

HITACHI

SERVICE MANUAL

NTSC

A2LXU CHASSIS

PA

No. 0037

35UX60B/CZ46J
35TX69K/CZ33J

R/C: CLU-850GR
CLU-692GR

CAUTION: Before servicing this chassis, it is important that the service technician read the "Safety Precaution" and "Product Safety Notices" in this Service Manual.

This television receiver will display television closed captioning (CC or) in accordance with paragraph 15.119 of the FCC rules.

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SPECIFICATIONS AND PARTS ARE SUBJECT TO CHANGE FOR IMPROVEMENT

SOLID STATE COLOR TELEVISION

SAFETY PRECAUTIONS

NOTICE: Comply with all cautions and safety related notes located on or inside the cabinet and on the chassis or picture tube.

WARNING: Since the chassis of this receiver is connected to one side of the AC power supply during operation, whenever the receiver is plugged in, service should not be attempted by anyone unfamiliar with the precautions necessary when working on this type of receiver.

The following precautions should be observed:

1. Do not install, remove, or handle the picture tube in any manner unless shatterproof goggles are worn. People not so equipped should be kept away from the body while handling.
2. When service is required, an isolation transformer should be inserted between power line and the receiver before any service is performed on a "HOT" chassis receiver.
3. When replacing a chassis in the receiver, all the protective devices must be put back in place, such as barriers, non-metallic knobs, adjustment and compartment cover-shields, isolation resistors-capacitors, etc.
4. When service is required, observe the original lead dress in the high voltage circuitry area.
5. Always use the manufacturer's replacement components. Especially critical components as indicated on the circuit diagram should not be replaced by other manufacturer's. Furthermore, where a short circuit has occurred, replace those components that indicate evidence of overheating.
6. Before returning a serviced receiver to the customer, the service technician must thoroughly test the unit to be certain that it is completely safe to operate without danger of electrical shock, and be sure that no protective device built into the receiver by the manufacturer has become defective, or inadvertently defeated during servicing.

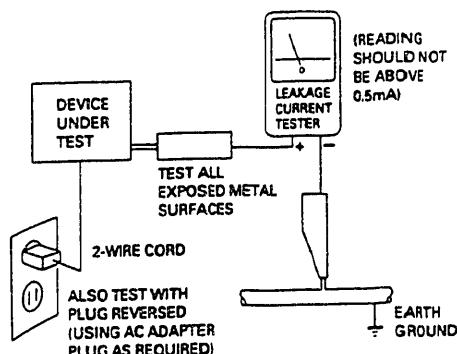
Therefore, the following checks should be performed for the continued protection of the customer and service technician.

Leakage Current Cold Check

With the AC plug removed from the 120V AC 60Hz source, place a jumper across the two plug prongs. Turn the AC power switch on. Using an insulation tester (DC500V), connect one lead to the jumpered AC plug and touch the other lead to each exposed metal part (antennas, screwheads, metal overlays, control shafts, etc.), particularly any exposed metal part having a return path to the chassis should have a minimum resistor reading of $0.24M\ \Omega$ and a maximum resistor reading of $5.2M\ \Omega$. Any resistance value below or above this range indicates an abnormality which requires corrective action. Exposed metal parts not having a return path to the chassis will indicate an open circuit.

Leakage Current Hot Check

Plug the AC line cord directly into an AC 120V 60Hz outlet (do not use an isolation transformer for this check). Turn the AC power switch on. Using a "leakage Current Tester (Simpson Model 229 or equivalent)", measure for current from all exposed metal parts of the cabinet (antennas, screwheads, metal overlays, control shafts, etc.), particularly any exposed metal part having a return path to the chassis, to a known earth ground (water pipe, conduit, etc.). Any current measured must not exceed 0.5mA.

**AC LEAKAGE TEST**

ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE RECEIVER TO THE CUSTOMER.

High Voltage

This receiver is provided with a hold down circuit for clearly indicating that voltage has increased in excess of a predetermined value. Comply with all notes described in this Service Manual regarding this hold down circuit when servicing, so that this hold down circuit is operated correctly.

Serviceman Warning

With minimum Black Level and Picture, the operating high voltage in this receiver is lower than 37.0kV. In case any component having influence on the high voltage is replaced, confirm that high voltage with minimum Black Level and Picture is lower than 37.0kV. To measure H.V. use a high impedance H.V. meter. Connect (-) to chassis earth and (+) to the CPT anode button (See the following connection diagram).

NOTE: Turn the power switch off without fail before the connection to the Anode button is made.

PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in HITACHI television receivers have special safety related characteristics. These are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacements parts which have these special safety characteristics are identified in the Model Service Manual.

Electrical components having such features are identified with an Δ mark in the schematics and parts list in the Model Service Manual.

The use of a substitute replacement component which does not have the same safety characteristics as the HITACHI recommended replacement one, shown in the parts list in the Model Service Manual, may create shock, fire, X-radiation, or other hazards.

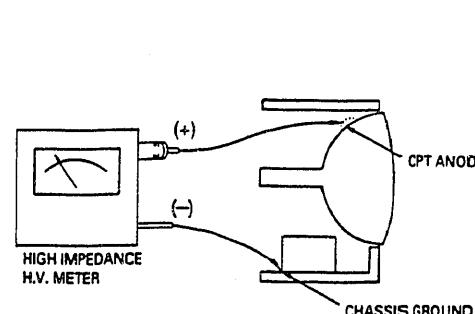
Production Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current HITACHI Service Manual. A subscription to, or additional copies of HITACHI Service Manual may be obtained at a nominal charge from HITACHI SALES CORPORATION.

This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual. Improperly performed repairs can adversely affect the product and safety, you should not risk trying to do so and refer to a qualified service technician.

WARNING

Lead in solder used in this product is listed by the California Health and Welfare agency as a known reproductive toxicant which may cause birth defects or other reproductive harm (California Health and Safety Code, Section 25249.5).

When servicing or handling circuit boards and other components with lead in solder, avoid unprotected skin contact with the solder. Also, when soldering do not inhale any smoke or fumes produced.

**X-Radiation**

TUBE: The primary source of X radiation in this receiver is the picture tube. The tube utilized in this chassis is specially constructed to limit X radiation emission. For continued X radiation protection, the replacement tube must be the same type as the original, HITACHI approved type.

When troubleshooting and making test measurements in a receiver with an excessive high voltage problem, avoid coming unnecessarily close to the picture tube and the high voltage component.

Do not operate the chassis longer than is necessary to locate the cause of the excessive voltage.

SAFETY NOTICE USE ISOLATION TRANSFORMER WHEN SERVICING

Components having special safety characteristics are identified by Δ on the parts list in this Service Data and its supplements and bulletins. Before servicing this, it is important that the service technician read and follow the "Safety Precautions" and the "Product Safety Notices" in this Service Manual.

- For continued x-radiation protection, replace picture tube with original type or Hitachi equivalent type.

POWER SOURCE

This television receiver is designed to operate on 120 volts/60Hz, AC house current. Insert the power cord into a 120 volts/60Hz outlet.

NEVER CONNECT THE TV TO OTHER THAN THE SPECIFIED VOLTAGE OR TO DIRECT CURRENT.

Use of this TV set in 50 Hz areas will not harm the TV set. However, it will cause the clock display to run slower. Consult service personnel if you move to an area where the power supply frequency is 50 Hz.

TECHNICAL SPECIFICATIONS

POWER RATINGS

35UX60B/CZ46J	220W
35TX69K/CZ33J	210W

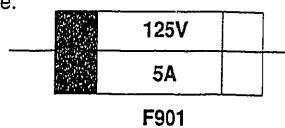
PICTURE TUBE

35UX60B/CZ46J	A89KPP50X01
35TX69K/CZ33J	A89AFX15X01

CAUTION

The following symbol near the fuse indicates fast operating fuse (to be replaced). Fuse ratings appear within the symbol.

Example:



The rating of fuse F901 is 5.0A-125V.
Replace with the same type fuse for continued protection against fire.

SELF CHECK REPAIR CODES

Press the AVX and POWER buttons on the control panel at the same time.

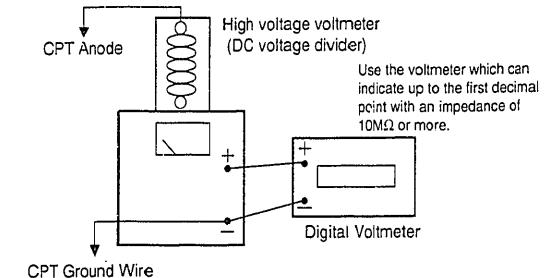
CODE	DETECTION CONTENTS	DETECTION TIME	REMARK
10	Check for PLL lock	Not locked in 2 sec.	During selection time
11	Check for AFC operation	Not finished in 2 sec.	During selection time
60	Check for AC input	At uP reset time	AC input (50/60Hz) not detected at reset time
31	Check IC0001 operation	At uP reset time	Check for out of range operation.

Note: Code 10 or 11 may appear if TV is turned on without an antenna source connected.

TECHNICAL CAUTIONS

Adjustment Preparation

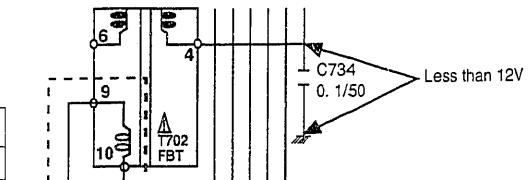
1. Connect the high voltage voltmeter between CPT anode terminal (anode capsule) and ground.
2. Set the AC input voltage to $120 \pm 3\text{V}$.
3. Receive circle pattern or broadcast signal and set "BLACK LEVEL" and "PICTURE" to max. Adjust the screen VR and sub brightness VR (R3540) so that beam current with $I_B \pm 0.1\text{ mA}$. (The voltage at ABL terminal -C734 - should be 12V or less.)



Adjustment Procedure

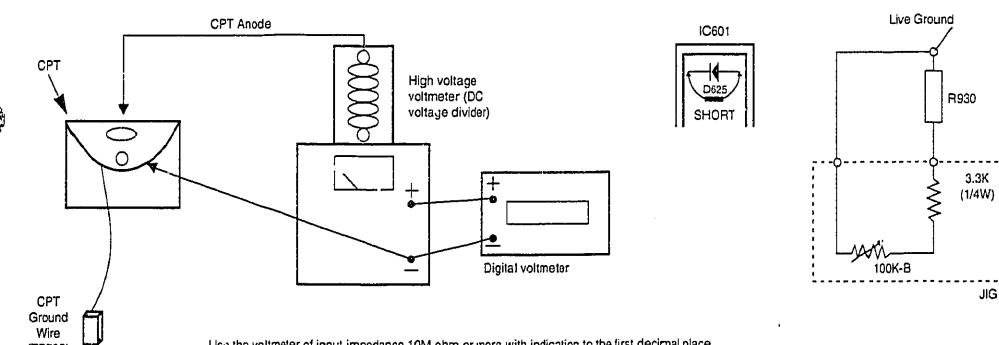
1. Check that the normal high voltage is $E_{HT} \pm 1\text{KV}$.

CHASSIS	EHT	I_B	E1
CZ46J	30.2KV	1.8mA	35.5KV
CZ33J	30.2KV	1.8mA	35.5KV



Adjustment Preparation

4. Turn off the TV set, connect the jig to both ends of R930. Turn the VR of the jig fully counterclockwise (VR max. direction). Short circuit both ends of D625.



Adjustment Procedure

2. Turn on the TV set, turn the VR jig fully clockwise and check that the picture disappears when high voltage is $E_1 \pm 1.3\text{KV}$. Then short circuit both ends of C914 to discharge.

ADJUSTMENT SPECIFICATIONS

MODEL NAME

A2LXU

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Refer to chassis service manual PA No. 0031 and PA No. 0038 for additional technical information.

Note:

1. Main chassis adjustment is done with precision equipment. Readjustment is only recommended if the service technician replaced a defective component related to the circuit.
2. Common service adjustment is recommended for the service technician after final trouble shooting and repair is done. Quick check and fine tuning is advisable to verify that the problem is eliminated.

I. MAIN CHASSIS ADJUSTMENT

1-1. COMB FILTER ADJUSTMENT

1-1-1. Comb Filter Adjustment (1) (2-Line PWB) (R5015), (L5001)

Adjustment Preparation

1. Receive the color bar signal at the regular tuning point.
2. Connect the jig shown below (emitter follower) to point A of the DL5003 output shown in Fig. 1-1-1-1.
3. Observe the emitter waveform of the jig's Q1 using the oscilloscope.
4. Turn the notch switch OFF and set the BRIGHTNESS to the center and CONTRAST to maximum.

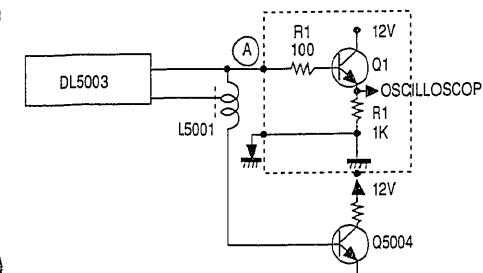
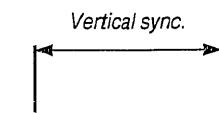


Fig. 1-1-1-1.

Adjustment Procedure

1. Turn R5015 and adjust so that the chrominance signal level is minimum.
2. In the same way as in (1), turn L5001 and adjust so that the chrominance signal level is minimum.
3. Then, turn R5015 again and adjust so that the chrominance signal level is minimum.

Note: The chrominance signal level means the position



shown.

Remarks

- Start adjustment about 2 minutes after the power is turned on.
- Use a 10:1 probe.
- The range of the oscilloscope should be 20 mV/div.
- The residual chroma signal level should be 20 mVp-p or less.
- Connect the base and ground of the jig emitter follower to the PWB with the shortest possible

leads to prevent the deterioration of the frequency characteristic and oscillations.

1-1-2. Comb Filter Adjustment (2) (2-Line PWB) (R5018), (R5022)

Adjustment Preparation

1. Receive the color bar signal at the regular tuning point.
2. Connect the oscilloscope to the CX Connector 4 pin.

Adjustment Procedure

1. Turn R5018 and adjust so that the chrominance signal level is minimum.
2. In the same way as in (1), turn R5022 and adjust so that the chrominance signal level is minimum.
3. Then, turn R5018 again and adjust so that the chrominance signal level is minimum.

Remarks

- The range of the oscilloscope used should be 50 mV/div.
- The residual chroma signal level should be 30 mVp-p or less.

Note: The chrominance signal level is shown in Fig. 1-1-2-1.

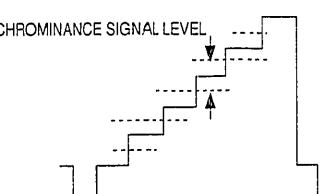


Fig. 1-1-2-1. Chrominance signal level.

1-1-3. Comb Filter Adjustment Check

Adjustment Preparation

1. Receive the color bar signal at the regular tuning point.
2. Connect the oscilloscope to the emitter of Q3503.
3. Set the BRIGHTNESS to max. and set the other controls to TYPICAL (center).

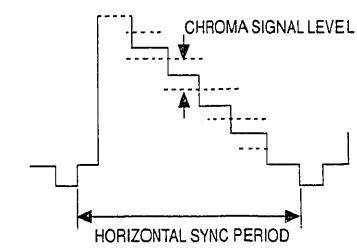


Fig. 1-1-3-1.

4. Set the FINE DEFINITION to OFF.

Adjustment Procedure

1. Check that the residual signal level is 50 mVp-p or less.

Note: The chroma signal level is shown in Fig. 1-1-3-1.

Remarks

- Use a 10:1 probe.
- Use a oscilloscope with a 20 mV/div resolution.

1-2. DEFLECTION CIRCUIT PICTURE ADJUSTMENT OPERATION CHECK**1-2-1. Vertical Size Adjustment (R627) and Vertical Center Adjustment (R636)****Adjustment Preparation**

1. Receive circle pattern signal.
2. Set PICTURE to max. and BLACK LEVEL to the center.

Adjustment Procedure

1. Adjust V.size adjustment VR (R627) so that the inner circle of circle pattern comes in contact with the top and bottom of the screen.
2. Adjust V.center adjustment VR (R636) so that the center of the circle pattern becomes the center of the screen.

1-2-2. Side Pin Distortion Coarse Adjustment (R752)**Adjustment Preparation**

1. Receive circle pattern signal.
2. Set PICTURE to max. and BLACK LEVEL to the center.

Adjustment Procedure

1. Vary R752 so that the right and left vertical lines are straight.

1-2-3. Horizontal Size Adjustment (R755) and Horizontal Center Adjustment (R773)**Adjustment Preparation**

1. Receive circle pattern signal.
2. Set PICTURE to max and BLACK LEVEL to the center.

Adjustment Procedure

1. Vary R755 so that the horizontal size markers at the right and left end are 1.5-1.5 on the average.
2. Vary R773 so that the difference of the horizontal size markers at the right and left end are within 1.5.

1-2-4. High Voltage Limiter Circuit Operation Check**Adjustment Preparation**

1. Connect a high voltage voltmeter between CPT anode terminal (anode cap side) and the ground (TP702).
2. Set AC input voltage to $120 \pm 3 \text{ V}$.

3. Receive circle pattern and set BLACK LEVEL and PICTURE to max. Adjust screen VR and sub-bright VR (R3540) so that beam current is $I_B \pm 0.1 \text{ mA}$.

Note: The voltage of ABL terminal C747 (both ends) should be 12 V or less.

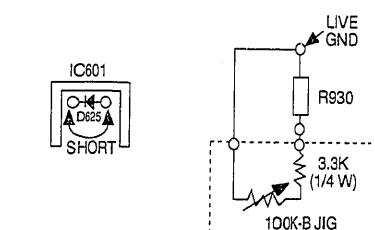
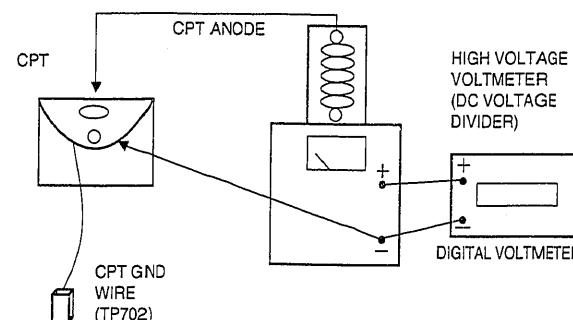
Adjustment Procedure

1. Check that the normal high voltage is $EHT \pm 1 \text{ KV}$.

CHASSIS	EHT	I_B	E1
CZ46J	30.2 KV	1.8 mA	35.5 KV
CZ33J	30.2 KV	1.8 mA	35.5 KV

Adjustment Preparation

4. Turn off the TV set; connect the jig to both ends of R930. Turn the VR of the jig fully counter clockwise (VR max. direction). Short-circuit both ends of D625.



Note: Use the voltmeter of input impedance $10M \text{ ohm}$ or more with indication to the 1st decimal place.

Adjustment Procedure

2. Turn on the TV set; turn the VR of the jig fully clockwise and check that the picture disappears when high voltage is $E1 \pm 1.3 \text{ KV}$. Then short-circuit both ends of C914 to discharge.

1-3. POWER SUPPLY CIRCUIT ADJUSTMENT AND OPERATION CHECK

Refer to Fig. 1-3 on Power Supply Operation Check.

1-3-1. +B Adjustment (R929)**Adjustment Preparation**

1. AC input power: $120 \text{ V} \pm 1 \text{ V}$. (Distortion rate: 3% or less.)
2. Turn R929 fully counter clockwise.
3. Receive circle pattern.
4. Set PICTURE control to max. and BLACK LEVEL control to center.
5. Apply heat-run 30 sec. or more after the power is turned on.
6. Short circuit: C914 both ends, C725 both ends and D625 both ends.

Adjustment Procedure

1. The power is turned on. Check that the V1 (+B power supply: voltage of C742 both ends) is V_A or less.
2. Turn R929 fully clockwise and check that the V1 is V_{MAX} or less. When the V1 did not satisfy item (1) or (2), alter the ZD903 and check item (1) and (2) again.
3. Turn R929 fully counter clockwise and C914, C725 and D625. Release short-circuit after the power is turned off.
4. With power turned on, adjust R929 so that the V1 (+B power supply: voltage of C742 both ends) is set to $+B \pm 0.3 \text{ V}$.

CHASSIS	V_A	V_{MAX}	+B
CZ46J	138 V	157 V	138 V
CZ33J	138 V	157 V	138 V

5. Check that the voltage of Q909 collector output is about $+70 \text{ V}$ (DC voltage pulse interval: 50-60 msec) when the power is turned on.

1-3-2. +B Overcurrent Limitation Operation Check**Adjustment Preparation**

1. Set R3 resistance to max. and close S2.

Adjustment Procedure

1. Reduce R3 resistance gradually and check that the power stops when A1 is 1.5 A or more.

Remarks

- To restart the power, turn on after 4-5 sec.

1-3-3. +B Overvoltage Limitation Operation Check**Adjustment Preparation**

1. Turn the power switch on.

2. Short circuit C725 and D625 both ends.

Adjustment Procedure

1. Short ZD902 and check if the protection circuit operates.
2. After the protection circuit operates, turn power switch off at once and remove the short-circuit of ZD902, C725 and D625.

1-3-4. +23 V Overcurrent Limitation Operation Check**Adjustment Preparation**

1. Turn on the S23 switch.

Adjustment Procedure

1. Check that the power stops when the current of R972 is 2.7-3 A. (limited current)
2. After the overcurrent limit operates, turn off S23 and the power at once.

1-3-5. +15 V Overcurrent Limitation Operation Check**Adjustment Preparation**

1. Turn on the S15 switch.

Adjustment Procedure

1. Check that the power stops when the current of

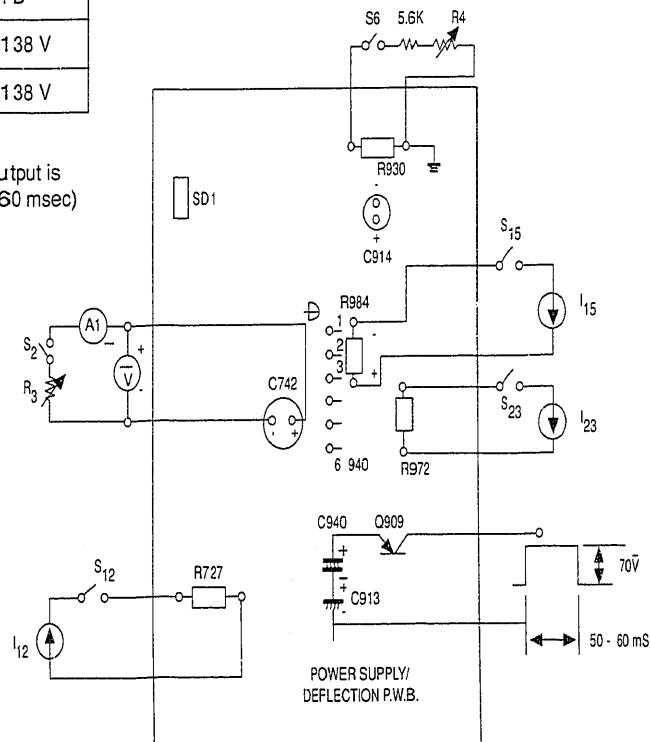


Fig. 1-3. Power supply block operation check connection.

- R984 is 2-2.3 A. (limited current)
 2. After the +15 V overcurrent limit operates, turn off S15 and the power at once.

1-3-6. +12 V Overcurrent Limitation Operation Check

Adjustment Preparation

1. Turn on the S12 switch.

Adjustment Procedure

1. Check that the power stops when the current of R727 is 1 A. (limited current)
 2. After the +12 V overcurrent limit operates, turn off S12 and the power at once.

1-4. MEMORY INITIALIZE-TIMER SOUND OPERATION CHECK

1-4-1. Memory Initialize (1)

Adjustment Procedure

1. Connect the jig D0015 between IC0001 pin ③③ and pin ③⑨. See Fig. 1-4-1-1.
 2. After memory-initialize operation, check that the "beep" sound comes out from the L CH speaker and the TV will receive the CH 03 signal. (initialized condition)

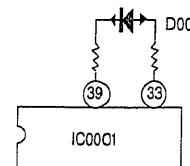


Fig. 1-4-1-1.

1-4-2. Memory Initialize (2)

Adjustment Procedure

1. Press MEMORY INITIALIZE key with remo-con jig.
 2. Check that the TV is on CH 03 and "beep" sound comes out from the left side (L CH).

Remarks

- After this operation, each setting becomes the initial setting automatically.
- Do not turn off the power until "beep" sound comes out. (about 3 sec)

1-5. AFC OPERATION CHECK

Adjustment Preparation

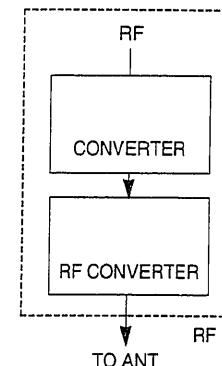
1. Connect the jig shown in Fig. 1-5-1 to the ANT terminal.

Adjustment Procedure

1. Receive a standard carrier signal (not offset) with the channel up/down or direct selection buttons. Check that it is pulled into the standard tuning point.
 2. Receive an offset signal of ± 1.5 MHz. Check that it

- is pulled into the standard tuning point. (Perform the channel selection operation again.)
 3. Receive an offset signal of -1.5 MHz. Check that it is pulled into the standard tuning point. (Perform the channel selection operation again.)

Note: Modulation signal should be used at the circle pattern and the color bar signal.



1-6. CHANNEL SELECTION AND OPERATION CHECK OF EACH KEY

1-6-1. On-screen Display Position Check

Adjustment Preparation

1. Receive the circle pattern signal with P.W.B actually mounted in the TV.
 2. Press the RECALL button of the remote control transmitter to display the channel number.

Adjustment Procedure

1. Check that the right end of the displayed number is at the position shown in Fig. 1-6-1.

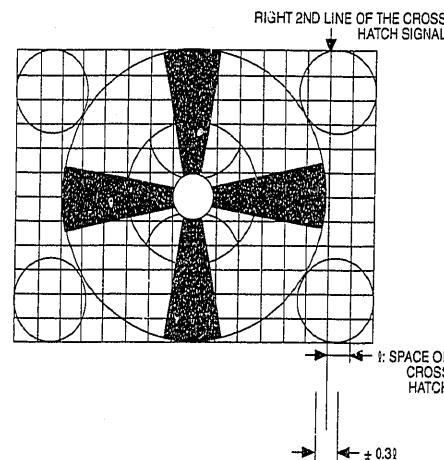


Fig. 1-6-1. On-screen display position specification.

1-6-2. Remo-con Operation Check

1-6-2-1. Direct channel selection

Adjustment Procedure

1. Input the channel number using "0" to "9" buttons and "100" button. Check that the input number matches the displayed channel number and also the picture received matches the channel number.

1-6-2-2. Last Channel

Adjustment Procedure

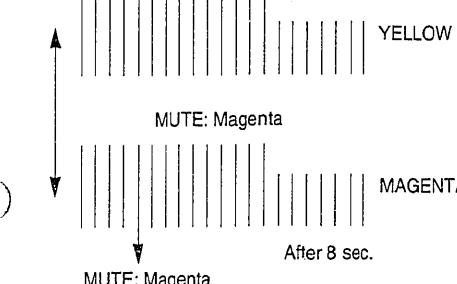
1. Check that the channel being received alternates with the channel received immediately every time the LST-CH button is pressed.

1-6-2-3. Mute

Adjustment Procedure

1. Check that the sound alternates between mute and normal every time the MUTE button is pressed.

VOLUME: Green



1-6-2-4. Recall

Adjustment Procedure

1. Check that the on-screen display is turned ON and OFF alternately every time the RECALL button is pressed.

1-6-3. Selection Operation Check

1-6-3-1. Power

Adjustment Preparation

1. Set so that the VHF/UHF/CATV signal can be received.

Adjustment Procedure

1. Every time the POWER button is pressed, the power should alternate between ON and OFF.

1-6-3-2. Channel Up/Down

Adjustment Procedure

1. Every time the CH UP (▲) or CH DOWN (▼) button is pressed, the normal reception should be done for VHF, UHF and CATV.
 2. Check that the on-screen display corresponding to the received contents can be displayed.
 3. Check ANT indication color.

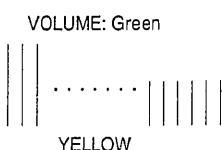
ANT*	CH DISPLAY COLOR
ANT 1	Green
ANT 2	Yellow

* Exclude CZ33J (35TX69K)

1-6-3-3. Volume Up/Down

Adjustment Procedure

1. Every time the VOL UP (▲) or VOL DOWN (▼) button is pressed, the volume should be increased/decreased continuously.
 2. Check that the on-screen display changes.



1-6-3-4. AVX selection

Adjustment Procedure

1. Every time the AVX selection button is pressed, the input of the picture displayed on the screen changes in sequence as shown in Fig. 1-6-3-4.

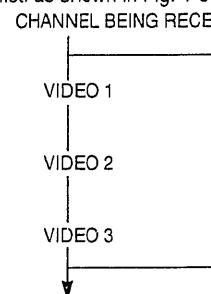


Fig. 1-6-3-4. Channel being received.

2. Check that the contents of the picture displayed on the screen match the current on-screen display.
 3. With "Video 1" and "Video 3" if the S input is used, "Video 1" 1 (S-IN) is displayed.
 CZ46J S input "Video 1, 3"
 CZ33J S input "Video 1"

1-6-3-5. ANT selection (CZ46J)

Adjustment Procedure

- Check that the color of the channel indication alternates between green and yellow every time the ANT select button is pressed so the channel corresponding to the display can be received.
Green: VHF/UHF terminal
Yellow: AUX terminal
The signals connected to each ANT terminal should be received.

Remarks

- Green: VHF/UHF terminal is for CZ33J which doesn't have an antenna selection.

1-6-4. AI Mode Operation Check

Adjustment Preparation

- Set to AI: ON of PICTURE SETTING mode.
- Set to PRESET of PICTURE SETTING mode.

Adjustment Procedure

- Check that the SHARPNESS voltage, the YNR2 voltage and P.MODE voltage are as shown with AI: ON and AI: OFF.

	AI: ON				
	AI: OFF	CIRCLE PATTERN	COLOR BAR PATTERN	CROSS HATCH PATTERN	
SHARPNESS IC0006 (17)	ABOUT 4.0 V	ABOUT 3.0 V	ABOUT 5.4 V	ABOUT 3.0 V	
YNR2 IC0006 (19)	ABOUT 3.1 V	ABOUT 3.0 V	ABOUT 4.0 V	ABOUT 4.3 V	
P.MODE IC0006 (17)	ABOUT 9.0 V	Check that the voltage decreased when signal condition is a weak field.			

1-6-5. CCD Operation Check

Adjustment Preparation

- Set mode to CLOSED CAPTION.
- Receive signal having CLOSED CAPTION.

Adjustment Procedure

- Set ON/OFF setting to ON with ENTER button. At this time, set the other settings as follows:
ON/OFF: ON
MODE: CAPTION
CHANNEL: 1
- Check that the CAPTION corresponding to the above setting is displayed on the screen.
- Set CHANNEL to 2. (Receive signal having CLOSED CAPTION CH 2.)
- Check that the CAPTION of CHANNEL 2 is displayed on the screen.
- Set CHANNEL to 10 (Receive signal having CLOSED CAPTION CH 10.)
- Check that the CAPTION of CHANNEL 10 is displayed on the screen.
- Set mode to TEXT.

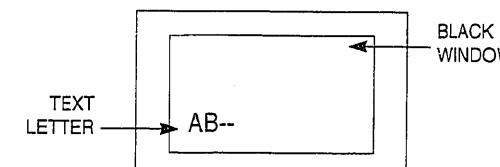
- Check that a black window appears and TEXT letters are displayed at the center of the screen.
- Repeat adjustment procedure from (3) to (6) and check that TEXT letters are displayed corresponding to each mode.
- Set mode to CAPTION.
- The black window should disappear returning to the state of (2).
- Set ON/OFF to OFF.
- Check that the CAPTION letters disappear.

Remarks

Note: Reading error should not occur on every mode.

The contents of error:

- Wrong letters are displayed.
- Letter omitting.
- Other abnormal display.
- Channel numbering varies in each location so receive any channel signal with closed caption.



1-6-6. P in P Operation Check

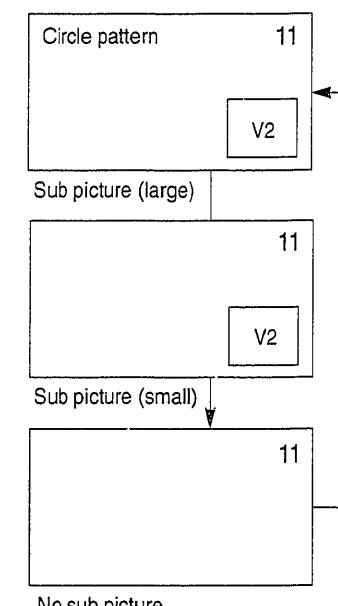
1-6-6-1. P in P ON/OFF SIZE

Adjustment Preparation

- Connect signals to V/U, AUX and VIDEO 1, 2, 3 (S VIDEO 1, 3 . . . CZ46J)
(S VIDEO 1 . . . CZ33J)
- Select the circle pattern.

Adjustment Procedure

- Check that the picture changes as follows using the P in P button of the remote control transmitter.



changed as shown in Fig. 1-6-6-2 using the SHIFT button of the remote control transmitter.

Remarks

- Station display: "NBC"
CH display: "11"
Sub picture mode: "V2"
- The SHIFT button should work only when P in P is ON.

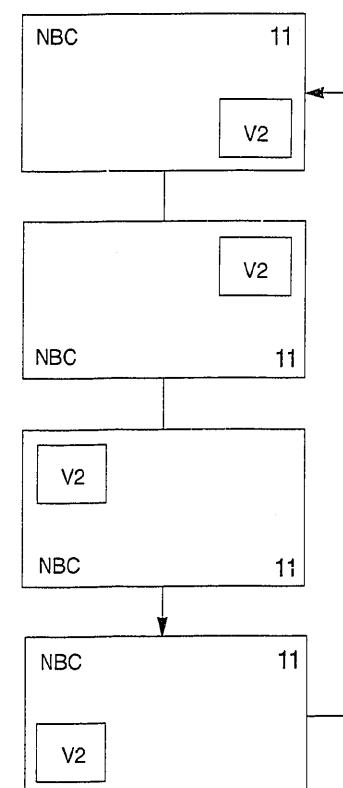


Fig. 1-6-6-2.

1-6-6-3. Exchange of the main and sub pictures

Adjustment Preparation

- Turn the P in P on.

Adjustment Procedure

- Check that the main and sub pictures are swapped using the EXCHANGE button of the remote control transmitter.
- Sound should also be swapped and synchronized with the picture.

1-6-6-4. Sub picture freeze

Adjustment Preparation

- Turn the P in P ON.
- Set the sub picture to the normal (moving) state.

Adjustment Procedure

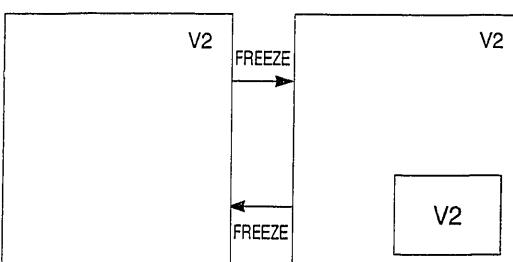
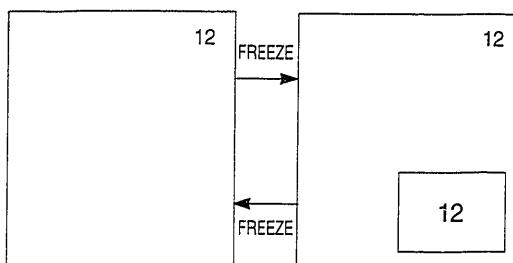
1. Check that the sub picture alternates between freeze and release using the FREEZE button of the remote control transmitter.

Remarks

- The freeze should not be released by changing the sub picture position.
- The freeze should be released by the main/sub pictures exchange operation.
- The freeze should be released by the channel selection operation when the sub picture is set to TV mode.

1-6-6-5. P in P off freeze**Adjustment Procedure**

1. Check that the sub picture changes on state and off state the same as main picture and freeze state using the FREEZE button.

**1-6-7. External Terminal Operation Check****Adjustment Preparation**

1. Input a signal to the INPUT 1 terminals (V, L/R).

Adjustment Procedure

1. External input check.
a. Check that the picture and sound of VIDEO 1 can be monitored.

Adjustment Preparation

2. Input a signal to the INPUT 1 (S input) terminal.
a. Check that the picture of VIDEO 1 (S input) can be monitored.
3. Input a signal to the INPUT 2 terminals (V, L/R).
b. Check that the picture and sound of VIDEO 2 can be monitored.

4. Input a signal to the INPUT 3 (S input) terminal.
(CZ46J)
c. Check that the picture of VIDEO 3 (S input) can be monitored.

5. Input a signal to the INPUT 3 terminals (V, LR).
d. Check that the picture and sound of VIDEO 3 can be monitored.
6. OUTPUT terminal

Adjustment Procedure

2. External output check.
a. Check that the picture and sound can be monitored. (Sound control is fixed.)

Adjustment Preparation

7. Audio to Hi-Fi terminal.
e. Check that sound from the speaker can be monitored.
8. Rear speaker terminals.
f. Check that the sound from the speaker can be monitored. (When surround is turned OFF.)

Remarks

- The S input is selected automatically.
- The S input has priority.
- Sound output from both L and R with L input. (L monaural)
- S input:
CZ46J VIDEO 1, VIDEO 3
CZ33J VIDEO 1
- Check with VIDEO mode.
- Check that the BASS, TREBLE, BALANCE, VOLUME, MUTE and SURROUND are effective.
- Refer to the surround operation.

1-7. SIGNAL CIRCUIT MOVEMENT OPERATION CHECK**1-7-1. Dimmer Control Operation Check****Adjustment Preparation**

1. Select PICTURE SETTING mode with the main picture.
2. Select A1 mode.

Adjustment Procedure

1. Set to A1: ON by pressing the ENTER key of the remote control transmitter and check the display. It will become dark when the front of Q0502 (light detector transistor on the control PWB) is covered with a hand.
2. Set to A1: OFF by pressing the ENTER key and check that the contrast of the display returns.

1-7-2. Auto Color Circuit Operation Check**Adjustment Preparation**

1. Receive the color-bar signal.
2. Select AUTO COLOR mode.

Adjustment Procedure

1. Set to color control:MAX.
2. Set to AUTO COLOR: OFF by pressing the ENTER key. Check the red part of color-bar signal grow deep a little.
3. Return the AUTO COLOR: OFF by pressing the ENTER key.
4. Return the color control typical.

1-7-3. Noise Reducer Circuit Operation Check**Adjustment Preparation**

1. Receive the color-bar signal.
2. Select NOISE REDUCER mode.

Adjustment Procedure

1. Set to NOISE REDUCER: ON by pressing the ENTER key of the remote control transmitter. Check if the noise is reduced.

1-7-4. Notch Filter Circuit Operation Check**Adjustment Preparation**

1. Receive the color-bar signal.
2. Select NOTCH FILTER mode.

Adjustment Procedure

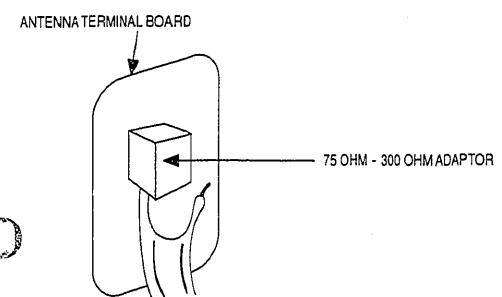
1. Set to NOTCH FILTER: ON by pressing the ENTER key. Check that the dot interference on the horizontal color border line of the color-bar is reduced.
2. Set to NOTCH FILTER: OFF by pressing the ENTER key.

1-7-5. Weak Electric Field Check**Adjustment Preparation**

1. Connect one side of the 300 ohm feeder to 75 ohm-300 ohm antenna adaptor. Connect the antenna adaptor to the VHF antenna terminal board as shown below.
2. Turn to no signal condition.

Adjustment Procedure

1. Check that the phenomena such as oscillation and abnormal beat, etc. do not occur in all the channels.

**1-8. MTS DEMODULATING CIRCUIT ADJUSTMENT****1-8-1. Stereo VCO Adjustment (R4007)****Adjustment Preparation**

1. Set R4114 fully counter clockwise.
2. Set S2 connector (1) pin to MTS GND.
3. Connect IC4001 pin (23) to pin (24) a resistance of 470K ohm as shown in Fig. 1-8-1-1.
4. Connect a frequency counter to IC4001 pin (41). Use a probe of 1:1. (Probe standard: $R_i \geq 1 M\Omega$, $C_i \leq 15 pF$.)
5. Input of IC4001 pin (39) is no signal.
6. Apply $+9.0 V \pm 0.1 V$ to IC4001 pin (32). See Fig. 1-8-1-2. (IC4001+B pin (32))

Adjustment Procedure

1. Turn R4007 and set it to 15.73 ± 0.01 kHz.
2. After the adjustment, remove 470K ohm (between pins (23) - (24)).

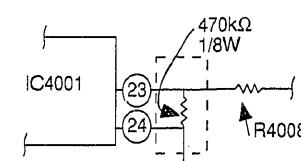


Fig. 1-8-1-1.

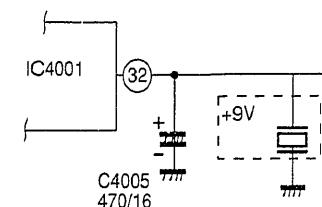


Fig. 1-8-1-2.

1-8-2. Filter Adjustment (R4114)**Adjustment Preparation**

1. Set R4114 fully counter clockwise.
2. Apply a signal to IC4001 pin (39) with the jig shown as follows:
SG Output Impedance: 600Ω . See Fig. 1-8-2-1.
 $f = 15.73$ kHz (sinusoidal wave)
 $V = 100 mV_{rms}$ (signal generator)
3. Connect an oscilloscope to IC4001 pin (35).
4. Apply $+9.0 V \pm 0.1 V$ to IC4001 pin (32).

Adjustment Procedure

1. Input signal 1 and adjust R4114 so that the waveform of pin (35) (15.73 kHz included) is minimum as shown in Fig. 1-8-2-2.

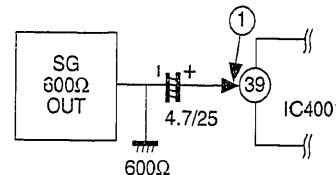


Fig. 1-8-2-1.

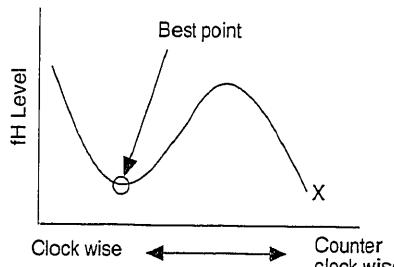


Fig. 1-8-2-2.

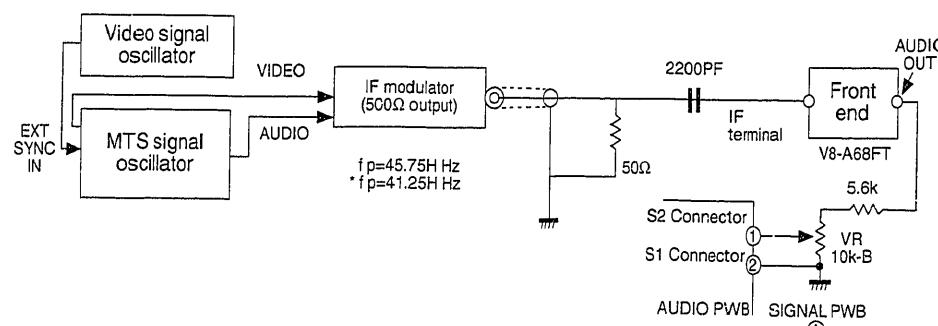


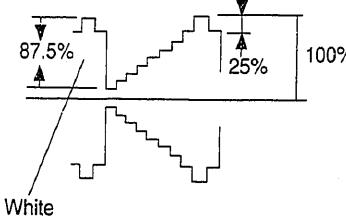
Fig. 1-8-3-1.

If Modulator Output Level and P/S $P = 106 \text{ dBu}$ (50 ohm termination)

S level = -3 dB to p

At this time, S/N ratio of F/E video output is 45 dB or less.

*Finish adjustment of INPUT LEVEL (150 mVrms \pm 5 mVrms) by sound modulation condition (3) shown on SIGNAL PWB A. Use the AC voltmeter of MATSUSHITA MODE, model VT 950C or equivalent.

If Modulator Output Signal Waveform (color bar or all white).**Sound Modulation Condition**

1. Noise reduction encoder: ON.
2. Stereo signal:
R = 0 (L only), 300 Hz, 30% modulation (See note 2, pg. 19)**
R = 0 (L only), 3 kHz, 30% modulation (See note 2, pg. 19)**
3. Monaural signal:
Monaural, 400 Hz, 100% modulation (PRE-EN OFF)
4. SAP signal:
SAP, 300 Hz, 30% modulation (See note 2, pg. 19)**

1-8-3. Separation Adjustment (R4009, R4010)**Adjustment Preparation**

1. Apply a signal to AUDIO PWB using the jig shown in Fig. 1-8-3-1.
2. Connect an oscilloscope to IC4001 pin ④.
3. Apply +9.0 V \pm 0.1 V to IC001 pin ③.
4. Set MTS mode to STEREO.

Adjustment Procedure

1. Select sound input signal 1 and adjust R4009 so that 300 Hz level is minimum.
2. Select sound input signal 2 and adjust R4010 so that 3 kHz level is minimum.
3. Repeat (1) and (2). Adjustment precision: within \pm 1 dB from minimum point.

Remarks

- Pay attention to the separation adjustment point. It may be deviated if the input level is not regularly adjusted.
- Check that ST is indicated in red under CH indication by pressing RECALL key of remo-con check jig.
- Check that SA is indicated in red under CH indication by pressing RECALL key of remo-con check jig.

Note 1: Use sound modulator with a frequency characteristic within $\pm 1\%$ during 50 Hz-100 kHz.

Note 2: Turn off the noise reduction encoder (NR) and set the modulation degree to 30% and then turn the NR. Set the modulation degree at the output of low frequency signal generator. Leave the sound modulator VR of the IF modulator as it is.

1-8-4. Separation Check**Adjustment Preparation**

1. Connect the same jig as the input level adjustment. (Disconnect the AC voltmeter connected to IC4001.)
2. Connect an oscilloscope to pin ③ (L) and pin ④ (R) of IC4001.
3. The same as (3) and (4) of 1-8-6.
4. Set MTS mode switch to STEREO.

Adjustment Procedure

1. Select the audio input signal 1 and check that L/R separation of 300 Hz component is 15 dB or more.
2. Select the audio input signal 2 and check that L/R separation of 3 kHz component is 15 dB or more. ($R < L$)

Remarks

- When the audio input signal 1-2 is received, "STEREO" should be displayed on the screen.

Note: Use an audio modulator with frequency characteristics of 50 Hz to 100 kHz $\pm 1\%$.

1-8-5. SAP Reception Check**Adjustment Preparation**

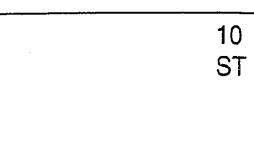
1. The same as (1) to (3) of 1-8-4.
2. Set MTS mode switch to SA.

Adjustment Procedure

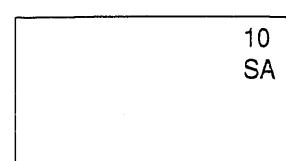
1. Select the audio input signal 1. The output level at this time is represented by VST.
2. Select the audio input signal 2. Check that the output level at this time is almost the same as ST. ("SA" should be displayed at this time.)

Remarks

- Turn the noise reduction encoder (NR) OFF and set to 30% modulation and then turn the NR ON.
- Set the modulation using the output from the low frequency signal generator and leave the audio modulation VR of the IF modulator as it is.



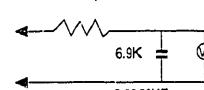
Check that ST is indicated in red under CH indication by pressing RECALL key of remo-con check jig.



Check that SA is indicated in red under CH indication by pressing RECALL key of remo-con check jig.

1-8-6. Input Level Adjustment (R0188)**Adjustment Preparation**

1. Apply the signal to F/E IF input terminals of MAIN PWB using the jig shown in Fig. 1-8-6-1.
2. Connect AC voltmeter V1 to IC4001 pin ⑨ through the jig shown. Use the AC voltmeter of MATSUSHITA make, model VT 950C or equivalent.



3. Apply to +9.0 V \pm 0.1 V to the IC 4001 32 pin.
4. Apply to +9.0 V \pm .1V. (F/E; +B)

Adjustment Procedure

1. Select sound input signal 3 and adjust R0188 to V1 150 mVrms \pm 5 mVrms.

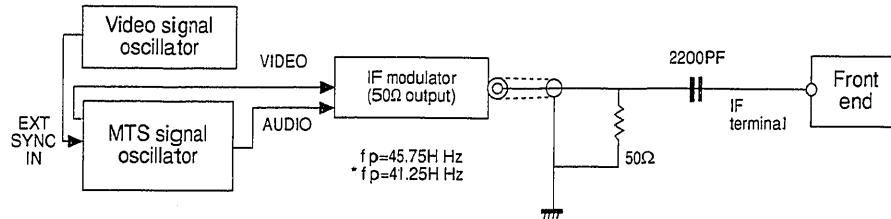
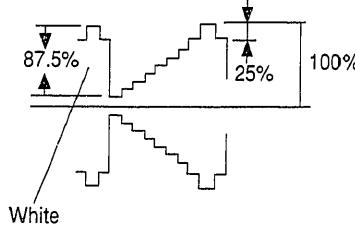


Fig. 1-8-6-1.

If Modulator Output Signal Waveform (color bar or all white).



If Modulator Output Level and P/S

P = 106 dBu (50 ohm termination)
 S level = -3 dB to p
 At this time, S/N ratio of F/E video output is 45 dB or less.

Sound Modulation Condition

1. Noise reduction encoder: ON.
2. Stereo signal:
 R = 0 (L only), 300 Hz, 30% modulation
 R = 0 (L only), 3 kHz, 30% modulation
3. Monoaural signal:
 Monoaural, 400 Hz, 100% modulation (PRE-EN OFF)
4. SAP signal:
 SAP, 300 Hz, 30% modulation

3. If it does not, turn the VR (R412) in the P in P unit and adjust above spec.

1-9-2. Sub Picture Black Level Check

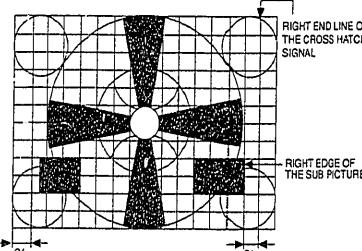
Checking Preparation

1-9. SUB PICTURE CHECK

1-9-1. Sub Picture Position Check

Checking Preparation

1. Display the circle pattern with the main picture.
2. Receive the color-bar signal with the sub picture and shift the sub picture position to the right side.



Checking Procedure

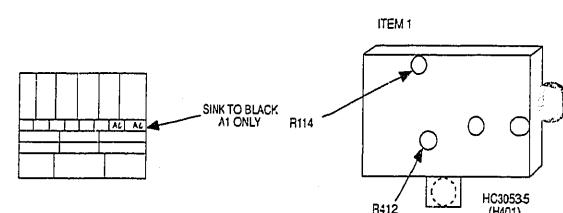
1. Check that matching right edge of the sub picture with the right end line of the circle pattern signal.
2. After checking, shift the sub picture position to the left side and check that they are balanced on left and right. (X₂ = X₁)

Checking Procedure

1. Check the sub picture so that only the point A1 sinks to black.
2. If it does not, turn the VR (R114) in the P in P unit and adjust above spec.

Remarks

- VR not shown on ITEM 1 should not be turned.



II COMMON SERVICE ADJUSTMENTS

2-1. PURITY CONVERGENCE ADJUSTMENT

2-1-1. Purity Convergence Adjustment Preparation

1. Keep DY in contact with CPT funnel. (ITC CPT)
2. Turn on the TV set and receive cross-hatch (or circle pattern signal).
3. Receive circle pattern signal and adjust the white balance according to item 2-4-1.
4. Set BRIGHT control and PICTURE control to max. and apply heat-run to the TV set with circle pattern signal received for "T" minimum or more.

MODEL	CPT	T	REMARKS
35UX60B	A89KPP50X01	40 MIN.	*ITC CPT
35TX69K	A89AFX15X01	40 MIN.	*ITC CPT

Purity Check:

The magnetic field should follow the magnetic field according to the destination. The TV set should face as shown. After degaussing in each direction, check these items visually and with a microscope.

- a. No problem in white unevenness.
- b. Each single color must not hit any other color.
- c. If white or each single color is defective, apply a magnet (S) on CPT for correction. If any magnet is applied, check it after degaussing.

MODEL	CPT	CHECK FACE
35UX60B	A89KPP50X01	NORTH SOUTH
35TX69K	A89AFX15X01	NORTH SOUTH

2-2. FOCUS ADJUSTMENT

See table 2-2.

2-3. DEFLECTION CIRCUIT PICTURE ADJUSTMENT

2-3-1. Horizontal Center Adjustment (R773)

Adjustment Preparation

1. Receive circle pattern signal.
2. Set PICTURE control to max. and BLACK LEVEL control to center.

Adjustment Procedure

1. Adjust H.center VR (R773) so that the difference of the horizontal size markers at the right and left end are within 1.5.

2-3-2. Horizontal Size Adjustment (R755)

Adjustment Preparation

1. Receive circle pattern signal.
2. Set PICTURE control to max. and BLACK level control to center.

Adjustment Procedure

1. Adjust R755 so that the average reading of right and left is on 1.5. The reading of each side should be at least 1.

2-3-3. Vertical Size Adjustment (R627)

Adjustment Preparation

1. The TV set should face the north or south.
2. Receive circle pattern signal.
3. Set PICTURE control to max. and BLACK LEVEL control to center.

