

COLOR TELEVISION RECEIVER

PAL/SECAM

ORION COLOR 515 DK

RTV servis Horvat

Kešinci, 31402 Semeljci

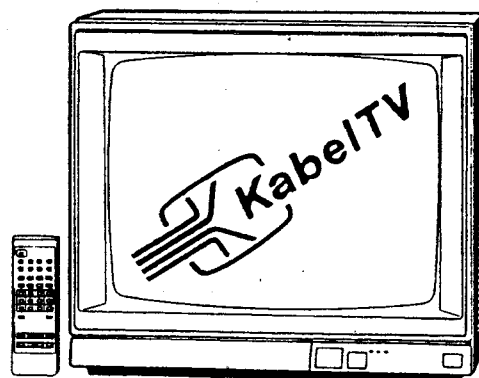
031-856-139

031-856-637

098-788-319

rtv-servis-horvat@os.tel.hr

Croatia



*Bei technischen Änderungen können Ergänzungsblätter
angefordert werden.*

Specifications are subject to change without notice.

Chassis Code:

A

Bestell-Nr.:

4771

SPECIFICATIONS

PICTURE SIZE	20 inch
SYSTEM	PAL/SECAM
FREQUENCY RANGE: VHF(L)	E2 - E4, X - S2 ch
VHF(H)	S3 - S10, E5 - E12,
UHF	S11 - S20 ch
MAXIMUM SENSITIVITY: VHF	21 - 69 ch
UHF	20 dB
INTERMEDIATE FREQUENCY:	
Picture IF Carrier Frequency	25 dB
Color Sub Carrier Frequency	38.9 MHz
Sound IF Carrier Frequency	34.47 MHz
SOUND INTERMEDIATE FREQUENCY	33.4 MHz
MAXIMUM OUTPUT POWER	5.5 MHz
10% THD OUTPUT POWER	2.0 W
POWER SOURCE	1.8 W
	AC 220V

IMPORTANT

- *USE AN ISOLATION TRANSFORMER WHEN PERFORMING ANY SERVICE ON THIS CHASSIS.
- *WHEN REMOVING A PCB OR RELATED COMPONENT, AFTER UNFASTENING OR CHANGING WIRE, BE SURE TO PUT WIRE BACK IN ITS ORIGINAL POSITION.
- *INFERIOR SILICON GREASE CAN DAMAGE IC's AND TRANSISTORS. WHEN REPLACING AN IC's OR TRANSISTORS, USE ONLY SPECIFIED SILICON GREASE (YG6260M). REMOVE ALL OLD SILICON BEFORE APPLYING NEW SILICON.

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ELECTRICAL ADJUSTMENTS

1. BEFORE ELECTRICAL ADJUSTMENT

These are adjustments when you replace electric parts or PCB ass'y. When you repair the electric circuit, please read these adjustments.

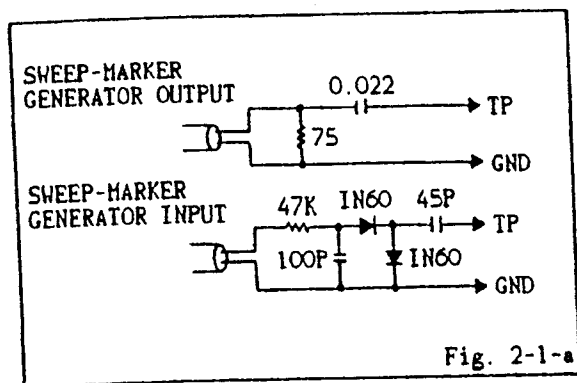
1-1: Prepare the following measurement tools for the electrical adjustment.

1. Oscilloscope (2 Channel Type)
2. Digital Voltmeter
3. Color Bar Generator
4. Sweepmarker Generator
5. VIF Unit
6. Distortion Meter

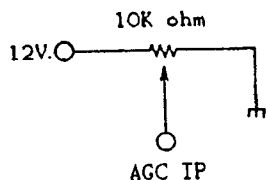
2. BASIC ADJUSTMENT

2-1: VIF AND AFT

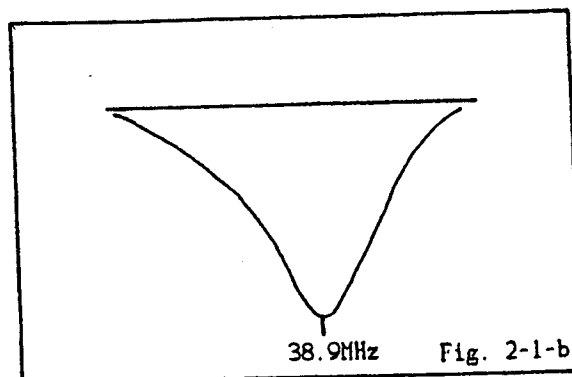
NOTE: Connect input and output terminal of the sweepmarker generator to circuit as shown in Fig. 2-1-a, then adjust it.



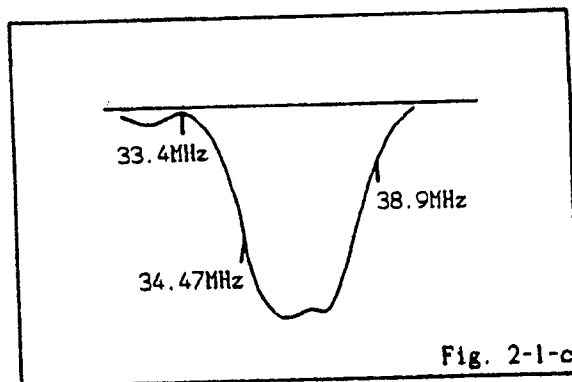
1. Connect output terminal of the sweepmarker generator to IP001.
2. Connect input terminal of the sweepmarker generator to IP007.
3. Connect the volume 10K ohm to IF AGC terminal (IP004), 12V line and ground, then adjust to make the waveform of the oscilloscope be easy to watch.



4. Adjust L204 until the waveform marker (38.9MHz) will become as shown in Fig. 2-1-b.



5. Disconnect output terminal of the sweepmarker generator from IP001, then connect it to TP of the Tuner Pack. (Connect the 2.7K ohm resistor between them.)
6. Connect the resistor 100 ohm between TP009 and IP010.
7. Adjust L206 until the waveform will become as shown in Fig. 2-1-c.

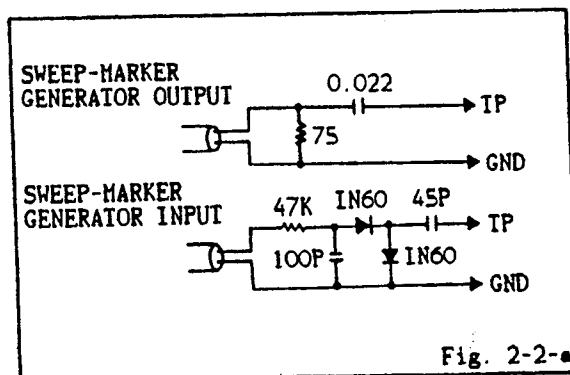


8. Disconnect the volume 10K ohm and resistor 100 ohm.
9. Input a 38.9MHz signal to TP of the tuner pack.
10. Connect the digital voltmeter to IP006.
11. Adjust L203 until the AFT ON mode voltage is as same as the AFT OFF mode voltage.

2-2: BELL FILTER

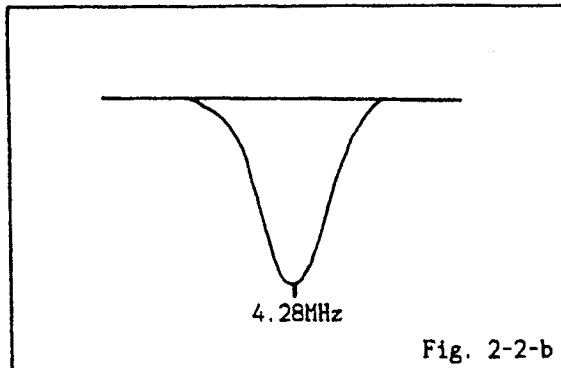
NOTE

Connect input and output terminal of the sweepmarker generator to circuit as shown in Fig. 2-2-a, then adjust it.



ELECTRICAL ADJUSTMENTS

1. Connect output terminal of the sweepmarker generator to TP of the Tuner Pack.
2. Connect input terminal of the sweepmarker generator to TP604.
3. Adjust L605 until the waveform will become as shown in Fig. 2-2-b.



2-3: SECAM IDENT

1. Receive the SECAM color bar pattern.
2. Set the PAL/SECAM switch to SECAM position.
3. Set the AFT switch ON position.
4. Connect a digital voltmeter to TP603.
5. Adjust L606 until voltage will be maximum. (More than 8V)

2-4: SECAM PHASE

1. Receive the SECAM color bar pattern.
2. Set the PAL/SECAM switch to SECAM position.
3. Adjust L601 and L602 until white part of the pattern is not changed even though you turn color control from minimum to maximum.

2-5: RF AGC

NOTE

Adjust after performing adjustments in section 2-1.

2-5-A: Weak electric field case.

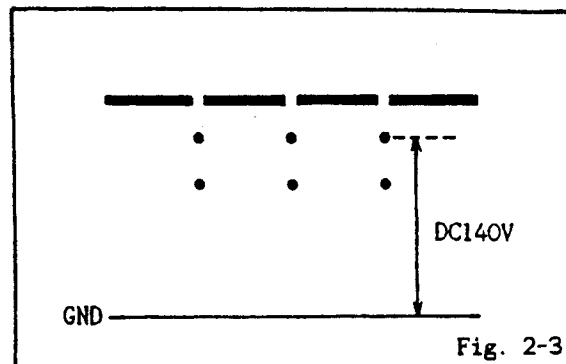
1. Receive the noisy channel.
2. Adjust VR201 until noise will be weak.
3. Change the channel, confirm other channels are normal.

2-5-B: Strong electric field case. (When diagonal streaks, radio frequency interference appear.)

1. Adjust VR201 until diagonal streaks will be weak.
2. When it is not good condition after adjusting VR201, install the attenuator to the antenna terminals, then adjust step (1) again.
3. Confirm noise will appear.
4. Change the channel, confirm other channels are normal.

2-6: CUT OFF

1. Receive the Color Bar Pattern.
2. Set the Bright and Contrast controls to minimum position
3. Connect the oscilloscope to collector of TP24.
4. Adjust the Screen control until voltage will be DC140V. (Refer to Fig. 2-3)



2-7: FOCUS

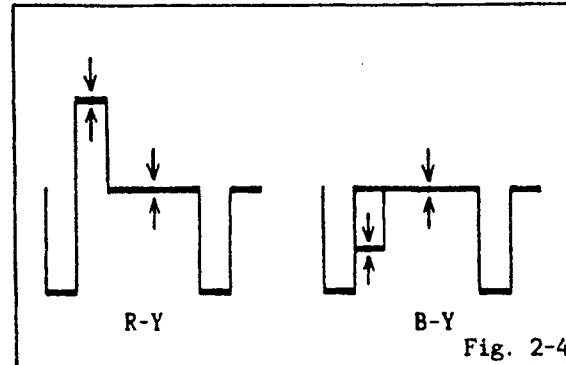
1. Receive the broadcasting signal.
2. Adjust the focus control until picture will be distinct.

2-8: VERTICAL SIZE

1. Receive the crosshatch pattern from the color bar generator.
2. Adjust the bright and contrast controls until the crosshatch pattern is distinct.
3. Adjust VR401 until the center of crosshatch is square.
4. Receive broadcasting signal, then confirm picture is normal

2-9: HUE DELAY

1. Receive the DEM Pattern.
2. Connect the dual oscilloscope to TP601 and TP602.
3. Adjust L603 and VR601 until the waveform will be straight line. (Refer to Fig. 2-4)



2-10: HORIZONTAL POSITION

1. Receive the color bar pattern.
2. Adjust VR402 until the color width of both of screen edges will be equal.
3. Receive broadcasting signal, then confirm picture is normal

2-11: SUB BRIGHT

1. Receive the monochrome pattern.
2. Set the bright control to minimum position.
3. Set the contrast control to maximum position.
4. Adjust VR603 until 25% of gray scale will be dim completely.

2-12: VERTICAL POSITION

1. Receive the color bar pattern.
2. Adjust VR403 until horizontal line of the color bar will come to around center of the CRT.

