

SAFETY PRECAUTIONS

SERVICE WARNING

Only qualified service technicians who are familiar with safety checks and guidelines should perform service work. Before replacing parts, disconnect power source to protect electrostatically sensitive parts. Do not attempt to modify any circuit unless so recommended by the manufacturer. When servicing the receiver, use an isolation transformer between the line cord and power receptacle.

SERVICING THE HIGH VOLTAGE AND CRT

Use EXTREME CAUTION when servicing the high voltage circuits. To discharge static high voltage, connect a 10K ohms resistor in series with a test lead between the receiver and CRT anode lead, DO NOT lift the CRT by the neck. Always wear shatterproof goggles when handling the CRT to protect eyes in case of implosion.

X-RAY RADIATION AND HIGH VOLTAGE LIMITS

Be aware of the instructions and procedures covering X-ray radiation. In solid-state receivers and monitors, the CRT is the only potential source of X-rays. Keep an accurate high voltage meter available at all times. Check meter calibration periodically. Whenever servicing a receiver, check the high voltage at various brightness levels to be sure it is regulating properly. Keep high voltage at rated value, NO HIGHER. Excessive high voltage may cause X-ray radiation or failure of associated components. DO NOT depend on protection circuits to keep voltage at rated value. When troubleshooting a receiver with excessive high voltage, avoid close contact with the CRT. DO NOT operate the receiver longer than necessary. To locate the cause of excessive high voltage, use a variable AC transformer to regulate voltage. In present receivers, many electrical and mechanical components have safety related characteristics which are not detectable by visual inspection. Such components are identified by a # on both the schematic and the parts list. For SAFETY, use only equivalent replacement parts when replacing these components.

GENERAL GUIDELINES

Perform a final SAFETY CHECK before returning receiver to customer. Check repaired area for poorly soldered connections, and check entire circuit board for solder splashes. Check inner board wiring for pinched wires or wires contacting any high wattage resistors. Check that all control knobs, shields, covers, grounds, and mounting hardware have been replaced. Be sure to replace all insulators and restore proper lead dress.

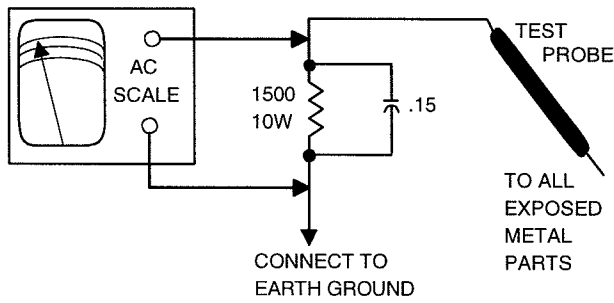
SAFETY CHECKS -- FIRE AND SHOCK HAZARD

Cold Leakage Checks for Receivers with Isolated Ground

Unplug the AC cord, connect a jumper across the plug prongs, and turn the power switch on (if applicable). Use an ohmmeter to measure the resistance between the jumped AC plug and any exposed metal cabinet parts such as antenna screw heads, control shafts, or handle brackets. Exposed metal parts with a return path should measure between 1M ohms and 5.2M ohms. Parts without a return path must measure infinity.

Hot Leakage Current Check

Plug the AC cord directly into an AC outlet. DO NOT use an isolation transformer. Use a 1500 ohms, 10W resistor in parallel with a .15µF capacitor to connect between any exposed metal parts on the receiver and a good earth ground. (See figure below.) Use an AC voltmeter with at least 5000 ohms per volt sensitivity to measure the voltage across the resistor. Check all exposed metal parts and measure voltage at each point. Voltage measurements should not exceed .75VAC, 500µA. Any value exceeding this limit constitutes a potential shock hazard and must be corrected. If the AC plug is not polarized, reverse the AC plug and repeat exposed metal part voltage measurement at each point.



| TEST JIG HOOKUP | | | | |
|-----------------|--------------------------|-------------------|-----|--------|
| Function | Chek-A-Color Adapter No. | PC Board Plug No. | Pin | Color |
| CRT | B239 | HV | 1 | Red |
| Yoke | D4137 | | 3 | Blue |
| Yoke Setting | YP1A | | 5 | Yellow |
| Comments | Focus Tap | | 6 | Green |

HIGH VOLTAGE SHUTDOWN TEST

Apply 120VAC to the receiver. Press the power button. Momentarily place a 20K ohms resistor across pin 1 and pin 3 of plug X. The receiver should lose raster and sound and remain in that state. If the receiver does not lose raster and sound, the high voltage shutdown circuit requires repair. To resume normal operation, remove AC power and wait 15 seconds and test the receiver for normal operation.

The listing of any available replacement part herein in no case constitutes a recommendation, warranty, or guarantee by Howard W. Sams & Company as to the quality and suitability of such replacement part. The numbers of the listed parts have been compiled from information furnished to Howard W. Sams & Company by the manufacturers of the specific type of replacement part listed.

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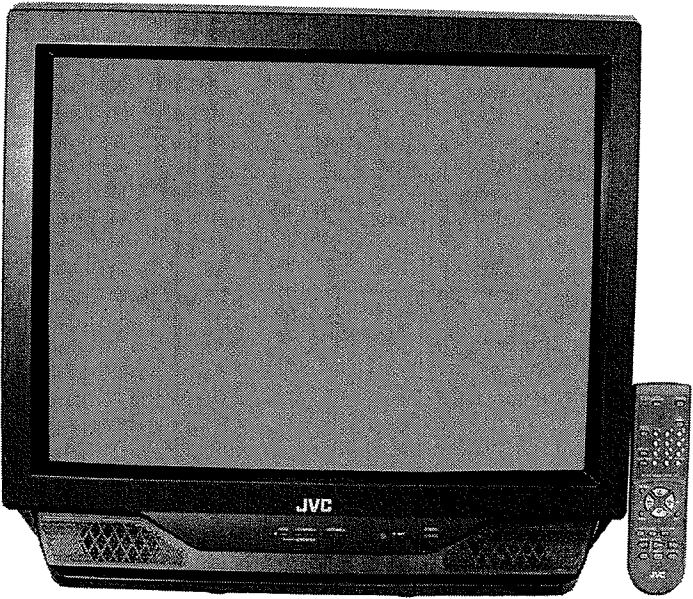
PHOTOFACT® Technical Service Data

SET 4281

MODELS AV-27015, AV-27020

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JVC
Models AV-27015, AV-27020



Model AV-27020

Essential coverage
for servicing a television receiver...

- Schematics
- Component locations
- Parts list



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APRIL 2000 SET 4281

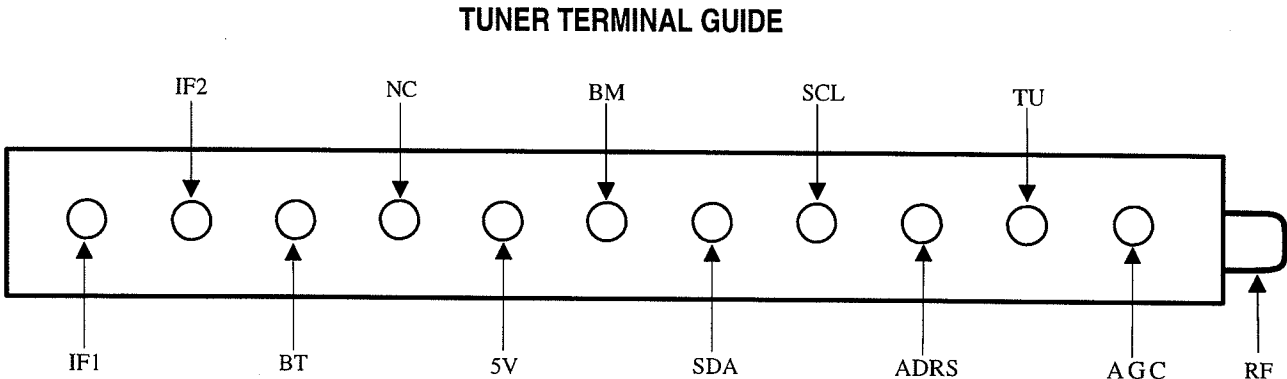
For Supplier Address,
See PHOTOFACT Annual Index

JVC

TUNER INFORMATION

| TUNER VOLTAGE CHART | | | |
|---------------------|--------------|---------------|----------|
| Pin | VHF Low Band | VHF High Band | UHF Band |
| AGC | 4.0V | 5.0V | 4.1V |
| TU | 1.2V | 4.3V | 4.9V |
| ADRS | 0V | 0V | 0V |
| SCL | 2.5V | 2.5V | 2.5V |
| SDA | 2.2V | 2.2V | 2.2V |
| BM | 8.3V | 8.3V | 8.3V |
| 5V | 5.1V | 5.1V | 5.1V |
| NC | 0V | 0V | 0V |
| BT | 32.0V | 32.0V | 32.0V |
| IF2 | 0V | 0V | 0V |
| IF1 | 0V | 0V | 0V |

NOTE: VHF Low Band voltages taken on channel 2.
VHF High Band voltages taken on channel 7.
UHF Band voltages taken on channel 14.



