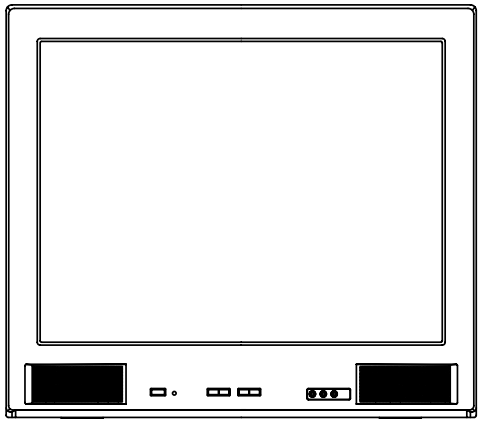
Memorex®

MT2274A

SERVICE MANUAL

COLOR TELEVISION RECEIVER



ORIGINAL
MFR'S VERSION A

SERVICING NOTICES ON CHECKING

1. KEEP THE NOTICES

As for the places which need special attentions, they are indicated with the labels or seals on the cabinet, chassis and parts. Make sure to keep the indications and notices in the operation manual.

2. AVOID AN ELECTRIC SHOCK

There is a high voltage part inside. Avoid an electric shock while the electric current is flowing.

3. USE THE DESIGNATED PARTS

The parts in this equipment have the specific characters of incombustibility and withstand voltage for safety. Therefore, the part which is replaced should be used the part which has the same character.
Especially as to the important parts for safety which is indicated in the circuit diagram or the table of parts as a ⚠ mark, the designated parts must be used.

4. PUT PARTS AND WIRES IN THE ORIGINAL POSITION AFTER ASSEMBLING OR WIRING

There are parts which use the insulation material such as a tube or tape for safety, or which are assembled in the condition that these do not contact with the printed board. The inside wiring is designed not to get closer to the pyrogenic parts and high voltage parts. Therefore, put these parts in the original positions.

5. TAKE CARE TO DEAL WITH THE CATHODE-RAY TUBE

In the condition that an explosion-proof cathode-ray tube is set in this equipment, safety is secured against implosion. However, when removing it or serving from backward, it is dangerous to give a shock. Take enough care to deal with it.

6. AVOID AN X-RAY

Safety is secured against an X-ray by considering about the cathode-ray tube and the high voltage peripheral circuit, etc.
Therefore, when repairing the high voltage peripheral circuit, use the designated parts and make sure not modify the circuit.
Repairing except indicates causes rising of high voltage, and it emits an X-ray from the cathode-ray tube.

7. PERFORM A SAFETY CHECK AFTER SERVICING

Confirm that the screws, parts and wiring which were removed in order to service are put in the original positions, or whether there are the portions which are deteriorated around the serviced places serviced or not. Check the insulation between the antenna terminal or external metal and the AC cord plug blades. And be sure the safety of that.

(INSULATION CHECK PROCEDURE)

1. Unplug the plug from the AC outlet.
2. Remove the antenna terminal on TV and turn on the TV.
3. Insulation resistance between the cord plug terminals and the eternal exposure metal **[Note 2]** should be more than 1M ohm by using the 500V insulation resistance meter **[Note 1]**.
4. If the insulation resistance is less than 1M ohm, the inspection repair should be required.

[Note 1]

If you have not the 500V insulation resistance meter, use a Tester.

[Note 2]

External exposure metal: Antenna terminal

HOW TO ORDER PARTS

Please include the following informations when you order parts. (Particularly the VERSION LETTER.)

1. MODEL NUMBER and VERSION LETTER
   The MODEL NUMBER can be found on the back of each product and the VERSION LETTER can be found at the end of the SERIAL NUMBER.
2. PART NO. and DESCRIPTION
   You can find it in your SERVICE MANUAL.

IMPORTANT

Inferior silicon grease can damage IC's and transistors.
When replacing an IC's or transistors, use only specified silicon grease (YG6260M).
Remove all old silicon before applying new silicon.

CONTENTS

GENERAL SPECIFICATIONS

G-1	**TV System**	CRT		CRT Size / Visual Size	27 inch / 676.0mmV
				CRT Type	Normal
				Magnetic Field BV/BH	+0.45G/0.18G
		Color System			NTSC
		Speaker			2Speaker
				Position	Front
				Size	2.0 x 3.5 Inch
				Impedance	8 ohm
		Sound Output		MAX	2.5 + 2.5 W
				10%(Typical)	- W
		NTSC3.58+4.43 /PAL60Hz			No
G-2	**Tuning System**	Broadcasting System			US System M
		Tuner and Receive CH		System	1Tuner
				Destination	USA(W/ CATV)
				CH Coverage	2 - 69, 4A, A-5 - A-1, A - I, J - W, W+1 - W+84
		Intermediate Frequency		Picture(FP)	45.75MHz
				Sound(FS)	41.25MHz
				FP-FS	4.50MHz
		Preset CH			No
		Stereo/Dual TV Sound			Yes
		Tuner Sound Muting			Yes
G-3	**Power**	Power Source		AC	120V AC 60Hz
				DC	
		Power Consumption		at AC	
					125 W at AC 120 V 60 Hz
				Stand by (at AC)	5 W at AC 120 V 60 Hz
				Per Year	-- kWh/Year
		Protector		Power Fuse	Yes
				Safety Circuit	Yes
				IC Protector(Micro Fuse)	No
G-4	**Regulation**			Safety	UL
				Radiation	FCC
				X-Radiation	DHHS
G-5	**Temperature**			Operation	+5°C ~ +40°C
				Storage	-20°C ~ +60°C
G-6	**Operating Humidity**				Less than 80% RH
G-7	**On Screen Display**	Menu			Yes
			Menu Type		Character
			Picture		Yes
				Contrast	Yes
				Brightness	Yes
				Color	Yes
				Tint	Yes
				Sharpness	Yes
			Audio		Yes
				Bass	No
				Treble	No
				Balance	No
				BBE On/Off	No
				Stable Sound On/Off	Yes
				Surround On/Off	No
			CH Set Up		Yes
				TV/CATV	Yes
				Auto CH Memory	Yes
				Add/Delete	Yes
			Language		Yes
			V-chip		Yes
				CH Label	No
				Favorite CH	No
				Color Stream DVD/DTV	No
			Control Level		Yes
				Volume	Yes
				Brightness	Yes
				Contrast	Yes
				Color	Yes
				Tint	Yes
				Sharpness	Yes
				Tuning	No
				Bass	No
				Treble	No
				Balance	No

GENERAL SPECIFICATIONS

			Back Light	No
		Stereo,Audio Output,SAP		Yes
		Video		Yes
		Color Stream		No
		Channel(TV/Cable)		Yes
		CH Label		No
		Sleep Timer		Yes
		Sound Mute		Yes
		V-chip Rating		Yes
G-8	**OSD Language**			English French Spanish
G-9	**Clock and Timer**	Sleep Timer	Max Time	120 Min
			Step	10 Min
		On/Off Timer	Program(On Timer / Off Timer)	No
		Wake Up Timer		No
		Timer Back-up (at Power Off Mode) more than		-- Min Sec
G-10	**Remote Control**	Unit		RC-DW
		Glow in Dark Remocon		No
		Format		NEC
		Remocon Format		Orion
		Custom Code		86-05 h
		Power Source	Voltage(D.C)	3V
			UM size x pcs	UM-4 x 2 pcs
		Total Keys		28 Keys
		Keys	Power	Yes
			1	Yes
			2	Yes
			3	Yes
			4	Yes
			5	Yes
			6	Yes
			7	Yes
			8	Yes
			9	Yes
			0	Yes
			100	No
			CH Up	Yes
			CH Down	Yes
			Volume Up	Yes
			Volume Down	Yes
			TV/Caption/Text	Yes
			CH1/CH2	Yes
			TV/Video(TV/AV)	Yes
			CH RTN/CH ENT(Quick View)	Yes
			Sleep	Yes
			RE Call(Call)	Yes
			Reset	Yes
			Menu	Yes
			Enter	Yes
			Mute	Yes
			Exit	No
			MTS(Audio Select)	Yes
			Set +	Yes
			Set -	Yes
		Multi Brand Keys	CH Up(VCR)	No
			CH Down(VCR)	No
			Pause/Still	No
			TV/VCR(VCR)	No
			Code	No
			CH Enter	No
			MBR Set	No
			FF	No
			Rew	No
			Rec	No
			Play	No
			Stop	No
			TV	No
			VCR	No
			Cable	No
G-11	**Features**	Auto Degauss		Yes
		Auto Shut Off		Yes
		Canal+		No

GENERAL SPECIFICATIONS

		CATV			Yes
		Anti-theft			No
		Rental			No
		Memory(Last CH)			Yes
		Memory(Last Volume)			Yes
		V-Chip			Yes
				Type	USA, ORION Type
		BBE			No
		Auto Search			No
		CH Allocation			No
		SAP			Yes
		Tone Control			No
		Channel Lock			No
		Just Clock Function			No
		Game Position			No
		CH Label			No
		VM Circuit			No
		Full OSD			No
		Premiere			No
		Comb Filter			No
					Lines
		Auto CH Memory			Yes
		Hotel Lock			No
		Closed Caption			Yes
		Stable Sound			Yes
		Surround			No
		Energy Star			No
		Power On Memory			No
		Favorite CH			No
G-12	**Accessories**	Owner's Manual		Language	English / Spanish
				w/Guarantee Card	No
		Remote Control Unit			Yes
		Rod Antenna			No
				Poles	
				Terminal	
		Loop Antenna			No
				Terminal	
		U/V Mixer			No
		DC Car Cord (Center+)			No
		Guarantee Card			Yes
		Warning Sheet			No
		Circuit Diagram			No
		Antenna Change Plug			No
		Service Facility List			No
		Important Safeguard			No
		Dew/AHC Caution Sheet			No
		AC Plug Adapter			No
		Quick Set-up Sheet			No
		Battery			No
				UM size x pcs	
				OEM Brand	No
		AC Cord			No
		AV Cord (2Pin-1Pin)			No
		Registration Card			No
		Information Sheet			No
		PTB Sheet			No
		300 ohm to 75 ohm Antenna Adapter			No
G-13	**Interface**	Switch	Front	Power	Yes
				System Select	No
				Main Power SW	No
				Sub Power	No
				Channel Up/Reset	Yes
				Channel Down/Enter	Yes
				Volume Up/Set Up	Yes
				Volume Down/Set Down	Yes
				Menu: Vol Up + Vol Down	Yes
			Rear	AC/DC	No
				TV/CATV Selector	No
				Degauss	No
				Main Power SW	No
		Indicator		Power	No
				Stand-by	No

GENERAL SPECIFICATIONS

				On Timer	No
		Terminals	Front	Video Input	RCA
				Audio Input	RCA x 2
				Other Terminal	No
			Rear	Video Input(Rear1)	RCA
				Video Input(Rear2)	No
				Audio Input(Rear1)	RCA x 2
				Audio Input(Rear2)	No
				Video Output	No
				Audio Output	No
				S-Input	Yes
				Color Stream	No
				Diversity	No
				Ext Speaker	No
				DC Jack 12V(Center +)	No
				VHF/UHF Antenna Input	F Type
				AC Outlet	No
G-14	**Set Size**			Approx. W x D x H (mm)	650 x 500.5 x 571.5
G-15	**Weight**			Net (Approx.)	36.5kg (80.5 lbs)
				Gross (Approx.)	40.5Kg (89.3 lbs)
G-16	**Carton**		Master Carton		No
				Content	---- Sets
				Material	-- /--
				Dimensions W x D x H(mm)	-- x -- x --
				Description of Origin	No
			Gift Box	Material	Double/Brown Corrugate Carton
				Dimensions W x D x H(mm)	731 x 580 x 665
				Design	As per Buyer's
				Description of Origin	Yes
			Drop Test		Natural Dropping At 1 Corner / 3 Edges / 6 Surfaces
				Height (cm)	31
			Container Stuffing		192 Sets/40' container
G-17	**Material**		Cabinet	Cabinet Front	PS 94V0 DECABROM
				Cabinet Rear	PS 94V0 DECABROM
			PCB	Non-Halogen Demand	No
				Eyelet Demand	No
G-18	**Environment**		Pb-free Soldering		No
			Parts Specificat		No

DISASSEMBLY INSTRUCTIONS

1. REMOVAL OF ANODE CAP

Read the following **NOTED** items before starting work.

* After turning the power off there might still be a potential voltage that is very dangerous. When removing the Anode Cap, make sure to discharge the Anode Cap's potential voltage.
* Do not use pliers to loosen or tighten the Anode Cap terminal, this may cause the spring to be damaged.

REMOVAL

1. Follow the steps as follows to discharge the Anode Cap. **(Refer to Fig. 1-1.)**
   Connect one end of an Alligator Clip to the metal part of a flat-blade screwdriver and the other end to ground. While holding the plastic part of the insulated screwdriver, touch the support of the Anode with the tip of the screwdriver.
   A cracking noise will be heard as the voltage is discharged.

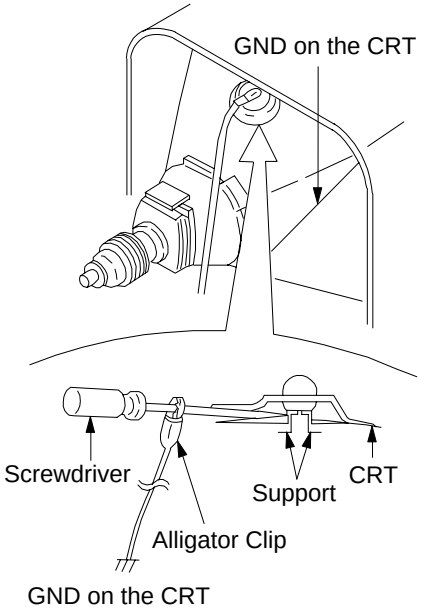


Fig. 1-1

2. Flip up the sides of the Rubber Cap in the direction of the arrow and remove one side of the support. **(Refer to Fig. 1-2.)**

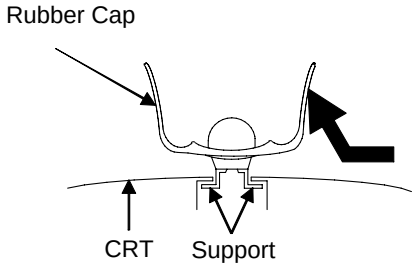


Fig. 1-2

3. After one side is removed, pull in the opposite direction to remove the other.

NOTE

Take care not to damage the Rubber Cap.

