



Colour Television Service Manual

21DN2F

Model

C21ES56NF (FRANCE)

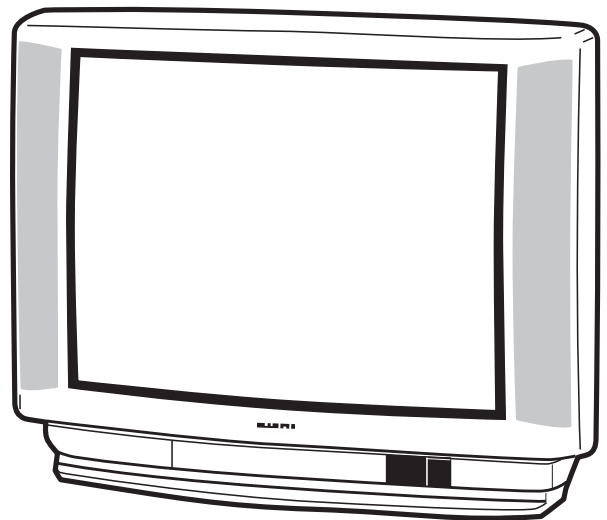
Service Ref. No. C21ES56NF-01

PRODUCT CODE: 1113 27010
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,L/L'/I
Colour system	PAL,SECAM
Receiving channel	VHF: E2-E12,F2-F10 CATV: X, Y, Z, S1-S41,B-Q UHF: #21-69
Aerial input impedance	75ohm
AV terminal	
21 Pin socket	AV1 CENELEC (Full +YC)
21 Pin socket	AV2 CENELEC standard
Sound output(Cont.)	5 watts X2
Picture tube	55cm diagonal, 90 degree
(Visible picture diagonal)	51cm
Dimensions (WxHxD)	610 x 479 x 485mm
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

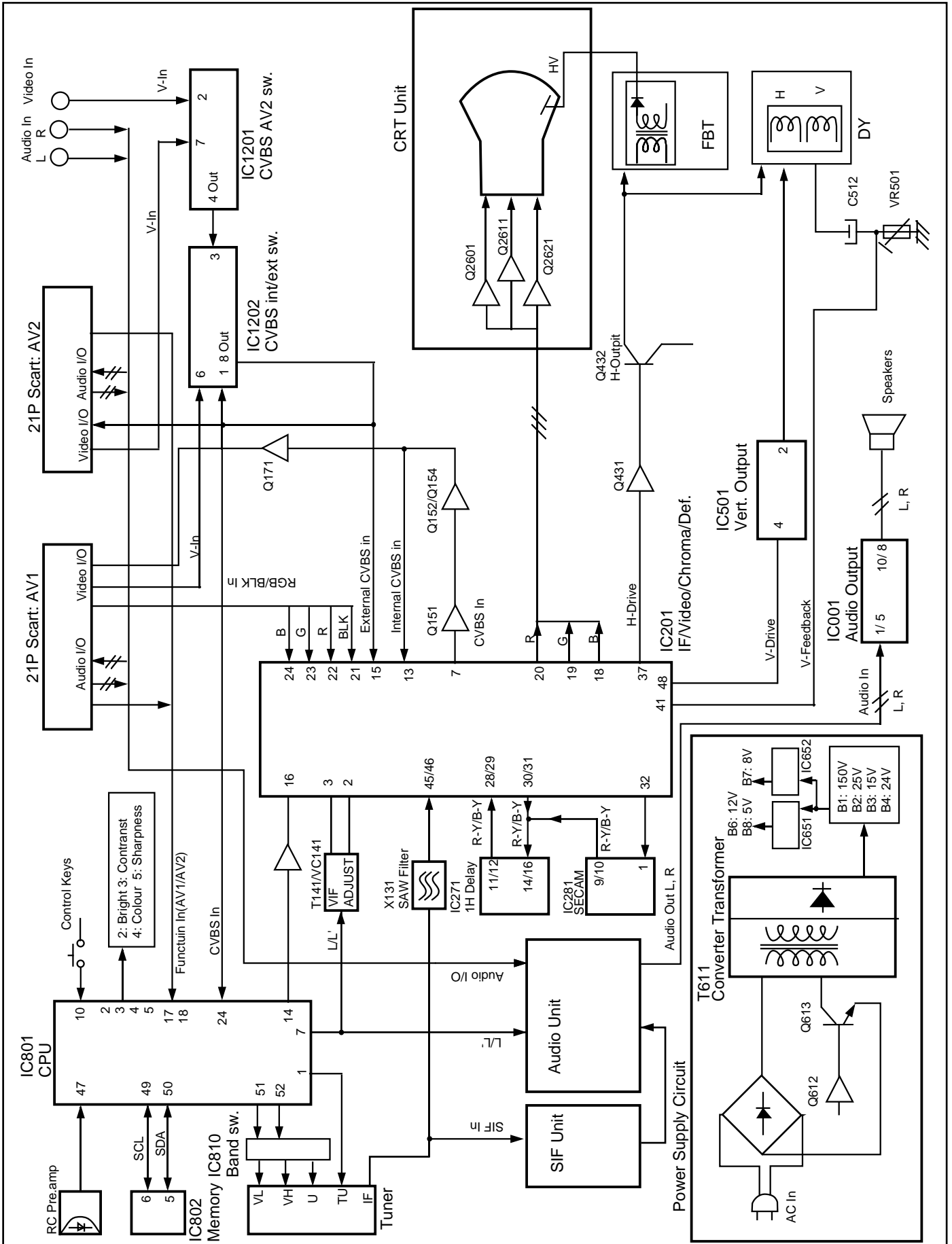
The primary source of X-RADIATION in the television receiver is the picture tube. The picture tube is specially constructed to limit X-RADIATION emissions. For continued X-RADIATION protection, the replacement tube must be the same type as the original including suffix letter. Excessive high voltage 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 → Q432 → 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.

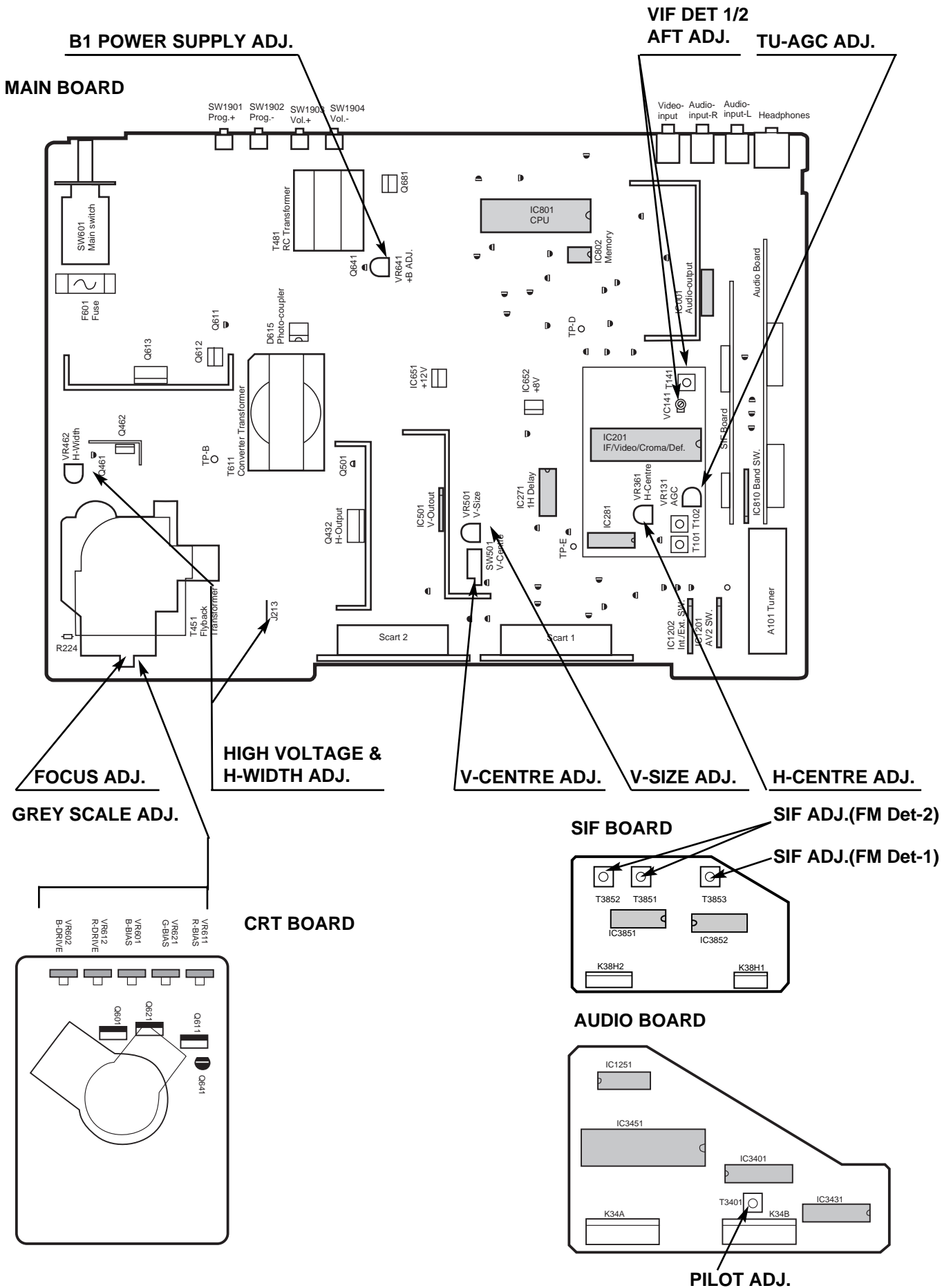
Pin25: Black
Pin26: IREF
Pin27: Odd/Even output
Pin28: GND
Pin29: -
Pin30: V-deflection stop output
Pin31: RGB REF
Pin32: Blue output for OSD
Pin33: Green output for OSD
Pin34: Red output for OSD
Pin35: Blanking output for OSD
Pin36: H-sync. input (Horizontal pulse for OSD)
Pin37: V-sync. input (Vertical 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 data)
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 $150 \pm 0.5V$.

AFT ADJUSTMENT

1. For B/G or L, tune the receiver to the clearest station. By using T141, adjust the AFT to obtain the best picture.
2. For L', tune the receiver to the clearest station. By using VC141, 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 26.0 ± 1 KV at beam current 1.4, and less than 29.0 KV at 0 beam current.

[H-WIDTH ADJUSTMENT]

5. Adjust VR462 to obtain proper H- width .
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.

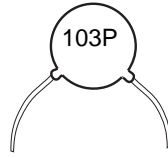
V-SIZE ADJUSTMENT

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

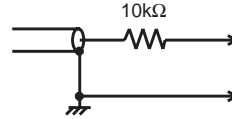
FOCUS ADJUSTMENT

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

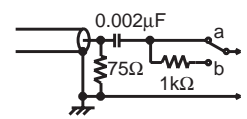
CIRCUIT ALIGNMENT



Jig-A

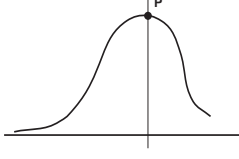


Input probe

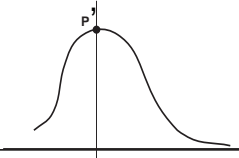


Output probe


VIF alignment (DETECTOR ADJ.1)

SETTING		Adjustment	Waveform	Notes						
DC 15.0V AGC voltage (4.3-4.5V) Output probe (Side b) Input probe DC5V JIG-A Sweep ATT 0dB=176mVrms/75 Scope System	IC651-pin1 IC201-pin48 IC201-pin45 IC201-pin7 Q681-E IC201-pin46 20dB 100mV/div L	By using T141, adjust "P" to be maximum amplitude.		How to select SYSTEM L or L'. 1. Before power on, connect IC801-pin11 to GND. 2. Select L or L' according to the table <table border="1" data-bbox="1189 622 1484 716"> <tr> <td></td> <td>L</td> <td>L'</td> </tr> <tr> <td>Q832-©GND</td> <td>Short</td> <td>Open</td> </tr> </table>		L	L'	Q832-©GND	Short	Open
	L	L'								
Q832-©GND	Short	Open								

VIF alignment (DETECTOR ADJ.2)

SETTING		Adjustment	Waveform	Notes						
DC 15.0V AGC voltage (4.3-4.5V) Output probe (Side b) Input probe DC5V JIG-A Sweep ATT 0dB=176mVrms/75 Scope System	IC651-pin1 IC201-pin48 IC201-pin45 IC201-pin7 Q681-E IC201-pin46 20dB 100mV/div L'	By using VC141, adjust "P" to be maximum amplitude.		How to select SYSTEM L or L'. 1. Before power on, connect IC801-pin11 to GND. 2. Select L or L' according to the table <table border="1" data-bbox="1189 1086 1484 1176"> <tr> <td></td> <td>L</td> <td>L'</td> </tr> <tr> <td>Q832-©GND</td> <td>Short</td> <td>Open</td> </tr> </table>		L	L'	Q832-©GND	Short	Open
	L	L'								
Q832-©GND	Short	Open								

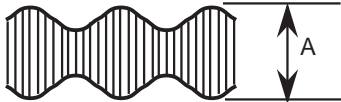
SIF alignment (FM Detector-1)

SETTING	Adjustment	Waveform
DC 12V AGC voltage (DC5V) Output probe (Side a) Input probe Jig-A Sweep ATT Scope Marker Frequency	K38H2-pin3 IC3852-pin13 IC3852-pin5 IC3852-pin17 IC3852-pin6 10dB 100mV/div 38.9MHz	By using T3853, adjust "P" to be 38.9MHz ±100KHz. 

SIF alignment (FM Detector-2)

SETTING		Adjustment	
DC 12V DC5V Output probe Input probe Scope Carrier Frequency Modulation Frequency System	K38H2-pin3 IC3851-pin21 IC3851-pin15 IC3851-pin16 100mV/div 5.5MHz 1KHz (Sine wave) B/G	By using T3852, adjust DC level to be 1.7V.	
SETTING		Adjustment	
DC 12V DC5V Output probe Input probe Scope Carrier Frequency Modulation Frequency System	K38H2-pin3 IC3851-pin21 IC3851-pin19 IC3851-pin18 100mV/div 5.74MHz 1KHz (Sine wave) B/G	By using T3851, adjust DC level to be 1.7V.	

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

K1	: +000	->	+001
K2	: +000	->	-001
ST ID	: +000		
ATT	: +004		
MAX	: -096	->	-050
MIN	: +010	->	-075

Manual set data

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 enter 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:

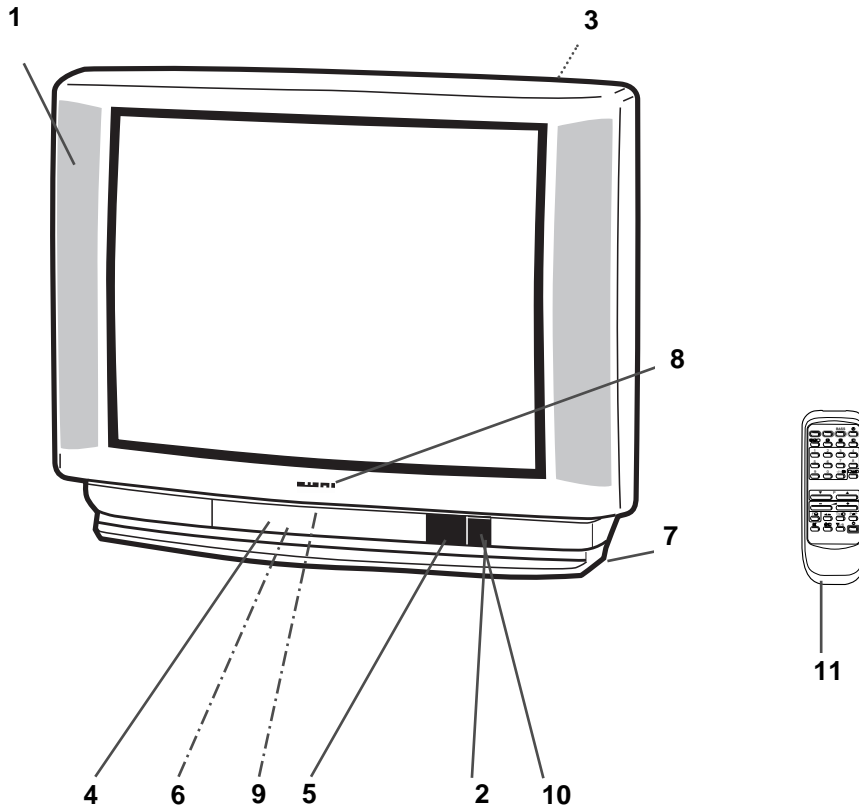
The items K1, K2, ST ID and ATT are invalid adjustments for a model which does not have an A2 stereo decoder.