SCHEMATIC COMPONENT LOCATION GUIDE

| | | | | | | | | | | | | | |
|------|-----|------|-----|-------|-----|-------|-----|------|-----|------|-----|-------|-----|
| C001 | C1 | C546 | E14 | C802 | A12 | IC251 | B6 | R142 | E13 | R525 | E5 | R724 | C23 |
| C003 | B24 | C548 | E14 | C803 | A12 | IC271 | B7 | R145 | C2 | R526 | D6 | R725 | E23 |
| C004 | B24 | C561 | E2 | C901 | A17 | IC421 | D4 | R146 | C1 | R530 | D6 | R726 | D23 |
| C005 | B24 | C562 | D2 | C902 | A18 | IC541 | E13 | R161 | B4 | R541 | D13 | R727 | D23 |
| C006 | A23 | C563 | D1 | C911 | B19 | IC602 | A31 | R162 | A4 | R542 | E18 | R728 | D23 |
| C011 | A24 | C581 | D14 | C912 | A20 | IC651 | A26 | R163 | B5 | R543 | E12 | R729 | C23 |
| C012 | B24 | C582 | D10 | C913 | A20 | IC652 | B28 | R164 | A6 | R544 | E13 | R730 | E23 |
| C101 | E13 | C583 | D10 | C914 | A20 | IC652 | C28 | R203 | B10 | R546 | E13 | R732 | C23 |
| C102 | B1 | C584 | E2 | C921 | C19 | IC701 | B22 | R204 | A10 | R561 | E2 | R733 | B22 |
| C103 | B1 | C614 | E14 | C922 | C20 | IC702 | E23 | R205 | A11 | R562 | E2 | R734 | B23 |
| C104 | B2 | C616 | A31 | C951 | D20 | IC703 | C18 | R208 | D11 | R563 | E2 | R735 | B23 |
| C105 | C3 | C617 | B31 | C953 | E18 | IC751 | A21 | R209 | D11 | R564 | E1 | R736 | C23 |
| C106 | B3 | C618 | A32 | C954 | D20 | IC921 | C19 | R210 | C11 | R566 | D1 | R737 | B23 |
| C108 | B2 | C619 | A32 | C956 | E20 | IC951 | E19 | R211 | C11 | R567 | D1 | R738 | B23 |
| C131 | B3 | C620 | A32 | C958 | B18 | J003 | B5 | R212 | B11 | R568 | D1 | R739 | A23 |
| C132 | B3 | C622 | B31 | C959 | E18 | J003 | B25 | R213 | B10 | R571 | A16 | R740 | A23 |
| C133 | B3 | C623 | C32 | C981 | B17 | J004 | B30 | R215 | B11 | R581 | D13 | R741 | A23 |
| C134 | C2 | C624 | B32 | C982 | B17 | J004 | C30 | R216 | B11 | R582 | B24 | R742 | A23 |
| C135 | A2 | C625 | B32 | CF001 | B1 | K701 | C18 | R218 | D10 | R583 | D10 | R745 | D23 |
| C138 | E14 | C626 | B32 | CF131 | B4 | L001 | B24 | R219 | D10 | R584 | D10 | R746 | D23 |
| C161 | E14 | C627 | D31 | CF161 | A4 | L003 | A24 | R220 | A10 | R585 | D10 | R751 | B22 |
| C162 | E14 | C651 | E14 | CF501 | D2 | L01 | B19 | R222 | A10 | R586 | E2 | R752 | B21 |
| C163 | A4 | C652 | E14 | CF702 | E22 | L102 | B2 | R251 | B5 | R615 | A30 | R753 | B21 |
| C164 | A4 | C653 | E27 | CRT | B16 | L104 | C3 | R254 | C5 | R616 | B30 | R754 | B21 |
| C166 | B5 | C654 | D27 | D001 | B23 | L131 | B4 | R256 | C5 | R617 | A30 | R755 | B21 |
| C167 | A6 | C655 | D27 | D002 | A24 | L161 | E13 | R264 | A7 | R618 | B30 | R756 | B21 |
| C169 | B5 | C656 | D27 | D003 | D24 | L162 | A4 | R266 | A7 | R619 | B31 | R757 | E23 |
| C170 | A5 | C657 | A26 | D004 | D24 | L201 | A10 | R271 | B7 | R620 | C32 | R758 | E23 |
| C205 | A10 | C658 | C27 | D201 | D10 | L391 | D14 | R272 | B7 | R621 | A32 | R767 | D19 |
| C207 | A11 | C659 | C27 | D202 | C11 | L521 | D6 | R274 | C8 | R622 | B32 | R768 | C23 |
| C208 | D10 | C660 | C27 | D203 | C11 | L701 | D22 | R275 | B8 | R623 | E30 | R769 | C23 |
| C209 | C11 | C661 | C27 | D252 | C6 | L709 | A22 | R276 | C7 | R625 | D30 | R804 | A13 |
| C210 | B11 | C662 | E26 | D253 | C5 | LF901 | A18 | R277 | C7 | R627 | D31 | R805 | B13 |
| C212 | B10 | C663 | E27 | D254 | B6 | P900 | A17 | R278 | A9 | R651 | D27 | R806 | B14 |
| C214 | B10 | C664 | E26 | D421 | D4 | Q101 | B2 | R290 | A9 | R652 | A25 | R901 | B19 |
| C215 | B11 | C665 | E27 | D422 | D5 | Q131 | B4 | R291 | A9 | R653 | A26 | R921 | C18 |
| C217 | D10 | C666 | E26 | D423 | C21 | Q132 | B5 | R305 | B10 | R654 | E27 | R923 | C19 |
| C252 | C6 | C667 | E26 | D501 | E19 | Q161 | A6 | R306 | B13 | R655 | E27 | R924 | C18 |
| C253 | C6 | C668 | E26 | D511 | C12 | Q201 | A10 | R351 | B7 | R656 | E27 | R925 | C18 |
| C254 | B5 | C669 | B28 | D541 | D13 | Q202 | A10 | R352 | B7 | R658 | E27 | R926 | B19 |
| C255 | B5 | C670 | B28 | D542 | E18 | Q203 | D11 | R361 | C6 | R660 | E27 | R927 | B19 |
| C256 | E14 | C671 | D26 | D543 | E12 | Q261 | A7 | R365 | B10 | R661 | C28 | R952 | B17 |
| C274 | A8 | C672 | C26 | D544 | E13 | Q263 | B8 | R366 | B9 | R662 | B28 | R953 | B17 |
| C276 | C7 | C673 | D26 | D561 | E2 | Q264 | B8 | R367 | B9 | R663 | C28 | R954 | E19 |
| C303 | B10 | C674 | D26 | D562 | E2 | Q271 | A9 | R371 | C14 | R664 | C28 | R955 | E18 |
| C304 | E14 | C675 | D26 | D563 | E1 | Q361 | B9 | R372 | A14 | R665 | D28 | R956 | B18 |
| C305 | C12 | C676 | D26 | D581 | D13 | Q371 | C15 | R373 | B14 | R666 | D27 | R957 | E18 |
| C306 | B13 | C679 | D27 | D582 | D9 | Q372 | A15 | R374 | C14 | R667 | D28 | R958 | E18 |
| C307 | B13 | C680 | D28 | D583 | D2 | Q373 | B15 | R375 | B15 | R668 | D28 | R981 | A17 |
| C309 | B12 | C682 | C29 | D601 | D30 | Q521 | E4 | R376 | B14 | R669 | C29 | RY901 | A18 |
| C356 | B7 | C683 | B29 | D602 | D30 | Q522 | E5 | R377 | C15 | R670 | B29 | RY901 | B18 |
| C374 | C15 | C685 | B26 | D651 | B26 | Q561 | E1 | R378 | B15 | R671 | B25 | S751 | B22 |
| C375 | A15 | C686 | B26 | D652 | B26 | Q562 | D1 | R379 | B15 | R672 | B25 | S752 | B21 |
| C376 | B15 | C687 | B25 | D659 | A26 | Q602 | D31 | R380 | C15 | R673 | C30 | S753 | B21 |
| C377 | C14 | C688 | B25 | D660 | B26 | Q651 | C29 | R381 | A15 | R674 | B30 | S754 | B21 |
| C391 | D14 | C701 | D21 | D704 | C23 | Q652 | C30 | R382 | B15 | R675 | C30 | S755 | B21 |
| C392 | E16 | C703 | C22 | D705 | D18 | Q653 | D29 | R383 | C15 | R676 | B30 | S756 | B22 |
| C401 | D3 | C704 | A2 | D706 | C19 | Q654 | D30 | R384 | A15 | R678 | C29 | SF101 | B2 |
| C402 | E3 | C705 | A22 | D707 | D19 | Q655 | D29 | R385 | B15 | R679 | C30 | SP01 | A32 |
| C403 | D3 | C706 | A22 | D711 | D21 | Q701 | D21 | R386 | C14 | R680 | D29 | SP02 | B32 |
| C421 | D4 | C707 | E22 | D717 | D23 | Q702 | C21 | R387 | A14 | R681 | D30 | T131 | A3 |
| C424 | D4 | C708 | E22 | D718 | D23 | Q703 | C23 | R388 | B14 | R682 | C27 | T161 | A5 |
| C425 | D14 | C709 | D22 | D751 | E23 | Q704 | C23 | R421 | D4 | R683 | A25 | T521 | E5 |
| C426 | D5 | C710 | D21 | D804 | A14 | Q951 | B17 | R422 | D6 | R684 | A25 | T522 | C7 |
| C427 | E5 | C711 | D21 | D805 | A14 | Q952 | D19 | R423 | E5 | R691 | D29 | T901 | D17 |
| C428 | D5 | C712 | D22 | D911 | A19 | Q953 | E18 | R424 | D6 | R701 | D21 | TH901 | A19 |
| C429 | D4 | C714 | D17 | D941 | D17 | R001 | B23 | R425 | D5 | R702 | D21 | V01 | B16 |
| C501 | E19 | C716 | D18 | D942 | D18 | R005 | A24 | R427 | D4 | R703 | D21 | VA901 | A17 |
| C502 | E3 | C717 | D18 | D943 | E17 | R101 | B1 | R428 | D4 | R704 | D22 | X301 | B12 |
| C503 | D2 | C718 | D21 | D944 | E18 | R102 | B1 | R429 | E3 | R705 | C21 | | |
| C505 | D1 | C719 | D19 | D951 | B18 | R103 | B1 | R433 | E5 | R706 | C21 | | |
| C511 | B12 | C720 | D20 | D953 | D18 | R104 | B2 | R441 | D3 | R708 | C22 | | |
| C521 | E4 | C721 | D22 | D957 | E18 | R105 | B2 | R501 | D2 | R709 | C21 | | |
| C522 | E4 | C722 | E22 | D958 | B17 | R106 | B2 | R502 | D3 | R710 | A2 | | |
| C523 | E5 | C723 | E22 | F901 | A17 | R131 | B3 | R505 | D2 | R713 | E22 | | |
| C524 | E6 | C724 | D20 | F902 | A20 | R133 | B4 | R506 | D2 | R714 | A7 | | |
| C525 | C20 | C725 | D19 | FR720 | D18 | R134 | B4 | R507 | D2 | R715 | D21 | | |
| C526 | D6 | C726 | B23 | IC201 | A5 | R135 | B4 | R511 | C12 | R716 | D17 | | |
| C527 | D6 | C735 | C21 | IC201 | B11 | R136 | B5 | R522 | E4 | R717 | D17 | | |
| C543 | D14 | C751 | D19 | IC201 | B3 | R137 | B5 | R523 | E4 | R719 | D21 | | |
| C545 | E12 | C801 | A12 | IC201 | D2 | R138 | B5 | R524 | E4 | R723 | E21 | | |