INSTALLATION

1. Clean the spot where the cap was located with a small amount of alcohol. **(Refer to Fig. 1-3.)**

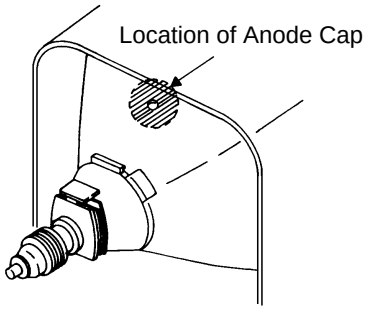


Fig. 1-3

NOTE

Confirm that there is no dirt, dust, etc. at the spot where the cap was located.

2. Arrange the wire of the Anode Cap and make sure the wire is not twisted.
3. Turn over the Rubber Cap. **(Refer to Fig. 1-4.)**

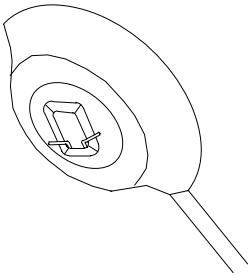


Fig. 1-4

4. Insert one end of the Anode Support into the anode button, then the other as shown in **Fig. 1-5.**

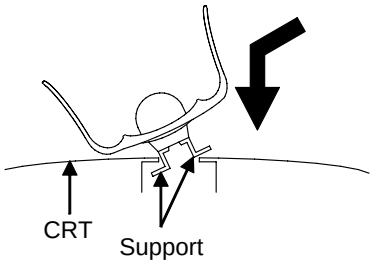


Fig. 1-5

5. Confirm that the Support is securely connected.
6. Put on the Rubber Cap without moving any parts.

DISASSEMBLY INSTRUCTIONS

2. REMOVAL AND INSTALLATION OF FLAT PACKAGE IC

REMOVAL

1. Put Masking Tape (cotton tape) around the Flat Package IC to protect other parts from any damage. **(Refer to Fig. 2-1.)**

   NOTE

   Masking is carried out on all the parts located within 10 mm distance from IC leads.

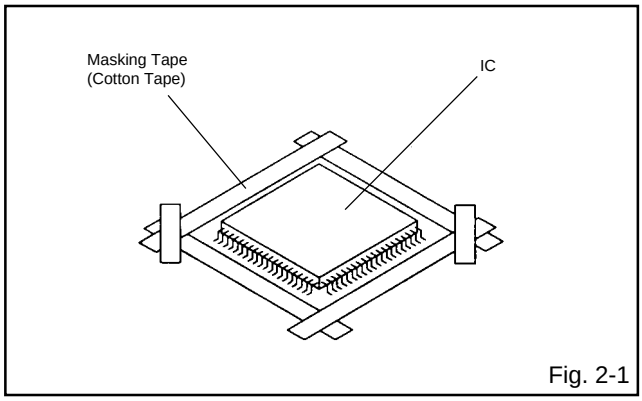


Fig. 2-1

2. Heat the IC leads using a blower type IC desoldering machine. **(Refer to Fig. 2-2.)**

   NOTE

   Do not rotate or move the IC back and forth until IC can move back and forth easily after desoldering the leads completely.

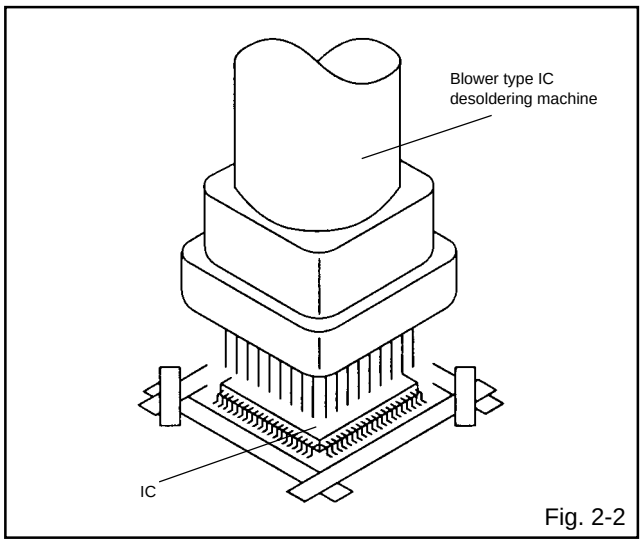


Fig. 2-2

3. When IC starts moving back and forth easily after desoldering completely, pickup the corner of the IC using a tweezers and remove the IC by moving with the IC desoldering machine. **(Refer to Fig. 2-3.)**

   NOTE

   Some ICs on the PCB are affixed with glue, so be careful not to break or damage the foil of each IC leads or solder lands under the IC when removing it.

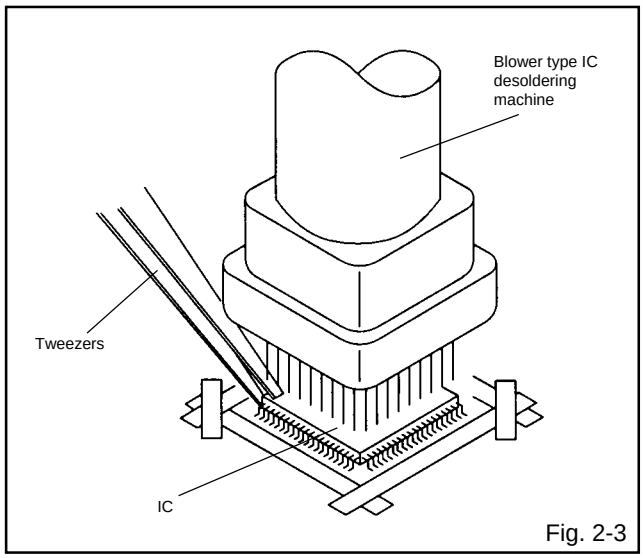


Fig. 2-3

4. Peel off the Masking Tape.

5. Absorb the solder left on the pattern using the Braided Shield Wire. **(Refer to Fig. 2-4.)**

   NOTE

   Do not move the Braided Shield Wire in the vertical direction towards the IC pattern.

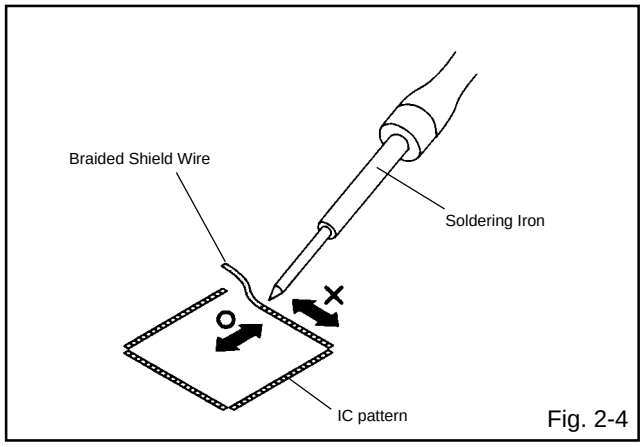


Fig. 2-4

DISASSEMBLY INSTRUCTIONS

INSTALLATION

1. Take care of the polarity of new IC and then install the new IC fitting on the printed circuit pattern. Then solder each lead on the diagonal positions of IC temporarily. **(Refer to Fig. 2-5.)**

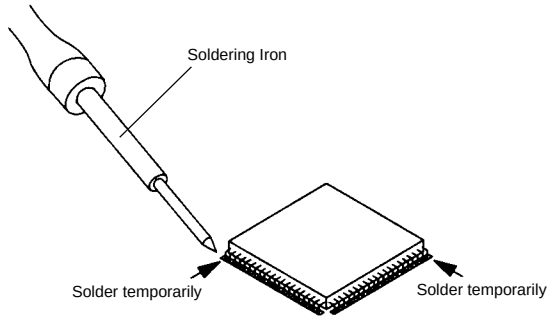


Fig. 2-5

2. Supply the solder from the upper position of IC leads sliding to the lower position of the IC leads. **(Refer to Fig. 2-6.)**

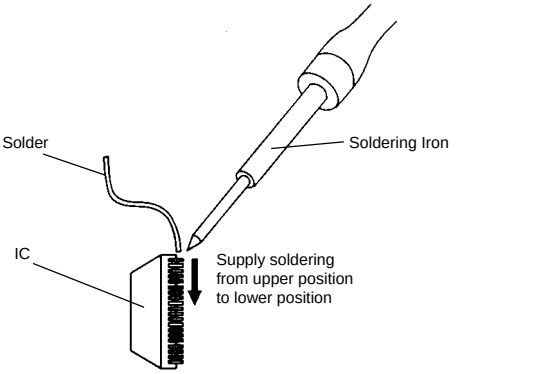


Fig. 2-6

3. Absorb the solder left on the lead using the Braided Shield Wire. **(Refer to Fig. 2-7.)**

   NOTE

   Do not absorb the solder to excess.

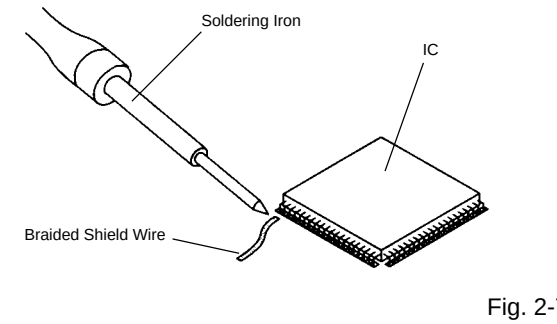


Fig. 2-7

4. When bridge-soldering between terminals and/or the soldering amount are not enough, resolder using a Thin-tip Soldering Iron. **(Refer to Fig. 2-8.)**

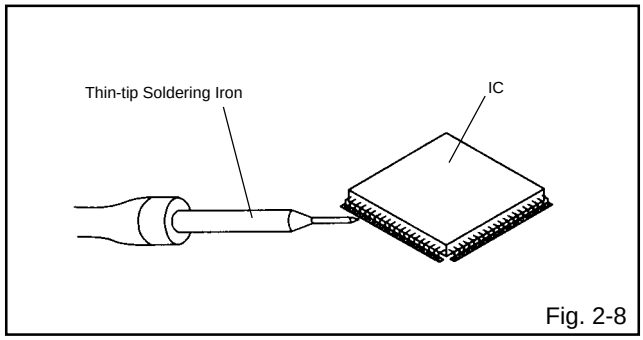


Fig. 2-8

5. Finally, confirm the soldering status on four sides of the IC using a magnifying glass.
   Confirm that no abnormality is found on the soldering position and installation position of the parts around the IC. If some abnormality is found, correct by resoldering.

   NOTE

   When the IC leads are bent during soldering and/or repairing, do not repair the bending of leads. If the bending of leads are repaired, the pattern may be damaged. So, be always sure to replace the IC in this case.

SERVICE MODE LIST

This unit is provided with the following SERVICE MODES so you can repair, examine and adjust easily.
To enter the Service Mode, press both set key and remote control key for more than 2 seconds.

Set Key	Remocon Key	Operations
VOL. (-) MIN	0	Releasing of V-CHIP PASSWORD and LOCK PASSWORD.
VOL. (-) MIN	1	Initialization of factory data. NOTE: Do not use this for normal servicing. If you set factory initialization, the memories are reset such as the clock setting, the channel setting, the POWER ON total hours, and PLAY/REC total hours.
VOL. (-) MIN	6	POWER ON total hours is displayed on the screen. Refer to the "CONFIRMATION OF HOURS USED". Can be checked of the INITIAL DATA of MEMORY IC. Refer to the "WHEN REPLACING EEPROM (MEMORY) IC".
VOL. (-) MIN	9	Display of the Adjustment MENU on the screen. Refer to the "ELECTRICAL ADJUSTMENT" (On-Screen Display Adjustment).

CONFIRMATION OF HOURS USED

POWER ON total hours can be checked on the screen. Total hours are displayed in 16 system of notation.

NOTE: If you set factory initialization, the total hours is reset to "0".

1. Set the VOLUME to minimum.
2. Press both VOL. DOWN button on the set and Channel button **(6)** on the remote control for more than 2 seconds.
3. After the confirmation of using hours, turn off the power.

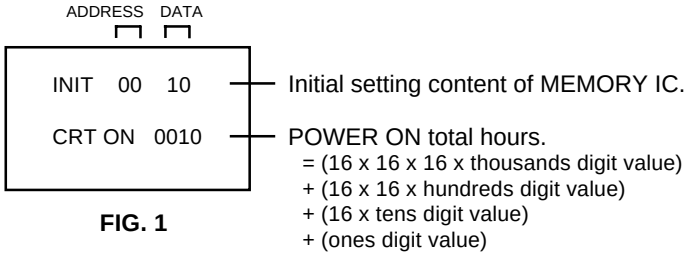


FIG. 1

WHEN REPLACING EEPROM (MEMORY) IC

If a service repair is undertaken where it has been required to change the MEMORY IC, the following steps should be taken to ensure correct data settings while making reference to TABLE 1.

INI	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+A	+B	+C	+D	+E	+F
00	10	04	4A	4C	57	B3	24	7B	03	02	CC	50	D4	3F	00	03

Table 1

1. Enter DATA SET mode by setting VOLUME to minimum.
2. While holding down VOLUME button on front cabinet, press key 6 on remote control for more than 2 seconds. ADDRESS and DATA should appear as FIG 1.
3. ADDRESS is now selected and should "blink". Using the VOL. +/- button on the remote, step through the ADDRESS until required ADDRESS to be changed is reached.
4. Press ENTER to select DATA. When DATA is selected, it will "blink".
5. Again, step through the DATA using VOL. +/- button until required DATA value has been selected.
6. Pressing ENTER will take you back to ADDRESS for further selection if necessary.
7. Repeat steps 3 to 6 until all data has been checked.
8. When satisfied correct DATA has been entered, turn POWER off (return to STANDBY MODE) to finish DATA input. **After the data input, set to the initializing of shipping.**
9. Turn POWER on.
10. While holding down VOLUME button on front cabinet, press key 1 on remote control for more than 1 second.
11. After the finishing of the initializing of shipping, the unit will turn off automatically.