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 C21ES56NF-01

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



Item	Part No.	Description
CABINET PARTS		
1	610 264 8058	ASSY,CABINET FR-F3JLV
2	610 261 6057	BUTTON POWER-F3SCM
3	610 264 8003	CABINET BACK-F3JLV
4	610 264 8034	DOOR-F3JLV
5	610 261 6132	DEC BOARD-F3SCM
6	610 261 7726	DEC CONTROL SHEET-F3SCM
7	610 253 2449	HOLDER AC CORD-GBR-D4VA
	610 260 0148	HOLDER RC GBR-BLFA
	610 265 4202	HOLDER DC-F3SCM
8	645 003 9256	BADGE,SANYO*46.2X13.5L45
9	610 104 2505	LATCH PUSH,7.9X6.9BK
10	610 261 3032	SPRING-E7GC
	610 224 5721	CRT CUSHION-B3MY-UK
	610 133 2354	FIXER PURSE LOCK,D11.5(PA
	645 005 0312	FIXER HOOK
ACCESSORIES		
11	JXZB	RC TRANSMITTER
	SKP10077	INSTRUCTIONS MANUAL-F3JL
	645 000 6708	BATTERY,MANGAN,COMPOSITE

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 Δ 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: 100px;">Rated Voltage</p> <p style="margin-left: 100px;">Tolerance Symbols:</p> <p style="margin-left: 100px;">Less than 10PF</p> <p style="margin-left: 100px;">A: Not specified B: $\pm 0.1PF$ C: $\pm 0.25PF$</p> <p style="margin-left: 100px;">D: $\pm 0.5PF$ F: $\pm 1PF$ G: $\pm 2PF$</p> <p style="margin-left: 100px;">R: $\pm 0.25-0PF$ S: $\pm 0-0.25PF$ E: $\pm 0-1PF$</p> <p style="margin-left: 100px;">More than 10PF</p> <p style="margin-left: 100px;">A: Not specified B: $\pm 0.1\%$ C: $\pm 0.25\%$</p> <p style="margin-left: 100px;">D: $\pm 0.5\%$ F: $\pm 1\%$ G: $\pm 2\%$</p> <p style="margin-left: 100px;">H: $\pm 3\%$ J: $\pm 5\%$ K: $\pm 10\%$</p> <p style="margin-left: 100px;">L: $\pm 15\%$ M: $\pm 20\%$ N: $\pm 30\%$</p> <p style="margin-left: 100px;">P: $\pm 100-0\%$ Q: $\pm 30-10\%$ T: $\pm 50-10\%$</p> <p style="margin-left: 100px;">U: $\pm 75-10\%$ V: $\pm 20-10\%$ W: $\pm 100-10\%$</p> <p style="margin-left: 100px;">X: $\pm 40-20\%$ Y: $\pm 150-10\%$ Z: $\pm 80-20\%$</p> <p style="margin-left: 100px;">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: 100px;">Rated Wattage</p> <p style="margin-left: 100px;">Performance Symbols:</p> <p style="margin-left: 100px;">A: General B: Non flammable Z: Low noise</p> <p style="margin-left: 100px;">Other: Temperature coefficient</p> <p style="margin-left: 100px;">Tolerance Symbols:</p> <p style="margin-left: 100px;">A: $\pm 0.05\%$ B: $\pm 0.1\%$ C: $\pm 0.25\%$ D: $\pm 0.5\%$</p> <p style="margin-left: 100px;">F: $\pm 1\%$ G: $\pm 2\%$ J: $\pm 5\%$ K: $\pm 10\%$</p> <p style="margin-left: 100px;">M: $\pm 20\%$ P: $\pm 5-15\%$</p> <p style="margin-left: 100px;">Rated value, ohms:</p> <p style="margin-left: 100px;">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>			<p>OUT OF CIRCUIT BOARD</p> <p>PICTURE TUBE</p> <p>ΔQ901 414 007 9001 CRT A51EBV13X09</p> <p>COIL</p> <p>ΔL901 645 002 5624 COIL,DEGAUSSING</p> <p>645 002 5631 COIL,DEGAUSSING</p> <p>MISCELLANEOUS</p> <p>SP901 610 232 3986 SPEAKER</p> <p>610 228 7202 SPEAKER</p> <p>SP902 610 232 3986 SPEAKER</p> <p>610 228 7202 SPEAKER</p> <p>W901 645 012 7632 ASSY ,CORD , POWER</p> <p>W902 610 024 2531 GROUNDING CONNECTOR</p> <p>610 264 4302</p> <p>ASSY,PWB,MAIN F3JLV (1AA0B10E217F0)</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>		

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
Q1042	406 007 1901	TR JC556A		405 004 4205	TR 2SA608-E-CTV-NP
	406 007 1802	TR JC556B		405 004 4809	TR 2SA608-F-CTV-NP
	405 004 4205	TR 2SA608-E-CTV-NP		405 028 7909	TR 2SA608-G-CTV-NP
	405 004 4809	TR 2SA608-F-CTV-NP	Q171	406 007 2106	TR JC546A
	405 028 7909	TR 2SA608-G-CTV-NP		406 007 2007	TR JC546B
Q1043	406 007 2106	TR JC546A		405 019 1909	TR 2SC536-E-NP
	406 007 2007	TR JC546B		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	Q2001	406 007 2106	TR JC546A
	405 019 3804	TR 2SC536-G-NP		406 007 2007	TR JC546B
Q1201	406 007 2106	TR JC546A		405 019 1909	TR 2SC536-E-NP
	406 007 2007	TR JC546B		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	Q201	406 007 2106	TR JC546A
	405 019 3804	TR 2SC536-G-NP		406 007 2007	TR JC546B
Q1202	406 007 2106	TR JC546A		405 019 1909	TR 2SC536-E-NP
	406 007 2007	TR JC546B		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	Q202	406 007 2106	TR JC546A
	405 019 3804	TR 2SC536-G-NP		406 007 2007	TR JC546B
Q1203	406 007 2106	TR JC546A		405 019 1909	TR 2SC536-E-NP
	406 007 2007	TR JC546B		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	Q203	406 007 2106	TR JC546A
	405 019 3804	TR 2SC536-G-NP		406 007 2007	TR JC546B
Q1204	406 007 2106	TR JC546A		405 019 1909	TR 2SC536-E-NP
	406 007 2007	TR JC546B		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	Q431	405 011 1808	TR 2SC1627-O
	405 019 3804	TR 2SC536-G-NP		405 011 1907	TR 2SC1627-Y
Q121	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	Q501	406 007 2106	TR JC546A
	405 019 3804	TR 2SC536-G-NP		406 007 2007	TR JC546B
Q141	406 007 2106	TR JC546A		405 019 1909	TR 2SC536-E-NP
	406 007 2007	TR JC546B		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	Q611	406 007 1901	TR JC556A
	405 019 3804	TR 2SC536-G-NP		406 007 1802	TR JC556B
Q142	406 007 1901	TR JC556A		405 004 4205	TR 2SA608-E-CTV-NP
	406 007 1802	TR JC556B		405 004 4809	TR 2SA608-F-CTV-NP
	405 004 4205	TR 2SA608-E-CTV-NP		405 028 7909	TR 2SA608-G-CTV-NP
	405 004 4809	TR 2SA608-F-CTV-NP	Q612	405 058 0208	TR 2SC3807-R-CTV-YA
	405 028 7909	TR 2SA608-G-CTV-NP	Q613	405 018 9203	TR 2SC3895-T-CTV-YB
Q151	406 007 1901	TR JC556A	Q641	406 007 2106	TR JC546A
	406 007 1802	TR JC556B		406 007 2007	TR JC546B
	405 004 4205	TR 2SA608-E-CTV-NP		405 019 1909	TR 2SC536-E-NP
	405 004 4809	TR 2SA608-F-CTV-NP		405 019 2708	TR 2SC536-F-NP
	405 028 7909	TR 2SA608-G-CTV-NP		405 019 3804	TR 2SC536-G-NP
Q152	406 007 2106	TR JC546A	Q652	405 023 4903	TR 2SD400-D-MP
	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
Q153	406 007 1901	TR JC556A		405 060 0005	TR 2SD1913-S-RA
	406 007 1802	TR JC556B	Q682	406 007 1901	TR JC556A
	405 004 4205	TR 2SA608-E-CTV-NP		406 007 1802	TR JC556B
	405 004 4809	TR 2SA608-F-CTV-NP		405 004 4205	TR 2SA608-E-CTV-NP
	405 028 7909	TR 2SA608-G-CTV-NP		405 004 4809	TR 2SA608-F-CTV-NP
Q154	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	Q831	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
Q161	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	Q832	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
Q162	406 007 1901	TR JC556A		405 019 2708	TR 2SC536-F-NP
	406 007 1802	TR JC556B		405 019 3804	TR 2SC536-G-NP

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
Q835	406 007 2106	TR JC546A	C009	403 270 3403	MT-POLYEST 0.22U K 63V
	406 007 2007	TR JC546B		403 237 7901	MT-COMPO 0.22U J 50V
	405 019 1909	TR 2SC536-E-NP	C010	403 270 3403	MT-POLYEST 0.22U K 63V
	405 019 2708	TR 2SC536-F-NP		403 237 7901	MT-COMPO 0.22U J 50V
	405 019 3804	TR 2SC536-G-NP	C011	403 042 4805	ELECT 1000U M 16V
Q861	406 007 1901	TR JC546A	C012	403 042 4805	ELECT 1000U M 16V
	406 007 1802	TR JC546B	C013	403 069 9500	CERAMIC 0.01U Z 50V
	405 004 4205	TR 2SA608-E-CTV-NP	C014	403 069 9500	CERAMIC 0.01U Z 50V
	405 004 4809	TR 2SA608-F-CTV-NP	C015	403 047 3100	ELECT 47U M 25V
	405 028 7909	TR 2SA608-G-CTV-NP	C016	403 085 4008	NP-ELECT 10U M 16V
Q871	406 007 2106	TR JC546A	C017	403 085 4008	NP-ELECT 10U M 16V
	406 007 2007	TR JC546B	C021	403 052 8503	ELECT 1000U M 35V
	405 019 1909	TR 2SC536-E-NP	C023	403 069 9500	CERAMIC 0.01U Z 50V
	405 019 2708	TR 2SC536-F-NP	C024	403 069 9500	CERAMIC 0.01U Z 50V
	405 019 3804	TR 2SC536-G-NP	C1001	403 069 1702	CERAMIC 1000P K 50V
Q872	406 007 2106	TR JC546A	C1002	403 041 8804	ELECT 10U M 16V
	406 007 2007	TR JC546B	C1003	403 009 5708	CERAMIC 100P J 50V
	405 019 1909	TR 2SC536-E-NP	C1004	403 130 3109	CERAMIC 0.047U K 50V
	405 019 2708	TR 2SC536-F-NP	C1005	403 069 1702	CERAMIC 1000P K 50V
	405 019 3804	TR 2SC536-G-NP	C1006	403 041 8804	ELECT 10U M 16V
Q873	406 007 2106	TR JC546A	C1007	403 009 5708	CERAMIC 100P J 50V
	406 007 2007	TR JC546B	C1008	403 130 3109	CERAMIC 0.047U K 50V
	405 019 1909	TR 2SC536-E-NP	C1009	403 041 8804	ELECT 10U M 16V
	405 019 2708	TR 2SC536-F-NP	C101	403 194 4609	ELECT 470U M 16V
	405 019 3804	TR 2SC536-G-NP	C102	403 043 9106	ELECT 47U M 16V
Q874	406 007 2106	TR JC546A	C1021	403 069 1702	CERAMIC 1000P K 50V
	406 007 2007	TR JC546B	C1022	403 041 8804	ELECT 10U M 16V
	405 019 1909	TR 2SC536-E-NP	C1023	403 009 5708	CERAMIC 100P J 50V
	405 019 2708	TR 2SC536-F-NP	C1024	403 041 9405	ELECT 10U M 16V
	405 019 3804	TR 2SC536-G-NP	C1025	403 069 1702	CERAMIC 1000P K 50V
Q875	406 007 2106	TR JC546A	C1026	403 041 8804	ELECT 10U M 16V
	406 007 2007	TR JC546B	C1027	403 009 5708	CERAMIC 100P J 50V
	405 019 1909	TR 2SC536-E-NP	C1028	403 041 9405	ELECT 10U M 16V
	405 019 2708	TR 2SC536-F-NP	C1029	403 041 8804	ELECT 10U M 16V
	405 019 3804	TR 2SC536-G-NP	C103A	403 069 9500	CERAMIC 0.01U Z 50V
INTEGRATED CIRCUIT			C1031	403 014 9203	CERAMIC 180P J 50V
IC001	409 301 4906	IC TDA7263M	C104B	403 043 9106	ELECT 47U M 16V
IC1201	409 018 7603	IC LA7016	C1041	403 041 8804	ELECT 10U M 16V
IC1202	409 120 3401	IC LA7221	C106	403 049 0008	ELECT 1U M 50V
IC201	409 380 8802	IC TDA8362/N5	C106A	403 069 9500	CERAMIC 0.01U Z 50V
IC271	409 371 7005	IC TDA4665/V4	C1101	403 041 8804	ELECT 10U M 16V
IC281	409 374 5503	IC TDA8395/N2	C1103	403 069 1702	CERAMIC 1000P K 50V
IC501	409 183 5008	IC LA7832	C1104	403 041 8804	ELECT 10U M 16V
IC651	409 143 3402	IC AN78M12 LB	C1105	403 009 5708	CERAMIC 100P J 50V
	409 365 2900	IC BA178M12T	C1106	403 069 1702	CERAMIC 1000P K 50V
	409 269 1207	IC L78M12CV	C1107	403 041 8804	ELECT 10U M 16V
	409 366 1803	IC MC78M12CT	C1108	403 014 9203	CERAMIC 180P J 50V
IC652	409 362 7403	IC AN78M08 LB	C1109	403 008 7406	CERAMIC 10P D 50V
	409 365 2801	IC BA178M08T	C114	401 037 5004	MT-GLAZE 0.000 ZA 1/10W
	409 285 5203	IC L78M08-RA	C117	401 037 5004	MT-GLAZE 0.000 ZA 1/10W
	409 269 1108	IC L78M08CV	C120	403 069 9500	CERAMIC 0.01U Z 50V
	409 366 1704	IC MC78M08CT	C1201	403 041 8804	ELECT 10U M 16V
IC801	410 269 6802	IC SAA5290ZP/061	C1202	403 041 8804	ELECT 10U M 16V
IC802	409 247 7702	IC ST24C02AB1	C1203	403 069 8305	CERAMIC 0.01U Z 50V
	409 281 8307	IC 24C02A/P	C1205	403 009 5708	CERAMIC 100P J 50V
	409 333 3700	IC 24LC02B/P	C121	403 068 0409	CERAMIC 0.1U Z 25V
IC810	409 019 6209	IC LA7910		403 070 2606	CERAMIC 0.1U Z 50V
CAPACITOR			C131	401 037 5004	MT-GLAZE 0.000 ZA 1/10W
C001	403 068 0409	CERAMIC 0.1U Z 25V	C132	403 069 1702	CERAMIC 1000P K 50V
	403 070 2606	CERAMIC 0.1U Z 50V	C132A	403 069 1702	CERAMIC 1000P K 50V
C002	403 070 9803	CERAMIC 0.015U K 50V	C132B	403 069 9500	CERAMIC 0.01U Z 50V
C003	403 068 0409	CERAMIC 0.1U Z 25V	C133	403 069 9500	CERAMIC 0.01U Z 50V
	403 070 2606	CERAMIC 0.1U Z 50V	C134	403 049 9803	ELECT 2.2U M 50V
C004	403 070 9803	CERAMIC 0.015U K 50V	C135	403 068 0409	CERAMIC 0.1U Z 25V
C005	403 046 3507	ELECT 33U M 25V		403 070 2606	CERAMIC 0.1U Z 50V
C006	403 046 3507	ELECT 33U M 25V	C136	403 194 4609	ELECT 470U M 16V
C007	403 270 3403	MT-POLYEST 0.22U K 63V	C137	403 068 0409	CERAMIC 0.1U Z 25V
	403 237 7901	MT-COMPO 0.22U J 50V		403 070 2606	CERAMIC 0.1U Z 50V
C008	403 270 3403	MT-POLYEST 0.22U K 63V	C138	403 069 9500	CERAMIC 0.01U Z 50V
	403 237 7901	MT-COMPO 0.22U J 50V	C141	403 028 4409	CERAMIC 56P J 50V
			C142	403 068 0409	CERAMIC 0.1U Z 25V
				403 070 2606	CERAMIC 0.1U Z 50V