MISCELLANEOUS ADJUSTMENTS

NOTE: This receiver employs digital customer controls. Unless otherwise indicated all adjustments were performed with the customer controls at center.

B+ CHECK

Tune in a picture. Connect a digital DC voltmeter to pin 4 of IC921. With AC line set to 120VAC, voltage should read 134V ± 2.0V.

HIGH VOLTAGE CHECK

Tune in a picture. Connect a high voltage probe to the CRT anode. High voltage should read 29.5kV to 31.5kV.

COLOR PURITY / CONVERGENCE

CRT and yoke are bonded. Color purity and convergence adjustments are not recommended.

SERVICE MENU

To enter the service menu, press the sleep timer key, and while the message "Sleep Timer 0 Min" is displayed on the screen, press the display and video status buttons together. The service menu is displayed as shown below. While in the service menu, use the menu up and down buttons to select and use the menu left and right buttons to adjust. To exit the service menu, press the exit button.

Service Menu Chart

| | |
|------------|------------|
| PICTURE | SOUND |
| GAME | |
| LOW LIGHT | HIGH LIGHT |
| RF AFC CHK | |
| VCO (CW) | |

SYSTEM CONSTANT

Enter the service menu and press the display and video status buttons together to display the system constant screen. If the system constant screen information differs from the system constant chart displayed below, use the menu up and down buttons to select the setting and the menu left and right buttons to adjust the setting. Press the exit button twice to exit.

System Constant Chart

| | |
|-----------------|-----|
| SYSTEM CONSTANT | |
| MTS | YES |
| VARI. OUT | YES |
| V-CHIP | NO |
| SURROUND | YES |
| S-VIDEO | YES |
| SIZE | 27V |

IC702 MEMORY IC REPLACEMENT

After replacing IC702 the following adustment must be accomplished. Ensure that the proper memory IC with the initial data values is used.

PICTURE MODE

Select Picture Mode from the service menu.

Picture Mode Menu Chart

| No. | Adjustment | Range | Initial Value | On-set Value |
|-----|------------|-------------|---------------|--------------|
| 1 | BRIGHT | 000 ~ 127 | 064 | 063 |
| 2 | PICTURE | 000 ~ 127 | 077 | 094 |
| 3 | TV DTL | 000 ~ 063 | 026 | 026 |
| 4 | TV BPF | 000 / 001 | 000 | 000 |
| 5 | TINT | 000 ~ 127 | 066 | 062 |
| 6 | COLOR | 000 ~ 127 | 050 | 040 |
| 7 | EXT BRI. | -025 ~ +025 | -002 | -002 |
| 8 | EXT PIC. | -025 ~ +025 | ±000 | ±000 |
| 9 | EXT DTL | 000 ~ 063 | 026 | 026 |
| 10 | EXT BPF | 000 / 001 | 000 | 000 |
| 11 | EXT TINT | -025 ~ +025 | +000 | ±000 |
| 12 | EXT COL. | -025 ~ +025 | +001 | +001 |
| 13 | V SIZE | 000 ~ 063 | 038 | 048 |
| 14 | V CENT. | 000 ~ 007 | 000 | 001 |
| 15 | H POS. | 000 ~ 031 | 018 | 018 |
| 16 | OSD HP | 000 ~ 031 | 023 | 023 |
| 17 | OSD VP | 000 ~ 015 | 014 | 014 |
| 18 | H AFC | 000 / 001 | 000 | 000 |
| 19 | RF AGC | 000 ~ 063 | 040 | 040 |

RF AGC

Tune in a picture. Decrease the value of RF AGC (19) until snow appears in the picture. Increase the value of RF AGC (19) until snow disappears from the picture. Check all channels for proper picture and readjust if necessary.

Vertical Size / Vertical Center / Vertical Position

Tune in a crosshatch pattern. Adjust V Size (13) for a slightly underscanned picture. Adjust V Center (14) to center the picture. Adjust V Size (13) for 92% of vertical screen size.

Horizontal Position

Tune in a crosshatch pattern. Adjust the H Position (15) to center the picture.

Sub Bright / Sub Contrast / Sub Color / Sub Tint

Tune in a picture. Adjust Bright (1) for best brightness. Adjust Picture (2) for best contrast. Adjust Color (6) for best color. Adjust Tint (5) for best fleshtone.

SOUND MODE

Select Sound Mode from the service menu. Receive a RF signal.

Sound Mode Menu Chart

| No. | Adjustment | Range | Initial Value | On-set Value |
|-----|------------|-----------|---------------|--------------|
| 1 | IN LEVEL | 000 ~ 063 | 029 | 029 |
| 2 | FH MON. | 000 / 001 | 000 | 000 |
| 3 | ST VCO | 000 ~ 063 | 020 | 034 |
| 4 | PILOT | 000 / 001 | 000 | 000 |
| 5 | FILTER | 000 ~ 063 | 025 | 030 |
| 6 | LOW SEP | 000 ~ 063 | 032 | 023 |
| 7 | HI SEP | 000 ~ 063 | 016 | 016 |
| 8 | 5FH MON | 000 / 001 | 000 | 000 |
| 9 | SAP VCO | 000 ~ 063 | 014 | 036 |
| 10 | FL OFF | 000 ~ 010 | 000 | ±000 |

MTS Input Level / MTS Filter

Select In Level (1) and set to initial value. Select Filter (5) and set to initial value.

MTS Stereo VCO

Set FH Monitor (2) to 1. Connect a frequency counter to pin 2 of connector MPX. Adjust Stereo VCO (3) for 15.73kHz ± .1kHz. Set FH Monitor (2) to 0.

MTS SAP VCO

Connect a 1M ohms resistor between pins 3 and 4 of connector MPX. Set 5FH MON (8) to 1. Connect a frequency counter to pin 2 of connector MPX. Adjust SAP VCO (9) for 78.67kHz ± .5kHz. Set 5FH MON (8) to 0.

MTS Separation

Connect an MTS TV stereo generator to the antenna input. Select pilot, 300Hz audio frequency, and left modulating signal on the generator. Connect an oscilloscope to pin 1 of connector MPX and adjust to display one cycle of the 300Hz signal. Connect oscilloscope to pin 2 of connector MPX. Adjust Low Sep (6) for minimum amplitude of the waveform. Select 8kHz audio frequency on the generator. Adjust HI Sep (7) for minimum amplitude of the waveform.

GAME MODE

Select Game Mode from the service menu.

Game Mode Menu Chart

| No. | Adjustment | Range | Initial Value | On-set Value |
|-----|------------|-----------|---------------|--------------|
| 1 | TINT | -20 ~ +20 | ±0 | ±0 |
| 2 | COLOR | -20 ~ +20 | ±0 | -0 |
| 3 | PICTURE | -20 ~ +20 | -10 | -10 |
| 4 | BRIGHT | -20 ~ +20 | -5 | -5 |
| 5 | DETAIL | -15 ~ +15 | +5 | +5 |

LOW LIGHT MODE

Select Low Light Mode from the service menu.

Low Light Mode Menu Chart

| Adjustment | Range | Initial Value | On-set Value |
|--------------|-----------|---------------|--------------|
| BRIGHT | 000 ~ 127 | 064 | 063 |
| RED CUTOFF | 000 ~ 255 | 020 | 049 |
| GREEN CUTOFF | 000 ~ 255 | 020 | 017 |
| BLUE CUTOFF | 000 ~ 255 | 020 | 045 |

NOTE: While in the Low Light Mode Menu adjustments are performed using the following buttons on the remote:

- | | | |
|----------------------------|----------------------------|----------------------------|
| 1 - Horizontal line. | 4 - Increase red cutoff. | 7 - Decrease red cutoff. |
| 2 - Restores full picture. | 5 - Increase green cutoff. | 8 - Decrease green cutoff. |
| 3 - Exit | 6 - Increase blue cutoff. | 9 - Decrease blue cutoff. |

White Balance (Low Light Adjustment)

Tune in a black and white signal. Press 1 to display a horizontal line. Adjust the screen control for a dim line of one dominant color. Adjust the other two cutoffs for a dim white line. Press 2 for a full picture.

