

HITACHI

SERVICE MANUAL

PAL/SECAM/NTSC

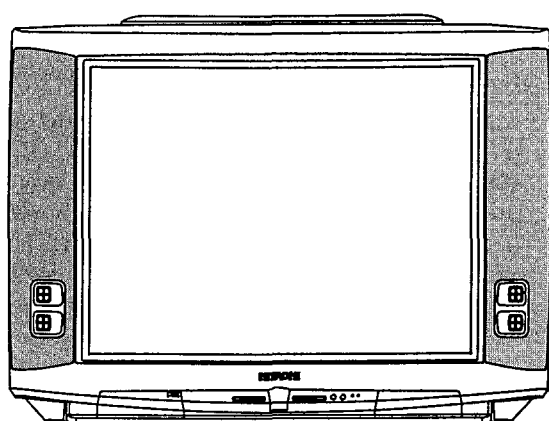
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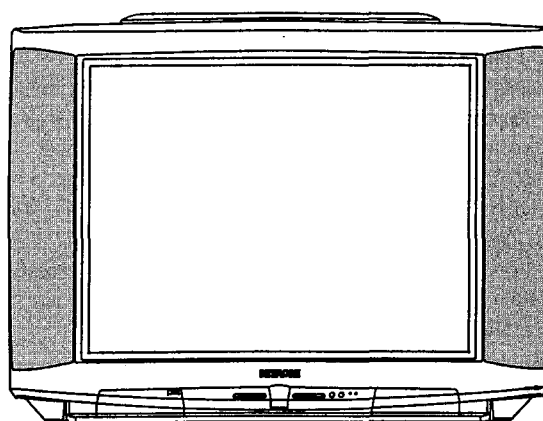
CMT2990-081S, 051, 191

CMT2990PX-981

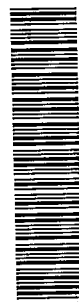
S6 Chassis



OTHERS



CMT2990-051



HITA-02926

注 意: 开始检修电视机机芯以前, 检修人员必须阅读这本检修手册中“有关安全上的预防事项”及“制品安全上的注意”两节。

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

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SPECIFICATIONS AND PARTS ARE SUBJECT TO CHANGE FOR IMPROVEMENT.

COLOR TELEVISION

February 1997

HITACHI CONSUMER PRODUCTS (S)

TECHNICAL CAUTIONS

SAFETY PRECAUTIONS

WARNING: Since the chassis of this receiver is connected to one side of the Mains Supply during operation, service should not be attempted by anyone unfamiliar with the precautions necessary when working on this type of equipment. The following precautions should be observed.

1. Do not install, remove, or handle the picture tube in any manner unless shatter-proof goggles are worn. People not so equipped should be kept away while picture tubes are handled. Keep picture tube away from the body while handling.
2. When replacing chassis in the cabinet, all the protective devices are put back in place, such as; barriers, non-metallic knobs, adjustment and compartment cover or shields, isolation resistors-capacitors, etc.
3. When service is required, observe the original lead dress. Extra care should be taken to assure correct lead dress in the high voltage circuitry area
4. Always use the manufacturer's replacement component. Especially critical components as indicated on the circuit diagram should not be replaced by other makes. Furthermore where a short circuit has occurred, replace those components that indicate evidence of overheating.
5. Before returning a serviced receiver to the customer, the service technician must thoroughly test the unit to be certain that it is completely safe to operate without danger of electrical shock, and be sure that no protective device built into the instrument by the manufacturer has become defective, or inadvertently defeated during servicing. Therefore, the following checks are recommended for the continued protection of the customers and service technicians.

INSULATION

Insulation resistance between the mains poles and any accessible metal parts should not be less than $7M\Omega$ at 500V DC. Also, no flashover or breakdown should occur during the dielectric strength test, to apply 4KV AC for one minute between the mains poles and any accessible metal parts.

X-RADIATION

TUBES: The primary source of X radiation in this receiver is the picture tube. The tube utilized in this chassis is specially constructed to limit X radiation.

For continued X radiation protection, the replacement tube must be the same type as the original, HITACHI approved type.

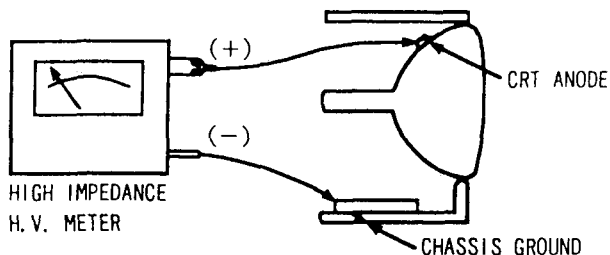
High Voltage

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

Serviceman Warning

With minimum Black Level and Picture, the operating high voltage in this receiver is lower than 310K. In case any component having influence on the high voltage is replaced, confirm that high voltage with minimum Brightness and contrast is lower than 330kV. To measure H. V. use a high impedance H. V. meter. Connect (-) to chassis earth and (+) to the CRT anode button. (See the following connection diagram)

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



PRODUCT SAFETY NOTICE

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

Electrical components having such features are identified by marking with a Δ mark in the schematics and on the replacement parts list in this Service Manual. The use of a substitute replacement component which does not have the same safety characteristics as the HITACHI recommended replacement one shown in the parts list in this Service Manual, may create electrical shock, fire, X radiation, or other hazards.

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

TECHNICAL CAUTIONS

High voltage limiter circuit operation check

1. Connect the high voltage voltmeter between the CPT anode (anode cap) and GND (CPT grounding lead).
2. Receive the broadcast signal and set the brightness and contrast VRs to max. Set the beam current to $1.5\text{mA} \pm 10\%$.

(After cut-off adjustment)

3. Set the AC input voltage to $220 \pm 3\text{V}$.
4. Check that the constant high voltage is $28.0 \pm 1.0\text{kV}$ at this time.
5. Turn the switch of the set to off and connect the jig shown in Fig.3 at both ends of R956 as shown in Fig.1.

6. With the brightness and contrast VRs left as set in item.2 and with the AC input voltage stabilized at 220V, turn the picture disappears with a high voltage of 32.5kV or less.
7. Turn the switch of the set to off immediately after the check is completed.
8. Remove the adjust jigs and high voltage voltmeter.

NOTE: When connecting/disconnecting the high voltage voltmeter to/from the anode cap, be sure to turn the switch of the set off and do it after the residual high voltage is discharged to the chassis because the high voltage may remain at the anode cap.

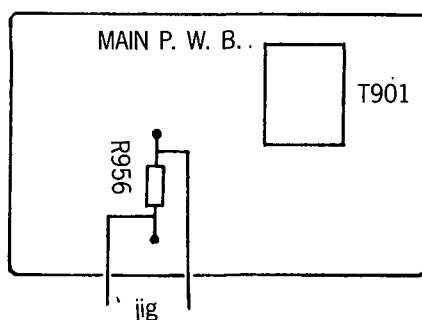


Fig. 1

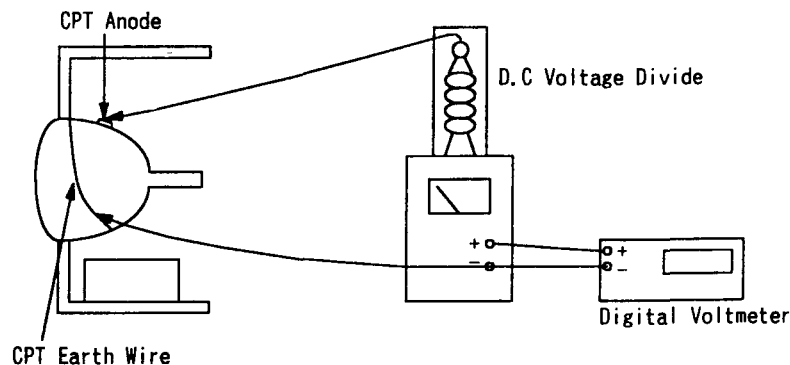


Fig. 2

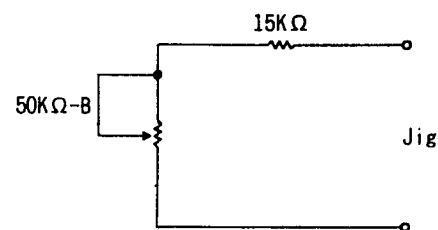


Fig. 3

有关安全上的预防事项

警告：因为在动作期间，这电视机的底盘与电源的一端互相连接，所以对检修这类型号的机器所必须的预防措施为下熟悉的人，不应该企图修机器。要检修必须遵守下列预防事项。

- 1. 要装入，取出或外理显象管时，必须带上防碎玻璃做的护目镜。外理显象管时，不带这护目镜的人不可接近。显象管应放在离开人体的地方。
- 2. 将底盘装入机箱里面时，所有的保护装置，如隔板，非金属的调整钮，小室盖子或小室屏蔽，隔离用电阻，电容器等，也应该装回去。
- 3. 开始检修之前，应该注意原来的引线包层。尤其是在高压电路部分需要特别小心，必须认清正确的引线包层。
- 4. 要检修，请一定要使用制造厂所指定的替换用机件。尤其在电路上注明几个特别重要的机件，要替换这些机件绝不可使用其他厂家的制品。当电路发生短路时，凡是有过热痕迹的机件都需要全部交换。
- 5. 将修好的电视机送回顾客以前，检修人员应该彻底检验机器以保证它完全安全，绝没有电击的危险，并确实检查机器内部的各种保护装置，以保证这些部分没有因检修而失灵。

由于上面理由，检修人员最好实行以下各项检查，以保证顾客和自己的安全。

绝缘

电源电极与任何可触及的金属部分之间的绝缘电阻不可小于7兆欧姆（加上直流500伏电压时）。而且，在电源电极与任何可触及的金属部分之间加上4千伏的交流电压（1分钟）而试验其绝缘强度时，不可发生闪络或绝缘击穿等现象。

X射线

显象管：这部电视机所产生的X射线，其主要的来源是显象管。所以这部电视机所使用的显象管有特别的构造设计，使X射线尽量减少。为了能继续防止X射线起见，要交换显象管时，请一定要使用相同型号的日立显象管。

高压

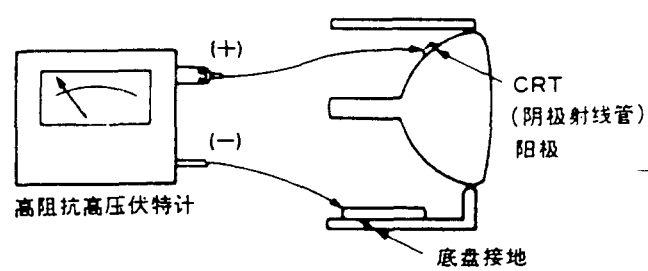
这电视机装有一个高压限制电路，可清楚地表示电压升高已超过额定值。进行维修服务时，请根据本维修说明书有关此高压限制电路的所有注解说明去做，则高压限制电路便可以正确地操作。

维修人员须注意

这电视机在最小黑色电平和图象电流时的高电压是在31.0kV以下的。若更换了会影响高压的部件时，一定请确认在最小亮度和对比度状况下的高电压是否低于33.0kV。

请使用高阻抗高压伏特计，令其（-）连接底盘接地线，令（+）连接CRT（阴极射线管）阳极电钮，去测量高电压（H.V.）。（参考下面的连接图）。

注：当要连接到阳极电钮以前，一定要先把电源开关关掉。



有关制品安全上的注意事项

日立电视机所使用的许多机件具有有关安全的特别性能。这种特别性能在表面上往往看不出来，而且即使使用额定电压或功率更大的其他替换用机件，也不一定可得到这些日立机件所保证的保护性能。在这本检修手册里面有指定

这些具有特别安全特性的替换用机件。在这本检修手册的简图和替换用机件表上附带△记号的机件，就表示具备这种特别的安全特性。

如果不使用这本检修手册机件表上HITACHI所推荐的替换用机件而使用没有同样安全特性的其他替换用机件的话，就可能会发生电击，失火，X射线等事故。

HITACHI对制品安全不断努力改进，经常发出新的技术指令。如需要新的技术情报就请参看最新的HITACHI检修手册。可向HITACHI销售公司预订或订阅“日立检修手册”，只收取极少费用。

技术上须注意事项

高压限压器电路操作检查

1. 把高压伏特计连接在CPT阳极（阳极罩）和GND（CPT的接地线）之间。
2. 试接收一个电台的广播信号，且把亮度和对比度的VRs（可变电阻器）调到最大。把射束电流调为 $1.5\text{mA} \pm 10\%$ （切断调整后）

3. 把AC电的输入电压调为 $220 \pm 3\text{V}$ 。
4. 此时，检查恒定高压是否呈 $28.0 \pm 1.0\text{kV}$ 。
5. 把设定开关关掉，然后把图3所示的夹具接在图1所示的R956的两端。
6. 以第2项所设定的亮度和对比度VRs，AC电流输入电压并保持稳定的 220V 状况下调节 $50\text{k}\Omega$ 可变电阻器以使影像消失掉，高压不可超过 32.5kV 。
7. 检查完毕后，请立即关掉设定开关。
8. 卸下调整夹具和高压伏特计。

注：当把高压伏特计连接到阳极罩拆下时，必须先关掉设定开关，并且等残留高压电流都往底盘放电完毕之后，才进行接拆工作。因为阳极罩上在关掉设定开关后，还可能残留有高压电流。

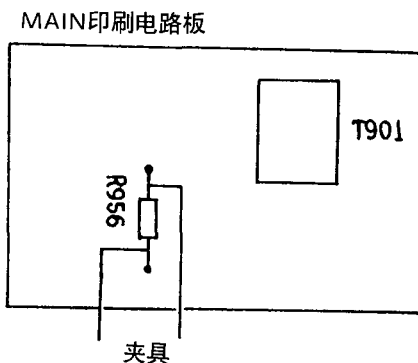


图 1

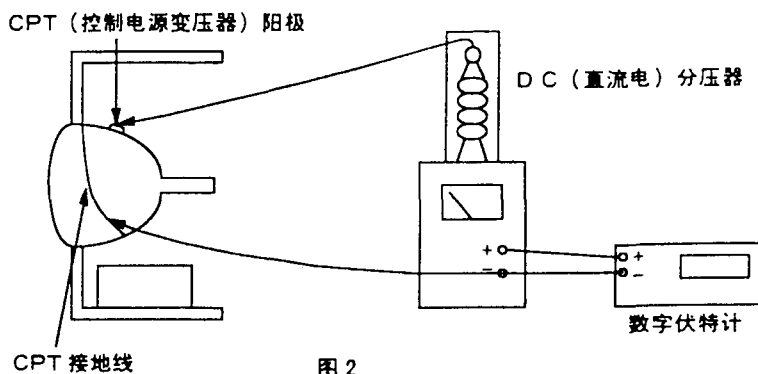


图 2

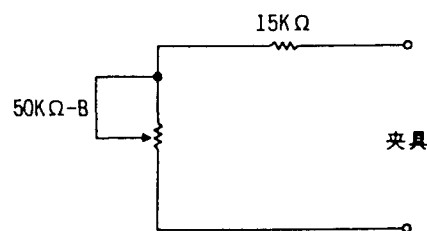


图 3

SPECIFICATIONS

Reception system	625-LINES B.G/I/D.K/H PAL B.G/D.K/K1 SECAM NTSC50 525-lines M/NTSC NTSC3.58-5.5/6.0/6.5 NTSC4.43-5.5/6.0/6.5 PAL 60	Antenna input	75 Ω COAXIAL IEC TYPE
		Color picture tube	A68KSA30X/A68AEG25X
		Speaker	10 ϕ ($\times$ 1), 6 $\times$ 12 ($\times$ 2)
		Sound output	10W $\times$ 2 + 20W
(Channel coverage Frequency range 44MHz-863MHz)	CCIR : E2~12, E21~69, S01~3, S1~41 OIRT : R1~12, R21~69 JAPAN : J1~12, J13~62 U.S.A. : US2~13, J~W, US14~69 Hong Kong, U.K : UK21~69 China : C1~12, C13~57, Z1~38	Power supply	191 : AC 127V 50/60HZ (Usable Range: 100V~280V) Others : AC 110~240V 50/60Hz (Usable Range: 100V~280V)
		Power consumption	185 W
		Weight (kg)	42.5 kg
		Dimensions W $\times$ H $\times$ D (cm)	77 $\times$ 56.6 $\times$ 47.3

* Specifications are subject to change without notice to improve performance.

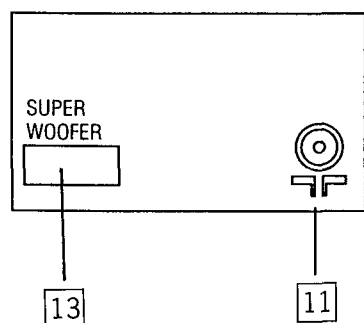
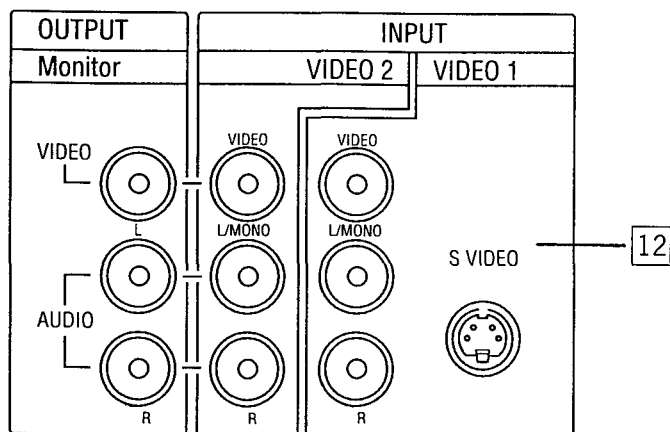
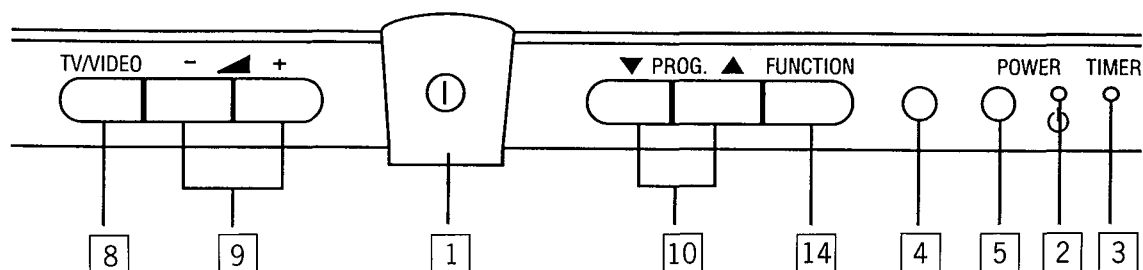
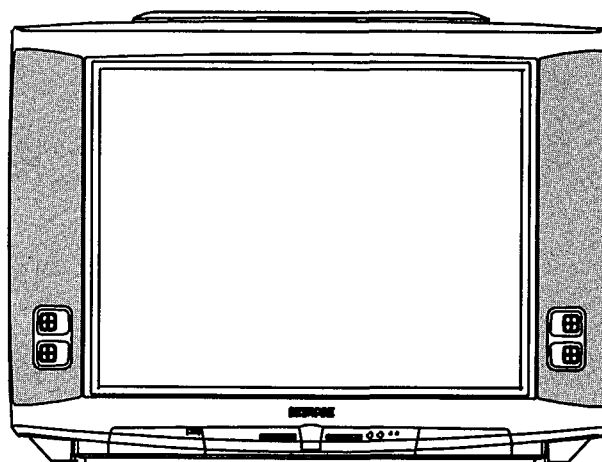
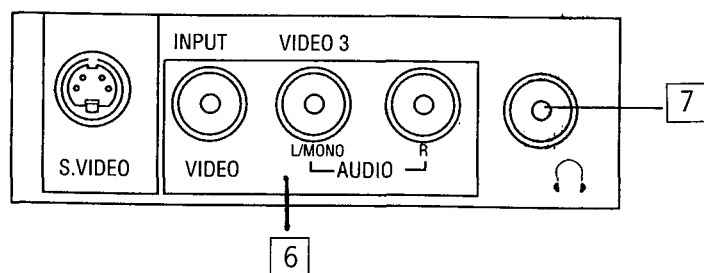
技术参数

接收方式	625条 B.G/I/D K/H PAL B G/D.K/K1SECAM NTSC50 525条 M/NTSC NTSC3 58~5.5/6.0/6.5 NTSC4 43~5.5/6.0/6.5 PAL60	天线输入	75欧姆同轴IEC型
		显象管	A68KSA30X/A68AEG25X
		扬声器	10 ϕ ($\times$ 1), 6 $\times$ 12 ($\times$ 2)
		声音输出 (最大)	10W $\times$ 2 + 20W
		电源	191: 交流127V 50/60Hz (使用范围:100V ~ 280V) 其他: 交流110 ~ 240V 50/60Hz (使用范围:100V ~ 280V)
频道范围 频率范围 44兆赫 ~ 863兆赫	CCIR : E2 ~ 12, E21 ~ 69, S01 ~ 3 S1 ~ 41 OIRT : R1 ~ 12, R21 ~ 69 日本 : J1 ~ 12, J13 ~ 62 美国 : US2 ~ 13, J ~ W, US14 ~ 69 香港, 英国: UK21 ~ 69 中国: C1 ~ 12, C13 ~ 57, Z1 ~ 38	电力消耗	185W
		重量 (公斤)	42.5
		外形尺寸 (厘米) (宽 $\times$ 高 $\times$ 深)	77 $\times$ 56.6 $\times$ 47.3

*上述各项参数有变更或改良时, 恕不另行通知。

CONTROL (各种调整控制机件)

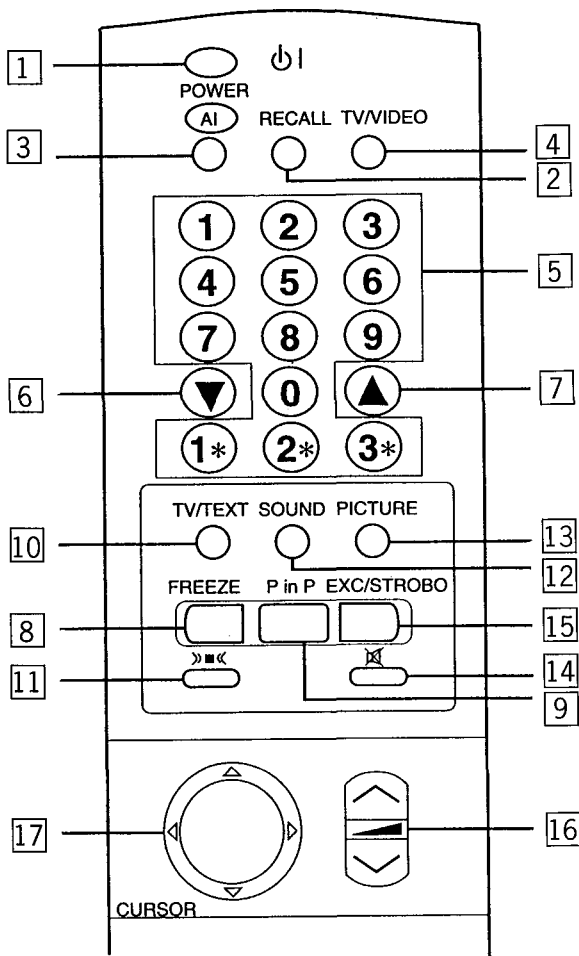
Front Panel 电视机的前面板



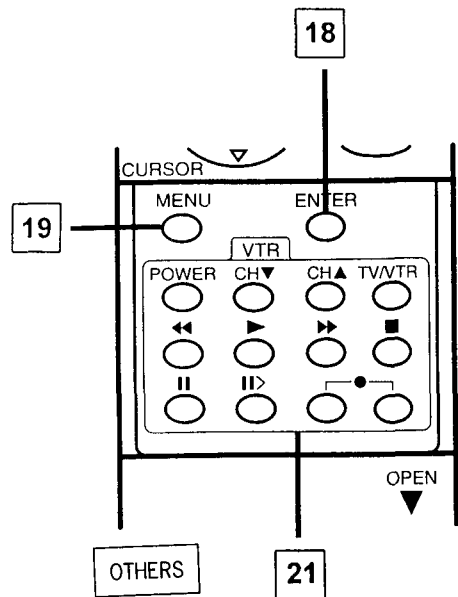
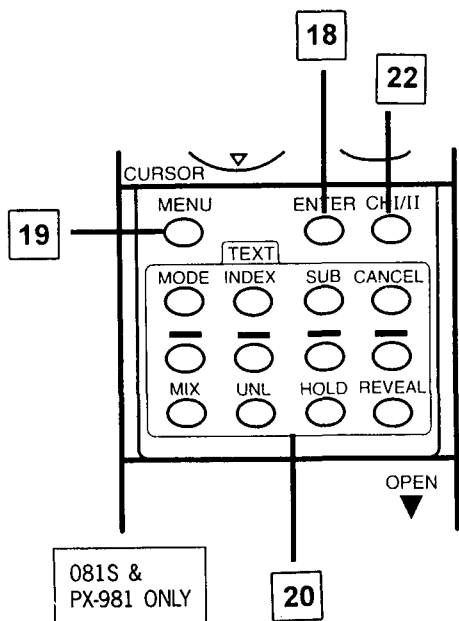
Rear Panel 电视机的后面板

1	POWER ON/OFF SWITCH 电源开关
2	POWER STANDBY INDICATOR 电源/等待指示灯
3	TIMER INDICATOR 定时指示灯
4	AI RECEIVER 电脑控制接收部
5	REMOTE CONTROL RECEIVER 遥控接收部
6	INPUT 3 INPUT TERMINAL INPUT 3 输入端子
7	HEADPHONE JACK 耳机插座
8	INPUT SELECT 输入选择
9	VOLUME UP/DOWN 音量升/降
10	PROGRAMME UP/DOWN 节目升/降
11	ARIAL TERMINAL 天线端子
12	AV IN/OUT TERMINALS AV 输入/输出端子
13	SUPER WOOFER TERMINAL 超重低音端子
14	FUNCTION 功能键

REMOTE CONTROL UNIT
(遥控发射器上之控制机件)



1	POWER ON/OFF SWITCH 电源开关
2	RECALL 召回
3	AI 电脑控制
4	INPUT SELECTION 输入选择
5	PROGRAMME SELECTOR 节目选择
6	PROGRAMME DOWN 节目降
7	PROGRAMME UP 节目升
8	FREEZE 固定画面
9	P in P 画中画
10	TV/TEXT (081S & PX-981 ONLT) CH I/CH II (OTHERS) TV/TEXT (只适用于081S与PX-981型号) CH I/CH II (其他型号)
11	SPATIALIZER 环绕声
12	SOUND 声音
13	PICTURE 图像
14	MUTE 静噪
15	EXCHANGE/STROBO 交换/频闪
16	VOLUME UP/DOWN 音量升/降
17	CURSOR 光标
18	ENTER 决定
19	MENU 菜单
20	TELETEXT OPERATING KEYS (081S & PX-981 ONLY) 图文电视 (只适用于081S与PX-981型号)
21	VTR OPERATING KEYS 录象机专用钮 (适用于其他型号)
22	CH I/CH II



CIRCUIT DESCRIPTION

(电路说明)

Selection and CPU circuitry

The IC type M37271MF, performs IIC controls, channel selection, up/down analogue control, on screen displays, search tuning, on/off control of Head phone, on/off control of Super woofer, on/off control of Spatializer, systems selection and selection control of inputs AV terminals etc.....

The pin function table of M37271MF are as below.

