

# AKAI SERVICE MANUAL

## RTV servis Horvat

Kešinci, 31402 Semeljci

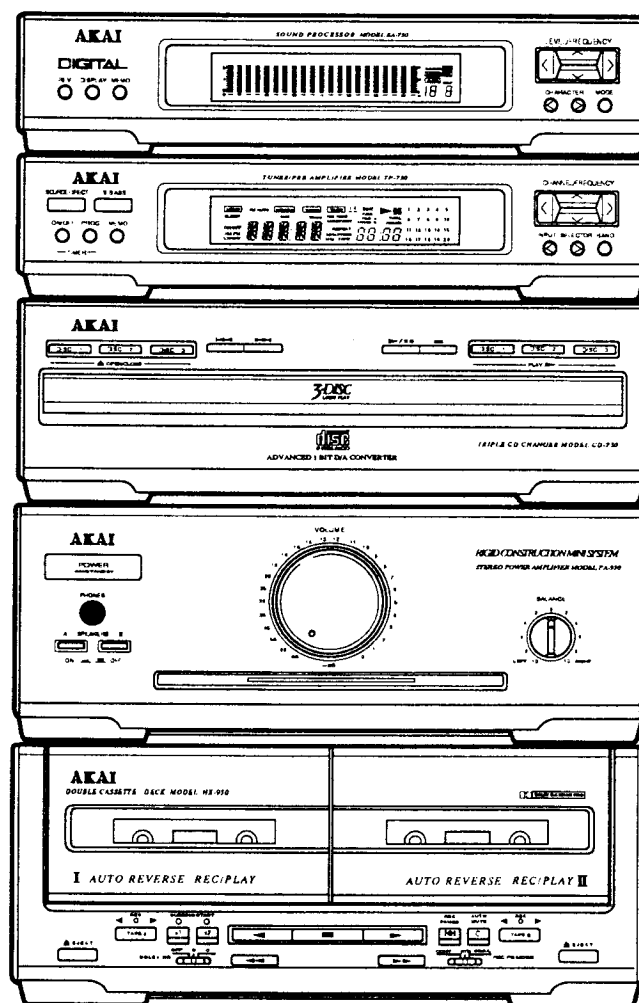
031-856-139

031-856-637

098-788-319

[rtv-servis-horvat@os.tel.hr](mailto:rtv-servis-horvat@os.tel.hr)

Croatia



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

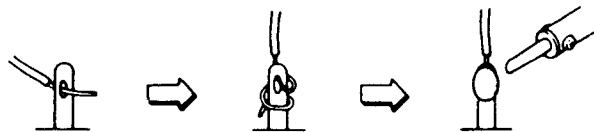
---

|                                            |    |                                             |    |
|--------------------------------------------|----|---------------------------------------------|----|
| SAFETY INSTRUCTIONS .....                  | 3  | MODEL CD-750                                |    |
| INFORMATIONS .....                         | 4  | SPECIFICATIONS .....                        | 51 |
| MODEL TP-750                               |    | I. DISASSEMBLY .....                        | 52 |
| SPECIFICATIONS .....                       | 5  | II. PRINCIPAL PARTS LOCATION .....          | 53 |
| I. DISASSEMBLY .....                       | 6  | III. REPLACEMENT OF                         |    |
| II. PRINCIPAL PARTS LOCATION .....         | 7  | THE PRINCIPAL COMPONENTS .....              | 54 |
| III. ADJUSTMENT .....                      | 8  | 3-1. DISMANTLING PROCEDURE                  |    |
| 3-1. INSTRUMENT CONNECTIONS .....          | 8  | OF THE COMPONENTS .....                     | 54 |
| 3-2. ADJUSTMENT .....                      | 9  | 3-2. REMOVAL OF THE TRAVERSE MECHA. ....    | 54 |
| IV. PARTS LIST .....                       | 10 | 3-3. REMOVAL OF THE MAIN PCB .....          | 54 |
| INDEX .....                                | 13 | 3-4. REMOVAL OF THE TRAY BLOCK .....        | 55 |
| ABBREVIATION (TUNER) .....                 | 14 | 3-5. REPLACEMENT OF THE PICK UP BLOCK ..... | 55 |
| MODEL EA-750                               |    | 3-6. REPLACEMENT OF THE SPINDLE MOTOR ....  | 55 |
| SPECIFICATIONS .....                       | 15 | 3-7. REPLACEMENT OF THE SLED MOTOR .....    | 56 |
| I. DISASSEMBLY .....                       | 16 | 3-8. REPLACEMENT OF THE LOADING MOTOR ....  | 56 |
| II. PRINCIPAL PARTS LOCATION .....         | 17 | 3-9. REPLACEMENT OF THE TABLE MOTOR .....   | 56 |
| III. PARTS LIST .....                      | 18 | IV. ELECTRICAL ADJUSTMENT .....             | 57 |
| INDEX .....                                | 22 | V. PARTS LIST .....                         | 58 |
| MODEL PA-750/950                           |    | INDEX .....                                 | 62 |
| SPECIFICATIONS .....                       | 23 | ABBREVIATIONS (COMPACT DISC) .....          | 63 |
| 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 |                                             |    |

# ★ 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 drop-lets, 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-

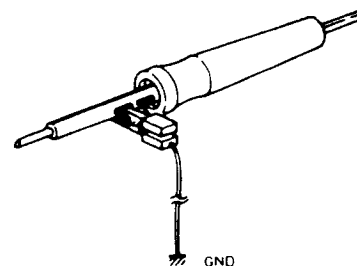
ohms paralleled with a 0.15  $\mu$ F capacitor, under the unit's normal working conditions.

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 adjusting 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 objects 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]

CLASS 1 LASER PRODUCT  
KLASSE 1 LASER PRODUKT  
LUOKAN 1 LASER LAITE  
KLASS 1 LASER APPARAT

Label affixed on the rear panel of the unit

CAUTION INVISIBLE LASER RADIATION WHEN OPEN  
AND INTERLUCKS DEFEATED AVOID EXPOSURE TO BEAM  
ADVARSEL! USYNLIG LASERSTRÅLING VED ÅR  
NING, NÅR SIKKERHEDSKAPBRYDERE BRUDES AF FUNKTION  
UNDGÅ UDSTRÆLSELSE FOR STRÅLING  
VARO! AVATTAESSA JA SUOJALUKITUS OIHET  
TAESSA OIHET ALTTIIN NÄYMATOMALLE LASERISATEI  
LÄLLE  
ALÄ KATSO SATEE SEEN!  
VARNING ÖSYNLIG LASERSTRÅLNING NÄR DENNA  
DEL ÅR ÖPPNAD OCH SPÄRREN ÅR UTRÖPPAD  
SE FRÅN ÅR STRÅLEN

