

SAMSUNG

COLOR TELEVISION RECEIVER

Chassis : KS3A(P) (REV. 2)
Model : CS29A5HT8X/BWT
CS29A5HT8X/NWT
CS29A5HT8X/VWT
CZ21A8VW8X/ELS

RTV servis Horvat

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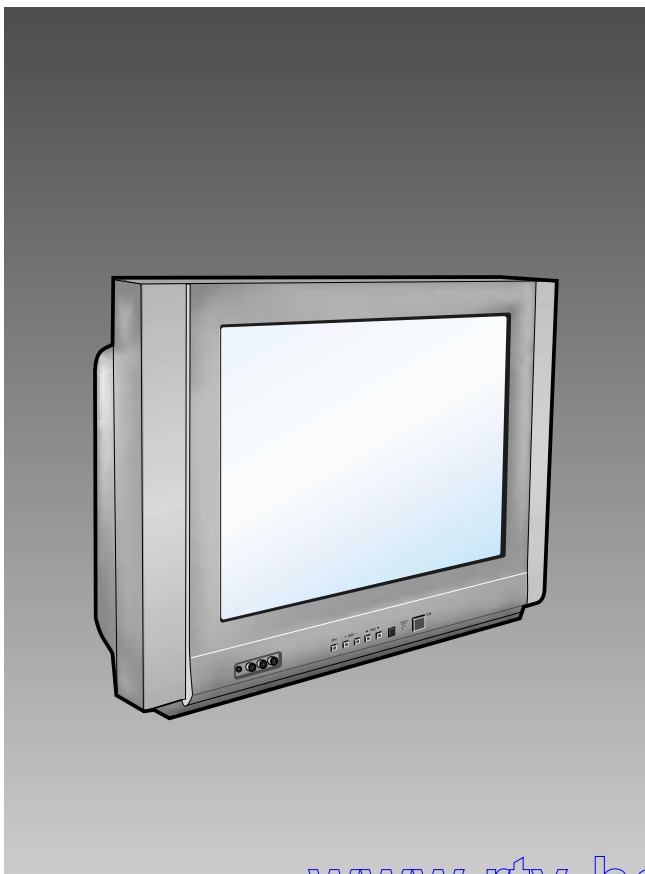
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SERVICE Manual

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.

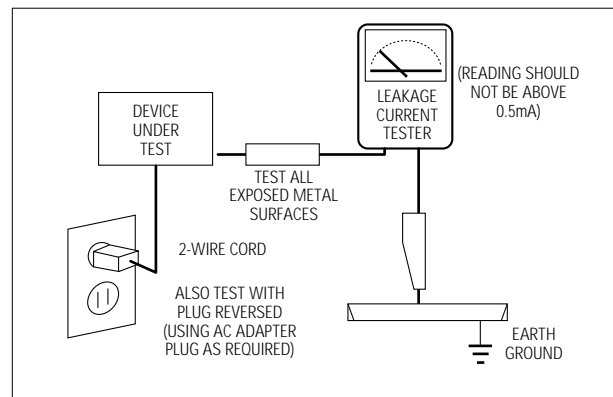


Fig. 1-1 AC Leakage Test



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.

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	VDP3112B	Video Processor	Refer to Table 2-3-1
		IC601	MSP3411G	Multistandard Sound Processor	Refer to Table 2-3-2
		IC901	SDA555X	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	DDR1001	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	TCLS3101PD09A9(S)	Main Tuner with IF Block	Refer to Table 2-3-4
TU02S	TCPN3081PD09A(S)	Sub Tuner with IF Block	Refer to Table 2-3-5		

Table 2 - 3 IC Line - Up						
NO	BOARD	LOC. NO	SPEC	DESCRIPTION	REMARK	
1	MAIN	T801S	AA26-00046A	Trans Switching	Refer to Table 2-3-6	
		T444S	FUJ-29B001	Trans FBT	Refer to Table 2-3-7	
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		Option
4	V-S/W	ICS01	TEA6425	Video Switching IC with Adder Output	Option	
5	PIP	ICP01	SDA9489X	High-end Picture-In Picture IC		
		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, Nicam, Virtual Dolby	

 **Table 2-3-3 SOUND AMP (IC602)**

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


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

SPEC	FUNCTION	REMARK
TCLS3101PD09A(S)	CS with LNA Function	Main
TCPS3001PD09D(S)	CS	
TCPS3001PD09E(S)	CS	India

Note TCPS3001PD09A(S) is out-of-date, TCPS3001PD09D(S) which is up-to-date has the same function.

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

SPEC	FUNCTION	REMARK
TCPS3000PC09B(S)	CS	Sub

 **Table 2-3-6 TRANS**

SPEC	FUNCTION	REMARK
FUJ-29B001	29"	
FUH-29A001B	21"	

 **Table 2-3-7 TRANS FLYBACK (FBT)**

SPEC	FUNCTION	REMARK
AA26-00046A	29"	
AA26-00044C	21"	

3. Specifications

Television System	CS	PAL/SECAM-B/G,D/K,L,I, NTSC-M	
Antena Input		75ohms, Coaxial Cable	
Power	Consumption	100W (Applied When 29" Flat)	
	Requirements	220V Only	
		Free Voltage	Not Present R815
Frequency	50/60Hz		
Sound	Output	15W x 2CH	29 Inch
		10W x 2CH	21 Inch
		5W x 2CH	
	Effect	Vitual Dolby	Option
		Turbo Sound	
Pseudo Stereo			
Jacks	Front (AV2)	RCA Input	
		S-VHS	Option
		Head-Phone	
	Back	2Scart Input/Output	AV1 : Scart I/O, RGB Input, RF Out AV2 : Scart I/O, Monitor Out
		DVD Input(YPbPr)	Option
		AV2 Monitor Audio Output	Option
		S-VHS	Option

Specifications are subject to change.



Specifications for Model Name (Ex. CS29A6??8X/HAC)

	Function	NOTE
N	NICAM	"NICAM" means that A2 STEREO + NICAM
P	2 TUNER PIP	
PF	2 TUNER PIP, NICAM, TTX	
PT	2 TUNER PIP, A2 STEREO, TTX	
PW	2 TUNER PIP, A2 STEREO	
MT	2 TUNER MULTI PIP, A2 STEREO,	
NT	NICAM, TTX	
WT	A2 STEREO, TTX	
GW	1 TUNER PIP, A2 STEREO, TTX	

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.

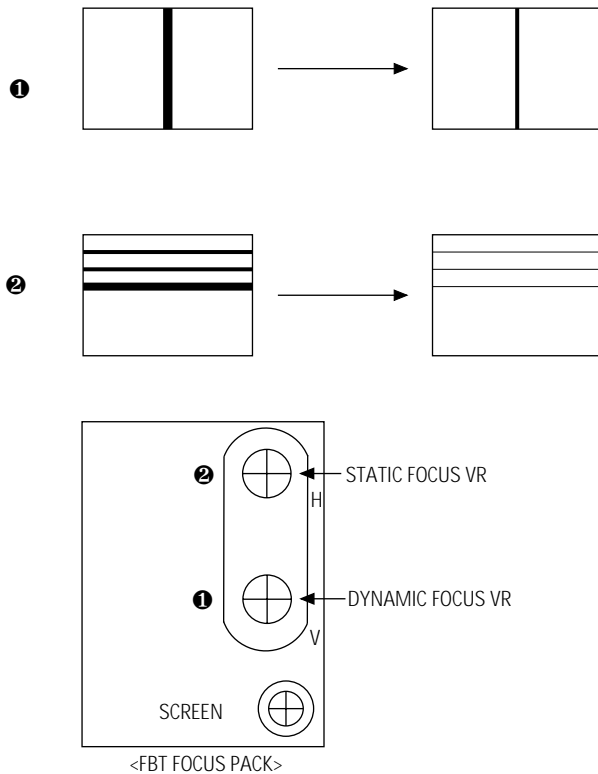
4-3 High voltage Check

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.

29 Inch	21 Inch
IBRM = 220	IBRM = 220
WDRV = 35	WDRV = 35
CDL = 220	CDL = 165
COLR G B = 150 150 150	COL = 70

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 = 220
WDRV = 35
CDL = 220
COLR G B = 150 150 150

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 $40 \text{ ft} \pm 3$.
 - Use "Red Drive" and "Blue Drive" to adjust High-Light (x : 290, y : 300)
 - Adjust "Sub Bright" so that Y (luminance) becomes $1.3 \text{ ft} \pm 0.3$.
 - Use "Red Cutoff" and "Blue Cutoff" to adjust Low-Light (x : 290, y : 300).
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

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

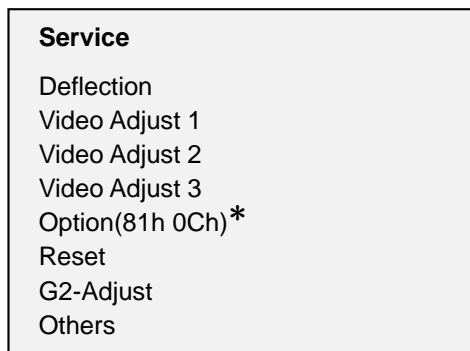
- If you do not have Factory remote-control



- If you have Factory remote-control



2. 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.

3. 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.)

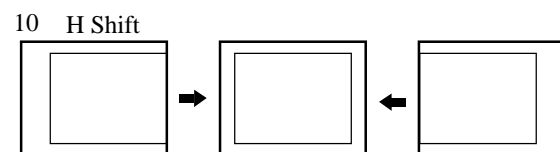
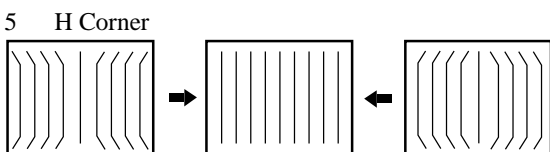
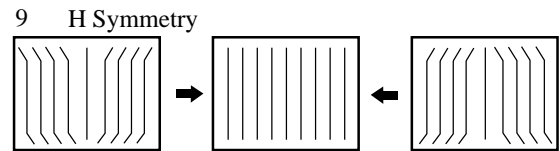
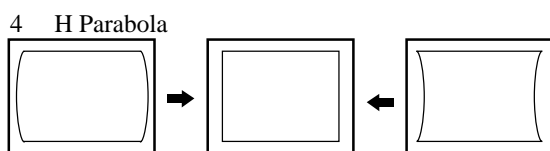
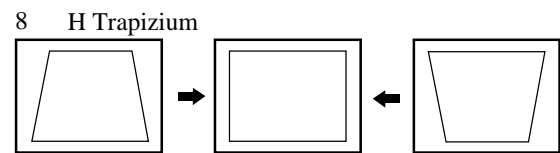
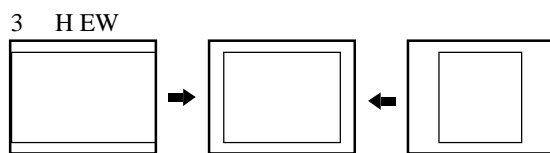
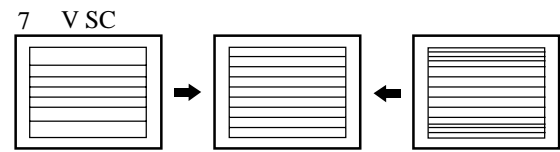
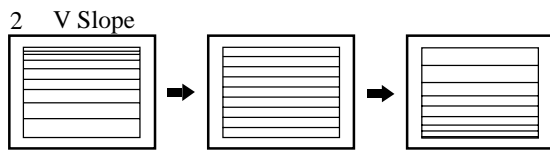
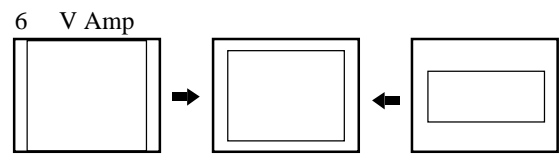
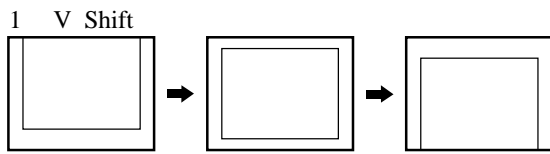
4-8-2 Memory Data

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

	Fixed Value
--	-------------

No.	OSD	Range	Initial Value	Function	Remark
1	V Shift	-128 ~127	-30	Adjust Vertical Picture Position	
2	V Amp	-128 ~127	-7	Adjust Vertical Picture Size	
3	V Slope	-128 ~127	-3	Adjust Vertical Slope Correction	
4	V SC	-128 ~127	-17	Adjust Vertical S-Correction	Not to be adjusted
5	H EW	-128 ~127	73	Adjust Horizontal Picture Size	
6	H Trapizium	-128 ~127	-47	Adjust Horizontal Trapeziod	
7	H Parabola	-128 ~127	-7	Adjust Horizontal Parabola Wave	
8	H Symmetry	-128 ~127	13	Adjust Horizontal Symmetry	Not to be adjusted
9	H Corner	-128 ~127	23	Adjust Horizontal Corner	
10	H Shift	-128 ~127	13	Adjust Horizontal Position	
11	PIP Contrast	0 ~ 15	8	Adjust PIP Contrast	
12	PIP Tint	0 ~ 63	0	Adjust PIP Tinit	
13	PIP PAL V Pos	0 ~ 255	26	Adjust PIP Vertical Position (Main Picture is PAL)	
14	PIP NTSC V Pos	0 ~ 255	23	Adjust PIP Vertical Position (Main Picture is NTSC)	
15	PIP H Pos	0 ~ 255	30	Adjust PIP Horizontal Position	
16	PIP BLKLG	0 ~ 15	6	Adjust PIP Green Cutoff Level	

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



4-8-2(C) VIDEO ADJUST 1

Fixed Value

No.	OSD	Range	Initial Value	Function	Remark
1	Red Cutoff	0 ~255	127	Adjust Red Cutoff Level	Low Light
2	Green Cutoff	0 ~255	127	Adjust Green Cutoff Level	
3	Blue Cutoff	0 ~255	127	Adjust Blue Cutoff Level	
4	Red Drive	0 ~255	127	Adjust Red Output Gain	High Light
5	Green Drive	0 ~255	127	Adjust Green Output Gain	
6	Blue Drive	0 ~255	127	Adjust Blue Output Gain	
7	Sub Bright	0 ~ 200	100	Adjust Brightness Level	Low Light
8	Sub Contrast	0 ~ 13	50	Adjust Contrast Level	High Light
9	Sub Color	0 ~ 27	27	Adjust Color Level	Not to be adjusted
10	Sub Tint	0 ~ 100	80	Adjust Tint	
11	BCL Threshold	0 ~ 255	65	Adjust Beam Control Limit Refer to Note 3	
12	BCL Gain	0 ~ 15	8		
13	BCL Time	0 ~ 15	9		
14	TTX Contrast	0 ~ 255	90	Adjust OSD/TTX Contrast	
15	YC Delay	0 ~ 8	*	Refer to Table 1	

Note 3. Beam Control Limit Characteristic

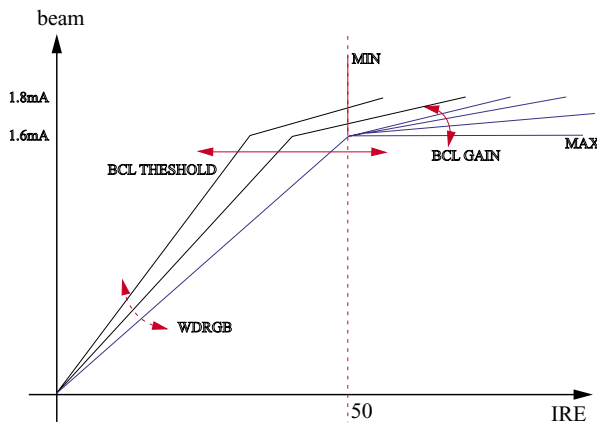


Table 1. YC Delay Adjustment Table

YC Delay	PAL					SECAM					NTSC	
	Def.	BG	DK	I	L	Def.	BG	DK	I	L	Def.	M
Value	4	3	6	6	7	1	1	5	8	5	4	3

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

4-8-2(D) VIDEO 2 ADJUST

Fixed Value

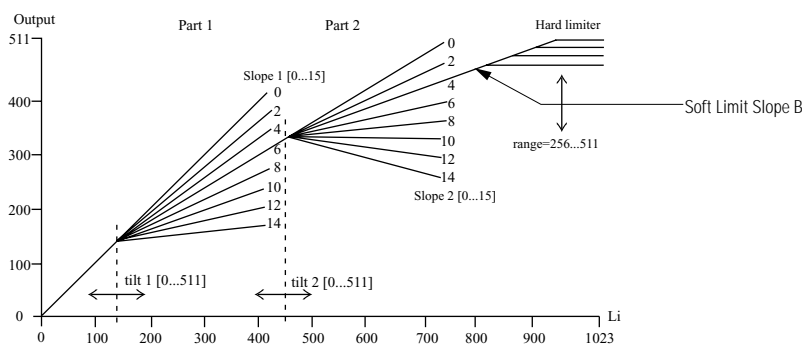
No.	OSD	Range	Initial Value	Function	Remark
1	B stretch-BTHR	0 ~ 55	50	Black Stretch Threshold	
2	B stretch-BTLT	0 ~ 15	8	Black Stretch Tilt Position	
3	B stretch-BAM	0 ~ 31	4	Black Stretch Amount	
4	Coring	10 ~ 31	20	Luma Peaking Filter Coring	
5	RGB Bright	0 ~ 255	45	OSD/TTX RGB Bright	
6	RGB Contrast	0 ~ 255	15	OSD/TTX RGB Contrast	
7	EHT Time	0 ~ 15	0	Electronic High Tension Response Time	
8	EHT Compensation	0 ~ 255	90	Electronic High Tension Coefficient	

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

4-8-2(E) VIDEO 3 ADJUST

No.	OSD	Range	Initial Value	Function	Remark
1	Peak Threshold	0 ~ 255	185	White Peak Level Threshold	Refer to Note Below
2	Soft Limit Slope B	0 ~ 15	4	Refer to Picture Below	
3	Hard Limit	0 ~ 255	255		
4	Peak Video Ref	0 ~ 4	0	White Peak Level Threshold Reference	
5	Peak Video Gain	0 ~ 5	0	White Peak Level Threshold Gain	
6	ACC-REF(PAL/NTSC)	0 ~ 40	33	Auto Color Control	
7	ACCR(SECAM)	0 ~ 39	39		




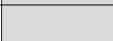
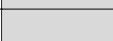


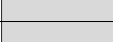


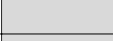




Note 4. Soft Limit & Hard Limit



"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(E) OPTION

 Fixed Value

No.	OSD	Initial Value 	Function	Remark
1	Language		Arab, Iran, Lybya, CIS	OSD Language
2	Sound		A2/NICAM, V-Dolby, Mono, L-Stereo	Depending on IC601 Refer to Note 5
3	CRT		4:3, Wide, Q(12.8:9), 4:3-16:9, Q-16:9	S:S-VHS, D:DVD
4	AV Mode		2Scart, 2Scart+S, 1RCA, 2RCA, 2RCA+S, 2RCA+D, 2RCA+S+D, 1Scart	
5	X-Ray		Off, On	
6	Tilt Control		Off, On	
7	Auto FM		Off, On	
8	PIP		2-Tuner, 1-Tuner, Off	
9	Txt Language		Arabic, Farsi, Arab-Hebrew, West Europe, East Europe, Russian, Greek-Turkey	
10	LNA		Off, On	When PIP is "2-Tuner", set to "ON"
11	Equalizer		Off, On	
12	High Deviate		Off, On	
13	TTX On/Off		Off, On	
14	AV by CH key		Off, On	Without "TV/VIDEO" key in the front panel, set to "On"

 Initial Value : Refer to Note 6 on the next page.

Note 5.

Sound	IC601
A2/NICAM	MSP3400D, MSP3410D
V-DOLBY	MSP3411G
Mono	Not used this mode for KS3A Chassis
L-Stereo	

Note 6. Option.

	CS29A5WT8X/UMG	CS29A6PF8X/HAC	CS29A6WT8X/BWT	CS29A5MT9X/BWT
Description	Initial Vaue	Initial Vaue	Initial Vaue	Initial Vaue
LANGUAGE	Arab	Arab	CIS	CIS
SOUND	V-Dolby	V-Dolby	A2/Nicam	A2/Nicam
CRT	4:3	4:3	4:3	4:3
AV MODE	2 RCA + S	2 RCA + S	2 SCART + S	2 SCART + S
X-RAY	OFF	OFF	OFF	OFF
TILT CONTROL	ON	ON	ON	ON
AUTO FM	ON	ON	ON	ON
PIP	OFF	2-Tuner	OFF	2-Tuner
TEXT LANGUAGE	Arabic	Farsi	RUSSIAN	RUSSIAN
LNA	OFF	ON	OFF	ON
EQUALIZER	ON	ON	ON	ON
HIGH DEVIATE	ON	ON	ON	ON
TTX ON/OFF	ON	ON	ON	ON
AV BY CH KEY	ON	OFF	OFF	ON
OPTION BYTE	84 CC D8	85 DC 5E	83 AC 28	83 AC AE

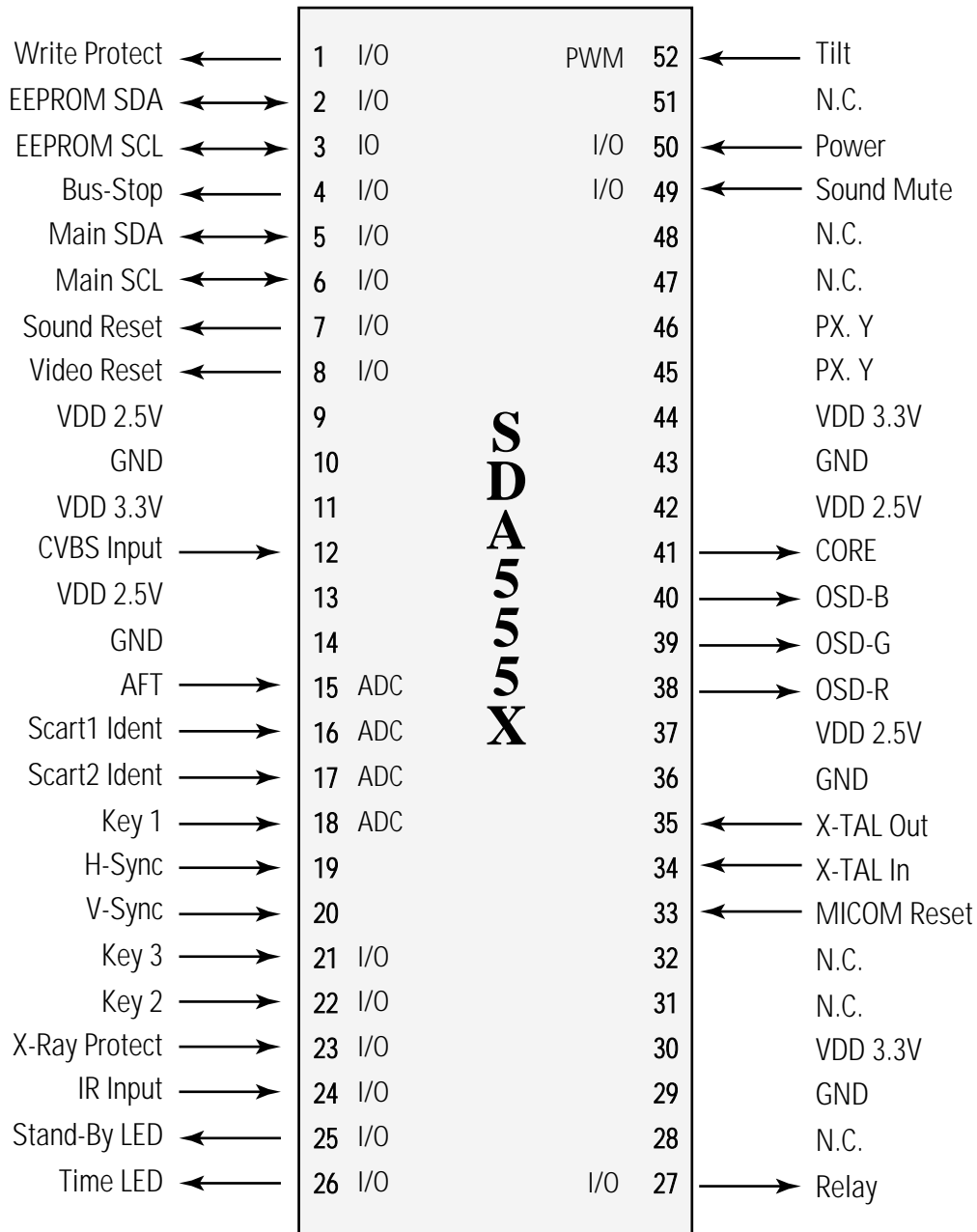
4-8-2(F) OTHERS

 Fixed Value

No.	OSD	Range	Initial Value	Function	Remark
1	VSU	96 ~ 111	98	Vertical Set Up Time	
2	H QEW	-30 ~ 30	0		
3	H ZOOM Parabola	-30 ~ 30	8	Adjust Horizontal Parabola in Zoom Mode	
4	H 16:9 Parabola	-30 ~ 30	-15	Adjust Horizontal Parabola in 16:9 Mode	
5	TTX H Shift	-30 ~ 30	6	Adjust Horizontal OSD/TTX Position	
6	Mono Sound System	BG/DK/I/M	BG		
7	V Slice Level	0 ~ 3	2		
8	Melody Volumn	0 ~ 20	8	Adjust Melody Volumn	

4-9 MICOM

4-9-1 Pin Layout



4-9-2 Pin Assignment Specification

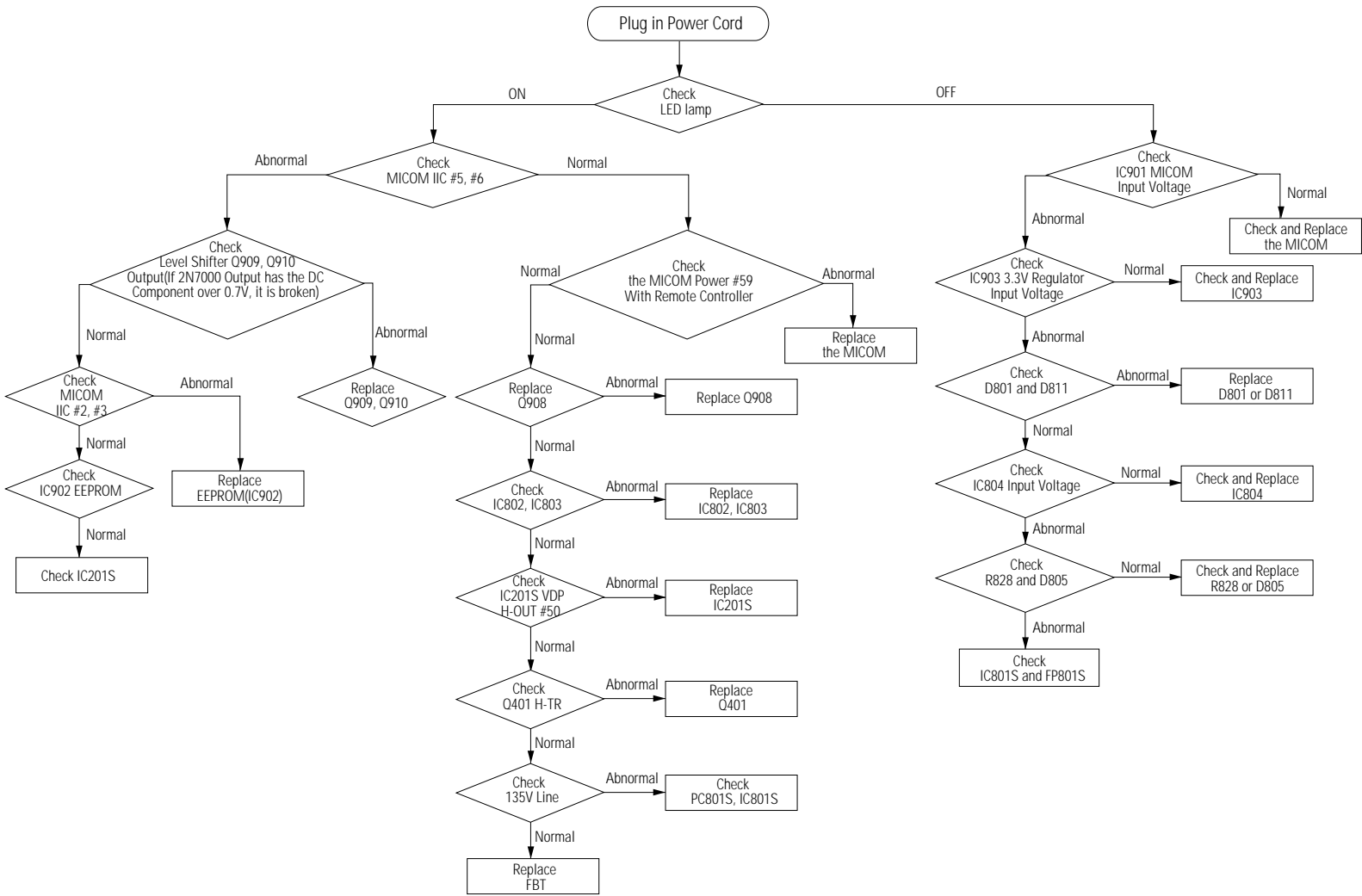
PIN NO	FUNCTION	ASSIGN	IN/OUT	ACTIVE H/L	DESCRIPTION
1	I/O	Write Protect	Out	Low	EEPROM Write Protection
2	I/O	ROM SDA	I/O		EEPROM Serial Data Line
3	I/O	ROM SCL	I/O		EEPROM Serial Clock Line
4	I/O	Bus Stop	In	Low	Disable Micom IIC
5	I/O	Main SDA	I/O		Peripheral IC Serial Data Line
6	I/O	Main SCL	I/O	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	SC1-ID	In		Scart1 Ident
17	ADC	SC2-ID	In		Scart2 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/TTX Output (Red)
38	R	OSD-R	Out		OSD/TTX Output (Green)
39	G	OSD-G	Out		OSD/TTX 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