PIN NO.	NAME	FANCTION
1	H sync	Input This is the horizontal synchronous signal input pin for On-screen display.
2	V sync	Input This is the vertical synchronous signal input pin for On-screen display.
3	Dimmer	Input A/D terminal served to detect the present of Q004.
4	HP SW	Input This is the on/off pin for Main SP on Head Phone use.
5	ASW	Input This is the on/off signal input pin for super woofer.
6	SYNC	Input H.SYNC signal input. After A/D conversion, this pin also serve to detect the present of RF signal.
7	AFC	Input AFC voltage input. After A/D conversion, this pin also serve to detect the present of RF signal.
8	AGC	Output This is the force AGC pin for unstable OSD on no signal.
9	Scan1	Output Output for front control matrix to control vol., programme.
10	Scan2	Output Output for front control matrix to control vol., programme.
11	Timer	Output Output for timer LED. H:Timer set L:Normal
12	BEEP	Output Beep sound output. L:Off, Beep:  50% Duty Cycle.
13	50/60 Force	Output Ident by IIC data and controls output from this pin. L:60HZ, H:50HZ
14	COMB	Output Output for NTSC signal & S-VIDEO signal.
15	R/C	Input Remote con.serial data input from R/C recieve unit(X001)
16	Return1	Input Return of front control matrix.
17	Return2	Input Return of front control matrix.
18	VCC	
19	HLF	
20	RVCO	
21	NC	
22	NC	
23	GND	
24	X-IN	Input 4 MHZ clock in
25	X-OUT	Output 4 MHZ clock out
26	GND	
27	VCC	
28	S-DET	Input To identify the voltage of S-VIDEO signal.
29	Return3	Input Return of front control matrix.
30	Reset	Input Resets I004 initiated by Power(Pin 33)
31	I/M	Output Selects the sub sound system
32	B.G/D K	Output
33	POWER	Output Power on/off control. H:On, L:Stand by
34	SPATIALIZER	Output SPATIALIZER control output
35	HP SW	Output Head phone select (Main/Sub)
36	SDA2	In/Out IIC data select for EEPROM
37	SDA1	In/Out IIC data select
38	SCL2	In/Out IIC clock select for EEPROM
39	SCL1	In/Out IIC clock select
40	ON/OFF MUTE	Output Mute control output.
41	SW4	Output Select the main signal system
42	SW3	Output
43	SW2	Output
44	SW1	Output
45	HP VOL.	Output Output of the DC level to control the Head Phone.
46	KARAOKE VOL	Output NC
47	KARAOKE ECHO	Output NC
48	VM ON/OFF	Output VM control output
49	OSD-BLK	Output On-Screen -Display blanking output
50	B	Output Blue output for On-Screen- Display
51	G	Output Green output for On-Screen- Display
52	R	Output Red output for On-Screen- Display

TUNER AND IF CIRCUIT

The tuner used on this chassis is powered by the 9v supply, it is IIC Bus controlled and covers VHF, UHF & CATV Band (Mid, Super and Hyper)

The IF circuit consists of I201 (LA7566), SAW X201, X208, Q2A2 and Q2A3

The IF output from tuner is applied to amplifier Q2A2 and Q2A3 (IF Sub PWB) respectively and input to pin 5 & 6 of I201 through SAW X201(PIF) & X208(SIF)

At the input of X201(PIF), Q205 serves to select the systems between (B/G,I,D/K) or (M)

After that, demodulation and sound systems selection (i.e. select B/G, I, D/K, M) are then performed by I201(LA7566) and create sound output at pin 1 and composite video signals at pin 13. At I201, the sound systems selection are as below

	B/G	I	D/K	M
I201 pin 22	H	H	L	L
I201 pin 23	H	L	H	L
Q205 base	L	L	L	H

VIDEO/CHROMA

I501 (TD1226AN) which incorporates VIDEO/CHROMA/DEFLECTION ckt is used to perform auto color identification of PAL/SECAM/NTSC, sync separation, AFC, H/V oscillator and output stage etc

At H301(COMB), the Y/C separation of NTSC is performed. For PAL/SECAM signals, color identification are operated within I501

At I502, first selection between NTSC and non-NTSC are operated by switching signal at pin 4 & 7. Either NTSC signal (Y/C) at pin 3/8 or composite video signals (other color systems) at pin 1/10 are selected and transfer to I301 via pin 5/6

At I301, Y/C signals from I502 or composite video signals (or signals from external terminals) are selected here and then transfer to I501 via Pin 37 and Pin 39

The received signals at I501 are as below

SYSTEMS	I501 pin 45/51	I501 pin 42
NTSC	Y	C
PAL / SECAM	COMPOSITE VIDEO	COMPOSITE VIDEO

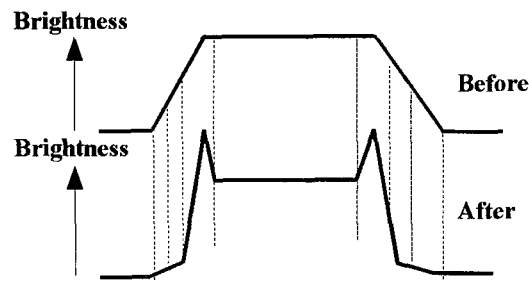
At I501, color identification and decoding are performed with internal 1HDL and x'tal 16.2 MHz at pin 40 instead of conventional 4.43

MHZ (PAL/SECAM) / 3.58MHz (NTSC) x'tal. After that, the resulted R,G,B signals are then combine with the OSD R,G,B signals from pin 18~20 and T/T PinP R,G,B signals from pin 23~25 by switching operation at pin 21 (D YS), pin 22 (A YS) and IIC control

The output are finally emerge from pin 12~24 as the "blue, green and red signals"

Due to IIC control, the R,G,B drive VR and BLK VR at the CRT PWB are therefore not required

In order to improve the luminance at the edges of picture where input signal level varies steeply from black to white or reversely, the luminance signal from pin 37 of I301 is further enhanced by VM circuit (at CRT PWB) via Q306 & Q304. The result is as below -



The VM circuit at CRT PWB consists of Q841~Q850 and switch control by Q851. At the time when PinP or OSD (e.g. MENU display etc) on operation, a "high" BLK signal is applied to the base of Q851 and turns "OFF" the VM circuit

HORIZONTAL DEFLECTION

This circuit used the horizontal deflection yoke (H DY) to deflect the electronic beam of the CRT horizontally, it also generates high-voltage and medium/low voltage power supplies through FBT. At pin 51 of I501, the composite video signal from Q305 is applied to the internal sync separator and phase detector/correction of I501, the resulted horizontal drive pulse is output from pin 4 of I501

The horizontal drive pulse is supplied to the horizontal drive circuit consisted of Q708, Q709 and T701

At the horizontal output transistor Q708, it generate a FBT pulse of approx 1100V at the collector and also cause sawtooth current to flow to the H DY, thus deflecting the electron beam in the CRT horizontally

This FBT pulse also causes a high voltage (H V) and medium/low voltages (i.e. 200V, 56V, 14V, 25V) to be generated at the secondary circuit of FBT T702

The pincushion distortion correction circuit in this chassis is to increase the H DY current to correct the pincushion distortion at both sides of screen. The vertical sawtooth wave of the V DY is input to Q665 and output as a parabolic wave. This parabolic wave modulates the horizontal pulse voltage at the cathode of diode modulator D703 through Q663, Q662 and Q661 with a vertical period to vary the H DY voltage.

The high-voltage beam current is supplied from +B (130V) to the ACL (Automatic Contrast Limiter) terminal of FBT. This produces a voltage proportional to the variations in the brightness at the ACL terminal. This voltage is applied to Q664, Q663 to correct meandering of the picture due to changes in brightness and also apply to Q663 through R663 to correct the size due to brightness change.

VERTICAL DEFLECTION

At I501, the composite video signal from pin 51 are applied to the internal integrated circuit, V separation circuit and V C/D circuit which counts down the horizontal frequency to obtain the vertical frequency. C6A2 at pin 52 of I501 is used for ramp generation, and produces the required sawtooth waveform output from pin 53.

The vertical drive output from pin 53 of I501 is applied to pin 4 of I601 via R612, and the vertical output to drive the D.Y is made available at pin 2. The voltage switching circuit in I601 increases the power voltage at pin 3 during the flyback period to make the flyback line faster.

The V deflection voltage that occurs is added to the DC voltage from pin 2 of I601, the result is applied to pin 54 of I501 and determine the linearity and vertical height.

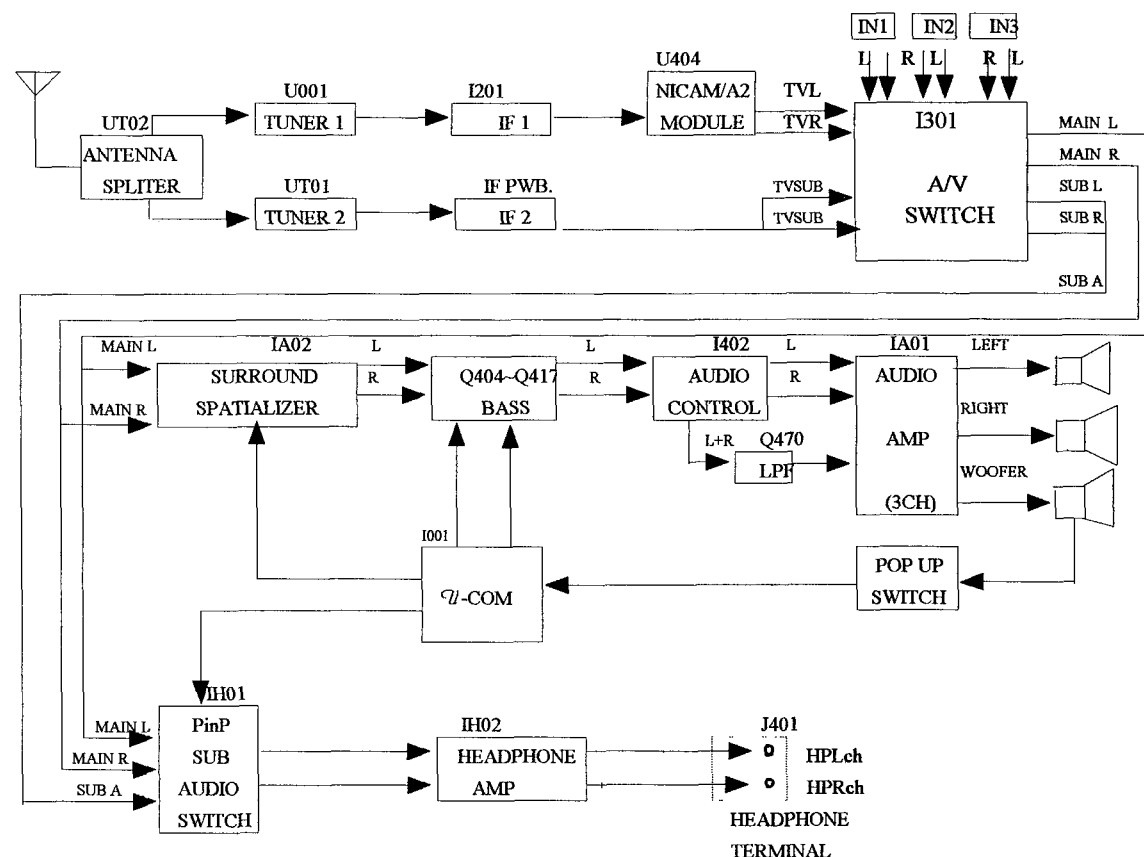
AUDIO CIRCUIT

The Audio circuit consists of following circuitry.

a) Surround Circuit b) Dynamic Bass Circuit c.) Audio Output Circuit d) P in P Audio Switch Circuit

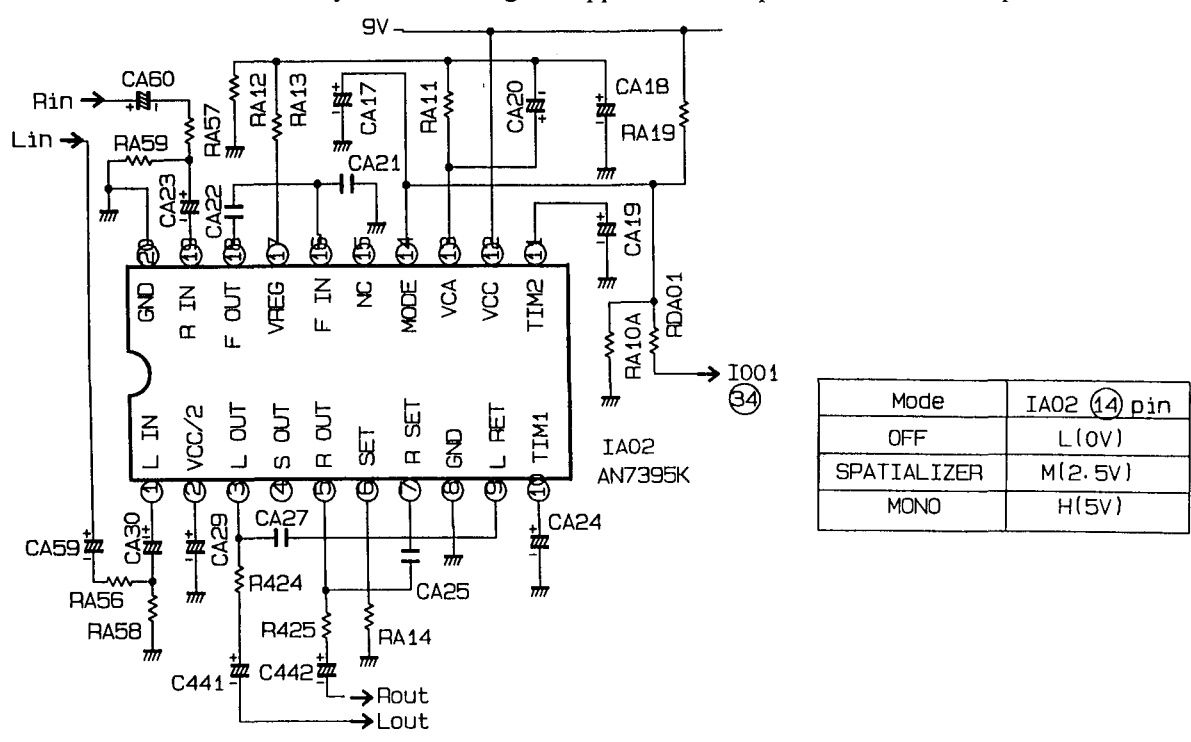
The following block diagrams show the audio circuitry

S6 AUDIO CIRCUIT BLOCK DIAGRAM



a) Surround circuit

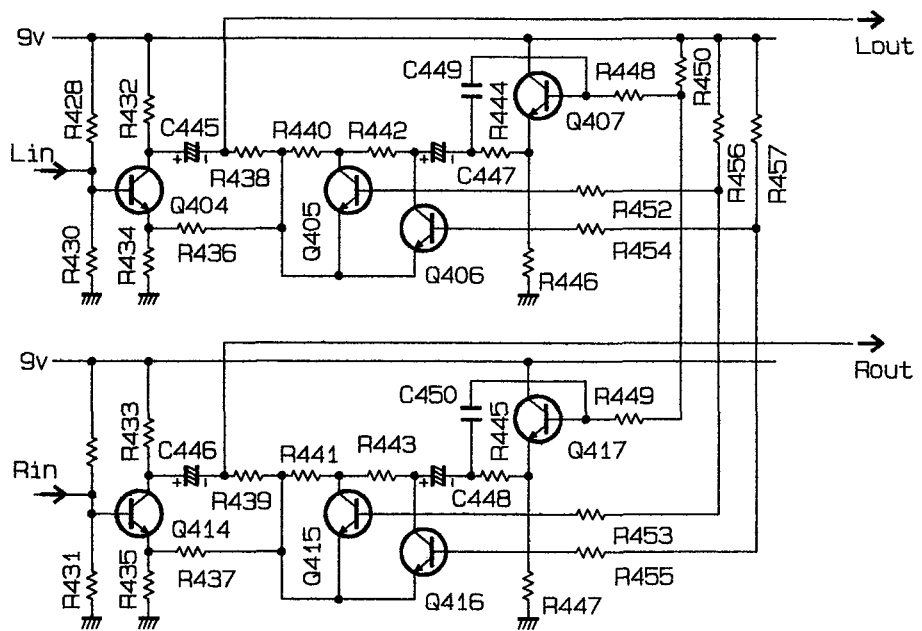
S6 chassis adopt the 3D Surround System, SPATIALIZER circuitry, by USA's DESPER PRODUCTS, INC... the following shows the surround circuit. The audio signals are input to pin 1 (Lin) and 19 (Rin) They are treated and output from pin 3 (Lout) and 5 (Rout)
The Surround mode is controlled by the control signal supplied to IA02 pin 14 from the I001 pin 34



b) Dynamic Bass Circuit

The following shows the dynamic bass circuit This circuit boost up the bass sound The gain of bass Sound is controlled by POP-UP SPEAKER.
When the POP-UP SPEAKER is off, the gain of the bass sound is minimum.
When the POP-UP SPEAKER is on, the gain of the bass sound is maximum

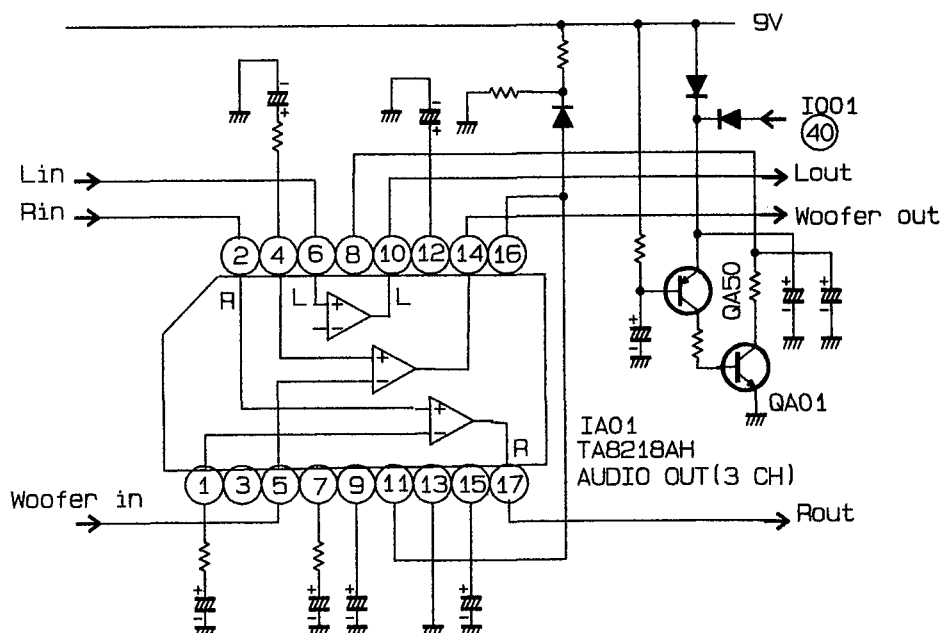
POP - UP	WOOFER	BASS SOUND GAIN
OFF	MUTE	MIN.
ON	ON	MAX.



c) Audio Output Circuit

The following shows the audio output circuit. The audio signal are input to pin 2 (Rin), 5 (Woofer in) and 6 (Lin). They are amplified and output from pin 17 (Rout), 14 (Woofer out) and 10 (Lout)

The mute circuit consists of QA50 and QA01, they are mute when power switch turned on and off.



d) Pin P Audio Switch Circuit

The following shows the headphone output circuit for Pin P.

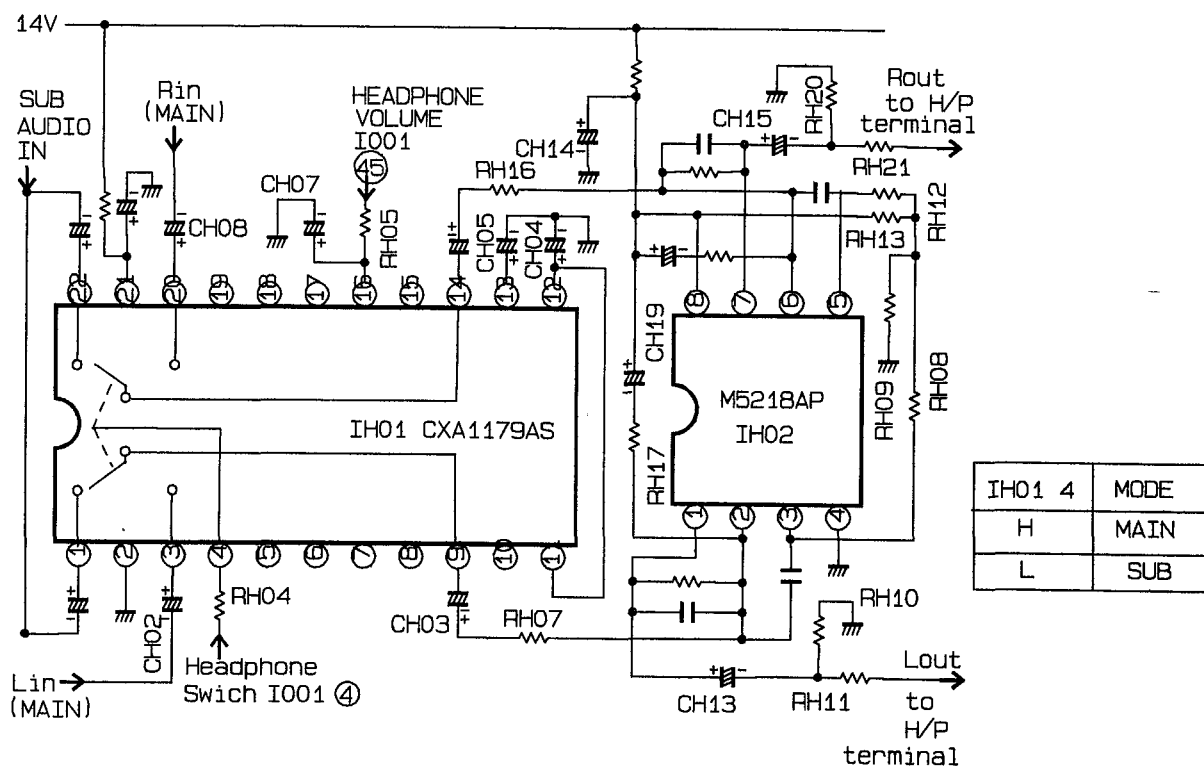
The main audio signals are input to IH01 pin 3 (Lch) and 20 (Rch).

The sub audio signals for sub picture are input to IH01 pin 1 (Lch) and 22 (Rch).

These signals are selected by the control signal supplied to IH01 pin 4 from I001 pin 4 and output put from IH01 pin 9 (Lch) and 14 (Rch).

The selected audio signals are then input to IH02 pin 2 (Lch) and 6 (Rch).

Thy are amplified and output from IH02 pin 1 (Lch) and 7 (Rch)



PinP (Sub Picture) signals Boardcasting

In this stage, the IF signal is first abstracted by the tuner and forward to the IF circuitry. The sound system switching provides the mode selection and output the selected signal to the IF circuitry. The VIDEO & AUDIO signals can then be detected and fed into I301.

I301 performs the switching between the External V1~3 signals inputs and the obtained signals inputs (Sub TV, L, R). All these functions are being controlled by I001 through the IIC bus.

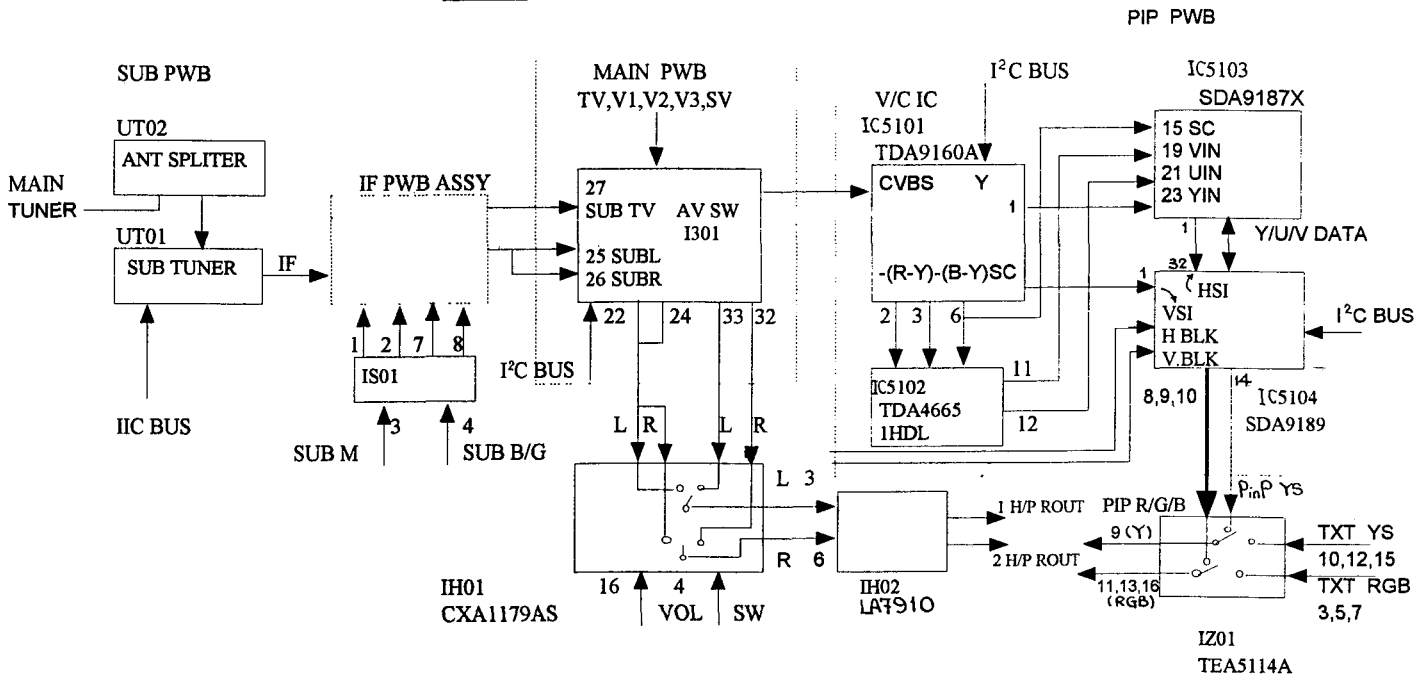
The selected VIDEO signal is injected into pin 24 of IC5101 (V/C/J TC) and the Y, -(R-Y), -(B-Y), VSYNC and SC (Sandcastle pulse) are generated. The SC, -(R-Y), and -(B-Y) singals are fed into pin 16 and 14 of IC 5102 (1 HDL) and output as VIN (-(B-V)) and UIN (-(R-Y)) signals.

After receiving the Y,U,V and SC (H.BLK) signals, IC 5103 (Pinp A/D) performs and analog to Digital conversion and output the YUV and HSI (H. BLK for sub picture) signals to IC 5104.

With the VSI (VSYNC for sub), HSI, YUV signals and V. BLK, V. BLK signals from main picture being received, the IC 5104 (D/A, PinP controller) performs a signal conversion and the RGB, Ys (for PinP) are resulted. The PinP RGB is selected by IZ01 only if the PInP Ys is "HIGH".

In the Headphone stage, the selected Audio signals output by I301 are applied to IH01 (Audio controller IC) for switching selection. The selected Audio signals (either MAIN or SUB) are amplified by IH02 (OP AMP) before outputting to the Headphone terminal.

PIP BLOCK DIAGRAM

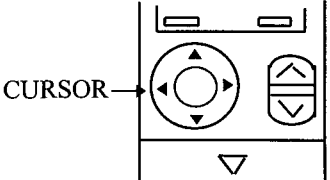


ADJUSTMENT INSTRUCTIONS (调整说明)

IIC ADJUSTMENTS

Most of the adjustment items in S6 chassis are control by IIC. Any changes on CRT, CPU IC, Video/Chorma IC or V. deflection IC(I601), please readjust the items shown in table 1
To start the IIC adjustment, please ensure the AC power switch is at "off" position. Press the **TV/VIDEO** button on the front panel and then press the power switch while pressing **TV/VIDEO** button. Release all buttons after the following displays appeared on screen.

NO.	DATA	
001	: 28	
002	: 28	← Select the Adjust items by ▲ or ▼ cursor
003	: 28	
004	: 80	
005	: 80	← Adjusts the selected item by ◀ or ▶ cursor
006	: 06	
007	: 75	
008	: 40	
◀▶ : ADJUST		
ENTER : MEMORIZE		



To select the adjustment items(e.g H. phase, sub-brightness level etc...), press the ▲ or ▼ cursor button on Remote control handset. To adjust the data of selected item, press the ◀ or ▶ cursor button on Remote control handset.

After completed the adjustments, press the **ENTER** button on Remote control handset (memorized). Press **MENU** button or turns off the TV set to end the IIC adjustment.

VERTICAL CENTER ADJUSTMENT

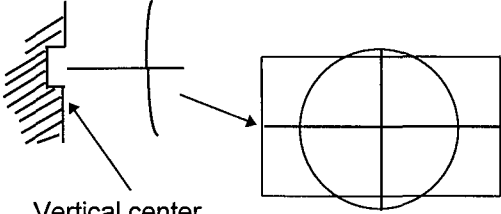
PREPARATION		PROCEDURES	
1	Turns on the TV set & heat run about 5 min.	1.	Select the IIC control address No 54.
2.	Receive the circular pattern signal.	2.	Set the horizontal center line to vertical center marker of CRT by adjustment of IIC i.e
3.	AC 220+ - 1v.		