ELECTRICAL ADJUSTMENTS

1. ADJUSTMENT PROCEDURE

Read and perform these adjustments when repairing the circuits or replacing electrical parts or PCB assemblies.

CAUTION

- Use an isolation transformer when performing any service on this chassis.
- Before removing the anode cap, discharge electricity because it contains high voltage.
- When removing a PCB or related component, after unfastening or changing a wire, be sure to put the wire back in its original position.
- When you exchange IC and Transistor with a heat sink, apply silicon grease on the contact section of the heat sink. Befor applying new silicon grease, remove all the old silicon grease. (Old grease may cause damages to the IC and Transistor.)

Prepare the following measurement tools for electrical adjustments.

1. Oscilloscope
2. Digital Voltmeter
3. Multi-sound Generator
4. Pattern Generator

On-Screen Display Adjustment

1. In the condition of NO indication on the screen. Press the VOL. DOWN button on the set and the Channel button **(9)** on the remote control for more than 1 second to appear the adjustment mode on the screen as shown in **Fig. 1-1**.

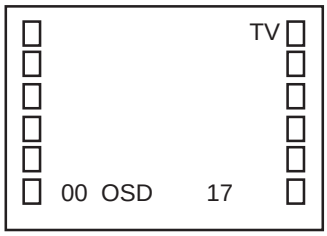


Fig. 1-1

2. Use the Channel UP/DOWN button or Channel button **(0-9)** on the remote control to select the options shown in **Fig. 1-2**.
3. Press the MENU button on the remote control to end the adjustments.

NO.	FUNCTION	NO.	FUNCTION
00	OSD H	16	CONTRAST CENT
01	CUT OFF	17	CONTRAST MAX
04	H.VCO	18	CONTRAST MIN
05	H.PHASE	19	COLOR CENT
06	V.SIZE	20	COLOR MAX
07	V.SHIFT	21	COLOR MIN
08	R.DRIVE	22	TINT
09	B.DRIVE	23	SHARPNESS
10	R.BIAS	24	FM LEVEL
11	G.BIAS	25	LEVEL
12	B.BIAS	26	SEPARATION 1
13	BRIGHT CENT	27	SEPARATION 2
14	BRIGHT MAX	28	TEST MONO
15	BRIGHT MIN	29	TEST STEREO

Fig. 1-2

2. BASIC ADJUSTMENTS

2-1: CONSTANT VOLTAGE

1. Place the set in AV MODE without signal.
2. Connect the digital voltmeter to the **TP401**.
3. Adjust the **VR502** until the digital voltmeter is 120 ± 0.5V.

2-2: CUT OFF

1. Place the set in Aging Test for more than 15 minutes.
2. Place the set in AV MODE without signal.
3. Using the remote control, set the brightness and contrast to normal position.
4. Activate the adjustment mode display of **Fig. 1-1** and press the channel button **(01)** on the remote control to select “CUT OFF”.
5. Adjust the **Screen Volume** until a dim raster is obtained.

2-3: WHITE BALANCE

NOTE: Adjust after performing CUT OFF adjustment.

1. Place the set in Aging Test for more than 15 minutes.
2. Receive the white 100% signal from the Pattern Generator.
3. Using the adjustment control, set the brightness and contrast to normal position.
4. Activate the adjustment mode display of **Fig. 1-1** and press the channel button **(10)** on the remote control to select "R.BIAS".
5. Using the VOL. UP/DOWN button on the remote control, adjust the R.BIAS.
6. Press the CH. UP/DOWN button on the remote control to select the "R.DRIVE", "B.DRIVE", "G.BIAS" or "B.BIAS".
7. Using the VOL. UP/DOWN button on the remote control, adjust the R.DRIVE, B.DRIVE, G.BIAS or B.BIAS.
8. Perform the above adjustments 6 and 7 until the white color is achieved.

2-4: FOCUS

1. Receive the monoscope pattern.
2. Turn the Focus Volume fully counterclockwise once.
3. Adjust the **Focus Volume** until picture is distinct.

2-5: VERTICAL POSITION

1. Receive the monoscope pattern.
2. Using the remote control, set the brightness and contrast to normal position.
3. Adjust the **VR401** until the horizontal line becomes fit to the notch of the shadow mask. **(Refer to Fig. 2-1)**

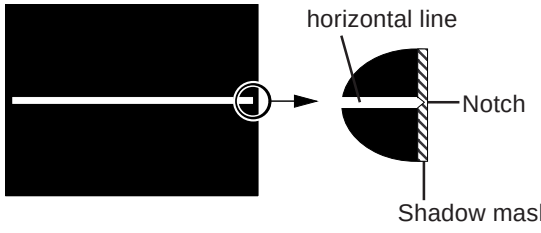


Fig. 2-1

ELECTRICAL ADJUSTMENTS

2-6: VERTICAL SIZE

1. Receive the monoscope pattern.
2. Using the remote control, set the brightness and contrast to normal position.
3. Activate the adjustment mode display of **Fig. 1-1** and press the channel button **(06)** on the remote control to select “V. SIZE”.
4. Press the VOL. UP/DOWN button on the remote control until the SHIFT quantity of the OVER SCAN on upside and downside becomes 9 ± 2%.

2-7: VERTICAL LINEARITY

NOTE: Adjust after performing adjustments in section 2-6. After the adjustment of Vertical Linearity, reconfirm the Vertical Position and Vertical Size adjustments.

1. Receive the monoscope pattern.
2. Using the remote control, set the brightness, contrast, to normal position.
3. Adjust the **VR402** until the SHIFT quantity of the OVER SCAN on upside and downside becomes minimum.

2-8: LEVEL

1. Connect the AC voltmeter to **pin 6 of CP601**.
2. Activate the adjustment mode display of **Fig. 1-1** and press the channel button **(25)** on the remote control to select “LEVEL”.
3. Press the VOL. UP/DOWN button on the remote control until the AC voltmeter is 80 ± 2mV.

2-9: HORIZONTAL PHASE

1. Receive the monoscope pattern.
2. Using the remote control, set the brightness and contrast to normal position.
3. Activate the adjustment mode display of **Fig. 1-1** and press the channel button **(05)** on the remote control to select “H.PHASE”.
4. Press the VOL. UP/DOWN button on the remote control until the SHIFT quantity of the OVER SCAN on right and left becomes minimum.

2-10: CONTRAST MAX

1. Receive an over 70dB color bar pattern. (RF Input)
2. Using the remote control, set the brightness and contrast to normal position.
3. Activate the adjustment mode display of **Fig. 1-1** and press the channel button **(17)** on the remote control to select "CONT MAX".
4. Press the VOL. UP/DOWN button on the remote control until the contrast step No. becomes "70".
5. Receive a broadcast and check if the picture is normal.
6. Receive the color bar pattern. (Audio Video Input)
7. Press the TV/VIDEO button on the remote control to set to the AV mode. Then perform the above adjustments 2~5.

2-11: SEPARATION 1, 2

Please do the method (1) or method (2) adjustment.

Method (1)

1. Set the multi-sound signal generator for each different L-ch and R-ch frequency (Ex. L-ch=2KHz, R-ch=400Hz) and receive the RF.
2. Connect the oscilloscope to the **pin 6 and pin 7 of CP601**.
3. Activate the adjustment mode display of **Fig. 1-1** and press the channel button **(26)** on the remote control to select “SEP 1”.
4. Press the VOL. UP/DOWN button on the remote control to adjust it until the audio output wave becomes a fine sine wave.
5. Press the CH UP button once the set to “SEP 2” mode. Then perform the above adjustment 4.

Method (2)

1. Set the multi-sound signal generator L-ch=1KHz, R-ch =Non input and receive the RF.
2. Connect the oscilloscope to the **pin 6 and pin 7 of CP601**.
3. Press the AUDIO SELECT button on the remote control to set to the stereo mode.
4. Activate the adjustment mode display of **Fig. 1-1** and press the channel button **(26)** on the remote control to select “SEP 1”.
5. Press the VOL. UP/DOWN button on the remote control to adjust it until the R-ch output becomes minimum.
6. Set the multi-sound signal generator L-ch=Non input, R-ch=1KHz and receive the RF.
7. Connect the oscilloscope to the **pin 6 and pin 7 of CP601**.
8. Activate the adjustment mode display of **Fig. 1-1** and press the channel button **(27)** on the remote control to select “SEP 2”.
9. Press the VOL. UP/DOWN button on the remote control to adjust it until the L-ch output becomes minimum. The output difference of the between with Filter and without Filter should be more than 20db for both L and R.

2-12: OSD POSITION

1. Activate the adjustment mode display of **Fig. 1-1**.
2. Press the VOL. UP/DOWN button on the remote control until the difference of A and B becomes minimum. **(Refer to Fig. 2-2)**

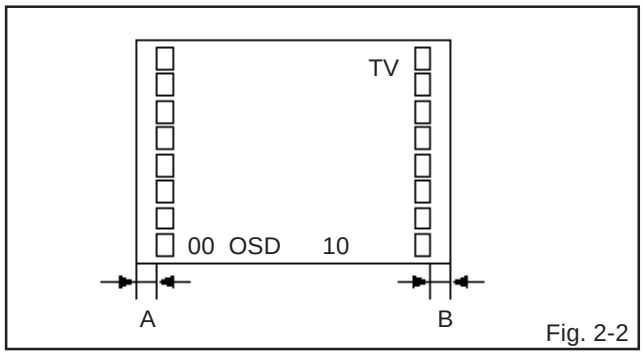


Fig. 2-2

ELECTRICAL ADJUSTMENTS

2-13: BRIGHT CENT

1. Receive the monoscope pattern. (RF Input)
2. Using the remote control, set the brightness and contrast to normal position.
3. Activate the adjustment mode display of **Fig. 1-1** and press the channel button **(13)** on the remote control to select "BRI CENT".
4. Press the VOL. UP/DOWN button on the remote control until the white 10% is starting to be visible.
5. Receive the monoscope pattern. (Audio Video Input)
6. Press the TV/VIDEO button on the remote control to set to the AV mode. Then perform the above adjustments 2~4.

2-14: COLOR CENT

1. Receive the color bar pattern. (RF Input)
2. Using the remote control, set the brightness, contrast, color and tint to normal position.
3. Connect the oscilloscope to **TP022**.
4. Activate the adjustment mode display of **Fig. 1-1** and press the channel button **(19)** on the remote control to select "COLOR CENT".
5. Adjust the VOLTS RANGE VARIABLE knob of the oscilloscope until the range between white 100% and 0% is set to 4 scales on the screen of the oscilloscope.
6. Press the VOL. UP/DOWN button on the remote control until the red color level is adjusted to 120 ± 5% of the white level. **(Refer to Fig. 2-3)**
7. Receive the video color bar pattern. (Audio Video Input)
8. Set to the AV mode. Then perform the above adjustments 2~6.

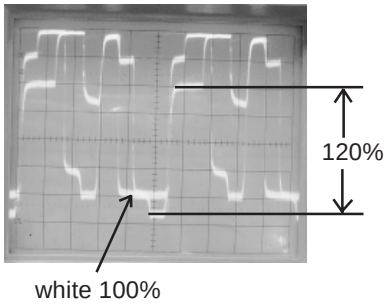


Fig. 2-3

2-15: TINT

1. Receive the color bar pattern. (RF Input)
2. Using the remote control, set the brightness, contrast, color and tint to normal position.
3. Connect the oscilloscope to **TP024**.
4. Activate the adjustment mode display of **Fig. 1-1** and press the channel button **(22)** on the remote control to select "TINT".
5. Press the VOL. UP/DOWN button on the remote control until the section "A" becomes as straight line. **(Refer to Fig. 2-4)**
6. Receive the video color bar pattern. (Audio Video Input)
7. Set to the AV mode. Then perform the above adjustments 2~5.

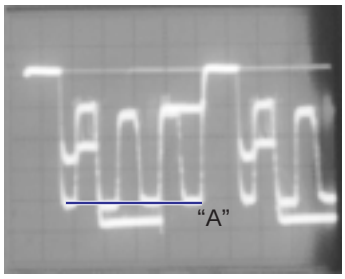


Fig. 2-4

2-16: HORIZONTAL SIZE

1. Receive the monoscope pattern.
2. Using the remote control, set the brightness and contrast to normal position.
3. Adjust the **VR404** until the SHIFT quantity of the OVER SCAN on the right and left becomes 10 ± 4%.

2-17: PALABOLA CORR

1. Receive the chosshatch pattern.
2. Using the remote control, set the brightness and contrast to normal position.
3. Adjust the **VR403**, so that the 4th length line becomes straight from the outside of the right and left.

2-18: Confirmation of Fixed Value (step No.)

Please check if the fixed values of the each adjustment items are set correctly referring below.

NO.	FUNCTION	RF	AV
04	H VCO	04	04
07	V.SHIFT	02	02
14	BRIGHT MAX	130	130
15	BRIGHT MIN	60	60
16	CONT CENT	35	35
18	CONT MIN	25	25
20	COLOR MAX	75	75
21	COLOR MIN	00	00
23	SHARPNESS	45	45
24	FM LEVEL	01	01

ELECTRICAL ADJUSTMENTS

3. PURITY AND CONVERGENCE ADJUSTMENTS

NOTE

1. Turn the unit on and let it warm up for at least 30 minutes before performing the following adjustments.
2. Place the CRT surface facing east or west to reduce the terrestrial magnetism.
3. Turn ON the unit and demagnetize with a Degauss Coil.

