

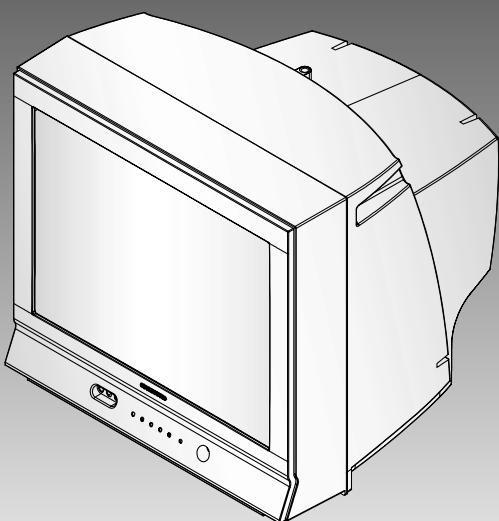
SAMSUNG

COLOR TELEVISION RECEIVER

Chassis : K15C
Model : TXM2090FX/XAA

SERVICE Manual

COLOR TELEVISION RECEIVER



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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.

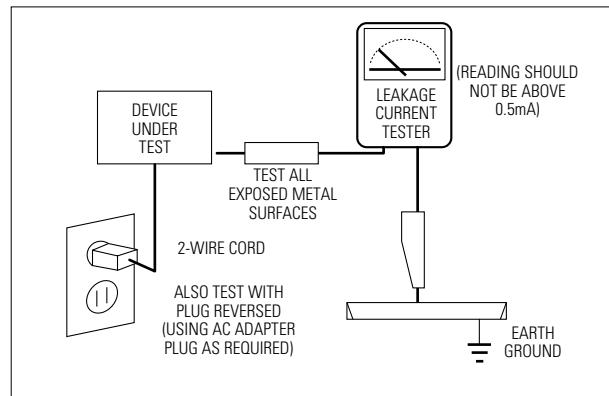


Fig. 1-1 AC Leakage Test

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.

CAUTION

These servicing instructions are for use by qualified service personnel only. To reduce the risk of electric shock do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so.

2. Specifications and IC Data

2-1 Specifications

Television System:

MODEL	SYSTEM
CT	NTSC ONLY

Channels:

System Band	NTSC
VHF	2 - 13
UHF	14 - 69
CABLE	1 - 125

Intermediate Frequencies (MHz) :

SYSTEM IF Carrier Frequency	NTSC
Picture IF Carrier	45.75
Sound IF Carrier	41.25
Color Sub Carrier	42.18

Picture Tube:

20 Inch	A51QDX991X001	20Inch	FLAT
25 Inch	A63QDB891X	25Inch	1.0R, +380MG
29 Inch	A68QDN891X001	29Inch	1.0R, +380MG

Power Requirements: AC 120V, 60Hz

Antenna Input Impedance: VHF, UHF : Telescopic dipole antenna (75 ohm unbalanced type)

Speaker Impedance 8 ohm, 2W+2W (Dual Type)

2-2 IC Line Up

Table 2-1 IC Line-Up

Loc. No	Specification	Description	Remark
IC201S	SPM456AN	TDA9377, English/Spanish/French	Philips
IC301	LA7841	VERTICAL OUTPUT	Sanyo
IC501	TDA6107Q	RGB DRIVE AMP	Philips
IC602	TDA7268	SOUND-AMP (2W x 2CH)	Philips
IC801S	KA5Q0740RT (0765RT)	POWER IC (STR)	FIAIR CHILD
IC802	KA7632	CUSTOM REGULATOR (5V, 8V, 3.3V)	SEC
IC202	24C04	EEPROM	
PC801S	TCET1108 / LTV817B	PHOTO COUPLER	
IC101	LA7510	SIF - IC	SANYO
IC601	MSP3425G	Sound Processor	Micronas

2-3 Semiconductor Base Diagrams

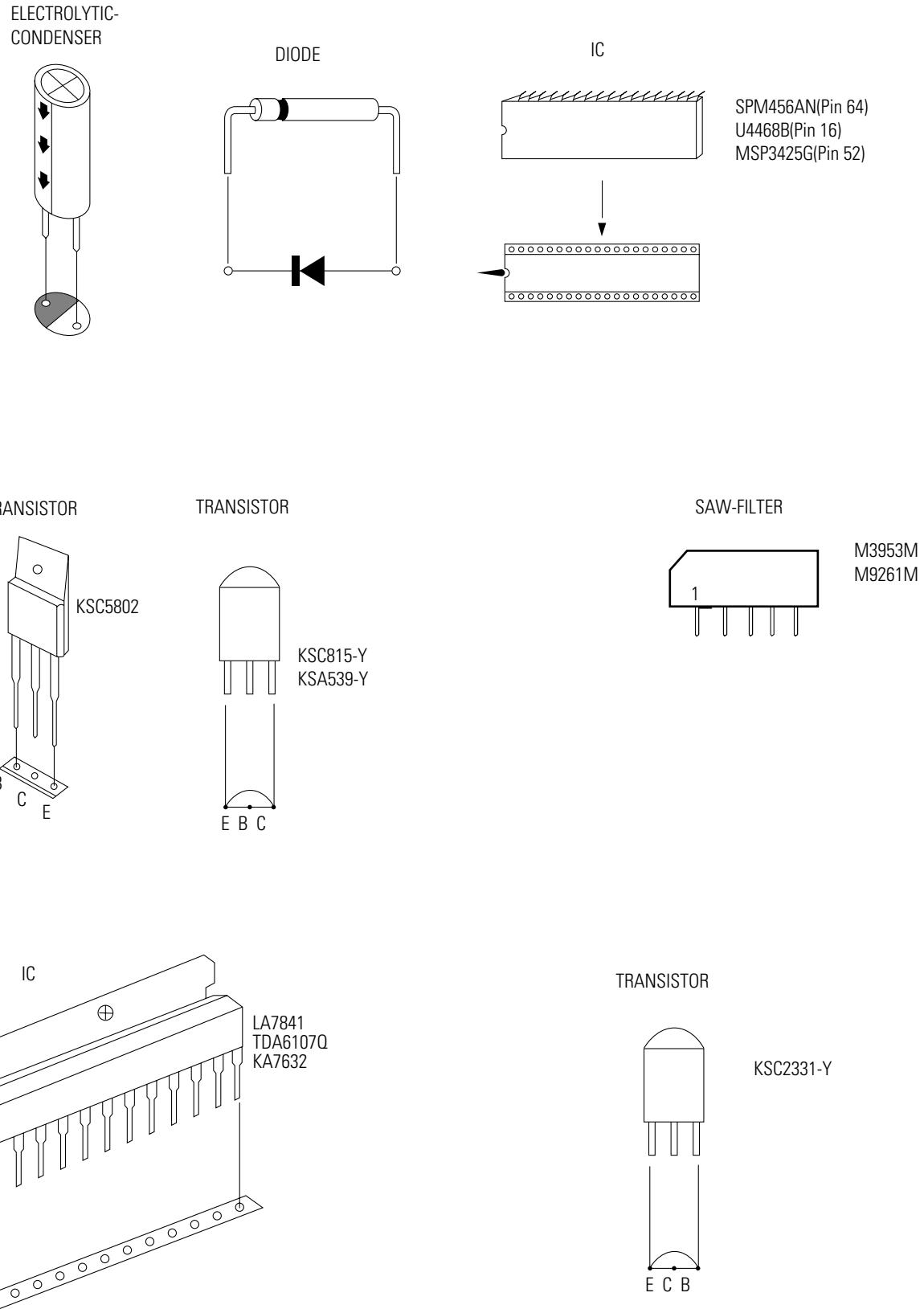
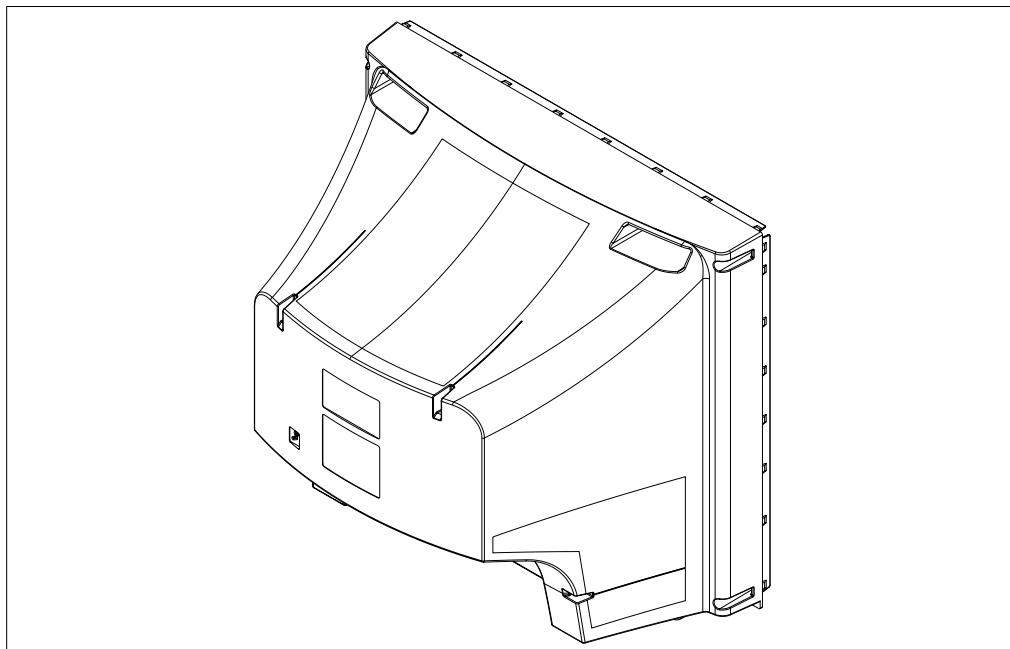


Fig. 2-1 Semiconductor Base Diagrams

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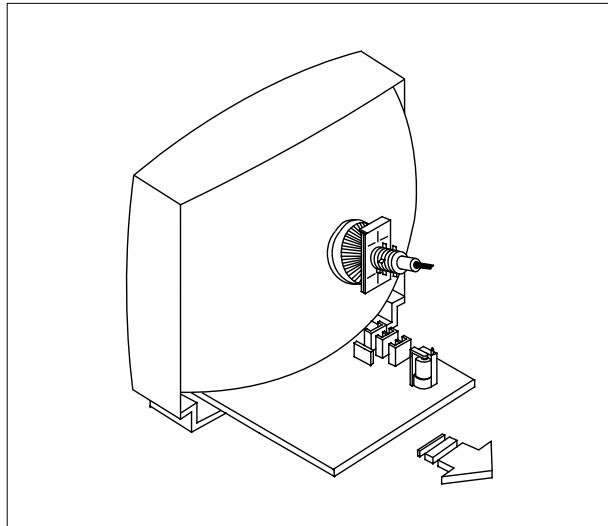
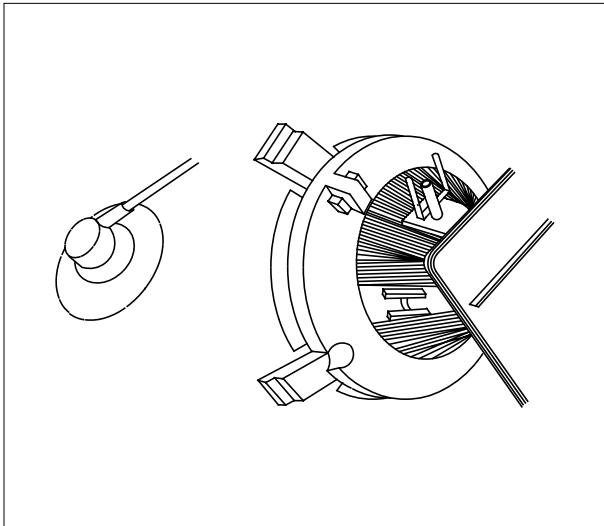
3. Disassembly and Reassembly

3-1 Back Cover Removal



1. After removing the screws, press the tension rib and pull the cabinet backwards.
2. To reassemble, press the tension rib (see diagram).

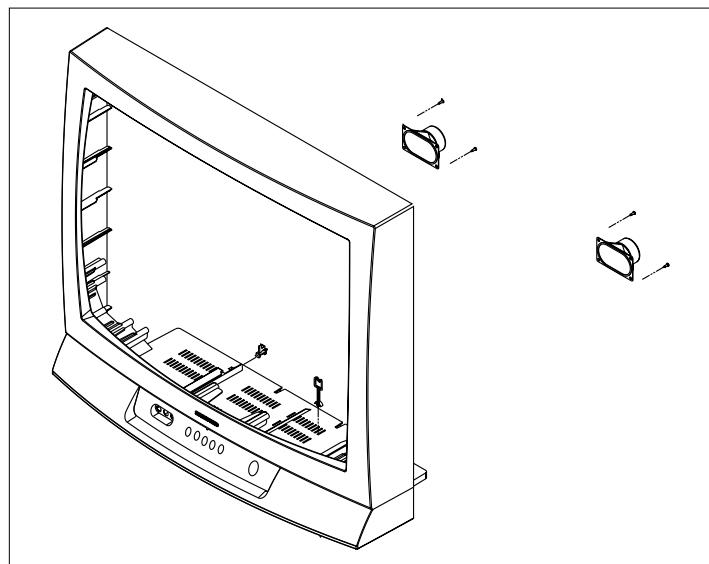
3-2 Main Board Removal



1. Separate the socket board from the CRT neck.
2. Remove the Anode Cap from the CRT.
3. Remove the main board by pulling it with both hands.

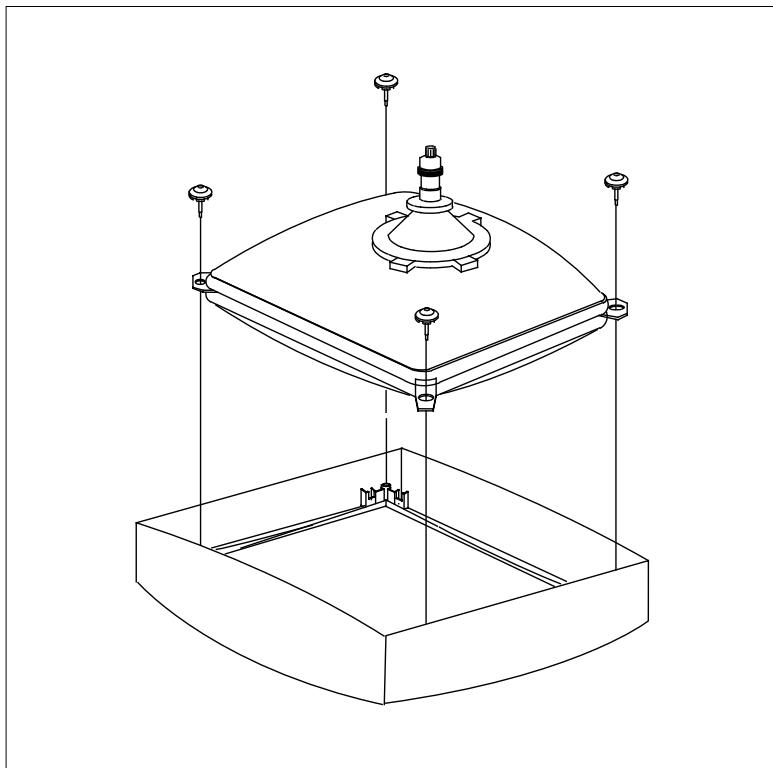
Warning: The FBT is charged with high voltage.
Before removing the Anode Cap, discharge the voltage
through one of the heat sinks on the main board.

3-3 Speaker Removal



1. Remove the speaker by
pressing the tension rib.

3-4 CRT Removal



1. Spread a soft mat on the floor. Place the TV set face down.
2. Remove the 4 nuts mounting the CRT to the front cabinet. Lift the CRT.
3. Caution: Because of the high vacuum and large surface area of the picture tube, be careful while handling it: (1) Always lift the picture tube by grasping it firmly around the faceplate, (2) Never lift the tube by its neck. (3) Do not scratch the picture tube or apply excessive pressure. Fractures of the glass may cause an implosion.

MEMO

4. Alignment and Adjustments

4-1 Preadjustment

4-1-1 Factory Mode

1. Do not attempt these adjustments in the Video Mode.
2. The Factory Mode adjustments are necessary when either the EEPROM (IC902) or the CRT is replaced.
3. Do not tamper with the "Adjustment" screen of the Factory Mode menu. This screen is intended only for factory use.

4-1-2 When EEPROM (IC902) Is Replaced

1. When IC902 is replaced all adjustment data revert to initial values. It is necessary to re-program this data.
2. After IC902 is replaced, warm up the TV for 10 seconds.

4-1-3 When CRT Is Replaced

1. Make the following adjustments AFTER setting up after setting up purity and convergence :
 - White Balance
 - Sub-Brightness
 - Vertical Center
 - Vertical Size
 - Horizontal Size
 - Fail Safe (This adjustment must be the last step).
2. If the EEPROM or CRT is replaced and set SC as 35(factory mode).

4-2 Factory/Service Mode

4-2-1 Procedure for the "Adjustment" Mode

1. This mode uses the standard remote control. The Service Mode is activated by entering the following remote-control sequence :
 - (1) DISPLAY → FACTORY.
 - (2) STAND-BY → MUTE → 1 → 8 → 2 →POWER ON.
2. The "SERVICE (FACTORY)" message will be displayed. The Service Mode has four components: ADJUST, OPTION , G2-ADJUST and RESET.
3. Access the Adjustment Mode by pressing the "VOLUME" keys (Up or Down). The adjustment parameters are listed in the accompanying table, and selected by pressing the CHANNEL keys (▲, ▼).
4. Selection sequences for the all system:

DOWN or UP key:

SCT>SBT>BLR>BLB>RG>GG>BG>VSL>VS>VA>HS>SC>CDL>STT>AKB>PDL>NDL>PSR>NSR>SCBT>VOL>CAP>MVOL>RP00>RP01>FMWS>AGC1>OMD>SCL>PWL>MUS>AGC>DSK>DVDB
5. The VOLUME keys increase or decrease the adjustment values (stored in the non-volatile memory) when Adjustment Mode is cancelled.
6. Cancel the Adjustment Mode by re-pressing the "FACTORY" or "Power OFF" keys.