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
C143	403 073 4201	CERAMIC 3900P K 50V	C432	403 075 7101	CERAMIC 1000P K 500V
C144	403 069 9500	CERAMIC 0.01U Z 50V	C433	403 076 3102	CERAMIC 3900P K 500V
C145	403 069 9500	CERAMIC 0.01U Z 50V	C434	403 229 1207	ELECT 47U M 35V
C146	403 010 8507	CERAMIC 12P J 50V	C437	403 066 6106	MT-POLYEST 0.47U J 250V
C151	403 024 2102	CERAMIC 39P J 50V	C438	403 059 3808	POLYESTER 2200P K 50V
C161	403 009 5708	CERAMIC 100P J 50V		403 179 2606	POLYESTER 2200P K 50V
C162	403 068 0409	CERAMIC 0.1U Z 25V	△C441	403 216 7601	POLYPRO 0.36U J 200V
	403 070 2606	CERAMIC 0.1U Z 50V	C445	403 049 4204	ELECT 10U M 50V
C163	403 041 8804	ELECT 10U M 16V	C481	403 076 1405	CERAMIC 2700P K 500V
C171	403 270 2901	MT-POLYEST 0.1U K 63V	C482	403 159 7409	MT-POLYEST 0.1U K 250V
	403 237 8007	MT-COMPO 0.1U J 50V	C501	403 054 1502	ELECT 470U M 35V
C1901	403 069 1702	CERAMIC 1000P K 50V	C502	403 053 2104	ELECT 220U M 35V
C200	403 068 0409	CERAMIC 0.1U Z 25V	C503	403 024 2102	CERAMIC 39P J 50V
	403 070 2606	CERAMIC 0.1U Z 50V	C504	403 069 9500	CERAMIC 0.01U Z 50V
C2001	403 068 0409	CERAMIC 0.1U Z 25V	C505	403 075 7101	CERAMIC 1000P K 500V
	403 070 2606	CERAMIC 0.1U Z 50V	C506	403 183 7901	MT-POLYEST 0.1U K 100V
C2002	403 068 0409	CERAMIC 0.1U Z 25V		403 256 4806	MT-COMPO 0.1U J 100V
	403 070 2606	CERAMIC 0.1U Z 50V	C511	403 188 1201	MT-POLYEST 0.15U K 100V
C2003	403 068 0409	CERAMIC 0.1U Z 25V		403 313 7603	MT-COMPO 0.15U J 100V
	403 070 2606	CERAMIC 0.1U Z 50V	C512	403 148 0404	ELECT 1000U M 25V
C201	403 014 3409	CERAMIC 18P J 50V	C513	403 049 4204	ELECT 10U M 50V
C202	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	CERAMIC 4700P K 500V
C203	403 073 9107	CERAMIC 4700P K 50V	△C601	404 056 1408	MT-POLYEST 0.1U M 250V
C204	403 068 0409	CERAMIC 0.1U Z 25V		404 074 6508	MT-COMPO 0.1U K 250V
	403 070 2606	CERAMIC 0.1U Z 50V	C602	404 056 1408	MT-POLYEST 0.1U M 250V
C205	403 068 0409	CERAMIC 0.1U Z 25V		404 074 6508	MT-COMPO 0.1U K 250V
	403 070 2606	CERAMIC 0.1U Z 50V	C603	403 312 8205	CERAMIC 1000P K 1K
C206	403 068 0409	CERAMIC 0.1U Z 25V		403 076 7100	CERAMIC 1000P M 1K
	403 070 2606	CERAMIC 0.1U Z 50V	C604	403 312 8205	CERAMIC 1000P K 1K
C207	403 068 0409	CERAMIC 0.1U Z 25V		403 076 7100	CERAMIC 1000P M 1K
	403 070 2606	CERAMIC 0.1U Z 50V	C605	403 312 8205	CERAMIC 1000P K 1K
C208	403 068 0409	CERAMIC 0.1U Z 25V		403 076 7100	CERAMIC 1000P M 1K
	403 070 2606	CERAMIC 0.1U Z 50V	C606	403 312 8205	CERAMIC 1000P K 1K
C209	403 069 1702	CERAMIC 1000P K 50V		403 076 7100	CERAMIC 1000P M 1K
C212	403 049 9803	ELECT 2.2U M 50V	C607	404 047 1707	ELECT 220U M 400V
C215	403 270 3908	MT-POLYEST 0.47U K 63V		404 069 5905	ELECT 220U M 400V
	403 256 0808	MT-COMPO 0.47U J 50V	C613	403 061 8303	POLYESTER 4700P K 50V
C222	404 045 6605	NP-ELECT 2.2U M 50V		403 179 1104	POLYESTER 4700P K 50V
C226	403 138 1602	ELECT 1U M 100V	C614	403 270 2901	MT-POLYEST 0.1U K 63V
C231	403 068 0409	CERAMIC 0.1U Z 25V		403 237 8007	MT-COMPO 0.1U J 50V
	403 070 2606	CERAMIC 0.1U Z 50V	C615	403 058 2604	POLYESTER 0.015U J 50V
C232	403 014 9203	CERAMIC 180P J 50V		403 179 3207	POLYESTER 0.015U J 50V
C233	403 068 0409	CERAMIC 0.1U Z 25V	C616	403 165 8407	CERAMIC 680P K 2K
	403 070 2606	CERAMIC 0.1U Z 50V		403 232 2109	CERAMIC 680P K 2K
C234	403 013 3004	CERAMIC 150P J 50V	C617	403 060 8403	POLYESTER 0.033U K 50V
C235	403 008 7406	CERAMIC 10P D 50V		403 179 1609	POLYESTER 0.033U K 50V
C271	403 069 1702	CERAMIC 1000P K 50V	△C631	404 060 6505	CERAMIC 2200P M 400V
C272	403 069 1702	CERAMIC 1000P K 50V		404 071 4200	CERAMIC 2200P M 400V
C273	403 069 9500	CERAMIC 0.01U Z 50V		404 060 6604	CERAMIC 2200P M 400V
C274	403 041 8804	ELECT 10U M 16V	△C632	404 044 2806	CERAMIC 470P K 400V
C281	403 270 3403	MT-POLYEST 0.22U K 63V		404 071 4606	CERAMIC 470P K 400V
	403 237 7901	MT-COMPO 0.22U J 50V		404 060 6901	CERAMIC 470P M 400V
C282	403 068 0409	CERAMIC 0.1U Z 25V	C640	403 069 8305	CERAMIC 0.01U Z 50V
	403 070 2606	CERAMIC 0.1U Z 50V	C641	403 165 9305	CERAMIC 680P K 1K
C283	403 069 9500	CERAMIC 0.01U Z 50V		403 262 4401	CERAMIC 680P K 1K
C284	403 043 9106	ELECT 47U M 16V	C642A	404 042 4505	ELECT 220U M 160V
C351	403 270 2901	MT-POLYEST 0.1U K 63V	C643	403 148 2002	ELECT 470U M 35V
	403 237 8007	MT-COMPO 0.1U J 50V	C644	403 148 0701	ELECT 2200U M 25V
C352	403 270 3809	MT-POLYEST 0.047U K 63V	C645	403 158 1309	ELECT 2200U M 35V
	403 225 2703	MT-COMPO 0.047U J 50V	C647	403 069 9500	CERAMIC 0.01U Z 50V
C353	403 073 9107	CERAMIC 4700P K 50V	C651	403 148 0305	ELECT 470U M 16V
C354	403 049 0008	ELECT 1U M 50V	C652	403 069 9500	CERAMIC 0.01U Z 50V
C361	403 072 5605	CERAMIC 2700P K 50V	C653	403 043 9106	ELECT 47U M 16V
C362	403 069 9500	CERAMIC 0.01U Z 50V	C655	403 126 4400	ELECT 100U M 10V
C363	403 042 2405	ELECT 100U M 16V	C661	403 051 0607	ELECT 4.7U M 50V
△C421	404 046 8400	MT-POLYPRO 8200P J 1.5K	C681	403 190 4702	ELECT 1000U M 25V
C425	403 165 7301	CERAMIC 330P K 3K	C682	403 069 9500	CERAMIC 0.01U Z 50V
	403 287 3601	CERAMIC 330P K 3K	C683	403 147 9606	ELECT 1000U M 10V
	403 232 3007	CERAMIC 330P K 3K	C684	403 050 6600	ELECT 3.3U M 50V
	403 186 0107	CERAMIC 330P K 3K	C802	403 270 2901	MT-POLYEST 0.1U K 63V
C430	403 075 7101	CERAMIC 1000P K 500V		403 237 8007	MT-COMPO 0.1U J 50V

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
C812	403 049 0008	ELECT 1U M 50V	R1032	401 038 7601	MT-GLAZE 560 JA 1/10W
C814	403 049 0008	ELECT 1U M 50V	R1033	401 038 7601	MT-GLAZE 560 JA 1/10W
C816	403 046 9905	ELECT 4.7U M 25V	R1041	401 038 2200	MT-GLAZE 27K JA 1/10W
C818	403 046 9905	ELECT 4.7U M 25V	R1042	401 037 5608	MT-GLAZE 10K JA 1/10W
C841	403 069 9500	CERAMIC 0.01U Z 50V	R1043	401 039 0304	MT-GLAZE 820 JA 1/10W
C860	403 022 8205	CERAMIC 33P J 50V	R1044	401 039 0304	MT-GLAZE 820 JA 1/10W
C861	403 061 7504	POLYESTER 4700P J 50V	R1045	401 037 5400	MT-GLAZE 1K JA 1/10W
	403 179 1203	POLYESTER 4700P J 50V	R1046	401 038 0701	MT-GLAZE 2.2K JA 1/10W
C871	403 068 0409	CERAMIC 0.1U Z 25V	R1047	401 037 6704	MT-GLAZE 1.2K JA 1/10W
	403 070 2606	CERAMIC 0.1U Z 50V	R1051	401 037 8104	MT-GLAZE 150K JA 1/10W
C872	403 043 9106	ELECT 47U M 16V	R1052	401 037 5707	MT-GLAZE 100K JA 1/10W
C873	403 018 0503	CERAMIC 22P J 50V	R1053	401 037 6704	MT-GLAZE 1.2K JA 1/10W
C874	403 018 0503	CERAMIC 22P J 50V	R1054	401 037 8104	MT-GLAZE 150K JA 1/10W
C875	403 068 0409	CERAMIC 0.1U Z 25V	R1055	401 037 5707	MT-GLAZE 100K JA 1/10W
	403 070 2606	CERAMIC 0.1U Z 50V	R1056	401 037 6704	MT-GLAZE 1.2K JA 1/10W
C878	403 073 9107	CERAMIC 4700P K 50V	R108	401 037 5004	MT-GLAZE 0.000 ZA 1/10W
C879	403 068 0409	CERAMIC 0.1U Z 25V	R110	401 038 3702	MT-GLAZE 33K JA 1/10W
	403 070 2606	CERAMIC 0.1U Z 50V	R1101	401 027 6608	CARBON 75 JA 1/6W
C881	403 069 9500	CERAMIC 0.01U Z 50V	R1102	401 037 7800	MT-GLAZE 150 JA 1/10W
C882	403 041 8804	ELECT 10U M 16V	R1103	401 038 0701	MT-GLAZE 2.2K JA 1/10W
C883	403 018 0503	CERAMIC 22P J 50V	R1104	401 038 0701	MT-GLAZE 2.2K JA 1/10W
C884	403 018 0503	CERAMIC 22P J 50V	R1105	401 037 5707	MT-GLAZE 100K JA 1/10W
C892	403 069 9500	CERAMIC 0.01U Z 50V	R1106	401 037 5707	MT-GLAZE 100K JA 1/10W
			R1111	401 037 5608	MT-GLAZE 10K JA 1/10W
			R1200	401 022 1905	CARBON 680 JA 1/4W
RESISTOR			R1201	401 038 6505	MT-GLAZE 47K JA 1/10W
R001	401 037 5400	MT-GLAZE 1K JA 1/10W	R1202	401 038 6505	MT-GLAZE 47K JA 1/10W
R002	401 037 9200	MT-GLAZE 1.8K JA 1/10W	R1203	401 037 5608	MT-GLAZE 10K JA 1/10W
R003	401 037 5400	MT-GLAZE 1K JA 1/10W	R1204	401 038 2200	MT-GLAZE 27K JA 1/10W
R004	401 037 9200	MT-GLAZE 1.8K JA 1/10W	R1205	401 038 2200	MT-GLAZE 27K JA 1/10W
R005	401 019 9600	CARBON 47 JA 1/4W	R1206	401 038 6505	MT-GLAZE 47K JA 1/10W
R006	401 014 4105	CARBON 1.5K JA 1/4W	R1207	401 024 7400	CARBON 10K JA 1/6W
R007	401 019 9600	CARBON 47 JA 1/4W	R1208	401 038 0800	MT-GLAZE 22K JA 1/10W
R008	401 014 4105	CARBON 1.5K JA 1/4W	R1209	401 024 7400	CARBON 10K JA 1/6W
R009	401 010 1504	CARBON 4.7 JA 1/2W	R121	401 027 0309	CARBON 47K JA 1/6W
R010	401 010 1504	CARBON 4.7 JA 1/2W	R1211	401 038 0909	MT-GLAZE 220K JA 1/10W
R011	401 007 7601	CARBON 150 JA 1/2W	R1212	401 038 0909	MT-GLAZE 220K JA 1/10W
R012	401 007 7601	CARBON 150 JA 1/2W	R1213	401 037 9101	MT-GLAZE 180 JA 1/10W
R013	401 037 6704	MT-GLAZE 1.2K JA 1/10W	R1214	401 038 9209	MT-GLAZE 6.8K JA 1/10W
R014	401 025 7409	CARBON 220 JA 1/6W	R1215	401 038 6505	MT-GLAZE 47K JA 1/10W
R015	401 037 5400	MT-GLAZE 1K JA 1/10W	R1216	401 037 6803	MT-GLAZE 12K JA 1/10W
R016	401 038 6505	MT-GLAZE 47K JA 1/10W	R1217	401 037 5202	MT-GLAZE 100 JA 1/10W
R017	401 037 5608	MT-GLAZE 10K JA 1/10W	R1218	401 038 7700	MT-GLAZE 5.6K JA 1/10W
R100	401 037 5004	MT-GLAZE 0.000 ZA 1/10W	R1219	401 038 9209	MT-GLAZE 6.8K JA 1/10W
R1001	401 038 7601	MT-GLAZE 560 JA 1/10W	R122	401 038 7700	MT-GLAZE 5.6K JA 1/10W
R1002	401 038 0701	MT-GLAZE 2.2K JA 1/10W	R123	401 027 2600	CARBON 5.6K JA 1/6W
R1003	401 038 7601	MT-GLAZE 560 JA 1/10W	R124	401 037 5400	MT-GLAZE 1K JA 1/10W
R1004	401 038 0701	MT-GLAZE 2.2K JA 1/10W	R125	401 038 0800	MT-GLAZE 22K JA 1/10W
R1005	401 027 6608	CARBON 75 JA 1/6W	R126	401 027 0309	CARBON 47K JA 1/6W
R1006	401 038 5300	MT-GLAZE 39K JA 1/10W	R127	401 038 0800	MT-GLAZE 22K JA 1/10W
R1007	401 038 3702	MT-GLAZE 33K JA 1/10W	R128	401 024 7004	CARBON 1K JA 1/6W
R1008	401 027 6608	CARBON 75 JA 1/6W	R129	401 022 1905	CARBON 680 JA 1/4W
R1009	401 027 6608	CARBON 75 JA 1/6W	R130	401 025 7409	CARBON 220 JA 1/6W
R101	401 037 5004	MT-GLAZE 0.000 ZA 1/10W	R131	401 037 5400	MT-GLAZE 1K JA 1/10W
R1010	401 027 6608	CARBON 75 JA 1/6W	R132	401 038 3603	MT-GLAZE 3.3K JA 1/10W
R1011	401 037 5202	MT-GLAZE 100 JA 1/10W	R133	401 037 5400	MT-GLAZE 1K JA 1/10W
R1012	401 027 6608	CARBON 75 JA 1/6W	R134	401 039 0908	MT-GLAZE 910 JA 1/10W
R1013	401 024 6700	CARBON 100 JA 1/6W	R135	401 037 5400	MT-GLAZE 1K JA 1/10W
R1014	401 027 6608	CARBON 75 JA 1/6W	R136	401 037 5400	MT-GLAZE 1K JA 1/10W
R1015	401 038 6406	MT-GLAZE 4.7K JA 1/10W	R137	401 039 0908	MT-GLAZE 910 JA 1/10W
R1016	401 019 1000	CARBON 390 JA 1/4W	R138	401 037 5400	MT-GLAZE 1K JA 1/10W
R1017	401 024 7400	CARBON 10K JA 1/6W	R139	401 022 1905	CARBON 680 JA 1/4W
R1018	401 038 3504	MT-GLAZE 330 JA 1/10W	R140	401 026 3905	CARBON 330 JA 1/6W
R1021	401 038 7601	MT-GLAZE 560 JA 1/10W	R141	401 037 9101	MT-GLAZE 180 JA 1/10W
R1022	401 038 0701	MT-GLAZE 2.2K JA 1/10W	R142	401 038 6505	MT-GLAZE 47K JA 1/10W
R1023	401 038 7601	MT-GLAZE 560 JA 1/10W	R143	401 038 6406	MT-GLAZE 4.7K JA 1/10W
R1024	401 038 0701	MT-GLAZE 2.2K JA 1/10W	R144	401 037 7909	MT-GLAZE 1.5K JA 1/10W
R1025	401 038 5300	MT-GLAZE 39K JA 1/10W	R145	401 026 9907	CARBON 4.7K JA 1/6W
R1026	401 038 3702	MT-GLAZE 33K JA 1/10W	R146	401 038 6307	MT-GLAZE 470 JA 1/10W
R1027	401 027 6608	CARBON 75 JA 1/6W	R147	401 025 7409	CARBON 220 JA 1/6W
R1028	401 027 6608	CARBON 75 JA 1/6W	R148	401 025 7409	CARBON 220 JA 1/6W
R1029	401 025 1308	CARBON 150 JA 1/6W	R149	401 038 7809	MT-GLAZE 56K JA 1/10W
R1031	401 038 7601	MT-GLAZE 560 JA 1/10W	R150	401 037 8005	MT-GLAZE 15K JA 1/10W
			R151	401 037 5004	MT-GLAZE 0.000 ZA 1/10W

