

# Service Manual



## Colour Television TX-14GV2 Z-082PF Chassis

### SPECIFICATIONS

<b>Power Source:</b>	220-240V a.c., 50Hz	<b>Picture Tube:</b>	A34EAC01X17	51cm
<b>Power Consumption:</b>	72W	<b>High Voltage:</b>	28kV ± 1kV	
<b>Stand-by Power Consumption:</b>	3W	<b>Audio Output:</b>	5W	
<b>Aerial Impedance:</b>	75Ω unbalanced, Coaxial Type		8Ω Impedance	
<b>Receiving System:</b>	PAL I, PAL-525/60 M.NTSC NTSC (AV only)	<b>Headphones:</b>	8Ω Impedance 3.5mm	
<b>Receiving Channels:</b>	UHF E21-E68	<b>Accessories supplied :</b>	Remote Control 2 x R6 (UM3) Batteries	
<b>Intermediate Frequency:</b>				
<b>Video/Audio</b>		<b>Dimensions:</b>		
Video	39.5MHz	Height:	400mm	
Audio	32.9MHz	Width:	386mm	
Colour	35.07MHz (PAL)	Depth:	367.5mm	
<b>Terminals:</b>		<b>Net weight:</b>	13kg	
AV1 IN	Video (21 pin) 1V p-p 75Ω Audio (21 pin) 500mV rms 10kΩ RGB (21 pin)			
AV FRONT	Audio (RCA x 1) 500mV rms 10kΩ Video (RCA x 1) 1V p-p 75Ω	Specifications are subject to change without notice. Weights and dimensions shown are approximate.		
AV1 OUT	Video (21 pin) 1V p-p 75Ω Audio (21 pin) 500mV rms 1kΩ			

### SPECIFICATIONS FOR VCR

<b>GENERAL</b>	Temperature.	5°C - 35°C (operating) -20°C - 60°C (storage temperature)
	Format.	Standard.
	Tape Width.	12.65mm.
	Tape Speed.	SP: 23.39mm/sec LP: 11.70mm/sec
	Maximum recording time with fullsize cassette.	SP: 240min. with E-240 video Cassette. LP: 480min. with E-240 video Cassette.
<b>AUDIO</b>	Recording System.	Longitudinal Track
	Input.	-3.8dBm(500mV rms), more than 47K ohms unbalanced.
	Output.	-3.8dBm(500mV rms), less than 1K ohm unbalanced.
	Frequency Range.	100Hz to 8KHz
	Signal To Noise Ratio.	40dB (more than)
<b>VIDEO</b>	Signal System.	PAL/SECAM colour and CCIR mono chrome signals, 625 lines/50 fields.
	Recording System.	Rotary 4-head helical scan with a slant double azimuth combination video head.
	Input.	1V p-p, 75 ohms, unbalanced.
	Output.	1V p-p, 75 ohms, unbalanced.
	Signal To Noise Ratio.	45dB with NETTETE IMAGE control at centre position.
	Horizontal resolution.	240 lines with NETTETE IMAGE control at centre position.

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## SAFETY PRECAUTIONS

### GENERAL GUIDE LINES

1. It is advisable to insert an isolation transformer in the a.c. supply before servicing a hot chassis.
2. When servicing, observe the original lead dress in the high voltage circuits. If a short circuit is found, replace all parts that have been overheated or damaged by the short circuit.
3. After servicing, see that all the protective devices such as insulation barriers, insulation papers, shields and isolation R-C combinations are correctly installed.
4. When the receiver is not being used for a long period of time, unplug the power cord from the a.c. outlet.
5. Potentials as high as 29kV are present when this receiver is in operation. Operation of the receiver without the rear cover involves the danger of a shock hazard from the receiver power supply. Servicing should not be attempted by anyone who is not familiar with the precautions necessary when working on high voltage equipment. Always discharge the anode of the tube.
6. After servicing make the following leakage current checks to prevent the customer from being exposed to shock hazard.

### LEAKAGE CURRENT COLD CHECK

1. Unplug the a.c. cord and connect a jumper between the two prongs of the plug.
2. Turn on the receiver's power switch.
3. Measure the resistance value with an ohmmeter, between the jumpered a.c. plug and each exposed metallic cabinet part on the receiver, such as screw heads, aerials, connectors, control shafts etc. When the exposed metallic part has a return path to the chassis, the reading should be between 4M ohm and 20M ohm. When the exposed metal does not have a return path to the chassis, the reading must be infinite.

### LEAKAGE CURRENT HOT CHECK

1. Plug the a.c. cord directly into the a.c. outlet. Do not use an isolation transformer for this check.
2. Connect a  $2k\Omega$  10W resistor in series with an exposed metallic part on the receiver and an earth, such as a water pipe.
3. Use an a.c. voltmeter with high impedance to measure the potential across the resistor.
4. Check each exposed metallic part and check the voltage at each point.
5. Reverse the a.c. plug at the outlet and repeat each of the above measurements.

6. The potential at any point should not exceed 1.4V rms. In case a measurement is outside the limits specified, there is a possibility of a shock hazard, and the receiver should be repaired and rechecked before it is returned to the customer.

### X-RADIATION WARNING

1. The potential sources of X-Radiation in TV sets are the high voltage section and the picture tube.
2. When using a picture tube test jig for service, ensure

### HOT CHECK CIRCUIT

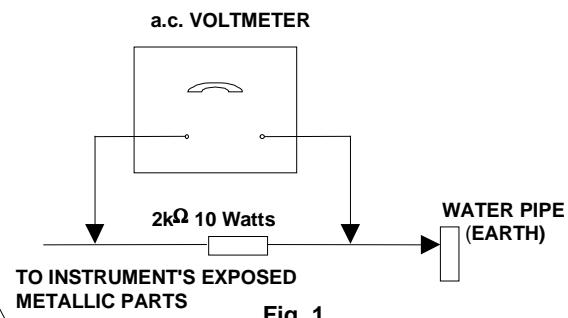


Fig. 1.

that the jig is capable of handling 29kV without causing X-Radiation.

**NOTE:** It is important to use an accurate periodically calibrated high voltage meter.

1. Set the brightness to minimum.
2. Measure the high voltage. The meter should indicate  $28kV \pm 1kV$ . If the meter indication is out of tolerance, immediate service and correction is required to prevent the possibility of premature component failure.
3. To prevent any X-Radiation possibility, it is essential to use the specified tube.

## SERVICE HINTS

### How to remove the rear cover

1. Remove the 5 screws as shown in Fig.2.



Fig.2.

## LOCATION OF CONTROLS

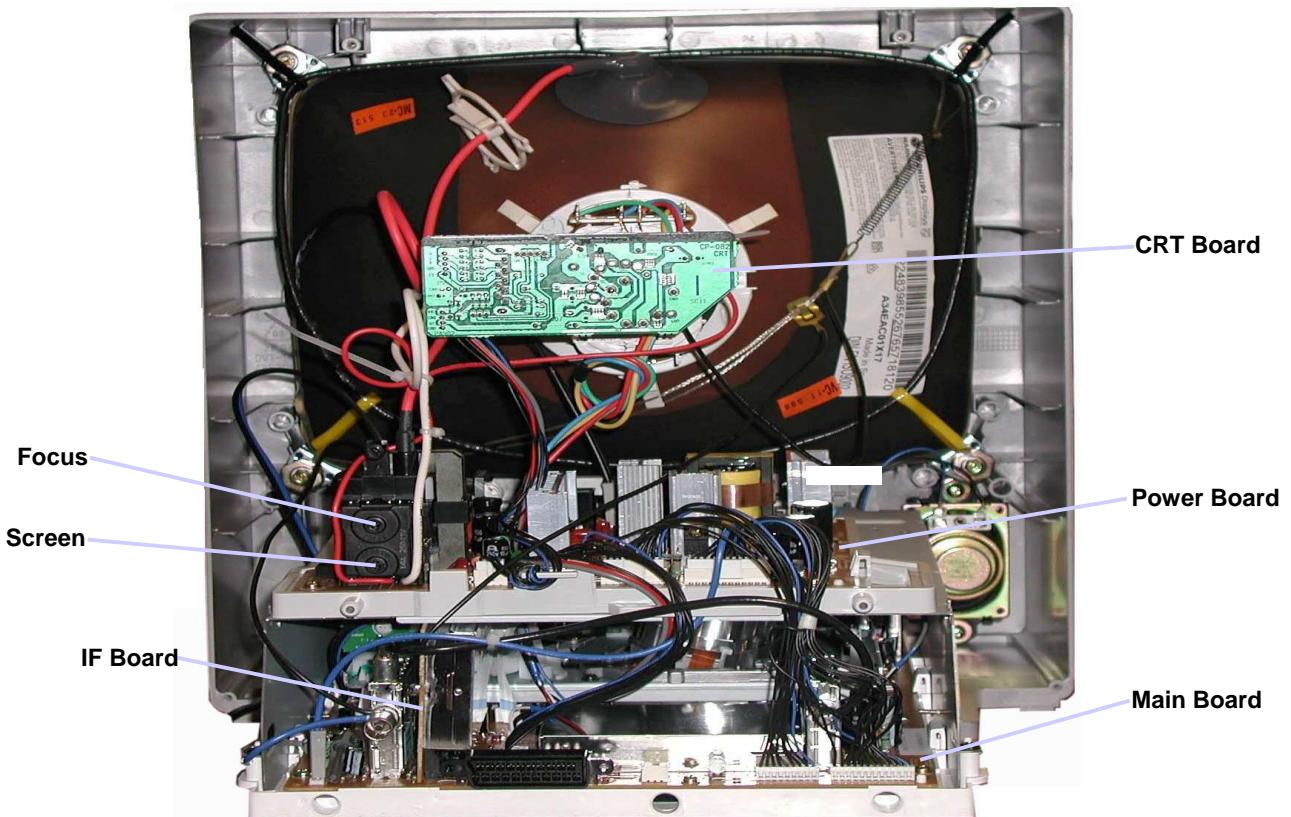


Fig.3.

## DISASSEMBLY

1. Remove the 6 screws, three from each side, from the top cover, as shown in **Fig.4.** and **Fig.5.**
2. Remove the 3 earth straps as shown in **Fig.4.** and **Fig.5.**
3. Remove the speaker connector as shown in **Fig.6.**
4. Remove the 5 screws from the power board to release from cover as shown in **Fig.7.**

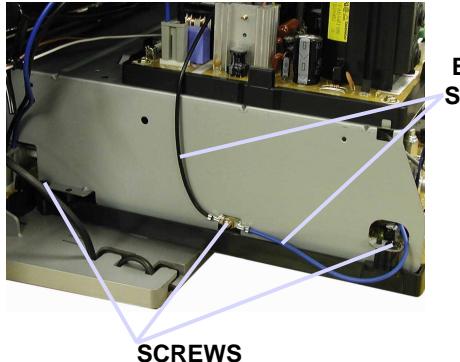


Fig.4.

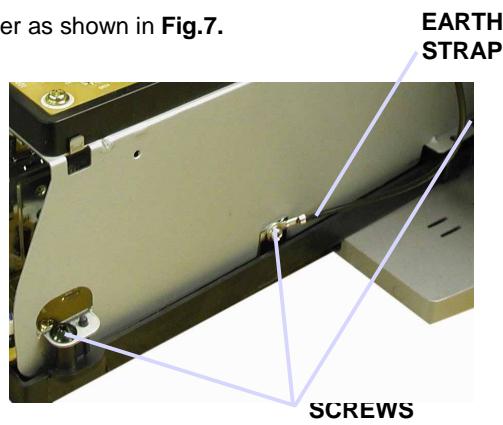


Fig.5.

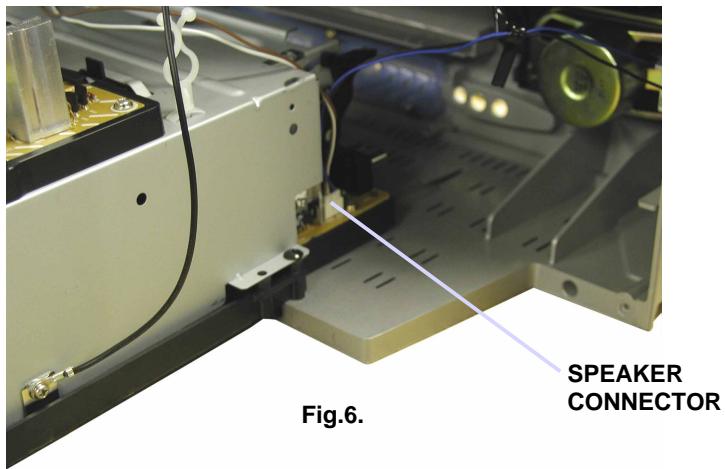


Fig.6.

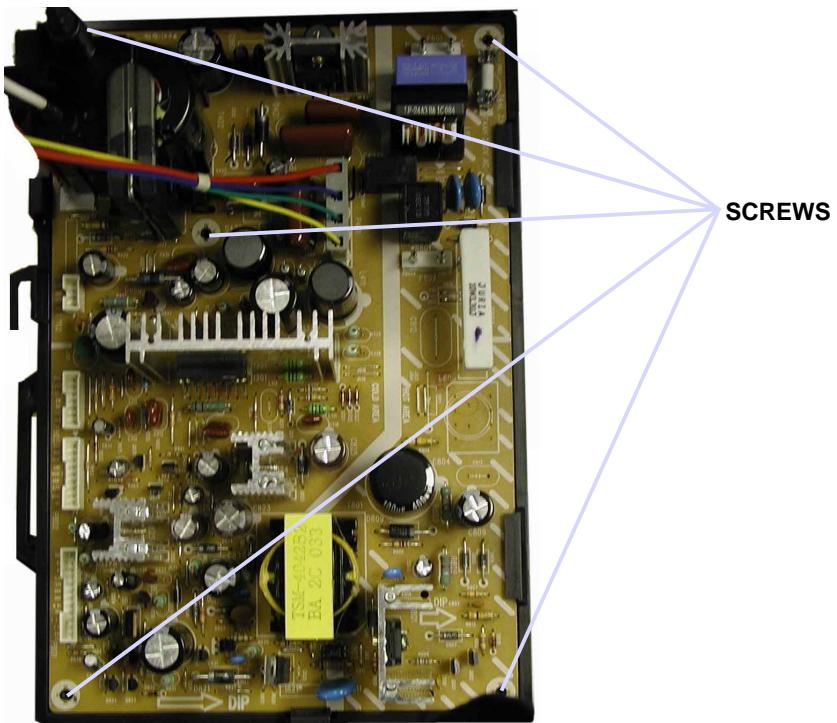
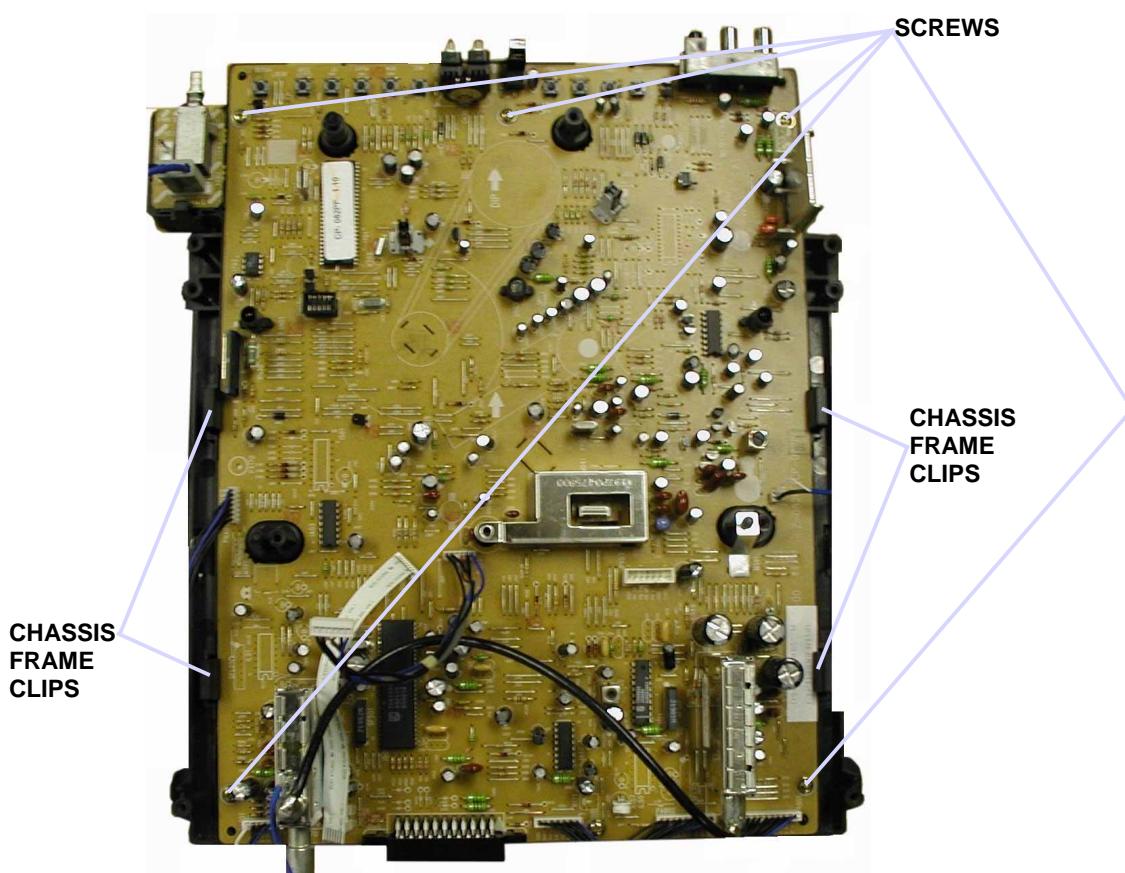
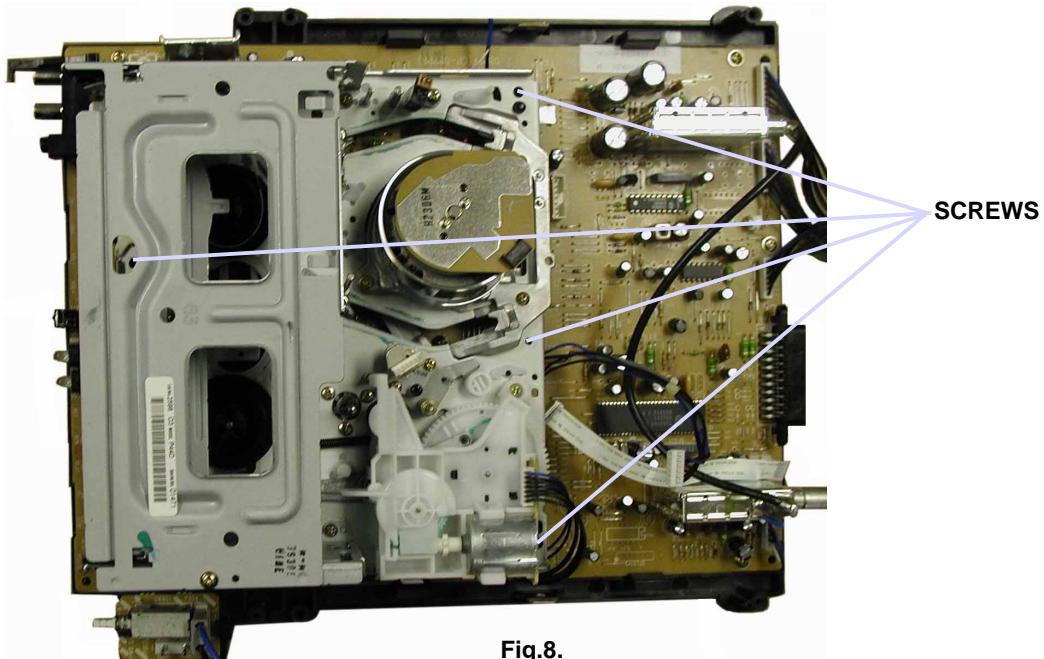