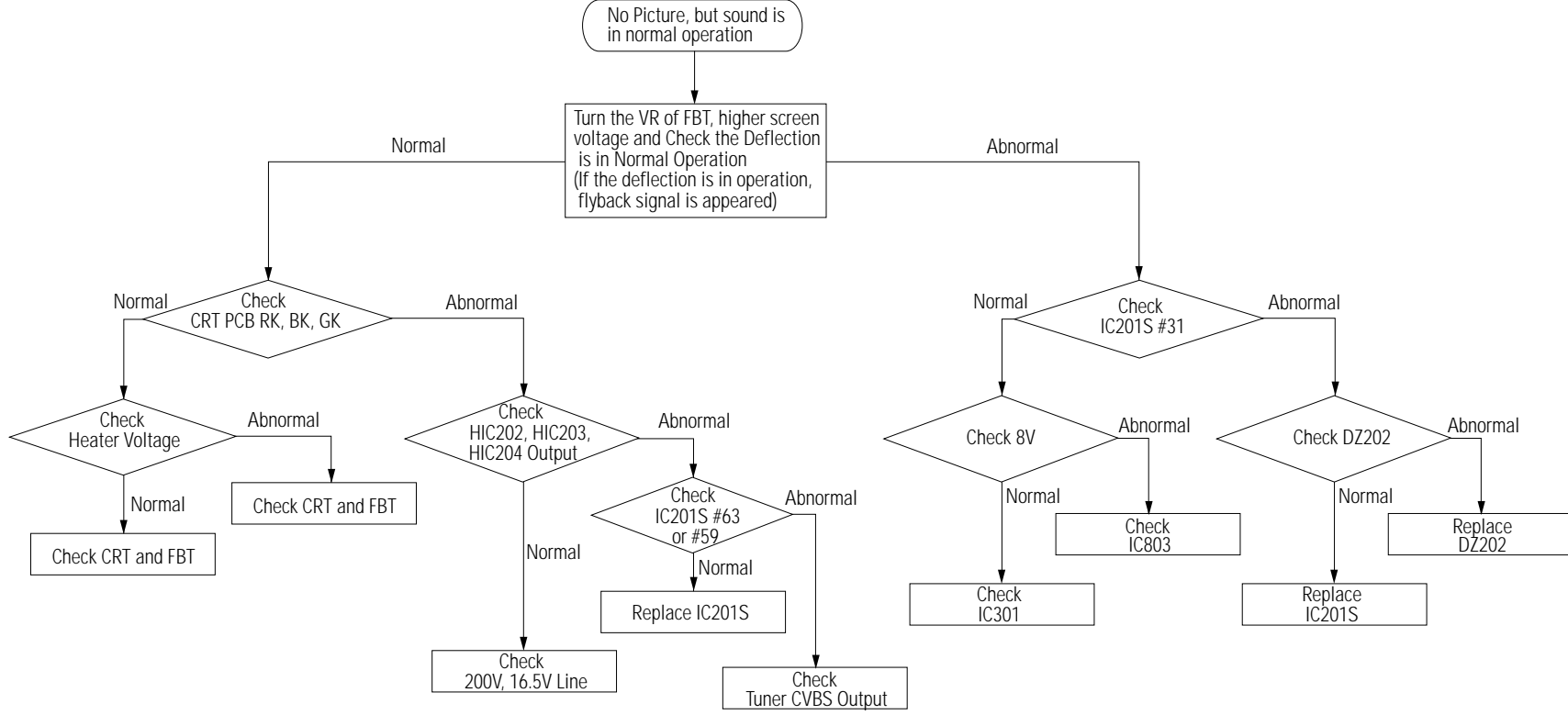
5. Troubleshooting

5-1 No Power

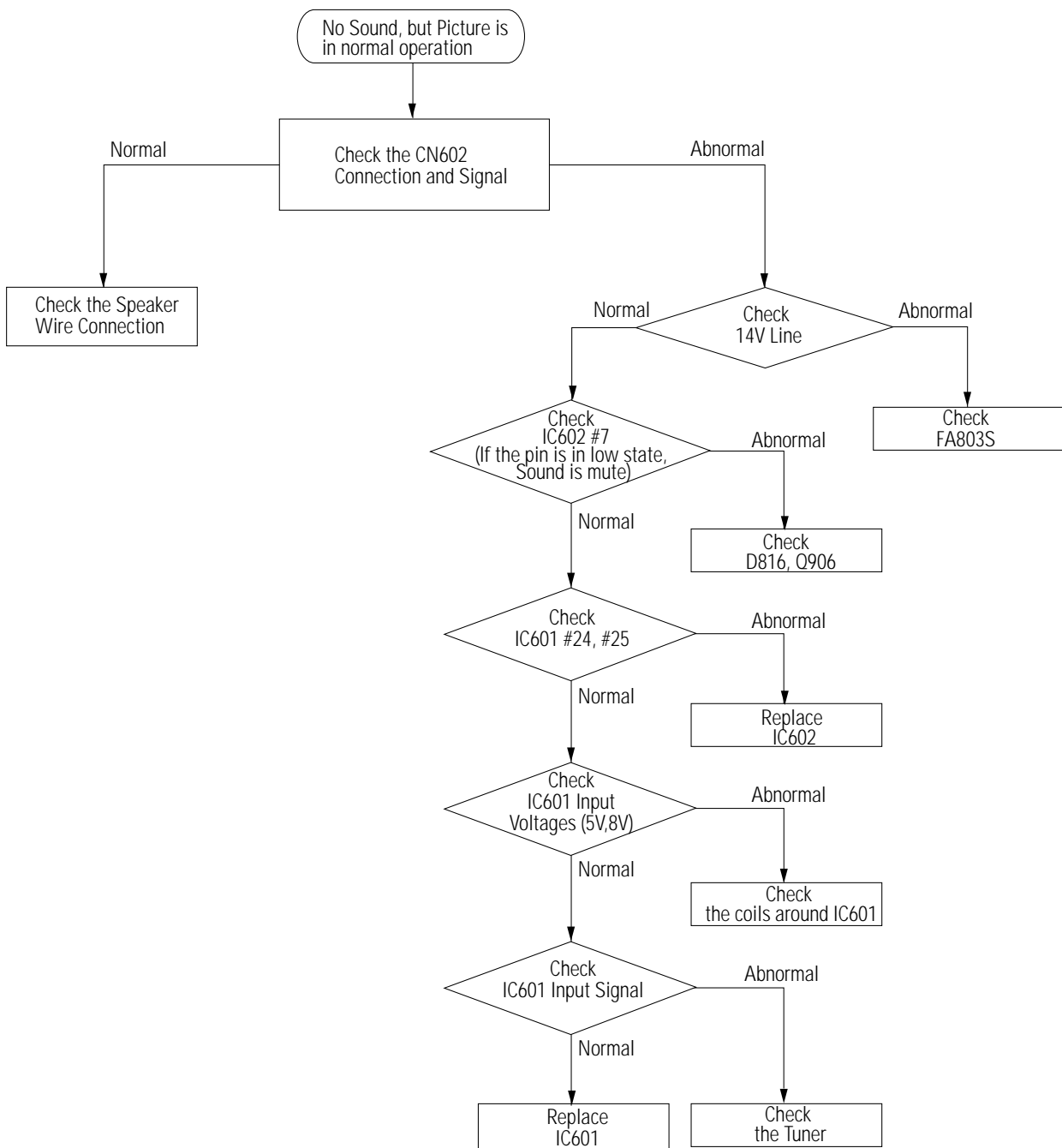


Note : When you check whether any component is normal, you must let the output pin be open in order not to be affected by the side of output.

5-2 No Picture



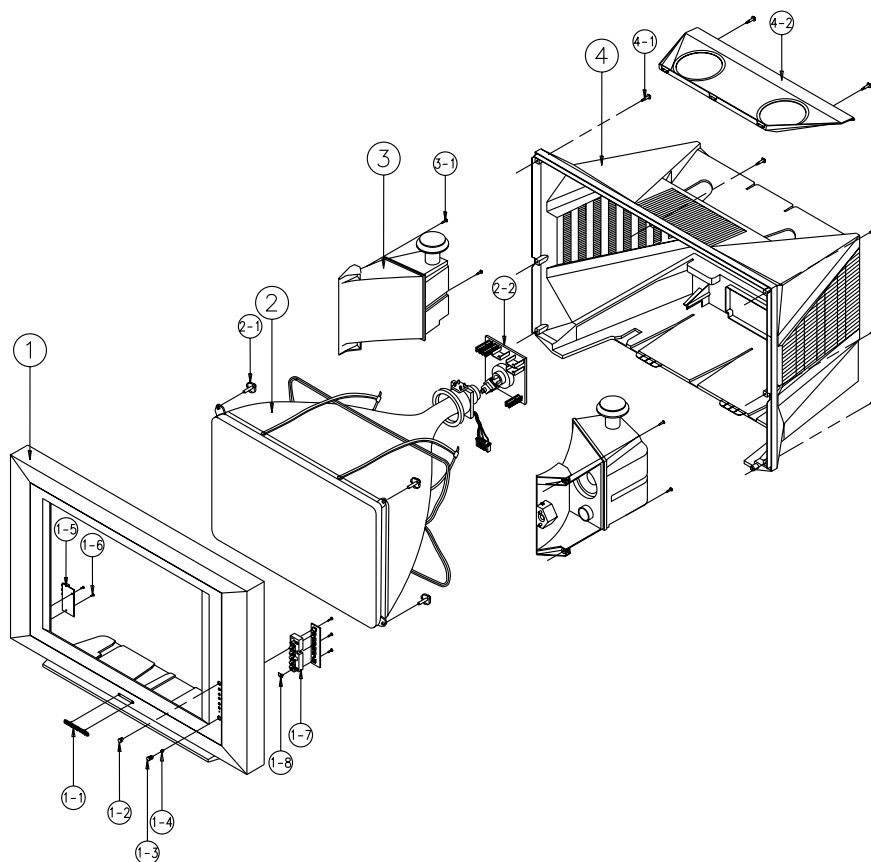
5-3 No Sound



6. Exploded View & Parts List

6-1 CS29A5HT8X/BWT

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No	Code No	Description;Specification	Q'ty	Remark
1	AA91-00113W	ASSY CABINET FRONT;- ,29A5 KS3A CIS,S704+	1	
	AA64-31106S	CABINET FRONT:29A5 KS3A,S704P+G802P PLAN	1	
1-1	AA64-70117B	BADGE-BRAND;AL,SS,SILVER,L65,R2000,-,-	1	
1-2	AA64-40455A	WINDOW-REMOCON;- ,725A,- ,PC,- ,VIOLET,-	1	
1-3	AA64-10709A	KNOB-MASTER;- ,295A,VT803M MASTER,ABS,HB,	1	
1-4	AA61-60005D	SPRING-CS;- ,SUS304,0.4,OD5.5,H9,N4,-,-,-	1	
1-5	AA95-00872A	ASSY-PCB,A/V SIDE;- ,29A6,29A5,100HZ,KS3A	1	
1-6	6002-000522	SCREW-TAPPING;TH,+2,M4,L15,ZPC(BLK),SWR	2	
1-7	AA64-10710A	KNOB-CONTROL;- ,725A,- ,ABS,HB,GRAY	1	
1-8	AA64-40456B	INDICATOR-LED;- ,295A,- ,ACRYL,- ,CLR,-	1	
1-9	6002-000514	SCREW-TAPPING;RH,+2,M4,L15,ZPC(BLK),SWR	3	
2	AA03-00076A	CRT-COLOR;- ,A68QCP891X004(C),+380MG,29IN	1	
2-1	AA60-10050V	SCREW-ASSY;WC,HH,+M6,L30,SWRCH18A,ZPC(S	4	
2-2	3704-001032	SOCKET-CRT;8P29PI,35.5PI,AU30U	1	
3	AA91-00333B	ASSY HOLDER SPK;- ,PP,8ohm/15W,BLK,AA91-0	1	
3-1	AA60-10050A	SCREW-ASSY;WP,RH,+M4,L25,SWRCH18A,- ,ZPC	4	
4	AA64-31107C	CABINET-BACK;- ,29A5,- ,HIPS,V2,BLK,-,-	1	
4-1	AA60-10050T	SCREW-TAPPING;RH,+2S,M4,L20,ZPC(BLK),SW	7	
4-2	AA63-30213C	COVER-TOP,SPK;- ,725A,- ,HIPS,V2,BLK,-,-	1	

7. Electrical Parts List

7-1 CS29A5HT8X/BWT

Level	Loc. No.	Code No.	Description ; Specification	Remark	Level	Loc. No.	Code No.	Description ; Specification	Remark
ASSY PCB MAIN(OPT)									
1	*	AA94-02759K	ASSY PCB MAIN(OPT);CS29A5HT8X/BWT;KS3A,R						
	..2	BOT1	AA39-00046E	LEAD CONNECTOR-ASSY;.....,JU					
	..2	C-BLOC	AA26-00069A	TRANS FBTFUJ-29C002C(S),DREAM3,4,....					
	..2	C423	2301-001296	C-FILM,MPPF:720NF,5%,400V,BK,26X15.5X20M					
	..2	C820	2401-003076	C-AL:3300UF,20%,50V,WPBK,18x35.5mm					
	..2	CLAMP	AA65-30109A	CLAMP-FBT:NYLON-66,V2,BLK,....	S.N.A				
	..2	CLAMP	AA65-30018A	CLAMP-WIRE:NYLON-66,....,DATL-600,DONG-A,	S.N.A				
	..2	CLAMP	AA65-30105C	CLAMP-WIRE:ALL MODEL,NYLON 66,V2,NTR,5MM	S.N.A				
	..2	CLAMP	AA65-30104C	CLAMP-WIRE:NYLON 66,V2,NTR,W1 Z4,ALL MOD	S.N.A				
	..2	CLAMP	AA65-30105A	CLAMP-WIRE:NYLON 66,V2,NTR,15MM,ALL MODE	S.N.A				
	..2	D-COIL	AA27-00128A	COIL DEGAUSSING;....,50T,7,....,29inch,2					
	..2	D211	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,					
	△	D801S	AA96-00276A	ASSY H/S;..,BRIDGE,AA62-00052A,RBV606,WA					
	..3		6003-000335	SCREW-TAPTITE:RH,+2S,M3,L8,ZPC(YEL),SWR					
	..3		AA62-00052A	HEAT SINK-PS;....,SILVER,HOLE 18.5mm, 2	S.N.A				
	..3		AA60-30003A	WASHER;....,T1.5,....,SBHG-1,-	S.N.A				
	..3		0402-000549	DIODE-BRIDGE:RBV606,600V,6A,....,BK					
	..3		0205-000129	GREASE-SILICON:SC102,JAPAN	S.N.A				
	..2	HC401	AA96-00291B	ASSY H/S;..,POWER,AA62-00051B,2SC5446 +					
	..3		6003-000334	SCREW-TAPTITE:RH,+2S,M3,L6,ZPC(YEL),SWR					
	..3		AA62-30177A	HEAT-SINK:PN;..,CUS-1,T1.0,....,KCV12D,....,1	S.N.A				
	..3		AA62-00051B	HEAT SINK-PS;....,SILVER,HOLE 34mm,ALL	S.N.A				
	..3		AA60-30001A	WASHER-PLATE:M3,JD3.5,15X8.5,T1.0,....,SBHG	S.N.A				
	..3		AA02-00007A	MICA:DPM-04,MICA,22x29x0.15mm					
	..3		6003-000333	SCREW-TAPTITE:RH,+2S,M3,L10,ZPC(YEL),SW					
	..3		0502-001175	TR-POWER:2SC5446,NPN,200000mW,TO-3PL,BK					
	..3		0402-001296	DIODE-RECTIFIER:FMP-3FU,1.5KV,5A,TO-3PF,					
	..3		0205-000129	GREASE-SILICON:SC102,JAPAN	S.N.A				
	..2	HC801	AA96-00475A	ASSY H/S;..,REGULATOR,AA62-00066B,FML-G1					
	..3		AA62-00066B	HEAT SINK:D2,D3,AL ,T1.0,89,70,....,AA62-00	S.N.A				
	..3		6003-000334	SCREW-TAPTITE:RH,+2S,M3,L6,ZPC(YEL),SWR					
	..3		1203-001006	IC-VOLTAGE REGULATOR:78R05,TO-220F,4P,....					
	..3		0402-001230	DIODE-RECTIFIER:FMG-G2CS,1000V,3A,TO-220					
	..3		0402-000223	DIODE-RECTIFIER:FML-G12S,200V,5A,....					
	..3		0205-000129	GREASE-SILICON:SC102,JAPAN	S.N.A				
	△	HIC401	AA13-00094A	IC-HYBRID;..,DDRIO01A,SIP5P,....,TP					
	△	IC201S	1204-001727	IC-VIDEO PROCESS:VDP3140D-E5,DIP,64P,....,P					
	△	IC301	AA96-50381A	ASSY-H/S;..,AA62-30180B,LA7845,....					
	..3		0205-000129	GREASE-SILICON:SC102,JAPAN	S.N.A				
	..3		1204-000517	IC-VERTICAL DEF:LA7845,SIP7P,....,PLASTIC					
	..3		6003-000333	SCREW-TAPTITE:RH,+2S,M3,L10,ZPC(YEL),SW					
	..3		AA62-30180B	HEAT SINK-ES;..,A6063 EXTR,2,WHT,70MM,....	S.N.A				
	△	IC602	AA96-50369B	ASSY-H/S;..,AA62-30181F,TDAT7297,....					
	..3		0205-000129	GREASE-SILICON:SC102,JAPAN	S.N.A				
	..3		1201-001064	IC-POWER AMP:7297,ZIP,15P,....,DUAL,32DB,PL					
	..3		6003-000333	SCREW-TAPTITE:RH,+2S,M3,L10,ZPC(YEL),SW					
	..3		AA62-30181F	HEAT SINK-ES;..,AL6063 EXTR,2,WHT,50MM,....	S.N.A				
	△	IC801S	AA96-50371C	ASSY-H/S;..,AA62-30181H,KA3S1265R,....					
	..3		AA62-30181H	HEAT SINK-ES;..,AL6063 EXTR,2,WHT,50MM,....	S.N.A				
	..3		AA61-10386A	BRACKET-IC;..,SECC 100,T1.0,....,KA2S0680,	S.N.A				
	..3		6003-000333	SCREW-TAPTITE:RH,+2S,M3,L10,ZPC(YEL),SW					
	..3		1203-001482	IC-PWM CONTROLLER:3S1265R,TO-3P,5P,210,P					
	..3		0205-000129	GREASE-SILICON:SC102,JAPAN	S.N.A				
	△	IC804	AA96-00243C	ASSY H/S;..,REGULATOR,AA62-00045A,KA7806					
	..3		0205-000129	GREASE-SILICON:SC102,JAPAN	S.N.A				
	..3		1203-000284	IC-POS.FIXED REG.:7806,TO-220,3P,....,PLAS					
	..3		6003-000335	SCREW-TAPTITE:RH,+2S,M3,L8,ZPC(YEL),SWR					
	..3		AA62-00045A	HEAT SINK-PS;....,T1.0,....,DREAM,....	S.N.A				
	△	IC901	AA09-00041A	IC-MCU:SDA555X-OTP,SDA555X-OTP,....,52					
	..2	JA701	3722-000195	JACK-SCART:42P,....,SN,BLK,NO					
	..2	L40E	AA27-10004F	COIL-CHOKE;..,56uH,K,....,2.5A,BK,....,DR12x15,					
	..2	L403	AA27-00015A	COIL-LINEARLTY;..,7.3UH,L81 DR15X18,....					
	..2	L408	AA27-00031A	COIL-HORIZ.WIDTH;..,140UH,AR 8X20,0.8MM,B					
	△	Q402	0505-001116	FET-SILICON:BUZ73A,N,200V,22A,0.6ohm,40W					
	△	..2	Q404	AA96-00437A	ASSY H/S;..,MAIN,AA62-00076A,IRF620,100H				
	..3		0505-000156	FET-SILICON:IRF620,N,200V,5A,0.8ohm,50W,					
	..3		AA62-00076A	HEAT SINK:100Hz,AL ,T1.0,10,40,....	S.N.A				
	..3		6003-000334	SCREW-TAPTITE:RH,+2S,M3,L6,ZPC(YEL),SWR					
	..2	S-H/S	AA65-30105A	CLAMP-WIRE:NYLON 66,V2,NTR,15MM,ALL MODE	S.N.A				
	△	..2	T444S	AA26-00082A	TRANS FBTFUJ-29C002F(S),CT29A7DR,1.95mH				
	△	..2	T801S	AA26-00046A	TRANS SWITCHING;....,AC90-260V,DC135/16				
	△	..2	TUBE	AA39-00108A	LEAD CONNECTOR-ASSY;.....,GRT-TUB				
	..2	Z	AA65-30105A	CLAMP-WIRE:NYLON 66,V2,NTR,15MM,ALL MODE	S.N.A				
	..2		AA39-20010C	LEAD CONNECTOR-ASSY;..,YFH800-01,S,1P,600					
	..2		AA95-00871A	ASSY-PCB,VIDEO S/V;..,100HZ,KS3A,PAL,....					
	..3	CNS01	3711-002704	CONNECTOR-HEADER:NOWALL,6P,1R,2.5mm,ANGL					
	..3	CNS02	3711-002706	CONNECTOR-HEADER:NOWALL,8P,1R,2.5mm,ANGL					
	△	..3	ICS01	1001-001114	IC-VIDEO SWITCH:TEA6425,VIDEO SWITCH ,DI				
	..3	PCB	AA41-00153E	PCB-VIDEO SWITCH:CS29A6,FR-1,1LE,1.6T,2	S.N.A				
	..3		AA99-20082H	ASSY-PCB SUB,AUTO;..,AA95-00871A ,V	S.N.A				
	..4	CS01	2305-000412	C-FILM,MPEF:470nF,5%,63V,TP,....,5mm					
	..4	CS02	2305-000412	C-FILM,MPEF:470nF,5%,63V,TP,....,5mm					
	..4	CS03	2305-000412	C-FILM,MPEF:470nF,5%,63V,TP,....,5mm					
	..4	CS04	2305-000412	C-FILM,MPEF:470nF,5%,63V,TP,....,5mm					
	..4	CS05	2305-000412	C-FILM,MPEF:470nF,5%,63V,TP,....,5mm					
	..4	CS06	2305-000412	C-FILM,MPEF:470nF,5%,63V,TP,....,5mm					
	..4	CS07	2401-002009	C-AL:100uF,20%,16V,GTP,6.3x7,5					
	..4	CS08	2305-000665	C-FILM,MPEF:100nF,5%,63V,TP,7.5x4.0x5.0m					
	..4	DZS01	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500					
	..4	DZS02	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500					
	..4	LS01	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm					
	..4	QS01	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T					
	..4	QS02	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T					
	..4	QS03	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T					
	..4	RS01	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP1.8X3.2MM					
	..4	RS02	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP1.8X3.2M					
	..4	RS03	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP1.8X3.2MM					
	..4	RS04	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP1.8X3.2M					
	..4	RS05	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP1.8X3.2MM					
	..4	RS06	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP1.8X3.2M					
	..4	RS07	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP1.8X3.2MM					
	..4	RS10	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP1.8X3.2MM					
	..4	RS11	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP1.8X3.2MM					
	..4	RS12	2001-000969	R-CARBON:75OHM,5%,1/8W,AA,TP1.8X3.2MM					
	..4	RS13	2001-000969	R-CARBON:75OHM,5%,1/8W,AA,TP1.8X3.2MM					
	..2		0202-000187	SOLDER-WIRE FLUX;..,RS60S,DI 2.63Sn/37Pb	S.N.A				
	..2		AA61-00462B	SUPPORT-HEAT SINK:21A9,ABS,GRAY,VO,....	S.N.A				
	..2		AA99-30192G	ASSY-PCB ROBOT;..,AA94-02759K ,ER	S.N.A				
	..3	C405	2303-001015	C-FILM,PPF:5.5nF,5%,1.6kV,TP,29x9.5x17,2					
	..3	C406	2303-001015	C-FILM,PPF:5.5nF,5%,1.6kV,TP,29x9.5x17,2					
	..3	C407	2301-001338	C-FILM,MPE-PPF:0.68nF,5%,1.6kV,TP,28x7x1					
	..3	C426	2306-000195	C-FILM,MPPF:360nF,5%,400V,TP,26x19x11.5,					
	..3	C803	2401-003576	C-AL:470uF,20%,450V,GPST,35x45mm,1,					
	..3	C815	2401-003026	C-AL:330uF,20%,200V,GPST,22x35,10					
	..3	CN501	3711-002641	CONNECTOR-HEADER:BOX,10P,1R,2.54mm,STRAI					
	..3	CN902	3711-003043	CONNECTOR-HEADER:BOX,4P,1R,2.5mm,STRAIGH					
	△	..3	CX801S	2306-000318	C-FILM,MPPF:220nF,20%,250V,TP,....,22.5mm				
	△	..3	CX802S	2306-000318	C-FILM,MPPF:220nF,20%,250V,TP,....,22.5mm				
	△	..3	CY802S	2201-002002	C-CERAMIC,DISC:4.7nF,20%,400V,Y5U,TP16x				
	△	..3	FP801S	3601-000297	FUSE-CARTRIDGE:250V,5A,TIME-LAG,GLASS,5,				
	△	..3	IC202	1203-001944	IC-POS.FIXED REG.:78R33,TO-220,3P,....,PL				</