3-1: STATIC CONVERGENCE (ROUGH ADJUSTMENT)

1. Tighten the screw for the magnet. Refer to the adjusted CRT for the position. **(Refer to Fig. 3-1)**
   If the deflection yoke and magnet are in one body, untighten the screw for the body.
2. Receive the green raster pattern from the color bar generator.
3. Slide the deflection yoke until it touches the funnel side of the CRT.
4. Adjust center of screen to green, with red and blue on the sides, using the pair of purity magnets.
5. Switch the color bar generator from the green raster pattern to the crosshatch pattern.
6. Combine red and blue of the 3 color crosshatch pattern on the center of the screen by adjusting the pair of 4 pole magnets.
7. Combine red/blue (magenta) and green by adjusting the pair of 6 pole magnets.
8. Adjust the crosshatch pattern to change to white by repeating steps 6 and 7.

3-2: PURITY

NOTE

Adjust after performing adjustments in section 3-1.

1. Receive the green raster pattern from color bar genera-
2. tor.
   Adjust the pair of purity magnets to center the color on the screen.
   Adjust the pair of purity magnets so the color at the ends
3. are equally wide.
   Move the deflection yoke backward (to neck side) slowly, and stop it at the position when the whole screen
4. is green.
5. Confirm red and blue color.
   Adjust the slant of the deflection yoke while watching the screen, then tighten the fixing screw.

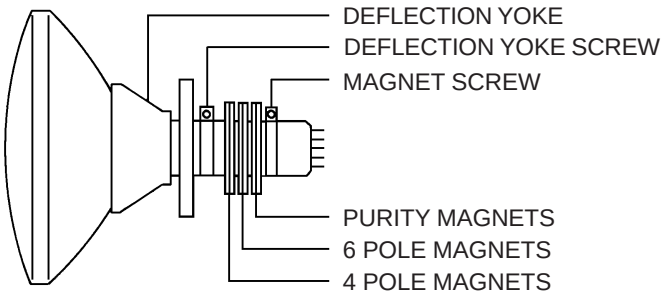


Fig. 3-1

3-3: STATIC CONVERGENCE

NOTE

Adjust after performing adjustments in section 3-2.

1. Receive the crosshatch pattern from the color bar generator.
2. Combine red and blue of the 3 color crosshatch pattern on the center of the screen by adjusting the pair of 4 pole magnets.
3. Combine red/blue (magenta) and green by adjusting the pair of 6 pole magnets.

3-4: DYNAMIC CONVERGENCE

NOTE

Adjust after performing adjustments in section 3-3.

1. Adjust the differences around the screen by moving the deflection yoke upward/downward and right/left. **(Refer to Fig. 3-2-a)**
2. Insert three wedges between the deflection yoke and CRT funnel to fix the deflection yoke. **(Refer to Fig. 3-2-b)**

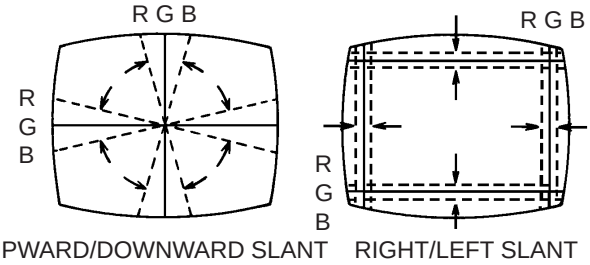


Fig. 3-2-a

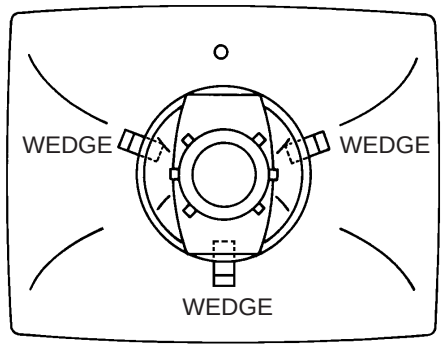
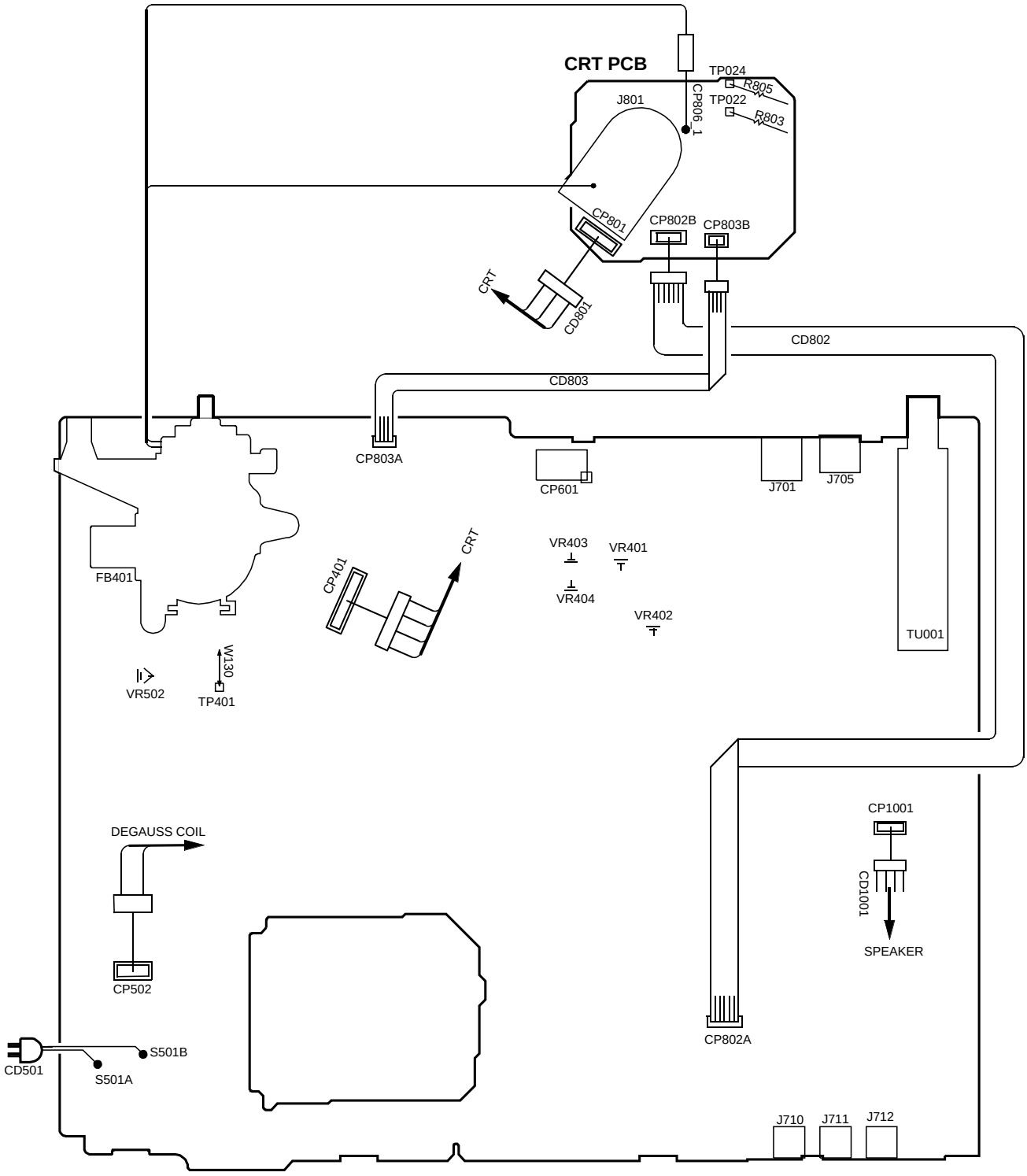


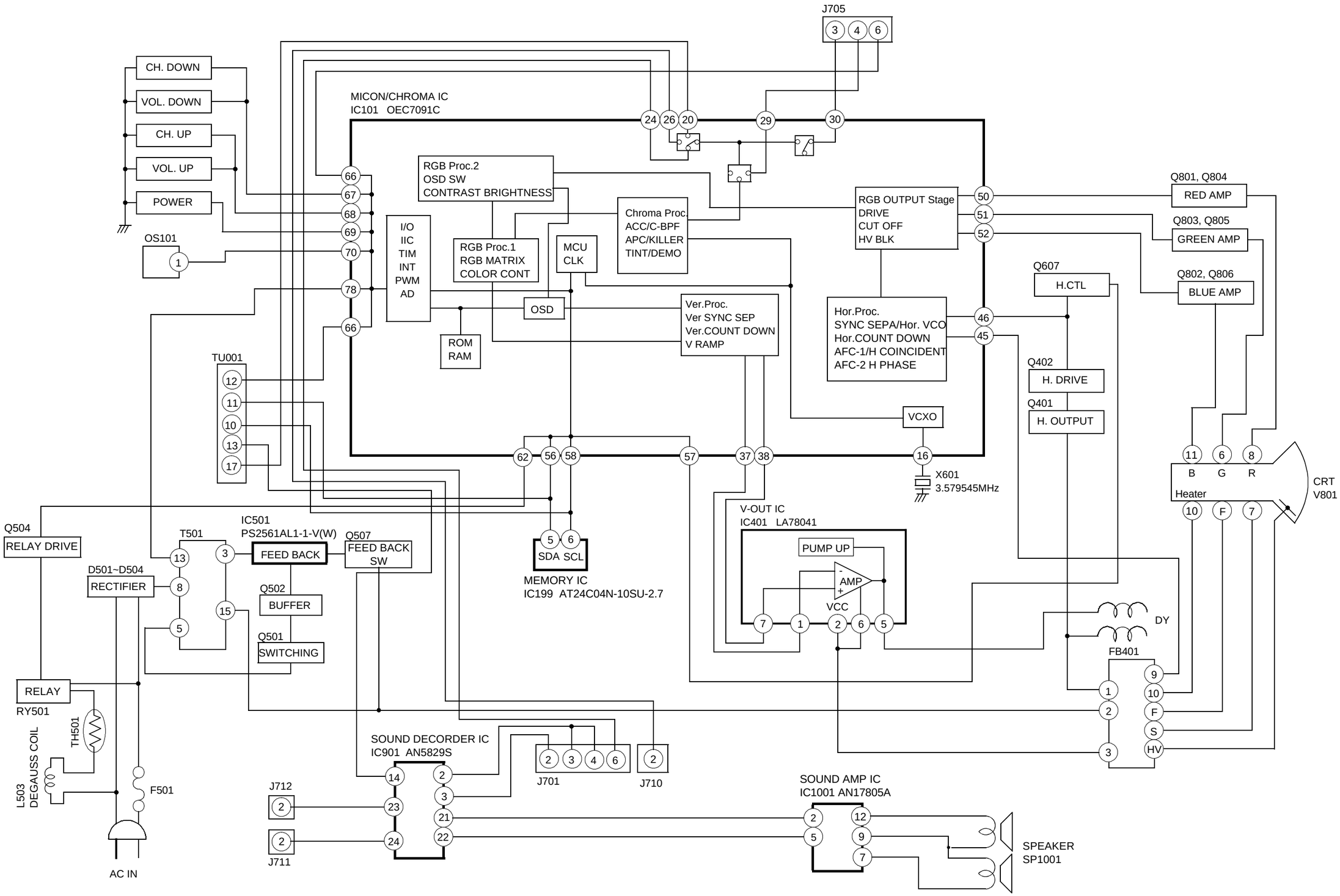
Fig. 3-2-b

ELECTRICAL ADJUSTMENTS

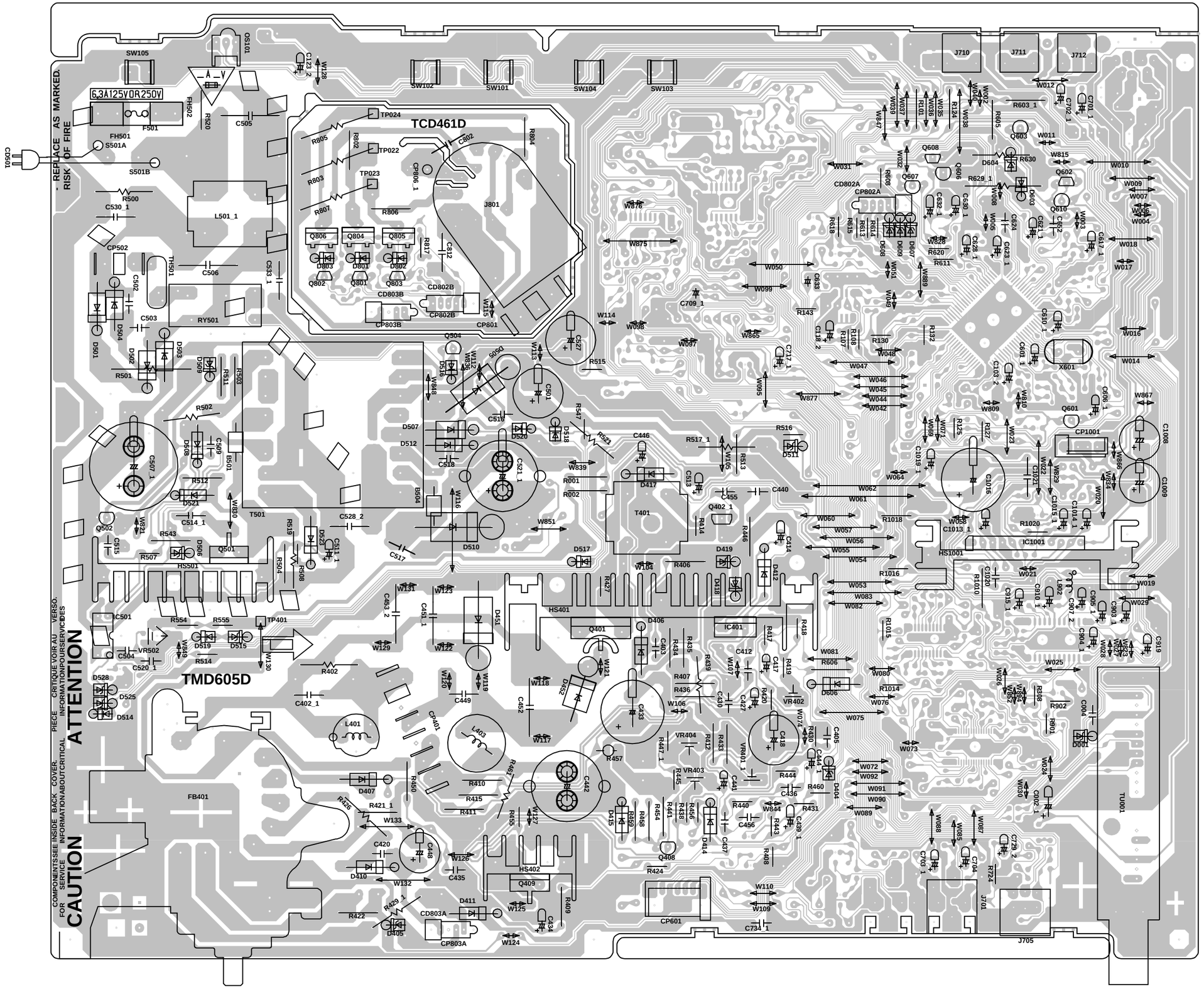
4. ELECTRICAL ADJUSTMENT PARTS LOCATION GUIDE (WIRING CONNECTION)