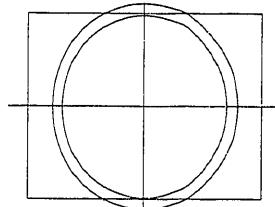
Adjustment Procedure

1. Adjust V.size VR (R627) so that the outer circle pattern is like the diagram.

Note: Perform this adjustment more than 5 minutes

NO.	MODEL	CPT	CONDITIONS	FOCUS VR SETTING POSITION
1	35UX60B	A89KPP50X01	• Receive the cross hatch signal	Turn the Focus VR gradually clockwise from the full counter clockwise. Then set it to the point where the focus of the 5th vertical line from the screen center becomes best.
2	35TX69K	A89AFX15X01	• Picture control: MAX • Sharpness control: center • Bright control: where the background is set	

Table 2-2.



- When the picture center is 0-2 mm above CPT center, adjust so that the bottom of the inner circle comes in contact with the bottom of the screen.
- Except for (c), adjust so that 1/2 of the width of the outer circle comes to the bottom of the screen.

2-3-4. Vertical Center Adjustment (R636)

Adjustment Preparation

- The TV set should face the north or south.
- Receive circle pattern signal.
- Set PICTURE control to max. and BLACK LEVEL control to center.

Adjustment Procedure

- If the center of the circle pattern is 2 mm or more below (above) the CPT geometric center, adjust V.center VR (R636) so that it comes within ± 2 mm.
- When R636 is adjusted, perform the vertical size adjustment again.

2-3-5. Side Pin Distortion Adjustment (R752)

Adjustment Preparation

- Receive cross-hatch signal.
- Set PICTURE control to max. and BLACK LEVEL control to the point where the background is set.

Adjustment Procedure

- Adjust R752 so that the line of the right and left is straight. (specification: $DL, DR \leq 5$ mm)

after applying the power ON.

- When the picture center is below CPT center, adjust so that 1/2 of the width of the outer circle comes to the top of the screen.
- Standard Condition: Adjust so that the inner circle comes in contact with the top and bottom of the screen.
- When the picture center is above CPT center:

- 2-3-6. Trapezoid Distortion Adjustment (R650A) (35UX60B CPT only)**
- Adjustment Preparation**
- Receive cross-hatch signal.
 - Set PICTURE control to max. and BLACK LEVEL control to center.
- Adjustment Procedure**
- In case of LT - LB > 10 mm install the R650A (68K ohm) on the power/def. PWB ASS.
 - When the R650A is installed, check as shown. (side pin adj)
- LT

LB

INSTALL

R650A

R650

68K

82K
- 2-4. SIGNAL CIRCUIT ADJUSTMENT AND OPERATION CHECK**
- 2-4-1. White Balance Adjustment**
- Adjustment Preparation**
- Apply heat-run for 10 minutes or more after the power is turned on.
 - Receive color bar pattern.
 - Set AUTO COLOR control to OFF.
 - Set PICTURE and COLOR controls to minimum.
 - Set the vertical incident illumination on the CPT surface to 20 lux or less.
 - Set BLACK LEVEL control to the center position.
 - Set A1 (PICTURE) control to OFF.
 - Set WHITE control to STD.
- Adjustment Procedure**
- Turn SUB-BLACK LABEL ADJUSTMENT VR (R3540) as follows:
Sub-Black Label Adjustment background of A1 is set to black and A2 is set lighter black.
 - Check by directly observing the CPT surface without using a mirror.
- 2-4-2. Sub-black Level Adjustment (R3540)**
- Adjustment Preparation**
- Apply heat-run for 10 minutes or more after the power is turned on.
 - Receive color bar pattern.
 - Set AUTO COLOR control to OFF.
 - Set PICTURE and COLOR controls to minimum.
 - Set the vertical incident illumination on the CPT surface to 20 lux or less.
 - Set BLACK LEVEL control to the center position.
 - Set A1 (PICTURE) control to OFF.
 - Set WHITE control to STD.
- Adjustment Procedure**
- Turn SCREEN VR fully clockwise.
 - Turn fully clockwise the LOW BRIGHTNESS WHITE BALANCE VRs, except VR-A, and adjust so that the red, green and blue bright colored lines appear on the screen equally.
 - Return the S5502 back to original position.
 - Set PICTURE and BLACK LEVEL control to min. and turn SUB-BLACK LEVEL VR (R3540) to set at the position where the white raster is just slightly seen.
 - Set the WHITE BALANCE METER at the center of the screen. (White balance meter should be calibrated as specified by HITACHI, Design Department.)
 - Adjust the PICTURE control so that the indication of the brightness meter is 80% of the full scale. Then, turn the DRIVE ADJUSTING VRs (R806, R816) and adjust the HIGH BRIGHTNESS WHITE BALANCE.
 - Adjust PICTURE control to min. and check that the low brightness white balance is obtained by directly observing the CPT surface without using a mirror.
 - When the low brightness white balance is not obtained, adjust other low brightness white balance VRs, except VR-A, and return to item (6).
- White Balance Color Temperature Setting: 7,200° K**
- Set WHITE control (color temperature control) to COOL and check that color temperature is approx. 9,300° K.

2-5. SUB PICTURE ADJUSTMENT

W	T	CY	G	MG	R	BL
75%						
A7	A6	A5	A4	A3	A2	A1
			B			
			D			
0	1		W 100%		BLK	

The background is set to black. Perform the adjustment without observing the boundary parts.

The background is set to lighter black.

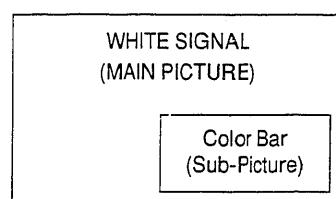
2-5-1. Sub Picture Black Level Check

Adjustment Preparation

1. Apply heat-run for 20 minutes or more after the power is turned on.
2. Receive the white signal in the main picture and receive the color bar signal in the sub picture.

Adjustment Procedure

1. Check that the black level setting background of A1 is only set to black in the sub picture.
2. The background is set to black. Perform the adjustment without observing the boundary parts.



W	T	CY	G	MG	R	BL
75%						
A7	A6	A5	A4	A3	A2	A1
			B			
			D			
0	1		W 100%		BLK	

The background is set to black. Perform the adjustment without observing the boundary parts.

2-5-2. Sub Picture White Balance Adjustment (R:R5587, G:R5624, B:R5589)

Adjustment Preparation

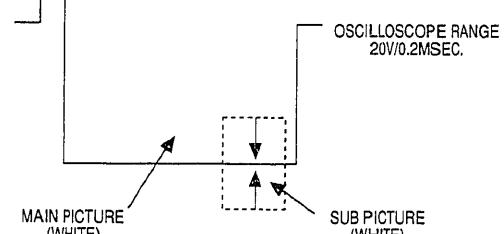
1. Turn off the sub picture by pressing P IN P key of remo-con. (Keeping the white signal in the main picture.)
2. Receive the freezing white signal in the sub picture by pressing FREEZE key of remo-con.

Adjustment Procedure

1. Observe red cathode (collector side of R851) on the CPT PWB and turn the RED ADJUSTMENT VR (R5587). Adjust so that the amplitude of the sub picture is the same as that of the main picture.
2. Similarly, observe the green cathode (collector side of R852) on the CPT PWB and turn the GREEN ADJUSTMENT VR (R5624). Adjust so that the amplitude of the sub picture is the same as that of the main picture.
3. Similarly, observe the blue cathode (collector side of R853) on the CPT PWB and turn the BLUE ADJUSTMENT VR (R5589). Adjust so that the amplitude of the sub picture is the same as that of the main picture.
4. Check the matching of the white balance of the sub picture with that of the main picture. If it does, do not return to (1).

Remarks

- See waveform diagram of R/G/B cathode.
- Perform this adjustment after the white balance and sub brightness adjustment of the main picture are completed.
- White balance spec.: 7200° K.
- Refer to the sub brightness adjustment for details of the gray scale of the color bar signal.



2-6. SURROUND OPERATION CHECK (I AND II)

I. Surround Operation Check (CZ33J only)

1. Perform the operation check
SURROUND: ON or OFF

II. Surround Circuit Operation Check (CZ46J only)

1. Set the SOUND modes as follows:
BASS: TYP
TREBLE: TYP
BALANCE: TYP
INT.SPEAKERS: ON
DYNAMIC BASS: OFF
LOUDNESS: OFF
SURROUND: DOLBY

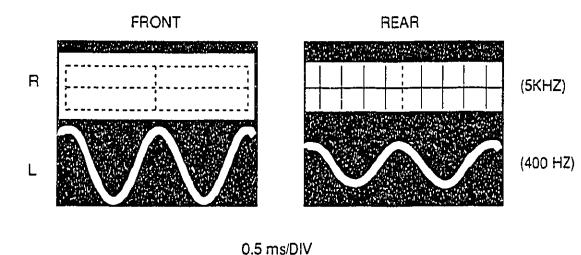
2. Set so that each level of the following outputs can be monitored from their waveforms.

FRONT SPEAKER: L output
R output

REAR SPEAKER: L output
R output

2-6-1. Surround Off Check

1. Set SURROUND: OFF and check that the waveform shown below is obtained.



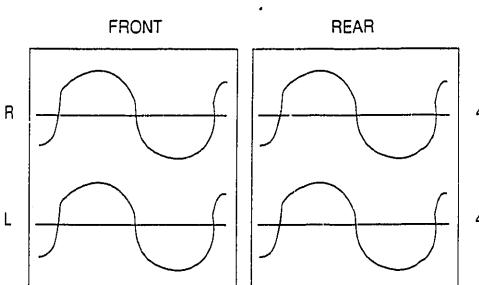
2-6-2. Surround Off/Monaural Check

Adjustment Preparation

1. Check that the following waveform is obtained. The amplitudes of 4 channels are equal.

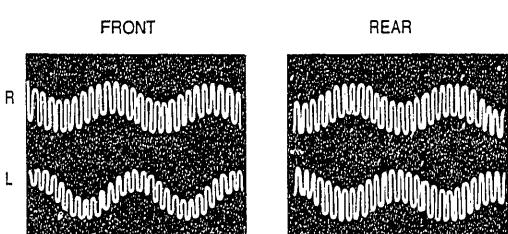
Note: Monaural check can be omitted.

2-6-3. Matrix Surround Check



Adjustment Preparation

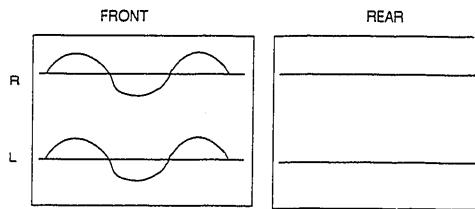
1. Set SURROUND: MATRIX.
2. Check that the following waveforms are obtained:
Front: Check that the phases of R and L are different and 400 Hz is superimposed on 5 kHz. The amplitudes of R and L are different.
Rear: Check that the phases of R and L are opposite and 400 Hz is superimposed on 5 kHz. The amplitudes of R and L are equal.



2-6-4. Matrix Surround/Monaural Check

Adjustment Preparation

- Check that the following waveforms are obtained:
Front: R and L waveforms are almost equal.
Rear: R and L waveforms are almost zero.

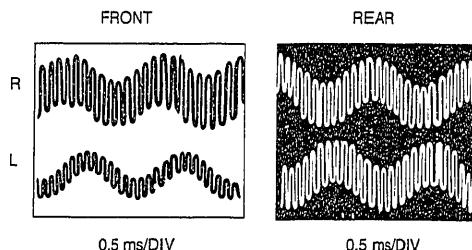


2-6-5. Hall Surround Check

Adjustment Preparation

- Set SURROUND: HALL
- Check that the following waveforms are obtained:
Front: Check that the phases of R and L signals are different and 400 Hz is superimposed on 5 kHz.
Rear: Check that the phases of R and L are opposite and 400 Hz is superimposed on 5 kHz.

Note: Amplitude levels of front R and L are not even, depending on the PWB.

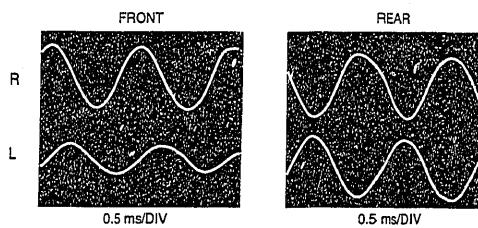


2-6-6. Hall Surround/Monaural Check

Adjustment Preparation

- Check that the following waveforms are obtained:
Front: The phases of R and L are different. The amplitudes of R and L are different.
Rear: The phases of R and L are opposite. The amplitudes of R and L are equal.

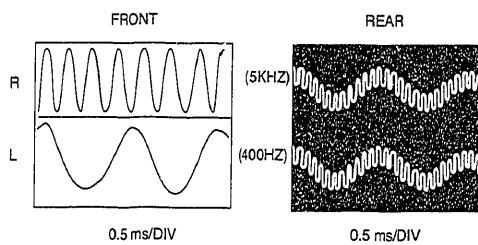
Note: the monaural check can be omitted. Amplitude levels of front R and L not even depending on the PWB.



2-6-7. Dolby Surround Check

Adjustment Preparation

- Set SURROUND: DOLBY.
- Check that the following waveforms are obtained:
Front: R is 5 kHz sine wave. L is 400 Hz sine wave.
Rear: R and L are the same signal and 400 Hz is superimposed on 5 kHz.

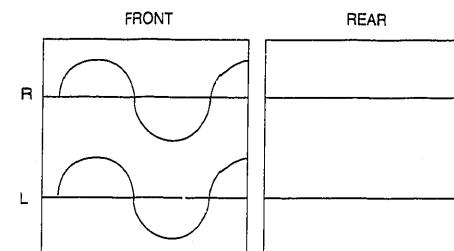


2-6-8. Dolby Surround/Monaural Check

Adjustment Preparation

- Check that the following waveforms are obtained:
Front: R and L are the same signal.
Rear: Almost no output from both R and L.

Note: Front side check can be omitted.



2-7. DYNAMIC BASS CIRCUIT OPERATION CHECK

Adjustment Preparation

- Input 90 Hz audio signal with 435 mVrms to L/MONO.
- Set the VOLUME to around the center.
- Set SURROUND: OFF

Adjustment Procedure

- Switch the DYNAMIC BASS of the SOUND SETTING from OFF to ON. Check that the output level of the front speaker changes by ± 7 to 9 dB.

Note: Since the level change at around VOLUME max. is reduced to 0-3 dB, perform checking at VOLUME center or lower.

2-8. AGC ADJUSTMENT CHECK

Adjustment Preparation

- Set visual coordinate (SHARPNESS, TINT, COLOR, BLACK LEVEL) and picture to the standard levels.
- Receive the CH 10 color bar signal. (antenna input: -45 ± 5 dBm, 0 dBm = 1 mW)
- Receive a broadcast signal. (antenna input: -20 ± 5 dBm)

Adjustment Procedure

- There should be no conspicuous noise in the picture when receiving color bar.
- There should be no cross-modulation beats, saturation, etc. in the picture when receiving broadcast signal.
- If reception condition is not good, replace the front-end.

Remarks

- AGC delay select point adjustment of the front-end is checked from medium/strong signal S/N ratio and strong signal cross-modulation characteristic.

2-9. SHOOT BALANCE ADJUSTMENT (R3566)

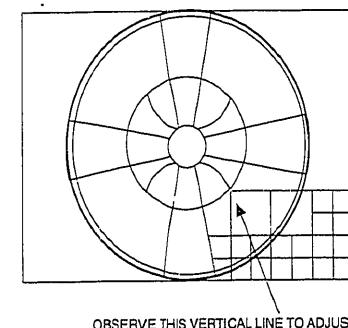
Adjustment Preparation

- Receive the circle pattern signal.
- Set the BRIGHTNESS and BLACK LEVEL controls to the center and set the SHARPNESS to maximum.
- Turn the SHOOT BALANCE ADJUSTMENT VR (R3566) fully counter clockwise.
- Pull off the P51 connector to shut off the VM function. (CZ46J only)

Adjustment Procedure

- Gradually turn the SHOOT BALANCE ADJUSTMENT VR (R3566) clockwise and adjust so that the widths of pre-shoot and over-shoot of the vertical line (black) on the circle pattern are balanced. (Check by eye.)
- After adjustment, insert the P51 connector. (CZ46J only)

Remarks



- Do not use a mirror and observe the screen directly.

2-10. MTS OPERATION CHECK

2-10-1. STEREO/SA Broadcast Receiving Check

Adjustment Preparation

- Set the TV so that a MTS broadcast (STEREO/SA) can be received.
 - Set MTS mode to STEREO or SA mode.
- Note:** To select between STEREO/SA display SOUND SETTING of MTS mode and select SOUND MENU.
- Set BALANCE to the center.

Adjustment Procedure

- When one of the MTS broadcast STEREO or SA is

ST	11
or SA	ST or SA

received, check that "ST" or "SA" is displayed on the screen.

- Stereo broadcast receiving check.
 - At select MTS mode, press ENTER button to display "STEREO" on the screen.
 - When only L CH signal is received, L CH sound comes out from the left speaker.
 - When only R CH signal is received, R CH sound comes out from the right speaker.
 - When monaural signal is received, monaural sound comes out from both the right and left speakers.
- SA broadcast receiving check.
 - At select MTS mode, press sound button to display "SA" on the screen.
 - SA signal comes out from both the right and left speakers.
 - When no SA signal, the sound on "MAIN" side, refer to (2), comes out.

Note: When the channel selection is performed or RECALL button is operated, "ST" or "SA" is shown below the channel number (approx. for 4 seconds).

2-10-2. MTS Mode Check

Adjustment Preparation

- Set the TV so that a MTS broadcast (STEREO/SA) can be received.
- Set BALANCE to the center.

Adjustment Procedure

- When "MTS MODE" mode is set to "STEREO" side, check that STEREO and MONO display on the screen, which have been ON, are turned OFF and that monaural sound comes out from the right and left speakers.

2. When "MTS MODE" mode is set to "STEREO" side, check that STEREO and MONO display on the screen, which have been OFF, are turned ON and that STEREO and SA sound can be received.

2-10-3. Stereo Separation Check

Adjustment Preparation

- Set the TV so that MTS broadcast (STEREO/SA) can be received.
- Make Surround OFF.
- Set MTS MODE to STEREO.
- Connect AUDIO OUT terminals L and R to an oscilloscope.

Adjustment Procedure

- When stereo L only signal (or R only signal) is received, check that the output level ratio of L CH and R CH is 15 dB or more.

CH	OUTPUT LEVEL
L	1.2 Vpp
R	0.21 Vpp or less

Example: When L only is received (100% modulation).

2-11. CHECK IN COMBINATION WITH EXTERNAL EQUIPMENT

2-11-1. Check in Combination with External Equipment

Preparation for Check

- Input video signals to VIDEO 1, VIDEO 2 and VIDEO 3 input terminals. (No input 3 for CZ33J.)
Signal condition: 100% white signal
 1 ± 0.2 Vp-p
 75Ω termination
- Input audio signals to AUDIO 1, AUDIO 2 and AUDIO 3 input terminals.
Signal condition: 435 ± 20 mVrms
VTR, tuner or equivalent.
- Connect the TV monitor to the output terminal.
- Input Y-C separate signals to S-VIDEO input terminal.
- Connect the AUDIO INPUT TERMINALS of the monitor TV to AUDIO TO HI-FI output terminals.

Checking Procedure

- Each time the input selection of the remote control transmitter is pressed, each input signal should be received alternately.
- Check that the picture and sound are normal when the external signals are received.

Remarks

- The 100% white of TV signal should be almost the same brightness as the 1 Vp-p (75Ω termination) external video input signal.

- For the audio signal, 100% modulation (25 kHz div.) of the TV signal should be almost the same level as the 435 mVrms external audio signal.

Checking Procedure

- Check that the reception of the TV monitor connected to the output terminal is also switched when item (1) is checked.

Remarks

- The signals from the output terminals are the same as those of the picture and sound of the TV set.

Checking Procedure

- When the phono plug connected to Audio R terminal is pulled out with the external signal input, the sound from both left and right speakers should be normal. (L monaural check) When the phono plug is connected only to R terminal, check that the sound will output only from the right speaker. (The sound should not output from the left speaker.) Check above in VIDEO 1, VIDEO 2 and VIDEO 3 modes.

Remarks

- The audio input terminals are switched over between stereo and monaural by switching the phono jacks:
When the phono plugs are connected to both L and R: Stereo input mode.
When the phono plug is connected only to L: Monaural input mode.

Checking Procedure

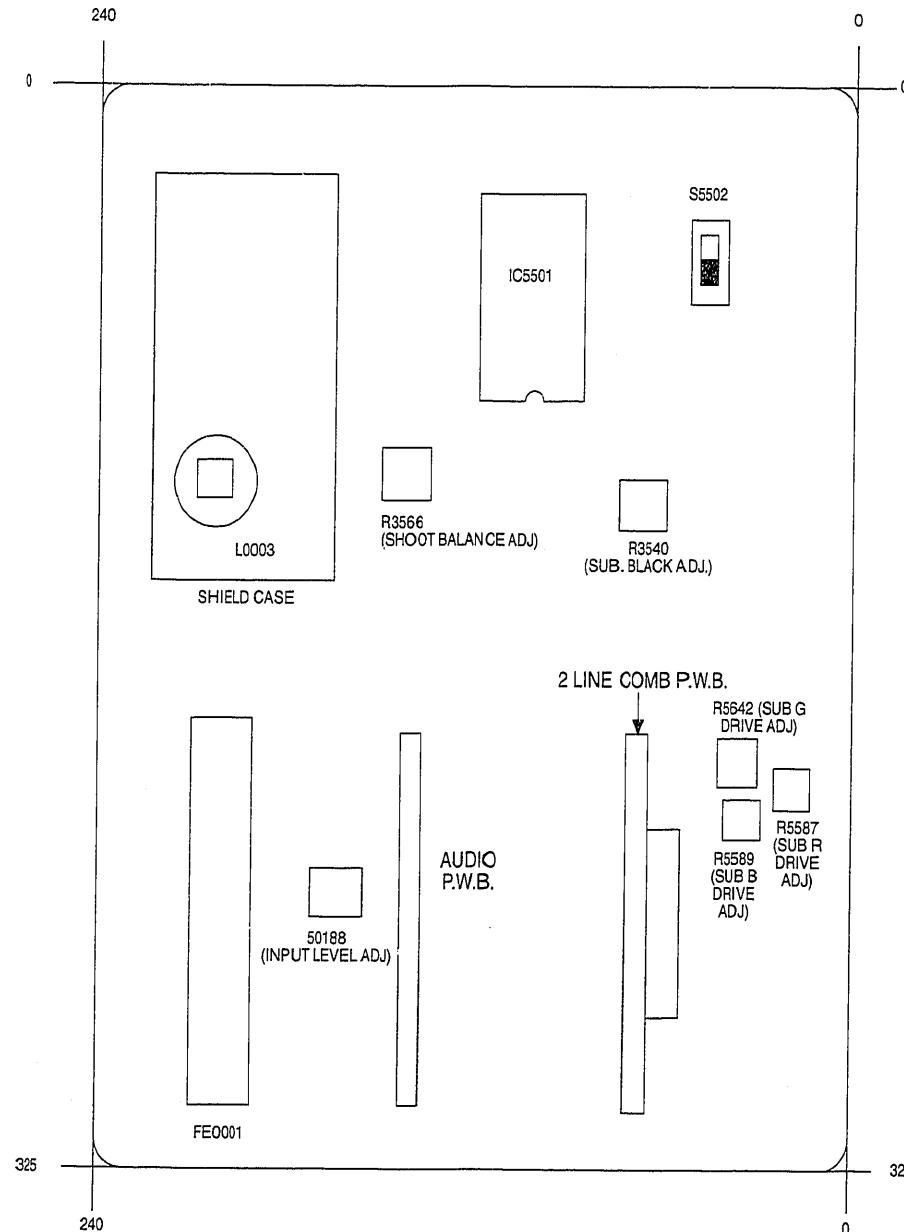
- When the Video (S-in) is selected, the picture and sound from the Y/C separated signal should be received. However, the output signal is a composite of S-Video input signal.
- The signal controlled from the TV side (bass, treble, balance, volume, mute and surround) is the output of the audio to Hi-Fi output terminals when item (1) is checked.

III. INITIAL SETTING

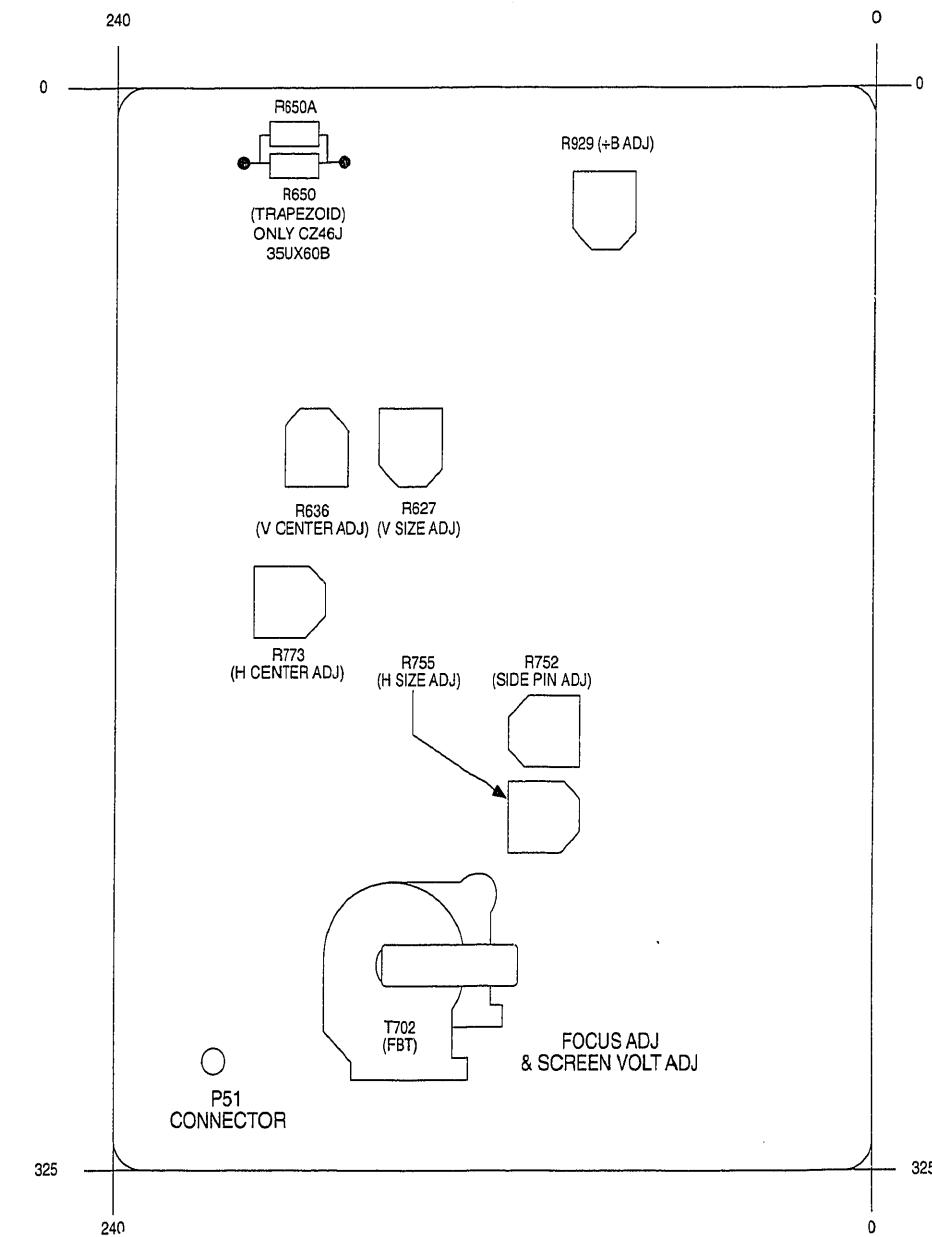
NO.	NAME	SPECIFICATIONS
1	RECEPTION CH	Ø3 CH
2	ANT	ANT 1
3	AVX	TV
4	VOLUME	20 STEP
5	P IN P	OFF
6	P IN P POSITION	LOWER RIGHT (P IN P ON)
7	CLOSED CAPTION	OFF (CAPTION, CHANNEL:1)
8	AIR/CABLE	AIR
9	CHANNEL MEMORY	02-13 CH
10	CHANNEL CAPTION	UNREGISTERED FOR ALL CHANNELS
11	CHILD LOCK	OFF FOR ALL CH
12	FAVORITE CHANNELS	OFF FOR ALL CH
13	VOLUME CORRECTION	OFF FOR ALL CH
14	CLOCK SET	UNKNOWN (OFF)
15	CONTRAST	MAX.
16	TINT	1/2
17	COLOR	1/2
18	BRIGHTNESS	1/2
19	SHARPNESS	1/2
20	WHITE CONTROL	COOL
21	SURROUND	OFF
22	BALANCE	1/2
23	BASS	1/2
24	TREBLE	1/2
25	MTS MODE	STEREO
26	DYNAMIC BASS	OFF
27	INT.SPEAKERS	ON
28	REAR VOLUME	20 STEP
29	AI	OFF
30	AUTO COLOR	ON
31	NOTCH FILTER	OFF
32	NOISE REDUCER	OFF

IV. ADJUSTMENT POINT LIST

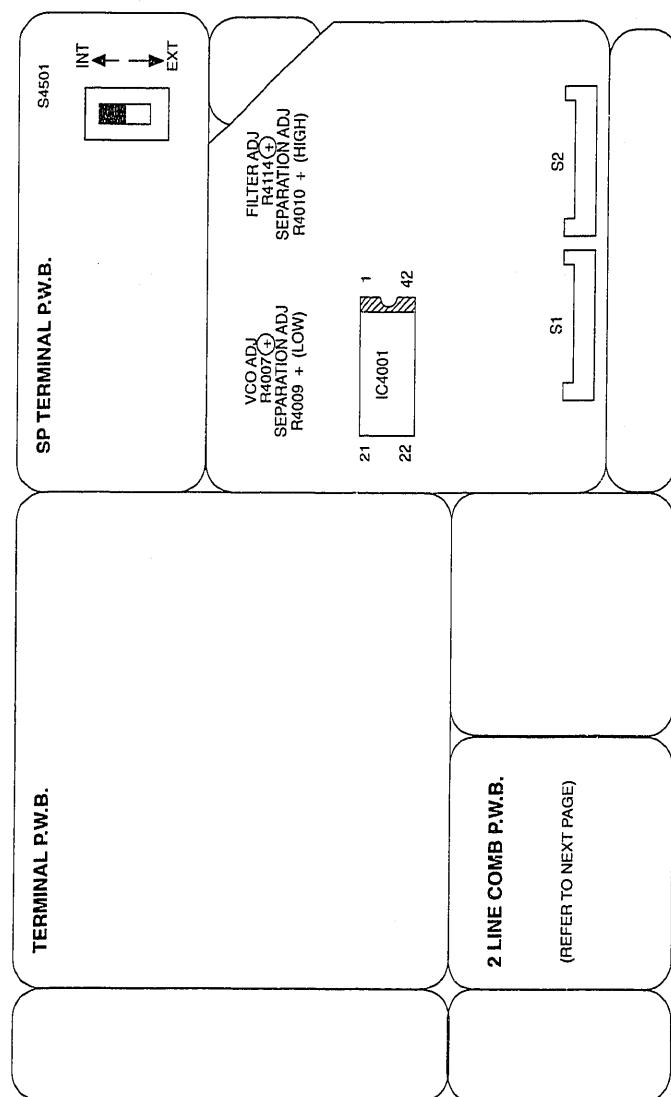
4-1. SIGNAL PWB



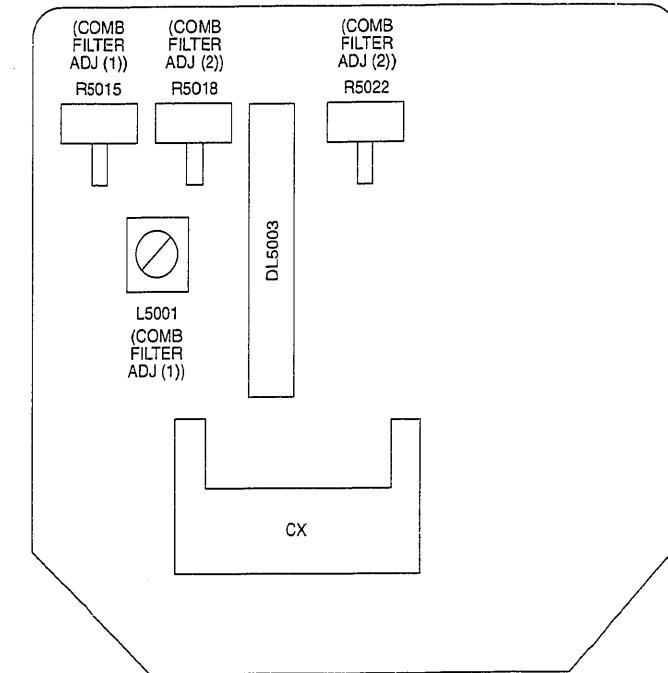
4-2. POWER SUPPLY/DEFLECTION PWB



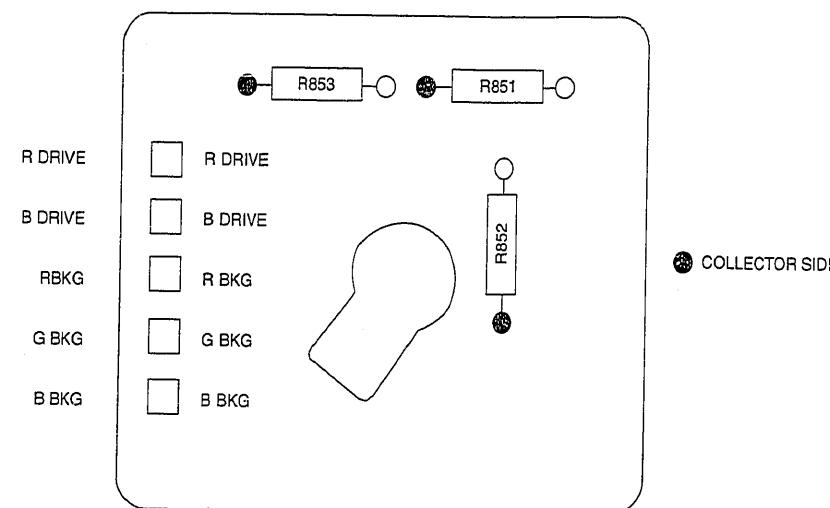
4-3. TERMINAL PWB



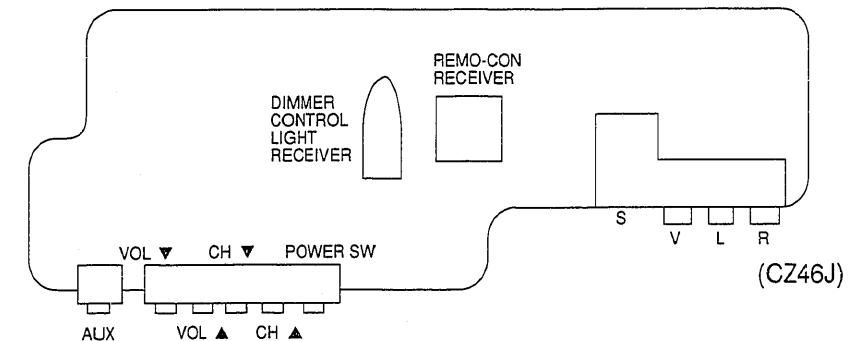
4-4. 2 LINE COMB. PWB



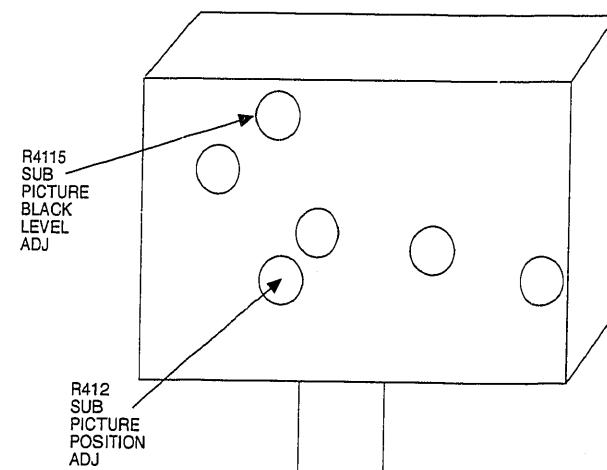
4-5. CPT PWB



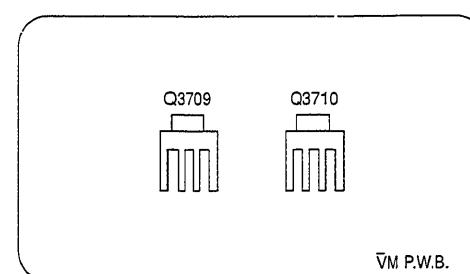
4-7. CONTROL PWB



4-6. PIN P UNIT

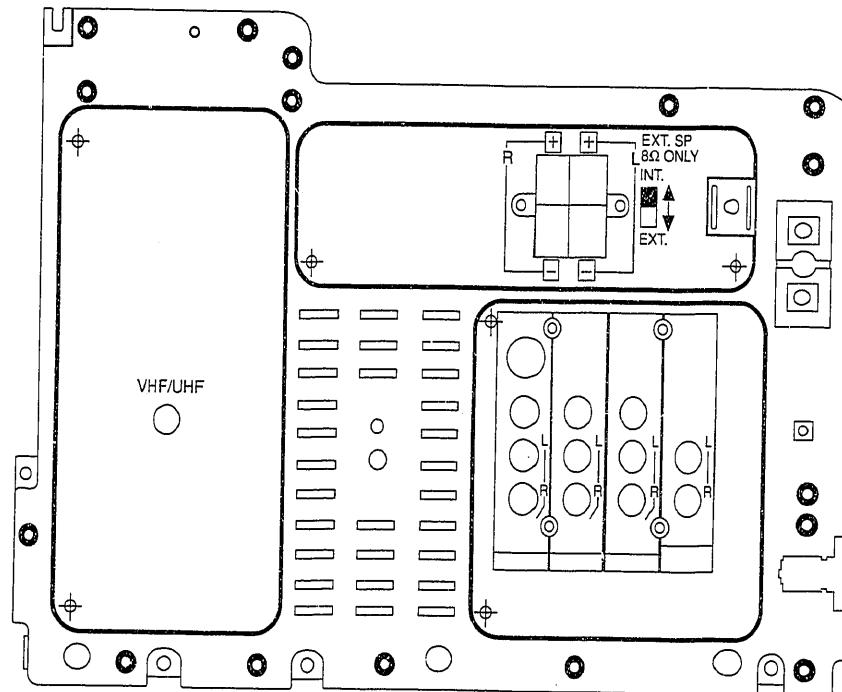


4-8. VM PWB (CZ46J ONLY)

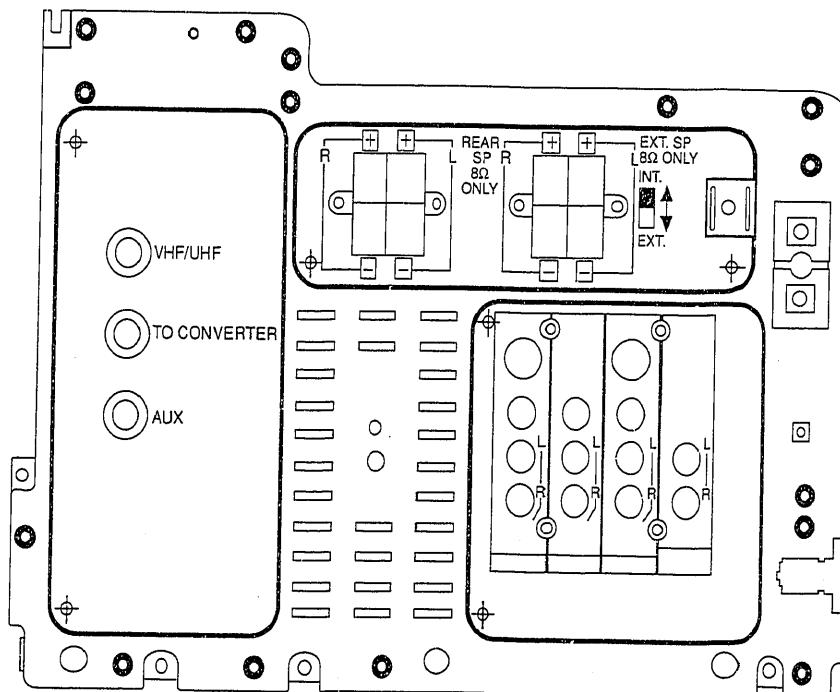


4-9. REAR TERMINALS LOCATIONS

CZ33J



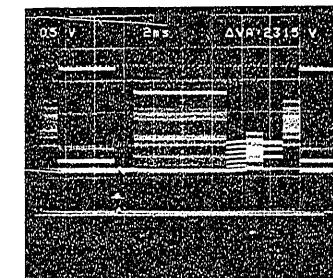
CZ46J



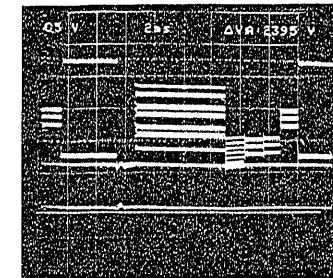
WAVEFORMS AT EACH SECTION

Numbers inside correspond to locations shown in the circuit diagram.

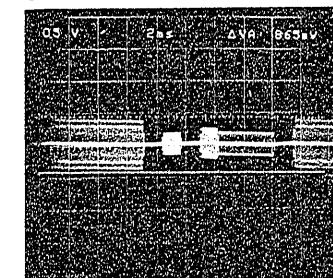
① CX Pin 2 (C Video-in)



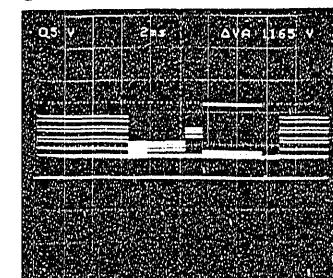
⑤ Q3503 Emitter (Y-Buffer)



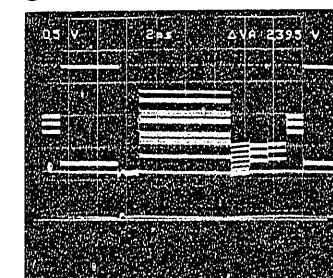
② CX Pin 6 (C-out)



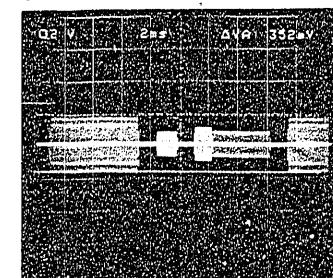
⑥ Q3514 Collector (3.58 MHz Trap)



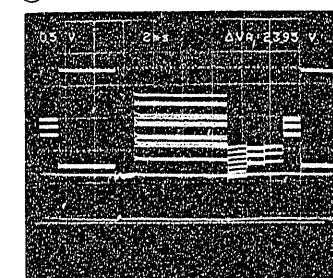
③ CX Pin 4 (Y-out)



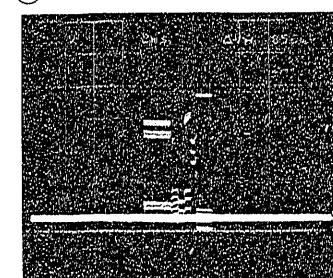
⑦ Q3504 Emitter (C-Buffer)



④ CD Pin 9 (YCE-out)



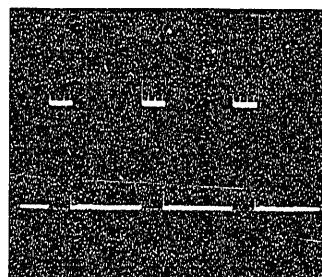
⑧ IC5501 Pin 16 (GTX in, PinP on)



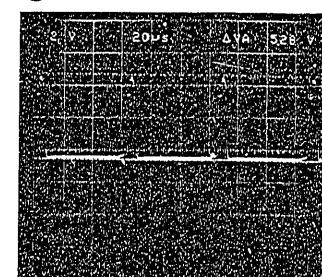
WAVEFORMS AT EACH SECTION

Numbers inside correspond to locations shown in the circuit diagram.

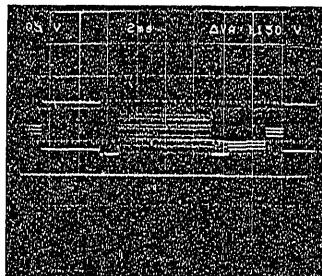
(9) IC5501 Pin 18 (Ys-PinP)



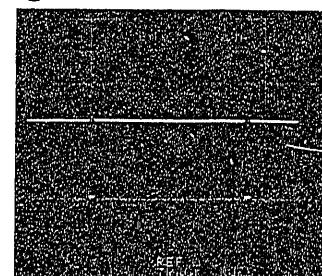
(13) IC5501 Pin 25 (FBP-in)



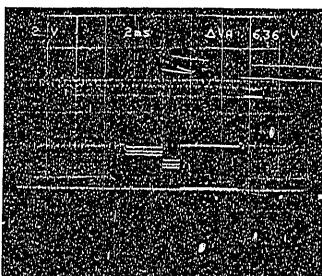
(10) IC5501 Pin 55 (Y-in)



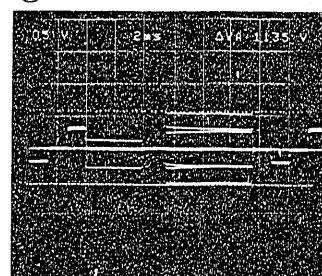
(14) IC5501 Pin 32 (V out)



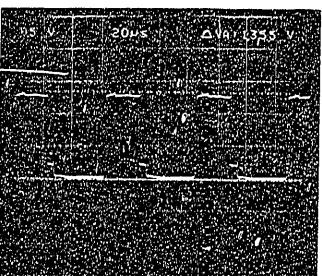
(11) IC5501 Pin 13 (-Y out)



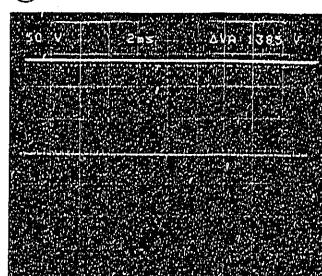
(15) IC5501 Pin 11 (G-Y out)



(12) IC5501 Pin 26 (H-out)



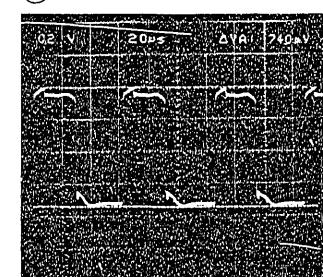
(16) FBT Pin 9 (+B)



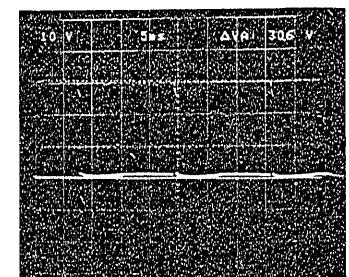
WAVEFORMS AT EACH SECTION

Numbers inside correspond to locations shown in the circuit diagram.

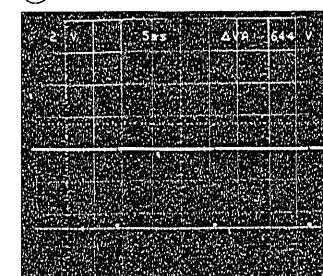
(17) SD2 Connector Pin 5 (H. Drive)



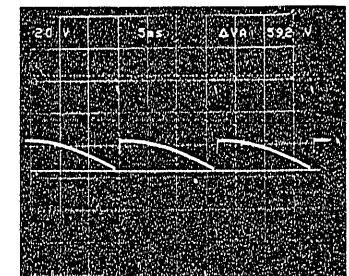
(21) IC625 Pin 9 (V. pump-up)



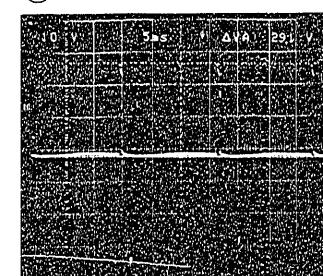
(18) SD2 Connector Pin 9 (V. Drive)



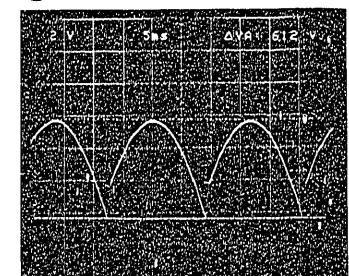
(22) IC625 Pin 12 (V. out)



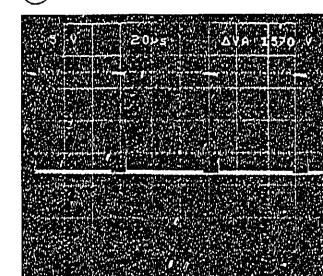
(19) SD2 Connector Pin 10 (V. Blanking)



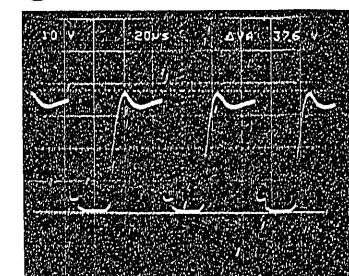
(23) M. Connector Pin 3 (V. Dy)



(20) SD3 Connector Pin 2 (H. Blanking)



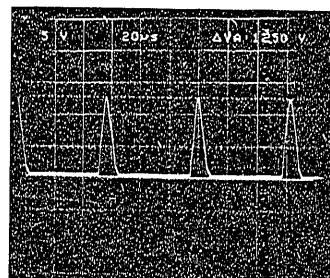
(24) Q701 Collector (H. Drive)



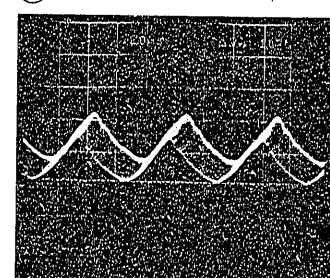
WAVEFORMS AT EACH SECTION

Numbers inside correspond to locations shown in the circuit diagram.

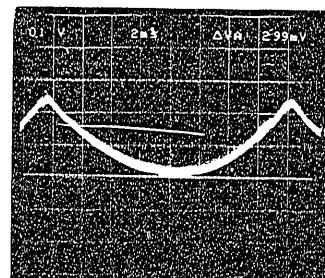
(25) Q702 Collector (H. output)



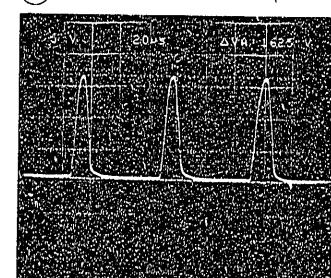
(29) SD2 Connector Pin 4 (H. OSC. +B)



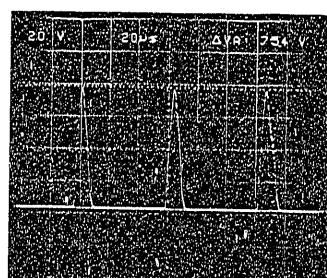
(26) Q651 Collector



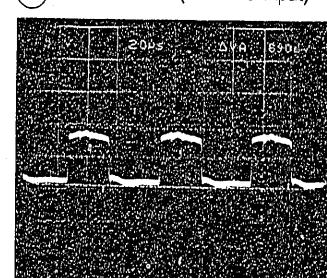
(30) SD3 Connector Pin 1 (H. AFC)



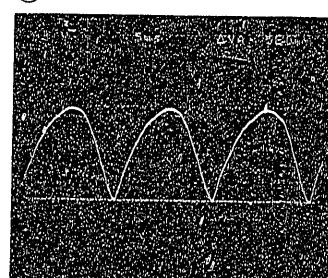
(27) FBT Pin 8



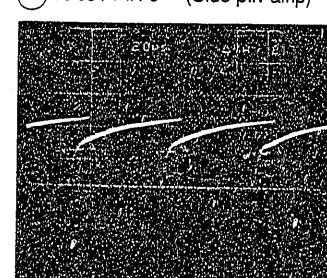
(31) Q701 base (H. Drive input)



(28) Q750 base



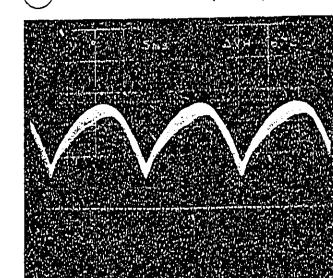
(32) IC651 Pin 6 (Side pin amp)



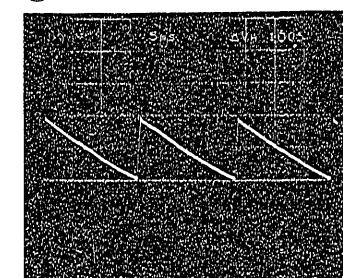
WAVEFORMS AT EACH SECTION

Numbers inside correspond to locations shown in the circuit diagram.