4-2-2 Main Adjustment Parameter

NO	OSD	FUNCTION	RANGE	INITIAL DATA	SETTING	REMARK
1	SCT	Sub Contrast	0 ~ 23	15	(16)	W/B Adjustment
2	SBT	Sub Brightness	0 ~ 23	8	(6)	W/B Adjustment
3	BLR	Black Level offset Red	0 ~ 63	35	(37)	W/B Adjustment
4	BLB	Black Level offset Blue	0 ~ 63	32	(33)	W/B Adjustment
5	RG	Red Gain	0 ~ 63	40	(38)	W/B Adjustment
6	GG	Green Gain	0 ~ 63	30	30	FIX
7	BG	Blue Gain	0 ~ 63	42	(39)	W/B Adjustment
8	VSL	Vertical Slope	0 ~ 63	30	(32)	Vertical Picture Adjusment
9	VS	Vertical Shift	0 ~ 63	31	31	FIX
10	VA	Vertical Amplitude	0 ~ 63	20	(20)	Vertical Picture Adjusment
11	HS	Horizontal Shift	0 ~ 63	32	(33)	Picture Adjustment
12	SC	S-Correction	0 ~ 63	35	35	FIX
13	CDL	Cathode Drive Level	0 ~ 15	11	11	FIX
14	STT	Sub Tint	0 ~ 7	3	3	FIX
15	AKB	AKB On / off	0 ~ 1	0	0	FIX
16	PDL	PAL Delay	0 ~ 15	2	2	FIX
17	NDL	NTSC Delay	0 ~ 15	1	1	FIX
18	PSR	PAL Sub color	0 ~ 23	20	20	FIX
19	NSR	NTSC Sub color	0 ~ 23	3	3	FIX
20	SCBT	Screen Brightness	0 ~ 63	35	35	FIX
21	VOL	Volume pre setting	0 ~ 63	10	10	FIX
22	CAP	Caption Position	0 ~ 15	12	12	FIX
23	MVOL	Melody Sound Volume	0 ~ 50	7	7	FIX
24	RP00	Ratio Pre / overshoot	0 ~ 1	1	1	FIX
25	RP01	Ratio Pre / overshoot	0 ~ 1	1	1	FIX
26	FMWS	Window Selection Sound PLL	0 ~ 1	0	0	FIX (Mono)
27	AGC1	IF AGC Speed	0 ~ 3	1	1	FIX (Nomal)
28	OMD	Offset IF Demodulator	0 ~ 63	32	32	FIX (No Crcetion)
29	SCL	Soft Clipping Level	0 ~ 3	3	3	FIX (Off)
30	PWL	Peak White Limitting	0 ~ 15	15	15	FIX (100%)
31	MUS	Matrix USA	0 ~ 1	0	0	FIX (Mono)
32	AGC	Automatic Gain Control	0 ~ 63	33	33	FIX
33	DSK	Dynamic Skin Tone	0 ~ 1	0	0	FIX
34	DVDB	DVD Bright Offset	0 ~ 10	5	4	FIX

4-2-3 Option Bytes

In the Service Mode, various can be selected via the Option Table. Example:

Option Table : xx xx

	OSD	SETTING	REMARK
1	VIDEO MUTE	OFF	- Video Mute On/Off changing the channel
2	AUDIO	STEREO	- Audio Option (Mono / Stereo)
3	E/W	OFF	- E/W Option
4	ZOOM	NOR/ZOOM	- Picture Size Option
5	AUTO POWER	OFF	- Master S/w Option
6	AUDIO MUTE	ON	- Audio Mute On/ Off without signal
7	LANGUAGE	ENGLISH	- Initial Language after Factory Reset
8	HOTEL MODE	OFF	- Hotel mode On/ Off
9	BULE SCREEN	OFF	- Bule Screen On/ Off without signal
10	2'nd SIF	INTERNAL	- SIF Option at Mono sound
11	V-CHIP	ON	- V-CHIP On/Off
12	AV Option	AV + DVD	- DVD, S-VHS Option
13	DEMO	OFF	- DEMONSTRATION On/Off

4-2-4 RESET

The Reset Mode is used during factory inspection.

Function Reset:

1. Picture Mode	Custom
2. Sound Mode	Custom
3. Auto Volume	Off
4. Melody	On
5. Surround	Off
6. Turbo Sound	Off
7. MTS	Stereo
8. Language	English
9. Caption	Off
10. Timer	Off

4-3 Other Adjustments

4-3-1 General

1. Usually, a color TV needs only slight touch-up adjustment upon installation. Check the basic characteristics such as height, horizontal and vertical sync and focus.
2. The picture should have good black and white details. There should be no objectionable color shading; if color shading is present, perform the 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.

4-3-2 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 has been moved or turned in a different direction, disconnect its AC power for at least 30 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 removing power.

4-3-3 High Voltage Check

CAUTION: There is no high voltage adjustment on this chassis. The B+ power supply must be set to +125 volts (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. The high voltage should not exceed 30KV.
4. Adjust the Brightness and contrast controls to both extremes. Ensure that the high voltage does not exceed 30KV under any conditions.

4-3-4 FOCUS Adjustment

1. Input a black and white signal.
2. Adjust the tuning control for the clearest picture.
3. Adjust the FOCUS control for well defined scanning lines in the center area of the screen.

4-3-5 Cathode Voltage Adjustment (Screen Adjustment)

1. Connect CRT socket pin GK to an oscilloscope probe.
2. Input a gray scale pattern. (Use a pattern generator, PM5518)
3. Use the P mode key (on the remote control) for the STANDARD picture.
4. Adjust the Screen VR (on the FBT) so that the voltage on the oscilloscope becomes $125\pm2.5V$ (See Fig. 4-1).

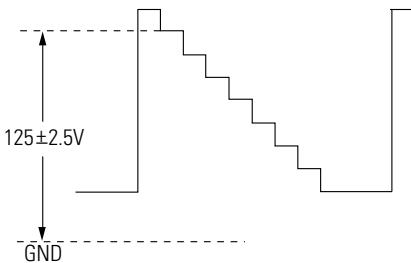


Fig. 4-1

4-3-6 Purity Adjustment

1. Warm up the receiver for at least 20 minutes.
2. Plug in the CRT deflection yoke and tighten the clamp screw.
3. Plug the convergence yoke into the CRT and set in as shown in Fig. 4-2.
4. Input a black and white signal.
5. Fully demagnetize the receiver by applying an external degaussing coil.
6. Turn the CONTRAST and BRIGHTNESS controls to maximum.
7. Loosen the clamp screw holding the yoke. Slide the yoke backward or forward to provide vertical green belt. (Fig. 4-3).
8. Tighten the convergence yoke.
9. Slowly move the deflection yoke forward, and adjust for the best overall green screen.
10. Temporarily tighten the deflection yoke.
11. Produce blue and red rasters by adjusting the low-light controls. Check for good purity in each field.
12. Tighten the deflection yoke.

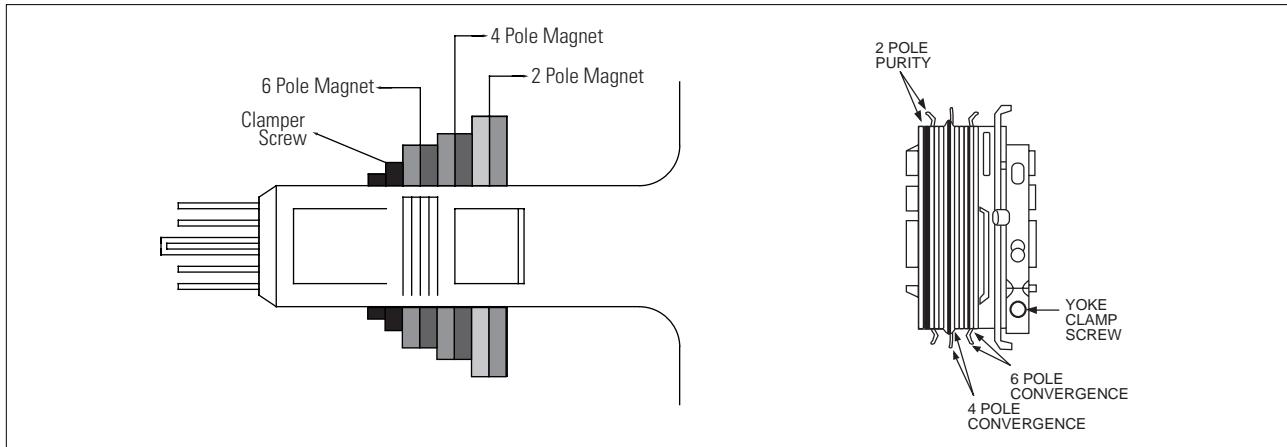


Fig. 4-2 Convergence Magnet Assembly

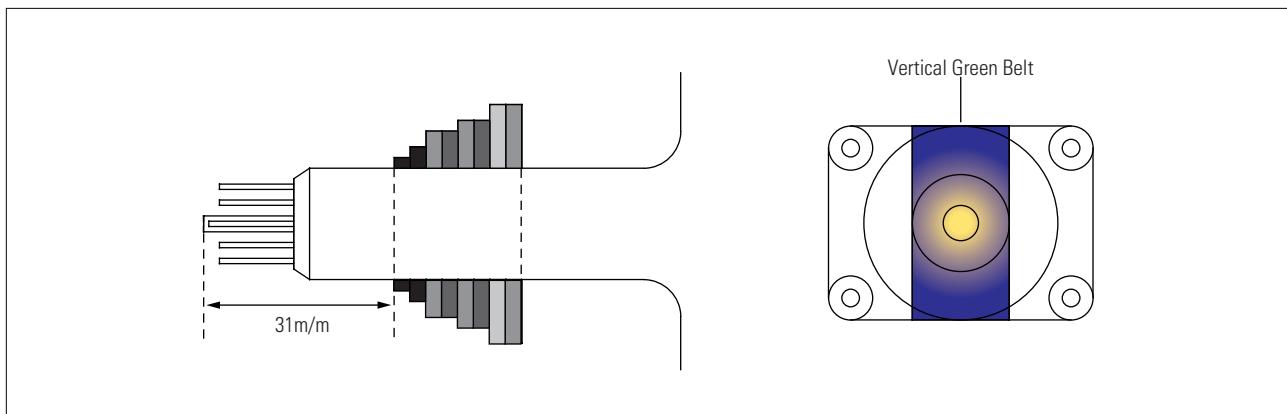


Fig. 4-3 Center Convergence Adjustment

4-3-7 White Balance Adjustment

(a) Set up

1. Warm up the TV for at least 30 minutes in the Aging Mode (OSD White). This mode is displayed by entering the following sequence:

DISPLAY →FACTORY → FACTORY

2. Input a Toshiba pattern.

(b) Low-Light Adjustment

1. Set SBT to 1.0 fL in the Factory Service Mode with using CA100. See Fig. 4-4.
2. Adjust RG,BG so that the levels are suitable to each local area.

(c) High-Light Adjustment

1. Set SCT to 35 fL in the Factory Service Mode with using CA100. See Fig. 4-4 .

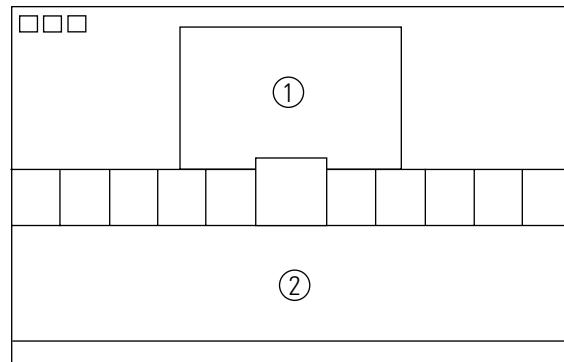


Fig. 4-4

4-3-8 Center Convergence Adjustment

1. Warm up the receiver for at least 20 minutes.
2. Adjust the two tabs of the 4 pole magnets to change the angle between them. Superimpose the red and blue vertical lines in the center area of the screen.
3. Adjust the Brightness and Contrast controls for a well defined picture.
4. Adjust the two-tab pairs of the 4 pole magnets, and change the angle between them. Superimpose the red and the blue vertical lines in the center area of the screen.
5. Turn the both tabs at the same time, keeping the angle constant, and superimpose the red and blue horizontal line in the center of the screen.
6. Adjust the two-tab pairs of the 6-pole magnets to superimpose the red and blue line onto the green. (Changing the angle affects the vertical lines, and rotating both magnets affects the horizontal lines.)
7. Repeat adjustments 2~6, if necessary.
8. Since the 4-pole magnets and 6-pole magnets interact, the dot movement is complex (Fig. 4-5).



Fig. 4-5 Center Convergence Adjustment

4-3-9 RF AGC Adjustment

Set the AGC data to 33 (Factory Mode).

4-3-10 Sub-Color Adjustment

Set $\frac{\text{PSR}}{\text{NSR}}$ data to $\frac{20}{3}$ (Factory Mode).

4-3-11 Geometry Adjustment

SC → VS → VA → VSL → HS

1. Input a lion head pattern.
2. Set the SC (S-Correction) as 35 and VS(Vertical Shift) 31 so that the lion head circle becomes oval.
3. Adjust with VA (Vertical Amplitude) so that the top margin of the picture is 4.

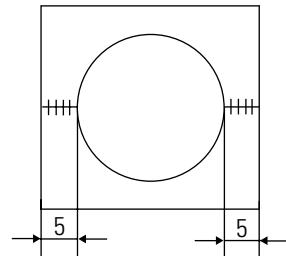


Fig. 4-9

6. Adjust HS (Horizontal Shift) so that the left and right margins of the picture are 5.

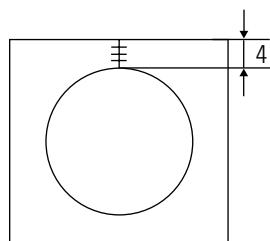


Fig. 4-7

4. Adjust with VSL (Vertical-Slope) so that the bottom margin of the picture is 4.

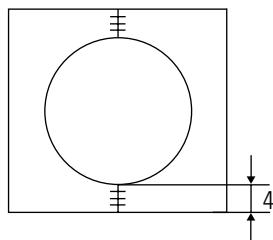
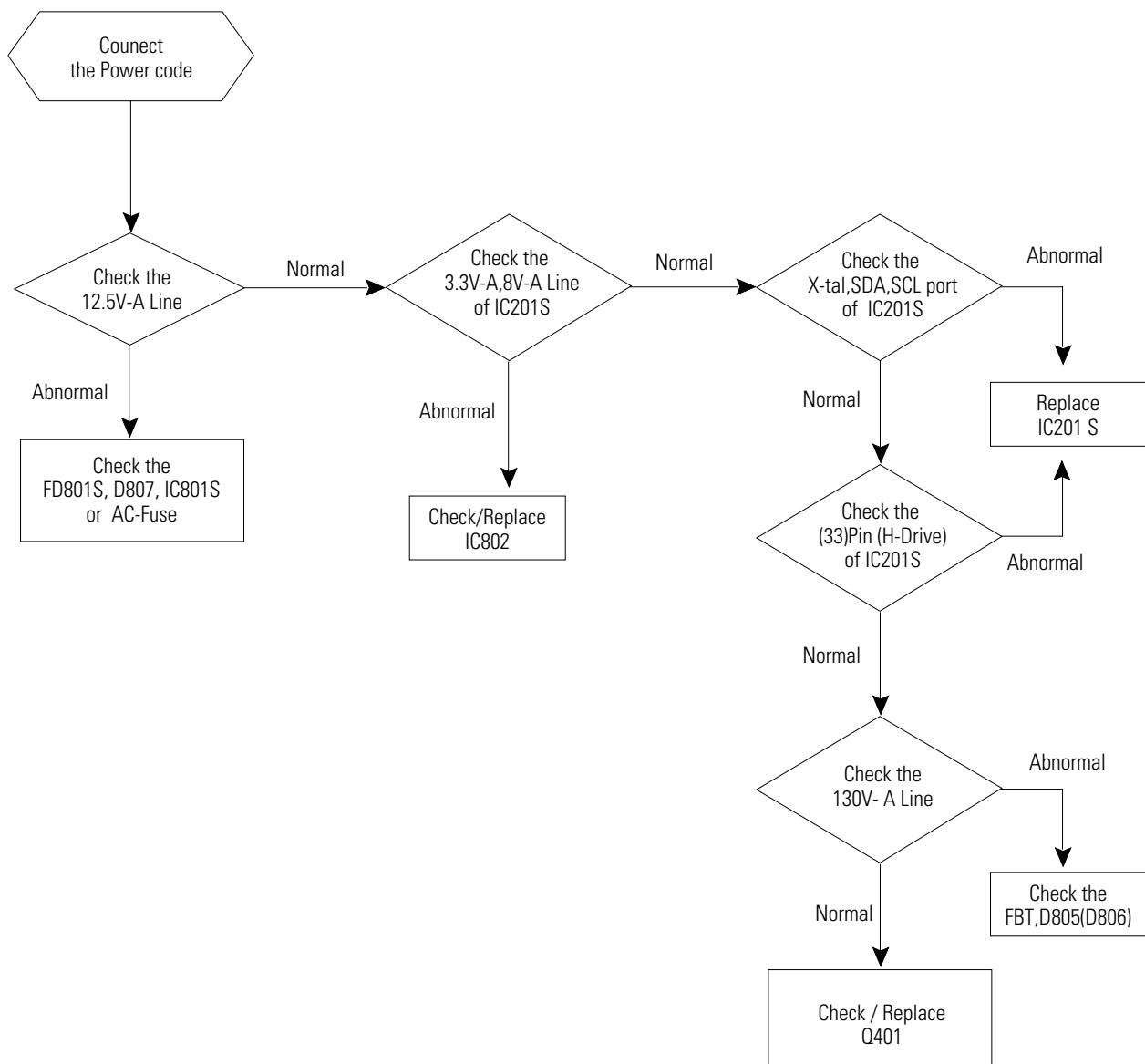


Fig. 4-8

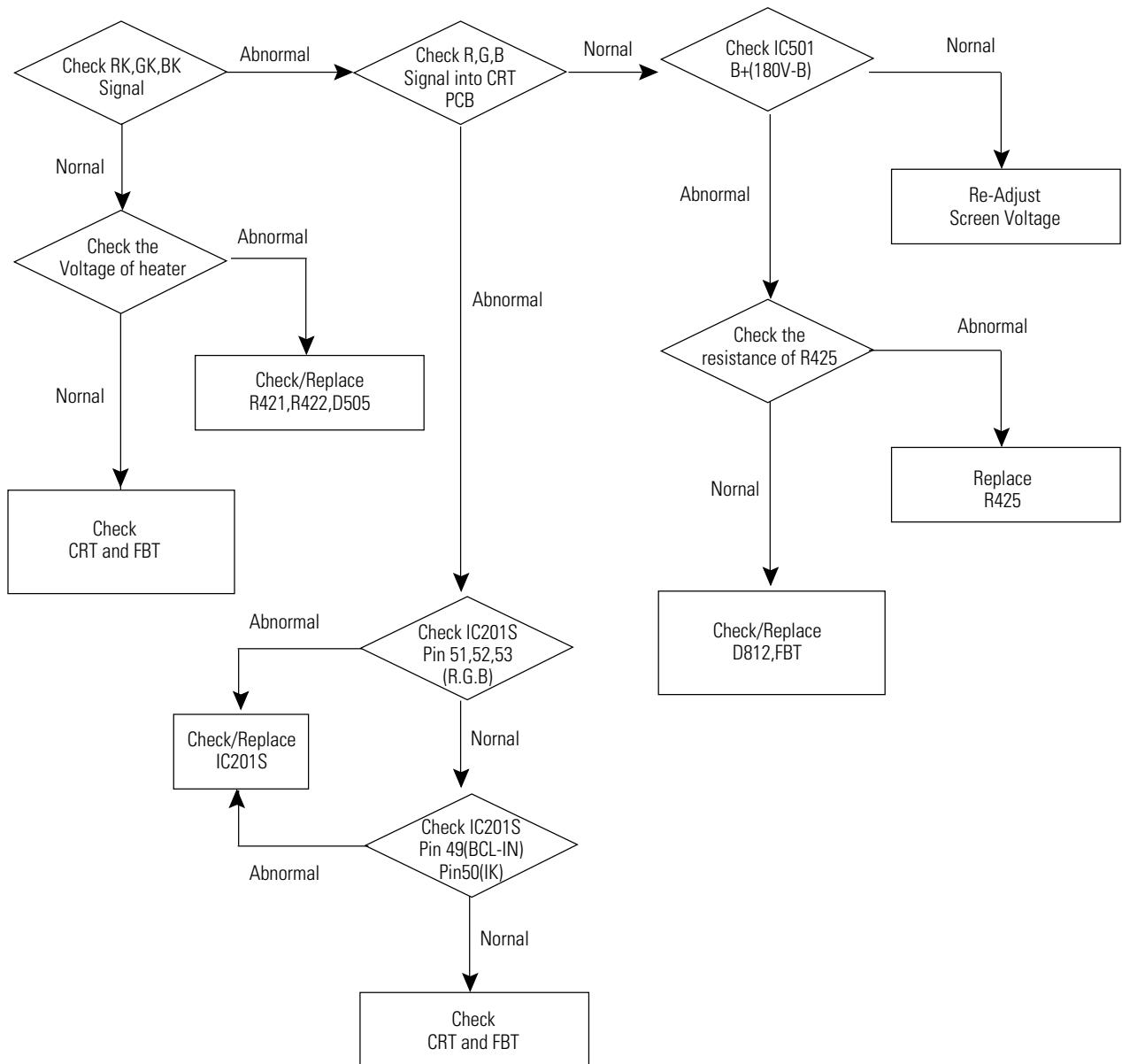
5. Adjust with HS (Horizontal Shift) so that the lion-head pattern and CRT centers are aligned.