Fig.7.

## DISASSEMBLY (CONTINUED)

5. Remove the 4 screws as shown in **Fig.8.** to release the video deck from the main board.
6. Remove the 5 screws as shown in **Fig.9.**
7. Release the 4 chassis frame clips as shown in **Fig.9.** and remove the main P.C.B. from the chassis frame.



# ALIGNMENT PROCEDURE AND OPTION SETTING

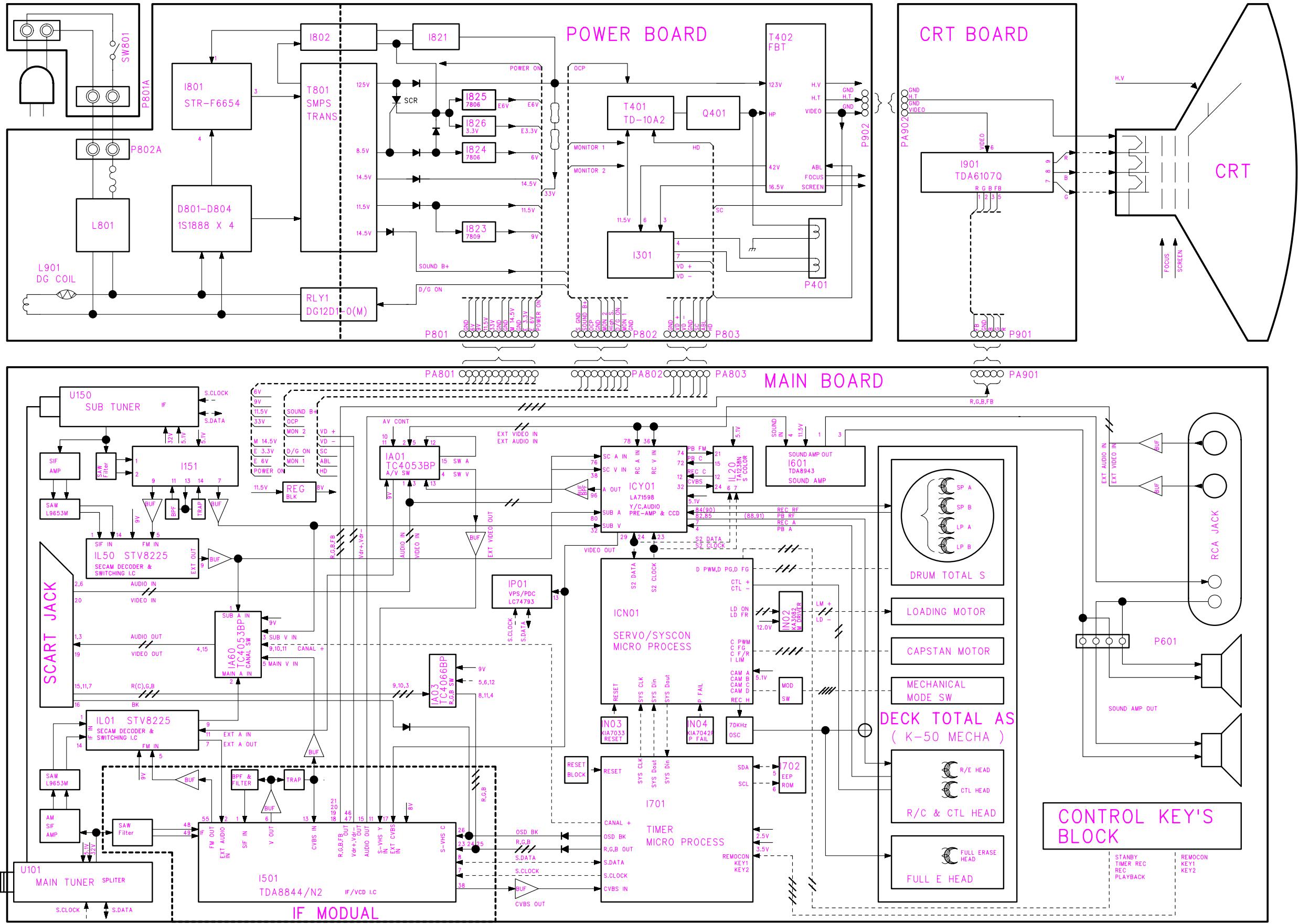
(The figures below are nominal and used for representative purposes only.)

## Entering SERVICE mode

- 1) To enter the On-Screen display adjustment, adjust the unit to programme 99, and tune in a test pattern. Select the sharpness setting using the MENU button. Set the sharpness to a minimum using the cursor left button. Once the sharpness is at 0, press menu to cancel the on screen display. Press the VCR INDEX button on the remote and simultaneously press the (-/v) button on the front of the set until the service mode display menu appears, the top left hand corner should display SVC, once the SVC is displayed you can now release the VCR INDEX button and the -/v button.
- 2) Press the **RED/GREEN** buttons to navigate through the functions.
- 3) Press the **YELLOW/BLUE** buttons to alter the function values.
- 4) To exit the Service Mode, press the **EXIT** button.

Alignment Function	Item	Settings/Special Features
Blue Correction	B 27	Optimum setting (for white balance).
Green Correction	G 24	Optimum setting (for white balance).
Red Correction	R 32	Optimum setting (for white balance).
Vertical Centre	V-Center 28	Optimum Setting.
Horizontal Centre	H-Center 41	Optimum Setting.
Vertical Size	V-Size 41	Optimum Setting.
Vertical Slope	V-Slope 25	Optimum Setting.
EW Trapezium	EW-Tra 30	Optimum Setting.
EW Parabola	EW-Par 15	Optimum Setting.
EW Correction	EW-Corr 23	Optimum Setting.
EW Amplitude	EW-Amp 53	Optimum Setting.
S Correction	S-Corr 15	Optimum Setting.
Main Tuner AGC	AGC 44	Optimum Setting.
Sub Tuner Option	Tuner Opt 2	Optimum Setting.

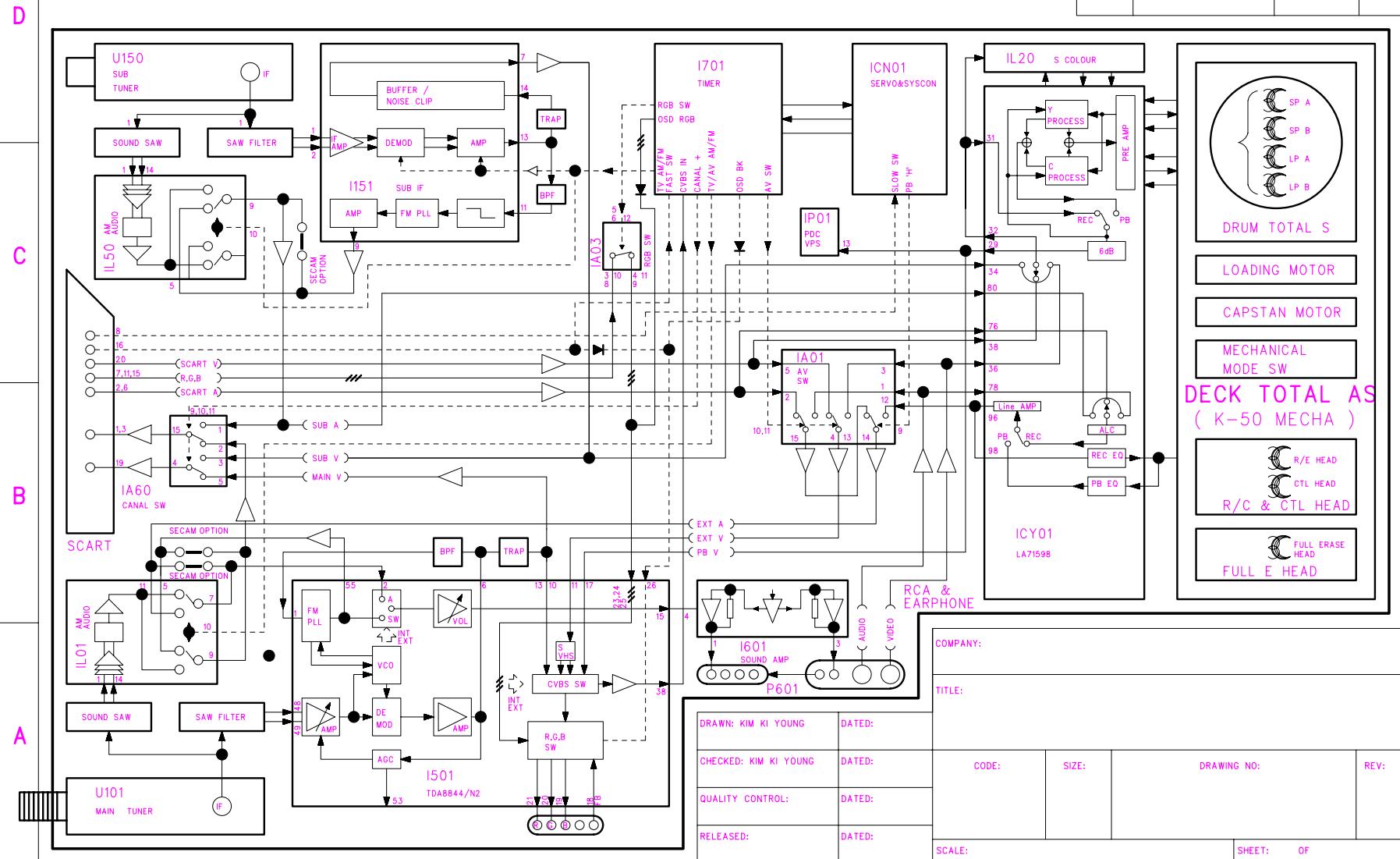
# Z-082PF BLOCK DIAGRAM(Power & Main)



6 5 4 3 2 1

REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:

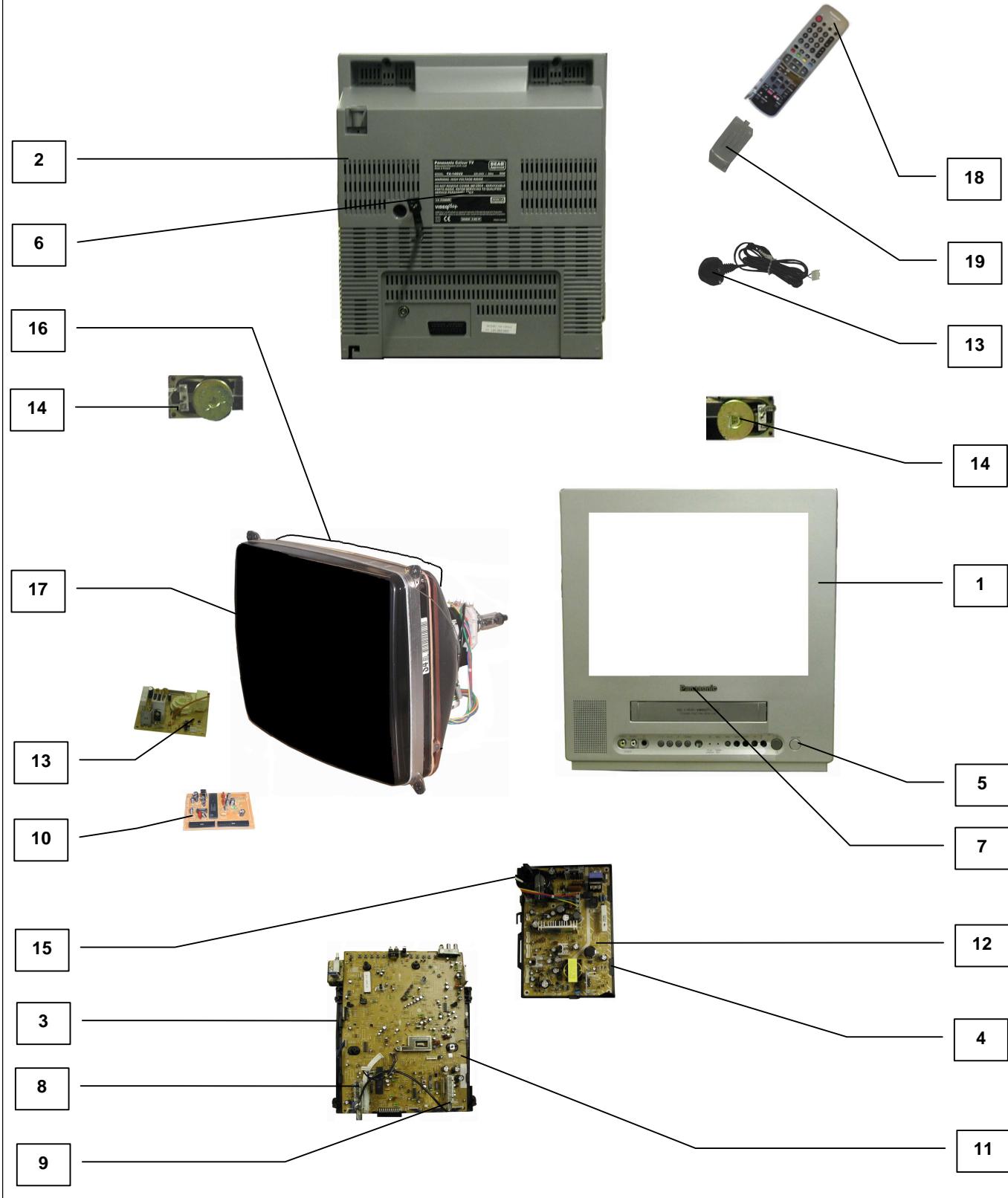
# Z-082PF AUDIO & VIDEO PROCESS



# PARTS LOCATION

**NOTE:**

The numbers on the exploded view below refer to the mechanical section of the Replacement Parts List.  
This diagram is used for representative purposes only.



# REPLACEMENT PARTS LIST

## Important Safety Notice

Components Identified by  mark have special characteristics important for safety.  
 \* When replacing any of these components, use only manufacturers specified parts.  
 In case of ordering these spare parts, please always add the complete Model-Type number to your order.