HIGH LIGHT MODE

Select High Light Mode from the service menu.

High Light Mode Menu Chart

| Adjustment | Range | Initial Value | On-set Value |
|-------------|-----------|---------------|--------------|
| GREEN DRIVE | 000 ~ 255 | 128 | 126 |
| BLUE DRIVE | 000 ~ 255 | 128 | 100 |

NOTE: While in the High Light Mode Menu adjustments are performed using the following buttons on the remote:

- | | | |
|----------------------------|---------------------------|---------------------------|
| 1 - Horizontal line. | 5 - Increase green drive. | 8 - Decrease green drive. |
| 2 - Restores full picture. | 6 - Increase blue drive. | 9 - Decrease blue drive. |
| 3 - Exit | | |

White Balance (High Light Adjustment)

Tune in a black and white signal. Adjust green and blue drives for best white balance. Exit Service menu and check white balance at high and low brightness.

RF AFC MODE

Select RF AFC from the service menu.

RF AFC Mode Menu Chart

| Adjustment | Range | Initial Value | On-set Value |
|------------|-----------|---------------|---------------------|
| RF AFC | On / Off | On | On, Do not adjust. |
| Fine | -77 ~ +77 | ±00 | +01, Do not adjust. |

VCO (CW) MODE

Select VCO (CW) Mode from the service menu.

VCO (CW) Mode Menu Chart

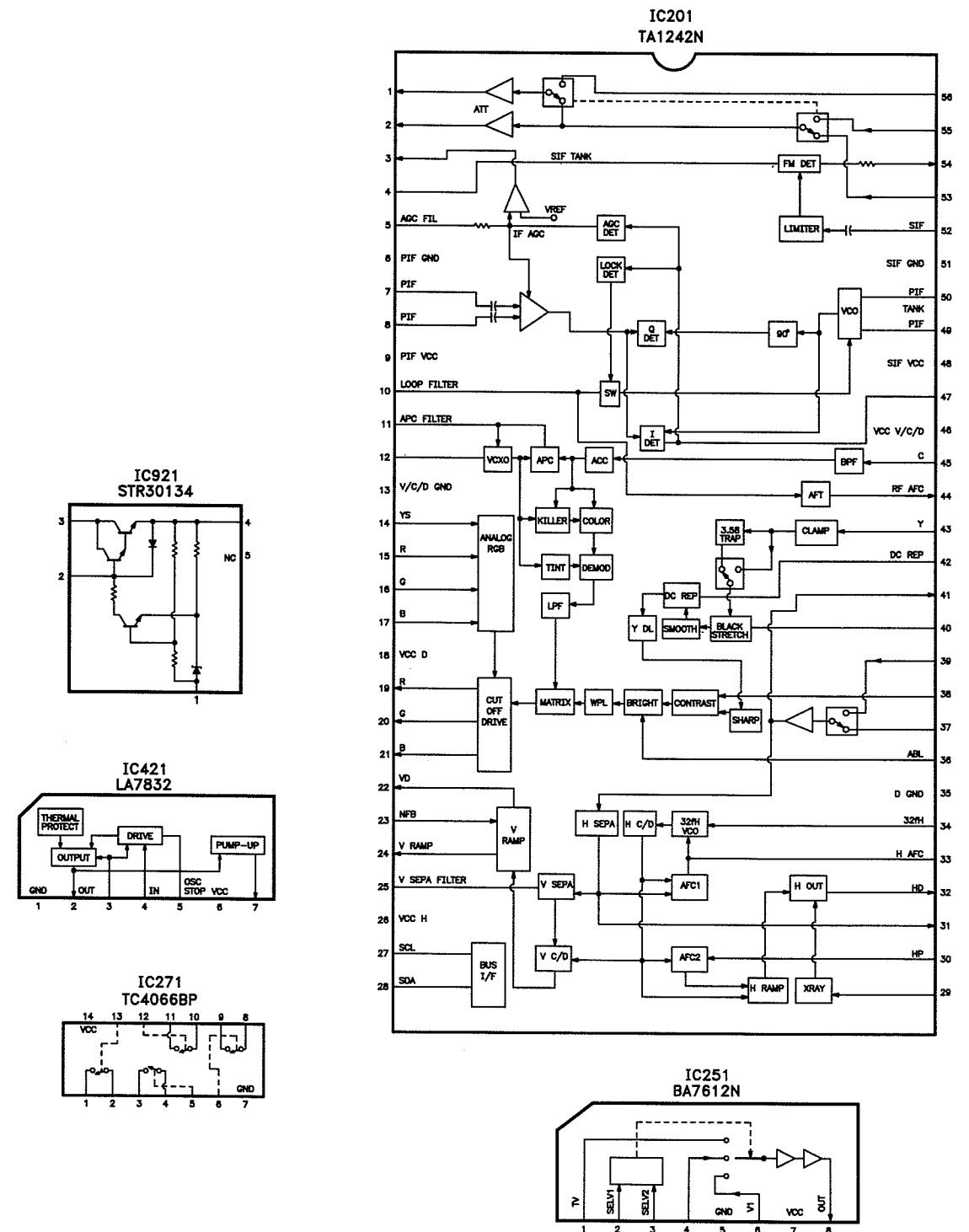
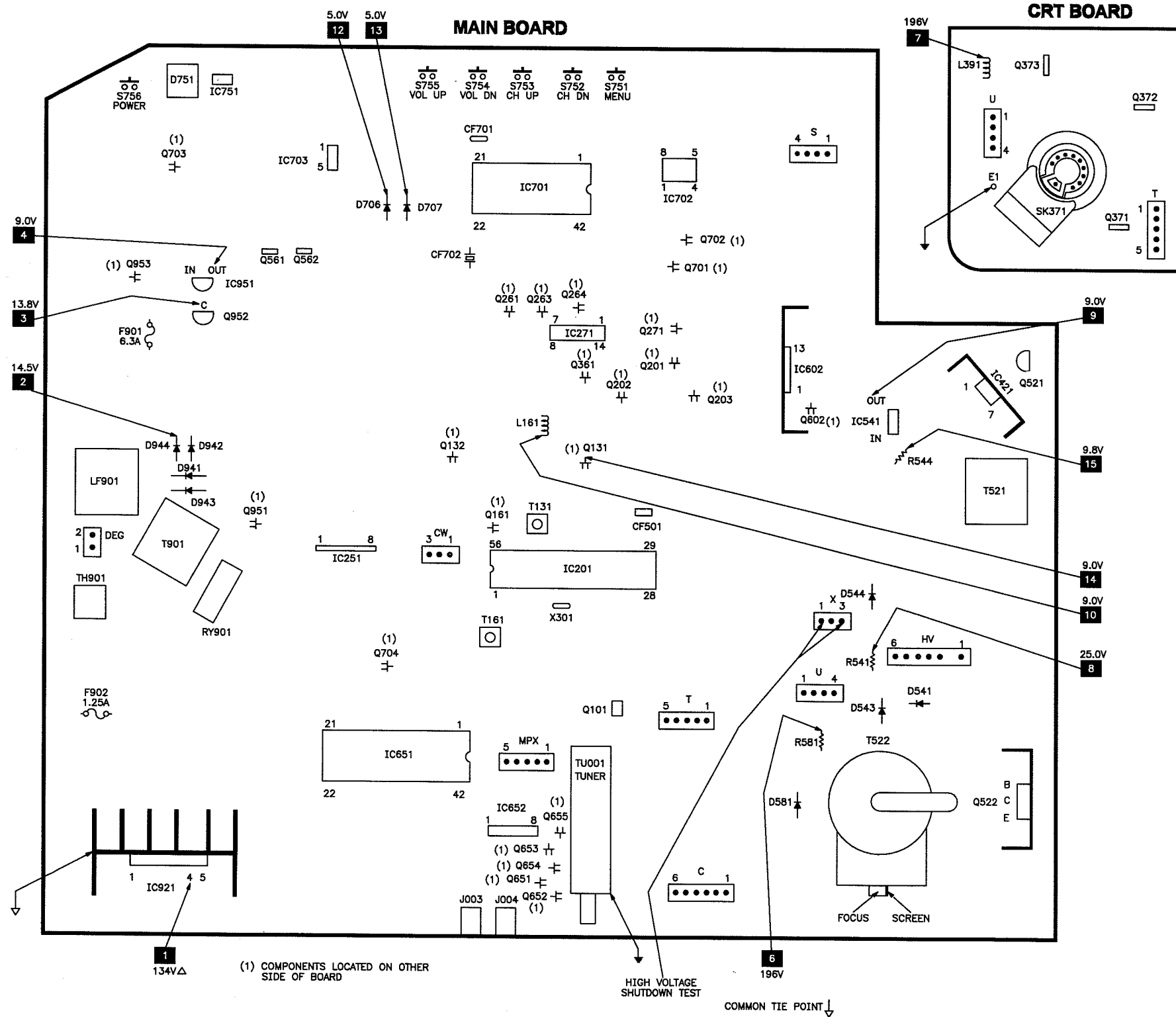
| | |
|-----------------|------------------------|
| TOO HIGH | |
| ABOVE REFERENCE | |
| BELOW REFERENCE | <----- Yellow in color |
| TOO LOW | |
| | |
| SYNC : YES | |

