 82 7W WW | 175136977 | 175645796 |
| R306 | 1200 3W Film | 3G-1.2K | 17610426A18 | R803 | 300 15W WW | 175645796 | 175645796 |
| R308 | VDR (2) | | 6C66263A24 | R805 | 100 5W WW | 175645796 | 175645796 |
| R512 | 3900 7W WW | | 175740259 | R806 | 300 15W WW | 175645796 | 175645796 |
| R617 | VDR (2) | | 6C66263A23 | | | | |
| R800 | 3.5 10W WW | | 175139352 | | | | |

(1) Use Part Number 175738283 when ordering from manufacturer.

(2) Voltage dependent resistor.

COILS (RF-IF)

| ITEM No. | FUNCTION | REPLACEMENT DATA | | | REMARKS |
|----------|---------------------------------------|------------------|----------------------|-----------------|--|
| | | PART No. | OTHER IDENTIFICATION | MILLER PART No. | |
| L100 | 39.75MHz Trap | 24D67754A20 | | 23A156RPC (2) | (1) Used in some versions. (2) Clip unused pin. |
| L101 | RF Choke | 24D69707A32 | | | |
| L102 | 47.25MHz Trap | 24D68501A18 | | | |
| L104 | 1st Video IF/ 2nd Video IF | 24D67754A23 | | 23A156RPC | |
| L105 | 3rd Video IF (Pri) | 24D6755A21 | | 23A156RPC | |
| L106 | 3rd Video IF (Sec)/ Video Detector | 24D67754A20 | | 23A156RPC (2) | |
| L107 | RF Choke | 24D66772A12 | | 74F826AP | |
| L108 | RF Choke | 24D68801A02 | | 72F474AP | |
| L109 | Sound Input IF | 24D68772A28 | | | |
| L110 | RF Choke | 24D66772A12 | | 74F826AP | |
| L300 | Quadrature | 24D68772A29 | | | |
| L501 | RF Choke | 24D69044A06 | | | |
| L502 | RF Choke | 24D65947A74 | | | |
| L503 | RF Choke | 24D69707A18 | | | |
| L801 | Line Choke | (1) | | | |
| T100 | Video Input IF | 24D68501A49 | | | |

SERVICING IN THE FIELD

CRT IMPLOSION PROTECTION AND CLEANING

Implosion protection is an integral part of the picture tube, cleaning accomplished without CRT removal.

FUSE DEVICES

A 2-amp fuse is used for AC line protection. (See photo, Cabinet - Rear View.)

VHF TUNER

The fine tuning mechanically engages oscillator slug for adjustment (one slug for each channel).

UHF TUNER

The UHF tuner employs a detent mechanism for channel selection. Fine tuning is adjusted by rotating the fine tuning knob.

HORIZONTAL OSCILLATOR

Adjustment of the horizontal hold is accomplished by the proper setting of the Horiz. Hold Coil (See photo, Cabinet - Rear View.)

WIDTH

The width may be varied by adjusting Horiz. Size and Linearity Coil. (See Transistor Placement Chart.)