Cct Ref	Parts Number	Description	
<b>EXPLODED VIEW</b>			
1	4852082701	CABINET	
2	4852162500	REAR COVER	
3	4853818100	CHASSIS FRAME	
4	4853818600	POWER P.C.B. FRAME	
5	4854863601	POWER BUTTON	
6	4855415800	MODEL LABEL	
7	4855624100	PANASONIC BADGE	
8	4859722830	TUNER1	
9	4859723430	TUNER2	
10	4859801212	IF P.C.B.	
11	4859806993	MAIN P.C.B.	
12	4859813111	POWER P.C.B.	
13	4859905110	POWER CORD	
14	48A8306000	SPEAKER	
15	50H0000209	F.B.T.	
16	58G0000084	DEGAUSS COIL	
17	A34EAC01X17	CRT	
18	EUR51941	REMOTE CONTROL	
19	UR51EC780	BATTERY COVER (REMOTE)	
<b>MISCELLANEOUS COMPONENTS</b>			
.	4850A01220	LOOP ANTENNA	
.	4851947500	KEY BUTTONS	
.	4852716000	SET FOOT	
.	4856715600	POWER BUTTON SPRING	
.	4858191600	CUSHIONS SET	
.	GPBMA1H8022	OUTER CARTON	
.	GPPMA1V5222	INSERT SHEET	
.	UM-3DJ-2P	BATTERY PACK	
<b>I.C.s</b>			
I151	TDA9800	IF PROCESSOR	
I301	TDA8357J	VERTICAL AMPLIFIER	
I501	TDA8844-N2	VIDEO PROCESSOR	
I601	TDA8943SF	AUDIO AMPLIFIER	
I701	SDA555XFL	MICROPROCESSOR	
I702	AT24C-14GV2	EAROM*	
I801	STRF6653	POWER SUPPLY SWITCHING	
I802	KP1010C	OPTO COUPLER	
I821	SE110N	ERROR AMPLIFIER	
I824	L7806CV	6V REGULTOR	
I825	L7806CV	6V REGULTOR	
I826	LP2950-3.3	3.3V REGLATOR	
I901	TDA6107Q	RGB OUTPUT	
IA01	HEF4053BP	AUDIO SWITCHING	
IA03	TC4066BP	TC4066BP	
IA60	HEF4053BP	AUDIO SWITCHING	
ICN01	MS37777M7H-G	VCR MICRPROCESOR	
ICP01	LC74793JM	VIDEO PROCESSOR	
ICY01	LA71598SM	AUDIO/VIDEO PROCESSOR	
IN02	KIA6801K	MOTOR DRIVE	
IN03	KIA7033AP	3.3V REGULATOR	
IN04	KIA7042AP	REGULATOR	

Cct Ref	Parts Number	Description	
IQ01	TSOP2238PM1	REMOTE RECEIVER	
<b>FUSES</b>			
F801	5FWML4022L	FUSE	
<b>DIODES</b>			
D101	DTZX5V1B	DIODE	
D103	DTZX33B	ZENER DIODE	
D150	DTZX5V1B	DIODE	
D152	DTZX8V2A	ZENER DIODE	
D153	1N4148	DIODE	
D311	1N4004S	DIODE	
D312	DTZX12C	DIODE	
D315	DTZX30A	ZENER DIODE	
D316	DTZX30A	ZENER DIODE	
D413	1N4937G	DIODE	
D421	1N4937G	DIODE	
D422	1N4937G	DIODE	
D423	1N4937G	DIODE	
D425	1N4148	DIODE	
D426	1N4148	DIODE	
D501	DTZX6V2	ZENER DIODE	
D502	1N4148	DIODE	
D503	1N4148	DIODE	
D504	1N4148	DIODE	
D505	1N4148	DIODE	
D506	1N4148	DIODE	
D570	DTZX8V2A	ZENER DIODE	
D571	1N4148	DIODE	
D601	1N4148	DIODE	
D602	1N4148	DIODE	
D701	1N4148	DIODE	
D703	1N4148	DIODE	
D704	DTZX6V2	ZENER DIODE	
D705	1N4148	DIODE	
D706	1N4148	DIODE	
D707	1N4148	DIODE	
D708	1N4148	DIODE	
D709	1N4004S	DIODE	
D710	1N4148	DIODE	
D711	DTZX2V4B	ZENER DIODE	
D801	LT2A05G	DIODE	
D802	LT2A05G	DIODE	
D803	LT2A05G	DIODE	
D804	LT2A05G	DIODE	
D805	1N4937G	DIODE	
D806	1N4937G	DIODE	
D807	1N4937G	DIODE	
D808	DTZX13B	ZENER DIODE	
D809	HER308G	DIODE	
D821	DBYW76	DIODE	
D822	RGP15J	DIODE	
D823	RGP15J	DIODE	
D824	RGP15J	DIODE	

Cct Ref	Parts Number	Description
D825	RGP15J	DIODE
D827	1N4148	DIODE
D828	1N4937G	DIODE
D831	1N4148	DIODE
D832	DTZX5V6B	DIODE
D833	DTZX5V6B	DIODE
D839	1N4004S	DIODE
D841	1N4148	DIODE
D901	1N4937G	DIODE
D902	1N4937G	DIODE
D903	1N4937G	DIODE
DA01	DTZX6V2	ZENER DIODE
DA02	1N4148	DIODE
DA03	DTZX6V2	ZENER DIODE
DA14	DTZX12C	DIODE
DA15	1N4148	DIODE
DN01	1N4004S	DIODE
DN02	1N4004S	DIODE
DN03	SI5312-H	IR L.E.D.
DN04	1N4148	DIODE
DN05	DTZX6V2	ZENER DIODE
DN06	1N4004S	DIODE
DN07	1N4004S	DIODE
DN70	DTZX5V1B	DIODE
DN71	DTZX5V1B	DIODE
DQ07	1N4148	DIODE
DU01	1N4148	DIODE
DY01	1N4148	DIODE
DY03	1N4004S	DIODE
I822	TX0202NA	THYRISTOR
R801	DEC140M290	DIODE
<b>TRANSISTORS</b>		
Q401	ST1803DHI	TRANSISTOR
Q402	KTC3209Y	TRANSISTOR
Q570	KTC3205Y	TRANSISTOR
Q710	2SA1980Y	TRANSISTR
Q712	H2N7000	FET
Q713	H2N7000	FET
Q801	KTC3207	TRANSISTOR
Q802	KTC3207	TRANSISTOR
Q821	2SC5343Y	TRANSISTR
Q822	2SC5343Y	TRANSISTR
Q823	2SC5343Y	TRANSISTR
Q824	2SC5343Y	TRANSISTR
Q825	2SC5343Y	TRANSISTR
Q827	KSA1013Y	TRANSISTOR
Q828	2SA1980Y	TRANSISTR
Q829	2SC5343Y	TRANSISTR
Q834	KTC3203-Y	TRANSISTOR
Q835	2SA1980Y	TRANSISTR
Q836	2SC5343Y	TRANSISTR
QA12	2SC5343Y	TRANSISTR
QA13	2SC5343Y	TRANSISTR
QA14	2SC5343Y	TRANSISTR
QC150	2SA812-T2B	TRANSISTOR
QC152	2SC1623-T2B	TRANSISTOR
QC153	2SC1623-T2B	TRANSISTOR
QC501	2SC1623-T2B	TRANSISTOR
QC502	2SC1623-T2B	TRANSISTOR
QC503	2SA812-T2B	TRANSISTOR
QC504	2SC1623-T2B	TRANSISTOR
QC505	2SC1623-T2B	TRANSISTOR
QC506	2SA812-T2B	TRANSISTOR
QC507	2SC1623-T2B	TRANSISTOR
QC508	2SC1623-T2B	TRANSISTOR
QC509	2SC1623-T2B	TRANSISTOR

Cct Ref	Parts Number	Description
QC601	2SC1623-T2B	TRANSISTOR
QC603	2SA812-T2B	TRANSISTOR
QC604	2SC1623-T2B	TRANSISTOR
QC605	2SC1623-T2B	TRANSISTOR
QC701	2SC1623-T2B	TRANSISTOR
QC702	2SC1623-T2B	TRANSISTOR
QC703	2SA812-T2B	TRANSISTOR
QC704	2SC1623-T2B	TRANSISTOR
QC707	2SC1623-T2B	TRANSISTOR
QC708	2SC1623-T2B	TRANSISTOR
QC711	2SC1623-T2B	TRANSISTOR
QCA01	2SA812-T2B	TRANSISTOR
QCA02	2SA812-T2B	TRANSISTOR
QCA03	2SA812-T2B	TRANSISTOR
QCA04	2SC1623-T2B	TRANSISTOR
QCA05	2SC1623-T2B	TRANSISTOR
QCA09	2SA812-T2B	TRANSISTOR
QCA10	2SC1623-T2B	TRANSISTOR
QCA11	2SC1623-T2B	TRANSISTOR
QCN01	2SC1623-T2B	TRANSISTOR
QCP01	2SA812-T2B	TRANSISTOR
QCQ03	2SC1623-T2B	TRANSISTOR
QCQ04	2SC1623-T2B	TRANSISTOR
QCY01	KTC3121-B	CHIP TRANSISTOR
QCY02	2SC1623-T2B	TRANSISTOR
QCY03	2SA812-T2B	TRANSISTOR
QCY04	2SA812-T2B	TRANSISTOR
QCY05	2SC1623-T2B	TRANSISTOR
QCY06	2SC1623-T2B	TRANSISTOR
QQ01	2SC5343Y	TRANSISTR
QQ02	2SC5343Y	TRANSISTR
QU01	2SC5343Y	TRANSISTR
QU02	KRC102M	TRANSISTOR
QU03	2SA1980Y	TRANSISTR
QU04	KTC3202Y	TRANSISTOR
QU05	2SA1980Y	TRANSISTR
QU06	2SC5343Y	TRANSISTR
QU07	2SC5343Y	TRANSISTR
QY50	2SC5343Y	TRANSISTR
<b>TRANSFORMERS</b>		
T401	50D10A2	TRANSFORMER
T801	50M3541A7-	POWER SWITCHING
<b>COILS</b>		
L103	5CPZ101K04	PEAKING COIL
L152	5CPZ101K04	PEAKING COIL
L153	5CPZ220K02	PEAKING COIL
L154	5CPZ689K02	PEAKING COIL
L155	TRF-7780A	COIL
L156	5CPZ101K04	PEAKING COIL
L311	5CPZ109M04	COIL
L312	5CPZ100K04	PEAKING COIL
L313	5CPZ100K04	PEAKING COIL
L401	58H0000018	LINEARITY COIL
L501	5CPZ100K04	PEAKING COIL
L502	5CPZ220K02	PEAKING COIL
L503	5CPZ150K02	PEAKING COIL
L504	5CPZ101K04	PEAKING COIL
L602	5CPZ100K04	PEAKING COIL
L603	5CPZ100K04	PEAKING COIL
L605	5CPZ101K04	PEAKING COIL
L701	5CPZ220K02	PEAKING COIL
L703	5CPZ220K02	PEAKING COIL
L704	5CPZ220K02	PEAKING COIL
L705	5CPZ220K02	PEAKING COIL
L802	5MC0000100	COIL
LA01	5CPZ100K04	PEAKING COIL

Cct Ref	Parts Number	Description
LA02	5CPZ100K04	PEAKING COIL
LA03	5CPZ100K04	PEAKING COIL
LA04	5CPZ101K04	PEAKING COIL
LA05	5CPZ220K02	PEAKING COIL
LA60	5CPZ101K04	PEAKING COIL
LP01	5CPZ220K02	PEAKING COIL
LP02	PZ569K02	COIL
LU01	5CPX103J	PEAKING COIL
LU02	5CPZ101K04	PEAKING COIL
LU03	5CPZ101K04	PEAKING COIL
LY01	5CPZ560K02	PEAKING COIL
LY02	5CPZ220K02	PEAKING COIL
LY03	5CPZ101K04	PEAKING COIL
LY04	5CPZ101K04	PEAKING COIL
LY05	5CPZ101K04	PEAKING COIL
LY06	5CPZ101K04	PEAKING COIL
TU01	5800000032	COIL
<b>FILTERS</b>		
L801	5PLF24A3	LINE FILTER
SF150	5PJ1981M	FILTER
SF501	J1952M	SAW FILTER
Z151	5PXLT6R0MH	FILTER
Z154	5PYXT6R0MB	FILTER
Z501	5PXLT6R0MH	FILTER
Z503	5PYXT6R0MB	FILTER
<b>CRYSTALS</b>		
X501	5XEX3R579C	CRYSTAL
X502	5XEX4R436C	CRYSTAL
X701	E6R0000C	CRYSTAL
X702	5XYR03276C	CRYSTAL
XN01	5XJ16R000E	CRYSTAL
XY01	5XEX4R433B	CRYSTAL
<b>RESISTORS</b>		
R101	ERD25TJ101	CARBON 0.25W 5% 100 Ω
R102	ERD25TJ101	CARBON 0.25W 5% 100 Ω
R104	ERD25TJ392	CARBON 0.25W 5% 3K9 Ω
R106	ERG2FJ560H	METAL 2W 5% 56 Ω ▲
R107	ERG2FJ560H	METAL 2W 5% 56 Ω ▲
R155	ERD25TJ681	CARBON 0.25W 5% 680 Ω
R157	RV4121103P	CARBON 0.25W 5% 10K Ω ▲
R158	ERD25TJ680	CARBON 0.25W 5% 68 Ω ▲
R159	ERD25TJ820	CARBON 0.25W 5% 82 Ω
R163	ERD25TJ331	CARBON 0.25W 5% 330 Ω
R166	ERD25TJ271	CARBON 0.25W 5% 270 Ω
R180	ERG2FJ560H	METAL 2W 5% 56 Ω ▲
R181	ERQ2CJP390	FUSIBLE 2W 5% 39 Ω
R311	RN-4Z1601F	METAL 1/4W 20% 1.6K Ω
R312	RN-4Z1601F	METAL 1/4W 20% 1.6K Ω
R315	ERD25TJ562	CARBON 0.25W 5% 5K6 Ω
R316	ERD25TJ272	CARBON 0.25W 5% 2K7 Ω
R317	ERD25TJ564	CARBON 0.25W 5% 560K Ω
R318	ERG2SJS391	METAL 2W 5% 390 Ω
R319	ERD25TJ159	CARBON 0.25W 5% 1R5 Ω ▲
R320	ERD25TJ473	CARBON 0.25W 5% 47K Ω
R321	ERD25TJ159	CARBON 0.25W 5% 1R5 Ω ▲
R405	ERD25TJ152	CARBON 0.25W 5% 1K5 Ω
R412	ERD25TJ272	CARBON 0.25W 5% 2K7 Ω
R413	ERD25TJ339	CARBON 0.25W 5% 3R3 Ω ▲
R416	ERG2SJS102	METAL 2W 5% 1K Ω
R417	ERG2SJS103	METAL 2W 5% 10K Ω
R419	ERD25TJ273	CARBON 0.25W 5% 27K Ω
R421	ERDS1TJ224	CARBON 0.5W 5% 220K Ω
R422	ERD25TJ102	CARBON 0.25W 5% 1K Ω
R423	ERD25TJ303	CARBON 1/4W 5% 30K Ω
R507	ERD25TJ182	CARBON 1/4W 5% 1K8 Ω ▲