5. Troubleshooting

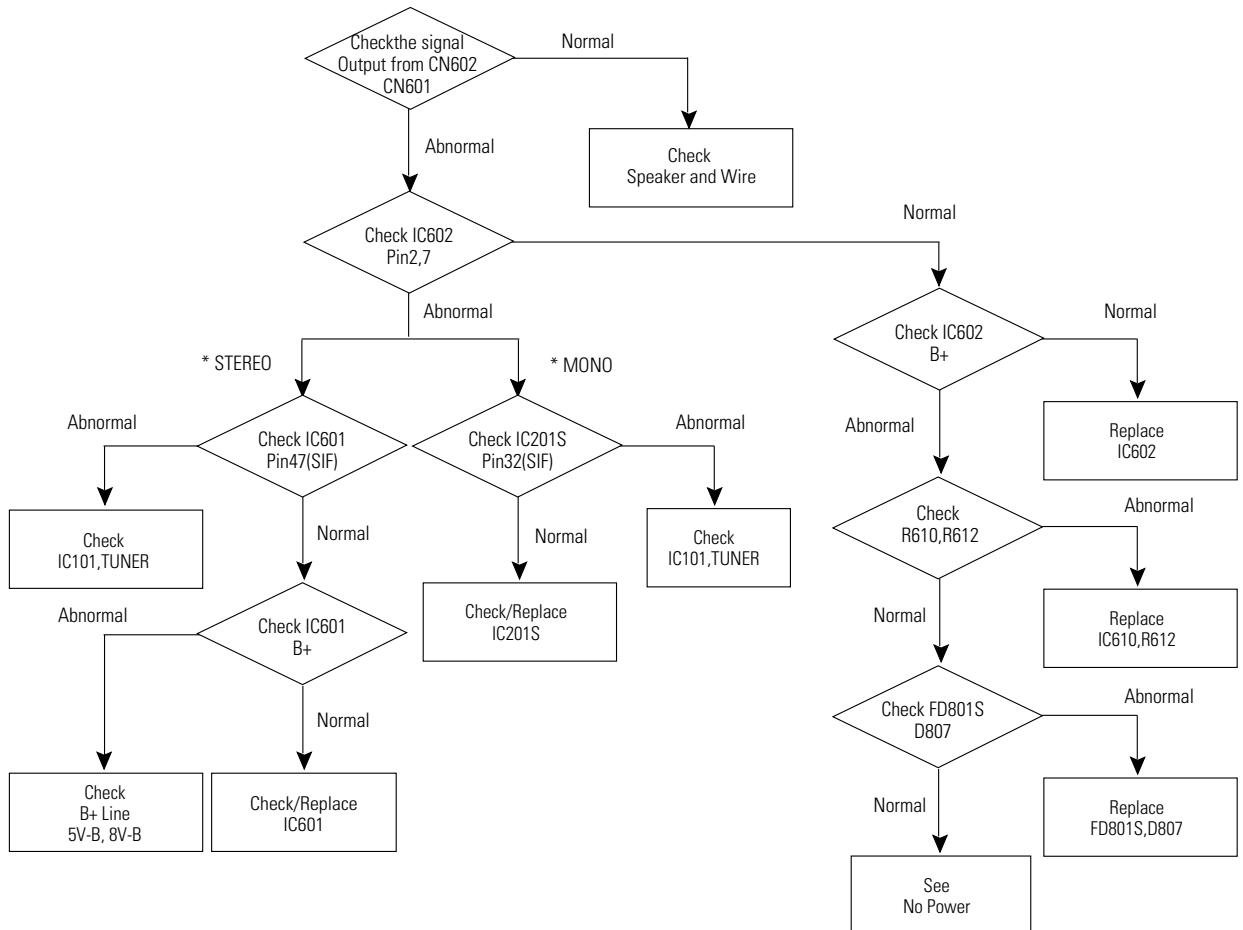
5-1 No Power



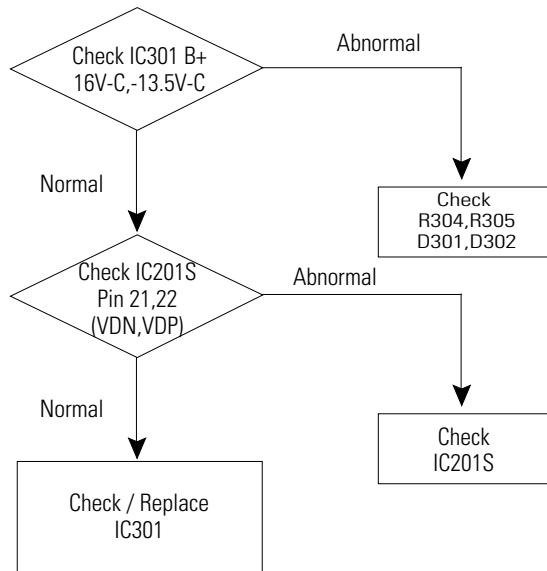
5-2 No Video (Sound OK)



5-3 No Sound (Video OK)

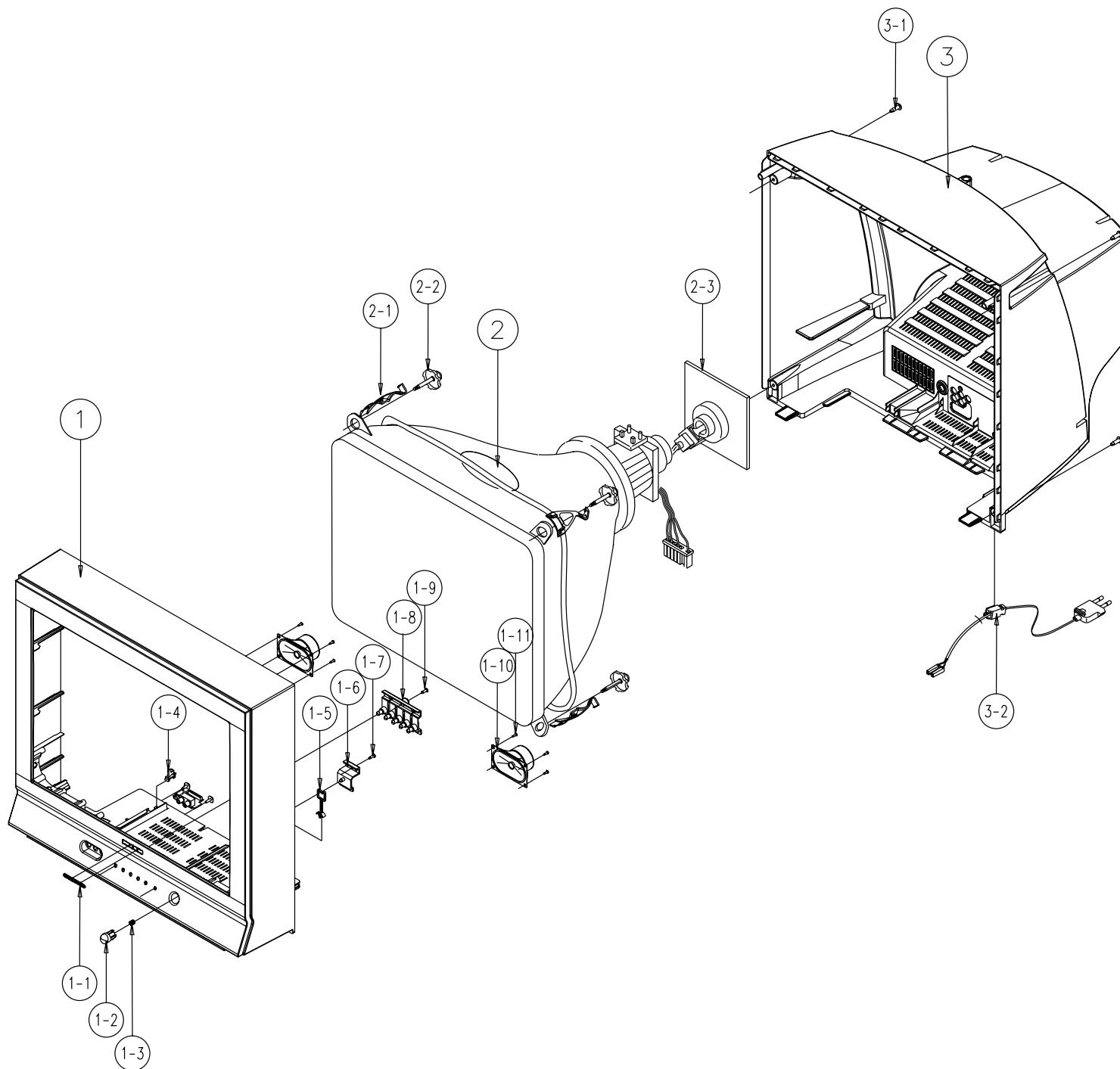


5-4 Horizontal Lines Appear or Screen



6. Exploded View & Parts List

6-1 TXM2090FX/XAA



No	Code No	Description	Specification	Q'ty	Remark
1	AA64-02958A	CABINET-FRONT:21K7,HIPS,VO,BLK,DG703P,SE		1	F/C
1-1	AA64-70123A	BADGE-BRAND:AL,SAMSUNG,SILVER,L=50,FLAT,		1	BADGE
1-2	AA64-02545A	KNOB-POWER:K15C,21K7,ABS,HB,G3676		1	KP
1-3	AA61-60003J	SPRING-CS:--,SUS304,0.5,OD6,H		1	SPRING
1-4	AA61-40113A	STOPPER-PCB:--,ABS,HB,NTR.		1	STOPPE
1-5	AA64-02547A	KNOB-CONTROL:21K7,ABS,HB,G3676		1	KC
1-6	6003-001019	SCREW-TAPITTE:RH,+,B,M4,L12,ZPC(BLK),SWR		1	KC+CF
1-7	AA64-02549A	WINDOW-RMC,21K7,PC,VIOLET		1	WR
1-8	6003-001019	SCREW-TAPITTE:RH,+,B,M4,L12,ZPC(BLK),SWR		1	WR+CF
1-9	AA65-30105A	CLAMP-WIRE:NYLON 66N,VO,NTR,15MM		1	CWFCL
1-10	3001-001262	SPEAKER:3W,80HM,87DB,280HZ		2	SPK
1-11	AA60-10008A	SCREW-TAPPING:--,TH,+,M3,L10,ZP		4	SPK+CF
2	AA03-00317A	CRT COLOR:A51QDX992X,0MG,1.85MH,18.0MH,2		1	CRT
2-1	AA65-00009B	CLAMP-D,COIL:NYLON 66,VO,--,21A8,-		4	CDCOIL
2-2	AA60-10050R	SCREW-ASSY:WC,HH,+,M5,L31.5,SWR		4	CRT+CF
3	AA64-02542A	CABINET-BACK,21K7,HIPS,VO,BLK		1	C/B
3-1	6003-001026	SCREW-TAPITTE:RH,+,B,M4,L15,ZPC(BLK),SWR		4	CB+CF
3-2	AA96-20129C	ASSY-POWER,CORD:--,EP2/YES,H/C200,ME301P,		1	PWR/AC

