

COLOR TELEVISION SERVICE MANUAL

CHASSIS C-110 SERIES

MODEL: DCB-408FA, (C-111A)
DCB-2007FA (C-111B)

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ELECTRICAL SPECIFICATIONS

Antenna Input Impedance	300 ohm balanced type for UHF/VHF 75 ohm Unbalanced type for VHF
Tuning Ranges	VHF - Channels 2 ~ 13 UHF - Channels 14 ~ 83 CATV- Channels A5 thru A1 A thru I J thru W W + 1 thru W + 29
Intermediate Frequencies	Picture IF Carrier Frequency 45.75MHz Sound IF Carrier Frequency 41.25MHz Color Sub-Carrier Frequency 42.17MHz
Power Input	AC 120 volts (60Hz)
Power Rating	88 Watts (DCB-408FA) 98 Watts (DCB-2007FA)
Picture Tube	370 DJB22-TC17(Y) DCB408FA 510 LCB22-TC16(Y) DCB-2007FA
Cabinet	Plastic Portable

WARNING

The Chassis in the receiver is cold with Isolation type switching mode power supply. Please be careful between isolation part and nonisolation part, when servicing this chassis.

In order to prevent electric shock, do not remove cover.

No user-serviceable parts inside. Refer servicing to qualified service personnel.

■ X-RAY RADIATION PRECAUTION

1. Excessive high voltage can produce potentially hazardous X-RAY RADIATION. To avoid such hazards, the high voltage must not be above the specified limit. The nominal value of the high voltage of this receiver is 24.0kv at zero beam current (minimum brightness) under a 120V AC power source. The high voltage must not, under any circumstances, exceed 26.7kv. Each time a receiver requires servicing, the high voltage should be checked following the HIGH VOLTAGE CHECK procedure on page (page 4) of this manual. It is recommended the reading of the high voltage be recorded as a part of the service record. It is important to use an accurate and reliable high voltage meter.
2. This receiver is equipped with X-RADIATION PROTECTION circuit which prevents the receiver from producing

an excessively high voltage even if the B+ voltage increases abnormally. Each time the receiver is serviced, X-RADIATION PROTECTION circuit must be checked to determine that the circuit is properly functioning, following the X-RADIATION PROTECTION CIRCUIT CHECK procedure on page 4 of this manual.

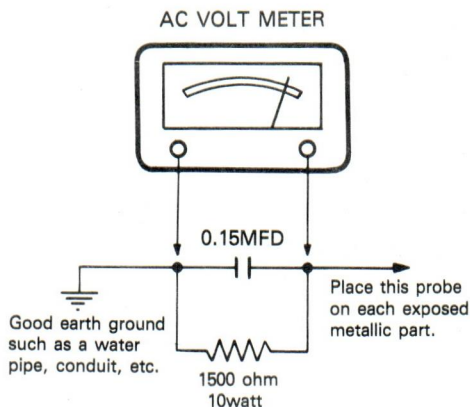
3. The only source of X-RAY RADIATION in this TV receiver is the picture tube. For continued X-RAY RADIATION protection, the replacement tube must be exactly the same type tube as specified in the parts list.
4. Some parts in this receiver have special safety-related characteristics for X-RAY RADIATION protection. For continued safety, parts replacement should be undertaken only after referring to the PRODUCT SAFETY NOTICE below.

■ SAFETY PRECAUTION

WARNING : Service should not be attempted by anyone unfamiliar with the necessary precautions on this receiver. The following are the necessary precautions to be observed before servicing.

1. Since the chassis of this receiver has hazardous potential to ground whenever the receiver is plugged in (floating chassis), an isolation transformer must be used during service to avoid shock hazard.
2. Always discharge the picture tube anode to the CRT conductive coating before handling the picture tube. The picture tube is highly evacuated and if broken, glass fragments will be violently expelled. Use shatterproof goggles and keep picture tube away from the body while handling.
3. When replacing a chassis in the cabinet, always be certain that all the protective devices are put back in place, such as; non-metallic control knobs, insulating covers, shields, isolation resistor-capacitor network. etc.
4. Before returning the set to the customer, always perform an AC leakage current check on the exposed metallic parts of the cabinet, such as antennas, terminals, screwheads, metal overlays, control shafts etc. to be sure the set is safe to operate without danger of electrical shock. Plug the AC line cord directly into a 120V AC outlet (do not use a line isolation transformer during this check). Use an AC voltmeter having 5000 ohms per volt or more sensitivity in the following manner:

Connect a 1500 ohm 10 watt resistor, paralleled by a 0.15mfd, AC type capacitor, between a known good earth ground (water pipe, conduit, etc.) and the exposed metallic parts, one at a time. Measure the AC voltage across the combination of 1500 ohm resistor and 0.15 mfd capacitor. Reverse the AC plug at the AC outlet and repeat AC voltage measurements for each exposed metallic part. Voltage measured must not exceed 0.3 volts RMS. This corresponds to 0.2 milliamp. AC. Any value exceeding this limit constitutes a potential shock hazard and must be corrected immediately.



■ PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in this chassis have special safety-related characteristics. These characteristics are often passed unnoticed by a visual inspection and the protection afforded by them cannot necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this manual and its supplements; electrical components having such features are

identified by shading on the schematic diagram and the parts list.

Before replacing any of these components, read the parts list in this manual carefully. The use of substitute replacement parts which do not have the same safety characteristics as specified in the parts list may create shock, fire, X-ray radiation or other hazards.

■ SERVICE NOTES

1. When replacing parts or circuit boards, clamp the lead wires to terminals before soldering.
2. When replacing a high wattage resistor (metal oxide film resistor) in the circuit board, keep the resistor min 1/2in) away from circuit board.

3. Keep wires away from high voltage or high temperature components.

BLOCK DIAGRAM

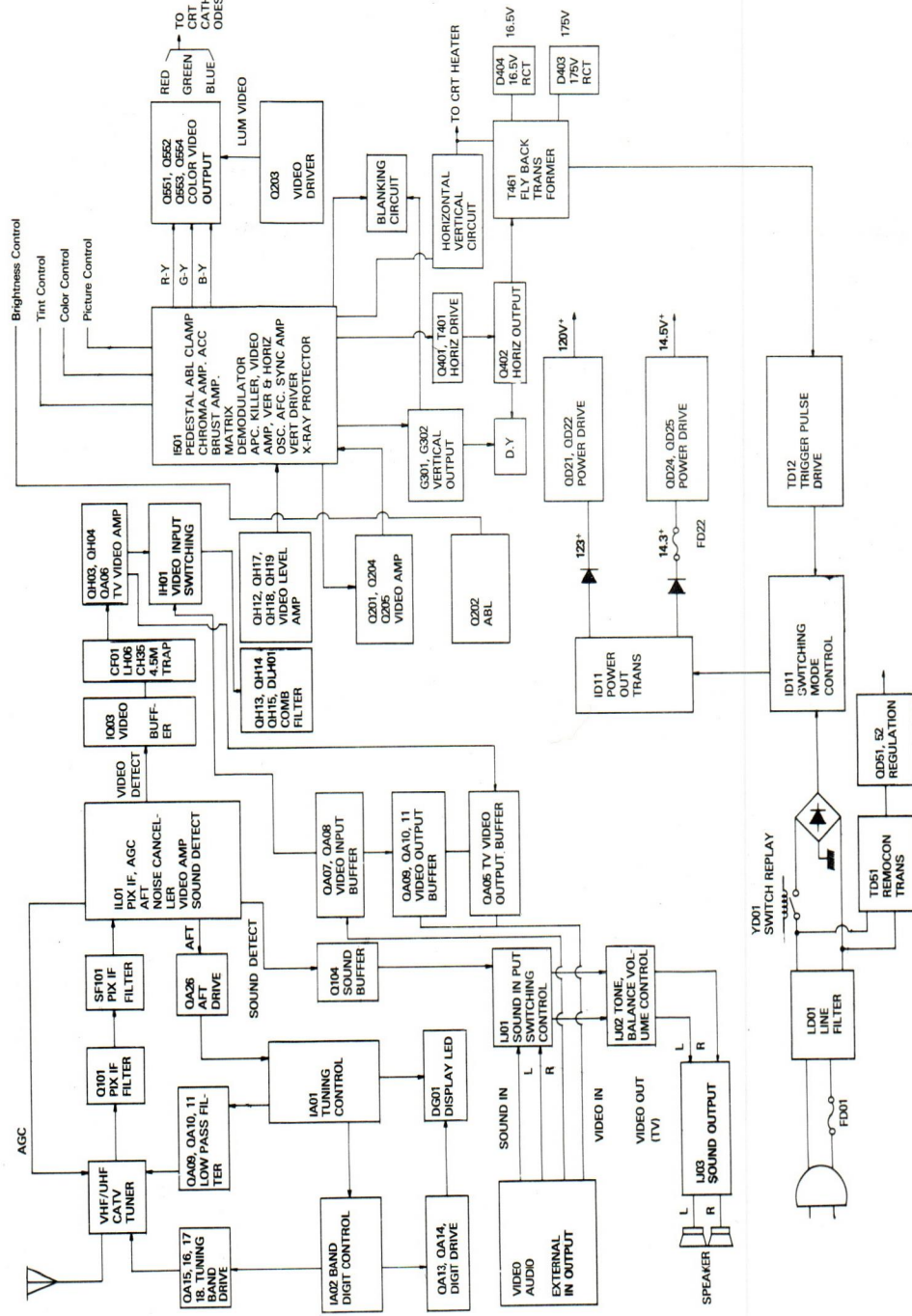


FIGURE 1, C-110 BLOCK DIAGRAM

■ INSTALLATION AND SERVICE ADJUSTMENTS

GENERAL

In the majority of cases, a color television receiver will need only slight touch-up adjustment upon installation.

Check the basic characteristics such as height, vertical sync., horizontal sync. and focus.

Observe the picture for good black and white details without objectionable color shading. If color shading is evident, demagnetize the receiver.

If color shading still persists, perform purity and convergence adjustments. This should be all that is necessary to achieve optimum receiver performance.

VERTICAL HOLD ADJUSTMENT

1. Turn channel selector to a local station.
2. Adjust vertical hold control (R305) to point where picture is stable.
3. Check all channels for a stable picture.

VERTICAL SIZE ADJUSTMENT

1. Turn channel selector to a local station.
2. Check vertical hold, brightness and contrast controls for a normal picture.
3. Adjust vertical size control (R307) for approximately one-half inch over scan at top and bottom of picture screen

FOCUS ADJUSTMENT

1. Turn channel selector to a local station.
2. Set brightness and contrast control at a normal viewing level.
3. Adjust focus control (part of T461) for sharp scanning lines and/or sharp picture.

HORIZONTAL HOLD ADJUSTMENT

1. Turn channel selector to a local station.
2. Adjust horizontal hold control (R409) to stabilize picture.
3. Check all channels for stable picture.

AFT ADJUSTMENT

1. Turn channel selector to a local station.
2. Check all channel for best picture and sound.
3. If it's not a good picture with AFT, adjust the coil L601 for best picture and sound (see page 11)

COLOR-PST AND TINT-PST ADJUSTMENT

1. Tune in color program.
2. Adjust the color and tint controls (R509, R551) for natural color intensity and proper facial tones

RF. AGC. ADJUSTMENT

1. Turn channel selector to a local station.
2. Turn FR AGC control (R115) full clockwise until snow or/and noise appear in picture then slowly turn control counterclockwise until snow or/and noise disappear.
3. Check all other channels.

SOUND

1. Turn channel selector to a local station.
2. Adjust volume control to mid-position.
3. Adjust sound det. coil (L601) to obtain a good clear sound.

HIGH VOLTAGE CHECK

High voltage is not adjustable but must be checked to verify that the receiver is operating within safe and efficient design limitations as specified:

1. Operate receiver for at least 15 minutes at 120V AC line, with strong air signal or test signal properly tuned in.
2. Disconnect raster tip from pin4
3. Rotate Screen control (on T461) to maximum CCW end of its rotation
4. Connect an accurate high voltage meter to CRT anode. The reading should be between 22.8kV and 24.6kV. (at zero beam)

If a correct reading cannot be obtained, check circuitry for malfunctioning components. Upon completion of voltage check, readjust Screen control for proper operation as detailed in BLACK AND WHITE TRACKING procedure.

X-RADIATION PROTECTION CIRCUIT TEST

When service has been performed on the horizontal deflection system, high voltage system or B+ system, the X-Radiation protection circuit must be tested for proper operation as follows:

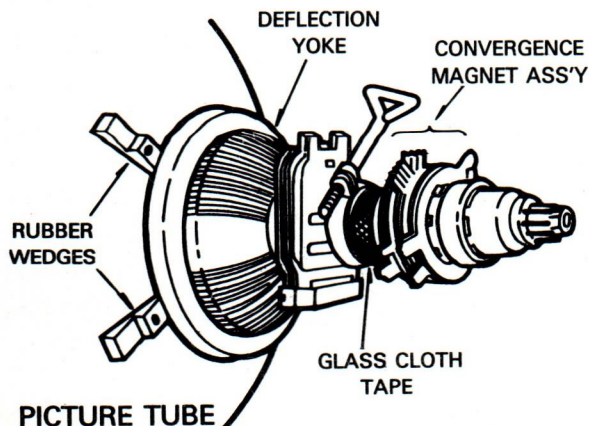
1. Apply 120V AC using a variable transformer for accurate input voltage.
2. Allow for warm up and adjust all customer controls for normal picture and sound.
3. Check the voltage of test point TP (It's voltage should be about 22V DC.)
4. Connect the cathode of diode D303 and D402 through a 6.8K ohm, 1/2W resistor.
5. To start operation, remove the resistor and touch the TP11 to chassis ground with a short clip lead. (Remove short clip lead as soon as the set operates again with normal picture.)
6. If the operation of horizontal osc. does not stop in step 4, the circuit must be repaired, before the set is returned to the customer.

Note: 1. When performing any adjustments to resistor controls and transformers use non-metallic screwdriver or TV alignment tools.

2. Before performing adjustment T.V. set must be on at least 15 minutes.

CRT GRAY SCALE ADJUSTMENT

1. Tune in an active channel.
2. Set the COLOR control to minimum
3. Turn the SCREEN control (on T461) fully counterclockwise.
4. By rotating the RED, GREEN and BLUE BIAS controls (R554, R559, R564) counterclockwise from the maximum, set them to the position where notches of the knobs become parallel to the surface of P.C. Board.
5. Set the GREEN and BLUE DRIVE controls (R560, R565) to the mid position.
6. Disconnect the raster tip on the Main Board.
7. Short temporarily terminals G and H on the Main Board (See Page 10) with a jumper wire. (The picture will become a single horizontal line).
8. Rotate the SCREEN control (on T461) gradually clockwise until the second horizontal line following the first line appears slightly on the screen. Then turn fully counterclockwise the two BIAS controls corresponding to the colors of the first and the second horizontal lines to eliminate the lines.
9. Set the SCREEN controls to the position where the third horizontal line lights slightly on the screen.
10. Adjust the two BIAS controls set to the minimum in item 8 above to obtain the slightly lighted horizontal line in the same levels of three (red, green, blue) colors. (The line should be white if the BIAS controls are adjusted properly.)
11. Remove a jumper wire between terminals G and H and reconnect the raster tip.
12. Rotate the BRIGHTNESS and CONTRAST Controls to the maximum.
13. Adjust the BLUE and GREEN DRIVE controls to obtain proper white-balanced picture in high light areas.
14. Rotate the BRIGHTNESS and CONTRAST controls to obtain dark gray raster. Then check the white balance in low brightness. If the white balance is not proper, retouch the BIAS controls and DRIVE controls to obtain a good white balance in both low and high light areas.



SUB-BRIGHTNESS ADJUSTMENT

1. Tune in a color program and turn the AUTO SW On.
2. Set the CONTRAST CONTROL TO MAXIMUM AND THE BRIGHTNESS control to maximum and the BRIGHTNESS control to the center position.
3. Set the COLOR and TINT controls to center.
4. Set the SUB-BRIGHT control (R207) to center and leave the receiver for five minutes in this state.
5. Watching the picture carefully, adjust the SUB-BRIGHT control in the position where the picture does not show evidence of blooming in high brightness area and not appear too dark in low bright area.
6. Check for proper picture variation by rotating the CONTRAST and BRIGHTNESS controls to both extremes.
7. If the picture does not appear dark with the CONTRAST and BRIGHTNESS controls turned to minimum, or not appear bright with the controls turned to maximum, adjust the SUB-BRIGHT control again for an acceptable picture.

CONVERGENCE MAGNET ASSEMBLY POSITIONING

Convergence magnet assembly and rubber wedges need mechanical positioning following the figure 2.

COLOR-PURITY-ADJUSTMENT

NOTE: Before attempting any purity adjustments, the receiver should be operated for at least 15 minutes.

1. Demagnetize the picture tube and cabinet using a degaussing coil.
2. Turn the CONTRAST and BRIGHTNESS controls to maximum.
3. Adjust RED and BLUE Bias controls (R554 and R564) to provide only a green raster. Advance the GREEN BIAS control (R559) if necessary.
4. Loosen the clamp screw holding the yoke, and slide the yoke backward to provide vertical green belt (zone) in the picture screen.
5. Remove the Rubber Wedges.
6. Rotate and spread the tabs of the purity magnet (See figure 3) around the neck of the picture tube until the green belt is in the center of the screen. At the same time, center the raster vertically.
7. Move the yoke slowly forward until a uniform green screen is obtained. Tighten the clamp screw of the yoke temporarily.
8. Check the purity of the red and blue raster by adjusting the BIAS controls.
9. Obtain a white raster, referring to "CRT GRAY SCALE ADJUSTMENT."
10. Proceed with convergence adjustment.