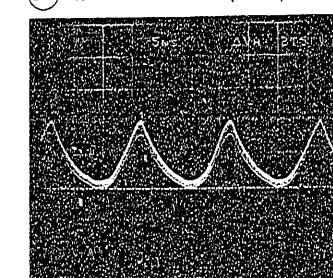
(33) Q651 Emitter (Side pin drive)



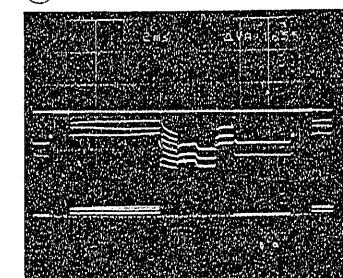
(37) IC651 Pin 3



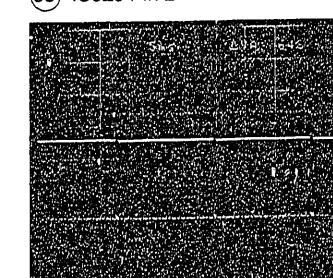
(34) Q752 Collector (Side pin out)



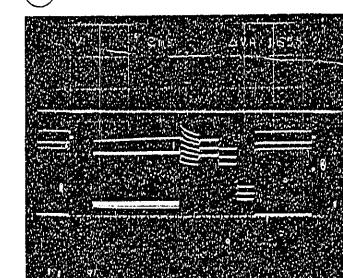
(38) Q854 Collector



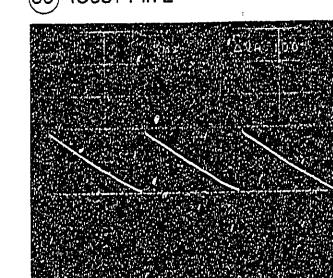
(35) IC625 Pin 2



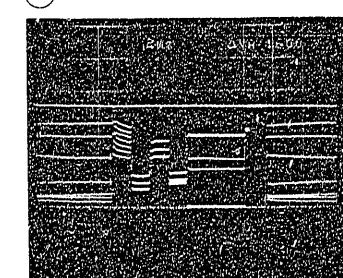
(39) Q855 Collector



(36) IC651 Pin 2



(40) Q856 Collector



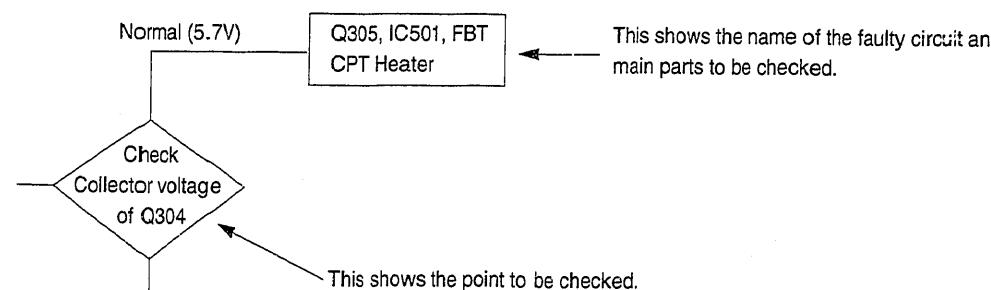
TROUBLESHOOTING

PRODUCT SAFETY NOTE

The shaded and Δ marked components have special characteristics important to safety. Read carefully the product safety notice of each service manual. Don't degrade the safety of the receiver through improper servicing when replacing any of this components.

HOW TO USE THE FLOW CHART

- (1) The flow chart shows the following:



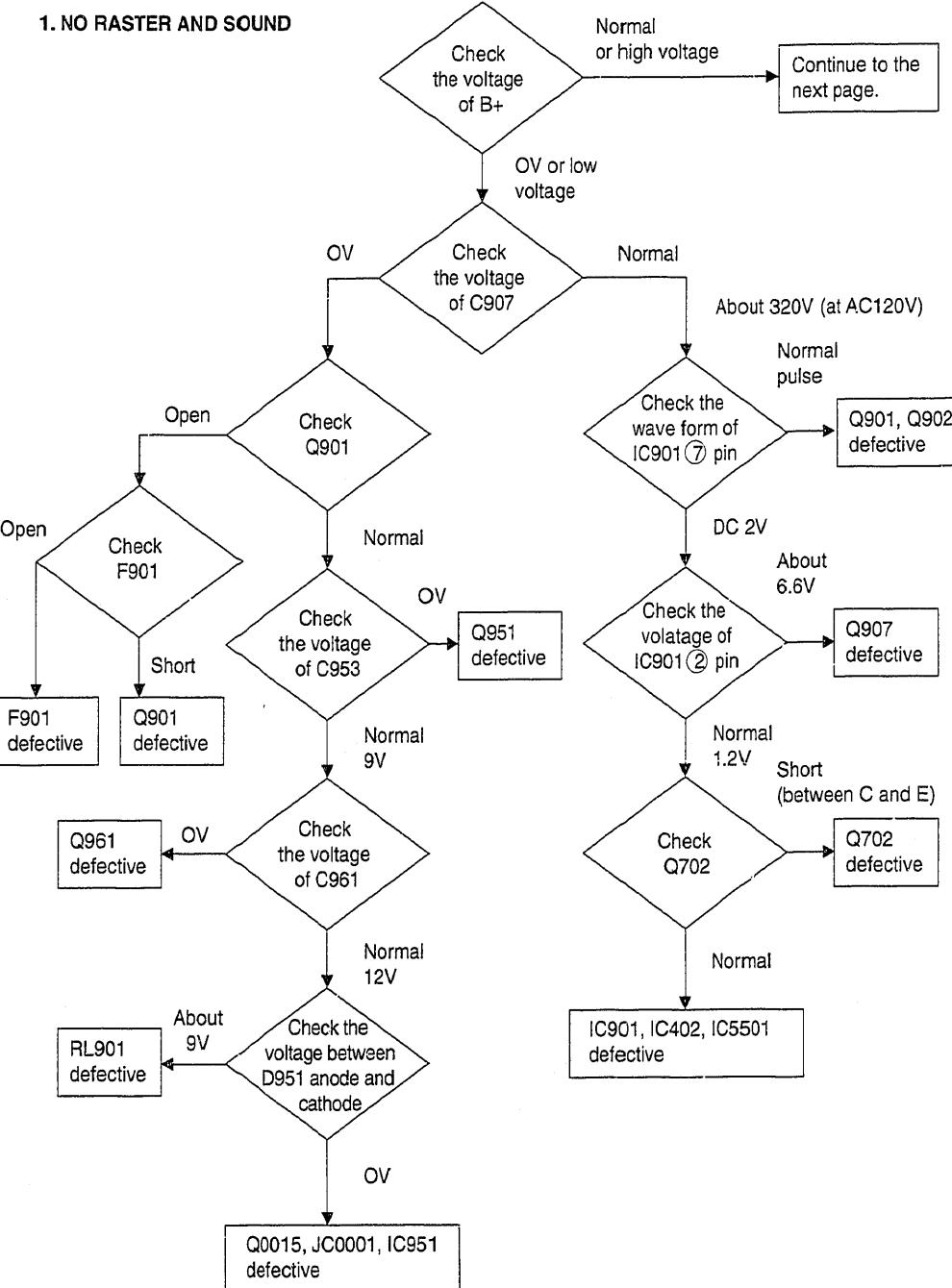
- (2) The voltage shown in the chart may differ to some extent depending on the condition of the set and tester.

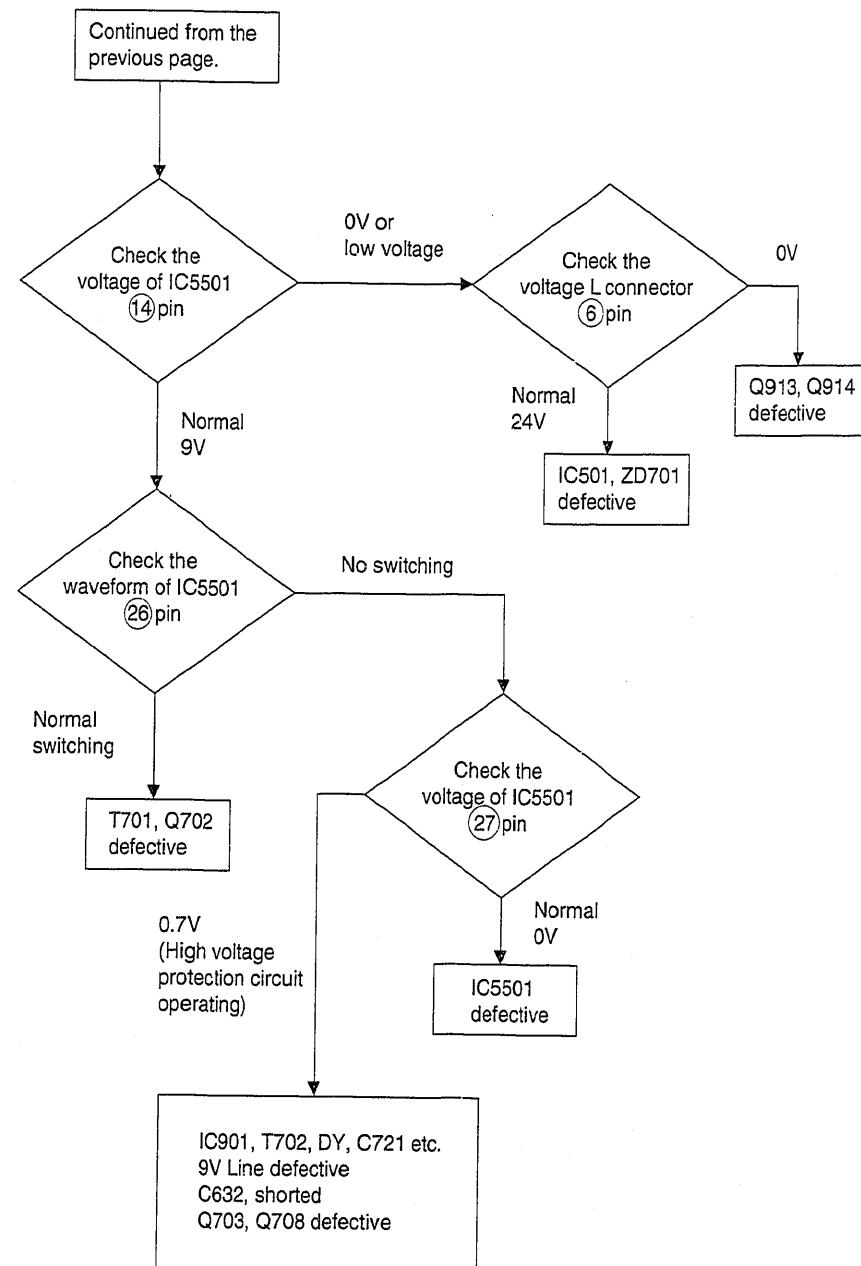
PRECAUTION ON MAKING MEASUREMENTS AND ON HANDLING

1. When any parts become abnormally hot or there is a smell of burning, cut off the power immediately.
2. Do not make shorts between circuits or across terminals except for those specified.
3. When applying a signal for checking purposes, make connection in the alternate current system for any not specified.
4. When measuring the voltages of ICs and TRs, be careful to see that the lead bar of the tester does not touch any other terminal.
5. Measure the voltage correctly.
6. Measure the resistance over a small range.
7. Be sure to switch off the power when replacing parts.
8. Do not apply a soldering iron for a long time when replacing parts. (Use a solder-wick.)
9. Use an isolation transformer when troubleshooting.

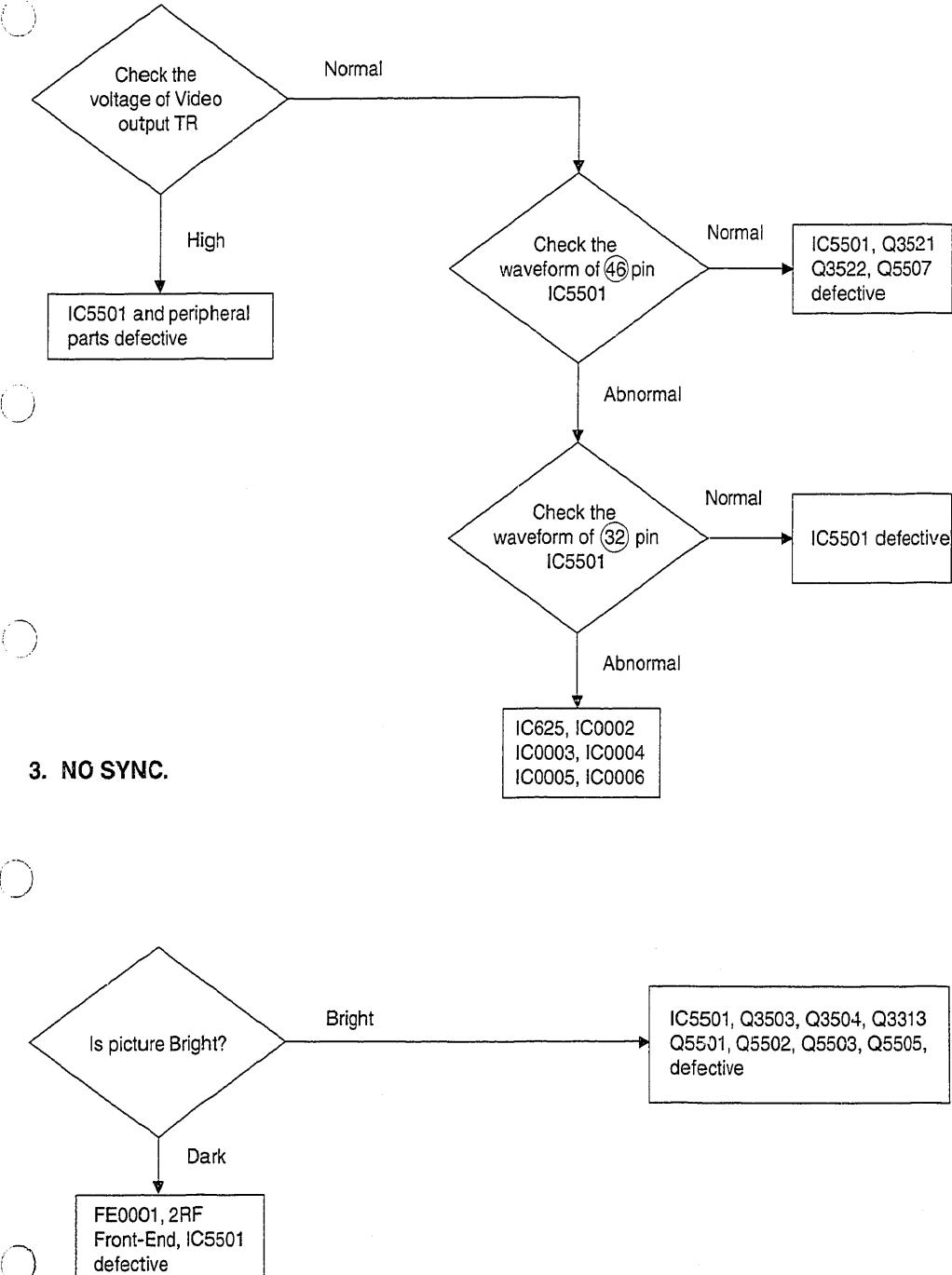
1. NO RASTER AND SOUND

1. NO RASTER AND SOUND

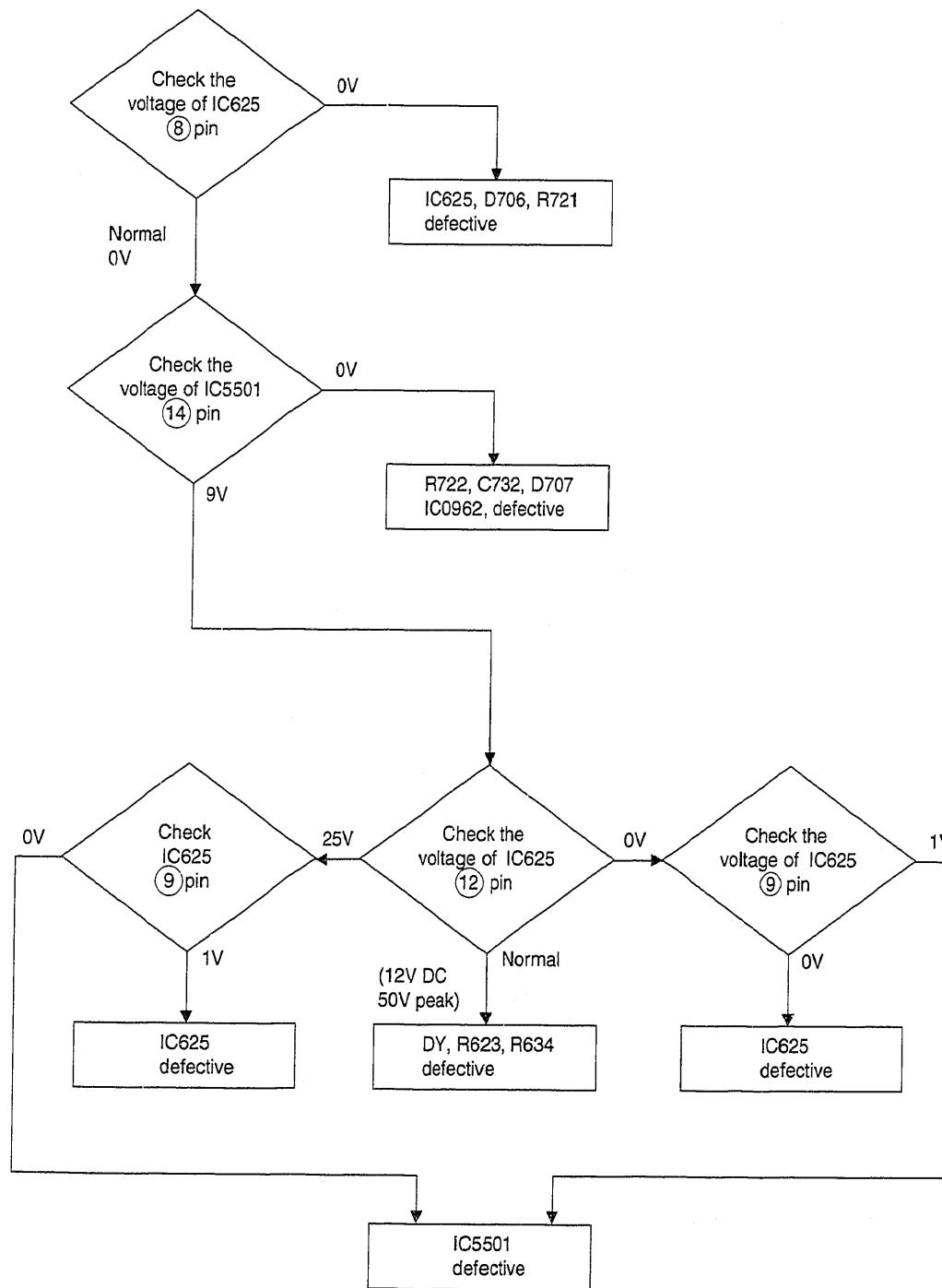




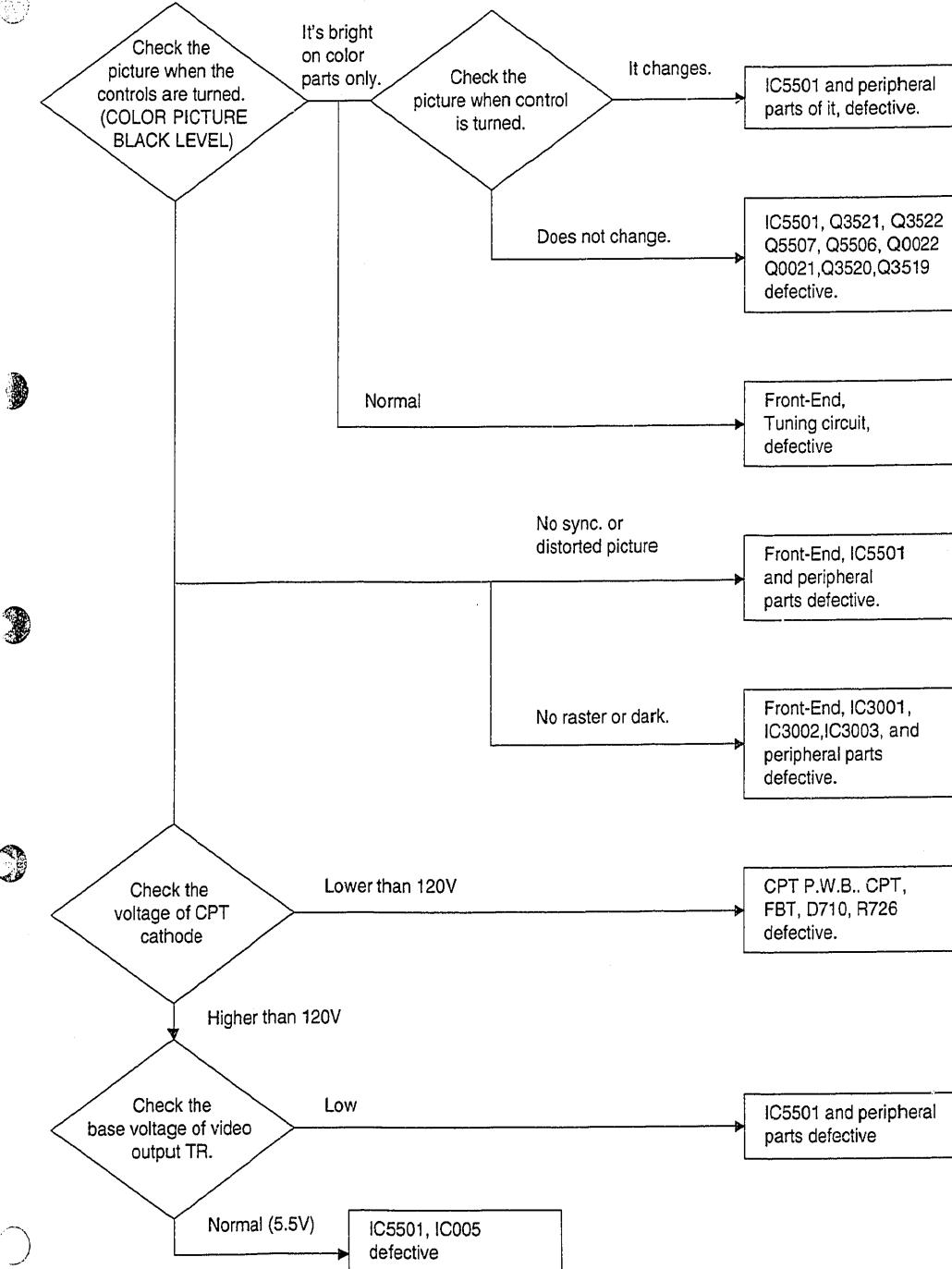
2. ONLY RASTER OR FLYBACK TRACE APPARENT ON PICTURE



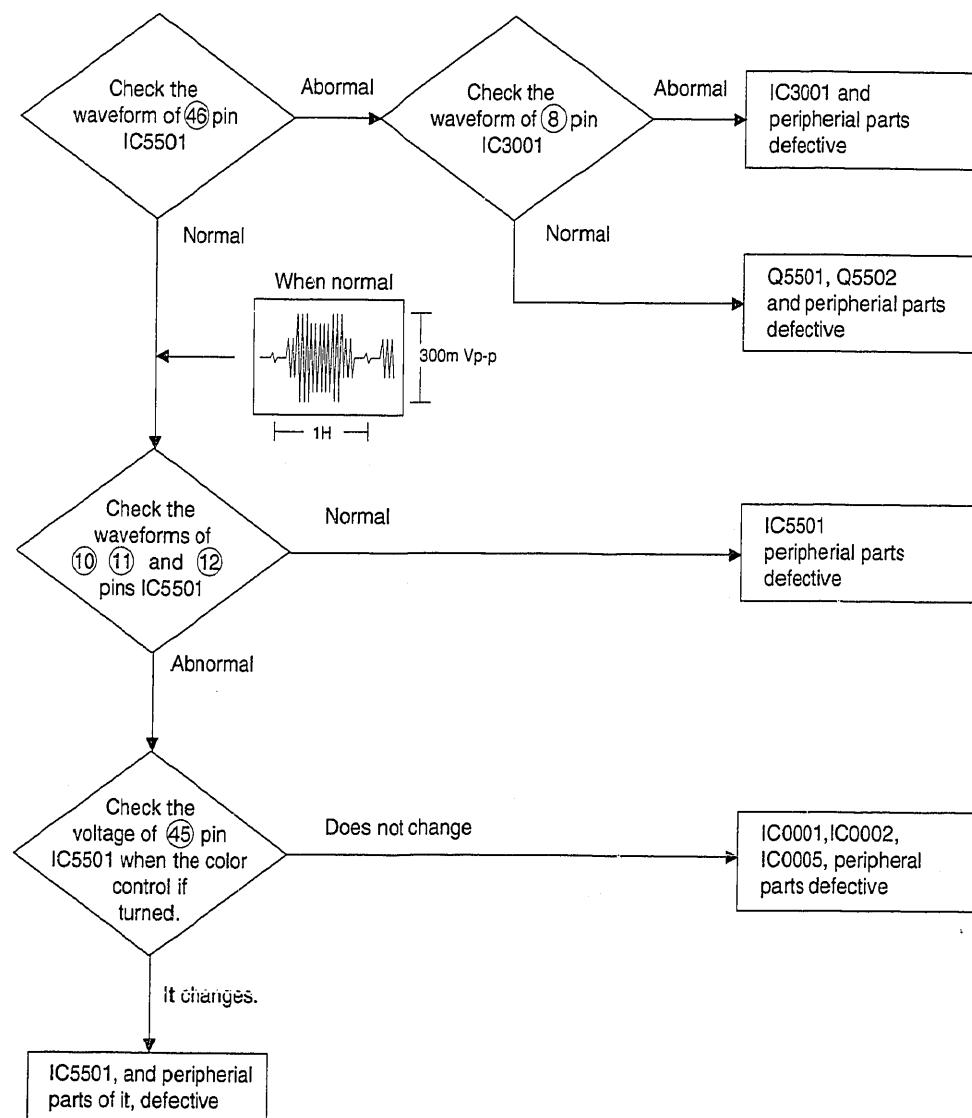
4. NO VERTICAL DEFLECTION OR V. SIZE IS DISTORTED



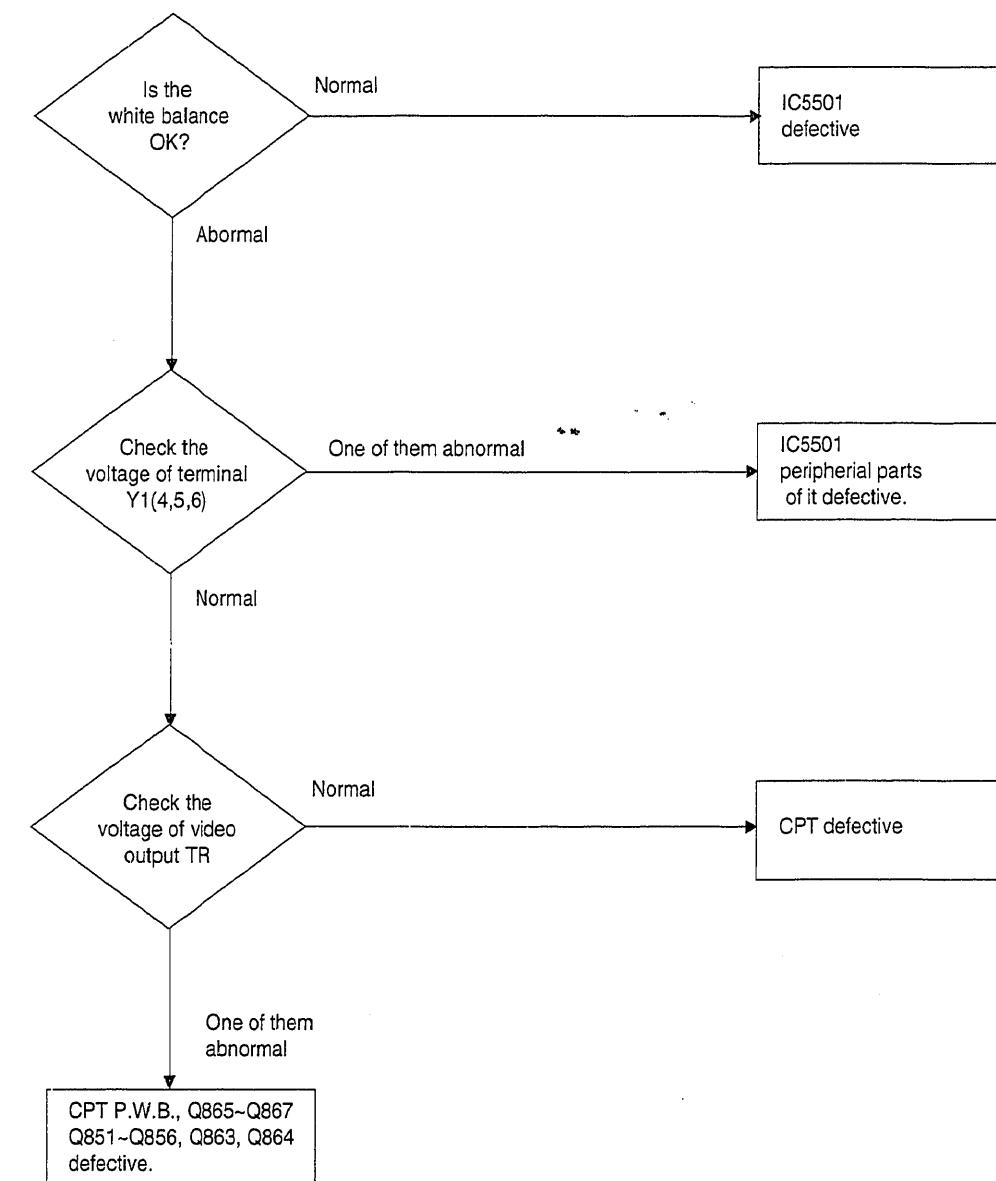
5. DARK PICTURE



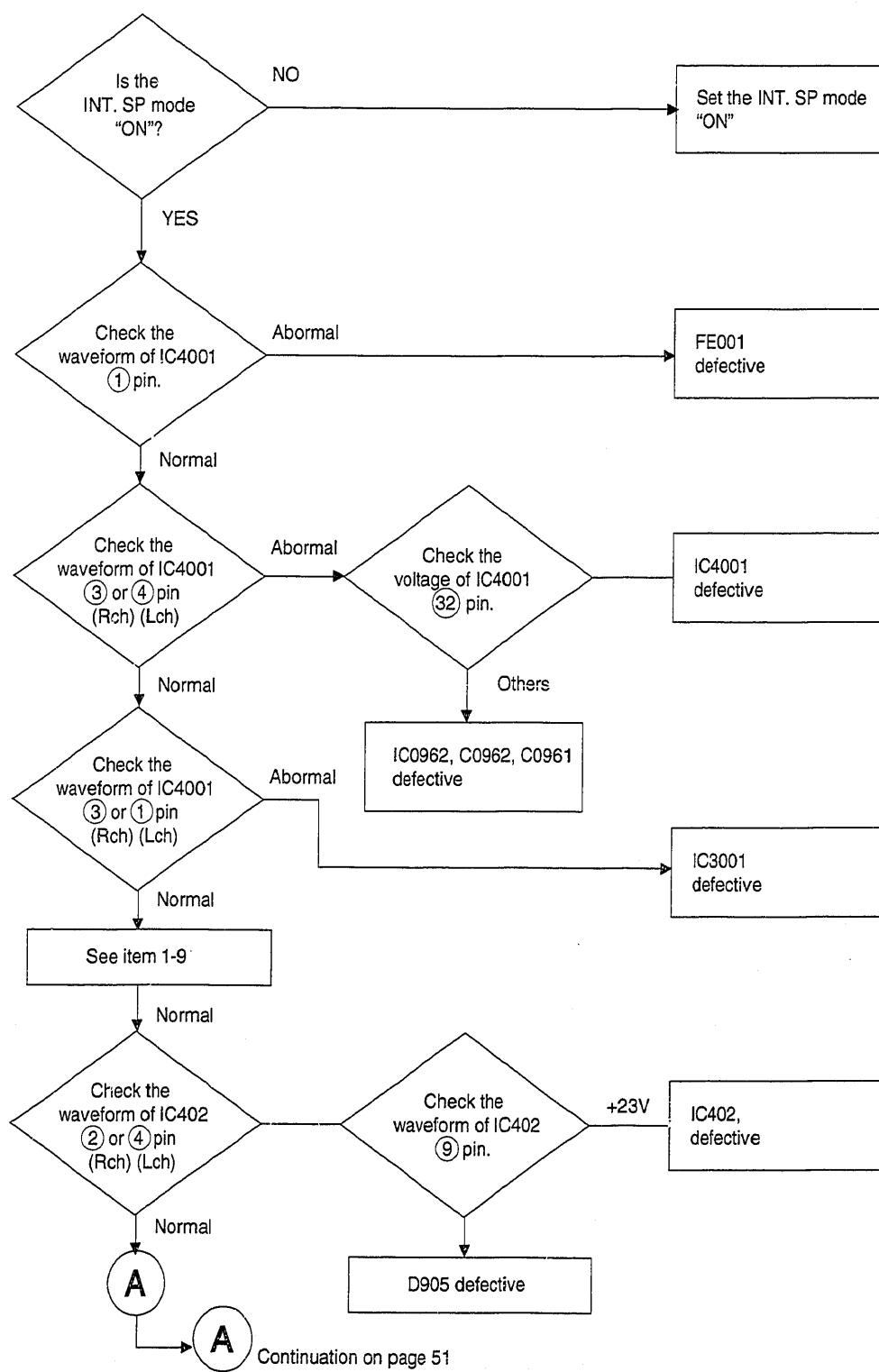
6. NO COLOR



7. WHITE BALANCE/TINT DEFECTIVE



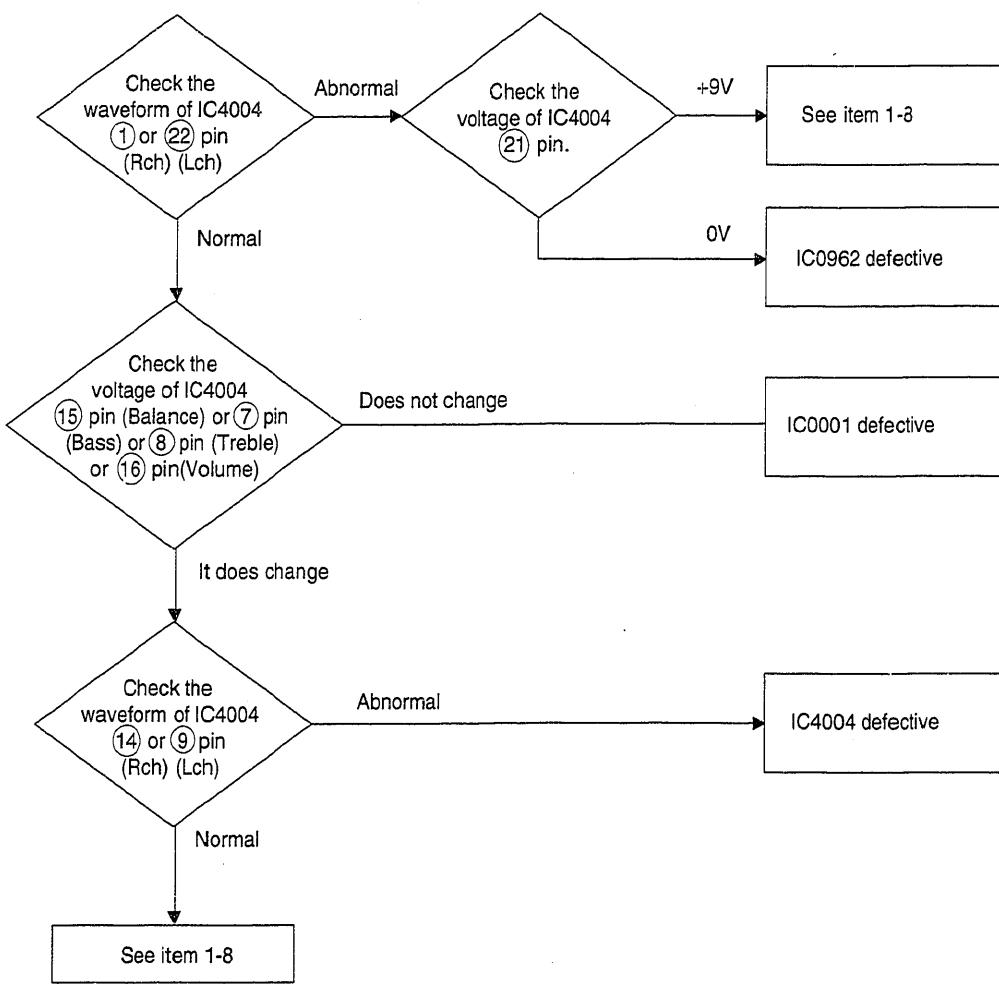
8. NO SOUND



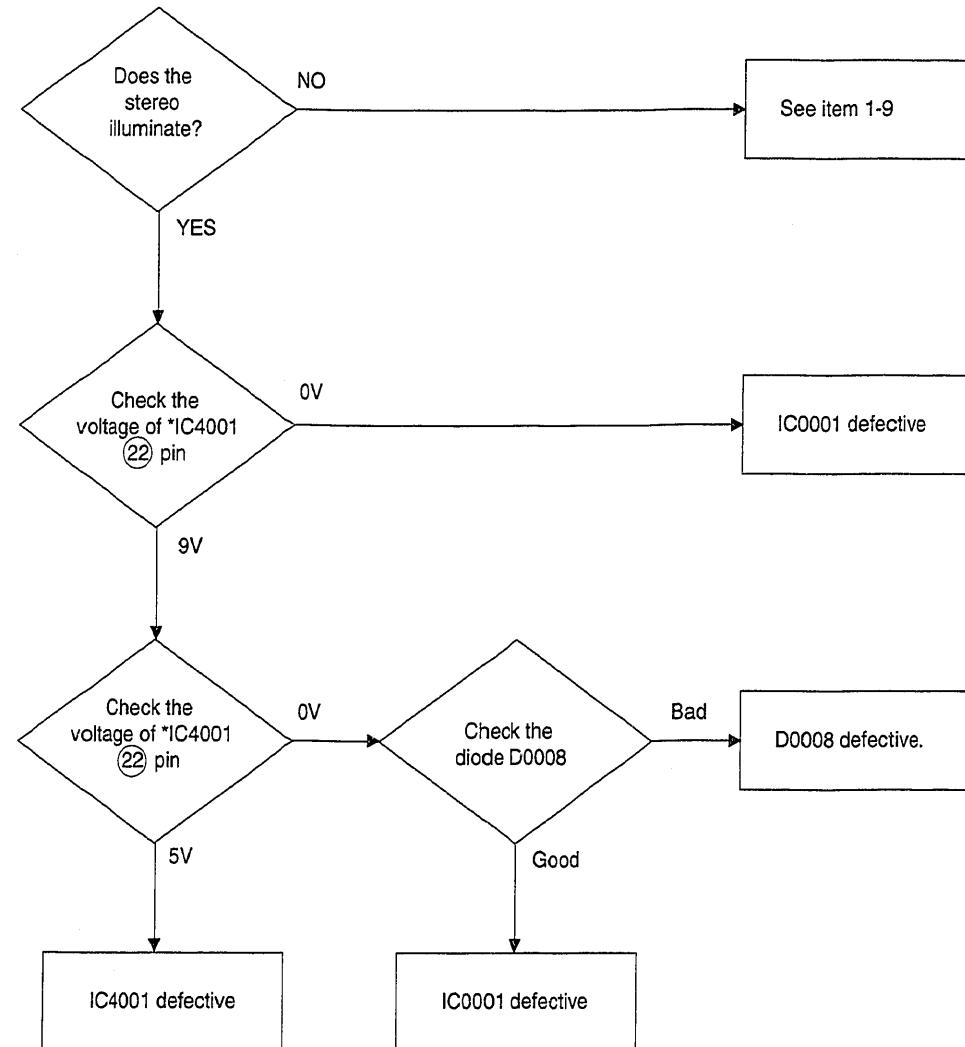
A
Check the waveform of IC402 (7) or (12) pin
Abnormal
IC402, IC4004 defective

Speaker Defective

9. NO SOUND OR NOT VARIABLE (BASS, TREBLE, VOLUME, BALANCE)

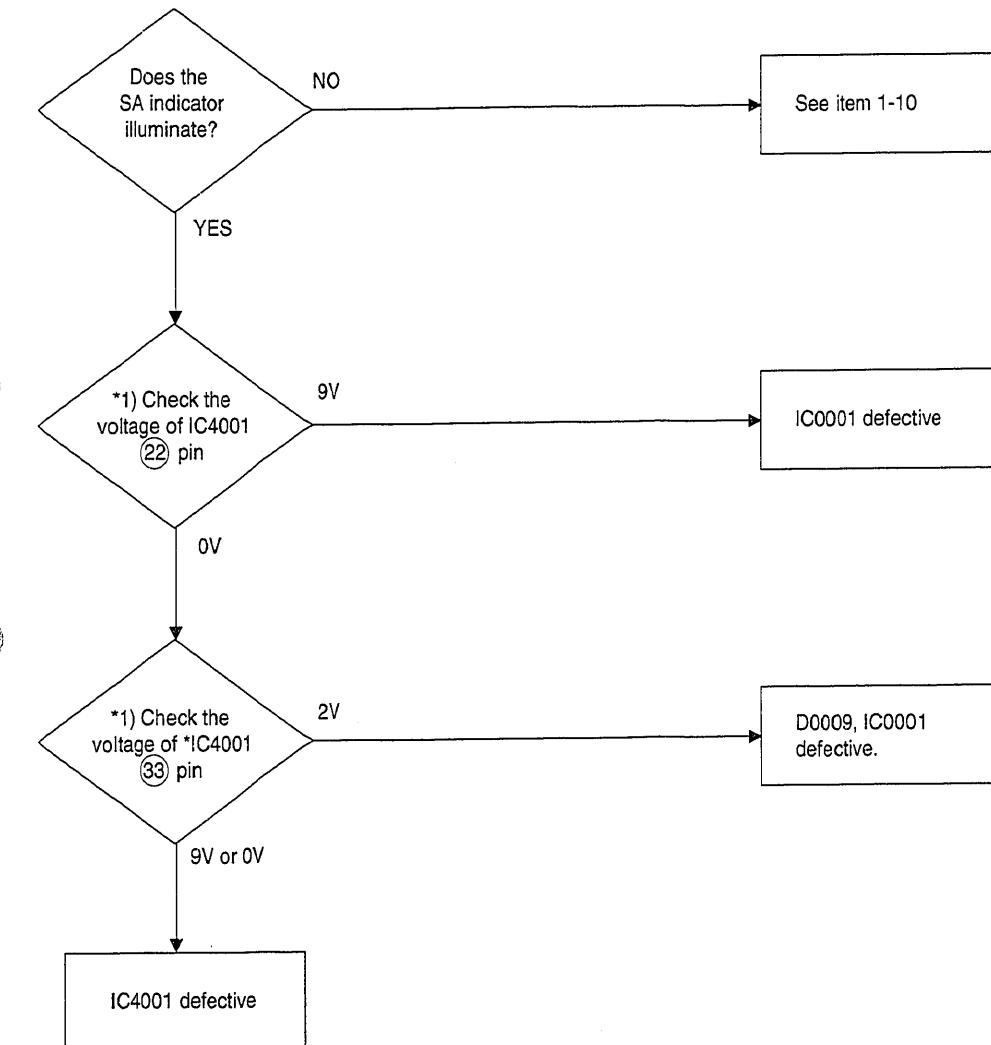


10. DOES NOT REPRODUCE STEREO SOUND (When receiving stereo broadcast)



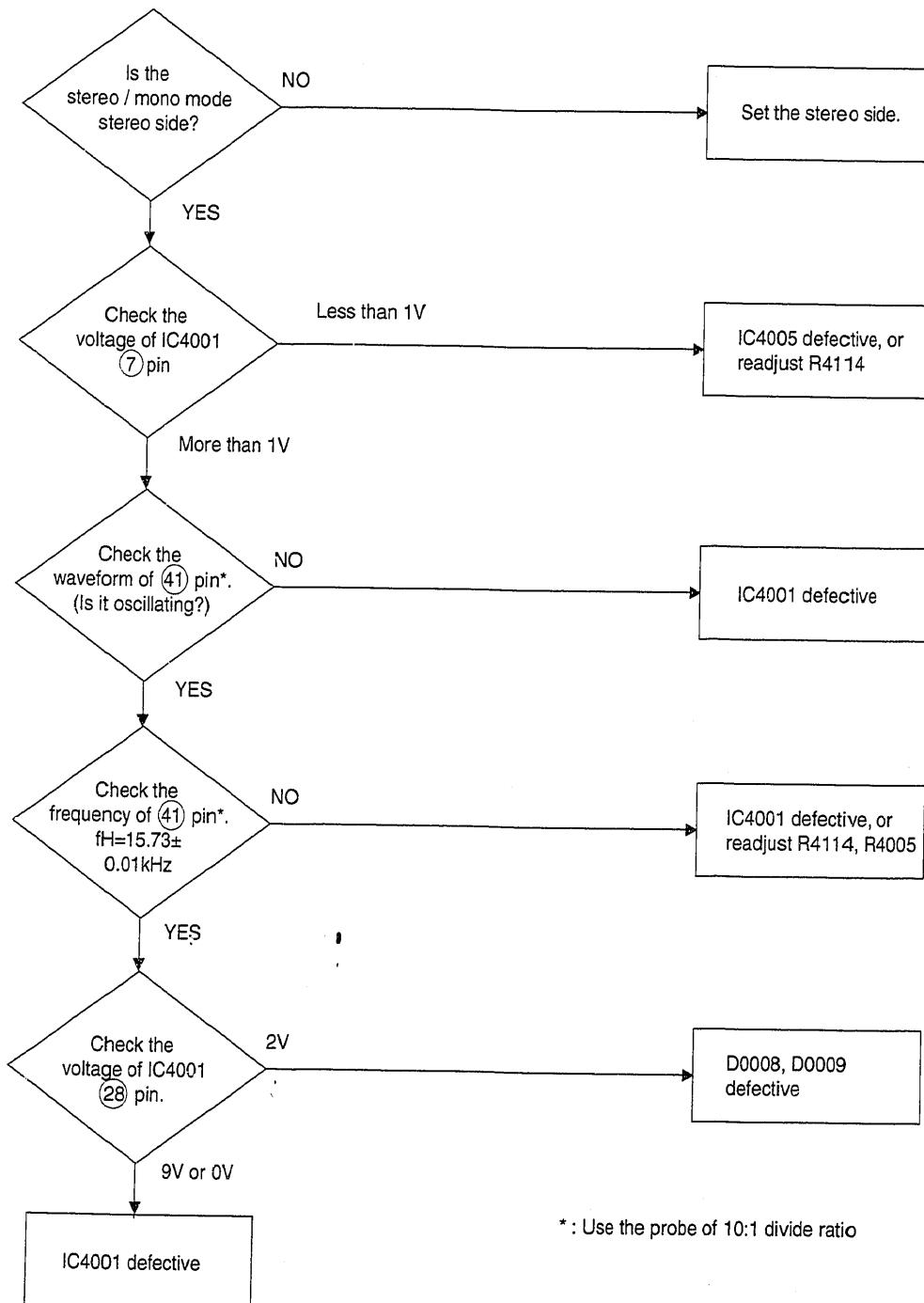
*: SA SELECT MODE is "MAIN" position

11. DOES NOT REPRODUCE SECOND AUDIO (When receiving SAP broadcast)

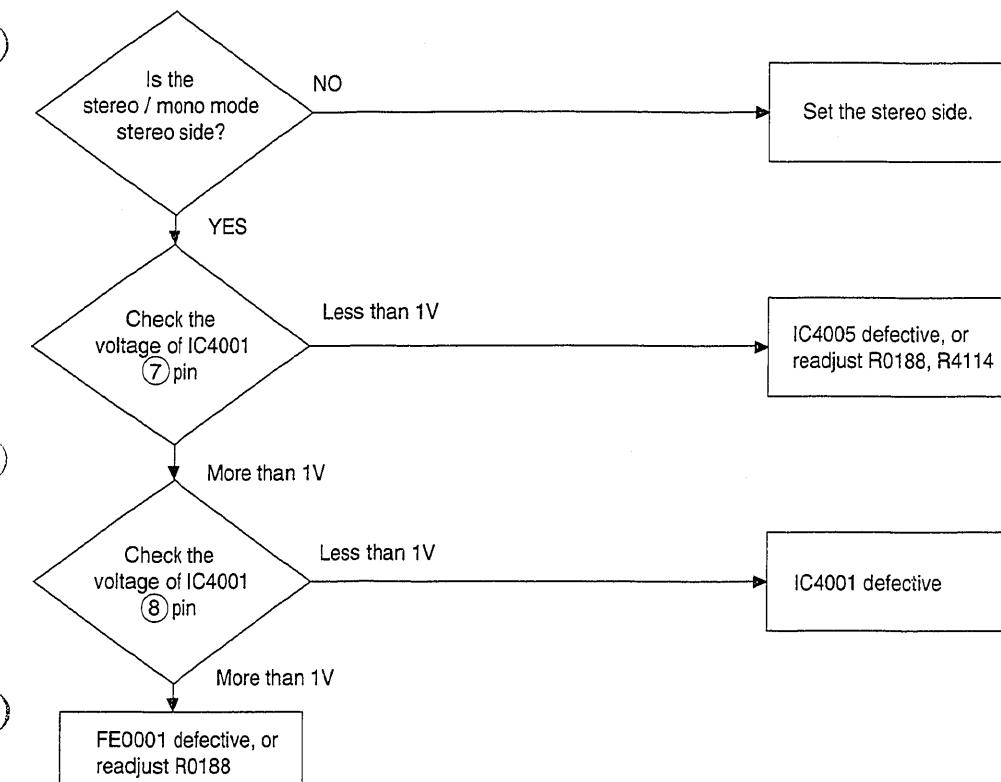


*1) : SA SELECT MODE is "SA" position

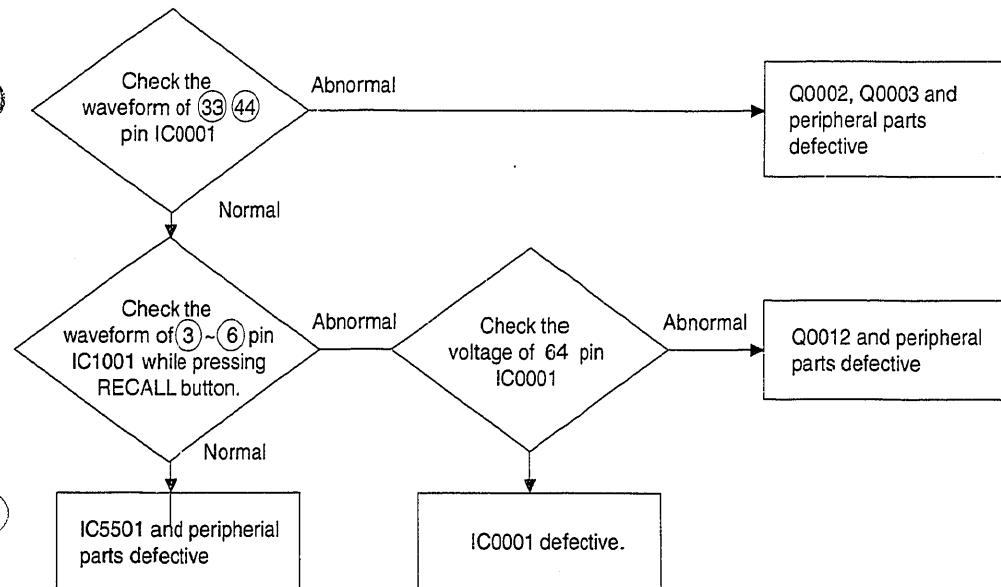
12. DOES NOT RECEIVE AND REPRODUCE A STEREO BROADCAST



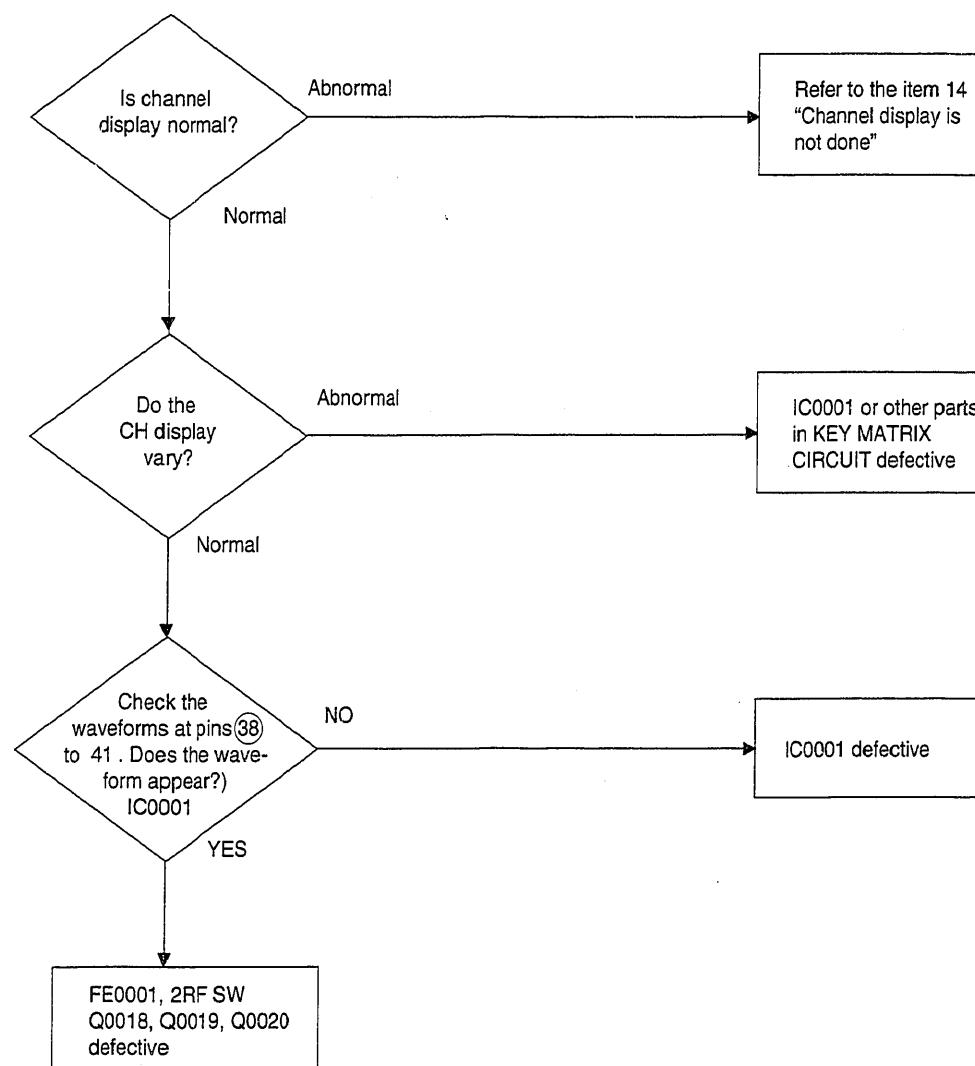
13. DOES NOT RECEIVE AND REPRODUCE SAP BROADCAST