Cct Ref	Parts Number	Description
R510	ERD25TJ221	CARBON 0.25W 5% 220 Ω
R511	ERD25TJ221	CARBON 0.25W 5% 220 Ω
R515	ERD25TJ151	CARBON 0.25W 5% 150 Ω
R519	ERD25TJ103	CARBON 0.25W 5% 10K Ω
R520	ERD25TJ101	CARBON 0.25W 5% 100 Ω
R521	ERD25TJ101	CARBON 0.25W 5% 100 Ω
R522	ERD25TJ101	CARBON 0.25W 5% 100 Ω
R524	ERD25TJ182	CARBON 1/4W 5% 1K8 Ω ▲
R525	ERD25TJ622	CARBON 0.25W 5% 6K2 Ω
R527	ERD25TJ109	CARBON 1/4W 5% 1 Ω ▲
R531	ERD25TJ681	CARBON 0.25W 5% 680 Ω
R533	ERD25TJ472	CARBON 0.25W 5% 4K7 Ω
R535	ERD25TJ102	CARBON 0.25W 5% 1K Ω
R539	ERD25TJ102	CARBON 0.25W 5% 1K Ω
R543	ERD25TJ151	CARBON 0.25W 5% 150 Ω
R545	ERD25TJ223	CARBON 0.25W 5% 22K Ω
R546	ERD25TJ152	CARBON 0.25W 5% 1K5 Ω
R547	ERX2SJS8R2	METAL 2W 5% 8.2 Ω
R556	ERD25TJ102	CARBON 0.25W 5% 1K Ω
R560	ERD25TJ101	CARBON 0.25W 5% 100 Ω
R561	ERD25TJ101	CARBON 0.25W 5% 100 Ω
R570	ERD25TJ681	CARBON 0.25W 5% 680 Ω
R601	ERD25TJ221	CARBON 0.25W 5% 220 Ω
R602	ERD25TJ102	CARBON 0.25W 5% 1K Ω
R611	ERD25TJ153	CARBON 0.25W 5% 15K Ω
R701	ERD25TJ472	CARBON 0.25W 5% 4K7 Ω
R709	ERD25TJ472	CARBON 0.25W 5% 4K7 Ω
R710	ERD25TJ472	CARBON 0.25W 5% 4K7 Ω
R711	ERD25TJ105	CARBON 1/4W 5% 1M Ω ▲
R714	ERD25TJ472	CARBON 0.25W 5% 4K7 Ω
R715	ERD25TJ103	CARBON 0.25W 5% 10K Ω
R716	ERD25TJ102	CARBON 0.25W 5% 1K Ω
R717	ERD25TJ223	CARBON 0.25W 5% 22K Ω
R720	ERD25TJ680	CARBON 0.25W 5% 68 Ω ▲
R729	ERD25TJ472	CARBON 0.25W 5% 4K7 Ω
R730	ERD25TJ473	CARBON 0.25W 5% 47K Ω
R731	ERD25TJ103	CARBON 0.25W 5% 10K Ω
R735	ERD25TJ101	CARBON 0.25W 5% 100 Ω
R737	ERD25TJ101	CARBON 0.25W 5% 100 Ω
R739	ERD25TJ101	CARBON 0.25W 5% 100 Ω
R741	ERD25TJ102	CARBON 0.25W 5% 1K Ω
R743	ERD25TJ103	CARBON 0.25W 5% 10K Ω
R747	ERD25TJ101	CARBON 0.25W 5% 100 Ω
R748	ERD25TJ103	CARBON 0.25W 5% 10K Ω
R749	ERD25TJ103	CARBON 0.25W 5% 10K Ω
R752	ERD25TJ272	CARBON 0.25W 5% 2K7 Ω
R753	ERD25TJ472	CARBON 0.25W 5% 4K7 Ω
R802	RX10B339JP	SOLID 10W 0% 3.3 Ω ▲
R803	ERDS2TJ683T	CARBON 2W 5% 68K Ω
R804	ERDS1TJ474	CARBON 0.5W 5% 470K Ω
R806	ERD25TJ470	CARBON 0.25W 5% 47 Ω
R807	ERD25TJ362	CARBON 0.25W 5% 3K6 Ω
R808	ERD25TJ681	CARBON 0.25W 5% 680 Ω
R809	ERQ2CKPR33	FUSIBLE 2W 10% 0.33 Ω
R810	ERD25TJ472	CARBON 0.25W 5% 4K7 Ω
R811	RC-2Z565KP	CARBON 0.5W 10% 5.6M Ω
R812	ERD25TJ470	CARBON 0.25W 5% 47 Ω
R813	ERDS1TJ304	CARBON 0.5W 5% 300K Ω
R820	ERD25TJ222	CARBON 0.25W 5% 2K2 Ω
R821	ERD25TJ470	CARBON 0.25W 5% 47 Ω
R822	ERD25TJ754	CARBON 1/4W 5% 750K Ω
R824	ERD25TJ332	CARBON 0.25W 5% 3K3 Ω
R825	ERD25TJ153	CARBON 0.25W 5% 15K Ω
R826	ERDS1TJ222	CARBON 0.5W 5% 2K2 Ω
R827	ERDS1TJ102	CARBON 0.5W 5% 1K Ω
R828	ERD25TJ473	CARBON 0.25W 5% 47K Ω

Cct Ref	Parts Number	Description			
R829	ERD25TJ103	CARBON	0.25W	5%	10K Ω
R830	ERX2SJS1R0H	METAL	2W	5%	1R0 Ω
R831	EROS2TKF4702	METAL	2W	5%	47K Ω
R832	ERW2PKR82	WOUND	2W	10%	0.82 Ω
R833	ERD25TJ363	CARBON	1/4W	5%	36K Ω
R834	ERD25TJ473	CARBON	0.25W	5%	47K Ω
R835	ERD25TJ753	CARBON	0.25W	5%	75K Ω
R836	ERX2SJS2R7H	METAL	2W	5%	2R7 Ω
R837	ERG2FJ270	METAL	2W	5%	27 Ω
R841	ERG2SJS103	METAL	2W	5%	10K Ω
R842	ERG2SJS103	METAL	2W	5%	10K Ω
R847	ERD25TJ104	CARBON	0.25W	5%	100K Ω
R848	ERD25TJ473	CARBON	0.25W	5%	47K Ω
R849	ERD25TJ472	CARBON	0.25W	5%	4K7 Ω
R852	ERD25TJ472	CARBON	0.25W	5%	4K7 Ω
R853	ERD25TJ473	CARBON	0.25W	5%	47K Ω
R854	ERD25TJ121	CARBON	0.25W	5%	120 Ω
R861	ERD25TJ104	CARBON	0.25W	5%	100K Ω
R862	ERD25TJ473	CARBON	0.25W	5%	47K Ω
R863	ERD25TJ472	CARBON	0.25W	5%	4K7 Ω
R901	ERD25TJ102	CARBON	0.25W	5%	1K Ω
R902	ERD25TJ102	CARBON	0.25W	5%	1K Ω
R903	ERD25TJ102	CARBON	0.25W	5%	1K Ω
R904	ERD25TJ101	CARBON	0.25W	5%	100 Ω
R905	ERD25TJ101	CARBON	0.25W	5%	100 Ω
R906	ERD25TJ101	CARBON	0.25W	5%	100 Ω
R907	RF01Y478K	FUSIBLE	1W	1%	0.47 Ω
R908	ERDS1TJ102	CARBON	0.5W	5%	1K Ω
R909	ERDS1TJ102	CARBON	0.5W	5%	1K Ω
R910	ERDS1TJ102	CARBON	0.5W	5%	1K Ω
R911	ERG2SJS121	METAL	2W	5%	120 Ω
RA01	ERD25TJ750	CARBON	0.25W	5%	75 Ω
RA09	ERD25TJ822	CARBON	0.25W	5%	8K2 Ω
RA10	ERD25TJ223	CARBON	0.25W	5%	22K Ω
RA11	ERD25TJ223	CARBON	0.25W	5%	22K Ω
RA12	ERD25TJ821	CARBON	0.25W	5%	820 Ω
RA13	ERD25TJ750	CARBON	0.25W	5%	75 Ω
RA14	ERD25TJ223	CARBON	0.25W	5%	22K Ω
RA16	ERD25TJ821	CARBON	0.25W	5%	820 Ω
RA17	ERD25TJ750	CARBON	0.25W	5%	75 Ω
RA18	ERD25TJ223	CARBON	0.25W	5%	22K Ω
RA34	ERD25TJ223	CARBON	0.25W	5%	22K Ω
RA39	ERD25TJ470	CARBON	0.25W	5%	47 Ω
RA43	ERD25TJ223	CARBON	0.25W	5%	22K Ω
RA46	ERD25TJ151	CARBON	0.25W	5%	150 Ω
RA47	ERD25TJ223	CARBON	0.25W	5%	22K Ω
RA49	ERD25TJ151	CARBON	0.25W	5%	150 Ω
RA51	ERD25TJ750	CARBON	0.25W	5%	75 Ω
RC150	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
RC151	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
RC154	ERJ6GEYJ392	S.M.CARB	0.1W	5%	3K9 Ω
RC156	ERJ6GEYJ822	S.M.CARB	0.1W	5%	8K2 Ω
RC160	ERJ6GEYJ242	S.M.CARB	0.1W	5%	2K4 Ω
RC161	ERJ6GEYJ182	S.M.CARB	0.1W	5%	1K8 Ω
RC162	ERJ6GEYJ302	S.M.CARB	0.1W	5%	3K Ω
RC164	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
RC165	ERJ6GEYJ561	S.M.CARB	0.1W	5%	560 Ω
RC167	ERJ6GEYJ223	S.M.CARB	0.1W	5%	22K Ω
RC168	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100K Ω
RC169	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100K Ω
RC174	ERJ6GEYJ154	S.M.CARB	0.1W	5%	150K Ω
RC175	ERJ6GEYJ753	S.M.CARB	0.1W	5%	75K Ω
RC176	ERJ6GEYJ152	S.M.CARB	0.1W	5%	1K5 Ω
RC178	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω
RC179	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω
RC501	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7 Ω

Cct Ref	Parts Number	Description			
RC502	ERJ6GEYJ561	S.M.CARB	0.1W	5%	560 Ω
RC503	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
RC504	ERJ6GEYJ562	S.M.CARB	0.1W	5%	5K6 Ω
RC505	ERJ6GEYJ270	S.M.CARB	0.1W	5%	27 Ω
RC506	ERJ6GEYJ681	S.M.CARB	0.1W	5%	680 Ω
RC508	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω
RC509	ERJ6GEYJ391	S.M.CARB	0.1W	5%	390 Ω
RC512	ERJ6GEYJ331	S.M.CARB	0.1W	5%	330 Ω
RC513	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
RC514	ERJ6GEYJ241	S.M.CARB	0.5W	5%	240 Ω
RC516	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75 Ω
RC517	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75 Ω
RC518	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75 Ω
RC523	ERJ6GEYJ823	S.M.CARB	0.1W	5%	82K Ω
RC526	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100K Ω
RC528	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω
RC529	ERJ6GEYJ223	S.M.CARB	0.1W	5%	22K Ω
RC530	ERJ6GEYJ393	S.M.CARB	0.1W	5%	39K Ω
RC532	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
RC534	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω
RC536	ERJ6GEYJ470	S.M.CARB	0.1W	5%	47 Ω
RC537	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
RC540	ERJ6GEYJ303	S.M.CARB	0.1W	5%	30K Ω
RC541	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
RC542	ERJ6GEYJ273	S.M.CARB	0.1W	5%	27K Ω
RC544	ERJ6GEYJ301	S.M.CARB	0.1W	5%	300 Ω
RC548	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7 Ω
RC549	ERJ6GEYJ272	S.M.CARB	0.1W	5%	2K7 Ω
RC550	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω
RC551	ERJ6GEYJ561	S.M.CARB	0.1W	5%	560 Ω
RC553	ERJ6GEYJ561	S.M.CARB	0.1W	5%	560 Ω
RC554	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω
RC555	ERJ6GEYJ331	S.M.CARB	0.1W	5%	330 Ω
RC557	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
RC558	ERJ6GEYJ821	S.M.CARB	0.1W	5%	820 Ω
RC559	ERJ6GEYJ242	S.M.CARB	0.1W	5%	2K4 Ω
RC603	ERJ6GEYJ362	S.M.CAR	0.1W	5%	3K6 Ω
RC604	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7 Ω
RC605	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7 Ω
RC606	ERJ6GEYJ332	S.M.CARB	0.1W	5%	3K3 Ω
RC607	ERJ6GEYJ223	S.M.CARB	0.1W	5%	22K Ω
RC608	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω
RC609	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7 Ω
RC670	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100K Ω
RC702	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7 Ω
RC703	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7 Ω
RC704	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7 Ω
RC705	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7 Ω
RC706	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7 Ω
RC707	ERJ6GEYJ182	S.M.CARB	0.1W	5%	1K8 Ω
RC708	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7 Ω
RC713	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
RC718	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω
RC719	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω
RC721	ERJ6GEYJ473	S.M.CARB	0.1W	5%	47K Ω
RC732	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7 Ω
RC742	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
RC744	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
RC751	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7 Ω
RC752	ERJ6GEYJ223	S.M.CARB	0.1W	5%	22K Ω
RC753	ERJ6GEYJ223	S.M.CARB	0.1W	5%	22K Ω
RCA02	ERJ6GEYJ393	S.M.CARB	0.1W	5%	39K Ω
RCA03	ERJ6GEYJ753	S.M.CARB	0.1W	5%	75K Ω
RCA04	ERJ6GEYJ824	S.M.CARB	0.1W	5%	820K Ω
RCA05	ERJ6GEYJ753	S.M.CARB	0.1W	5%	75K Ω
RCA15	ERJ6GEYJ223	S.M.CARB	0.1W	5%	22K Ω

Cct Ref	Parts Number	Description				
RCA19	ERJ6GEYJ223	S.M.CARB	0.1W	5%	22K $\Omega$	
RCA20	ERJ6GEYJ821	S.M.CARB	0.1W	5%	820 $\Omega$	
RCA22	ERJ6GEYJ124	S.M.CARB	0.1W	5%	120K $\Omega$	
RCA23	ERJ6GEYJ124	S.M.CARB	0.1W	5%	120K $\Omega$	
RCA24	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K $\Omega$	
RCA25	ERJ6GEYJ124	S.M.CARB	0.1W	5%	120K $\Omega$	
RCA26	ERJ6GEYJ124	S.M.CARB	0.1W	5%	120K $\Omega$	
RCA27	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K $\Omega$	
RCA35	ERJ6GEYJ223	S.M.CARB	0.1W	5%	22K $\Omega$	
RCA36	ERJ6GEYJ333	S.M.CARB	0.1W	5%	33K $\Omega$	
RCA37	ERJ6GEYJ153	S.M.CARB	0.1W	5%	15K $\Omega$	
RCA38	ERJ6GEYJ391	S.M.CARB	0.1W	5%	390 $\Omega$	
RCA40	ERJ6GEYJ683	S.M.CARB	0.1W	5%	68K $\Omega$	
RCA41	ERJ6GEYJ683	S.M.CARB	0.1W	5%	68K $\Omega$	
RCA42	ERJ6GEYJ152	S.M.CARB	0.1W	5%	1K5 $\Omega$	
RCA44	ERJ6GEYJ221	S.M.CARB	0.1W	5%	220 $\Omega$	
RCA45	ERJ6GEYJ151	S.M.CARB	0.1W	5%	150 $\Omega$	
RCA48	ERJ6GEYJ221	S.M.CARB	0.1W	5%	220 $\Omega$	
RCA50	ERJ6GEYJ221	S.M.CARB	0.1W	5%	220 $\Omega$	
RCA52	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7 $\Omega$	
RCA53	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7 $\Omega$	
RCA54	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7 $\Omega$	
RCA55	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7 $\Omega$	
RCN01	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7 $\Omega$	
RCN02	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7 $\Omega$	
RCN11	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K $\Omega$	
RCN12	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K $\Omega$	
RCN15	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7 $\Omega$	
RCN16	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7 $\Omega$	
RCN17	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7 $\Omega$	
RCN18	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7 $\Omega$	
RCN19	ERJ6GEYJ182	S.M.CARB	0.1W	5%	1K8 $\Omega$	
RCN21	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K $\Omega$	
RCN22	ERJ6GEYJ105	S.M.CARB	0.1W	5%	1M $\Omega$	
RCN23	ERJ6GEYJ511	S.M.CARB	0.1W	5%	510 $\Omega$	
RCN24	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K $\Omega$	
RCN25	ERJ6GEYJ106	S.M.CARB	0.1W	5%	10M $\Omega$	
RCN26	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100K $\Omega$	
RCN34	ERJ6GEYJ221	S.M.CARB	0.1W	5%	220 $\Omega$	
RCN35	ERJ6GEYJ273	S.M.CARB	0.1W	5%	27K $\Omega$	
RCN36	ERJ6GEYJ221	S.M.CARB	0.1W	5%	220 $\Omega$	
RCN37	ERJ6GEYJ273	S.M.CARB	0.1W	5%	27K $\Omega$	
RCN41	ERJ6GEYJ332	S.M.CARB	0.1W	5%	3K3 $\Omega$	
RCN44	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K $\Omega$	
RCN45	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K $\Omega$	
RCN46	ERJ6GEYJ562	S.M.CARB	0.1W	5%	5K6 $\Omega$	
RCN47	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 $\Omega$	
RCN48	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 $\Omega$	
RCN49	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7 $\Omega$	
RCN52	ERJ6GEYJ474	S.M.CARB	0.1W	5%	470K $\Omega$	
RCN53	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K $\Omega$	
RCP01	ERJ6GEYJ391	S.M.CARB	0.1W	5%	390 $\Omega$	
RCP04	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K $\Omega$	
RCP05	ERJ6GEYJ182	S.M.CARB	0.1W	5%	1K8 $\Omega$	
RCP06	ERJ6GEYJ562	S.M.CARB	0.1W	5%	5K6 $\Omega$	
RCP07	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K $\Omega$	
RCQ02	ERJ6GEYJ122	S.M.CARB	0.1W	5%	1K2 $\Omega$	
RCQ03	ERJ6GEYJ122	S.M.CARB	0.1W	5%	1K2 $\Omega$	
RCQ19	ERJ6GEYJ122	S.M.CARB	0.1W	5%	1K2 $\Omega$	
RCQ20	ERJ6GEYJ122	S.M.CARB	0.1W	5%	1K2 $\Omega$	
RCU01	ERJ6GEYJ124	S.M.CARB	0.1W	5%	120K $\Omega$	
RCU02	ERJ6GEYJ124	S.M.CARB	0.1W	5%	120K $\Omega$	
RCU03	ERJ6GEYJ821	S.M.CARB	0.1W	5%	820 $\Omega$	
RCU04	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K $\Omega$	
RCU06	ERJ6GEYJ152	S.M.CARB	0.1W	5%	1K5 $\Omega$	
RCU07	ERJ6GEYJ470	S.M.CARB	0.1W	5%	47 $\Omega$	

