



Colour Television Service Manual

21P1

Model CE21P1-C (W.Europe)

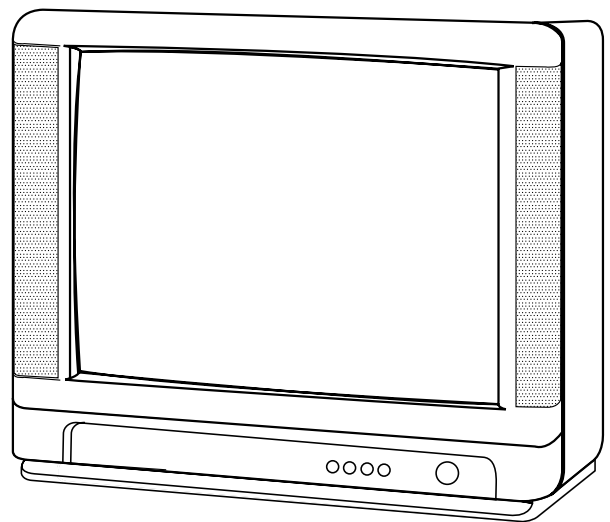
Service Ref. No. CE21P1-C-01

PRODUCT CODE: 111319404
ORIGINAL VERSION: Chassis No. EB4-A

Note

This TV receiver will not work properly in foreign countries where the television transmission system and power source differ from the design specifications. Refer to the specifications for the design specifications

Give complete "SERVICE REF. NO." for parts order or servicing, it is shown on the rating sheet on the cabinet back of the TV set.



Specifications

Power source	AC 220~240V 50Hz
Television system	System B/G
Colour system	PAL
Receiving channel	VHF: E2-E12 CATV: X, Y, Z, S1-S41 UHF: #21~69
Aerial input impedance	75ohm
AV terminal	
21 Pin socket	CENELEC standard
Sound output(Music)	9 watts X2
Picture tube	55cm diagonal, 90 degree
(Visible picture diagonal)	51cm
Dimensions (WxHxD)	596 x 467 x 483 mm
Weight	21.5 Kg

SAFETY PRECAUTION

- 1: An isolation transformer should be connected in the power line between the receiver and the AC line when a service is performed on the primary of the converter transformer of the set.
- 2: Comply with all caution and safety-related notes provided on the cabinet back, inside the cabinet, on the chassis or the picture tube.
- 3: When replacing a chassis in the cabinet, always be certain that all the protective devices are installed properly, such as, control knobs, adjustment covers or shields, barriers, isolation resistor-capacitor networks etc. Before returning any television to the customer, the service technician must be sure that it is completely safe to operate without danger of electrical shock.

X-RADIATION PRECAUTION

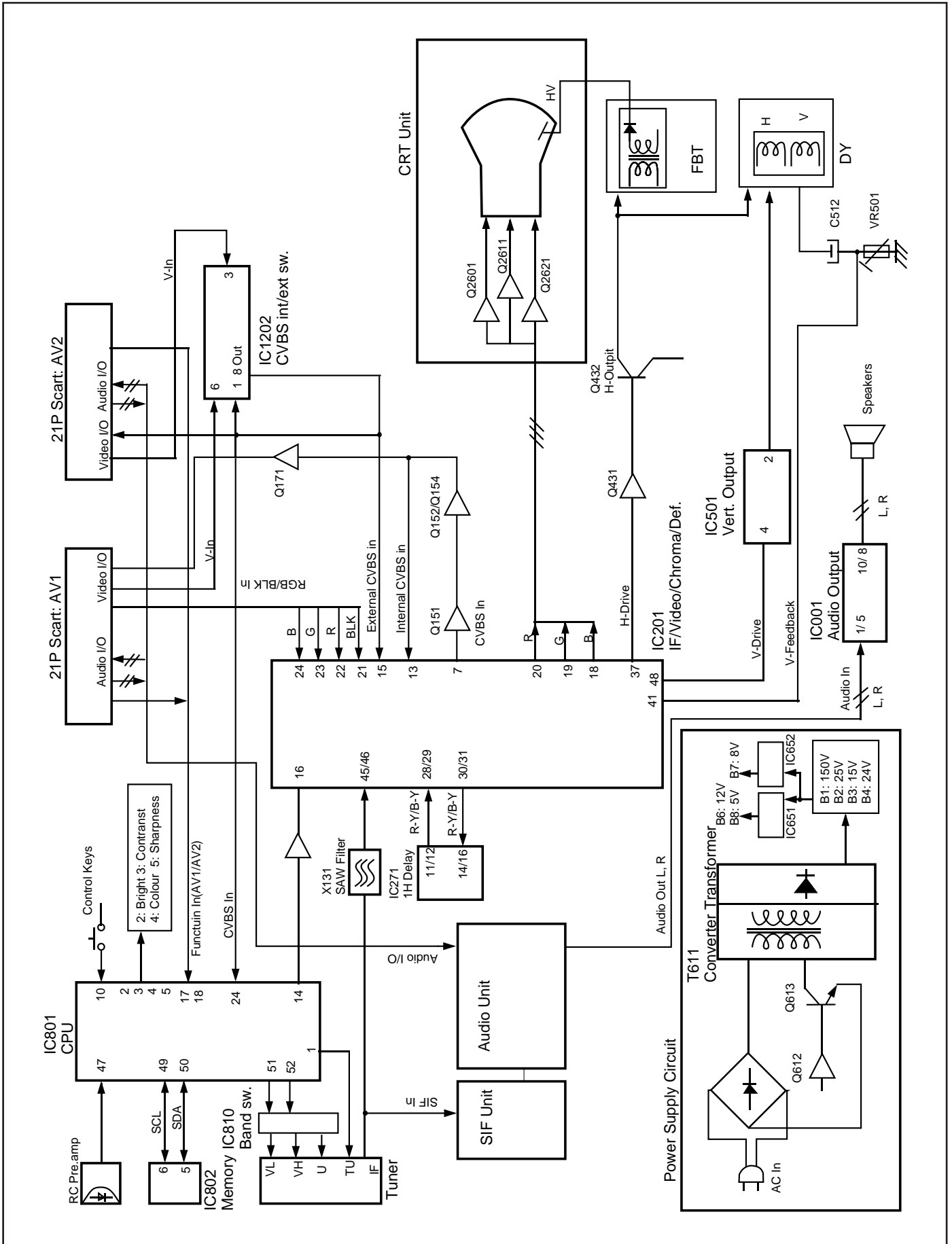
The primary source of X-RADIATION in the television receiver is the picture tube. The picture tube is specially constructed to limit X-RADIATION emissions. For continued X-RADIATION protection, the replacement tube must be the same type as the original including suffix letter. Excessive high voltage may produce potentially hazardous X-RADIATION. To avoid such hazards, the high voltage must be maintained within specified limit. Refer to this service manual, high voltage adjustment for specific high voltage limit. If high voltage exceeds specified limits, take necessary corrective action. Carefully follow the instructions for +B1 volt power supply adjustment, and high voltage adjustment to maintain the high voltage within the specified limits.

PRODUCT SAFETY NOTICE

Product safety should be considered when a component replacement is made in any area of a receiver. Components indicated by mark ! in the parts list and the schematic diagram designate components in which safety can be of special significance. It is particularly recommended that only parts designated on the parts list in this manual be used for component replacement designated by mark ! . No deviations from resistance wattage or voltage ratings may be made for replacement items designated by mark ! .

BLOCK DIAGRAM

This is a diagram for all models and therefore differs slightly from the actual block diagram.



CIRCUIT DESCRIPTION

1. POWER SUPPLY

The power supply circuit of the EB4-A chassis is composed of a rectifier smoothing circuit, an oscillation circuit, a control circuit and an output rectifier circuit. The AC input voltage is full-wave rectified by the rectifier smoothing circuit, and an unstable DC voltage is generated at both terminals of the smoothing capacitor C607. This voltage is input to the oscillation circuit. The oscillation circuit is provided with a blocking oscillator circuit that switches the switching transistor Q613 ON and OFF, and an oscillation frequency and a duty square wave pulse are generated in the input windings according to operation of the control circuit. A square-wave pulse whose size is dependent on the turn ratio of the input and output windings is obtained in the output winding. This is rectified in the output rectifier circuit, and the desired DC voltage is obtained.

2. IF & DEFLECTION (TDA8361)

The IF output signal from the tuner passes through the SAW filter, and it is input to pin45 and pin46 of IC201. The signal input to the IC passes through the IF amplifier, video detection and video amplifier circuits and is output from pin7 as a composite video signal. And after this signal is converted to impedance at Q151, supplies to the video and chroma amplifier stages.

The sync.-separation circuit separates the video signals applied to pin13(internal video signal) or pin15(external video signal) to vertical- and horizontal-sync. signals respectively. The horizontal oscillator requires no external components and is fully integrated. The oscillator is always running when the start-pin36 is supplied with 8V. Horizontal drive signal is output from pin37. VR361 is for adjustment of the horizontal centring. The separated vertical-sync. signal from sync. separation circuit passes through the vertical-separation circuit, and applied to trigger divider circuit. The horizontal oscillation pulse and input vertical sync. pulse are monitored by the trigger divider circuit, and switching 50Hz and 60Hz system, the vertical amplitude automatically adjusted for 50Hz and 60Hz. The output signal from the trigger divider is triggered vertical oscillation circuit consisting of C351, R352 and pin42, and vertical drive pulse is output from pin43. VR501 is for changing the amount of AC feedback applied to pin41 and for adjustment of the vertical amplitude.

3. VIDEO CHROMA & R.G.B. (TDA8361)

The composite video signal output from the pin7 of IC101 passes through Q151-Q154, and it is supplied to pin13. The external video signal output from SCART is supplied to pin15. The video signal input to pin13 or pin15 is separated to luminance (Y) signal and chroma signal in IC201. These pins are used in common with H/V-sync. separation input. The peaking of Y signal is adjusted by DC voltage of pin14. ("SHARPNESS"

control) The chroma signal is divided into R-Y and B-Y chroma signals, demodulated in IC201, and output from pin30 (R-Y) and pin31 (B-Y). These chroma signals pass through the 1H delay line circuit (IC271), and they are input to pin29 (R-Y) and pin28 (B-Y). These R-Y/B-Y signals pass through RGB matrix circuit and RGB selector circuit of IC101. The internal RGB signals are generated in RGB matrix circuit and the RGB selector, consisting linear amplifiers, clamps and selects either the internal RGB signals or the external RGB signals input from pin22(R), pin23(G), pin24(B). Selection is controlled by the voltage at the RGB switch control (pin21) and mixed RGB modes are possible since RGB switching is fast. The RGB switch also functions as a fast blanking pin by blanking the RGB output stages; here internal and external RGB signals are overruled. The colour gain is controlled by DC voltage of pin26. ("COLOUR" control) The contrast control voltage present at pin25, and the brightness control voltage present at pin17 controls DC level of RGB signals. The RGB signals are finally buffered before being available at the RGB output pins [pin20 (R), pin19 (G), pin18 (R)].

4. AUDIO OUTPUT(TDA7263M)

The audio signals output from the audio unit are input to pin1(L) and 5(R) of IC171 and passes through the pre-amplifier circuit and drive circuit, after which it is input to the audio amplifier. The audio amplifier is an SEPP (single-ended, push-pull) OTL type and output to pin8(R) and 10(L) to directly drive the speakers.

5. VERTICAL OUTPUT (LA7832/LA7832)

An IC (LA7832/LA7833) is used for the vertical output circuit in this chassis. The vertical drive pulse from pin43 of IC201 is input to pin4 of IC501. This pulse drives IC501, and vertical scanning is performed. In the first half of scanning a deflecting current is output from pin2 and passes through the following path:

Vcc(B4) → D501 → pin3 → pin2 → DY → C512 → VR501/R509. An electric charge is then stored in C512. In the last half of scanning the current path is C512 → DY → pin2 → pin1 → VR501/R509 → C512. In this way, an amplifying sawtooth waveform current flows directly to DY to perform electron beam deflection. Next, in the first half of the banking period the vertical drive pulse suddenly becomes OFF, and in order to reduce the current flowing to DY, the current path becomes as follows by the inductance of DY:

DY → pin2 → pin1 → VR501/R509 → C512 → DY. Also, when the charge of DY has dissipated, the current path becomes Vcc24V → pin6 → pin7 → C502 → pin3 → pin2 → DY → C512 → VR501/R509, and when the prescribed current value is reached, the vertical drive pulse becomes ON. This completes one cycle.

6. HORIZONTAL OUTPUT

A horizontal oscillation signal is output from pin37 of IC201 and switches the drive transistor Q431. This switching signal is current amplified by the drive transformer T431 and drives the output transistor Q432. When Q432 becomes ON, an amplifying current flows directly to DY through C441 → DY → 0432 → GND, and deflection is performed in the last half of the scanning period. Next, when Q432 becomes OFF, the charge that had been stored in DY up to that point releases a resonance current to the resonant capacitors C421/C423 and charges them. The current stored in C421/C423 is then flowed back to DY, and an opposite charge is then stored in DY. This opposite charge then switches the dumper diode in Q432 ON, the resonance state is completed, and an amplifying current is then flowed again directly to DY through the dumper diode. By this means, deflection in the first half of the scanning period is performed, and when Q432 becomes ON at the end of the first half of the scanning period, deflection during the last half is begun, thus completing one cycle.

In the PCC circuit consisting of Q461 and Q462, the parabola signal supplied from the vertical circuit is added at the horizontal output stage and pincushion compensation is performed by varying the DC voltage bias. Further, the ABL voltage is feedback to the base of Q462 to compensate for width variations due to variations in the beam current.

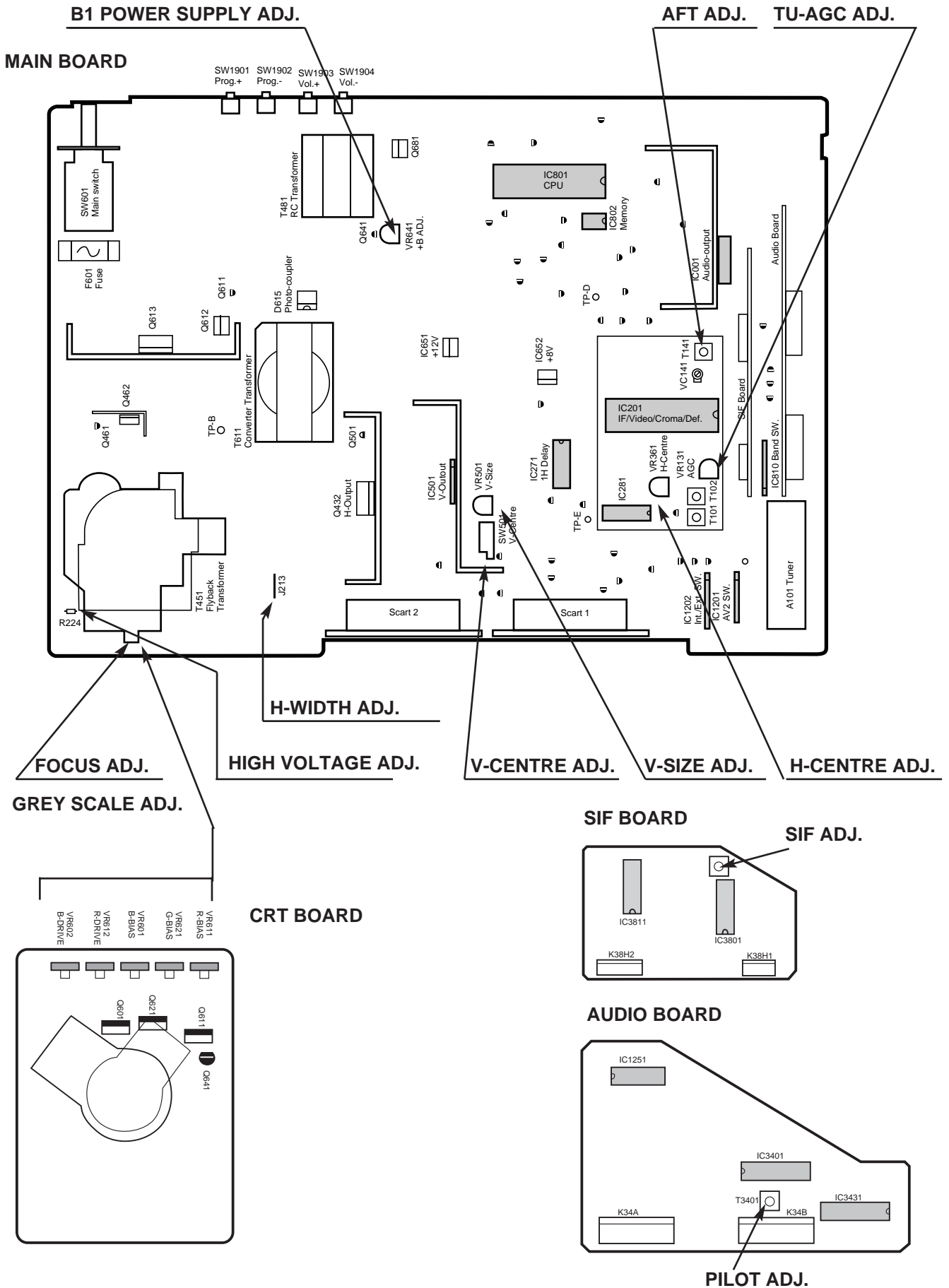
Pin25: Black
Pin26: IREF
Pin27: Odd/Even output
Pin28: GND
Pin29: -
Pin30: V-deflection stop output
Pin31: RGB REF
Pin32: Blue output for OSD
Pin33: Green output for OSD
Pin34: Red output for OSD
Pin35: Blanking output for OSD
Pin36: H-sync. input (Horizontal pulse for OSD)
Pin37: V-sync. input (Vertical pulse for OSD)
Pin38~39: Supply (+5V)
Pin 40: OSC GND
Pin 41: Oscillator input for CPU
Pin 42: Oscillator output for CPU
Pin 43: Reset input
Pin 44: Supply (+5V)
Pin 45: Protect signal input (L:Power circuit defects)
Pin 46: Ident. signal input
Pin 47: R/C signal input
Pin 48: Mute output in no picture
Pin 49: I²C bus SCL (Serial clock)
Pin 50: I²C bus SDA (Serial date)
Pin 51: Option SW5 & Band select output1
Pin 52: Band select output2

7. CPU <System and Teletext Control>

Pin description

Pin1: Tuning voltage output
Pin2: Brightness control output (6-bit DAC)
Pin3: Contrast control output (6-bit DAC)
Pin4: Colour control output (6-bit DAC)
Pin5: Sharpness control output(6-bit DAC)
Pin6: Not used (GND)
Pin7: Not used (GND)
Pin8: Power ON/OFF output (H:ON)
Pin9: AFT signal input
Pin10: Option SW1 & Keyboard scan input (DC)
Pin11: Option SW2
Pin12: 50/60Hz switch input (50Hz: Hi)
Pin13: GND
Pin14: TV/AV switch output (TV: Hi)
Pin15: S-VHS switch output (S-VHS: Hi)
Pin16: Option SW3 (2AV: Hi)
Pin17: Function signal input for SCART1
Pin18: Function signal input for SCART2
Pin19: Power LED drive output1
Pin20: Option SW4 & Power LED drive output2
Pin21: Ignore output
Pin22: GND
Pin23: CVBS input0 (Internal)
Pin24: CVBS input1 (Internal/External)

SERVICE CONTROL ADJUSTMENT



B1 POWER SUPPLY ADJUSTMENT

1. Set VR641 to be mechanically centre before pressing the mains ON/OFF switch.
2. Tune the receiver to a PAL circular pattern.
3. Set the brightness and contrast controls to normal.
4. Connect a digital V-meter to test point "TP-B".
5. Using VR641, adjust the voltage to $130 \pm 0.5V$.