TABLE 1 : IIC-BUS CONTROL/ADDRESS

ADJ NO	NAME OF ADJUSTMENT	DATA (INITIAL)	ADJUST WHEN CHANGE		
			MEMORY 1002	CPT	V/C IC 1201
1	R CUT OFF	0~255 (0)	O	O	O
2	G CUT OFF	0~255 (0)	O	O	O
3	B CUT OFF	0~255 (0)	O	O	O
4	G DRIVE GAIN	0~255 (80)	O	O	O
5	B DRIVE GAIN	0~255 (80)	O	O	O
6	HORIZONTAL POSITION	0~31 (16)	O	O	O
7	SUB-COLOUR	-127~+127 (0)	O	X	X
8	SUB-TINT	-63~+63 (0)	O	X	X
9	SUB-BRIGHT	-127~+127 (0)	O	X	X
10	SUB-CONTRAST	-127~+127 (0)	O	X	X
11	SUB-SHARPNISS	-31~+31 (0)	O	X	X
12	Y-SUB-CONTRAST	-16~+16 (0)	O	X	X
13	P/N KILL	0,1 (0)	O	X	X
14	DTrip-SWITCH	0,1 (1)	O	X	X
15	R-MON	0,1 (0)	O	X	X
16	B-MON	0,1 (0)	O	X	X
17	SUB-RGB-CONTRAST	-127~+127 (0)	O	X	X
18	AUDIO-ATT GAIN	0~127 (0)	O	X	X
19	Y ON/OFF	0,1 (0)	O	X	X
20	WHITE PEAK LIMIT SWITCH	0,1 (0)	O	X	X
21	PEAK ACL SWITCH	0,1 (0)	O	X	X
22	BLUE BACK MODE SELECT	0~3 (0)	O	X	X
23	Y-DELAY TIME	0~7 (4)	O	X	X
24	AFC MODE	0~3 (0)	O	X	X
25	H-OUT CLOCK SWITCH	0,1 (0)	O	X	X
26	B. S. OFF	0,1 (0)	O	X	X
27	CHROMA TRAP OF/OFF SW	0,1 (0)	O	X	X
28	BLACK OFFSET SECAM JUSTMENT	0,1 (0)	O	X	X
29	P/N TOF ON/OFF SW	0,1 (0)	O	X	X
30	PAL GATE POSITION	0,1 (0)	O	X	X
31	COLOUR LIMIT ON/OFF	0,1 (0)	O	X	X
32	WIDE V-BLK ON/OFF	0,1 (0)	O	X	X
33	WIDE PICTURE MUTE ON/OFF	0,1 (0)	O	X	X
34	SECAM DETECT	0,1 (0)	O	X	X
35	3 58TRAP	0,1 (0)	O	X	X
36	FORCE B/W SWITCH	0,1 (0)	O	X	X
37	X' TAL MODE	0~7 (0)	O	X	X
38	R-Y SECAM W/B	0~15 (8)	O	X	O
39	B-Y SECAM W/B	0~15 (8)	O	X	O
40	COLOUR LIMIT LEVEL	0~3 (2)	O	X	X
41	P/N COLOR AMPLITUDE ADJUST	0~3 (0)	O	X	X
42	TOF Q ADJUSTMENT	0~3 (2)	O	X	X
43	TOF FO ADJUSTMENT	0~3 (0)	O	X	X
44	CHROMA TRAP Q CONTROL	0~3 (2)	O	X	X
45	CHROMA TRAP FO CONTROL	0~3 (2)	O	X	X
46	BLACK STRETCH START POINT	0~7 (4)	O	X	X
47	DC CORECTION LEVEL SW	0~7 (0)	O	X	X
48	APA-CON PEAK FO SWITCH	0~3 (2)	O	X	X
49	APL DETECT VOLTAGE	0~7 (4)	O	X	X
50	APL SENSITIVITY	0~7 (0)	O	X	X

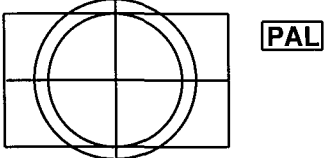
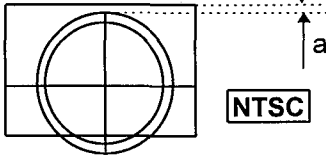
Continue in Pg.17.....

TABLE 1 : IIC-BUS CONTROL/ADDRESS(CONTINUE)

ADJ NO	NAME OF ADJUSTMENT	DATA (INITIAL)	ADJUST WHEN CHANGE		
			MEMORY 1002	CPT	V/C IC 1201
51	HALF TON GAIN SW	0~3 (2)	O	X	X
52	H BLK POSITION	0~7 (0)	O	X	X
53	V. FREQUENCY	0~3 (0)	O	X	X
54	V. POSITION	0~7 (0)	O	O	O
55	V. SIZE	0~127 (64)	O	O	O
56	SW FOR SIGNAL OF DET	0~3 (2)	O	X	X
57	V. S CORECTION	0~127 (64)	O	O	O
58	SELECT FOR BASE LINE OF DRIVE	0,1 (0)	O	X	X
59	V LINEARITY	0~31 (0)	O	O	O
60	V-COUNT DOWN MODE SW	0,1 (0)	O	X	X
61	ALL DRIVE GAIN FORCE CENTRE SW	0,1 (0)	O	X	X
62	SW FOR TIME CONSTANT OF V RAMP	0,1 (1)	O	X	X
63	SELECT FOR POSITION OF FRONT OF VERTICAL	0~63 (63)	O	X	X
64	BLANKING ON/OFF	0,1 (0)	O	X	X
65	SELECT FOR POSITION OF BACK OF VERTICAL	0~127 (0)	O	X	X
66	SW FOR DET LEVEL OF NOISE	0~3 (2)	O	X	X
67	SELECT FOR PRE-MUTE OF PICTURE	0~63 (63)	O	X	X
68	SELECT FOR MATRIX AT 1H	0,1 (0)	O	X	X
69	SELECT FOR AFTER MUTE OF PICTURE	0~127 (0)	O	X	X
70	SW FOR COLUR & Q OF SECAM ON WEEK SIGNAL	0,1 (0)	O	X	X
71	ADJUSTMENT FOR AMPLITUDE OF COLUR ON SECAM	0,1 (0)	O	X	X
72	SELECT FOR TIME CONSTANT OF DE-EMPHASIS ON SECAM	0,1 (0)	O	X	X
73	SECAM GATE POSITION SW	0,1 (0)	O	X	X
74	SECAM V-ID ON/OFF SWITCH	0,1 (0)	O	X	X
75	SECAM KILLER SENSITIVITY	0,1 (0)	O	X	X
76	BELL FILTER ADJUST	0~3 (1)	O	X	X
77	INT/EXT SW	0,1 (0)	O	X	X
78	AUDIO MUTE ON/OFF	0,1 (0)	O	X	X
79	COLOR SYSTEM SW	0~3 (0)	O	X	X
80	MUTE MODE	0~3 (0)	O	O	X
93	OPERATE AT PICK UP NOISE	0,1 (0)	O	X	X
94	INPUT LEVEL ADJUST	0~63 (32)	O	X	X
95	5H MONITOR ON/OFF	0,1 (0)	O	X	X
96	STEREO VCO ADJUST	0~63 (32)	O	X	X
97	PILOT CANCELER ON/OFF	0,1 (0)	O	X	X
98	FILTER ADJUST	0~63 (63)	O	X	X
99	LOW FREQ. SEPARATION ADJUST	0~63 (32)	O	X	X
100	HIGH FREQ. SEPARATION ADJUST	0~63 (32)	O	X	X
101	5H MONITOR	0,1 (0)	O	X	X
102	SAP VCO ADJUST	0~63 (32)	O	X	X
103	MUTE NO/OFF	0,1 (1)	O	X	X
104	SEPARATION ADJUST	0~63 (21)	O	X	X
105	SELPIN OUTPUT SIGNAL DELAY LEVEL SET	0~15 (-)	O	X	X
106	PIP H. POSITION	0~3 (-)	O	X	X
107	PIP H. POSITION	01~ FF (-)	O	X	X
108	PIP V. POSITION	00~ FF (-)	O	X	X
109	SUB PICTURE H. POSITION	00~32 (-)	O	X	X
110	SET FOR SIGNAL OF SUB V. PULS	00~32 (-)	O	X	X
111	SET FOR SIGNAL OF MAIN V. PULS	00~32 (-)	O	X	X
112	BRIGHTNESS OF FRAME COLOR	00~16 (8)	O	X	X

ADJ NO	NAME OF ADJUSTMENT	DATA (INITIAL)	ADJUST WHEN CHANGE		
			MEMORY 1002	CPT	V/C IC 1201
113	SUB PICTURE CONTRAST	00~16 (8)	O	X	X
114	PINP TINT	00~63 (32)	O	X	X
115	PIP FRAME WIDTH (V)	0~3	O	X	X
116	PIP FRAME WIDTH (H)	0~8	O	X	X
117	MATRIX OF DETECTOR		O	X	X
118	PLL LOOP FILTER		O	X	X
119	PEDESTAL FOR R-Y		O	X	X
120	PEDESTAL FOR B-Y		O	X	X
121	INPUT OF ANALOG CONTROL PIN		O	X	X
122	AUTOMATIC CONTROL DAC ON/OFF		O	X	X
123	AUTOMATIC START FOR CURRENT OF OUT1~OUT3		O	X	X
124	SET FOR BACK GROUND COLOR OF FULL SCREEN		O	X	X
125	BACK GROUND COLOR SCREEN		O	X	X
126	WIPE TIME SET		O	X	X
127	ADJUST FOR BLANKING TIME OF WIPE		O	X	X
128	BRIGHTNESS OF CARACTOR		O	X	X
129	BRIGHTNESS FOR BACKGROUND OF CARACTOR		O	X	X
130	CARACTOR RAM BIT ADDRESS		O	X	X
131	PHASE TIME ADJUSTMENT		O	X	X
132	FORCE MODE	0~3	O	X	X
133	X'TAL SW	0,1	O	X	X
134	PHASE LOOP CONTROL	0,1	O	X	X
135	INTRACE SW	0,1	O	X	X
136	SERVICE BLK	0,1	O	X	X
137	NICAM SET DATA	0~255	O	X	X
138	ERROW RATE	0~255	O	X	X
139	A2 STEREO JUDGE	0~127	O	X	X
140	A2 BILINGAL JUDGE	0~127	O	X	X
141	PIP CONTRAST	(B0)	O	X	X
300	SOUND SYSTEM SELECT ON AUTO SERCH	0~3 (1)	O	X	X
301	CHANNEL SELECT	0~5 (1)	O	X	X
302	TEXT Y/N SW	0,1 (0)	O	X	X
303	SOUND MULTIPLEX Y/N SW	0~6 (0)	O	X	X
304	SOUND SYSTEM SW	0~6 (6)	O	X	X
305	TUNER TYPE SELECT	0~2 (0)	O	X	X
306	PINP YES OR NO	0,1 (0)	O	X	X
307	SPATILIZER YES/NO	0~2 (2)	O	X	X
308	IIC BUS DATA/CLOCK OPEN	0,1 (0)	O	X	X
309	GAME Y/N SW	0,1 (1)	O	X	X
310	RGB/SUB-PICTURE DATA STORE/RCL	0~3 (0)	O	X	X
311	HITACHI DISPLAY Y/N	0,1 (1)	O	X	X
312	HITACHI/FUJIAN/SINGER DISPLAY	0~2 (0)	O	X	X
313	INITIALIZE/SIPPING SET	0~3 (0)	O	X	X
314	HEAD PHONE MUTE FUNCTION	0,1 (0)	O	X	X
315	ASW Y/N	0,1 (1)	O	X	X
316	ARABIC Y/N	0,1 (0)	O	X	X
317	KARAPOKE Y/N	0,1 (0)	O	X	X
318	SELECT LANGUAGE AT SHIPPING	0~4 (0)	O	X	X
319	FRONT SP BASS CHARACTERISTIC SW	0,1 (0)	O	X	X

VERTICAL SIZE ADJUSTMENT

PREPARATION		PROCEDURES	
1	Turns on the TV set & heat run about 5 min.	1.	Select the IIC control address No 55.
2	Receive circular pattern signal (PAL).	2.	Adjust IIC data to obtain the following condition. i.e.
3	Set all picture settings to normal condition(i.e. Brightness : Max, Others : 0)		
4	AC 220 +-1V.		PICTURE TOP : Inner circle reach the edge of TV raster. PICTURE BOTTOM : Inner circle reach the edge of TV raster.
		3	Receive the NTSC circular signal, and check the picture size after the above V size adjustment.
		4.	If a > 0mm, go back to IIC control No 54(V-center adjustment), increase the IIC data by 1 position
			

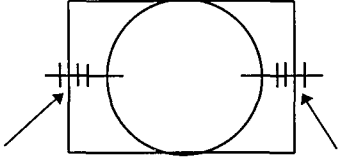
SIDE PIN-CUSHION DISTORTION ADJUSTMENT

PREPARATION		PROCEDURES	
1.	Perform this adjustment after the purity and convergence adjustment.	1	Adjust R656 so that all vertical lines except the lines at both the left and right ends are straight
2	Receive the circular pattern signal.	2.	Receive the Cross Hatch signal, check that the vertical lines are straight except the 1st outer vertical line(R/L).
3.	Set the Contrast to max. and Back level to normal.		
4.	The horizontal size adjustment.		
5.	Set the horizontal size VR R657 to the mechanical center.		
6	Perform this adjustment after the Vertical size adjustment.		

HORIZONTAL CENTER ADJUSTMENT

PREPARATION		PROCEDURES	
1.	Perform this adjustment after the Side pin adjustment.	1.	Select the IIC control address No 06.
2.	Receive the circular pattern signal	2.	Adjust the picture center to meet the CRT geometrical center

HORIZONTAL SIZE ADJUSTMENT

PREPARATION		PROCEDURES	
1.	Perform this adjustment after H. center adjustment.	1.	Turn R657 to Max(clockwise)
2	Receive the HITACHI circular pattern signal(PAL)	2	Adjust R657 so that the average reading of right and left is 1.5+-0 5. i.e
3.	Set the Contrast at Max, and others at 0(center)		

WHITE BALANCE ADJUSTMENT

PREPARATION		PROCEDURES	
1	Switch on the TV set for at lease 20mins.	1	Connect and measure the waveform at No 5 pin of connector PY1(or pin 14 of I501).
2	Adjust this adjustment after the Purity adjustment.	2	Select the IIC Control address No 01(Cut-off red) and adjust the data to obtain the following waveform at pin 5 of PY1.
3.	Ensure the vertical incident illuminatin on CRT surface to be 20 lux or less		
4.	Receive the white balance raster.	3.	Select the IIC control address No 02(Cut-off green) and No 03(Cut-off blue), adjust both datas to the same data number as in address No 01
5.	Set the following settings by Remote control handset. Contrast : Max Brightness Center Color Min	4	Select the IIC control address No 04(Blue drive) and No 05(Red drive), adjust both datas to 80
		5	Turn the screen VR of FBT fully counter-clockwise.
		6	Press the TV/VIDEO button 3 times to obtain the lateral line mode
		7	Turn the screen VR clockwise and set it to the position where the bright colored line starts to appear.
		8	Release the lateral line mode by pressing TV/VIDEO button once
		9.	Set the W/B meter probe at the center of the screen.
		10	Do the W/B adjustment to the desired W/B color temperature by using the following keys of IIC.
			<u>IIC Adress No</u> R BKG 01 G BKG 02 B BKG 03 R DRIVE 04 B DRIVE 05
			Note . To obtain the low brightness and high brightness conditions, adjust the Brightness control of remote control handset

SUB-BRIGHTNESS ADJUSTMENT

PREPARATION		PROCEDURES																																											
1	Switch on the TV set for at lease 20mins.	1	Select the IIC control address No. 09.																																										
2	Adjust this adjustment after the Horizontal size and Side pin cushion adjustment.	2.	Adjust the data until A1 portion becomes black and A2 portion becomes lighter black. i.e																																										
3.	Ensure the vertical incident illumination on CRT surface to be 20 lux or less.	<table><tr><td>W</td><td>Y</td><td>CY</td><td>G</td><td>MG</td><td>R</td><td>BL</td></tr><tr><td>A7</td><td>A6</td><td>A5</td><td>A4</td><td>A3</td><td>A2</td><td>A1</td></tr><tr><td colspan="7">B</td></tr><tr><td colspan="7">C</td></tr><tr><td colspan="7">D</td></tr><tr><td>Q</td><td>I</td><td colspan="3">W100%</td><td colspan="2">BLK</td></tr></table> Complete Black Lighter Black		W	Y	CY	G	MG	R	BL	A7	A6	A5	A4	A3	A2	A1	B							C							D							Q	I	W100%			BLK	
W	Y	CY	G	MG	R	BL																																							
A7	A6	A5	A4	A3	A2	A1																																							
B																																													
C																																													
D																																													
Q	I	W100%			BLK																																								
4.	Receive color bar pattern signal.																																												
5	Set the following settings by remote control handset. Contrast : Min Color : Min Brightness : Center																																												

SUB-TINT ADJUSTMENT

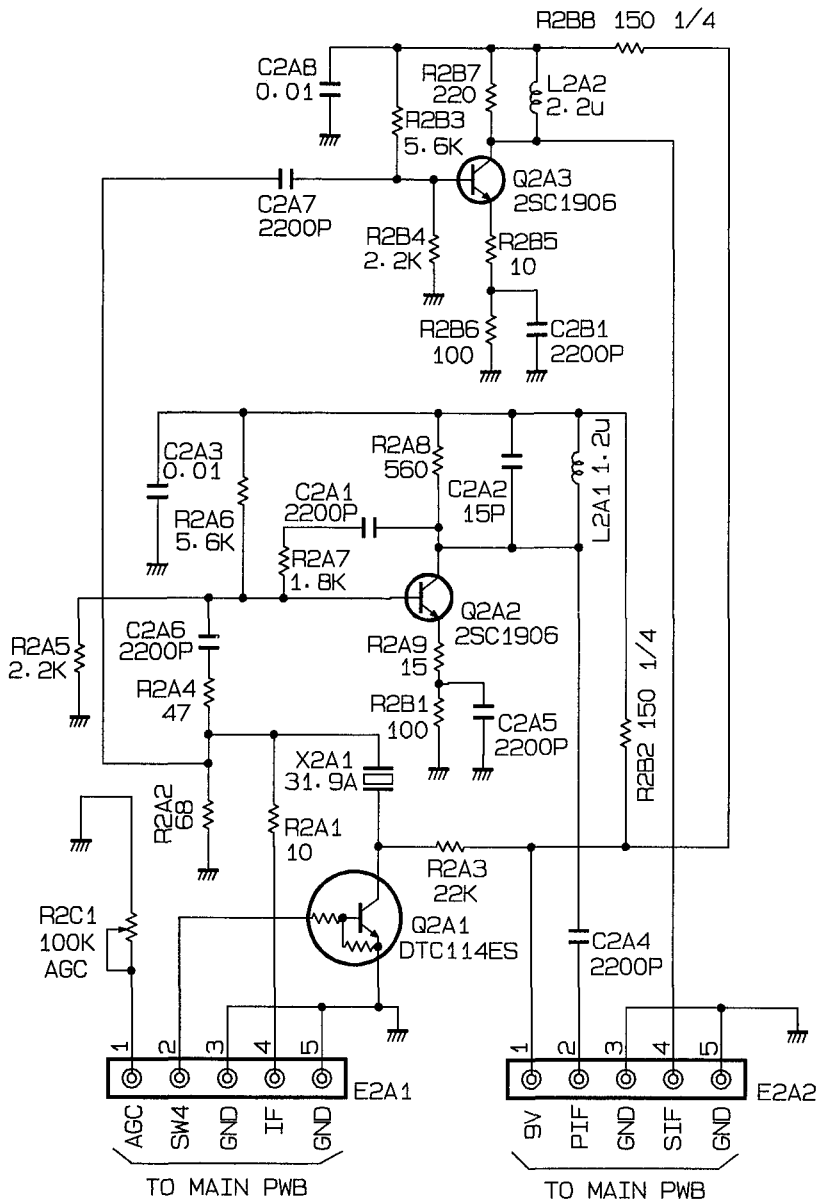
PREPARATION		PROCEDURES	
1	Receive the color bar signal (NTSC)	1	Connect and measure the waveform at pin 5 of EY1(R signal).
2.	Set the following settings by Remote Control handset Contrast : Max Tint : Center Color : Center Black Level : Center Sharpness : Center	2.	Select the IIC address No. 08.
		3.	Adjust the data to obtain the following waveform (s and s" to same level).

CIRCUIT DIAGRAMS (电路图)

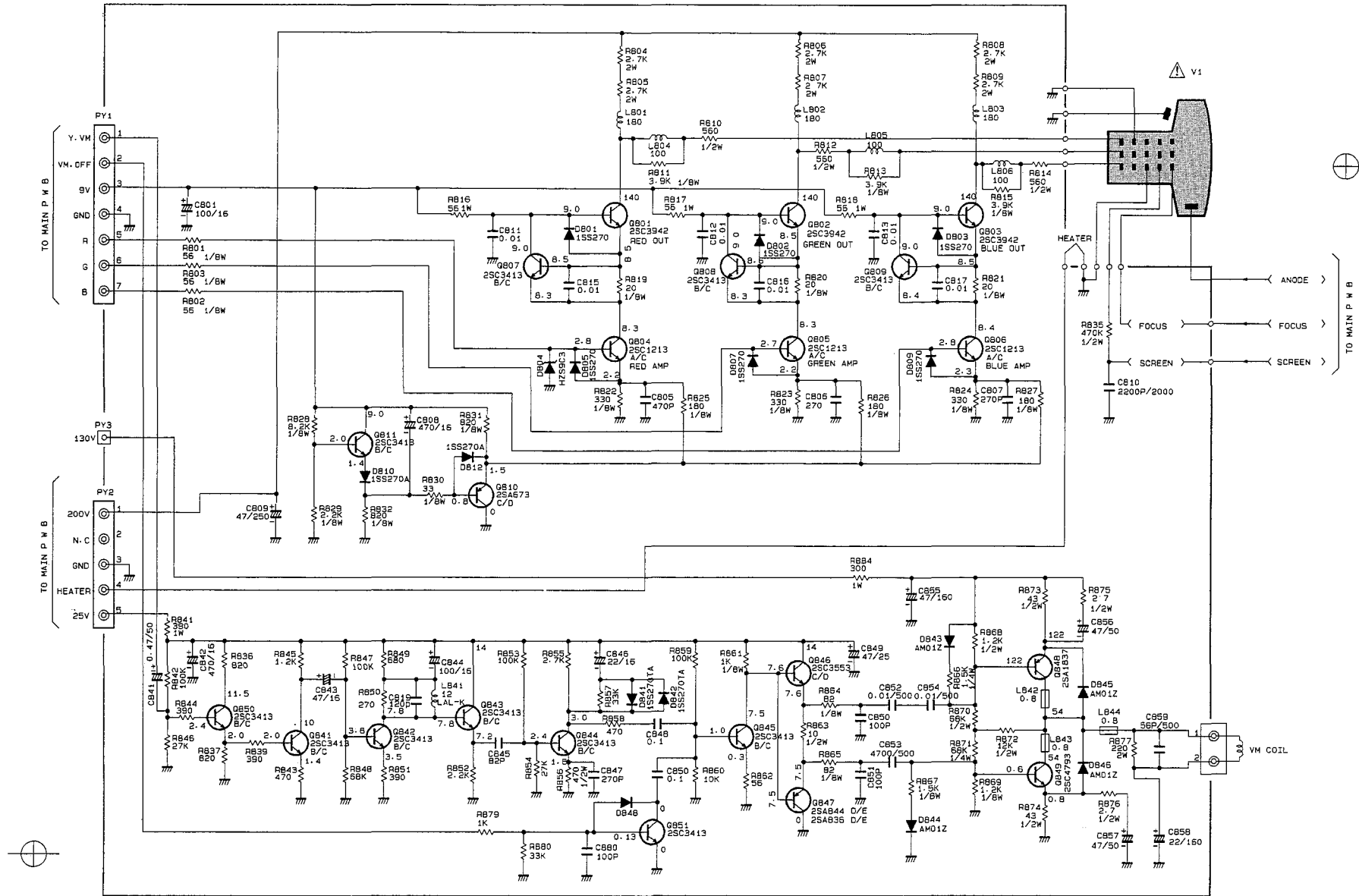
The circuit diagrams of CMT2990 consisted of the following

1. IF SUB PWB(Pg.20 - A4 size)
2. CRT PWB(Pg.21 - A3 size)
3. T/TEXT PWB(Pg.22 - A3 size) - 081S & PX-981 only
4. POWER/DEFLECTION CIRCUIT(Pg.23 - A2 size)
5. SUB PWB(Pg.24 - A2 size)
6. SIGNAL CIRCUIT(Pg.25 - A2 size)
7. CPU SELECTION CIRCUIT(Pg.26 - A2 size)
8. IF PWB(Pg.29 - A3 size)
9. PinP CIRCUIT(Pg.30 - A3 size)
10. AUDIO CIRCUIT(Pg.31 - A4 size)

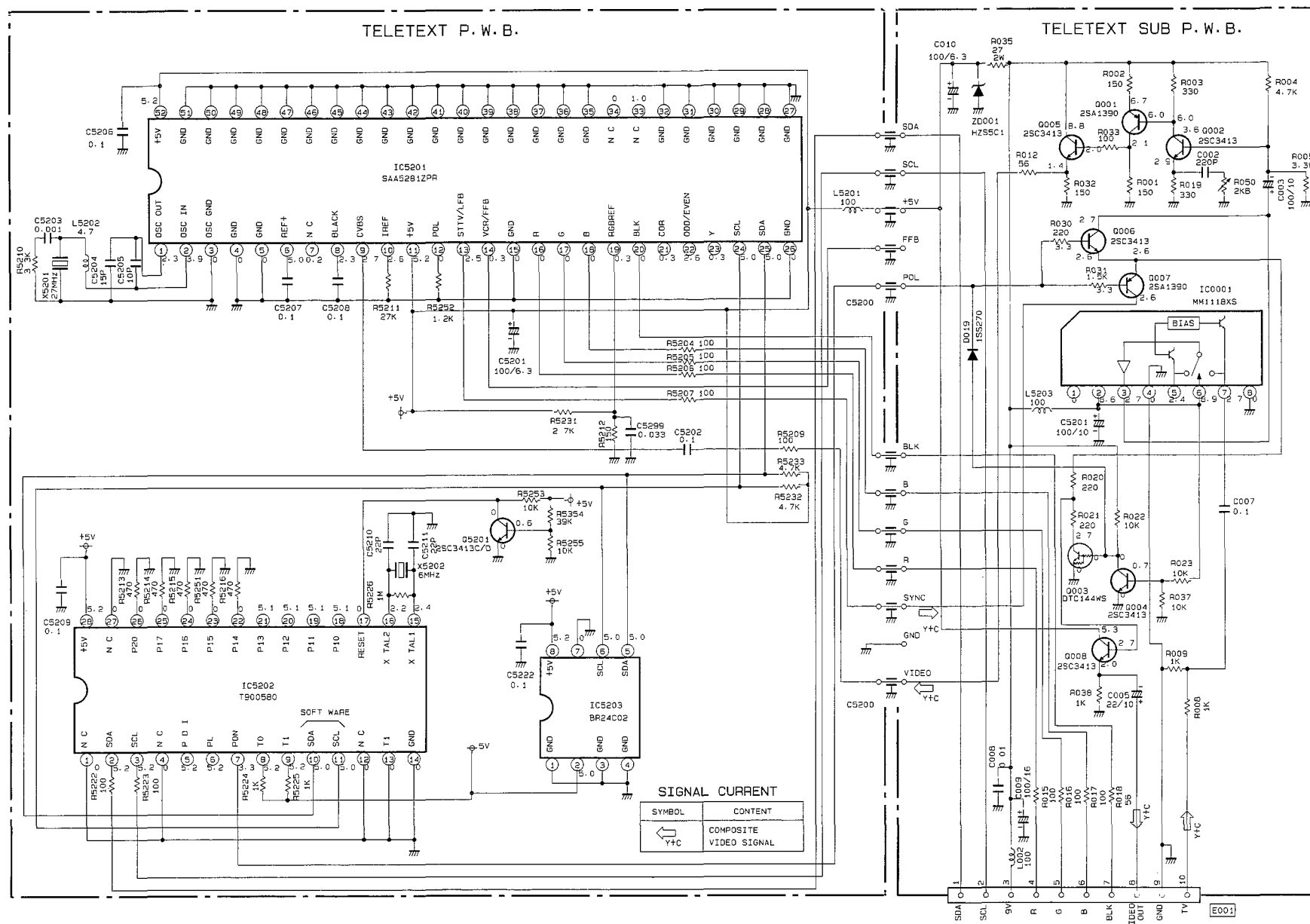
CIRCUIT DIAGRAM : IF SUB PWB



CIRCUIT DIAGRAM : CPT PWB

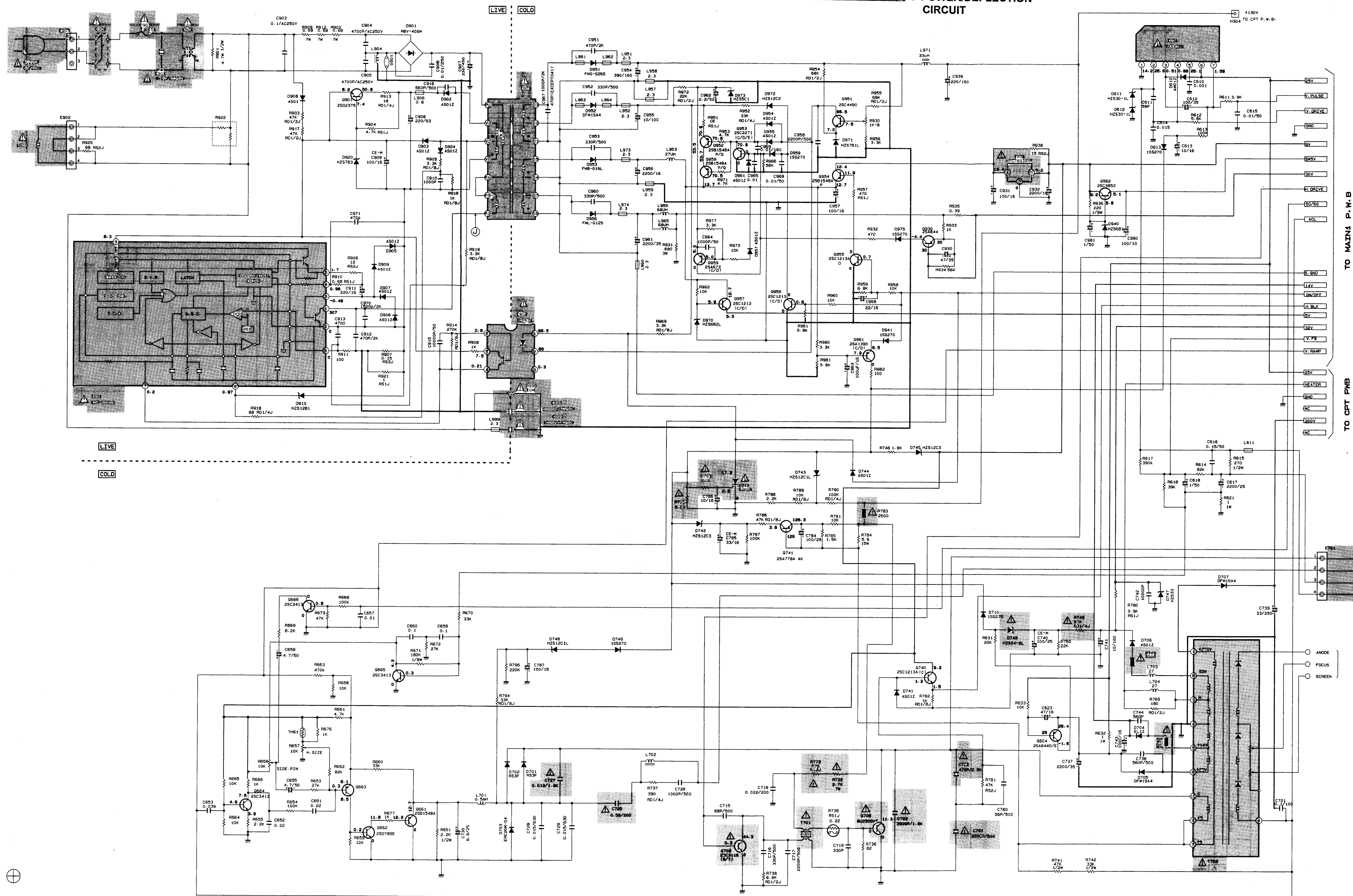


CIRCUIT DIAGRAM . T/TEXT PWB(FOR 081S & PX-981 ONLY)



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

CIRCUIT DIAGRAM : POWER/DEFLECTION
CIRCUIT



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

CIRCUIT DIAGRAM : SUB PWB

This detailed circuit diagram illustrates the internal components and wiring of a television sub-PWB. The board is populated with a variety of electronic components, including integrated circuits (ICs), resistors, capacitors, and diodes, all interconnected to perform specific functions.