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
R1902	401 039 0403	MT-GLAZE 8.2K JA 1/10W	R511	401 060 7402	OXIDE-MT 270 JA 1W
R1902A	401 037 5004	MT-GLAZE 0.000 ZA 1/10W	R513	401 059 3903	OXIDE-MT 1.5K JA 1W
R1903	401 038 6406	MT-GLAZE 4.7K JA 1/10W	R602	402 067 7709	WIRE WOUND 3.9 KA 7W
R1903A	401 037 5004	MT-GLAZE 0.000 ZA 1/10W		402 072 4403	WIRE WOUND 3.9 KA 7W
R1904	401 038 2101	MT-GLAZE 2.7K JA 1/10W	R611	401 027 2600	CARBON 5.6K JA 1/6W
R1905	401 038 0701	MT-GLAZE 2.2K JA 1/10W	R615	401 025 8208	CARBON 22K JA 1/6W
R1906	401 037 5004	MT-GLAZE 0.000 ZA 1/10W	R617	401 024 9305	CARBON 1.2K JA 1/6W
R1907	401 037 5608	MT-GLAZE 10K JA 1/10W	R619	401 016 1508	CARBON 22 JA 1/4W
R1908	401 038 3504	MT-GLAZE 330 JA 1/10W	R620	401 007 5805	CARBON 120K JA 1/2W
R1909	401 037 7909	MT-GLAZE 1.5K JA 1/10W	R621	401 007 5805	CARBON 120K JA 1/2W
R1911	401 038 6307	MT-GLAZE 470 JA 1/10W	R622	401 014 5201	CARBON 15K JA 1/4W
R1921	401 037 6605	MT-GLAZE 120 JA 1/10W	R623	401 025 7805	CARBON 2.2K JA 1/6W
R1922	401 038 5003	MT-GLAZE 390 JA 1/10W	R624	401 068 6902	OXIDE-MT 56 JA 2W
R1924	401 027 5502	CARBON 6.8K JA 1/6W	R625	401 067 8204	OXIDE-MT 39 JA 2W
R2001	401 038 2200	MT-GLAZE 27K JA 1/10W	R626	401 016 3304	CARBON 2.2K GA 1/4W
R2002	401 037 5608	MT-GLAZE 10K JA 1/10W	△R631	402 000 8305	SOLID 5.6M KA 1/2W
R2004	401 037 7800	MT-GLAZE 150 JA 1/10W	△R632	402 000 8305	SOLID 5.6M KA 1/2W
R2005	401 024 9701	CARBON 12K JA 1/6W	R641	401 012 8105	CARBON 100K JA 1/4W
R201	401 039 0403	MT-GLAZE 8.2K JA 1/10W	R642	401 026 9907	CARBON 4.7K JA 1/6W
R202	401 037 5707	MT-GLAZE 100K JA 1/10W	R643	401 014 6109	CARBON 150K JA 1/4W
R203	401 024 6700	CARBON 100 JA 1/6W	R644	401 010 4307	CARBON 47K JA 1/2W
R204	401 024 6700	CARBON 100 JA 1/6W	R645	401 025 8208	CARBON 22K JA 1/6W
R205	401 024 6700	CARBON 100 JA 1/6W	R646	402 067 3305	WIRE WOUND 4.7 KA 5W
R206	401 037 5202	MT-GLAZE 100 JA 1/10W		402 075 5704	WIRE WOUND 4.7 KA 5W
R207	401 037 5202	MT-GLAZE 100 JA 1/10W	R652	401 069 5607	OXIDE-MT 8.2 JA 2W
R208	401 037 5202	MT-GLAZE 100 JA 1/10W	R653	401 067 8204	OXIDE-MT 39 JA 2W
R211	401 038 0800	MT-GLAZE 22K JA 1/10W	R655	401 065 5809	OXIDE-MT 15 JA 2W
R212	401 027 5502	CARBON 6.8K JA 1/6W	R656	401 026 9600	CARBON 470 JA 1/6W
R213	401 037 8005	MT-GLAZE 15K JA 1/10W	R657	401 007 6901	CARBON 15 JA 1/2W
R214	401 037 5202	MT-GLAZE 100 JA 1/10W	R661	401 068 4700	OXIDE-MT 4.7K JA 2W
R215	401 038 3702	MT-GLAZE 33K JA 1/10W	R662	401 068 0207	OXIDE-MT 3.9K JA 2W
R216	401 025 8208	CARBON 22K JA 1/6W	R681	401 008 1608	CARBON 1.8K JA 1/2W
R217	401 025 8208	CARBON 22K JA 1/6W	R682	401 069 1708	OXIDE-MT 68 JA 2W
R218	401 038 7809	MT-GLAZE 56K JA 1/10W	R684	401 027 8602	CARBON 8.2K JA 1/6W
R223	401 014 6109	CARBON 150K JA 1/4W	R685	401 025 8208	CARBON 22K JA 1/6W
R224	401 024 7004	CARBON 1K JA 1/6W	R800	401 025 7805	CARBON 2.2K JA 1/6W
R226	401 026 7408	CARBON 39K JA 1/6W	R801	401 037 5004	MT-GLAZE 0.000 ZA 1/10W
R227	401 024 7400	CARBON 10K JA 1/6W	R802	401 038 0701	MT-GLAZE 2.2K JA 1/10W
R231	401 037 7800	MT-GLAZE 150 JA 1/10W	R803	401 037 9408	MT-GLAZE 180K JA 1/10W
R232	401 037 5202	MT-GLAZE 100 JA 1/10W	R804	401 024 7400	CARBON 10K JA 1/6W
R271	401 024 6700	CARBON 100 JA 1/6W	R806	401 024 7400	CARBON 10K JA 1/6W
R272	401 024 9008	CARBON 120 JA 1/6W	R807	401 024 7400	CARBON 10K JA 1/6W
R351	401 037 5202	MT-GLAZE 100 JA 1/10W	R808	401 019 1901	CARBON 3.9K JA 1/4W
R352	401 037 5806	MT-GLAZE 1M JA 1/10W	R811	401 025 7805	CARBON 2.2K JA 1/6W
R353	401 038 0909	MT-GLAZE 220K JA 1/10W	R812	401 038 5102	MT-GLAZE 3.9K JA 1/10W
R356	401 037 5202	MT-GLAZE 100 JA 1/10W	R813	401 026 4605	CARBON 33K JA 1/6W
R357	401 037 8005	MT-GLAZE 15K JA 1/10W	R815	401 024 6700	CARBON 100 JA 1/6W
R361	401 038 5409	MT-GLAZE 390K JA 1/10W	R816	401 037 5608	MT-GLAZE 10K JA 1/10W
R363	401 038 0800	MT-GLAZE 22K JA 1/10W	R817	401 027 8602	CARBON 8.2K JA 1/6W
R364	401 037 5202	MT-GLAZE 100 JA 1/10W	R818	401 037 5707	MT-GLAZE 100K JA 1/10W
R365	401 038 6406	MT-GLAZE 4.7K JA 1/10W	R819	401 025 7805	CARBON 2.2K JA 1/6W
R431	401 038 3504	MT-GLAZE 330 JA 1/10W	R820	401 037 5608	MT-GLAZE 10K JA 1/10W
R432	401 038 3504	MT-GLAZE 330 JA 1/10W	R821	401 038 0800	MT-GLAZE 22K JA 1/10W
R433	401 010 3102	CARBON 470 JA 1/2W	R822	401 038 6505	MT-GLAZE 47K JA 1/10W
R434	401 067 9201	OXIDE-MT 390 JA 2W	R823	401 013 5341	CARBON 1.2K JA 1/4W
R435	402 069 8704	WIRE WOUND 8.2 KA 7W	R824	401 038 0701	MT-GLAZE 2.2K JA 1/10W
	402 076 0609	WIRE WOUND 8.2 KA 7W	R825	401 038 3603	MT-GLAZE 3.3K JA 1/10W
R436	401 021 3009	CARBON 5.6K JA 1/4W	R831	401 038 0800	MT-GLAZE 22K JA 1/10W
R441	401 058 3706	OXIDE-MT 1K JA 1W	R832	401 037 5608	MT-GLAZE 10K JA 1/10W
R447	401 026 9907	CARBON 4.7K JA 1/6W	R833	401 038 0800	MT-GLAZE 22K JA 1/10W
R448	401 009 5803	CARBON 330 JA 1/2W	R834	401 038 0800	MT-GLAZE 22K JA 1/10W
R451	401 064 5701	OXIDE-MT 1.8 JA 2W	R835	401 037 5400	MT-GLAZE 1K JA 1/10W
R481	401 025 4903	CARBON 180K JA 1/6W	R836	401 038 0800	MT-GLAZE 22K JA 1/10W
R482	401 027 2600	CARBON 5.6K JA 1/6W	R837	401 037 5400	MT-GLAZE 1K JA 1/10W
R501	401 026 9907	CARBON 4.7K JA 1/6W	R838	401 037 8005	MT-GLAZE 15K JA 1/10W
R502	402 051 8705	FUSIBLE RES 4.7 J- 1/2W	R839	401 026 4605	CARBON 33K JA 1/6W
R504	401 027 3003	CARBON 56K JA 1/6W	R840	401 026 9600	CARBON 470 JA 1/6W
R505	401 024 7400	CARBON 10K JA 1/6W	R841	401 038 0800	MT-GLAZE 22K JA 1/10W
R506	401 025 1605	CARBON 1.5K JA 1/6W	R842	401 026 9907	CARBON 4.7K JA 1/6W
R507	401 025 3807	CARBON 180 JA 1/6W	R843	401 037 5608	MT-GLAZE 10K JA 1/10W
R508	401 025 7805	CARBON 2.2K JA 1/6W	R844	401 038 5102	MT-GLAZE 3.9K JA 1/10W
R509	401 057 9105	OXIDE-MT 1.2 JA 1W			

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
R845	401 037 5608	MT-GLAZE 10K JA 1/10W	L101	645 001 4567	INDUCTOR,10U K
R846	401 038 6406	MT-GLAZE 4.7K JA 1/10W	L102	645 008 2863	INDUCTOR,4.7U K
R847	401 037 5608	MT-GLAZE 10K JA 1/10W	L1022	645 002 1787	CORE,PIPE
R848	401 038 6406	MT-GLAZE 4.7K JA 1/10W	L1023	645 001 4567	INDUCTOR,10U K
R851	401 037 5400	MT-GLAZE 1K JA 1/10W	L1024	645 001 4567	INDUCTOR,10U K
R852	401 037 5400	MT-GLAZE 1K JA 1/10W	L1025	645 001 4567	INDUCTOR,10U K
R853	401 038 0800	MT-GLAZE 22K JA 1/10W	L1026	645 001 4567	INDUCTOR,10U K
R861	401 038 2101	MT-GLAZE 2.7K JA 1/10W	L1027	645 008 2863	INDUCTOR,4.7U K
R862	401 038 0800	MT-GLAZE 22K JA 1/10W	L1101	645 001 4567	INDUCTOR,10U K
R863	401 038 0800	MT-GLAZE 22K JA 1/10W	L1102	645 001 4567	INDUCTOR,10U K
R864	401 039 0304	MT-GLAZE 820 JA 1/10W	L1103	645 008 2863	INDUCTOR,4.7U K
R865	401 038 6406	MT-GLAZE 4.7K JA 1/10W	L141	645 001 4567	INDUCTOR,10U K
R866	401 038 6406	MT-GLAZE 4.7K JA 1/10W	L151	645 001 4567	INDUCTOR,10U K
R867	401 038 6406	MT-GLAZE 4.7K JA 1/10W	L152	645 003 9782	INDUCTOR,22U K
R868	401 037 6704	MT-GLAZE 1.2K JA 1/10W	L201	645 001 4567	INDUCTOR,10U K
R869	401 038 2200	MT-GLAZE 27K JA 1/10W	L202	645 001 4567	INDUCTOR,10U K
R870A	401 038 0800	MT-GLAZE 22K JA 1/10W	L203	645 001 4567	INDUCTOR,10U K
R871	401 038 6406	MT-GLAZE 4.7K JA 1/10W	L231	645 008 2863	INDUCTOR,4.7U K
R872	401 038 3702	MT-GLAZE 33K JA 1/10W	L232	645 008 2863	INDUCTOR,4.7U K
R873	401 038 6406	MT-GLAZE 4.7K JA 1/10W	L271	645 001 4567	INDUCTOR,10U K
R874	401 037 5608	MT-GLAZE 10K JA 1/10W	L432	645 002 1787	CORE,PIPE
R875	401 038 7700	MT-GLAZE 5.6K JA 1/10W	L441A	610 000 0605	LINEARITY COIL
R876	401 037 5608	MT-GLAZE 10K JA 1/10W		610 210 8071	LINEARITY COIL
R877	401 039 0403	MT-GLAZE 8.2K JA 1/10W	L442	610 000 0278	COIL
R878	401 037 7909	MT-GLAZE 1.5K JA 1/10W		610 205 1117	COIL
R879	401 037 5608	MT-GLAZE 10K JA 1/10W	L501	645 008 5642	INDUCTOR,3.3U K
R880	401 038 6505	MT-GLAZE 47K JA 1/10W	△L601	645 012 3337	LINE FILTER
R884	401 037 7800	MT-GLAZE 150 JA 1/10W	L607	610 237 1000	PIPE CORE
R885	401 038 5102	MT-GLAZE 3.9K JA 1/10W	L608	610 237 1000	PIPE CORE
R886	401 037 7800	MT-GLAZE 150 JA 1/10W	L641	645 002 1787	CORE,PIPE
R887	401 038 5102	MT-GLAZE 3.9K JA 1/10W	L642	645 002 1787	CORE,PIPE
R888	401 037 5202	MT-GLAZE 100 JA 1/10W	L643	645 002 1787	CORE,PIPE
R889	401 037 5202	MT-GLAZE 100 JA 1/10W	L871	645 008 0203	INDUCTOR,5.6U K
R891	401 038 6406	MT-GLAZE 4.7K JA 1/10W	L881	645 001 4697	INDUCTOR,1.5U M
R892	401 038 6406	MT-GLAZE 4.7K JA 1/10W			
R893	401 037 5400	MT-GLAZE 1K JA 1/10W	DIODE		
R894	401 037 5400	MT-GLAZE 1K JA 1/10W	D1005	407 063 8309	ZENER DIODE MTZJ11C
R895	401 037 6704	MT-GLAZE 1.2K JA 1/10W		407 158 3400	ZENER DIODE UZ-11BSC
R896	401 038 6505	MT-GLAZE 47K JA 1/10W	D1007	407 063 8309	ZENER DIODE MTZJ11C
R897	401 024 7004	CARBON 1K JA 1/6W		407 158 3400	ZENER DIODE UZ-11BSC
R898	401 024 7004	CARBON 1K JA 1/6W	D1008	407 063 8309	ZENER DIODE MTZJ11C
				407 158 3400	ZENER DIODE UZ-11BSC
VARIABLE RESISTOR			D1010	407 063 8309	ZENER DIODE MTZJ11C
VC141	645 004 2263	TRIMMER,10PF		407 158 3400	ZENER DIODE UZ-11BSC
VR131	645 006 5422	VR,SEMI,10K N	D1011	407 063 8309	ZENER DIODE MTZJ11C
	610 239 7567	VR B-10K		407 158 3400	ZENER DIODE UZ-11BSC
VR361	645 006 5422	VR,SEMI,10K N	D1021	407 063 8309	ZENER DIODE MTZJ11C
	610 239 7567	VR B-10K		407 158 3400	ZENER DIODE UZ-11BSC
VR501	645 006 5408	VR,SEMI,100 N	D1022	407 063 8309	ZENER DIODE MTZJ11C
	610 232 7908	VR,SEMI,100 N		407 158 3400	ZENER DIODE UZ-11BSC
VR641	645 006 5514	VR,SEMI,2.2K N	D1023	407 063 8309	ZENER DIODE MTZJ11C
	610 239 7581	VR B-2K		407 158 3400	ZENER DIODE UZ-11BSC
			D1024	407 063 8309	ZENER DIODE MTZJ11C
				407 158 3400	ZENER DIODE UZ-11BSC
TRANSFORMER			D1026	407 063 8309	ZENER DIODE MTZJ11C
T141	610 037 4522	S COIL		407 158 3400	ZENER DIODE UZ-11BSC
T431	610 000 1053	DRIVE TRANS	D1027	407 063 8309	ZENER DIODE MTZJ11C
	610 000 1060	DRIVE TRANS		407 158 3400	ZENER DIODE UZ-11BSC
△T451	645 014 2987	TRANS,FLYBACK	D1101	407 063 8309	ZENER DIODE MTZJ11C
△T611	645 015 7646	TRANS,POWER,PULSE		407 158 3400	ZENER DIODE UZ-11BSC
	645 018 9425	TRANS,POWER,PULSE	D1201	407 053 6803	ZENER DIODE MTZ5.6C
△T681	610 033 3758	POWER TRANS		407 057 0104	ZENER DIODE RD5.6EB3
	610 240 4722	POWER TRANS		407 151 8501	ZENER DIODE UZ-5.6BCC
COIL			D131	407 012 4406	DIODE 1SS133
L001	645 008 5635	INDUCTOR,12U K		407 012 5809	DIODE 1SS176
L002	645 008 5635	INDUCTOR,12U K	D135	407 063 8309	ZENER DIODE MTZJ11C
L003	645 002 1787	CORE,PIPE		407 158 3400	ZENER DIODE UZ-11BSC
L1002	645 002 1787	CORE,PIPE	D141	407 088 2603	DIODE 1SS265
L1003	645 001 4567	INDUCTOR,10U K	D161	407 012 4406	DIODE 1SS133
L1004	645 001 4567	INDUCTOR,10U K		407 012 5809	DIODE 1SS176
L1005	645 001 4567	INDUCTOR,10U K	D1901-1	610 255 3956	HOLDER LED-E7GC
L1006	645 001 4567	INDUCTOR,10U K	D1901A	407 120 9706	LED LN28RPL