AFT ADJUSTMENT

1. Tune the receiver to the clearest station.
2. Using T141, adjust the AFT to obtain the best picture.

AGC ADJUSTMENT

NOTE: Do not attempt this adjustment with a weak signal.

1. Tune the receiver to the clearest station.
2. Set AGC VR(VR131) in direction which causes snow noise just to appear, then in the opposite direction until the snow noise just disappears.

GREY SCALE ADJUSTMENT

[SCREEN VR ADJUSTMENT]

1. Tune the receiver to the white pattern.
2. Set the brightness and contrast controls to normal.
3. Set VR2602 and VR2612 to their mechanical centres.
4. Turn VR2601, VR2611 and VR2621 fully counter-clockwise (anti-clockwise).
5. Set the TV into service mode by pressing the Function button **F** on the Remote control and the Prog + **P** on the TV front panel. Press the Function button **F** on the Remote control until "SCREEN" is highlighted. This sets up a horizontal scanning line.
6. Set screen VR so that one colour is just visible.

[BIAS VR ADJUSTMENT]

7. By using VR2601, VR2611 or VR2621, adjust the line until it becomes white.
8. Set screen mode OFF, by pressing the Recall button **□** on the Remote control.

[DRIVE VR ADJUSTMENT]

9. Using VR2602 and VR2612, adjust white balance.

HIGH VOLTAGE & WIDTH ADJUSTMENT

[HIGH VOLTAGE ADJUSTMENT]

1. Tune the receiver to the circular pattern.
2. Set the brightness and contrast controls to **maximum**.
3. Connect a digital V-meter to both terminals of R224, and a high voltage meter to the CRT anode.
4. Confirm high voltage to be 25.0 ± 1 KV at beam current 1.1mA, and less than 28.0 KV at 0 beam current.

[H-WIDTH ADJUSTMENT]

5. If H- width is too wide or narrow, connect or disconnect a lead wire J213.
6. Reconfirm high voltage.

H-CENTRE ADJUSTMENT

1. Tune the receiver to a circular pattern.
2. Adjust H-centre by using VR361.

V-CENTRE ADJUSTMENT

1. Tune the receiver to a circular pattern.
2. Adjust V-centre by using SW501.

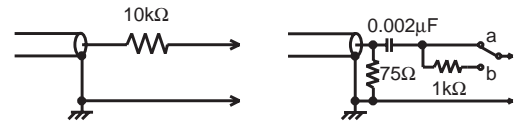
V-SIZE ADJUSTMENT

1. Tune the receiver to a circular pattern.
2. Adjust V-size by using VR501.

FOCUS ADJUSTMENT

By using FOCUS VR, adjust focus control for good scanning lines.

CIRCUIT ALIGNMENT



VIF alignment

Input probe

Output probe

SETTING		Adjustment	Waveform
DC 15.5V AGC voltage (4.3-4.5V) Output probe Input probe Marker frequency Sweep ATT 0dB=176mVrms/75	C644 + IC201-pin48 IC201-pin45 (Side b) IC201-pin7	By using T141, adjust "P" to be maximum amplitude.	

SIF alignment

SETTING		Adjustment	Waveform
DC 12V AGC voltage Output probe Input probe Sweep ATT Marker Frequency	IC3801-pin11 IC3801-pin3 IC3801-pin1 (Side b) IC3801-pin12	1. Adjust AGC voltage to be "A" = 0.5Vp-p. 2. By using T3801, adjust "P" to be equal centre line.	

Pilot alignment

SETTING		Adjustment	Waveform
Oscilloscope Input sound signal source TV system Deviation Mode	IC3401-pin5 System B/G 27kHz Stereo	By using T3401, adjust amplitude to be maximum.	

INITIALISATION (Important Notice)

When you replace a memory IC (IC802), it is necessary to initialise the IC as following step.

A. Initialisation

Press and hold the **normalisation button** →•← on the remote control handset and press the **programme + button** P▲ on the TV set.

The IC will be initialised automatically to set the following data.

User control data

Colour	: Centre
Brightness	: Centre
Contrast	: Maximum
Sharpness	: Centre
Text. Bright	: Centre
Bass	: Centre
Treble	: Centre
Balance	: Centre
Volume	: Step 12

Service data

<u>Service data</u>		<u>Manual set data</u>	
K1	: +000	->	+001
K2	: +000	->	-001
ST ID	: +000		
ATT	: +004		
MAX	: -096	->	-050
MIN	: +010	->	-075

The initialised service data of items K1, K2, MAX and MIN should be modified to the manual set data shown above.

For how to modify, refer to next step.

B. Service Mode

1. To entre the service mode, press and hold the **Function button** F[] on the remote control handset and press the **programme + button** P▲ on the TV set.

The following OSD appears on the screen.

ADJUST	DATA
K1	+000
K2	-006
ST ID	+000
ATT	+004
MAX	-050
MIN	-075
SCREEN	VOL
CPU Ver	1.0

2. Select the desired service item by using the **Function button** F[] on the remote control handset.
3. Change the data by using the **Level + or - button** - ▲ + .
4. To return to TV mode press the **Recall button** [] [Y] on the remote control handset.

Service mode description

K1, K2 : For adjustment of stereo separation

ST ID : Mode setting for A2 stereo judgement

+000 : Fast mode

+001: Normal mode

+002: Fast -> normal mode

ATT : Attenuation of FM sound

To equalise sound levels between FM and Nicam.

MAX : Setting of sensitivity for switching Nicam to FM mode

MIN : Setting of sensitivity for switching FM to Nicam mode.

SCREEN: For screen adjustment

To make one horizontal scanning line.

NOTE:

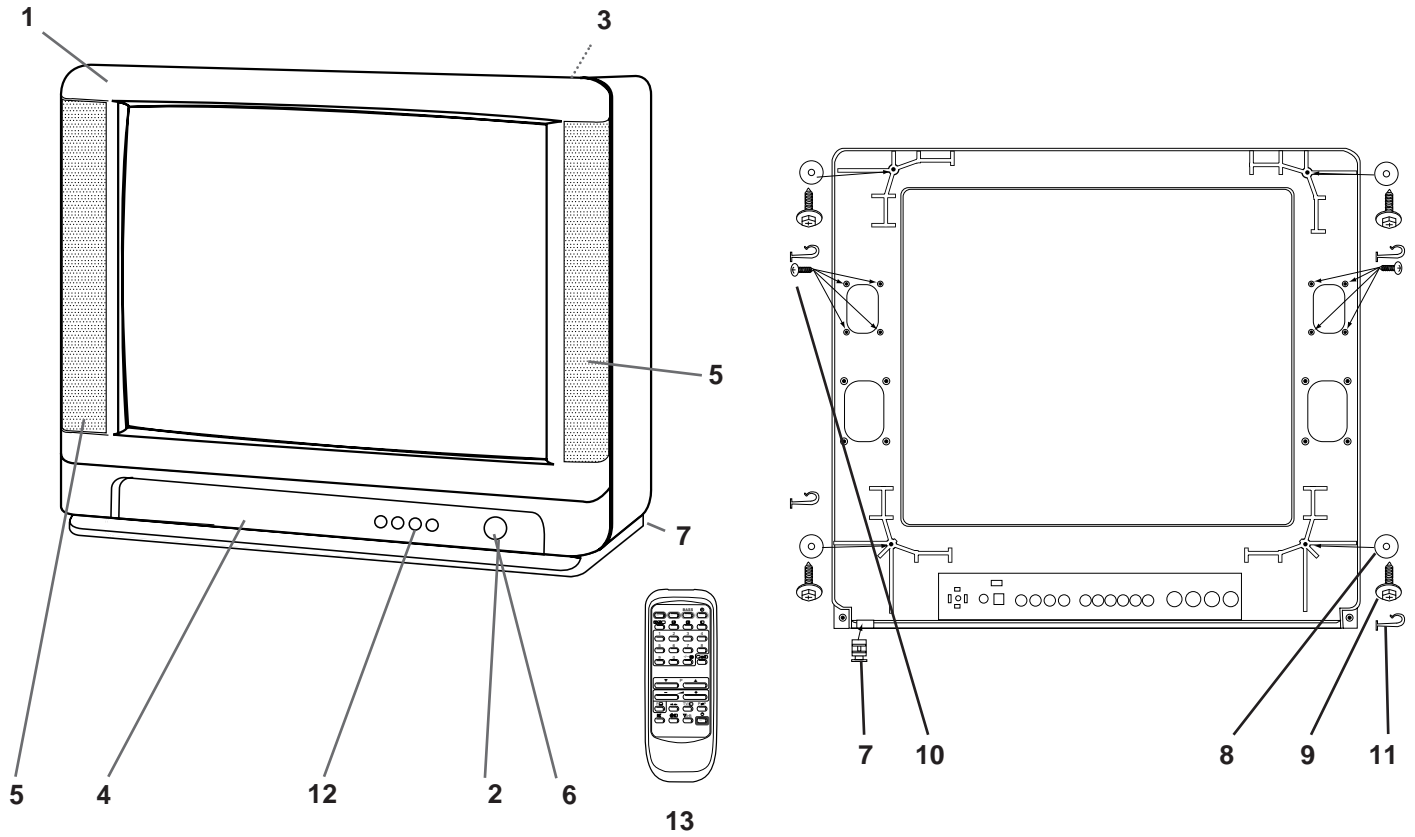
The items K1, K2, ST ID and ATT are invalid adjustments for a model which does not have an A2 stereo decoder.

The items MAX and MIN are invalid adjustments for a model which does not have a Nicam decoder.

These items allow modifications to the set data, but there is no effect in performance.

CABINET PARTS LIST FOR MODELS CE21P1-C -01

Note: Parts order must contain Service Ref. No., Part No., and descriptions.



Item	Part No.	Description
CABINET PARTS		
1	610 270 6758	ASSY, CABINET FR- E7PE
2	610 249 5355	BUTTON POWER- E7KC
3	610 261 6798	CABINET BACK- F2RCV
4	610 266 1736	DEC SHEET- E7PA
5	610 270 6772	ASSY, GRILLE SP- F2RA
6	610 261 3032	SPRING- E7GC
7	610 253 2449	HOLDER AC CORD- GBR- D4VA
8	610 224 5721	SPACER CUSHION- B3MY
9	412 009 3003	CRT SCREW 6 X 30
10	411 076 1400	SCREW TPG 4 X 14
11	610 265 4202	HOLDER DEGAUSS COIL- F3SC
12	610 249 5331	BUTTON UNIT A- E7KC
ACCESSORIES		
13	JXZB	RC TRANSMITTER
14	SKP10099	INST MANUAL (GB, D)

CHASSIS ELECTRICAL PARTS LIST

Product safety should be considered when a component replacement is made in any area of a receiver. Components indicated by a **⚠** mark in this parts list and the circuit diagram show components whose value have special significance to product safety. It is particularly recommended that only parts specified on the following parts list be used for components replacement pointed out by the mark.

Note: Parts order must contain Service Ref. No., Part No., and descriptions.

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
<p>Read description in the Capacitor and Resistor as follows:</p> <p>CAPACITOR</p> <p>CERAMIC 100P K 50V</p> <p style="margin-left: 40px;">└─── Rated Voltage</p> <p style="margin-left: 40px;">└─── Tolerance Symbols:</p> <p style="margin-left: 40px;">Less than 10PF</p> <p style="margin-left: 40px;">A: Not specified B: ±0.1PF C: ±0.25PF</p> <p style="margin-left: 40px;">D: ±0.5PF F: ±1PF G: ±2PF</p> <p style="margin-left: 40px;">R: ±0.25-0PF S: ±0-0.25PF E: +0-1PF</p> <p style="margin-left: 40px;">More than 10PF</p> <p style="margin-left: 40px;">A: Not specified B: ±0.1% C: ±0.25%</p> <p style="margin-left: 40px;">D: ±0.5% F: ±1% G: ±2%</p> <p style="margin-left: 40px;">H: ±3% J: ±5% K: ±10%</p> <p style="margin-left: 40px;">L: ±15% M: ±20% N: ±30%</p> <p style="margin-left: 40px;">P: +100-0% Q: +30-10% T: +50-10%</p> <p style="margin-left: 40px;">U: +75-10% V: +20-10% W: +100-10%</p> <p style="margin-left: 40px;">X: +40-20% Y: +150-10% Z: +80-20%</p> <p style="margin-left: 40px;">└─── Rated value: P=pico farad, U=Micro farad</p> <p>Material:</p> <p>CERAMIC..... Ceramic</p> <p>MT-PAPER..... Metallized Paper</p> <p>POLYESTER..... Polyester</p> <p>MT-POLYEST.... Metallized Polyester</p> <p>POLYPRO..... Polypropylene</p> <p>MT-POLYPRO.... Metallized Polypropylene</p> <p>COMPO FILM.... Composite film</p> <p>MT-COMPO..... Metallized Composite</p> <p>STYRENE..... Styrene</p> <p>TA-SOLID..... Tantalum Solid</p> <p>AL-SOLID..... Aluminium Solid</p> <p>ELECT..... Electrolytic</p> <p>NP-ELECT..... Non-polarized Electrolytic</p> <p>OS-SOLID..... Aluminium Solid with Organic Semiconductive Electrolytic</p> <p>DL-ELECT..... Doble Layered Electrolytic</p> <p>RESISTOR</p> <p>CARBON 4.7K J A 1/4W</p> <p style="margin-left: 40px;">└─── Rated Wattage</p> <p style="margin-left: 40px;">└─── Performance Symbols:</p> <p style="margin-left: 40px;">A: General B: Non flammable Z: Low noise</p> <p style="margin-left: 40px;">Other: Temperature coefficient</p> <p style="margin-left: 40px;">└─── Tolerance Symbols:</p> <p style="margin-left: 40px;">A: ±0.05% B: ±0.1% C: ±0.25% D: ±0.5%</p> <p style="margin-left: 40px;">F: ±1% G: ±2% J: ±5% K: ±10%</p> <p style="margin-left: 40px;">M: ±20% P: +5-15%</p> <p style="margin-left: 40px;">└─── Rated value, ohms:</p> <p style="margin-left: 40px;">K: 1,000, M: 1,000,000</p> <p>Material:</p> <p>CARBON..... Carbon</p> <p>MT-FILM..... Metal Film</p> <p>OXIDE-MT..... Oxide Metal Film</p> <p>SOLID..... Composition</p> <p>MT-GLAZE..... Metal Glaze</p> <p>WIRE WOUND... Wire Wound</p> <p>CERAMIC RES.. Ceramic</p> <p>FUSIBLE RES.... Fusible</p>			<h2 style="margin: 0;">Chassis construction</h2> <h3 style="margin: 0;">CE21P1-01 (21P1)</h3> <p style="margin: 5px 0;">ASSY,PWB,MAIN E7PEV 1AA0B10H018K0 (Page 11)</p> <p style="margin: 5px 0;">ASSY,PWB,SIF F2RT 1AA0B10E230BA (Page 17)</p> <p style="margin: 5px 0;">ASSY,PWB,AUDIO F2RT 1AA0B10E230BB (Page 17)</p> <p style="margin: 5px 0;">ASSY,PWB,CRT F2RC 1AA0B10E24500 (Page 18)</p> <p style="margin: 5px 0;">OUT OF CIRCUIT-E7PEV (Page 19)</p> <hr style="border: 1px solid black;"/> <p style="margin: 5px 0;">ASSY,PWB,MAIN E7PEV 1AA0B10H018K0</p> <p>TRANSISTOR</p> <p>Q001 406 007 2106 TR JC546A</p> <p>406 007 2007 TR JC546B</p> <p>405 019 1909 TR 2SC536- E- NP</p> <p>405 019 2708 TR 2SC536- F- NP</p> <p>405 019 3804 TR 2SC536- G- NP</p> <p>Q1001 406 007 1901 TR JC556A</p> <p>406 007 1802 TR JC556B</p> <p>405 004 4205 TR 2SA608- E- CTV- NP</p> <p>405 004 4809 TR 2SA608- F- CTV- NP</p> <p>405 028 7909 TR 2SA608- G- CTV- NP</p> <p>Q1002 406 007 2106 TR JC546A</p> <p>406 007 2007 TR JC546B</p> <p>405 019 1909 TR 2SC536- E- NP</p> <p>405 019 2708 TR 2SC536- F- NP</p> <p>405 019 3804 TR 2SC536- G- NP</p> <p>Q1003 406 007 2106 TR JC546A</p> <p>406 007 2007 TR JC546B</p> <p>405 019 1909 TR 2SC536- E- NP</p> <p>405 019 2708 TR 2SC536- F- NP</p> <p>405 019 3804 TR 2SC536- G- NP</p> <p>Q1004 406 007 2106 TR JC546A</p> <p>406 007 2007 TR JC546B</p> <p>405 019 1909 TR 2SC536- E- NP</p> <p>405 019 2708 TR 2SC536- F- NP</p> <p>405 019 3804 TR 2SC536- G- NP</p> <p>Q1005 406 007 2106 TR JC546A</p> <p>406 007 2007 TR JC546B</p> <p>405 019 1909 TR 2SC536- E- NP</p> <p>405 019 2708 TR 2SC536- F- NP</p> <p>405 019 3804 TR 2SC536- G- NP</p> <p>Q1041 406 007 2106 TR JC546A</p> <p>406 007 2007 TR JC546B</p> <p>405 019 1909 TR 2SC536- E- NP</p> <p>405 019 2708 TR 2SC536- F- NP</p> <p>405 019 3804 TR 2SC536- G- NP</p> <p>Q1042 406 007 1901 TR JC556A</p> <p>406 007 1802 TR JC556B</p> <p>405 004 4205 TR 2SA608- E- CTV- NP</p> <p>405 004 4809 TR 2SA608- F- CTV- NP</p> <p>405 028 7909 TR 2SA608- G- CTV- NP</p> <p>Q1043 406 007 2106 TR JC546A</p> <p>406 007 2007 TR JC546B</p> <p>405 019 1909 TR 2SC536- E- NP</p>		