Electrical Parts List

Level	Loc. No.	Code No.	Description ; Specification	Remark	Level	Loc. No.	Code No.	Description ; Specification	Remark
△	...	RL801S	3501-001040	RELAY-POWER:12VDC,500mW,10A,1FormA,15mS,		...	C425	2301-001259	C-FILM,MPPF:100nF,5%,400V,TP,19x8x16,7.5
△	...	T401	AA26-50001S	TRANS-HORIZ.DRIVE:-.6.0mH,44uH,1.5uH,EI2		...	C601	2201-000558	C-CERAMIC,DISC:0.47nF,10%,50V,Y5P,TP,5x3
△	...	TU01S	AA40-00060A	TUNER-F/S;TCPS3001PD09D(S);-PAL-M(NTSC)		...	C603	2401-002235	C-AL:10uF,20%,16V,GP,TP,5x11mm,5mm
	...		AA99-10187U	ASSY-PCB MAIN,AUTO: AA99-30192G_V	S.N.A	...	C604	2401-000603	C-AL:1uF,20%,50V,GP,TP,5x11.5
	...	C103	2301-000383	C-FILM,PEF:10nF,5%,50V,TP,6x7x3.2mm,5mm		...	C605	2305-000665	C-FILM,MPEF:100nF,5%,63V,TP,7.5x4.0x5.0m
	...	C104	2401-0003578	C-AL:1000uF,20%,10V,GP,TP,8x20mm,5		...	C607	2202-000796	C-CERAMIC,MLC-AXIAL:1NF,10%,50V,Y5P,TP,3
	...	C105	2301-000383	C-FILM,PEF:10nF,5%,50V,TP,6x7x3.2mm,5mm		...	C608	2202-000796	C-CERAMIC,MLC-AXIAL:1NF,10%,50V,Y5P,TP,3
	...	C106	2401-000611	C-AL:1uF,20%,50V,WT,TP,5x11.5		...	C610	2301-000445	C-FILM,PEF:4.7nF,5%,50V,TP,5.5x7x3mm,5mm
	...	C113	2202-000127	C-CERAMIC,MLC-AXIAL:10nF,+80-20%,25V,Y5V		...	C611	2301-000445	C-FILM,PEF:4.7nF,5%,50V,TP,5.5x7x3mm,5mm
	...	C115	2202-000121	C-CERAMIC,MLC-AXIAL:100pF,10%,50V,Y5P,TP		...	C612	2401-001914	C-AL:1uF,20%,50V,BP,TP,5x11.5
	...	C116	2202-000121	C-CERAMIC,MLC-AXIAL:100pF,10%,50V,Y5P,TP		...	C613	2401-001914	C-AL:1uF,20%,50V,BP,TP,5x11.5
	...	C201	2401-000603	C-AL:1uF,20%,50V,GP,TP,5x11.5		...	C617	2401-000493	C-AL:10uF,20%,50V,LZ,TP,5x11mm,5mm
	...	C202	2401-002235	C-AL:10uF,20%,16V,GP,TP,5x11mm,5mm		...	C620	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		...	C621	2401-002458	C-AL:1000uF,20%,35V,GP,TP,16x25.7.5
	...	C206	2305-000665	C-FILM,MPEF:100nF,5%,63V,TP,7.5x4.0x5.0m		...	C622	2401-001989	C-AL:4.7uF,20%,50V,BP,TP,5x11.5
	...	C207	2401-002235	C-AL:10uF,20%,16V,GP,TP,5x11mm,5mm		...	C623	2202-000231	C-CERAMIC,MLC-AXIAL:330pF,10%,50V,Y5P,TP
	...	C208	2401-001026	C-AL:3.3UF,20%,50V,GP,TP,5X11.5		...	C624	2202-000231	C-CERAMIC,MLC-AXIAL:330pF,10%,50V,Y5P,TP
	...	C209	2401-001914	C-AL:1uF,20%,50V,BP,TP,5x11.5		...	C625	2401-001989	C-AL:4.7uF,20%,50V,BP,TP,5x11.5
	...	C211	2202-000796	C-CERAMIC,MLC-AXIAL:1NF,10%,50V,Y5P,TP,3		...	C626	2401-001989	C-AL:4.7uF,20%,50V,BP,TP,5x11.5
	...	C212	2301-000224	C-FILM,PEF:2.2nF,5%,50V,TP,7.4x3.9x13mm,5		...	C627	2202-000231	C-CERAMIC,MLC-AXIAL:330pF,10%,50V,Y5P,TP
	...	C213	2301-000247	C-FILM,PEF:33nF,5%,50V,TP,8.1x4.5x13mm,5		...	C628	2401-001989	C-AL:4.7uF,20%,50V,BP,TP,5x11.5
	...	C214	2305-000665	C-FILM,MPEF:100nF,5%,63V,TP,7.5x4.0x5.0m		...	C629	2202-000231	C-CERAMIC,MLC-AXIAL:330pF,10%,50V,Y5P,TP
	...	C215	2401-002235	C-AL:10uF,20%,16V,GP,TP,5x11mm,5mm		...	C630	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		...	C631	2401-002235	C-AL:10uF,20%,16V,GP,TP,5x11mm,5mm
	...	C217	2401-001026	C-AL:3.3UF,20%,50V,GP,TP,5X11.5		...	C632	2202-000806	C-CERAMIC,MLC-AXIAL:220pF,10%,50V,Y5P,TP
	...	C218	2202-000632	C-CERAMIC,MLC-AXIAL:100nF,20%,50V,Z5U,TP		...	C634	2401-001840	C-AL:100uF,20%,16V,GP,TP,6.3x11.5
	...	C219	2202-000632	C-CERAMIC,MLC-AXIAL:100nF,20%,50V,Z5U,TP		...	C635	2305-000665	C-FILM,MPEF:100nF,5%,63V,TP,7.5x4.0x5.0m
	...	C220	2202-000632	C-CERAMIC,MLC-AXIAL:100nF,20%,50V,Z5U,TP		...	C636	2401-001026	C-AL:3.3UF,20%,50V,BP,TP,5x11.5
	...	C221	2202-000632	C-CERAMIC,MLC-AXIAL:100nF,20%,50V,Z5U,TP		...	C637	2401-000027	C-AL:4.7uF,20%,50V,GP,TP,5x11.5
	...	C222	2202-000632	C-CERAMIC,MLC-AXIAL:100nF,20%,50V,Z5U,TP		...	C638	2202-000231	C-CERAMIC,MLC-AXIAL:330pF,10%,50V,Y5P,TP
	...	C223	2202-000632	C-CERAMIC,MLC-AXIAL:100nF,20%,50V,Z5U,TP		...	C639	2202-000231	C-CERAMIC,MLC-AXIAL:330pF,10%,50V,Y5P,TP
	...	C224	2201-002031	C-CERAMIC,DISC:0.005nF,0.5pF,50V,NPO,TP,		...	C640	2401-000027	C-AL:4.7uF,20%,50V,GP,TP,5x11.5
	...	C225	2201-002031	C-CERAMIC,DISC:0.005nF,0.5pF,50V,NPO,TP,		...	C641	2401-000027	C-AL:4.7uF,20%,50V,GP,TP,5x11.5
	...	C228	2301-000356	C-FILM,PEF:4.7nF,5%,50V,TP,7.5x4.0x6.5.5m		...	C642	2202-000231	C-CERAMIC,MLC-AXIAL:330pF,10%,50V,Y5P,TP
	...	C229	2401-002619	C-AL:47uF,20%,25V,GP,TP,5x11.5		...	C643	2401-000027	2401-000027
	...	C230	2301-000356	C-FILM,PEF:4.7nF,5%,50V,TP,7.5x4.0x6.5.5m		...	C644	2202-000231	C-CERAMIC,MLC-AXIAL:330pF,10%,50V,Y5P,TP
	...	C231	2401-002235	C-AL:10uF,20%,16V,GP,TP,5x11mm,5mm		...	C645	2401-002235	C-AL:10uF,20%,16V,GP,TP,5x11mm,5mm
	...	C232	2202-000632	C-CERAMIC,MLC-AXIAL:100nF,20%,50V,Z5U,TP		...	C646	2305-000665	C-FILM,MPEF:100nF,5%,63V,TP,7.5x4.0x5.0m
	...	C233	2305-000412	C-FILM,MPEF:470nF,5%,63V,TP,-,5mm		...	C647	2202-000286	C-CERAMIC,MLC-AXIAL:56pF,5%,50V,SL,TP,1.
	...	C234	2305-000412	C-FILM,MPEF:470nF,5%,63V,TP,-,5mm		...	C649	2301-000108	C-FILM,PEF:1.5nF,5%,50V,TP,6.3x0.5x5.5mm
	...	C235	2305-000412	C-FILM,MPEF:470nF,5%,63V,TP,-,5mm		...	C652	2401-002235	C-AL:10uF,20%,16V,GP,TP,5x11mm,5mm
	...	C236	2305-000412	C-FILM,MPEF:470nF,5%,63V,TP,-,5mm		...	C654	2201-000611	C-CERAMIC,DISC:0.056nF,5%,50V,NPO,TP,7x3
	...	C237	2401-000914	C-AL:22uF,20%,16V,GP,TP,5x11.5		...	C656	2201-000304	C-CERAMIC,DISC:0.001nF,0.25pF,50V,NPO,TP
	...	C239	2401-002235	C-AL:10uF,20%,16V,GP,TP,5x11mm,5mm		...	C657	2201-000304	C-CERAMIC,DISC:0.001nF,0.25pF,50V,NPO,TP
	...	C240	2305-000665	C-FILM,MPEF:100nF,5%,63V,TP,7.5x4.0x5.0m		...	C701	2202-000121	C-CERAMIC,MLC-AXIAL:100pF,10%,50V,Y5P,TP
	...	C242	2301-000192	C-FILM,PEF:1nF,5%,50V,TP,5.3x10mm,5mm		...	C702	2202-000231	C-CERAMIC,MLC-AXIAL:330pF,10%,50V,Y5P,TP
	...	C244	2202-000121	C-CERAMIC,MLC-AXIAL:100pF,10%,50V,Y5P,TP		...	C703	2202-000231	C-CERAMIC,MLC-AXIAL:330pF,10%,50V,Y5P,TP
	...	C245	2202-000121	C-CERAMIC,MLC-AXIAL:100pF,10%,50V,Y5P,TP		...	C707	2401-001989	C-AL:4.7uF,20%,50V,BP,TP,5x11.5
	...	C246	2202-000210	C-CERAMIC,MLC-AXIAL:270PF,10%,50V,Y5P,TP		...	C708	2401-002235	C-AL:10uF,20%,16V,GP,TP,5x11mm,5mm
	...	C247	2202-000849	C-CERAMIC,MLC-AXIAL:18pF,5%,50V,CH,TP,3.		...	C804	2201-000332	C-CERAMIC,DISC:2.2nF,20%,250V,Y5U,TP,9x4
	...	C248	2202-000210	C-CERAMIC,MLC-AXIAL:270PF,10%,50V,Y5P,TP		...	C805	2201-000332	C-CERAMIC,DISC:2.2nF,20%,250V,Y5U,TP,9x4
	...	C249	2202-000231	C-CERAMIC,MLC-AXIAL:330pF,10%,50V,Y5P,TP		...	C807	2301-001397	C-FILM,PPF:2.2nF,5%,1.2kV,TP,15x8.5x13.5
	...	C250	2202-000121	C-CERAMIC,MLC-AXIAL:100pF,10%,50V,Y5P,TP		...	C808	2401-003046	C-AL:47uF,20%,50V,WT,TP,6.3x11.2.5
	...	C302	2401-000360	C-AL:100uF,20%,50V,GP,TP,8x11.5.5		...	C809	2301-000356	C-FILM,PEF:4.7nF,5%,50V,TP,7.5x4.0x6.5.5m
	...	C303	2201-002103	C-CERAMIC,DISC:0.015nF,5%,500V,NPO,TP,6.		...	C810	2301-000356	C-FILM,PEF:4.7nF,5%,50V,TP,7.5x4.0x6.5.5m
	...	C304	2305-000285	C-FILM,MPEF:220nF,5%,100V,TP,10.5X5.5X15		...	C811	2301-000356	C-FILM,PEF:4.7nF,5%,50V,TP,7.5x4.0x6.5.5m
	...	C305	2305-000149	C-FILM,MPEF:100nF,5%,100V,TP,12x12.5x6.5		...	C814	2201-000406	C-CERAMIC,DISC:0.27nF,10%,2kV,Y5P,TP,6.3
	...	C306	2301-000342	C-FILM,PEF:2.2nF,5%,50V,TP,7.4x3.9x13mm,		...	C816	2401-000293	C-AL:100uF,20%,16V,GP,TP,6.3x11.2.5
	...	C307	2401-000360	C-AL:100uF,20%,50V,GP,TP,8x11.5.5		...	C817	2201-000599	C-CERAMIC,DISC:0.56nF,10%,500V,Y5P,TP,5.
	...	C308	2305-000412	C-FILM,MPEF:470nF,5%,63V,TP,-,5mm		...	C818	2401-000722	C-AL:2200uF,20%,25V,WT,TP,16x25.7.5
	...	C401	2201-000556	C-CERAMIC,DISC:0.47nF,10%,500V,Y5P,TP,5.		...	C819	2201-000599	C-CERAMIC,DISC:0.56nF,10%,500V,Y5P,TP,5.
	...	C402	2401-001397	C-AL:470uF,20%,25V,GP,TP,10x16.5		...	C821	2301-000192	C-FILM,PEF:1nF,5%,50V,TP,5.3x10mm,5mm
	...	C403	2201-000556	C-CERAMIC,DISC:0.47nF,10%,500V,Y5P,TP,5.		...	C822	2201-000599	C-CERAMIC,DISC:0.56nF,10%,500V,Y5P,TP,5.
	...	C404	2401-001397	C-AL:470uF,20%,25V,GP,TP,10x16.5		...	C823	2401-003046	C-AL:47uF,20%,50V,WT,TP,6.3x11.2.5
	...	C408	2305-000382	C-FILM,MPEF:4.7nF,5%,400V,TP,-,5mm		...	C824	2401-003046	C-AL:47uF,20%,50V,WT,TP,6.3x11.2.5
	...	C409	2301-001268	C-FILM,PPF:33nF,5%,630V,TP,20x11x17.7.5		...	C825	2305-000665	C-FILM,MPEF:100nF,5%,63V,TP,7.5x4.0x5.0m
	...	C411	2301-000232	C-FILM,PEF:3.3nF,5%,50V,TP,8.1x4.5x13mm,		...	C826	2401-000287	C-AL:100uF,20%,16V,WT,TP,6.3x11.5
	...	C412	2301-000148	C-FILM,PEF:10nF,5%,100V,TP,7x3.2x7mm,5mm		...	C827	2401-002212	C-AL:10uF,20%,25V,WT,TP,5x11.5
	...	C413	2401-000493	C-AL:10uF,20%,50V,LZ,TP,5x11mm,5mm		...	C829	2305-000665	C-FILM,MPEF:100nF,5%,63V,TP,7.5x4.0x5.0m
	...	C414	2401-002597	C-AL:220uF,20%,35V,GP,TP,10x12.5.5		...	C831	2305-000665	C-FILM,MPEF:100nF,5%,63V,TP,7.5x4.0x5.0m
	...	C415	2301-000342	C-FILM,PEF:2.2nF,5%,50V,TP,7.4x3.9x13mm,		...	C832	2401-001840	C-AL:100uF,20%,16V,GP,TP,6.3x11.5
	...	C416	2301-000383	C-FILM,PEF:10nF,5%,50V,TP,6x7x3.2mm,5mm		...	C833	2401-002619	C-AL:47uF,20%,25V,GP,TP,5x11.5
	...	C418	2401-002597	C-AL:220uF,20%,35V,GP,TP,10x12.5.5		...	C835	2401-002289	C-AL:470uF,20%,35V,WT,TP,10x20.5
	...	C421	2201-000556	C-CERAMIC,DISC:0.47nF,10%,500V,Y5P,TP,5.		...	C837	2305-000665	C-FILM,MPEF:100nF,5%,63V,TP,7.5x4.0x5.0m
	...	C422	2401-001527	C-AL:47uF,20%,250V,HR,TP,13x25mm,5m		...	C838	2401-001840	C-AL:100uF,20%,16V,GP,TP,6.3x11.5
	...	C424	2201-000132	C-CERAMIC,DISC:0.1nF,10%,500V,Y5P,TP,6.5		...	C839	2305-000665	C-FILM,MPEF:100nF,5%,63V,TP,7.5x4.0x5.0m

Level	Loc. No.	Code No.	Description ; Specification	Remark	Level	Loc. No.	Code No.	Description ; Specification	Remark
....4	C840	2401-002212	C-AL:10uF,20%,25V,WT,TP,5x11,5		....4	DZ602	0403-000720	DIODE-ZENER:MTZJ9.1B,9.1V,8.57-9.01V,500	
....4	C841	2401-000611	C-AL:1uF,20%,50V,WT,TP,5x11,5		....4	DZ603	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500	
....4	C901	2202-000632	C-CERAMIC,MLC-AXIAL:100nF,20%,50V,Z5U,TP		....4	DZ605	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500	
....4	C902	2301-000192	C-FILM,PEF:1nF,5%,50V,TP5.3x10mm,5mm		....4	DZ801	0403-001322	DIODE-ZENER:MTZJ8.2B,7.78-8.19V,500mW,DO	
....4	C903	2202-000719	C-CERAMIC,MLC-AXIAL:6.8nF,20%,16V,Y5R,3.		....4	DZ802	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500	
....4	C905	2202-000796	C-CERAMIC,MLC-AXIAL:1nF,10%,50V,Y5P,TP,3		....4	DZ803	0403-001167	DIODE-ZENER:MTZJ30D,30V,29.02-30.51V,500	
....4	C907	2305-000412	C-FILM,MPEF:470nF,5%,63V,TP,-,5mm		....4	DZ804	0403-000700	DIODE-ZENER:TZP33A,33V,31-35V,1W,DO-41,T	
....4	C908	2202-000863	C-CERAMIC,MLC-AXIAL:560pF,10%,50V,Y5P,TP		....4	DZ805	1203-001217	IC-POS:ADJUST REG.:431,TO-92,3P4,58MIL	
....4	C909	2301-000383	C-FILM,PEF:10nF,5%,50V,TP,6x7x3.2mm,5mm		....4	DZ806	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500	
....4	C910	2201-000980	C-CERAMIC,DISC:0.03nF,5%,50V,NPO,TP,5x3,		....4	DZ808	0403-001322	DIODE-ZENER:MTZJ8.2B,7.78-8.19V,500mW,DO	
....4	C911	2201-000980	C-CERAMIC,DISC:0.03nF,5%,50V,NPO,TP,5x3,		....4	DZ902	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500	
....4	C912	2401-000027	C-AL:4.7uF,20%,50V,GP,TP,5x11,5		....4	DZ903	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500	
....4	C913	2401-001840	C-AL:100uF,20%,16V,GP,TP,6.3x11,5		....4	DZ904	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500	
....4	C914	2305-000665	C-FILM,MPEF:100nF,5%,63V,TP,7.5x4.0x5.0m		....4	DZ905	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500	
....4	C915	2401-001840	C-AL:100uF,20%,16V,GP,TP,6.3x11,5		....4	DZ906	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500	
....4	C916	2305-000665	C-FILM,MPEF:100nF,5%,63V,TP,7.5x4.0x5.0m		....4	DZ907	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500	
....4	C917	2401-000493	C-AL:10uF,20%,50V,LZ,TP,5x11mm,5mm		....4	DZ908	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500	
....4	C918	2401-001840	C-AL:100uF,20%,16V,GP,TP,6.3x11,5		....4	DZ909	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500	
....4	C919	2202-000632	C-CERAMIC,MLC-AXIAL:100nF,20%,50V,Z5U,TP		....4	DZ910	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500	
....4	C920	2401-002235	C-AL:10uF,20%,16V,GP,TP,5x11mm,5mm		....4	F801A	3602-000114	FUSE-HOLDER,-,30mohm	
....4	C921	2202-000632	C-CERAMIC,MLC-AXIAL:100nF,20%,50V,Z5U,TP		....4	F801B	3602-000114	FUSE-HOLDER,-,30mohm	
....4	C922	2202-000632	C-CERAMIC,MLC-AXIAL:100nF,20%,50V,Z5U,TP		△....4	FA802S	3601-001086	FUSE-AXIAL LEAD:125V,5A,FAST-ACTING,GLAS	
....4	C923	2202-000796	C-CERAMIC,MLC-AXIAL:1nF,10%,50V,Y5P,TP,3		△....4	FA803S	3601-001228	FUSE-AXIAL LEAD:125V,10A,FAST-ACTING,EPO	
....4	C924	2202-000632	C-CERAMIC,MLC-AXIAL:100nF,20%,50V,Z5U,TP		....4	HIC201	AA13-00093A	IC HYBRID:-,DRGB001A,SIP5P,-,TP	
....4	CN502	3711-002646	CONNECTOR-HEADER:BOX,7P,1R,2.5mm,STRAIGH		....4	HIC202	AA13-00093A	IC HYBRID:-,DRGB001A,SIP5P,-,TP	
....4	CN602	3711-002644	CONNECTOR-HEADER:BOX,5P,1R,2.5mm,STRAIGH		....4	HIC203	AA13-00093A	IC HYBRID:-,DRGB001A,SIP5P,-,TP	
....4	CN702	3711-002647	CONNECTOR-HEADER:BOX,8P,1R,2.5mm,STRAIGH		....4	HIC204	AA13-00093A	IC HYBRID:-,DRGB001A,SIP5P,-,TP	
....4	CN704	3711-002646	CONNECTOR-HEADER:BOX,7P,1R,2.5mm,STRAIGH		△....4	IC903	1203-001944	IC-POS:FIXED REG.:78RM33,TO-220,3P,-,PL	
....4	CN901	3711-002644	CONNECTOR-HEADER:BOX,5P,1R,2.5mm,STRAIGH		△....4	IC904	1203-001943	IC-VOL. DETECTOR:7025,TO-92,3P,-,PLASTIC	
....4	CW901	2503-000156	C-NETWORK:100pF,20%,50V		....4	J231	2001-000449	R-CARBON:2.2KOHM,5%,1/8W,AA,TP,1.8x3.2M	
....4	D201	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,		....4	J401	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm	
....4	D202	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,		....4	J412	3301-001223	CORE-FERRITE BEAD:AA,62ohm,3.5x0.8x5mm,-	
....4	D203	0404-000156	DIODE-SCHOTTKY:RB441Q,10V,100mA,DO-34,TP		....4	J901	3301-000287	CORE-FERRITE BEAD:AA,3.5x1.0x6.0mm,1500,	
....4	D204	0404-000156	DIODE-SCHOTTKY:RB441Q,10V,100mA,DO-34,TP		....4	J904	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8x3.2MM	
....4	D205	0404-000156	DIODE-SCHOTTKY:RB441Q,10V,100mA,DO-34,TP		....4	L102	2701-000200	INDUCTOR-AXIAL:5.6uH,10%,4.2x9.8mm	
....4	D206	0404-000156	DIODE-SCHOTTKY:RB441Q,10V,100mA,DO-34,TP		....4	L103	2701-000115	INDUCTOR-AXIAL:10uH,10%,3x7mm	
....4	D207	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,		....4	L108	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm	
....4	D208	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,		....4	L109	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm	
....4	D209	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,		....4	L201	2901-000297	FILTER-EMI ON BOARD:-,3A,-,3.5x5,TP-	
....4	D210	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,		....4	L202	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm	
....4	D301	0402-000546	DIODE-RECTIFIER:TVR10G,400V,1.0A,DO-41,T		....4	L204	2701-000184	INDUCTOR-AXIAL:4.7uH,10%,2.5x3.4mm	
△....4	D401	0402-000540	DIODE-RECTIFIER:RU20A,600V,1.5A,-,TP		....4	L207	3301-000287	CORE-FERRITE BEAD:AA,3.5x1.0x6.0mm,1500,	
△....4	D402	0402-000534	DIODE-RECTIFIER:RG10V,400V,1.2A,DO-201,T		....4	L208	2701-000146	INDUCTOR-AXIAL:2.2uH,10%,2.5x3.4mm	
△....4	D404	0402-000534	DIODE-RECTIFIER:RG10V,400V,1.2A,DO-201,T		....4	L209	2701-000168	INDUCTOR-AXIAL:3.3uH,5%,2.5x3.4mm	
△....4	D405	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,		....4	L210	2701-000168	INDUCTOR-AXIAL:3.3uH,5%,2.5x3.4mm	
△....4	D406	0402-000132	DIODE-RECTIFIER:1N4004,400V,1A,DO-41,TP		....4	L212	2701-000168	INDUCTOR-AXIAL:3.3uH,5%,2.5x3.4mm	
△....4	D408	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,		....4	L301	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm	
△....4	D411	0402-000534	DIODE-RECTIFIER:RG10V,400V,1.2A,DO-201,T		....4	L302	3301-000287	CORE-FERRITE BEAD:AA,3.5x1.0x6.0mm,1500,	
....4	D602	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,		....4	L303	3301-000287	CORE-FERRITE BEAD:AA,3.5x1.0x6.0mm,1500,	
....4	D604	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,		....4	L401	2001-001038	R-CARBON(S):0.56OHM,5%,1/2W,AA,TP,2.4X6.	
△....4	D801	0402-001111	DIODE-RECTIFIER:1N5397GP,600V,1.5A,DO-20		....4	L406	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm	
△....4	D803	0402-000546	DIODE-RECTIFIER:TVR10G,400V,1.0A,DO-41,T		....4	L407	2901-000297	FILTER-EMI ON BOARD:-,3A,-,3.5x5,TP-	
△....4	D804	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,		....4	L410	3301-001223	CORE-FERRITE BEAD:AA,62ohm,3.5x0.8x5mm,-	
△....4	D808	0402-000132	DIODE-RECTIFIER:1N4004,400V,1A,DO-41,TP		....4	L601	2901-000297	FILTER-EMI ON BOARD:-,3A,-,3.5x5,TP-	
△....4	D810	0402-000132	DIODE-RECTIFIER:1N4004,400V,1A,DO-41,TP		....4	L604	2701-000169	INDUCTOR-AXIAL:3.9uH,10%,2.5x3.4mm	
△....4	D811	0402-000132	DIODE-RECTIFIER:1N4004,400V,1A,DO-41,TP		....4	L605	2701-000177	INDUCTOR-AXIAL:33uH,10%,2.5x3.4mm	
△....4	D816	0402-000546	DIODE-RECTIFIER:TVR10G,400V,1.0A,DO-41,T		....4	L606	2701-000177	INDUCTOR-AXIAL:33uH,10%,2.5x3.4mm	
....4	D901	0404-000156	DIODE-SCHOTTKY:RB441Q,10V,100mA,DO-34,TP		....4	L607	2701-000177	INDUCTOR-AXIAL:33uH,10%,2.5x3.4mm	
....4	D902	0404-000156	DIODE-SCHOTTKY:RB441Q,10V,100mA,DO-34,TP		....4	L608	2701-000177	INDUCTOR-AXIAL:33uH,10%,2.5x3.4mm	
....4	D903	0404-000156	DIODE-SCHOTTKY:RB441Q,10V,100mA,DO-34,TP		....4	L609	2901-000297	FILTER-EMI ON BOARD:-,3A,-,3.5x5,TP-	
....4	D904	0404-000156	DIODE-SCHOTTKY:RB441Q,10V,100mA,DO-34,TP		....4	L701	2701-000177	INDUCTOR-AXIAL:33uH,10%,2.5x3.4mm	
....4	D906	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,		....4	L702	2701-000177	INDUCTOR-AXIAL:33uH,10%,2.5x3.4mm	
....4	D907	0402-000132	DIODE-RECTIFIER:1N4004,400V,1A,DO-41,TP		....4	L705	2701-000177	INDUCTOR-AXIAL:33uH,10%,2.5x3.4mm	
....4	DZ201	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500		....4	L706	2701-000177	INDUCTOR-AXIAL:33uH,10%,2.5x3.4mm	
....4	DZ202	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500		....4	L709	2701-000168	INDUCTOR-AXIAL:3.3uH,5%,2.5x3.4mm	
....4	DZ203	0403-001321	DIODE-ZENER:MTZJ6.8C,6.66-7.01V,500mW,DO		....4	L710	2701-000168	INDUCTOR-AXIAL:3.3uH,5%,2.5x3.4mm	
....4	DZ204	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500		....4	L711	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm	
....4	DZ205	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500		....4	L801	3301-001223	CORE-FERRITE BEAD:AA,62ohm,3.5x0.8x5mm,-	
....4	DZ206	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500		....4	L802	3301-000287	CORE-FERRITE BEAD:AA,3.5x1.0x6.0mm,1500,	
....4	DZ302	0403-001329	DIODE-ZENER:MTZJ24B,22.61-23.77V,500mW,D		....4	L803	3301-000287	CORE-FERRITE BEAD:AA,3.5x1.0x6.0mm,1500,	
....4	DZ303	0403-001329	DIODE-ZENER:MTZJ24B,22.61-23.77V,500mW,D		....4	L804	3301-000287	CORE-FERRITE BEAD:AA,3.5x1.0x6.0mm,1500,	
....4	DZ304	0403-001329	DIODE-ZENER:MTZJ24B,22.61-23.77V,500mW,D		....4	L806	3301-001223	CORE-FERRITE BEAD:AA,62ohm,3.5x0.8x5mm,-	
....4	DZ305	0403-001221	DIODE-ZENER:UZ39BSB,35.36-37.19V,500mW,D		....4	L807	2901-000297	FILTER-EMI ON BOARD:-,3A,-,3.5x5,TP-	
....4	DZ306	0403-000700	DIODE-ZENER:TZP33A,33V,31-35V,1W,DO-41,T		....4	L809	3301-000287	CORE-FERRITE BEAD:AA,3.5x1.0x6.0mm,1500,	
....4	DZ401	0403-001325	DIODE-ZENER:MTZJ15C,14.35-15.09V,500mW,D		....4	L901	2702-001094	INDUCTOR-RADIAL:10uH,10%,6x4mm	
....4	DZ402	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,		....4	L902	2701-000184	INDUCTOR-AXIAL:4.7uH,10%,2.5x3.4mm	
....4	DZ601	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500		....4	L903	2702-001094	INDUCTOR-RADIAL:10uH,10%,6x4mm	

