

SAMSUNG

COLOR TELEVISION RECEIVER

Chassis : KS3A(N)

Model : SAM27405C/XAA

TXK3276C/XAA

TXK3676C/XAA

TXK3679C/XAA

SAM25405C/XAA

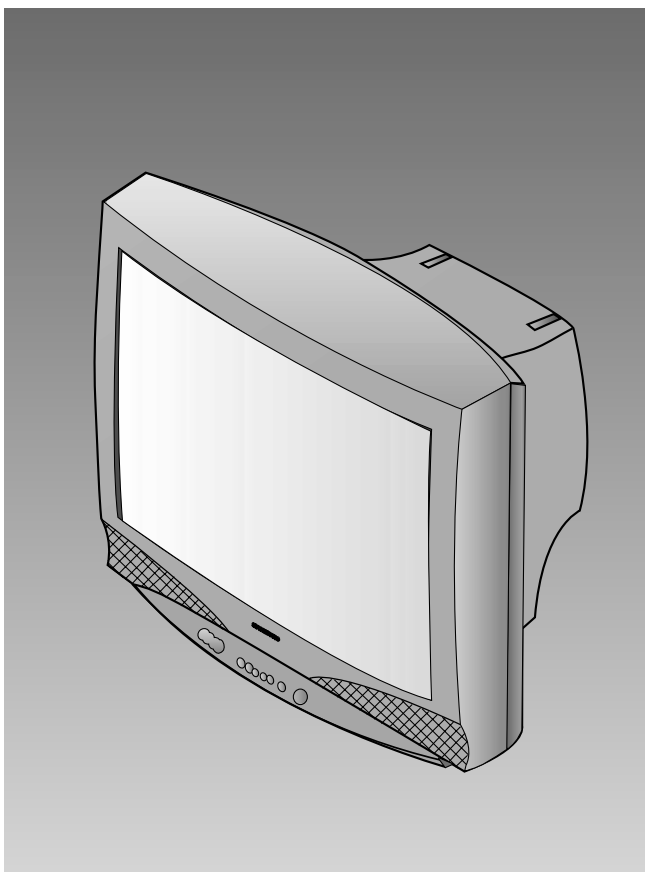
TXK3276C/XAC

TXK3676C/XAC

TXK3679C/XAC

SERVICE *Manual*

COLOR TELEVISION RECEIVER



CONTENTS

1. Precautions
2. Reference Information
3. Specifications
4. Alignment and Adjustments
5. Troubleshooting
6. Exploded Views and Parts List
7. Electrical Parts List
8. Block Diagrams
9. Wiring Diagram
10. Schematic Diagrams



ELECTRONICS

1. Precautions

Follow these safety, servicing and ESD precautions to prevent damage and protect against potential hazards such as electrical shock and X-rays.

1-1 Safety Precautions

1. Be sure that all of the built-in protective devices are replaced. Restore any missing protective shields.
2. When reinstalling the chassis and its assemblies, be sure to restore all protective devices, including: nonmetallic control knobs and compartment covers.
3. Make sure that there are no cabinet openings through which people—particularly children—might insert fingers and contact dangerous voltages. Such openings include the spacing between the picture tube and the cabinet mask, excessively wide cabinet ventilation slots, and improperly fitted back covers.

If the measured resistance is less than 1.0 megohm or greater than 5.2 megohms, an abnormality exists that must be corrected before the unit is returned to the customer.

4. Leakage Current Hot Check (Figure 1-1):
Warning: Do not use an isolation transformer during this test. Use a leakage-current tester or a metering system that complies with American National Standards Institute (ANIS C101.1, Leakage Current for Appliances), and Underwriters Laboratories (UL Publication UL1410, 59.7).
5. With the unit completely reassembled, plug the AC line cord directly into the power outlet. With the unit's AC switch first in the ON position and then OFF, measure the current between a known earth ground (metal water pipe, conduit, etc.) and all exposed metal parts, including: antennas, handle brackets, metal cabinets, screwheads and control shafts. The current measured should not exceed 0.5 milliamp. Reverse the power-plug prongs in the AC outlet and repeat the test.

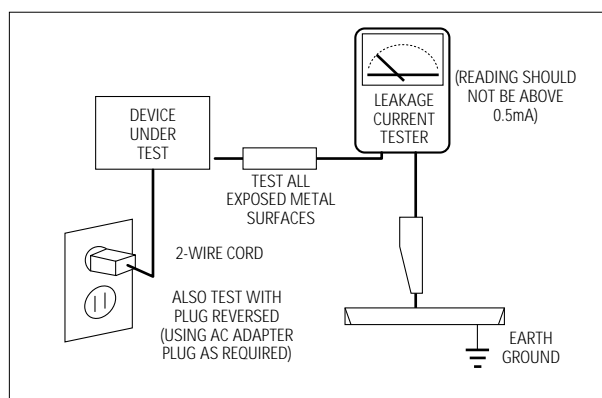


Fig. 1-1 AC Leakage Test



6. Antenna Cold Check:
With the unit's AC plug disconnected from the AC source, connect an electrical jumper across the two AC prongs. Connect one lead of the ohmmeter to an AC prong. Connect the other lead to the coaxial connector.
7. X-ray Limits:
The picture tube is especially designed to prohibit X-ray emissions. To ensure continued X-ray protection, replace the picture tube only with one that is the same type as the original. Carefully reinstall the picture tube shields and mounting hardware; these also provide X-ray protection.
8. High Voltage Limits:
High voltage must be measured each time servicing is done on the B+, horizontal deflection or high voltage circuits. Correct operation of the X-ray protection circuits must be reconfirmed whenever they are serviced.
(X-ray protection circuits also may be called "horizontal disable" or "hold-down".)

Heed the high voltage limits. These include the X-ray Protection Specifications Label, and the Product Safety and X-ray Warning Note on the service data schematic.

1-1 Safety Precautions (Continued)

9. High voltage is maintained within specified limits by close-tolerance, safety-related components and adjustments. If the high voltage exceeds the specified limits, check each of the special components.
10. Design Alteration Warning:
Never alter or add to the mechanical or electrical design of this unit. Example: Do not add auxiliary audio or video connectors. Such alterations might create a safety hazard. Also, any design changes or additions will void the manufacturer's warranty.
11. Hot Chassis Warning:
Some TV receiver chassis are electrically connected directly to one conductor of the AC power cord. If an isolation transformer is not used, these units may be safely serviced only if the AC power plug is inserted so that the chassis is connected to the ground side of the AC source.

To confirm that the AC power plug is inserted correctly, do the following: Using an AC voltmeter, measure the voltage between the chassis and a known earth ground. If the reading is greater than 1.0V, remove the AC power plug, reverse its polarity and reinsert. Re-measure the voltage between the chassis and ground.
12. Some TV chassis are designed to operate with 85 volts AC between chassis and ground, regardless of the AC plug polarity. These units can be safely serviced only if an isolation transformer inserted between the receiver and the power source.
13. Some TV chassis have a secondary ground system in addition to the main chassis ground. This secondary ground system is not isolated from the AC power line. The two ground systems are electrically separated by insulating material that must not be defeated or altered.
14. Components, parts and wiring that appear to have overheated or that are otherwise damaged should be replaced with parts that meet the original specifications. Always determine the cause of damage or overheating, and correct any potential hazards.
15. Observe the original lead dress, especially near the following areas: Antenna wiring, sharp edges, and especially the AC and high voltage power supplies. Always inspect for pinched, out-of-place, or frayed wiring. Do not change the spacing between components and the printed circuit board. Check the AC power cord for damage. Make sure that leads and components do not touch thermally hot parts.
16. Picture Tube Implosion Warning:
The picture tube in this receiver employs "integral implosion" protection. To ensure continued implosion protection, make sure that the replacement picture tube is the same as the original.
17. Do not remove, install or handle the picture tube without first putting on shatterproof goggles equipped with side shields. Never handle the picture tube by its neck. Some "in-line" picture tubes are equipped with a permanently attached deflection yoke; do not try to remove such "permanently attached" yokes from the picture tube.
18. Product Safety Notice:
Some electrical and mechanical parts have special safety-related characteristics which might not be obvious from visual inspection. These safety features and the protection they give might be lost if the replacement component differs from the original—even if the replacement is rated for higher voltage, wattage, etc.

Components that are critical for safety are indicated in the circuit diagram by shading, () or (). Use replacement components that have the same ratings, especially for flame resistance and dielectric strength specifications. A replacement part that does not have the same safety characteristics as the original might create shock, fire or other hazards.

1-2 Servicing Precautions

Warning1: First read the "Safety Precautions" section of this manual. If some unforeseen circumstance creates a conflict between the servicing and safety precautions, always follow the safety precautions.

Warning2: An electrolytic capacitor installed with the wrong polarity might explode.

1. Servicing precautions are printed on the cabinet. Follow them.
2. Always unplug the unit's AC power cord from the AC power source before attempting to:
(a) Remove or reinstall any component or assembly, (b) Disconnect an electrical plug or connector, (c) Connect a test component in parallel with an electrolytic capacitor.
3. Some components are raised above the printed circuit board for safety. An insulation tube or tape is sometimes used. The internal wiring is sometimes clamped to prevent contact with thermally hot components. Reinstall all such elements to their original position.
4. After servicing, always check that the screws, components and wiring have been correctly reinstalled. Make sure that the portion around the serviced part has not been damaged.
5. Check the insulation between the blades of the AC plug and accessible conductive parts (examples: metal panels, input terminals and earphone jacks).
6. Insulation Checking Procedure: Disconnect the power cord from the AC source and turn the power switch ON. Connect an insulation resistance meter (500V) to the blades of the AC plug.

The insulation resistance between each blade of the AC plug and accessible conductive parts (see above) should be greater than 1 megohm.
7. Never defeat any of the B+ voltage interlocks. Do not apply AC power to the unit (or any of its assemblies) unless all solid-state heat sinks are correctly installed.
8. Always connect a test instrument's ground lead to the instrument chassis ground before connecting the positive lead; always remove the instrument's ground lead last.

1-3 Precautions for Electrostatically Sensitive Devices (ESDs)

1. Some semiconductor (“solid state”) devices are easily damaged by static electricity. Such components are called Electrostatically Sensitive Devices (ESDs); examples include integrated circuits and some field-effect transistors. The following techniques will reduce the occurrence of component damage caused by static electricity.
2. Immediately before handling any semiconductor components or assemblies, drain the electrostatic charge from your body by touching a known earth ground. Alternatively, wear a discharging wrist-strap device. (Be sure to remove it prior to applying power—this is an electric shock precaution.)
3. After removing an ESD-equipped assembly, place it on a conductive surface such as aluminum foil to prevent accumulation of electrostatic charge.
4. Do not use freon-propelled chemicals. These can generate electrical charges that damage ESDs.
5. Use only a grounded-tip soldering iron when soldering or unsoldering ESDs.
6. Use only an anti-static solder removal device. Many solder removal devices are not rated as “anti-static”; these can accumulate sufficient electrical charge to damage ESDs.
7. Do not remove a replacement ESD from its protective package until you are ready to install it. Most replacement ESDs are packaged with leads that are electrically shorted together by conductive foam, aluminum foil or other conductive materials.
8. Immediately before removing the protective material from the leads of a replacement ESD, touch the protective material to the chassis or circuit assembly into which the device will be installed.
9. Minimize body motions when handling unpackaged replacement ESDs. Motions such as brushing clothes together, or lifting a foot from a carpeted floor can generate enough static electricity to damage an ESD.

2. Reference Information

2-1 Tables of Abbreviations and Acronyms

Table 2-1 Abbreviations

A	Ampere	MV	Megavolt
Ah	Ampere-hour	MW	Megawatt
Å	Angstrom	MΩ	Megohm
dB	Decibel	m	Meter
dBm	Decibel Referenced to One Milliwatt	μA	Microampere
°C	Degree Celsius	μF	Microfarad
°F	Degree Fahrenheit	μH	Microhenry
°K	degree Kelvin	μm	Micrometer
F	Farad	μs	Microsecond
G	Gauss	μW	Microwatt
GHz	Gigahertz	mA	Milliampere
g	Gram	mg	Milligram
H	Henry	mH	Millihenry
Hz	Hertz	ml	Milliliter
h	Hour	mm	Millimeter
ips	Inches Per Second	ms	Millisecond
kWh	Kilowatt-hour	mV	Millivolt
kg	Kilogram	nF	Nanofarad
kHz	Kilohertz	Ω	Ohm
kΩ	Kilohm	pF	Picofarad
km	Kilometer	lb	Pound
km/h	Kilometer Per Hour	rpm	Revolutions Per Minute
kV	Kilovolt	rps	Revolutions Per Second
kVA	Kilovolt-ampere	s	Second (Time)
kW	Kilowatt	V	Volt
l	Liter	VA	Volt-ampere
MHz	Megahertz	W	Watt
		Wh	Watt-hour

Table 2-2 Table of Acronyms

ABL	Automatic Brightness Limiter	I/O	Input/output
AC	Alternating Current	L	Left
ACC	Automatic Chroma Control	L	Low
AF	Audio Frequency	LED	Light Emitting Diode
AFC	Automatic Frequency Control	LF	Low Frequency
AFT	Automatic Fine Tuning	MOSFET	Metal-Oxide-Semiconductor-Field-Effect-Tr
AGC	Automatic Gain Control	MTS	Multi-channel Television Sound
AM	Amplitude Modulation	NAB	National Association of Broadcasters
ANSI	American National Standards Institute	NEC	National Electric Code
APC	Automatic Phase Control	NTSC	National Television Systems Committee
APC	Automatic Picture Control	OSD	On Screen Display
A/V	Audio-Video	PCB	Printed Circuit Board
AVC	Automatic Volume Control	PLL	Phase-Locked Loop
BAL	Balance	PWM	Pulse Width Modulation
BPF	Bandpass Filter	QIF	Quadrature Intermediate Frequency
B-Y	Blue-Y	R	Right
CATV	Community Antenna Television (Cable TV)	RC	Resistor & Capacitor
CB	Citizens Band	RF	Radio Frequency
CCD	Charge Coupled Device	R-Y	Red-Y
CCTV	Closed Circuit Television	SAP	Second Audio Program
Ch	Channel	SAW	Surface Acoustic Wave(Filter)
CRT	Cathode Ray Tube	SIF	Sound Intermediate Frequency
CW	Continuous Wave	SMPS	Switching Mode Power Supply
DC	Direct Current	S/N	Signal/Noise
DVM	Digital Volt Meter	SW	Switch
EIA	Electronics Industries Association	TP	Test Point
ESD	Electrostatic Discharge	TTL	Transistor Transistor Logic
ESD	Electrostatically Sensitive Device	TV	Television
FBP	Feedback Pulse	UHF	Ultra High Frequency
FBT	Flyback Transformer	UL	Underwriters Laboratories
FF	Flip-Flop	UV	Ultraviolet
FM	Frequency Modulation	VCD	Variable-Capacitance Diode
FS	Fail Safe	VCO	Voltage Controlled Oscillator
GND	Ground	VCXO	Voltage Controlled Crystal Oscillator
G-Y	Green-Y	VHF	Very High Frequency
H	High	VIF	Video Intermediate Frequency
HF	High-Frequency	VR	Variable Resistor
HI-FI	High Fidelity	VTR	Video Tape Recorder
IC	Inductance-Capacitance	VTVM	Vacuum Tube Voltmeter
IC	Integrated Circuit	TR	Transistor
IF	Intermediate Frequency		

2-2 IC Line Up

Table 2 - 3 IC Line - Up					
NO	BOARD	LOC. NO	SPEC	DESCRIPTION	REMARK
1	MAIN	IC201S	VDP3130Y	Video Processor	Refer to Table 2-3-1
		IC601	MSP3451G	Multistandard Sound Processor	Refer to Table 2-3-2
		IC901	SIM408AY	MICOM, TTX(MTP)	
		IC902	KS24L161	EEPROM	
		IC602	TDA7297	Audio AMP	Refer to Table 2-3-3
		HIC201	DRGB001	RGB Drive AMP Hybrid IC	VM Option
		HIC202			
		HIC203			
		HIC204			
		HIC401	DDRI001	100Hz Horizontal Pulse AMP	Option
		IC301	LA7845	Vertical IC	
		Q402	KSC2073-H2	Horizontal Drive IC	HC401
		Q401	KSD5703		
		D414	FMP-3FU		
		IC401	KA393	E/W Drive IC	
		Q404	IRF620		
		IC801S	3S1265R	SPS Controllor	
		D801S	RBV606	Bridge Diode	
		PC801S	PC123Y	Photo Coupler	
		IC802	KA78R05	5V Controlled Regulator	HC801
		D805	FML-G12S	Rectifier Diode	
		D806			
		D807			
		D802	FMG-G2CS		
		IC201	KA78RM33	3.3V Regulator	VDPY
		IC804	KA7806	6V Regulator	
		IC803	KA78R08	8V Controlled Regulator	
		IC903	KA78RM33	3.3V Regulator	
		IC904	KIA7025AP	MICOM Reset IC	
		Q909	2N7000	IIC Level Shifter	
Q910					
TU01S	TCLN3181PA09A	Main Tuner with IF Block	Refer to Table 2-3-4		
TU02S	TCPN3081PD09A	Sub Tuner with IF Block	Refer to Table 2-3-5		

Table 2 - 3 IC Line - Up

NO	BOARD	LOC. NO	SPEC	DESCRIPTION	REMARK	
2	CRT	IC501	TDA6111Q	Video Output AMP R.G.B Drive		
		IC502				
		IC503				
		QF04	2SC2344	Push-Pull (VM)	Option	
		QF05	2SA1011			
		QG02	KSA940	TR-Power (TILT)		
		QG03	KSD2073-H2			
		ICG01	KA4558			OP-AMP (TILT)
3	DOUBLE FOCUS	ICH01	KA4558	OP-AMP		Option
		QH01	2SC4636RB	TR-Power		
4	V-S/W	ICS01	TEA6425	Video Switching IC with Adder Output		Option
5	PIP	ICP01	SDA9388X	High-end Picture-In Picture IC	Option	
		ICP02	EZ1086CM	3.3V Regulator		

Table 2-3-1 VIDEO IC (IC201S)

SPEC	FUNCTION	REMARK
VDP3108B	50Hz Basic	
VDP3112B	50Hz, 2H Comb Filtr	
VDP3120B	50Hz, 2H Comb Filter, Horizontal Scaler	
VDP3130Y	50Hz, 2H Comb Filter, DVD Input	
VDP3140D	100Hz	

Table 2-3-2 SOUND IC (IC601)

SPEC	FUNCTION	REMARK
MSP3400D	Multistandard, A2 Stereo	
MSP3410D	Multistandard, A2 Stereo, Nicam	
MSP3411G	Multistandard, A2 Stereo, Virtual Dolby	
MSP3440G	Multistandard, A2 Stereo, Virtual Dolby	
MSP3451G	Multistandard, A2 Stereo, Virtual Dolby	

Table 2-3-3 SOUND AMP (IC602)

SPEC	FUNCTION	REMARK
TDA7297	15W x 2CH, 10W x 2CH	

Table 2-3-4 1'st TUNER (TU01S)

SPEC	FUNCTION	REMARK
TCLN3181PA09A	NTSC, PAL N.M, LNA Function	Main, F-Jack
TCPN3081PC09A	PAL N.M, NTSC, LNA Function	Main, Thin Jack
TCPN3081PA09A	PAL N.M, NTSC, LNA Function	Main 1Tuner

Note TCPS3001PD09A(S) is out-of-date, TCPS3001PD09D(S) which is up-to-date has the same function.

Table 2-3-5 2'nd TUNER (TU02S)

SPEC	FUNCTION	REMARK
TCLN3181PD09A	NTSC, PAL N.M LNA Function	Sub
TCPN3081PD09A	NTSC	Sub

MEMO

3. Specifications

Television System	Multi	NTSC-M, PAL N.M	
Antena Input		75ohms, Coaxial Cable	
Power	Consumption	160W (Applied When 29" Flat)	
	Requirements	Free Volts(100V-240Volts)	
		Free Voltage	Not Present R815
Frequency	50/60Hz		
Sound	Output	15W x 2CH	
		10W x 2CH	
		5W x 2CH	
	Effect	Vitual Dolby	Option
		Turbo Sound	
Pseudo Stereo			
Jacks	Front (AV2)	RCA Input	
		S-VHS	Option
		Head-Phone	
	Back	2 AV Input	
		DVD Input(YPbPr)	Option
		AV2 Monitor Audio Output	Option
		S-VHS	Option

Specifications are subject to change.



