MX-750

AKAI SERVICE MANUAL

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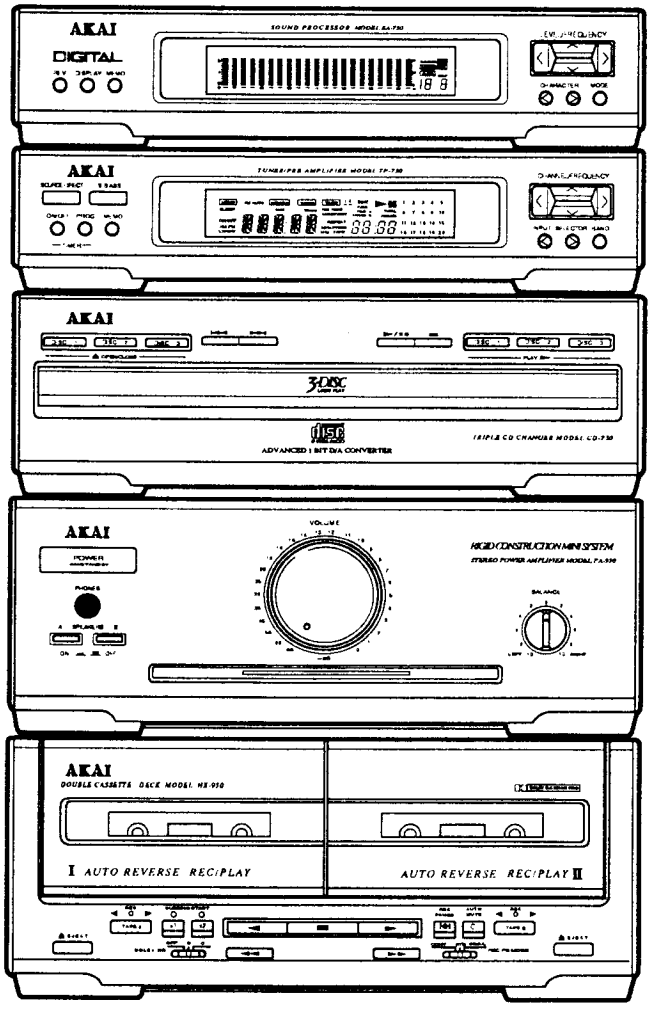


COMPACT disc DIGITAL AUDIO

SYSTEM MX-950

14905

MINI COMPONENT SYSTEM

MX-750

(TP-750/EA-750/PA-750/HX-750/CD-750)

MX-950

(TP-750/EA-750/PA-950/HX-950/CD-750)

TABLE OF CONTENTS

SAFETY INSTRUCTIONS 3
INFORMATIONS 4

MODEL TP-750
SPECIFICATIONS 5
I. DISASSEMBLY 6
II. PRINCIPAL PARTS LOCATION 7
III. ADJUSTMENT 8
3-1. INSTRUMENT CONNECTIONS 8
3-2. ADJUSTMENT 9
IV. PARTS LIST 10
INDEX 13
ABBREVIATION (TUNER) 14

MODEL EA-750
SPECIFICATIONS 15
I. DISASSEMBLY 16
II. PRINCIPAL PARTS LOCATION 17
III. PARTS LIST 18
INDEX 22

MODEL PA-750/950
SPECIFICATIONS 23
I. DISASSEMBLY 24
II. PRINCIPAL PARTS LOCATION 25
III. PARTS LIST 26
INDEX 30
ABBREVIATIONS (AMPLIFIER) 31

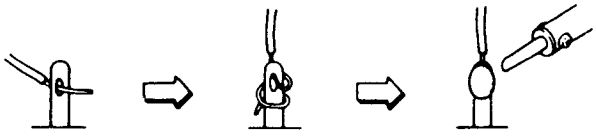
MODEL HX-750/950
SPECIFICATIONS 33
I. DISASSEMBLY 34
II. PRINCIPAL PARTS LOCATION 35
2-1. MODEL HX-750 35
2-2. MODEL HX-950 36
III. REPLACEMENT OF PRINCIPAL MECHANICAL PARTS 37
3-1. REPLACEMENT OF THE PINCH ROLLER BLOCK 37
3-2. REPLACEMENT OF THE PB HEAD (MODEL HX-750 TAPE I ONLY) 37
3-3. REPLACEMENT OF THE REC/PB HEAD (EXCEPT MODEL HX-750 TAPE I) 37
3-4. REPLACEMENT OF THE CAPSTAN MOTOR 37
3-5. REPLACEMENT OF THE DRIVE BELT 37
IV. MECHANICAL ADJUSTMENT 38
4-1. ADJUSTMENT OF THE PB HEAD AZIMUTH ALIGNMENT (MODEL HX-750 TAPE I ONLY) 38
4-2. ADJUSTMENT OF THE REC/PB HEAD AZIMUTH ALIGNMENT (EXCEPT MODEL HX-750 TAPE I) 38
V. ELECTRICAL ADJUSTMENT 39
5-1. MODEL HX-750 39
5-2. MODEL HX-950 40
VI. PARTS LIST 41
INDEX 48
ABBREVIATIONS (CASSETTE) 50

MODEL CD-750
SPECIFICATIONS 51
I. DISASSEMBLY 52
II. PRINCIPAL PARTS LOCATION 53
III. REPLACEMENT OF THE PRINCIPAL COMPONENTS 54
3-1. DISMANTLING PROCEDURE OF THE COMPONENTS 54
3-2. REMOVAL OF THE TRAVERSE MECHA. 54
3-3. REMOVAL OF THE MAIN PCB 54
3-4. REMOVAL OF THE TRAY BLOCK 55
3-5. REPLACEMENT OF THE PICK UP BLOCK 55
3-6. REPLACEMENT OF THE SPINDLE MOTOR 55
3-7. REPLACEMENT OF THE SLED MOTOR 56
3-8. REPLACEMENT OF THE LOADING MOTOR 56
3-9. REPLACEMENT OF THE TABLE MOTOR 56
IV. ELECTRICAL ADJUSTMENT 57
V. PARTS LIST 58
INDEX 62
ABBREVIATIONS (COMPACT DISC) 63

★SAFETY INSTRUCTIONS

PRECAUTIONS DURING SERVICING

1. Parts identified by the ⚠ (*) symbol are critical for safety. Replace them only with the parts number specified.
2. In addition to safety, other parts and assemblies are specified for conformance with such regulations as those applying to spurious radiation.
   These must also be replaced only with the specified replacements.
   Examples: RF converters, tuner units, antenna selector switches, RF cables, noise blocking capacitors, noise blocking filters, etc.
3. Use specified internal wiring. Note especially:
   1) Wires covered with PVC tubing
   2) Double insulated wires
   3) High voltage leads
4. Use specified insulating materials for hazardous live parts. Note especially:
   1) Insulation Tape
   2) PVC tubing
   3) Spacers (insulating barriers)
   4) Insulation sheets for transistors
   5) Plastic screws for fixing micro switches
5. When replacing AC primary side components (transformers, power cords, noise blocking capacitors, etc.), wrap the ends of the wires securely around the terminals before soldering.



6. Make sure that wires do not contact heat producing parts (heat sinks, oxide metal film resistors, fusible resistors, etc.).
7. Check that replaced wires do not contact sharp edged or pointed parts.
8. Also check areas surrounding repaired locations.
9. Make sure that foreign objects (screws, solder droplets, etc.) do not remain inside the set.

MAKE YOUR CONTRIBUTION TO PROTECT THE ENVIRONMENT

Used batteries with the ISO symbol for recycling as well as small accumulators (rechargeable batteries), mini-batteries (cells) and starter batteries should not be thrown into the garbage can. Please leave them at an appropriate depot. All other household batteries can be thrown out with the household waste.

SAFETY CHECK AFTER SERVICING

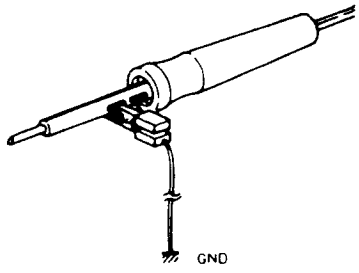
After servicing, make measurements of leakage-current or resistance in order to determine that exposed parts are acceptably insulated from the supply circuit.
The leakage-current measurement should be done between accessible metal parts (such as chassis, ground terminal, microphone jacks, signal input/output connec-

ohms paralleled with a 0.15 µF capacitor, under the unit's normal working conditions.
The leakage-current should be less than 0.5 mA rms AC.
The resistance measurement should be done between accessible exposed metal parts and power cord plug prongs with the power switch (if included) "ON". The resistance should be more than 2.2 M Ohms.

PRECAUTIONS IN REPAIRING

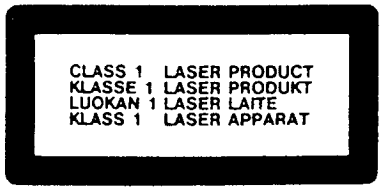
When repairing or adjusing the unit, please note the following points.

1. Do not put excessive pressure on the mechanical part (operation part), including the pick-up block, as extremely high mechanical precision is required in these parts.
2. When the base is removed for repair or adjustment, make sure that there are no metal obiects in the narrow gap between the P.C. board or the mecha parts and the base.
3. The Micro-Computer and the CD signal processing ICs can be damaged by static electricity or leakage from a soldering iron during repairing. While soldering, please take the precautions against leakage as in the illustration.

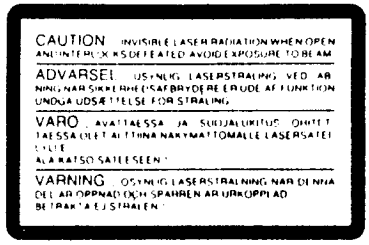


4. Do not loosen any screws in the pick-up block.
   When handling the pick-up block, please refer to the points to NOTE when replacing the pick up block.
5. To avoid hazardous invisible Laser Radiation, DO NOT look at the Laser Beam (Objective lens) directly.
6. On models for some countries, laser warning labels are affixed on the unit and inside of the unit, as shown below.For your safety, read these labels carefully when repairing or adjusting the unit.

[EUROPE, SCANDINAVIA, UK and AUSTRALIA]



Label affixed on the rear panel of the unit



★INFORMATIONS

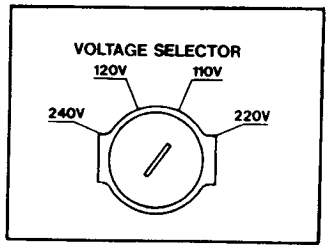
SYMBOLS FOR PRIMARY DESTINATION

Alphabet indicates the destination of the units as listed below.

Symbol	Principal Destination
[B]	UK
[E]	Europe (except UK)
[S]	Australia
[V]	Germany
[U]	Universal
[Y*]	Custom version

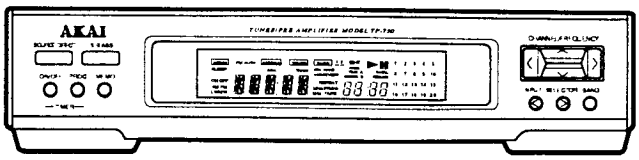
VOLTAGE CONVERSION ([U] Model only)

Before connecting the power cord, set the VOLTAGE SELECTOR located on the rear panel of the PA-750/950 so that the correct voltage for your area is indicated.



PRECAUTION ABOUT THE POWER SUPPLY

The power supply of the EA-750, HX-750/950 and CD-750 is supplied from the PA-750/950 through the TP-750. So when repair of the TP-750, EA-750, PA-750/950, HX-750/950 and CD-750 is necessary, repair should be made together with the TP-750, EA-750, PA-750/950, HX-750/950 and CD-750.



TUNER/PRE AMPLIFIER

MODEL TP-750

SPECIFICATIONS

Tuner section

FM

Tuning frequency range	87.5 to 108MHz
Usable sensitivity	13.2dBf [E/U], 17.2dBf [V] (IHF, 3% THD)
Quieting sensitivity	
Mono	17.2dBf [E/U], 21.2dBf [V]
Stereo	31.2dBf [E/U], 35.2dBf [V]
S/N ratio	
Mono	70dB [E/U], 65dB [V] (IHF)
Stereo	60dB (IHF)
Frequency response	30Hz to 15kHz (±1dB)
Total harmonic distortion	
Mono	0.5% (at 1kHz)
Stereo	0.3% [E/U], 0.7% [V] (at 1kHz)
Selectivity	55dB (± 400kHz)
Image rejection	50dB
Stereo separation	45dB (at 1kHz)
Capture ratio	2dBf
AM suppression	60dB
Spurious rejection	55dB
IF rejection	90dB
Output level	500mV [E/U], 450mV [V] (100% MOD)

MW

Tuning frequency range	531 to 1602kHz (9kHz step) 530 to 1710kHz [U] (10kHz step)
Usable sensitivity	500μVm
S/N ratio	36dB
Selectivity	15dB
Image rejection	37dB
IF rejection	40dB
Output level	150mV (30% MOD)

LW

Tuning frequency range	144 to 351kHz [E/U], 144 to 288kHz [V] (1kHz step)
Usable sensitivity	800μVm
S/N ratio	28dB
Selectivity	17dB
Image rejection	33dB
IF rejection	40dB
Output level	150mV (30% MOD)

Pre amplifier Section

Input sensitivity	
PHONO	3mV/47 ohms
VCR/AUX	230mV/22k ohms
Output level	VCR 150mV/1k ohms
S/N ratio	
PHONO	63dB
except PHONO	77dB
Residual noise	0.1mV
Channel separation	65dB
Frequency response	10Hz to 100kHz (10Hz : −4dB, 100kHz : −3dB)
Super bass effects	6dB/50Hz (SB−1) 12dB/50Hz (SB−2)

[GENERAL]

Power consumption	10W
Dimension	270(W) x 61(H) x 304(D) mm
Weight	1.8kg

Standard accessories

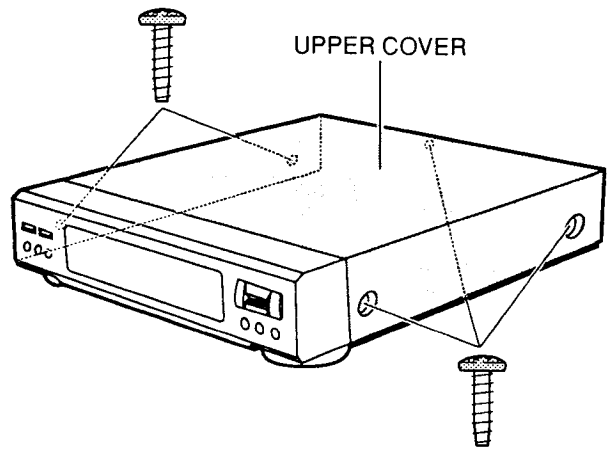
FM long wire antenna	x1
AM loop antenna	x1
Plug adaptor	x1

* For improvement purposes, specifications and design are subject to change without notice.

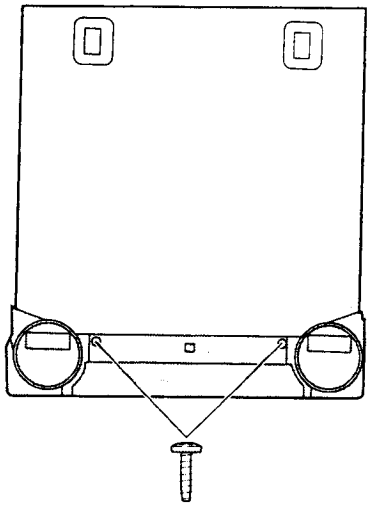
I. DISASSEMBLY

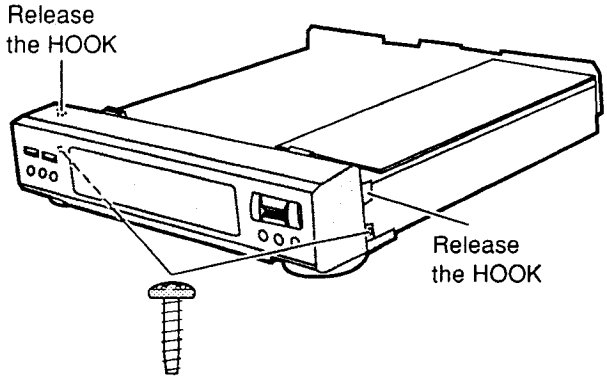
In case of trouble etc., necessitating dismantling, please dismantle in the order shown in the illustrations. Reassemble in the reverse order.

1. Removal of the UPPER COVER



2. Removal of the FRONT PANEL





II. PRINCIPAL PARTS LOCATION

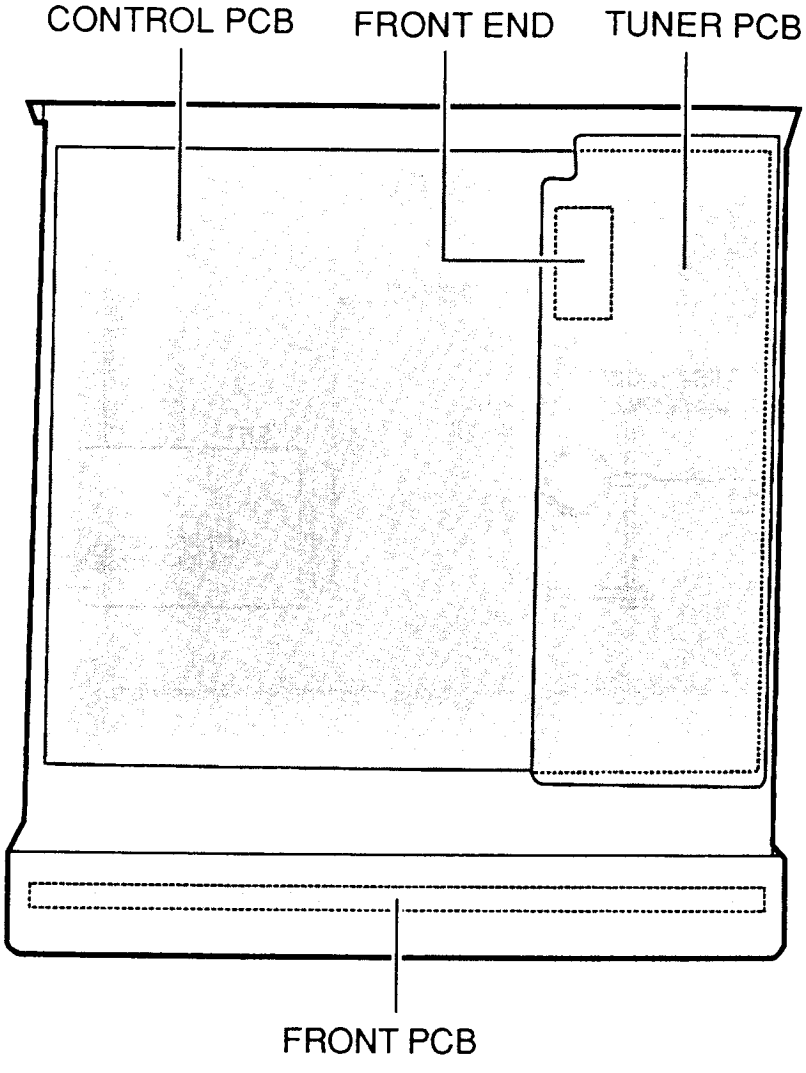


Fig.2-1 Top view

III. ADJUSTMENT

3-1.INSTRUMENT CONNECTIONS

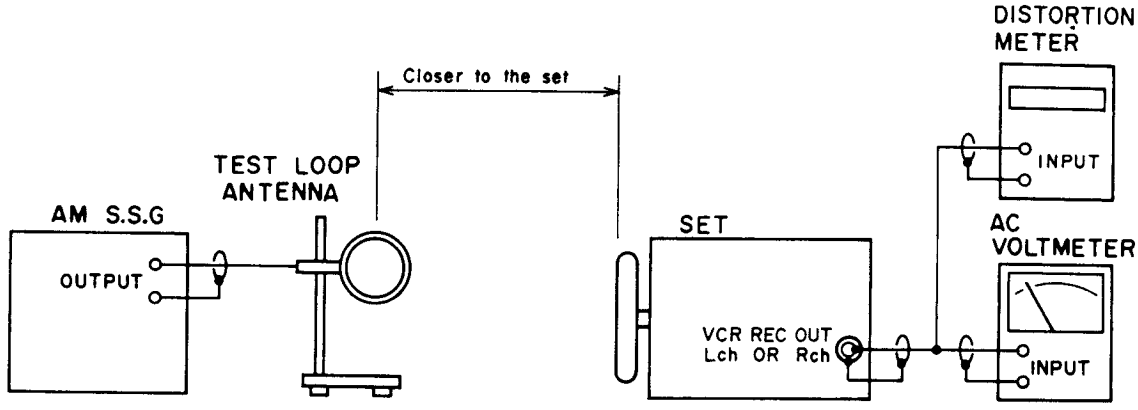


Fig.3-1 Instrument Connection of AM Adjustment

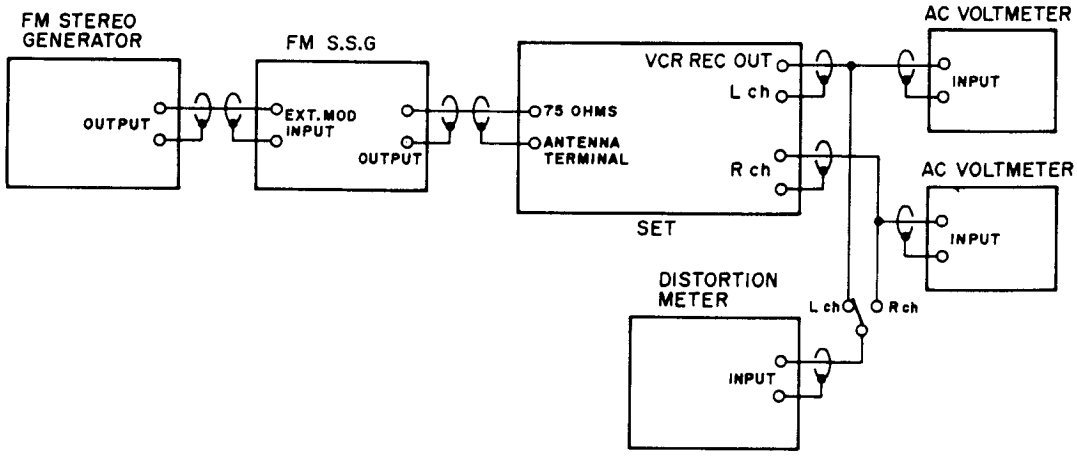


Fig.3-2 Instrument Connection of FM Adjustment

NOTE:

Before making ajustment, please set the input to "TUNER" mode by pressing the input SELECTOR button on the TP-750, then select the tuner band with the BAND button according to the adjustment procedure.

.Set the S.S.G. to 1kHz, 75kHz deviation for U, S, B or E model, 1 kHz, 40 kHz deviation for V model.

ADJUSTMENT ITEM
FREQ. & OUTPUT LEVEL
Tuning FREQ.
Part
ARKs (•) & RESULT (*)

: Point Adjustment Part

LW

2	LW SENSITIVITY
1.	162kHz, 75dBμ (Low) or 297kHz <288kHz>, 75dBμ (High)
2.	162kHz PRESET 4 ch, 297kHz <288kHz> PRESET 7 ch.
3.	T202 (Low), VC202 (High)
4.	• Connect the milli-voltmeter to VCR/REC OUT. *Maximum output level. *For best result, repeat Low and High adjustments several times.

NOTE: 1. Set the S.S.G to 1kHz 30% modulation on each adjustment.
2. Frequencies indicated in < > are for the V model.

1	LW OSC
1.	—
2.	351kHz <288kHz> (preset 10 ch)
3.	T204
4.	• Connect the Digital DC Voltmeter between TP1 and GND. *8.2 ± 0.1V <5.75 ± 0.1V>.

AM

NOTE: Set the S.S.G to 1kHz 30% modulation on each adjustment.

2	AM (MW) SENSITIVITY
1.	603kHz, 70dBμ (Low) or 1,404kHz, 70dBμ (High)
2.	603kHz (Low), PRESET 8 ch 1,404kHz (High), PRESET 7 ch
3.	T201 (Low), VC201 (High)
4.	• Connect the milli-voltmeter to VCR/REC OUT. *Maximum output level. *For best result, repeat Low a High adjustments several times.

1	AM (MW) OSC
1.	—
2.	1,404kHz (PRESET 7 ch)
3.	T203
4.	• Connect the Digital DC Voltmeter between TP1 and GND. *6.7 ± 0.1 V.

3	AM IF
1.	162kHz, 65dBμ
2.	162 kHz
3.	T205
4.	• Connect the milli-voltmeter to VCR/REC OUT. *Maximum output level.

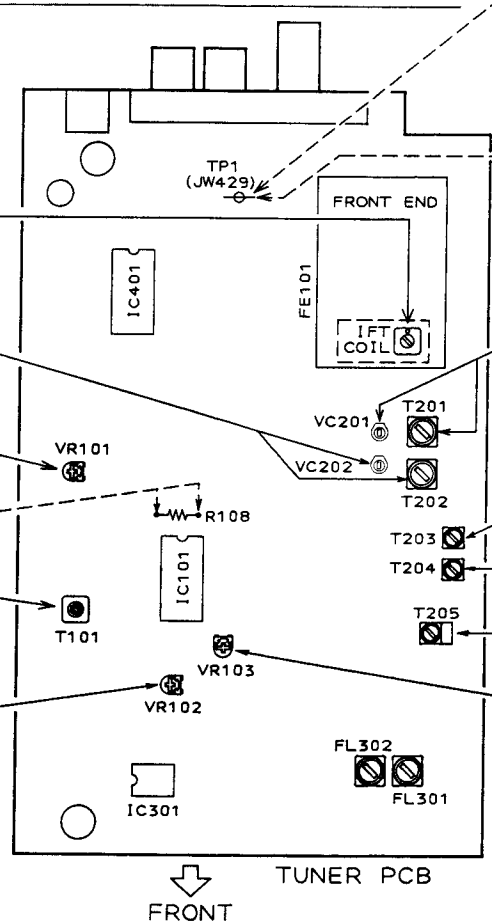
4	TUNING LED
1.	198kHz, 70dBμ
2.	198kHz
3.	Tuning LED on the front panel, VR103.
4.	*Tuning LED is lit.

DISTORTION (STEREO)
98.0MHz, 60dBμ (STEREO L or R channel only)
98.0MHz
IFT (FRONT END)
• Connect the distortion meter to VCR/REC OUT.
*Minimum Distortion

TUNING LED
98.0MHz, 22dBμ (MONO)
98.0MHz
Tuning LED on the front panel, VR101.
*Tuning LED is lit.

CENTER VOLTAGE
98.0MHz, 60dBμ (MONO)
98.0MHz
T101
• Connect the DC Digital Voltmeter to both ends of R108.
0 ± 50mV

STEREO SEPARATION
8.0MHz, 60dBμ (STEREO L or R channel only)
8.0MHz
VR102
Connect the milli-voltmeter to VCR/REC OUT.
*Minimum output level for opposite channel.



ARTS LIST

ATTENTION

n placing an order for parts, be sure to list Part No., Model No. and the description of eachpart.
rwise, the non-delivery of the part or the delivery of a wrong part may result.
se make sure that Part No. is correct when ordering.
, a part different from the one you ordered may be delivered.
the parts shown in Parts List of Preliminary Service Manual may have been the subject of changes,
e use this Parts List for all future reference.

HOW TO USE THIS PARTS LIST

ts List lists those parts which are considered necessary for repairs. Other common parts, such as resistors and ca- are listed in the "Common List for Service Parts" from which these parts should be selected and stocked.
ommended Spare Parts List shows those parts in the Parts List which are considered particularly important for ser-

t shown in the Parts List and "Common List for Service Parts" will not in principle be supplied.
ead the Parts List.

anism Block

BASE BLOCK

lo.	Description
2023A320A	HEAD BASE BLOCK
2206A010A	HEAD R/P PR4-8FU C
7876	PAN20×03STL CMT
6488	BID20×08STL CMT
2895	SP CS ANGLE ADJUST

— SP (Service Parts) Classification
— This number corresponds with the individ ual parts index number in that figure.

b) PC Board

6. MAIN PC BOARD

Ref. No.	Part No.	Description
IC1	EI-324536	IC HD14049BP
IC2	EI-336801	IC MB8841-564M
C1A	EC-338399	C MMY V 223M 250AC [U,E,B,S]
C1B	EC-350949	C MMY V 223M 250DC [J]
C1C	EC-338397	C MMY V 223M 125AC [C,A]
X1	EI-318384	OSC X'TAL NC-18C

Symbols for primary destination
[A] :AAL (U.S.A) [S] :SAA (Australia)
[B] :BEAB (England) [U] :U/T (Universal Area)
[C] :CSA (Canada)
[E] :CEE (Europe) [V] :VDE (Germany)
[J] :JPN (Japan) [Y] :Custom Version

SP (Service Parts) Classification

These reference symbols correspond with component symbols in the Schematic Diagrams.

able PC Board Blocks are listed separately.
rt No. is known, Parts Index at end of Parts List can be used to locate where that part is shown in Parts

ference No.listed at right of Part No.

WARNING

DICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY . COMPONENTS ONLY WITH MANUFACTURE'S RECOMMENDED PARTS.

AVERTISSEMENT

INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE TÉDE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDEES PAR LÉ ANT.

1. RECOMMENDED SPARE PARTS

We suggest you to stock the following Recommended Spare Part items listed below since they can cover most of the routine service.

Ref.No.	Part No.	Description
1	*EC-410588J	C DOUBLE FYD0H474Z 5.5DC
2	ED-410423J	D LED SEL4914D D ORANGE
3	ED-307572	D SILICON H 1SS131
4	ED-624903	D SILICON H 1S2473
5	*ED-511907	D SILICON 1N4002 100/1.0A
6	ED-372893	D VARACTOR SVC321SPA A DBL
7	ED-397289J	D ZENER H HZS20-2
8	ED-367576	D ZENER H HZS5.6B2J
9	ED-389688J	D ZENER H HZS5B2
10	ED-370786	D ZENER H HZS9.1B2J
11	ED-346559	D ZENER H HZ12B2L
12	ED-346560	D ZENER H HZ12B3L
13	ED-337990	D ZENER H HZ27-1L
14	ED-329058	D ZENER H HZ5 C1
15	ED-346531	D ZENER H HZ7A2L
16	ED-351418	D ZENER H HZ7B1L
17	ED-346534	D ZENER H HZ7C1L
18	EE-408686J	FRONT END FE415-G10
19	EH-364919	COMP R RKC8BS 473J
20	EH-394759J	FILTER CE SFE10.7MS2GK-A [U,E]
21	EH-338338	FILTER CE SFE10.7MS3GK-A [V]
22	EH-360924	FILTER LC BP BPMB6A [V]
23	EH-405199J	FILTER LC LP K7-J1YD-0170 [V]
24	EH-408815J	FILTER LC LP 42B-5226-03
25	EI-408675J2	IC M38173M6-145FP MXA1TP3
26	EI-382660J	IC BA15218-DX
27	EI-387938J	IC HD74LS05P
28	EI-408673J	IC LA1851N
29	EI-354951	IC LM7000N
30	EI-213390	IC NJM4558D
31	EI-400756J	IC NJM4558L-B
32	EI-408672J	IC S-80721AN
33	EI-302233	IC TC4051BP
34	EI-332259	IC TC4052BP
35	EI-200573	IC TC4053BP
36	EI-408674J	OSC CE CSB456F15 19.000KHZ
37	EI-405327J	OSC CE CST6.00MGW 6.000MHZ
38	EI-368825M	OSC X'TAL C-002RX 32.768KHZ
39	EI-408814M	OSC X'TAL HC-49/U 7200KHZ
40	EM-408409J	IND FL 10-MT-44GK CHARACTER
41	EO-408689M	COIL DET 1 499HNAS0078Z10.7MHZ
42	EO-408687J	COIL IFT BCFAZ-024
43	EO-363279	COIL OSC 2 A7NRS-9857X 150.0UH
44	EO-352089	COIL OSC 2 7BRS-9098X 580.0UH
45	EO-408808M	COIL VARI 2 MRHNF-45614A
46	EO-408809M	COIL VARI 2 MRZNF-45615A
47	*ER-326169	R FUSE H S10 ERD2FC 1/4W 22R0G
48	*ER-318647	R FUSE H S10 ERD2FC 1/4W 4R7J
49	*ER-386215J	R OMF H S12 FS 1W 220J
50	*ER-408692J	R OMF H S15 FS 2W 390J
51	ES-362883	SW TACT SKHHLM
52	ES-394818J	SW TACT SOR-123HS T05
53	ET-411995J	DETECTOR GP1U581X
54	ET-356336	TR DTA114ES
55	ET-369248	TR DTA114YS
56	ET-354370	TR DTA124ES
57	ET-353897	TR DTC114ES
58	ET-354371	TR DTC124ES
59	ET-373392	TR DTC124XS
60	ET-354094	TR DTC144WS
61	ET-349458	TR FET 2SK192A Y
62	ET-337759	TR FET 2SK246 GR
63	ET-353899	TR 2SA1317 S,T,U
64	*ET-366365	TR 2SB1185 E,F
65	ET-397160J	TR 2SC3330 R,S,T,U,V
66	ET-394735J	TR 2SC3792 T05
67	ET-356437	TR 2SC930 D2,E,F
68	*ET-366581	TR 2SD1762 E,F
69	*ET-373025	TR 2SD1944 J1,J2,K
70	ET-401091J	TR 2SD2144S U,V,W T05
71	ET-396072J	TR 2SD2159 V,W
72	EW-408684J	WIRE ASSY HFG0704-0801 L600 4P
73	EW-408682J	WIRE ASSY HFG07115101 L630 11P
74	EW-408678J	WIRE ASSY HFG07157501 L600 15P
75	EW-408679J	WIRE ASSY 52305-1411 L=650 14P
76	EW-408683J	WIRE ASSY 52305-1510 L=300 15P

2. P.C BOARD BLK

Ref.No.	Part No.	Description
1A	BA-A6007T030G	ML PC (#) TU-PRE BLKTP-750 (U) /ML
1B	BA-A6007T030H	ML PC (#) TU-PRE BLKTP-750 (E) /ML
1C	BA-A6007T030J	ML PC (#) TU-PRE BLKTP-750 (V) /ML
2	BA-A6009T060A	ML PC SYSCON BLK TP-750/ML

PC (#) TU-PRE BLK CONSISTS OF FOLLOWING P.C BOARD.
- TUNER P.C BOARD
- CONTROL P.C BOARD

3. TUNER P.C BOARD

Ref.No.	Part No.	Description
D101	ED-307572	D SILICON H 1SS131
D201	ED-372893	D VARACTOR SVC321SPA A DBL
D202	ED-372893	D VARACTOR SVC321SPA A DBL
D203	ED-307572	D SILICON H 1SS131
D204	ED-307572	D SILICON H 1SS131
D401	ED-367576	D ZENER H HZS5.6B2J
D402	ED-307572	D SILICON H 1SS131
D403	ED-307572	D SILICON H 1SS131
D404	ED-307572	D SILICON H 1SS131
D405	ED-370786	D ZENER H HZS9.1B2J
D406	ED-389688J	D ZENER H HZS5B2
FE101	EE-408686J	FRONT END FE415-G10
FL101	EH-360924	FILTER LC BP BPMB6A [V]
FL102A	EH-394759J	FILTER CE SFE10.7MS2GK-A [U,E]
FL102B	EH-338338	FILTER CE SFE10.7MS3GK-A [V]
FL103A	EH-394759J	FILTER CE SFE10.7MS2GK-A [U,E]
FL103B	EH-338338	FILTER CE SFE10.7MS3GK-A [V]
FL104	EH-405199J	FILTER LC LP K7-J1YD-0170 [V]
FL301	EH-408815J	FILTER LC LP 42B-5226-03
FL302	EH-408815J	FILTER LC LP 42B-5226-03
IC101	EI-408673J	IC LA1851N
IC301	EI-213390	IC NJM4558D
IC401	EI-354951	IC LM7000N
L101	EO-357539	COIL FIX 1 EL0606RA T05 222K
L301	EO-353588	COIL FIX 1 LAP02 F05 2R2K [V]
L302	EO-353588	COIL FIX 1 LAP02 F05 2R2K [V]
R107	ER-324184	R CB H S10 FS RDS 1/4W 121J
R108	ER-333387	R CB H S10 FS RDS 1/4W 223J
R425	*ER-318647	R FUSE H S10 ERD2FC 1/4W 4R7J
T101	EO-408689M	COIL DET 1 499HNAS0078Z10.7MHZ
T201	EO-408808M	COIL VARI 2 MRHNF-45614A
T202	EO-408809M	COIL VARI 2 MRZNF-45615A
T203	EO-363279	COIL OSC 2 A7NRS-9857X 150.0UH
T204	EO-352089	COIL OSC 2 7BRS-9098X 580.0UH
T205	EO-408687J	COIL IFT BCFAZ-024
TM1	EJ-359031	TERMINAL LEVER YKD31-0215 P 2P
TR101	ET-356437	TR 2SC930 D2,E,F
TR102	ET-397160J	TR 2SC3330 R,S,T,U,V
TR201	ET-349458	TR FET 2SK192A Y
TR202	ET-394735J	TR 2SC3792 T05
TR203	ET-353897	TR DTC114ES
TR401	ET-337759	TR FET 2SK246 GR
TR402	ET-397160J	TR 2SC3330 R,S,T,U,V
TR403	ET-354094	TR DTC144WS
TR404	ET-354094	TR DTC144WS
TR405	ET-354094	TR DTC144WS

Ref.No.	Part No.	Description
TR406	ET-353899	TR 2SA1317 S,T,U
TR407	ET-353899	TR 2SA1317 S,T,U
TR408	ET-396072J	TR 2SD2159 V,W
VC201	EC-337603	C S-FIX H VCT51F 5.5-30
VC202	EC-356284	C S-FIX H VCT51G 7.5-50
VR101	EV-358829	R S-FIX H RH0615C 0.10W 223
VR102	EV-356576	R S-FIX H RH0615C 0.10W 472
VR103	EV-356576	R S-FIX H RH0615C 0.10W 472
X101	EI-408674J	OSC CE CSB456F15 19.000KHZ
X401	EI-408814M	OSC X'TAL HC-49/U 7200KHZ

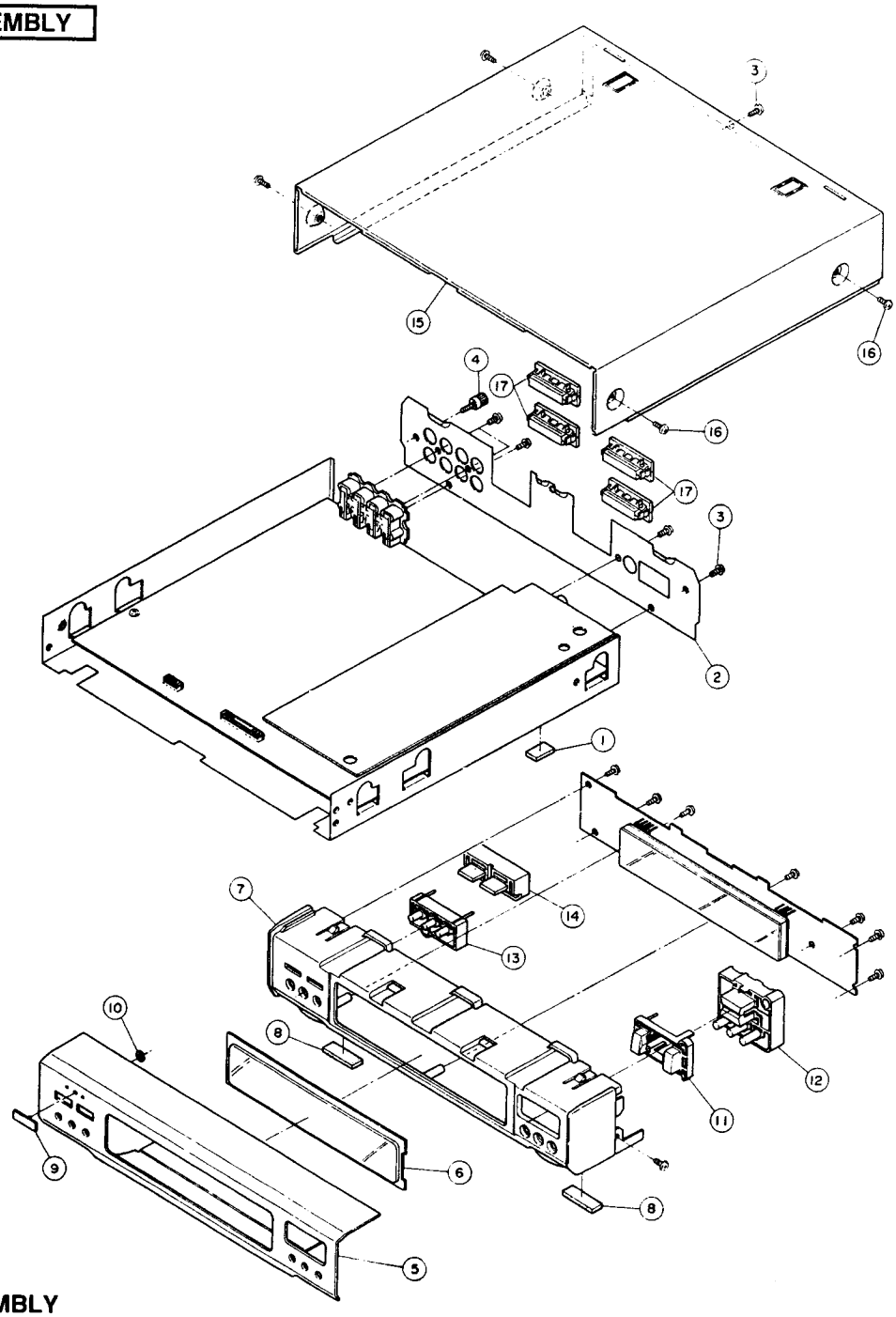
4. CONTROL P.C BOARD

Ref.No.	Part No.	Description
C764	*EC-346868	C CE V T05 F 473Z 50DC
C765	*EC-346868	C CE V T05 F 473Z 50DC
C766	*EC-346868	C CE V T05 F 473Z 50DC
C767	*EC-346868	C CE V T05 F 473Z 50DC
C801	*EC-410588J	C DOUBLE FYD0H474Z 5.5DC
D701	ED-346534	D ZENER H HZ7C1L
D702	ED-346534	D ZENER H HZ7C1L
D751	*ED-511907	D SILICON 1N4002 100/1.0A
D752	*ED-511907	D SILICON 1N4002 100/1.0A
D753	*ED-511907	D SILICON 1N4002 100/1.0A
D754	*ED-511907	D SILICON 1N4002 100/1.0A
D755	ED-346559	D ZENER H HZ12B2L
D756	ED-346560	D ZENER H HZ12B3L
D757	*ED-511907	D SILICON 1N4002 100/1.0A
D758	*ED-511907	D SILICON 1N4002 100/1.0A
D759	*ED-511907	D SILICON 1N4002 100/1.0A
D760	ED-337990	D ZENER H HZ27-1L
D761	*ED-511907	D SILICON 1N4002 100/1.0A
D762	*ED-511907	D SILICON 1N4002 100/1.0A
D763	ED-351418	D ZENER H HZ7B1L
D764	ED-346531	D ZENER H HZ7A2L
D765	*ED-511907	D SILICON 1N4002 100/1.0A
D766	ED-511907	D SILICON 1N4002 100/1.0A
D767	ED-511907	D SILICON 1N4002 100/1.0A
D768	ED-329058	D ZENER H HZ5 C1
D801	ED-307572	D SILICON H 1SS131
D802	ED-307572	D SILICON H 1SS131
D803	ED-307572	D SILICON H 1SS131
D804	ED-307572	D SILICON H 1SS131
D805	ED-307572	D SILICON H 1SS131
D806	ED-307572	D SILICON H 1SS131
D807	ED-307572	D SILICON H 1SS131 [U]
D808	ED-307572	D SILICON H 1SS131 [V]
D813	ED-307572	D SILICON H 1SS131
D814	ED-511907	D SILICON 1N4002 100/1.0A
D815	ED-307572	D SILICON H 1SS131
D821	ED-397289J	D ZENER H HZS20-2
D822	ED-307572	D SILICON H 1SS131
IB801	EH-364919	COMP R RKC8BS 473J
IC501	EI-302233	IC TC4051BP
IC502	EI-200573	IC TC4053BP
IC601	EI-302233	IC TC4051BP
IC602	EI-200573	IC TC4053BP
IC701	EI-382660J	IC BA15218-DX
IC702	EI-400756J	IC NJM4558L-B
IC703	EI-400756J	IC NJM4558L-B
IC704	EI-332259	IC TC4052BP
IC801	EI-408675J2	IC M38173M6-145FP MXA1TP3
IC802	EI-387938J	IC HD74LS05P
IC803	EI-387938J	IC HD74LS05P
IC804	EI-408672J	IC S-80721AN
J11A	EJ-408671J	PIN J T6592AABB W/SHIELD 8P [U,E]
J11B	EJ-408670J	PIN J T6388-AABC 8P [V]
R751	*ER-386215J	R OMF H S12 FS 1W 220J
R752	*ER-386215J	R OMF H S12 FS 1W 220J
R759	*ER-386215J	R OMF H S12 FS 1W 220J
R764	*ER-326169	R FUSE H S10 ERD2FC 1/4W 22R0G
R765	*ER-408692J	R OMF H S15 FS 2W 390J
TR501	ET-394735J	TR 2SC3792 T05
TR512	ET-397160J	TR 2SC3330 R,S,T,U,V
TR601	ET-394735J	TR 2SC3792 T05
TR612	ET-397160J	TR 2SC3330 R,S,T,U,V
TR752	*ET-373025	TR 2SD1944 J1,J2,K
TR753	ET-353899	TR 2SA1317 S,T,U
TR754	*ET-366365	TR 2SB1185 E,F
TR755	ET-353899	TR 2SA1317 S,T,U
TR756	*ET-366365	TR 2SB1185 E,F
TR757	ET-397160J	TR 2SC3330 R,S,T,U,V
TR758	*ET-366581	TR 2SD1762 E,F
TR759	ET-397160J	TR 2SC3330 R,S,T,U,V
TR760	ET-353899	TR 2SA1317 S,T,U
TR761	ET-353899	TR 2SA1317 S,T,U
TR801	ET-354371	TR DTC124ES
TR802	ET-354371	TR DTC124ES
TR803	ET-354371	TR DTC124ES
TR804	ET-354371	TR DTC124ES
TR805	ET-354371	TR DTC124ES
TR806	ET-353897	TR DTC114ES
TR807	ET-354371	TR DTC124ES
TR808	ET-354370	TR DTA124ES
TR809	ET-373392	TR DTC124XS
TR810	ET-369248	TR DTA114YS
TR811	ET-353897	TR DTC114ES
TR812	ET-354370	TR DTA124ES
TR815	ET-353899	TR 2SA1317 S,T,U
TR816	ET-354371	TR DTC124ES
TR817	ET-356336	TR DTA114ES
TR818	ET-401091J	TR 2SD2144S U,V,W T05
TR819	ET-401091J	TR 2SD2144S U,V,W T05
TS801	ES-362883	SW TACT SKHHLM
W1	EW-408678J	WIRE ASSY HFG07157501 L600 15P
W2	EW-408679J	WIRE ASSY 52305-1411 L=650 14P
W3	EW-408682J	WIRE ASSY HFG07115101 L630 11P
W4	EW-408683J	WIRE ASSY 52305-1510 L=300 15P
W5	EW-408684J	WIRE ASSY HFG0704-0801 L600 4P
X801	EI-405327J	OSC CE CST6.00MGW 6.000MHZ
X802	EI-368825M	OSC X'TAL C-002RX 32.768KHZ

5. FRONT P.C BOARD

Ref.No.	Part No.	Description
D851	ED-624903	D SILICON H 1S2473
D852	ED-624903	D SILICON H 1S2473
D853	ED-624903	D SILICON H 1S2473
D854	ED-624903	D SILICON H 1S2473
D855	ED-624903	D SILICON H 1S2473
D856	ED-624903	D SILICON H 1S2473
D857	ED-624903	D SILICON H 1S2473
D861	ED-410423J	D LED SEL4914D D ORANGE
D862	ED-410423J	D LED SEL4914D D ORANGE
HS851	ET-411995J	DETECTOR GP1U581X
IN851	EM-408409J	IND FL 10-MT-44GK CHARACTER
TR851	ET-353897	TR DTC114ES
TS851	ES-394818J	SW TACT SOR-123HS T05
TS852	ES-394818J	SW TACT SOR-123HS T05
TS853	ES-394818J	SW TACT SOR-123HS T05
TS854	ES-394818J	SW TACT SOR-123HS T05
TS855	ES-394818J	SW TACT SOR-123HS T05
TS856	ES-394818J	SW TACT SOR-123HS T05
TS857	ES-394818J	SW TACT SOR-123HS T05
TS858	ES-394818J	SW TACT SOR-123HS T05
TS859	ES-394818J	SW TACT SOR-123HS T05
TS860	ES-394818J	SW TACT SOR-123HS T05
TS861	ES-394818J	SW TACT SOR-123HS T05
TS862	ES-394818J	SW TACT SOR-123HS T05
W852	EW-408819J1	CORD A6009 L=130 13P
W853	EW-408819J1	CORD A6009 L=130 13P
W854	EW-408818J1	CORD A6009 L=130 9P

FINAL ASSEMBLY



6. FINAL ASSEMBLY

Ref.No.	Part No.	Description
1	SA-407840M	CUSHION FOOT REAR (SG)
2A	SP-407974M	PANEL REAR TP-750 (U) (SG)
2B	SP-407975M	PANEL REAR TP-750 (E) (SG)
2C	SP-407976M	PANEL REAR TP-750 (V) (SG)
3	ZS-394412M	BT BID30X08STL BZN PROJECTION
4	EJ-393745J	TERMINAL W/SCREW UB-0132
5	SP-407959J	PANEL FRONT-TP
6	SE-407964M	WINDOW FLD-TP (SG)
7	SE-407956M	ESCUTCHEON FRONT (SG)
8	SA-394136M	CUSHION FOOT (SG)
9	SM-409218J	NAME PLATE AKAI-S
10	ZW-408744J	PUSH NUT SPN-2
11	SB-407961M	BUTTON FR (SG)
12	SB-407962M	BUTTON OP (SG)
13	SB-407965M	BUTTON MEMO (SG)
14	SB-407966M	BUTTON SOURCE (SG)
15	SP-407980M	COVER UPPER-TP (SG)
16	ZS-331182	BT BID30X08STL BNI
17	SZ-407909M	WIRE HOLDER

NOTE:
Parts will not be supplied if they are not listed in the parts list, even if they appear on the assembling illustrations with reference No.

7. ACCESSARY

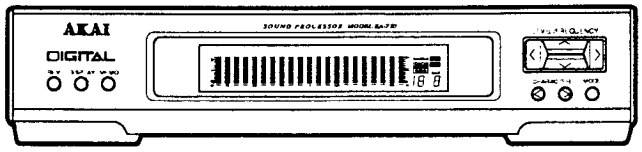
Ref.No.	Part No.	Description
1	EE-394420M1	ANT LOOP LA-75
2	EE-396107M	ANT WIRE FM A3063
3	EJ-394417J	SOCKET COAX HXC 0526-01-010

INDEX

Part No.	Ref. No.	Part No.	Ref. No.	Part No.	Ref. No.	Part No.	Ref. No.
BAA6007T030G	2-1A	EH364919	4-IB801	ET353899	4-TR755		
BAA6007T030H	2-1B	EH394759J	3-FL102A	ET353899	4-TR760		
BAA6007T030J	2-1C	EH394759J	3-FL103A	ET353899	4-TR761		
BAA6009T060A	2-2	EH405199J	3-FL104	ET353899	4-TR815		
EC337603	3-VC201	EH408815J	3-FL301	ET354094	3-TR403		
EC346868	4-C764	EH408815J	3-FL302	ET354094	3-TR404		
EC346868	4-C765	EI200573	4-IC502	ET354094	3-TR405		
EC346868	4-C766	EI200573	4-IC602	ET354370	4-TR808		
EC346868	4-C767	EI213390	3-IC301	ET354370	4-TR812		
EC356284	3-VC202	EI302233	4-IC501	ET354371	4-TR801		
EC410588J	4-C801	EI302233	4-IC601	ET354371	4-TR802		
ED307572	3-D101	EI332259	4-IC704	ET354371	4-TR803		
ED307572	3-D203	EI354951	3-IC401	ET354371	4-TR804		
ED307572	3-D204	EI368825M	4-X802	ET354371	4-TR805		
ED307572	3-D402	EI382660J	4-IC701	ET354371	4-TR807		
ED307572	3-D403	EI387938J	4-IC802	ET354371	4-TR816		
ED307572	3-D404	EI387938J	4-IC803	ET356336	4-TR817		
ED307572	4-D801	EI400756J	4-IC702	ET356437	3-TR101		
ED307572	4-D802	EI400756J	4-IC703	ET366365	4-TR754		
ED307572	4-D803	EI405327J	4-X801	ET366365	4-TR756		
ED307572	4-D804	EI408672J	4-IC804	ET366581	4-TR758		
ED307572	4-D805	EI408673J	3-IC101	ET369248	4-TR810		
ED307572	4-D806	EI408674J	3-X101	ET373025	4-TR752		
ED307572	4-D807	EI408675J2	4-IC801	ET373392	4-TR809		
ED307572	4-D808	EI408814M	3-X401	ET394735J	3-TR202		
ED307572	4-D813	EJ359031	3-TM1	ET394735J	4-TR501		
ED307572	4-D815	EJ393745J	6-4	ET394735J	4-TR601		
ED307572	4-D822	EJ394417J	7-3	ET396072J	3-TR408		
ED329058	4-D768	EJ408670J	4-J11B	ET397160J	3-TR102		
ED337990	4-D760	EJ408671J	4-J11A	ET397160J	3-TR402		
ED346531	4-D764	EM408409J	5-IN851	ET397160J	4-TR512		
ED346534	4-D701	EO352089	3-T204	ET397160J	4-TR612		
ED346534	4-D702	EO353588	3-L301	ET397160J	4-TR757		
ED346559	4-D755	EO353588	3-L302	ET397160J	4-TR759		
ED346560	4-D756	EO357539	3-L101	ET401091J	4-TR818		
ED351418	4-D763	EO363279	3-T203	ET401091J	4-TR819		
ED367576	3-D401	EO408687J	3-T205	ET411995J	5-HS851		
ED370786	3-D405	EO408689M	3-T101	EV356576	3-VR102		
ED372893	3-D201	EO408808M	3-T201	EV356576	3-VR103		
ED372893	3-D202	EO408809M	3-T202	EV358829	3-VR101		
ED389688J	3-D406	ER318647	3-R425	EW408678J	4-W1		
ED397289J	4-D821	ER324184	3-R107	EW408679J	4-W2		
ED410423J	5-D861	ER326169	4-R764	EW408682J	4-W3		
ED410423J	5-D862	ER333387	3-R108	EW408683J	4-W4		
ED511907	4-D751	ER386215J	4-R751	EW408684J	4-W5		
ED511907	4-D752	ER386215J	4-R752	EW408818J1	5-W854		
ED511907	4-D753	ER386215J	4-R759	EW408819J1	5-W852		
ED511907	4-D754	ER408692J	4-R765	EW408819J1	5-W853		
ED511907	4-D757	ES362883	4-TS801	SA394136M	6-8		
ED511907	4-D758	ES394818J	5-TS851	SA407840M	6-1		
ED511907	4-D759	ES394818J	5-TS852	SB407961M	6-11		
ED511907	4-D761	ES394818J	5-TS853	SB407962M	6-12		
ED511907	4-D762	ES394818J	5-TS854	SB407965M	6-13		
ED511907	4-D765	ES394818J	5-TS855	SB407966M	6-14		
ED511907	4-D766	ES394818J	5-TS856	SE407956M	6-7		
ED511907	4-D767	ES394818J	5-TS857	SE407964M	6-6		
ED511907	4-D814	ES394818J	5-TS858	SM409218J	6-9		
ED624903	5-D851	ES394818J	5-TS859	SP407959J	6-5		
ED624903	5-D852	ES394818J	5-TS860	SP407974M	6-2A		
ED624903	5-D853	ES394818J	5-TS861	SP407975M	6-2B		
ED624903	5-D854	ES394818J	5-TS862	SP407976M	6-2C		
ED624903	5-D855	ET337759	3-TR401	SP407980M	6-15		
ED624903	5-D856	ET349458	3-TR201	SZ407909M	6-17		
ED624903	5-D857	ET353897	3-TR203	ZS331182	6-16		
EE394420M1	7-1	ET353897	4-TR806	ZS394412M	6-3		
EE396107M	7-2	ET353897	4-TR811	ZW408744J	6-10		
EE408686J	3-FE101	ET353897	5-TR851				
EH338338	3-FL102B	ET353899	3-TR406				
EH338338	3-FL103B	ET353899	3-TR407				

ABBREVIATIONS (TUNER)

ABBREVIATION	EXPLANATION	ABBREVIATION	EXPLANATION
AFC	Auto Frequency Control	MEMO	MEMOry
AGC	Auto Gain Control	MI-COM	MIcro-COMputer
ALC	Auto Level Control	MIN	MINimum
AM	Amplitude Modulation	MIX	MIXing
AMP	AMPlifier	MPX	MultiPleX
ANT	ANTenna	MW	Medium Wave (frequency)
BATT	BATTery	NC	No Connection
BLK	BLocK	NFB	Negative Feed Back
BUFF	BUFFer	OSC	OSCillator
COMP	COMPalator	PCB	Printed Circuit Board
DET	DETect (DETctor)	PLL	Phase Locked Loop
FLD	FLuorescent Display	Q.D	Quadrature Detector
FM	Frequency Modulation	Rch	Right channel
FREQ	FREQuency	REF	REFerence
GND	GrouND	REG	REGulator
H	Hight	RF	Radio Frequency
HPF	Hight Pass Filter	SEG	SEGment
IF	Intermediate Frequency	SELE	SELEctor
IHF	Institut of High Fidelity	SENS	SENSitivity
IND	INDicator	SIG	SIGnal
I/O	In/Out	S/N	Signal to Noise ratio
JW	Jumper Wire	SSG	Standard Signal Generator
L	Low	STD	STanDard
LCD	Liquid Crystal Display	SW	SWitch: Short Wave (frequency)
Lch	Left channel	THD	Total Harmonic Distortion
LED	Light Emiting Diode	TP	Test Point
LPF	Low Pass Filter	VCO	Voltage Controlled Oscillator
LW	Long Wave (Frequency)	VR	Variable Resistor
		X'TAL	Crystal



DIGITAL SOUND PROCESSOR

MODEL EA-750

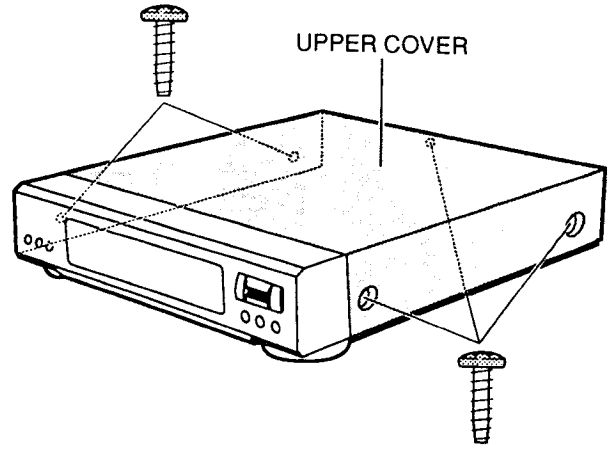
SPECIFICATIONS

Center frequency	63Hz/160Hz/400Hz/1kHz/2.5kHz/6.3kHz/16kHz
Control range	-10dB (2dB step)
S/N ratio	100dB (A-Weight)
Total harmonic distortion	0.008% (1kHz, flat)
Power consumption	10W
Dimensions	270 (W) X 61 (H) X 295 (D)mm
Weights	1.6kg

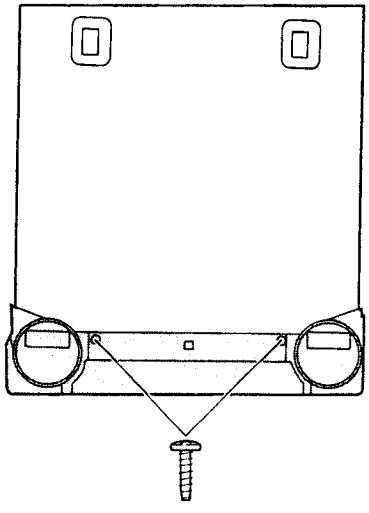
I. DISASSEMBLY

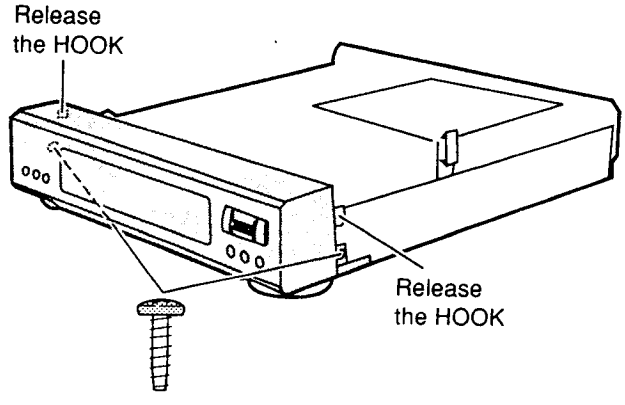
In cace of trouble, etc., necessitating dismantling, please dismantle in the order shown in the illustrations.
Rwassemble in the reverse order.

1.Removal of the UPPER COVER



2.Removal of the FRONT PANEL





II. PRINCIPAL PARTS LOCATION

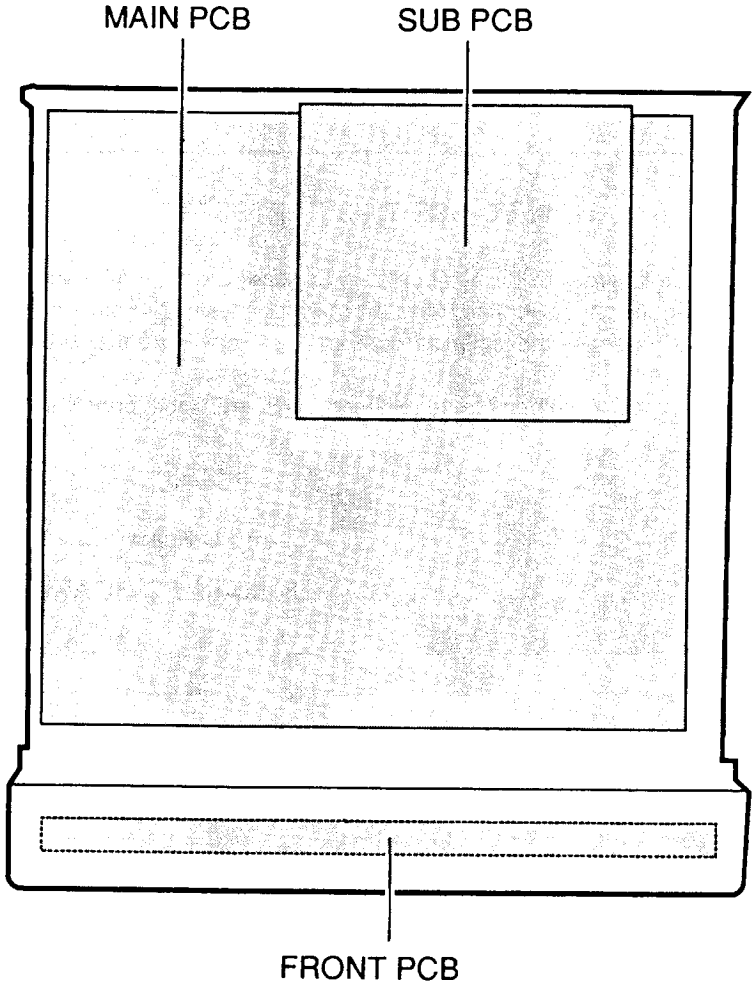


Fig.2-1 Top view

III. PARTS LIST

ATTENTION

1. **When placing an order for parts, be sure to list Part No., Model No. and the description of eachpart. Otherwise, the non-delivery of the part or the delivery of a wrong part may result.**
2. **Please make sure that Part No. is correct when ordering. If not, a part different from the one you ordered may be delivered.**
3. **Since the parts shown in Parts List of Preliminary Service Manual may have been the subject of changes, please use this Parts List for all future reference.**

HOW TO USE THIS PARTS LIST

1. This Parts List lists those parts which are considered necessary for repairs. Other common parts, such as resistors and capacitors, are listed in the "Common List for Service Parts" from which these parts should be selected and stocked.
2. The Recommended Spare Parts List shows those parts in the Parts List which are considered particularly important for service.
3. Parts not shown in the Parts List and "Common List for Service Parts" will not in principle be supplied.
4. How to read the Parts List.

a) Mechanism Block

2. HEAD BASE BLOCK

Ref. No.	Part No.	Description
1	BH-T2023A320A	HEAD BASE BLOCK
2	HP-H2206A010A	HEAD R/P PR4-8FU C
3	ZS-477876	PAN20×03STL CMT
4	ZS-536488	BID20×08STL CMT
5	ZG-402895	SP CS ANGLE ADJUST

SP (Service Parts) Classification

This number corresponds with the individual parts index number in that figure.

b) PC Board

6. MAIN PC BOARD

Ref. No.	Part No.	Description
IC1	EI-324536	IC HD14049BP
IC2	EI-336801	IC MB8841-564M
C1A	EC-338399	C MMY V 223M 250AC [U,E,B,S]
C1B	EC-350949	C MMY V 223M 250DC [J]
C1C	EC-338397	C MMY V 223M 125AC [C,A]
X1	EI-318384	OSC X'TAL NC-18C

Symbols for primary destination

[A] :AAL (U.S.A) [S] :SAA (Australia)
[B] :BEAB (England) [U] :U/T (Universal Area)
[C] :CSA (Canada)
[E] :CEE (Europe) [V] :VDE (Germany)
[J] :JPN (Japan) [Y] :Custom Version

SP (Service Parts) Classification

These reference symbols correspond with component symbols in the Schematic Diagrams.

The available PC Board Blocks are listed separately.

5. When Part No. is known, Parts Index at end of Parts List can be used to locate where that part is shown in Parts List
by its Reference No.listed at right of Part No.

WARNING

⚠ (*) INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURE'S RECOMMENDED PARTS.

AVERTISSEMENT

⚠ (*) IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉDE L'APPAREIL, NE REMPLACER QUE DES PIÉCES RECOMMANDEES PAR LÉ FABRICANT.

1. RECOMMENDED SPARE PARTS

We suggest you to stock the following Recommended Spare Part items listed below since they can cover most of the routine service.

Ref.No.	Part No.	Description
1	ED-307572	D SILICON H 1SS131
2	ED-624903	D SILICON H 1S2473
3	*ED-511907	D SILICON 1N4002 100/1.0A
4	ED-346559	D ZENER H HZ12B2L
5	ED-346620	D ZENER H HZ27 2
6	*ED-346529	D ZENER H HZ6C2L
7	ED-346538	D ZENER H HZ9A2L
8	ED-400519J	D ZENER H MTZJ3.9A T26
9	ED-403978J	D ZENER H UTZJ5.1B T26
10	*ED-405446J	D ZENER H UTZJ5.6B T26
11	EH-408801J	COMP R RGLE7T 105J
12	EI-387938J	IC HD74LS05P
13	EI-359053	IC LA3600
14	EI-408647J	IC LC7522
15	EI-408798J	IC M38173M6-143FP MXB1GE1
16	EI-403308J	IC M50194P
17	EI-393323J	IC M5218AL-771
18	EI-408810J	IC M5289P-610
19	EI-408797J	IC M74HC154P
20	EI-400756J	IC NJM4558L-B
21	EI-408393J	IC ST24C01B1
22	EI-302233	IC TC4051BP
23	EI-332259	IC TC4052BP
24	EI-200573	IC TC4053BP
25	EI-408646J	IC XR1091ECP
26	EI-382875J	OSC CE CST4.00MGW 4MHZ
27	EI-405327J	OSC CE CST6.00MGW 6.000MHZ
28	EM-408411J	IND FL BJ048GK DOUBLE
29	*ER-345751	R FUSE H S10 ERD2FC 1/4W 15R0G
30	*ER-408806J	R OMF H S12 FS 1W 470J
31	*ER-408267J	R OMF H S15 FS 2W 5R6J
32	ES-394818J	SW TACT SOR-123HS T05
33	ET-354370	TR DTA124ES
34	ET-396487J	TR DTA124XL T05
35	ET-354415	TR DTA144ES
36	ET-354414	TR DTC144ES
37	*ET-353899	TR 2SA1317 S,T,U
38	ET-352726	TR 2SA1392 T,U
39	*ET-366365	TR 2SB1185 E,F
40	*ET-356817	TR 2SB891 Q,R
41	*ET-397160J	TR 2SC3330 R,S,T,U,V
42	ET-378524J	TR 2SC3383 S,T,U
43	ET-361736	TR 2SC3576
44	*ET-354083	TR 2SD1189 Q,R
45	*ET-366581	TR 2SD1762 E,F

2. P.C BOARD BLK

Ref.No.	Part No.	Description
1	BA-D3016T030A	ML PC MAIN EA BLK EA-750/ML
2	BA-D3016T040A	ML PC (#) SUB EA BLK EA-750/ML

PC (#) SUB EA BLK CONSISTS OF FOLLOWING P.C BOARD.

- SUB P.C BOARD
- FRONT P.C BOARD

3. MAIN P.C BOARD

Ref.No.	Part No.	Description
D1	*ED-511907	D SILICON 1N4002 100/1.0A
D2	*ED-511907	D SILICON 1N4002 100/1.0A
D3	*ED-511907	D SILICON 1N4002 100/1.0A
D4	*ED-511907	D SILICON 1N4002 100/1.0A
D5	ED-511907	D SILICON 1N4002 100/1.0A
D6	ED-511907	D SILICON 1N4002 100/1.0A
D7	*ED-346529	D ZENER H HZ6C2L
D8	*ED-346529	D ZENER H HZ6C2L
D10	*ED-405446J	D ZENER H UTZJ5.6B T26
D11	ED-346559	D ZENER H HZ12B2L
D12	ED-346559	D ZENER H HZ12B2L
D13	*ED-346529	D ZENER H HZ6C2L
D14	*ED-405446J	D ZENER H UTZJ5.6B T26
D15	ED-346620	D ZENER H HZ27 2
D19	ED-400519J	D ZENER H MTZJ3.9A T26
D20	ED-307572	D SILICON H 1SS131
D21	ED-307572	D SILICON H 1SS131
D22	ED-307572	D SILICON H 1SS131
D23	ED-624903	D SILICON H 1S2473
D26	ED-307572	D SILICON H 1SS131
D27	ED-307572	D SILICON H 1SS131
D28	ED-307572	D SILICON H 1SS131
D29	ED-307572	D SILICON H 1SS131
D30	ED-403978J	D ZENER H UTZJ5.1B T26
D31	ED-403978J	D ZENER H UTZJ5.1B T26
D32	ED-624903	D SILICON H 1S2473
D33	ED-511907	D SILICON 1N4002 100/1.0A
D34	ED-511907	D SILICON 1N4002 100/1.0A
IC1	EI-408798J	IC M38173M6-143FP MXB1GE1
IC2	EI-387938J	IC HD74LS05P
IC3	EI-403308J	IC M50194P
IC4	EI-400756J	IC NJM4558L-B
IC5	EI-400756J	IC NJM4558L-B
IC6	EI-393323J	IC M5218AL-771
IC7	EI-393323J	IC M5218AL-771
IC8	EI-400756J	IC NJM4558L-B
IC9	EI-400756J	IC NJM4558L-B
IC10	EI-359053	IC LA3600
IC11	EI-200573	IC TC4053BP
IC12	EI-332259	IC TC4052BP
IC13	EI-302233	IC TC4051BP
IC14	EI-200573	IC TC4053BP
IC15	EI-200573	IC TC4053BP
IC16	EI-408646J	IC XR1091ECP
IC17	EI-408646J	IC XR1091ECP
IC18	EI-302233	IC TC4051BP
IC19	EI-302233	IC TC4051BP
IC20	EI-408393J	IC ST24C01B1
J1	EJ-404321J	SOCKET 52303-1510 WHITE 15P
L1	EO-345887	COIL FIX 1 EL0606SKI 221J
L2	EO-345887	COIL FIX 1 EL0606SKI 221J
L3	EO-345887	COIL FIX 1 EL0606SKI 221J
L4	EO-345887	COIL FIX 1 EL0606SKI 221J
R1	*ER-408267J	R OMF H S15 FS 2W 5R6J
R2	*ER-408267J	R OMF H S15 FS 2W 5R6J
R3	*ER-345751	R FUSE H S10 ERD2FC 1/4W 15R0G
R4	*ER-345751	R FUSE H S10 ERD2FC 1/4W 15R0G
R171	*ER-408267J	R OMF H S15 FS 2W 5R6J
R172	*ER-345751	R FUSE H S10 ERD2FC 1/4W 15R0G
TR1	*ET-366581	TR 2SD1762 E,F
TR2	*ET-397160J	TR 2SC3330 R,S,T,U,V
TR3	*ET-356817	TR 2SB891 Q,R
TR4	*ET-353899	TR 2SA1317 S,T,U
TR5	*ET-354083	TR 2SD1189 Q,R
TR6	ET-397160J	TR 2SC3330 R,S,T,U,V
TR7	*ET-356817	TR 2SB891 Q,R
TR8	ET-353899	TR 2SA1317 S,T,U
TR9	*ET-354083	TR 2SD1189 Q,R
TR10	*ET-397160J	TR 2SC3330 R,S,T,U,V
TR11	*ET-366365	TR 2SB1185 E,F
TR12	ET-353899	TR 2SA1317 S,T,U
TR15	ET-353899	TR 2SA1317 S,T,U
TR16	ET-397160J	TR 2SC3330 R,S,T,U,V
TR17	ET-397160J	TR 2SC3330 R,S,T,U,V
TR18	ET-354415	TR DTA144ES
TR19	ET-361736	TR 2SC3576
TR20	ET-361736	TR 2SC3576
TR21	ET-361736	TR 2SC3576
TR22	ET-361736	TR 2SC3576
TR23	ET-361736	TR 2SC3576
TR24	ET-354370	TR DTA124ES
TR25	ET-354370	TR DTA124ES
TR26	ET-354370	TR DTA124ES
TR28	ET-397160J	TR 2SC3330 R,S,T,U,V
TR29	ET-361736	TR 2SC3576
TR30	ET-361736	TR 2SC3576
TR31	ET-354415	TR DTA144ES
TR32	ET-354414	TR DTC144ES
X1	EI-405327J	OSC CE CST6.00MGW 6.000MHZ

4. SUB P.C BOARD

Ref.No.	Part No.	Description
D201	ED-346538	D ZENER H HZ9A2L
D202	ED-346538	D ZENER H HZ9A2L
D203	ED-307572	D SILICON H 1SS131
D204	ED-307572	D SILICON H 1SS131
D205	ED-307572	D SILICON H 1SS131
D206	ED-307572	D SILICON H 1SS131
D207	ED-307572	D SILICON H 1SS131
D208	ED-307572	D SILICON H 1SS131
D209	ED-307572	D SILICON H 1SS131
D210	ED-403978J	D ZENER H UTZJ5.1B T26
IC201	EI-393323J	IC M5218AL-771
IC202	EI-408810J	IC M5289P-610
IC203	EI-408810J	IC M5289P-610
IC204	EI-408647J	IC LC7522
IC205	EI-400756J	IC NJM4558L-B
IC206	EI-332259	IC TC4052BP
IC207	EI-400756J	IC NJM4558L-B
IC208	EI-400756J	IC NJM4558L-B
R243	*ER-408806J	R OMF H S12 FS 1W 470J
R244	*ER-408806J	R OMF H S12 FS 1W 470J
SR201	EH-408801J	COMP R RGLE7T 105J
SR202	EH-408801J	COMP R RGLE7T 105J
TR201	ET-378524J	TR 2SC3383 S,T,U
TR202	ET-352726	TR 2SA1392 T,U

5. FRONT P.C BOARD

Ref.No.	Part No.	Description
D301	ED-624903	D SILICON H 1S2473
D302	ED-624903	D SILICON H 1S2473
D303	ED-624903	D SILICON H 1S2473
D304	ED-624903	D SILICON H 1S2473
D305	ED-624903	D SILICON H 1S2473
D306	ED-511907	D SILICON 1N4002 100/1.0A
FL301	EM-408411J	IND FL BJ048GK DOUBLE
IC301	EI-408797J	IC M74HC154P
TR301	ET-396487J	TR DTA124XL T05
TR302	ET-396487J	TR DTA124XL T05
TR303	ET-396487J	TR DTA124XL T05
TR304	ET-396487J	TR DTA124XL T05
TR305	ET-396487J	TR DTA124XL T05
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TR308	ET-396487J	TR DTA124XL T05
TR309	ET-396487J	TR DTA124XL T05
TR310	ET-396487J	TR DTA124XL T05
TR311	ET-396487J	TR DTA124XL T05
TR312	ET-396487J	TR DTA124XL T05
TS301	ES-394818J	SW TACT SOR-123HS T05
TS302	ES-394818J	SW TACT SOR-123HS T05
TS303	ES-394818J	SW TACT SOR-123HS T05
TS304	ES-394818J	SW TACT SOR-123HS T05
TS305	ES-394818J	SW TACT SOR-123HS T05
TS306	ES-394818J	SW TACT SOR-123HS T05
TS307	ES-394818J	SW TACT SOR-123HS T05
TS308	ES-394818J	SW TACT SOR-123HS T05
TS309	ES-394818J	SW TACT SOR-123HS T05
TS310	ES-394818J	SW TACT SOR-123HS T05

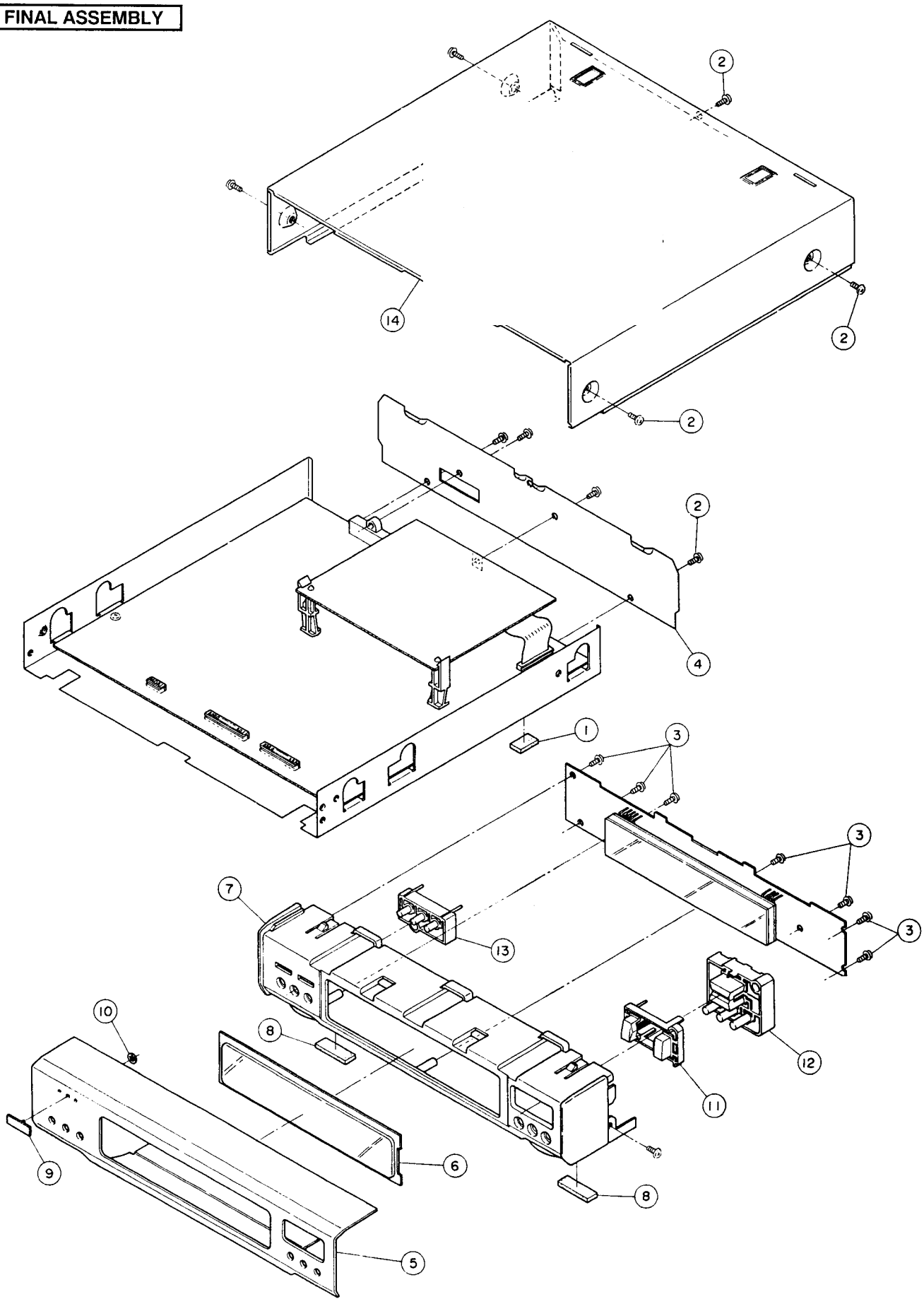
6. FINAL ASSEMBLY

Ref.No.	Part No.	Description
1	SA-407840M	CUSHION FOOT REAR (SG)
2	ZS-394412M	BT BID30X08STL BZN PROJECTION
3	ZS-331182	BT BID30X08STL BNI
4A	SP-407967M	PANEL REAR EA-750 (U) (SG) [U]
4B	SP-407969M	PANEL REAR EA-750 (E) (SG) [E]
5	SP-407958J	PANEL FRONT-EA
6	SE-407963M	WINDOW FLD-EA (SG)
7	SE-407956M	ESCUTCHEON FRONT (SG)
8	SA-394136M	CUSHION FOOT (SG)
9	SM-409218J	NAME PLATE AKAI-S
10	ZW-408744J	PUSH NUT SPN-2
11	SB-407961M	BUTTON FR (SG)
12	SB-407962M	BUTTON OP (SG)
13	SB-407965M	BUTTON MEMO (SG)
14	SP-407980M	COVER UPPER-TP (SG)

NOTE:

Parts will not be supplied if they are not listed in the parts list, even if they appear on the assembling illustrations with reference No.

FINAL ASSEMBLY



INDEX

Part No.	Ref. No.	Part No.	Ref. No.	Part No.	Ref. No.	Part No.	Ref. No.
BAD3016T030A	2-1	EI403308J	3-IC3	ET396487J	5-TR312		
BAD3016T040A	2-2	EI405327J	3-X1	ET397160J	3-TR2		
ED307572	3-D20	EI408393J	3-IC20	ET397160J	3-TR6		
ED307572	3-D21	EI408646J	3-IC16	ET397160J	3-TR10		
ED307572	3-D22	EI408646J	3-IC17	ET397160J	3-TR16		
ED307572	3-D26	EI408647J	4-IC204	ET397160J	3-TR17		
ED307572	3-D27	EI408797J	5-IC301	ET397160J	3-TR28		
ED307572	3-D28	EI408798J	3-IC1	SA394136M	6-8		
ED307572	3-D29	EI408810J	4-IC202	SA407840M	6-1		
ED307572	4-D203	EI408810J	4-IC203	SB407961M	6-11		
ED307572	4-D204	EJ404321J	3-J1	SB407962M	6-12		
ED307572	4-D205	EM408411J	5-FL301	SB407965M	6-13		
ED307572	4-D206	EO345887	3-L1	SE407956M	6-7		
ED307572	4-D207	EO345887	3-L2	SE407963M	6-6		
ED307572	4-D208	EO345887	3-L3	SM409218J	6-9		
ED307572	4-D209	EO345887	3-L4	SP407958J	6-5		
ED346529	3-D7	ER345751	3-R3	SP407967M	6-4A		
ED346529	3-D8	ER345751	3-R4	SP407969M	6-4B		
ED346529	3-D13	ER345751	3-R172	SP407980M	6-14		
ED346538	4-D201	ER408267J	3-R1	ZS331182	6-3		
ED346538	4-D202	ER408267J	3-R2	ZS394412M	6-2		
ED346559	3-D11	ER408267J	3-R171	ZW408744J	6-10		
ED346559	3-D12	ER408806J	4-R243				
ED346620	3-D15	ER408806J	4-R244				
ED400519J	3-D19	ES394818J	5-TS301				
ED403978J	3-D30	ES394818J	5-TS302				
ED403978J	3-D31	ES394818J	5-TS303				
ED403978J	4-D210	ES394818J	5-TS304				
ED405446J	3-D9	ES394818J	5-TS305				
ED405446J	3-D10	ES394818J	5-TS306				
ED405446J	3-D14	ES394818J	5-TS307				
ED511907	3-D1	ES394818J	5-TS308				
ED511907	3-D2	ES394818J	5-TS309				
ED511907	3-D3	ES394818J	5-TS310				
ED511907	3-D4	ET352726	4-TR202				
ED511907	3-D5	ET353899	3-TR4				
ED511907	3-D6	ET353899	3-TR8				
ED511907	3-D33	ET353899	3-TR12				
ED511907	3-D34	ET353899	3-TR15				
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ED624903	3-D23	ET354083	3-TR9				
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ED624903	5-D304	ET354415	3-TR18				
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EH408801J	4-SR201	ET356817	3-TR3				
EH408801J	4-SR202	ET356817	3-TR7				
EI200573	3-IC11	ET361736	3-TR19				
EI200573	3-IC14	ET361736	3-TR20				
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EI302233	3-IC13	ET361736	3-TR22				
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EI359053	3-IC10	ET366581	3-TR1				
EI382875J	3-X2	ET378524J	4-TR201				
EI387938J	3-IC2	ET396487J	5-TR301				
EI393323J	3-IC6	ET396487J	5-TR302				
EI393323J	3-IC7	ET396487J	5-TR303				
EI393323J	4-IC201	ET396487J	5-TR304				
EI400756J	3-IC4	ET396487J	5-TR305				
EI400756J	3-IC5	ET396487J	5-TR306				
EI400756J	3-IC8	ET396487J	5-TR307				
EI400756J	3-IC9	ET396487J	5-TR308				
EI400756J	4-IC205	ET396487J	5-TR309				
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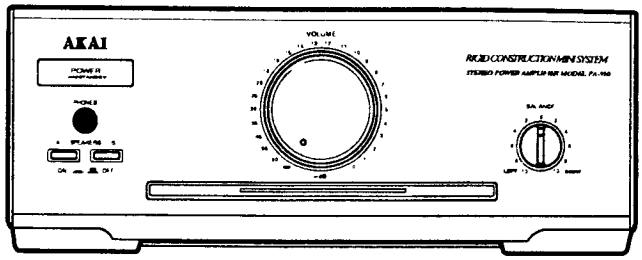
EI400756J	4-IC208	ET396487J	5-TR311				



MODEL PA-950

STEREO POWER AMPLIFIER

MODEL PA-750, 950

SPECIFICATIONS

Power output	
MODEL PA-750	
FTC	45W + 45W (60Hz to 20kHz, 0.5% THD, 6 ohms)
DIN	55W + 55W (1kHz, 1.0% THD, 6 ohms)
	50W + 50W (1kHz, 1.0% THD, 8 ohms)
EIAJ	70W + 70W (1kHz, 10% THD, 6 ohms)
MODEL PA-950	
FTC	55W + 55W (60Hz to 20kHz, 0.5% THD, 6 ohms)
DIN	65W + 65W (1kHz, 1.0% THD, 6 ohms)
	55W + 55W (1kHz, 1.0% THD, 8 ohms)
EIAJ	85W + 85W (1kHz, 10% THD, 6 ohms)
Music power output	
MODEL PA-750	500W (L / R total)
MODEL PA-950	600W (L / R total)
Peak music power output	
MODEL PA-750	800W (L / R total)
MODEL PA-950	900W (L / R total)
Required speaker impedance	6 to 16 ohms (A or B)
	12 to 16 ohms (A + B)
Power requirement	AC220 - 230V, 50Hz for Europe except UK
	AC240V, 50Hz for UK and Australia
	AC110/120/220/240V, 50/60Hz convertible for other countries.
Power consumption	
MODEL PA-750	110W
MODEL PA-950	130W
Dimensions	270(W) X 100(H) X 358(D) mm
Weights	
MODEL PA-750	5.6kg
MODEL PA-950	6.2kg

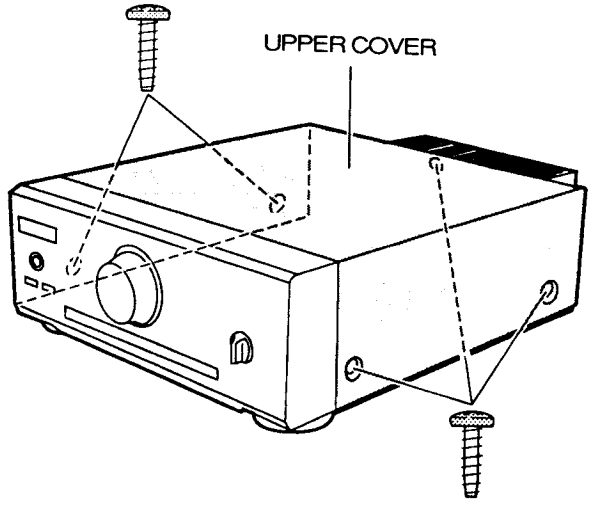
Standard accessories	
Remote control unit	X1
Batteries	X2
Operator's manual	X1

* For improvement purposes, specifications and design are subject to change without notice.

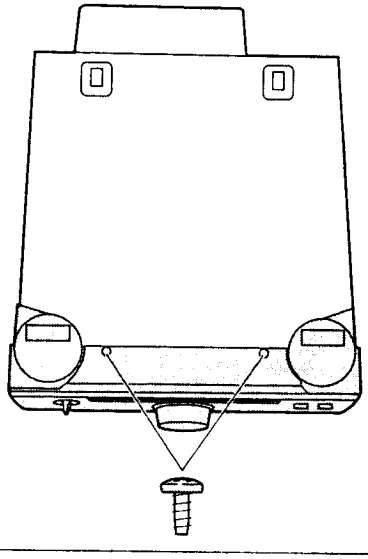
I. DISASSEMBLY

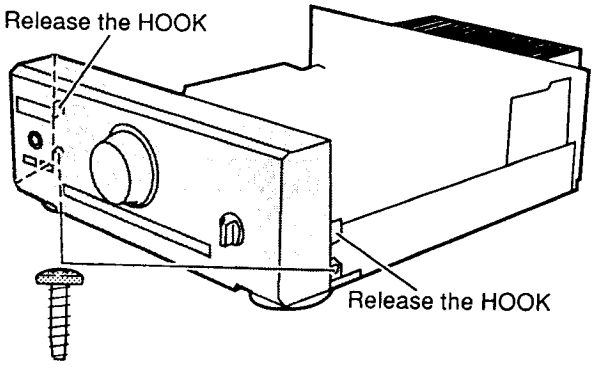
In case of trouble, etc., necessitating dismantling, please dismantle in the order shown in the illustrations. Reassemble in the reverse order.

1.Removal of the UPPER COVER



2.Removal of the FRONT PANEL





II.PRINCIPAL PARTS LOCATION

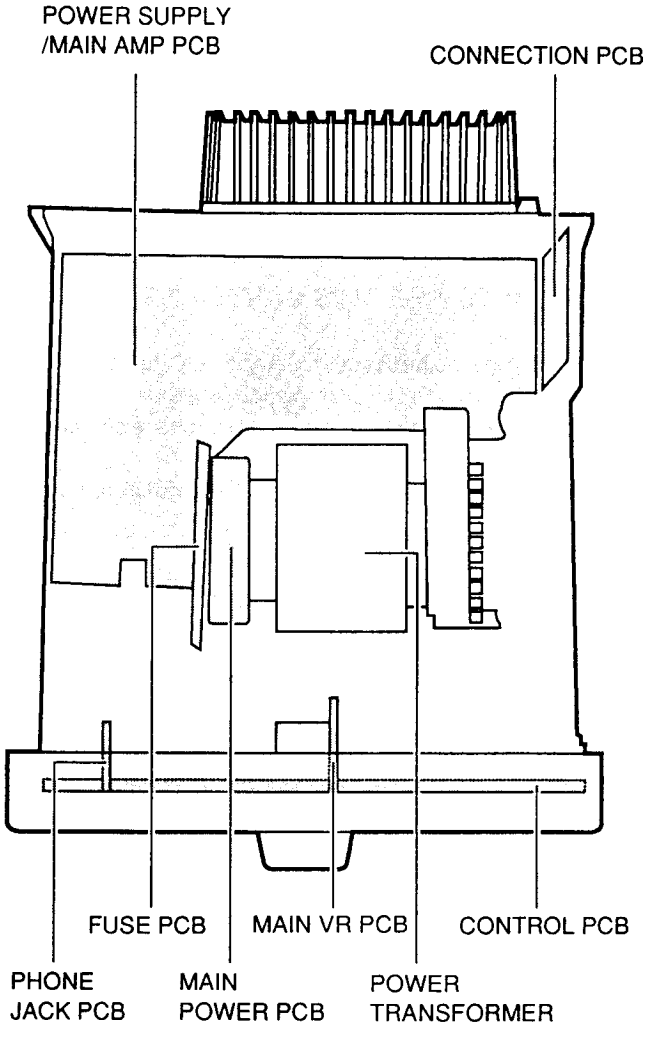


Fig.2-1 Top view

III. PARTS LIST

ATTENTION

1. **When placing an order for parts, be sure to list Part No., Model No. and the description of eachpart. Otherwise, the non-delivery of the part or the delivery of a wrong part may result.**
2. **Please make sure that Part No. is correct when ordering. If not, a part different from the one you ordered may be delivered.**
3. **Since the parts shown in Parts List of Preliminary Service Manual may have been the subject of changes, please use this Parts List for all future reference.**

HOW TO USE THIS PARTS LIST

1. This Parts List lists those parts which are considered necessary for repairs. Other common parts, such as resistors and capacitors, are listed in the "Common List for Service Parts" from which these parts should be selected and stocked.
2. The Recommended Spare Parts List shows those parts in the Parts List which are considered particularly important for service.
3. Parts not shown in the Parts List and "Common List for Service Parts" will not in principle be supplied.
4. How to read the Parts List.

a) Mechanism Block

2. HEAD BASE BLOCK

Ref. No.	Part No	Description
1	BH-T2023A320A	HEAD BASE BLOCK
2	HP-H2206A010A	HEAD R/P PR4-8FU C
3	ZS-477876	PAN20×03STL CMT
4	ZS-536488	BID20×08STL CMT
5	ZG-402895	SP CS ANGLE ADJUST

SP (Service Parts) Classification

This number corresponds with the individual parts index number in that figure.

b) PC Board

6. MAIN PC BOARD

Ref. No.	Part No.	Description
IC1	EI-324536	IC HD14049BP
IC2	EI-336801	IC MB8841-564M
C1A	EC-338399	C MMY V 223M 250AC [U,E,B,S]
C1B	EC-350949	C MMY V 223M 250DC [J]
C1C	EC-338397	C MMY V 223M 125AC [C,A]
X1	EI-318384	OSC X'TAL NC-18C

Symbols for primary destination

[A] :AAL (U.S.A) [S] :SAA (Australia)
[B] :BEAB (England) [U] :U/T (Universal Area)
[C] :CSA (Canada)
[E] :CEE (Europe) [V] :VDE (Germany)
[J] :JPN (Japan) [Y] :Custom Version

SP (Service Parts) Classification

These reference symbols correspond with component symbols in the Schematic Diagrams.

The available PC Board Blocks are listed separately.

5. When Part No. is known, Parts Index at end of Parts List can be used to locate where that part is shown in Parts List
by its Reference No.listed at right of Part No.

WARNING

⚠ (*) INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURE'S RECOMMENDED PARTS.

AVERTISSEMENT

⚠ (*) IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉDE L'APPAREIL, NE REMPLACER QUE DES PIÉCES RECOMMANDEES PAR LÉ FABRICANT.

1. RECOMMENDED SPARE PARTS

We suggest you to stock the following Recommended Spare Part items listed below since they can cover most of the routine service.

Ref.No.	Part No.	Description
1	AX-408738M	REMOCON RC-S650
2	*BT-408786M	TRANS POW A5013 B S [B,S] [750]
3	*BT-408785M	TRANS POW A5013 E V [E,V] [750]
4	*BT-408784M	TRANS POW A5013 U [U] [750]
5	*BT-408789M	TRANS POW A5014 B S [B,S] [950]
6	*BT-408788M	TRANS POW A5014 E V [E,V] [950]
7	*BT-408787M	TRANS POW A5014 U [U] [950]
8	ED-394509J	D LED GL3HY43 ORANGE
9	ED-408768J	D LED SEL2213C TP6 RED
10	ED-408640J	D LED SEL2913KTP6 D ORANGE T05
11	ED-307572	D SILICON H 1SS131
12	*ED-394708J	D SILICON RBA402 200/4.0A [750]
13	*ED-384278J	D SILICON RBV602 200/6.0A [950]
14	*ED-511907	D SILICON 1N4002 100/1.0A
15	ED-388320J	D ZENER H HZS12B3L
16	*ED-378530J	D ZENER H HZS6B2L
17	*EF-355398	FUSE BET T 250V 2.00A [U,B,S]
18	*EF-364518	FUSE BET T 250V 2.50A [750]
19	*EF-359225	FUSE BET T 250V 3.15A [950]
20	*EF-359086	FUSE BET T 250V 4.00A
21	*EF-358974	FUSE BET T 250V 630MA
22	*EF-601964	FUSE SEMKO T 250V 1.60A [750]
23	*EI-358554	IC STK4152II [750]
24	*EI-366695	IC STK4172-2 [950]
25	EO-337880	COIL FIX 2 202AK-018 2R2K
26	*EO-338409	COIL LF FKOB160MH02 250UH
27	*ER-331188	R FUSE H S10 ERD2FC 1/4W 8R2J
28	*ER-401039J	R FUSE V T05 ERD2FCV 1/4W 4R7J
29	*ER-408716J	R FUSE V T05 ERD2FCV 1/4W56R0G
30	ER-397193J	R OMF V T05 FS 1W 100J
31	ES-394512J	SW PUSH SPEA12 02-02N
32	*ES-349070	SW SELECTOR YKS11-0002 02-4
33	ES-408703J	SW TACT EVQ 233 05R T05
34	ET-369248	TR DTA114YS
35	ET-373985	TR DTA144TS
36	ET-354365	TR DTC114YS
37	ET-354371	TR DTC124ES
38	ET-353899	TR 2SA1317 S,T,U
39	*ET-366365	TR 2SB1185 E,F
40	ET-397160J	TR 2SC3330 R,S,T,U,V
41	*ET-378524J	TR 2SC3383 S,T,U
42	ET-394735J	TR 2SC3792 T05
43	*ET-366581	TR 2SD1762 E,F
44	EV-408707J	VR ROTARY RK11K1140 SP W104 [BALANCE VR]
45	EV-408811J	VR SPL RK16EUWMZ1 B104X2 [MAIN VR]

2. P.C BOARD BLK

Ref.No.	Part No.	Description
1A	BA-A5013T030A	ML PC (#) MAIN BLK PA-750 (U) /ML
1B	BA-A5013T030B	ML PC (#) MAIN BLK PA-750 (E) /ML
1C	BA-A5013T030C	ML PC (#) MAIN BLK PA-750 (V) /ML
1D	BA-A5013T030D	ML PC (#) MAIN BLK PA-750 (B) /ML
1E	BA-A5013T030E	ML PC (#) MAIN BLK PA-950 (U) /ML
1G	BA-A5013T030G	ML PC (#) MAIN BLK PA-950 (V) /ML
1H	BA-A5013T030H	ML PC (#) MAIN BLK PA-950 (B) /ML

PC (#) MAIN BLK CONSISTS OF FOLLOWING P.C BOARD.

- POWER SUPPLY/MAIN AMP P.C BOARD
- CONNECTION P.C BOARD
- CONTROL P.C BOARD
- MAIN VR P.C BOARD
- PHONE JACK P.C BOARD
- INDICATOR P.C BOARD
- FUSE P.C BOARD

3. POWER SUPPLY/MAIN AMP P.C BOARD

Ref.No.	Part No.	Description
C83A	EC-394535J	C EC V CUT SME 332M 45.0DC [750]
C83B	EC-394534J	C EC V CUT SME 472M 50.0DC [950]
C84A	EC-394535J	C EC V CUT SME 332M 45.0DC [750]
C84B	EC-394534J	C EC V CUT SME 472M 50.0DC [950]
C91	*EC-403337J	C CE V DE7100 F472M 400AC
C92	*EC-403337J	C CE V DE7100 F472M 400AC
D1A	*ED-394708J	D SILICON RBA402 200/4.0A [750]
D1B	*ED-384278J	D SILICON RBV602 200/6.0A [950]
D2	*ED-511907	D SILICON 1N4002 100/1.0A
D3	*ED-511907	D SILICON 1N4002 100/1.0A
D4	ED-388320J	D ZENER H HZS12B3L
D5	ED-307572	D SILICON H 1SS131
D6	ED-307572	D SILICON H 1SS131
D7	ED-307572	D SILICON H 1SS131
D8	ED-307572	D SILICON H 1SS131
D9	ED-307572	D SILICON H 1SS131
D10	*ED-388320J	D ZENER H HZS12B3L
D11	*ED-511907	D SILICON 1N4002 100/1.0A
D12	*ED-511907	D SILICON 1N4002 100/1.0A
D13	*ED-388320J	D ZENER H HZS12B3L
D14	ED-511907	D SILICON 1N4002 100/1.0A
D15	ED-511907	D SILICON 1N4002 100/1.0A
D16	ED-511907	D SILICON 1N4002 100/1.0A
D17	ED-511907	D SILICON 1N4002 100/1.0A
D18	*ED-511907	D SILICON 1N4002 100/1.0A
FR1	*ER-331188	R FUSE H S10 ERD2FC 1/4W 8R2J
FR2	*ER-408716J	R FUSE V T05 ERD2FCV 1/4W56R0G
FR3	*ER-401039J	R FUSE V T05 ERD2FCV 1/4W 4R7J
IC1A	*EI-358554	IC STK4152II [750]
IC1B	*EI-366695	IC STK4172-2 [950]
L1	EO-337880	COIL FIX 2 202AK-018 2R2K
L2	EO-337880	COIL FIX 2 202AK-018 2R2K
L3	EO-342936	COIL BALUM [V]
L4	EO-342936	COIL BALUM [V]
L5	*EO-338409	COIL LF FKOB160MH02 250UH
R9	ER-397193J	R OMF V T05 FS 1W 100J
R10	ER-397193J	R OMF V T05 FS 1W 100J
R59	ER-397193J	R OMF V T05 FS 1W 100J
R60	ER-397193J	R OMF V T05 FS 1W 100J
TM1	EJ-408698J	TERMINAL PUSH LQR0810-0006 8P
TR1	ET-354365	TR DTC114YS
TR2	ET-373985	TR DTA144TS
TR3	*ET-366365	TR 2SB1185 E,F
TR4	ET-353899	TR 2SA1317 S,T,U
TR5	ET-369248	TR DTA114YS
TR6	*ET-353899	TR 2SA1317 S,T,U
F1A	*EF-364518	FUSE BET T 250V 2.50A [750]
F1B	*EF-359225	FUSE BET T 250V 3.15A [950]
F2A	*EF-364518	FUSE BET T 250V 2.50A

Ref.No.	Part No.	Description
F2B	*EF-359225	FUSE BET T 250V 3.15A [950]
F3	*EF-355398	FUSE BET T 250V 2.00A [U,B,S]
F4	*EF-355398	FUSE BET T 250V 2.00A [U]

4. CONECTION P.C BOARD

Ref.No.	Part No.	Description
D201	*ED-511907	D SILICON 1N4002 100/1.0A
D202	*ED-511907	D SILICON 1N4002 100/1.0A
D203	*ED-378530J	D ZENER H HZS6B2L
D204	*ED-388320J	D ZENER H HZS12B3L
D205	*ED-307572	D SILICON H 1SS131
J6	EJ-408717J	SOCKET CFG1115-0121 RED 15P
J7	EJ-408775J	SOCKET CFG1204-0101 BLACK 4P
TR201	*ET-366581	TR 2SD1762 E,F
TR202	*ET-378524J	TR 2SC3383 S,T,U

5. CONTROL P.C BOARD

Ref.No.	Part No.	Description
D301	ED-408768J	D LED SEL2213C TP6 RED
D302	ED-408768J	D LED SEL2213C TP6 RED
D303	ED-408768J	D LED SEL2213C TP6 RED
D304	ED-408768J	D LED SEL2213C TP6 RED
D305	ED-408640J	D LED SEL2913KTP6 D ORANGE T05
D306	ED-408640J	D LED SEL2913KTP6 D ORANGE T05
D307	ED-408640J	D LED SEL2913KTP6 D ORANGE T05
D308	ED-408640J	D LED SEL2913KTP6 D ORANGE T05
D309	ED-408640J	D LED SEL2913KTP6 D ORANGE T05
R313	ER-397194J	R OMF V T05 FS 1W 331J
R314	ER-397194J	R OMF V T05 FS 1W 331J
SW301	ES-394512J	SW PUSH SPEA12 02-02N
SW302	ES-394512J	SW PUSH SPEA12 02-02N
TR301	ET-353899	TR 2SA1317 S,T,U
TR302	ET-353899	TR 2SA1317 S,T,U
TR303	ET-397160J	TR 2SC3330 R,S,T,U,V
TR304	ET-397160J	TR 2SC3330 R,S,T,U,V
TR305	ET-354371	TR DTC124ES
TR306	ET-354371	TR DTC124ES
TR307	ET-354371	TR DTC124ES
TR308	ET-354371	TR DTC124ES
TR309	ET-394735J	TR 2SC3792 T05
TR310	ET-394735J	TR 2SC3792 T05
TS301	ES-408703J	SW TACT EVQ 233 05R T05
VR301	EV-408707J	VR ROTARY RK11K1140 SP W104 [BALANCE VR]

6. MAIN VR P.C BOARD

Ref.No.	Part No.	Description
VR401	EV-408811J	VR SPL RK16EUWMZ1 B104X2 [MAIN VR]

7. PHONE JACK P.C BOARD

Ref.No.	Part No.	Description
J501	EJ-390079J	PHONE J 3P YKB21-5009A NI 6.3

8. INDICATOR P.C BOARD

Ref.No.	Part No.	Description
D601	ED-394509J	D LED GL3HY43 ORANGE

9. FUSE P.C BOARD

Ref.No.	Part No.	Description
F701A	*EF-601964	FUSE SEMKO T 250V 1.60A [750]
F701B	*EF-355398	FUSE BET T 250V 2.00A [950]
F702A	*EF-601964	FUSE SEMKO T 250V 1.60A [750]
F702B	*EF-355398	FUSE BET T 250V 2.00A [950]
F703	*EF-358974	FUSE BET T 250V 630MA
F704	*EF-358974	FUSE BET T 250V 630MA
F705	*EF-359086	FUSE BET T 250V 4.00A
F706	*EF-359086	FUSE BET T 250V 4.00A

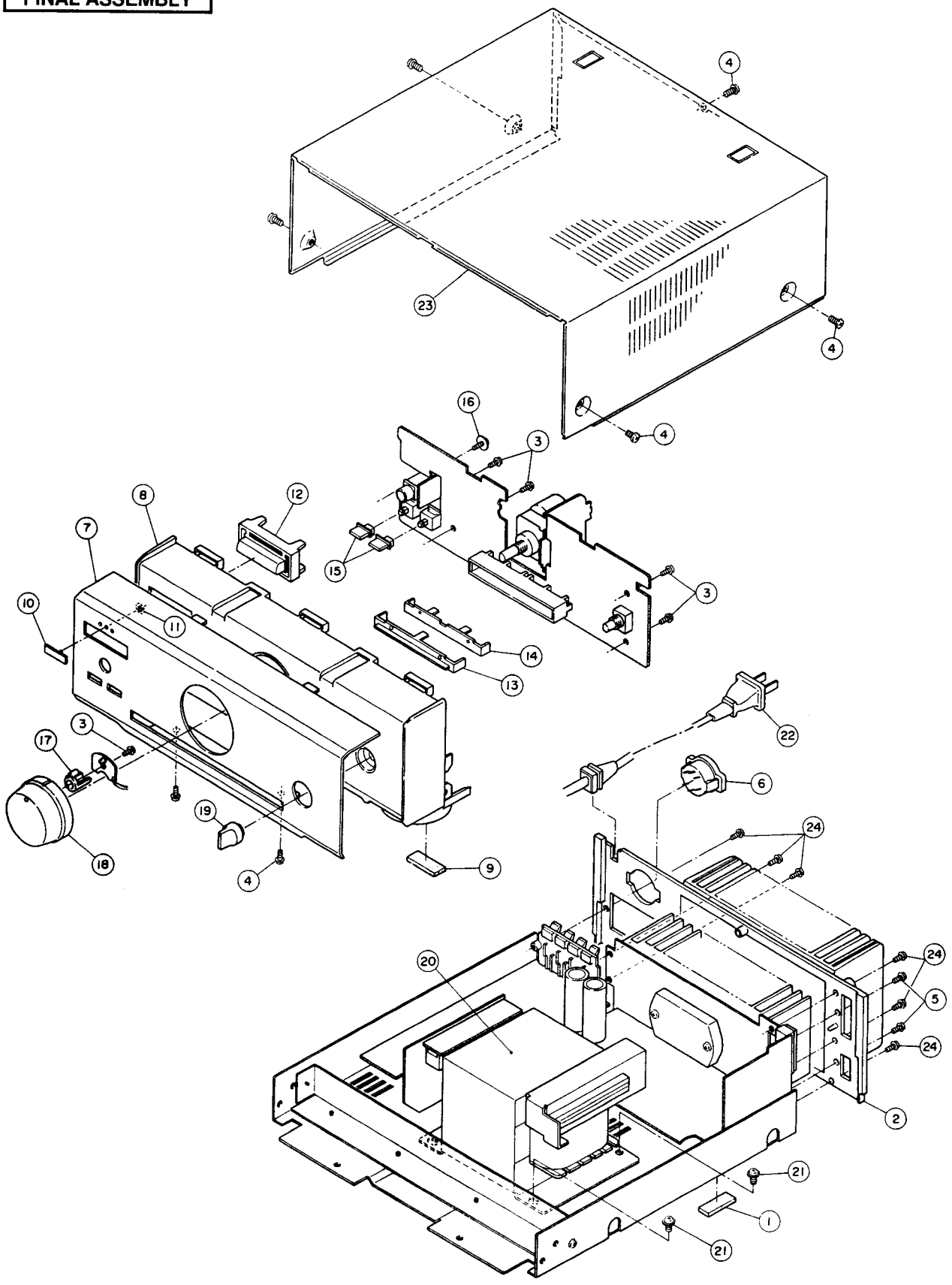
10. FINAL ASSEMBLY

Ref.No.	Part No.	Description
1	SA-407840M	CUSHION FOOT REAR (SG)
2A	SP-408079M	PANEL REAR PA- (1) (SG) [U]
2B	SP-408080M	PANEL REAR PA- (2) (SG) [E,V,B,S]
3	ZS-331182	BT BID30X08STL BNI
4	ZS-394412M	BT BID30X08STL BZN PROJECTION
5	ZS-725336J	BT BID30X16STL BNI
6	*ES-349070	SW SELECTOR YKS11-0002 02-4
7A	SP-408063J1	PANEL FRONT-A [750]
7B	SP-408072J1	PANEL FRONT-B [950]
8	SE-408064M1	ESCUTCHEON FRONT (SG)
9	SA-394136M	CUSHION FOOT (SG)
10	SM-409218J	NAME PLATE AKAI-S
11	ZW-408744J	PUSH NUT SPN-2
12	SB-408066M	BUTTON POWER (SG)
13	SE-408069M	LENS INDICATOR (1) (SG)
14	SE-408070M	LENS INDICATOR (2) (SG)
15	SE-408067M	BUTTON SP (SG)
16	ZS-407886M	BT PAN30X08STL BZN C100 (SG)
17	SE-407867M	LENS VR (SG)
18	SK-407864M	KNOB VR (SG)
19	SK-407865M	KNOB BALANCE (SG)
20A	*BT-408784M	TRANS POW A5013 U [U] [750]
20B	*BT-408785M	TRANS POW A5013 E V [E,V] [750]
20C	*BT-408786M	TRANS POW A5013 B S [B,S] [750]
20D	*BT-408787M	TRANS POW A5014 U [U] [950]
20E	*BT-408788M	TRANS POW A5014 E V [E,V] [950]
20F	*BT-408789M	TRANS POW A5014 B S [B,S] [950]
21	ZS-346742	ST BID40X08STL CMT CUP
22A	*EW-408790M	AC CORD200 SZ4W H03VVH2F B120 U [U]
22B	*EW-404002M	AC CORD 200 SE-1 WITH TUBE E [E,V]
22C	*EW-404001M	AC CORD 200 VCTFK WITH TUBE B [B]
22D	*EW-404003M	AC CORD 200 SA-2 WITH TUBE S [S]
23	SP-408065M	COVER UPPER PA (SG)

11. ACCESSARY

Ref.No.	Part No.	Description
1	AX-408738M	REMOCON RC-S650

FINAL ASSEMBLY



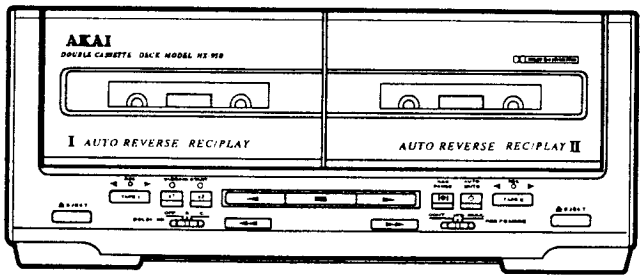
NOTE:
Parts will not be supplied if they are not listed in the parts list, even if they appear on the assembling illustrations

INDEX

Part No.	Ref. No.	Part No.	Ref. No.	Part No.	Ref. No.	Part No.	Ref. No.
AX408738M	11-1	EI366695	3-IC1B				
BAA5013T030A	2-1A	EJ390079J	7-J501				
BAA5013T030B	2-1B	EJ408698J	3-TM1				
BAA5013T030C	2-1C	EJ408717J	4-J6				
BAA5013T030D	2-1D	EJ408775J	4-J7				
BAA5013T030E	2-1E	EO337880	3-L1				
BAA5013T030F	2-1F	EO337880	3-L2				
BAA5013T030G	2-1G	EO338409	3-L5				
BAA5013T030H	2-1H	EO342936	3-L3				
BT408784M	10-20A	EO342936	3-L4				
BT408785M	10-20B	ER331188	3-FR1				
BT408786M	10-20C	ER397193J	3-R9				
BT408787M	10-20D	ER397193J	3-R10				
BT408788M	10-20E	ER397193J	3-R59				
BT408789M	10-20F	ER397193J	3-R60				
EC394534J	3-C83B	ER397194J	5-R313				
EC394534J	3-C84B	ER397194J	5-R314				
EC394535J	3-C83A	ER401039J	3-FR3				
EC394535J	3-C84A	ER408716J	3-FR2				
EC403337J	3-C91	ES349070	10-6				
EC403337J	3-C92	ES394512J	5-SW301				
ED307572	3-D5	ES394512J	5-SW302				
ED307572	3-D6	ES408703J	5-TS301				
ED307572	3-D7	ET353899	3-TR4				
ED307572	3-D8	ET353899	3-TR6				
ED307572	3-D9	ET353899	5-TR301				
ED307572	4-D205	ET353899	5-TR302				
ED378530J	4-D203	ET354365	3-TR1				
ED384278J	3-D1B	ET354371	5-TR305				
ED388320J	3-D4	ET354371	5-TR306				
ED388320J	3-D10	ET354371	5-TR307				
ED388320J	3-D13	ET354371	5-TR308				
ED388320J	4-D204	ET366365	3-TR3				
ED394509J	8-D601	ET366581	4-TR201				
ED394708J	3-D1A	ET369248	3-TR5				
ED408640J	5-D305	ET373985	3-TR2				
ED408640J	5-D306	ET378524J	4-TR202				
ED408640J	5-D307	ET394735J	5-TR309				
ED408640J	5-D308	ET394735J	5-TR310				
ED408640J	5-D309	ET397160J	5-TR303				
ED408768J	5-D301	ET397160J	5-TR304				
ED408768J	5-D302	EV408707J	5-VR301				
ED408768J	5-D303	EV408811J	6-VR401				
ED408768J	5-D304	EW404001M	10-22C				
ED511907	3-D2	EW404002M	10-22B				
ED511907	3-D3	EW404003M	10-22D				
ED511907	3-D11	EW408790M	10-22A				
ED511907	3-D12	SA394136M	10-9				
ED511907	3-D14	SA407840M	10-1				
ED511907	3-D15	SB408066M	10-12				
ED511907	3-D16	SE407867M	10-17				
ED511907	3-D17	SE408064M1	10-8				
ED511907	3-D18	SE408067M	10-15				
ED511907	4-D201	SE408069M	10-13				
ED511907	4-D202	SE408070M	10-14				
EF355398	3-F3	SK407864M	10-18				
EF355398	3-F4	SK407865M	10-19				
EF355398	9-F701B	SM409218J	10-10				
EF355398	9-F702B	SP408063J1	10-7A				
EF358974	9-F703	SP408065M	10-23				
EF358974	9-F704	SP408072J1	10-7B				
EF359086	9-F705	SP408079M	10-2A				
EF359086	9-F706	SP408080M	10-2B				
EF359225	3-F1B	ZS331182	10-3				
EF359225	3-F2B	ZS346742	10-21				
EF364518	3-F1A	ZS394412M	10-4				
EF364518	3-F2A	ZS407886M	10-16				
EF601964	9-F701A	ZS425336J	10-5				
EF601964	9-F702A	ZW408744J	10-11				
EI358554	3-IC1A						

ABBREVIATIONS (AMPLIFIER)

ABBREVIATION	EXPLANATION
A	Analog
AC	Alternating Current
AMP	AMPlifier
CD	Compact Disc
COM	COMmon
D	Digital
D/A	Digital to Analog
DAC	Digital to Analog Converter
DAT	Digital Audio Tape recorder
DC	Direct Current
GND	GrouND
L	Left
LED	Light Emitting Diode
MC	Moving Coil
MM	Moving Magnet
PCB	Printed Circuit Board
R	Right
REG	REGulator
REC	RECord
TR	TRansistor
SW	SWitch
V.AMP	Voltage AMPlifier
VCR	Video Cassette Recorder
V.DISC	Video DISC
VR	Variable Resistor
VTR	Video Tape Recorder



MODEL HX-950

STEREO CASSETTE DECK

MODEL HX-750,950

SPECIFICATIONS

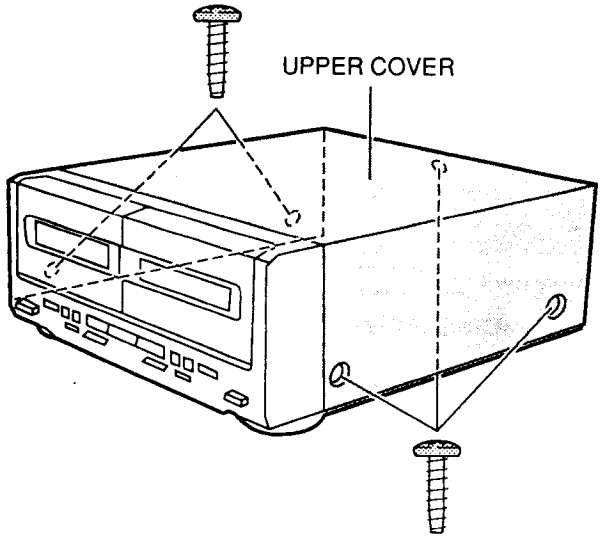
Track system	4 track 2 channel system
Wow & Flutter	0.09% (WRMS), 0.15% (DIN)
Frequency response	Normal 35Hz to 14,000Hz (±3dB)
	CrO_2 35Hz to 15,000Hz (±3dB)
	Metal 35Hz to 15,000Hz (±3dB) (HX-950 only)
S/N ratio	76dB (Dolby C ON, 1kHz to 10kHz)
	66dB (Dolby B ON, 5kHz)
	56dB (Dolby OFF, CrO_2 tape)
Total harmonic distortion	Less than 0.3% (Normal tape, at 315Hz)
Channel separation	35dB (Normal tape)
Power consumption	
MODEL HX-750	15W
MODEL HX-950	15W
Dimensions	270 (W) X 110 (H) X 301 (D)mm
Weights	
MODEL HX-750	2.6kg
MODEL HX-950	2.8kg

* For improvement purposes, specifications and design are subject to change without notice.
* Noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
"DOLBY" and ⊡ symbol are trademarks of Dolby Licensing Corporation.

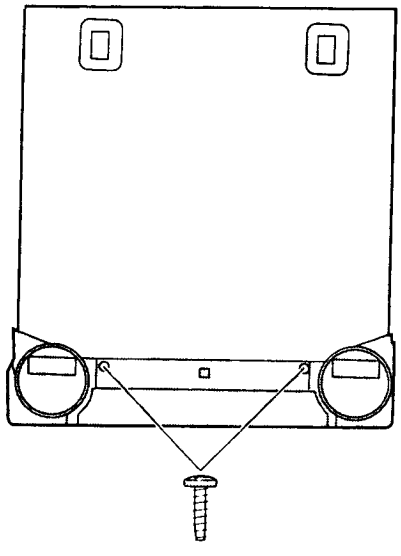
I. DISASSEMBLY

In case of trouble, etc., necessitating dismantling, please dismantle in the order shown in the illustrations. Reassemble in the reverse order.

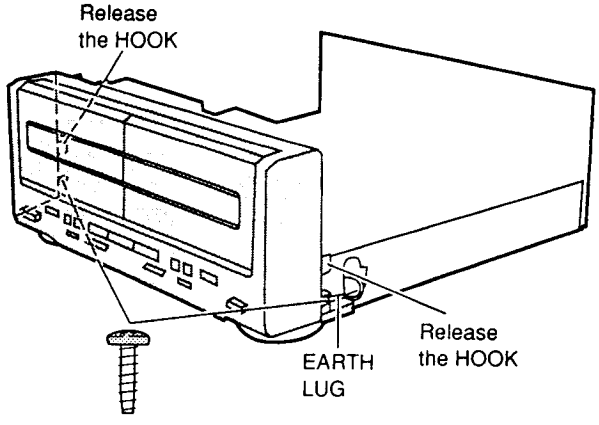
1. Removal of the UPPER COVER



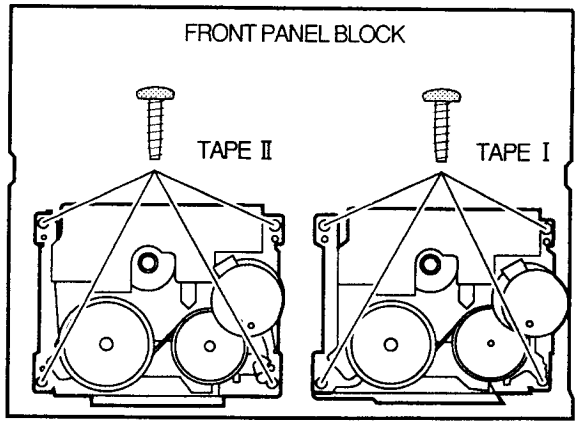
2. Removal of the FRONT PANEL BLOCK



3.