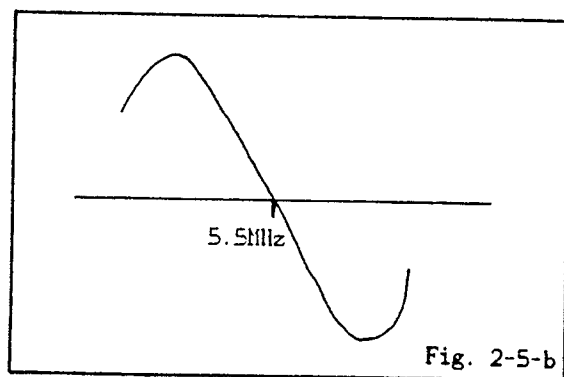
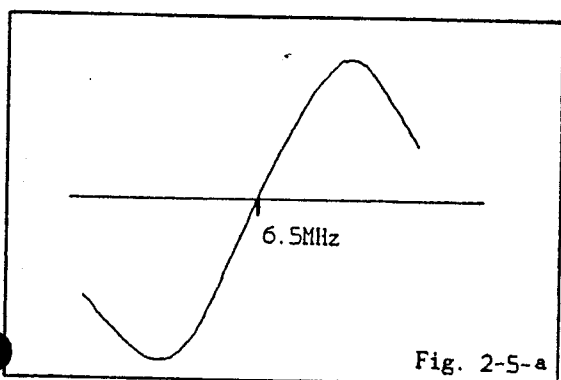
ELECTRICAL ADJUSTMENTS

2-13: HORIZONTAL SIZE

1. Receive the crosshatch pattern from the color bar generator.
2. Adjust the bright and contrast controls until the crosshatch pattern is distinct.
3. Adjust VR501 until the center of crosshatch is square.
4. Receive broadcasting signal, then confirm picture is normal

2-14: SIF

1. Connect output terminal of the Sweep-Marker Generator to TP003.
2. Connect input terminal of the Sweep-Marker Generator to TP002.
3. Adjust LA03 until 6.5MHz marker comes to around center of the waveform. (Refer to Fig. 2-5-a)
4. Adjust LA02 until 5.5MHz marker comes up to peak.
5. Adjust LA01 until the waveform which is at peak in step 4 comes up to maximum.
6. Adjust LA02 until the waveform marker (5.5MHz) will become as shown in Fig. 2-5-b.
7. Connect CH-1 of the oscilloscope to SP out and to the distortion meter. Connect CH-2 to TPA01.
8. Receive the Color Bar Pattern.
9. Adjust LA02 until waveform of CH-2 is maximum and flat.
10. Connect CH-1 of the oscilloscope to SP out. Connect CH-2 to TPA01. Connect the distortion meter to TP002.
11. Receive the DEM Pattern.
12. Adjust LA03 until waveform of CH-2 is maximum and flat.



2-15: SUB COLOR

1. Receive the color bar pattern.
2. Press the NORMAL button on the remote control unit.
3. Connect the oscilloscope to TP801.
4. Adjust VR602 until red color level is 75%.

3. PURITY AND CONVERGENCE ADJUSTMENT

NOTE

1. Turn the unit on and let it warm up for at least 30 minutes before performing the following adjustments.
2. Place the CRT surface facing east or west to reduce the terrestrial magnetism.
3. Power ON the unit and demagnetize with a Degauss Coil.

3-1: STATIC CONVERGENCE (ROUGH ADJUSTMENT)

1. Tighten the screw for the magnet. Refer to the adjusted CRT for the position. (Refer to Fig. 3-1)
If the deflection yoke and magnet are in one body, untighten the screw for the body.
2. Receive the green raster pattern from color bar generator.
3. Slide the deflection yoke until it touches the funnel side of the CRT.
4. Adjust center of screen to green, with red and blue on the sides, using the pair of purity magnets.
5. Switch the color bar generator from the green raster pattern to the crosshatch pattern.
6. Combine red and blue of the 3 color crosshatch pattern on the center of the screen by adjusting the pair of 4 pole magnets.
7. Combine red/blue (magenta) and green by adjusting the pair of 6 pole magnets.
8. Adjust the crosshatch pattern to change to white by repeating steps 6 and 7.

3-2: PURITY

NOTE

Adjust after performing adjustments in section 3-1.

1. Receive the green raster pattern from color bar generator.
2. Adjust the pair of purity magnets to center the color on the screen.
Also, adjust the pair of purity magnets to equal the width of both ends color.
3. Move the deflection yoke backward (To neck side) slowly, and stop it at the position when the whole screen is green.
4. Confirm the color concerning to the red and blue.
5. Adjust the slant of the deflection yoke while watching the screen, then tighten the fixing screw.

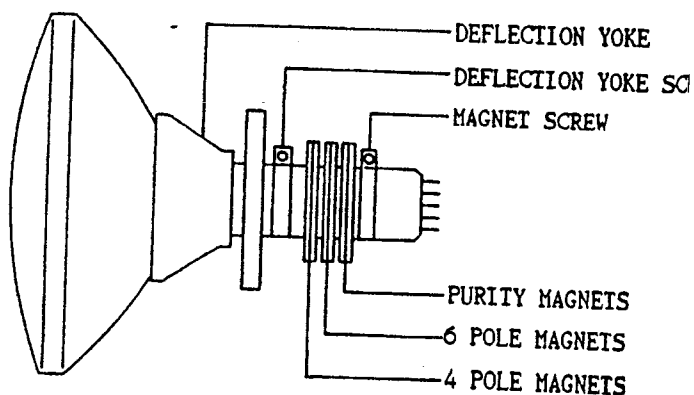


Fig. 3-1

ELECTRICAL ADJUSTMENTS

3-3: STATIC CONVERGENCE

NOTE

Adjust after performing adjustments in section 3-2.

1. Receive the crosshatch pattern from color bar generator.
2. Combine red and blue of the 3 color crosshatch pattern on the center of the screen by adjusting the pair of 4 pole magnets.
3. Combine red/blue (magenta) and green by adjusting the pair of 6 pole magnets.

3-4: DYNAMIC CONVERGENCE

NOTE

Adjust after performing adjustments in section 3-3.

1. Adjust the differences around the screen by moving the deflection yoke upward/downward and right/left. (Refer to Fig. 3-2-a)
2. Insert three wedges between the deflection yoke and CRT funnel to fix the deflection yoke. (Refer to Fig. 3-2-b)

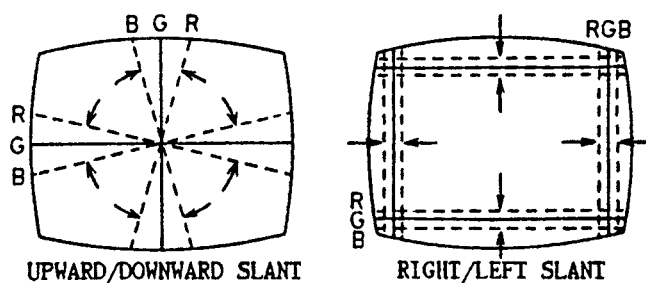


Fig. 3-2-a

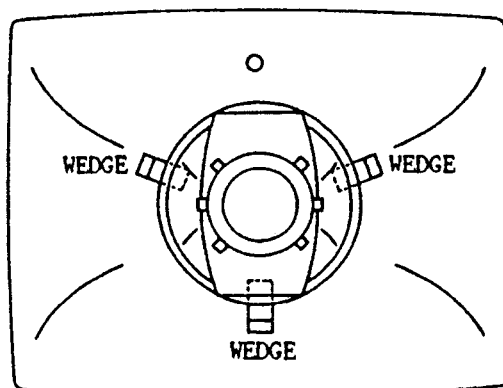
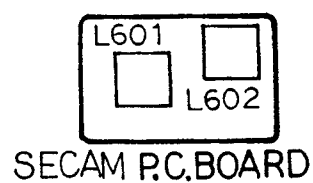
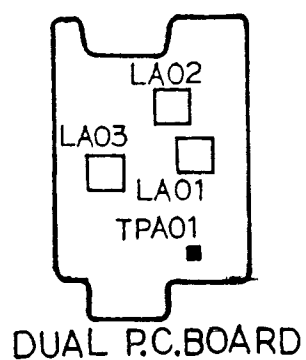
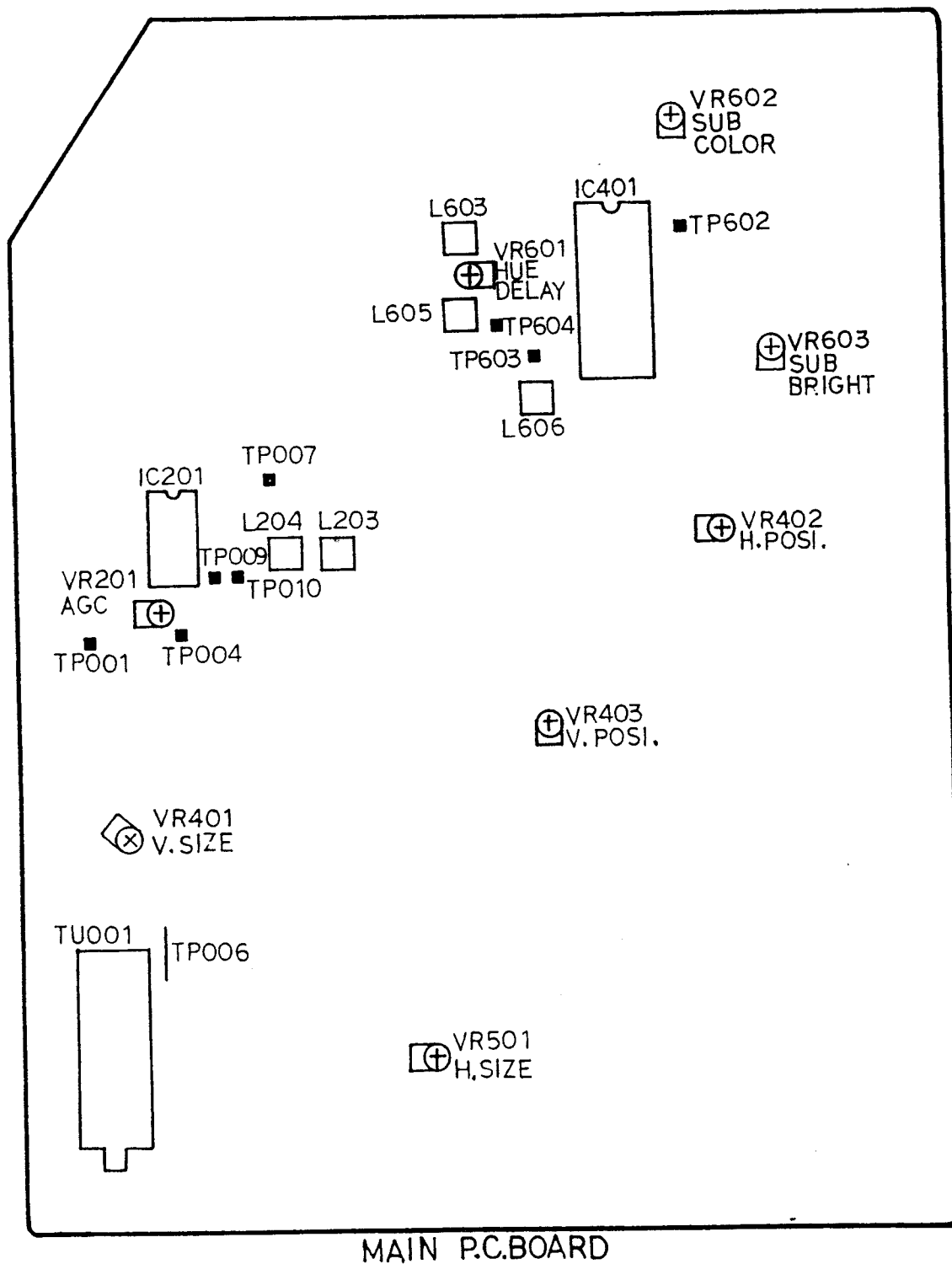
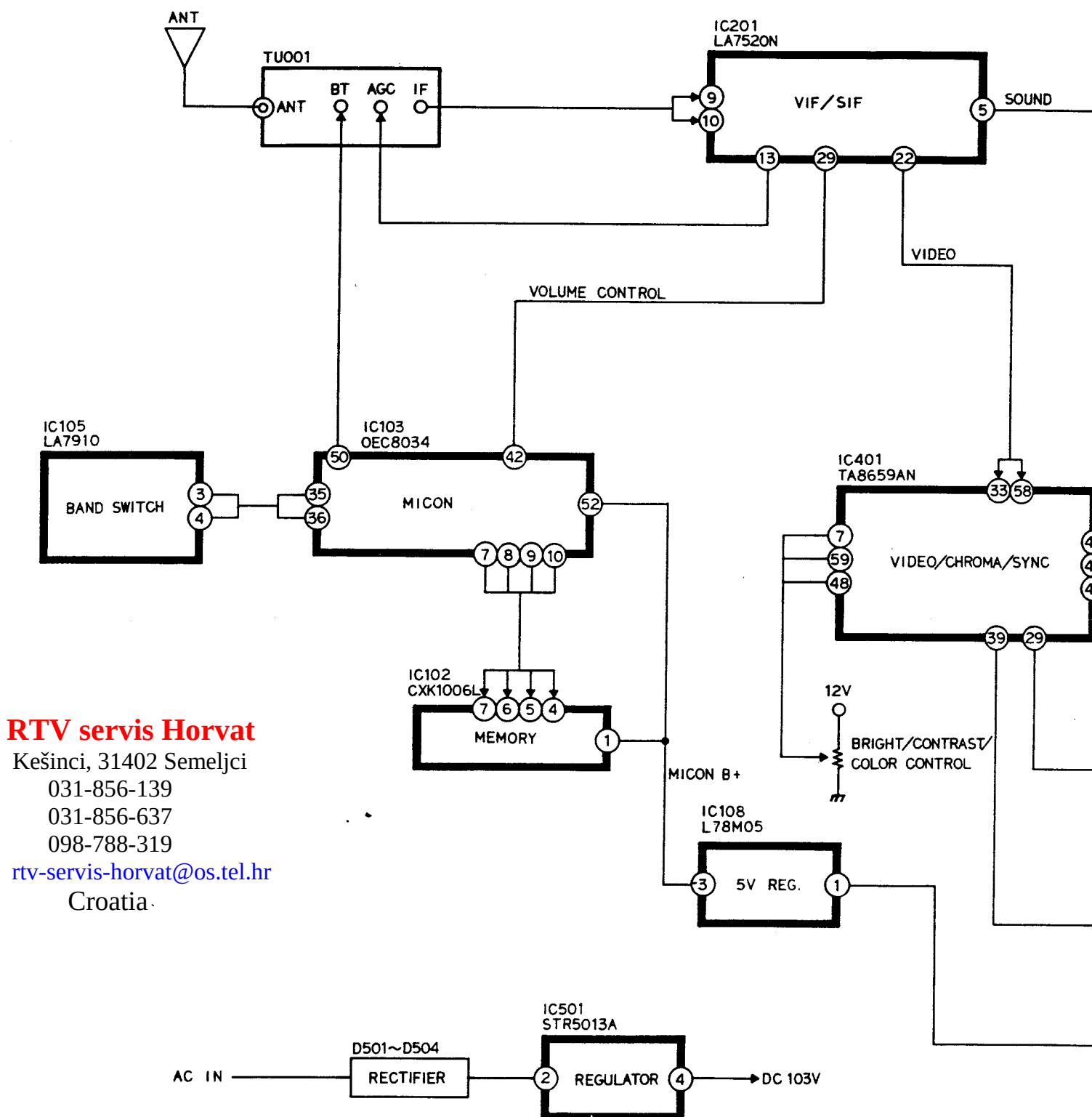