Specifications for Model Name

	Function	NOTE
P	2 TUNER PIP	

MEMO

4. Alignment and Adjustments

4-1 General Alignment Instructions

1. Usually, a color TV-VCR needs only slight touch-up adjustment upon installation. Check the basic characteristics such as height, horizontal and vertical sync and focus.
2. Observe the picture for good black and white details. There should be objectionable color shading; if color shading is present, demagnetize, perform purity and convergence adjustments described below.
3. Use the specified test equipment or its equivalent.
4. Correct impedance matching is essential.
5. Avoid overload. Excessive signal from a sweep generator might overload the front-end of the TV. When inserting signal markers, do not allow the marker generator to distort test results.
6. Connect the TV only to an AC power source with voltage and frequency as specified on the backcover nameplate.
7. Do not attempt to connect or disconnect any wires while the TV is turned on. Make sure that the power cord is disconnected before replacing any parts.
8. To protect against shock hazard, use an isolation transformer.

4-2 Automatic Degaussing

A degaussing coil is mounted around the picture tube, so that external degaussing after moving the TV should be unnecessary. But the receiver must be properly degaussed upon installation.

The degaussing coil operates for about 1 second after the power is switched ON. If the set is moved or turned in a different direction, the power should be OFF for at least 10 minutes.

If the chassis or parts of the cabinet become magnetized, poor color purity will result. If this happens, use an external degaussing coil. Slowly move the degaussing coil around the faceplate of the picture tube and the sides and front of the receiver. Slowly withdraw the coil to a distance of about 6 feet before turning power OFF.

If color shading persists, perform the following Color purity and Convergence adjustments.

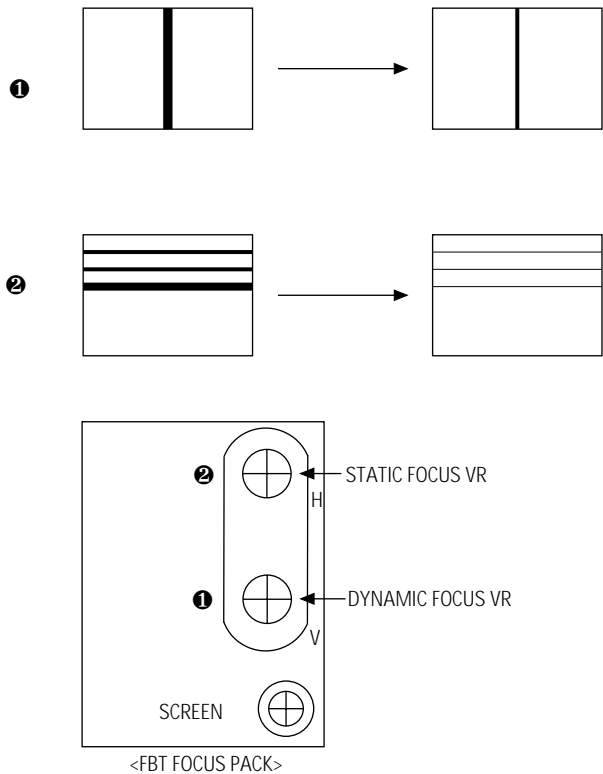
4-3 High voltage Check

CAUTION : There is no high voltage adjustment on this chassis. The B+ power supply should be +135 volts (with full color- bar input and normal picture level).

1. Connect a digital voltmeter to the second anode of the picture tube.
2. Turn on the TV. Set the Brightness and Contrast controls to minimum (zero beam current).
3. Adjust the Brightness and contrast controls to both extremes. Ensure that the high voltage does not exceed 32 KV under any conditions.

4-4 Dynamic Focus Adjustment

1. A dynamic focus adjustment should be done after replacing the CRT PCB, FBT or CRT.
2. Input a crosshatch pattern.
3. Enter " STANDARD " in video mode.
4. Turn the Dynamic focus VR fully clockwise (maximum). (❶)
5. Turn the Static focus VR fully counterclockwise (maximum). (❷)
6. Slowly turn the static focus VR counterclockwise. Adjust until the vertical line in the middle of the screen has maximum clarity. (❶)
7. Slowly turn the dynamic focus VR (clockwise) and adjust the 3rd horizontal line for maximum clarity. (❷)
8. Repeat 4-7, if necessary.



4-5 SCREEN Adjustment

1. Input Toshiba Pattern
2. Enter "Service Mode".(Refer to "Service Mode")
3. Select "G2-Adjust".
4. Set the values as below.

IBRM = 200
WDRV = 35
CDL = 200
COLR G B = 120 120 120

5. Turn the SCREEN VR until "MRCR G B" and "MRWDG" are green and those value are about 100.
(The incorrect SCREEN Voltage may result that "MRCR G B" and "MRWDG" should be red)

Note 1. When you do not have Toshiba Pattern, follow this method.

1. Set the TV on the condition that AV mode no signal(black)
2. Enter the "Menu" and set the mode to blue screen off.
3. Enter the "Service Mode".
4. Select " G2-Adjust".
5. Set the values as below.

IBRM = 200
WDRV = 35
CDL = 200
COLR G B = 120 120 120

6. Turn the SCREEN VR until the value of " MRCR G B" is about 120. Do not mind that the "OSD" Color is red.

■ After completing G2-Adjust, follow this procedure.

- ① Enter the "Video Adjust 1".
- ② Choose any item in menu. (ex. Select "Red Cutoff")
- ③ Change the value of item you select, and recover the value.

For example, when the value of "Red Cutoff" is 127, change the value to 128 and restore the value to 127.

If you do not follow this procedure, the picture may be abnormal.
 For example, when the TV set is on, the picture becomes brighter gradually.

4-6 E²PROM (IC902) Replacement

1. When IC902 is replaced, all adjustment data revert to the initial values.
So, all adjustment values when servicing should be readjusted.
2. After IC902 is replaced, connect the AC power supply cord.
3. Turn the power switch ON.
4. In stand-by, warm up the TV for at least 10 seconds.
5. Power on the TV.

4-7 White Balance Adjustment

- Equipment : Color-Analyzer (CA-100)
- Input Signal : Pattern signal (Toshiba pattern)

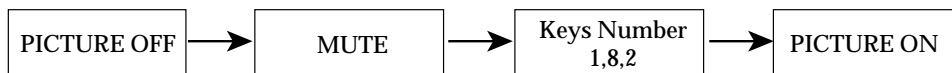
1. Select STANDARD from the menu.
2. Input an 100% White pattern.
3. Enter the "Service Mode". (Refer to "4-8 Service Mode")
4. Warm up the TV set at least for 30 minutes.
5. Input a Toshiba pattern signal.
6. Enter the "Video Adjust1".
 - Adjust "Sub Contrast" so that Y (luminance) becomes $50 \text{ ft} \pm 3$.
 - Use "Red Drive" and "Blue Drive" to adjust High-Light (x : 275, y : 295)
 - Adjust "Sub Bright" so that Y (luminance) becomes $1.5 \text{ ft} \pm 0.3$.
 - Use "Red Cutoff" and "Blue Cutoff" to adjust Low-Light (x : 275, y : 295).
7. Adjust CA-100 so that the final adjustment value can be fixed.
8. Use the Channel Up/Down (▲/▼) buttons to move the cursor on the adjustment modes.
9. Use the Volume +/- buttons to change the adjustment value.

4-8 Factory Adjustment

4-8-1 Service Mode

- To enter the "Service Mode", Press the remote-control keys in this sequence :

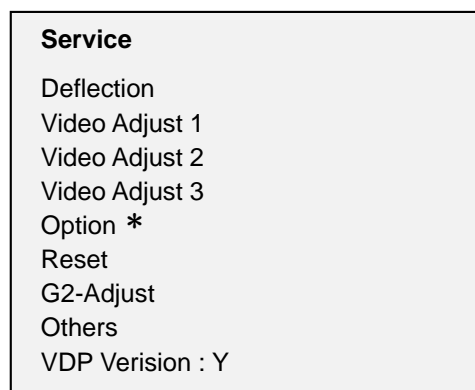
- If you do not have Factory remote-control



- If you have Factory remote-control



- After the Service Mode is entered, the initial screen is as shown in the figure below.



* These hexa digits are check sum value which depends on the MICOM.
If check sum value is changed, the value of E²PROM Data newly initialed.

- Use the Channel Up/Down buttons to move the cursor in the adjustment parameters.

Note 2.

- When CRT, CRT PCB, FBT, E²PROM (sometimes MICOM) is replaced, the adjustment values should be controlled.
- After the Service adjustment is completed, Do not select "Reset" in the service mode menu. (After above procedure is done, power is on initially and the "Plug and Play" will be operated.)

Note 3.

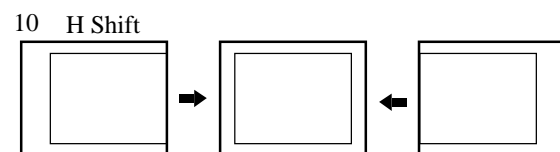
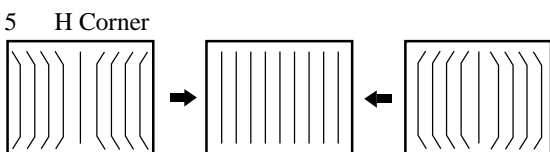
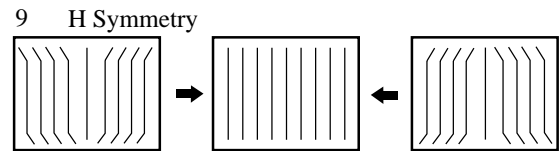
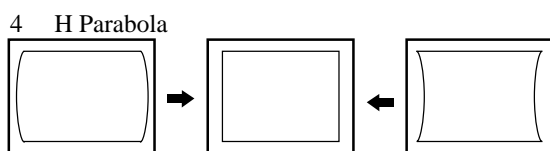
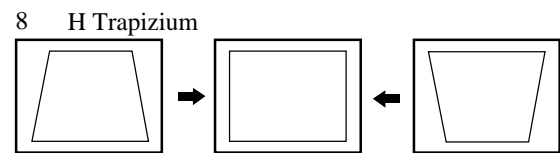
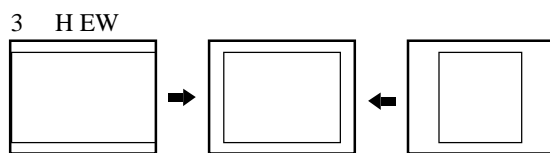
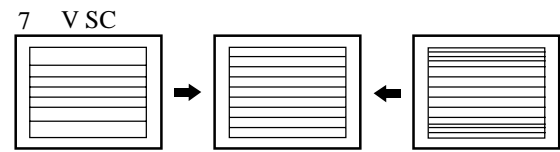
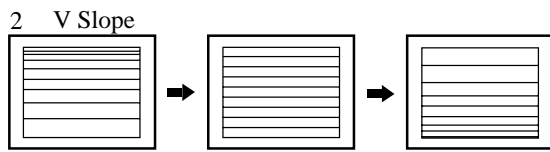
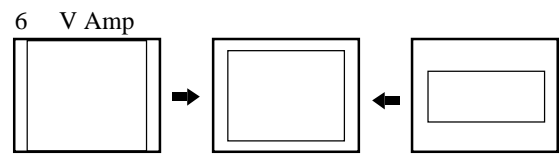
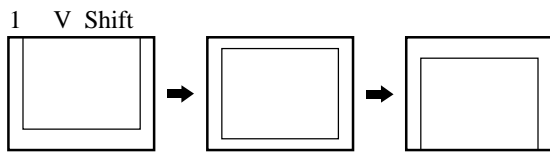
- When E²PROM (IC902) and Micom are replaced at the same time :
 1. After the Factory Mode is entered, check the VDP version in the service list.
 2. Set the version so that the VDP version is identical with the video chip (IC201S)
 3. After all settings are completed, adjust the service value of each mode to its default.
 4. Refer to "Service Manual" for factory value.
 5. Check the version
 - a. Check the VDP version "Y" in the Factory Mode.
 - b. Version Mode : "Y", "B" from IC201S(Video Chip) VDD3130"Y"
VDD3112"B", VDD3108"B"

4-8-2 Memory Data

4-8-2(A) DEFLECTION (GEOMETRIC ADJUSTMENT VALUE)

DEFLECTION	Initial Value	Adjustment Value	SAM2540 SAM2740	TXK3276	CL29A6	TXK3279	TXK3676	TXK3679
H Bow	0	Fixed	0	0	0	0	0	0
H Angle	0	Adjustment	0	0	10	0	0	0
H DSCC	1	Fixed	1	1	3	3	1	3
V SHIFT	-40	Adjustment	-18	<u>-27</u>	-55	-51	<u>-27</u>	-51
V AMP	5	Adjustment	18	<u>-17</u>	0	-35	<u>-17</u>	-35
V SLOPE	-2	Adjustment	-4	<u>-3</u>	0	-2	<u>-3</u>	-2
V SC	-7	Fixed	-13	-13	-17	0	-13	0
H EW	64	Adjustment	24	<u>71</u>	45	49	<u>71</u>	49
H TRAPEZIUM	-20	Adjustment	20	<u>-50</u>	-50	-30	<u>-50</u>	-30
H PARABOLA	-13	Adjustment	17	<u>10</u>	-5	18	<u>10</u>	18
H SYMMETRY	13	Fixed	13	13	13	13	13	13
H CORNER	15	Adjustment	69	<u>-13</u>	25	-34	<u>-13</u>	-34
H SHIFT	4		13	<u>20</u>	-20	-6	<u>20</u>	-6
PIP CONTRAST	15	Fixed	-	-	15	10	-	10
PIP TINT	0	Fixed	-	-	0	0	-	0
PIP PAL V.POS	12	Fixed	-	-	12	12	-	12
PIP NTSC V.POS	10	Fixed	-	-	10	10	-	10
PIP H.POS	15	Fixed	-	-	15	15	-	15

4-8-2(B) SCREEN CHANGE (I2C BUS GEOMETRIC ADJUSTMENT)



4-8-2(C) VIDEO ADJUST 1

VIDEO ADJUST1	Initial Value	Adjustment Value	SAM2540 SAM2740	TXK3276	CL29A6	TXK3279	TXK3676	TXK3679
RED CUT OFF	127	Adjustment	127	127	127	127	127	127
GREEN CUT OFF	127	Fixed	127	127	127	127	127	127
BLUE CUT OFF	127	Adjustment	127	127	127	127	127	127
RED DRIVE	127	Adjustment	127	127	127	127	127	127
GREEN DRIVE	127	Fixed	127	127	127	127	127	127
BLUE DRIVE	127	Adjustment	127	127	127	127	127	127
SUB BRIGHT	110	Adjustment	100	100	100	100	100	100
SUB CONTRAST	52	Adjustment	52	52	52	52	52	52
SUB COLOR	27	Fixed	50	50	50	50	50	50
SUB TINT	30	Fixed	70	70	40	70	70	70
BCL THRESHOLD	62	Fixed	58	58	65	60	58	60
BCLGAIN	8	Fixed	8	8	8	9	8	9
BCL TIME	13	Fixed	10	10	6	5	10	5
DVD SUBTint		Fixed			25	25		25
N. YC DELAY	0		3	3	3	3	3	3

Note 3. Beam Control Limit Characteristic

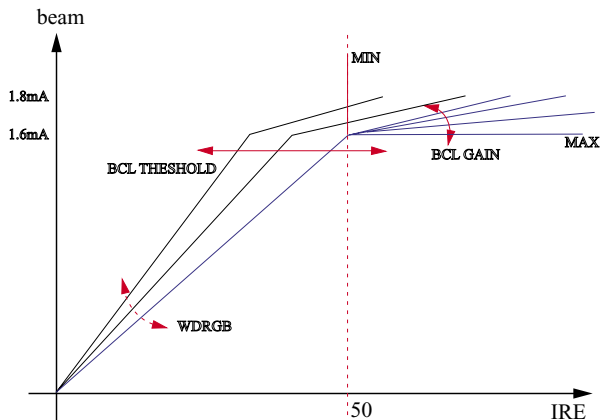


Table 1. YC Delay Adjustment Table

N.YC Delay	NTSC	
	Def.	M
Value	4	3

✍ The "Def." means that TV is in AV mode.

4-8-2(D) VIDEO 2 ADJUST

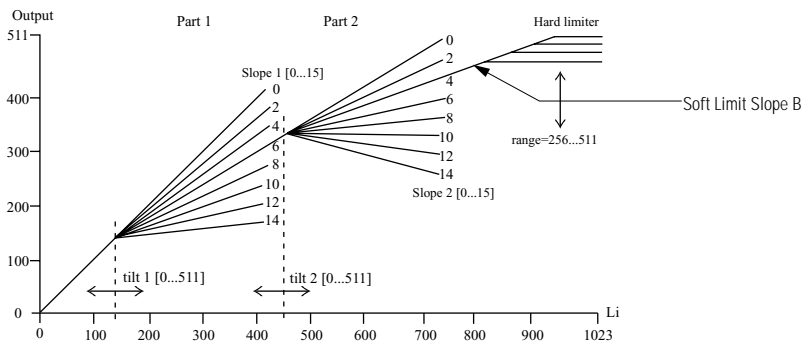
VIDEO ADJUST2	Initial Value	Adjustment Value	SAM2540 SAM2740	TXK3276	CL29A6	TXK3279	TXK3676	TXK3679
B STRETCH-BTHR	50	Fixed	50	50	50	50	50	50
B DTRETCH-BTLT	8	Fixed	8	8	8	8	8	8
B STERTCH-BAM	4	Fixed	4	4	4	4	4	4
CORING	31	Fixed	31	31	31	31	31	31
NTSC COMB FILTER	1		1	1	3	3	1	3
RGB BRIGHT	0	Fixed	0	<u>45</u>	<u>0</u>	<u>45</u>	<u>45</u>	<u>45</u>
RG B CONTRAST	0	Fixed	0	<u>15</u>	<u>0</u>	<u>15</u>	<u>15</u>	<u>15</u>
EHT TIME	0	Fixed	0	0	3	8	0	8
EHT COMPENSATION	60	Fixed	60	60	60	60	60	60
DTI CORING		Fixed	0	0	0	0	0	0
DTI GAIN		Fixed	1	1	1	1	1	1
DTI BAND		Fixed	1	1	1	1	1	1
EHT Offset	0	Fixed	-	-	0	0	-	0
EHT Horizontal	0	Fixed	-	-	0	0	-	0

✍ Coring : The Value of Center Frequency for the active bandwidth.

4-8-2(E) VIDEO 3 ADJUST

VIDEO ADJUST3	Initial Value	Adjustment Value	SAM2540 SAM2740	TXK3276	CL29A6	TXK3279	TXK3676	TXK3679
PEAK Threshold	255	Fixed	255	255	255	255	255	255
SOFT LIMIT SLOPE B	4	Fixed	4	4	4	4	4	4
HARD LIMIT	255	Fixed	255	255	255	255	255	255
MODULATION ON/OFF	0	Fixed	0	0	0	0	0	0
A TILT POINT	0	Fixed	0	0	0	0	0	0
B TILT POINT	0	Fixed	114	114	114	114	114	114
GAIN 1 (VIDEO)		Fixed	11	<u>31</u>	<u>31</u>	<u>31</u>	<u>31</u>	<u>31</u>
DELAY 1 (VIDEO)		Fixed	3	3	3	3	3	3
PEAK VIDEO REF		Fixed	0	0	0	0	0	0
PEAK VIDEO GAIN		Fixed	0	0	0	0	0	0
LIMIT VALUE		Fixed	74	74	127	74	74	74
VELOCITY DELAY		Fixed	7	7	7	7	7	7
VELOCITY CORING		Fixed	10	10	2	10	10	10
ACC-REF	20	Fixed	20	20	20	20	20	20
ACCR	21	Fixed	21	21	21	21	21	21

Note 5. Soft Limit & Hard Limit



“Soft Limit” is that Limiting the peak white without feed-back, but “Peak Limit” is that with feed-back for white peak level

4-8-2(F) OPTION

	Model	CL29A6	SAM2540 SAM2740	TXK3276 TXK3676	TXK3279 TXK3679	TXK3279 TXK3679
No.	Description	Initial Value	Initial Value	Initial Value	Initial Value	Initial Value
1	SYSTEM	CN(EN+SP+PO)	CT(EN+SP+FR)	CT(EN+SP+FR)	CT(EN+SP+FR)	CT(EN+SP+FR)
2	ACS(CT, CTA)	OFF	ON	ON	ON	OFF
3	SOUND	VIRTUAL DOLBY	STEREO	STEREO	VIRTUAL DOLBY	VIRTUAL DOLBY
4	CRT	4:3	4:3	4:3	4:3	4:3
5	AV MODE(V,Y)	2RCA + S + D	1RCA	2RCA +S	2RCA +S+D	2RCA +S+D
6	AUDIO MUTE	ON	ON	ON	ON	ON
7	X-RAY	OFF	ON	ON	ON	ON
8	VIDEO-MUTE	ON	OFF	OFF	OFF	ON
9	TILT CONTROL	ON	OFF	OFF	OFF	ON
10	GAME+DEMO(CN)	ON	OFF	OFF	OFF	OFF
11	LNA	ON	OFF	OFF	OFF	ON
12	PIP	2-TUNER	OFF	OFF	2-TUNER	2-TUNER
13	VCHIP(CT,CTA)	OFF	ON	ON	ON	OFF
14	BLUE SCREEN	ON	OFF	OFF	OFF	ON
15	AKB	ON	OFF	OFF	OFF	ON
16	AUTO POWER ON	OFF	OFF	OFF	OFF	OFF
17	HOTEL	OFF	-	-	-	OFF
Option Byte		04 DE 12 1C	01 01 80 09	01 01 88 09	04 01 92 09	

Note 6.