4. Removal of the MECHA. BLOCK



II. PRINCIPAL PARTS LOCATION

2-1. MODEL HX-750

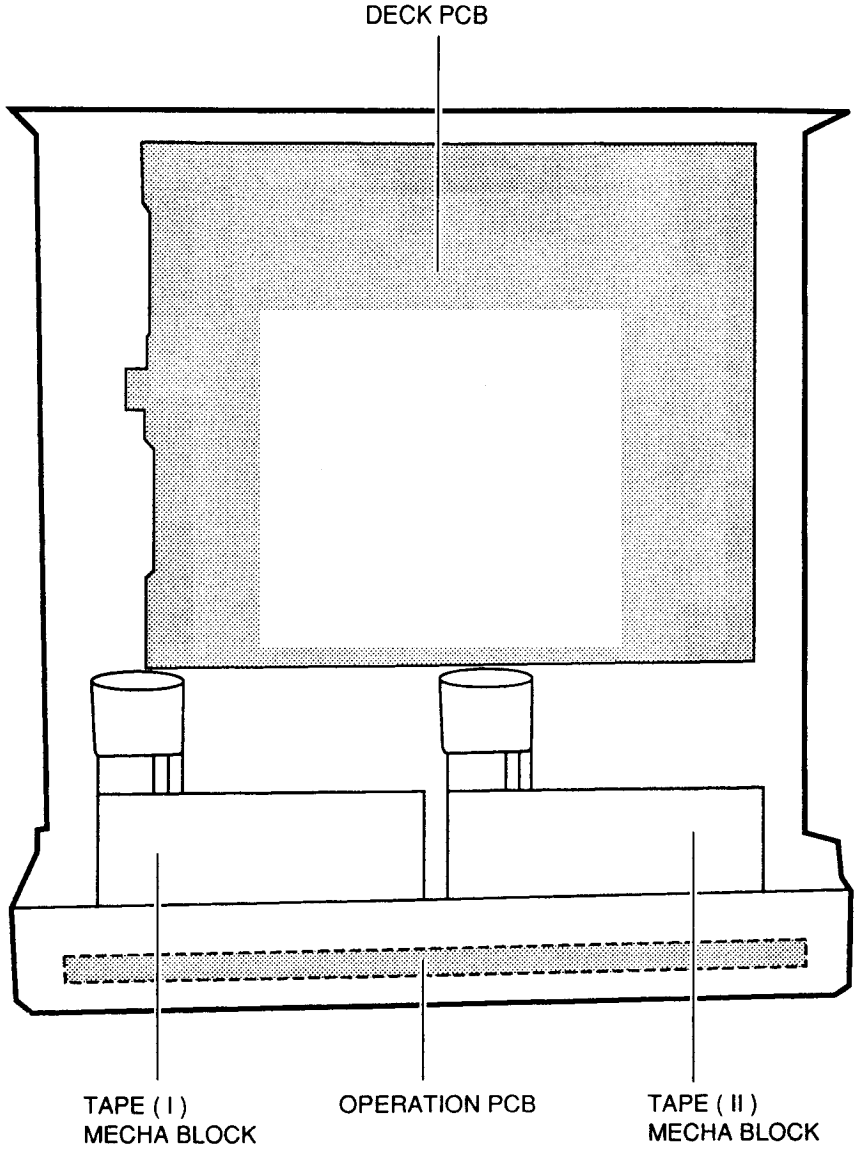


Fig.2-1 Top view

2-2. MODEL HX-950

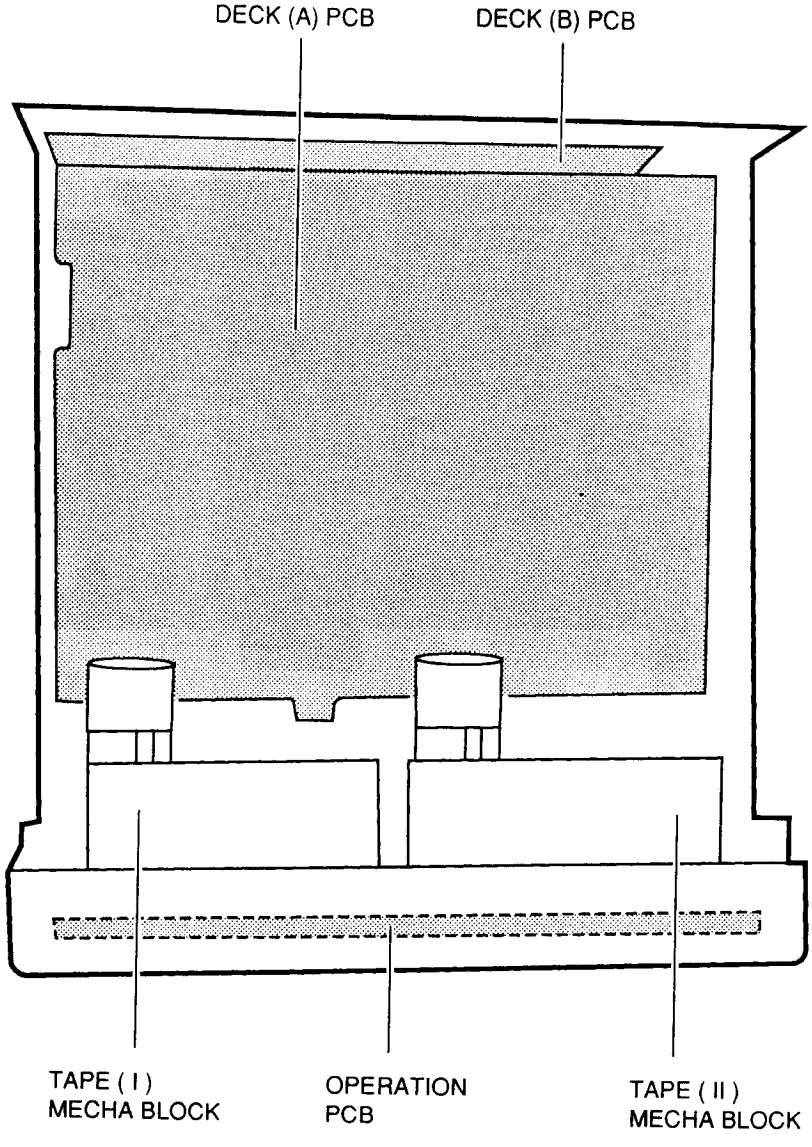


Fig.2-2 Top view

III. REPLACEMENT OF PRINCIPAL MECHANICAL PARTS

3-1. REPLACEMENT OF THE PINCH ROLLER BLOCK

1) Pull the PINCH ROLLER BLOCK upward (⬆) while releasing the PINCH ROLLER RETAINING HOOK.
2) Reassemble in the reverse order.

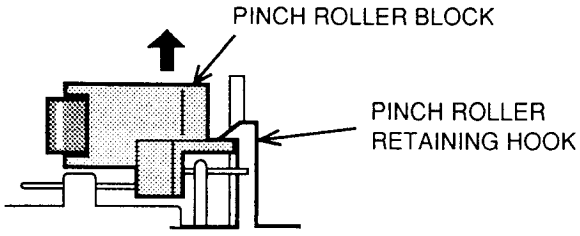


Fig.3-1

3-2. REPLACEMENT OF THE PB HEAD (model HX-750 TAPE I only)

1) Remove the two HEAD RETAINING Ⓐ SCREWS.
2) Pull out the HEAD and disconnect all the lead wires with a soldering iron, then replace the PB HEAD.
3) Reassemble in the reverse order. After replacement, head azimuth and PB level adjustment must be performed.

Fig.3-2

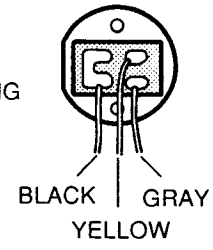
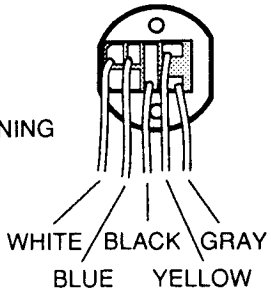


Fig.3-3

3-3. REPLACEMENT OF THE REC/PB HEAD (Except model HX-750 TAPE I)

1) Remove the two HEAD RETAINING Ⓐ SCREWS.
2) Pull out the HEAD and disconnect all lead wires with a soldering iron, then replace the REC/PB HEAD.
3) Reassemble in the reverse order. After replacement, head azimuth, PB level, BIAS current and REC level adjustments must be performed.



3-4. REPLACEMENT OF THE CAPSTAN MOTOR

1) Disconnect the lead wire of the CAPSTAN MOTOR with a soldering iron.
2) Remove the CAPSTAN MOTOR RETAINING Ⓑ SCREWS, then replace the CAPSTAN MOTOR.
3) Reassemble in the reverse order and set the DRIVE BELT. After replacement, tape speed adjustment must be performed.

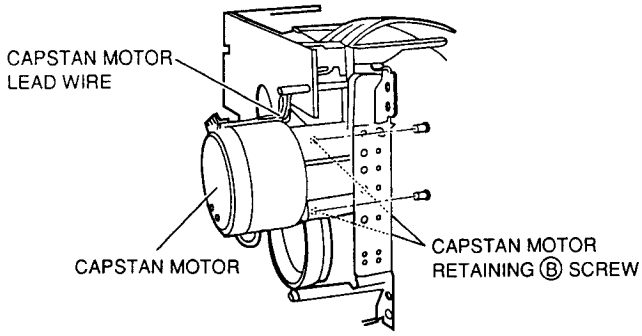
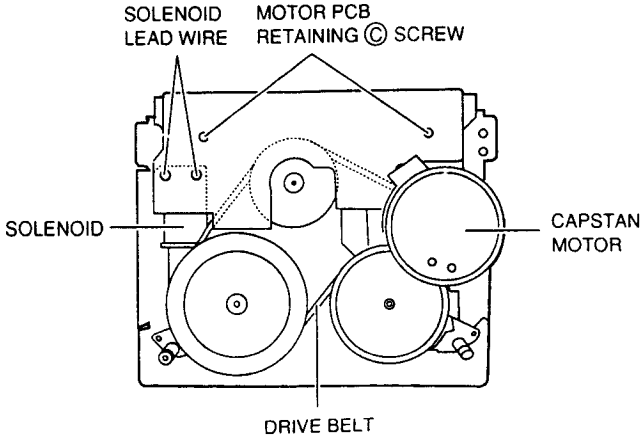


Fig.3-6

3-5. REPLACEMENT OF THE DRIVE BELT

1) Remove the CAPSTAN MOTOR RETAINING Ⓑ SCREWS. (refer illustration Fig.3-6)
2) Unsolder the lead wires of the SOLENOID with a soldering iron.
3) Remove the two MOTOR PCB RETAINING Ⓒ SCREWS and separate the MOTOR PCB from the MECHA BLK. Replace the DRIVE BELT.
4) Reassemble in the reverse order. After replacement, confirm the tape speed and if the result is not satisfactory, adjust the tape speed.



IV. MECHANICAL ADJUSTMENT

4-1. ADJUSTMENT OF THE PB HEAD AZIMUTH ALIGNMENT (model HX-750 TAPE I only)

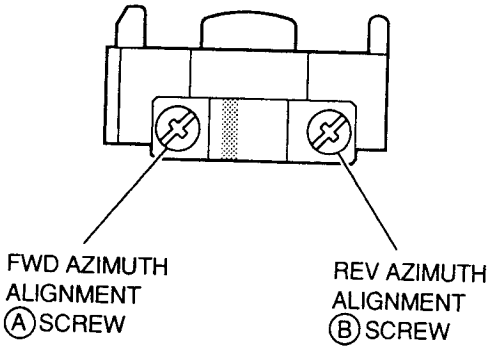


Fig.4-1

1) Connect an AC milli-voltmeter to the TP-750 VCR REC OUT L and R-CH then connect an oscilloscope's input CH-1 and CH-2 to the output of the AC milli-voltmeters.
2) Play back the 10 kHz (−15 dB), HEAD AZIMUTH ALIGNMENT TEST TAPE (TF-106CH) then adjust the PB HEAD AZIMUTH ALIGNMENT Ⓐ (FWD PLAY) and Ⓑ (REV PLAY) SCREW respectively so that the reading on the AC mill-voltmeters are at maximum and waveforms on the oscilloscope are in the same phase, in both FWD and REV directions.

4-2. ADJUSTMENT OF THE REC/PB HEAD AZIMUTH ALIGNMENT (Except HX-750 TAPE I)

1) Connect an AC milli-voltmeter to the TP-750 VCR REC OUT L and R-CH then connect the oscilloscope's input CH-1 and CH-2 to the output of the AC milli-voltmeters.
2) Play back the 10 kHz (−15dB), HEAD AZIMUTH ALIGNMENT TEST TAPE (TF-106CH) then adjust the REC/PB HEAD AZIMUTH ALIGNMENT Ⓐ (FWD PLAY) and Ⓑ (REV PLAY) SCREW respectively so that the reading on the AC milli-voltmeters are at maximum and waveforms on the oscilloscope are in the same phase in both FWD and REV directions.

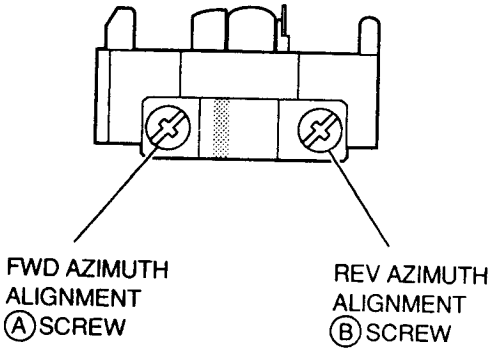


Fig.4-2

DEL HX-750

llowing adjustment should be performed
test mode.
gage the test mode, connect the AC power
the AC outlet while pressing the ▶▶ and
uttons together.
the test mode is engaged, X1 dub lamp is

performing the tape speed adjustment,
e the following notes.
stment should be started more than 30
nds after the power is ON.
stment should be made on X2 speed mode
hen adjust normal speed mode.
stment should be made in the forward
ion.

STEP	ADJUSTMENT
1.	TEST TAPE/INPUT SIGNAL
2.	MODE
3.	CHECK POINT, ADJUSTMENT PART
4.	REMARKs (•) and RESULT (*)

→ Adjustment Part
→ Test Point

(0 dBs = 0.775V)

6 TAPE II PB LEVEL
1. 315Hz test tape (TF-101CL)
2. PLAY
3. VCR REC OUT, VR102 (L-ch) / VR152 (R-ch)
4. • Connect an AC milli-voltmeter to the VCR REC OUT.
   *−10 dBs

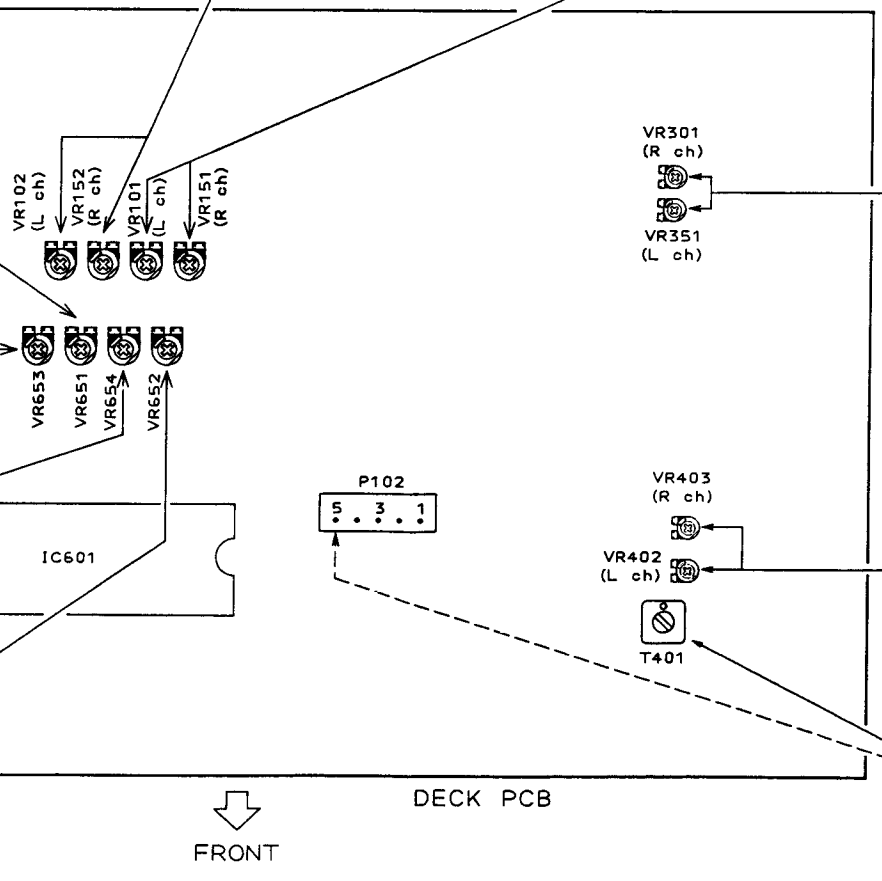
5 TAPE I PB LEVEL
1. 315Hz test tape (TF-101CL)
2. PLAY
3. VCR REC OUT, VR101 (L-ch) / VR151 (Rch)
4. • Connect an AC milli-voltmeter to the VCR REC OUT.
   *−10 dBs

I (X2) TAPE SPEED
lz test tape (TF-110CT)
press the x 2 DUBBING START button)
EC OUT, VR651
ect a frequency counter to the VCR
OUT.
± 20 Hz

I NORMAL TAPE SPEED
z test tape (TF-110CT)
EC OUT, VR653
ect a frequency counter to the VCR
OUT:
± 10 Hz

II (X2) TAPE SPEED
z test tape (TF-110CT)
press the x 2 DUBBING START button)
EC OUT, VR654
ect a frequency counter to the VCR
OUT.
± 20 Hz

II NORMAL TAPE SPEED
z test tape (TF-110CT)
EC OUT, VR652
ct a frequency counter to the VCR
OUT.
± 10 Hz



9 RECORDING LEVEL
1. 1 kHz, −10 dBs (VCR REC OUT) / NORMAL recording test tape (UD-124)
2. REC → PLAY
3. VCR REC OUT, VR351 (L-ch) / VR301 (R-ch)
4. • Connect an AC Milli -voltmeter to the VCR REC OUT.
   • Connect an audio signal generator to the AUX INPUT and set the generator level so that the VCR REC OUT levels are −10 dBs.
   *Playback levels after recording are −10 dBs

8 NORMAL POSITION BIAS
1. 1kHz and 10kHz, −30dBs (VCR REC OUT) NORMAL recording test tape (UD-124).
2. REC → PLAY
3. VCR REC OUT, VR402 (L-ch) / VR403 (R-ch)
4. • Connect an AC Milli-voltmeter to the VCR REC OUT.
   • Connect an audio signal generator to the AUX INPUT and set the generator level so that the VCR REC OUT levels are −30dBs.
   *Playback level difference between 1kHz and 10kHz after recording is within ± 0.2 dB.

7 BIAS OSC FREQUENCY
1. CrO_2 type blank tape
2. REC
3. TAPE II, T401 (P102)
4. • Connect a frequency counter between P102 ⑤ pin and GND.
   *100.0 ± 0.2 kHz

owing adjustment should be performed in the
de.
ge the test mode, connect the AC power
the AC outlet while pressing the ▶▶ and
ons together.
e test mode is engaged, X1 dub lamp is lit.
erforming the tape speed adjustment,
the following notes.
nent should be started more than 30 seconds
e power is ON.
nent should be made on X 2 speed mode first
djust normal speed mode.
nent should be made in the forward direction.

JUSTMENT
APE/INPUT SIGNAL

POINT, ADJUSTMENT PART
Ks (•) and RESULT (✻)
.775V)

Adjustment Part
Test Point

OSC FREQUENCY
recording test tape (AC-712)

pin, T501 (TAPE I)
pin, T551 (TAPE II)
ct a frequency counter between P101
and GND, P102 ③pin and GND.
± 0.2kHz

DIP POINT
recording test tape (AC-712)

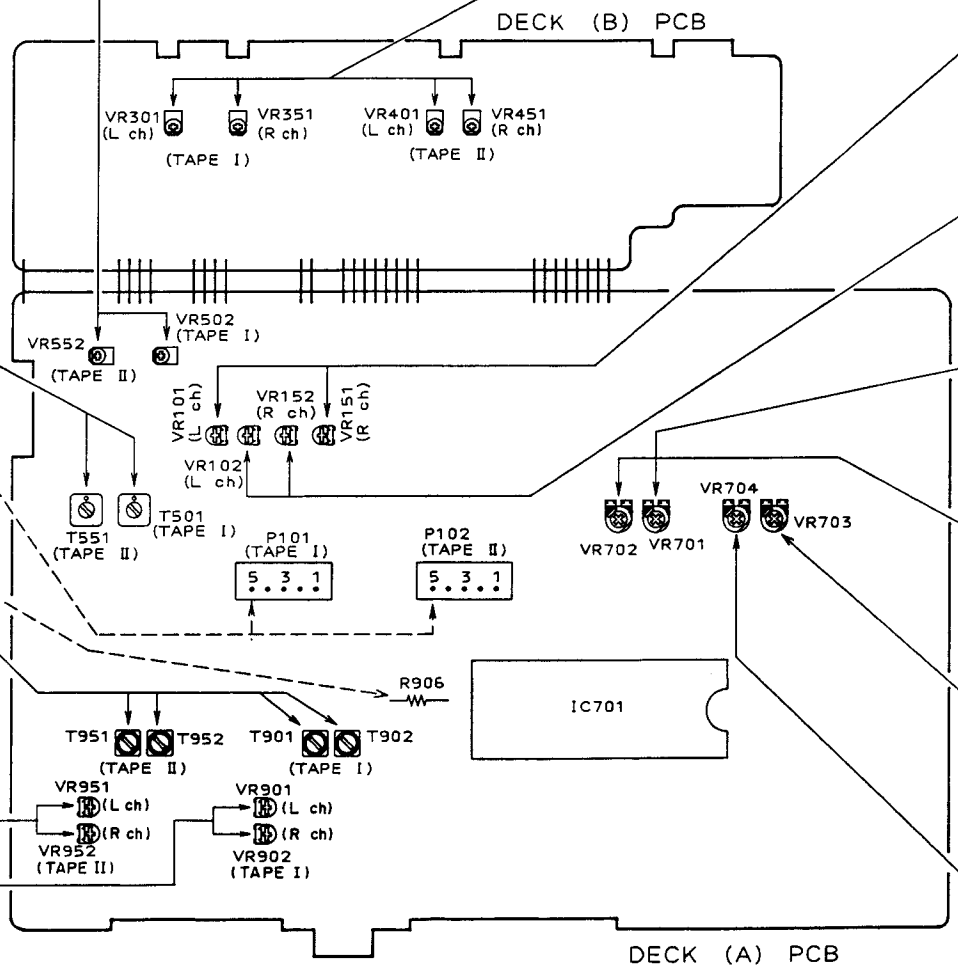
901.T902 (TAPE I)
951.T952 (TAPE II)
t a digital voltmeter both end of the

m level of DC range.

AL POSITION BIAS
d 10kHz, -30dBs (VCR REC OUT)
MAL recording test tape (UD-124).
PLAY
C OUT, VR901 (TAPE I L-ch) /
TAPE I R-ch) and VR951
L-ch) / VR952 (TAPE II R-ch)
t an AC Milli-voltmeter to the VCR
UT.
t an audio signal generator to the
PUT and set the generator level so
VCR REC OUT levels are -30dBs.
ck level difference between 1kHz
kHz is within ± 0.2dB.

11 METAL POSITION BIAS
1. 1kHz and 10kHz, -30 dBs (VCR REC OUT)
   METAL recording test tape (AC-712)
2. REC → PLAY
3. VCR REC OUT, VR502 (TAPE I) / VR552 (TAPE II)
4. •Connect an AC Milli-voltmeter to the VCR REC OUT.
   •Connect an audio signal generator to the AUX INPUT and set the generator level so that the VCR REC OUT levels are -30 dBs.
   ✻Playback levels difference between 1kHz and 10kHz is within 0.2dB.

10 RECORDING LEVEL
1. 1 kHz, -10 dBs (VCR REC OUT) / NORMAL recording test tape (UD-124)
2. REC → PLAY
3. VCR REC OUT, VR301 (TAPE I L-ch) / VR351 (TAPE I R-ch) and VR401 (TAPE II L-ch) / VR451 (TAPE II R-ch).
4. •Connect an AC Milli-voltmeter to the VCR REC OUT.
   •Connect an audio signal generator to the AUX INPUT and set the generator level so that the VCR REC OUT levels are -10 dBs.
   ✻Playback levels after recording are -10 dBs



5 TAPE I PB LEVEL
1. 315Hz test tape (TF-101CL)
2. PLAY
3. VCR REC OUT, VR101 (L-ch) / VR151 (R-ch)
4. •Connect an AC milli-voltmeter to the VCR REC OUT.
   ✻-10dBs

6 TAPE II PB LEVEL
1. 315Hz test tape (TF-101CL)
2. PLAY
3. VCR REC OUT, VR102 (L-ch) / VR152 (R-ch)
4. •Connect an AC milli-voltmeter to the VCR REC OUT.
   ✻-10dBs

1 TAPE I (X2) TAPE SPEED
1. 3,150Hz test tape (TF-110CT)
2. PLAY
   (press the X2 DUBBING START button)
3. VCR REC OUT, VR701
4. •Connect a frequency counter to the VCR REC OUT.
   ✻6,300 ± 20Hz

2 TAPE I NORMAL TAPE SPEED
1. 3,150Hz test tape (TF-110CT)
2. PLAY
3. VCR REC OUT, VR702
4. •Connect a frequency counter to the VCR REC OUT.
   ✻3,150 ± 10Hz

3 TAPE II (X2) TAPE SPEED
1. 3,150Hz test tape (TF-110CT)
2. PLAY
   (press the X2 DUBBING START button)
3. VCR REC OUT, VR703
4. •Connect a frequency counter to the VCR REC OUT.
   ✻6,300 ± 20Hz

4 TAPE II NORMAL TAPE SPEED
1. 3,150Hz test tape (TF-110CT)
2. PLAY
3. VCR REC OUT, VR704
4. •Connect a frequency counter to the VCR REC OUT.
   ✻3,150 ± 10Hz

VI. PARTS LIST

ATTENTION

1. **When placing an order for parts, be sure to list Part No., Model No. and the description of eachpart. Otherwise, the non-delivery of the part or the delivery of a wrong part may result.**
2. **Please make sure that Part No. is correct when ordering. If not, a part different from the one you ordered may be delivered.**
3. **Since the parts shown in Parts List of Preliminary Service Manual may have been the subject of changes, please use this Parts List for all future reference.**

HOW TO USE THIS PARTS LIST

1. This Parts List lists those parts which are considered necessary for repairs. Other common parts, such as resistors and capacitors, are listed in the "Common List for Service Parts" from which these parts should be selected and stocked.
2. The Recommended Spare Parts List shows those parts in the Parts List which are considered particularly important for service.
3. Parts not shown in the Parts List and "Common List for Service Parts" will not in principle be supplied.
4. How to read the Parts List.

a) Mechanism Block

2. HEAD BASE BLOCK

Ref. No.	Part No.	Description
1	BH-T2023A320A	HEAD BASE BLOCK
2	HP-H2206A010A	HEAD R/P PR4-8FU C
3	ZS-477876	PAN20×03STL CMT
4	ZS-536488	BID20×08STL CMT
5	ZG-402895	SP CS ANGLE ADJUST

SP (Service Parts) Classification

This number corresponds with the individual parts index number in that figure.

b) PC Board

6. MAIN PC BOARD

Ref. No.	Part No.	Description
IC1	EI-324536	IC HD14049BP
IC2	EI-336801	IC MB8841-564M
C1A	EC-338399	C MMY V 223M 250AC [U,E,B,S]
C1B	EC-350949	C MMY V 223M 250DC [J]
C1C	EC-338397	C MMY V 223M 125AC [C,A]
X1	EI-318384	OSC X'TAL NC-18C

Symbols for primary destination

[A] :AAL (U.S.A) [S] :SAA (Australia)
[B] :BEAB (England) [U] :U/T (Universal Area)
[C] :CSA (Canada)
[E] :CEE (Europe) [V] :VDE (Germany)
[J] :JPN (Japan) [Y] :Custom Version

SP (Service Parts) Classification

These reference symbols correspond with component symbols in the Schematic Diagrams.

The available PC Board Blocks are listed separately.

5. When Part No. is known, Parts Index at end of Parts List can be used to locate where that part is shown in Parts List
by its Reference No.listed at right of Part No.

WARNING

⚠ (*) INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURE'S RECOMMENDED PARTS.

AVERTISSEMENT

⚠ (*) IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉDE L'APPAREIL, NE REMPLACER QUE DES PIÉCES RECOMMANDEES PAR LÉ FABRICANT.

1. RECOMMENDED SPARE PARTS

We suggest you to stock the following Recommended Spare Part items listed below since they can cover most of the routine service.

Ref.No.	Part No.	Description
1	BB-408782M1	MECHA GAK9302 [750 TAPE-1]
2	BB-408781M1	MECHA GAK9602 [950 TAPE-2]
3	BB-408783M1	MECHA GAK9603 [950 TAPE-1]
4	BB-410525M1	MECHA GAK9604 [750 TAPE-2]
5	BM-729992J	MOTOR EG-530KD-2B [OLD]
6	BM-729993J	MOTOR EG-530YD-2B [NEW]
7	ED-394509J	D LED GL3HY43 ORANGE
8	ED-394724J	D LED GL3PR43 RED [950]
9	ED-408651J	D LED SEL2913K ORANGE [750]
10	ED-307572	D SILICON H 1SS131
11	*ED-511907	D SILICON 1N4002 100/1.0A
12	*ED-408743J	D ZENER H HZS11B3L
13	ED-404319J	D ZENER H HZS12B2L
14	*ED-388320J	D ZENER H HZS12B3L
15	ED-391003J	D ZENER H HZS4C3
16	ED-408733J	D ZENER H HZS6A3L
17	*ED-400171J	D ZENER H HZS6C2L
18	EH-408820J	COMP R RGLE10T 472J
19	EH-408821J	COMP R RGLE12T 473J
20	EH-387619J	COMP R RGLE14X 103J
21	EH-404318J	COMP R RGLE5X 332J
22	EH-389421J	COMP R RGLE7X 103J
23	EH-408713J	COMP R RGLE8T 332J
24	EI-394573J	IC CXA1331S
25	EI-387938J	IC HD74LS05P
26	EI-394574J	IC LA2000
27	EI-337008	IC LC7800
28	EI-393323J	IC M5218AL-771
29	EI-394569J	IC M66312P
30	EI-310036	IC TC4066BP
31	EI-373383	IC UPC1297CA
32	EI-408700J1	IC UPD75108CW-W19 MXA1DK2
33	EI-410610J	IC UPD75108CW-W20 MXB1DK1
34	EI-373957J1	OSC CE CST4.19MGW 4.194MHZ
35	EO-408699J	COIL OSC 1 T2134 100.0KHZ
36	EO-408762J	COIL OSC 1 T2135-1 100.0KHZ
37	EO-408763J	COIL OSC 1 T2135-2 (HX) 100.0KHZ
38	EO-356809	COIL TUN 1 100Z-121 100.00KHZ
39	EP-733165J	SOLENOID ASSY
40	*ER-200926	R FUSE H S10 ERD2FC 1/4W 27R0G
41	ES-733164J	LEAF SWITCH LSA-1114G
42	ES-733163J	LEAF SWITCH LSA-1141EAU
43	ES-408708J	SW SLIDE SSSS91 L=2 1-01-03
44	ES-408641J	SW TACT EVQ 233 07K T05
45	ET-733156J	DETECTOR NJL5165K
46	ET-369248	TR DTA114YS
47	ET-373382	TR DTA143ZS
48	ET-373985	TR DTA144TS
49	ET-360399	TR DTC114TS
50	ET-354365	TR DTC114YS
51	ET-373485	TR DTC123JS
52	ET-375986	TR DTC124TS
53	ET-354364	TR DTC143TS
54	ET-373391	TR DTC143ZS
55	ET-354414	TR DTC144ES
56	ET-370310	TR DTC144TS
57	ET-408777J	TR FET 2SJ40 D,E T05
58	ET-408709J	TR FET 2SK373 Y,GR T05
59	*ET-348302	TR FET 2SK381 C,D F05
60	ET-353899	TR 2SA1317 S,T,U
61	ET-408772J	TR 2SA1318 S,T,U T05
62	ET-397160J	TR 2SC3330 R,S,T,U,V
63	ET-361736	TR 2SC3576
64	ET-400741J	TR 2SC3708 T T05
65	*ET-366581	TR 2SD1762 E,F
67	ET-396072J	TR 2SD2159 V,W
68	EV-330531	R S-FIX H TM8KV2-1S 0.50W503
69	EV-404299J	R S-FIX H T05 KVSF637T 0.1W332
70	EV-394561J	R S-FIX H V8K4-11 (1S) 0.10W102
71	EV-367524	R S-FIX H V8K4-11 (1S) 0.10W501
72	EV-403967J	R S-FIX V T05EVNDCAA03 0.1W332
73	EW-733169J	5P HEAD WIRE ASSY
74	EW-733168J	3P HEAD WIRE ASSY
75	HP-733172J	ROTATION HEAD MK10P-AB2N3
76	HR-733173J	ROTATION HEAD YK56R-AA4N3
77	HZ-733119J	TAPE GUIDE
78	MB-733130J	DRIVE BELT (A)
79	MR-733129J	P ROLLER
80	MZ-733132J	HOUSING ASSY (L)
81	MZ-733131J	HOUSING ASSY (R)

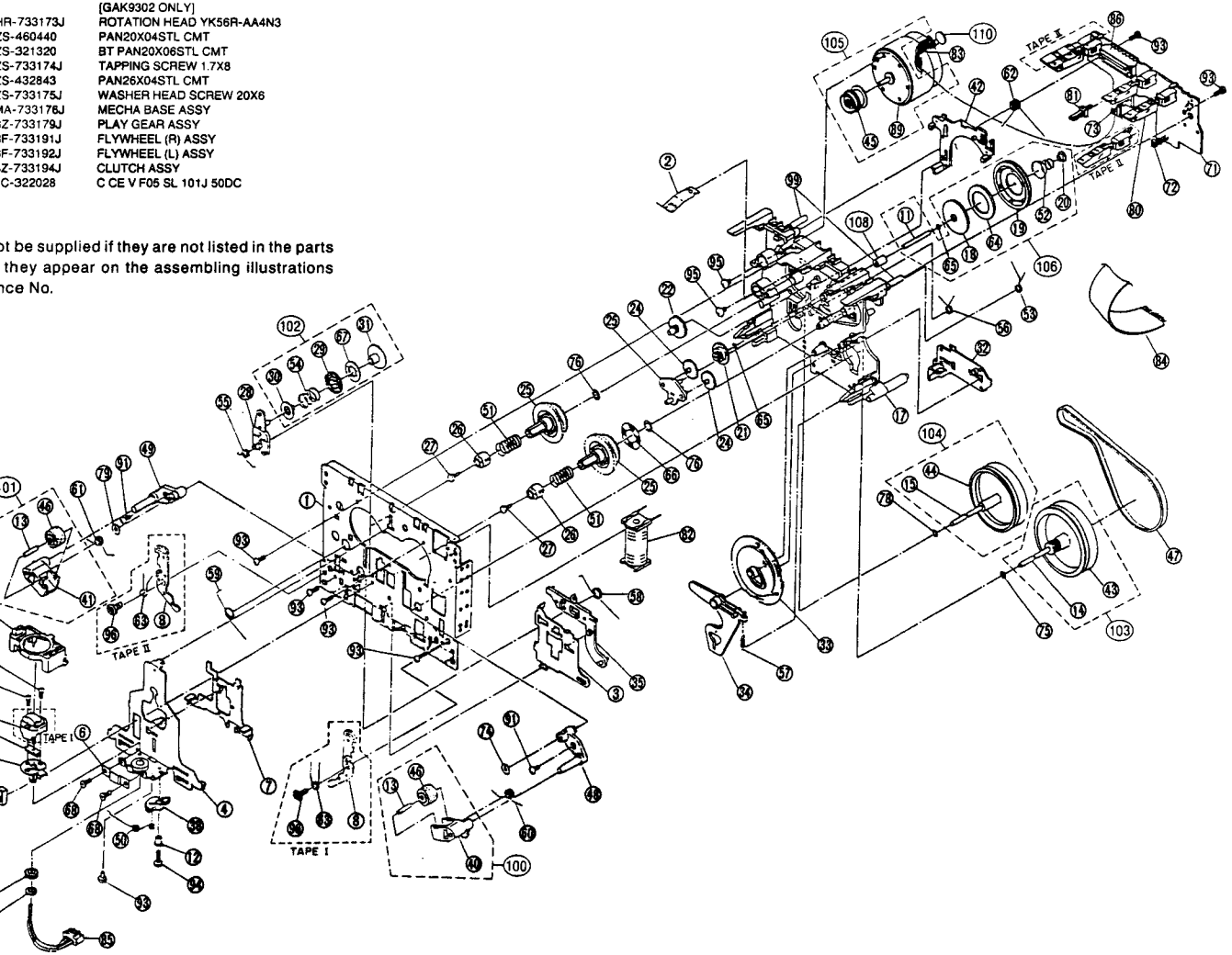
2. MECHA BLK

Ref.No.	Part No.	Description
2	ZG-733087J	PACK SPRING
3	ML-733088J	SHIFT LEVER
5	HZ-733090J	HEAD PLATE ASSY
6	ZG-733091J	AZIMUTH SPRING
12	MZ-733096J	COLLAR
13	MS-733097J	PINCH ROLLER ARM SHAFT
21	MZ-733104J	CLUTCH GEAR
22	MZ-733105J	REW GEAR
23	ML-733106J	ER ARM
24	MZ-733107J	FR GEAR
25	MZ-733108J	REEL GEAR
26	MT-733109J	REEL CAP (A)
27	MT-733110J	REEL BUSH (B)
28	ML-733111J	PLAY ARM
32	ML-733115J	SHIFT LEVER SELECT
33	MZ-733116J	PLAY CAM GEAR
34	ML-733117J	TRIGGER ARM
35	ML-733118J	SELECT ARM
36	HZ-733119J	TAPE GUIDE
37	MZ-733120J	ROTATION GEAR
38	MZ-733121J	RETURN GEAR
39	MS-733122J	CASSETTE GUIDE
40	ML-733123J	P ROLLER ARM (R)
41	ML-733124J	P ROLLER ARM (L)
42	ML-733125J	BRAKE ARM
45	MR-733128J	MOTOR PULLEY
46	MR-733129J	P ROLLER
47	MB-733130J	DRIVE BELT (A)
48	MZ-733131J	HOUSING ASSY (R)
49	MZ-733132J	HOUSING ASSY (L)
50	ZG-733133J	RETURN SPRING
51	ZG-733134J	REEL SPRING
53	ZG-733136J	CLUTCH ARM SPRING
55	ZG-733138J	PLAY ARM SPRING
56	ZG-733139J	SHIFT LEVER SELECT SPRING
57	ZG-733140J	TRIGGEER ARM SPRING
58	ZG-733141J	SHIFT SPRING
59	ZG-733142J	HEAD CHASSIS SPRING
60	ZG-733143J	P ROLLER ARM (R) SPRING
61	ZG-733144J	P ROLLER ARM (L) SPRING
62	ZG-733145J	BRAKE ARM SPRING
63A	ZG-733146J	INTER LOCK LEVER (R) SPRING [GAK9602][GAK9604]
63B	ZG-733147J	INTER LOCK LEVER (L) SPRING [GAK9603][GAK9302]
65	ZW-733149J	POLYSLIDER WASHER 1.6X3X0.13T
66	SZ-733150J	REFLECT SEAL
68	ZG-733152J	AZIMUTH SCREW
70	ZG-733154J	HEAD SCREW (RVS)
72	ET-733156J	DETECTOR NJL5165K
73	ER-341091	R CB H F05 RDS 1/6W 152J
74	ZW-733157J	POLYSLIDER WASHER 1.8X6X0.5T
75	ZW-733158J	POLYSLIDER WASHER 2.3X4X0.25T
76	ZW-733159J	TEFRON WASHER 4.1X6.5X0.25T
77	ZW-733160J	POLYSLIDER WASHER 3.5X6.5X0.5T
78	ZW-733161J	POLYSLIDER WASHER 2.1X4X0.25T
79	ZW-733162J	POLYSLIDER WASHER 1.65X5X0.5T
80	ES-733163J	LEAF SWITCH LSA-1141EAU
81	ES-733164J	LEAF SWITCH LSA-1114G

A BLK

Part No.	Description
EW-733167J	15P FLAT RIBBON WIRE
EW-733168J	3P HEAD WIRE ASSY [PB]
EW-733169J	5P HEAD WIRE ASSY [REC/PB]
EJ-733170J	CONNECTOR 52004-1510
BM-729992J	MOTOR EG-530KD-2B [OLD]
BM-729993J	MOTOR EG-530YD-2B [NEW]
HP-733172J	ROTATION HEAD MK10P-AB2N3 [GAK9302 ONLY]
HR-733173J	ROTATION HEAD YK56R-AA4N3
XS-460440	PAN20X04STL CMT
XS-321320	BT PAN20X06STL CMT
XS-733174J	TAPPING SCREW 1.7X8
XS-432843	PAN26X04STL CMT
XS-733175J	WASHER HEAD SCREW 20X6
MA-733176J	MECHA BASE ASSY
XZ-733179J	PLAY GEAR ASSY
XF-733191J	FLYWHEEL (R) ASSY
XF-733192J	FLYWHEEL (L) ASSY
XZ-733194J	CLUTCH ASSY
XC-322028	C CE V F05 SL 101J 50DC

ot be supplied if they are not listed in the parts
they appear on the assembling illustrations
nce No.



3. P.C BOARD BLK

Ref.No.	Part No.	Description
1A	BA-T2134T070A	ML PC—DECK-750 BLK HX-750/ML
1B	BA-T2135T070A	ML PC—DECK-950 BLK HX-950/ML

PC (#) DECK-750 BLK CONSISTS OF FOLLOWING P.C BOARD.
- DECK P.C BOARD
- OPERATION P.C BOARD

PC (#) DECK-950 BLK CONSISTS OF FOLLOWING P.C BOARD.
- DECK (A) P.C BOARD
- DECK (B) P.C BOARD
- OPERATION P.C BOARD

RTV servis Horvat
Kešinci, 31402 Semeljci
031-856-139
031-856-637
098-788-319
rtv-servis-horvat@os.tel.hr
Croatia

4. DECK P.C BOARD (HX-750)

Ref.No.	Part No.	Description
C701	EC-363491	C EC V CUT SME 222M 25.0DC
C702	EC-366613	C EC V CUT SME 102M 25.0DC
C741	EC-363491	C EC V CUT SME 222M 25.0DC
D101	ED-307572	D SILICON H 1SS131
D151	ED-307572	D SILICON H 1SS131
D301	ED-307572	D SILICON H 1SS131
D351	ED-307572	D SILICON H 1SS131
D401	ED-391003J	D ZENER H HZS4C3
D501	ED-307572	D SILICON H 1SS131
D502	ED-307572	D SILICON H 1SS131
D503	ED-307572	D SILICON H 1SS131
D504	ED-307572	D SILICON H 1SS131
D505	ED-307572	D SILICON H 1SS131
D601	ED-307572	D SILICON H 1SS131
D602	*ED-408743J	D ZENER H HZS11B3L
D603	ED-307572	D SILICON H 1SS131
D604	ED-307572	D SILICON H 1SS131
D651	ED-307572	D SILICON H 1SS131
D652	ED-307572	D SILICON H 1SS131
D701	*ED-511907	D SILICON 1N4002 100/1.0A
D702	*ED-511907	D SILICON 1N4002 100/1.0A
D703	*ED-511907	D SILICON 1N4002 100/1.0A
D704	*ED-511907	D SILICON 1N4002 100/1.0A
D705	*ED-388320J	D ZENER H HZS12B3L
D706	*ED-388320J	D ZENER H HZS12B3L
D721	*ED-400171J	D ZENER H HZS6C2L
D722	*ED-400171J	D ZENER H HZS6C2L
D723	ED-511907	D SILICON 1N4002 100/1.0A
D724	ED-511907	D SILICON 1N4002 100/1.0A
D725	ED-511907	D SILICON 1N4002 100/1.0A
D726	ED-511907	D SILICON 1N4002 100/1.0A
D741	*ED-511907	D SILICON 1N4002 100/1.0A
D742	*ED-511907	D SILICON 1N4002 100/1.0A
D743	*ED-388320J	D ZENER H HZS12B3L
D761	ED-307572	D SILICON H 1SS131
FL101	EO-356809	COIL TUN 1 100Z-121 100.00KHZ
FL151	EO-356809	COIL TUN 1 100Z-121 100.00KHZ
FL301	EO-356809	COIL TUN 1 100Z-121 100.00KHZ
FL351	EO-356809	COIL TUN 1 100Z-121 100.00KHZ
IB601	EH-408820J	COMP R RGLE10T 472J
IB602	EH-408713J	COMP R RGLE8T 332J
IB603	EH-408821J	COMP R RGLE12T 473J
IC101	EI-310036	IC TC4066BP
IC102	EI-393323J	IC M5218AL-771
IC202	EI-394573J	IC CXA1331S
IC301	EI-393323J	IC M5218AL-771
IC551	EI-394574J	IC LA2000
IC601	EI-408700J1	IC UPD75108CW-W19 MXA1DK2
IC602	EI-387938J	IC HD74LS05P
J201	EJ-394445J	SOCKET 52303-1411 BLACK 14P
L301	EO-394589J	COIL FIX 1 RCP095 822J
L302	EO-393645J	COIL FIX 1 RCP095 392J
L351	EO-394589J	COIL FIX 1 RCP095 822J
L352	EO-393645J	COIL FIX 1 RCP095 392J
L401	EO-403270J	COIL FIX 1 EL0405RA T05 101J
TR101	ET-408709J	TR FET 2SK373 Y,GR T05
TR102	ET-375986	TR DTC124TS
TR103	ET-354364	TR DTC143TS
TR104	ET-354364	TR DTC143TS
TR105	ET-354364	TR DTC143TS
TR106	ET-354364	TR DTC143TS
TR107	ET-370310	TR DTC144TS
TR108	ET-370310	TR DTC144TS
TR151	ET-408709J	TR FET 2SK373 Y,GR T05
TR152	ET-375986	TR DTC124TS
TR153	ET-354364	TR DTC143TS
TR154	ET-354364	TR DTC143TS
TR155	ET-354364	TR DTC143TS
TR156	ET-354364	TR DTC143TS
TR157	ET-370310	TR DTC144TS
TR158	ET-370310	TR DTC144TS
TR181	ET-369248	TR DTA114YS
TR182	ET-370310	TR DTC144TS
TR183	ET-370310	TR DTC144TS
TR184	ET-369248	TR DTA114YS
TR201	ET-397160J	TR 2SC3330 R,S,T,U,V
TR202	ET-397160J	TR 2SC3330 R,S,T,U,V
TR251	ET-397160J	TR 2SC3330 R,S,T,U,V
TR252	ET-397160J	TR 2SC3330 R,S,T,U,V
TR281	ET-354414	TR DTC144ES
TR301	ET-397160J	TR 2SC3330 R,S,T,U,V
TR302	ET-354364	TR DTC143TS
TR303	ET-354364	TR DTC143TS
TR304	ET-354364	TR DTC143TS
TR305	ET-408777J	TR FET 2SJ40 D,E T05
TR351	ET-397160J	TR 2SC3330 R,S,T,U,V
TR352	ET-354364	TR DTC143TS
TR353	ET-354364	TR DTC143TS
TR354	ET-354364	TR DTC143TS
TR355	ET-408777J	TR FET 2SJ40 D,E T05
TR381	ET-369248	TR DTA114YS
TR401	ET-354414	TR DTC144ES
TR402	ET-354414	TR DTC144ES
TR403	ET-397160J	TR 2SC3330 R,S,T,U,V
TR404	ET-373391	TR DTC143ZS
TR405	*ET-373025	TR 2SD1944 J1,J2,K
TR406	*ET-397160J	TR 2SC3330 R,S,T,U,V
TR407	*ET-397160J	TR 2SC3330 R,S,T,U,V
TR408	ET-354364	TR DTC143TS
TR409	ET-400741J	TR 2SC3708 T T05
TR410	ET-400741J	TR 2SC3708 T T05
TR501	ET-397160J	TR 2SC3330 R,S,T,U,V
TR502	ET-397160J	TR 2SC3330 R,S,T,U,V
TR503	ET-397160J	TR 2SC3330 R,S,T,U,V
TR504	ET-397160J	TR 2SC3330 R,S,T,U,V
TR505	ET-397160J	TR 2SC3330 R,S,T,U,V
TR506	ET-397160J	TR 2SC3330 R,S,T,U,V
TR601	ET-373485	TR DTC123JS
TR602	ET-369248	TR DTA114YS
TR603	ET-373382	TR DTA143ZS
TR606	ET-354365	TR DTC114YS
TR607	ET-354365	TR DTC114YS
TR608	ET-361736	TR 2SC3576
TR609	ET-361736	TR 2SC3576
TR610	ET-373485	TR DTC123JS
TR611	ET-373391	TR DTC143ZS
TR612	ET-361736	TR 2SC3576
TR613	ET-361736	TR 2SC3576
TR614	ET-373485	TR DTC123JS
TR615	ET-373391	TR DTC143ZS
TR616	ET-373391	TR DTC143ZS
TR617	ET-408772J	TR 2SA1318 S,T,U T05
TR618	ET-408772J	TR 2SA1318 S,T,U T05
TR653	ET-353899	TR 2SA1317 S,T,U
TR654	ET-353899	TR 2SA1317 S,T,U
TR655	ET-373382	TR DTA143ZS
TR656	ET-396072J	TR 2SD2159 V,W
TR657	ET-396072J	TR 2SD2159 V,W
TR658	ET-396072J	TR 2SD2159 V,W
TR659	ET-397160J	TR 2SC3330 R,S,T,U,V
TR660	ET-397160J	TR 2SC3330 R,S,T,U,V
TR701	*ET-373025	TR 2SD1944 J1,J2,K
TR702	*ET-397160J	TR 2SC3330 R,S,T,U,V
TR703	*ET-408772J	TR 2SA1318 S,T,U T05
TR704	*ET-353899	TR 2SA1317 S,T,U
TR721	*ET-373025	TR 2SD1944 J1,J2,K
TR722	*ET-397160J	TR 2SC3330 R,S,T,U,V
TR741	*ET-366581	TR 2SD1762 E,F
TR742	*ET-366581	TR 2SD1762 E,F
TR743	*ET-397160J	TR 2SC3330 R,S,T,U,V
TR744	*ET-348302	TR FET 2SK381 C,D F05
TR745	ET-354365	TR DTC114YS
TR761	ET-373985	TR DTA144TS
TR763	ET-354414	TR DTC144ES
TR764	ET-397160J	TR 2SC3330 R,S,T,U,V
TR765	ET-354414	TR DTC144ES
T401	EO-408699J	COIL OSC 1 T2134 100.0KHZ
VR101	EV-404299J	R S-FIX H T05 KVSF637T 0.1W332
VR102	EV-404299J	R S-FIX H T05 KVSF637T 0.1W332
VR151	EV-404299J	R S-FIX H T05 KVSF637T 0.1W332
VR152	EV-404299J	R S-FIX H T05 KVSF637T 0.1W332
VR301	EV-404299J	R S-FIX H T05 KVSF637T 0.1W332
VR351	EV-404299J	R S-FIX H T05 KVSF637T 0.1W332
VR402	EV-330531	R S-FIX H TM8KV2-1S 0.50W503
VR403	EV-330531	R S-FIX H TM8KV2-1S 0.50W503
VR651	EV-394561J	R S-FIX H V8K4-11 (1S) 0.10W102
VR652	EV-394561J	R S-FIX H V8K4-11 (1S) 0.10W102
VR653	EV-367524	R S-FIX H V8K4-11 (1S) 0.10W501
VR654	EV-367524	R S-FIX H V8K4-11 (1S) 0.10W501
X601	EI-373957J1	OSC CE CST4.19MGW 4.194MHZ

5. DECK (A) P.C BOARD (HX-950)

Ref.No.	Part No.	Description
C701	EC-363491	C EC V CUT SME 222M 25.0DC
C703	EC-363491	C EC V CUT SME 222M 25.0DC
D101	ED-307572	D SILICON H 1SS131
D102	ED-307572	D SILICON H 1SS131
D151	ED-307572	D SILICON H 1SS131
D152	ED-307572	D SILICON H 1SS131
D181	ED-307572	D SILICON H 1SS131
D321	ED-307572	D SILICON H 1SS131
D371	ED-307572	D SILICON H 1SS131
D421	ED-307572	D SILICON H 1SS131
D471	ED-307572	D SILICON H 1SS131
D501	ED-391003J	D ZENER H HZS4C3
D551	ED-391003J	D ZENER H HZS4C3
D601	ED-307572	D SILICON H 1SS131
D602	ED-307572	D SILICON H 1SS131
D603	ED-307572	D SILICON H 1SS131
D604	ED-307572	D SILICON H 1SS131
D651	ED-307572	D SILICON H 1SS131
D701	*ED-511907	D SILICON 1N4002 100/1.0A
D702	*ED-511907	D SILICON 1N4002 100/1.0A
D703	*ED-511907	D SILICON 1N4002 100/1.0A
D704	*ED-511907	D SILICON 1N4002 100/1.0A
D705	*ED-511907	D SILICON 1N4002 100/1.0A
D706	*ED-511907	D SILICON 1N4002 100/1.0A
D707	ED-404319J	D ZENER H HZS12B2L
D708	ED-404319J	D ZENER H HZS12B2L
D709	ED-400171J	D ZENER H HZS6C2L
D710	ED-408733J	D ZENER H HZS6A3L
D711	ED-388320J	D ZENER H HZS12B3L
D712	ED-307572	D SILICON H 1SS131
D713	ED-307572	D SILICON H 1SS131
D714	ED-307572	D SILICON H 1SS131
D751	ED-511907	D SILICON 1N4002 100/1.0A
D752	ED-511907	D SILICON 1N4002 100/1.0A
D753	ED-511907	D SILICON 1N4002 100/1.0A
D754	ED-511907	D SILICON 1N4002 100/1.0A
D755	ED-511907	D SILICON 1N4002 100/1.0A
D756	ED-511907	D SILICON 1N4002 100/1.0A
D757	ED-307572	D SILICON H 1SS131
D758	ED-307572	D SILICON H 1SS131
FL101	EO-356809	COIL TUN 1 100Z-121 100.00KHZ
FL151	EO-356809	COIL TUN 1 100Z-121 100.00KHZ
FL301	EO-356809	COIL TUN 1 100Z-121 100.00KHZ
FL351	EO-356809	COIL TUN 1 100Z-121 100.00KHZ
FL401	EO-356809	COIL TUN 1 100Z-121 100.00KHZ
FL451	EO-356809	COIL TUN 1 100Z-121 100.00KHZ
FR701	*ER-200926	R FUSE H S10 ERD2FC 1/4W 27R0G
IB701	EH-387619J	COMP R RGLE14X 103J
IB702	EH-404318J	COMP R RGLE5X 332J
IB703	EH-389421J	COMP R RGLE7X 103J
IC101	EI-310036	IC TC4066BP
IC102	EI-393323J	IC M5218AL-771
IC701	EI-410610J	IC UPD75108CW-W20 MXB1DK1
IC702	EI-337008	IC LC7800
IC703	EI-394569J	IC M66312P
IC704	EI-387938J	IC HD74LS05P
IC901	EI-373383	IC UPC1297CA
IC951	EI-373383	IC UPC1297CA
J701	EJ-394445J	SOCKET 52303-1411 BLACK 14P
L501	EO-403270J	COIL FIX 1 EL0405RA T05 101J
L551	EO-403270J	COIL FIX 1 EL0405RA T05 101J
R711	ER-408692J	R OMF H S15 FS 2W 390J
R906	ER-333342	R CB H S10 FS RDS 1/4W 2R2J
TR101	ET-408709J	TR FET 2SK373 Y,GR T05
TR102	ET-408709J	TR FET 2SK373 Y,GR T05
TR103	ET-354364	TR DTC143TS
TR104	ET-354364	TR DTC143TS
TR105	ET-354364	TR DTC143TS
TR106	ET-354364	TR DTC143TS
TR107	ET-354364	TR DTC143TS
TR108	ET-370310	TR DTC144TS
TR109	ET-370310	TR DTC144TS
TR151	ET-408709J	TR FET 2SK373 Y,GR T05
TR152	ET-408709J	TR FET 2SK373 Y,GR T05
TR153	ET-354364	TR DTC143TS
TR154	ET-354364	TR DTC143TS
TR155	ET-354364	TR DTC143TS
TR156	ET-354364	TR DTC143TS
TR157	ET-354364	TR DTC143TS

Ref.No.	Part No.	Description
TR159	ET-370310	TR DTC144TS
TR181	ET-369248	TR DTA114YS
TR182	ET-369248	TR DTA114YS
TR183	ET-370310	TR DTC144TS
TR184	ET-370310	TR DTC144TS
TR201	ET-397160J	TR 2SC3330 R,S,T,U,V
TR202	ET-397160J	TR 2SC3330 R,S,T,U,V
TR251	ET-397160J	TR 2SC3330 R,S,T,U,V
TR252	ET-397160J	TR 2SC3330 R,S,T,U,V
TR321	ET-408777J	TR FET 2SJ40 D,E T05
TR371	ET-408777J	TR FET 2SJ40 D,E T05
TR391	ET-369248	TR DTA114YS
TR421	ET-408777J	TR FET 2SJ40 D,E T05
TR471	ET-408777J	TR FET 2SJ40 D,E T05
TR491	ET-369248	TR DTA114YS
TR501	ET-354414	TR DTC144ES
TR502	ET-354414	TR DTC144ES
TR503	ET-373391	TR DTC143ZS
TR504	ET-397160J	TR 2SC3330 R,S,T,U,V
TR505	*ET-373025	TR 2SD1944 J1,J2,K
TR506	ET-397160J	TR 2SC3330 R,S,T,U,V
TR507	ET-397160J	TR 2SC3330 R,S,T,U,V
TR508	ET-354364	TR DTC143TS
TR509	ET-354364	TR DTC143TS
TR510	ET-400741J	TR 2SC3708 T T05
TR511	ET-400741J	TR 2SC3708 T T05
TR551	ET-354414	TR DTC144ES
TR552	ET-354414	TR DTC144ES
TR553	ET-373391	TR DTC143ZS
TR554	ET-397160J	TR 2SC3330 R,S,T,U,V
TR555	*ET-373025	TR 2SD1944 J1,J2,K
TR556	ET-397160J	TR 2SC3330 R,S,T,U,V
TR557	ET-397160J	TR 2SC3330 R,S,T,U,V
TR558	ET-354364	TR DTC143TS
TR559	ET-354364	TR DTC143TS
TR560	ET-400741J	TR 2SC3708 T T05
TR561	ET-400741J	TR 2SC3708 T T05
TR601	ET-397160J	TR 2SC3330 R,S,T,U,V
TR602	ET-397160J	TR 2SC3330 R,S,T,U,V
TR603	ET-397160J	TR 2SC3330 R,S,T,U,V
TR604	ET-397160J	TR 2SC3330 R,S,T,U,V
TR651	ET-397160J	TR 2SC3330 R,S,T,U,V
TR652	ET-397160J	TR 2SC3330 R,S,T,U,V
TR701	*ET-373025	TR 2SD1944 J1,J2,K
TR702	ET-404320J	TR 2SC3331 T,U T05
TR703	*ET-373025	TR 2SD1944 J1,J2,K
TR704	ET-404320J	TR 2SC3331 T,U T05
TR705	*ET-408772J	TR 2SA1318 S,T,U T05
TR706	ET-408772J	TR 2SA1318 S,T,U T05
TR707	ET-397160J	TR 2SC3330 R,S,T,U,V
TR708	*ET-366581	TR 2SD1762 E,F
TR709	*ET-366581	TR 2SD1762 E,F
TR710	ET-348302	TR FET 2SK381 C,D F05
TR711	ET-397160J	TR 2SC3330 R,S,T,U,V
TR712	*ET-366581	TR 2SD1762 E,F
TR713	*ET-366581	TR 2SD1762 E,F
TR714	ET-354365	TR DTC114YS
TR715	ET-373382	TR DTA143ZS
TR716	ET-396072J	TR 2SD2159 V,W
TR717	ET-396072J	TR 2SD2159 V,W
TR718	ET-396072J	TR 2SD2159 V,W
TR719	ET-397160J	TR 2SC3330 R,S,T,U,V
TR720	ET-397160J	TR 2SC3330 R,S,T,U,V
TR721	ET-353899	TR 2SA1317 S,T,U
TR722	ET-353899	TR 2SA1317 S,T,U
TR723	ET-373485	TR DTC123JS
TR724	ET-373485	TR DTC123JS
TR725	ET-373485	TR DTC123JS
TR726	ET-369248	TR DTA114YS
TR727	ET-373382	TR DTA143ZS
TR728	ET-373382	TR DTA143ZS
TR729	ET-354414	TR DTC144ES
TR730	ET-354414	TR DTC144ES
TR731	ET-397160J	TR 2SC3330 R,S,T,U,V
TR732	ET-397160J	TR 2SC3330 R,S,T,U,V
T501	EO-408762J	COIL OSC 1 T2135-1 100.0KHZ
T551	EO-408762J	COIL OSC 1 T2135-1 100.0KHZ
T901	EO-408763J	COIL OSC 1 T2135-2 (HX) 100.0KHZ
T902	EO-408763J	COIL OSC 1 T2135-2 (HX) 100.0KHZ
T951	EO-408763J	COIL OSC 1 T2135-2 (HX) 100.0KHZ
T952	EO-408763J	COIL OSC 1 T2135-2 (HX) 100.0KHZ
VR101	EV-404299J	R S-FIX H T05 KVSF637T 0.1W332

Ref.No.	Part No.	Description
VR151	EV-404299J	R S-FIX H T05 KVSF637T 0.1W332
VR152	EV-404299J	R S-FIX H T05 KVSF637T 0.1W332
VR502	EV-404294J	R S-FIX H T05 KVSF637T 0.1W102
VR552	EV-404294J	R S-FIX H T05 KVSF637T 0.1W102
VR701	EV-394561J	R S-FIX H V8K4-11 (1S) 0.10W102
VR702	EV-367524	R S-FIX H V8K4-11 (1S) 0.10W501
VR703	EV-394561J	R S-FIX H V8K4-11 (1S) 0.10W102
VR704	EV-367524	R S-FIX H V8K4-11(1S) 0.10W501
VR901	EV-405657J	R S-FIX H T05 KVSF637T 0.1W103
VR902	EV-405657J	R S-FIX H T05 KVSF637T 0.1W103
VR951	EV-405657J	R S-FIX H T05 KVSF637T 0.1W103
VR952	EV-405657J	R S-FIX H T05 KVSF637T 0.1W103
X701	EI-373957J1	OSC CE CST4.19MGW 4.194MHZ

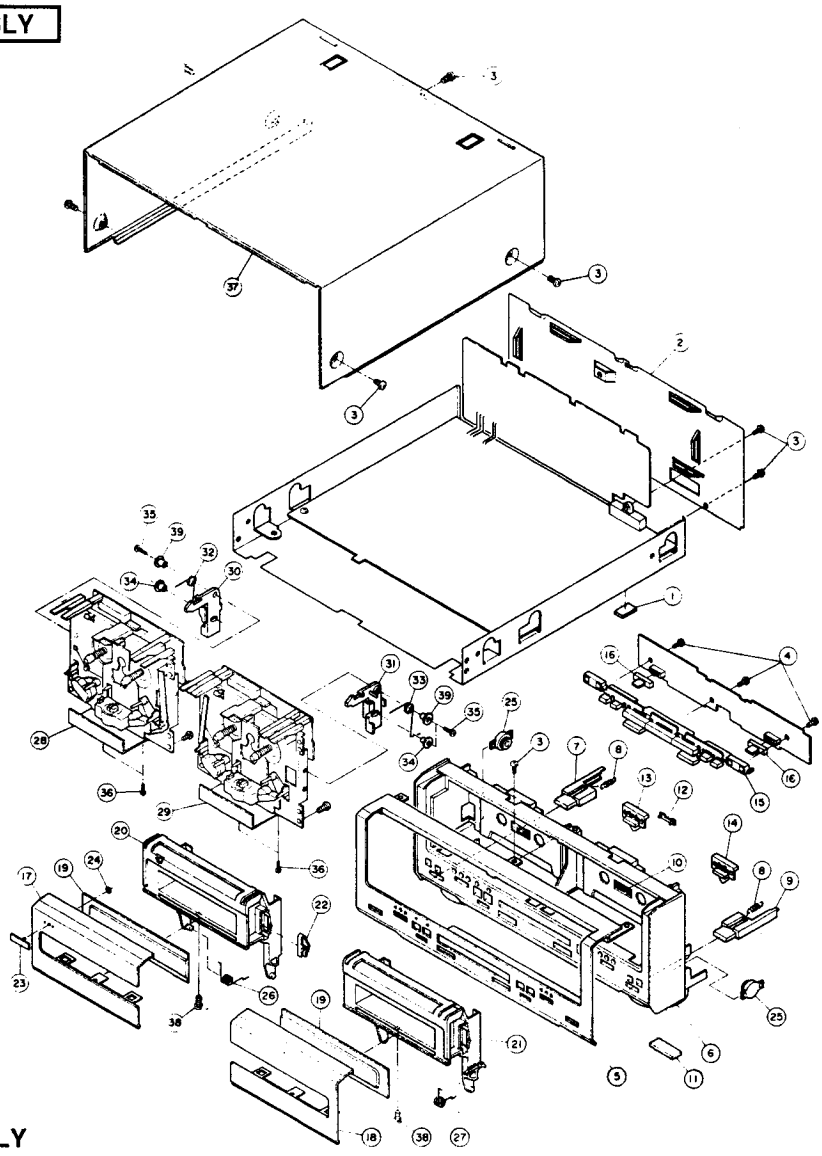
6. DECK (B) P.C BOARD (HX-950)

Ref.No.	Part No.	Description
IC201	EI-394573J	IC CXA1331S
IC301	EI-393323J	IC M5218AL-771
IC401	EI-393323J	IC M5218AL-771
IC681	EI-394574J	IC LA2000
L301	EO-394589J	COIL FIX 1 RCP095 822J
L351	EO-394589J	COIL FIX 1 RCP095 822J
L401	EO-394589J	COIL FIX 1 RCP095 822J
L402	EO-393645J	COIL FIX 1 RCP095 392J
L451	EO-394589J	COIL FIX 1 RCP095 822J
L452	EO-393645J	COIL FIX 1 RCP095 392J
TR281	ET-354365	TR DTC114YS
TR301	ET-397160J	TR 2SC3330 R,S,T,U,V
TR302	ET-354364	TR DTC143TS
TR303	ET-354364	TR DTC143TS
TR304	ET-354364	TR DTC143TS
TR351	ET-397160J	TR 2SC3330 R,S,T,U,V
TR352	ET-354364	TR DTC143TS
TR353	ET-354364	TR DTC143TS
TR354	ET-354364	TR DTC143TS
TR381	ET-360399	TR DTC114TS
TR401	ET-397160J	TR 2SC3330 R,S,T,U,V
TR402	ET-354364	TR DTC143TS
TR403	ET-354364	TR DTC143TS
TR404	ET-354364	TR DTC143TS
TR405	ET-354364	TR DTC143TS
TR406	ET-354364	TR DTC143TS
TR451	ET-397160J	TR 2SC3330 R,S,T,U,V
TR452	ET-354364	TR DTC143TS
TR453	ET-354364	TR DTC143TS
TR454	ET-354364	TR DTC143TS
TR455	ET-354364	TR DTC143TS
TR456	ET-354364	TR DTC143TS
TR481	ET-360399	TR DTC114TS
VR301	EV-403967J	R S-FIX V T05EVNDCAA03 0.1W332
VR351	EV-403967J	R S-FIX V T05EVNDCAA03 0.1W332
VR401	EV-403967J	R S-FIX V T05EVNDCAA03 0.1W332
VR451	EV-403967J	R S-FIX V T05EVNDCAA03 0.1W332

7. OPERATION P.C BOARD

Ref.No.	Part No.	Description
D801	ED-394509J	D LED GL3HY43 ORANGE
D802A	ED-394509J	D LED GL3HY43 ORANGE [750]
D802B	ED-394724J	D LED GL3PR43 RED [950]
D803	ED-394509J	D LED GL3HY43 ORANGE
D804	ED-394509J	D LED GL3HY43 ORANGE
D805A	ED-394509J	D LED GL3HY43 ORANGE [750]
D805B	ED-394724J	D LED GL3PR43 RED [950]
D806	ED-394509J	D LED GL3HY43 ORANGE
D807A	ED-408651J	D LED SEL2913K ORANGE [750]
D807B	ED-394509J	D LED GL3HY43 ORANGE [950]
D808A	ED-408651J	D LED SEL2913K ORANGE [750]
D808B	ED-394509J	D LED GL3HY43 ORANGE [950]
D809A	ED-394724J	D LED GL3PR43 RED [750]
D809B	ED-408651J	D LED SEL2913K ORANGE [950]
D810	ED-408651J	D LED SEL2913K ORANGE [950]
SW801	ES-408708J	SW SLIDE SSSS91 L=2 1-01-03
SW802	ES-408708J	SW SLIDE SSSS91 L=2 1-01-03 [950]
TS801	ES-408641J	SW TACT EVQ 233 07K T05
TS802	ES-408641J	SW TACT EVQ 233 07K T05
TS803	ES-408641J	SW TACT EVQ 233 07K T05
TS804	ES-408641J	SW TACT EVQ 233 07K T05
TS805	ES-408641J	SW TACT EVQ 233 07K T05
TS806	ES-408641J	SW TACT EVQ 233 07K T05
TS807	ES-408641J	SW TACT EVQ 233 07K T05
TS808	ES-408641J	SW TACT EVQ 233 07K T05
TS809	ES-408641J	SW TACT EVQ 233 07K T05
TS810	ES-408641J	SW TACT EVQ 233 07K T05
TS811	ES-408641J	SW TACT EVQ 233 07K T05

FINAL ASSEMBLY



8. FINAL ASSEMBLY

Ref.No.	Part No.	Description
1	SA-407840M	CUSHION FOOT REAR (SG)
2A	SP-408144M	PANEL REAR HX-750 (U) (SG)
2B	SP-408145M	PANEL REAR HX-750 (E) (SG)
2C	SP-408146M	PANEL REAR HX-950 (U) (SG)
2D	SP-408147M	PANEL REAR HX-950 (E) (SG)
3	ZS-394412M	BT BID30X08STL BZN PROJECTION
4	ZS-331182	BT BID30X08STL BNI
5A	SP-408130J	PANEL FRONT 750
5B	SP-408149J	PANEL FRONT 950
6	SE-408129M	ESCUTCHEON FRONT (SG)
7	SB-408140M	BUTTON EJECT (L) (SG)
8	ZG-408164M	SP PULL EJECT BUTTON (SG)
9	SB-408141M	BUTTON EJECT (R) (SG)
10	SE-394092M	REFLECTOR (SG)
11	SA-394136M	CUSHION FOOT (SG)
12	SE-408138M	LENS INDICATOR (SG)
13A	SB-409356M	BUTTON TAPE (3) (SG) [750]
13B	SB-408142M	BUTTON TAPE (1) (SG) [950]
14	SB-408153M	BUTTON TAPE (2) (SG)
15	SB-408139M	BUTTON OP (SG)
16	SK-407866M	KNOB SLIDE (SG)
17A	SP-408133J	LID PANEL (L) 750
17B	SP-408154J	LID PANEL (L) 950
18A	SP-408134J	LID PANEL (R) 750
18B	SP-408155J	LID PANEL (R) 950
19	SE-408136M	WINDOW LID (SG)
20	MZ-408131M	HOLDER LID (L) (SG)

Ref.No.	Part No.	Description
22	ZG-394158M	SP PLATE CASSETTE HOLDER (SG)
23	SM-409218J	NAME PLATE AKAI-S
24	ZW-408744J	PUSH NUT SPN-2
25	MZ-408740J	DUMPER 2G50-C
26	ZG-408124M1	SP TORSION EJECT (L) (SG)
27	ZG-408125M1	SP TORSION EJECT (R) (SG)
28A	BB-408782M1	MECHA GAK9302 [750 TAPE-1]
28B	BB-408783M1	MECHA GAK9603 [950 TAPE-1]
29A	BB-410525M1	MECHA GAK9604 [750 TAPE-2]
29B	BB-408781M1	MECHA GAK9602 [950 TAPE-2]
30	ML-408121M	LEVER EJECT (L) (SG)
31	ML-408128M	LEVER EJECT (R) (SG)
32	ZG-408122M1	SP TORSION LEVER EJECT (L) (SG)
33	ZG-408123M1	SP TORSION LEVER EJECT (R) (SG)
34	MZ-408127M	COLLAR (SG)
35	ZS-715857	T2BID20X10STL CMT
36	ZS-357727	ST PAN20X05STL CMT
37	SP-408143M	COVER UPPER (SG)
38	ZS-404181M	BT BID30X06STL BZN (SG)
39	MZ-411095J	COLLAR EJECT

NOTE:

Parts will not be supplied if they are not listed in the parts list, even if they appear on the assembling illustrations

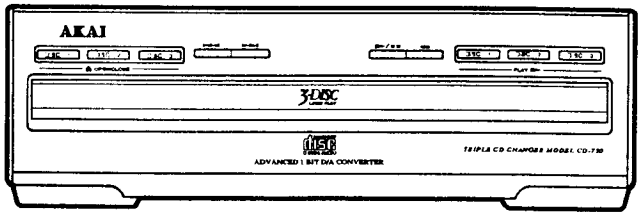
INDEX

Part No.	Ref. No.	Part No.	Ref. No.	Part No.	Ref. No.	Part No.	Ref. No.
BAT2134T070A	3-1A	ED400171J	4-D721	EO356809	5-FL351	ET354364	5-TR153
BAT2135T070A	3-1B	ED400171J	4-D722	EO356809	5-FL401	ET354364	5-TR154
BB408781M1	8-29B	ED400171J	5-D709	EO356809	5-FL451	ET354364	5-TR155
BB408782M1	8-28A	ED404319J	5-D707	EO393645J	4-L302	ET354364	5-TR156
BB408783M1	8-28B	ED404319J	5-D708	EO393645J	4-L352	ET354364	5-TR157
BB410525M1	8-29A	ED408651J	7-D807A	EO393645J	6-L402	ET354364	5-TR508
BF733191J	2-103	ED408651J	7-D808A	EO393645J	6-L452	ET354364	5-TR509
BF733192J	2-104	ED408651J	7-D809B	EO394589J	4-L301	ET354364	5-TR558
BM729992J	2-89A	ED408651J	7-D810	EO394589J	4-L351	ET354364	5-TR559
BM729993J	2-89B	ED408733J	5-D710	EO394589J	6-L301	ET354364	6-TR302
BZ733179J	2-102	ED408743J	4-D602	EO394589J	6-L351	ET354364	6-TR303
BZ733194J	2-106	ED511907	4-D701	EO394589J	6-L401	ET354364	6-TR304
EC322028	2-110	ED511907	4-D702	EO394589J	6-L451	ET354364	6-TR352
EC363491	4-C701	ED511907	4-D703	EO403270J	4-L401	ET354364	6-TR353
EC363491	4-C741	ED511907	4-D704	EO403270J	5-L501	ET354364	6-TR354
EC363491	5-C701	ED511907	4-D723	EO403270J	5-L551	ET354364	6-TR402
EC363491	5-C703	ED511907	4-D724	EO408699J	4-T401	ET354364	6-TR403
EC366613	4-C702	ED511907	4-D725	EO408762J	5-T501	ET354364	6-TR404
ED307572	4-D101	ED511907	4-D726	EO408762J	5-T551	ET354364	6-TR405
ED307572	4-D151	ED511907	4-D741	EO408763J	5-T901	ET354364	6-TR406
ED307572	4-D301	ED511907	4-D742	EO408763J	5-T902	ET354364	6-TR452
ED307572	4-D351	ED511907	5-D701	EO408763J	5-T951	ET354364	6-TR453
ED307572	4-D501	ED511907	5-D702	EO408763J	5-T952	ET354364	6-TR454
ED307572	4-D502	ED511907	5-D703	EP733165J	2-82	ET354364	6-TR455
ED307572	4-D503	ED511907	5-D704	ER200926	5-FR701	ET354364	6-TR456
ED307572	4-D504	ED511907	5-D705	ER333342	5-R906	ET354365	4-TR606
ED307572	4-D505	ED511907	5-D706	ER341091	2-73	ET354365	4-TR607
ED307572	4-D601	ED511907	5-D751	ER408692J	5-R711	ET354365	4-TR745
ED307572	4-D603	ED511907	5-D752	ES408641J	7-TS801	ET354365	5-TR714
ED307572	4-D604	ED511907	5-D753	ES408641J	7-TS802	ET354365	6-TR281
ED307572	4-D651	ED511907	5-D754	ES408641J	7-TS803	ET354414	4-TR281
ED307572	4-D652	ED511907	5-D755	ES408641J	7-TS804	ET354414	4-TR401
ED307572	4-D761	ED511907	5-D756	ES408641J	7-TS805	ET354414	4-TR402
ED307572	5-D101	EH387619J	5-IB701	ES408641J	7-TS806	ET354414	4-TR763
ED307572	5-D102	EH389421J	5-IB703	ES408641J	7-TS807	ET354414	4-TR765
ED307572	5-D151	EH404318J	5-IB702	ES408641J	7-TS808	ET354414	5-TR501
ED307572	5-D152	EH408713J	4-IB602	ES408641J	7-TS809	ET354414	5-TR502
ED307572	5-D181	EH408820J	4-IB601	ES408641J	7-TS810	ET354414	5-TR551
ED307572	5-D321	EH408821J	4-IB603	ES408641J	7-TS811	ET354414	5-TR552
ED307572	5-D371	EI310036	4-IC101	ES408708J	7-SW801	ET354414	5-TR729
ED307572	5-D421	EI310036	5-IC101	ES408708J	7-SW802	ET354414	5-TR730
ED307572	5-D471	EI337008	5-IC702	ES733163J	2-80	ET360399	6-TR381
ED307572	5-D601	EI373383	5-IC901	ES733164J	2-81	ET360399	6-TR481
ED307572	5-D602	EI373383	5-IC951	ET348302	4-TR744	ET361736	4-TR608
ED307572	5-D603	EI373957J1	4-X601	ET348302	5-TR710	ET361736	4-TR609
ED307572	5-D604	EI373957J1	5-X701	ET353899	4-TR653	ET361736	4-TR612
ED307572	5-D651	EI387938J	4-IC602	ET353899	4-TR654	ET361736	4-TR613
ED307572	5-D712	EI387938J	5-IC704	ET353899	4-TR704	ET366581	4-TR741
ED307572	5-D713	EI393323J	4-IC102	ET353899	5-TR721	ET366581	4-TR742
ED307572	5-D714	EI393323J	4-IC301	ET353899	5-TR722	ET366581	5-TR708
ED307572	5-D757	EI393323J	5-IC102	ET354364	4-TR103	ET366581	5-TR709
ED307572	5-D758	EI393323J	6-IC301	ET354364	4-TR104	ET366581	5-TR712
ED388320J	4-D705	EI393323J	6-IC401	ET354364	4-TR105	ET366581	5-TR713
ED388320J	4-D706	EI394569J	5-IC703	ET354364	4-TR106	ET369248	4-TR181
ED388320J	4-D743	EI394573J	4-IC202	ET354364	4-TR153	ET369248	4-TR184
ED388320J	5-D711	EI394573J	6-IC201	ET354364	4-TR154	ET369248	4-TR381
ED391003J	4-D401	EI394574J	4-IC551	ET354364	4-TR155	ET369248	4-TR602
ED391003J	5-D501	EI394574J	6-IC681	ET354364	4-TR156	ET369248	5-TR181
ED391003J	5-D551	EI408700J1	4-IC601	ET354364	4-TR302	ET369248	5-TR182
ED394509J	7-D801	EI410610J	5-IC701	ET354364	4-TR303	ET369248	5-TR391
ED394509J	7-D802A	EJ394445J	4-J201	ET354364	4-TR304	ET369248	5-TR491
ED394509J	7-D803	EJ394445J	5-J701	ET354364	4-TR352	ET369248	5-TR726
ED394509J	7-D804	EJ733170J	2-86	ET354364	4-TR353	ET370310	4-TR107
ED394509J	7-D805A	EO356809	4-FL101	ET354364	4-TR354	ET370310	4-TR108
ED394509J	7-D806	EO356809	4-FL151	ET354364	4-TR408	ET370310	4-TR157
ED394509J	7-D807B	EO356809	4-FL301	ET354364	5-TR103	ET370310	4-TR158
ED394509J	7-D808B	EO356809	4-FL351	ET354364	5-TR104	ET370310	4-TR182
ED394724J	7-D802B	EO356809	5-FL101	ET354364	5-TR105	ET370310	4-TR183
ED394724J	7-D805B	EO356809	5-FL151	ET354364	5-TR106	ET370310	5-TR108
ED394724J	7-D809A	EO356809	5-FL301	ET354364	5-TR107	ET370310	5-TR109

Part No.	Ref. No.	Part No.	Ref. No.	Part No.	Ref. No.	Part No.	Ref. No.
ET370310	5-TR158	ET397160J	5-TR603	EW733167J	2-84	ZG408124M1	8-26
ET370310	5-TR159	ET397160J	5-TR604	EW733168J	2-85A	ZG408125M1	8-27
ET370310	5-TR183	ET397160J	5-TR651	EW733169J	2-85B	ZG408164M	8-8
ET370310	5-TR184	ET397160J	5-TR652	HP733172J	2-90A	ZG733087J	2-2
ET373025	4-TR405	ET397160J	5-TR707	HR733173J	2-90B	ZG733091J	2-6
ET373025	4-TR701	ET397160J	5-TR711	HZ733090J	2-5	ZG733133J	2-50
ET373025	4-TR721	ET397160J	5-TR719	HZ733119J	2-36	ZG733134J	2-51
ET373025	5-TR505	ET397160J	5-TR720	MA733176J	2-99	ZG733136J	2-53
ET373025	5-TR555	ET397160J	5-TR731	MB733130J	2-47	ZG733138J	2-55
ET373025	5-TR701	ET397160J	5-TR732	ML408121M	8-30	ZG733139J	2-56
ET373025	5-TR703	ET397160J	6-TR301	ML408128M	8-31	ZG733140J	2-57
ET373382	4-TR603	ET397160J	6-TR351	ML733088J	2-3	ZG733141J	2-58
ET373382	4-TR655	ET397160J	6-TR401	ML733106J	2-23	ZG733142J	2-59
ET373382	5-TR715	ET397160J	6-TR451	ML733111J	2-28	ZG733143J	2-60
ET373382	5-TR727	ET400741J	4-TR409	ML733115J	2-32	ZG733144J	2-61
ET373382	5-TR728	ET400741J	4-TR410	ML733117J	2-34	ZG733145J	2-62
ET373391	4-TR404	ET400741J	5-TR510	ML733118J	2-35	ZG733146J	2-63A
ET373391	4-TR611	ET400741J	5-TR511	ML733123J	2-40	ZG733147J	2-63B
ET373391	4-TR615	ET400741J	5-TR560	ML733124J	2-41	ZG733152J	2-68
ET373391	4-TR616	ET400741J	5-TR561	ML733125J	2-42	ZG733154J	2-70
ET373391	5-TR503	ET404320J	5-TR702	MR733128J	2-45	ZS321320	2-93
ET373391	5-TR553	ET404320J	5-TR704	MR733129J	2-46	ZS331182	8-4
ET373485	4-TR601	ET408709J	4-TR101	MS733097J	2-13	ZS357727	8-36
ET373485	4-TR610	ET408709J	4-TR151	MS733122J	2-39	ZS394412M	8-3
ET373485	4-TR614	ET408709J	5-TR101	MT733109J	2-26	ZS404181M	8-38
ET373485	5-TR723	ET408709J	5-TR102	MT733110J	2-27	ZS432843	2-95
ET373485	5-TR724	ET408709J	5-TR151	MZ408127M	8-34	ZS460440	2-91
ET373485	5-TR725	ET408709J	5-TR152	MZ408131M	8-20	ZS715857	8-35
ET373985	4-TR761	ET408772J	4-TR617	MZ408132M	8-21	ZS733174J	2-94
ET375986	4-TR102	ET408772J	4-TR618	MZ408740J	8-25	ZS733175J	2-96
ET375986	4-TR152	ET408772J	4-TR703	MZ411095J	8-39	ZW408744J	8-24
ET396072J	4-TR656	ET408772J	5-TR705	MZ733096J	2-12	ZW733149J	2-65
ET396072J	4-TR657	ET408772J	5-TR706	MZ733104J	2-21	ZW733157J	2-74
ET396072J	4-TR658	ET408777J	4-TR305	MZ733105J	2-22	ZW733158J	2-75
ET396072J	5-TR716	ET408777J	4-TR355	MZ733107J	2-24	ZW733159J	2-76
ET396072J	5-TR717	ET408777J	5-TR321	MZ733108J	2-25	ZW733160J	2-77
ET396072J	5-TR718	ET408777J	5-TR371	MZ733116J	2-33	ZW733161J	2-78
ET397160J	4-TR201	ET408777J	5-TR421	MZ733120J	2-37		
ET397160J	4-TR202	ET408777J	5-TR471	MZ733121J	2-38		
ET397160J	4-TR251	ET733156J	2-72	MZ733131J	2-48		
ET397160J	4-TR252	EV330531	4-VR402	MZ733132J	2-49		
ET397160J	4-TR301	EV330531	4-VR403	SA394136M	8-11		
ET397160J	4-TR351	EV367524	4-VR653	SA407840M	8-1		
ET397160J	4-TR403	EV367524	4-VR654	SB408139M	8-15		
ET397160J	4-TR406	EV367524	5-VR702	SB408140M	8-7		
ET397160J	4-TR407	EV367524	5-VR704	SB408141M	8-9		
ET397160J	4-TR501	EV394561J	4-VR651	SB408142M	8-13B		
ET397160J	4-TR502	EV394561J	4-VR652	SB408153M	8-14		
ET397160J	4-TR503	EV394561J	5-VR701	SB409356M	8-13A		
ET397160J	4-TR504	EV394561J	5-VR703	SE394092M	8-10		
ET397160J	4-TR505	EV403967J	6-VR301	SE408129M	8-6		
ET397160J	4-TR506	EV403967J	6-VR351	SE408136M	8-19		
ET397160J	4-TR659	EV403967J	6-VR401	SE408138M	8-12		
ET397160J	4-TR660	EV403967J	6-VR451	SK407866M	8-16		
ET397160J	4-TR702	EV404294J	5-VR502	SM409218J	8-23		
ET397160J	4-TR722	EV404294J	5-VR552	SP408130J	8-5A		
ET397160J	4-TR743	EV404299J	4-VR101	SP408133J	8-17A		
ET397160J	4-TR764	EV404299J	4-VR102	SP408134J	8-18A		
ET397160J	5-TR201	EV404299J	4-VR151	SP408143M	8-37		
ET397160J	5-TR202	EV404299J	4-VR152	SP408144M	8-2A		
ET397160J	5-TR251	EV404299J	4-VR301	SP408145M	8-2B		
ET397160J	5-TR252	EV404299J	4-VR351	SP408146M	8-2C		
ET397160J	5-TR504	EV404299J	5-VR101	SP408147M	8-2D		
ET397160J	5-TR506	EV404299J	5-VR102	SP408149J	8-5B		
ET397160J	5-TR507	EV404299J	5-VR151	SP408154J	8-17B		
ET397160J	5-TR554	EV404299J	5-VR152	SP408155J	8-18B		
ET397160J	5-TR556	EV405657J	5-VR901	SZ733150J	2-66		
ET397160J	5-TR557	EV405657J	5-VR902	ZG394158M	8-22		
ET397160J	5-TR601	EV405657J	5-VR951	ZG408122M1	8-32		
ET397160J	5-TR602	EV405657J	5-VR952	ZG408123M1	8-33		

ABBREVIATIONS (CASSETTE)

ABBREVIATION	EXPLANATION	ABBREVIATION	EXPLANATION
AC	Alternating Current	MIN	MINute
A/D	Analog/Digital	MML	Maximum Modulation Level
AF	Auto Fader	MOL	Maximum Output Level
AMP	AMPlifier	MPX	Multi PleX
AR	Anti Recording	NC	Not Connected (No Connection)
AT BIAS	Auto Turning BIAS	NFB	Negative Feed Back
ATT	ATTenuator	NORM	NORMal
BAL	BALance	NR	Noise Reduction
BEF	Band Elimination Filter	OSC	OSCillator (OSCillation)
BSS	Blank Search System	P	Pulse
CAP M	CAPstan Motor	PB	Play Back
CH	CHannel	QMSS	Quick Memory Search System
COMP	COMParator	QR	Quick Reverse
CONT	CONTinuance	R CH	Right CHannel
CRLP	Computer Recording Level Processing	REC	RECord (RECording)
CS	Chip Select	REV	REVerse
D/A	Digital/Analog	ROT	ROTation
DC	Direct Current	REW	REWind
DET	DETector	SEC	SECond
DISCRI	DISCRIminator	SELE	SELEctor
DUB	DUBbing	SENS	SENSitivity
EQ	EQualizer	SEPP	Single Ended Push Pull
FF (or F.FWD)	Fast Foward	SIG	SIGnal
FLD	FLuoresent Display	SPECT	SPECTrum
FREQ	FREQuency	STD	STanDard
FWD	ForWarD	SW	SWitch
GND	GrouND	SYSCON	SYStem CONtrol
H	High	TP	Test Point
HPF	High Pass Filter	TRIG	TRIGa
IND	INDicator	VCA	Voltage Control Attenuator
IPLS	Instant Program Location System	VOL	VOLume
L	Low	VOLT	VOLtage
L CH	Left CHannel	VR	Variable Resistor
LED	Light Emitining Diode	X'TAL	cysTAL
MEMO	MEMOry	X1	Normal speed
MICOM	MIcroCOMputer	X2	Dubble speed



COMPACT disc DIGITAL AUDIO

MULTI COMPACT DISC PLAYER

MODEL CD-750

SPECIFICATIONS

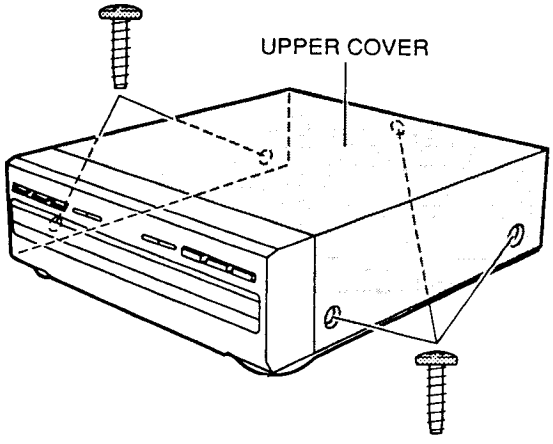
Type	3 discs auto changer
Pick up system	3 beam laser pick-up
Sampling frequency	44.1kHz
Error correction system	Cross interleave reed solomon
Number of channels	2 channel stereo
Frequency response	20 to 20,000Hz ±1dB
S/N ratio	97dB (A-weight)
Wow & flutter	Less than measurable limits
Total harmonic distortion	0.01% (at 1kHz)
Channel separation	85dB (at 1kHz)
Dynamic range	95dB
Dimensions	270 (W) x 88 (H) x 324 (D)mm
Weight	2.7kg
Power requirement	Supplied from the PA-750/950 through the TP-750.
Power consumption	10W

* For improvement purposes, specifications and design are subject to change without notice.

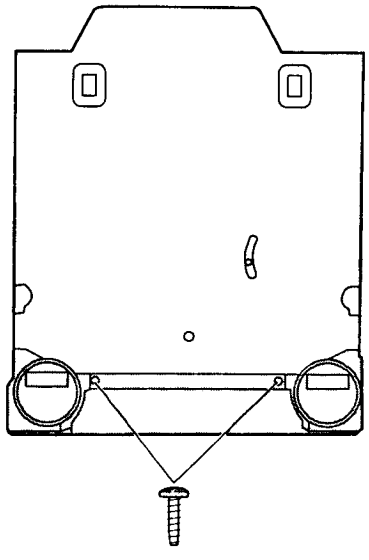
I. DISASSEMBLY

In case of trouble, etc., necessitating dismantling, please dismantle in the order shown in the illustrations. Reassemble in the reverse order.

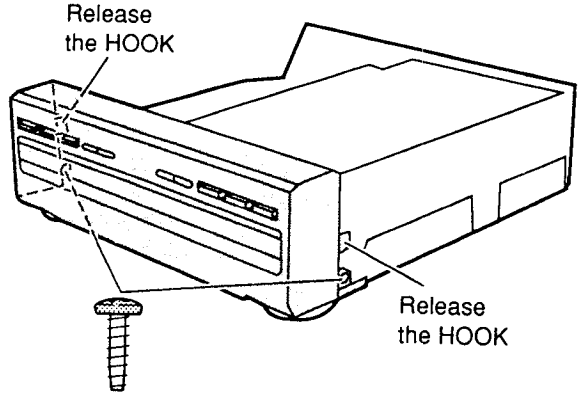
1. Removal of the UPPER COVER



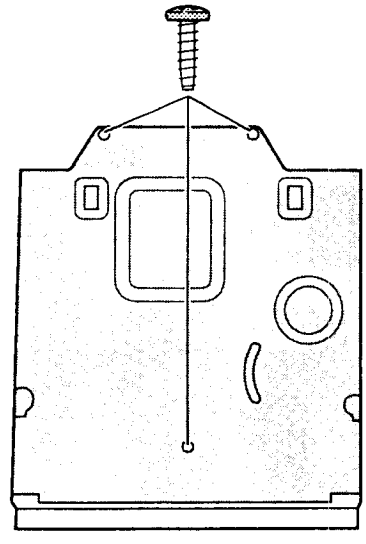
2. Removal of the FRONT PANEL



3.



4. Removal of the BOTTOM COVER



II. PRINCIPAL PARTS LOCATION

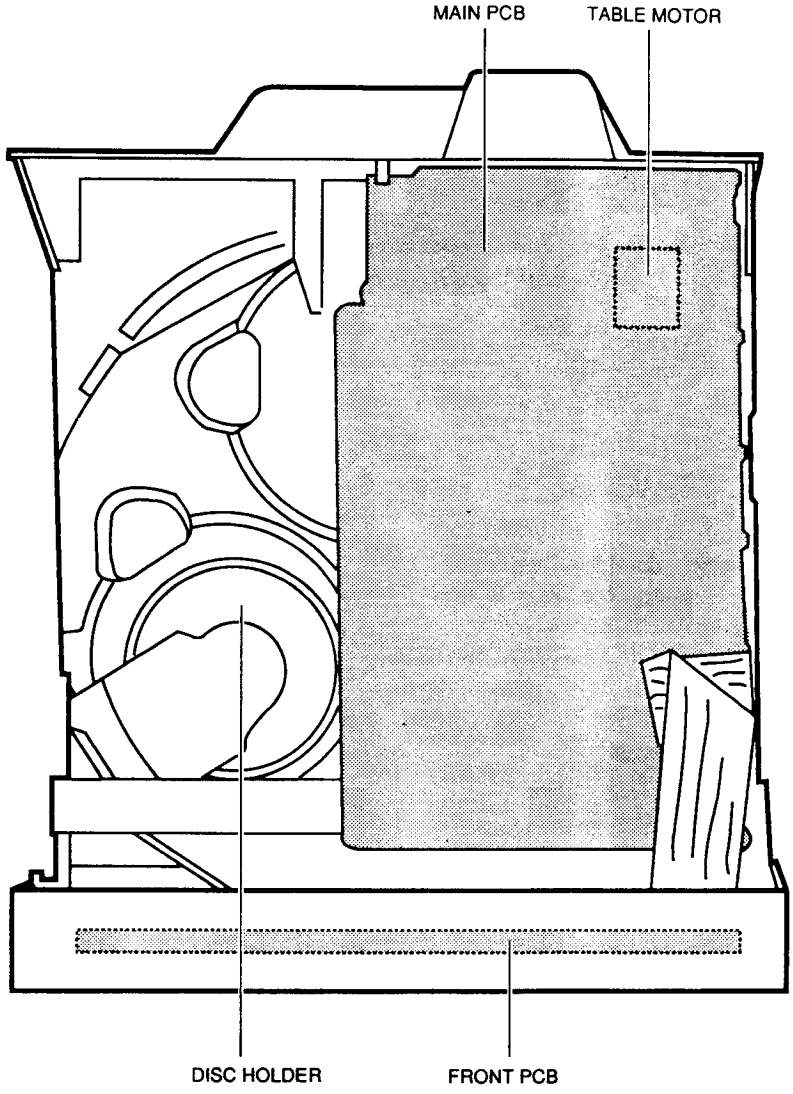


Fig.2-1 Top view

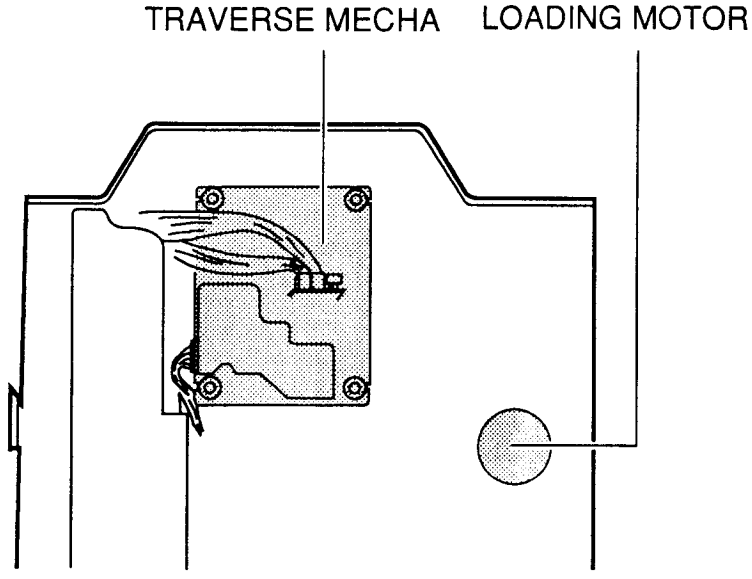
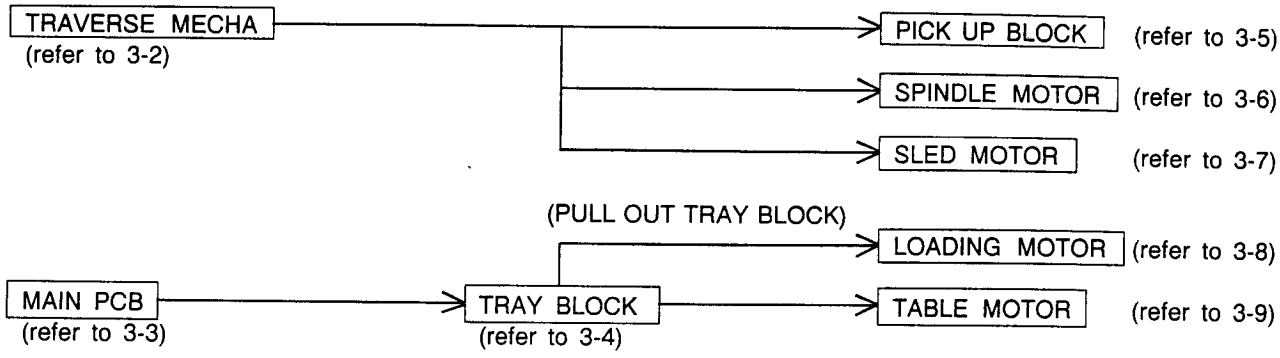


Fig.2-2 Bottom view

III. REPLACEMENT OF THE PRINCIPAL COMPONENTS

3-1.DISMANTLING PROCEDURE OF THE COMPONENTS

When replacement of the mechanical parts is necessary, replace them using the following procedure.



3-2.REMOVAL OF THE TRAVERSE MECHA.

1) Disconnect the three connectors carefully (two connectors are on the PICK UP PCB and the other is on the MOTOR PCB of the TRAVERSE MECHA.).
2) Remove the four retaining screws, then remove the PICK UP UNIT.

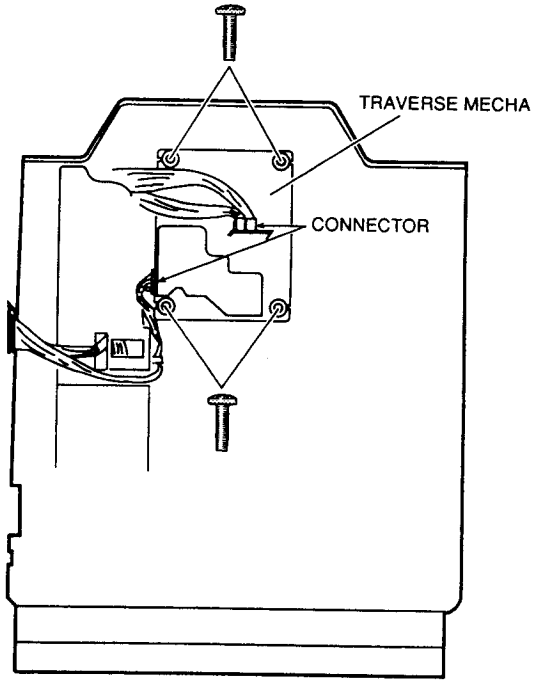


Fig.3-1

3-3.REMOVAL OF THE MAIN PCB

1) Disconnect the P4, P5 and P6 connectors on the MAIN PCB.
2) Remove the four retaining screws of the MAIN PCB, then remove the MAIN PCB.

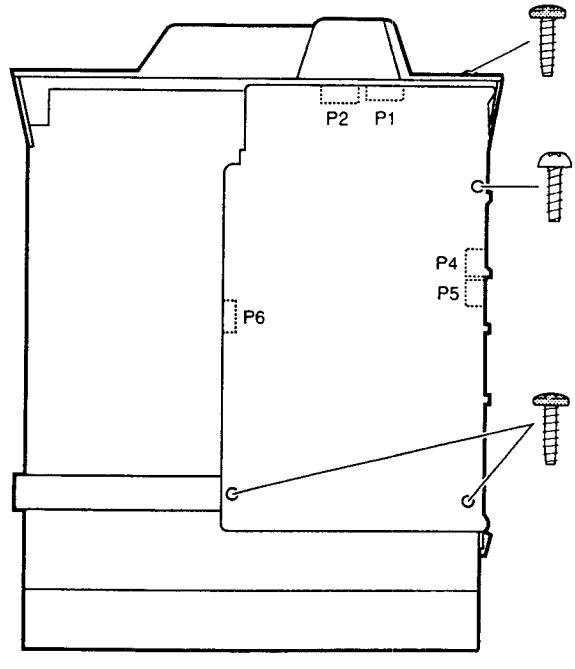


Fig.3-2

3-4. REMOVAL OF THE TRAY BLOCK

1) Remove the MAIN PCB.
2) Slide the GEAR HOLDER RETAINING SCREW in the direction of the arrow and pull out the TRAY BLOCK slowly.
3) Remove the MAIN PCB HOLDER RETAINING SCREWS then remove the MAIN PCB HOLDER and the BRACKETS on both side.
4) Remove the TRAY BLOCK.

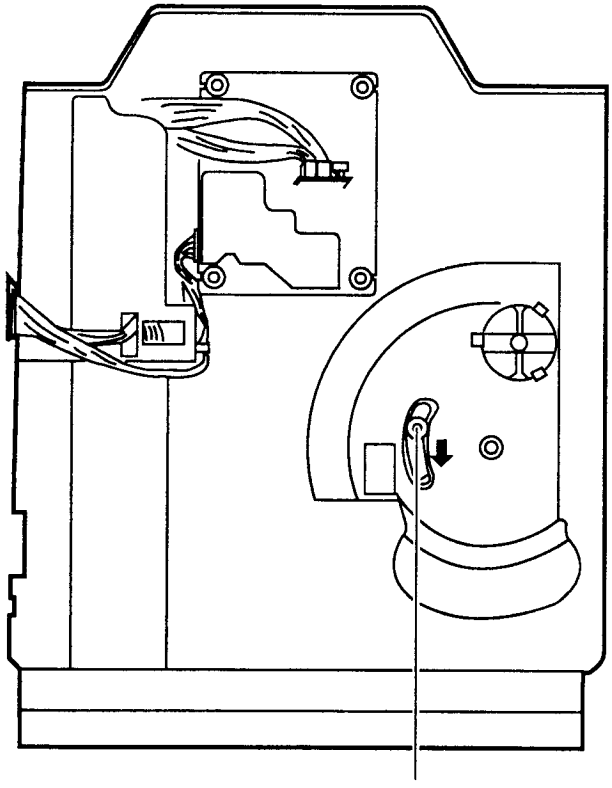


Fig.3-3

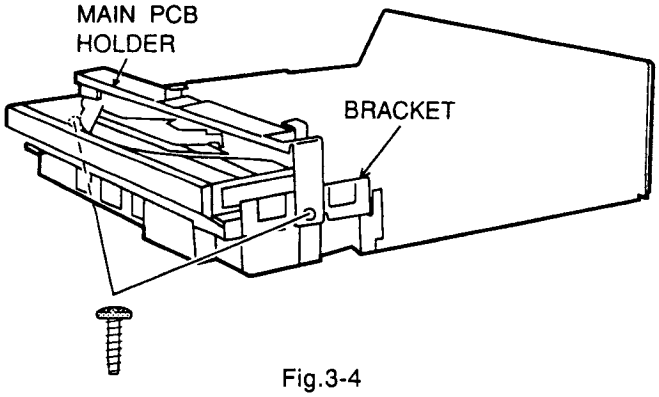


Fig.3-4

3-5. REPLACEMENT OF THE PICK UP BLOCK

1) Remove the TRAVERSE MECHA.
2) Push the Ⓐ stopper in the right direction and pull the SLIDE SHAFT in the forward direction to remove the PICK UP BLOCK, then replace the PICK UP BLOCK.
3) Reassemble in the reverse order.

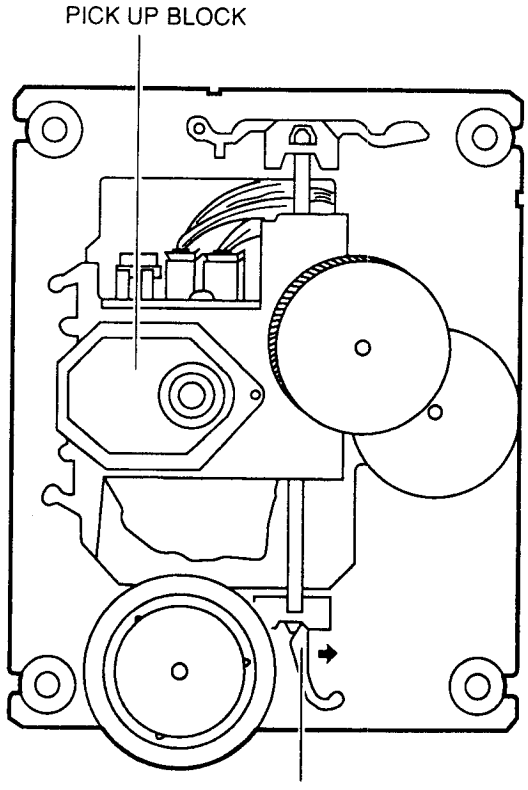


Fig.3-5

3-6. REPLACEMENT OF THE SPINDLE MOTOR

Replacement of the SPINDLE MOTOR itself is not recommended, because the adjustment of the TURN TABLE height is quite critical and necessitating the use of a special jig.

3-7.REPLACEMENT OF THE SLED MOTOR

1) Remove the TRAVERSE MECHA.
2) Remove the MOTOR PCB.
3) Remove the SLED MOTOR RETAINING Ⓑ SCREWS, then replace the SLED MOTOR.
4) Reassemble in the reverse order.

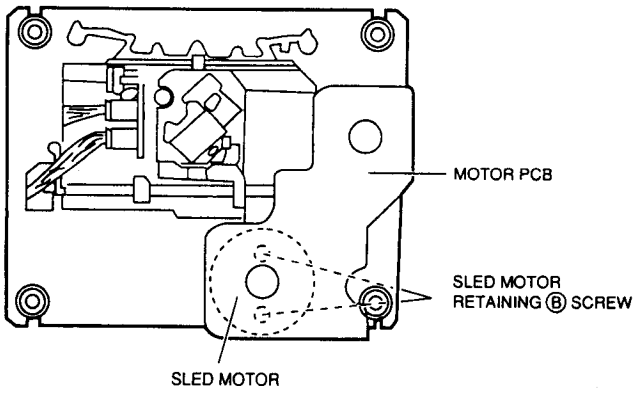
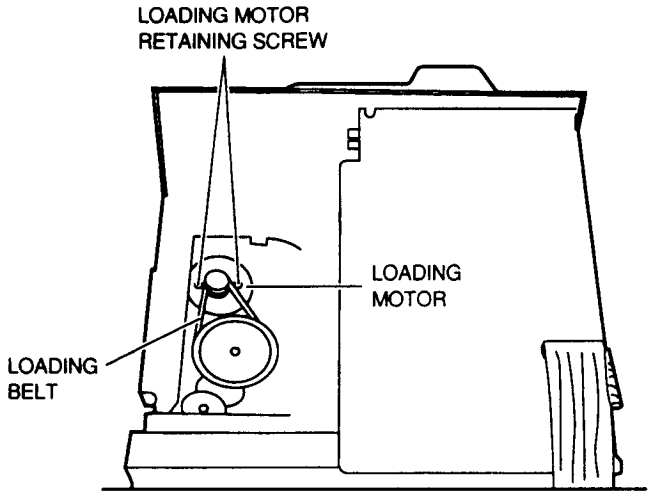


Fig.3-6

3-8.REPLACEMENT OF THE LOADING MOTOR

1) Push the GEAR HOLDER RETAINING SCREW in the direction of the arrow, then pull out the TRAY BLOCK.
2) Remove the LOADING BELT and the LOADING MOTOR RETAINING SCREWS.
3) Unsolder the lead wires of the LOADING MOTOR with a soldering iron.
4) While opening the LOADING MOTOR'S THREE RETAINING HOOKs, remove and replace the LOADING MOTOR.
5) Reassemble in the reverse order.



3-9.REPLACEMENT OF THE TABLE MOTOR

1) Remove the MAIN PCB.
2) Remove the TRAY BLOCK.
3) Remove the DISC HOLDER RETAINING SCREW then remove DISC HOLDER.
4) Remove the GEAR COVER then remove the TABLE GEAR (B) and WORM WHEEL TABLE GEAR.
5) Unsolder the lead wires of the TABLE MOTOR.
6) Remove the TABLE MOTOR while opening the TABLE MOTOR RETAINING HOOK, then replace the TABLE MOTOR.
7) Reassemble in the reverse order.

NOTE: 1) When reassembling, make sure that the TABLE GEAR (A)'s hole is aligned with the reference hole on the LOADING TRAY.
2) When installing the DISC HOLDER on the LOADING TRAY, make sure to place the DISC HOLDER so that "DISC 3" is facing upward ("DISC 2" faces right and "DISC 1" faces left accordingly).

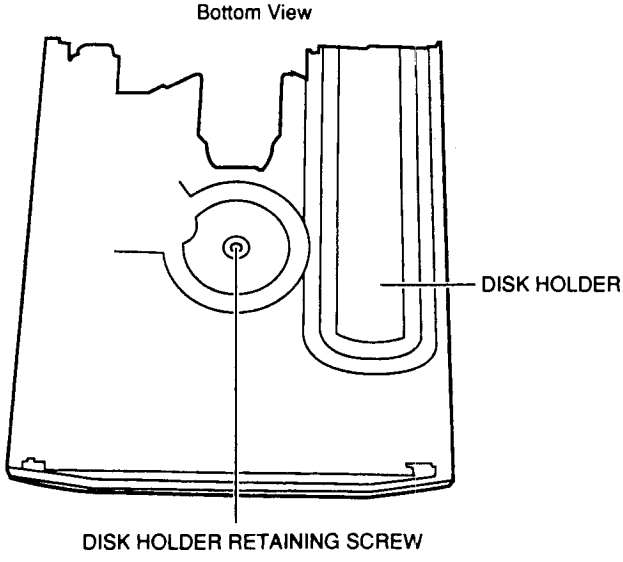
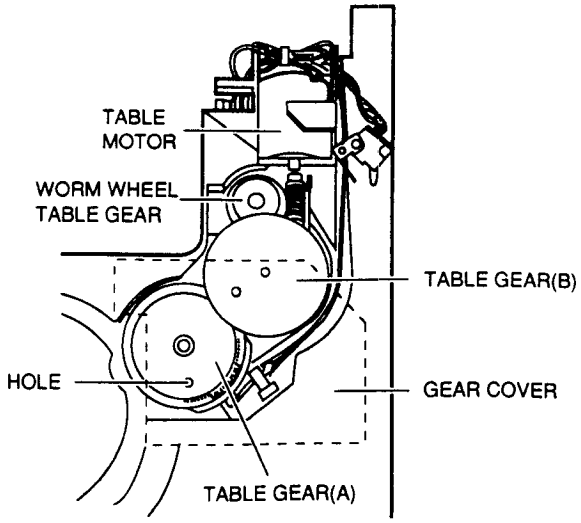


Fig.3-8



ELECTRICAL ADJUSTMENT

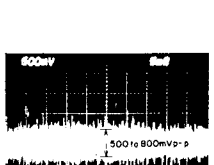
e making adjustments 1 - 5, load a test disc as follows.
irst setting the unit to the test mode 1, press the ▶/■■ button to open the disc tray and place a SONY TYPE 3 test disc on SC 1 holder. Press the ▶/■■ button again to close the tray. Adjustments can now be made.

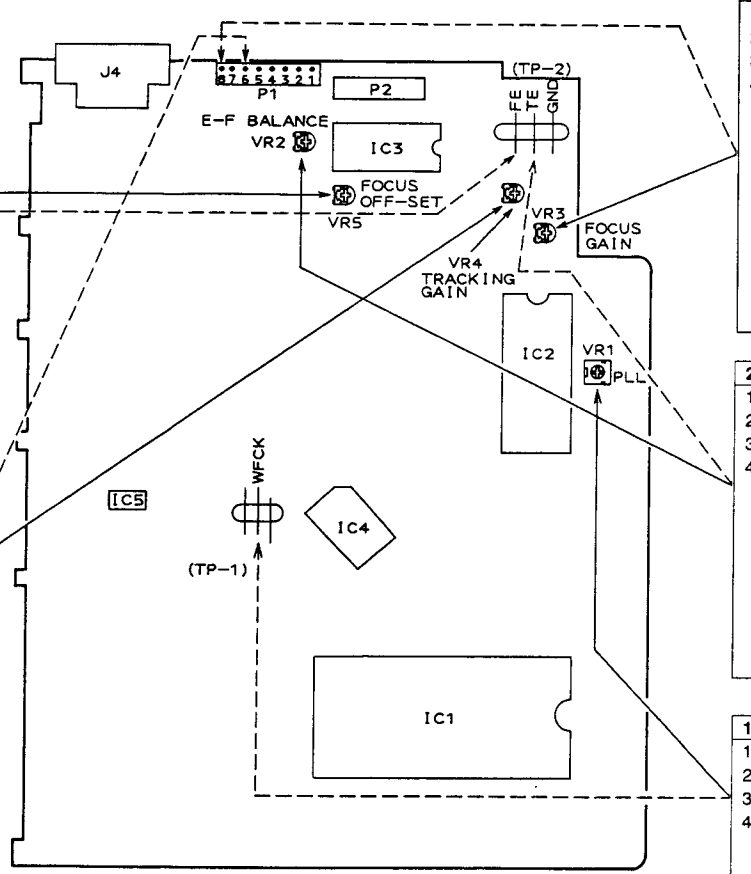
P ADJUSTMENT
EST DISC
ODE or TEST mode
EST POINT and ADJUSTMENT parts.
EMARK (•), RESULT (✻)

Test point — ADJ.part

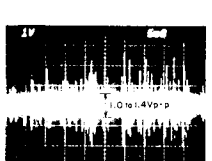
5 FOCUS OFF-SET
1. Test disc SONY TYPE 3 (AT-711881)
2. Test mode 2 and 1
3. FE (TP-2) / VR 5
4. •Connect a digital DC voltmeter to the TP 2 (FE) and check the voltage A in the test mode 2, then press STOP button and adjust the voltage B so that the reading on the digital DC voltmeter is the same as voltage A.
   ✻A=B

4 TRACKING SERVO GAIN
1. Test disc SONY TYPE 3 (AT-711881)
2. Test mode 5
3. P1 ⑥ pin / VR 4
4. •Connect an oscilloscope to the P1 connector ⑥ pin.
   ✻500 to 800mVp-p

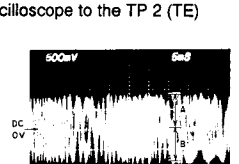




3 FOCUS SERVO GAIN
1. Test disc SONY TYPE 3 (AT-711881)
2. Test mode 5
3. P1 ⑧ pin / VR 3
4. •Connect an oscilloscope to the P1 connector ⑧ pin
   ✻1.0 to 1.4Vp-p



2 E-F BALANCE
1. Test disc SONY TYPE 3 (AT-711881)
2. Test mode 3
3. TE (TP 2) / VR 2
4. •Connect an oscilloscope to the TP 2 (TE)
   ✻A=B



1 VCO
1. —
2. Test mode 1
3. WFCK (TP-1) / VR 1
4. •Connect a frequency counter to the TP 1 (WFCK).
   ✻7,350 ±10Hz

MODE	HOW TO SET EACH MODE	FUNCTION	LED 1	LED 2	LED 3	MUSIC CALENDAR
1	While pressing the ■ and ▶▶I buttons, insert the power cord.	•Indicates that unit is set into the TEST mode.	ON	OFF	OFF	1
2	Press the ⏏ OPEN/CLOSE DISC 1 button	•FOCUS SERVO is on.	OFF	ON	OFF	2
3	Press the ⏏ OPEN/CLOSE DISC 2 button	•CLV-S SERVO is on.	ON	ON	OFF	3
4	Press the ⏏ OPEN/CLOSE DISC 3 button	•TRACKING SERVO is on.	OFF	OFF	ON	4
5	Press the PLAY ▶ DISC 1 button	•CLV-A and SLED SERVO are on.	ON	OFF	ON	5
6	Press the PLAY ▶ DISC 2 button	•ANTI SHOCK is on	OFF	ON	ON	6

- The disc tray can be opened or closed by pressing the ▶/■■ button (during any mode). After opening the tray, closing it will move the pick up to the inward position and return the unit to the TEST MODE 1.
- Pressing the ■ button will return the unit to the TEST MODE 1 regardless of the test mode presently engaged. However, the pick up will not be moved.
- Test modes can be selected directly.

ARTS LIST

ATTENTION

en placing an order for parts, be sure to list Part No., Model No. and the description of eachpart.
erwise, the non-delivery of the part or the delivery of a wrong part may result.
ase make sure that Part No. is correct when ordering.
ot, a part different from the one you ordered may be delivered.
ce the parts shown in Parts List of Preliminary Service Manual may have been the subject of changes,
ase use this Parts List for all future reference.

HOW TO USE THIS PARTS LIST

rts List lists those parts which are considered necessary for repairs. Other common parts, such as resistors and ca-s, are listed in the "Common List for Service Parts" from which these parts should be selected and stocked.
commended Spare Parts List shows those parts in the Parts List which are considered particularly important for ser-

ot shown in the Parts List and "Common List for Service Parts" will not in principle be supplied.
read the Parts List.

hanism Block

BASE BLOCK

No.	Description
T2023A320A	HEAD BASE BLOCK
H2206A010A	HEAD R/P PR4-8FU C
77876	PAN20×03STL CMT
536488	BID20×08STL CMT
402895	SP CS ANGLE ADJUST

— SP (Service Parts) Classification
— This number corresponds with the individ ual parts index number in that figure.

b) PC Board

6. MAIN PC BOARD

Ref. No.	Part No.	Description
IC1	EI-324536	IC HD14049BP
IC2	EI-336801	IC MB8841-564M
C1A	EC-338399	C MMY V 223M 250AC [U,E,B,S]
C1B	EC-350949	C MMY V 223M 250DC [J]
C1C	EC-338397	C MMY V 223M 125AC [C,A]
X1	EI-318384	OSC X'TAL NC-18C

Symbols for primary destination
[A] :AAL (U.S.A) [S] :SAA (Australia)
[B] :BEAB (England) [U] :U/T (Universal Area)
[C] :CSA (Canada)
[E] :CEE (Europe) [V] :VDE (Germany)
[J] :JPN (Japan) [Y] :Custom Version
SP (Service Parts) Classification
These reference symbols correspond with component symbols in the Schematic Diagrams.

ailable PC Board Blocks are listed separately.
art No. is known, Parts Index at end of Parts List can be used to locate where that part is shown in Parts

eference No.listed at right of Part No.

WARNING

NDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY AL COMPONENTS ONLY WITH MANUFACTURE'S RECOMMENDED PARTS.

AVERTISSEMENT

. INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE ITÉDE L'APPAREIL, NE REMPLACER QUE DES PIÉCES RECOMMANDEES PAR LÉ CANT.

1. RECOMMENDED SPARE PARTS

We suggest you to stock the following Recommended Spare Part items listed below since they can cover most of the routine service.