Fig. 3-2-b

MAJOR COMPONENTS LOCATION GUIDE



BLOCK DIAGRAM



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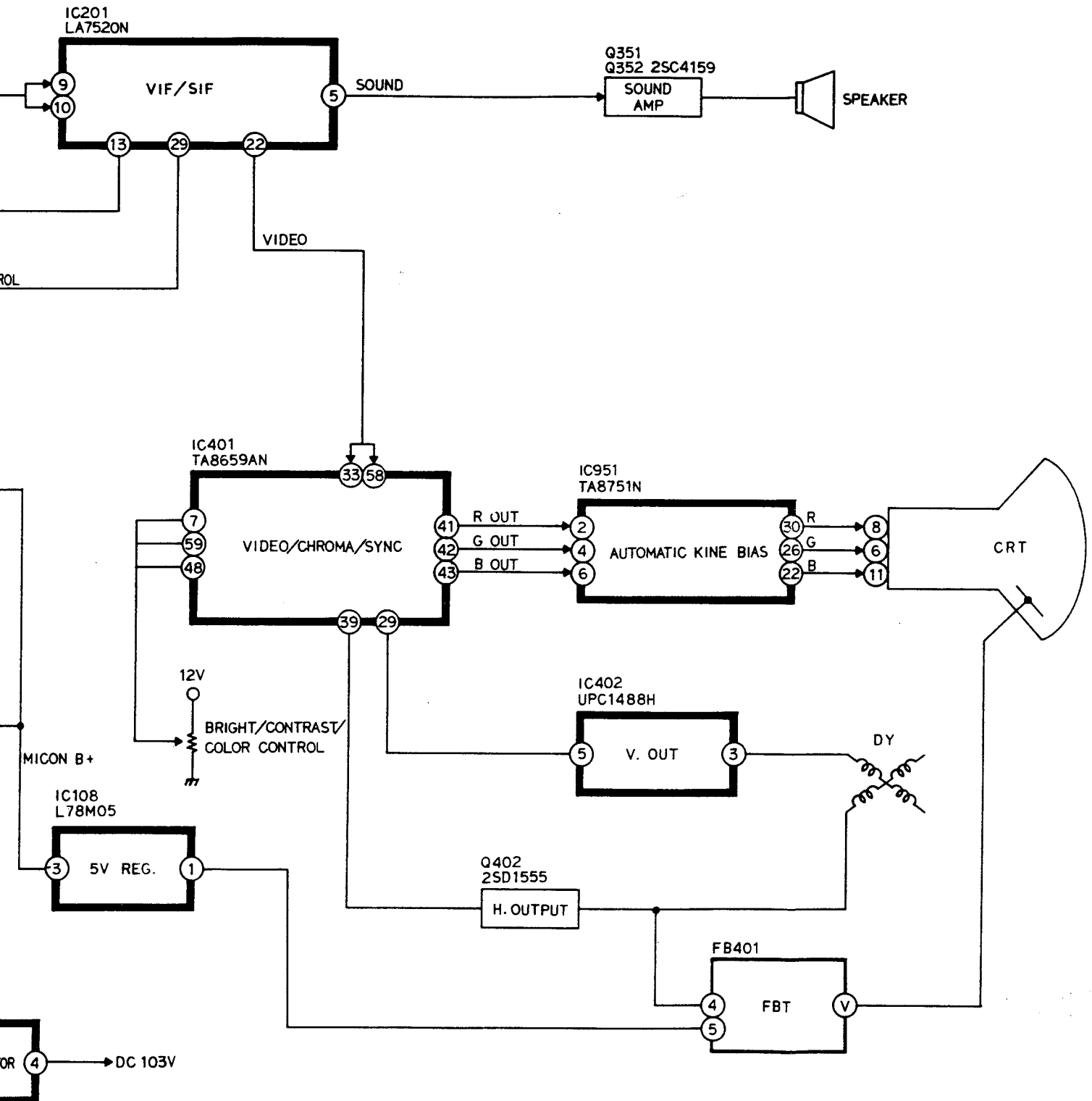
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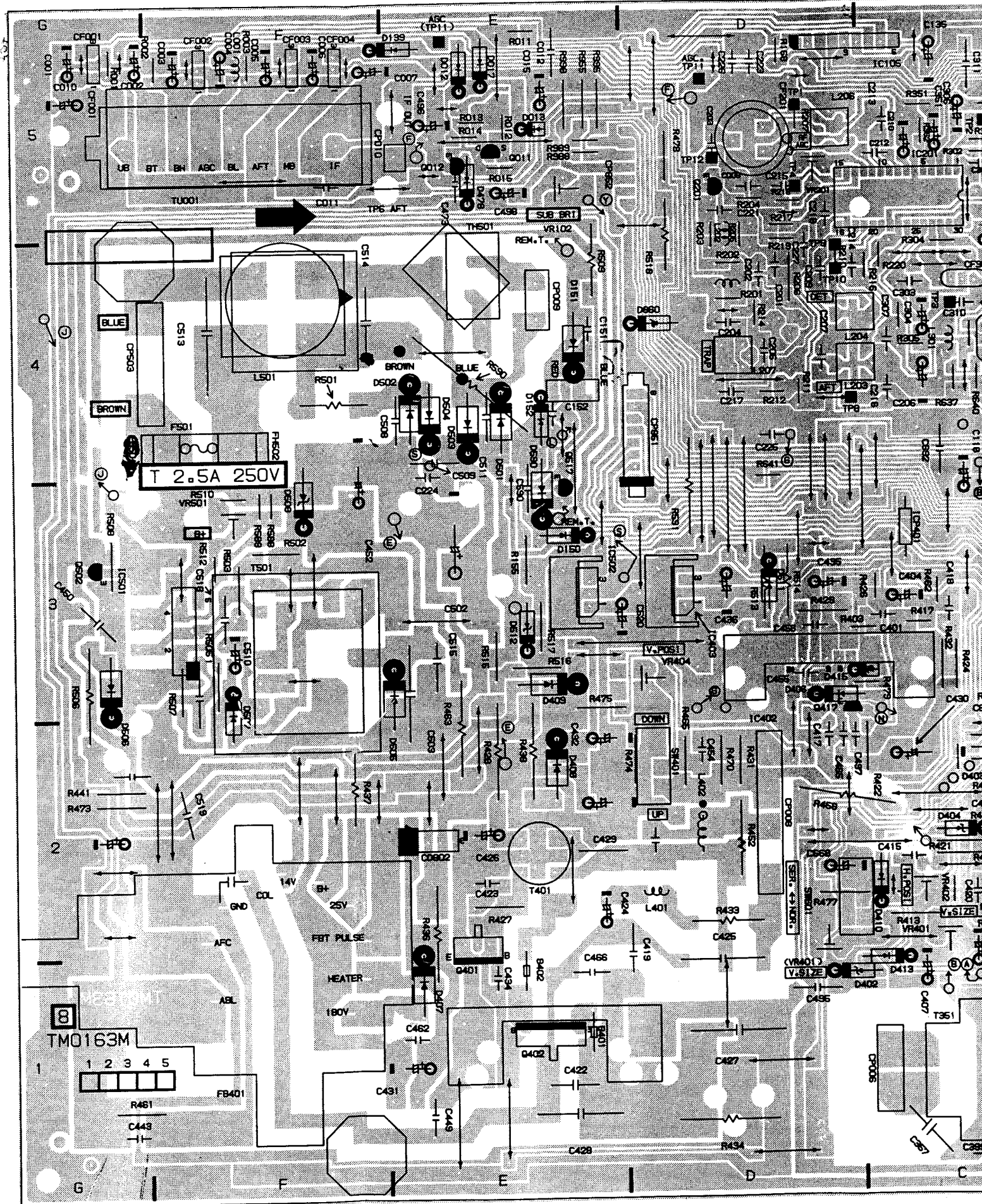
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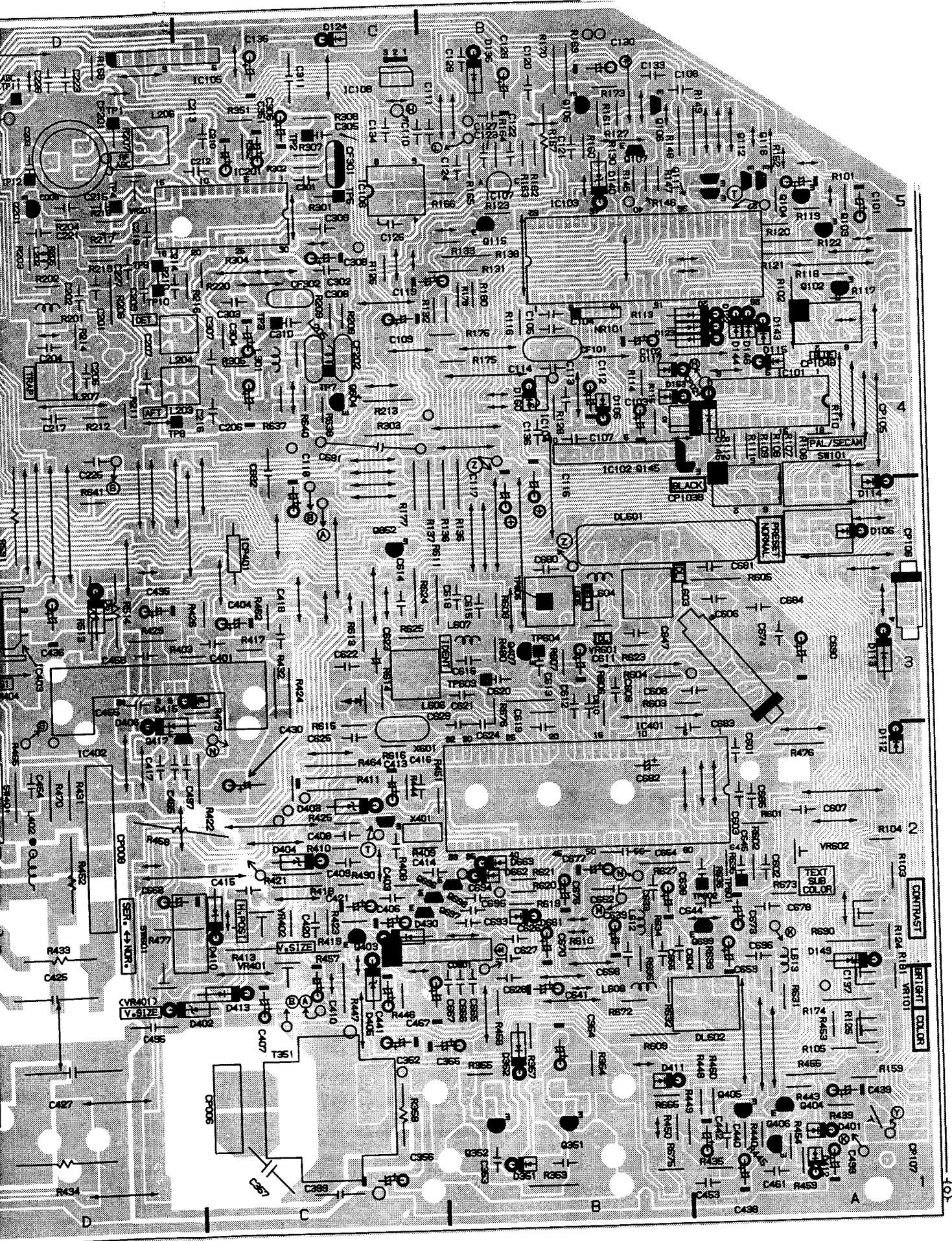
BLOCK DIAGRAM