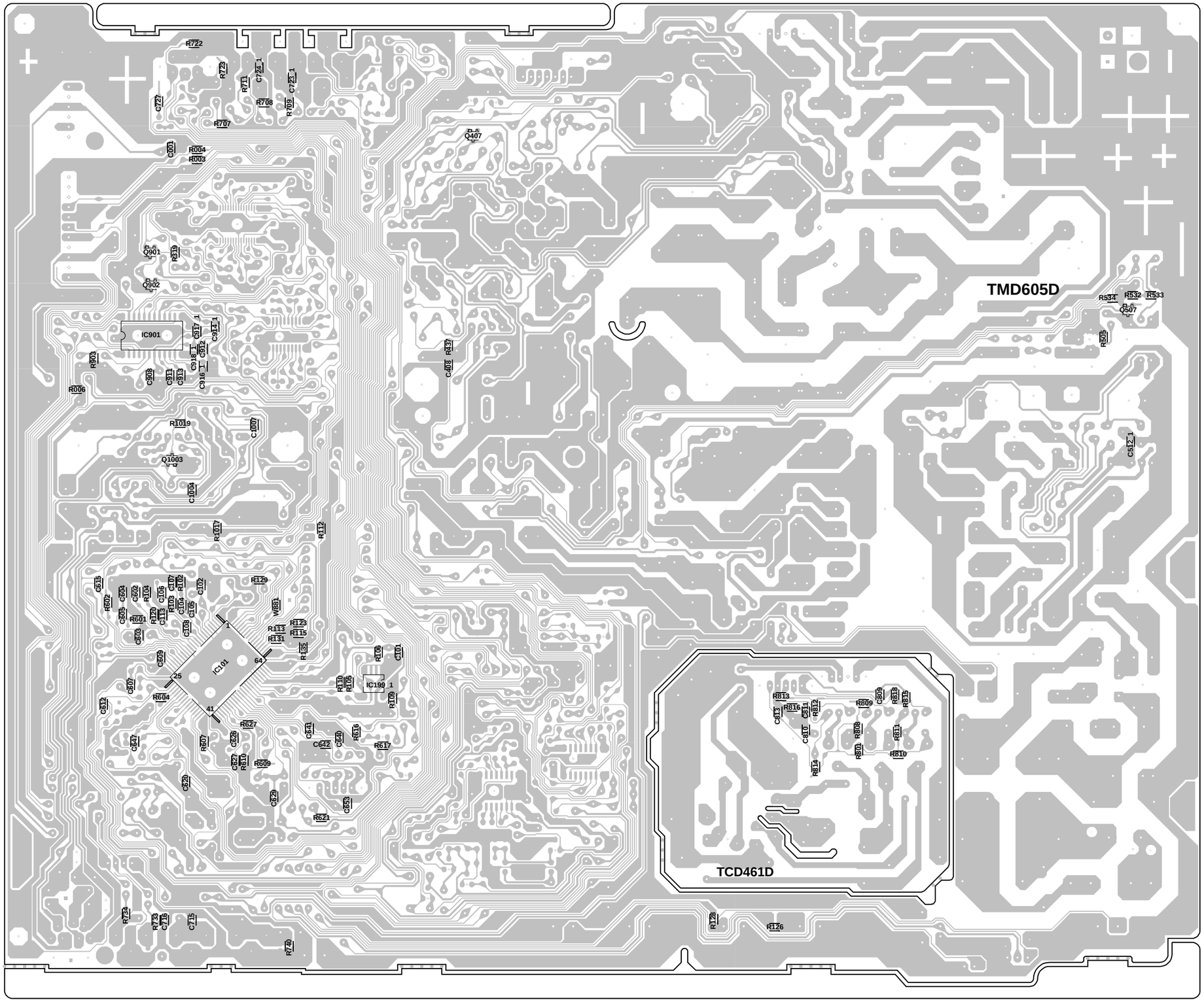
BLOCK DIAGRAM



PRINTED CIRCUIT BOARDS
MAIN/CRT (INSERTED PARTS)
SOLDER SIDE



PRINTED CIRCUIT BOARDS
MAIN/CRT (CHIP MOUNTED PARTS)
SOLDER SIDE



MICON/CHROMA/TUNER SCHEMATIC DIAGRAM

(MAIN PCB)

1	CNVSS	41	NC
2	XIN	42	HVCO F/B
3	XOUT	43	AFC FILTER
4	TEST1	44	DEF GND
5	VSS	45	FBP IN
6	MCU VCC	46	H OUT
7	TEST0	47	DEF VCC
8	FILT	48	NC
9	HLT	49	HI VCC
10	VHOLD	50	R OUT
11	CVIN	51	G OUT
12	RESET IN	52	B OUT
13	MCU RESET OUT	53	ACL
14	Y SW OUT	54	NC
15	V/C GND	55	PROTECT
16	3.58 XTAL	56	SDA
17	C-APC	57	H_CTL
18	MCU5.7V REG OUT	58	SCL
19	NC	59	NC
20	CVBS IN3	60	NC
21	AUDIO IN3	61	NC
22	V/C VCC	62	DEGAUSS_H
23	MCU TEST	63	STANDBY_H
24	CVBS IN2	64	VOLUME
25	AUDIO IN2	65	NC
26	CVBS IN1	66	AFT
27	AUDIO IN1	67	KEY1
28	5.7V REG OUT	68	KEY2
29	C(Y/C) IN	69	POWER_ON
30	Y(Y/C) IN	70	REMOCON
31	VREG VCC	71	AV2
32	FSC OUT	72	AV1
33	MONITOR OUT	73	AUDIO_MUTE
34	AUDIO ATT OUT	74	X-RAY
35	AUDIO ATT FILTER	75	IIC_OFF
36	NC	76	ON_TIMER
37	V RAMP F/B	77	SYNC
38	V RAMP OUT	78	POWER FAIL
39	V RAMP CAP	79	X-RAY_TEST
40	8.7V REG OUT	80	EXT_MUTE

NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE 。

NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

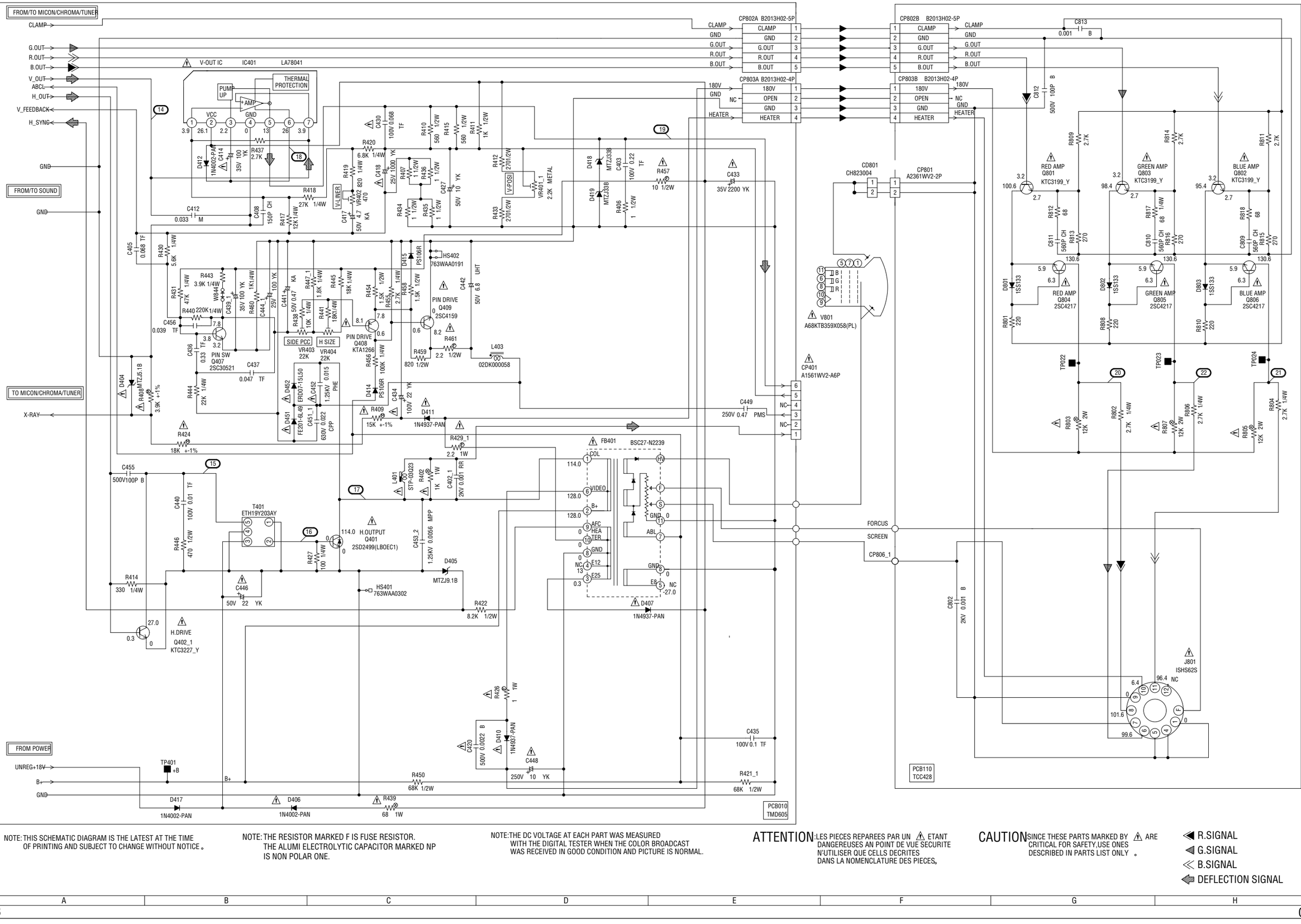
ATTENTION: LES PIECES REPAREES PAR UN ⚠ ETANT DANGEREUSES AN POINT DE VUE SECURITE N'UTILISER QUE CELLS DECRITES DANS LA NOMENCLATURE DES PIECES。

CAUTION SINCE THESE PARTS MARKED BY ⚠ ARE CRITICAL FOR SAFETY, USE ONES DESCRIBED IN PARTS LIST ONLY 。

◀ R.SIGNAL
◀ G.SIGNAL
≪ B.SIGNAL

⇚ DEFLECTION SIGNAL
⇦ AUDIO SIGNAL
◁◁ TUNER VIDEO SIGNAL

DEFLECTION/CRT SCHEMATIC DIAGRAM (TV MT PCB)



NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE 。

NOTE: THE RESISTOR MARKED F IS FUSE RESISTOR. THE ALUMI ELECTROLYTIC CAPACITOR MARKED NP IS NON POLAR ONE.

NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

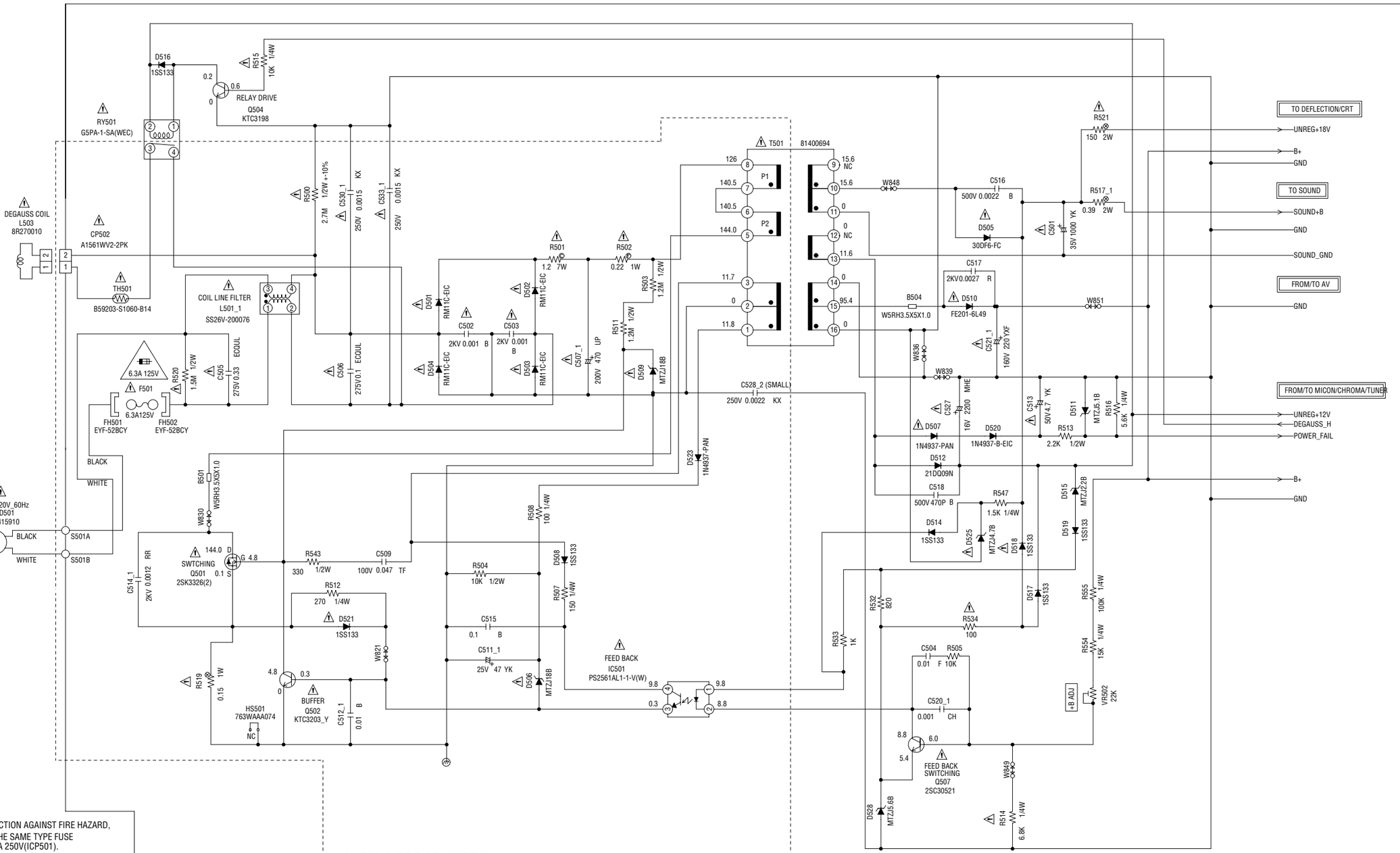
ATTENTION: LES PIECES REPAREES PAR UN ⚠ ETANT DANGEREUSES AN POINT DE VUE SECURITE N'UTILISER QUE CELLS DECRITES DANS LA NOMENCLATURE DES PIECES。