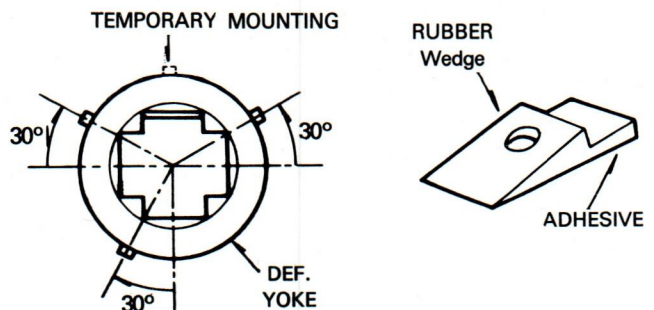


Fig2 RUBBER WEDGES LOCATION

CONTINUED

CONVERGENCE ADJUSTMENTS

NOTE: Before attempting any convergence adjustments, the receiver should be operated for at least 15 minutes.

■ CENTER CONVERGENCE ADJUSTMENT

1. Receive crosshatch pattern with a color bar signal generator.
2. Adjust the BRIGHTNESS and CONTRAST Controls for well defined pattern.
3. Adjust two tabs of the 4-Pole Magnets to change the angle between them (See figure 3) and superimpose red and blue vertical lines in the center area of the picture screen. (See figure 4).
4. Turn both tabs at the same time keeping their angles constant to superimpose red and blue horizontal lines at the center of the screen. (See figure 4).
5. Adjust two tabs of 6-Pole Magnets to superimpose red/blue line with green one. Adjusting the angle affects the vertical lines and rotating both magnets affects the horizontal lines.
6. Repeat adjustments 3, 4, 5, keeping in mind red, green and blue movement, because 4-Pole Magnets and 6-Pole Magnets interact and make dot movement complex.

■ CIRCUMFERENCE CONVERGENCE ADJUSTMENT

NOTE: This adjustment requires Rubber Wedge Kit.

1. Loosen the clamping screw of deflection yoke to allow the yoke to tilt.
2. Place a wedge as shown in figure (2) temporarily. (Do not remove cover paper on adhesive part of the wedge.)
3. Tilt front of the deflection yoke up or down to obtain better convergence in circumference. (See figure 4) Push the mounted wedge into the space between picture tube and the yoke to hold the yoke temporarily.
4. Place other wedge into bottom space and remove the cover paper to stick.
5. Tilt front of the yoke right or left to obtain better convergence in circumference. (See figure 4).
6. Hold the yoke position and put another wedge in either upper space. Remove cover paper and stick the wedge on picture tube to hold the yoke.
7. Detach the temporarily mounted wedge and put it in another upper space. Stick it on picture tube to fix the yoke.
8. After placing three wedges, recheck overall convergence. Tighten the screw firmly to hold the yoke tightly in place.
9. Stick 3 adhesive tapes on wedges as shown in figure 2

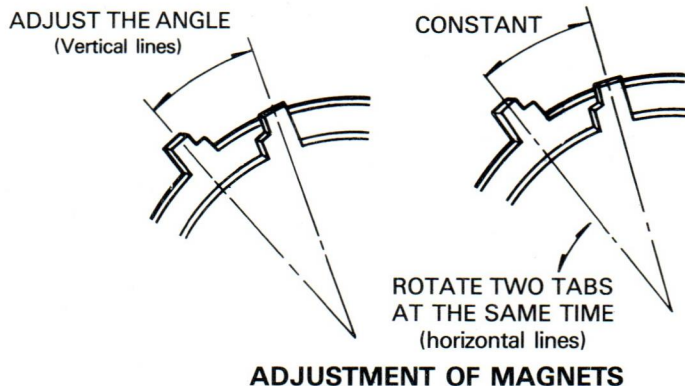
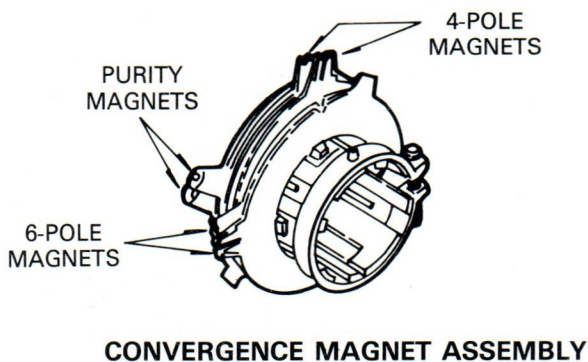


Fig. 3

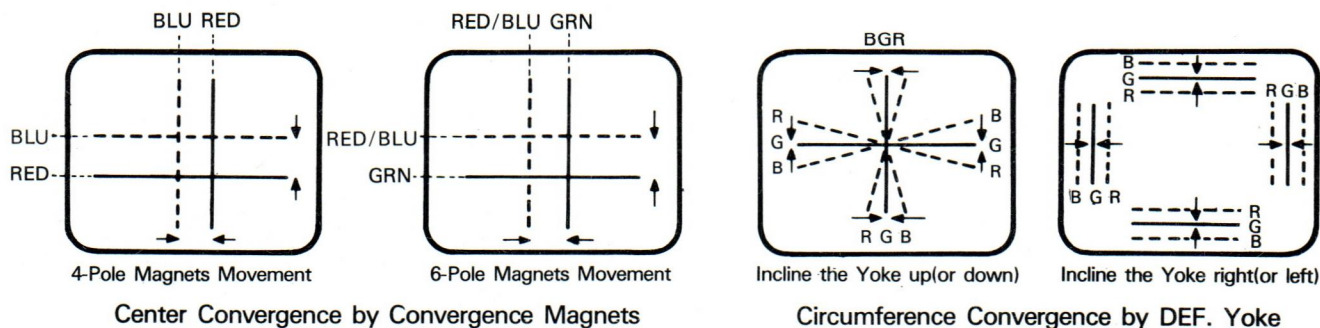


Fig 4 Dot Movement Pattern

■ GENERAL ALIGNMENT INSTRUCTIONS

THIS RECEIVER IS TRANSISTORIZED AND SPECIAL CARE MUST BE TAKEN WHEN SERVICING. READ THE FOLLOWING NOTES BEFORE ATTEMPTING ALIGNMENT.

- Alignment requires an exacting procedure and should be undertaken only when necessary.
 - Isolation transformer must be used to prevent shock hazard.
 - The test equipment specified or its equivalent is required to perform the alignment properly. Use of equipment which does not meet these requirements may result in improper alignment.
 - Correct matching of the equipment is essential. Failure to use proper matching will result in responses which cannot represent the true operation of the receiver.
 - Use of excessive signal from a sweep generator can cause overloading of receiver circuit. Overloading should be avoided to obtain a true response curve. Insertion of markers from the marker generator should not cause distortion of the response.
 - The AC Power line voltage should be kept within from 115 to 125volts while alignment.
 - Do not attempt to connect or disconnect any wire while the receiver is in operation.
- Make sure the power cord is disconnected before replacing any parts in the receiver.

TEST EQUIPMENTS

VACUUM-TUBE VOLTMETER	B&K Model 177 or equivalent
OSCILLOSCOPE	B&K Model 1460, 1465 or equivalent
DIRECT/LOW-CAPACITY PROBE	B&K Model PR-20, PR-14 or equivalent. (Accessory of oscilloscope).
COLOR-BAR/DOT/CROSSHATCH GENERATOR	Leader Model LCG388 or equivalent
SWEEP/MARKER ALIGNMENT GENERATOR	B&K Model 415 or equivalent
BIAS SUPPLY	B&K Model PR-151 or equivalent
MATCHING PAD	(Combined in Model 415 generator) B&K Model TP-41 ... (Accessory of Model 415 generator)
ISOLATION TRANSFORMER	Voltage adjustable type having capacity of more than 150 watts.

■ PICTURE I-F SWEEP ALIGNMENT

PCB SUB Solder Part.

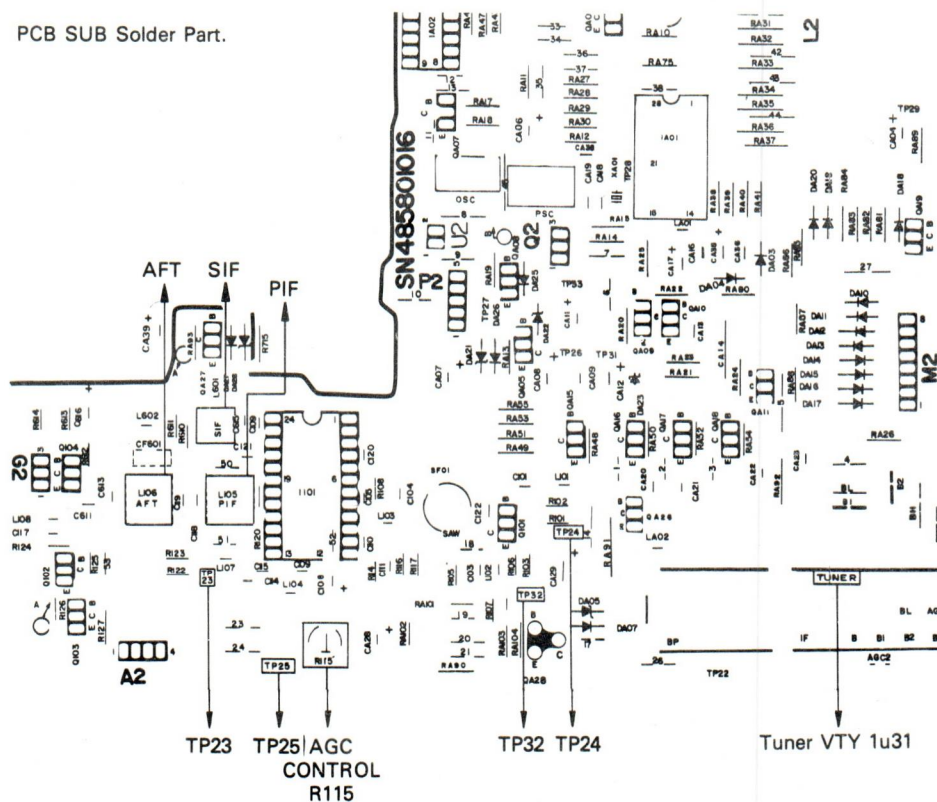


Fig A Picture I-F Sweep Alignment points.

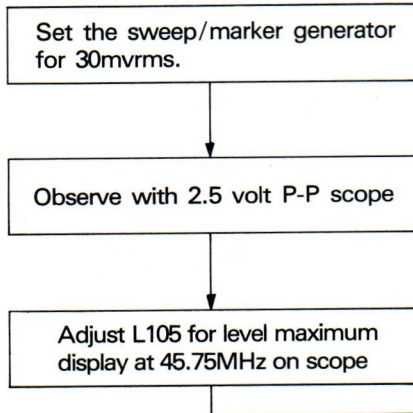
■ PICTURE I-F SWEEP ALIGNMENT

* Before Picture IF sweep alignment open patterns of TP23, TP24, TP25

* Refer to figures 5, 6 and 7 for alignment points and test equipment connections.

1. Connect the sweep/marker generator in series with matching pad to test point on tuner. Tune to 40-50MHz sweep.
2. Connect the oscilloscope with direct probe to terminal TP23 on the main board through 100K ohm resistor.
3. Apply +12V to terminal TP32 on the Sub-board.
4. Disconnect the antenna leads. Turn the receiver on.
5. Set the AGC DELAY control (R115) fully counter-clockwise.
6. Proceed with the alignment steps following the chart below

* PIF ADJUSTMENT



* AFT ADJUSTMENT

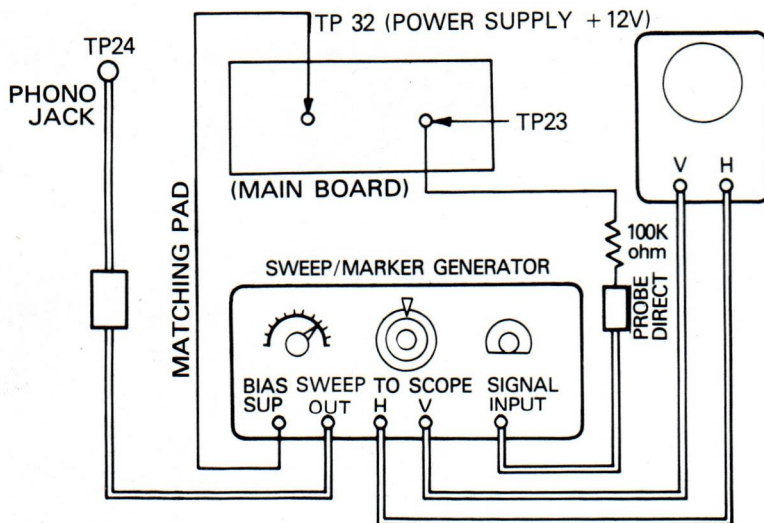
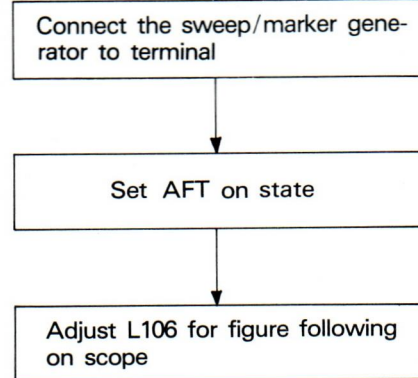


Figure 5 Picture I-F Sweep Alignment

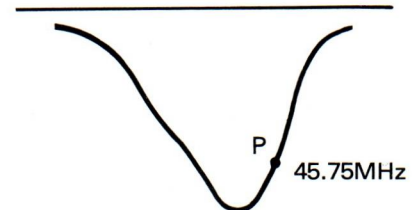


Figure 6 P IF RESPONSE Curve

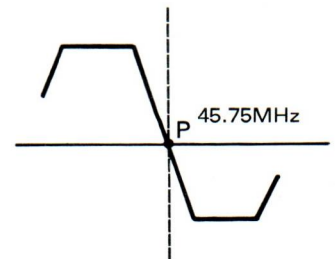


Figure 7 AFT RESPONSE Curve

* After completing the above steps, disconnect equipment and adjust the AGC delay circuit following AGC delay adjustment.

■ COLOR SYNC. ALIGEMENT

1. Tune in a color program and warm up for five minutes.
2. Connect a capacitor (0.1-0.47 mfd) between terminal TP5 and TP6.
3. Connect a jumper wire between pin 13 of IC501 and +12V source line
4. Set the controls as follows
Color : Max, Contrast : Max
Tint : Middle,

5. Adjust the color sync. capacitor (C509) on the Main Board (See Fig 8) so that the color bar pattern stands still or drifts slowly across the picture screen.
6. Remove the jumper wire and the capacitor.
7. Check that the color sync. is stable with channel changing and power ON-OFF operation. If the color is slow to appear or the color sync. is out of order, retouch the color sync. capacitor (C509) for proper color display.