# ★ INFORMATIONS

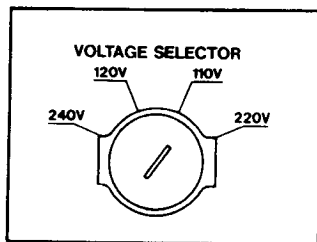
## SYMBOLS FOR PRIMARY DESTINATION

Alphabet indicates the destination of the units as listed below.

| Symbol    | Principal Destination |
|-----------|-----------------------|
| <b>B</b>  | UK                    |
| <b>E</b>  | Europe (except UK)    |
| <b>S</b>  | Australia             |
| <b>V</b>  | Germany               |
| <b>U</b>  | Universal             |
| <b>Y*</b> | Custom version        |

## VOLTAGE CONVERSION ( **U** Model only)

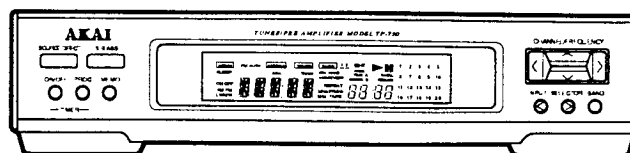
Before connecting the power cord, set the VOLTAGE SELECTOR located on the rear panel of the PA-750/950 so that the correct voltage for your area is indicated.



## 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 ( $\pm 1$ dB)  
 Total harmonic distortion  
 Mono ..... 0.5% (at 1kHz)  
 Stereo ..... 0.3% [E/U], 0.7% [V] (at 1kHz)  
 Selectivity ..... 55dB ( $\pm 400$ kHz)  
 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 ..... 500 $\mu$ Vm  
 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 ..... 800 $\mu$ Vm  
 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

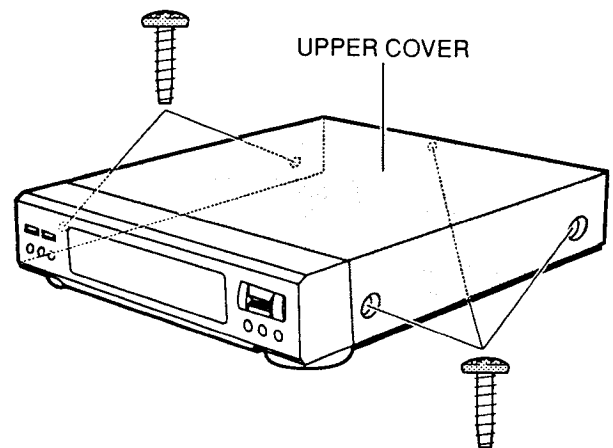
### Standard accessories

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

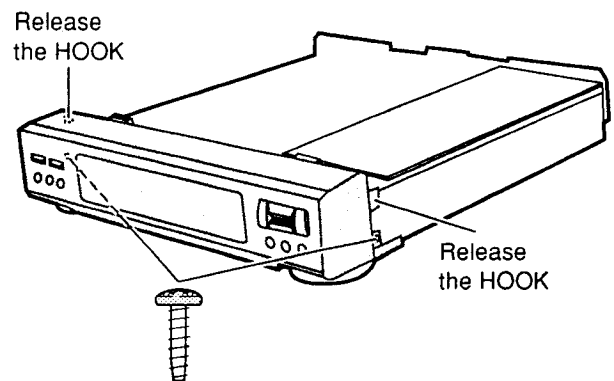
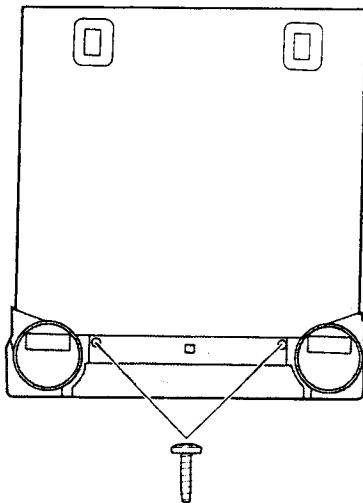
# I. DISASSEMBLY