Key Components and Sections:

- Input/Output Section (Top Left):** Features connectors for ANT1, ANT2, and various signal inputs (SCL, SDA, 5V, 33V, 1F2/NC, 1F1). It includes components like CT01, CT02, CT03, CT04, CT05, CT06, CT07, CT08, CT09, CT10, CT11, CT12, CT13, CT14, CT15, CT16, CT17, CT18, CT19, CT20, CT21, CT22, CT23, CT24, CT25, CT26, CT27, CT28, CT29, CT30, CT31, CT32, CT33, CT34, CT35, CT36, CT37, CT38, CT39, CT40, CT41, CT42, CT43, CT44, CT45, CT46, CT47, CT48, CT49, CT50, CT51, CT52, CT53, CT54, CT55, CT56, CT57, CT58, CT59, CT60, CT61, CT62, CT63, CT64, CT65, CT66, CT67, CT68, CT69, CT70, CT71, CT72, CT73, CT74, CT75, CT76, CT77, CT78, CT79, CT80, CT81, CT82, CT83, CT84, CT85, CT86, CT87, CT88, CT89, CT90, CT91, CT92, CT93, CT94, CT95, CT96, CT97, CT98, CT99, CT100.
- Audio Section (Top Right):** Includes a WOOFER output, a speaker (LA01), and a series of resistors (RA01, RA02, RA03, RA04, RA05, RA06, RA07, RA08, RA09, RA10, RA11, RA12, RA13, RA14, RA15, RA16, RA17, RA18, RA19, RA20, RA21, RA22, RA23, RA24, RA25, RA26, RA27, RA28, RA29, RA30, RA31, RA32, RA33, RA34, RA35, RA36, RA37, RA38, RA39, RA40, RA41, RA42, RA43, RA44, RA45, RA46, RA47, RA48, RA49, RA50, RA51, RA52, RA53, RA54, RA55, RA56, RA57, RA58, RA59, RA60, RA61, RA62, RA63, RA64, RA65, RA66, RA67, RA68, RA69, RA70, RA71, RA72, RA73, RA74, RA75, RA76, RA77, RA78, RA79, RA80, RA81, RA82, RA83, RA84, RA85, RA86, RA87, RA88, RA89, RA90, RA91, RA92, RA93, RA94, RA95, RA96, RA97, RA98, RA99, RA100).
- Control Section (Middle):** Contains several ICs, including IC01 (LA7910), IC02 (LA7910), IC03 (LA7910), IC04 (LA7910), IC05 (LA7910), IC06 (LA7910), IC07 (LA7910), IC08 (LA7910), IC09 (LA7910), IC10 (LA7910), IC11 (LA7910), IC12 (LA7910), IC13 (LA7910), IC14 (LA7910), IC15 (LA7910), IC16 (LA7910), IC17 (LA7910), IC18 (LA7910), IC19 (LA7910), IC20 (LA7910), IC21 (LA7910), IC22 (LA7910), IC23 (LA7910), IC24 (LA7910), IC25 (LA7910), IC26 (LA7910), IC27 (LA7910), IC28 (LA7910), IC29 (LA7910), IC30 (LA7910), IC31 (LA7910), IC32 (LA7910), IC33 (LA7910), IC34 (LA7910), IC35 (LA7910), IC36 (LA7910), IC37 (LA7910), IC38 (LA7910), IC39 (LA7910), IC40 (LA7910), IC41 (LA7910), IC42 (LA7910), IC43 (LA7910), IC44 (LA7910), IC45 (LA7910), IC46 (LA7910), IC47 (LA7910), IC48 (LA7910), IC49 (LA7910), IC50 (LA7910), IC51 (LA7910), IC52 (LA7910), IC53 (LA7910), IC54 (LA7910), IC55 (LA7910), IC56 (LA7910), IC57 (LA7910), IC58 (LA7910), IC59 (LA7910), IC60 (LA7910), IC61 (LA7910), IC62 (LA7910), IC63 (LA7910), IC64 (LA7910), IC65 (LA7910), IC66 (LA7910), IC67 (LA7910), IC68 (LA7910), IC69 (LA7910), IC70 (LA7910), IC71 (LA7910), IC72 (LA7910), IC73 (LA7910), IC74 (LA7910), IC75 (LA7910), IC76 (LA7910), IC77 (LA7910), IC78 (LA7910), IC79 (LA7910), IC80 (LA7910), IC81 (LA7910), IC82 (LA7910), IC83 (LA7910), IC84 (LA7910), IC85 (LA7910), IC86 (LA7910), IC87 (LA7910), IC88 (LA7910), IC89 (LA7910), IC90 (LA7910), IC91 (LA7910), IC92 (LA7910), IC93 (LA7910), IC94 (LA7910), IC95 (LA7910), IC96 (LA7910), IC97 (LA7910), IC98 (LA7910), IC99 (LA7910), IC100 (LA7910).
- Power Section (Bottom):** Includes a series of resistors (R01, R02, R03, R04, R05, R06, R07, R08, R09, R10, R11, R12, R13, R14, R15, R16, R17, R18, R19, R20, R21, R22, R23, R24, R25, R26, R27, R28, R29, R30, R31, R32, R33, R34, R35, R36, R37, R38, R39, R40, R41, R42, R43, R44, R45, R46, R47, R48, R49, R50, R51, R52, R53, R54, R55, R56, R57, R58, R59, R60, R61, R62, R63, R64, R65, R66, R67, R68, R69, R70, R71, R72, R73, R74, R75, R76, R77, R78, R79, R80, R81, R82, R83, R84, R85, R86, R87, R88, R89, R90, R91, R92, R93, R94, R95, R96, R97, R98, R99, R100).

The diagram shows a complex network of connections between these components, with labels indicating specific values and types (e.g., 10K, 100K, 1M, 100/16, 100/10, 100/100, 100/1000, 100/10000, 100/100000, 100/1000000, 100/10000000, 100/100000000, 100/1000000000, 100/10000000000, 100/100000000000, 100/1000000000000, 100/10000000000000, 100/100000000000000, 100/1000000000000000, 100/10000000000000000, 100/100000000000000000, 100/1000000000000000000, 100/10000000000000000000, 100/100000000000000000000, 100/1000000000000000000000, 100/10000000000000000000000, 100/100000000000000000000000, 100/1000000000000000000000000, 100/10000000000000000000000000, 100/100000000000000000000000000, 100/1000000000000000000000000000, 100/10000000000000000000000000000, 100/100000000000000000000000000000, 100/1000000000000000000000000000000, 100/10000000000000000000000000000000, 100/100000000000000000000000000000000, 100/1000000000000000000000000000000000, 100/10000000000000000000000000000000000, 100/100000000000000000000000000000000000, 100/1000000000000000000000000000000000000, 100/10000000000000000000000000000000000000, 100/100000000000000000000000000000000000000, 100/1000000000000000000000000000000000000000, 100/100, 100/1000, 100/100, 100/1000, 100/100, 100/1000, 100/100, 100/1000, 100/100, 100/1000, 10

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

CIRCUIT DIAGRAM : SIGNALS CIRCUIT

SIGNAL CURRENT

SYMBOL	CONTENT
YFC	COMPOSITE VIDEO SIGNAL
C	CHROMA SIGNAL
R, G, B, R-Y, G-Y, B-Y	AUDIO SIGNAL
S	(L, R, W, C)
H-V	H, V DRIVE SIGNAL

TO AUDIO CIRCUIT

TO U-CON

TO SUB P.W.B

TO POWER DEF.

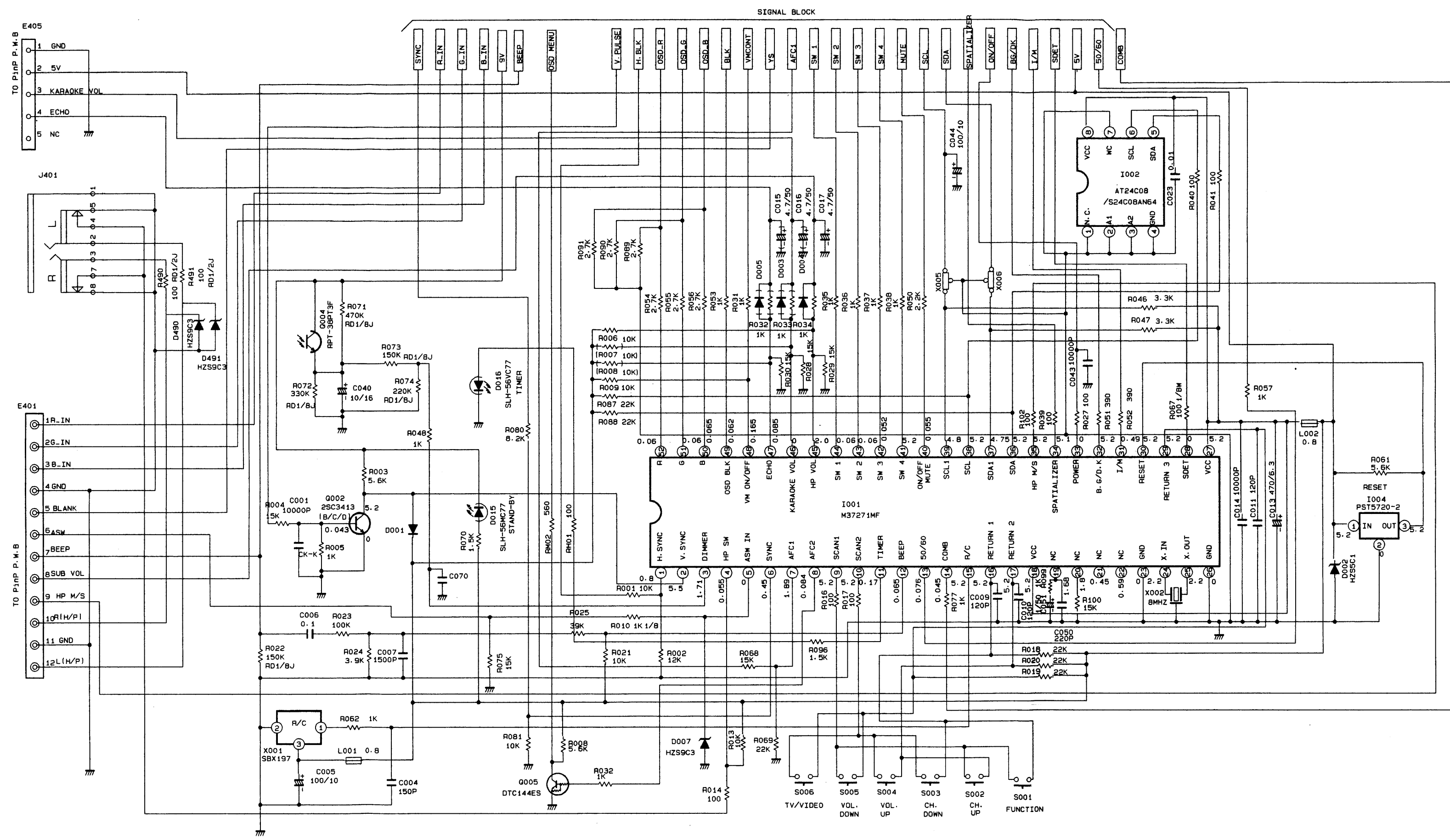
TO SUB P.W.B

TELETEXT P.W.B.

TO CPT P.W.B

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

CIRCUIT DIAGRAM : CPU SELECTION CIRCUIT



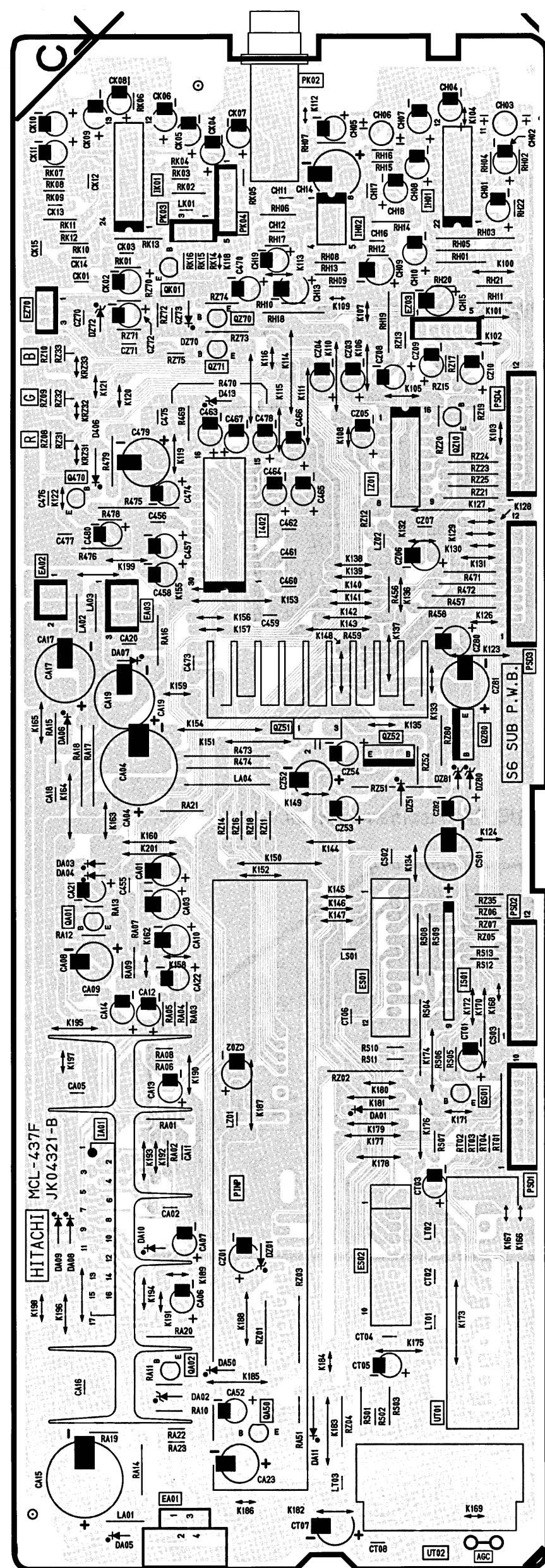
SIGNAL CURRENT	
SYMBOL	CONTENT
	COMPOSITE VIDEO SIGNAL
	CHROMA SIGNAL
	AUDIO SIGNAL
	H.V DRIVE SIGNAL

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

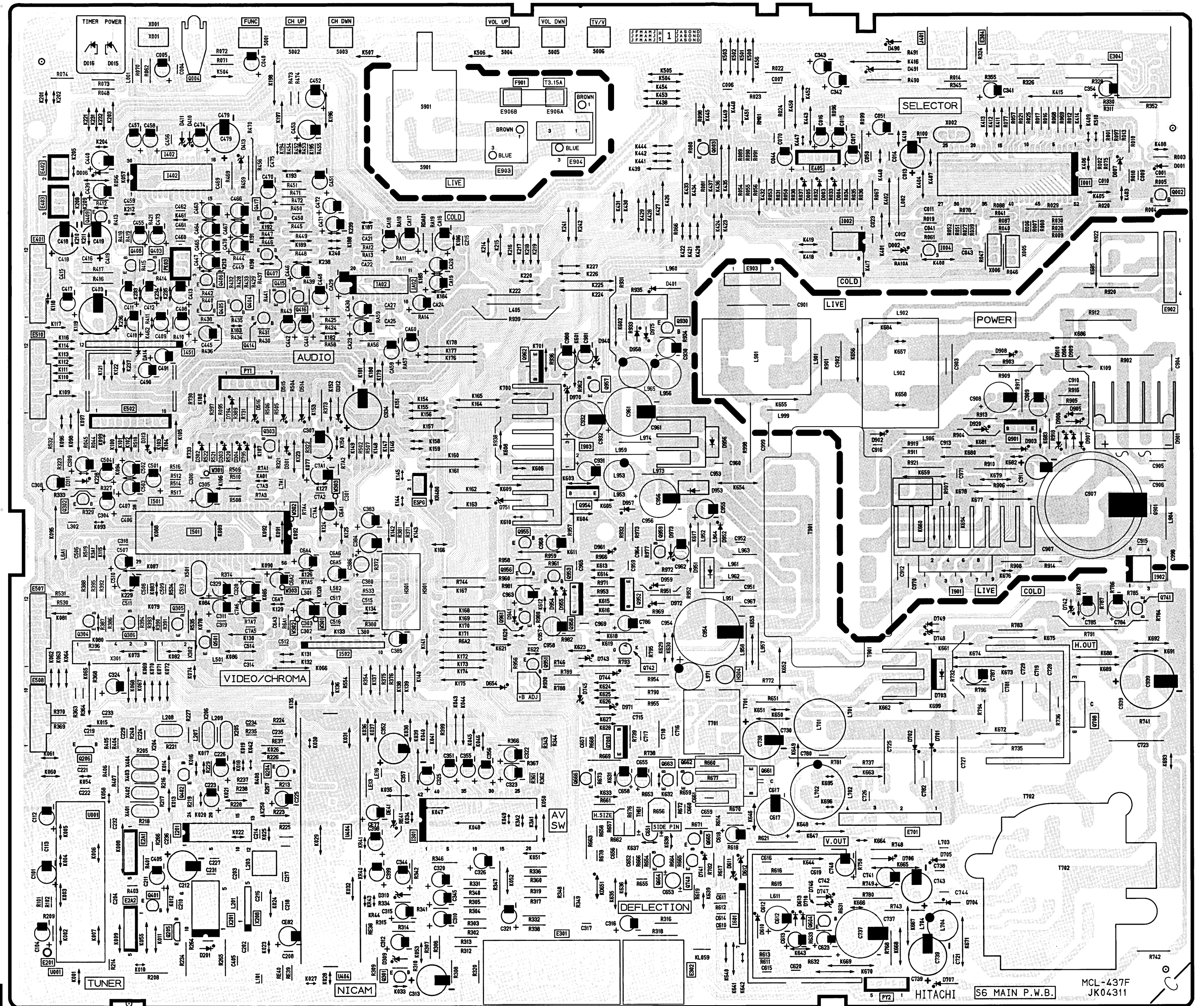
PRWTD WIRING BOARD

(印刷电路图)