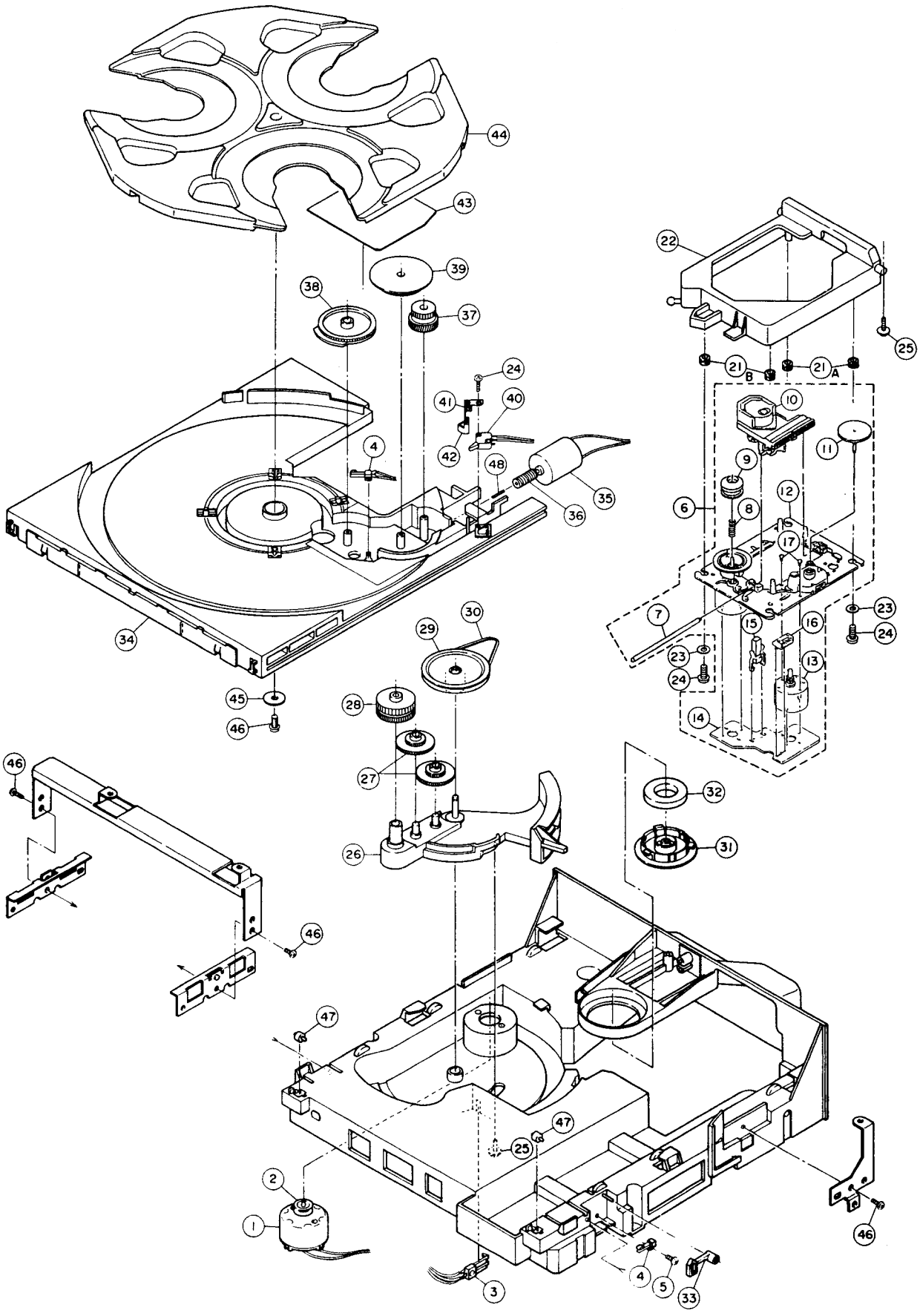
Ref.No.	Part No.	Description
1	*BB-408757N1	MECHA TRAVERSE KSM-2101ABM
2	BM-733203J	MOTOR GEAR ASSY (MB)
3	BM-374198	MOTOR RF-370CA-15370
4	BM-408752M	MOTOR RF-500TB-14415
5	*BO-394728J	PICK UP KSS-210A
6	ED-408651J	D LED SEL2913K ORANGE
7	ED-307572	D SILICON H 1SS131
8	*ED-511907	D SILICON 1N4002 100/1.0A
9	ED-408721J	D ZENER H HZS2B3
10	ED-408720J	D ZENER H HZS3C1
11	ED-408719J	D ZENER H HZS4C2
12	ED-403743J	D ZENER H HZS6B3
13	*ED-400171J	D ZENER H HZS6C2L
14	EH-408654J	COMP R RGLE10T 223J
15	EH-404307J	COMP R RGLE13X 223J
16	EH-408656J	COMP R RGLE6X 472J
17	EI-330352	IC BA6109
18	EI-389264J	IC BA6209N
19	EI-390112J	IC CXA1081S
20	EI-390120J	IC CXA1082BS
21	EI-403497J	IC CXD1167Q
22	EI-387938J	IC HD74LS05P
23	EI-408657J1	IC M38002M4-126SP MXA1CD2
24	EI-393325J	IC M5218AP
25	EI-213390	IC NJM4558D
26	EI-408658J	IC PCM67U
27	EI-390149J	OSC CE CST4.23MGW 4.230MHZ
28	EI-381139J	OSC X'TAL HC-49/U 16934.400KHZ
29	ES-733205J	SW LEAF
30	ES-408754M	SW LEAF LSA-1119H
31	ES-408755M	SW LEAF LSA-2127E
32	ES-394427J	SW TACT SOR-133HS T05
33	ET-369248	TR DTA114YS
34	ET-360399	TR DTC114TS
35	ET-354365	TR DTC114YS
36	ET-354371	TR DTC124ES
37	ET-354364	TR DTC143TS
38	ET-353899	TR 2SA1317 S,T,U
39	ET-394919J	TR 2SB1329 Q,R T05
40	*ET-388338J	TR 2SB1425 S,E
41	ET-397160J	TR 2SC3330 R,S,T,U,V
42	ET-379239	TR 2SD1380 Q,R
43	*ET-396072J	TR 2SD2159 V,W
44	MA-733202J	TURNTABLE CHASSIS ASSY (MB)

2. CD MECHANISM

Ref.No.	Part No.	Description
1	BM-408752M	MOTOR RF-500TB-14415
2	MR-407764M	PULLEY (SG)
3	ES-408755M	SW LEAF LSA-2127E
4	ES-408754M	SW LEAF LSA-1119H
5	ZS-343082	PT BR26X08STL CMT
6	*BB-408757N1	MECHA TRAVERSE KSM-2101ABM
7	MS-733198J	SLIDE SHAFT
8	ZG-733199J	SP COMPRESSION
9	MZ-733200J	CENTER RING (LO)
10	*BO-394728J	PICK UP KSS-210A
11	MZ-733201J	GEAR (A)
12	MA-733202J	TURNTABLE CHASSIS ASSY (MB)
13	BM-733203J	MOTOR GEAR ASSY (MB)
14	EA-733204J	MOTOR P.C BOARD (6P)
15	ES-733205J	SW LEAF
16	EJ-733206J	CONNECTOR 6P
17	ZS-477876	PAN20X03STL CMT
18	EW-408749M	WIRE ASSY YMC-02 PU1 8P
19	EW-408750M	WIRE ASSY YMC-02 PU2 8P
20	EW-408751M	WIRE ASSY YMC-02 TRAVERSE 6P
21A	MB-407746M1	INSULATOR (SG)
21B	MB-411992M1	INSULATOR (B) (SG)
22	MZ-407745M1	HOLDER TRAVERSE (SG)
23	ZW-409219M	PW23X100X100STL BZN (SG)
24	ZS-390395J	BT BID20X10STL BZN
25	ZS-407886M	BT PAN30X08STL BZN C100 (SG)
26	BL-409250M	SG HOLDER GEAR PART
27	MZ-407734J1	GEAR LOADING (B)
28	MZ-407733M	GEAR LOADING (A) (SG)
29	MZ-407763J1	PULLEY GEAR
30	MB-407767M	BELT LOADING (SG)
31	MZ-410907J1	CLAMPER (B)
32	MZ-408753J	MAGNET FM30X17X5.2 2P
33	ML-407765J	LEVER SW LOADING
34	SC-407748M	TRAY LOADING (SG)
35	BM-374198	MOTOR RF-370CA-15370
36	MZ-407740J	WORM TABLE
37	MZ-407739M	GEAR WORM WHEEL TABLE (SG)
38	MZ-407737M	GEAR TABLE (A) (SG)
39	MZ-407738M	GEAR TABLE (B) (SG)
40	ES-408758M	SW LEVER SSCTL-S-R
41	ZG-407741M	SP PLATE HOLDER DISK (SG)
42	ML-407742M	LEVER SW (SG)
43	SZ-407750M	COVER GEAR (SG)
44	MZ-407749M	HOLDER DISK (SG)
45	ZW-396336M	PW30X150X080STL CMT (SG)
46	ZS-331182	BT BID30X08STL BNI
47	MR-407755M	ROLLER (SG)
48	MS-411215J	SHAFT WORM

NOTE:
Parts will not be supplied if they are not listed in the parts list, even if they appear on the assembling illustrations with reference No.

CD MECHANISM



3. P.C BOARD BLOCK

Ref.No.	Part No.	Description
1	BA-P2069T030B	ML PC (#) CD BLK CD-750/ML

PC (#) CD BLK CONSISTS OF FOLLOWING P.C BOARD.
- MAIN P.C BOARD
- FRONT P.C BOARD

4. MAIN P.C BOARD

Ref.No.	Part No.	Description
D1	*ED-511907	D SILICON 1N4002 100/1.0A
D2	*ED-511907	D SILICON 1N4002 100/1.0A
D3	*ED-511907	D SILICON 1N4002 100/1.0A
D4	*ED-511907	D SILICON 1N4002 100/1.0A
D5	*ED-511907	D SILICON 1N4002 100/1.0A
D6	*ED-511907	D SILICON 1N4002 100/1.0A
D7	*ED-400171J	D ZENER H HZS6C2L
D9	*ED-400171J	D ZENER H HZS6C2L
D11	ED-307572	D SILICON H 1SS131
D12	ED-307572	D SILICON H 1SS131
D13	ED-307572	D SILICON H 1SS131
D14	ED-403743J	D ZENER H HZS6B3
D15	ED-400171J	D ZENER H HZS6C2L
D16	ED-408721J	D ZENER H HZS2B3
D17	ED-408720J	D ZENER H HZS3C1
D18	ED-408719J	D ZENER H HZS4C2
D19	ED-307572	D SILICON H 1SS131
D20	ED-307572	D SILICON H 1SS131
IB1	EH-404307J	COMP R RGLE13X 223J
IB2	EH-408654J	COMP R RGLE10T 223J
IB3	EH-408656J	COMP R RGLE6X 472J
IC1	EI-408657J1	IC M38002M4-126SP MXA1CD2
IC2	EI-390120J	IC CXA1082BS
IC3	EI-390112J	IC CXA1081S
IC4	EI-403497J	IC CXD1167Q
IC5	EI-408658J	IC PCM67U
IC6	EI-393325J	IC M5218AP
IC7	EI-213390	IC NJM4558D
IC8	EI-387938J	IC HD74LS05P
IC9	EI-389264J	IC BA6209N
IC10	EI-330352	IC BA6109
J4	EJ-408660J	SOCKET CFG1111-0161 BLUE 11P
R50	*ER-394882J	R OMF V T05 FS 1/2W 1R2J
R53	*ER-394882J	R OMF V T05 FS 1/2W 1R2J
TR1	ET-397160J	TR 2SC3330 R,S,T,U,V
TR2	*ET-396072J	TR 2SD2159 V,W
TR3	*ET-396072J	TR 2SD2159 V,W
TR4	*ET-396072J	TR 2SD2159 V,W
TR5	ET-353899	TR 2SA1317 S,T,U
TR6	*ET-388338J	TR 2SB1425 S,E
TR7	ET-353899	TR 2SA1317 S,T,U
TR8	ET-397160J	TR 2SC3330 R,S,T,U,V
TR9	ET-360399	TR DTC114TS
TR10	ET-354365	TR DTC114YS
TR11	ET-397160J	TR 2SC3330 R,S,T,U,V
TR12	ET-397160J	TR 2SC3330 R,S,T,U,V
TR13	ET-397160J	TR 2SC3330 R,S,T,U,V
TR14	ET-360399	TR DTC114TS
TR15	ET-360399	TR DTC114TS
TR16	ET-354371	TR DTC124ES
TR17	ET-354364	TR DTC143TS
TR18	ET-354364	TR DTC143TS
TR19	ET-369248	TR DTA114YS
TR21	ET-379239	TR 2SD1380 Q,R
TR22	ET-388338J	TR 2SB1425 S,E
TR23	ET-379239	TR 2SD1380 Q,R
TR24	ET-394919J	TR 2SB1329 Q,R T05
TR25	ET-396072J	TR 2SD2159 V,W
TR26	ET-388338J	TR 2SB1425 S,E
TR27	ET-396072J	TR 2SD2159 V,W
TR28	ET-388338J	TR 2SB1425 S,E
TR29	ET-354365	TR DTC114YS
TR30	ET-354365	TR DTC114YS
TR31	ET-354365	TR DTC114YS
VR1	EV-404260J	R S-FIX H RH0681C 0.30W 102
VR2	EV-358829	R S-FIX H RH0615C 0.10W 223
VR5	EV-356576	R S-FIX H RH0615C 0.10W 472
X1	EI-381139J	OSC X'TAL HC-49/U 16934.400KHZ
X2	EI-390149J	OSC CE CST4.23MGW 4.230MHZ

5. FRONT P.C BOARD

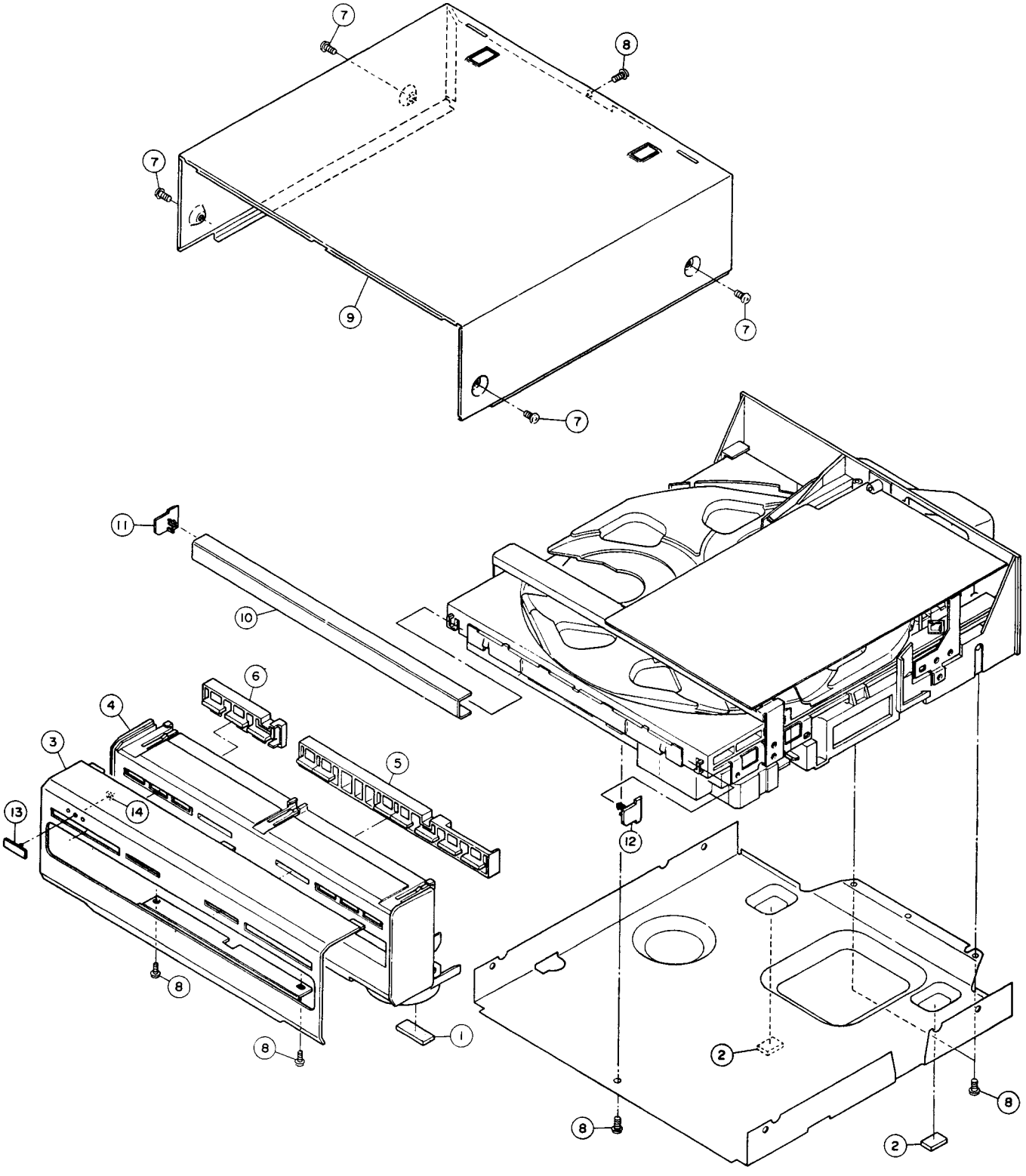
Ref.No.	Part No.	Description
D301	ED-408651J	D LED SEL2913K ORANGE
D302	ED-408651J	D LED SEL2913K ORANGE
D303	ED-408651J	D LED SEL2913K ORANGE
TS301	ES-394427J	SW TACT SOR-133HS T05
TS302	ES-394427J	SW TACT SOR-133HS T05
TS303	ES-394427J	SW TACT SOR-133HS T05
TS304	ES-394427J	SW TACT SOR-133HS T05
TS305	ES-394427J	SW TACT SOR-133HS T05
TS306	ES-394427J	SW TACT SOR-133HS T05
TS307	ES-394427J	SW TACT SOR-133HS T05
TS308	ES-394427J	SW TACT SOR-133HS T05
TS309	ES-394427J	SW TACT SOR-133HS T05
TS310	ES-394427J	SW TACT SOR-133HS T05

6. FINAL ASSEMBLY

Ref.No.	Part No.	Description
1	SA-394136M	CUSHION FOOT (SG)
2	SA-407840M	CUSHION FOOT REAR (SG)
3	SP-408026J	PANEL FRONT
4	SE-408024M	ESCUTCHEON FRONT (SG)
5	SB-408027M	BUTTON OP (SG)
6	SB-408028M	BUTTON OPEN (SG)
7	ZS-331182	BT BID30X08STL BNI
8	ZS-394412M	BT BID30X08STL BZN PROJECTION
9	SP-408022M	COVER UPPER (SG)
10	SP-408029J	COVER TRAY
11	SC-408030M	CAP TRAY L (SG)
12	SC-408031M	CAP TRAY R (SG)
13	SM-409218J	NAME PLATE AKAI-S
14	ZW-408744J	PUSH NUT SPN-2

NOTE:
Parts will not be supplied if they are not listed in the parts list, even if they appear on the assembling illustrations with reference No.

FINAL ASSEMBLY



INDEX

Part No.	Ref. No.
BAP2069T030B	3-1
BB408757N1	2-6
BL409250M	2-26
BM374198	2-35
BM408752M	2-1
BM733203J	2-13
BO394728J	2-10
EA733204J	2-14
ED307572	4-D11
ED307572	4-D12
ED307572	4-D13
ED307572	4-D19
ED307572	4-D20
ED400171J	4-D7
ED400171J	4-D9
ED400171J	4-D15
ED403743J	4-D14
ED408651J	5-D301
ED408651J	5-D302
ED408651J	5-D303
ED408719J	4-D18
ED408720J	4-D17
ED408721J	4-D16
ED511907	4-D1
ED511907	4-D2
ED511907	4-D3
ED511907	4-D4
ED511907	4-D5
ED511907	4-D6
EH404307J	4-IB1
EH408654J	4-IB2
EH408656J	4-IB3
EI213390	4-IC7
EI330352	4-IC10
EI381139J	4-X1
EI387938J	4-IC8
EI389264J	4-IC9
EI390112J	4-IC3
EI390120J	4-IC2
EI390149J	4-X2
EI393325J	4-IC6
EI403497J	4-IC4
EI408657J1	4-IC1
EI408658J	4-IC5
EJ408660J	4-J4
EJ733206J	2-16
ER394882J	4-R50
ER394882J	4-R53
ES394427J	5-TS301
ES394427J	5-TS302
ES394427J	5-TS303
ES394427J	5-TS304
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ES394427J	5-TS306
ES394427J	5-TS307
ES394427J	5-TS308
ES394427J	5-TS309
ES394427J	5-TS310
ES408754M	2-4
ES408755M	2-3
ES408758M	2-40
ES733205J	2-15
ET353899	4-TR5
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ET354365	4-TR10
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ET354365	4-TR31
ET354371	4-TR16
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ET369248	4-TR19
ET379239	4-TR21
ET379239	4-TR23
ET388338J	4-TR6
ET388338J	4-TR22
ET388338J	4-TR26
ET388338J	4-TR28
ET394919J	4-TR24
ET396072J	4-TR2
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EV356576	4-VR5
EV358829	4-VR2
EV358829	4-VR3
EV358829	4-VR4
EV404260J	4-VR1
EW408749M	2-18
EW408750M	2-19
EW408751M	2-20
MA733202J	2-12
MB407746M	2-21A
MB407767M	2-30
MB411992M	2-21B
ML407742M	2-42
ML407765J	2-33
MR407755M	2-47
MR407764M	2-2
MS411215J	2-48
MS733198J	2-7
MZ407733M	2-28
MZ407734J1	2-27
MZ407737M	2-38
MZ407738M	2-39
MZ407739M	2-37
MZ407740J	2-36
MZ407745M	2-22
MZ407749M	2-44
MZ407763J1	2-29
MZ408753J	2-32
MZ410907J1	2-31
MZ733200J	2-9
MZ733201J	2-11
SA394136M	6-1
SA407840M	6-2
SB408027M	6-5
SB408028M	6-6
SC407748M	2-34
SC408030M	6-11
SC408031M	6-12
SE408024M	6-4
SM409218J	6-13
SP408022M	6-9
SP408026J	6-3
SP408029J	6-10
SZ407750M	2-43
ZG407741M	2-41
ZG733199J	2-8
ZS331182	2-46
ZS331182	6-7
ZS343082	2-5
ZS390395J	2-24
ZS394412M	6-8
ZS407886M	2-25
ZS477876	2-17
ZW396336M	2-45
ZW408744J	6-14
ZW409219M	2-23

ABBREVIATIONS (COMPACT DISC)

ABBREVIATION	EXPLANATION	ABBREVIATION	EXPLANATION
A-D	Analog to Digital (Convertor)	Mb	Mega Bits
ADC	Analog to Digital (Convertor)	MDA	Mortor Drive Amplifier
BCD	Binary Code Decimal	MFM	Modified Frequency Modulation
BPI	Bits per Inch	MM	Mono-stable Multivibrator
CD	Compact Disc	M^2FM	Modified Modified Frequency Modulation
CIRC	Cross Interleaving & Reed Solomon Coding	MOD2	Modulo 2 (Addition)
CLV	Constant Linear Velocity	MP	Microprocessor
CP	Clock Pulses	MSB	Most Significant Bit
CRCC	Cyclic Redundancy Check Codes	NA	Numerical Aperture
D Level	Decision Level	NRZ	Non Return to Zero
D-A	Digital to Analog (Convertor)	NRZ-1	Non Return to Zero Inverted
DAC	Digital to Analog (Convertor)	P	Parity Data
DAD	Digital Audio Disc	PAM	Pulse Amplitude Modulation
DEM	Dynamic Element Matching	PCM	Pulse Code Modulation
DPD	Differential Phase Detection	PD	Phase Detector
DSV	Digital Sum Value	PE	Phase Encode
EFM	Eight to fourteen Modulation	PLL	Phase Locked Loop
EX-OR	EXclusive OR	PNM	Pulse Number Modulation
FCI	Flux Changes per Inch	PPM	Pulse Phase Modulation
FIR	Finite Impulse Response	PWM	Pulse Width Modulation
FP	Front Pulse	Q	Parity Data
FPG	Front Pulse Gate	R, R_1, R_2, etc.	Data for Right Channel
f	Frequency of Sampling	RAM	Random Access Memory
GF	Galois Field	RPG	Rear Pulse Gate
H & V (Parity)	Horizonal & Vertical	SCOOP	Self Coupled Optical Pick-up
IIR	Infinite Impulse Response	S & H	Sample & Hold
kb	Kilo Bits	S/N	Signal to Noise Ratio
L, L_1, L_2, etc.	Data for Left Channel	SSG	Standard Signal Generator
LPF	Low Pass Filter	SYSCON	SYStem CONtrol
LSB	Least Significant Bit		

AKAI

MODEL MX-750
(TP-750, EA-750, PA-750, HX-750, CD-750)

MODEL MX-950
(TP-750, EA-750, PA-950, HX-950, CD-750)

SCHEMATIC DIAGRAMS AND PC BOARDS

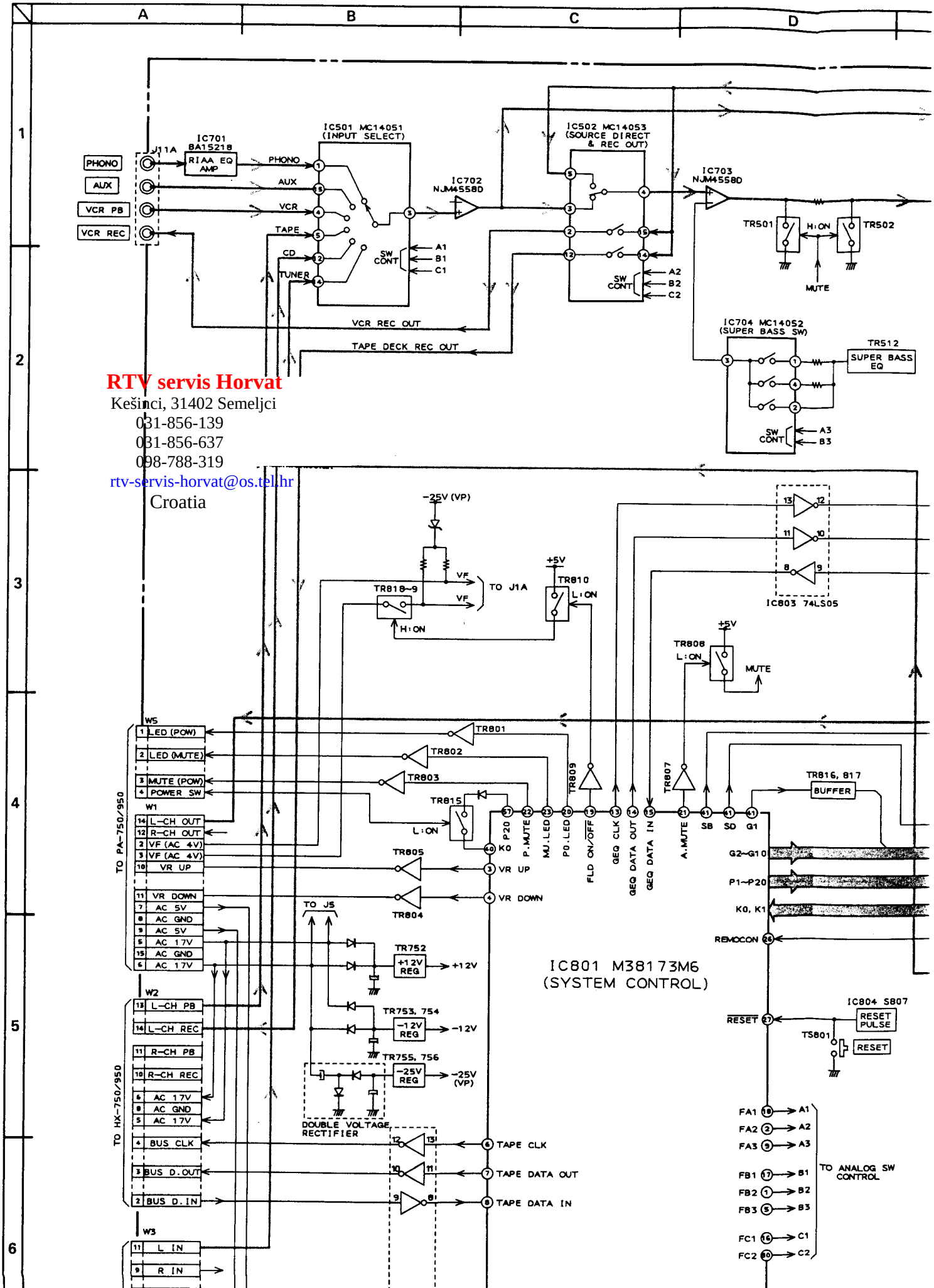
TABLE OF CONTENTS

I. BLOCK DIAGRAMS
1. TP-750 3
2. EA-750 4
3. HX-750 DECK & OPERATION 5
4. HX-950 DECK (A) · (B) & OPERATION 6
5. CD-750 7

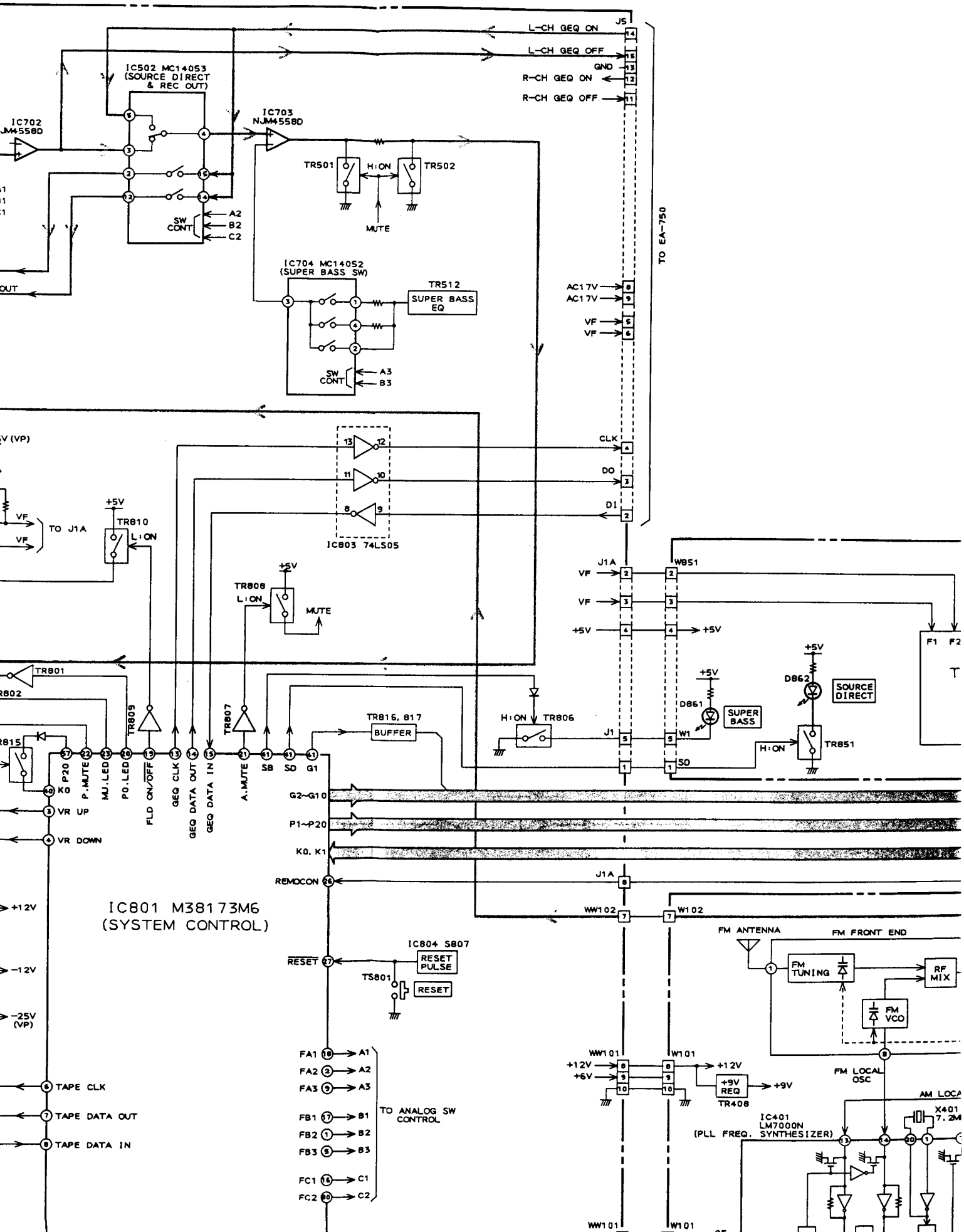
II. SCHEMATIC DIAGRAMS AND PC BOARDS
1. TP-750 CONTROL & FRONT 8
2. TP-750 TUNER 10
3. EA-750 FRONT 13
4. EA-750 MAIN & SUB 14
5. PA-750, 950 POWER SUPPLY & MAIN AMP 16
6. HX-750 18
7. HX-950 20
8. CD-750 MAIN & FRONT 22

III. INFORMATION OF ICs 24

Use these schematic diagrams and PC boards together with the provided service manual.



RTV servis Horvat
Kešinci, 31402 Semeljci
031-856-139
031-856-637
098-788-319
rtv-servis-horvat@os.tel.hr
Croatia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L-CH GEQ OFF
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R-CH GEQ ON
R-CH GEQ OFF
J5
TO EA-750
IC502 MC14053
(SOURCE DIRECT
& REC OUT)
IC703
NJM4558D
IC702
JM4558D
TR501
H:ON
TR502
MUTE
SW
CONT
A2
B2
C2
IC704 MC14052
(SUPER BASS SW)
TR512
SUPER BASS
EQ
SW
CONT
A3
B3
AC17V
AC17V
VF
VF
CLK
DO
DI
IC803 74LS05
+5V
TR810
L:ON
TO J1A
VF
VF
+5V
TR808
L:ON
MUTE
J1A
W851
VF
VF
+5V
+5V
TR801
TR809
TR807
TR816, 817
BUFFER
H:ON
TR806
J1
W1
SD
+5V
D862
SOURCE
DIRECT
+5V
D861
SUPER
BASS
H:ON
TR851
F1
F2
P20
P.MUTE
MU.LED
PO.LED
FLD ON/OFF
GEQ CLK
GEQ DATA OUT
GEQ DATA IN
A.MUTE
SB
SD
G1
K0
VR UP
VR DOWN
G2~G10
P1~P20
K0, K1
REMOCON
IC801 M38173M6
(SYSTEM CONTROL)
+12V
-12V
-25V
(VP)
TAPE CLK
TAPE DATA OUT
TAPE DATA IN
J1A
WW102
W102
FM ANTENNA
FM FRONT END
FM
TUNING
RF
MIX
FM
VCO
IC804 S807
RESET
PULSE
RESET
TS801
RESET
WW101
W101
+12V
+6V
+12V
+9V
REQ
TR408
+9V
FM LOCAL
OSC
FA1
FA2
FA3
FB1
FB2
FB3
FC1
FC2
TO ANALOG SW
CONTROL
A1
A2
A3
B1
B2
B3
C1
C2
IC401
LM7000N
(PLL FREQ. SYNTHESIZER)
X401
7.2M

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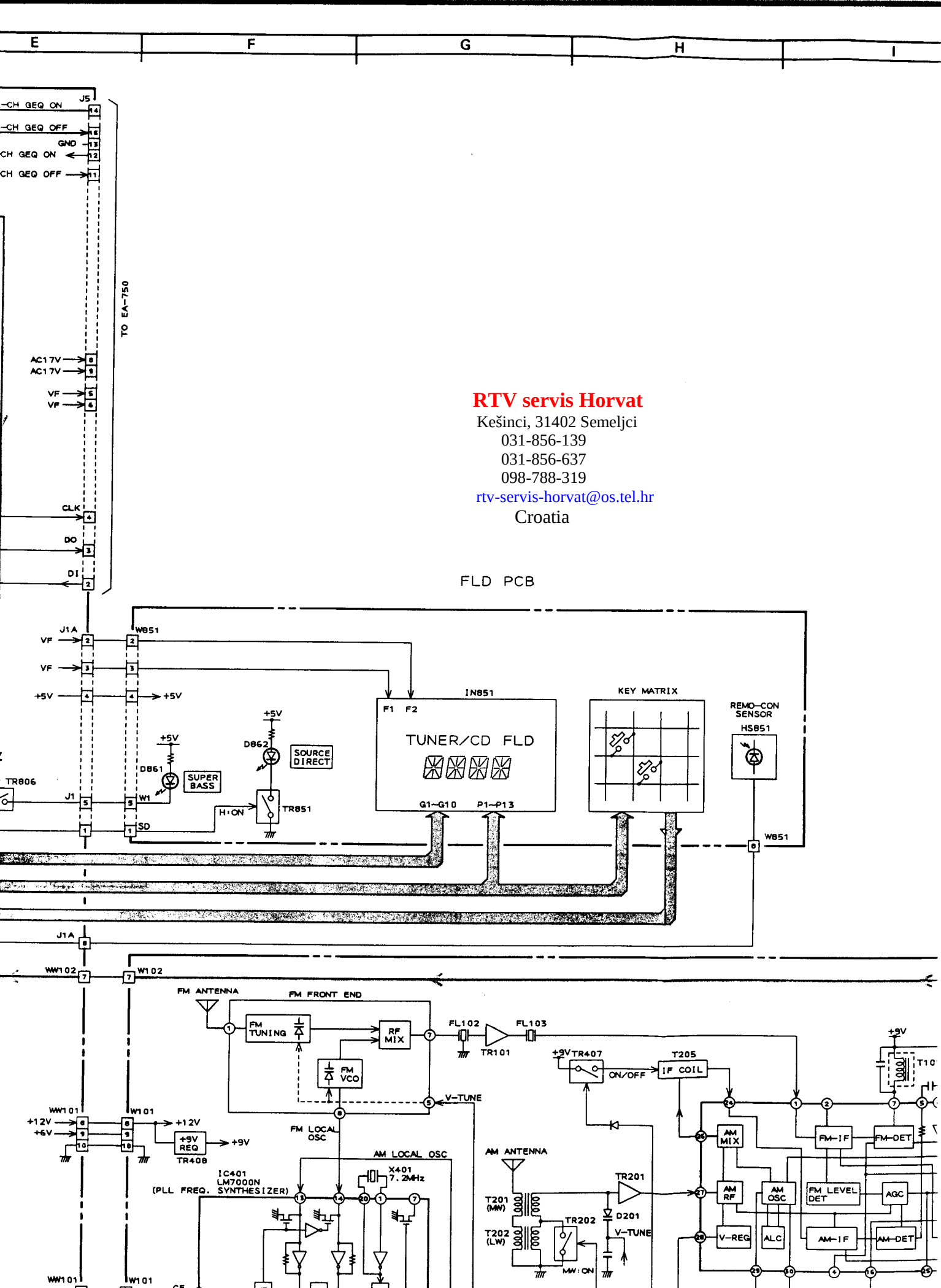
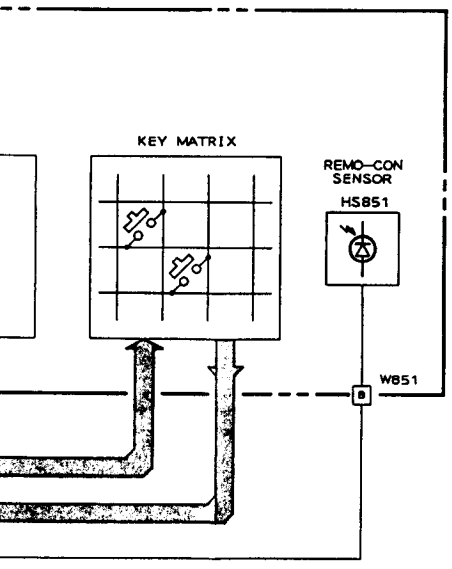
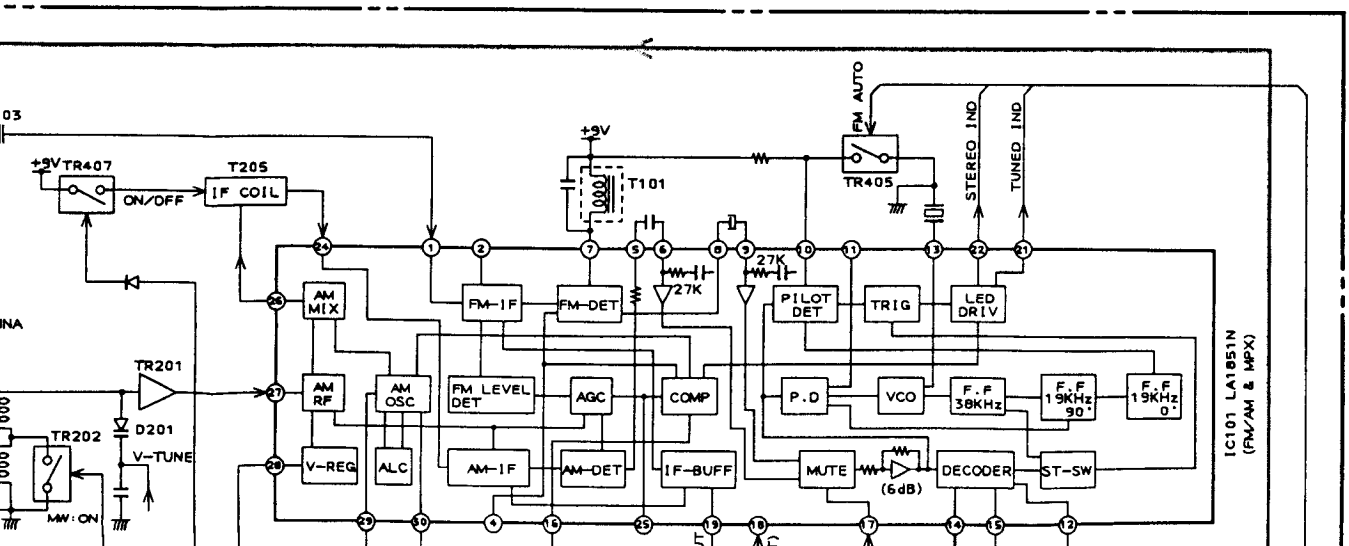
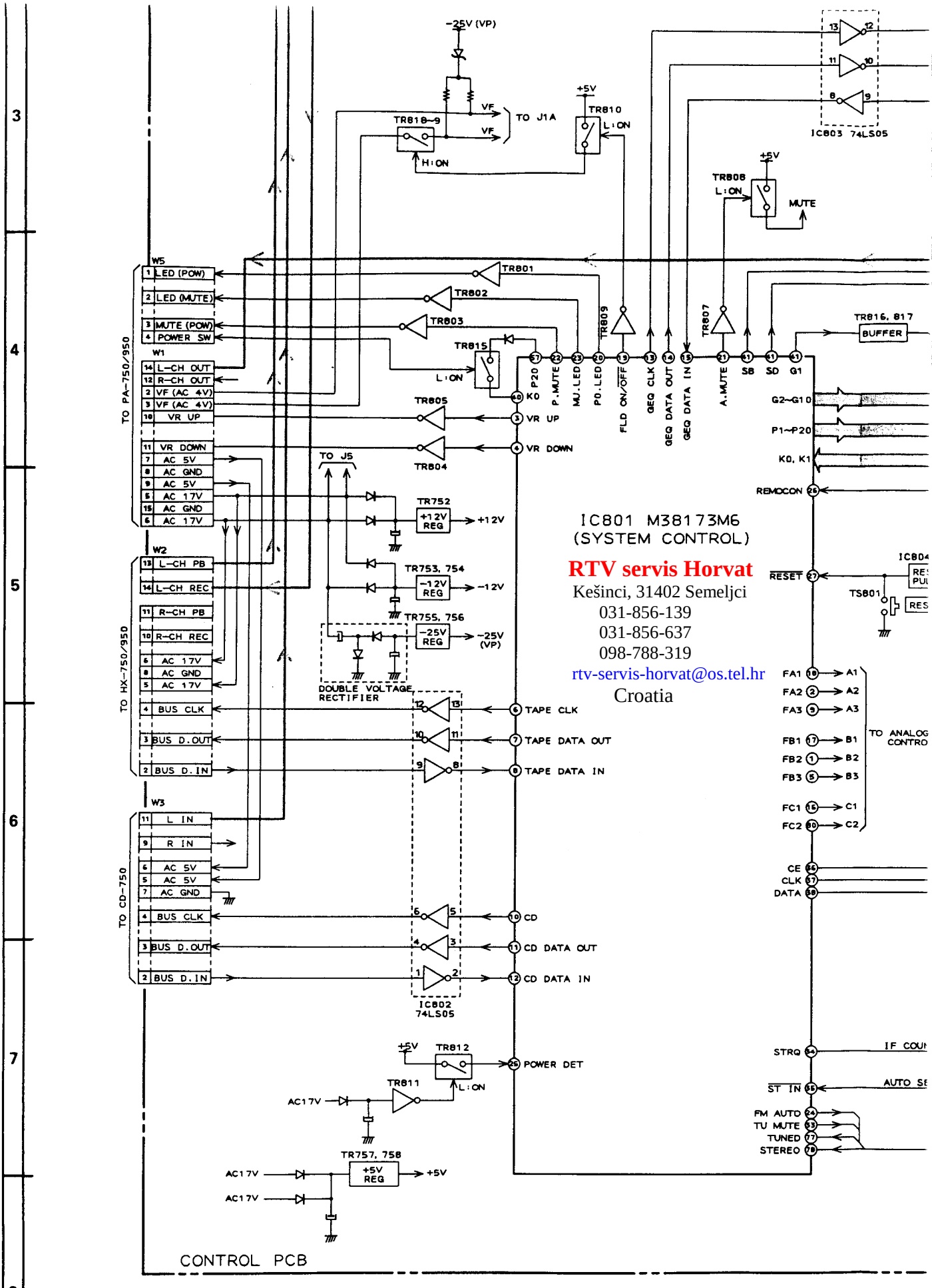



KEY MATRIX
REMO-CON SENSOR
HS851
W851
8


+9V
TR407
ON/OFF
T205
IF COIL
T101
TR405
FM AUTO
STEREO IND
TUNED IND
27K
27K
AM MIX
FM-IF
FM-DET
PILOT DET
TRIG
LED DRIV
TR201
AM RF
AM OSC
FM LEVEL DET
AGC
COMP
P.D
VCO
F.F 38KHz
F.F 19KHz 90°
F.F 19KHz 0°
TR202
D201
V-TUNE
MW:ON
V-REG
ALC
AM-IF
AM-DET
IF-BUFF
MUTE
(6dB)
DECODER
ST-SW
IC101 LA1851N
(FM/AM & MPX)



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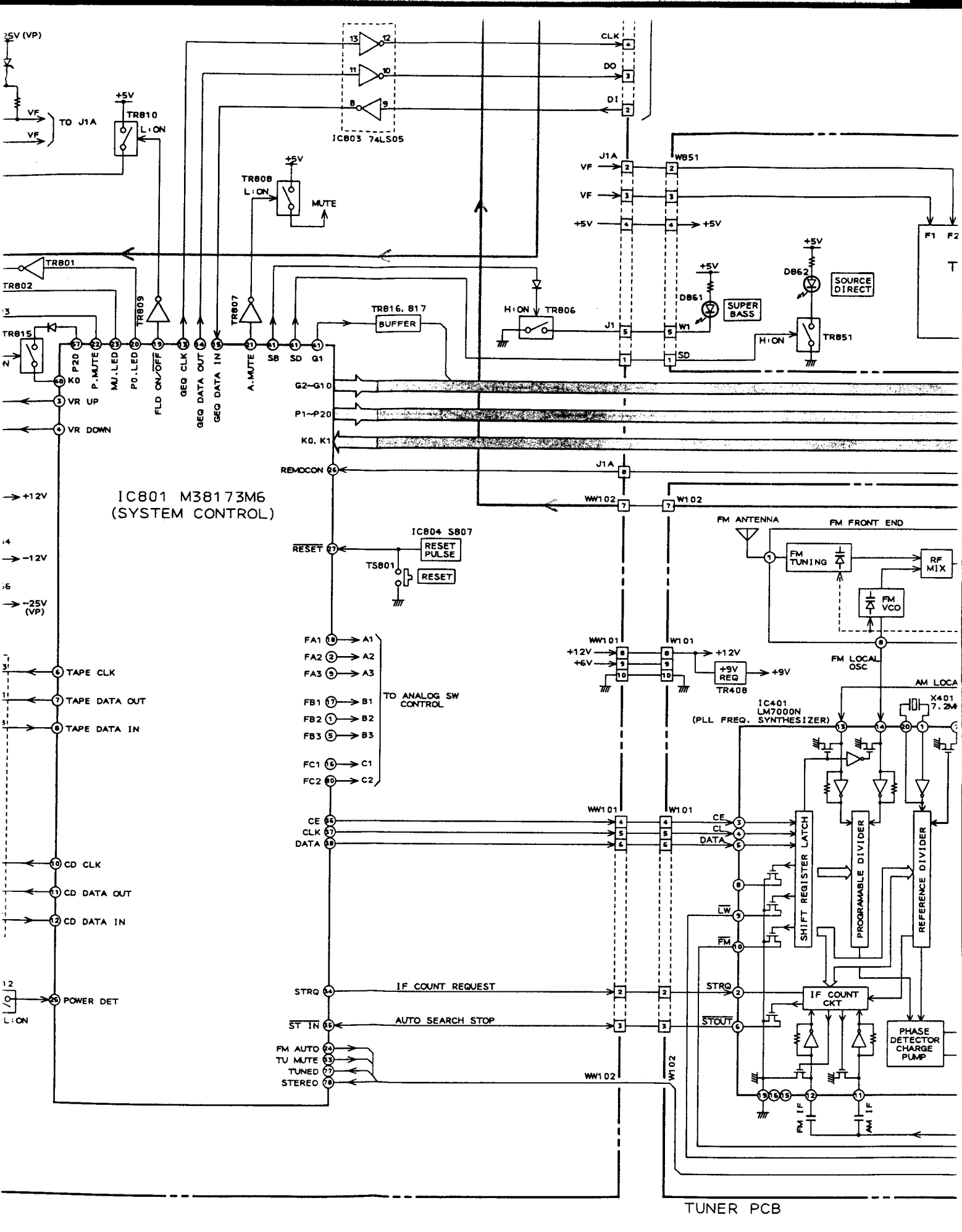
IC801 M38173M6
(SYSTEM CONTROL)
IC803 74LS05
TO J1A
TR810
TR808
MUTE
TR801
TR802
TR815
TR809
TR807
TR816, 817
BUFFER
H:ON TR806
TR851
SUPER BASS
SOURCE DIRECT
D861
D862
J1A
W851
W1
SD
F1 F2
P20
P.MUTE
MU.LED
PO.LED
FLD ON/OFF
GEQ CLK
GEQ DATA OUT
GEQ DATA IN
A.MUTE
SB
SD
G1
G2~G10
P1~P20
K0, K1
K0
VR UP
VR DOWN
REMOCON
+12V
-12V
-25V (VP)
IC804 S807
RESET PULSE
RESET
TS801
FA1
FA2
FA3
FB1
FB2
FB3
FC1
FC2
TO ANALOG SW CONTROL
A1
A2
A3
B1
B2
B3
C1
C2
TAPE CLK
TAPE DATA OUT
TAPE DATA IN
CD CLK
CD DATA OUT
CD DATA IN
POWER DET
CE
CLK
DATA
STRQ
ST IN
IF COUNT REQUEST
AUTO SEARCH STOP
FM AUTO
TU MUTE
TUNED
STEREO
WW102
W102
WW101
W101
FM ANTENNA
FM FRONT END
FM TUNING
RF MIX
FM VCO
FM LOCAL OSC
+9V REQ
TR408
+9V
IC401
LM7000N
(PLL FREQ. SYNTHESIZER)
X401
7.2M
SHIFT REGISTER LATCH
PROGRAMABLE DIVIDER
REFERENCE DIVIDER
IF COUNT CKT
PHASE DETECTOR CHARGE PUMP
FM IF
AM IF
TUNER PCB

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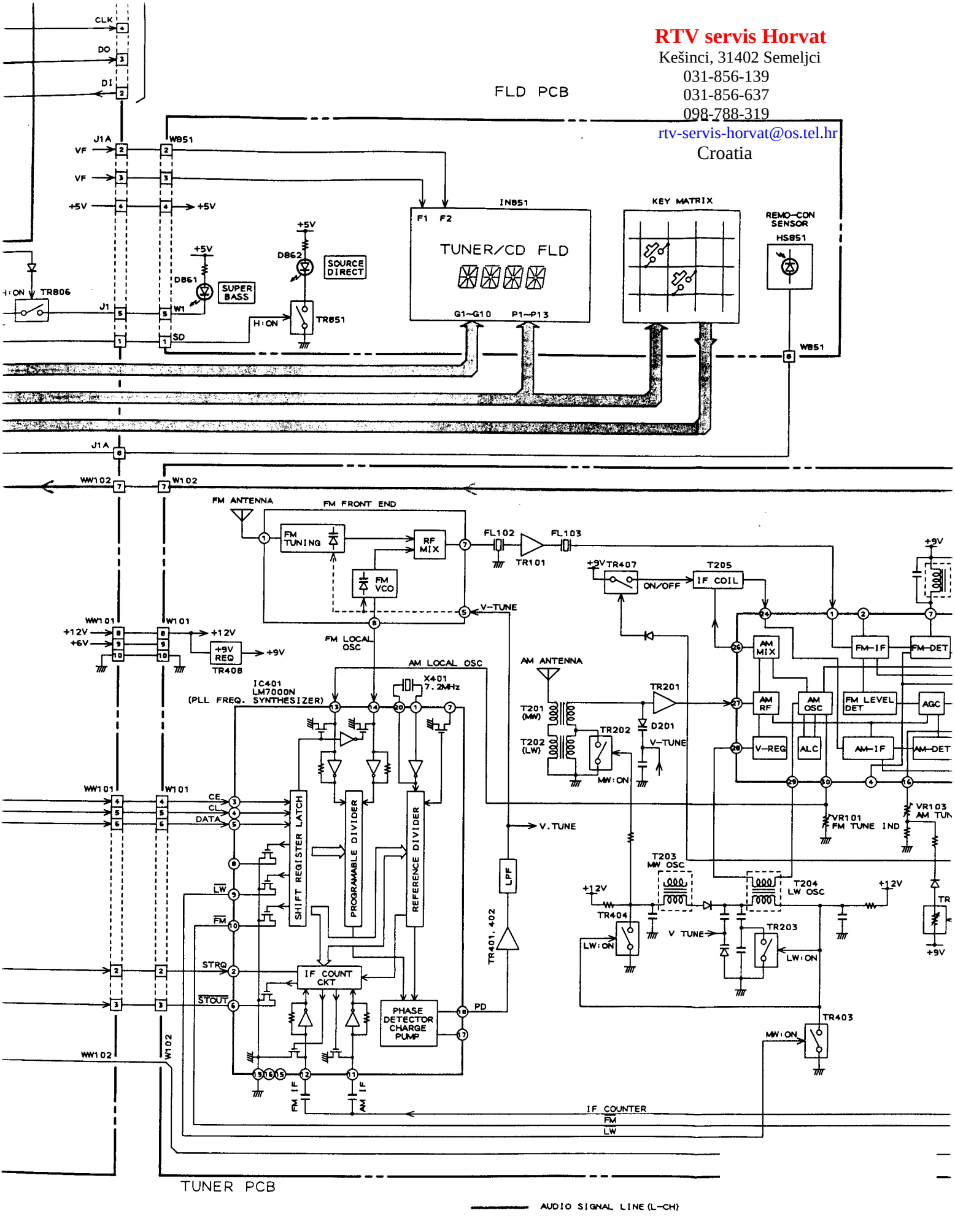
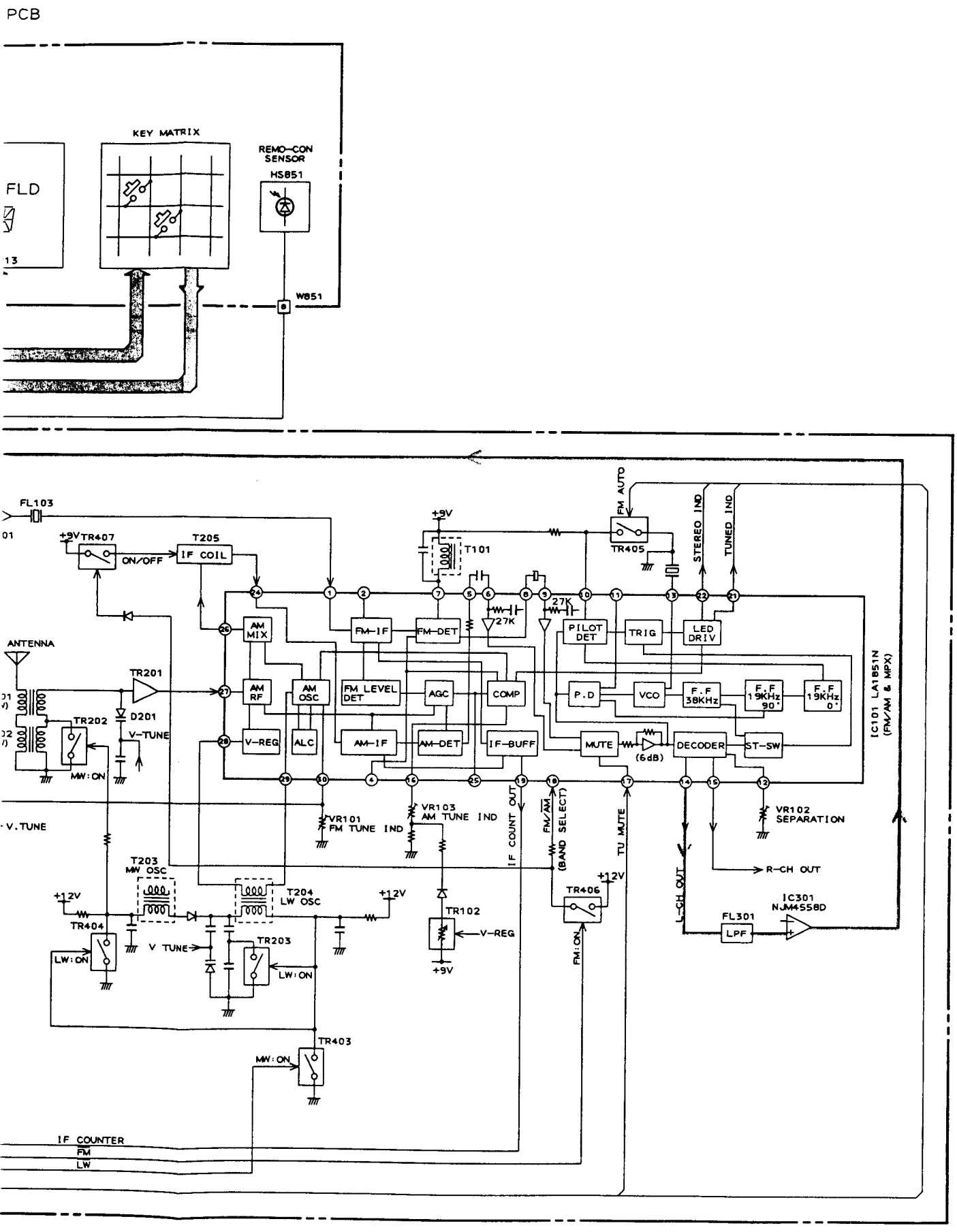
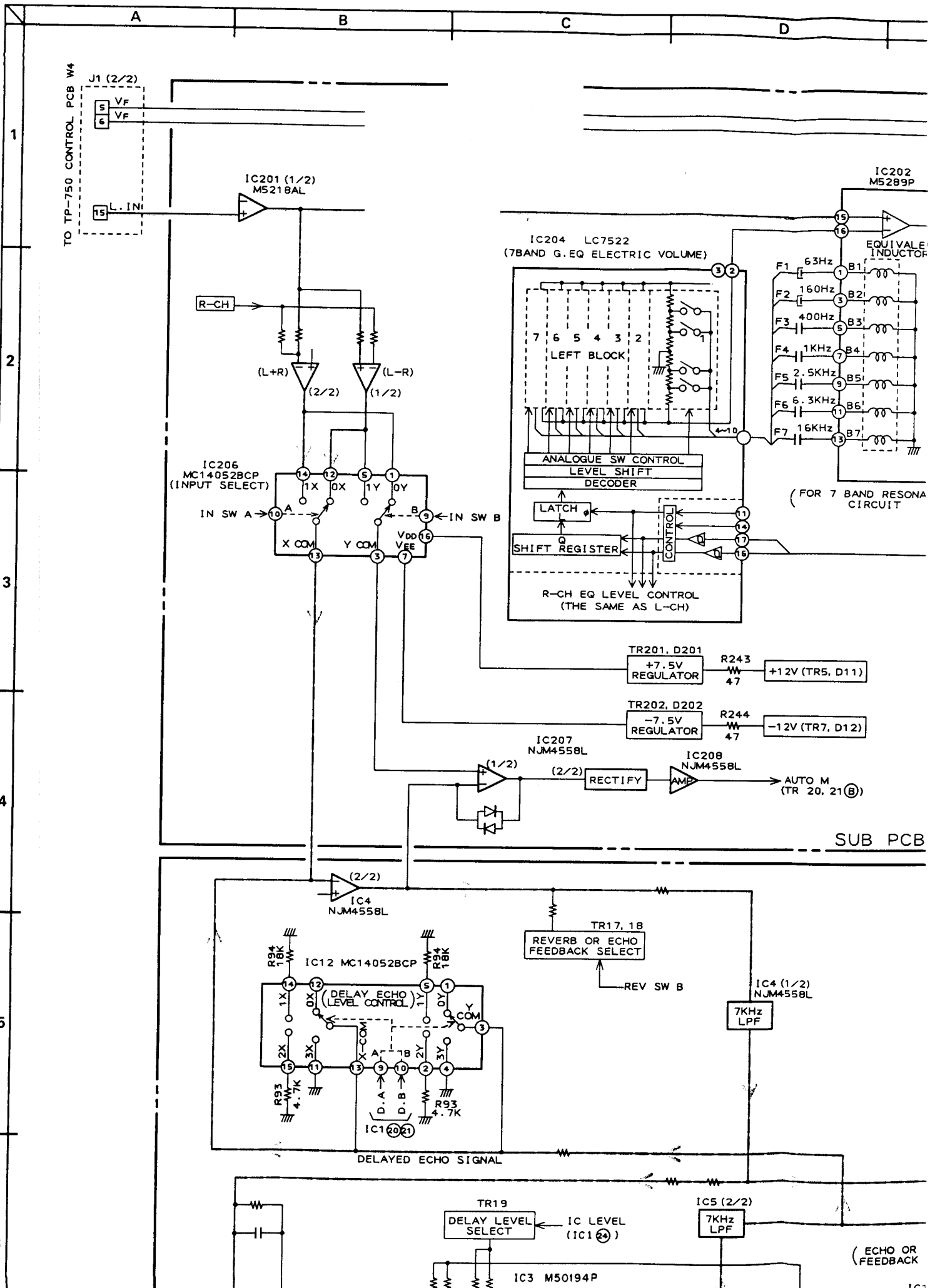
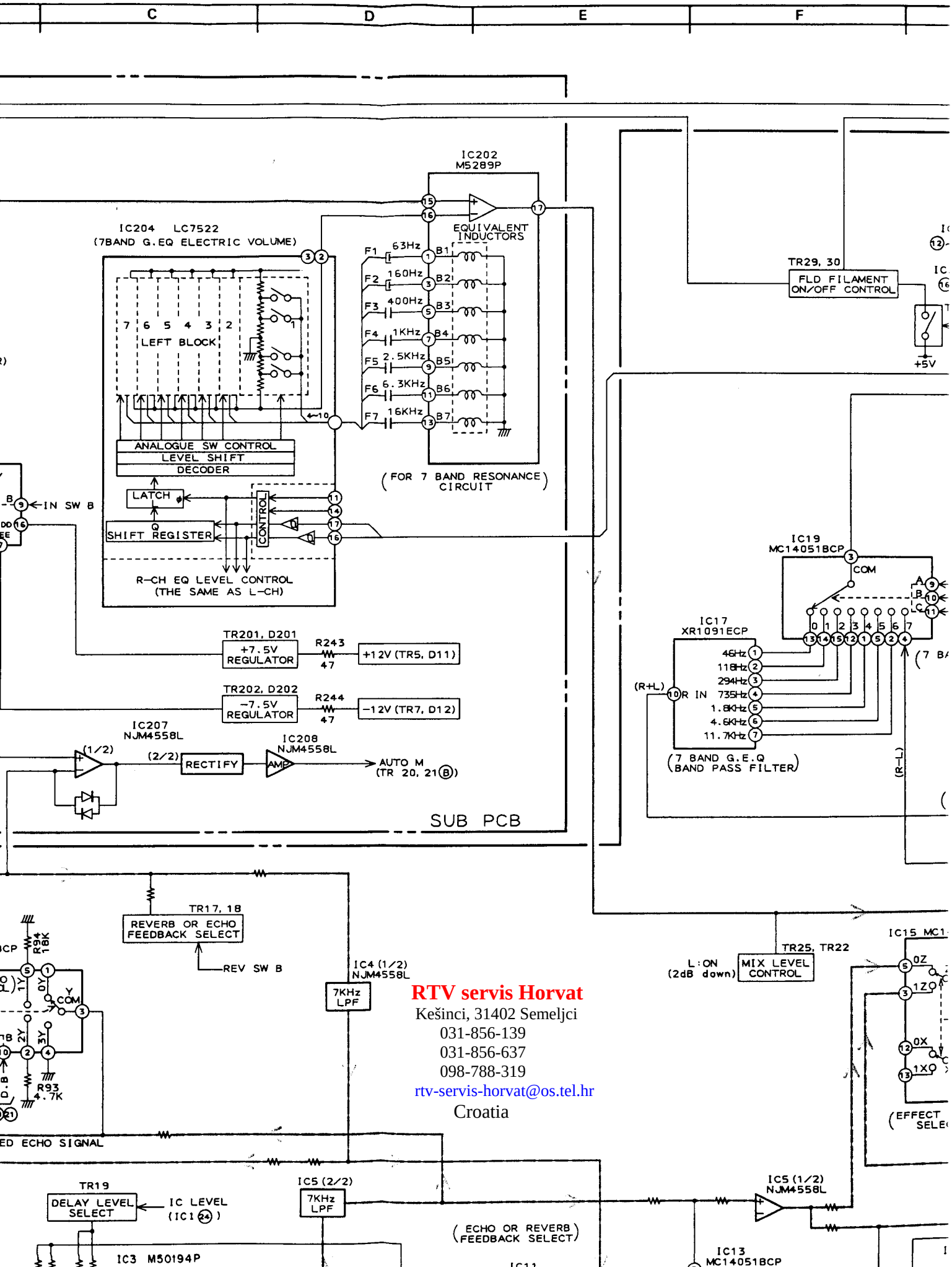




TP-750
BLOCK DIAGRAM
No.5-1 A600951M


A
B
C
D
1
2
3
4
5
6
J1 (2/2)
TO TP-750 CONTROL PCB W4
VF
VF
L. IN
IC201 (1/2)
M5218AL
IC202
M5289P
IC204 LC7522
(7BAND G.EQ ELECTRIC VOLUME)
EQUIVALE
INDUCTOR
F1 63Hz
F2 160Hz
F3 400Hz
F4 1KHz
F5 2.5KHz
F6 6.3KHz
F7 16KHz
B1
B2
B3
B4
B5
B6
B7
R-CH
(L+R)
(2/2)
(L-R)
(1/2)
7 6 5 4 3 2 1
LEFT BLOCK
4~10
ANALOGUE SW CONTROL
LEVEL SHIFT
DECODER
LATCH
SHIFT REGISTER
CONTROL
R-CH EQ LEVEL CONTROL
(THE SAME AS L-CH)
(FOR 7 BAND RESONA
CIRCUIT
IC206
MC14052BCP
(INPUT SELECT)
1X
0X
1Y
0Y
IN SW A
IN SW B
X COM
Y COM
Vdd
VEE
TR201, D201
+7.5V
REGULATOR
R243
47
+12V (TR5, D11)
TR202, D202
-7.5V
REGULATOR
R244
47
-12V (TR7, D12)
IC207
NJM4558L
(1/2)
(2/2)
RECTIFY
IC208
NJM4558L
AMP
AUTO M
(TR 20, 21 B)
SUB PCB
(2/2)
IC4
NJM4558L
TR17, 18
REVERB OR ECHO
FEEDBACK SELECT
REV SW B
IC4 (1/2)
NJM4558L
7KHz
LPF
R94
18K
IC12 MC14052BCP
DELAY ECHO
LEVEL CONTROL
2X
3X
2Y
3Y
Y
COM
R93
4.7K
D.A
D.B
IC1 20 21
DELAYED ECHO SIGNAL
TR19
DELAY LEVEL
SELECT
IC LEVEL
(IC1 24)
IC5 (2/2)
7KHz
LPF
(ECHO OR
FEEDBACK
IC3 M50194P



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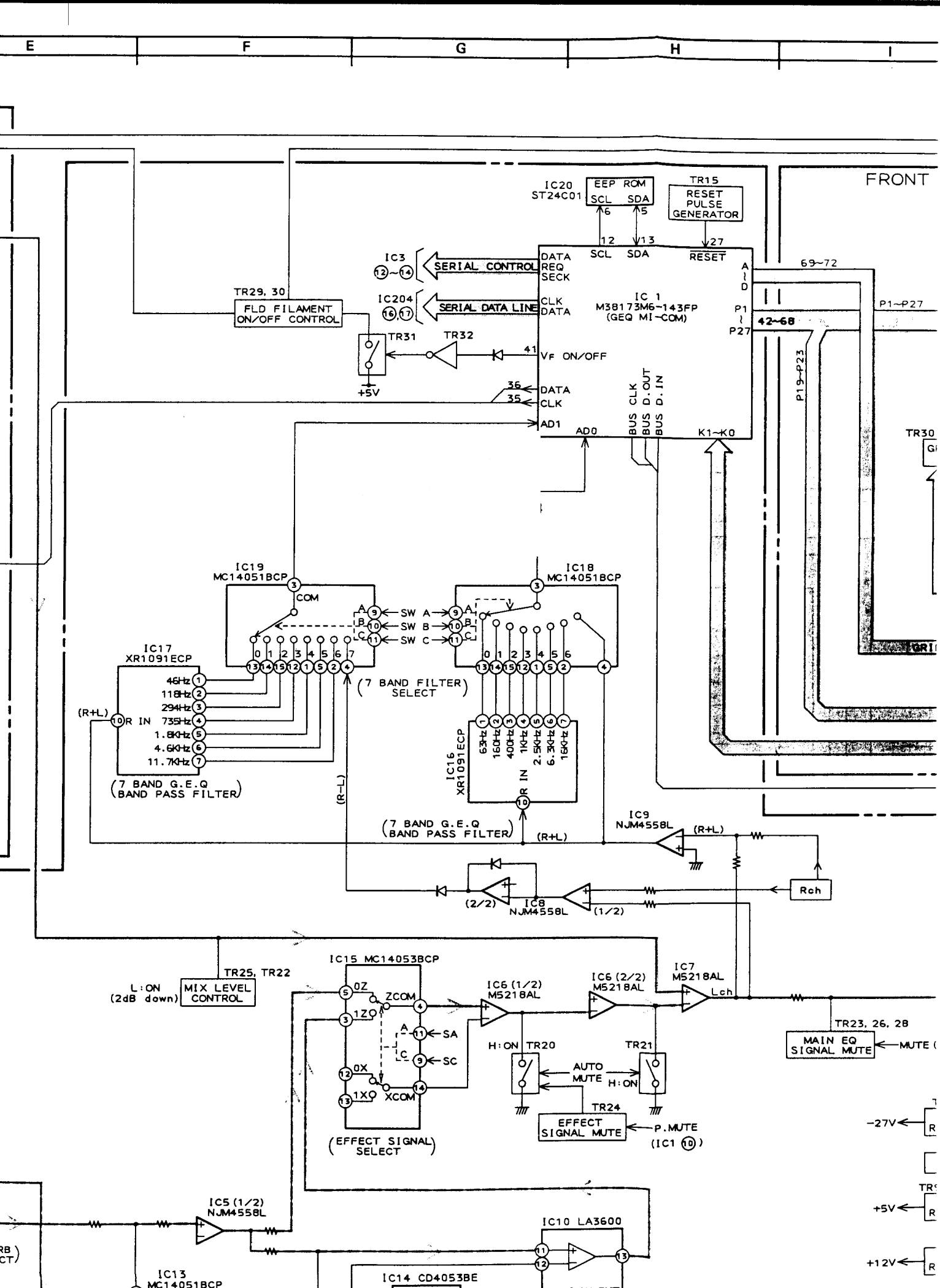
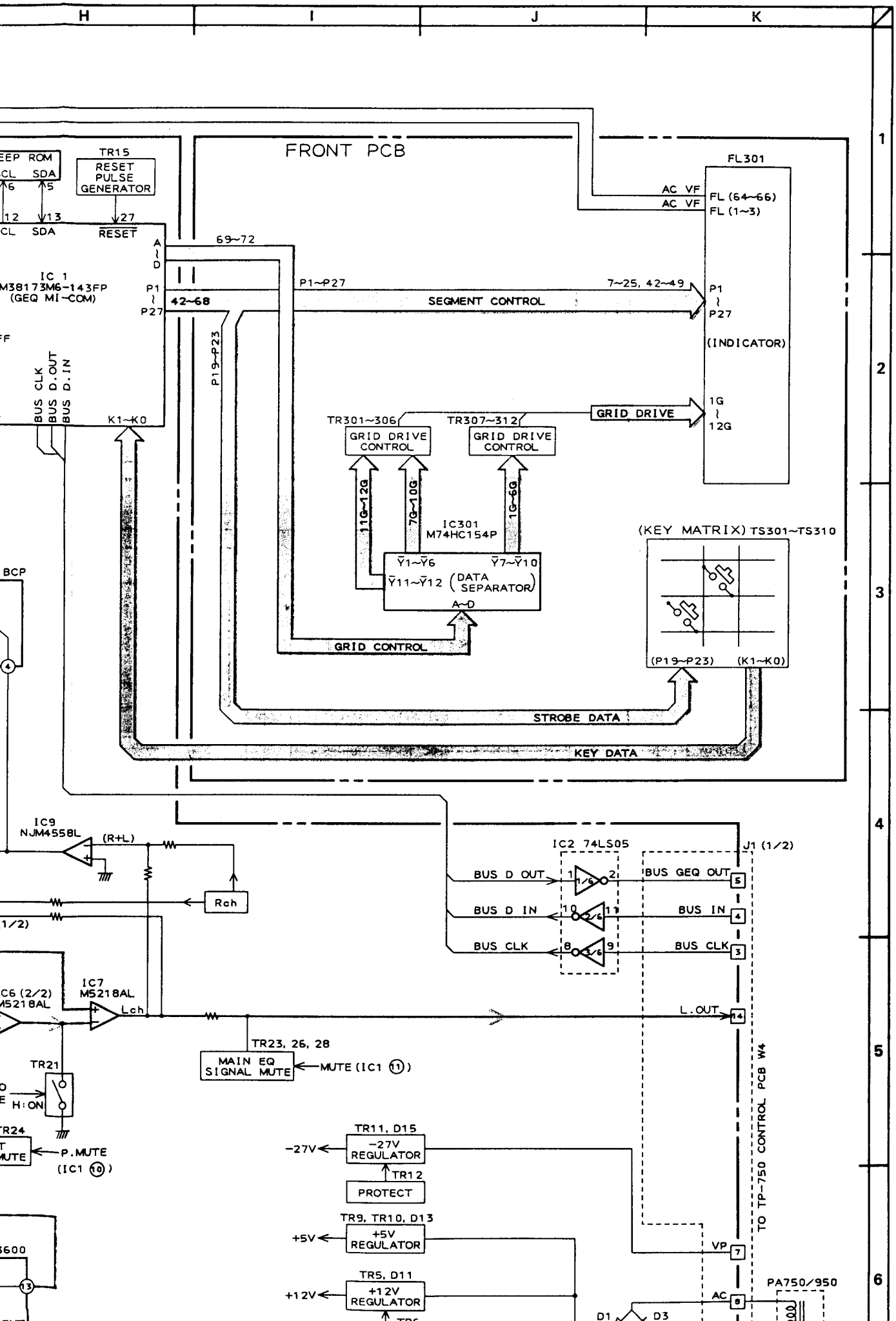
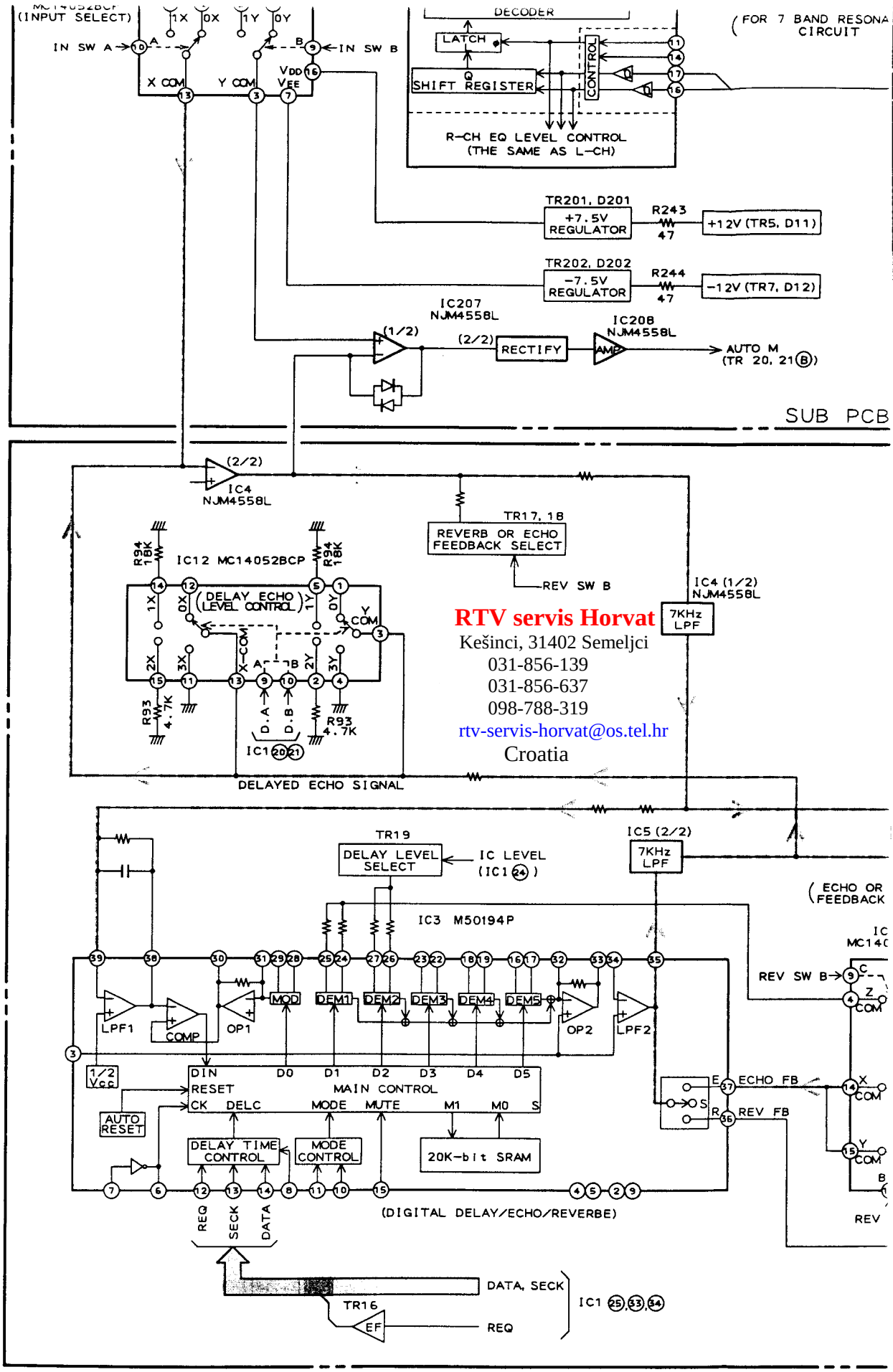

E
F
G
H
I
FRONT
IC20 ST24C01
EEP ROM
SCL SDA
TR15
RESET PULSE GENERATOR
IC3
SERIAL CONTROL
DATA REQ SECK
IC204
SERIAL DATA LINE
CLK DATA
IC 1
M38173M6-143FP
(GEQ MI-COM)
TR29, 30
FLD FILAMENT ON/OFF CONTROL
TR31
TR32
VF ON/OFF
+5V
DATA
CLK
AD1
AD0
BUS CLK
BUS D.OUT
BUS D.IN
K1~K0
P1~P27
42~68
P19~P23
69~72
TR30
IC19
MC14051BCP
COM
SW A
SW B
SW C
IC18
MC14051BCP
IC17
XR1091ECP
45Hz
118Hz
294Hz
735Hz
1.8KHz
4.6KHz
11.7KHz
R IN
(R+L)
(7 BAND G.E.Q BAND PASS FILTER)
(7 BAND FILTER SELECT)
IC16
XR1091ECP
63Hz
160Hz
400Hz
1KHz
2.5KHz
6.3KHz
16KHz
(R-L)
IC9
NJM4558L
Rch
IC8
NJM4558L
(2/2)
(1/2)
IC15 MC14053BCP
TR25, TR22
L:ON (2dB down)
MIX LEVEL CONTROL
0Z
1Z
0X
1X
ZCOM
XCOM
SA
SB
SC
(EFFECT SIGNAL SELECT)
IC6 (1/2) M5218AL
IC6 (2/2) M5218AL
IC7 M5218AL
Lch
H:ON
TR20
TR21
AUTO MUTE
TR24
EFFECT SIGNAL MUTE
P.MUTE (IC1 10)
TR23, 26, 28
MAIN EQ SIGNAL MUTE
MUTE
-27V
+5V
+12V
IC5 (1/2) NJM4558L
IC10 LA3600
IC13 MC14051BCP
IC14 CD4053BE


H
I
J
K
1
2
3
4
5
6
FRONT PCB
TR15
RESET PULSE GENERATOR
RESET
IC 1
M38173M6-143FP
(GEQ MI-COM)
69~72
P1~P27
42~68
7~25, 42~49
SEGMENT CONTROL
FL301
AC VF
AC VF
FL (64~66)
FL (1~3)
P1~P27
(INDICATOR)
1G~12G
GRID DRIVE
TR301~306
TR307~312
GRID DRIVE CONTROL
GRID DRIVE CONTROL
11G~12G
7G~10G
1G~6G
IC301
M74HC154P
Y1~Y6
Y7~Y10
Y11~Y12 (DATA SEPARATOR)
A~D
GRID CONTROL
(KEY MATRIX) TS301~TS310
(P19~P23)
(K1~K0)
STROBE DATA
KEY DATA
BUS CLK
BUS D.OUT
BUS D.IN
P19~P23
K1~K0
IC9
NJM4558L
(R+L)
Rch
Lch
IC7
M5218AL
IC2 74LS05
BUS D OUT
BUS D IN
BUS CLK
BUS GEQ OUT
BUS IN
BUS CLK
J1 (1/2)
L.OUT
TR23, 26, 28
MAIN EQ SIGNAL MUTE
MUTE (IC1 11)
TR21
H:ON
TR24
P.MUTE
(IC1 10)
TR11, D15
-27V
-27V REGULATOR
TR12
PROTECT
TR9, TR10, D13
+5V
+5V REGULATOR
TR5, D11
+12V
+12V REGULATOR
VP
AC
PA750/950
D1
D3
TO TP~750 CONTROL PCB W4


(INPUT SELECT)
1X
0X
1Y
0Y
IN SW A
A
B
IN SW B
X COM
Y COM
VDD
VEE
DECODER
LATCH
SHIFT REGISTER
CONTROL
R-CH EQ LEVEL CONTROL
(THE SAME AS L-CH)
(FOR 7 BAND RESONA
CIRCUIT
TR201, D201
+7.5V
REGULATOR
R243
47
+12V (TR5, D11)
TR202, D202
-7.5V
REGULATOR
R244
47
-12V (TR7, D12)
IC207
NJM4558L
(1/2)
(2/2)
RECTIFY
IC208
NJM4558L
AMP
AUTO M
(TR 20, 21 B)
SUB PCB
(2/2)
IC4
NJM4558L
TR17, 18
REVERB OR ECHO
FEEDBACK SELECT
REV SW B
IC4 (1/2)
NJM4558L
7KHz
LPF
R94
18K
IC12 MC14052BCP
DELAY ECHO
LEVEL CONTROL
1X
0X
1Y
0Y
X COM
Y COM
2X
3X
2Y
3Y
A
B
R93
4.7K
D.A
D.B
IC1 20 21
DELAYED ECHO SIGNAL
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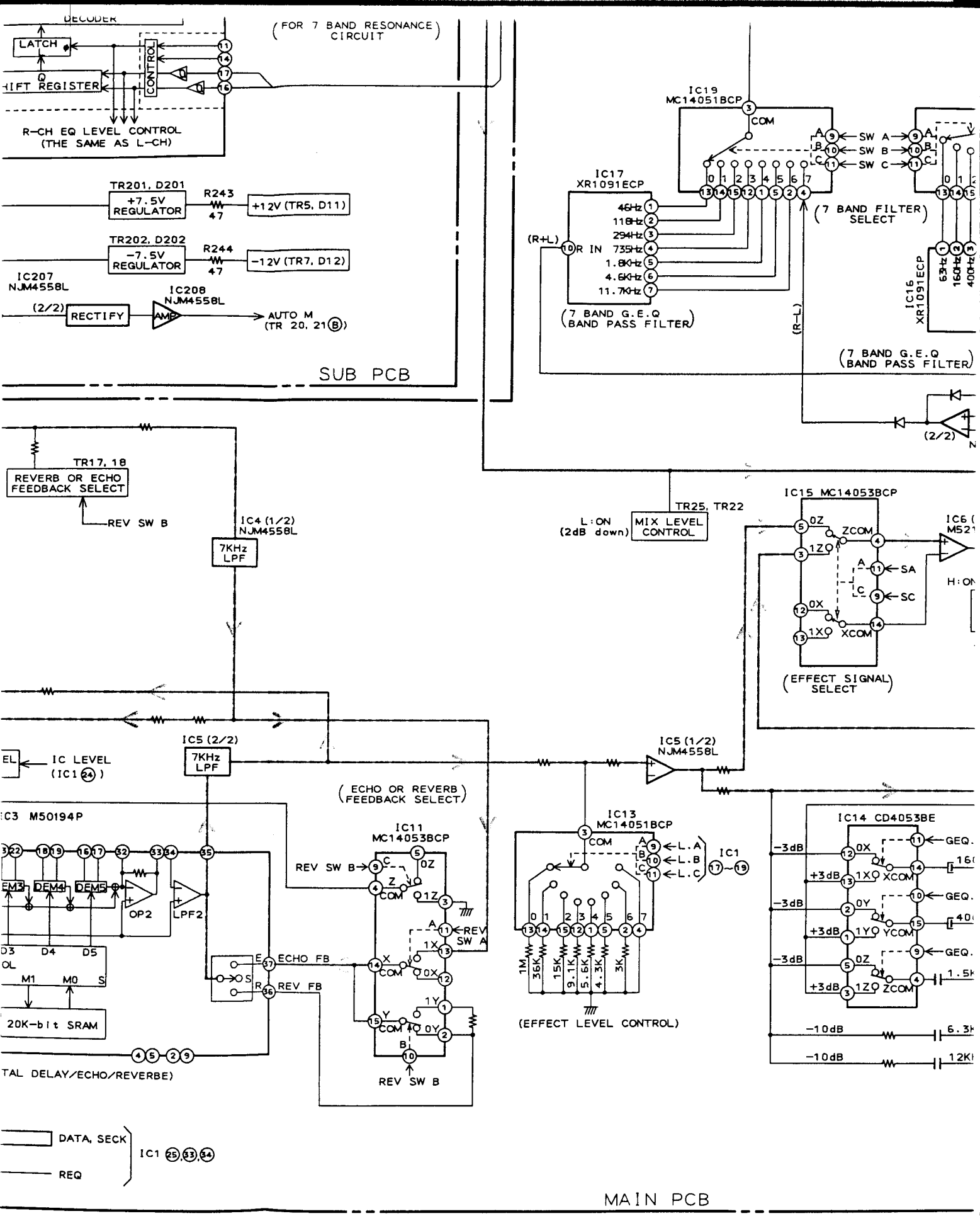
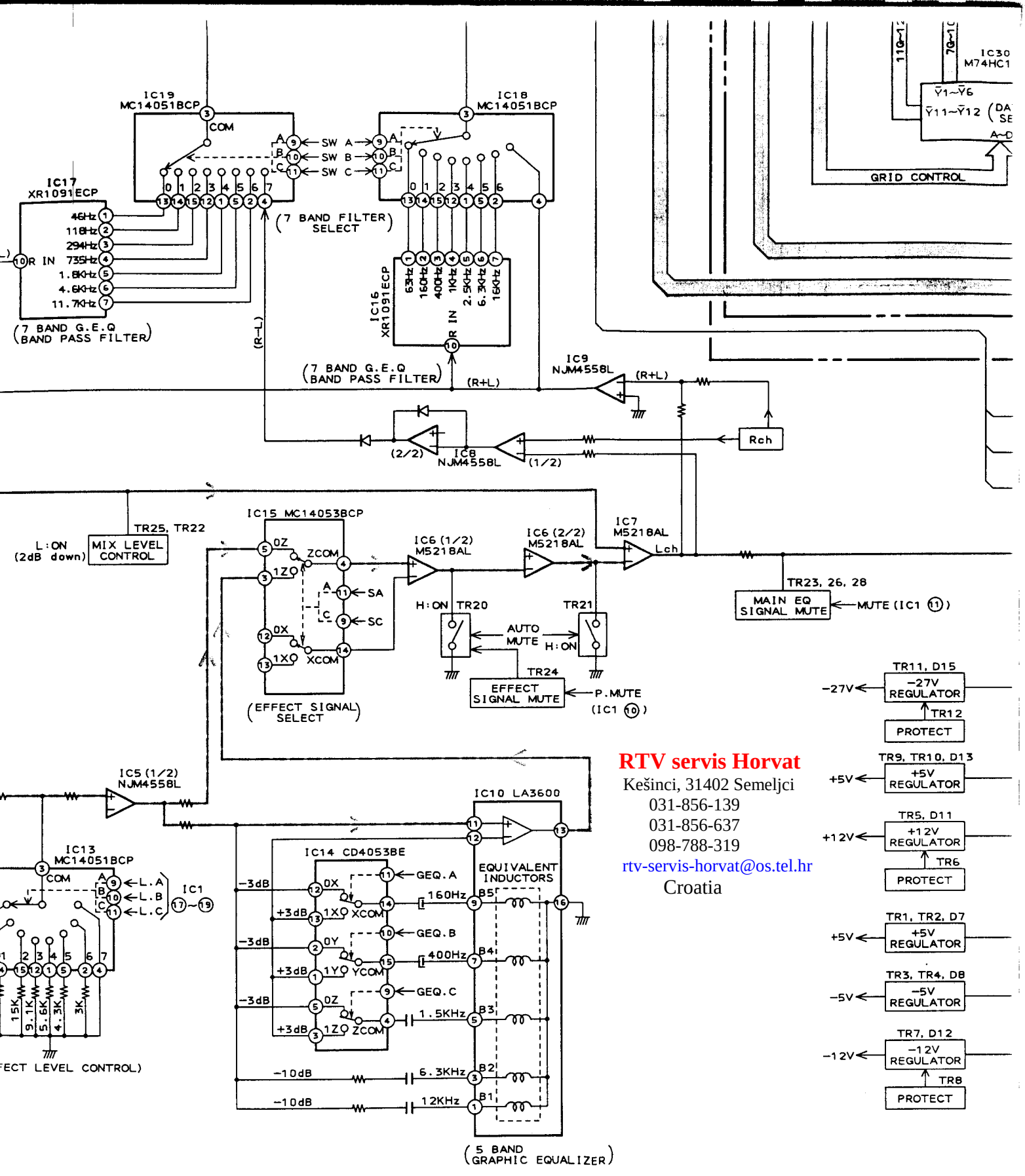
TR19
DELAY LEVEL
SELECT
IC LEVEL
(IC1 24)
IC5 (2/2)
7KHz
LPF
(ECHO OR
FEEDBACK
IC3 M50194P
MOD
DEM1
DEM2
DEM3
DEM4
DEM5
LPF1
COMP
OP1
OP2
LPF2
1/2
Vcc
DIN
RESET
CK
DELC
D0
D1
D2
D3
D4
D5
MAIN CONTROL
MODE
MUTE
M1
M0
S
AUTO
RESET
DELAY TIME
CONTROL
MODE
CONTROL
20K-bit SRAM
REQ
SECK
DATA
(DIGITAL DELAY/ECHO/REVERBE)
REV SW B
ECHO FB
REV FB
DATA, SECK
TR16
EF
REQ
IC1 25,33,34


DECODER
LATCH
SHIFT REGISTER
CONTROL
R-CH EQ LEVEL CONTROL
(THE SAME AS L-CH)
(FOR 7 BAND RESONANCE CIRCUIT)
IC19
MC14051BCP
COM
SW A
SW B
SW C
IC17
XR1091ECP
46Hz
118Hz
294Hz
735Hz
1.8KHz
4.6KHz
11.7KHz
(R+L)
R IN
(7 BAND FILTER SELECT)
(7 BAND G.E.Q BAND PASS FILTER)
IC16
XR1091ECP
63Hz
160Hz
400Hz
(R-L)
(7 BAND G.E.Q BAND PASS FILTER)
TR201, D201
+7.5V REGULATOR
R243
47
+12V (TR5, D11)
TR202, D202
-7.5V REGULATOR
R244
47
-12V (TR7, D12)
IC207
NJM4558L
(2/2)
RECTIFY
IC208
NJM4558L
AMP
AUTO M
(TR 20, 21 B)
SUB PCB
TR17, 18
REVERB OR ECHO FEEDBACK SELECT
REV SW B
IC4 (1/2)
NJM4558L
7KHz LPF
TR25, TR22
L:ON
(2dB down)
MIX LEVEL CONTROL
IC15 MC14053BCP
ZCOM
SA
SC
XCOM
(EFFECT SIGNAL SELECT)
IC5 (2/2)
7KHz LPF
IC LEVEL
(IC1 24)
IC5 (1/2)
NJM4558L
(ECHO OR REVERB FEEDBACK SELECT)
IC3 M50194P
DEM3
DEM4
DEM5
OP2
LPF2
D3
D4
D5
M1
M0
S
20K-bit SRAM
TAL DELAY/ECHO/REVERBE)
IC11
MC14053BCP
REV SW B
REV SW A
ECHO FB
REV FB
REV SW B
IC13
MC14051BCP
COM
L.A
L.B
L.C
IC1
1M
36K
15K
9.1K
5.6K
4.3K
3K
(EFFECT LEVEL CONTROL)
IC14 CD4053BE
-3dB
+3dB
GEQ.
-10dB
6.3K
12K
DATA, SECK
REQ
IC1 25,33,34
MAIN PCB



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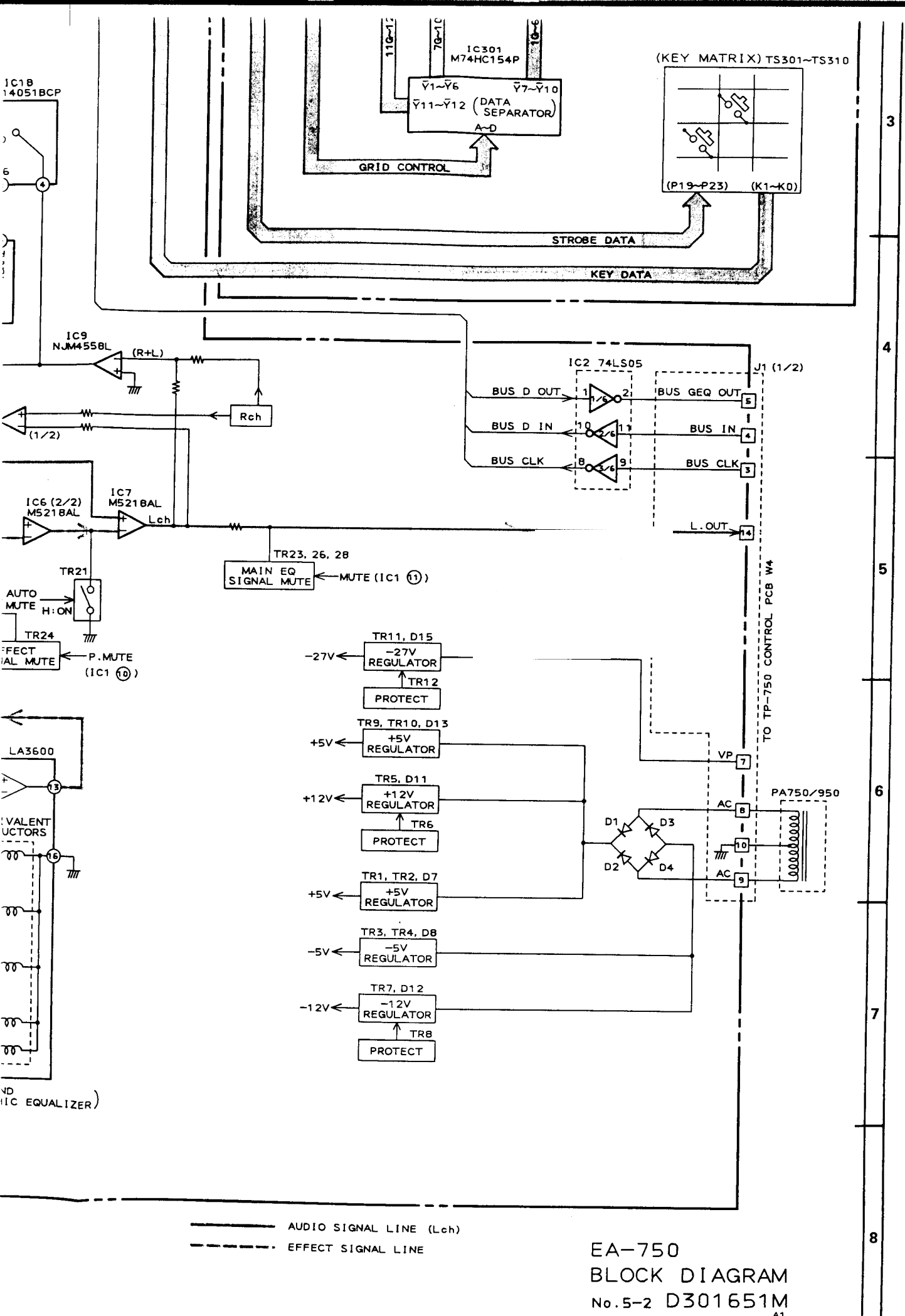
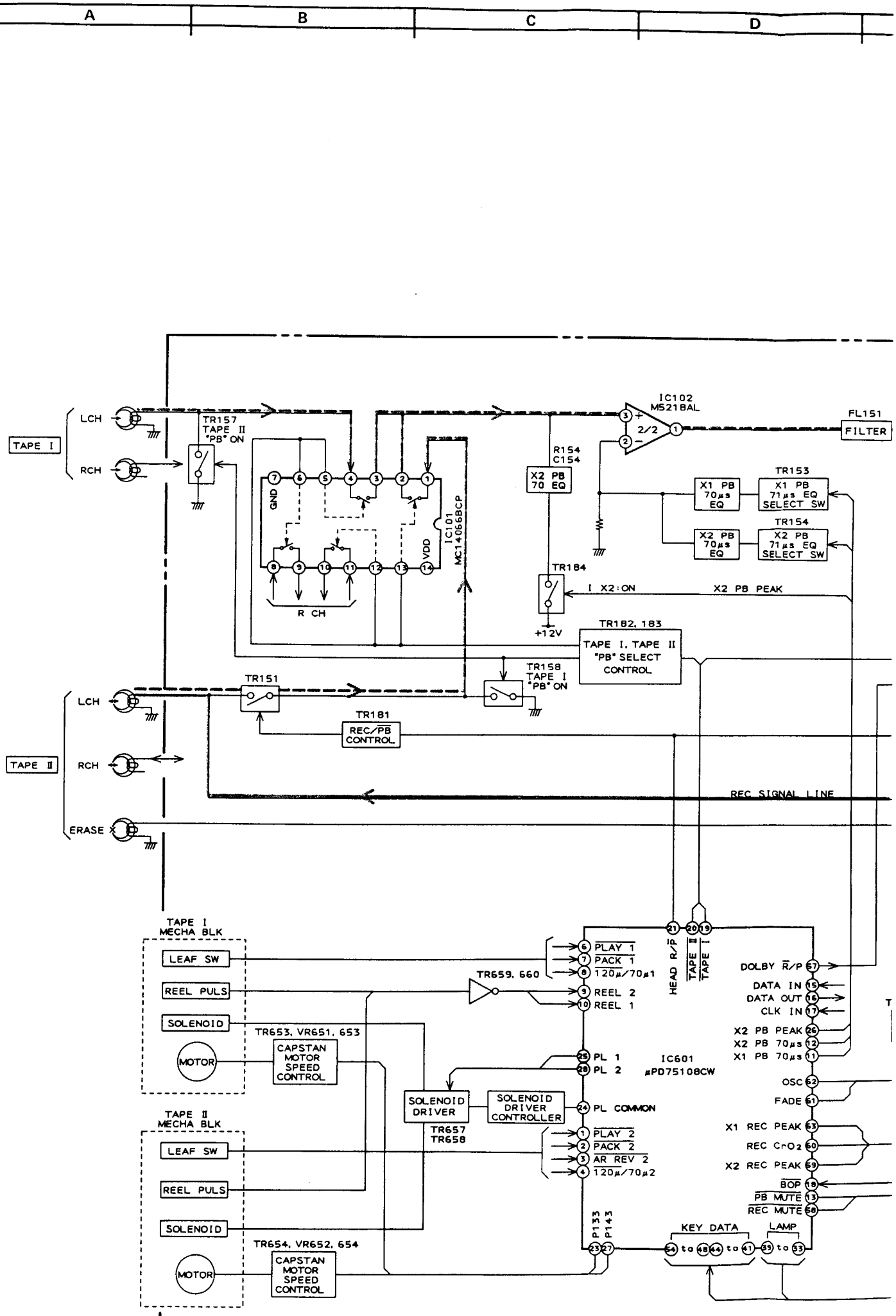
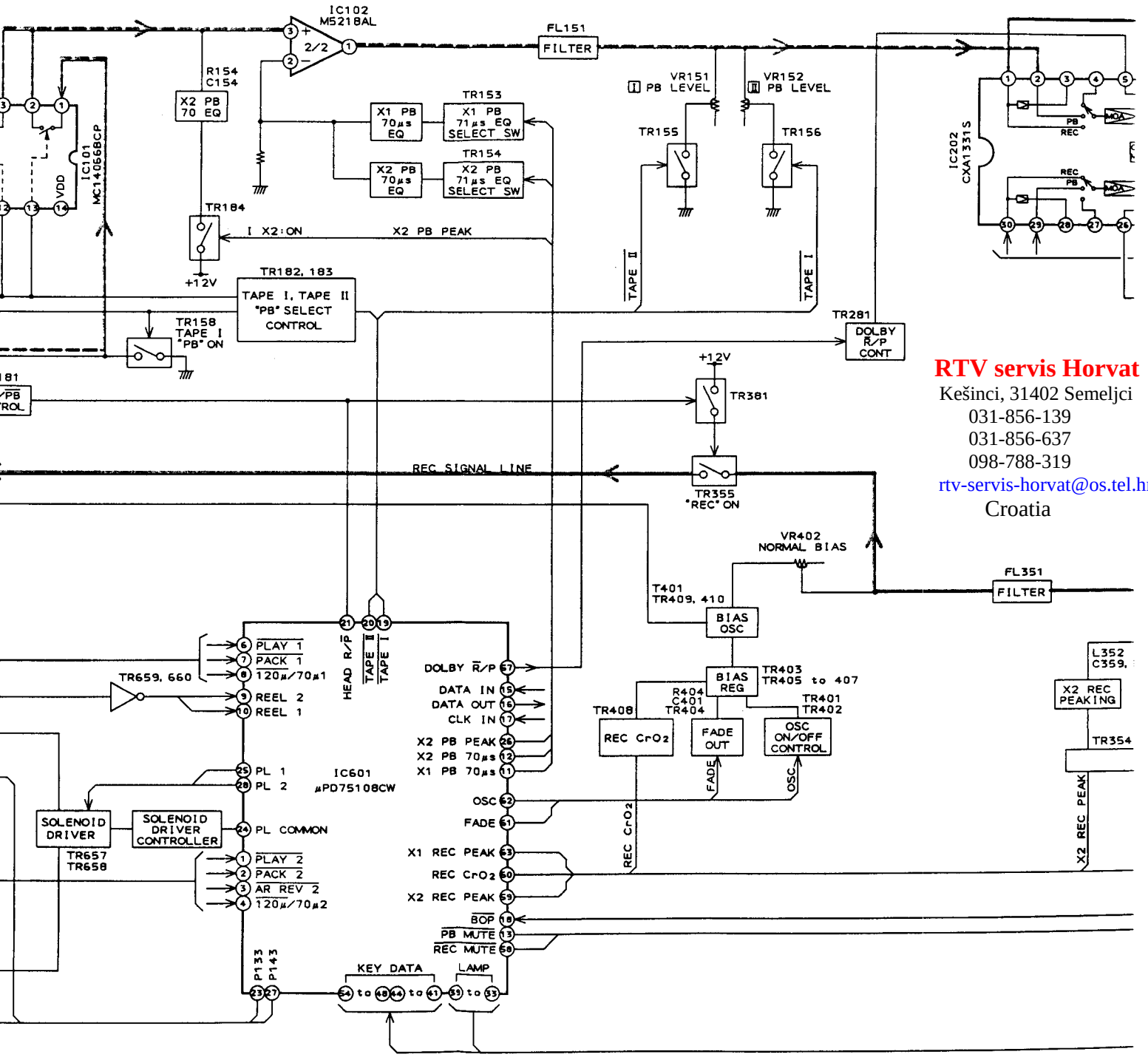
MAIN PCB

AUDIO SIGNAL LINE (Lch)
EFFECT SIGNAL LINE



EA-750
BLOCK DIAGRAM
No.5-2 D301651M


A
B
C
D
1
2
3
4
5
6
TAPE I
LCH
RCH
TR157
TAPE II
"PB" ON
GND
VDD
IC101
MC14066BCP
R CH
IC102
M5218AL
2/2
FL151
FILTER
R154
C154
X2 PB
70 EQ
TR153
X1 PB
70μs
EQ
X1 PB
71μs EQ
SELECT SW
TR154
X2 PB
70μs
EQ
X2 PB
71μs EQ
SELECT SW
TR184
I X2:ON
X2 PB PEAK
+12V
TR182, 183
TAPE I, TAPE II
"PB" SELECT
CONTROL
TR158
TAPE I
"PB" ON
TR151
TR181
REC/PB
CONTROL
TAPE II
LCH
RCH
ERASE
REC SIGNAL LINE
TAPE I
MECHA BLK
LEAF SW
REEL PULS
SOLENOID
MOTOR
TR653, VR651, 653
CAPSTAN
MOTOR
SPEED
CONTROL
TAPE II
MECHA BLK
LEAF SW
REEL PULS
SOLENOID
MOTOR
TR654, VR652, 654
CAPSTAN
MOTOR
SPEED
CONTROL
TR659, 660
SOLENOID
DRIVER
TR657
TR658
SOLENOID
DRIVER
CONTROLLER
PLAY 1
PACK 1
120μ/70μ1
REEL 2
REEL 1
PL 1
PL 2
PL COMMON
PLAY 2
PACK 2
AR REV 2
120μ/70μ2
P133
P143
IC601
μPD75108CW
HEAD R/P
TAPE II
TAPE I
DOLBY R/P
DATA IN
DATA OUT
CLK IN
X2 PB PEAK
X2 PB 70μs
X1 PB 70μs
OSC
FADE
X1 REC PEAK
REC CrO2
X2 REC PEAK
BOP
PB MUTE
REC MUTE
KEY DATA
LAMP



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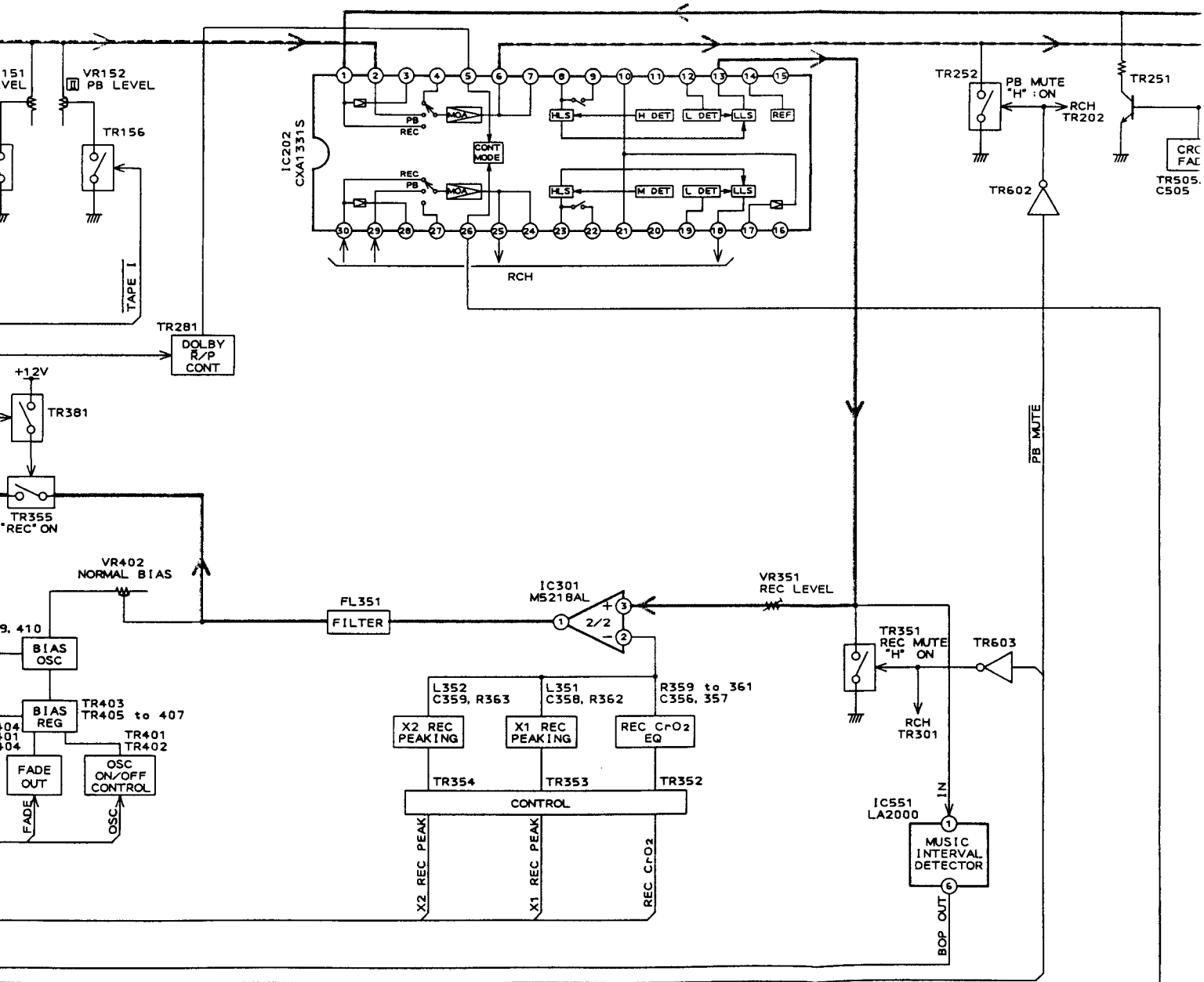
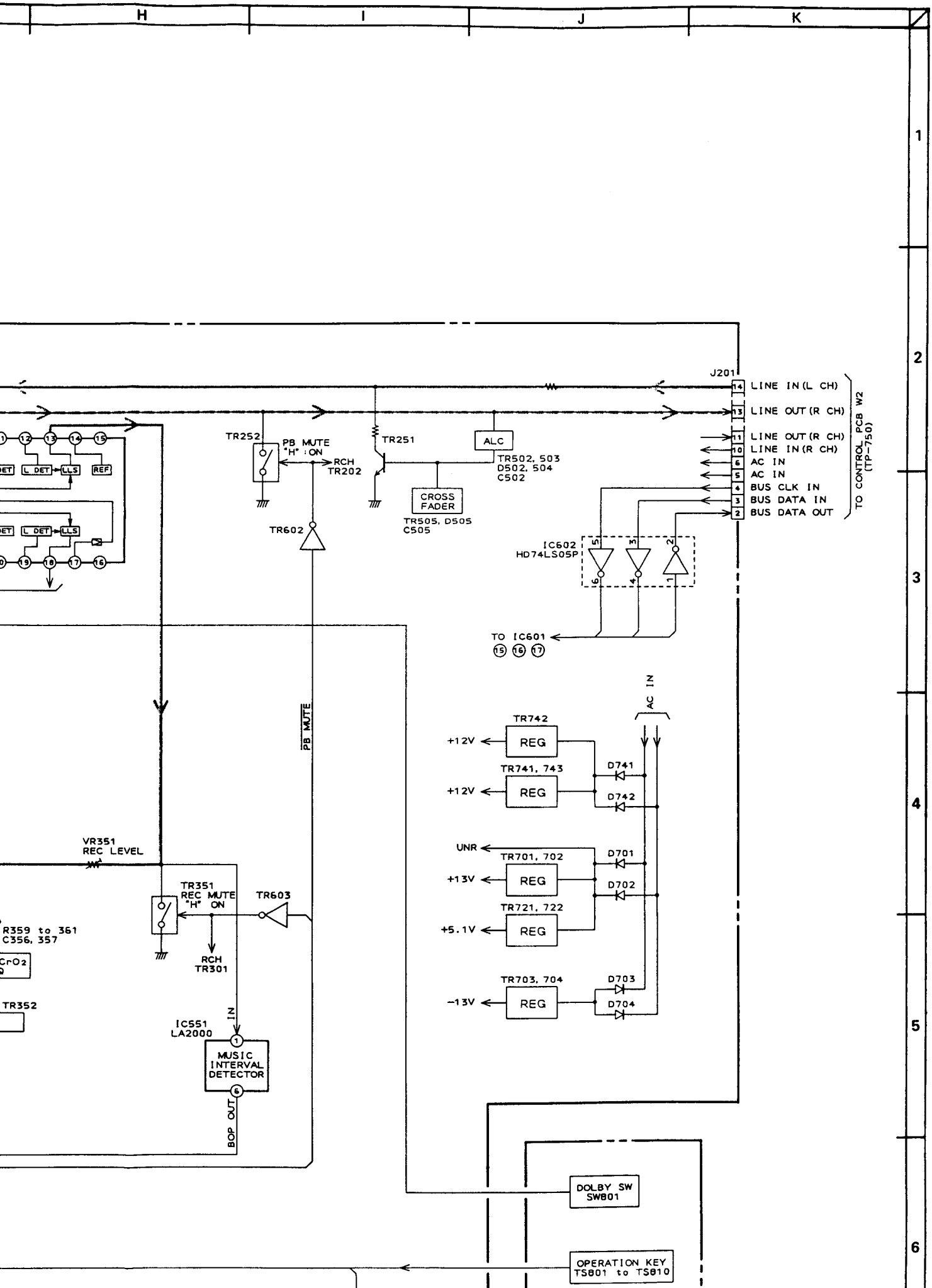
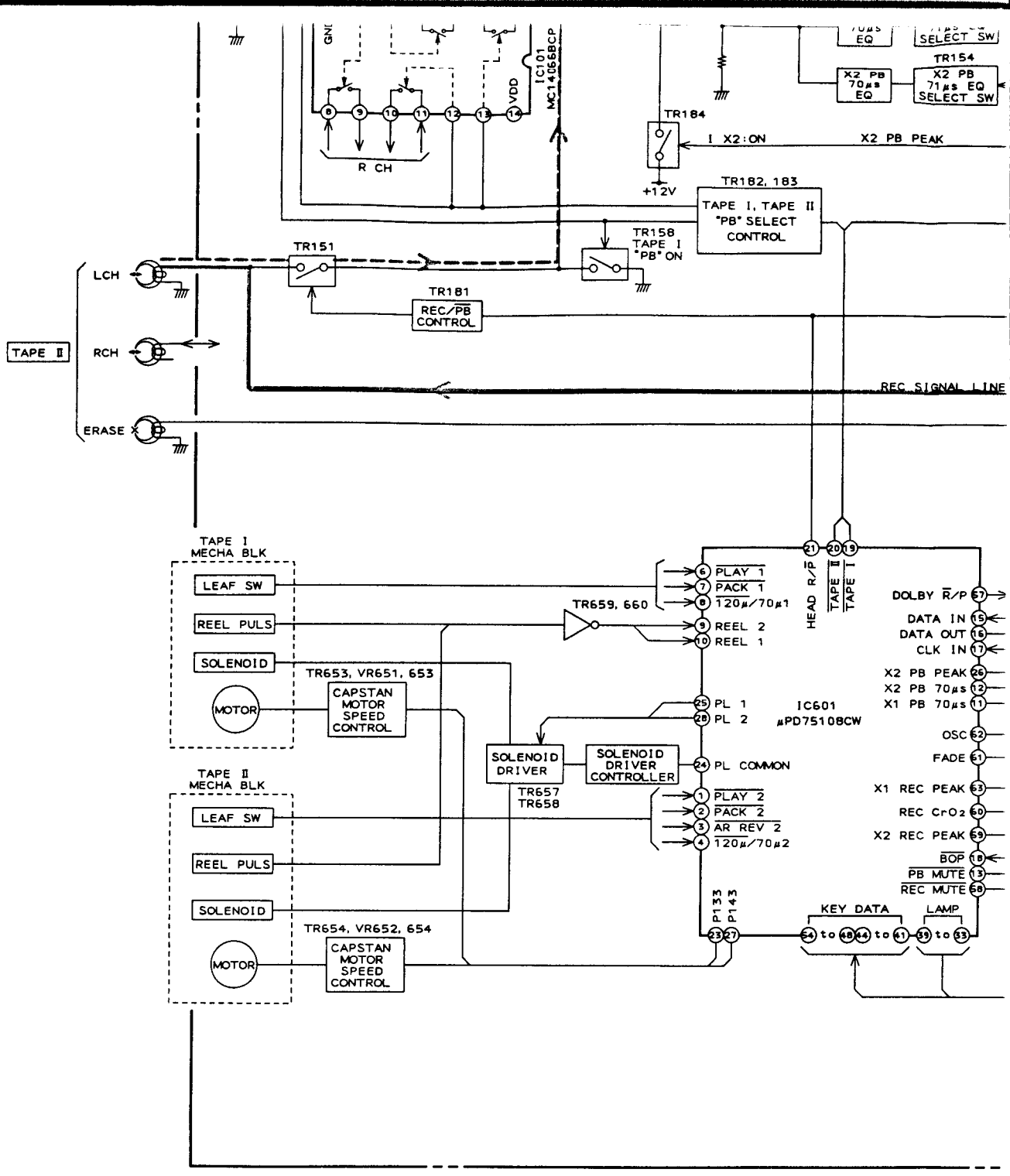
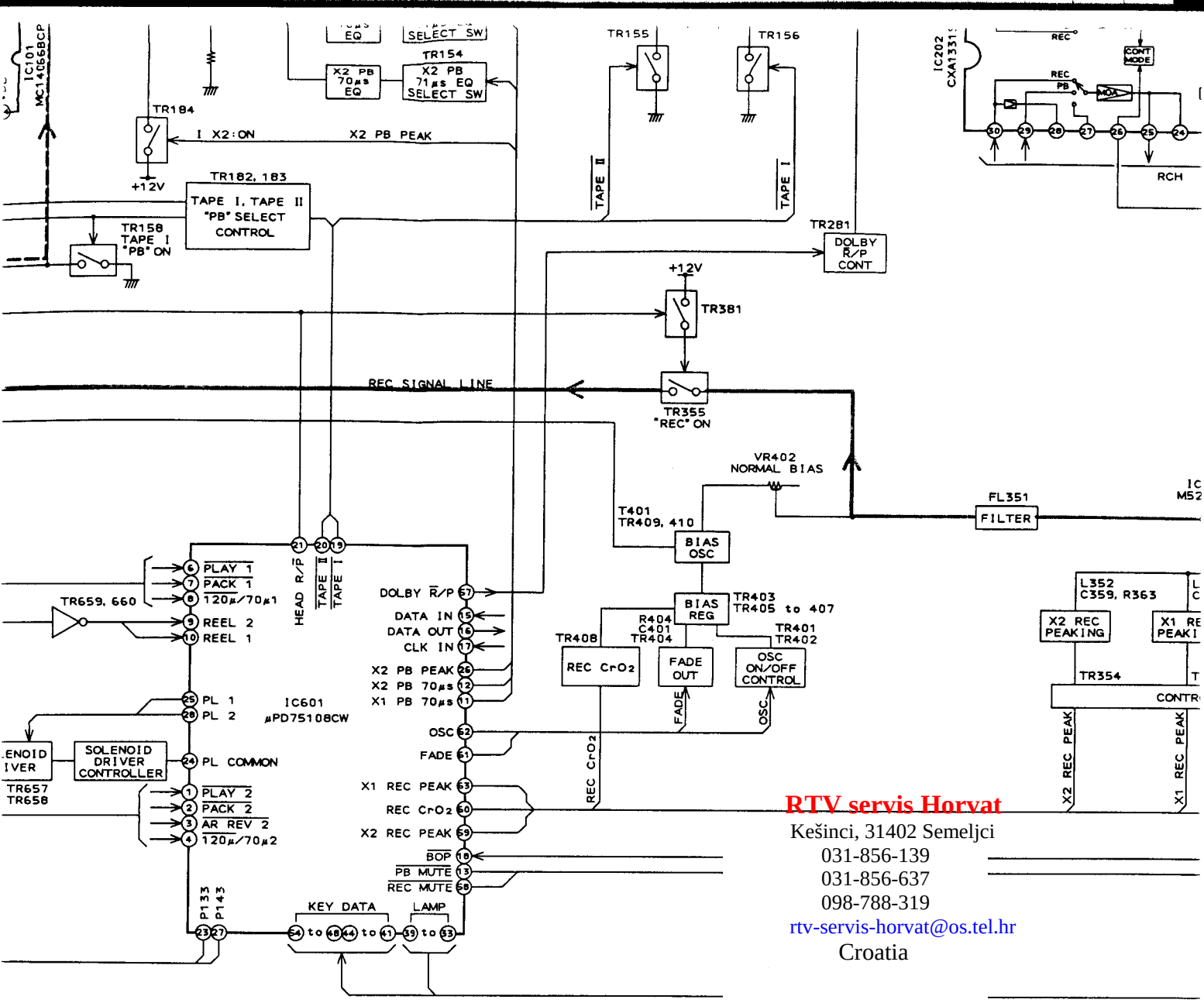

VR152
PB LEVEL
TR156
TAPE 1
TR281
DOLBY
R/P
CONT
+12V
TR381
TR355
"REC" ON
VR402
NORMAL BIAS
BIAS
OSC
BIAS
REG
TR403
TR405 to 407
TR401
TR402
FADE
OUT
OSC
ON/OFF
CONTROL
FADE
OSC
IC202
CXA1331S
PB
REC
REC
PB
MOA
HLS
H DET
L DET
LLS
REF
CONT
MODE
M DET
RCH
FL351
FILTER
IC301
M5218AL
2/2
VR351
REC LEVEL
L352
C359, R363
L351
C358, R362
R359 to 361
C356, 357
X2 REC
PEAKING
X1 REC
PEAKING
REC CrO2
EQ
TR354
TR353
TR352
CONTROL
X2 REC PEAK
X1 REC PEAK
REC CrO2
TR252
PB MUTE
"H" :ON
RCH
TR202
TR251
TR602
TR603
TR351
REC MUTE
"H" ON
RCH
TR301
PB MUTE
IC551
LA2000
IN
MUSIC
INTERVAL
DETECTOR
BOP OUT


H
I
J
K
1
2
3
4
5
6
J201
LINE IN (L CH)
LINE OUT (R CH)
LINE OUT (R CH)
LINE IN (R CH)
AC IN
AC IN
BUS CLK IN
BUS DATA IN
BUS DATA OUT
TO CONTROL PCB W2 (TP-750)
TR252
PB MUTE "H" : ON
RCH TR202
TR251
ALC
TR502, 503
D502, 504
C502
CROSS FADER
TR505, D505
C505
TR602
IC602
HD74LS05P
TO IC601
15 16 17
L DET
LLS
REF
PB MUTE
AC IN
TR742
+12V
REG
TR741, 743
D741
D742
UNR
TR701, 702
D701
D702
+13V
TR721, 722
+5.1V
TR703, 704
D703
D704
-13V
VR351
REC LEVEL
TR351
REC MUTE "H" ON
TR603
RCH TR301
R359 to 361
C356, 357
TR352
IC551
LA2000
IN
MUSIC INTERVAL DETECTOR
BOP OUT
DOLBY SW
SW801
OPERATION KEY
TS801 to TS810


IC101
MC14066BCP
VDD
R CH
TR184
I X2:ON
X2 PB PEAK
+12V
TR182, 183
TAPE I, TAPE II
"PB" SELECT
CONTROL
TR158
TAPE I
"PB" ON
TR151
TR181
REC/PB
CONTROL
LCH
RCH
ERASE
TAPE II
REC SIGNAL LINE
TAPE I
MECHA BLK
LEAF SW
REEL PULS
SOLENOID
MOTOR
CAPSTAN
MOTOR
SPEED
CONTROL
TR653, VR651, 653
TR659, 660
TAPE II
MECHA BLK
TR654, VR652, 654
SOLENOID
DRIVER
SOLENOID
DRIVER
CONTROLLER
TR657
TR658
PLAY 1
PACK 1
120μ/70μ1
REEL 2
REEL 1
PL 1
PL 2
PL COMMON
PLAY 2
PACK 2
AR REV 2
120μ/70μ2
IC601
μPD75108CW
HEAD R/P
TAPE II
TAPE I
DOLBY R/P
DATA IN
DATA OUT
CLK IN
X2 PB PEAK
X2 PB 70μs
X1 PB 70μs
OSC
FADE
X1 REC PEAK
REC CrO2
X2 REC PEAK
BOP
PB MUTE
REC MUTE
P133
P143
KEY DATA
LAMP
SELECT SW
TR154
X2 PB
71μs EQ
SELECT SW
X2 PB
70μs
EQ