IF VCO

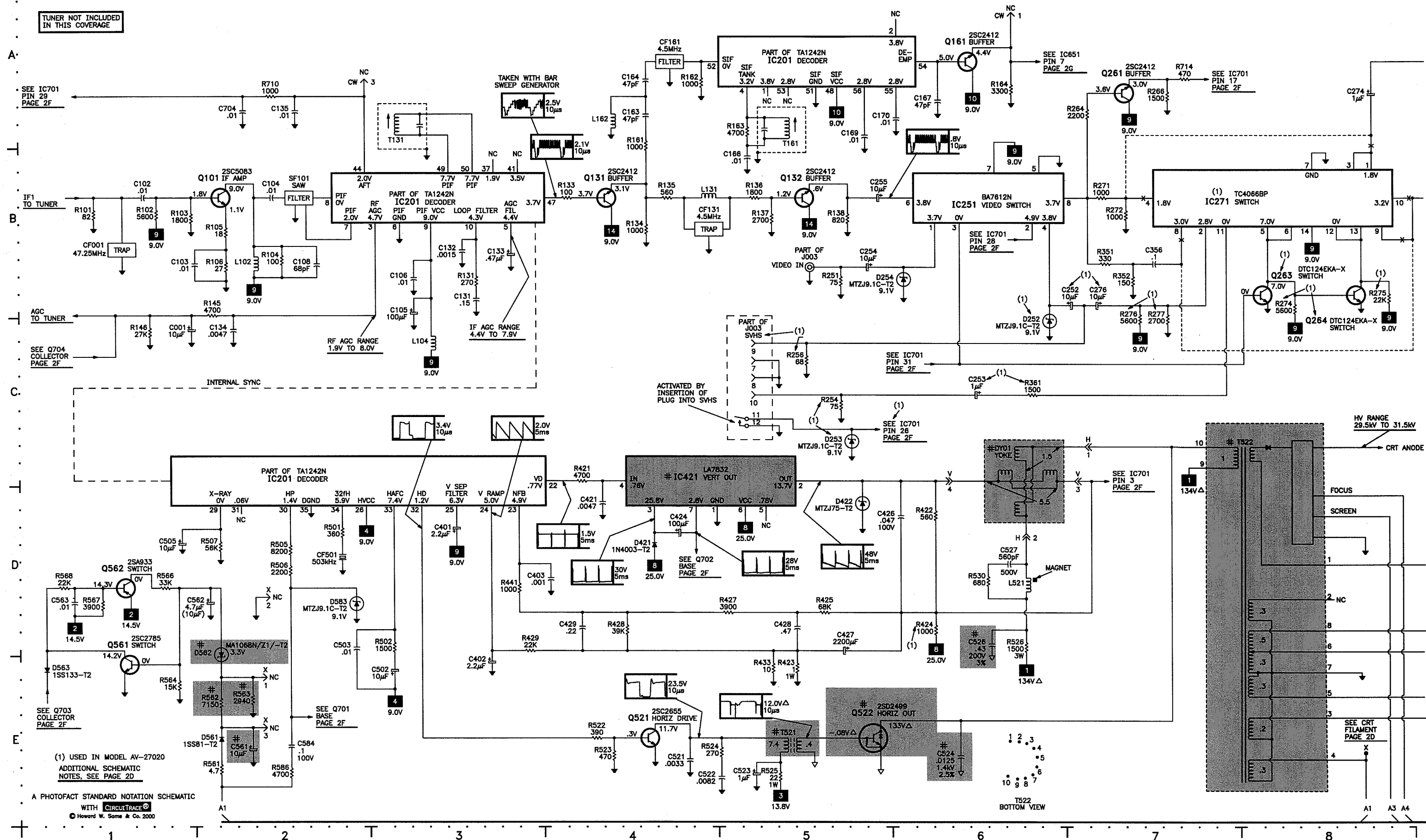
Adjust PIF Transformer T131 until BELOW REFERENCE mark turns yellow in color, confirm that SYNC : YES being shown on the screen. Exit service menu and check the picture quality.