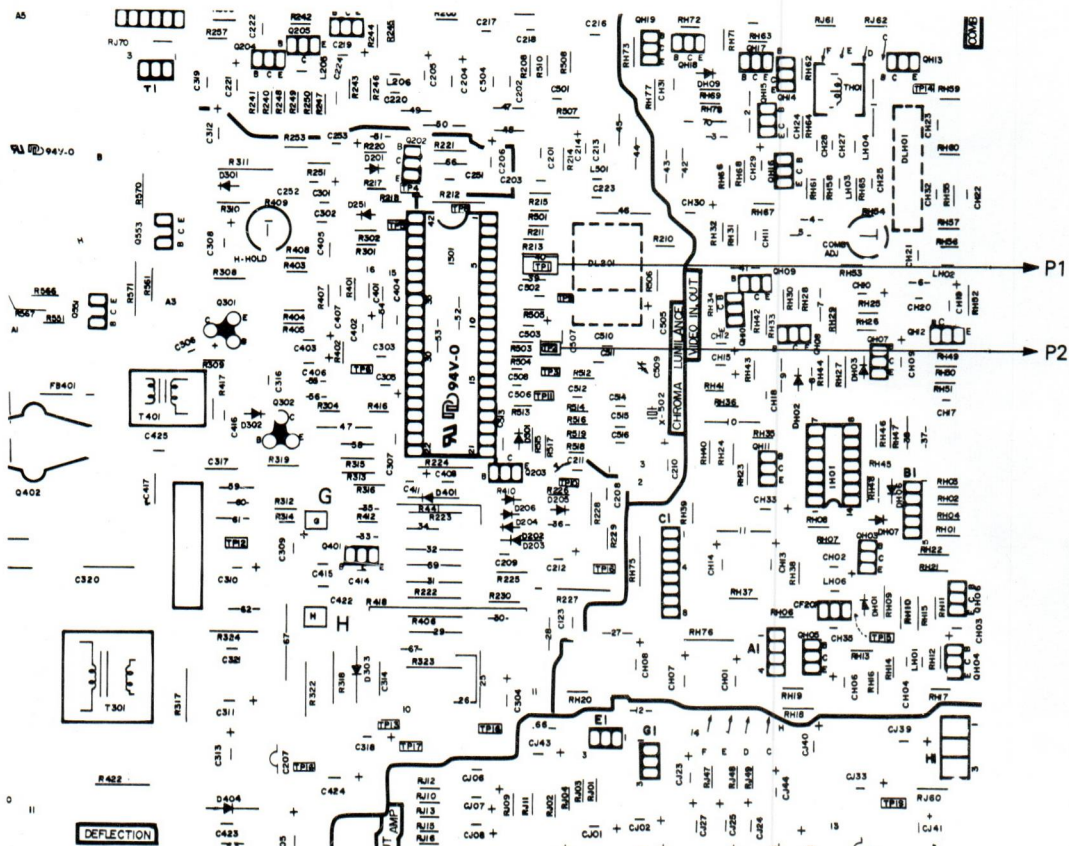


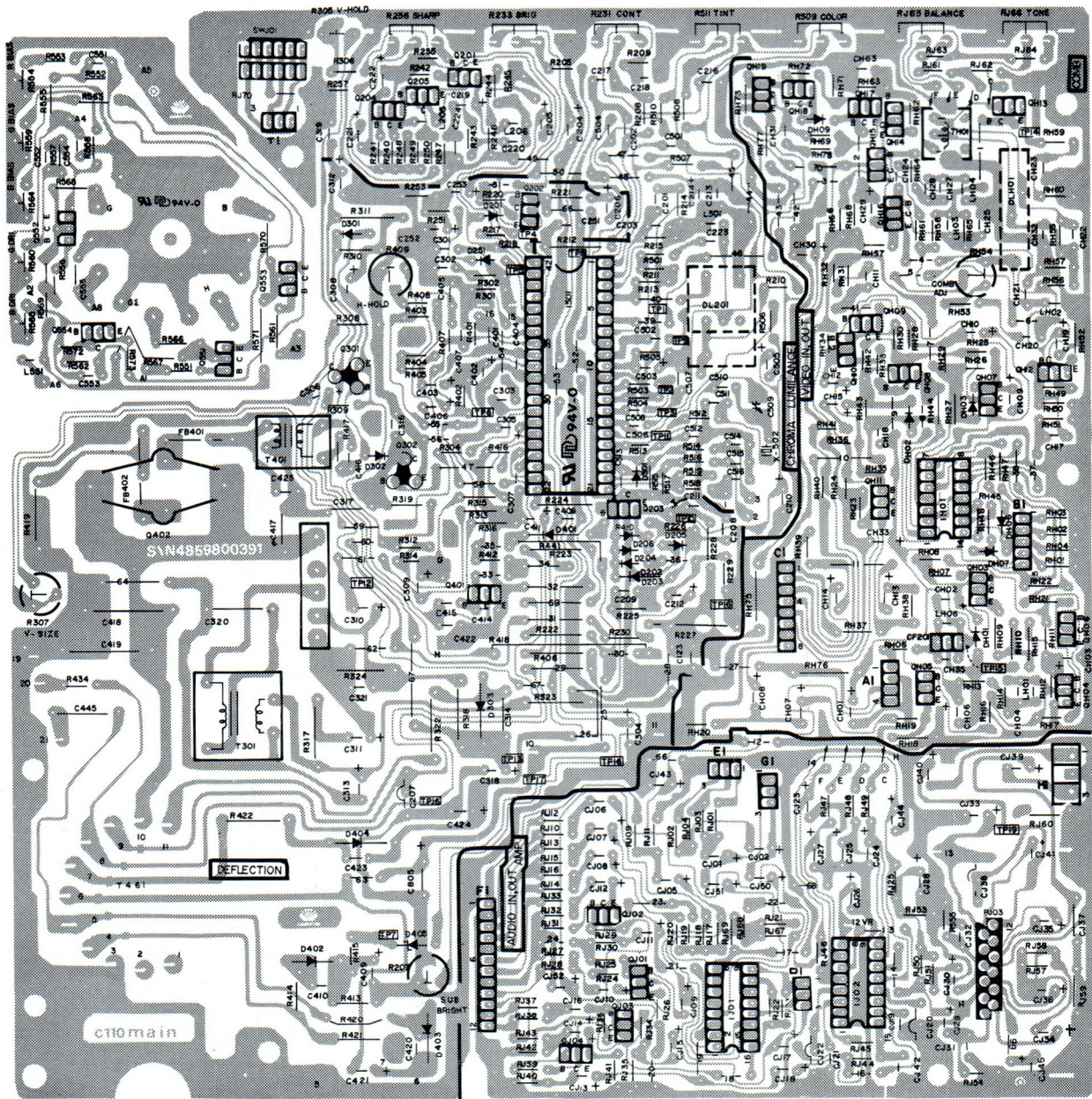
Fig 8 Color Sync. Alignments Points

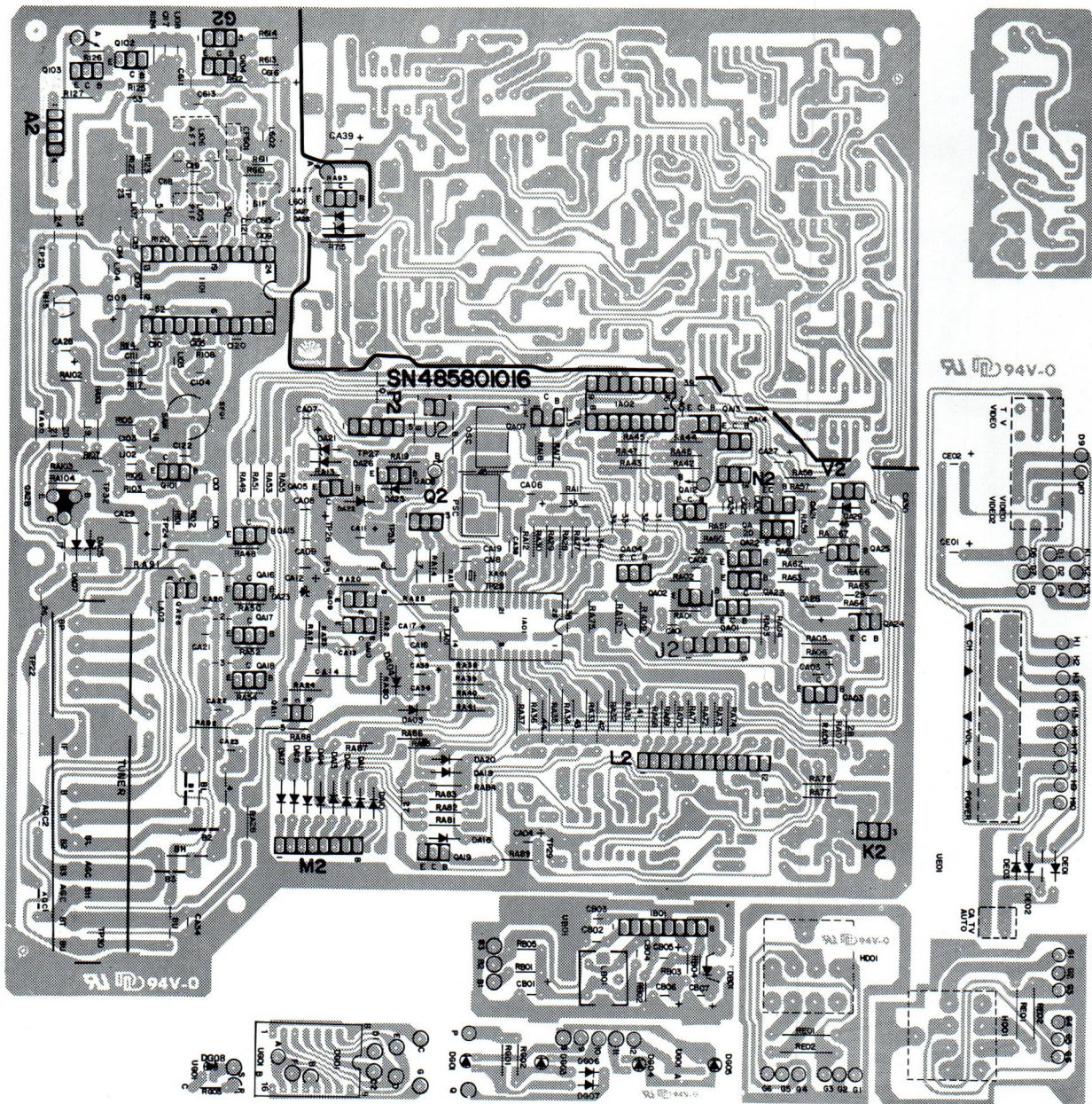
■ AFT ALIGNMENT

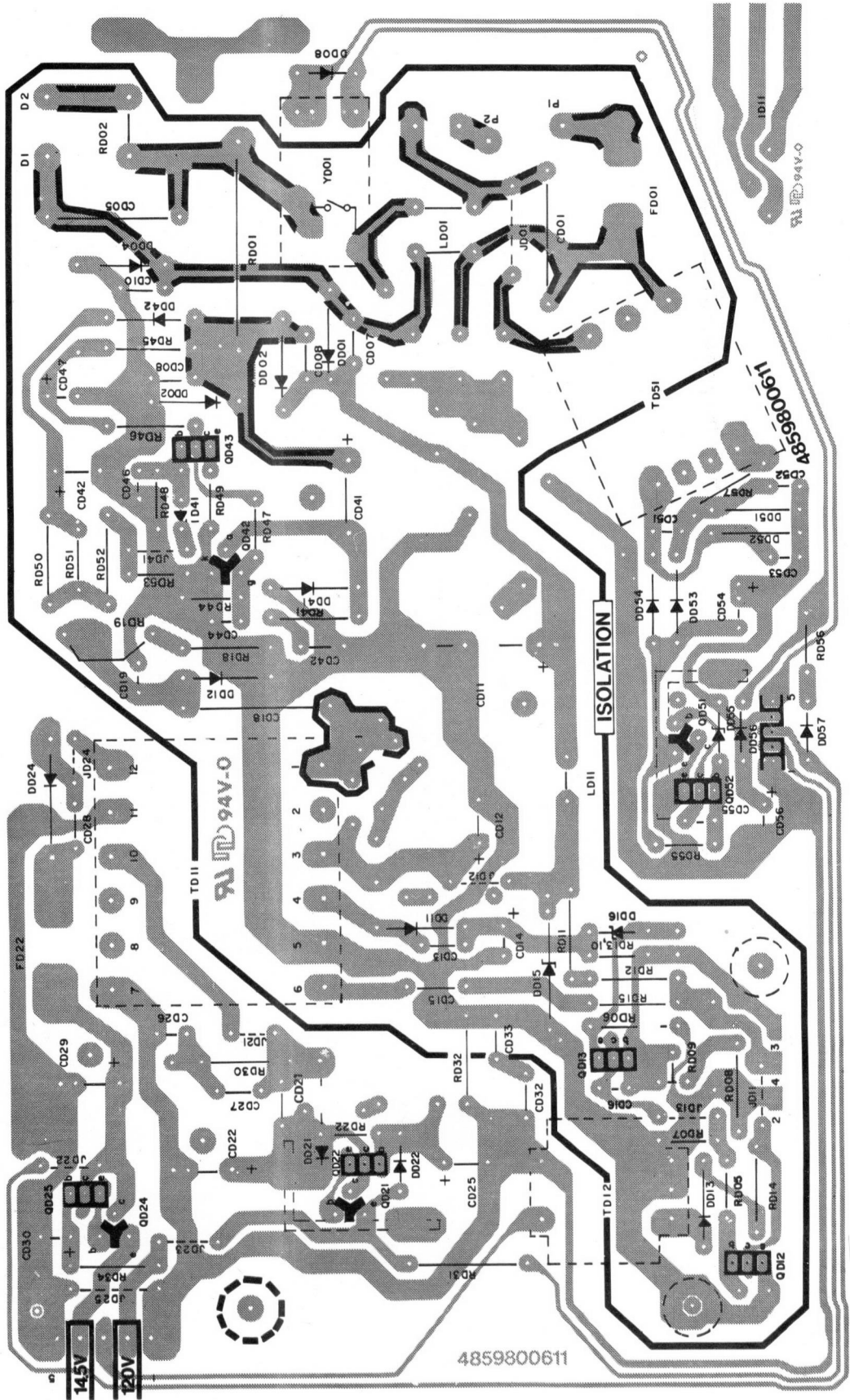
1. Tune in an active channel
2. Set the ON/OFF Button the ON state
3. Carefully adjust the AFT Coil (L601) for correct picture.

4. Set the ON/OFF button to the ON state after try to do ON and OFF twice or third.
5. Check all channels for good picture and sound.

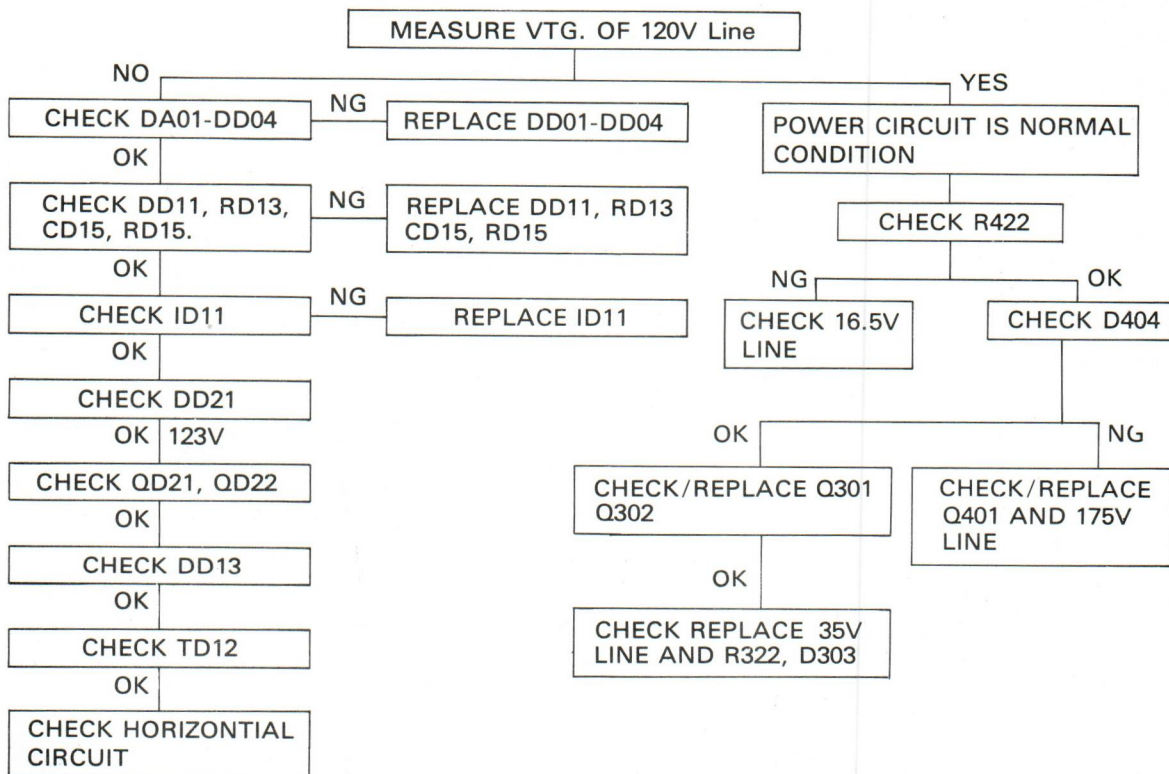
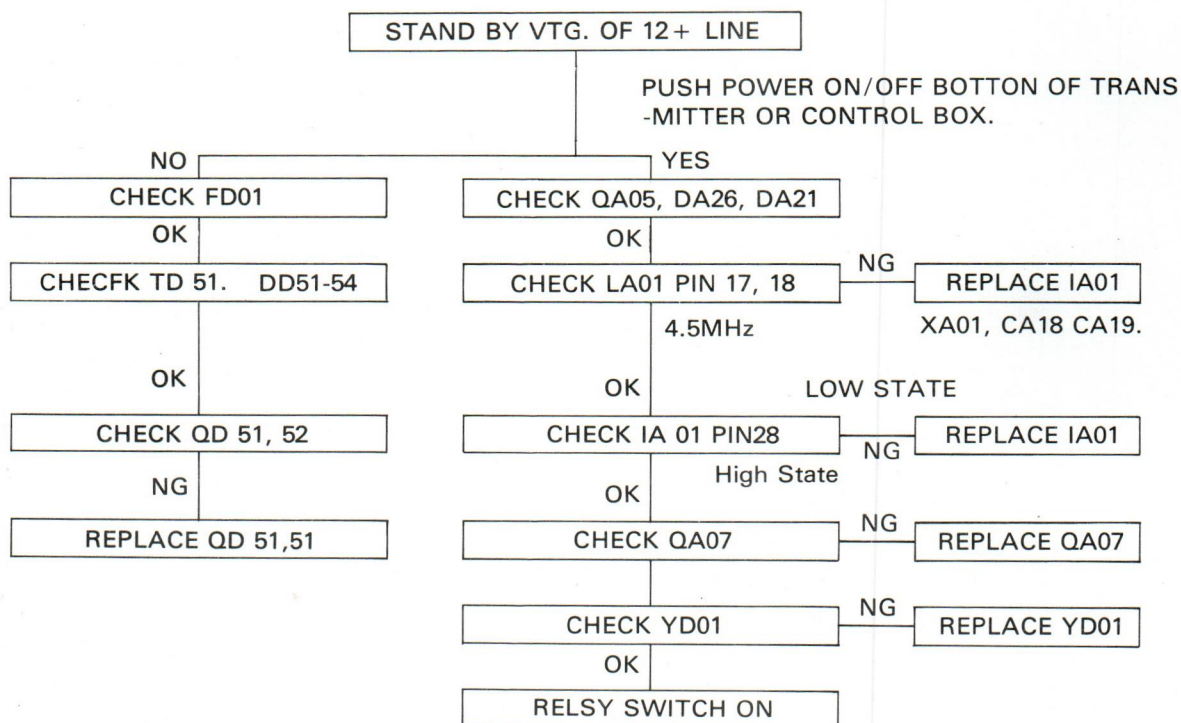
• MAIN PWB