Electrical Parts List

Level	Loc. No.	Code No.	Description ; Specification	Remark	Level	Loc. No.	Code No.	Description ; Specification	Remark
....4	L904	2702-001094	INDUCTOR-RADIAL:10uH,10%,6x4mm		....4	R407	2001-001114	R-CARBON(S):2700HM,5%,1/2W,AA,TP2.4X6.4	
....4	L905	2001-000995	R-CARBON:820OHM,5%,1/8W,AA,TP1.8X3.2MM		....4	R409	2003-001018	R-METAL OXIDE(S):220ohm,5%,2W,AF,TP3.9x	
....4	L907	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm		....4	R410	2003-001018	R-METAL OXIDE(S):220ohm,5%,2W,AF,TP3.9x	
....4	L908	2701-000191	INDUCTOR-AXIAL:47uH,10%,2.5x3.4mm		....4	R411	2001-000028	R-CARBON(S):1000HM,5%,1/2W,AA,TP2.4X6.4	
....4	L909	2701-000191	INDUCTOR-AXIAL:47uH,10%,2.5x3.4mm		....4	R412	2001-000020	R-CARBON(S):220OHM,5%,1/2W,AA,TP2.4X6.4MM	
....4	PCB	AA41-00168F	PCB-MAIN:CS29A6,FR-1,1L,F,1.6T,330x245,	S.N.A	....4	R413	2008-001018	R-FUSIBLE(S):0.47ohm,10%,2W,AF,TP3.9x10	
....4	Q201	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T		....4	R414	2008-000253	R-FUSIBLE(S):0.47ohm,5%,1W,AF,TP3.9x10m	
....4	Q202	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T		....4	R415	2001-001093	R-CARBON(S):2.2KOHM,5%,1/2W,AA,TP2.4X6.	
....4	Q203	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T		....4	R417	2004-001397	R-METAL(S):4.7Kohm,1%,1/2W,AA,TP2.4x6.4	
....4	Q204	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T		....4	R418	2001-001159	R-CARBON(S):5100HM,5%,1/2W,AA,TP2.4X6.4	
....4	Q601	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T		....4	R420	2004-004015	R-METAL(S):9.1Kohm,1%,1/2W,AA,TP2.5x6.5	
....4	Q701	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T		....4	R421	2001-001093	R-CARBON(S):2.2KOHM,5%,1/2W,AA,TP2.4X6.	
....4	Q802	0501-000369	TR-SMALL SIGNAL:KSC2331-Y,NPN,1000mW,TO-		....4	R422	2001-000020	R-CARBON(S):220OHM,5%,1/2W,AA,TP2.4X6.4MM	
....4	Q901	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T		....4	R423	2004-004048	R-METAL(S):3.9Kohm,1%,1/2W,AA,TP2.5x6.5	
....4	Q902	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T		....4	R424	2008-001018	R-FUSIBLE(S):0.47ohm,10%,2W,AF,TP3.9x10	
....4	Q903	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T		....4	R425	2008-001011	R-FUSIBLE(S):0.18ohm,10%,2W,AF,TP3.9x10	
....4	Q906	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T		....4	R426	2003-000540	R-METAL OXIDE(S):1Kohm,5%,2W,AF,TP4x12m	
....4	Q908	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T		....4	R433	2003-001042	R-METAL OXIDE(S):5.6Kohm,5%,2W,AF,TP3.9	
....4	Q909	0505-000109	FET-SILICON:2N7000,N,60V,200mA,5ohm,400m		....4	R434	2003-002064	R-METAL OXIDE:7.5ohm,5%,2W,AF,TP10x3.9m	
....4	Q910	0505-000109	FET-SILICON:2N7000,N,60V,200mA,5ohm,400m		....4	R601	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R102	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP1.8X3.2MM		....4	R602	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R103	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP1.8X3.2MM		....4	R603	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R105	2001-000702	R-CARBON:39KOHM,5%,1/8W,AA,TP1.8X3.2MM		....4	R604	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R106	2001-000864	R-CARBON:56KOHM,5%,1/8W,AA,TP1.8X3.2MM		....4	R605	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R202	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP1.8X3.2MM		....4	R606	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R203	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP1.8X3.2MM		....4	R607	2001-000613	R-CARBON:3.9KOHM,5%,1/8W,AA,TP1.8X3.2M	
....4	R204	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP1.8X3.2MM		....4	R608	2001-000613	R-CARBON:3.9KOHM,5%,1/8W,AA,TP1.8X3.2M	
....4	R205	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP1.8X3.2MM		....4	R609	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R206	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP1.8X3.2MM		....4	R610	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R207	2001-000221	R-CARBON:1.2KOHM,5%,1/8W,AA,TP1.8X3.2M		....4	R611	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R208	2001-000405	R-CARBON:180OHM,5%,1/8W,AA,TP1.8X3.2MM		....4	R612	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R209	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP1.8X3.2MM		....4	R613	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R210	2001-000812	R-CARBON:5.6KOHM,5%,1/8W,AA,TP1.8X3.2M		....4	R614	2001-000780	R-CARBON:470OHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R211	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP1.8X3.2MM		....4	R615	2001-000780	R-CARBON:470OHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R212	2004-000218	R-METAL:10Kohm,1%,1/8W,AA,TP1.8x3.2mm		....4	R616	2001-000780	R-CARBON:470OHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R214	2001-000411	R-CARBON:18KOHM,5%,1/8W,AA,TP1.8X3.2MM		....4	R617	2001-000780	R-CARBON:470OHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R215	2001-000522	R-CARBON:22KOHM,5%,1/8W,AA,TP1.8X3.2MM		....4	R620	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R216	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP1.8X3.2MM		....4	R621	2001-000577	R-CARBON:2KOHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R224	2001-000780	R-CARBON:470OHM,5%,1/8W,AA,TP1.8X3.2MM		....4	R622	2001-000577	R-CARBON:2KOHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R225	2001-000780	R-CARBON:470OHM,5%,1/8W,AA,TP1.8X3.2MM		....4	R627	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R226	2001-000780	R-CARBON:470OHM,5%,1/8W,AA,TP1.8X3.2MM		....4	R628	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R228	2001-000117	R-CARBON(S):680HM,5%,1/2W,AA,TP2.4X6.4MM		....4	R629	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R231	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP1.8X3.2MM		....4	R701	2001-000969	R-CARBON:750HM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R232	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP1.8X3.2MM		....4	R702	2001-000969	R-CARBON:750HM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R233	2901-000297	FILTER-EMI ON BOARD:-3A,-,-,3.5x5,TP-		....4	R703	2001-000969	R-CARBON:750HM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R235	2001-000515	R-CARBON:220OHM,5%,1/8W,AA,TP1.8X3.2MM		....4	R704	2001-000969	R-CARBON:750HM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R236	2001-000515	R-CARBON:220OHM,5%,1/8W,AA,TP1.8X3.2MM		....4	R705	2001-000969	R-CARBON:750HM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R237	2001-000515	R-CARBON:220OHM,5%,1/8W,AA,TP1.8X3.2MM		....4	R706	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R238	2001-000515	R-CARBON:220OHM,5%,1/8W,AA,TP1.8X3.2MM		....4	R707	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R241	2001-000938	R-CARBON:680HM,5%,1/8W,AA,TP1.8X3.2MM		....4	R708	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R242	2001-000969	R-CARBON:750HM,5%,1/8W,AA,TP1.8X3.2MM		....4	R709	2001-000938	R-CARBON:680HM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R243	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP1.8X3.2MM		....4	R710	2001-000938	R-CARBON:680HM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R244	2001-000786	R-CARBON:47KOHM,5%,1/8W,AA,TP1.8X3.2MM		....4	R711	2001-000969	R-CARBON:750HM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R245	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP1.8X3.2MM		....4	R712	2001-000969	R-CARBON:750HM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R246	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP1.8X3.2MM		....4	R715	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R247	2001-000515	R-CARBON:220OHM,5%,1/8W,AA,TP1.8X3.2MM		....4	R716	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R248	2001-000003	R-CARBON:330ohm,5%,1/8W,AA,TP1.8x3.2mm		....4	R717	2001-000702	R-CARBON:39KOHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R249	2001-000003	R-CARBON:330ohm,5%,1/8W,AA,TP1.8x3.2mm		....4	R718	2001-000702	R-CARBON:39KOHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R250	2001-000003	R-CARBON:330ohm,5%,1/8W,AA,TP1.8x3.2mm		....4	R719	2001-000969	R-CARBON:750HM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R252	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP1.8X3.2MM		....4	R723	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R253	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP1.8X3.2M		....4	R724	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP1.8X3.2M	
....4	R254	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP1.8X3.2MM		....4	R725	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP1.8X3.2M	
....4	R301	2001-001054	R-CARBON(S):1.6KOHM,5%,1/2W,AA,TP2.4X6.		....4	R726	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R302	2004-001403	R-METAL(S):7.5Kohm,1%,1/2W,AA,TP2.4x6.4		....4	R802	2003-001025	R-METAL OXIDE(S):15Kohm,5%,2W,AF,TP3.9x	
....4	R303	2001-000016	R-CARBON(S):10HM,5%,1/2W,AA,TP2.4X6.4MM		....4	R803	2003-001025	R-METAL OXIDE(S):15Kohm,5%,2W,AF,TP3.9x	
....4	R304	2003-002228	R-METAL OXIDE(S):0.47ohm,5%,2W,AG,TP3.9		....4	R804	2003-001025	R-METAL OXIDE(S):15Kohm,5%,2W,AF,TP3.9x	
....4	R305	2003-002157	R-METAL OXIDE:220OHM,5%,2W,AG,TP6x16MM		....4	R805	2001-001150	R-CARBON(S):470KOHM,5%,1/2W,AA,TP2.4X6.	
....4	R306	2003-002157	R-METAL OXIDE:220OHM,5%,2W,AG,TP6x16MM		....4	R806	2001-001150	R-CARBON(S):470KOHM,5%,1/2W,AA,TP2.4X6.	
....4	R309	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP1.8X3.2MM		....4	R807	2006-001083	R-CEMENT:120ohm,5%,5W,CJ,TP14x10x27mm	
....4	R310	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP1.8X3.2MM		....4	R808	2001-001079	R-CARBON(S):150HM,5%,1/2W,AA,TP2.4X6.4MM	
....4	R313	2004-001137	R-METAL:6.8Kohm,1%,1/8W,AA,TP1.8x3.2m		....4	R809	2001-000022	R-CARBON(S):330OHM,5%,1/2W,AA,TP2.4X6.4MM	
....4	R314	2004-001893	R-METAL(S):22Kohm,1%,1/2W,AA,TP2.5x6.5m		....4	R810	2001-001178	R-CARBON(S):680OHM,5%,1/2W,AA,TP2.4X6.4	
....4	R401	2003-000586	R-METAL OXIDE(S):22Kohm,5%,2W,AF,TP4x12		....4	R811	2004-001008	R-METAL(S):91Kohm,1%,1/2W,AA,TP2.4x6.4m	
....4	R402	2003-000586	R-METAL OXIDE(S):22Kohm,5%,2W,AF,TP4x12		....4	R812	2001-000780	R-CARBON:470OHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R404	2001-001038	R-CARBON(S):0.56OHM,5%,1/2W,AA,TP2.4X6.		....4	R813	2001-001153	R-CARBON(S):470HM,5%,1/2W,AA,TP2.4X6.4MM	
....4	R405	2008-001018	R-FUSIBLE(S):0.47ohm,10%,2W,AF,TP3.9x10		....4	R816	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP1.8X3.2MM	

Level	Loc. No.	Code No.	Description ; Specification	Remark	Level	Loc. No.	Code No.	Description ; Specification	Remark
....4	R817	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM		....4	1201-001131	IC-VIDEO AMP:6111,SIP9P,-,SINGLE,-,PLAS		
....4	R818	2001-001113	R-CARBON(S):270KOHM,5%,1/2W,AA,TP,2.4X6.4		....4	6001-000057	SCREW-MACHINE-RH,+M3,L6,ZPC(BLK),SWRCH1	S.N.A	
....4	R819	2004-001983	R-METAL(S):2.49Kohm,1%,1/2W,AA,TP,2.4x6.		....4	6021-000222	NUT-HEXAGON:2C,M3,ZPC(YEL),SM20C 1	S.N.A	
....4	R820	2001-001096	R-CARBON(S):2.20HM,5%,1/2W,AA,TP,2.4X6.4		....4	AA61-10060A	BRACKET-TR-,-,CUS-1 1/2H,TO.5,-,-,-	S.N.A	
....4	R821	2004-001891	R-METAL(S):133Kohm,1%,1/2W,AA,TP,2.5x6.5		△...3	IC502	AA96-50151B	ASSY-H/S-,-,AMPA61-10060A,TDA6111Q,-	
....4	R822	2001-000273	R-CARBON:100KOHM,5%,1/8W,AA,TP,1.8X3.2M		△...3	IC503	AA96-50151B	ASSY-H/S-,-,AMPA61-10060A,TDA6111Q,-	
....4	R823	2001-000522	R-CARBON:22KOHM,5%,1/8W,AA,TP,1.8X3.2MM		△...3	ICG01	1201-000191	IC-OP AMP:4558,DIP8P,300MIL,DUAL,20V/mV	
....4	R824	2001-000273	R-CARBON:100KOHM,5%,1/8W,AA,TP,1.8X3.2M		....3	JA501	3722-001503	JACK-PIN:TP,1P,NI,RED,SCR-JACK	
....4	R825	2001-000066	R-CARBON(S):10KOHM,5%,1/2W,AA,TP,2.4X6.4		....3	PCB	AA41-00210C	PCB-CRT:CS29A6,FR-1,1L,C,1.6T,330x245,	S.N.A
....4	R827	2008-000284	R-FUSIBLE(S):0.10HM,10%,2W,AF,TP,3.9X10MM		....3	QF04	AA96-00111A	ASSY-H/S-,-,AA62-30013L,2SC2344,-	
....4	R828	2008-000266	R-FUSIBLE(S):1ohm,5%,2W,AF,TP,3.9x10mm		....4	0502-000153	TR-POWER:2SC2344-D,NPN,1.2W,TO-220,-.60		
....4	R829	2008-001029	R-FUSIBLE(S):5.6OHM,5%,2W,AF,TP,3.9X10MM		....4	6003-000333	SCREW-TAPTITE:RH,+2S,M3,L10,ZPC(YEL),SW		
....4	R831	2001-000780	R-CARBON:470OHM,5%,1/8W,AA,TP,1.8X3.2MM		....4	AA62-30013L	HEATSINK-ES-,-,-,44/22,-,WHT,-,-,-,-	S.N.A	
....4	R832	2001-001153	R-CARBON(S):47OHM,5%,1/2W,AA,TP,2.4X6.4MM		....3	QF05	AA96-00111B	ASSY-H/S-,-,AA62-30013L,2SA1011,-	
....4	R833	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M		....4	0502-000131	TR-POWER:2SA1011-D,PNP,1.2W,TO-220,-.60		
....4	R835	2003-002181	R-METAL OXIDE(S):68Kohm,5%,2W,AG,TP,3.9x		....4	6003-000333	SCREW-TAPTITE:RH,+2S,M3,L10,ZPC(YEL),SW		
....4	R836	2003-002181	R-METAL OXIDE(S):68Kohm,5%,2W,AG,TP,3.9x		....4	AA62-30013L	HEATSINK-ES-,-,-,44/22,-,WHT,-,-,-,-	S.N.A	
....4	R901	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,1.8X3.2MM		....3	QG01	0501-000283	TR-SMALL SIGNAL:KSA539,PNP,400mW,TO-92,T	
....4	R903	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M		....3	R511	2001-001088	R-CARBON(S):1KOHM,5%,1/2W,AA,TP,2.4X6.4M	
....4	R904	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M		....3	R523	2008-000255	R-FUSIBLE(S):1.5ohm,5%,1W,AA,TP,3.9x10mm	
....4	R905	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M		△...3	VA999	3704-001032	SOCKET-CRT:8P,29P1,35.5P1,40U30U	
....4	R906	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M		....3	AA99-20081P	ASSY-PCB SUB,AUTO; AA95-00838A ,V	S.N.A	
....4	R907	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM		....4	C502	2305-000704	C-FILM,MPEF:100nF,5%,250V,TP,16.5x10.3x5	
....4	R908	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M		....4	C503	2201-000599	C-CERAMIC,DISC:0.56nF,10%,500V,Y5P,TP5	
....4	R909	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM		....4	C505	2305-000704	C-FILM,MPEF:100nF,5%,250V,TP,16.5x10.3x5	
....4	R910	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM		....4	C506	2201-000599	C-CERAMIC,DISC:0.56nF,10%,500V,Y5P,TP5	
....4	R911	2001-000628	R-CARBON:300OHM,5%,1/8W,AA,TP,1.8X3.2MM		....4	C508	2305-000704	C-FILM,MPEF:100nF,5%,250V,TP,16.5x10.3x5	
....4	R912	2001-000628	R-CARBON:300OHM,5%,1/8W,AA,TP,1.8X3.2MM		....4	C509	2201-000599	C-CERAMIC,DISC:0.56nF,10%,500V,Y5P,TP5	
....4	R913	2001-000947	R-CARBON:7.5KOHM,5%,1/8W,AA,TP,1.8X3.2M		....4	C510	2401-001563	C-AL:47uF,20%,400V,GP,TP,16x25,7.5	
....4	R914	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM		....4	C511	2401-001232	C-AL:4.7uF,20%,250V,GP,TP,10x12,5.5	
....4	R919	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,1.8X3.2MM		....4	C512	2401-000914	C-AL:22uF,20%,16V,GP,TP,5x11,5	
....4	R920	2001-000780	R-CARBON:470OHM,5%,1/8W,AA,TP,1.8X3.2MM		....4	C513	2201-000723	C-CERAMIC,DISC:4.7nF,20%,3KV,Y5U,TP,16x5	
....4	R921	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M		....4	C514	2401-000430	C-AL:10uF,20%,250V,GP,TP,10x16mm,5m	
....4	R922	2001-000924	R-CARBON:680OHM,5%,1/8W,AA,TP,1.8X3.2MM		....4	C515	2401-000914	C-AL:22uF,20%,16V,GP,TP,5x11,5	
....4	R923	2001-000924	R-CARBON:680OHM,5%,1/8W,AA,TP,1.8X3.2MM		....4	C516	2301-000192	C-FILM,PEF:1nF,5%,50V,TP,5.3x10mm,5mm	
....4	R924	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM		....4	C518	2301-000224	C-FILM,PEF:22nF,5%,50V,TP,7.4x3.9x13mm,5	
....4	R925	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM		....4	C519	2301-000224	C-FILM,PEF:22nF,5%,50V,TP,7.4x3.9x13mm,5	
....4	R927	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M		....4	C520	2301-000224	C-FILM,PEF:22nF,5%,50V,TP,7.4x3.9x13mm,5	
....4	R928	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M		....4	C521	2301-000224	C-FILM,PEF:22nF,5%,50V,TP,7.4x3.9x13mm,5	
....4	R929	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM		....4	C522	2301-000224	C-FILM,PEF:22nF,5%,50V,TP,7.4x3.9x13mm,5	
....4	R930	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM		....4	C523	2301-000224	C-FILM,PEF:22nF,5%,50V,TP,7.4x3.9x13mm,5	
....4	R931	2001-000003	R-CARBON:330ohm,5%,1/8W,AA,TP,1.8x3.2mm		....4	C526	2401-000914	C-AL:22uF,20%,16V,GP,TP,5x11,5	
....4	R935	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,1.8X3.2MM		....4	CF01	2201-000180	C-CERAMIC,DISC:10nF,10%,50V,Y5V,TP,7x3,5	
....4	R936	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM		....4	CF02	2301-000192	C-FILM,PEF:1nF,5%,50V,TP,5.3x10mm,5mm	
....4	R937	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M		....4	CF03	2201-000376	C-CERAMIC,DISC:0.22nF,5%,50V,SL,TP,6.3x3	
....4	R938	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M		....4	CF04	2201-000653	C-CERAMIC,DISC:0.068nF,5%,50V,SL,TP,5x3,	
....4	R940	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM		....4	CF05	2301-000261	C-FILM,PEF:4.7nF,5%,100V,TP,10.5x12.5x6	
....4	R941	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM		....4	CF06	2201-000516	C-CERAMIC,DISC:4.7nF,+100-0%,500V,Y5U,TP	
....4	R942	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM		....4	CF07	2305-000704	C-FILM,MPEF:100nF,5%,250V,TP,16.5x10.3x5	
....4	R945	2001-000449	R-CARBON:2.2KOHM,5%,1/8W,AA,TP,1.8X3.2M		....4	CF08	2201-000604	C-CERAMIC,DISC:0.056nF,+100-0%,500V,SL,T	
....4	R946	2001-000449	R-CARBON:2.2KOHM,5%,1/8W,AA,TP,1.8X3.2M		....4	CF10	2401-001840	C-AL:100uF,20%,16V,GP,TP,6.3x11,5	
....4	R947	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM		....4	CF11	2401-000927	C-AL:22uF,20%,250V,GP,TP,13x20,5	
....4	R948	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM		....4	CF12	2401-001840	C-AL:100uF,20%,16V,GP,TP,6.3x11,5	
△...4	RX801S	2002-001010	R-COMPOSITION:1.8Mohm,5%,1/2W,AA,TP,3.7x		....4	CF14	2401-000832	C-AL:220uF,20%,25V,GP,TP,8x11,5,5	
△...4	RY801S	2002-001011	R-COMPOSITION:3.3Mohm,5%,1/2W,AA,TP,3.7x		....4	CG01	2401-000832	C-AL:220uF,20%,25V,GP,TP,8x11,5,5	
△...4	RY802S	2002-001013	R-COMPOSITION:4.7Mohm,5%,1/2W,AA,TP,3.7x		....4	CG02	2305-000149	C-FILM,MPEF:100nF,5%,100V,TP,12x12.5x6.5	
△...4	VP801S	1405-000187	VARISTOR:750V,1250A,12.5x7mm,TP		....4	CG03	2401-000493	C-AL:10uF,20%,50V,SL,TP,5x11mm,5mm	
△...4	VX801S	1405-000187	VARISTOR:750V,1250A,12.5x7mm,TP		....4	CG04	2401-000832	C-AL:220uF,20%,25V,GP,TP,8x11,5,5	
....4	X201	2801-003432	CRYSTAL-UNIT:20.25MHZ,30PPM,28-AAM,13PF		....4	CN502A	3711-002646	CONNECTOR-HEADER:BOX,7P,1R,2.5mm,STRAIGH	
....4	X601	2801-003903	CRYSTAL-UNIT:18.432MHZ,25ppm,28-AAM,12pF		....4	CNF01	3711-002642	CONNECTOR-HEADER:BOX,3P,1R,2.5MM,STRAIGH	
....4	X901	2801-003728	CRYSTAL-UNIT:6MHz,30ppm,28-AAM,20pF,40oh		....4	CNG01	3711-002643	CONNECTOR-HEADER:BOX,4P,1R,2.5MM,STRAIGH	
....2	AA98-00053A	ASSY SUB PARTKS3A,MAIN(OPT),PAL-	S.N.A		....4	D502	0402-000132	DIODE-RECTIFIER:1N4004,400V,1A,DO-41,TP	
....2	0202-000187	SOLDER-WIRE FLUX:-,RS60S,D1,2.63Sn/37Pb	S.N.A		....4	D507	0402-001105	DIODE-RECTIFIER:ERB43-04SV1,400V,1.0A,-,	
....3	AA95-00840A	ASSY-DYNAMIC FOCUS:-,29,100HZ,KS3A,PAL,			....4	D508	0402-001105	DIODE-RECTIFIER:ERB43-04SV1,400V,1.0A,-,	
....3	LH01	AA26-90002C	TRANS-DUMMY:-,3.5mH,EER2834,130/1200,ST		....4	D509	0402-001105	DIODE-RECTIFIER:ERB43-04SV1,400V,1.0A,-,	
....3	LH02	AA27-40003L	COIL-HORIZ.WIDTH:-,1.0mH,DR14x20,2JEUW0.4		....4	D510	0402-001105	DIODE-RECTIFIER:ERB43-04SV1,400V,1.0A,-,	
....3	PCB	AA41-00152C	PCB-DOUBLE FOCUS:CV29A6VNBX/XEF,FR-1,1L,	S.N.A	....4	D511	0402-001105	DIODE-RECTIFIER:ERB43-04SV1,400V,1.0A,-,	
....3	RH28	2008-001113	R-FUSIBLE(S):0.22ohm,10%,2W,AG,TP,3.9x12		....4	D512	0402-001105	DIODE-RECTIFIER:ERB43-04SV1,400V,1.0A,-,	
....3	WIRE3	AA39-20061C	LEAD CONNECTOR-ASSY:-,YFH800-03,S,3P,200		....4	DF01	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,	
....3	AA98-00055A	ASSY SUB PARTKS3A,DYNAMIC FOCUS,ALL,-	S.N.A		....4	DF02	0402-001105	DIODE-RECTIFIER:ERB43-04SV1,400V,1.0A,-,	
....4	0202-000187	SOLDER-WIRE FLUX:-,RS60S,D1,2.63Sn/37Pb	S.N.A		....4	DF03	0402-001105	DIODE-RECTIFIER:ERB43-04SV1,400V,1.0A,-,	
....3	AA99-20081O	ASSY-PCB SUB,AUTO; AA95-00840A ,V	S.N.A		....4	DF04	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,	
....2	AA95-00838A	ASSY PCB CRT:-,KS3A,29(100HZ)-,PAL			....4	DG01	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,	
....3	CN501A	3711-002641	CONNECTOR-HEADER:BOX,10P,1R,2.54mm,STRAI		....4	DZ503	0403-001211	DIODE-ZENER:MTZJ12B,11.44-12.03V,500mW,D	
....3	CN501E	AA39-20025F	LEAD CONNECTOR-ASSY:-,67096-010,S,10P,50		....4	DZ504	0403-001325	DIODE-ZENER:MTZJ15C,14.35-15.09V,500mW,D	
....3	CN502E	AA39-20029K	LEAD CONNECTOR-ASSY:-,67096-007,S,7P,400		....4	DZ505	0403-001325	DIODE-ZENER:MTZJ15C,14.35-15.09V,500mW,D	
△...3	IC501	AA96-50151B	ASSY-H/S-,-,AMPA61-10060A,TDA6111Q,-		....4	DZF01	0403-001039	DIODE-ZENER:MA2560,56V,52-60V,1W,DO-41,T	