PLACEMENT CHART

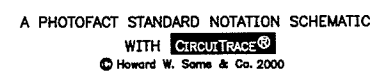
IC FUNCTIONS



**TUNER NOT INCLUDED
IN THIS COVERAGE**



D



E

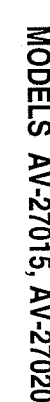


F

**TUNER NOT INCLUDED
IN THIS COVERAGE**

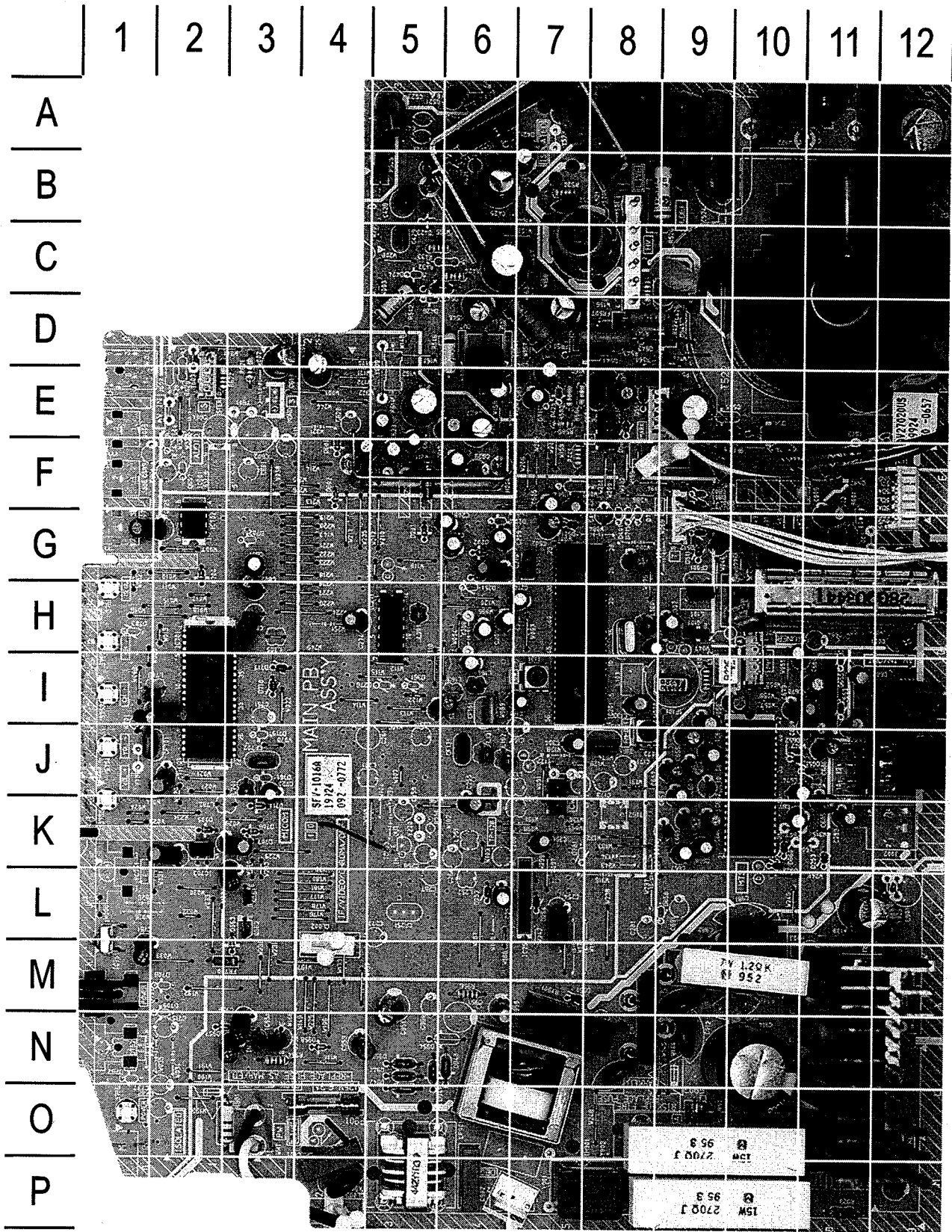


H



SET 4281 Page 2

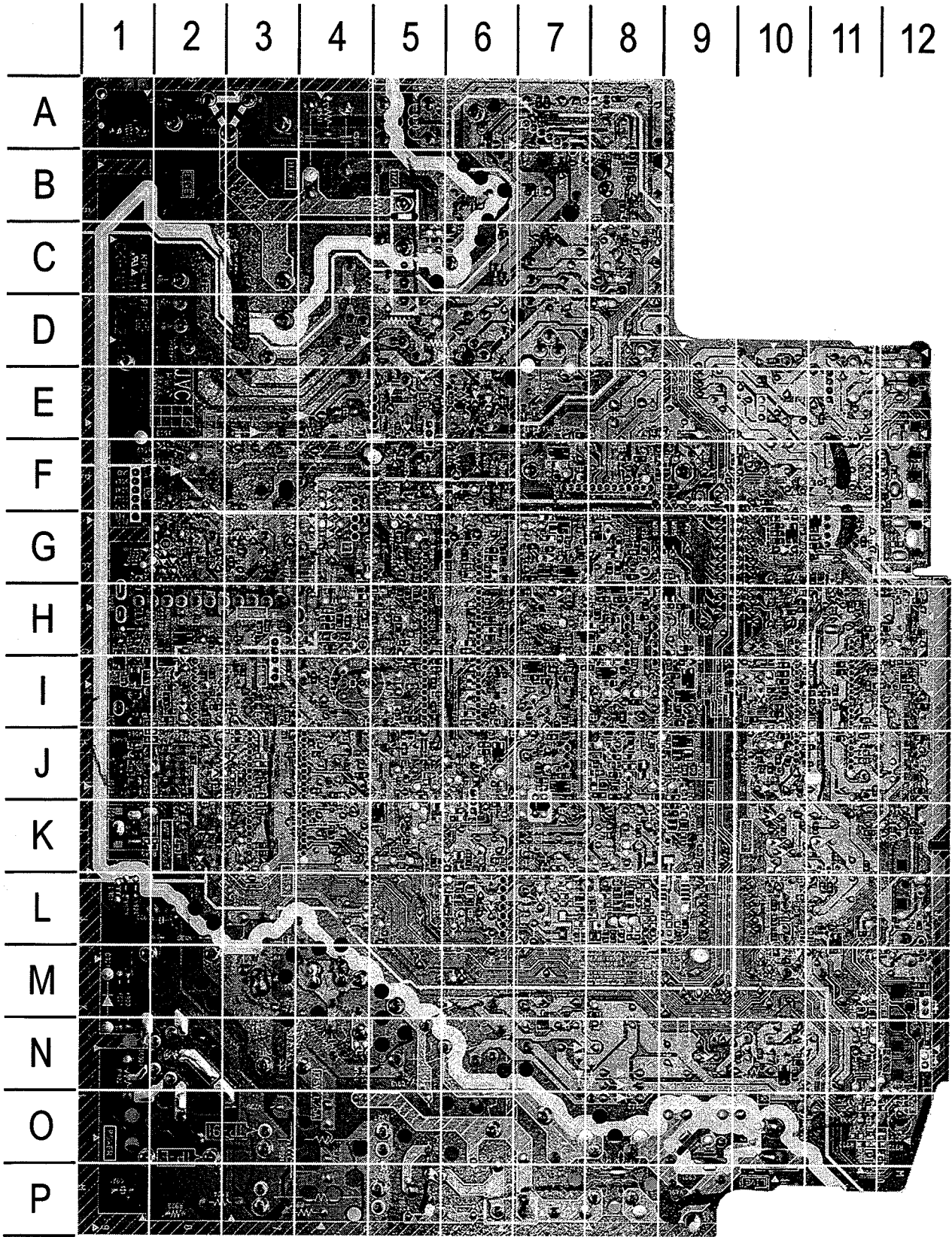
MAIN BOARD - TOP VIEW



MAIN BOARD - TOP VIEW, GRIDTRACE LOCATION GUIDE

| | | | | | | | | | | | | | |
|------|-----|------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|
| C001 | H12 | C524 | A9 | C671 | K10 | CF701 | J2 | D717 | I3 | L102 | I9 | R583 | E7 |
| C003 | G11 | C525 | A12 | C674 | J10 | CF702 | J3 | D718 | I3 | L104 | H8 | R584 | E7 |
| C004 | G11 | C526 | A9 | C679 | I10 | D001 | G10 | D751 | M1 | L131 | J6 | R585 | E7 |
| C006 | F11 | C527 | B7 | C680 | H10 | D002 | G11 | D804 | F9 | L161 | I6 | R586 | F10 |
| C105 | H8 | C543 | D7 | C682 | I11 | D003 | G12 | D805 | G9 | L162 | J6 | R621 | E3 |
| C131 | J8 | C545 | E7 | C683 | I11 | D004 | G12 | D911 | M8 | L201 | H5 | R622 | E2 |
| C133 | I8 | C546 | D6 | C685 | J11 | D201 | G5 | D941 | N5 | L521 | C7 | R901 | M10 |
| C138 | I6 | C548 | E6 | C686 | J11 | D202 | G6 | D942 | O5 | L701 | J3 | R921 | P10 |
| C161 | I7 | C561 | E8 | C707 | I2 | D203 | G6 | D943 | N6 | L709 | I1 | R923 | P11 |
| C207 | H6 | C562 | L3 | C711 | J2 | D252 | L6 | D944 | N5 | LF901 | P5 | R924 | P11 |
| C208 | G6 | C581 | E9 | C716 | K2 | D253 | K11 | D951 | M7 | Q101 | H9 | R925 | P10 |
| C209 | G6 | C583 | E7 | C719 | K3 | D254 | L7 | D953 | N5 | Q521 | A6 | R926 | P9 |
| C210 | G6 | C584 | E8 | C720 | J3 | D421 | C7 | D957 | N3 | Q522 | A11 | R927 | O9 |
| C214 | H7 | C614 | E5 | C724 | H4 | D422 | B6 | D958 | N4 | Q561 | L3 | R954 | N3 |
| C215 | H6 | C616 | F4 | C725 | H4 | D423 | C5 | DEG | P7 | Q562 | L3 | R956 | M6 |
| C217 | G6 | C617 | F6 | C751 | M1 | D501 | G7 | F901 | O4 | Q952 | N3 | R981 | O3 |
| C252 | L6 | C618 | E6 | C801 | G3 | D511 | G9 | F902 | O9 | R001 | G11 | RY901 | N7 |
| C253 | K11 | C619 | D3 | C802 | H3 | D541 | C8 | FR720 | M3 | R005 | G10 | S | E2 |
| C254 | L7 | C622 | E5 | C803 | H3 | D542 | C5 | H | C8 | R104 | I9 | S751 | H1 |
| C255 | K6 | C623 | F5 | C901 | P4 | D543 | D9 | IC201 | H7 | R422 | C8 | S752 | H1 |
| C256 | K7 | C624 | F5 | C902 | P6 | D544 | D8 | IC251 | L7 | R423 | B6 | S753 | I1 |
| C274 | H4 | C625 | D4 | C911 | M9 | D561 | E8 | IC271 | H5 | R424 | C6 | S754 | J1 |
| C276 | I6 | C627 | E6 | C912 | N9 | D562 | E8 | IC421 | A6 | R433 | C5 | S755 | K1 |
| C304 | J7 | C652 | I10 | C913 | N8 | D581 | E10 | IC541 | D6 | R441 | F7 | S756 | O1 |
| C307 | H9 | C653 | I9 | C914 | N10 | D582 | F11 | IC602 | F5 | R511 | G10 | SF101 | I9 |
| C401 | G8 | C655 | J9 | C921 | P12 | D583 | E8 | IC651 | J10 | R524 | A6 | T | G9 |
| C402 | G8 | C656 | J9 | C922 | L12 | D601 | F4 | IC652 | I11 | R525 | B5 | T131 | I7 |
| C424 | B7 | C657 | J9 | C951 | M5 | D602 | F4 | IC701 | I2 | R526 | B9 | T161 | J8 |
| C425 | B6 | C659 | J9 | C953 | N4 | D651 | J11 | IC702 | G2 | R530 | B7 | T521 | A8 |
| C426 | C9 | C662 | J9 | C956 | N3 | D652 | J11 | IC703 | K2 | R541 | D8 | T522 | C11 |
| C427 | C6 | C663 | J9 | C958 | N6 | D653 | M3 | IC751 | M1 | R542 | D5 | T901 | O7 |
| C428 | B5 | C664 | K9 | C959 | N3 | D659 | K10 | IC921 | N12 | R543 | D8 | TH901 | P8 |
| C429 | C5 | C665 | K9 | C981 | L10 | D660 | K10 | IC951 | N3 | R544 | D7 | V | C8 |
| C501 | F7 | C666 | K9 | C982 | L10 | D704 | G2 | J003 | J12 | R546 | D6 | VA901 | P4 |
| C502 | G7 | C667 | K9 | CF001 | H9 | D705 | K2 | J004 | I12 | R561 | D9 | X301 | H8 |
| C505 | F7 | C668 | K9 | CF131 | J6 | D706 | K3 | K701 | I1 | R571 | E8 | | |
| C511 | G9 | C669 | I11 | CF161 | I6 | D707 | K3 | L001 | G11 | R581 | E9 | | |
| C523 | A5 | C670 | I11 | CF501 | G7 | D711 | K3 | L003 | G10 | R582 | F9 | | |