V-DOLBY	MSP3451G, MSP3440GB6
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4-8-2(G) OTHERS

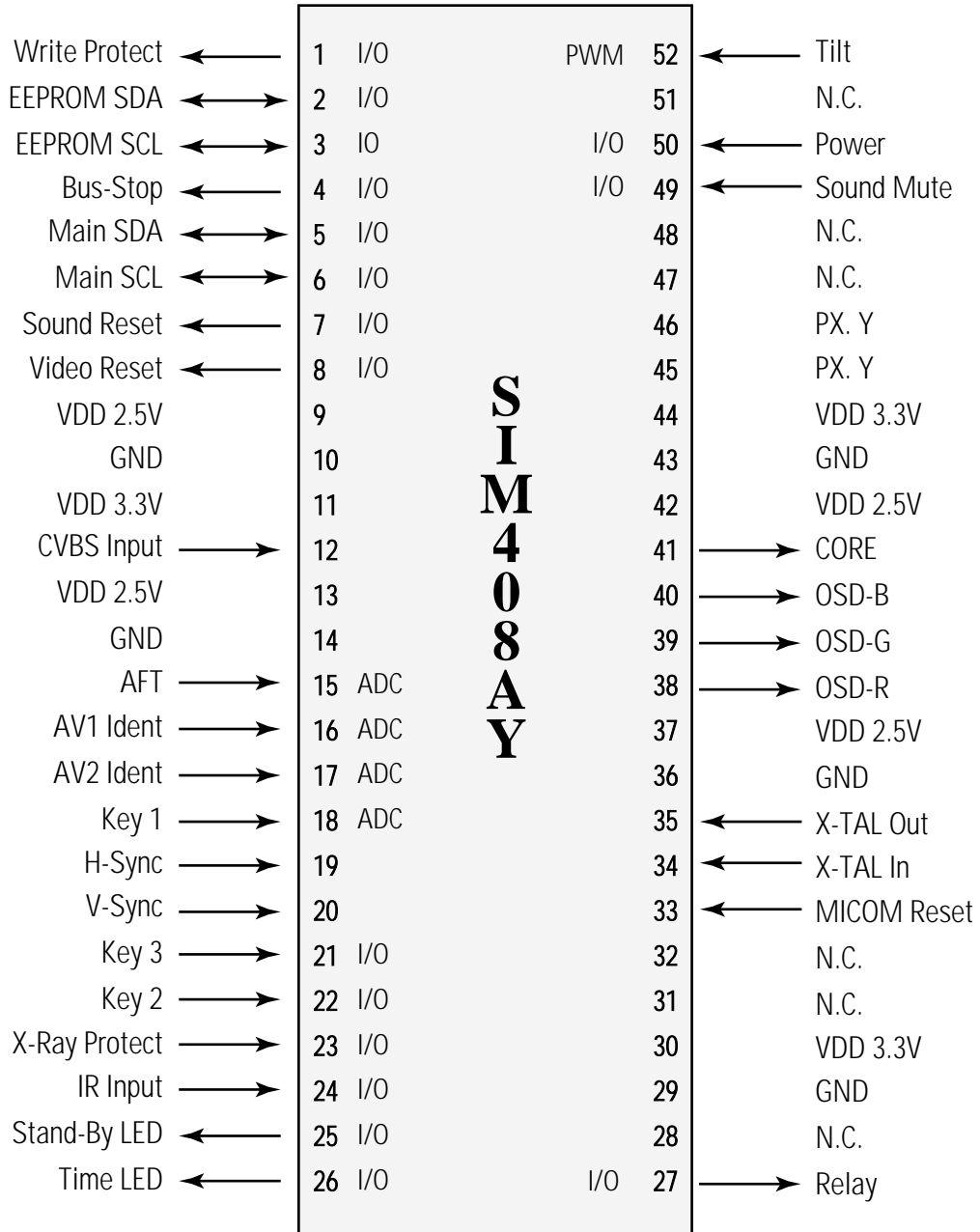
OTHERS	Initial Value	Adjustment Value	SAM2540 SAM2740	TXK3276	CL29A6	TXK3279	TXK3676	TXK3679
VSU	108	Fixed	105	<u>105</u>	<u>98</u>	<u>108</u>	<u>105</u>	<u>108</u>
VSU2			0	0	0	0	0	0
H QEW	0	Fixed	0	0	0	0	0	0
H ZOOM Parabola	8	Fixed	8	8	12	12	0	0
H 16:9 Parabola	-10	Fixed	-18	-18	-19	-19	0	0
DVD Tint Control	0	Fixed	0	0	1	1	0	0
PAL V SHIFT		Fixed	-29	-29	-66	-62	-29	-20
PAL H SHIFT		Fixed	18	18	-15	-1	18	-3
Melody Volume	5	Fixed	7	7	7	7	7	7
PIP BRIGHT		Fixed			3	5		5
PIP COLOR		Fixed			7	7		7

4-8-2(G) G2 ADJUST

G2 Adjust	Initial Value	Adjustment Value	SAM2540 SAM2740	TXK3276	CL29A6	TXK3279	TXK3676	TXK3679
MRC R G B								
MRWDG								
IBRM	-10	FIX	200	<u>195</u>	<u>200</u>	<u>195</u>	<u>195</u>	<u>195</u>
WDRV	0	FIX	35	35	35	35	35	35
CDL		FIX	150	<u>170</u>	<u>200</u>	<u>170</u>	<u>170</u>	<u>170</u>
COL		FIX	130	130	120	130	130	130
VDP Version			B	B	Y	Y	B	Y
WHITE BALANCE		H	275,295,35	275,295,28	275,295,50	275,295,28	275,295,28	275,295,28
		L	275,295,1.2	275,295,1.0	275,295,1.5	275,295,1.0	275,295,1.0	275,295,1.0

4-9 MICOM

4-9-1 Pin Layout



4-9-2 Pin Assignment Specification

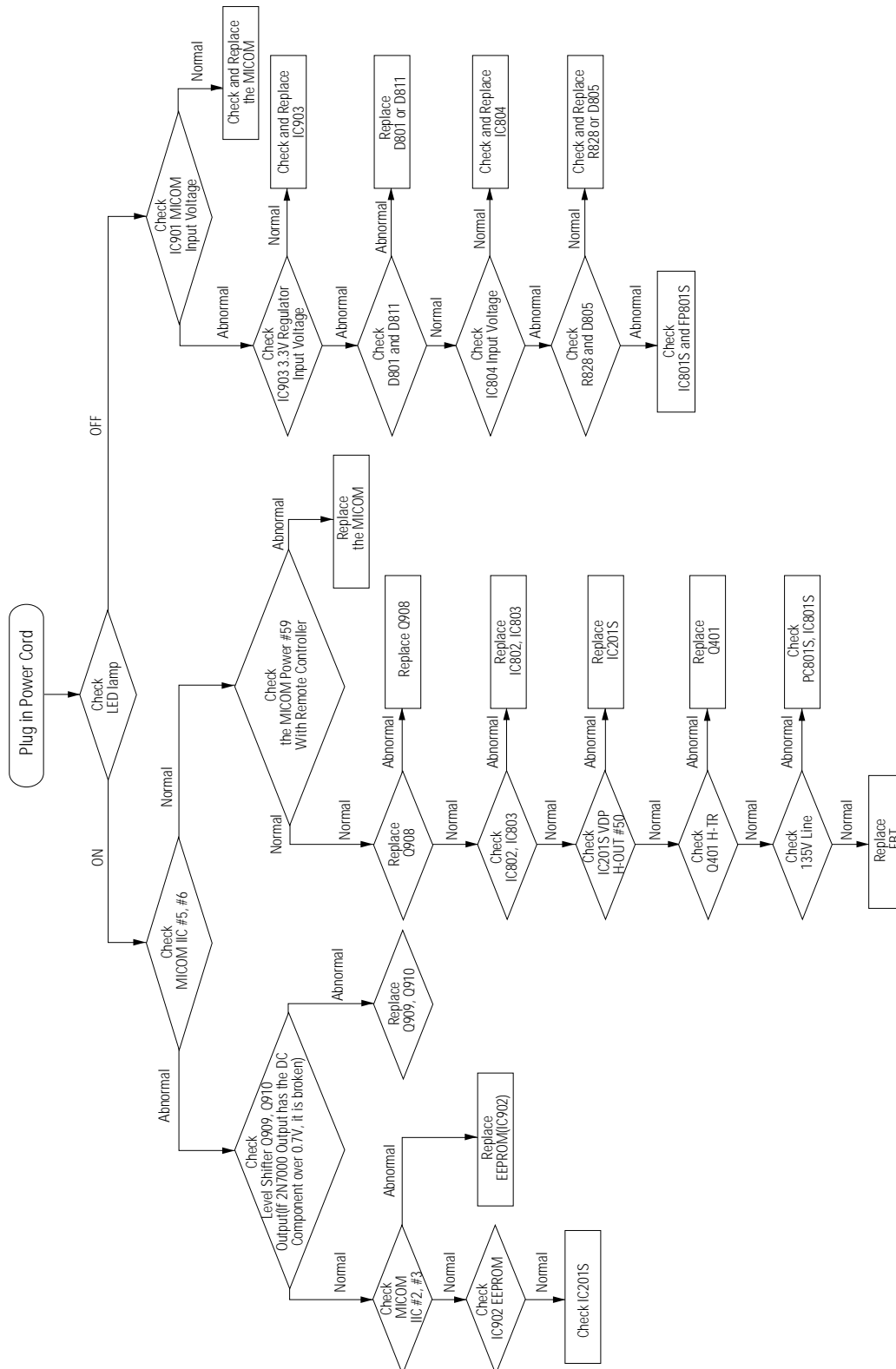
PIN NO	FUNCTION	ASSIGN	IN/OUT	ACTIVE H/L	DESCRIPTION
1	I/O	Write Protect	Out	Low	EEPROM Write Protection
2	I/O	ROM SDA	I/O		EEPROM Serial Data Line
3	I/O	ROM SCL	I/O		EEPROM Serial Clock Line
4	I/O	Bus Stop	In	Low	Disable Micom IIC
5	I/O	Main SDA	I/O		Peripheral IC Serial Data Line
6	I/O	Main SCL	I/O	Low	Peripheral IC Serial Clock Line
7	I/O	Sound Reset	Out	Low	MSP IC Initial Control
8	I/O	Video Reset	Out		VDP IC Initial Control
9	Vdd	VDD 2.5V			
10	GND				
11	Vdd	VDD 3.3V			
12	CVBS	CVBS Input	In		TTX CVBS Input
13	Vdd	VDD 2.5V			Analog B+
14	GND				Analog Ground
15	ADC	AFT	In		Auto Fine Tuning Control
16	ADC	AV1-ID	In		AV1 Ident
17	ADC	AV2-ID	In		AV2 Ident
18	ADC	Key1	In		Key1 Input
19	HS	H-Sync	In		Horizontal Sync Input
20	VS	V-Sync	In		Vertical Sync Input
21	I/O	Key3	In		Key3 Input
22	I/O	Key2	In		Key2 Input
23	I/O	X-Ray	In		X-Ray Protection
24	I/O	IR-In	In		Remocon Signal Input
25	I/O	STD-LED	Out		LED Drive Output(Red)
26	I/O	TIM-LED	Out		LED Drive Output(Green)

4-9-2 Pin Assignment Specification (Continued)

PIN NO	FUNCTION	ASSIGN	IN/OUT	ACTIVE H/L	DESCRIPTION
27	I/O	Relay	Out	Low	Activate Degaussing Coil
28	N.C.				Not Used (Programmed Gound Level)
29	GND				Analog Ground
30	Vdd	VDD 3.3V			Not Used (Programmed Gound Level)
31	N.C.				Not Used (Programmed Gound Level)
32	N.C.				Micom Hardware Reset
33	Reset	Reset	In	Low	Crystal Oscillation Input
34	X-In	X-TAL In	In	6MHz	Crystal Oscillation Output
35	X-Out	X-TAL Out	Out	6MHz	Analog Ground
36	GND				Analog B+
37	Vdd	VDD 2.5V			OSD/Caption Output (Red)
38	R	OSD-R	Out		OSD/Caption Output (Green)
39	G	OSD-G	Out		OSD/Caption Output (Blue)
40	B	OSD-B	Out		Fast Blank/Half Contrast Output
41	COR	CORE	Out		
42	Vdd	VDD 2.5V			
43	GND				
44	Vdd	VDD 3.3V			
45	I/O	PX.Y	In		When The Caption Function Adopted, Used.
46	I/O	PX.Y	Out		
47	N.C.				Not Used (Programmed Gound Level)
48	N.C.				
49	I/O	S-Mute	Out	High	Sound Amp Mute
50	I/O	Power	Out	Low	Picture On/Off Control
51	N.C.				Not Used (Programmed Gound Level)
52	I/O	Tilt	Out	PWM	Tilt Control Output

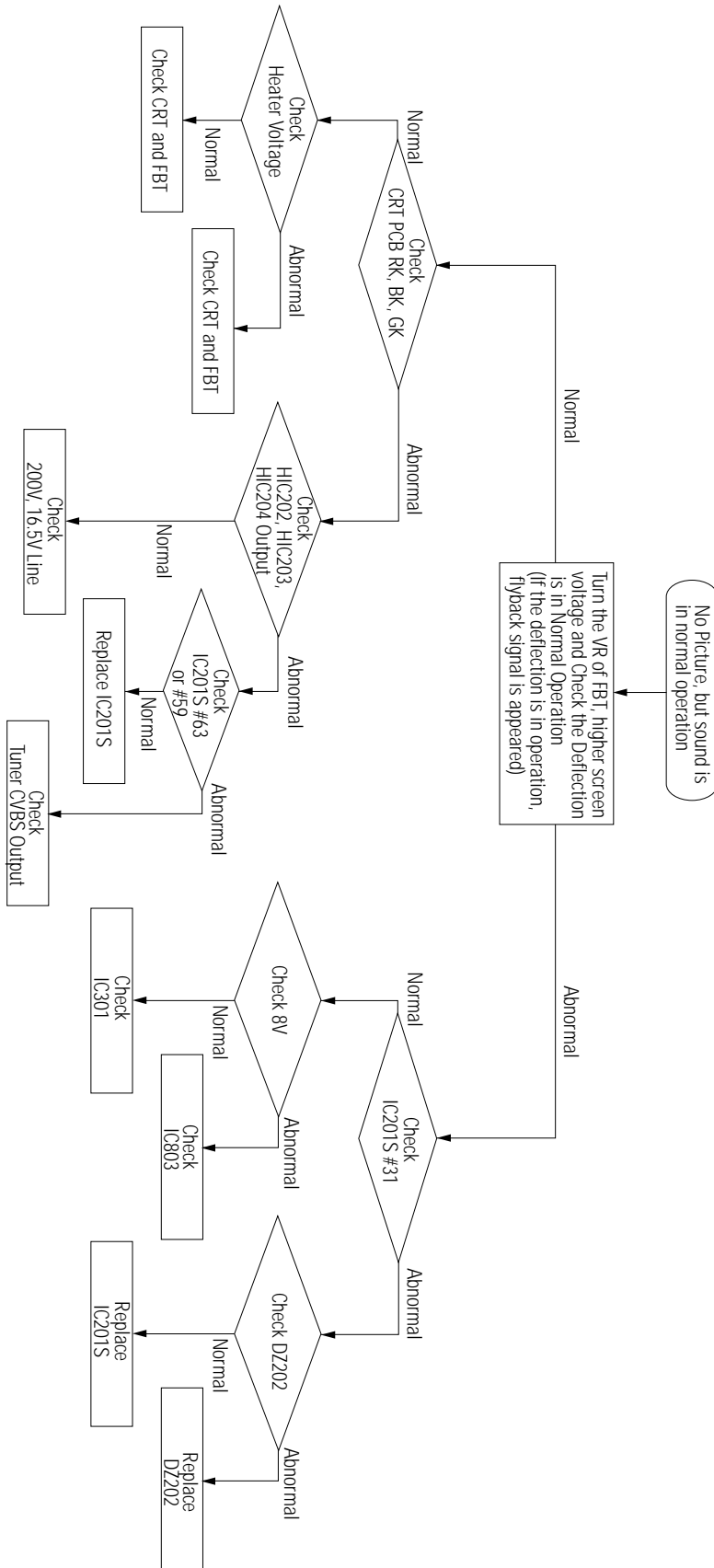
5. Troubleshooting

5-1 No Power

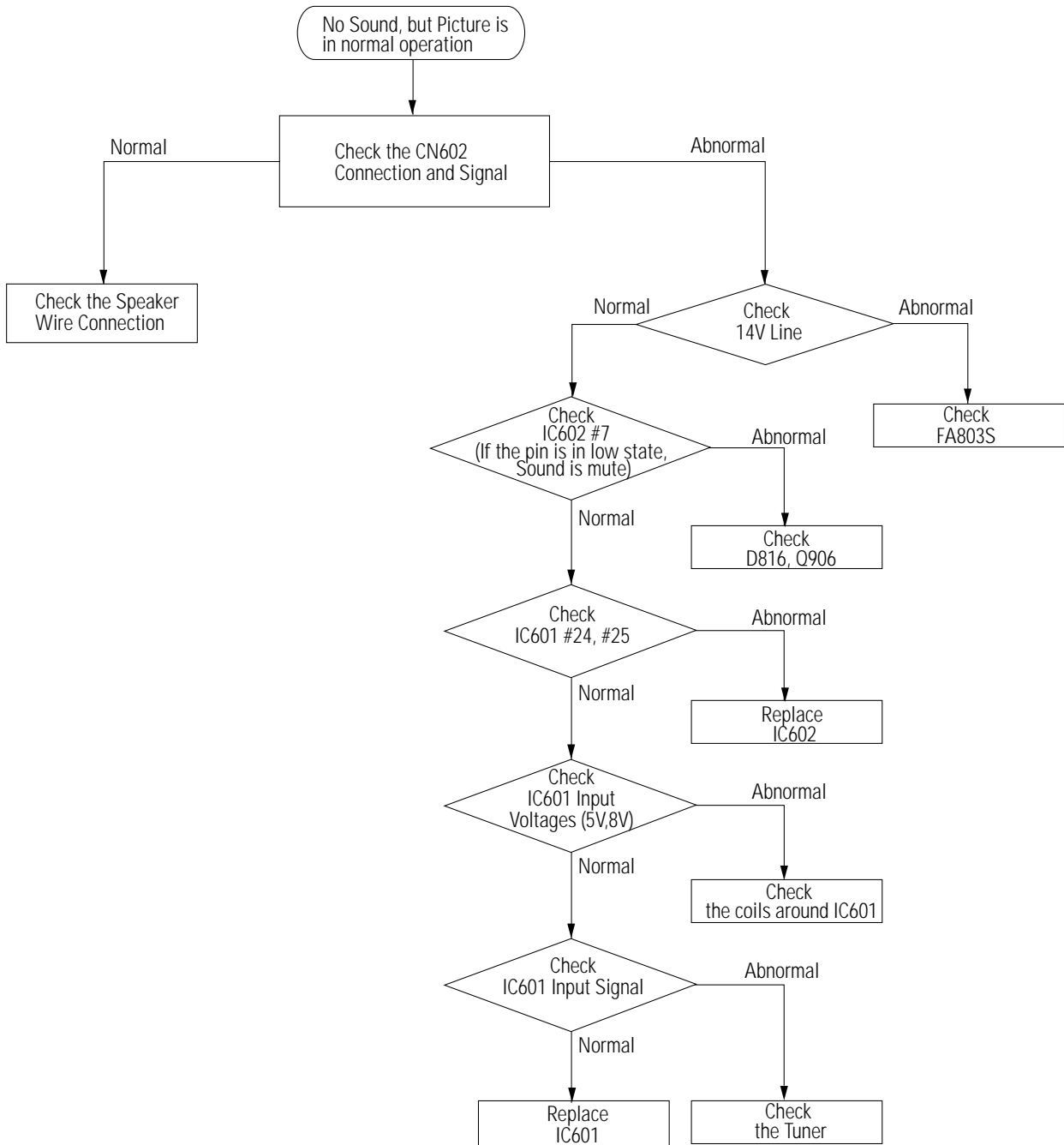


Note : When you check whether any component is normal, you must let the output pin be open in order not to be affected by the side of output.