MAIN



PRINTED CIRCUIT BOARD
MAIN



PRINTED CIRCUIT BOARD



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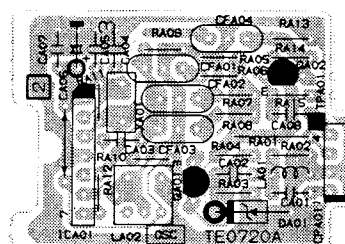
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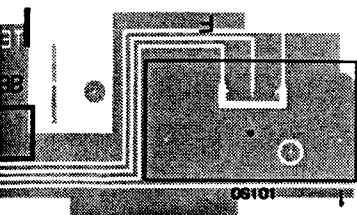
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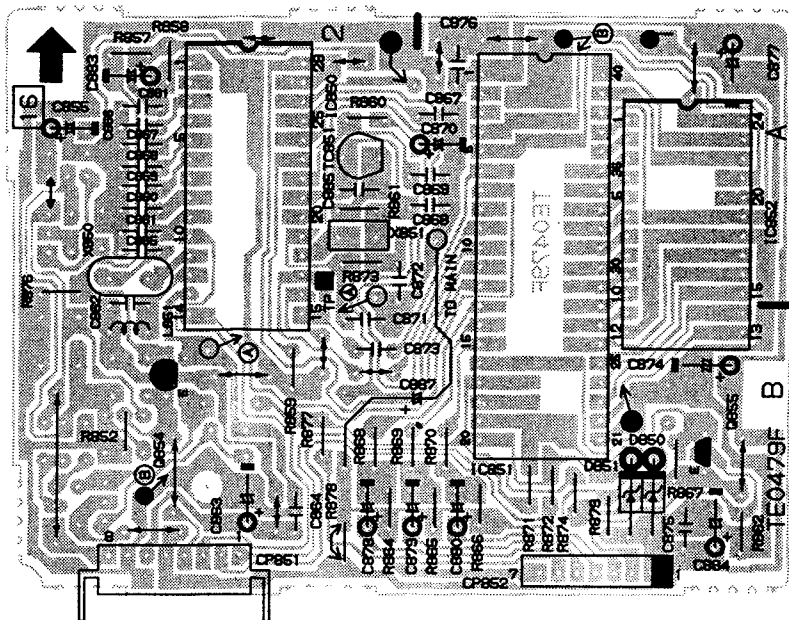
SUB



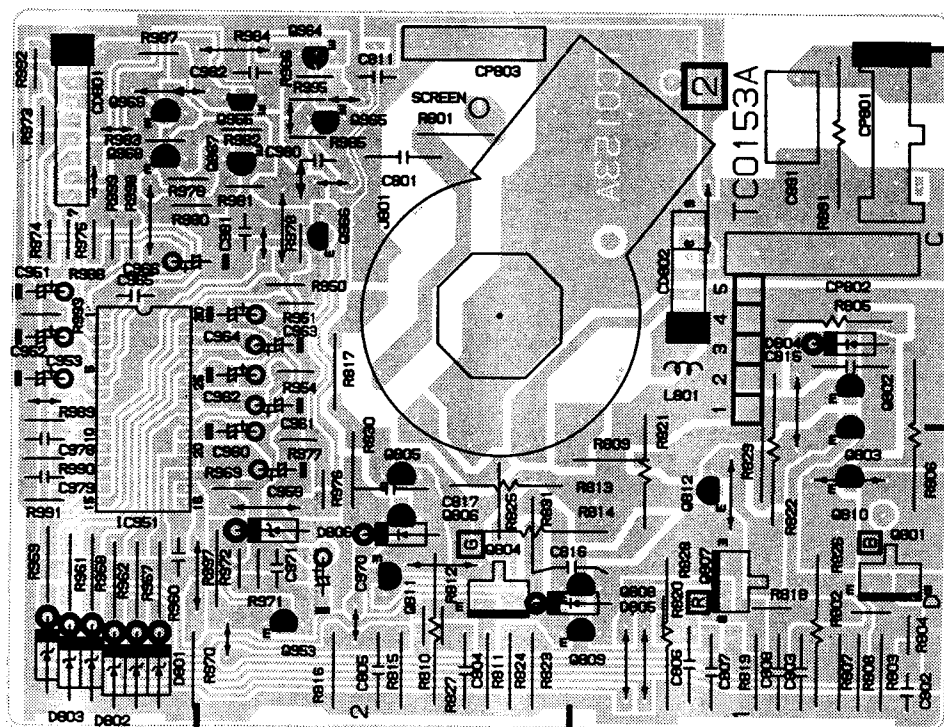
ED CIRCUIT BOARDS



T' TEXT



CRT / AKB

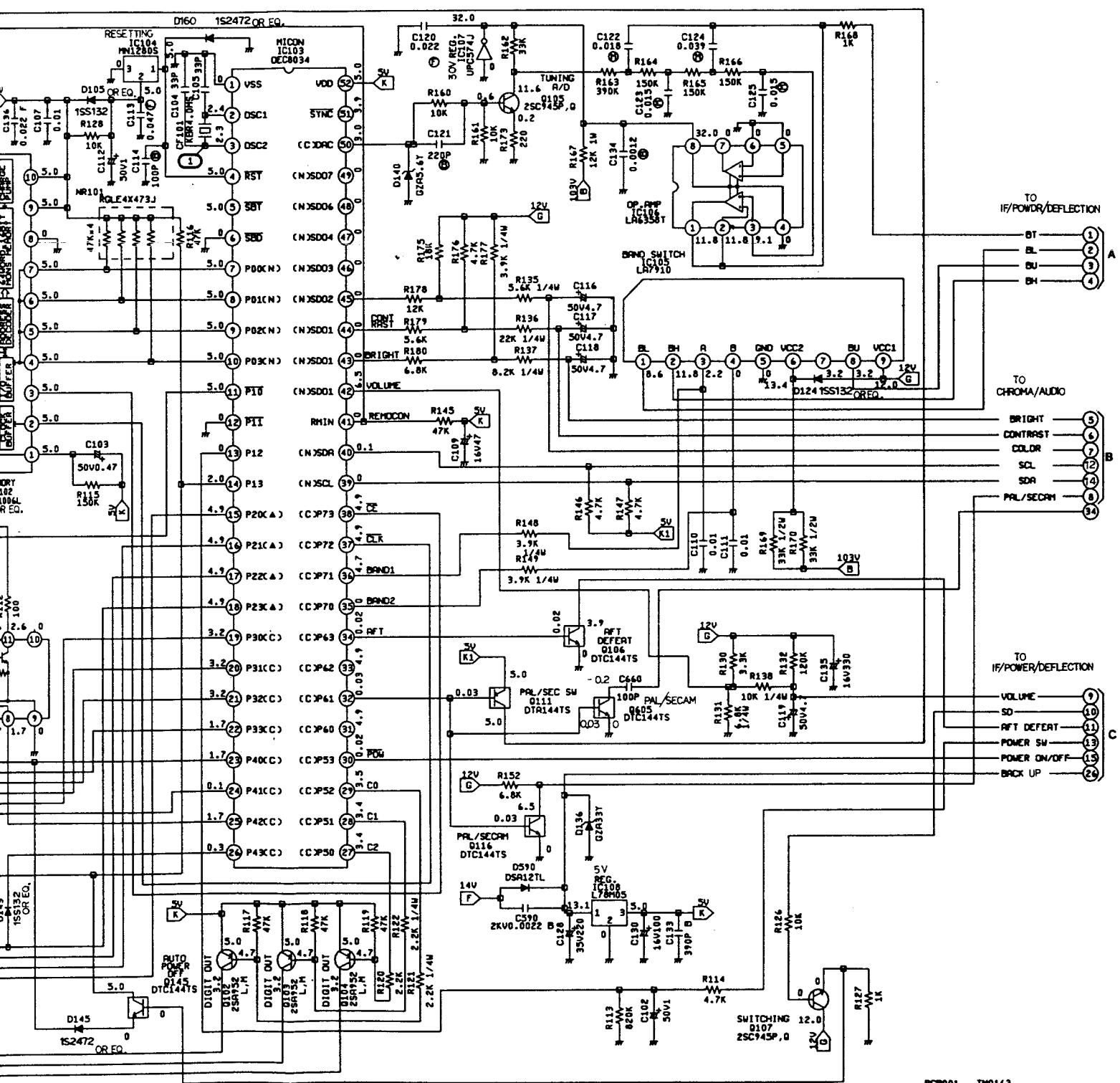


PRINTED CIRCUIT BOARDS

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MICON SCHEMATIC DIAGRAM

MICON SCHEMATIC DIAGRAM

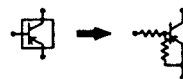
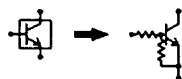


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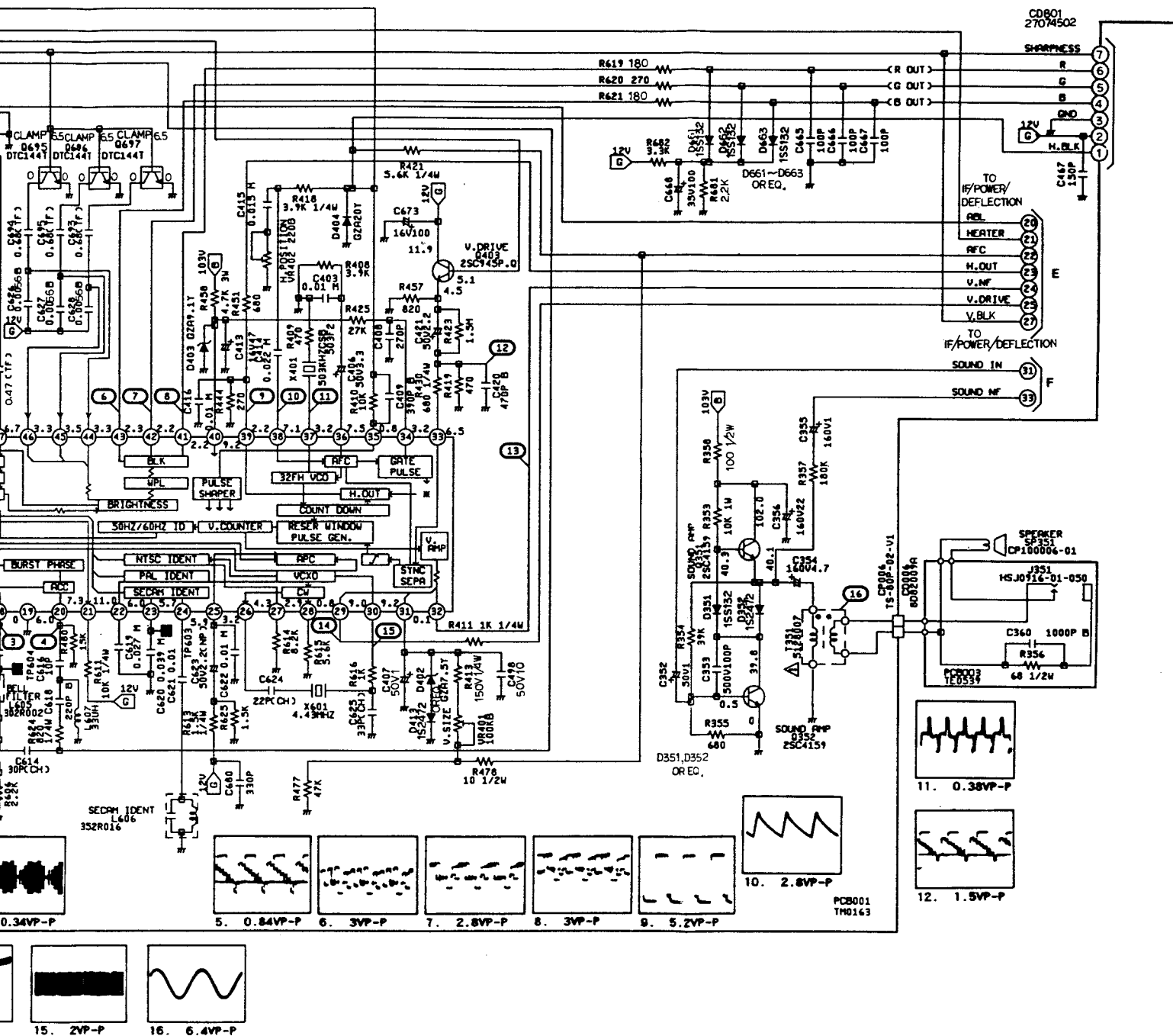
CAUTION: DIGITAL TRANSISTOR