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

---

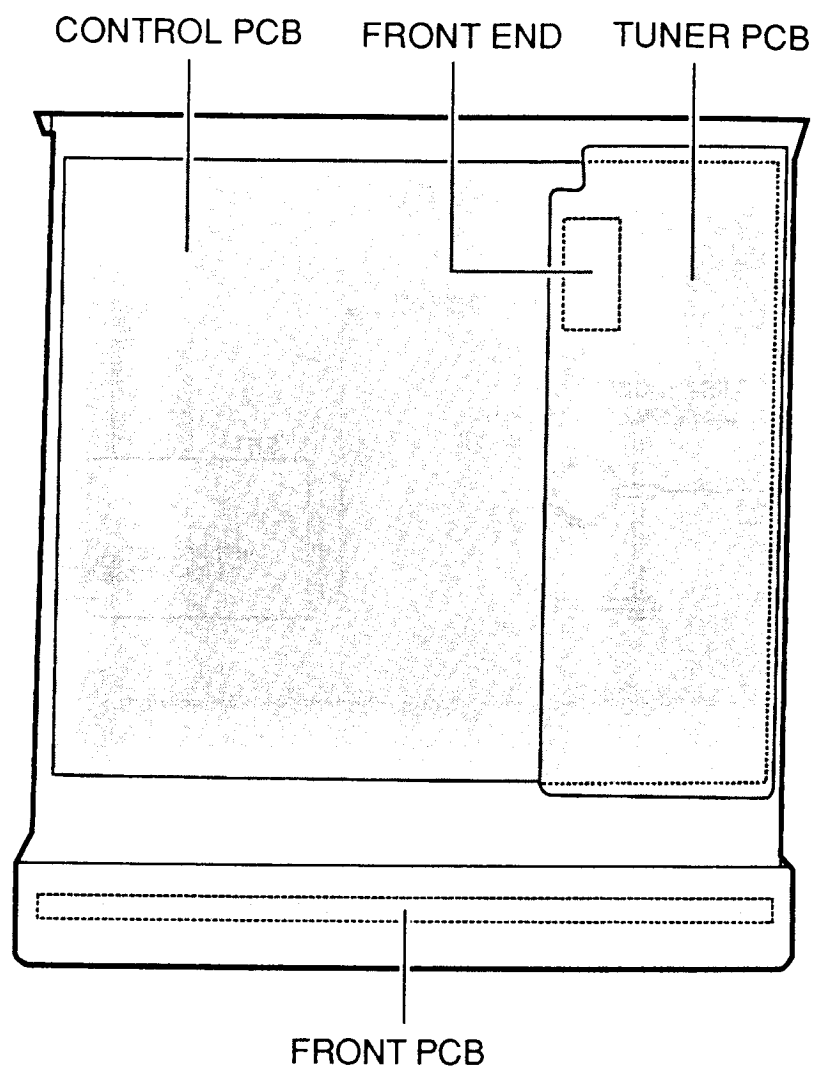


Fig.2-1 Top view

### III. ADJUSTMENT

#### 3-1. INSTRUMENT CONNECTIONS

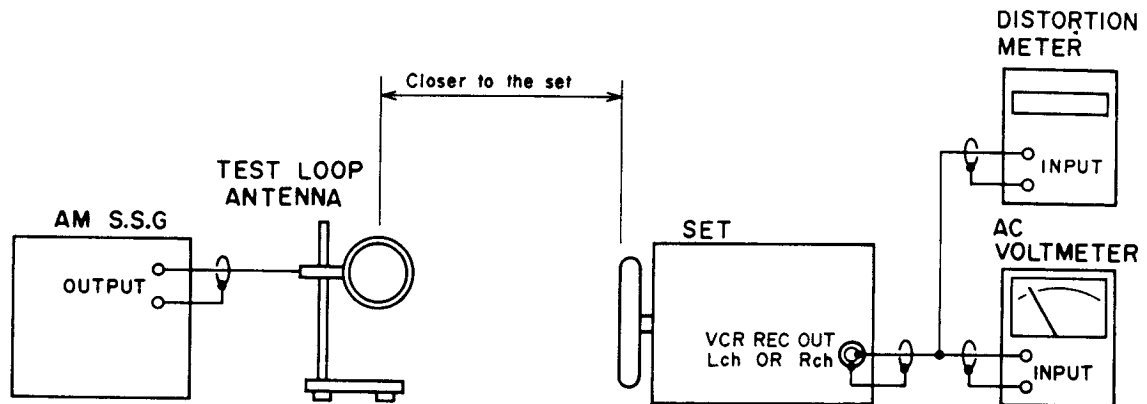


Fig.3-1 Instrument Connection of AM Adjustment

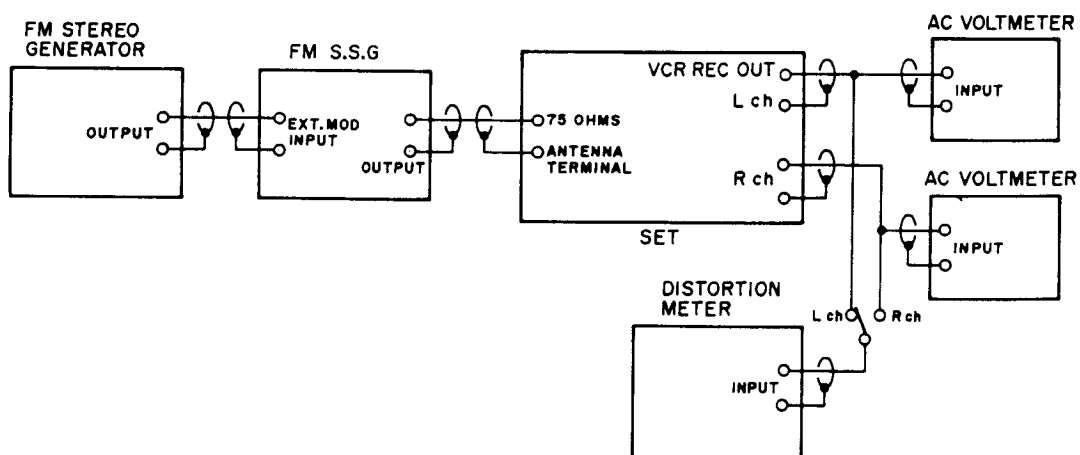


Fig.3-2 Instrument Connection of FM Adjustment

**NOTE:**

Before making adjustment, 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.

## ADJUSTMENT

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  
Points (•) & RESULT (\*)  
Point Adjustment Part

### 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

98.0MHz, 60dBμ (STEREO L or R channel only)  
98.0MHz  
VR102  
• Connect the milli-voltmeter to VCR/REC OUT.  
Minimum output level for opposite channel.

## LW

### 2 LW SENSITIVITY

- 162kHz, 75dBμ (Low) or 297kHz <288kHz>, 75dBμ (High)
- 162kHz PRESET 4 ch, 297kHz <288kHz> PRESET 7 ch.
- T202 (Low), VC202 (High)
- 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

- 
- 351kHz <288kHz> (preset 10 ch)
- T204
- 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

- 603kHz, 70dBμ (Low) or 1,404kHz, 70dBμ (High)
- 603kHz (Low), PRESET 8 ch  
1,404kHz (High), PRESET 7 ch
- T201 (Low), VC201 (High)
- 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

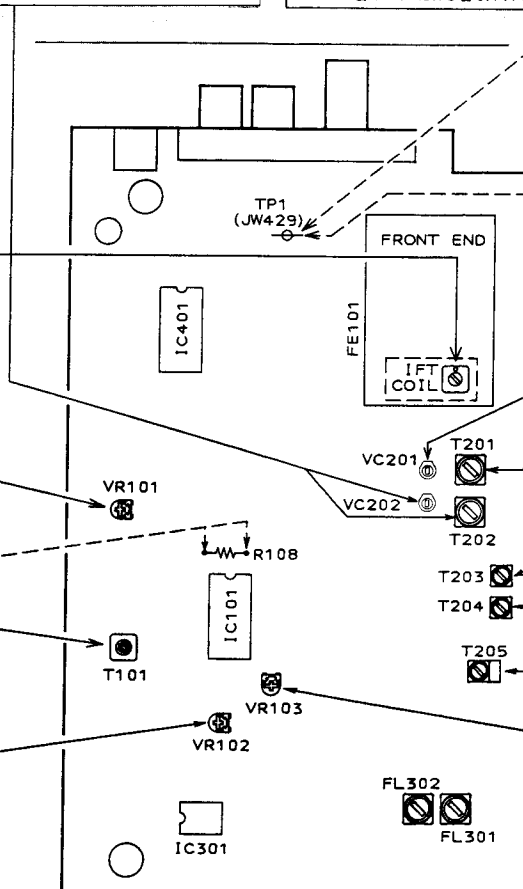
- 
- 1,404kHz (PRESET 7 ch)
- T203
- Connect the Digital DC Voltmeter between TP1 and GND.  
\*6.7 ± 0.1 V.

### 3 AM IF

- 162kHz, 65dBμ
- 162 kHz
- T205
- Connect the milli-voltmeter to VCR/REC OUT.  
\*Maximum output level.

### 4 TUNING LED

- 198kHz, 70dBμ
- 198kHz
- Tuning LED on the front panel, VR103.
- \*Tuning LED is lit.



↓  
FRONT  
TUNER PCB

# PARTS LIST

## ATTENTION

When placing an order for parts, be sure to list Part No., Model No. and the description of each part. Otherwise, the non-delivery of the part or the delivery of a wrong part may result. Please 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, so please use this Parts List for all future reference.

## HOW TO USE THIS PARTS LIST

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. The Recommended Spare Parts List shows those parts in the Parts List which are considered particularly important for service. Parts shown in the Parts List and "Common List for Service Parts" will not in principle be supplied. Please read the Parts List.