7. Electrical Parts List

7-1 TXM2090FX/XAA

Loc. No.	Code No.	Description ; Specification	Remark	Loc. No.	Code No.	Description ; Specification	Remark
ASSY-CHASSIS							
1 A/CHAS	AA91-04214L	ASSY-CHASSIS;KS3A;SPACE,27,SEA/SECA		4	0205-000129	GREASE-SILICON;SC102,JAPAN	
2 CW	AA65-30018A	CLAMP-WIRE:-,NYLON6.6,-,DATL		4	0402-001399	DIODE-BRIDGE;GSIB660,600V,6A,SIP-4,BK	
2 FBT	AA65-30018A	CLAMP-WIRE:-,NYLON6.6,-,DATL		4	6003-000335	SCREW-TAPITI:RH,+,2S,M3,L8,ZPC(YEL),SWR	
2 A/MAIN	AA94-08533D	ASSY-PCB MAIN;KS3A,27,SEA/SECA		4	AA60-30003A	WASHER:-,-,T1.5,-,SBHG-1	
3 Q402	0502-001007	TR-POWER;KSC2073-H2,NPN,150V,1		4	AA62-00052A	HEAT SINK-PS:-,-,SILVER,HOLE 18.5mm, 2	
3 Q404	0505-000156	FET-SILICON;IRF620-N,200V,5A,0.8ohm,50W,		3 LD901	AA96-00461A	ASSY LED GUIDE:-,-,SL-255D,RED/GRN	
△ 3 PC801S	0604-001038	PHOTOCOUPLER;TR,130-260%,200MW		3 HC801	AA96-00475A	ASSY H/S:-,REGULATOR,AA62-00066B,FML-G1	
3 IC902	1103-001177	IC-EEPMOD24WC16,2048x8bit,DIP,8P,2.5V		4	0205-000129	GREASE-SILICON;SC102,JAPAN	
△ 3 IC401	1202-000103	IC-VOLTAGECOMP;393,DIP,8P,300MIL,DUAL		4	0402-000233	DIODE-RECTIFIER;FML-G12S,200V,	
△ 3 IC803	1203-001697	IC-VOLTAGEREGULATOR;7R808,TO-220,4P		4	0402-001230	DIODE-RECTIFIERFMG-G2CS,1000V,3A,TO-22	
3 IC903	1203-001944	IC-POSI.FIXEDREG;78RM33,T0-220,3P,PLAST		4	1203-001006	IC-VOLTAGEREGULATOR;7R805,TO-220F,4P	
3 IC601	1204-001737	IC-SOUND PROCESSOR;MSP3451G-PO-A2,DIP,52		4	6003-000334	SCREW-TAPITI:RH,+,2S,M3,L6,ZP	
△ 3 IC201S	1204-001812	IC-VIDEO PROCESS;VDP3130Y-B2,DIP,64P,760		4	AA62-00066B	HEAT SINK:D2,D3,AL ,T1.0,89.70,-,AA62-00	
△ 3 PT801S	1404-000002	THERMISTOR;NTC,90HM,20%,TR,AC290VRMS,120		3 PWR/AC	AA96-00695A	ASSY-POWER,CORD:EP2/YES,H/C450,ME301P	
△ 3 NT802S	1404-001045	THERMISTOR NTC:4.70HM,15%,2900K,35.0MW,T		4	AA39-10097Y	POWER-CORD:-,EP2/YES,SPT-2 18AWGx2C,2.4m	
3 R807	2006-001083	R-CEMENT;120ohm,5%W,CJ,TP14x10x27mm		4	AA61-20284A	HOLDER P CORD;PP,VO,BLK,KE-002	
△ 3 CY802S	2201-000446	C-CERAMIC,AC;CK45PE400V332-M(T		3 IC602	AA96-50372B	ASSY H/S;SOUND AMPAA62-30181J,TDA7266S	
3 C423	2301-001192	C-FILM,MPPF;820nF,5%,400V,TP,29x18.5x25.		4	0205-000129	GREASE-SILICON;SC102,JAPAN	
3 C407	2301-001338	C-FILM,MPE,PPFO;68nF,5%,1.6kV,TP,28x7x1		4	1201-001308	IC-POWERAMP;7266 ZIP,15P,-,DUAL,26dB,PL	
3 C426	2306-000204	C-FILM,MPPF;430nF,5%,400V,-,20		4	6003-000333	SCREW-TAPITI:RH,+,2S,M3,L10,ZPC(YEL),SW	
△ 3 CX801S	2306-000318	C-FILM,MPPF;220nF,20%,250V,-,2		4	AA62-30181J	HEAT-SINK,ES,AL6063 EXTR,2,WHT,40MM,AN	
△ 3 CX802S	2306-000318	C-FILM,MPPF;220nF,20%,250V,-,2		△ 3 IC801S	AA96-50371F	ASSY H/S:-,PWM,AA62-30181H,KA351265RD	
3 C405	2306-000330	C-FILM;CF922P1.6KV772-HBUP		4	0205-000129	GREASE-SILICON;SC102,JAPAN	
3 C406	2306-000330	C-FILM;CF922P1.6KV772-HBUP		4	6003-000333	SCREW-TAPITI:RH,+,2S,M3,L10,ZPC(YEL),SW	
3 C803	2401-001652	C-ELECTROLYTIC;CE04W250V680M-M		4	AA02-00007A	MICA-DPM-04,MICA,22x29x0.15mm	
3 C820	2401-003076	C-AL;3300uF,20%,50V,WP,BK,18x35.5mm		4	AA13-00101A	IC HYBRID;KA3A1265RD,CN5039,5Pin,-50to12	
3 C815	2401-003602	C-AL;220uF,20%,160V,GR,BK,22x25mm,1		4	AA61-10386A	BRACKET;C,-,SECC100,T1.0,-,KA2S0680,	
3 SW906	3404-001004	SWITCH TACT;12V,50mA,160GF8,4X22.7MM		4	AA62-30181H	HEATSINK-ES;-,AL6063EXTR,2,WHT,50MM,-	
△ 3 RL801S	3501-001040	RELAYPOWER;12VDC,500MW,10A,1FO		3 IC301	AA96-50406A	ASSY H/S;LA62-30180K,LA7845	
△ 3 FP801S	3601-000293	FUSE-CARTRIDGE;250V,5A,SLOW-BLOW,GLASS,5		4	1204-000517	IC-LINEAR;LA7845SIPVERTICALAMP	
3 CN501	3711-002641	POST-HEADER;67094-010(AUTO)		4	6003-000333	SCREW-TAPITI:RH,+,2S,M3,L10,ZPC(YEL),SW	
3 CN602	3711-002644	POST-HEADER;67094-005(AUTO)		4	AA62-30180K	HEATSINK-ES;-,A6063EXTR,-,WHT,50/13,-	
3 CN502	3711-002646	POST-HEADER;67094-007(AUTO)		3 A/AUTO	AA97-07506P	ASSY-AUTO;MAIN;KS3A,27,SEA/SECA	
3 CN702	3711-002647	POST-HEADER;67094-008(AUTO)		4 D201	0401-000005	DIODE;1N4148,100V,300mA,1V,8nS,TAPING	
3 JA701	3722-001333	JACK-RCA9P3.2mm,NI,BLK		4 D202	0401-000005	DIODE;1N4148,100V,300mA,1V,8nS,TAPING	
3 JA702	3722-001596	JACK-RCA;3P/9.3mm,NI,BLK(GRN/BLU/RED		4 D207	0401-000005	DIODE;1N4148,100V,300mA,1V,8nS,TAPING	
3 IC901	AA09-00243A	IC MICOM;SIM-408A3,CL-21A8,52P,0.3-+,7,		4 D208	0401-000005	DIODE;1N4148,100V,300mA,1V,8nS,TAPING	
△ 3 T801S	AA26-00044C	TRANS SWITCHING,CODE-NO,CT-21A8,AC90-260		4 D209	0401-000005	DIODE;1N4148,100V,300mA,1V,8nS,TAPING	
△ 3 T444S	AA26-00105A	TRANS FBT;FUH-29C001(S),CT29A5P4.3MH,13		4 D210	0401-000005	DIODE;1N4148,100V,300mA,1V,8nS,TAPING	
△ 3 T401	AA26-50001L	HORIZ.DRIVE;-,29MH,133UH,4.5UH		4 D211	0401-000005	DIODE;1N4148,100V,300mA,1V,8nS,TAPING	
3 L402	AA27-00067A	COIL HORIZ. WIDTH:-,240uH,YL9N,12x20 C,6		4 D602	0401-000005	DIODE;1N4148,100V,300mA,1V,8nS,TAPING	
3 L405	AA27-00096A	COIL HORIZ. WIDTH:-,10.0mH,DR15 X 27.5,U		4 D604	0401-000005	DIODE;1N4148,100V,300mA,1V,8nS,TAPING	
3 L808	AA27-00098A	COIL CHOKE:-,24uH,10%,-,0.1,3.0A,DR10X		△ 4 D804	0401-000005	DIODE;1N4148,100V,300mA,1V,8nS,TAPING	
△ 3 L403	AA27-00099A	COIL LINEARITY;23.5uH,23.5uH,DR14x15C,5:		4 D906	0401-000005	DIODE;1N4148,100V,300mA,1V,8nS,TAPING	
3 L408	AA27-00103A	COIL CHOKE;600uH,-,600uH,+,10%,600uH,0.5		4 DZ402	0401-000005	DIODE;1N4148,100V,300mA,1V,8nS,TAPING	
△ 3 LX801S	AA29-00012A	FILTER LINE NOISE;CS29A6P8X/HAC,-,0.1MA		4 D405	0402-000493	DIODE-RECTIFIER;1R5GU41,400V,1	
△ 3 LX802S	AA29-00012A	FILTER LINE NOISE;CS29A6P8X/HAC,-,0.1MA		4 D408	0402-000493	DIODE-RECTIFIER;1R5GU41,400V,1	
3 GT101	AA39-20010B	LEAD-CONNECTOR,ASSY;-,YFH800-01,500MM,1P		4 D402	0402-000534	DIODE-RECTIFIER;RG10V,400V,1.5	
△ 3 TU01S	AA40-00074A	TUNER;TCPN3081PA09A(B),NTSC,18ICH,45		△ 4 DR01S	0402-000534	DIODE-RECTIFIER;RG10V,400V,1.5	
3 RM901	AA59-60001U	MODULE-REMOCON:-,ORC-50V,38KH		4 D413	0402-000537	DIODE-RECTIFIER;RH1A,600V,0.6A,	
3 L/POS	AA68-01018A	LABEL-POS;-,50mmX,13,-,WHITE,-		4 D401	0402-000540	DIODE-RECTIFIER;RU20A,600V,1.5	
△ 3 IC804	AA96-00243C	ASSY H/S:-,REGULATOR,AA62-00045A,KA7806		4 D404	0402-000540	DIODE-RECTIFIER;RU20A,600V,1.5	
4 0205-000129		GREASE-SILICON;SC102,JAPAN		4 D301	0402-000546	DIODE-RECTIFIER;TVR10G,400V,1.	
4 1203-000284		IC-POSI.FIXEDREG;7806,TO-220,		4 D411	0402-000546	DIODE-RECTIFIER;TVR10G,400V,1.	
4 6003-000335		SCREW-TAPITI:RH,+,2S,M3,L8,ZPC(YEL),SWR		△ 4 D803	0402-000546	DIODE-RECTIFIER;TVR10G,400V,1.	
4 AA62-00045A		HEAT SINK-PS:-,T1.0,-,DREAM,-,-,-		△ 4 D816	0402-000546	DIODE-RECTIFIER;TVR10G,400V,1.	
3 HC401	AA96-00275A	ASSY H/S:-,COMPLEX,AA62-00051A,KSD5703,		△ 4 D801	0402-001111	DIODE-RECTIFIER;1N5397GP,600V,1.5A,DO-2	
4 0205-000129		GREASE-SILICON;SC102,JAPAN		4 D403	0402-000132	DIODE-RECTIFIER;1N4004,400V,1A,DO-41	
4 0402-001296		DIODE-RECTIFIER;FMP-3FU,1500V,5A,T0-3PF		4 D406	0402-000132	DIODE-RECTIFIER;1N4004,400V,1A,DO-41	
4 0502-001136		TR-POWER;KSD5703,NPN,70W,TO-3PF,ST,8-		4 D407	0402-000132	DIODE-RECTIFIER;1N4004,400V,1A,DO-41	
4 6003-000335		SCREW-TAPITI:RH,+,2S,M3,L8,ZPC(YEL),SWR		△ 4 D808	0402-000132	DIODE-RECTIFIER;1N4004,400V,1A,DO-41	
4 AA60-30001A		WASHER-PLATE;-,M3,1D3.5,15X8.5,T1.0,-,SB		△ 4 D810	0402-000132	DIODE-RECTIFIER;1N4004,400V,1A,DO-41	
4 AA62-00051A		HEAT SINK-PS:-,-,SILVER,HOLE 31mm,ALL,		△ 4 D811	0402-000132	DIODE-RECTIFIER;1N4004,400V,1A,DO-41	
△ 3 D801S	AA96-00276C	ASSY H/S:-,BRIDGE,AA62-00052A,GSIB660,		4 D907	0402-000132	DIODE-RECTIFIER;1N4004,400V,1A,DO-41	
				4 DZ201	0403-000508	DIODE-ZENER;MTZJ5.6B,5.6V,5.45-5.73V,500	
				4 DZ202	0403-000508	DIODE-ZENER;MTZJ5.6B,5.6V,5.45-5.73V,500	
				4 DZ204	0403-000508	DIODE-ZENER;MTZJ5.6B,5.6V,5.45-5.73V,500	
				4 DZ205	0403-000508	DIODE-ZENER;MTZJ5.6B,5.6V,5.45-5.73V,500	

Electrical Parts List

Loc. No.	Code No.	Description ; Specification	Remark	Loc. No.	Code No.	Description ; Specification	Remark
4 DZ601	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500		4 R231	2001-000281	R-CARBON:1000HM,5%,1/8W,AA,TP,	
4 DZ603	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500		4 R232	2001-000281	R-CARBON:1000HM,5%,1/8W,AA,TP,	
4 DZ605	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500		4 R604	2001-000281	R-CARBON:1000HM,5%,1/8W,AA,TP,	
4 DZ802	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500		4 R605	2001-000281	R-CARBON:1000HM,5%,1/8W,AA,TP,	
4 DZ806	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500		4 R612	2001-000281	R-CARBON:1000HM,5%,1/8W,AA,TP,	
4 DZ901	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500		4 R613	2001-000281	R-CARBON:1000HM,5%,1/8W,AA,TP,	
4 DZ902	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500		4 R627	2001-000281	R-CARBON:1000HM,5%,1/8W,AA,TP,	
4 DZ905	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500		4 R628	2001-000281	R-CARBON:1000HM,5%,1/8W,AA,TP,	
4 DZ906	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500		4 R723	2001-000281	R-CARBON:1000HM,5%,1/8W,AA,TP,	
4 DZ907	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500		4 R907	2001-000281	R-CARBON:1000HM,5%,1/8W,AA,TP,	
4 DZ908	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500		4 R909	2001-000281	R-CARBON:1000HM,5%,1/8W,AA,TP,	
4 DZ909	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500		4 R925	2001-000281	R-CARBON:1000HM,5%,1/8W,AA,TP,	
4 DZ910	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500		4 R940	2001-000281	R-CARBON:1000HM,5%,1/8W,AA,TP,	
4 DZ306	0403-000700	DIODE-ZENER:TZP33A,33V,31-35V,		4 R941	2001-000281	R-CARBON:1000HM,5%,1/8W,AA,TP,	
4 DZ804	0403-000700	DIODE-ZENER:TZP33A,33V,31-35V,		4 R942	2001-000281	R-CARBON:1000HM,5%,1/8W,AA,TP,	
4 DZ602	0403-000720	DIODE-ZENER:MTZJ9.1B,9.1V,8.57-9.01V,500		4 R947	2001-000281	R-CARBON:1000HM,5%,1/8W,AA,TP,	
4 DZ803	0403-001167	DIODE-ZENER:MTZJ30D,30V,29.02-30.51V,500		4 R202	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,	
4 DZ305	0403-001221	DIODE-ZENER:UZ39BSB,35.36-37.19V,500mW,D		4 R205	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,	
4 DZ203	0403-001321	DIODE-ZENER:MTZJ6.6B,6.6-7.01V,500mW,DO		4 R206	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,	
△4 DZR01S	0403-001321	DIODE-ZENER:MTZJ6.8C,6.6-7.01V,500mW,DO		4 R211	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,	
4 DZ801	0403-001322	DIODE-ZENER:MTZJ8.2B,7.78-8.19V,500mW,DO		4 R243	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,	
4 DZ808	0403-001322	DIODE-ZENER:MTZJ8.2B,7.78-8.19V,500mW,DO		4 R245	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,	
4 DZ401	0403-001325	DIODE-ZENER:MTZJ15C,14.35-15.09V,500mW,D		4 R246	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,	
4 DZ302	0403-001329	DIODE-ZENER:MTZJ24B,22.61-23.77V,500mW,		4 R309	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,	
4 DZ303	0403-001329	DIODE-ZENER:MTZJ24B,22.61-23.77V,500mW,		4 R310	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,	
4 DZ304	0403-001329	DIODE-ZENER:MTZJ24B,22.61-23.77V,500mW,		4 R601	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,	
4 D203	0404-000156	DIODE-SCHOTTKY:RB4410,10V,100MA,DO-34,TP		4 R602	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,	
4 D204	0404-000156	DIODE-SCHOTTKY:RB4410,10V,100MA,DO-34,TP		4 R606	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,	
4 D205	0404-000156	DIODE-SCHOTTKY:RB4410,10V,100MA,DO-34,TP		4 R609	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,	
4 D206	0404-000156	DIODE-SCHOTTKY:RB4410,10V,100MA,DO-34,TP		4 R620	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,	
4 D901	0404-000156	DIODE-SCHOTTKY:RB4410,10V,100MA,DO-34,TP		4 R629	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,	
4 D902	0404-000156	DIODE-SCHOTTKY:RB4410,10V,100MA,DO-34,TP		4 R715	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,	
4 D903	0404-000156	DIODE-SCHOTTKY:RB4410,10V,100MA,DO-34,TP		4 R716	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,	
4 D904	0404-000156	DIODE-SCHOTTKY:RB4410,10V,100MA,DO-34,TP		4 R935	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,	
△4 QR01S	0501-000283	TRANSISTOR:KSA539-Y(TAPG)/YTAM		4 R952	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,	
4 Q802	0501-000369	TRANSISTOR:KSC231-Y(TAPG)		△4 RR07S	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,	
4 Q201	0501-000389	TRANSISTOR:KSC815-Y(TAPG)/YTAM		△4 RR10S	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,	
4 Q202	0501-000389	TRANSISTOR:KSC815-Y(TAPG)/YTAM		4 R208	2001-000405	R-CARBON:1800HM,5%,1/8W,AA,TP,	
4 Q203	0501-000389	TRANSISTOR:KSC815-Y(TAPG)/YTAM		4 R214	2001-000411	R-CARBON:18KOHM,5%,1/8W,AA,TP,	
4 Q204	0501-000389	TRANSISTOR:KSC815-Y(TAPG)/YTAM		4 R209	2001-000429	R-CARBON:1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
4 Q601	0501-000389	TRANSISTOR:KSC815-Y(TAPG)/YTAM		4 R216	2001-000429	R-CARBON:1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
4 Q901	0501-000389	TRANSISTOR:KSC815-Y(TAPG)/YTAM		4 R234	2001-000429	R-CARBON:1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
4 Q902	0501-000389	TRANSISTOR:KSC815-Y(TAPG)/YTAM		4 R235	2001-000429	R-CARBON:1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
4 Q903	0501-000389	TRANSISTOR:KSC815-Y(TAPG)/YTAM		4 R252	2001-000429	R-CARBON:1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
4 Q904	0501-000389	TRANSISTOR:KSC815-Y(TAPG)/YTAM		4 R603	2001-000429	R-CARBON:1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
4 Q905	0501-000389	TRANSISTOR:KSC815-Y(TAPG)/YTAM		4 R607	2001-000429	R-CARBON:1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
4 Q906	0501-000389	TRANSISTOR:KSC815-Y(TAPG)/YTAM		4 R608	2001-000429	R-CARBON:1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
4 Q907	0501-000389	TRANSISTOR:KSC815-Y(TAPG)/YTAM		4 R817	2001-000429	R-CARBON:1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
4 Q908	0501-000389	TRANSISTOR:KSC815-Y(TAPG)/YTAM		4 R902	2001-000429	R-CARBON:1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
4 Q911	0501-000389	TRANSISTOR:KSC815-Y(TAPG)/YTAM		4 R910	2001-000429	R-CARBON:1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
△4 OR02S	0501-000389	TRANSISTOR:KSC815-Y(TAPG)/YTAM		4 R911	2001-000429	R-CARBON:1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
4 DZ805	1203-001217	IC-POST,ADJUSTREG;431,TO-92,3P,4.58MIL,P		4 R912	2001-000429	R-CARBON:1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
4 IC904	1203-001943	IC-VOL-DETECTOR:7025,TO-92,3P,PLASTIC		4 R914	2001-000429	R-CARBON:1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
△4 VP801S	1405-000152	VARISTOR:560V,2500A,14X8.5MM,T		4 R924	2001-000429	R-CARBON:1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
△4 VX801S	1405-000152	VARISTOR:560V,2500A,14X8.5MM,T		4 R929	2001-000429	R-CARBON:1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
4 R223	2001-000003	R-CARBON:3300HM,5%,1/8W,AA,TP,		4 R930	2001-000429	R-CARBON:1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
4 R248	2001-000003	R-CARBON:3300HM,5%,1/8W,AA,TP,		4 R936	2001-000429	R-CARBON:1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
4 R249	2001-000003	R-CARBON:3300HM,5%,1/8W,AA,TP,		△4 RR08S	2001-000429	R-CARBON:1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
4 R250	2001-000003	R-CARBON:3300HM,5%,1/8W,AA,TP,		4 R236	2001-000515	R-CARBON:2200HM,5%,1/8W,AA,TP,	
4 R934	2001-000003	R-CARBON:3300HM,5%,1/8W,AA,TP,		4 R237	2001-000515	R-CARBON:2200HM,5%,1/8W,AA,TP,	
4 R916	2001-000007	R-CARBON:3KOHM,5%,1/8W,AA,TP,		4 R238	2001-000515	R-CARBON:2200HM,5%,1/8W,AA,TP,	
4 R918	2001-000009	R-CARBON:20KOHM,5%,1/8W,AA,TP,		4 R247	2001-000515	R-CARBON:2200HM,5%,1/8W,AA,TP,	
4 R303	2001-000016	R-CARBON(S);10HM,5%,1/2W,AA,TP		4 R932	2001-000515	R-CARBON:2200HM,5%,1/8W,AA,TP,	
4 R412	2001-000020	R-CARBON(S);220HM,5%,1/2W,AA,T		4 R943	2001-000515	R-CARBON:2200HM,5%,1/8W,AA,TP,	
4 R809	2001-000022	R-CARBON(S);330HM,5%,1/2W,AA,T		4 R215	2001-000522	R-CARBON:22KOHM,5%,1/8W,AA,TP,	
4 R411	2001-000028	R-CARBON(S);1000HM,5%,1/2W,AB,		4 R823	2001-000522	R-CARBON:22KOHM,5%,1/8W,AA,TP,	
4 R422	2001-000037	R-CARBON(S);3300HM,5%,1/2W,AA,		4 R915	2001-000577	R-CARBON:2KOHM,5%,1/8W,AA,TP,1	
4 R825	2001-000066	R-CARBON(S);10KOHM,5%,1/2W,AA,		4 R949	2001-000660	R-CARBON:33KOHM,5%,1/8W,AA,TP,	
4 R228	2001-000117	R-CARBON(S);68ohm,5%,1/2W,AA,TP,2.4x6.4m		4 R105	2001-000702	R-CARBON:39KOHM,5%,1/8W,AA,TP,	
4 R207	2001-000221	R-CARBON:1.2KOHM,5%,1/8W,AA,TP		4 R251	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,	
4 R213	2001-000232	R-CARBON:1.3KOHM,5%,1/8W,AA,TP		4 R833	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,	
4 R822	2001-000273	R-CARBON:100KOHM,5%,1/8W,AA,TP		4 R901	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,	
4 J904	2001-000281	R-CARBON:1000HM,5%,1/8W,AA,TP,		4 R903	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,	
4 R102	2001-000281	R-CARBON:1000HM,5%,1/8W,AA,TP,		4 R904	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,	
4 R103	2001-000281	R-CARBON:1000HM,5%,1/8W,AA,TP,		4 R905	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,	
4 R203	2001-000281	R-CARBON:1000HM,5%,1/8W,AA,TP,		4 R921	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,	
4 R204	2001-000281	R-CARBON:1000HM,5%,1/8W,AA,TP,		4 R927	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,	