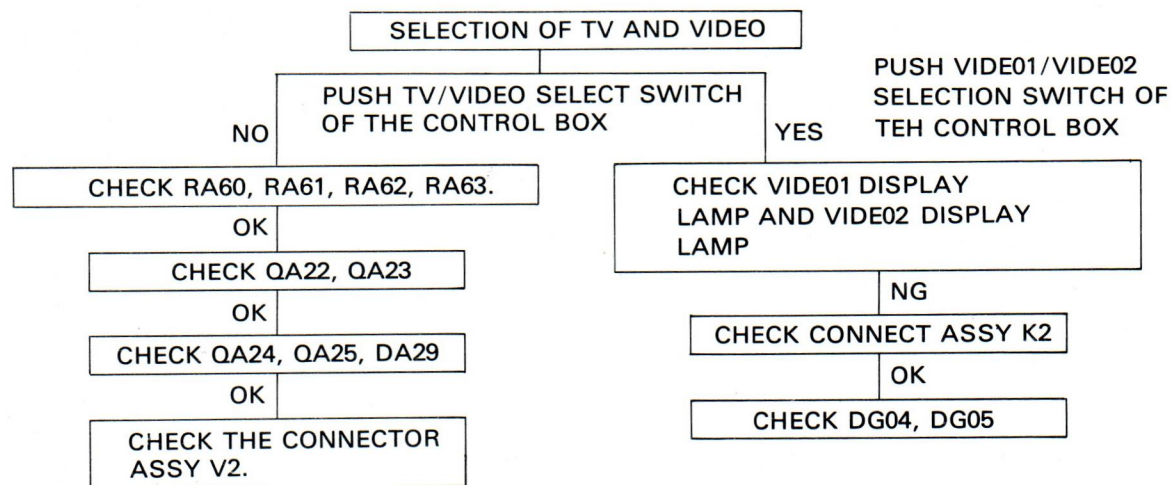
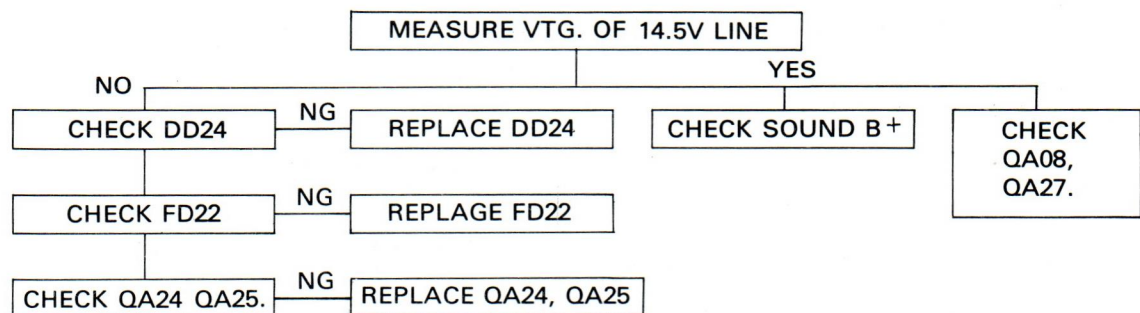




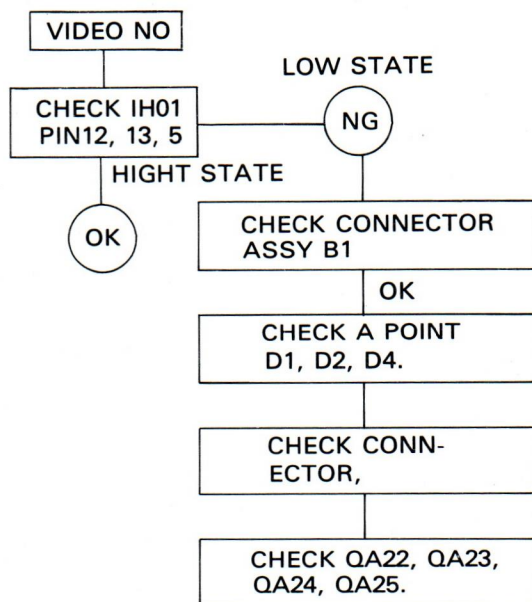
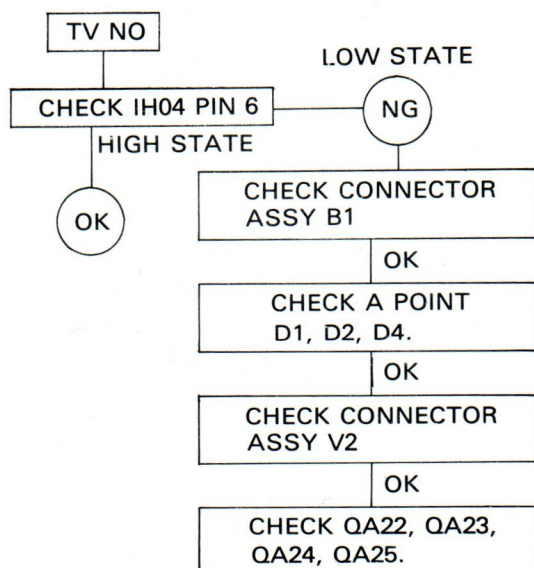


*** NO POWER ***

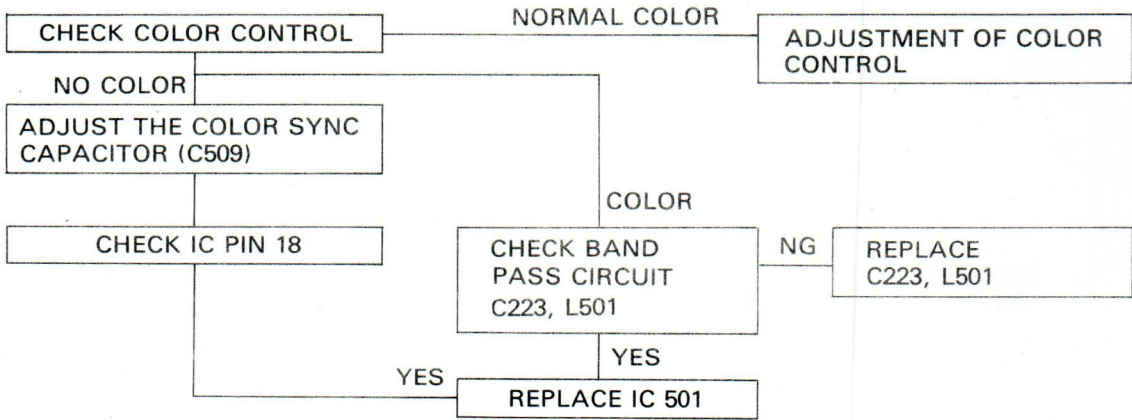




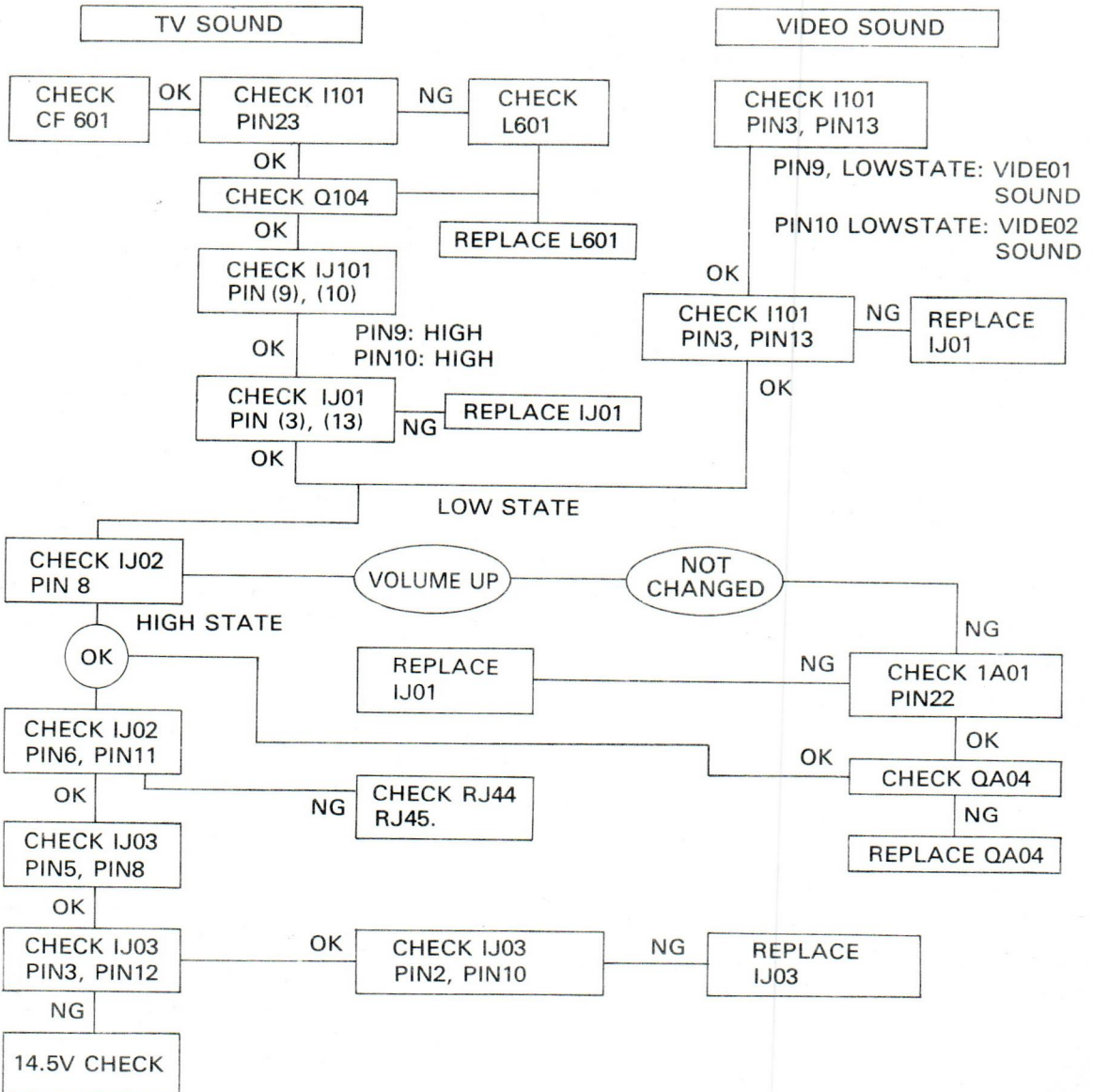
*** NO VIDEO ON THE SCREEN ***



*** NO COLOR ***



*** NO SOUND ***



■ REPLACEMENT PART LIST

CAUTION: The shaded areas in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE On page 2. Do not degrade the safety of the receiver through improper servicing.

ABBREVIATIONS: Capacitors....CD: Ceramic Disk, PF: Plastic Film, EL: Electrolytic

Resistors..... CF: Carbon Film, CC: Carbon Composition, OMF: Oxide Metal Film,
VR: Variable Resistor,

(All CD and PF capacitors are $\pm 5\%$, 50V and all resistors, $\pm 5\%$, 1/8W unless otherwise noted.

LOCATION NUMBER	STOCK NUMBER	DESCRIPTION
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MAIN BOARD ASSEMBLY (U101)

U101	4859800391	PCB MAIN
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CAPACITORS AND RESISTORS

CH01	CEXE1C221B	EL 220 μ F 16V
CH02	CEXE1C100A	EL 10 μ F 16V
CH03	CEXE1C100A	EL 10 μ F 16V
CH04	CCXH1H121J	CD 120PF $\pm 5\%$ 50V (CHJ)
CH06	CEXE1C100A	EL 10 μ F 16V
CH07	CEXE1C221B	EL 220 μ F 16V
CH08	CEXE1C221B	EL 220 μ F 16V
CH09	CEXE1C100A	EL 10 μ F 16V
CH10	CEXE1C100A	EL 10 μ F 16V
CH11	CCXH1H330J	CD 33PF $\pm 5\%$ 50V
CH12	CEXE1C100A	EL 10 μ F 16V
CH13	CEXE1C221B	EL 220 μ F 16
CH14	CEXE1C221B	EL 220 μ F 16V
CH15	CEXE1C100A	EL 10 μ F 16V
CH17	CEXE1C100A	EL 10 μ F 16V
CH18	CCXF1H103Z	CD 0.01 μ F + 10% 50V
CH19	CEXE1C100A	EL 10 μ F 16V
CH29	CEXE1H109A	EL 1 μ F 50V
CH30	CEBE1C471A	EL 470 μ F 16V
CH31	CCXB1H471K	CD 470PF $\pm 10\%$ 50V
CH33	CEXE1C100A	EL 10 μ F 16V
CH35	CCXH1H100J	CD 10PF $\pm 5\%$ 50V (CHJ)
CJ01	CEXE1H339A	EL 3.3 μ F 50V
CJ02	CEXE1H339A	EL 3.3 μ F 50V
CJ05	CEXE1H339A	EL 3.3 μ F 50V
CJ06	CEXE1H339A	EL 3.3 μ F 50V
CJ07	CEXE1H339A	EL 3.3 μ F 50V
CJ08	CEXE1H339A	EL 3.3 μ F 50V
CJ09	CEXE1H339A	EL 3.3 μ F 50V
CJ10	CEXE1H339A	EL 3.3 μ F 50V
CJ11	CEXE1H339A	EL 3.3 μ F 50V
CJ12	CEXE1H339A	EL 3.3 μ F 50V
CJ13	CEXE1H339A	EL 3.3 μ F 50V
CJ14	CEXE1H339A	EL 3.3 μ F 50V
CJ15	CEXE1H339A	EL 3.3 μ F 50V
CJ16	CEXE1H339A	EL 3.3 μ F 50V

CJ17	CEXE1H339A	EL 3.3 μ F 50V
CJ18	CEXE1H339A	EL 3.3 μ F 50V
CJ19	CMXM1H472J	CM 4700PF $\pm 5\%$ 50V
CJ20	CMXM1H124J	CM 0.12MF $\pm 5\%$ 50V
CJ21	CMXM1H472J	CM 4700PF $\pm 5\%$ 50V
CJ22	CMXM1H124J	CM 0.12MF $\pm 5\%$ 50V
CJ23	EEXE1C470A	EL 47 μ F 16V
CJ24	CEXE1H479A	EL 4.7 μ F 50V
CJ25	CEXE1H479A	EL 4.7 μ F 50V
CJ26	CEXE1H479A	EL 4.7 μ F 50V
CJ27	CEXE1H479A	EL 4.7 μ F 50V
CJ28	CEXE1C470A	EL 47 μ F 16V
CJ29	CEXE1H339A	EL 3.3 μ F 50V
CJ30	CEXE1H339A	EL 3.3 μ F 50V
CJ31	CCXB1H102K	CD 1000PF $\pm 10\%$ 50V
CJ32	CCXB1H102K	CD 1000PF $\pm 10\%$ 50V
CJ33	CECD1E120A	EL 1000 μ F 25V
CJ34	CEXD1E470A	EL 47 μ F 25V
CJ35	CEXE1C470A	EL 47 μ F 16V
CJ36	CEXE1C470A	EL 47 μ F 16V
CJ37	CMXM1H104J	CM 0.1 μ F $\pm 5\%$ 50V
CJ38	CMXM1H104J	CM 0.1 μ F $\pm 5\%$ 50V
CJ39	CECD1E102A	EL 1000 μ F 25V
CJ40	CECD1E102A	EL 1000 μ F 25V
CJ41	CEXD1E470A	EL 47 μ F 25V
CJ42	CEXE1C470A	EL 47 μ F 25V
CJ43	CEXE1C101A	EL 100 μ F 16V
CJ44	CEXE1C101A	EL 100 μ F 16V
CJ50	CEXE1H339A	EL 3.3 μ F 50V
CJ51	CEXE1H339A	EL 3.3 μ F 50V
CJ52	CEXE1C100A	EL 10 μ F 16V
C123	CCXB1H471K	CD 470PF $\pm 10\%$ 50V (K)
C201	CCBB1H121K	CD 120PF + 10% 50V (K)
C202	CCXF1H103Z	CD 0.01 μ F 10% 50V (Z)
C203	CB, L1H151J	CD 150PF $\pm 5\%$ 50V (SL)
C204	CEXE1E479A	EL 4.7 μ F 25V
C205	CEXE1H109A	EL 1 μ F 50V
C206	CEXE1E330A	EL 33 μ F 25V
C207	CMXM1H104J	CM 0.1 μ F $\pm 5\%$ 50V
C208	CCXB1H181K	CD 180PF $\pm 10\%$ 50V
C209	CBSL2H470J	CM 47PF $\pm 5\%$ 500V (SL)
C210	CEBE1C471A	EL 470 μ F 16V
C211	CCXB1H182K	CD 1800PF $\pm 10\%$ 50V