Diagram Block

## BASE BLOCK

| No.       | 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 individual parts index number in that figure.

b) PC Board

## 6. MAIN PC BOARD

| Ref. No. | Part No.  | Description                   |
|----------|-----------|-------------------------------|
| IC1      | EI-324536 | IC HD140498P                  |
| 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 XTAL 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.

Table PC Board Blocks are listed separately.

Part No. is known, Parts Index at end of Parts List can be used to locate where that part is shown in Parts

Reference No. listed at right of Part No.

## WARNING

INDICATES 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 SÉCURITÉ L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDÉES PAR LE 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       | *EC-410588J | C DOUBLE FYPD0H474Z 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-397288J  | D ZENER H HZS20-2              |
| 8       | ED-367576   | D ZENER H HZS5.6B2J            |
| 9       | ED-396688J  | D ZENER H HZS5B2               |
| 10      | ED-370786   | D ZENER H HZS9.1B2J            |
| 11      | ED-346559   | D ZENER H HZ1282L              |
| 12      | ED-346560   | D ZENER H HZ1283L              |
| 13      | ED-337990   | D ZENER H HZ27-1               |
| 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-382860J  | 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 8.000KMHZ    |
| 38      | EI-368825M  | OSC XTAL C-002RX 32.768KHZ     |
| 39      | EI-408814M  | OSC XTAL 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-408808J  | 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 SKHLM                  |
| 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.UJ              |
| 64      | *ET-366365  | TR 2SB1185 EF                  |
| 65      | ET-397160J  | TR 2SC3330 R.S.T.U.V           |
| 66      | ET-394735J  | TR 2SC3792 T05                 |
| 67      | ET-356437   | TR 2SC930 D2.EF                |
| 68      | *ET-366581  | TR 2SD1762 E.F                 |
| 69      | *ET-373025  | TR 2SD1944 J1J2K               |
| 70      | ET-401091J  | TR 2SD2144S U.V.W T05          |

| Ref.No. | Part No.   | Description                    |
|---------|------------|--------------------------------|
| 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-307786  | D ZENER H HZS9.1B2J            |
| D406    | ED-396688J | 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.EF                |
| TR102   | ET-397160J | TR 2SC3330 R.S.T.U.V           |
| TR201   | ET-349458  | TR FET 2SK192A Y               |
| TR202   | ET-394735J | TR FET 2SK246 GR               |
| 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

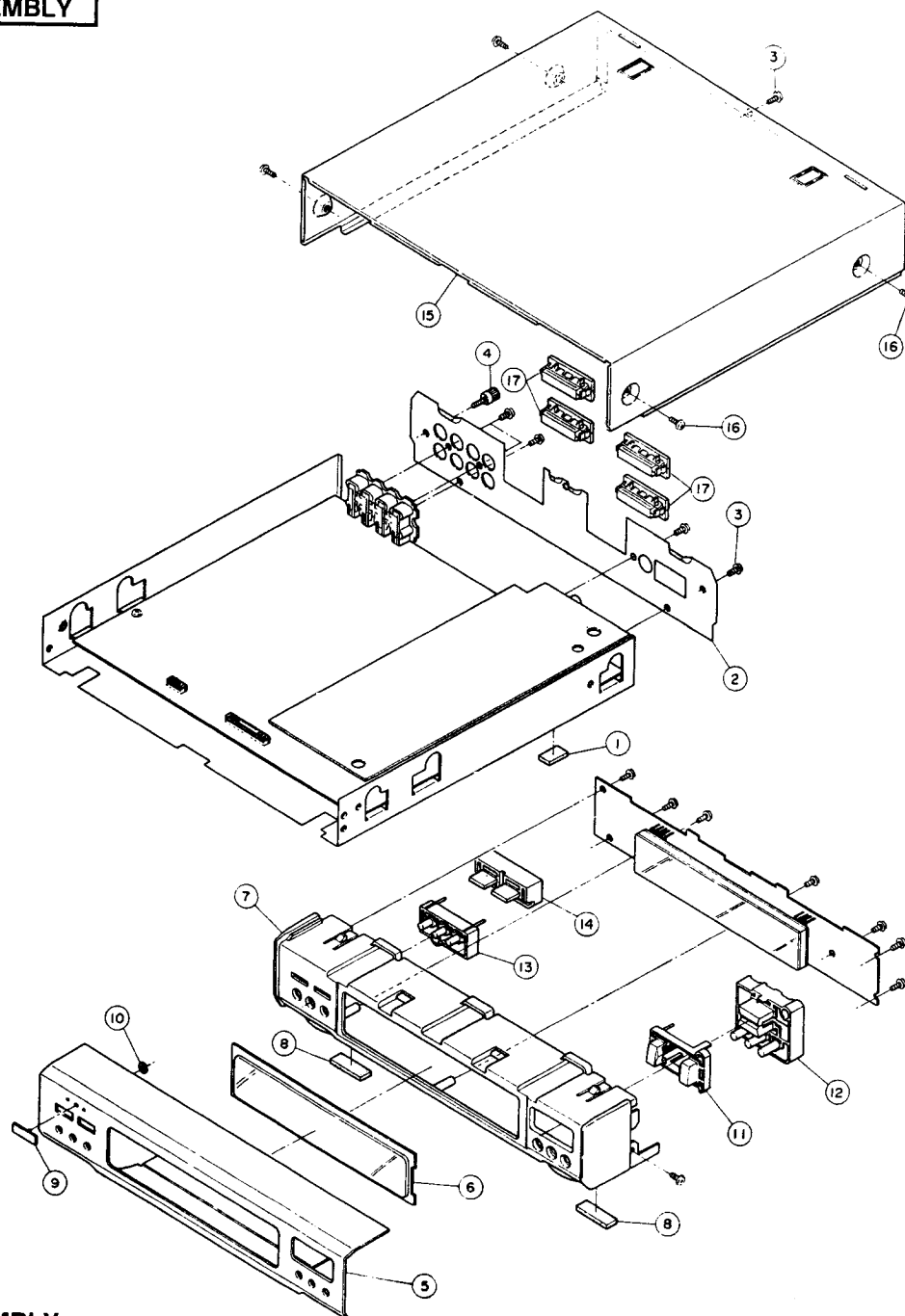
| Ref.No. | Part No.    | Description                    |
|---------|-------------|--------------------------------|
| C764    | *EC-346868  | C CE V T05 F 473Z 50DC         |
| C765    | *EC-346868  | C CE V T05 F 473Z 50DC         |
| C766    | *EC-346868  | C CE V T05 F 473Z 50DC         |
| C767    | *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             |
| D808    | ED-307572   | D SILICON H 1SS131             |
| 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    |
| J11B    | EJ-408670J  | PIN J T6388-AABC 8P            |
| 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           |

| Ref.No. | Part No.   | Description                    |
|---------|------------|--------------------------------|
| 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 SKHLM                  |
| 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. ACCESSORY

| 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 |

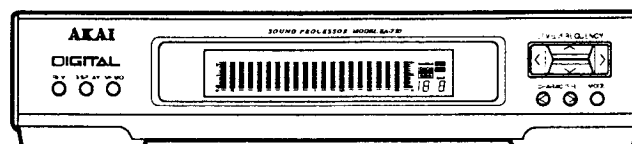


# INDEX

| 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       | Mlcro-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**