Loc. No.	Code No.	Description ; Specification	Remark	Loc. No.	Code No.	Description ; Specification	Remark
4 R928	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP		4 R417	2004-001382	R-METAL(S):13KOHM,1%,1/2W,AA,TP,2.4X6.4M	
4 R937	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP		4 R301	2004-001397	R-METAL(S):4.7KOHM,1%,1/2W,AA,	
4 R938	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP		4 R420	2004-001402	R-METAL(S):6.8KOHM,1%,1/2W,AA,	
△ 4 RR02S	2001-000766	R-CARBON:43KOHM,5%,1/8W,AA,TP		4 R811	2004-001408	R-METAL(S):91KOHM,1%,1/2W,AA,T	
4 R224	2001-000780	R-CARBON:470ohm,5%,1/8W,AA,TP,1.8x3.2mm		4 R821	2004-001891	R-METAL(S):133KOHM,1%,1/2W,AA,	
4 R225	2001-000780	R-CARBON:470ohm,5%,1/8W,AA,TP,1.8x3.2mm		△ 4 RR03S	2004-001897	R-METAL(S):43.2KOHM,1%,1/2W,AA	
4 R226	2001-000780	R-CARBON:470ohm,5%,1/8W,AA,TP,1.8x3.2mm		4 R819	2004-001983	R-METAL:2.49KOHM,1%,1/2W,AA,TP,2.4X6.4	
4 R614	2001-000780	R-CARBON:470ohm,5%,1/8W,AA,TP,1.8x3.2mm		4 R302	2004-001984	R-METAL:26.7KOHM,1%,1/2W,AA,TP	
4 R615	2001-000780	R-CARBON:470ohm,5%,1/8W,AA,TP,1.8x3.2mm		4 R314	2004-001986	R-METAL:35.7KOHM,1%,1/2W,AA,TP	
4 R616	2001-000780	R-CARBON:470ohm,5%,1/8W,AA,TP,1.8x3.2mm		4 R415	2004-004048	R-METAL(S):3.9Kohm,1%,1/2W,AA,TP,2.5x6.5	
4 R617	2001-000780	R-CARBON:470ohm,5%,1/8W,AA,TP,1.8x3.2mm		4 R315	2004-004970	R-METAL(S):62Kohm,1%,1/8W,AA,TP,1.8x3.2m	
4 R812	2001-000780	R-CARBON:470ohm,5%,1/8W,AA,TP,1.8x3.2mm		4 R405	2008-000253	R-FUSIBLE(S):0.470HM,5%,1W,AF,	
4 R831	2001-000780	R-CARBON:470ohm,5%,1/8W,AA,TP,1.8x3.2mm		4 R414	2008-000253	R-FUSIBLE(S):0.470HM,5%,1W,AF,	
4 R919	2001-000780	R-CARBON:470ohm,5%,1/8W,AA,TP,1.8x3.2mm		4 R304	2008-000254	R-FUSIBLE(S):0.680HM,5%,2W,AF,	
4 R920	2001-000780	R-CARBON:470ohm,5%,1/8W,AA,TP,1.8x3.2mm		△ 4 RR01S	2008-000264	R-FUSIBLE(S):10HM,5%,1W,AF,TP,	
4 R931	2001-000780	R-CARBON:470ohm,5%,1/8W,AA,TP,1.8x3.2mm		4 R828	2008-000266	R-FUSIBLE(S):10HM,5%,2W,AF,TP,	
4 R933	2001-000780	R-CARBON:470ohm,5%,1/8W,AA,TP,1.8x3.2mm		4 R827	2008-000284	R-FUSIBLE(S):0.10HM,10%,2W,AF,TP,3.9X10M	
△ 4 RR09S	2001-000780	R-CARBON:470ohm,5%,1/8W,AA,TP,1.8x3.2mm		4 R413	2008-001018	R-FUSIBLE(S):0.470HM,10%,2W,AF	
4 R816	2001-000780	R-CARBON:470ohm,5%,1/8W,AA,TP,1.8x3.2mm		4 R424	2008-001018	R-FUSIBLE(S):0.470HM,10%,2W,AF	
4 R244	2001-000786	R-CARBON:47KOHM,5%,1/8W,AA,TP,		4 R425	2008-001018	R-FUSIBLE(S):0.470HM,10%,2W,AF	
4 R210	2001-000812	R-CARBON:5.6Kohm,5%,1/8W,AA,TP,1.8x3.2mm		4 R829	2008-001029	R-FUSIBLE(S):5.60HM,5%,2W,AF,T	
4 R106	2001-000864	R-CARBON:56Kohm,5%,1/8W,AA,TP,1.8x3.2mm		4 C424	2201-000132	C-CERAMIC,DISC:100PF,10%,500V,Y5P,6X3MM,	
4 R824	2001-000864	R-CARBON:56Kohm,5%,1/8W,AA,TP,1.8x3.2mm		4 C656	2201-000304	C-CERAMIC,DISCO.001nF,0.25pF,50V,NPO,TP	
4 R917	2001-000878	R-CARBON:6.2KOHM,5%,1/8W,AA,TP		4 C657	2201-000304	C-CERAMIC,DISCO.001nF,0.25pF,50V,NPO,TP	
△ 4 RR04S	2001-000908	R-CARBON:62Kohm,5%,1/8W,AA,TP,1.8x3.2mm		4 C804	2201-000332	C-CERAMIC,AC:CK45PTAPGE250V222	
4 R923	2001-000924	R-CARBON:680hm,5%,1/8W,AA,TP,1.8x3.2mm		4 C805	2201-000332	C-CERAMIC,AC:CK45PTAPGE250V222	
4 R241	2001-000938	R-CARBON:68ohm,5%,1/8W,AA,TP,1.8x3.2mm		4 C828	2201-000374	C-CERAMIC,DISC:220pF,5%,50V,CH,TP,12.5x3	
4 R709	2001-000938	R-CARBON:68ohm,5%,1/8W,AA,TP,1.8x3.2mm		4 C814	2201-000406	C-CERAMIC,HIC:CK45(T)B2KV271-K	
4 R913	2001-000947	R-CARBON:7.5KOHM,5%,1/8W,AA,TP		4 C401	2201-000556	C-CERAMIC,DISC:470PF,10%,500V,	
4 C251	2001-000969	R-CARBON:750HM,5%,1/8W,AA,TP,1		4 C403	2201-000556	C-CERAMIC,DISC:470PF,10%,500V,	
4 C253	2001-000969	R-CARBON:750HM,5%,1/8W,AA,TP,1		4 C421	2201-000556	C-CERAMIC,DISC:470PF,10%,500V,	
4 R242	2001-000969	R-CARBON:750HM,5%,1/8W,AA,TP,1		△ 4 CR01S	2201-000556	C-CERAMIC,DISC:470PF,10%,500V,	
4 R704	2001-000969	R-CARBON:750HM,5%,1/8W,AA,TP,1		4 C601	2201-000558	C-CERAMIC,DISC:470PF,10%,500V,Y	
4 R705	2001-000969	R-CARBON:750HM,5%,1/8W,AA,TP,1		4 C419	2201-000599	C-CERAMIC,DISC:560PF,10%,500V,	
4 R719	2001-000969	R-CARBON:750HM,5%,1/8W,AA,TP,1		4 C817	2201-000599	C-CERAMIC,DISC:560PF,10%,500V,	
4 R720	2001-000969	R-CARBON:750HM,5%,1/8W,AA,TP,1		4 C819	2201-000599	C-CERAMIC,DISC:560PF,10%,500V,	
△ 4 RR06S	2001-000977	R-CARBON:8.2Kohm,5%,1/8W,AA,TP,1.8x3.2m		4 C822	2201-000599	C-CERAMIC,DISC:560PF,10%,500V,	
4 L905	2001-000995	R-CARBON:8200HM,5%,1/8W,AA,TP,		4 C654	2201-000611	C-CERAMIC,DISC:56pF,5%,50V,NPO	
△ 4 L401	2001-001038	R-CARBON(S):0.560HM,5%,1/2W,AA,TP,2.4X6.		4 C910	2201-000980	C-CERAMIC,DISC:30PF,5%,50V,NPO,5.0X3.0.5	
4 R404	2001-001038	R-CARBON(S):0.560HM,5%,1/2W,AA,TP,2.4X6.		4 C911	2201-000980	C-CERAMIC,DISC:30PF,5%,50V,NPO,5.0X3.0.5	
4 R808	2001-001079	R-CARBON(S):150HM,5%,1/2W,AB,T		4 C224	2201-002031	C-CERAMIC,DISC:5pF,0.25pF,50V,NPO,TP,5x3	
4 R418	2001-001088	R-CARBON(S):1KOHM,5%,1/2W,AA,TP,2.4X6.4		4 C225	2201-002031	C-CERAMIC,DISC:5pF,0.25pF,50V,NPO,TP,5x3	
△ 4 RR430S	2001-001088	R-CARBON(S):1KOHM,5%,1/2W,AA,TP,2.4X6.4		4 C303	2201-002103	C-CERAMIC,DISC:0.015nF,5%,500V,NPO,TP,6.	
4 R421	2001-001093	R-CARBON(S):2.2KOHM,5%,1/2W,AA,TP,2.4X6.		4 C115	2202-000121	C-CERAMIC,MLC-AXIAL:100PF,10%,	
4 R820	2001-001096	R-CARBON(S):2.20HM,5%,1/2W,AA,		4 C116	2202-000121	C-CERAMIC,MLC-AXIAL:100PF,10%,	
4 R818	2001-001113	R-CARBON(S):270KOHM,5%,1/2W,AA		4 C244	2202-000121	C-CERAMIC,MLC-AXIAL:100PF,10%,	
4 R432	2001-001122	R-CARBON/METALFLIM:RD1/2T3.9K-		4 C245	2202-000121	C-CERAMIC,MLC-AXIAL:100PF,10%,	
4 R429	2001-001139	R-CARBON(S):39KOHM,5%,1/2W,AA,		4 C113	2202-000127	C-CERAMIC,MLC-AXIAL:10NF,+80-2	
4 R805	2001-001150	R-CARBON(S):470KOHM,5%,1/2W,AA		4 C246	2202-000210	C-CERAMIC,MLC-AXIAL:270pF,10%,50V,Y5P,TP	
4 R806	2001-001150	R-CARBON(S):470KOHM,5%,1/2W,AA		4 C248	2202-000210	C-CERAMIC,MLC-AXIAL:270pF,10%,50V,Y5P,TP	
4 R813	2001-001153	R-CARBON(S):470HM,5%,1/2W,AA,T		4 C627	2202-000231	C-CERAMIC,MLC-AXIAL:330PF,10%,50V,Y5P,3.	
4 R832	2001-001153	R-CARBON(S):470HM,5%,1/2W,AA,T		4 C629	2202-000231	C-CERAMIC,MLC-AXIAL:330PF,10%,50V,Y5P,3.	
4 R423	2001-001155	R-CARBON(S):5.6ohm,5%,1/2W,AA,TP,2.4x6.		4 C638	2202-000231	C-CERAMIC,MLC-AXIAL:330PF,10%,50V,Y5P,3.	
4 R810	2001-001178	R-CARBON(S):6800HM,5%,1/2W,AA,		4 C639	2202-000231	C-CERAMIC,MLC-AXIAL:330PF,10%,50V,Y5P,3.	
4 R428	2001-001184	R-CARBON(S):750KOHM,5%,1/2W,AB		4 C642	2202-000231	C-CERAMIC,MLC-AXIAL:330PF,10%,50V,Y5P,3.	
△ 4 RP802S	2002-001010	R-COMPOSITION:1.8MOHM,5%,1/2W,AA,TP,3.7X		4 C644	2202-000231	C-CERAMIC,MLC-AXIAL:330PF,10%,50V,Y5P,3.	
△ 4 RY802S	2002-001013	R-COMPOSITION:4.7MOhm,5%,1/2W,AA,TP,3.7X		4 C701	2202-000231	C-CERAMIC,MLC-AXIAL:330PF,10%,50V,Y5P,3.	
4 R426	2003-000540	R-METALOXIDE(S):1KOHM,5%,2W,AD		4 C709	2202-000243	C-CERAMIC,MLC-AXIAL:33pF,5%,50	
4 R401	2003-000586	R-METALOXIDE(S):22KOHM,5%,2W,A		4 C710	2202-000243	C-CERAMIC,MLC-AXIAL:33pF,5%,50	
4 R402	2003-000586	R-METALOXIDE(S):22KOHM,5%,2W,A		4 C711	2202-000243	C-CERAMIC,MLC-AXIAL:33pF,5%,50	
4 R233	2003-000592	R-METALOXIDE(S):220HM,5%,2W,AD		4 C647	2202-000286	C-CERAMIC,MLC-AXIAL:56pF,5%,50	
4 R434	2003-000664	R-METAL OXIDE(S):330HM,5%,2W,AF,TP,4X12M		4 C903	2202-000719	C-CERAMIC,MLC-AXIAL:6.8nF,20%,16V,Y5R,TP	
4 R802	2003-001025	R-METALOXIDE(S):15KOHM,5%,2W,A		4 C211	2202-000796	C-CERAMIC,MLC-AXIAL:1NF,10%,50	
4 R803	2003-001025	R-METALOXIDE(S):15KOHM,5%,2W,A		4 C607	2202-000796	C-CERAMIC,MLC-AXIAL:1NF,10%,50	
4 R804	2003-001025	R-METALOXIDE(S):15KOHM,5%,2W,A		4 C608	2202-000796	C-CERAMIC,MLC-AXIAL:1NF,10%,50	
4 R433	2003-001042	R-METALOXIDE(S):5.6KOHM,5%,2W,AF,TP,3.9X		4 C905	2202-000796	C-CERAMIC,MLC-AXIAL:1NF,10%,50	
4 R403	2003-001091	R-METALOXIDE:RS2RT(S)100-J10R		4 C632	2202-000806	C-CERAMIC,MLC-AXIAL:220pF,10%,50V,Y5P,TP	
4 R436	2003-002008	R-METAL OXIDE(S):18KOHM,5%,2W,AF,TP,3.9X		4 C247	2202-000849	C-CERAMIC,MLC-AXIAL:18pF,5%,50V,CH,TP,3.	
4 R409	2003-002009	R-METALOXIDE(S):3900HM,5%,2W,A		4 C908	2202-000863	C-CERAMIC;CKOAX7R50VT561-KUP050561	
4 R410	2003-002009	R-METALOXIDE(S):3900HM,5%,2W,A		4 C218	2202-002037	C-CERAMIC,MLC-AXIAL:100NF,+80-20	
4 R305	2003-002157	R-METAL OXIDE:2200HM,5%,2W,AG,TP,6X16MM		4 C219	2202-002037	C-CERAMIC,MLC-AXIAL:100NF,+80-20	
4 R306	2003-002157	R-METAL OXIDE:2200HM,5%,2W,AG,TP,6X16MM		4 C220	2202-002037	C-CERAMIC,MLC-AXIAL:100NF,+80-20	
4 R835	2003-002211	R-METALOXIDE(S):91Kohm,5%,2W,AG,TP,3x		4 C252	2202-002037	C-CERAMIC,MLC-AXIAL:100NF,+80-20	
4 R836	2003-002211	R-METALOXIDE(S):91Kohm,5%,2W,AG,TP,3x		4 C254	2202-002037	C-CERAMIC,MLC-AXIAL:100NF,+80-20	
4 R212	2004-000218	R-METAL:10KOHM,1%,1/8,1.8X3.2M		4 C901	2202-002037	C-CERAMIC,MLC-AXIAL:100NF,+80-20	
△ 4 RR05S	2004-000531	R-METAL:20Kohm,1%,1/2W,AA,TP,3.3x9mm		4 C919	2202-002037	C-CERAMIC,MLC-AXIAL:100NF,+80-20	
4 R313	2004-001137	R-METAL:6.8KOHM,1%,1/8W,AA,TP,1.8*3.2M		4 C921	2202-002037	C-CERAMIC,MLC-AXIAL:100NF,+80-20	