CAUTION: DIGITAL TRANSISTOR

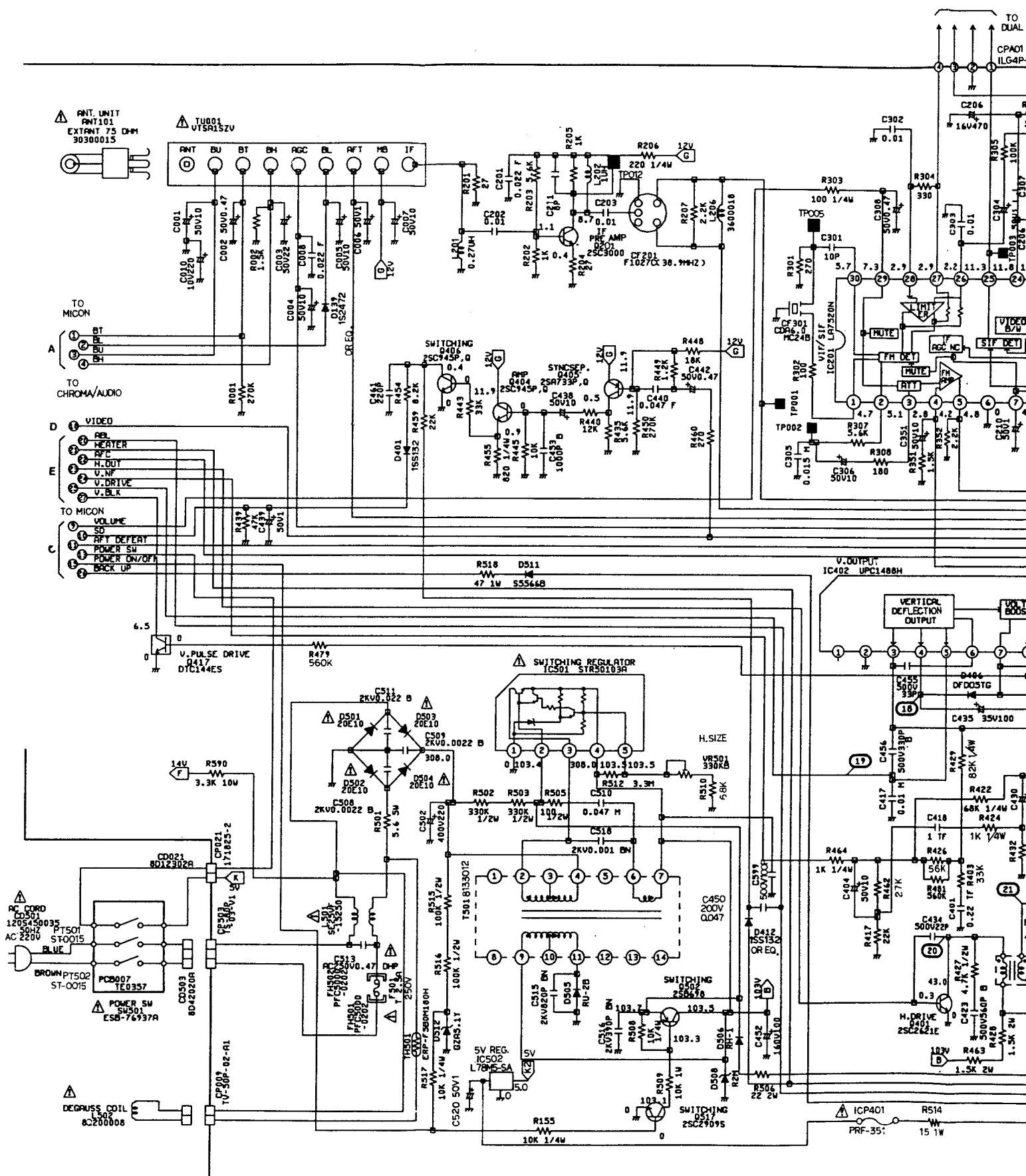
MICON
SCHEMATIC DIAGRAM
1-10706



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IF/DEFLECTION/POWER SCHEMATIC DIAGRAM



CAUTION: SINCE THESE PARTS MARKED BY  ARE CRITICAL FOR SAFETY, USE ONES DESCRIBED ON PARTS LIST ONLY.

ATTENTION: LES PIECES REPARÉES PAR UN ÉTANT DANGEREUSES AU POINT DE VUE SÉCURITÉ N'UTILISER QUE CELLES DÉCRITES DANS LA NOMENCLATURE DES PIÈCES.

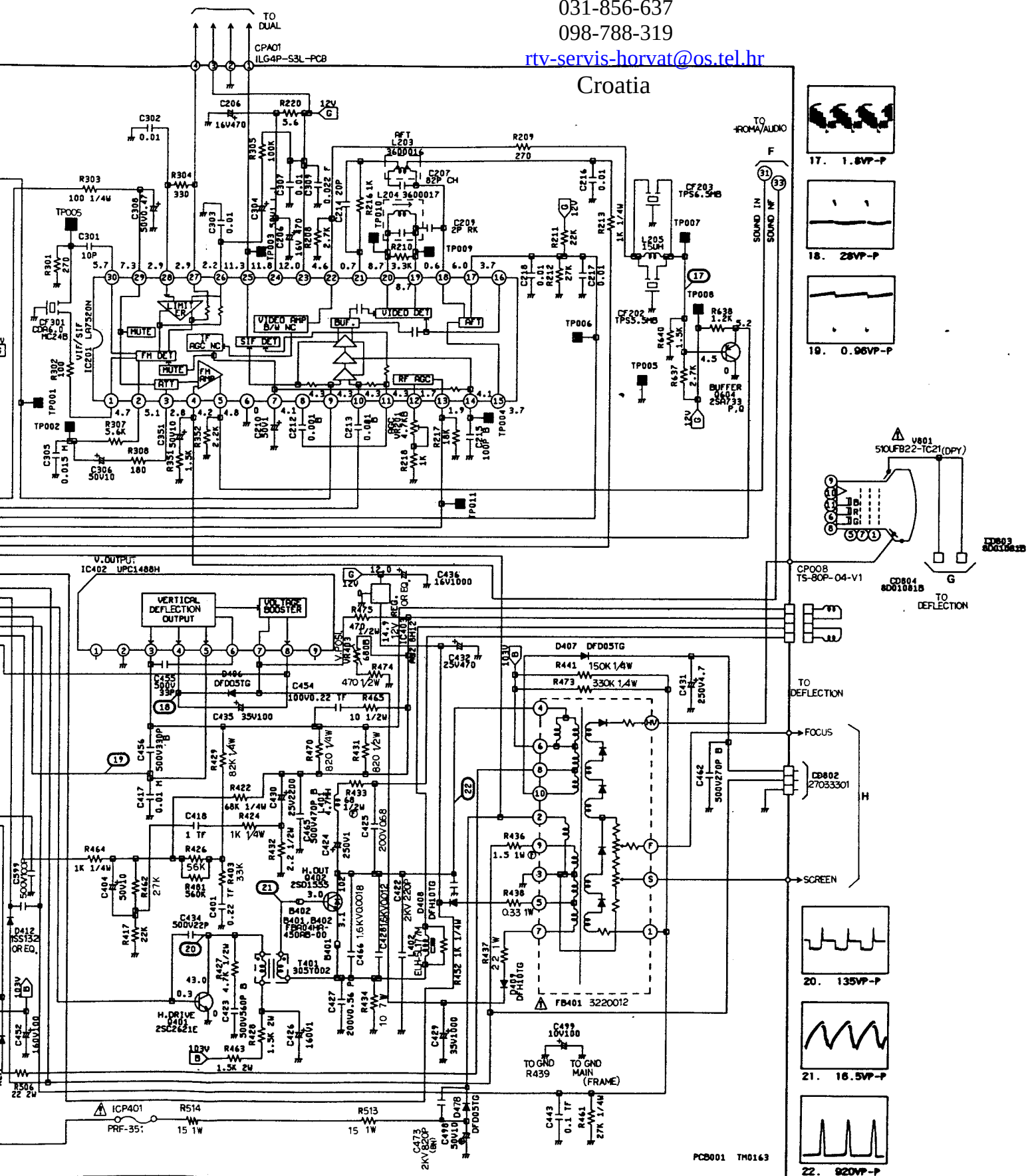
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ON/POWER SCHEMATIC DIAGRAM



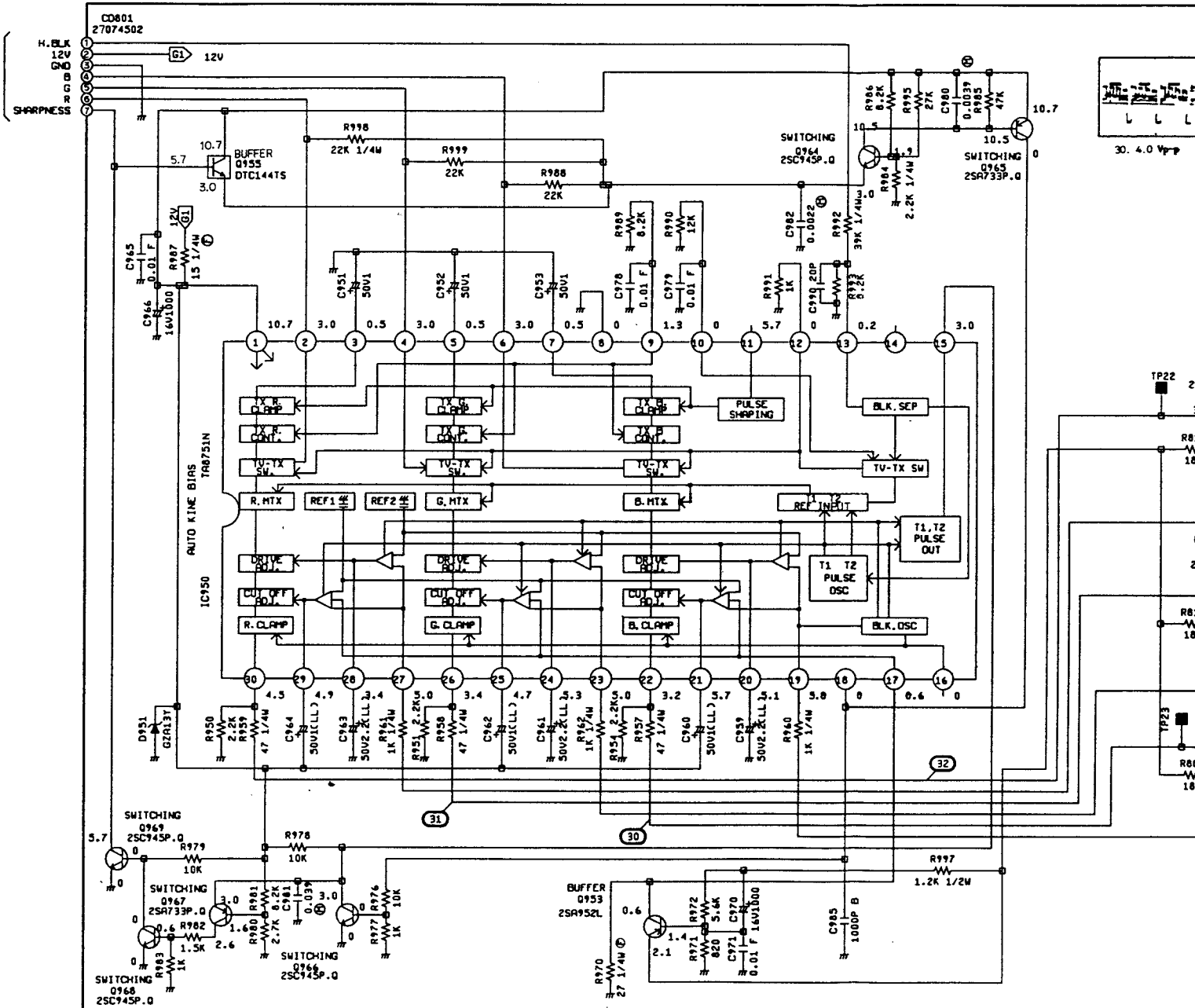
ES PAR UN  ETANT
INT DE VUE SECURITE
LS DECRITES
RE DES PIECES.