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
Q1201	405 019 2708	TR 2SC536- F- NP	Q612	405 058 0208	TR 2SC3807- R- CTV- YA
	405 019 3804	TR 2SC536- G- NP	Q613	405 018 9203	TR 2SC3895- T- CTV- YB
	406 007 2106	TR JC546A	Q641	406 007 2106	TR JC546A
	406 007 2007	TR JC546B		406 007 2007	TR JC546B
Q1204	405 019 1909	TR 2SC536- E- NP		405 019 1909	TR 2SC536- E- NP
	405 019 2708	TR 2SC536- F- NP		405 019 2708	TR 2SC536- F- NP
	405 019 3804	TR 2SC536- G- NP		405 019 3804	TR 2SC536- G- NP
	406 007 2106	TR JC546A	Q652	405 023 4903	TR 2SD400- D- MP
Q121	406 007 2007	TR JC546B		405 023 5009	TR 2SD400- E- MP
	405 019 1909	TR 2SC536- E- NP		405 023 5306	TR 2SD400- F- MP
	405 019 2708	TR 2SC536- F- NP	Q681	405 059 9804	TR 2SD1913- Q- RA
	405 019 3804	TR 2SC536- G- NP		405 059 9903	TR 2SD1913- R- RA
Q151	406 007 2106	TR JC546A		405 060 0005	TR 2SD1913- S- RA
	406 007 2007	TR JC546B	Q682	406 007 1901	TR JC556A
	405 019 1909	TR 2SC536- E- NP		406 007 1802	TR JC556B
	405 019 2708	TR 2SC536- F- NP		405 004 4205	TR 2SA608- E- CTV- NP
Q152	405 019 3804	TR 2SC536- G- NP		405 004 4809	TR 2SA608- F- CTV- NP
	406 007 1901	TR JC556A		405 028 7909	TR 2SA608- G- CTV- NP
	406 007 1802	TR JC556B	Q801	405 118 4207	TR PH2369
	405 004 4205	TR 2SA608- E- CTV- NP	Q835	406 007 2106	TR JC546A
Q153	405 004 4809	TR 2SA608- F- CTV- NP		406 007 2007	TR JC546B
	405 028 7909	TR 2SA608- G- CTV- NP		405 019 1909	TR 2SC536- E- NP
	406 007 2106	TR JC546A		405 019 2708	TR 2SC536- F- NP
	406 007 2007	TR JC546B	Q861	405 019 3804	TR 2SC536- G- NP
Q154	405 019 1909	TR 2SC536- E- NP		406 007 1901	TR JC556A
	405 019 2708	TR 2SC536- F- NP		406 007 1802	TR JC556B
	405 019 3804	TR 2SC536- G- NP		405 004 4205	TR 2SA608- E- CTV- NP
	406 007 1901	TR JC556A		405 004 4809	TR 2SA608- F- CTV- NP
Q171	406 007 1802	TR JC556B		405 028 7909	TR 2SA608- G- CTV- NP
	405 004 4205	TR 2SA608- E- CTV- NP	Q871	406 007 2106	TR JC546A
	405 004 4809	TR 2SA608- F- CTV- NP		406 007 2007	TR JC546B
	405 028 7909	TR 2SA608- G- CTV- NP		405 019 1909	TR 2SC536- E- NP
Q2001	406 007 2106	TR JC546A		405 019 2708	TR 2SC536- F- NP
	406 007 2007	TR JC546B		405 019 3804	TR 2SC536- G- NP
	405 019 1909	TR 2SC536- E- NP	Q872	406 007 2106	TR JC546A
	405 019 2708	TR 2SC536- F- NP		406 007 2007	TR JC546B
Q201	405 019 3804	TR 2SC536- G- NP		405 019 1909	TR 2SC536- E- NP
	406 007 2106	TR JC546A		405 019 2708	TR 2SC536- F- NP
	406 007 2007	TR JC546B		405 019 3804	TR 2SC536- G- NP
	405 019 1909	TR 2SC536- E- NP	Q873	406 007 2106	TR JC546A
Q202	405 019 2708	TR 2SC536- F- NP		406 007 2007	TR JC546B
	405 019 3804	TR 2SC536- G- NP		405 019 1909	TR 2SC536- E- NP
	406 007 2106	TR JC546A		405 019 2708	TR 2SC536- F- NP
	406 007 2007	TR JC546B		405 019 3804	TR 2SC536- G- NP
Q203	405 019 1909	TR 2SC536- E- NP	Q874	406 007 2106	TR JC546A
	405 019 2708	TR 2SC536- F- NP		406 007 2007	TR JC546B
	405 019 3804	TR 2SC536- G- NP		405 019 1909	TR 2SC536- E- NP
	406 007 2106	TR JC546A		405 019 2708	TR 2SC536- F- NP
Q431	405 011 1808	TR 2SC1627- 0		405 019 3804	TR 2SC536- G- NP
	405 011 1907	TR 2SC1627- Y	Q875	406 007 2106	TR JC546A
	405 013 6801	TR 2SC2274- E		406 007 2007	TR JC546B
	405 013 7006	TR 2SC2274- F		405 019 1909	TR 2SC536- E- NP
Q432	405 022 6809	TR 2SD1651- CTV- YB		405 019 2708	TR 2SC536- F- NP
	406 007 2106	TR JC546A		405 019 3804	TR 2SC536- G- NP
	406 007 2007	TR JC546B		406 007 2106	TR JC546A
	405 019 1909	TR 2SC536- E- NP		406 007 2007	TR JC546B
Q501	405 019 2708	TR 2SC536- F- NP		405 019 1909	TR 2SC536- E- NP
	405 019 3804	TR 2SC536- G- NP		405 019 2708	TR 2SC536- F- NP
	406 007 1901	TR JC556A		405 019 3804	TR 2SC536- G- NP
	406 007 1802	TR JC556B		406 007 2106	TR JC546A
Q611	405 004 4205	TR 2SA608- E- CTV- NP		406 007 2007	TR JC546B
	405 004 4809	TR 2SA608- F- CTV- NP		405 019 1909	TR 2SC536- E- NP
	405 028 7909	TR 2SA608- G- CTV- NP		405 019 2708	TR 2SC536- F- NP
				405 019 3804	TR 2SC536- G- NP
			INTEGRATED CIRCUIT		
			IC001	409 301 4906	IC TDA7263M
			IC1202	409 120 3401	IC LA7221
			IC201	409 309 6209	IC TDA8361/N3
			IC271	409 404 0201	IC U3665M
			IC501	409 192 5709	IC LA7833
			IC651	409 143 3402	IC AN78M12 LB
				409 365 2900	IC BA178M12T
				409 026 9507	IC L78M12- RA
				409 269 1207	IC L78M12CV
				409 366 1803	IC MC78M12CT
			IC652	409 362 7403	IC AN78M08 LB
				409 365 2801	IC BA178M08T
				409 285 5203	IC L78M08- RA
				409 269 1108	IC L78M08CV
				409 366 1704	IC MC78M08CT
			IC801	410 269 6802	IC SAA5290ZP/061
			IC802	409 333 3700	IC 24LC02B/P
			IC810	409 019 6209	IC LA7910

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
CAPACITOR			C2001	403 068 0409	CERAMI C 0.1U Z 25V
C001A	403 068 0419	CERAMI C 0.1U Z 25V		403 070 2606	CERAMI C 0.1U Z 50V
C002	403 070 9803	CERAMI C 0.015U K 50V	C2002	403 068 0409	CERAMI C 0.1U Z 25V
C003A	403 068 0419	CERAMI C 0.1U Z 25V		403 070 2606	CERAMI C 0.1U Z 50V
C004B	403 047 3100	ELECT 47U M 25V	C2003	403 068 0409	CERAMI C 0.1U Z 25V
C005	403 046 3507	ELECT 33U M 25V		403 070 2606	CERAMI C 0.1U Z 50V
C006	403 046 3507	ELECT 33U M 25V	C201	403 014 3409	CERAMI C 18P J 50V
C007	403 270 3403	MT- POLYEST 0.22U K 63V	C202	403 270 2901	MT- POLYEST 0.1U K 63V
	403 237 7901	MT- COMPO 0.22U J 50V		403 237 8007	MT- COMPO 0.1U J 50V
C008	403 270 3403	MT- POLYEST 0.22U K 63V	C203	403 073 9107	CERAMI C 4700P K 50V
	403 237 7901	MT- COMPO 0.22U J 50V	C204	403 068 0409	CERAMI C 0.1U Z 25V
C009	403 270 3403	MT- POLYEST 0.22U K 63V		403 070 2606	CERAMI C 0.1U Z 50V
	403 237 7901	MT- COMPO 0.22U J 50V	C205	403 068 0409	CERAMI C 0.1U Z 25V
C010	403 270 3403	MT- POLYEST 0.22U K 63V		403 070 2606	CERAMI C 0.1U Z 50V
	403 237 7901	MT- COMPO 0.22U J 50V	C206	403 068 0409	CERAMI C 0.1U Z 25V
C011	403 045 1504	ELECT 1000U M 25V		403 070 2606	CERAMI C 0.1U Z 50V
C012	403 045 1504	ELECT 1000U M 25V	C207	403 068 0409	CERAMI C 0.1U Z 25V
C015	403 047 3100	ELECT 47U M 25V		403 070 2606	CERAMI C 0.1U Z 50V
C018	403 069 9500	CERAMI C 0.01U Z 50V	C208	403 068 0409	CERAMI C 0.1U Z 25V
C021	403 052 8503	ELECT 1000U M 35V		403 070 2606	CERAMI C 0.1U Z 50V
C1001	403 069 1702	CERAMI C 1000P K 50V	C209	403 069 1702	CERAMI C 1000P K 50V
C1002	403 041 8804	ELECT 10U M 16V	C212	403 049 9803	ELECT 2.2U M 50V
C1003	403 009 5708	CERAMI C 100P J 50V	C215	403 270 3908	MT- POLYEST 0.47U K 63V
C1004	403 130 3109	CERAMI C 0.047U K 50V		403 256 0808	MT- COMPO 0.47U J 50V
C1005	403 069 1702	CERAMI C 1000P K 50V	C222	404 045 6605	NP- ELECT 2.2U M 50V
C1006	403 041 8804	ELECT 10U M 16V	C226	403 138 1602	ELECT 1U M 100V
C1007	403 009 5708	CERAMI C 100P J 50V	C231	403 068 0409	CERAMI C 0.1U Z 25V
C1008	403 130 3109	CERAMI C 0.047U K 50V		403 070 2606	CERAMI C 0.1U Z 50V
C1009	403 041 8804	ELECT 10U M 16V	C232	403 014 9203	CERAMI C 180P J 50V
C101	403 194 4609	ELECT 470U M 16V	C233	403 068 0409	CERAMI C 0.1U Z 25V
C102	403 043 9106	ELECT 47U M 16V		403 070 2606	CERAMI C 0.1U Z 50V
C1021	403 069 1702	CERAMI C 1000P K 50V	C234	403 013 3004	CERAMI C 150P J 50V
C1022	403 041 8804	ELECT 10U M 16V	C235	403 008 7406	CERAMI C 10P D 50V
C1023	403 009 5708	CERAMI C 100P J 50V	C271	403 069 1702	CERAMI C 1000P K 50V
C1024	403 041 9405	ELECT 10U M 16V	C272	403 069 1702	CERAMI C 1000P K 50V
C1025	403 069 1702	CERAMI C 1000P K 50V	C273	403 069 9500	CERAMI C 0.01U Z 50V
C1026	403 041 8804	ELECT 10U M 16V	C274	403 041 8804	ELECT 10U M 16V
C1027	403 009 5708	CERAMI C 100P J 50V	C351	403 270 2901	MT- POLYEST 0.1U K 63V
C1028	403 041 9405	ELECT 10U M 16V		403 237 8007	MT- COMPO 0.1U J 50V
C1029	403 041 8804	ELECT 10U M 16V	C352	403 270 3809	MT- POLYEST 0.047U K 63V
C103A	403 069 9500	CERAMI C 0.01U Z 50V		403 225 2703	MT- COMPO 0.047U J 50V
C1031	403 014 9203	CERAMI C 180P J 50V	C353	403 073 9107	CERAMI C 4700P K 50V
C104	403 043 9106	ELECT 47U M 16V	C354	403 049 0008	ELECT 1U M 50V
C1041	403 041 8804	ELECT 10U M 16V	C361	403 072 5605	CERAMI C 2700P K 50V
C106	403 049 0008	ELECT 1U M 50V	C362	403 069 9500	CERAMI C 0.01U Z 50V
C106TM	403 069 8305	CERAMI C 0.01U Z 50V	C363	403 042 2405	ELECT 100U M 16V
C114	401 037 5004	MT- GLAZE 0.000 ZA 1/10W	△C421	404 046 8400	MT- POLYPRO 8200P J 1.5K
C117	401 037 5004	MT- GLAZE 0.000 ZA 1/10W	C425	403 165 7301	CERAMI C 330P K 3K
C120	403 069 9500	CERAMI C 0.01U Z 50V		403 287 3601	CERAMI C 330P K 3K
C1201	403 041 8804	ELECT 10U M 16V		403 232 3007	CERAMI C 330P K 3K
C1203	403 069 8305	CERAMI C 0.01U Z 50V	C430	403 075 7101	CERAMI C 1000P K 500V
C1205	403 609 5718	CERAMI C 100P J 50V	C432	403 075 7101	CERAMI C 1000P K 500V
C121	403 068 0409	CERAMI C 0.1U Z 25V	C433	403 076 3102	CERAMI C 3900P K 500V
	403 070 2606	CERAMI C 0.1U Z 50V	C434	403 229 1207	ELECT 47U M 35V
C131	401 037 5004	MT- GLAZE 0.000 ZA 1/10W	C437	403 066 6106	MT- POLYEST 0.47U J 250V
C132	403 069 1702	CERAMI C 1000P K 50V	C438	403 057 0601	POLYESTER 0.01U K 50V
C133	403 069 9500	CERAMI C 0.01U Z 50V		403 179 3801	POLYESTER 0.01U K 50V
C134	403 050 6600	ELECT 3.3U M 50V	△C441	403 216 7601	POLYPRO 0.36U J 200V
C135	403 068 0409	CERAMI C 0.1U Z 25V	C445	403 049 4204	ELECT 10U M 50V
	403 070 2606	CERAMI C 0.1U Z 50V	C481	403 076 1405	CERAMI C 2700P K 500V
C136	403 194 4609	ELECT 470U M 16V	C482	403 159 7409	MT- POLYEST 0.1U K 250V
C137	403 068 0409	CERAMI C 0.1U Z 25V	C501	403 054 1502	ELECT 470U M 35V
	403 070 2606	CERAMI C 0.1U Z 50V	C502	403 053 2104	ELECT 220U M 35V
C138	403 069 9500	CERAMI C 0.01U Z 50V	C503	403 024 2102	CERAMI C 39P J 50V
C141	403 028 4409	CERAMI C 56P J 50V	C504	403 069 9500	CERAMI C 0.01U Z 50V
C142	403 068 0409	CERAMI C 0.1U Z 25V	C505	403 075 7101	CERAMI C 1000P K 500V
	403 070 2606	CERAMI C 0.1U Z 50V	C506	403 183 7901	MT- POLYEST 0.1U K 100V
C143	403 027 1201	CERAMI C 5P C 50V		403 256 4806	MT- COMPO 0.1U J 100V
C146	403 010 8517	CERAMI C 12P C 50V	C511	403 188 1201	MT- POLYEST 0.15U K 100V
C151	403 024 2102	CERAMI C 39P J 50V		403 313 7603	MT- COMPO 0.15U J 100V
C162	403 068 0409	CERAMI C 0.1U Z 25V	C512	403 148 0404	ELECT 1000U M 25V
	403 070 2606	CERAMI C 0.1U Z 50V	C513	403 049 4204	ELECT 10U M 50V
C171	403 270 2901	MT- POLYEST 0.1U K 63V	C514	403 049 4204	ELECT 10U M 50V
	403 237 8007	MT- COMPO 0.1U J 50V	C600	403 076 4000	CERAMI C 4700P K 500V
C1901	403 069 1702	CERAMI C 1000P K 50V	△C601	404 047 3602	MT- POLYEST 0.1U M 125V
C200	403 068 0409	CERAMI C 0.1U Z 25V		404 044 0901	MT- COMPO 0.1U M 250V
	403 070 2606	CERAMI C 0.1U Z 50V			