Cct Ref	Parts Number	Description				
RCU08	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K $\Omega$	
RCU09	ERJ6GEYJ562	S.M.CARB	0.1W	5%	5K6 $\Omega$	
RCU12	ERJ6GEYJ123	S.M.CARB	0.1W	5%	12K $\Omega$	
RCU13	ERJ6GEYJ223	S.M.CARB	0.1W	5%	22K $\Omega$	
RCU14	ERJ6GEYJ822	S.M.CARB	0.1W	5%	8K2 $\Omega$	
RCU15	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K $\Omega$	
RCU16	ERJ6GEYJ334	S.M.CARB	0.1W	5%	330K $\Omega$	
RCU17	ERJ6GEYJ151	S.M.CARB	0.1W	5%	150 $\Omega$	
RCU18	ERJ6GEYJ273	S.M.CARB	0.1W	5%	27K $\Omega$	
RCU22	ERJ6GEYJ152	S.M.CARB	0.1W	5%	1K5 $\Omega$	
RCU23	ERJ6GEYJ470	S.M.CARB	0.1W	5%	47 $\Omega$	
RCU24	ERJ6GEYJ223	S.M.CARB	0.1W	5%	22K $\Omega$	
RCU25	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K $\Omega$	
RCU26	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K $\Omega$	
RCU27	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K $\Omega$	
RCY06	ERJ6GEYJ122	S.M.CARB	0.1W	5%	1K2 $\Omega$	
RCY08	ERJ6GEYJ331	S.M.CARB	0.1W	5%	330 $\Omega$	
RCY09	ERJ6GEYJ272	S.M.CARB	0.1W	5%	2K7 $\Omega$	
RCY10	ERJ6GEYJ201	S.M.CARB	0.1W	5%	200 $\Omega$	
RCY11	ERJ6GEYJ561	S.M.CARB	0.1W	5%	560 $\Omega$	
RCY12	ERJ6GEYJ561	S.M.CARB	0.1W	5%	560 $\Omega$	
RCY13	ERJ6GEYJ152	S.M.CARB	0.1W	5%	1K5 $\Omega$	
RCY14	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7 $\Omega$	
RCY18	ERJ6GEYJ563	S.M.CARB	0.1W	5%	56K $\Omega$	
RCY26	ERJ6GEYJ182	S.M.CARB	0.1W	5%	1K8 $\Omega$	
RCY27	ERJ6GEYJ822	S.M.CARB	0.1W	5%	8K2 $\Omega$	
RCY50	ERJ6GEYJ511	S.M.CARB	0.1W	5%	510 $\Omega$	
RCY51	ERJ6GEYJ511	S.M.CARB	0.1W	5%	510 $\Omega$	
RCY52	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K $\Omega$	
RCY53	ERJ6GEYJ363	S.M.CARB	0.5W	5%	36K $\Omega$	
RCY54	ERJ6GEYJ473	S.M.CARB	0.1W	5%	47K $\Omega$	
RCY55	ERJ6GEYJ393	S.M.CARB	0.1W	5%	39K $\Omega$	
RCY56	ERJ6GEYJ302	S.M.CARB	0.1W	5%	3K $\Omega$	
RCY57	ERJ6GEYJ473	S.M.CARB	0.1W	5%	47K $\Omega$	
RCY58	ERJ6GEYJ473	S.M.CARB	0.1W	5%	47K $\Omega$	
RCY59	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7 $\Omega$	
RN03	ERD25TJ562	CARBON	0.25W	5%	5K6 $\Omega$	
RN04	ERD25TJ304	CARBON	0.25W	5%	300K $\Omega$	
RN05	ERD25TJ121	CARBON	0.25W	5%	120 $\Omega$	
RN06	ERD25TJ304	CARBON	0.25W	5%	300K $\Omega$	
RN09	ERD25TJ912	CARBON	0.25W	5%	9K1 $\Omega$	
RN10	ERD25TJ332	CARBON	0.25W	5%	3K3 $\Omega$	
RN13	ERD25TJ103	CARBON	0.25W	5%	10K $\Omega$	
RN14	ERD25TJ221	CARBON	0.25W	5%	220 $\Omega$	
RN20	ERD25TJ182	CARBON	1/4W	5%	1K8 $\Omega$ <span style="float: right;">▲</span>	
RN27	ERD25TJ472	CARBON	0.25W	5%	4K7 $\Omega$	
RN28	ERD25TJ472	CARBON	0.25W	5%	4K7 $\Omega$	
RN29	ERD25TJ332	CARBON	0.25W	5%	3K3 $\Omega$	
RN30	ERDS2TJ3R9	CARBON	2W	5%	3.9 $\Omega$	
RN31	ERD25TJ102	CARBON	0.25W	5%	1K $\Omega$	
RN32	ERD25TJ102	CARBON	0.25W	5%	1K $\Omega$	
RN33	ERD25TJ102	CARBON	0.25W	5%	1K $\Omega$	
RN38	ERD25TJ182	CARBON	1/4W	5%	1K8 $\Omega$ <span style="float: right;">▲</span>	
RN39	ERD25TJ103	CARBON	0.25W	5%	10K $\Omega$	
RN40	ERD25TJ821	CARBON	0.25W	5%	820 $\Omega$	
RN42	ERD25TJ182	CARBON	1/4W	5%	1K8 $\Omega$ <span style="float: right;">▲</span>	
RN43	ERD25TJ473	CARBON	0.25W	5%	47K $\Omega$	
RN50	ERD25TJ183	CARBON	0.25W	5%	18K $\Omega$	
RN51	ERD25TJ223	CARBON	0.25W	5%	22K $\Omega$	
RP02	ERD25TJ102	CARBON	0.25W	5%	1K $\Omega$	
RP03	ERD25TJ102	CARBON	0.25W	5%	1K $\Omega$	
RQ05	ERD25TJ102	CARBON	0.25W	5%	1K $\Omega$	
RQ06	ERD25TJ102	CARBON	0.25W	5%	1K $\Omega$	

Cct Ref	Parts Number	Description			
RQ07	ERD25TJ181J	CARBON	0,25W	5%	180 Ω
RQ08	ERD25TJ181J	CARBON	0,25W	5%	180 Ω
RQ10	ERD25TJ271	CARBON	0,25W	5%	270 Ω
RQ11	ERD25TJ431	CARBON	0,25W	5%	430 Ω
RQ12	ERD25TJ821	CARBON	0,25W	5%	820 Ω
RQ13	ERD25TJ202	CARBON	0,25W	5%	2K Ω
RQ15	ERD25TJ271	CARBON	0,25W	5%	270 Ω
RQ16	ERD25TJ431	CARBON	0,25W	5%	430 Ω
RQ17	ERD25TJ821	CARBON	0,25W	5%	820 Ω
RQ18	ERD25TJ202	CARBON	0,25W	5%	2K Ω
RQ21	ERD25TJ153	CARBON	0,25W	5%	15K Ω
RQ22	ERD25TJ153	CARBON	0,25W	5%	15K Ω
RQ23	ERD25TJ153	CARBON	0,25W	5%	15K Ω
RQ24	ERD25TJ153	CARBON	0,25W	5%	15K Ω
RU07	ERD25TJ272	CARBON	0,25W	5%	2K7 Ω
RU11	ERD25TJ821	CARBON	0,25W	5%	820 Ω
RU19	RN-4Z1001F	METAL	1/4W	1%	1K Ω
RU20	ERD25TJ229	CARBON	1/4W	5%	2.2 Ω <span style="color:red;">▲</span>
RU21	ERD25TJ229	CARBON	1/4W	5%	2.2 Ω <span style="color:red;">▲</span>
RU28	ERD25TJ561	CARBON	0,25W	5%	560 Ω
RU29	ERD25TJ333	CARBON	0,25W	5%	33K Ω
RU30	ERD25TJ153	CARBON	0,25W	5%	15K Ω
RU32	ERD25TJ563	CARBON	0,25W	5%	56K Ω
RU35	ERD25TJ333	CARBON	0,25W	5%	33K Ω
RU36	ERD25TJ362	CARBON	0,25W	5%	3K6 Ω
RY01	ERD25TJ223	CARBON	0,25W	5%	22K Ω
RY02	ERD25TJ103	CARBON	0,25W	5%	10K Ω
RY03	ERD25TJ183	CARBON	0,25W	5%	18K Ω
RY04	ERD25TJ153	CARBON	0,25W	5%	15K Ω
RY05	ERD25TJ822	CARBON	0,25W	5%	8K2 Ω
RY07	ERD25TJ331	CARBON	0,25W	5%	330 Ω
RY15	ERD25TJ102	CARBON	0,25W	5%	1K Ω
RY16	ERD25TJ102	CARBON	0,25W	5%	1K Ω
RY17	ERD25TJ221	CARBON	0,25W	5%	220 Ω
RY19	ERD25TJ750	CARBON	0,25W	5%	75 Ω
RY20	ERD25TJ750	CARBON	0,25W	5%	75 Ω
RY21	ERD25TJ820	CARBON	0,25W	5%	82 Ω
RY23	ERD25TJ392	CARBON	0,25W	5%	3K9 Ω
RY24	ERD25TJ102	CARBON	0,25W	5%	1K Ω
RY25	ERD25TJ272	CARBON	0,25W	5%	2K7 Ω
RY28	ERD25TJ182	CARBON	1/4W	5%	1K8 Ω <span style="color:red;">▲</span>
RY29	ERD25TJ103	CARBON	0,25W	5%	10K Ω
RY30	ERD25TJ103	CARBON	0,25W	5%	10K Ω
RY31	ERD25TJ221	CARBON	0,25W	5%	220 Ω
RY32	ERD25TJ102	CARBON	0,25W	5%	1K Ω
<b>CAPACITORS</b>					
C101	CBZF1H104Z	CERAMIC	50V	100nF	
C102	ECEA1H220	ELECT	50V	22pF	
C105	ECEA1H470	ELECT	50V	47pF	
C107	ECEA1ES101	ELECT	25V	100pF	
C151	ECEA1ES101	ELECT	25V	100pF	
C156	ECEA1H220	ELECT	50V	22pF	
C157	ECEA1H470	ELECT	50V	47pF	
C164	ECEA1H220	ELECT	50V	22pF	
C166	ECEA1ES470	ELECT	25V	47pF	
C168	CZCH1H220J	CERAMIC	50V	22pF	
C171	ECKC1H101J	CERAMIC	50V	100pF	
C173	ECEA1H229	ELECT	50V	2.2μF	
C174	ECEA1CS331	ELECT	16V	330nF	
C176	ECEA1H100	ELECT	50V	10pF	
C177	ECEA1CS222	ELECT	16V	2.2nF	
C311	ECEA1ES471	ELECT	25V	470pF	
C312	CBXF1H104Z	CERAMIC	50V	100nF	
C313	CMXM2A104J	MYLAR	100V	100nF	
C314	CMXM2A473J	MYLAR	100V	47nF	
C315	CMXM2A473J	MYLAR	100V	47nF	

Cct Ref	Parts Number	Description			
C317	CMXM2A103J	MYLAR	100V	10nF	
C320	CMXM2A473J	MYLAR	100V	47nF	
C403	ECKC2H221KB	CERAMIC	500V	220pF	
C410	ECEA1H100	ELECT	50V	10pF	
C411	ECCR2H222J	CERAMIC	500V	2.2nF <span style="color:red;">▲</span>	
C412	CMXM2A104J	MYLAR	100V	100nF	
C418	CMYE2G394J	C MYLAR	400V	390nF	
C419	ECEA2CS100	ELECT	160V	10pF	
C421	ECEA2CS470	ELECT	160V	47pF	
C423	ECEA2CS100	ELECT	160V	10pF	
C424	CMXM2A104J	MYLAR	100V	100nF	
C426	CMYH3C722J	MYLAR	1K6V	7200pF <span style="color:red;">▲</span>	
C433	ECCR2H470J	CERAMIC	100V	47pF	
C500	ECEA1H100	ELECT	50V	10pF	
C503	ECCR1H229J	ELECT	50V	2.2μF	
C505	CZCH1H220J	CERAMIC	50V	22pF	
C506	CZCH1H100J	CERAMIC	50V	10pF	
C507	CMXM2A473J	MYLAR	100V	47nF	
C508	ECKC1H223J	CERAMIC	50V	22nF	
C509	ECEA1H229	ELECT	50V	2.2μF	
C510	ECEA1H478	ELECT	50V	470μF	
C511	ECEA1CS331	ELECT	16V	330nF	
C513	ECEA1CS331	ELECT	16V	330nF	
C515	ECEA1H478	ELECT	50V	470μF	
C516	ECEA1H229	ELECT	50V	2.2μF	
C518	CMXM2A104J	MYLAR	100V	100nF	
C519	ECEA1H478	ELECT	50V	470μF	
C520	CBZF1H104Z	CERAMIC	50V	100nF	
C521	CBZF1H104Z	CERAMIC	50V	100nF	
C522	CBZF1H104Z	CERAMIC	50V	100nF	
C523	ECEA1H220	ELECT	50V	22pF	
C531	ECEA1CS471	ELECT	16V	470μF	
C532	ECEA1H109	ELECT	50V	1μF	
C534	ECEA1H478	ELECT	50V	470μF	
C537	ECEA1H229	ELECT	50V	2.2μF	
C541	CMXM2A104J	MYLAR	100V	100nF	
C542	CEXD1H109F	ELECT	50V	1μF	
C543	CBZF1H104Z	CERAMIC	50V	100nF	
C544	ECEA1H229	ELECT	50V	2.2μF	
C545	ECEA1H100	ELECT	50V	10pF	
C547	ECEA1CS221	ELECT	16V	220nF	
C549	ECEA1CS222	ELECT	16V	2.2nF	
C551	ECEA1CS222	ELECT	16V	2.2nF	
C552	ECCR1H229J	ELECT	50V	2.2μF	
C556	ECEA1H479	ELECT	50V	4.7μF	
C570	ECEA1CS222	ELECT	16V	2.2nF	
C584	ECEA1CS331	ELECT	16V	330nF	
C586	ECEA1CS471	ELECT	16V	470μF	
C587	ECEA1CS221	ELECT	16V	220nF	
C609	ECEA1CS220	ELECT	16V	22nF	
C611	ECEA1CS470	ELECT	16V	47μF	
C613	CMXL1J224J	MYLAR	63V	220nF	
C614	ECEA1H100	ELECT	50V	10pF	
C615	ECEA1CS220	ELECT	16V	22nF	
C616	ECEA1CS331	ELECT	16V	330nF	
C617	ECEA1H100	ELECT	50V	10pF	
C618	CMXL1J224J	MYLAR	63V	220nF	
C620	ECEA1CS331	ELECT	16V	330nF	
C702	ECEA1ES101	ELECT	25V	100pF	
C704	ECEA1CS101	ELECT	16V	100pF	
C706	ECEA1CS101	ELECT	16V	100pF	
C707	CBZF1H104Z	CERAMIC	50V	100nF	
C709	ECEA1CS101	ELECT	16V	100pF	
C729	ECEA1CS470	ELECT	16V	47μF	
C801	CL1UC3474M	FILM	250V	470nF	
C802	ECKC3A472J	CERAMIC	1KV	4.7nF	

Cct Ref	Parts Number	Description			
C803	ECKC3A472J	CERAMIC	1KV	4.7nF	
C804	CEYN2G101P	ELECT	400V	100μF	
C805	ECEA1H330	ELECT	50V	33pF	
C806	ECKC3D471JB	CERAMIC	2KV	470pF	⚠
C807	ECKC1H152J	CERAMIC	50V	1.5nF	
C808	ECCR1H471J	CERAMIC	50V	470pF	
C809	CEXF2W100V	ELECT	450V	10pF	
C811	CH1BFE472M	CAPACITO	4kV	4.7nF	⚠
C821	ECEA2CS101	ELECT	160V	100pF	
C822	ECEA1CS102	ELECT	16V	1nF	
C823	ECEA1ES102	ELECT	25V	1nF	
C824	ECEA1CS102	ELECT	16V	1nF	
C825	ECEA1CS102	ELECT	16V	1nF	
C827	ECCR1H472J	CERAMIC	50V	4.7nF	
C831	ECCR3A471J	CERAMIC	1KV	470pF	
C832	ECCR2H471J	CERAMIC	500V	470pF	⚠
C837	ECEA1V102	ELECT	35V	1nF	
C838	ECEA1CS470	ELECT	16V	47μF	
C839	ECEA1CS470	ELECT	16V	47μF	
C842	ECEA1CS101	ELECT	16V	100pF	
C843	ECEA1CS101	ELECT	16V	100pF	
C844	ECEA1CS222	ELECT	16V	2.2nF	
C845	ECEA1CS101	ELECT	16V	100pF	
C846	ECEA1CS101	ELECT	16V	100pF	
C849	ECEA1CS101	ELECT	16V	100pF	
C850	ECEA2CS470	ELECT	160V	47pF	
C852	ECKC1H103J	CERAMIC	50V	100μF	
C856	ECKC1H103J	CERAMIC	50V	100μF	
C858	ECKC1H103J	CERAMIC	50V	100μF	
C902	ECKC2H103J	CERAMIC	500V	10nF	⚠
C904	ECKC3D102J	CERAMIC	2KV	1nF	⚠
C921	ECKC1H221J	CERAMIC	50V	220pF	
C922	ECKC1H221J	CERAMIC	50V	220pF	
C923	ECKC1H221J	CERAMIC	50V	220pF	
CA08	ECEA1CS470	ELECT	16V	47μF	
CA09	ECEA1H100	ELECT	50V	10pF	
CA10	ECEA1CS470	ELECT	16V	47μF	
CA11	ECEA1CS470	ELECT	16V	47μF	
CA12	ECEA1CS470	ELECT	16V	47μF	
CA13	ECEA1CS470	ELECT	16V	47μF	
CA14	ECEA1H100	ELECT	50V	10pF	
CA15	ECEA1H100	ELECT	50V	10pF	
CA16	ECEA1H100	ELECT	50V	10pF	
CA17	CBZF1H104Z	CERAMIC	50V	100nF	
CA20	ECEA1H100	ELECT	50V	10pF	
CA21	ECEA1CS101	ELECT	16V	100pF	
CA22	ECEA1CS101	ELECT	16V	100pF	
CA23	ECEA1CS470	ELECT	16V	47μF	
CA24	ECEA1CS101	ELECT	16V	100pF	
CA25	ECEA1H100	ELECT	50V	10pF	
CA26	ECEA1H100	ELECT	50V	10pF	
CA60	ECEA1ES101	ELECT	25V	100pF	
CA62	ECEA1H100	ELECT	50V	10pF	
CA63	ECEA1H100	ELECT	50V	10pF	
CA65	ECEA1ES470	ELECT	25V	47pF	
CA66	ECEA1ES470	ELECT	25V	47pF	
CA67	ECEA1CS331	ELECT	16V	330nF	
CC150	ECUV1H103JCN	CERAMIC	50V	10nF	
CC156	ECJ2VB1H102K	CERAMIC	50V	1nF	
CC157	ECUV1H104KBX	S.M. CAP	50V	100nF	
CC159	ECUV1H104KBX	S.M. CAP	50V	100nF	
CC160	ECUV1H181JCX	S.M. CAP	50V	180pF	
CC161	ECJ2VB1H333K	CERAMIC	50V	33nF	
CC162	ECJ2VB1H333K	CERAMIC	50V	33nF	
CC163	ECUV1H223JCN	CERAMIC	50V	22nF	
CC165	ECUV1H104KBX	S.M. CAP	50V	100nF	