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■ REPLACEMENT PART LIST

LOCATION NUMBER	STOCK NUMBER	DESCRIPTION
C212	CEXE1H100A	EL 10 μ F 16V
C213	CCXF1H473Z	CD 0.047 μ F + 10% 50V (Z)
C214	CEXE1C100A	EL 10 μ F 16V
C216	CCXF1H103Z	CD 0.01 μ F \pm 10% 50V (Z)
C217	CCXB1H471K	CD 470PF \pm 10% 50V (K)
C218	CCXB1H391K	CD 390PF \pm 10% 50V (K)
C219	CEXE1C100A	EL 10 μ F 16V
C220	CCXB1H102K	CD 1000PF + 10% 50V (K)
C221	CEXE1C100A	EL 10 μ F 16V
C222	CEXE1C100A	EL 10 μ F 16V
C223	CCXH1H680J	CD 68PF + 5% 50V (J)
C224	CCBB1H121K	CD 120PF + 10% 50V (K)
C301	CCXB1H122K	CD 1200PF \pm 10% 50V (K)
C302	CMXN1H563K	CM 0.056 μ F \pm 10% 50V
C303	CEXE1H109A	EL 1 μ F 16V
C304	CTXD1V228K	C TANTAL 0.22 μ F \pm 10% 35V
C305	CEXD1H229B	EL 2.3 μ F 50V
C306	CTXD1V109K	C TANTAL 1 μ F + 10% 35V
C307	CCXB1H472K	CD 4700PF \pm 10% 50V (K)
C308	CEXB1H470A	EL 47 μ F 50V
C309	CTXD1V688K	C TANTAL 0.68 μ F + 10% 35V
C310	CECE1E471A	EL 470PF 25V
C311	CEBD1E221A	EL 220 μ F 25V
C312	CEXE1H220A	EL 22 μ F 50V
C313	CEXE0J101A	EL 100 μ F 6.3V
C314	CCDB3A102K	CD 1000PF \pm 10% 1KV (K)
C316	CCXB2H471K	CD 470PF + 10% 500V (K)
C317	CCXB2H221K	CD 220PF \pm 10% 500V (K)
C318	CEXE1H470A	EL 47 μ F 50V
C319	CCXB2H471K	CD 470PF \pm 10% 500 (K)
C320	CMDN20364K	CM 0.36 μ F \pm 10% 200V
C321	CCXB2H103K	CD 0.10 μ F \pm 10% 500 (K)
C251	CCXB1H681K	CD 680PF + 10% 50V (K)
C252	CEXE1E479A	EL 4.7 μ F 25V
C253	CEXE1E477A	EL 4.7 μ F 25V
C401	CCXF1H331K	CD 330PF + 10% 50V (K)
C402	CEXE1C220A	EL 22 μ F 16V
C403	CEXE1H109A	EL 1 μ F 50V
C404	CMSN1H272J	CM 2700PF \pm 5% 50V NON INDUCT
C405	CMXN1H562K	CM 5600PF \pm 10% 50V
C406	CEXE1H478A	EL 0.47 μ F 50V
C407	CMXN1H822K	CM 8200PF 50V, \pm 10%
C408	CCXB1H102K	CD 1000PF \pm 10% 50V (K)
C409	CEXE1H479A	EL 4.7 μ F 50V
C410	CCXB1H102K	CD 1000PF \pm 10% 50V (K)
C411	CEXE1C100A	EL 10 μ F 16V
C414	CCXB1F102K	CD 1000PF \pm 10% 50V (K)
C415	CCXL2H100K	CD 10PF \pm 10% 500V (K)
C416	CCXB2H102K	CD 1000PF \pm 10% 500V (K)
C417	CCDB3D471K	CD 470PF + 10% 2KV (K)

LOCATION NUMBER	STOCK NUMBER	DESCRIPTION
C418	CMFN3C302J	CM 3000PF \pm 5% 1.6KV NON INDUCT
C419	CMFN3C302J	CM 3000PF + 5% 1.6KV NON INDUCT
C420	CCXB1H102K	CD 1000PF \pm 10% 50V (K)
C421	CEXE2A100A	EL 10 μ F 100V
C422	CCXF2H471K	CD 470PF \pm 10% 500V (K)
C423	CCXB2H152K	CD 1500PF + 10% 500V (K)
C424	CECD1E102A	EL 1000 μ F 25V
C425	CCXB1H222K	CD 2200PF \pm 10% 50V (K)
C445	CMHN2D224J	CM 2.2 μ F \pm 5% 200V
C501	CCXF1H103Z	CD 0.01 μ F \pm 10% 50V (Z)
C502	CCXH1H120J	CD 12PF + 5% 50V
C503	CEXE1H478A	EL 0.47 μ F 50V
C504	CCXF1H103Z	CD 0.01 μ F + 10% 50V (Z)
C505	CEXE1H478A	EL 0.47 μ F 50V
C506	CMXN1H103K	CM 0.01 μ F + 10% 50V
C507	CMXN1H393K	CM 0.039 μ F \pm 10% 50V
C508	CCXF1H103Z	CD 0.01 μ F \pm 10% 50V (Z)
C509	587700002-	CERAMIC TRIMMER TZ03R200F
C510	CCXH1H809C	CD 8PF \pm 5% (CH.C) 50V
C511	CCXH1H330J	CD 33PF \pm 5% (CH.J) 50V
C512	CCXH1H820J	CD 82PF \pm 5% (CH.J) 50V
C513	CCXB1H271K	CD 270PF \pm 10% 50V (K)
C514	CCXB1H471K	CD 470PF \pm 10% 50V (K)
C515	CCXB1H471K	CD 470PF \pm 10% 50V (K)
C516	CCXB1H471K	CD 470PF \pm 10% 50V (K)
C805	CECD2C330A	EL 22 μ F 160V
C551	CCXB1H152K	CD 1500PF \pm 10% 50V (K)
C552	CCXB1H102K	CD 1000PF \pm 10% 50V (K)
C553	CCXB1H102K	CD 1000PF \pm 10% 50V (K)
C554	CCXB1H181K	CD 1800PF \pm 10% 50V (K)
C555	CCDF3A103K	CD 0.01 μ F + 10% 1KV (K)
RH01	RD-6Z123J-	CF 12K ohm 1/6W
RH02	RD-6Z123J-	CF 12K ohm 1/6W
RH03	RD-6Z123J-	CF 12K ohm 1/6W
RH04	RD-6Z123J-	CD 12K ohm 1/6W
RH06	RD-6Z221J-	CF 220 ohm 1/6W
RH07	RD-6Z153J-	CF 15K ohm 1/6W
RH08	RD-6Z333J-	CF 33K ohm 1/6W
RH09	RD-4Z331J-	CF 330 ohm 1/6W
RH10	RD-4Z331J-	CF 330 ohm 1/6W
RH11	RD-6Z562J-	CF 5.6K ohm 1/6W
RH12	RD-6Z562J-	CF 5.6K ohm 1/6W
RH13	RD-6Z102J-	CF 1K ohm 1/6W
RH14	RD-6Z182J-	CF 1.8K ohm 1/6W
RH15	RD-4Z331J-	CF 330 ohm 1/4W
RH16	RD-6Z102J-	CD 1K ohm 1/6W
RH17	RD-6Z102J-	CF 1K ohm 1/6W
RH18	RD-4Z681J-	CF 680 ohm 1/4W
RH19	RD-6Z680J-	CF 680 ohm 1/6W
RH20	RD-6Z104J-	CF 100K ohm 1/6W
RH21	RD-4Z391J-	CF 390 ohm 1/4W

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■ REPLACEMENT PART LIST

LOCATION NUMBER	STOCK NUMBER	DESCRIPTION
RH22	RD-4Z391J-	CF 390 ohm 1/4W
RH23	RD-6Z222J-	CF 2.2K ohm 1/6W
RH24	RD-6Z820J-	CF 82 ohm 1/6W
RH25	RD-6Z473J-	CF 47K ohm 1/6W
RH26	RD-6Z473J-	CF 47K ohm 1/6W
RH27	RD-4Z821J-	CF 820 ohm 1/4W
RH28	RD-6Z473J-	CF 47K ohm 1/6W
RH29	RD-6Z123J-	CF 12K ohm 1/6W
RH30	RD-6Z102J-	CF 1K ohm 1/6W
RH31	RD-6Z561J-	CF 560 ohm 1/6W
RH32	RD-6Z680J-	CF 68 ohm 1/6W
RH33	RD-6Z681J-	CF 680 ohm 1/6W
RH34	RD-6Z102J-	CF 1K ohm 1/6W
RH35	RD-6Z822J-	CF 8.2K ohm 1/6W
RH36	RD-6Z183J-	CF 18K ohm 1/6W
RH37	RD-4Z681J-	CF 680 ohm 1/6W
RH38	RD-6Z680J-	CH 68 ohm 1/6W
RH39	RD-6Z104J-	CF 100K ohm 1/6W
RH40	RD-6Z104J-	CF 100K ohm 1/6W
RH41	RD-6Z102J-	CF 1K ohm 1/6W
RH42	RD-6Z473J-	CF 47K ohm 1/6W
RH43	RD-6Z473J-	CF 47K ohm 1/6W
RH44	RD-4Z821J-	CF 820 ohm 1/4W
RH45	RD-6Z124J-	CF 120K ohm 1/6W
RH46	RD-6Z124J-	CF 120K ohm 1/6W
RH47	RD-6Z124J-	CF 120K ohm 1/6W
RH48	RD-6Z124J-	CF 120K ohm 1/6W
RH49	RD-6Z153J-	CF 15K ohm 1/6W
RH51	RD-6Z683J-	CF 68K ohm 1/6W
RH52	RD-4Z821J-	CF 820 ohm 1/4W
RH61	RD-6Z102J-	CF 1K ohm 1/6W
RH68	RD-6Z184J-	CF 180K ohm 1/6W
RH69	RD-6Z391J-	CF 390 ohm 1/6W
RH70	RD-6Z822J-	CF 8.2K ohm 1/6W
RH71	RD-6Z152J-	CF 1.5K ohm 1/6W
RH72	RD-6Z101J-	CF 100 ohm 1/6W
RH73	RD-4Z471J-	CF 470 ohm 1/6W
RH75	RD-2Z151J-	CF 150 ohm 1/2W
RH76	RS01D820J-	OMF 82 ohm 1W
RH77	RD-4Z681J-	CF 680 ohm 1/4W
RH78	RD-6Z822J-	CF 8.2K ohm 1/6W
RJ01	RD-6Z102J-	CF 1K ohm 1/6W
RJ02	RD-6Z102J-	CF 1K ohm 1/6W
RJ03	RD-6Z104J-	CF 100K ohm 1/6W
RJ04	RD-6Z104J-	CF 100K ohm 1/6W
RJ09	RD-1Z102J-	CF 1K ohm 1/6W
RJ10	RD-1Z102J-	CF 1K ohm 1/6W
RJ11	RD-6Z104J-	CF 100K ohm 1/6W
RJ12	RD-6Z104J-	CF 100K ohm 1/6W
RJ13	RD-6Z102J-	CF 1K ohm 1/6W
RJ14	RD-6Z102J-	CF 1K ohm 1/6W
RJ15	RD-6Z104J-	CF 100K ohm 1/6W
RJ16	RD-6Z104J-	CF 100K ohm 1/6W

LOCATION NUMBER	STOCK NUMBER	DESCRIPTION
RJ17	RD-6Z104J-	CF 100K ohm 1/6W
RJ18	RD-6Z104J-	CF 100K ohm 1/6W
RJ19	RD-6Z104J-	CF 100K ohm 1/6W
RJ20	RD-6Z104J-	CF 100K ohm 1/6W
RJ21	RD-6Z104J-	CF 100K ohm 1/6W
RJ22	RD-6Z473J-	CF 47K ohm 1/6W
RJ23	RD-6Z473J-	CF 47K ohm 1/6W
RJ24	RD-6Z473J-	CF 47K ohm 1/6W
RJ25	RD-6Z223J-	CF 22K ohm 1/6W
RJ26	RD-6Z102J-	CF 1K ohm 1/6W
RJ27	RD-6Z102J-	CF 1K ohm 1/6W
RJ28	RD-6Z561J-	CF 560K ohm 1/6W
RJ29	RD-6Z473J-	CF 47K ohm 1/6W
RJ30	RD-6Z223J-	CF 22K ohm 1/6W
RJ31	RD-6Z102J-	CF 1K ohm 1/6W
RJ32	RD-6Z104J-	CF 100K ohm 1/6W
RJ33	RD-6Z561J-	CF 560 ohm 1/6W
RJ34	RD-6Z473J-	CF 47K ohm 1/6W
RJ35	RD-6Z223J-	CF 22K ohm 1/6W
RJ36	RD-6Z102J-	CF 1K ohm 1/6W
RJ37	RD-6Z104J-	CF 100K ohm 1/6W
RJ38	RD-6Z561J-	CF 560 ohm 1/6W
RJ39	RD-6Z473J-	CF 47K ohm 1/6W
RJ40	RD-6Z223J-	CF 22K ohm 1/6W
RJ41	RD-6Z102J-	CF 1K ohm 1/6W
RJ42	RD-6Z104J-	CF 100K ohm 1/6W
RJ43	RD-6Z561J-	CF 560K ohm 1/6W
RJ44	RD-6Z104J-	CF 100K ohm 1/6W
RJ45	RD-6Z104J-	CF 100K ohm 1/6W
RJ46	RD-6Z152J-	CF 1.5K ohm 1/6W
RJ47	RD-6Z101J-	CF 100 ohm 1/6W
RJ48	RD-6Z101J-	CF 100 ohm 1/6W
RJ49	RD-6Z101J-	CF 100 ohm 1/6W
RJ50	RD-6Z103J-	CF 10K ohm 1/6W
RJ51	RD-6Z103J-	CF 10K ohm 1/6W
RJ52	RD-6Z152J-	CF 1.5K ohm 1/6W
RJ53	RD-6Z152J-	CF 1.5K ohm 1/6W
RJ54	RD-6Z333J-	CF 33K ohm 1/6W
RJ55	RD-6Z333J-	CF 33K ohm 1/6W
RJ56	RD-6Z101J-	CF 100 ohm 1/6W
RJ57	RD-6Z151J-	CF 150 ohm 1/6W
RJ58	RD-6Z151J-	CF 150 ohm 1/6W
RJ59	RD-4Z479J-	CF 4.7 ohm 1/4W
RJ60	RD-4Z479J-	CF 4.7 ohm 1/4W
RJ61	RD-6Z562J-	CF 5.6K ohm 1/6W
RJ62	RD-6Z562J-	CF 5.6K ohm 1/6W
RJ63	RD-6Z122J-	CF 1.2K ohm 1/6W
RJ64	RD-6Z122J-	CF 1.2K ohm 1/6W
RJ67	RD-6Z104J-	CF 100K ohm 1/6W
RJ68	RD-6Z102J-	CF 1K ohm 1/6W
RJ69	RD-6Z102J-	CF 1K ohm 1/6W
R205	RD-6Z332J-	CF 3.3K 1/6W

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■ REPLACEMENT PART LIST

LOCATION NUMBER	STOCK NUMBER	DESCRIPTION
R207	RV5417472-	R SEMIFIXED SR19R B4.7K OHM
R208	RD-6Z183J-	CF 18K ohm 1/6W
R209	RD-6Z272J-	CF 2.7K ohm 1/6W
R210	RD-6Z182J-	CF 1.8K ohm 1/6W
R211	RD-6Z472J-	CF 4.7K ohm 1/6W
R212	RD-6Z471J-	CF 470 ohm 1/6W
R213	RD-6Z182J-	CF 1.8K ohm 1/6W
R214	RD-6Z471J-	CF 470 ohm 1/6W
R215	RD-6Z102J	CF 1K ohm 1/6W
R217	RD-6Z561J-	CF 560 ohm 1/6W
R218	RD-6Z104J-	CF 100K ohm 1/6W
R220	RD-6Z123J-	CF 12K ohm 1/6W
R221	RD-6Z472J-	CF 4.7K ohm 1/6W
R222	RD-6Z124J-	CF 120K ohm 1/4W
R223	RD-6Z103J-	CF 10K ohm 1/4W
R224	RD-6Z681J-	CF 680 ohm 1/6W
R225	RD-4Z123J-	CF 12K ohm 1/4W
R226	RD-4Z682J-	CF 6.8K ohm 1/4W
R227	RS01F430J-	OMF 43 ohm 1W
R228	RD-4Z911J-	CF 910 ohm 1/4W
R229	RD-6Z393J-	CF 39K ohm 1/6W
R230	RD-6Z122J-	CF 1.2K ohm 1/6W
R240	RD-6Z562J-	CF 5.6K ohm 1/6W
R241	RD-6Z471J-	CF 470 ohm 1/6W
R242	RD-6Z182J-	CF 1.8K ohm 1/6W
R243	RD-6Z471J-	CF 470 ohm 1/6W
R244	RD-6Z122J-	CF 1.2K ohm 1/6W
245	RD-6Z331J-	CF 330 ohm 1/6W
R246	RD-6Z471J-	CF 470 ohm 1/6W
R247	RD-6Z221J-	CF 220 ohm 1/6W
R248	RD-6Z183J-	CF 18K ohm 1/6W
R249	RD-6Z471J-	CF 470 ohm 1/6W
R250	RD-6Z682J-	CF 6.8K ohm 1/6W
R251	RD-6Z121J-	CF 120 ohm 1/6W
R253	RD-6Z683J-	CF 68K ohm 1/6W
R255	RD-6Z101J-	CF 100 ohm 1/6W
R257	RD-6Z123J-	CF 12K ohm 1/6W
R301	RD-6Z822J-	CF 8.2K ohm 1/6W
R302	RD-6Z562J-	CF 5.6K ohm 1/6W
R304	RD-6Z103J-	CF 10K ohm 1/6W
R305	RV5316204M	R SEMIFIXED CET 115A B 200K ohm.
R306	6D-6Z224J-	CF 220K ohm 1/6W
R307	RV5417223-	R SEMIFIXED SR19R B22K ohm 0.15W
R308	RD-6Z222J-	CF 2.2K ohm 1/6W
R309	RD-6Z682J-	CF 6.8K ohm 1/6W
R310	RD-6Z621J-	CF 620J ohm 1/6W
R311	RD-6Z621J-	CF 620 ohm 1/6W
R312	RD-6Z104J-	CF 100K ohm 1/6W
R313	RD-6Z104J-	CF 100K ohm ohm 1/6W
R314	RD-6Z753J-	CF 75K ohm 1/6W
R315	RD-6Z102J-	CF 1K ohm 1/6W