Level	Loc. No.	Code No.	Description ; Specification	Remark	Level	Loc. No.	Code No.	Description ; Specification	Remark
....4	DZF02	0403-001039	DIODE-ZENER:MA2560,56V,52-60V,1W,DO-41,T		ASSY TERMINAL BOARD				
....4	L501	2701-000178	INDUCTOR-AXIAL:33uH,10%,3x7mm		1	*	AA91-00368C	ASSY TERMINAL BOARD:-,HIPS,V0,BLK,KS3A S	
....4	L503	2901-000297	FILTER-EMI ON BOARD:-,3A,-,-,3.5x5,TP,-		..2		AA63-40254B	TERMINAL-BOARD,ANT:-,HIPS HB,BLK KCT55A,	S.N.A
....4	L504	2901-000297	FILTER-EMI ON BOARD:-,3A,-,-,3.5x5,TP,-		..2		AA64-01036D	INLAY BACK:29A5,PS SHEET,T0.5,-,BLK,-,SC	S.N.A
....4	L505	3301-000287	CORE-FERRITE BEAD:AA,3.5x1.0x6.0mm,1500,		ASSY CHASSIS PART				
....4	LF01	3301-000287	CORE-FERRITE BEAD:AA,3.5x1.0x6.0mm,1500,		1	*	AA90-30213D	ASSY CHASSIS PART:KS3A,295A	S.N.A
....4	LF02	2701-000112	INDUCTOR-AXIAL:100uH,10%,3x7mm		..2	AV	AA65-00011C	CLAMP-WIRE:ALL MODEL,NYLON 66,V2,NTR,25M	S.N.A
....4	LF04	2901-000297	FILTER-EMI ON BOARD:-,3A,-,-,3.5x5,TP,-		..2	D-FOCU	6003-001023	SCREW-TAPTITE:RWH,+ ,B,M3,L10,ZPC(YEL),SW	
....4	LF05	2901-000297	FILTER-EMI ON BOARD:-,3A,-,-,3.5x5,TP,-		..2	PM+HC	6003-001023	SCREW-TAPTITE:RWH,+ ,B,M3,L10,ZPC(YEL),SW	
....4	Q502	0501-000283	TR-SMALL SIGNAL:KSA539,PNP,400mW,TO-92,T		..2	TB+HC	6003-001023	SCREW-TAPTITE:RWH,+ ,B,M3,L10,ZPC(YEL),SW	
....4	Q503	0501-000283	TR-SMALL SIGNAL:KSA539,PNP,400mW,TO-92,T		..2		AA61-20254A	HOLDER-CHASSIS:-,CS-622A,HIPS,V0,BLK,-	S.N.A
....4	Q504	0501-000283	TR-SMALL SIGNAL:KSA539,PNP,400mW,TO-92,T		ASSY-PCB,A/V SIDE				
....4	QF01	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T		1	*	AA95-00872A	ASSY-PCB,A/V SIDE:-,29A6,29A5,100HZ,KS3A	
....4	QF02	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T		..2	C701	2202-000121	C-CERAMIC,MLC-AXIAL:100pF,10%,50V,Y5P,TP	
....4	QF03	0501-000369	TR-SMALL SIGNAL:KSC2331-Y,NPN,1000mW,TO-		..2	C702	2202-000121	C-CERAMIC,MLC-AXIAL:100pF,10%,50V,Y5P,TP	
....4	QG02	0502-000244	TR-POWER:KSA940,PNP,1.5W,TO-220,-,40-14		..2	C703	2202-000231	C-CERAMIC,MLC-AXIAL:330pF,10%,50V,Y5P,TP	
....4	QIG03	0502-001007	TR-POWER:KSC2073-H2,NPN,25W,TO-220,ST,6		..2	C704	2202-000231	C-CERAMIC,MLC-AXIAL:330pF,10%,50V,Y5P,TP	
....4	R501	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM		..2	C705	2401-002009	C-AL:100uF,20%,16V,GPTP6.3x7.5	
....4	R502	2001-001093	R-CARBON(S):2.2KOHM,5%,1/2W,AA,TP,2.4X6.		..2	C706	2401-002009	C-AL:100uF,20%,16V,GPTP6.3x7.5	
....4	R503	2001-000085	R-CARBON(S):100KOHM,5%,1/2W,AA,TP,2.4X6.		..2	C707	2202-000231	C-CERAMIC,MLC-AXIAL:330pF,10%,50V,Y5P,TP	
....4	R505	2002-001008	R-COMPOSITION:1.8Kohm,10%,1/2W,AA,TP,3.7		..2	C708	2202-000231	C-CERAMIC,MLC-AXIAL:330pF,10%,50V,Y5P,TP	
....4	R506	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM		..2	CN701	AA39-20068G	LEAD CONNECTOR-ASSY:-,YBNH025-08,67096-0	
....4	R507	2001-001093	R-CARBON(S):2.2KOHM,5%,1/2W,AA,TP,2.4X6.		..2	CN702	AA39-20070J	LEAD CONNECTOR-ASSY:-,7P,-,-,YBNH2	
....4	R508	2001-000085	R-CARBON(S):100KOHM,5%,1/2W,AA,TP,2.4X6.		..2	CN703	AA39-20069A	LEAD CONNECTOR-ASSY:-,YBNH025-05,67096-0	
....4	R510	2002-001008	R-COMPOSITION:1.8Kohm,10%,1/2W,AA,TP,3.7		..2	CN704	AA39-00070A	LEAD CONNECTOR-ASSY:-,YB	
....4	R512	2001-001093	R-CARBON(S):2.2KOHM,5%,1/2W,AA,TP,2.4X6.		..2	JA701	3722-001031	JACK-RCA:3P,6MM,#18,AU	
....4	R513	2001-000085	R-CARBON(S):100KOHM,5%,1/2W,AA,TP,2.4X6.		..2	JH701	3722-000143	JACK-PHONE:1P(VER),3.4mm,AG,BLK,NO	
....4	R515	2002-001008	R-COMPOSITION:1.8Kohm,10%,1/2W,AA,TP,3.7		..2	JS701	3722-001163	JACK-VHS:4P,12mm,AU,BLK,N	
....4	R517	2001-001062	R-CARBON(S):10MOHM,5%,1/2W,AA,TP,2.4X6.4		..2	L701	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm	
....4	R518	2003-002171	R-METAL OXIDE(S):150ohm,5%,2W,AG,TP,3.9x		..2	L702	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm	
....4	R519	2002-001009	R-COMPOSITION:2.7Kohm,10%,1/2W,AA,TP,3.7		..2	L703	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm	
....4	R521	2001-000660	R-CARBON:33KOHM,5%,1/8W,AA,TP,1.8X3.2MM		..2	L704	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm	
....4	R522	2001-000449	R-CARBON:2.2KOHM,5%,1/8W,AA,TP,1.8X3.2M		..2	L705	2701-000168	INDUCTOR-AXIAL:3.3uH,5%,2.5x3.4mm	
....4	R526	2004-000500	R-METAL:2.7Kohm,1%,1/8W,AA,TP,1.8x3.2m		..2	L706	2701-000168	INDUCTOR-AXIAL:3.3uH,5%,2.5x3.4mm	
....4	R527	2004-000433	R-METAL:1Kohm,1%,1/8W,AA,TP,1.8x3.2mm		..2	L707	3301-000287	CORE-FERRITE BEAD:AA,3.5x1.0x6.0mm,1500,	
....4	R542	2001-000832	R-CARBON:510OHM,5%,1/8W,AA,TP,1.8X3.2MM		..2	L708	3301-000287	CORE-FERRITE BEAD:AA,3.5x1.0x6.0mm,1500,	
....4	R543	2001-000832	R-CARBON:510OHM,5%,1/8W,AA,TP,1.8X3.2MM		..2	L709	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm	
....4	R544	2001-000832	R-CARBON:510OHM,5%,1/8W,AA,TP,1.8X3.2MM		..2	PCB	AA41-00155B	PCB-SIDE AV:CS29A6,FR-1,1L,B,1.6T,245x24	S.N.A
....4	R546	2001-000832	R-CARBON:510OHM,5%,1/8W,AA,TP,1.8X3.2MM		..2	R701	2001-000028	R-CARBON(S):100OHM,5%,1/2W,AA,TP,2.4X6.4	
....4	RF02	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M		..2	R702	2001-000028	R-CARBON(S):100OHM,5%,1/2W,AA,TP,2.4X6.4	
....4	RF03	2001-000362	R-CARBON:150OHM,5%,1/8W,AA,TP,1.8X3.2MM		..2	0202-000187		SOLDER-WIRE FLUX:-,RS60S,D1.2.63Sn/37Pb	S.N.A
....4	RF04	2001-000449	R-CARBON:2.2KOHM,5%,1/8W,AA,TP,1.8X3.2M		..2	AA63-10002A		BAND-TIE:-,NYLON66 V2,-,-,L100,NTR,-,-	S.N.A
....4	RF05	2001-000522	R-CARBON:22KOHM,5%,1/8W,AA,TP,1.8X3.2MM		ASSY-POWER,CORD				
....4	RF06	2001-000989	R-CARBON:820KOHM,5%,1/8W,AA,TP,1.8X3.2M		1	*	AA96-20130C	ASSY-POWER,CORD:-,CP2/NO(4.0R),H/C300MM,	
....4	RF07	2001-000904	R-CARBON:620OHM,5%,1/8W,AA,TP,1.8X3.2MM		..2		AA61-20284A	HOLDER:-,P-CORD,PPV0,BLK,KE-002	S.N.A
....4	RF08	2001-000313	R-CARBON:11KOHM,5%,1/8W,AA,TP,1.8X3.2MM		..2		AA39-10003B	POWER-CORD:-,KJP-140,KLCE-2F,2.4m,HOUS,S	
....4	RF09	2001-000221	R-CARBON:1.2KOHM,5%,1/8W,AA,TP,1.8X3.2M		..2		3811-000401	WIRE-PVC CU:BCWA,300V,ROLL,17/0.16mm,#22	S.N.A
....4	RF10	2001-000241	R-CARBON:1.5KOHM,5%,1/8W,AA,TP,1.8X3.2M		ASSY PCB CONTROL				
....4	RF11	2001-000241	R-CARBON:1.5KOHM,5%,1/8W,AA,TP,1.8X3.2M		1	*	AA95-00681A	ASSY PCB CONTROL:-,KS3A,29A5(50HZ),PAL	
....4	RF12	2001-000221	R-CARBON:1.2KOHM,5%,1/8W,AA,TP,1.8X3.2M		..2	CN811	AA39-20179F	LEAD CONNECTOR-ASSY:-,3(2)P,-,-,YF	
....4	RF13	2001-001179	R-CARBON(S):68KOHM,5%,1/2W,AA,TP,2.4X6.4		..2	CNY01	AA39-20546E	LEAD CONNECTOR-ASSY:-,5P,-,-,YBNH2	
....4	RF14	2001-001071	R-CARBON(S):12KOHM,5%,1/2W,AA,TP,2.4X6.4		..2	CNY02	AA39-00106B	LEAD CONNECTOR-ASSY:-,4P,-,-,YBNH2	
....4	RF15	2001-001100	R-CARBON(S):2.7OHM,5%,1/2W,AA,TP,2.4X6.4		..2	CY01	2401-002144	C-AL:47uF,20%,16V,GPT,PS1x11,5	
....4	RF16	2001-001179	R-CARBON(S):68KOHM,5%,1/2W,AA,TP,2.4X6.4		..2	LDY01	0601-000198	LED-ROUND,RED/GRN,5.0mm,630/565nm	
....4	RF17	2001-001100	R-CARBON(S):2.7OHM,5%,1/2W,AA,TP,2.4X6.4		..2	PCB	AA41-00299B	PCB-CONTROL:CS29A5V,FR-1,1L,B,1.6T,245x	S.N.A
....4	RF18	2003-000458	R-METAL OXIDE(S):100ohm,5%,2W,AF,TP,4x12						
....4	RF19	2003-001023	R-METAL OXIDE(S):120ohm,5%,2W,AF,TP,3.9x						
....4	RF20	2003-002214	R-METAL OXIDE(S):680ohm,5%,2W,AG,TP,3.9x						
....4	RF21	2003-002214	R-METAL OXIDE(S):680ohm,5%,2W,AG,TP,3.9x						
....4	RF22	2003-002214	R-METAL OXIDE(S):680ohm,5%,2W,AG,TP,3.9x						
....4	RF23	2003-000746	R-METAL OXIDE(S):56ohm,5%,2W,AF,TP,4x12m						
....4	RF24	2003-000746	R-METAL OXIDE(S):56ohm,5%,2W,AF,TP,4x12m						
....4	RF25	2003-002009	R-METAL OXIDE(S):390ohm,5%,2W,AF,TP,3.9x						
....4	RG01	2004-001397	R-METAL(S):4.7Kohm,1%,1/2W,AA,TP,2.4x6.4						
....4	RG02	2004-002022	R-METAL(S):51Kohm,1%,1/2W,AA,TP,2.4x6.4m						
....4	RG03	2004-001987	R-METAL(S):4.3Kohm,1%,1/2W,AA,TP,2.4x6.4						
....4	RG04	2004-002022	R-METAL(S):51Kohm,1%,1/2W,AA,TP,2.4x6.4m						
....4	RG05	2001-001163	R-CARBON(S):560OHM,5%,1/2W,AA,TP,2.4X6.4						
....4	RG06	2001-001100	R-CARBON(S):2.7OHM,5%,1/2W,AA,TP,2.4X6.4						
....4	RG07	2001-001100	R-CARBON(S):2.7OHM,5%,1/2W,AA,TP,2.4X6.4						
....4	RG08	2001-001163	R-CARBON(S):560OHM,5%,1/2W,AA,TP,2.4X6.4						
....4	SG501	AA27-00084A	COIL:S-23,-,-,-,-,S-23,5000Mohm						
....4	SG502	AA27-00084A	COIL:S-23,-,-,-,-,S-23,5000Mohm						
....4	SG503	AA27-00084A	COIL:S-23,-,-,-,-,S-23,5000Mohm						
....4	SG504	AA27-00084A	COIL:S-23,-,-,-,-,S-23,5000Mohm						
....3	0202-000187		SOLDER-WIRE FLUX:-,RS60S,D1.2.63Sn/37Pb	S.N.A					

Level	Loc. No.	Code No.	Description ; Specification	Remark	Level	Loc. No.	Code No.	Description ; Specification	Remark
..2	RMV01	AA59-60002B	MODULE-REMOCON;-;ORC-50HF,38KHZ,940MM,ME						
..2	SCREW	6001-000057	SCREW-MACHINE:RH,+,M3,L6,ZPC(BLK),SWRCH1	S.N.A					
△	SW811S	3403-000179	SWITCH-PUSH:250V,5A,DPST,-,JPW-2104B						
..2	SWY02	3404-000176	SWITCH-TACT:12V,50mA,120gf,6x6mm,SPST		1	*	AA94-02886A	ASSY ACCESSORY;CS29A5HT8X/BWT,KS3A,RUSSI	S.N.A
..2	SWY03	3404-000176	SWITCH-TACT:12V,50mA,120gf,6x6mm,SPST						
..2	SWY04	3404-000176	SWITCH-TACT:12V,50mA,120gf,6x6mm,SPST		..2		AA68-01316A	MANUAL USERS;CS29A5HT8X/BWT,-,RUS,-,W/P1	
..2	SWY05	3404-000176	SWITCH-TACT:12V,50mA,120gf,6x6mm,SPST		..2		AA68-01120A	MANUAL SERVICE;-;CIS,A4,6PAGE(FOLD),W/	S.N.A
..2	SWY06	3404-000176	SWITCH-TACT:12V,50mA,120gf,6x6mm,SPST						
..2	AA99-20083B	AA99-20083B	ASSY-PCB SUB,AUTO: AA95-00681A ,V	S.N.A					
...3	DZY01	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500						
...3	DZY02	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500						
...3	LY01	2701-000136	INDUCTOR-AXIAL:18uH,10%,2.5x3.4mm						
...3	RY01	2001-000020	R-CARBON(S);220HM,5%,1/2W,AA,TP2.4X6.4M						
...3	RY02	2001-000577	R-CARBON;2KOHM,5%,1/8W,AA,TP1.8X3.2MM						
...3	RY03	2001-000007	R-CARBON;3KOHM,5%,1/8W,AA,TP1.8X3.2MM						
...3	RY04	2001-000878	R-CARBON;6.2KOHM,5%,1/8W,AA,TP1.8X3.2M						
...3	RY05	2001-000009	R-CARBON;20KOHM,5%,1/8W,AA,TP1.8X3.2MM						
..2	AA98-00056A	AA98-00056A	ASSY SUB PART;KS3A,PCB,CONTROL,ALL,-	S.N.A					
...3	0202-000187	0202-000187	SOLDER-WIRE FLUX;-;RS60S,D1.2,63Sn/37Pb	S.N.A					

ASSY ACCESSORY

REMOCON

ASSY CABINET FRONT

1	*	AA91-00113W	ASSY CABINET FRONT;-;29A5 KS3A CIS,S704+	
..2	KNOPOW	AA61-60005D	SPRING-CS;-;SUS304,0.4,OD5.5,H9,N4,-,-,-	
..2		AA64-60445V	INLAY AV;29A5,PS SHEET,-,-,BLK,-,KS3A E	
..2		AA64-60446C	INLAY-PC,JACK;29A6,L/GRAY,PS SHEET,T0.5	S.N.A
..2		AA64-70117B	BADGE-BRAND;AL,SS,SILVER,L65,R2000,-,-	S.N.A
..2		AA65-00011C	CLAMP-WIRE;ALL MODEL,NYLON 66,V2,NTR,25M	S.N.A
..2		AA65-30105A	CLAMP-WIRE;NYLON 66,V2,NTR,15MM,ALL MODE	S.N.A
..2		AA64-40456B	INDICATOR-LED;-;295A,-,ACRYL,-,CLR,-	
..2		AA64-10709A	KNOB-MASTER;-;295A,VT803M MASTER,ABS,HB,	
..2		AA64-10710A	KNOB-CONTROL;-;725A,-,ABS,HB,GRAY	
..2		AA64-31106S	CABINET FRONT;29A5 KS3A,S704P+G802P PLAN	
..2		AA64-40455A	WINDOW-REMOCON;-;725A,-,PC,-,VIOLET,-	

ASSY CABINET

1	*	AA90-00376D	ASSY CABINET;25A6,CS29A5HT8X/BWT	
..2	BRK+CF	6002-000514	SCREW-TAPPING;RH,+,2,M4,L15,ZPC(BLK),SWR	S.N.A
..2	CABBAC	AA60-00091J	SPACER-FELT;-;FELT,330X10,-,-,BLK,T0.5,-	S.N.A
..2	CB+TER	AA60-10050T	SCREW-TAPPING;RH,+,2S,M4,L20,ZPC(BLK),SW	
..2	CF+AV	6002-000522	SCREW-TAPPING;TH,+,2,M4,L15,ZPC(BLK),SWR	
..2	CF+CB	AA60-10050T	SCREW-TAPPING;RH,+,2S,M4,L20,ZPC(BLK),SW	
..2	CP+CF	6002-000514	SCREW-TAPPING;RH,+,2,M4,L15,ZPC(BLK),SWR	S.N.A
..2	CRT	AA63-60004G	SPACER-GUM,CRT;NTR RUBBER,T3.0,GRY,-,-,-	S.N.A
..2	CRT+CF	AA60-10050V	SCREW-ASSY;WC,HH,+,M6,L30,SWRCH18A,ZPC(S	S.N.A
..2	CTS+CB	AA60-10050T	SCREW-TAPPING;RH,+,2S,M4,L20,ZPC(BLK),SW	
..2	D-COIL	AA65-30113A	CLAMP-D,COIL;NYLON 66,V2,BLK,TVI 25-29,-	S.N.A
..2	DOME	AA60-10050A	SCREW-ASSY;WPRH,+,M4,L25,SWRCH18A,-,ZPC	S.N.A
..2	TER+RJ	6002-000514	SCREW-TAPPING;RH,+,2,M4,L15,ZPC(BLK),SWR	S.N.A
..2		AA65-30017A	CLAMP-D,COIL;NYLON-66,VO,NTR,DADH300,25	S.N.A
..2		AA65-30008A	CLAMP-CORD;PE,HB,BLK,-,-,-	S.N.A
..2		AA61-10054A	BRACKET-CRATER;-;6277,STS304,T0.5,-,-,-	S.N.A
..2		AA63-10007C	BAND-PP;-,-,-,W18,-,CLEAR,1G,-	S.N.A
..2		AA63-30213C	COVER-TOPSPK;-;725A,-,HIPS,V2,BLK,-,-	S.N.A
..2		AA64-01230B	INLAY-COVER;D2,D3,PVC-SHEET,T0.4,94V0,-,	S.N.A
..2		AA64-31107C	CABINET-BACK;-;29A5,-,HIPS,V2,BLK,-,-	

ASSY HOLDER SPK

1	*	AA91-00333B	ASSY HOLDER SPK;-;PP8ohm/15W,BLK,AA91-0	
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ASSY-CRT

1	*	AA94-01251A	ASSY-CRT;A68QCP891X004(C),+380MG,29INCH	
△	..2	AA03-00076A	CRT-COLOR;-;A68QCP891X004(C),+380MG,29IN	

7-2 CZ21A8VW8X/ELS

Level	Loc. No.	Code No.	Description ; Specification	Remark	Level	Loc. No.	Code No.	Description ; Specification	Remark
ASSY PCB MAIN(OPT)									
1	*	AA94-02037Z	ASSY PCB MAIN(OPT);CZ21A8VW8X/ELS,KS3A,4		△	...3	IC301	AA96-50406A	ASSY H/S;-;AA62-30180K,LA7845,-
..2	BOT	2201-000681	C-CERAMIC,DISC:0.082nF,5%,50V,SL,TP5x3,		...	...4	0205-000129	GREASE-SILICON:SC102,JAPAN	S.N.A
..2	BOTZ	0403-000720	DIODE-ZENER:MTZJ9.1B,9.1V,8.57-9.01V,500		...	...4	1204-000517	IC-VERTICAL DEF:LA7845,SIP,7P,-,PLASTIC	
..2	C407	2301-001338	C-FILM,MPE-PF:0.68nF,5%,1.6kV,TP,28x7x1		...	...4	6003-000333	SCREW-TAPTITE:RH,+2S,M3,L10,ZPC(YEL),SW	
..2	C815	2401-003602	C-AL:220uF,20%,160V,GPBK,22x25mm,1	S.N.A	...	...4	AA62-30180K	HEAT SINK-ES;-A6063 EXTR,-,VHT,50/13,-,	S.N.A
..2	C820	2401-003076	C-AL:3300uF,20%,50V,WPBK,18x35.5mm		△	...3	IC401	1202-000103	IC-VOLTAGE COMP:393,DIP8P,300MIL,DUAL,
..2	CLAMP	AA65-30109A	CLAMP-FBT:NYLON-66,V2,BLK,-,-,-	S.N.A	△	...3	IC501	1201-000539	IC-VIDEO AMP:6101,ZIP9P,-,SINGLE,-,PLAS
..2	CLAMP	AA65-30018A	CLAMP-WIRE:NYLON-66,-,-,DATL-600,DONG-A,	S.N.A	△	...3	IC503	1201-000539	IC-VIDEO AMP:6101,ZIP9P,-,SINGLE,-,PLAS
..2	CN501B	AA39-20054B	LEAD CONNECTOR-ASSY;-;YBNH025-06,S,6P,50		△	...3	IC601	1204-001775	IC-SOUND PROCESSOR:MSP3410D-C5 9458 ,SDI
..2	CN502B	AA39-20053A	LEAD CONNECTOR-ASSY;-;YBNH025-05,S,5P,40		△	...3	IC603	1203-001697	IC-VOLTAGE REGULATOR:78R08,TO-220,4P,-,P
..2	D-COIL	AA27-00130A	COIL DEGAUSSING;-,-,-,40T,9ohm,-,21inc		△	...3	IC902	1103-001171	IC-EEPROM:L51DC,16Kbit,DIP8P,300MIL,10m
△	D801S	AA96-00276A	ASSY H/S;-;BRIDGE,AA62-00052A,RBV606,WA		△	...3	L403	AA27-00101A	COIL LINEARITY:58uH,58uH,DR14x15 C:6,0,1
...3		6003-000335	SCREW-TAPTITE:RH,+2S,M3,L8,ZPC(YEL),SWR		△	...3	L405	AA27-00096A	COIL HORIZ. WIDTH:-,10.0mH,DR15 X 27.5,U
...3		AA62-00052A	HEAT SINK-PS;-,-,-,SILVER,HOLE 18.5mm, 2	S.N.A	△	...3	L408	AA27-00097A	COIL HORIZ. WIDTH:-,700uH,DR15 X 27.5,US
...3		AA60-30003A	WASHER;-,-,-,T1.5,-,SBHG-1,-	S.N.A	△	...3	L808	AA27-00098A	COIL CHOKE;-,-,24uH,10%-,-,0.1,3.0A,DR10X
...3		0402-000549	DIODE-BRIDGE:RBV606,600V,6A,-,BK		△	...3	LD901	AA96-00461A	ASSY LED GUIDE;-,-,SL-255D,RED/GRN
...3		0205-000129	GREASE-SILICON:SC102,JAPAN	S.N.A	△	...3	LX801S	AA29-30002N	FILTER-LINE NOISE;-,-,16MH,1.5A,AC100-260V
..2	HC401	AA96-00275A	ASSY H/S;-;COMPLEX,AA62-00051A,KS5703,		△	...3	LX802S	AA29-30002N	FILTER-LINE NOISE;-,-,16MH,1.5A,AC100-260V
...3		6003-000333	SCREW-TAPTITE:RH,+2S,M3,L10,ZPC(YEL),SW		△	...3	NT802S	1404-001045	THERMISTOR-NTC:4.70HM,15%,2900K,35.0MW,T
...3		AA60-30001A	WASHER-PLATE:M3,ID3.5,15X8.5,T1.0,-,SBHG	S.N.A	△	...3	PC801S	0604-001038	PHOTO-COUPLER:TR,130-260%,200mW,DIP-4,ST
...3		AA62-00051A	HEAT SINK-PS;-,-,-,SILVER,HOLE 31mm,ALL,	S.N.A	△	...3	PT801S	1404-001156	THERMISTOR-PTC:90HM,+30%/-20%,220VRMS,27
...3		0502-001136	TR-POWER:KSD5703,NPN,70W,TO-3PF,ST,8-		△	...3	RV901	AA59-60001U	MODULE-REMOCOON;-;ORC-50V/SR-12V,38KHz,9
...3		0402-001296	DIODE-RECTIFIER:FMP-3FU,1.5KV,5A,TO-3PF,		△	...3	SW801S	3403-000179	SWITCH-PUSH:250V,5A,DPST,-,JPW-2104B
...3		0205-000129	GREASE-SILICON:SC102,JAPAN	S.N.A	△	...3	T401	AA26-50001L	TRANS-HORIZ.DRIVE;-,-,29mH,133uH,4.5uH,EI2
..2	HC801	AA96-00274A	ASSY H/S;-;COMPLEX,AA62-00053A,FMLG12S		△	...3	TU01S	AA40-00015A	TUNER-F/S:TCPW3001PD09A(S),PAL/SECAM,TR,
...3		6003-000334	SCREW-TAPTITE:RH,+2S,M3,L6,ZPC(YEL),SWR		△	...3	V999S	3704-001105	SOCKET-CRT:11P,20P,26.5PI,Ni,-
...3		AA62-00053A	HEAT SINK-PS;-,-,-,SILVER,HOLE 22mm,ALL,	S.N.A	...	...4	AA99-10182Q	ASSY-PCB MAIN,AUTO: AA99-30186Z ,V	S.N.A
...3		1203-001006	IC-VOLTAGE REGULATOR:78R05,TO-220F,4P,-,		...	...4	C102	2401-001513	C-AL:47uF,20%,16V,WT,TP5x11.5
...3		0402-000233	DIODE-RECTIFIER:FML-G12S,200V,5A,-,-		...	...4	C103	2301-000383	C-FILM,PEF:10nF,5%,50V,TP,6x7x3.2mm,5mm
...3		0402-000231	DIODE-RECTIFIER:FMG-G26S,600V,4A,TO-220F		...	...4	C104	2401-0003578	C-AL:1000uF,20%,10V,GP,TP,8x20mm,5
...3		0205-000129	GREASE-SILICON:SC102,JAPAN	S.N.A	...	...4	C105	2301-000383	C-FILM,PEF:10nF,5%,50V,TP,6x7x3.2mm,5mm
△	IC602	AA96-50372B	ASSY H/S;-;SOUND AMP,AA62-30181J,TDA726		...	...4	C106	2401-000611	C-AL:1uF,20%,50V,WT,TP5x11.5
...3		0205-000129	GREASE-SILICON:SC102,JAPAN	S.N.A	...	...4	C113	2202-000127	C-CERAMIC,MLC-AXIAL:10nF,+80-20%,25V,Y5V
...3		1201-001308	IC-POWER AMP:7266,ZIP,15P,-,DUAL,26dB,PL		...	...4	C115	2202-000121	C-CERAMIC,MLC-AXIAL:100pF,10%,50V,Y5P,TP
...3		6003-000333	SCREW-TAPTITE:RH,+2S,M3,L10,ZPC(YEL),SW		...	...4	C116	2202-000121	C-CERAMIC,MLC-AXIAL:100pF,10%,50V,Y5P,TP
...3		AA62-30181J	HEAT SINK-ES;-;AL6063 EXTR.,2,VHT,40MM,-,	S.N.A	...	...4	C201	2401-000603	C-AL:1uF,20%,50V,GP,TP5x11.5
△	IC801S	AA96-50373C	ASSY H/S;-;AA62-30181K,KA3S1265R,-		...	...4	C202	2401-002235	C-AL:10uF,20%,16V,GP,TP5x11mm,5mm
...3		AA62-30181K	HEAT SINK-ES;-;AL6063 EXTR.,2,VHT,40MM,-,	S.N.A	...	...4	C205	2401-002235	C-AL:10uF,20%,16V,GP,TP5x11mm,5mm
...3		AA61-10386A	BRACKET-IC;-,-,SECC 100,T1.0,-,KA2S0680,	S.N.A	...	...4	C208	2401-001026	C-AL:3.3UF,20%,50V,GP,TP5x11.5
...3		6003-000333	SCREW-TAPTITE:RH,+2S,M3,L10,ZPC(YEL),SW		...	...4	C211	2202-000796	C-CERAMIC,MLC-AXIAL:1NF,10%,50V,Y5P,TP,3
...3		1203-001482	IC-PWM CONTROLLER:3S1265R,TO-3P5P210,P	S.N.A	...	...4	C212	2301-000224	C-FILM,PEF:22nF,5%,50V,TP,7.4x3.9x13mm,5
...3		0205-000129	GREASE-SILICON:SC102,JAPAN	S.N.A	...	...4	C213	2301-000247	C-FILM,PEF:33nF,5%,50V,TP,8.1x4.5x13mm,5
△	IC804	AA96-00243C	ASSY H/S;-;REGULATOR,AA62-00045A,KA7806		...	...4	C214	2305-000665	C-FILM,MPEF:100nF,5%,63V,TP,7.5x4.0x5.0m
...3		0205-000129	GREASE-SILICON:SC102,JAPAN	S.N.A	...	...4	C215	2401-002235	C-AL:10uF,20%,16V,GP,TP5x11mm,5mm
...3		1203-000284	IC-POS.FIXED REG.:7806,TO-220,3P,-,PLAS		...	...4	C216	2305-000665	C-FILM,MPEF:100nF,5%,63V,TP,7.5x4.0x5.0m
...3		6003-000335	SCREW-TAPTITE:RH,+2S,M3,L8,ZPC(YEL),SWR		...	...4	C217	2401-001026	C-AL:3.3UF,20%,50V,GP,TP5x11.5
...3		AA62-00045A	HEAT SINK-PS;-,-,T1.0,-,DREAM,-,-,-,-	S.N.A	...	...4	C218	2202-000632	C-CERAMIC,MLC-AXIAL:100nF,20%,50V,Z5U,TP
△	IC901	AA09-00041A	IC-MCU:SDA555X-OTP,SDA555X-OTP,-,-,52		...	...4	C219	2202-000632	C-CERAMIC,MLC-AXIAL:100nF,20%,50V,Z5U,TP
..2	JA701	3722-000195	JACK-SCART:42P,-,SN,BLK,NO		...	...4	C220	2202-000632	C-CERAMIC,MLC-AXIAL:100nF,20%,50V,Z5U,TP
..2	S-H/S	AA65-30105A	CLAMP-WIRE:NYLON 66,V2,NTR,15MM,ALL MODE	S.N.A	...	...4	C221	2202-000632	C-CERAMIC,MLC-AXIAL:100nF,20%,50V,Z5U,TP
△	T444S	AA26-00057A	TRANS-FBT;-;FUH-29A001B(S),25/29,130		...	...4	C222	2202-000632	C-CERAMIC,MLC-AXIAL:100nF,20%,50V,Z5U,TP
△	T801S	AA26-00044C	TRANS SWITCHING:CODE:NO,CT-21A8,-,AC90-2		...	...4	C223	2305-000412	C-FILM,MPEF:47nF,5%,50V,TP,7.5x4.0x6.5,5m
△	TUBE	AA39-00108A	LEAD CONNECTOR-ASSY;-,-,-,-,-,GRT-TUB		...	...4	C229	2401-002619	C-AL:47uF,20%,25V,GP,TP5x11.5
..2		AA61-00462B	SUPPORT-HEAT SINK:21A9,ABS,GRAY,VO,-,-,-	S.N.A	...	...4	C230	2301-000356	C-FILM,PEF:47nF,5%,50V,TP,7.5x4.0x6.5,5m
..2		AA98-00053A	ASSY SUB PARTKS3A,MAIN(OPT),PAL-	S.N.A	...	...4	C231	2401-002235	C-AL:10uF,20%,16V,GP,TP5x11mm,5mm
...3		0202-000187	SOLDER-WIRE FLUX;-;RS60S,D1.2,63Sn/37Pb	S.N.A	...	...4	C232	2202-000632	C-CERAMIC,MLC-AXIAL:100nF,20%,50V,Z5U,TP
..2		AA99-30186Z	ASSY-PCB ROBOT: AA94-02037Z ,ER	S.N.A	...	...4	C233	2305-000412	C-FILM,MPEF:470nF,5%,63V,TP,-,5mm
...3	C405	2306-000327	C-FILM,MPPF:6.3nF,3%,1.6kV,TP,28.5x18x10		...	...4	C234	2305-000412	C-FILM,MPEF:470nF,5%,63V,TP,-,5mm
...3	C406	2306-000327	C-FILM,MPPF:6.3nF,3%,1.6kV,TP,28.5x18x10		...	...4	C235	2305-000412	C-FILM,MPEF:470nF,5%,63V,TP,-,5mm
...3	C423	2306-000235	C-FILM,MPPF:560nF,5%,400V,TP,26*22.5*14,		...	...4	C236	2305-000412	C-FILM,MPEF:470nF,5%,63V,TP,-,5mm
...3	C426	2306-000195	C-FILM,MPPF:360nF,5%,400V,TP,26x19x11.5,		...	...4	C237	2401-000914	C-AL:22uF,20%,16V,GP,TP5x11.5
...3	C803	2401-003025	C-AL:330uF,20%,400V,GPST,30x40,10		...	...4	C244	2202-000121	C-CERAMIC,MLC-AXIAL:100pF,10%,50V,Y5P,TP
△	CX801S	2306-000318	C-FILM,MPPF:220nF,20%,250V,TP,-,22.5mm		...	...4	C245	2202-000121	C-CERAMIC,MLC-AXIAL:100pF,10%,50V,Y5P,TP
△	CX802S	2306-000318	C-FILM,MPPF:220nF,20%,250V,TP,-,22.5mm		...	...4	C248	2202-000121	C-CERAMIC,MLC-AXIAL:100pF,10%,50V,Y5P,TP
△	CY802S	2201-002002	C-CERAMIC,DISC:4.7nF,20%,400V,Y5U,TP,16x		...	...4	C250	2202-000121	C-CERAMIC,MLC-AXIAL:100pF,10%,50V,Y5P,TP
△	FP801S	3601-000297	FUSE-CARTRIDGE:250V,5A,TIME-LAG,GLASS,5,		...	...4	C301	2401-000603	C-AL:1uF,20%,50V,GP,TP5x11.5
△	IC201S	1204-001633	IC-VIDEO PROCESS:VDP3112B-C3,DIP,64P,709		...	...4	C302	2401-000360	C-AL:100uF,20%,50V,GP,TP,8x11.5,5
...					...	...4	C303	2201-002103	C-CERAMIC,DISC:0.015nF,5%,500V,NPO,TP,6