Cct Ref	Parts Number	Description			
CC167	ECJ2VC1H560J	CERAMIC	50V	56pF	
CC169	ECJ2VB1H472K	CERAMIC	50V	4.7nF	
CC170	ECJ2VB1H102K	CERAMIC	50V	1nF	
CC172	ECJ2VC1H809D	CERAMIC	50V	8pF	
CC501	ECJ2VC1H221J	CERAMIC	50V	220pF	
CC502	ECUV1H151JCX	S.M. CAP	50V	150pF	
CC504	ECJ2VC1H560J	CERAMIC	50V	56pF	
CC512	ECUV1H104KBX	S.M. CAP	50V	100nF	
CC514	ECUV1H104KBX	S.M. CAP	50V	100nF	
CC517	ECUV1H181JCX	S.M. CAP	50V	180pF	
CC524	ECUV1H104KBX	S.M. CAP	50V	100nF	
CC525	ECUV1H104KBX	S.M. CAP	50V	100nF	
CC526	ECUV1H150JCX	S.M. CAP	50V	15pF	
CC527	ECUV1H150JCX	S.M. CAP	50V	15pF	
CC528	ECJ2VF1H474Z	CERAMIC	50V	470nF	
CC529	ECJ2VB1H472K	CERAMIC	50V	4.7nF	
CC530	ECUV1H104KBX	S.M. CAP	50V	100nF	
CC533	ECUV1H181JCX	S.M. CAP	50V	180pF	
CC535	ECUV1H332KBX	S.M. CAP	50V	3.3nF	
CC536	ECJ2VB1H472K	CERAMIC	50V	4.7nF	
CC538	ECJ2VB1H102K	CERAMIC	50V	1nF	
CC539	ECJ2VB1H102K	CERAMIC	50V	1nF	
CC540	ECJ2VB1H102K	CERAMIC	50V	1nF	
CC545	ECUV1H392KBX	CERAMIC	50V	3.9nF	
CC546	ECUV1H104KBX	S.M. CAP	50V	100nF	
CC548	ECJ2VB1H102K	CERAMIC	50V	1nF	
CC552	ECUV1H103JCN	CERAMIC	50V	10nF	
CC554	ECUV1H151JCX	S.M. CAP	50V	150pF	
CC576	ECJ2VB1H472K	CERAMIC	50V	4.7nF	
CC581	ECUV1H222KBX	S.M. CAP	50V	2.2nF	
CC582	ECUV1H222KBX	S.M. CAP	50V	2.2nF	
CC583	ECUV1H101JCG	CERAMIC	50V	100pF	
CC584	ECUV1H101JCG	CERAMIC	50V	100pF	
CC585	ECUV1H101JCG	CERAMIC	50V	100pF	
CC602	ECUV1H822KBX	S.M. CAP	50V	8.2nF	
CC619	ECUV1H104KBX	S.M. CAP	50V	100nF	
CC620	ECJ2VB1H102K	CERAMIC	50V	1nF	
CC621	ECJ2VB1H102K	CERAMIC	50V	1nF	
CC703	ECUV1H104KBX	S.M. CAP	50V	100nF	
CC705	ECUV1H104KBX	S.M. CAP	50V	100nF	
CC708	ECUV1H104KBX	S.M. CAP	50V	100nF	
CC710	ECJ2VB1H472K	CERAMIC	50V	4.7nF	
CC712	ECUV1H103JCN	CERAMIC	50V	10nF	
CC713	ECJ2VC1H221J	CERAMIC	50V	220pF	
CC715	ECUV1H103JCN	CERAMIC	50V	10nF	
CC719	ECUV1H103JCN	CERAMIC	50V	10nF	
CC722	ECUV1H103JCN	CERAMIC	50V	10nF	
CC724	ECUV1H103JCN	CERAMIC	50V	10nF	
CC726	ECUV1H330JCX	S.M. CAP	50V	33pF	
CC727	ECUV1H330JCX	S.M. CAP	50V	33pF	
CC728	ECUV1H104KBX	S.M. CAP	50V	100nF	
CC730	ECUV1H104KBX	S.M. CAP	50V	100nF	
CC734	ECJ2VB1H221J	CERAMIC	50V	220pF	
CC735	ECUV1H151JCX	S.M. CAP	50V	150pF	
CC736	ECUV1H104KBX	S.M. CAP	50V	100nF	
CCA01	ECJ2VB1H102K	CERAMIC	50V	1nF	
CCA02	ECJ2VB1H102K	CERAMIC	50V	1nF	
CCA03	ECJ2VB1H102K	CERAMIC	50V	1nF	
CCA04	ECJ2VC1H471J	CERAMIC	50V	470pF	
CCA05	ECJ2VB1H102K	CERAMIC	50V	1nF	
CCA07	ECUV1H561KBX	S.M. CAP	50V	560pF	
CCA18	ECUV1H101JCG	CERAMIC	50V	100pF	
CCN07	ECUV1H104KBX	S.M. CAP	50V	100nF	
CCN14	ECUV1H103JCN	CERAMIC	50V	10nF	
CCN29	ECUV1H332KBX	S.M. CAP	50V	3.3nF	
CCN30	ECUV1H182KBX	S.M. CAP	50V	1.8nF	

Cct Ref	Parts Number	Description			
CCN32	ECUV1H104KBX	S.M. CAP	50V	100nF	
CCP01	ECUV1H103JCN	CERAMIC	50V	10nF	
CCP03	ECUV1H473JCN	CERAMIC	50V	47nF	
CCP05	ECUV1H103JCN	CERAMIC	50V	10nF	
CCQ01	ECUV1H103JCN	CERAMIC	50V	10nF	
CCU06	ECUV1H104KBX	S.M. CAP	50V	100nF	
CCU09	ECUV1H104KBX	S.M. CAP	50V	100nF	
CCU11	ECUV1H103JCN	CERAMIC	50V	10nF	
CCU20	ECUV1H104KBX	S.M. CAP	50V	100nF	
CCU27	ECUV1H332KBX	S.M. CAP	50V	3.3nF	
CCY04	ECUV1H104KBX	S.M. CAP	50V	100nF	
CCY08	ECJ2VC1H509D	CERAMIC	50V	5pF	
CCY09	ECUV1H391JCX	S.M. CAP	50V	390pF	
CCY11	ECJ2VC1H221J	CERAMIC	50V	220pF	
CCY15	ECUV1H103JCN	CERAMIC	50V	10nF	
CCY25	ECUV1H104KBX	S.M. CAP	50V	100nF	
CCY27	ECUV1H104KBX	S.M. CAP	50V	100nF	
CCY31	ECUV1H103JCN	CERAMIC	50V	10nF	
CCY32	ECUV1H103JCN	CERAMIC	50V	10nF	
CCY35	ECUV1H104KBX	S.M. CAP	50V	100nF	
CCY46	ECUV1H103JCN	CERAMIC	50V	10nF	
CCY47	ECUV1H473JCN	CERAMIC	50V	47nF	
CCY48	ECUV1H103JCN	CERAMIC	50V	10nF	
CCY50	ECJ2VC1H510J	CERAMIC	50V	51pF	
CCY51	ECUV1H300JCX	CERAMIC	50V	30pF	
CCY52	ECUV1H300JCX	CERAMIC	50V	30pF	
CCY54	ECUV1H104KBX	S.M. CAP	50V	100nF	
CCY55	ECUV1H300JCX	CERAMIC	50V	30pF	
CCY56	ECUV1H300JCX	CERAMIC	50V	30pF	
CCY57	ECJ2VC1H510J	CERAMIC	50V	51pF	
CCY60	ECUV1H104KBX	S.M. CAP	50V	100nF	
CL06	ECCR1H229J	ELECT	50V	2.2μF	
CN01	ECKC1H103J	CERAMIC	50V	100μF	
CN02	ECKC1H103J	CERAMIC	50V	100μF	
CN03	ECKC1H103J	CERAMIC	50V	100μF	
CN08	ECEA1CS101	ELECT	16V	100pF	
CN09	CZCH1H220J	CERAMIC	50V	22pF	
CN10	CZCH1H220J	CERAMIC	50V	22pF	
CN12	CZCH1H180J	CERAMIC	50V	18pF	
CN13	CZCH1H180J	CERAMIC	50V	18pF	
CN15	ECEA1H109	ELECT	50V	1μF	
CN16	ECKC1H103J	CERAMIC	50V	100μF	
CN17	CBZF1H104Z	CERAMIC	50V	100nF	
CN18	ECEA1CS101	ELECT	16V	100pF	
CN19	ECKC1H103J	CERAMIC	50V	100μF	
CN20	ECKC1H101J	CERAMIC	50V	100pF	
CN21	ECKC1H101J	CERAMIC	50V	100pF	
CN22	ECKC1H101J	CERAMIC	50V	100pF	
CN23	ECKC1H101J	CERAMIC	50V	100pF	
CN24	ECKC1H101J	CERAMIC	50V	100pF	
CN25	ECKC1H101J	CERAMIC	50V	100pF	
CN26	ECEA1CS101	ELECT	16V	100pF	
CN27	ECEA1CS101	ELECT	16V	100pF	
CN28	ECEA1CS471	ELECT	16V	470μF	
CN29	ECEA1CS470	ELECT	16V	47μF	
CN31	ECEA1CS220	ELECT	16V	22nF	
CN33	ECEA1CS101	ELECT	16V	100pF	
CN34	ECKC1H223J	CERAMIC	50V	22nF	
CN35	ECKC1H223J	CERAMIC	50V	22nF	
CN36	CDYF0H105K	CERAMIC	5.5V	1μF	
CN70	CBZR1C392M	CERAMIC	16V	3900pF	
CP02	CZCH1H220J	CERAMIC	50V	22pF	
CP04	ECEA1H479	ELECT	50V	4.7μF	
CP07	ECEA1H109	ELECT	50V	1μF	
CP09	ECEA1CS101	ELECT	16V	100pF	
CP10	ECEA1H109	ELECT	50V	1μF	

Cct Ref	Parts Number	Description			
CQ03	ECEA1CS470	ELECT	16V	47μF	
CU01	ECEA1H100	ELECT	50V	10pF	
CU02	CMXM2A103J	MYLAR	100V	10nF	
CU03	CMXM2A333J	FILM	100V	33nF	
CU04	CMXM2A104J	MYLAR	100V	100nF	
CU05	ECEA1H479	ELECT	50V	4.7μF	
CU08	CMXM2A122J	MYLAR	100V	1200pF	
CU10	ECEA1CS470	ELECT	16V	47μF	
CU12	ECEA1H100	ELECT	50V	10pF	
CU13	ECEA1H479	ELECT	50V	4.7μF	
CU14	CMXM2A272J	MYLAR	100V	2.7nF	
CU15	CMXM2A122J	MYLAR	100V	1200pF	
CU16	CMXM2A103J	MYLAR	100V	10nF	
CU17	CMXM2A333J	FILM	100V	33nF	
CU18	ECEA1CS470	ELECT	16V	47μF	
CU19	CMXM2A223J	MYLAR	100V	22nF	
CU21	ECEA1CS101	ELECT	16V	100pF	
CU22	CBZF1H104Z	CERAMIC	50V	100nF	
CU23	ECEA1H229	ELECT	50V	2.2μF	
CU24	ECEA1CS470	ELECT	16V	47μF	
CU25	CBZF1H104Z	CERAMIC	50V	100nF	
CU26	CBZF1H104Z	CERAMIC	50V	100nF	
CY01	ECEA1H109	ELECT	50V	1μF	
CY02	CMXM2A473J	MYLAR	100V	47nF	
CY03	ECEA1H109	ELECT	50V	1μF	
CY05	ECEA1CS101	ELECT	16V	100pF	
CY06	CZSL1H270J	CERAMIC	50V	27pF	
CY07	ECKC1H103J	CERAMIC	50V	100μF	
CY10	ECEA1H479	ELECT	50V	4.7μF	
CY16	ECEA1ES101	ELECT	25V	100pF	
CY17	ECEA1H100	ELECT	50V	10pF	
CY18	ECEA1CS220	ELECT	16V	22nF	
CY19	CBZF1H104Z	CERAMIC	50V	100nF	
CY20	ECKC1H103J	CERAMIC	50V	100μF	
CY21	ECEA1H109	ELECT	50V	1μF	
CY22	CBZF1H104Z	CERAMIC	50V	100nF	
CY23	CBZF1H104Z	CERAMIC	50V	100nF	
CY24	ECEA1CS470	ELECT	16V	47μF	
CY26	ECEA1CS101	ELECT	16V	100pF	
CY28	ECEA1CS101	ELECT	16V	100pF	
CY29	ECEA1H109	ELECT	50V	1μF	
CY30	ECEA1H109	ELECT	50V	1μF	
CY33	ECKC1H103J	CERAMIC	50V	100μF	
CY34	ECKC1H103J	CERAMIC	50V	100μF	
CY36	ECEA1CS101	ELECT	16V	100pF	
CY37	CBZF1H104Z	CERAMIC	50V	100nF	
CY38	ECEA1CS101	ELECT	16V	100pF	
CY39	ECKC1H103J	CERAMIC	50V	100μF	
CY40	ECEA1H109	ELECT	50V	1μF	
CY41	ECKC1H103J	CERAMIC	50V	100μF	
CY42	ECEA1H109	ELECT	50V	1μF	
CY43	CMXM2A223J	MYLAR	100V	22nF	
CY44	ECEA1H109	ELECT	50V	1μF	
CY45	CMXM2A223J	MYLAR	100V	22nF	
CY49	ECKC1H103J	CERAMIC	50V	100μF	
CY53	ECEA1CS101	ELECT	16V	100pF	
CY58	ECEA1H100	ELECT	50V	10pF	
CY59	ECEA1H109	ELECT	50V	1μF	
CY65	CBZF1H104Z	CERAMIC	50V	100nF	
CY66	CBZF1H104Z	CERAMIC	50V	100nF	
CY70	CBZF1H104Z	CERAMIC	50V	100nF	
<b>TERMINALS AND LINKS</b>					
JA01	4859109950	AV JACK			
SCT1	4859303930	CRT SOCKET			▲
<b>SWITCHES</b>					
SW02	5S50101Z90	SWITCH			

Cct Ref	Parts Number	Description
SW03	5S50101Z90	SWITCH
SW04	5S50101Z90	SWITCH
SW06	5S50101Z90	SWITCH
SW07	5S50101Z90	SWITCH
SW08	5S50101Z90	SWITCH
SW10	5S50101Z90	SWITCH
SW11	5S50101Z90	SWITCH
SW12	5S50101Z90	SWITCH
SW13	5S50101Z90	SWITCH
SW801	5S40101146	SWITCH
SWN01	5SN0101Z20	DETECTION SWITCH
<b>RELAYS</b>		
RLY1	5SC0101340	SWITCHING RELAY
<b>INSTRUCTION BOOKS</b>		
TQB8E3857	O.I. BOOK	▲

Cct Ref	Parts Number	Description

# SCHEMATIC DIAGRAMS FOR MODELS

## TX-14GV2

### (Z-082PF CHASSIS)

#### IMPORTANT SAFETY NOTICE

Components identified by  mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.