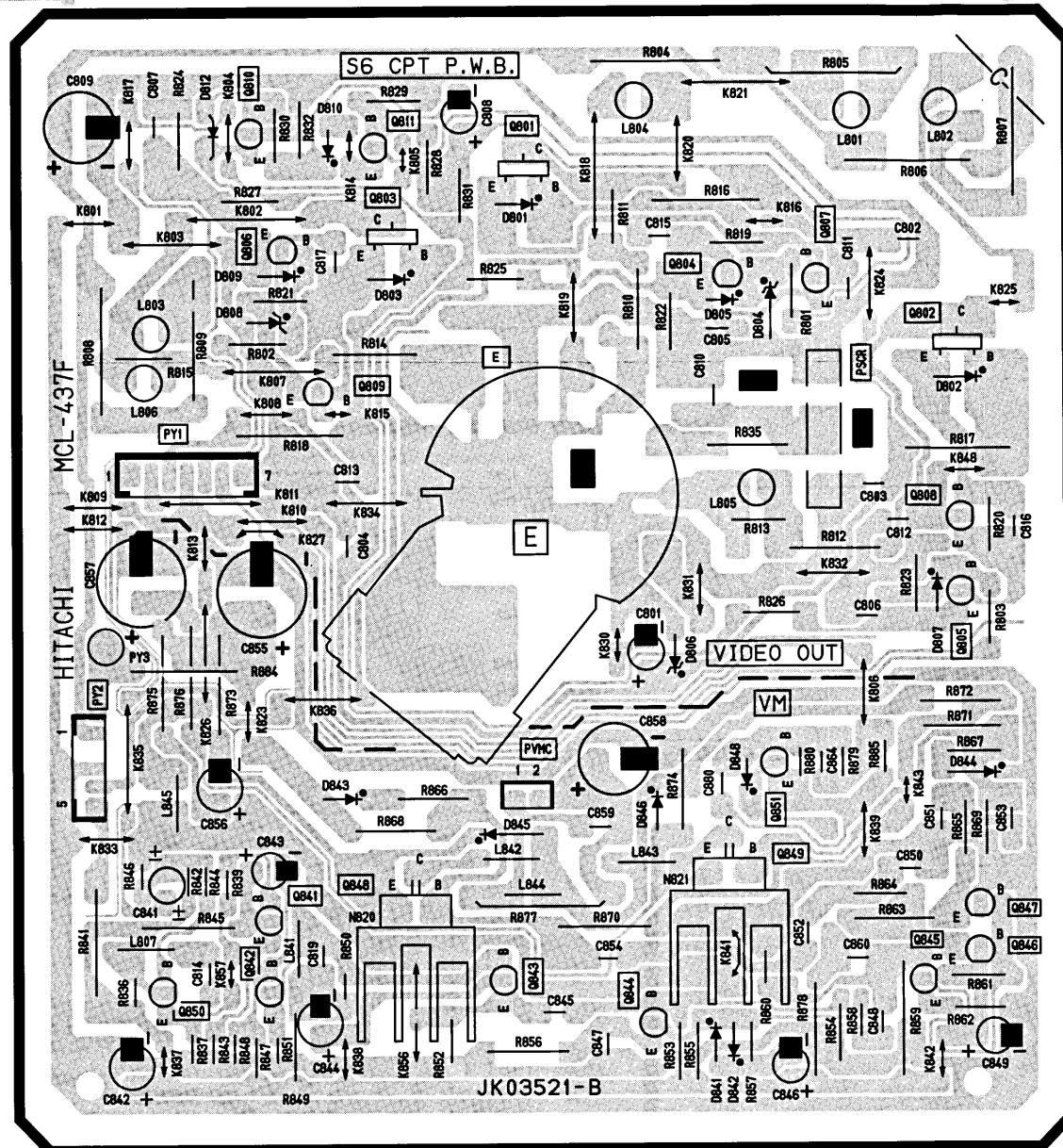
SUB PWB



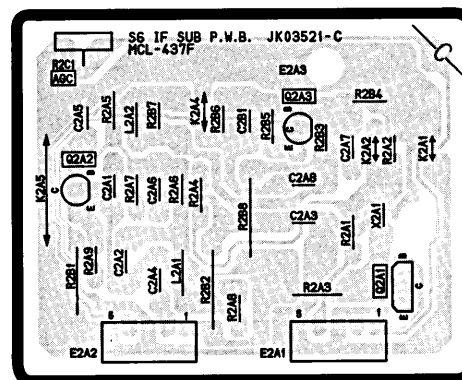
MAIN PWB



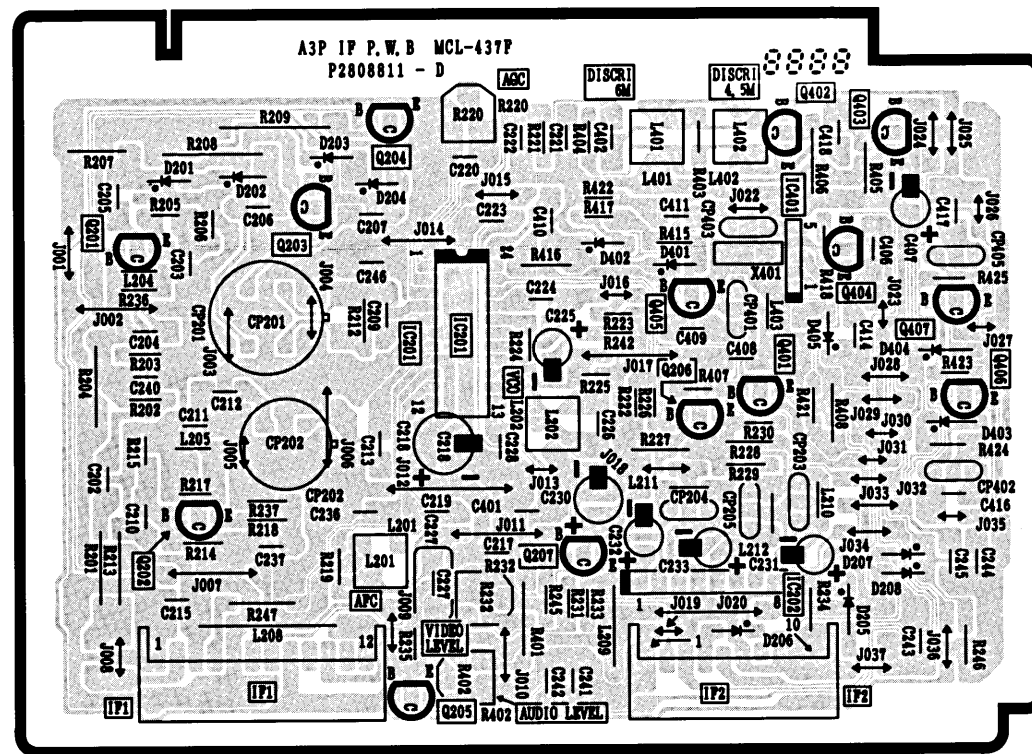
CRT PWB



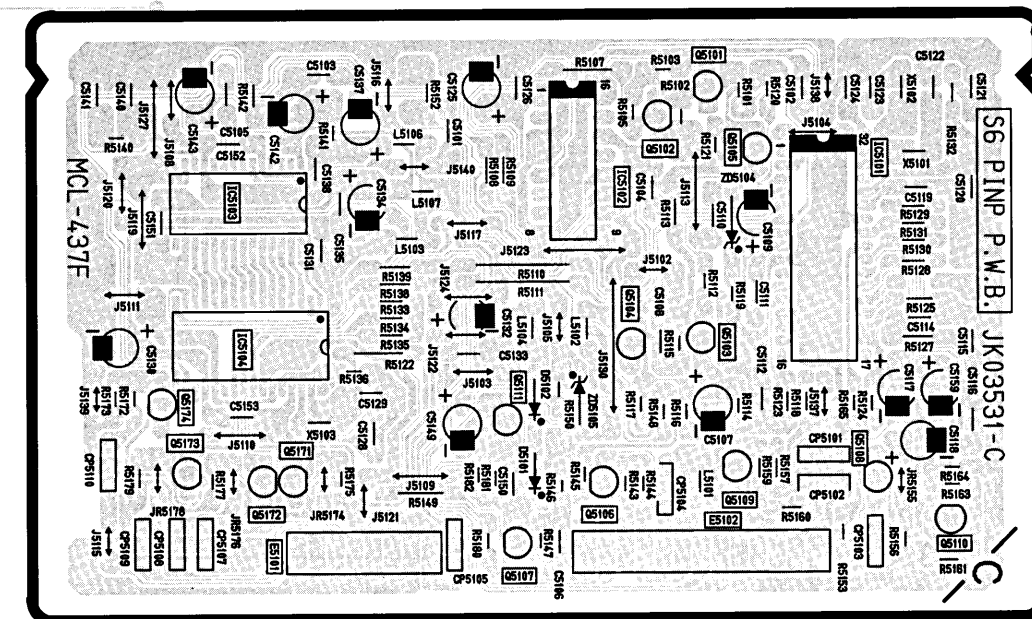
IF SUB PWB



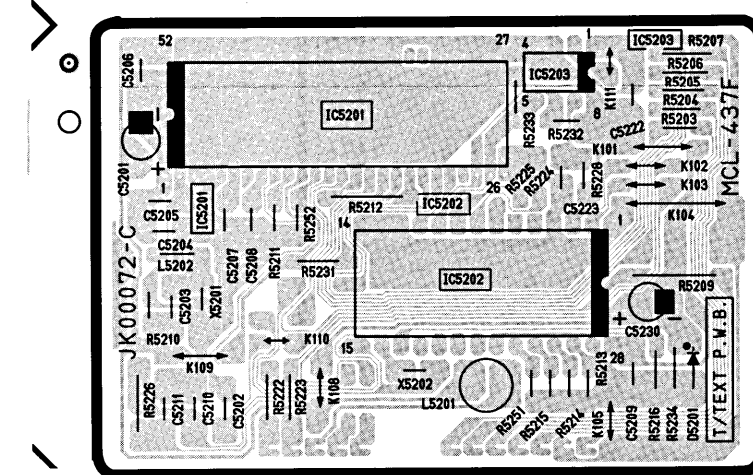
IF PWB



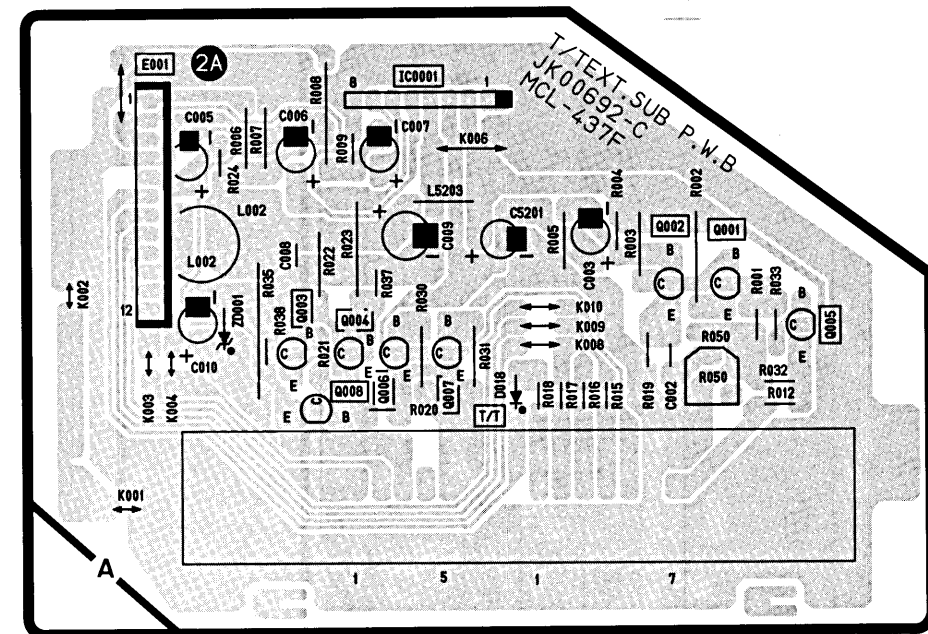
Pin P PWB

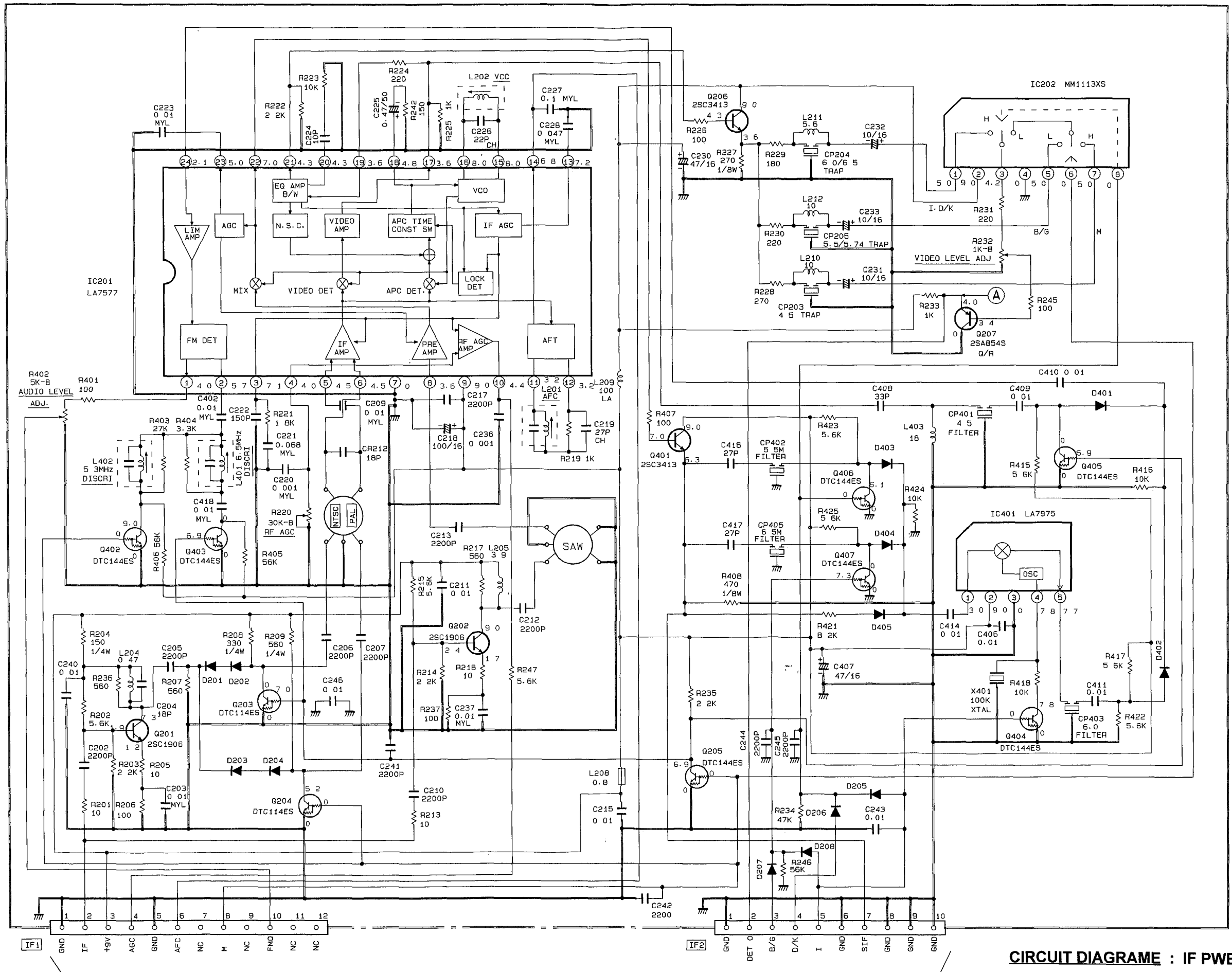


T/TEXT PWB (081S & PX-981 ONLY)



T/TEXT SUB PWB (081S & PX-981 ONLY)

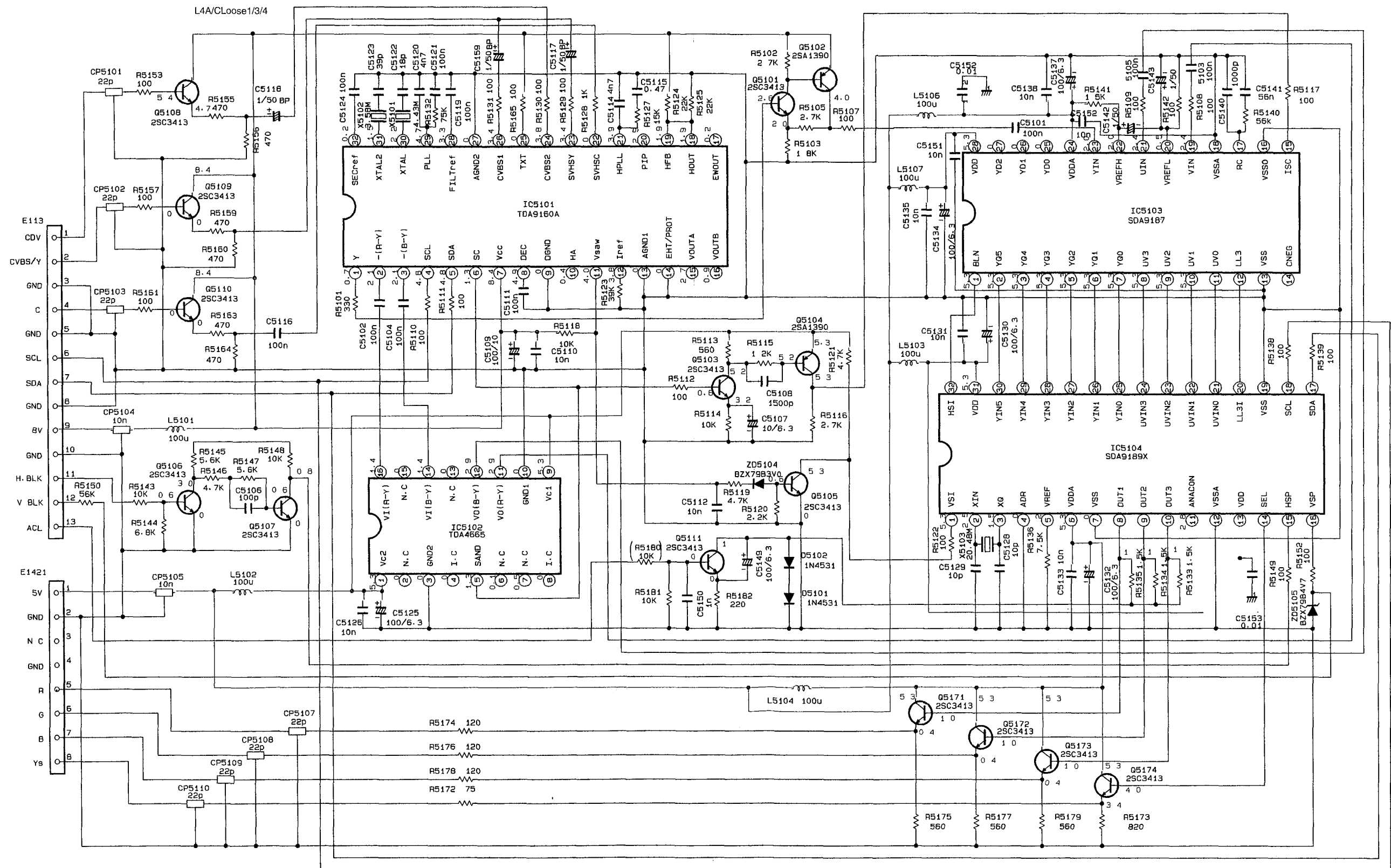


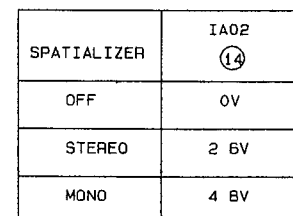


CIRCUIT DIAGRAM : IF PWB

TO SUB P.W.B.

CIRCUIT DIAGRAM : PinP PWB





REPLACEMENT PARTS LIST

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

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

SYMBOL NO.	PART NO.	DESCRIPTION	SYMBOL NO.	PART NO.	DESCRIPTION
#1013	3700971	LEAD CLAMP 72	C051	0800003R	EL 1MF 50V SME
$\triangle$ #122	QD03371	BACKCOVER	C070	0880044R	PF 0 01MF 50V
#150	NX02311	POP-UP UNIT	C101	0800049R	EL 100MF 16V SME
#200	QD03811	FRAME ASSY CMT2990-081S	C104	0800015R	EL 10MF 16V SME
#200	QD03812	FRAME ASSY (051 ONLY)	C112	0800003R	EL 1MF 50V SME
#300A	NJ02231	SPEAKER BOX ASSY CMT2990	C113	0244171R	CD 10000PF 50V F
A41	GM00452	WOOFER UNIT ASSEMBLY	C202	0244105R	CD 2200PF 50V B
$\triangle$ B	JK04311C	S6 MAIN PWB	C203	0244105R	CD 2200PF 50V B
$\triangle$ B001	JK00692A	T/TEXT SUB PWB (T/TEXT)	C203	0880044R	PF 0 01MF 50V
$\triangle$ B001	JK04321C	S6 SUB PWB	C204	0880016R	PF 0 1MF 50V
$\triangle$ B201	2808811	A3P IF PWB	C204	0890117R	CD 18PF 50V CH
$\triangle$ B5100	JK03531C	S6 P IN P PWB	C205	0244105R	CD 2200PF 50V B
$\triangle$ B5201	JK00072	S2 T/TEXT PWB (T/TEXT)	C206	0244105R	CD 2200PF 50V B
$\triangle$ B800	JK03521C	CPT/IF SUB PWB	C207	0244105R	CD 2200PF 50V B
C001	0880009R	PF 0 01MF 50V	C208	0880009R	PF 0 01MF 50V
C002	0890077R	CD 180MF 50V B (T/TEXT)	C209	0880044R	PF 0 01MF 50V
C003	0800048R	EL 100MF 10V SME (T/TEXT)	C210	0244105R	CD 2200PF 50V B
C004	0890076R	CD 150MF 50V B	C210	0244171R	CD 10000PF 50V F
C005	0800022R	EL 22MF 10V SME (T/TEXT)	C211	0244171R	CD 10000PF 50V F
C005	0800048R	EL 100MF 10V SME	C211	0800003R	EL 1MF 50V CME
C006	0800001R	EL 0.47MF 50V SME (T/TEXT)	C212	0244105R	CD 2200PF 50V B
C006	0880016R	PF 0.1MF 50V	C212	0800361N	EL 1000MF 16V SMG
C007	0880016R	PF 0.1MF 50V (T/TEXT)	C213	0244105R	CD 2200PF 50V B
C007	0890089R	CD 0.0015M 50V B	C214	0880012R	PF 0 022MF 50V
C008	0880044R	PF 0 01MF 50V (T/TEXT)	C215	0880044R	PF 0 01MF 50V
C009	0800049R	EL 100MF 16V SME (T/TEXT)	C216	0880009R	PF 0 01MF 50V
C009	0890075R	CD 120PF 50V SL	C217	0244105R	CD 2200PF 50V B
C010	0800047R	EL 100MF 6 3V SME (T/TEXT)	C217	0880009R	PF 0 01MF 50V
C010	0890075R	CD 120PF 50V SL	C218	0244171R	CD 10000PF 50V F
C011	0890075R	CD 120PF 50V SL	C218	0800326R	EL 100MF 16V SMG
C012	0880009R	PF 0 01MF 50V	C219	0244171R	CD 10000PF 50V F
C013	0800072R	EL 470MF 6 3V SME	C219	0246450R	CD 27PF 50V CH
C014	0880009R	PF 0 01MF 50V	C220	0880031R	PF 0.001MF 50V
C017	0800012R	EL 4 7MF 50V SME	C221	0244171R	CD 10000PF 50V F
C020	0890087R	CD 0 001MF 50V B (T/TEXT)	C221	0880055R	PF 0.068MF 50V
C023	0880009R	PF 0.01MF 50V	C222	0244171R	CD 10000PF 50V F
C040	0800015R	EL 10MF 16V SME	C222	0890076R	CD 150PF 50V B
C043	0880009R	PF 0 01MF 50V	C223	0800005R	EL 2 2MF 50V SME
C044	0800048R	EL 100MF 10V SME	C223	0880044R	PF 0 01MF 50V
C050	0243505R	CD 220PF 500V B	C224	0880009R	PF 0 01MF 50V

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SYMBOL NO.	PART NO.	DESCRIPTION	SYMBOL NO.	PART NO.	DESCRIPTION
C224	0890061R	CD 10PF 50V SL	C317	0244171R	CD 10000PF 50V F
C225	0800001R	EL 0 47MF 50V SME	C318	0880016R	PF 0 1MF 50V
C225	0800015R	EL 10MF 16V SME	C319	0244171R	CD 10000PF 50V F
C226	0800001R	EL 0 47MF 50V SME	C320	0800015R	EL 10MF 16V SME
C226	0890118R	CD 22PF 50V CH	C321	0800015R	EL 10MF 16V SME
C227	0244105R	CD 2200PF 50V B	C322	0800015R	EL 10MF 16V SME
C227	0880057R	PF 0 1MF 50V	C323	0800015R	EL 10MF 16V SME
C228	0880053R	PF 0 047MF 50V	C324	0880016R	PF 0 1MF 50V
C229	0244171R	CD 10000PF 50V F	C325	0880016R	PF 0 1MF 50V
C230	0800041R	EL 47MF 16V SME	C326	0800015R	EL 10MF 16V SME
C231	0800015R	EL 10MF 16V SME	C328	0800012R	EL 4 7MF 50V SME
C232	0244171R	CD 10000PF 50V F	C329	0800015R	EL 10MF 16V SME
C232	0800015R	EL 10MF 16V SME	C341	0800015R	EL 10MF 16V SME
C233	0244171R	CD 10000PF 50V F	C342	0800015R	EL 10MF 16V SME
C233	0800015R	EL 10MF 16V SME	C343	0800015R	EL 10MF 16V SME
C234	0890076R	CD 150PF 50V B	C344	0800015R	EL 10MF 16V SME
C235	0890066R	CD 27PF 50V SL	C345	0800015R	EL 10MF 16V SME
C236	0244105R	CD 2200PF 50V B	C351	0800023R	EL 22MF 16V SME
C236	0880031R	PF 0 001MF 50V	C352	0800353R	EL 470MF 16V SMF
C237	0880044R	PF 0 01MF 50V	C354	0800015R	EL 10MF 16V SME
C240	0244171R	CD 10000PF 50V F	C355	0800015R	EL 10MF 16V SME
C241	0244105R	CD 2200PF 50V B	C356	0800015R	EL 10MF 16V SME
C242	0244105R	CD 2200PF 50V B	C357	0880009R	PF 0 01MF 50V
C243	0244171R	CD 10000PF 50V F	C380	0890068R	CD 39PF 50V SL
C244	0244105R	CD 2200PF 50V B	C383	0800023R	EL 22MF 16V SME
C245	0244105R	CD 2200PF 50V B	C384	0800049R	EL 100MF 16V SME
C246	0244171R	CD 10000PF 50V F	C385	0800015R	EL 10MF 16V SME
C2A1	0244105R	CD 2200PF 50V B	C386	0252396R	EL 10MF 16V BP
C2A2	0890063R	CD 15PF 50V SL	C398	0800015R	EL 10MF 16V SME
C2A3	0244171R	CD 10000PF 50V F	C399	0800015R	EL 10MF 16V SME
C2A4	0244105R	CD 2200PF 50V B	C402	0880044R	PF 0 01MF 50V
C2A5	0244105R	CD 2200PF 50V B	C403	0255011F	EL 2200MF 35V KME
C2A6	0244105R	CD 2200PF 50V B	C405	0880009R	PF 0.01M 50V
C2A7	0244105R	CD 2200PF 50V B	C406	0244171R	CD 10000PF 50V F
C2A8	0244171R	CD 10000PF 50V F	C407	0244171R	CD 10000PF 50V F
C2B1	0244105R	CD 2200PF 50V B	C407	0800041R	EL 47MF 16V SME
C301	0244171R	CD 10000PF 50V F	C408	0890067R	CD 33PF 50V SL
C302	0244171R	CD 10000PF 50V F	C409	0244171R	CD 10000PF 50V F
C303	0800047R	EL 100MF 6 3V SME	C410	0244171R	CD 10000PF 50V F
C304	0800023R	EL 22MF 16V SME	C411	0244171R	CD 10000PF 50V F
C305	0800049R	EL 100MF 16V SME	C414	0244171R	CD 10000PF 50V F
C306	0244171R	CD 10000PF 50V F	C416	0890066R	CD 27PF 50V SL
C307	0800058R	EL 220MF 16V SME	C417	0890066R	CD 27PF 50V SL
C310	0800015R	EL 10MF 16V SME	C418	0880044R	PF 0 01MF 50V
C311	0800047R	EL 100MF 6 3V SME	C441	0800015R	EL 10MF 16V SME
C312	0800015R	EL 10MF 16V SME	C442	0800015R	EL 10MF 16V SME
C313	0800074N	EL 470MF 16V SME	C445	0800009R	EL 4 7MF 25V SME
C314	0880016R	PF 0 1MF 50V	C446	0800009R	EL 4 7MF 25V SME
C315	0800015R	EL 10MF 16V SME	C447	0800005R	EL 2.2MF 50V SME
C316	0800015R	EL 10MF 16V SME	C448	0800005R	EL 2.2MF 50V SME

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SYMBOL NO.	PART NO.	DESCRIPTION	SYMBOL NO.	PART NO.	DESCRIPTION
C449	0880014R	PF 0.047MF 50V	C5115	0276725R	PF 0.47MF-J 50V
C450	0880014R	PF 0.047MF 50V	C5116	0880057R	PF 0.1MF 50V
C451	0800041R	EL 47MF 16V SME	C5117	0284623R	EL 1MF 50V SME
C455	0880018R	PF 0.22MF 50V	C5118	0284623R	EL 1MF 50V SME
C456	0880041R	PF 0.0056MF 50V	C5119	0880057R	PF 0.1MF 50V
C457	0800015R	EL 10MF 16V SME	C512	0880009R	PF 0.01MF-K 50V
C458	0800007R	EL 3.3MF 50V SME	C5120	0890096R	CD 4700PF 25V B
C459	0880052R	PF 0.039MF 50V	C5121	0880057R	PF 0.1MF 50V
C460	0880009R	PF 0.01MF 50V	C5122	0890117R	CD 18PF-J 50V CH
C461	0880052R	PF 0.039MF 50V	C5123	0890122R	CD 39PF-J 50V CH
C462	0880052R	PF 0.039MF 50V	C5124	0880057R	PF 0.1MF 50V
C463	0800003R	EL 1MF 50V SME	C5125	0800047R	EL 100MF 6.3V SME
C464	0800015R	EL 10MF 16V SME	C5126	0890101R	CD 0.01PF 50V B
C465	0800015R	EL 10MF 16V SME	C5128	0890114R	CD 10PF-D 50V CH
C466	0800015R	EL 10MF 16V SME	C5129	0890114R	CD 10PF-D 50V CH
C467	0800015R	EL 10MF 16V SME	C513	0246442R	CD 12PF-J 50V CH
C469	0800081N	EL 1000MF 10V SME	C5130	0800047R	EL 100MF 6.3V SME
C470	0800015R	EL 10MF 16V SME	C5131	0890101R	CD 0.01PF 50V B
C473	0880018R	PF 0.22MF 50V	C5132	0800047R	EL 100MF 6.3V SME
C474	0800015R	EL 10MF 16V SME	C5133	0890101R	CD 0.01PF 50V B
C475	0880009R	PF 0.01MF 50V	C5134	0800047R	EL 100MF 6.3V SME
C477	0880016R	PF 0.1MF 50V	C5135	0890101R	CD 0.01PF 50V B
C478	0800015R	EL 10MF 16V SME	C5137	0800047R	EL 100MF 6.3V SME
C479	0800366N	EL 2200MF 10V SMG	C5138	0890101R	CD 0.01PF 50V B
C480	0800003R	EL 1MF 50V SME	C514	0880012R	PF 0.022MF-K 50V
C490	0800015R	EL 10MF 16V SME	C5140	0890087R	CD 1000PF-K 50V B
C491	0800015R	EL 10MF 16V SME	C5141	0880054R	PF 0.056MF-K 50V
C501	0800003R	EL 1MF 50V SME	C5142	0800003R	EL 1MF 50V SME
C502	0800003R	EL 1MF 50V SME	C5143	0800003R	EL 1MF 50V SME
C503	0800003R	EL 1MF 50V SME	C5149	0800047R	EL 100MF 6.3V SME
C504	0800012R	EL 4.7MF 50V SME	C515	0880016R	PF 0.1MF 50V
C506	0880009R	PF 0.01MF-K 50V	C5150	0890087R	CD 1000PF-K 50V B
C507	0800005R	EL 2.2MF 50V SME	C5151	0880044R	PF 0.01MF-K 50V
C508	0880016R	PF 0.1MF 50V	C5152	0880044R	PF 0.01MF-K 50V
C509	0880016R	PF 0.1MF 50V	C5153	0880044R	PF 0.01MF-K 50V
C510	0800047R	EL 100MF 6.3V SME	C5159	0284623R	EL 1MF 50V SME
C5101	0880057R	PF 0.1MF 50V	C516	0244171R	CD 10000PF 50V F
C5102	0880057R	PF 0.1MF 50V	C517	0800047R	EL 100MF 6.3V SME
C5103	0880057R	PF 0.1MF 50V	C5200	0238296	CEE PLUG PIN (T/TEXT)
C5104	0880057R	PF 0.1MF 50V	C5201	0800048R	EL 100MF 10V SME (T/TEXT)
C5105	0880057R	PF 0.1MF 50V	C5201	0800143	EL 100MF-M 6.3V SRA (T/TEXT)
C5106	0890074R	CD 100PF 50V SL	C5202	0270734R	PF 0.1MF-J 50V (T/TEXT)
C5107	0800015R	EL 10MF 16V SME	C5203	0880003R	PF 0.001MF-K 50V (T/TEXT)
C5108	0890089R	CD 0.0015PF-K 50V B	C5204	0890063R	CD 15PF-J 50V SL (T/TEXT)
C5109	0800048R	EL 100MF 10V SME	C5205	0890061R	CD 10PF-D 50V SL (T/TEXT)
C511	0244171R	CD 10000PF 50V F	C5206	0270734R	PF 0.1MF-J 50V (T/TEXT)
C5110	0890101R	CD 0.01PF 50V B	C5207	0270734R	PF 0.1MF-J 50V (T/TEXT)
C5111	0880057R	PF 0.1MF-K 50V	C5208	0270734R	PF 0.1MF-J 50V (T/TEXT)
C5112	0890101R	CD 0.01PF 50V B	C5209	0270734R	PF 0.1MF-J 50V (T/TEXT)
C5114	0890096R	CD 4700PF 25V B	C5210	0890118R	CD 22PF-J 50V CH (T/TEXT)