Level	Loc. No.	Code No.	Description ; Specification	Remark	Level	Loc. No.	Code No.	Description ; Specification	Remark
....4	C304	2305-000285	C-FILM,MPEF:220nF,5%,100V,TP,10.5X5.5X15		....4	C646	2305-000665	C-FILM,MPEF:100nF,5%,63V,TP,7.5x4.0x5.0m	
....4	C305	2305-000149	C-FILM,MPEF:100nF,5%,100V,TP,12x12.5x6.5		....4	C647	2202-000286	C-CERAMIC,MLC-AXIAL:56pF,5%,50V,SL,TP,1	
....4	C306	2301-000342	C-FILM,PEF:2.2nF,5%,50V,TP,7.4x3.9x13mm,		....4	C649	2301-000108	C-FILM,PEF:1.5nF,5%,50V,TP,6.5x3.0x5.5mm	
....4	C307	2401-000360	C-AL:100uF,20%,50V,GP,TP,8x11.5,5		....4	C652	2401-002235	C-AL:10uF,20%,16V,GP,TP,5x11mm,5mm	
....4	C308	2305-000412	C-FILM,MPEF:470nF,5%,63V,TP,-5mm		....4	C654	2201-000611	C-CERAMIC,DISC:0.056nF,5%,50V,NPO,TP,7x3	
....4	C401	2201-000556	C-CERAMIC,DISC:0.47nF,10%,500V,Y5P,TP5.		....4	C656	2201-000304	C-CERAMIC,DISC:0.001nF,0.25pF,50V,NPO,TP	
....4	C402	2401-001397	C-AL:470uF,20%,25V,GP,TP,10x16,5		....4	C657	2201-000304	C-CERAMIC,DISC:0.001nF,0.25pF,50V,NPO,TP	
....4	C403	2201-000556	C-CERAMIC,DISC:0.47nF,10%,500V,Y5P,TP5.		....4	C701	2202-000231	C-CERAMIC,MLC-AXIAL:330pF,10%,50V,Y5P,TP	
....4	C404	2401-001397	C-AL:470uF,20%,25V,GP,TP,10x16,5		....4	C702	2202-000231	C-CERAMIC,MLC-AXIAL:330pF,10%,50V,Y5P,TP	
....4	C408	2305-000382	C-FILM,MPEF:4.7nF,5%,400V,TP,-5mm		....4	C703	2202-000231	C-CERAMIC,MLC-AXIAL:330pF,10%,50V,Y5P,TP	
....4	C409	2303-001001	C-FILM,PPF:22nF,5%,630V,TP,18x14.5x8.5mm		....4	C707	2401-001989	C-AL:4.7uF,20%,50V,BP,TP,5x11,5	
....4	C410	2301-000213	C-FILM,PEF:220nF,5%,250V,TP,21.5x11,7,5		....4	C708	2401-002235	C-AL:10uF,20%,16V,GP,TP,5x11mm,5mm	
....4	C411	2301-000104	C-FILM,PEF:1.2nF,5%,50V,TP,6.5x3.0x5.5mm		....4	C804	2201-000332	C-CERAMIC,DISC:2.2nF,20%,250V,Y5U,TP,9x4	
....4	C412	2301-000313	C-FILM,PEF:8.2nF,5%,100V,TP,7x3.2x7mm,5m		....4	C805	2201-000332	C-CERAMIC,DISC:2.2nF,20%,250V,Y5U,TP,9x4	
....4	C413	2401-000493	C-AL:10uF,20%,50V,LZ,TP,5x11mm,5mm		....4	C807	2301-001435	C-FILM,PPF:1.5nF,5%,1.2kV,TP,15x8x12.5mm	
....4	C414	2401-002597	C-AL:220uF,20%,35V,GP,TP,10x12.5,5		....4	C808	2401-003046	C-AL:47uF,20%,50V,WT,TP,6.3x11,2,5	
....4	C415	2301-000445	C-FILM,PEF:4.7nF,5%,50V,TP,5.5x7x3mm,5mm		....4	C809	2301-000356	C-FILM,PEF:47nF,5%,50V,TP,7.5x4.0x6.5,5m	
....4	C416	2301-000224	C-FILM,PEF:22nF,5%,50V,TP,7.4x3.9x13mm,5		....4	C810	2301-000356	C-FILM,PEF:47nF,5%,50V,TP,7.5x4.0x6.5,5m	
....4	C418	2401-002597	C-AL:220uF,20%,35V,GP,TP,10x12.5,5		....4	C811	2301-000356	C-FILM,PEF:47nF,5%,50V,TP,7.5x4.0x6.5,5m	
....4	C419	2201-000599	C-CERAMIC,DISC:0.56nF,10%,500V,Y5P,TP5.		....4	C814	2201-000406	C-CERAMIC,DISC:0.27nF,10%,2kV,Y5P,TP,6.3	
....4	C420	2301-001211	C-FILM,PPF:22nF,5%,400V,TP,20x7x14,7,5mm		....4	C816	2401-000262	C-AL:100uF,20%,160V,HR,TP,16x25,7,5	
....4	C421	2201-000556	C-CERAMIC,DISC:0.47nF,10%,500V,Y5P,TP5.		....4	C817	2201-000599	C-CERAMIC,DISC:0.56nF,10%,500V,Y5P,TP5.	
....4	C422	2401-001527	C-AL:47uF,20%,250V,HR,TP,13x25mm,5m		....4	C818	2401-000722	C-AL:220uF,20%,25V,WT,TP,16x25,7,5	
....4	C424	2201-000132	C-CERAMIC,DISC:0.1nF,10%,500V,Y5P,TP,6,5		....4	C819	2201-000599	C-CERAMIC,DISC:0.56nF,10%,500V,Y5P,TP5.	
....4	C427	2401-002267	C-AL:2.2uF,20%,250V,GP,TP,8x11,5,5		....4	C821	2301-000192	C-FILM,PEF:1nF,5%,50V,TP,5.3x10mm,5mm	
....4	C501	2202-000205	C-CERAMIC,MLC-AXIAL:22pF,5%,50V,SL,TP,1		....4	C822	2201-000599	C-CERAMIC,DISC:0.56nF,10%,500V,Y5P,TP5.	
....4	C502	2202-000205	C-CERAMIC,MLC-AXIAL:22pF,5%,50V,SL,TP,1		....4	C823	2401-003046	C-AL:47uF,20%,50V,WT,TP,6.3x11,2,5	
....4	C503	2202-000205	C-CERAMIC,MLC-AXIAL:22pF,5%,50V,SL,TP,1		....4	C824	2401-003046	C-AL:47uF,20%,50V,WT,TP,6.3x11,2,5	
....4	C504	2305-000704	C-FILM,MPEF:100nF,5%,250V,TP,16.5x10.3x5		....4	C825	2305-000665	C-FILM,MPEF:100nF,5%,63V,TP,7.5x4.0x5.0m	
....4	C505	2201-000599	C-CERAMIC,DISC:0.56nF,10%,500V,Y5P,TP5.		....4	C826	2401-000287	C-AL:100uF,20%,16V,WT,TP,6.3x11,5	
....4	C506	2305-000704	C-FILM,MPEF:100nF,5%,250V,TP,16.5x10.3x5		....4	C827	2401-002212	C-AL:10uF,20%,25V,WT,TP,5x11,5	
....4	C507	2201-000599	C-CERAMIC,DISC:0.56nF,10%,500V,Y5P,TP5.		....4	C829	2305-000665	C-FILM,MPEF:100nF,5%,63V,TP,7.5x4.0x5.0m	
....4	C508	2305-000704	C-FILM,MPEF:100nF,5%,250V,TP,16.5x10.3x5		....4	C831	2305-000665	C-FILM,MPEF:100nF,5%,63V,TP,7.5x4.0x5.0m	
....4	C509	2201-000599	C-CERAMIC,DISC:0.56nF,10%,500V,Y5P,TP5.		....4	C832	2401-001840	C-AL:100uF,20%,16V,GP,TP,6.3x11,5	
....4	C511	2401-000493	C-AL:10uF,20%,50V,LZ,TP,5x11mm,5mm		....4	C833	2401-002619	C-AL:47uF,20%,25V,GP,TP,5x11,5	
....4	C512	2401-000914	C-AL:22uF,20%,16V,GP,TP,5x11,5		....4	C835	2401-002289	C-AL:470uF,20%,35V,WT,TP,10x20,5	
....4	C513	2301-000192	C-FILM,PEF:1nF,5%,50V,TP,5.3x10mm,5mm		....4	C837	2305-000665	C-FILM,MPEF:100nF,5%,63V,TP,7.5x4.0x5.0m	
....4	C514	2401-000430	C-AL:10uF,20%,250V,GP,TP,10x16mm,5m		....4	C838	2401-001840	C-AL:100uF,20%,16V,GP,TP,6.3x11,5	
....4	C515	2401-001232	C-AL:4.7uF,20%,250V,GP,TP,10x12,5,5		....4	C839	2305-000665	C-FILM,MPEF:100nF,5%,63V,TP,7.5x4.0x5.0m	
....4	C516	2201-000723	C-CERAMIC,DISC:4.7nF,20%,3KV,Y5U,TP,16x5		....4	C840	2401-002212	C-AL:10uF,20%,25V,WT,TP,5x11,5	
....4	C517	2305-000665	C-FILM,MPEF:100nF,5%,63V,TP,7.5x4.0x5.0m		....4	C841	2401-000611	C-AL:1uF,20%,50V,WT,TP,5x11,5	
....4	C601	2201-000558	C-CERAMIC,DISC:0.47nF,10%,50V,Y5P,TP,5x3		....4	C901	2202-000632	C-CERAMIC,MLC-AXIAL:100nF,20%,50V,Z5U,TP	
....4	C603	2401-002235	C-AL:10uF,20%,16V,GP,TP,5x11mm,5mm		....4	C902	2301-000192	C-FILM,PEF:1nF,5%,50V,TP,5.3x10mm,5mm	
....4	C604	2401-000660	C-AL:1uF,20%,50V,GP,TP,5x11,5		....4	C903	2202-000719	C-CERAMIC,MLC-AXIAL:6.8nF,20%,16V,Y5R,3	
....4	C605	2305-000665	C-FILM,MPEF:100nF,5%,63V,TP,7.5x4.0x5.0m		....4	C904	2401-001495	C-AL:47uF,20%,16V,GP,TP,5x11,5	
....4	C607	2202-000796	C-CERAMIC,MLC-AXIAL:1nF,10%,50V,Y5P,TP,3		....4	C905	2202-000796	C-CERAMIC,MLC-AXIAL:1nF,10%,50V,Y5P,TP,3	
....4	C608	2202-000796	C-CERAMIC,MLC-AXIAL:1nF,10%,50V,Y5P,TP,3		....4	C907	2305-000412	C-FILM,MPEF:470nF,5%,63V,TP,-5mm	
....4	C610	2301-000445	C-FILM,PEF:4.7nF,5%,50V,TP,5.5x7x3mm,5mm		....4	C908	2202-000863	C-CERAMIC,MLC-AXIAL:560pF,10%,50V,Y5P,TP	
....4	C611	2301-000445	C-FILM,PEF:4.7nF,5%,50V,TP,5.5x7x3mm,5mm		....4	C909	2301-000383	C-FILM,PEF:10nF,5%,50V,TP,6x7x3.2mm,5mm	
....4	C612	2401-001914	C-AL:1uF,20%,50V,BP,TP,5x11,5		....4	C910	2201-000980	C-CERAMIC,DISC:0.03nF,5%,50V,NPO,TP,5x3	
....4	C613	2401-001914	C-AL:1uF,20%,50V,BP,TP,5x11,5		....4	C911	2201-000980	C-CERAMIC,DISC:0.03nF,5%,50V,NPO,TP,5x3	
....4	C617	2401-000493	C-AL:10uF,20%,50V,LZ,TP,5x11mm,5mm		....4	C913	2401-001840	C-AL:100uF,20%,16V,GP,TP,6.3x11,5	
....4	C620	2305-000665	C-FILM,MPEF:100nF,5%,63V,TP,7.5x4.0x5.0m		....4	C914	2305-000665	C-FILM,MPEF:100nF,5%,63V,TP,7.5x4.0x5.0m	
....4	C621	2401-002458	C-AL:1000uF,20%,35V,GP,TP,16x25,7,5		....4	C915	2401-001840	C-AL:100uF,20%,16V,GP,TP,6.3x11,5	
....4	C622	2401-001989	C-AL:4.7uF,20%,50V,BP,TP,5x11,5		....4	C916	2305-000665	C-FILM,MPEF:100nF,5%,63V,TP,7.5x4.0x5.0m	
....4	C623	2202-000231	C-CERAMIC,MLC-AXIAL:330pF,10%,50V,Y5P,TP		....4	C917	2401-000493	C-AL:10uF,20%,50V,LZ,TP,5x11mm,5mm	
....4	C624	2202-000231	C-CERAMIC,MLC-AXIAL:330pF,10%,50V,Y5P,TP		....4	C918	2401-001840	C-AL:100uF,20%,16V,GP,TP,6.3x11,5	
....4	C625	2401-001989	C-AL:4.7uF,20%,50V,BP,TP,5x11,5		....4	C919	2202-000632	C-CERAMIC,MLC-AXIAL:100nF,20%,50V,Z5U,TP	
....4	C626	2401-001989	C-AL:4.7uF,20%,50V,BP,TP,5x11,5		....4	C920	2401-002235	C-AL:10uF,20%,16V,GP,TP,5x11mm,5mm	
....4	C627	2202-000231	C-CERAMIC,MLC-AXIAL:330pF,10%,50V,Y5P,TP		....4	C921	2202-000632	C-CERAMIC,MLC-AXIAL:100nF,20%,50V,Z5U,TP	
....4	C628	2401-001989	C-AL:4.7uF,20%,50V,BP,TP,5x11,5		....4	C922	2202-000632	C-CERAMIC,MLC-AXIAL:100nF,20%,50V,Z5U,TP	
....4	C629	2202-000231	C-CERAMIC,MLC-AXIAL:330pF,10%,50V,Y5P,TP		....4	C923	2202-000263	C-CERAMIC,MLC-AXIAL:470pF,10%,50V,Y5P,TP	
....4	C630	2401-002235	C-AL:10uF,20%,16V,GP,TP,5x11mm,5mm		....4	CN602	3711-002644	CONNECTOR-HEADER:BOX,5P,1R,2.5mm,STRAIGH	
....4	C631	2401-002235	C-AL:10uF,20%,16V,GP,TP,5x11mm,5mm		....4	CN702	3711-002647	CONNECTOR-HEADER:BOX,8P,1R,2.5mm,STRAIGH	
....4	C632	2202-000806	C-CERAMIC,MLC-AXIAL:220pF,10%,50V,Y5P,TP		....4	CW901	2503-000156	C-NETWORK:100pF,20%,50V	
....4	C634	2401-001840	C-AL:100uF,20%,16V,GP,TP,6.3x11,5		....4	D201	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,	
....4	C635	2305-000665	C-FILM,MPEF:100nF,5%,63V,TP,7.5x4.0x5.0m		....4	D202	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,	
....4	C636	2401-001026	C-AL:3.3uF,20%,50V,GP,TP,5x11,5		....4	D203	0404-000156	DIODE-SCHOTTKY:RB441Q,10V,100mA,DO-34,TP	
....4	C637	2401-000027	C-AL:4.7uF,20%,50V,GP,TP,5x11,5		....4	D204	0404-000156	DIODE-SCHOTTKY:RB441Q,10V,100mA,DO-34,TP	
....4	C638	2202-000231	C-CERAMIC,MLC-AXIAL:330pF,10%,50V,Y5P,TP		....4	D205	0404-000156	DIODE-SCHOTTKY:RB441Q,10V,100mA,DO-34,TP	
....4	C639	2202-000231	C-CERAMIC,MLC-AXIAL:330pF,10%,50V,Y5P,TP		....4	D206	0404-000156	DIODE-SCHOTTKY:RB441Q,10V,100mA,DO-34,TP	
....4	C640	2401-000027	C-AL:4.7uF,20%,50V,GP,TP,5x11,5		....4	D207	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,	
....4	C641	2401-000027	C-AL:4.7uF,20%,50V,GP,TP,5x11,5		....4	D208	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,	
....4	C642	2202-000231	C-CERAMIC,MLC-AXIAL:330pF,10%,50V,Y5P,TP		....4	D209	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,	
....4	C643	2401-000027	C-AL:4.7uF,20%,50V,GP,TP,5x11,5		....4	D210	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,	
....4	C644	2202-000231	C-CERAMIC,MLC-AXIAL:330pF,10%,50V,Y5P,TP		....4	D211	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,	
....4	C645	2401-002235	C-AL:10uF,20%,16V,GP,TP,5x11mm,5mm		....4	D301	0402-000546	DIODE-RECTIFIER:TVR10G,400V,1.0A,DO-41,T	

Electrical Parts List

Level	Loc. No.	Code No.	Description ; Specification	Remark	Level	Loc. No.	Code No.	Description ; Specification	Remark
△	...4	D401	0402-000540	DIODE-RECTIFIER:RU20A,600V,1.5A,-,TP		...4	L207	3301-000287	CORE-FERRITE BEAD:AA,3.5x1.0x6.0mm,1500,
△	...4	D402	0402-000534	DIODE-RECTIFIER:RG10V,400V,1.2A,DO-201,T		...4	L208	2701-000168	INDUCTOR-AXIAL:3.3uH,5%,2.5x3.4mm
△	...4	D403	0402-000132	DIODE-RECTIFIER:1N4004,400V,1A,DO-41,TP		...4	L209	2701-000168	INDUCTOR-AXIAL:3.3uH,5%,2.5x3.4mm
△	...4	D404	0402-000540	DIODE-RECTIFIER:RU20A,600V,1.5A,-,TP		...4	L210	2701-000168	INDUCTOR-AXIAL:3.3uH,5%,2.5x3.4mm
△	...4	D405	0402-000493	DIODE-RECTIFIER:1R5GU41,400V,1.5A,DO-15L		...4	L212	2701-000168	INDUCTOR-AXIAL:3.3uH,5%,2.5x3.4mm
△	...4	D406	0402-000132	DIODE-RECTIFIER:1N4004,400V,1A,DO-41,TP		...4	L301	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm
△	...4	D407	0402-000132	DIODE-RECTIFIER:1N4004,400V,1A,DO-41,TP		...4	L302	3301-000287	CORE-FERRITE BEAD:AA,3.5x1.0x6.0mm,1500,
△	...4	D408	0402-000493	DIODE-RECTIFIER:1R5GU41,400V,1.5A,DO-15L		...4	L303	3301-000287	CORE-FERRITE BEAD:AA,3.5x1.0x6.0mm,1500,
△	...4	D411	0402-000546	DIODE-RECTIFIER:TVR10G,400V,1.0A,DO-41,T		...4	L401	2001-001053	R-CARBON(S):1.50HM,5%,1/2W,AA,TP,2.4X6.4
△	...4	D413	0402-000537	DIODE-RECTIFIER:RH1A,600V,0.6A,DO-204AC		...4	L406	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm
△	...4	D501	2004-000433	R-METAL:1Kohm,1%,1/8W,AA,TP,1.8x3.2mm		...4	L407	2901-000297	FILTER-EMI ON BOARD:-,3A,-,-,3.5x5,TP,-
△	...4	D502	0402-000132	DIODE-RECTIFIER:1N4004,400V,1A,DO-41,TP		...4	L410	3301-000287	CORE-FERRITE BEAD:AA,3.5x1.0x6.0mm,1500,
△	...4	D601	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,		...4	L412	3301-000287	CORE-FERRITE BEAD:AA,3.5x1.0x6.0mm,1500,
△	...4	D602	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,		...4	L501	2901-000297	FILTER-EMI ON BOARD:-,3A,-,-,3.5x5,TP,-
△	...4	D801	0402-001111	DIODE-RECTIFIER:1N5397GP600V,1.5A,DO-20		...4	L601	2901-000297	FILTER-EMI ON BOARD:-,3A,-,-,3.5x5,TP,-
△	...4	D803	0402-000546	DIODE-RECTIFIER:TVR10G,400V,1.0A,DO-41,T		...4	L604	2701-000169	INDUCTOR-AXIAL:3.9uH,10%,2.5x3.4mm
△	...4	D804	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,		...4	L605	2701-000177	INDUCTOR-AXIAL:33uH,10%,2.5x3.4mm
△	...4	D810	0402-000132	DIODE-RECTIFIER:1N4004,400V,1A,DO-41,TP		...4	L606	2701-000177	INDUCTOR-AXIAL:33uH,10%,2.5x3.4mm
△	...4	D811	0402-000132	DIODE-RECTIFIER:1N4004,400V,1A,DO-41,TP		...4	L607	2701-000177	INDUCTOR-AXIAL:33uH,10%,2.5x3.4mm
△	...4	D816	0402-000546	DIODE-RECTIFIER:TVR10G,400V,1.0A,DO-41,T		...4	L608	2701-000177	INDUCTOR-AXIAL:33uH,10%,2.5x3.4mm
△	...4	D901	0404-000156	DIODE-SCHOTTKY:RB441Q,10V,100mA,DO-34,TP		...4	L609	2901-000297	FILTER-EMI ON BOARD:-,3A,-,-,3.5x5,TP,-
△	...4	D902	0404-000156	DIODE-SCHOTTKY:RB441Q,10V,100mA,DO-34,TP		...4	L701	2701-000177	INDUCTOR-AXIAL:33uH,10%,2.5x3.4mm
△	...4	D903	0404-000156	DIODE-SCHOTTKY:RB441Q,10V,100mA,DO-34,TP		...4	L702	2701-000177	INDUCTOR-AXIAL:33uH,10%,2.5x3.4mm
△	...4	D904	0404-000156	DIODE-SCHOTTKY:RB441Q,10V,100mA,DO-34,TP		...4	L705	2701-000177	INDUCTOR-AXIAL:33uH,10%,2.5x3.4mm
△	...4	D905	0404-000156	DIODE-SCHOTTKY:RB441Q,10V,100mA,DO-34,TP		...4	L706	2701-000177	INDUCTOR-AXIAL:33uH,10%,2.5x3.4mm
△	...4	D906	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,		...4	L709	2701-000168	INDUCTOR-AXIAL:3.3uH,5%,2.5x3.4mm
△	...4	D907	0402-000132	DIODE-RECTIFIER:1N4004,400V,1A,DO-41,TP		...4	L710	2701-000168	INDUCTOR-AXIAL:3.3uH,5%,2.5x3.4mm
△	...4	D909	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,		...4	L711	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm
△	...4	DZ201	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500		...4	L801	3301-001223	CORE-FERRITE BEAD:AA,62ohm,3.5x0.8x5mm,-
△	...4	DZ202	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500		...4	L802	3301-000287	CORE-FERRITE BEAD:AA,3.5x1.0x6.0mm,1500,
△	...4	DZ203	0403-001321	DIODE-ZENER:MTZJ6.8C,6.66-7.01V,500mW,DO		...4	L803	3301-000287	CORE-FERRITE BEAD:AA,3.5x1.0x6.0mm,1500,
△	...4	DZ302	0403-001329	DIODE-ZENER:MTZJ24B,22.61-23.77V,500mW,D		...4	L804	3301-000287	CORE-FERRITE BEAD:AA,3.5x1.0x6.0mm,1500,
△	...4	DZ303	0403-001329	DIODE-ZENER:MTZJ24B,22.61-23.77V,500mW,D		...4	L806	3301-001223	CORE-FERRITE BEAD:AA,62ohm,3.5x0.8x5mm,-
△	...4	DZ304	0403-001329	DIODE-ZENER:MTZJ24B,22.61-23.77V,500mW,D		...4	L807	2901-000297	FILTER-EMI ON BOARD:-,3A,-,-,3.5x5,TP,-
△	...4	DZ305	0403-001221	DIODE-ZENER:UZ39BSB,35.36-37.19V,500mW,D		...4	L809	3301-000287	CORE-FERRITE BEAD:AA,3.5x1.0x6.0mm,1500,
△	...4	DZ306	0403-000700	DIODE-ZENER:TZP33A,33V,31-35V,1W,DO-41,T		...4	L901	2702-001094	INDUCTOR-RADIAL:10uH,10%,6x4mm
△	...4	DZ401	0403-001325	DIODE-ZENER:MTZJ15C,14.35-15.09V,500mW,D		...4	L903	2702-001094	INDUCTOR-RADIAL:10uH,10%,6x4mm
△	...4	DZ402	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,		...4	L904	2702-001094	INDUCTOR-RADIAL:10uH,10%,6x4mm
△	...4	DZ502	0403-001211	DIODE-ZENER:MTZJ12B,11.44-12.03V,500mW,D		...4	L905	2001-000995	R-CARBON:820OHM,5%,1/8W,AA,TP,1.8X3.2MM
△	...4	DZ503	2004-000500	R-METAL:2.7Kohm,1%,1/8W,AA,TP,1.8x3.2mm		...4	L907	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm
△	...4	DZ504	0403-001211	DIODE-ZENER:MTZJ12B,11.44-12.03V,500mW,D		...4	L908	2701-000191	INDUCTOR-AXIAL:47uH,10%,2.5x3.4mm
△	...4	DZ601	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500		...4	L909	2701-000191	INDUCTOR-AXIAL:47uH,10%,2.5x3.4mm
△	...4	DZ602	0403-000720	DIODE-ZENER:MTZJ9.1B,9.1V,8.57-9.01V,500		...4	PCB	AA41-00168C	PCB-MAIN:K53A,FR-1,1L,C,1.6T,330x245,-,
△	...4	DZ603	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500		...4	Q201	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T
△	...4	DZ801	0403-001322	DIODE-ZENER:MTZJ8.2B,7.78-8.19V,500mW,DO		...4	Q202	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T
△	...4	DZ802	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500		...4	Q203	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T
△	...4	DZ803	0403-001167	DIODE-ZENER:MTZJ30D,30V,29.02-30.51V,500		...4	Q204	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T
△	...4	DZ804	0403-000700	DIODE-ZENER:TZP33A,33V,31-35V,1W,DO-41,T		△	Q402	0502-001007	TR-POWER:KSC2073-H2,NPN,25V,1W,TO-220,ST
△	...4	DZ805	1203-001217	IC-POS:ADJUST REG.:431,TO-92,3P,4.58MIL		△	Q404	0505-000156	FET-SILICON:IRF620,N,200V,5A,0.8ohm,50W,
△	...4	DZ806	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500		...4	Q501	0501-000283	TR-SMALL SIGNAL:KSA539,PNP,400mW,TO-92,T
△	...4	DZ808	0403-001322	DIODE-ZENER:MTZJ8.2B,7.78-8.19V,500mW,DO		...4	Q601	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T
△	...4	DZ901	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500		...4	Q701	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T
△	...4	DZ902	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500		...4	Q901	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T
△	...4	DZ903	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500		...4	Q902	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T
△	...4	DZ904	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500		...4	Q903	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T
△	...4	DZ905	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500		...4	Q904	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T
△	...4	DZ906	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500		...4	Q905	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T
△	...4	DZ907	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500		...4	Q906	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T
△	...4	F801A	3602-000114	FUSE-HOLDER:-,30mohm		...4	Q908	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T
△	...4	F801B	3602-000114	FUSE-HOLDER:-,30mohm		...4	Q909	0505-000109	FET-SILICON:2N7000,N,60V,200mA,5ohm,400m
△	...4	FA802S	3601-001086	FUSE-AXIAL LEAD:125V,5A,FAST-ACTING,GLAS		...4	Q910	0505-000109	FET-SILICON:2N7000,N,60V,200mA,5ohm,400m
△	...4	FA803S	3601-001163	FUSE-AXIAL LEAD:125V,7A,-,EPOXY,2.4X7.1M		...4	R102	2001-000281	R-CARBON:1000OHM,5%,1/8W,AA,TP,1.8X3.2MM
△	...4	HIC202	AA13-00093A	IC HYBRID:-,DRGB001A,SIP5P,-,TP		...4	R103	2001-000281	R-CARBON:1000OHM,5%,1/8W,AA,TP,1.8X3.2MM
△	...4	HIC203	AA13-00093A	IC HYBRID:-,DRGB001A,SIP5P,-,TP		...4	R105	2001-000702	R-CARBON:39KOHM,5%,1/8W,AA,TP,1.8X3.2MM
△	...4	HIC204	AA13-00093A	IC HYBRID:-,DRGB001A,SIP5P,-,TP		...4	R106	2001-000864	R-CARBON:56KOHM,5%,1/8W,AA,TP,1.8X3.2MM
△	...4	IC903	1203-001944	IC-POS:FIXED REG.:78RM33,TO-220,3P,-,PL		...4	R202	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,1.8X3.2MM
△	...4	IC904	1203-001943	IC-VOL. DETECTOR:7025,TO-92,3P,-,PLASTIC		...4	R203	2001-000281	R-CARBON:1000OHM,5%,1/8W,AA,TP,1.8X3.2MM
△	...4	J706	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm		...4	R204	2001-000281	R-CARBON:1000OHM,5%,1/8W,AA,TP,1.8X3.2MM
△	...4	J718	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm		...4	R205	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,1.8X3.2MM
△	...4	J901	3301-000287	CORE-FERRITE BEAD:AA,3.5x1.0x6.0mm,1500,		...4	R206	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,1.8X3.2MM
△	...4	J904	2001-000281	R-CARBON:1000HM,5%,1/8W,AA,TP,1.8X3.2MM		...4	R207	2001-000221	R-CARBON:1.2KOHM,5%,1/8W,AA,TP,1.8X3.2M
△	...4	L102	2701-000159	INDUCTOR-AXIAL:22uH,10%,4.2x9.8mm		...4	R208	2001-000405	R-CARBON:180OHM,5%,1/8W,AA,TP,1.8X3.2MM
△	...4	L103	2701-000115	INDUCTOR-AXIAL:10uH,10%,3x7mm		...4	R209	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM
△	...4	L201	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm		...4	R210	2001-000812	R-CARBON:5.6KOHM,5%,1/8W,AA,TP,1.8X3.2M
△	...4	L202	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm		...4	R212	2004-000218	R-METAL:10Kohm,1%,1/8W,AA,TP,1.8x3.2mm
△	...4	L204	2701-000184	INDUCTOR-AXIAL:4.7uH,10%,2.5x3.4mm		...4	R213	2001-000232	R-CARBON:1.3KOHM,5%,1/8W,AA,TP,1.8X3.2M