CAUTION SINCE THESE PARTS MARKED BY ⚠ ARE CRITICAL FOR SAFETY, USE ONES DESCRIBED IN PARTS LIST ONLY 。

◀ R.SIGNAL
◀ G.SIGNAL
≪ B.SIGNAL
⋘ DEFLECTION SIGNAL

POWER SCHEMATIC DIAGRAM

(TV MT PCB)



6.3A 125V 5A 250V

CAUTION: FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH THE SAME TYPE FUSE 6.3A 125V(F501)AND 5A 250V(ICP501).

ATTENTION: POUR UNE PROTECTION CONTINUE LES RISQUES D'INCEIE N'UTILISER QUE DES FUSIBLE DE MEME TYPE 6.3A 125V(F501) ET 5A 250(ICP501).

CAUTION: ICP501 IS MANUFACTURED BY SKYGATE CO,LTD. TYPE 20N.

CAUTION: ⏚ IS THE LIVE CONNECTION

PCB010
TMD605

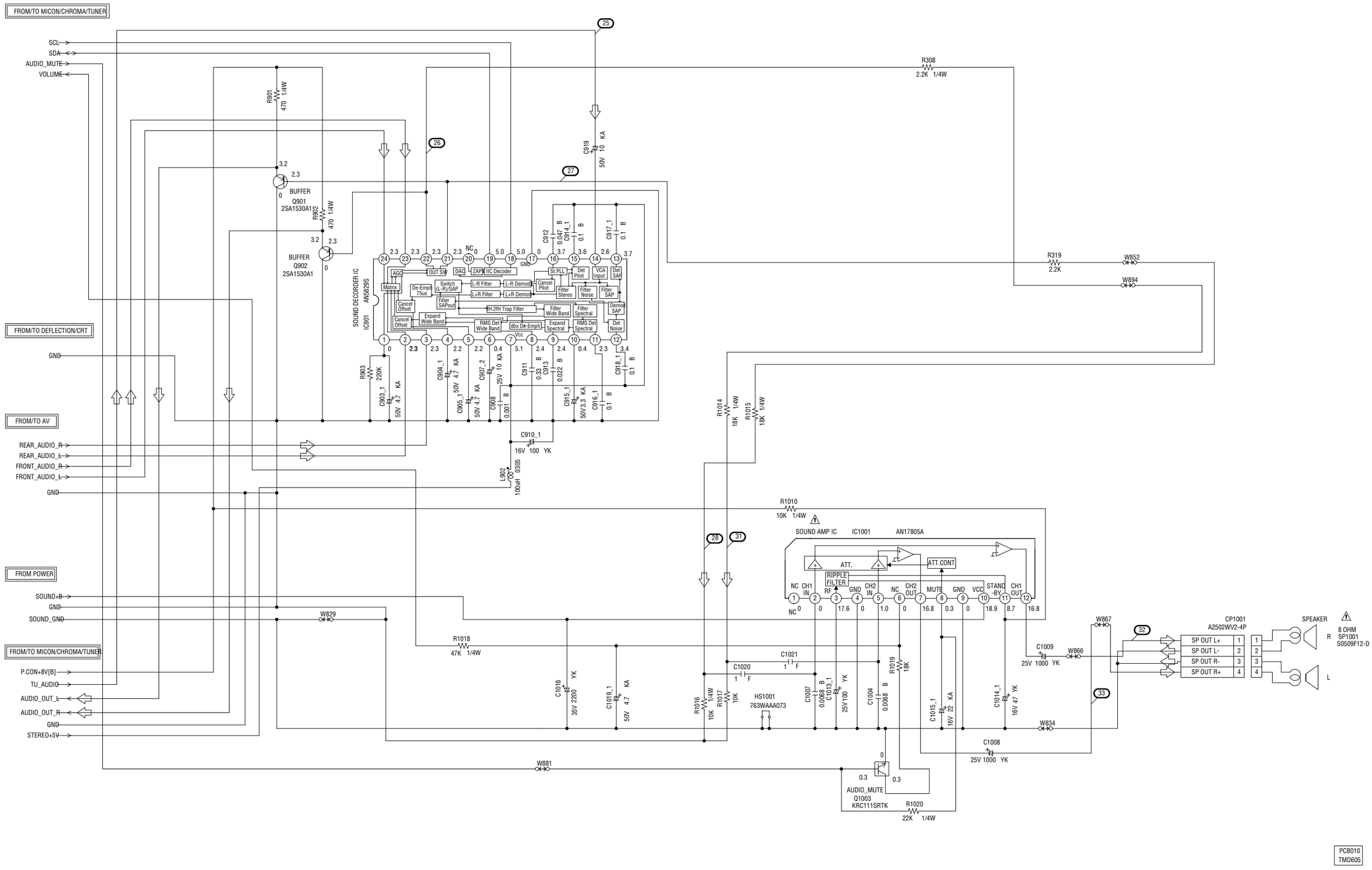
NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE。

NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

ATTENTION: LES PIECES REPAREES PAR UN ⚠ ETANT DANGEREUSES AN POINT DE VUE SECURITE N'UTILISER QUE CELLS DECRITES DANS LA NOMENCLATURE DES PIECES。

CAUTION SINCE THESE PARTS MARKED BY ⚠ ARE CRITICAL FOR SAFETY,USE ONES DESCRIBED IN PARTS LIST ONLY 。

SOUND SCHEMATIC DIAGRAM
(MAIN PCB)



NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE 。

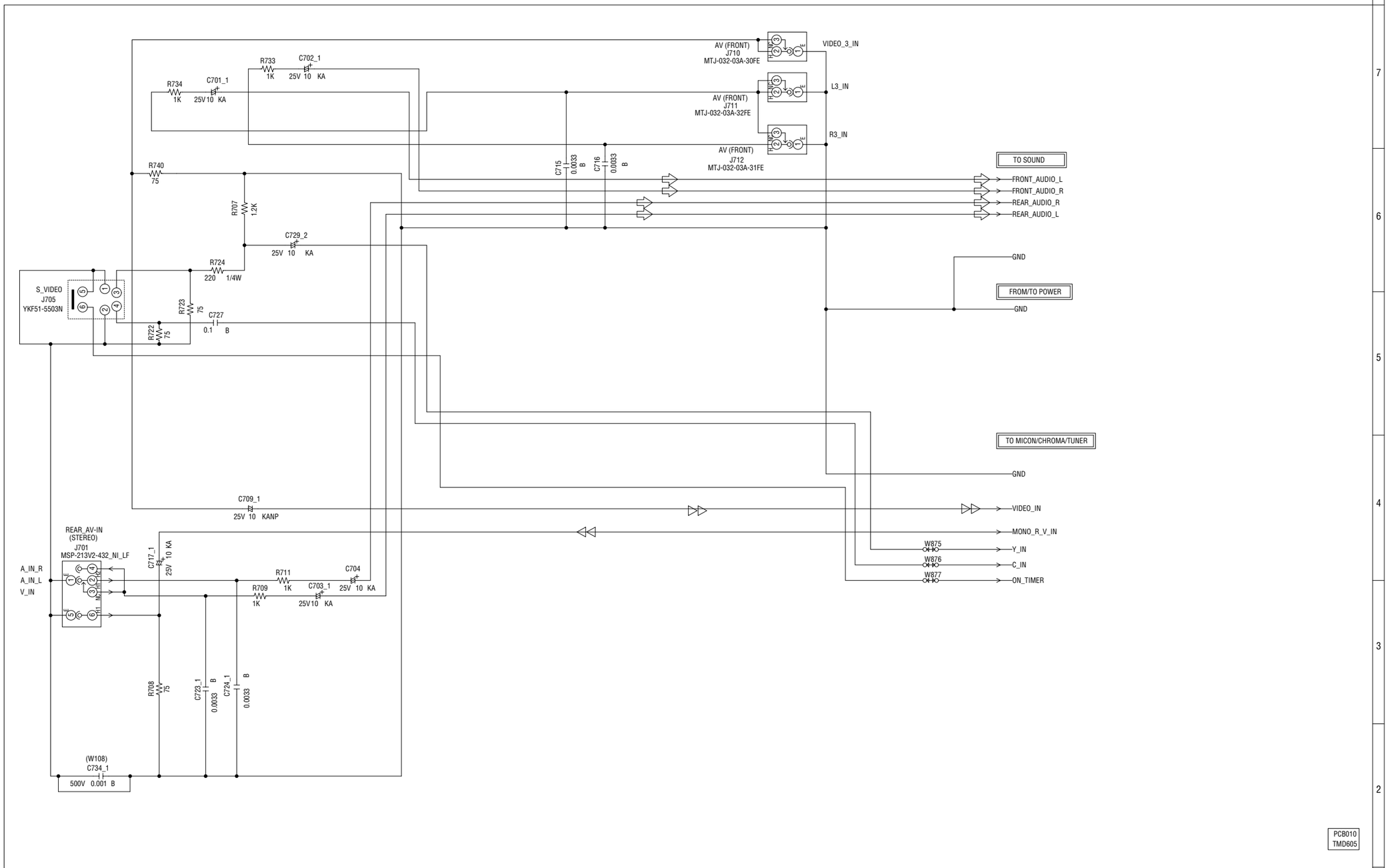
NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

ATTENTION: LES PIECES REPAREES PAR UN ⚠ ETANT DANGEREUSES AN POINT DE VUE SECURITE N'UTILISER QUE CELLS DECRITES DANS LA NOMENCLATURE DES PIECES。

CAUTION SINCE THESE PARTS MARKED BY ⚠ ARE CRITICAL FOR SAFETY, USE ONES DESCRIBED IN PARTS LIST ONLY 。

⇦ AUDIO SIGNAL

AV SCHEMATIC DIAGRAM
(TV MT PCB)



NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE。

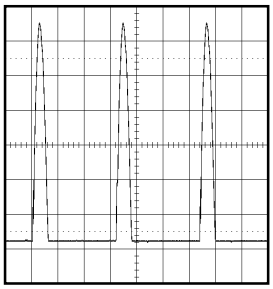
NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