5-2 No Picture



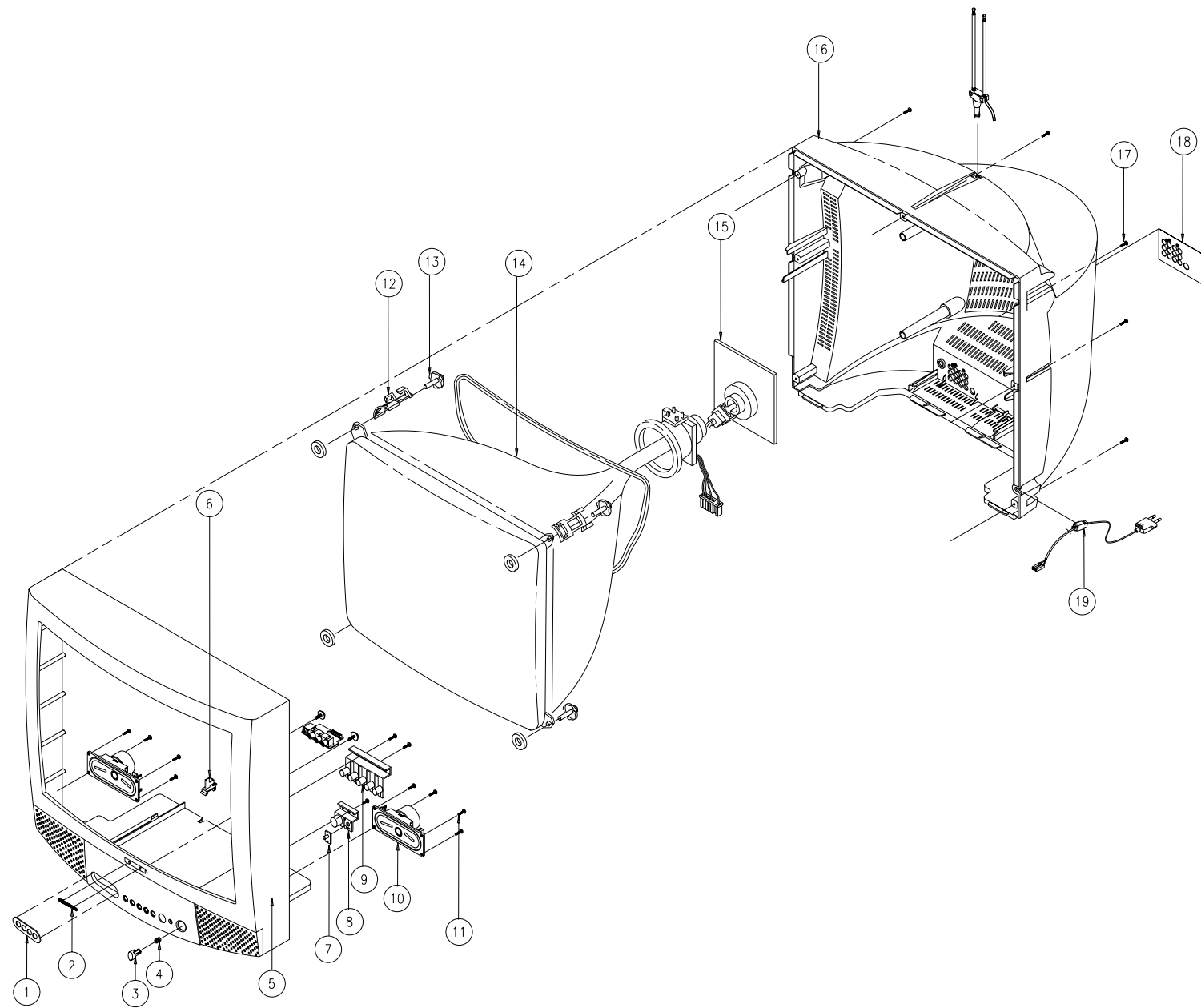
5-3 No Sound



MEMO

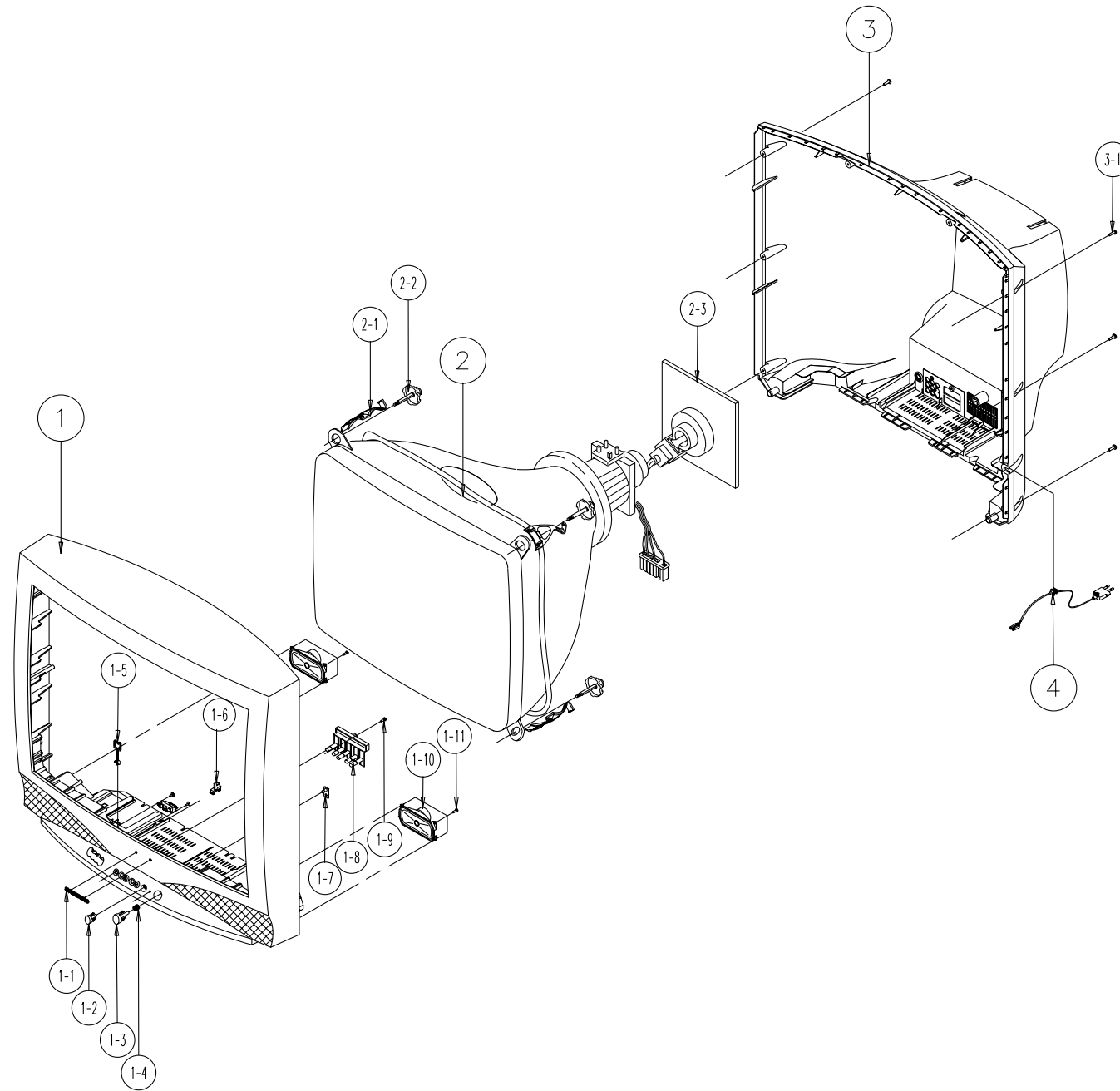
6. Exploded View & Parts List

6-1 SAM25405C/XAA



No	Code No	Description	Specification	Q'ty	Remark
1	AA64-01230B	INLAY-COVER	;D2,D3,PVC-SHEET,T0.4,94V0,-,	1	
2		BADGE			
3	AA64-01258A	KNOB POWER	;6345,ABS HB,-,BLK,-,-,-,-	1	
4	AA61-60003J	SPRING-CS;	-,SUS304,0.5,OD6,H12,N7,-,-,-	1	
5	AA64-01252A	CABINET FRONT	;6345,BK708P ELN,HIPS VO,-,	1	
6	AA61-40113A	STOPPER-PCB	;501H,HIPS,NTR,HB,-,-	1	
7	AA64-01256B	INDICATOR LED	;6345,ACRYL,-,CLR,-,-,-	1	
8	AA64-01254B	WINDOW REMOCON	;6345,PC VO,-,-,-,-,VIOLET	1	
9	AA64-01260A	KNOB CONTROL	;6345,ABS HB,-,BLK,-,-,-,-	1	
10	3001-001038	SPEAKER	;6W,16OHM,92DB,140HZ	2	
11	6002-000522	SCREW-TAPPING	;TH,+2,M4,L15,ZPC(BLK),SWR	8	
12	AA65-30113A	CLAMP-D,COIL	;NYLON 66,V2,BLK,TVI 25-29,-	4	
13	AA60-10050R	SCREW-ASSY	;WC,HH,+M5,L31.5,SWRCH18A,ZPC	4	
14	AA03-00032A	CRT-COLOR	;-A63QDB891X,+380MG,26INCH,100	1	
15	3704-001105	SOCKET-CRT	;11P,20PI,26.5PI,NI,-	1	
16	AA64-01250A	CABINET BACK	;6345,-,HIPS VO,-,BLK	1	
17	6003-001025	SCREW-TAPTITE	;RH,+B,M4,L20,ZPC(BLK),SWR	7	
18	AA64-00892K	INLAY BACK	;D2,PS SHEET,T0.3,-,BLK,-,RCA3	1	
19	AA96-20129A	ASSY-POWER,CORD	;-EP2/YES,H/C300,ME301P, 1		

6-2 TXK3276C/XAA



No	Code No	Description	Specification	Q'ty	Remark
1	AA64-00885A	CABINET FRONT	;TOOL,34D3-1,MOLD,-,-,-,-,-	1	
1-1	AA64-70124C	BADGE-BRAND	;AL,R2500,SILVER,L=70,SAMSUNG	1	
1-2	AA64-00354A	WINDOW-REMOCON	;MOLD,37D3,MOLD,-,-,-,-,-	1	
1-3	AA64-00352A	KNOB-POWER	;TOOL,37D3,MOLD,-,-,-,-,-	1	
1-4	AA61-60003J	SPRING-CS	;-,SUS304,0.5,OD6,H12,N7,-,-,-	1	
1-5	AA65-30008A	CLAMP-CORD	;PE,HB,BLK,-,-,-,-,-	1	
1-6	AA61-40113A	STOPPER-PCB	;501H,HIPS,NTR,HB,-,-,-	1	
1-7	AA64-00355A	INDICATOR-LED	;DP,37D3,MOLD,-,-,-,-,-	1	
1-8	AA64-00353A	KNOB-CONTROL	;TOOL,37D3,MOLD,-,-,-,-,-	1	
1-9	6003-001019	SCREW-TAPTITE	;RH,+ ,B,M4,L12,ZPC(BLK),SWR	1	
1-10	3001-001115	SPEAKER	;15W,8ohm,93dB,110	2	
1-11	6003-001019	SCREW-TAPTITE	;RH,+ ,B,M4,L12,ZPC(BLK),SWR	8	
2	AA03-00131A	CRT COLOR	;A81AGZ50X07,-,-,34INCH,-,-,-,1.2	1	
2-1	AA65-30113A	CLAMP-D,COIL	;NYLON 66,V2,BLK,TVI 25-29,-	4	
2-2	AA60-10050V	SCREW-ASSY	;WC,HH,+ ,M6,L30,SWRCH18A,ZPC(S	4	
2-3	3704-000114	SOCKET-CRT	;14P,29.1,35.5,SN,ISH09S/BK	1	
3	AA64-00886A	CABINET BACK	;TOOL,34D3-1,MOLD,-,-,-,-,-	1	
3-1	6003-001025	SCREW-TAPTITE	;RH,+ ,B,M4,L20,ZPC(BLK),SWR	8	
4	AA96-20129B	ASSY-POWER,CORD	;-,EP2/YES,H/C400,ME301P,	1	

7. Electrical Parts List

7-1 SAM27405C/XAA (SAM27405C/XAA and SAM25405C/XAA Dissimilar Parts)

Loc. No.	Code No.	Description ; Specification	Remark	Loc. No.	Code No.	Description ; Specification	Remark
ASSY PCB MAIN(OPT)				ASSY-SKD			
		* AA94-02629BASSY PCB MAIN(OPT);SAM27405C/XAA,KS3A,USA,-				* AA97-00701BASSY-SKD;-;SAM27405C/XAA,KS3A,-;-	
C405	2306-000327	C-FILM,MPPF:6.3nF,3%,1.6KV,TP,28.5x18x10,2		AA27-20001N	COIL-DEGAUSSING;-;29,9ohm,50T,L3200,E		
C406	2306-000253	C-FILM,MPPF:7.2nF,5%,1.6KV,TP,28.5x18.5x12					
L403	AA27-00075A	COIL LINEARITY;- ,50uH,DR14x20,11mm,18x38mm,6T,38T,BK,20%,					
R522	2008-000266	R-FUSIBLE(S);1ohm,5%,2W,AF,TP,3.9x10mm					
RR03S	2001-000009	R-CARBON;20KOHM,5%,1/8W,AA,TP,1.8X3.2MM					
RR05S	2001-001015	R-CARBON;9.1KOHM,5%,1/8W,AA,TP,1.8X3.2MM					
ASSY CABINET FRONT							
		* AA92-00380BASSY CABINET FRONT:6845 T/W ITEM					
	AA64-01251A	CABINET BACK:6845,-;HIPS VO,-;BLK					
	AA64-01253A	CABINET FRONT:6845,BK708P ELN,HIPS VO,-;BLK					
	AA64-01255A	WINDOW REMOCON:6845,PC VO,-;-;-;VIOLET,-					
	AA64-01257A	INDICATOR LED:6845,ACRYL,-;CLR,-;-;-					
	AA64-01259A	KNOB POWER:6845,ABS HB,-;BLK,-;-;-					
	AA64-01261A	KNOB CONTROL:6845,ABS HB,-;BLK,-;-;-					
ASSY CRT							
		* AA97-00700BASSY CRT;-;-;27,-;SAM2740,-					
	AA03-00147A	CRT COLOR;- ,A68QDN891X001,+380mG,29inch,110,42.5%,1.0R					

Electrical Parts List

Loc. No.	Code No.	Description ; Specification	Remark	Loc. No.	Code No.	Description ; Specification	Remark
SW905	3404-000244	SWITCH-TACT;15V,20mA,90-170gf,7.5x7mm,SP				ASSY-POWER,CORD * AA96-20129AASSY-POWER,CORD;- ,EP2/YES,H/C300,ME301P, AA61-20284A HOLDER;- ,P-CORD,PP,VO,BLK,KE-002 AA39-10007Y POWER-CORD;- ,EP2/YES,SPT-2 18AWGx2C,2.4m	
SW906	3404-001004	SWITCH-TACT;12V,50MA,160GF,8.4X22.7MM,SP					
△ T401	AA26-50001L	TRANS-HORIZ.DRIVE;- ,29mH,133uH,4.5uH,EI2					
△ T444S	AA26-00057A	TRANS-FBT;- ,FUH-29A001B(S),25/29,130					
△ T801S	AA26-00044C	TRANS SWITCHING;CODE-NO,CT-21A8,- ,AC90-2					
△ TU01S	AA40-00021A	TUNER-F/S;TCPN3081PA09A(S),NTSC,TR,181CH					
△ V999S	3704-001105	SOCKET-CRT;11P,20PI,26.5PI,NI,-					
△ VP801S	1405-000152	VARISTOR;560V,2500A,14x8.5mm,TP					
△ VX801S	1405-000152	VARISTOR;560V,2500A,14x8.5mm,TP					
WIRE	AA39-00046C	LEAD CONNECTOR-ASSY;- ,,,,,, ,JU					
WIRE	AA39-00046E	LEAD CONNECTOR-ASSY;- ,,,,,, ,JU					
X201	2801-003432	CRYSTAL-UNIT;20.25MHZ,30PPM,28-AAM,13PF					
X601	2801-003903	CRYSTAL-UNIT;18.432MHZ,25ppm,28-AAM,12pF					
X901	2801-003728	CRYSTAL-UNIT;6MHz,30ppm,28-AAM,20pF,40oh					

ASSY CABINET(COM)

* AA92-00379AASSY CABINET(COM);6345 T/W ITEM
 * AA92-00380AASSY CABINET FRONT;6345 T/W ITEM

CB+CF	6003-001025	SCREW-TAPTITE;RH,+ ,B,M4,L20,ZPC(BLK),SWR	
CB+RJ	6002-000522	SCREW-TAPPING;TH,+ ,2,M4,L15,ZPC(BLK),SWR	
CRT+CF	AA60-10050R	SCREW-ASSY;WC,HH,+ ,M5,L31.5,SWRCH18A,ZPC	
KC+CF	6002-000522	SCREW-TAPPING;TH,+ ,2,M4,L15,ZPC(BLK),SWR	
SPK+CF	6002-000522	SCREW-TAPPING;TH,+ ,2,M4,L15,ZPC(BLK),SWR	
WR+CF	6002-000522	SCREW-TAPPING;TH,+ ,2,M4,L15,ZPC(BLK),SWR	
	AA63-60001X	SPACER-FELT;FELT,TO.5,BLK,330X15,-,-	
	AA63-60004G	SPACER-GUM,CRT;NTR RUBBER,T3.0,GRY,-,-	
	AA64-00892K	INLAY BACK;D2,PS SHEET,TO.3,- ,BLK,- ,RCA3	
	AA64-01250A	CABINET BACK;6345,- ,HIPS,VO,- ,BLK	
	AA64-60421C	INLAY COVER;- ,SEA,PS,TO.3,BLK,-,-	
	AA65-30008A	CLAMP-CORD;PE,HB,BLK,-,-,-	
	AA65-30017A	CLAMP-D,COIL;NYLON-66,VO,NTR,DADH300,25	
	AA65-30113A	CLAMP-D,COIL;NYLON 66,V2,BLK,TVI 25-29,-	
	AA61-40113A	STOPPER-PCB;501H,HIPS,NTR,HB,-,-	
	AA61-60003J	SPRING-CS;- ,SUS304,0.5,OD6,H12,N7,-,-,-	
	AA64-01252A	CABINET FRONT;6345,BK708P ELN,HIPS,VO,- ,	
	AA64-01254B	WINDOW REMOCON;6345,PC,VO,-,-,- ,VIOLET	
	AA64-01256B	INDICATOR LED;6345,ACRYL,- ,CLR,-,-,-	
	AA64-01258A	KNOB POWER;6345,ABS,HB,- ,BLK,-,-,-,-	
	AA64-01260A	KNOB CONTROL;6345,ABS,HB,- ,BLK,-,-,-,-	
	AA65-00011B	CLAMP-WIRE;ALL MODEL,NYLON 66,V2,NTR,15M	

ASSY SPEAKER

* AA96-00432AASSY SPEAKER;- ,16ohm,6W,3001-001098,AA39

3001-001038	SPEAKER;6W,16OHM,92DB,140HZ
AA39-00151A	LEAD CONNECTOR-ASSY;- ,,-,5(4)P,-,-,-,67

REMOCON

* AA59-10110RREMOCON;- ,TM59,SZM368ET,24,L/GRAY,SAMT

7-3 TXK3276C/XAC (TXK3276C/XAC and TXK3276C/XAA Dissimilar Parts)

Loc. No.	Code No.	Description ; Specification	Remark	Loc. No.	Code No.	Description ; Specification	Remark
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ASSY PCB MAIN(OPT)

* ASSY PCB MAIN(OPT);TXK3276C/XAC,KS3A,CANADA,-

ASSY PACKING

* AA92-00445BASSY PACKING;TXK3276C/XAC

2011-001061 RC-NETWORK:1-2Mohm,-.270pF,2,1/2W,2P
 AA26-90001E TRANS-MATCHING:-,300ohm/75ohm,NTSC,40-890MHZ

7-4 TXK3276C/XAA

Loc. No.	Code No.	Description ; Specification	Remark	Loc. No.	Code No.	Description ; Specification	Remark
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ASSY CABINET FRONT