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SYMBOL NO.	PART NO.	DESCRIPTION	SYMBOL NO.	PART NO.	DESCRIPTION
C5211	0890118R	CD 22PF-J 50V CH (T/TEXT)	$\triangle$ C782	0249491F	CD 470PF-K 2 5KV B
C5222	0270734R	PF 0 1MF-J 50V (T/TEXT)	C784	0800051R	EL 100MF 25V SME
C5299	0880051R	PF 0 033MF-K 50V (T/TEXT)	C785	0800032R	EL 33MF 16V SME
C610	0890087R	CD 1000PF-K 50V B	C786	0800015R	EL 10MF 16V SME
C611	0247848R	CD 56PF-J 500V SL	C787	0800326R	EL 100MF 16V SMG
C612	0800052R	EL 100MF 35V SME	C7A1	0800058R	EL 220MF 16V SME
C613	0800015R	EL 10MF 16V SME	C7A2	0244171R	CD 10000PF 50V F
C614	0880011R	PF 0 015MF-K 50V	C7A3	0880009R	PF 0 01MF-K 50V
C615	0880009R	PF 0 01MF-K 50V	C7A4	0880009R	PF 0 01MF-K 50V
C616	0880017R	PF 0 15MF-K 50V	C7A5	0880009R	PF 0 01MF-K 50V
C617	0800368N	EL 2200MF 25V SMG	C7A6	0800003R	EL 1MF 50V SME
C618	0800003R	EL 1MF 50V SME	C801	0800326R	EL 100MF 16V SMG
C623	0800041R	EL 47MF 16V SME	C805	0890083R	CD 470PF-K 50V B
C651	0880018R	PF 0 22MF-K 50V	C806	0890079R	CD 270PF-K 50V B
C652	0880018R	PF 0 22MF-K 50V	C807	0890079R	CD 270PF-K 50V B
C653	0880052R	PF 0 039MF-K 50V	C808	0800353R	EL 470MF 16V SMG
C655	0800012R	EL 4 7MF 50V SME	C809	0253973F	EL 22MF 250V SME
C657	0880009R	PF 0 01MF-K 50V	C810	0244889R	CD 2200PF-K 2KV B
C658	0800012R	EL 4 7MF 50V SME	C811	0880044R	PF 0 01MF-K 50V
C659	0880016R	PF 0 1MF 50V	C812	0880044R	PF 0 01MF-K 50V
C660	0880016R	PF 0 1MF 50V	C813	0880044R	PF 0 01MF-K 50V
C661	0880011R	PF 0 015MF-K 50V	C815	0880044R	PF 0 01MF-K 50V
C6A1	0800003R	EL 1MF 50V SME	C816	0880044R	PF 0 01MF-K 50V
C6A2	0292718F	TA 2 2MF 20V	C817	0880044R	PF 0 01MF-K 50V
C6A3	0880016R	PF 0 1MF 50V	C819	0890075R	CD 120PF-J 50V SL
C6A4	0800003R	EL 1MF 50V SME	C841	0284621R	EL 0 47MF 50V BP
C6A7	0890087R	CD 1000PF-K 50V B	C842	0800353R	EL 470MF 16V SMG
C715	0247850R	CD 68PF-J 500V SL	C843	0800041R	EL 47MF 16V SME
C716	0243507R	CD 330PF-K 500V B	C844	0800326R	EL 100MF 16V SMG
C717	0244505R	CD 2200PF-K 500V B	C845	0890073R	CD 82PF-J 50V SL
C718	0299918F	PF 0 022MF-K 200V E	C846	0800023R	EL 22MF 16V SME
C719	0890081R	CD 330PF-K 50V B	C847	0890079R	CD 270PF-K 50V B
C721	0279693R	PF 0 1MF-K 100V	C848	0880057R	PF 0 1MF-K 50V
$\triangle$ C723	0262416F	PF 0 0039MF 1 8KV	C849	0800042R	EL 47MF-M 25V SME
$\triangle$ C725	0262801F	PF 0 56MF-J 250V	C850	0890074R	CD 100PF-J 50V SL
C726	0244501R	CD 1000PF-K 500V B	C851	0890074R	CD 100PF-J 50V SL
$\triangle$ C727	0262429F	PF 0 012MF-J 1 8KV	C852	AJ00001R	CD 0 01PF-Z 500V
C728	0299720F	PF 0 015MF 630V	C853	0244509R	CD 4700PF-K 500V
C729	0299720F	PF 0 015MF 630V	C854	AJ00001R	CD 0 01PF-Z 500V
C730	0259475	EL 6.8MF-M 35V BP	C855	0253959F	EL 47MF 160V
C737	0284442	EL 2200MF-M 35V	C856	0800044R	EL 47MF 50V SME
C738	0243510R	CD 560PF-K 500V B	C857	0800044R	EL 47MF 50V SME
C739	0253974N	EL 33MF 250V	C858	0253957F	EL 22MF-M 160V
C740	0800051R	EL 100MF 25V SME	C859	0247848R	CD 56PF-J 500V SL
C741	0800021R	EL 10MF 100V SME	C860	0880057R	PF 0 1MF-K 50V
C742	0880009R	PF 0 01MF-K 50V	C880	0890074R	CD 100PF-J 50V SL
C743	0800361N	EL 1000MF 16V SMG	$\triangle$ C901	0262774	PF 0 22MF-M 250V
C744	0243510R	CD 560PF-K 500V B	C903	0248594F	CD 0 01PF-Z 250V F
C780	0247848R	CD 56PF-J 500V SL	C904	0248593F	CD 4700PF-Z 250V F
$\triangle$ C781	0244507R	CD 3300PF-K 500V B	C905	0248593F	CD 4700PF-Z 250V F

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SYMBOL NO.	PART NO.	DESCRIPTION	SYMBOL NO.	PART NO.	DESCRIPTION
C906	0248594F	CD 0 01PF-Z 250V F	CA12	0800015R	EL 10MF 16V SME
C907	AL00095	EL 330MF 450V	CA13	0800003R	EL 1MF 50V SME
C908	0800063N	EL 220MF 63V SME	CA14	0800003R	EL 1MF 50V SME
C909	0800326R	EL 100MF 16V SMG	CA15	0253934F	EL 2200MF 35V
C910	0890087R	CD 1000PF-K 50V B	CA15	0880009R	PF 0 01MF 50V
C911	0284405R	EL 220MF-M 16V	CA16	0800049R	EL 100M 16V SME
C912	0244202F	CD 470PF-K 2KV R	CA16	0880016R	PF 0 1MF 50V
C913	0244109R	CD 4700PF-K 50V B	CA17	0800049R	EL 100M 16V SME
C915	0880044R	PF 0 01UF-K 50V	CA17	0800084N	EL 1000MF 35V SME
C916	0243510R	CD 560PF-K 500V B	CA18	0800003R	EL 1MF 50V SME
C930	0800043R	EL 47MF 35V SME	CA18	0880016R	PF 0 1MF 50V
C931	0800326R	EL 100MF 16V SMG	CA19	0800015R	EL 10MF 16V SME
C932	0254510N	EL 2200MF 16V KME	CA19	0800084N	EL 1000MF 35V SME
C934	0800087F	EL 2200MF 16V SME	CA20	0800023R	EL 22MF 16V SME
C939	0253862F	EL 220MF-M 160V	CA20	0880016R	PF 0 1MF 50V
C951	0244202F	CD 470PF-K 2KV R	CA21	0880049R	PF 0 027MF 50V
C952	0243507R	CD 330PF-K 500V B	CA22	0800015R	EL 10MF 16V SME
C953	0243507R	CD 330PF-K 500V B	CA22	0880009R	PF 0 01MF 50V
C954	0251703	EL 390MF-M 160V	CA23	0800015R	EL 10MF 16V SME
C955	0284478R	EL 10MF-M 100V	CA23	0800048R	EL 100MF 10V SME
C956	0254510N	EL 2200MF 16V KME	CA24	0800015R	EL 10MF 16V SME
C957	0800326R	EL 100MF 16V SMG	CA25	0880054R	PF 0 056MF 50V
C958	0244505R	CD 2200PF-K 500V B	CA27	0880052R	PF 0 039MF 50V
C959	0279687R	PF 0 01MF 100V	CA29	0800049R	EL 100M 16V SME
C960	0243507R	CD 330PF-K 500V B	CA30	0800015R	EL 10MF 16V SME
C961	0255011F	EL 2200MF 35V KME	CA52	0800005R	EL 2 2MF 50V SME
C962	0800005R	EL 2 2MF 50V SME	CA59	0800015R	EL 10MF 16V SME
C963	0800326R	EL 100MF 16V SMG	CA60	0800015R	EL 10MF 16V SME
C964	0890087R	CD 1000PF-K 50V B	CE77	0800048R	EL 100MF 10V SME
C965	0880044R	PF 0 01MF-K 50V	CE82	0800048R	EL 100MF 10V SME
C967	0244202F	CD 470PF-K 2KV R	CH01	0800015R	EL 10MF 16V SME
C968	0800023R	EL 22MF 16V SME	CH02	0800015R	EL 10MF 16V SME
C969	0880044R	PF 0 01MF-K 50V	CH03	0252396R	EL 10MF 16V BP
C970	0244213	CD 1500PF-K 2KV	CH04	0800003R	EL 1MF 50V SME
C971	0890083R	CD 470PF-K 50V B	CH05	0800041R	EL 47MF 16V SME
C980	0800048R	EL 100MF 10V SME	CH06	0252396R	EL 10MF 16V BP
C981	0800003R	EL 1MF 50V SME	CH07	0800003R	EL 1MF 50V SME
 C998	AJ00184F	PF 2200PF 250V	CH08	0800015R	EL 10MF 16V SME
 C999	AJ00182F	PF 1000PF 250V	CH09	0800015R	EL 10MF 16V SME
CA01	0800051R	EL 100MF 25V SME	CH10	0800015R	EL 10MF 16V SME
CA02	0890092R	CD 2200PF 50V B	CH11	0890076R	CD 150PF 50V B
CA03	0800051R	EL 100MF 25V SME	CH12	0890076R	CD 150PF 50V B
CA04	0253934F	EL 2200MF 35V SME	CH13	0800049R	EL 100M 16V SME
CA05	0880018R	PF 0 22MF 50V	CH14	0800353R	EL 470MF 16V SMG
CA06	0800042R	EL 47MF 25V SME	CH15	0800049R	EL 100M 16V SME
CA07	0800042R	EL 47MF 25V SME	CH16	0890076R	CD 150PF 50V B
CA08	0800059R	EL 220MF 25V SME	CH17	0890076R	CD 150PF 50V B
CA09	0890092R	CD 2200PF 50V F	CH18	0800005R	EL 2 2MF 50V SME
CA10	0800051R	EL 100MF 25V SME	CH19	0800005R	EL 2 2MF 50V SME
CA11	0890092R	CD 2200PF 50V F	CP201	BG00331	SAW FILTER HW3071

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SYMBOL NO.	PART NO.	DESCRIPTION	SYMBOL NO.	PART NO.	DESCRIPTION
CP202	2305861	SAW FILTER HW2226	D019	2338321M	DI 1SS270 (T/TEXT)
CP203	2142241A	TRAP 4 5MHZ	D201	2338321M	DI 1SS270
CP204	2143473	TRAP 6/6 5MHZ	D202	2338321M	DI 1SS270
CP205	2167371	TRAP 5 5/5 74MHZ	D203	2338321M	DI 1SS270
CP401	2142601	CERAMIC FILTER 4 5MHZ	D204	2338321M	DI 1SS270
CP402	2142602	CERAMIC FILTER 5 5MHZ	D205	2338321M	DI 1SS270
CP403	2142603A	CERAMIC FILTER 6 0MHZ	D206	2338321M	DI 1SS270
CP405	2142604	CERAMIC FILTER 6 5MHZ	D207	2338321M	DI 1SS270
CP5101	2791751R	LC FILTER 22PF	D208	2338321M	DI 1SS270
CP5102	2791751R	LC FILTER 22PF	D301	2338321M	DI 1SS270
CP5103	2791751R	LC FILTER 22PF	D302	2338321M	DI 1SS270
CP5104	2791762R	LC FILTER 10,000PF	D303	2338321M	DI 1SS270
CP5105	2791762R	LC FILTER 10,000PF	D304	2338321M	DI 1SS270
CP5107	2791751R	LC FILTER 22PF	D311	2337341M	DI 1SS270A (TP)
CP5108	2791751R	LC FILTER 22PF	D312	2338321M	DI 1SS270
CP5109	2791751R	LC FILTER 22PF	D313	2338321M	DI 1SS270
CP5110	2791751R	LC FILTER 22PF	D401	2333001M	DI RU2M
CR212	0890117R	CD 18PF 50V CH	D401	2338321M	DI 1SS270
CS01	0800359R	EL 1000MF 10V SMG	D402	2338321M	DI 1SS270
CS02	0890101R	CD 0.01MF 50V B	D403	2338321M	DI 1SS270
CS03	0880013R	PF 0.033MF 50V	D404	2338321M	DI 1SS270
CT01	0800015R	EL 10MF 16V SME	D405	2338321M	DI 1SS270
CT02	0890101R	CD 0.01MF 50V B	D406	2339481M	DI AS01Z 200V
CT03	0800048R	EL 100MF 10V SME	D413	2339867M	ZD HZS9C1
CT04	0890101R	CD 0.01MF 50V B	D490	2339869M	ZD HZS9C3
CT05	0800047R	EL 100MF 6 3V SME	D491	2339869M	ZD HZS9C3
CT06	0890101R	CD 0.01MF 50V B	D5101	2338321M	DI 1SS270
CT07	0800048R	EL 100MF 10V SME	D5102	2338321M	DI 1SS270
CT08	0890101R	CD 0.01MF 50V B	D514	2339869M	ZD HZS9C3
CZ01	0800048R	EL 100MF 10V SME	D515	2339869M	ZD HZS9C3
CZ02	0800047R	EL 100MF 6 3V SME	D516	2339869M	ZD HZS9C3
CZ03	0800003R	EL 1MF 50V SME	D610	CH00681M	DI 11ES2 200V
CZ04	0800003R	EL 1MF 50V SME	D611	2339231M	ZD HZS30-1L
CZ05	0800003R	EL 1MF 50V SME	D612	2339231M	ZD HZS30-1L
CZ06	0800049R	EL 100M 16V SME	D613	2338321M	DI 1SS270
CZ07	0890101R	CD 0.01MF 50V B	D701	2348511	DI RS3FS
CZ08	0800003R	EL 1MF 50V SME	D702	2348511	DI RS3FS
CZ09	0800003R	EL 1MF 50V SME	D703	2344071	DI ERC20M-04
CZ10	0800003R	EL 1MF 50V SME	D704	2359361M	DI EL1ZV
CZ52	0800048R	EL 100MF 10V SME	D705	2338902M	DI DFM1SA4
CZ53	0800041R	EL 47MF 16V SME	D706	CH00711M	DI 10ELS2
CZ54	0800047R	EL 100MF 6 3V SME	D707	2338902M	DI DFM1SA4
CZ80	0800353R	EL 470MF 16V SMG	D710	2338321M	DI 1SS270
CZ81	0800353R	EL 470MF 16V SMG	D741	CH00711M	DI 10ELS2
CZ82	0800041R	EL 47MF 16V SME	D742	2339889M	ZD HZS12C3
D001	2338321M	DI 1SS270	D743	2339151M	ZD HZS12C1L
D004	2338321M	DI 1SS270	D744	CH00711M	DI 10ELS2
D007	2339869M	ZD HZS9C3	D745	2339889M	ZD HZS12C3
D015	CH00231A	LED SLH-56VC3F	$\triangle$ D746	2339212M	ZD HZS24-2L
D016	CH00232	LED SLH-56MC	D747	2335991M	ZD HZT33-02

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SYMBOL NO.	PART NO.	DESCRIPTION	SYMBOL NO.	PART NO.	DESCRIPTION
D748	2339151M	ZD HZS12C1L	DA06	2338321M	DI 1SS270
D749	2338321M	DI 1SS270	DA07	2338321M	DI 1SS270
D794	2344041M	DI 1SS254/1SS270	DA08	2338321M	DI 1SS270
D795	2344041M	DI 1SS254/1SS270	DA09	2338321M	DI 1SS270
D801	2344041M	DI 1SS254/1SS270	DA10	2338321M	DI 1SS270
D802	2344041M	DI 1SS254/1SS270	DA11	2338321M	DI 1SS270
D803	2344041M	DI 1SS254/1SS270	DA12	2338321M	DI 1SS270
D804	2339869M	ZD HZS9C3	DA13	2338321M	DI 1SS270
D805	2344041M	DI 1SS254/1SS270	DA14	2338321M	DI 1SS270
D807	2344041M	DI 1SS254/1SS270	DA14	2339481M	DI AS01Z 200V
D809	2344041M	DI 1SS254/1SS270	DA90	2338321M	DI 1SS270
D810	2344041M	DI 1SS254/1SS270	DA91	2338321M	DI 1SS270
D812	2344041M	DI 1SS254/1SS270	DE41	2339862M	ZD HZS9A2
D841	2344041M	DI 1SS254/1SS270	DK167	2333001M	DI RU2M
D842	2344041M	DI 1SS254/1SS270	DZ01	2339863M	ZD HZS9A3
D843	2339491M	DI AM01Z 200V	DZ51	2339845M	ZD HZS6B2
D844	2339491M	DI AM01Z 200V	DZ80	2339022M	ZD HZS6B2L
D845	2339491M	DI AM01Z 200V	DZ81	2339042M	ZD HZS7A2L
D846	2339491M	DI AM01Z 200V	Δ E	2698673	SOE-HPS1401-019690
D848	2338321M	DI 1SS270	E001	2122652	FERRITE CORE WITH LEAD
D901	2338313	DI RBV-406M (60V)	E001	2902269	10P MINI PLUG PIN WITH BASE (T/TEXT)
D902	CH00711M	DI 10ELS2	E008	2905241	ADAPTOR
D903	CH00711M	DI 10ELS2	E009	3705233	ANODE CLAMPER
D904	CH00711M	DI 10ELS2	E1001	2941311	BATTERY EVEREADY AA1015
D906	CH00711M	DI 10ELS2	E1L	1EF2014	3P CONN W/WIRES (#2NC)
D907	CH00711M	DI 10ELS2	E1R	1EF2013	2P CONN W/WIRES (L=680)
D908	CH00712M	DI 10ELS4 400V	E1TXT	1EF2010	10P CONNECTOR WITH WIRES
D909A	2339481M	DI AS01Z	E1VMC	2979222	CO-02C-C2R5-121(VM)
D909B	2339481M	DI AS01Z	E1Y1	2973833	7P CONN W/WIRES (L=680)
D910	2339884M	ZD HZS12B1	E1Y2	1EF2008	5P CONN W/WIRES (#2NC)
D920	2339053M	ZD HZS7B3L	E1Y3	2997976	1P CONNECTOR WITH LEAD
D940	2339844M	ZD HZS6B1	E201	2122652M	FERRITE CORE WITH LEAD
D941	2338321M	DI 1SS270	E2A1	ED00363	5P PIN POST
D951	2338931	DI FMG-G26S	E2A2	ED00363	5P PIN POST
D952	2338902M	DI DFM1SA4	E2A3	1ML2001	SHOULDER PIN RIVET (TAIKO)
D953	2349851	DI FMB-G16L	E301	2693863	TERMINAL JPJ1989
D954	CH00711M	DI 10ELS2	E302	2693851	TERMINAL JXT1043
D955	CH00711M	DI 10ELS2	E304	2673601	US 13PIN JACK
D956	2338944	DI FML-G12S (F)	E401	2674646	PH 12P CONNECTOR
D957	CH00711M	DI 10ELS2	E502	2902269	10P MINI PLUG PIN WITH BASE
D959	2338321M	DI 1SS270	E507	2674646	PH 12P CONNECTOR
D961	CH00711M	DI 10ELS2	E508	2674645	JP 10 PIN CONNECTOR
D970	2339022M	ZD HZS6B2L	E510	2674646	PH 12P CONNECTOR
D971	2339051M	ZD HZS7B1L	E5101	1EA2002	8P "F" CONNECTOR
D972	2339888M	ZD HZS12C2	E5102	1EA2003	13P "F" CONNECTOR
D973	2339837M	ZD HZS5C1	E701	2665272	4P PLUG PIN W/BASE (UL) HAS
D975	2338321M	DI 1SS270	E902	2661753	4P PLUG PIN WITH BASE
DA01	2338321M	DI 1SS270	E903	2786227	CONN W/WIRE MINI 2J 350
DA02	2338321M	DI 1SS270	E903	2995909	2J PROCESSED WIRE WITH AMPIN
DA05	2338321M	DI 1SS270			

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SYMBOL NO.	PART NO.	DESCRIPTION	SYMBOL NO.	PART NO.	DESCRIPTION
$\triangle$ E904	2972591	POWER CORD	IZ01	2008741	IC TEA5114A
E906A	2729252R	FUSE HOLDER	J401	2672041	HEADPHONE JACK
E906B	2729252R	FUSE HOLDER	L001	2123461M	FERRITE BEADS B 0.8 MH
EA01	ED01521	4P FG SOCKET	L002	2123461M	FERRITE BEADS B 0.8 MH
EA02	2723101J	2P PLUG PIN W/BASE	L002	2123781R	PEAKING COIL 100MH-K (T/TEXT)
EA03	2723102J	3P PLUG	L101	2123781R	PEAKING COIL 100MH-K
EAN1	EY00031	PINCABLE L TYPE 1 7C	L201	2143601	7MM SQUARE COIL
EAN2	EY00031	PINCABLE L TYPE 1 7C	L202	2143812	IF COIL WITH 7 CASE 11T
EB	2776541	MAGNET ETC35C61FA	L203	BH00614	VCO COIL 38.9MHZ
EFS	2956783	2P CONNECTOR WITH WIRE (UL3239)	L204	2123407M	LAL AXIAL COIL 0.47MH
ES01	2675591	12P PLUG PIN	L205	2123097M	LAL AXIAL COIL 3.9MH
ES02	2675588	10P PLUG PIN	L207	2123104M	LAL AXIAL COIL 12MH
ESPG	2902261	2P MINI PLUG PIN WITH BASE	L208	2123102M	LAL AXIAL COIL 8.2MH
EW01	EF05191	4P CONNECTOR W/FG,UP,FASTEN	L208	2123461M	FERRITE BEADS B 0.8 MH
EZ03	2902264	5P MINI PLUG PIN WITH BASE	L209	2122253M	LAL AXIAL COIL 100MH
$\triangle$ F901	2720402	FUSE 3 15A	L209	2123103M	LAL AXIAL COIL 10MH
G901	CJ00071R	SPARK GAP	L210	2123103M	LAL AXIAL COIL 10MH
H301	HP00151	Y/C COMB FILTER	L211	2123099M	LAL AXIAL COIL 5.6MH
H304	2661756	1P PLUG PIN WITH BASE	L212	2123103M	LAL AXIAL COIL 10MH
I001	CP04361	IC M37271EFSP	L2A1	2123412M	LAL AXIAL COIL 1.2MH
I002	CP03981	IC S24C08A	L2A2	2123415M	LAL AXIAL COIL 2.2MH
I004	2003522R	IC PST5720-7	L301	2123781R	PEAKING COIL 100MH
I201	CP03771	IC LA7566	L302	2123781R	PEAKING COIL 100MH
I301	CP03781	IC MM1313AD	L380	2122949M	LAL AXIAL COIL 33MH
I402	2004901	IC TA8776N	L401	2145992	6.0MHZ COIL
I501	CP03791U	IC TB1226AN	L402	2145991	SIF COIL 4.5MHZ
I502	2003981	IC BA7604N	L403	2123106M	LAL AXIAL COIL 18MH
$\triangle$ I601	CP03651	IC TA8427K	L405	2123461M	FERRITE BEADS B 0.8MH
$\triangle$ I901	2373382	IC STR-S6709	L501	2123781R	PEAKING COIL 100MH
$\triangle$ I902	2004761	IC TLP631	L502	2123781R	PEAKING COIL 100MH
$\triangle$ I903	2003423	IC UPC7893AHF	L5101	2123781R	PEAKING COIL 100MH
IA01	2004681	IC TA8218AH	L5102	2123781R	PEAKING COIL 100MH
IA02	CP01251U	IC AN7395K	L5103	2123781R	PEAKING COIL 100MH
IC0001	2004691	IC MM1118XS (T/TEXT)	L5104	2123781R	PEAKING COIL 100MH
IC201	2004171	IC LA7577	L5106	2123781R	PEAKING COIL 100MH
IC202	2004693	IC MM1113XS	L5107	2123781R	PEAKING COIL 100MH
IC401	2020561	IC LA7975	L5201	2123781R	PEAKING COIL 100MH-(T/TEXT)
IC5101	CP01611U	IC TDA9160A	L5202	2123098M	LAL AXIAL COIL 4.7MH (T/TEXT)
IC5102	CP02611	IC TDA4665	L5203	2122956M	LAL AXIAL COIL 100MH (T/TEXT)
IC5103	CK02691U	IC SDA9187X	L611	2123461M	FERRITE BEADS 0.8MH
IC5104	CK02701U	IC SDA9189X	L701	2124183	CHOKE COIL
IC5201	2009902	IC SAA5281ZP/E (T/TEXT)	L702	BZ01351	LINEARITY COIL 27MH
IC5202	CP00241	IC T900580 (T/T/EXT)	L703	2125763R	RADIAL COIL 27MH
IC5203	2007951	IC M-BR24C02 (T/TEXT)	L704	2122095	FIXED COIL 27MH
IF1	ED00201	12P CONNECTOR WITH LOCK	L7A1	2123781R	PEAKING COIL 100MH
IF2	ED00198	10P CONNECTOR WITH LOCK	L801	2123766R	RADIAL COIL 180MH
IH01	2004362	IC CXA1279AS	L802	2123766R	RADIAL COIL 180MH
IH02	2387304	IC M5218AP	L803	2123766R	RADIAL COIL 180MH
IS01	2366621	INTEGRATED CIRCUIT LA7910	L804	2123763R	COIL 100MH
			L805	2123763R	COIL 100MH

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SYMBOL NO.	PART NO.	DESCRIPTION	SYMBOL NO.	PART NO.	DESCRIPTION
L806	2123763R	COIL 100MH	PVMC	2902261	2P MINI PLUG PIN WITH BASE
L841	2122944M	LAL AXIAL COIL 12MH	PY1	2902266	7P SUB MINI PLUG PIN
L842	2123468M	FERRITE CORE 0 8MH	PY2	2675216	PLG-05P2R5VPWB4
L843	2123468M	FERRITE CORE 0 8MH	PY3	2661756	1P PLUG PIN WITH BASE
L844	2123468M	FERRITE CORE 0.8MH	Q001	CF00865R	TR 2SA1980 Y/G (T/TEXT)
 L901	2276072	LINE FILTER 15MH	Q002	2327773M	TR 2SC3413C/D
L904	2161152	FILTER COIL	Q002	CF00875R	TR 2SC5343 Y/G (T/TEXT)
 L905	2276061	DEGAUSSING COIL	Q003	2326875R	TR DTC144WS (T/TEXT)
L906	2123461M	FERRITE BEADS 0.8 MH	Q003	2327773M	TR 2SC3413C/D
L951	2123462M	FERRITE BEADS 2.3MH	Q004	2312995	PHOTO TRS RPT-38PT3F(L/M)
L952	2123462M	FERRITE BEADS 2 3MH	Q004	CF00875R	TR 2SC5343 Y/G (T/TEXT)
L953	2125803N	COIL 27MH	Q005	2326873R	TR DTC144ES
L956	2125808N	COIL 68MH	Q005	CF00875R	TR 2SC5343 Y/G (T/TEXT)
L957	2123462M	FERRITE BEADS 2 3MH	Q006	CF00875R	TR 2SC5343 Y/G (T/TEXT)
L958	2123462M	FERRITE BEADS 2 3MH	Q007	CF00865R	TR 2SA1980 Y/G (T/TEXT)
L959	2123462M	FERRITE BEADS 2 3MH	Q008	CF00875R	TR 2SC5343 Y/G (T/TEXT)
L960	2123462M	FERRITE BEADS 2 3MH	Q201	2320144M	TR 2SC1906
L961	2123461M	FERRITE BEADS 0.8 MH	Q202	2320144M	TR 2SC1906
L962	2123461M	FERRITE BEADS 0 8 MH	Q203	2326872R	TR DTC114ES
L963	2123461M	FERRITE BEADS 0 8 MH	Q204	2326872R	TR DTC114ES
L964	2123461M	FERRITE BEADS 0 8 MH	Q204	2327752M	TR 2SA1390 B/C
L965	2125808N	COIL 68MH	Q205	2326872R	TR DTC114ES
L971	2125804N	FILTER COIL 33MH	Q205	2326873R	TR DTC144ES
L973	2123462M	FERRITE BEADS 2.3MH	Q206	2326872R	TR DTC114ES
L974	2123462M	FERRITE BEADS 2 3MH	Q206	2327773M	TR 2SC3413C/D
L999	2123462M	FERRITE BEADS 2 3MH	Q207	2325702M	TR 2SA854S Q/R
LA01	2123468M	FERRITE CORE WITH LEAD 0 8MH	Q2A1	2326872R	TR DTC114ES
LA02	2123468M	FERRITE CORE WITH LEAD 0.8MH	Q2A2	2320144M	TR 2SC1906
LA03	2123468M	FERRITE CORE WITH LEAD 0 8MH	Q2A3	2320144M	TR 2SC1906
LA04	2123468M	FERRITE CORE WITH LEAD 0.8MH	Q301	2327751M	TR 2SA1390 B/C/D
LE13	2123461M	FERRITE BEADS B 0 8 MH	Q303	2327752M	TR 2SA1390 B/C
LE16	2123781R	PEAKING COIL 100MH-K	Q304	2327754M	TR 2SA1390 D
LK059	2123461M	FERRITE BEADS B 0 8 MH	Q305	2327751M	TR 2SA1390 B/C/D
LS01	2123781R	PEAKING COIL 100MH-K	Q306	2327751M	TR 2SA1390 B/C/D
LT01	2123781R	PEAKING COIL 100MH-K	Q401	2327773M	TR 2SC3413C/D
LT02	2123781R	PEAKING COIL 100MH-K	Q402	2326873R	TR DTC144ES
LT03	2123781R	PEAKING COIL 100MH-K	Q402	2327773M	TR 2SC3413C/D
LZ01	2123781R	PEAKING COIL 100MH-K	Q403	2326873R	TR DTC144ES
LZ02	2123781R	PEAKING COIL 100MH-K	Q404	2326873R	TR DTC144ES
N	4615641A	WEDGE	Q404	2327773M	TR 2SC3413C/D
N001	3708105	LED HOLDER	Q405	2326873R	TR DTC144ES
N01	1PH2003	WEDGE	Q405	2327773M	TR 2SC3413C/D
N02	2772982K	FERRITE SHEET	Q406	2326873R	TR DTC144ES
N701	3790171	DEGAUSSING COIL HOLDER	Q406	2327773M	TR 2SC3413C/D
N702	3333923	EARTH SPRING	Q407	2326873R	TR DTC144ES
PSCR	2665271	3P PLUG PIN W/BASE	Q407	2327773M	TR 2SC3413C/D
PSD1	2674635	PLUG PIN	Q414	2327773M	TR 2SC3413C/D
PSD2	2674636	PLUG PIN	Q415	2327773M	TR 2SC3413C/D
PSD3	2674636	PLUG PIN	Q416	2327773M	TR 2SC3413C/D
PSD4	2674636	PLUG PIN	Q417	2327773M	TR 2SC3413C/D