LOCATION NUMBER	STOCK NUMBER	DESCRIPTION
R316	RD-4Z159J-	CF 1.5 ohm 1/4W
R317	RS01F181J-	OMF 180 ohm 1W
R318	RS01F152J-	OMF 1.5K ohm 1/6W
R319	RD-4Z100J-	CF 10 ohm 1/4W
R322	RF01F399J-	R FUSIBLE 3.9 ohm 1W
R323	RS01F511J-	CMF 510 ohm 1W
R324	RD-2Z561J-	CF 560 ohm 1/2W
R401	RD-6Z332J-	CF 3.3K ohm 1/6W
R402	RD-6Z154J-	CF 150K ohm 1/6W
R403	RD-6Z153J-	CF 15K ohm 1/6W
R404	RD-6Z472J-	CF 4.7K ohm 1/6W
R405	RD-6Z332J-	CF 3.3K ohm 1/6W
R406	RD-6Z563J-	CF 56K ohm 1/4W
R407	RD-6Z333J-	CF 33K ohm 1/6W
R408	RD-6Z124J-	CF 120K ohm 1/6W
R409	RV5417103-	R SEMIFIXED SR19R B10K ohm 0.15W
R410	RD-6Z331J-	CF 330 ohm 1/6W
R411	RS02H822J-	OMF 8.2K ohm 2W
R412	RD-6Z182J-	CF 1.8K ohm 1/6W
R413	RD-6Z103J-	CF 10K ohm 1/6W
R414	RD-6Z273J-	CF 10 ohm 1/4W
R415	RD-6Z103J-	CF 10K ohm 1/6W
R416	RD-6Z153J-	CF 15K ohm 1/6W
R417	RD-4Z472J-	CF 4.7K ohm 1/4W
R418	RS03P182J-	OMF 1.8K ohm 3W
R419	RF-1F338J-	R FUSIBLE
R420	RF-2D100J-	R FUSIBLE 10 ohm 1/2W
R421	RF01F109J-	R FUSIBLE 1 ohm 1W
R422	RF01F109J-	R FUSIBLE 1 ohm 1W
R433	RD-6Z104J-	CF 100K ohm 1/6W
R434	RD-6Z104J-	CF 100K ohm 1/W6W
R501	RD-6Z471J-	CF 470 ohm 1/6W
R503	RD-6Z561J-	CF 560 ohm 1/6W
R504	RD-6Z275J-	CF 2.7M ohm 1/6W
R505	RD-6Z224J-	CF 220K ohm 1/6W
R506	RD-6Z472J-	CF 4.7K ohm 1/6W
R507	RD-6Z333J-	CF 33K ohm 1/6W
R508	RD-6Z822J-	CF 8.2K ohm 1/6W
R510	RD-6Z473J-	CF 47K ohm 1/6W
R512	RD-6Z102J-	CF 1K ohm 1/6W
R513	RD-6Z471J-	CF 470 ohm 1/6W
R514	RD-6Z331J-	CF 330 ohm 1/6W
R515	RD-6Z272J-	CF 2.6K ohm 1/6W
R516	RD-6Z331J-	CF 330 ohm 1/6W
R517	RD-6Z272J-	CF 2.7K ohm 1/6W
R518	RD-6Z330J-	CF 330 ohm 1/6W
R519	RD-6Z272J-	CF 2.7K ohm 1/6W
R551	RD-6Z331J-	CF 330 ohm 1/6W
R552	RD-6Z181J-	CF 180 ohm 1/6W
R553	RD-6Z152J-	CF 1.5K ohm 1/6W
R554	RV5316502M	R SEMIFIXED CET115A B5K
R555	RD-6Z151J-	CF 150 ohm 1/6W

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION," "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON PAGE 2 OF THIS MANUAL.

REPLACEMENT PART LIST

LOCATION NUMBER	STOCK NUMBER	DESCRIPTION
R556	RD-6Z331J-	CF 330 ohm 1/6W
R557	RD-6Z181J-	CF 180 ohm 1/6W
R558	RD-6Z152J-	CF 1.5K ohm 1/6W
R559	RV316502M	R SEMIFIXED CET115A B5K ohm
R560	RV5316301M	R SEMIFIXED CET115A B300 ohm
R561	RD-6Z331J-	CF 330 ohm 1/6W
R562	RD-6Z820J-	CF 82 ohm 1/6W
R563	RD-6Z152J-	CF 1.5K ohm 1/6W
R564	RV5316502M	R SEMIFIXED CET115A B5K ohm
R565	RV5316301M	R SEMIFIXED CET115 B300 ohm
R566	RD-4Z332J-	CF 3.3K ohm 1/4W
R567	RS01F123J-	MF 12K ohm 1W
R568	RD-4Z332J	CF 3.3K ohm 1/4W
R569	RS01F123J-	OMF 12K ohm 1W
R570	RD-4Z332J-	CF 3.3K ohm 1/4
R571	RS01F123J-	OMF 12K ohm 1W
R572	RD-6Z101J-	CF 100 ohm 1/6W
R573	RD-6Z102J-	CF 1K ohm 1/6W
RJ65	551103021B	R VARI V016L8-7-3-25K-B 10K ohm CC
RJ66	551103021B	R VARI V016L8-7-3-25K-B 10K ohm CC
R231	551103020B	R VARI V016L8-7-3-25K-B 10K ohm
R223	551202011B	R VARI V016L8-7-3-25K-B 2K ohm
R256	551202020B	R VARI V016L8-7-3-25K-B 10K ohm
R509	551103021B	R VARI V016L8-7-3-25K-B 10K ohm CC
R511	551103021B	R VARI V016L8-7-3-25K-B 10K ohm

PICTURE TUBE

V901	4859602040	CRT370DJB22-TC17CY
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PACKAGED CIRCUITS

CF201	2PTPS45M13	CERAMIC FILTER 4.5MHz TRAP
X502	5PHC18U---	CRYSTAL 3.58MHz
DL201	58Q0000013	DELAY LINE DLY 540492

LOCATION NUMBER	STOCK NUMBER	DESCRIPTION
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TRANSISTORS

QH03	TKTC1815Y-	KTC1815Y
QH04	TKTC1815Y-	KTC1815Y
QH05	TKTC1959Y-	KTC1959Y
QH06	TKTC1815Y-	KTC1815Y
QH07	TKTC1815Y-	KTC1815Y
QH08	TKTC1815Y-	KTC1815Y
QH09	TKTC1815Y-	KTC1815Y
QH10	TKTC1015Y-	KTC1015Y
QH11	TKTC1959Y-	KTC1958Y
QH12	TKTC1815Y-	KTC1815Y
QH17	TKTA1015Y-	KTA1015Y
QH18	TKTA1015Y-	KTA1015Y
QH19	TKTC1959Y-	KTC1959Y
QJ01	TKTC1815Y-	KTC1815Y
QJ02	TKTC1815Y-	KTC1815Y
QJ03	TKTC1815Y-	KTC1815Y
QJ04	TKTC1815Y-	KTC1815Y
Q201	TKTC1815Y-	KTC1815Y
Q202	TKTC1815Y-	KTC1815Y
Q203	TKTC1815Y-	KTC1815Y
Q204	TKTC1815Y-	KTC1815Y
Q205	TKTC1815Y-	KTC1815Y
Q301	TKTD880Y--	KTD880Y
Q302	TKTD880Y--	KTD880Y
Q401	TKTC2482--	KTD2482
Q402	T2SD869---	2SD869
Q551	TKTC2482--	TKTC2482
Q552	TKTC2482--	TKTC2482
Q553	TKTC2482--	TKTC2482
Q554	TKTC1815Y-	KTC1815Y

DIODE

DH01	DIN4148---	IN4148
DH02	DIN4148---	IN4148
DH03	DIN4148---	IN4148
DH06	DIN4148---	IN4148
DH07	DIN4148---	IN4148
DH09	DIN4148---	IN4148
D201	DIN4148---	IN4148
D202	DIN4148---	IN4148
D203	DIN4148---	IN4148
D204	DIN4148---	IN4148
D205	DIN4148---	IN4148
D206	DIN4148---	IN4148

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION," "SAFE-TY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON PAGE 2 OF THIS MANUAL.

■ REPLACEMENT PART LIST

LOCATION NUMBER	STOCK NUMBER	DESCRIPTION
D401	DIN4148---	IN4148
D402	DRH13-----	RH-1B
D403	DS5295G---	S5295G
D404	DS5295G---	S5295G
D405	DZEA0222A	AENOR EQA02-22A
D301	DIN4148---	IN4148
D302	DIN4148---	IN4148
D303	DS5295G---	S5295G
D251	DIN4148---	IN4148
D501	DIN4148---	IN4148

INTEGRATED CIRCUIT

IH01	ITC4066BP-	TC4066BP INPUT VIDEO CONTROL SW UPD4066BP
IJ01	ITC4052BP-	TC4052BP INPUT SOUND CONTROL SW UPD4052BP
IJ02	ITA7630P--	TA7630P TON, VOL BAL. CONTROL
IJ03	ITA7227P--	TA7227P
IS01	ITA7670---	TA7670

COIL AND TRANSFORMER

LH01	58P100J032	COIL PEAKING PL-10A 10 μ H J
LH06	58P100J032	COIL PEAKING PL-10A 10 μ H J
L501	58P330J021	COIL PEAKING PL-33A 33 μ H J
L205	5LP000K014	COIL PEAKING 27 μ H K
L206	5LP000K014	COIL PEAKING 27 μ H K
L551	58P131J033	COIL PEAKING PL-180A 180 μ H
T301	5TCU000006	TRANS PIN CUSH SPC462550
T401	5TDU000007	TRANS H DEIVE Z001PE
T461	5THU000028	TRANS FBT MSH1FBA05
FB401	58C0000026	COIL CHOKE HC-4035
FB402	58C0000026	COIL CHOKE HC-4035

CONNECTOR WAFER AND CRT SOCKET

V901	4859300530	CRT SOCKET HPS-0092-01-030
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LOCATION NUMBER	STOCK NUMBER	DESCRIPTION
A1	4859201020	CONNECTOR WAFER 5045-4A
B1	4859201320	CONNECTOR WAFER 5045-05A
C1	4859204920	CONNECTOR WAFER 5045-08A
D1	4859201120	CONNECTOR WAFER 5045-03A
E1	4859201120	CONNECTOR WAFER 5045-03A
F1	4859202320	CONNECTOR WAFER 5045-12A
G1	4859201120	CONNECTOR WAFER 5045-03A
H1	4859203020	CONNECTOR WAFER 5273-03A
P113	4859205320	CONNECTOR WAFER W-P-3005

BOARD SUB ASSY

UA01	4859801016	PCB Sub
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RESISTORS

RA01	RD-6Z362J-	CF 3.6K ohm 1/6W
RA02	RD-6Z103J-	CF 10K ohm 1/6W
RA03	RD-6Z473J-	CF 47K ohm 1/6W
RA04	RD-6Z912J-	CF 9.1K ohm 1/6W
RA05	RD-6Z473J-	CF 47K ohm 1/6W
RA06	RD-6Z102J-	CF 1K ohm 1/6W
RA07	RD-6Z102J-	CF 1K ohm 1/6W
RA08	RD-6Z222J-	CF 2.2K ohm 1/6W
RA09	RD-6Z101J-	CF 100 ohm 1/6W
RA10	RD-6Z103J-	CF 10K ohm 1/6W
RA11	RD-6Z473J-	CF 47K ohm 1/6W
RA12	RD-6Z103J-	CF 10K ohm 1/6W
CA13	RD-6Z391J-	CF 390 ohm 1/6W
RA14	RD-6Z104J-	CF 100K ohm 1/6W
RA15	RD-6Z473J-	CF 47K ohm 1/6W
RA17	RD-6Z472J-	CF 4.7K ohm 1/6W
RA18	RD-6Z472J-	CF 4.7K ohm 1/6W
RA19	RD-6Z221J-	CF 220 ohm 1/6W
RA20	RD-6Z333J-	CF 33K ohm 1/6W
RA21	RD-6Z103J-	CF 10K ohm 1/6W
RA22	RD-6Z562J-	CF 5.6 ohm 1/6W
RA23	RD-6Z102J-	CF 1K ohm 1/6W
RA25	RD-6Z472J-	CF 4.7K ohm 1/6W
RA26	RD-6Z222J-	CF 2.2K ohm 1/6W
RA27	RD-6Z223J-	CF 22K ohm 1/6W
RA28	RD-6Z223J-	CF 22K ohm 1/6W
RA29	RD-6Z223J-	CF 22K ohm 1/6W

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION," "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON PAGE 2 OF THIS MANUAL.

■ REPLACEMENT PART LIST

LOCATION NUMBER	STOCK NUMBER	DESCRIPTION
RA30	RD-6Z223J-	CF 22K ohm 1/6W
RA31	RD-6Z223J-	CF 22K ohm 1/6W
RA32	RD-6Z223J-	CF 22K ohm 1/6W
RA33	RD-6Z223J-	CF 22K ohm 1/6W
RA34	RD-6Z223J-	CF 22K ohm 1/6W
RA35	RD-6Z223J-	CF 22K ohm 1/6W
RA36	RD-6Z223J-	CF 22K ohm 1/6W
RA37	RD-6Z223J-	CF 22K ohm 1/6W
RA38	RD-6Z223J-	CF 22K ohm 1/6W
RA39	RD-6Z223J-	CF 22K ohm 1/6W
RA40	RD-6Z223J-	CF 22K ohm 1/6W
RA41	RD-6Z223J-	CF 22K ohm 1/6W
RA44	RD-6Z223J-	CF 22K ohm 1/6W
RA45	RD-6Z332J-	CF 3.3K ohm 1/6W
RA46	RD-6Z223J-	CF 22K ohm 1/6W
RA47	RD-6Z332J-	CF 3.3K ohm 1/6W
RA48	RD-6Z223J-	CF 22K ohm 1/6W
RA49	RD-6Z103J-	CF 10K ohm 1/6W
RA50	RD-6Z223J-	CF 22K ohm 1/6W
RA51	RD-6Z103J-	CF 10K ohm 1/6W
RA52	RD-6Z104J-	CF 100K ohm 1/6W
RA53	RD-6Z104J-	CF 100K ohm 1/6W
RA54	RD-6Z223J-	CF 22K ohm 1/6W
RA55	RD-6Z103J-	CF 10K ohm 1/6W
RA60	RD-6Z223J-	CF 22K ohm 1/6W
RA61	RD-6Z102J-	CF 1K ohm 1/6W
RA62	RD-6Z152J-	CF 1.5K ohm 1/6W
RA63	RD-6Z223J-	CF 22K ohm 1/6W
RA64	RD-6Z562J-	CF 5.6K ohm 1/6W
RA65	RD-6Z152J-	CF 1.5K ohm 1/6W
RA66	RD-6Z223J-	CF 22K ohm 1/6W
RA67	RD-6Z562J-	CF 5.6K ohm 1/6W
RA68	RD-6Z221J-	CF 220 ohm 1/6W
RA69	RD-6Z221J-	CF 220 ohm 1/6
RA70	RD-6Z221J-	CF 220 ohm 1/6W
RA71	RD-6Z221J-	CF 220 ohm 1/6W
RA72	RD-6Z221J-	CF 220 ohm 1/6W
RA73	RD-6Z221J-	CF 220 ohm 1/6W
RA74	RD-6Z221J-	CF 220 ohm 1/6W
RA75	RD-6Z104J-	CF 100K ohm 1/6W
RA77	RD-6Z102J-	CF 1K ohm 1/6W
RA78	RD-6Z102J-	CF 1K ohm 1/6W
RA80	RD-6Z393J-	CF 33K ohm 1/6W
RA81	RD-6Z101J-	CF 100 ohm 1/6W
RA82	RD-6Z101J-	CF 100 ohm 1/6W
RA83	RD-6Z101J-	CF 100 ohm 1/6W
RA84	RD-6Z101J-	CF 100 ohm 1/6W
RA85	RD-6Z101J-	CF 100 ohm 1/6W
RA86	RD-6Z101J-	CF 100 ohm 1/6W
RA87	RD-6Z101J-	CF 100 ohm 1/6W
RA88	RD-6Z101J-	CF 100 ohm 1/6W
RA89	RD-6Z223J-	CF 22K ohm 1/6W
RA90	RD-6Z562J-	CF 5.6 ohm 1/6W

LOCATION NUMBER	STOCK NUMBER	DESCRIPTION
RA91	RD-6Z101J-	CF 100 ohm 1/6W
RA92	RD-6Z472J-	CF 4.7K ohm 1/6W
RA93	RD-6Z391J-	CF 390 ohm 1/6W
RA101	RD-6Z104J-	CF 100K ohm 1/6W
RA102	RD-6Z204J-	CF 200K ohm 1/6W
RA103	RD-2Z101J-	CF 100 ohm 1/2W
RA104	RD-6Z681J-	CF 680 ohm 1/6W
R101	RD-6Z101J-	CF 100 ohm 1/6W
R102	RD-6Z152J-	CF 1.5K ohm 1/6W
R103	RD-6Z562J-	CF 5.6K ohm 1/6W
R105	RD-6Z330J-	CF 33 ohm 1/6W
R106	RD-6Z391J-	CF 390J ohm 1/6W
R107	RD-6Z331J-	CF 330 ohm 1/6W
R108	RD-6Z391J-	CF 390 ohm 1/6W
R114	RD-6Z684J-	CF 680K ohm 1/6W
R115	RV5417103-	R SEMIFIXED SR19R B10K OHM 0.15W
R116	RD-6Z103J-	CF 10K ohm 1/6W
R117	RD-6Z391J-	CF 390 ohm 1/6W
R120	RD-6Z332J-	CF 3.3K ohm 1/6W
R122	RD-6Z182J-	CF 1.8K ohm 1/6W
R123	RD-6Z102J-	CF 1K ohm 1/6W
R124	RD-6Z152J-	CF 1.5K ohm 1/6W
R125	RD-6Z821J-	CF 820 ohm 1/6W
R126	RD-6Z391J-	CF 390 ohm 1/6W
R127	RD-6Z221J-	CF 220 ohm 1/6W
R610	RD-6Z102J-	CF 1K ohm 1/6W
R611	RD-6Z822J-	CF 8.2K ohm 1/6W
R614	RD-6Z102J-	CF 1K ohm 1/6W