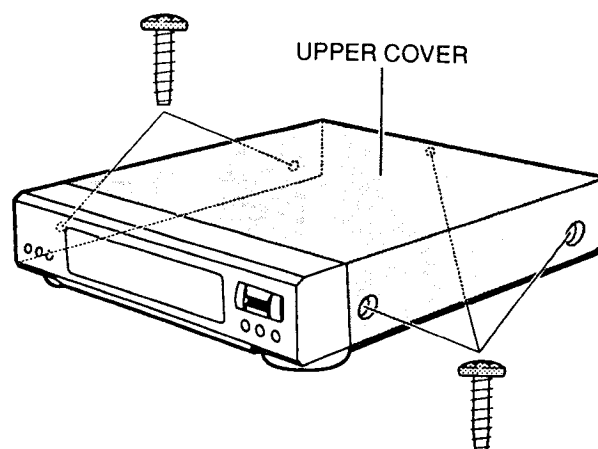
## SPECIFICATIONS

|                                 |                                           |
|---------------------------------|-------------------------------------------|
| 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                                     |

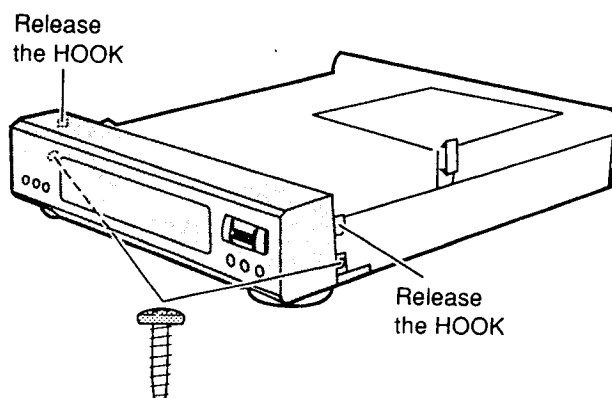
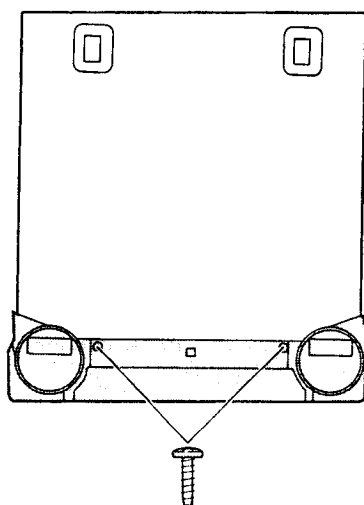
# I. DISASSEMBLY

In 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

---

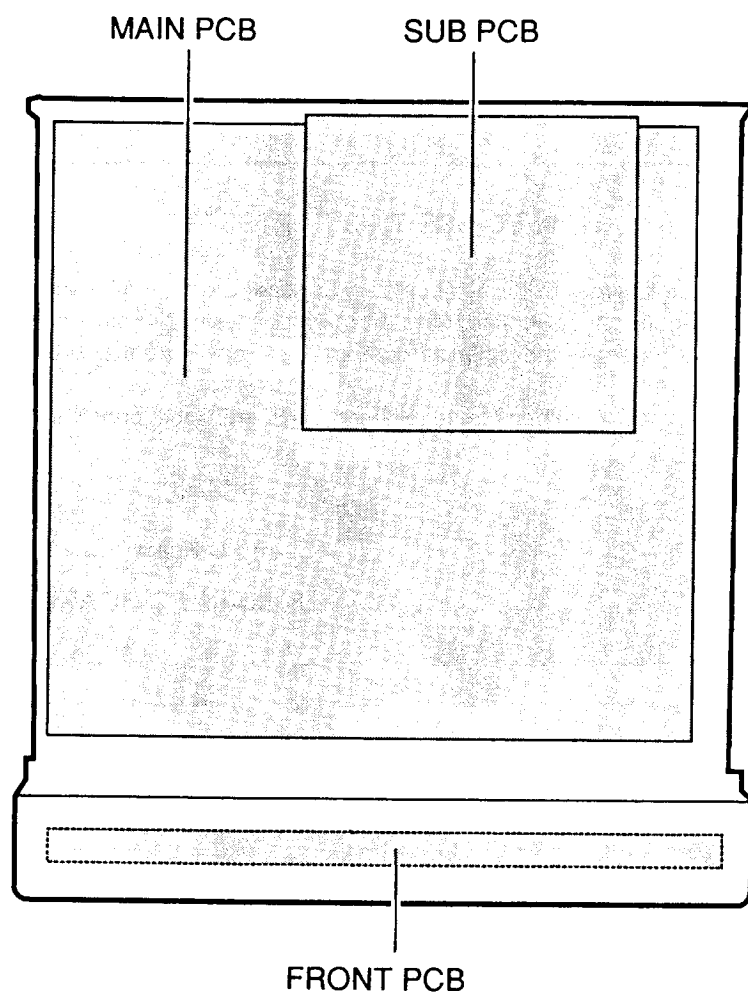


Fig.2-1 Top view

### III. PARTS LIST

#### ATTENTION

1. When placing an order for parts, be sure to list Part No., Model No. and the description of each part. 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 SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDÉES PAR LE 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 RGL7T 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          |

| Ref.No. | Part No.    | Description                    |
|---------|-------------|--------------------------------|
| 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 RGL7T 105J      |
| SR202   | EH-408801J  | COMP R RGL7T 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           |
| TR306   | ET-396487J | TR DTA124XL T05           |
| TR307   | ET-396487J | TR DTA124XL T05           |
| 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