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SYMBOL NO.	PART NO.	DESCRIPTION	SYMBOL NO.	PART NO.	DESCRIPTION
Q470	2327773M	TR 2SC3413C/D	Q849	2315391	TR 2SC4793
Q501	2326873R	TR DTC144ES	Q850	2327772M	TR 2SC3413 B/C
Q5101	CF01421R	TR KTC3198 GR	Q851	2327773M	TR 2SC3413C/D
Q5102	CF01431R	TR KTA 1266Y	Q901	2312174	TR 2SD2375 (P)
Q5103	CF01421R	TR KTC3198 GR	Q930	2321351M	TR 2SA836/844D/E
Q5104	CF01431R	TR KTA 1266Y	Q951	CF00114R	TR 2SC4490AN Q,R,T
Q5105	CF01421R	TR KTC3198 GR	Q952	2315933	TR 2SB1548A-P/Q
Q5106	CF01421R	TR KTC3198 GR	Q953	CF00114R	TR 2SC4490AN Q,R,T
Q5107	CF01421R	TR KTC3198 GR	Q954	2315931	TR 2SB1548A-P
Q5108	CF01421R	TR KTC3198 GR	Q955	2320665R	TR 2SC1213A(D R)
Q5109	CF01421R	TR KTC3198 GR	Q956	2320647M	TR 2SC1213 C/D
Q5110	CF01421R	TR KTC3198 GR	Q957	2320647M	TR 2SC1213 C/D
Q5111	CF01421R	TR KTC3198 GR	Q958	2315933	TR 2SB1548A-P/Q
Q5171	CF01421R	TR KTC3198 GR	Q959	2320637M	TR 2SA673 C/D
Q5172	CF01421R	TR KTC3198 GR	Q961	2327753M	TR 2SA1390 C/D
Q5173	CF01421R	TR KTC3198 GR	Q962	2312171	TR 2SC3852
Q5174	CF01421R	TR KTC3198 GR	QA01	2327773M	TR 2SC3413C/D
Q5201	CF00875R	TR 2SC5343 Y/G (T/TEXT)	QA50	2327753M	TR 2SA1390 C/D
Q604	2321351M	TR 2SA836/844D/E	QS01	CF01421R	TR KTC3198 GR
Q661	2315933	TR 2SB1548A-P/Q	QZ10	2327773M	TR 2SC3413C/D
Q662	2323522M	TR 2SD789E	QZ51	2003423	IC UPC7893AHF
Q663	2327752M	TR 2SA1390 B/C	QZ52	2312171	TR 2SC3852
Q664	2327773M	TR 2SC3413C/D	QZ80	2324611	TR 2SD882 Q/P
Q665	2327773M	TR 2SC3413C/D	R001	0700029M	CF 150 OHM 1/16W +-5% (T/TEXT)
Q666	2327773M	TR 2SC3413C/D	CF	0700054M	CF 10K OHM 1/16W +-5%
$\triangle$ Q708	2315451	TR BU2508AF	R002	0700029M	CF 150 OHM 1/16W +-5% (T/TEXT)
$\triangle$ Q709	2326216	TR 2SC3116 S/T	R002	0700055M	CF 12K OHM 1/16W +-5%
Q740	2320663M	TR 2SC1213AC	R003	0700034M	CF 330 OHM 1/16W +-5% (T/TEXT)
Q741	2321112M	TR 2SA778AK-02	R003	0700051M	CF 5 6K OHM 1/16W +-5%
$\triangle$ Q742	2323782	THYRISTOR 03P2M	R004	0700049M	CF 4 7K OHM 1/16W +-5% (T/TEXT)
$\triangle$ Q742	2323782R	THYRISTOR 03P2M	R004	0700056M	CF 15K OHM 1/16W +-5%
Q801	CF00951	TR KTC 3229	R005	0700041M	CF 1K OHM 1/16W +-5%
Q802	CF00951	TR KTC 3229	R005	0700047M	CF 3 3K OHM 1/16W +-5% (T/TEXT)
Q803	CF00951	TR KTC 3229	R006	0700024M	CF 56 OHM 1/16W +-5% (T/TEXT)
Q804	2320663M	TR 2SC1213AC	R006	0700041M	CF 1K OHM 1/16W +-5%
Q805	2320663M	TR 2SC1213AC	R007	0700041M	CF 1K OHM 1/16W +-5% (T/TEXT)
Q806	2320663M	TR 2SC1213AC	R008	0700041M	CF 1K OHM 1/16W +-5% (T/TEXT)
Q807	2327772M	TR 2SC3413 B/C	R008	0700051M	CF 5 6K OHM 1/16W +-5%
Q808	2327772M	TR 2SC3413 B/C	R009	0700041M	CF 1K OHM 1/16W +-5% (T/TEXT)
Q809	2327772M	TR 2SC3413 B/C	R009	0700046M	CF 2 7K OHM 1/16W +-5%
Q810	2320637M	TR 2SA673 C/D	R010	0100065M	CF 1K OHM 1/8W +-5%
Q811	2327772M	TR 2SC3413 B/C	R012	0700027M	CF 100 OHM 1/16W +-5% (T/TEXT)
Q841	2327772M	TR 2SC3413 B/C	R013	0700054M	CF 10K OHM 1/16W +-5%
Q842	2327772M	TR 2SC3413 B/C	R014	0700027M	CF 100 OHM 1/16W +-5%
Q843	2327772M	TR 2SC3413 B/C	R015	0700027M	CF 100 OHM 1/16W +-5% (T/TEXT)
Q844	2327772M	TR 2SC3413 B/C	R016	0700027M	CF 100 OHM 1/16W +-5% (T/TEXT)
Q845	2327772M	TR 2SC3413 B/C	R017	0700027M	CF 100 OHM 1/16W +-5% (T/TEXT)
Q846	2327783M	TR 2SC3553 C/D	R018	0700024M	CF 56 OHM 1/16W +-5% (T/TEXT)
Q847	2321351M	TR 2SA836/844D/E	R018	0700058M	CF 22K OHM 1/16W +-5%
Q848	2315381	TR 2SA1837	R019	0700034M	CF 330 OHM 1/16W +-5% (T/TEXT)

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SYMBOL NO.	PART NO.	DESCRIPTION	SYMBOL NO.	PART NO.	DESCRIPTION
R019	0700048M	CF 3.9K OHM 1/16W +-5%	R071	0100129M	CF 470K OHM 1/8W +-5%
R020	0700032M	CF 220 OHM 1/16W +-5% (T/TEXT)	R072	0100125M	CF 330K OHM 1/8W +-5%
R020	0700058M	CF 22K OHM 1/16W +-5%	R073	0100117M	CF 150K OHM 1/8W +-5%
R021	0700032M	CF 220 OHM 1/16W +-5% (T/TEXT)	R074	0100121M	CF 220K OHM 1/8W +-5%
R021	0700054M	CF 10K OHM 1/16W +-5%	R075	0700056M	CF 15K OHM 1/16W +-5%
R022	0100117M	CF 150K OHM 1/8W +-5%	R077	0700041M	CF 1K OHM 1/16W +-5%
R022	0700054M	CF 10K OHM 1/16W +-5% (T/TEXT)	R078	0700027M	CF 100 OHM 1/16W +-5%
R023	0700054M	CF 10K OHM 1/16W +-5% (T/TEXT)	R080	0700053M	CF 8 2K OHM 1/16W +-5%
R023	0700067M	CF 100K OHM 1/16W +-5%	R081	0700047M	CF 3 3K OHM 1/16W +-5%
R024	0700048M	CF 3 9K OHM 1/16W +-5%	R087	0700058M	CF 22K OHM 1/16W +-5%
R025	0700062M	CF 39K OHM 1/16W +-5%	R088	0700058M	CF 22K OHM 1/16W +-5%
R027	0700027M	CF 100 OHM 1/16W +-5%	R089	0700046M	CF 2 7K OHM 1/16W +-5%
R028	0700056M	CF 15K OHM 1/16W +-5%	R090	0700046M	CF 2 7K OHM 1/16W +-5%
R030	0700032M	CF 220 OHM 1/16W +-5% (T/TEXT)	R091	0700046M	CF 2 7K OHM 1/16W +-5%
R031	0700027M	CF 100 OHM 1/16W +-5%	R095	0700027M	CF 100 OHM 1/16W +-5%
R031	0700043M	CF 1 5K OHM 1/16W +-5% (T/TEXT)	R096	0700043M	CF 1 5K OHM 1/16W +-5%
R032	0700029M	CF 150 OHM 1/16W +-56% (T/TEXT)	R097	0700051M	CF 5.6K OHM 1/16W +-5%
R032	0700041M	CF 1K OHM 1/16W +-5%	R098	0700051M	CF 5 6K OHM 1/16W +-5%
R033	0700027M	CF 100 OHM 1/16W +-5% (T/TEXT)	R099	0700041M	CF 1K OHM 1/16W +-5%
R034	0700041M	CF 1K OHM 1/16W +-5%	R100	0700056M	CF 15K OHM 1/16W +-5%
R035	0110207S	MF 27 OHM 2W +-5% (T/TEXT)	R101	0700027M	CF 100 OHM 1/16W +-5%
R035	0700041M	CF 1K OHM 1/16W +-5%	R102	0700027M	CF 100 OHM 1/16W +-5%
R036	0700041M	CF 1K OHM 1/16W +-5%	R201	0700014M	CF 10 OHM 1/16W +-5%
R037	0700041M	CF 1K OHM 1/16W +-5%	R202	0700051M	CF 5 6K OHM 1/16W +-5%
R037	0700054M	CF 10K OHM 1/16W +-5% (T/TEXT)	R203	0700045M	CF 2 2K OHM 1/16W +-5%
R038	0700041M	CF 1K OHM 1/16W +-5% (T/TEXT)	R204	0114135M	CF 150 OHM 1/4W +-5%
R039	0700027M	CF 100 OHM 1/16W +-5%	R205	0700014M	CF 10 OHM 1/16W +-5%
R040	0700027M	CF 100 OHM 1/16W +-5%	R205	0700045M	CF 2 2K OHM 1/16W +-5%
R041	0700027M	CF 100 OHM 1/16W +-5%	R206	0700027M	CF 100 OHM 1/16W +-5%
R044	0700027M	CF 100 OHM 1/16W +-5%	R207	0700037M	CF 560 OHM 1/16W +-5%
R045	0700027M	CF 100 OHM 1/16W +-5%	R208	0114143M	CF 330 OHM 1/4W +-5%
R046	0700047M	CF 3 3K OHM 1/16W +-5%	R208	0700041M	CF 1K OHM 1/16W +-5%
R047	0700047M	CF 3 3K OHM 1/16W +-5%	R209	0114149M	CF 560 OHM 1/4W +-5%
R048	0700041M	CF 1K OHM 1/16W +-5%	R209	0700065M	CF 68K OHM 1/16W +-5%
R050	0150262	VR 2K OHM-B (T/TEXT)	R213	0700014M	CF 10 OHM 1/16W +-5%
R050	0700058M	CF 22K OHM 1/16W +-5%	R213	0700037M	CF 560 OHM 1/16W +-5%
R051	0700035M	CF 390 OHM 1/16W +-5%	R214	0700045M	CF 2 2K OHM 1/16W +-5%
R052	0700035M	CF 390 OHM 1/16W +-5%	R214	0700056M	CF 15K OHM 1/16W +-5%
R053	0700041M	CF 1K OHM 1/16W +-5%	R215	0700051M	CF 5 6K OHM 1/16W +-5%
R054	0700046M	CF 2 7K OHM 1/16W +-5%	R216	0700045M	CF 2 2K OHM 1/16W +-5%
R055	0700046M	CF 2 7K OHM 1/16W +-5%	R217	0700037M	CF 560 OHM 1/16W +-5%
R056	0700046M	CF 2 7K OHM 1/16W +-5%	R217	0700045M	CF 2 2K OHM 1/16W +-5%
R057	0700041M	CF 1K OHM 1/16W +-5%	R218	0700014M	CF 10 OHM 1/16W +-5%
R061	0700051M	CF 5 6K OHM 1/16W +-5%	R218	0700054M	CF 10K OHM 1/16W +-5%
R062	0700041M	CF 1K OHM 1/16W +-5%	R219	0700027M	CF 100 OHM 1/16W +-5%
R066	0700027M	CF 100 OHM 1/16W +-5%	R219	0700041M	CF 1K OHM 1/16W +-5%
R067	0100041M	CF 100 OHM 1/8W +-5%	R220	0150158	VR 30K OHM-B
R068	0700056M	CF 15K OHM 1/16W +-5%	R221	0700031M	CF 180 OHM 1/16W +-5%
R069	0700058M	CF 22K OHM 1/16W +-5%	R221	0700044M	CF 1 8K OHM 1/16W +-5%
R070	0700043M	CF 1 5K OHM 1/16W +-5%	R222	0700045M	CF 2 2K OHM 1/16W +-5%

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SYMBOL NO.	PART NO.	DESCRIPTION	SYMBOL NO.	PART NO.	DESCRIPTION
R223	0700054M	CF 10K OHM 1/16W +5%	R2C1	AW00131	VR 100K OHM +5%
R223	0700063M	CF 47K OHM 1/16W +5%	R302	0100038M	CF 75 OHM 1/8W +5%
R224	0700032M	CF 220 OHM 1/16W +5%	R303	0100041M	CF 100 OHM 1/8W +5%
R224	0700037M	CF 560 OHM 1/16W +5%	R304	0100113M	CF 100K OHM 1/8W +5%
R225	0700041M	CF 1K OHM 1/16W +5%	R305	0100041M	CF 100 OHM 1/8W +5%
R226	0700027M	CF 100 OHM 1/16W +5%	R306	0100105M	CF 47K OHM 1/8W +5%
R226	0700062M	CF 39K OHM 1/16W +5%	R307	0100041M	CF 100 OHM 1/8W +5%
R227	0100051M	CF 270 OHM 1/8W +5%	R308	0700025M	CF 68 OHM 1/16W +5%
R227	0700033M	CF 270 OHM 1/16W +5%	R309	0100045M	CF 2.2K OHM 1/16W +5%
R228	0700033M	CF 270 OHM 1/16W +5%	R310	0700027M	CF 100 OHM 1/16W +5%
R228	0700037M	CF 560 OHM 1/16W +5%	R311	0700054M	CF 10K OHM 1/16W +5%
R229	0700031M	CF 180 OHM 1/16W +5%	R312	0100113M	CF 100K OHM 1/8W +5%
R230	0700032M	CF 220 OHM 1/16W +5%	R313	0100041M	CF 100 OHM 1/8W +5%
R231	0700032M	CF 220 OHM 1/16W +5%	R314	0100105M	CF 47K OHM 1/8W +5%
R232	0150134	VR 1K OHM-B	R315	0100041M	CF 100 OHM 1/8W +5%
R233	0700041M	CF 1K OHM 1/16W +5%	R316	0100038M	CF 75 OHM 1/8W +5%
R234	0700041M	CF 1K OHM 1/16W +5%	R317	0100041M	CF 100 OHM 1/8W +5%
R234	0700063M	CF 47K OHM 1/16W +5%	R318	0100038M	CF 75 OHM 1/8W +5%
R235	0700037M	CF 560 OHM 1/16W +5%	R319	0100041M	CF 100 OHM 1/8W +5%
R235	0700045M	CF 2.2K OHM 1/16W +5%	R320	0100113M	CF 100K OHM 1/8W +5%
R236	0700037M	CF 560 OHM 1/16W +5%	R321	0700058M	CF 22K OHM 1/16W +5%
R237	0187058M	CF 510 OHM 1/16W +5%	R322	0700056M	CF 15K OHM 1/16W +5%
R237	0700027M	CF 100 OHM 1/16W +5%	R323	0700058M	CF 22K OHM 1/16W +5%
R238	0700039M	CF 820 OHM 1/16W +5%	R324	0100129M	CF 470k OHM 1/8W +5%
R240	0700041M	CF 1K OHM 1/16W +5%	R326	0100129M	CF 470k OHM 1/8W +5%
R242	0700029M	CF 150 OHM 1/16W +5%	R328	0100038M	CF 75 OHM 1/8W +5%
R245	0700027M	CF 100 OHM 1/16W +5%	R329	0700027M	CF 100 OHM 1/16W +5%
R246	0700064M	CF 56K OHM 1/16W +5%	R330	0700027M	CF 100 OHM 1/16W +5%
R247	0700051M	CF 5.6K OHM 1/16W +5%	R331	0100041M	CF 100 OHM 1/8W +5%
R264	0700041M	CF 1K OHM 1/16W +5%	R332	0100041M	CF 100 OHM 1/8W +5%
R265	0700047M	CF 3.3K OHM 1/16W +5%	R333	0700063M	CF 47K OHM 1/16W +5%
R266	0700054M	CF 10K OHM 1/16W +5%	R336	0100038M	CF 75 OHM 1/8W +5%
R267	0700063M	CF 47K OHM 1/16W +5%	R338	0100105M	CF 47K OHM 1/8W +5%
R2A1	0700014M	CF 10 OHM 1/16W +5%	R340	0100105M	CF 47K OHM 1/8W +5%
R2A2	0700025M	CF 68 OHM 1/16W +5%	R341	0700027M	CF 100 OHM 1/16W +5%
R2A3	0700058M	CF 22K OHM 1/16W +5%	R342	0700027M	CF 100 OHM 1/16W +5%
R2A4	0700023M	CF 47 OHM 1/16W +5%	R343	0700027M	CF 100 OHM 1/16W +5%
R2A5	0700045M	CF 2.2K OHM 1/16W +5%	R344	0700027M	CF 100 OHM 1/16W +5%
R2A6	0700051M	CF 5.6K OHM 1/16W +5%	R345	0700027M	CF 100 OHM 1/16W +5%
R2A7	0700044M	CF 1.8K OHM 1/16W +5%	R346	0700027M	CF 100 OHM 1/16W +5%
R2A8	0700037M	CF 560 OHM 1/16W +5%	R347	0700027M	CF 100 OHM 1/16W +5%
R2A9	0700016M	CF 15 OHM 1/16W +5%	R348	0700027M	CF 100 OHM 1/16W +5%
R2B1	0700027M	CF 100 OHM 1/16W +5%	R349	0700027M	CF 100 OHM 1/16W +5%
R2B2	0114135M	CF 150 OHM 1/4W +5%	R352	0100091M	CF 12K OHM 1/8W +5%
R2B3	0700051M	CF 5.6K OHM 1/16W +5%	R354	0700036M	CF 470 OHM 1/16W +5%
R2B4	0700045M	CF 2.2K OHM 1/16W +5%	R355	0187038M	CF 75 OHM 1/16W +5%
R2B5	0700014M	CF 10 OHM 1/16W +5%	R360	0700027M	CF 100 OHM 1/16W +5%
R2B6	0700027M	CF 100 OHM 1/16W +5%	R361	0700041M	CF 1K OHM 1/16W +5%
R2B7	0700032M	CF 220 OHM 1/16W +5%	R362	0700041M	CF 1K OHM 1/16W +5%
R2B8	0114135M	CF 150 OHM 1/4W +5%	R363	0700027M	CF 100 OHM 1/16W +5%

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SYMBOL NO.	PART NO.	DESCRIPTION	SYMBOL NO.	PART NO.	DESCRIPTION
R364	0700027M	CF 100 OHM 1/16W +5%	R424	0700054M	CF 10K OHM 1/16W +5%
R366	0700027M	CF 100 OHM 1/16W +5%	R425	0700027M	CF 100 OHM 1/16W +5%
R367	0700027M	CF 100 OHM 1/16W +5%	R425	0700051M	CF 5 6K OHM 1/16W +5%
R368	0700027M	CF 100 OHM 1/16W +5%	R428	0700059M	CF 27K OHM 1/16W +5%
R369	0700027M	CF 100 OHM 1/16W +5%	R429	0700059M	CF 27K OHM 1/16W +5%
R370	0700027M	CF 100 OHM 1/16W +5%	R430	0700056M	CF 15K OHM 1/16W +5%
R371	0700027M	CF 100 OHM 1/16W +5%	R431	0700056M	CF 15K OHM 1/16W +5%
R372	0700027M	CF 100 OHM 1/16W +5%	R432	0700044M	CF 1 8K OHM 1/16W +5%
R373	0119514S	CF 10 OHM 1/4W +5%	R433	0700044M	CF 1.8K OHM 1/16W +5%
R374	0100122M	CF 240K OHM 1/8W +5%	R434	0700044M	CF 1 8K OHM 1/16W +5%
R375	0700027M	CF 100 OHM 1/16W +5%	R435	0700044M	CF 1 8K OHM 1/16W +5%
R376	0700027M	CF 100 OHM 1/16W +5%	R436	0700034M	CF 330 OHM 1/16W +5%
R380	0700044M	CF 1 8K OHM 1/16W +5%	R437	0700034M	CF 330 OHM 1/16W +5%
R381	0700027M	CF 100 OHM 1/16W +5%	R438	0700063M	CF 47K OHM 1/16W +5%
R386	0700037M	CF 560 OHM 1/16W +5%	R439	0700063M	CF 47K OHM 1/16W +5%
R387	0700027M	CF 100 OHM 1/16W +5%	R440	0700059M	CF 27K OHM 1/16W +5%
R388	0100065M	CF 1K OHM 1/8W +5%	R441	0700059M	CF 27K OHM 1/16W +5%
R389	0700027M	CF 100 OHM 1/16W +5%	R442	0700041M	CF 1K OHM 1/16W +5%
R390	0700041M	CF 1K OHM 1/16W +5%	R443	0700041M	CF 1K OHM 1/16W +5%
R391	0700041M	CF 1K OHM 1/16W +5%	R444	0700035M	CF 390 OHM 1/16W +5%
R392	0100053M	CF 330 OHM 1/8W +5%	R445	0700035M	CF 390 OHM 1/16W +5%
R393	0700038M	CF 680 OHM 1/16W +5%	R446	0700038M	CF 680 OHM 1/16W +5%
R394	0700027M	CF 100 OHM 1/16W +5%	R447	0700038M	CF 680 OHM 1/16W +5%
R395	0100057M	CF 470 OHM 1/8W +5%	R448	0100115M	CF 120K OHM 1/8W +5%
R396	0700037M	CF 560 OHM 1/16W +5%	R449	0100115M	CF 120K OHM 1/8W +5%
R397	0700027M	CF 100 OHM 1/16W +5%	R450	0700049M	CF 4 7K OHM 1/16W +5%
R399	0100041M	CF 100 OHM 1/8W +5%	R451	0700049M	CF 4 7K OHM 1/16W +5%
R3A1	0700045M	CF 2 2K OHM 1/16W +5%	R452	0700061M	CF 33K OHM 1/16W +5%
R401	0700027M	CF 100 OHM 1/16W +5%	R453	0700061M	CF 33K OHM 1/16W +5%
R402	0150136	VR 5K OHM-B	R454	0700061M	CF 33K OHM 1/16W +5%
R403	0700041M	CF 1K OHM 1/16W +5%	R455	0700061M	CF 33K OHM 1/16W +5%
R403	0700059M	CF 27K OHM 1/16W +5%	R456	0700054M	CF 10K OHM 1/16W +5%
R404	0700034M	CF 330 OHM 1/16W +5%	R457	0700045M	CF 2 2K OHM 1/16W +5%
R404	0700047M	CF 3 3K OHM 1/16W +5%	R458	0700045M	CF 2 2K OHM 1/16W +5%
R405	0700034M	CF 330 OHM 1/16W +5%	R459	0700054M	CF 10K OHM 1/16W +5%
R405	0700064M	CF 56k OHM 1/16W +5%	R469	0100127M	CF 100 OHM 1/16W +5%
R406	0700034M	CF 330 OHM 1/16W +5%	R470	0110215S	MF 56 OHM 2W +5%
R406	0700064M	CF 56K OHM 1/16W +5%	R471	0700027M	CF 100 OHM 1/16W +5%
R407	0700027M	CF 100 OHM 1/16W +5%	R472	0700027M	CF 100 OHM 1/16W +5%
R407	0700034M	CF 330 OHM 1/16W +5%	R473	0700027M	CF 100 OHM 1/16W +5%
R408	0100057M	CF 470 OHM 1/8W +5%	R474	0700027M	CF 100 OHM 1/16W +5%
R408	0700041M	CF 1K OHM 1/16W +5%	R475	0700038M	CF 680 OHM 1/16W +5%
R415	0700051M	CF 5 6K OHM 1/16W +5%	R476	0700051M	CF 5.6K OHM 1/16W +5%
R416	0700054M	CF 10K OHM 1/16W +5%	R478	0700041M	CF 1K OHM 1/16W +5%
R417	0700051M	CF 5 6K OHM 1/16W +5%	R479	0119514G	FR 10 OHM 1/4W +5%
R418	0700054M	CF 10K OHM 1/16W +5%	R480	0140972M	CF 10M OHM 2W +5%
R421	0700053M	CF 8 2K OHM 1/16W +5%	R490	0113725M	CF 100 OHM 1/2W +5%
R422	0700051M	CF 5 6K OHM 1/16W +5%	R491	0113725M	CF 100 OHM 1/2W +5%
R423	0700051M	CF 5 6K OHM 1/16W +5%	R502	0700027M	CF 100 OHM 1/16W +5%
R424	0700027M	CF 100 OHM 1/16W +5%	R504	0100041M	CF 100 OHM 1/8W +5%