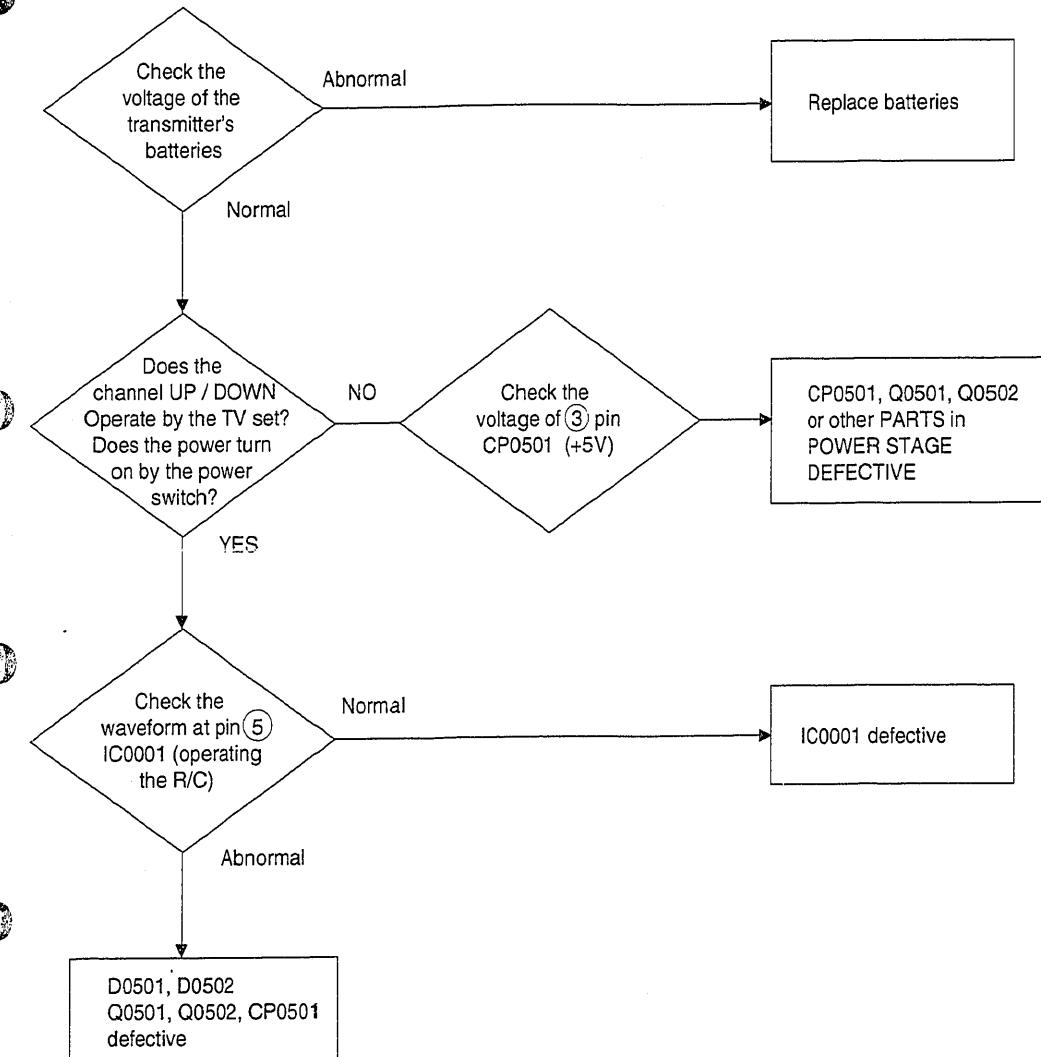
14. CHANNEL DISPLAY IS NOT DONE



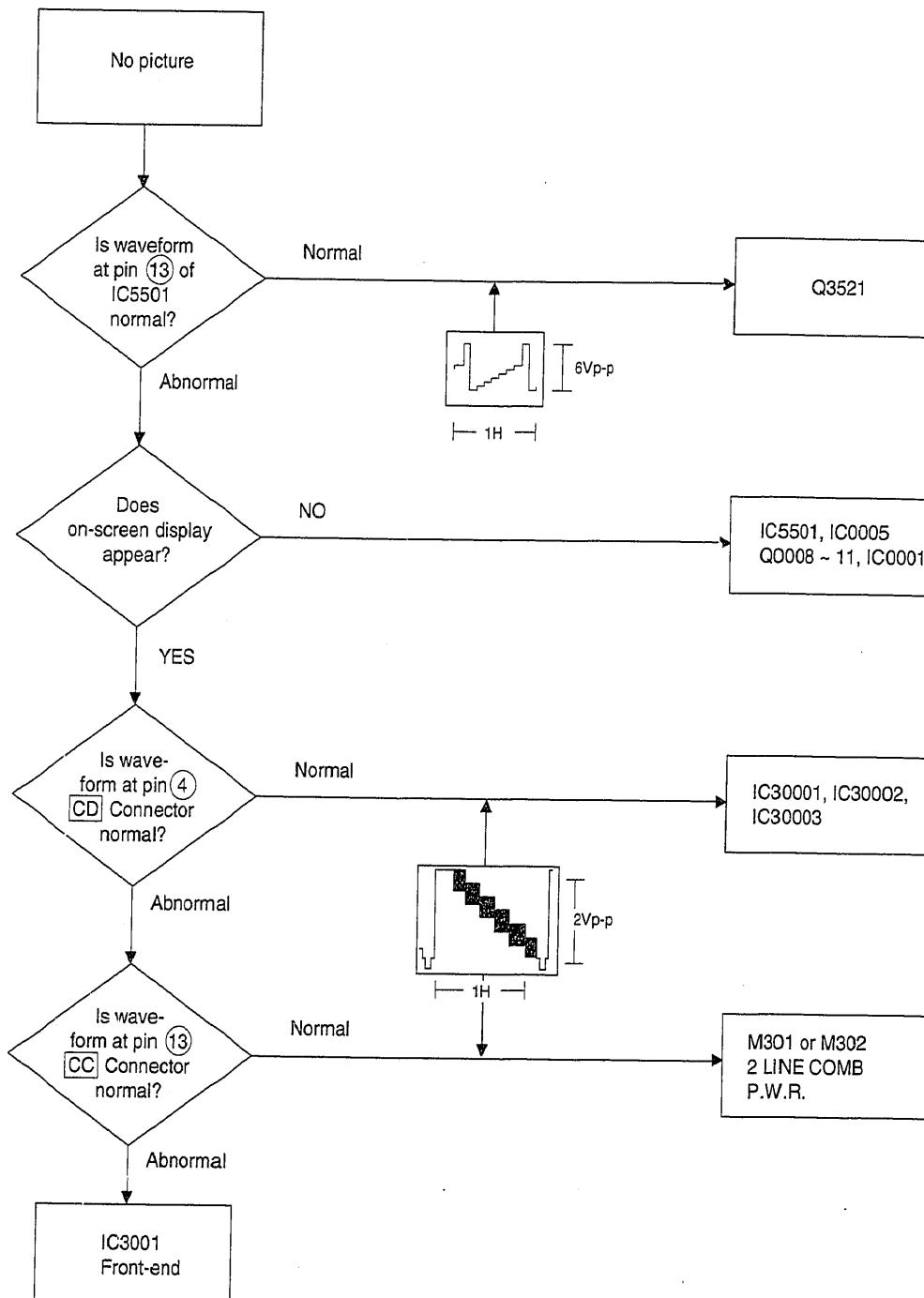
15. CHANNEL SELECTION IS NOT DONE



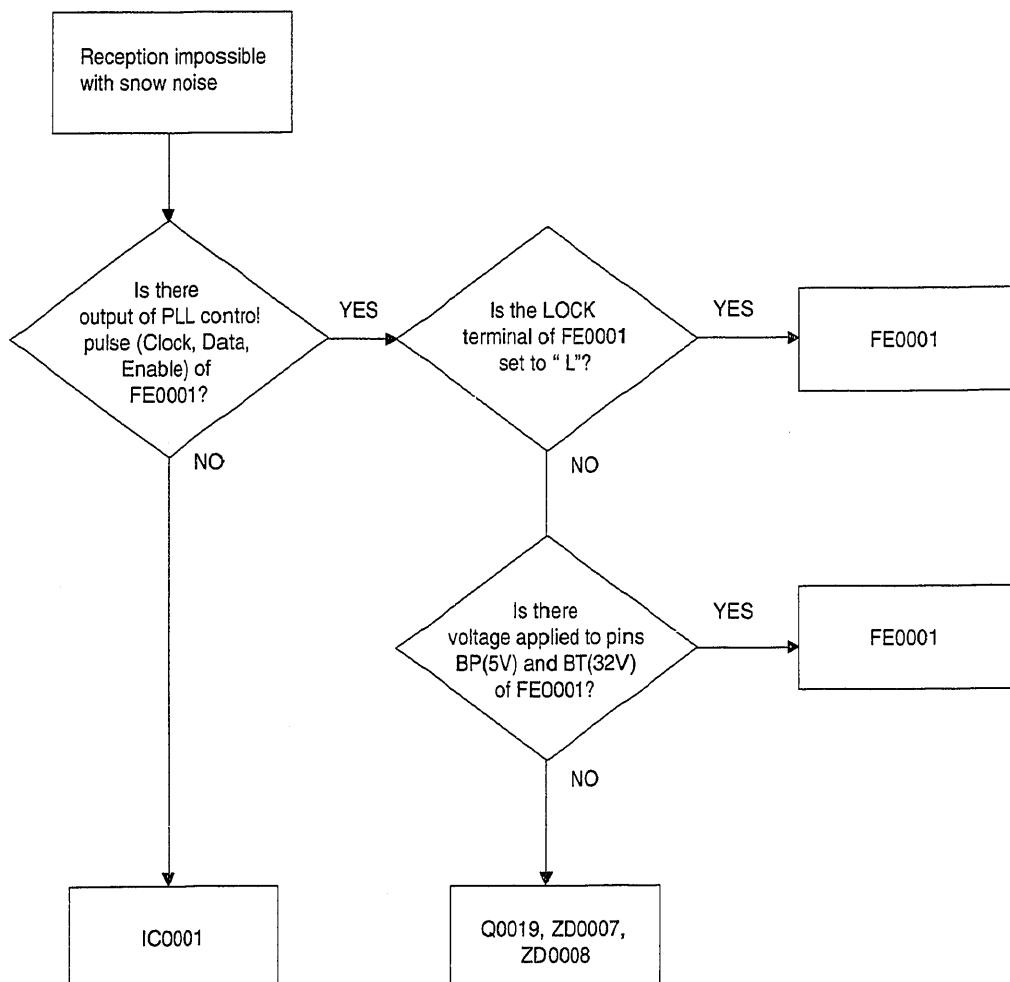
16. DOES NOT OPERATE BY REMOTE CONTROL



17. NO PICTURE

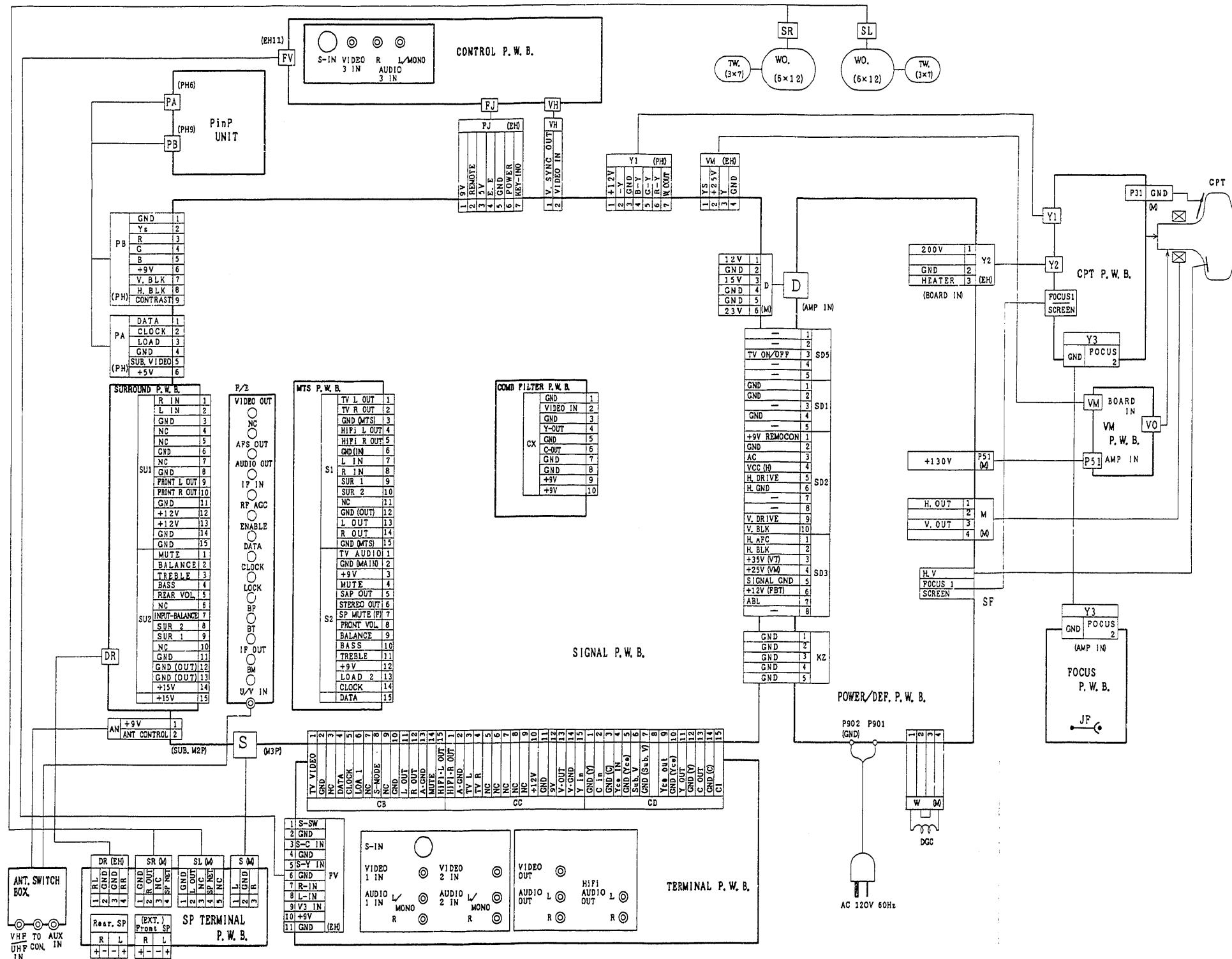


18. RECEPTION IMPOSSIBLE WITH SNOW NOISE

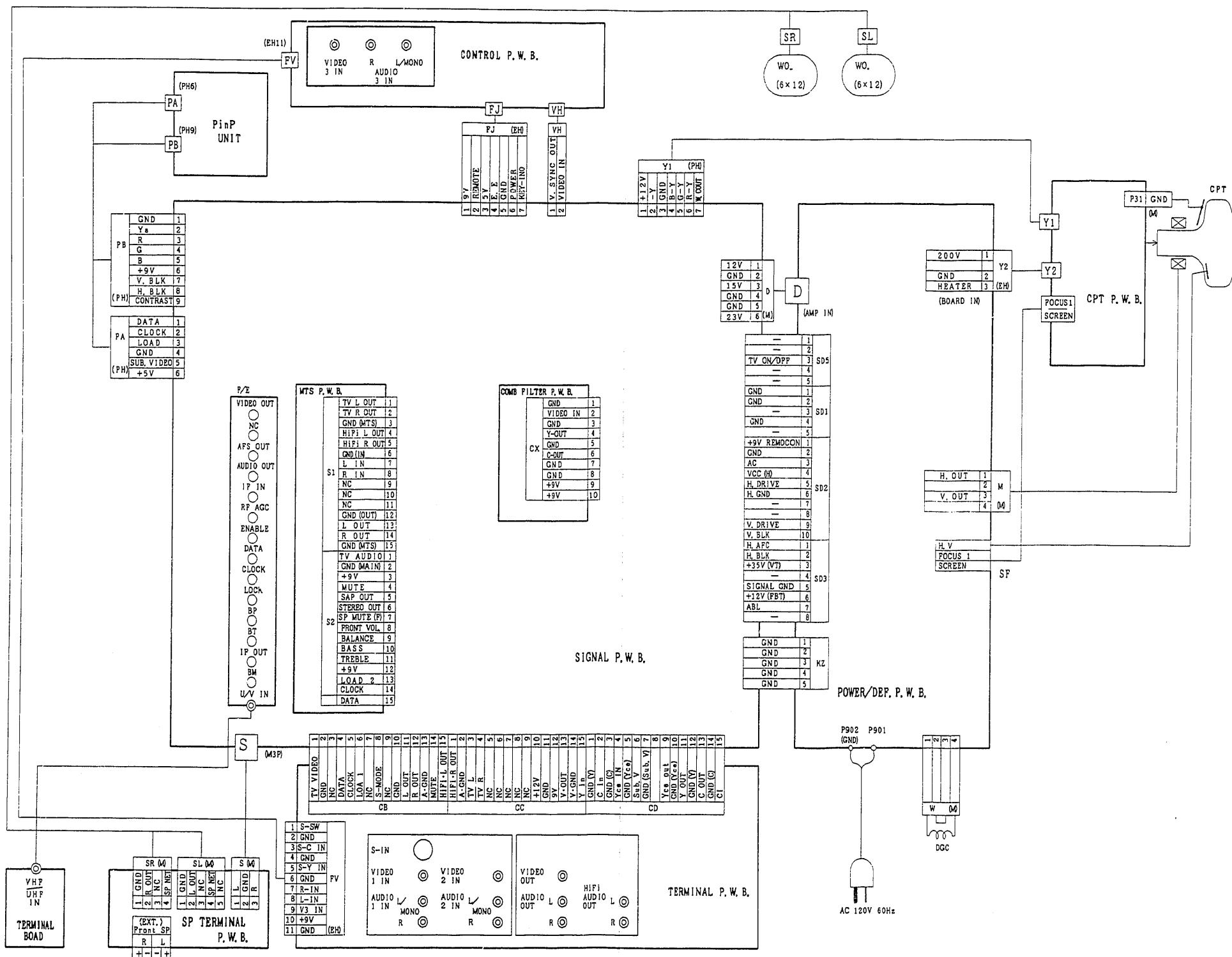


A2LXU

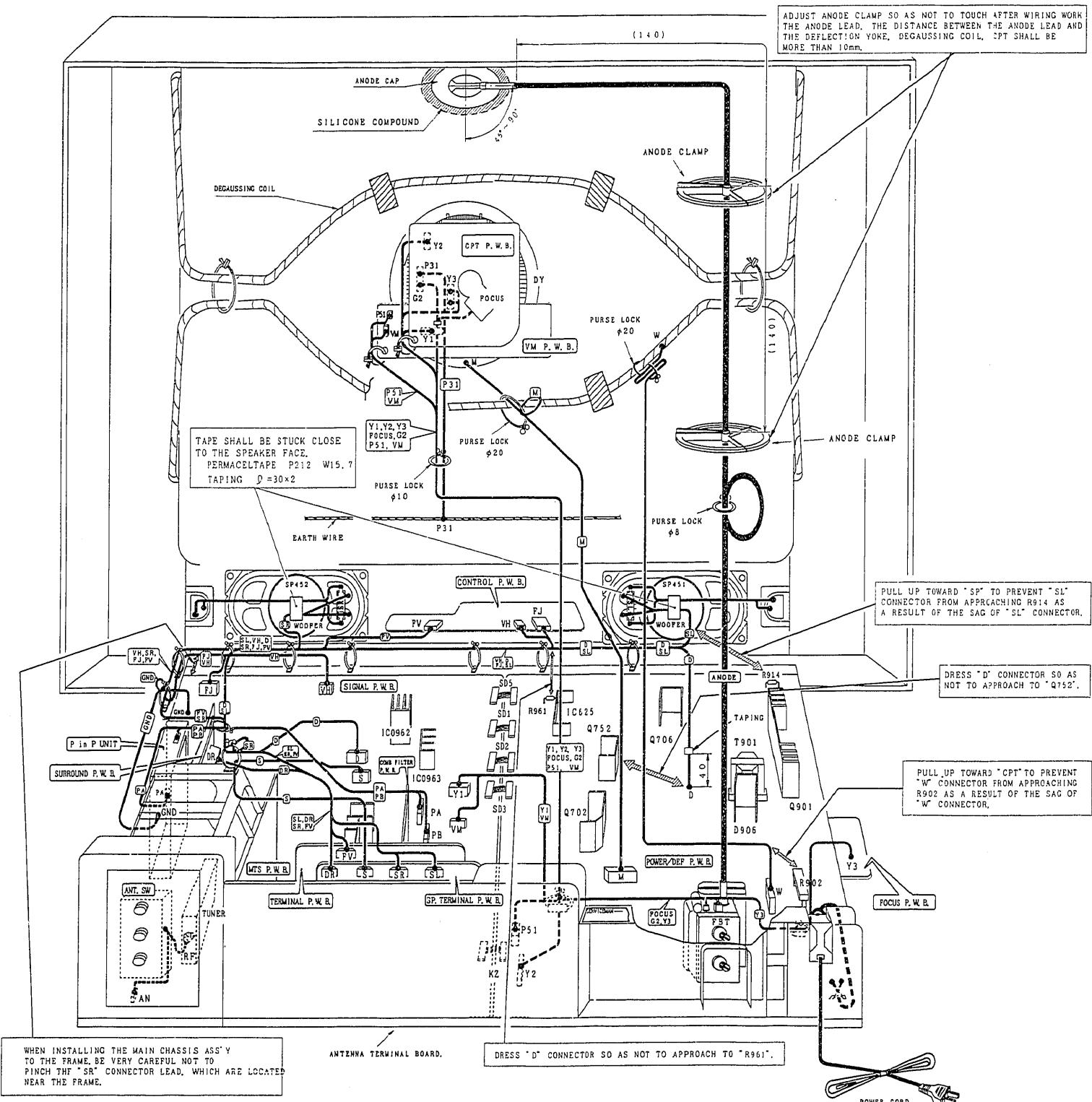
WIRING DIAGRAM OF 35UX60B/CZ46J



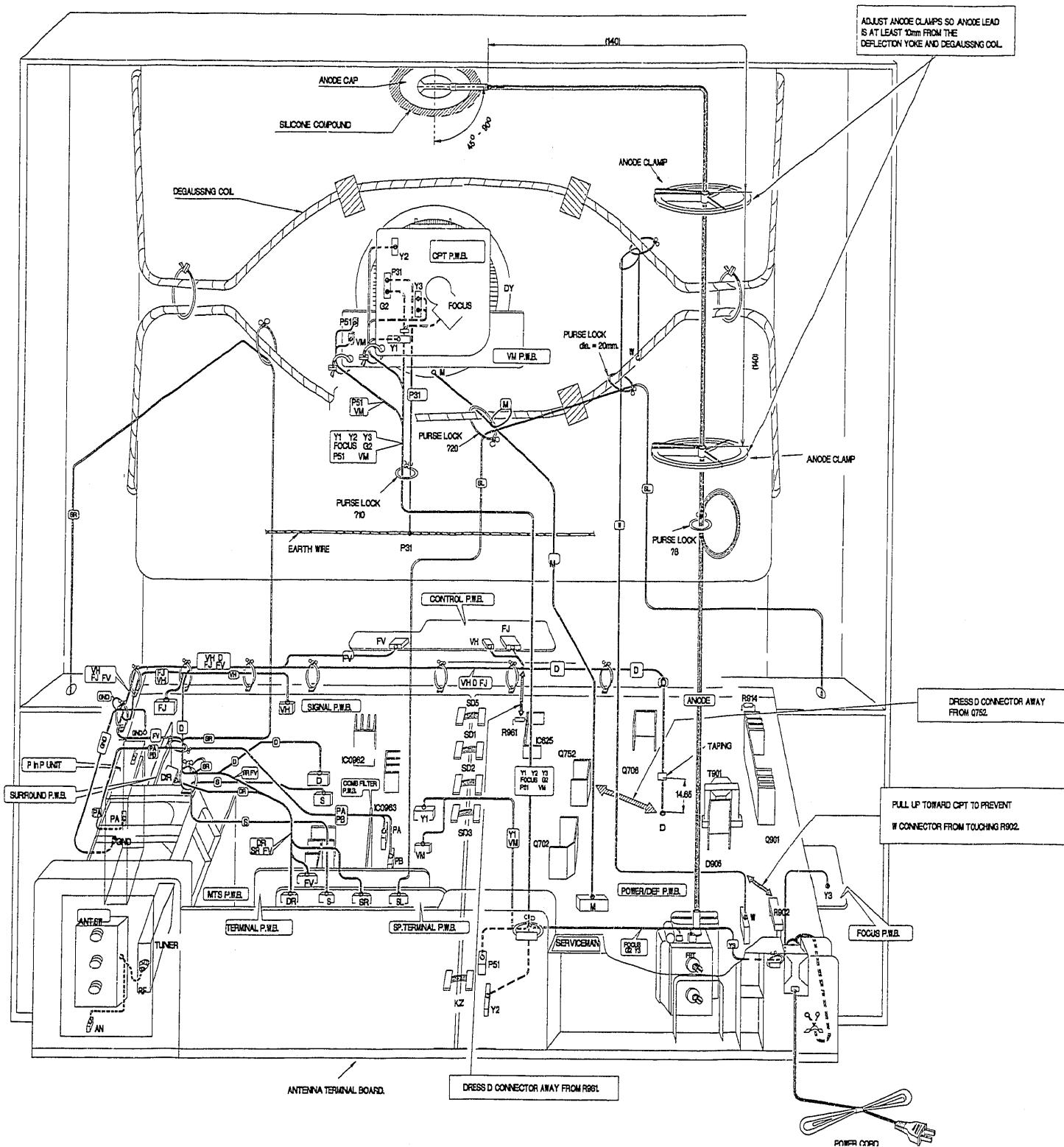
WIRING DIAGRAM OF 35TX69K/CZ33J FINAL ASSEMBLY



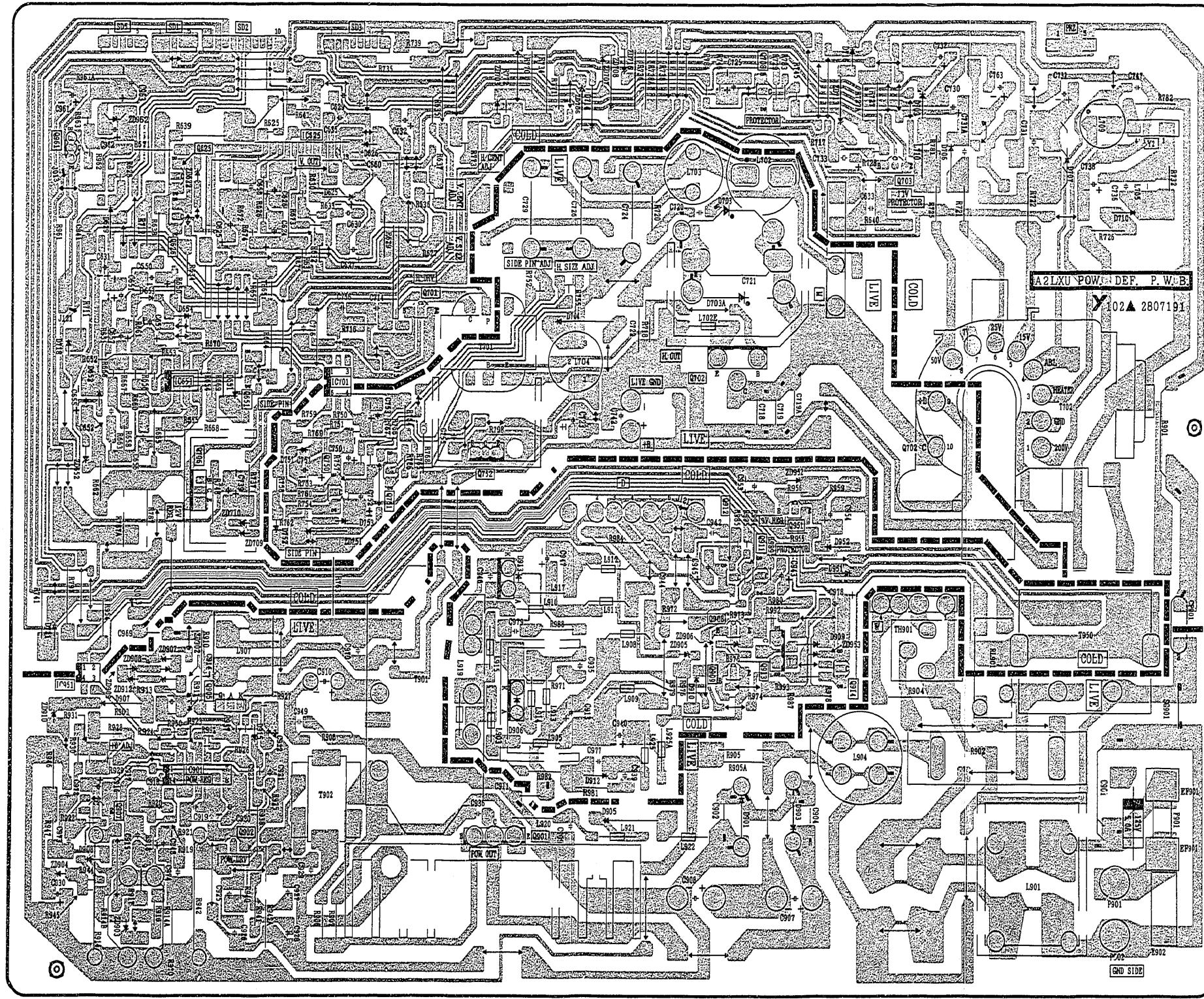
WIRING DIAGRAM OF 35UX60B/CZ46J FINAL ASSEMBLY



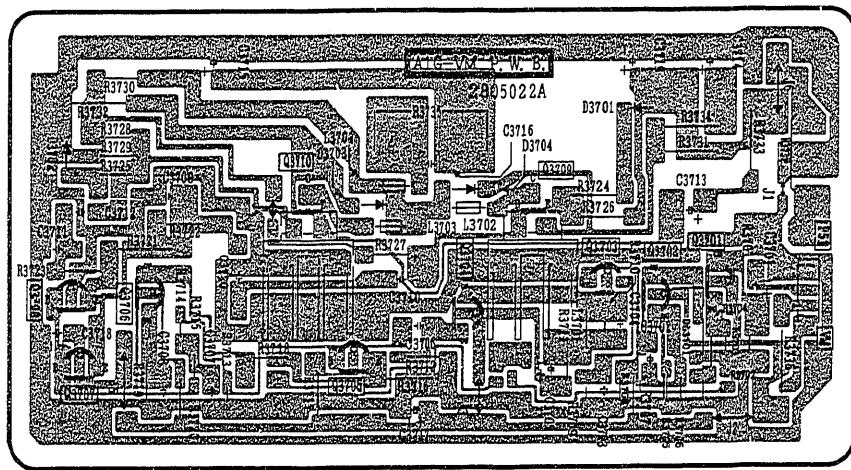
WIRING DIAGRAM OF 35TX69K/CZ33J



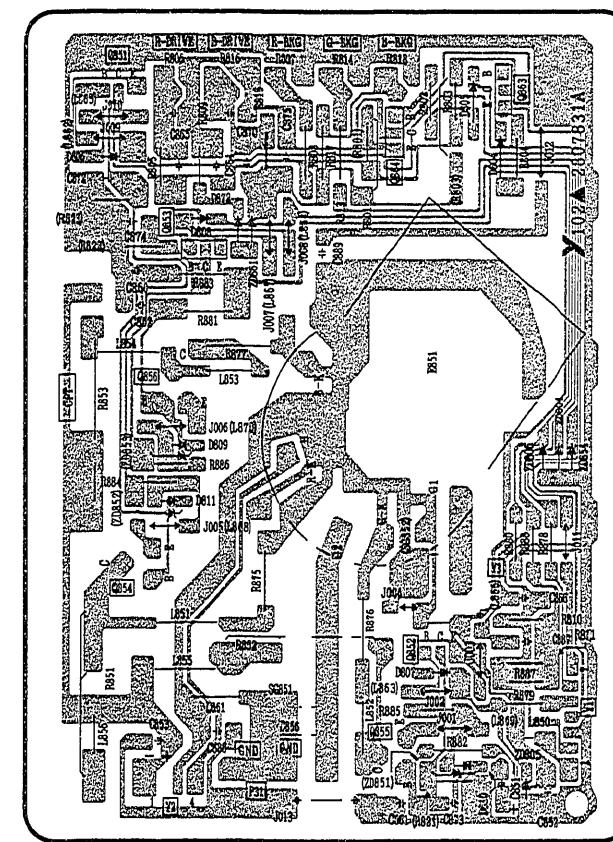
POWER/DEFLECTION P.W.B



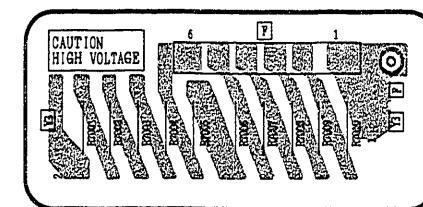
V.M. P.W.B.



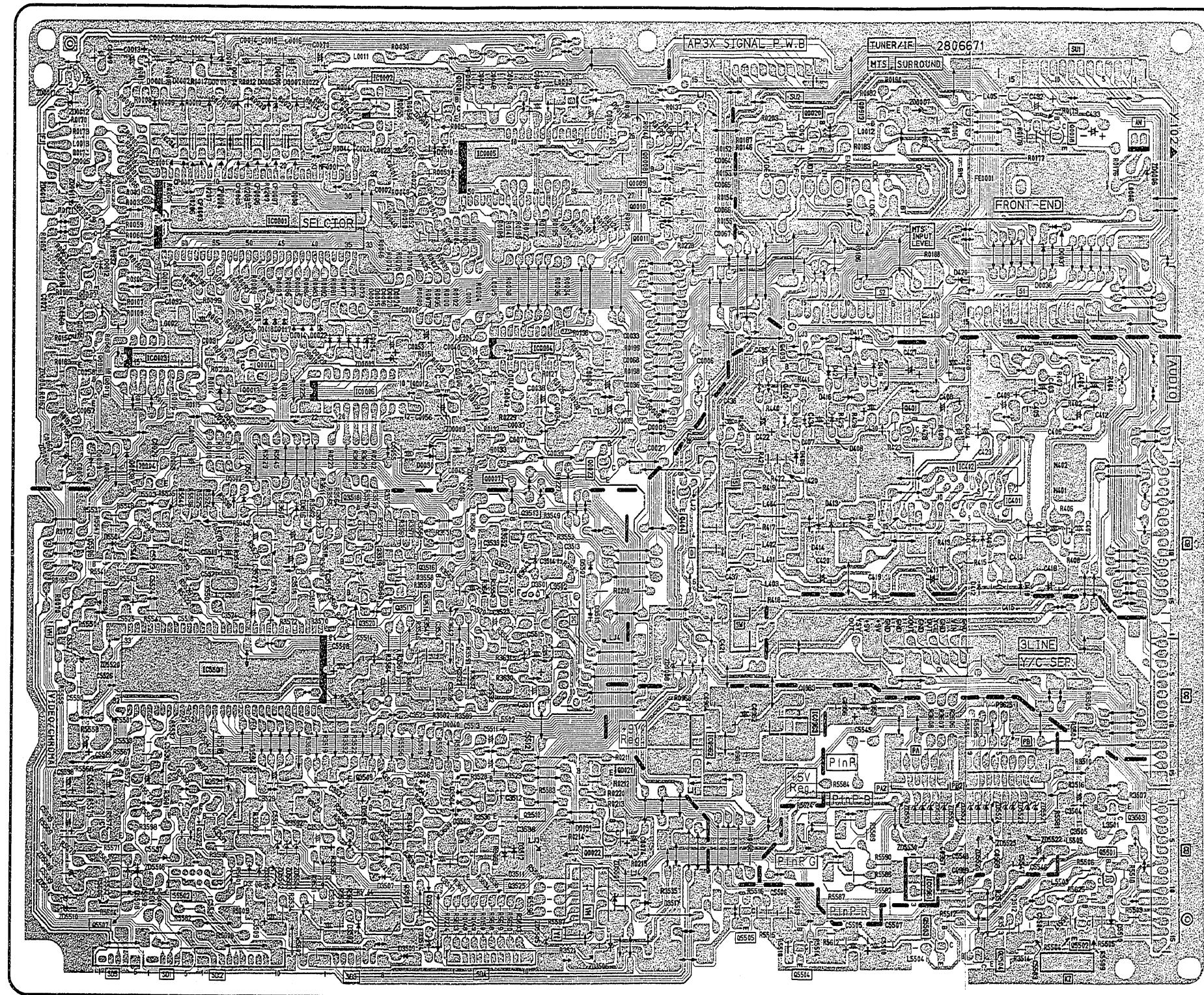
C.P.T. P.W.B.



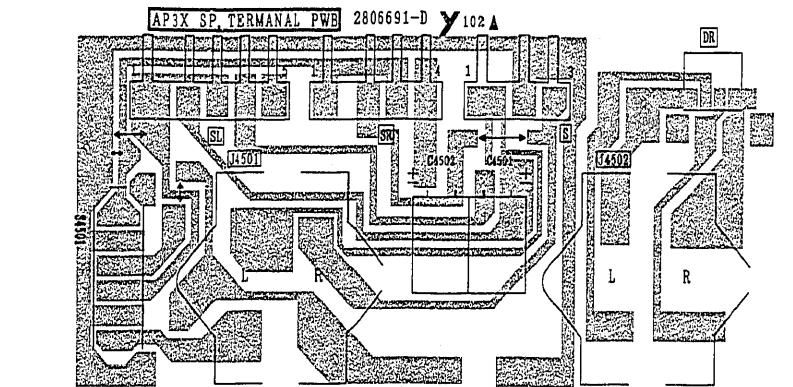
FOCUS P.W.B.



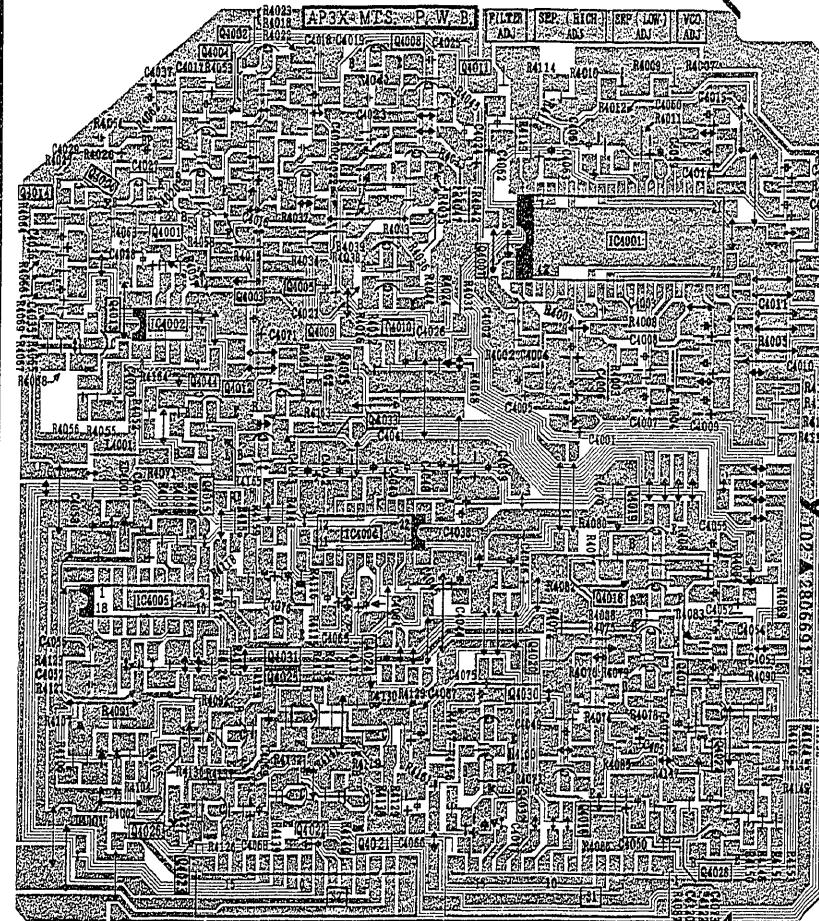
SIGNAL P.W.B.



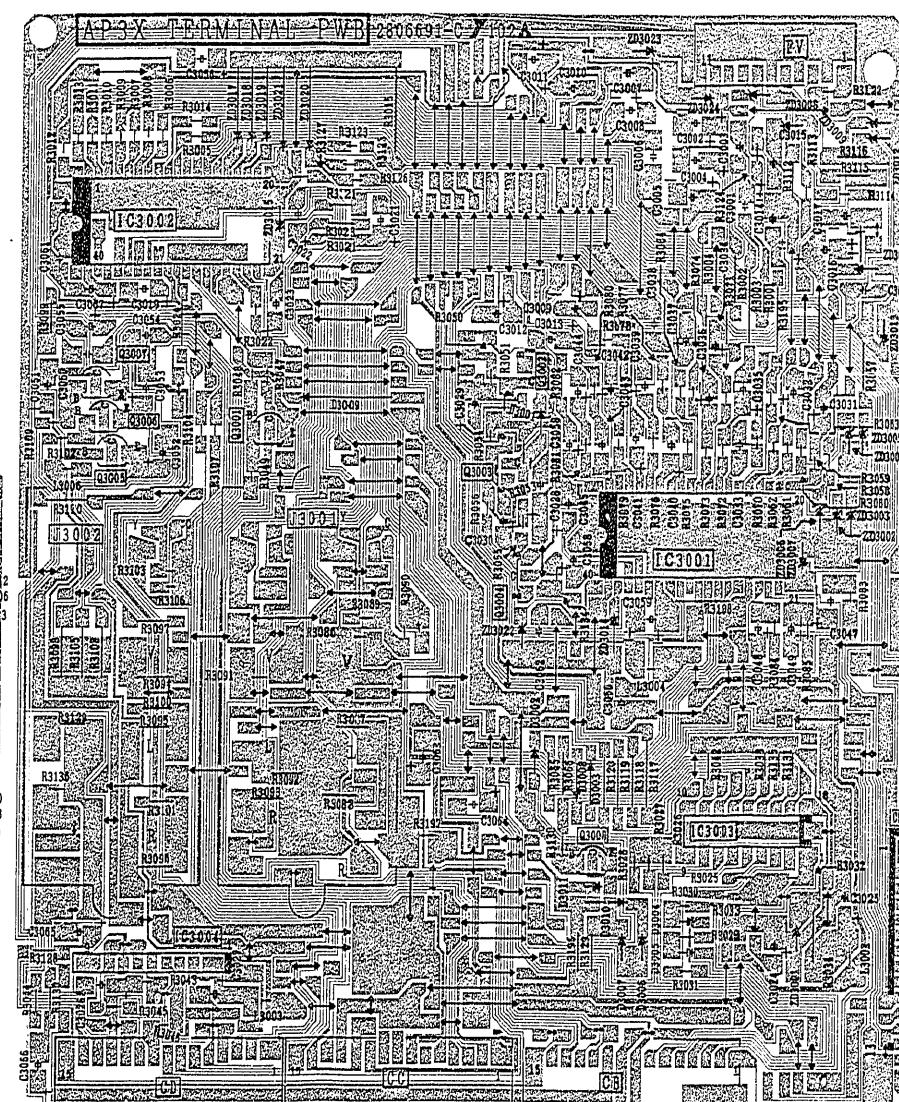
SP TERMINAL P.W.B.



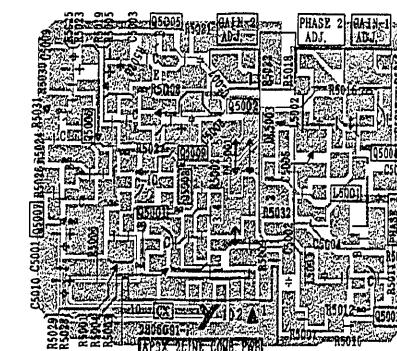
MTS P.W.B.

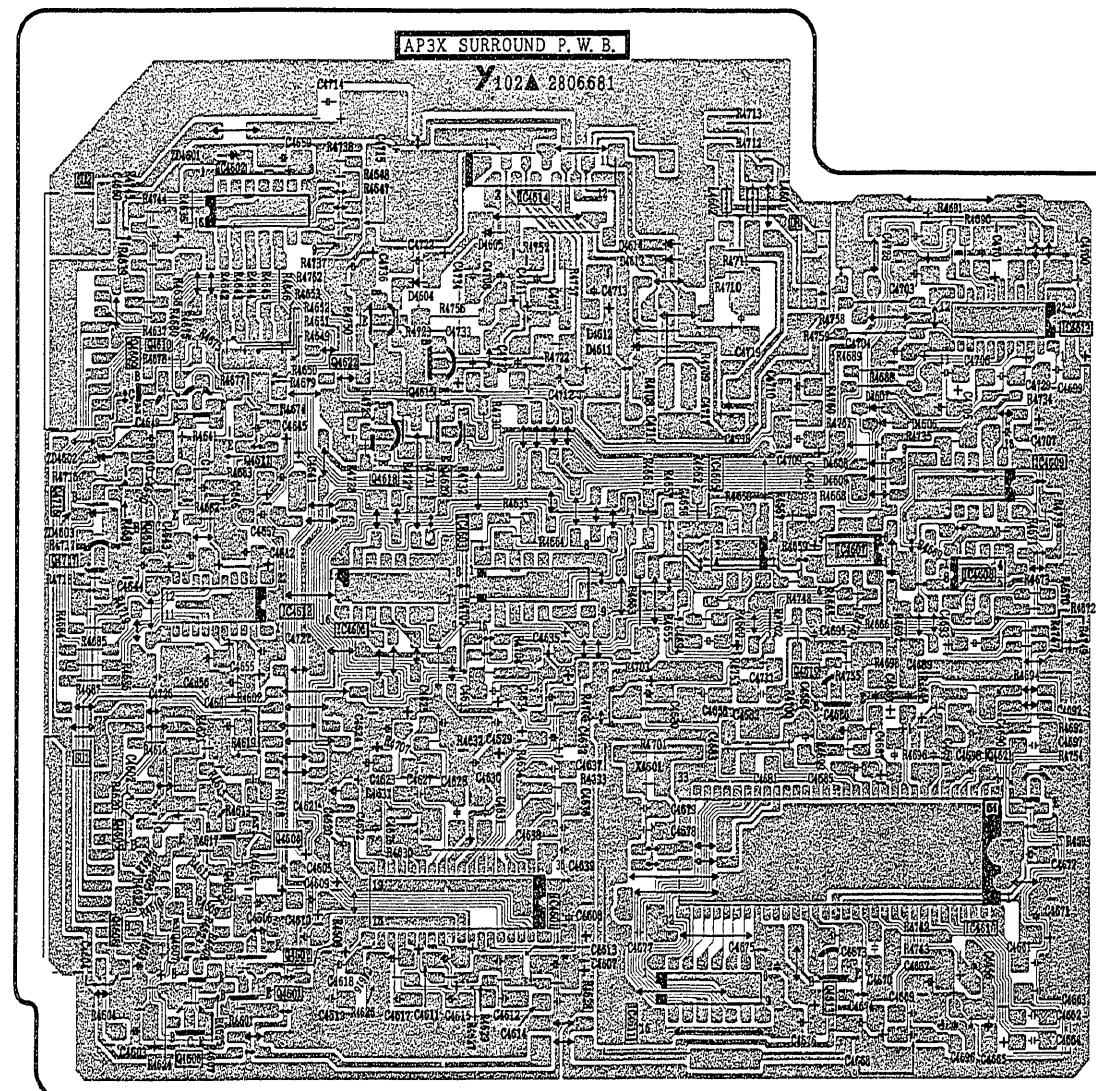


TERMINAL P.W.B.

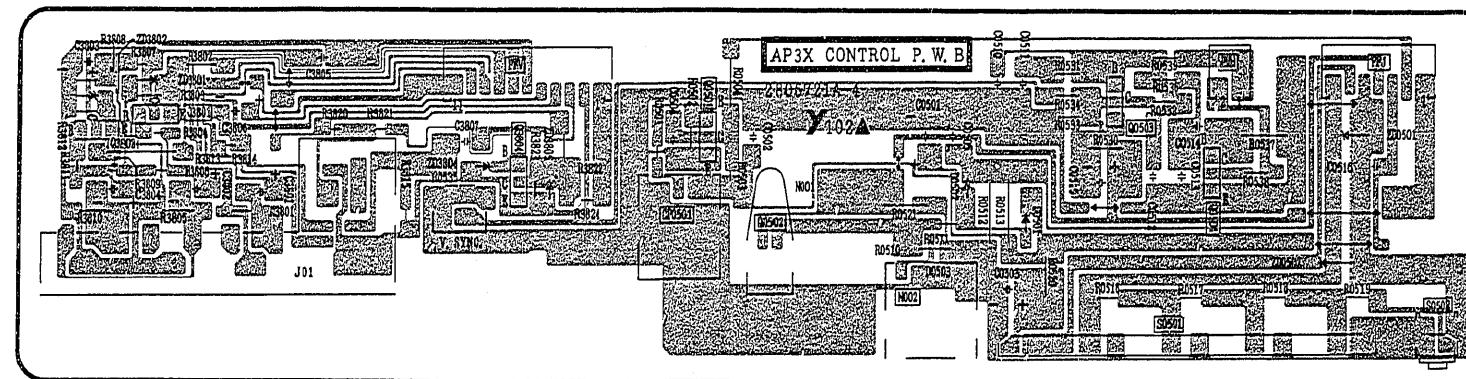


COMB FILTER P.W.B.