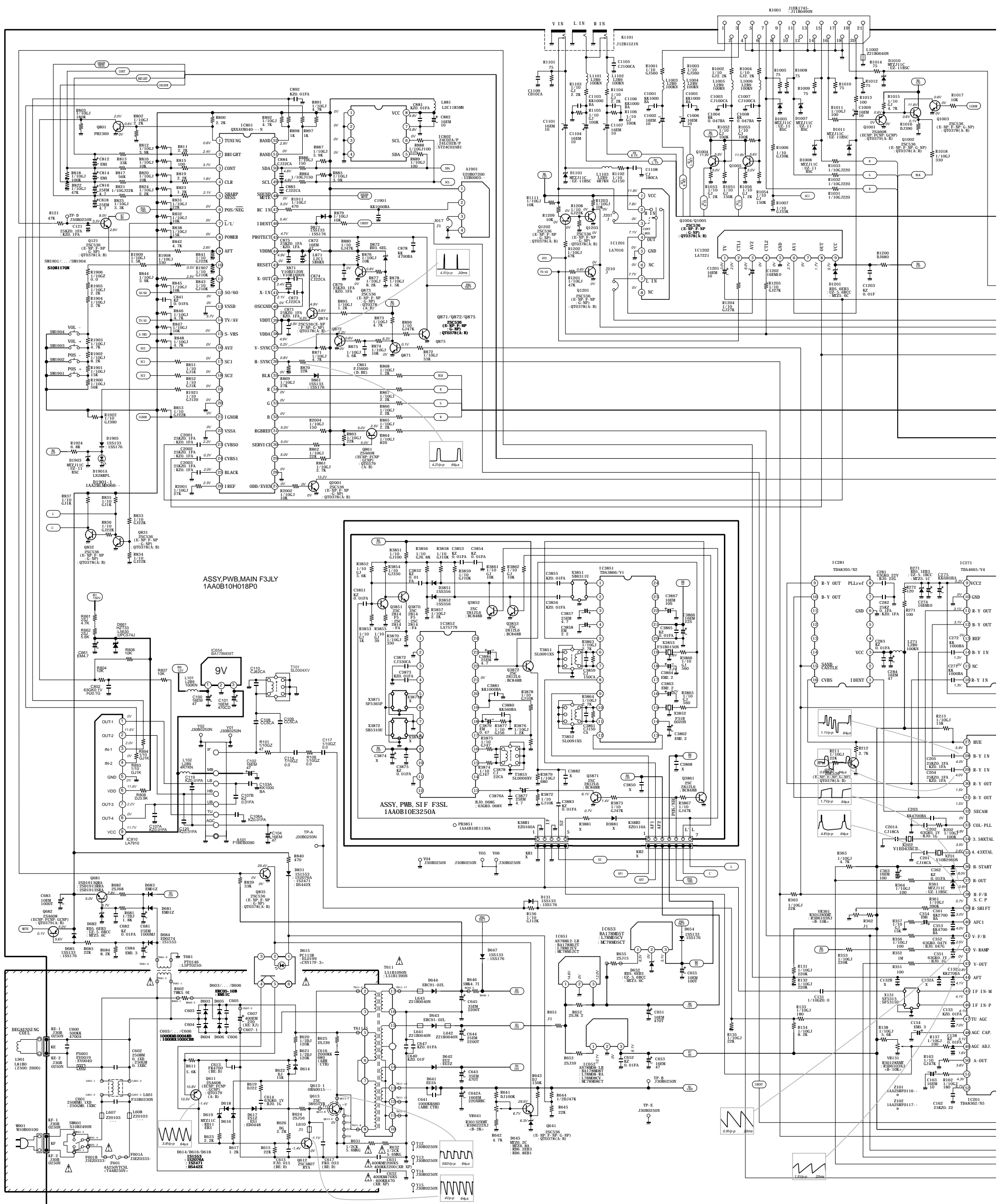
Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
D1903	407 063 8309	ZENER DIODE MTZJ11C	D642	407 007 7603	DIODE EU2
	407 158 3400	ZENER DIODE UZ-11BSC		407 007 7801	DIODE EU2Z
D1905	407 012 4406	DIODE 1SS133	D643	407 166 2303	DIODE ERC91-02L
	407 012 5809	DIODE 1SS176	D644	407 166 2303	DIODE ERC91-02L
D201	407 063 8309	ZENER DIODE MTZJ11C	D645	407 053 7206	ZENER DIODE MTZ6.2C
	407 158 3400	ZENER DIODE UZ-11BSC		407 053 7503	ZENER DIODE MTZ6.8A
D202	407 063 8309	ZENER DIODE MTZJ11C		407 057 2801	ZENER DIODE RD6.2EB3
	407 158 3400	ZENER DIODE UZ-11BSC		407 057 4003	ZENER DIODE RD6.8EB1
D203	407 063 8309	ZENER DIODE MTZJ11C	D647	407 012 4406	DIODE 1SS133
	407 158 3400	ZENER DIODE UZ-11BSC		407 012 5809	DIODE 1SS176
D210	407 012 4406	DIODE 1SS133	D652	407 053 6803	ZENER DIODE MTZ5.6C
	407 012 5809	DIODE 1SS176		407 057 0104	ZENER DIODE RD5.6EB3
D221	407 012 4406	DIODE 1SS133		407 151 8501	ZENER DIODE UZ-5.6BCC
	407 012 5809	DIODE 1SS176	D654	407 012 4406	DIODE 1SS133
D222	407 005 4505	DIODE DS442X		407 012 5809	DIODE 1SS176
	407 013 1008	DIODE 1S1553	D655	407 012 4406	DIODE 1SS133
	407 013 4306	DIODE 1S2076A		407 012 5809	DIODE 1SS176
	407 013 6508	DIODE 1S2471	D661	409 013 0104	IC HZT33
D271	407 053 6407	ZENER DIODE MTZ5.1C		409 026 8005	IC L5630
	407 056 8200	ZENER DIODE RD5.1EB3		409 057 5103	IC UPC574J
	407 163 8209	ZENER DIODE UZ-5.1BCC	D681	407 005 7308	DIODE EM01Z
D361	407 063 8309	ZENER DIODE MTZJ11C	D682	407 053 6803	ZENER DIODE MTZ5.6C
	407 158 3400	ZENER DIODE UZ-11BSC		407 057 0104	ZENER DIODE RD5.6EB3
D431	407 053 8708	ZENER DIODE MTZ9.1A		407 151 8501	ZENER DIODE UZ-5.6BCC
	407 053 8807	ZENER DIODE MTZ9.1B	D683	407 005 7308	DIODE EM01Z
	407 057 9602	ZENER DIODE RD9.1EB1	D684	408 007 8607	DIODE 1N4148
	407 057 9701	ZENER DIODE RD9.1EB2		407 013 1206	DIODE 1S1555
	407 163 9909	ZENER DIODE UZ-9.1BCA	D685	407 012 4406	DIODE 1SS133
	407 162 2703	ZENER DIODE UZ-9.1BCB		407 012 5809	DIODE 1SS176
D432	407 005 7308	DIODE EM01Z	D831	407 005 4505	DIODE DS442X
D442	407 005 4505	DIODE DS442X		407 013 1008	DIODE 1S1553
	407 013 1008	DIODE 1S1553		407 013 4306	DIODE 1S2076A
	407 013 4306	DIODE 1S2076A		407 013 6508	DIODE 1S2471
	407 013 6508	DIODE 1S2471	D861	407 012 4406	DIODE 1SS133
D445	407 012 4406	DIODE 1SS133		407 012 5809	DIODE 1SS176
	407 012 5809	DIODE 1SS176	D871	407 012 4406	DIODE 1SS133
D446	407 151 9003	ZENER DIODE UZ-7.5BCC		407 012 5809	DIODE 1SS176
	407 151 9102	ZENER DIODE UZ-8.2BCA	D872	407 055 7907	ZENER DIODE RD3.6EL
D481	407 007 7405	DIODE EU1			
D482	407 012 4406	DIODE 1SS133	MISCELLANEOUS		
	407 012 5809	DIODE 1SS176	Δ F601	423 022 2102	FUSE 250V 4A
D501	407 005 7308	DIODE EM01Z	F601A	645 000 5077	HOLDER,FUSE
	408 009 9008	DIODE BYD33D	F601B	645 000 5077	HOLDER,FUSE
D502	407 118 2207	ZENER DIODE 1Z75	A101	645 017 2571	TUNER,U/V
D603	407 006 6300	DIODE ERC05-10B	A1901	645 007 1546	UNIT,REMOCON RECEIVER
	407 009 6901	DIODE RM11C		610 224 5806	RC PREAMP 409-1L
D604	407 006 6300	DIODE ERC05-10B	K001	645 005 5706	JACK,PHONE D3.6
	407 009 6901	DIODE RM11C		645 006 4708	JACK,PHONE D3.6
D605	407 006 6300	DIODE ERC05-10B	K10B	645 004 2911	PLUG,5P
	407 009 6901	DIODE RM11C	K1001	645 005 5867	SOCKET,RGB 21P
D606	407 006 6300	DIODE ERC05-10B		610 234 3779	SOCKET 21P
	407 009 6901	DIODE RM11C	K1001Z	610 261 2813	MOUNTING-BRKT F2WV
D614	407 005 4505	DIODE DS442X	K1002	645 005 5867	SOCKET,RGB 21P
	407 013 1008	DIODE 1S1553		610 234 3779	SOCKET 21P
	407 013 4306	DIODE 1S2076A	K1002Z	610 261 2813	MOUNTING-BRKT F2WV
	407 013 6508	DIODE 1S2471	K11A	645 004 2881	PLUG,2P
Δ D615	407 105 8700	PHOTO COUPLE PC113B	K1101	645 016 6433	JACK,RCA-3
	408 009 8407	PHOTO COUPLE CNY17F-3OPT6	Δ PS601	408 003 6805	THERMISTOR 902P44E180MR14
D616	407 005 4505	DIODE DS442X		408 015 1904	THERMISTOR PA3A5180B270
	407 013 1008	DIODE 1S1553	SW1901	610 011 4432	SWITCH,PUSH
	407 013 4306	DIODE 1S2076A	SW1902	610 011 4432	SWITCH,PUSH
	407 013 6508	DIODE 1S2471	SW1903	610 011 4432	SWITCH,PUSH
D617	407 007 6606	DIODE ES1	SW1904	610 011 4432	SWITCH,PUSH
	407 007 6903	DIODE ES1Z	SW501	610 011 2728	SWITCH,LEVER 1P-3T
	408 009 9008	DIODE BYD33D	Δ SW601	645 017 0928	SWITCH,PUSH POWER 2P-2T
D618	407 005 4505	DIODE DS442X	X131	421 002 2609	SAW F TSF5315
	407 013 1008	DIODE 1S1553		421 003 3902	SAW F TSF5315U
	407 013 4306	DIODE 1S2076A	X151	610 015 2854	TRAP,CERAMIC 5.5MHZ
	407 013 6508	DIODE 1S2471	X152	610 015 3011	TRAP,CERAMIC 6.5MHZ
D619	407 053 3000	ZENER DIODE MTZ11C	X161	645 003 2813	CERAMIC FILTER
	407 054 1807	ZENER DIODE RD11EB3	X201	645 018 9050	OSC,CRYSTAL 4.433619MHZ
D641	407 007 7702	DIODE EU2A		610 249 5577	CRYSTAL OSCILLATOR

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
X871	645 018 9593	OSC,CRYSTAL 12MHZ			
	645 015 8339	OSC,CRYSTAL 12MHZ			
610 260 0667			COIL		
ASSY,PWB,CRT F2RC (1AA0B10E24500)			L2601	645 008 0012	INDUCTOR, 330U K
TRANSISTOR			L2611	645 008 0012	INDUCTOR, 330U K
Q2601	405 041 6507	TR 2SC2621-D-RA	L2621	645 008 0012	INDUCTOR, 330U K
	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			
Q2611	405 041 6507	TR 2SC2621-D-RA			
	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			
Q2621	405 041 6507	TR 2SC2621-D-RA			
	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			
Q2640	406 007 1901	TR JC556A			
	406 007 1802	TR JC556B			
	405 004 4205	TR 2SA608-E-CTV-NP			
	405 004 4809	TR 2SA608-F-CTV-NP			
	405 028 7909	TR 2SA608-G-CTV-NP			
Q2651	406 007 1901	TR JC556A			
	406 007 1802	TR JC556B			
	405 004 4205	TR 2SA608-E-CTV-NP			
	405 004 4809	TR 2SA608-F-CTV-NP			
	405 028 7909	TR 2SA608-G-CTV-NP			
CAPACITOR					
C2601	403 074 5702	CERAMIC 560P K 50V			
C2611	403 074 5702	CERAMIC 560P K 50V			
C2621	403 074 5702	CERAMIC 560P K 50V			
C2631	403 077 2708	CERAMIC 1000P P 2K			
C2635	403 055 8401	ELECT 22U M 250V			
	403 260 0405	ELECT 22U M 250V			
C2651	403 201 5001	ELECT 330U M 16V			
RESISTOR					
R2601	401 018 2800	CARBON 330 JA 1/4W			
R2602	401 019 1901	CARBON 3.9K JA 1/4W			
R2603	401 012 5708	CARBON 1K JA 1/4W			
R2604	401 065 4604	OXIDE-MT 12K JA 2W			
R2605	401 009 6602	CARBON 3.3K JA 1/2W			
R2611	401 018 2800	CARBON 330 JA 1/4W			
R2612	401 019 1901	CARBON 3.9K JA 1/4W			
R2613	401 016 3809	CARBON 2.2K JA 1/4W			
R2614	401 065 4604	OXIDE-MT 12K JA 2W			
R2615-B	401 009 6602	CARBON 3.3K JA 1/2W			
R2621	401 018 2800	CARBON 330 JA 1/4W			
R2622	401 019 1901	CARBON 3.9K JA 1/4W			
R2623	401 015 2704	CARBON 1.8K JA 1/4W			
R2624	401 065 4604	OXIDE-MT 12K JA 2W			
R2625-B	401 009 6602	CARBON 3.3K JA 1/2W			
R2627	401 020 0801	CARBON 470 JA 1/4W			
R2641	401 020 2003	CARBON 4.7K JA 1/4W			
R2642	401 018 3807	CARBON 3.3K JA 1/4W			
R2644	401 017 0807	CARBON 270 JA 1/4W			
R2652	401 012 7009	CARBON 10K JA 1/4W			
R2653	401 012 7009	CARBON 10K JA 1/4W			
VARIABLE RESISTOR					
VR2601	645 003 5722	VR,SEMI,4.7K N			
VR2602	645 003 5647	VR,SEMI,1K N			
VR2611	645 003 5722	VR,SEMI,4.7K N			
VR2612	645 003 5647	VR,SEMI,1K N			
VR2621	645 003 5722	VR,SEMI,4.7K N			
			610 264 1455		
			ASSY,PWB,AUDIO & ASSY,PWB,SIF F3SL (1AA0B10E32500)		
			ASSY,PWB,SIF F3SL		
			TRANSISTOR		
			Q3851	405 015 9701	TR 2SC2814-F4-TA
				405 015 9909	TR 2SC2814-F5-TA
			Q3852	405 109 4407	TR BC848-B
				405 015 8704	TR 2SC2812-L6-TA
			Q3853	405 109 4407	TR BC848-B
				405 015 8704	TR 2SC2812-L6-TA
			Q3861	405 109 4407	TR BC848-B
				405 015 8704	TR 2SC2812-L6-TA
			Q3870	405 015 9701	TR 2SC2814-F4-TA
				405 015 9909	TR 2SC2814-F5-TA
			Q3871	405 109 4407	TR BC848-B
				405 015 8704	TR 2SC2812-L6-TA
			Q3872	405 109 4407	TR BC848-B
				405 015 8704	TR 2SC2812-L6-TA
			INTEGRATED CIRCUIT		
			IC3851	409 330 9903	IC TDA3866/V1
			IC3852	409 310 8407	IC LA7577N
			CAPACITOR		
			C3851	403 069 9500	CERAMIC 0.01U Z 50V
			C3852	403 069 9500	CERAMIC 0.01U Z 50V
			C3853	403 069 9500	CERAMIC 0.01U Z 50V
			C3854	403 069 9500	CERAMIC 0.01U Z 50V
			C3855	403 069 9500	CERAMIC 0.01U Z 50V
			C3856	403 069 9500	CERAMIC 0.01U Z 50V
			C3857	403 046 9905	ELECT 4.7U M 25V
			C3858	403 049 9803	ELECT 2.2U M 50V
			C3859	403 013 3004	CERAMIC 150P J 50V
			C3861	403 013 3004	CERAMIC 150P J 50V
			C3862	403 049 9803	ELECT 2.2U M 50V
			C3863	403 049 9803	ELECT 2.2U M 50V
			C3864	403 049 9803	ELECT 2.2U M 50V
			C3865	403 069 9500	CERAMIC 0.01U Z 50V
			C3866	403 042 8308	ELECT 22U M 16V
			C3867	403 041 9405	ELECT 10U M 16V
			C3872	403 023 4404	CERAMIC 330P J 50V
			C3873	403 069 9500	CERAMIC 0.01U Z 50V
			C3875	403 069 9500	CERAMIC 0.01U Z 50V
			C3876A	403 270 4202	MT-POLYEST 0.068U K 63V
				403 249 9405	MT-COMPO 0.068U J 50V
			C3877	403 046 9905	ELECT 4.7U M 25V
			C3878	403 018 0503	CERAMIC 22P J 50V
			C3879	403 048 6308	ELECT 0.47U M 50V
			C3880	403 074 6600	CERAMIC 560P K 50V
			C3881	403 069 1702	CERAMIC 1000P K 50V
			C3883	403 069 9500	CERAMIC 0.01U Z 50V
			C3884	403 046 9905	ELECT 4.7U M 25V