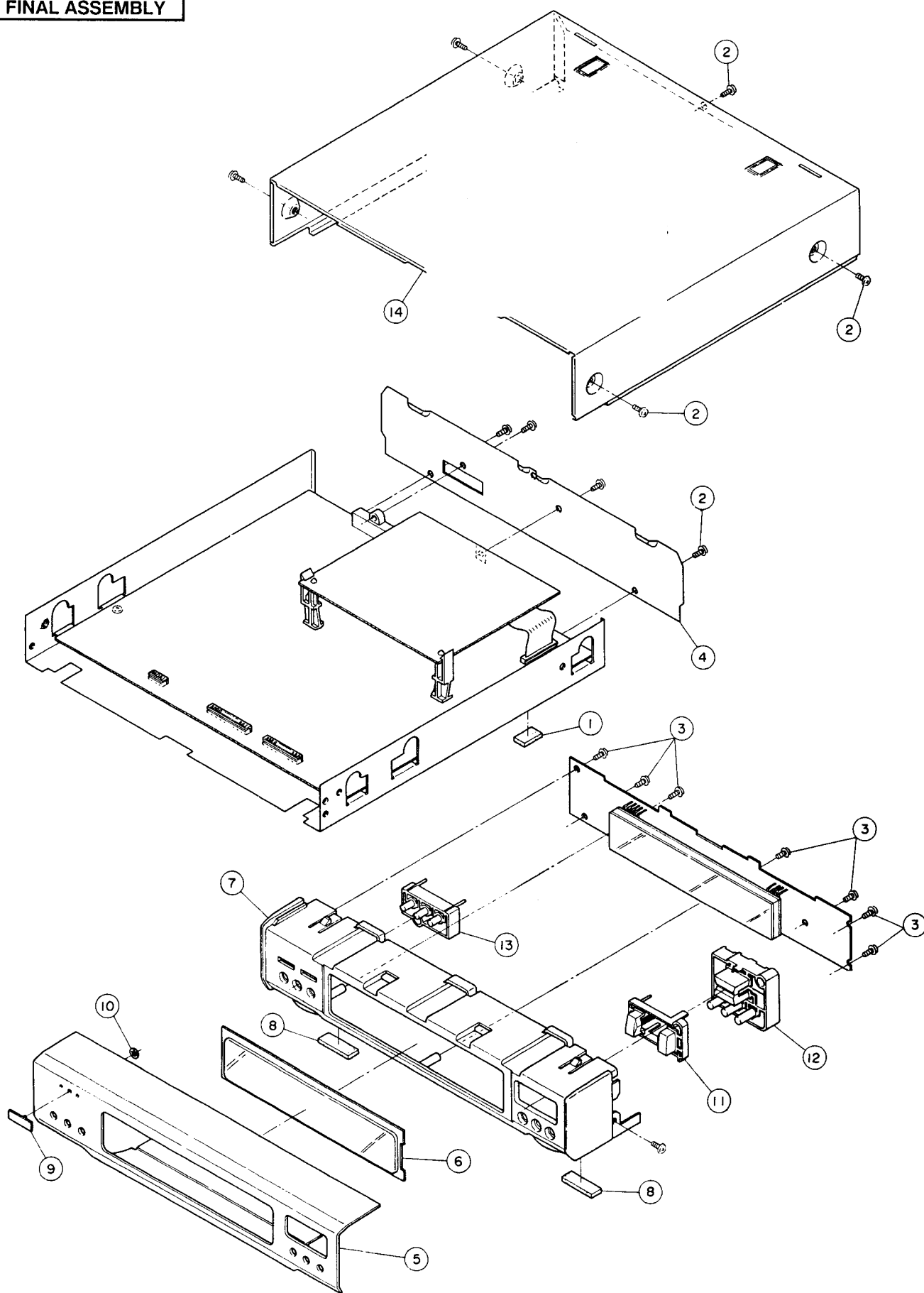
| Ref.No. | Part No.   | Description                   |
|---------|------------|-------------------------------|
| 1       | SA-407840M | CUSHION FOOT REAR (SG)        |
| 2       | ZS-394412M | BT BID30X08STL BZN PROJECTION |
| 3       | ZS-331182  | BT BID30X08STL BNI            |
| 4A      | SP-407967M | 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.

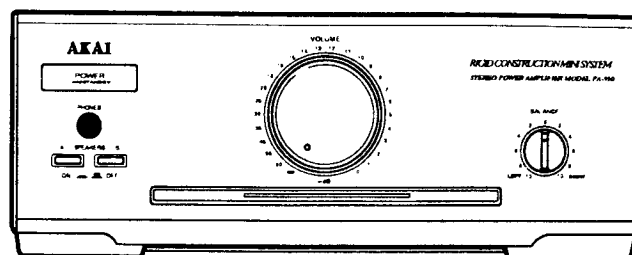


# FINAL ASSEMBLY



# 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   |           |          |          |          |
| ED511907     | 5-D306   | ET354083  | 3-TR5    |           |          |          |          |
| ED624903     | 3-D23    | ET354083  | 3-TR9    |           |          |          |          |
| ED624903     | 3-D32    | ET354370  | 3-TR24   |           |          |          |          |
| ED624903     | 5-D301   | ET354370  | 3-TR25   |           |          |          |          |
| ED624903     | 5-D302   | ET354370  | 3-TR26   |           |          |          |          |
| ED624903     | 5-D303   | ET354414  | 3-TR32   |           |          |          |          |
| ED624903     | 5-D304   | ET354415  | 3-TR18   |           |          |          |          |
| ED624903     | 5-D305   | ET354415  | 3-TR31   |           |          |          |          |
| EH408801J    | 4-SR201  | ET356817  | 3-TR3    |           |          |          |          |
| EH408801J    | 4-SR202  | ET356817  | 3-TR7    |           |          |          |          |
| EI200573     | 3-IC11   | ET361736  | 3-TR19   |           |          |          |          |
| EI200573     | 3-IC14   | ET361736  | 3-TR20   |           |          |          |          |
| EI200573     | 3-IC15   | ET361736  | 3-TR21   |           |          |          |          |
| EI302233     | 3-IC13   | ET361736  | 3-TR22   |           |          |          |          |
| EI302233     | 3-IC18   | ET361736  | 3-TR23   |           |          |          |          |
| EI302233     | 3-IC19   | ET361736  | 3-TR29   |           |          |          |          |
| EI332259     | 3-IC12   | ET361736  | 3-TR30   |           |          |          |          |
| EI332259     | 4-IC206  | ET366365  | 3-TR11   |           |          |          |          |
| 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  |           |          |          |          |
| EI400756J    | 4-IC207  | ET396487J | 5-TR310  |           |          |          |          |
| 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

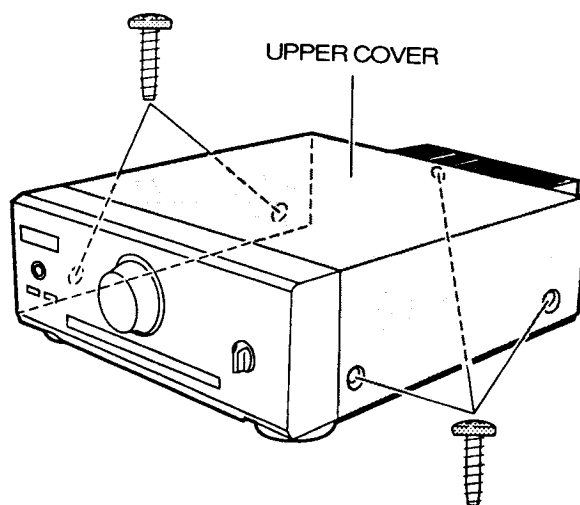
|                           |    |
|---------------------------|----|
| Remote control unit ..... | X1 |
| Batteries .....           | X2 |
| Operator's manual .....   | X1 |