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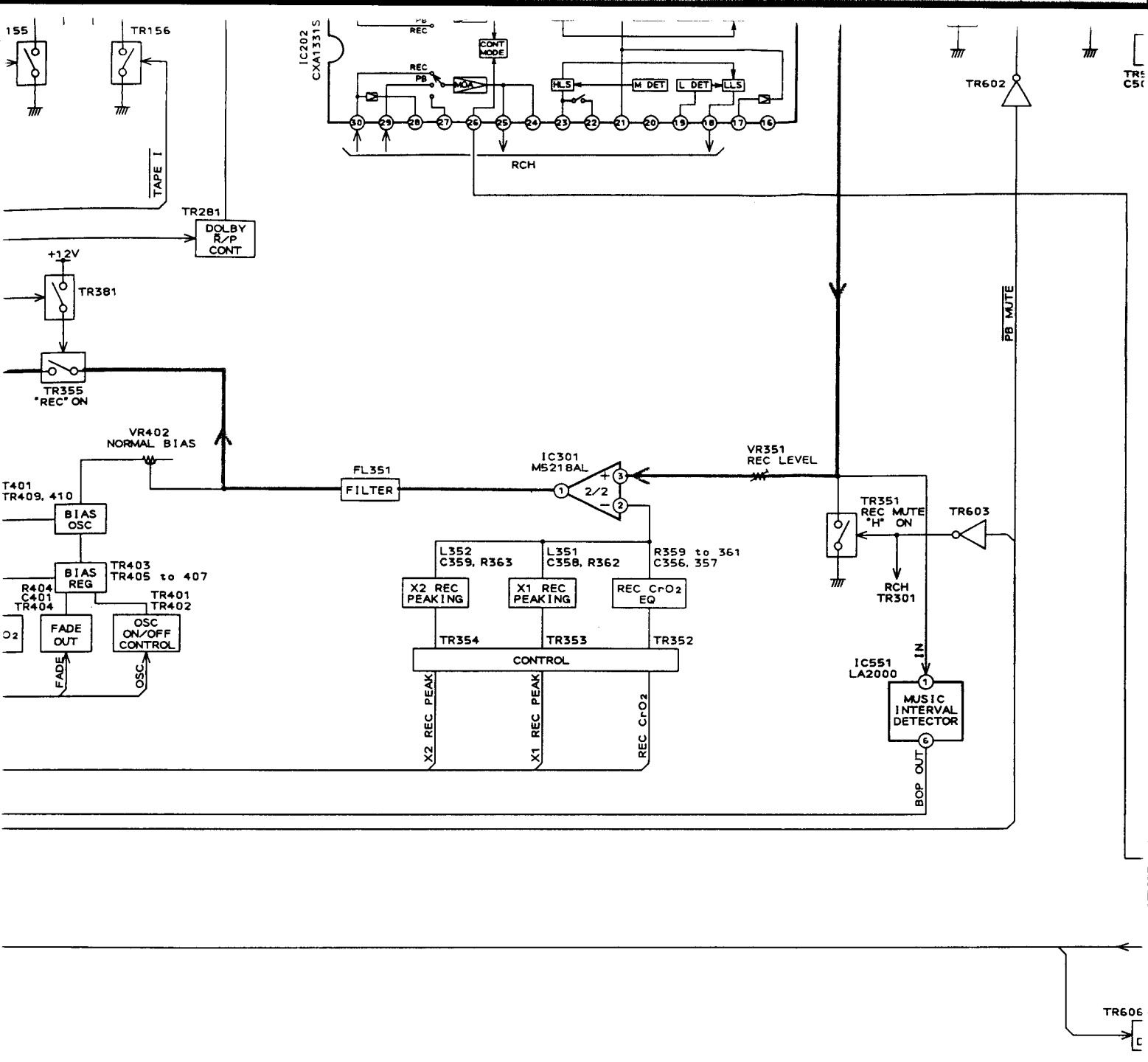
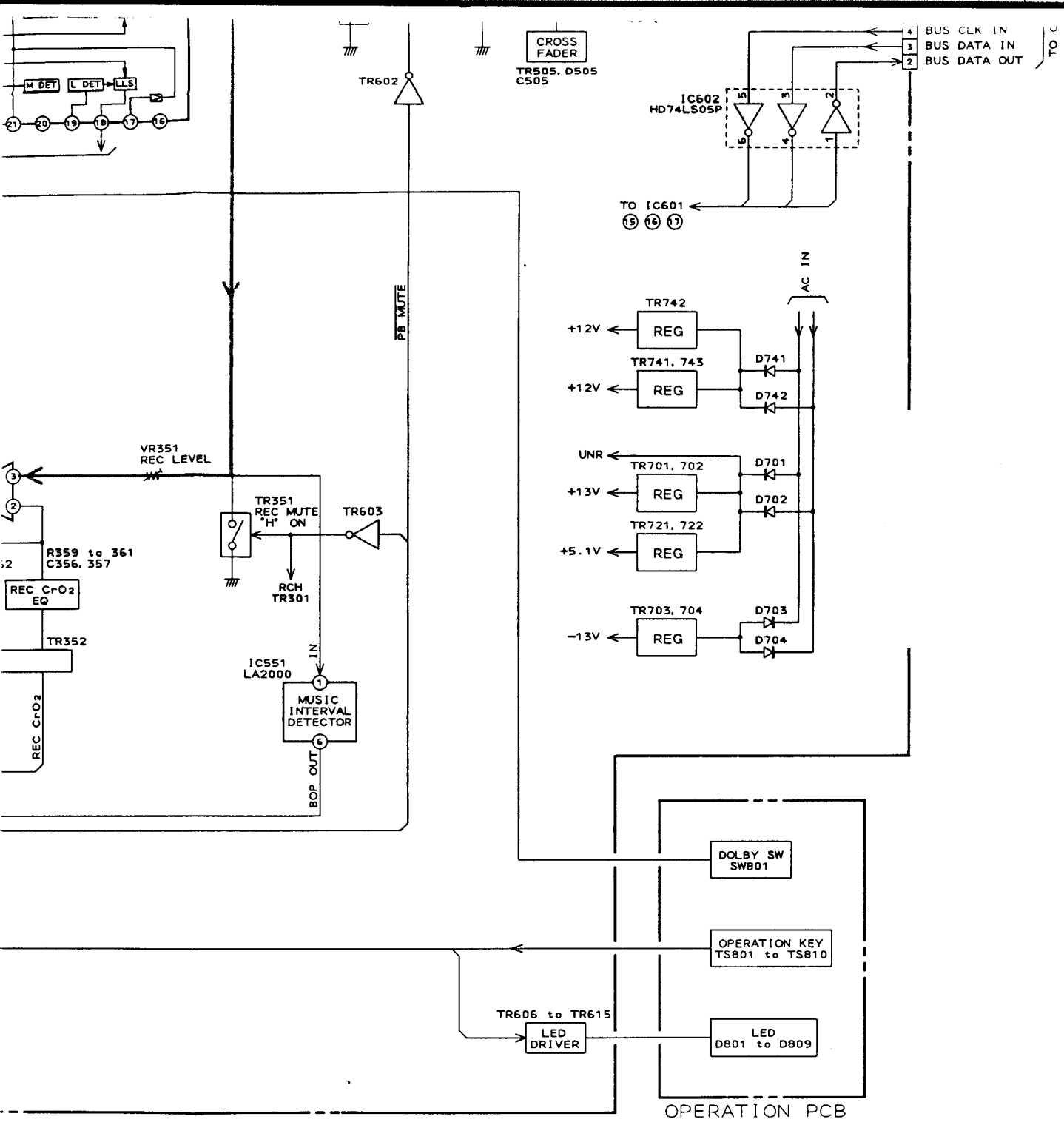
DECK PCB



DECK PCB

:PB SIGNAL LINE

:REC SIGNAL LINE

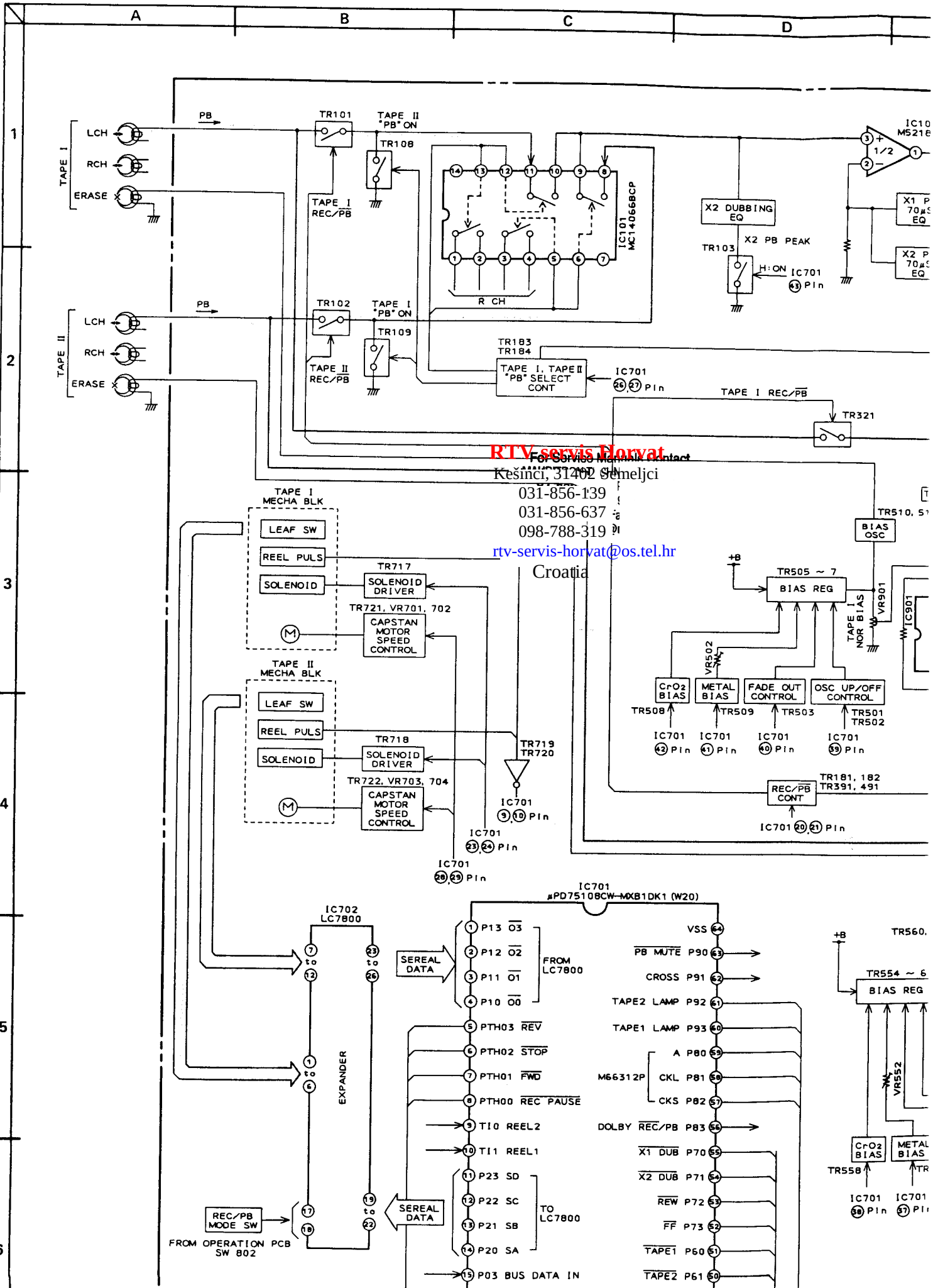


: PB SIGNAL LINE

: REC SIGNAL LINE

HX-750
DECK & OPERATION BLOCK DIAGRAM

No.5-3 T213451M
A1



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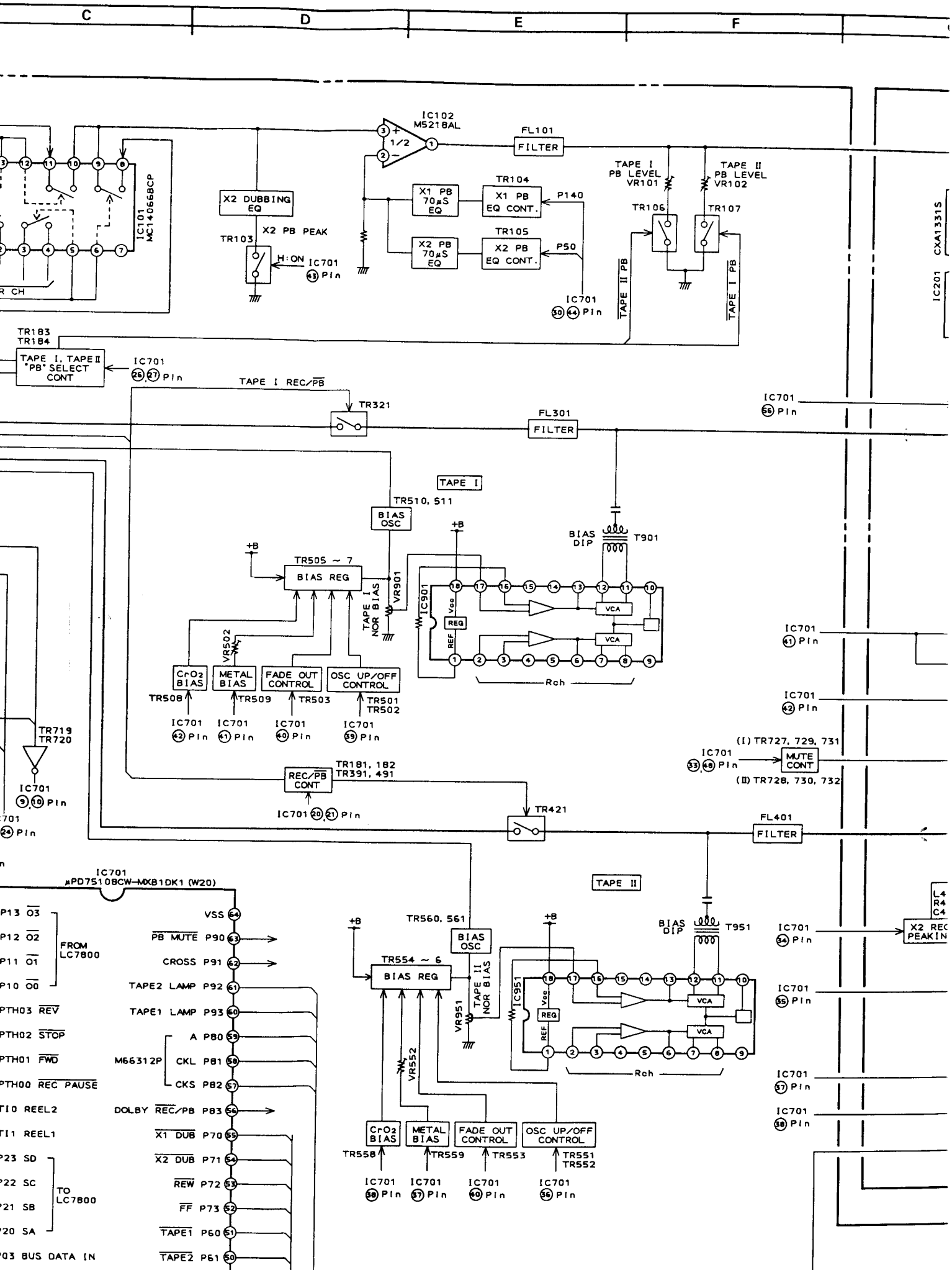
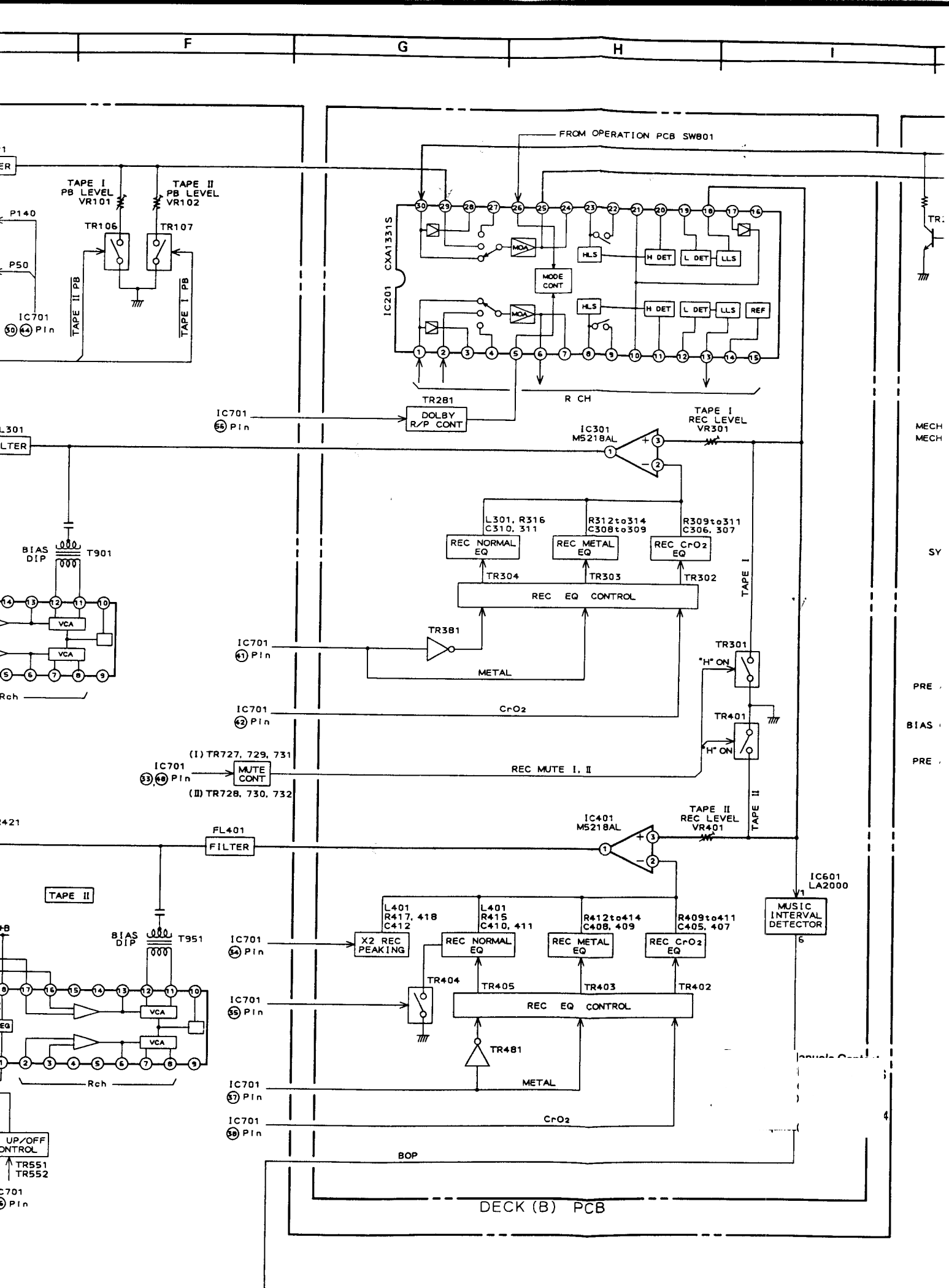
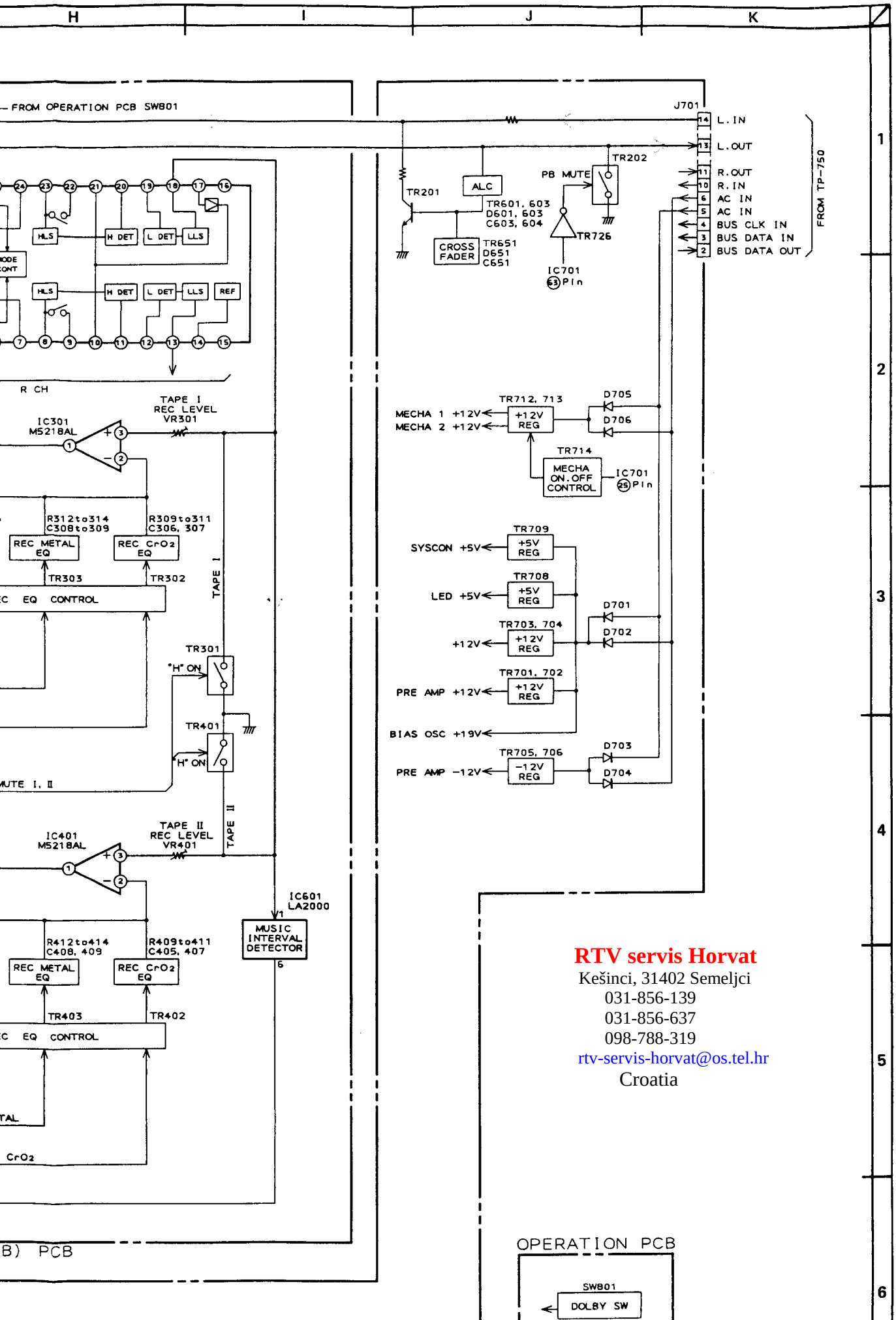

C
D
E
F
IC102
M5218AL
1/2
FL101
FILTER
TAPE I
PB LEVEL
VR101
TAPE II
PB LEVEL
VR102
X2 DUBBING
EQ
X2 PB PEAK
TR103
H:ON
IC701
43 Pin
X1 PB
70μS
EQ
TR104
X1 PB
EQ CONT.
P140
X2 PB
70μS
EQ
TR105
X2 PB
EQ CONT.
P50
IC701
50 44 Pin
TR106
TR107
TAPE II PB
TAPE I PB
IC101
MC14066BCP
R CH
IC201
CXA1331S
TR183
TR184
TAPE I, TAPE II
"PB" SELECT
CONT
IC701
26 27 Pin
TAPE I REC/PB
TR321
FL301
FILTER
IC701
56 Pin
TAPE I
TR510, 511
BIAS
OSC
+B
BIAS
DIP
T901
TR505 ~ 7
BIAS REG
VR901
TAPE I
NOR BIAS
IC901
Vcc
REG
REF
VCA
VCA
Rch
VR502
CrO2
BIAS
METAL
BIAS
FADE OUT
CONTROL
OSC UP/OFF
CONTROL
TR508
TR509
TR503
TR501
TR502
IC701
42 Pin
IC701
41 Pin
IC701
40 Pin
IC701
39 Pin
IC701
41 Pin
IC701
42 Pin
(I) TR727, 729, 731
IC701
53 48 Pin
MUTE
CONT
(II) TR728, 730, 732
TR719
TR720
IC701
9 10 Pin
IC701
24 Pin
TR181, 182
TR391, 491
REC/PB
CONT
IC701 20 21 Pin
TR421
FL401
FILTER
IC701
μPD75108CW-MXB1DK1 (W20)
P13 O3
P12 O2
P11 O1
P10 O0
FROM
LC7800
PTH03 REV
PTH02 STOP
PTH01 FWD
PTH00 REC PAUSE
TI0 REEL2
TI1 REEL1
P23 SD
P22 SC
P21 SB
P20 SA
TO
LC7800
P03 BUS DATA IN
VSS 64
PB MUTE P90 63
CROSS P91 62
TAPE2 LAMP P92 61
TAPE1 LAMP P93 60
M66312P
A P80 59
CKL P81 58
CKS P82 57
DOLBY REC/PB P83 56
X1 DUB P70 55
X2 DUB P71 54
REW P72 53
FF P73 52
TAPE1 P60 51
TAPE2 P61 50
TAPE II
TR560, 561
BIAS
OSC
+B
BIAS
DIP
T951
TR554 ~ 6
BIAS REG
VR951
TAPE II
NOR BIAS
IC951
Vcc
REQ
REF
VCA
VCA
Rch
VR552
CrO2
BIAS
METAL
BIAS
FADE OUT
CONTROL
OSC UP/OFF
CONTROL
TR558
TR559
TR553
TR551
TR552
IC701
38 Pin
IC701
37 Pin
IC701
40 Pin
IC701
36 Pin
IC701
34 Pin
IC701
35 Pin
IC701
37 Pin
IC701
38 Pin
L4
R4
C4
X2 REC
PEAKIN


F
G
H
I
FROM OPERATION PCB SW801
TAPE I PB LEVEL VR101
TAPE II PB LEVEL VR102
TR106
TR107
P140
P50
IC701
TAPE II PB
TAPE I PB
IC201 CXA1331S
MOA
HLS
H DET
L DET
LLS
REF
MODE CONT
R CH
TR281
DOLBY R/P CONT
IC701
TAPE I REC LEVEL VR301
IC301 M5218AL
L301, R316 C310, 311
R312to314 C308to309
R309to311 C306, 307
REC NORMAL EQ
REC METAL EQ
REC CrO2 EQ
TR304
TR303
TR302
REC EQ CONTROL
TAPE I
TR381
METAL
TR301
"H" ON
CrO2
TR401
(I) TR727, 729, 731
MUTE CONT
REC MUTE I, II
(II) TR728, 730, 732
FL401
FILTER
IC401 M5218AL
TAPE II REC LEVEL VR401
TAPE II
IC601 LA2000
MUSIC INTERVAL DETECTOR
BIAS DIP
T901
T951
VCA
Rch
L401 R417, 418 C412
L401 R415 C410, 411
R412to414 C408, 409
R409to411 C405, 407
X2 REC PEAKING
TR404
TR405
TR403
TR402
TR481
BOP
DECK (B) PCB



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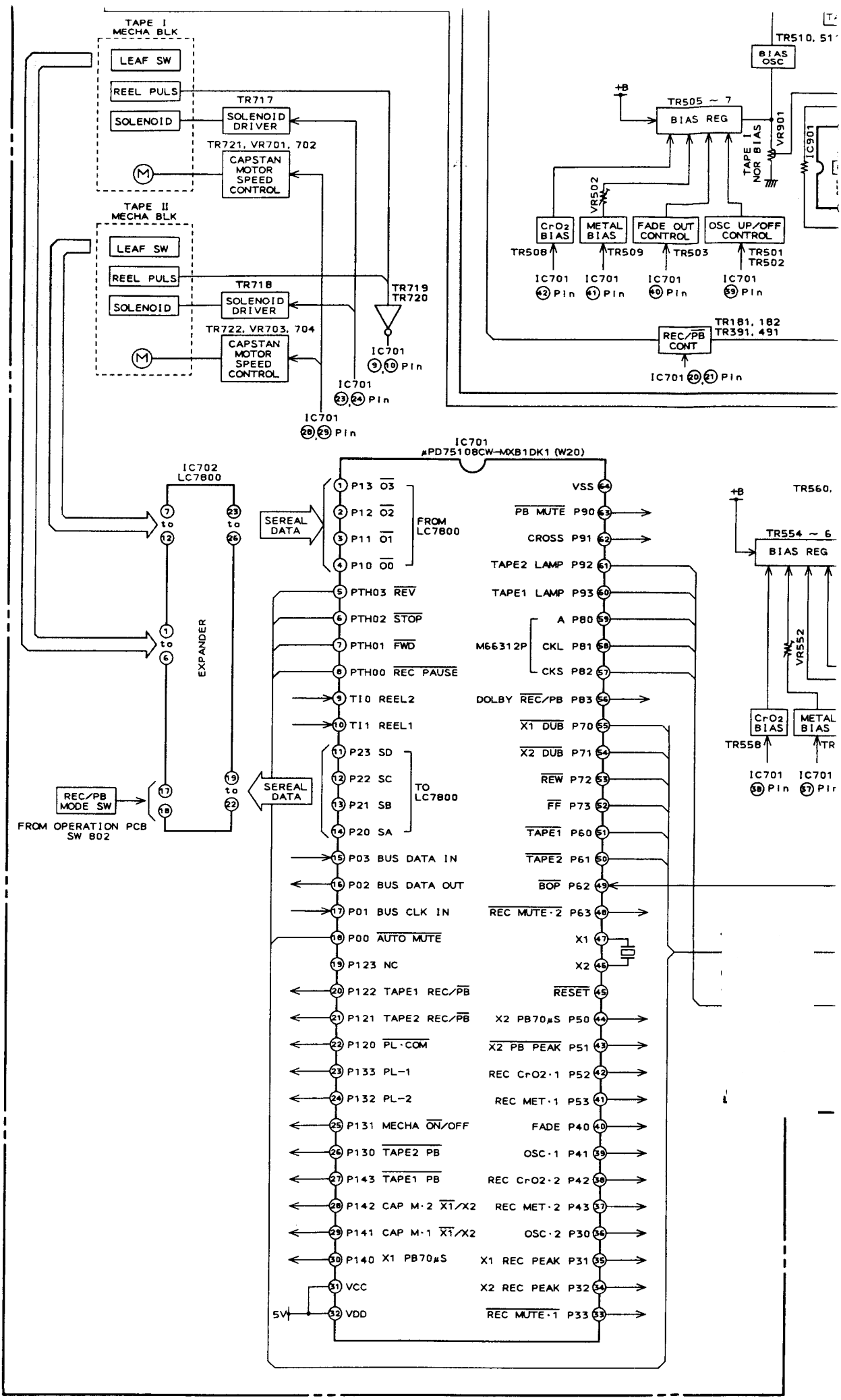
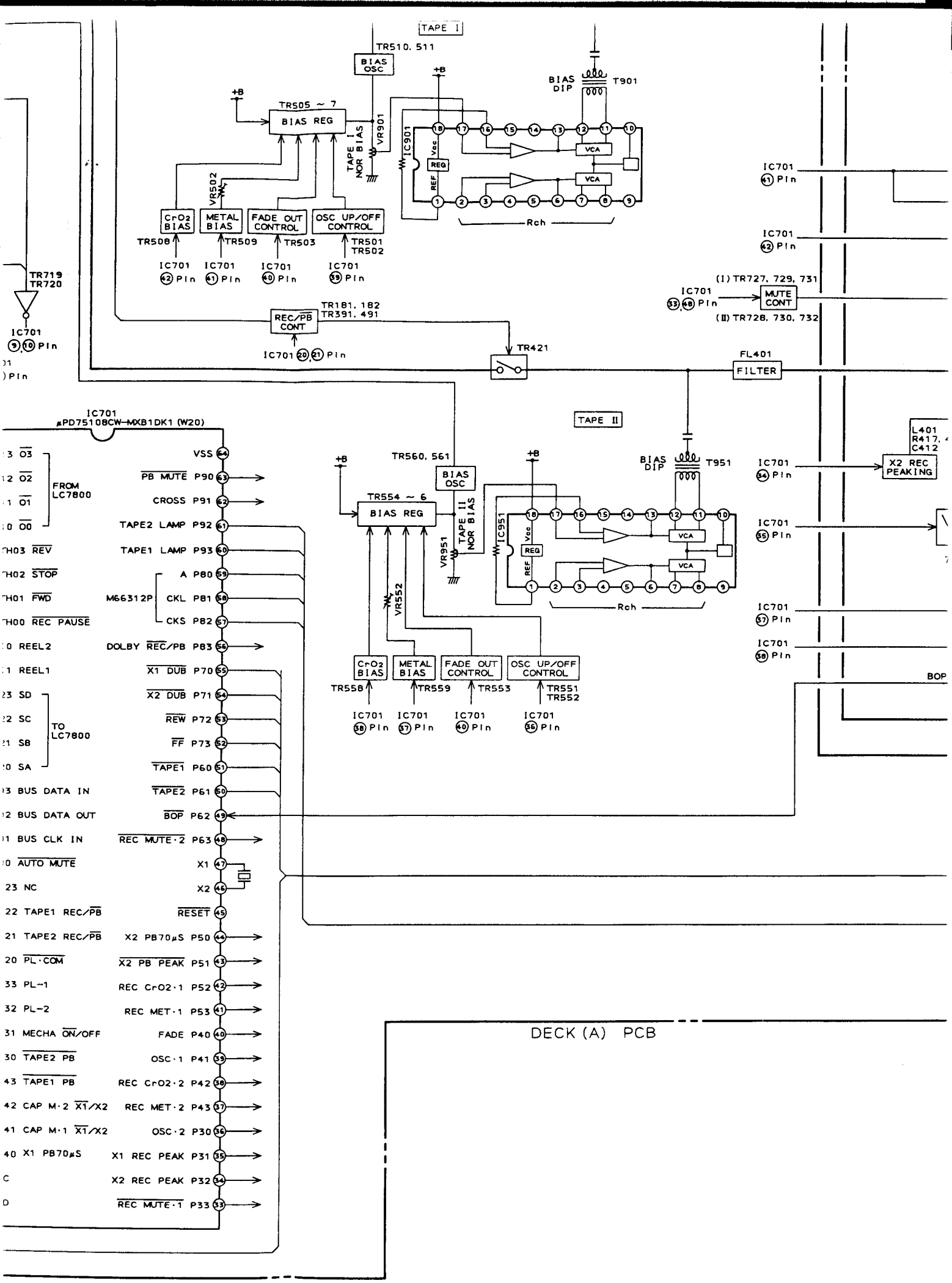
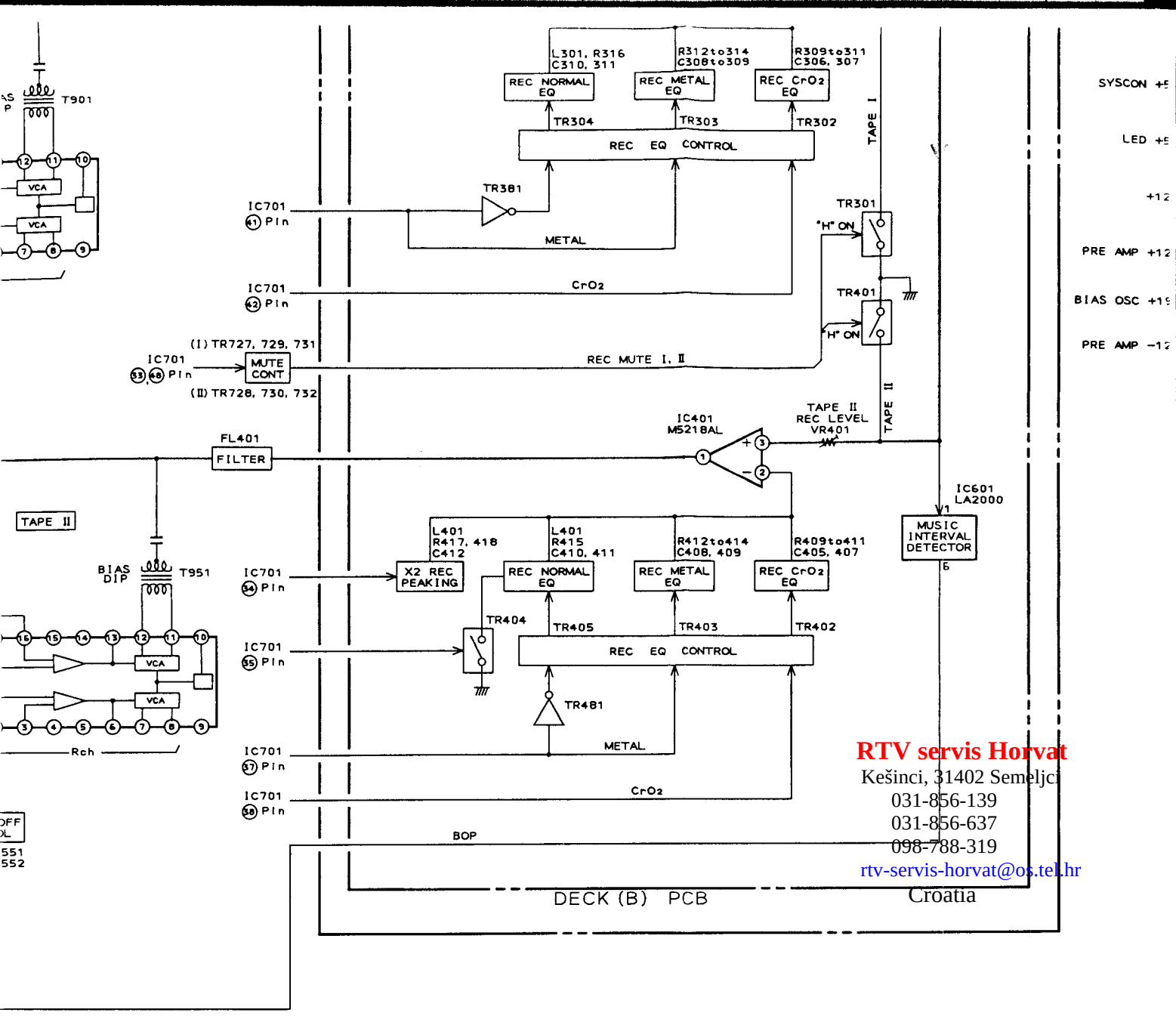

TAPE I MECHA BLK
LEAF SW
REEL PULS
SOLENOID
TR717
SOLENOID DRIVER
TR721, VR701, 702
CAPSTAN MOTOR SPEED CONTROL
TAPE II MECHA BLK
LEAF SW
REEL PULS
SOLENOID
TR718
SOLENOID DRIVER
TR722, VR703, 704
CAPSTAN MOTOR SPEED CONTROL
TR719 TR720
IC701 9,10 Pin
IC701 23,24 Pin
IC701 28,29 Pin
TR510, 51
BIAS OSC
+B
TR505 ~ 7
BIAS REG
VR901
TAPE I NOR BIAS
TC901
VR502
CrO2 BIAS
METAL BIAS
FADE OUT CONTROL
OSC UP/OFF CONTROL
TR508
TR509
TR503
TR501 TR502
IC701 42 Pin
IC701 41 Pin
IC701 40 Pin
IC701 39 Pin
TR181, 182 TR391, 491
REC/PB CONT
IC701 20,21 Pin
IC701 μPD75108CW-MXB1DK1 (W20)
IC702 LC7800
EXPANDER
7 to 12
23 to 26
1 to 6
17 to 22
SEREAL DATA
FROM LC7800
TO LC7800
REC/PB MODE SW
FROM OPERATION PCB SW 802
P13 O3
P12 O2
P11 O1
P10 O0
PTH03 REV
PTH02 STOP
PTH01 FWD
PTH00 REC PAUSE
TI0 REEL2
TI1 REEL1
P23 SD
P22 SC
P21 SB
P20 SA
P03 BUS DATA IN
P02 BUS DATA OUT
P01 BUS CLK IN
P00 AUTO MUTE
P123 NC
P122 TAPE1 REC/PB
P121 TAPE2 REC/PB
P120 PL·COM
P133 PL-1
P132 PL-2
P131 MECHA ON/OFF
P130 TAPE2 PB
P143 TAPE1 PB
P142 CAP M·2 X1/X2
P141 CAP M·1 X1/X2
P140 X1 PB70μS
VCC
5V
VDD
VSS
PB MUTE P90
CROSS P91
TAPE2 LAMP P92
TAPE1 LAMP P93
M66312P
A P80
CKL P81
CKS P82
DOLBY REC/PB P83
X1 DUB P70
X2 DUB P71
REW P72
FF P73
TAPE1 P60
TAPE2 P61
BOP P62
REC MUTE·2 P63
X1
X2
RESET
X2 PB70μS P50
X2 PB PEAK P51
REC CrO2·1 P52
REC MET·1 P53
FADE P40
OSC·1 P41
REC CrO2·2 P42
REC MET·2 P43
OSC·2 P30
X1 REC PEAK P31
X2 REC PEAK P32
REC MUTE·1 P33
+B
TR560,
TR554 ~ 6
BIAS REG
VR552
CrO2 BIAS
METAL BIAS
TR558
IC701 38 Pin
IC701 37 Pin


TAPE I
TR510, 511
BIAS OSC
+B
BIAS DIP
T901
TR505 ~ 7
BIAS REG
VR901
TAPE I NOR BIAS
IC901
Vcc
REQ
REF
VCA
Rch
VR502
CrO2 BIAS
METAL BIAS
FADE OUT CONTROL
OSC UP/OFF CONTROL
TR508
TR509
TR503
TR501 TR502
IC701 42 Pin
IC701 41 Pin
IC701 40 Pin
IC701 39 Pin
TR719 TR720
IC701 9,10 Pin
REC/PB CONT
TR181, 182 TR391, 491
IC701 20,21 Pin
TR421
FL401
FILTER
IC701 41 Pin
IC701 42 Pin
(I) TR727, 729, 731
IC701 33,48 Pin
MUTE CONT
(II) TR728, 730, 732
IC701 μPD75108CW-MXB1DK1 (W20)
VSS 64
PB MUTE P90 63
CROSS P91 62
TAPE2 LAMP P92 61
TAPE1 LAMP P93 60
A P80 59
CKL P81 58
CKS P82 57
DOLBY REC/PB P83 56
X1 DUB P70 55
X2 DUB P71 54
REW P72 53
FF P73 52
TAPE1 P60 51
TAPE2 P61 50
BOP P62 49
REC MUTE·2 P63 48
X1 47
X2 46
RESET 45
X2 PB70μS P50 44
X2 PB PEAK P51 43
REC CrO2·1 P52 42
REC MET·1 P53 41
FADE P40 40
OSC·1 P41 39
REC CrO2·2 P42 38
REC MET·2 P43 37
OSC·2 P30 36
X1 REC PEAK P31 35
X2 REC PEAK P32 34
REC MUTE·1 P33 33
FROM LC7800
TO LC7800
M66312P
TAPE II
TR560, 561
TR554 ~ 6
BIAS REG
VR951
VR552
TR558
TR559
TR553
TR551 TR552
IC701 38 Pin
IC701 37 Pin
IC701 40 Pin
IC701 35 Pin
L401 R417, C412
X2 REC PEAKING
IC701 54 Pin
IC701 55 Pin
IC701 57 Pin
IC701 58 Pin
BOP
DECK (A) PCB



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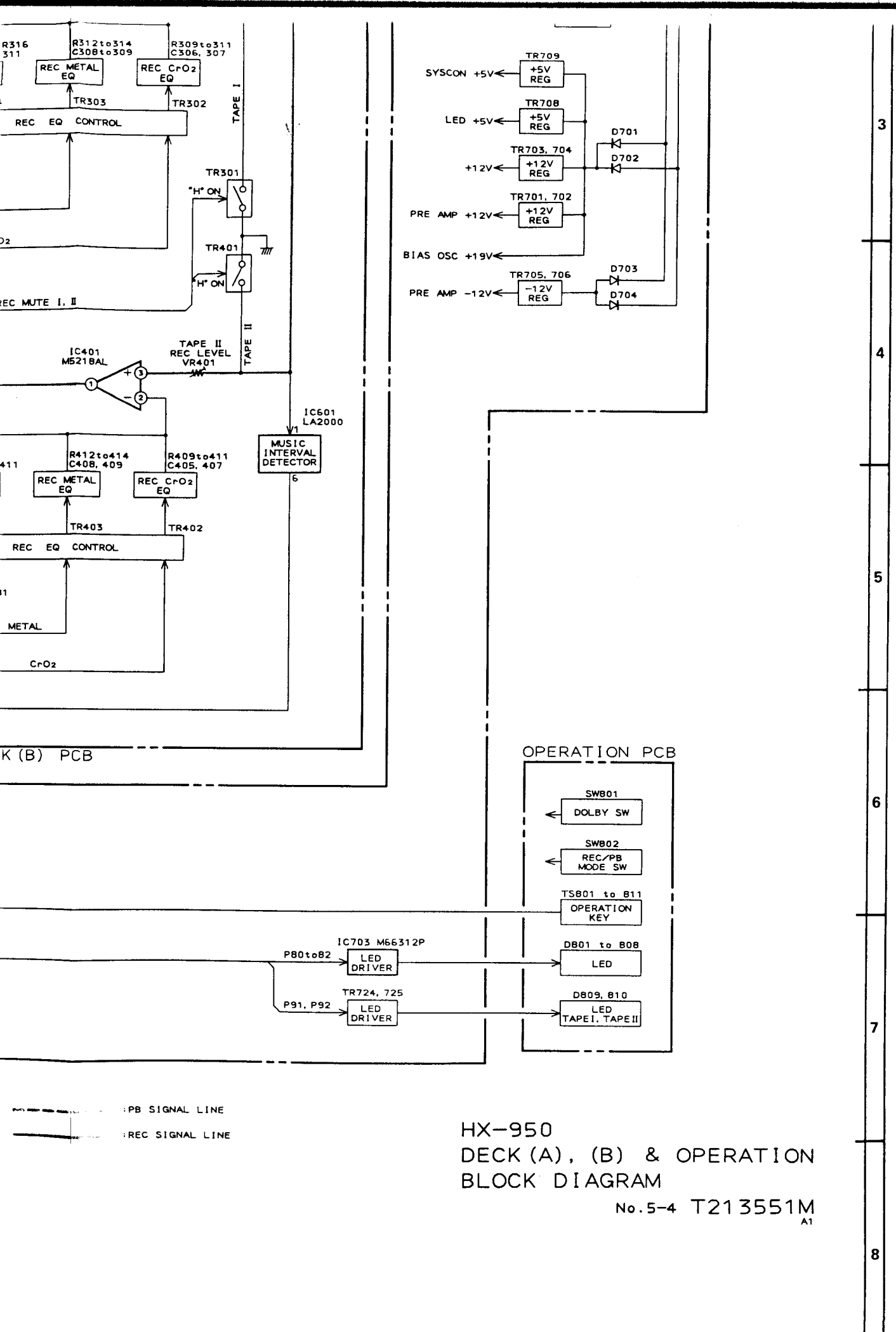
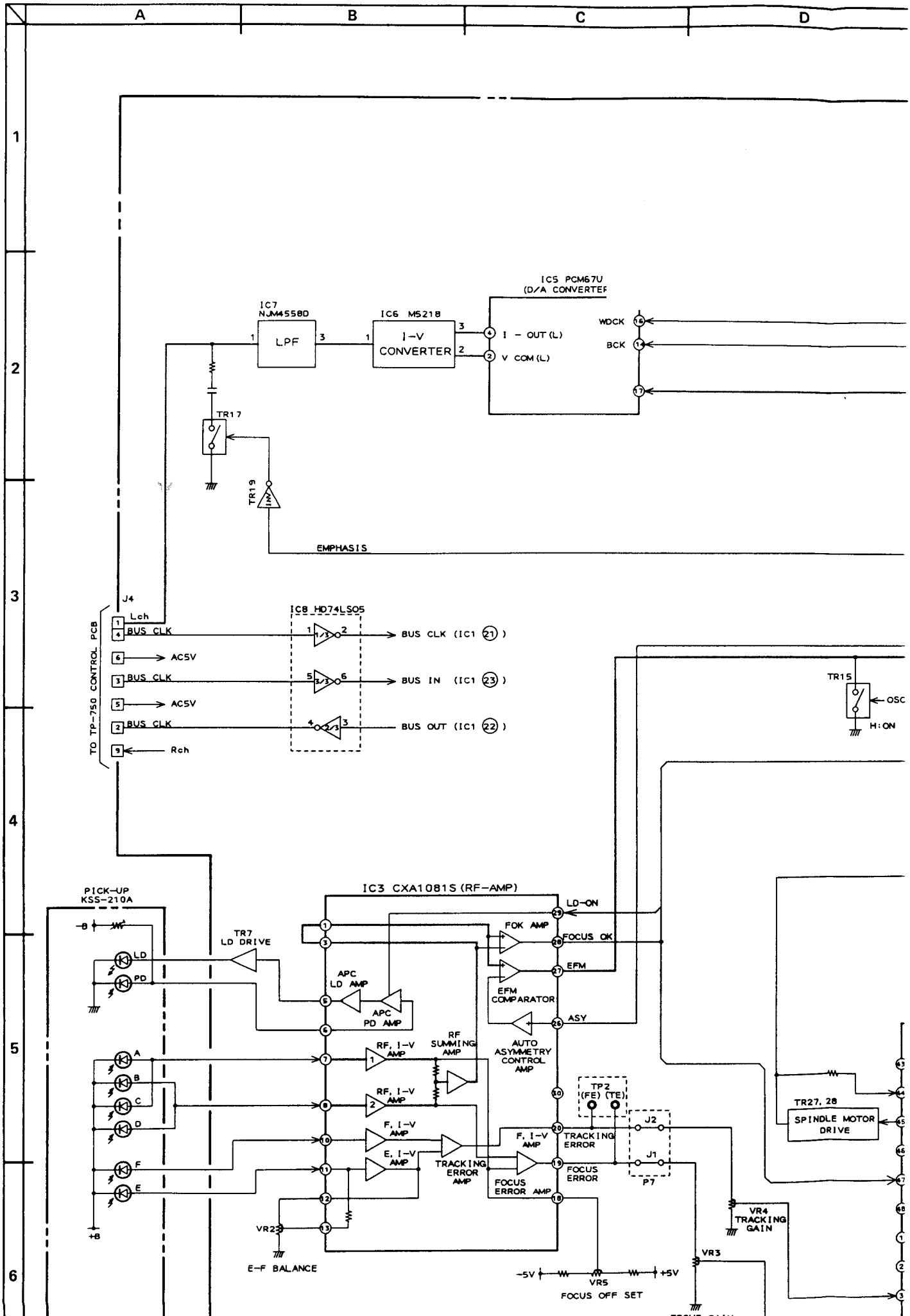
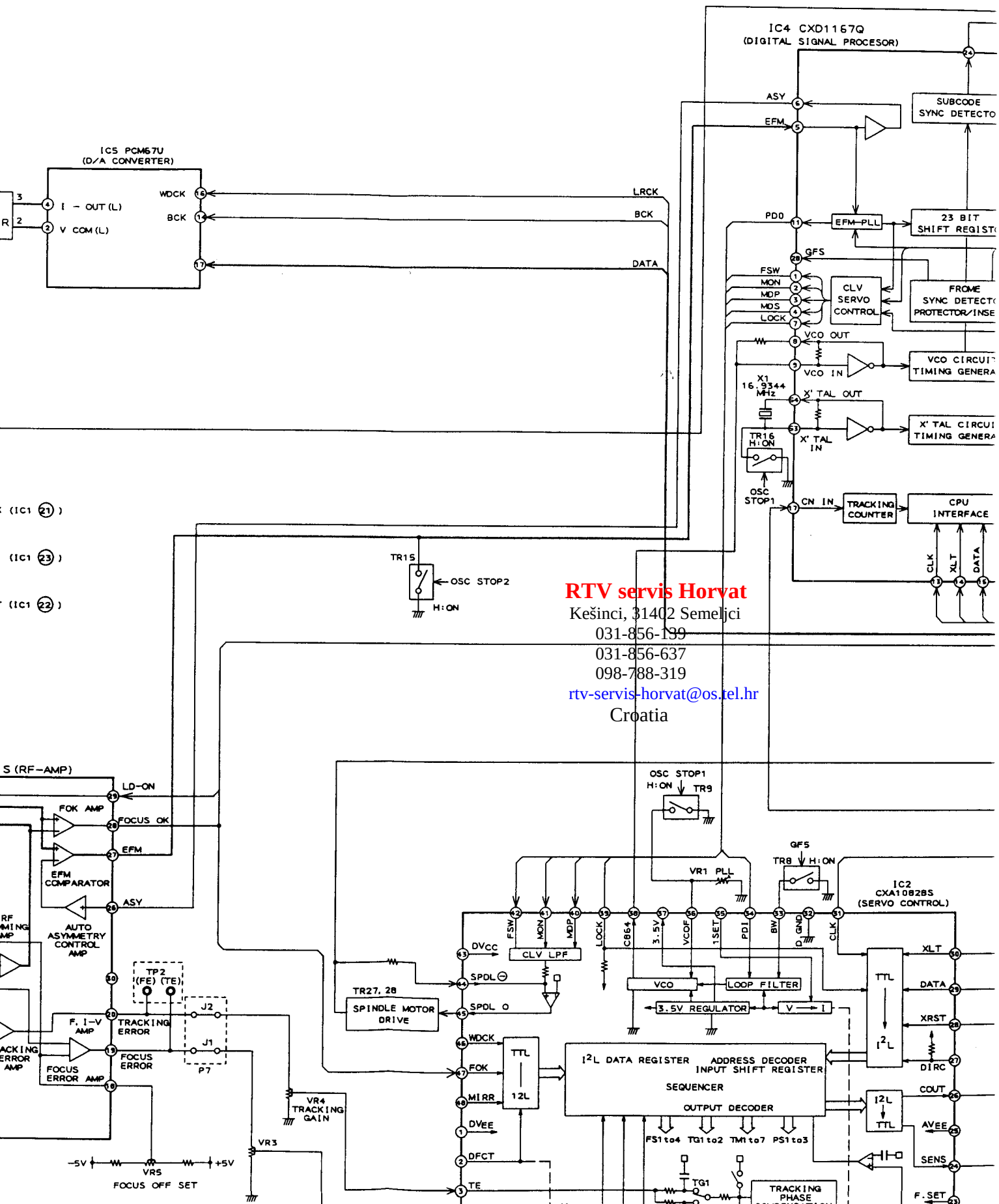
H
D
B



HX-950
DECK (A), (B) & OPERATION BLOCK DIAGRAM

No.5-4 T213551M
A1


A
B
C
D
1
2
3
4
5
6
IC5 PCM67U
(D/A CONVERTER)
IC7
NJM4558D
LPF
IC6 M5218
I-V
CONVERTER
I - OUT (L)
V COM (L)
WDCK
BCK
TR17
TR19
EMPHASIS
J4
Lch
BUS CLK
ACSV
BUS CLK
ACSV
BUS CLK
Rch
TO TP-750 CONTROL PCB
IC8 HD74LS05
BUS CLK (IC1 21)
BUS IN (IC1 23)
BUS OUT (IC1 22)
TR15
OSC
H:ON
PICK-UP
KSS-210A
IC3 CXA1081S (RF-AMP)
LD-ON
FOK AMP
FOCUS OK
EFM
EFM COMPARATOR
ASY
AUTO ASYMMETRY CONTROL AMP
TR7
LD DRIVE
APC
LD AMP
APC
PD AMP
RF SUMMING AMP
RF, I-V AMP
RF, I-V AMP
F, I-V AMP
E, I-V AMP
TRACKING ERROR AMP
FOCUS ERROR AMP
F, I-V AMP
TRACKING ERROR
FOCUS ERROR
TP2
(FE) (TE)
J2
J1
P7
TR27, 28
SPINDLE MOTOR DRIVE
VR4
TRACKING GAIN
VR3
VR2
E-F BALANCE
VR5
FOCUS OFF SET
-5V
+5V
-B
+B
LD
PD
A
B
C
D
F
E



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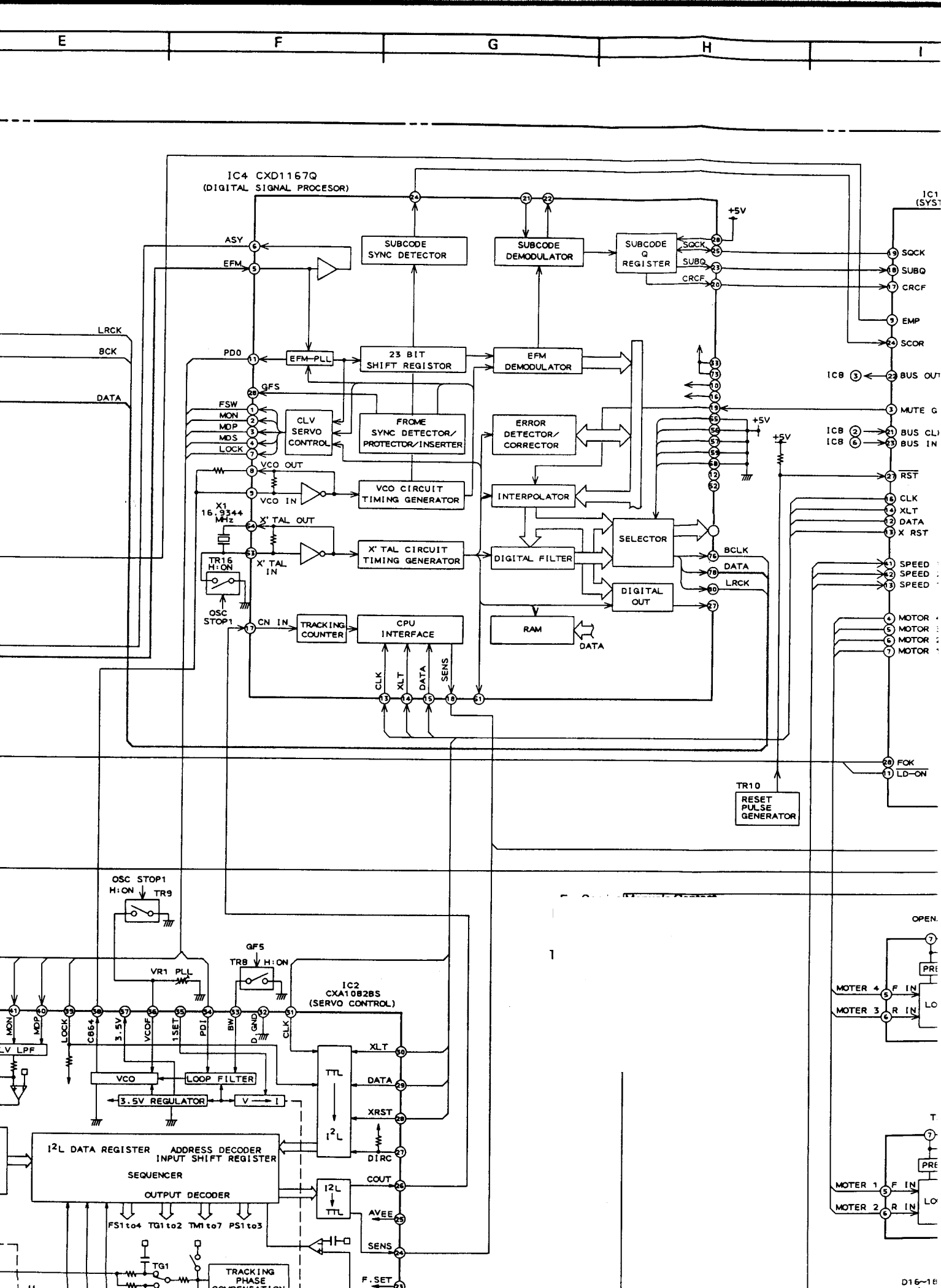
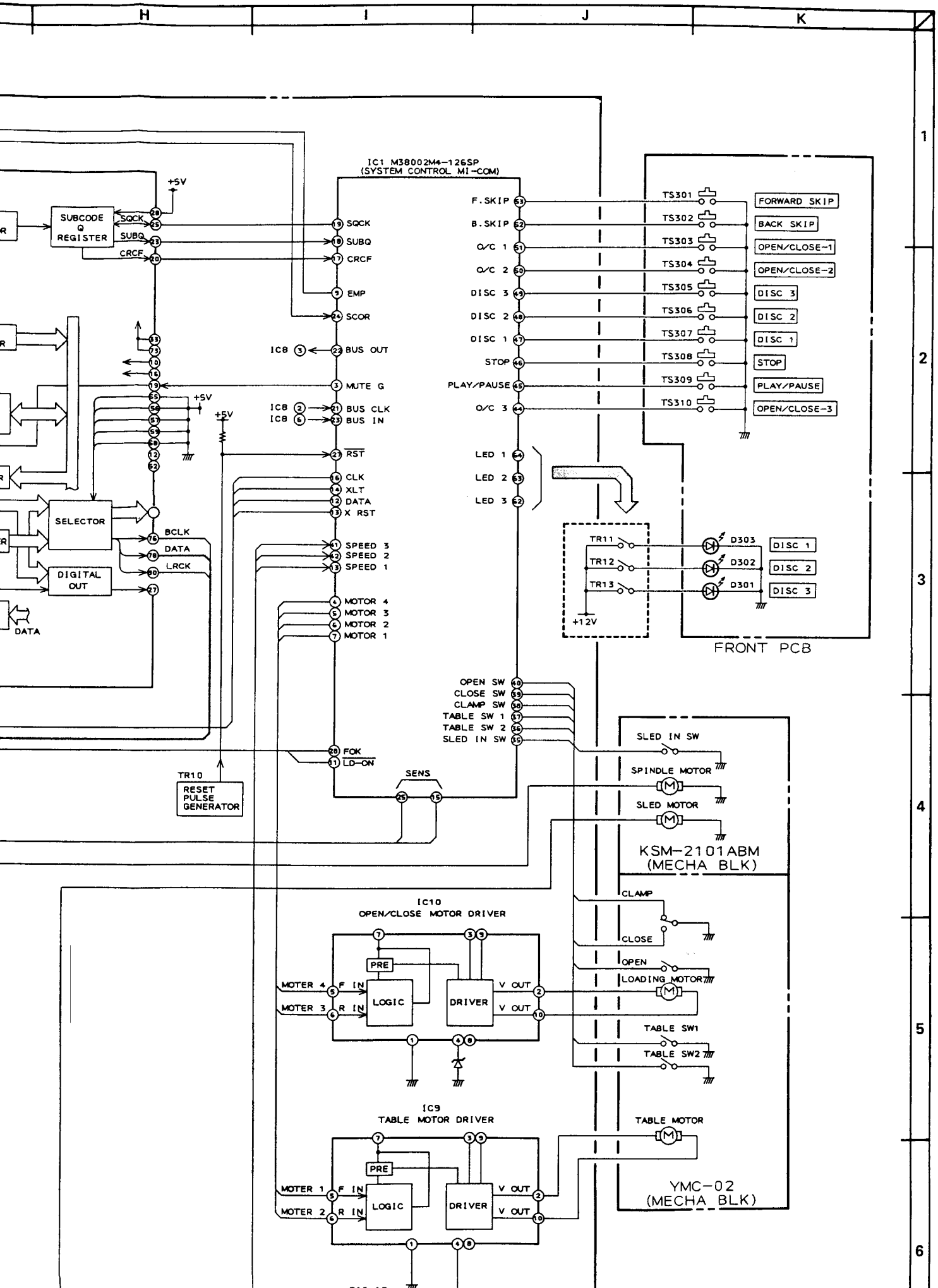
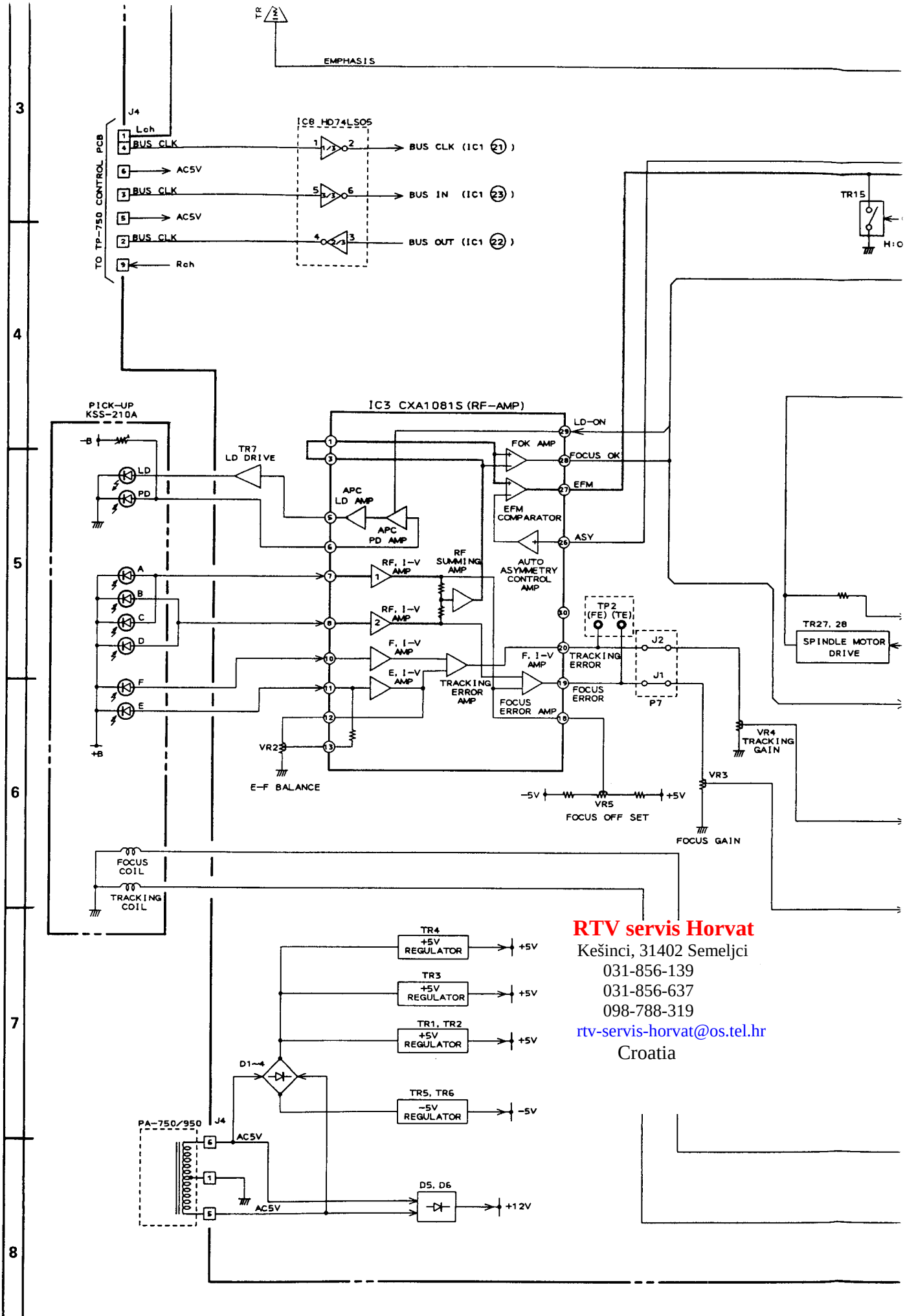

IC4 CXD1167Q
(DIGITAL SIGNAL PROCESOR)
ASY
EFM
PDO
GFS
FSW
MON
MDP
MDS
LOCK
VCO OUT
VCO IN
X1
16.9344 MHz
X' TAL OUT
X' TAL IN
TR16 H:ON
OSC STOP1
CN IN
LRCK
BCK
DATA
SUBCODE SYNC DETECTOR
SUBCODE DEMODULATOR
SUBCODE Q REGISTER
SQCK
SUBQ
CRCF
EFM-PLL
23 BIT SHIFT REGISTOR
EFM DEMODULATOR
CLV SERVO CONTROL
FROME SYNC DETECTOR/ PROTECTOR/INSERTER
ERROR DETECTOR/ CORRECTOR
VCO CIRCUIT TIMING GENERATOR
INTERPOLATOR
X' TAL CIRCUIT TIMING GENERATOR
DIGITAL FILTER
SELECTOR
DIGITAL OUT
TRACKING COUNTER
CPU INTERFACE
RAM
DATA
CLK
XLT
DATA
SENS
BCLK
DATA
LRCK
+5V
IC1 (SYST
SQCK
SUBQ
CRCF
EMP
SCOR
IC8 BUS OUT
MUTE G
IC8 BUS CLI
IC8 BUS IN
RST
CLK
XLT
DATA
X RST
SPEED
SPEED
SPEED
MOTOR
MOTOR
MOTOR
MOTOR
FOK
LD-ON
TR10
RESET PULSE GENERATOR
OSC STOP1
H:ON
TR9
GFS
TR8 H:ON
VR1 PLL
IC2
CXA1082BS
(SERVO CONTROL)
MON
MDP
LOCK
C864
3.5V
VCOF
ISET
PDI
BW
D GND
CLK
V LPF
VCO
LOOP FILTER
3.5V REGULATOR
V → I
TTL
I²L
XLT
DATA
XRST
DIRC
COUT
AVEE
SENS
F.SET
I²L DATA REGISTER
ADDRESS DECODER
INPUT SHIFT REGISTER
SEQUENCER
OUTPUT DECODER
FS1to4 TG1to2 TM1to7 PS1to3
I2L
TTL
TG1
TRACKING PHASE
MOTER 4
F IN
MOTER 3
R IN
MOTER 1
F IN
MOTER 2
R IN
OPEN.
PRE
LO


H
I
J
K
1
2
3
4
5
6
IC1 M38002M4-126SP
(SYSTEM CONTROL MI-COM)
+5V
SUBCODE Q REGISTER
SQCK
SUBQ
CRCF
EMP
SCOR
BUS OUT
MUTE G
BUS CLK
BUS IN
RST
CLK
XLT
DATA
X RST
SELECTOR
BCLK
DATA
LRCK
DIGITAL OUT
SPEED 3
SPEED 2
SPEED 1
MOTOR 4
MOTOR 3
MOTOR 2
MOTOR 1
FOK
LD-ON
SENS
TR10
RESET PULSE GENERATOR
F.SKIP
B.SKIP
O/C 1
O/C 2
DISC 3
DISC 2
DISC 1
STOP
PLAY/PAUSE
O/C 3
LED 1
LED 2
LED 3
TS301
TS302
TS303
TS304
TS305
TS306
TS307
TS308
TS309
TS310
FORWARD SKIP
BACK SKIP
OPEN/CLOSE-1
OPEN/CLOSE-2
DISC 3
DISC 2
DISC 1
STOP
PLAY/PAUSE
OPEN/CLOSE-3
TR11
TR12
TR13
+12V
D303
D302
D301
DISC 1
DISC 2
DISC 3
FRONT PCB
OPEN SW
CLOSE SW
CLAMP SW
TABLE SW 1
TABLE SW 2
SLED IN SW
SLED IN SW
SPINDLE MOTOR
SLED MOTOR
KSM-2101ABM
(MECHA BLK)
IC10
OPEN/CLOSE MOTOR DRIVER
PRE
MOTER 4
F IN
MOTER 3
R IN
LOGIC
DRIVER
V OUT
V OUT
CLAMP
CLOSE
OPEN
LOADING MOTOR
TABLE SW1
TABLE SW2
IC9
TABLE MOTOR DRIVER
MOTER 1
MOTER 2
TABLE MOTOR
YMC-02
(MECHA BLK)



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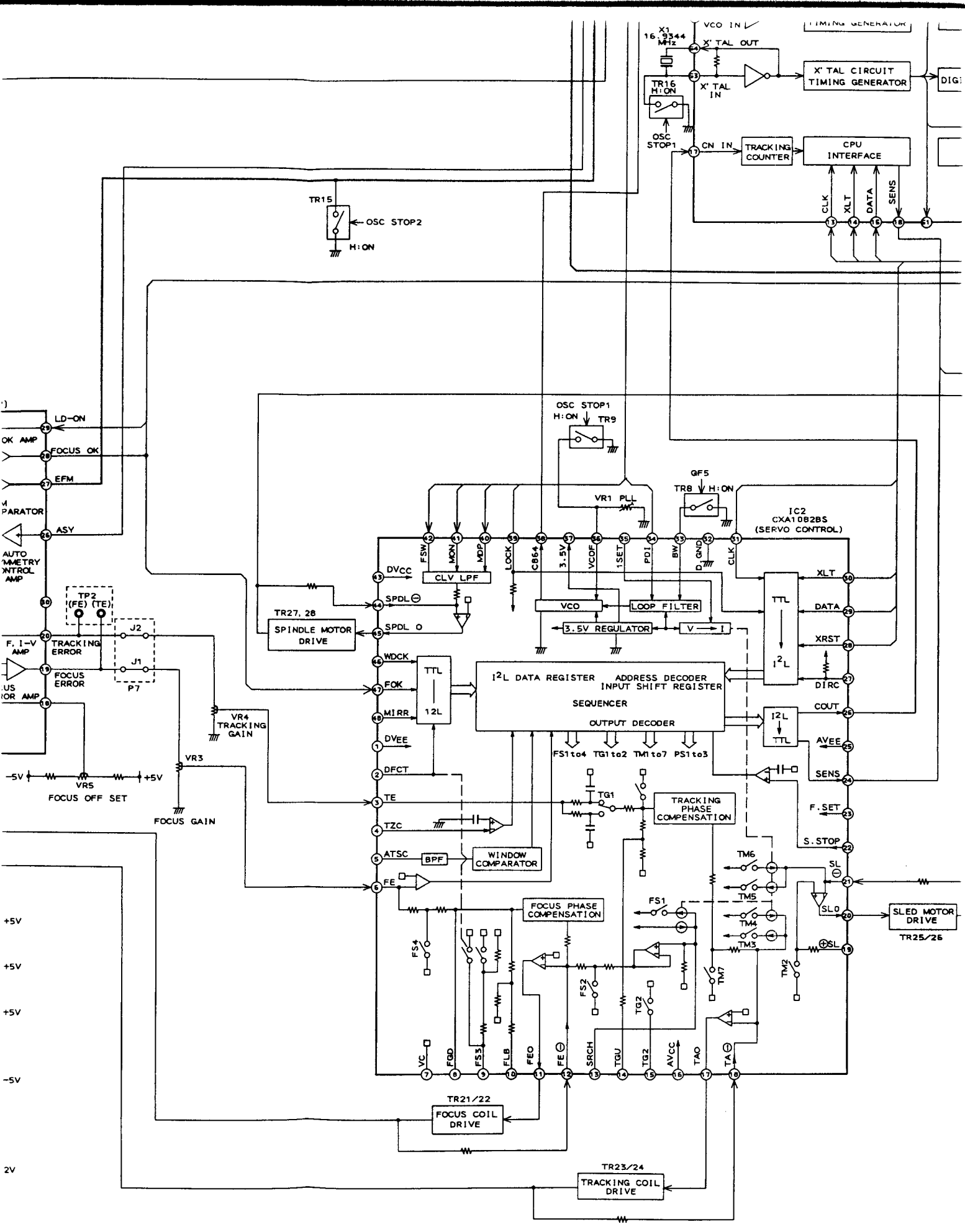
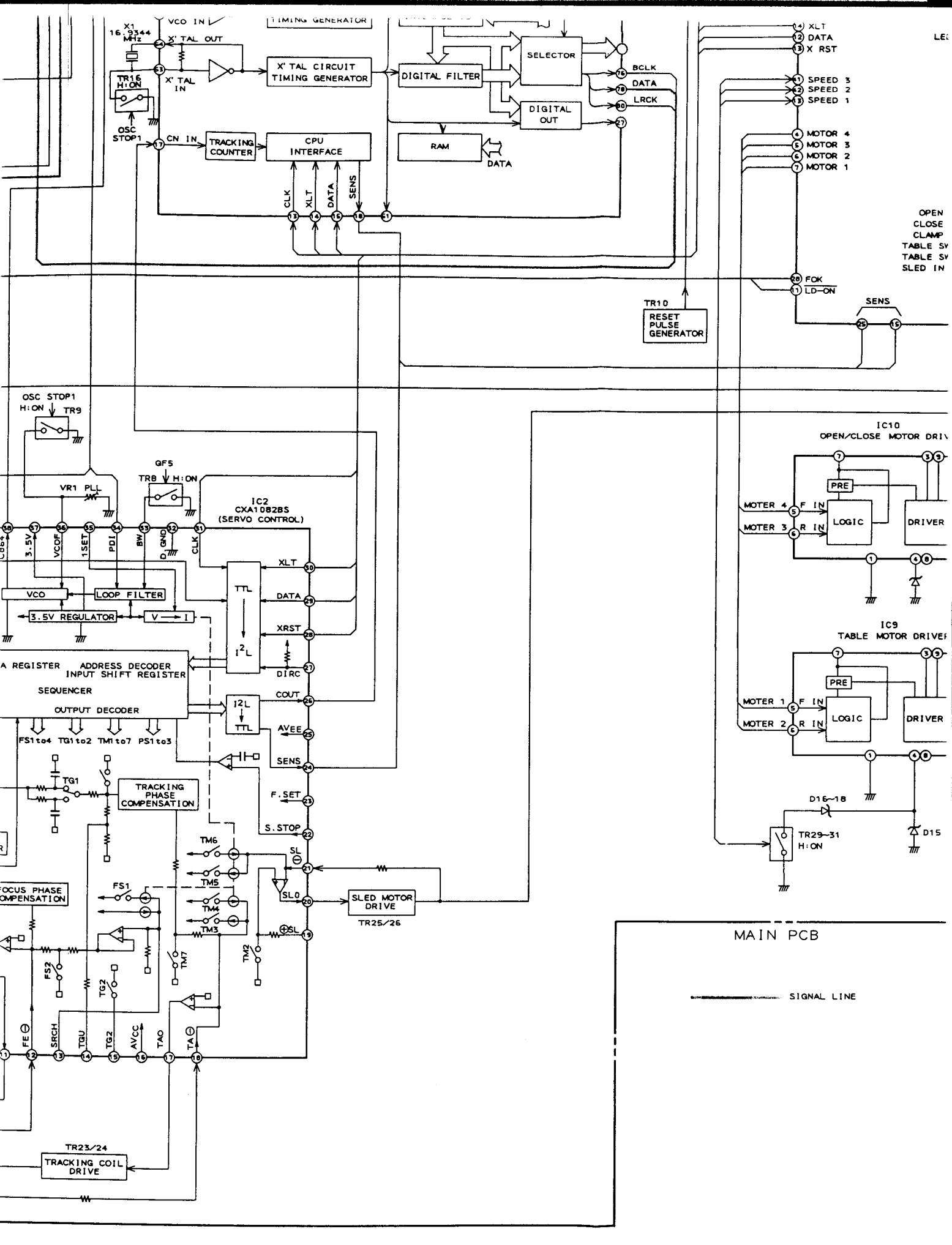
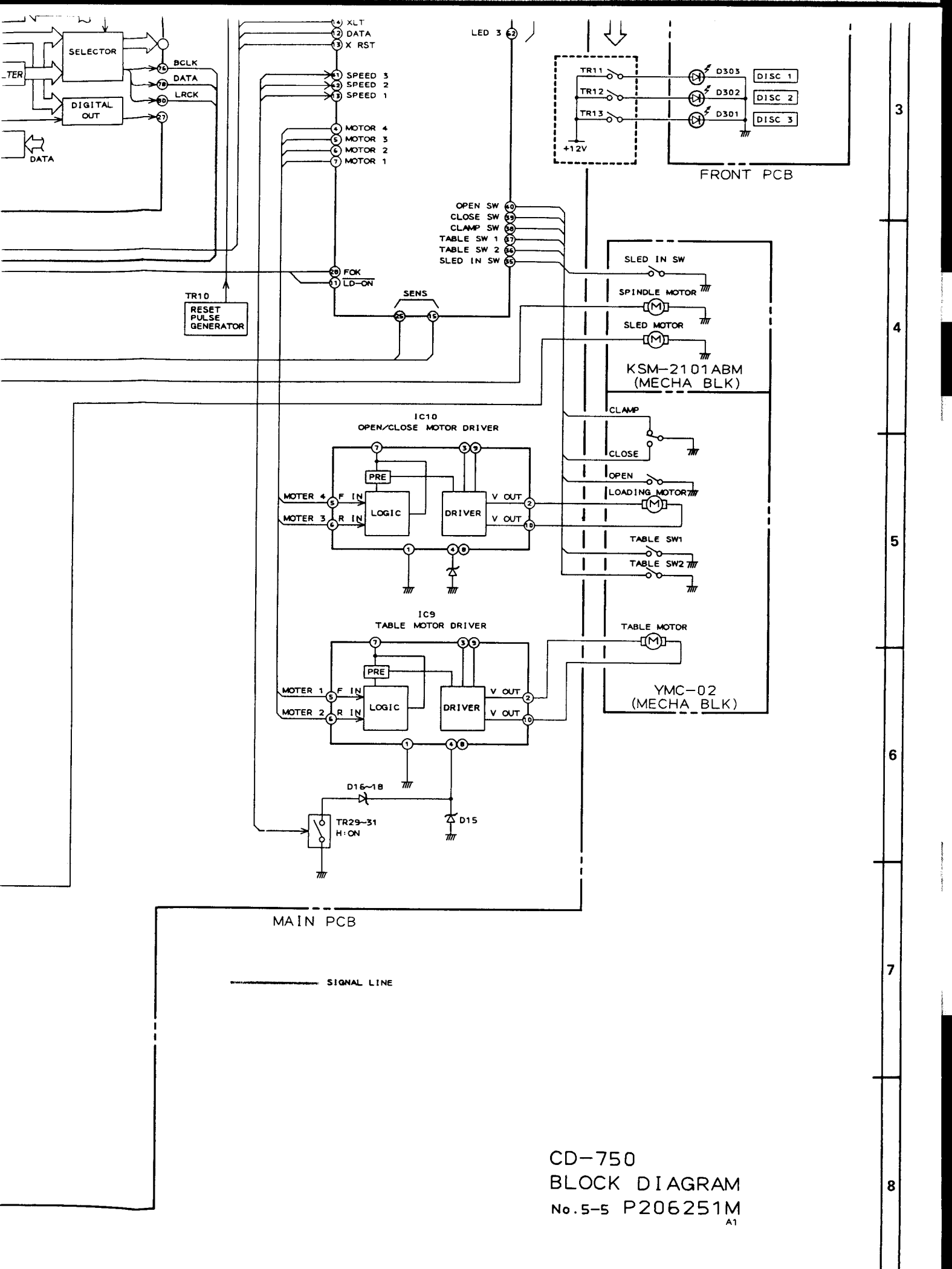
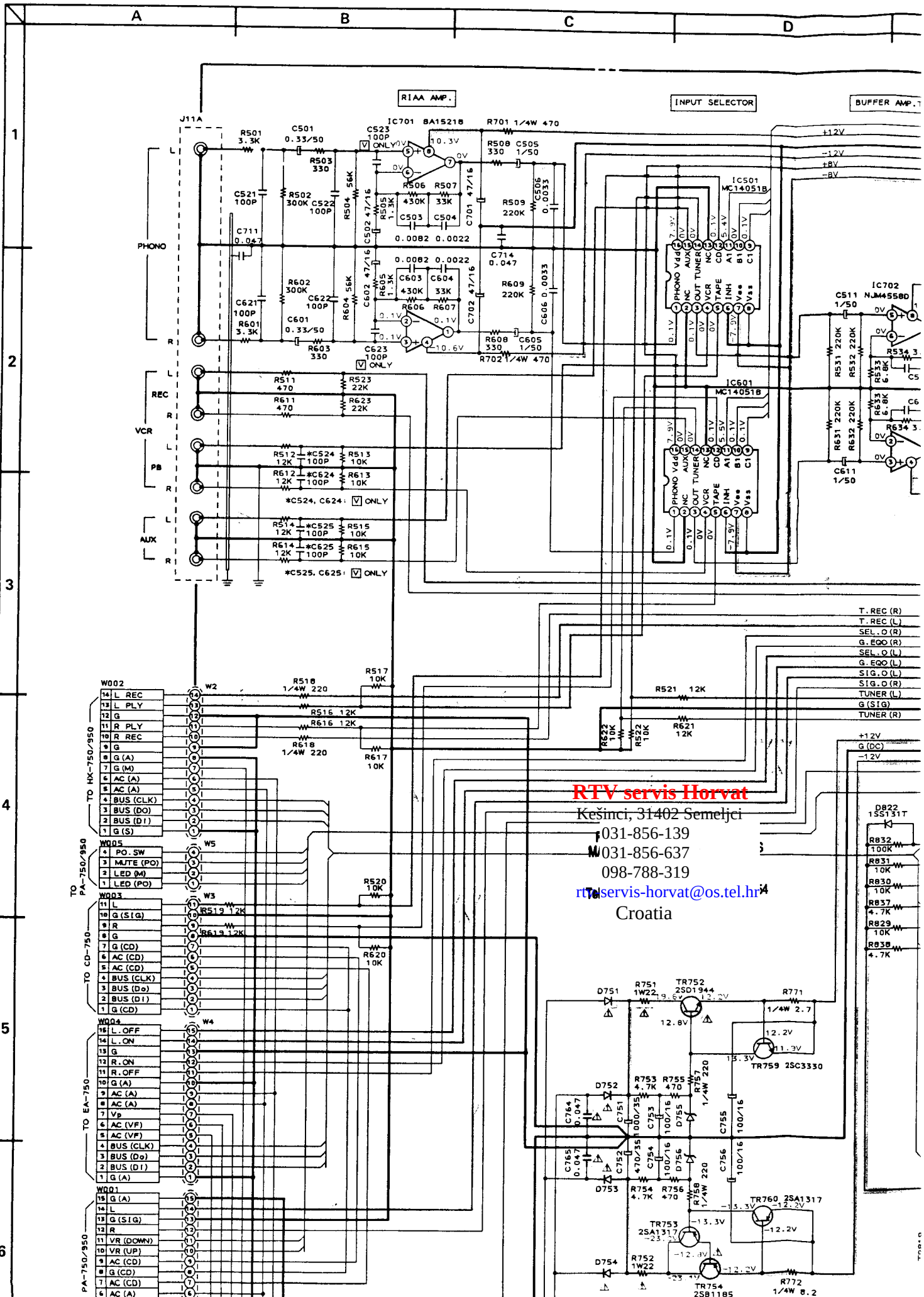

X1
16.9344 MHz
X' TAL OUT
X' TAL IN
TR16
H:ON
OSC STOP1
VCO IN
CN IN
TRACKING COUNTER
CPU INTERFACE
X' TAL CIRCUIT
TIMING GENERATOR
CLK
XLT
DATA
SENS
TR15
OSC STOP2
H:ON
LD-ON
FOCUS OK
EFM
ASY
TP2
(FE) (TE)
J2
J1
P7
TRACKING ERROR
FOCUS ERROR
VR4
TRACKING GAIN
VR3
FOCUS GAIN
VR5
FOCUS OFF SET
-5V
+5V
OSC STOP1
H:ON
TR9
GF5
TR8
H:ON
VR1 PLL
IC2
CXA1082BS
(SERVO CONTROL)
FSW
MON
MDP
LOCK
C864
3.5V
VCOF
1SET
PDI
BW
GND
CLK
DVCC
CLV LPF
SPDL⊖
SPDL ⊙
TR27, 28
SPINDLE MOTOR DRIVE
VCO
LOOP FILTER
3.5V REGULATOR
V → I
WDCK
FOK
MIRR
DVEE
DFCT
TE
TZC
ATSC
FE
TTL
12L
I²L DATA REGISTER
ADDRESS DECODER
INPUT SHIFT REGISTER
SEQUENCER
OUTPUT DECODER
FS1to4 TG1to2 TM1to7 PS1to3
TTL
I²L
XLT
DATA
XRST
DIRC
COUT
I2L
TTL
AVEE
SENS
F.SET
S.STOP
SL⊖
SL⊙
SLED MOTOR DRIVE
TR25/26
TG1
TRACKING PHASE COMPENSATION
BPF
WINDOW COMPARATOR
FOCUS PHASE COMPENSATION
TM6
TM5
TM4
TM3
TM2
TM7
FS1
FS2
FS4
TG2
VC
FGD
FS3
FLB
FEO
FE⊖
SRCH
TGU
TG2
AVCC
TAO
TA⊖
TR21/22
FOCUS COIL DRIVE
TR23/24
TRACKING COIL DRIVE


VCO IN
X1
16.9344 MHz
X' TAL OUT
X' TAL IN
TR16 H:ON
OSC STOP1
CN IN
TRACKING COUNTER
CPU INTERFACE
X' TAL CIRCUIT TIMING GENERATOR
DIGITAL FILTER
SELECTOR
DIGITAL OUT
RAM
DATA
BCLK
DATA
LRCK
CLK
XLT
DATA
SENS
XLT
DATA
X RST
SPEED 3
SPEED 2
SPEED 1
MOTOR 4
MOTOR 3
MOTOR 2
MOTOR 1
FOK
LD-ON
SENS
TR10
RESET PULSE GENERATOR
OSC STOP1
H:ON
TR9
QF5
TR8 H:ON
VR1 PLL
IC2
CXA1082BS
(SERVO CONTROL)
3.5V
VCOF
ISET
PDI
BW
GND
CLK
VCO
LOOP FILTER
3.5V REGULATOR
V → I
TTL
I²L
XLT
DATA
XRST
DIRC
COUT
AVEE
SENS
F.SET
S.STOP
SL
SL0
SLED MOTOR DRIVE
TR25/26
A REGISTER
ADDRESS DECODER
INPUT SHIFT REGISTER
SEQUENCER
OUTPUT DECODER
FS1to4
TG1to2
TM1to7
PS1to3
TG1
TRACKING PHASE COMPENSATION
FOCUS PHASE COMPENSATION
TM6
TM5
TM4
TM3
TM2
TM7
FS1
FS2
TG2
FE
SRCH
TGU
TG2
AVCC
TAO
TA
TR23/24
TRACKING COIL DRIVE
IC10
OPEN/CLOSE MOTER DRIV
MOTER 4
MOTER 3
F IN
R IN
PRE
LOGIC
DRIVER
IC9
TABLE MOTOR DRIVE
MOTER 1
MOTER 2
D16~18
D15
TR29~31
H:ON
OPEN
CLOSE
CLAMP
TABLE SV
TABLE SV
SLED IN
MAIN PCB
SIGNAL LINE



CD-750
BLOCK DIAGRAM
No.5-5 P206251M
A1



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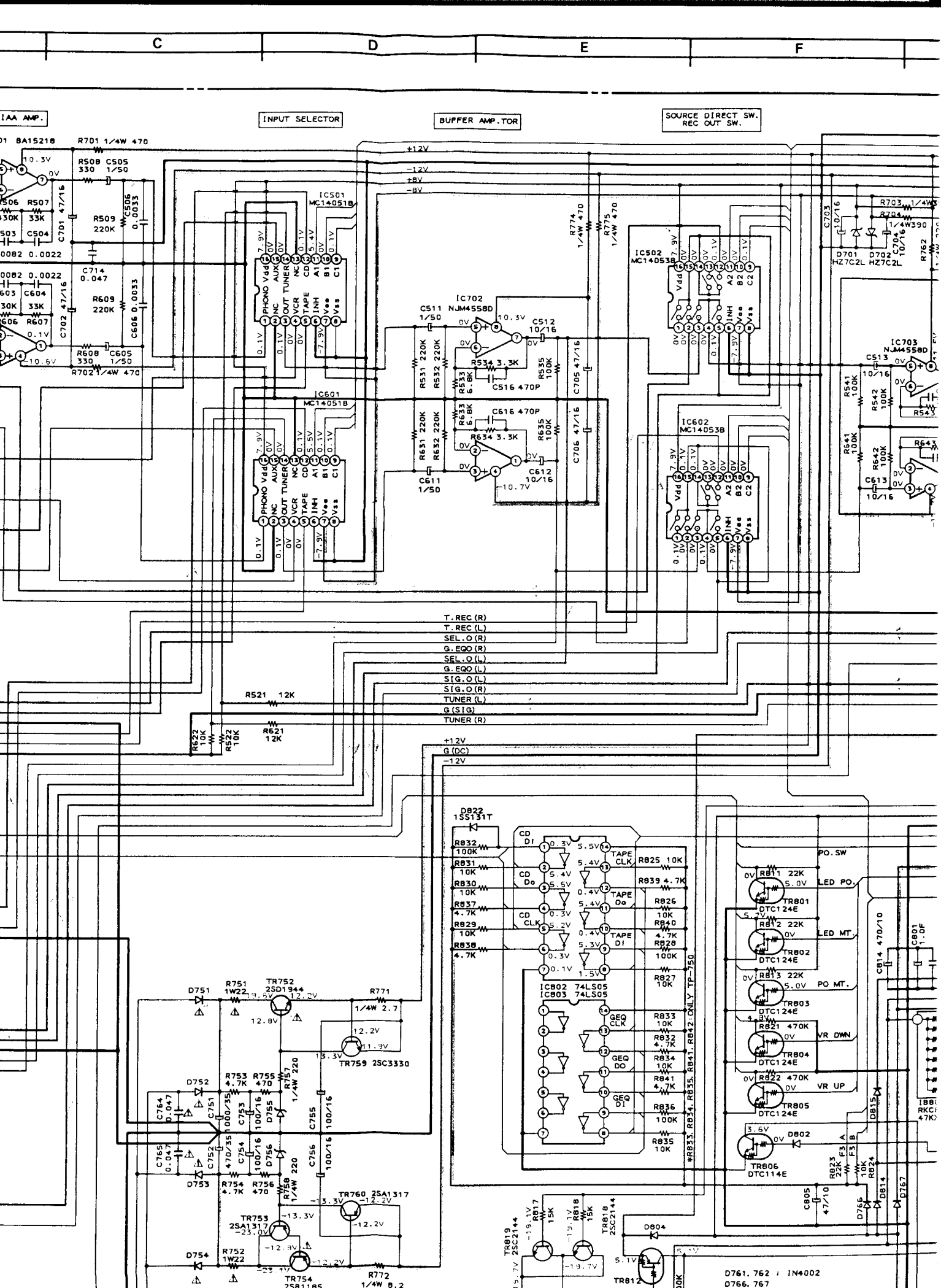
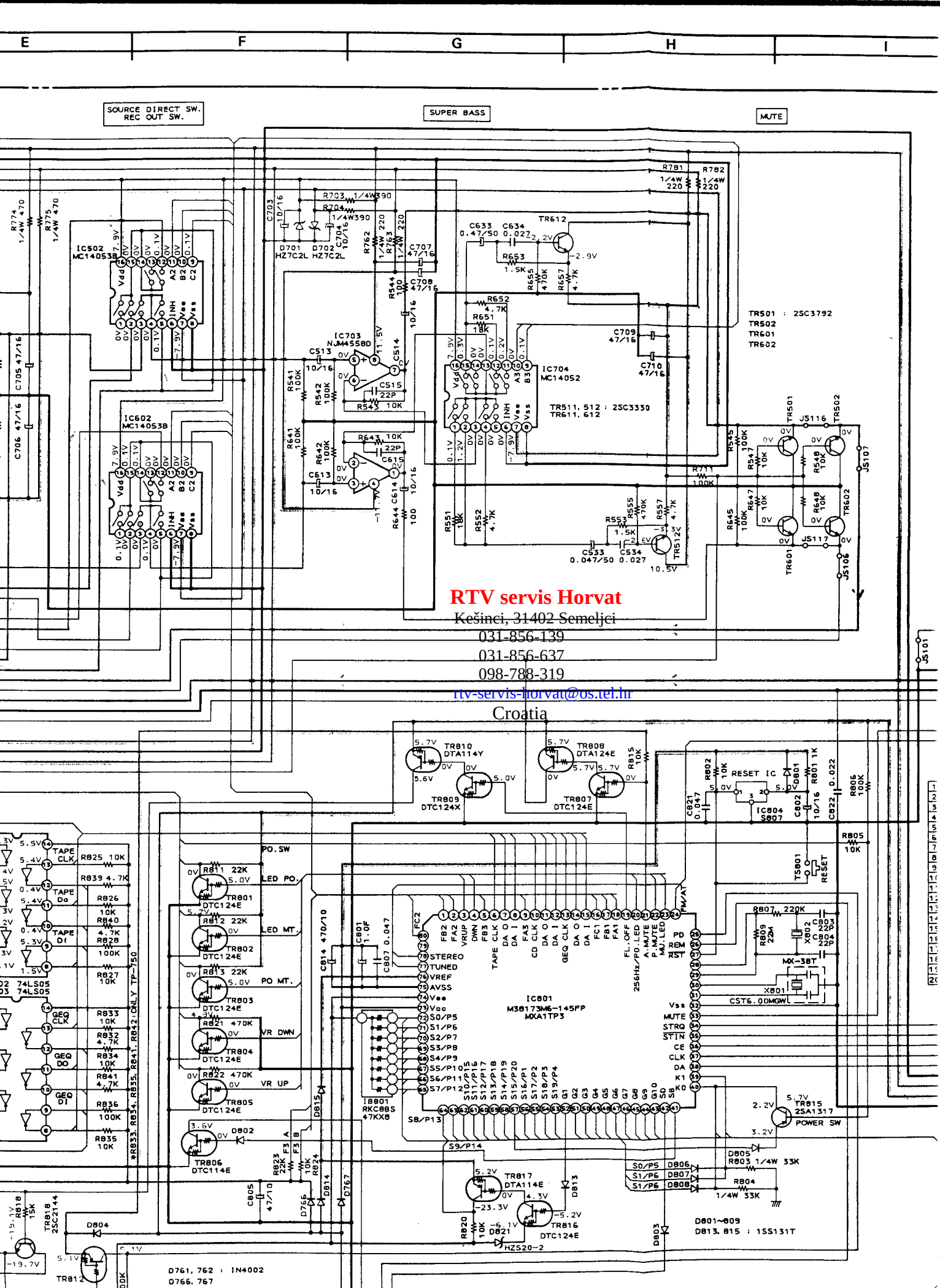

C
D
E
F
IAA AMP.
INPUT SELECTOR
BUFFER AMP.TOR
SOURCE DIRECT SW.
REC OUT SW.
+12V
-12V
+8V
-8V
IC501 MC14051B
IC601 MC14051B
IC702 NJM4558D
IC502 MC14053B
IC602 MC14053B
IC703 NJM4558D
T.REC (R)
T.REC (L)
SEL.O (R)
G.EQO (R)
SEL.O (L)
G.EQO (L)
SIG.O (L)
SIG.O (R)
TUNER (L)
G (SIG)
TUNER (R)
G (DC)
D822 1SS131T
IC802 74LS05
IC803 74LS05
*R833, R834, R835, R841, R842: ONLY TP-750
PO. SW
LED PO.
LED MT.
PO MT.
VR DWN
VR UP
TR752 2SD1944
TR759 2SC3330
TR760 2SA1317
TR753 2SA1317
TR754 2SB1185
TR819 2SC2144
TR818 2SC2144
TR812
TR801 DTC124E
TR802 DTC124E
TR803 DTC124E
TR804 DTC124E
TR805 DTC124E
TR806 DTC114E
D761, 762 : IN4002
D766, 767


SOURCE DIRECT SW.
REC OUT SW.
SUPER BASS
MUTE
IC502 MC14053B
IC602 MC14053B
IC703 NJM4558D
IC704 MC14052
TR612
TR501 : 2SC3792
TR502
TR601
TR602
TR511, 512 : 2SC3330
TR611, 612
RESET IC
IC804 S807
IC801 M38173M6-145FP MXA1TP3
TR810 DTA114Y
TR808 DTA124E
TR809 DTC124X
TR807 DTC124E
TR801 DTC124E
TR802 DTC124E
TR803 DTC124E
TR804 DTC124E
TR805 DTC124E
TR806 DTC114E
TR817 DTA114E
TR816 DTC124E
TR815 2SA1317
POWER SW
TR812 2SC2144
IB801 RKC08S 47KX8
D761, 762 : IN4002
D766, 767
D801~809
D813, 815 : 1SS131T
PO.SW
LED PO.
LED MT.
PO MT.
VR DWN
VR UP
TAPE CLK
TAPE Do
TAPE DI
GEQ CLK
GEQ DO
GEQ DI
ONLY TP-750
74LS05
74LS05
MX-38T
CST6.00MGWL
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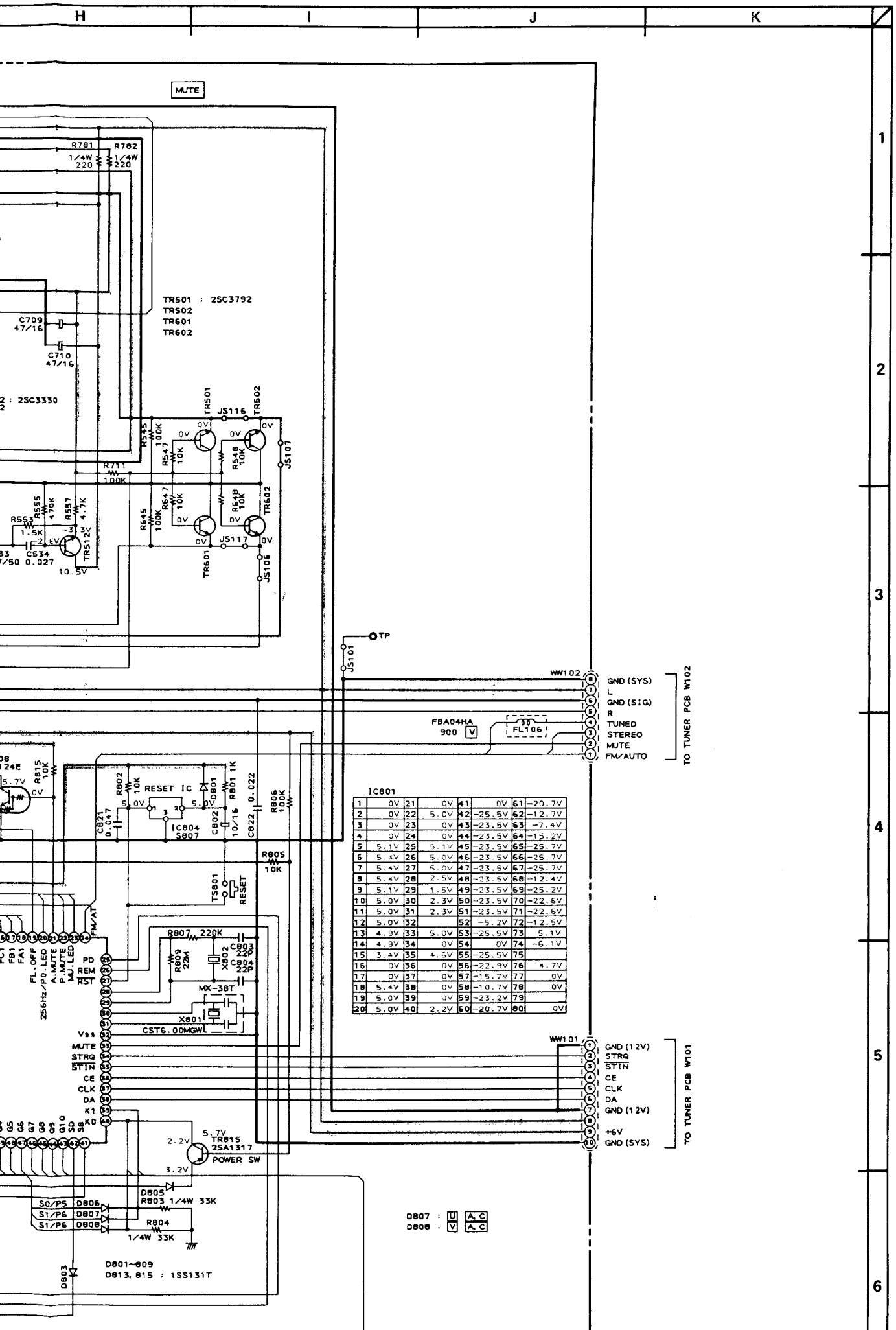
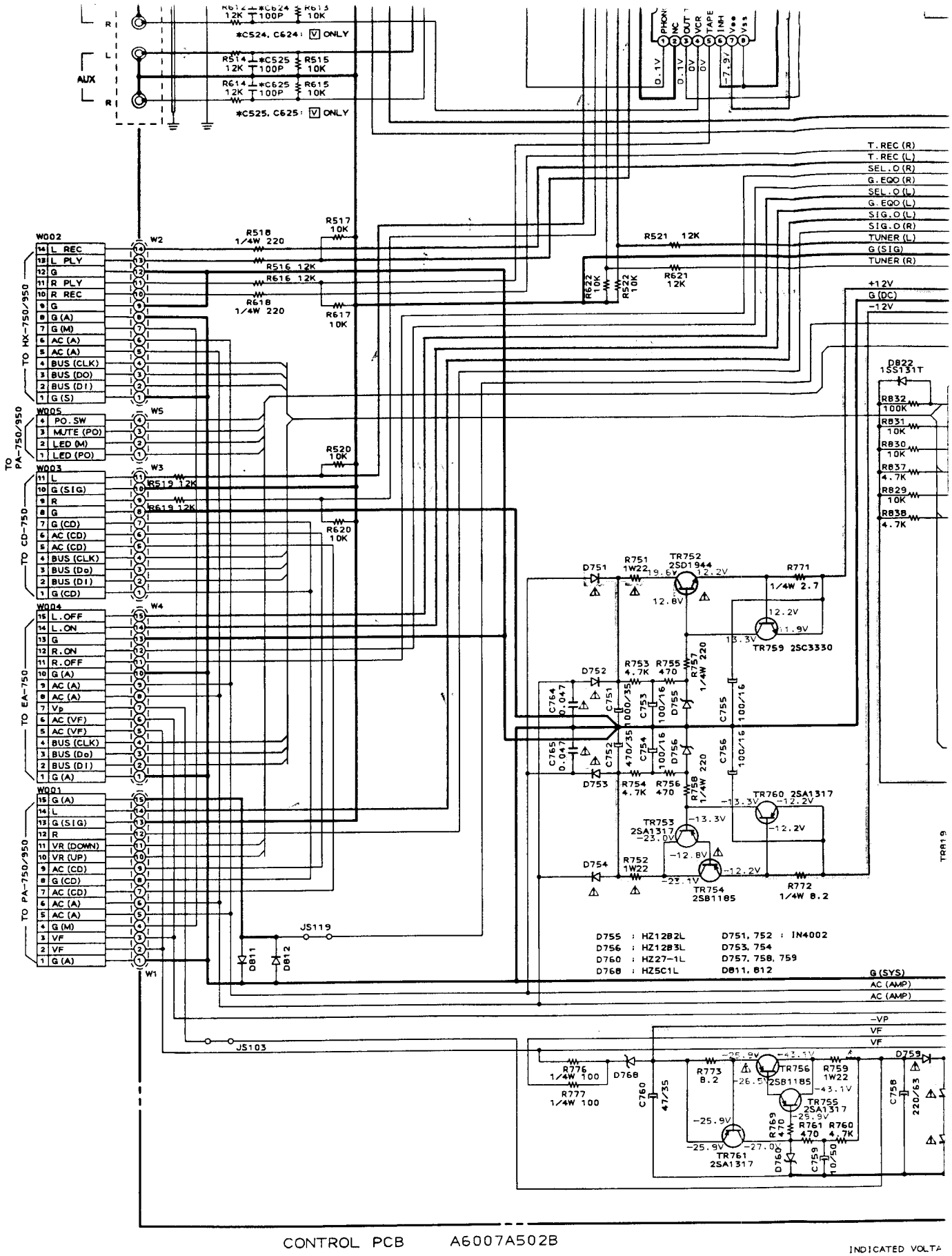


IC801							
1	0V	21	0V	41	0V	61	-20.7V
2	0V	22	5.0V	42	-25.5V	62	-12.7V
3	0V	23	0V	43	-23.5V	63	-7.4V
4	0V	24	0V	44	-23.5V	64	-15.2V
5	5.1V	25	5.1V	45	-23.5V	65	-25.7V
6	5.4V	26	5.0V	46	-23.5V	66	-25.7V
7	5.4V	27	5.0V	47	-23.5V	67	-25.7V
8	5.4V	28	2.5V	48	-23.5V	68	-12.4V
9	5.1V	29	1.5V	49	-23.5V	69	-25.2V
10	5.0V	30	2.3V	50	-23.5V	70	-22.6V
11	5.0V	31	2.3V	51	-23.5V	71	-22.6V
12	5.0V	32		52	-5.2V	72	-12.5V
13	4.9V	33	5.0V	53	-25.5V	73	5.1V
14	4.9V	34	0V	54	0V	74	-6.1V
15	3.4V	35	4.6V	55	-25.5V	75	
16	0V	36	0V	56	-22.9V	76	4.7V
17	0V	37	0V	57	-15.2V	77	0V
18	5.4V	38	0V	58	-10.7V	78	0V
19	5.0V	39	0V	59	-23.2V	79	
20	5.0V	40	2.2V	60	-20.7V	80	0V



CONTROL PCB A6007A502B

INDICATED VOLTA
DURING FM STERE

B (PC

AUDI

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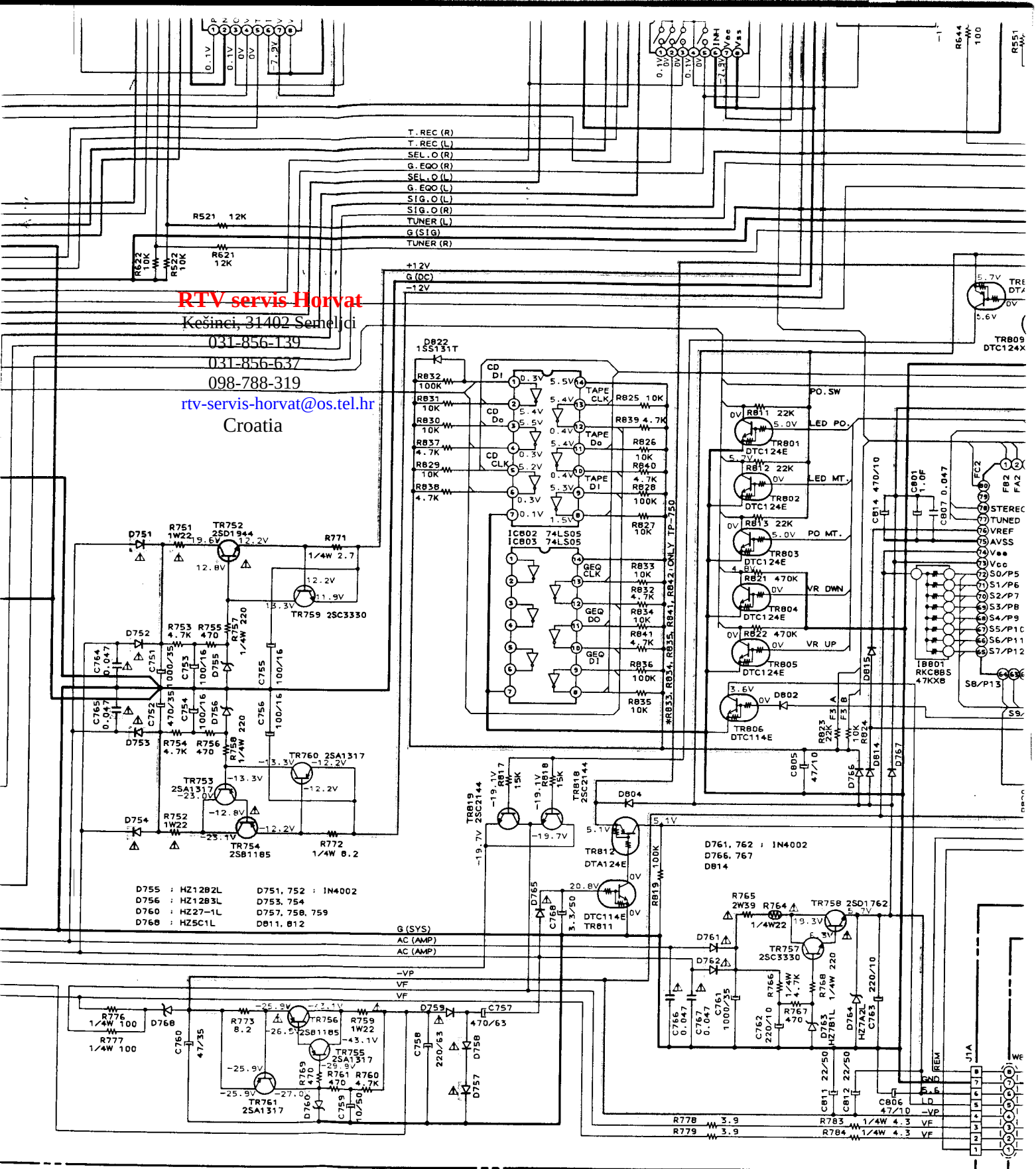


6007A502B

INDICATED VOLTAGES WERE MEASURED DURING FM STEREO MODE.