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
△C602	404 047 3602	MT- POLYEST 0. 1U M 125V	R010	401 010 1504	CARBON 4. 7 JA 1/2W
	404 044 0901	MT- COMPO 0. 1U M 250V	R013	401 037 6704	MT- GLAZE 1. 2K JA 1/10W
C603	403 076 7100	CERAMI C 1000P M 1K	R014	401 025 7409	CARBON 220 JA 1/6W
C604	403 076 7100	CERAMI C 1000P M 1K	R015	401 037 5400	MT- GLAZE 1K JA 1/10W
C605	403 076 7100	CERAMI C 1000P M 1K	R016	401 038 6505	MT- GLAZE 47K JA 1/10W
C606	403 076 7100	CERAMI C 1000P M 1K	R017	401 037 5608	MT- GLAZE 10K JA 1/10W
C607	404 047 1707	ELECT 220U M 400V	R100	401 037 5004	MT- GLAZE 0. 000 ZA 1/10W
	404 069 5905	ELECT 220U M 400V	R1001	401 038 7601	MT- GLAZE 560 JA 1/10W
C613	403 061 8303	POLYESTER 4700P K 50V	R1002	401 038 0701	MT- GLAZE 2. 2K JA 1/10W
	403 179 1104	POLYESTER 4700P K 50V	R1003	401 038 7601	MT- GLAZE 560 JA 1/10W
C614	403 270 2901	MT- POLYEST 0. 1U K 63V	R1004	401 038 0701	MT- GLAZE 2. 2K JA 1/10W
	403 237 8007	MT- COMPO 0. 1U J 50V	R1005	401 027 6608	CARBON 75 JA 1/6W
C615	403 058 2604	POLYESTER 0. 015U J 50V	R1006	401 038 5300	MT- GLAZE 39K JA 1/10W
	403 179 3207	POLYESTER 0. 015U J 50V	R1007	401 038 3702	MT- GLAZE 33K JA 1/10W
C616	403 165 8407	CERAMI C 680P K 2K	R1008	401 027 6608	CARBON 75 JA 1/6W
	403 232 2109	CERAMI C 680P K 2K	R1009	401 027 6608	CARBON 75 JA 1/6W
C617	403 060 8403	POLYESTER 0. 033U K 50V	R101	401 037 5004	MT- GLAZE 0. 000 ZA 1/10W
	403 179 1609	POLYESTER 0. 033U K 50V	R1010	401 027 6608	CARBON 75 JA 1/6W
△C631	404 060 6505	CERAMI C 2200P M 400V	R1011	401 037 5202	MT- GLAZE 100 JA 1/10W
	404 071 4200	CERAMI C 2200P M 400V	R1012	401 027 6608	CARBON 75 JA 1/6W
	404 060 6604	CERAMI C 2200P M 400V	R1013	401 024 6700	CARBON 100 JA 1/6W
△C632	404 044 2806	CERAMI C 470P K 400V	R1014	401 027 6608	CARBON 75 JA 1/6W
	404 071 4606	CERAMI C 470P K 400V	R1015	401 038 6406	MT- GLAZE 4. 7K JA 1/10W
	404 060 6901	CERAMI C 470P M 400V	R1016	401 019 1000	CARBON 390 JA 1/4W
C640	403 069 8305	CERAMI C 0. 01U Z 50V	R1017	401 024 7400	CARBON 10K JA 1/6W
C641	403 165 9305	CERAMI C 680P K 1K	R1018	401 038 3504	MT- GLAZE 330 JA 1/10W
	403 262 4401	CERAMI C 680P K 1K	R1021	401 038 7601	MT- GLAZE 560 JA 1/10W
C642A	404 055 9801	ELECT 220U M 200V	R1022	401 038 0701	MT- GLAZE 2. 2K JA 1/10W
C643	403 148 2002	ELECT 470U M 35V	R1023	401 038 7601	MT- GLAZE 560 JA 1/10W
C644	403 148 0701	ELECT 2200U M 25V	R1024	401 038 0701	MT- GLAZE 2. 2K JA 1/10W
C645	403 158 1309	ELECT 2200U M 35V	R1025	401 038 5300	MT- GLAZE 39K JA 1/10W
C647	403 069 9500	CERAMI C 0. 01U Z 50V	R1026	401 038 3702	MT- GLAZE 33K JA 1/10W
C651	403 148 0305	ELECT 470U M 16V	R1027	401 027 6608	CARBON 75 JA 1/6W
C652	403 069 9500	CERAMI C 0. 01U Z 50V	R1028	401 027 6608	CARBON 75 JA 1/6W
C653	403 043 9106	ELECT 47U M 16V	R1029	401 025 1308	CARBON 150 JA 1/6W
C655	403 126 4400	ELECT 100U M 10V	R1031	401 038 0612	MT- GLAZE 220 JA 1/10W
C661	403 051 0607	ELECT 4. 7U M 50V	R1032	401 038 0612	MT- GLAZE 220 JA 1/10W
C681	403 190 4702	ELECT 1000U M 25V	R1033	401 038 0612	MT- GLAZE 220 JA 1/10W
C682	403 069 9500	CERAMI C 0. 01U Z 50V	R1041	401 038 2200	MT- GLAZE 27K JA 1/10W
C683	403 147 9606	ELECT 1000U M 10V	R1042	401 037 5608	MT- GLAZE 10K JA 1/10W
C684	403 050 6600	ELECT 3. 3U M 50V	R1043	401 039 0304	MT- GLAZE 820 JA 1/10W
C802	403 270 2901	MT- POLYEST 0. 1U K 63V	R1044	401 039 0304	MT- GLAZE 820 JA 1/10W
	403 237 8007	MT- COMPO 0. 1U J 50V	R1045	401 037 5400	MT- GLAZE 1K JA 1/10W
C812	403 049 0008	ELECT 1U M 50V	R1046	401 038 0701	MT- GLAZE 2. 2K JA 1/10W
C814	403 049 0008	ELECT 1U M 50V	R1047	401 037 6704	MT- GLAZE 1. 2K JA 1/10W
C816	403 046 9905	ELECT 4. 7U M 25V	R1051	401 037 8104	MT- GLAZE 150K JA 1/10W
C818	403 046 9905	ELECT 4. 7U M 25V	R1052	401 037 5707	MT- GLAZE 100K JA 1/10W
C841	403 069 9500	CERAMI C 0. 01U Z 50V	R1053	401 037 6704	MT- GLAZE 1. 2K JA 1/10W
C860	403 022 8205	CERAMI C 33P J 50V	R1054	401 037 8104	MT- GLAZE 150K JA 1/10W
C861	403 179 1213	POLYESTER 4700P J 50V	R1055	401 037 5707	MT- GLAZE 100K JA 1/10W
C871	403 068 0409	CERAMI C 0. 1U Z 25V	R1056	401 037 6704	MT- GLAZE 1. 2K JA 1/10W
	403 070 2606	CERAMI C 0. 1U Z 50V	R108	401 037 5004	MT- GLAZE 0. 000 ZA 1/10W
C872	403 043 9106	ELECT 47U M 16V	R1200	401 022 1905	CARBON 680 JA 1/4W
C873	403 018 0503	CERAMI C 22P J 50V	R1201	401 038 6505	MT- GLAZE 47K JA 1/10W
C874	403 018 0503	CERAMI C 22P J 50V	R1203	401 037 5608	MT- GLAZE 10K JA 1/10W
C875	403 068 0409	CERAMI C 0. 1U Z 25V	R1204	401 038 2200	MT- GLAZE 27K JA 1/10W
	403 070 2606	CERAMI C 0. 1U Z 50V	R1205	401 038 2200	MT- GLAZE 27K JA 1/10W
C878	403 073 9107	CERAMI C 4700P K 50V	R1206	401 038 6505	MT- GLAZE 47K JA 1/10W
C879	403 068 0409	CERAMI C 0. 1U Z 25V	R1207	401 024 7400	CARBON 10K JA 1/6W
	403 070 2606	CERAMI C 0. 1U Z 50V	R121	401 027 0309	CARBON 47K JA 1/6W
C881	403 069 9510	CERAMI C 0. 01U Z 50V	R133	401 037 9101	MT- GLAZE 180 JA 1/10W
C882	403 041 8804	ELECT 10U M 16V	R134	401 038 9209	MT- GLAZE 6. 8K JA 1/10W
C883	403 018 0503	CERAMI C 22P J 50V	R135	401 038 6505	MT- GLAZE 47K JA 1/10W
C884	403 018 0503	CERAMI C 22P J 50V	R137	401 037 5202	MT- GLAZE 100 JA 1/10W
C892	403 069 9510	CERAMI C 0. 01U Z 50V	R138	401 038 7700	MT- GLAZE 5. 6K JA 1/10W
			R141	401 038 9209	MT- GLAZE 6. 8K JA 1/10W
RESISTOR			R150	401 024 7004	CARBON 1K JA 1/6W
R001	401 037 5400	MT- GLAZE 1K JA 1/10W	R151	401 022 1905	CARBON 680 JA 1/4W
R002	401 037 9200	MT- GLAZE 1. 8K JA 1/10W	R152	401 025 3807	CARBON 180 JA 1/6W
R003	401 037 5400	MT- GLAZE 1K JA 1/10W	R153	401 037 5400	MT- GLAZE 1K JA 1/10W
R004	401 037 9200	MT- GLAZE 1. 8K JA 1/10W	R154	401 038 2101	MT- GLAZE 2. 7K JA 1/10W
R005	401 019 9600	CARBON 47 JA 1/4W	R155	401 037 5400	MT- GLAZE 1K JA 1/10W
R006	401 014 4105	CARBON 1. 5K JA 1/4W	R156	401 037 5400	MT- GLAZE 1K JA 1/10W
R007	401 019 9600	CARBON 47 JA 1/4W	R157	401 039 0908	MT- GLAZE 910 JA 1/10W
R008	401 014 4105	CARBON 1. 5K JA 1/4W	R158	401 037 5400	MT- GLAZE 1K JA 1/10W
R009	401 010 1504	CARBON 4. 7 JA 1/2W	R159	401 022 1905	CARBON 680 JA 1/4W
			R163	401 038 6505	MT- GLAZE 47K JA 1/10W

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
R171	401 038 6307	MT- GLAZE 470 JA 1/10W	R617	401 024 9305	CARBON 1. 2K JA 1/6W
R172	401 025 7409	CARBON 220 JA 1/6W	R619	401 016 1508	CARBON 22 JA 1/4W
R173	401 025 7409	CARBON 220 JA 1/6W	R620	401 007 5805	CARBON 120K JA 1/2W
R1900	401 038 7809	MT- GLAZE 56K JA 1/10W	R621	401 007 5805	CARBON 120K JA 1/2W
R1901	401 037 8005	MT- GLAZE 15K JA 1/10W	R622	401 014 5201	CARBON 15K JA 1/4W
R1901A	401 037 5004	MT- GLAZE 0. 000 ZA 1/10W	R623	401 025 7805	CARBON 2. 2K JA 1/6W
R1902	401 039 0403	MT- GLAZE 8. 2K JA 1/10W	R624	401 068 6902	OXI DE- MT 56 JA 2W
R1902A	401 037 5004	MT- GLAZE 0. 000 ZA 1/10W	R625	401 067 8204	OXI DE- MT 39 JA 2W
R1903	401 038 6406	MT- GLAZE 4. 7K JA 1/10W	R626	401 016 3304	CARBON 2. 2K GA 1/4W
R1903A	401 037 5004	MT- GLAZE 0. 000 ZA 1/10W	△R631	402 000 8305	SOLI D 5. 6M KA 1/2W
R1904	401 038 2101	MT- GLAZE 2. 7K JA 1/10W	△R632	402 000 8305	SOLI D 5. 6M KA 1/2W
R1905	401 038 0701	MT- GLAZE 2. 2K JA 1/10W	R641	401 012 8105	CARBON 100K JA 1/4W
R1906	401 037 5004	MT- GLAZE 0. 000 ZA 1/10W	R642	401 026 9907	CARBON 4. 7K JA 1/6W
R1907	401 037 5608	MT- GLAZE 10K JA 1/10W	R643	401 014 6109	CARBON 150K JA 1/4W
R1908	401 038 3504	MT- GLAZE 330 JA 1/10W	R644	401 010 4307	CARBON 47K JA 1/2W
R1909	401 037 7909	MT- GLAZE 1. 5K JA 1/10W	R645	401 025 8208	CARBON 22K JA 1/6W
R1911	401 038 6307	MT- GLAZE 470 JA 1/10W	R646	402 067 3305	WI RE WOUND 4. 7 KA 5W
R1921	401 037 6615	MT- GLAZE 120 JA 1/10W		402 075 5704	WI RE WOUND 4. 7 KA 5W
R1922	401 038 5013	MT- GLAZE 390 JA 1/10W	R652	401 065 1801	OXI DE- MT 12 JA 2W
R1924	401 027 5502	CARBON 6. 8K JA 1/6W	R653	401 067 8204	OXI DE- MT 39 JA 2W
R2001	401 038 2200	MT- GLAZE 27K JA 1/10W	R655	401 067 4206	OXI DE- MT 33 JA 2W
R2002	401 037 5608	MT- GLAZE 10K JA 1/10W	R656	401 026 9620	CARBON 470 JA 1/6W
R2004	401 037 7800	MT- GLAZE 150 JA 1/10W	R657	401 007 6901	CARBON 15 JA 1/2W
R2005	401 013 6447	CARBON 12K JA 1/4W	R661	401 068 4700	OXI DE- MT 4. 7K JA 2W
R201	401 038 6505	MT- GLAZE 47K JA 1/10W	R662	401 068 0207	OXI DE- MT 3. 9K JA 2W
R202	401 037 5707	MT- GLAZE 100K JA 1/10W	R681	401 008 1608	CARBON 1. 8K JA 1/2W
R203	401 024 6720	CARBON 100 JA 1/6W	R682	401 069 1708	OXI DE- MT 68 JA 2W
R204	401 024 6720	CARBON 100 JA 1/6W	R684	401 027 8602	CARBON 8. 2K JA 1/6W
R205	401 024 6720	CARBON 100 JA 1/6W	R685	401 025 8208	CARBON 22K JA 1/6W
R206	401 037 5202	MT- GLAZE 100 JA 1/10W	R800	401 026 9907	CARBON 4. 7K JA 1/6W
R207	401 037 5202	MT- GLAZE 100 JA 1/10W	R801	401 037 5004	MT- GLAZE 0. 000 ZA 1/10W
R208	401 037 5202	MT- GLAZE 100 JA 1/10W	R802	401 038 0701	MT- GLAZE 2. 2K JA 1/10W
R211	401 038 0800	MT- GLAZE 22K JA 1/10W	R803	401 037 9408	MT- GLAZE 180K JA 1/10W
R212	401 017 1844	CARBON 2. 7K JA 1/4W	R804	401 024 7400	CARBON 10K JA 1/6W
R213	401 038 7700	MT- GLAZE 5. 6K JA 1/10W	R806	401 024 7400	CARBON 10K JA 1/6W
R214	401 037 5202	MT- GLAZE 100 JA 1/10W	R807	401 024 7400	CARBON 10K JA 1/6W
R215	401 038 3702	MT- GLAZE 33K JA 1/10W	R808	401 019 1901	CARBON 3. 9K JA 1/4W
R216	401 025 8208	CARBON 22K JA 1/6W	R811	401 025 7805	CARBON 2. 2K JA 1/6W
R217	401 025 8208	CARBON 22K JA 1/6W	R812	401 038 5102	MT- GLAZE 3. 9K JA 1/10W
R218	401 038 7809	MT- GLAZE 56K JA 1/10W	R813	401 026 4605	CARBON 33K JA 1/6W
R223	401 014 6109	CARBON 150K JA 1/4W	R815	401 024 6700	CARBON 100 JA 1/6W
R224	401 024 7004	CARBON 1K JA 1/6W	R816	401 037 5608	MT- GLAZE 10K JA 1/10W
R226	401 026 7408	CARBON 39K JA 1/6W	R817	401 027 8602	CARBON 8. 2K JA 1/6W
R227	401 024 7400	CARBON 10K JA 1/6W	R818	401 038 9308	MT- GLAZE 68K JA 1/10W
R231	401 037 7800	MT- GLAZE 150 JA 1/10W	R819	401 025 7805	CARBON 2. 2K JA 1/6W
R232	401 037 7800	MT- GLAZE 150 JA 1/10W	R820	401 037 5608	MT- GLAZE 10K JA 1/10W
R271	401 024 6700	CARBON 100 JA 1/6W	R821	401 038 0800	MT- GLAZE 22K JA 1/10W
R272	401 024 9008	CARBON 120 JA 1/6W	R822	401 038 6505	MT- GLAZE 47K JA 1/10W
R351	401 024 6700	CARBON 100 JA 1/6W	R823	401 016 3304	CARBON 2. 2K GA 1/4W
R352	401 024 8001	CARBON 1M JA 1/6W	R824	401 038 5102	MT- GLAZE 3. 9K JA 1/10W
R353	401 038 0909	MT- GLAZE 220K JA 1/10W	R825	401 038 3603	MT- GLAZE 3. 3K JA 1/10W
R356	401 037 5202	MT- GLAZE 100 JA 1/10W	R838	401 037 8005	MT- GLAZE 15K JA 1/10W
R357	401 037 8005	MT- GLAZE 15K JA 1/10W	R839	401 026 4605	CARBON 33K JA 1/6W
R361	401 038 5409	MT- GLAZE 390K JA 1/10W	R840	401 026 9600	CARBON 470 JA 1/6W
R363	401 038 0800	MT- GLAZE 22K JA 1/10W	R841	401 038 0800	MT- GLAZE 22K JA 1/10W
R364	401 037 5202	MT- GLAZE 100 JA 1/10W	R842	401 026 9907	CARBON 4. 7K JA 1/6W
R365	401 038 6406	MT- GLAZE 4. 7K JA 1/10W	R843	401 037 5608	MT- GLAZE 10K JA 1/10W
R431	401 038 3504	MT- GLAZE 330 JA 1/10W	R844	401 038 5102	MT- GLAZE 3. 9K JA 1/10W
R432	401 038 3504	MT- GLAZE 330 JA 1/10W	R845	401 037 5608	MT- GLAZE 10K JA 1/10W
R433	401 010 3102	CARBON 470 JA 1/2W	R846	401 038 6406	MT- GLAZE 4. 7K JA 1/10W
R434	401 067 9201	OXI DE- MT 390 JA 2W	R847	401 037 5608	MT- GLAZE 10K JA 1/10W
R435A	402 069 8704	WI RE WOUND 8. 2 KA 7W	R848	401 038 6406	MT- GLAZE 4. 7K JA 1/10W
	402 076 0609	WI RE WOUND 8. 2 KA 7W	R851	401 037 5400	MT- GLAZE 1K JA 1/10W
R436	401 014 5241	CARBON 15K JA 1/4W	R852	401 037 5400	MT- GLAZE 1K JA 1/10W
R441	401 058 3706	OXI DE- MT 1K JA 1W	R853	401 038 0800	MT- GLAZE 22K JA 1/10W
R447	401 026 9907	CARBON 4. 7K JA 1/6W	R861	401 038 2101	MT- GLAZE 2. 7K JA 1/10W
R448	401 009 5803	CARBON 330 JA 1/2W	R862	401 038 0800	MT- GLAZE 22K JA 1/10W
R451	401 064 5701	OXI DE- MT 1. 8 JA 2W	R863	401 038 0800	MT- GLAZE 22K JA 1/10W
R481	401 025 4903	CARBON 180K JA 1/6W	R864	401 039 0304	MT- GLAZE 820 JA 1/10W
R482	401 027 2600	CARBON 5. 6K JA 1/6W	R865	401 038 0711	MT- GLAZE 2. 2K JA 1/10W
R501	401 026 9907	CARBON 4. 7K JA 1/6W	R866	401 038 0711	MT- GLAZE 2. 2K JA 1/10W
R502	402 051 8705	FUSI BLE RES 4. 7 J- 1/2W	R867	401 038 0711	MT- GLAZE 2. 2K JA 1/10W
R504	401 027 3003	CARBON 56K JA 1/6W	R868	401 037 6704	MT- GLAZE 1. 2K JA 1/10W
R602	402 072 4403	WI RE WOUND 3. 9 KA 7W	R869	401 038 2200	MT- GLAZE 27K JA 1/10W
R611	401 027 2600	CARBON 5. 6K JA 1/6W	R870A	401 025 8208	CARBON 22K JA 1/6W
R615	401 025 8208	CARBON 22K JA 1/6W	R871	401 038 6406	MT- GLAZE 4. 7K JA 1/10W