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
RESISTOR			IC3401	409 371 6206	IC TDA9840/V2
R3851	401 037 5202	MT-GLAZE 100 JA 1/10W	IC3431	409 316 4601	IC TDA8424
R3852	401 038 7700	MT-GLAZE 5.6K JA 1/10W	IC3451	409 404 3707	IC SAA7283ZP/M2
R3853	401 037 5400	MT-GLAZE 1K JA 1/10W	CAPACITOR		
R3854	401 038 3504	MT-GLAZE 330 JA 1/10W	C1251	403 041 8804	ELECT 10U M 16V
R3855	401 037 5202	MT-GLAZE 100 JA 1/10W	C3401	403 041 8804	ELECT 10U M 16V
R3856	401 038 9209	MT-GLAZE 6.8K JA 1/10W	C3402	403 069 5601	CERAMIC 0.01U K 50V
R3857	401 038 0701	MT-GLAZE 2.2K JA 1/10W	C3403	403 068 0409	CERAMIC 0.1U Z 25V
R3858	401 037 5608	MT-GLAZE 10K JA 1/10W		403 070 2606	CERAMIC 0.1U Z 50V
R3859	401 037 5608	MT-GLAZE 10K JA 1/10W	C3404	403 310 5008	CERAMIC 3300P G 25V
R3861	401 037 5608	MT-GLAZE 10K JA 1/10W	C3405	403 042 2405	ELECT 100U M 16V
R3862	401 037 5608	MT-GLAZE 10K JA 1/10W	C3407	403 026 2803	CERAMIC 47P J 50V
R3863	401 038 2101	MT-GLAZE 2.7K JA 1/10W	C3408	403 049 9803	ELECT 2.2U M 50V
R3864	401 038 2101	MT-GLAZE 2.7K JA 1/10W	C3409	403 049 9803	ELECT 2.2U M 50V
R3865	401 038 7601	MT-GLAZE 560 JA 1/10W	C3411	403 069 5601	CERAMIC 0.01U K 50V
R3866	401 038 7601	MT-GLAZE 560 JA 1/10W	C3412	403 069 5601	CERAMIC 0.01U K 50V
R3867	401 038 6505	MT-GLAZE 47K JA 1/10W	C3413	403 068 0409	CERAMIC 0.1U Z 25V
R3870	401 038 3504	MT-GLAZE 330 JA 1/10W		403 070 2606	CERAMIC 0.1U Z 50V
R3872	401 037 5608	MT-GLAZE 10K JA 1/10W	C3414	403 068 0409	CERAMIC 0.1U Z 25V
R3873	401 038 6505	MT-GLAZE 47K JA 1/10W		403 070 2606	CERAMIC 0.1U Z 50V
R3874	401 038 6208	MT-GLAZE 47 JA 1/10W	C3415	403 069 9500	CERAMIC 0.01U Z 50V
R3875	401 038 6208	MT-GLAZE 47 JA 1/10W	C3421	403 069 9500	CERAMIC 0.01U Z 50V
R3876	401 037 6704	MT-GLAZE 1.2K JA 1/10W	C3422	403 041 8804	ELECT 10U M 16V
R3877	401 038 7502	MT-GLAZE 56 JA 1/10W	C3431	403 049 0008	ELECT 1U M 50V
R3878	401 037 5608	MT-GLAZE 10K JA 1/10W	C3432	403 042 2405	ELECT 100U M 16V
R3879	401 038 9001	MT-GLAZE 680 JA 1/10W	C3433	403 049 0008	ELECT 1U M 50V
TRANSFORMER			C3434	403 068 0409	CERAMIC 0.1U Z 25V
T3851	610 037 5512	S COIL		403 070 2606	CERAMIC 0.1U Z 50V
T3852	610 037 5512	S COIL	C3435	403 068 3202	CERAMIC 0.033U K 25V
T3853	610 037 4539	S COIL		403 073 1200	CERAMIC 0.033U K 50V
DIODE			C3436	403 074 7607	CERAMIC 5600P K 50V
D3851	407 166 1108	DIODE 1SS356-TW11	C3437	403 074 7607	CERAMIC 5600P K 50V
D3852	407 166 1108	DIODE 1SS356-TW11	C3438	403 068 3202	CERAMIC 0.033U K 25V
MISCELLANEOUS				403 073 1200	CERAMIC 0.033U K 50V
K38H1	610 221 3713	TERMINAL 5P	C3456	403 069 9500	CERAMIC 0.01U Z 50V
K38H2	610 221 3652	TERMINAL	C3458	403 073 3501	CERAMIC 390P K 50V
X3851	421 005 6703	SAW F TSB6311U	C3459	403 069 8305	CERAMIC 0.01U Z 50V
X3852	645 003 2806	CERAMIC FILTER	C3460	403 069 9500	CERAMIC 0.01U Z 50V
X3853	645 006 3022	CERAMIC FILTER 5.742MHZ	C3461	403 069 9500	CERAMIC 0.01U Z 50V
X3871	421 006 0809	SAW F TSF5365P	C3462	403 041 8804	ELECT 10U M 16V
X3872	421 005 1708	SAW F TSB5310U	C3463	403 008 7406	CERAMIC 10P D 50V
ASSY,PWB,AUDIO F3SL			C3464	403 041 8804	ELECT 10U M 16V
TRANSISTOR			C3465	403 018 7403	CERAMIC 220P J 50V
Q1251	405 109 4407	TR BC848-B	C3466	403 069 9500	CERAMIC 0.01U Z 50V
	405 015 8704	TR 2SC2812-L6-TA	C3467	403 041 8804	ELECT 10U M 16V
Q1252	405 109 4407	TR BC848-B	C3468	403 069 9500	CERAMIC 0.01U Z 50V
	405 015 8704	TR 2SC2812-L6-TA	C3469	403 049 0008	ELECT 1U M 50V
Q3411	405 109 4407	TR BC848-B	C3471	403 069 9500	CERAMIC 0.01U Z 50V
	405 015 8704	TR 2SC2812-L6-TA	C3472	403 041 8804	ELECT 10U M 16V
Q3412	405 109 4407	TR BC848-B	C3473	403 072 1607	CERAMIC 0.022U K 50V
	405 015 8704	TR 2SC2812-L6-TA	C3474	403 192 5905	CERAMIC 0.1U K 25V
Q3431	405 109 4407	TR BC848-B		403 070 0909	CERAMIC 0.1U K 50V
	405 015 8704	TR 2SC2812-L6-TA	C3475	403 026 2803	CERAMIC 47P J 50V
Q3432	405 109 4407	TR BC848-B	C3476	403 026 2803	CERAMIC 47P J 50V
	405 015 8704	TR 2SC2812-L6-TA	C3477	403 069 9500	CERAMIC 0.01U Z 50V
Q3481	405 109 4407	TR BC848-B	C3478	403 048 6308	ELECT 0.47U M 50V
	405 015 8704	TR 2SC2812-L6-TA	C3480	403 192 5905	CERAMIC 0.1U K 25V
Q3482	405 109 4407	TR BC848-B		403 070 0909	CERAMIC 0.1U K 50V
	405 015 8704	TR 2SC2812-L6-TA	C3481	403 069 9500	CERAMIC 0.01U Z 50V
Q3483	405 109 4407	TR BC848-B	C3482	403 043 9106	ELECT 47U M 16V
	405 015 8704	TR 2SC2812-L6-TA	C3483	403 069 9500	CERAMIC 0.01U Z 50V
Q3484	405 109 4407	TR BC848-B	C3484	403 043 9106	ELECT 47U M 16V
	405 015 8704	TR 2SC2812-L6-TA	C3485	403 049 0008	ELECT 1U M 50V
INTEGRATED CIRCUIT			C3486	403 049 0008	ELECT 1U M 50V
IC1251	409 009 2501	IC HD14052BP	C3487	403 069 9500	CERAMIC 0.01U Z 50V
	409 120 7607	IC MN4052B	C3488	403 043 9106	ELECT 47U M 16V
	409 051 2801	IC TC4052BP	C3490	403 009 5708	CERAMIC 100P J 50V
	409 059 2209	IC UPD4052BC	C3491	403 130 3604	CERAMIC 0.047U K 25V
				403 130 3109	CERAMIC 0.047U K 50V
			C3492	403 041 8804	ELECT 10U M 16V
			C3493	403 069 9500	CERAMIC 0.01U Z 50V

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
C3494	403 043 9106	ELECT 47U M 16V			
RESISTOR					
R1251	401 038 2101	MT-GLAZE 2.7K JA 1/10W			
R1252	401 038 9209	MT-GLAZE 6.8K JA 1/10W			
R1253	401 039 0502	MT-GLAZE 82K JA 1/10W			
R1254	401 039 0502	MT-GLAZE 82K JA 1/10W			
R1257	401 038 6307	MT-GLAZE 470 JA 1/10W			
R1258	401 038 0701	MT-GLAZE 2.2K JA 1/10W			
R1262	401 039 0502	MT-GLAZE 82K JA 1/10W			
R1264	401 039 0502	MT-GLAZE 82K JA 1/10W			
R1265	401 038 6307	MT-GLAZE 470 JA 1/10W			
R1266	401 038 0701	MT-GLAZE 2.2K JA 1/10W			
R3401	401 037 5202	MT-GLAZE 100 JA 1/10W			
R3402	401 037 5202	MT-GLAZE 100 JA 1/10W			
R3403	401 038 3108	MT-GLAZE 30K JA 1/10W			
R3410	401 038 0909	MT-GLAZE 220K JA 1/10W			
R3411	401 038 0800	MT-GLAZE 22K JA 1/10W			
R3412	401 038 0800	MT-GLAZE 22K JA 1/10W			
R3431	401 037 5202	MT-GLAZE 100 JA 1/10W			
R3432	401 037 5202	MT-GLAZE 100 JA 1/10W			
R3433	401 037 5202	MT-GLAZE 100 JA 1/10W			
R3434	401 037 7909	MT-GLAZE 1.5K JA 1/10W			
R3435	401 037 5202	MT-GLAZE 100 JA 1/10W			
R3436	401 037 7909	MT-GLAZE 1.5K JA 1/10W			
R3451	401 025 7102	CARBON 22 JA 1/6W			
R3461	401 037 5400	MT-GLAZE 1K JA 1/10W			
R3462	401 037 5202	MT-GLAZE 100 JA 1/10W			
R3463	401 037 5608	MT-GLAZE 10K JA 1/10W			
R3464	401 038 6505	MT-GLAZE 47K JA 1/10W			
R3465	401 037 5806	MT-GLAZE 1M JA 1/10W			
R3466	401 037 5608	MT-GLAZE 10K JA 1/10W			
R3467	401 038 9407	MT-GLAZE 680K JA 1/10W			
R3468	401 037 9200	MT-GLAZE 1.8K JA 1/10W			
R3469	401 038 3702	MT-GLAZE 33K JA 1/10W			
R3471	401 037 5202	MT-GLAZE 100 JA 1/10W			
R3472	401 037 5202	MT-GLAZE 100 JA 1/10W			
R3473	401 038 3603	MT-GLAZE 3.3K JA 1/10W			
R3474	401 038 7700	MT-GLAZE 5.6K JA 1/10W			
R3475	401 038 7700	MT-GLAZE 5.6K JA 1/10W			
R3476	401 038 3603	MT-GLAZE 3.3K JA 1/10W			
R3477	401 038 3603	MT-GLAZE 3.3K JA 1/10W			
R3478	401 038 3603	MT-GLAZE 3.3K JA 1/10W			
R3479	401 038 3603	MT-GLAZE 3.3K JA 1/10W			
R3480	401 038 3603	MT-GLAZE 3.3K JA 1/10W			
R3481	401 038 0701	MT-GLAZE 2.2K JA 1/10W			
R3482	401 038 0701	MT-GLAZE 2.2K JA 1/10W			
TRANSFORMER					
T3401	645 015 7943	COIL,FERRITE 2.5M			
COIL					
L3401	645 001 4758	INDUCTOR,100U K			
L3451	645 018 9999	INDUCTOR,120 OHM			
L3452	645 008 2221	INDUCTOR,2.2U K			
L3454	645 008 2221	INDUCTOR,2.2U K			
L3455	645 008 2221	INDUCTOR,2.2U K			
L3461	645 008 1996	INDUCTOR,10U J			
DIODE					
D3461	407 169 7909	VARACTOR DI BBY31			
D3462	407 004 8009	DIODE DSB015-TA			
MISCELLANEOUS					
K12A	645 004 2881	PLUG,2P			
K12B	645 004 2911	PLUG,5P			
K34A	645 008 3341	PLUG,10P			
K34B	645 008 3341	PLUG,10P			
X3401	645 018 6875	OSC,CRYSTAL 10MHZ			
	645 016 6662	OSC,CRYSTAL 10MHZ			
X3461	645 007 7449	OSC,CRYSTAL 8.192MHZ			

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



COLOUR TELEVISION

SANYO

CHASSIS SERIES **EB4**

Model Number: **21DN2F/C21ES56NF**

SERVICE REF.NO. **C21ES56NF-04**
C21ES56NF-07

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 sullo 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 :

- Tutti 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 capacitance di meno di sono espressi in μF , e di più di 1 sono in pF. I valori di capacitance elettrolitici sono in μF .
- Tutti i valori di capacitance nominali sono di 50V a meno che sia indicato altrimenti.
- Tutti i valori di induttanza sono in μH .
- I valori letti del voltaggio presi con un "VTVM" proven gono 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 può variare con l'intensità del segnale.