⇦ AUDIO SIGNAL

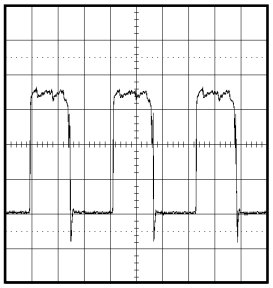
◁◁ TUNER VIDEO SIGNAL

WAVEFORMS

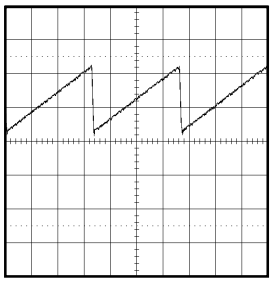
MICON/CHROMA/TUNER



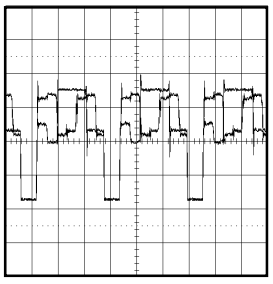
② 20V 20µs/div



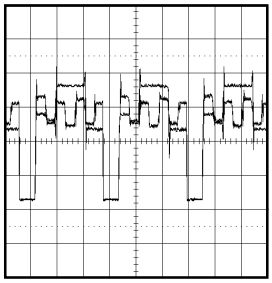
③ 200mV 20µs/div



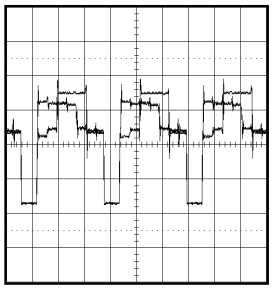
④ 0.5V 5ms/div



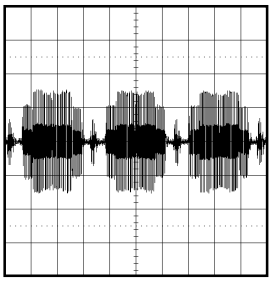
⑤ 1V 20µs/div



⑥ 1V 20µs/div

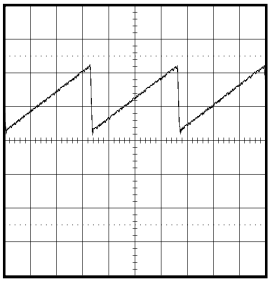


⑦ 1V 20µs/div

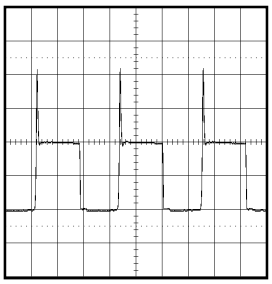


⑧ 200mV 20µs/div

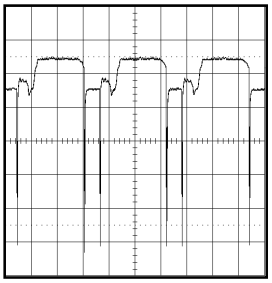
DEFLECTION/CRT



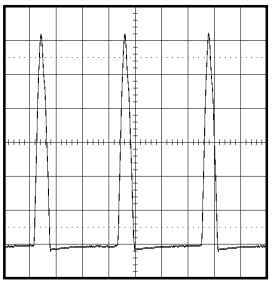
⑭ 0.5V 5ms/div



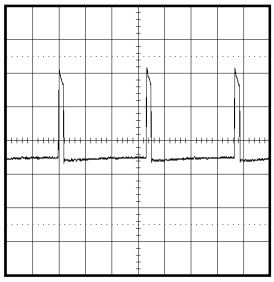
⑮ 20V 20µs/div



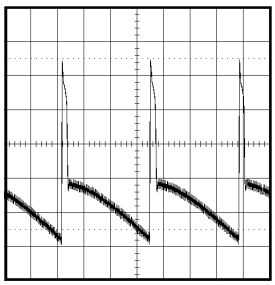
⑯ 2V 20µs/div



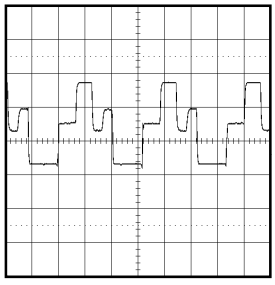
⑰ 200V 20µs/div



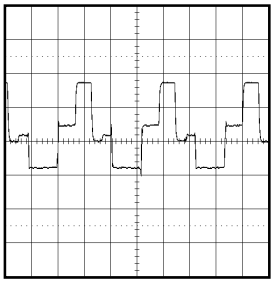
⑱ 10V 5ms/div



⑲ 10V 5ms/div



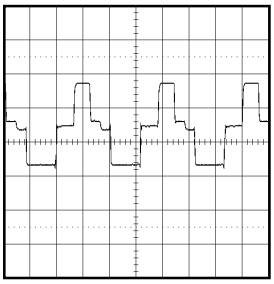
⑳ 50V 20µs/div



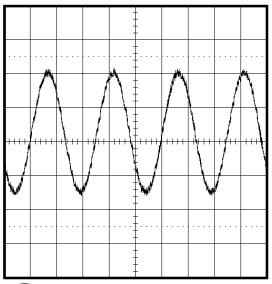
㉑ 50V 20µs/div

NOTE: The following waveforms were measured at the point of the corresponding balloon number in the schematic diagram.

WAVEFORMS

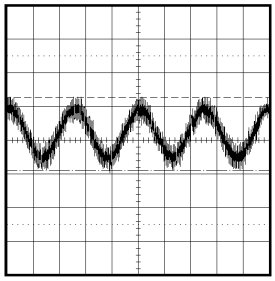


(22) 50V 20µs/div

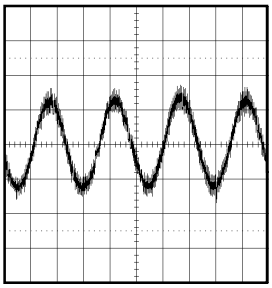


(31) 200mV 1ms/div

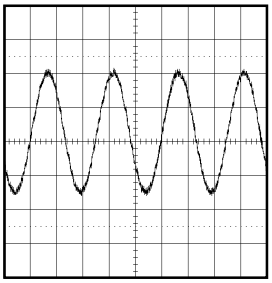
SOUND



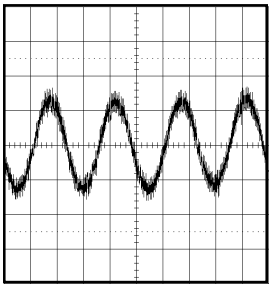
(25) 0.5V 1ms/div



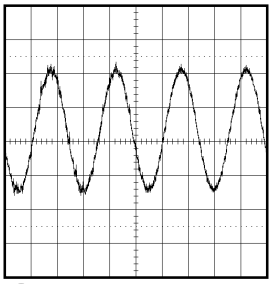
(32) 0.5V 1ms/div



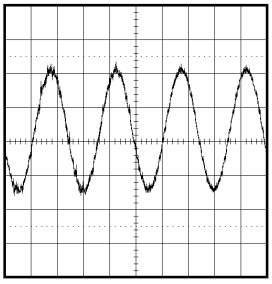
(26) 200mV 1ms/div



(33) 0.5V 1ms/div



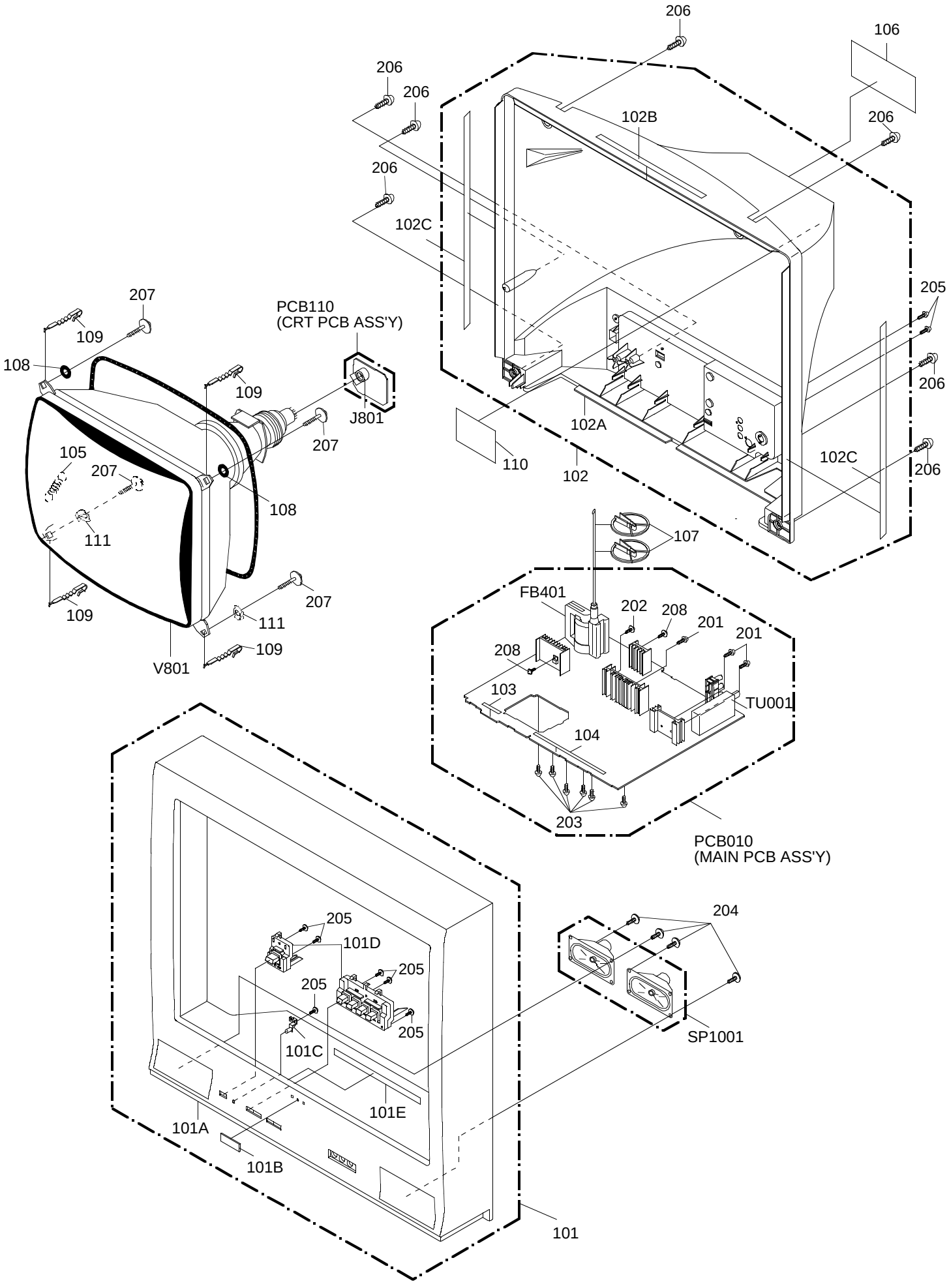
(27) 200mV 1ms/div



(28) 200mV 1ms/div

NOTE: The following waveforms were measured at the point of the corresponding balloon number in the schematic diagram.

MECHANICAL EXPLODED VIEW



MECHANICAL REPLACEMENT PARTS LIST

REF. NO.	PART NO.	DESCRIPTION		
101	7A701A271A	FRONT,CABI ASS'Y		
101A	701WPJC873	CABINET,FRONT		
101B	711WPCA043	BADGE,BRAND		
101C	713WPAA170	GUIDE,REMOCON		
101D	735WPBB277	BUTTON,ASS'Y		
101E	800WQ0A049	FELT,SHEET		9x220xT=0.3
102	7A702A080A	BACK,CABI ASS'Y		
102A	702WPAA792	CABINET,BACK		
102B	800WQ0A046	FELT,SHEET		9x220xT=0.5
102C	800WQ0A090	FELT,SHEET		9x350xT=0.5
103	800WQ0A067	FELT,SHEET		5x30xT=0.5
104	800WQ0A070	FELT,SHEET		5x150xT=0.5
105	741WUA0021	SPRING,EARTH		
106	722A08A158	SHEET,RATING		
107	899HV3T000	HOLDER,ANODE WIRE		
108	800WR0A003	SHEET,CRT SUPPORT		
109	762WPA0009	HOLDER,CRT WIRE		
110	726000A077	SHEET,CRT SERVICEMAN		
111	769WSAA008	WASHER,CRT		T=0.5
201	810763080U	SCREW,TAP TITE(S)	BRAZIER	3x8
202	8109I30A0U	SCREW,TAP TITE(B)	WH7	3x10
203	810963080Q	SCREW,TAP TITE(B)	BRAZIER	3x8
204	811063080U	SCREW,TAP TITE(P)	BRAZIER	3x8
205	8110630A0U	SCREW,TAP TITE(P)	BRAZIER	3x10
206	8117540B0U	SCREW,TAP TITE(B0)	TRUSS	4x20
207	8141H60D5U	SCREW,TAP TITE(P)	GW20	6x45
208	8109I3080U	SCREW,TAP TITE(B)	WH7	3x8
---	791WHAA115	FILM,BAG		
---	792WHAA101	PACKAGE,BOTTOM		
---	792WHAA102	PACKAGE,TOP FRONT		
---	792WHAA103	PACKAGE,TOP BACK		
---	793WCDC635	GIFT BOX		
---	A3T109D975	INSTRUCTION BOOK KIT		
---	J5780102C	WARRANTY SHEET		
---	JB5KD200	POLYBAG,INSTRUCTION(RED CAUTION)		
---	J3T10921A	INSTRUCTION BOOK		

ELECTRICAL REPLACEMENT PARTS LIST

REF. NO.	PART NO.	DESCRIPTION	
		RESISTORS	
⚠ R402	R3K181102J	R,METAL OXIDE	1K OHM 1W
⚠ R408	R4X5T6392F	R,METAL	3.9K OHM 1/6W
⚠ R409	R4X5T6153F	R,METAL	15K OHM 1/6W
⚠ R414	R002T4331J	RC	330 OHM 1/4W
⚠ R420	R002T4682J	RC	6.8K OHM 1/4W
⚠ R424	R4X5T6183F	R,METAL	18K OHM 1/6W
⚠ R426	R65581010J	R,FUSE	1 OHM 1W
⚠ R429	R638812R2J	R,FUSE	2.2 OHM 1W
⚠ R436	R002T2010J	RC	1 OHM 1/2W
⚠ R438	R002T4103J	RC	10K OHM 1/4W
⚠ R439	R3X181680J	R,METAL OXIDE	68 OHM 1W
⚠ R461	R655822R2J	R,FUSE	2.2 OHM 1/2W
⚠ R500	R0G3K2275K	RC	2.7M OHM 1/2W
⚠ R501	R5X2CE1R2J	R,CEMENT	1.2 OHM 7W
⚠ R502	R63881R22J	R,FUSE	0.22 OHM 1W
⚠ R515	R002T4103J	RC	10K OHM 1/4W
R517	R3X28AR39J	R,METAL OXIDE	0.39 OHM 2W
⚠ R519	R3X181R15J	R,METAL OXIDE	0.15 OHM 1W
⚠ R520	R002T2155J	RC	1.5M OHM 1/2W
R521	R3X28A151J	R,METAL OXIDE	150 OHM 2W
R629	R3X18A470J	R,METAL OXIDE	47 OHM 2W
R630	R3X28A470J	R,METAL OXIDE	47 OHM 2W
⚠ R803	R3X18A123J	R,METAL OXIDE	12K OHM 2W
⚠ R805	R3X18A123J	R,METAL OXIDE	12K OHM 2W
⚠ R807	R3X18A123J	R,METAL OXIDE	12K OHM 2W
		CAPACITORS	
C402	C0PLRR713K	CC	0.001 UF 2KV R
⚠ C408	CS0PCH4E2J	CC	150 PF 50V CH
⚠ C412	P1F4T0333J	CP	0.033 UF 50V
⚠ C414	E02LU4101M	CE	100 UF 35V
⚠ C418	E02LF3102M	CE	1000 UF 25V
⚠ C420	C0JTB05H3K	CC	0.0022UF 500V B
C433	E02LF4222M	CE	2200 UF 35V
⚠ C434	E02LU8220M	CE	22 UF 100V
C442	E736F56R8M	CE	6.8 UF 50V
⚠ C446	E02LU5220M	CE	22 UF 50V
⚠ C448	E0ELTD100M	CE	10 UF 250V
C449	P4J7F3474J	CMPP	0.47 UF 250V PMS
C451	P3G1F5223J	CPP	0.022 UF 630V PP
⚠ C452	P4G8FJ153H	CMPP	0.015 UF 1.25KV PHE
C453	P4N8FJ562H	CMPP	0.0056UF 1.25KV
⚠ C501	E02LF4102M	CE	1000 UF 35V
⚠ C505	P2122B334M	CMP	0.33 UF 275V ECQUL
⚠ C506	P2122B104M	CMP	0.1 UF 275V ECQUL
⚠ C507	E51CGC471M	CE	470 UF 200V
C514	C0PLRR7B3K	CC	0.0012 UF 2KV R
C517	C03L0R7K3K	CC	0.0027UF 2KV R
⚠ C521	E62NFB221M	CE	220 UF 160V
C527	E5EZF2222M	CE	2200 UF 16V
⚠ C528	CD39E0MH3M	CC	0.0022UF 250V
⚠ C530	CD39E0ME3M	CC	0.0015UF 250V
⚠ C533	CD39E0ME3M	CC	0.0015UF 250V
C802	C0JBB0713K	CC	0.001 UF 2KV B
C812	C0J0B0512K	CC	100 PF 500V B or
	C0JTB0512K	CC	100 PF 500V B
C1008	E02L03102M	CE	1000 UF 25V
C1009	E02L03102M	CE	1000 UF 25V
C1016	E02LF4222M	CE	2200 UF 35V
		DIODES	
D001	D97U03301B	DIODE,ZENER	MTZJ33B T-77
⚠ D404	D97U05R11B	DIODE,ZENER	MTZJ5.1B T-77
D405	D97U09R11B	DIODE,ZENER	MTZJ9.1B T-77
⚠ D406	D2MXN40020	DIODE,FAST RECOVERY	1N4002-PAN
⚠ D407	D2MXN49370	DIODE,FAST RECOVERY	1N4937-PAN
⚠ D410	D2MXN49370	DIODE,FAST RECOVERY	1N4937-PAN
⚠ D411	D2MXN49370	DIODE,FAST RECOVERY	1N4937-PAN
D412	D2MXN40020	DIODE,FAST RECOVERY	1N4002-PAN
D414	D2MXS106R0	DIODE,FAST RECOVERY	PS106R
D415	D2MXS106R0	DIODE,FAST RECOVERY	PS106R
D417	D2MXN40020	DIODE,FAST RECOVERY	1N4002-PAN
D418	D97U03301B	DIODE,ZENER	MTZJ33B T-77
D419	D97U03301B	DIODE,ZENER	MTZJ33B T-77
⚠ D451	D2CF2016L0	DIODE SILICON	FE201-6L49
⚠ D452	D2CF0715L0	DIODE SILICON	ERD07-15L50
⚠ D501	D2WTRM11C0	DIODE SILICON	RM11C-EIC
⚠ D502	D2WTRM11C0	DIODE SILICON	RM11C-EIC
⚠ D503	D2WTRM11C0	DIODE SILICON	RM11C-EIC