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IF/DEFLECTION/POWER SCHEMATIC DIAGRAM

1-10708

DEFLECTION SCHEMATIC DIAGRAM

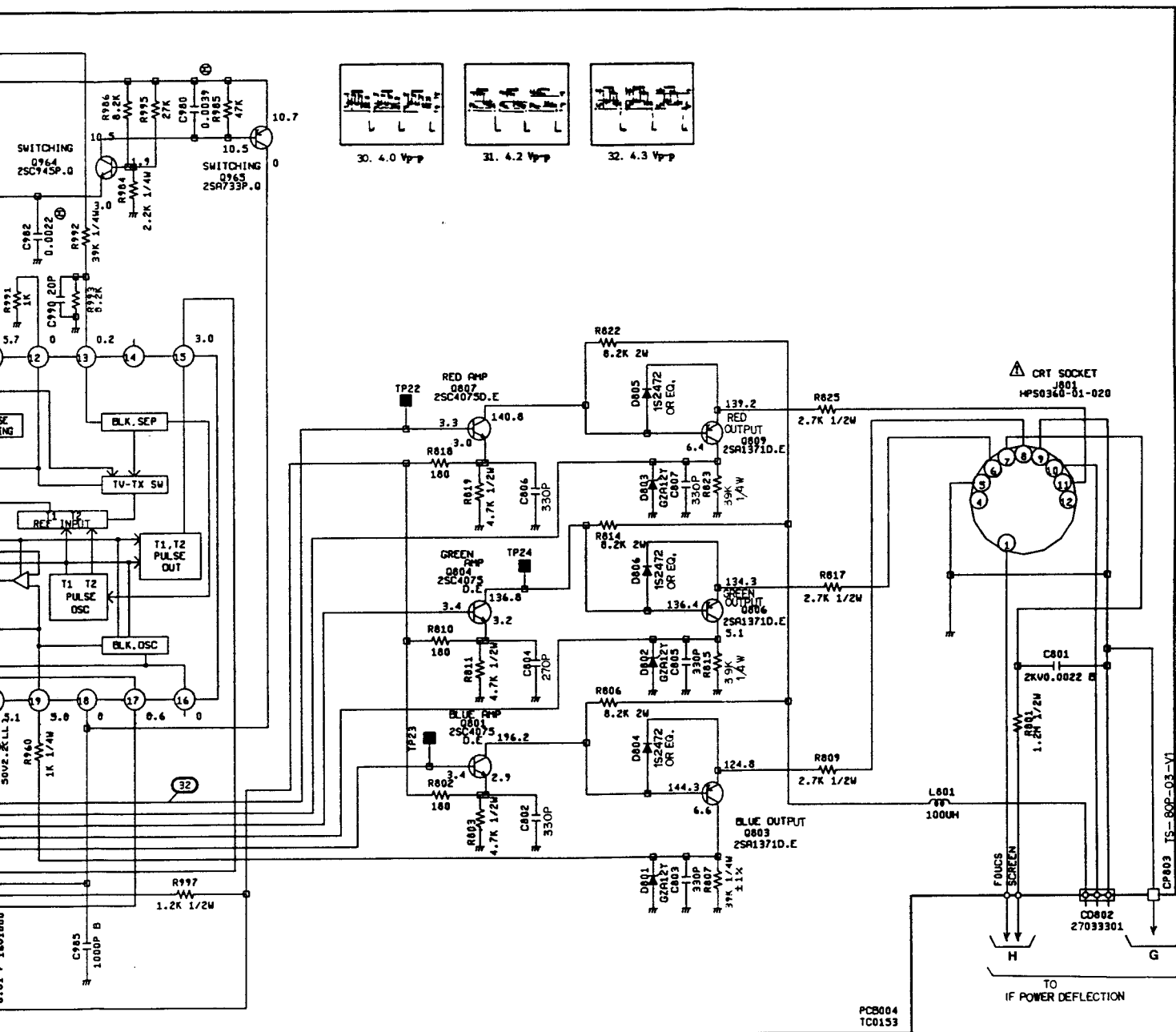


CAUTION: SINCE THESE PARTS MARKED BY ARE CRITICAL FOR SAFETY, USE ONES DESCRIBED ON PARTS LIST ONLY.

ATTENTION: LES PIECES REPARÉES PAR UN ÉTANT DANGEREUSES AU POINT DE VUE SÉCURITÉ, N'UTILISER QUE CELLES DÉCRITES DANS LA NOMENCLATURE DES PIÈCES.

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DEFLECTION SCHEMATIC DIAGRAM



DEFLECTION SCHEMATIC DIAGRAM

1-10709

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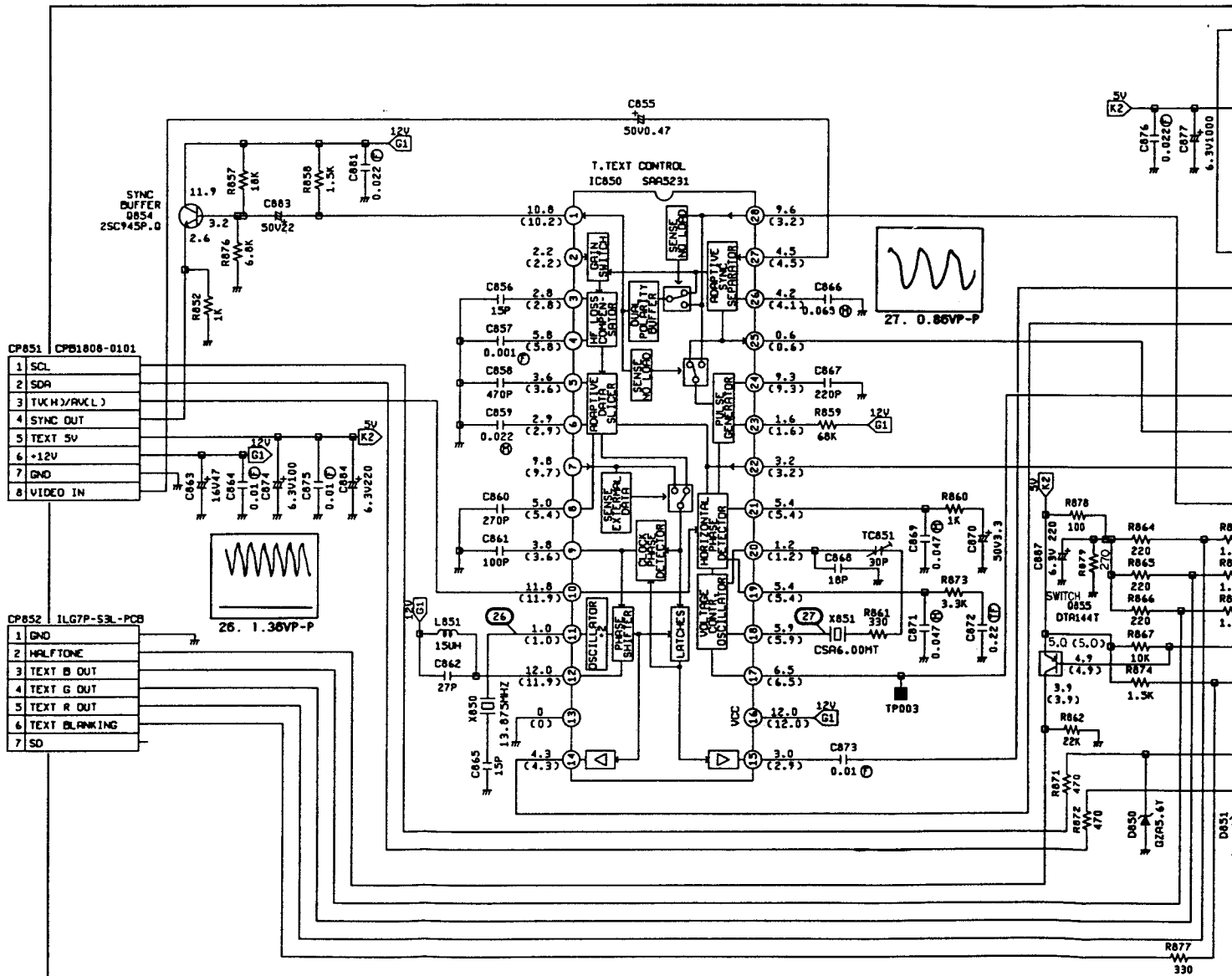
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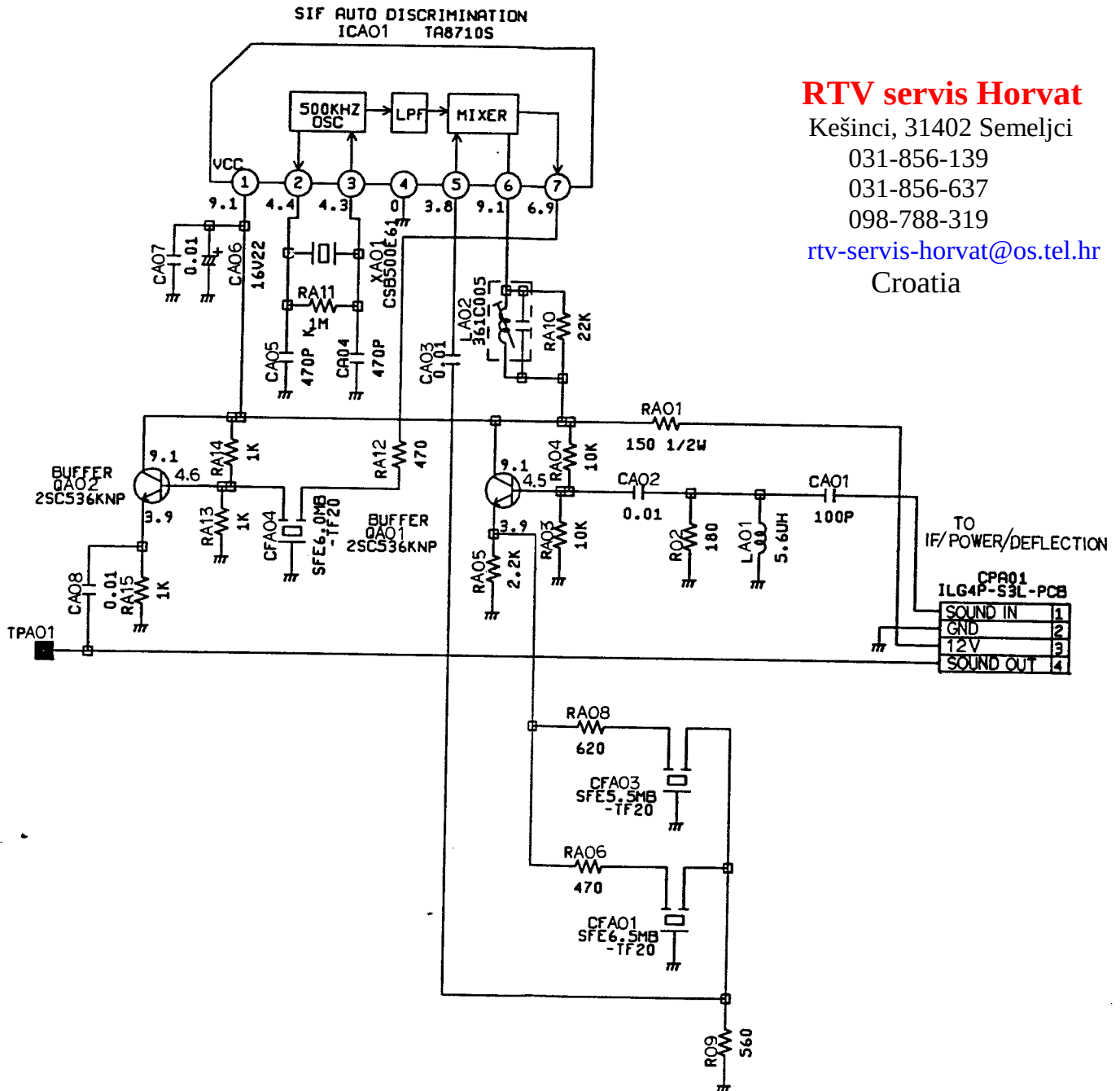
TTEXT SCHEMATIC DIAGRAM