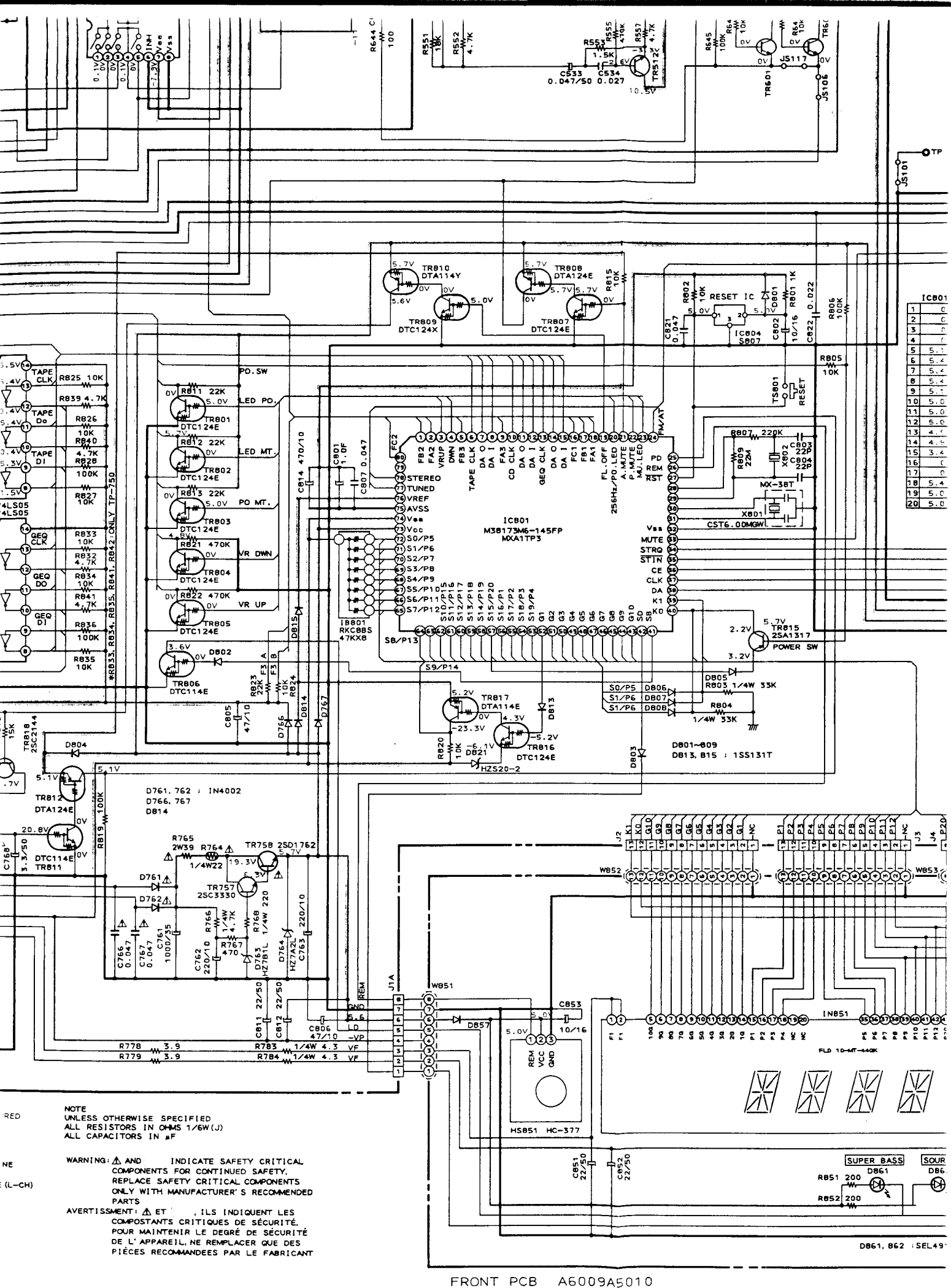
B (POWER SUPPLY) LINE

AUDIO SIGNAL LINE (L-CH)

NOTE
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS 1/6W (J)
ALL CAPACITORS IN μF

WARNING: ⚠ AND INDICATE SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

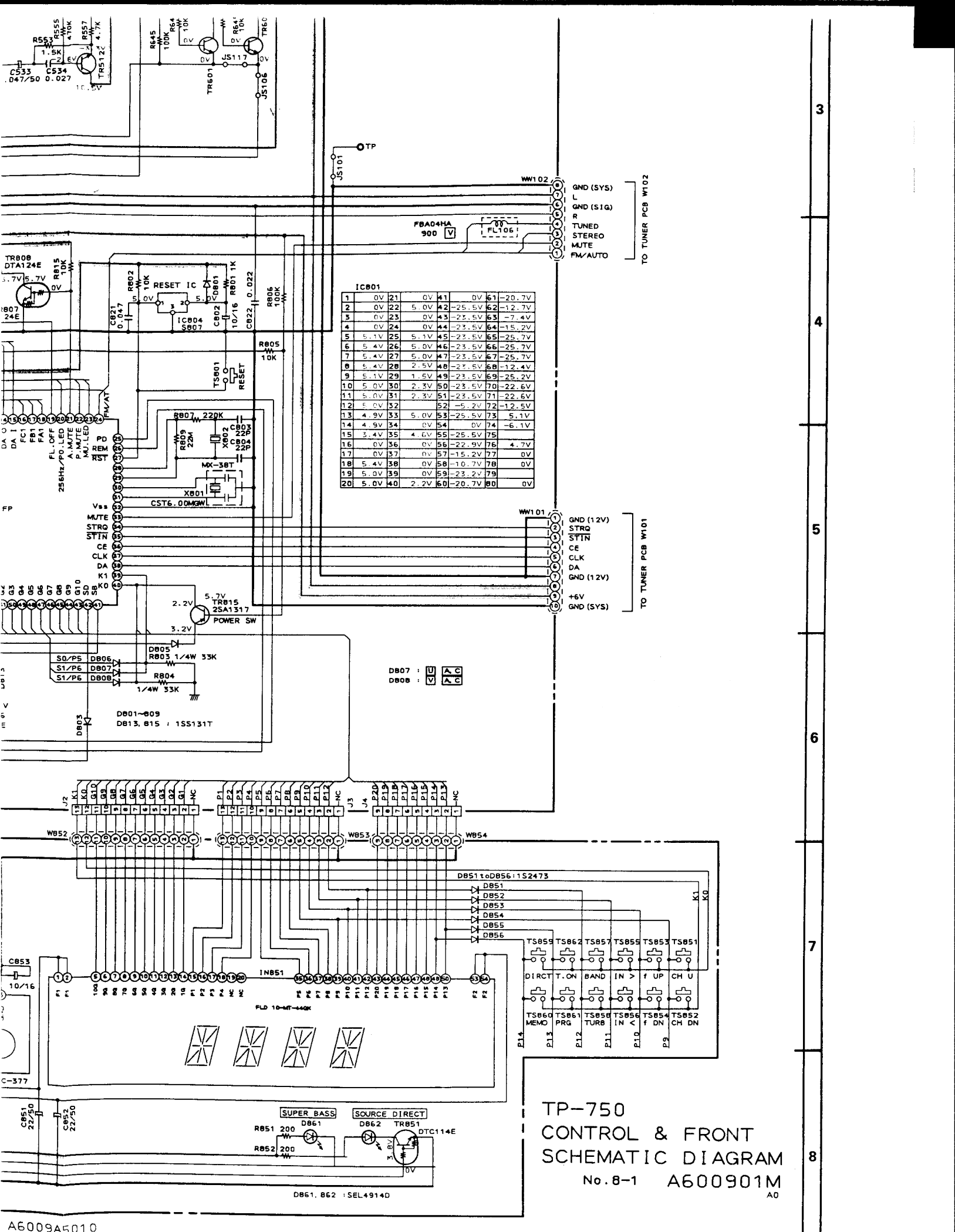
AVERTISSMENT: ⚠ ET , ILS INDIQUENT LES COMPOSTANTS CRITIQUES DE SÉCURITÉ, POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDEES PAR LE FABRICANT



NOTE
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS 1/6W(J)
ALL CAPACITORS IN μF

WARNING: ⚠ AND INDICATE SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY. REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

AVERTISSMENT: ⚠ ET , ILS INDIQUENT LES COMPOSTANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDEES PAR LE FABRICANT

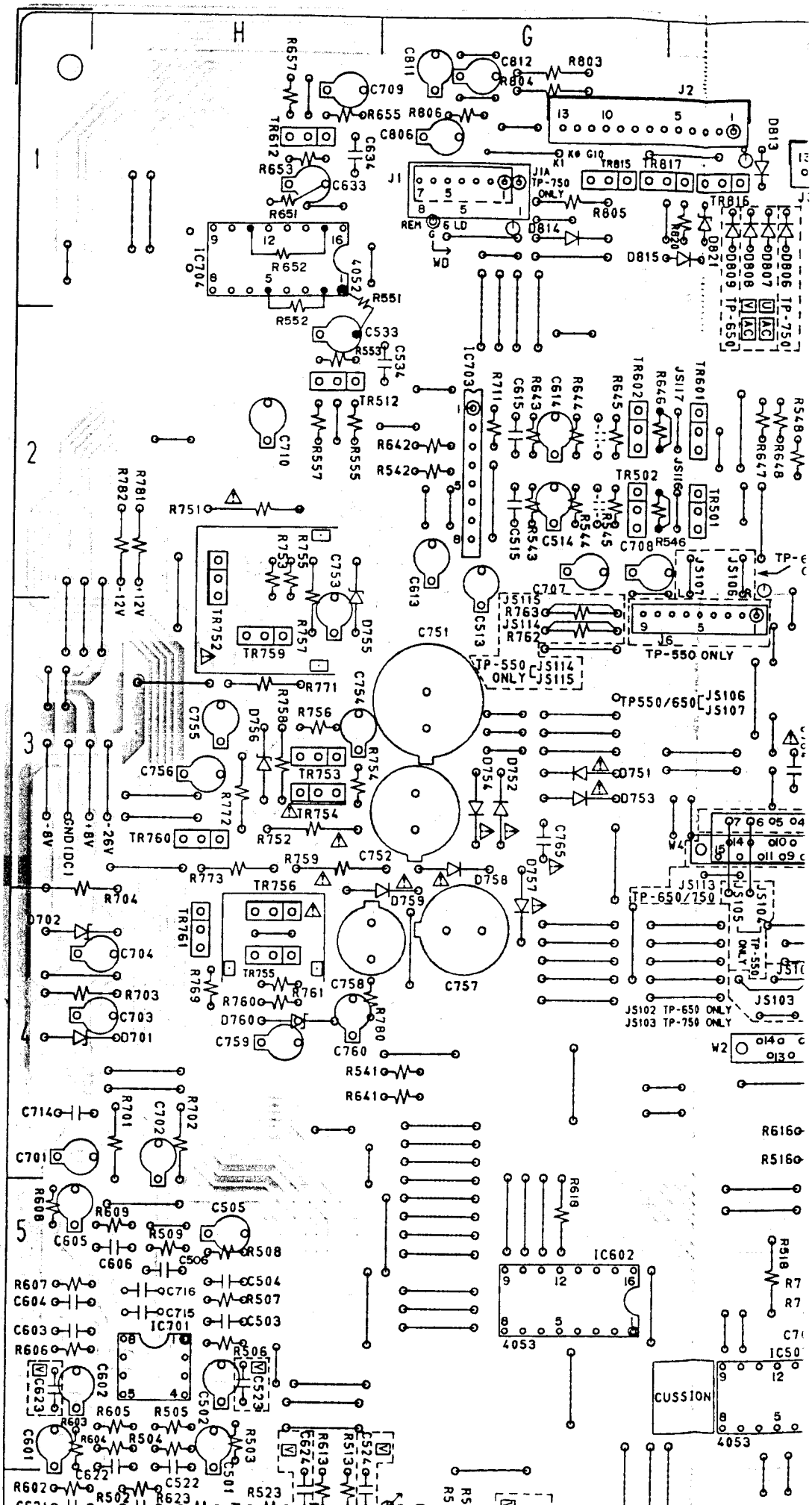


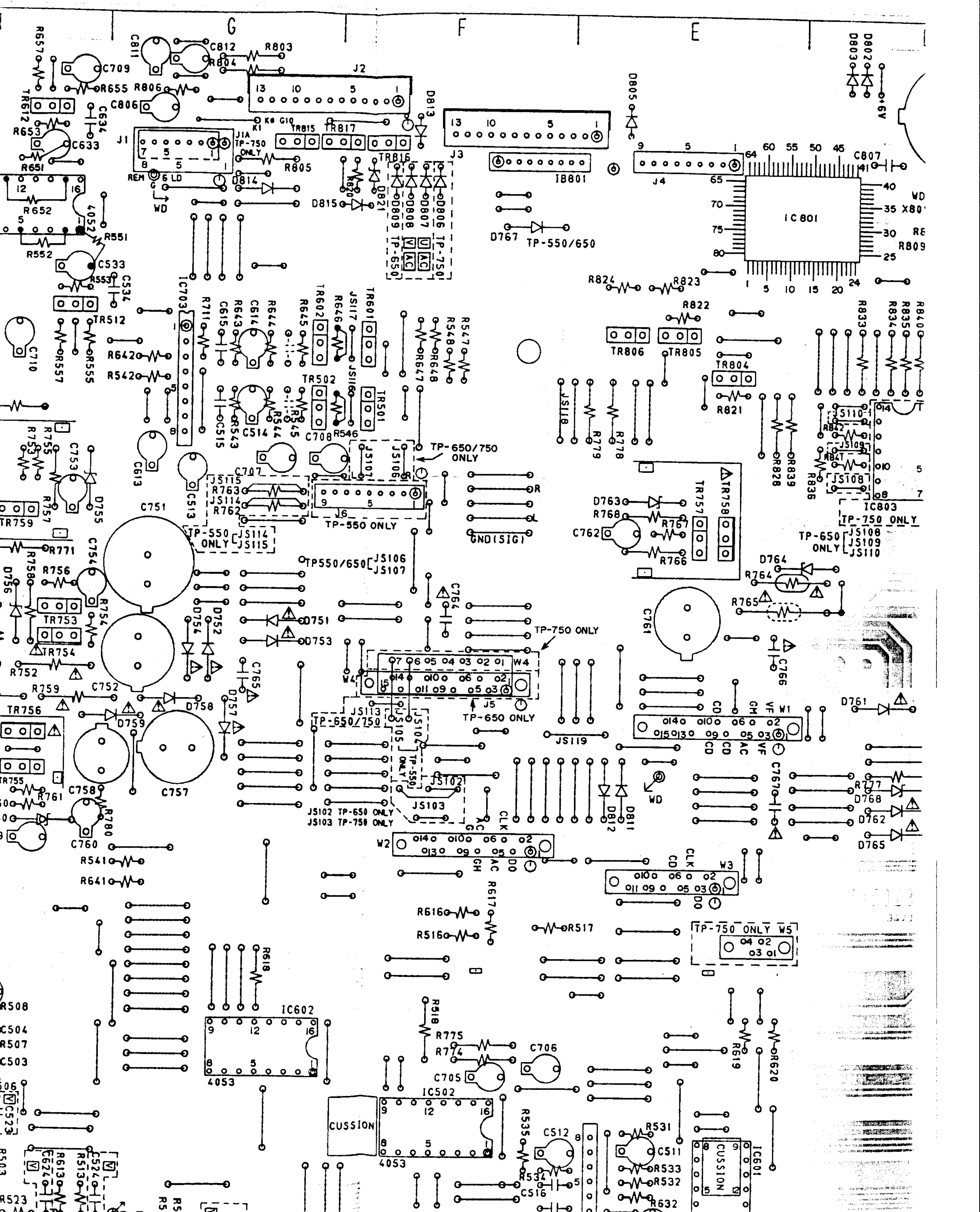
IC801							
1	0V	21	0V	41	0V	61	-20.7V
2	0V	22	5.0V	42	-25.5V	62	-12.7V
3	0V	23	0V	43	-23.5V	63	-7.4V
4	0V	24	0V	44	-23.5V	64	-15.2V
5	5.1V	25	5.1V	45	-23.5V	65	-25.7V
6	5.4V	26	5.0V	46	-23.5V	66	-25.7V
7	5.4V	27	5.0V	47	-23.5V	67	-25.7V
8	5.4V	28	2.5V	48	-23.5V	68	-12.4V
9	5.1V	29	1.5V	49	-23.5V	69	-25.2V
10	5.0V	30	2.3V	50	-23.5V	70	-22.6V
11	5.0V	31	2.3V	51	-23.5V	71	-22.6V
12	5.0V	32		52	-5.2V	72	-12.5V
13	4.9V	33	5.0V	53	-25.5V	73	5.1V
14	4.9V	34	0V	54	0V	74	-6.1V
15	3.4V	35	4.6V	55	-25.5V	75	
16	0V	36	0V	56	-22.9V	76	4.7V
17	0V	37	0V	57	-15.2V	77	0V
18	5.4V	38	0V	58	-10.7V	78	0V
19	5.0V	39	0V	59	-23.2V	79	
20	5.0V	40	2.2V	60	-20.7V	80	0V

TP-750
CONTROL & FRONT
SCHEMATIC DIAGRAM

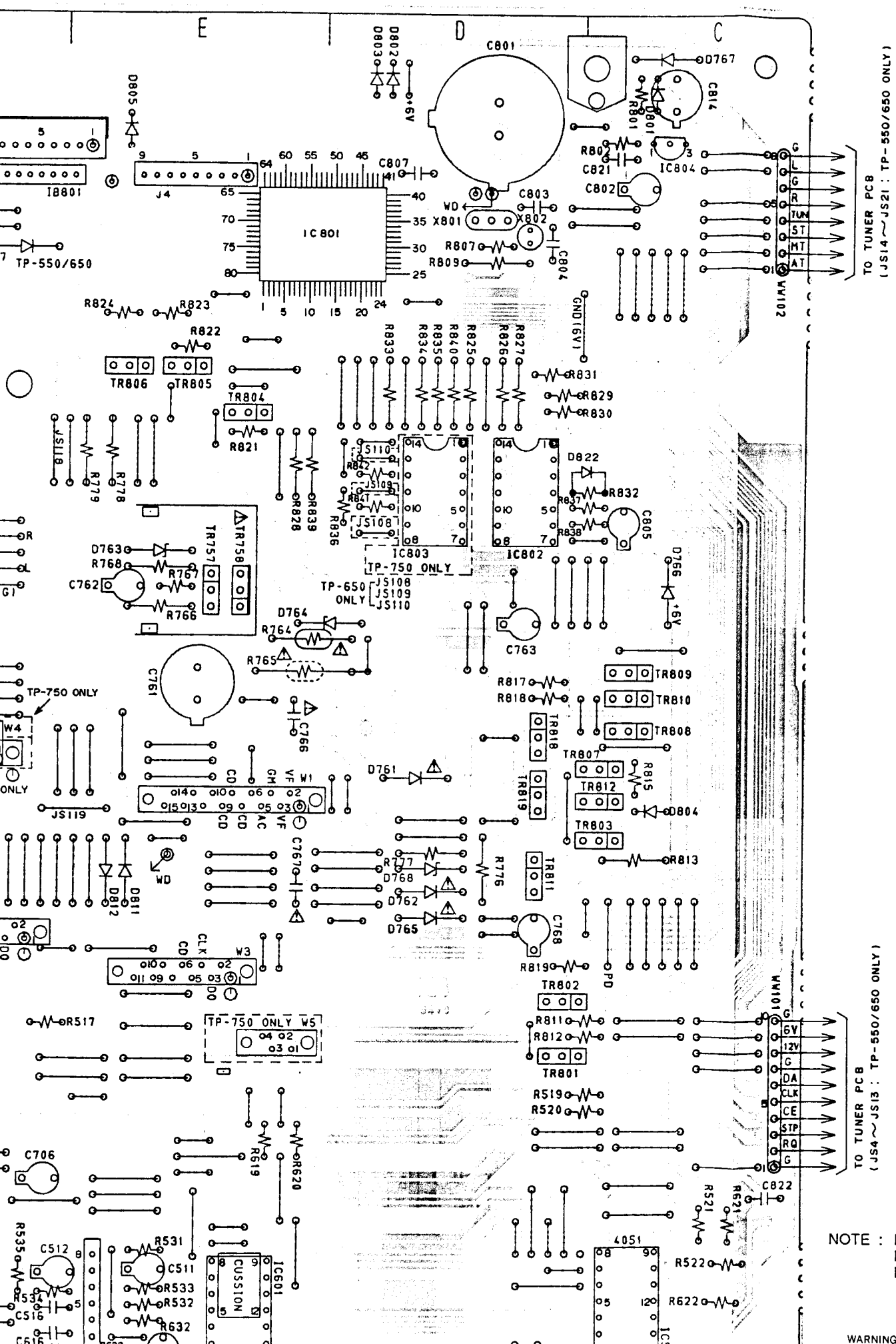
No.8-1 A600901M

A0


H
G
1
2
3
4
5
R657
C709
R655
C811
C812
R803
R804
R806
C806
J2
13
10
5
D813
TR612
C634
R653
C633
R651
J1
J1A
TP-750
ONLY
K1
K0 G10
TR815
TR817
R805
TR816
D814
REM
6 LD
WD
D821
D815
D806
D807
D808
D809
TP-750
TP-650
IC704
12
16
8
5
4052
R652
R551
R552
C533
R553
C534
TR512
IC703
R711
C615
R643
C614
R644
R645
TR602
R646
JS117
TR601
JS116
TR501
R548
R647
R648
C710
R557
R555
R642
R542
TR502
C514
R544
R545
R543
C515
C708
R546
C613
C513
C707
JS115
R763
JS114
R762
J6
TP-550 ONLY
JS106
JS107
TP-
R751
R781
R782
+12V
-12V
R755
R758
C753
D755
R757
TR752
TR759
C751
TP-550
ONLY
JS114
JS115
R771
C754
R756
C755
D756
R758
TR753
R754
C756
R772
TR760
R752
TP550/650
JS106
JS107
D751
D753
D754
D752
C765
D757
W4
-8V
GND
DC1
+8V
-26V
R704
R759
C752
R773
TR756
D758
D759
C757
JS113
TP-650/750
JS104
JS105
TP-550
ONLY
JS1
JS103
JS102 TP-650 ONLY
JS103 TP-750 ONLY
D702
C704
TR761
TR755
R769
R761
R760
C758
R780
D760
C759
C760
W2
R703
C703
D701
R541
R641
C714
R701
C702
R702
C701
R608
R609
C505
R509
R508
C605
C606
C506
R607
C604
C504
C716
R507
C715
IC701
C503
C603
R606
R506
C602
C623
C523
C502
R603
R605
R505
R503
C601
R604
R504
C622
C501
R602
R502
C522
R623
R523
R618
IC602
4053
R616
R516
R518
R7
C7
IC50
CUSSION
4053



G
F
E
J1
J1A TP-750 ONLY
J2
J3
J4
J5
J6
IB801
IC801
IC803
TP-750 ONLY
IC703
IC602
IC502
IC601
4052
4053
CUSSION
TP-550 ONLY
TP-650 ONLY
TP-650/750 ONLY
TP-550/650
TP-750 ONLY
TP-550 ONLY JS114 JS115
TP550/650 JS106 JS107
TP-650 ONLY JS108 JS109 JS110
JS102 TP-650 ONLY
JS103 TP-750 ONLY
TP-650/750
W1
W2
W3
W4
W5
TP-750 ONLY W5
GND(SIG)
WD
REM
6 LD
+6V
D767 TP-550/650
D809 D808 D807 D806 TP-650 TP-750
C709 C811 C812 C806 C633 C634 C533 C534 C710 C615 C614 C515 C514 C613 C513 C707 C708 C751 C752 C753 C754 C757 C758 C760 C761 C762 C764 C765 C766 C767 C705 C706 C807 C511 C512 C516 C504 C503
R657 R655 R806 R803 R804 R653 R651 R652 R551 R552 R553 R557 R555 R642 R542 R711 R643 R644 R645 R646 R647 R648 R547 R548 R543 R544 R545 R546 R805 R820 R824 R823 R822 R821 R833 R834 R835 R840 R809 R828 R839 R836 R842 R841 R779 R778 R763 R762 R768 R767 R766 R764 R765 R753 R755 R757 R771 R758 R756 R754 R752 R759 R761 R780 R541 R641 R616 R516 R617 R517 R618 R518 R775 R774 R619 R620 R535 R531 R533 R532 R534 R632 R777 R508 R507 R523 R613 R513
D805 D802 D803 D813 D814 D815 D821 D763 D764 D761 D768 D762 D765 D751 D753 D752 D754 D755 D756 D757 D758 D759 D811 D812
TR612 TR512 TR815 TR817 TR816 TR602 TR601 TR502 TR501 TR806 TR805 TR804 TR757 TR758 TR759 TR753 TR754 TR756 TR755
JS117 JS116 JS118 JS119 JS107 JS106 JS115 JS114 JS113 JS105 JS104 JS102 JS103 JS110 JS109 JS108
CD GM VF AC CLK DO GH



PRINCIPA

ICs

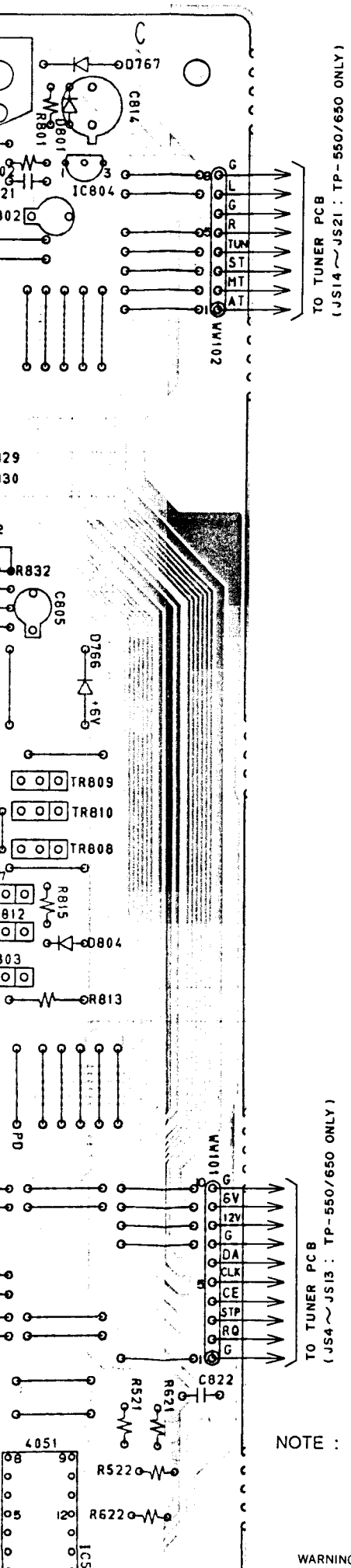
IC101 .....
IC301 .....
IC401 .....
IC501 .....
IC502 .....
IC601 .....
IC602 .....
IC701 .....
IC702 .....
IC703 .....
IC704 .....
IC801 .....
IC801A .....
IC802 .....
IC803 .....
IC804 .....

TRANSISTO

TR101 .....
TR201 .....
TR202 .....
TR203 .....
TR401 .....
TR402 .....
TR403 .....
TR404 .....
TR405 .....
TR406 .....
TR407 .....
TR408 .....
TR501 .....
TR502 .....
TR512 .....
TR601 .....
TR602 .....
TR612 .....
TR752 .....

NOTE : PARTS DIFFER
REFER TO SCHE
PARTS INFORMA

WARNING: ⚠ INDICATES SAFETY



PRINCIPAL PARTS LOCATION

ICs

IC101	B2,3
IC301	B1
IC401	B4,5
IC501	C5,6
IC502	F5
IC601	E5,6
IC602	G5
IC701	H5
IC702	E5,6
IC703	G2
IC704	H1
IC801	D,E1
IC801A	D,E1
IC802	D2,3
IC803	D2,3
IC804	C1

TRANSISTORs

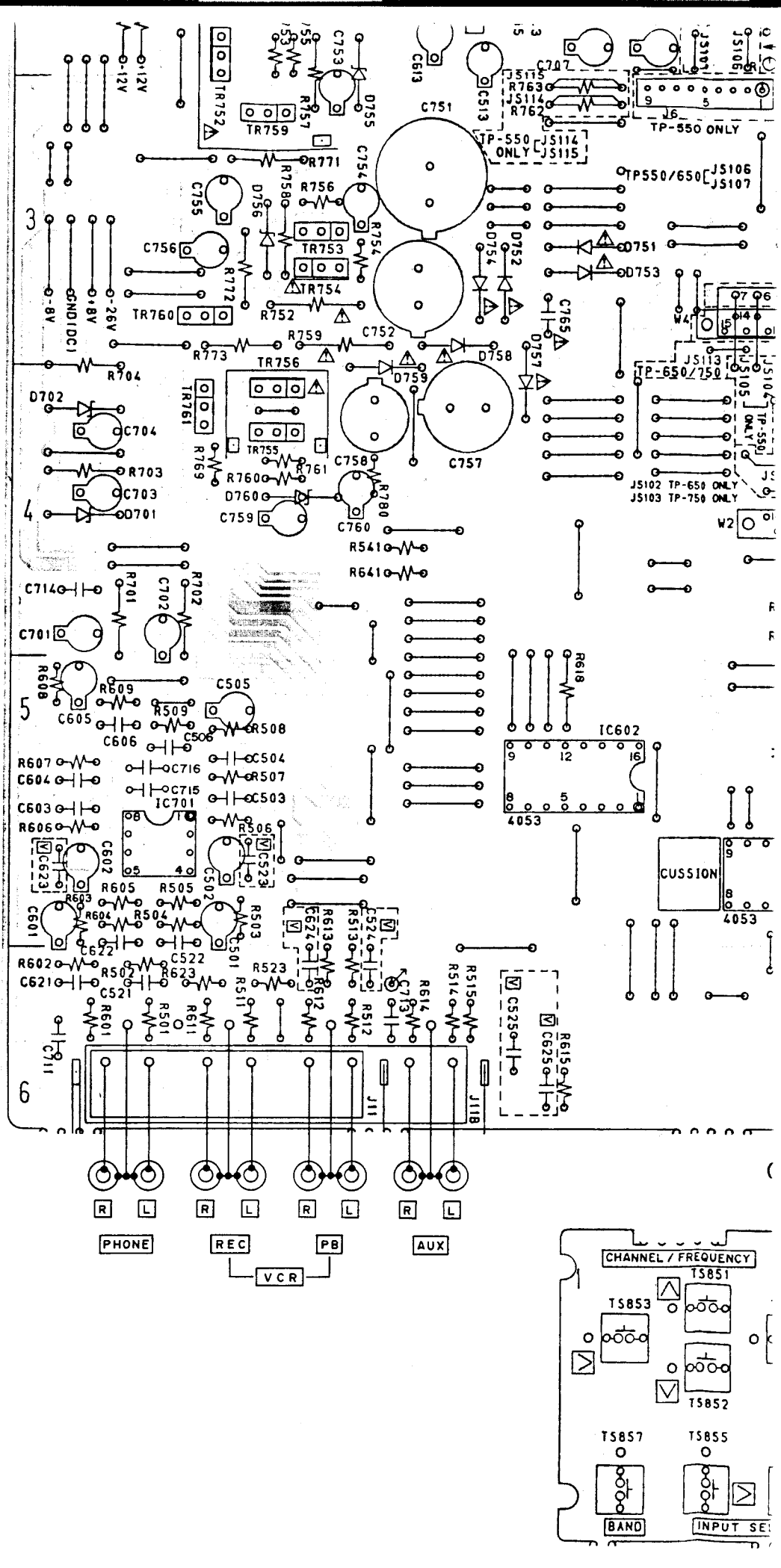
TR101	B3
TR201	A3
TR202	A4
TR203	A3
TR401	B5
TR402	B5,6
TR403	B4
TR404	B4
TR405	B2
TR406	A4
TR407	A4
TR408	B4
TR501	F2
TR502	G2
TR512	H2
TR601	F2
TR602	G2
TR612	H1
TR752	H2
TR753	H3
TR754	H3
TR755	H4
TR756	H4
TR757	E3
TR758	E3
TR759	H3
TR760	H3
TR761	H4
TR801	D5
TR802	D4
TR803	C4
TR804	E2
TR805	E2
TR806	E2
TR807	C3
TR808	C3
TR809	C3
TR810	C3
TR811	D4
TR812	C4
TR815	G1
TR816	F1
TR817	F,G1
TR818	D3
TR819	D3,4

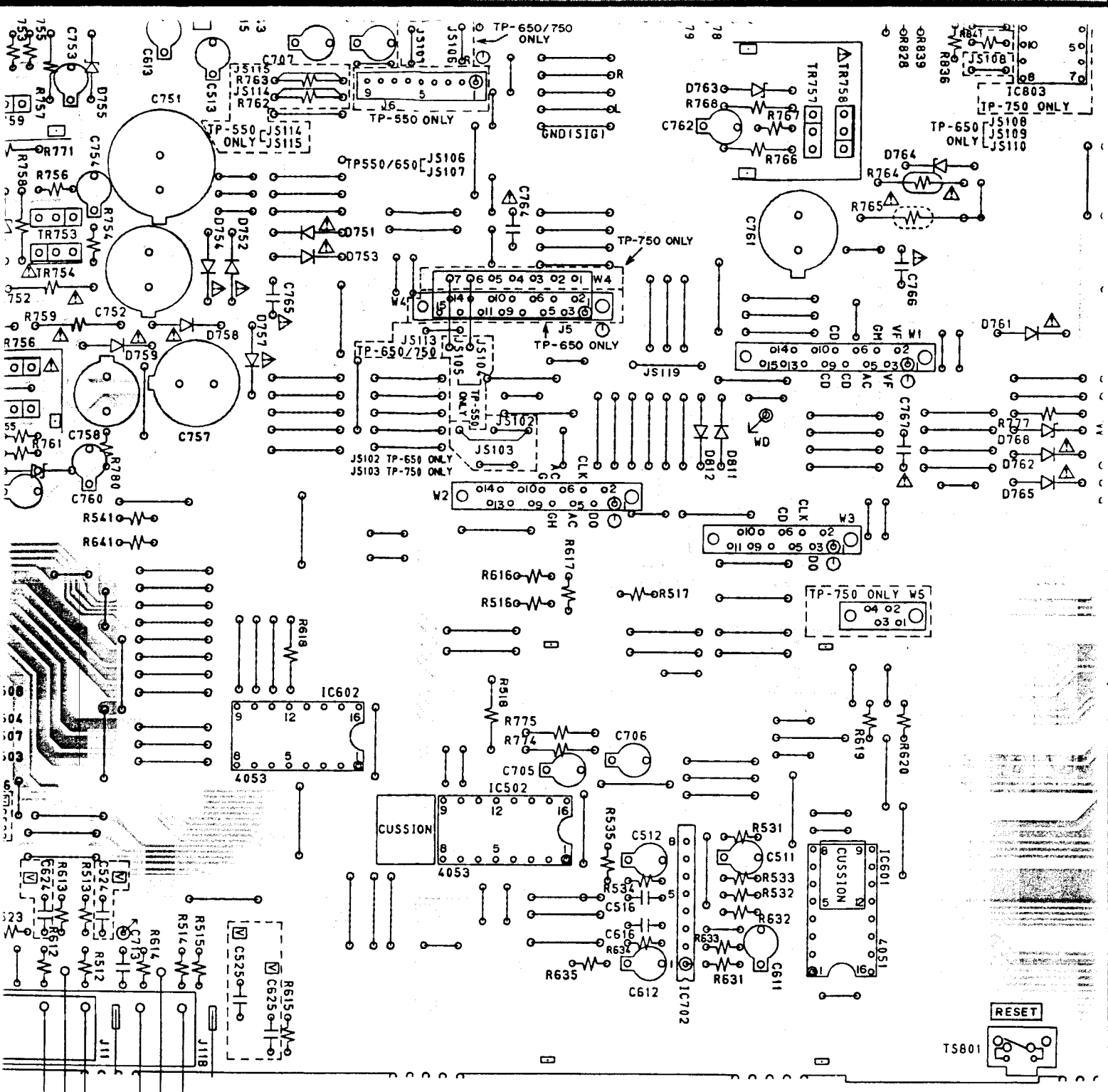
CONNECTORs

J1,J1A	G1
J2	F,G1
J3	E,F1
J4	E1
J5	F3
J6	F,G3
J11,11A,B,C	G,H6
J101	B3

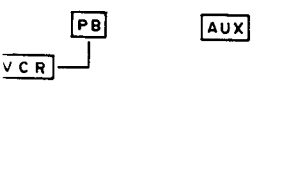
NOTE : PARTS DIFFER DEPENDING ON MODEL NUMBER. REFER TO SCHEMATIC DIAGRAMS FOR PERTAINING PARTS INFORMATION.

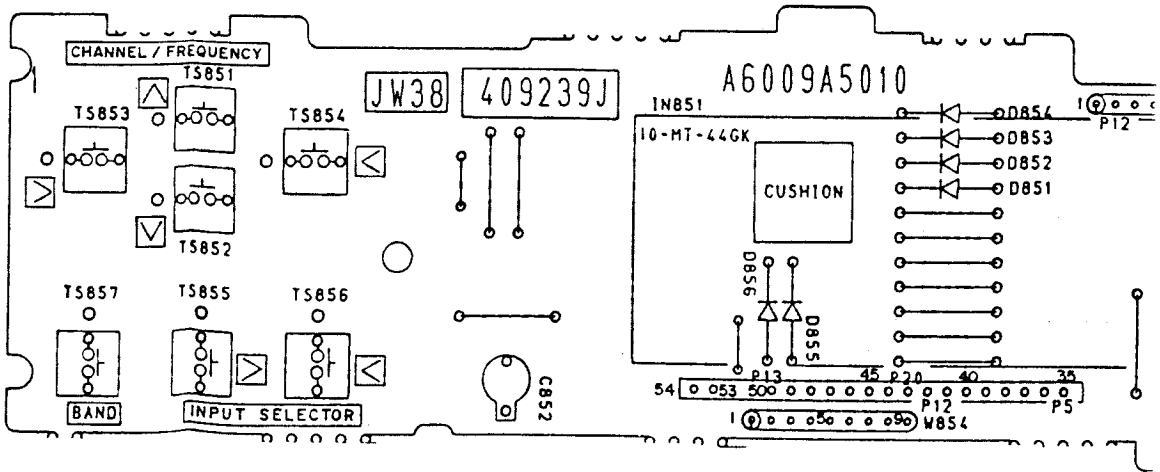
WARNING: ⚠INDICATES SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY.

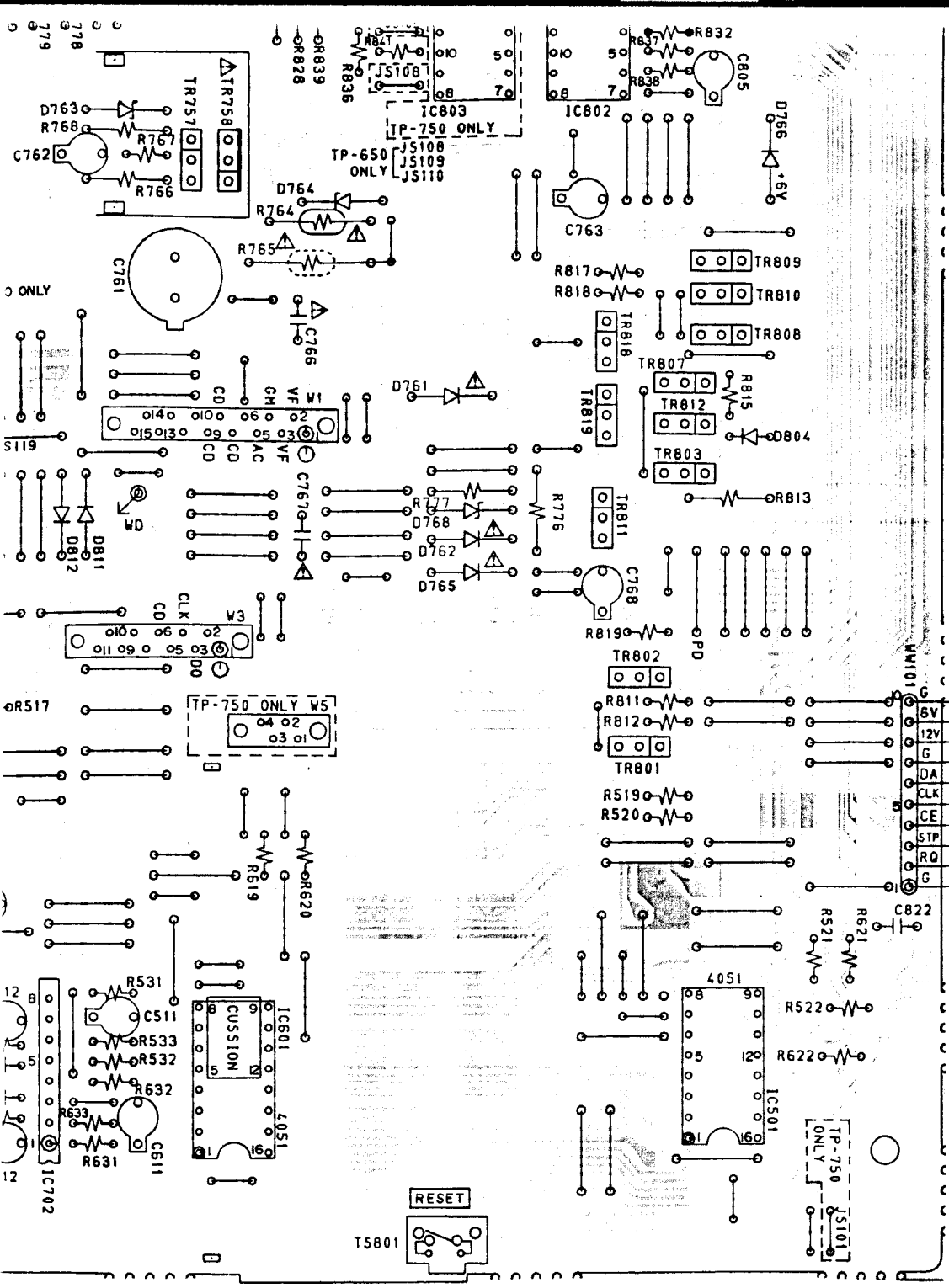

+12V
-12V
TR752
TR759
R757
C753
D755
C751
C513
C613
C707
R763
R762
JS115
JS114
TP-550 ONLY
TP-550 ONLY
JS106
JS107
TP550/650
R771
C754
R758
R756
C755
D756
TR753
TR754
R754
R752
C756
R772
TR760
D754
D752
D751
D753
C765
W4
JS113
TP-650/750
JS104
JS105
TP-550 ONLY
JS102 TP-650 ONLY
JS103 TP-750 ONLY
-8V
GND
+8V
-26V
DC1
R704
R773
R759
C752
D758
D757
TR756
D759
TR761
TR755
R769
R760
R761
C758
C757
D760
C759
R780
C760
D702
C704
R703
C703
D701
R541
R641
W2
C714
C701
R701
C702
R702
R608
R609
C505
C605
R509
R508
C606
C506
C504
R607
C604
C716
R507
C715
C503
C603
R606
IC701
R506
C602
C623
C523
R605
R505
R603
R604
C601
C622
R504
C502
R503
C624
R613
C524
R513
R602
C621
C522
R502
C623
R523
R501
R511
R512
R614
R515
R514
C521
R601
R611
C711
C713
C525
C625
R615
J11
J11B
IC602
4053
R618
CUSSION
4053
R
L
PHONE
REC
PB
AUX
VCR
CHANNEL / FREQUENCY
TS851
TS853
TS852
TS857
TS855
BAND
INPUT SE



CONTROL PCB A6007A502B







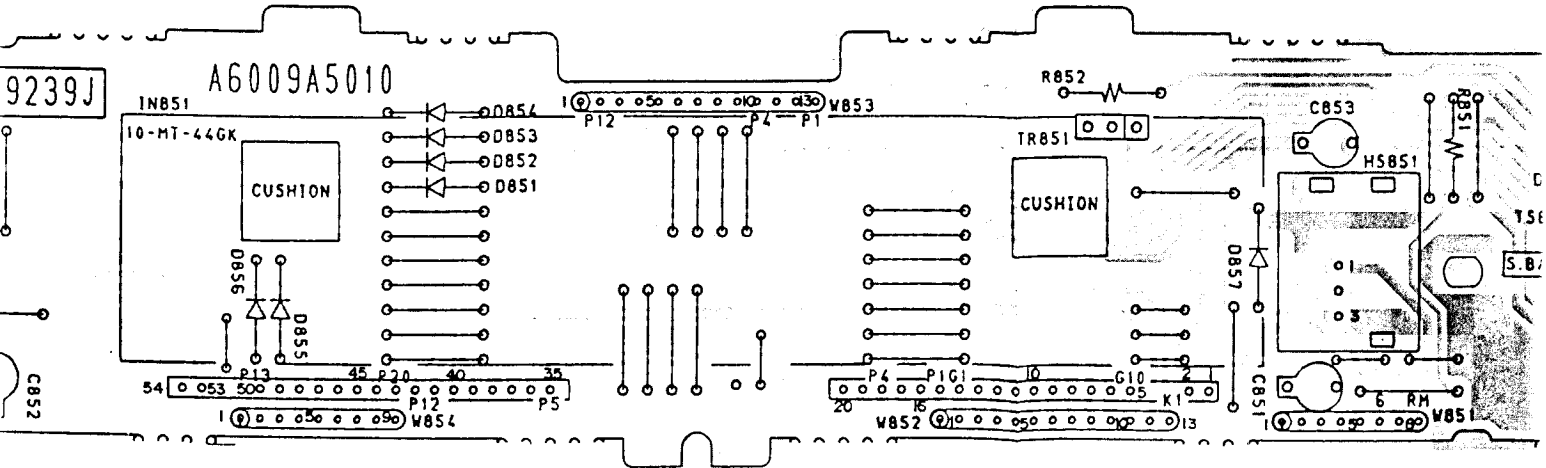
TR201	A3
TR202	A4
TR203	A3
TR401	B5
TR402	B5,6
TR403	B4
TR404	B4
TR405	B2
TR406	A4
TR407	A4
TR408	B4
TR501	F2
TR502	G2
TR512	H2
TR601	F2
TR602	G2
TR612	H1
TR752	H2

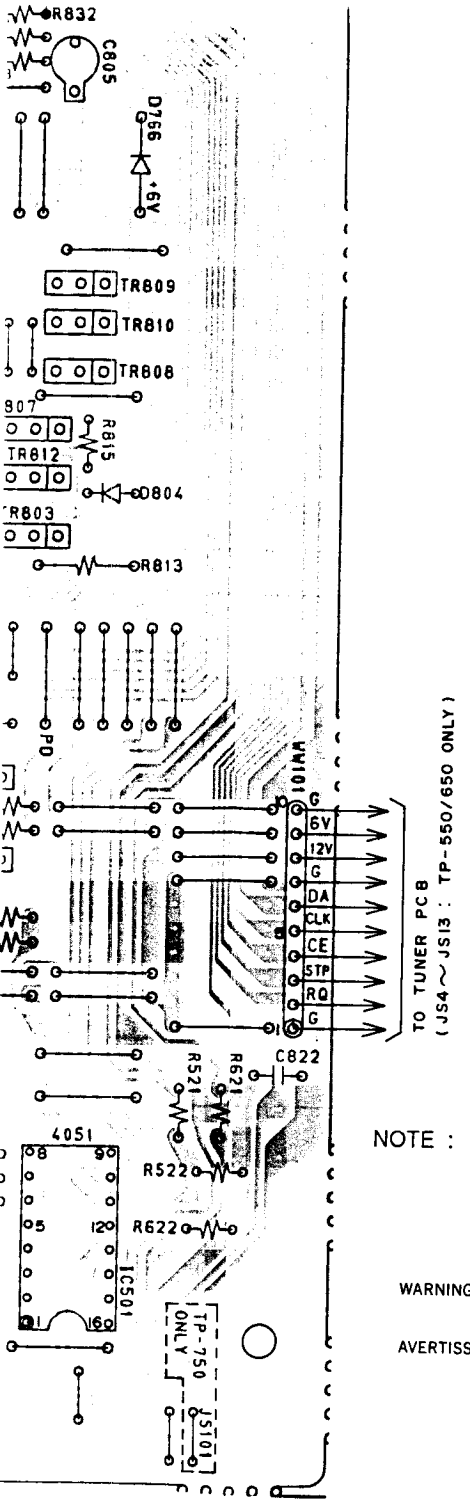
NOTE : PARTS DIFFER DEPEND
REFER TO SCHEMATIC D
PARTS INFORMATION.

WARNING: ⚠ INDICATES SAFETY CRITICAL CO
REPLACE SAFETY CRITICAL COMPO
RECOMMENDED PARTS

AVERTISSEMENT: ⚠ IL INDIQUE LES COMPOSA
POUR MAINTENIR LE DEGRÉ DE SÉ
NE REMPLACER QUE DES PIÈCES F

A6007A502B



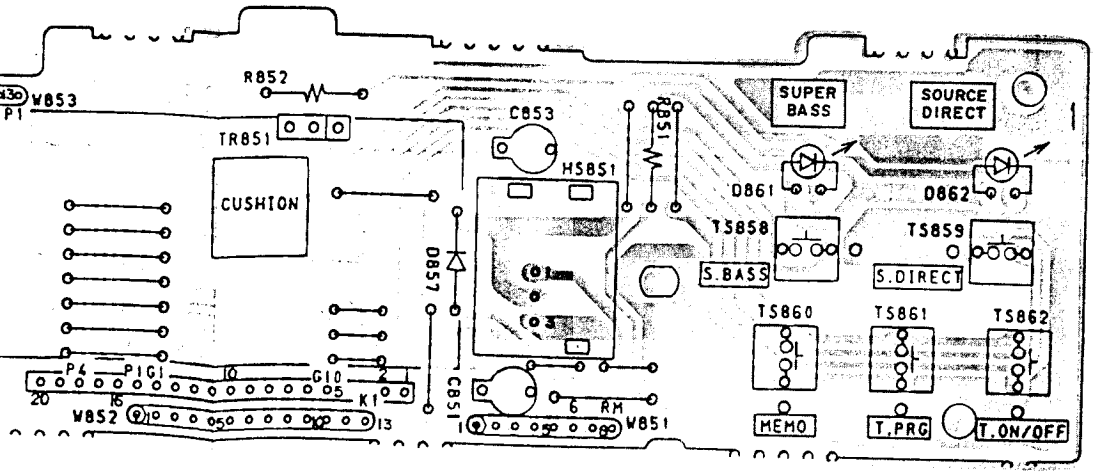


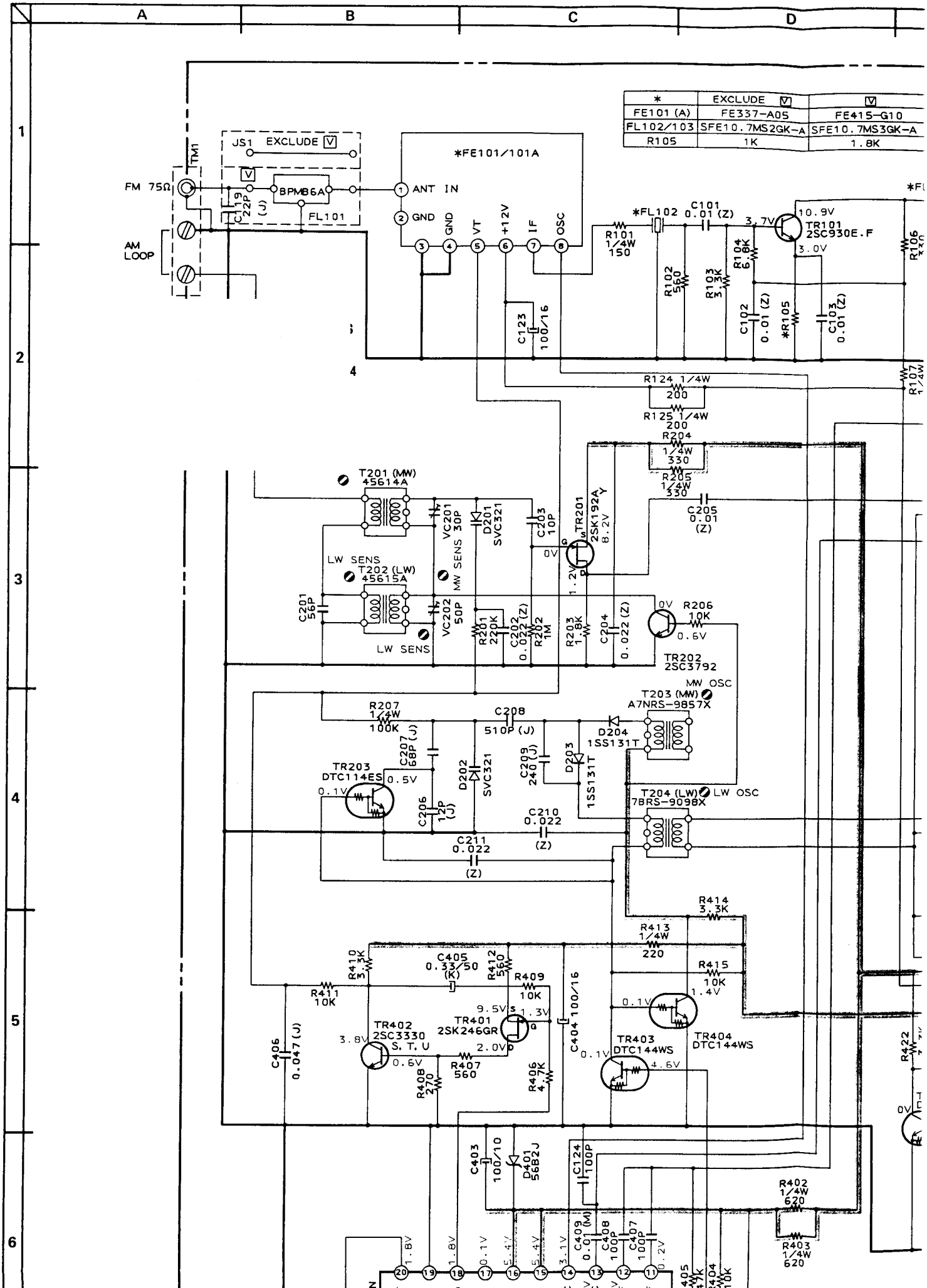
TR201	A3	TR811	D4
TR202	A4	TR812	C4
TR203	A3	TR815	G1
TR401	B5	TR816	F1
TR402	B5,6	TR817	F,G1
TR403	B4	TR818	D3
TR404	B4	TR819	D3,4
TR405	B2		
TR406	A4	**CONNECTORs**	
TR407	A4	J1,J1A	G1
TR408	B4	J2	F,G1
TR501	F2	J3	E,F1
TR502	G2	J4	E1
TR512	H2	J5	F3
TR601	F2	J6	F,G3
TR602	G2	J11,11A,B,C	G,H6
TR612	H1	J101	B3
TR752	H2		

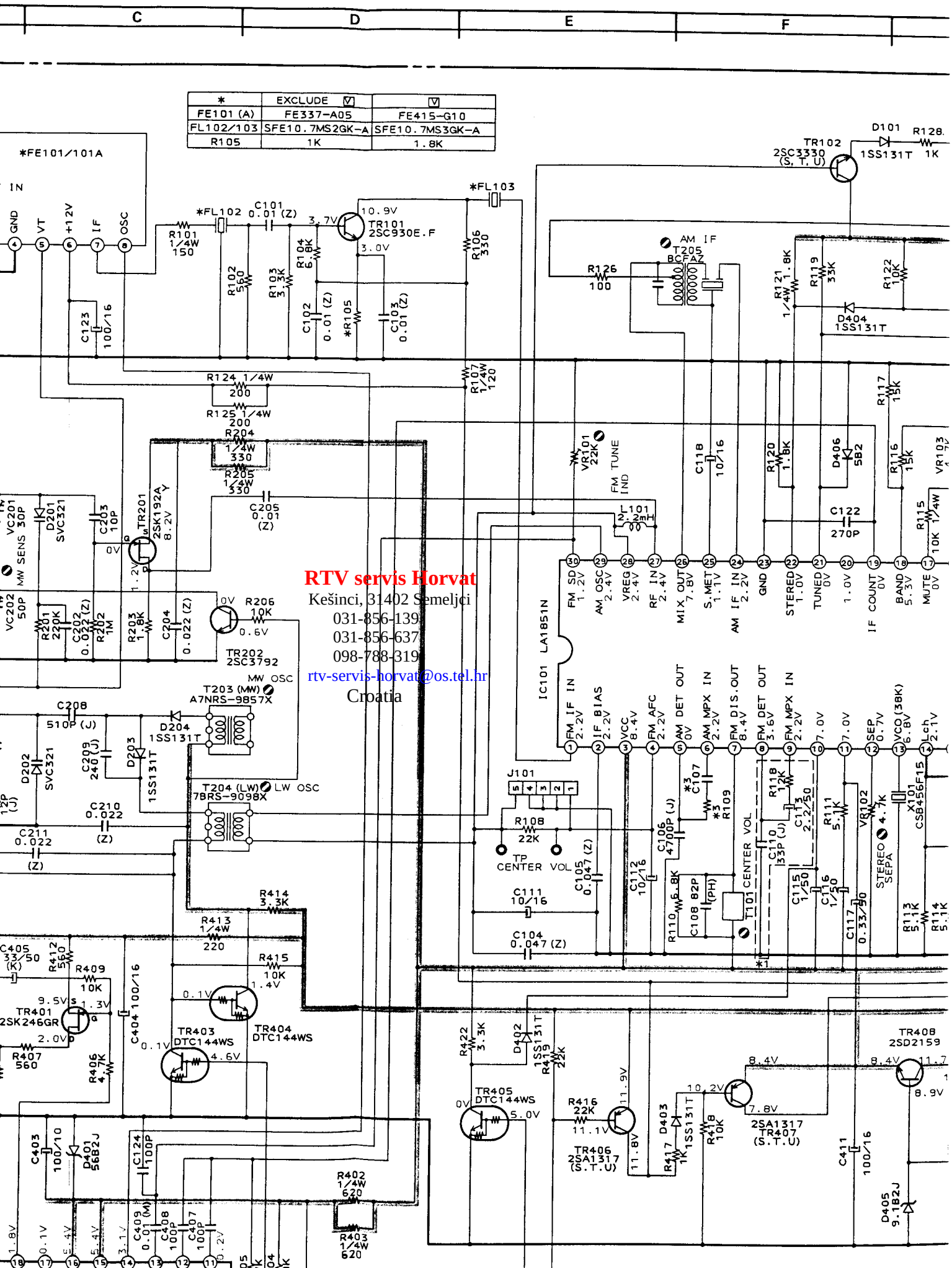
NOTE : PARTS DIFFER DEPENDING ON MODEL NUMBER. REFER TO SCHEMATIC DIAGRAMS FOR PERTAINING PARTS INFORMATION.

WARNING: ⚠INDICATES SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

AVERTISSEMENT: ⚠IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDEES PAR LE FABRICANT




A
B
C
D
1
2
3
4
5
6
*
EXCLUDE V
V
FE101 (A)
FE337-A05
FE415-G10
FL102/103
SFE10.7MS2GK-A
SFE10.7MS3GK-A
R105
1K
1.8K
JS1 EXCLUDE V
TM1
FM 75Ω
AM LOOP
C119 22P (J)
BPMB6A
FL101
*FE101/101A
1 ANT IN
2 GND
3 GND
4 GND
5 VT
6 +12V
7 IF
8 OSC
*FL102
C101 0.01 (Z)
R101 1/4W 150
R102 560
R103 3.3K
R104 6.8K
C102 0.01 (Z)
*R105
C103 0.01 (Z)
C123 100/16
10.9V
3.7V
3.0V
TR101 2SC930E.F
R106
R107 1/4W
R124 1/4W 200
R125 1/4W 200
R204 1/4W 330
R205 1/4W 330
C205 0.01 (Z)
T201 (MW) 45614A
T202 (LW) 45615A
LW SENS
MW SENS
VC201 30P
VC202 50P
D201 SVC321
C203 10P
TR201 2SK192A
8.2V
1.2V
0V
C201 56P
R201 220K
C202 0.022 (Z)
R202 1M
R203 1.8K
C204 0.022 (Z)
0V R206 10K
0.6V
TR202 2SC3792
MW OSC
T203 (MW) A7NRS-9857X
R207 1/4W 100K
C208 510P (J)
D204 1SS131T
C207 68P (J)
D202 SVC321
C209 240 (J)
D203 1SS131T
TR203 DTC114ES
0.5V
0.1V
C206 12P (J)
T204 (LW) 7BRS-9098X
LW OSC
C210 0.022 (Z)
C211 0.022 (Z)
R414 3.3K
R413 1/4W 220
R415 10K
1.4V
0.1V
TR404 DTC144WS
R410 3.3K
C405 0.33/50 (K)
R412 560
R409 10K
R411 10K
9.5V
1.3V
TR401 2SK246GR
2.0V
C404 100/16
TR402 2SC3330 S, T, U
3.8V
0.6V
R407 560
R408 270
R406 4.7K
C406 0.047 (J)
TR403 DTC144WS
0.1V
4.6V
R422
0V
C403 100/10
D401 5682J
C124 100P
R402 1/4W 620
R403 1/4W 620
C409 0.01 (M)
C408 100P
C407 100P
1.8V
0.1V
5.4V
3.1V
0.2V
20 19 18 17 16 15 14 13 12 11
R405 47K
R404 10K



*	EXCLUDE ▽	▽
FE101 (A)	FE337-A05	FE415-G10
FL102/103	SFE10.7MS2GK-A	SFE10.7MS3GK-A
R105	1K	1.8K

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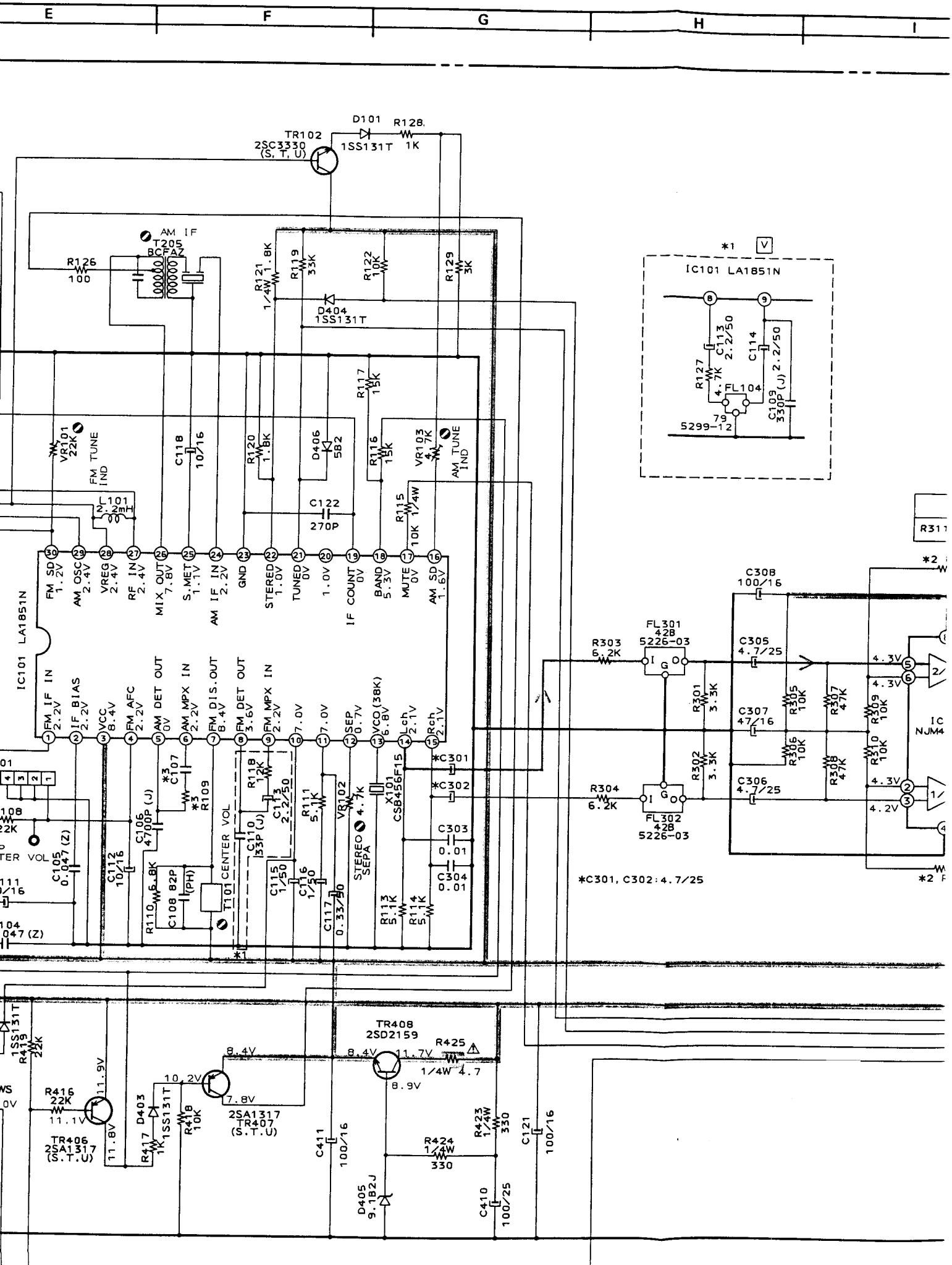
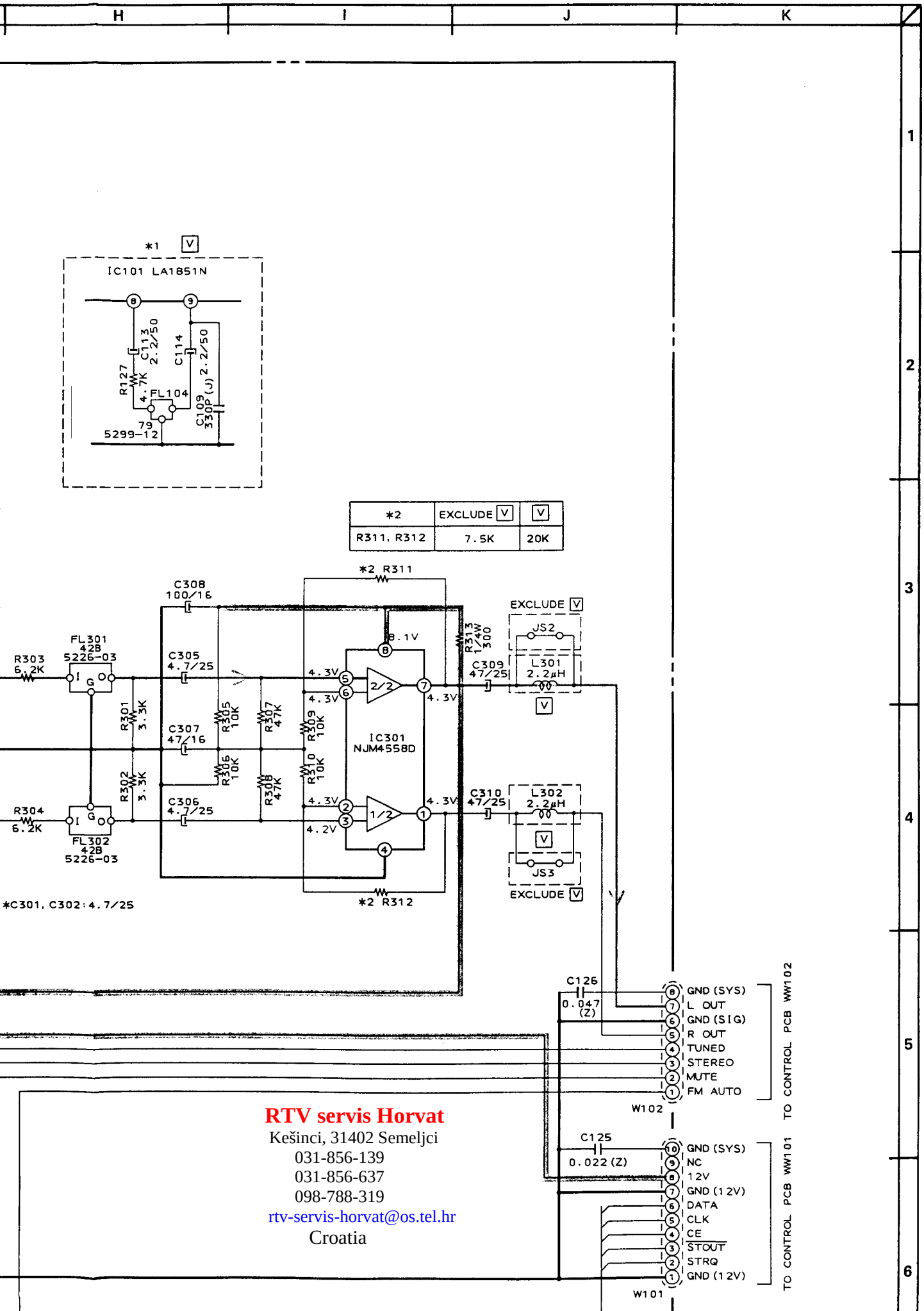

E
F
G
H
I
TR102
2SC3330
(S, T, U)
D101
1SS131T
R128
1K
AM IF
T205
BCFAZ
R126
100
R121
1/4W 1.8K
R119
33K
R122
10K
R129
3K
D404
1SS131T
*1
V
IC101 LA1851N
C113
2.2/50
C114
2.2/50
R127
4.7K
FL104
C109
330P (J)
79
5299-12
R117
15K
VR101
22K
FM TUNE
IND
C118
10/16
R120
1.8K
D406
5B2
R116
15K
VR103
4.7K
AM TUNE
IND
C122
270P
R115
1/4W
10K
L101
2.2mH
IC101 LA1851N
FM IF IN 2.2V
IF BIAS 2.2V
VCC 8.4V
FM AFC 2.2V
AM DET OUT 0V
AM MPX IN 2.2V
FM DIS.OUT 8.4V
FM DET OUT 3.6V
FM MPX IN 2.2V
7.0V
7.0V
SEP 0.7V
VCO(38K) 6.8V
Lch 2.1V
Rch 2.1V
FM SD 1.2V
AM OSC 2.4V
VREG 2.4V
RF IN 2.4V
MIX OUT 7.8V
S.MET 1.1V
AM IF IN 2.2V
GND
STEREO 1.0V
TUNED 0V
1.0V
IF COUNT 0V
BAND 5.3V
MUTE 0V
AM SD 1.6V
C308
100/16
FL301
428
5226-03
R303
6.2K
C305
4.7/25
R301
3.3K
R305
10K
R307
47K
R309
10K
C307
47/16
R306
10K
R308
47K
R310
10K
R302
3.3K
C306
4.7/25
R304
6.2K
FL302
428
5226-03
4.3V
4.3V
4.3V
4.2V
IC
NJM4
*C301
*C302
C303
0.01
C304
0.01
*3
C107
*3
R109
R118
1K
C111
2.2/50
R111
5.1K
VR102
4.7K
STEREO
SEPA
X101
CS8456F15
R113
5.1K
R114
5.1K
C115
1/50
C116
1/50
C117
0.33/50
C106
4700P (J)
C105
0.047 (Z)
C112
10/16
R110
6.8K
C108
82P
(PH)
T101
CENTER VOL
C110
33P (J)
*1
*C301, C302: 4.7/25
*2
TR408
2SD2159
R425
1/4W 4.7
8.4V
8.4V
11.7V
8.9V
10.2V
7.8V
2SA1317
TR407
(S.T.U)
8.4V
R423
1/4W
330
R424
1/4W
330
C411
100/16
C121
100/16
C410
100/25
D405
9.1B2J
R416
22K
11.1V
11.9V
TR406
2SA1317
(S.T.U)
11.8V
D403
1SS131T
R417
1K
R418
10K
1SS131T
R419
22K



*2	EXCLUDE V	V
R311, R312	7.5K	20K

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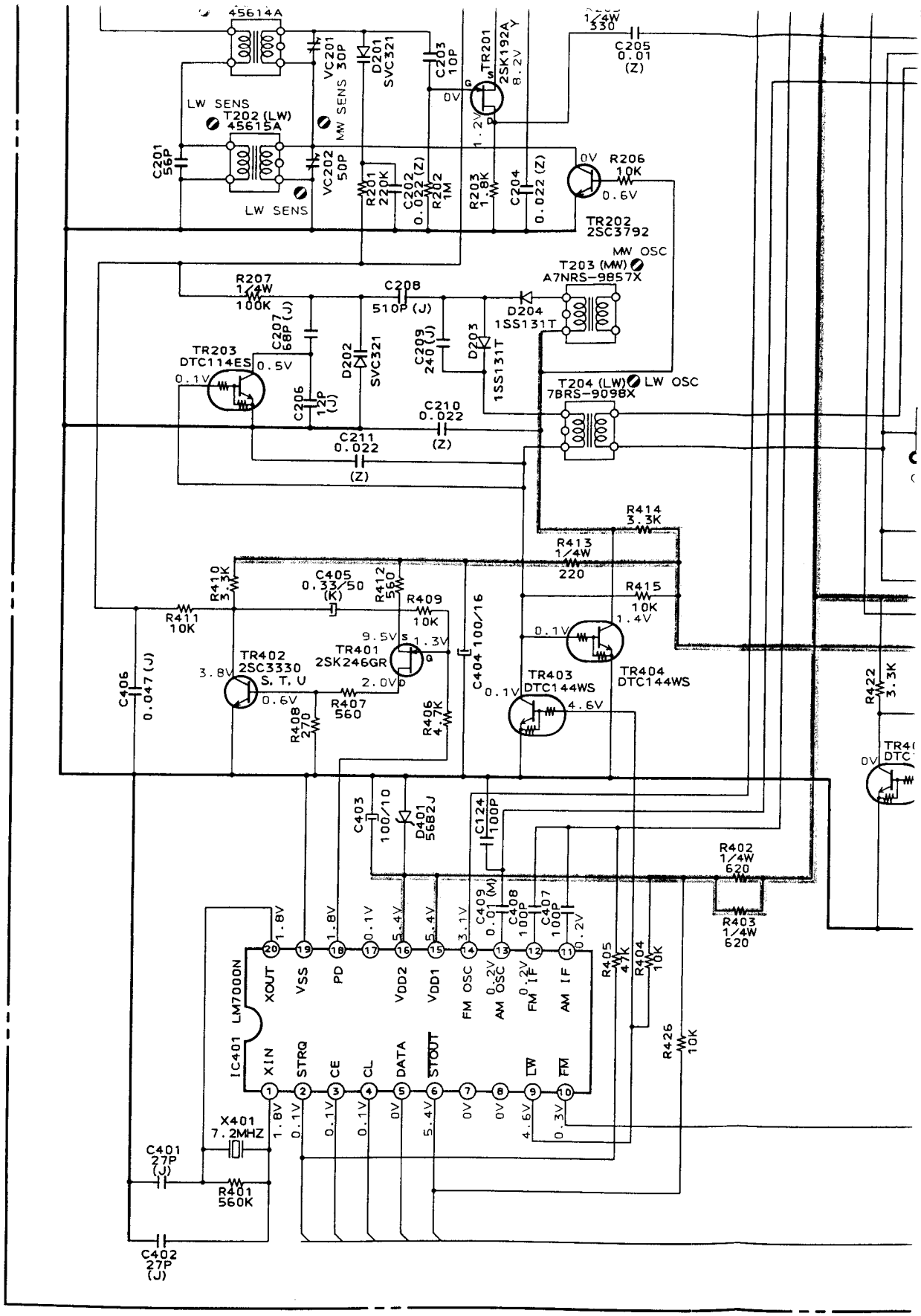
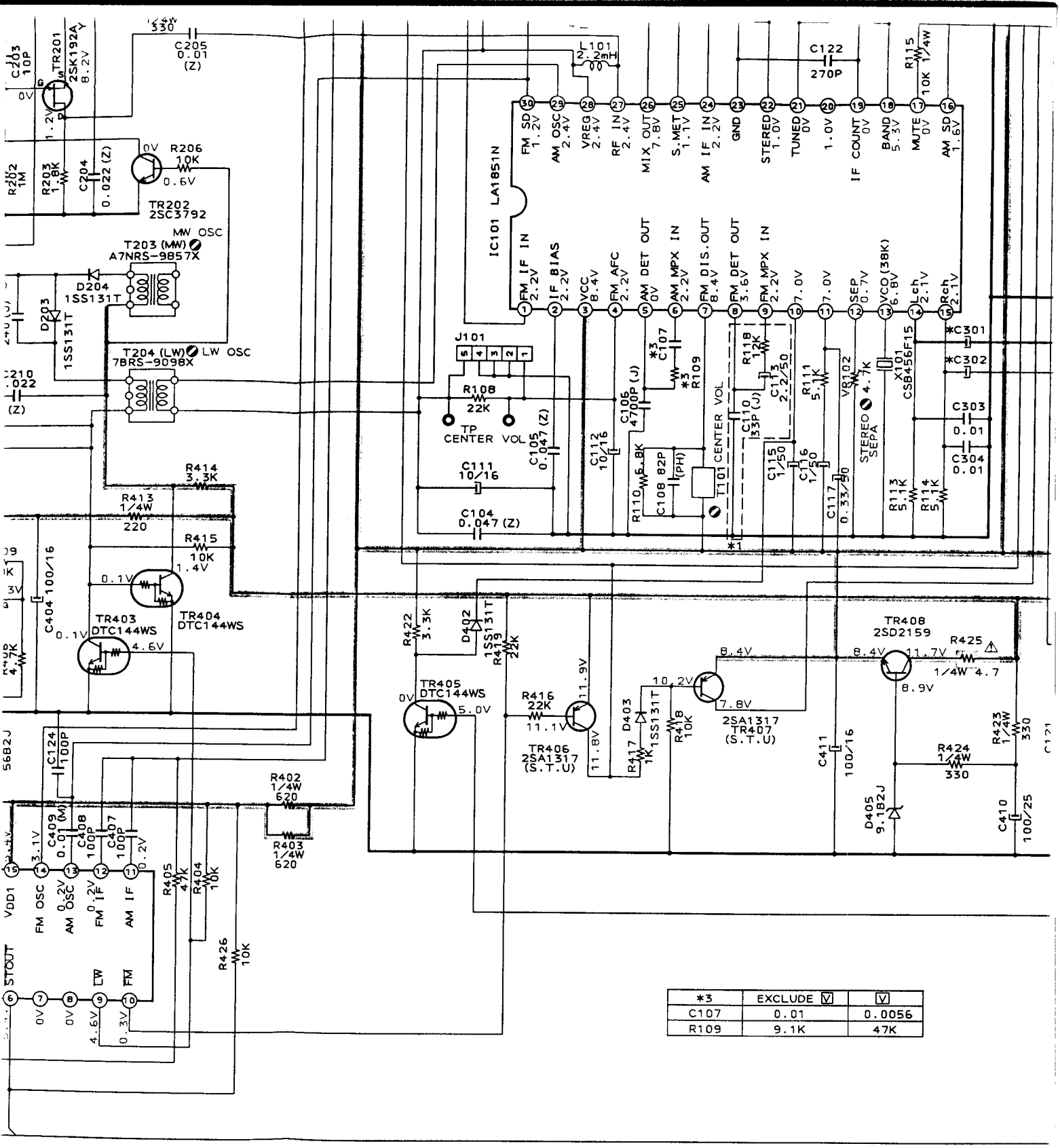


TUNER PCB A6007A502A

B (POWER SUPPLY) L

AUDIO SIGNAL LIN



*3	EXCLUDE ▽	▽
C107	0.01	0.0056
R109	9.1K	47K

5007A502A

B (POWER SUPPLY) LINE

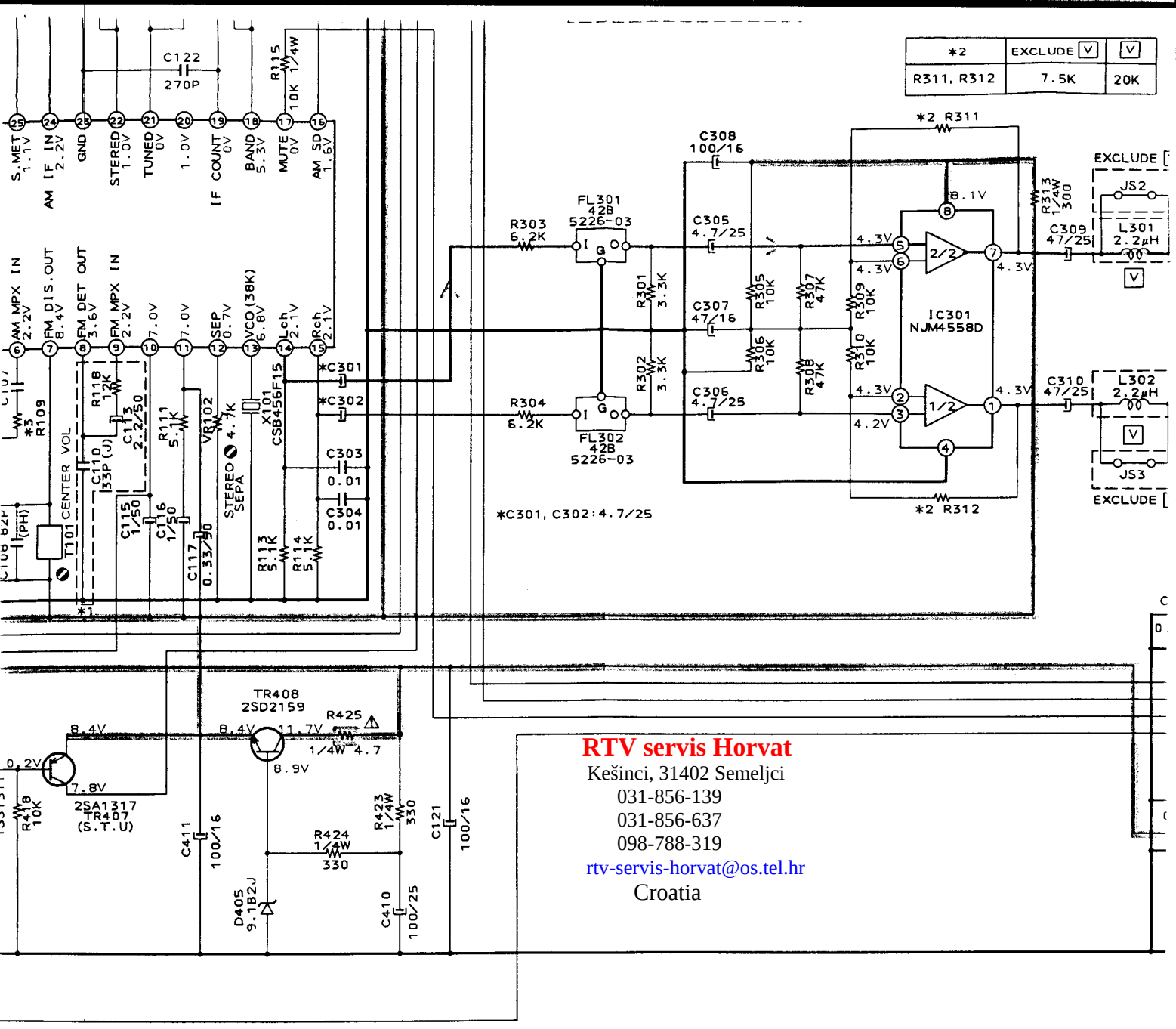
AUDIO SIGNAL LINE (L-CH)

WARNING: ⚠ AND ▨ INDICATE SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

AVERTISSMENT: ⚠ ET ▨, ILS INDIQUENT LES COMPOSTANTS CRITIQUES DE SÉCURITÉ, POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDEES PAR LE FABRICANT

NOTE:
UNLESS
ALL RE
ALL CA
ALL EL

INDICA
DURING



*2	EXCLUDE V	V
R311, R312	7.5K	20K

*3	EXCLUDE V	V
C107	0.01	0.0056
R109	9.1K	47K

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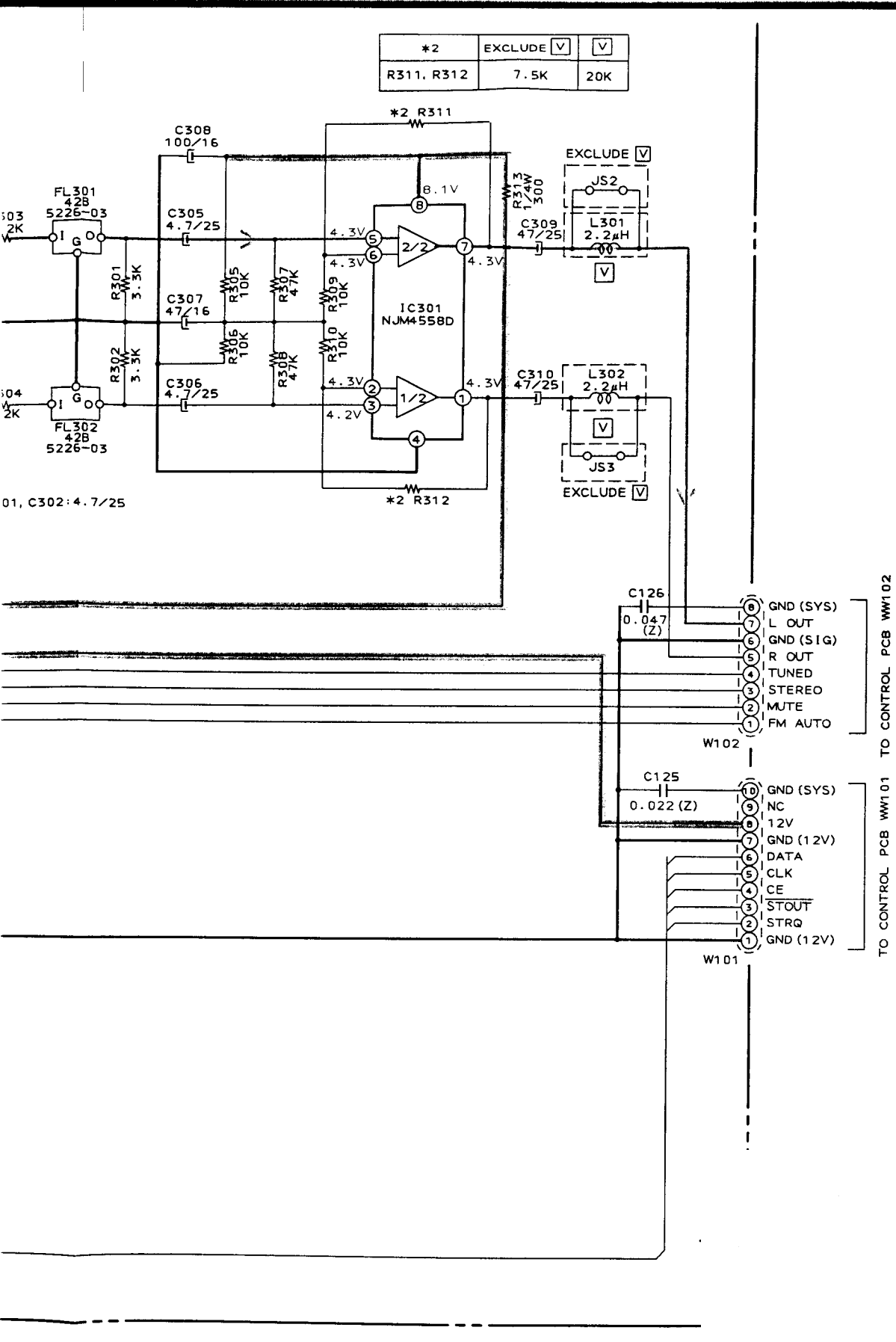
ND ▓▓ INDICATE SAFETY CRITICAL
PONENTS FOR CONTINUED SAFETY.
LACE SAFETY CRITICAL COMPONENTS
Y WITH MANUFACTURER' S RECOMMENDED
TS

T: ⚠ ET ▓▓, ILS INDIQUENT LES
POSTANTS CRITIQUES DE SÉCURITÉ.
R MAINTENIR LE DEGRÉ DE SÉCURITÉ
L' APPAREIL, NE REMPLACER QUE DES
CES RECOMMANDEES PAR LE FABRICANT

NOTE:
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS
ALL CAPACITORS IN μF (P=PF)
ALL ELECTROLYTIC CAPACITORS IN μF/WV

INDICATED VOLTAGES WERE MEASURED
DURING FM STEREO MODE.

TP-7
TUNE
SCHE
N



*2	EXCLUDE V	V
R311, R312	7.5K	20K

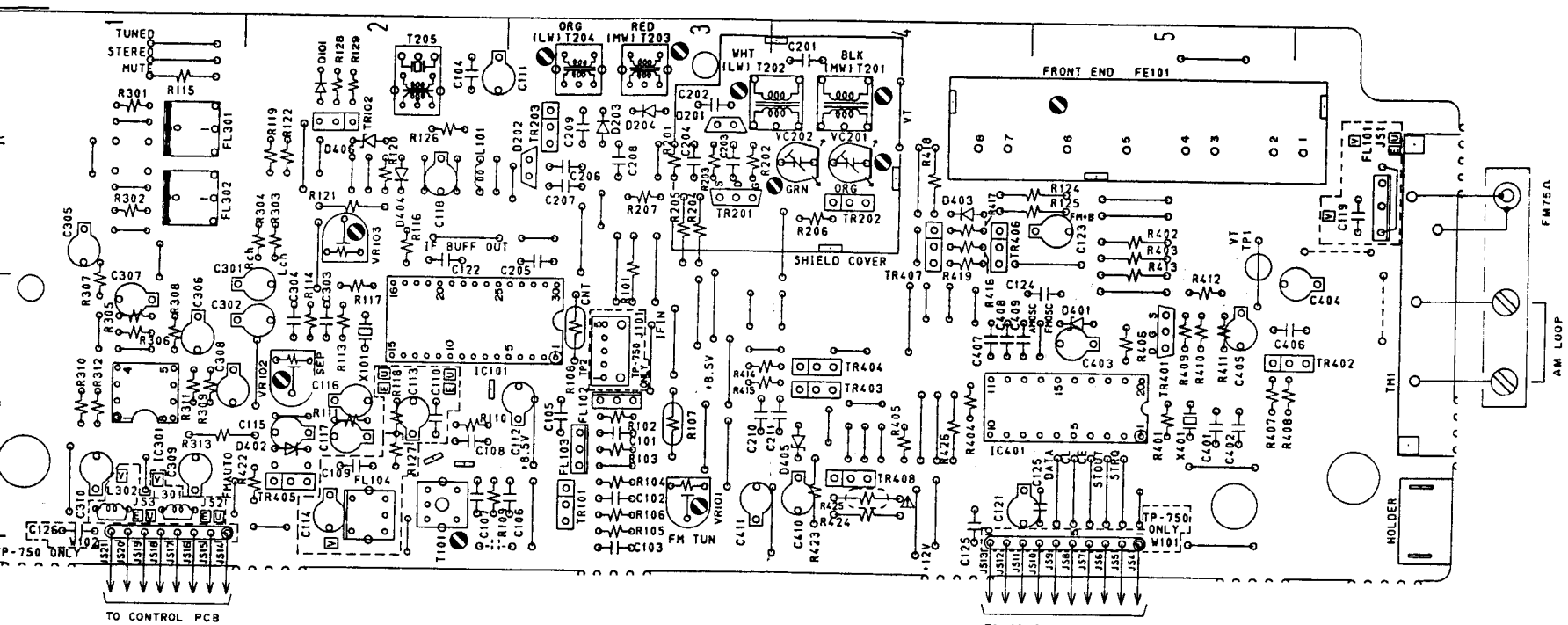
01, C302: 4.7/25

SPECIFIED
OHMS
N μF (P=PF)
CAPACITORS IN μF/WV

ES WERE MEASURED
MODE.

TP-750
TUNER
SCHEMATIC DIAGRAM

No. 8-2 A600902M
A1

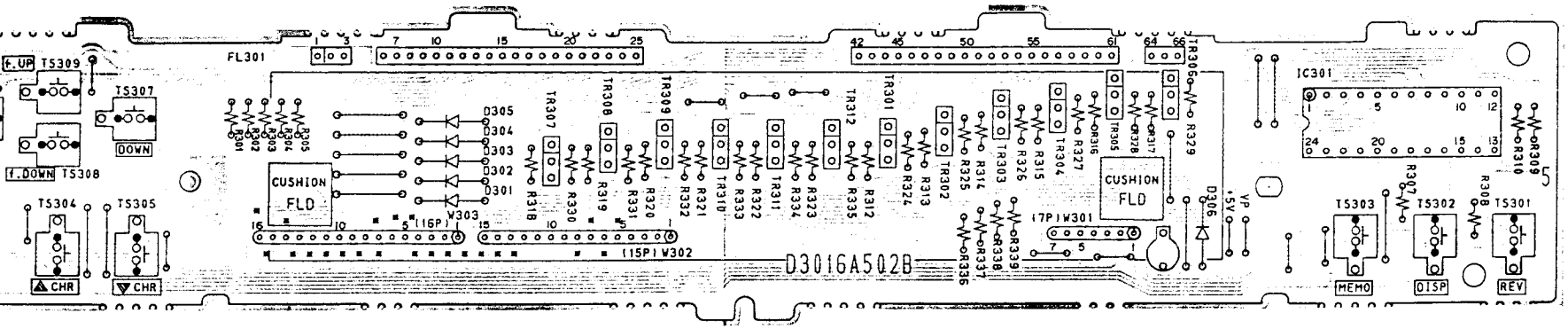


TUNER PCB A6007A502A

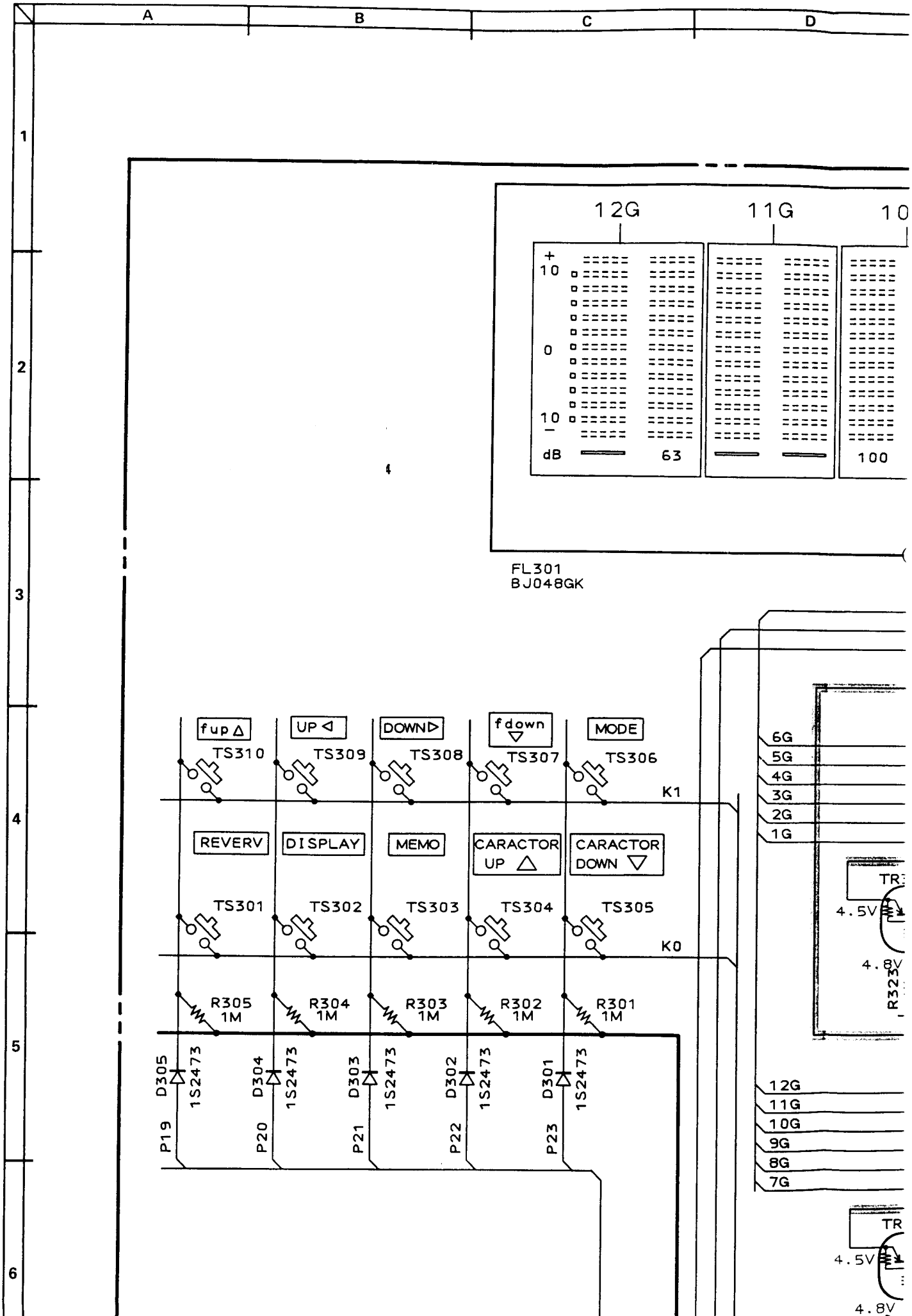
NOTE : PARTS DIFFER DEPENDING ON MODEL NUMBER. REFER TO SCHEMATIC DIAGRAMS FOR PERTAINING PARTS INFORMATION.

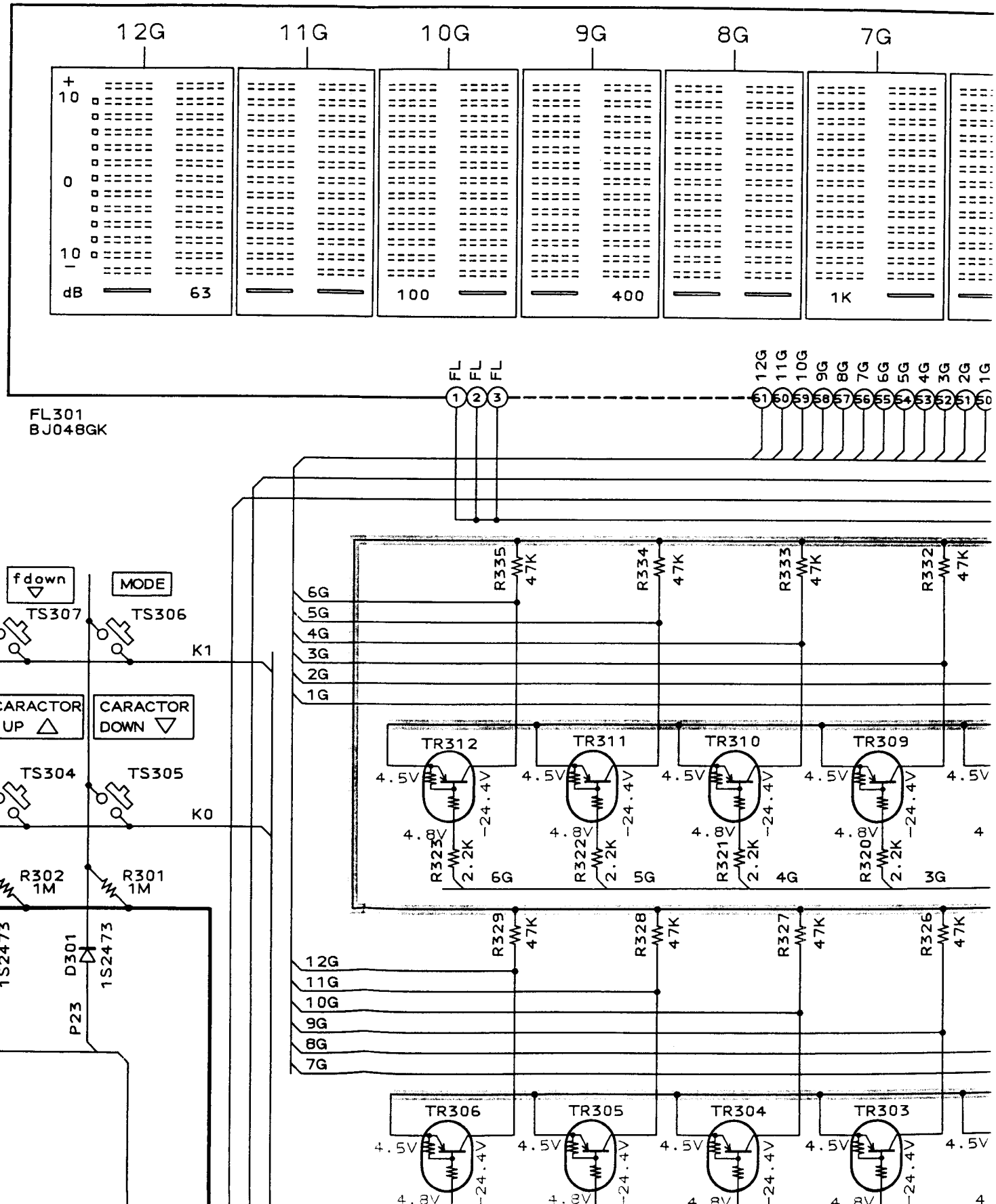
ARNING: ⚠ INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

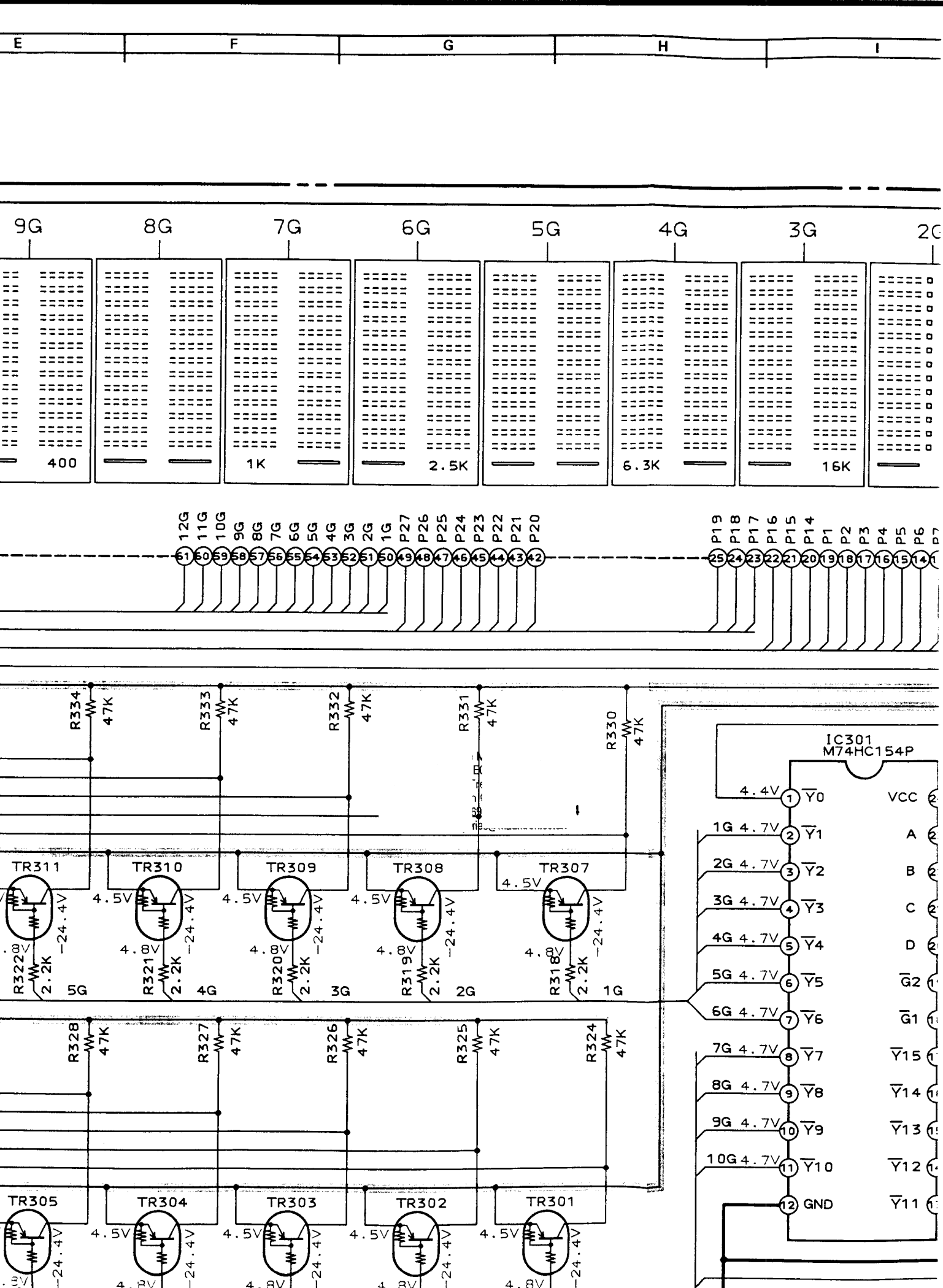
VERTISSEMENT: ⚠ IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDÉES PAR LE FABRICANT

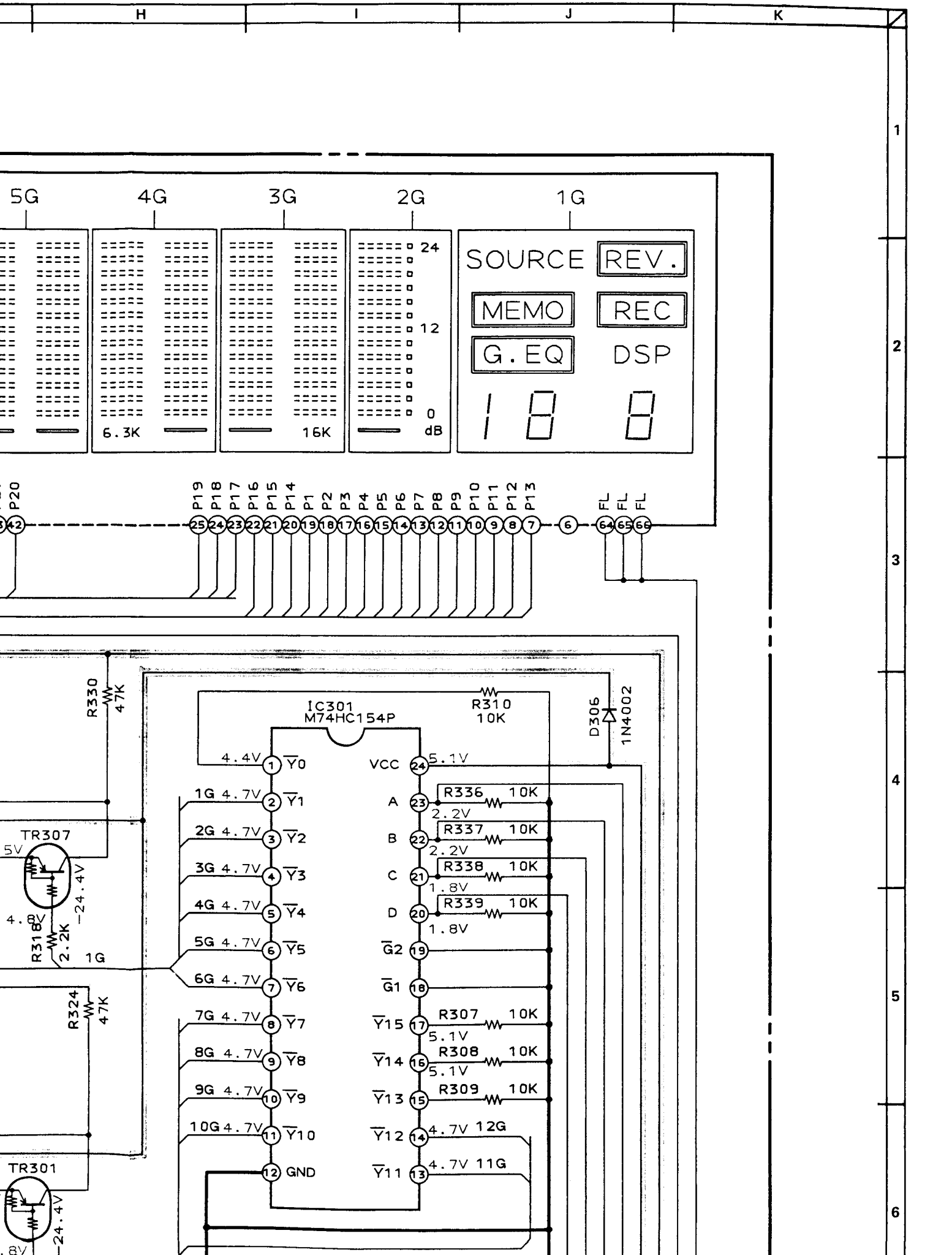


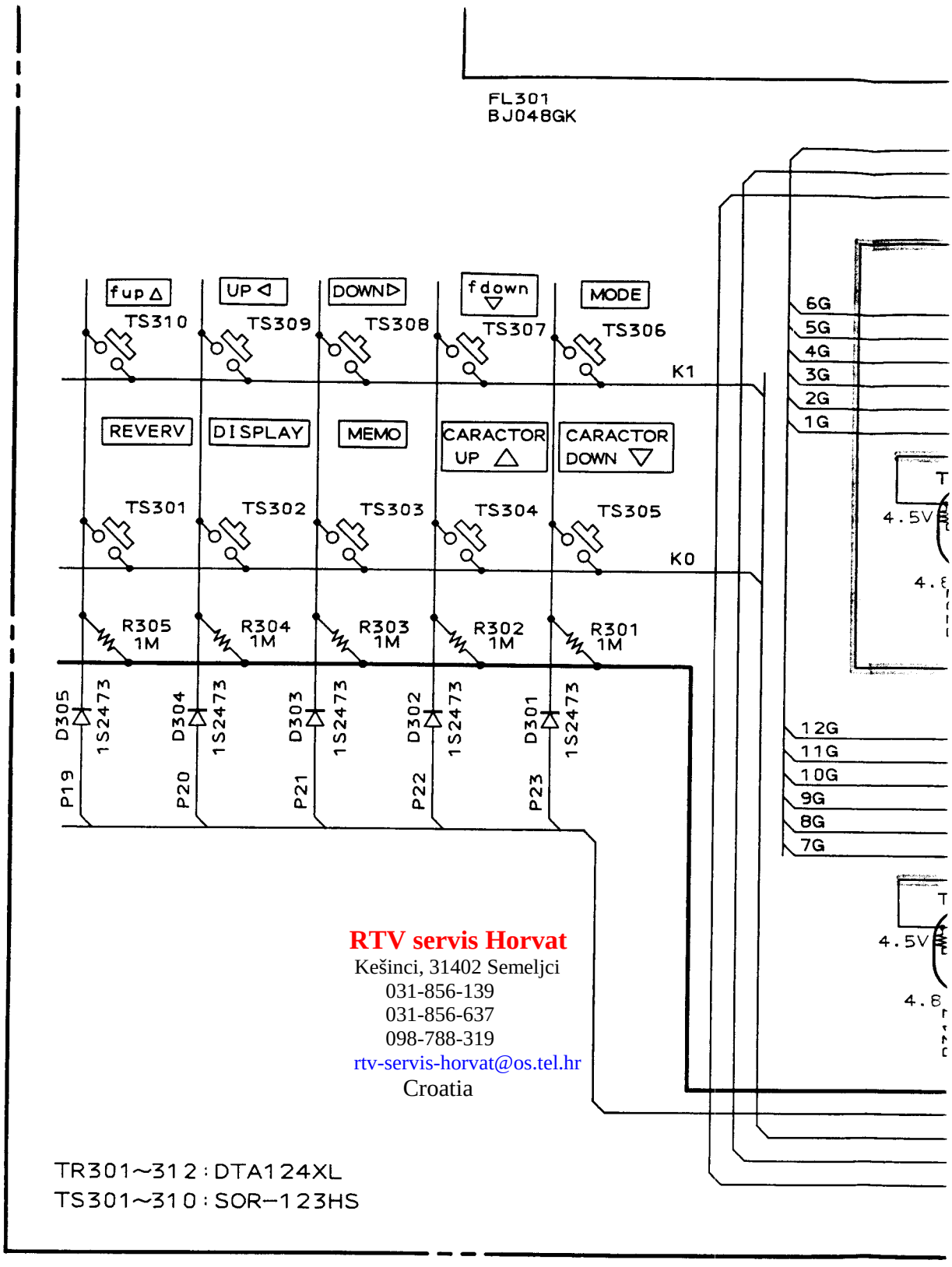
FRONT PCB D3016A502B


A
B
C
D
1
2
3
4
5
6
12G
11G
10
+
10
0
10
dB
63
100
FL301
BJ048GK
fup △
UP ◁
DOWN ▷
fdown ▽
MODE
TS310
TS309
TS308
TS307
TS306
K1
REVERV
DISPLAY
MEMO
CARACTOR UP △
CARACTOR DOWN ▽
TS301
TS302
TS303
TS304
TS305
K0
R305 1M
R304 1M
R303 1M
R302 1M
R301 1M
D305 1S2473
D304 1S2473
D303 1S2473
D302 1S2473
D301 1S2473
P19
P20
P21
P22
P23
6G
5G
4G
3G
2G
1G
TR
4.5V
4.8V
R323
12G
11G
10G
9G
8G
7G
TR
4.5V
4.8V


12G
11G
10G
9G
8G
7G
+10
0
10
dB
63
100
400
1K
FL
FL
FL
12G 11G 10G 9G 8G 7G 6G 5G 4G 3G 2G 1G
61 60 59 58 57 56 55 54 53 52 51 50
1 2 3
FL301
BJ048GK
fdown
MODE
TS307
TS306
K1
CARACTOR UP
CARACTOR DOWN
TS304
TS305
K0
R302 1M
R301 1M
D302 1S2473
D301 1S2473
P22
P23
R335 47K
R334 47K
R333 47K
R332 47K
6G
5G
4G
3G
2G
1G
TR312
TR311
TR310
TR309
4.5V
4.8V
-24.4V
R323 2.2K
R322 2.2K
R321 2.2K
R320 2.2K
R329 47K
R328 47K
R327 47K
R326 47K
12G
11G
10G
9G
8G
7G
TR306
TR305
TR304
TR303


E
F
G
H
I
9G
8G
7G
6G
5G
4G
3G
400
1K
2.5K
6.3K
16K
12G 11G 10G 9G 8G 7G 6G 5G 4G 3G 2G 1G P27 P26 P25 P24 P23 P22 P21 P20
61 60 59 58 57 56 55 54 53 52 51 50 49 48 47 46 45 44 43 42
P19 P18 P17 P16 P15 P14 P1 P2 P3 P4 P5 P6
25 24 23 22 21 20 19 18 17 16 15 14
R334 47K
R333 47K
R332 47K
R331 47K
R330 47K
TR311
TR310
TR309
TR308
TR307
4.5V
4.8V
-24.4V
R322 2.2K
R321 2.2K
R320 2.2K
R319 2.2K
R318 2.2K
5G
4G
3G
2G
1G
R328 47K
R327 47K
R326 47K
R325 47K
R324 47K
TR305
TR304
TR303
TR302
TR301
IC301
M74HC154P
4.4V
1G 4.7V
2G 4.7V
3G 4.7V
4G 4.7V
5G 4.7V
6G 4.7V
7G 4.7V
8G 4.7V
9G 4.7V
10G 4.7V
Y0
Y1
Y2
Y3
Y4
Y5
Y6
Y7
Y8
Y9
Y10
GND
VCC
A
B
C
D
G2
G1
Y15
Y14
Y13
Y12
Y11


H
I
J
K
1
2
3
4
5
6
5G
4G
3G
2G
1G
24
12
0
dB
6.3K
16K
SOURCE
REV.
MEMO
REC
G.EQ
DSP
1 8 8
P19 P18 P17 P16 P15 P14 P1 P2 P3 P4 P5 P6 P7 P8 P9 P10 P11 P12 P13
25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7
FL FL FL
64 65 66
R330 47K
IC301
M74HC154P
R310 10K
D306 1N4002
4.4V 1 Y0
1G 4.7V 2 Y1
2G 4.7V 3 Y2
3G 4.7V 4 Y3
4G 4.7V 5 Y4
5G 4.7V 6 Y5
6G 4.7V 7 Y6
7G 4.7V 8 Y7
8G 4.7V 9 Y8
9G 4.7V 10 Y9
10G 4.7V 11 Y10
12 GND
VCC 24 5.1V
A 23 R336 10K 2.2V
B 22 R337 10K 2.2V
C 21 R338 10K 1.8V
D 20 R339 10K 1.8V
G2 19
G1 18
Y15 17 R307 10K 5.1V
Y14 16 R308 10K 5.1V
Y13 15 R309 10K
Y12 14 4.7V 12G
Y11 13 4.7V 11G
TR307
5V
4.8V
R318 2.2K
-24.4V
1G
R324 47K
TR301
-24.4V



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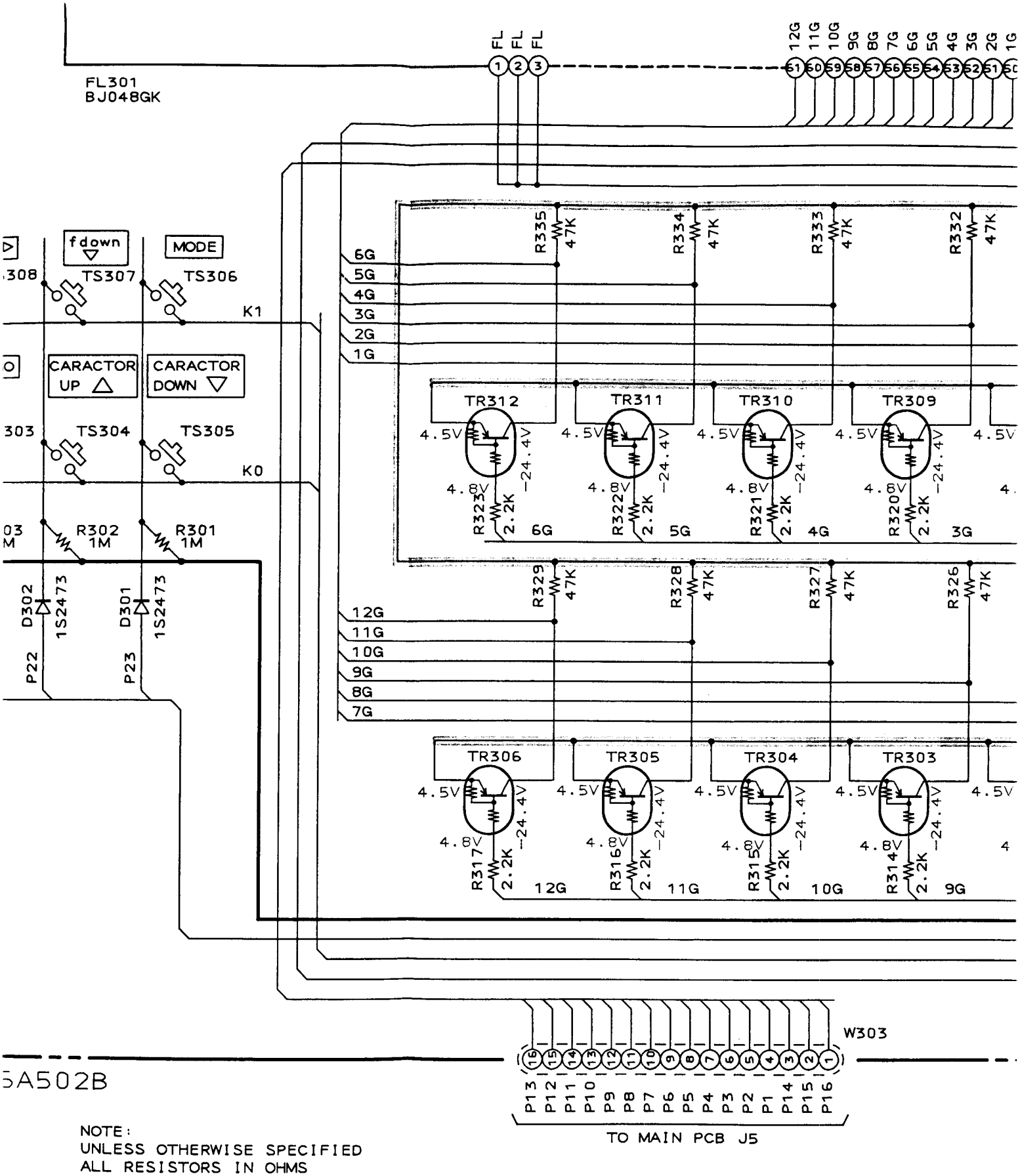
031-856-139
031-856-637
098-788-319
rtv-servis-horvat@os.tel.hr
Croatia

FRONT PCB D3016A502B

NOTE:
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS
ALL CAPACITORS IN μF (P=PF)
ALL ELECTROLYTIC CAPACITORS IN μF/WV

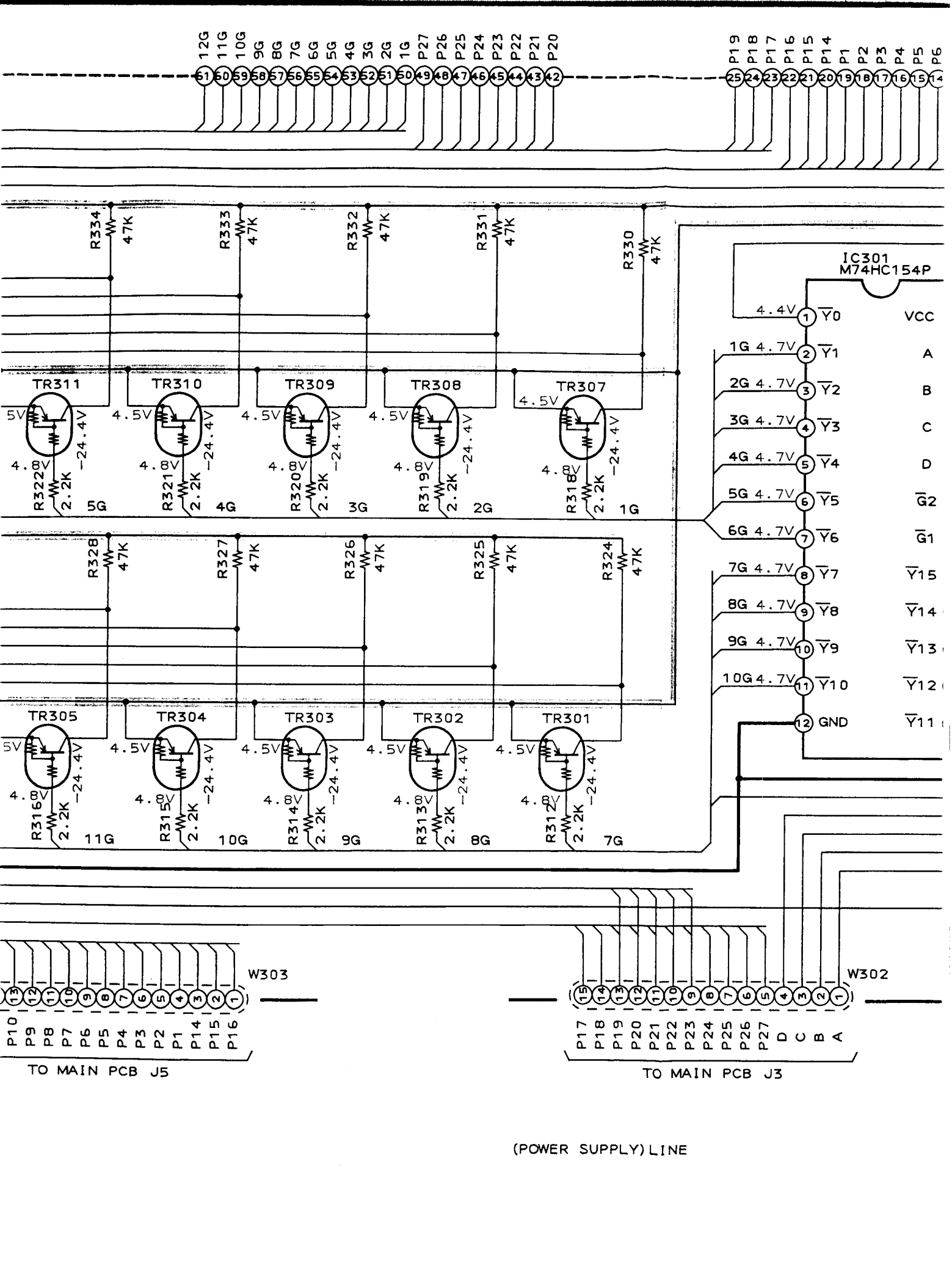
INDICATED VOLTAGES WERE MEASURED
DURING THE EQUALIZER'S FLAT MODE.

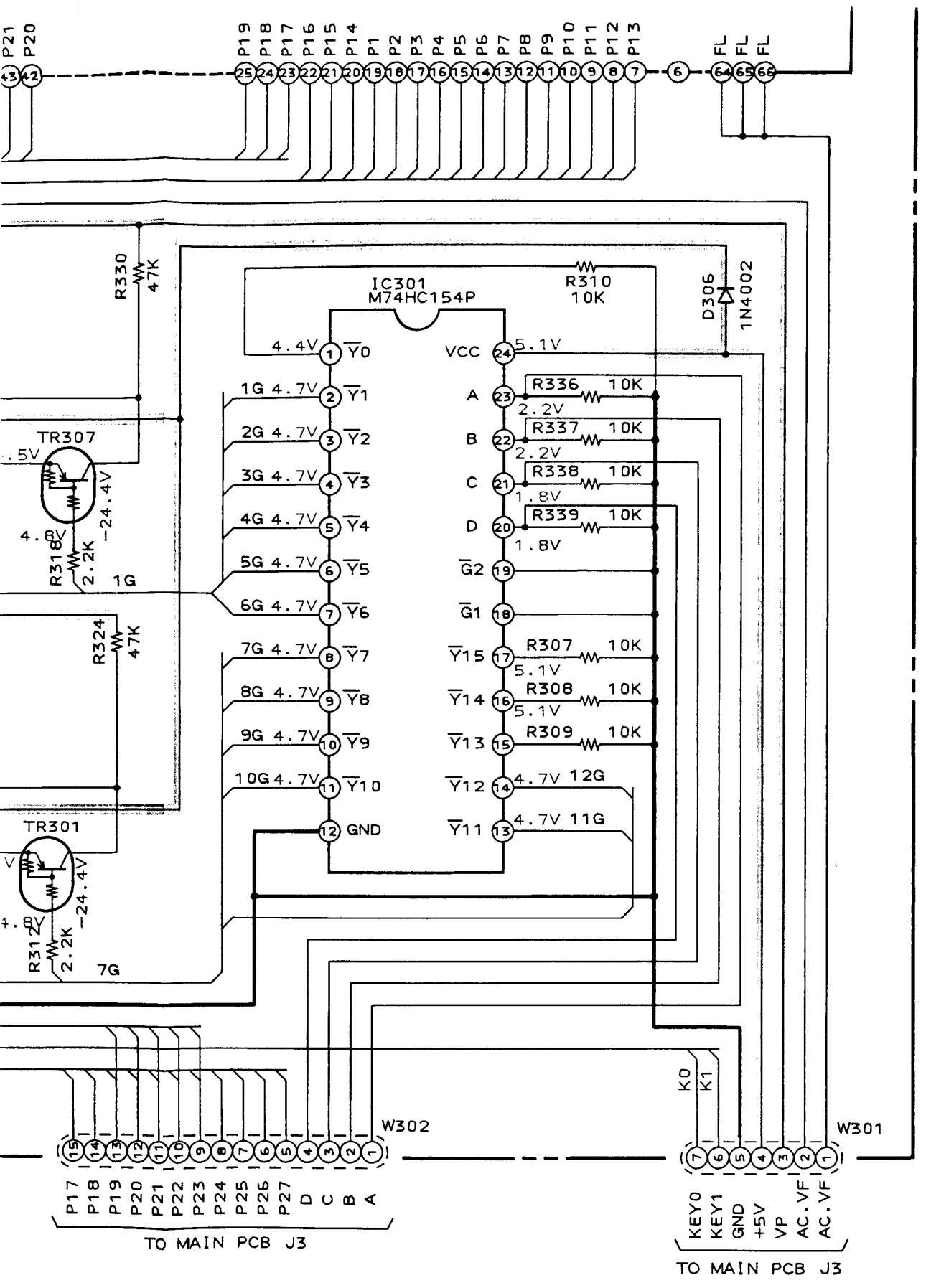


5A502B

NOTE:
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS
ALL CAPACITORS IN μF (P=PF)
ALL ELECTROLYTIC CAPACITORS IN μF/WV

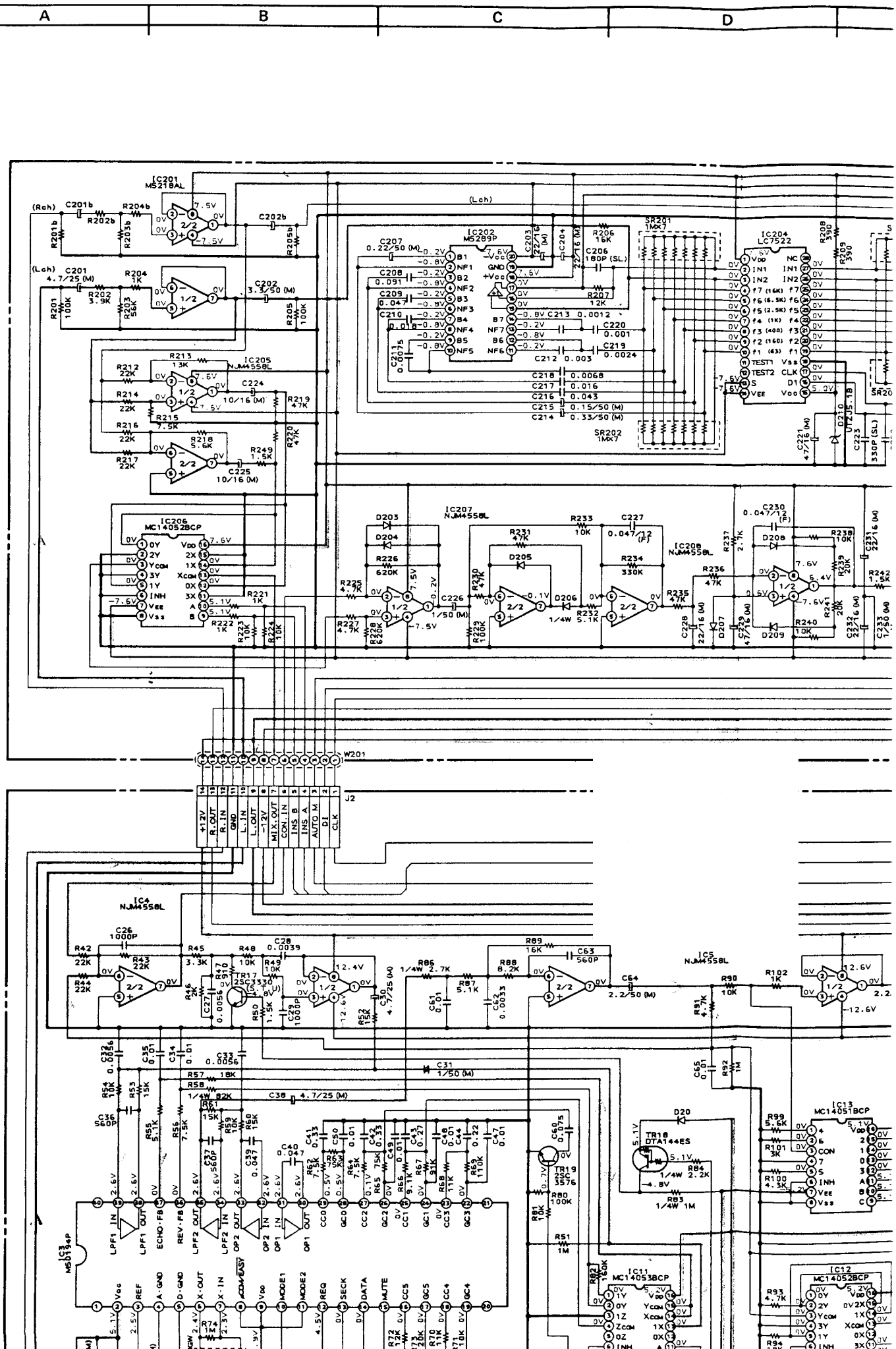
INDICATED VOLTAGES WERE MEASURED
DURING THE EQUALIZER'S FLAT MODE.