MAIN BOARD - BOTTOM VIEW



MAIN BOARD - BOTTOM VIEW, GRIDTRACE LOCATION GUIDE

| | | | | | | | | | | | | | |
|------|-----|------|-----|------|-----|------|----|------|-----|------|-----|------|-----|
| C005 | G3 | C658 | J3 | Q361 | I8 | R210 | G7 | R501 | G6 | R668 | I2 | R728 | I11 |
| C011 | H3 | C660 | J3 | Q602 | F7 | R211 | G7 | R502 | G6 | R669 | I2 | R729 | I11 |
| C012 | G2 | C661 | J4 | Q651 | I1 | R212 | G7 | R505 | G6 | R670 | I1 | R730 | I10 |
| C101 | H4 | C672 | K3 | Q652 | I1 | R213 | G8 | R506 | G6 | R671 | J2 | R732 | I10 |
| C102 | H4 | C673 | K3 | Q653 | I2 | R215 | H6 | R507 | G6 | R672 | J2 | R733 | J10 |
| C103 | H4 | C675 | J3 | Q654 | I1 | R216 | H6 | R522 | A8 | R673 | I2 | R734 | I10 |
| C104 | I4 | C676 | J3 | Q655 | H2 | R218 | G7 | R523 | A8 | R674 | I2 | R735 | I10 |
| C106 | I5 | C687 | J1 | Q701 | G10 | R219 | G7 | R562 | E5 | R675 | J2 | R736 | H10 |
| C108 | I4 | C688 | J1 | Q702 | G11 | R220 | H8 | R563 | E5 | R676 | I2 | R737 | H10 |
| C132 | I5 | C701 | G10 | Q703 | L11 | R222 | H8 | R564 | L10 | R678 | I1 | R738 | H10 |
| C134 | I5 | C703 | G11 | Q704 | K5 | R251 | K2 | R566 | L10 | R679 | I1 | R739 | H10 |
| C135 | H6 | C704 | J11 | Q951 | N7 | R254 | J2 | R567 | L10 | R680 | H2 | R740 | G10 |
| C162 | I7 | C705 | I11 | Q953 | N10 | R256 | J2 | R568 | M10 | R681 | H2 | R741 | G11 |
| C163 | I7 | C706 | I11 | R101 | H4 | R264 | I9 | R615 | F9 | R682 | J4 | R742 | G11 |
| C164 | J7 | C708 | J11 | R102 | H4 | R266 | I9 | R616 | F8 | R683 | K3 | R745 | I10 |
| C166 | J5 | C709 | J11 | R103 | H4 | R271 | J8 | R617 | F9 | R684 | K3 | R746 | I10 |
| C167 | J6 | C710 | J11 | R105 | H4 | R272 | J8 | R618 | F8 | R691 | H2 | R751 | H12 |
| C169 | I6 | C712 | J11 | R106 | H4 | R274 | I9 | R619 | E7 | R701 | F10 | R752 | H12 |
| C170 | I6 | C714 | I12 | R131 | I5 | R275 | I9 | R620 | F8 | R702 | G10 | R753 | I12 |
| C205 | H8 | C717 | L11 | R133 | I7 | R276 | H8 | R623 | H10 | R703 | G10 | R754 | K12 |
| C212 | G8 | C718 | L11 | R134 | I7 | R277 | H8 | R625 | F7 | R704 | G11 | R755 | J12 |
| C303 | H7 | C721 | J11 | R135 | I7 | R278 | H9 | R627 | F7 | R705 | F10 | R756 | J12 |
| C305 | G6 | C722 | J10 | R136 | J7 | R290 | H9 | R651 | J4 | R706 | G10 | R757 | M12 |
| C306 | H5 | C723 | J10 | R137 | J7 | R291 | H9 | R652 | J4 | R708 | G11 | R758 | M12 |
| C309 | G6 | C726 | I10 | R138 | J7 | R305 | I6 | R653 | J4 | R709 | H12 | R767 | K11 |
| C356 | I8 | C735 | H11 | R142 | I7 | R306 | H4 | R654 | K4 | R710 | I9 | R768 | L11 |
| C403 | G5 | C954 | N10 | R145 | I5 | R351 | J8 | R655 | J4 | R713 | J11 | R769 | K11 |
| C421 | C8 | Q131 | I7 | R146 | H1 | R352 | J8 | R656 | K3 | R714 | K11 | R804 | H5 |
| C503 | G6 | Q132 | J7 | R161 | I7 | R361 | I8 | R658 | K3 | R715 | J11 | R805 | H5 |
| C521 | A7 | Q161 | J6 | R162 | I7 | R365 | I8 | R660 | K4 | R716 | I12 | R806 | H5 |
| C522 | A7 | Q201 | H8 | R163 | J5 | R366 | H8 | R661 | I2 | R717 | I12 | R952 | M7 |
| C563 | M10 | Q202 | H7 | R164 | J6 | R367 | I8 | R662 | I2 | R719 | J10 | R953 | M8 |
| C582 | F1 | Q203 | G7 | R203 | G8 | R421 | C8 | R663 | I2 | R723 | J10 | R955 | N10 |
| C620 | D10 | Q261 | J9 | R204 | H8 | R425 | B8 | R664 | I2 | R724 | I11 | R957 | N10 |
| C626 | E11 | Q263 | I9 | R205 | H8 | R427 | B8 | R665 | I2 | R725 | I11 | R958 | N10 |
| C651 | I3 | Q264 | I9 | R208 | G7 | R428 | C8 | R666 | I3 | R726 | I11 | | |
| C654 | J3 | Q271 | H9 | R209 | G7 | R429 | C8 | R667 | I3 | R727 | H11 | | |

JVC

MODELS AV-27015, AV-27020

PARTS LIST

SEMICONDUCTORS

(Select the replacement that gives the best results.)

| Item No. | Type No. | Mfr. Part No. | ECG Part No. | NTE Part No. |
|--------------|------------|-----------------|--------------|--------------|
| D001 | - | MTZJ33B-T2 | - | - |
| D002 | - | MTZJ5.1B-T2 | - | - |
| D003, 04 | - | MTZJ9.1C-T2 | - | - |
| D201, 02, 03 | - | ISS133-T2 | ECG177 | NTE177 |
| D252, 53 (1) | - | MTZJ9.1C-T2 | - | - |
| D254 | - | MTZJ9.1C-T2 | - | - |
| D421 | - | 1N4003-T2 | ECG116 | NTE116 |
| D422 | - | MTZJ75-T2 | - | - |
| D423 | - | ISS133-T2 | ECG177 | NTE177 |
| D501 | - | MTZJ9.1C-T2 | - | - |
| D511 | - | MTZJ3.3A-T2 | - | - |
| D541 | - | RGP10J-5025-T3 | - | - |
| D542 | - | 1SR35-400A-T2 | - | - |
| D543, 44 | - | RGP10J-5025-T3 | - | - |
| D561 | - | ISS81-T2 | ECG177 | NTE177 |
| # D562 | - | MA4068N/Z1/-T2 | - | - |
| D563 | - | ISS133-T2 | ECG177 | NTE177 |
| # D581 | - | RH1S-T3 | ECG552 | NTE552 |
| D582 | - | RGP10J-5025-T3 | - | - |
| D583 | - | MTZJ9.1C-T2 | - | - |
| D601, 02 | - | ISS133-T2 | ECG177 | NTE177 |
| D651, 52 | - | MTZJ9.1C-T2 | - | - |
| D659, 60 | - | MTZJ9.1C-T2 | - | - |
| D704 Thru | - | | | |
| D707 | - | ISS133-T2 | ECG177 | NTE177 |
| D711 | - | ISS133-T2 | ECG177 | NTE177 |
| D717, 18 | - | MTZJ9.1C-T2 | - | - |
| D751 | - | SLR-342VR3F | - | - |
| D804 | - | MTZJ5.1B-T2 | - | - |
| D805 | - | ISS133-T2 | ECG177 | NTE177 |
| # D911 | - | D3SB60 | ECG5310 | NTE5310 |
| D941 Thru | - | | | |
| D944 | - | 1SR35-400A-T2 | - | - |
| D951 | - | MTZJ12C-T2 | - | - |
| D953 | - | 1SR35-400A-T2 | - | - |
| D957, 58 | - | ISS133-T2 | ECG177 | NTE177 |
| IC201 | - | TA1242N | - | - |
| IC251 | - | BA7612N | - | - |
| IC271 (1) | - | TC4066BP | ECG4066B | NTE4066B |
| # IC421 | - | LA7832 | - | - |
| IC541 | - | AN7809F | ECG1966 | - |
| # IC602 | - | LA4446 | - | - |
| IC651 | - | UPC1851BCU | - | - |
| IC652 (1) | - | BA15218N | ECG778S | NTE778S |
| IC701 | - | M37272M8-134SP | ECG7051 | NTE7051 |
| IC702 | 24C02PC | AT24C02AV20020 | - | - |
| IC703 | 78LR05 | 78LR05E-MA | ECG977 | - |
| # IC921 | - | STR30134 | ECG1778 | NTE1778 |
| IC951 | TA78L009AP | TA78L009AP-T | ECG1902 | NTE1902 |
| Q101 | 2SC5083 | 2SC5083/L-P/-T | - | - |
| Q131, 32 | 2SC2412 | 2SC2412K/QR/-X | ECG2408 | NTE2408 |
| Q161 | 2SC2412 | 2SC2412K/QR/-X | ECG2408 | NTE2408 |
| Q201, 02, 03 | 2SC2412 | 2SC2412K/QR/-X | ECG2408 | NTE2408 |
| Q261 | 2SC2412 | 2SC2412K/QR/-X | ECG2408 | NTE2408 |
| Q263, 64 (1) | - | DTC124EKA-X | ECG2357 | NTE2357 |
| Q271, 361 | 2SC2412 | 2SC2412K/QR/-X | ECG2408 | NTE2408 |
| Q371, 72, 73 | 2SC4544 | 2SC4544-LB | ECG376% | NTE376% |
| Q521 | 2SC2655Y | 2SC2655/Y/-T | ECG2363 | NTE293 |
| # Q522 | 2SD2499 | 2SD2499-LB | - | - |
| Q561 | 2SC2785 | 2SC2785/JH/-T | ECG2361 | NTE2361 |
| Q562 | 2SA933 | 2SA933AS/QR/-T | ECG290A | NTE290A |
| Q602 | DTC323 | DTC323TK-X | - | - |
| Q651 Thru | | | | |
| Q654 (1) | 2SC2412 | 2SC2412K/QR/-X | ECG2408 | NTE2408 |
| Q955 (1) | 2SA1037 | 2SA1037AK/QR/-X | ECG2409 | NTE2409 |
| Q701, 02, 03 | 2SC2412 | 2SC2412K/QR/-X | ECG2408 | NTE2408 |
| Q704 | DTC323 | DTC323TK-X | - | - |
| Q951 | 2SC2412 | 2SC2412K/QR/-X | ECG2408 | NTE2408 |
| Q952 | 2SA966 | 2SA966/OY/-T | ECG294 | NTE294 |
| Q953 | 2SC2412 | 2SC2412K/QR/-X | ECG2408 | NTE2408 |

For SAFETY use only equivalent replacement part.
(1) Used in model AV-27020.
% Use insulating hardware supplied with replacement.