Croatia

1-10710

DUAL SCHEMATIC DIAGRAM



PCB010 TE0720

DUAL

MECHANICAL REPLACEMENT PARTS LIST

REF. NO	PART NO	DESCRIPTION
101	A36943B720	CABINET, FRONT ASS'Y
	701WPB00009	CABINET, FRONT
	7111TPD0012	PLATE, FRONT
	7230002163	PLATE, COLOR
	7230003290	SHEET, LED
	7230003577	SHEET, OPERATION
	7232020231	PLATE, BRAND
	7260000214	SHEET, WARNING
	735TPA0111	BUTTON, PUSH
102	712TPD0018	DOOR
103	735TPA0085	BUTTON, PUSH
104	735TPA0112	BUTTON, POWER
105	702WPA0050	CABINET, BACK
	7222021282	SHEET, RATING
106	762WSA0011	ANGLE, CRT
107	800TR00003	SHEET, CRT SUPPORT
109	741TUA0003	SPRING, EARTH
201	8110630804	TAP TITE(P) BRAZIER
202	8117540A64	TAPPING(B0) TRUSS
203	8110240B04	TAP TITE(P) BIND
204	8117E30A04	TAPPING(B0) WH10
205	8300560004	SL NUT
---	J1080102C	GUARANTEE CARD
---	J3691628B	WARNING SHEET
---	J3694301A	INSTRUCTION BOOK
---	J3694303A	SCHEMATIC DIAGRAM
---	791SHA0031	LAMIFILM, BAG
---	792WHA0044	PACKAGE, TOP
---	792WHA0045	PACKAGE, BOTTOM
---	793WCD0252	GIFT BOX

THIS ELECTRICAL PARTS LIST IS STANDARD PART LIST. BUT
INTERCHANGEABLE PARTS MAY BE USED IN THE UNIT.
SEE THE INTERCHANGEABLE PARTS LIST AFTER THE STANDARD PARTS LIST.

ELECTRICAL REPLACEMENT PARTS LIST

REF. NO	PART NO	DESCRIPTION	REF. NO	PART NO	DESCRIPTION
RESISTORS			SEMICONDUCTORS (CONT)		
RA01	R00202151J	RC	D143	D1VT001320	DIODE, SILICON
R167	R3B181123J	R. METAL OXIDE	D145	D1VT024720	DIODE, SILICON
R353	R3B181103J	R. METAL OXIDE	D160	D1VT024720	DIODE, SILICON
R358	R61582101J	R. FUSE	D351	D1VT001320	DIODE, SILICON
R428	R3B18A152J	R. METAL OXIDE	D352	D1VT024720	DIODE, SILICON
R433	R61582680J	R. FUSE	D401	D1VT001320	DIODE, SILICON
R434	R5W2CE100J	R. CEMENT	D402	D93T07R50Y	DIODE, ZENER
R436	R614811R5J	R. FUSE	D403	D93T09R10Y	DIODE, ZENER
R437	R615812R2J	R. FUSE	D404	D93T02000Y	DIODE, ZENER
R438	R61481R33K	R. FUSE	D405	D93T01200Y	DIODE, ZENER
R458	R3B28B472J	R. METAL OXIDE	D406	D23TFD05TG	DIODE, RECTIFIER
R463	R3B18A152J	R. METAL OXIDE	D407	D23TFD05TG	DIODE, RECTIFIER
R501	R5W2CD5R6K	R. CEMENT	D408	D23TFH10TG	DIODE, RECTIFIER
R506	R3B18A220J	R. METAL OXIDE	D409	D23TFH10TG	DIODE, RECTIFIER
R509	R3B181103J	R. METAL OXIDE	D410	D23TFD05TG	DIODE, RECTIFIER
R513	R4B181150J	R. METAL	D411	D1VT001320	DIODE, SILICON
R514	R4B181150J	R. METAL	D412	D1VT001320	DIODE, SILICON
R510	R3B181470J	R. METAL OXIDE	D413	D1VT024720	DIODE, SILICON
R590	R5W2CF32J	R. CEMENT	D478	D23TFD05TG	DIODE, RECTIFIER
R691	R00106393J	RC	D501	D28020E100	DIODE, SILICON
R806	R3118A522J	R. METAL OXIDE	D502	D28020E100	DIODE, SILICON
R814	R3118A522J	R. METAL OXIDE	D503	D28020E100	DIODE, SILICON
R822	R3118A522J	R. METAL OXIDE	D504	D28020E100	DIODE, SILICON
R970	R63584270J	R. FUSE	D505	D2800RU280	DIODE, SILICON
R985	R00106473J	RC	D506	D28F00RH10	DIODE, RECTIFIER
R987	R63584150J	R. FUSE	D508	D28000R2M0	DIODE, AVALANCHE
R995	R00106273J	RC	D511	D25T5566B0	DIODE, RECTIFIER
CAPACITORS			D512	D93T05R10Y	DIODE, ZENER
C222	C0A0SL480D	CC	D590	D23TDSA12T	DIODE, RECTIFIER
C360	C0A0B0413K	CC	D601	D1VT001320	DIODE, SILICON
C422	C0S0BN7H2K	CC	D661	D1VT001320	DIODE, SILICON
C425	P441F2684J	CMPP	D662	D1VT001320	DIODE, SILICON
C427	P441F2564J	CMPP	D663	D1VT001320	DIODE, SILICON
C428	P442F9123J	CMPP	D801	D93T01200Y	DIODE, ZENER
C429	E087F4102M	CE	D802	D93T01200Y	DIODE, ZENER
C430	E087F3222M	CE	D803	D93T01200Y	DIODE, ZENER
C431	E025FD4R7M	CE	D804	D1VT024720	DIODE, SILICON
C450	P341F2473J	CCP	D805	D1VT024720	DIODE, SILICON
C451	C010BN713K	CC	D806	D1VT024720	DIODE, SILICON
C452	E085FB101M	CE	D850	D93005R60Y	DIODE, ZENER
C466	P442F9182J	CMPP	D851	D93T01200Y	DIODE, ZENER
C473	C0S0BN7W2K	CC	D951	D93T01300Y	DIODE, ZENER
C502	E52C0H221M	CE	ICA01	I05SB8710S	IC
C508	C0JBB07H3K	CC	IC101	I01D108210	IC
C509	C0JBB07H3K	CC	IC102	I30S1006L0	IC
C511	C0JBB07H3K	CC	IC103	I51D080340	IC
C513	P4440B474M	CMPP	IC104	I01901280S	IC
C515	C0S0BN7W2K	CC	IC105	I03S079100	IC
C516	C0S0BN7N2K	CC	IC106	I03D06358T	IC
C518	C0S0BN713K	CC	IC107	I02190574J	IC
C590	C0JBB07H3K	CC	IC108	I03A98M050	IC
C599	C0J0B0512K	CC	IC109	I52D061220	IC
C682	E0E705010M	CE	IC201	I03DE7520N	IC
C801	C02BB07H3K	CC	IC401	I05DE86590	IC
C869	P1E4F0473J	CP	IC402	I02SD14880	IC
C877	E0E7F0102M	CE	IC403	I01A98M120	IC
C887	E0E700221M	CE	IC501	I28490103A	IC
C891	E0250D220M	CE	IC502	I03B98M050	IC
C990	C0J0SL421J	CC	IC850	I9KDF52310	IC
SEMICONDUCTORS			IC851	I4KDF52430	IC
D101	0040122003	LED DISPLAY IC	IC852	I53D03517C	IC
D102	0021320090	LED	IC951	I05DE87510	IC
D103	0021320090	LED	QA01	TC3T0536K0	TRANSISTOR, SILICON
D104	0021320090	LED	QA02	TC3T0536K0	TRANSISTOR, SILICON
D105	D1VT001320	DIODE, SILICON	Q102	TALT009520	TRANSISTOR, SILICON
D106	D1VT001320	DIODE, SILICON	Q103	TALT009520	TRANSISTOR, SILICON
D108	0021320030	LED	Q104	TALT009520	TRANSISTOR, SILICON
D109	0021320030	LED	Q105	TCLT009450	TRANSISTOR, SILICON
D110	0021320030	LED	Q106	TNQT003002	COMPOUND TRANSISTOR
D111	0021320030	LED	Q107	TCLT009450	TRANSISTOR, SILICON
D112	D1VT001320	DIODE, SILICON	Q111	TPQT003002	COMPOUND TRANSISTOR
D113	D1VT024720	DIODE, SILICON	Q112	TNQT003001	COMPOUND TRANSISTOR
D114	D1VT001320	DIODE, SILICON	Q116	TNQT003002	COMPOUND TRANSISTOR
D115	D1VT001320	DIODE, SILICON	Q145	TNQT003002	COMPOUND TRANSISTOR
D117	D1VT001320	DIODE, SILICON	Q201	TC3T030000	TRANSISTOR, SILICON
D124	D1VT001320	DIODE, SILICON	Q351	TC30041590	TRANSISTOR, SILICON
D136	D93T03300Y	DIODE, ZENER	Q352	TC30041590	TRANSISTOR, SILICON
D139	D1VT024720	DIODE, SILICON	Q401	TC3002621E	TRANSISTOR, SILICON
D140	D93T05R60Y	DIODE, ZENER	Q402	TD5F015550	TRANSISTOR, SILICON
			Q403	TCLT009450	TRANSISTOR, SILICON
			Q404	TCLT009450	TRANSISTOR, SILICON
			Q405	TALT00733Q	TRANSISTOR, SILICON
			Q406	TCLT009450	TRANSISTOR, SILICON
			Q407	TNQT003002	COMPOUND TRANSISTOR
			Q417	TNQT003001	COMPOUND TRANSISTOR