* AA92-00390AASSY CABINET FRONT;TXK3276C/XAA

CB+CF	6003-001025	*SCREW-TAPTITE:RH,+B,M4,L20,ZPC(BLK),SWR	
CB+RCA	6003-001025	SCREW-TAPTITE:RH,+B,M4,L20,ZPC(BLK),SWR	
CRT+CF	AA60-10050V	SCREW-ASSY:WC,HH,+M6,L30,SWRCH18A,ZPC(S	
D-COIL	AA65-30113A	CLAMP-D,COIL:NYLON 66,V2,BLK,TVI 25-29,-	
IND+CF	6003-001019	SCREW-TAPTITE:RH,+B,M4,L12,ZPC(BLK),SWR	
KC+CF	6003-001019	SCREW-TAPTITE:RH,+B,M4,L12,ZPC(BLK),SWR	
KNOPOW	AA61-60003J	SPRING-CS:-,SUS304,0.5,OD6,H12,N7,-,-,-	
PA+CF	6006-001095	SCREW-ASS'Y TAPT:WP,BH,+M4,L12,ZPC(YEL)	
SPK+CF	6003-001019	SCREW-TAPTITE:RH,+B,M4,L12,ZPC(BLK),SWR	
	AA64-00886A	CABINET BACK:TOOL,34D3-1,MOLD,-,-,-,-	
	AA64-00892E	INLAY BACK:D2,D3,RCA9P+S-VHS,PS SHEET,TO	
	AA65-30008A	CLAMP-CORD:PE,HB,BLK,-,-,-	
	AA61-40113A	STOPPER-PCB:501H,HIPS,NTR,HB,-,-	
	AA64-00352A	KNOB-POWER:TOOL,37D3,MOLD,-,-,-	
	AA64-00353A	KNOB-CONTROL:TOOL,37D3,MOLD,-,-,-	
	AA64-00354A	WINDOW-REMOCON:MOLD,37D3,MOLD,-,-,-	
	AA64-00355A	INDICATOR-LED:DP,37D3,MOLD,-,-,-	
	AA64-00885A	CABINET FRONT:TOOL,34D3-1,MOLD,-,-,-,-	
	AA64-70124C	BADGE-BRAND:AL,R2500,SILVER,L=70,SAMSUNG	
	AA65-00011C	CLAMP-WIRE:ALL MODEL,NYLON 66,V2,NTR,25M	

ASSY PCB MAIN(OPT)

* AA94-02674AASSY PCB MAIN(OPT);TXK3276C/XAA,KS3A,USA

C103	2301-000383	C-FILM,PEF:10nF,5%,50V,TP,6x7x3.2mm,5mm	
C104	2401-001363	C-AL:470uF,20%,16V,GP,TP,10x12.5,5	

C105	2301-000383	C-FILM,PEF:10nF,5%,50V,TP,6x7x3.2mm,5mm	
C106	2401-000611	C-AL:1uF,20%,50V,WT,TP,5x11,5	
C113	2202-000127	C-CERAMIC,MLC-AXIAL:10nF,+80-20%,25V,Y5V	
C115	2202-000121	C-CERAMIC,MLC-AXIAL:100pF,10%,50V,Y5P,TP	
C116	2202-000121	C-CERAMIC,MLC-AXIAL:100pF,10%,50V,Y5P,TP	
C201	2401-000603	C-AL:1uF,20%,50V,GP,TP,5x11,5	
C202	2401-002235	C-AL:10uF,20%,16V,GP,TP,5x11mm,5mm	
C203	2305-000665	C-FILM,MPEF:100nF,5%,63V,TP,7.5x4.0x5.0m	
C204	2305-000665	C-FILM,MPEF:100nF,5%,63V,TP,7.5x4.0x5.0m	
C205	2401-002235	C-AL:10uF,20%,16V,GP,TP,5x11mm,5mm	
C208	2401-001026	C-AL:3.3UF,20%,50V,GP,TP,5X11,5	
C210	2401-000287	C-AL:100uF,20%,16V,WT,TP,6.3x11,5	
C211	2202-000796	C-CERAMIC,MLC-AXIAL:1NF,10%,50V,Y5P,TP,3	
C212	2301-000224	C-FILM,PEF:22nF,5%,50V,TP,7.4x3.9x13mm,5	
C213	2301-000247	C-FILM,PEF:33nF,5%,50V,TP,8.1x4.5x13mm,5	
C214	2305-000665	C-FILM,MPEF:100nF,5%,63V,TP,7.5x4.0x5.0m	
C215	2401-002235	C-AL:10uF,20%,16V,GP,TP,5x11mm,5mm	
C216	2305-000665	C-FILM,MPEF:100nF,5%,63V,TP,7.5x4.0x5.0m	
C217	2401-001026	C-AL:3.3UF,20%,50V,GP,TP,5X11,5	
C218	2202-002037	C-CERAMIC,MLC-AXIAL:100nF,80-20%,50V,Y5V	
C219	2202-002037	C-CERAMIC,MLC-AXIAL:100nF,80-20%,50V,Y5V	
C220	2202-002037	C-CERAMIC,MLC-AXIAL:100nF,80-20%,50V,Y5V	
C221	2202-002037	C-CERAMIC,MLC-AXIAL:100nF,80-20%,50V,Y5V	
C222	2202-002037	C-CERAMIC,MLC-AXIAL:100nF,80-20%,50V,Y5V	
C223	2202-002037	C-CERAMIC,MLC-AXIAL:100nF,80-20%,50V,Y5V	
C224	2201-002031	C-CERAMIC,DISC:0.005nF,0.5pF,50V,NP0,TP,	
C225	2201-002031	C-CERAMIC,DISC:0.005nF,0.5pF,50V,NP0,TP,	
C228	2301-000356	C-FILM,PEF:47nF,5%,50V,TP,7.5x4.0x6.5,5m	
C229	2401-002619	C-AL:47uF,20%,25V,GP,TP,5x11,5	
C230	2301-000356	C-FILM,PEF:47nF,5%,50V,TP,7.5x4.0x6.5,5m	
C231	2401-002235	C-AL:10uF,20%,16V,GP,TP,5x11mm,5mm	
C232	2202-002037	C-CERAMIC,MLC-AXIAL:100nF,80-20%,50V,Y5V	
C233	2305-000412	C-FILM,MPEF:470nF,5%,63V,TP,-,5mm	
C234	2305-000412	C-FILM,MPEF:470nF,5%,63V,TP,-,5mm	

Loc. No.	Code No.	Description ; Specification	Remark	Loc. No.	Code No.	Description ; Specification	Remark
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ASSY-SKD

* AA97-00722AASSY-SKD;- ,TXK3276C/XAA,KS3A,NTSC;-,-

CLAMP AA27-00018A COIL-DEGAUSSING;- ,34,10ohm,60T,L3600,E
 CLAMP AA65-30018A CLAMP-WIRE;NYLON-66;-,-,DATL-600,DONG-A,
 CLAMP AA65-30104C CLAMP-WIRE;NYLON 66,V2,NTR,W1 Z4,ALL MOD
 AA65-30109A CLAMP-FBT;NYLON-66,V2,BLK;-,-,-
 AA39-20015B LEAD CONNECTOR-ASSY;- ,67096-003;- ,3(2)P,
 AA65-30009A CLAMP-FBT;ABS,V0,BLK;-,-,-

ASSY SPEAKER

* AA96-00459AASSY SPEAKER;- ,8ohm,15W;- ,AA39-00102M,-

3001-001115 SPEAKER;15W,8ohm,93dB,110
 AA39-00102MLEAD CONNECTOR-ASSY;- ,-,-,-,-,-,-,-,35

ASSY-POWER,CORD

* AA96-20129BASSY-POWER,CORD;- ,EP2/YES,H/C400,ME301P,

AA61-20284A HOLDER;- ,P-CORD,PP,V0,BLK,KE-002
 AA39-10007Y POWER-CORD;- ,EP2/YES,SPT-2 18AWGx2C,2.4m

REMOCON

* AA59-00141AREMOCON;- ,TM58,SSM174PT,41,SS,L/GRAY,M

2802-000194 RESONATOR-CERAMIC;8MHz,1.0%,TP;8.5x4.5x5
 AA09-00052A IC-MCU;Z86L8808SSC-R5019,- ,STICK,- ,28

7-5 TXK3676C/XAC (TXK3676C/XAC and TXK3676C/XAA Dissimilar Parts)

Loc. No.	Code No.	Description ; Specification	Remark	Loc. No.	Code No.	Description ; Specification	Remark
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ASSY PCB MAIN(OPT)

* AA94-02674GASSY PCB MAIN(OPT);TXK3676C/XAC,KS3A,CANADA,-

ASSY PACKING

* AA92-00445BASSY PACKING;TXK3276C/XAC

2011-001061 RC-NETWORK:1-2Mohm,-.270pF,2,1/2W,2P
AA26-90001E TRANS-MATCHING:-,300ohm/75ohm,NTSC,40-890MHZ

7-6 TXK3676C/XAA

Loc. No.	Code No.	Description ; Specification	Remark	Loc. No.	Code No.	Description ; Specification	Remark
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ASSY PCB MAIN(OPT)

* AA94-02674CASSY PCB MAIN(OPT);TXK3676C/XAA,KS3A,USA

C407	2301-001338	C-FILM,MPE-PPF:0.68nF,5%,1.6kV,TP,28x7x1	
C803	2401-001652	C-AL:680uF,20%,250V,GP,BK,25x50mm,1	
C820	2401-003076	C-AL:3300uF,20%,50V,WP,BK,18x35.5mm	
△ IC201S	1204-001632	IC-VIDEO PROCESS:VDP3108B-C3,DIP,64P,-,P	
△ IC901	AA09-000414	IC-MCU:SDA555X-OTP,SDA555X-OTP,-,-,52	
△ IC903	1203-001944	IC-POSI.FIXED REG.:78RM33,TO-220,3P,-,PL	
JA701	3722-001333	JACK-RCA:9P,3.2mm,NI,BLK,-	
JA702	3722-001458	JACK-DIN:5P,-,NI,BLK,-	
L403	AA27-00052A	COIL-LINEARLITY:-,29uH,14x15x6,0.1x30,17	
L405	AA27-00057A	COIL HORIZ. WIDTH:-,10mH,YL-9N 15x27.5 C	
L408	AA27-00038A	COIL-HORIZ.WIDTH:-,700UH,15X27,-,BK	
L808	AA27-10002L	COIL-CHOKE:-,24UH,K,-,2A,-,24UH-K,10X10M	
△ T444S	AA26-00059A	TRANS-FBT:-,FUH-34A001B(S),34/37,130V	
△ T801S	AA26-00044C	TRANS SWITCHING:CODE:NO,CT-21A8,-,AC90-2	
TUBE	AA39-00108A	LEAD CONNECTOR-ASSY:-,-----,GR	
WIRE	AA39-00046E	LEAD CONNECTOR-ASSY:-,-----,JU	
	2201-000374	C-CERAMIC,DISC:0.22nF,5%,50V,NPO,TP,10.5	
	AA39-20010B	LEAD CONNECTOR-ASSY:-,YFH800-01,S,1P,500	
	AA64-01230B	INLAY-COVER:D2,D3,PVC-SHEET,TO.4,94V0,-,	

ASSY-PCB,VIDEO S/W

* AA95-00683AASSY-PCB,VIDEO S/W,-,29A6,KS3A,PAL,-,-

△ ICS01	1001-001114	IC-VIDEO SWITCH:TEA6425,VIDEO SWITCH ,DI	
CNS01	3711-002704	CONNECTOR-HEADER:NO WALL,6P,1R,2.5mm,ANGL	
CNS02	3711-002706	CONNECTOR-HEADER:NO WALL,8P,1R,2.5mm,ANGL	
QS01	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T	

QS02	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T	
QS03	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T	
RS01	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
RS03	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
RS05	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
RS07	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
RS10	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
RS11	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
RS02	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M	
RS04	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M	
RS06	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M	
CS01	2305-000412	C-FILM,MPEF:470nF,5%,63V,TP,-,5mm	
CS02	2305-000412	C-FILM,MPEF:470nF,5%,63V,TP,-,5mm	
CS03	2305-000412	C-FILM,MPEF:470nF,5%,63V,TP,-,5mm	
CS04	2305-000412	C-FILM,MPEF:470nF,5%,63V,TP,-,5mm	
CS05	2305-000412	C-FILM,MPEF:470nF,5%,63V,TP,-,5mm	
CS06	2305-000412	C-FILM,MPEF:470nF,5%,63V,TP,-,5mm	
CS08	2305-000665	C-FILM,MPEF:100nF,5%,63V,TP,7.5x4.0x5.0m	
CS07	2401-002009	C-AL:100uF,20%,16V,GP,TP,6.3x7,5	
LS01	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm	
PCB	AA41-00153D	PCB-VIDEO SWITCH:CS29A6,FR-1,1L,D,1.6T,2	
△ IC804	1203-000284	IC-POSI.FIXED REG.:7806,TO-220,3P,-,PLAS	H/SINK
△ HC401	0402-001296	DIODE-RECTIFIER:FMP-3FU,1.5KV,5A,TO-3PF,	H/SINK
△ HC401	0502-001136	TR-POWER:KSD5703,NPN,70W,TO-3PF,ST,8-	H/SINK
△ D801S	0402-000549	DIODE-BRIDGE:RBV606,600V,6A,-,BK	H/SINK
△ HC801	0402-000233	DIODE-RECTIFIER:FML-G12S,200V,5A,-,-	H/SINK
△ HC801	0402-001230	DIODE-RECTIFIER:FMG-G2CS,1000V,3A,TO-220	H/SINK
△ HC801	1203-001006	IC-VOLTAGE REGULATOR:78R05,TO-220F,4P,-,	H/SINK
△ IC602	1201-001064	IC-POWER AMP:7297,ZIP,15P,-,DUAL,32DB,PL	H/SINK
△ IC801S	1203-001482	IC-PWM CONTROLLER:3S1265R,TO-3P,5P,210,P	H/SINK
△ IC301	1204-000517	IC-VERTICAL DEF.:LA7845,SIP,7P,-,PLASTIC H/SINK	H/SINK
△ PC801S	0604-001038	PHOTO-COUPLER:TR,130-260%,200mW,DIP-4,ST	H/SINK
△ IC902	1103-001171	IC-EEPROM:24L161,16KBIT,DIP,8P,300MIL,10	H/SINK
△ IC401	1202-000103	IC-VOLTAGE COMP.:393,DIP,8P,300MIL,DUAL,	H/SINK
△ IC803	1203-001697	IC-VOLTAGE REGULATOR:78R08,TO-220,4P,-,P	H/SINK

Electrical Parts List

Loc. No.	Code No.	Description ; Specification	Remark	Loc. No.	Code No.	Description ; Specification	Remark
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ASSY-POWER,CORD

* AA96-20129BASSY-POWER,CORD;- ,EP2/YES,H/C400,ME301P,
 AA61-20284AHOLDER;- ,P-CORD,PPVO,BLK,KE-002
 AA39-10007Y POWER-CORD;- ,EP2/YES,SPT-2 18AWGx2C,2.4m

ASSY CRT

* AA97-00550AASSY CRT:A90AHH50X08(V),+380MG,- ,ITC,TX
 AA03-00126ACRT COLOR;- ,A90AHH50X08(V),+380mG,- ,110,

ASSY-SKD

* AA97-00722CASSY-SKD;- ,TXK3676C/XAA,KS3A,NTSC,-,-
 AA39-20015B LEAD CONNECTOR-ASSY;- ,67096-003,- ,3(2)P,
 AA27-20003P COIL-DEGAUSSING;- ,37,11.7ohm,90T,L4250,E

REMOCON

* AA59-00141AREMOCON;- ,TM58,SSM174PT,41,SS,L/GRAY,M
 2802-000194 RESONATOR-CERAMIC:8MHz,1.0%,TP,8.5x4.5x5
 AA09-00052AIC-MCU:Z86L8808SSC-R5019,- ,STICK,- ,28

7-7 TXK3679C/XAC (TXK3679C/XAC and TXK3679C/XAA Dissimilar Parts)

Loc. No.	Code No.	Description ; Specification	Remark	Loc. No.	Code No.	Description ; Specification	Remark
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ASSY PCB MAIN(OPT)

* AA94-02674HASSY PCB MAIN(OPT);TXK3679C/XAC,KS3A,CANADA,-

ASSY PACKING

* AA92-00445DASSY PACKING;TXK3679C

AA26-90001E TRANS-MATCHING;- ,300ohm/75ohm,NTSC,40-890MHz
2011-001061 RC-NETWORK;1-2Mohm,- ,270pF,2,1/2W,2P

7-8 TXK3679C/XAA

Loc. No.	Code No.	Description ; Specification	Remark	Loc. No.	Code No.	Description ; Specification	Remark
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ASSY PCB MAIN(OPT)

* AA94-02674DASSY PCB MAIN(OPT);TXK3679C/XAA,KS3A,USA

C101	2301-000383	C-FILM,PEF;10nF,5%,50V,TP,6x7x3.2mm,5mm	
C102	2401-001513	C-AL:47uF,20%,16V,WT,TP,5x11,5	
C103	2301-000383	C-FILM,PEF;10nF,5%,50V,TP,6x7x3.2mm,5mm	
C104	2401-001363	C-AL:470uF,20%,16V,GP,TP,10x12.5,5	
C105	2301-000383	C-FILM,PEF;10nF,5%,50V,TP,6x7x3.2mm,5mm	
C106	2401-000611	C-AL:1uF,20%,50V,WT,TP,5x11,5	
C107	2301-000383	C-FILM,PEF;10nF,5%,50V,TP,6x7x3.2mm,5mm	
C108	2401-001363	C-AL:470uF,20%,16V,GP,TP,10x12.5,5	
C111	2401-000603	C-AL:1uF,20%,50V,GP,TP,5x11,5	
C112	2301-000383	C-FILM,PEF;10nF,5%,50V,TP,6x7x3.2mm,5mm	
C113	2202-000127	C-CERAMIC,MLC-AXIAL:10nF,+80-20%,25V,Y5V	
C115	2202-000121	C-CERAMIC,MLC-AXIAL:100pF,10%,50V,Y5P,TP	
C116	2202-000121	C-CERAMIC,MLC-AXIAL:100pF,10%,50V,Y5P,TP	
C201	2401-000603	C-AL:1uF,20%,50V,GP,TP,5x11,5	
C202	2401-002235	C-AL:10uF,20%,16V,GP,TP,5x11mm,5mm	
C203	2305-000665	C-FILM,MPEF:100nF,5%,63V,TP,7.5x4.0x5.0m	
C204	2305-000665	C-FILM,MPEF:100nF,5%,63V,TP,7.5x4.0x5.0m	
C205	2401-002235	C-AL:10uF,20%,16V,GP,TP,5x11mm,5mm	
C206	2305-000665	C-FILM,MPEF:100nF,5%,63V,TP,7.5x4.0x5.0m	
C207	2401-002235	C-AL:10uF,20%,16V,GP,TP,5x11mm,5mm	
C208	2401-001026	C-AL:3.3UF,20%,50V,GP,TP,5X11,5	
C210	2401-000287	C-AL:100uF,20%,16V,WT,TP,6.3x11,5	
C211	2202-000796	C-CERAMIC,MLC-AXIAL:1NF,10%,50V,Y5P,TP,3	
C212	2301-000224	C-FILM,PEF:22nF,5%,50V,TP,7.4x3.9x13mm,5	
C213	2301-000310	C-FILM,PEF:68nF,5%,50V,TP,8.0X8.5X4.0X5.	
C214	2305-000665	C-FILM,MPEF:100nF,5%,63V,TP,7.5x4.0x5.0m	
C215	2401-002235	C-AL:10uF,20%,16V,GP,TP,5x11mm,5mm	
C216	2305-000665	C-FILM,MPEF:100nF,5%,63V,TP,7.5x4.0x5.0m	
C217	2401-001026	C-AL:3.3UF,20%,50V,GP,TP,5X11,5	
C218	2202-002037	C-CERAMIC,MLC-AXIAL:100nF,80-20%,50V,Y5V	