CAPACITORS

CA01	CCXB1H561K	CD560PF \pm 10% 50V (K)
CA02	CCXB1H272K	CD2700PF \pm 10% 50V (K)
CA03	CEXE1H109A	EL 1 μ F 50V
CA04	CEXE1C229A	EL 2.2 μ F 16V
CA06	CEXE1A479A	EL 4.7 μ F 16V
CA07	CEXE1C101A	EL 100 μ F 16V
CA08	CEXE1C221A	EL 200 μ F 16V
CA09	CCXF1H103Z	CD 0.01 μ F \pm 10% 50V (Z)
CA11	CEBE1C471A	EL 470 μ F 16V
CA12	CEXE1H470A	EL 47 μ F 50V
CA13	CCXF1H103Z	CD 0.01 μ F \pm 10% 50V (Z)
CA14	CMXN1H473J	EL 2.2 μ F 16V
CA16	CCXF1H103Z	CD 0.01 μ F \pm 10% 50V (Z)
CA17	CEXE1C100A	EL 10 μ F 16V
CA18	CXCH1H180J	CD 18PF \pm 5% 50V (CH)

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■ REPLACEMENT PART LIST

LOCATION NUMBER	STOCK NUMBER	DESCRIPTION
CA19	CXCH1H220J	CD 22PF \pm 5% 50V (CH)
CA20	CCXF1H103Z	CD 0.01 μ F \pm 10% 50V (Z)
CA21	CCXF1H103Z	CD 0.01 μ F \pm 10% 50V (Z)
CA22	CCXF1H103Z	CD 0.01 μ F \pm 10% 50V (Z)
CA23	CCXF1H103Z	CD 0.01 μ F \pm 10% 50V (Z)
CA24	CCXF1H103Z	CD 0.01 μ F \pm 10% 50V (Z)
CA25	CCXF1H103Z	CD 0.01 μ F \pm 10% 50V (Z)
CA28	CEXE1H229A	EL 2.2 μ F 50V
CA29	CEXE1C102A	EL 1000 μ F 16V
CA30	CCXF1H103Z	CD 0.01 μ F \pm 10% 50V (Z)
CA31	CEXE1C470A	EL 47 μ F 16V
CA34	CMXM1H104J	CM 0.1 μ F \pm 5% (50V)
CA35	CEXE1H479A	EL 4.7 μ F 50V
CA36	CMXN1H103K	CM 0.01 μ F 50V
CA37	CEBE1C471A	EL 470 μ F 16V
CA38	CCXF1H103Z	CD 0.01 μ F \pm 10% 50V (Z)
C101	CCXF1H103Z	CD 0.01 μ F \pm 10% 50V (Z)
C103	CCXF1H103Z	CD 0.01 μ F \pm 10% 50V (Z)
C104	CCXF1H103Z	CD 0.01 μ F \pm 10% 50V (Z)
C105	CCXF1H102K	CD 1.001 μ F \pm 10% 50V (K)
C108	CEXE1H478A	EL 0.47 μ F 50V
C109	CCXF1H103Z	CD 0.01 μ F \pm 10% 50V (Z)
C110	CCXF1H103Z	CD 0.01 μ F \pm 10% 50V (Z)
C111	CCXF1H103Z	CD 0.01 μ F \pm 10% 50V (Z)
C114	CCXF1H103Z	CD 0.01 μ F \pm 10% 50V (Z)
C115	CCXF1H103Z	CD 0.01 μ F \pm 10% 50i (Z)
C117	CCXF1H470J	CD 47PF \pm 5% 50V (CH)
C118	CXCA1H209C	CD 2PF 50V (C)
C119	CXCA1H209C	CD 2PF 50V (C)
C120	CCXF1H103Z	CD 0.01 μ F 50V (Z)
C121	CCXF1H473Z	CD 0.47 μ F 50V (Z)
C122	CCXF1H103Z	CD 0.01 μ F 50V (Z)
C611	CXCH1H180J	CD 18PF 50V (CH) J
C613	CXCH1H220J	CD 22PF 50V (CH) J
C614	CCXF1H103Z	CD 0.01 μ F 50V (Z)
C615	CMXN1H562K	CM 5600PF 50V (K)

INTEGRATED CIRCUITS

IA01	IUPDO9C113	UP1709—113 FS CONTROL IC
IA02	IUPD4556C—	UPD 4556C
I101	ITA7680---	TA7680 PIF. SIF.
DA23	IUPC574---	UPC574

LOCATION NUMBER	STOCK NUMBER	DESCRIPTION
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TRANSISTORS

QA01	TKTC1815Y-	KTC1815Y
QA02	TKTC1815Y-	KTC1815Y
QA03	TKTA1015Y-	KTA1015Y
QA04	TKTC1815Y-	KTC1815Y
QA05	TKTC2236Y-	KTC2236Y
QA07	TKTC2120Y-	KTC2120Y
QA08	TKTC2120Y-	KTC2120Y
QA09	TKTC1815Y-	KTC1815Y
QA10	TKTC1815Y-	KTC1815Y
QA11	TKTC1815Y-	KTC1815Y
QA13	TKTA1015Y-	KTA1015Y
QA14	TKTA1015Y-	KTA1015Y
QA15	TKTA1015Y-	KTA1015Y
QA16	TKTA1015Y-	KTA1015Y
QA17	TKTA1015Y-	KTA1015
QA18	TKTA1015Y-	KTA1015Y
QA19	TKTC1815Y-	KTC1815Y
QA22	TKTC1815Y-	KTC1815Y
QA24	TKTC1815Y-	KTC1815Y
QA25	TKTA1015Y-	KTA1015Y
QA26	TKTA1815Y-	KTA1815Y
QA27	TKTA2120Y-	KTA2120Y
QA28	TKTD880Y--	KTD880Y
Q101	TKTC388A--	KTC388A
Q102	TKTC1815Y-	KTC1815Y
Q103	TKTA1015Y-	KTA1015Y
Q104	TKTA1815Y-	KTA1815Y

DIODES

DA03	DID4148---	IN4148
DA05	DZPD12----	ZPD12 ZENOR
DA07	DIN4148---	IN4148
DA10	DIN4148---	IN4148
DA11	DIN4148---	IN4148
DA12	DIN4148---	IN4148
DA14	DIN4148----	IN4148
DA15	DIN4148---	IN4148
DA16	DIN4148---	IN4148
DA17	DIN4148---	IN4148
DA18	DIN4148---	IN4148
DA19	DIN4148---	IN4148
DA21	DZPD51EB--	ZPD5.1EB
DA22	DZPD12----	ZP12 ZENOR
DA25	DIN4148---	IN4148

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION," "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON PAGE 2 OF THIS MANUAL.

■ REPLACEMENT PART LIST

LOCATION NUMBER	STOCK NUMBER	DESCRIPTION
DA26	DIN4148---	IN4148
DA27	DIN4148---	IN4148
DA28	DIN4148---	IN4148
DA29	DIN4148---	IN4148

COIL AND TRANSFORMER

LA01	58P104K609	PEAKING COIL PL-100B 100 μ H K
LA02	58P569J041	PEAKING COIL PL5.6A 5.6 μ H
L101	58C568K033	CHOKE COIL 0.56 μ H K
L102	58C758K029	CHOKE COIL 0.75 μ H K
L103	58C109K037	CHOKE COIL 1 μ H K
L104	58C568K033	CHOKE COIL 0.56 μ H K
L105	58B0000032	COIL PIF 213KEA-K5001FFV-KR
L106	58E0000004	COIL AFT 213KDA-K5002FLC-KR
L107	58P139J031	PEAKING COIL 1.3 μ H J
L108	58P130J028	PEAKING COIL 13 μ H J
L601	58S0000003	COIL SIF BMF 199CC-K5125BS-KR.
L602	58P220J012	PEAKING COIL 22 μ H J

PACKAGE CIRCUITS

SF101	5PF1032U--	SAW FILTER F1032U
XA01	5P45HC18U-	CRYSTAL 4.5MHZ HC-18/U
CF601	5RSFE45MBM	CERA FILTER SFE 4.5MBM (4.5MHZ)
TUNER	4859702130	TUNER VTY-1U31

CONNECTOR WAFER

G2	4859201120	MOLEX 5045-03A
V2	4859201120	MOLEX 5045-03A
N2	4859201120	MOLEX 5045-03A
K2	4859201120	MOLEX 5045-03A
Q2	4859201120	MOLEX 5045-03A
A2	4859201020	MOLEX 5045-04A
P2	4859201320	MOLEX 5045-05A
J2	4859201420	MOLEX 5045-06A
M2	4859204920	MOLEX 5045-08A
L2	4859202320	MOLEX 5045-12A

LOCATION NUMBER	STOCK NUMBER	DESCRIPTION
UD01	4859800611	PCB POWER

POWER ASS'Y

CAPACITORS

CD01	CLJA2B108-	LINE ACROSS 0.1 μ F LHX125V AC
CD05	CLJA2B108-	LINE ACROSS 0.1 μ F LHX125V AC
CD07	CCBB2H472K	CD 4700PF 500V (K)
CD08	CCBB2H472K	CD 4700PF 500V (K)
CD09	CCBB2H472K	CD 4700OF 500V (K)
CD10	CCBB2H472K	CD 4700PF 500V (K)
CD11	CEYE2D471D	EL 470 μ F 200V
CD14	CEBE2C100A	EL10 μ F 160V
CD15	CMBM1H224-	CM 0.22 μ F 50V
CD18	CMFN3C562J	CM 5600PF 1.6KV
CD19	CCBB3A102K	CD 1000PF 1KV (K)
CD21	CCBB3A821B	CD 820PF 1KV (K)
CD22	CEDH2C101A	EL 100 μ F 160V
CD25	CECE2C330A	EL 33 μ F 160V
CD26	CCBB3A102K	CD 1000PF 1KV (K)
CD27	CCBB2A681K	CD 680PF 500V (K)
CD28	CCBB2A681K	CD 680PF 500V (K)
CD29	CEDH1H1E472A	EL 4700 μ F 25V
CD30	CEBD1C101A	EL 100 μ F 16V
CD32	CCYB2L471K	CD 470PF 400V AC (K)
CD33	CCYB2L471K	CD 470PF 400V AC (K)
CD51	CCC82H102K	CD 0.001 μ F 500V (K)
CD52	CCC82H102K	CD 0.001 μ F 500V (K)
CD53	CCC82H102K	CD 0.001 μ F 500V (K)
CD54	CECE2A331A	EL 330 μ F 100V
CD54	CEXE1C221A	EL 220 μ F 16V

RESISTORS

RD01	RX10P339TS	R CEMENT 3.3 ohm 10WJ
RD02	DPT1H624105	POSISTOR PTH624-105BG 150M 140
RD11	RD-2Z104J-	CF 100K ohm 1/2W
RD12	RD-21473J-	CF 47K ohm 1/2W
RD13	RD-4Z152J-	CF 680 ohm 1/4W
RD14	RS01H330J-	OMF 8.2 ohm 1W
RD15	RS01D820J-	OMF 33 ohm 1W
RD18	RX10P171J-	R CEMENT 170 ohm 10W
RD22	RD-4Z272J-	CF 2.7K ohm 1/4W
RD30	RSO2H471J-	OMF 470 ohm 2W
RD31	RSO2H153J-	OMF 15K ohm 2W
RD34	RD-4Z154J-	CF 150K ohm 1/4W

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION," "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON PAGE 2 OF THIS MANUAL.

■ REPLACEMENT PART LIST

LOCATION NUMBER	STOCK NUMBER	DESCRIPTION
RD55	RD-4Z103J-	CF 10K ohm 1/4W
RD56	RD-4Z390J-	CF 39 ohm 1/4W

INTEGRATED CIRCUITS

ID11	1STR470A--	STR 470A POWER SWITCHING TR
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TRANSISTORS

QD21	TKTC2073J-	KTC2073Y
QD22	TKTC2229Y-	KTC2229Y
QA24	TKTD880Y--	KTD880Y
QD25	TKTC1815Y-	KTC1815Y
QD51	TKTD880Y-	KTD880Y
QD52	TKTD1015Y-	KTA1015Y

DIODES

DD01	DIS1888---	IS1888 ERB12-06
DD02	DIS1888---	IS1888 ERB12-06
DD03	DIS1888---	IS1888 ERB12-06
DD04	DIS1888---	IS1888 ERB12-06
DD08	DIN4148---	IN4148
DD11	DFR106----	FR106
DD12	DFR106----	FR106
DD13	DFR103----	FR103
DD21	DFR256----	FR256
DD22	DIN4002---	IN4002
DD24	DFR253----	FR253
DD51	DIN4003---	IN4003
DD52	DIN4003---	IN4003
DD53	DIN4003---	IN4003
DD54	DIN4003---	IN4003
DD55	DZPD12----	DIODE ZENOR ZPD12
DD56	DIN4002---	IN4002
DD57	DIN4002---	IN4002

COIL AND TRANSFORMERS

LD01	5PPN000112	LINE FILTER PN: 000112 (G5025-3)
LD11	58C820K038	COIL CHOKE CH-082
TD11		TRANSFORMER TSW4202
TD12	5TP0000059	TRANSFORMER TSW-2201
TD51	5TP0000060	TRANSFORMER TSW-2010

LOCATION NUMBER	STOCK NUMBER	DESCRIPTION
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MISCELLANEOUS

YD01	5400202002	SW RELAY VS-12MB
FD01	5F1GB4021S	FUSE UL/CSA MF51 4A 125V TS
FD22	5F1GB2021S	FUSE UL/CSA MF51 2A 250V TS
CORD		
POWER	5990800054	7A 125V SPT-2 HZ-TC1031S
P3	4859201320	CONNECTOR WAFER 5045-05A
Q3	4859203220	CONNECTOR WAFER 5273-05A
HT SINK	4857013300	PLATE C HT SINK SPCL T1.0 SN-3
HT SIN	4857013600	ID11 HT SINK A1050P-H24 T2.0
LD00	58G000020	DEGAUSSING COIL HD-2074C
V901	4859602040	CRT 370JB22-TC17(Y)
V901A	58D1000030	COIL DY KY6003D
SPEAKER	4858302020	MSF-2D35
	4858302120	CS0906T1880
DG01	DJL-2241--	DISPLAY LED UL2241 (COMMONANODE)
DG04	DKLG208E--	LED GREEN KLG208E
DGO5	DKLR208E--	LED RED KLR208E
SWE01	5440404034	PUSH SWITCH SUF-24
SWE02	5440000018	PUSH SWITCH SUHK50H(G)
SWE03	5440201017	PUSH SWITCH SUH-12A(G)
HE01	47172086V0	HEADPHONE JACK HYT-80(065)
RE01	RD-2Z331J-	CF 330 ohm 1/2W
RE02	RD-2Z331J-	CF 330 ohm 1/2W
CE01	CEAC1H339-	EL 3.3μF 50V
CE02	CEAC1H339-	EI 3.3μF 50V
DE01	DIN4148---	IN4148
CB01	CEXD1C470A	EL 47μF 16V
CB02	CCXB1H102K	CD 1000PF 50V (K)
CB03	CMXN1H473K	CM 0.047μF 50V (K)
CB04	CCXB1H332J	CD 3300PF 50V (J)
CB05	CEXE1V100A	EL 10μF 35V
CB06	CEXD1V479A	EL 4.7μF 35V
CB07	CEXE1V100A	EL 10μF 35V
DB01	DPH302---	PHOTO DIODE PH302(NEC)
RB01	RD-6Z101J-	CF 100 ohm 1/6W
RB02	RD-6Z154J-	CF 150K ohm 1/6W
RB03	RD-6Z220J-	CF 22 ohm 1/6W
RB04	RD-6Z102J-	CF 1K ohm 1/6W
RB05	RD-6Z104J-	CF 100K ohm 1/6W
LB01	5800000011	OSC COIL TRF038

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION," "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON PAGE 2 OF THIS MANUAL.

■ REPLACEMENT PART LIST

LOCATION NUMBER	STOCK NUMBER	DESCRIPTION
IB01	1UPC1373H-	PRE AMP IC UPC1373H
UF01	4859800417	PCB TERMINAL
SF01	5430306009	KSA-222 SPEAK MODE SWITCH
RF01	RD-4Z750J-	CF 75 ohm 1/4 W
F4	4859209220	CONNECTOR WAFER JAW-025-03
S4	4859209220	CONNECTOR WAFER JAW-025-03
R4	4859209320	CONNECTOR WAFER JAW-025-04
C4	4859209720	CONNECTOR WAFER JAW-025-08
F4	4859210020	CONNECTOR WAFER JAW-025-12
UC01	4859801027	PCB TRANSMITTER
RC03	RD-4Z108J-	CF 1 ohm 1/4 W
CC01	CDCH1H101J	CD 100PF 50V(J)
CC02	CDCH1H101J	CD 100PF 50V(J)
CC03	CEXEOJ470A	EL 47μF 6.3V
DC01	DLD271----	DIODE INFRARED LD271
DC02	DLD271----	DIODE INFRARED LD271
DC04	DIN4148---	IN4148
QC02	TKTC2120Y-	TR KTC2120Y
XC01	5897100000	CERA RESONATOR CSB455C
XC01	1UPD1913C-	TRANSMITTER IC UPD1913C
LOOP		
ANTENNA	4850A00220	SWRM02 + SWPA - 01 + W/ENGLISH
ROD		
ANTENNA	4850A01110	KAP-0027-0-3
ANTENNA		
MATCHING		
TRANS	4850A00250	IM-06

LOCATION NUMBER	STOCK NUMBER	DESCRIPTION
G1, G2	4859203043	5051 - 0342 + 5159T + U - S-HW = 320
H1	4859206243	5239 - 03 + 5167T + U - BW-IRE = 620
S4	4859204443	JW - 025 - 03 + TST025 + U - BU = 350
P2, P3	4859205845	5051 - 05 + 5159T + U - BW-IRE = 250
Q2	4859203643	5051 - 03 + 5159T + U - BW-IRE = 500
N2		5051 - 03 + 5159T + U - BW-IRE = 520
K2	4859203443	5051 - 03 + 5159T + U - BW-IRE = 450
R4	4859204144	JW025 - 04 + TST025 + U - BUSWIRE
L2	4859200752	5051 - 12 + 5150T + BUSWIRE = 490
M2	4859200648	5051 - 08 + 5159T + U - BW-IRE = 450

CONNECTOR ASS'Y

A1-A2	4859202844	5051 - 04 + 5159T + U - SH-W = 300
B1	4859203745	5051 - 05 + 5159T + U - BW-IRE = 620
C1, C4	4859200848	5051 - 05 + 5159T + U - SH-LDS = 260
D1	4859203243	5051 - 05 + 5159T + U - BW-IRE = 680
E1, E4	4859206843	5051 - 05 + 5159T + U - SH-LDW = 260
F1, F4	4859200452	5051 - 05 + 5159T + U - SH-LDW = 200

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION," "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON PAGE 2 OF THIS MANUAL.