S.N.A

Level	Loc. No.	Code No.	Description ; Specification	Remark	Level	Loc. No.	Code No.	Description ; Specification	Remark
....4	R214	2001-000411	R-CARBON:18KOHM,5%,1/8W,AA,TP1.8X3.2MM		....4	R514	2001-000515	R-CARBON:220OHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R215	2001-000522	R-CARBON:22KOHM,5%,1/8W,AA,TP1.8X3.2MM		....4	R515	2002-001008	R-COMPOSITION:1.8Kohm,10%,1/2W,AA,TP3.7	
....4	R216	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP1.8X3.2MM		....4	R517	2003-001024	R-METAL OXIDE(S):150ohm,5%,2W,AF,TP3.9x	
....4	R223	2001-000003	R-CARBON:330ohm,5%,1/8W,AA,TP1.8x3.2mm		....4	R518	2003-001090	R-METAL OXIDE(S):10Kohm,5%,2W,AF,TP4x12	
....4	R224	2001-000780	R-CARBON:470OHM,5%,1/8W,AA,TP1.8X3.2MM		....4	R519	2001-000864	R-CARBON:56KOHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R225	2001-000780	R-CARBON:470OHM,5%,1/8W,AA,TP1.8X3.2MM		....4	R520	2001-000008	R-CARBON:15KOHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R226	2001-000780	R-CARBON:470OHM,5%,1/8W,AA,TP1.8X3.2MM		....4	R521	2001-000924	R-CARBON:680OHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R228	2001-000117	R-CARBON(S):68OHM,5%,1/2W,AA,TP2.4X6.4M		....4	R522	2008-000290	R-FUSIBLE(S):2.4ohm,5%,2W,AF,TP3.9X10MM	
....4	R231	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP1.8X3.2MM		....4	R524	2008-000299	R-FUSIBLE(S):47ohm,5%,2W,AF,TP3.9x10mm	
....4	R232	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP1.8X3.2MM		....4	R525	2001-001062	R-CARBON(S):10MOHM,5%,1/2W,AA,TP2.4X6.4	
....4	R234	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP1.8X3.2MM		....4	R526	2002-001009	R-COMPOSITION:2.7Kohm,10%,1/2W,AA,TP3.7	
....4	R235	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP1.8X3.2MM		....4	R601	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R236	2001-000515	R-CARBON:220OHM,5%,1/8W,AA,TP1.8X3.2MM		....4	R602	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R237	2001-000515	R-CARBON:220OHM,5%,1/8W,AA,TP1.8X3.2MM		....4	R603	2001-000429	R-CARBON:10KOHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R238	2001-000515	R-CARBON:220OHM,5%,1/8W,AA,TP1.8X3.2MM		....4	R604	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R241	2001-000362	R-CARBON:150OHM,5%,1/8W,AA,TP1.8X3.2MM		....4	R605	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R242	2001-000405	R-CARBON:180OHM,5%,1/8W,AA,TP1.8X3.2MM		....4	R606	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R243	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP1.8X3.2MM		....4	R607	2001-000429	R-CARBON:10KOHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R244	2001-000786	R-CARBON:47KOHM,5%,1/8W,AA,TP1.8X3.2MM		....4	R608	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R245	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP1.8X3.2MM		....4	R610	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R246	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP1.8X3.2MM		....4	R611	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R248	2001-000003	R-CARBON:330ohm,5%,1/8W,AA,TP1.8x3.2mm		....4	R612	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R249	2001-000003	R-CARBON:330ohm,5%,1/8W,AA,TP1.8x3.2mm		....4	R613	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R250	2001-000003	R-CARBON:330ohm,5%,1/8W,AA,TP1.8x3.2mm		....4	R614	2001-000780	R-CARBON:470OHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R251	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP1.8X3.2M		....4	R615	2001-000780	R-CARBON:470OHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R252	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP1.8X3.2MM		....4	R616	2001-000780	R-CARBON:470OHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R301	2004-000699	R-METAL:3.3Kohm,1%,1/8W,AA,TP1.8x3.2m		....4	R617	2001-000780	R-CARBON:470OHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R302	2004-001386	R-METAL(S):16.9Kohm,1%,1/2W,AA,TP2.4x6.		....4	R620	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R303	2001-000016	R-CARBON(S):10HM,5%,1/2W,AA,TP2.4X6.4MM		....4	R621	2001-000577	R-CARBON:2KOHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R304	2008-000254	R-FUSIBLE(S):0.68ohm,5%,2W,AF,TP3.9x10m		....4	R622	2001-000577	R-CARBON:2KOHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R305	2003-002205	R-METAL OXIDE(S):330ohm,5%,2W,AG,TP3.9X		....4	R627	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R306	2003-002205	R-METAL OXIDE(S):330ohm,5%,2W,AG,TP3.9X		....4	R628	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R309	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP1.8X3.2MM		....4	R629	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R310	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP1.8X3.2MM		....4	R701	2001-000969	R-CARBON:75OHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R313	2004-001137	R-METAL:6.8Kohm,1%,1/8W,AA,TP1.8x3.2m		....4	R702	2001-000969	R-CARBON:75OHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R314	2004-001986	R-METAL(S):35.7Kohm,1%,1/2W,AA,TP2.4x6.		....4	R703	2001-000969	R-CARBON:75OHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R315	2004-004970	R-METAL(S):62Kohm,1%,1/8W,AA,TP1.8x3.2m		....4	R704	2001-000969	R-CARBON:75OHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R401	2003-002008	R-METAL OXIDE(S):18Kohm,5%,2W,AF,TP3.9x		....4	R705	2001-000969	R-CARBON:75OHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R402	2003-002008	R-METAL OXIDE(S):18Kohm,5%,2W,AF,TP3.9x		....4	R706	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R403	2003-001091	R-METAL OXIDE(S):10ohm,5%,2W,AF,TP4x12m		....4	R707	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R404	2001-001057	R-CARBON(S):1.8OHM,5%,1/2W,AA,TP2.4X6.4		....4	R708	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R405	2008-000253	R-FUSIBLE(S):0.47ohm,5%,1W,AF,TP3.9x10m		....4	R709	2001-000938	R-CARBON:68OHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R409	2003-002009	R-METAL OXIDE(S):390ohm,5%,2W,AF,TP3.9x		....4	R710	2001-000938	R-CARBON:68OHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R410	2003-002009	R-METAL OXIDE(S):390ohm,5%,2W,AF,TP3.9x		....4	R711	2001-000969	R-CARBON:75OHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R411	2001-000028	R-CARBON(S):100OHM,5%,1/2W,AA,TP2.4X6.4		....4	R712	2001-000969	R-CARBON:75OHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R412	2001-000020	R-CARBON(S):220OHM,5%,1/2W,AA,TP2.4X6.4M		....4	R715	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R413	2008-001018	R-FUSIBLE(S):0.47ohm,10%,2W,AF,TP3.9x10		....4	R716	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R414	2008-000253	R-FUSIBLE(S):0.47ohm,5%,1W,AF,TP3.9x10m		....4	R717	2001-000702	R-CARBON:39KOHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R415	2004-001402	R-METAL(S):6.8Kohm,1%,1/2W,AA,TP2.4x6.4		....4	R718	2001-000702	R-CARBON:39KOHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R417	2004-001382	R-METAL(S):13Kohm,1%,1/2W,AA,TP2.4x6.4m		....4	R719	2001-000969	R-CARBON:75OHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R418	2001-001088	R-CARBON(S):1KOHM,5%,1/2W,AA,TP2.4X6.4M		....4	R723	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R420	2004-001402	R-METAL(S):6.8Kohm,1%,1/2W,AA,TP2.4x6.4		....4	R724	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP1.8X3.2M	
....4	R421	2001-001093	R-CARBON(S):2.2KOHM,5%,1/2W,AA,TP2.4X6.		....4	R725	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP1.8X3.2M	
....4	R422	2003-000649	R-METAL OXIDE(S):330ohm,5%,1W,AF,TP3.3x		....4	R726	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R423	2003-001042	R-METAL OXIDE(S):5.6Kohm,5%,2W,AF,TP3.9		....4	R802	2003-001025	R-METAL OXIDE(S):15Kohm,5%,2W,AF,TP3.9x	
....4	R424	2008-001018	R-FUSIBLE(S):0.47ohm,10%,2W,AF,TP3.9x10		....4	R803	2003-001025	R-METAL OXIDE(S):15Kohm,5%,2W,AF,TP3.9x	
....4	R425	2008-001018	R-FUSIBLE(S):0.47ohm,10%,2W,AF,TP3.9x10		....4	R804	2003-001025	R-METAL OXIDE(S):15Kohm,5%,2W,AF,TP3.9x	
....4	R426	2003-000540	R-METAL OXIDE(S):1Kohm,5%,2W,AF,TP4x12m		....4	R805	2001-001150	R-CARBON(S):470KOHM,5%,1/2W,AA,TP2.4X6.	
....4	R428	2001-000096	R-CARBON(S):1MOHM,5%,1/2W,AA,TP2.4X6.4M		....4	R806	2001-001150	R-CARBON(S):470KOHM,5%,1/2W,AA,TP2.4X6.	
....4	R429	2001-001103	R-CARBON(S):20KOHM,5%,1/2W,AA,TP2.4X6.4		....4	R807	2006-001083	R-CEMENT:120ohm,5%,5W,CJ,TP14x10x27mm	
....4	R432	2004-001402	R-METAL(S):6.8Kohm,1%,1/2W,AA,TP2.4x6.4		....4	R808	2001-001079	R-CARBON(S):150HM,5%,1/2W,AA,TP2.4X6.4M	
....4	R433	2003-001042	R-METAL OXIDE(S):5.6Kohm,5%,2W,AF,TP3.9		....4	R809	2001-000022	R-CARBON(S):330HM,5%,1/2W,AA,TP2.4X6.4M	
....4	R434	2003-000664	R-METAL OXIDE(S):33ohm,5%,2W,AF,TP4x12m		....4	R810	2001-001178	R-CARBON(S):680OHM,5%,1/2W,AA,TP2.4X6.4	
....4	R436	2003-002008	R-METAL OXIDE(S):18Kohm,5%,2W,AF,TP3.9x		....4	R811	2004-001408	R-METAL(S):91Kohm,1%,1/2W,AA,TP2.4x6.4m	
....4	R501	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP1.8X3.2MM		....4	R812	2001-000780	R-CARBON:470OHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R502	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP1.8X3.2MM		....4	R813	2001-001153	R-CARBON(S):470HM,5%,1/2W,AA,TP2.4X6.4M	
....4	R503	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP1.8X3.2MM		....4	R816	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R504	2001-000449	R-CARBON:2.2KOHM,5%,1/8W,AA,TP1.8X3.2M		....4	R817	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R505	2001-000449	R-CARBON:2.2KOHM,5%,1/8W,AA,TP1.8X3.2M		....4	R818	2001-001113	R-CARBON(S):270KOHM,5%,1/2W,AA,TP2.4X6.	
....4	R506	2001-000449	R-CARBON:2.2KOHM,5%,1/8W,AA,TP1.8X3.2M		....4	R819	2004-001983	R-METAL(S):2.49Kohm,1%,1/2W,AA,TP2.4x6.	
....4	R507	2001-001194	R-CARBON(S):82KOHM,5%,1/2W,AA,TP2.4X6.4		....4	R820	2001-001096	R-CARBON(S):2.2OHM,5%,1/2W,AA,TP2.4X6.4	
....4	R508	2001-000515	R-CARBON:220OHM,5%,1/8W,AA,TP1.8X3.2MM		....4	R821	2004-001889	R-METAL(S):127Kohm,1%,1/2W,AA,TP2.5x6.5	
....4	R509	2002-001008	R-COMPOSITION:1.8Kohm,10%,1/2W,AA,TP3.7		....4	R822	2001-000273	R-CARBON:100KOHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R510	2001-001194	R-CARBON(S):82KOHM,5%,1/2W,AA,TP2.4X6.4		....4	R823	2001-000522	R-CARBON:220KOHM,5%,1/8W,AA,TP1.8X3.2MM	
....4	R511	2001-000515	R-CARBON:220OHM,5%,1/8W,AA,TP1.8X3.2MM		....4	R824	2001-000273	R-CARBON:100KOHM,5%,1/8W,AA,TP1.8X3.2M	
....4	R512	2002-001008	R-COMPOSITION:1.8Kohm,10%,1/2W,AA,TP3.7		....4	R825	2001-000066	R-CARBON(S):10KOHM,5%,1/2W,AA,TP2.4X6.4	
....4	R513	2001-001194	R-CARBON(S):82KOHM,5%,1/2W,AA,TP2.4X6.4		....4	R827	2008-000284	R-FUSIBLE(S):0.1OHM,10%,2W,AF,TP3.9X10M	

Level	Loc. No.	Code No.	Description ; Specification	Remark	Level	Loc. No.	Code No.	Description ; Specification	Remark
..2		6006-001089	SCREW-ASS'Y TAPT;WC,HH,+,M5,L45,ZPC(YEL)	S.N.A					
..2		AA64-00811B	CABINET BACK;-;21A8,-;HIPS,V2,BLK,-;-						
..2		AA64-00894B	INLAY BACK:D2,D3,SCART(2),PS SHEET,T0.3,	S.N.A					
..2		AA65-00009B	CLAMP-D,COIL;NYLON 66,V0,-;-;21A8,-	S.N.A					

ASSY ACCESSORY

1	*	AA94-02764A	ASSY ACCESSORY;CZ21A8VW8X/ELS,KS3A,AUSTR	S.N.A
..2		AA68-01113A	MANUAL USERS;-;21A8,GER,36P;-;W/P100(G),	S.N.A

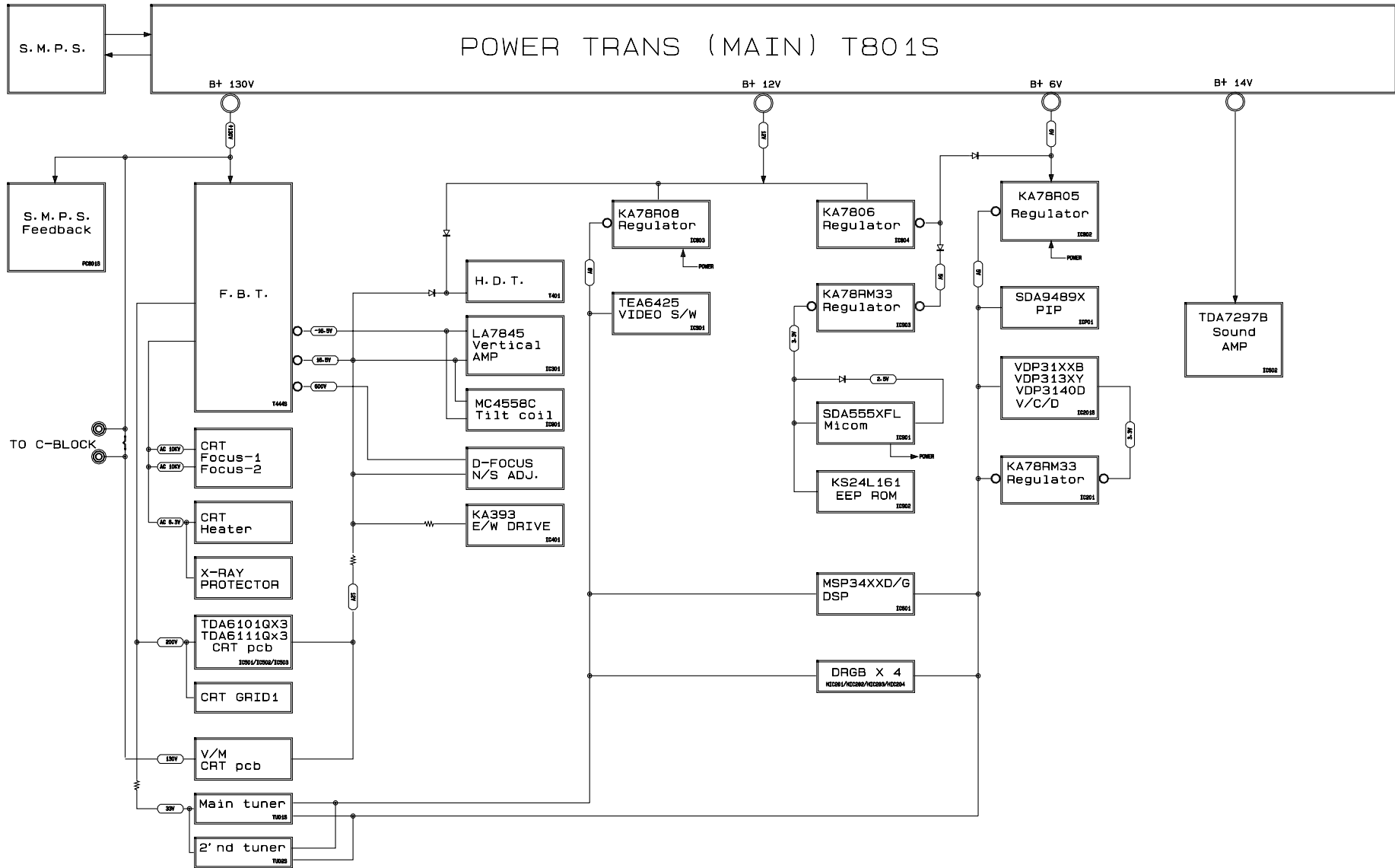
REMOCON

1	*	AA59-00104A	REMOCON;-;TM59,DREAM,29,L/GRAY;-;EX,PA	
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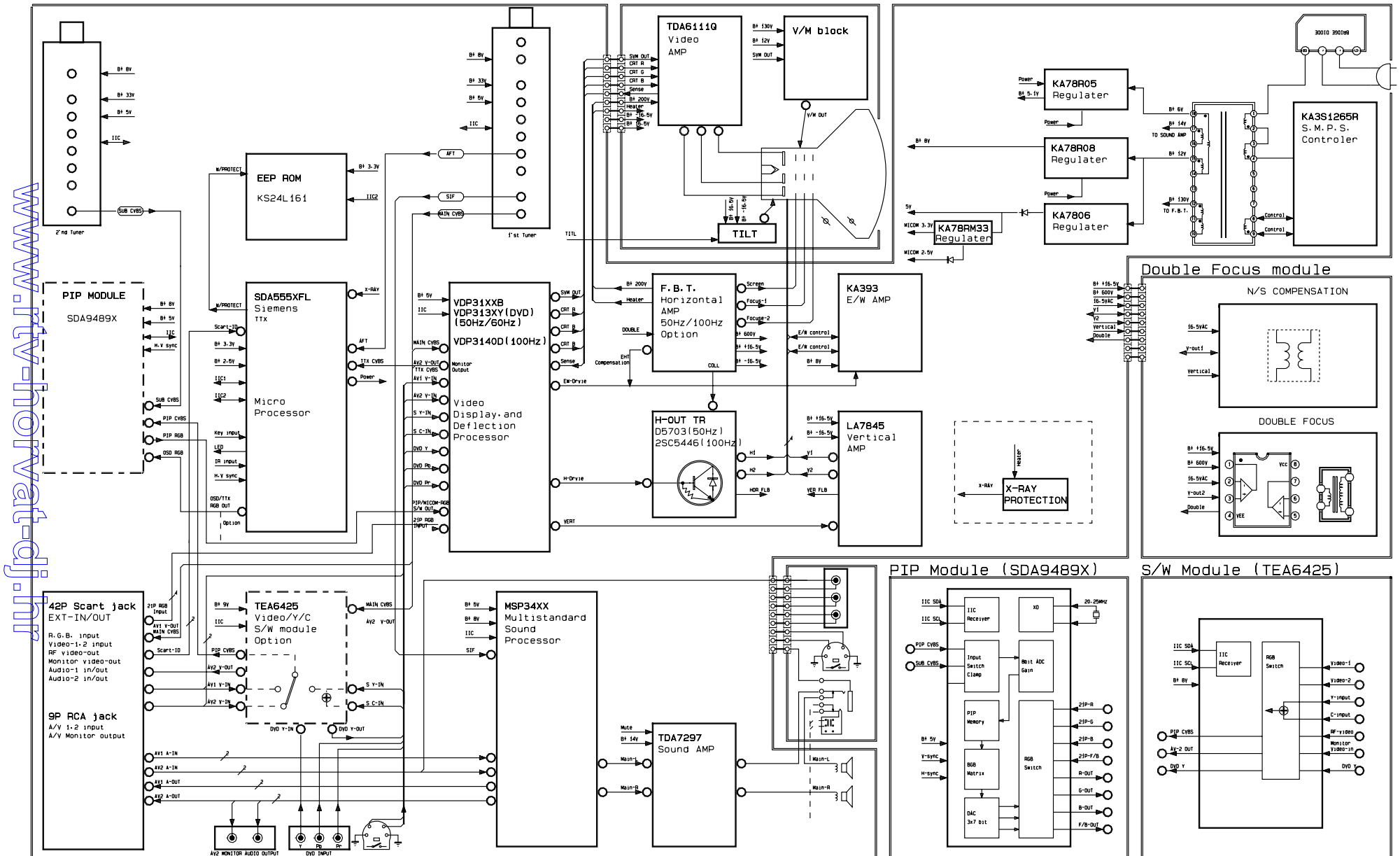
8. Block Diagrams

8-1 Power Diagram

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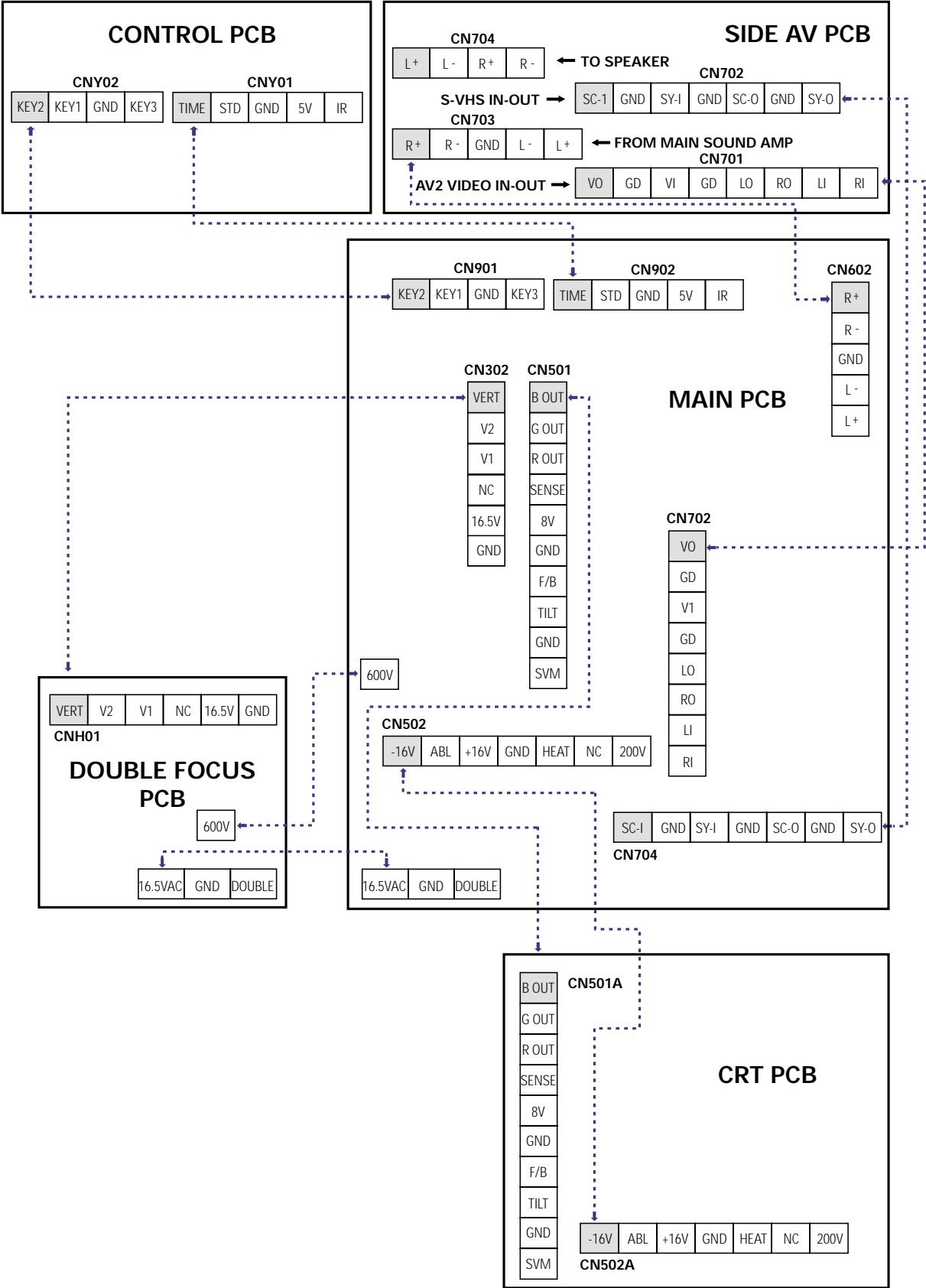


8-2 Block Diagram



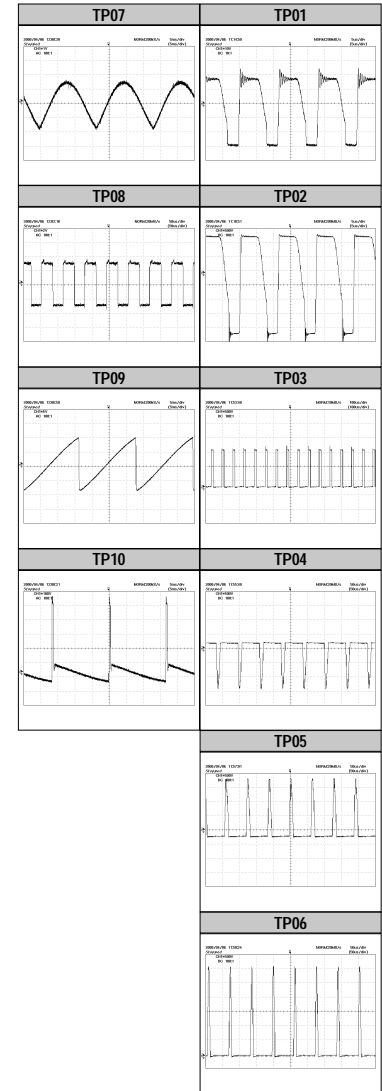
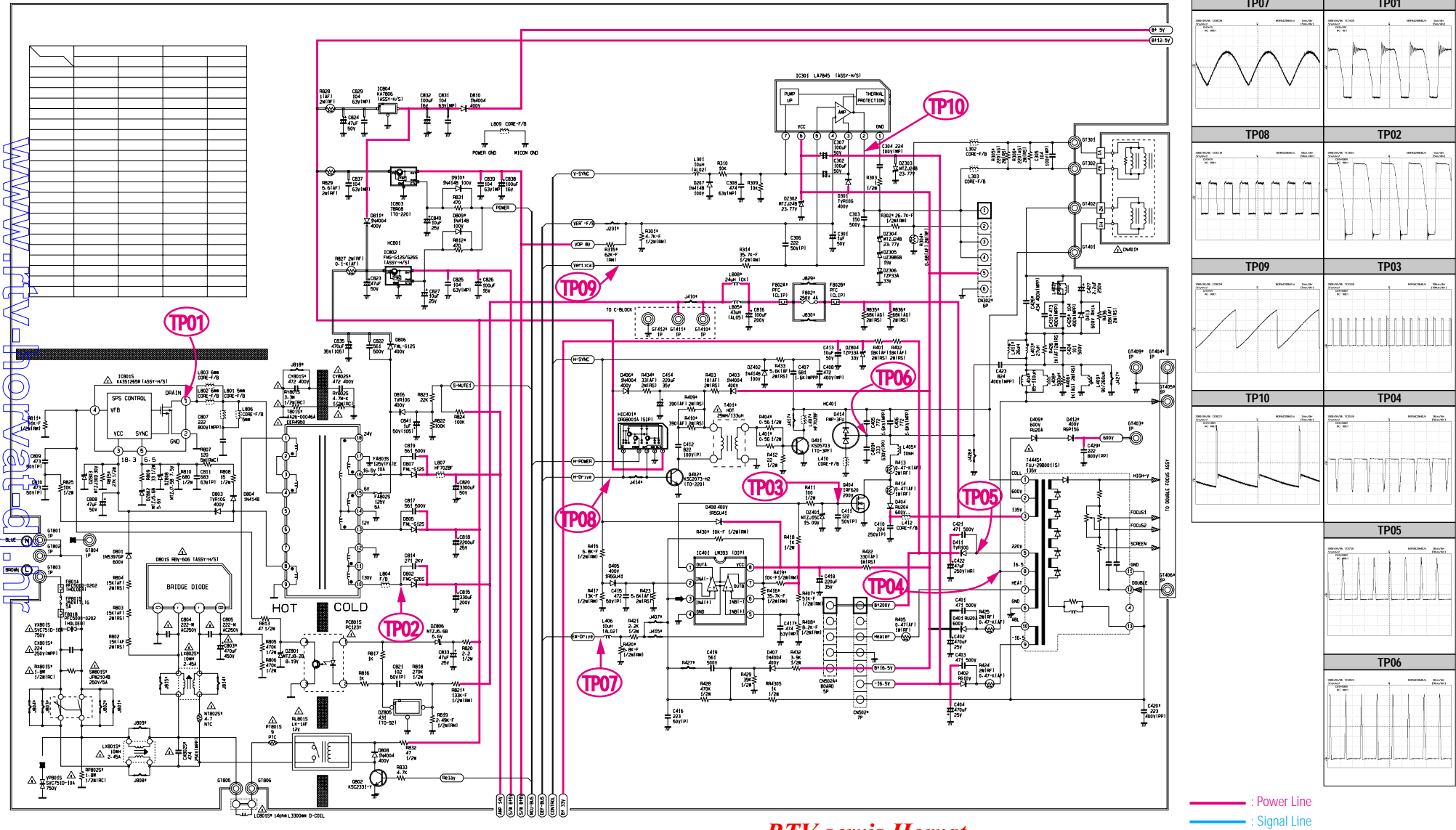
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9. Wiring Diagram