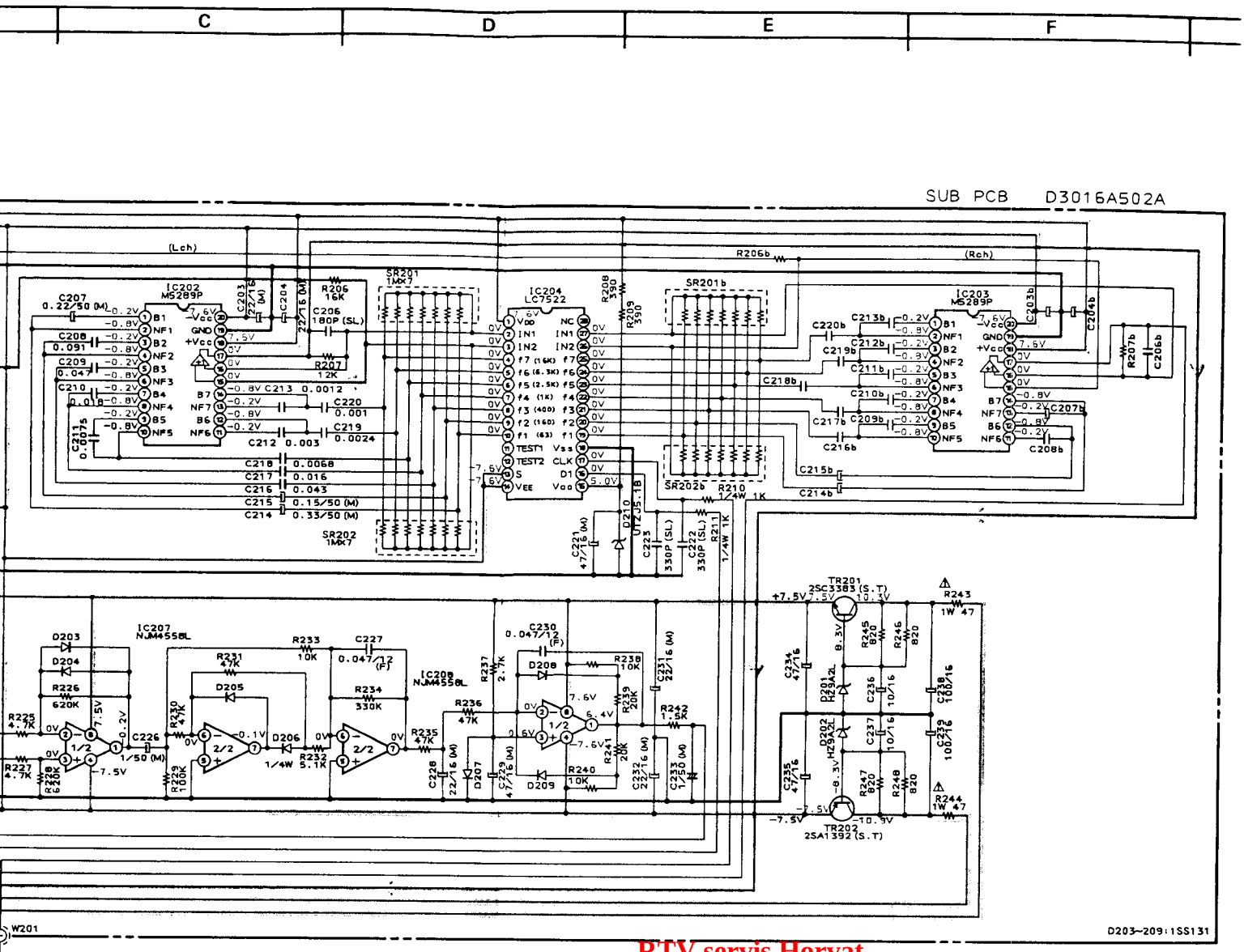

12G 11G 10G 9G 8G 7G 6G 5G 4G 3G 2G 1G P27 P26 P25 P24 P23 P22 P21 P20
61 60 59 58 57 56 55 54 53 52 51 50 49 48 47 46 45 44 43 42
P19 P18 P17 P16 P15 P14 P1 P2 P3 P4 P5 P6
25 24 23 22 21 20 19 18 17 16 15 14
R334 47K
R333 47K
R332 47K
R331 47K
R330 47K
IC301
M74HC154P
4.4V 1 Y0 VCC
1G 4.7V 2 Y1 A
2G 4.7V 3 Y2 B
3G 4.7V 4 Y3 C
4G 4.7V 5 Y4 D
5G 4.7V 6 Y5 G2
6G 4.7V 7 Y6 G1
7G 4.7V 8 Y7 Y15
8G 4.7V 9 Y8 Y14
9G 4.7V 10 Y9 Y13
10G 4.7V 11 Y10 Y12
12 GND Y11
TR311
TR310
TR309
TR308
TR307
5V
4.5V
4.8V
-24.4V
R322 2.2K 5G
R321 2.2K 4G
R320 2.2K 3G
R319 2.2K 2G
R318 2.2K 1G
R328 47K
R327 47K
R326 47K
R325 47K
R324 47K
TR305
TR304
TR303
TR302
TR301
R316 2.2K 11G
R315 2.2K 10G
R314 2.2K 9G
R313 2.2K 8G
R312 2.2K 7G
W303
P10 P9 P8 P7 P6 P5 P4 P3 P2 P1 P14 P15 P16
TO MAIN PCB J5
W302
P17 P18 P19 P20 P21 P22 P23 P24 P25 P26 P27 D C B A
TO MAIN PCB J3
(POWER SUPPLY) LINE



POWER SUPPLY) LINE

EA-750
FRONT
SCHEMATIC DIAGRAM
No.8-3 D301602M
A2


A
B
C
D
1
2
3
4
5
6
IC201 M5218AL
IC202 M5289P
IC203 M5289P
IC204 LC7522
IC205 NJM4558L
IC206 MC14052BCP
IC207 NJM4558L
IC208 NJM4558L
IC4 NJM4558L
IC5 NJM4558L
IC11 MC14053BCP
IC12 MC14052BCP
IC13 MC14051BCP
SR201 1MX7
SR202 1MX7
W201
J2
+12V
R.OUT
R.IN
GND
L.IN
L.OUT
-12V
MIX.OUT
CON.IN
INS B
INS A
AUTO M
DI
CLK
(Rch)
(Lch)
TR17 2SC3330
TR18 DTA144ES
TR19 2SC3576
D20
D210
D211



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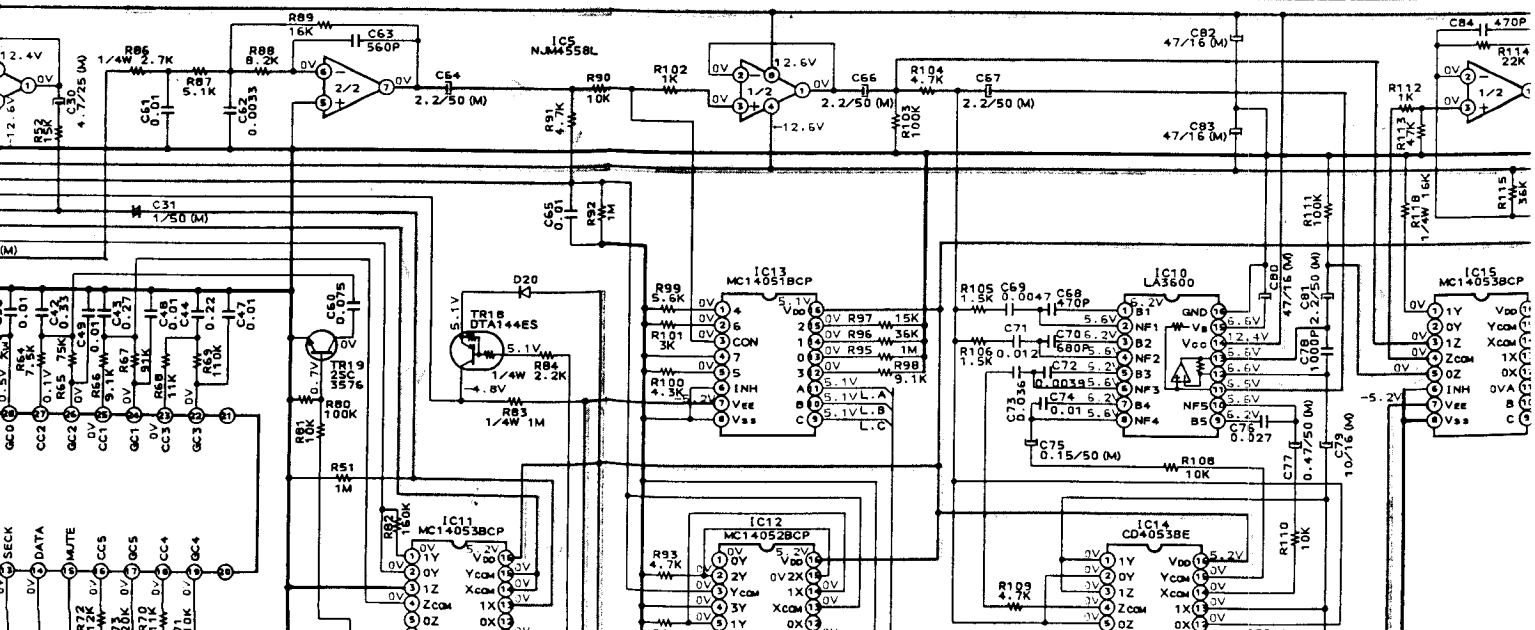
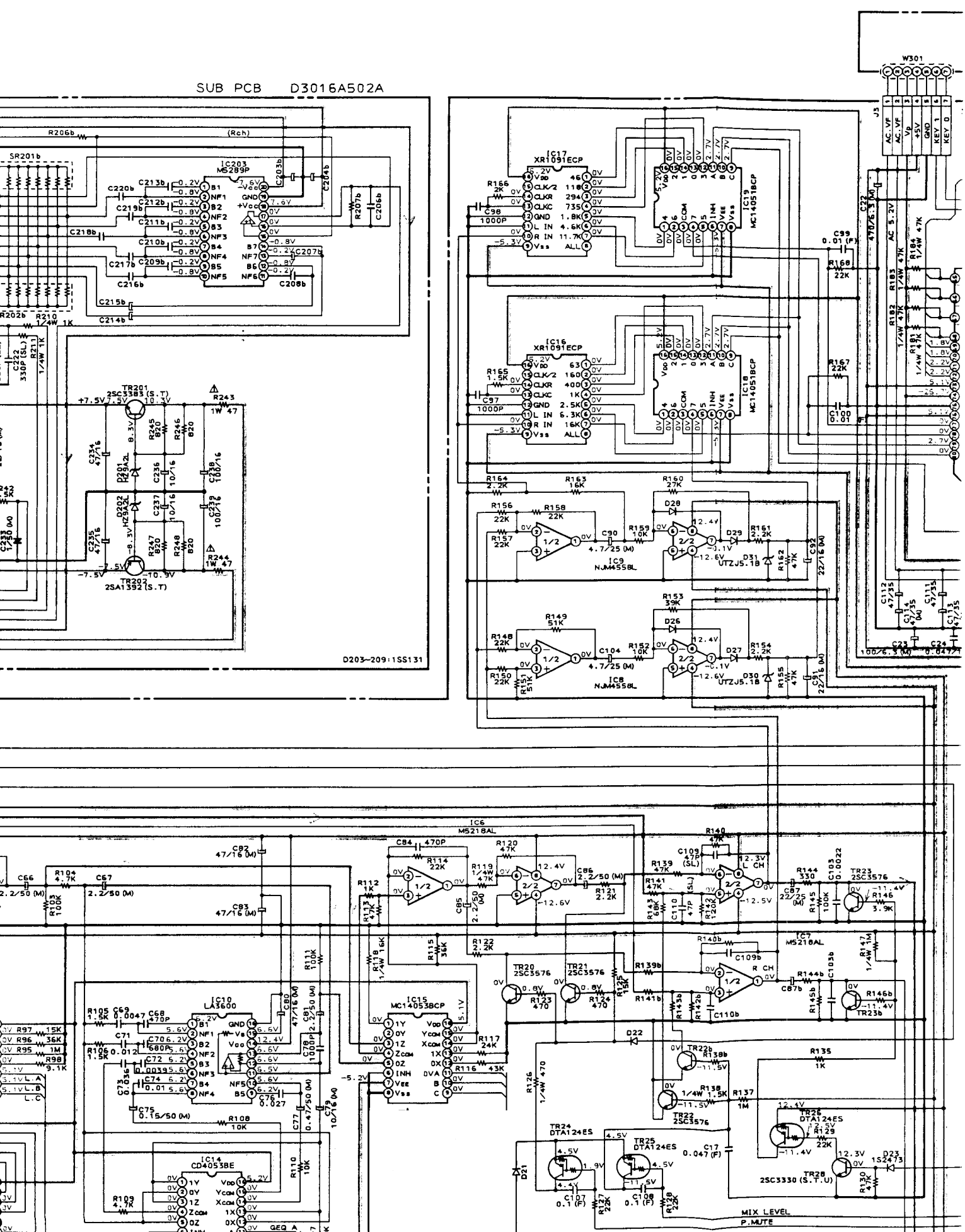
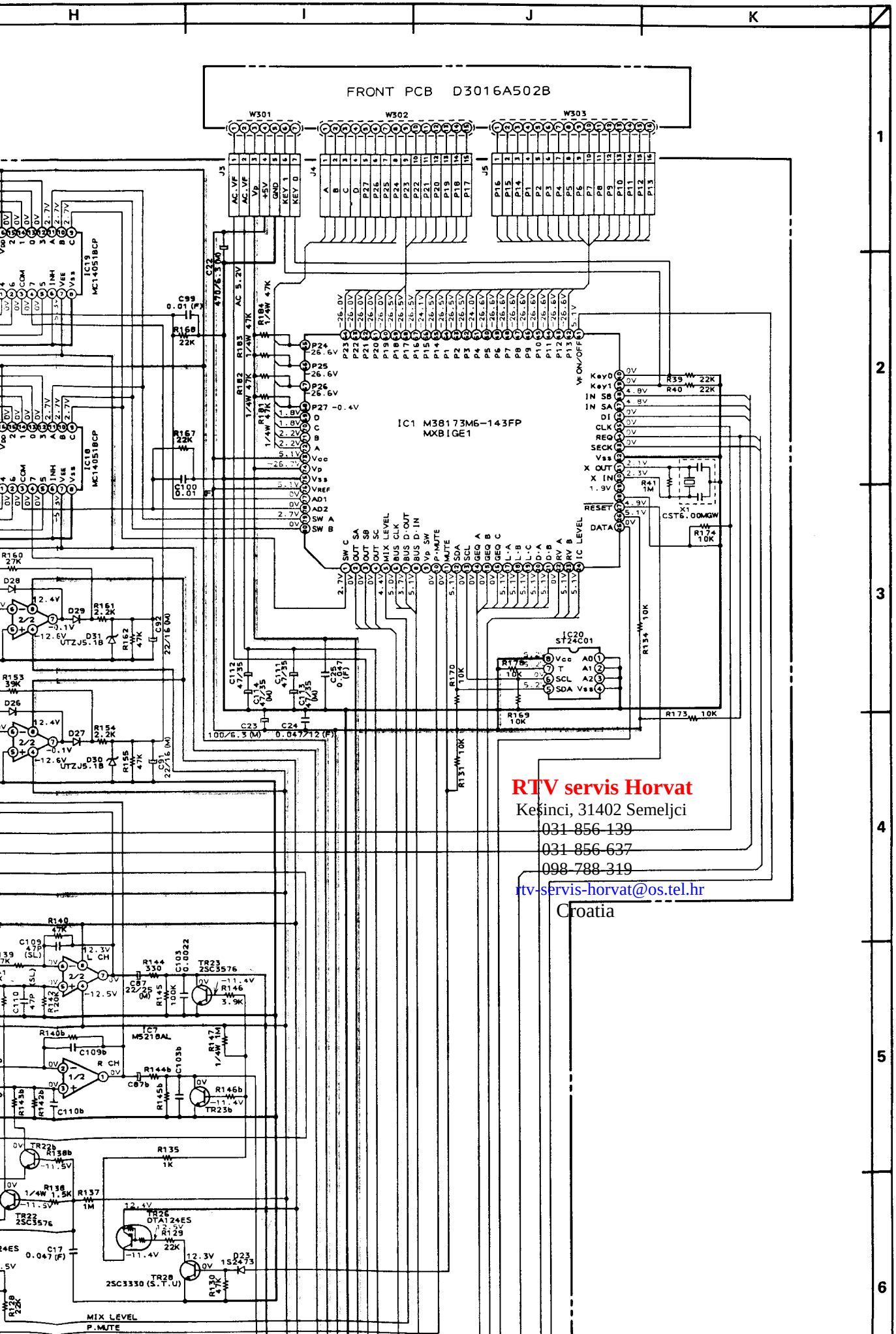



SUB PCB D3016A502A
W301
J3
AC.VF
AC.VF
Vp
+5V
GND
KEY 1
KEY 0
(Rch)
IC203 MS289P
IC17 XR1091ECP
IC16 XR1091ECP
IC19 MC14051BCP
IC18 MC14051BCP
TR201 2SC3383 (S.T)
TR202 2SA1392 (S.T)
D201 HZ9A2L
D202 HZ9A2L
D203~209:1SS131
IC9 NJM4558L
IC8 NJM4558L
IC6 M5218AL
IC7 M5218AL
IC10 LA3600
IC15 MC14053BCP
IC14 CD4053BE
TR20 2SC3576
TR21 2SC3576
TR22 2SC3576
TR23 2SC3576
TR24 DTA124ES
TR25 DTA124ES
TR26 DTA124ES
TR28 2SC3330 (S.T.U)
D22
D23 1S2473
MIX LEVEL
P.MUTE
GEQ A



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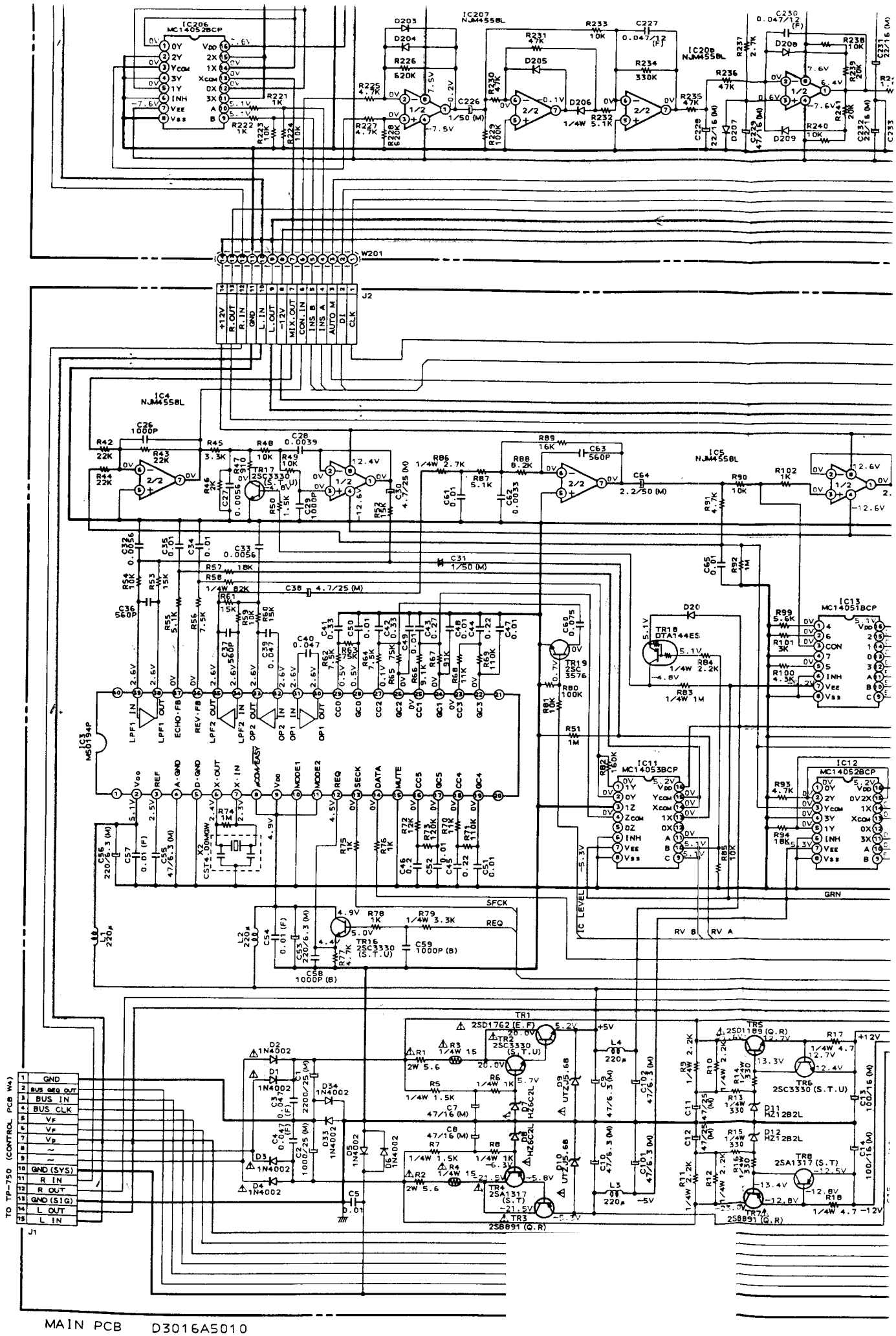
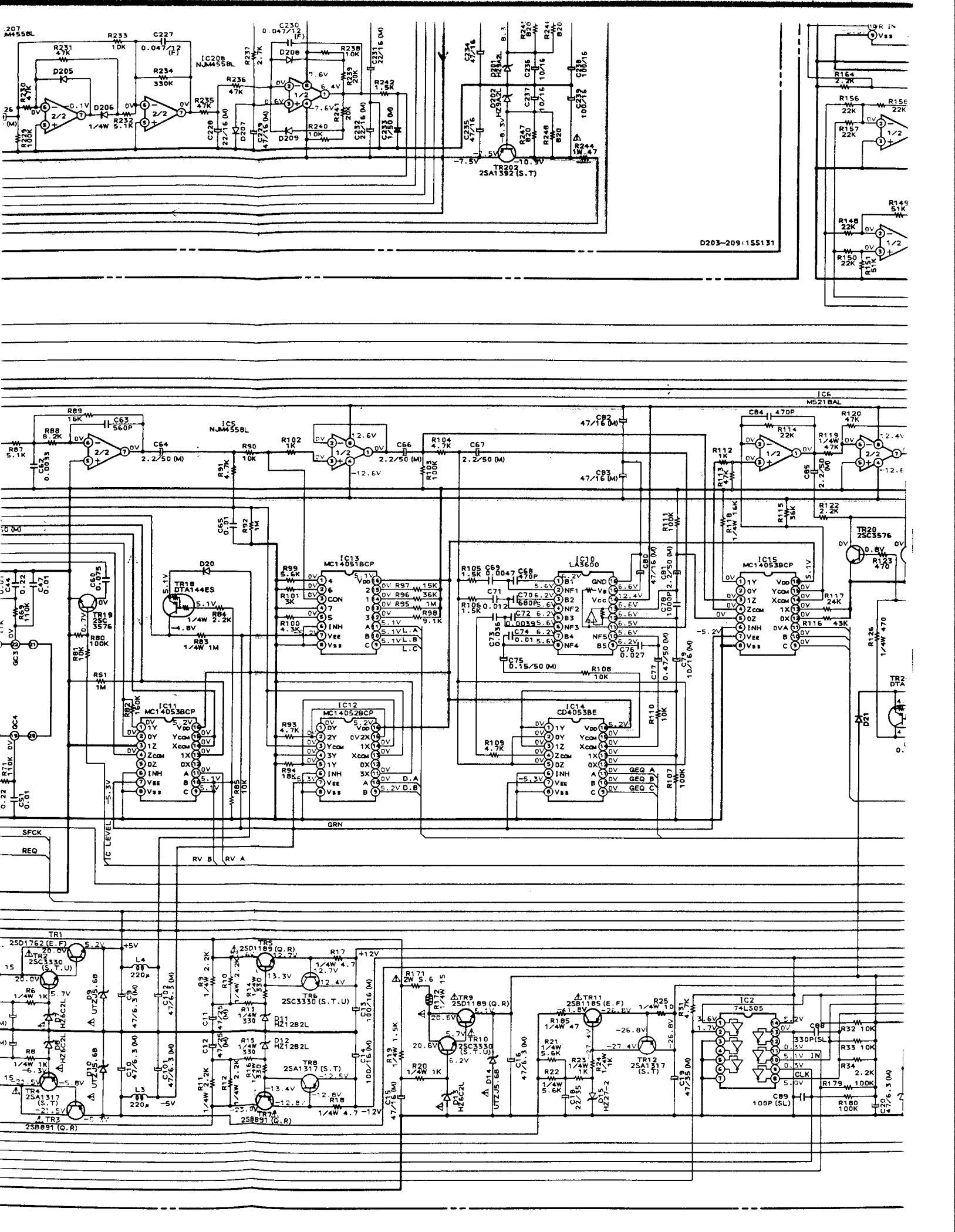
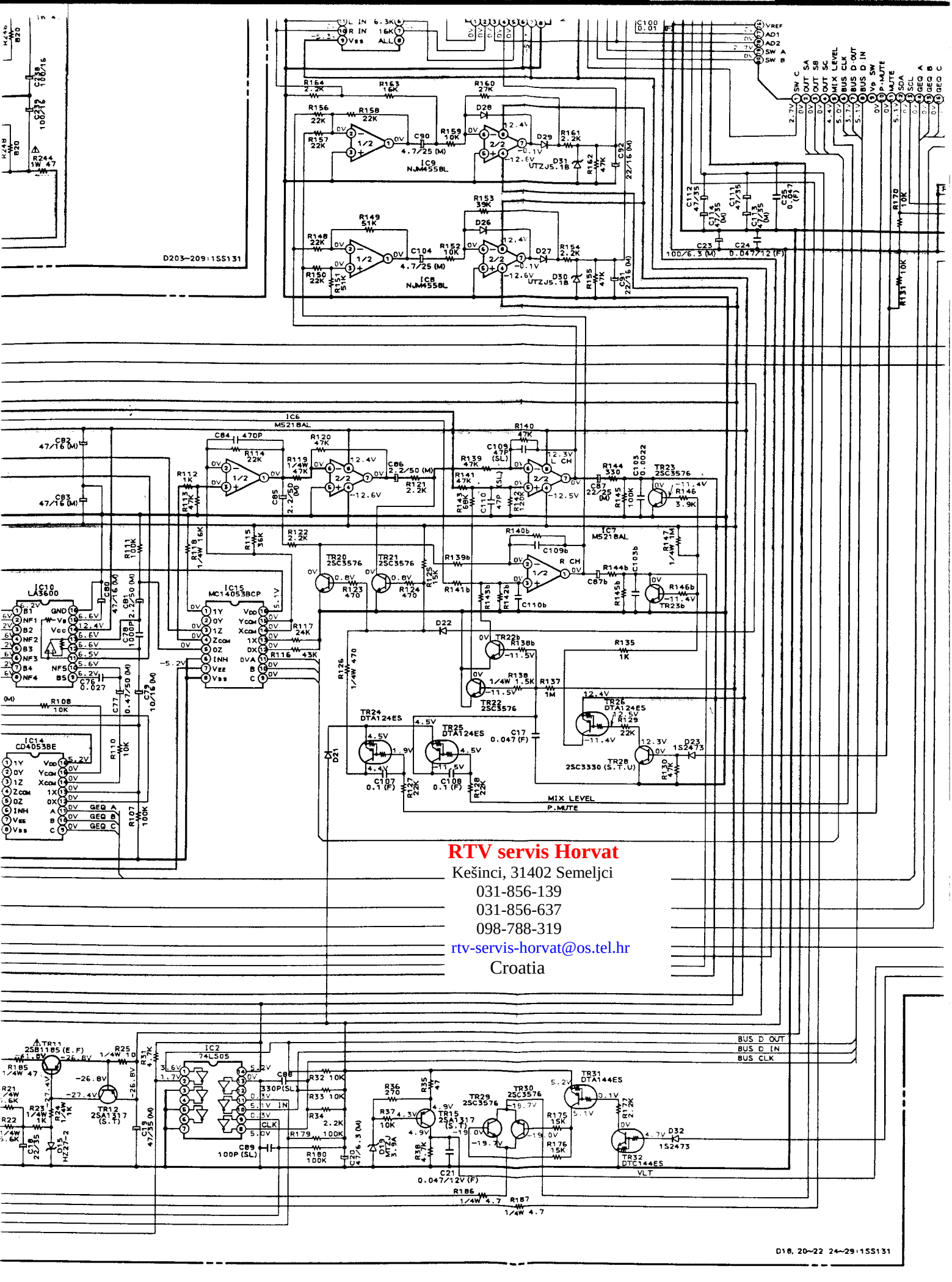

IC206 MC14052BCP
IC207 NJM4558L
IC208 NJM4558L
IC4 NJM4558L
IC5 NJM4558L
W201
J2
+12V
R. OUT
R. IN
GND
L. IN
L. OUT
-12V
MIX. OUT
CON. IN
INS. B
INS. A
AUTO M
DI
CLK
IC3 MSM5134P
IC11 MC14053BCP
IC12 MC14052BCP
IC13 MC14051BCP
TR1 2SD1762 (E.F)
TR2 2SC3330 (S.T.U)
TR3 2SB891 (Q.R)
TR4 2SA1317 (S.T)
TR5 2SD1189 (Q.R)
TR6 2SC3330 (S.T.U)
TR7 2SB891 (Q.R)
TR8 2SA1317 (S.T)
TR16 2SC3330 (S.T.U)
TR17 2SC3330 (S.T.U)
TR18 DTA144ES
TR19 2SC3576
TO TP-750 (CONTROL PCB W4)
GND
BUS REQ OUT
BUS IN
BUS CLK
J1
SFCK
REQ
GRN
RV B
RV A
MAIN PCB D3016A5010


IC208 NJM4558L
R233 10K
C227 0.047/12 (F)
R231 47K
D205
R234 330K
R230 47K
D206
R232 5.1K 1/4W
R235 47K
R236 47K
C228 22/16 (M)
D207
C229 47/16 (M)
D208
D209
R237 2.7K
R238 10K
R239 20K
R240 10K
R241 20K
R242 1.5K
C230 0.047/12 (F)
C231 22/16 (M)
C232 22/16 (M)
C233 1/50 (M)
C234 47/16
C235 47/16
C236 10/16
C237 10/16
C238 100/16
C239 100/16
R244 1W 47
TR203 2SA1392 (S.T)
D202 HZ9A2L
D203–209: 1SS131
R156 22K
R157 22K
R164 2.2K
R148 22K
R150 22K
R151 51K
R149 51K
IC5 NJM4558L
R87 5.1K
R88 8.2K
R89 16K
C63 560P
C64 2.2/50 (M)
R90 10K
R91 4.7K
R102 1K
C66 2.2/50 (M)
R104 4.7K
C67 2.2/50 (M)
R103 100K
C82 47/16 (M)
C83 47/16 (M)
IC6 M5218AL
C84 470P
R114 22K
R120 47K
R119 1/4W 47K
C85 2.2/50 (M)
R112 1K
R113 4.7K
R115 36K
R122 2.2K
R118 1/4W 1.6K
TR20 2SC3576
R123 470
R126 1/4W 470
C65 0.01
R92 1M
IC13 MC14051BCP
R99 5.6K
R101 3K
R100 4.3K
R97 15K
R96 36K
R95 1M
R98 9.1K
L.A
L.B
L.C
D20
TR18 DTA144ES
R84 2.2K 1/4W
R83 1M 1/4W
TR19 2SC 3576
R80 100K
R81 100K
C60 0.015
C61 0.22
C47 0.01
C51 0.01
R69 110K
R71 110K
IC10 LA3600
R105 1.5K
C69 0.0047
C68 470P
C71
C70 680P
R106 1.5K
C72 0.0039
C73 0.036
C74 6.2
C75 0.15/50 (M)
C76 0.027
C80 47/16 (M)
C81 2.2/50 (M)
C78 1000P
C79 10/16 (M)
C77 0.47/50 (M)
R108 10K
R111 100K
IC15 MC14053BCP
R117 24K
R116 43K
IC11 MC14053BCP
R82 100K
R85 10K
IC12 MC14052BCP
R93 4.7K
R94 18K
IC14 CD4053BE
R109 4.7K
R110 10K
R107 100K
R51 1M
-5.3V
-5.2V
SFCK
REQ
GRN
TC LEVEL
RV B
RV A
GEQ A
GEQ B
GEQ C
D21
TR1 2SD1762 (E.F)
TR2 2SC3330 (S.T.U)
TR3 2SB891 (Q.R)
TR4 2SA1317 (S.T)
TR5 2SD1189 (Q.R)
TR6 2SC3330 (S.T.U)
TR7 2SB891 (Q.R)
TR8 2SA1317 (S.T)
TR9 2SD1189 (Q.R)
TR10 2SC3330 (S.T.U)
TR11 2SB1185 (E.F)
TR12 2SA1317 (S.T)
D9 UTZJ5.6B
D10 UTZJ5.6B
D11 HZ12B2L
D12 HZ12B2L
D13 HZ6C2L
D14 UTZJ5.6B
D15 HZ27-2
L3 220μ
L4 220μ
R6 1/4W 1K
R8 1/4W 1K
R9 1/4W 2.2K
R10 1/4W 2.2K
R11 1/4W 2.2K
R12 1/4W 2.2K
R13 1/4W 330
R14 1/4W 330
R15 1/4W 330
R16 1/4W 330
R17 1/4W 4.7
R18 1/4W 4.7
R19 1/4W 1.5K
R20 1/4W 1K
R21 1/4W 5.6K
R22 1/4W 5.6K
R23 1/4W 1K
R24 1/4W 1K
R25 1/4W 10
R31 4.7K
IC2 74LS05
C88 330P(SL)
C89 100P (SL)
R32 10K
R33 10K
R34 2.2K
R179 100K
R180 100K
C20 47/6.3 (M)
CLK
IN
+5V
+12V
-5V
-12V



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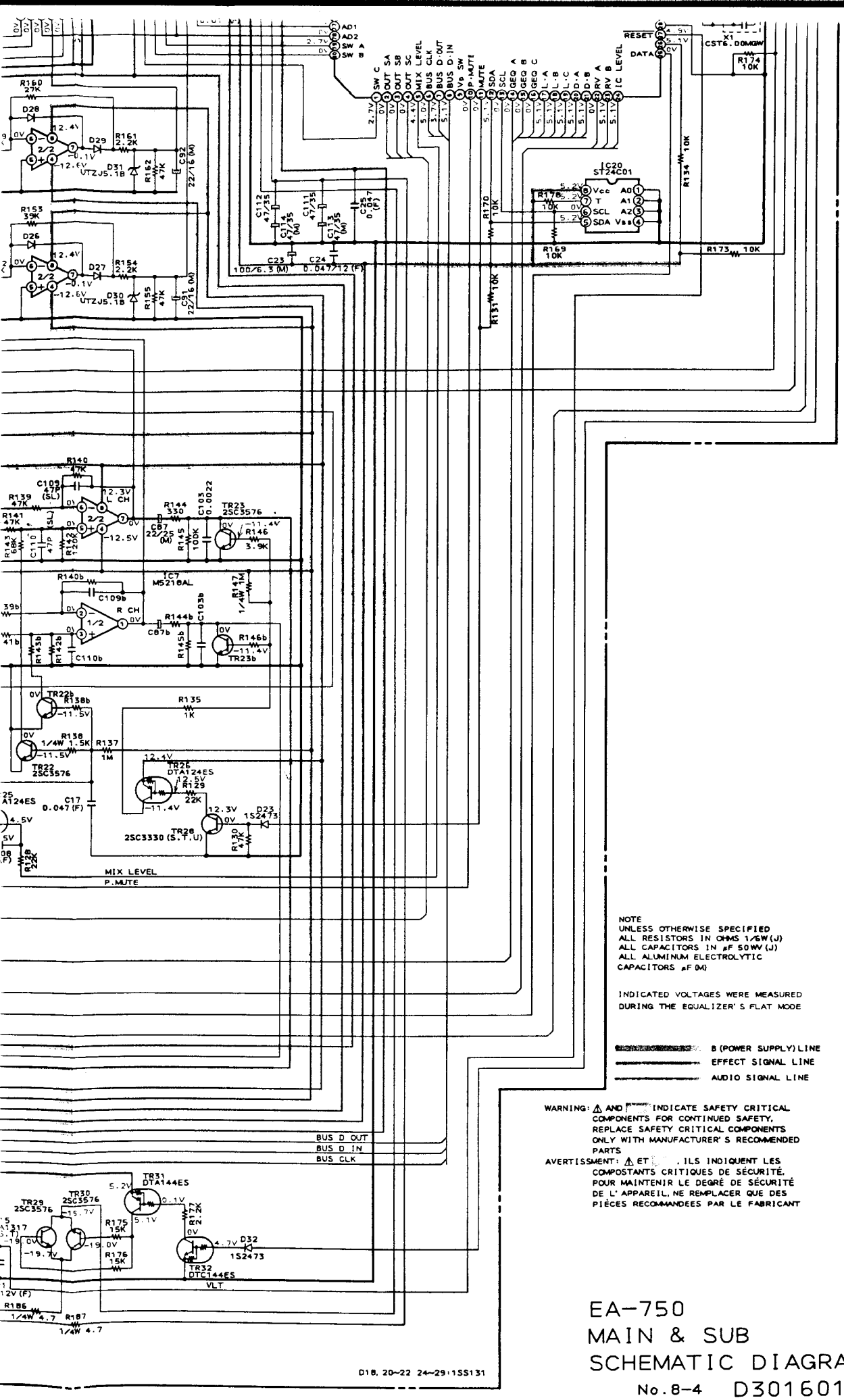
rtv-servis-horvat@os.tel.hr
Croatia



NOTE
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS 1/6W (J)
ALL CAPACITORS IN μF 50WV (J)
ALL ALUMINUM ELECTROLYTIC
CAPACITORS μF (M)

INDICATED VOLTAGES WERE MEASURED
DURING THE EQUALIZER' S FLAT MODE

B (POWER SUPPLY) LINE
EFFECT SIGNAL LINE
AUDIO SIGNAL LINE

WARNING: ⚠ AND [redacted] INDICATE SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER' S RECOMMENDED PARTS

AVERTISSMENT: ⚠ ET [redacted], ILS INDIQUENT LES COMPOSTANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L' APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDEES PAR LE FABRICANT

EA-750
MAIN & SUB
SCHEMATIC DIAGRAM

No.8-4 D301601M
A0

PRINCIPAL PARTS LOCATION

ICs

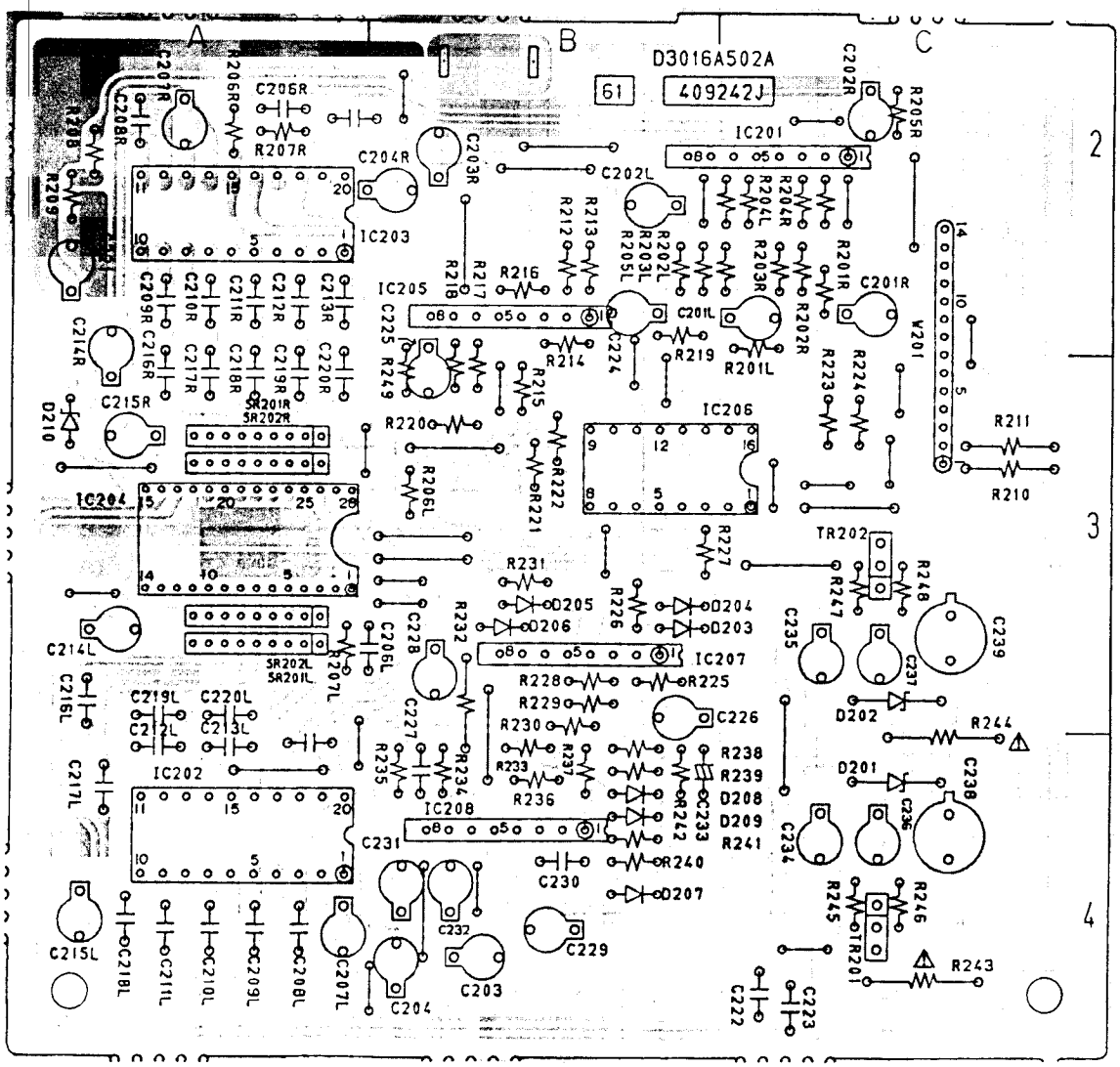
IC201 ..... C2
IC202 ..... A4
IC203 ..... A2
IC204 ..... A3
IC205 ..... B2
IC206 ..... B3
IC207 ..... B3
IC208 ..... B4

WIRE

W201 ..... C2,3

TRANSISTORs

TR201 ..... C4
TR202 ..... C3

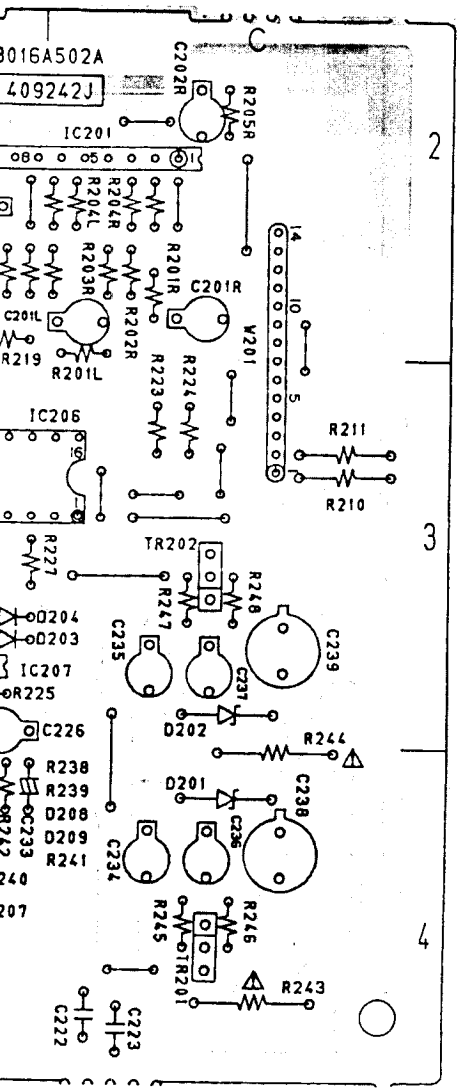


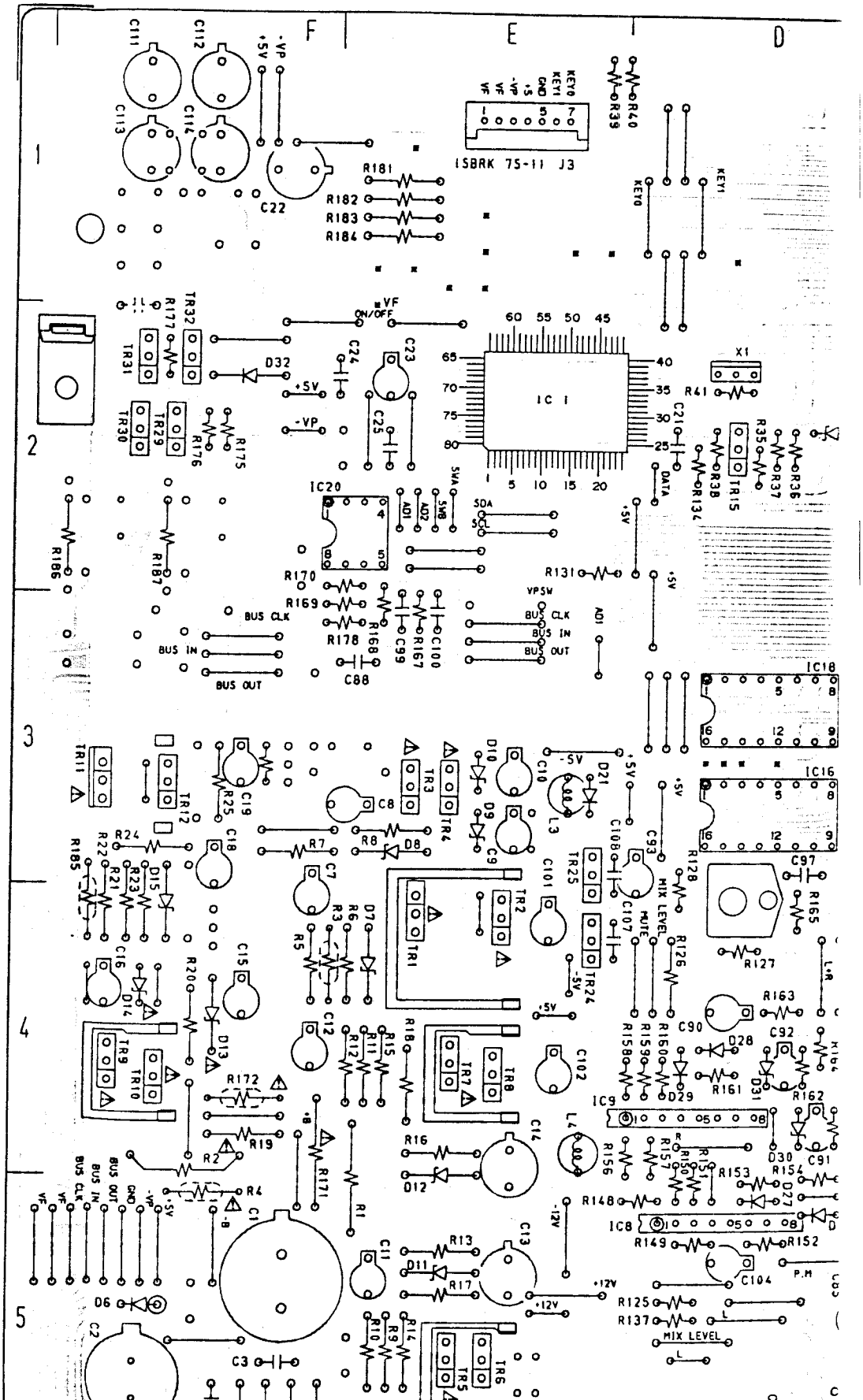
RINCIPAL PARTS LOCATION

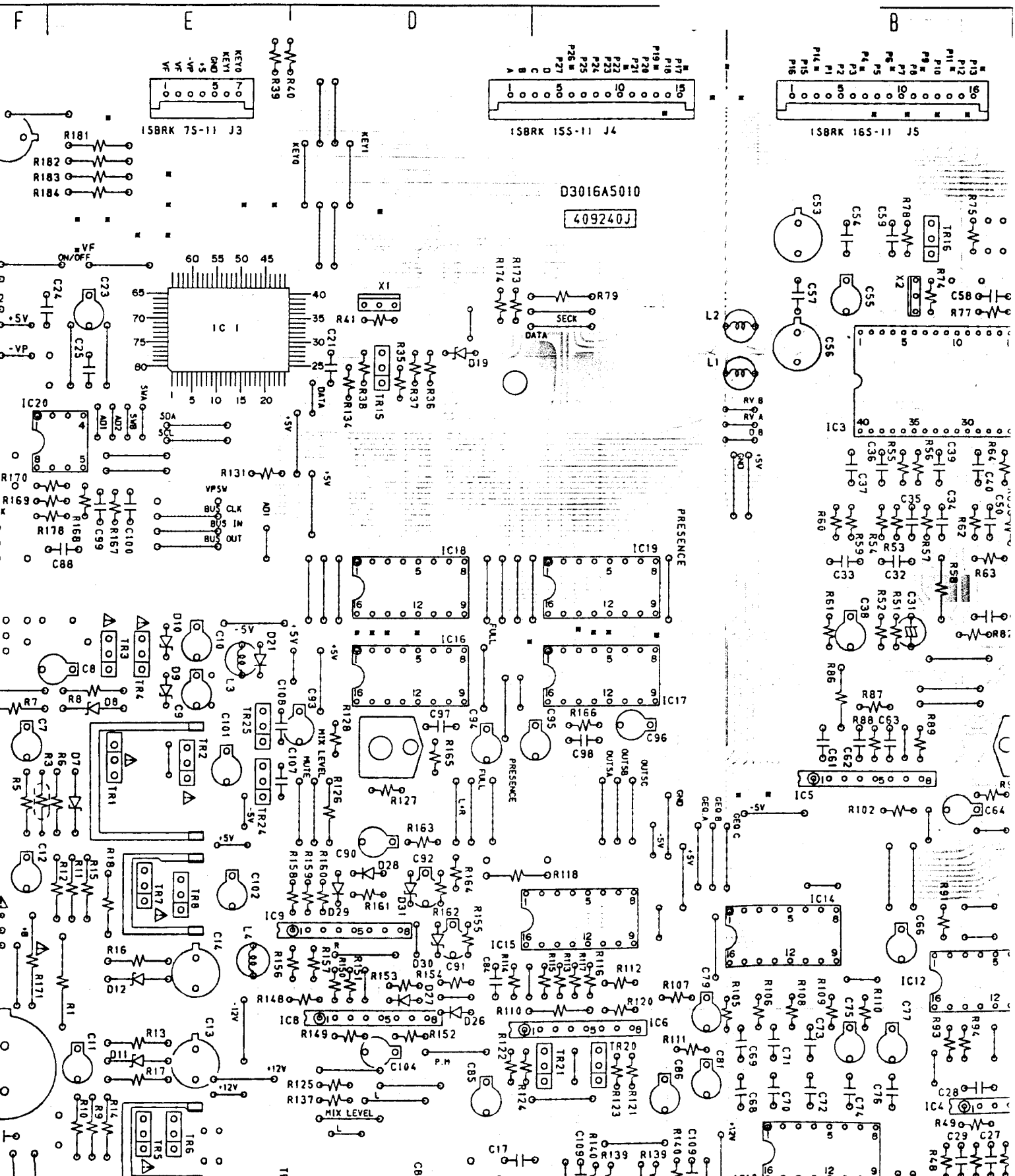
201 ..... C2
202 ..... A4
203 ..... A2
204 ..... A3
205 ..... B2
206 ..... B3
207 ..... B3
208 ..... B4

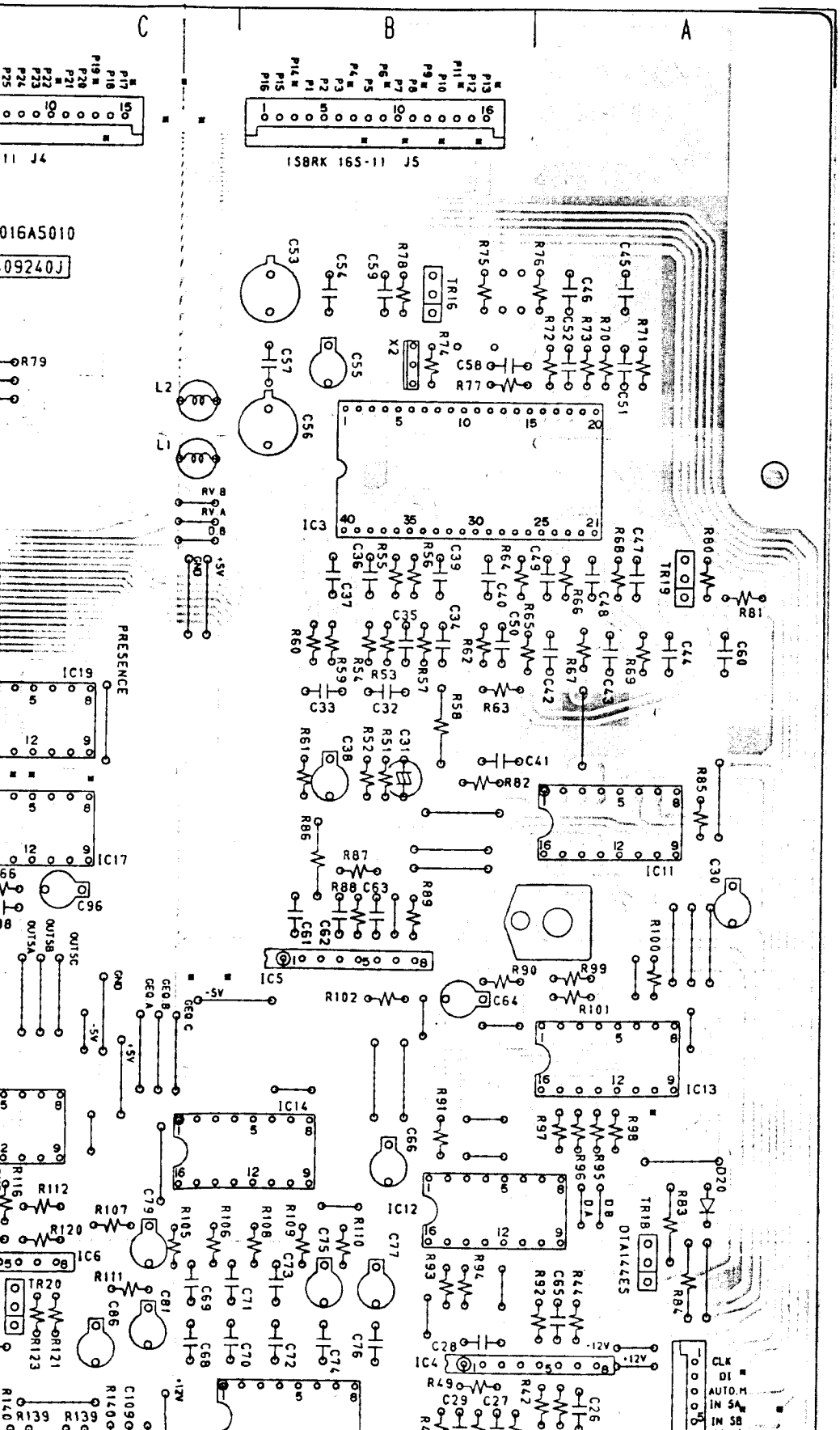
RE
01 ..... C2,3

ANSISTORs
01 ..... C4
02 ..... C3






F
E
D
B
ISBRK 7S-11 J3
ISBRK 15S-11 J4
ISBRK 16S-11 J5
D3016A5010
409240J
IC 1
IC3
IC4
IC5
IC6
IC8
IC9
IC12
IC14
IC15
IC16
IC17
IC18
IC19
IC20
X1
X2
TR1
TR2
TR3
TR4
TR5
TR6
TR7
TR8
TR15
TR16
TR20
TR21
TR24
TR25
L1
L2
L3
L4
SECK
DATA
PRESENCE
FULL
MIX LEVEL
MUTE
BUS CLK
BUS IN
BUS OUT
VP5V
-VP
+5V
-5V
+12V
-12V
GND



PRINCIPAL PARTS LOCATION

ICs

IC1 ..... E2
IC2 ..... F6
IC3 ..... B2
IC4 ..... A,B5
IC5 ..... B4
IC6 ..... C5
IC7 ..... C5,6
IC8 ..... D5
IC9 ..... D4
IC10 ..... B5
IC11 ..... A3
IC12 ..... A,B5
IC13 ..... A4
IC14 ..... C,B4
IC15 ..... C4
IC16 ..... D3
IC17 ..... C3
IC18 ..... D3
IC19 ..... C3
IC20 ..... E2

CONNECTORs

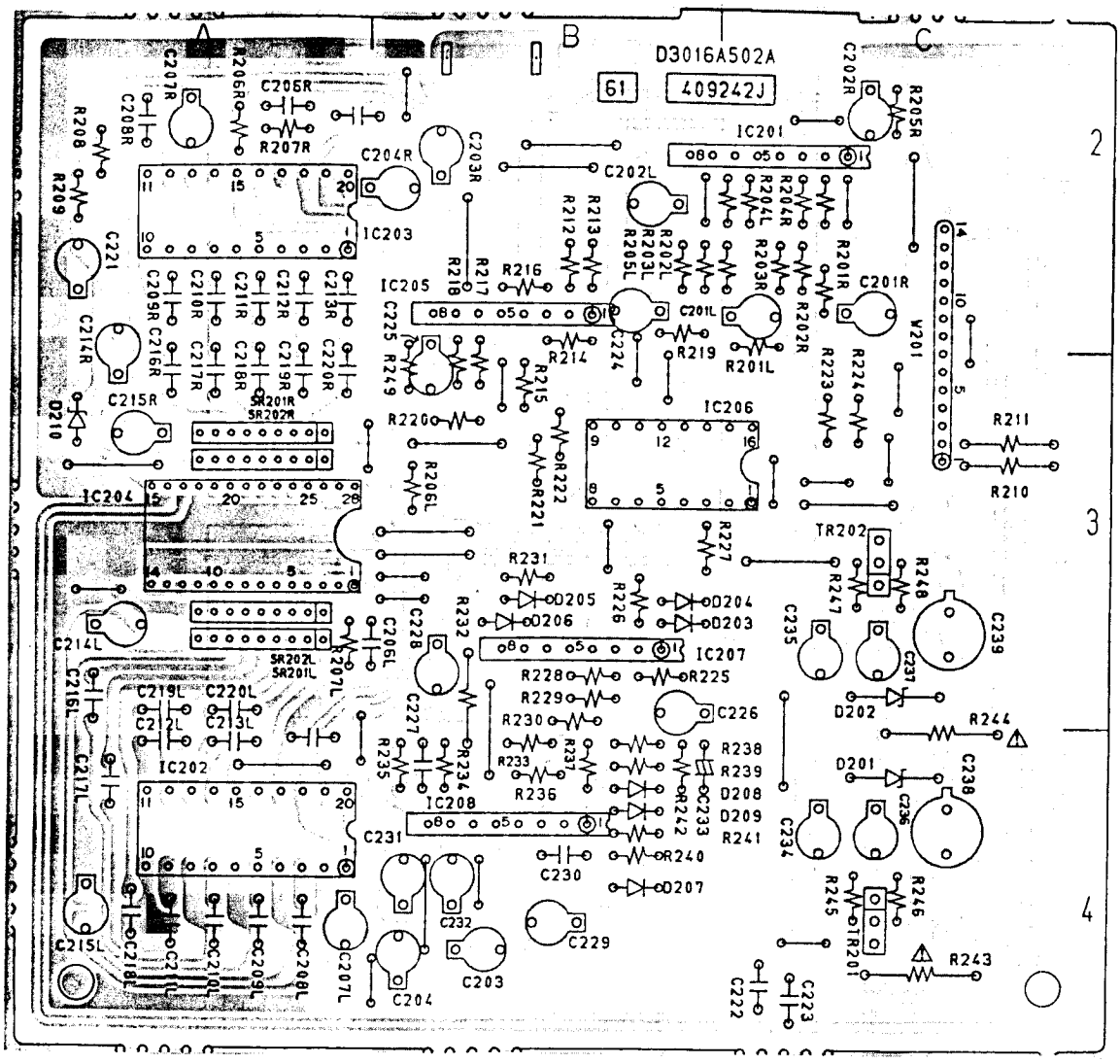
J1 ..... E6
J2 ..... A5,6
J3 ..... E1
J4 ..... C1
J5 ..... B1

TRANSISTORs

TR1 ..... E4
TR2 ..... E4
TR3 ..... E3
TR4 ..... E3
TR5 ..... E5
TR6 ..... E5
TR7 ..... E4
TR8 ..... E4
TR9 ..... F4
TR10 ..... F4
TR11 ..... F3
TR12 ..... F3
TR15 ..... D2
TR16 ..... B1
TR17 ..... B5,6
TR18 ..... A5
TR19 ..... A2
TR20 ..... C5
TR21 ..... C5
TR22 ..... C6
TR23 ..... D6
TR24 ..... E4
TR25 ..... E3
TR26 ..... E6
TR28 ..... E5,6
TR29 ..... F2
TR30 ..... F2
TR31 ..... F2
TR32 ..... F2

W201 ..... C2,3

TRANSISTORs
TR201 ..... C4
TR202 ..... C3

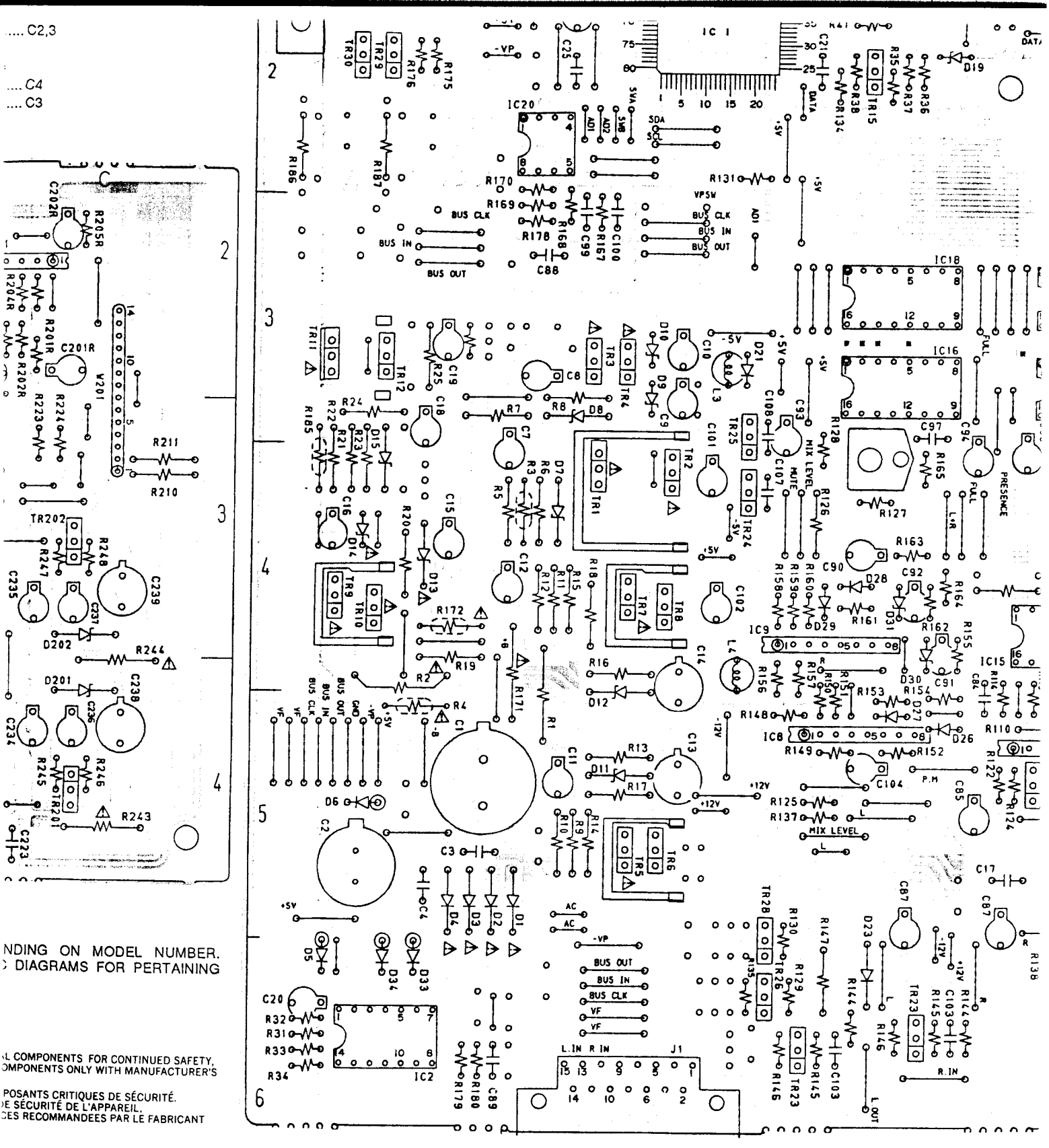


SUB PCB D3016A502A

NOTE : PARTS DIFFER DEPENDING ON MODEL NUMBER. REFER TO SCHEMATIC DIAGRAMS FOR PERTAINING PARTS INFORMATION.

WARNING: ⚠ INDICATES SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY. REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

AVERTISSEMENT: ⚠ IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDEES PAR LE FABRICANT

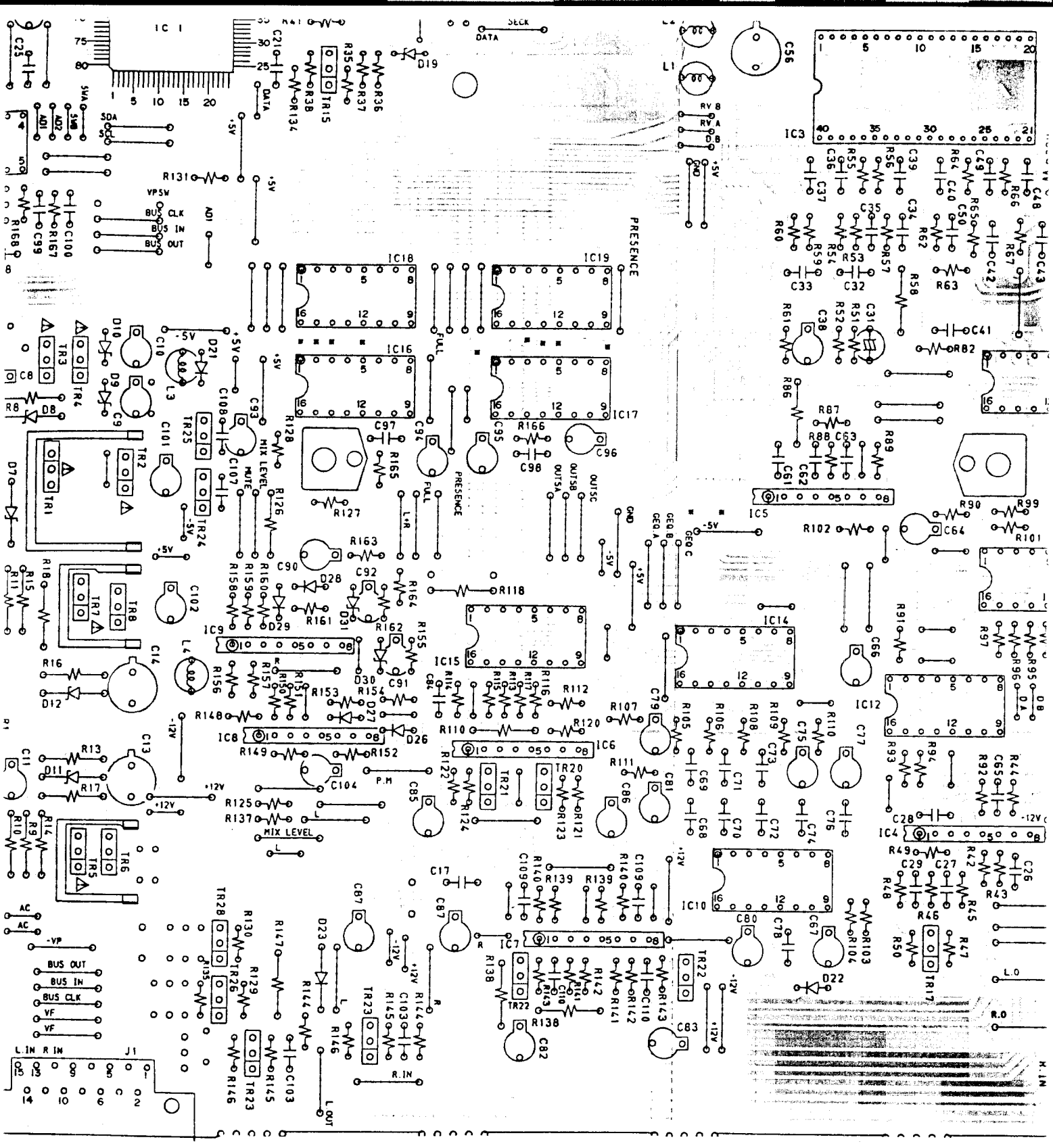


NDING ON MODEL NUMBER.
DIAGRAMS FOR PERTAINING

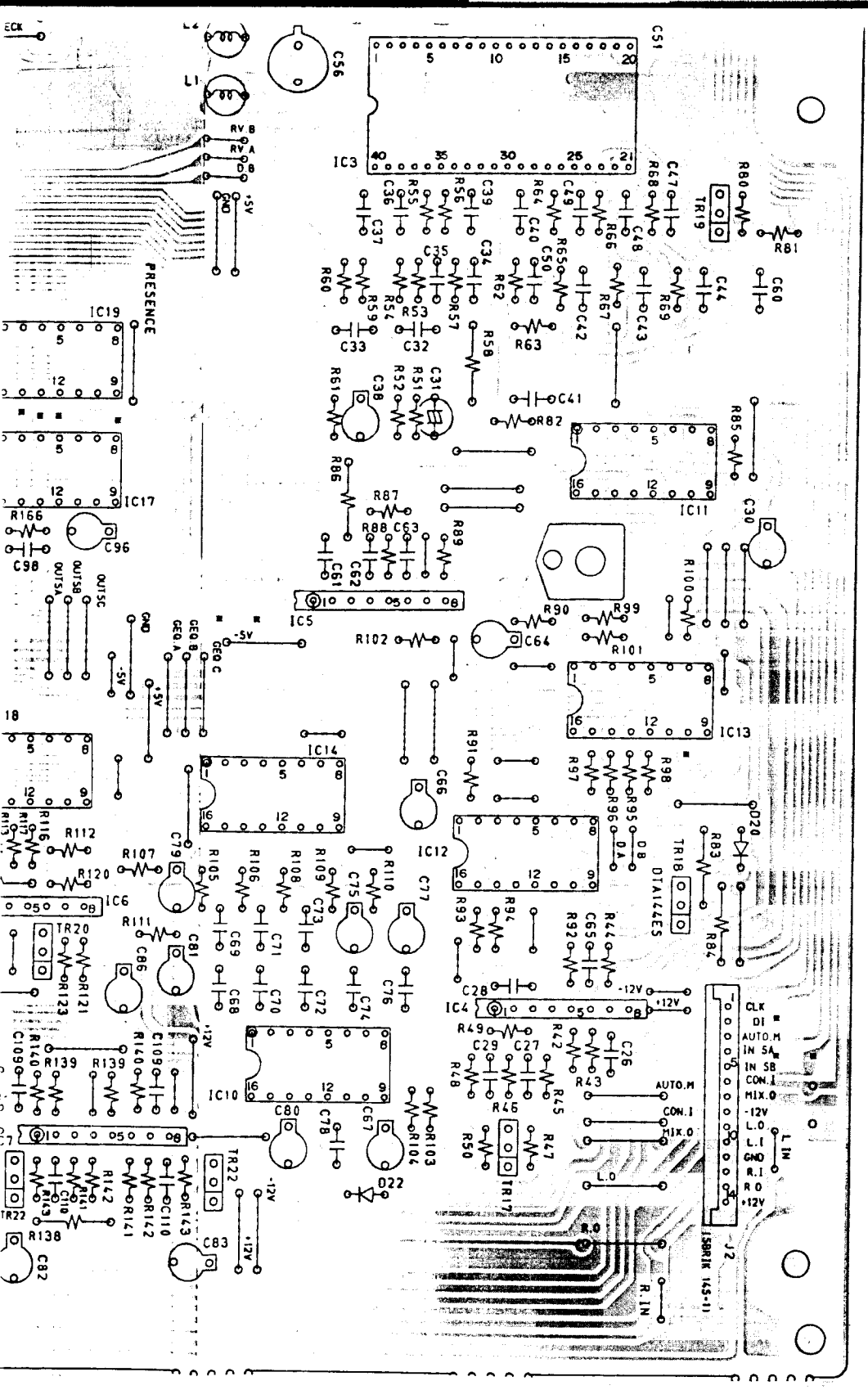
L COMPONENTS FOR CONTINUED SAFETY,
OMPONENTS ONLY WITH MANUFACTURER'S

POSANTS CRITIQUES DE SÉCURITÉ.
E SÉCURITÉ DE L'APPAREIL,
CES RECOMMANDEES PAR LE FABRICANT

MAIN PCB D3



MAIN PCB D3016A5010



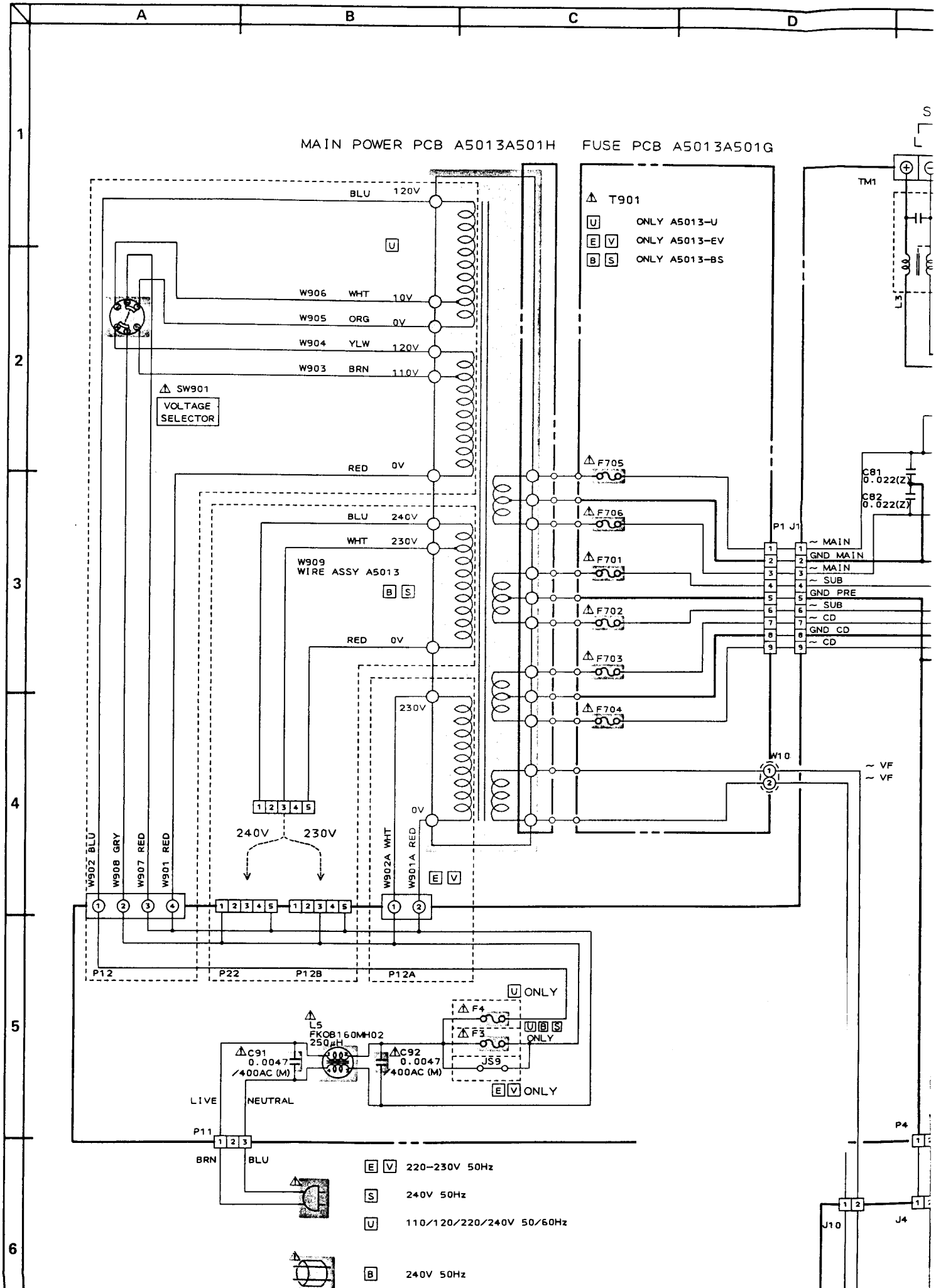
IC12 ..... A,B5
IC13 ..... A4
IC14 ..... C,B4
IC15 ..... C4
IC16 ..... D3
IC17 ..... C3
IC18 ..... D3
IC19 ..... C3
IC20 ..... E2

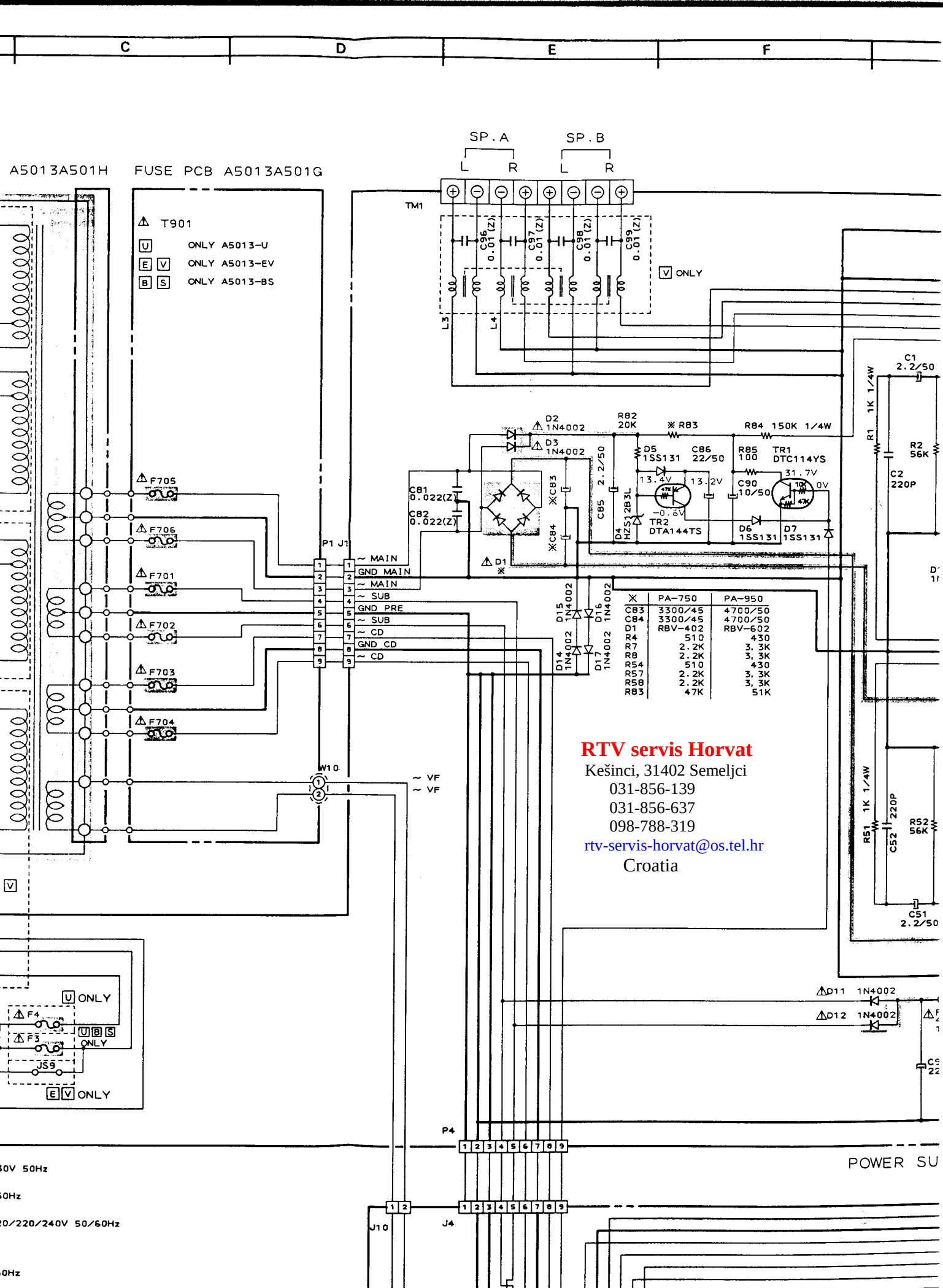
CONNECTORs

J1 ..... E6
J2 ..... A5,6
J3 ..... E1
J4 ..... C1
J5 ..... B1

TRANSISTORs

TR1 ..... E4
TR2 ..... E4
TR3 ..... E3
TR4 ..... E3
TR5 ..... E5
TR6 ..... E5
TR7 ..... E4
TR8 ..... E4
TR9 ..... F4
TR10 ..... F4
TR11 ..... F3
TR12 ..... F3
TR15 ..... D2
TR16 ..... B1
TR17 ..... B5,6
TR18 ..... A5
TR19 ..... A2
TR20 ..... C5
TR21 ..... C5
TR22 ..... C6
TR23 ..... D6
TR24 ..... E4
TR25 ..... E3
TR26 ..... E6
TR28 ..... E5,6
TR29 ..... F2
TR30 ..... F2
TR31 ..... F2
TR32 ..... F2


A
B
C
D
1
2
3
4
5
6
MAIN POWER PCB A5013A501H
FUSE PCB A5013A501G
BLU 120V
W906 WHT 10V
W905 ORG 0V
W904 YLW 120V
W903 BRN 110V
SW901
VOLTAGE SELECTOR
RED 0V
BLU 240V
WHT 230V
W909
WIRE ASSY A5013
RED 0V
230V
0V
240V 230V
W902 BLU
W908 GRY
W907 RED
W901 RED
W902A WHT
W901A RED
P12
P22
P12B
P12A
T901
ONLY A5013-U
ONLY A5013-EV
ONLY A5013-BS
F705
F706
F701
F702
F703
F704
TM1
L3
C81 0.022(Z)
C82 0.022(Z)
P1 J1
~ MAIN
GND MAIN
~ MAIN
~ SUB
GND PRE
~ SUB
~ CD
GND CD
~ CD
W10
~ VF
~ VF
U ONLY
F4
F3
JS9
U B S ONLY
E V ONLY
L5
FKOB160MH02
250μH
C91 0.0047 /400AC (M)
C92 0.0047 /400AC (M)
LIVE
NEUTRAL
P11
BRN
BLU
P4
J10
J4
E V 220-230V 50Hz
S 240V 50Hz
U 110/120/220/240V 50/60Hz
B 240V 50Hz



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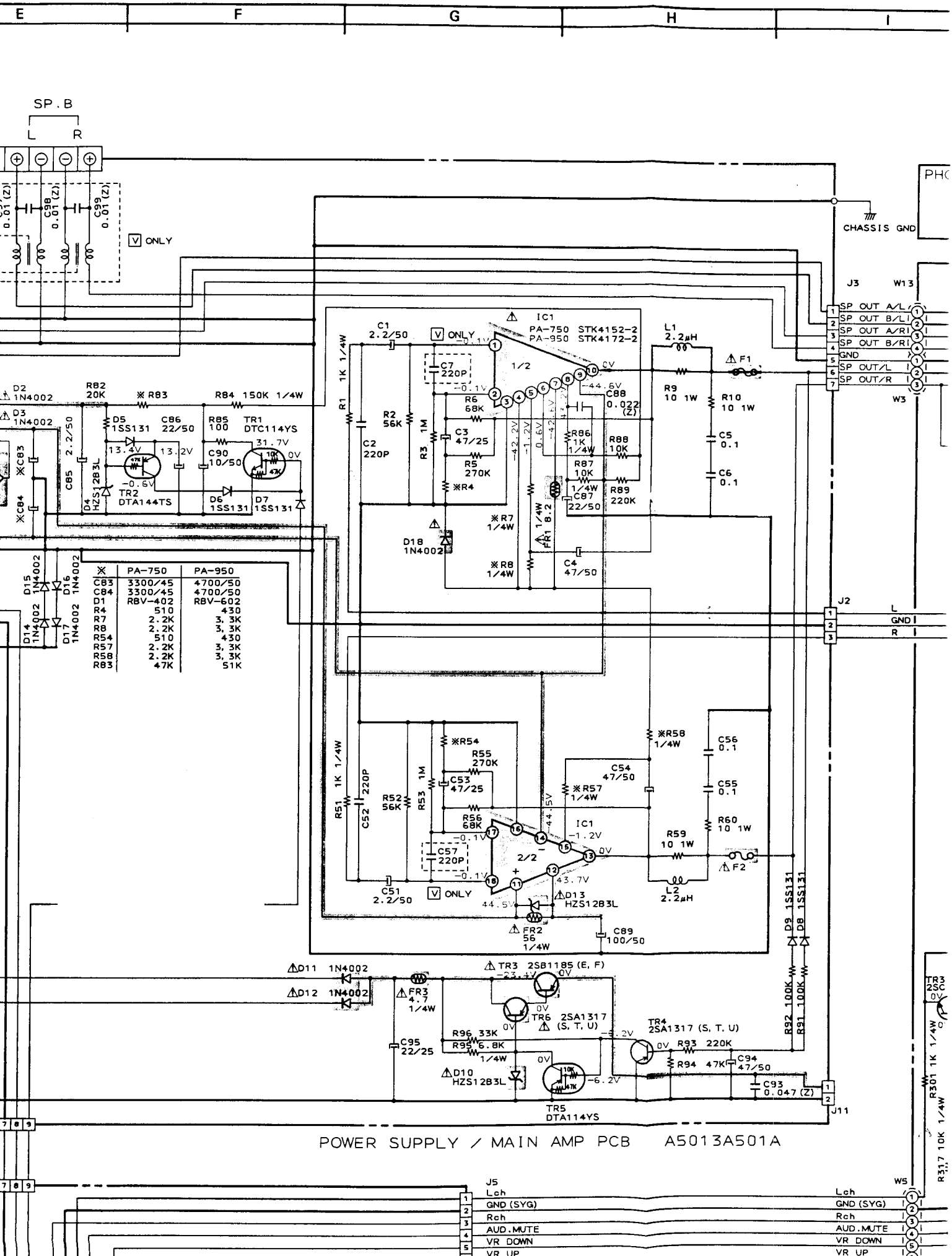
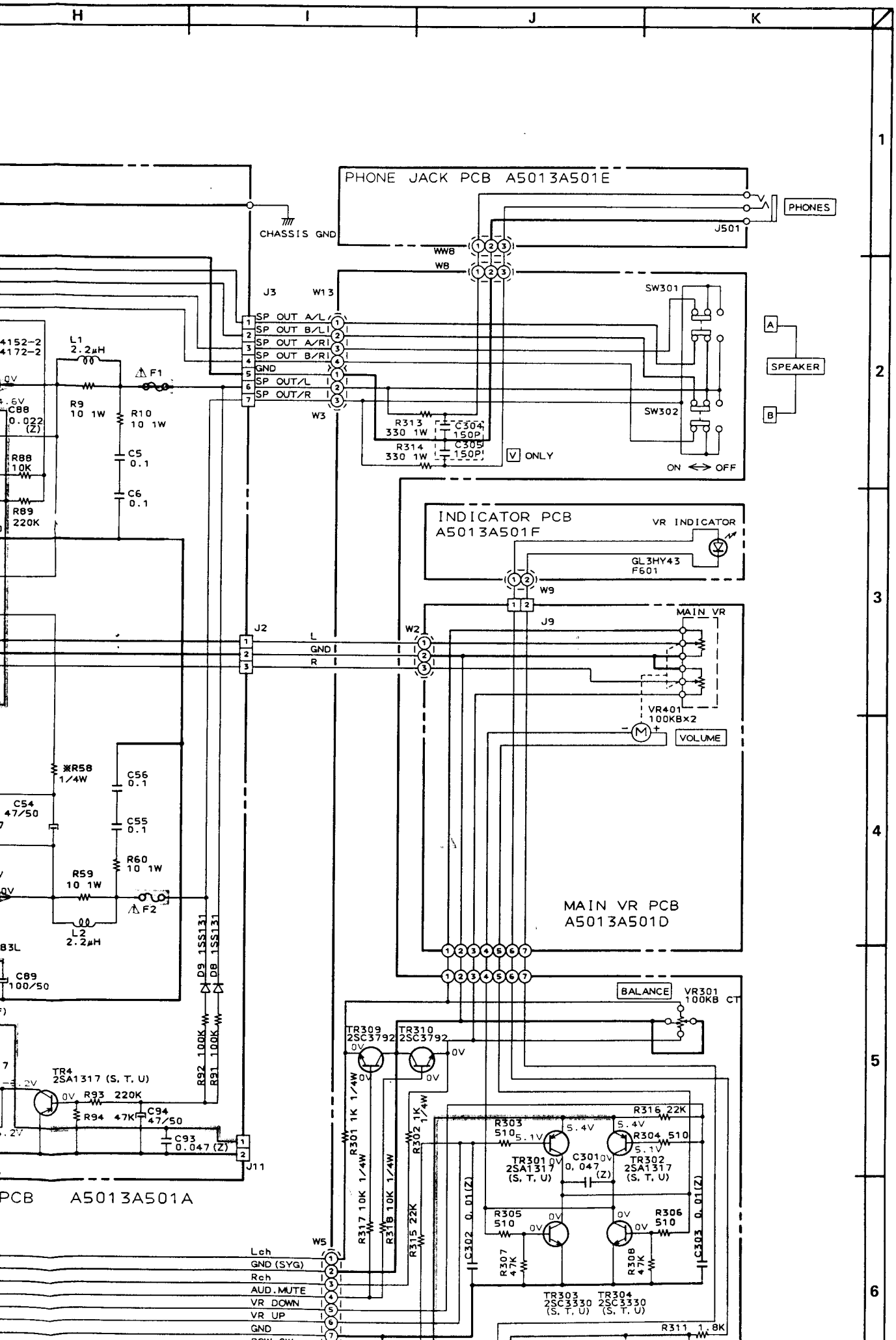
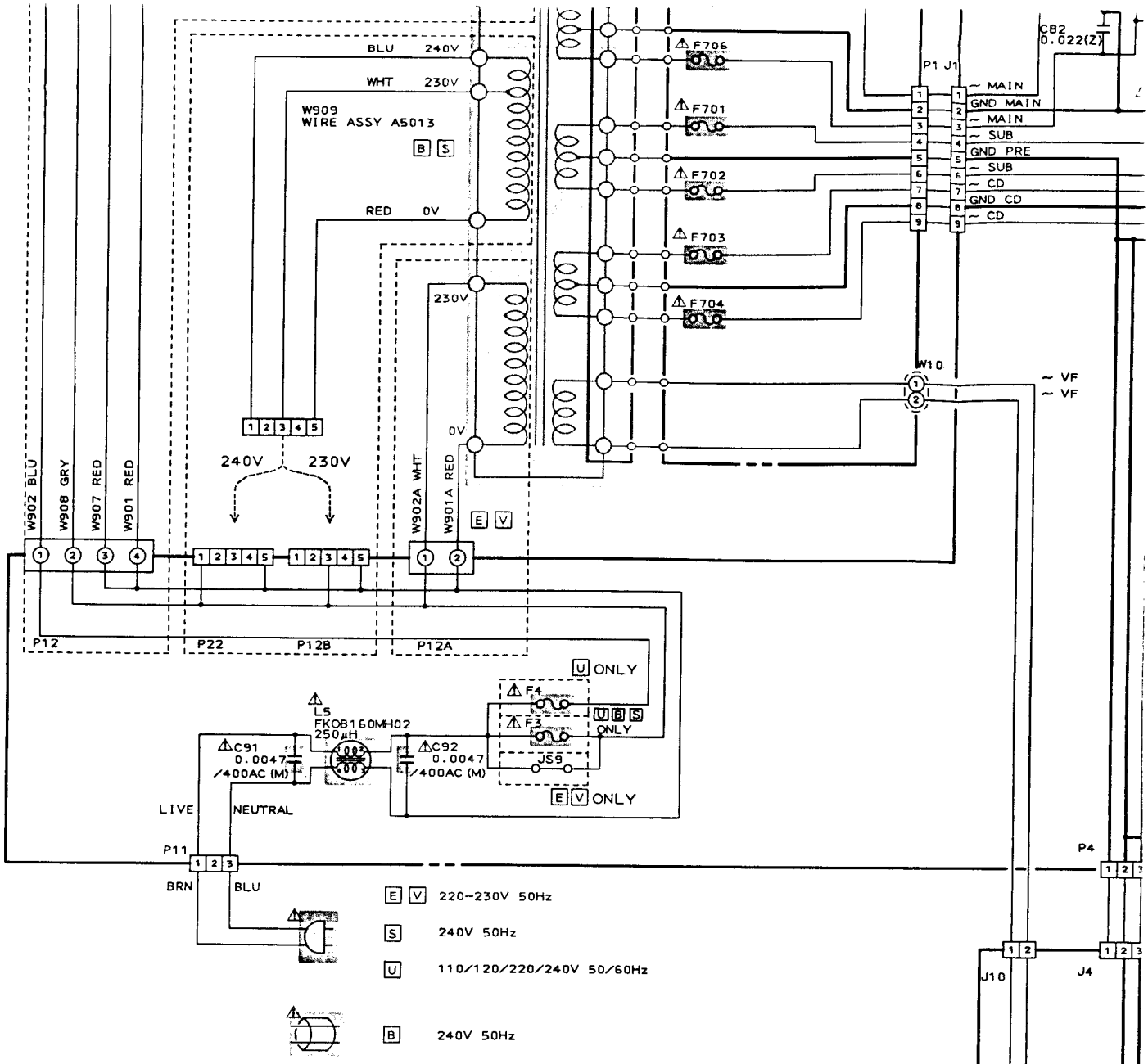


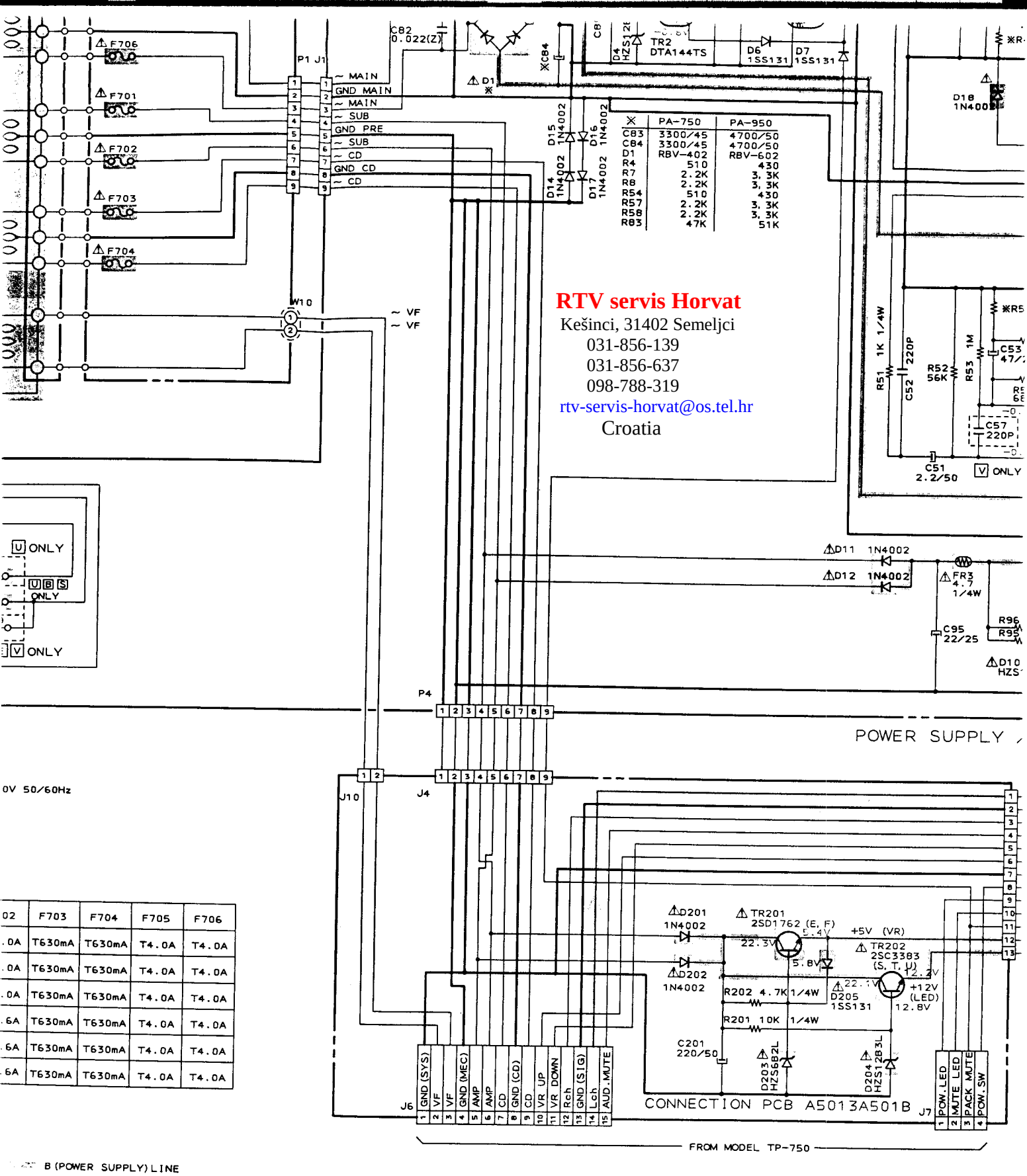
※	PA-750	PA-950
C83	3300/45	4700/50
C84	3300/45	4700/50
D1	RBV-402	RBV-602
R4	510	430
R7	2.2K	3.3K
R8	2.2K	3.3K
R54	510	430
R57	2.2K	3.3K
R58	2.2K	3.3K
R83	47K	51K

POWER SUPPLY / MAIN AMP PCB A5013A501A


H
I
J
K
1
2
3
4
5
6
PHONE JACK PCB A5013A501E
PHONES
J501
CHASSIS GND
W8
W13
J3
SP OUT A/L
SP OUT B/L
SP OUT A/R
SP OUT B/R
GND
SP OUT/L
SP OUT/R
W3
SW301
SW302
A
B
SPEAKER
ON ↔ OFF
R313 330 1W
R314 330 1W
C304 150P
C305 150P
V ONLY
INDICATOR PCB A5013A501F
VR INDICATOR
GL3HY43 F601
W9
MAIN VR
J9
J2
W2
L
GND
R
VR401 100KBx2
VOLUME
L1 2.2μH
L2 2.2μH
F1
F2
R9 10 1W
R10 10 1W
R59 10 1W
R60 10 1W
※R58 1/4W
C88 0.022 (Z)
R88 10K
R89 220K
C5 0.1
C6 0.1
C54 47/50
C55 0.1
C56 0.1
C89 100/50
D9 1SS131
D8 1SS131
R92 100K
R91 100K
MAIN VR PCB A5013A501D
BALANCE
VR301 100KB CT
TR309 2SC3792
TR310 2SC3792
TR4 2SA1317 (S, T, U)
R93 220K
R94 47K
C94 47/50
C93 0.047 (Z)
J11
PCB A5013A501A
R301 1K 1/4W
R302 1K 1/4W
R303 510
R304 510
R316 22K
TR301 2SA1317 (S, T, U)
TR302 2SA1317 (S, T, U)
C301 0.047 (Z)
R305 510
R306 510
R307 47K
R308 47K
C302 0.01(Z)
C303 0.01(Z)
R317 10K 1/4W
R318 10K 1/4W
R315 22K
TR303 2SC3330 (S, T, U)
TR304 2SC3330 (S, T, U)
R311 1.8K
W5
Lch
GND (SYG)
Rch
AUD.MUTE
VR DOWN
VR UP
GND



FUSE No.	F1	F2	F3	F4	F701	F702	F703	F704	F705	F706
PA-950 E V	T3.15A	T3.15A	—	—	T2.0A	T2.0A	T630mA	T630mA	T4.0A	T4.0A
PA-950 S B	T3.15A	T3.15A	T2.0A	—	T2.0A	T2.0A	T630mA	T630mA	T4.0A	T4.0A
PA-950 U	T3.15A	T3.15A	T2.0A	T2.0A	T2.0A	T2.0A	T630mA	T630mA	T4.0A	T4.0A
PA-750 E V	T2.5A	T2.5A	—	—	T1.6A	T1.6A	T630mA	T630mA	T4.0A	T4.0A
PA-750 S B	T2.5A	T2.5A	T2.0A	—	T1.6A	T1.6A	T630mA	T630mA	T4.0A	T4.0A
PA-750 U	T2.5A	T2.5A	T2.0A	T2.0A	T1.6A	T1.6A	T630mA	T630mA	T4.0A	T4.0A



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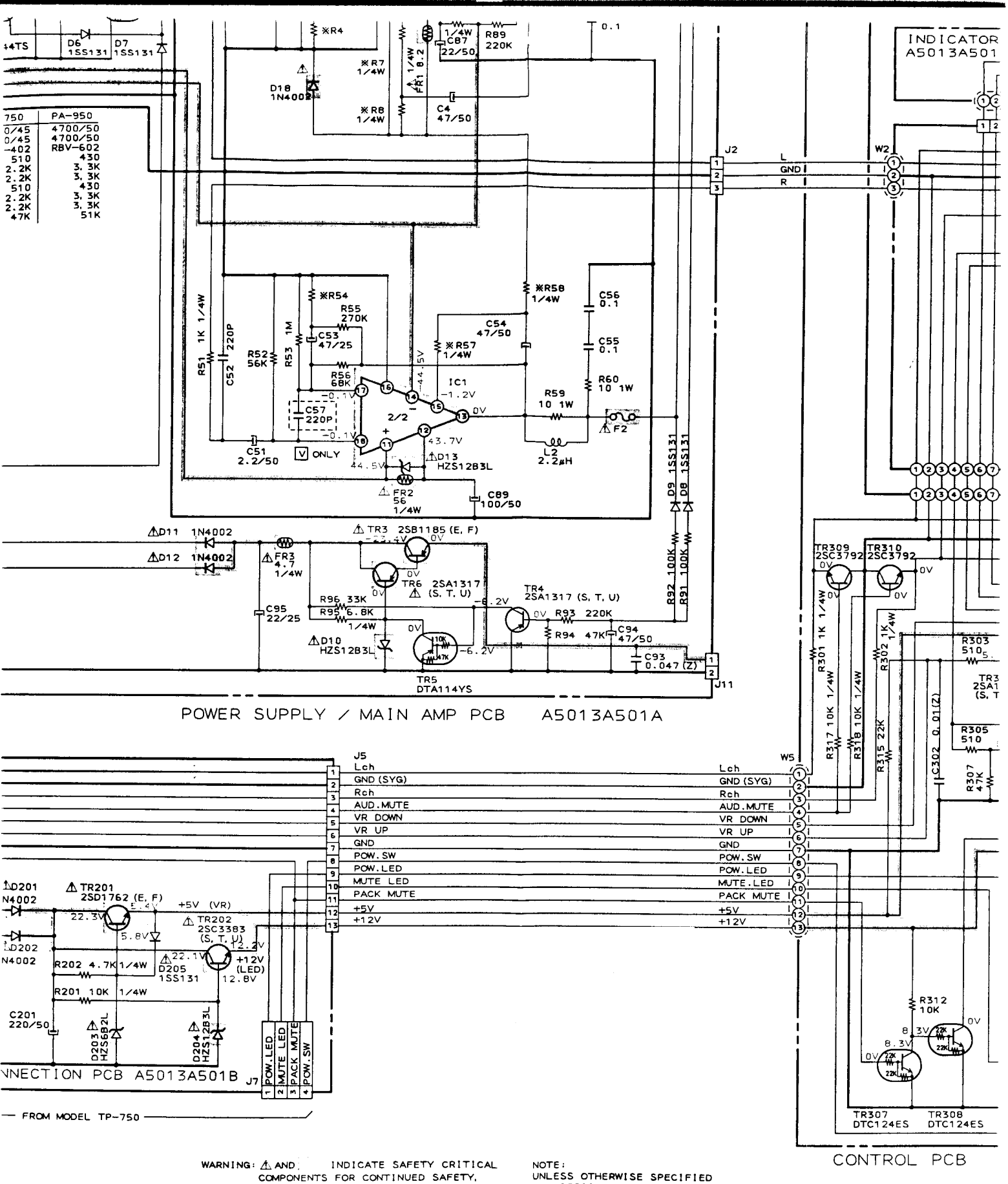
Croatia

02	F703	F704	F705	F706
.0A	T630mA	T630mA	T4.0A	T4.0A
.0A	T630mA	T630mA	T4.0A	T4.0A
.0A	T630mA	T630mA	T4.0A	T4.0A
.6A	T630mA	T630mA	T4.0A	T4.0A
.6A	T630mA	T630mA	T4.0A	T4.0A
.6A	T630mA	T630mA	T4.0A	T4.0A

B (POWER SUPPLY) LINE

AUDIO SIGNAL LINE (L-CH)

WARNING: ⚠ AND IN
COMPONENTS FO
REPLACE SAFET
ONLY WITH MAN
PARTS
AVERTISSMENT: ⚠ ET
COMPOSTANTS C
POUR MAINTENI
DE L' APPAREIL
PIÈCES RECOM



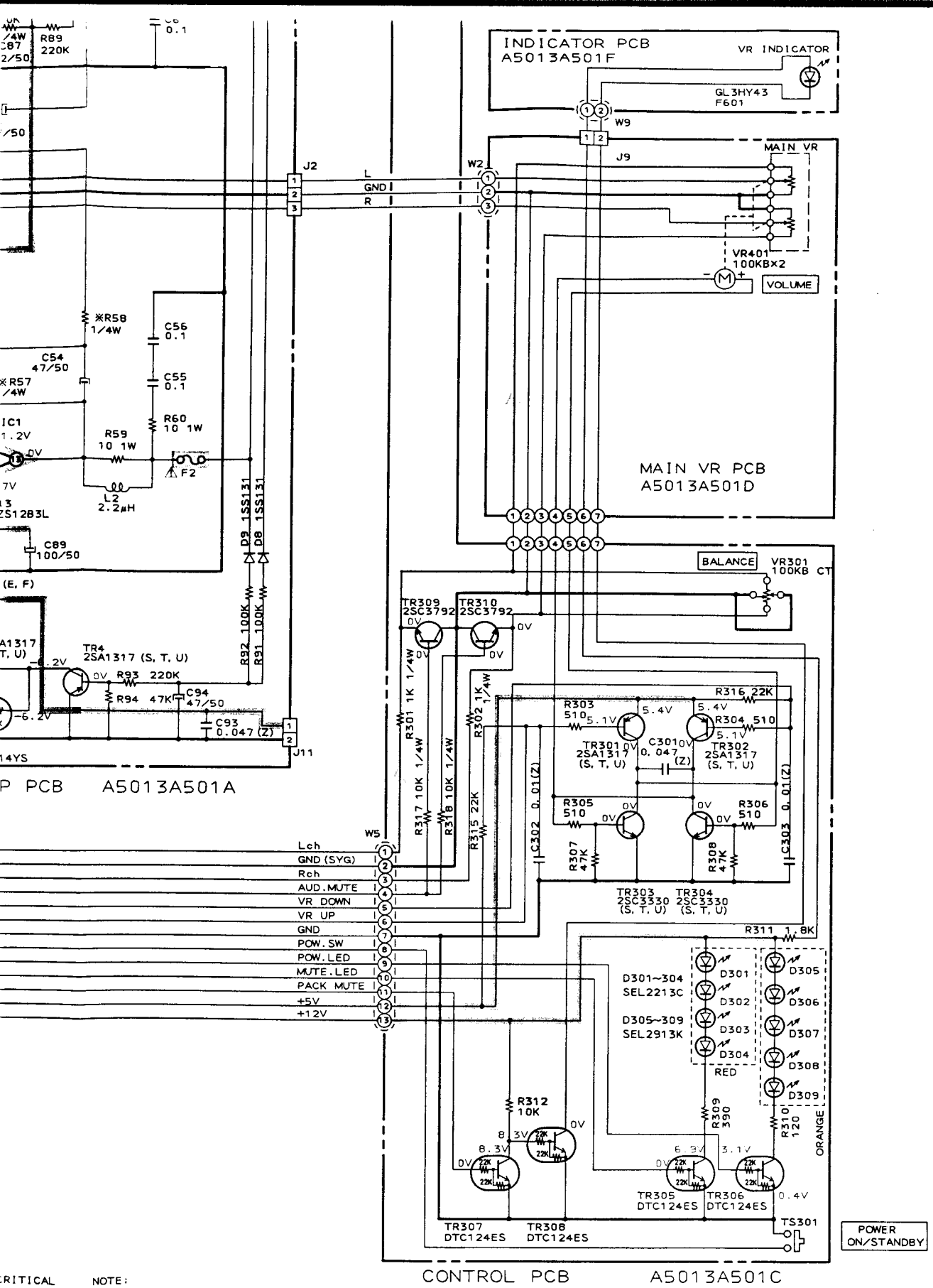
WARNING: ⚠ AND INDICATE SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

AVERTISSMENT: ⚠ ET , ILS INDIQUENT LES COMPOSTANTS CRITIQUES DE SÉCURITÉ, POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDEES PAR LE FABRICANT

NOTE:
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS 1/6W (J)
ALL CAPACITORS IN μF (P=PF) 50V (J)
ALL ELECTROLYTIC CAPACITORS IN μF/WV (M)

INDICATED VOLTAGES WERE MEASURED WHEN NO SIGNAL WAS BEING INPUT.

PA-750,
POWER
SCHEMA



RITICAL
FETY,
PONENTS
COMMENDED

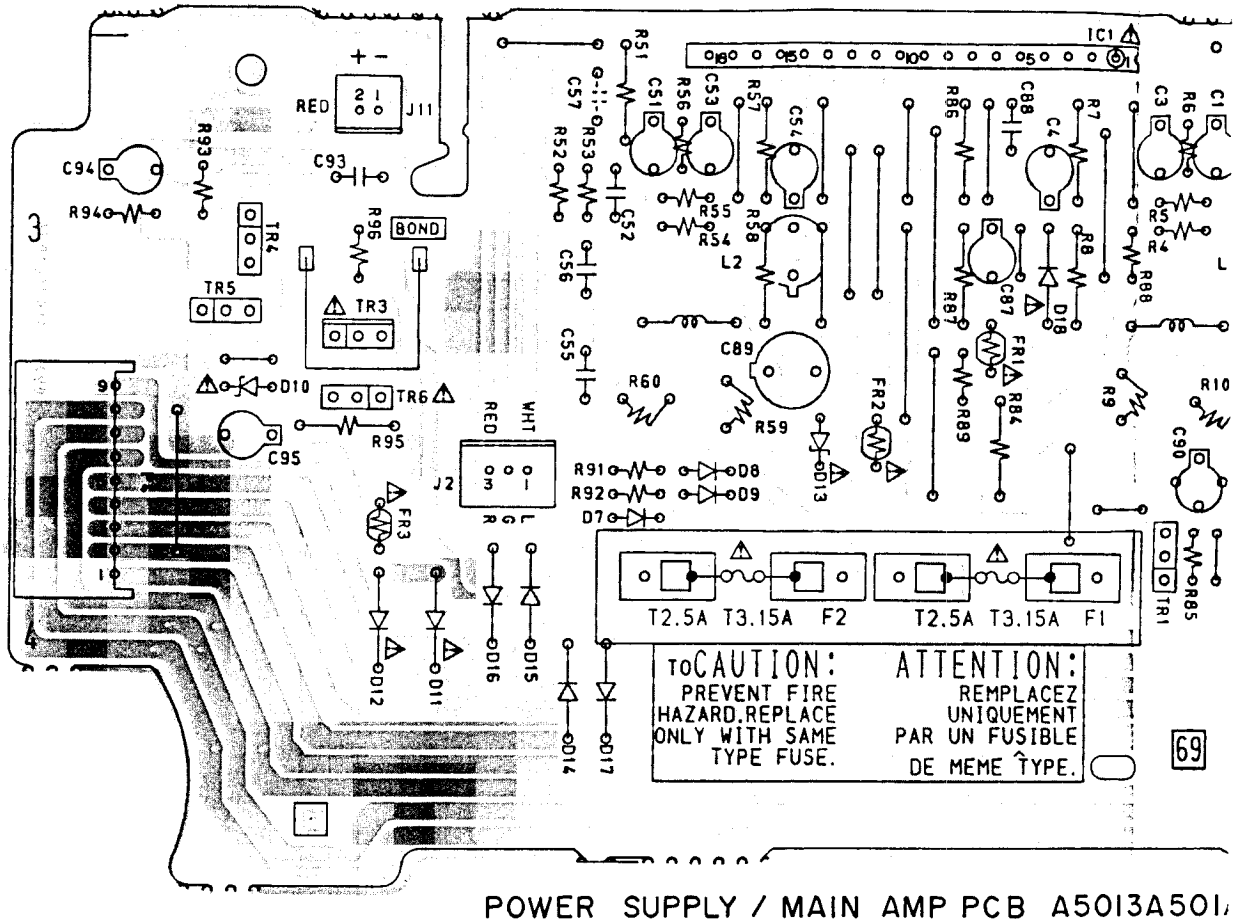
NT LES
CURITÉ,
SÉCURITÉ
QUE DES
FABRICANT

NOTE:
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS 1/6W (J)
ALL CAPACITORS IN μF (P=PF) 50V (J)
ALL ELECTROLYTIC CAPACITORS IN μF/WV (M)

INDICATED VOLTAGES WERE MEASURED
WHEN NO SIGNAL WAS BEING INPUT

PA-750/950
POWER SUPPLY & MAIN AMP SCHEMATIC DIAGRAM

No. 8-5 A501302M
A1

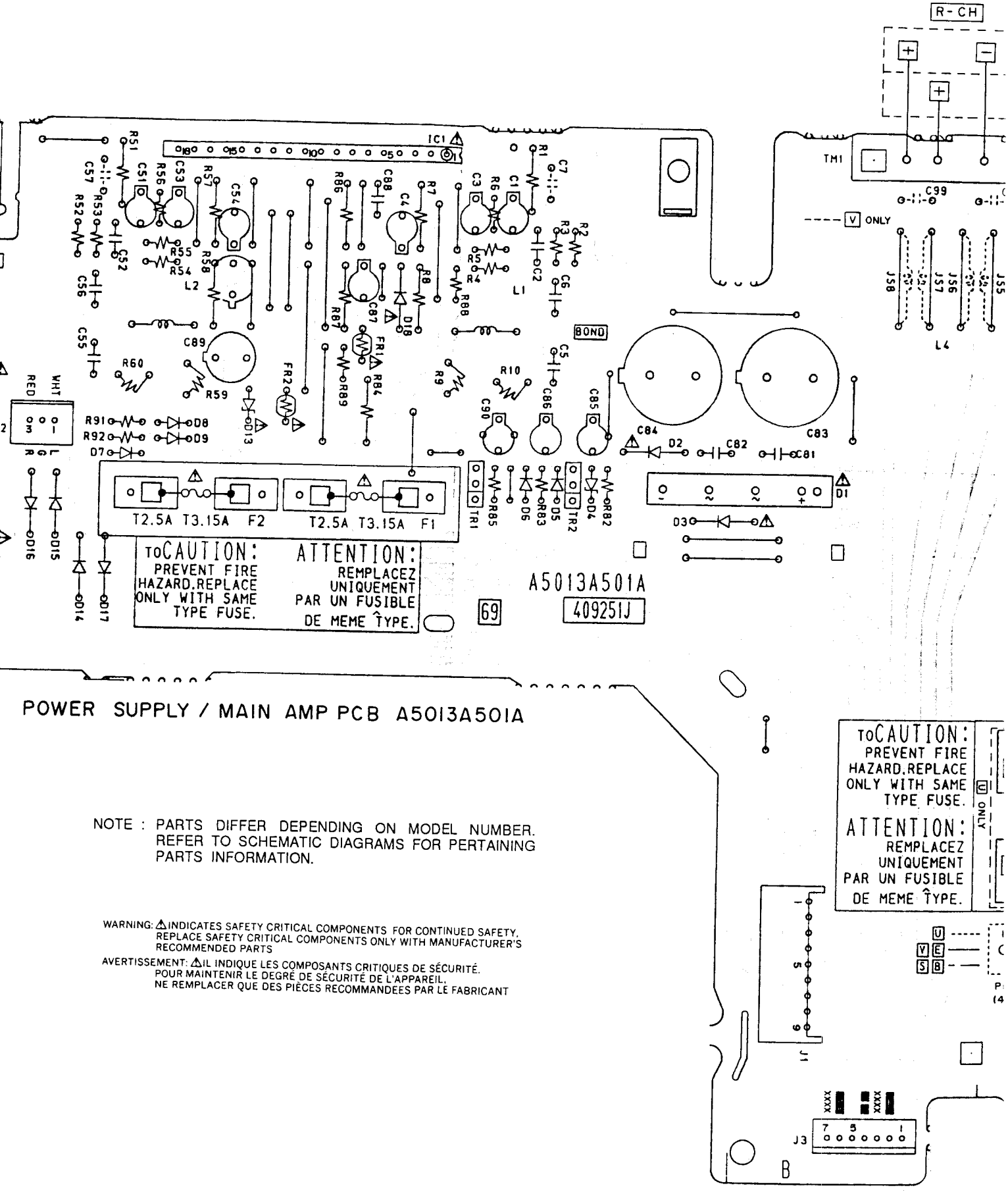


POWER SUPPLY / MAIN AMP PCB A5013A501

NOTE : PARTS DIFFER DEPENDING ON MODEL NUMB
REFER TO SCHEMATIC DIAGRAMS FOR PERTAIN
PARTS INFORMATION.

WARNING: ⚠ INDICATES SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFET
REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER
RECOMMENDED PARTS

AVERTISSEMENT: ⚠ IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ.
POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL,
NE REMPLACER QUE DES PIÈCES RECOMMANDÉES PAR LE FABRICANT

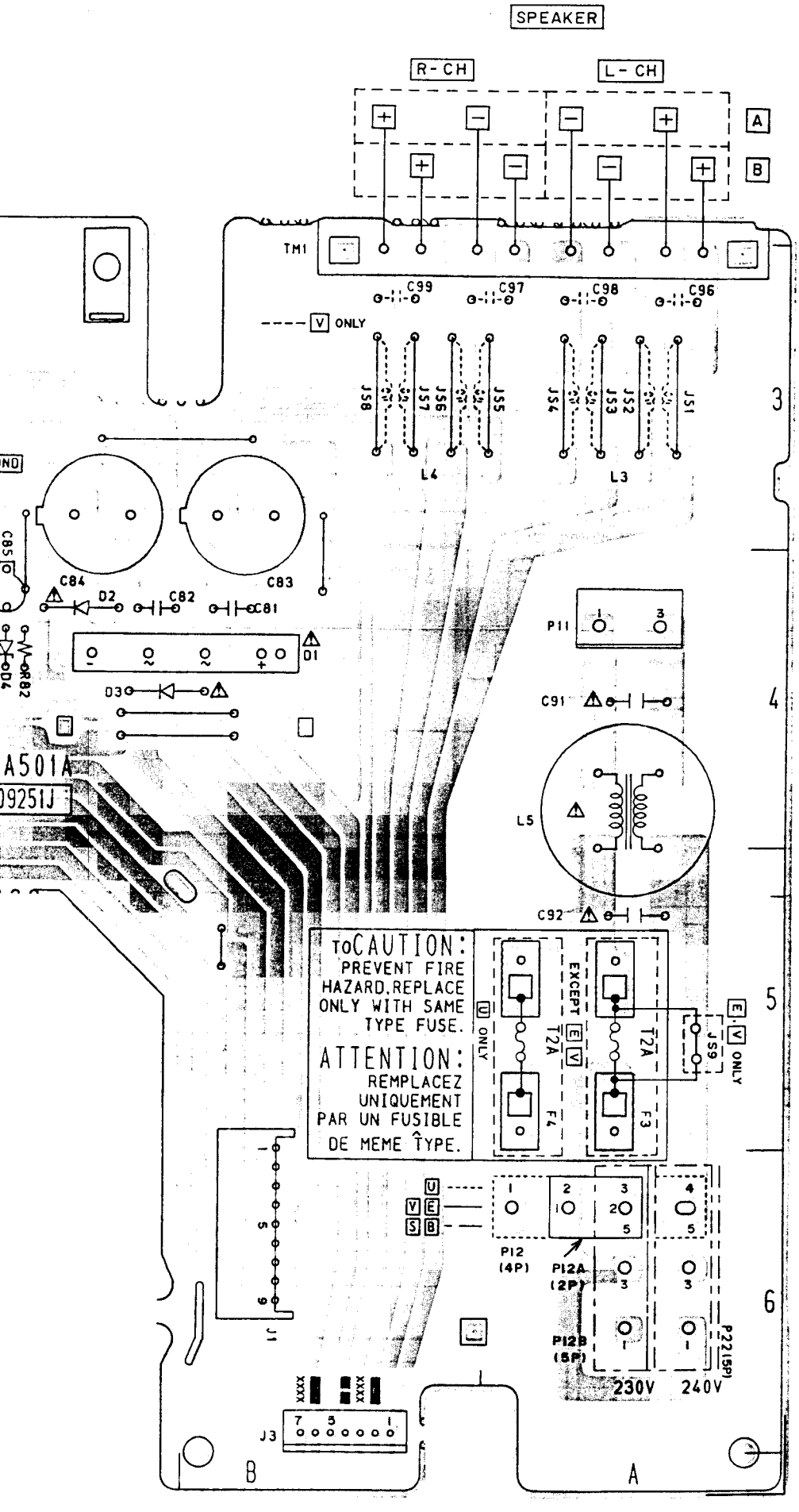


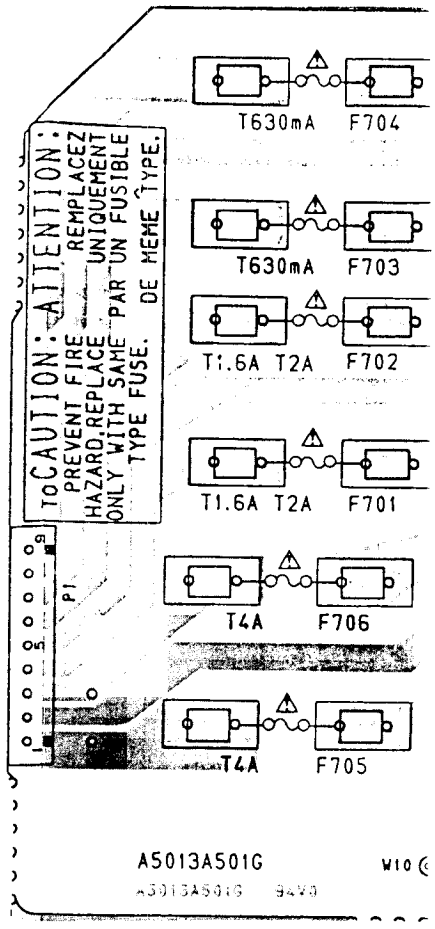
POWER SUPPLY / MAIN AMP PCB A5013A501A

NOTE : PARTS DIFFER DEPENDING ON MODEL NUMBER.
REFER TO SCHEMATIC DIAGRAMS FOR PERTAINING
PARTS INFORMATION.