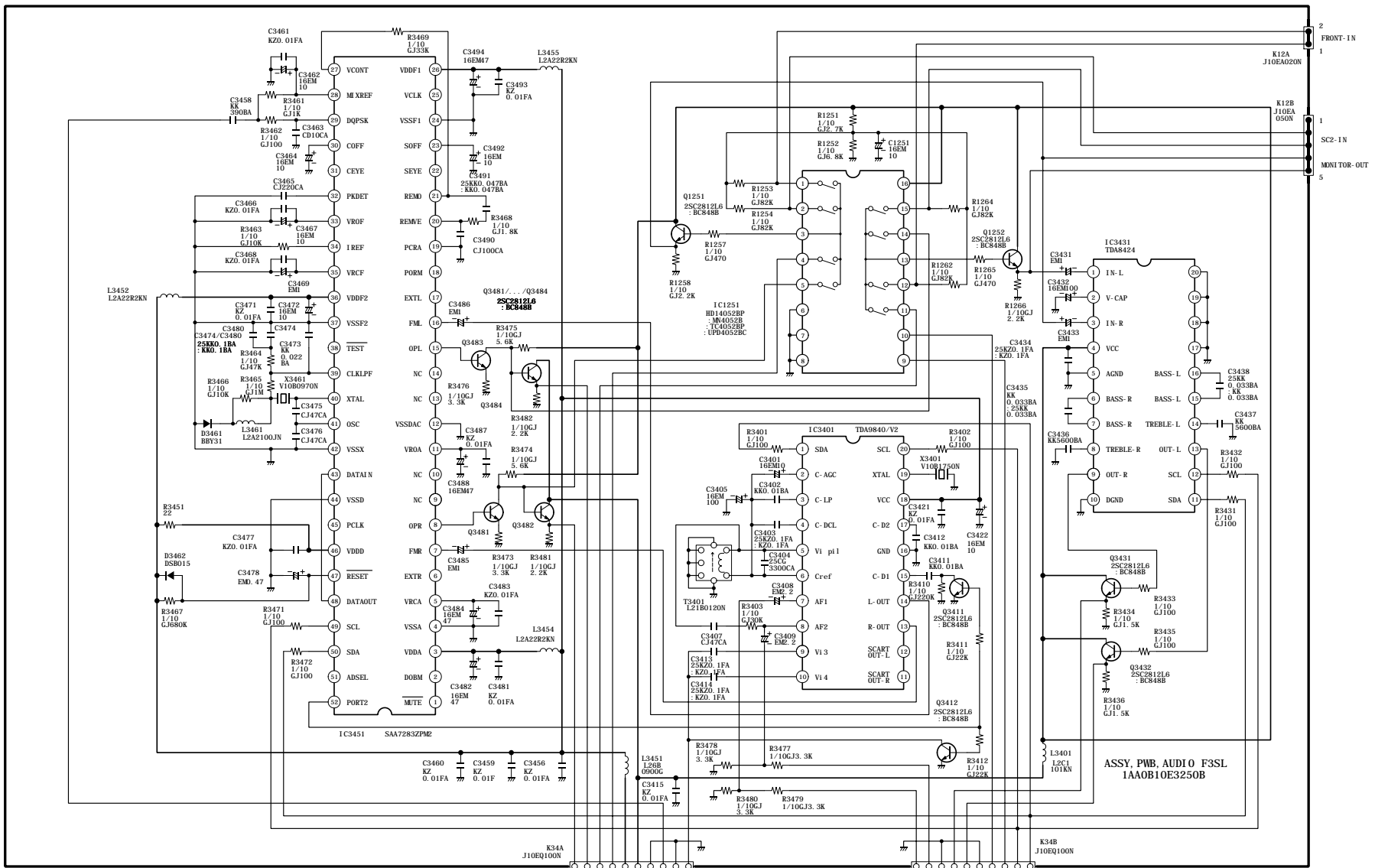
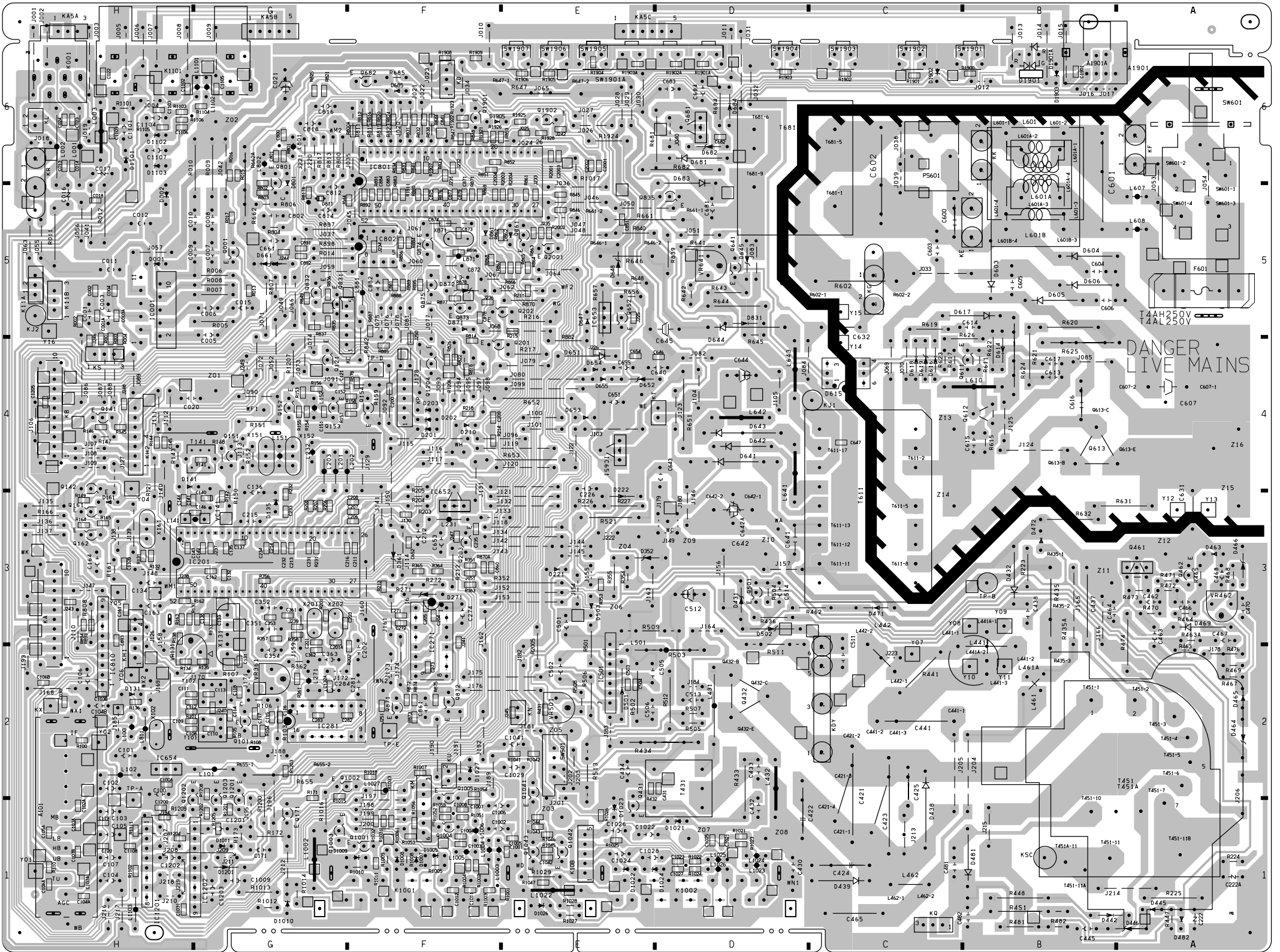
- Le forme di onda furono prese con il segnale di barre colore e i controlli regolati oppure le forme di onda di immagine normale furono prese usando un oscillografo a larga banda ed una sonda bassa capacitance.
- Rispetto a quando indicato su questo schema possono essere state introdotte delle modifiche.
- 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) può essere sostituito con 2SA933(Q,R), 2SA564(QA,RA), oppure 2SA1015(O,Y) a meno che sia specificato altrimenti.

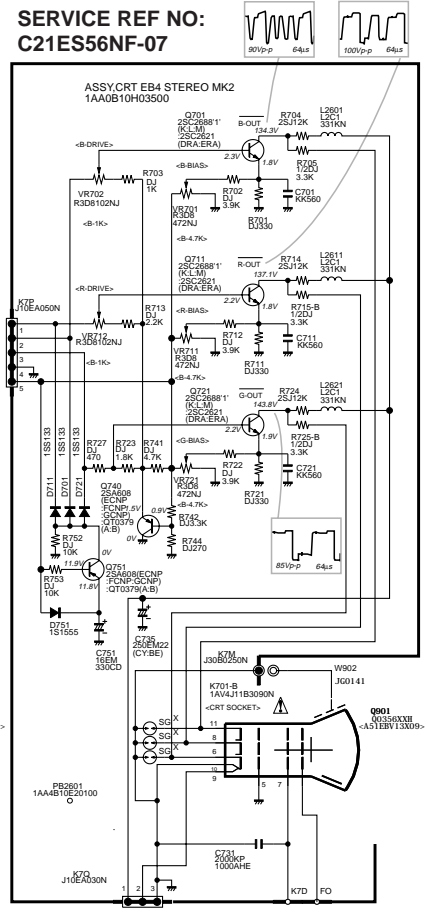
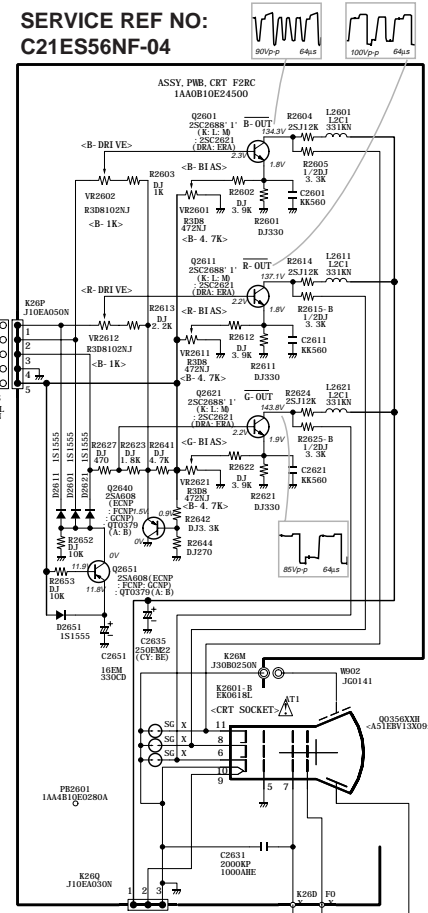
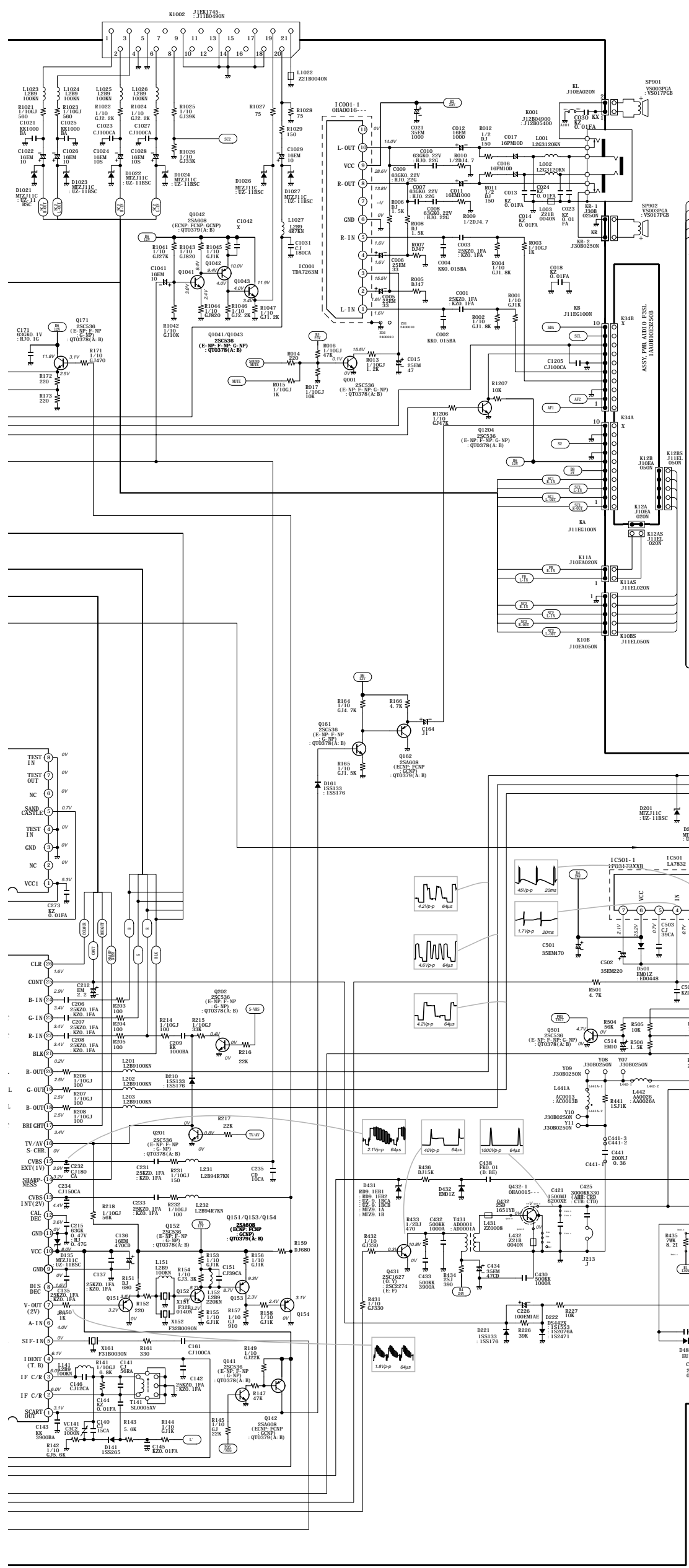
Circuit diagram notes :

- 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.

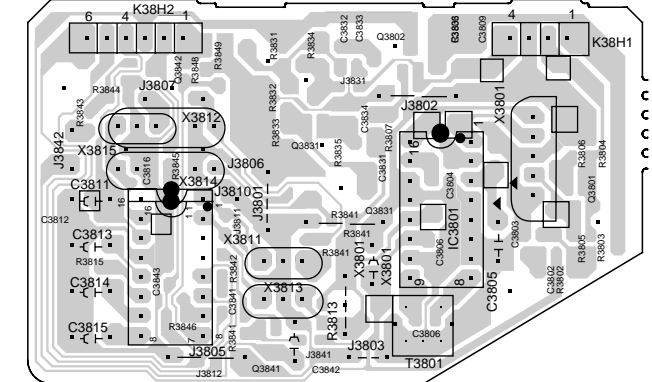
Main Board /Pannelo Principale

Circuit side/Lato del Circuito

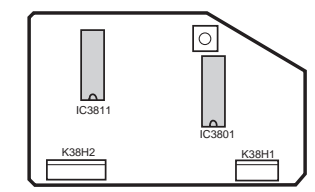




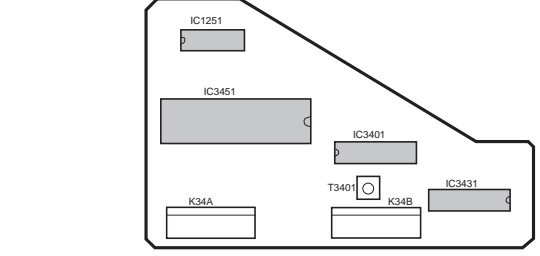
SIF Board /Pannello SIF
Circuit side/Lato del Circuito



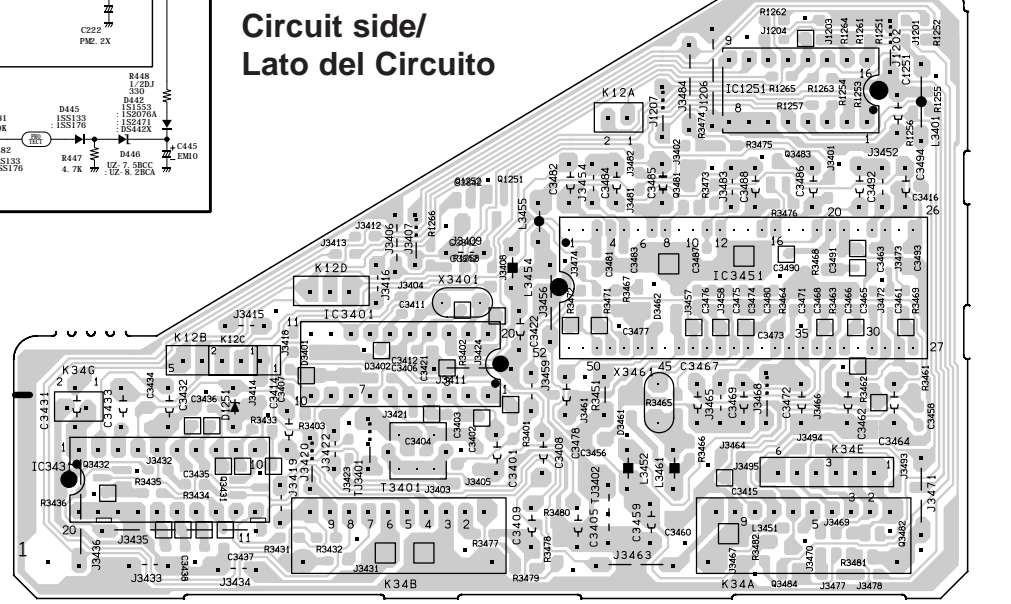
Component Location/Lato del Componente



Audio Board /Pannello Audio
Component Location/Lato del Componente

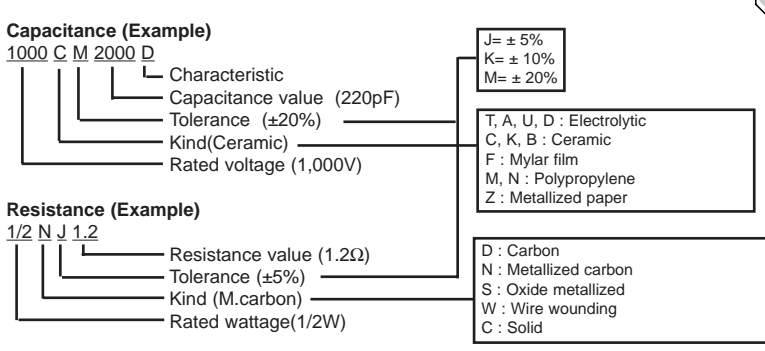


Circuit side/
Lato del Circuito

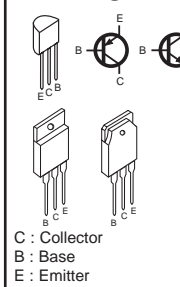


- This circuit diagram covers a basic or representative chassis only. There may be some components or partial circuit differences between the actual chassis and the circuit diagram.
- Diode 1S1555 may be replaced with 1S2473, 1S2076 or D5472 unless otherwise noted.
- Transistor 2SC536(Q,R,S), 2SC1740(Q,R,S), 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.