CAPACITORS & ELECTROLYTICS

| Item No. | Rating | Mfr. Part No. |
|----------------|------------------------|---------------|
| # C392 | .001 +80% -20% 3kV | QCZ0121-102 |
| C402 | 2.2µF 10% 16V Tantalum | QBHC1CK-225Z |
| # C524 | .0125 2.5% 1.4kV | QFZ0117-1252 |
| # C525 | 100µF 20% 160V | QEZ0203-107 |
| # C526 | .43 3% 200V | QFZ0119-434 |
| # C561 | 10µF 20% 50V | QETN1HM-106Z |
| # C581 | 10µF 20% 250V | QETN2EM-106Z |
| C616, 22 | .47µF 20% 50V NP | QENC1HM-474Z |
| C655 | 4.7µF 20% 50V NP | QENC1HM-475Z |
| C656 | 1µF 20% 50V NP | QENC1HM-105Z |
| C662 | 3.3µF 10% 16V Tantalum | QBTC1CK-335Z |
| C664 | 10µF 10% 16V Tantalum | QBTC1CK-106Z |
| C669, 70 (1) | 1µF 20% 50V NP | QENC1HM-105Z |
| C801, 02, 03 | .47µF 20% 50V NP | QENC1HM-474Z |
| # C901 | .1 20% 275VAC | QFZ9040-104 |
| # C902 | .047 20% 275VAC | QFZ9040-473 |
| # C911, 12, 13 | .0047 20% 125VAC | QCZ9074-472 |
| # C914 | 470µF 20% 200V | QEZ0429-477 |
| # C981, 82 | .01 20% 250VAC | - |
| | .01 20% 125VAC | QCZ9074-103 |

For SAFETY use only equivalent replacement part.
(1) Used in model AV-27020.

COILS & TRANSFORMERS

| Item No. | Function/Rating | Mfr. Part No. |
|------------|------------------------------|---------------|
| DY01 (2) | Yoke Horiz 1.3mH Vert 18.3mH | - |
| K701 | Ferrite Bead | QQR0582-001Z |
| L001 | 15µH | QQL03BJ-150Z |
| L003 | 5.6µH | QQL03BJ-5R6 |
| # L01 | Degaussing | CE41329-00DJB |
| L102 | - | QQLZ014-R22 |
| L104 | 68µH | QQL03BJ-680Z |
| L131 | 22µH | QQL03BJ-220Z |
| L161 | 68µH | QQL03BJ-680Z |
| L162 | 39µH | QQL03BJ-390Z |
| L201 | 33µH | QQL03BJ-330Z |
| L391 | 39µH | QQL03BJ-390Z |
| L521 | Horizontal Linearity | CELL004-001 |
| L701 | 4.7µH | QQL03BJ-4R7Z |
| L709 | 10µH | QQL03BJ-100Z |
| # LF901 | Line Filter | QQR0864-002 |
| T131 | PIF | QQR0907-001 |
| T161 | SIF | CELT003-109J3 |
| # T521 | Horizontal Drive | CE41106-00CJ1 |
| # T522 (1) | Horizontal Output | QQH0028-001 |
| # T901 | Power | QQT0198-001 |

For SAFETY use only equivalent replacement part.
(1) Focus and screen controls are part of T522.
(2) Bonded part of CRT.

Important Parts Information

- The parts listed here are those not usually available from a well-stocked supply cabinet or bin.
- Where items may be replaced with equivalent parts, several alternates are shown from participating vendors.
- On the parts lists, safety items are marked with a # to remind you that only exact replacements are recommended for these items.
- When ordering parts, state the model number, part number, and description.

Obtaining Parts

Many of these parts are available from your local Sams authorized distributor or the manufacturer of the equipment. Call Sams for the name of your nearest distributor:

800-428-7267

Or consult the Sams *Annual Index* for the address of the original equipment manufacturer.

Participating Vendors

Information on test equipment and replacement parts is listed in these pages for the following participating vendors. Consult the Sams *Annual Index* for their current address.

- Custom Components Corporation (Chek-A-Color)
- NTE Electronics, Inc. (NTE)
- Philips ECG Company (ECG)
- Sencore, Inc.
- Terrell & Nobis (TNI Electronics)

PARTS LIST continued

CONTROLS & RESISTORS

| Item No. | Function/Rating | Mfr. Part No. | NTE Part No. |
|------------|----------------------|---------------|--------------|
| # FR720 | 82 5% 1/4W Fusible | QRZ9017-820 | - |
| R526 | 1500 5% 3W | QRL039J-152 | 3W215 |
| R543, 44 | 1 5% 3W | QRT039J-1R0 | 3W1D0 |
| # R562 | 7150 1/10W | NRZ0032-7151X | - |
| # R563 | 2940 1/10W | NRZ0032-2941X | - |
| # R901 | 1.2 10% 7W Wirewound | QRF074K-1R2 | - |
| # R921 | 2.7 5% 2W | QRX029J-2R7 | 2W2D7 |
| # R926, 27 | 270 5% 15W Wirewound | QRF154J-271 | - |
| # R981 | 2.7M 10% 1/2W | QRZ9041-275 | HW527 |
| # TH901 | 5.1 Cold PTC | CEKP007-002 | - |
| # VA901 | Varistor | ERZV10V361CS | - |

For SAFETY use only equivalent replacement part.

MISCELLANEOUS

| Item No. | Description | Mfr. Part No. | Notes |
|-------------|-----------------|----------------|---------------------------|
| CF001 | Trap | FTP47.25MF | 47.25MHz |
| CF131 | Trap | CE41505-001 | 4.5MHz |
| CF161 | Filter | SFSH4.5MCB | 4.5MHz |
| CF501 | Resonator | CSB503F30-T2 | 503kHz |
| CF701 | Resonator | CST8.00MTW | - |
| CF702 | Resonator | QAX0428-001 | - |
| # F901 | Fuse | QMF0007-6R3J1 | 6.3Amp, 125V, Fast Acting |
| # F902 | Fuse | QMF0007-1R25J1 | 1.25A, 125V, Fast Acting |
| FC901 | Fuse Holder | CEMG002-001Z | For F901 (2 Used) |
| FC902 | Fuse Holder | CEMG002-001Z | For F902 (2 Used) |
| IC751 | Receiver | GP1U281Q | Remote |
| J003 (1) | Jack | QNZ0117-001 | Assembly |
| J003 (2) | Jack | QNN0182-001 | Assembly |
| J004 (1) | Jack | QNN0181-001 | Assembly |
| # P900 | Line Cord | QMPD200-200-JC | AC, Polarized |
| # RY901 | Relay | QSK0083-001 | Power |
| S751 | Switch | QSW0619-003Z | Menu |
| S752 | Switch | QSW0619-003Z | Channel Down |
| S753 | Switch | QSW0619-003Z | Channel Up |
| S754 | Switch | QSW0619-003Z | Volume Down |
| S755 | Switch | QSW0619-003Z | Volume Up |
| S756 | Switch | QSW0619-003Z | Power |
| SF101 | Filter | CE42589-201 | SAW |
| # SK371 | Socket | CE42535-001J1 | CRT |
| # SP01, 02 | Speaker | CEBSS09D-03KJ2 | 2" X 3 1/2", 8 ohm, 5W |
| # TU001 (3) | Tuner | QAU0069-001 | UHF/VHF, ENV56D44G3 |
| # V01 | CRT | A68ADT25X01 | - |
| X301 | Crystal | QAX0310-001Z | 3.58MHz |
| | PC Board (1) | SFV-1016A-M2 | Main |
| | PC Board (2) | SFV-1017A-M2 | Main |
| | Transmitter (1) | RM-C345-1A | Remote |
| | Transmitter (2) | EM-C241-1H | Remote |

For SAFETY use only equivalent replacement part.

- (1) Used in model AV-27020.
(2) Used in model AV-27015.
(3) Contact TNI Electronics for replacement; order by part number on tuner.

CABINET PARTS

| Item | Mfr. Part No. |
|------|---------------|
|------|---------------|

Models AV-27015, AV-27020

| | |
|--------------------|----------------|
| Badge (JVC) | CM48006-A03-H |
| Buttons | LC30271-001A-A |
| Button Power | LC30376-001A-A |
| # Cabinet Front | LC10081-001E-A |
| # Cabinet Rear (1) | LC10082-001D-A |
| # Cabinet Rear (2) | LC10082-002A-A |
| IR Window | LC30191-001C-A |

For SAFETY use only equivalent replacement part.

- (1) Used in model AV-27020.
(2) Used in model AV-27015.

TEST EQUIPMENT

Test equipment listed by participating manufacturer illustrates typical or equivalent equipment used by Sams engineers to obtain measurements. This equipment is compatible with most types used by field service technicians.

| Equipment | Sencore No. |
|-----------------------|-------------|
| Oscilloscope | SC3100 |
| Generators | |
| RGB | CM2125 |
| Multiburst Signal | VG91 |
| Color Bar | VG91 |
| TV Stereo | VG91 |
| Digital VOM | SC3100 |
| Frequency Meter | SC3100 |
| Hi-Voltage Probe | HP200 |
| Accessory Probes | TP212 |
| Isolation Transformer | PR570 |
| Capacitance Analyzer | LC102 |
| CRT Analyzer | CR7000 |
| AC Leakage Tester | PR570 |
| Inductance Analyzer | LC102 |
| Flyback Yoke Tester | TVA92 |
| Field Strength Meter | SL753 |
| Transistor Tester | TF46 |
| Horizontal Analyzer | HA-2500 |
| Video Analyzer | VG91, TVA92 |

JVC

MODELS AV-27015, AV-27020