10. Schematic Diagrams

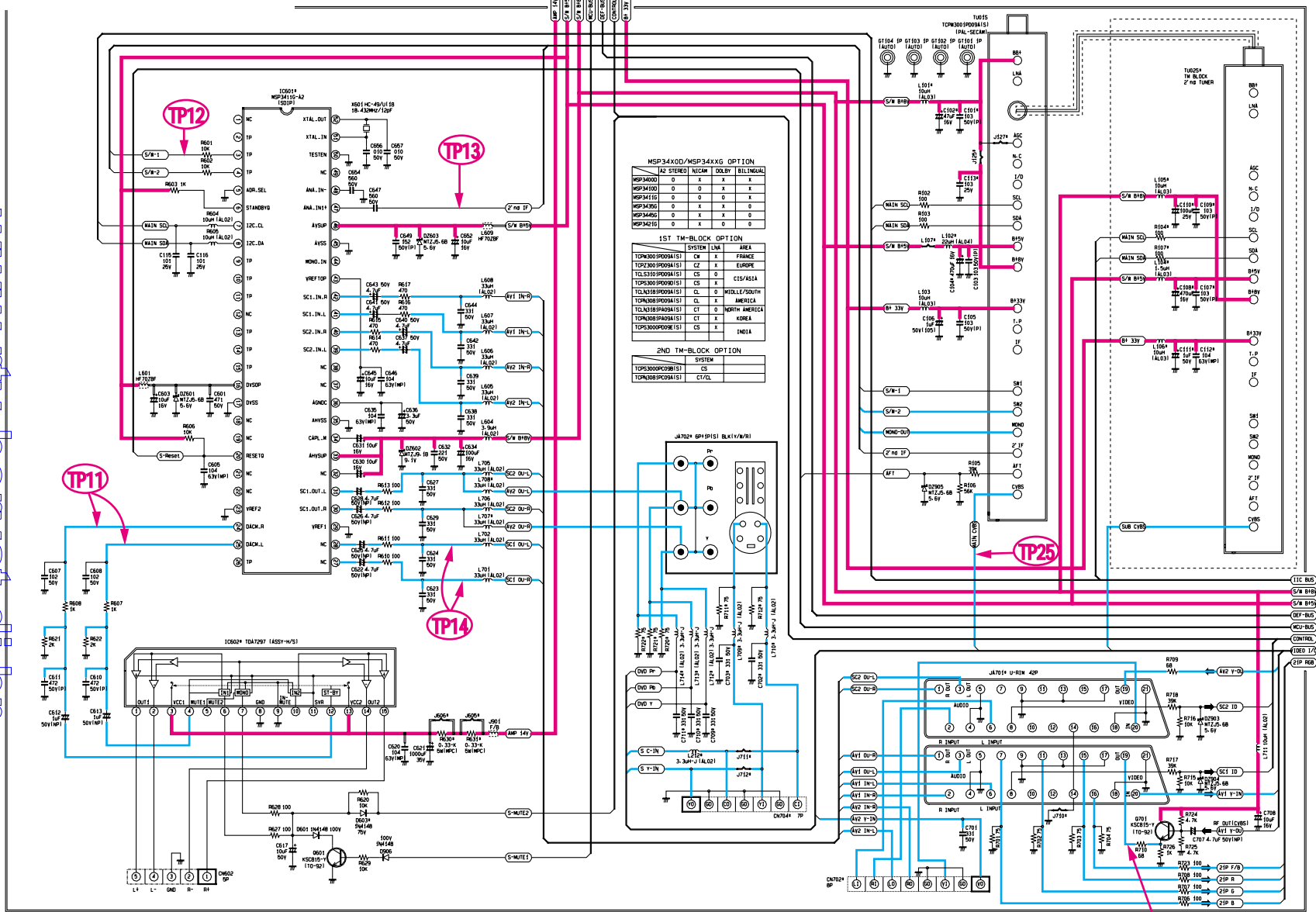
10-1 MAIN 1



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10-2 MAIN 2

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MSP34X0D/MSP34XXG OPTION

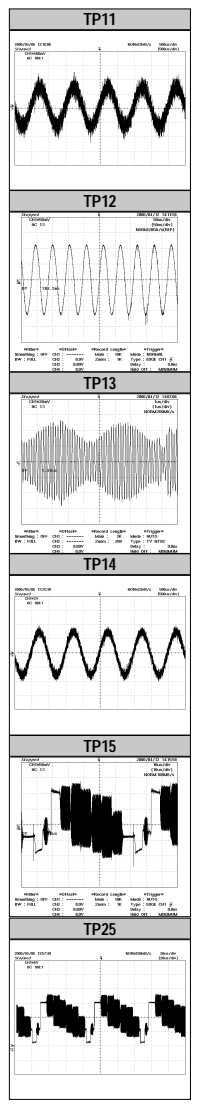
	I2	STEREO	NICAM	DOLBY	BILINGUAL
MSP34000	0	X	X	X	X
MSP34100	0	0	X	X	X
MSP34110	0	0	0	0	X
MSP34300	0	X	X	X	0
MSP34310	0	X	X	0	0
MSP34210	0	X	0	0	0

1ST TM-BLOCK OPTION

	SYSTEM	LMA	AREA
TOP3000(PROG)S1	CS	X	FRANCE
TOP3000(PROG)S2	CS	X	EUROPE
TOP3000(PROG)S3	CS	0	CIS/ASIA
TOP3000(PROG)S4	CS	X	MIDDLE/EAST
TOP3000(PROG)S5	CS	X	AMERICA
TOP3000(PROG)S6	CT	X	NORTH AMERICA
TOP3000(PROG)S7	CS	X	KOREA
TOP3000(PROG)S8	CS	X	INDIA

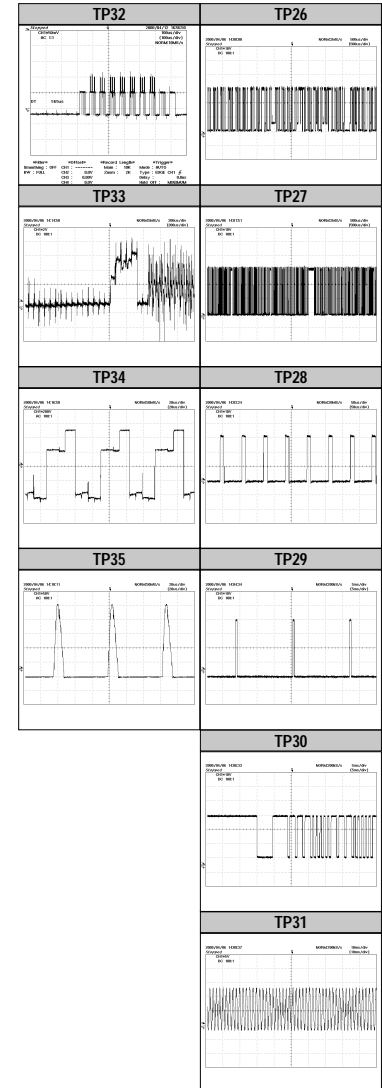
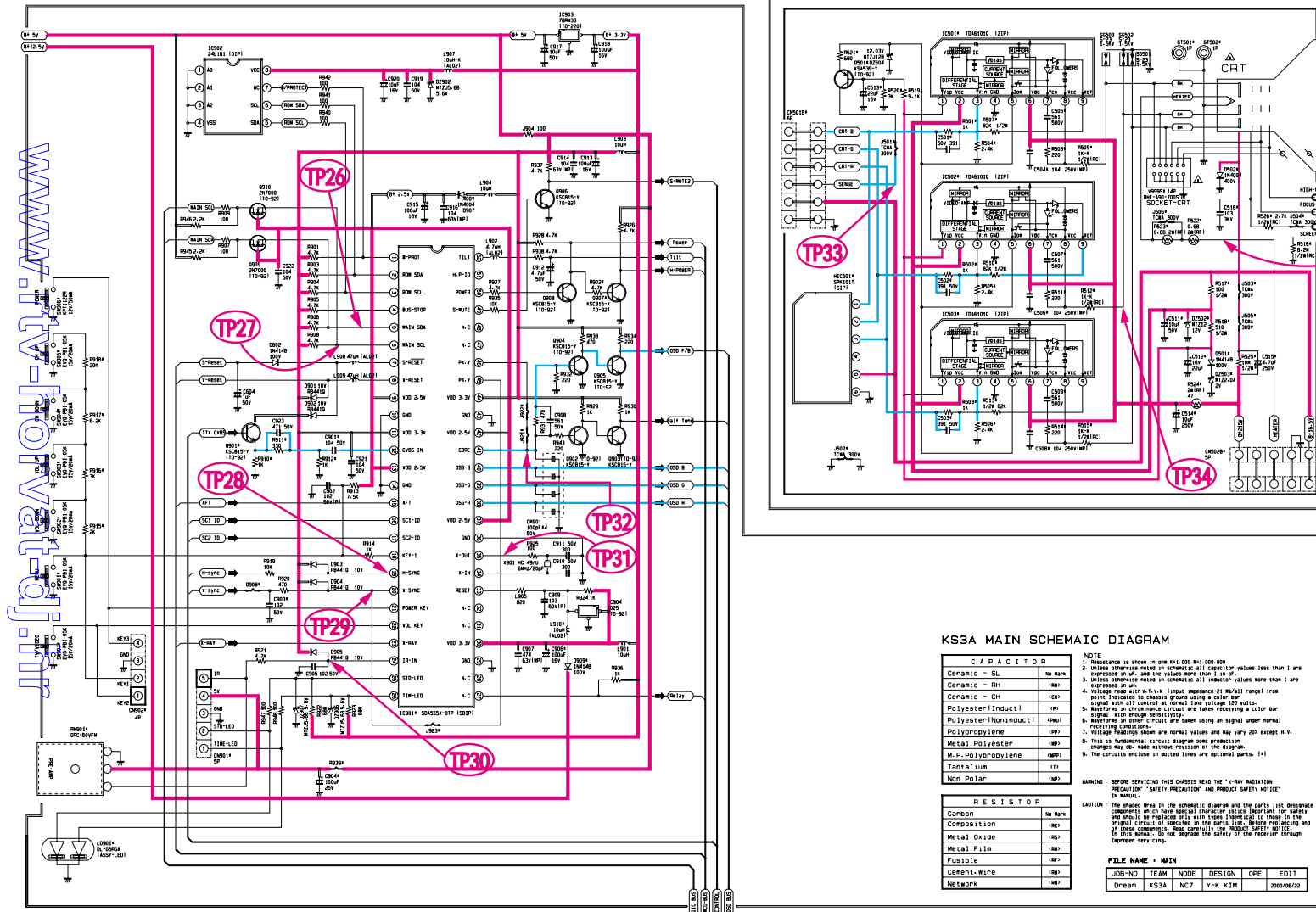
2ND TM-BLOCK OPTION

	SYSTEM
TOP3000(PROG)S1	CS
TOP3000(PROG)S2	CT/CL



— : Power Line
— : Signal Line

10-4 MAIN 4



KS3A MAIN SCHEMATIC DIAGRAM

CAPACITOR	
Ceramic - SL	no mark
Ceramic - RH	(RH)
Ceramic - CH	(CH)
Polyester/Inductol	(P)
Polyester/Noninductol	(NP)
Polypropylene	(PP)
Metal Polyester	(MP)
M.P. Polypropylene	(MPP)
Tantalum	(T)
Non Polar	(NP)

RESISTOR	
Carbon	no mark
Composition	(C)
Metal Oxide	(MO)
Metal Film	(MF)
Fusible	(F)
Cement-wire	(CW)
Network	(N)

NOTE

1. Resistance is shown in ohm $\times 1000$ M $\times 1000000$.
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 read with V.K.M. (Klein) measured by R.M.M.I. (Rohde & Schwarz) point indicator to chassis ground using a color bar.
5. Waveforms in chrominance circuit are taken receiving a color bar signal with high resistance.
6. Waveforms in other circuit are taken using an signal under normal receiving conditions.
7. Voltage readings shown are normal values and may vary 20% except H.V.
8. This is functional circuit diagram, some production changes may be made without revision of the diagram.
9. The circled indicate in boxed lines are optional parts. (4)

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 dimension (critical dimension) for safety and should be replaced only with types identical to those in the original circuit or indicate in the parts list. Before replacing one of these components, read carefully the product safety notice in this manual. Do not compromise the safety of the receiver design through servicing.

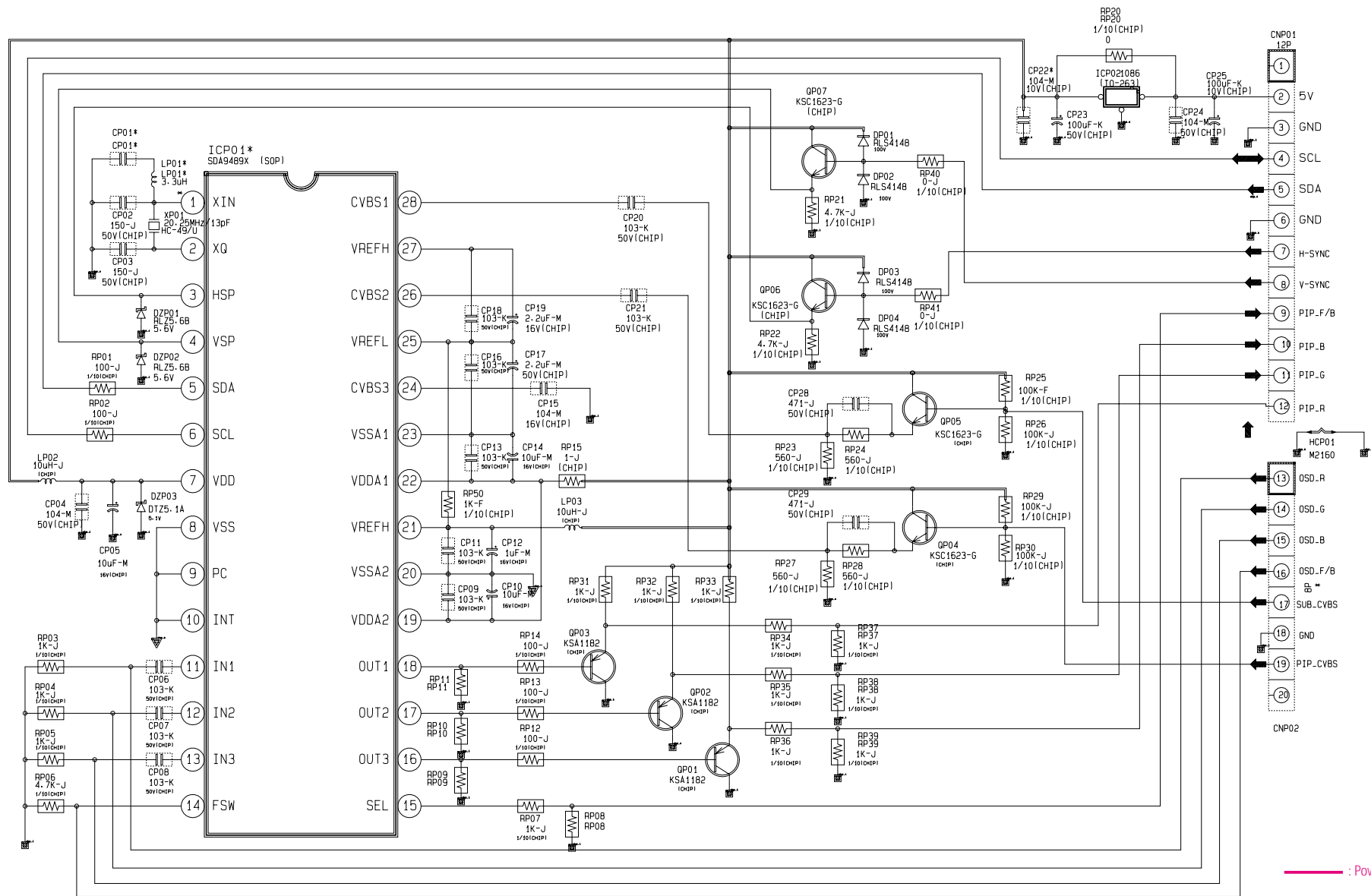
FILE NAME + MAIN

JOB-NO	TEAM	NODE	DESIGN	OPER	EDIT
Drawn	KS3A	NC-7	Y-K KJM		2000/06/22

Power Line : Pink
Signal Line : Blue

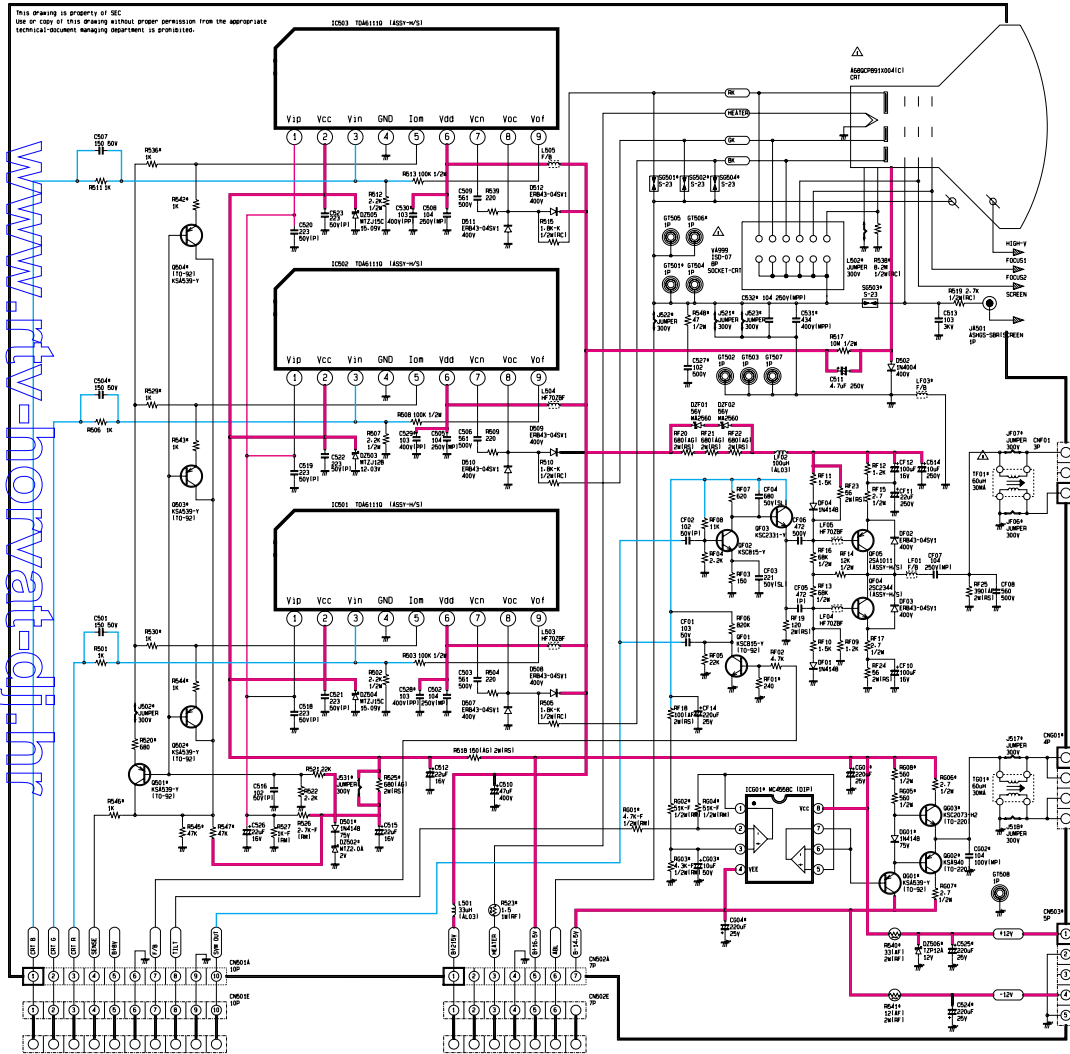
10-5 PIP

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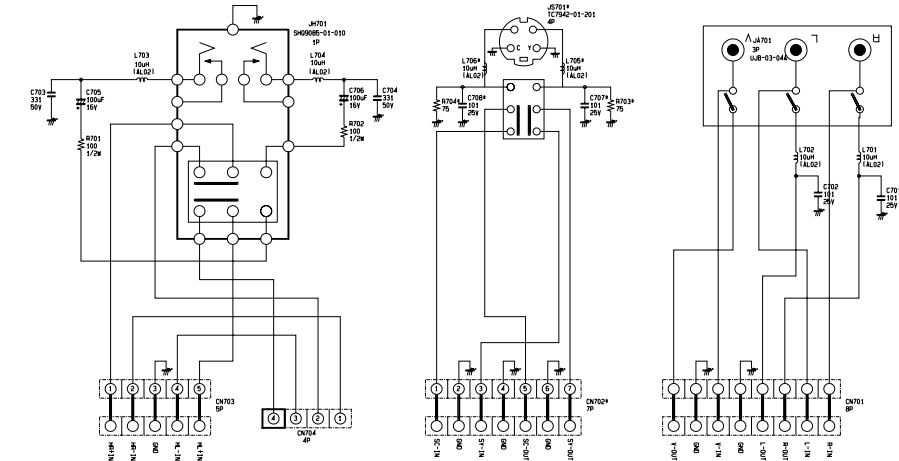


10-6 CRT, SIDE AV, VIDEO SWITCH

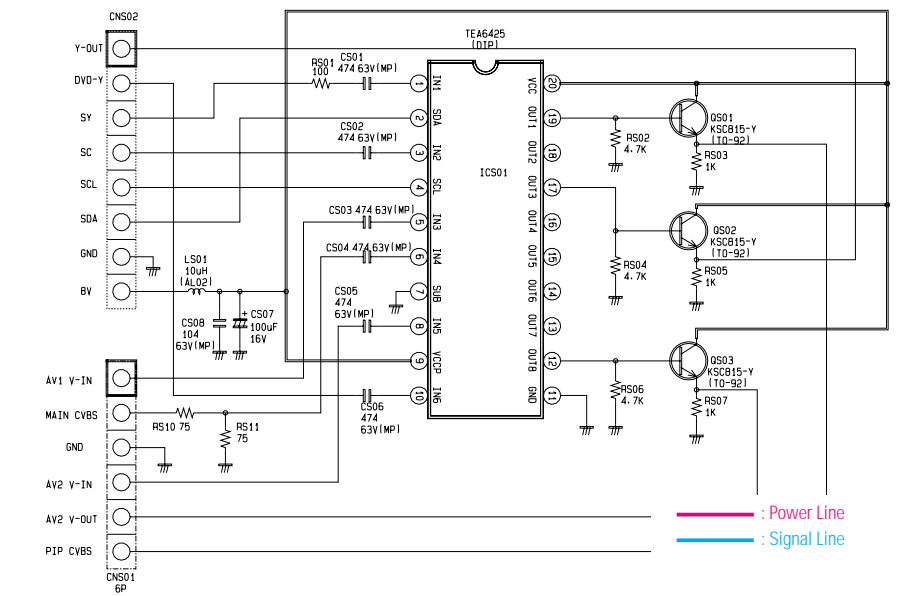
CRT



SIDE AV



VIDEO SWITCH

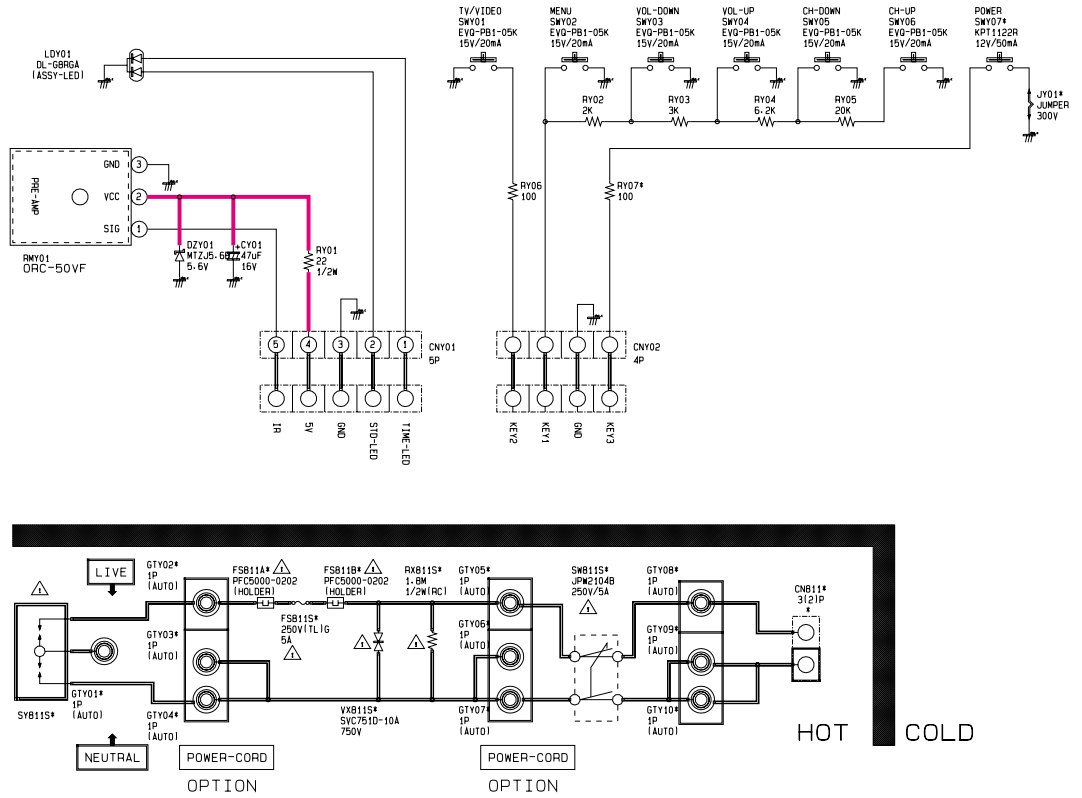
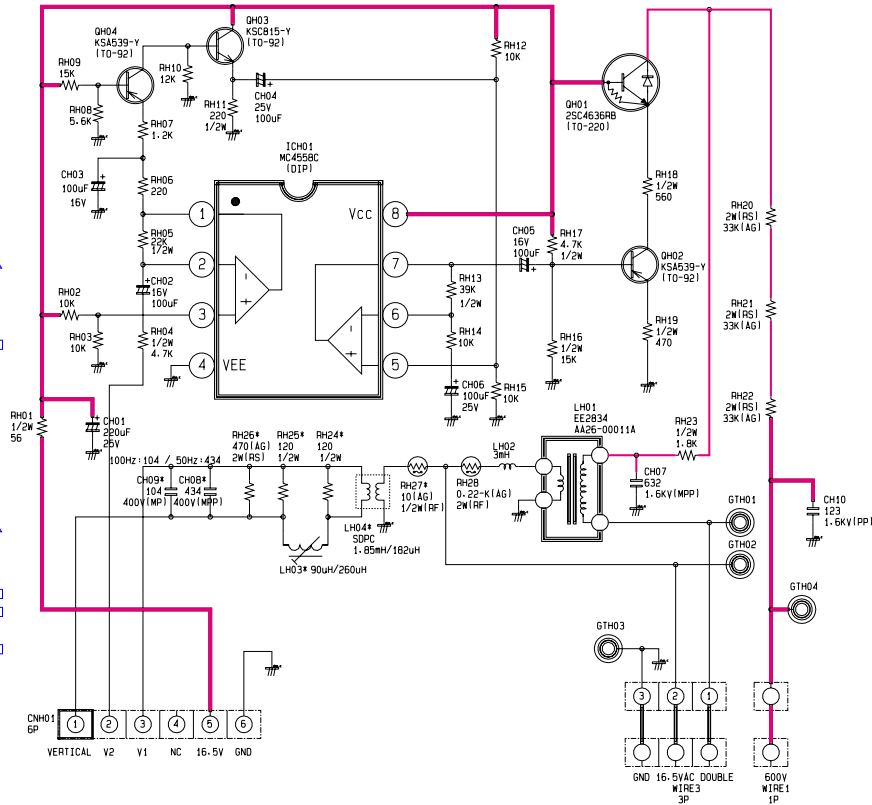


10-7 DOUBLE FOCUS, CONTROL

DOUBLE FOCUS

CONTROL

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— : Power Line