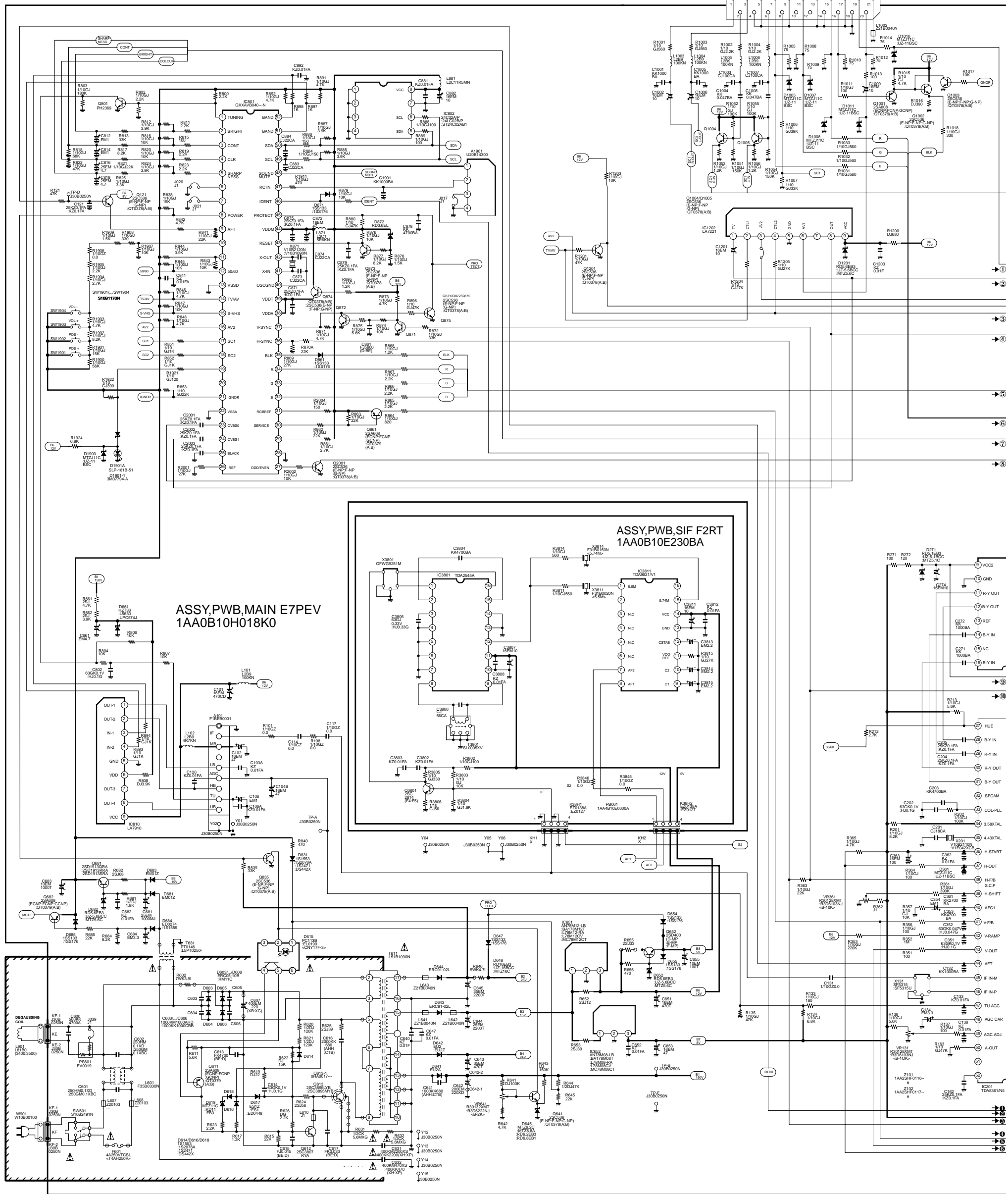
Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
R872	401 038 3702	MT- GLAZE 33K JA 1/10W	D1005	407 063 8309	ZENER DI ODE MTZJ11C
R873	401 038 6406	MT- GLAZE 4. 7K JA 1/10W		407 158 3400	ZENER DI ODE UZ- 11BSC
R874	401 037 5608	MT- GLAZE 10K JA 1/10W	D1007	407 063 8309	ZENER DI ODE MTZJ11C
R875	401 038 7700	MT- GLAZE 5. 6K JA 1/10W		407 158 3400	ZENER DI ODE UZ- 11BSC
R876	401 037 5608	MT- GLAZE 10K JA 1/10W	D1008	407 063 8309	ZENER DI ODE MTZJ11C
R877	401 039 0403	MT- GLAZE 8. 2K JA 1/10W		407 158 3400	ZENER DI ODE UZ- 11BSC
R878	401 037 7909	MT- GLAZE 1. 5K JA 1/10W	D1010	407 063 8309	ZENER DI ODE MTZJ11C
R879	401 037 5608	MT- GLAZE 10K JA 1/10W		407 158 3400	ZENER DI ODE UZ- 11BSC
R880	401 038 6505	MT- GLAZE 47K JA 1/10W	D1011	407 063 8309	ZENER DI ODE MTZJ11C
R884	401 037 7800	MT- GLAZE 150 JA 1/10W		407 158 3400	ZENER DI ODE UZ- 11BSC
R885	401 038 5102	MT- GLAZE 3. 9K JA 1/10W	D1021	407 063 8309	ZENER DI ODE MTZJ11C
R886	401 037 7800	MT- GLAZE 150 JA 1/10W		407 158 3400	ZENER DI ODE UZ- 11BSC
R887	401 038 5102	MT- GLAZE 3. 9K JA 1/10W	D1022	407 063 8309	ZENER DI ODE MTZJ11C
R888	401 037 5202	MT- GLAZE 100 JA 1/10W		407 158 3400	ZENER DI ODE UZ- 11BSC
R889	401 037 5202	MT- GLAZE 100 JA 1/10W	D1023	407 063 8309	ZENER DI ODE MTZJ11C
R891	401 038 6406	MT- GLAZE 4. 7K JA 1/10W		407 158 3400	ZENER DI ODE UZ- 11BSC
R892	401 038 6406	MT- GLAZE 4. 7K JA 1/10W	D1024	407 063 8309	ZENER DI ODE MTZJ11C
R893	401 037 5400	MT- GLAZE 1K JA 1/10W		407 158 3400	ZENER DI ODE UZ- 11BSC
R894	401 037 5400	MT- GLAZE 1K JA 1/10W	D1026	407 063 8309	ZENER DI ODE MTZJ11C
R895	401 037 6704	MT- GLAZE 1. 2K JA 1/10W		407 158 3400	ZENER DI ODE UZ- 11BSC
R896	401 038 6505	MT- GLAZE 47K JA 1/10W	D1027	407 063 8309	ZENER DI ODE MTZJ11C
R897	401 012 5748	CARBON 1K JA 1/4W		407 158 3400	ZENER DI ODE UZ- 11BSC
R898	401 012 5748	CARBON 1K JA 1/4W	D1201	407 053 6803	ZENER DI ODE MTZ5. 6C
				407 057 0104	ZENER DI ODE RD5. 6EB3
				407 151 8501	ZENER DI ODE UZ- 5. 6BCC
VARIABLE RESISTOR			D135	407 063 8309	ZENER DI ODE MTZJ11C
VR131	645 003 5531	VR, SEMI, 10K N		407 158 3400	ZENER DI ODE UZ- 11BSC
VR361	645 003 5531	VR, SEMI, 10K N		407 116 6504	LED SLP- 181B- 51
VR501	645 003 5531	VR, SEMI, 100 N	D1901A	407 063 8309	ZENER DI ODE MTZJ11C
VR641	645 003 5531	VR, SEMI, 2. 2K N	D1902	407 158 3400	ZENER DI ODE UZ- 11BSC
				407 063 8309	ZENER DI ODE MTZJ11C
			D1903	407 063 8309	ZENER DI ODE MTZJ11C
			D1905	407 012 4406	DI ODE 1SS133
TRANSFORMER			D201	407 063 8309	ZENER DI ODE MTZJ11C
T141	610 037 4522	S COIL		407 158 3400	ZENER DI ODE UZ- 11BSC
T431	610 000 1053	DRIVE TRANS		407 063 8309	ZENER DI ODE MTZJ11C
	610 000 1060	DRIVE TRANS		407 158 3400	ZENER DI ODE UZ- 11BSC
△T451	645 014 2987	TRANS, FLYBACK	D202	407 063 8309	ZENER DI ODE MTZJ11C
△T611	645 015 7646	TRANS, POWER, PULSE		407 158 3400	ZENER DI ODE UZ- 11BSC
T681	610 033 3758	POWER TRANS	D203	407 063 8309	ZENER DI ODE MTZJ11C
	610 240 4722	POWER TRANS		407 158 3400	ZENER DI ODE UZ- 11BSC
			D210	407 012 4406	DI ODE 1SS133
				407 012 5809	DI ODE 1SS176
COIL			D221	407 012 4406	DI ODE 1SS133
L1002	645 002 1787	CORE, PIPE		407 012 5809	DI ODE 1SS176
L1003	645 001 4567	INDUCTOR, 10U K		407 005 4505	DI ODE DS442X
L1004	645 001 4567	INDUCTOR, 10U K	D222	407 013 1008	DI ODE 1S1553
L1005	645 001 4567	INDUCTOR, 10U K		407 013 4306	DI ODE 1S2076A
L1006	645 001 4567	INDUCTOR, 10U K		407 013 6508	DI ODE 1S2471
L101	645 001 4567	INDUCTOR, 10U K		407 053 6407	ZENER DI ODE MTZ5. 1C
L102	645 008 2863	INDUCTOR, 4. 7U K	D271	407 056 8200	ZENER DI ODE RD5. 1EB3
L1022	645 002 1787	CORE, PIPE		407 163 8209	ZENER DI ODE UZ- 5. 1BCC
L1023	645 001 4567	INDUCTOR, 10U K		407 063 8309	ZENER DI ODE MTZJ11C
L1024	645 001 4567	INDUCTOR, 10U K	D361	407 158 3400	ZENER DI ODE UZ- 11BSC
L1025	645 001 4567	INDUCTOR, 10U K		407 053 8708	ZENER DI ODE MTZ9. 1A
L1026	645 001 4567	INDUCTOR, 10U K	D431	407 053 8807	ZENER DI ODE MTZ9. 1B
L1027	645 008 2863	INDUCTOR, 4. 7U K		407 057 9602	ZENER DI ODE RD9. 1EB1
L141	645 001 4550	PEAKING COIL 10UH		407 057 9701	ZENER DI ODE RD9. 1EB2
L151	645 008 2924	INDUCTOR, 8. 2U K		407 162 2703	ZENER DI ODE UZ- 9. 1BCA
L152	645 003 9782	INDUCTOR, 22U K		407 005 7308	DI ODE EM01Z
L201	645 001 4567	INDUCTOR, 10U K	D432	407 006 4108	DI ODE ERB44- 04
L202	645 001 4567	INDUCTOR, 10U K	D439	407 005 4505	DI ODE DS442X
L203	645 001 4567	INDUCTOR, 10U K	D442	407 013 1008	DI ODE 1S1553
L231	645 008 2863	INDUCTOR, 4. 7U K		407 013 4306	DI ODE 1S2076A
L232	645 008 2863	INDUCTOR, 4. 7U K		407 013 6508	DI ODE 1S2471
L431	645 008 5628	INDUCTOR, 1U M		407 012 4406	DI ODE 1SS133
L432	645 002 1787	CORE, PIPE	D445	407 012 5809	DI ODE 1SS176
L441A	610 000 0605	LINEARITY COIL		407 151 9003	ZENER DI ODE UZ- 7. 5BCC
L442	610 219 0342	COIL		407 151 9102	ZENER DI ODE UZ- 8. 2BCA
L501	645 008 5642	INDUCTOR, 3. 3U K	D446	407 007 7405	DI ODE EU1
△L601	645 012 3337	LINE FILTER		407 012 4406	DI ODE 1SS133
L607	610 237 1000	PIPE CORE	D481	407 012 5809	DI ODE 1SS176
L608	610 237 1000	PIPE CORE	D482	407 005 7308	DI ODE EM01Z
L641	645 002 1787	CORE, PIPE		408 009 9008	DI ODE BYD33D
L642	645 002 1787	CORE, PIPE	D501	407 118 2207	ZENER DI ODE 1Z75
L643	645 002 1787	CORE, PIPE		407 006 6300	DI ODE ERC05- 10B
L871	645 008 0203	INDUCTOR, 5. 6U K	D502	407 009 6901	DI ODE RM11C
L881	645 001 4697	INDUCTOR, 1. 5U M	D603	407 006 6300	DI ODE ERC05- 10B
			D604		
DIODE					