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SYMBOL NO.	PART NO.	DESCRIPTION	SYMBOL NO.	PART NO.	DESCRIPTION
R505	0100041M	CF 100 OHM 1/8W +5%	R5147	0700051M	CF 5.6K OHM 1/16W +5%
R506	0100041M	CF 100 OHM 1/8W +5%	R5148	0700054M	CF 10K OHM 1/16W +5%
R507	0700027M	CF 100 OHM 1/16W +5%	R5149	0700027M	CF 100 OHM 1/16W +5%
R508	0700045M	CF 2.2K OHM 1/16W +5%	R5150	0700064M	CF 56k OHM 1/16W +5%
R509	0700045M	CF 2.2K OHM 1/16W +5%	R5152	0700027M	CF 100 OHM 1/16W +5%
R510	0700045M	CF 2.2K OHM 1/16W +5%	R5153	0700027M	CF 100 OHM 1/16W +5%
R5101	0700034M	CF 330 OHM 1/16W +5%	R5155	0700036M	CF 470 OHM 1/16W +5%
R5102	0700046M	CF 2.7K OHM 1/16W +5%	R5156	0700036M	CF 470 OHM 1/16W +5%
R5103	0700044M	CF 1.8K OHM 1/16W +5%	R5157	0700027M	CF 100 OHM 1/16W +5%
R5105	0700046M	CF 2.7K OHM 1/16W +5%	R5159	0700036M	CF 470 OHM 1/16W +5%
R5107	0700027M	CF 100 OHM 1/16W +5%	R516	0700041M	CF 1K OHM 1/16W +5%
R5108	0700027M	CF 100 OHM 1/16W +5%	R5160	0700036M	CF 470 OHM 1/16W +5%
R5109	0700027M	CF 100 OHM 1/16W +5%	R5161	0700027M	CF 100 OHM 1/16W +5%
R5110	0700027M	CF 100 OHM 1/16W +5%	R5163	0700036M	CF 470 OHM 1/16W +5%
R5111	0700027M	CF 100 OHM 1/16W +5%	R5164	0700036M	CF 470 OHM 1/16W +5%
R5112	0700027M	CF 100 OHM 1/16W +5%	R517	0700041M	CF 1K OHM 1/16W +5%
R5113	0700037M	CF 560 OHM 1/16W +5%	R5172	0187038M	CF 75 OHM 1/16W +5%
R5114	0700054M	CF 10K OHM 1/16W +5%	R5173	0700039M	CF 850 OHM 1/16W +5%
R5115	0700042M	CF 1.2K OHM 1/16W +5%	R5175	0700037M	CF 560 OHM 1/16W +5%
R5116	0700046M	CF 2.7K OHM 1/16W +5%	R5177	0700037M	CF 560 OHM 1/16W +5%
R5117	0700027M	CF 100 OHM 1/16W +5%	R5179	0700037M	CF 560 OHM 1/16W +5%
R5118	0700054M	CF 10K OHM 1/16W +5%	R518	0700041M	CF 1K OHM 1/16W +5%
R5119	0700049M	CF 4.7K OHM 1/16W +5%	R5181	0700054M	CF 10K OHM 1/16W +5%
R512	0700041M	CF 1K OHM 1/16W +5%	R5182	0700032M	CF 220 OHM 1/16W +5%
R5120	0700045M	CF 2.2K OHM 1/16W +5%	R519	0700054M	CF 10K OHM 1/16W +5%
R5121	0700049M	CF 4.7K OHM 1/16W +5%	R520	0700027M	CF 100 OHM 1/16W +5%
R5122	0700027M	CF 100 OHM 1/16W +5%	R5204	0700027M	CF 100 OHM 1/16W +5% (T/TEXT)
R5123	0700062M	CF 39k OHM 1/16W +5%	R5205	0700027M	CF 100 OHM 1/16W +5% (T/TEXT)
R5124	0700058M	CF 22k OHM 1/16W +5%	R5206	0700027M	CF 100 OHM 1/16W +5% (T/TEXT)
R5125	0700058M	CF 22k OHM 1/16W +5%	R5207	0700033M	CF 270 OHM 1/16W +5% (T/TEXT)
R5127	0700056M	CF 15k OHM 1/16W +5%	R5209	0700027M	CF 100 OHM 1/16W +5% (T/TEXT)
R5128	0700041M	CF 1K OHM 1/16W +5%	R521	0700027M	CF 100 OHM 1/16W +5%
R5129	0700027M	CF 100 OHM 1/16W +5%	R5210	0700047M	CF 3.3K OHM 1/16W +5% (T/TEXT)
R5130	0700027M	CF 100 OHM 1/16W +5%	R5211	0700059M	CF 27K OHM 1/16W +5% (T/TEXT)
R5131	0700027M	CF 100 OHM 1/16W +5%	R5212	0700029M	CF 150 OHM 1/16W +5% (T/TEXT)
R5132	0187110M	CF 75K OHM 1/16W +5%	R5213	0700036M	CF 470 OHM 1/16W +5% (T/TEXT)
R5133	0700043M	CF 1.5K OHM 1/16W +5%	R5214	0700036M	CF 470 OHM 1/16W +5% (T/TEXT)
R5134	0700043M	CF 1.5K OHM 1/16W +5%	R5215	0700036M	CF 470 OHM 1/16W +5% (T/TEXT)
R5135	0700043M	CF 1.5K OHM 1/16W +5%	R5216	0700036M	CF 470 OHM 1/16W +5% (T/TEXT)
R5136	0187086M	CF 7.5K OHM 1/16W +5%	R522	0700027M	CF 100 OHM 1/16W +5%
R5138	0700027M	CF 100 OHM 1/16W +5%	R5222	0700027M	CF 100 OHM 1/16W +5% (T/TEXT)
R5139	0700027M	CF 100 OHM 1/16W +5%	R5223	0700027M	CF 100 OHM 1/16W +5% (T/TEXT)
R514	0700041M	CF 1K OHM 1/16W +5%	R5224	0700041M	CF 1K OHM 1/16W +5% (T/TEXT)
R5140	0700064M	CF 56K OHM 1/16W +5%	R5225	0700041M	CF 1K OHM 1/16W +5% (T/TEXT)
R5141	0700043M	CF 1.5K OHM 1/16W +5%	R5226	0700081M	CF 1.0M OHM 1/16W +5% (T/TEXT)
R5142	0700027M	CF 100 OHM 1/16W +5%	R5231	0700046M	CF 2.7K OHM 1/16W +5% (T/TEXT)
R5143	0700054M	CF 10K OHM 1/16W +5%	R5232	0700049M	CF 4.7K OHM 1/16W +5% (T/TEXT)
R5144	0700052M	CF 6.8K OHM 1/16W +5%	R5233	0700049M	CF 4.7K OHM 1/16W +5% (T/TEXT)
R5145	0700051M	CF 5.6K OHM 1/16W +5%	R5251	0700036M	CF 470 OHM 1/16W +5% (T/TEXT)
R5146	0700049M	CF 4.7K OHM 1/16W +5%	R5252	0700042M	CF 1.2K OHM 1/16W +5% (T/TEXT)

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SYMBOL NO.	PART NO.	DESCRIPTION	SYMBOL NO.	PART NO.	DESCRIPTION
R5253	0700054	CF 10K OHM 1/16W +-5% (T/TEXT)	R736	0700026M	CF 82 OHM 1/16W +-5%
R5254	0700062	CF 39K OHM 1/16W +-5% (T/TEXT)	R737	0114145M	CF 390 OHM 1/4W +-5%
R5255	0700054	CF 10K OHM 1/16W +-5% (T/TEXT)	R738	0188142M	CF 6 8K OHM 1/2W +-5%
R530	0700027M	CF 100 OHM 1/16W +-5%	R741	0188153M	CF 8 2K OHM 1/16W +-5%
R531	0700027M	CF 100 OHM 1/16W +-5%	R742	0188151M	CF 33K OHM 1/2W +-5%
R533	0700027M	CF 100 OHM 1/16W +-5%	$\triangle$ R743	AZ00026	PROTECTOR 2 5A
R534	0700027M	CF 100 OHM 1/16W +-5%	R746	0700044M	CF 1 8K OHM 1/16W +-5%
R535	0700044M	CF 1 8K OHM 1/16W +-5%	$\triangle$ R748	AZ00026M	PROTECTOR 2 5A
R554	0700036M	CF 470 OHM 1/16W +-5%	$\triangle$ R749	0114213M	CF 33K 1/4W +-5%
R611	0700048M	CF 3 9K OHM 1/16W +-5%	R750	0700058M	CF 22K OHM 1/16W +-5%
R612	0700051M	CF 5 6K OHM 1/16W +-5%	R768	0188121M	CF 180 OHM 1/2W +-5%
R613	0700067M	CF 100K OHM 1/16W +-5%	$\triangle$ R772	0110243S	MF 820 OHM 2W +-5%
R614	0700066M	CF 82K OHM 1/16W +-5%	R780	0110159S	MF 3 9K OHM 1W +-5%
R615	0188123M	CF 270 OHM 1/2W +-5%	R781	0110285S	MF 47K OHM 2W +-5%
R617	0100127M	CF 390K 1/8W +-5%	R782	0100065M	CF 1K OHM 1/8W +-5%
R618	0700061M	CF 33K OHM 1/16W +-5%	$\triangle$ R783	AZ00026M	PROTECTOR 2 5A
R621	0119722M	RM 1 0 OHM 1W +-5%	R784	0147825	WW 56 6 OHM 15W +-5%
R631	0700058M	CF 22K OHM 1/16W +-5%	R785	0700043M	CF 1 5K OHM 1/16W +-5%
R632	0119722M	RM 1 0 OHM 1W +-5%	R786	0100105M	CF 47K 1/8W +-5%
R633	0700054M	CF 10K OHM 1/16W +-5%	R787	0700067M	CF 100K OHM 1/16W +-5%
R651	0188135M	CF 2 2K OHM 1/2W +-5%	R788	0700045M	CF 2 2K OHM 1/16W +-5%
R653	0700059M	CF 27K OHM 1/16W +-5%	R789	0100089M	CF 10K OHM 1/8W +-5%
R654	0700067M	CF 100K OHM 1/16W +-5%	R790	0114281M	CF 100K OHM 1/4W +-5%
R655	0700045M	CF 2 2K OHM 1/16W +-5%	R791	0700054M	CF 10 OHM 1/16W +-5%
R656	0150287	VR 10K OHM-B	$\triangle$ R793	0700039M	CF 820 OHM 1/16W +-5%
R657	0150287	VR 10K OHM-B	R794	0100101M	CF 33K OHM 1/8W +-5%
R658	0700054M	CF 10K OHM 1/16W +-5%	$\triangle$ R795	0700051M	CF 5 6K OHM 1/16W +-5%
R659	0700054M	CF 10K OHM 1/16W +-5%	R796	0700072M	CF 220K OHM 1/16W +-5%
R660	0700061M	CF 33K OHM 1/16W +-5%	R7A1	0700038M	CF 680 OHM 1/16W +-5%
R661	0700049M	CF 4 7K OHM 1/16W +-5%	R7A2	0700031M	CF 180 OHM 1/16W +-5%
R662	0700066M	CF 82K OHM 1/16W +-5%	R7A3	0700054M	CF 10K OHM 1/16W +-5%
R663	0100129M	CF 470K 1/8W +-5%	R7A4	0100113M	CF 100K OHM 1/8W +-5%
R664	0700054M	CF 10K OHM 1/16W +-5%	R7A5	0700053M	CF 8 2K OHM 1/16W +-5%
R665	0700054M	CF 10K OHM 1/16W +-5%	R7A7	0700053M	CF 8 2K OHM 1/16W +-5%
R666	0700041M	CF 1K OHM 1/16W +-5%	R801	0100035M	CF 56 OHM 1/8W +-5%
R668	0700067M	CF 100K OHM 1/16W +-5%	R802	0100035M	CF 56 OHM 1/8W +-5%
R669	0700053M	CF 8.2K OHM 1/16W +-5%	R803	0100035M	CF 56 OHM 1/8W +-5%
R670	0700061M	CF 33K OHM 1/16W +-5%	R804	0110255S	MF 2 7K OHM 2W +-5%
R671	0100119M	CF 180K OHM 1/8W +-5%	R805	0110255S	MF 2 7K OHM 2W +-5%
R672	0700059M	CF 27K OHM 1/16W +-5%	R806	0110255S	MF 2 7K OHM 2W +-5%
R673	0700063M	CF 47K OHM 1/16W +-5%	R807	0110255S	MF 2 7K OHM 2W +-5%
R676	0700041M	CF 1K OHM 1/16W +-5%	R808	0110255S	MF 2 7K OHM 2W +-5%
R677	0700041M	CF 1K OHM 1/16W +-5%	R809	0110255S	MF 2 7K OHM 2W +-5%
R6A1	0700045M	CF 2 2K OHM 1/16W +-5%	R810	0113744M	CF 560 OHM 1/2W +-5%
R6A2	0700041M	CF 1K OHM 1/16W +-5%	R811	0100079M	CF 3 9K OHM 1/8W +-5%
R730	0700051M	CF 5 6K OHM 1/16W +-5%	R812	0113744M	CF 560 OHM 1/2W +-5%
$\triangle$ R731	0700027M	CF 100 OHM 1/16W +-5%	R813	0100079M	CF 3 9K OHM 1/8W +-5%
R732	0145051S	WW 2 7K OHM 7W +-5%	R814	0113744M	CF 560 OHM 1/2W +-5%
R733	0700027M	CF 100 OHM 1/16W +-5%	R815	0100079M	CF 3 9K OHM 1/8W +-5%
R735	0119688M	MF 0 22 OHM 1W +-5%	R816	0110115S	MF 56 OHM 1W +-5%

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SYMBOL NO.	PART NO.	DESCRIPTION	SYMBOL NO.	PART NO.	DESCRIPTION
R817	0110115S	MF 56 OHM 1W +-5%	R871	0188155M	CF 68K OHM 1/2W +-5%
R818	0110115S	MF 56 OHM 1W +-5%	R872	0113776M	CF 12K OHM 1/2W +-5%
R819	0100024M	CF 20 OHM 1/8W +-5%	R873	0113716M	CF 43 OHM 1/2W +-5%
R820	0100024M	CF 20 OHM 1/8W +-5%	R874	0113716M	CF 43 OHM 1/2W +-5%
R821	0100024M	CF 20 OHM 1/8W +-5%	R875	0113686M	CF 2.7 OHM 1/2W +-5%
R822	0100053M	CF 330 OHM 1/8W +-5%	R876	0113686M	CF 2.7 OHM 1/2W +-5%
R823	0100053M	CF 330 OHM 1/8W +-5%	R877	0110229S	MF 220 OHM 2W +-5%
R824	0100053M	CF 330 OHM 1/8W +-5%	R879	0700041M	CF 1K OHM 1/16W +-5%
R825	0100047M	CF 180 OHM 1/8W +-5%	R880	0700061M	CF 33K OHM 1/16W +-5%
R826	0100047M	CF 180 OHM 1/8W +-5%	R884	0110132S	MF 300 OHM 1W +-5%
R827	0100047M	CF 180 OHM 1/8W +-5%	R901	0179538M	MG 4.7M OHM 1/8W +-5%
R828	0100087M	CF 8 2K OHM 1/8W +-5%	R902	0147606	WW 0 68 OHM 7W +-5%
R829	0100074M	CF 2.4K OHM 1/8W +-5%	R903	0188153M	CF 47K OHM 1/2W +-5%
R830	0100029M	CF 33 OHM 1/8W +-5%	R904	0110161S	MF 4 7K OHM 1W +-5%
R831	0100063M	CF 820 OHM 1/8W +-5%	R905	0100077M	CF 3 3K OHM 1/8W +-5%
R832	0100063M	CF 820 OHM 1/8W +-5%	R906	0110199S	MF 12 OHM 2W +-5%
R835	0113815M	CF 470K OHM 1/2W +-5%	R907	0148044	WW 0 15 OHM 3W +-5%
R836	0700039M	CF 820 OHM 1/16W +-5%	R908	0700041M	CF 1K OHM 1/16W +-5%
R837	0700039M	CF 820 OHM 1/16W +-5%	R909	0147606	WW 0 68 OHM 7W +-5%
R839	0700035M	CF 390 OHM 1/16W +-5%	R910	0119731M	MF 0 68 OHM 1W +-5%
R841	0110135S	MF 390 OHM 1W +-5%	R911	0700027M	CF 100 OHM 1/16W +-5%
R842	0700067M	CF 100K OHM 1/16W +-5%	R912	0147606	WW 0.68 OHM 7W +-5%
R843	0700036M	CF 470 OHM 1/16W +-5%	R913	0114047M	CF 18 OHM 1/4 +-5%
R844	0700035M	CF 390 OHM 1/16W +-5%	R914	0100123M	CF 270K OHM 1/8W +-5%
R845	0700042M	CF 1 2K OHM 1/16W +-5%	R916	0100065M	CF 1K OHM 1/8W +-5%
R846	0700059M	CF 27K OHM 1/16W +-5%	R917	0188153M	CF 47K OHM 1/2W +-5%
R847	0700067M	CF 100K OHM 1/16W +-5%	R918	0114061M	CF 68 OHM 1/4W +-5%
R848	0700065M	CF 68K OHM 1/16W +-5%	R919	0100077M	CF 3 3K OHM 1/8W +-5%
R849	0700038M	CF 680 OHM 1/16W +-5%	R920	0110217S	MF 68 OHM 2W +-5%
R850	0700033M	CF 270 OHM 1/16W +-5%	R921	0119722M	MF 1 0 OHM 1W +-5%
R851	0700035M	CF 390 OHM 1/16W +-5%	R922	CJ00041	PTC THERMISTOR
R852	0700045M	CF 2 2K OHM 1/16W +-5%	R930	AW00102	VR 1K OHM-B
R853	0700067M	CF 100K OHM 1/16W +-5%	R931	0110341S	MF 680 OHM 3W +-5%
R854	0700059M	CF 27K OHM 1/16W +-5%	R932	0700036M	CF 470 OHM 1/16W +-5%
R855	0700046M	CF 2.7K OHM 1/16W +-5%	R933	0700036M	CF 470 OHM 1/16W +-5%
R856	0113742M	CF 470 OHM 1/2W +-5%	R934	0700037M	CF 560 OHM 1/16W +-5%
R857	0700061M	CF 33K OHM 1/16W +-5%	R935	0148019	WW 0.39 OHM 2W +-5%
R858	0700036M	CF 470 OHM 1/16W +-5%	R936	0100049M	CF 220 OHM 1/8W +-5%
R859	0700067M	CF 100K OHM 1/16W +-5%	R938	0110201S	MF 15 OHM 2W +-5%
R860	0700054M	CF 10K OHM 1/16W +-5%	R951	0110103S	MF 18 OHM 1W +-5%
R861	0100065M	CF 1K OHM 1/8W +-5%	R952	0114213M	CF 33K OHM 1/4W +-5%
R862	0700024M	CF 56 OHM 1/16W +-5%	R953	0700049M	CF 4.7K OHM 1/16W +-5%
R863	0113701M	CF 10 OHM 1/2W +-5%	R954	0188155M	CF 68K OHM 1/2W +-5%
R864	0100039M	CF 82 OHM 1/8W +-5%	R955	0188155M	CF 68K OHM 1/2W +-5%
R865	0100039M	CF 82 OHM 1/8W +-5%	R956	0700048M	CF 3 9K OHM 1/16W +-5%
R866	0188133M	CF 1 5K OHM 1/2W +-5%	R957	0110137S	MF 470 OHM 1W +-5%
R867	0100069M	CF 1.5K OHM 1/8W +-5%	R958	0700054M	CF 10K OHM 1/16W +-5%
R868	0188132M	CF 1.5K OHM 1/2W +-5%	R959	0700052M	CF 6.8K OHM 1/16W +-5%
R869	0100067M	CF 100K OHM 1/16W +-5%	R960	0700054M	CF 10K OHM 1/16W +-5%
R870	0188155M	CF 68K OHM 1/2W +-5%	R961	0700052M	CF 6 8K OHM 1/16W +-5%

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SYMBOL NO.	PART NO.	DESCRIPTION	SYMBOL NO.	PART NO.	DESCRIPTION
R962	0700054M	CF 10K OHM 1/16W +5%	RH04	0700041M	CF 1K OHM 1/16W +5%
R966	0700064M	CF 56K OHM 1/16W +5%	RH05	0700041M	CF 1K OHM 1/16W +5%
R969	0100077M	CF 3 3K OHM 1/8W +5%	RH06	0100125M	CF 330K OHM 1/8W +5%
R971	0700049M	CF 4 7K OHM 1/16W +5%	RH07	0700063M	CF 47K OHM 1/16W +5%
R972	0113783M	CF 22K OHM 1/2W +5%	RH08	0700061M	CF 33K OHM 1/16W +5%
R973	0700054M	CF 10K OHM 1/16W +5%	RH09	0700042M	CF 1.2K OHM 1/16W +5%
R977	0700047M	CF 3.3K OHM 1/16W +5%	RH10	0700061M	CF 33K OHM 1/16W +5%
R980	0700047M	CF 3.3K OHM 1/16W +5%	RH11	0100035M	CF 56 OHM 1/8W +5%
R981	0700051M	RES CAR FILM 1/16 5 6K-J	RH12	0700061M	CF 33K OHM 1/16W +5%
R982	0700027M	RES CAR FILM 1/16 100-J	RH13	0700039M	CF 820 OHM 1/16W +5%
Δ R998	0174704G	MF 10M OHM 1W +5%	RH14	0100125M	CF 330K OHM 1/8W +5%
RA01	0700028M	CF 120 OHM 1/16W +5%	RH15	0700058M	CF 22K OHM 1/16W +5%
RA02	0700028M	CF 120 OHM 1/16W +5%	RH16	0700063M	CF 47K OHM 1/16W +5%
RA04	0700027M	CF 100 OHM 1/16 W +5%	RH17	0700058M	CF 22K OHM 1/16W +5%
RA06	0700045M	CF 2.2K OHM 1/16W +5%	RH18	0110127S	MF 180 OHM 1W +5%
RA07	0700045M	CF 2 2K OHM 1/16W +5%	RH19	0113725M	CF 100 OHM 1/2W +5%
RA08	0700048M	CF 3.9K OHM 1/16W +5%	RH20	0700041M	CF 1K OHM 1/16W +5%
RA09	0700048M	CF 3.9K OHM 1/16W +5%	RH21	0100035M	CF 56 OHM 1/8W +5%
RA10	0700054M	CF 10K OHM 1/16W +5%	RH22	0700027M	CF 100 OHM 1/16W +5%
RA10A	0700048M	CF 3 9K OHM 1/16W +5%	RM01	0700027M	CF 100 OHM 1/16W +5%
RA11	0100117M	CF 150K OHM 1/8W +5%	RM02	0700037M	CF 100 OHM 1/16W +5%
RA11	0700048M	CF 3 9K OHM 1/16W +5%	RS01	0100121M	CF 220K OHM 1/8W +5%
RA12	0700039M	CF 820 OHM 1/16W +5%	RS02	0700067M	CF 100K OHM 1/16W +5%
RA12	0700045M	CF 2 2K OHM 1/16W +5%	RS03	0100115M	CF 120K OHM 1/8W +5%
RA13	0700041M	CF 1K OHM 1/16W +5%	RS04	0700027M	CF 100 OHM 1/16W +5%
RA13	0700049M	CF 4 7K OHM 1/16W +5%	RS05	0700041M	CF 1K OHM 1/16W +5%
RA14	0100133M	CF 680K OHM 1/8W +5%	RS06	0700042M	CF 1 2K OHM 1/16W +5%
RA14	0119505G	FM 2 2 OHM 1/4W +5%	RS07	0700027M	CF 100 OHM 1/16W +5%
RA15	0119505G	FM 2 2 OHM 1/4W +5%	RS08	0700027M	CF 100 OHM 1/16W +5%
RA16	0119505G	FM 2.2 OHM 1/4W +5%	RS09	0700027M	CF 100 OHM 1/16W +5%
RA19	0700054M	CF 10K OHM 1/16W +5%	RS10	0700027M	CF 100 OHM 1/16W +5%
RA21	0700041M	CF 1K OHM 1/16W +5%	RS11	0700027M	CF 100 OHM 1/16W +5%
RA22	0700054M	CF 10K OHM 1/16W +5%	RS12	0700027M	CF 100 OHM 1/16W +5%
RA23	0700054M	CF 10K OHM 1/16W +5%	RS13	0700027M	CF 100 OHM 1/16W +5%
RA51	0700064M	CF 56K OHM 1/16W +5%	RT01	0700063M	CF 47K OHM 1/16W +5%
RA56	0700042M	CF 1.2K OHM 1/16W +5%	RT02	0700027M	CF 100 OHM 1/16W +5%
RA57	0700042M	CF 1 2K OHM 1/16W +5%	RT03	0700027M	CF 100 OHM 1/16W +5%
RA58	0700052M	CF 6 8K OHM 1/16W +5%	RT04	0700027M	CF 100 OHM 1/16W +5%
RA59	0700052M	CF 6 8K OHM 1/16W +5%	RZ01	0700027M	CF 100 OHM 1/16W +5%
RDA01	0700051M	CF 5.6K OHM 1/16W +5%	RZ02	0700027M	CF 100 OHM 1/16W +5%
RE01	0700042M	CF 1 2K OHM 1/16W +5%	RZ03	0700027M	CF 100 OHM 1/16W +5%
RE02	0700041M	CF 1K OHM 1/16W +5%	RZ04	0119514G	FR 10 OHM 1/4W +5%
RE37	0700027M	CF 100 OHM 1/16W +5%	RZ05	0700027M	CF 100 OHM 1/16W +5%
RE38	0700027M	CF 100 OHM 1/16W +5%	RZ06	0700062M	CF 39K OHM 1/16W +5%
RE39	0700027M	CF 100 OHM 1/16W +5%	RZ07	0700027M	CF 100 OHM 1/16W +5%
RE40	0700027M	CF 100 OHM 1/16W +5%	RZ08	0700033M	CF 270 OHM 1/16W +5%
RE41	0110203S	MF 18 OHM 2W +5%	RZ09	0700033M	CF 270 OHM 1/16W +5%
RH01	0700027M	CF 100 OHM 1/16W +5%	RZ10	0700033M	CF 270 OHM 1/16W +5%
RH02	0700027M	CF 100 OHM 1/16W +5%	RZ11	0700027M	CF 100 OHM 1/16W +5%
RH03	0700027M	CF 100 OHM 1/16W +5%	RZ13	0700027M	CF 100 OHM 1/16W +5%

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SYMBOL NO.	PART NO.	DESCRIPTION	SYMBOL NO.	PART NO.	DESCRIPTION
RZ14	0700041M	CF 1K OHM 1/16W +-5%	X401	2167311B	CER FILTER 4 5MHZ
RZ15	0700027M	CF 100 OHM 1/16W +-5%	X401	2168971	OSC CSB503E5
RZ16	0700041M	CF 1K OHM 1/16W +-5%	X402	2167211B	CER FILTER 5 5MHZ
RZ17	0700027M	CF 100 OHM 1/16W +-5%	X403	2167212B	CER FILTER 6 0MHZ
RZ18	0700041M	CF 1K OHM 1/16W +-5%	X404	2167213B	CER FILTER 6 5MHZ
RZ19	0700041M	CF 1K OHM 1/16W +-5%	X501	BP00661	X'TAL 16 2MHZ
RZ20	0700041M	CF 1K OHM 1/16W +-5%	X5101	BP00691	X'TAL 4 433619MHZ
RZ21	0700027M	CF 100 OHM 1/16W +-5%	X5102	2788591	X'TAL 3 58MHZ
RZ23	0700027M	CF 100 OHM 1/16W +-5%	X5103	BP00681	X'TAL 20 48MHZ
RZ24	0700027M	CF 100 OHM 1/16W +-5%	X5201	BP00031	X'TAL 27MHZ (T/TEXT)
RZ25	0700027M	CF 100 OHM 1/16W +-5%	X5202	2940241	X'TAL 6MHZ (T/TEXT)
RZ35	0700056M	CF 15K OHM 1/16W +-5%	ZD001	2339837M	ZD HZS5C1 (T/TEXT)
RZ51	0110215S	MF 56 OHM 2W +-5%	ZD5104	2339815M	ZD HZS3B2
RZ51A	0110215S	MF 56 OHM 2W +-5%	ZD5105	2339834M	ZD HZS5B1
RZ52	0100049M	CF 220 OHM 1/8W +-5%			
RZ80	0113735M	CF 270 OHM 1/2W +-5%			
S001	2632922	TACT SWITCH			
S002	2632922	TACT SWITCH			
S003	2632922	TACT SWITCH			
S004	2632922	TACT SWITCH			
S005	2632922	TACT SWITCH			
S006	2632922	TACT SWITCH			
$\triangle$ S901	2634732	MAINS SWITCH			
SP401L	GK00241	6x12 SPEAKER			
SP401R	GK00241	6x12 SPEAKER			
$\triangle$ T701	BS00011	H DRIVE TRANS			
$\triangle$ T702	2436628	FBT			
$\triangle$ T901	BT00661	SWT TRANSFORMER			
TH61	2340371	THERMISTOR			
U001	HJ00132	TUNER BTP AH453			
U1001	HL00171	REMOTE CONTROL UNIT CLE-908			
U404	HP00451	MSP3410 UNIT (NICAM/A2-051/081S ONLY)			
$\triangle$ U701	2444255	DY			
UT01	HJ00132	TUNER BTP AH453			
UT02	FU00401	ADAPTOR			
$\triangle$ V1	2471562	CRT A68KSA30X(D)			
WSPG	2976147A	2P CONNECTOR W/WIRES			
X001	2574762A	R/C RECEIVER			
X002	BP00761	X'TAL CST8 00MTW			
X005	2791754R	LC FILTER			
X006	2791754R	LC FILTER			
X201	BG00671	SAW FILTER K6262K			
X204	2167371	CER TRAP 5 5/5 74MHZ			
X205	2143472	COMPOSITE TRAP 6 0/6 5MHZ			
X206	2142241	CER TRAP 4 5MHZ			
X208	BJ00271	FILTER SAF33 4MCB70Z			
X2A1	BN00081	HIGH FREQ TRAP 31 9 MHZ			
X301	2150411	200N SEC DELAY LINE			
X302	2143893	TRAP COIL 4 43MHZ			

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