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

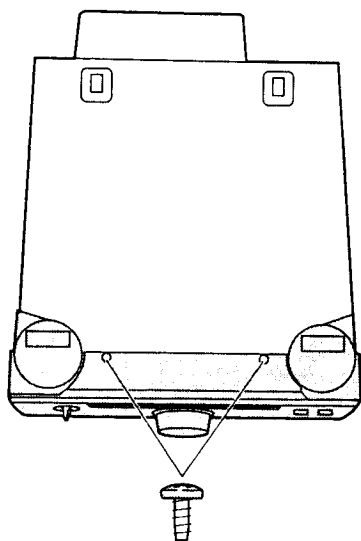
# I. DISASSEMBLY

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

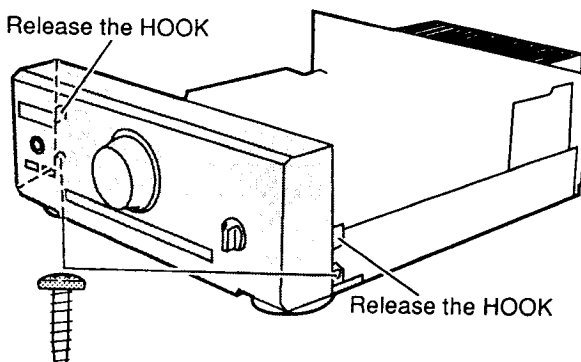
## 1. Removal of the UPPER COVER



## 2. Removal of the FRONT PANEL



Release the HOOK



# II.PRINCIPAL PARTS LOCATION

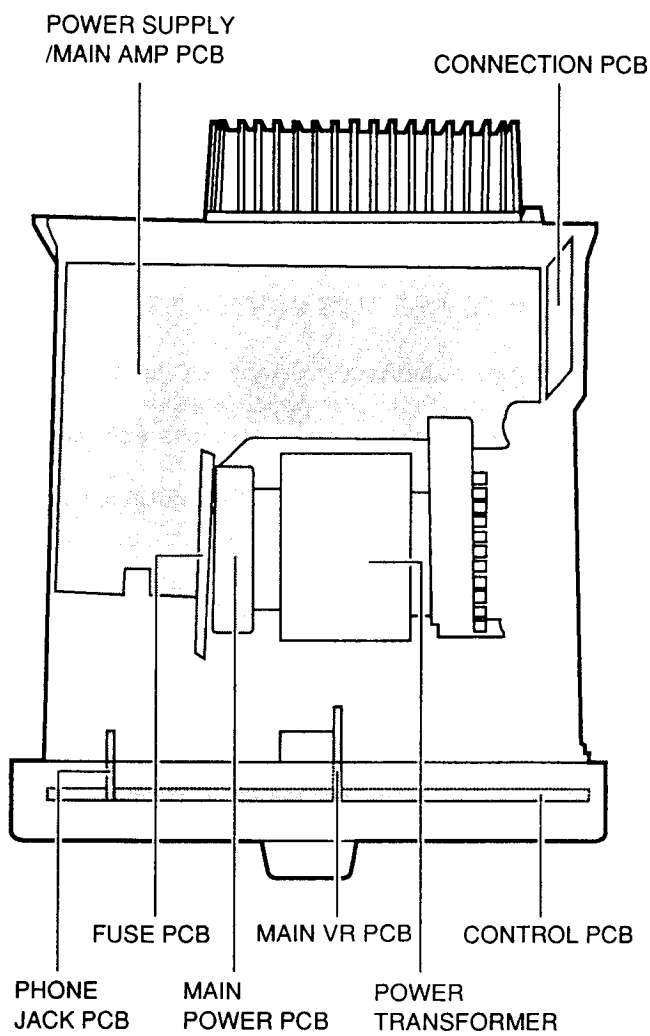


Fig.2-1 Top view

### III. PARTS LIST

#### ATTENTION

1. When placing an order for parts, be sure to list Part No., Model No. and the description of each part. 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 SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDÉES PAR LE 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<br>[B,S] [750]          |
| 3       | *BT-408785M | TRANS POW A5013 E V<br>[E,V] [750]          |
| 4       | *BT-408784M | TRANS POW A5013 U<br>[U] [750]              |
| 5       | *BT-408789M | TRANS POW A5014 B S<br>[B,S] [950]          |
| 6       | *BT-408788M | TRANS POW A5014 E V<br>[E,V] [950]          |
| 7       | *BT-408787M | TRANS POW A5014 U<br>[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<br>[750]          |
| 13      | *ED-384278J | D SILICON RBV602 200/6.0A<br>[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<br>[U,B,S]            |
| 18      | *EF-364518  | FUSE BET T 250V 2.50A<br>[750]              |
| 19      | *EF-359225  | FUSE BET T 250V 3.15A<br>[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<br>[750]            |
| 23      | *EI-358554  | IC STK4152II<br>[750]                       |
| 24      | *EI-366695  | IC STK4172-2<br>[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<br>[BALANCE VR] |
| 45      | EV-408811J  | VR SPL RK16EUWMZ1 B104X2<br>[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 |

| Ref.No. | Part No.      | Description                       |
|---------|---------------|-----------------------------------|
| 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<br>[750] |
| C83B    | EC-394534J  | C EC V CUT SME 472M 50.0DC<br>[950] |
| C84A    | EC-394535J  | C EC V CUT SME 332M 45.0DC<br>[750] |
| C84B    | EC-394534J  | C EC V CUT SME 472M 50.0DC<br>[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<br>[750]  |
| D1B     | *ED-384278J | D SILICON RBV602 200/6.0A<br>[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<br>[750]               |
| IC1B    | *EI-366695  | IC STK4172-2<br>[950]               |
| L1      | EO-337880   | COIL FIX 2 202AK-018 2R2K           |
| L2      | EO-337880   | COIL FIX 2 202AK-018 2R2K           |
| L3      | EO-342936   | COIL BALUM<br>[V]                   |
| L4      | EO-342936   | COIL BALUM<br>[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<br>[750]      |
| F1B     | *EF-359225  | FUSE BET T 250V 3.15A<br>[950]      |
| F2A     | *EF-364518  | FUSE BET T 250V 2.50A               |

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

#### 6. MAIN VR P.C BOARD

| Ref.No. | Part No.   | Description                           |
|---------|------------|---------------------------------------|
| VR401   | EV-408811J | VR SPL RK16EUWMZ1 B104X2<br>[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<br>[750] |
| F701B   | *EF-355398 | FUSE BET T 250V 2.00A<br>[950]   |
| F702A   | *EF-601964 | FUSE SEMKO T 250V 1.60A<br>[750] |
| F702B   | *EF-355398 | FUSE BET T 250V 2.00A<br>[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