C219	2202-002037	C-CERAMIC,MLC-AXIAL:100nF,80-20%,50V,Y5V	
C220	2202-002037	C-CERAMIC,MLC-AXIAL:100nF,80-20%,50V,Y5V	
C221	2202-002037	C-CERAMIC,MLC-AXIAL:100nF,80-20%,50V,Y5V	
C222	2202-002037	C-CERAMIC,MLC-AXIAL:100nF,80-20%,50V,Y5V	
C223	2202-002037	C-CERAMIC,MLC-AXIAL:100nF,80-20%,50V,Y5V	
C224	2201-002031	C-CERAMIC,DISC:0.005nF,0.5pF,50V,NP0,TP,	
C225	2201-002031	C-CERAMIC,DISC:0.005nF,0.5pF,50V,NP0,TP,	
C228	2301-000356	C-FILM,PEF:47nF,5%,50V,TP,7.5x4.0x6.5,5m	
C229	2401-002619	C-AL:47uF,20%,25V,GP,TP,5x11,5	
C230	2301-000356	C-FILM,PEF:47nF,5%,50V,TP,7.5x4.0x6.5,5m	
C231	2401-002235	C-AL:10uF,20%,16V,GP,TP,5x11mm,5mm	
C232	2202-002037	C-CERAMIC,MLC-AXIAL:100nF,80-20%,50V,Y5V	
C233	2305-000412	C-FILM,MPEF:470nF,5%,63V,TP,-,5mm	
C234	2305-000412	C-FILM,MPEF:470nF,5%,63V,TP,-,5mm	
C235	2305-000412	C-FILM,MPEF:470nF,5%,63V,TP,-,5mm	
C236	2305-000412	C-FILM,MPEF:470nF,5%,63V,TP,-,5mm	
C237	2401-000914	C-AL:22uF,20%,16V,GP,TP,5x11,5	
C238	2202-002037	C-CERAMIC,MLC-AXIAL:100nF,80-20%,50V,Y5V	
C239	2401-000444	C-AL:10uF,20%,25V,GP,TP,5x5mm,5mm	
C240	2305-000665	C-FILM,MPEF:100nF,5%,63V,TP,7.5x4.0x5.0m	
C241	2202-002037	C-CERAMIC,MLC-AXIAL:100nF,80-20%,50V,Y5V	
C244	2202-000121	C-CERAMIC,MLC-AXIAL:100pF,10%,50V,Y5P,TP	
C245	2202-000121	C-CERAMIC,MLC-AXIAL:100pF,10%,50V,Y5P,TP	
C248	2202-000121	C-CERAMIC,MLC-AXIAL:100pF,10%,50V,Y5P,TP	
C250	2202-000121	C-CERAMIC,MLC-AXIAL:100pF,10%,50V,Y5P,TP	
C251	2202-000121	C-CERAMIC,MLC-AXIAL:100pF,10%,50V,Y5P,TP	
C252	2202-002037	C-CERAMIC,MLC-AXIAL:100nF,80-20%,50V,Y5V	
C253	2202-000121	C-CERAMIC,MLC-AXIAL:100pF,10%,50V,Y5P,TP	
C254	2202-002037	C-CERAMIC,MLC-AXIAL:100nF,80-20%,50V,Y5V	
C301	2401-000603	C-AL:1uF,20%,50V,GP,TP,5x11,5	
C302	2401-000360	C-AL:100uF,20%,50V,GP,TP,8x11.5,5	
C303	2201-002103	C-CERAMIC,DISC:0.015nF,5%,500V,NP0,TP,6.	
C304	2305-000285	C-FILM,MPEF:220nF,5%,100V,TP,10.5X5.5X15	
C305	2305-000149	C-FILM,MPEF:100nF,5%,100V,TP,12x12.5x6.5	
C306	2301-000342	C-FILM,PEF:2.2nF,5%,50V,TP,7.4x3.9x13mm,	

Loc. No.	Code No.	Description ; Specification	Remark
R506	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R507	2001-001093	R-CARBON(S):2.2KOHM,5%,1/2W,AA,TP,2.4X6.	
R508	2001-000085	R-CARBON(S):100KOHM,5%,1/2W,AA,TP,2.4X6.	
R509	2001-000515	R-CARBON:220OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R510	2002-001008	R-COMPOSITION:1.8Kohm,10%,1/2W,AA,TP,3.7	
R511	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R512	2001-001093	R-CARBON(S):2.2KOHM,5%,1/2W,AA,TP,2.4X6.	
R513	2001-000085	R-CARBON(S):100KOHM,5%,1/2W,AA,TP,2.4X6.	
R515	2002-001008	R-COMPOSITION:1.8Kohm,10%,1/2W,AA,TP,3.7	
R517	2001-001062	R-CARBON(S):10MOHM,5%,1/2W,AA,TP,2.4X6.4	
R518	2003-001023	R-METAL OXIDE(S):120ohm,5%,2W,AF,TP,3.9x	
R519	2002-001009	R-COMPOSITION:2.7Kohm,10%,1/2W,AA,TP,3.7	
R521	2001-000660	R-CARBON:33KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R522	2001-000449	R-CARBON:2.2KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R523	2008-000190	R-FUSIBLE(S):1.2ohm,5%,2W,AA,TP,3.9x10mm	
R526	2008-001057	R-FUSIBLE:750ohm,5%,1/2W,AF,TP,2.5x6.5mm	
R527	0403-001316	DIODE-ZENER:MTZJ3.0A,2.85-3.07V,500mW,DO	
R538	2002-001048	R-COMPOSITION:24Mohm,5%,1/2W,AA,TP,3.9x9	
R539	2001-000515	R-CARBON:220OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R542	2001-000832	R-CARBON:510OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R543	2001-000832	R-CARBON:510OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R544	2001-000832	R-CARBON:510OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R546	2001-000832	R-CARBON:510OHM,5%,1/8W,AA,TP,1.8X3.2MM	
RF02	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M	
RF03	2001-000362	R-CARBON:150OHM,5%,1/8W,AA,TP,1.8X3.2MM	
RF04	2001-000449	R-CARBON:2.2KOHM,5%,1/8W,AA,TP,1.8X3.2M	
RF05	2001-000522	R-CARBON:22KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
RF06	2001-000989	R-CARBON:820KOHM,5%,1/8W,AA,TP,1.8X3.2M	
RF07	2001-000904	R-CARBON:620OHM,5%,1/8W,AA,TP,1.8X3.2MM	
RF08	2001-000313	R-CARBON:11KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
RF09	2001-000221	R-CARBON:1.2KOHM,5%,1/8W,AA,TP,1.8X3.2M	
RF10	2001-000241	R-CARBON:1.5KOHM,5%,1/8W,AA,TP,1.8X3.2M	
RF11	2001-000241	R-CARBON:1.5KOHM,5%,1/8W,AA,TP,1.8X3.2M	
RF12	2001-000221	R-CARBON:1.2KOHM,5%,1/8W,AA,TP,1.8X3.2M	
RF13	2001-001179	R-CARBON(S):68KOHM,5%,1/2W,AA,TP,2.4X6.4	
RF14	2001-001071	R-CARBON(S):12KOHM,5%,1/2W,AA,TP,2.4X6.4	
RF15	2001-001100	R-CARBON(S):2.7OHM,5%,1/2W,AA,TP,2.4X6.4	
RF16	2001-001179	R-CARBON(S):68KOHM,5%,1/2W,AA,TP,2.4X6.4	
RF17	2001-001100	R-CARBON(S):2.7OHM,5%,1/2W,AA,TP,2.4X6.4	
RF18	2003-000458	R-METAL OXIDE(S):100ohm,5%,2W,AF,TP,4x12	
RF19	2003-001023	R-METAL OXIDE(S):120ohm,5%,2W,AF,TP,3.9x	
RF20	2003-002214	R-METAL OXIDE(S):680ohm,5%,2W,AG,TP,3.9x	
RF21	2003-002214	R-METAL OXIDE(S):680ohm,5%,2W,AG,TP,3.9x	
RF22	2003-002214	R-METAL OXIDE(S):680ohm,5%,2W,AG,TP,3.9x	
RF23	2003-000746	R-METAL OXIDE(S):56ohm,5%,2W,AF,TP,4x12m	
RF24	2003-000746	R-METAL OXIDE(S):56ohm,5%,2W,AF,TP,4x12m	
RF25	2003-002009	R-METAL OXIDE(S):390ohm,5%,2W,AF,TP,3.9x	
SG501	AA27-00084A	COIL:S-23,-,-,-,-,-,S-23,5000Mohm	
SG502	AA27-00084A	COIL:S-23,-,-,-,-,-,S-23,5000Mohm	
SG503	AA27-00084A	COIL:S-23,-,-,-,-,-,S-23,5000Mohm	
SG504	AA27-00084A	COIL:S-23,-,-,-,-,-,S-23,5000Mohm	
VA999	3704-000114	SOCKET-CRT:14P,29.1,35.5,SN,ISH09S/BK	

ASSY CABINET FRONT

* AA92-00389BASSY CABINET(COM):TXK3679C/XAA
 * AA92-00391BASSY CABINET FRONT:TXK3679C/XAA

CB+CF	6003-001025	SCREW-TAPTITE:RH,+,B,M4,L20,ZPC(BLK),SWR	
CB+RCA	6003-001025	SCREW-TAPTITE:RH,+,B,M4,L20,ZPC(BLK),SW	
CRT	AA63-60004W	SPACER-GUM,CRT:RUBBER,T4.0,BLK,T2,34D,-	
CRT+CF	AA60-10050V	SCREW-ASSY:WC,HH,+,M6,L30,SWRCH18A,ZPC(S	
D-COIL	AA65-30113A	CLAMP-D,COIL:NYLON 66,V2,BLK,TVI 25-29,-	
IND+CF	6003-001019	SCREW-TAPTITE:RH,+,B,M4,L12,ZPC(BLK),SWR	
KC+CF	6003-001019	SCREW-TAPTITE:RH,+,B,M4,L12,ZPC(BLK),SWR	
KNOPOV	AA61-60003J	SPRING-CS:-,SUS304,0.5,OD6,H12,N7,-,-,-	
PA+CF	6006-001095	SCREW-ASSY TAPT:WPHH,+,M4,L12,ZPC(YEL)	
SPK+CF	6003-001019	SCREW-TAPTITE:RH,+,B,M4,L12,ZPC(BLK),SWR	
	AA61-00098A	SUPPORT-CRT:TOOL,-,-,-,-,-,MOLD,37D3	
	AA64-00350A	CABINET-BACK:TOOL,37D3,MOLD,-,-,-,-,-	
	AA64-00892G	INLAY BACK:D2,D3,RCA9P+S-VHS+DVD,PS SHEE	
	AA65-30008A	CLAMP-CORD:PE,HB,BLK,-,-,-	
	AA61-40113A	STOPPER-PCB:50TH,HIPS,NTR,HB,-,-	
	AA64-00348A	CABINET-FRONT:TOOL,37D3,MOLD,-,-,-,-,-	
	AA64-00352A	KNOB-POWER:TOOL,37D3,MOLD,-,-,-	

Loc. No.	Code No.	Description ; Specification	Remark
	AA64-00353A	KNOB-CONTROL:TOOL,37D3,MOLD,-,-,-,-,-	
	AA64-00354A	WINDOW-REMOCON:MOLD,37D3,MOLD,-,-,-,-,-	
	AA64-00355A	INDICATOR-LED:DP,37D3,MOLD,-,-,-,-,-	
	AA64-70124C	BADGE-BRAND:AL,R2500,SILVER,L=70,SAMSUNG	
	AA65-00011C	CLAMP-WIRE:ALL MODEL,NYLON 66,V2,NTR,25M	

ASSY-PCB,A/V FRONT

* AA95-00647AASSY-PCB,A/V FRONT:DP,TKX3276C/XAA,KS3A,

CA02	2202-000121	C-CERAMIC,MLC-AXIAL:100pf,10%,50V,Y5P,TP	
CA03	2202-000121	C-CERAMIC,MLC-AXIAL:100pf,10%,50V,Y5P,TP	
CA04	2202-000720	C-CERAMIC,MLC-AXIAL:8.2nF,20%,16V,Y5R,TP	
CA05	2202-000720	C-CERAMIC,MLC-AXIAL:8.2nF,20%,16V,Y5R,TP	
CA06	2401-003102	C-AL:100uf,20%,10V,GP,TP,5x11.5	
CA07	2401-003102	C-AL:100uf,20%,10V,GP,TP,5x11.5	
CN01A	AA39-20068E	LEAD CONNECTOR-ASSY:-,YBNH025-08,67096-0	
CN05A	AA39-20069D	LEAD CONNECTOR-ASSY:-,YBNH025-05,67096-0	
CN06A	AA39-00070A	LEAD CONNECTOR-ASSY:-,-----,-,YB	
JE01	3722-000143	JACK-PHONE:1P(VER),3.4mm,AG,BLK,NO	
JR01	3722-001031	JACK-RCA:3P,3.6MM,#18,AU	
LA04	2701-000180	INDUCTOR-AXIAL:33uH,5%,2.5x3.4mm	
LA05	2701-000180	INDUCTOR-AXIAL:33uH,5%,2.5x3.4mm	
PCB	AA41-10358C	PCB-FRONT AV:CHASSIS-ALL,FR-1,1L,C,1.6T,	
RA01	2001-000028	R-CARBON(S):100OHM,5%,1/2W,AA,TP,2.4X6.4	
RA02	2001-000028	R-CARBON(S):100OHM,5%,1/2W,AA,TP,2.4X6.4	
	3301-001201	CORE-FERRITE:AE,230.5x10.25x36mm,1500,28	

ASSY SPEAKER

* AA96-00459AASSY SPEAKER:-,8ohm,15W,-,AA39-00102M,-

3001-001115 SPEAKER:15W,8ohm,93dB,110
 AA39-00102MLEAD CONNECTOR-ASSY:-,-----,-,35

ASSY-POWER,CORD

* AA96-20129BASSY-POWER,CORD:-,EP2/YES,H/C400,ME301P,

AA61-20284A HOLDER:-,P-CORD,PP,VO,BLK,KE-002
 AA39-10007Y POWER-CORD:-,EP2/YES,SPT-2 18AWGx2C,2.4mm

ASSY CRT

* AA97-00550AASSY CRT:A90AHH50X08(V),+380MG,-,ITC,TX
 AA03-00126A CRT COLOR:-,A90AHH50X08(V),+380mG,-,110,

ASSY-SKD

* AA97-00722DASSY-SKD:-,TKX3679C/XAA,KS3A,NTSC,-,-

AA27-20003P COIL-DEGAUSSING:-,37,11.7ohm,90T,L4250,E
 AA39-20015B LEAD CONNECTOR-ASSY:-,67096-003,-,3(2)P,

REMOCON

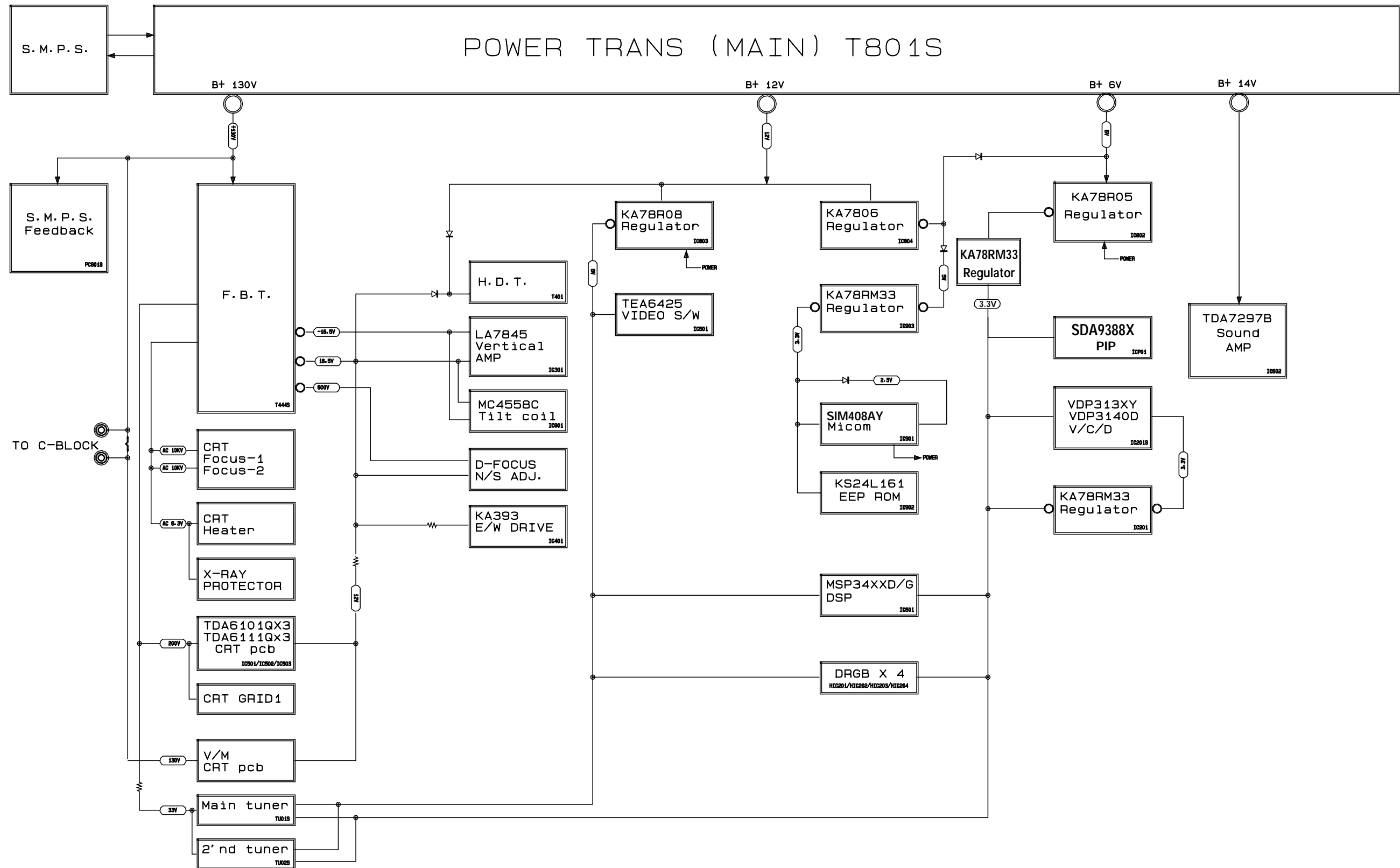
* AA59-00141AREMOCON:-,TM58,SSM174PT,41,SS,L/GRAY,M