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
D605	407 009 6901	DI ODE RM11C		610 234 3779	SOCKET 21P
	407 006 6300	DI ODE ERC05- 10B	K1001Z	610 261 2813	MOUNTING- BRKT F2WW
	407 009 6901	DI ODE RM11C	K1002	645 005 5867	SOCKET, RGB 21P
D606	407 006 6300	DI ODE ERC05- 10B		610 234 3779	SOCKET 21P
	407 013 6508	DI ODE RM11C	K1002Z	610 261 2813	MOUNTING- BRKT F2WW
D614	407 005 4505	DI ODE DS442X	△PS601	408 003 6805	THERMI STOR 902P44E180MR14
	407 013 1008	DI ODE 1S1553		408 015 1904	THERMI STOR PA3A5180B270
	407 013 4306	DI ODE 1S2076A	SW1901	610 011 2698	SWIT CH, PUSH
	407 013 6508	DI ODE 1S2471	SW1902	610 011 2698	SWIT CH, PUSH
△D615	407 105 8700	PHOTO COUPLE PC113B	SW1903	610 011 2698	SWIT CH, PUSH
	408 009 8407	PHOTO COUPLE CNY17F- 30PT6	SW1904	610 011 2698	SWIT CH, PUSH
D616	407 005 4505	DI ODE DS442X	SW501	610 011 2728	SWIT CH, LEVER 1P- 3T
	407 013 1008	DI ODE 1S1553	△SW601	645 024 0607	PUSH SW POWER SDDFC3
	407 013 4306	DI ODE 1S2076A	X131	421 002 2609	SAW F TSF5315
	407 013 6508	DI ODE 1S2471		421 003 3902	SAW F TSF5315U
D617	407 007 6606	DI ODE ES1	X151	610 015 2854	TRAP, CERAMIC 5. 5MHZ
	407 007 6903	DI ODE ES1Z	X152	610 015 3011	TRAP, CERAMIC 6. 5MHZ
	408 009 9008	DI ODE BYD33D	X201	645 025 2631	CRYSTAL OSCILL 4. 43MHZ
D618	407 005 4505	DI ODE DS442X	X871	645 015 8339	OSC, CRYSTAL 12MHZ
	407 013 1008	DI ODE 1S1553	Y07	645 008 4058	TERMINAL PLUG
	407 013 4306	DI ODE 1S2076A			
	407 013 6508	DI ODE 1S2471			
D619	407 053 3000	ZENER DI ODE MTZ11C			
	407 054 1807	ZENER DI ODE RD11EB3			
D641	407 007 7712	DI ODE EU2A			
D642	407 007 7603	DI ODE EU2			
	407 007 7801	DI ODE EU2Z			
D643	407 166 2303	DI ODE ERC91- 02L			
D644	407 166 2303	DI ODE ERC91- 02L			
D645	407 053 7206	ZENER DI ODE MTZ6. 2C			
	407 053 7503	ZENER DI ODE MTZ6. 8A			
	407 057 2801	ZENER DI ODE RD6. 2EB3			
	407 057 4003	ZENER DI ODE RD6. 8EB1			
	407 151 8600	ZENER DI ODE UZ- 6. 2BCC			
	407 164 9908	ZENER DI ODE UZ- 6. 8BCA			
D647	407 012 4406	DI ODE 1SS133			
	407 012 5809	DI ODE 1SS176			
D652	407 053 6803	ZENER DI ODE MTZ5. 6C			
	407 057 0104	ZENER DI ODE RD5. 6EB3			
	407 151 8501	ZENER DI ODE UZ- 5. 6BCC			
D654	407 012 4406	DI ODE 1SS133			
	407 012 5809	DI ODE 1SS176			
D655	407 012 4406	DI ODE 1SS133			
	407 012 5809	DI ODE 1SS176			
D661	409 013 0104	IC HZT33			
	409 026 8005	IC L5630			
	409 057 5103	IC UPC574J			
D681	407 005 7308	DI ODE EMO1Z			
D682	407 053 6803	ZENER DI ODE MTZ5. 6C			
	407 057 0104	ZENER DI ODE RD5. 6EB3			
	407 151 8501	ZENER DI ODE UZ- 5. 6BCC			
D683	407 005 7308	DI ODE EMO1Z			
D684	408 007 8607	DI ODE 1N4148			
	407 013 1206	DI ODE 1S1555			
D685	407 012 4406	DI ODE 1SS133			
	407 012 5809	DI ODE 1SS176			
D831	407 005 4505	DI ODE DS442X			
	407 013 1008	DI ODE 1S1553			
	407 013 4306	DI ODE 1S2076A			
	407 013 6508	DI ODE 1S2471			
D861	407 012 4406	DI ODE 1SS133			
	407 012 5809	DI ODE 1SS176			
D871	407 012 4406	DI ODE 1SS133			
	407 012 5809	DI ODE 1SS176			
D872	407 055 7907	ZENER DI ODE RD3. 6EL			
MISCELLANEOUS			ASSY,PWB,SIF F2RT 1AA0B10E230BA		
△F601	423 022 2102	FUSE 250V 4A	TRANSI STOR		
A101	645 017 2571	TUNER, U/V	Q3801	405 015 9701	TR 2SC2814- F4- TA
A1901	645 007 1546	UNIT, REMOCON RECEIVER		405 015 9909	TR 2SC2814- F5- TA
	610 224 5806	RC PREAMP 409- 1L	INTEGRATED CIRCUIT		
TP- A	645 008 4058	TERMINAL, PLUG	IC3801	409 290 4307	IC TDA2545A/V4
TP- B	645 008 4058	TERMINAL, PLUG	IC3811	409 376 6300	IC TDA9821/V1
TP- D	645 008 4058	TERMINAL, PLUG	CAPACITOR		
TP- E	645 008 4058	TERMINAL, PLUG	C3802	403 069 9500	CERAMIC 0. 01U Z 50V
K10B	645 004 2911	PLUG, 5P	C3803	403 069 9500	CERAMIC 0. 01U Z 50V
K1001	645 005 5867	SOCKET, RGB 21P	C3804	403 073 9107	CERAMIC 4700P K 50V
			C3805	403 166 8000	MF- POLYEST 0. 33U J 63V
				403 260 2904	MF- COMPO 0. 33U J 50V
			C3806	403 028 4102	CERAMIC 56P J 50V
			C3807	403 041 8804	ELECT 10U M 16V
			C3808	403 069 9500	CERAMIC 0. 01U Z 50V
			C3811	403 041 8804	ELECT 10U M 16V
			C3812	403 069 9500	CERAMIC 0. 01U Z 50V
			C3813	403 049 9803	ELECT 2. 2U M 50V
			C3814	403 049 9803	ELECT 2. 2U M 50V
			C3815	403 049 9803	ELECT 2. 2U M 50V
			RESI STOR		
			R3802	401 037 5202	MF- GLAZE 100 JA 1/10W
			R3803	401 037 5608	MF- GLAZE 10K JA 1/10W
			R3804	401 037 9200	MF- GLAZE 1. 8K JA 1/10W
			R3805	401 038 3504	MF- GLAZE 330 JA 1/10W
			R3806	401 038 7502	MF- GLAZE 56 JA 1/10W
			R3811	401 038 7601	MF- GLAZE 560 JA 1/10W
			R3814	401 038 7601	MF- GLAZE 560 JA 1/10W
			R3815	401 038 2200	MF- GLAZE 27K JA 1/10W
			R3845	401 037 5004	MF- GLAZE 0. 000 ZA 1/10W
			R3846	401 037 5004	MF- GLAZE 0. 000 ZA 1/10W
			TRANSFORMER		
			T3801	610 037 4522	S COIL
			MI SCELLANEOUS		
			K38H1	610 012 4561	TERMINAL 4P
			K38H2	610 012 4561	TERMINAL 4P
			X3801	421 006 2902	SAW F OFWG9251M
			X3811	645 003 2806	CERAMIC FILTER
			X3814	645 006 3022	CERAMIC FILTER 5. 742MHZ
MISCELLANEOUS			ASSY,PWB,AUDIO F2RT 1AA0B10E230BB		
			TRANSI STOR		
			Q1251	405 109 4407	TR BC848- B
				405 015 8704	TR 2SC2812- L6- TA
			Q1252	405 109 4407	TR BC848- B
				405 015 8704	TR 2SC2812- L6- TA
			Q3431	405 109 4407	TR BC848- B
				405 015 8704	TR 2SC2812- L6- TA
			Q3432	405 109 4407	TR BC848- B
				405 015 8704	TR 2SC2812- L6- TA
			Q3482	405 109 4407	TR BC848- B

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
Q3484	405 015 8704	TR 2SC2812-L6-TA	Q2611	405 041 6507	TR 2SC2621-D-RA
	405 109 4407	TR BC848-B		405 041 6705	TR 2SC2621-E-RA
	405 015 8704	TR 2SC2812-L6-TA		405 066 9903	TR 2SC2688(1)-K
INTEGRATED CIRCUIT				405 067 0008	TR 2SC2688(1)-L
IC1251	409 009 2501	IC HD14052BP	Q2621	405 067 0107	TR 2SC2688(1)-M
	409 120 7607	IC MN4052B		405 041 6507	TR 2SC2621-D-RA
	409 051 2801	IC TC4052BP		405 041 6705	TR 2SC2621-E-RA
	409 059 2209	IC UPD4052BC		405 066 9903	TR 2SC2688(1)-K
IC3401	409 371 6206	IC TDA9840/V2		405 067 0008	TR 2SC2688(1)-L
IC3431	409 316 4601	IC TDA8424		405 067 0107	TR 2SC2688(1)-M
CAPACITOR			Q2640	406 007 1901	TR JC556A
C1251	403 041 8804	ELECT 10U M 16V		406 007 1802	TR JC556B
C3401	403 041 8804	ELECT 10U M 16V		405 004 4205	TR 2SA608-E-CTV-NP
C3402	403 069 5601	CERAMIC 0.01U K 50V		405 004 4809	TR 2SA608-F-CTV-NP
C3403	403 068 0409	CERAMIC 0.1U Z 25V		405 028 7909	TR 2SA608-G-CTV-NP
	403 070 2606	CERAMIC 0.1U Z 50V	Q2651	406 007 1901	TR JC556A
C3404	403 310 5008	CERAMIC 3300P G 25V		406 007 1802	TR JC556B
C3405	403 042 2405	ELECT 100U M 16V		405 004 4205	TR 2SA608-E-CTV-NP
C3406	401 037 5004	MT-GLAZE 0.000 ZA 1/10W		405 004 4809	TR 2SA608-F-CTV-NP
C3407	403 026 2803	CERAMIC 47P J 50V		405 028 7909	TR 2SA608-G-CTV-NP
C3408	403 049 9803	ELECT 2.2U M 50V	CAPACITOR		
C3409	403 049 9803	ELECT 2.2U M 50V	C2601	403 074 5702	CERAMIC 560P K 50V
C3411	403 069 5601	CERAMIC 0.01U K 50V	C2611	403 074 5702	CERAMIC 560P K 50V
C3412	403 069 5601	CERAMIC 0.01U K 50V	C2621	403 074 5702	CERAMIC 560P K 50V
C3421	403 069 9500	CERAMIC 0.01U Z 50V	C2631	403 077 2708	CERAMIC 1000P P 2K
C3422	403 041 8804	ELECT 10U M 16V	C2635	403 055 8401	ELECT 22U M 250V
C3431	403 049 0008	ELECT 1U M 50V		403 260 0405	ELECT 22U M 250V
C3432	403 042 2405	ELECT 100U M 16V	C2651	403 201 5001	ELECT 330U M 16V
C3433	403 049 0008	ELECT 1U M 50V	RESISTOR		
C3434	403 068 0409	CERAMIC 0.1U Z 25V	R2601	401 018 2800	CARBON 330 JA 1/4W
	403 070 2606	CERAMIC 0.1U Z 50V	R2602	401 019 1901	CARBON 3.9K JA 1/4W
C3435	403 068 3202	CERAMIC 0.033U K 25V	R2603	401 012 5708	CARBON 1K JA 1/4W
	403 073 1200	CERAMIC 0.033U K 50V	R2604	401 065 4604	OXI DE-MT 12K JA 2W
C3436	403 074 7607	CERAMIC 5600P K 50V	R2605	401 009 6602	CARBON 3.3K JA 1/2W
C3437	403 074 7607	CERAMIC 5600P K 50V	R2611	401 018 2800	CARBON 330 JA 1/4W
C3438	403 068 3202	CERAMIC 0.033U K 25V	R2612	401 019 1901	CARBON 3.9K JA 1/4W
	403 073 1200	CERAMIC 0.033U K 50V	R2613	401 016 3809	CARBON 2.2K JA 1/4W
RESISTOR			R2614	401 065 4604	OXI DE-MT 12K JA 2W
R1251	401 038 2101	MT-GLAZE 2.7K JA 1/10W	R2615-B	401 009 6602	CARBON 3.3K JA 1/2W
R1252	401 038 9209	MT-GLAZE 6.8K JA 1/10W	R2621	401 018 2800	CARBON 330 JA 1/4W
R1253	401 039 0502	MT-GLAZE 82K JA 1/10W	R2622	401 019 1901	CARBON 3.9K JA 1/4W
R1254	401 039 0502	MT-GLAZE 82K JA 1/10W	R2623	401 015 2704	CARBON 1.8K JA 1/4W
R1257	401 038 6307	MT-GLAZE 470 JA 1/10W	R2624	401 065 4604	OXI DE-MT 12K JA 2W
R1258	401 038 0701	MT-GLAZE 2.2K JA 1/10W	R2625-B	401 009 6602	CARBON 3.3K JA 1/2W
R1262	401 039 0502	MT-GLAZE 82K JA 1/10W	R2627	401 020 0801	CARBON 470 JA 1/4W
R1264	401 039 0502	MT-GLAZE 82K JA 1/10W	R2641	401 020 2003	CARBON 4.7K JA 1/4W
R1265	401 038 6307	MT-GLAZE 470 JA 1/10W	R2642	401 018 3807	CARBON 3.3K JA 1/4W
R1266	401 038 0701	MT-GLAZE 2.2K JA 1/10W	R2644	401 017 0807	CARBON 270 JA 1/4W
R3401	401 037 5202	MT-GLAZE 100 JA 1/10W	R2652	401 012 7009	CARBON 10K JA 1/4W
R3402	401 037 5202	MT-GLAZE 100 JA 1/10W	R2653	401 012 7009	CARBON 10K JA 1/4W
R3403	401 038 3108	MT-GLAZE 30K JA 1/10W	VARIABLE RESISTOR		
R3431	401 037 5202	MT-GLAZE 100 JA 1/10W	VR2601	645 003 5722	VR, SEMI, 4.7K N
R3432	401 037 5202	MT-GLAZE 100 JA 1/10W	VR2602	645 003 5647	VR, SEMI, 1K N
R3433	401 037 5202	MT-GLAZE 100 JA 1/10W	VR2611	645 003 5722	VR, SEMI, 4.7K N
R3434	401 037 7909	MT-GLAZE 1.5K JA 1/10W	VR2612	645 003 5647	VR, SEMI, 1K N
R3435	401 037 5202	MT-GLAZE 100 JA 1/10W	VR2621	645 003 5722	VR, SEMI, 4.7K N
R3436	401 037 7909	MT-GLAZE 1.5K JA 1/10W	COIL		
R3477	401 038 0701	MT-GLAZE 2.2K JA 1/10W	L2601	645 008 0012	INDUCTOR, 330U K
R3479	401 038 0701	MT-GLAZE 2.2K JA 1/10W	L2611	645 008 0012	INDUCTOR, 330U K
R3481	401 038 0701	MT-GLAZE 2.2K JA 1/10W	L2621	645 008 0012	INDUCTOR, 330U K
R3482	401 038 0701	MT-GLAZE 2.2K JA 1/10W	DIODE		
TRANSFORMER			D2601	407 013 1206	DIODE 1S1555
T3401	645 015 7943	COIL, FERRITE 2.5M	D2611	407 013 1206	DIODE 1S1555
COIL			D2621	407 013 1206	DIODE 1S1555
L3451	401 037 5004	MT-GLAZE 0.000 ZA 1/10W	D2651	407 013 1206	DIODE 1S1555
MISCELLANEOUS			MISCELLANEOUS		
X3401	645 016 6662	OSC, CRYSTAL 10MHZ	K26M	645 008 4058	TERMINAL, PLUG
ASSY,PWB,CRT F2RC 1AA0B10E24500			K26P	645 004 2911	PLUG, 5P
TRANSISTOR			K26Q	645 004 2898	PLUG, 3P
Q2601	405 041 6507	TR 2SC2621-D-RA	K2601-B	610 233 7990	CRT SOCKET
	405 041 6705	TR 2SC2621-E-RA			
	405 066 9903	TR 2SC2688(1)-K			
	405 067 0008	TR 2SC2688(1)-L			
	405 067 0107	TR 2SC2688(1)-M			

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
OUT OF CIRCUIT -E7PEV					
PICTURE TUBE (VIDEOCOLOR)					
<u>△</u> Q901	414 007 9001	CRT A51EBV13X09			
COIL					
<u>△</u> L901	645 002 5624	COIL, DEGAUSSING			
	645 002 5631	COIL, DEGAUSSING			
MISCELLANEOUS					
SP901	610 232 3986	SPEAKER			
	610 228 7202	SPEAKER			
SP902	610 232 3986	SPEAKER			
	610 228 7202	SPEAKER			
<u>△</u> W901	645 012 7632	ASSY, CORD, POWER			
W902	610 251 5824	GROUNDING CONNECTOR			

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description



COLOUR TELEVISION

SANYO

CHASSIS SERIES **EB4**

Model Number: **21P1/CE21P1-C**

SERVICE REF.NO. **CE21P1-C-01**

The service Precaution:
The area enclosed by this line () is directly connected with AC mains voltage. When servicing the area, connect an isolating transformer between TV receiver and AC line to eliminate hazard of electric shock.

Product safety notice:
Product safety should be considered when a component replacement is made in any area of a receiver. Components indicated by a mark Δ in this circuit diagram show components whose values have special significance to product safety. It is particularly recommended that only parts specified on the part service manual be used for components replacement pointed out by the mark.

PRECAUZIONE DI SERVIZIO
L'area inclusa in questa linea () è collegata direttamente con la tensione della rete CA quando si serve l'area collegare un trasformatore isolante tra il ricevitore TV e la linea CA per eliminare il pericolo di scossa elettrica.

NOTIZIE SULLA SICUREZZA DI FUNZIONAMENTO
Ogni sostituzione di componenti va fatta tenendo conto della sicurezza di funzionamento. I componenti indicati solo schema con il simbolo Δ hanno particolare importanza per il sicuro funzionamento del TV. I suddetti componenti devono essere sostituiti esclusivamente con quelli indicati nell'elenco.

Note sul diagramma di circuito :

- Tutte i valori di resistenza sono in ohm, K=1,000, M=1,000,000.
- Tutte le resistenze nominali watt sono di 1/6 a meno che sia specificato altrimenti.
- Eccezione per i condensatori elettrolitici, tutti i valori di capacità di meno di 1 sono espressi in μF , e di più di 1 sono in pF. I valori di capacità elettrolitici sono in μF .
- Tutti i valori di induttanza sono in μH .
- I valori letti del voltaggio presi con un "VTVM" proveni go dal punto indicato sulla massa del chassis, i valori di voltaggio presi usando un segnale di barre colore sono con tutti i controlli alle loro posizioni normali ed il commutatore AFC in posizione "OFF". Il voltaggio puo variare con l'intensità del segnale.