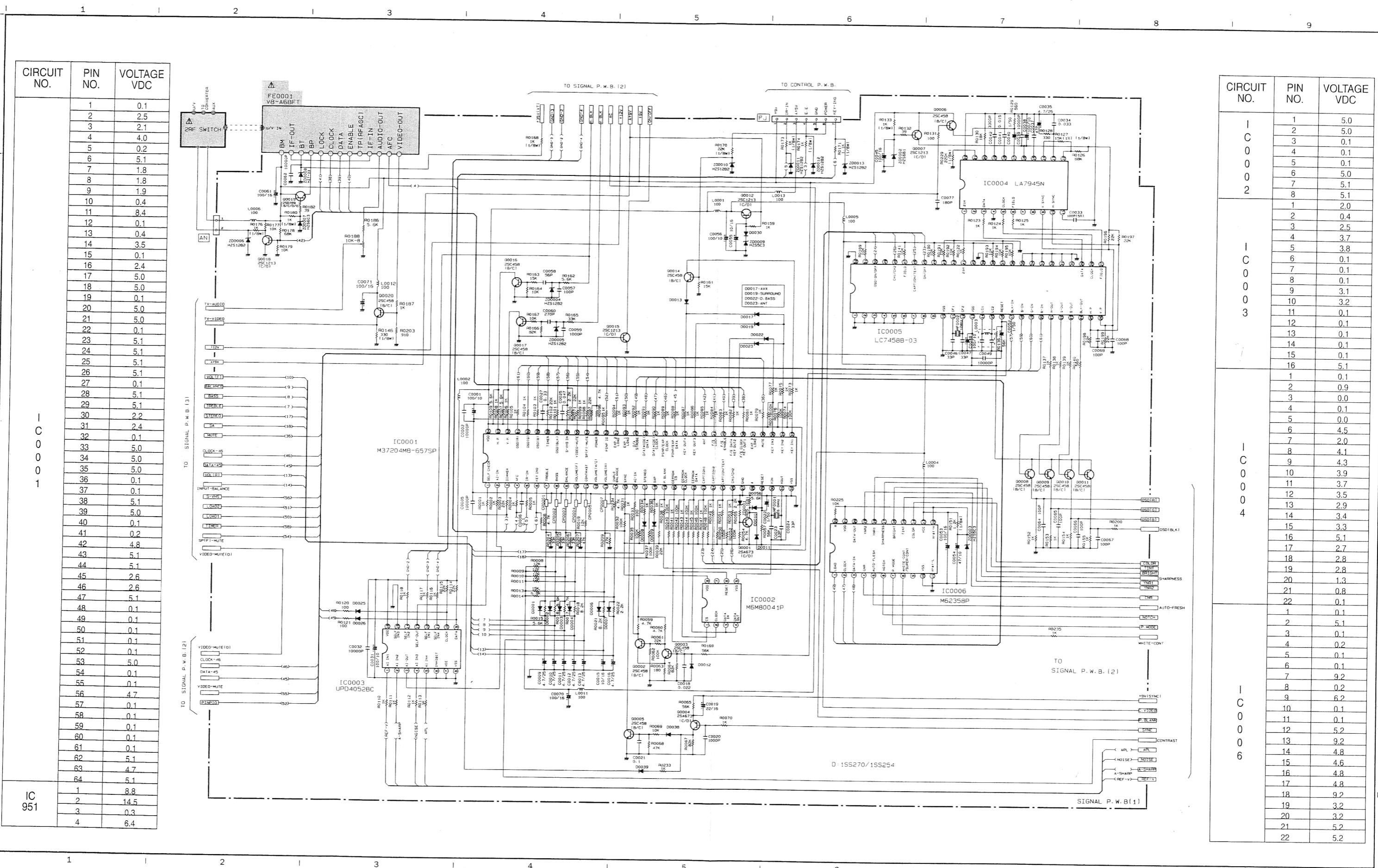
SURROUND P.W.B



CONTROL P.W.B

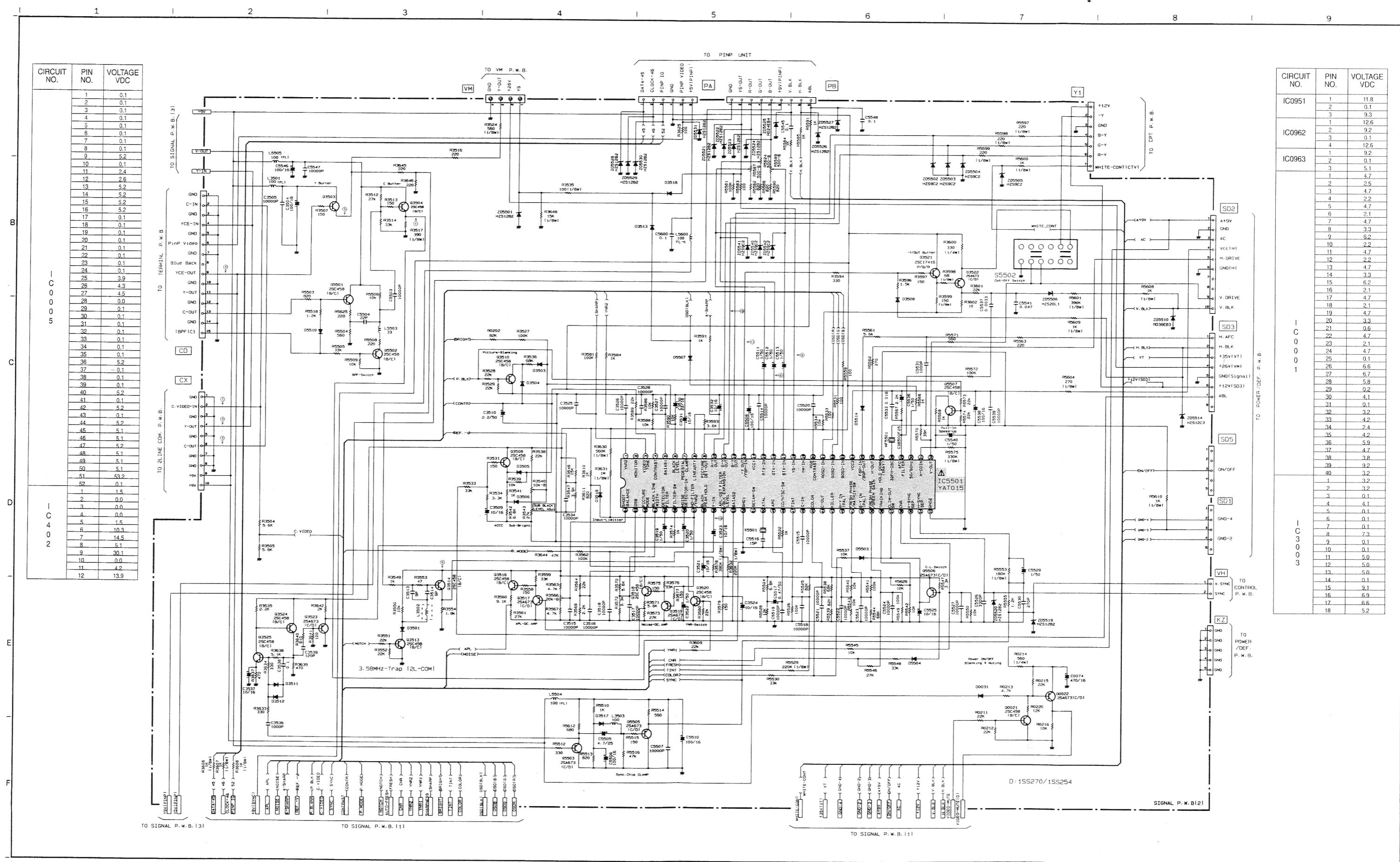
BASIC CIRCUIT DIAGRAM OF 35UX60B/CZ46J

PRODUCT SAFETY NOTE: Components marked with a and shaded have special characteristics important to safety. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE of this Service Manual. Don't degrade the safety of the receiver through improper servicing.



BASIC CIRCUIT DIAGRAM OF 35UX60B/CZ46J

PRODUCT SAFETY NOTE: Components marked with a and shaded have special characteristics important to safety. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE of this Service Manual. Don't degrade the safety of the receiver through improper servicing.

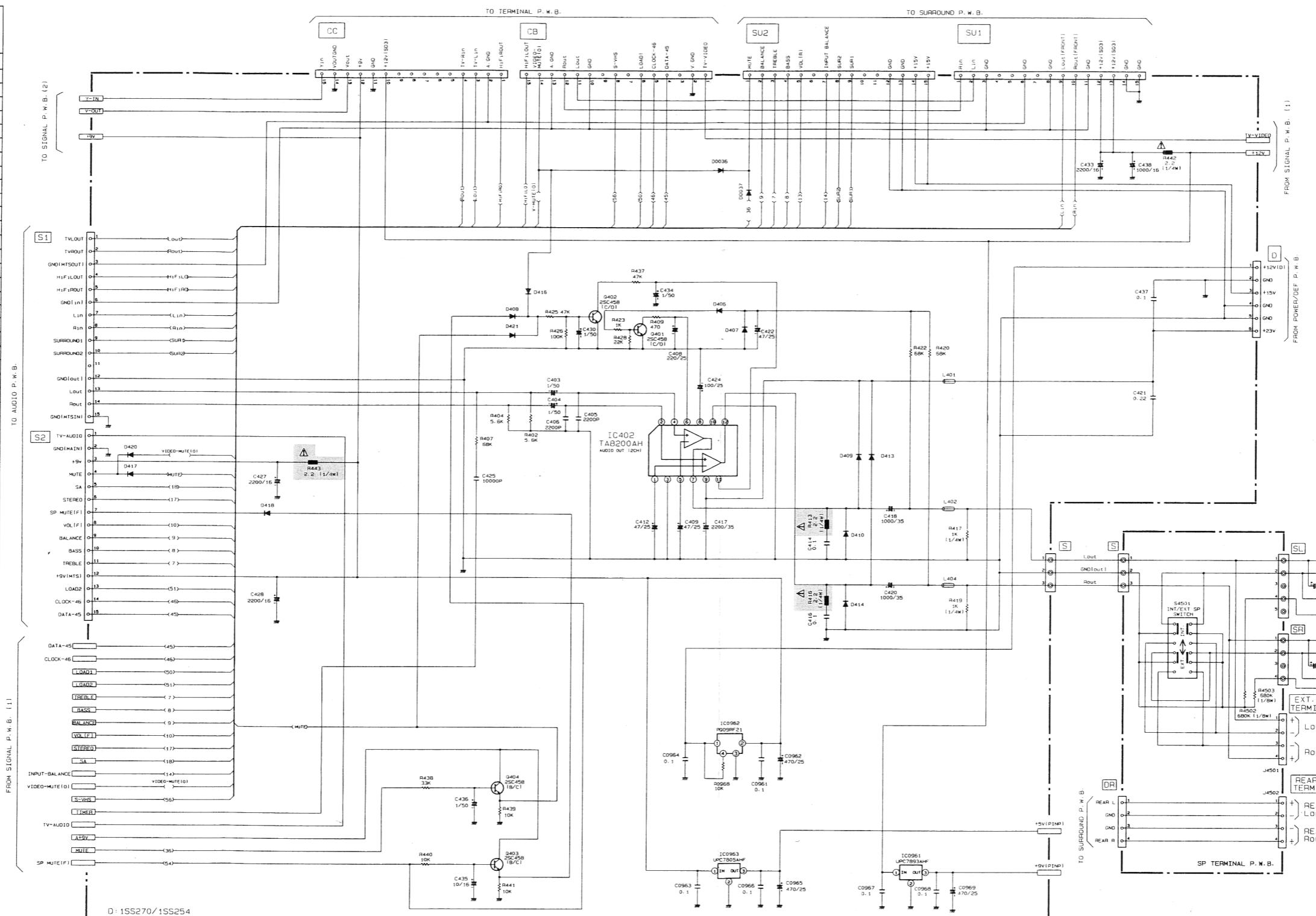


* Since this is a basic circuit diagram, the value of the parts is subject to be altered for improvement.
 * All DC voltage to be measured with a tester (100kΩ/N). Voltage taken on a complex color bar signal including a standard color bar signal.

BASIC CIRCUIT DIAGRAM OF 35UX60B/CZ46

PRODUCT SAFETY NOTE: Components marked with a  and shaded have special characteristics important to safety. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE of this Service Manual. Don't degrade the safety of the receiver through improper servicing.

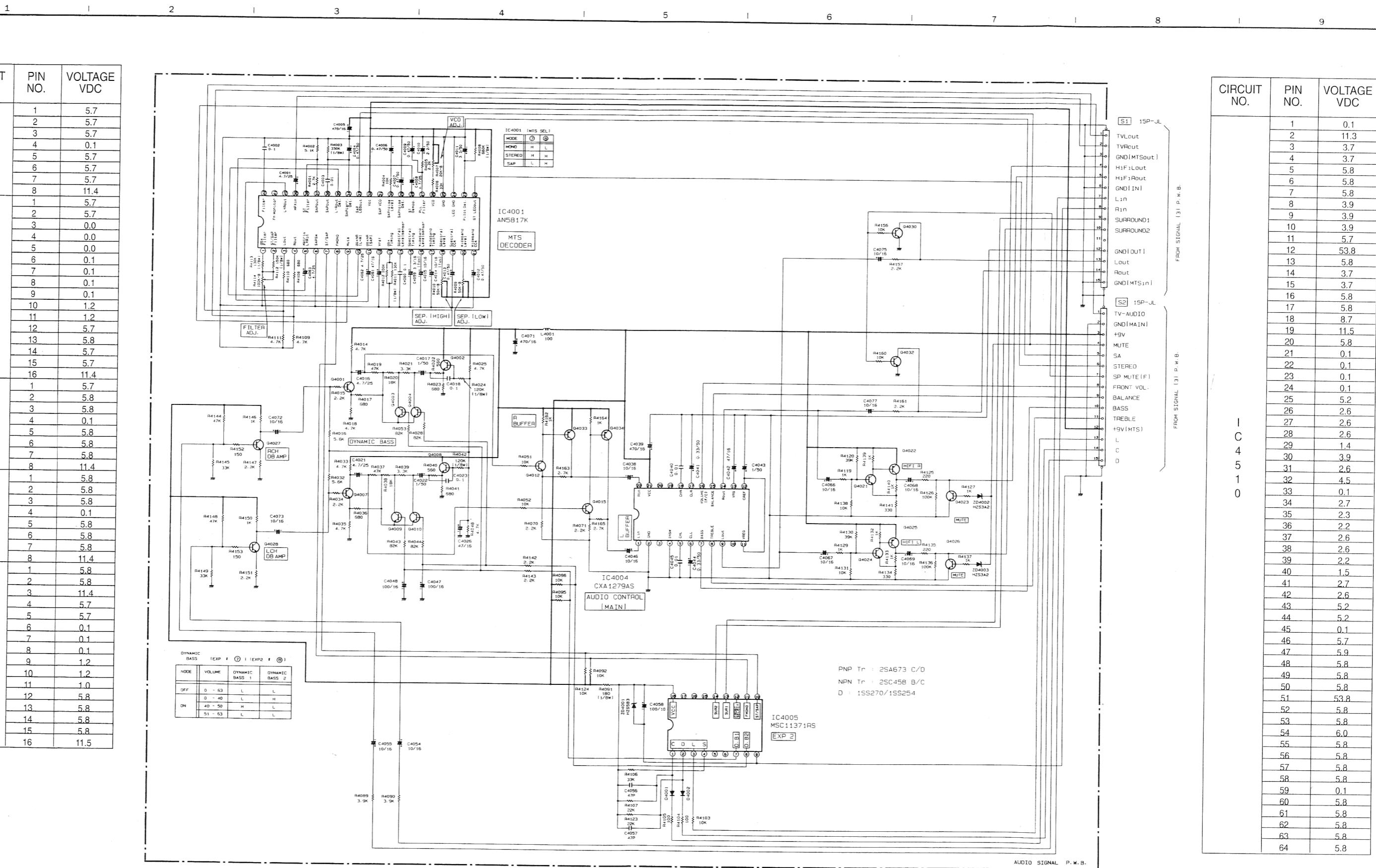
CIRCUIT NO.	PIN NO.	VOLTAGE VDC
I C 3 0 0 2	1	4.7
	2	2.5
	3	4.7
	4	2.1
	5	4.7
	6	2.1
	7	4.7
	8	3.3
	9	0.2
	10	2.3
	11	4.7
	12	2.2
	13	4.7
	14	3.3
	15	5.0
	16	2.1
	17	4.7
	18	2.1
	19	4.7
	20	3.3
	21	0.5
	22	4.7
	23	2.1
	24	4.7
	25	0.1
	26	5.0
	27	5.0
	28	530
	29	0.2
	30	4.1
	31	0.1
	32	3.2
	33	4.2
	34	2.0
	35	4.2
	36	6.0
	37	4.7
	38	3.0
	39	9.2
	40	3.2
I C 4 0 0 4	1	4.5
	2	0.1
	3	4.5
	4	0.1
	5	4.6
	6	4.7
	7	2.6
	8	4.6
	9	0.0
	10	2.6
	11	2.6
	12	0.0
	13	4.6
	14	2.6
I C 7 0 1	15	1.5
	16	4.7
	17	4.7
	18	0.0
	19	4.5
	20	9.0
	21	4.5
	22	10.8
I C 7 0 1	1	9.6
	2	0.0
	3	4.9
	4	36.4
	5	5.3
	6	



CIRCUIT NO.	PIN NO.	VOLTAGE VDC
IC4001	1	1.3
	2	1.3
	3	4.8
	4	4.08
	5	4.8
	6	0.1
	7	8.0
	8	6.3
	9	0.1
	10	48
	11	4.8
	12	4.8
	13	1.3
	14	5.0
	15	0.5
	16	2.9
	17	2.6
	18	5.3
	19	5.7
	20	5.0
	21	4.7
	22	0.1
	23	5.3
	24	0.1
	25	0.1
	26	5.5
	27	4.7
	28	5.3
	29	7.3
	30	4.9
	31	0.3
	32	9.0
	33	0.2
	34	1.9
	35	27
	36	0.8
	37	7.2
	38	7.4
	39	7.3
	40	7.7
	41	6.5
	42	7.8
IC4005	1	3.2
	2	3.2
	3	0.1
	4	4.0
	5	0.1
	6	0.1
	7	0.1
	8	0.1
	9	0.1
	10	8.8
	11	8.3
	12	0.1
	13	0.1
	14	0.1
	15	0.1
	16	0.1
	17	0.1
	18	5.1
IC551	1	5.2
	2	5.2
	3	5.1
	4	0.0
	5	5.9
	6	5.9
	7	6.6
	8	10.8

BASIC CIRCUIT DIAGRAM OF 35UX60B/CZ46J

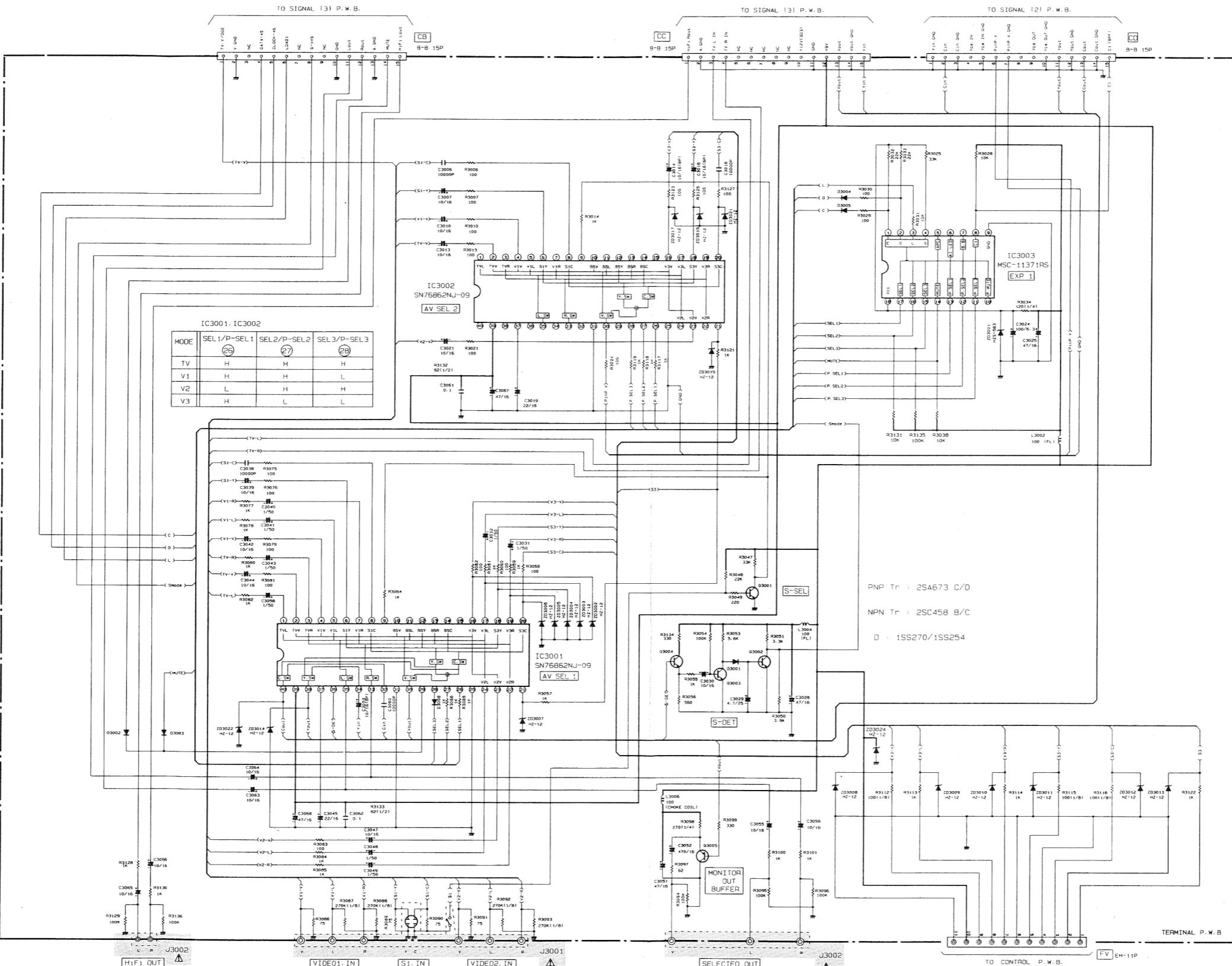
PRODUCT SAFETY NOTE: Components marked with a and shaded have special characteristics important to safety. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE of this Service Manual. Don't degrade the safety of the receiver through improper servicing.



BASIC CIRCUIT DIAGRAM OF 35UX60B/CZ46J

PRODUCT SAFETY NOTE: Components marked with a and shaded have special characteristics important to safety. Before replacing any of these components, read carefully the **PRODUCT SAFETY NOTICE** of this Service Manual. Don't degrade the safety of the receiver through improper servicing.

CIRCUIT NO.	PIN NO.	VOLTAGE VDC
I C 4 5 1 1	1	4.5
	2	2.6
	3	3.9
	4	1.4
	5	2.6
	6	2.6
	7	2.6
	8	5.2
	9	1.5
	10	2.2
	11	2.6
	12	2.6
	13	2.2
	14	2.3
	15	2.7
	16	0.1
I C 4 5 1 3	1	5.8
	2	0.1
	3	5.8
	4	6.6
	5	6.0
	6	6.0
	7	2.7
	8	2.7
	9	5.9
	10	0.0
	11	2.7
	12	2.7
	13	5.8
	14	5.8
	15	2.7
	16	2.5
I C 4 5 1 4	17	6.0
	18	6.0
	19	0.0
	20	5.8
	21	11.5
	22	5.8
	1	1.8
	2	0.1
	3	0.1
	4	0.1
	5	1.8
	6	5.5
	7	7.6
I C 5 1 4	8	5.1
	9	16.1
	10	0.1
	11	4.2
	12	7.4
	1	8.3
	2	4.6
	3	4.2
	4	4.2
	5	0.0
	6	4.2
	7	3.9
	8	26.0
I C 5 2 5	9	2.7
	10	1.4
	11	0.0
	12	14.3
	13	26.8



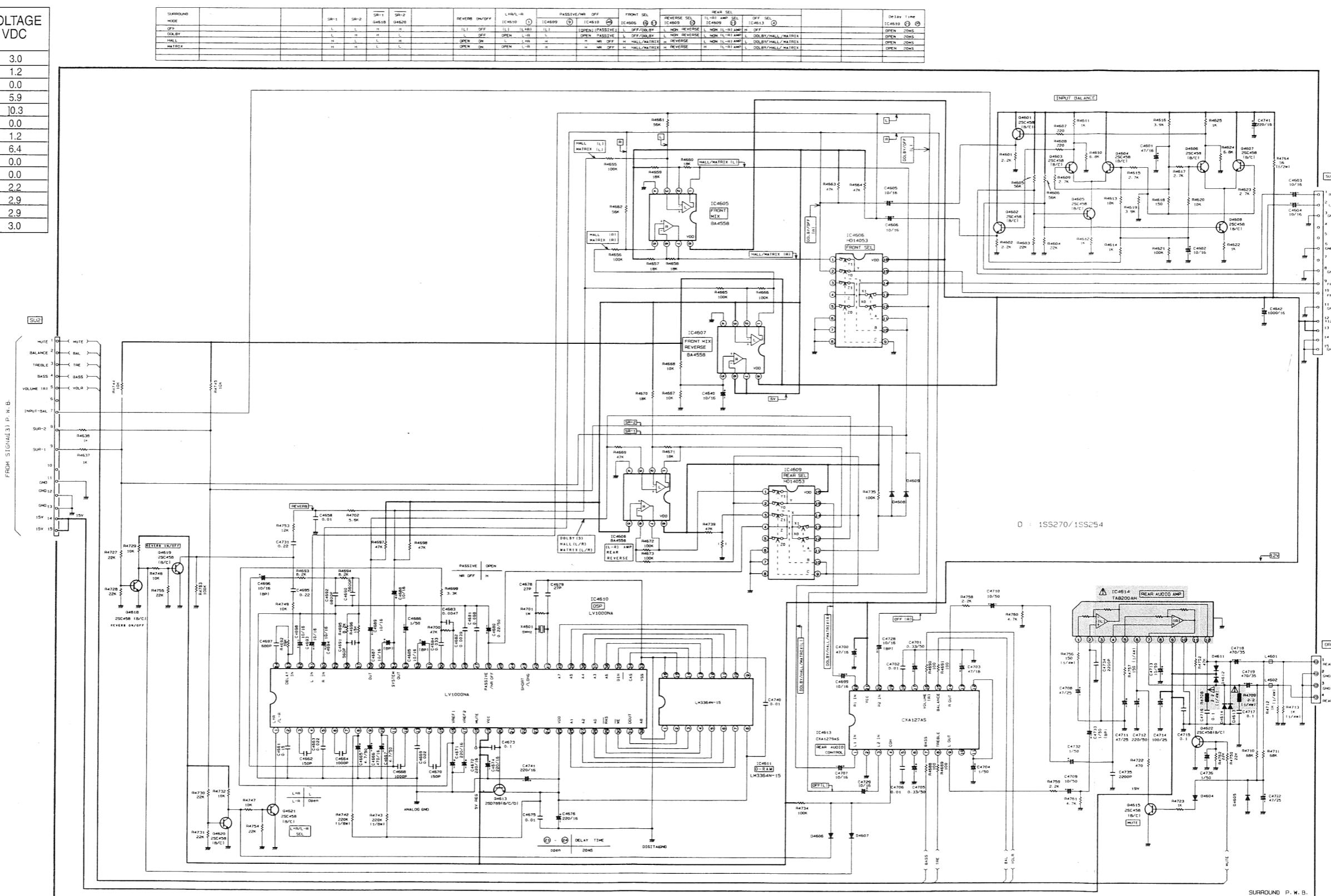
CIRCUIT NO.	PIN NO.	VOLTAGE VDC
IC0951	1	3.3
	2	0.3
	3	4.7
	4	8.0
IC0962	5	4.7
	6	5.1
	7	7.1
	8	9.1
	9	0.4
	10	5.3
	11	5.4
	12	5.4
	13	4.0
	14	9.2
	15	3.3
	16	3.3
	17	3.3
	18	0.1
	19	0.2
	20	8.5
	21	0.1
	22	0.1
	23	0.1
	24	7.9
	25	0.8
	26	0.6
	27	0.1
	28	5.1
I C 5 5 0 1	29	5.7
	30	8.9
	31	7.6
	32	4.6
	33	0.1
	34	7.0
	35	6.5
	36	0.4
	37	9.2
	38	4.2
	39	1.8
	40	1.4
	41	3.7
	42	1.4
	43	4.3
	44	6.8
	45	4.9
	46	3.3
	47	4.9
	48	0.8
	49	6.0
	50	5.6
	51	2.1
	52	0.1
	53	0.1
	54	5.2
	55	4.3
	56	6.9
	57	4.5
	58	4.0
	59	0.1
	60	4.4
	61	3.5
	62	5.9
	63	1.0
	64	5.1

BASIC CIRCUIT DIAGRAM OF 35UX60B/CZ46J

PRODUCT SAFETY NOTE: Components marked with a and shaded have special characteristics important to safety. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE of this Service Manual. Don't degrade the safety of the receiver through improper servicing.

1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9

CIRCUIT NO.	PIN NO.	VOLTAGE VDC
I C 9 0 1	1	3.0
	2	1.2
	3	0.0
	4	5.9
	5	10.3
	6	0.0
	7	1.2
	8	6.4
	9	0.0
	10	0.0
	11	2.2
	12	2.9
	13	2.9
	14	3.0



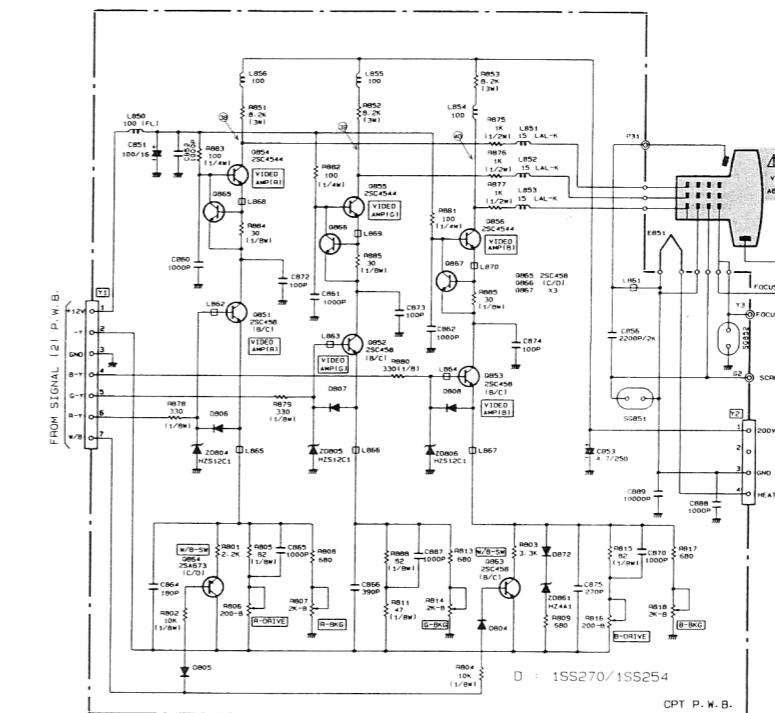
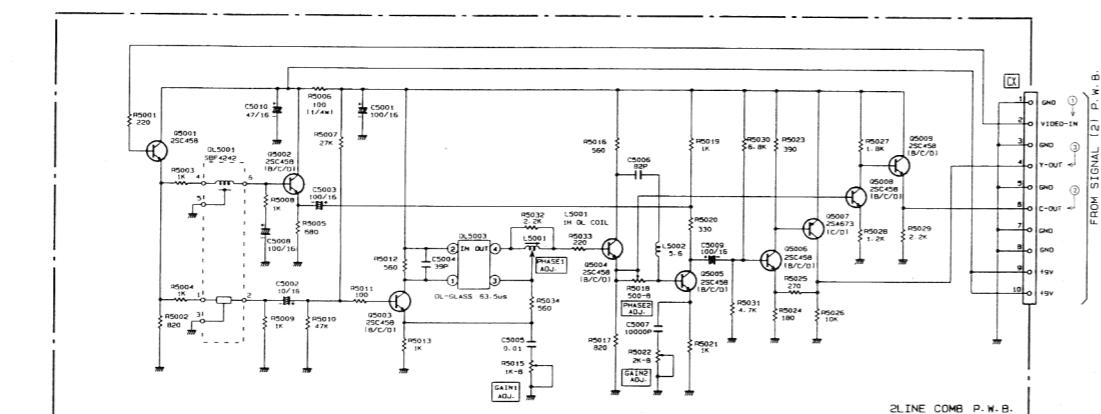
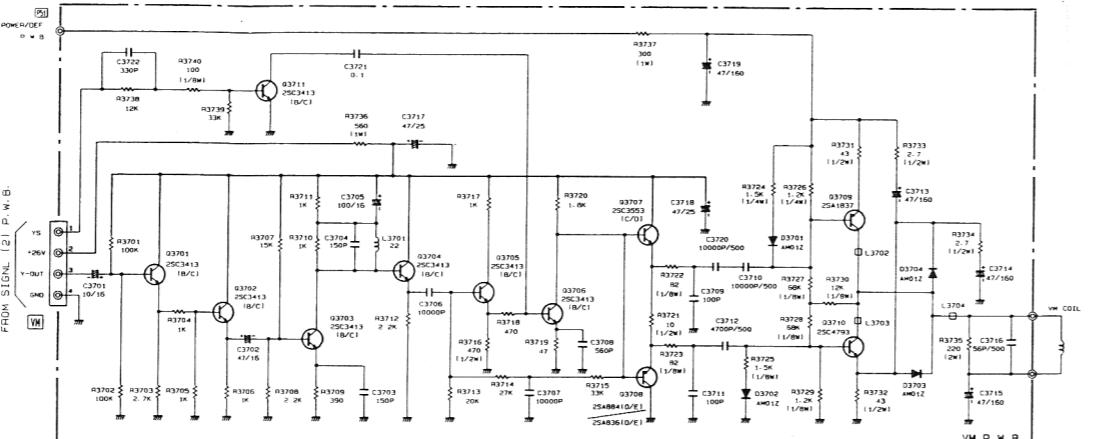
CIRCUIT NO.	PIN NO.	VOLTAGE VDC
Q0001	B	4.5
Q0002	C	5.1
Q0002	E	0.7
Q0002	B	2.4
Q0002	E	0.3
Q0002	C	0.3
Q0003	E	0.3
Q0003	B	2.6
Q0003	E	0.3
Q0004	C	0.2
Q0004	E	4.9
Q0004	B	0.7
Q0005	C	0.1
Q0005	E	0.1
Q0006	B	1.9
Q0006	C	9.2
Q0006	E	1.3
Q0007	B	5.7
Q0007	C	9.2
Q0007	E	5.1
Q0008	B	0.1
Q0008	C	5.1
Q0008	E	0.1
Q0009	B	0.1
Q0009	C	5.1
Q0009	E	0.1
Q0010	C	5.1
Q0010	E	0.1
Q0011	C	0.1
Q0011	E	0.1
Q0012	B	5.9
Q0012	C	8.8
Q0012	E	5.2
Q0014	C	0.2
Q0014	E	0.2
Q0015	B	0.8
Q0015	C	0.2
Q0015	E	0.1
Q0016	B	0.0
Q0016	C	4.6
Q0016	E	0.1
Q0017	C	5.0
Q0017	E	0.1
Q0018	B	0.8
Q0018	C	0.1
Q0018	E	0.1
Q0019	C	8.5
Q0019	E	0.2
Q0020	B	1.6
Q0020	C	9.1
Q0020	E	1.0
Q0021	C	0.1
Q0021	E	0.1
Q0022	B	8.8
Q0022	C	0.2
Q0022	E	0.8
Q0501	C	0.1
Q0501	E	0.1

TO SPEAKER LINE IN

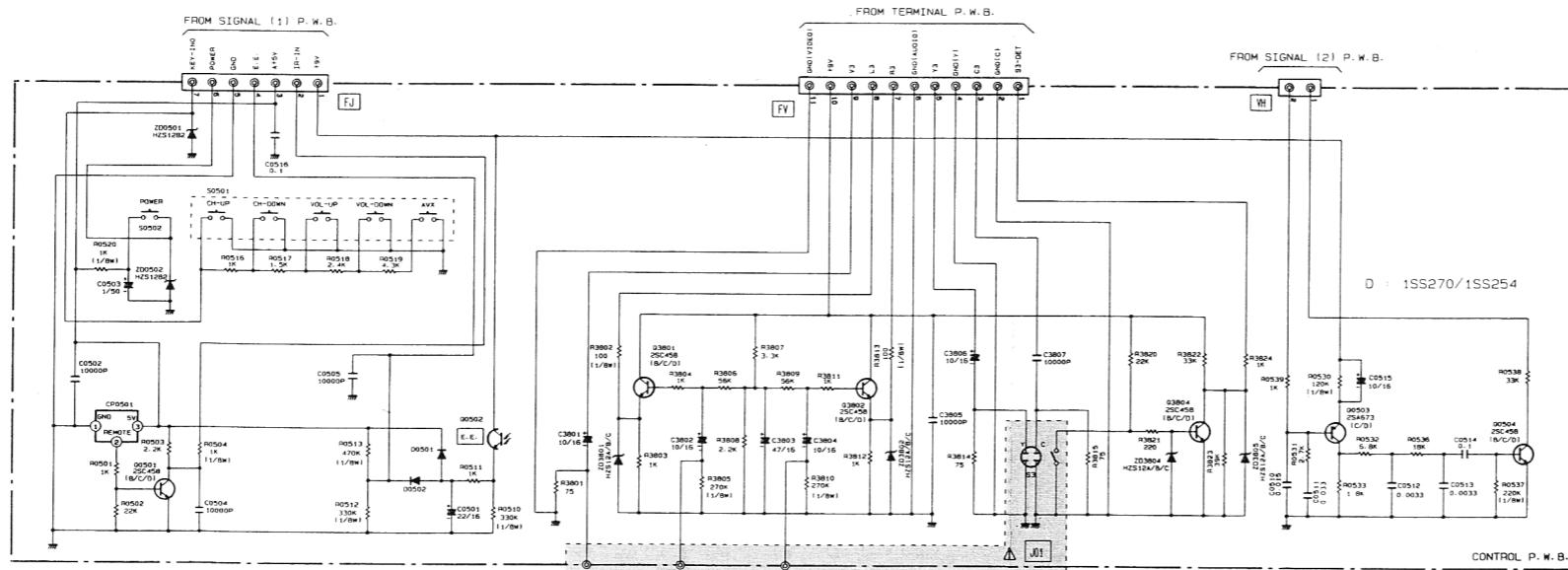
BASIC CIRCUIT DIAGRAM OF 35UX60B/CZ46J

PRODUCT SAFETY NOTE: Components marked with a and shaded have special characteristics important to safety. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE of this Service Manual. Don't degrade the safety of the receiver through improper servicing.

CIRCUIT NO.	PIN NO.	VOLTAGE VDC	CIRCUIT NO.	PIN NO.	VOLTAGE VDC
Q0502	B	NO BASE	Q3624	B	2.9
	C	9.2		C	9.2
	E	1.0		E	2.2
Q0503	B	5.0	Q3625	B	2.1
	C	0.1		C	2.9
	E	5.1		E	1.5
Q0504	B	-0.1		B	6.3
	C	6.4		C	14.7
	E	0.1		E	5.7
Q3001	B	0.8	Q3701	B	2.8
	C	0.1		C	14.7
	E	0.1		E	2.1
Q3002	B	0.3		B	1.8
	C	4.6		C	11.7
	E	0.1		E	1.1
Q3003	B	0.8		B	11.7
	C	0.2		C	14.7
	E	0.1		E	11.0
Q3004	B	5.9		B	1.5
	C	6.3		C	12.8
	E	5.2		E	0.9
Q3005	B	4.1		B	0.9
	C	0.1		C	6.6
	E	4.8		E	0.2
Q3503	B	3.8		B	6.6
	C	9.2		C	14.7
	E	3.1		E	6.6
Q3504	B	4.5		B	6.6
	C	9.2		C	11.1
	E	3.8		E	5.6
Q3508	B	9.8		B	0.13
	C	9.2		C	0.068
	E	9.2		E	0.13
Q3510	B	0.1		B	0.88
	C	8.4		C	0.068
	E	0.1		E	0.3
Q3513	B	0.1		B	6 mv
	C	9.0		C	0.0
	E	0.1		E	7 mv
Q3514	B	1.6		B	3.1
	C	9.2		C	3.2
	E	1.0		E	2.5
Q3516	B	5.7		B	3.1
	C	9.2		C	9.2
	E	5.1		E	2.4
Q3517	B	5.2		B	0.81
	C	0.1		C	0.13
	E	5.7		E	0.12
Q3518	B	5.1		B	4.4
	C	9.2		C	5.2
	E	4.5		E	3.0
Q3519	B	4.5		B	2.0
	C	0.1		C	9.0
	E	5.1		E	2.2
Q3520	B	0.8		B	0.1
	C	0.2		C	3.8
	E	0.1		E	3.8
Q3521	B	4.1		B	0.1
	C	9.2		C	3.8
	E	3.4		E	3.8
Q3522	B	3.4		B	4.4
	C	0.5		C	5.3
	E	3.7		E	3.7
Q3523	B	0.1		B	2.9
	C	0.1		C	9.0
	E	0.8		E	2.2

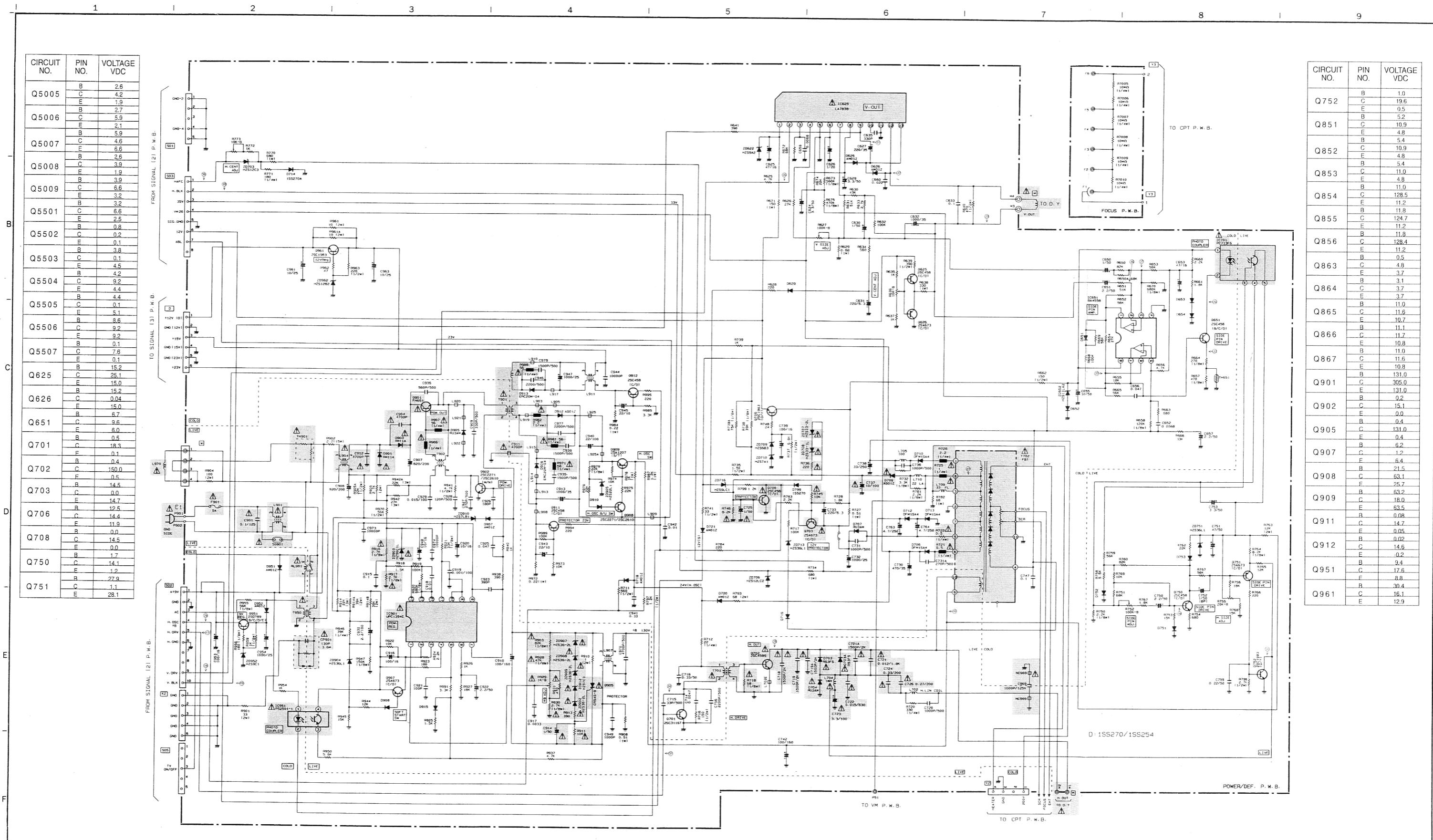


CIRCUIT NO.	PIN NO.	VOLTAGE VDC	CIRCUIT NO.	PIN NO.	VOLTAGE VDC
Q 4009	B	0.0	Q 4033	B	8.4
	C	3.7		C	4.9
	E	3.7		E	9.0
Q 401	B	0.1	Q 4034	B	8.4
	C	8.8		C	4.8
	E	0.1		E	9.0
Q 4010	B	0.0	Q 404	B	0.1
	C	3.7		C	8.8
	E	3.7		E	0.1
Q 4012	B	3.5	Q 4601	B	7.3
	C	8.4		C	10.6
	E	2.9		E	5.7
Q 4015	B	3.5		B	7.4
	C	8.4		C	10.6
	E	2.9		E	6.7
Q 4016	B	-0.6 mv	Q 4603	B	5.5
	C	8.8		C	7.4
	E	0.0		E	4.8
Q 4017	B	-0.6 mv		B	5.4
	C	8.8		C	10.6
	E	0.0		E	4.8
Q 4018	B	8.8	Q 4604	B	2.9
	C	8.9		C	4.8
	E	8.1		E	2.3
Q 4019	B	8.8		B	5.5
	C	8.9		C	7.4
	E	8.1		E	4.8
Q 402	B	0.1		B	5.3
	C	4.4		C	10.6
	E	0.1		E	4.8
Q 4020	B	-7 mv	Q 4605	B	3.0
	C	0.0		C	4.8
	E	-12 mv		E	2.3
Q 4021	B	1.9		B	5.7
	C	8.4		C	11.5
	E	1.2		E	5.2
Q 4022	B	8.4		B	0.2
	C	4.1		C	5.5
	E	9.0		E	0.1
Q 4023	B	0.1		B	0.6
	C	0.1		C	6.2
	E	0.1		E	0.1
Q 4024	B	1.9		B	0.8
	C	8.4		C	0.1
	E	8.9		E	0.1
Q 4025	B	8.4		B	0.6
	C	4.2		C	6.2
	E	9.0		E	0.1
Q 4026	B	0.0		B	0.8
	C	0.1		C	0.1
	E	0.1		E	0.1
Q 4027	B	3.7		B	0.1
	C	7.7		C	4.1
	E	3.0		E	0.1
Q 4028	B	3.6		B	4.1
	C	7.7		C	9.2
	E	2.9		E	3.4
Q 403	B	0.1		B	3.4
	C	8.8		C	9.6
	E	0.1		E	2.7
Q 4030	B	0.1		B	3.9
	C	0.1		C	4.8
	E	0.1		E	3.3
Q 4032	B	0.1		B	3.2
	C	0.1		C	4.8
	E	0.1		E	3.2



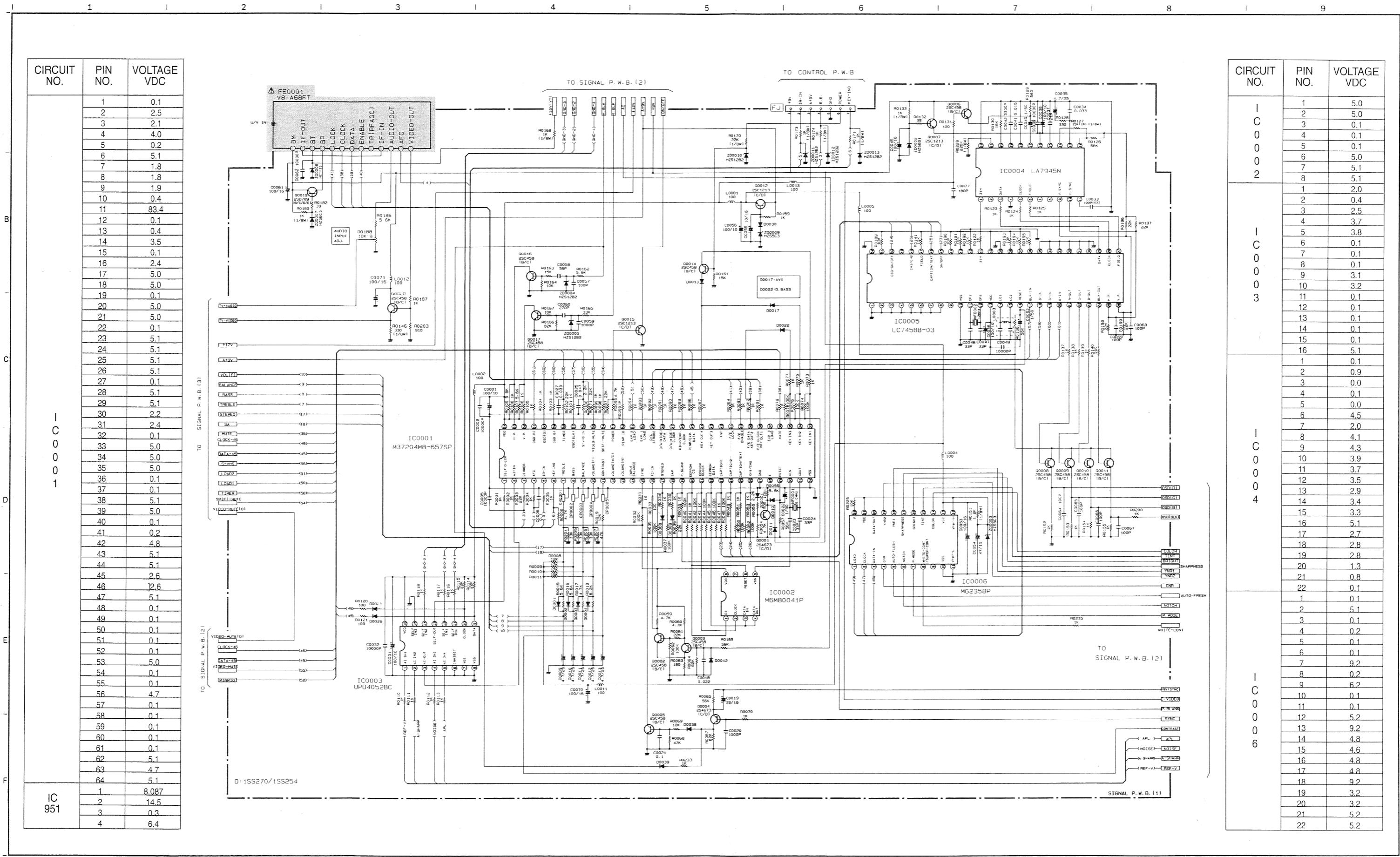
BASIC CIRCUIT DIAGRAM OF 35UX60B/CZ46J

PRODUCT SAFETY NOTE: Components marked with a  and shaded have special characteristics important to safety. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE of this Service Manual. Don't degrade the safety of the receiver through improper servicing.



BASIC CIRCUIT DIAGRAM OF 35TX69K/CZ33J

PRODUCT SAFETY NOTE: Components marked with a and shaded have special characteristics important to safety. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE of this Service Manual. Don't degrade the safety of the receiver through improper servicing.

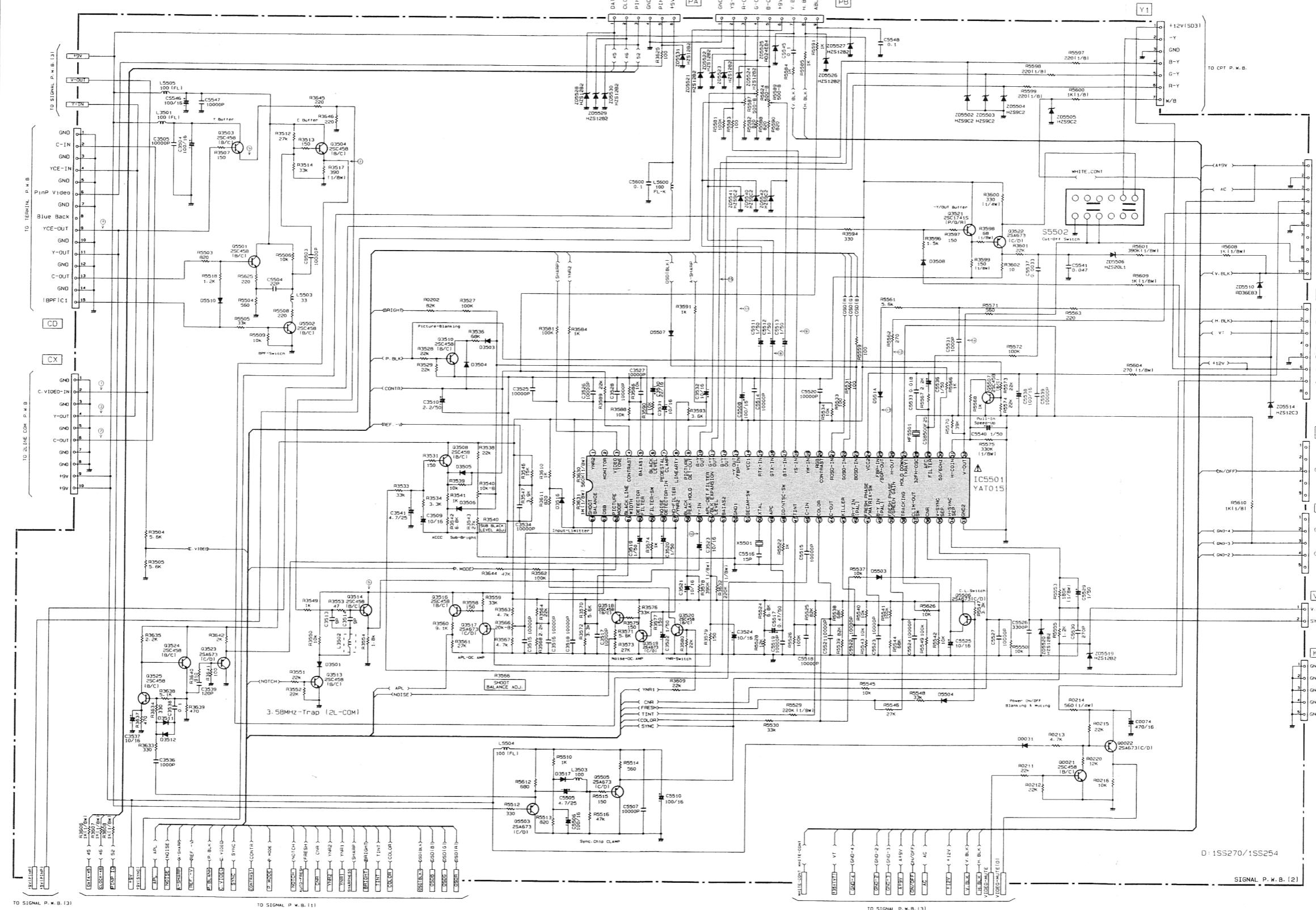


* Since this is a basic circuit diagram, the value of the parts is subject to be altered for improvement.
 * All DC voltage to be measured with a tester (100kΩ/N). Voltage taken on a complex color bar signal including a standard color bar signal.

BASIC CIRCUIT DIAGRAM OF 35TX69K/CZ33.

PRODUCT SAFETY NOTE: Components marked with a  and shaded have special characteristics important to safety. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE of this Service Manual. Don't degrade the safety of the receiver through improper servicing.