2802-000194 RESONATOR-CERAMIC:8MHz,1.0%,TP,8.5x4.5x5
 AA09-00052A IC-MCU:Z86L8808SSC-R5019,-,STICK,-,28

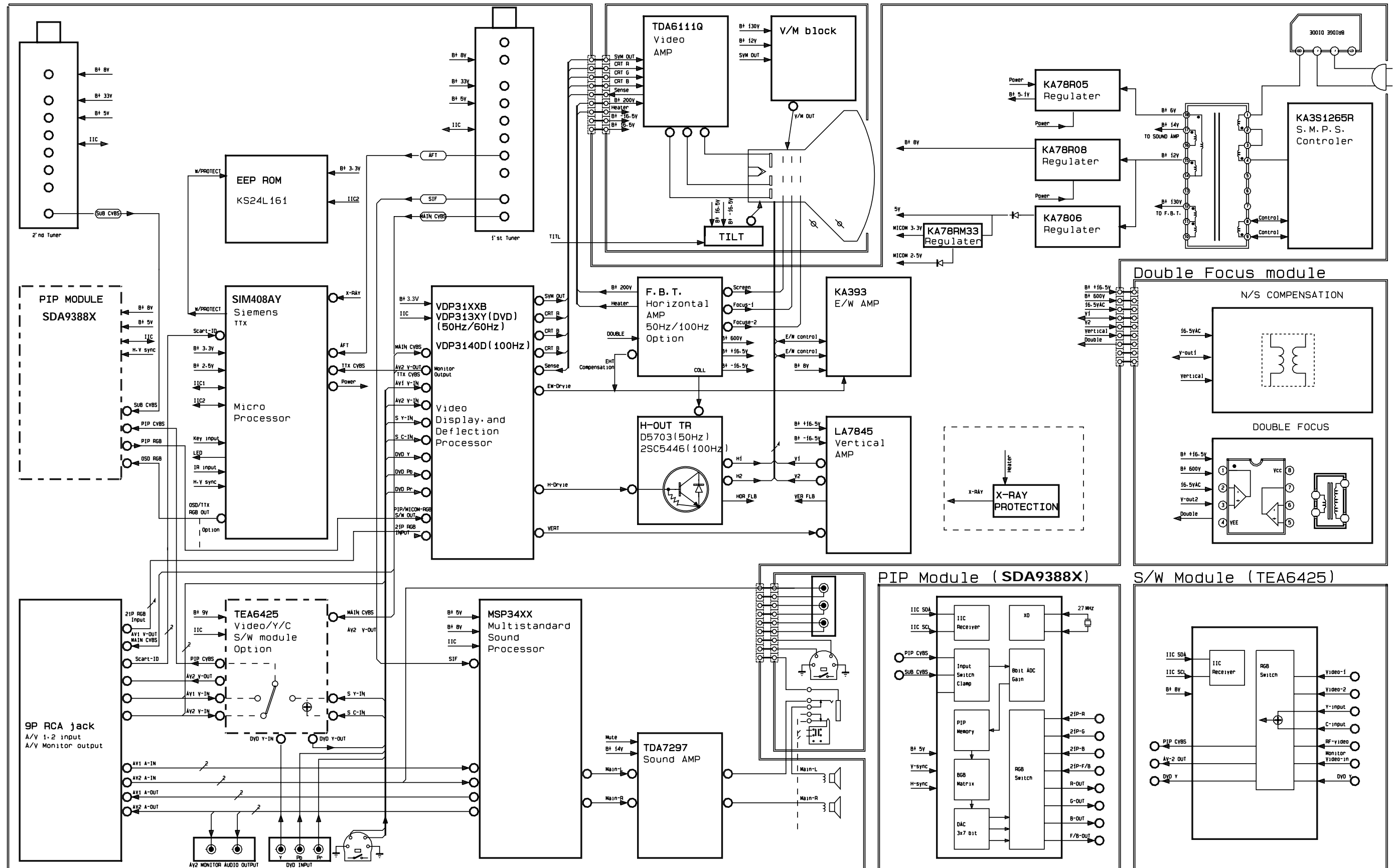
MEMO

8. Block Diagrams

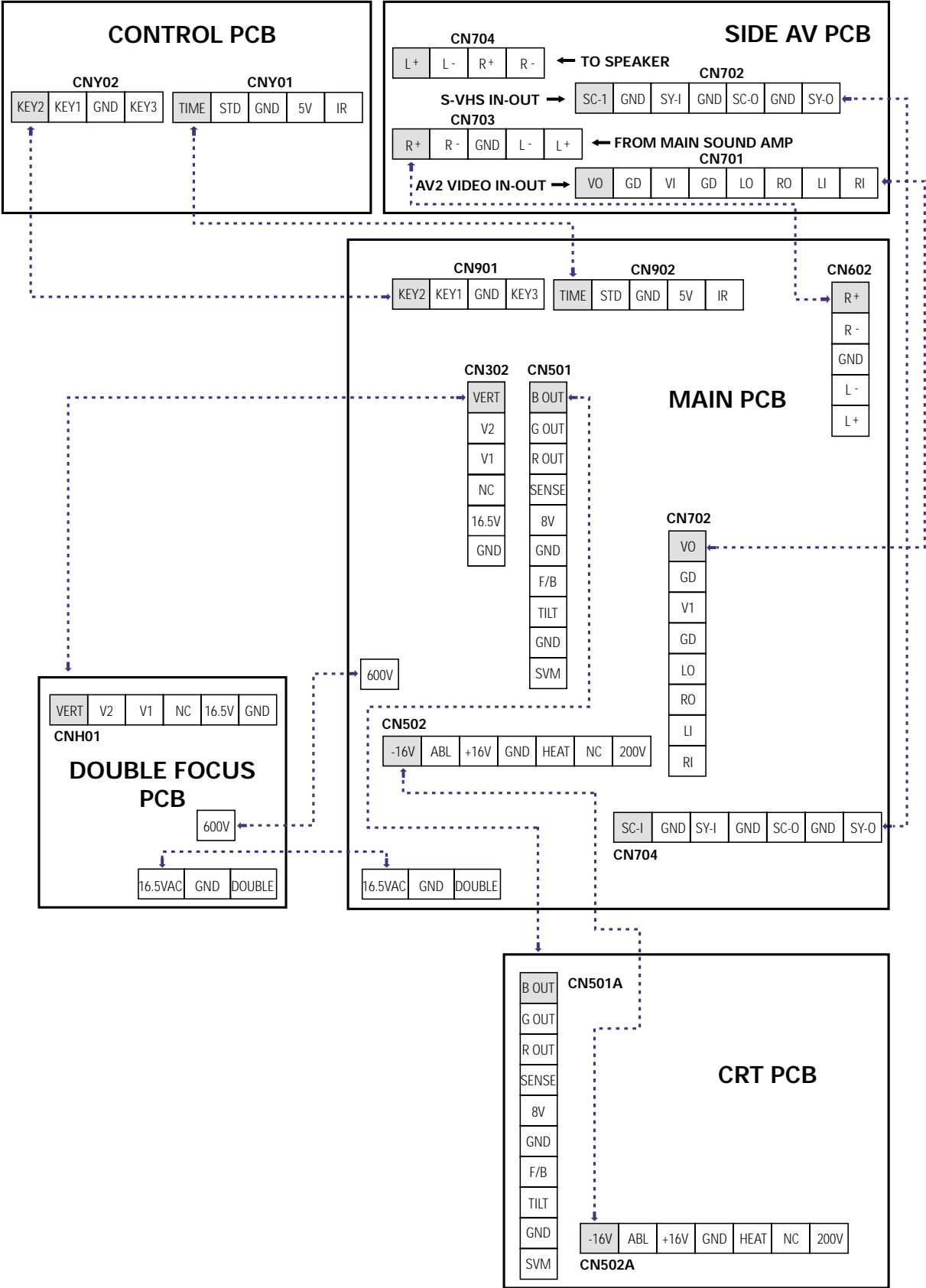
8-1 Power Diagram



8-2 Block Diagram



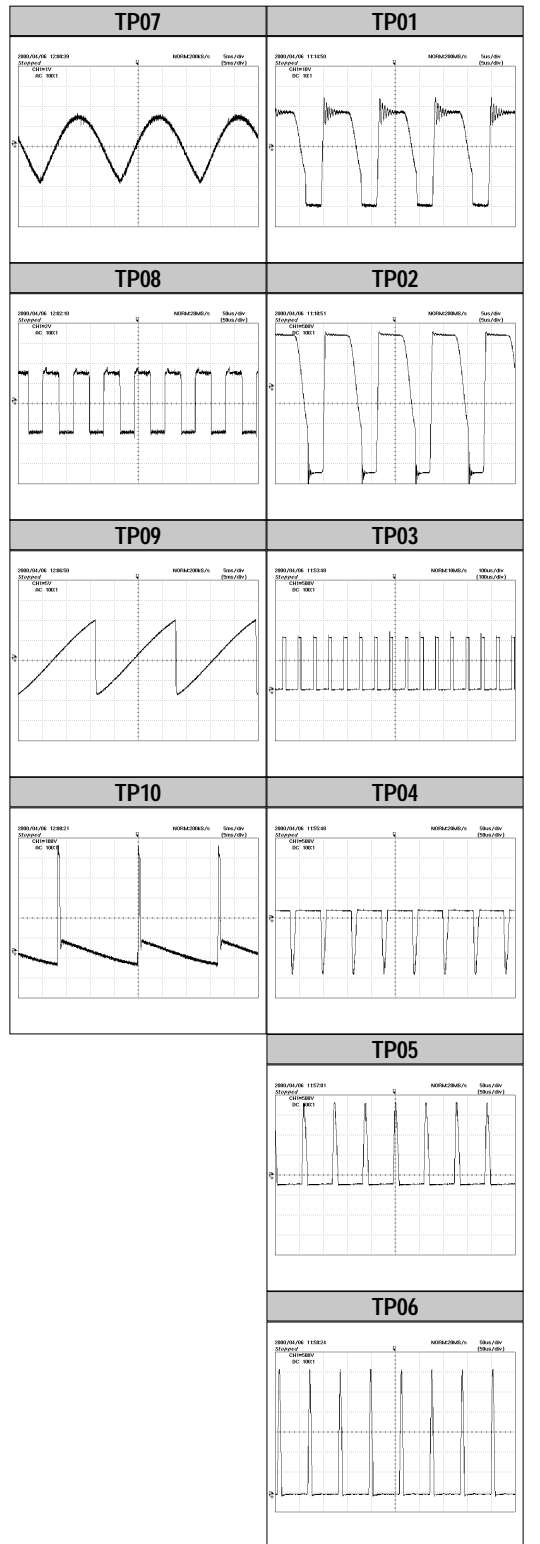
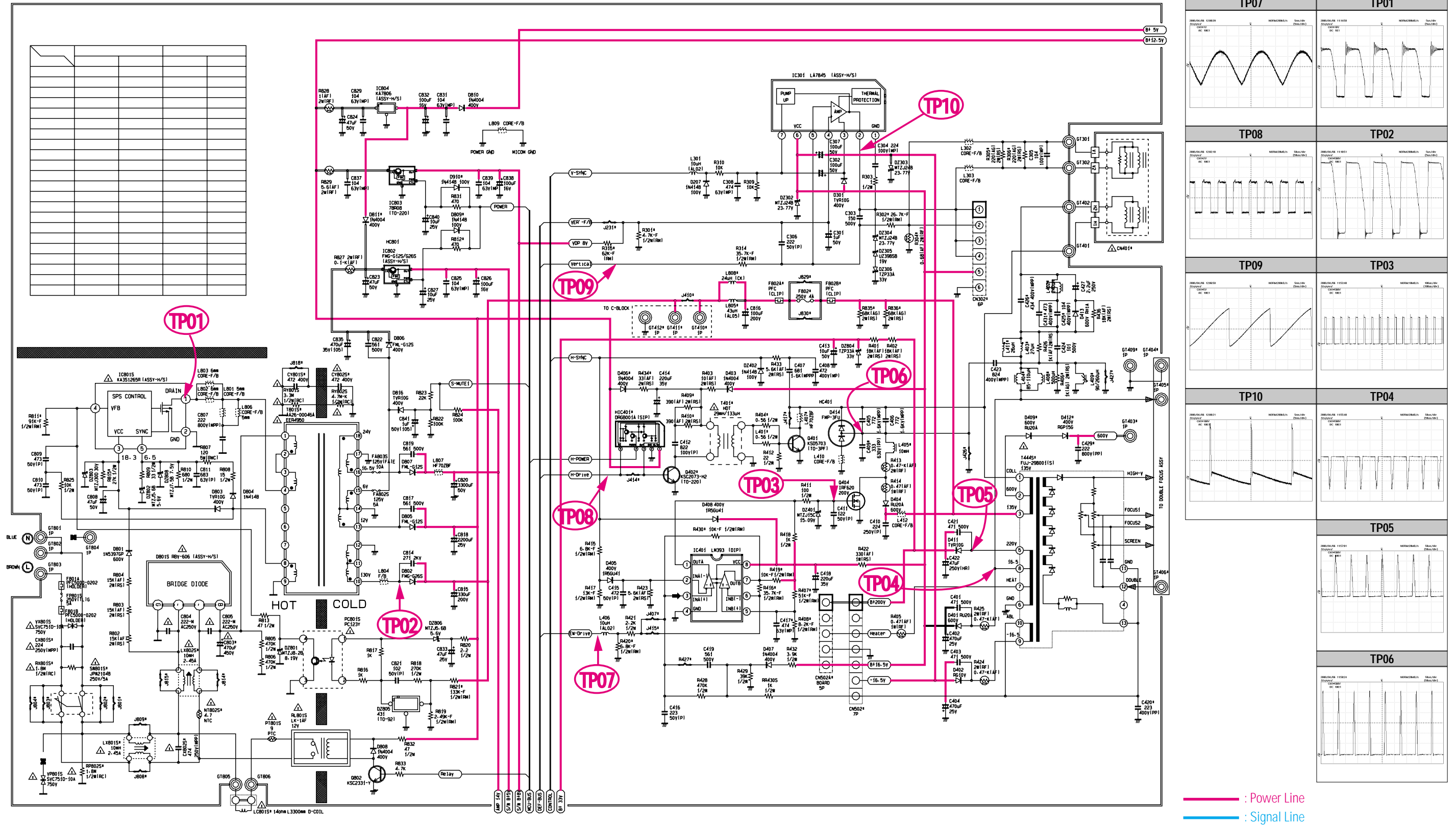
9. Wiring Diagram



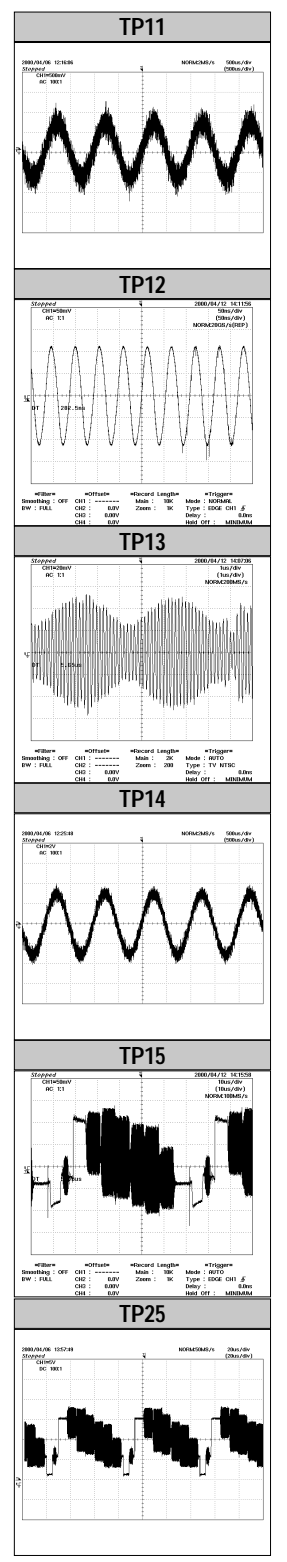
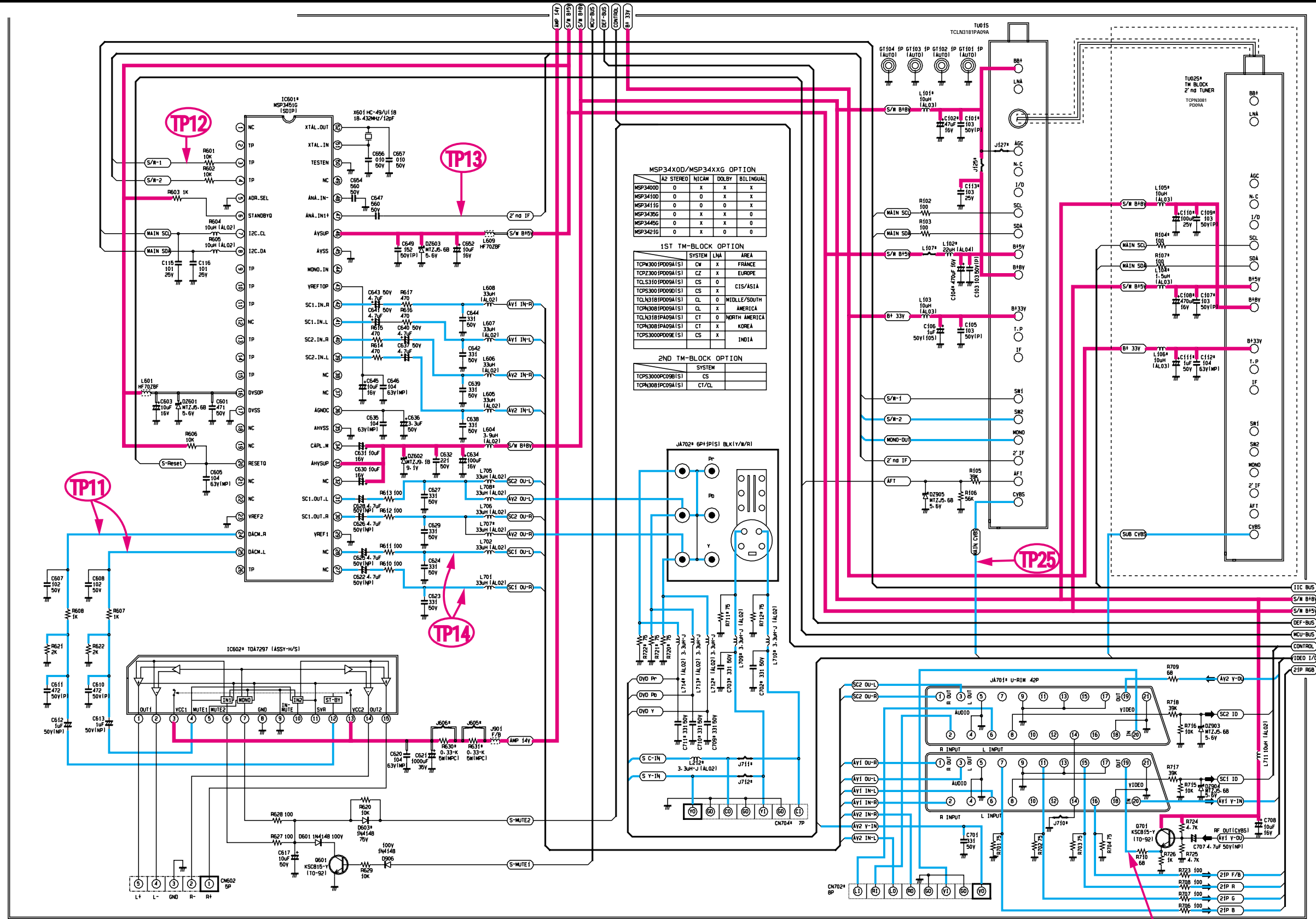
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10. Schematic Diagrams

10-1 MAIN 1

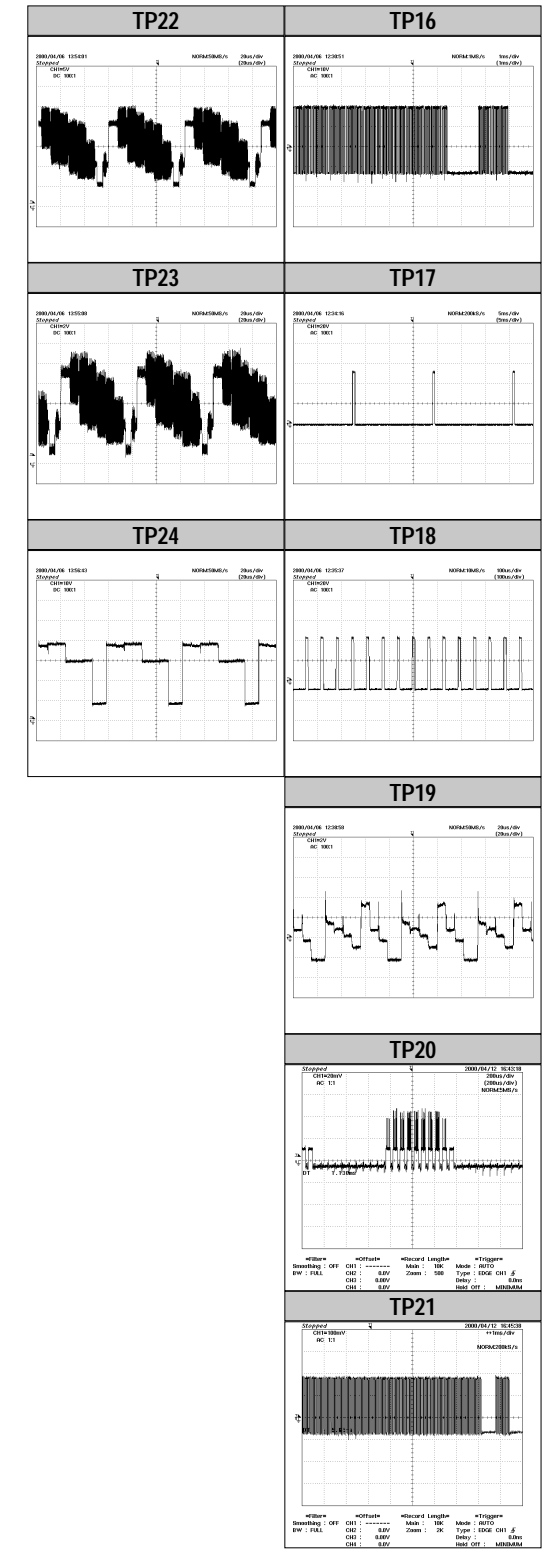
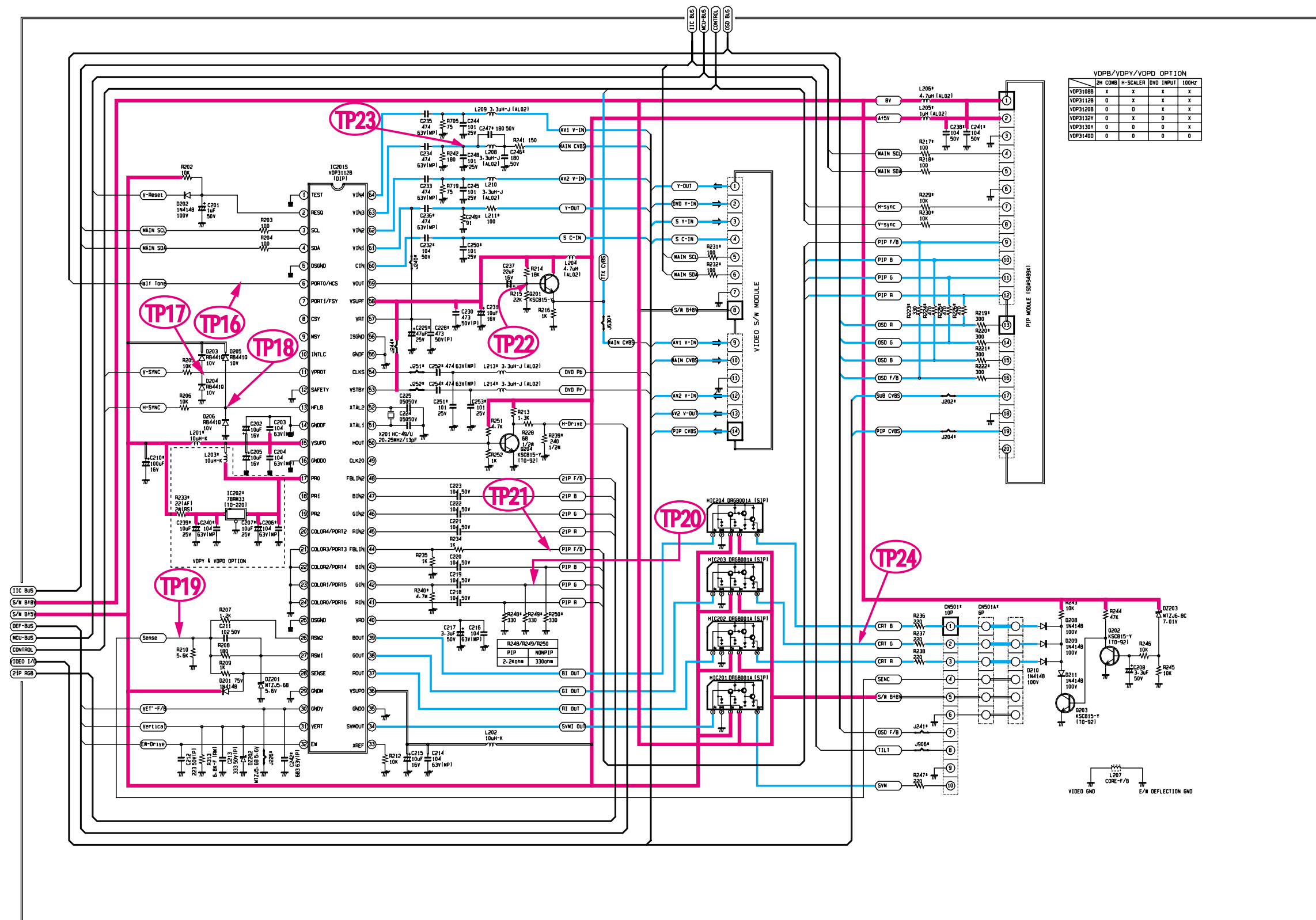