#### NOTE

##### 1. RESISTOR

All resistors are carbon  $\frac{1}{4}W$  resistor, unless marked otherwise.

Unit of resistance is OHM ( $\Omega$ ) ( $k=1,000$ ,  $M=1,000,000$ )

##### 2. CAPACITORS

All capacitors are ceramic 50V unless marked otherwise.

Unit of capacitance is  $\mu F$  unless otherwise stated.

##### 3. COIL

Unit of inductance is  $\mu H$ , unless otherwise stated.

##### 4. TEST POINT



##### 5. EARTH SYMBOL



##### 6. VOLTAGE MEASUREMENT

Voltage is measured by a d.c. voltmeter.

Measurement conditions are as follows:

Power source a.c. 220V-240V, 50Hz

Receiving Signal Colour Bar signal (RF)

All customer controls Maximum position

##### 7.

 Indicates the Video signal path

 Indicates the Audio signal path

These schematic diagrams are the latest at time of printing and are subject to change without notice.

#### REMARKS

- a. Do not touch the hot part, or the hot and cold parts at the same time, as you are liable to a shock hazard.
- b. Do not short circuit the hot and cold circuits as electrical components may be damaged.
- c. Do not connect an instrument, such as an oscilloscope, to the hot and cold circuits simultaneously as this may cause fuse failure. Connect the earth of the instruments to the earth connection of the circuit being measured.
- d. Make sure to disconnect the power plug before removing the chassis.

#### NOTE

1. The Power Supply Circuit contains a circuit area, which uses a separate power supply to isolate the earth connection. The circuit is defined by HOT and COLD indications in the schematic diagram. All circuits, except the Power Circuit, are COLD.

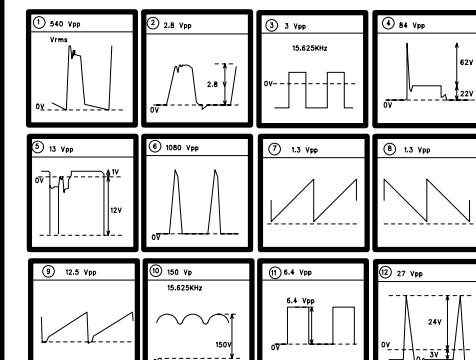
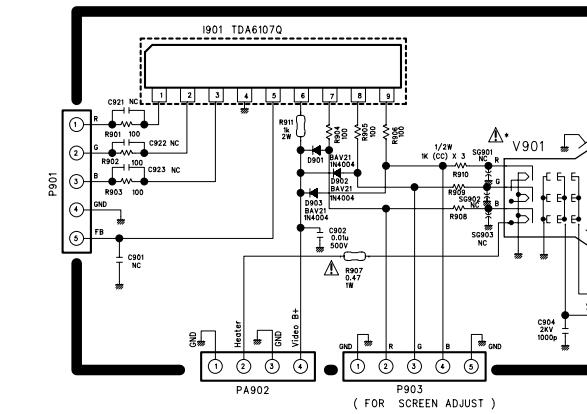
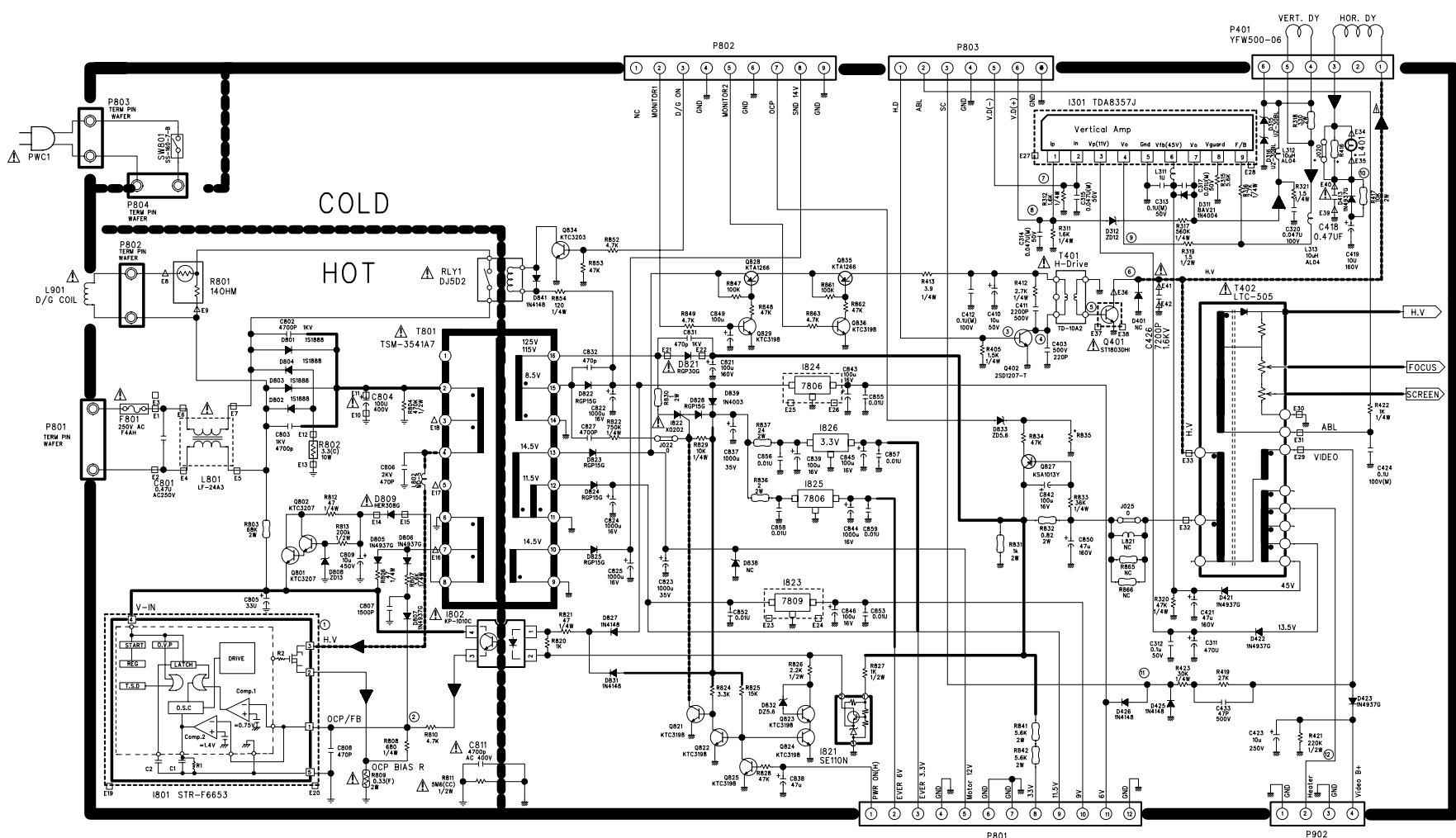
## SAFETY CAUTION :

BEFORE SERVICING THIS CHASSIS IT IS IMPORTANT THAT THE SERVICE TECHNICIAN READ AND FOLLOW THE "X-RAY RADIATION PRECAUTION, "SAFETY PRECAUTIONS" AND "PRODUCT SAFETY NOTICE" IN THE SERVICE MANUAL.

## PRODUCT SAFETY NOTE :

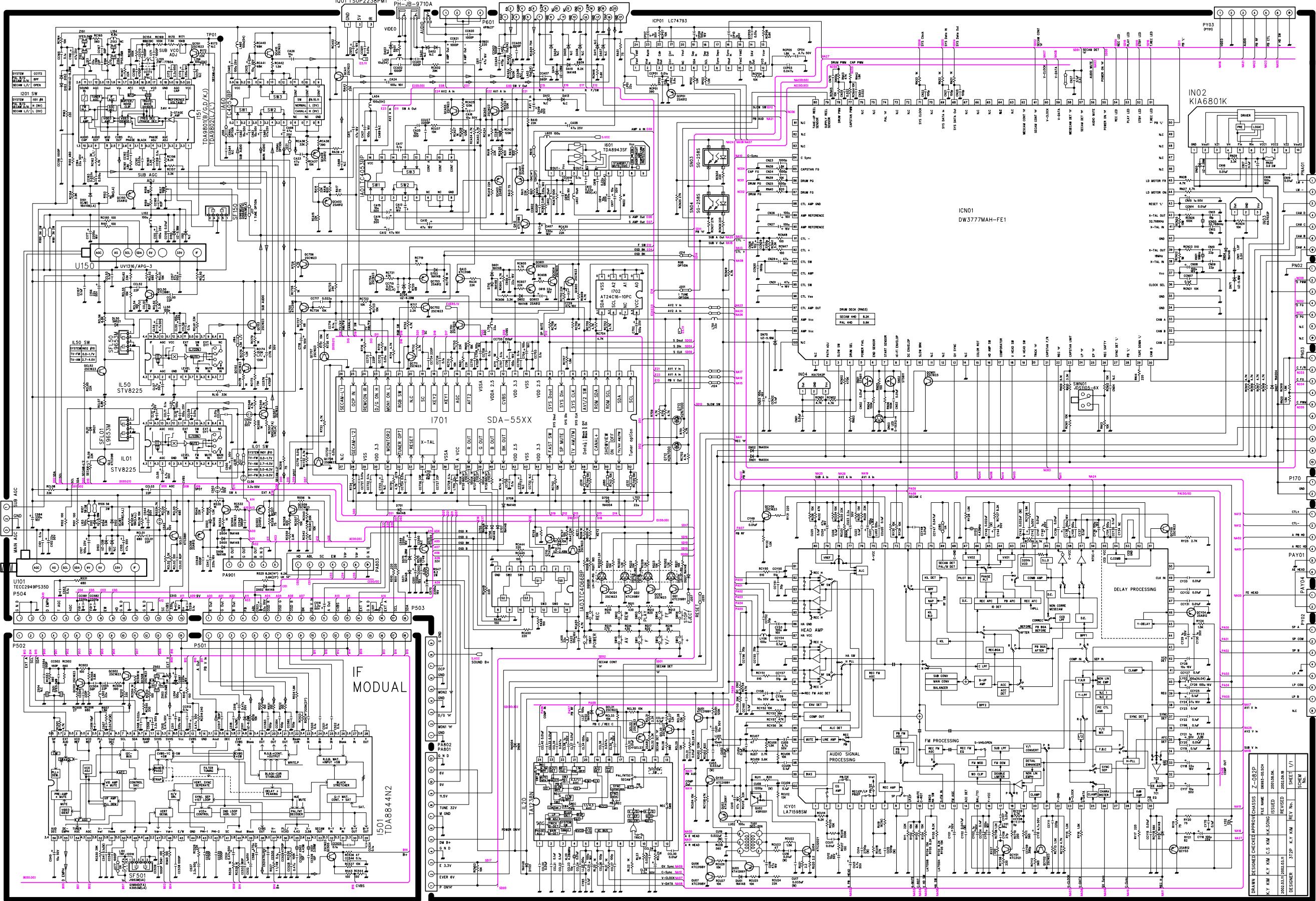
COMPONENTS MARKED WITH  $\Delta$  ARE IMPORTANT FOR MAINTAINING THE SAFETY OF THE SET AND SHOULD BE REPLACED ONLY WITH TYPES IDENTICAL TO THOSE IN THE ORIGINAL OR SPECIFIED ONE IN THE PARTS LIST. DON'T DEGRADE THE SAFETY OF THE SET THROUGH IMPROPER SERVICING.

Z-082P CHASSIS  
POWER / DEF. PART CIRCUIT

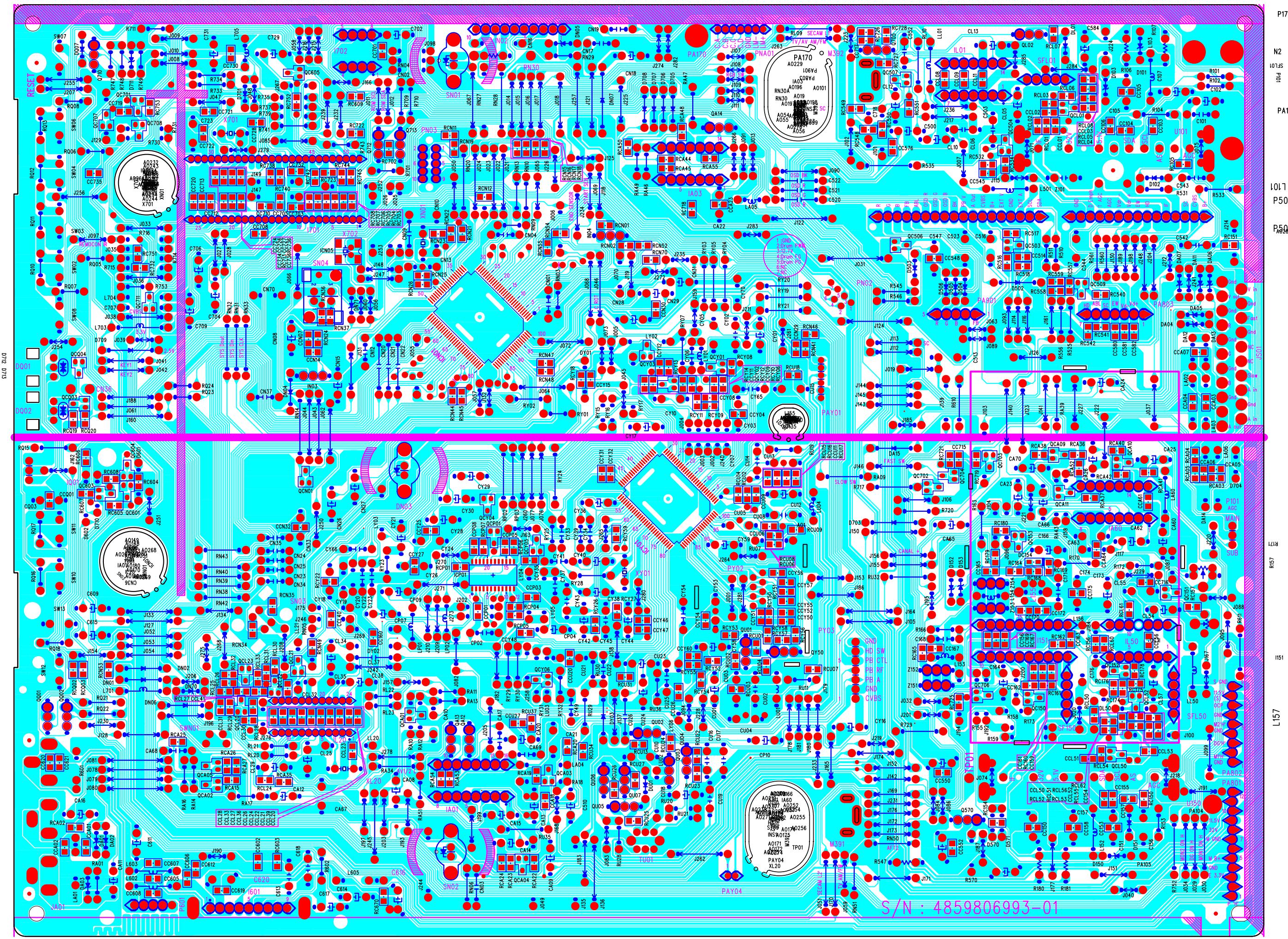


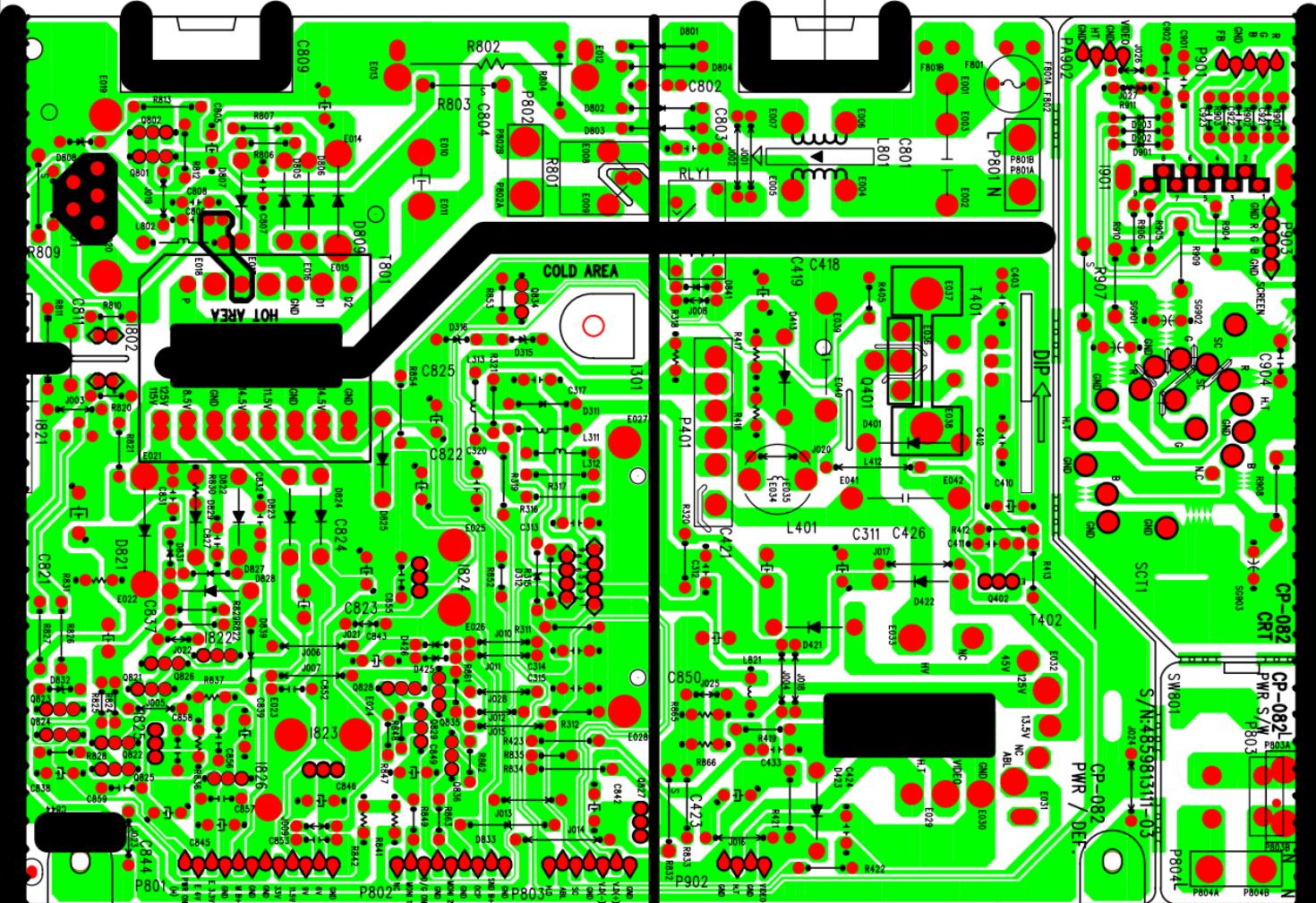
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J.H KIM	J.H KIM		C.S KIM	FILE NAME	
01.04.02				ISSUED	13111-MP
				REVISED	
DESIGNER	3T 3R	J.H KIM	REV. NO.	SHEET	1/1
DAEWOO ELECTRONICS TV RESEARCH CENTER					
SCHM. NO. _____					