ELECTRICAL REPLACEMENT PARTS LIST

REF.NO	PART NO	DESCRIPTION	REF.NO	PART NO	DESCRIPTION
SEMICONDUCTORS (CONT)			P.C. BOARDS ASS'Y		
Q502	TBWT00698E	TRANSISTOR,SILICON 2SB698E-AA	PCB001	A36943801AC	PCB ASS'Y TM0163-C
Q517	TC3T02909S	TRANSISTOR,SILICON 2SC2909S-AA	PCB002	A36943803A	PCB ASS'Y TE0538
Q604	TALT007330	TRANSISTOR,SILICON 2SA733(C)-T	PCB003	A36943827A	PCB ASS'Y TE0539
Q605	TNQT003002	COMPOUND TRANSISTOR DTC144TSTP	PCB004	A36943811A	PCB ASS'Y TC0153
Q655	TNQT003002	COMPOUND TRANSISTOR DTC144TSTP	PCB005	A36943819A	PCB ASS'Y TE0541
Q656	TNQT003002	COMPOUND TRANSISTOR DTC144TSTP	PCB006	A36943820A	PCB ASS'Y TE0540
Q657	TNQT003002	COMPOUND TRANSISTOR DTC144TSTP	PCB007	A36943834A	PCB ASS'Y TE0357
Q659	TCLT009450	TRANSISTOR,SILICON 2SC945A(C)-T	PCB008	A36943806A	PCB ASS'Y TE0551
Q801	TC3Q040750	TRANSISTOR,SILICON 2SC4075-YAC	PCB009	A36943815A	PCB ASS'Y TE0479
Q803	TA3T1371A0	TRANSISTOR,SILICON 2SA1371-AE	PCB010	A36943824A	PCB ASS'Y TE0720
Q804	TC3Q040750	TRANSISTOR,SILICON 2SC4075-YAC	MISCELLANEOUS		
Q806	TA3T1371A0	TRANSISTOR,SILICON 2SA1371-AE	ANT101	0630300015	ANT.UNIT 30300015
Q807	TC3Q040750	TRANSISTOR,SILICON 2SC4075-YAC	B401	024JT03551	CORE,BEADS FBA04HA450AB-00
Q809	TA3T1371A0	TRANSISTOR,SILICON 2SA1371-AE	B402	024JT03551	CORE,BEADS FBA04HA450AB-00
Q852	TCLT009450	TRANSISTOR,SILICON 2SC945A(C)-T	BT101	141T004003	BATTERY,MANGAN UM-4
Q854	TCLT009450	TRANSISTOR,SILICON 2SC945A(C)-T	BT102	141T004003	BATTERY,MANGAN UM-4
Q855	TPQT003002	COMPOUND TRANSISTOR DTA144TSTP	CD006	068D82009A	CORD,CONNECTOR 8D82009A
Q953	TCLT00952L	TRANSISTOR,SILICON 2SA952(C)-T L	CD021	068D12302A	CORD,CONNECTOR 8D12302A
Q955	TNQT003002	COMPOUND TRANSISTOR DTC144TSTP	CD101	0694250110	CONNECTOR PCB SIDE 174074-5
Q964	TCLT009450	TRANSISTOR,SILICON 2SC945A(C)-T	CD102	0694250110	CONNECTOR PCB SIDE 174074-5
Q965	TALT007330	TRANSISTOR,SILICON 2SA733(C)-T	CD103	1226063303	CORD,JUMPER 26063303
Q966	TCLT009450	TRANSISTOR,SILICON 2SC945A(C)-T	CD104	1228063002	CORD,JUMPER 28063002
Q967	TALT007330	TRANSISTOR,SILICON 2SA733(C)-T	CD501	120S450035	CORD,AC 120S450035
Q968	TCLT009450	TRANSISTOR,SILICON 2SC945A(C)-T	CD503	068D42020A	CORD,CONNECTOR 8D42020A
Q969	TCLT009450	TRANSISTOR,SILICON 2SC945A(C)-T	CD801	1227074502	CORD,JUMPER 27074502
COILS & TRANSFORMERS			CD802	1227033301	CORD,JUMPER 27033301
LA01	021JA65R6K	COIL 5.6 UH	CD803	068D010818	CORD,CONNECTOR 8D010818
LA02	03361C0051	COIL,SOUND IFT 361C005	CD804	068D010818	CORD,CONNECTOR 8D010818
L201	021JA6R27M	COIL 0.27 UH	CD805	068D010818	CORD,CONNECTOR 8D010818
L202	021Z731R0J	COIL 1.0 UH	CFA01	1012006R51	FILTER,CERAMIC SFE6.5MB
L203	033600016C	COIL,VIDEO IFT 3600016	CFA03	1012005R53	FILTER,CERAMIC SFE5.5MBF
L204	033600017C	COIL,VIDEO IFT 3600017	CFA04	1012006R03	FILTER,CERAMIC SFE6.0MBF
L205	021JA6150K	COIL 15 UH	CF101	1003T4R001	CERAMIC OSCILLATOR KBR-4.0MSTF
L206	033600018C	COIL,VIDEO IFT 3600018	CF201	1027038R94	FILTER,SAW F1027C
LA01	021679472K	COIL 4.7 MH	CF202	1012105R51	FILTER,CERAMIC TRAP TP55.5MB
LA02	022R000012	COIL,LINEARITY ELH-5L177M	CF203	1012106R51	FILTER,CERAMIC TRAP TP56.5MB
LA501	0294000037	COIL,LINEFILTER SE25VF-15250	CF301	1012206R04	FILTER,CERAMIC DIS. CDA6.0MC24B
LA502	028Q200008	COIL,DEGAUSS 8Q200008	CF351	116F3TH4Z1	FILTER,EMI LTSTF223ZBTB
L601	03352R011C	COIL,CHROMA 352R011	CP006	069D320018	CONNECTOR PCB SIDE TS-80P-02-V1
L602	03352R011C	COIL,CHROMA 352R011	CP008	069D340018	CONNECTOR PCB SIDE TS-80P-04-V1
L603	03352R007C	COIL,CHROMA 16035SU	CP009	069D420029	CONNECTOR PCB SIDE TV-50P-02-A1
L604	021JA6100K	COIL 10 UH	CP013	069HF4007A	F-CHIP ILG4P-S3L-PCB-S
L605	03302R002C	COIL,CHROMA 302R002	CP021	069H120099	CONNECTOR PCB SIDE 171825-2
L606	03352R016C	COIL,CHROMA 352R016	CP101	0694250100	CONNECTOR PCB SIDE 174075-5
L607	021JA6330K	COIL 33 UH	CP102	0694250100	CONNECTOR PCB SIDE 174075-5
L608	021JA6270K	COIL 27 UH	CP105	069H180209	CONNECTOR PCB SIDE ILG8P-S3L-PCB-S
L612	021JA6390K	COIL 39 UH	CP106	069Q140179	CONNECTOR PCB SIDE CPB1804-0101
L801	021673101K	COIL 100 UH	CP107	069H130209	CONNECTOR PCB SIDE ILG3P-S3L-PCB-S
L851	021Z73150K	COIL 15 UH	CP503	069D330018	CONNECTOR PCB SIDE TS-80P-03-V1
T351	045128007U	TRANS.,SOUND OUTPUT 5128007	CP601	069H190209	CONNECTOR PCB SIDE ILG9P-S3L-PCB-S
T401	03305Y002C	TRANS.,HORIZONTAL DRIVE 305Y002	CP803	069D330018	CONNECTOR PCB SIDE TS-80P-03-V1
T501	048133012W	TRANSFORMER,SWITCHING 8133012	CP851	069Q180179	CONNECTOR PCB SIDE CPB1808-0101
JACKS			CP852	069H170209	CONNECTOR PCB SIDE ILG7P-S3L-PCB-S
J351	0602161001	JACK,RCA 3.5 HJS0916-01-050	CP103A	069R960029	CONNECTOR PCB SIDE 51016-0600
J801	0662130007	SOCKET,CRT HPS0360-01-020	CP103B	069R960019	CONNECTOR PCB SIDE 52004-0610
SWITCHES			CP104A	069R960029	CONNECTOR PCB SIDE 51016-0600
SW101	0500202014	SWITCH,PUSH SPUP20002A	CP104B	069R960019	CONNECTOR PCB SIDE 52004-0610
SW102	0504101T20	SWITCH,TACT EVQ-11405K	DL601	104114R430	DELAY LINE GLASS 5102294N
SW103	0504101T20	SWITCH,TACT EVQ-11405K	DL602	1035000406	DELAY LINE ELT102294N
SW104	0504101T20	SWITCH,TACT EVQ-11405K	EAR351	074N130007	EARPHONE SE100-335
SW105	0504101T20	SWITCH,TACT EVQ-11405K	F501	0808T2R502	FUSE 2.5A 250V
SW106	0504101T20	SWITCH,TACT EVQ-11405K	FB401	0432200121	TRASFORMER,FLYBACK 3220012
SW109	0504101T20	SWITCH,TACT EVQ-11405K	FH501	06760T0001	HOLDER FUSE PFC5000-0202
SW110	0504101T20	SWITCH,TACT EVQ-11405K	FH502	06760T0001	HOLDER FUSE PFC5000-0202
SW111	0504101T20	SWITCH,TACT EVQ-11405K	ICP401	084E00R301	IC PROTECTOR PRF-315
SW112	0504101T20	SWITCH,TACT EVQ-11405K	MS002	1283200020	SILICON,SHEET 3200020
SW115	0504101T20	SWITCH,TACT EVQ-11405K	NR101	1102447302	R.NETWORK RGL4X473J
SW501	0530102008	SWITCH,PUSH ESB-76937A	OS101	077M006004	REMOTE RECEIVER KEY-C00SV2
VARIABLE RESISTORS			PT501	126C000002	TERMINAL,PIN ST-0015
VR102	V126214BT1	VR,SEMI FIXED RH0632C14R01	PT502	126C000002	TERMINAL,PIN ST-0015
VR201	V116303BT2	VR,SEMI FIXED EVNDXAA028Q3	SP351	070R143005	SPEAKER CP100006-01
VR401	V126315803	VR,SEMI FIXED RH0624C15J0E	TC851	0100514001	C,CERAMIC TRIMMER TZ03R300E
VR402	V1163H2BT2	VR,SEMI FIXED EVNDXAA028E2	TH501	D810M180H0	DEGAUSS ELEMENT ERP-F5B0M180H
VR403	V1263U2803	VR,SEMI FIXED RH0624CW2J	TM101	076G037090	TRANSMITTER EUR-531136
VR501	V1163L5BT2	VR,SEMI FIXED EVNDXAA02BY5	TU001	0145P11004	TUNER,UHF-VHF VTA1S1ZV
VR601	V116313BT2	VR,SEMI FIXED EVNDXAA02B13	V801	098G200438	COLOR PICTURE TUBE 510UF822-TC21
VR602	V1162H4BT1	VR,SEMI FIXED EVN-DCAA03BE4	XA01	1002R50006	CERAMIC OSCILLATOR CSB500E61

ELECTRICAL REPLACEMENT PARTS LIST

REF.NO	PART NO	DESCRIPTION
MISCELLANEOUS (CONT)		
X401	1002R50301	CERAMIC OSCILLATOR CSB503F2
X601	10064R43B2	CRYSTAL HC-49/U 4.43361875MHZ
X850	100613R801	CRYSTAL HC49/U 13.875MHZ
X851	10026R0004	SERIALOCK CSA6.00MT

RESISTOR

RC.....CARBON RESISTOR

CAPACITORS

CC.....CERAMIC CAPACITOR
 CE.....ALUMI ELECTROLYTIC CAPACITOR
 CP.....POLYESTER CAPACITOR
 CPP.....POLYPROPYLENE CAPACITOR
 CPL.....PLASTIC CAPACITOR
 CMP.....METAL POLYESTER CAPACITOR
 CMPL.....METAL PLASTIC CAPACITOR
 CMPP.....METAL POLYPROPYLENE CAPACITOR
 CST.....STYROL CAPACITOR

RTV servis Horvat

Kešinci, 31402 Semeljci

031-856-139

031-856-637

098-788-319

rtv-servis-horvat@os.tel.hr

Croatia

INTERCHANGEABLE PARTS LIST

NOTE: THE FOLLOWING PART(S) MAY BE SUBSTITUTED FOR PARTS INDICATED IN THE BASIC PART(S) LIST (WITH THE SAME REF.NO.). THESE PARTS SHARE THE SAME ELECTRICAL CHARACTERISTICS AND OTHER ELEMENTS FOR COMMON USAGE. EITHER PART NUMBER MAY BE USED IN THIS UNIT

REF.NO	DESCRIPTION (PART NO)	DESCRIPTION (PART NO)
D105	GMA-01-BT (D13TGMA010)	1SS132T-77 (D1VT001320)
D106	GMA-01-BT (D13TGMA010)	1SS132T-77 (D1VT001320)
D112	GMA-01-BT (D13TGMA010)	1SS132T-77 (D1VT001320)
D113	DS442X-BT (D13TDS442X)	1S2472T-77 (D1VT024720)
D114	GMA-01-BT (D13TGMA010)	1SS132T-77 (D1VT001320)
D115	GMA-01-BT (D13TGMA010)	1SS132T-77 (D1VT001320)
D117	GMA-01-BT (D13TGMA010)	1SS132T-77 (D1VT001320)
D124	GMA-01-BT (D13TGMA010)	1SS132T-77 (D1VT001320)
D139	DS442X-BT (D13TDS442X)	1S2472T-77 (D1VT024720)
D143	GMA-01-BT (D13TGMA010)	1SS132T-77 (D1VT001320)
D145	DS442X-BT (D13TDS442X)	1S2472T-77 (D1VT024720)
D160	DS442X-BT (D13TDS442X)	1S2472T-77 (D1VT024720)
D351	GMA-01-BT (D13TGMA010)	1SS132T-77 (D1VT001320)
D352	DS442X-BT (D13TDS442X)	1S2472T-77 (D1VT024720)
D401	GMA-01-BT (D13TGMA010)	1SS132T-77 (D1VT001320)
D411	GMA-01-BT (D13TGMA010)	1SS132T-77 (D1VT001320)
D412	GMA-01-BT (D13TGMA010)	1SS132T-77 (D1VT001320)
D413	DS442X-BT (D13TDS442X)	1S2472T-77 (D1VT024720)
D601	GMA-01-BT (D13TGMA010)	1SS132T-77 (D1VT001320)
D661	GMA-01-BT (D13TGMA010)	1SS132T-77 (D1VT001320)
D662	GMA-01-BT (D13TGMA010)	1SS132T-77 (D1VT001320)
D663	GMA-01-BT (D13TGMA010)	1SS132T-77 (D1VT001320)
D804	DS442X-BT (D13TDS442X)	1S2472T-77 (D1VT024720)
D805	DS442X-BT (D13TDS442X)	1S2472T-77 (D1VT024720)
D806	DS442X-BT (D13TDS442X)	1S2472T-77 (D1VT024720)
DL601	EFDEN645A31F (104114R43G)	ADL-CP145 (104A14R43F)
IC102	CXK1006L (130S1006L0)	CXK1008L (130S1008L0)
IC403	AN78M12 (101A98M120)	L78M12-SA (103B98M120)