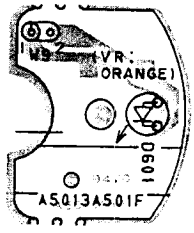
WARNING: ⚠ INDICATES SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY.
REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S
RECOMMENDED PARTS

AVERTISSEMENT: ⚠ IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ.
POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL,
NE REMPLACER QUE DES PIÈCES RECOMMANDEES PAR LE FABRICANT

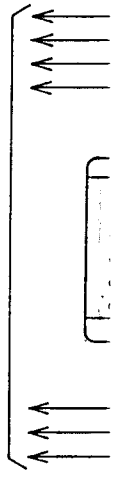




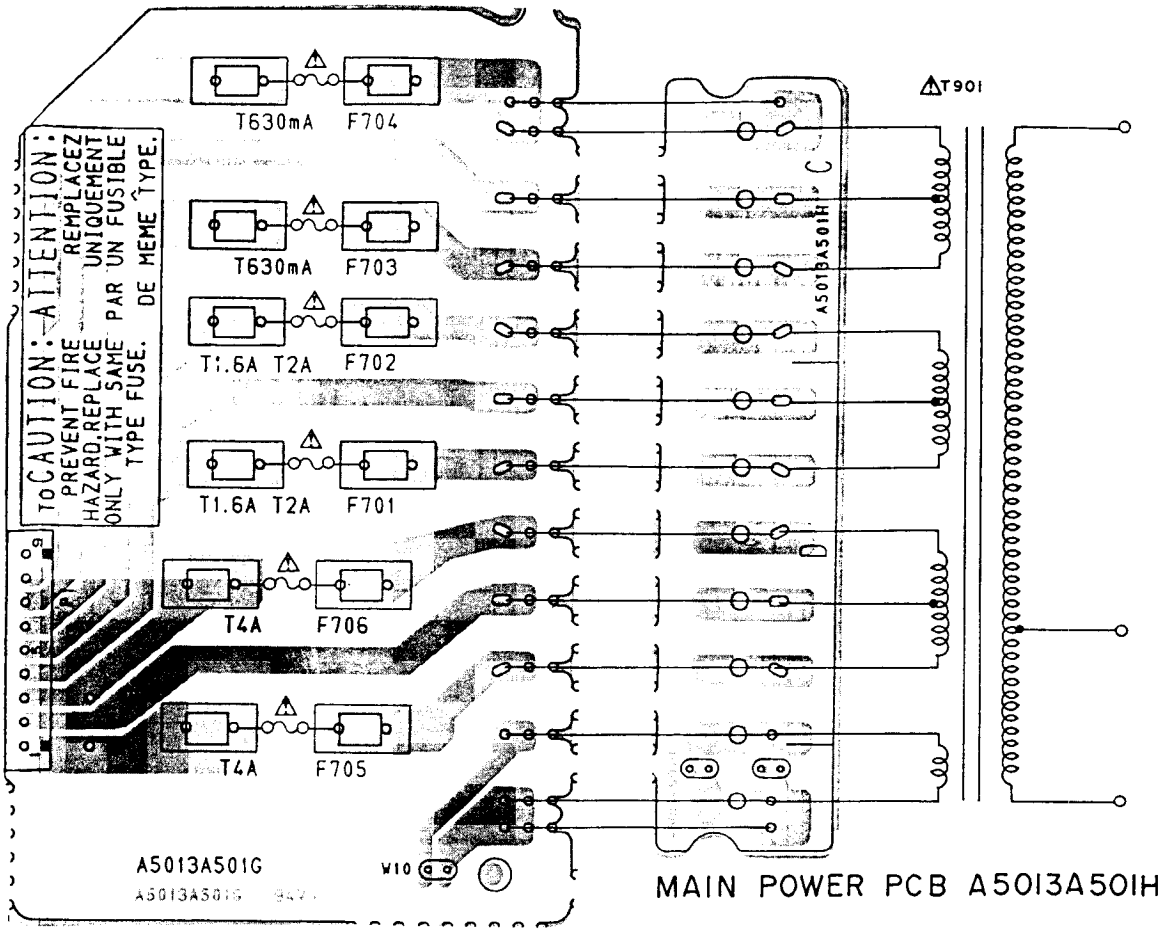
FUSE PCB A5013A501(



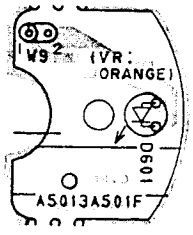
INDICATOR PCB
A5013A501F



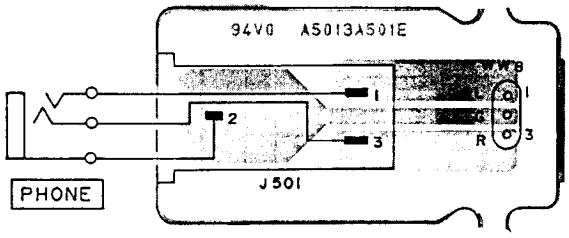
MAI



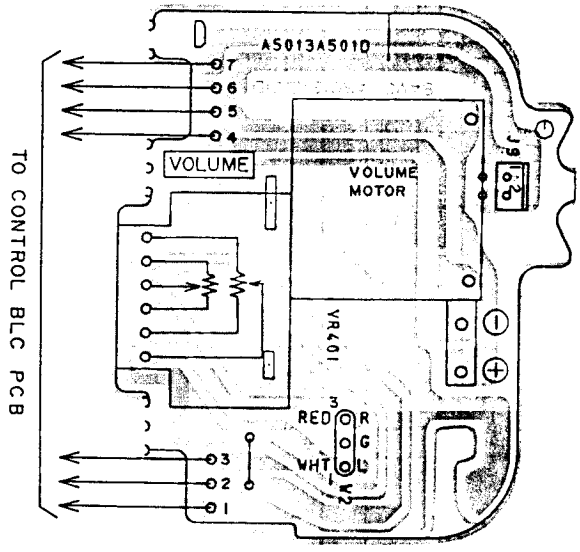
FUSE PCB A5013A501G



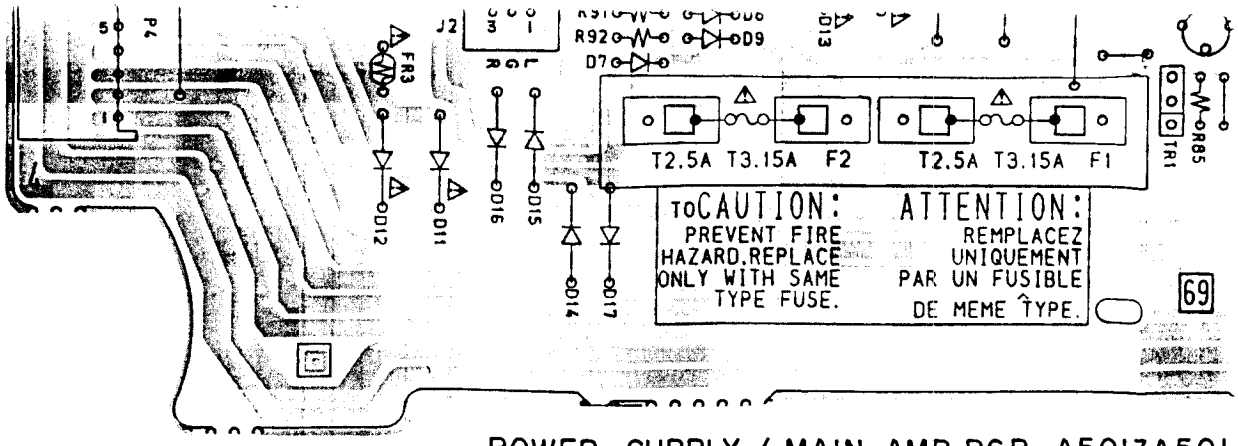
INDICATOR PCB
A5013A501F



PHONE JACK PCB A5013A501E



MAIN VR PCB A5013A501D

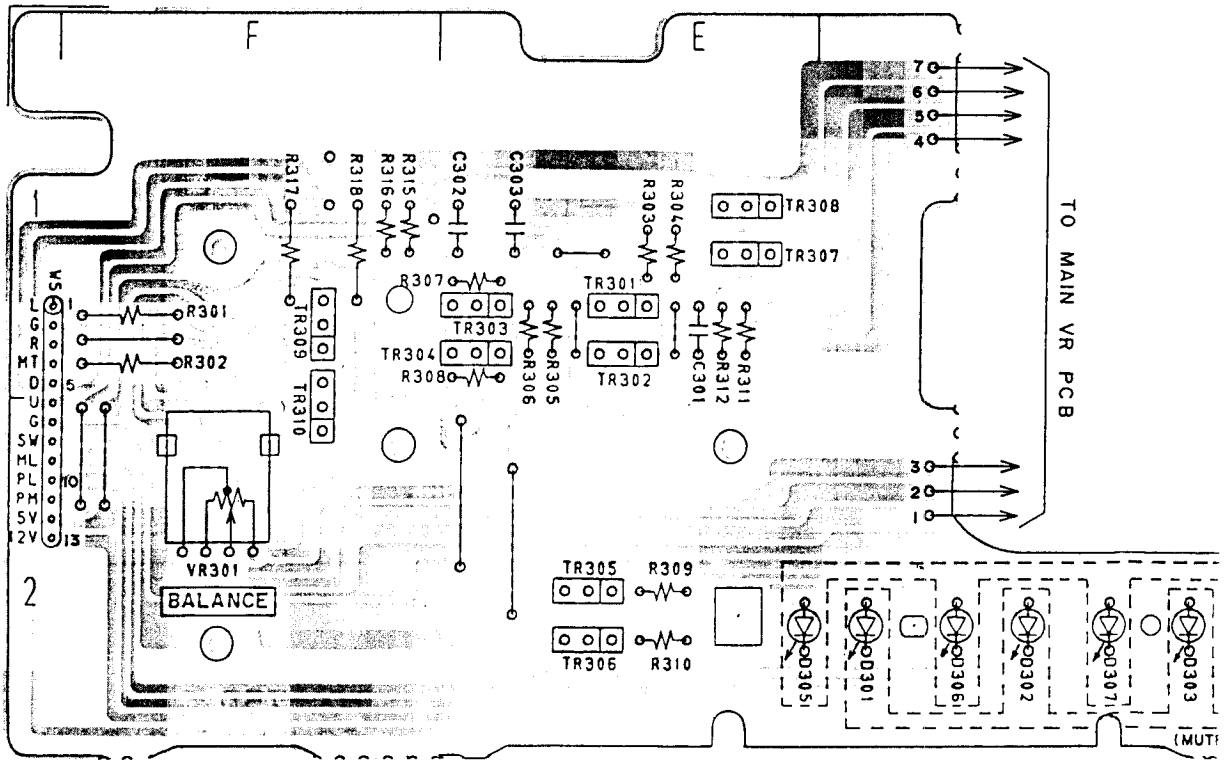


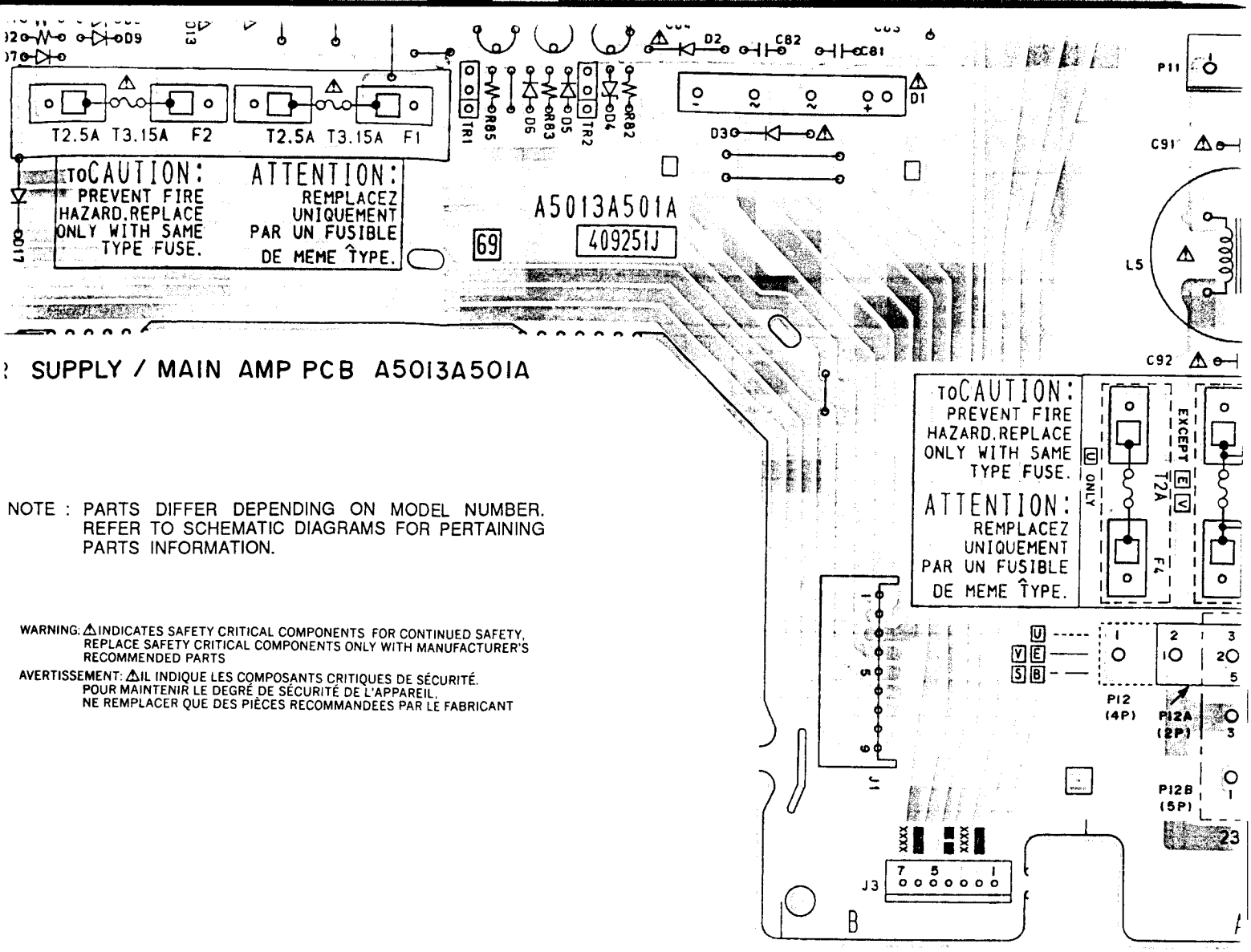
POWER SUPPLY / MAIN AMP PCB A5013A501

NOTE : PARTS DIFFER DEPENDING ON MODEL NUMB
REFER TO SCHEMATIC DIAGRAMS FOR PERTAIN
PARTS INFORMATION.

WARNING: ⚠ INDICATES SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFET
REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURE
RECOMMENDED PARTS

AVERTISSEMENT: ⚠ IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ.
POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL,
NE REMPLACER QUE DES PIÈCES RECOMMANDEES PAR LE FABRICANT



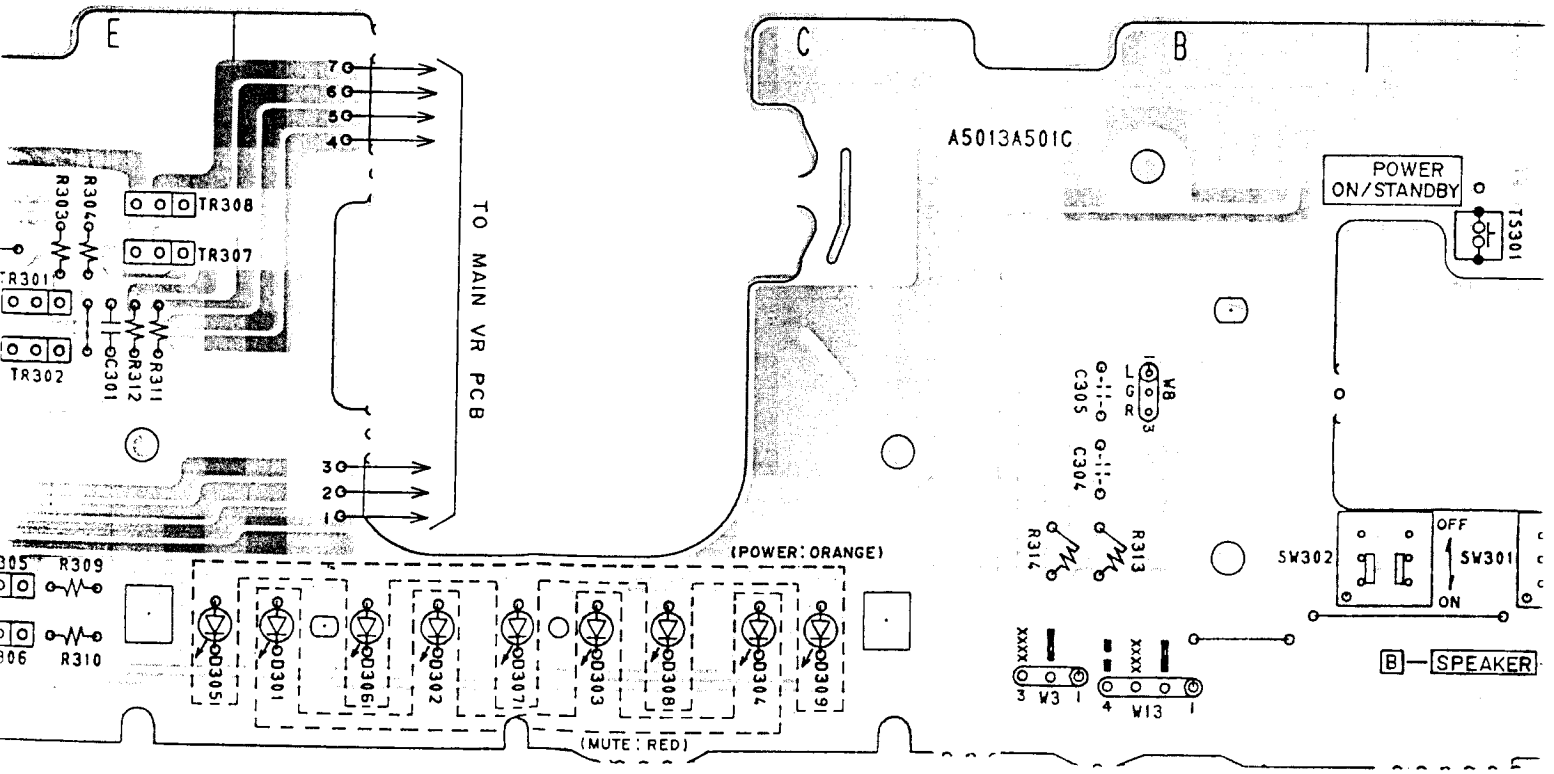


SUPPLY / MAIN AMP PCB A5013A501A

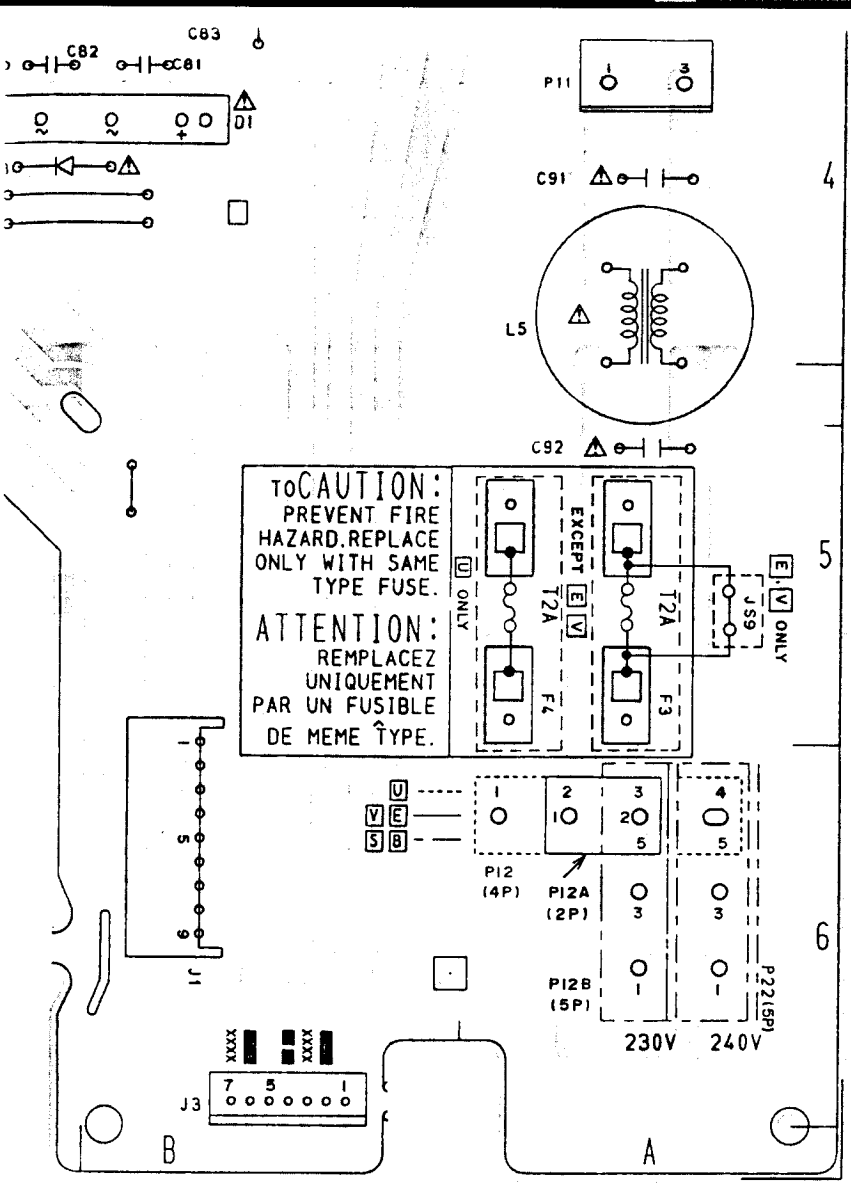
NOTE : PARTS DIFFER DEPENDING ON MODEL NUMBER. REFER TO SCHEMATIC DIAGRAMS FOR PERTAINING PARTS INFORMATION.

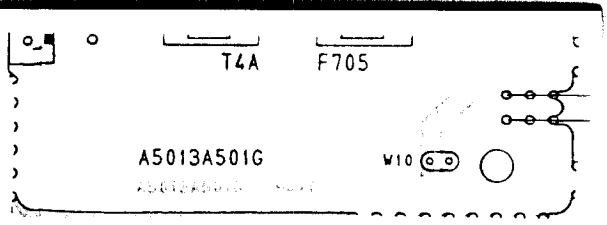
WARNING: ⚠ INDICATES SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

AVERTISSEMENT: ⚠ IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDEES PAR LE FABRICANT

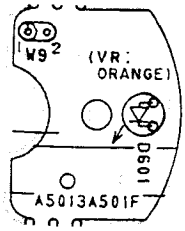


CONTROL PCB A5013A501C

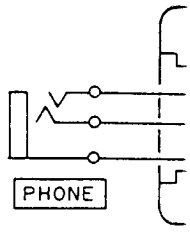




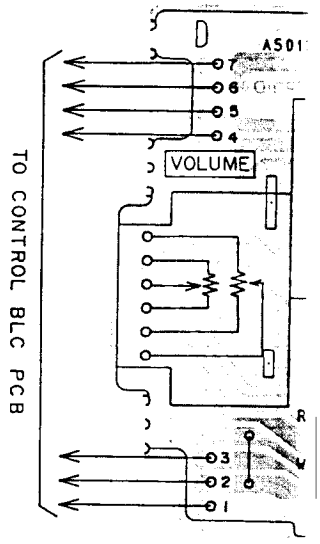
FUSE PCB A5013A501G



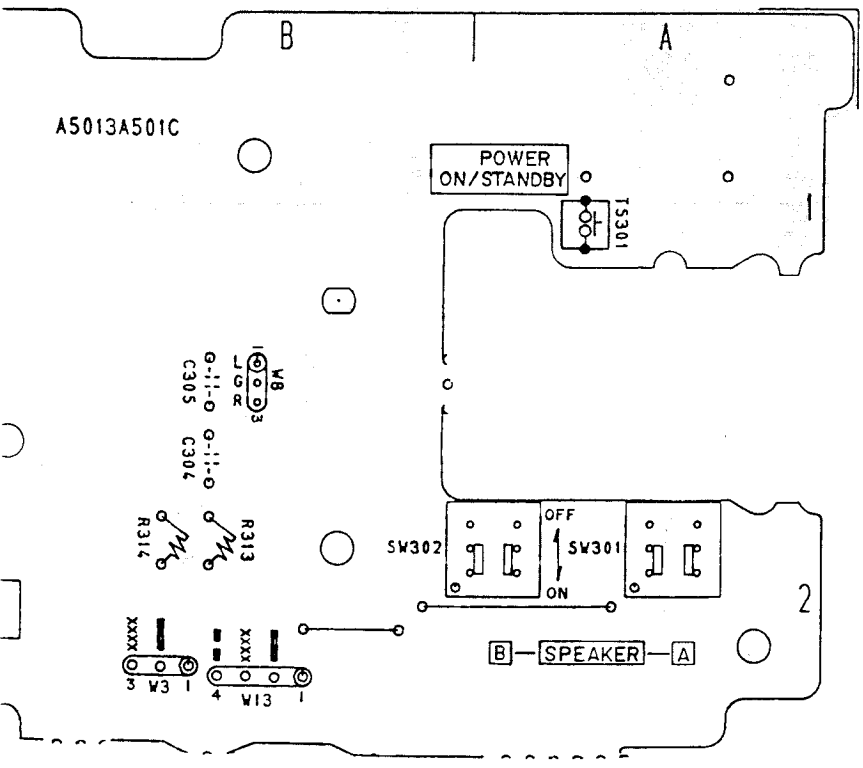
INDICATOR PCB
A5013A501F

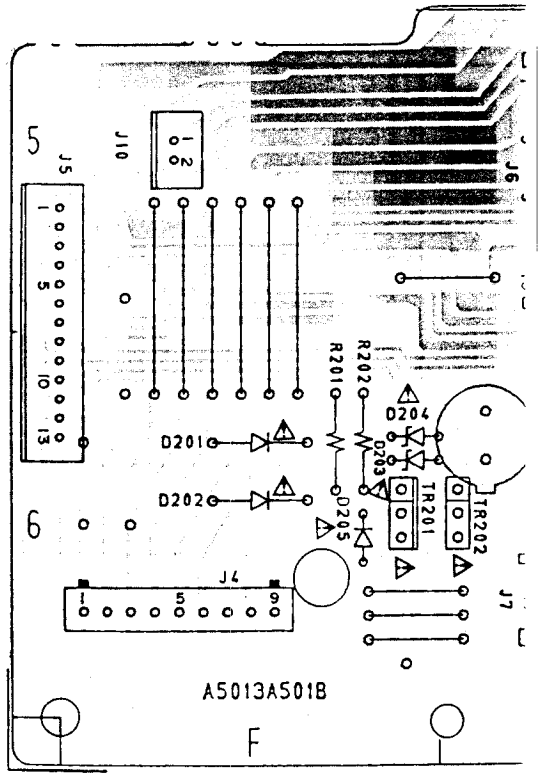


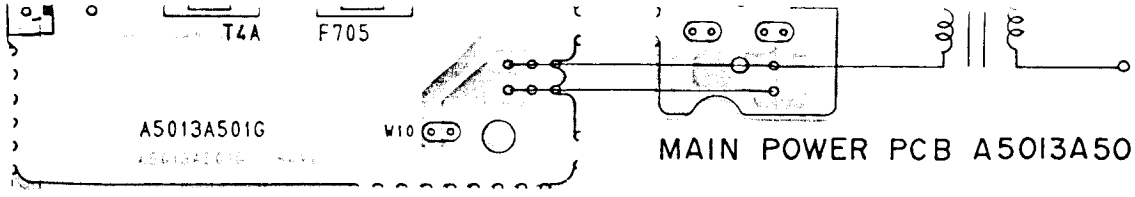
PH



MAIN VR PC

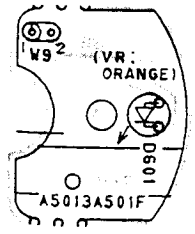




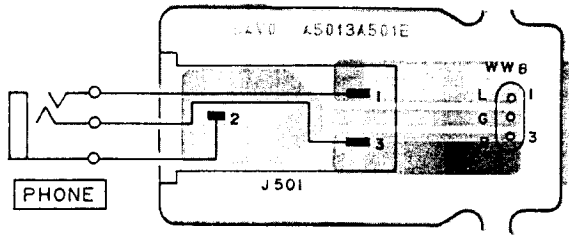


MAIN POWER PCB A5013A501H

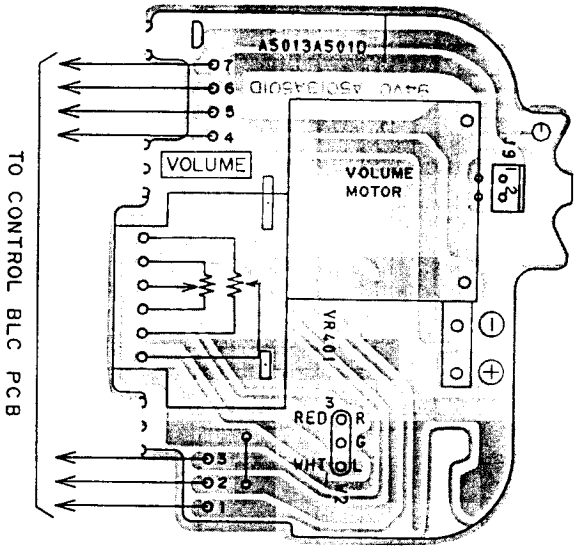
FUSE PCB A5013A501G



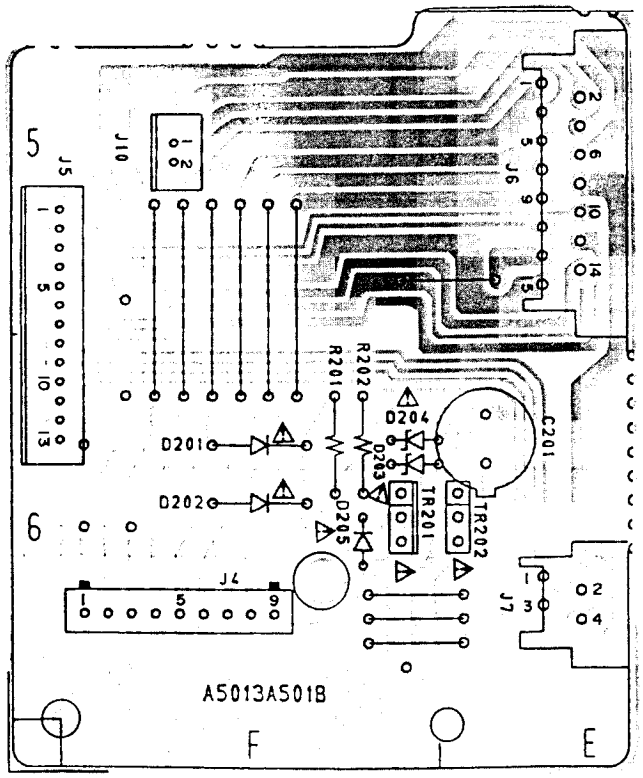
INDICATOR PCB
A5013A501F

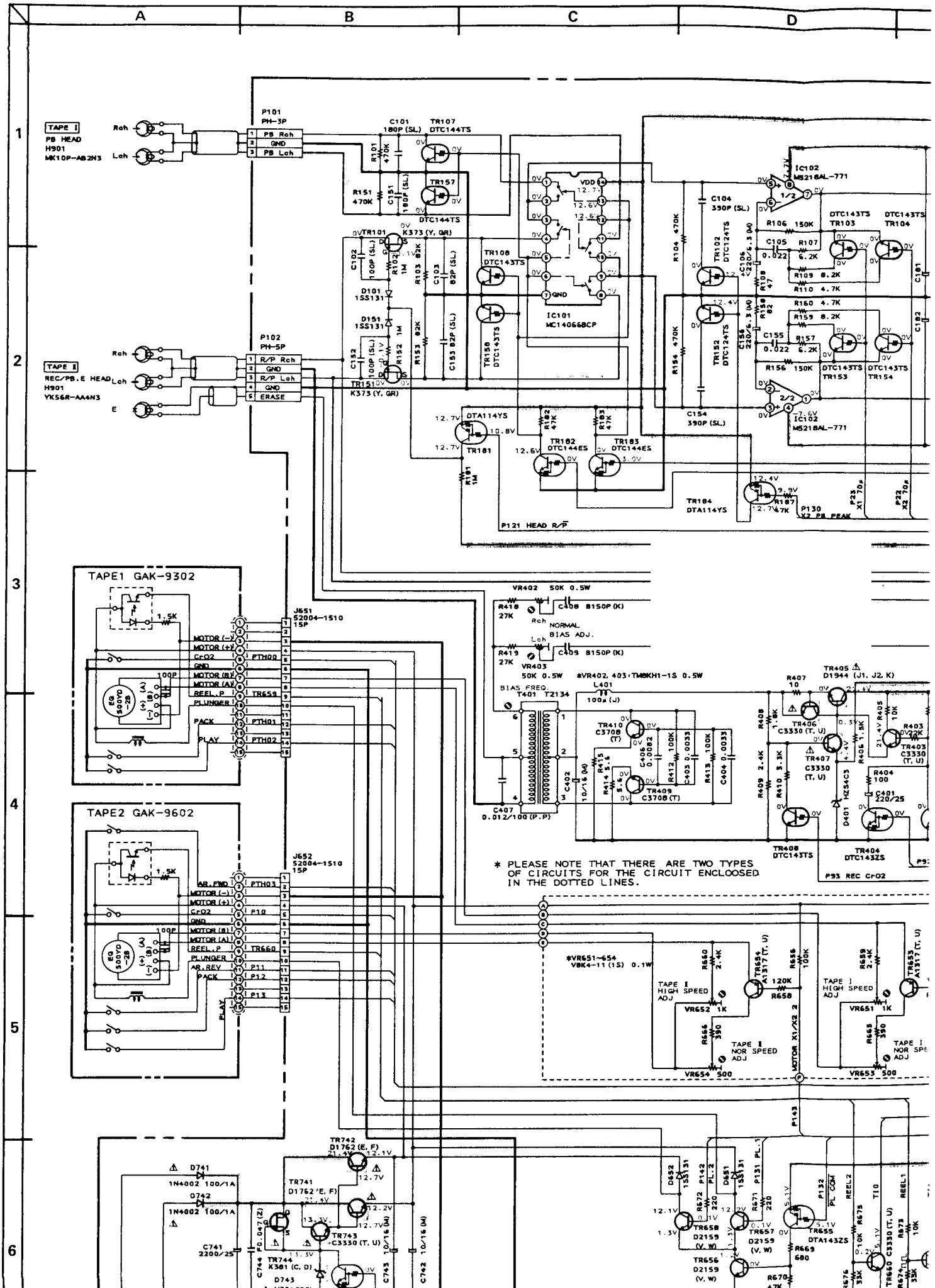


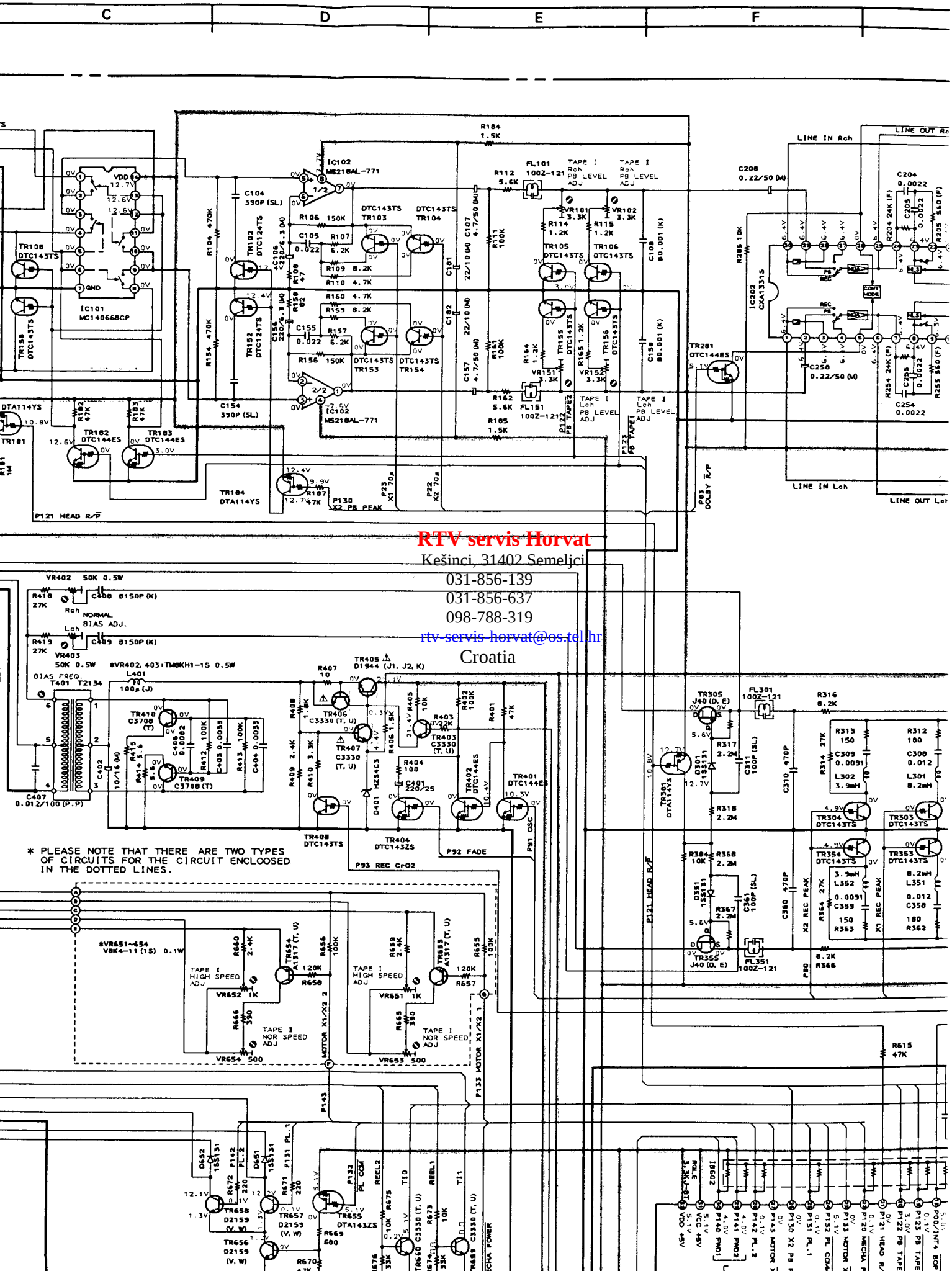
PHONE JACK PCB A5013A501E



MAIN VR PCB A5013A501D




A
B
C
D
1
2
3
4
5
6
TAPE I
PB HEAD
H901
MK10P-AB2N3
Rch
Lch
P101
PH-3P
PB Rch
GND
PB Lch
TAPE II
REC/PB.E HEAD
H901
YK56R-AA4N3
E
P102
PH-5P
R/P Rch
R/P Lch
ERASE
TR101
K373 (Y, GR)
TR151
K373 (Y, GR)
TR107
DTC144TS
TR157
DTC144TS
TR108
DTC143TS
TR158
DTC143TS
IC101
MC14066BCP
IC102
M5218AL-771
TR102
DTC124TS
TR152
DTC124TS
TR103
DTC143TS
TR104
DTC143TS
TR153
DTC143TS
TR154
DTC143TS
TR181
DTA114YS
TR182
DTC144ES
TR183
DTC144ES
TR184
DTA114YS
P121 HEAD R/P
P130
X2 PB PEAK
P23
X1 70μ
P22
X2 70μ
TAPE1 GAK-9302
J651
52004-1510
15P
MOTOR (-)
MOTOR (+)
CrO2
GND
MOTOR (B)
MOTOR (A)
REEL.P
PLUNGER
PACK
PLAY
PTH00
PTH01
PTH02
TR659
TAPE2 GAK-9602
J652
52004-1510
15P
AR.FWD
AR.REV
PTH03
P10
P11
P12
P13
TR660
VR402 50K 0.5W
VR403
50K 0.5W
BIAS ADJ.
BIAS FREQ.
T401 T2134
L401
100μ (J)
TR405
D1944 (J1, J2, K)
TR406
C3330 (T, U)
TR407
C3330
(T, U)
TR403
C3330
(T, U)
TR408
DTC143TS
TR404
DTC143ZS
TR410
C3708
(T)
TR409
C3708 (T)
D401
HZS4C3
* PLEASE NOTE THAT THERE ARE TWO TYPES OF CIRCUITS FOR THE CIRCUIT ENCLOOSED IN THE DOTTED LINES.
#VR651~654
VBK4-11 (1S) 0.1W
TAPE I
HIGH SPEED
ADJ
VR652 1K
TAPE II
NOR SPEED
ADJ
VR654 500
TAPE I
HIGH SPEED
ADJ
VR651 1K
TAPE I
NOR SPE
ADJ
VR653 500
MOTOR X1/X2
P93 REC CrO2
TR742
D1762 (E, F)
TR741
D1762 (E, F)
TR743
C3330 (T, U)
TR744
K381 (C, D)
D741
1N4002 100/1A
D742
1N4002 100/1A
D743
TR656
D2159
(V, W)
TR657
D2159
(V, W)
TR658
D2159
(V, W)
TR655
DTA143ZS
P143
P132
PL COM
REEL2
REEL1
T10



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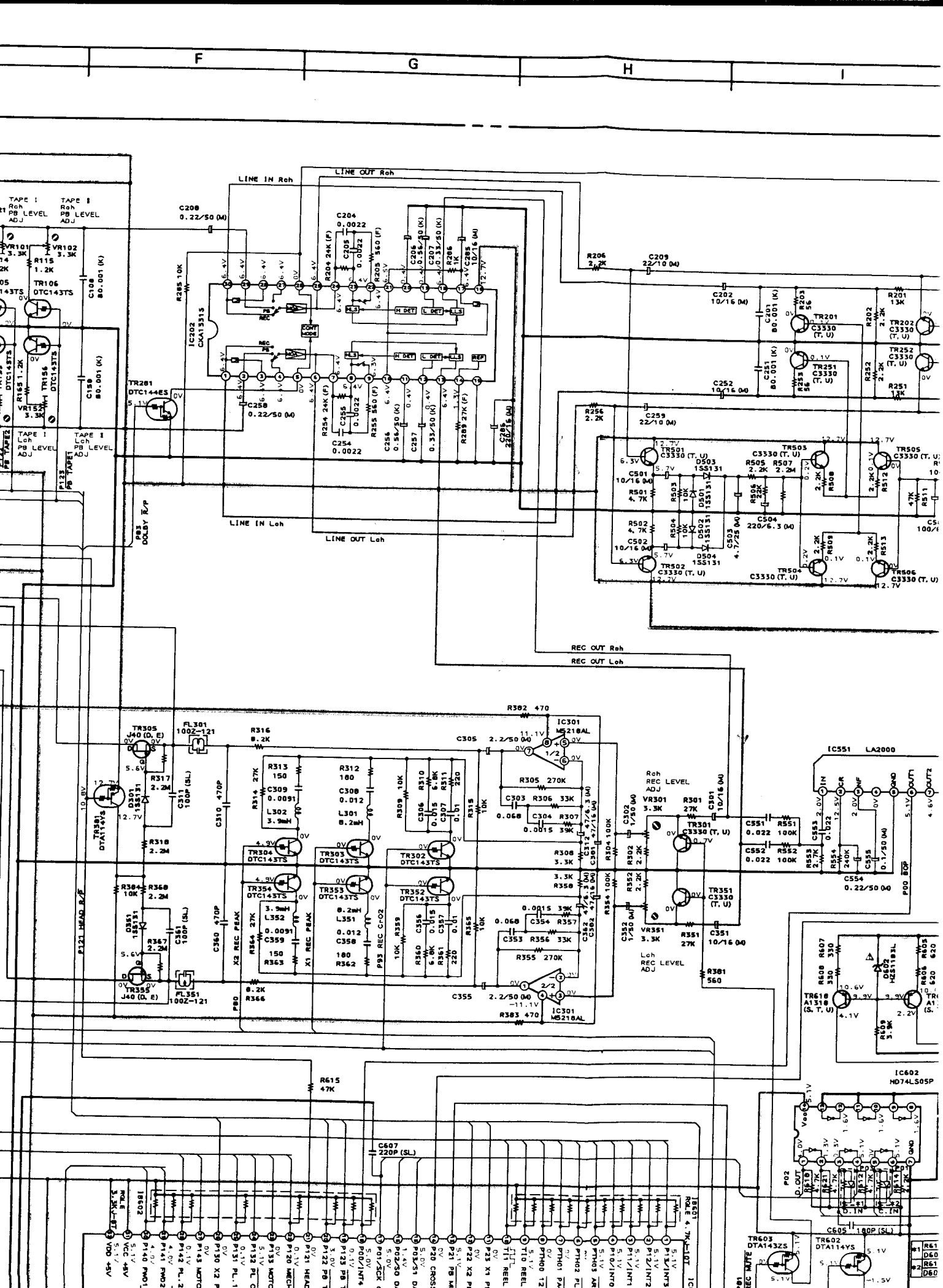
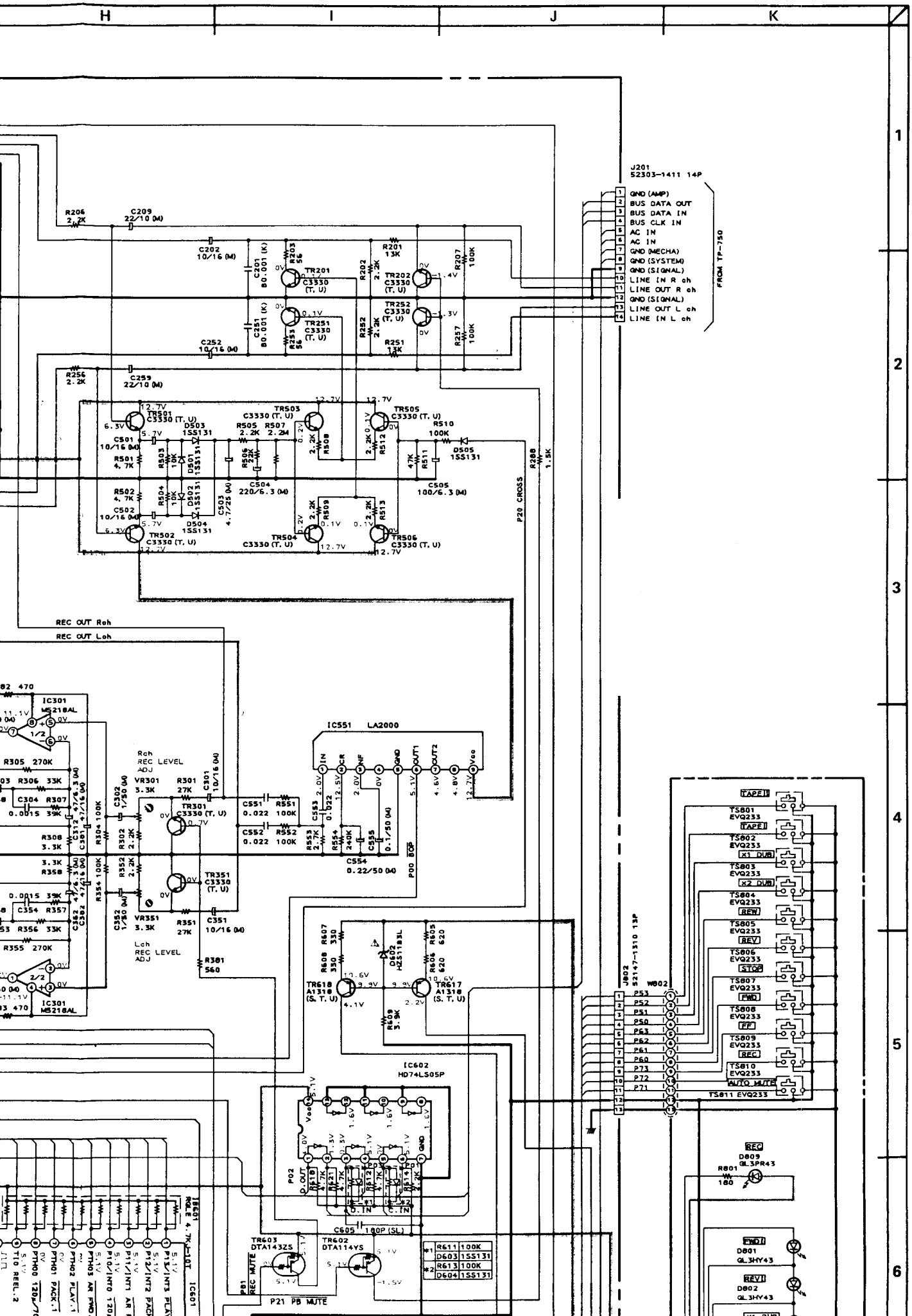
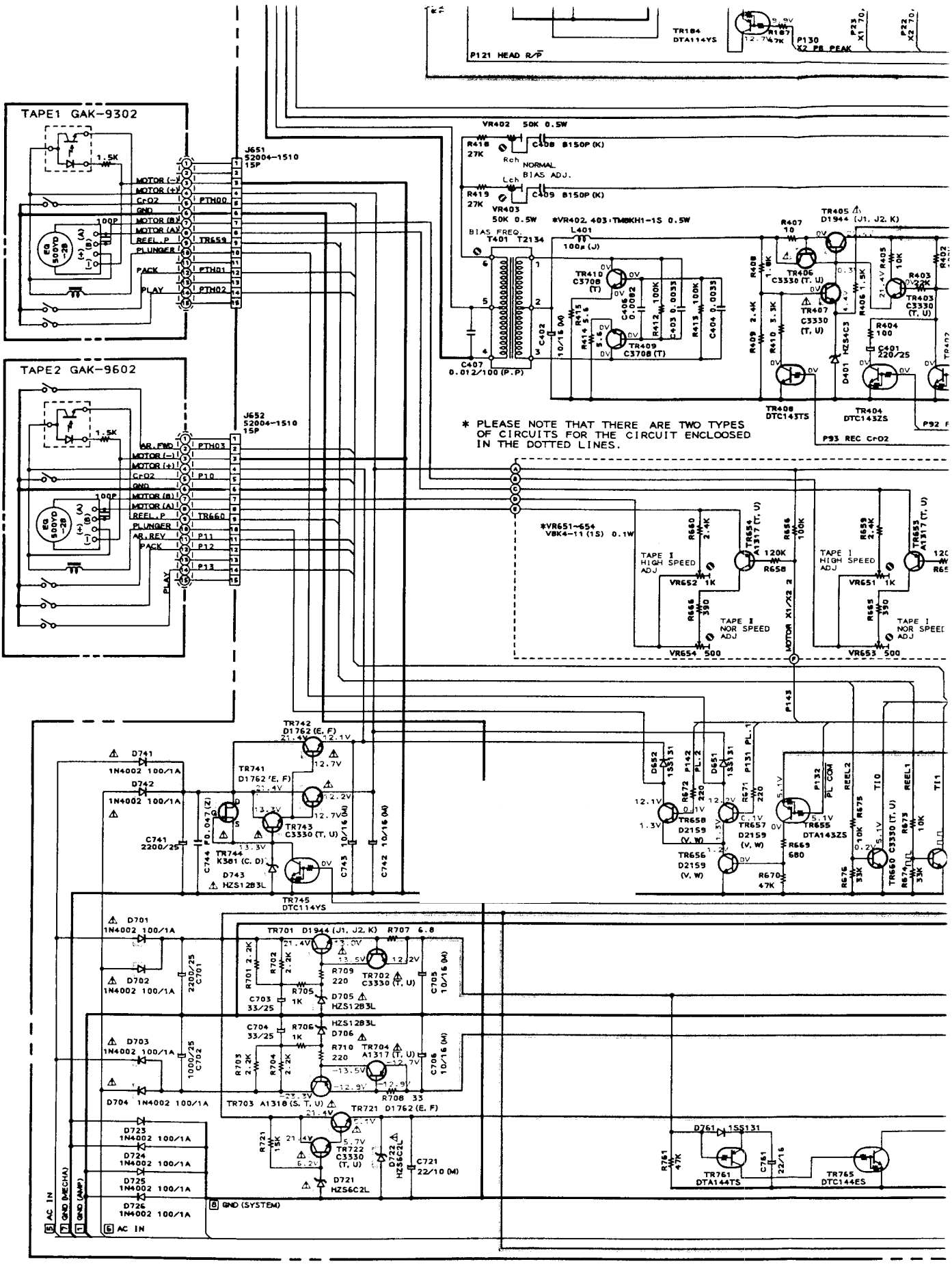

F
G
H
I
LINE IN Rch
LINE OUT Rch
LINE IN Lch
LINE OUT Lch
REC OUT Rch
REC OUT Lch
IC202 CXA1331S
IC301 M5218AL
IC551 LA2000
IC602 MD74LS05P
TR201 C3330 (T, U)
TR251 C3330 (T, U)
TR252 C3330 (T, U)
TR501 C3330 (T, U)
TR502 C3330 (T, U)
TR503 C3330 (T, U)
TR504 C3330 (T, U)
TR505 C3330 (T, U)
TR506 C3330 (T, U)
TR281 DTC144ES
TR301 C3330 (T, U)
TR351 C3330 (T, U)
TR302 DTC143TS
TR303 DTC143TS
TR304 DTC143TS
TR352 DTC143TS
TR353 DTC143TS
TR354 DTC143TS
TR305 J40 (D, E)
TR355 J40 (D, E)
TR603 DTA143ZS
TR602 DTA114YS
TR618 A1318 (S, T, U)
TAPE I Rch PB LEVEL ADJ
TAPE II Rch PB LEVEL ADJ
TAPE I Lch PB LEVEL ADJ
TAPE II Lch PB LEVEL ADJ
Rch REC LEVEL ADJ
Lch REC LEVEL ADJ
P121 HEAD P/P
P123 PB TAPE1
P83 DOLBY P/P
P80
P00 BOP
P02
X2 REC PEAK
X1 REC PEAK
P93 REC CrO2
REC MUTE

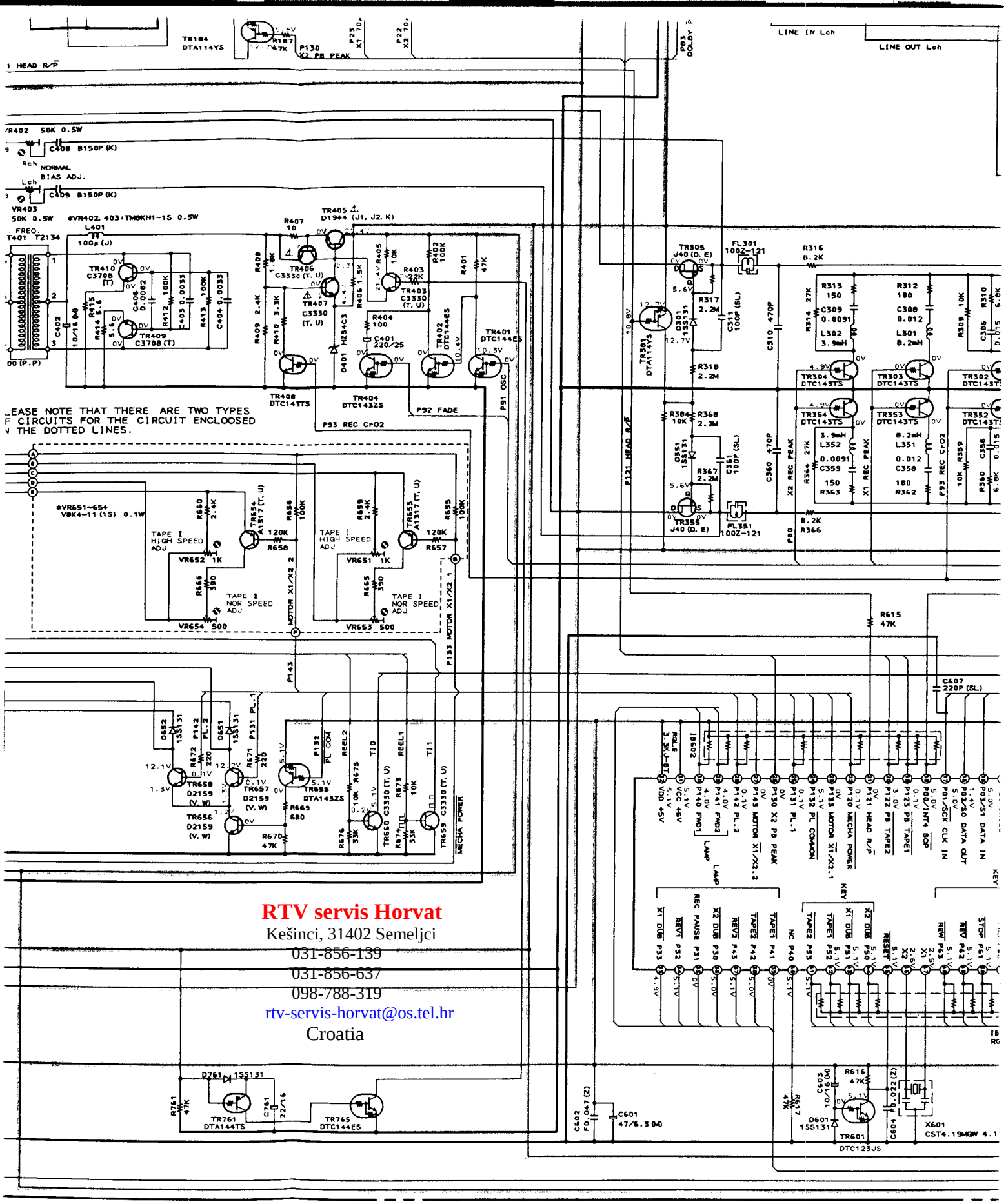

H
I
J
K
1
2
3
4
5
6
J201
52303-1411 14P
GND (AMP)
BUS DATA OUT
BUS DATA IN
BUS CLK IN
AC IN
AC IN
GND (MECHA)
GND (SYSTEM)
GND (SIGNAL)
LINE IN R ch
LINE OUT R ch
GND (SIGNAL)
LINE OUT L ch
LINE IN L ch
FROM TP-750
TR201 C3330 (T, U)
TR202 C3330 (T, U)
TR251 C3330 (T, U)
TR252 C3330 (T, U)
TR501 C3330 (T, U)
TR502 C3330 (T, U)
TR503 C3330 (T, U)
TR504 C3330 (T, U)
TR505 C3330 (T, U)
TR506 C3330 (T, U)
D503 1SS131
D504 1SS131
D505 1SS131
P20 CROSS
REC OUT Rch
REC OUT Lch
IC301 MS218AL
IC551 LA2000
Rch REC LEVEL ADJ
Lch REC LEVEL ADJ
VR301 3.3K
VR351 3.3K
TR301 C3330 (T, U)
TR351 C3330 (T, U)
P00 BGP
TR618 A1318 (S, T, U)
TR617 A1318 (S, T, U)
D602 HZS118L
IC602 HD74LS05P
P02 D.OUT
TR603 DTA143ZS
TR602 DTA114YS
P81 REC MUTE
P21 PB MUTE
C605 100P (SL)
J802 52147-1310 13P
W802
TAPE II
TAPE I
X1 DUB
X2 DUB
REW
REV
STOP
FWD
FF
REC
AUTO MUTE
TS801 EVQ233
TS802 EVQ233
TS803 EVQ233
TS804 EVQ233
TS805 EVQ233
TS806 EVQ233
TS807 EVQ233
TS808 EVQ233
TS809 EVQ233
TS810 EVQ233
TS811 EVQ233
D809 GL3PR43
D801 GL3HY43
D802 GL3HY43



DECK PCB T2134A501A

INDICATED VOLTAGES WERE MEASURED DURING PB MODE
(CONDITION: TAPE 1, FWD PLAY, NORMAL TAPE, DOLBY OFF)

: B (POWER SUP
: PB SIGNAL L
: REC SIGNAL



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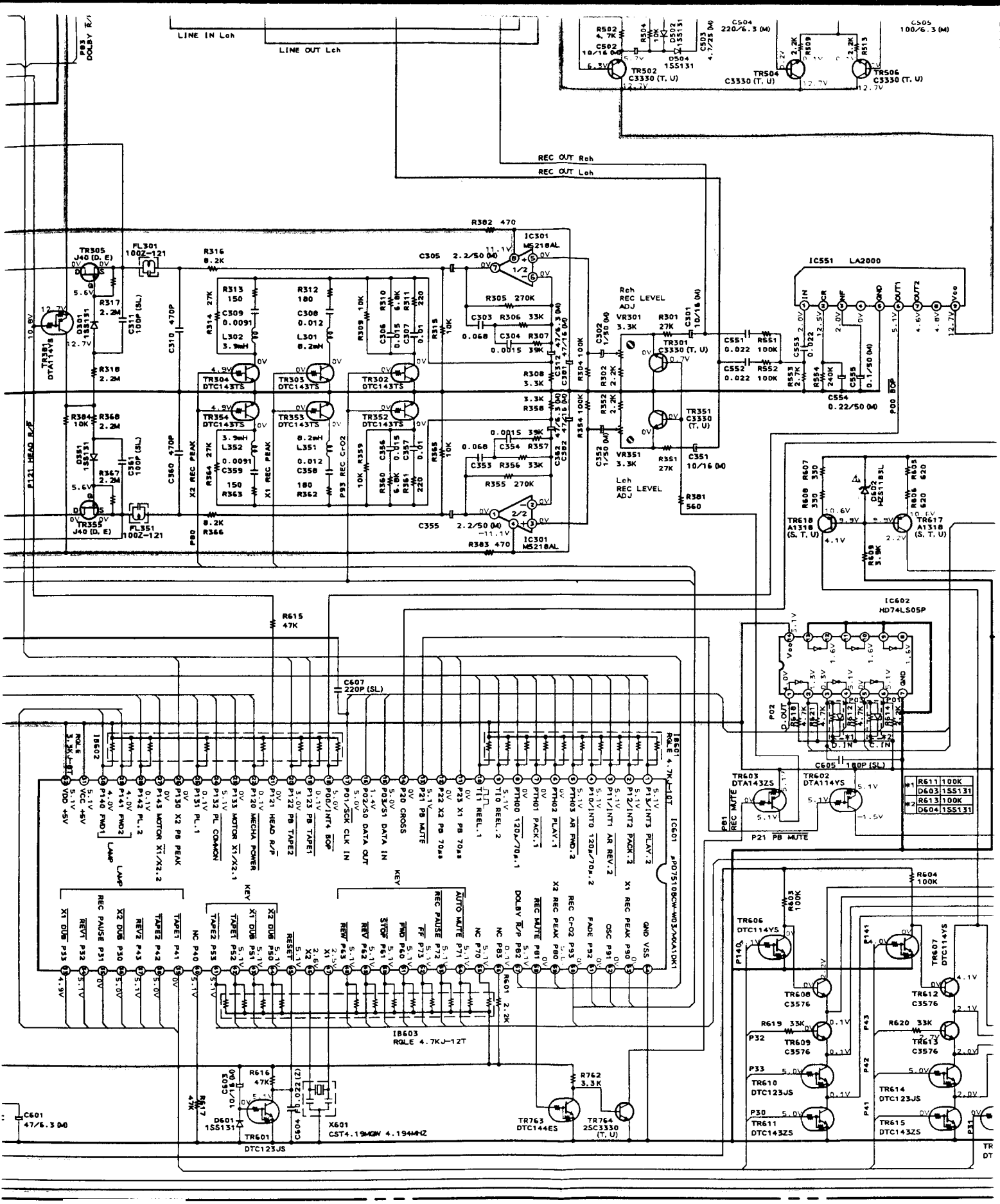
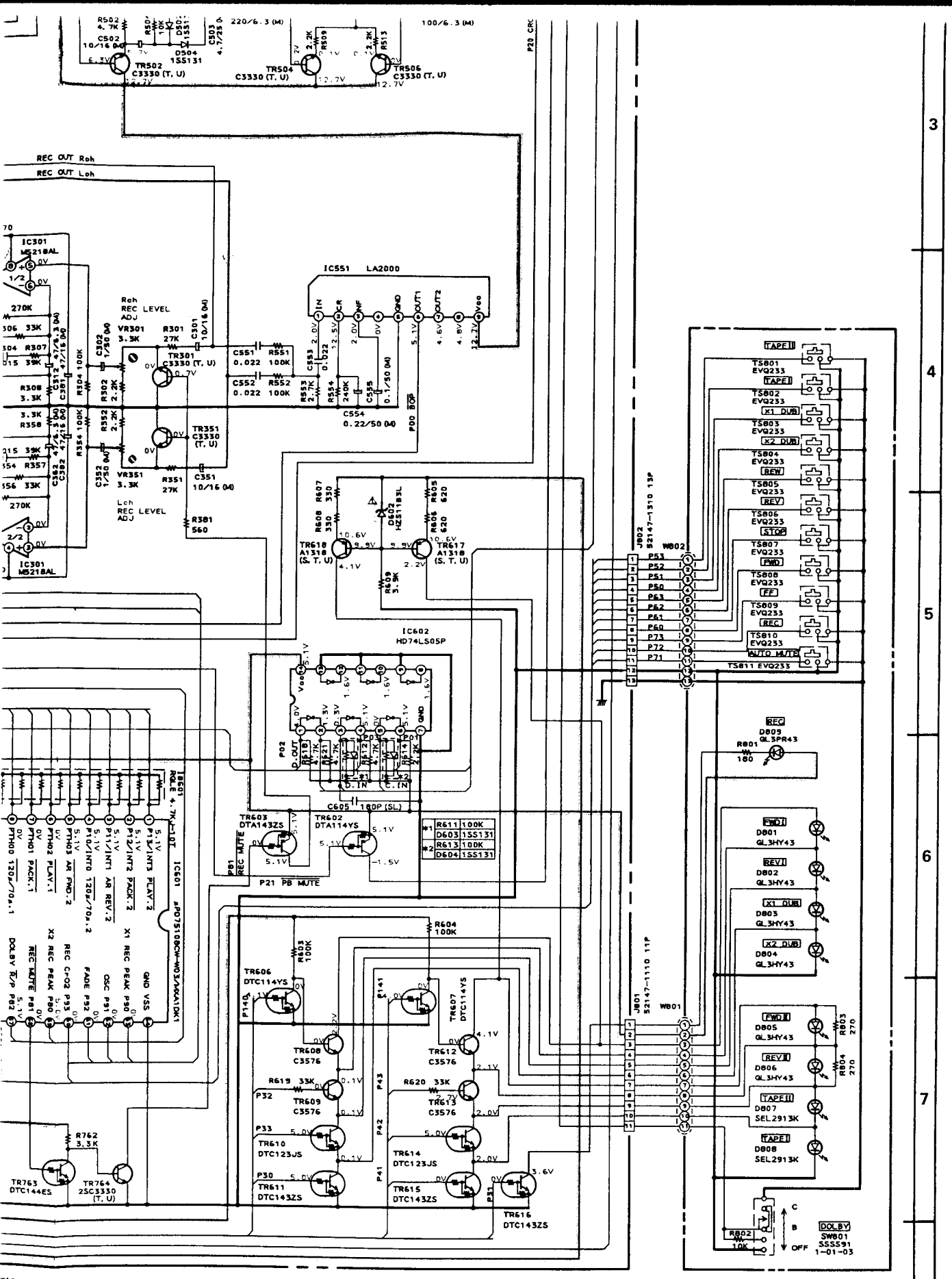
Croatia

MEASURED DURING PB MODE
AV, NORMAL TAPE, DOLBY OFF)

: B (POWER SUPPLY) LINE
: PB SIGNAL LINE
: REC SIGNAL LINE

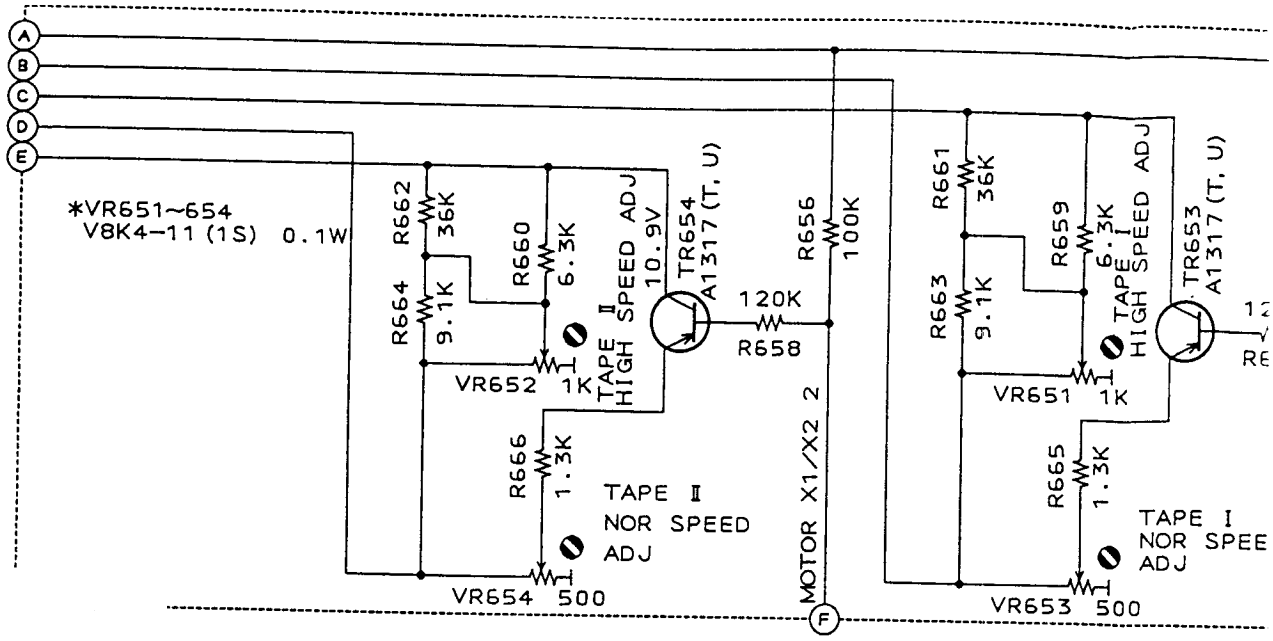
WARNING: ⚠ AND
COMPONENT
REPLACE S
ONLY WITH
PARTS
AVERTISSEMENT: ⚠ E
COMPOSTAN
POUR MAIN
DE L' APPA
PIÈCES RE

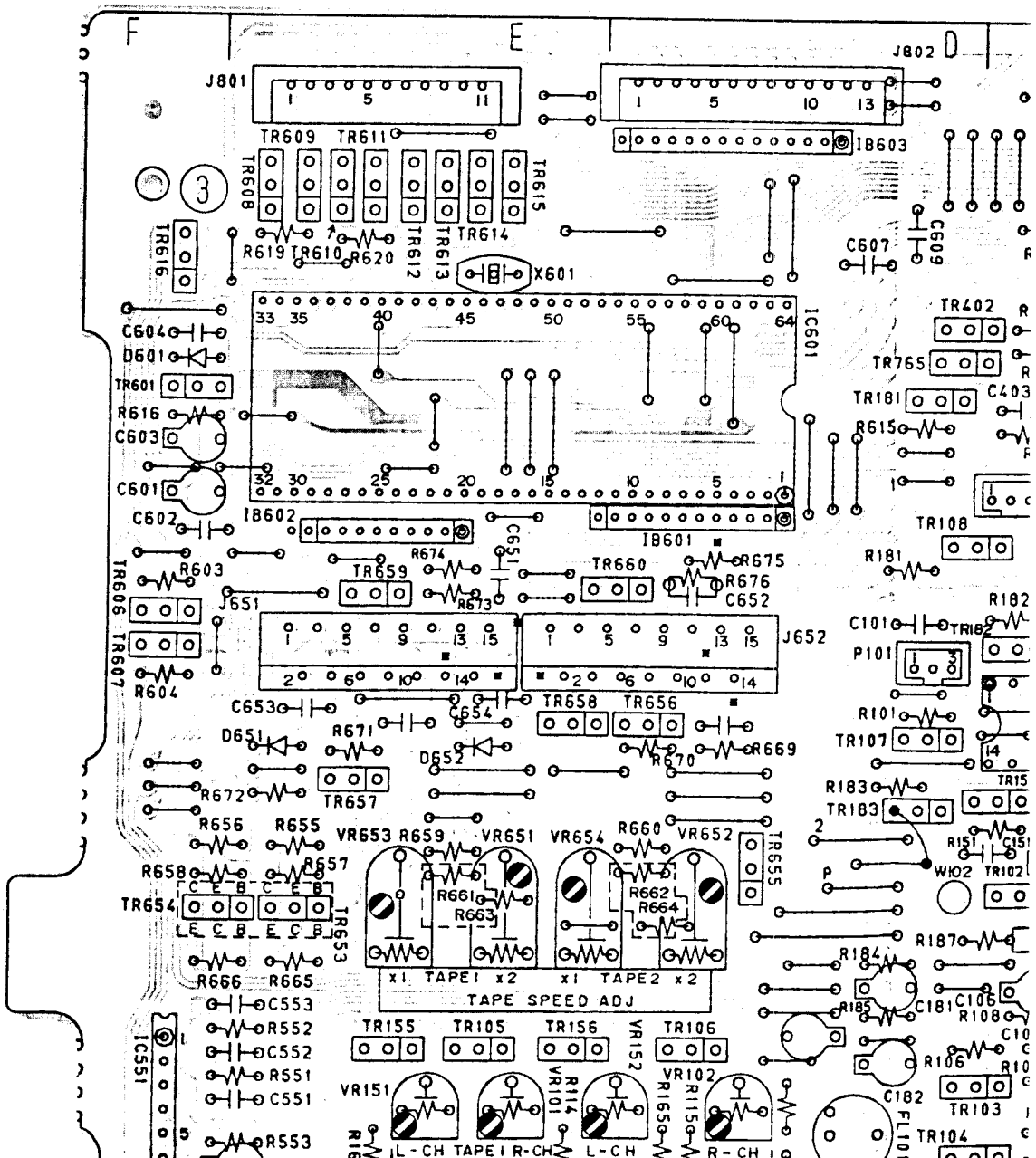

LINE IN Lch
LINE OUT Lch
REC OUT Rch
REC OUT Lch
IC551 LA2000
IC602 HD74LS05P
IC301 MS218AL
IB601 RQLE 4.7KJ-10T
IB602
IB603 RQLE 4.7KJ-12T
Rch REC LEVEL ADJ
Lch REC LEVEL ADJ
P121 HEAD R/F
P83 DOLBY R/F
P21 PB MUTE
P02 D.OUT
P01 D.IN
X601 CST4.19MGW 4.194MHZ
TR618 A1318 (S, T, U)
TR617 A1318 (S, T, U)
TR602 DTA114YS
TR603 DTA143ZS
TR606 DTC114YS
TR607 DTC114YS
TR608 C3576
TR609 C3576
TR610 DTC123JS
TR611 DTC143ZS
TR612 C3576
TR613 C3576
TR614 DTC123JS
TR615 DTC143ZS
TR763 DTC144ES
TR764 2SC3330 (T, U)
TR601 DTC123JS
TR502 C3330 (T, U)
TR504 C3330 (T, U)
TR506 C3330 (T, U)
TR301 C3330 (T, U)
TR351 C3330 (T, U)
TR302 DTC143TS
TR303 DTC143TS
TR304 DTC143TS
TR352 DTC143TS
TR353 DTC143TS
TR354 DTC143TS
TR305 J40 (D, E)
TR355 J40 (D, E)
TR381 DTA114YS
FL301 100Z-121
FL351 100Z-121
D502 MZ5183L
D504 1SS131
D601 1SS131
D351 1SS131
D301 1SS131
*1 R611 100K D603 1SS131
*2 R613 100K D604 1SS131
P141 P142 P143 P150 P151 P132 P133 P120 P121 P122 P123 P00/INT4 P01/SCK P02/SO P03/SI P20 P21 P22 P23 P10 P11 P12 P13 P140 P31 P32 P43 P42 P41 P40 P33 P52 P51 P50 P62 P61 P60 P73 P72 P71 P30 P83 P82 P81 P80 P93 P92 P91 P90 P63
R615 47K
C607 220P (SL)
C605 180P (SL)
C601 47/6.3 (M)
R762 3.3K
R604 100K
R603 100K
R601 2.2K
R616 47K
R617 47K
C604 0.022 (Z)
C606 10/16 (M)
R382 470
R383 470
C305 2.2/50 (M)
C355 2.2/50 (M)
C504 220/6.3 (M)
C505 100/6.3 (M)
C554 0.22/50 (M)
C502 10/16 (M)
C503 4.7/25 (M)
C301 10/16 (M)
C351 10/16 (M)
C381 47/16 (M)
C382 47/16 (M)
C302 1/50 (M)
C352 1/50 (M)
C551 0.022
C552 0.022
C553 0.022
C555 0.1/50 (M)
R381 560
R308 3.3K
R358 3.3K
R309 3.9K
R316 8.2K
R366 8.2K
R318 2.2M
R368 2.2M
R317 2.2M
R367 2.2M
R304 10K
R354 100K
R302 2.2K
R352 2.2K
R303 10K
R353 10K
R305 270K
R355 270K
R306 33K
R356 33K
R307 39K
R357 39K
R551 100K
R552 100K
R553 2.7K
R554 240K
R301 27K
R351 27K
VR301 3.3K
VR351 3.3K
R619 33K
R620 33K
C309 0.0091
C359 0.0091
C308 0.012
C358 0.012
L302 3.9mH
L352 3.9mH
L301 8.2mH
L351 8.2mH
C311 100P (SL)
C361 100P (SL)
C310 470P
C360 470P
X2 REC PEAK
X1 REC PEAK
P83 REC C-O2
P80 BOP
P00 BOP
LAMP
KEY
WARNING: ⚠ AND ▯ INDICATE SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS
AVERTISSMENT: ⚠ ET ▯, ILS INDIQUENT LES COMPOSTANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL NE REMPLACER QUE DES PIÈCES RECOMMANDEES PAR LE FABRICANT
NOTE
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN Ω&MS
ALL CAPACITORS IN μF

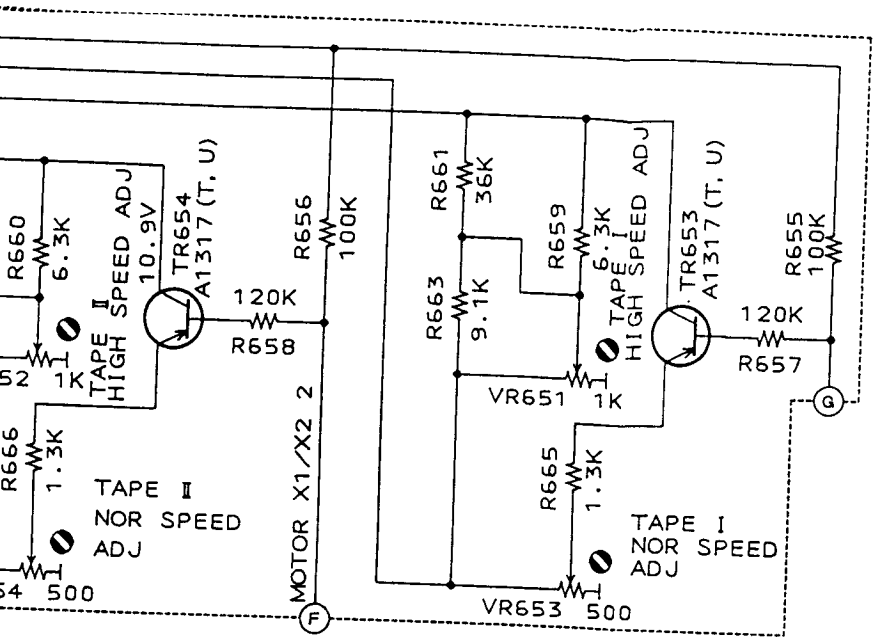


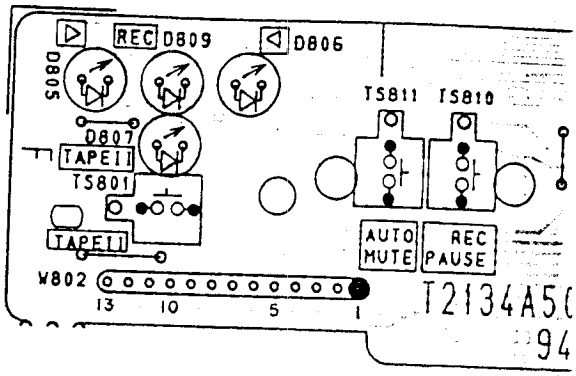
NOTE
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS
ALL CAPACITORS IN μF

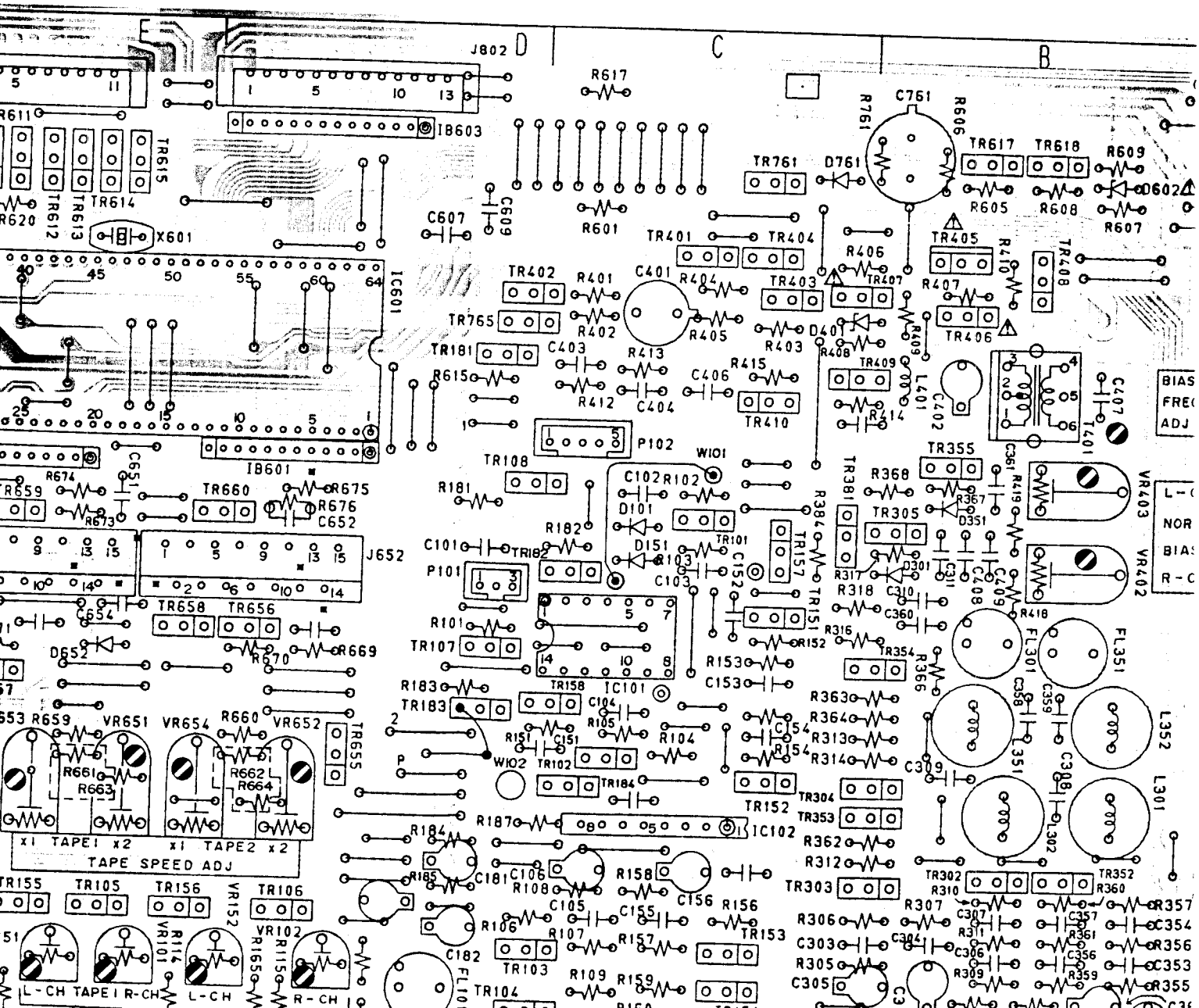
* ANOTHER TYPE

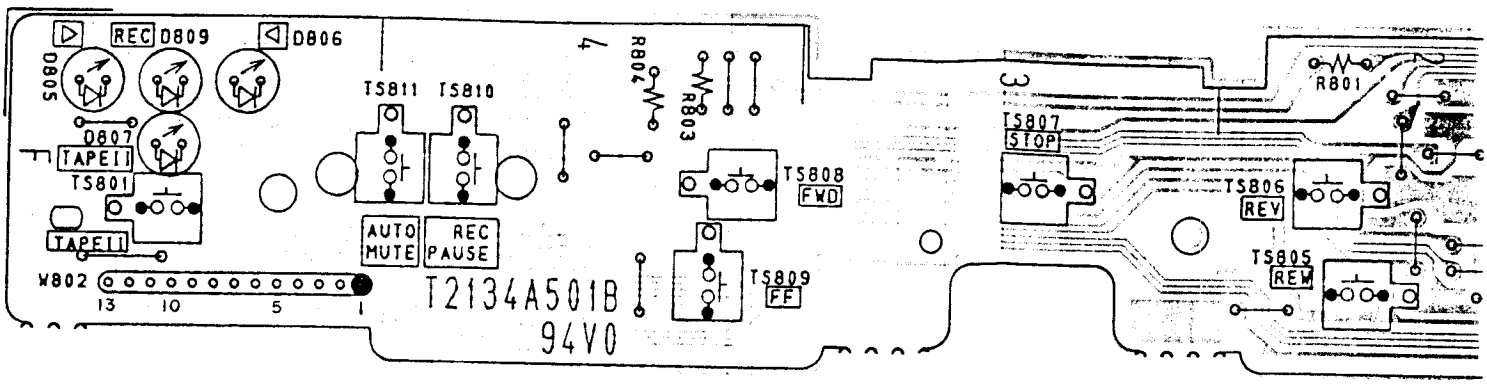




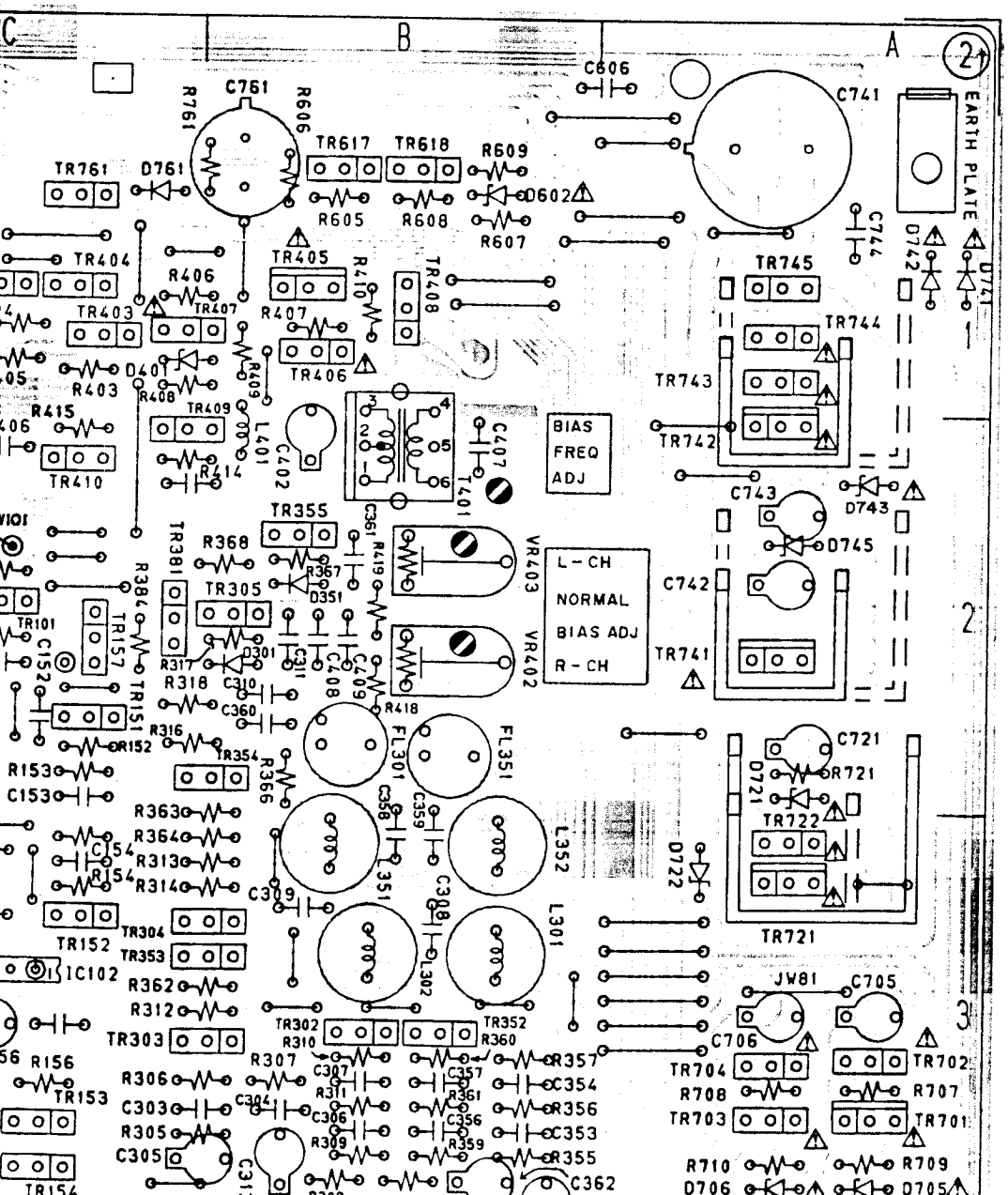

R660
6.3K
TAPE II
HIGH SPEED ADJ
10.9V
TR654
A1317(T, U)
R656
100K
120K
R658
R661
36K
R663
9.1K
R659
6.3K
TAPE I
HIGH SPEED ADJ
TR653
A1317(T, U)
R655
100K
120K
R657
VR651 1K
R666
1.3K
TAPE II
NOR SPEED
ADJ
MOTOR X1/X2
R665
1.3K
TAPE I
NOR SPEED
ADJ
VR653 500


REC
D809
D806
D805
D807
TAPE II
TS801
TAPE II
TS811
TS810
AUTO MUTE
REC PAUSE
W802
13 10 5 1


J802
IB603
IB601
IC601
X601
TR615
TR614
TR613
TR612
R620
R611
C607
C609
R601
R617
C761
R761
R606
TR761
D761
TR617
TR618
R609
D602
R605
R608
R607
TR401
TR404
TR405
R406
TR407
TR408
R410
TR402
R401
C401
R404
TR403
R407
TR406
TR765
R402
R405
D401
R403
R408
R409
TR181
C403
R413
R415
TR409
L401
C402
C407
R615
R412
C404
C406
TR410
R414
P102
WI01
TR108
C102
R102
R181
D101
R182
C101
TR182
D151
R103
C103
P101
R101
TR107
IC101
TR158
R183
TR183
C104
R105
R104
R151
C151
WI02
TR102
TR184
R187
IC102
R184
R185
C181
C106
R108
R158
C156
R106
C105
C155
R156
R107
R157
TR153
C182
TR103
R109
R159
TR104
FL101
TR659
R659
VR651
VR654
R660
VR652
TR655
R661
R663
R662
R664
x1 TAPE1 x2
x1 TAPE2 x2
TAPE SPEED ADJ
TR155
TR105
TR156
TR106
VR152
VR102
VR101
L-CH TAPE I
R-CH
L-CH
R-CH
TR355
R368
R367
C361
R419
VR403
TR305
D351
C351
C408
C409
R418
VR402
R317
D301
C301
R318
C310
C360
R316
TR354
R366
FL301
FL351
R363
R364
R313
R314
C309
C358
C359
L352
L351
L302
L301
TR304
TR353
R362
R312
TR303
TR302
R310
TR352
R360
R307
R311
R309
R306
C303
R305
C305
C307
C357
C306
C356
C354
C353
R357
R356
R355
BIAS FREQ ADJ
NOR
BIAS
R-CH



OPERATION PCB T2134A501B



PRINCIPAL PARTS LOCATIO

ICs

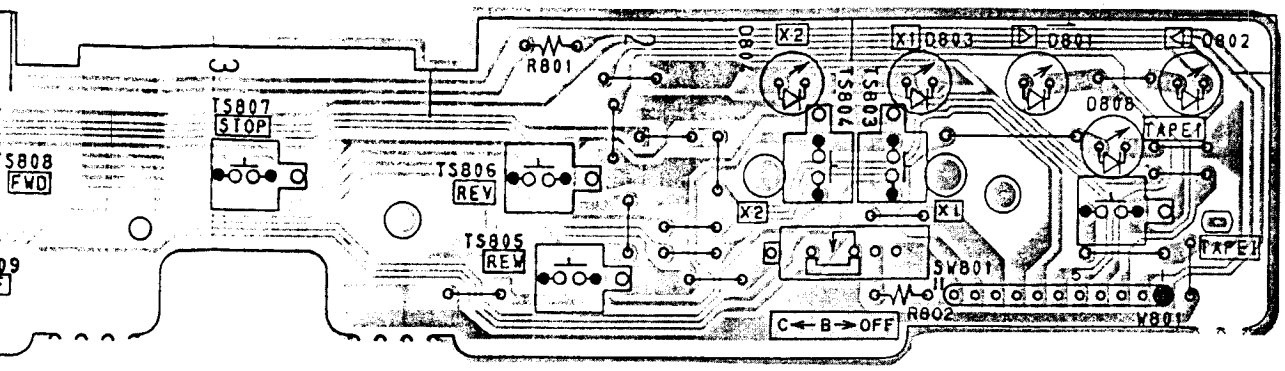
IC101	C2
IC102	C3
IC202	D,E4
IC301	B4
IC551	F3,4
IC601	D,E1
IC602	B4

CONNECTORs

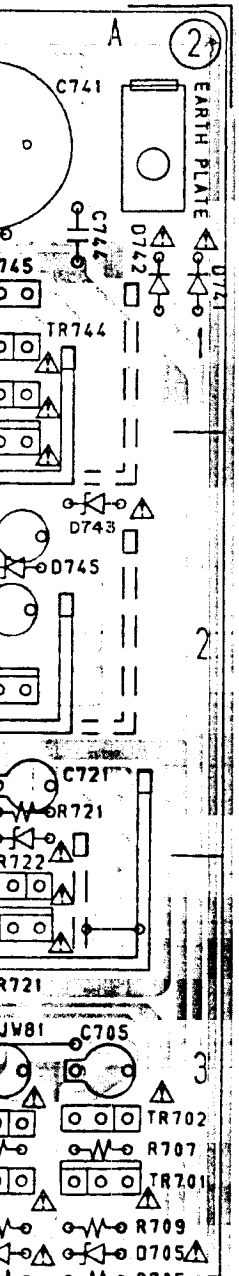
P101	D2
P102	C2
J201	B5
J651	E2
J652	D,E2
J801	E1
J802	D1

TRANSISTORs

TR101	C2
TR102	C3
TR103	C,D3
TR104	C,D3
TR105	E3
TR106	D3
TR107	D2
TR108	C,D2
TR151	C2
TR152	C3
TR153	C3
TR154	C3
TR155	E3
TR156	D,E3
TR157	C2
TR158	C3
TR181	D1
TR182	C2
TR183	D2



OPERATION PCB T2134A501B



PRINCIPAL PARTS LOCATION

ICs

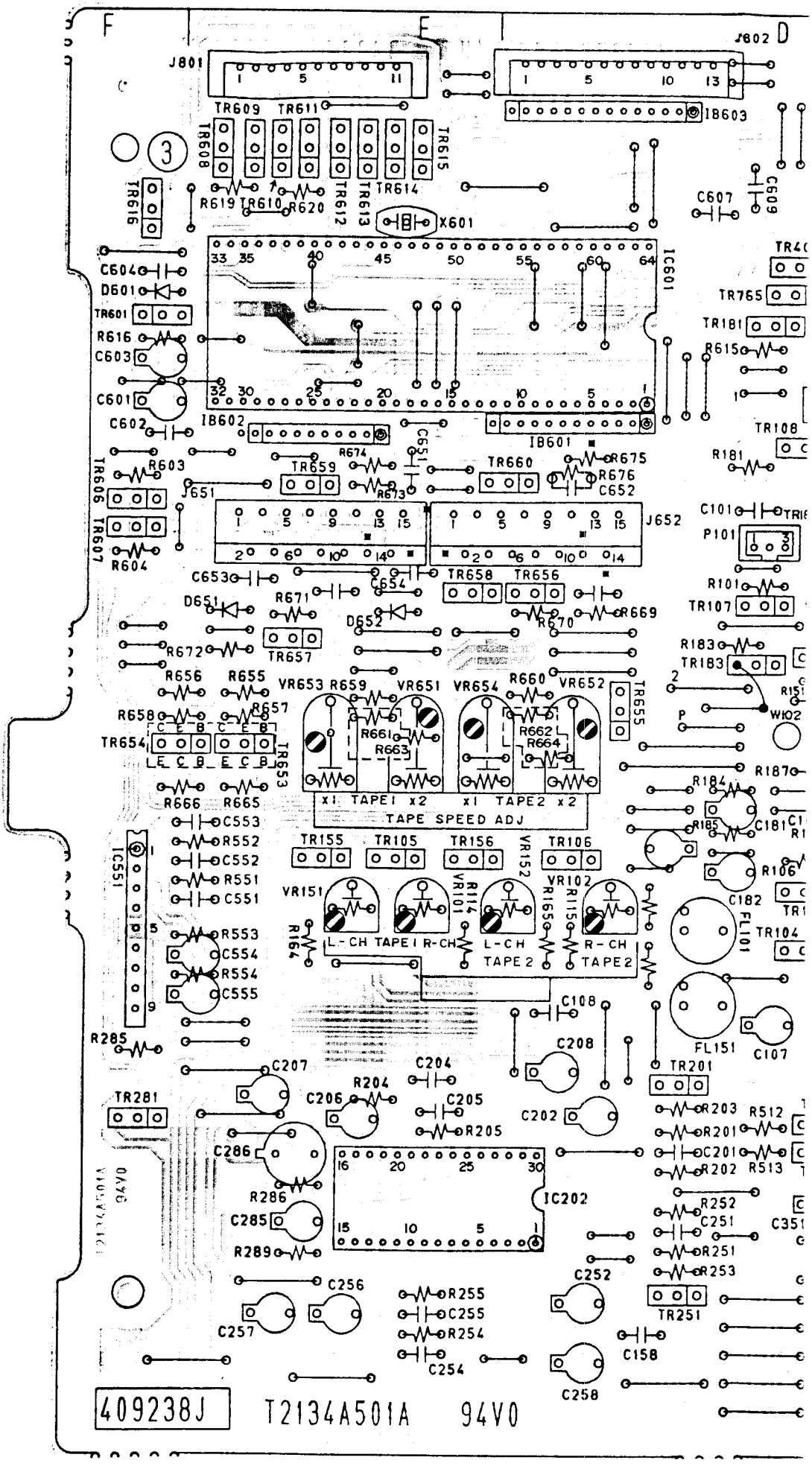
IC101	C2
IC102	C3
IC202	D,E4
IC301	B4
IC551	F3,4
IC601	D,E1
IC602	B4

CONNECTORs

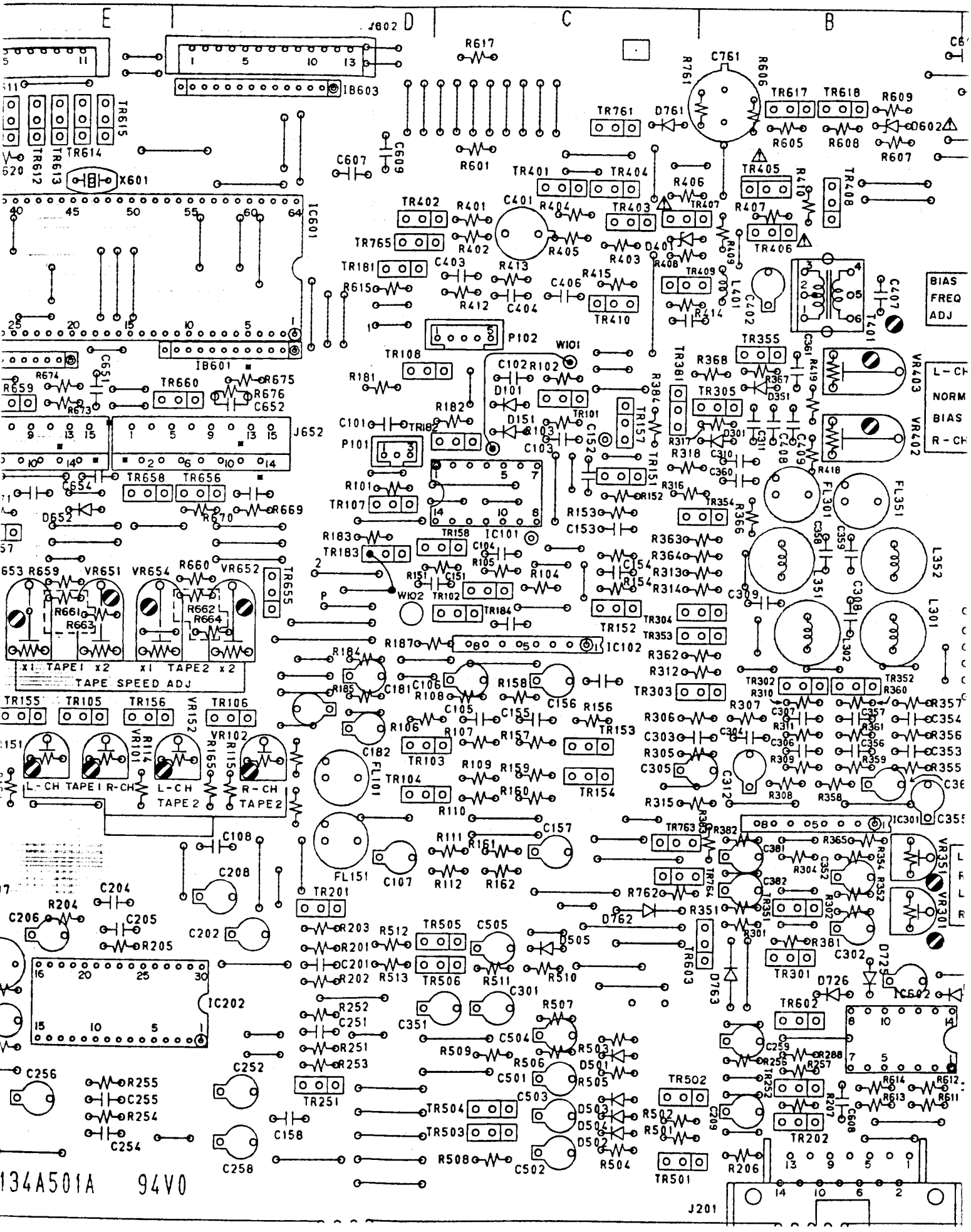
P101	D2
P102	C2
J201	B5
J651	E2
J652	D,E2
J801	E1
J802	D1

TRANSISTORs

TR101	C2
TR102	C3
TR103	C,D3
TR104	C,D3
TR105	E3
TR106	D3
TR107	D2
TR108	C,D2
TR151	C2
TR152	C3
TR153	C3
TR154	C3
TR155	E3
TR156	D,E3
TR157	C2
TR158	C3
TR181	D1
TR182	C2
TR183	D3
TR402	C,D1
TR403	C1
TR404	C1
TR405	B1
TR406	B1
TR407	B,C1
TR408	B1
TR409	B,C2
TR410	C2
TR501	B,C5
TR502	B,C5
TR503	C5
TR504	C5
TR505	C4
TR506	C4
TR601	F1
TR602	B4
TR603	B4
TR606	F2
TR607	F2
TR608	E1
TR609	E1
TR610	E1
TR611	E1
TR612	E1
TR613	E1
TR614	E1
TR615	E1
TR616	F1
TR617	B1
TR618	B1
TR653	E3
TR654	E,F3
TR655	D3
TR656	D2
TR657	E2,3
TR658	E2



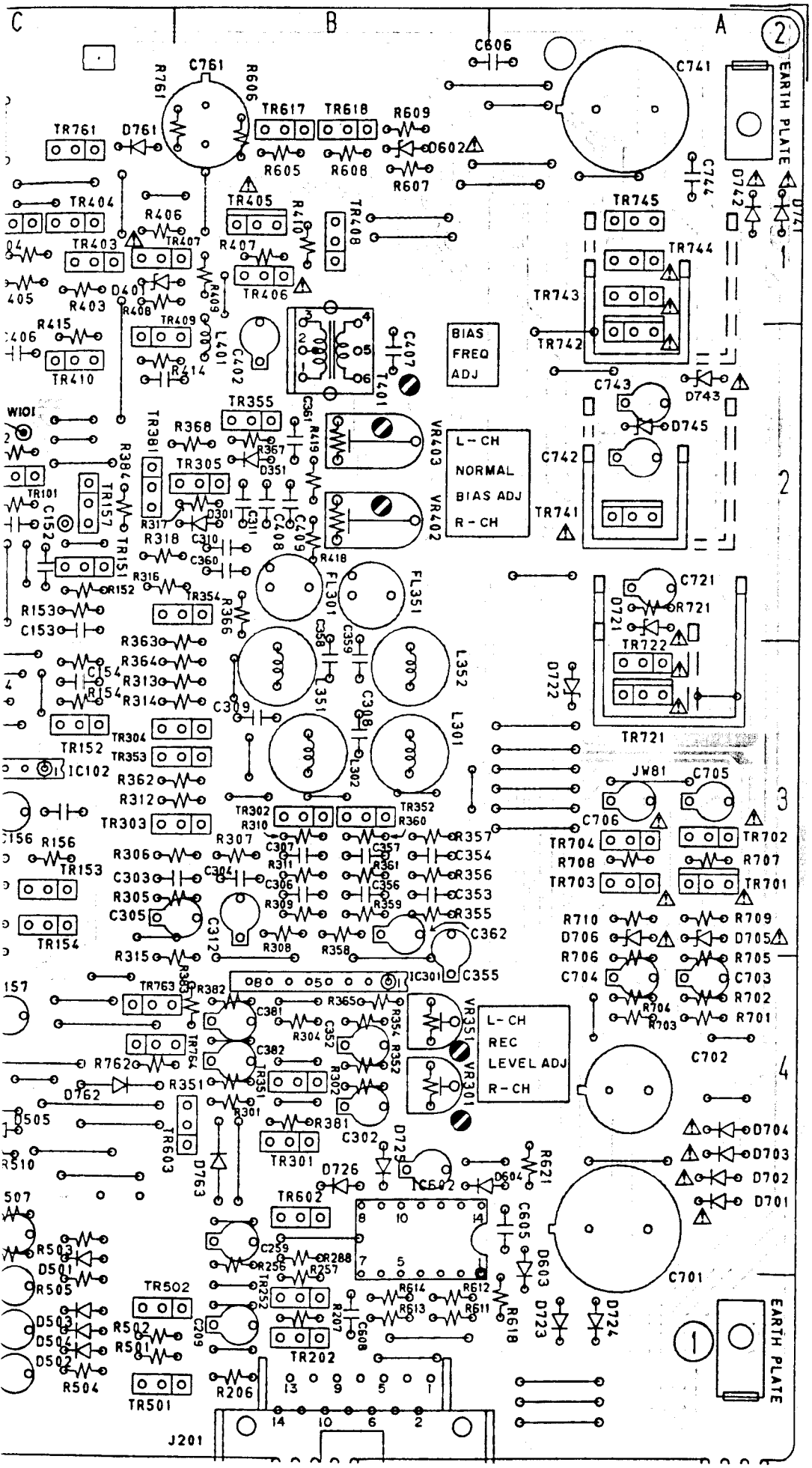
WARNING: ⚠ INDICATES SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS



CATES SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY,
E SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S
MENDED PARTS

DECK PCB T2134A501A

For Service Manuals Contact



PRINCIPAL PARTS LOCATION

ICs

IC101	C2	TF
IC102	C3	TF
IC202	D,E4	TF
IC301	B4	TF
IC551	F3,4	TF
IC601	D,E1	TF
IC602	B4	TF
		TF

CONNECTORs

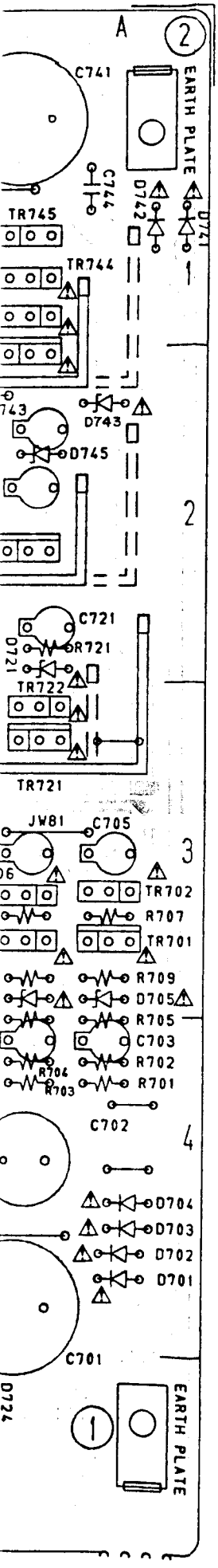
P101	D2	TF
P102	C2	TF
J201	B5	TF
J651	E2	TF
J652	D,E2	TF
J801	E1	TF
J802	D1	TF
		TF

TRANSISTORs

TR101	C2	TF
TR102	C3	TF
TR103	C,D3	TF
TR104	C,D3	TF
TR105	E3	TF
TR106	D3	TF
TR107	D2	TF
TR108	C,D2	TF
TR151	C2	TF
TR152	C3	TF
TR153	C3	TF
TR154	C3	TF
TR155	E3	TF
TR156	D,E3	TF
TR157	C2	TF
TR158	C3	TF
TR181	D1	TF
TR182	C2	TF
TR183	D3	TF
TR184	C3	TF
TR201	D4	TF
TR202	B5	TF
TR251	D5	TF
TR252	B5	TF
TR281	F4	TF
TR301	B4	TF
TR302	B3	TF
TR303	B,C3	TF
TR304	B,C3	TF
TR305	B2	TF
TR351	B4	TF
TR352	B3	TF
TR353	B,C3	TF
TR354	B,C2	TF
TR355	B2	TF
TR381	C2	TF
TR401	C1	

3 T2134A501A

NOTE : REFER TO SCHEMATIC DIAGRAMS FOR



PRINCIPAL PARTS LOCATION

ICs

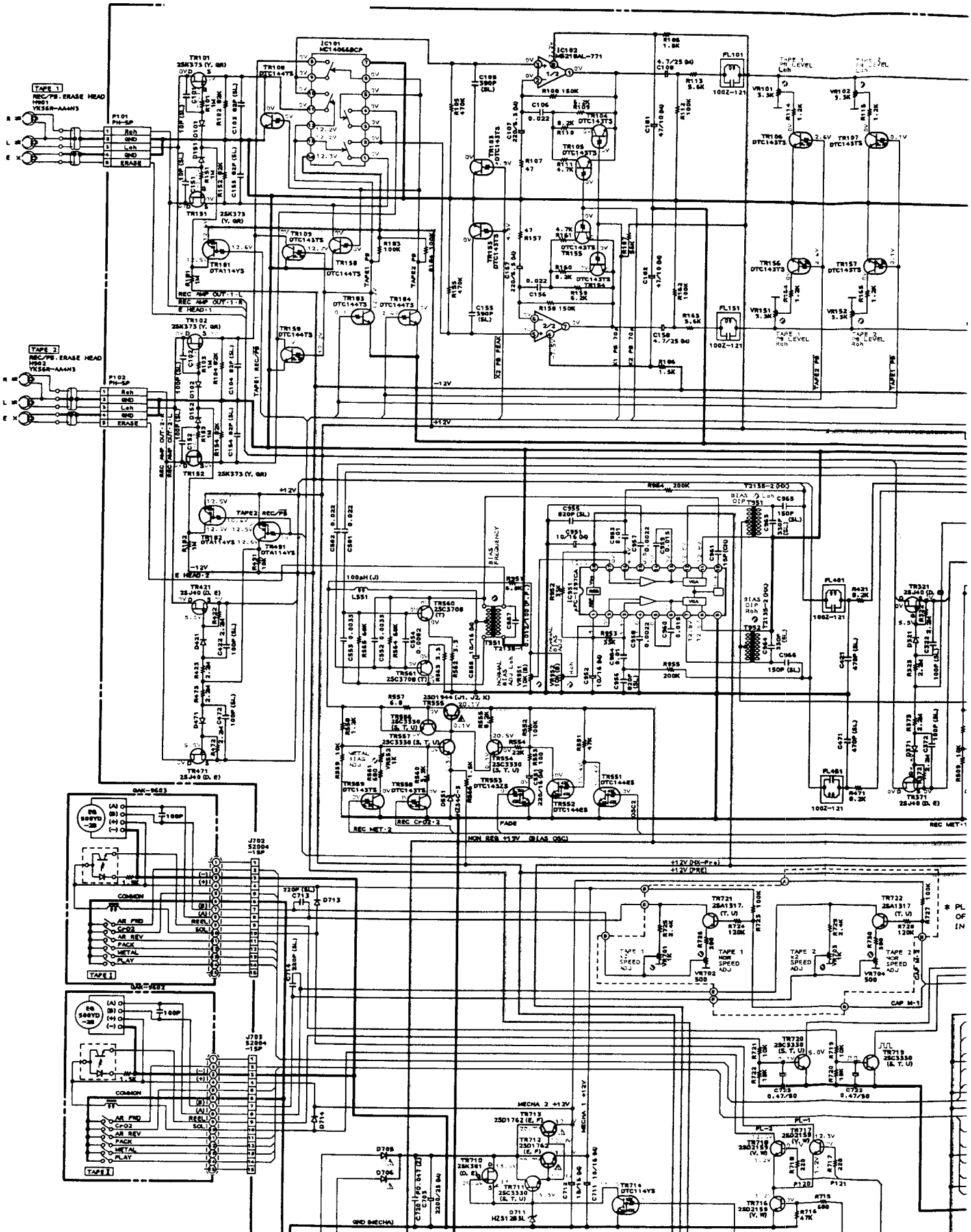
IC101 ..... C2
IC102 ..... C3
IC202 ..... D,E4
IC301 ..... B4
IC551 ..... F3,4
IC601 ..... D,E1
IC602 ..... B4

CONNECTORs

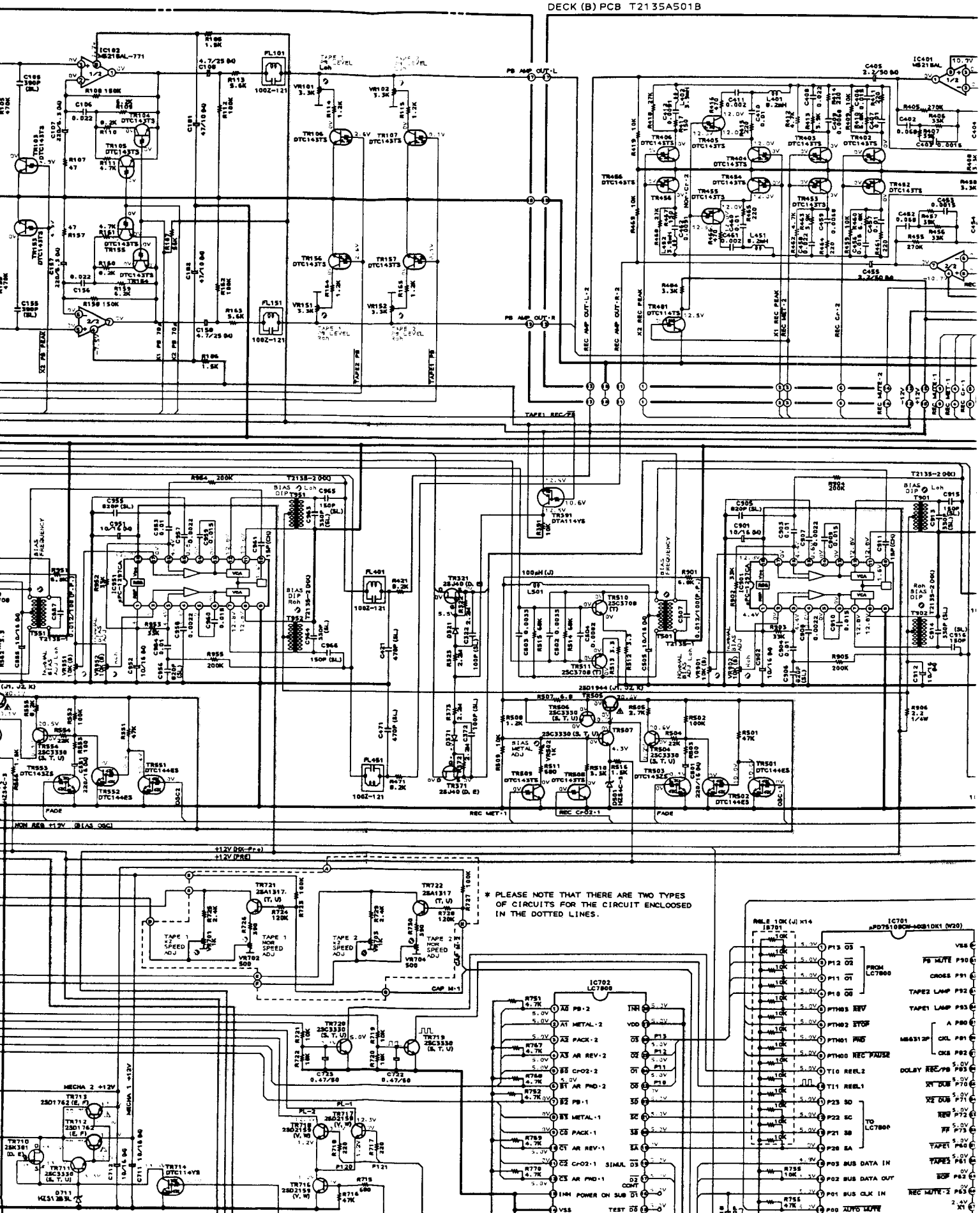
P101 ..... D2
P102 ..... C2
J201 ..... B5
J651 ..... E2
J652 ..... D,E2
J801 ..... E1
J802 ..... D1

TRANSISTORs

TR101 ..... C2
TR102 ..... C3
TR103 ..... C,D3
TR104 ..... C,D3
TR105 ..... E3
TR106 ..... D3
TR107 ..... D2
TR108 ..... C,D2
TR151 ..... C2
TR152 ..... C3
TR153 ..... C3
TR154 ..... C3
TR155 ..... E3
TR156 ..... D,E3
TR157 ..... C2
TR158 ..... C3
TR181 ..... D1
TR182 ..... C2
TR183 ..... D3
TR184 ..... C3
TR201 ..... D4
TR202 ..... B5
TR251 ..... D5
TR252 ..... B5
TR281 ..... F4
TR301 ..... B4
TR302 ..... B3
TR303 ..... B,C3
TR304 ..... B,C3
TR305 ..... B2
TR351 ..... B4
TR352 ..... B3
TR353 ..... B,C3
TR354 ..... B,C2
TR355 ..... B2
TR381 ..... C2
TR401 ..... C1
TR402 ..... C,D1
TR403 ..... C1
TR404 ..... C1
TR405 ..... B1
TR406 ..... B1
TR407 ..... B,C1
TR408 ..... B1
TR409 ..... B,C2
TR410 ..... C2
TR501 ..... B,C5
TR502 ..... B,C5
TR503 ..... C5
TR504 ..... C5
TR505 ..... C4
TR506 ..... C4
TR601 ..... F1
TR602 ..... B4
TR603 ..... B4
TR606 ..... F2
TR607 ..... F2
TR608 ..... E1
TR609 ..... E1
TR610 ..... E1
TR611 ..... E1
TR612 ..... E1
TR613 ..... E1
TR614 ..... E1
TR615 ..... E1
TR616 ..... F1
TR617 ..... B1
TR618 ..... B1
TR653 ..... E3
TR654 ..... E,F3
TR655 ..... D3
TR656 ..... D2
TR657 ..... E2,3
TR658 ..... E2
TR659 ..... E2
TR660 ..... D,E2
TR701 ..... A3
TR702 ..... A3
TR703 ..... A3
TR704 ..... A3
TR721 ..... A3
TR722 ..... A3
TR741 ..... A2
TR742 ..... A2
TR743 ..... A1
TR744 ..... A1
TR745 ..... A1
TR761 ..... C1
TR763 ..... B,C4
TR764 ..... B,C4
TR765 ..... C,D1


TAPE 1
REC/PB, ERASE HEAD
YK56R-AA4N3
P101
PH-5P
Rch
GND
Lch
GND
ERASE
TAPE 2
REC/PB, ERASE HEAD
YK56R-AA4N3
P102
PH-5P
IC101
MC14066BCP
IC102
NJM2150AL-771
TR101
2SK373 (Y, GR)
TR102
2SK373 (Y, GR)
TR151
2SK373 (Y, GR)
TR152
2SK373 (Y, GR)
TR158
DTC144TS
TR159
DTC144TS
TR183
DTC144TS
TR184
DTC144TS
TR181
DTA114YS
TR182
DTA114YS
TR491
DTA114YS
TR421
2SJ440 (D, E)
TR471
2SJ440 (D, E)
TR371
2SJ440 (D, E)
TR321
2SJ440 (D, E)
TR560
2SC3708 (T)
TR561
2SC3708 (T)
TR554
2SC3330 (S, T, U)
TR555
2SC3330 (S, T, U)
TR556
2SC3330 (S, T, U)
TR557
2SC3330 (S, T, U)
TR553
DTC143ZS
TR552
DTC144ES
TR551
DTC144ES
TR569
DTC143TS
TR568
DTC143TS
TR721
2SA1317 (T, U)
TR722
2SA1317 (T, U)
TR720
2SC3330 (S, T, U)
TR719
2SC3330 (S, T, U)
TR713
2SD1762 (E, F)
TR712
2SD1762 (E, F)
TR710
2SK361 (E, F)
TR711
2SC3330 (S, T, U)
TR714
DTC114YS
TR715
2SB1218A (V, W)
TR716
2SB1218A (V, W)
TR717
2SB1218A (V, W)
TR718
2SB1218A (V, W)
TR101
DTC144TS
TR102
DTC144TS
TR103
DTC143TS
TR104
DTC143TS
TR105
DTC143TS
TR106
DTC143TS
TR107
DTC143TS
TR153
DTC143TS
TR154
DTC143TS
TR155
DTC143TS
TR156
DTC143TS
TR157
DTC143TS
FL101
FL151
FL401
FL461
100Z-121
VR101 5.3K
VR102 5.3K
VR151 5.3K
VR152 5.3K
VR701 500
VR702 500
VR703 500
VR704 500
VR351 10K (B)
VR352 10K (B)
T2158-2040
T351
T352
L551
100μH (J)
J702 52004-15P
J703 52004-15P
DECK-9603
DECK-9602
TAPE 1
TAPE 2
COMMON
AR FWD
CrO2
AR REV
PACK
METAL
PLAY
REEL
SOL
REC MET-1
REC MET-2
REC CrO2-1
REC CrO2-2
FADE
BIAS FREQUENCY
NORMAL BIAS ADJ
TAPE 1 HIGH SPEED ADJ
TAPE 2 HIGH SPEED ADJ
TAPE 1 NOR SPEED ADJ
TAPE 2 NOR SPEED ADJ
+12V
-12V
GND (MECHA)
MECHA 1 +12V
MECHA 2 +12V
+12V (DIG-Pro)
+12V (PRE)
NOR REG +12V (BIAS OSC)
REC AMP OUT-1-L
REC AMP OUT-1-R
REC AMP OUT-2-L
REC AMP OUT-2-R
E HEAD-1
E HEAD-2
TAPE1 REC/PB
TAPE2 REC/PB
TAPE1 PB
TAPE2 PB
X1 PB FREQ
X2 PB FREQ
P120
P121
PL-1
PL-2
CAP M-1