FOCUS

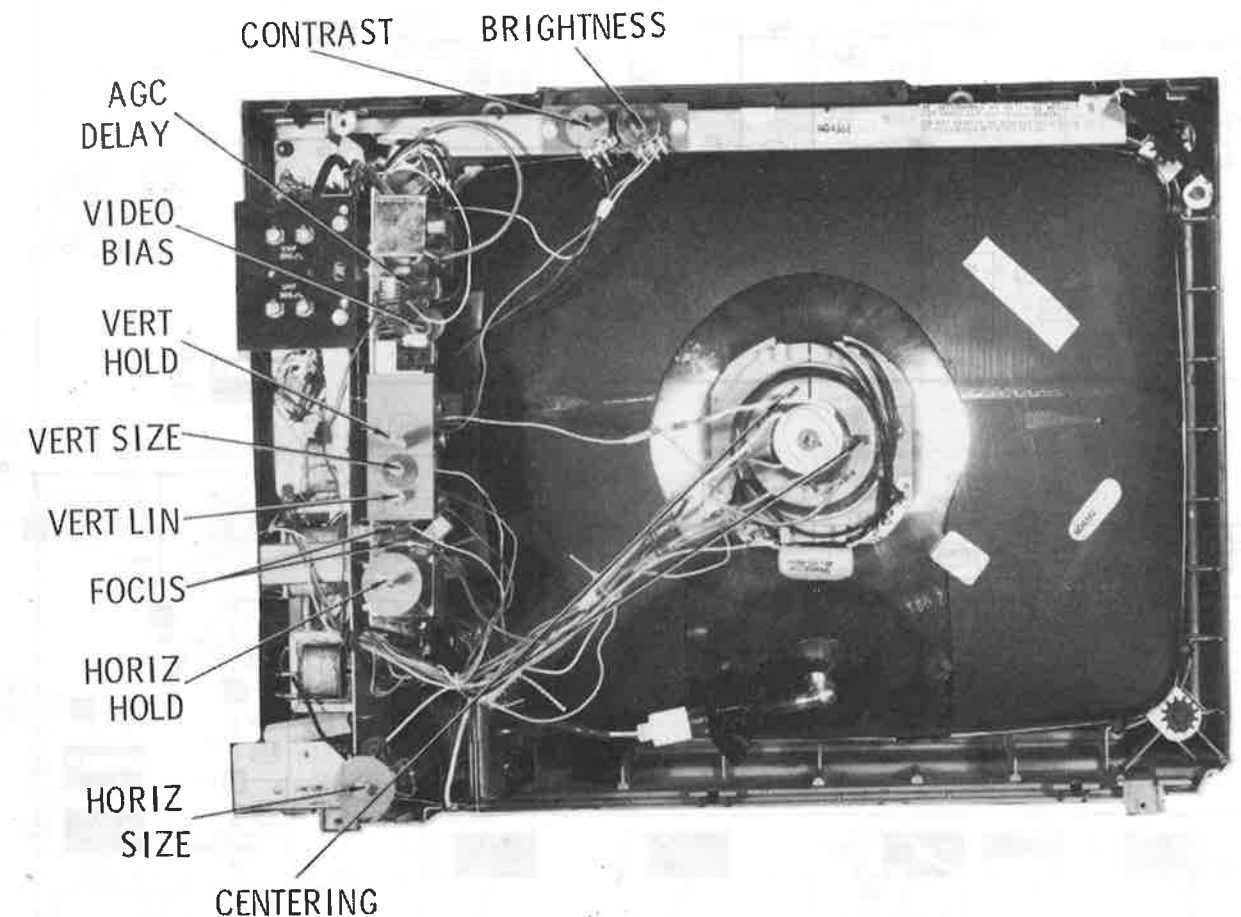
The focus may be varied by connecting the lead from pin 4 of CRT to various voltage points. (See photo, Cabinet - Rear View.)

AGC

The AGC may be varied by an RF AGC control. (See photo, Cabinet - Rear View.)

CENTERING

Centering is accomplished by proper adjustment of two magnetic rings located on the yoke rear cover. (See photo, Cabinet - Rear View.)



CABINET-REAR VIEW

MISCELLANEOUS ADJUSTMENTS

RF AGC DELAY

Tune in a weak station. Turn RF AGC Control clockwise until snow appears. Then turn counter-clockwise until snow just disappears.

VIDEO BIAS

Set VHF channel selector between channel 12 and 13 to eliminate all signal. Set Contrast control to maximum and brightness to normal. Turn video bias control until all snow disappears from screen and then turn in opposite direction until snow just appears.

DISASSEMBLY INSTRUCTIONS

CHASSIS REMOVAL Model XP5618LP

Remove all knobs and lay set facedown on a soft protective surface. Remove five screws holding cabinet back.

Disconnect picture-tube socket, high-voltage anode lead, deflection yoke and speaker leads.

Remove two screws holding brightness and contrast controls. Remove five screws holding

chassis and lift chassis and controls from cabinet front.

PICTURE TUBE REMOVAL

Follow "Chassis Removal" procedure. Remove deflection yoke from picture-tube neck. Remove four screws holding picture tube to cabinet front. Lift picture tube away from cabinet front. Do not lift picture tube by the neck.