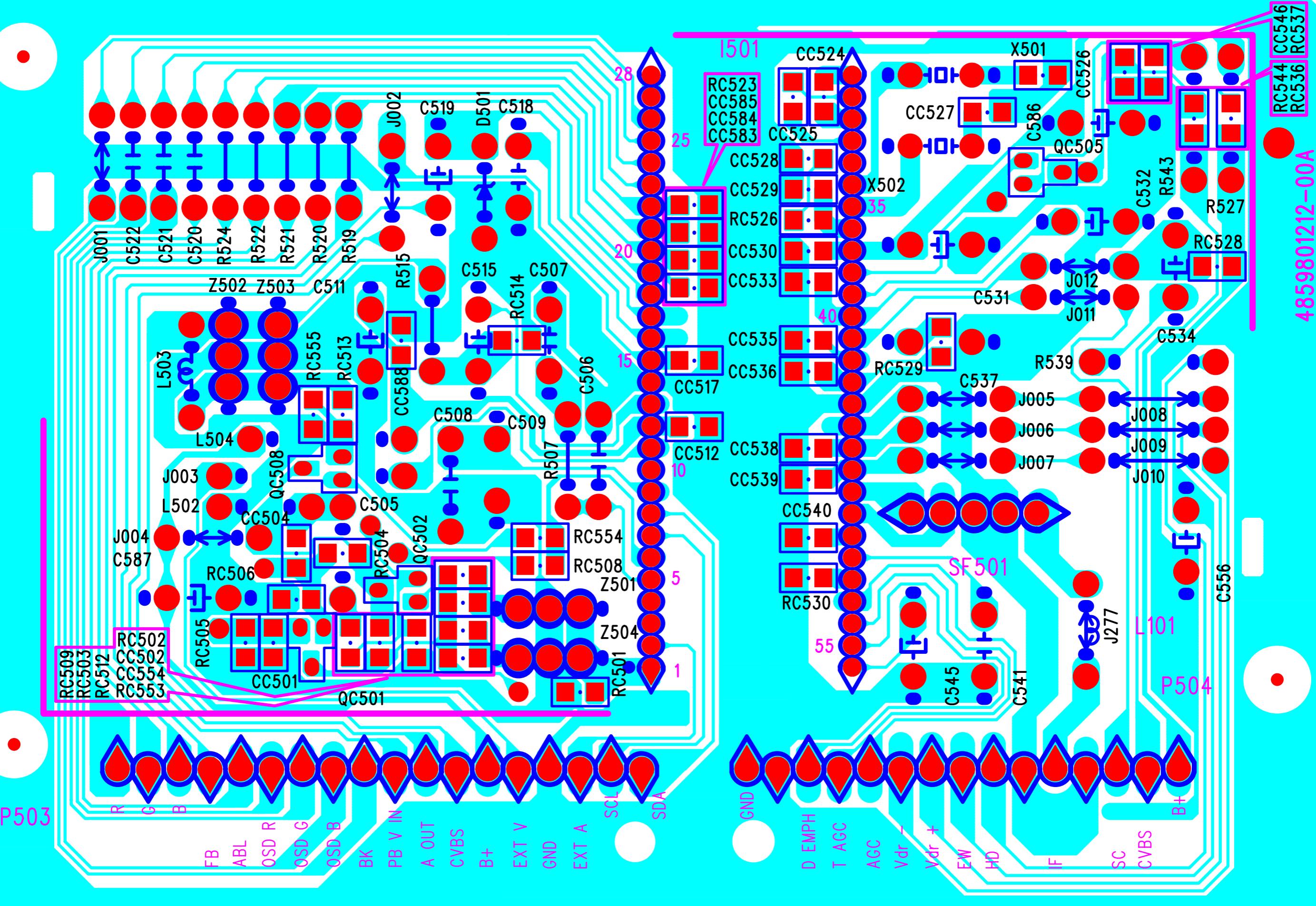
Z-082P CHASSIS MAIN SCHEMATIC DIAGRAM (06993-00)



DRAWN DESIGNED CHECKED APPROVED CHASSIS  
Z-082P  
06993-00-000  
FILE NAME : 06993-00-000  
ISSUED : 2002/03/06  
REVISED : 2002/03/06  
DESIGNER : 312P K.Y.KIM REV. No. :  
SHEET 1/1  
SCHEM. No. :



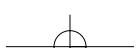
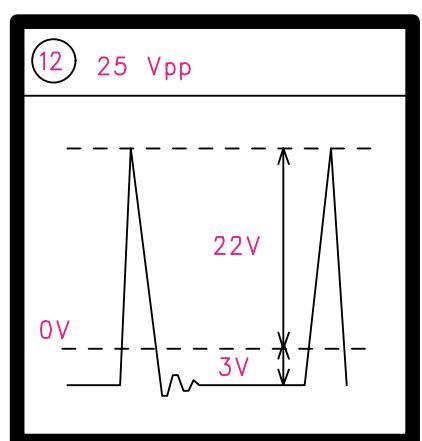
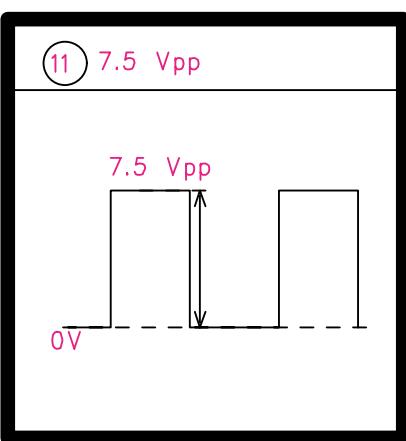
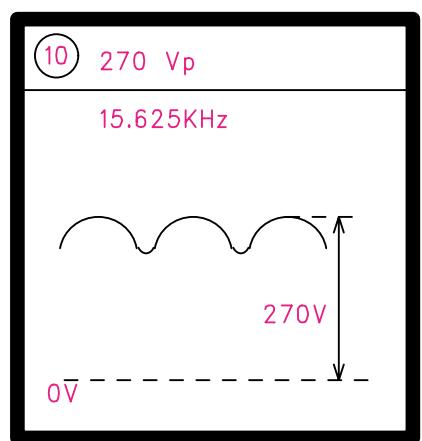
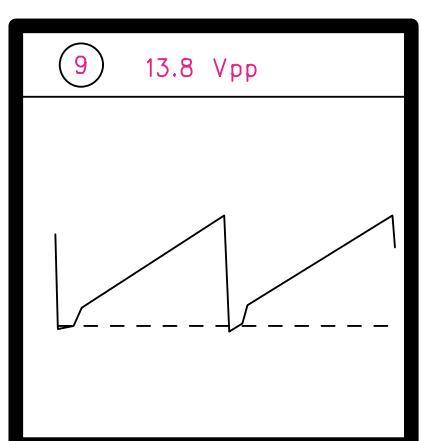
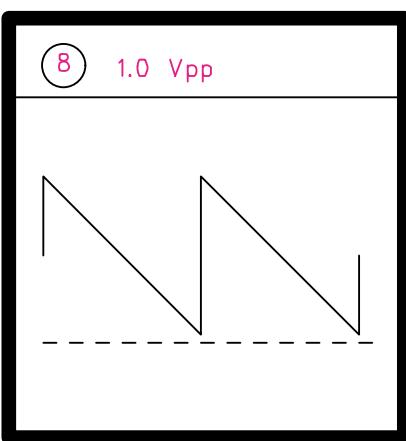
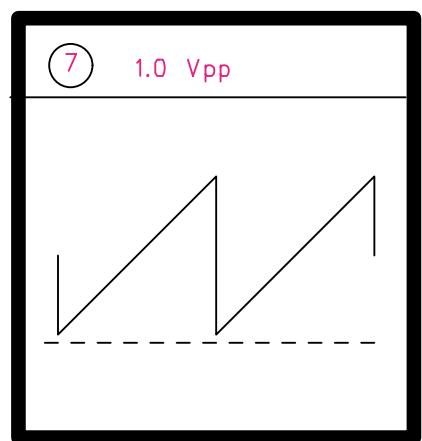
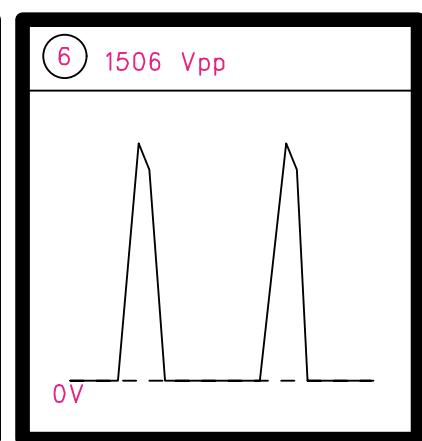
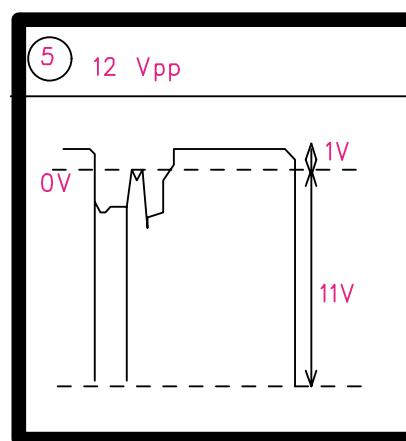
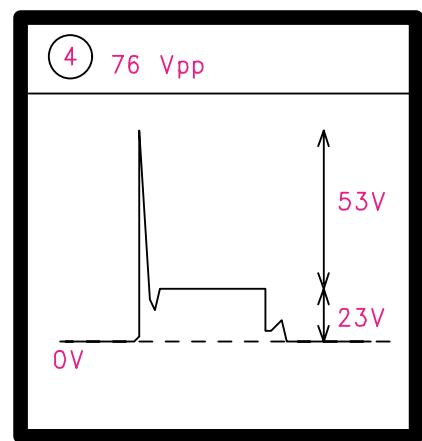
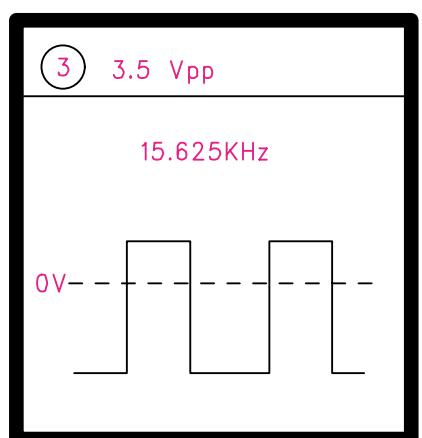
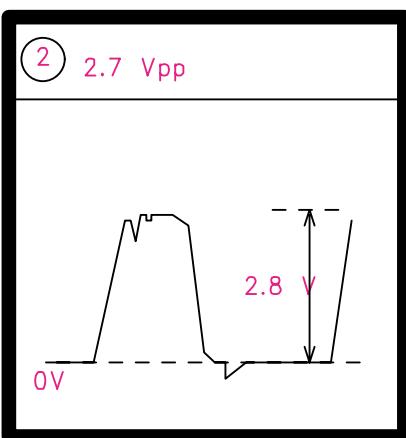
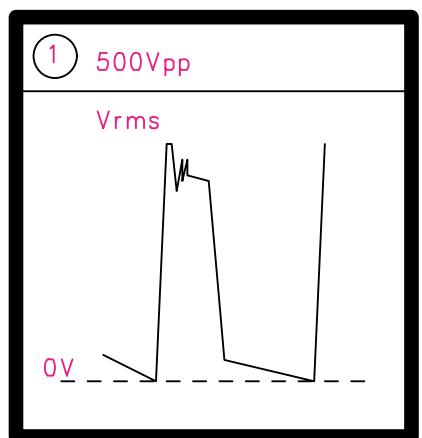






## WAVEFORM PATTERN TABLE

**Note:** All waveforms have been taken using a standard colour bar pattern.



# REPLACEMENT PARTS LIST

## **Important Safety Notice**

Components Identified by  mark have special characteristics important for safety.  
 \* When replacing any of these components, use only manufacturers specified parts.  
 In case of ordering these spare parts, please always add the complete Model-Type number to your order.

Cct Ref	Parts Number	Description
<b>MISCELLANEOUS COMPONENTS</b>		
A0100	97SA309700	MAIN BASE AS
A0200	97S0901400	PLATE
A0300	97S2701800	RACK F/L PBT
A0400	97SA310900	S SLANT POLE AS
A0500	97SA311000	T SLANT POLE AS
A0600	97SA308500	L LOADING AS
A0700	97SA308600	R LOADING AS
A0800	97SA308400	LOADING RACK AS
A0900	97S3101800	WASHER POLY
A1000	97S8100700	MOTOR CAPSTAN
A1100	97S3102000	SCREW
A1200	97S3004000	AC HEAD SPRING
A1300	97SA311200	AC HEAD AS
A1400	7391300211	NUT HEX
A1500	97S2604100	LEVER RELAY
A1600	97S2701400	GEAR CAM
A1700	97SA310700	PINCH LEVER AS
A1800	97S3117300	WASHER POLY
A2000	7274300611	SCREW TAPITITE
A2100	97SA311600	IDLER PLATE AS
A2100	97SA311620	IDLER PLATE ASS
A2200	97S3108200	WASHER POLY
A2300	97S2901600	TABLE REEL
A2400	97S3903600	POLY SLIDER
A2500	97SA310800	TENSION BAND AS
A2600	97S3003500	TENSION SPRING
A2700	97SA309300	S SUB BRAKE AS
A2800	97SA309400	T SUB BRAKE AS
A2900	97SA309110	MAIN BRAKE AS
A2900	97SA309120	MAIN BRAKE ASS
A3100	97S8004500	HEAD FE
A3100	97S8012900	HEAD FE
A3200	97S3102100	SCREW TAPITITE
A3300	97SA309000	REEL GEAR TOT AS
A3300	97SA309020	REEL GEAR ASS
A3400	97S3108200	WASHER POLY
A3500	97S5500400	BELT REEL
A3600	97S2603500	LEVER RECORD SAFETY
A3800	7274301011	SCREW TAPITITE
AC001	97SA381500	HEAD CLEANER AS
AD001	97PA287001	4 HEAD MONO NON-DLC
AD001	97PA287401	4 HEAD MONO NON-DLC
AF001	97SA251400	F/L AS K-MECHA
B0020	97SA322300	DRUM MOTOR ASSEMBLY
B0030	7001260711	SCREW MACHINE
B0040	7001260711	SCREW MACHINE
B0050	97S2303600	HOLDER MAIN
B0080	97S2303700	HOLDER MAIN
B0090	97S1401700	DRUM BASE
B0100	7051300811	SCREW MACHINE
B1905	97SA414100	L/C BRKT AS

Cct Ref	Parts Number	Description
B1910	97PA409200	L/C MOTOR AS
B1920	97P6538222	L/C MOTOR PCB
B1930	97P6271500	CONNECTOR
B1940	5SSFF1DKM10	CAM SWITCH
B1960	97S2901500	WORM WHEEL