Electrical Parts List

Loc. No.	Code No.	Description ; Specification	Remark	Loc. No.	Code No.	Description ; Specification	Remark
4 C922	2202-002037	C-CERAMIC,MLC-AXIAL;100NF,+80-20		4 C422	2401-001527	C-AL:47UF,20%,250V,HR,13X25MM,	
4 C649	2301-000108	C-FILM,PEF;1.5NF,5%,50V,6.5X3.0X5.5MM,5M		4 C634	2401-001840	C-AL:100UF,20%,16V,GP,TP,6.3X1	
4 C821	2301-000192	C-FILM,PEF;1NF,5%,50V,5.3X10MM		4 C832	2401-001840	C-AL:100UF,20%,16V,GP,TP,6.3X1	
4 C902	2301-000192	C-FILM,PEF;1NF,5%,50V,5.3X10MM		4 C838	2401-001840	C-AL:100UF,20%,16V,GP,TP,6.3X1	
4 C212	2301-000224	C-FILM,PEF;22NF,5%,50V,7.4X3.9		4 C913	2401-001840	C-AL:100UF,20%,16V,GP,TP,6.3X1	
4 C416	2301-000224	C-FILM,PEF;22NF,5%,50V,7.4X3.9		4 C915	2401-001840	C-AL:100UF,20%,16V,GP,TP,6.3X1	
4 C411	2301-000232	C-FILM,PEF;3.3NF,5%,50V,8.1X4.		4 C918	2401-001840	C-AL:100UF,20%,16V,GP,TP,6.3X1	
4 C213	2301-000310	C-FILM,PEF;68NF,5%,50V,8.0X8.5		4 C209	2401-001914	C-AL:1uF,20%,50V,BP,TP,5x11,5	
4 C412	2301-000313	C-FILM,PEF;8.2NF,5%,100V,7X3.2		4 C612	2401-001914	C-AL:1uF,20%,50V,BP,TP,5x11,5	
4 C306	2301-000342	C-FILM,PEF;2.2nF,5%,50V,TP,7.4x3.9x13mm		4 C613	2401-001914	C-AL:1uF,20%,50V,BP,TP,5x11,5	
4 C228	2301-000356	C-FILM,PEF;47nF,5%,50V,TP,7.5x4.0x6.5,5mm		4 C626	2401-001989	C-AL:4.7uF,20%,50V,BP,TP,5x11,5	
4 C230	2301-000356	C-FILM,PEF;47nF,5%,50V,TP,7.5x4.0x6.5,5mm		4 C628	2401-001989	C-AL:4.7uF,20%,50V,BP,TP,5x11,5	
4 C809	2301-000356	C-FILM,PEF;47nF,5%,50V,TP,7.5x4.0x6.5,5mm		4 C827	2401-002212	C-AL:10UF,20%,25V,WT,TP,5X11,5	
4 C810	2301-000356	C-FILM,PEF;47nF,5%,50V,TP,7.5x4.0x6.5,5mm		4 C840	2401-002212	C-AL:10UF,20%,25V,WT,TP,5X11,5	
4 C811	2301-000356	C-FILM,PEF;47nF,5%,50V,TP,7.5x4.0x6.5,5mm		4 C202	2401-002235	C-ELECTROLYTIC;CE04W(T)16V10M	
4 C101	2301-000383	C-FILM,PEF;10nf,5%,50V,TP,6x7x3.2mm,5mm		4 C205	2401-002235	C-ELECTROLYTIC;CE04W(T)16V10M	
4 C103	2301-000383	C-FILM,PEF;10nf,5%,50V,TP,6x7x3.2mm,5mm		4 C207	2401-002235	C-ELECTROLYTIC;CE04W(T)16V10M	
4 C105	2301-000383	C-FILM,PEF;10nf,5%,50V,TP,6x7x3.2mm,5mm		4 C215	2401-002235	C-ELECTROLYTIC;CE04W(T)16V10M	
4 C909	2301-000383	C-FILM,PEF;10nf,5%,50V,TP,6x7x3.2mm,5mm		4 C231	2401-002235	C-ELECTROLYTIC;CE04W(T)16V10M	
4 C415	2301-000445	C-FILM,PEF;4.7nF,5%,50V,TP,5.5x7x3mm,5mm		4 C239	2401-002235	C-ELECTROLYTIC;CE04W(T)16V10M	
4 C610	2301-000445	C-FILM,PEF;4.7nF,5%,50V,TP,5.5x7x3mm,5mm		4 C603	2401-002235	C-ELECTROLYTIC;CE04W(T)16V10M	
4 C611	2301-000445	C-FILM,PEF;4.7nF,5%,50V,TP,5.5x7x3mm,5mm		4 C630	2401-002235	C-ELECTROLYTIC;CE04W(T)16V10M	
4 C420	2301-001065	C-FILM,MPPF;47NF,55,630V,TP,19		4 C631	2401-002235	C-ELECTROLYTIC;CE04W(T)16V10M	
4 C425	2301-001259	C-FILM,MPPF;100nf,5%,400V,TP,19x8x16,7.5		4 C645	2401-002235	C-ELECTROLYTIC;CE04W(T)16V10M	
4 C409	2301-001268	C-FILM,PFP;33nF,5%,630V,TP,20x11x17,7.5		4 C652	2401-002235	C-ELECTROLYTIC;CE04W(T)16V10M	
4 C807	2301-001397	C-FILM,PFP;2.2nF,5%,1.2kV,TP,15x8.5x13.5		4 C920	2401-002235	C-ELECTROLYTIC;CE04W(T)16V10M	
4 C305	2305-000149	C-FILM,CF922N100VT104-J-40/105		△ 4 CR02S	2401-002235	C-ELECTROLYTIC;CE04W(T)16V10M	
4 C304	2305-000285	C-FILM,MPEF;220NF,5%,100V,-5M		△ 4 CR03S	2401-002235	C-ELECTROLYTIC;CE04W(T)16V10M	
4 C408	2305-000382	C-FILM,MPEF;4.7NF,5%,400V,TP,-5MM.		4 C427	2401-002267	C-AL:2.2UF,20%,250V,GP,8X12MM,	
4 C233	2305-000411	C-FILM,MPEF;470NF,5%,50V,7.3X4		4 C835	2401-002289	C-ELEC;CE04-40/+10535VT471-MW1	
4 C234	2305-000411	C-FILM,MPEF;470NF,5%,50V,7.3X4		4 C621	2401-002458	C-AL:1000UF,20%,35V,GP,16X25MM	
4 C235	2305-000411	C-FILM,MPEF;470NF,5%,50V,7.3X4		4 C414	2401-002597	C-AL:220uF,20%,35V,GP,TP,10x12.5,5	
4 C236	2305-000411	C-FILM,MPEF;470NF,5%,50V,7.3X4		4 C418	2401-002597	C-AL:220uF,20%,35V,GPT,10x12.5,5	
4 C308	2305-000411	C-FILM,MPEF;470NF,5%,50V,7.3X4		4 C229	2401-002619	C-AL:47uF,20%,25V,GP,TP,5x11,5	
4 C907	2305-000411	C-FILM,MPEF;470NF,5%,50V,7.3X4		4 C833	2401-002619	C-AL:47uF,20%,25V,GP,TP,5x11,5	
△ 4 C904S	2305-000412	C-FILM,MPEF;470NF,5%,63V,-5MM		4 C808	2401-003046	C-AL:47uF,20%,50V,WT,TP,6.3x11,2.5	
4 C206	2305-000665	C-FILM;104J, 60V,5MM TAPING		4 C823	2401-003046	C-AL:47uF,20%,50V,WT,TP,6.3x11,2.5	
4 C214	2305-000665	C-FILM;104J, 60V,5MM TAPING		4 C824	2401-003046	C-AL:47uF,20%,50V,WT,TP,6.3x11,2.5	
4 C216	2305-000665	C-FILM;104J, 60V,5MM TAPING		4 C104	2401-003578	C-AL:1000UF,20%,10V,GP,TP,8x20mm,5	
4 C240	2305-000665	C-FILM;104J, 60V,5MM TAPING		4 CW901	2503-000156	C-NETWORK:100pFx4,20+,50V	
4 C605	2305-000665	C-FILM;104J, 60V,5MM TAPING		4 J401	2701-000114	INDUCTOR-AXIAL;10UH,10%,2.5X3.	
4 C620	2305-000665	C-FILM;104J, 60V,5MM TAPING		4 L108	2701-000114	INDUCTOR-AXIAL;10UH,10%,2.5X3.	
4 C635	2305-000665	C-FILM;104J, 60V,5MM TAPING		4 L109	2701-000114	INDUCTOR-AXIAL;10UH,10%,2.5X3.	
4 C646	2305-000665	C-FILM;104J, 60V,5MM TAPING		4 L202	2701-000114	INDUCTOR-AXIAL;10UH,10%,2.5X3.	
4 C825	2305-000665	C-FILM;104J, 60V,5MM TAPING		4 L301	2701-000114	INDUCTOR-AXIAL;10UH,10%,2.5X3.	
4 C829	2305-000665	C-FILM;104J, 60V,5MM TAPING		4 L406	2701-000114	INDUCTOR-AXIAL;10UH,10%,2.5X3.	
4 C831	2305-000665	C-FILM;104J, 60V,5MM TAPING		4 L907	2701-000114	INDUCTOR-AXIAL;10UH,10%,2.5X3.	
4 C837	2305-000665	C-FILM;104J, 60V,5MM TAPING		4 L101	2701-000115	INDUCTOR-AXIAL;10UH,10%,2.8X7M	
4 C839	2305-000665	C-FILM;104J, 60V,5MM TAPING		4 L103	2701-000115	INDUCTOR-AXIAL;10UH,10%,2.8X7M	
4 C914	2305-000665	C-FILM;104J, 60V,5MM TAPING		4 L712	2701-000142	INDUCTOR-AXIAL;1UH,10%,2.5X3.4	
4 C916	2305-000665	C-FILM;104J, 60V,5MM TAPING		4 L713	2701-000142	INDUCTOR-AXIAL;1UH,10%,2.5X3.4	
4 C637	2401-000027	C-AL:4.7UF,20%,50V,GP,5*11MM,5MEA		4 L714	2701-000142	INDUCTOR-AXIAL;1UH,10%,2.5X3.4	
4 C640	2401-000027	C-AL:4.7UF,20%,50V,GP,5*11MM,5MEA		4 L208	2701-000146	INDUCTOR-AXIAL;2.2UF,10%,2.5X3.4MM	
4 C641	2401-000027	C-AL:4.7UF,20%,50V,GP,5*11MM,5MEA		4 L102	2701-000159	INDUCTOR-RAXIAL;22uH,10%,4.2x9.8mm	
4 C643	2401-000027	C-AL:4.7UF,20%,50V,GP,5*11MM,5MEA		4 L209	2701-000168	INDUCTOR-RAXIAL;3.3uH,5%,2.5x3.4mm	
4 C912	2401-000027	C-AL:4.7UF,20%,50V,GP,5*11MM,5MEA		4 L210	2701-000168	INDUCTOR-RAXIAL;3.3uH,5%,2.5x3.4mm	
4 C816	2401-000262	C-AL:100UF,20%,160V,GP,16X25MM,5MM,		4 L604	2701-000169	INDUCTOR-RAXIAL;3.9uH,10%,2.5x3.4mm	
4 C210	2401-000287	C-AL:100UF,20%,16V,WT,6X11MM,5		4 L605	2701-000177	INDUCTOR-AXIAL;33uH,10%,2.5X3.4MM	
4 C826	2401-000287	C-AL:100UF,20%,16V,WT,6X11MM,5		4 L606	2701-000177	INDUCTOR-AXIAL;33uH,10%,2.5X3.4MM	
4 C302	2401-000360	C-AL:100UF,20%,50V,GP,8X11MM,5		4 L607	2701-000177	INDUCTOR-AXIAL;33uH,10%,2.5X3.4MM	
4 C307	2401-000360	C-AL:100UF,20%,50V,GP,8X11MM,5		4 L608	2701-000177	INDUCTOR-AXIAL;33uH,10%,2.5X3.4MM	
4 C413	2401-000493	C-AL:10UF,20%,50V,WT,5X11MM,5M		4 L705	2701-000177	INDUCTOR-AXIAL;33uH,10%,2.5X3.4MM	
4 C617	2401-000493	C-AL:10UF,20%,50V,WT,5X11MM,5M		4 L706	2701-000177	INDUCTOR-AXIAL;33uH,10%,2.5X3.4MM	
4 C917	2401-000493	C-AL:10UF,20%,50V,WT,5X11MM,5M		4 J919	2701-000183	INDUCTOR-AXIAL;39uH,5%,2.4x3.4mm	
4 C201	2401-000603	C-AL:1UF,20%,50V,GP,5X11MM,5MM		4 L204	2701-000184	INDUCTOR-AXIAL;4.7UH,10%,2.5X3.4MM	
4 C301	2401-000603	C-AL:1UF,20%,50V,GP,5X11MM,5MM		4 L902	2701-000184	INDUCTOR-AXIAL;4.7UH,10%,2.5X3.4MM	
4 C604	2401-000603	C-AL:1UF,20%,50V,GP,5X11MM,5MM		4 L908	2701-000191	INDUCTOR-AXIAL;47UH,10%,2.5X3.4MM	
4 C106	2401-000611	C-AL:1UF,20%,50V,WT,5X11MM,5MM		4 L909	2701-000191	INDUCTOR-AXIAL;47UH,10%,2.5X3.4MM	
4 C841	2401-000611	C-AL:1UF,20%,50V,WT,5X11MM,5MM		4 L203	2702-001094	INDUCTOR-RADIAL;10uH,10%,6x4mm	
4 C188	2401-000722	C-AL:2200uF,20%,25V,WT,TP,16x25,7.5		4 L601	2702-001094	INDUCTOR-RADIAL;10uH,10%,6x4mm	
4 C237	2401-000914	C-AL:22UF,20%,16V,GP,5X11MM,5,TP		4 L609	2702-001094	INDUCTOR-RADIAL;10uH,10%,6x4mm	
4 C208	2401-001026	C-AL:3.3UF,20%,50V,GP,5X11MM,5		4 L901	2702-001094	INDUCTOR-RADIAL;10uH,10%,6x4mm	
4 C217	2401-001026	C-AL:3.3UF,20%,50V,GP,5X11MM,5		4 L903	2702-001094	INDUCTOR-RADIAL;10uH,10%,6x4mm	
4 C636	2401-001026	C-AL:3.3UF,20%,50V,GP,5X11MM,5		4 L904	2702-001094	INDUCTOR-RADIAL;10uH,10%,6x4mm	
4 C402	2401-001397	C-AL:470UF,20%,25V,GP,10X16MM,		4 L216	2702-001094	INDUCTOR-RADIAL;10uH,10%,6x4mm	
4 C404	2401-001397	C-AL:470UF,20%,25V,GP,10X16MM,		4 X201	2801-003432	CRYSTAL-UNIT;20.25MHZ,30PPM,28-AAM,13P	
4 C102	2401-001513	C-AL:47UF,20%,16V,WT,5X11MM,5M		4 X901	2801-003728	CRYSTAL-UNIT;6MHz,30ppm,28AAM,20pf,40oh	