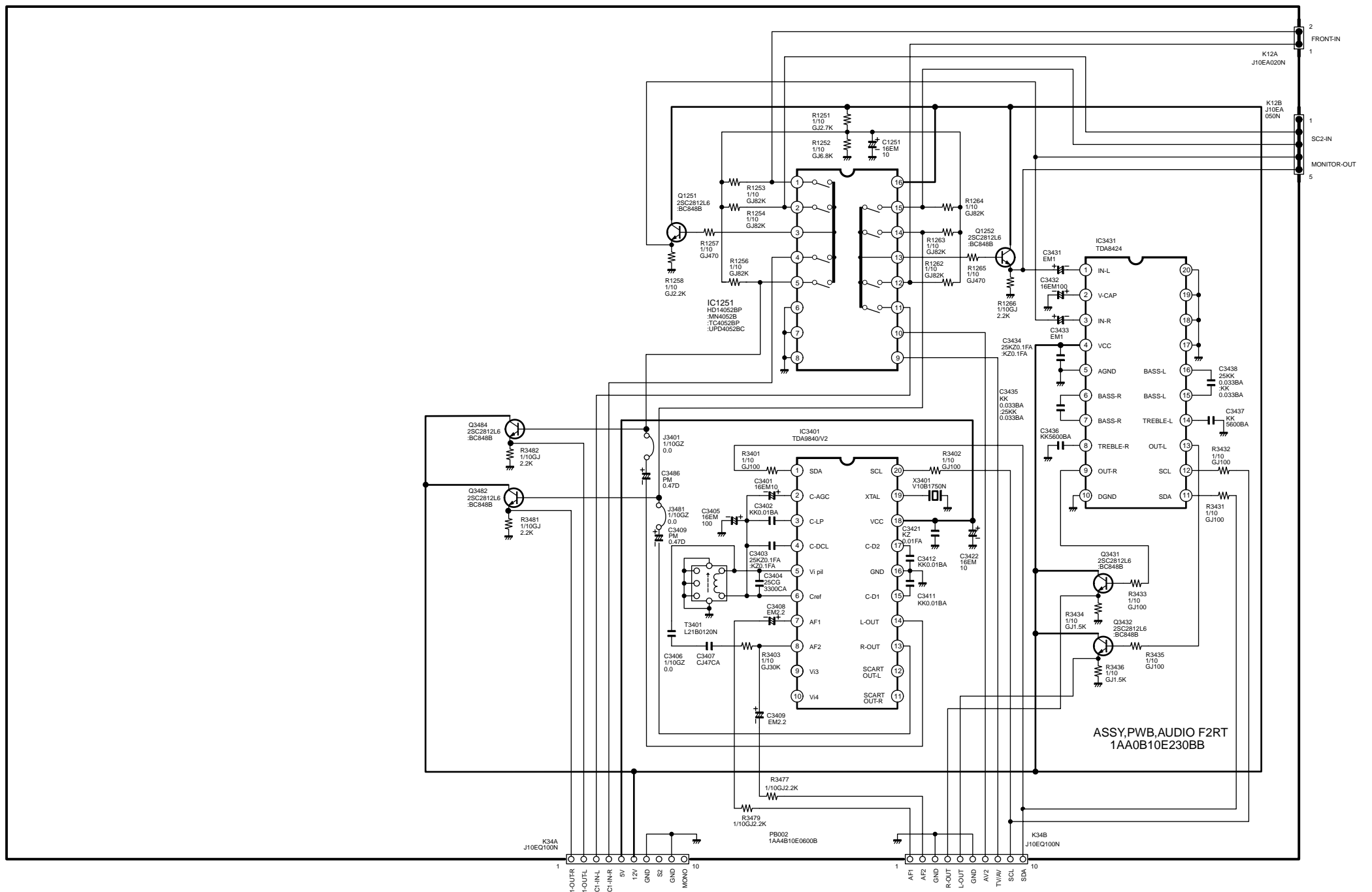
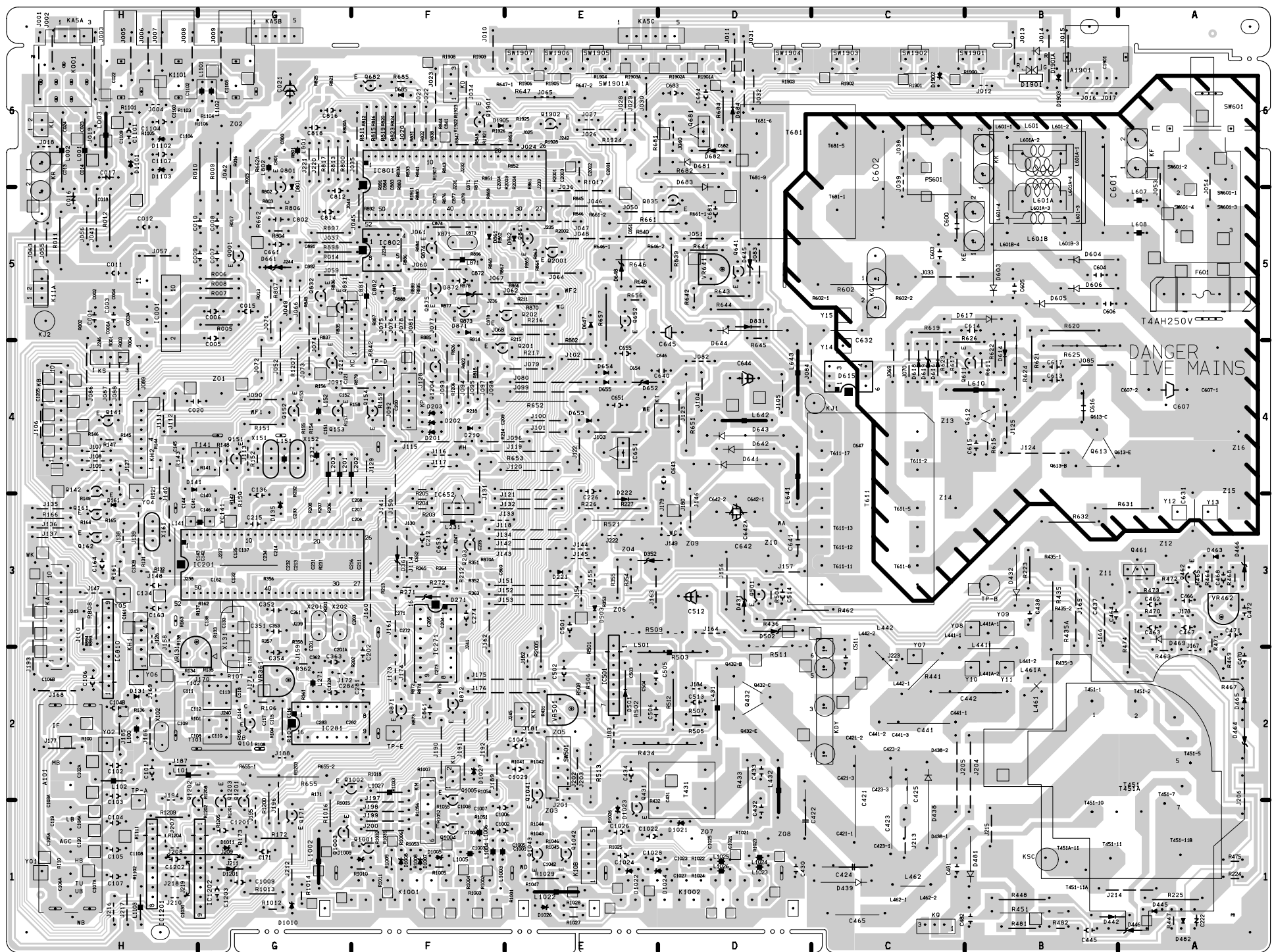
- Le forme di onda furono prese con il segnale di barre colore e i controlli regolati oppure le forme di onda di immagine normale furono prese usando un oscillatore a larga banda ed una sonda bassa capacità.
- Rispetto a quando indicato su questo schema possono essere state introdotte delle modifiche.
- I diodi 1S1555 possono essere sostituiti con 1S2473, 1S2076 oppure DS472 a meno che sia specificato altrimenti.
- I transistori possono essere sostituiti con 2SC536(Q,R,S), 2SC1740(Q,R,S), 2SC945A(Q,R,P) oppure 2SC1815(G,O,Y) a meno che sia specificato altrimenti.
- Il transistor 2SA608(E,F) puo essere sostituito con 2SA933(Q,R), 2SA564(QA,RA), oppure 2SA1015(O,Y) a meno che sia specificato altrimenti.

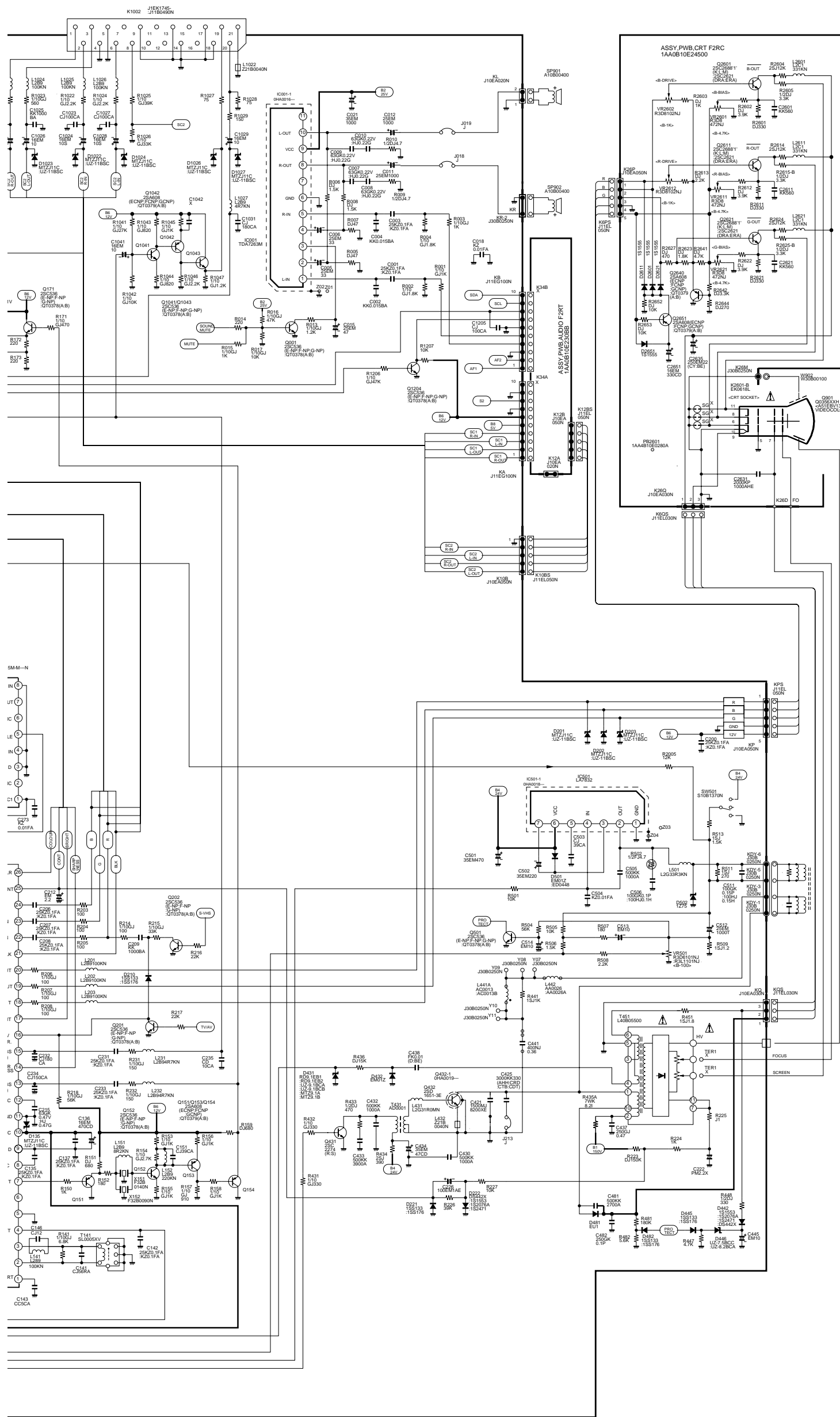
Circuit diagram notes :

- All resistance values are in ohms, K=1,000, M=1,000,000.
- All resistance rated wattages are 1/6W unless otherwise noted.
- Excepting electrolytic capacitors, all capacitance values of less than 1 are expressed in μF and more than 1 are pF.
- All capacitance rated voltages are 50V unless otherwise noted.
- All inductance values are in μH .
- Voltage readings taken a digital voltmeter are from point indicated chassis ground. Voltage readings taken by using a colour bar signal are with all controls at normal position. Some voltages may vary with signal strength.
- Waveforms were taken with colour bar and controls adjusted for normal picture. Waveforms were taken by using a wide band oscilloscope and a low capacity probe.

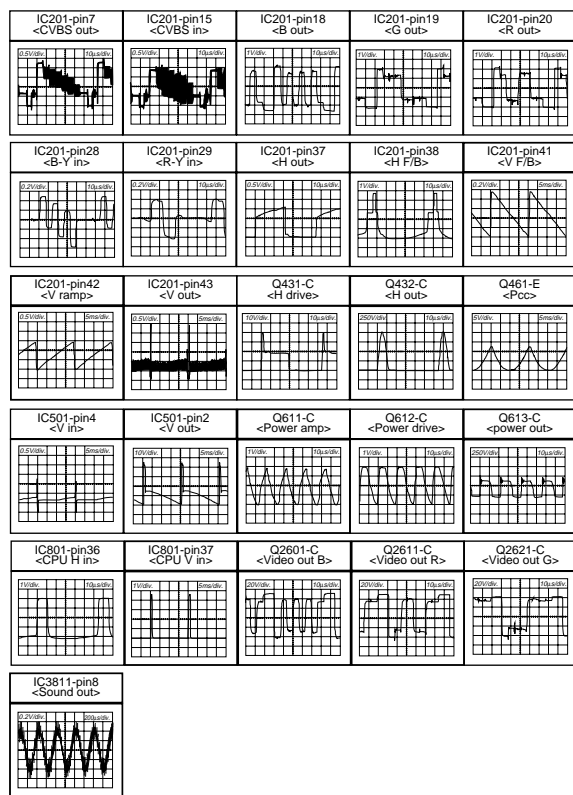
Main Board /Pannello Principale

Circuit side/Lato del Circuito





Waveforms on ICs and Transistors



Voltage on ICs

IC001																	
1	1.6V	2	1.6V	3	15.5V	4	1.6V	5	1.6V	6	0V	7	-	8	13.8V	9	28.6V
10	14.0V	11	0V														
IC201																	
1	3.1V	2	6.0V	3	6.0V	4	6.1V	5	0V	6	4.0V	7	3.1V	8	1.6V	9	0V
10	8.0V	11	0V	12	3.6V	13	4.4V	14	3.2V	15	3.9V	16	0V	17	3.4V	18	2.5V
19	2.5V	20	2.5V	21	0.2V	22	3.4V	23	3.4V	24	3.4V	25	2.9V	26	1.6V	27	5.9V
28	4.0V	29	4.0V	30	1.5V	31	1.5V	32	0V	33	4.9V	34	3.5V	35	2.6V	36	8.0V
37	0.9V	38	0.7V	39	3.0V	40	4.0V	41	2.5V	42	0V	43	0.8V	44	4.1V	45	4.1V
46	4.1V	47	7.0V	48	3.1V	49	1.6V	50	3.6V	51	4.3V	52	6.7V				
IC221																	
1	5.3V	2	0V	3	0V	4	0V	5	0.7V	6	0V	7	0V	8	0V	9	5.2V
10	0V	11	3.1V	12	3.1V	13	0V	14	1.3V	15	0V	16	1.3V				
IC501																	
1	0V	2	13.4V	3	25.3V	4	0.7V	5	0.7V	6	25.2V	7	2.1V				
IC651					IC652												
1	14.5V	2	0V	3	11.9V	1	10.5V	2	0V	3	8.0V						
IC801																	
1	0.6V	2	2.4V	3	3.7V	4	1.8V	5	2.1V	6	0V	7	0V	8	0V	9	2.6V
10	0.5V	11	2.5V	12	0V	13	0V	14	3.7V	15	0V	16	0V	17	0V	18	0V
19	0V	20	0V	21	0V	22	0V	23	2.2V	24	0V	25	2.0V	26	2.3V	27	0V
28	0V	29	5.0V	30	5.0V	31	5.0V	32	0V	33	0V	34	0V	35	0V	36	0.8V
37	0.2V	38	4.9V	39	4.9V	40	0V	41	2.1V	42	2.4V	43	0V	44	4.9V	45	4.7V
46	5.4V	47	5.0V	48	0V	49	4.8V	50	4.8V	51	5.2V	52	2.9V				
IC802																	
1	0V	2	0V	3	0V	4	0V	5	4.8V	6	4.8V	7	0V	8	5.0V		
IC810																	
1	0V	2	11.6V	3	2.0V	4	0V	5	0V	6	11.3V	7	2.2V	8	0V	9	11.7V
IC1201																	
1	11.8V	2	7.8V	3	0V	4	7.1V	5	0V	6	0V	7	7.7V	8	0V		
IC1202																	
1	3.0V	2	2.0V	3	6.0V	4	0V	5	0V	6	2.7V	7	0V	8	1.7V	9	5.7V
IC1251																	
1	8.4V	2	8.4V	3	5.0V	4	8.4V	5	0V	6	0V	7	0V	8	0V	9	0V
10	11.9V	11	5.0V	12	8.4V	13	8.4V	14	8.4V	15	8.4V	16	11.9V				
IC3401																	
1	4.8V	2	3.4V	3	2.7V	4	2.5V	5	2.5V	6	2.5V	7	2.5V	8	2.5V	9	2.5V
10	2.5V	11	2.5V	12	2.5V	13	2.5V	14	2.5V	15	2.5V	16	0V	17	2.5V	18	5.1V
19	3.3V	20	4.8V														
IC3431																	
1	5.8V	2	11.7V	3	5.8V	4	11.8V	5	0V	6	0V	7	5.8V	8	5.8V	9	5.8V
10	0V	11	4.8V	12	4.8V	13	5.8V	14	5.8V	15	5.8V	16	5.8V	17	0V	18	0V
19	0V	20	0V														
IC3451																	
1	0V	2	0.3V	3	5.1V	4	0V	5	2.5V	6	0.4V	7	2.5V	8	2.5V	9	0V
10	0V	11	2.5V	12	0V	13	0V	14	0V	15	2.5V	16	2.5V	17	0.4V	18	4.6V
19	0V	20	2.3V	21	2.5V	22	2.5V	23	2.4V	24	0V	25	2.5V	26	5.0V	27	2.4V
28	2.3V	29	2.3V	30	2.3V	31	2.3V	32	0.3V	33	2.3V	34	2.3V	35	2.3V	36	4.7V
37	0V	38	4.8V	39	2.0V	40	3.4V	41	2.4V	42	0V	43	2.0V	44	0V	45	2.4V
46	4.8V	47	4.7V	48	2.0V	49	4.8V	50	0V	51	4.0V	52	0V				
IC3801																	
1	4.5V	2	4.6V	3	6.0V	4	0V	5	0V	6	0V	7	0V	8	5.3V	9	5.3V
10	0V	11	11.9V	12	5.9V	13	0V	14	0V	15	4.5V	16	4.5V				
IC3811																	
1	2.5V	2	0V	3	0V	4	0V	5	0V	6	0V	7	2.2V	8	2.2V	9	2.2V
10	2.2V	11	2.6V	12	4.3V	13	0V	14	5.1V	15	2.5V	16	0V				