■ REPLACEMENT PART LIST

LOCATION NUMBER	STOCK NUMBER	DESCRIPTION
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**This parts list is for DCB-2007FA only
PCB MAIN ASS'Y**

RESISTORS

R414	RD-4Z270J-	CH 27 ohm 1/4 W
CACKAGED CIRCUITS	5800000011	DELAY LINE DL2106 (0.6M/sec)

CAPACITORS

C418	CMFN3C392J	CM 3900PF $\pm 10\%$ 1.6KV
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POWER TRANSISTOR

Q402	T2SD870---	2SD870
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TRANSFORMER

T461	5THU000029	MSHIFBA04
T301	5TCU000007	Spc462548

ADDITIONAL PART LIST (COMB FILTER CIRCUIT)

RH54	RV5417102-	R SEMIFIXED SR 19R B 1K OHM 0.15W
RH55	RD-6Z391J-	CF 390 OHM 1/6W
RH56	RD-6Z153J-	CF 15K OHM 1/6W
RH57	RD-6Z682J-	CF 6.8K OHM 1/6W
RH58	RD-6Z102J-	CF 1K OHM 1/6W
RH59	RD-6Z820J-	CF 82 OHM 1/6W
RH60	RD-6Z272J-	CF 2.7K OHM 1/6W
RH61	RD-6Z102J-	CF 1K OHM 1/6W
RH62	RD-6Z820J-	CF 82 OHM 1/6W
RH63	RD-6Z272J-	CF 2.7K OHM 1/6W

LOCATION NUMBER	STOCK NUMBER	DESCRIPTION
RH64	RD-6Z122J-	CF 1.2K OHM 1/6W
RH65	RD-6Z102J-	CF 1K OHM 1/6W
RH66	RD-6Z152J-	CF 1.5K OHM 1/6W
RH67	RD-6Z152J-	CF 1.5K OHM 1/6W

CAPACITORS

CH20	CCXF1H103Z	CD 0.01 μ F $\pm 10\%$ 50V(Z)
CH21	CCXF1H331K	CD 330PF $\pm 10\%$ 50V(K)
CH22	CCXF1H331K	CD 330PF $\pm 10\%$ 50V(K)
CH23	CCXF1H103Z	CD 0.01 μ F $\pm 10\%$ 50V(Z)
CH24	CDCH1H101J	CD 100PF $\pm 10\%$ 50V(J)
CH25	CBCH1H270J	CD 27PF $\pm 10\%$ 50V(J)
CH26	CCXF1H103Z	CD 0.01 μ F $\pm 10\%$ 50V(Z)
CH27	CCXH1H330J	CD 33PF $\pm 10\%$ 50V(J)
CH28	CXCH1H209C	CD 29PF $\pm 10\%$ 50V(C)

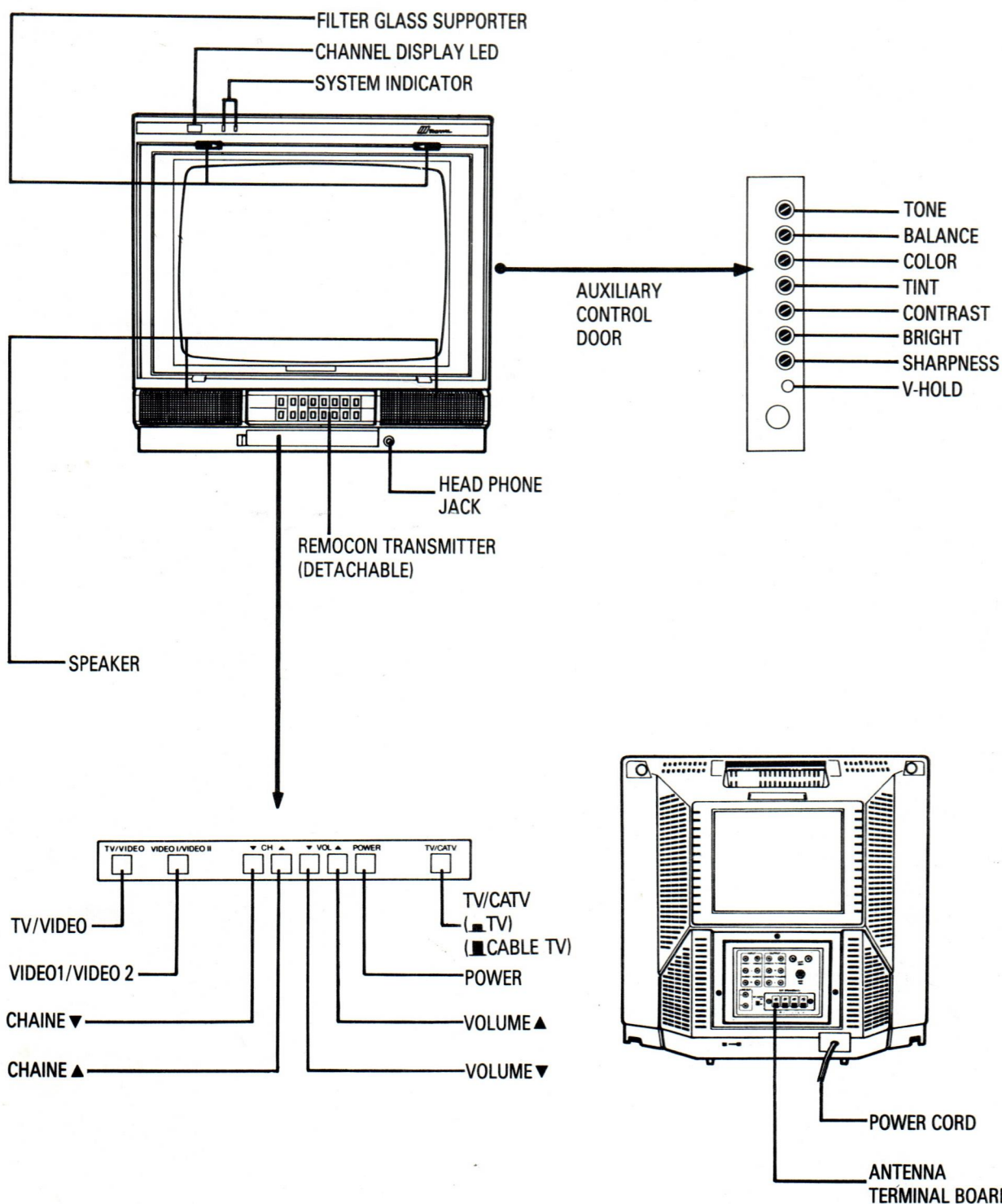
TRANSISTOR

QH13	TKTC1815Y-TR	KTC1815-Y
QH14	TKTC1815Y-TR	KTC1815-Y
QH15	TKTC1815Y-TR	KTC1815-Y
QH16	TKTC1815Y-TR	KTC1815-Y
TH01	58F1230009 Coil Comb	TRF-3050

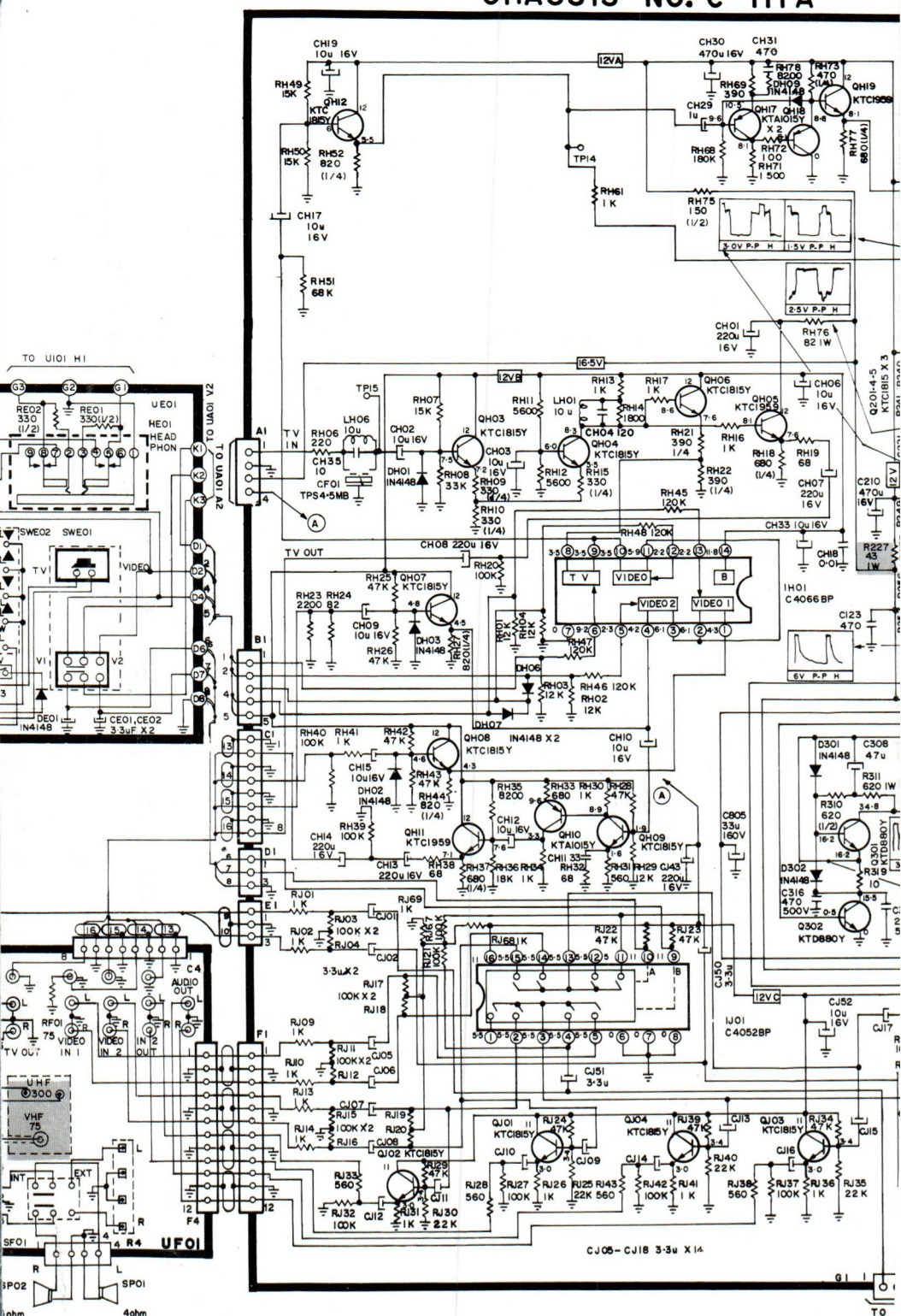
COIL

LH02	58P150J026 peaking coil	PL-15A(15 μ HJ)
LH03	5LP000K014 peaking coil	27 μ H (K)
LH04	58P560J014 peaking coil	56 μ H (K)
DLH01	5800000020 Delay Line	ADL-CN335

DCB-408FA.



SCHEMATIC DIAGRAM
CHASSIS NO. C-111A



NOTE

RESISTANCE IS SHOWN IN OHM. K=1,000, M=1,000,000.

2-UNLESS OTHERWISE NOTED IN SCHEMATIC ALL CAPACITOR VALUES LESS THAN 1 ARE EXPRESSED IN mfd AND THE VALUES MORE THAN 1 IN pF.

3-UNLESS OTHERWISE NOTED IN SCHEMATIC ALL INDUCTOR
VALUES MORE THAN 1 ARE EXPRESSED IN μ H AND THE
VALUES LESS THAN 1 IN H.

4. VOLTAGES READ WITH "VTVM" FROM POINT INDICATED
TO CHASSIS GROUND, USING A COLOR BAR SIGNAL WITH

5. VOLTAGE READINGS SHOWN ARE NOMINAL VALUES AND MAY VARY $\pm 20\%$ EXCEPT H.V.

6-THIS CIRCUIT DIAGRAM IS A STANDARD ONE, CIRCUITS PRINTED MAY BE SUBJECT TO CHANGE FOR PRODUCT IMPROVEMENT WITHOUT PRIOR NOTICE.

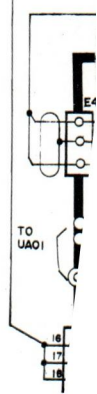
"WAR!"

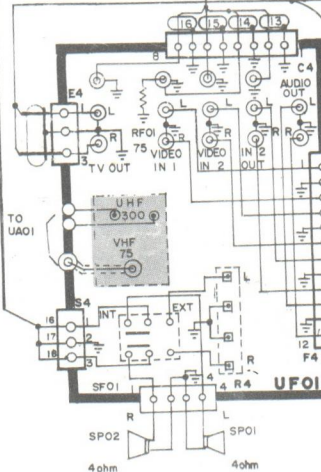
BEFORE
"X-RAY"
AND "PRO"

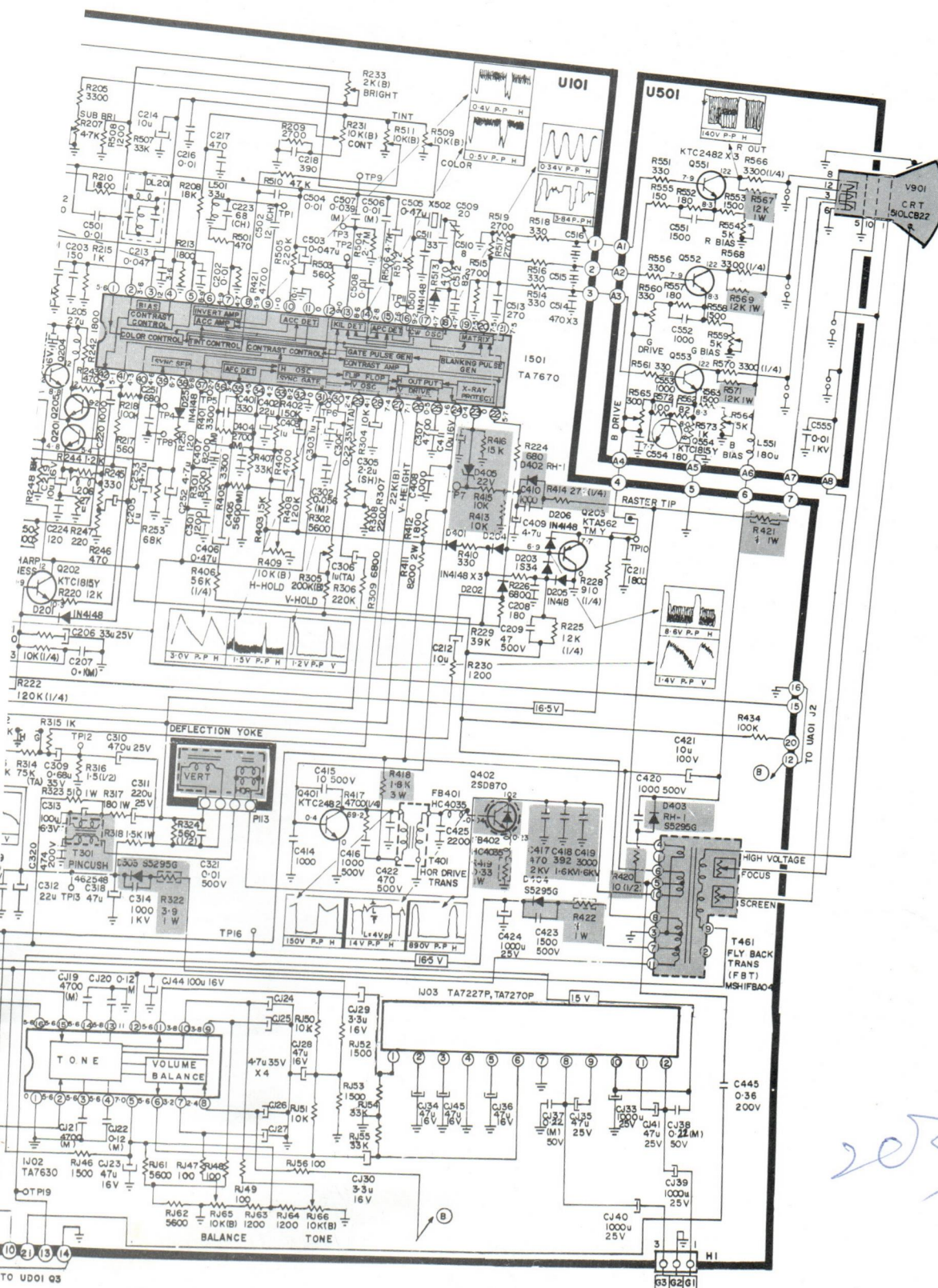
CAUTION

BEFORE I
TO MAKE
MEASURE
ARE PRO









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■ FRONT/BACK VIEW

DCB-2007FA.