REF. NO.	PART NO.	DESCRIPTION	
		DIODES	
⚠ D504	D2WTRM11C0	DIODE SILICON	RM11C-EIC
D505	D28F30DF60	DIODE RECTIFIER	30DF6-FC
⚠ D506	D97U01801B	DIODE,ZENER	MTZJ18B T-77
D507	D2MXN49370	DIODE,FAST RECOVERY	1N4937-PAN
D508	D1VT001330	DIODE,SILICON	1SS133T-77
⚠ D509	D97U01801B	DIODE,ZENER	MTZJ18B T-77
⚠ D510	D2CF2016L0	DIODE SILICON	FE201-6L49
D511	D97U05R11B	DIODE,ZENER	MTZJ5.1B T-77
D512	D28T21DQN9	DIODE SCHOTTKY	21DQ09N-TA2B1
D514	D1VT001330	DIODE,SILICON	1SS133T-77
D515	D97U02R21B	DIODE,ZENER	MTZJ2.2B T-77
D516	D1VT001330	DIODE,SILICON	1SS133T-77
D517	D1VT001330	DIODE,SILICON	1SS133T-77
D518	D1VT001330	DIODE,SILICON	1SS133T-77
D519	D1VT001330	DIODE,SILICON	1SS133T-77
D520	D2W0N49370	DIODE SILICON	1N4937-B-EIC or
	D2WXN49370	DIODE SILICON	1N4937
⚠ D521	D1VT001330	DIODE,SILICON	1SS133T-77
D523	D2MXN49370	DIODE,FAST RECOVERY	1N4937-PAN
D525	D97U04R71B	DIODE,ZENER	MTZJ4.7B T-77
D528	D97U05R61B	DIODE,ZENER	MTZJ5.6B T-77
D603	D1VT001330	DIODE,SILICON	1SS133T-77
D604	D97U08R21B	DIODE,ZENER	MTZJ8.2B T-77
D606	D2MXN40020	DIODE,FAST RECOVERY	1N4002-PAN
D607	D97U01201B	DIODE,ZENER	MTZJ12B T-77
D608	D97U01201B	DIODE,ZENER	MTZJ12B T-77
D609	D97U01201B	DIODE,ZENER	MTZJ12B T-77
D801	D1VT001330	DIODE,SILICON	1SS133T-77
D802	D1VT001330	DIODE,SILICON	1SS133T-77
D803	D1VT001330	DIODE,SILICON	1SS133T-77
		ICS	
IC101	I56F07091C	IC	OEC7091C
IC199	A3T109D015	INIT DATA	AT24C04N-10SU-2.7
⚠ IC401	I03TD80410	IC	LA78041
⚠ IC501	000220002W	PHOTO COUPLER	PS2561AL1-1-V(W)
IC901	I01FF58290	IC	AN5829S
IC1001	I0FSP7805A	IC	AN17805A
		TRANSISTORS	
⚠ Q401	TDUU024990	TRANSISTOR SILICON	2SD2499(LB0EC1)
⚠ Q402	TCAT03227Y	TRANSISTOR SILICON	KTC3227_Y-AT
Q407	T8RA030520	TRANSISTOR SILICON	2SC3052-T1
⚠ Q408	TAATA12660	TRANSISTOR,SILICON	KTA1266-AT(Y,GR)
⚠ Q409	TC30041590	TRANSISTOR,SILICON	2SC4159(D,E)
⚠ Q501	T220033260	FET	2SK3326(2)
⚠ Q502	TCAT032034	TRANSISTOR, SILICON	KTC3203_Y-AT
Q504	TCATC31980	TRANSISTOR,SILICON	KTC3198-AT(Y,GR)
Q507	T8RA030520	TRANSISTOR SILICON	2SC3052-T1
Q601	TCAT032034	TRANSISTOR, SILICON	KTC3203_Y-AT
Q602	TCAT03209Y	TRANSISTOR SILICON	KTC3209_Y-AT
Q603	TCAT032034	TRANSISTOR, SILICON	KTC3203_Y-AT
Q606	TCAT032034	TRANSISTOR, SILICON	KTC3203_Y-AT
Q607	TCATC31980	TRANSISTOR,SILICON	KTC3198-AT(Y,GR)
Q608	TCAT03209Y	TRANSISTOR SILICON	KTC3209_Y-AT
Q610	TCAT032034	TRANSISTOR, SILICON	KTC3203_Y-AT
Q801	TCATC3199Y	TRANSISTOR SILICON	KTC3199_Y-AT
Q802	TCATC3199Y	TRANSISTOR SILICON	KTC3199_Y-AT
Q803	TCATC3199Y	TRANSISTOR SILICON	KTC3199_Y-AT
⚠ Q804	TC3F042170	TRANSISTOR,SILICON	2SC4217(D,E)-RAC
⚠ Q805	TC3F042170	TRANSISTOR,SILICON	2SC4217(D,E)-RAC
⚠ Q806	TC3F042170	TRANSISTOR,SILICON	2SC4217(D,E)-RAC
Q901	T6RA015300	TRANSISTOR SILICON	2SA1530A-T1
Q902	T6RA015300	TRANSISTOR SILICON	2SA1530A-T1
Q1003	TNAAJ05003	COMPOUND TRANSISTOR	KRC111SRTK
		COILS &TRANSFORMERS	
⚠ L401	022810041A	COIL,LINEARITY	STP-03Q23
L403	02DK000058	COIL CHOKE	02DK000058
⚠ L501	029X000418	COIL,LINE FILTER	SS26V-200076
⚠ L503	028R270010	COIL,DEGAUSS	8R270010
L902	02167F101J	COIL	100 UH
T401	0450190161	TRANS,HORIZONTAL DRIVE	ETH19Y203AY
⚠ T501	0481400694	TRANSFORMER,SWITCHING	81400694
		JACKS	
J701	060J431020	RCA JACK	MSP-213V2-432_NI_LF
J705	063Q700011	JACK	YKF51-5503N
J710	060J401104	RCA JACK	MTJ-032-03A-30FE
J711	060J401106	RCA JACK	MTJ-032-03A-32FE
J712	060J401105	RCA JACK	MTJ-032-03A-31FE

ELECTRICAL REPLACEMENT PARTS LIST

REF. NO.	PART NO.	DESCRIPTION	
		JACKS	
⚠ J801	066F130021	SOCKET,CATHODE RAY,TUBE	ISHS62S
		SWITCHES	
SW101	0504101T34	SWITCH,TACT	EVQ21505R
SW102	0504101T34	SWITCH,TACT	EVQ21505R
SW103	0504101T34	SWITCH,TACT	EVQ21505R
SW104	0504101T34	SWITCH,TACT	EVQ21505R
SW105	0504101T34	SWITCH,TACT	EVQ21505R
		VARIABLE RESISTORS	
VR401	V1K63H3BTE	VOLUME,SEMI FIXED	NVG6TLTAB222
VR402	V1163Q2BTC	VOLUME,SEMI FIXED	EVNCYAA03BQ2
VR403	V1163H4BTC	VOLUME,SEMI FIXED	EVNCYAA03BE4
VR404	V1163H4BTC	VOLUME,SEMI FIXED	EVNCYAA03BE4
VR502	V1163H4BTC	VOLUME,SEMI FIXED	EVNCYAA03BE4
		P.C.BOARD ASSEMBLIES	
PCB010	A3T109D010	PCB ASS'Y	TMD605D
PCB110	A3T109D110	PCB ASS'Y	TCD461D
		MISCELLANEOUS	
B501	024HT03553	CORE,BEADS	W5RH3.5X5X1.0
B504	024HT03553	CORE,BEADS	W5RH3.5X5X1.0
⚠ CD501	1209415910	CORD AC BUSH	9415910
CD801	06CH823004	CORD CONNECTOR	CH823004
CD802	WCL6854038	FLAT CABLE AWM2468	AWG26 5C GRAY 540MM
CD803	WBL6040038	FLAT CABLE AWM2468	AWG26 4C BLACK 400MM
CP401	069S460089	CORD UX CONNECTOR	A1561WV2-A6P
⚠ CP502	069S420099	CONNECTOR PCB SIDE	A1561WV2-2PK
CP601	069S270639	CONNECTOR PCB SIDE	A2001WR2-7P
CP801	069S320010	CONNECTOR PCB SIDE	A2361WV2-2P
CP1001	069S140419	CONNECTOR PCB SIDE	A2502WV2-4P
CP802A	067U005049	WIRE HOLDER	B2013H02-5P
CP802B	067U005049	WIRE HOLDER	B2013H02-5P
CP803A	067U004029	WIRE HOLDER	B2013H02-4P
CP803B	067U004029	WIRE HOLDER	B2013H02-4P
EL001	124116281A	EYE LET	XRY16X28BD
EL002	124120301A	EYE LET	XRY20X30BD
⚠ F501	081PC6R305	FUSE	51MS063L
⚠ FB401	043227024Y	TRANSFORMER,FLYBACK	BSC27-N2239
FH501	06710T0009	HOLDER,FUSE	EYF-52BCY
FH502	06710T0009	HOLDER,FUSE	EYF-52BCY
OS101	077Q000025	REMOTE RECEIVER	KSM-713SY
⚠ RY501	0560X20118	RELAY	G5PA-1-SA(WEC)
⚠ SP1001	070Y435005	SPEAKER	S0509F12-D
⚠ TH501	D8EE0B1400	DEGAUSS ELEMENT	B59203-S1060-B14
TM101	076N0DW130	TRANSMITTER	RC-DW130
⚠ TU001	0163300018	RF UNIT	115-V-KA35ARB
⚠ V801	098B270602	CRT W/DY	A68KTB359X058(PL)
X601	100DT3R531	CRYSTAL	HC-49/U

RESISTOR

RC..... CARBON RESISTOR

CAPACITORS

CC..... CERAMIC CAPACITOR
CE..... ALUMI ELECTROLYTIC CAPACITOR
CP..... POLYESTER CAPACITOR
CPP..... POLYPROPYLENE CAPACITOR
CPL..... PLASTIC CAPACITOR
CMP..... METAL POLYESTER CAPACITOR
CMPL..... METAL PLASTIC CAPACITOR
CMPP..... METAL POLYPROPYLENE CAPACITOR

SPEC.NO.	M3T1-09D
O/R NO.	W523015

Memorex®

MT2274A

SERVICE MANUAL

COLOR TELEVISION RECEIVER

REVISION 1
MFR'S VERSION B

MFR'S VERSION	PRODUCT IMPROVEMENT
A	-
B	SH COMPLIANT

Please file the revision with the original version.

Change of SH COMPLIANT

ELECTRICAL REPLACEMENT PARTS LIST

REF. NO.	MFR'S VERSION A		MFR'S VERSION B	
	PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
TM101	076N0DW130	TRANSMITTER RC-DW130	076N0DW190	TRANSMITTER RC-DW190
PCB010	A3T109D010	MAIN PCB ASS'Y (VERSION A) TMD605D	A3T118D010	MAIN PCB ASS'Y (VERSION B) CME045A
PCB110	A3T109D110	CRT PCB ASS'Y (VERSION A) TCD461D	A3T117D110	CRT PCB ASS'Y (VERSION B) CCE038A

MAIN PCB's and CRT PCB's are not interchangeable.

SPEC.NO.	M3T1-13D
O/R NO.	W583087