CIRCUIT NO.	PIN NO.	VOLTAGE VDC
I C 0 0 5	1	0.1
	2	0.1
	3	0.1
	4	0.1
	5	0.1
	6	0.1
	7	0.1
	8	0.1
	9	5.2
	10	0.1
	11	2.4
	12	2.6
	13	5.2
	14	5.2
	15	5.2
	16	5.2
	17	0.1
	18	0.1
	19	0.1
	20	0.1
	21	0.1
	22	0.1
	23	0.1
	24	0.1
	25	3.9
	26	4.3
	27	4.5
	28	0.0
	29	0.1
	30	0.1
	31	0.1
	32	0.1
	33	0.1
	34	0.1
	35	0.1
	36	5.2
	37	0.1
	38	0.1
	39	0.1
	40	5.2
	41	0.1
	42	5.2
	43	0.1
	44	5.2
	45	5.1
	46	5.1
	47	5.2
	48	5.1
	49	5.1
	50	5.1
	51	5.2
	52	0.1
I C 4 0 2	1	1.5
	2	0.0
	3	0.0
	4	0.0
	5	1.5
	6	10.3
	7	14.5
	8	5.1
	9	30.1
	10	0.0
	11	4.2
	12	13.9

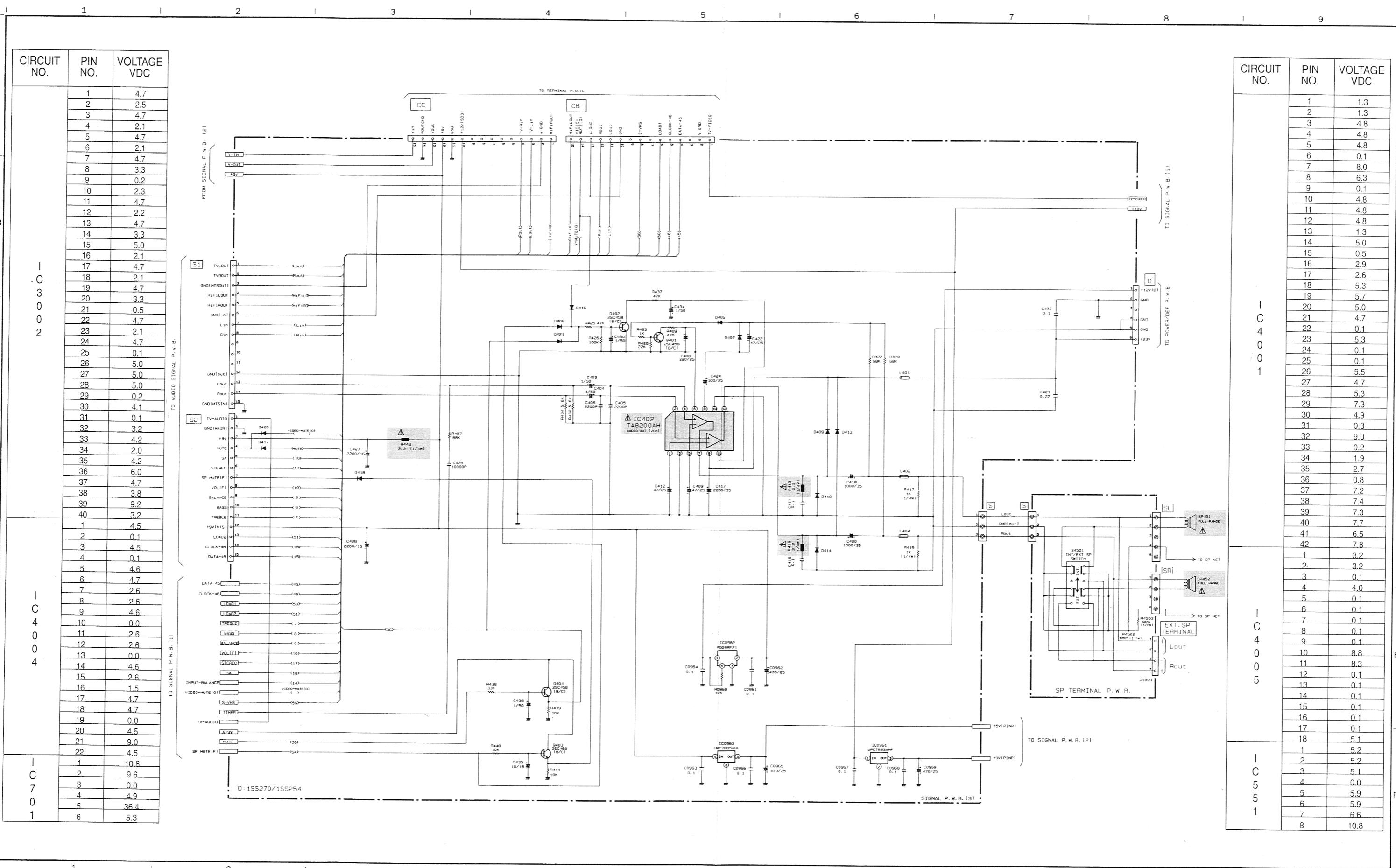


CIRCUIT NO.	PIN NO.	VOLTAGE VDC
IC0951	1	11.8
	2	0.1
	3	9.3
IC0962	1	12.6
	2	9.2
	3	0.1
	4	12.6
IC0963	1	9.2
	2	0.1
	3	5.1
IC0001	1	4.7
	2	2.5
	3	4.7
	4	2.2
	5	4.7
	6	2.1
	7	4.7
	8	3.3
	9	6.2
	10	2.2
	11	4.7
	12	2.2
	13	4.7
	14	3.3
	15	6.2
	16	2.1
	17	4.7
	18	2.1
	19	4.7
	20	3.3
	21	0.6
	22	4.7
	23	2.1
	24	4.7
	25	0.1
	26	6.6
	27	6.7
	28	5.8
	29	0.2
	30	4.1
	31	0.1
	32	3.2
	33	4.2
	34	2.4
	35	4.2
	36	5.9
	37	4.7
	38	3.8
	39	93.2
	40	3.2
IC3003	1	3.2
	2	3.2
	3	0.1
	4	4.1
	5	0.1
	6	0.1
	7	0.1
	8	7.3
	9	0.1
	10	0.1
	11	5.0
	12	5.0
	13	5.0
	14	0.1
	15	9.1
	16	6.9
	17	6.6
	18	5.2

- Since this is a basic circuit diagram, the value of the parts is subject to be altered for improvement.
- All DC voltage to be measured with a tester ($100k\Omega M$). Voltage taken on a complex color bar signal including a standard color bar si

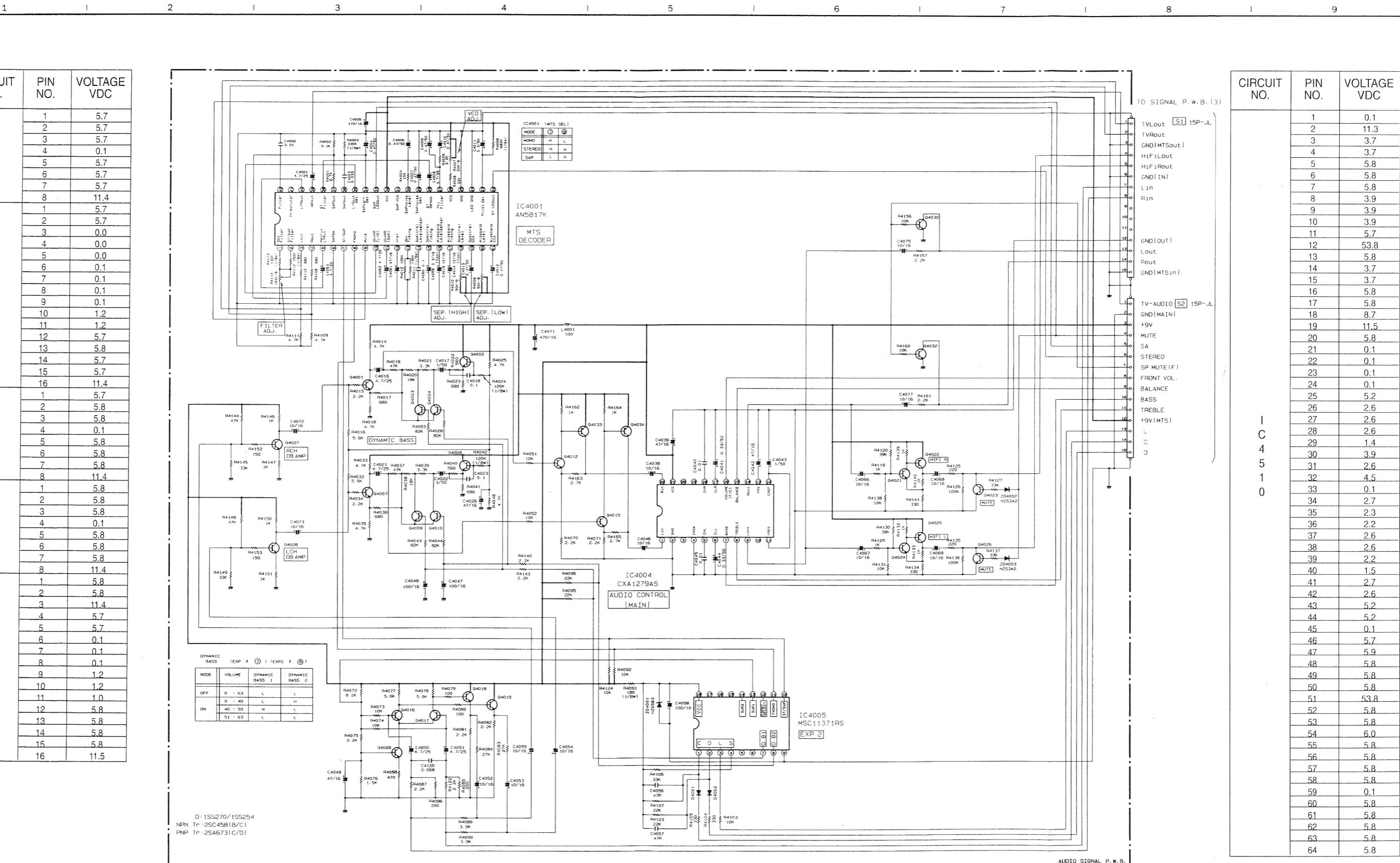
BASIC CIRCUIT DIAGRAM OF 35TX69K/CZ33J

PRODUCT SAFETY NOTE: Components marked with a and shaded have special characteristics important to safety. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE of this Service Manual. Don't degrade the safety of the receiver through improper servicing.



BASIC CIRCUIT DIAGRAM OF 35TX69K/CZ33J

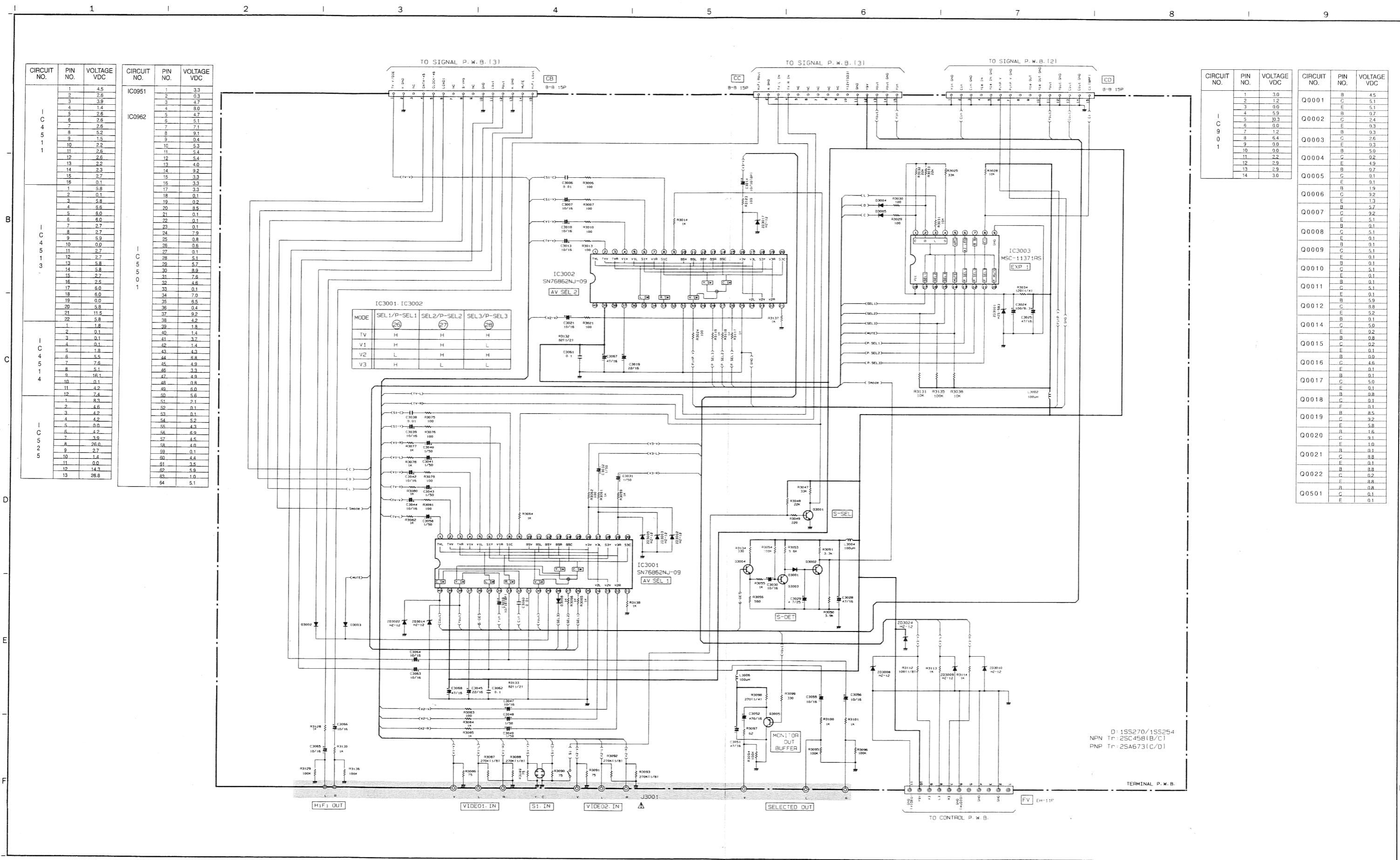
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* Since this is a basic circuit diagram, the value of the parts is subject to be altered for improvement.
* All DC voltage to be measured with a tester (100kΩ/N). Voltage taken on a complex color bar signal including a standard color bar signal.

BASIC CIRCUIT DIAGRAM OF 35TX69K/CZ33J

PRODUCT SAFETY NOTE: Components marked with a and shaded have special characteristics important to safety. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE of this Service Manual. Don't degrade the safety of the receiver through improper servicing.

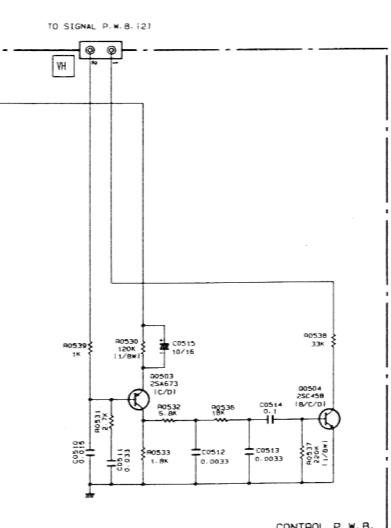
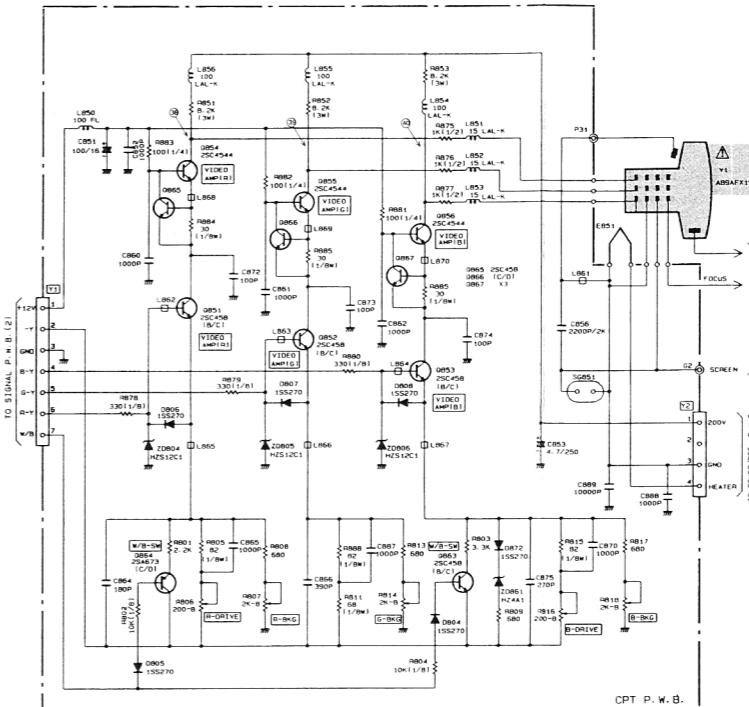
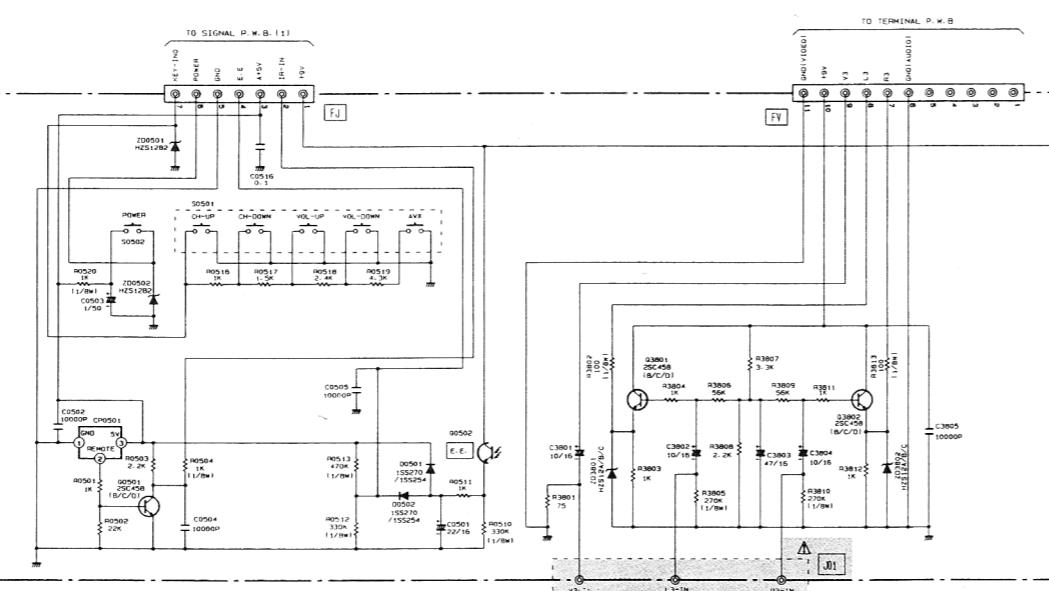
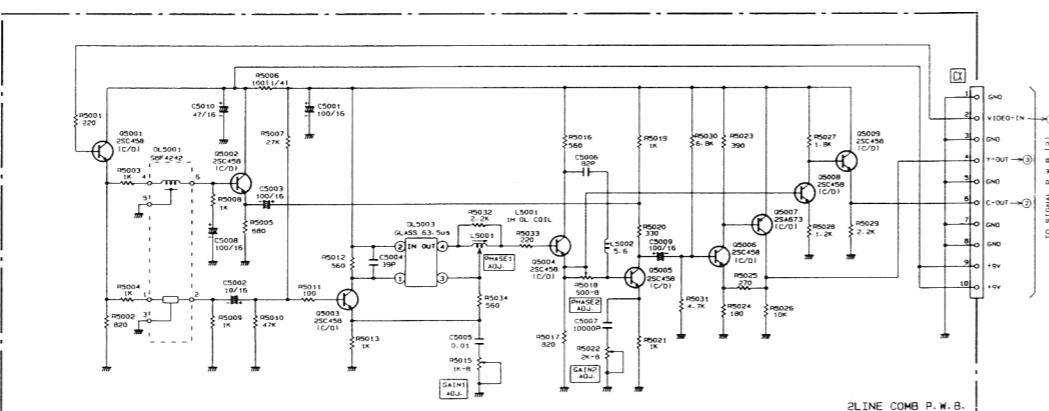


BASIC CIRCUIT DIAGRAM OF 35TX69K/CZ33J

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CIRCUIT NO.	PIN NO.	VOLTAGE VDC
Q0502	B	NO BASE
	C	9.2
	E	1.0
Q0503	B	5.0
	C	0.1
	E	5.1
Q0504	B	-0.1
	C	6.4
	E	0.1
Q3001	B	0.8
	C	0.1
	E	0.1
Q3002	B	0.3
	C	4.6
	E	0.1
Q3003	B	0.8
	C	0.2
	E	0.1
Q3004	B	5.9
	C	6.3
	E	5.2
Q3005	B	4.1
	C	0.1
	E	4.8
Q3503	B	3.8
	C	9.2
	E	3.1
Q3504	B	4.5
	C	9.2
	E	3.8
Q3508	B	9.8
	C	9.2
	E	9.2
Q3510	B	0.1
	C	8.4
	E	0.1
Q3513	B	0.1
	C	9.0
	E	0.1
Q3514	B	1.6
	C	9.2
	E	1.0
Q3516	B	5.7
	C	9.2
	E	5.1
Q3517	B	5.2
	C	0.1
	E	5.7
Q3518	B	5.1
	C	9.2
	E	4.5
Q3519	B	4.5
	C	0.1
	E	5.1
Q3520	B	0.8
	C	0.2
	E	0.1
Q3521	B	4.1
	C	9.2
	E	3.4
Q3522	B	3.4
	C	0.5
	E	3.7
Q3523	B	0.1
	C	0.1
	E	0.8

CIRCUIT NO.	PIN NO.	VOLTAGE VDC
Q3624	B	2.9
	C	9.2
	E	2.2
Q3625	B	2.1
	C	2.9
	E	1.5
Q3701	B	6.3
	C	14.7
	E	5.7
Q3702	B	2.8
	C	14.7
	E	2.1
Q3703	B	1.8
	C	11.7
	E	1.1
Q3704	B	11.7
	C	14.7
	E	11.0
Q3705	B	1.5
	C	12.8
	E	0.9
Q3706	B	0.9
	C	6.6
	E	0.2
Q3707	B	6.6
	C	14.7
	E	6.6
Q3708	B	6.6
	C	11.1
	E	6.6
Q3709	B	0.13
	C	0.068
	E	0.13
Q3710	B	0.88
	C	0.068
	E	0.3
Q3711	B	6 mv
	C	0.0
	E	7 mw
Q3801	B	3.1
	C	9.2
	E	2.5
Q3802	B	3.1
	C	9.2
	E	2.4
Q3804	B	0.81
	C	0.13
	E	0.12
Q4001	B	4.4
	C	5.2
	E	3.8
Q4002	B	2.8
	C	9.0
	E	2.2
Q4003	B	0.1
	C	3.8
	E	3.8
Q4004	B	0.1
	C	3.8
	E	3.8
Q4007	B	4.4
	C	5.3
	E	3.7
Q4008	B	2.9
	C	9.0
	E	2.2

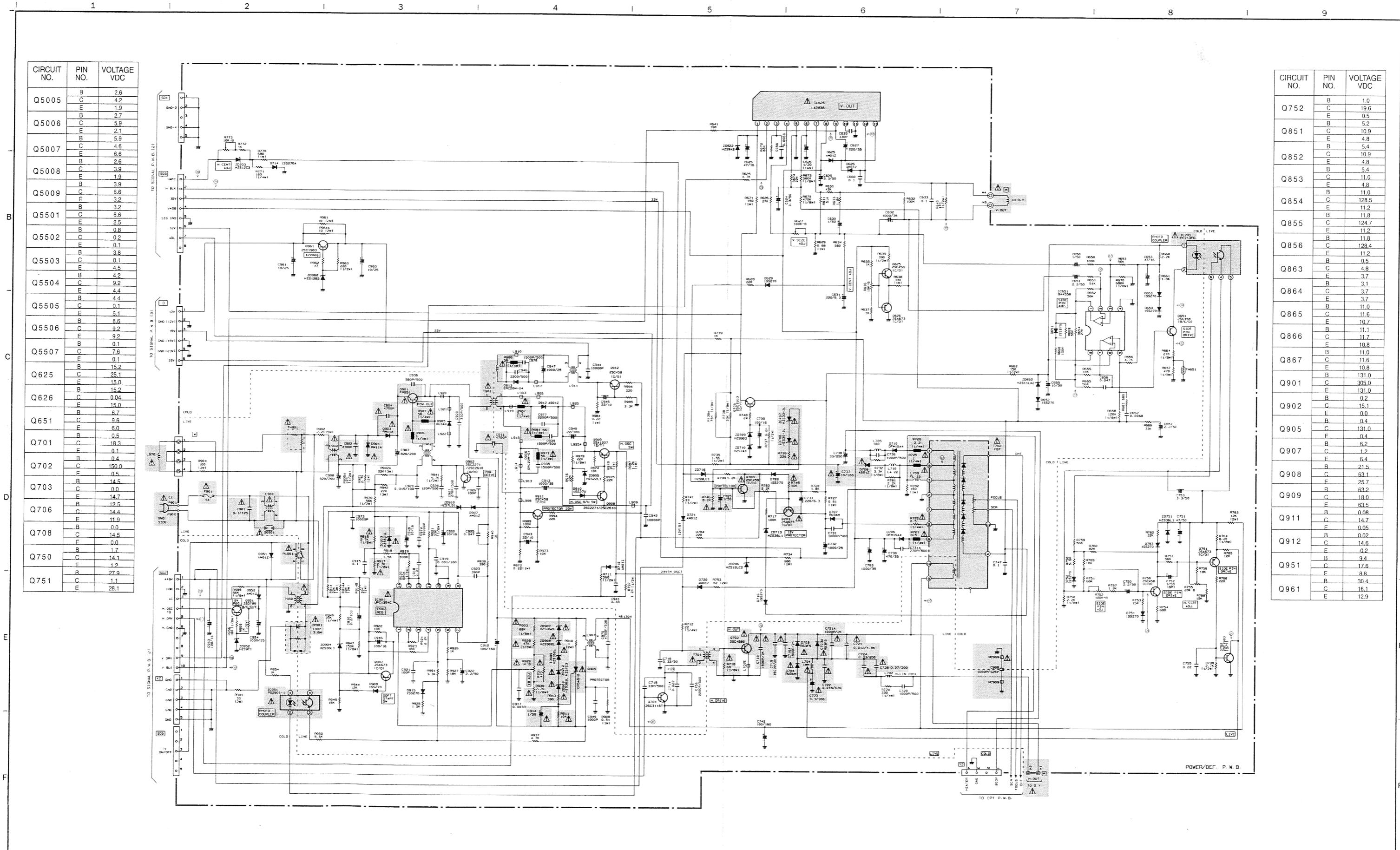


CIRCUIT NO.	PIN NO.	VOLTAGE VDC
Q4009	B	0.0
	C	3.7
	E	3.7
Q401	B	0.1
	C	8.8
	E	0.1
Q4010	B	0.0
	C	3.7
	E	3.7
Q4012	B	3.5
	C	8.4
	E	2.9
Q4015	B	3.5
	C	8.4
	E	2.9
Q4016	B	-0.6 mv
	C	8.8
	E	0.0
Q4017	B	-0.6 mv
	C	8.8
	E	0.0
Q4018	B	8.8
	C	8.9
	E	8.1
Q4019	B	8.8
	C	8.9
	E	8.1
Q402	B	0.1
	C	4.4
	E	0.1
Q4020	B	-7.mv
	C	0.0
	E	-12 mv
Q4021	B	1.9
	C	8.4
	E	1.2
Q4022	B	8.4
	C	4.1
	E	9.0
Q4023	B	0.1
	C	0.1
	E	0.1
Q4024	B	1.9
	C	8.4
	E	8.9
Q4025	B	8.4
	C	4.2
	E	9.0
Q4026	B	0.0
	C	0.1
	E	0.1
Q4027	B	3.7
	C	7.7
	E	3.0
Q4028	B	3.6
	C	7.7
	E	2.9
Q403	B	0.1
	C	8.8
	E	0.1
Q4030	B	0.1
	C	0.1
	E	0.1
Q4032	B	0.1
	C	0.1
	E	0.1

CIRCUIT NO.	PIN NO.	VOLTAGE VDC
Q4033	B	8.4
	C	4.9
	E	9.0
Q4034	B	8.4
	C	4.8
	E	9.0
Q404	B	0.1
	C	8.8
	E	0.1
Q4601	B	7.3
	C	10.6
	E	6.7
Q4602	B	7.4
	C	10.6
	E	6.7
Q4603	B	5.5
	C	7.4
	E	4.8
Q4604	B	5.4
	C	10.6
	E	4.8
Q4605	B	2.9
	C	4.8
	E	2.3
Q4606	B	5.5
	C	7.4
	E	4.8
Q4607	B	5.3
	C	10.6
	E	4.8
Q4608	B	3.0
	C	4.8
	E	2.3
Q4613	B	5.7
	C	11.5
	E	5.2
Q4615	B	0.2
	C	5.5
	E	0.1
Q4618	B	0.6
	C	8.2
	E	0.1
Q4619	B	0.8
	C	0.1
	E	0.1
Q4620	B	0.6
	C	6.2
	E	0.1
Q4621	B	0.8
	C	0.1
	E	0.1
Q4622	B	0.1
	C	4.1
	E	0.1
Q5001	B	4.1
	C	3.2
	E	3.4
Q5002	B	3.4
	C	6.6
	E	2.7
Q5003	B	3.9
	C	4.8
	E	3.3
Q5004	B	3.2
	C	4.8
	E	2.6

BASIC CIRCUIT DIAGRAM OF 35TX69K/CZ33J

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REPLACEMENT PARTS LIST

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ABBREVIATIONS	Capacitors CD:Ceramic Disc, PF:Polyester Film, EL: Electrolytic, PP: Polypropylene, PR: Paper, TA: Tantalum, TM: Trimmer
Resistors.....	CF: Carbon Film, CC: Carbon Composition, MF: Metal oxide Film, VR: Variable Resistor, WW: Wire Wound, FR: Fuse Resistor, MG: Metal Glazed
Semiconductors	TR: Transistor, DI: diode, ZD: Zener Diode, VA: Varistor, TH: Thermistor, IC: Integrated Circuit

SYMBOL NO.	PART NO.	PART DESCRIPTION	SYMBOL NO.	PART NO.	PART DESCRIPTION
		CAPACITORS	C0057	0890074	CAPACITOR CERAMIC DISCAL 100PF +5% 50V
			C0058	0890071	CAPACITOR CERAMIC DISCAL 50PF +5% 50V
			C0059	0890087	CAPACITOR CERAMIC DISCAL 1000PF +10% 50V
			C0060	0890079R	CAPACITOR,CERAMIC DISCAL 270PF +10% 50V
C0001	0800048	CAPACITOR ELECTROLYTIC 100MF 10V	C0061	0800049	CAPACITOR,ELECTROLYTIC 100MF 16V
C0002	0244171	CD 0.01MF +80-20% 50V	C0062	0244171	CD 0.01MF +80-20% 50V
C0005	0244171	CD 0.01MF +80-20% 50V	C0064	0890074	CAPACITOR CERAMIC DISCAL 100PF +5% 50V
C0006	0880057	CAPACITOR POLYESTER FILM 0.1MF +10% 50V	C0065	0890074	CAPACITOR CERAMIC DISCAL 100PF +5% 50V
C0009	0800009	CAPACITOR ELECTROLYTIC 4.7MF 25V	C0066	0890074	CAPACITOR CERAMIC DISCAL 100PF +5% 50V
C0010	0800009	CAPACITOR ELECTROLYTIC 4.7MF 25V	C0067	0890074	CAPACITOR CERAMIC DISCAL 100PF +5% 50V
C0011	0800009	CAPACITOR ELECTROLYTIC 4.7MF 25V	C0068	0890074	CAPACITOR CERAMIC DISCAL 100PF +5% 50V
C0012	0800009	CAPACITOR ELECTROLYTIC 4.7MF 25V	C0069	0890074	CAPACITOR CERAMIC DISCAL 100PF +5% 50V
C0013	0800009	CAPACITOR ELECTROLYTIC 4.7MF 25V	C0070	0800049	CAPACITOR,ELECTROLYTIC 100MF 16V
C0015	0800015	CAPACITOR,ELECTROLYTIC 10MF 16V (35UX60B)	C0071	0800049	CAPACITOR,ELECTROLYTIC 100MF 16V
C0016	0800009	CAPACITOR ELECTROLYTIC 4.7MF 25V(35UX60B)	C0074	0800074	CAPACITOR ELECTROLYTIC 470MF 16V
C0018	0880048	CAPACITOR POLYESTER FILM 0.022MF +10% 50V	C0077	0890077	CAPACITOR CERAMIC DISCAL 180PF +10% 50V
C0019	0800023	CAPACITOR ELECTROLYTIC 22MF 16V	C0501	0800023	CAPACITOR ELECTROLYTIC 22MF 16V
C0020	0890087	CAPACITOR CERAMIC DISCAL 1000PF +10% 50V	C0502	0244171	CD 0.01MF +80-20% 50V
C0021	0880057	CAPACITOR POLYESTER FILM 0.1MF +10% 50V	C0503	0800003	CAPACITOR ELECTROLYTIC 1MF 50V
C0022	0800003	CAPACITOR ELECTROLYTIC 1MF 50V	C0504	0244171	CD 0.01MF +80-20% 50V
C0023	0890067	CAPACITOR CERAMIC DISCAL 33PF +5% 50V	C0505	0244171	CD 0.01MF +80-20% 50V
C0024	0890067	CAPACITOR CERAMIC DISCAL 33PF +5% 50V	C0510	0880011	CAPACITOR POLYESTER FILM 0.015MF +10% 50V
C0025	0880053	CAPACITOR POLYESTER FILM 0.047MF +10% 50V	C0511	0880013	CAPACITOR POLYESTER FILM 0.033MF +10% 50V
C0027	0880051	CAPACITOR POLYESTER FILM 0.033MF +10% 50V	C0512	0880006	CAPACITOR POLYESTER FILM 3300PF +10% 50V
C0031	0800048	CAPACITOR ELECTROLYTIC 100MF 10V	C0513	0880006	CAPACITOR POLYESTER FILM 3300PF +10% 50V
C0032	0244171	CD 0.01MF +80-20% 50V	C0514	0880016	CAPACITOR POLYESTER FILM 0.1MF +10% 50V
C0033	0890074	CAPACITOR CERAMIC DISCAL 100PF +5% 50V	C0515	0800015	CAPACITOR,ELECTROLYTIC 10MF 16V
C0034	0880051	CAPACITOR POLYESTER FILM 0.033MF +10% 50V	C0516	0880016	CAPACITOR POLYESTER FILM 0.1MF +10% 50V
C0035	0800009	CAPACITOR ELECTROLYTIC 4.7MF 25V	C0961	0880057	CAPACITOR POLYESTER FILM 0.1MF +10% 50V
C0037	0890059	CAPACITOR,CERAMIC DISCAL 47PF +5% 50V	C0962	0800075	CAPACITOR ELECTROLYTIC 470MF 25V
C0038	0800048	CAPACITOR ELECTROLYTIC 100MF 10V	C0963	0880057	CAPACITOR POLYESTER FILM 0.1MF +10% 50V
C0039	0244171	CD 0.01MF +80-20% 50V	C0964	0880057	CAPACITOR POLYESTER FILM 0.1MF +10% 50V
C0040	0800003	CAPACITOR ELECTROLYTIC 1MF 50V	C0965	0800075	CAPACITOR ELECTROLYTIC 470MF 25V
C0041	0880046	CAPACITOR POLYESTER FILM 0.015MF +10% 50V	C0966	0880057	CAPACITOR POLYESTER FILM 0.1MF +10% 50V
C0042	0244107	CD 3300PF +10% 50V	C0967	0880057	CAPACITOR POLYESTER FILM 0.1MF +10% 50V
C0045	0800049	CAPACITOR ELECTROLYTIC 10MF 16V	C0968	0880057	CAPACITOR POLYESTER FILM 0.1MF +10% 50V
C0046	0890067	CAPACITOR CERAMIC DISCAL 33PF +5% 50V	C0969	0800075	CAPACITOR ELECTROLYTIC 470MF 25V
C0047	0890067	CAPACITOR CERAMIC DISCAL 33PF +5% 50V	C3006	0244171	CD 0.01MF +80-20% 50V
C0048	0800048	CAPACITOR ELECTROLYTIC 100MF 10V	C3007	0800015	CAPACITOR,ELECTROLYTIC 10MF 16V
C0049	0244171	CD 0.01MF +80-20% 50V	C3010	0800015	CAPACITOR,ELECTROLYTIC 10MF 16V
C0052	0800003	CAPACITOR ELECTROLYTIC 1MF 50V	C3013	0800015	CAPACITOR,ELECTROLYTIC 10MF 16V
C0053	0800049	CAPACITOR,ELECTROLYTIC 100MF 16V	C3014	0284638	EL 10MF 16V
C0054	0800039	CAPACITOR ELECTROLYTIC 47MF 10V	C3016	0284638	EL 10MF 16V(35UX60B)
C0055	0800015	CAPACITOR,ELECTROLYTIC 10MF 16V	C3018	0244171	CD 0.01MF +80-20% 50V (35UX60B)
C0056	0800048	CAPACITOR ELECTROLYTIC 100MF 10V			

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SYMBOL NO.	PART NO.	PART DESCRIPTION	SYMBOL NO.	PART NO.	PART DESCRIPTION
C3019	0800023	CAPACITOR ELECTROLYTIC 22MF 16V	C3530	0800023	CAPACITOR ELECTROLYTIC 22MF 16V
C3021	0800015	CAPACITOR ELECTROLYTIC 10MF 16V	C3531	0800015	CAPACITOR ELECTROLYTIC 10MF 16V
C3024	0800047	CAPACITOR ELECTROLYTIC 100MF 6.3V	C3532	0800015	CAPACITOR ELECTROLYTIC 10MF 16V
C3025	0800041	CAPACITOR ELECTROLYTIC 47MF 16V	C3534	0244171	CD 0.01MF +80-20% 50V
C3028	0800041	CAPACITOR ELECTROLYTIC 47MF 16V	C3536	0890087	CAPACITOR CERAMIC DISCAL 1000PF +10% 50V
C3029	0800099	CAPACITOR ELECTROLYTIC 4.7MF 25V	C3537	0800015	CAPACITOR ELECTROLYTIC 10MF 16V
C3030	0800015	CAPACITOR ELECTROLYTIC 10MF 16V	C3538	0880057	CAPACITOR POLYESTER FILM 0.1MF +10% 50V
C3031	0800003	CAPACITOR ELECTROLYTIC 1MF 50V	C3539	0890075	CAPACITOR CERAMIC DISCAL 120PF +5% 50V
C3032	0800003	CAPACITOR ELECTROLYTIC 1MF 50V	C3541	0800009	CAPACITOR ELECTROLYTIC 4.7MF 25V (35TX69K)
C3038	0244171	CD 0.01MF +80-20% 50V	C3701	0800291	CAPACITOR ELECTROLYTIC 10MF 16V (35UX60B)
C3039	0800015	CAPACITOR ELECTROLYTIC 10MF 16V	C3702	0800017	CAPACITOR ELECTROLYTIC 47MF 16V (35UX60B)
C3040	0800003	CAPACITOR ELECTROLYTIC 1MF 50V	C3703	0248688	CD 150PF +5% 50V (35UX60B)
C3041	0800003	CAPACITOR ELECTROLYTIC 1MF 50V	C3704	0248688	CD 150PF +5% 50V (35UX60B)
C3042	0800015	CAPACITOR ELECTROLYTIC 10MF 16V	C3705	0800326	CAPACITOR ELECTROLYTIC 100MF 16V (35UX60B)
C3043	0800003	CAPACITOR ELECTROLYTIC 1MF 50V	C3706	0880044	CAPACITOR POLYESTER FILM 0.01MF +10% 50V (35UX60B)
C3044	0800015	CAPACITOR ELECTROLYTIC 10MF 16V	C3707	0880044	CAPACITOR POLYESTER FILM 0.01MF +10% 50V (35UX60B)
C3045	0800023	CAPACITOR ELECTROLYTIC 22MF 16V	C3708	0248688	CD 560PF +5% 50V (35UX60B)
C3047	0800015	CAPACITOR ELECTROLYTIC 10MF 16V	C3709	0890074	CAPACITOR CERAMIC DISCAL 100PF +5% 50V (35UX60B)
C3048	0800003	CAPACITOR ELECTROLYTIC 1MF 50V	C3710	0244541	CD 0.01MF +10% 500V (35UX60B)
C3049	0800003	CAPACITOR ELECTROLYTIC 1MF 50V	C3711	0890074	CAPACITOR CERAMIC DISCAL 100PF +5% 50V (35UX60B)
C3051	0800041	CAPACITOR ELECTROLYTIC 47MF 16V	C3712	0244509	CD 4700PF +10% 500V (35UX60B)
C3052	0800074	CAPACITOR ELECTROLYTIC 470MF 16V	C3713	0253959F	EL 47MF 160V (35UX60B)
C3055	0800015	CAPACITOR ELECTROLYTIC 10MF 16V	C3714	0253959F	EL 47MF 160V (35UX60B)
C3056	0800015	CAPACITOR ELECTROLYTIC 10MF 16V	C3715	0253959F	EL 47MF 160V (35UX60B)
C3058	0800003	CAPACITOR ELECTROLYTIC 1MF 50V	C3716	0247848	CD 56PF +5% 500V (35UX60B)
C3059	0284638	EL 10MF 16V	C3717	0800318	CAPACITOR ELECTROLYTIC 47MF 25V (35UX60B)
C3060	0244171	CD 0.01MF +80-20% 50V	C3718	0800318	CAPACITOR ELECTROLYTIC 47MF 25V (35UX60B)
C3061	0880057	CAPACITOR POLYESTER FILM 0.1MF +10% 50V	C3719	0253959F	EL 47MF 160V (35UX60B)
C3062	0800057	CAPACITOR POLYESTER FILM 0.1MF +10% 50V	C3720	0244541	CD 0.01MF +10% 50V (35UX60B)
C3063	0800015	CAPACITOR ELECTROLYTIC 10MF 16V	C3721	0880057	CAPACITOR POLYESTER FILM 0.1MF +10% 50V (35UX60B)
C3064	0800015	CAPACITOR ELECTROLYTIC 10MF 16V	C3722	0890081R	CAPACITOR CERAMIC DISCAL 330PF +10% 50V (35UX60B)
C3065	0800015	CAPACITOR ELECTROLYTIC 10MF 16V	C3801	0800015	CAPACITOR ELECTROLYTIC 10MF 16V
C3066	0800015	CAPACITOR ELECTROLYTIC 10MF 16V	C3802	0800015	CAPACITOR ELECTROLYTIC 10MF 16V
C3067	0800041	CAPACITOR ELECTROLYTIC 47MF 16V	C3803	0800041	CAPACITOR ELECTROLYTIC 47MF 16V
C3068	0800041	CAPACITOR ELECTROLYTIC 47MF 16V	C3804	0800015	CAPACITOR ELECTROLYTIC 10MF 16V
C3504	0800049	CAPACITOR ELECTROLYTIC 100MF 16V	C3805	0244171	CD 0.01MF +80-20% 50V
C3505	0244171	CD 0.01MF +80-20% 50V	C3806	0800015	CAPACITOR ELECTROLYTIC 10MF 16V (35UX60B)
C3509	0800015	CAPACITOR ELECTROLYTIC 10MF 16V	C3807	0244171	CD 0.01MF +80-20% 50V (35UX60B)
C3510	0800005	CAPACITOR ELECTROLYTIC 2.2MF 50V	C4001	0800009	CAPACITOR ELECTROLYTIC 4.7MF 25V
C3513	0890113	CAPACITOR CERAMIC DISCAL 9PF +0.5% 50V	C4002	0880057	CAPACITOR POLYESTER FILM 0.1MF +10% 50V
C3514	0890113	CAPACITOR CERAMIC DISCAL 9PF +0.5% 50V	C4003	0880044	CAPACITOR POLYESTER FILM 0.01MF +10% 50V
C3515	0244171	CD 0.01MF +80-20% 50V	C4004	0800001	CAPACITOR ELECTROLYTIC 0.47MF 50V
C3516	0244171	CD 0.01MF +80-20% 50V	C4005	0800074	CAPACITOR ELECTROLYTIC 470MF 16V
C3517	0244171	CD 0.01MF +80-20% 50V	C4006	0800001	CAPACITOR ELECTROLYTIC 0.47MF 50V
C3518	0244171	CD 0.01MF +80-20% 50V	C4007	0800001	CAPACITOR ELECTROLYTIC 0.47MF 50V
C3519	0800003	CAPACITOR ELECTROLYTIC 1MF 50V	C4008	0800009	CAPACITOR ELECTROLYTIC 4.7MF 25V
C3520	0800003	CAPACITOR ELECTROLYTIC 1MF 50V	C4009	0800001	CAPACITOR ELECTROLYTIC 0.47MF 50V
C3521	0800015	CAPACITOR ELECTROLYTIC 10MF 16V	C4010	0800005	CAPACITOR ELECTROLYTIC 2.2MF 50V
C3522	0800003	CAPACITOR ELECTROLYTIC 1MF 50V	C4011	0800007	CAPACITOR ELECTROLYTIC 3.3MF 50V
C3523	0800015	CAPACITOR ELECTROLYTIC 10MF 16V	C4012	0800001	CAPACITOR ELECTROLYTIC 0.47MF 50V
C3524	0800015	CAPACITOR ELECTROLYTIC 10MF 16V	C4013	0800001	CAPACITOR ELECTROLYTIC 0.47MF 50V
C3525	0244171	CD 0.01MF +80-20% 50V	C4014	0292714F	TA 10MF +10% 16V
C3526	0244171	CD 0.01MF +80-20% 50V	C4015	0800015	CAPACITOR ELECTROLYTIC 10MF 16V
C3527	0244171	CD 0.01MF +80-20% 50V	C4016	0800009	CAPACITOR ELECTROLYTIC 4.7MF 25V
C3528	0244171	CD 0.01MF +80-20% 50V	C4017	0800003	CAPACITOR ELECTROLYTIC 1MF 50V

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SYMBOL NO.	PART NO.	PART DESCRIPTION	SYMBOL NO.	PART NO.	PART DESCRIPTION
C4018	0680057	CAPACITOR POLYESTER FILM 0.1MF +10% 50V	C422	0800042	CAPACITOR ELECTROLYTIC 47MF 25V
C4021	0800009	CAPACITOR ELECTROLYTIC 4.7MF 25V	C424	0800051	CAPACITOR ELECTROLYTIC 100MF 25V
C4022	0800003	CAPACITOR ELECTROLYTIC 1MF 50V	C425	0244171	CD 0.01MF +80-20% 50V
C4023	0680057	CAPACITOR POLYESTER FILM 0.1MF +10% 50V	C427	0800087	CAPACITOR ELECTROLYTIC 220MF 16V
C4026	0800041	CAPACITOR ELECTROLYTIC 47MF 16V	C428	0800087	CAPACITOR ELECTROLYTIC 220MF 16V
C403	0800003	CAPACITOR ELECTROLYTIC 1MF 50V	C430	0800003	CAPACITOR ELECTROLYTIC 1MF 50V
C4038	0800015	CAPACITOR ELECTROLYTIC 10MF 16V	C433	0800087	CAPACITOR ELECTROLYTIC 220MF 16V (35UX60B)
C4039	0800074	CAPACITOR ELECTROLYTIC 47MF 16V	C434	0800003	CAPACITOR ELECTROLYTIC 1MF 50V
C4040	0800003	CAPACITOR ELECTROLYTIC 1MF 50V	C435	0800015	CAPACITOR ELECTROLYTIC 10MF 16V
C4041	0253943	EL 0.33MF 50V	C436	0800003	CAPACITOR ELECTROLYTIC 1MF 50V
C4042	0800041	CAPACITOR ELECTROLYTIC 47MF 16V	C437	0800057	CAPACITOR POLYESTER FILM 0.1MF +10% 50V
C4043	0800003	CAPACITOR ELECTROLYTIC 1MF 50V	C438	0800082	CAPACITOR ELECTROLYTIC 1000MF 16V (35UX60B)
C4044	0253943	EL 0.33MF 50V	C4501	0258616	EL 2.2MF 50V
C4045	0880044	CAPACITOR POLYESTER FILM 0.01MF +10% 50V	C4502	0258616	EL 2.2MF 50V
C4046	0800015	CAPACITOR ELECTROLYTIC 10MF 16V	C4601	0800041	CAPACITOR ELECTROLYTIC 47MF 16V (35UX60B)
C4047	0800049	CAPACITOR ELECTROLYTIC 10MF 16V	C4602	0800015	CAPACITOR ELECTROLYTIC 10MF 16V (35UX60B)
C4048	0800049	CAPACITOR ELECTROLYTIC 10MF 16V	C4603	0800015	CAPACITOR ELECTROLYTIC 10MF 16V (35UX60B)
C4049	0800041	CAPACITOR ELECTROLYTIC 47MF 16V (35TX69K)	C4604	0800015	CAPACITOR ELECTROLYTIC 10MF 16V (35UX60B)
C405	0244105	CD 2200PF +10% 50V	C4605	0800015	CAPACITOR ELECTROLYTIC 10MF 16V (35UX60B)
C4050	0800009	CAPACITOR ELECTROLYTIC 4.7MF 25V (35TX69K)	C4606	0800015	CAPACITOR ELECTROLYTIC 10MF 16V (35UX60B)
C4051	0800009	CAPACITOR ELECTROLYTIC 4.7MF 25V (35TX69K)	C4607	0800082	CAPACITOR ELECTROLYTIC 1000MF 16V (35UX60B)
C4052	0284638	EL 10MF 16V (35TX69K)	C4608	0800044	CAPACITOR POLYESTER FILM 0.01MF +10% 50V (35UX60B)
C4053	0284638	EL 10MF 16V (35TX69K)	C4609	0800059	CAPACITOR POLYESTER FILM 0.15MF 50V (35UX60B)
C4054	0800015	CAPACITOR ELECTROLYTIC 10MF 16V	C4610	0890076	CAPACITOR CERAMIC DISCAL 150PF +10% 50V (35UX60B)
C4055	0800015	CAPACITOR ELECTROLYTIC 10MF 16V	C4611	0880048	CAPACITOR POLYESTER FILM 0.022MF +10% 50V (35UX60B)
C4056	0890069	CAPACITOR CERAMIC DISCAL 47PF +5% 50V	C4612	0890087	CAPACITOR CERAMIC DISCAL 1000PF +10% 50V (35UX60B)
C4057	0890069	CAPACITOR CERAMIC DISCAL 47PF +5% 50V	C4613	0890012	CAPACITOR ELECTROLYTIC 4.7MF 50V (35UX60B)
C4058	0800048	CAPACITOR ELECTROLYTIC 10MF 10V	C4614	0800074	CAPACITOR ELECTROLYTIC 47MF 16V (35UX60B)
C4059	0292712F	TA 3.3MF 16V	C4615	0800012	CAPACITOR ELECTROLYTIC 4.7MF 50V (35UX60B)
C406	0244105	CD 2200PF +10% 50V	C4616	0890087	CAPACITOR CERAMIC DISCAL 1000PF +10% 50V (35UX60B)
C4060	0880057	CAPACITOR POLYESTER FILM 0.1MF +10% 50V	C4617	0880048	CAPACITOR POLYESTER FILM 0.022MF +10% 50V (35UX60B)
C4061	0800041	CAPACITOR ELECTROLYTIC 47MF 16V	C4618	0890076	CAPACITOR CERAMIC DISCAL 150PF +10% 50V (35UX60B)
C4062	0800009	CAPACITOR ELECTROLYTIC 4.7MF 25V	C4619	0800058	CAPACITOR ELECTROLYTIC 220MF 16V (35UX60B)
C4063	0800009	CAPACITOR ELECTROLYTIC 4.7MF 25V	C4620	0800058	CAPACITOR ELECTROLYTIC 220MF 16V (35UX60B)
C4066	0800015	CAPACITOR ELECTROLYTIC 10MF 16V	C4621	0800057	CAPACITOR POLYESTER FILM 0.1MF +10% 50V (35UX60B)
C4067	0800015	CAPACITOR ELECTROLYTIC 10MF 16V	C4622	0800058	CAPACITOR ELECTROLYTIC 220MF 16V (35UX60B)