Electrical Parts List

Loc. No.	Code No.	Description ; Specification	Remark	Loc. No.	Code No.	Description ; Specification	Remark
4 EY850	AA60-40011A	EYELET:-,ID2.0,OD2.8,-,-,BST		3 0504	0501-000283	TRANSISTOR;KSA539-Y(TAPG)/YTAM	
4 EY851	AA60-40011A	EYELET:-,ID2.0,OD2.8,-,-,BST		3 QG01	0501-000283	TRANSISTOR;KSA539-Y(TAPG)/YTAM	
4 EY853	AA60-40011A	EYELET:-,ID2.0,OD2.8,-,-,BST		3 OF03	0501-000369	TRANSISTOR;KSC2331-Y(TAPG)	
4 EY854	AA60-40011A	EYELET:-,ID2.0,OD2.8,-,-,BST		3 QF01	0501-000389	TRANSISTOR;KSC815-Y(TAPG)/YTAM	
4 EY855	AA60-40011A	EYELET:-,ID2.0,OD2.8,-,-,BST		3 QF02	0501-000389	TRANSISTOR;KSC815-Y(TAPG)/YTAM	
4 EY856	AA60-40011A	EYELET:-,ID2.0,OD2.8,-,-,BST		3 OG02	0502-000244	TR-POWER;KSA940,PNP,-150V,-150	
4 EY857	AA60-40011A	EYELET:-,ID2.0,OD2.8,-,-,BST		3 OG03	0502-001007	TR-POWER;KSC2073-H2,NPN,150V,1	
4 EY858	AA60-40011A	EYELET:-,ID2.0,OD2.8,-,-,BST		3 ICG01	1201-000191	IC;MC4558C	
4 EY859	AA60-40011A	EYELET:-,ID2.0,OD2.8,-,-,BST		3 R503	2001-000085	R-CARBON(S);100KOHM,5%,1/2W,AA	
4 EY860	AA60-40011A	EYELET:-,ID2.0,OD2.8,-,-,BST		3 R508	2001-000085	R-CARBON(S);100KOHM,5%,1/2W,AA	
4 EY861	AA60-40011A	EYELET:-,ID2.0,OD2.8,-,-,BST		3 R513	2001-000085	R-CARBON(S);100KOHM,5%,1/2W,AA	
4 EL401	AA60-40011B	EYELET:-,ID2.2,OD3.2,-,-,BSP		3 RF09	2001-000221	R-CARBON;1.2KOHM,5%,1/8W,AA,TP	
4 EL402	AA60-40011B	EYELET:-,ID2.2,OD3.2,-,-,BSP		3 RF12	2001-000221	R-CARBON;1.2KOHM,5%,1/8W,AA,TP	
4 EL404	AA60-40011B	EYELET:-,ID2.2,OD3.2,-,-,BSP		3 RF10	2001-000241	R-CARBON;1.5KOHM,5%,1/8W,AA,TP	
4 EL405	AA60-40011B	EYELET:-,ID2.2,OD3.2,-,-,BSP		3 RF11	2001-000241	R-CARBON;1.5KOHM,5%,1/8W,AA,TP	
4 EL406	AA60-40011B	EYELET:-,ID2.2,OD3.2,-,-,BSP		3 RF08	2001-000313	R-CARBON;11KOHM,5%,1/8W,AA,TP	
4 EL802	AA60-40011B	EYELET:-,ID2.2,OD3.2,-,-,BSP		3 RF03	2001-000362	R-CARBON;150OHM,5%,1/8W,AA,TP	
4 EL803	AA60-40011B	EYELET:-,ID2.2,OD3.2,-,-,BSP		3 R542	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
4 EL805	AA60-40011B	EYELET:-,ID2.2,OD3.2,-,-,BSP		3 R543	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
4 EL806	AA60-40011B	EYELET:-,ID2.2,OD3.2,-,-,BSP		3 R544	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
4 EL807	AA60-40011B	EYELET:-,ID2.2,OD3.2,-,-,BSP		3 R546	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
4 EL808	AA60-40011B	EYELET:-,ID2.2,OD3.2,-,-,BSP		3 R522	2001-000449	R-CARBON;2.2KOHM,5%,1/8W,AA,TP	
4 EL809	AA60-40011B	EYELET:-,ID2.2,OD3.2,-,-,BSP		3 RF04	2001-000449	R-CARBON;2.2KOHM,5%,1/8W,AA,TP	
4 EL810	AA60-40011B	EYELET:-,ID2.2,OD3.2,-,-,BSP		3 R504	2001-000515	R-CARBON;220OHM,5%,1/8W,AA,TP	
4 EL811	AA60-40011B	EYELET:-,ID2.2,OD3.2,-,-,BSP		3 R509	2001-000515	R-CARBON;220OHM,5%,1/8W,AA,TP	
4 GT101	AA60-40014A	PIN-GT,ASSY;1P,-,-,AUTO		3 R539	2001-000515	R-CARBON;220OHM,5%,1/8W,AA,TP	
4 GT102	AA60-40014A	PIN-GT,ASSY;1P,-,-,AUTO		3 R521	2001-000522	R-CARBON;22KOHM,5%,1/8W,AA,TP	
4 GT103	AA60-40014A	PIN-GT,ASSY;1P,-,-,AUTO		3 RF05	2001-000522	R-CARBON;22KOHM,5%,1/8W,AA,TP	
4 GT104	AA60-40014A	PIN-GT,ASSY;1P,-,-,AUTO		3 RF02	2001-000734	R-CARBON;4.7KOHM,5%,1/8W,AA,TP	
4 GT301	AA60-40014A	PIN-GT,ASSY;1P,-,-,AUTO		3 RF07	2001-000904	R-CARBON;6200HM,5%,1/8W,AA,TP,1.8X3.2MM	
4 GT302	AA60-40014A	PIN-GT,ASSY;1P,-,-,AUTO		3 RF06	2001-000989	R-CARBON;820Kohm,5%,1/8W,AA,TP,1.8X3.2mm	
4 GT401	AA60-40014A	PIN-GT,ASSY;1P,-,-,AUTO		3 R517	2001-001062	R-CARBON(S);10MOHM,5%,1/2W,AA,	
4 GT402	AA60-40014A	PIN-GT,ASSY;1P,-,-,AUTO		3 RF14	2001-001071	R-CARBON(S);12KOHM,5%,1/2W,AA,	
4 GT409	AA60-40014A	PIN-GT,ASSY;1P,-,-,AUTO		3 R501	2001-001088	R-CARBON(S);1KOHM,5%,1/2W,AA,TP,2.4X6.4	
4 GT410	AA60-40014A	PIN-GT,ASSY;1P,-,-,AUTO		3 R506	2001-001088	R-CARBON(S);1KOHM,5%,1/2W,AA,TP,2.4X6.4	
4 GT411	AA60-40014A	PIN-GT,ASSY;1P,-,-,AUTO		3 R511	2001-001088	R-CARBON(S);1KOHM,5%,1/2W,AA,TP,2.4X6.4	
4 GT412	AA60-40014A	PIN-GT,ASSY;1P,-,-,AUTO		3 R502	2001-001093	R-CARBON(S);2.2KOHM,5%,1/2W,AA,TP,2.4X6.	
4 GT801	AA60-40014A	PIN-GT,ASSY;1P,-,-,AUTO		3 R507	2001-001093	R-CARBON(S);2.2KOHM,5%,1/2W,AA,TP,2.4X6.	
4 GT802	AA60-40014A	PIN-GT,ASSY;1P,-,-,AUTO		3 R512	2001-001093	R-CARBON(S);2.2KOHM,5%,1/2W,AA,TP,2.4X6.	
4 GT803	AA60-40014A	PIN-GT,ASSY;1P,-,-,AUTO		3 RF15	2001-001100	R-CARBON(S);2.70HM,5%,1/2W,AA,	
4 GT804	AA60-40014A	PIN-GT,ASSY;1P,-,-,AUTO		3 RF17	2001-001100	R-CARBON(S);2.70HM,5%,1/2W,AA,	
4 GT805	AA60-40014A	PIN-GT,ASSY;1P,-,-,AUTO		3 RG06	2001-001100	R-CARBON(S);2.70HM,5%,1/2W,AA,	
4 GT806	AA60-40014A	PIN-GT,ASSY;1P,-,-,AUTO		3 RG07	2001-001100	R-CARBON(S);2.70HM,5%,1/2W,AA,	
4 L/LINE	AA68-01544A	LABEL-LINE,ALL MDL COMMON		3 RG05	2001-001163	R-CARBON(S);5600HM,5%,1/2W,AA,	
4 R621	2001-000890	R-CARBON;6.8KOHM,5%,1/8W,AA,TP		3 RG08	2001-001163	R-CARBON(S);5600HM,5%,1/2W,AA,	
4 R622	2001-000890	R-CARBON;6.8KOHM,5%,1/8W,AA,TP		3 RF13	2001-001179	R-CARBON(S);68KOHM,5%,1/2W,AA,	
4 R908	2001-000449	R-CARBON;2.2KOHM,5%,1/8W,AA,TP		3 RF16	2001-001179	R-CARBON(S);68KOHM,5%,1/2W,AA,	
4 R906	2001-000449	R-CARBON;2.2KOHM,5%,1/8W,AA,TP		3 R519	2002-001009	R-COMPOSITION;2.7KOHM,10%,1/2W,AA,TP,3.7	
4 C410	2301-000213	C-FILM,PEF;220NF,5%,250V,21.5X		3 R505	2002-001017	R-COMPOSITION;1K,10%,1/2W,AA,TP,3.7x9.0m	
3 0204-000442	0204-000442	SOLVENT;CH3-CH5-CH396%IM-1000		3 R510	2002-001017	R-COMPOSITION;1K,10%,1/2W,AA,TP,3.7x9.0m	
3 0202-000008	0202-000008	SOLDER-WIRE;S63-S3.0,S63A,D3.63/37		3 R515	2002-001017	R-COMPOSITION;1K,10%,1/2W,AA,TP,3.7x9.0m	
3 0204-001024	0204-001024	FLUX;DF-96TVS,-,20%,-		3 RF18	2003-000458	R-METALOXIDE(S);1000HM,5%,2W,A	
3 0202-000187	0202-000187	SOLDER-WIREFLUX:-,RS60S,D1.2,6		3 RF23	2003-000746	R-METALOXIDE(S);560HM,5%,2W,AD	
3 SH+CW	AA65-30105B	CLAMP-WIRE;NYLON 66,V2,NTR,25MM,ALL MODE		3 RF24	2003-000746	R-METALOXIDE(S);560HM,5%,2W,AD	
3 SH+H/S	AA61-00462B	SUPPORT-HEAT-SINK;21A9,ABS,HB,GRAY		3 RF19	2003-001023	R-METALOXIDE(S);1200HM,5%,2W,A	
2 A/CRT	AA95-01158A	ASSY PCB CRT;KS3A,29FLAT,PAL		3 RF25	2003-002009	R-METALOXIDE(S);3900HM,5%,2W,A	
3 DF01	0401-000005	DIODE;1N4148,100V,300mA,1V,8nS,TAPING		3 R518	2003-002171	R-METAL OXIDE(S);150ohm,5%,2W,AG,TP,3.9x	
3 DF04	0401-000005	DIODE;1N4148,100V,300mA,1V,8nS,TAPING		3 RF20	2003-002214	R-METALOXIDE(S);680ohm,5%,2W,AG,TP,3x19	
3 DG01	0401-000005	DIODE;1N4148,100V,300mA,1V,8nS,TAPING		3 RF21	2003-002214	R-METALOXIDE(S);680ohm,5%,2W,AG,TP,3x19	
3 D502	0402-000132	DIODE-RECTIFIER;1N4004,400V,1A,DO-41		3 RF22	2003-002214	R-METALOXIDE(S);680ohm,5%,2W,AG,TP,3x19	
3 D507	0402-001105	DIODE-RECTIFIER;ERB43-04SV1,40		3 R527	2004-000433	R-METAL;1KOHM,1%,1/8W,AA,TP,1.	
3 D508	0402-001105	DIODE-RECTIFIER;ERB43-04SV1,40		3 R526	2004-000500	R-METAL;2.7Kohm,1%,1/8W,AA,TP,1.8x3.2mm	
3 D509	0402-001105	DIODE-RECTIFIER;ERB43-04SV1,40		3 RG01	2004-001397	R-METAL(S);4.7KOHM,1%,1/2W,AA,	
3 D510	0402-001105	DIODE-RECTIFIER;ERB43-04SV1,40		3 RG03	2004-001987	R-METAL;4.3KOHM,1%,1/2W,AA,TP,	
3 D511	0402-001105	DIODE-RECTIFIER;ERB43-04SV1,40		3 RG02	2004-002022	R-METAL;FILM;RM1/2T51K-F	
3 D512	0402-001105	DIODE-RECTIFIER;ERB43-04SV1,40		3 RG04	2004-002022	R-METAL;FILM;RM1/2T51K-F	
3 DF02	0402-001105	DIODE-RECTIFIER;ERB43-04SV1,40		3 R523	2008-000267	R-FUSIBLE(S);2.40HM,5%,2W,AA,TP,3.9x10	
3 DF03	0402-001105	DIODE-RECTIFIER;ERB43-04SV1,40		3 CF01	2201-000180	C-CERAMIC,DISC;10NF,10%,50V,5V,TP,6.5*3	
3 DZF01	0403-001039	DIODE ZENER;MA2560,56V,52-60V,1W,DO-41,T		3 C501	2201-000247	C-CERAMIC,DISC;15PF,5%,50V,CH,	
3 DZF02	0403-001039	DIODE ZENER;MA2560,56V,52-60V,1W,DO-41,T		3 C507	2201-000247	C-CERAMIC,DISC;15PF,5%,50V,CH,	
3 DZ503	0403-001211	DIODE-ZENER;MTZJ12B,11.44-12.03V,500MW,D		3 CF03	2201-000376	C-CERAMIC,DISC;220PF,5%,50V,SL,4X4MM,5MM	
3 RWK/CR	0403-001211	DIODE-ZENER;MTZJ12B,11.44-12.03V,500MW,D		3 CF06	2201-000516	C-CERAMIC,DISC;4.7NF,+100-0%,5	
3 DZ504	0403-001325	DIODE-ZENER;MTZJ15C,14.35-15.09V,500mW,D		3 CF08	2201-000604	C-CERAMIC,DISC;56PF,+100-0%,50	
3 DZ505	0403-001325	DIODE-ZENER;MTZJ15C,14.35-15.09V,500mW,D		3 CF04	2201-000653	C-CERAMIC,DISC;68PF,5%,50V,SL,4.0X3.5MM,	
3 DZG501	0403-001328	DIODE-ZENER;MTZJ22A,20.15-21.20V,500mW,D		3 C513	2201-000723	C-CERAMIC,DISC;4.7nF,20%,3KV,Y5U,TP,16x5	
3 Q502	0501-000283	TRANSISTOR;KSA539-Y(TAPG)/YTAM		3 C503	2201-002108	C-CERAMIC,DISC;1.5nF,10%,500V,B,TP8.5x3	
3 Q503	0501-000283	TRANSISTOR;KSA539-Y(TAPG)/YTAM		3 C506	2201-002108	C-CERAMIC,DISC;1.5nF,10%,500V,B,TP8.5x3	

Loc. No.	Code No.	Description ; Specification	Remark	Loc. No.	Code No.	Description ; Specification	Remark
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2 L/IND AA68-00524A LABEL-INDICATOR;A/P 90(G),CXJ1352X/XAA,U
 2 S/CRT AA61-01009A SUPPORT-CRT,29K7,HIPS,VO
 2 H/BLOC AA61-01066A HOLDER-C,BLOCK,29K7,HIPS,VO,BLK
 2 C-BLOC AA26-00069A TRANS FBT;FUJ-29C002C(S),DREAM3.4,-,-,
 2 HB+CBK AA60-10008A SCREW-TAPPING:-,TH,+,M3,L10,ZP
 2 L/SPK AA39-00102M LEAD-CONNECTOR,ASSY;4P,35155-0400,REC,80
 2 A/A-V AA96-00960A ASSY-PCB;A/V FRONT;KS3A,29
 3 BAND AA63-10002A BAND-TIE:-,NYLON66V2,-,L100,NTR,-,
 3 CN01A AA39-20068E LEAD CONNECTOR-ASSY:-,YBNH025-08,67096-0
 3 CN05A AA39-20069D LEAD-CONNECTOR,ASSY:-,YBNH025-
 3 CN06A AA39-00070A LEAD CONNECTOR-ASSY;4P,200mm,YBNH250-04,
 3 JE01 3722-000143 JACKPHONE;1P,3.4MM,,-,MBAG
 3 JR01 3722-001031 JACK-RCA;3P,3.6MM,#18,AU
 3 02VER AA41-10358C PCB-FRONT AV/CHASSIS-ALL,FR-1,L,C,1.6T,
 3 CA02 2202-000121 C-CERAMIC,MLC-AXIAL:100PF,10%,
 3 CA03 2202-000121 C-CERAMIC,MLC-AXIAL:100PF,10%,
 3 CA04 2202-000720 C-CERAMIC,MLC-AXIAL:8.2nF,20%,16V,Y5R,TP
 3 CA05 2202-000720 C-CERAMIC,MLC-AXIAL:8.2nF,20%,16V,Y5R,TP
 3 LA02 3812-000219 JUMPER-WIRE-SO,COPPER:TA0.6SN/52M/M(A
 3 LA03 3812-000219 JUMPER-WIRE-SO,COPPER:TA0.6SN/52M/M(A
 3 LA04 2701-000180 INDUCTOR-AXIAL:33UH,5%,2.5X3.4
 3 LA05 2701-000180 INDUCTOR-AXIAL:33UH,5%,2.5X3.4
 3 RA01 2001-000028 R-CARBON(S):1000HM,5%,1/2W,AB,
 3 RA02 2001-000028 R-CARBON(S):1000HM,5%,1/2W,AB,
 3 CA06 2401-003102 C-AL:100uF,20%,10V,GP,TP,5x11,5
 3 CA07 2401-003102 C-AL:100uF,20%,10V,GP,TP,5x11,5
 2 S/CRT AA60-00038A SPACER-CRT;PS,SHEET,T1.0,BLK,OD22,ID10.
 2 F/C AA64-02959A CABINET-FRONT;29K7,HIPS,VO,BLK,DG703P,SE
 3 KP AA64-02544A KNOB-POWER;29K7,ABS,HB,G3676
 3 KC AA64-02546A KNOB-CONTROL;29K7,ABS,HB,G3676
 3 WR AA64-02548A WINDOW-RMC,LED;29K7,PC,CLR
 3 SPRING AA61-60003J SPRING-CS:-,SUS304,0.5,OD6,H
 3 KC+CF 6003-001019 SCREW-TAPITIE;RH,+,B,M4,L12,ZPC(BLK),SWR
 3 WR+CF 6003-001019 SCREW-TAPITIE;RH,+,B,M4,L12,ZPC(BLK),SWR
 2 BCR+CF 6002-000522 SCREW-TAPPING;TH,+,2,M4,L15,ZP

ASSY-BOX

1 A/BOX AA92-05516A ASSY-BOX;KS3A,29K7,SEA/SECA
 2 L/BOX AA68-01542A LABEL;(UNIBOX),PAPER WHT ALLMD
 2 PCK AA69-00063A PACKING-CASE;29K7(SAMEX),D-3 AB,A1,750,6

ASSY-P/MATERIAL

1 A/PACK AA92-05517A ASSY-P/MATERIAL;KS3A,29K7,SEA/SECA
 2 BXTAPE 0203-001295 TAPE-OPP MASKING;1242,T0.06,W100,L91.4M,
 2 STAPLE AA60-40006A PIN-STAPLE:-,-,H18,33X17.8X2
 2 C/SET AA69-01564A CUSHION-SET;29K7,PS FOAMED,C=0.02
 2 PE-BAG AA69-01209A BAG;SHEET,25-27,W54,L60,FOAM,OEM.

ASSY CPT

1 A/CPT AA91-01356A ASSY CPT;TXL2791FX/XAA
 △ 2 CRT AA03-00360A CRT COLOR:A68QCP891X100(M),+380MG,1.11MH
 2 D-COIL AA27-20002Q COILDEGAUSSING:-,29,140HM,70T
 2 CDCOIL AA65-30017A CLAMP-D,COIL:-,NYLON-66,VO,NTR,DADH300,2
 2 CDCOIL AA65-30113A CLAMP-D,COIL:NYLON66,V2,BLK,TVI25-29,-
 2 A/TBC AA98-70011A ASSY-TBC, WIRE(P):-,29,NTSC,PAL,2P

ASSY-LABEL

1 A/LABE AA92-05443A ASSY-LABEL;KS3A,27,SEA
 2 INLAYB AA64-00892F INLAY BACK;D2,D3,RCA9P+DVD,PS SHEET,T0.3
 2 L/RAT AA68-02445A LABEL-RATING;ART-PAPER;60X90MM,V17A,77HN
 2 LCRT AA68-01557A LABEL ENERGY;STAR,STATIC FREE FILM
 2 L/SET AA68-50394T LABEL-D.H.H.S;TSK2792FX/XAA,A/P120(G),-

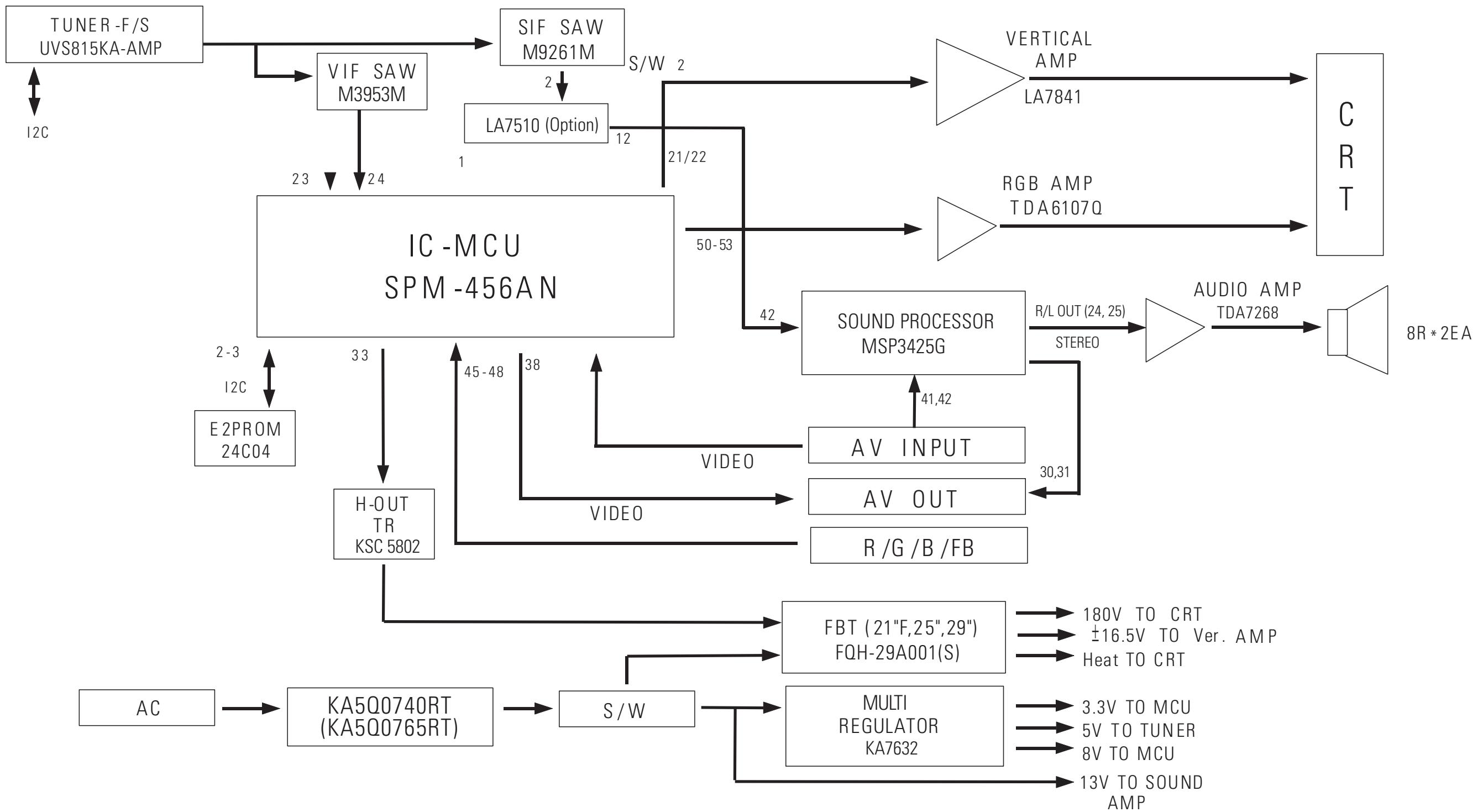
ASSY-ACCESSORY

1 A/ACCE AA92-05575A ASSY-ACCESSORY;KS3A,27,SEA
 2 AC-TAP 0203-001279 TAPE-OPP MASKING:#232,T0.14,W15,L50000,Y
 2 BATT 4301-000120 BATTERY-MN;1.5V,-,AA
 2 C/RCA AA39-40001B PATCH-CORD;3P,3P1500MMRED,WH,YEL,500
 2 RMT AA59-10113H REMOCON;DP,TM59,-,-,-,-,AA59-10110H,
 2 C/WARR AA68-01433A CARD WARRANTY;TV/TVCR,ALL,W/P100(G),B5,
 2 B/WARR AA68-01561A CARD WARRANTY;BLOCK,STATEMENT ONLY,SEA/S
 2 I/B AA68-02463A MANUAL-USERS;ENG,W/P100(G),B5,60P,KS3A
 2 C/REG AA68-01969A CARD;REGISTRATION PRODUCT,W/P120(G),SEA
 2 BAG-PE AA69-01195A BAG PE;CL29A6W8X,HDPE0.012,93/4X151