DECK (B) PCB T2135A501B



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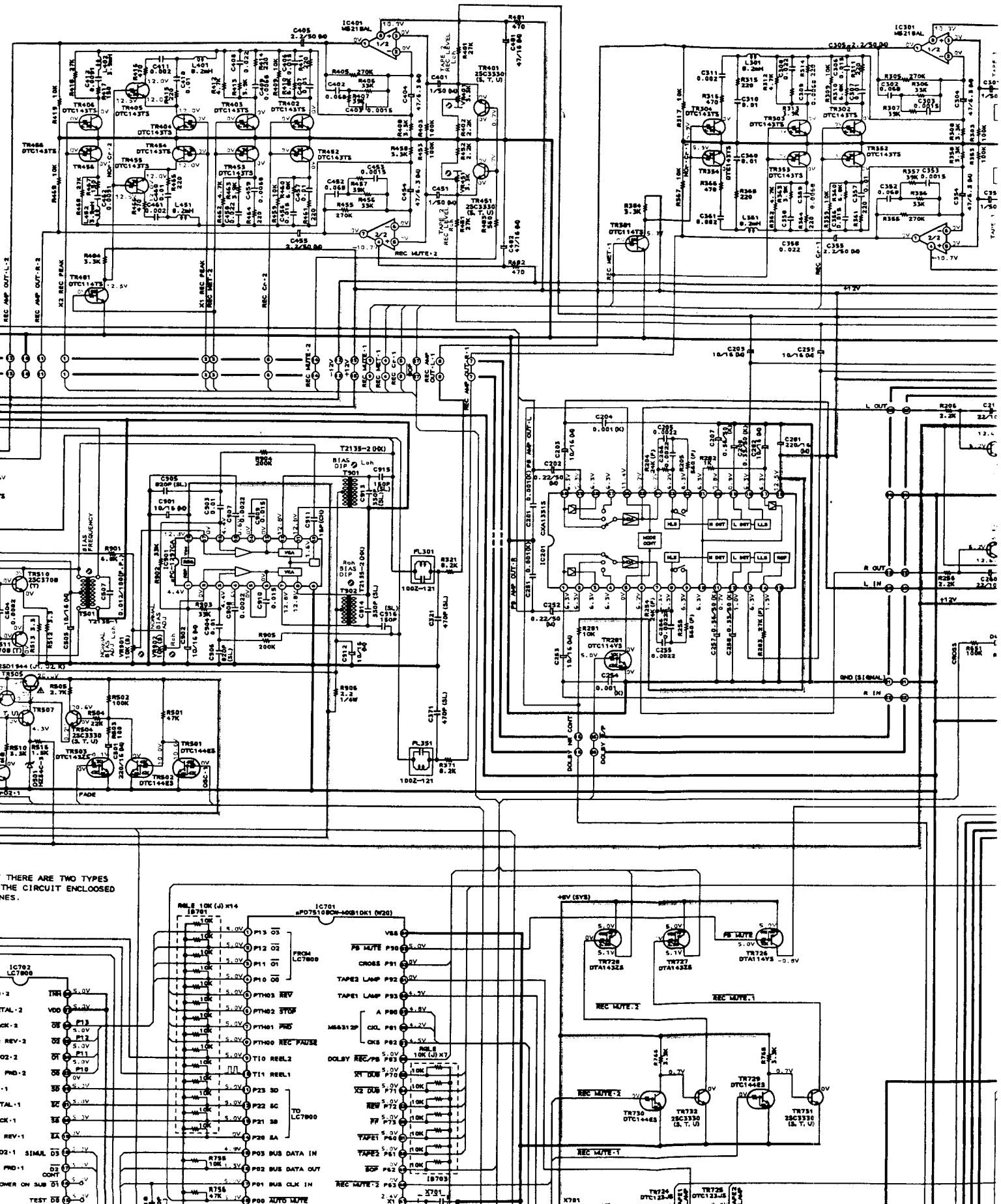
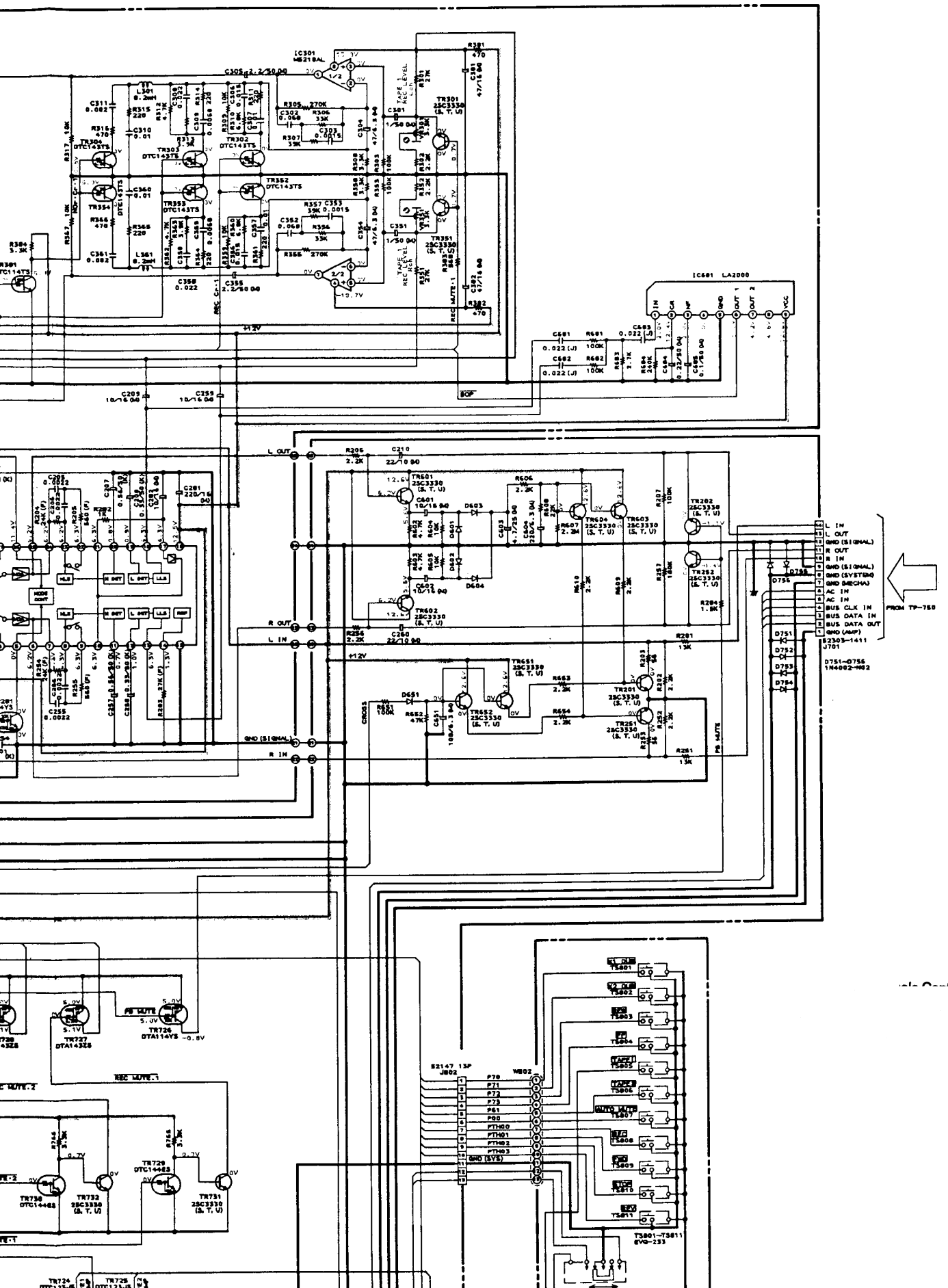
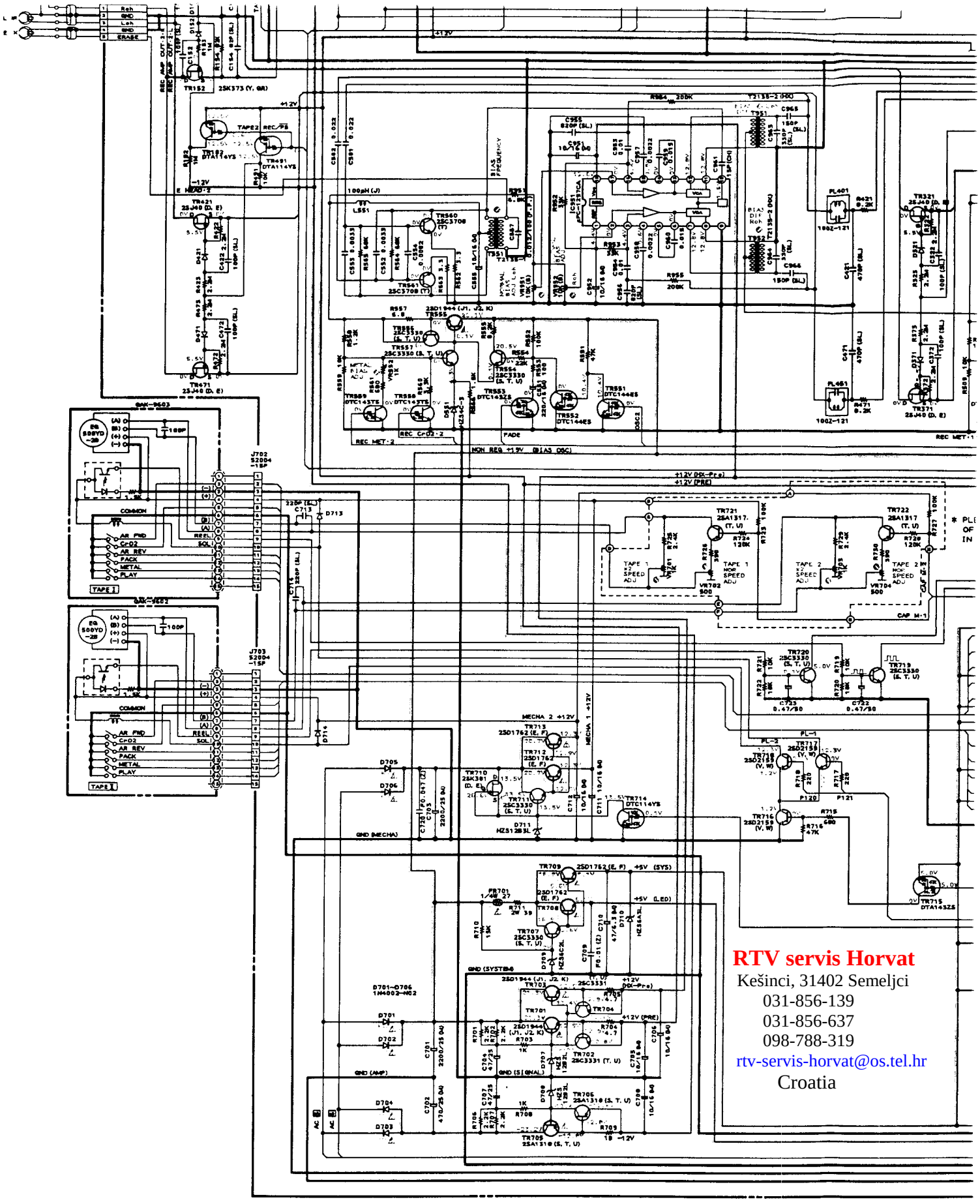
Kešinci, 31402 Semeljci
031-856-139
031-856-637
098-788-319
rtv-servis-horvat@os.tel.hr
Croatia

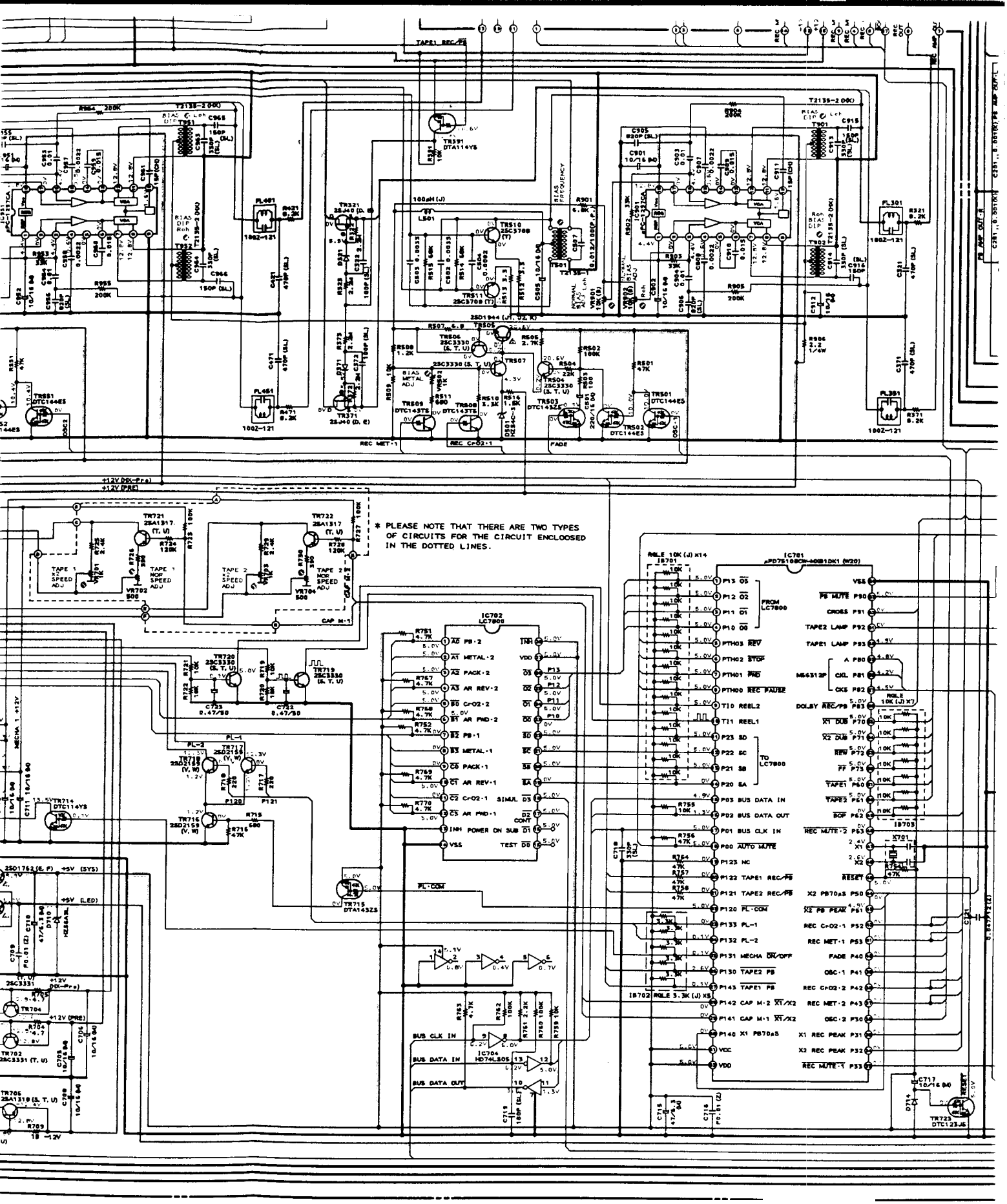
(B) PCB T2135A501B




IC301 MB218AL
IC601 LA2000
+12V
-10.7V
L OUT
R OUT
L IN
R IN
GND (SIGNAL)
FROM TP-750
52305-1411
J701
D751-D756
1N4002-M02
82147 15P
J802
P70
P71
P72
P73
P61
P60
PTH00
PTH01
PTH02
PTH03
GND (SYS)
T5801-T5811
EVG-253
TR726 DTA114YS
TR727 DTA143ZS
TR729 DTC144ES
TR730 DTC144ES
TR731 2SC3330
TR732 2SC3330



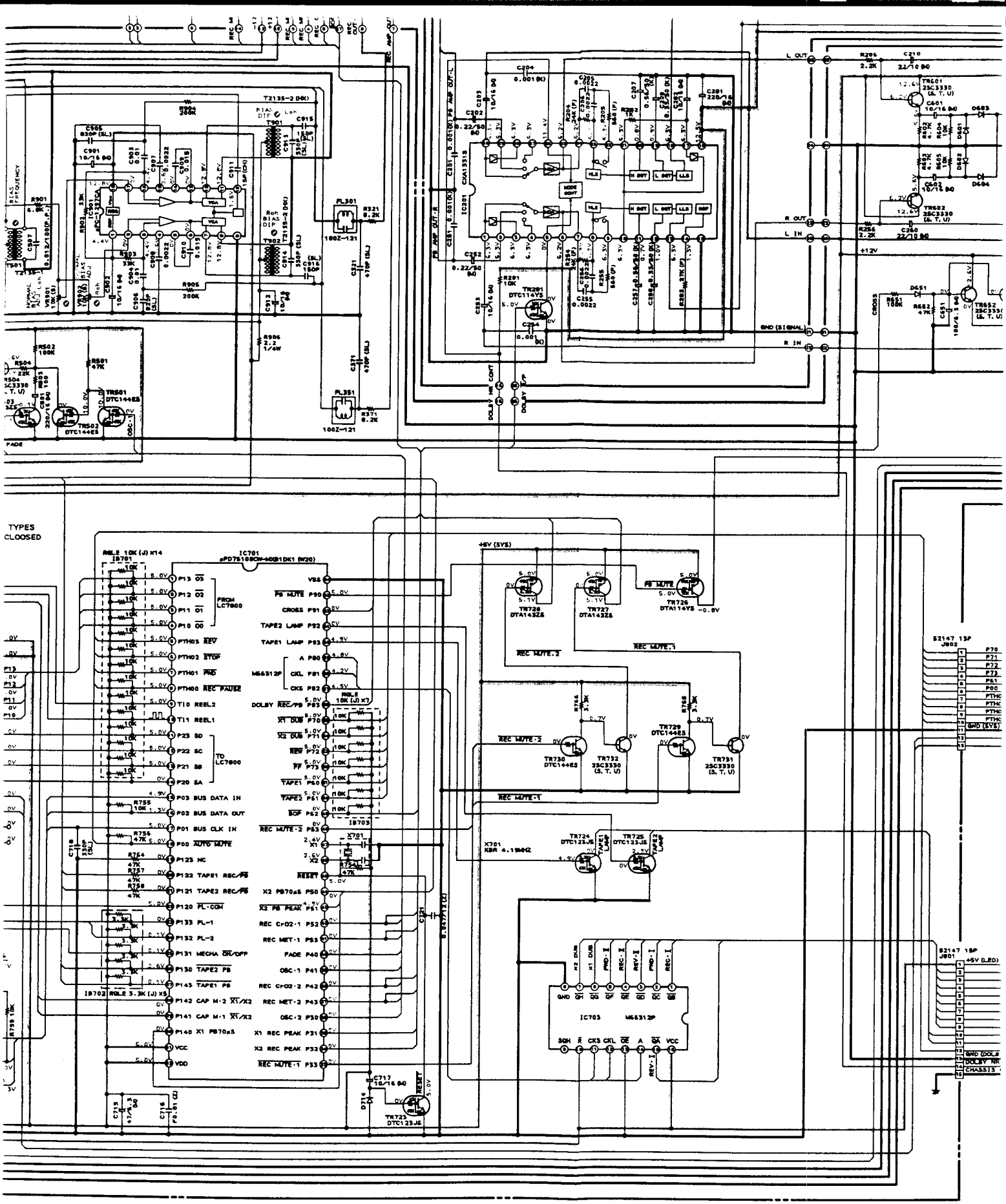
RTV servis Horvat
Kešinci, 31402 Semeljci
031-856-139
031-856-637
098-788-319
rtv-servis-horvat@os.tel.hr
Croatia



: B (POWER SUPPLY) LINE

: PB SIGNAL LINE

: REC SIGNAL LINE

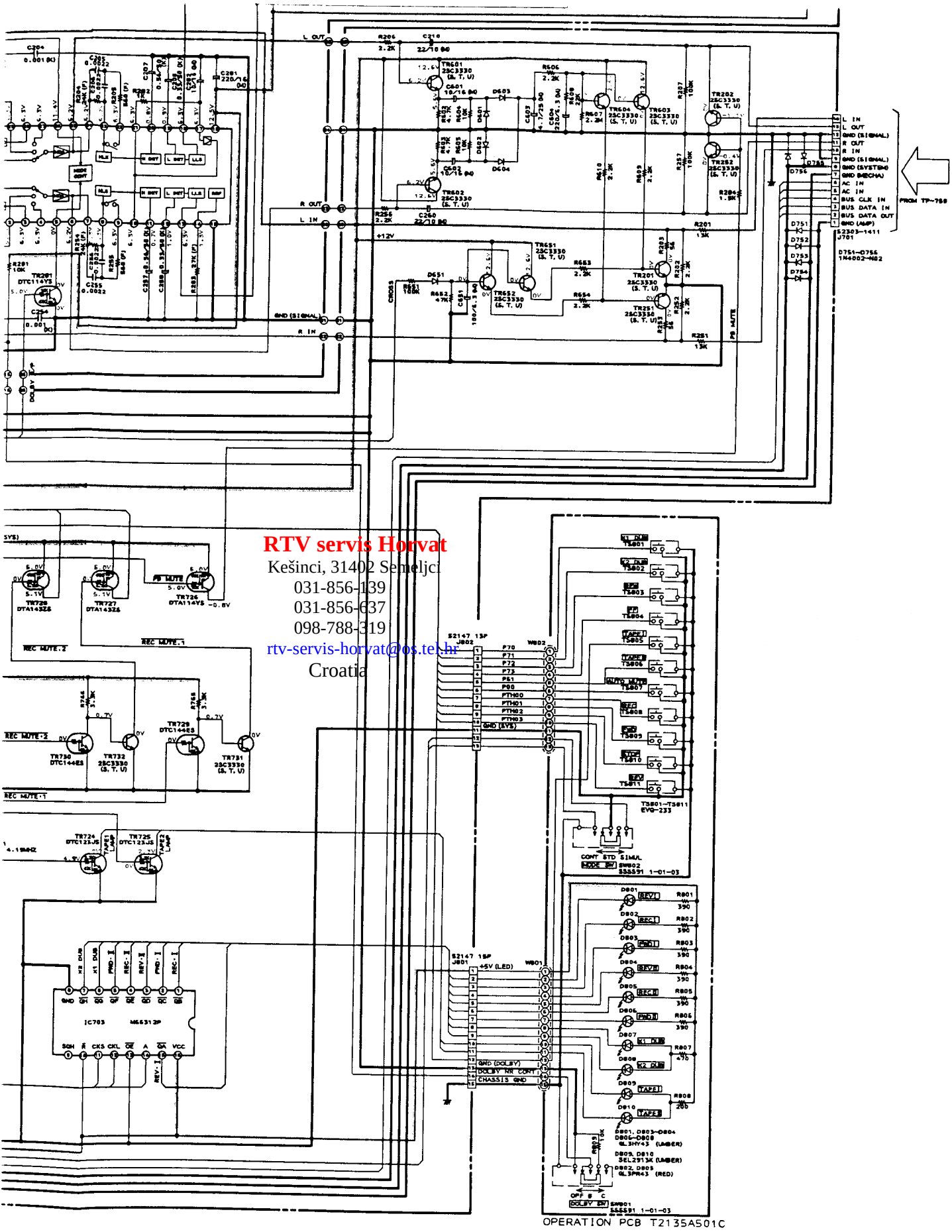


NOTE
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS
ALL CAPACITORS IN μF
ALL DIODES ARE 1S1331T

INDICATED VOLTAGES WERE MEASURED DURING PB MODE
(CONDITION: TAPE 1, FWD PLAY, NORMAL TAPE, DOLBY OFF)

WARNING: ⚠ AND ▲ INDICATE SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY. REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

AVERTISSEMENT: ⚠ ET ▲ ILS INDIQUENT LES COMPOSTANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDEES PAR LE FABRICANT



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031-856-637
098-788-319
rtv-servis-horvat@os.tel.hr
Croatia

OPERATION PCB T2135A501C

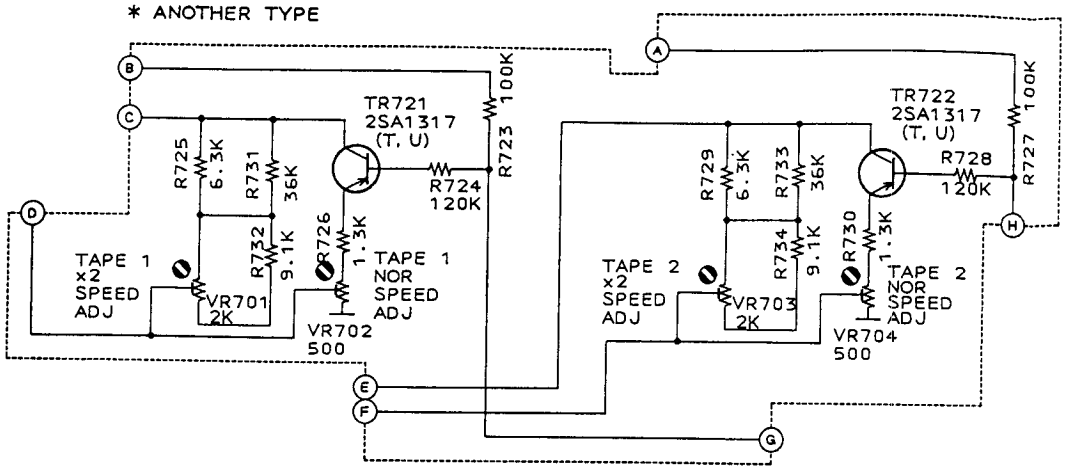
NOTE
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS
ALL CAPACITORS IN μF
ALL DIODES ARE 1SS131T

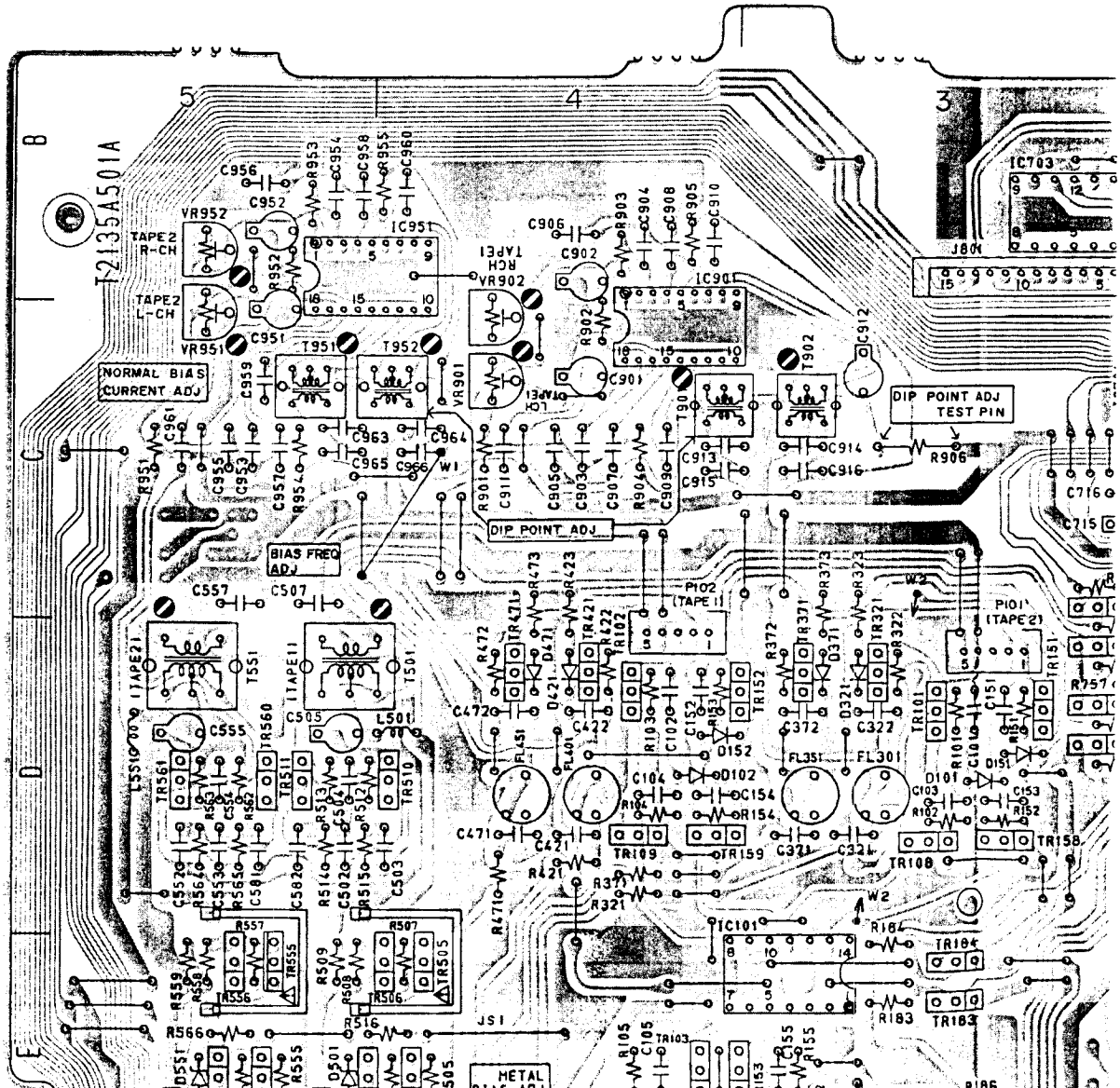
INDICATE VOLTAGES WERE MEASURED DURING PB MODE
(CONDITION: TAPE 1, FWD PLAY, NORMAL TAPE, DOLBY OFF)

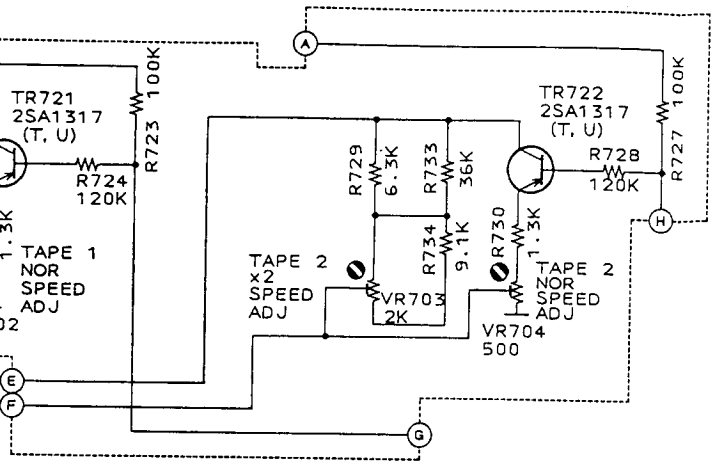
WARNING: ⚠ AND ⚠ INDICATE SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

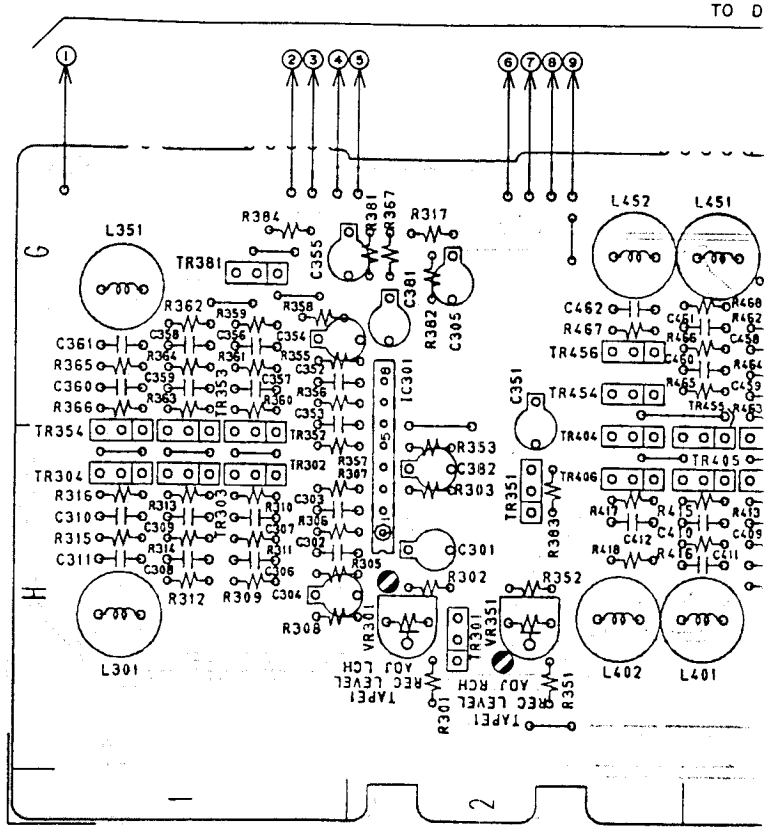
AVERTISSEMENT: ⚠ ET ⚠ , ILS INDIQUENT LES COMPOSTANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL NE REMPLACER QUE DES PIÈCES RECOMMANDÉES PAR LE FABRICANT

HX-950
SCHEMATIC DIAGRAM
No.8-7 T213501M
A0

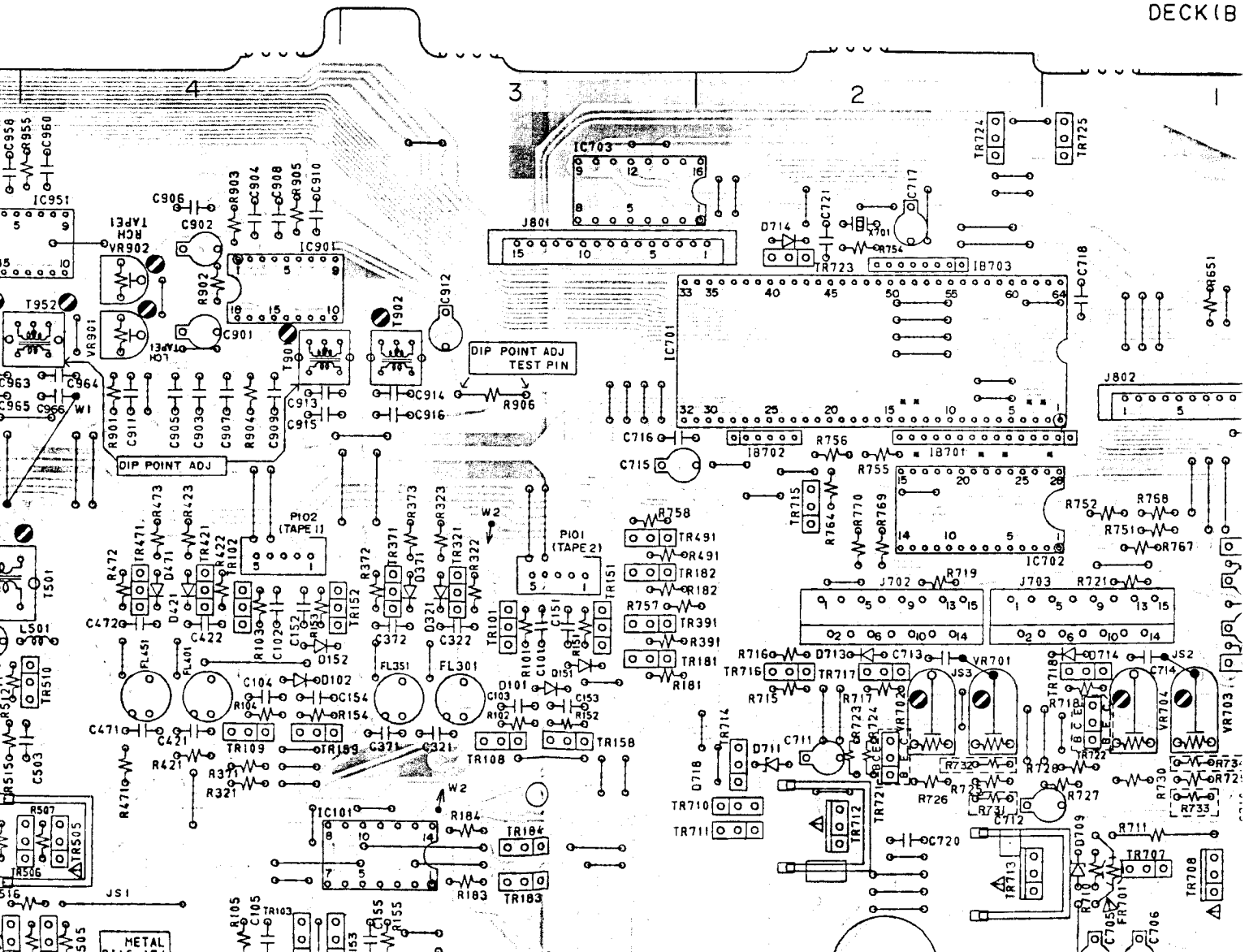

* ANOTHER TYPE
TR721
2SA1317
(T, U)
R723 100K
R724
120K
R725
6.3K
R731
36K
R732
9.1K
R726
1.3K
TAPE 1
×2
SPEED
ADJ
VR701
2K
VR702
500
TAPE 1
NOR
SPEED
ADJ
TR722
2SA1317
(T, U)
R727 100K
R728
120K
R729
6.3K
R733
36K
R734
9.1K
R730
1.3K
TAPE 2
×2
SPEED
ADJ
VR703
2K
VR704
500
TAPE 2
NOR
SPEED
ADJ


T2135A501A
TAPE2
R-CH
TAPE2
L-CH
VR952
VR951
NORMAL BIAS
CURRENT ADJ
BIAS FREQ
ADJ
DIP POINT ADJ
DIP POINT ADJ
TEST PIN
R906
IC703
J804
IC951
IC901
T951
T952
T902
VR902
VR901
TAPE2
RCH
TAPE1
LCH
W1
W2
PI02
(TAPE 1)
PI01
(TAPE 2)
L501
FL451
FL401
FL351
FL301
TR109
TR159
TR108
TR158
TR104
TR184
TR103
TR183
IC101
JS1
HETAL

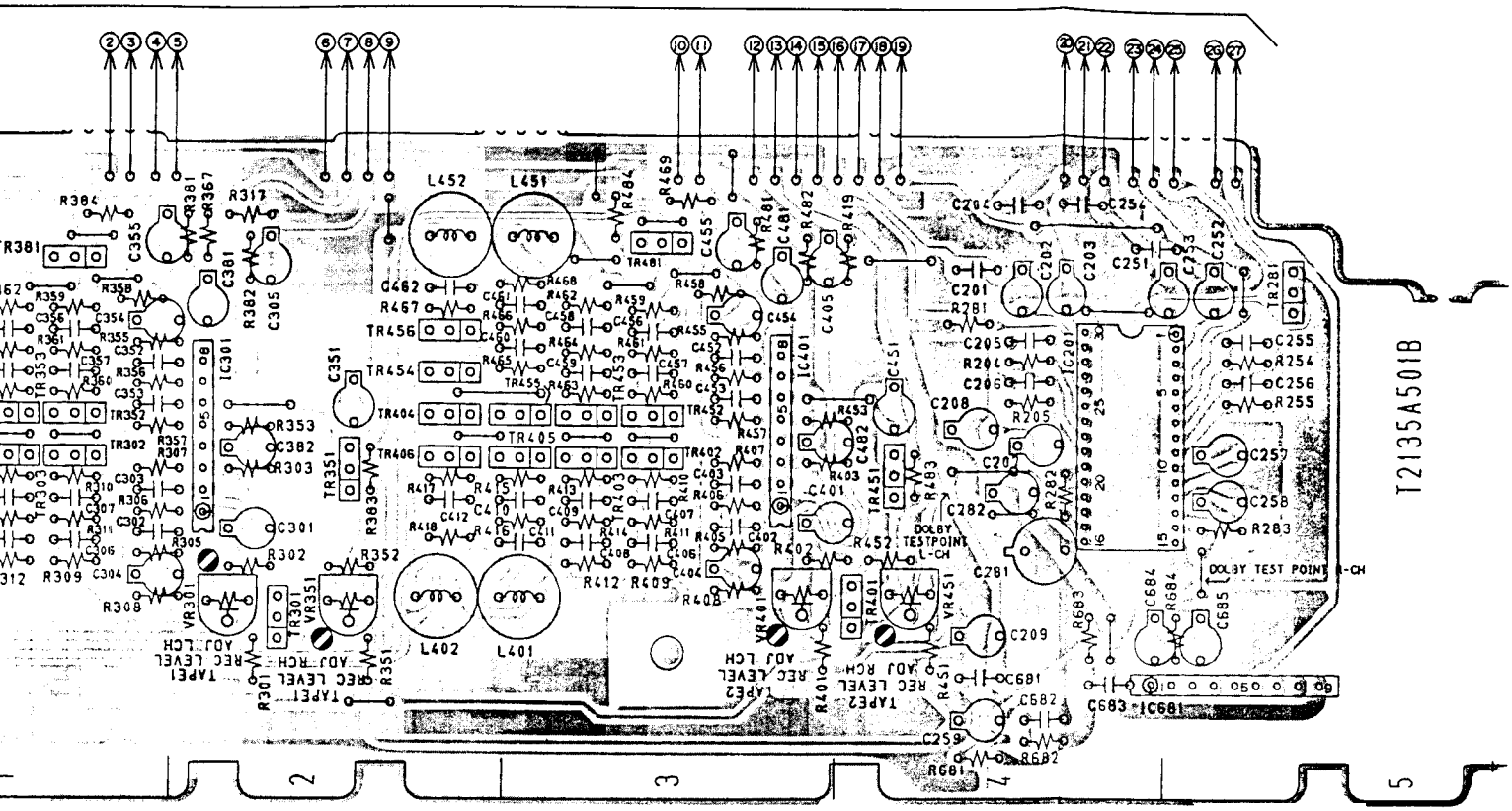

TR721
2SA1317
(T, U)
R723 100K
R724
120K
TAPE 1
NOR
SPEED
ADJ
TAPE 2
×2
SPEED
ADJ
VR703
2K
R729
6.3K
R733
36K
R734
9.1K
R730
1.3K
VR704
500
TAPE 2
NOR
SPEED
ADJ
TR722
2SA1317
(T, U)
R728
120K
R727 100K


TO D
L351
L301
L452
L451
L402
L401
IC301
TR381
TR354
TR304
TR456
TR454
TR404
TR405
TR406
TR351
TR352
TR302
TR303
TAPE1
REC LEVEL
ADJ LCH
ADJ RCH
G
H
2

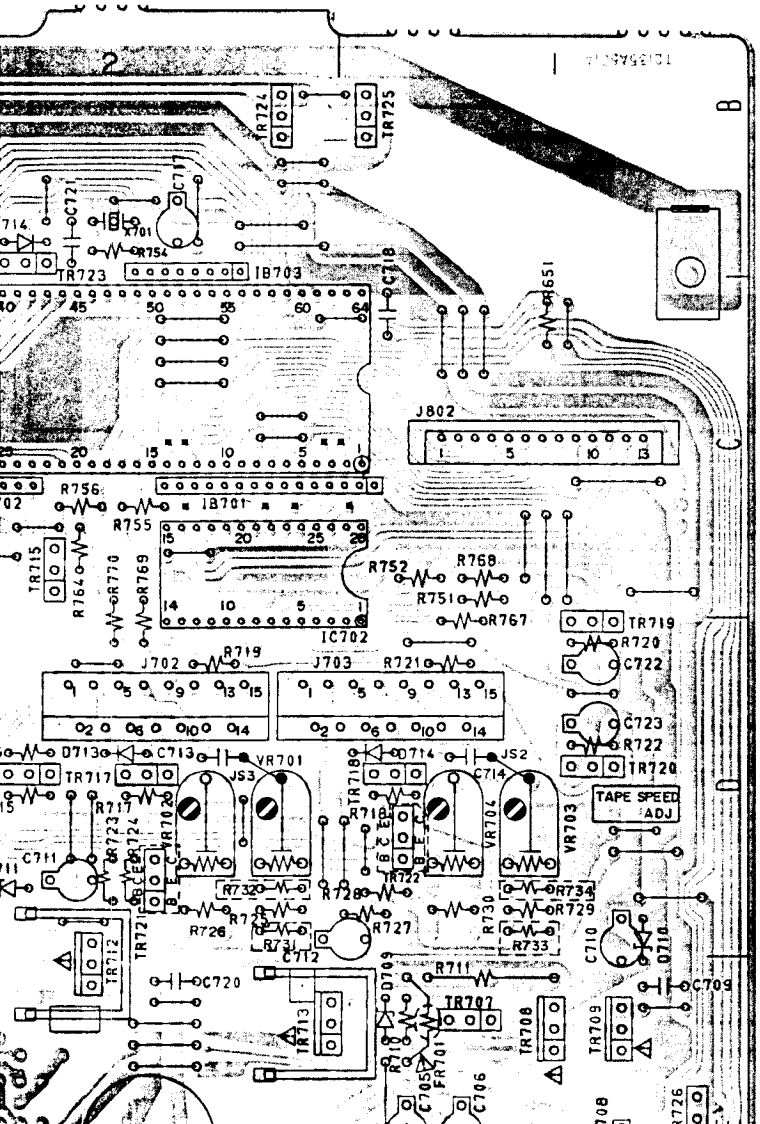
DECK(B


4
3
2
1
IC703
IC951
IC901
IC701
IC702
J801
J802
J702
J703
IB703
IB702
IB701
VR902
VR901
VR701
VR703
VR704
T952
T901
T902
DIP POINT ADJ
TEST PIN
DIP POINT ADJ
P102
(TAPE 1)
P101
(TAPE 2)
W1
W2
JS1
JS2
JS3
FL451
FL401
FL351
FL301
IC101
TR109
TR159
TR108
TR158
TR183
TR184
TR712
TR713
TR707
TR708
TR710
TR711
TR491
TR391
TR181
TR182
TR715
TR716
TR717
TR718
TR723
TR724
TR725
TR501
TR505
TR506
TR510
METAL

TO DECK(A) PCB



DECK(B) PCB T2135A501B



PRINCIPAL PARTS LOCATION

ICs

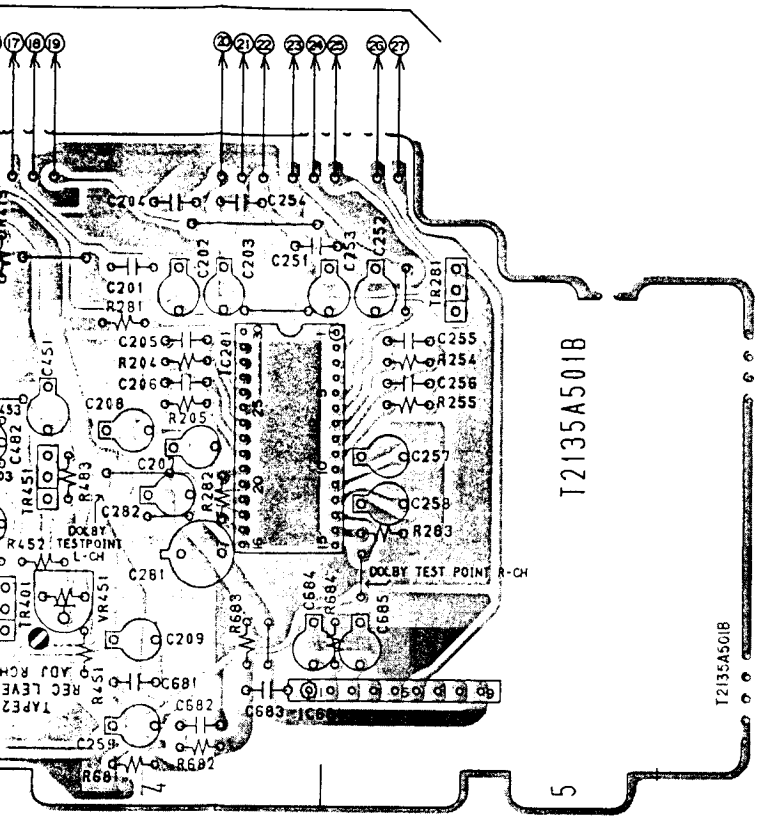
IC101 ..... E3
IC102 ..... E3,4
IC701 ..... C2
IC702 ..... C1,2
IC703 ..... B3
IC704 ..... F1
IC901 ..... C4
IC951 ..... B4,5

CONNECTORs

J701 ..... F1,2
J702 ..... D2
J703 ..... D1,2
J801 ..... B3
J802 ..... C1
P101 ..... D3
P102 ..... D4

TRANSISTORs

TR101 ..... D3
TR102 ..... D4
TR103 ..... E4
TR104 ..... F4
TR105 ..... E4
TR106 ..... F4
TR107 ..... F4
TR108 ..... D3
TR109 ..... D4
TR151 ..... D3
TR152 ..... D3
TR153 ..... E3
TR154 ..... F3
TR155 ..... E3
TR156 ..... F3
TR157 ..... F4
TR158 ..... D3
TR159 ..... D4
TR181 ..... D3
TR182 ..... D3
TR506 ..... E4
TR507 ..... E5
TR508 ..... E5
TR509 ..... E5
TR510 ..... D5
TR511 ..... D5
TR551 ..... F5
TR552 ..... F5
TR553 ..... E5
TR554 ..... E5
TR555 ..... E5
TR556 ..... E5
TR557 ..... E5
TR558 ..... F5
TR559 ..... F5
TR560 ..... D5
TR561 ..... D5
TR601 ..... F3
TR602 ..... F3
TR603 ..... F3
TR604 ..... F3
TR651 ..... F2
TR652 ..... F2
TR701 ..... E1
TR702 ..... E1
TR703 ..... E1
TR704 ..... E1
TR705 ..... E1
TR706 ..... E1
TR707 ..... E1
TR708 ..... E1
TR709 ..... E1
TR710 ..... D2
TR711 ..... E2
TR712 ..... D,E2
TR713 ..... E1,2
TR714 ..... D2
TR715 ..... C2
TR716 ..... D2



PRINCIPAL PARTS LOCATION

ICs

IC201	G,H4
IC301	G,H2
IC401	G,H3
IC681	H4,5

TRANSISTORs

TR281	G5
TR301	H2
TR302	H1
TR303	H1
TR304	H1
TR351	H2
TR352	G,H1
TR353	G,H1
TR354	G,H1
TR381	G1
TR401	H4
TR402	H3
TR403	H3
TR404	G,H2
TR405	H3
TR406	H2
TR451	H4
TR452	G,H3
TR453	G,H3
TR454	G2
TR455	G,H3
TR456	G2
TR481	G3

01B

NCIPAL PARTS LOCATION

1	E3
2	E3,4
1	C2
2	C1,2
3	B3
4	F1
1	C4
1	B4,5

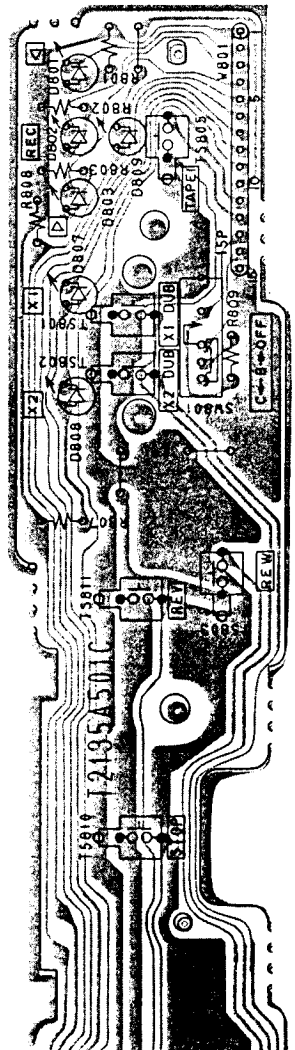
NECTORs

	F1,2
	D2
	D1,2
	B3
	C1
	D3
	D4

NSISTORs

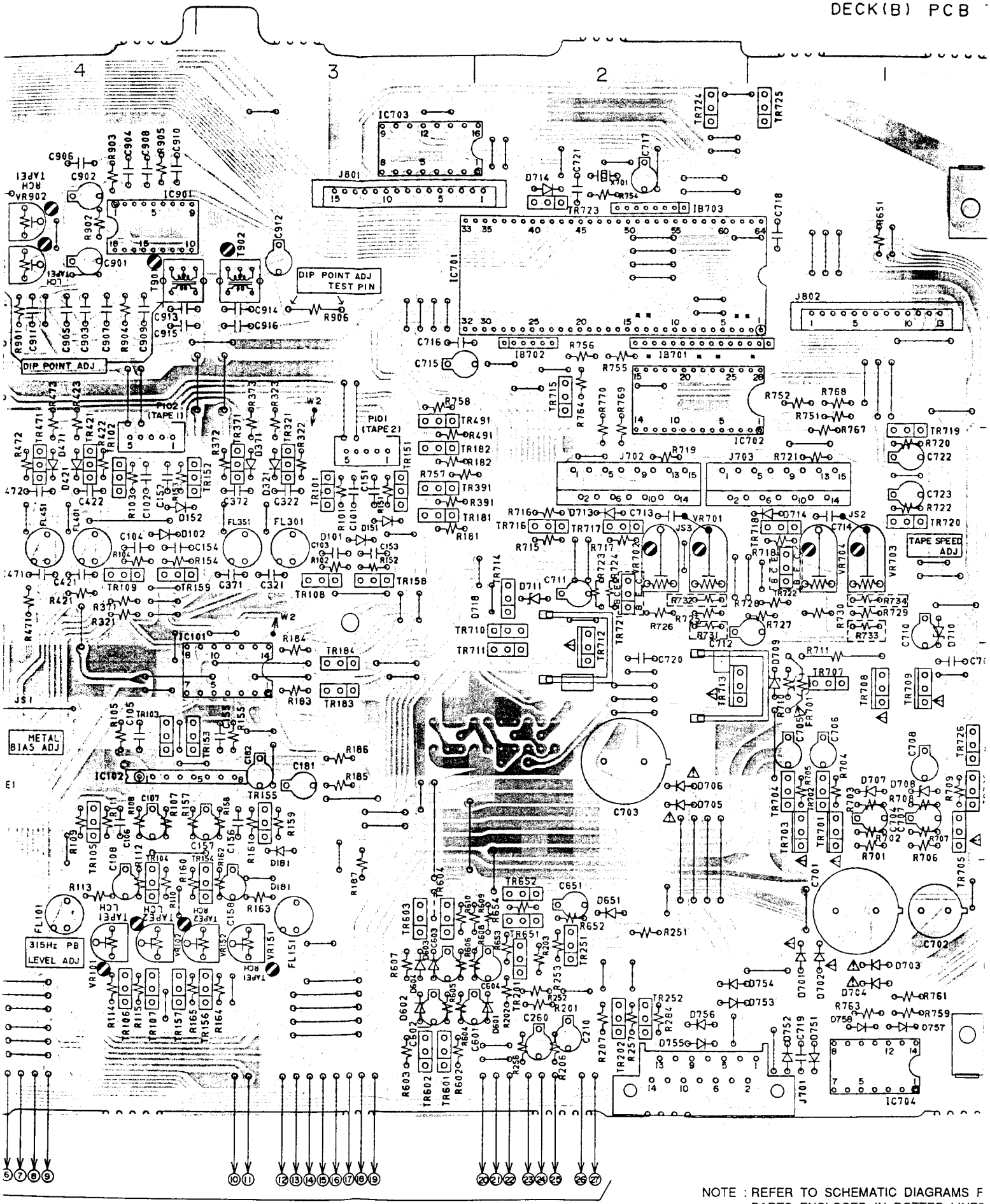
01	D3
02	D4
03	E4
04	F4
05	E4
06	F4
07	F4
08	D3
09	D4
51	D3
52	D3
53	E3
54	F3
55	E3
56	F3
57	F4
58	D3
59	D4
1	D3
2	D3

TR506	E4
TR507	E5
TR508	E5
TR509	E5
TR510	D5
TR511	D5
TR551	F5
TR552	F5
TR553	E5
TR554	E5
TR555	E5
TR556	E5
TR557	E5
TR558	F5
TR559	F5
TR560	D5
TR561	D5
TR601	F3
TR602	F3
TR603	F3
TR604	F3
TR651	F2
TR652	F2
TR701	E1
TR702	E1
TR703	E1
TR704	E1
TR705	E1
TR706	E1
TR707	E1
TR708	E1
TR709	E1
TR710	D2
TR711	E2
TR712	D,E2
TR713	E1,2
TR714	D2
TR715	C2
TR716	D2



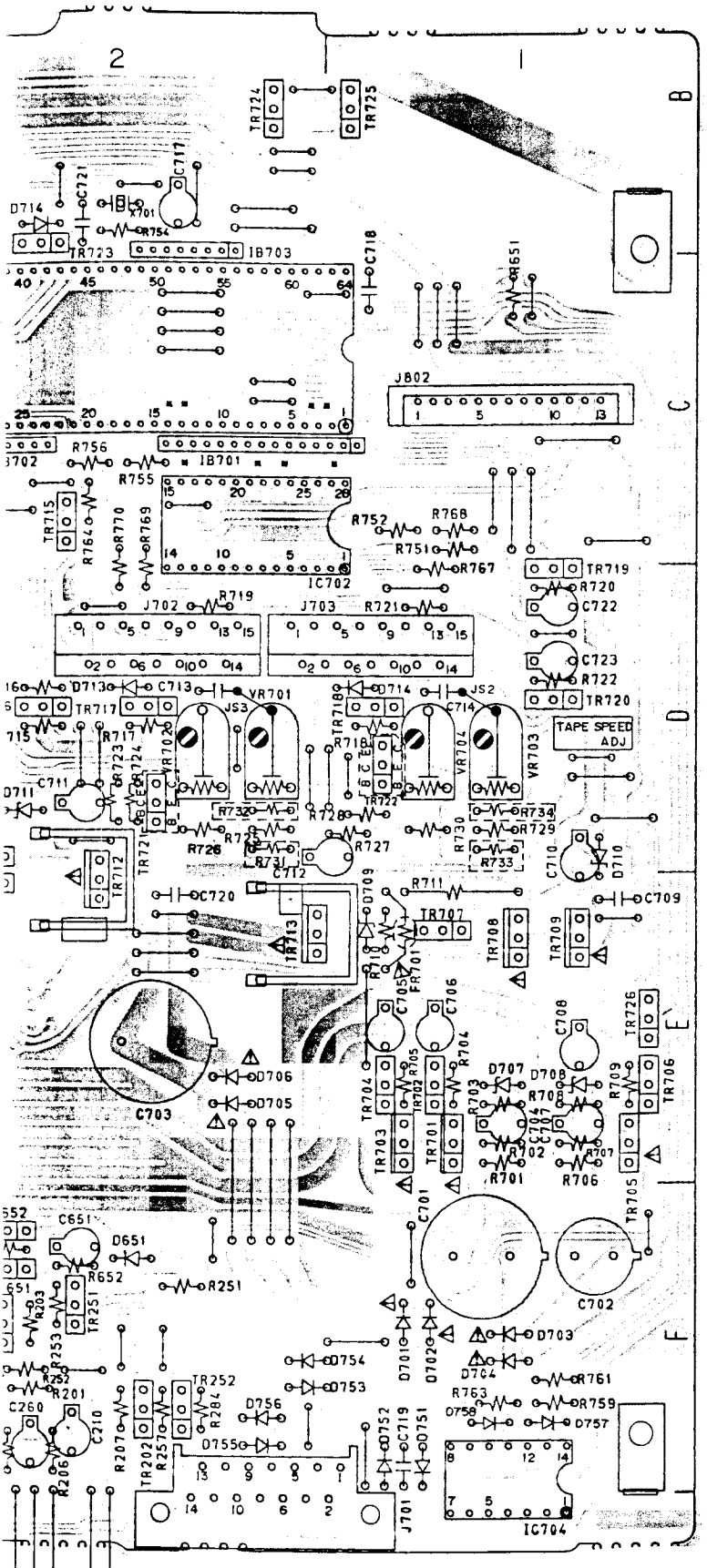
OPERATION PCB T2135A501C

12135A501A
TAPE2 R-CH
TAPE2 L-CH
NORMAL BIAS CURRENT ADJ
BIAS FREQ ADJ
DIP POINT ADJ
DIP POINT ADJ TEST PIN
METAL BIAS ADJ
315Hz PB LEVEL ADJ
TAPE1 RCH
TAPE1 LCH
TAPE2 RCH
TAPE2 LCH
TO DECK(B) PCB



NOTE : REFER TO SCHEMATIC DIAGRAMS F
PARTS ENCLOSED IN DOTTED LINES

DECK(B) PCB T2135A501B



PRINCIPAL PARTS LOCATION

ICs

IC101	E3
IC102	E3,4
IC701	C2
IC702	C1,2
IC703	B3
IC704	F1
IC901	C4
IC951	B4,5

CONNECTORs

J701	F1,2
J702	D2
J703	D1,2
J801	B3
J802	C1
P101	D3
P102	D4

TRANSISTORs

TR101	D3
TR102	D4
TR103	E4
TR104	F4
TR105	E4
TR106	F4
TR107	F4
TR108	D3
TR109	D4
TR151	D3
TR152	D3
TR153	E3
TR154	F3
TR155	E3
TR156	F3
TR157	F4
TR158	D3
TR159	D4
TR181	D3
TR182	D3
TR183	E3
TR184	E3
TR201	F2
TR202	F2
TR251	F2
TR252	F2
TR321	D3
TR371	D3
TR391	D3
TR421	D4
TR471	D4
TR491	C3
TR501	F5
TR502	F4
TR503	E,F5
TR504	E4
TR505	E4
TR506	E4
TR507	E5
TR508	E5
TR509	E5
TR510	D5
TR511	D5
TR551	F5
TR552	F5
TR553	E5
TR554	E5
TR555	E5
TR556	E5
TR557	E5
TR558	F5
TR559	F5
TR560	D5
TR561	D5
TR601	F3
TR602	F3
TR603	F3
TR604	F3
TR651	F2
TR652	F2
TR701	E1
TR702	E1
TR703	E1
TR704	E1
TR705	E1
TR706	E1
TR707	E1
TR708	E1
TR709	E1
TR710	D2
TR711	E2
TR712	D,E2
TR713	E1,2
TR714	D2
TR715	C2
TR716	D2
TR717	D2
TR718	D1
TR719	D1
TR720	D1
TR721	D2
TR722	D1
TR723	B2
TR724	B2
TR725	B1
TR726	E1
TR727	F5
TR728	F5
TR729	F5
TR730	F5
TR731	F5
TR732	F5

WARNING: ⚠ INDICATES SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

AVERTISSEMENT: ⚠ IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDÉES PAR LE FABRICANT

NOTE : REFER TO SCHEMATIC DIAGRAMS FOR PARTS ENCLOSED IN DOTTED LINES.

.501B

PRINCIPAL PARTS LOCATION

ICs

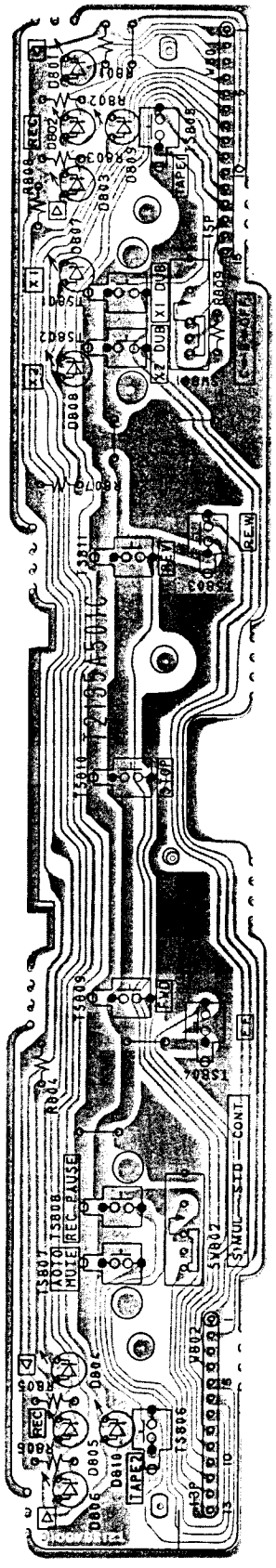
IC101 ..... E3
IC102 ..... E3,4
IC701 ..... C2
IC702 ..... C1,2
IC703 ..... B3
IC704 ..... F1
IC901 ..... C4
IC951 ..... B4,5

CONNECTORs

J701 ..... F1,2
J702 ..... D2
J703 ..... D1,2
J801 ..... B3
J802 ..... C1
P101 ..... D3
P102 ..... D4

TRANSISTORs

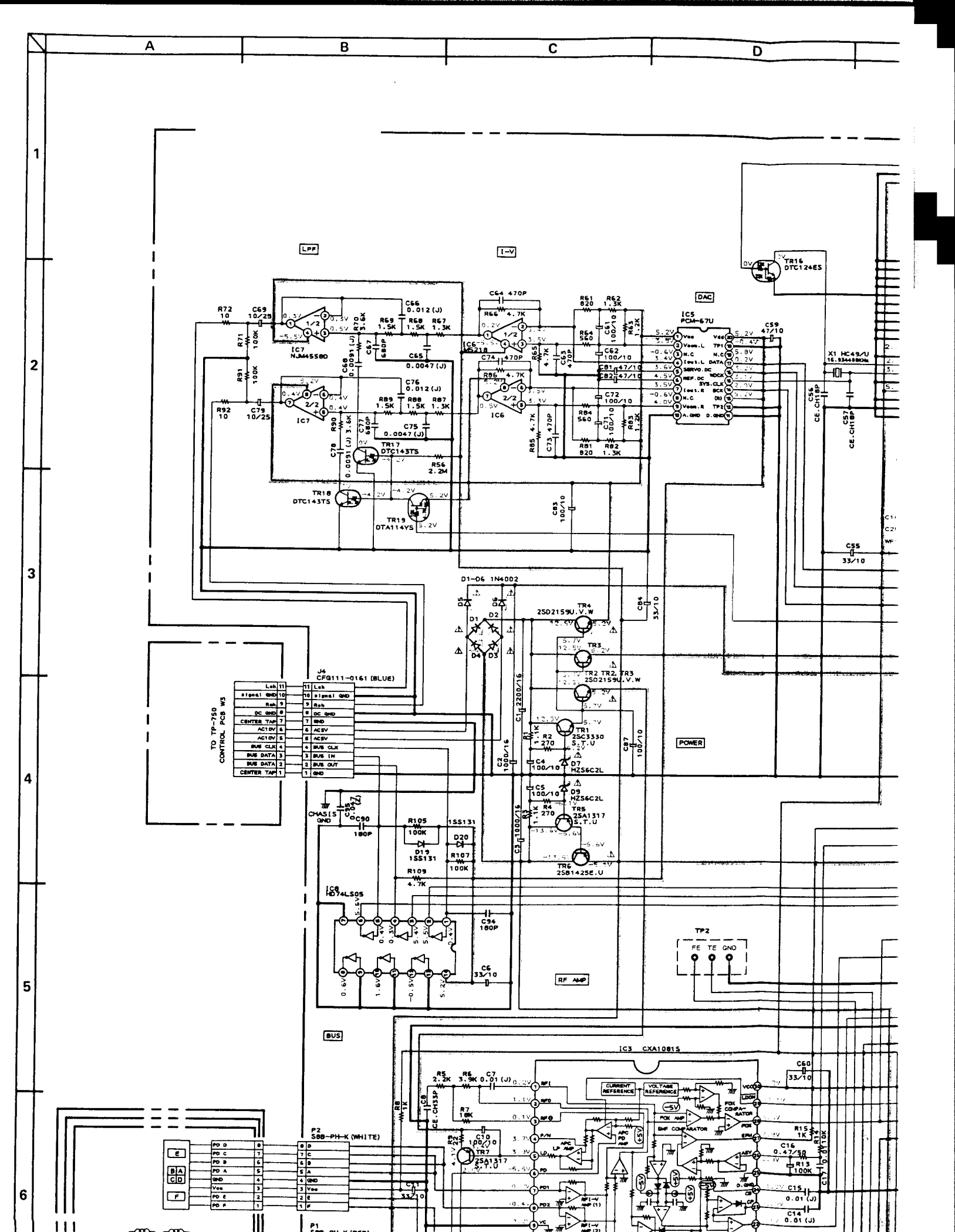
TR101 ..... D3
TR102 ..... D4
TR103 ..... E4
TR104 ..... F4
TR105 ..... E4
TR106 ..... F4
TR107 ..... F4
TR108 ..... D3
TR109 ..... D4
TR151 ..... D3
TR152 ..... D3
TR153 ..... E3
TR154 ..... F3
TR155 ..... E3
TR156 ..... F3
TR157 ..... F4
TR158 ..... D3
TR159 ..... D4
TR181 ..... D3
TR182 ..... D3
TR183 ..... E3
TR184 ..... E3
TR201 ..... F2
TR202 ..... F2
TR251 ..... F2
TR252 ..... F2
TR321 ..... D3
TR371 ..... D3
TR391 ..... D3
TR421 ..... D4
TR471 ..... D4
TR491 ..... C3
TR501 ..... F5
TR502 ..... F4
TR503 ..... E,F5
TR504 ..... E4
TR505 ..... E4
TR506 ..... E4
TR507 ..... E5
TR508 ..... E5
TR509 ..... E5
TR510 ..... D5
TR511 ..... D5
TR551 ..... F5
TR552 ..... F5
TR553 ..... E5
TR554 ..... E5
TR555 ..... E5
TR556 ..... E5
TR557 ..... E5
TR558 ..... F5
TR559 ..... F5
TR560 ..... D5
TR561 ..... D5
TR601 ..... F3
TR602 ..... F3
TR603 ..... F3
TR604 ..... F3
TR651 ..... F2
TR652 ..... F2
TR701 ..... E1
TR702 ..... E1
TR703 ..... E1
TR704 ..... E1
TR705 ..... E1
TR706 ..... E1
TR707 ..... E1
TR708 ..... E1
TR709 ..... E1
TR710 ..... D2
TR711 ..... E2
TR712 ..... D,E2
TR713 ..... E1,2
TR714 ..... D2
TR715 ..... C2
TR716 ..... D2
TR717 ..... D2
TR718 ..... D1
TR719 ..... D1
TR720 ..... D1
TR721 ..... D2
TR722 ..... D1
TR723 ..... B2
TR724 ..... B2
TR725 ..... B1
TR726 ..... E1
TR727 ..... F5
TR728 ..... F5
TR729 ..... F5
TR730 ..... F5
TR731 ..... F5
TR732 ..... F5

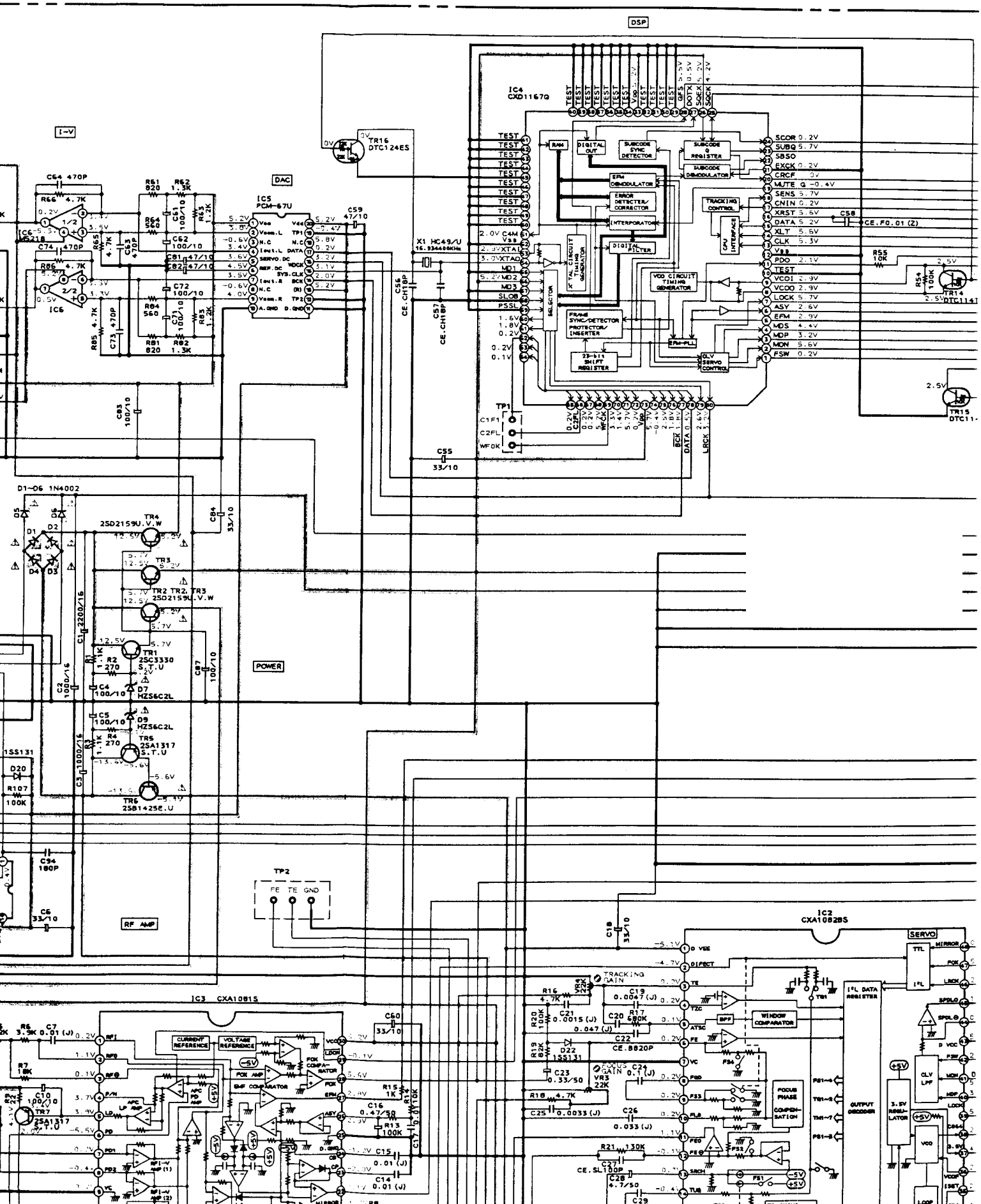


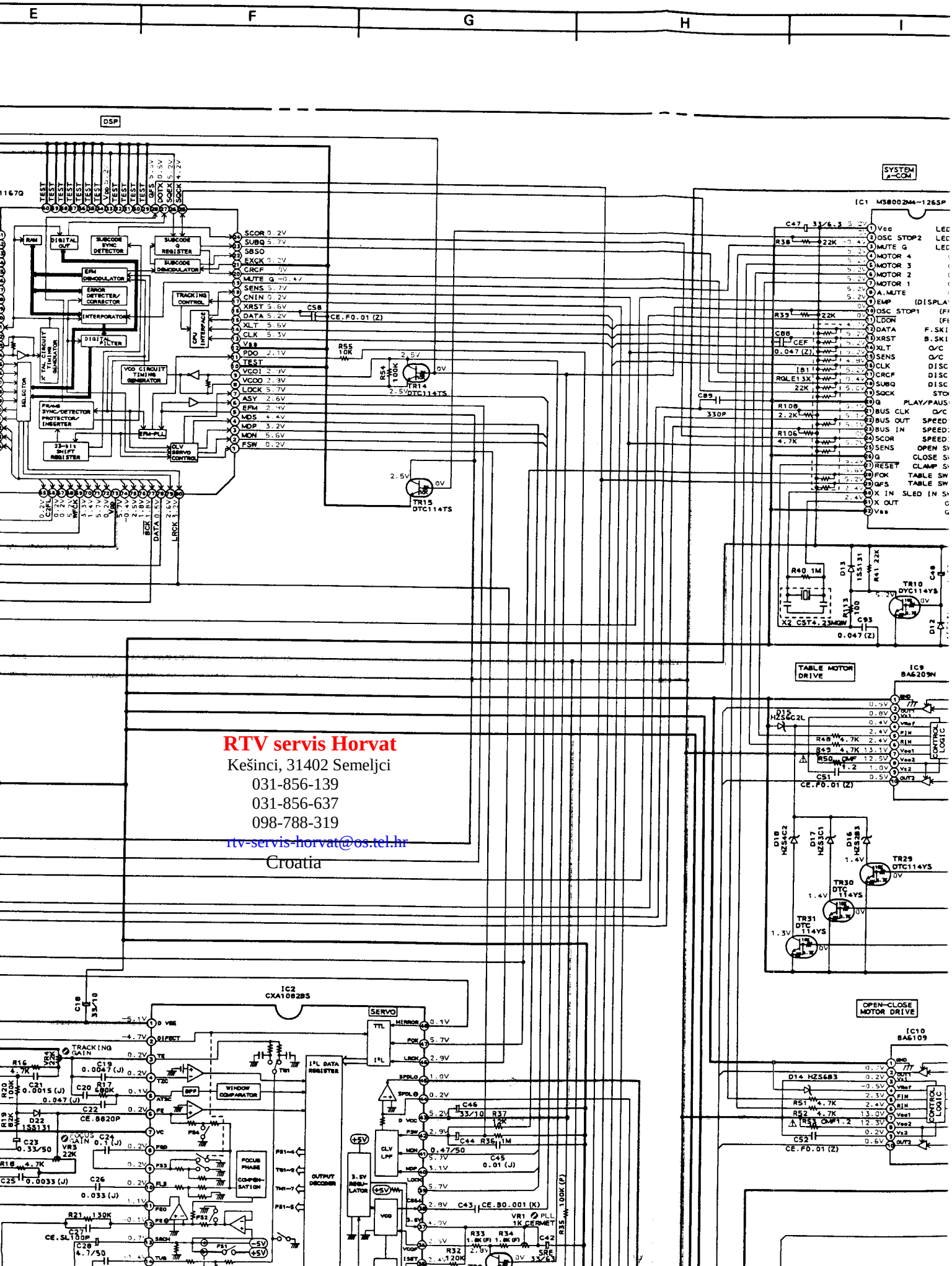
OPERATION PCB T2135A501C

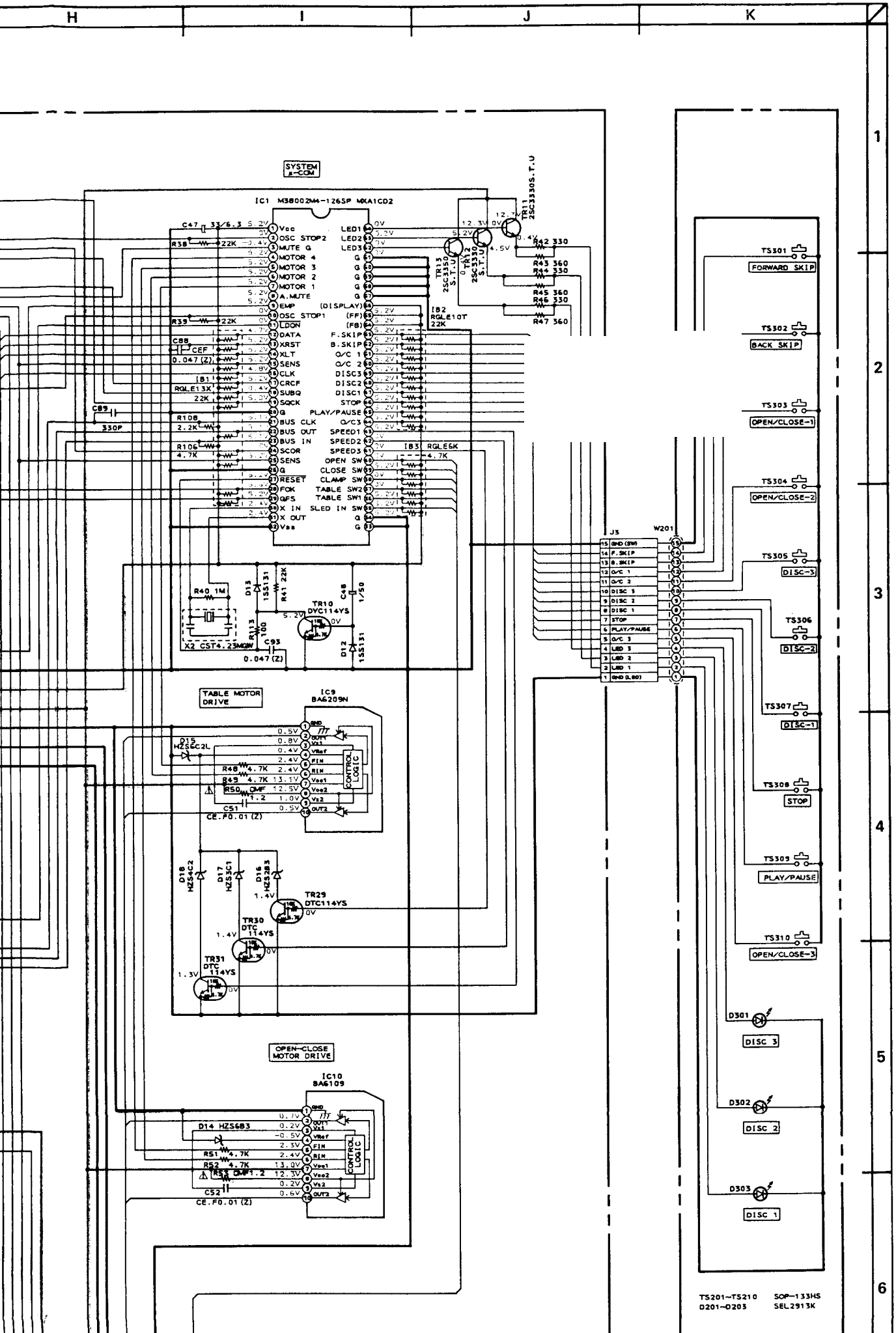
RNING: ⚠INDICATES SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY. REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

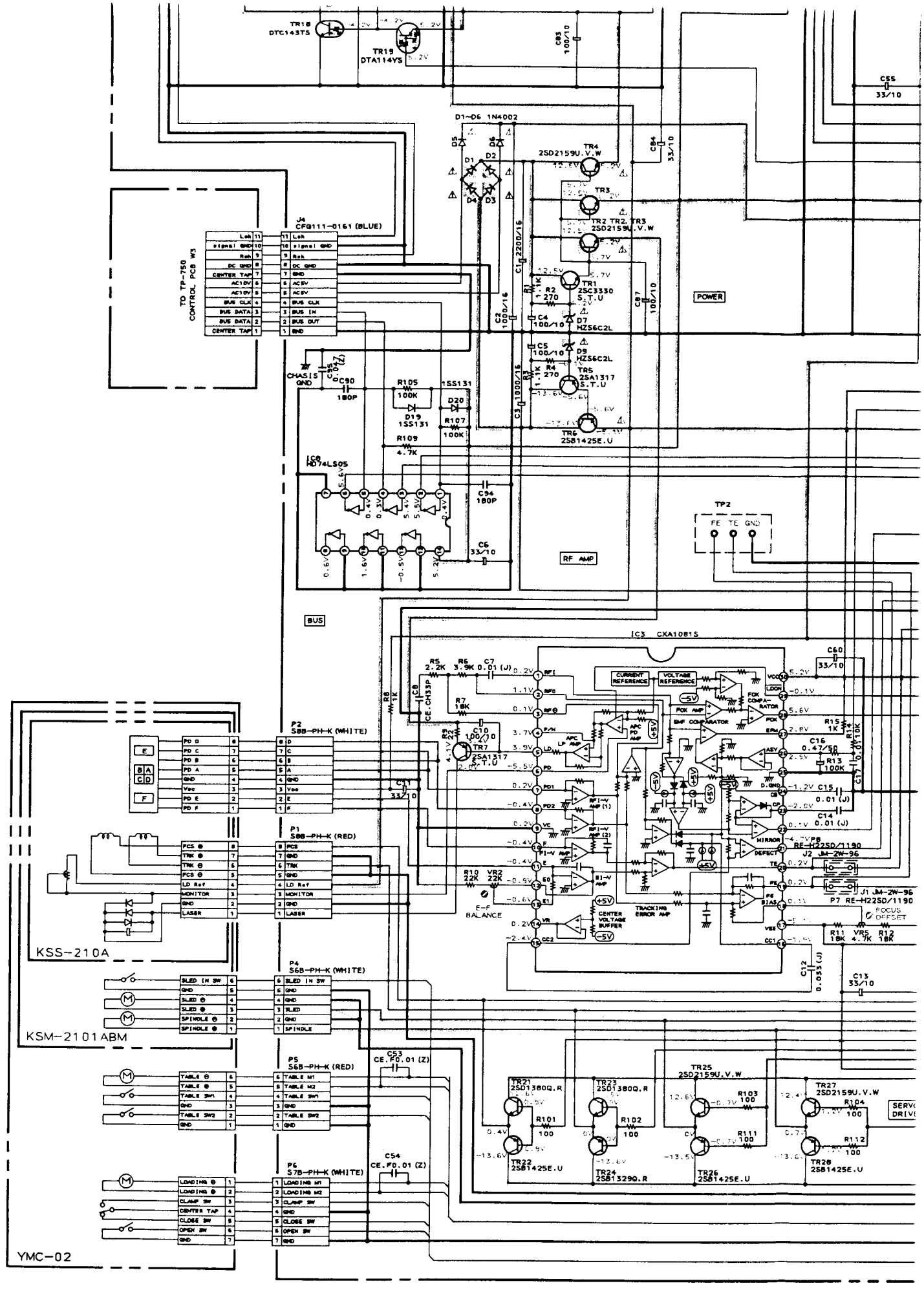
RTISSEMENT: ⚠IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDEES PAR LE FABRICANT

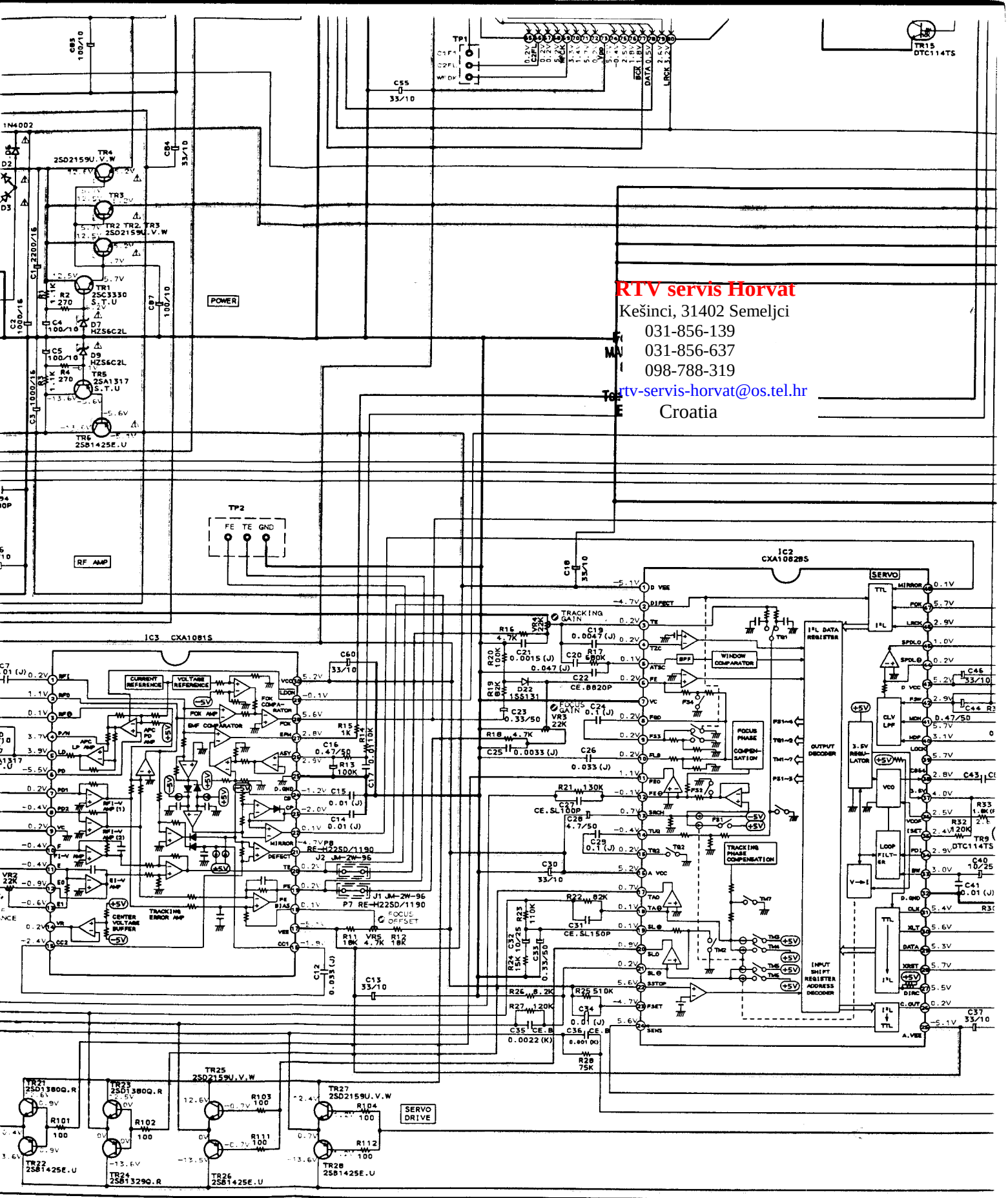

A
B
C
D
1
2
3
4
5
6
LPF
I-V
DAC
POWER
RF AMP
BUS
IC5 PCM-67U
IC7 NJM4558D
IC6 BA218
IC3 CXA1081S
IC9 74LS05
TR16 DTC124ES
TR17 DTC143TS
TR18 DTC143TS
TR19 DTA114YS
TR4 2SD2159U.V.W
TR3
TR2 TR2. TR3 2SD2159U.V.W
TR1 2SC3330 S.T.U
TR5 2SA1317 S.T.U
TR6 2SB1425E.U
TR7 2SA1317 S.T.U
D1-06 1N4002
D7 HZS6C2L
D9 HZS6C2L
D19 1SS131
D20
1SS131
X1 HC49/U 16.9344800Hz
J4 CFG111-0161 (BLUE)
TO TP-750 CONTROL PCB W3
P2 S8B-PH-K (WHITE)
P1
TP2
FE TE GND
CHASIS GND
CURRENT REFERENCE
VOLTAGE REFERENCE
FOK AMP
FOK COMPARATOR
EMF COMPARATOR
APC AMP
LD AMP
RF I-V AMP (1)
RF I-V AMP (2)
RF I-V AMP (3)
C1 2200/16
C2 1000/16
C3 1000/16
C4 100/10
C5 100/10
C6 33/10
C55 33/10
C56 CE.CH18P
C57 CE.CH18P
C59 47/10
C60 33/10
C62 100/10
C64 470P
C72 100/10
C74 470P
C83 100/10
C84 33/10
C87 100/10
C90 180P
C94 180P
R105 100K
R107 100K
R109 4.7K


DSP
IC4 CXD1167Q
I-V
DAC
IC5 PCM-67U
IC6
TR16 DTC124ES
X1 HC49/U 16.934600KHz
TP1
C1F1
C2FL
WFOK
C55 33/10
C56 CE.CH10P
C57 CE.CH10P
C58 CE.F0.01 (Z)
R55 10K
TR14 DTC114
TR15 DTC11
D1-D6 1N4002
TR4 2SD2159U.V.W
TR3
TR2. TR3 2SD2159U.V.W
TR1 2SC3330 S.T.U
TR5 2SA1317 S.T.U
TR6 2SB1425E.U
D7 HZS6C2L
D9 HZS6C2L
1SS131
POWER
TP2
FE TE GND
RF AMP
IC3 CXA1081S
IC2 CXA1082BS
SERVO
TRACKING GAIN
FOCUS GAIN
CURRENT REFERENCE
VOLTAGE REFERENCE
WINDOW COMPARATOR
FOCUS PHASE COMPENSATION
OUTPUT DECODER
CLV LPF
VCO
3.5V REGULATOR


E
F
G
H
I
DSP
SYSTEM μ-COM
IC1 M38002M4-126SP
IC2 CXA1082BS
SERVO
TABLE MOTOR DRIVE
IC9 BA6209N
OPEN-CLOSE MOTOR DRIVE
IC10 BA6109
TRACKING GAIN
FOCUS GAIN
WINDOW COMPARATOR
FOCUS PHASE COMPENSATION
OUTPUT DECODER
CONTROL LOGIC
RTV servis Horvat
Kešinci, 31402 Semeljci
031-856-139
031-856-637
098-788-319
rtv-servis-horvat@os.tel.hr
Croatia


H
I
J
K
1
2
3
4
5
6
SYSTEM µ-COM
IC1 M38002M4-126SP MKA1CD2
TABLE MOTOR DRIVE
IC9 BA6209N
OPEN-CLOSE MOTOR DRIVE
IC10 BA6109
TR10 DTC114YS
TR29 DTC114YS
TR30 DTC 114YS
TR31 DTC 114YS
TR11 2SC3330S.T.U
TR12 2SC3330S.T.U
TR13 2SC3330S.T.U
J3
W201
TS301 FORWARD SKIP
TS302 BACK SKIP
TS303 OPEN/CLOSE-1
TS304 OPEN/CLOSE-2
TS305 DISC-3
TS306 DISC-2
TS307 DISC-1
TS308 STOP
TS309 PLAY/PAUSE
TS310 OPEN/CLOSE-3
D301 DISC 3
D302 DISC 2
D303 DISC 1
TS201~TS210 SOP-133HS
D201~D203 SEL2913K


TR18 DTC143TS
TR19 DTA114YS
D1~D6 1N4002
TR4 2SD2159U.V.W
TR3
TR2 TR2, TR3 2SD2159U.V.W
TR1 2SC3330 S.T.U
D7 HZS6C2L
D9 HZS6C2L
TR5 2SA1317 S.T.U
TR6 2SB1425E.U
POWER
J4 CFQ111-0161 (BLUE)
TO TP-750 CONTROL PCB W3
CHASIS GND
R105 100K
D19 1SS131
D20 1SS131
R107 100K
R109 4.7K
IC6 M74LS05
C94 180P
C6 33/10
TP2
FE TE GND
RF AMP
BUS
IC3 CXA1081S
CURRENT REFERENCE
VOLTAGE REFERENCE
FCK COMPARATOR
EMF COMPARATOR
APC AMP
APC LP AMP
RF I-V AMP (1)
RF I-V AMP (2)
P-I-V AMP
RF I-V AMP
CENTER VOLTAGE BUFFER
TRACKING ERROR AMP
MIRROR
DEFECT
PE BIAS
E-F BALANCE
FOCUS OFFSET
P2 S8B-PH-K (WHITE)
P1 S6B-PH-K (RED)
KSS-210A
P4 S6B-PH-K (WHITE)
KSM-2101ABM
P5 S6B-PH-K (RED)
P6 S7B-PH-K (WHITE)
YMC-02
TR21 2SD1380Q,R
TR23 2SD1380Q,R
TR25 2SD2159U.V.W
TR27 2SD2159U.V.W
TR22 2SB1425E.U
TR24 2SB1329Q.R
TR26 2SB1425E.U
TR28 2SB1425E.U
J2 JM-2W-96
P7 RE-H22SD/1190
J1 JM-2W-96
P7 RE-H22SD/1190



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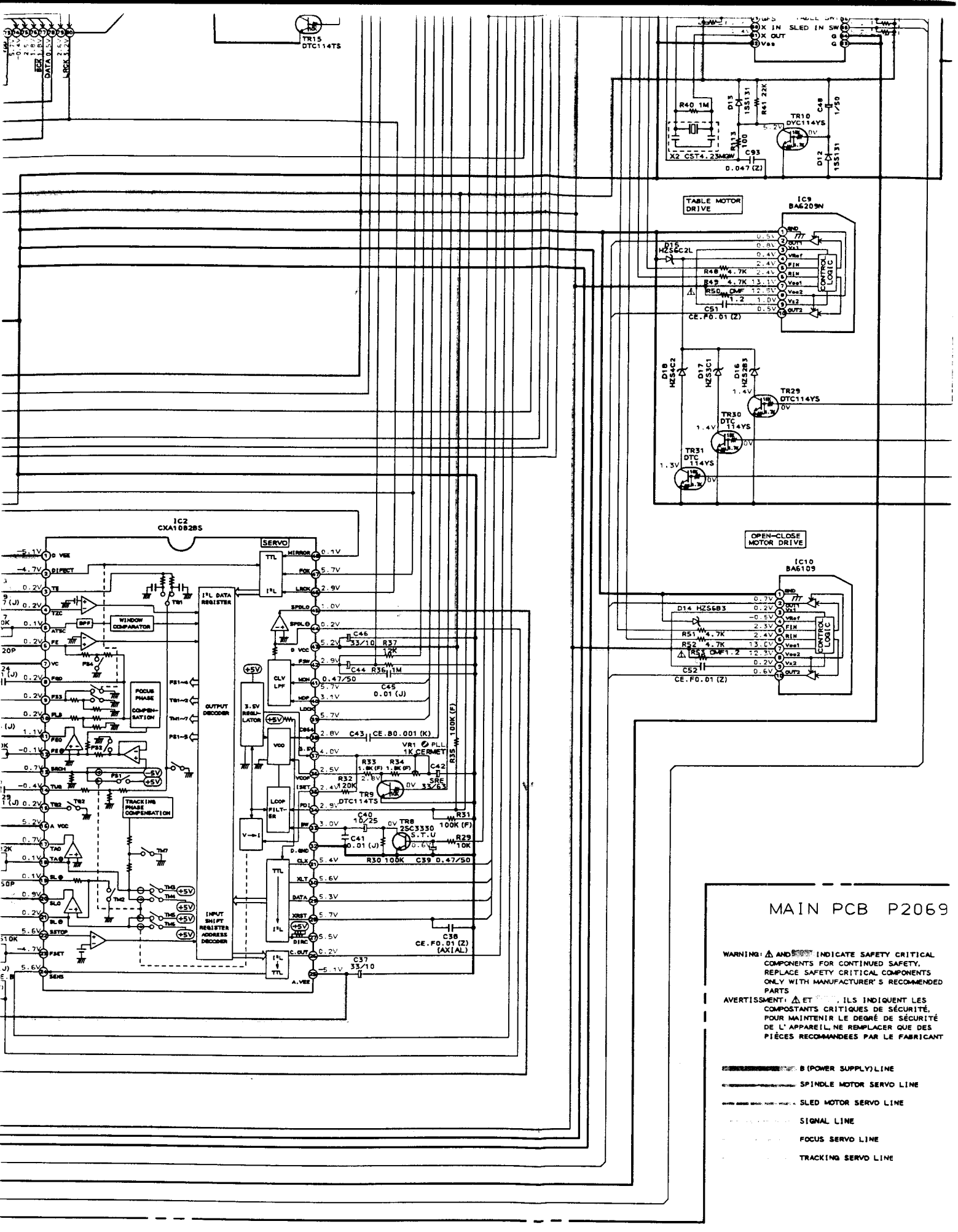


MAIN PCB P2069

WARNING: ⚠ AND [redacted] INDICATE SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY. REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

AVERTISSMENT: ⚠ ET [redacted], ILS INDIQUENT LES COMPOSTANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDEES PAR LE FABRICANT

B (POWER SUPPLY) LINE

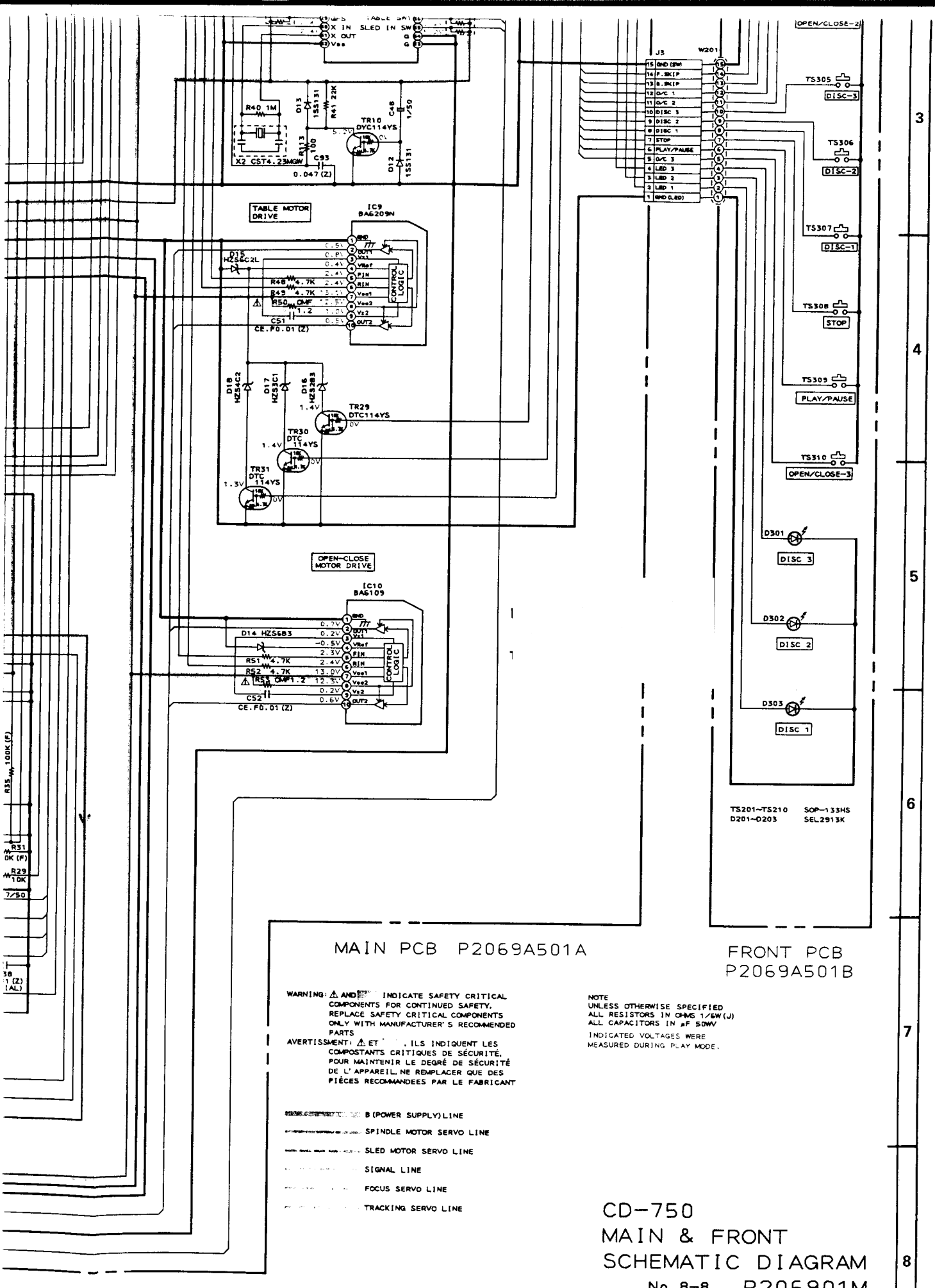
SPINDLE MOTOR SERVO LINE

SLED MOTOR SERVO LINE

SIGNAL LINE

FOCUS SERVO LINE

TRACKING SERVO LINE



MAIN PCB P2069A501A

FRONT PCB P2069A501B

WARNING: ⚠ AND ▒▒ INDICATE SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

AVERTISSMENT: ⚠ ET ▒▒, ILS INDIQUENT LES COMPOSTANTS CRITIQUES DE SÉCURITÉ, POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDEES PAR LE FABRICANT

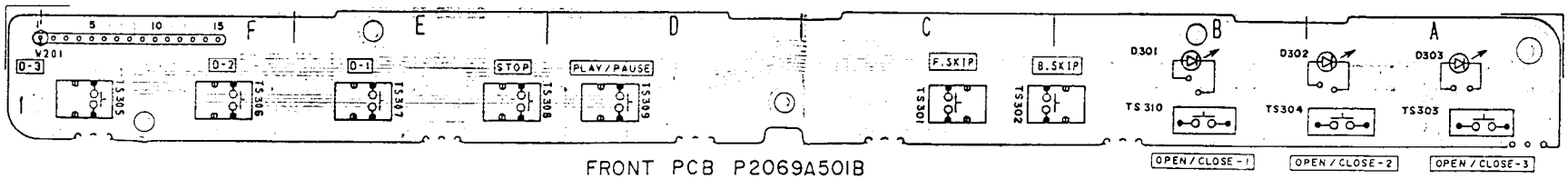
NOTE
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS 1/6W(J)
ALL CAPACITORS IN μF 50WV

INDICATED VOLTAGES WERE MEASURED DURING PLAY MODE.

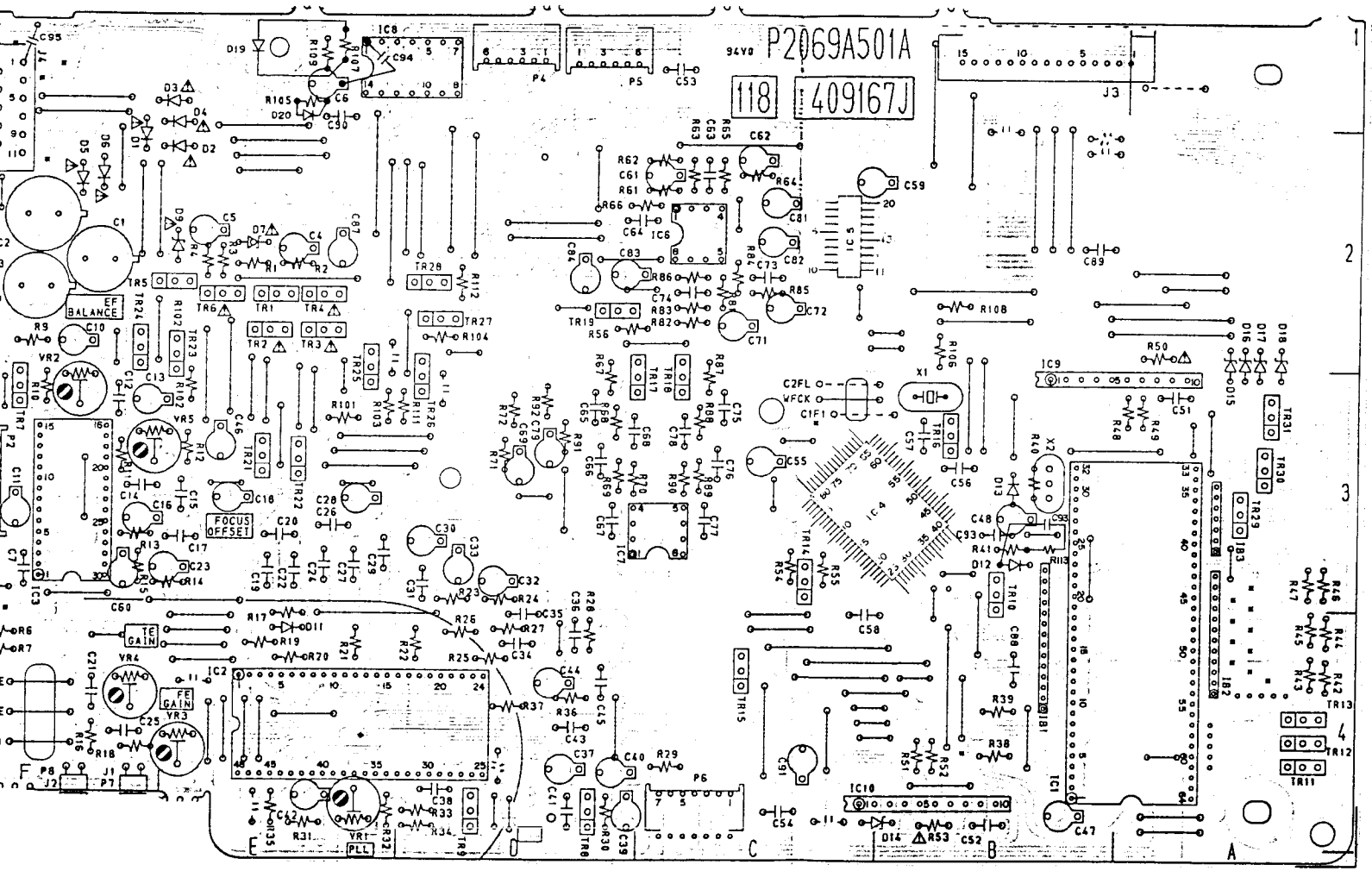
▒▒ B (POWER SUPPLY) LINE
SPINDLE MOTOR SERVO LINE
SLED MOTOR SERVO LINE
SIGNAL LINE
FOCUS SERVO LINE
TRACKING SERVO LINE

CD-750
MAIN & FRONT SCHEMATIC DIAGRAM

No.8-8 P206901M
A01



FRONT PCB P2069A501B



MAIN PCB P2069A501A

⚠INDICATES SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

MENT: ⚠IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDÉES PAR LE FABRICANT

PRINCIPAL PARTS LOCATION

ICs

IC1	3,4A,B
IC2	4D,E
IC3	3F
IC4	3B,C
IC5	2C
IC6	2C
IC7	3C,D
IC8	1D,E
IC9	3A,B
IC10	4B,C

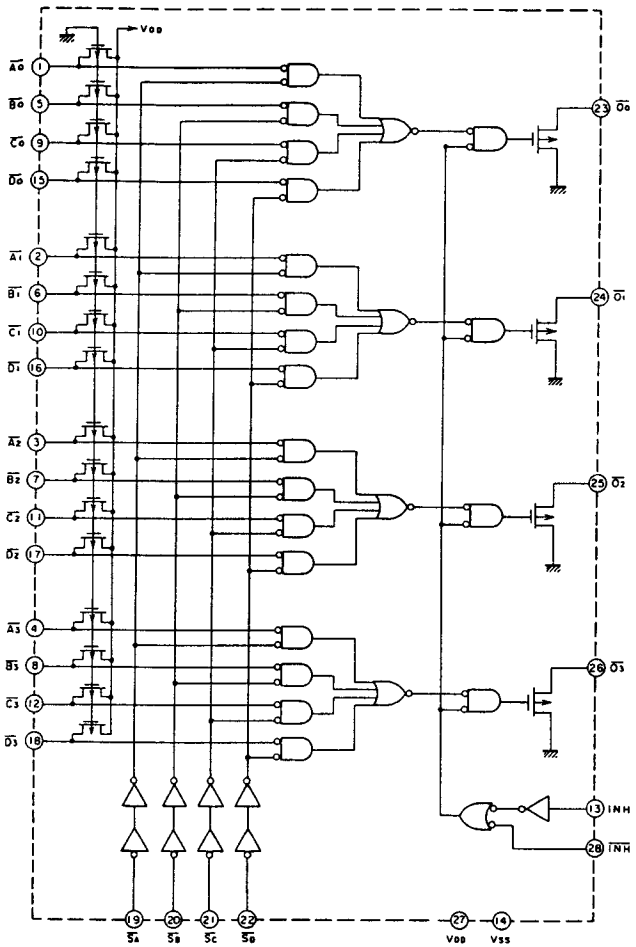
CONNECTORs

P1	2,3F
P2	3F
P4	1D
P5	1D
P6	4C
P7	4F
P8	4F

TRANSISTORs

TR1	2E
TR2	2E
TR3	2E
TR4	2E
TR5	2E
TR6	2E
TR7	3F
TR8	4D
TR9	4D
TR10	3B
TR11	4A
TR12	4A
TR13	4A
TR14	3C
TR15	4C
TR16	3B
TR17	3D
TR18	3C
TR19	2D
TR21	3E
TR22	3E
TR23	2,3E
TR24	2F
TR25	2,3E
TR26	3D
TR27	2D
TR28	2D
TR29	3A
TR30	3A
TR31	3A

LC7800 (Input Port Expander)



M38002M4-126SP MXA1CD2 (CD-750 SYSTEM CONTROL MI-COM)

Pin No.	PORT NAME	I/O	DESCRIPTION
1	VCC		+5V power supply
2	OSC STOP 2	O	Osilator control output for main CLOCK, VCO and PLL.
3	MUTE G	O	Output to stop audio data H:mute on
4	MOTOR 4	O	TRAY control output
5	MOTOR 3	O	TRAY control output
6	MOTOR 2	O	TRAY rotation control output
7	MOTOR 1	O	TRAY rotation control output
8	AUDIO MUTE	O	Not used
9	EMP	O	Emphasis control output
10	OSC STOP 1	O	Oscilator control output for main CLOCK, VCO and PLL.
11	LDON	O	Laser diode ON/OFF control output H:laser off
12	DATA	O	Command data output
13	XRST	O	Reset signal output
14	XLT	O	Latch signal output
15	SENS	I	Auto sequence end detection input
16	CLK	O	Clock signal output
17	CRCF	I	Input to detect Sub Code - Q CRC check
18	SUBQ	I	Input to detect Sub Code - Q data
19	SQCK	O	Reading clock out of Sub Code Q data
20	GND		GND
21	CD CLK IN	I	Bus clock from TUNER input
22	BUS OUT	O	Bus data output to TUNER
23	CD DATA IN	I	Bus data input from TUNER
24	SCOR	I	Sub code - Q data ditect input
25	SENS	I	Auto sequence end ditection input
26	GND		GND
27	RESET	I	Reset input
28	FOK	I	Focus lock detection input H:Focus lock
29	GFS	I	Input to detect PLL lock condition H:lock on
30	X IN	I	Main clock input
31	X OUT	O	Main clock output
32	VSS		GND
33	GND		GND
34	GND		GND
35	IN SW	I	Input to detect pick up position
36	LU SW 1	I	Input to detect disc rotation position
37	LU SW 2	I	Input to detect disc rotation position
38	CLAMP SW	I	Input to detect disc clamp position
39	CLOSE SW	I	Input to detect tray close position
40	OPEN SW	I	Input to detect tray open position
41	SPEED 3	O	TRAY rotation control output
42	SPEED 2	O	TRAY rotation control output
43	SPEED 1	O	TRAY rotation control output
44	OPEN/CLOSE 3	I	Input to open or close and rotate TRAY
45	PLAY/PAUSE	I	Input to change mode to PLAY from STOP and PAUSE
46	STOP	I	Input to stop every movement and return PICK UP to start position
47	DISC 1	I	Input to play DISK 1
48	DISC 2	I	Input to play DISK 2
49	DISC 3	I	Input to play DISK 3
50	OPEN/CLOSE 2	I	Input to open or close and rotate TRAY
51	OPEN/CLOSE 1	I	Input to open or close and rotate TRAY
52	BS	I	To skip to next tune
53	FS	I	To skip to next tune
54	FB	I	Input for backward quick movement
55	FF	I	Input for forward quick movement
56	DISPLAY	I	Display control input
57	GND		GND
58	GND		GND
59	GND		GND
60	GND		GND
61	GND		GND
62	LED 3	O	LED control output
63	LED 2	O	LED control output
64	LED 1	O	LED control output

	PORT NAME	I/O	DISCRIPTION
	SW C	O	Output switch C
	OUT SA	O	Output switch A
	OUT SB	O	Output switch B
	OUT SC	O	Output switch C
	MIX LEVEL	O	Control TR25 and decrease 2dB main signal GEQ level
	BUS CLK	I	Bus clock input
	BUS D.OUT	O	Bus data output
	BUS D.IN	I	Bus data input
	VP SW	-	Not used
	P. MUTE	O	Mute operation and control TR24 L: ON
	MUTE	I	Mute operation and control TR28 H: ON
	SDA	O	Out terminal to call and write when EEPROM use
	SCL	O	
	GEQ A	O	GEQ pre-set frequency response
	GEQ B	O	
	GEQ C	O	
	L.A	O	Effect level switching
	L.B	O	
	L.C	O	
	D.A	O	On delay mode, switch IC12
	D.B	O	
	RV A	O	Control IC11
	RV B	O	
	IC LEVEL	O	Output IC3 (M50194P) delay level
	DATA	O	Serial data to change IC3 (M50194P) mode
		-	Decide operation mode and set to "H"
	RESET	I	Input to reset
		-	Decide operation mode and set to "L"
		-	Not used
	X IN	I	Main clock in
	X OUT	O	Main clock out
	VSS	-	GND
	SECK	O	Serial data control IC3 (M50194P) mode
	REQ	O	
	CLK	O	Serial data control IC204 (LC7522) level
	DI	O	
	IN SA	I	Input to select L+R/L-R input mode
	IN SB	I	
	KEY 1	I	Input 10 key matrix
	KEY 0	I	
	VF ON/OFF	O	On/off filament power supply
	P13	O	Output control FLD 27 segments
	P12	O	
	P11	O	
	P10	O	
	P9	O	
	P8	O	
	P7	O	
	P6	O	
	P5	O	
	P4	O	
	P3	O	
	P2	O	
	P1	O	
	P14	O	

Pin No.	PORT NAME	I/O	DESCRIPTION
56	P15	O	Output control FLD 27 segments
57	P16	O	
58	P17	O	
59	P18	O	
60	P19	O	
61	P20	O	
62	P21	O	
63	P22	O	
64	P23	O	
65	P24	O	
66	P25	O	
67	P26	O	
68	P27	O	
69	D	O	Output control FLD 12 grids
70	C	O	
71	B	O	
72	A	O	
73	VCC	-	+B (+5V)
74	VP	I	VP
75	VSS	-	GND
76	VREF	-	+B (+5V)
77	AD1	I	Input AD 1
78	AD2	I	Input ad 2
79	SW A	O	Output switch A
80	SW B	O	Output switch B

145FP MXA1TP3 (TP-750 SYSTEM CONTROL MI-COM)

	PORT NAME	I/O	DESCRIPTION
	FB 2	O	For switching function output
	FA 2	O	For switching function output
	VR UP	O	Main VR control (UP) output H:UP
	VR DOWN	O	Main VR control (DOWN) output H:DOWN
	FB 3	O	SUPER BASS control output
	DECK CLK	O	DECK bus clock output
	DECK DATA OUT	O	DECK bus data output
	DECK DATA IN	I	DECK bus data input
	FA 3	O	SUPER BASS control output
	CD CLK	O	CD bus clock output
	CD DATA OUT	O	CD bus data output
	CD DATA IN	I	CD bus data input
	G-EQ CLK	O	G-EQ bus clock output
	G-EQ DATA OUT	O	G-EQ bus data output
	G-EQ DATA IN	I	G-EQ bus data input
	FC 1	O	For switching function input
	FB 1	O	For switching function input
	FA 1	O	For switching function input
	FLD OFF	O	FL display off output L:OFF
	POWER LED	O	Power led control output
	AMP MUTE	O	Pre amp mute control output H:MUTE ON
	POWER MUTE	O	Power amp mute control output L:MUTE ON
	POWER LED	O	Power LED control output
	FM A/M	O	FM auto/mono control output
	POWER DOWN	I	Back up ditection input
	REMOCON	I	REMOCON signal ditection input
	RESET	I	Reset input
	XC IN	I	X'tal OSC
	XC OUT	O	
	X IN	I	
	X OUT	O	
	VSS		GND
	TUNER MUTE	O	Mute control output H:MUTE ON
	PLL STRQ	O	PLL control output
	PLL STIN	I	PLL control input
	PLL CE	O	PLL control output
	PLL CLK	O	PLL control output
	PLL DATA	O	PLL control output
	K 1	I	Key scan input 1
	K 0	I	Key scan input 0
	SB	O	Super bass led control output
	SD	O	Super direct led control output
	DIG 9	O	Digit data output
	DIG 8	O	
	DIG 7	O	
	DIG 6	O	
	DIG 5	O	
	DIG 4	O	
	DIG 3	O	
	DIG 2	O	
	DIG 1	O	
	DIG 0	O	
	SEG 19	O	Segment data output
	SEG 18	O	
	SEG 17	O	
	SEG 16	O	
	SEG 15	O	
	SEG 14	O	

Pin No.	PORT NAME	I/O	DESCRIPTION
59	SEG 13	O	Segment data output
60	SEG 12	O	
61	SEG 11	O	
62	SEG 10	O	
63	SEG 9	O	
64	SEG 8	O	
65	SEG 7	O	
66	SEG 6	O	
67	SEG 5	O	
68	SEG 4	O	
69	SEG 3	O	
70	SEG 2	O	
71	SEG 1	O	
72	SEG 0	O	
73	VCC		+5V
74	VEE		-Vp
75	AVSS		GND
76	VREF		+5V
77	TUNED	I	TUNED display input
78	STEREO	I	STEREO display input
79	CD POWER OFF	O	CD power off output H:OFF
80	FC 2	O	For switching function output

µPD75108CW - W20 MXB1DK1 (HX-950 SYSTEM CONTROL MI -CON)

PIN NO.	PORT NAME	I/O	DISCRIPTION
1	$\overline{O3}$	I	Input IC702 (LC7800) P13 output pulse
2	$\overline{O2}$	I	Input IC702 (LC7800) P12 output pulse
3	$\overline{O1}$	I	Input IC702 (LC7800) P11 output pulse
4	$\overline{O0}$	I	Input IC702 (LC7800) P10 output pulse
5	$\overline{REV}$	I	Command reverse tape play L: ON
6	$\overline{STOP}$	I	Command stop mechanism movement L: ON
7	$\overline{FWD}$	I	Command forward tape play L: ON
8	$\overline{REC\ PAUSE}$	I	REC PAUSE command input L: ON
9	REEL 2	I	Input detect reel pulse (TAPE II)
10	REEL 1	I	Input detect reel pulse (TAPE I)
11	SD	O	Output decide IC702 (LC7800) input timing
12	SC	O	
13	SB	O	
14	SA	O	
15	BUS DATA IN	I	Bus serial data input
16	BUS DATA OUT	O	Bus serial data output
17	BUS CLK IN	I	Bus clock input
18	$\overline{AUTO\ MUTE}$	I	AUTO MUTE command input L: ON
19	NC	–	Not used
20	TAPE I $\overline{REC/PB}$	O	Head recording/playback control output H: playback
21	TAPE II $\overline{REC/PB}$	O	
22	$\overline{PL-COM}$	O	Plunger ON/OFF control output
23	PL-1	O	
24	PL-2	O	
25	MECHA $\overline{ON}$/OFF	O	Stop power supply for mecha.
26	$\overline{TAPE\ II\ PB}$	O	TAPE II playback switching control output
27	$\overline{TAPE\ I\ PB}$	O	TAPE I playback switching control output
28	CAP M2 $\overline{X1}$/X2	O	Capstan motor X1/X2 speed switching output L: 1 H: 2
29	CAP M1 $\overline{X1}$/X2	O	
30	X1 PB 70µS	O	X1/X2 speed playback EQ switching output
31	VCC	–	+5V
32	VDD	–	+5V
33	$\overline{REC\ MUTE\ 1}$	O	REC MUTE control output L: ON
34	X2 REC PEAK	O	X1/X2 speed recording peaking frequency switching output
35	X1 REC PEAK	O	
36	OSC 2	O	Bias OSC control output H: ON
37	REC MET 2	O	Metal tape recording EQ output
38	REC CrO_2 2	O	CrO_2 tape recording EQ output
39	OSC 1	O	Bias OSC control output H: ON
40	FADE	O	Fade edit control output
41	REC MET 1	O	Metal tape recording EQ output
42	$\overline{REC\ CrO_2\ 1}$	O	CrO_2 tape recording EQ output
43	$\overline{X2\ PB\ PEAK}$	O	X1/X2 PB peaking frequency output
44	X2 PB 70µS	O	X2 speed playback EQ switching output
45	$\overline{RESET}$	I	Reset signal input
46	X2	O	Main clock output
47	X1	I	Main clock input
48	$\overline{REC\ MUTE\ 2}$	O	Rec mute control output L: ON
49	$\overline{BOP}$	I	Music interval detection signal input
50	TAPE II	I	Input TAPE II operation key L: ON
51	TAPE I	I	Input TAPE I operation key L: ON
52	$\overline{FF}$	I	Command fast forward tape play L: ON
53	$\overline{REW}$	I	Command rewind tape play L: ON
54	X2 DUB	I	Input X2 dubbing operation
55	X1 DUB	I	Input X1 dubbing operation
56	DOLBY $\overline{REC}$/PB	O	Dolby IC recording/playback
57	CKS	O	LED control output
58	CKL	O	
59	A	O	
60	TAPE I LAMP	O	TAPE I lamp control output
61	TAPE II LAMP	O	TAPE II lamp control output
62	CROSS	O	Cross edit control output
63	$\overline{PB\ MUTE}$	O	Playback mute control output
64	VSS	-	GND

µPD75108CW - W03 MXA1DK1 (HX-750 SYSTEM CONTROL MI-COM)

Pin No.	PORT NAME	I/O	DESCRIPTION
1	PLAY·II	O	Input detect head position
2	PACK·II	O	Input detect pack
3	AR·REV·II	O	Input inhibit reverse recording
4	120µ/70µ·II	O	Input detect 120µs/70µs tape L:120µs
5	AR·FWD·II	O	Input inhibit forward recording
6	PLAY I	O	Input detect head position
7	PACK I	O	Input detect pack
8	120µ/70µ·I	O	Input detect 120µs/70µs tape L:120µs
9	REEL·II	O	Reel pulse input
10	REEL·I	O	Reel pulse input
11	x 1 PB 70µs	O	x 1/ x 2 speed playback EQ switching output
12	x 2 PB 70µs	O	x 2 speed playback EQ switching output
13	PB MUTE	O	Playback mute control output
14	CROSS	O	CROSS EDIT control output
15	DATA IN	I	Bus serial data input
16	DATA OUT	O	Bus serial data output
17	CLK IN	I	Bus clock input
18	BOP	I	Music interval detection signal input H:Music interval
19	PB TAPE I	O	TAPE I playback switching control output
20	PB TAPE II	O	TAPE II playback switching control output
21	HEAD REC/PB	O	HEAD recording/playback control output H:playback
22	MECHA POWER	O	Capstan motor stop input
23	MOTOR x 1/ x 2·I	O	Capstan motor x 1/ x 2 speed switching output L: x 1 H: x 2
24	PL COMMON	O	Plunger ON/OFF control output
25	PL·I	O	Plunger ON/OFF control output
26	x 2 PB PEAK	O	For x 1/ x 2 speed playback peaking frequency switching
27	MOTOR x 1/ x 2·II	O	Capstan motor x 1/ x 2 speed switching output L: x 1 H: x 2
28	PL·II	O	Plunger ON/OFF control output
29	FWD LAMP·II	O	TAPE II ▶ LAMP control output
30	FWD LAMP·I	O	TAPE I ▶ LAMP control output
31	VCC		+5V power supply
32	VDD		+5V power supply
33	x 1 DUBBING LAMP	O	x 1 DUBBING LAMP control output
34	REV LAMP·I	O	TAPE I ◀ LAMP control output
35	REC PAUSE LAMP	O	REC PAUSE LAMP control output
36	x 2 DUBBING LAMP	O	x 2 DUBBING LAMP control output
37	REV LAMP·II	O	TAPE II ◀ LAMP control output
38	TAPE II LAMP	O	TAPE II LAMP control output
39	TAPE I LAMP	O	TAPE I LAMP control output
40	MAIN VR LAMP	O	MAIN VR LAMP control output
41	TAPE II	I	TAPE II operation input L:ON
42	TAPE I	I	TAPE I operation input L:ON
43	x 1 DUB	I	x 1 SPEED DUBBING L:ON
44	x 2 DUB	I	x 2 SPEED DUBBING L:ON
45	RESET	I	Reset signal input
46	x 2	O	Main clock output
47	x 1	I	Main clock input
48	REW	I	Command rewind tape play L:ON
49	REV	I	Command reverse tape play L:ON
50	STOP	I	Command stop machanism movement L:ON
51	FWD	I	Command forward tape play L:ON
52	FF	I	Command fast forward tape play L:ON
53	REC PAUSE	I	REC PAUSE command input L:ON
54	AUTO MUTE	I	AUTO MUTE command input L:ON
55	POWER SW	I	Power switch ON/OFF command input
56	PACK MUTE	O	PACK MUTE control putput
57	DOLBY REC/PB	O	DOLBY recording/playback control output
58	REC MUTE	O	REC MUTE control output L:MUTE ON
59	x 2 REC PEAKING	O	For x1/ x 2 speed recording peaking frequency switching
60	REC CrO_2	O	CrO_2 tape recording EQ switching output H:CrO_2 tape
61	FADE	O	FADE EDIT control output
62	OSC	O	Bias OSC control output H:OSC ON
63	x1 REC PEAKING	O	For x1/ x 2 speed recording peaking frequency switching H: x1
64	VSS		GND

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