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SYMBOL NO.	PART NO.	PART DESCRIPTION	SYMBOL NO.	PART NO.	PART DESCRIPTION
C4694	0284638	EL 10MF 16V(35UX60B)	C5511	0800003	CAPACITOR ELECTROLYTIC 1MF 50V
C4695	0880062	CAPACITOR POLYESTER FILM 0.22MF +10% 50V(35UX60B)	C5512	0800003	CAPACITOR ELECTROLYTIC 1MF 50V
C4696	0284638	EL 10MF 16V(35UX60B)	C5513	0800003	CAPACITOR ELECTROLYTIC 1MF 50V
C4697	0890085	CAPACITOR CERAMIC DISCAL 680PF +10% 50V (35UX60B)	C5514	0244171	CD 0.01MF +80-20% 50V
C4698	0800015	CAPACITOR,ELECTROLYTIC 10MF 16V (35UX60B)	C5515	0244171	CD 0.01MF +80-20% 50V
C4699	0284638	EL 10MF 16V(35UX60B)	C5516	0890116	CAPACITOR CERAMIC DISCAL 15PF +5% 50V
C4700	0800041	CAPACITOR ELECTROLYTIC 47MF 16V(35UX60B)	C5517	0800001	CAPACITOR ELECTROLYTIC 0.47MF 50V
C4701	0800105	CAPACITOR ELECTROLYTIC 0.38MF 50V (35UX60B)	C5518	0244171	CD 0.01MF +80-20% 50V
C4702	0880044	CAPACITOR POLYESTER FILM 0.01MF +10% 50V (35UX60B)	C5519	0244171	CD 0.01MF +80-20% 50V
C4703	0800041	CAPACITOR ELECTROLYTIC 47MF 16V (35UX60B)	C5520	0244171	CD 0.01MF +80-20% 50V
C4704	0800003	CAPACITOR ELECTROLYTIC 1MF 50V (35UX60B)	C5521	0244171	CD 0.01MF +80-20% 50V
C4705	0800105	CAPACITOR ELECTROLYTIC 0.38MF 50V(35UX60B)	C5522	0244171	CD 0.01MF +80-20% 50V
C4706	0880044	CAPACITOR POLYESTER FILM 0.01MF +10% 50V (35UX60B)	C5523	0244171	CD 0.01MF +80-20% 50V
C4707	0284638	EL 10MF 16V (35UX60B)	C5524	0244171	CD 0.01MF +80-20% 50V
C4708	0800042	CAPACITOR ELECTROLYTIC 47MF 25V(35UX60B)	C5525	0800015	CAPACITOR,ELECTROLYTIC 10MF 16V
C4709	0800018	CAPACITOR ELECTROLYTIC 10MF 50V(35UX60B)	C5526	0244107	CD 3300PF +10% 50V
C4710	0800018	CAPACITOR ELECTROLYTIC 10MF 50V(35UX60B)	C5527	0244171	CD 0.01MF +80-20% 50V
C4711	0800042	CAPACITOR ELECTROLYTIC 47MF 25V(35UX60B)	C5529	0800003	CAPACITOR ELECTROLYTIC 1MF 50V
C4712	0800059	CAPACITOR ELECTROLYTIC 220MF 25V (35UX60B)	C5530	0890079R	CAPACITOR,CERAMIC DISCAL 270PF +10% 50V
C4713	0800018	CAPACITOR ELECTROLYTIC 10MF 50V (35UX60B)	C5531	0890087	CAPACITOR CERAMIC DISCAL 1000PF +10% 50V
C4714	0252969	EL 220MF 25V (35UX60B)	C5533	0880047	CAPACITOR POLYESTER FILM 0.01MF +10% 50V
C4715	0880057	CAPACITOR POLYESTER FILM 0.1MF +10% 50V(35UX60B)	C5535	0800003	CAPACITOR ELECTROLYTIC 1MF 50V
C4716	0880057	CAPACITOR POLYESTER FILM 0.1MF +10% 50V (35UX60B)	C5537	0880037	CAPACITOR POLYESTER FILM 3300PF +10% 50V
C4717	0880057	CAPACITOR POLYESTER FILM 0.1MF +10% 50V (35UX60B)	C5538	0800049	CAPACITOR,ELECTROLYTIC 100MF 16V
C4718	0800076	CAPACITOR ELECTROLYTIC 470MF 35V(35UX60B)	C5539	0244171	CD 0.01MF +80-20% 50V
C4719	0800076	CAPACITOR ELECTROLYTIC 470MF 35V (35UX60B)	C5540	0800003	CAPACITOR ELECTROLYTIC 1MF 50V
C4722	0800042	CAPACITOR ELECTROLYTIC 47MF 25V(35UX60B)	C5541	0880053	CAPACITOR POLYESTER FILM 0.047MF +10% 50V
C4728	0284638	EL 10MF 16V(35UX60B)	C5545	0880057	CAPACITOR POLYESTER FILM 0.1MF +10% 50V
C4729	0284638	EL 10MF 16V(35UX60B)	C5546	0800049	CAPACITOR,ELECTROLYTIC 100MF 16V
C4731	0880062	CAPACITOR POLYESTER FILM 0.22MF +10% 50V(35UX60B)	C5547	0244171	CD 0.01MF +80-20% 50V
C4732	0284623R	EL 1MF 50V(35UX60B)	C5548	0880057	CAPACITOR POLYESTER FILM 0.1MF +10% 50V
C4733	0284623R	EL 1MF 50V (35UX60B)	C5600	0880057	CAPACITOR POLYESTER FILM 0.1MF +10% 50V
C4734	0880031	CAPACITOR POLYESTER FILM 1000PF +10% 50V(35UX60B)	C624	0800007	CAPACITOR,ELECTROLYTIC 3.3MF 50V
C4735	0880031	CAPACITOR POLYESTER FILM 1000PF +10% 50V (35UX60B)	C625	0800041	CAPACITOR ELECTROLYTIC 47MF 16V
C4736	0800003	CAPACITOR ELECTROLYTIC 1MF 50V(35UX60B)	C626	0292716	TA 1MF +10% 20V
C4740	0880044	CAPACITOR POLYESTER FILM 0.01MF +10% 50V(35UX60B)	C627	0800061	CAPACITOR ELECTROLYTIC 220MF 35V
C4741	0800058	CAPACITOR ELECTROLYTIC 220MF 16V(35UX60B)	C629	0800007	CAPACITOR,ELECTROLYTIC 3.3MF 50V
C4742	0800058	CAPACITOR ELECTROLYTIC 220MF 16V(35UX60B)	C630	0800003	CAPACITOR ELECTROLYTIC 1MF 50V
C5001	0800049	CAPACITOR,ELECTROLYTIC 100MF 16V	C631	0800056	CAPACITOR,ELECTROLYTIC 220MF 6.3V
C5002	0800015	CAPACITOR,ELECTROLYTIC 10MF 16V	C632	0800084	CAPACITOR ELECTROLYTIC 100MF 35V
C5003	0800049	CAPACITOR,ELECTROLYTIC 100MF 16V	C633	0880057	CAPACITOR POLYESTER FILM 0.1MF +10% 50V
C5004	0890122R	CAPACITOR CERAMIC DISCAL 39PF +5% 50V	C635	0890081R	CAPACITOR,CERAMIC DISCAL 330PF +10% 50V
C5005	0880044	CAPACITOR POLYESTER FILM 0.01MF +10% 50V	C650	0800003	CAPACITOR ELECTROLYTIC 1MF 50V
C5006	0246462	CD 82PF +10% 50V	C651	0800005	CAPACITOR,ELECTROLYTIC 2.2MF 50V
C5007	0244171	CD 0.01MF +80-20% 50V	C652	0880042	CAPACITOR POLYESTER FILM 6800PF +10% 50V
C5008	0800049	CAPACITOR,ELECTROLYTIC 100MF 16V	C653	0800041	CAPACITOR ELECTROLYTIC 47MF 16V
C5009	0800049	CAPACITOR,ELECTROLYTIC 100MF 16V	C655	0800018	CAPACITOR ELECTROLYTIC 10MF 50V
C5010	0800041	CAPACITOR ELECTROLYTIC 47MF 16V	C656	0880053	CAPACITOR POLYESTER FILM 0.047MF +10% 50V
C5503	0244171	CD 0.01MF +80-20% 50V	C657	0800005	CAPACITOR,ELECTROLYTIC 2.2MF 50V
C5504	0246448	CD 22PF +5% 50V	C658	0880042	CAPACITOR POLYESTER FILM 6800PF +10% 50V
C5505	0800009	CAPACITOR ELECTROLYTIC 4.7MF 25V	C660	0880057	CAPACITOR POLYESTER FILM 0.1MF +10% 50V
C5506	0800049	CAPACITOR,ELECTROLYTIC 100MF 16V	C714	0880048	CAPACITOR POLYESTER FILM 0.022MF +10% 50V
C5507	0244171	CD 0.01MF +80-20% 50V	C715	0247842	CD 33PF +5% 500V
C5508	0800049	CAPACITOR,ELECTROLYTIC 100MF 16V	C716	0880019	CAPACITOR POLYESTER FILM 0.33MF +10% 50V
C5510	0800049	CAPACITOR,ELECTROLYTIC 100MF 16V	Δ C718	0244213	CD 1500PF +10% 2KV

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SYMBOL NO.	PART NO.	PART DESCRIPTION	SYMBOL NO.	PART NO.	PART DESCRIPTION
Δ C719	0244213	CD 1500PF +10% 2KV	C913	0800084	CAPACITOR ELECTROLYTIC 1000MF 35V
Δ C719A	0244213	CD 1500PF +10% 2KV	Δ C914	0800003	CAPACITOR ELECTROLYTIC 1MF 50V
C720	0244501	CD 1000PF +10% 500V	C915	0880057	CAPACITOR POLYESTER FILM 0.1MF +10% 50V
Δ C721	0262429F	PP 0.012MF +5% 180V	C916	0800049	CAPACITOR,ELECTROLYTIC 100MF 16V
Δ C721A	0244213	CD 1500PF +10% 2KV	C917	0880037	CAPACITOR POLYESTER FILM 3300PF +10% 50V
Δ C722	0299707	PP 0.015MF +10% 630V	C918	0880044	CAPACITOR POLYESTER FILM 0.01MF +10% 50V
C723	0263001	EL 3.3MF 100V	C919	0299001	PP 0.001MF +2% 100V
Δ C724	0299932	PP 0.33MF +10% 200V	C920	0800015	CAPACITOR,ELECTROLYTIC 10MF 16V
Δ C725	0800003	CAPACITOR ELECTROLYTIC 1MF 50V	C921	0890074	CAPACITOR CERAMIC DISCAL 100PF +5% 50V
Δ C726	0299931	PP 0.27MF +10% 200V	C922	0800005	CAPACITOR,ELECTROLYTIC 2.2MF 50V
C730	0800084	CAPACITOR ELECTROLYTIC 1000MF 35V	C923	0890082R	CAPACITOR CERAMIC DISCAL 390PF +10% 50V
C731	0244501	CD 1000PF +10% 500V	C925	0880053	CAPACITOR POLYESTER FILM 0.047MF +10% 50V
C731A	0243506	CD 270PF +10% 500V	C926	0890077	CAPACITOR CERAMIC DISCAL 180PF +10% 50V
C732	0800083	CAPACITOR ELECTROLYTIC 1000MF 25V	C927	0243506	CD 270PF +10% 500V
C733	0800056	CAPACITOR,ELECTROLYTIC 220MF 6.3V	C928	0247856	CD 120PF +5% 500V
C736	0244501	CD 1000PF +10% 500V	C929	0279849	PF 0.015MF +10% 100V
Δ C737	0800021	CAPACITOR ELECTROLYTIC 10MF 100V	C930	0800006	CAPACITOR,ELECTROLYTIC 2.2MF 100V
C738	0253974N	EL 33MF 250V	C935	0244503	CD 1500PF +10% 50V
C739	0800049	CAPACITOR,ELECTROLYTIC 100MF 16V	C936	0243510	CD 560PF +10% 500V
C742	0254823	EL 10MF 160V	C939	0244503	CD 1500PF +10% 50V
C747	0880057	CAPACITOR POLYESTER FILM 0.01MF +10% 50V	C940	0800028	CAPACITOR,ELECTROLYTIC 22MF 100V
C750	0880005	CAPACITOR,ELECTROLYTIC 2.2MF 50V	C941	0880019	CAPACITOR POLYESTER FILM 0.33MF +10% 50V
C751	0800044	CAPACITOR ELECTROLYTIC 47MF 50V	C942	0244171	CD 0.01MF +80-20% 50V
C752	0252417	EL 1MF 50V	C943	0800022	CAPACITOR ELECTROLYTIC 22MF 10V
C753	0800007	CAPACITOR,ELECTROLYTIC 3.3MF 50V	C944	0244171	CD 0.01MF +80-20% 50V
C755	0880062	CAPACITOR POLYESTER FILM 0.22MF +10% 50V	C945	0800022	CAPACITOR ELECTROLYTIC 22MF 10V
C756	0244505	CD 2200PF +10% 500V	C946	0244505	CD 2200PF +10% 500V
C763	0259171	EL 4.7MF 250V	C947	0800083	CAPACITOR ELECTROLYTIC 1000MF 25V
C764	0259171	EL 4.7MF 250V	C948	0800015	CAPACITOR,ELECTROLYTIC 10MF 16V
C851	0800049	CAPACITOR,CERAMIC DISCAL 100MF 16V	C949	0890087	CAPACITOR CERAMIC DISCAL 1000PF +10% 50V
C852	0890087	CAPACITOR CERAMIC DISCAL 1000PF +10% 50V	C953	0800049	CAPACITOR,ELECTROLYTIC 100MF 16V
C853	0257540	EL 4.7MF 250V	C954	0800083	CAPACITOR ELECTROLYTIC 1000MF 25V
C856	0244729F	CD 2200PF +10% 2KV	C961	0800016	CAPACITOR ELECTROLYTIC 10MF 25V
C860	0890087	CAPACITOR,CERAMIC DISCAL 1000PF +10% 50V	C963	0800016	CAPACITOR ELECTROLYTIC 10MF 25V
C861	0890087	CAPACITOR,CERAMIC DISCAL 1000PF +10% 50V	Δ C969	0249391	CD 1000PF +10% 125V
C962	0890087	CAPACITOR,CERAMIC DISCAL 1000PF +10% 50V	C970	0244556	CD 4700PF

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SYMBOL NO.	PART NO.	PART DESCRIPTION	SYMBOL NO.	PART NO.	PART DESCRIPTION
R0015	0700051	RESISTOR,CARBON FILM 5.6K OHM +5% 1/16W	R0082	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W
R0016	0700051	RESISTOR,CARBON FILM 5.6K OHM +5% 1/16W	R0083	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W
R0017	0700049	RESISTOR,CARBON FILM 4.7K OHM +5% 1/16W	R0084	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W
R0018	0700053	RESISTOR,CARBON FILM 8.2K OHM +5% 1/16W	R0085	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W (35UX60B)
R0019	0700055	RESISTOR,CARBON FILM 12K OHM +5% 1/16W	R0086	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W (35UX60B)
R0021	0700053	RESISTOR,CARBON FILM 8.2K OHM +5% 1/16W (35UX60B)	R0087	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W
R0022	0700045	RESISTOR,CARBON FILM 2.2K OHM +5% 1/16W (35UX60B)	R0088	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W
R0031	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W	R0089	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W
R0032	0700067	RESISTOR,CARBON FILM 100K OHM +5% 1/16W	R0090	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W
R0033	0700027	RESISTOR,CARBON FILM 100 OHM +5% 1/16W	R0091	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W
R0034	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W	R0092	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W
R0035	0700067	RESISTOR,CARBON FILM 100K OHM +5% 1/16W	R0093	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W
R0036	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W	R0094	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W
R0037	0700067	RESISTOR,CARBON FILM 100K OHM +5% 1/16W	R0095	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W
R0038	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W	R0096	0700049	RESISTOR,CARBON FILM 4.7K OHM +5% 1/16W
R0039	0700058	RESISTOR,CARBON FILM 22K OHM +5% 1/16W	R0097	0700058	RESISTOR,CARBON FILM 22K OHM +5% 1/16W
R0040	0700067	RESISTOR,CARBON FILM 100K OHM +5% 1/16W	R0098	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W
R0041	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W	R0099	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W
R0042	0700067	RESISTOR,CARBON FILM 100K OHM +5% 1/16W	R0100	0700045	RESISTOR,CARBON FILM 2.2K OHM +5% 1/16W
R0043	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W	R0101	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W
R0044	0700067	RESISTOR,CARBON FILM 100K OHM +5% 1/16W	R0102	0700058	RESISTOR,CARBON FILM 22K OHM +5% 1/16W
R0045	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W	R0103	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W
R0046	0700067	RESISTOR,CARBON FILM 100K OHM +5% 1/16W	R0104	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W
R0047	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W	R0105	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W
R0048	0700067	RESISTOR,CARBON FILM 100K OHM +5% 1/16W	R0106	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W
R0049	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W	R0107	0700051	RESISTOR,CARBON FILM 5.6K OHM +5% 1/16W
R0050	0700067	RESISTOR,CARBON FILM 100K OHM +5% 1/16W	R0108	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W
R0051	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W	R0109	0700051	RESISTOR,CARBON FILM 5.6K OHM +5% 1/16W
R0052	0700067	RESISTOR,CARBON FILM 100K OHM +5% 1/16W	R0110	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W
R0053	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W	R0111	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W
R0054	0700049	RESISTOR,CARBON FILM 4.7K OHM +5% 1/16W	R0112	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W
R0055	0700045	RESISTOR,CARBON FILM 2.2K OHM +5% 1/16W	R0113	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W
R0056	0700051	RESISTOR,CARBON FILM 5.6K OHM +5% 1/16W	R0114	0700058	RESISTOR,CARBON FILM 22K OHM +5% 1/16W
R0057	0700064	RESISTOR,CARBON FILM 56K OHM +5% 1/16W	R0115	0700058	RESISTOR,CARBON FILM 22K OHM +5% 1/16W
R0059	0700049	RESISTOR,CARBON FILM 4.7K OHM +5% 1/16W	R0116	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W
R0060	0700049	RESISTOR,CARBON FILM 4.7K OHM +5% 1/16W	R0117	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W
R0061	0700058	RESISTOR,CARBON FILM 22K OHM +5% 1/16W	R0118	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W
R0062	0700067	RESISTOR,CARBON FILM 100K OHM +5% 1/16W	R0120	0700027	RESISTOR,CARBON FILM 100 OHM +5% 1/16W
R0063	0700031	RESISTOR,CARBON FILM 180 OHM +5% 1/16W	R0121	0700027	RESISTOR,CARBON FILM 100 OHM +5% 1/16W
R0064	0700066	RESISTOR,CARBON FILM 82K OHM +5% 1/16W	R0122	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W
R0065	0700064	RESISTOR,CARBON FILM 56K OHM +5% 1/16W	R0123	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W
R0067	0700066	RESISTOR,CARBON FILM 82K OHM +5% 1/16W	R0124	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W
R0068	0700063	RESISTOR,CARBON FILM 47K OHM +5% 1/16W	R0125	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W
R0069	0700054	RESISTOR,CARBON FILM 10K OHM +5% 1/16W	R0126	0700065	RESISTOR,CARBON FILM 56K OHM +5% 1/16W
R0070	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W	R0127	0119635	MF 15K OHM +1% 1/8W
R0071	0700058	RESISTOR,CARBON FILM 22K OHM +5% 1/16W	R0128	0700034	RESISTOR,CARBON FILM 339 OHM +5% 1/16W
R0073	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W	R0129	0700037	RESISTOR,CARBON FILM 560 OHM +5% 1/16W
R0074	0700067	RESISTOR,CARBON FILM 100K OHM +5% 1/16W	R0130	0700057	RESISTOR,CARBON FILM 18K OHM +5% 1/16W
R0075	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W	R0131	0700027	RESISTOR,CARBON FILM 100 OHM +5% 1/16W
R0076	0700067	RESISTOR,CARBON FILM 100K OHM +5% 1/16W	R0132	0700022	RESISTOR,CARBON FILM 39 OHM +5% 1/16W
R0077	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W	R0133	0100065	CF 1K OHM +5% 1/8W
R0078	0700067	RESISTOR,CARBON FILM 100K OHM +5% 1/16W	R0136	0700064	RESISTOR,CARBON FILM 56K OHM +5% 1/16W
R0079	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W	R0137	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W
R0080	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W (35UX60B)	R0138	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W
R0081	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W	R0139	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W

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SYMBOL NO.	PART NO.	PART DESCRIPTION	SYMBOL NO.	PART NO.	PART DESCRIPTION
R0140	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W	R0216	0700054	RESISTOR,CARBON FILM 10K OHM +5% 1/16W
R0141	0700054	RESISTOR,CARBON FILM 10K OHM +5% 1/16W	R0220	0700055	RESISTOR,CARBON FILM 12K OHM +5% 1/16W
R0146	0100053	CF 330 OHM +5% 1/8W	R0225	0700054	RESISTOR,CARBON FILM 10K OHM +5% 1/16W
R0151	0100067	CF 1.2K OHM +5% 1/8W	R0229	0100121	CF 220K OHM +5% 1/8W
R0152	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W	R0233	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W
R0153	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W	R0234	0700049	RESISTOR,CARBON FILM 4.7K OHM +5% 1/16W (35UX60B)
R0154	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W	R0235	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W
R0155	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W	R0501	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W
R0159	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W	R0502	0700058	RESISTOR,CARBON FILM 22K OHM +5% 1/16W
R0161	0700056	RESISTOR,CARBON FILM 15K OHM +5% 1/16W	R0503	0700045	RESISTOR,CARBON FILM 2.2K OHM +5% 1/16W
R0162	0700051	RESISTOR,CARBON FILM 5.6K OHM +5% 1/16W	R0504	0100065	CF 1K OHM +5% 1/8W
R0163	0700056	RESISTOR,CARBON FILM 15K OHM +5% 1/16W	R0510	0100125	CF 330K OHM +5% 1/8W
R0164	0700054	RESISTOR,CARBON FILM 10K OHM +5% 1/16W	R0511	0700041	RESISTOR,CARBON FILM 1K CHM +5% 1/16W
R0165	0700061	RESISTOR,CARBON FILM 33K OHM +5% 1/16W	R0512	0100125	CF 330K OHM +5% 1/8W
R0166	0700066	RESISTOR,CARBON FILM 82K OHM +5% 1/16W	R0513	0100129	CF 470K OHM +5% 1/8W
R0167	0700054	RESISTOR,CARBON FILM 10K OHM +5% 1/16W	R0516	0700041	RESISTOR,CARBON FILM 1K CHM +5% 1/16W
R0168	0100065	CF 1K OHM +5% 1/8W	R0517	0700043	RESISTOR,CARBON FILM 1.5K OHM +5% 1/16W
R0169	0700064	RESISTOR,CARBON FILM 56K OHM +5% 1/16W	R0518	0187074	CF 2.4K OHM +5% 1/16W
R0170	0100097	CF 22K OHM +5% 1/8W	R0519	0187080	CF 4.3K OHM +5% 1/16W
R0171	0100066	CF 1.1K OHM +5% 1/8W	R0520	0100065	CF 1K OHM +5% 1/8W
R0173	0100065	CF 1K OHM +5% 1/8W	R0530	0100115	CF 120K OHM +5% 1/8W
R0174	0100065	CF 1K OHM +5% 1/8W	R0531	0700046	RESISTOR,CARBON FILM 2.7K OHM +5% 1/16W
R0176	0100065	CF 1K OHM +5% 1/8W(35UX60B)	R0532	0700052	RESISTOR,CARBON FILM 6.8K OHM +5% 1/16W
R0177	0700054	RESISTOR,CARBON FILM 10K OHM +5% 1/16W(35UX60B)	R0533	0700044	RESISTOR,CARBON FILM 1.8K OHM +5% 1/16W
R0178	0700065	RESISTOR,CARBON FILM 68K OHM +5% 1/16W(35UX60B)	R0536	0700057	RESISTOR,CARBON FILM 18K OHM +5% 1/16W
R0179	0700054	RESISTOR,CARBON FILM 10K OHM +5% 1/16W(35UX60B)	R0537	0100121	CF 220K OHM +5% 1/8W
R0180	0100065	CF 1K OHM +5% 1/8W	R0538	0700061	RESISTOR,CARBON FILM 33K OHM +5% 1/16W
R0182	0700022	RESISTOR,CARBON FILM 39 OHM +5% 1/16W	R0539	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W
R0186	0700051	RESISTOR,CARBON FILM 5.6K OHM +5% 1/16W	R0568	0700054	RESISTOR,CARBON FILM 10K OHM +5% 1/16W
R0187	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W	R3006	0700027	RESISTOR,CARBON FILM 10

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SYMBOL NO.	PART NO.	PART DESCRIPTION	SYMBOL NO.	PART NO.	PART DESCRIPTION
R3058	0700027	RESISTOR,CARBON FILM 100 OHM +5% 1/16W (35UX60B)	R3137	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W (35TX69K)
R3059	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W	R3138	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W(35TX69K)
R3060	0700027	RESISTOR,CARBON FILM 100 OHM +5% 1/16W(35UX60B)	R3504	0700051	RESISTOR,CARBON FILM 5.6K OHM +5% 1/16W
R3061	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W	R3505	0700051	RESISTOR,CARBON FILM 5.6K OHM +5% 1/16W
R3062	0700027	RESISTOR,CARBON FILM 100 OHM +5% 1/16W	R3507	0700029	RESISTOR,CARBON FILM 150 OHM +5% 1/16W
R3064	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W	R3512	0700059	RESISTOR,CARBON FILM 27K OHM +5% 1/16W
R3065	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W	R3513	0700029	RESISTOR,CARBON FILM 150 OHM +5% 1/16W
R3066	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W	R3514	0700061	RESISTOR,CARBON FILM 33K OHM +5% 1/16W
R3075	0700027	RESISTOR,CARBON FILM 100 OHM +5% 1/16W	R3516	0700032	RESISTOR,CARBON FILM 220 OHM +5% 1/16W (35UX60B)
R3076	0700027	RESISTOR,CARBON FILM 100 OHM +5% 1/16W	R3517	0100055	CF 390 OHM +5% 1/8W
R3077	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W	R3524	0100059	CF 560 OHM +5% 1/8W(35UX60B)
R3078	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W	R3527	0700067	RESISTOR,CARBON FILM 100K OHM +5% 1/16W
R3079	0700027	RESISTOR,CARBON FILM 100 OHM +5% 1/16W	R3528	0700058	RESISTOR,CARBON FILM 22K OHM +5% 1/16W
R3080	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W	R3529	0700058	RESISTOR,CARBON FILM 22K OHM +5% 1/16W
R3081	0700027	RESISTOR,CARBON FILM 100 OHM +5% 1/16W	R3531	0700029	RESISTOR,CARBON FILM 150 OHM +5% 1/16W
R3082	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W	R3533	0700061	RESISTOR,CARBON FILM 33K OHM +5% 1/16W
R3083	0700027	RESISTOR,CARBON FILM 100 OHM +5% 1/16W	R3534	0700047	RESISTOR,CARBON FILM 3.3K OHM +5% 1/16W
R3084	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W	R3535	0100041	CF 100 OHM +5% 1/8W(35UX60B)
R3085	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W	R3536	0700065	RESISTOR,CARBON FILM 68K OHM +5% 1/16W
R3086	0187038	CF 75 OHM +5% 1/16W	R3538	0700058	RESISTOR,CARBON FILM 22K OHM +5% 1/16W
R3087	0100123	CF 270K OHM +5% 1/8W	R3539	0700054	RESISTOR,CARBON FILM 10K OHM +5% 1/16W
R3088	0100123	CF 270K OHM +5% 1/8W	R3540	0150137	VR 10K OHM-B
R3089	0187038	CF 75 OHM +5% 1/16W	R3541	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W
R3090	0187038	CF 75 OHM +5% 1/16W	R3542	0700052	RESISTOR,CARBON FILM 6.8K OHM +5% 1/16W
R3091	0187038	CF 75 OHM +5% 1/16W	R3543	0700059	RESISTOR,CARBON FILM 27K OHM +5% 1/16W
R3092	0100123	CF 270K OHM +5% 1/8W	R3546	0700056	RESISTOR,CARBON FILM 15K OHM +5% 1/16W
R3093	0100123	CF 270K OHM +5% 1/8W	R3547	0700048	RESISTOR,CARBON FILM 3.9K OHM +5% 1/16W
R3094	0700067	RESISTOR,CARBON FILM 100K OHM +5% 1/16W	R3549	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W
R3095	0700067	RESISTOR,CARBON FILM 100K OHM +5% 1/16W	R3550	0700054	RESISTOR,CARBON FILM 10K OHM +5% 1/16W
R3096	0700067	RESISTOR,CARBON FILM 100K OHM +5% 1/16W	R3551	0700058	RESISTOR,CARBON FILM 22K OHM +5% 1/16W
R3097	0187036M	CF 62 OHM +5% 1/16W	R3552	0700058	RESISTOR,CARBON FILM 22K OHM +5% 1/16W
R3098	0114141	CF 270 OHM +5% 1/4W	R3553	0700023	RESISTOR,CARBON FILM 47 OHM +5% 1/16W
R3099	0700034	RESISTOR,CARBON FILM 330 OHM +5% 1/16W	R3554	0700044	RESISTOR,CARBON FILM 1.8K OHM +5% 1/16W
R3100	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W	R3558	0700029	RESISTOR,CARBON FILM 150 OHM +5% 1/16W
R3101	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W	R3559	0700061	RESISTOR,CARBON FILM 33K OHM +5% 1/16W
R3112	0100041	CF 100 OHM +5% 1/8W	R3560	0187088	CF 9.1K OHM +5% 1/16W
R3113	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W	R3561	0700059	RESISTOR,CARBON FILM 27K OHM +5% 1/16W
R3114	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W	R3562	0700067	RESISTOR,CARBON FILM 100K OHM +5% 1/16W
R3115	0100041	CF 100 OHM +5% 1/8W (35UX60B)	R3563	0700049	RESISTOR,CARBON FILM 4.7K OHM +5% 1/16W
R3116	0100041	CF 100 OHM +5% 1/8W (35UX60B)	R3564	0700058	RESISTOR,CARBON FILM 22K OHM +5% 1/16W
R3117	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W	R3566	0150138	VR 20K OHM-B
R3118	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W	R3567	0700049	RESISTOR,CARBON FILM 4.7K OHM +5% 1/16W
R3119	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W	R3568	0700045	RESISTOR,CARBON FILM 2.2K OHM +5% 1/16W
R3121	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W (35UX60B)	R3570	0700051	RESISTOR,CARBON FILM 5.6K OHM +5% 1/16W
R3122	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W (35UX60B)	R3571	0700065	RESISTOR,CARBON FILM 5.6K OHM +5% 1/16W
R3123	0700027	RESISTOR,CARBON FILM 100 OHM +5% 1/16W	R3572	0700047	RESISTOR,CARBON FILM 3.3K OHM +5% 1/16W
R3125	0700027	RESISTOR,CARBON FILM 100 OHM +5% 1/16W (35UX60B)	R3573	0700059	RESISTOR,CARBON FILM 27K OHM +5% 1/16W
R3127	0700027	RESISTOR,CARBON FILM 100 OHM +5% 1/16W (35UX60B)	R3574	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W
R3128	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W	R3575	0700029	RESISTOR,CARBON FILM 150 OHM +5% 1/16W
R3129	0700067	RESISTOR,CARBON FILM 100K OHM +5% 1/16W	R3576	0700061	RESISTOR,CARBON FILM 33K OHM +5% 1/16W
R3130	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W	R3577	0700029	RESISTOR,CARBON FILM 150 OHM +5% 1/16W
R3131	0700054	RESISTOR,CARBON FILM 10K OHM +5% 1/16W	R3578	0100127	CF 390K OHM +5% 1/8W
R3134	0700034	RESISTOR,CARBON FILM 330 OHM +5% 1/16W	R3579	0700029	RESISTOR,CARBON FILM 150 OHM +5% 1/16W
R3135	0700067	PESISTOR,CARBON FILM 100K OHM +5% 1/16W	R3580	0700058	RESISTOR,CARBON FILM 22K OHM +5% 1/16W
R3136	0700067	RESISTOR,CARBON FILM 100K OHM +5% 1/16W	R3581	0700067	RESISTOR,CARBON FILM 100K OHM +5% 1/16W

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SYMBOL NO.	PART NO.	PART DESCRIPTION	SYMBOL NO.	PART NO.	PART DESCRIPTION
R3584	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W	R3718	0700036	RESISTOR,CARBON FILM 470 OHM +5% 1/16W(35UX60B)
R3586	0700054	RESISTOR,CARBON FILM 10K OHM +5% 1/16W	R3719	0700023	RESISTOR,CARBON FILM 47 OHM +5% 1/16W(35UX60B)
R3588	0700054	RESISTOR,CARBON FILM 10K OHM +5% 1/16W	R3720	0700044	RESISTOR,CARBON FILM 1.8K OHM +5% 1/16W (35UX60B)
R3589	0700058	RESISTOR,CARBON FILM 22K OHM +5% 1/16W	R3721	0113701	CF 10 OHM +5% 1/2W(35UX60B)
R3590	0700054	RESISTOR,CARBON FILM 10K OHM +5% 1/16W	R3722	0100039	CF 82 OHM +5% 1/8W(35UX60B)
R3591	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W	R3723	0100039	CF 82 OHM +5% 1/8W(35UX60B)
R3593	0187078	CF 3.6K OHM +5% 1/16W	R3724	0114165	CF 1.5K OHM +5% 1/4W(35UX60B)
R3594	0700034	RESISTOR,CARBON FILM 330 OHM +5% 1/16W	R3725	0100069	CF 1.5K OHM +5% 1/8W(35UX60B)
R3596	0700043	RESISTOR,CARBON FILM 1.5K OHM +5% 1/16W	R3726	0114163	CF 1.2K OHM +5% 1/4W/35UX60B)
R3597	0700029	RESISTOR,CARBON FILM 150 OHM +5% 1/16W	R3727	0101009	CF 68K OHM +5% 1/8W(35UX60B)
R3598	0100037	CF 68 OHM +5% 1/8W	R3728	0101019	CF 68K OHM +5% 1/8W(35UX60B)
R3599	0100045	CF 150 OHM +5% 1/8W	R3729	0100067	CF 1.2K OHM +5% 1/8W (35UX60B)
R3600	0137563	CF 330 OHM +5% 1/4W	R3730	0100091	CF 12K OHM +5% 1/8W (35UX60B)
R3601	0700058	RESISTOR,CARBON FILM 22K OHM +5% 1/16W	R3731	0113716	CF 43 OHM +5% 1/2W (35UX60B)
R3602	0700014	RESISTOR,CARBON FILM 10 OHM +5% 1/16W	R3732	0113716	CF 43 OHM +5% 1/2W(35UX60B)
R3606	0100065	CF 1K OHM +5% 1/8W	R3733	0113686	CF 2.7 OHM +5% 1/2W (35UX60B)
R3607	0100065	CF 1K OHM +5% 1/8W	R3734	0113686	CF 2.7 OHM +5% 1/2W(35UX60B)
R3608	0100065	CF 1K OHM +5% 1/8W	R3735	0110229	MF 220 OHM +5% 2W(35UX60B)
R3609	0700058	RESISTOR,CARBON FILM 22K OHM +5% 1/16W	R3736	0110139	MF 560 OHM +5% 1W(35UX60B)
R3610	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W	R3737	0110132	MF 300 OHM +5% 1W(35UX60B)
R3611	0700039	RESISTOR,CARBON FILM 820 OHM +5% 1/16W	R3738	0700055	RESISTOR,CARBON FILM 12K OHM +5% 1/16W (35UX60B)
R3625	0700027	RESISTOR,CARBON FILM 100 OHM +5% 1/16W	R3739	0700061	RESISTOR,CARBON FILM 33K OHM +5% 1/16W (35UX60B)
R3630	0100131	CF 560K OHM +5% 1/8W	R3740	0100041	CF 100 OHM +5% 1/8W (35UX60B)
R3631	0179536	MG 1M OHM +5% 1/8W	R3801	0187038	CF 75 OHM +5% 1/16W
R3632	0100121	CF 220K OHM +5% 1/8W	R3802	0700041	CF 100 OHM +5% 1/8W
R3633	0700034	RESISTOR,CARBON FILM 330 OHM +5% 1/16W	R3803	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W
R3634	0700034	RESISTOR,CARBON FILM 330 OHM +5% 1/16W	R3804	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W
R3635	0700045	RESISTOR,CARBON FILM 2.2K OHM +5% 1/16W	R3805	0100123	CF 270K OHM +5% 1/8W
R3637	0700036	RESISTOR,CARBON FILM 470 OHM +5% 1/16W	R3806	0700064	RESISTOR,CARBON FILM 56K OHM +5% 1/16W
R3638	0187082	CF 5.1K OHM +5% 1/16W	R3807	0700047	RESISTOR,CARBON FILM 3.3K OHM +5% 1/16W
R3639	0700036	RESISTOR,CARBON FILM 470 OHM +5%			

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SYMBOL NO.	PART NO.	PART DESCRIPTION	SYMBOL NO.	PART NO.	PART DESCRIPTION
R4014	0700049	RESISTOR,CARBON FILM 4.7K OHM +5% 1/16W	R4091	0100047	CF 180 OHM +5% 1/8W
R4015	0700045	RESISTOR,CARBON FILM 2.2K OHM +5% 1/16W	R4092	0700054	RESISTOR,CARBON FILM 10K OHM +5% 1/16W
R4016	0700051	RESISTOR,CARBON FILM 5.6K OHM +5% 1/16W	R4095	0700054	RESISTOR,CARBON FILM 10K OHM +5% 1/16W
R4017	0700038	RESISTOR,CARBON FILM 680 OHM +5% 1/16W	R4096	0700054	RESISTOR,CARBON FILM 10K OHM +5% 1/16W
R4018	0700049	RESISTOR,CARBON FILM 4.7K OHM +5% 1/16W	R4103	0700054	RESISTOR,CARBON FILM 10K OHM +5% 1/16W
R4019	0700063	RESISTOR,CARBON FILM 47K OHM +5% 1/16W	R4104	0700027	RESISTOR,CARBON FILM 100 OHM +5% 1/16W
R402	0700051	RESISTOR,CARBON FILM 5.6K OHM +5% 1/16W	R4105	0700027	RESISTOR,CARBON FILM 100 OHM +5% 1/16W
R4020	0700057	RESISTOR,CARBON FILM 18K OHM +5% 1/16W	R4106	0700061	RESISTOR,CARBON FILM 33K OHM +5% 1/16W
R4021	0700047	RESISTOR,CARBON FILM 3.3K OHM +5% 1/16W	R4107	0700058	RESISTOR,CARBON FILM 22K OHM +5% 1/16W
R4022	0700037	RESISTOR,CARBON FILM 560 OHM +5% 1/16W	R4108	0700038	RESISTOR,CARBON FILM 680 OHM +5% 1/16W
R4023	0700038	RESISTOR,CARBON FILM 680 OHM +5% 1/16W	R4109	0700049	RESISTOR,CARBON FILM 4.7K OHM +5% 1/16W
R4024	0100115	CF 120K OHM +5% 1/8W	R4110	0700038	RESISTOR,CARBON FILM 680 OHM +5% 1/16W
R4025	0700049	RESISTOR,CARBON FILM 4.7K OHM +5% 1/16W	R4111	0700049	RESISTOR,CARBON FILM 4.7K OHM +5% 1/16W
R4028	0700066	RESISTOR,CARBON FILM 82K OHM +5% 1/16W	R4112	0100117	CF 150K OHM +5% 1/8W
R4032	0700051	RESISTOR,CARBON FILM 5.6K OHM +5% 1/16W	R4113	0100116	CF 130K OHM +5% 1/8W
R4033	0700049	RESISTOR,CARBON FILM 4.7K OHM +5% 1/16W	R4114	0101060	VR 10K OHM B+30%
R4034	0700045	RESISTOR,CARBON FILM 2.2K OHM +5% 1/16W	R4119	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W
R4035	0700049	RESISTOR,CARBON FILM 4.7K OHM +5% 1/16W	R4120	0700062	RESISTOR,CARBON FILM 39K OHM +5% 1/16W
R4036	0700038	RESISTOR,CARBON FILM 680 OHM +5% 1/16W	R4122	0700045	RESISTOR,CARBON FILM 22K OHM +5% 1/16W (35TX69K)
R4037	0700063	RESISTOR,CARBON FILM 47K OHM +5% 1/16W	R4123	0700058	RESISTOR,CARBON FILM 22K OHM +5% 1/16W
R4038	0700057	RESISTOR,CARBON FILM 13K OHM +5% 1/16W	R4124	0700054	RESISTOR,CARBON FILM 10K OHM +5% 1/16W
R4039	0700047	RESISTOR,CARBON FILM 3.3K OHM +5% 1/16W	R4125	0700032	RESISTOR,CARBON FILM 220 OHM +5% 1/16W
R404	0700051	RESISTOR,CARBON FILM 5.6K OHM +5% 1/16W	R4126	0700067	RESISTOR,CARBON FILM 100K OHM +5% 1/16W
R4040	0700037	RESISTOR,CARBON FILM 560 OHM +5% 1/16W	R4127	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W
R4041	0700038	RESISTOR,CARBON FILM 680 OHM +5% 1/16W	R4129	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W
R4042	0100115	CF 120K OHM +5% 1/8W	R4131	01195051	FR 2.2 OHM +5% 1/4W
R4043	0700066	RESISTOR,CARBON FILM 82K OHM +5% 1/16W	R4130	0700062	RESISTOR,CARBON FILM 39K OHM +5% 1/16W
R4044	0700066	RESISTOR,CARBON FILM 82K OHM +5% 1/16W	R4131	0700054	RESISTOR,CARBON FILM 10K OHM +5% 1/16W
R4048	0700049	RESISTOR,CARBON FILM 4.7K OHM +5% 1/16W	R4132	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W
R4051	0700054	RESISTOR,CARBON FILM 10K OHM +5% 1/16W	R4133	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W
R4052	0700054	RESISTOR,CARBON FILM 10K OHM +5% 1/16W	R4134	0700034	RESISTOR,CARBON FILM 330 OHM +5% 1/16W
R4053	0700066	RESISTOR,CARBON FILM 82K OHM +5% 1/16W	R4135	0700032	RESISTOR,CARBON FILM 220 OHM +5% 1/16W
R407	0700065	RESISTOR,CARBON FILM 68K OHM +5% 1/16W	R4136	0700067	RESISTOR,CARBON FILM 100K OHM +5% 1/16W
R4070	0700045	RESISTOR,CARBON FILM 2.2K OHM +5% 1/16W	R4137	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W
R4071	0700045	RESISTOR,CARBON FILM 2.2K OHM +5% 1/16W	R4138	0700054	RESISTOR,CARBON FILM 10K OHM +5% 1/16W
R4072	0700053	RESISTOR,CARBON FILM 8.2K OHM +5% 1/16W (35TX69K)	R4139	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W
R4073	0700054	RESISTOR,CARBON FILM 10K OHM +5% 1/16W (35TX69K)	R4140	0700031	RESISTOR,CARBON FILM 1K OHM +5% 1/16W
R4074	0700054	RESISTOR,CARBON FILM 10K OHM +5% 1/16W (35TX69K)	R4141	0700034	RESISTOR,CARBON FILM 330 OHM +5% 1/16W
R4075	0700045	RESISTOR,CARBON FILM 2.2K OHM +5% 1/16W (35TX69K)	R4142	0700045	RESISTOR,CARBON FILM 2.2K OHM +5% 1/16W
R4076	0700043	RESISTOR,CARBON FILM 1.5K OHM +5% 1/16W (35TX69K)	R4143	0700045	RESISTOR,CARBON FILM 2.2K OHM +5% 1/16W
R4077	0700051	RESISTOR,CARBON FILM 5.6K OHM +5% 1/16W (35TX69K)	R4144	0700063	RESISTOR,CARBON FILM 47K OHM +5% 1/16W
R4078	0700051	RESISTOR,CARBON FILM 5.6K OHM +5% 1/16W (35TX69K)	R4145	0700061	RESISTOR,CARBON FILM 33K OHM +5% 1/16W
R4079	0700027	RESISTOR,CARBON FILM 100 OHM +5% 1/16W (35TX69K)	R4146	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W
R4080	0700027	RESISTOR,CARBON FILM 100 OHM +5% 1/16W (35TX69K)	R4147	0700045	RESISTOR,CARBON FILM 2.2K OHM +5% 1/16W
R4081	0700045	RESISTOR,CARBON FILM 2.2K OHM +5% 1/16W (35TX69K)	R4148	0700063	RESISTOR,CARBON FILM 47K OHM +5% 1/16W
R4082	0700045	RESISTOR,CARBON FILM 2.2K OHM +5% 1/16W (35TX69K)	R4149	0700061	RESISTOR,CARBON FILM 33K OHM +5% 1/16W
R4083	0700059	RESISTOR,CARBON FILM 27K OHM +5% 1/16W (35TX69K)	R4150	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W
R4084	0700059	RESISTOR,CARBON FILM 27K OHM +5% 1/16W (35TX69K)	R4151	0700045	RESISTOR,CARBON FILM 2.2K OHM +5% 1/16W
R4085	0187048	CF 200 OHM +5% 1/16W (35TX69K)	R4152	0700029	RESISTOR,CARBON FILM 150 OHM +5% 1/16W
R4086	0187048	CF 200 OHM +5% 1/16W (35TX69K)	R4153	0700029	RESISTOR,CARBON FILM 150 OHM +5% 1/16W
R4087	0700045	RESISTOR,CARBON FILM 2.2K OHM +5% 1/16W (35TX69K)	R4156	0700054	RESISTOR,CARBON FILM 10K OHM +5% 1/16W
R4088	0700036	RESISTOR,CARBON FILM 470 OHM +5% 1/16W (35TX69K)	R4157	0700045	RESISTOR,CARBON FILM 2.2K OHM +5% 1/16W
R4089	0700048	RESISTOR,CARBON FILM 3.9K OHM +5% 1/16W	R4161	01195051	FR 2.2 OHM +5% 1/4W
R409	0700036	RESISTOR,CARBON FILM 470 OHM +5% 1/16W	R4160	0700054	RESISTOR,CARBON FILM 10K OHM +5% 1/16W
R4090	0700048	RESISTOR,CARBON FILM 3.9K OHM +5% 1/16W	R4161	0700045	RESISTOR,CARBON FILM 2.2K OHM +5% 1/16W

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SYMBOL NO.	PART NO.	PART DESCRIPTION	SYMBOL NO.	PART NO.	PART DESCRIPTION
R4162	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W	R4662	0700064	RESISTOR,CARBON FILM 56K OHM +5% 1/16W (35UX60B)
R4163	0700046	RESISTOR,CARBON FILM 2.7K OHM +5% 1/16W	R4663	0700063	RESISTOR,CARBON FILM 47K OHM +5% 1/16W (35UX60B)
R4164	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W	R4664	0700063	RESISTOR,CARBON FILM 47K OHM +5% 1/16W (35UX60B)
R4165	0700046	RESISTOR,CARBON FILM 2.7K OHM +5% 1/16W	R4665	0700067	RESISTOR,CARBON FILM 100K OHM +5% 1/16W (35UX60B)
R417	0114161	CF 1K OHM +5% 1/4W	R4666	0700054	RESISTOR,CARBON FILM 10K OHM +5% 1/16W (35UX60B)
R419	0114161	CF 1K OHM +5% 1/4W	R4667	0700054	RESISTOR,CARBON FILM 10K OHM +5% 1/16W (35UX60B)
R420	0700065	RESISTOR,CARBON FILM 68K OHM +5% 1/16W	R4668	0700054	RESISTOR,CARBON FILM 10K OHM +5% 1/16W (35UX60B)
R422	0700065	RESISTOR,CARBON FILM 68K OHM +5% 1/16W	R4669	0700063	RESISTOR,CARBON FILM 18K OHM +5% 1/16W (35UX60B)
R423	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W	R4670	0700057	RESISTOR,CARBON FILM 18K OHM +5% 1/16W (35UX60B)
R425	0700063	RESISTOR,CARBON FILM 47K OHM +5% 1/16W	R4671	0700057	RESISTOR,CARBON FILM 18K OHM +5% 1/16W (35UX60B)
R426	0700067	RESISTOR,CARBON FILM 100K OHM +5% 1/16W	R4672	0700067	RESISTOR,CARBON FILM 100K OHM +5% 1/16W (35UX60B)
R428	0700058	RESISTOR,CARBON FILM 22K OHM +5% 1/16W	R4673	0700067	RESISTOR,CARBON FILM 100K OHM +5% 1/16W (35UX60B)
R437	0700063	RESISTOR,CARBON FILM 47K OHM +5% 1/16W	R4688	0700027	RESISTOR,CARBON FILM 100 OHM +5% 1/16W (35UX60B)
R438	0700061	RESISTOR,CARBON FILM 33K OHM +5% 1/16W	R4689	0700027	RESISTOR,CARBON FILM 100 OHM +5% 1/16W (35UX60B)
R439	0700054	RESISTOR,CARBON FILM 10K OHM +5% 1/16W	R4690	0700027	RESISTOR,CARBON FILM 100 OHM +5% 1/16W (35UX60B)
R440	0700054	RESISTOR,CARBON FILM 10K OHM +5% 1/16W	R4691	0700027	RESISTOR,CARBON FILM 100 OHM +5% 1/16W (35UX60B)
R441	0700054	RESISTOR,CARBON FILM 10K OHM +5% 1/16W	R4692	0700062	RESISTOR,CARBON FILM 39K OHM +5% 1/16W (35UX60B)
R442	01195051	FR 2.2 OHM +5% 1/4W (35UX60B)	R4693	0700053	RESISTOR,CARBON FILM 8.2K OHM +5% 1/16W (35UX60B)
R443	01195051	FR 2.2 OHM +5% 1/4W	R4694	0700053	RESISTOR,CARBON FILM 8.2K OHM +5% 1/16W (35UX60B)
R4502	0100133	CF 680K OHM +5% 1/8W	R4695	0700053	RESISTOR,CARBON FILM 8.2K OHM +5% 1/16W (35UX60B)
R4503	0100133	CF 680K OHM +5% 1/8W	R4696	0700056	RESISTOR,CARBON FILM 15K OHM +5% 1/16W (35UX60B)
R4601	0700045	RESISTOR,CARBON FILM 2.2K OHM +5% 1/16W (35UX60B)	R4697	0700063	RESISTOR,CARBON FILM 47K OHM +5% 1/16W (35UX60B)
R4602	0700045	RESISTOR,CARBON FILM 2.2K OHM +5% 1/16W (35UX60B)	R4698	0700063	RESISTOR,CARBON FILM 47K OHM +5% 1/16W (35UX60B)
R4603	0700058	RESISTOR,CARBON FILM 22K OHM +5% 1/16W (35UX60B)	R4699	0700047	RESISTOR,CARBON FILM 3.3K OHM +5% 1/16W (35UX60B)
R4604	0700058	RESISTOR,CARBON FILM 22K OHM +5% 1/16W (35UX60B)	R4700	0700063	RESISTOR,CARBON FILM 47K OHM +5% 1/16W (35UX60B)
R4605	0700064	RESISTOR,CARBON FILM 55K OHM +5% 1/16W (35UX60B)	R4701	0179536	MG 1M OHM +5% 1/8W (35UX60B)
R4606	0700064	RESISTOR,CARB			

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SYMBOL NO.	PART NO.	PART DESCRIPTION	SYMBOL NO.	PART NO.	PART DESCRIPTION
R4755	0700058	RESISTOR,CARBON FILM 22K OHM +5% 1/16W(35UX60B)	R5518	0700042	RESISTOR,CARBON FILM 1.2K OHM +5% 1/16W
R4756	0114135	CF 150 OHM +5% 1/4W(35UX60B)	R5522	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W
R4757	0114135	CF 150 OHM +5% 1/4W(35UX60B)	R5524	0700052	RESISTOR,CARBON FILM 6.8K OHM +5% 1/16W
R4758	0700045	RESISTOR,CARBON FILM 2.2K OHM +5% 1/16W(35UX60B)	R5525	0700066	RESISTOR,CARBON FILM 82K OHM +5% 1/16W
R4759	0700045	RESISTOR,CARBON FILM 2.2K OHM +5% 1/16W(35UX60B)	R5526	0700067	RESISTOR,CARBON FILM 100K OHM +5% 1/16W
R4760	0700045	RESISTOR,CARBON FILM 2.2K OHM +5% 1/16W(35UX60B)	R5528	0700055	RESISTOR,CARBON FILM 12K OHM +5% 1/16W
R4761	0700045	RESISTOR,CARBON FILM 2.2K OHM +5% 1/16W(35UX60B)	R5529	0100121	CF 220K OHM +5% 1/8W
R4762	0700058	RESISTOR,CARBON FILM 22K OHM +5% 1/16W (35UX60B)	R5530	0700061	RESISTOR,CARBON FILM 33K OHM +5% 1/16W
R4763	0700067	RESISTOR,CARBON FILM 100K OHM +5% 1/16W (35UX60B)	R5531	0700027	RESISTOR,CARBON FILM 100 OHM +5% 1/16W
R4764	0113719	CF 56 OHM +5% 1/2W(35UX60B)	R5533	0700027	RESISTOR,CARBON FILM 100 OHM +5% 1/16W
R5001	0700032	RESISTOR,CARBON FILM 220 OHM +5% 1/16W	R5534	0700054	RESISTOR,CARBON FILM 10K OHM +5% 1/16W
R5002	0700039	RESISTOR,CARBON FILM 820 OHM +5% 1/16W	R5537	0700054	RESISTOR,CARBON FILM 10K OHM +5% 1/16W
R5003	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W	R5538	0700065	RESISTOR,CARBON FILM 68K OHM +5% 1/16W
R5004	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W	R5539	0700066	RESISTOR,CARBON FILM 82K OHM +5% 1/16W
R5005	0700038	RESISTOR,CARBON FILM 680 OHM +5% 1/16W	R5540	0700054	RESISTOR,CARBON FILM 10K OHM +5% 1/16W
R5006	0114131	CF 100 OHM +5% 1/4W	R5541	0700067	RESISTOR,CARBON FILM 100K OHM +5% 1/16W
R5007	0700059	RESISTOR,CARBON FILM 27K OHM +5% 1/16W	R5542	0700054	RESISTOR,CARBON FILM 10K OHM +5% 1/16W
R5008	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W	R5543	0700054	RESISTOR,CARBON FILM 10K OHM +5% 1/16W
R5009	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W	R5544	0700065	RESISTOR,CARBON FILM 68K OHM +5% 1/16W
R5010	0700063	RESISTOR,CARBON FILM 47K OHM +5% 1/16W	R5545	0700054	RESISTOR,CARBON FILM 10K OHM +5% 1/16W
R5011	0700027	RESISTOR,CARBON FILM 100 OHM +5% 1/16W	R5546	0700059	RESISTOR,CARBON FILM 27K OHM +5% 1/16W
R5012	0700037	RESISTOR,CARBON FILM 560 OHM +5% 1/16W	R5547	0700047	RESISTOR,CARBON FILM 3.3K OHM +5% 1/16W
R5013	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W	R5548	0700061	RESISTOR,CARBON FILM 33K OHM +5% 1/16W
R5015	0150111	VR 1K OHM-B	R5549	0700067	RESISTOR,CARBON FILM 100K OHM +5% 1/16W
R5016	0700037	RESISTOR,CARBON FILM 560 OHM +5% 1/16W	R5550	0700054	RESISTOR,CARBON FILM 10K OHM +5% 1/16W
R5017	0700039	RESISTOR,CARBON FILM 820 OHM +5% 1/16W	R5553	0100119	CF 180K OHM +5% 1/8W
R5018	0150110	VR 500 OHM-B	R5555	0700042	RESISTOR,CARBON FILM 1.2K OHM +5% 1/16W
R5019	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W	R5559	0700027	RESISTOR,CARBON FILM 100 OHM +5% 1/16W
R5020	0700034	RESISTOR,CARBON FILM 330 OHM +5% 1/16W	R5561	0700051	RESISTOR,CARBON FILM 5.6K OHM +5% 1/16W
R5021	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W	R5562	0700033	RESISTOR,CARBON FILM 270 OHM +5% 1/16W
R5022	0150112	VR 2K OHM-3	R5563	0700032	RESISTOR,CARBON FILM 220 OHM +5% 1/16W
R5023	0700035	RESISTOR,CARBON FILM 390 OHM +5% 1/16W	R5566	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W
R5024	0700031	RESISTOR,CARBON FILM 180 OHM +5% 1/16W	R5567	0700046	RESISTOR,CARBON FILM 2.7K OHM +5% 1/16W
R5025	0700033	RESISTOR,CARBON FILM 270 OHM +5% 1/16W	R5568	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W
R5026	0700054	RESISTOR,CARBON FILM 10K OHM +5% 1/16W	R5570	0700062	RESISTOR,CARBON FILM 39K OHM +5% 1/16W
R5027	0700044	RESISTOR,CARBON FILM 1.8K OHM +5% 1/16W	R5571	0700037	RESISTOR,CARBON FILM 560 OHM +5% 1/16W
R5028	0700042	RESISTOR,CARBON FILM 1.2K OHM +5% 1/16W	R5572	0700067	RESISTOR,CARBON FILM 100K OHM +5% 1/16W
R5029	0700045	RESISTOR,CARBON FILM 2.2K OHM +5% 1/16W	R5573	0700058	RESISTOR,CARBON FILM 22K OHM +5% 1/16W
R5030	0700052	RESISTOR,CARBON FILM 6.8K OHM +5% 1/16W	R5574	0700058	RESISTOR,CARBON FILM 22K OHM +5% 1/16W
R5031	0700049	RESISTOR,CARBON FILM 4.7K OHM +5% 1/16W	R5575	0100125	CF 330K OHM +5% 1/8W
R5032	0700045	RESISTOR,CARBON FILM 2.2K OHM +5% 1/16W	R5581	0700067	RESISTOR,CARBON FILM 100K OHM +5% 1/16W
R5033	0700032	RESISTOR,CARBON FILM 220 OHM +5% 1/16W	R5582	0700039	RESISTOR,CARBON FILM 820 OHM +5% 1/16W
R5034	0700037	RESISTOR,CARBON FILM 560 OHM +5% 1/16W	R5583	0700027	RESISTOR,CARBON FILM 100 OHM +5% 1/16W
R5035	0700039	RESISTOR,CARBON FILM 820 OHM +5% 1/16W	R5584	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W
R5036	0700037	RESISTOR,CARBON FILM 560 OHM +5% 1/16W	R5585	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W
R5037	0700061	RESISTOR,CARBON FILM 33K OHM +5% 1/16W	R5587	0150133	VR 500 OHM-B
R5038	0700054	RESISTOR,CARBON FILM 10K OHM +5% 1/16W	R5588	0700039	RESISTOR,CARBON FILM 820 OHM +5% 1/16W
R5039	0700032	RESISTOR,CARBON FILM 220 OHM +5% 1/16W	R5589	0150133	VR 500 OHM-B
R5040	0700054	RESISTOR,CARBON FILM 10K OHM +5% 1/16W	R5590	0700039	RESISTOR,CARBON FILM 820 OHM +5% 1/16W
R5041	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W	R5591	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W
R5042	0700034	RESISTOR,CARBON FILM 330 OHM +5% 1/16W	R5597	0100049	CF 220 OHM +5% 1/8W
R5043	0700039	RESISTOR,CARBON FILM 820 OHM +5% 1/16W	R5598	0100049	CF 220 OHM +5% 1/8W
R5044	0700037	RESISTOR,CARBON FILM 560 OHM +5% 1/16W	R5599	0100049	CF 220 OHM +5% 1/8W
R5045	0700029	RESISTOR,CARBON FILM 150 OHM +5% 1/16W	R5600	0100065	CF 1K OHM +5% 1/8W
R5046	0700063	RESISTOR,CARBON FILM 47K OHM +5% 1/16W	R5601	0100127	CF 390K OHM +5% 1/8W