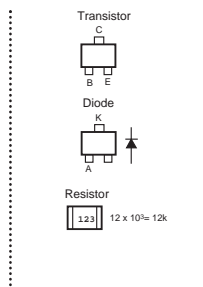
Expression of capacitance and resistance in circuit diagram.



Terminal guide

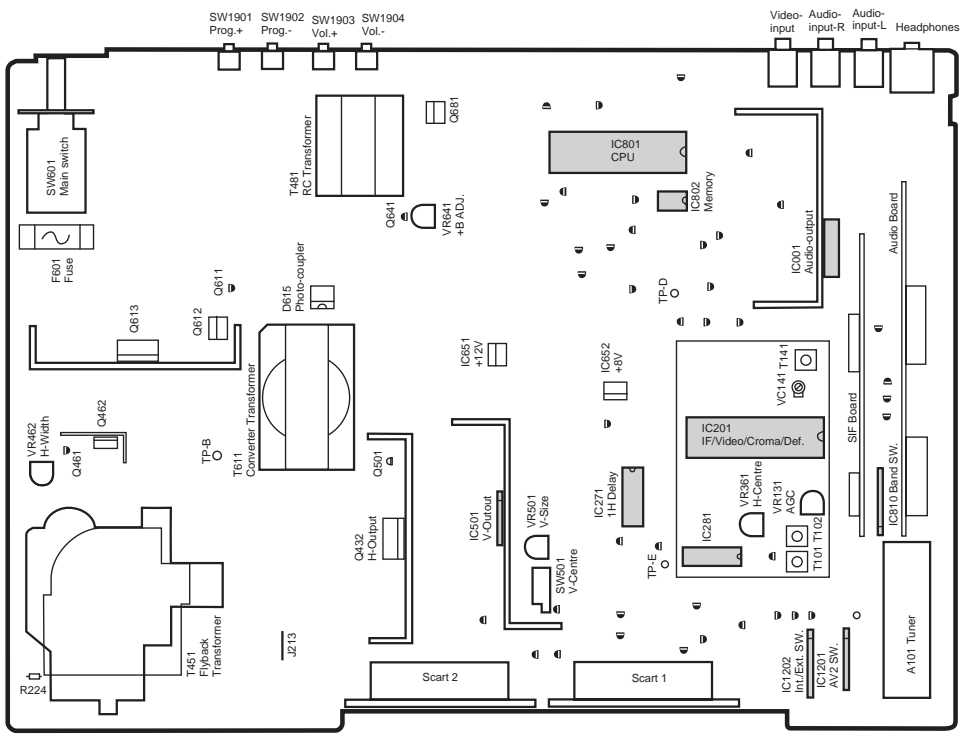


Chip Components

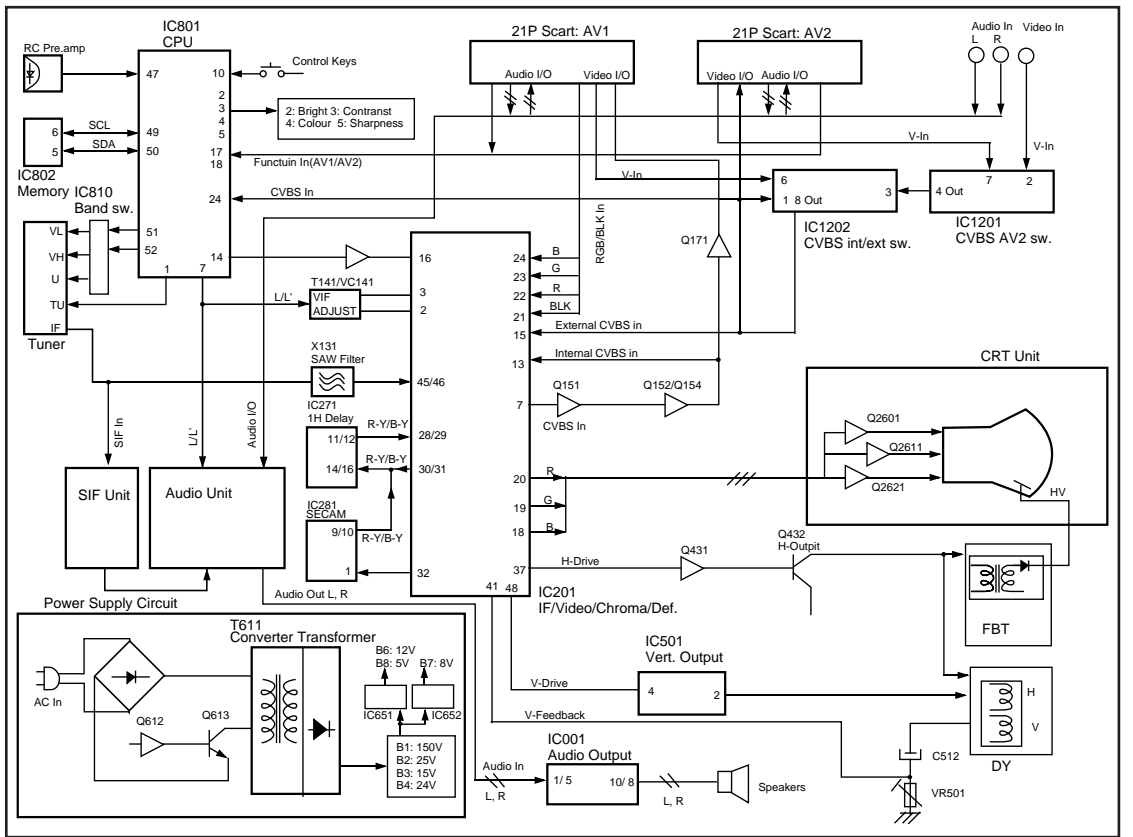


Main Board /Pannello Principale

Component Location/Lato del Componente



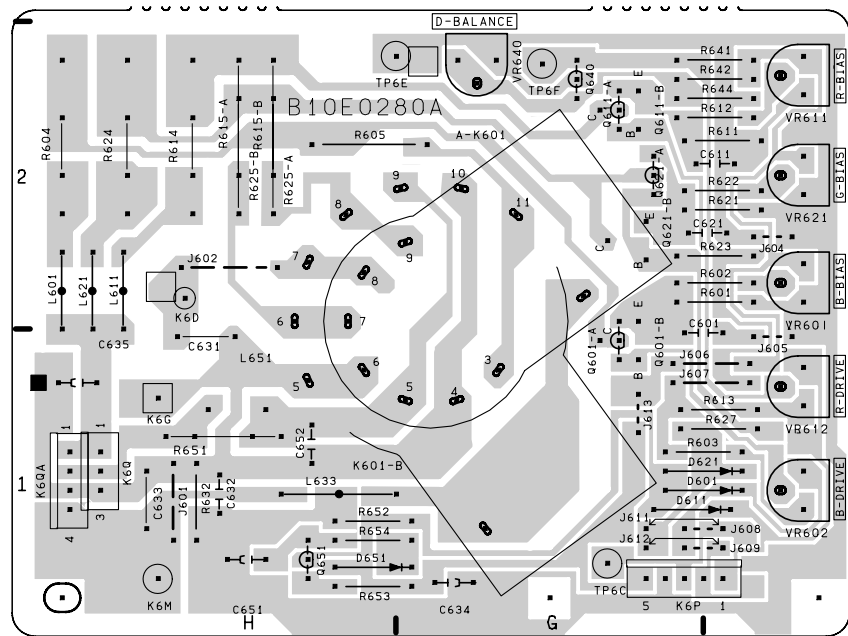
GENERAL BLOCK DIAGRAM FOR EB4 CHASSIS



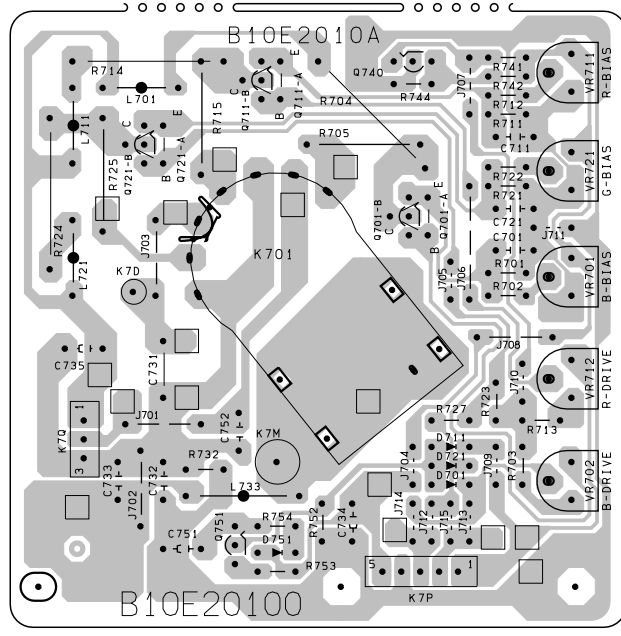
CRT Board /Pannello Cinescopio

Circuit side/Lato del Circuito

SERVICE REF NO: C21ES56NF-04

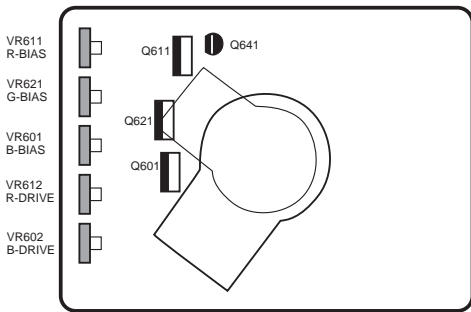


SERVICE REF NO: C21ES56NF-07

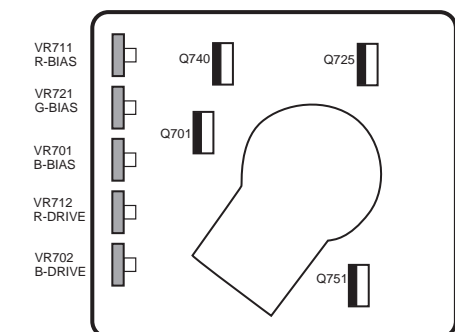


Component Location/Lato del Componente

SERVICE REF NO: C21ES56NF-04



SERVICE REF NO: C21ES56NF-07



REGOLAZIONI DI SERVIZIO TECNICO

REGOLAZIONE DELL'ALIMENTATORE B1

1. Regolare VR641 in modo che sia centro meccanico, prima di premere l'interruttore principale.
2. Sintonizzare il ricevitore sull'oscillogramma circolare PAL.
3. Regolare i comandi di luminosità e contrasto sui livelli normali.
4. Collegare il misuratore V digitale su "TP-B".
5. Servendosi di VR641, regolare il voltaggio su 130 ± 0.5 V (per 21 pollici).
6. Servendosi di VR641, regolare il voltaggio su 150 ± 0.5 V (per 25 pollici).

REGOLAZIONE AFT

1. Sintonizzare il ricevitore sulla stazione più chiara.
2. Servendosi di T141, regolare AFT per ottenere l'immagine migliore.

REGOLAZIONE AGC

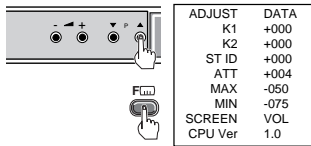
NOTA: Non tentare questa regolazione con un segnale debole.

1. Sintonizzare il ricevitore sulla stazione più chiara.
2. Regolare AGC VR(VR130) nella direzione in cui appaiono i disturbi da neve, quindi regolare in direzione opposta nel punto esatto in cui i disturbi da neve scompaiono.

REGOLAZIONE DELLA SCALA DEI GRIGI

[REGOLAZIONE VR DI SCHERMO]

1. Sintonizzare il ricevitore sull'oscillogramma bianco.
2. Regolare il comando della luminosità su centro display e quello del contrasto su normale.
3. Regolare VR2601 e VR2611 in modo che sia centro meccanico.
4. Ruotare fino in fondo, in senso antiorario VR602, VR612 o VR622.
5. Quando si tiene premuto il pulsante tasto "Funzione" (sul telecomando) e contemporaneamente si preme il pulsante P (sul televisore) appariranno le seguenti indicazioni sullo schermo.



6. Premere il tasto "Funzione" (sul televisore) per selezione la funzione "SCREEN".

7. Per regolare il livelli, premere il tasto livello.



8. Regolare VR di schermo per un solo colore in modo che sia ben visibile.

[REGOLAZIONE VR DEL BIAS (POLARIZZAZIONE)]

7. Servendosi di VR602, VR612 o VR622, regolare la linea in modo che sia bianca.



[REGOLAZIONE VR DEL DRIVE (ECCITAZIONE)]

9. Servendosi di VR601 e VR611, regolare il bilanciamento del bianco.

REGOLAZIONE DI ALTO VOLTAGGIO E DI AMPIEZZA

[REGOLAZIONE DI ALTO VOLTAGGIO]

1. Sintonizzare il ricevitore sull'oscillogramma circolare PAL.
2. Regolare i comandi di luminosità e contrasto sui livelli massimi.
3. Collegare il misuratore V digitale su entrambi i terminali di R224 (lato sinistro) (+), e il misuratore di alto voltaggio sull'angolo CRT.
4. Confermare che l'alto voltaggio sia 25.0 ± 1 KV alla corrente di fascio di elettroni 1.0, e meno di 28.0 KV alla corrente di fascio di elettroni 0 (per 21 pollici).
5. Confermare che l'alto voltaggio sia 26.0 ± 1 KV alla corrente di fascio di elettroni 1.1, e meno di 29.0 KV alla corrente di fascio di elettroni 0 (per 25/28 pollici).

[REGOLAZIONE DI AMPIEZZA-H]

5. Se l'ampiezza H è troppo larga o troppo stretta, collegare o scollegare un filo in piombo J213 (per 21 pollici).
- Regolare VR462 per ottenere l'ampiezza H appropriata (per 25/28 pollici).
- Riconfermare l'alto voltaggio.

REGOLAZIONE DI CENTRO-H

1. Sintonizzare il ricevitore sull'oscillogramma circolare.
2. Regolare il centro-H servendosi di VR361.

REGOLAZIONE DI CENTRO-V

1. Sintonizzare il ricevitore sull'oscillogramma circolare.
2. Regolare il centro-V servendosi di SW501.

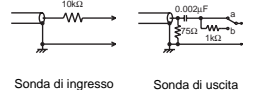
REGOLAZIONE DELLA DIMENSIONE-V

1. Sintonizzare il ricevitore sull'oscillogramma circolare.
2. Regolare la dimensione-V servendosi di VR501.

REGOLAZIONE DELLA MESSA A FUOCO

Servendosi di FOCUS VR, regolare il controllo della messa a fuoco per una buona scansione delle linee.

ALLINEAMENTO DI CIRCUITO



Allineamento VIF

IMPOSTAZIONE	Regolazione	Forma d'onda VIF
DC 15.5V Tensione AGC (4.3-4.5V) Sonda di uscita	C644 + IC201-pin48 IC201-pin45 (Side b) IC201-pin7	Servendosi di T141, regolare "P" in modo che sia di ampiezza massima.
Sonda di ingresso		
Marker frequency Sweep ATT 0dB=176mVrms/75	38.9MHz 20dB	

Allineamento SIF

IMPOSTAZIONE	Regolazione	Forma d'onda SIF
DC 12V Tensione AGC Sonda di uscita	IC3801-pin11 IC3801-pin3 IC3801-pin1 (Side b) IC3801-pin12 100B 38.9MHz	1. Regolare la tensione AGC in modo che sia "A" = 0.5Vp-p. 2. Servendosi di T3801, regolare "P" in modo che sia uguale alla linea di centro.
Sonda di ingresso ATT di deflessione Frequenza segnalatore		

Allineamento Pilot

IMPOSTAZIONE	Regolazione	Forma d'onda
Oscilloscopio Ingresso di desidera SW di sistema Deviazione Modo	IC3401-pin5 Sistema B/G 27KHz Stereo	Servendosi di T3401, regolare "P" in modo che sia di ampiezza massima.