10-2 MAIN 2



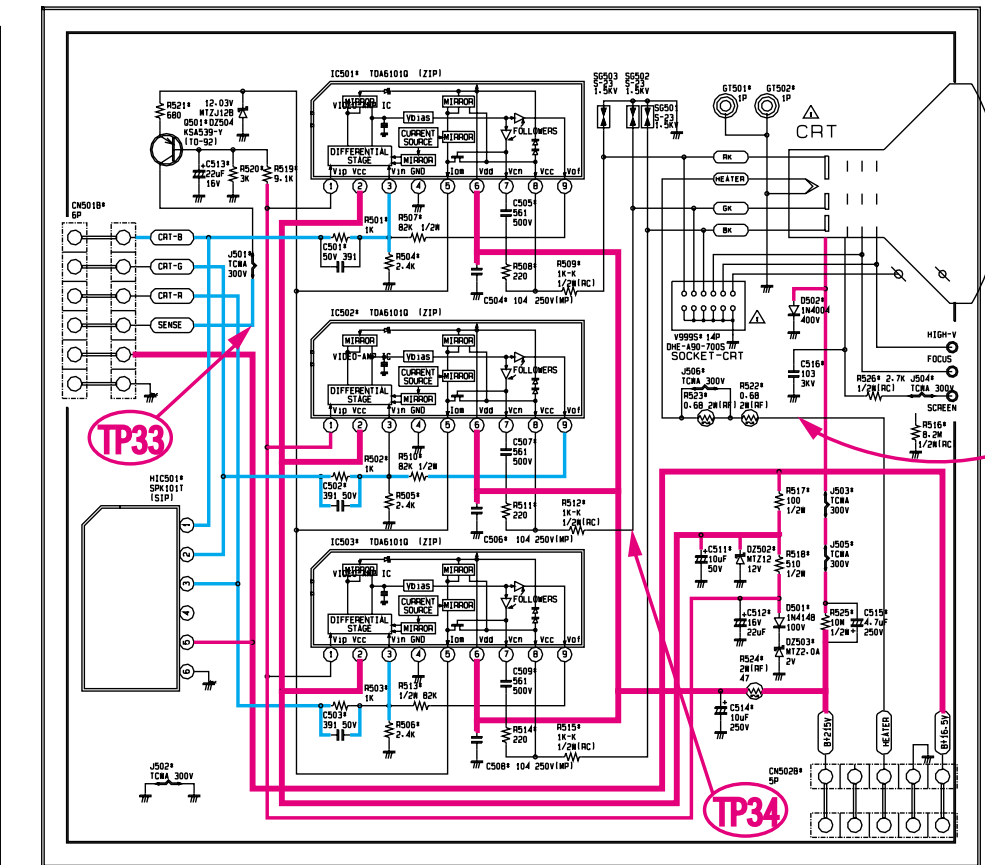
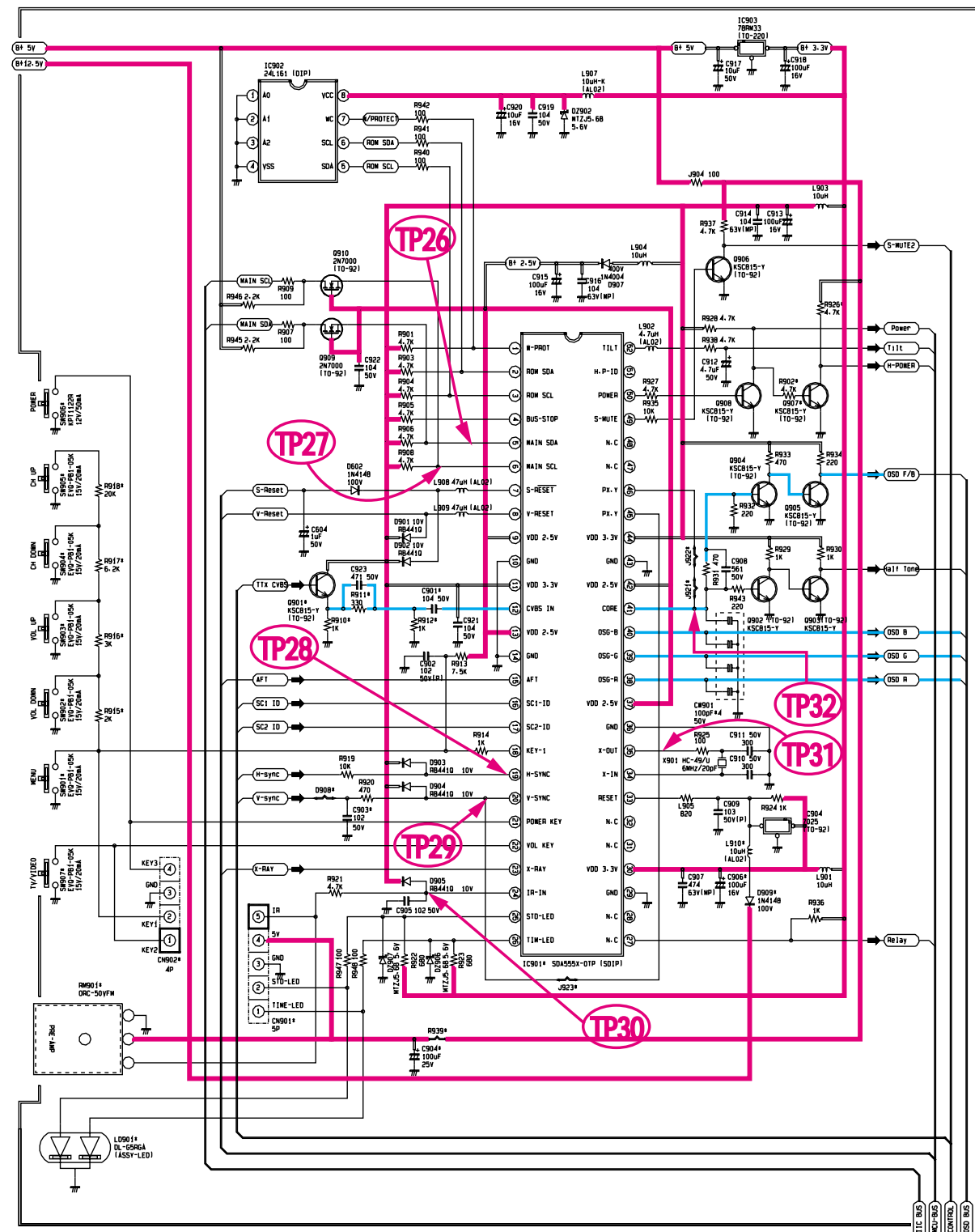
— : Power Line
— : Signal Line

10-3 MAIN3



— : Power Line
 — : Signal Line

10-4 MAIN 4



KS3A MAIN SCHEMATIC DIAGRAM

CAPACITOR	
Ceramic - SL	No Mark
Ceramic - RH	(RH)
Ceramic - CH	(CH)
Polyester/Inductl	(P)
Polyester/Noninductl	(PW)
Polypropylene	(PP)
Metal Polyester	(MP)
M. P. Polypropylene	(MPP)
Tantalum	(T)
Non Polar	(NP)

RESISTOR	
Carbon	No Mark
Composition	(C)
Metal Oxide	(MS)
Metal Film	(MF)
Fusible	(F)
Cement-Wire	(CW)
Network	(N)

NOTE

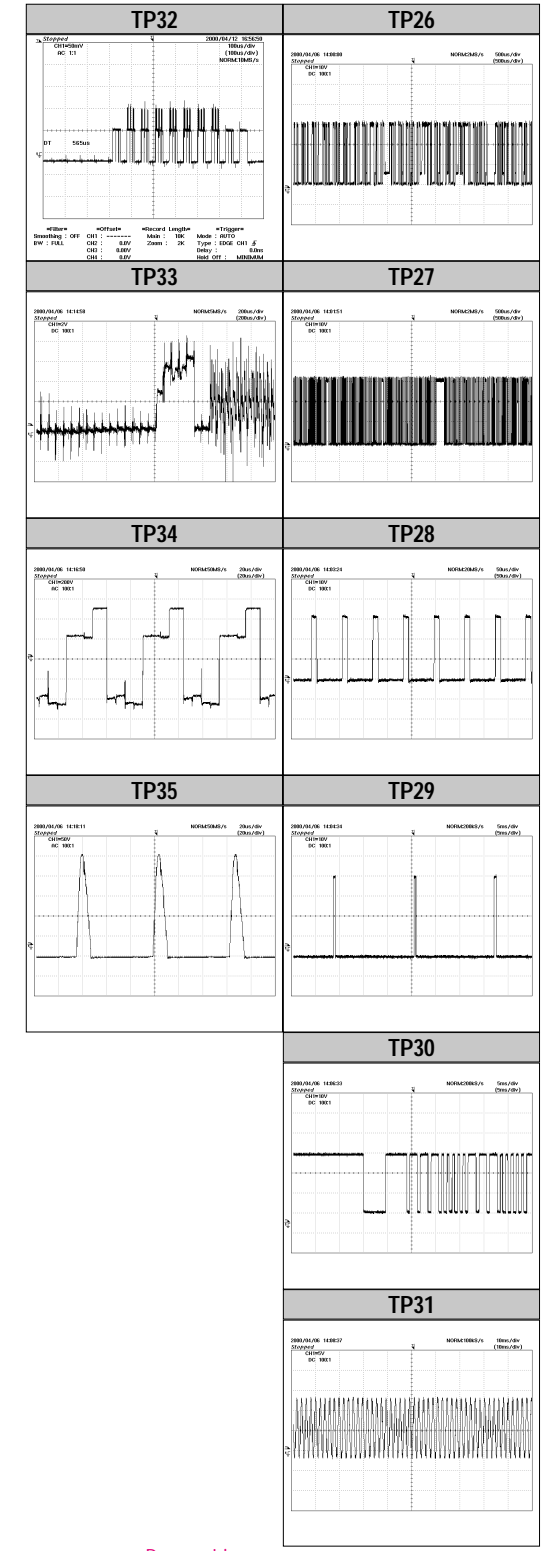
1. Resistance is shown in one K=1,000 M=1,000,000
2. Unless otherwise noted in schematic all capacitor values less than 1 are expressed in μ F, and the values more than 1 in μ F.
3. Unless otherwise noted in schematic all inductor values more than 1 are expressed in μ H.
4. Voltage reads with v.t.v.m (input impedance 20 M Ω or more) from point indicated to chassis ground using a color bar signal with all controls at normal line voltage 100 volts.
5. Waveforms in chrominance circuit are taken receiving a color bar signal with enough sensitivity.
6. Waveforms in other circuit are taken using a signal under normal receiving conditions.
7. Voltage readings shown are normal values and may vary 20% except H.V.
8. This is fundamental circuit diagram some production changes may be made without revision of the diagram.
9. The circuits enclosed in dotted lines are optional parts. (O)

WARNING BEFORE SERVICING THIS CHASSIS READ THE "X-RAY RADIATION PRECAUTION" "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" IN MANUAL.

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

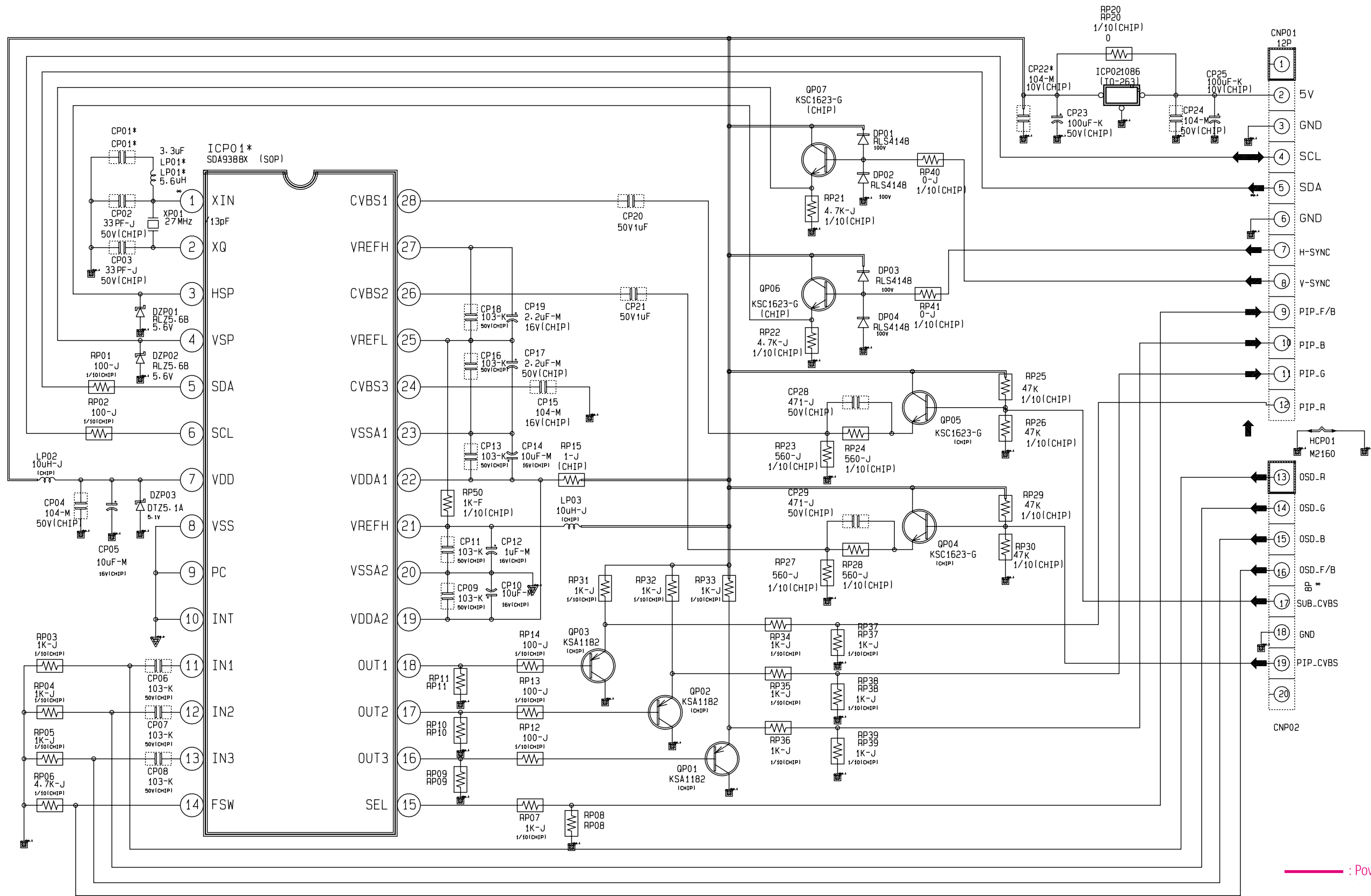
FILE NAME : MAIN

JOB-NO	TEAM	NODE	DESIGN	OPER	EDIT
Dream	KS3A	NC7	Y-K	KJM	2000/06/22



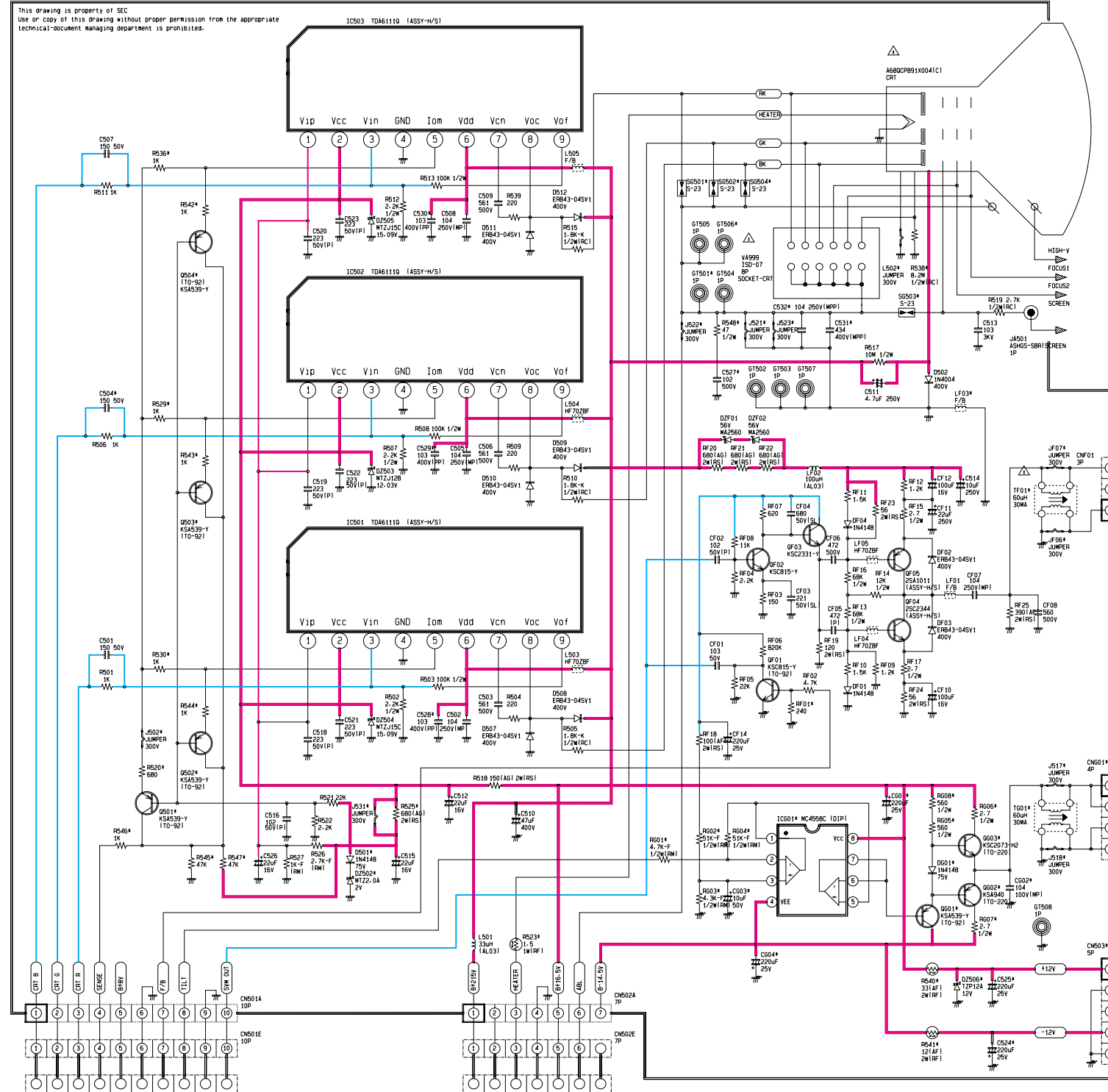
— : Power Line
 — : Signal Line

10-5 PIP



10-6 CRT, SWITCH

CRT



SWITCH