Waveforms & Voltages (Vcc=4.2) EB4 Chassis

Voltage on Transistors

Q001	Q121	Q151	Q152	Q153	Q154	Q171	Q201	Q202
E 0V	E 2.8V	E 3.8V	E 3.2V	E 9.3V	E 3.1V	E 2.5V	E 0V	E 0V
C 15.5V	C 8.0V	C 0V	C 8.7V	C 2.3V	C 0V	C 11.8V	C 0V	C 0.4V
B 0.1V	B 3.3V	B 3.2V	B 0V	B 8.7V	B 2.4V	B 3.1V	B 0.8V	B 0V
Q203	Q431	Q432	Q461	Q462	Q501	Q611	Q612	Q613
E 0V	E 0V	E 0V	E 12.9V	E 0V	E 0V	E 10.8V	E 0V	E 0V
C 6.0V	C 10.8V	C -	C 0V	C 12.9V	C 4.7V	C -1.4V	C -1.1V	C -
B 0V	B 0V	B 0V	B 13.5V	B 0.5V	B 0V	B 10.5V	B -1.4V	B -1.1V
Q641	Q652	Q681	Q682	Q801	Q835	Q861	Q871	Q872
E 6.3V	E 5.2V	E 5.0V	E 5.0V	E 0V	E 0V	E 5.0V	E 0V	E 0V
C 29.5V	C 8.3V	C 7.8V	C 0.1V	C 2.0V	C 29.4V	C 5.0V	C 6.3V	C 0.2V
B 6.7V	B 5.8V	B 5.7V	B 5.6V	B 0.6V	B 0V	B 2.5V	B 0.1V	B 0.6V
Q873	Q874	Q875	Q1001	Q1002	Q1003	Q1004	Q1005	Q1201
E 0V	E 4.9V	E 0V	E 0.6V	E 0.1V	E 0V	E 5.0V	E 5.0V	E 0V
C 0V	C 4.9V	C 4.7V	C 0V	C 0V	C 11.8V	C 0.6V	C 11.9V	C 11.9V
B 0.8V	B 5.6V	B 0V	B 0V	B 0V	B 0.6V	B 0V	B 5.6V	B 0.6V
Q1202	Q1203	Q1204	Q1041	Q1042	Q1043	Q1251	Q1252	Q1901
E 0V	E 0V	E 0V	E 2.4V	E 10.0V	E 3.4V	E 7.7V	E 7.9V	E 1.8V
C 0V	C 0V	C 11.9V	C 9.4V	C 4.0V	C 11.9V	C 11.9V	C 11.9V	C 5.0V
B 0V	B 0V	B 0V	B 3.0V	B 9.4V	B 4.0V	B 8.4V	B 8.4V	B 0.2V
Q1902	Q2001	Q2601	Q2611	Q2621	Q2640	Q2651	Q3431	Q3432
E 0V	E 0V	E 1.8V	E 1.8V	E 1.9V	E 1.5V	E 11.8V	E 5.2V	E 5.2V
C 5.0V	C 13.2V	C 134.3V	C 137.1V	C 143.8V	C 0V	C 0V	C 11.9V	C 11.9V
B 0.0V	B 0V	B 2.3V	B 2.2V	B 2.2V	B 0.9V	B 11.9V	B 5.9V	B 5.9V
Q3481	Q3482	Q3483	Q3484	Q3801	Q3802			
E 1.9V	E 7.7V	E 1.9V	E 7.7V	E 0.7V	E 5.2V			
C 8.4V	C 11.9V	C 8.4V	C 11.9V	C 6.1V	C 11.9V			
B 2.5V	B 8.4V	B 2.5V	B 8.4V	B 1.4V	B 5.9V			

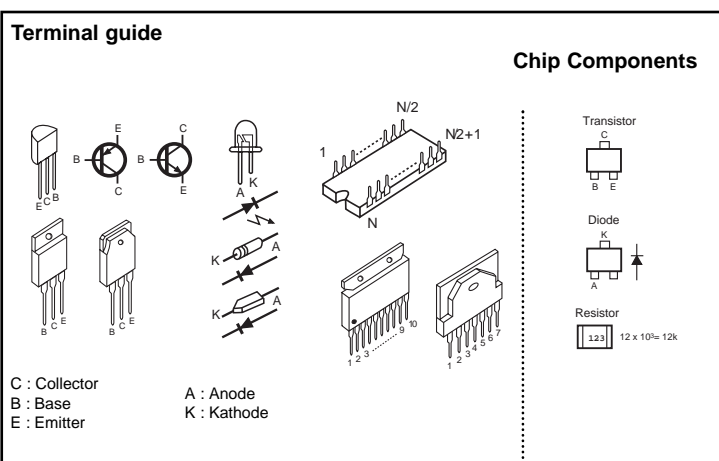
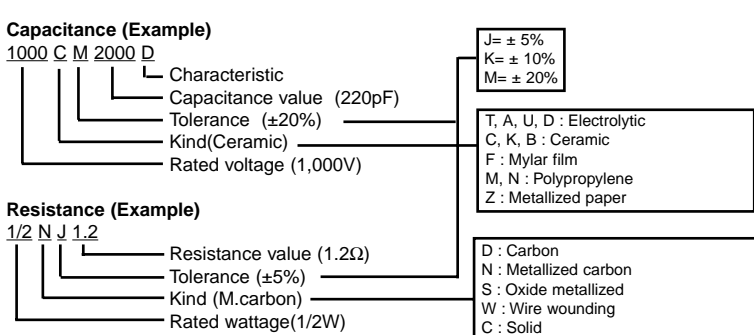
8. This circuit diagram covers a basic or representative chassis only. There may be some components or partial circuit differences between the actual chassis and the circuit diagram.

9. Diode 1S1555 may be replaced with 1S2473, 1S2076 or DS472 unless otherwise noted.

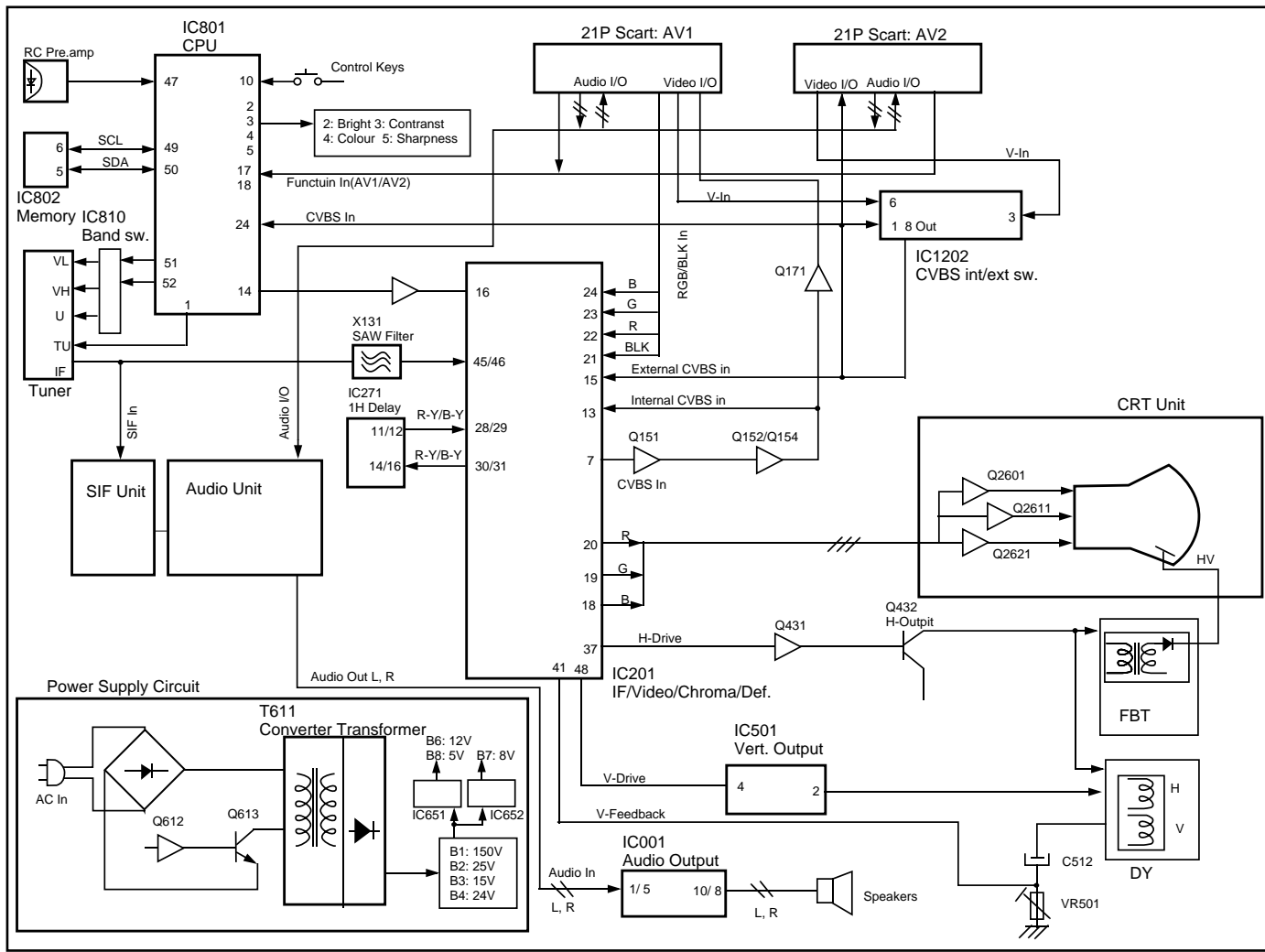
Transistor 2SC536(Q,R,S), 2SC1740(Q,R,S), 2SC945A(Q,R,P) or 2SC1815(G,O,Y) unless otherwise noted.

Transistor 2SA608(E,F) may be replaced with 2SA933(Q,R), 2SA564(QA,RA), or 2SA1015(O,Y) unless otherwise noted.

Expression of capacitance and resistance in circuit diagram.



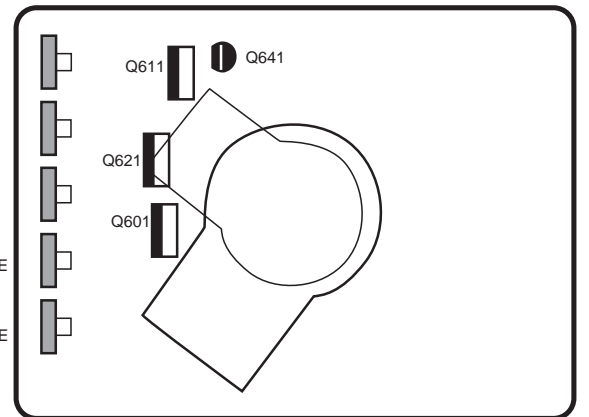
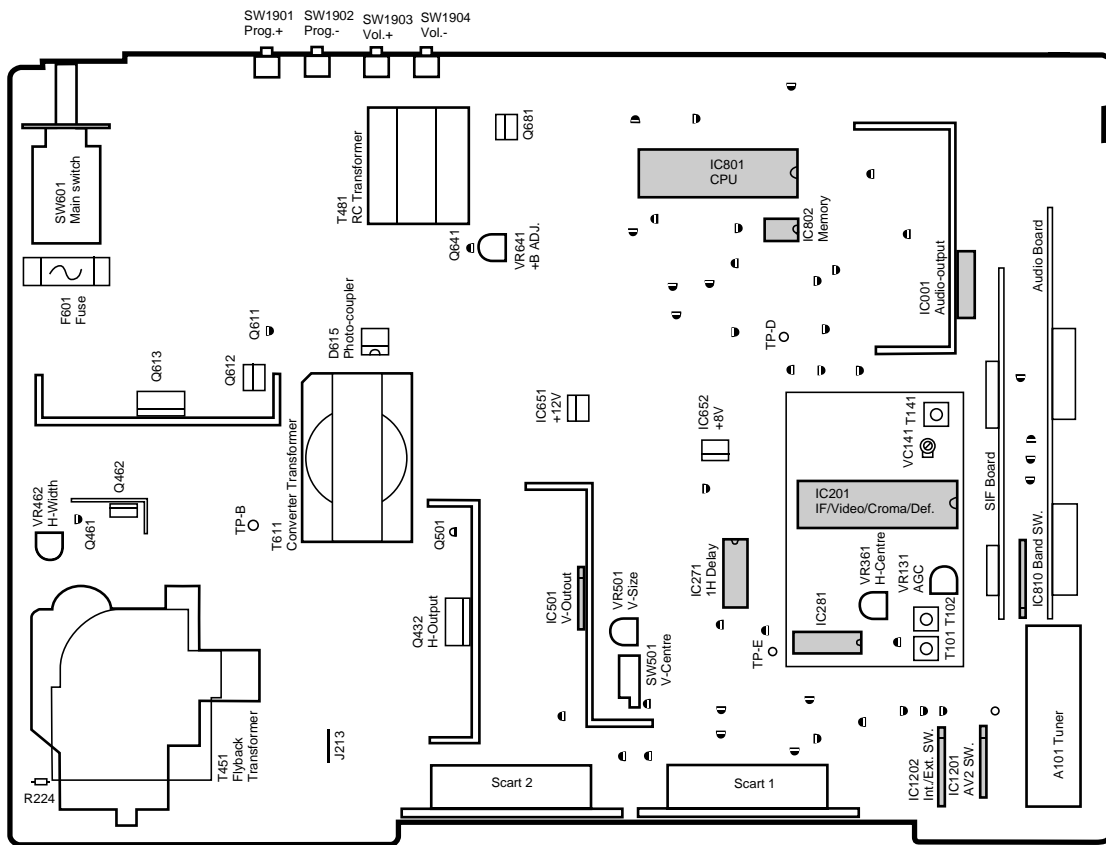
GENERAL BLOCK DIAGRAM FOR EB4 CHASSIS



CRT Board /Pannello Cinescopio
Component Location/Lato del Componente

Main Board /Pannello Principale

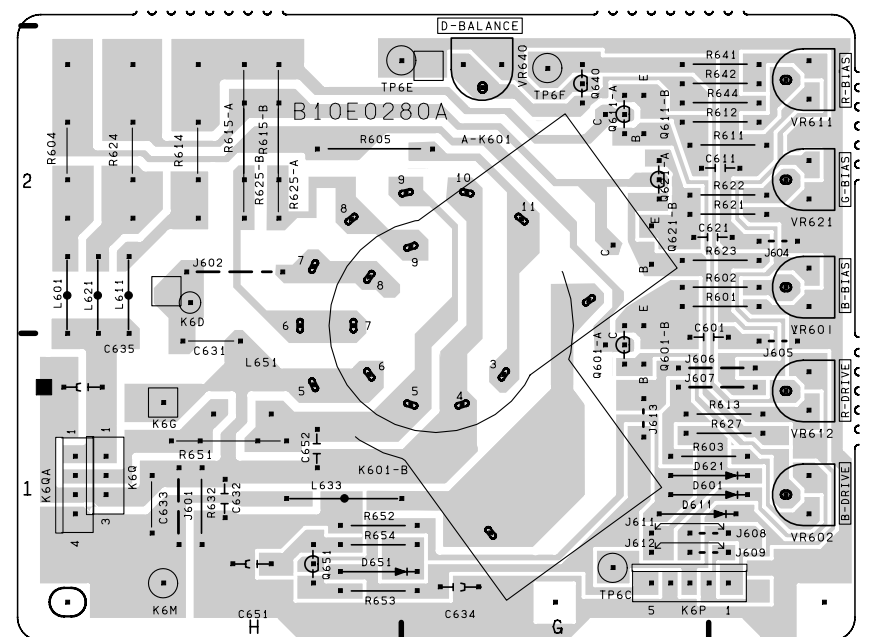
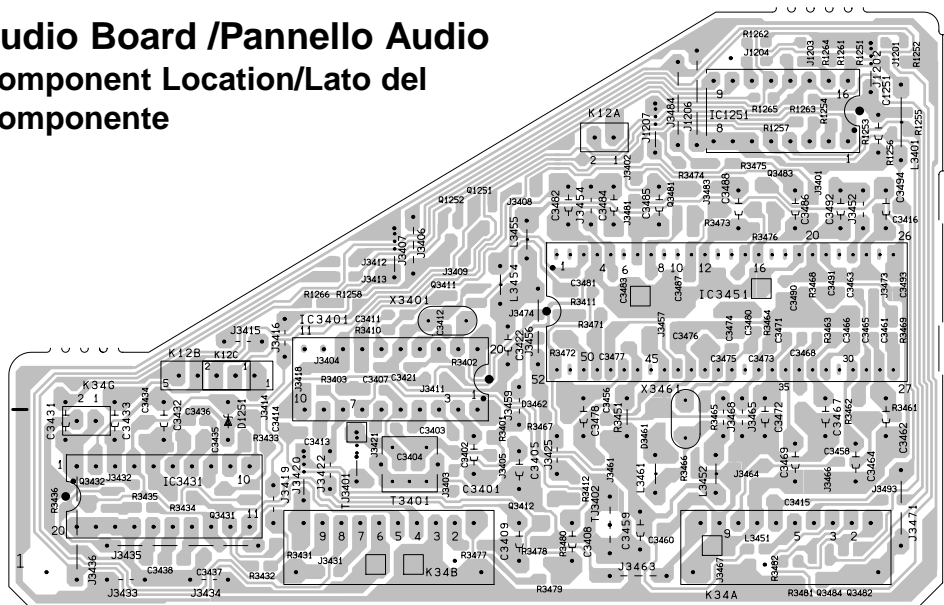
Component Location/Lato del Componente



Circuit side/Lato del Circuito

Audio Board /Pannello Audio

Component Location/Lato del Componente



Circuit side/Lato del Circuito