MEMO

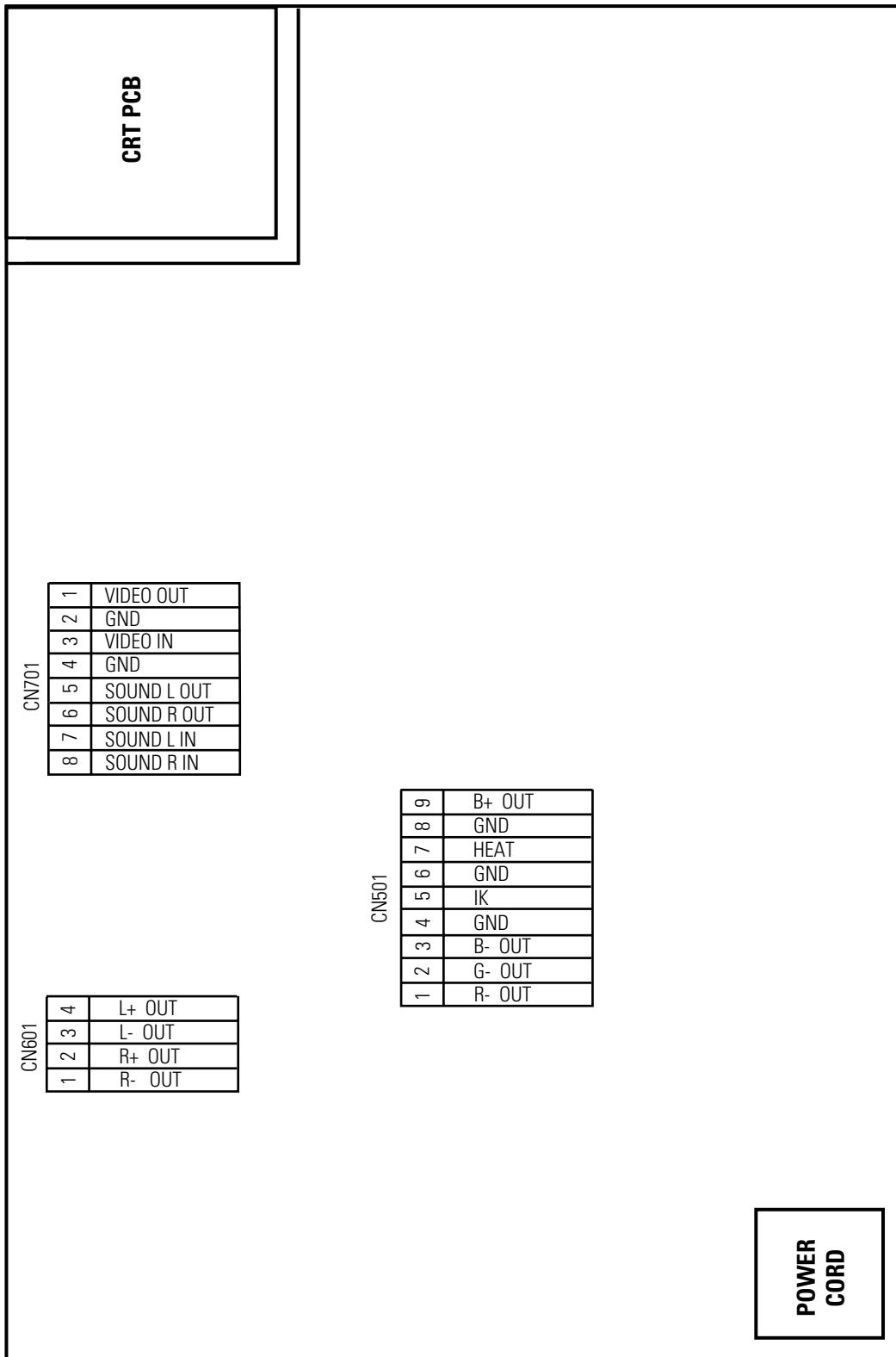
8. Block Diagram

8-1 K15C



9. Wiring Diagram

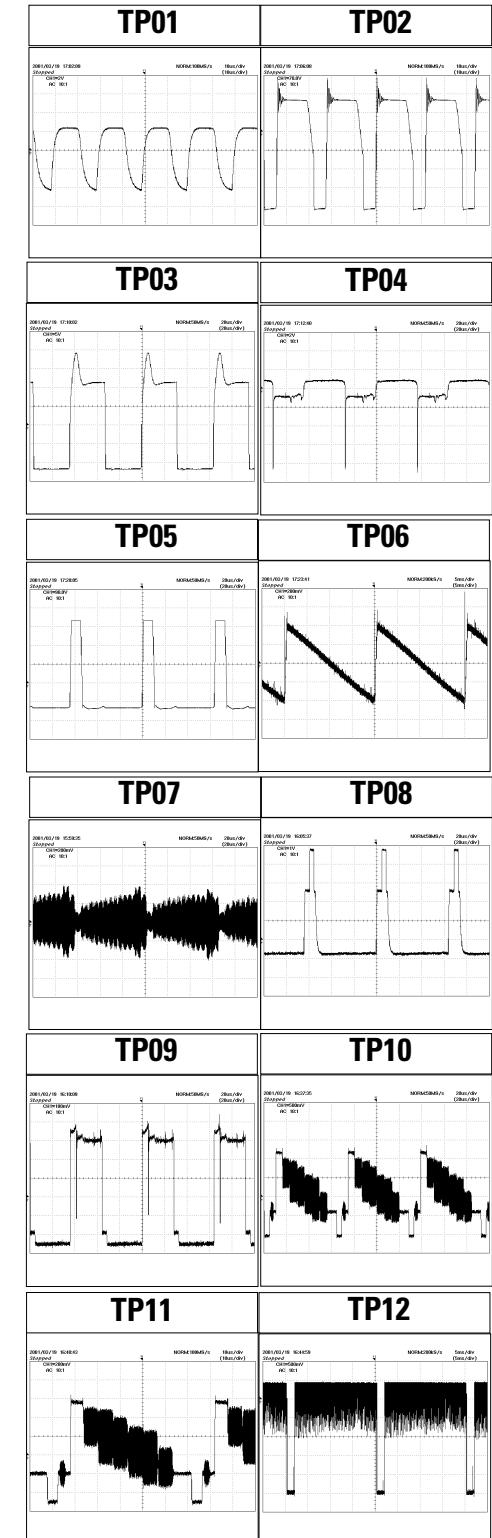
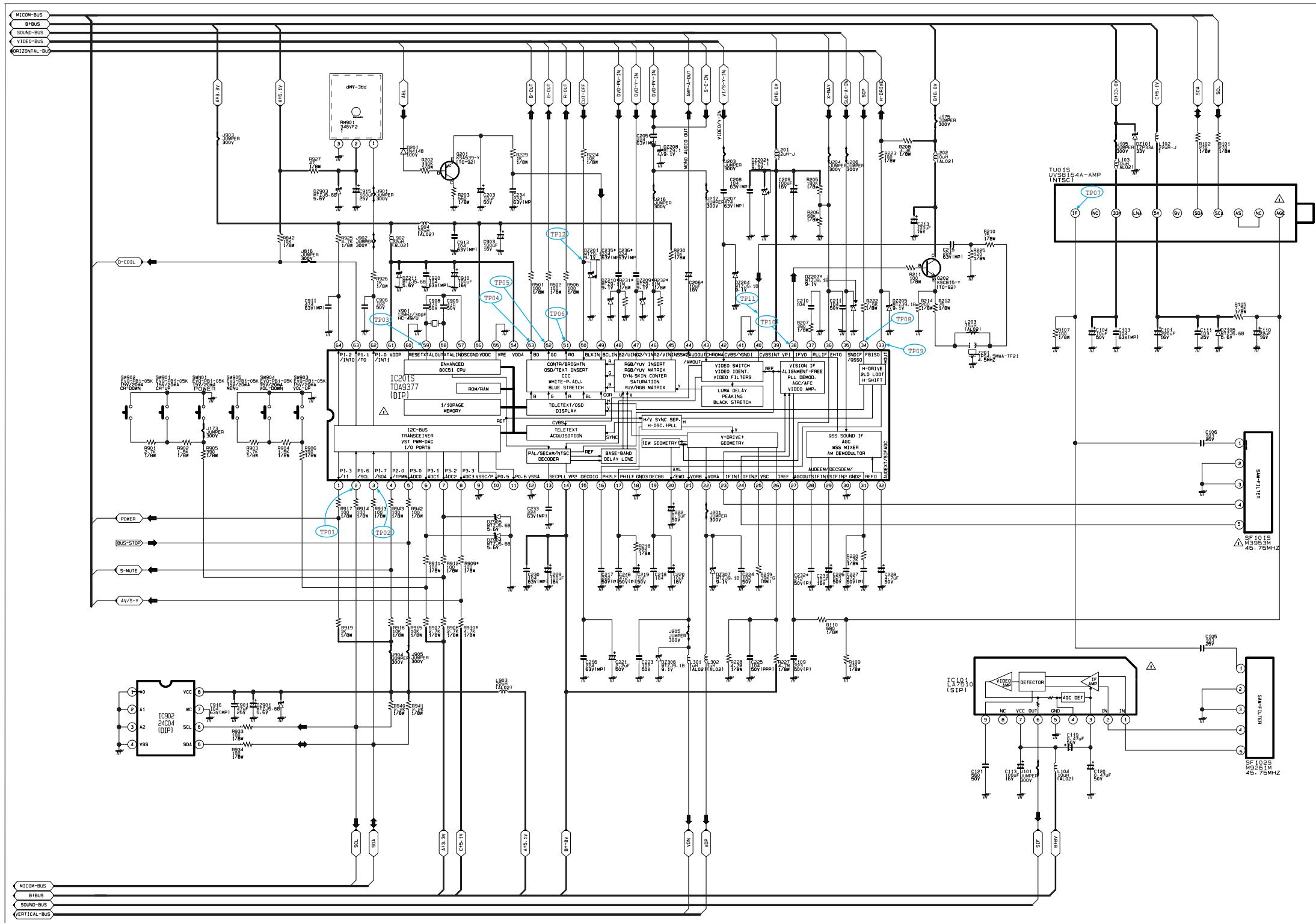
9-1 K15C



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10. Schematic Diagrams

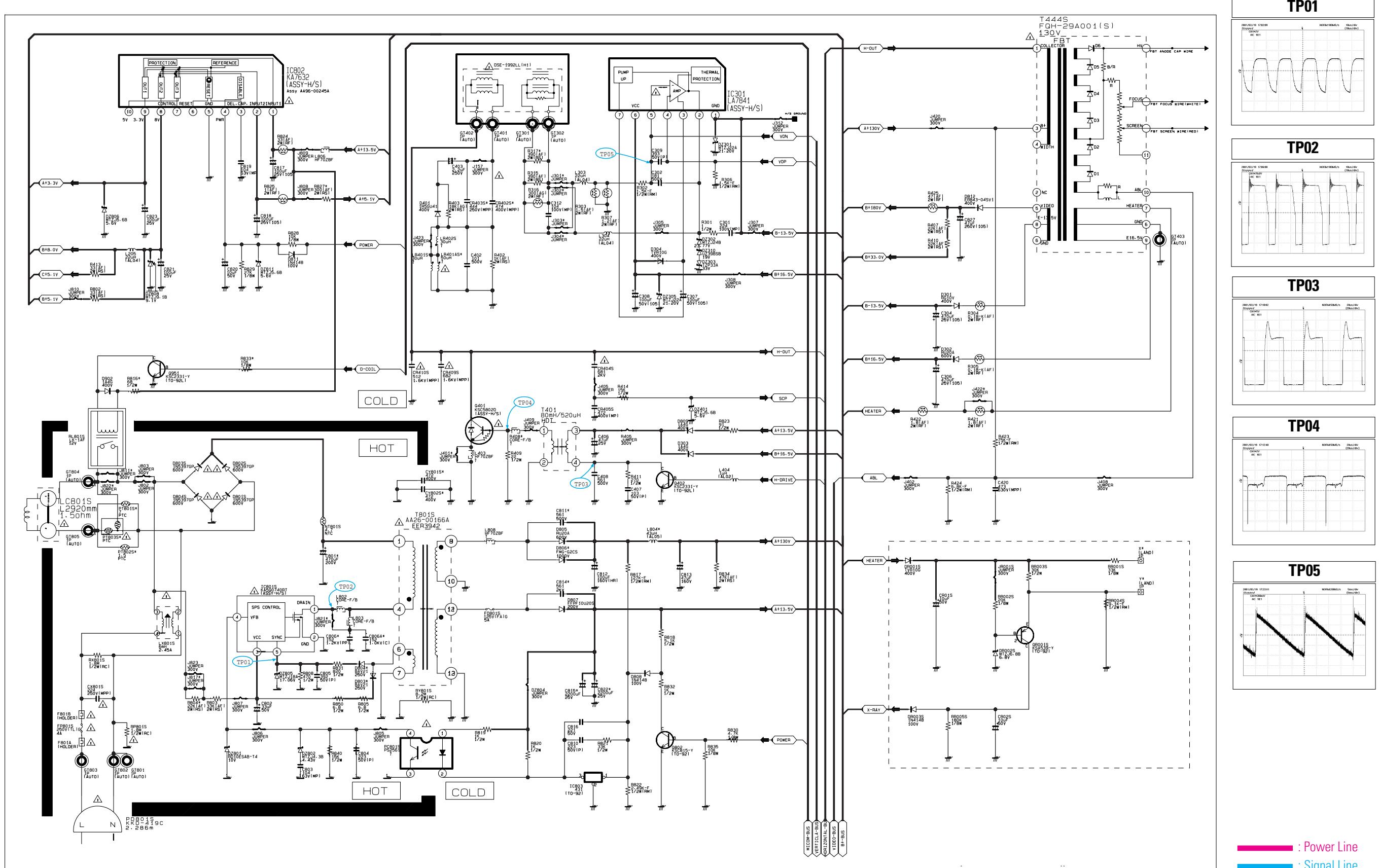
10-1 MAIN (1/4)



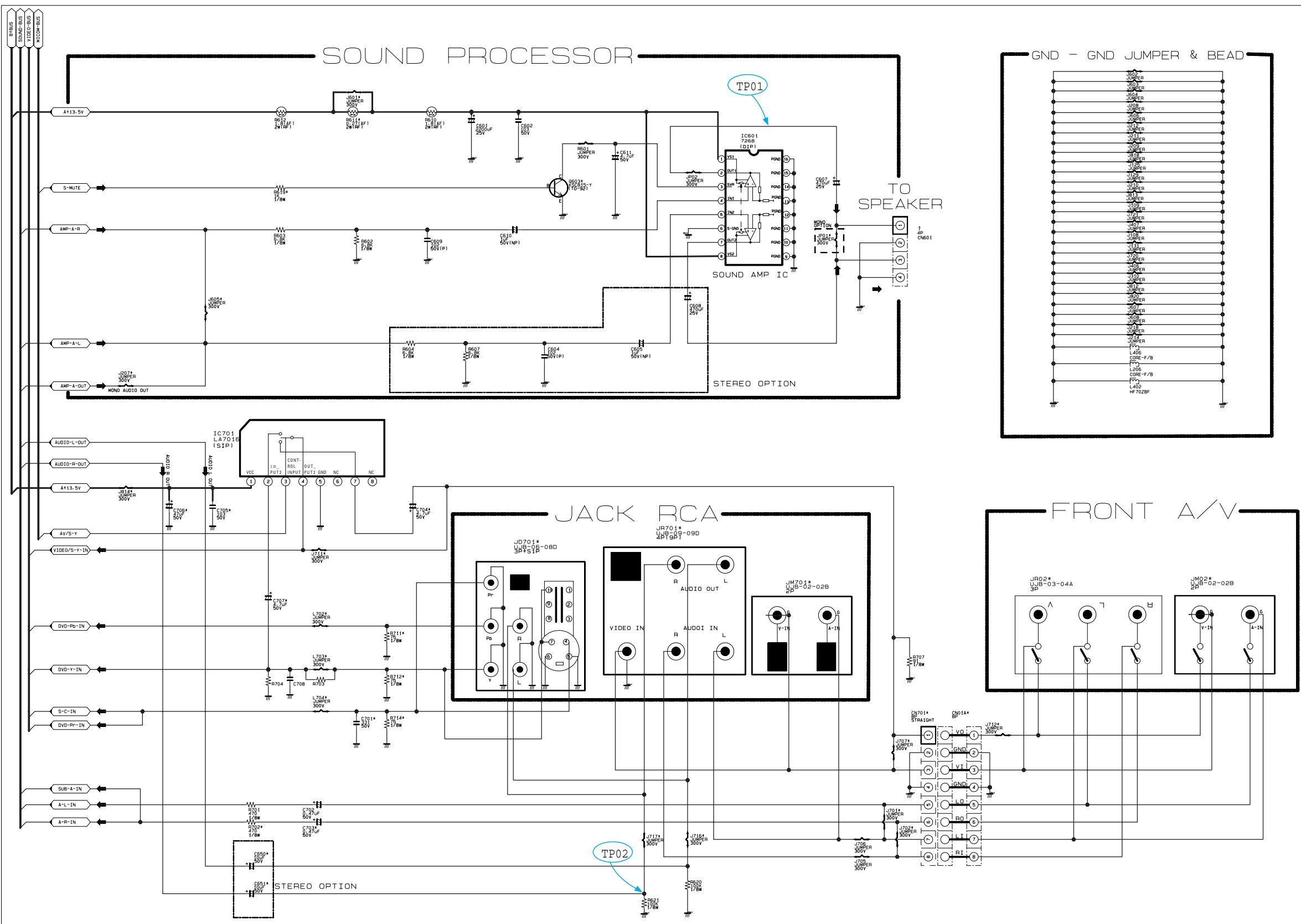
: Power Line

: Signal Line

10-2 MAIN (2/4)



10-3 MAIN (3/4)



10-4 MAIN (4/4)