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SYMBOL NO.	PART NO.	PART DESCRIPTION	SYMBOL NO.	PART NO.	PART DESCRIPTION
R5604	0100051	CF 270 OHM +5% 1/8W	R7010	0179600	MG 10M OHM +5% 1/8W (35UX60B)
R5608	0100065	CF 1K OHM +5% 1/8W	R711	0113744	CF 560 OHM +5% 1/2W
R5609	0100065	CF 1K OHM +5% 1/8W	R712	0114949	CF 22 OHM +5% 1/4W
R5610	0100065	CF 1K OHM +5% 1/8W	R716	0113729	CF 150 OHM +5% 1/2W(35UX60B)
R5612	0700038	RESISTOR,CARBON FILM 680 OHM +5% 1/16W	R717	0700067	RESISTOR,CARBON FILM 100K OHM +5% 1/16W
R5624	0150282	VR 500 OHM(B)	R718	0100037	CF 68 OHM +5% 1/8W
R5625	0700032	RESISTOR,CARBON FILM 220 OHM +5% 1/16W	R720	0114143	CF 330 OHM +5% 1/4W
R5626	0700054	RESISTOR,CARBON FILM 10K OHM +5% 1/16W	Δ R721	0119838	FR 0.5 OHM +5% 1/4W
R625	0700049	RESISTOR,CARBON FILM 4.7K OHM +5% 1/16W	Δ R722	0119838	FR 0.5 OHM +5% 1/4W
R626	0700059	RESISTOR,CARBON FILM 27K OHM +5% 1/16W	Δ R725	01195121	FR 1 OHM +5% 1/4W
R627	0150160	VR 10K OHM-B +30%	Δ R726	01195051	FR 2.2 OHM +5% 1/4W
R628	0700032	RESISTOR,CARBON FILM 220 OHM +5% 1/16W	R727	0119696	MF 0.51 OHM +5% 1W
R629	0119731	FR 0.68 OHM 1W	R728	0700044	RESISTOR,CARBON FILM 1.8K OHM +5% 1/16W
R630	0187104	CF 43K OHM +5% 1/16W	R729	0700048	RESISTOR,CARBON FILM 3.9K OHM +5% 1/16W
R631	0187106	CF 51K OHM +5% 1/16W	R732	0100077	CF 3.3K OHM +5% 1/16W
R632	0700057	RESISTOR,CARBON FILM 100K OHM +5% 1/16W	R734	0110141	MF 680 OHM +5% 1W
R633	0700046	RESISTOR,CARBON FILM 2.7K OHM +5% 1/16W	R735	0113754	CF 1.5K OHM +5% 1/2W
R634	0700037	RESISTOR,CARBON FILM 560 OHM +5% 1/16W	Δ R736	0700032	RESISTOR,CARBON FILM 220 OHM +5% 1/16W
R635	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W	R737	0113770	CF 6.8K OHM +5% 1/2W
R636	0150287	VR 10K OHM-B	R738	0100103	CF 39K OHM +5% 1/8W
R637	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W	R738A	0100110	CF 75K OHM +5% 1/8W
R638	0110133	MF 330 OHM +5% 1W	R739	0700041	RESISTOR,CARBON FILM 1K OHM +5% 1/16W
R639	0113739	CF 390 OHM +5% 1/2W	R741	0113713	CF 33 OHM +5% 1/2W
R640	0113742	CF 470 OHM +5% 1/2W	Δ R745	0700054	RESISTOR,CARBON FILM 10K OHM +5% 1/16W
R641	0700035	RESISTOR,CARBON FILM 390 OHM +5% 1/16W	Δ R746	0700053	RESISTOR,CARBON FILM 8.2K OHM +5% 1/16W
R650	0700066	RESISTOR,CARBON FILM 82K OHM +5% 1/16W	R748	0187026	CF 24 OHM +5% 1/16W
R650A	0700065	RESISTOR,CARBON FILM 68K OHM +5% 1/16W(35UX60B)	R750	0100073	CF 2.2K OHM +5% 1/6W
R651	0187106	CF 51K OHM +5% 1/16W	R751	0700065	RESISTOR,CARBON FILM 68K OHM +5% 1/16W
R652	0700064	RESISTOR,CARBON FILM 56K OHM +5% 1/16W	R752	0150160	VR 10K OHM-B +30%
R653	0700064	RESISTOR,CARBON FILM 56K OHM +5% 1/16W	R753	0700056	RESISTOR,CARBON FILM 15K OHM +5% 1/16W
R654	0700059	RESISTOR,CARBON FILM 27K OHM +5% 1/16W	R754	0700038	RESISTOR,CARBON FILM 560 OHM +5% 1/16W
R655	0700057	RESISTOR,CARBON FILM 18K OHM +5% 1/16W	R755	0150157	VR 200K OHM-B RV-6
R656	0700049	RESISTOR,CARBON FILM 4.7K OHM +5% 1			

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SYMBOL NO.	PART NO.	PART DESCRIPTION	SYMBOL NO.	PART NO.	PART DESCRIPTION
R798	0113760	CF 2.7K OHM $\pm 5\%$ 1/2W	R922	0700054	RESISTOR,CARBON FILM 10K OHM $\pm 5\%$ 1/16W
R799	0700042	RESISTOR,CARBON FILM 1.2K OHM $\pm 5\%$ 1/16W	R923	0700031	RESISTOR,CARBON FILM 180 OHM $\pm 5\%$ 1/16W
R801	0700045	RESISTOR,CARBON FILM 2.2K OHM $\pm 5\%$ 1/16W	R924	0700045	RESISTOR,CARBON FILM 2.2K OHM $\pm 5\%$ 1/16W
R802	0100039	CF 10K OHM $\pm 5\%$ 1/8W	R925	0700043	RESISTOR,CARBON FILM 1.5K OHM $\pm 5\%$ 1/16W
R803	0700047	RESISTOR,CARBON FILM 3.3K OHM $\pm 5\%$ 1/16W	R926	0700041	RESISTOR,CARBON FILM 1K OHM $\pm 5\%$ 1/16W
R804	0100089	CF 10K OHM $\pm 5\%$ 1/8W	R927	0700057	RESISTOR,CARBON FILM 18K OHM $\pm 5\%$ 1/16W
R805	0100039	CF 82 OHM $\pm 5\%$ 1/8W	Δ R928	0100105	CF 47K OHM $\pm 5\%$ 1/8W
R806	0150109	VR 200 OHM-B RS-6	Δ R929	0150152	VR 1K OHM-B RV-6
R807	0150112	VR 2K OHM-B	R930	0100075	CF 2.7K OHM $\pm 5\%$ 1/8W
R808	0700038	RESISTOR,CARBON FILM 680 OHM $\pm 5\%$ 1/16W	Δ R931	0700036	RESISTOR,CARBON FILM 470 OHM $\pm 5\%$ 1/16W
R809	0700038	RESISTOR,CARBON FILM 680 OHM $\pm 5\%$ 1/16W	R932	0700049	RESISTOR,CARBON FILM 4.7K OHM $\pm 5\%$ 1/16W
R811	0100033	CF 47 OHM $\pm 5\%$ 1/8W	R933	0700035	RESISTOR,CARBON FILM 390 OHM $\pm 5\%$ 1/16W
R813	0700038	RESISTOR,CARBON FILM 680 OHM $\pm 5\%$ 1/16W	R940	0700041	RESISTOR,CARBON FILM 1K OHM $\pm 5\%$ 1/16W
R814	0150112	VR 2K OHM-B	R941	0113766	CF 4.7K OHM $\pm 5\%$ 1/2W
R815	0100039	CF 82 OHM $\pm 5\%$ 1/8W	R942	0110379	MF 27K OHM $\pm 5\%$ 3W
R816	0150109	VR 200 OHM-B RS-6	R942A	0110377	MF 22K OHM $\pm 5\%$ 3W
R817	0700038	RESISTOR,CARBON FILM 680 OHM $\pm 5\%$ 1/16W	R944	0700055	RESISTOR,CARBON FILM 12K OHM $\pm 5\%$ 1/16W
R818	0150112	VR 2K OHM-B	R945	0700056	RESISTOR,CARBON FILM 15K OHM $\pm 5\%$ 1/16W
R851	0110367	MF 8.2K OHM $\pm 5\%$ 3W	R946	0114215	CF 59K OHM $\pm 5\%$ 1/4W
R852	0110367	MF 8.2K OHM $\pm 5\%$ 3W	R947	0100117	CF 150K OHM $\pm 5\%$ 1/8W
R853	0110367	MF 8.2K OHM $\pm 5\%$ 3W	R950	0700051	RESISTOR,CARBON FILM 5.6K OHM $\pm 5\%$ 1/16W
R875	0113750	CF 1K OHM $\pm 5\%$ 1/2W	R954	0700041	RESISTOR,CARBON FILM 1K OHM $\pm 5\%$ 1/16W
R876	0113750	CF 1K OHM $\pm 5\%$ 1/2W	R955	0100107	CF 56K OHM $\pm 5\%$ 1/8W
R877	0113750	CF 1K OHM $\pm 5\%$ 1/2W	R956	0100047	CF 180 OHM $\pm 5\%$ 1/8W
R878	0100053	CF 330 OHM $\pm 5\%$ 1/8W	R959	0100055	CF 1K OHM $\pm 5\%$ 1/3W
R879	0100053	CF 330 OHM $\pm 5\%$ 1/8W	R961	0110197	MF 10 OHM $\pm 5\%$ 2W
R880	0100053	CF 330 OHM $\pm 5\%$ 1/8W	R961A	0110197	MF 10 OHM $\pm 5\%$ 2W
R881	0114131	CF 100 OHM $\pm 5\%$ 1/4W	R962	0700023	RESISTOR,CARBON FILM 47 OHM $\pm 5\%$ 1/16W
R882	0114131	CF 100 OHM $\pm 5\%$ 1/4W	R963	0113733	CF 220 OHM $\pm 5\%$ 1/2W
R883	0114131	CF 100 OHM $\pm 5\%$ 1/4W	R970	0113793	CF 56K OHM $\pm 5\%$ 1/2W
R884	0100028	CF 30 OHM $\pm 5\%$ 1/8W	Δ R971	0119508	FR 56 OHM $\pm 5\%$ 1/4W
R885	0100028	CF 30 OHM $\pm 5\%$ 1/8W	R972	0119588	MF 0.22 OHM $\pm 5\%$ 1W
R886	0100028	CF 30 OHM $\pm 5\%$ 1/8W	R973	0700054	RESISTOR,CARBON FILM 10K OHM $\pm 5\%$ 1/16W
R888	0100039	CF 82 OHM $\pm 5\%$ 1/8W	R974	0700054	RESISTOR,CARBON FILM 10K OHM $\pm 5\%$ 1/16W
R901	0147060	WW 33 OHM $\pm 5\%$ 2W	R975	0700058	RESISTOR,CARBON FILM 22K OHM $\pm 5\%$ 1/16W
R902	0141154	WW 2.2 OHM $\pm 10\%$ 15W	R976	0700058	RESISTOR,CARBON FILM 22K OHM $\pm 5\%$ 1/16W
Δ R903	0100111	CF 82K OHM $\pm 5\%$ 1/8W	R978	0110145	MF 1K OHM $\pm 5\%$ 1W
R904	0110221	MF 100 OHM $\pm 5\%$ 2W	R979	0100097	CF 22K OHM $\pm 5\%$ 1/8W
R905	0110255	MF 2.7K OHM $\pm 5\%$ 2W	Δ R981	0119508	FR 56 OHM $\pm 5\%$ 1/4W
R905A	0113783	CF 22K OHM $\pm 5\%$ 1/2W	Δ R982	01195051	FR 2.2 OHM $\pm 5\%$ 1/4W
Δ R906	01195121	FR 1 OHM $\pm 5\%$ 1/4W	R984	0119688	MF 0.22 OHM $\pm 5\%$ 1W
Δ R907	0119508	FR 56 OHM $\pm 5\%$ 1/4W	R985	0700047	RESISTOR,CARBON FILM 3.3K OHM $\pm 5\%$ 1/16W
R908	0119696	MF 0.51 OHM $\pm 5\%$ 1W	R987	0110147	MF 1.2K OHM $\pm 5\%$ 1W
R910	0194068	WW 1 OHM $\pm 5\%$ 2W	R988	0119508	FR 56 OHM $\pm 5\%$ 1/4W
Δ R911	0700054	RESISTOR,CARBON FILM 10K OHM $\pm 5\%$ 1/16W	R989	0700067	RESISTOR,CARBON FILM 100K OHM $\pm 5\%$ 1/16W
Δ R913	0700035	RESISTOR,CARBON FILM 390 OHM $\pm 5\%$ 1/16W	R991	0700047	RESISTOR,CARBON FILM 3.3K OHM $\pm 5\%$ 1/16W
R914	0110377	MF 22K OHM $\pm 5\%$ 3W	R994	0700032	RESISTOR,CARBON FILM 220 OHM $\pm 5\%$ 1/16W
R914A	0110283	MF 39K OHM $\pm 5\%$ 2W	R995	0700032	RESISTOR,CARBON FILM 220 OHM $\pm 5\%$ 1/16W
R914B	0110283	MF 39K OHM $\pm 5\%$ 2W			ICs
Δ R916	0119617	PIONEER RN16PQ2701F MF 2.7K OHM $\pm 1\%$ 1/8W			
Δ R917	0119617	PIONEER RN16PQ2701F MF 2.7K OHM $\pm 1\%$ 1/8W			
R918	0700043	RESISTOR,CARBON FILM 1.5K OHM $\pm 5\%$ 1/16W	IC0001	CP00191	IC M37204MC-75SP (35UX60B)(ICON)
R919	0700067	RESISTOR,CARBON FILM 100K OHM $\pm 5\%$ 1/16W	IC0001	2001762	IC M37204M8-65SP(35TX69K)
R920	0100133	CF 680K OHM $\pm 5\%$ 1/8W	IC0002	2007831	IC M6M80041P
R921	0119643	MF 33K OHM $\pm 1\%$ 1/8W	IC0003	2366301	IC UPD4052BC

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SYMBOL NO.	PART NO.	PART DESCRIPTION	SYMBOL NO.	PART NO.	PART DESCRIPTION
IC0004	2004952	IC LA7945N	Q0504	2320598	TR 2SC458B/C/D SI 230MHZ 200MW
IC0005	2001753	IC LC7458B-03	Q3001	2320591	TR 2SC458B/C SI 230MHZ 200MW
IC0006	2008721	IC M62358P	Q3002	2320591	TR 2SC458B/C SI 230MHZ 200MW
IC0961	2003423	IC UPC7893AHF (LINEAR)	Q3003	2320591	TR 2SC458B/C SI 230MHZ 200MW
IC0962	2004665	IC PO09RF21	Q3004	2320591	TR 2SC458B/C SI 230MHZ 200MW
IC0963	2003421	IC UPC7805AHF	Q3005	2320637	TR 2SA673C/D SI 80MHZ 400MW
IC3001	2004792	IC SN76862NU-09	Q3503	2320591	TR 2SC458B/C SI 230MHZ 200MW
IC3002	2004792	IC SN76862NU-09	Q3504	2320591	TR 2SC458B/C SI 230MHZ 200MW
IC3003	2917391	IC MSC1137IRS	Q3508	2320591	TR 2SC458B/C SI 230MHZ 200MW
IC4001	2004592	IC AN5817K	Q3510	2320591	TR 2SC458B/C SI 230MHZ 200MW
IC4004	2004362	IC CXA1279AS	Q3513	2320591	TR 2SC458B/C SI 230MHZ 200MW
IC4005	2917391	IC MSC1137IRS	Q3514	2320591	TR 2SC458B/C SI 230MHZ 200MW
IC402	2004751	IC TA8200AH	Q3516	2320591	TR 2SC458B/C SI 230MHZ 200MW
IC4605	2362605	IC BA4558 (35UX60B)	Q3517	2320637	TR 2SA673C/D SI 80MHZ 400MW
IC4606	2362651	IC HD14053BP(35UX60B)	Q3518	2320591	TR 2SC458B/C SI 230MHZ 200MW
IC4607	2362605	IC BA4558 (35UX60B)	Q3519	2320637	TR 2SA673C/D SI 80MHZ 400MW
IC4668	2362605	IC BA4558 (35UX60B)	Q3520	2320591	TR 2SC458B/C SI 230MHZ 200MW
IC4609	2362651	IC HD14053BP(35UX60B)	Q3521	2320621	TR 2SC1741S
IC4610	2004242	IC LV1000NA (35UX60B)	Q3522	2320637	TR 2SA673C/D SI 80MHZ 400MW
IC4611	2004651	IC LM3256N-15 (35UX60B)	Q3523	2320637	TR 2SA673C/D SI 80MHZ 400MW
IC4613	2004362	IC CXA1279AS (35UX60B)	Q3524	2320591	TR 2SC458B/C SI 230MHZ 200MW
Δ IC4614	2004751	IC TA8200AH(35UX60B)	Q3525	2320591	TR 2SC458B/C SI 230MHZ 200MW
Δ IC5501	2020321	IC YAT015	Q3701	2327772	TR 2SC3413 (B)/(C) (35UX60B)
Δ IC625	2003541	IC LA7838 (LINEAR)	Q3702	2327772	TR 2SC3413 (B)/(C)(35UX60B)
IC651	2362605	IC BA4558	Q3703	2327772	TR 2SC3413 (B)(C)(35UX60B)
Δ IC701	2000521	IC PC713F6 (LINEAR)	Q3704	2327772	TR 2SC3413 (B)(C)(35UX60B)
Δ IC901	236721	IC UPC1394C	Q3705	2327772	TR 2SC3413 (B)(C)(35UX60B)
Δ IC951	2000461	IC PS2501-1 (PHOTO COUPLER)	Q3706	2327772	TR 2SC3413 (B)(C)(35UX60B)
		TRANSISTORS	Q3707	2327783	TR 2SC3553 C/D (35UX60B)
			Q3708	2321351	TR 2SA838644 D/E SI 200MHZ 300MW (35UX60B)
			Q3709	2315381	TRANSISTOR 2SA1837 (35UX60B)
			Q3710	2315391	TRANSISTOR 2SC4793 (35UX60B)
			Q3711	2327772	TR 2SC3413 (B)/(C)(35UX60B)
			Q3801	2320598	TR 2SC458B/C/D SI 230MHZ 200MW
			Q3802	2320598	TR 2SC458B/C/D SI 230MHZ 200MW
			Q38		

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Q4023	2320591	TP 2SC458B/C SI 230MHZ 200MW	Q853	2320591	TR 2SC458B/C SI 230MHZ 200MW
Q4024	2320591	TR 2SC458B/C SI 230MHZ 200MW	Q854	2315491	TRANSISTOR 2SC4544
Q4025	2320637	TR 2SA673C/D SI 80MHZ 400MW	Q855	2315491	TRANSISTOR 2SC4544
Q4026	2320591	TR 2SC458B/C SI 230MHZ 200MW	Q856	2315491	TRANSISTOR 2SC4544
Q4027	2320591	TR 2SC458B/C SI 230MHZ 200MW	Q863	2320591	TR 2SC458B/C SI 230MHZ 200MW
Q4028	2320591	TR 2SC458B/C SI 230MHZ 200MW	Q864	2320637	TR 2SA673C/D SI 80MHZ 400MW
Q403	2320591	TR 2SC458B/C SI 230MHZ 200MW	Q865	2320596	TR 2SC458C/D SI 230MHZ 200MW
Q4030	2320591	TR 2SC458B/C SI 230MHZ 200MW	Q866	2320596	TR 2SC458C/D SI 230MHZ 200MW
Q4032	2320591	TR 2SC458B/C SI 230MHZ 200MW	Q867	2320596	TR 2SC458C/D SI 230MHZ 200MW
Q4033	2320637	TR 2SA673C/D SI 80MHZ 400MW	Δ Q901	2328451	TR FN651
Q4034	2320637	TR 2SA673C/D SI 80MHZ 400MW	Q902	2324322	TR 2SC2271/2SC2610-05 SI
Q404	2320591	TR 2SC458B/C SI 230MHZ 200MW	Δ Q905	2326631	THYRISTOR CR5AS-8
Q4601	2320591	TR 2SC458B/C SI 230MHZ 200MW (35UX60B)	Q907	2320637	TR 2SA673C/D SI 80MHZ 400MW
Q4602	2320591	TR 2SC458B/C SI 230MHZ 200MW(35UX60B)	Q908	2324322	TR 2SC2271/2SC2610-05 SI
Q4603	2320591	TR 2SC458B/C SI 230MHZ 200MW (35UX60B)	Q909	2327883	TR 2SA1207
Q4604	2320591	TR 2SC458B/C SI 230MHZ 200MW (35UX60B)	Q911	2320596	TR 2SC458C/D SI 230MHZ 200MW
Q4605	2320591	TR 2SC458B/C SI 230MHZ 200MW(35UX60B)	Q912	2320596	TR 2SC458C/D SI 230MHZ 200MW
Q4606	2320591	TR 2SC458B/C SI 230MHZ 200MW (35UX60B)	Q951	2223521	TR 2SD789 B/C/D/E
Q4607	2320591	TR 2SC458B/C SI 230MHZ 200MW (35UX60B)	Q961	2323431	TR 2SC1993 SI
Q4608	2320591	TR 2SC458B/C SI 230MHZ 200MW(35UX60B)			DIODES
Q4613	2320591	TR 2SD789 B/C/D/E(35UX60B)			
Q4615	2320591	TR 2SC458B/C SI 230MHZ 200MW(35UX60B)	D0001	2398611	DI 1SS254
Q4618	2320591	TR 2SC458B/C SI 230MHZ 200MW (35UX60B)	D0002	2398611	DI 1SS254
Q4619	2320591	TR 2SC458B/C SI 230MHZ 200MW (35UX60B)	D0003	2398611	DI 1SS254
Q4620	2320591	TR 2SC458B/C SI 230MHZ 200MW(35UX60B)	D0004	2398611	DI 1SS254
Q4621	2320591	TR 2SC458B/C SI 230MHZ 200MW (35UX60B)	D0006	2398611	DI 1SS254(35UX60B)
Q4622	2320591	TR 2SC458B/C SI 230MHZ 200MW (35UX60B)	D0007	2398611	DI 1SS254 (35UX60B)
Q5001	2320596	TR 2SC458C/D SI 230MHZ 200MW	D0008	2398611	DI 1SS254
Q5002	2320596	TR 2SC458C/D SI 230MHZ 200MW	D0009	2398611	DI 1SS254
Q5003	2320596	TR 2SC458C/D SI 230MHZ 200MW	D0010	2398611	DI 1SS254
Q5004	2320596	TR 2SC458C/D SI 230MHZ 200MW	D0011	2398611	DI 1SS254
Q5005	2320596	TR 2SC458C/D SI 230MHZ 200MW	D0012	2398611	DI 1SS254
Q5006	2320596	TR 2SC458C/D SI 230MHZ 200MW	D0013	2398611	DI 1SS254
Q5007	2320637	TR 2SA673C/D SI 80MHZ 400MW	D0017	2398611	DI 1SS254
Q5008	2320596	TR 2SC458C/D SI 230MHZ 200MW	D0019	2398611	DI 1SS254(35UX60B)
Q5501	2320591	TR 2SC458B/C SI 230MHZ 200MW	D0022	2398611	DI 1SS254
Q5502	2320591	TR 2SC458B/C SI 230MHZ 200MW	D0023	2398611	DI 1SS254 (35UX60B)
Q5503	2320637	TR 2SA673C/D SI 80MHZ 400MW	D0025	2398611	DI 1SS254
Q5505	2320637	TR 2SA673C/D SI 80MHZ 400MW	D0026	2398611	DI 1SS254
Q5506	2320307	TR 2SA673C/D SI 80MHZ 400MW	D0030	2398611	DI 1SS254
Q5507	2320591	TR 2SC458B/C SI 230MHZ 200MW	D0031	2398611	DI 1SS254
Q625	2320596	TR 2SC458C/D SI 230MHZ 200MW	D0036	2398611	DI 1SS254(35UX60B)
Q626	2320637	TR 2SA673C/D SI 80MHZ 400MW	D0037	2398611	DI 1SS254 (35UX60B)
Q651	2320598	TR 2SC458B/C/D SI 230MHZ 200MW	D0038	2398611	DI 1SS254
Q701	2326218	TR 2SC3116T	D0039	2398611	DI 1SS254
Δ Q702	2315272	TRANSISTOR 2SC4589-03	D0501	2398611	DI 1SS254
Δ Q703	2320637	TR 2SA673C/D SI 80MHZ 400MW	D0502	2398611	DI 1SS254
Q706	2323431	TR 2SC1983 SI	D3001	2398611	DI 1SS254
Δ Q708	2320596	TR 2SC458C/D SI 230MHZ 200MW	D3002	2398611	DI 1SS254
Q750	2320596	TR 2SC458C/D SI 230MHZ 200MW	D3003	2398611	DI 1SS254
Q751	2320637	TR 2SA673C/D SI 80MHZ 400MW	D3004	2398611	DI 1SS254
Q752	2323431	TR 2SC1983 SI	D3005	2398611	DI 1SS254
Q851	2320591	TR 2SC458B/C SI 230MHZ 200MW	D3008	2398611	DI 1SS254
Q852	2320591	TR 2SC458B/C SI 230MHZ 200MW	D3501	2398611	DI 1SS254

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SYMBOL NO.	PART NO.	PART DESCRIPTION	SYMBOL NO.	PART NO.	PART DESCRIPTION
D3503	2398611	DI 1SS254	D707	2336612	DI RU3AM
D3504	2398611	DI 1SS254	Δ D709	23394811	DI AS01Z
D3505	2398611	DI 1SS254	D710	2338902	DI DFM1SA4
D3506	2398611	DI 1SS254	D712	2338902	DI DFM1SA4 (35UX60B)
D3508	2398611	DI 1SS254	D713	2338902	DI DFM1SA4(35UX60B)
D3511	2398611	DI 1SS254	D714	23373411	DI 1SS270A
D3512	2398611	DI 1SS254	D716	23383211	DI 1SS270
D3513	2398611	DI 1SS254 (35UX60B)	D718	23394911	DI AM01Z
D3516	2398611	DI 1SS254	D720	23394911	DI AM01Z
D3517	2398611	DI 1SS254	D721	23394911	DI AM01Z
D3518	2398611	DI 1SS254 (35UX60B)	D751	23383211	DI 1SS270
D3701	23394911	DI AM01Z (35UX60B)	D752	23383211	DI 1SS270
D3702	23394911	DI AM01Z(35UX60B)	D753	23383211	DI 1SS270
D3703	23394911	DI AM01Z(35UX60B)	D799	23383211	DI 1SS270
D3704	23394911	DI AM01Z (35UX60B)	D804	23383211	DI 1SS270
D4001	2398611	DI 1SS254	D805	23383211	DI 1SS270
D4002	2398611	DI 1SS254	D806	23383211	DI 1SS270
D406	2398611	DI 1SS254	D807	23383211	DI 1SS270
D407	2398611	DI 1SS254	D808	23383211	DI 1SS270
D408	2398611	DI 1SS254	D812	23383211	DI 1SS270
D409	2398611	DI 1SS254	Δ D901	2335982	DI RM11A
D410	2398611	DI 1SS254	Δ D903	2335982	DIRM11A
D413	2398611	DI 1SS254	D905	2336612	DIRU3AM
D414	2398611	DI 1SS254	D906	2344071	DI ERC20M-04
D416	2398611	DI 1SS254	D907	23394911	DI AM01Z
D417	2398611	DI 1SS254	D908	23383211	DI 1SS270
D418	2398611	DI 1SS254	D910	23383211	DI 1SS270
D420	2398611	DI 1SS254	D912	23394811	DI AS01Z
D421	2398611	DI 1SS254	D913	2344071	DI ERC20M-04
D4604	2398611	DI 1SS254 (35UX60B)	D915	23383211	DI 1SS270
D4605	2398611	DI 1SS254 (35UX60B)	D951	23394911	DI AM01Z
D4606	2398611	DI 1SS254(35UX60B)	D952	23394911	DI AM01Z
D4607	2398611	DI 1SS254(35UX60B)	ZD0001	2334122	ZD RD5.1EB1 SI
D4608	2398611	DI 1SS254(35UX60B)	ZD0002	2339844	ZD HZ56B1
D4609	2398611	DI 1SS254 (35UX60B)	ZD0003	2339839	ZD HZ5C3
D4611	2398611	DI 1SS254(35UX60B)	ZD0004	2339885	ZD HZ12B2
D4612	2398611	DI 1SS254 (35UX60B)	ZD0005	2339885	ZD HZ12B2
D4613	2398611	DI 1SS254 (35UX60B)	ZD0006	2339885	ZD HZ12B2(35UX60B)
D4614	2398611	DI 1SS254 (35UX60B)	ZD0007	2339849	DIODE-ZENER HZ5C3
D5503	2398611	DI 1SS254	ZD0008	2335991	ZD HZT-33
D5504	2398611	DI 1SS254	ZD0009	2339839	ZD HZ5C3
D5507	2398611	DI 1SS254	ZD010	2339885	ZD HZ12B2
D551A	2398611	DI 1SS254	ZD011	2339885	ZD HZ12B2
D5510	2398611	DI 1SS254	ZD012	2339885	ZD HZ12B2
D625	23394911	DI AM01Z	ZD013	2339885	ZD HZ12B2
D626	23394911	DI AM01Z	ZD0501	2339885	ZD HZ12B2
D629	23383211	DI 1SS270	ZD0502	2339885	ZD HZ12B2
D651	23383211	DI 1SS270	ZD1001	2339835	ZD HZ12B2
D652	23383211	DI 1SS270	ZD3002	2331154	ZD HZ12 (A1-3/B1-3/C1-3)
D653	23383211	DI 1SS270	ZD3003	2331154	ZD HZ12 (A1-3/B1-3/C1-3)
D654	23383211	DI 1SS270	ZD3004	2331154	ZD HZ12 (A1-3/B1-3/C1

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SYMBOL NO.	PART NO.	PART DESCRIPTION	SYMBOL NO.	PART NO.	PART DESCRIPTION
ZD3009	2331154	ZD HZ12 (A1-3/B1-3/C1-3)	ZD805	2339887	DIODE-ZENER HZS12C1
ZD3010	2331154	ZD HZ12 (A1-3/B1-3/C1-3)	ZD806	2339887	DIODE-ZENER HZS12C1
ZD3011	2331154	ZD HZ12 (A1-3/B1-3/C1-3) (35UX60B)	ZD861	2331781	ZD HZ4 (A1)
ZD3012	2331154	ZD HZ12 (A1-3/B1-3/C1-3) (35UX60B)	Δ ZD902	2339252	ZD HZS36-2L
ZD3013	2331154	ZD HZ12 (A1-3/B1-3/C1-3) (35UX60B)	Δ ZD903	2339031	ZD HZS6C1L
ZD3014	2331154	ZD HZ12 (A1-3/B1-3/C1-3)	ZD904	2339251	ZD HZS36-1L
ZD3015	2331154	ZD HZ12 (A1-3/B1-3/C1-3) (35UX60B)	ZD905	2339201	DIODE-ZENER HZS22-1L
ZD3017	2331154	ZD HZ12 (A1-3/B1-3/C1-3)	Δ ZD907	2339252	ZD HZS36-2L
ZD3019	2331154	ZD HZ12 (A1-3/B1-3/C1-3) (35UX60B)	Δ ZD908	2339252	ZD HZS36-2L
ZD3021	2331154	ZD HZ12 (A1-3/B1-3/C1-3) (35UX60B)	Δ ZD909	2339252	ZD HZS36-2L
ZD3022	2331154	ZD HZ12 (A1-3/B1-3/C1-3)	ZD910	23390511	ZD HZ781L
ZD3024	2331154	ZD HZ12 (A1-3/B1-3/C1-3)	Δ ZD912	2339859M	DIODE HZS7C3
ZD3801	2331154	ZD HZ12 (A1-3/B1-3/C1-3)	ZD952	2339867	DIODE-ZENER HZS9C1
ZD3802	2331154	ZD HZ12 (A1-3/B1-3/C1-3)	ZD962	2339885	ZD HZ12B2
ZD3804	2331154	ZD HZ12 (A1-3/B1-3/C1-3) (35UX60B)			TRANSFORMERS
ZD3805	2331154	ZD HZ12 (A1-3/B1-3/C1-3) (35UX60B)			
ZD4001	2339836	DIODE-ZENER HZS9B3			
ZD4002	2339812M	DIODE-ZENER HZS3A2	Δ T701	2260163	HORIZONTAL DRIVE TRANSFORMER
ZD4003	2339812M	DIODE-ZENER HZS3A2	Δ T702	2436623	FLYBACK TRANSFORMER HFL1735J (HHEA MD)
ZD5501	23398685	ZD HZS12B2 (35UX60B)	Δ T901	2215693	POWER TRANSFORMER (HHEA MD)
ZD5502	2339868M	ZD HZS9C2	T902	2260021	HORIZONTAL DRIVE COIL
ZD5503	2339868M	ZD HZS9C2	Δ T950	2215911	POWER TRANSFORMER
ZD5504	2339868M	ZD HZS9C2			FUSE
ZD5505	2339868M	ZD HZS9C2			
ZD5506	2339191M	ZD HZS20-1LT A			
ZD5510	2334324	ZD RD36EB3	Δ F901	2721053	UL FUSE 5A
ZD5514	2331849	ZD HZ-12(C3)			COMPOUND COMPONENTS
ZD5519	2339885	ZD HZS12B2			
ZD5520	2339885	ZD HZS12B2			
ZD5521	2339885	ZD HZS12B2	CP0001	2791754	DSS306-55B101M
ZD5522	2339885	ZD HZS12B2	CP0002	2791754	DSS306-55B101M
ZD5523	2339885	ZD HZS12B2	CP0003	2791754	DSS306-55B101M
ZD5524	2339885	ZD HZS12B2	CP0004	2791754	DSS306-55B101M
ZD5525	2334285	DIODE-ZENER RD24EB4	CP0005	2791754	DSS306-55B101M
ZD5526	2339885	ZD HZS12B2	CP0007	2791754	DSS306-55B101M (35UX60B)
ZD5527	2339885	ZD HZS12B2	CP0501	2381126	REMOTE CONTROL RECEIVER SPS-409-1F
ZD5528	2339885	ZD HZS12B2	Δ CP901	2793313	COMPUND COMPONENT
ZD5529	2339885	ZD HZS12B2			
ZD5530	2339885	ZD HZS12B2			COILS
ZD5531	2339885	ZD HZS12B2			
ZD5540	2339868M	ZD HZS9C2	L0001	2122955	LA AXIAL COIL 100 MICRO H +10%
ZD5541	2339868M	ZD HZS9C2	L0002	2122955	LA AXIAL COIL 100 MICRO H +10%
ZD5542	2339868M	ZD HZS9C2	L0003	2146091	COIL-OSC
ZD622	2339862M	ZD HZS9A2	L0004	2122955	LA AXIAL COIL 100 MICRO H +10%
ZD652	2339102M	ZD HZS11A2LT A	L0005	2122955	LA AXIAL COIL 100 MICRO H +10%
ZD703	2339889	ZD HZS12C3	L0006	2122955	LA AXIAL COIL 100 MICRO H +10% (35UX60B)
ZD706	2339152M	ZD HZS12C2LT A	L0011	2122955	LA AXIAL COIL 100 MICRO H +10%
Δ ZD707	2339242	ZD HZS33-2L	L0012	2122955	LA AXIAL COIL 100 MICRO H +10%
Δ ZD708	2339241	DI HZS331L	L0013	2122955	LA AXIAL COIL 100 MICRO H +10%
ZD709	2339846M	ZD HZS6B3TA	L3002	2120489	FILTER COIL 100 MICRO H +10%
ZD710	2339851	DIODE-ZENER HZS7A1	L3004	2120489	FILTER COIL 100 MICRO H +10%
ZD713	2339251	ZD HZS6-1L	L3006	2125721	CHOKE COIL (HHEA MD)
ZD716	2339091M	ZD HZS9C1LT A	L3501	2120482	FILTER COIL 100 MICRO H +10%
ZD751	2339251	ZD HZS36-1L	L3502	2166121	TRAP COIL 3.5MHZ
ZD804	2339887	DIODE-ZENER HZS12C1	L3503	2122955	LA AXIAL COIL 100 MICRO H +10%

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SYMBOL NO.	PART NO.	PART DESCRIPTION	SYMBOL NO.	PART NO.	PART DESCRIPTION
L3701	2122947	LA AXIAL COIL 22 MICRO H +10% (35UX60B)	L922	2122653	FERRITE BEADS CORE
L3702	2123468	FERRITE BEADS CORE LEAD 0.8 (35UX60B)	L925	2122653	FERRITE BEADS CORE
L3703	2123468	FERRITE BEADS CORE LEAD 0.8 (35UX60B)	L925A	2122653	FERRITE BEADS CORE
L3704	2123468	FERRITE BEADS CORE LEAD 0.8 (35UX60B)	Δ L970	2229023	DEGAUSSING COIL (HHEA MD)
L4001	2122253	LA AXIAL COIL 100 MICRO H			
L401	2123461	FERRITE BEADS CORE			SWITCH
L402	2123461	FERRITE BEADS CORE	S0501	2632851	TACTO SWITCH
L404	2123461	FERRITE BEADS CORE	S0502	2632901	KEY SWITCH
L4601	2123461	FERRITE BEADS CORE (35UX60B)	S4501	2622561	SLIDE SWITCH
L4602	2123461	FERRITE BEADS CORE (35UX60B)	S5502	2621051	SLIDE SWITCH
L5001	2141148	1H DL COIL			
L5002	2122939	LA AXIAL COIL 5.6 MICRO H			
L5003	2122949	LA AXIAL COIL 33 MICRO H +10%			
L5504	2120482	FILTER COIL 100 MICRO H +10%			
L5505	2120482	FILTER COIL 100 MICRO H +10%	Δ V1	2471591	COLOR PICTURE TUBE A89AFF15X01 (HHEA MD)
L5600	2120482	FILTER COIL 100 MICRO H +10%	Δ V1	2471581	COLOR PICTURE TUBE A89KPP50X01 (HHEA MD)
L702	2124513	LINEARITY COIL			
L702E	2122653	FERRITE BEADS CORE			
Δ L704	2275381	CHOKING COIL			MISCELLANEOUS
L705	2220591	CHOKING COIL			
L709	2122096	FILTER COIL 33 MICRO H	DL3701	2150361	LC FILTER SDL4620 (35UX60B)
L710	2122244	LA AXIAL COIL 22 MICRO H	DL5001	2151041	DELAY LINE AND B.P.F
L850	2120482	FILTER COIL 100 MICRO H +10%	DL5003	2794401	DELAY LINE
L851	2122945	LA AXIAL COIL 15 MICRO H +10%	EANT	2427366	ANTENNA SWITCH ASB-321A (HHEA MD)
L852	2122945	LA AXIAL COIL 15 MICRO H +10%	EF901	2720221	FUSE HOLDER
L853	2122945	LA AXIAL COIL 15 MICRO H +10%	Δ E1	2572521	POWER CORD
L854	2122956	LA AXIAL COIL 100 MICRO H +10%	E301	2573971	REMOTE CONTROL TRANSMITTER CLU-850GR (HHEA MD)
L855	2122956	LA AXIAL COIL 100 MICRO H +10%	E301	2573922	REMOTE CONTROL TRANSMITTER CLU-692GR (HHEA MD)
L856	2122956	LA AXIAL COIL 100 MICRO H +10%	E603A	2771461	MAGNET PEACE
L861	2122653	FERRITE BEADS CORE	E851	2953349	CPT SOCKET (HHEA MD)
L862	2123468	FERRITE BEADS CORE LEAD 0.8	Δ E902	3772201	AC CORD HOLDER
L863	2123468	FERRITE BEADS CORE LEAD 0.8	Δ FE0001	242691	FRONTEND V8-A68FT (HHEA MD)
L864	2123468	FERRITE BEADS CORE LEAD 0.8	JPA	2908757	6P CONNECTOR
L865	2123468	FERRITE BEADS CORE LEAD 0.8	JPB	2908845	9P CONNECTOR
L866	2123468	FERRITE BEADS CORE LEAD 0.8	Δ J01	2983111	3P JACK WITH S TERMINAL
L867	2123468	FERRITE BEADS CORE LEAD 0.8	Δ J3001	2572891	6P PIN JACK WITH S TERMINAL
L868	2123468	FERRITE BEADS CORE LEAD 0.8	Δ J3002	2572894	5P PIN JACK
L869	2123468	FERRITE BEADS CORE LEAD 0.8	J4501	2672901	4P PUSH TERMINAL
L870	2123468	FERRITE BEADS CORE LEAD 0.8	J4502	2672901	4P PUSH TERMINAL (35UX60B)
Δ L901	2272293	LINE FILTER LL (T)	MF0081	2163972	CERAMIC FILTER 6MHZ
L903	2122653	FERRITE BEADS CORE	MF0082	2168831	CRYSTAL
Δ L904	2121674	LINE FILTER COIL	MF5501	2786685	CRYSTAL
L905	2122653	FERRITE BEADS CORE	M302	JP00241	CHIP BOARD KC-0015 (ADV. P IN P UNIT) (HHEA MD)
L907	2124362	DC NOISE FILTER 2	M302	2375511	CHIP BOARD HC3053 (P IN P UNIT) (HHEA MD)
L908	2122653	FERRITE BEADS CORE	Δ NC969	2771892	FERRITE BEADS CORE 004
L909	2122653	FERRITE BEADS CORE	ND906A	4520883	M3X12 SCREW WITH WASHER
L910	2122653	FERRITE BEADS CORE	NEB	4243445	G51 INSULATOR (35UX60B)
L911	2124362	DC NOISE FILTER 2	NQ3709	4520883	M3X12 SCREW WITH WASHER (35UX60B)
L913	2122653	FERRITE BEADS CORE	NQ3710	4520883	M3X12 SCREW WITH WASHER (35UX60B)
L914	2122653	FERRITE BEADS CORE	NQ702B	881234	3 NUT
L915	2122653	FERRITE BEADS CORE	NQ702C	8813124	WASHER
L917	2122653	FERRITE BEADS CORE	NQ702E	2771893	FERRITE BEADS CORE
L919	2122653	FERRITE BEADS CORE	NQ702G	4159411	3X8 KNURL TAPPING SCREW
L920	2122653	FERRITE BEADS CORE	NQ706A	4520881	M3X8 SCREW WITH WASHER
L921	2122653	FERRITE BEADS CORE			

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SYMBOL NO.	PART NO.	PART DESCRIPTION	SYMBOL NO.	PART NO.	PART DESCRIPTION
NQ752A	4520881	M3X8 SCREW WITH WASHER	#	3921952	DOOR ASSY (HHEA MD)
NQ901A	4520883	M3X12 SCREW WITH WASHER	#	PH01061	DECO PANEL(R)(35TX69K)
NT804	8821114	NUT 3	#	PH01062	DECO PANEL(L)(35TX69K)
NVM1	4520883	M3X12 SCREW WITH WASHER(35UX60B)	#011	3142721	CABINET ASSY (HHEA MD)(35TX69K)
NVM2	8821114	NUT 3 (35UX60B)	#013	3142723	CABINET ASSY (HHEA MD)(35UX60B)
NVM3	4243445	G51 INSULATOR(35UX60B)	#022	H920181	VELCRO (35TX69K)
N001	3744173	CLAMPER	#024	H920182	VELCRO (35TX69K)
N001A	3744172	CLUMT 20	#026	H420201	INSERT NUT (35TX69K)
N004	3763751	SK BINDER	#028	H820062	1/4-20X1 SCR (35TX69K)
N0962A	4520883	M3X12 SCREW WITH WASHER	#030	H830011	SAE 1/4 PLAIN (35TX69K)
N0963A	4520883	M3X12 SCREW WITH WASHER	#080	3164771	BACK COVER (HHEA MD)
N1	3763751	SK BINDER (35UX60B)	#088	3483761	BACK COVER NET (HHEA MD)
N102	3731081	PURSE LOCK 10	#100	4521713	HEXAGON HEAD TAPPING SCREW (35TX69K)
N108	2788841	ANODE CLAMP	#100	'4326624	CT3170 EVER (35TX69K)
N201	4881132	INSTRUCTION MANUAL (HHEA MD)(35TX69K)	#105	4516581	SCREW 4X16 SPECIAL WASHER SWRM
N201	QR00611	INSTRUCTION MANUAL (HHEA MD)(35UX60B)	#105	4516582	4X26 TAPPING SCREW WITH BOLT(35TX69K)
N402A	4520881	M3X8 SCREW WITH WASHER	#11	3554521	CARTON BOX (HHEA MD)(35TX69K)
N4614A	4520883	M3X12 SCREW WITH WASHER (35UX60B)	#110	4519512	TAPPING SCREW 4X16 MM
N606	333922	EARTH SPRING	#121	3831231	TERMINAL HOLDER (HHEA MD)
N610A	2772981	FERRITE SHEET	#125	4525751	NO.8X1/2 HEX (35TX69K)
N611G	3763751	SK BINDER	#13	3554523	CARTON BOX (HHEA MD)(35UX60B)
N612	3763752	SK BINDER	#130	4519512	TAPPING SCREW 4X16 MM
N625A	4520881	M3X6 SCREW WITH WASHER	#130	H420231	MAGNETIC LATCH (35TX69K)
N901	8815126	LOCKING WASHER 4	#130	4492661	CHASSIS FIXING (35TX69K)
PAN	2663821	2P PLUG PIN (35UX60B)	#131	81251034	#5x3/4" FLAT (35TX69K)
PDR	2902263	4P SUB MINI PLUG PIN (35UX60B)	#135	4525751	NO.8X1/2 HEX (35TX69K)
PFJ	2902266	7P SUB MINI PLUG PIN	#140	4519503	3X12 TAPPING SCREW
PKZ	2674631	5P CONNECTOR	#140	H420331	MAG. CATCH P (35TX69K)
PM	2665272	4P PLUG PIN WITH BASE	#140	3702941	J67S HOLDER (35TX69K)
PP51D	2661756	1P PLUG PIN WITH BASE(35UX60B)	#141	4519503	3X12 TAPPING SCREW (35UX60B)
PS	2661752	PLUG PIN	#142	4519503	3X12 TAPPING SCREW(35TX69K)
PS	2661942	CONNECTOR	#145	H450021	#5 X 1/2" FLAT (35TX69K)
PSD1	2674631	5P CONNECTOR	#150	H810081	#5 X 1/2 PAN HANDLE (35TX69K)
PSD2	2674635	10P CONNECTOR	#152	4517801	6 FLANGE NUT
PSD3	2674634	8P CONNECTOR	#160	4519512	TAPPING SCREW 4X16 MM
PSD5	2674631	5P CONNECTOR	#201	8781646	4X16 TAPPING SCREW
PSL	2661944	CONNECTOR	#202	4520881	M3X8 SCREW WITH WASHER
PVM	2902263	4P SUB MINI PLUG PIN (35UX60B)	#202	8781642	4X12 TAPPING SCREW (35UX60B)
PW	2661753	PIN PLUG WITH BASE	#204	8815114	LOCK WASHER 3MMD
PY1	2902266	7P SJB MINI PLUG PIN	#21	3621551	TOP CUSHION (HHEA MD)
PY2	2902263	4P SUB MINI PLUG PIN	#210	4519512	TAPPING SCREW 4X16 MM
△RF	2994843	MINI PIN PLUG WITH COAXIAL CABLE(35TX69K)	#212	8815126	LOCKING WASHER 4
△RL901	2641221	POWER RELAY	#218	H930013	LOCTITE THREAD (35TX69K)
SG851	2340037	SPARK GAP	#22	3621561	BOTTOM CUSHION (HHEA MD)
SG852	2340037	SPARK GAP(35UX60B)	#220	4520771	4X18 TAPPING SCREW WITH WASHER
△SG901	2340741	SPARK GAP	#221	4520771	4X18 TAPPING SCREW WITH WASHER
△SP451	2414607	SPEAKER 6X12	#222	3742921	PLASTIC RIVET
△SP452	2414607	SPEAKER 6X12	#222	4520232	4X16 DT SCREW
△SP453	2415001	SPEAKER 3X7 (35UX60B)	#223	4520232	4X16 DT SCREW
△SP454	2415001	SPEAKER 3X7(35UX60B)	#250	3727972	HOLDER-AC LINE CORD
TH651	2340371	TERMISTOR 112301-9	#26	3554531	BOTTOM PAD (HHEA MD)
△TH901	2341281	TERMISTOR PTH451C460BG3R1Q	#260	3874421	BRACKET (35TX69K)
X4601	2786585	CRYSTAL (35UX60B)	#280	3106403	FRONT FRAME(35TX69K)
X5501	2791505	CRYSTAL	#281	3106401	FRONT FRAME(35UX60B)
			#283	3273871	BUTTON (HHEA MD)

PRODUCT SAFETY NOTE: Components marked with an **Δ** have special characteristics important to safety. Before replacing any of these components, read carefully, the PRODUCT SAFETY NOTICE of this Service Manual. Don't degrade the safety of the receiver through improper servicing.

SYMBOL NO.	PART NO.	PART DESCRIPTION	SYMBOL NO.	PART NO.	PART DESCRIPTION
#289	8781642	4X12 TAPPING SCREW			
#291	4159423	M3X12 SCREW W/WASHER (35UX60B)			
#292	8815126	LOCKING WASHER 4			
#298	3875771	LATCH			
#300	3828041	DECORATION PLATE AV (HHEA MD)			
#310	3828031	DECORATION PLATE ANT (HHEA MD) (35UX60B)			
#320	3828032	DECORATION PLATE ANT (HHEA MD) (35TX69K)			
#330	3828053	DECORATION PLATE SP (HHEA MD) (35UX60B)			
#340	3828054	DECORATION PLATE SP (HHEA MD) (35TX69K)			
#400	3739571	CORD HOLDER			
#500	4229271	WASHER (F)(35UX60B)			
#510	4522901	NUT (35UX60B)			
#80	H420301	SLIDER ASSEMBLY (35TX69K)			
#90	H420161	BUTT HINGE (35TX69K)			

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