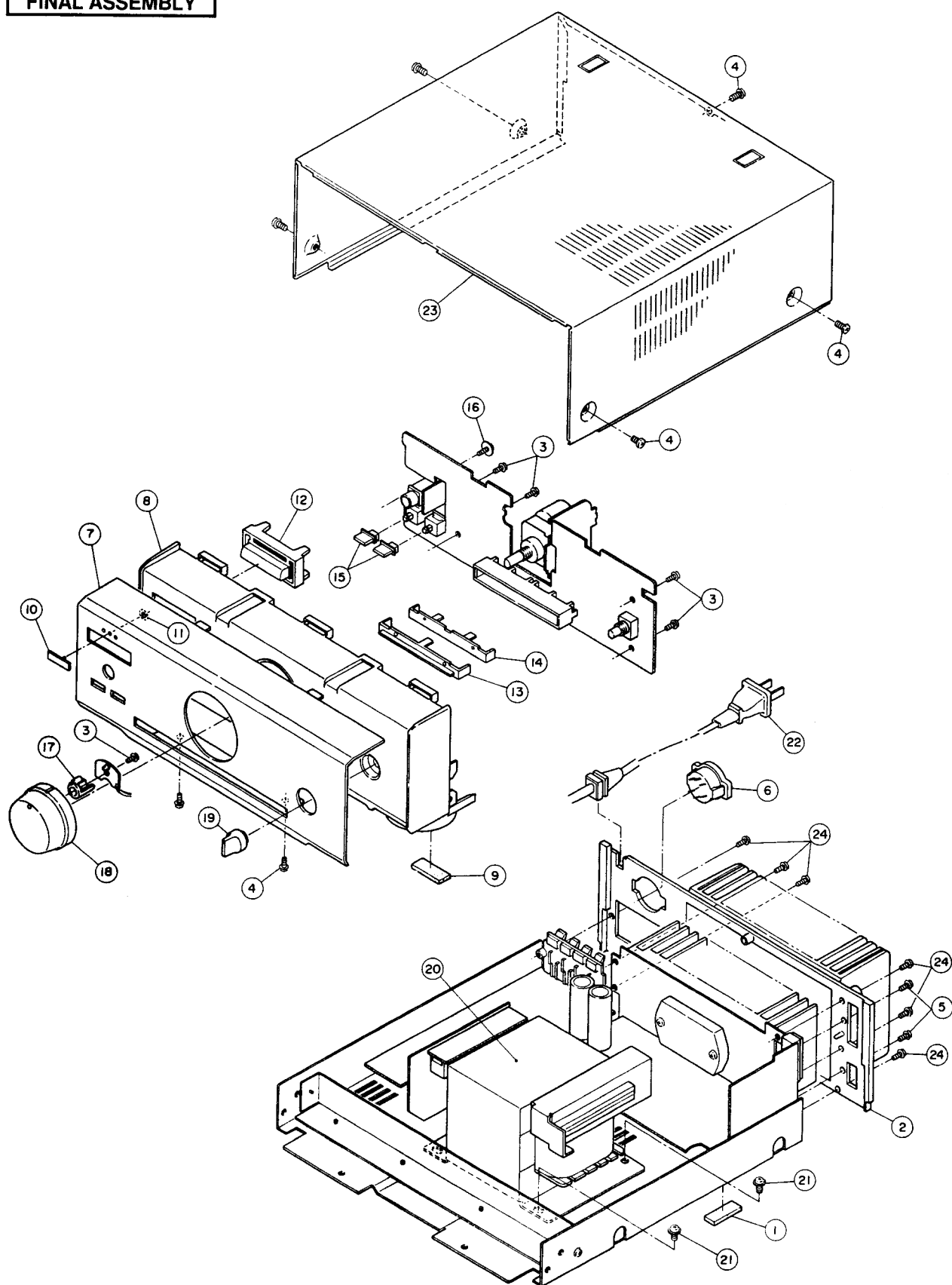
| Ref.No. | Part No.    | Description                            |
|---------|-------------|----------------------------------------|
| 1       | SA-407840M  | CUSHION FOOT REAR (SG)                 |
| 2A      | SP-408079M  | PANEL REAR PA- (1) (SG)<br>[U]         |
| 2B      | SP-408080M  | PANEL REAR PA- (2) (SG)<br>[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<br>[750]                 |
| 7B      | SP-408072J1 | PANEL FRONT-B<br>[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<br>[U] [750]         |
| 20B     | *BT-408785M | TRANS POW A5013 E V<br>[E,V] [750]     |
| 20C     | *BT-408786M | TRANS POW A5013 B S<br>[B,S] [750]     |
| 20D     | *BT-408787M | TRANS POW A5014 U<br>[U] [950]         |
| 20E     | *BT-408788M | TRANS POW A5014 E V<br>[E,V] [950]     |
| 20F     | *BT-408789M | TRANS POW A5014 B S<br>[B,S] [950]     |
| 21      | ZS-346742   | ST BID40X08STL CMT CUP                 |
| 22A     | *EW-408790M | AC CORD200 SZ4W H03VVH2F B120 U<br>[U] |
| 22B     | *EW-404002M | AC CORD 200 SE-1 WITH TUBE E<br>[E,V]  |
| 22C     | *EW-404001M | AC CORD 200 VCTFK WITH TUBE B<br>[B]   |
| 22D     | *EW-404003M | AC CORD 200 SA-2 WITH TUBE S<br>[S]    |
| 23      | SP-408065M  | COVER UPPER PA (SG)                    |

#### 11. ACCESSORY

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



# FINAL ASSEMBLY



## NOTE:

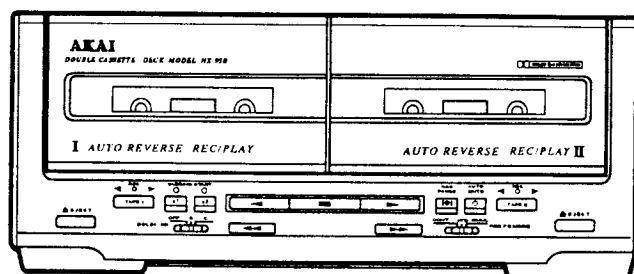
Parts will not be supplied if they are not listed in the parts list, even if they appear on the assembling illustrations

# 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 ( $\pm 3$ dB)<br>CrO <sub>2</sub> 35Hz to 15,000Hz ( $\pm 3$ dB)<br>Metal 35Hz to 15,000Hz ( $\pm 3$ dB) (HX-950 only) |
| S/N ratio .....                 | 76dB (Dolby C ON, 1kHz to 10kHz)<br>66dB (Dolby B ON, 5kHz)<br>56dB (Dolby OFF, CrO <sub>2</sub> 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.

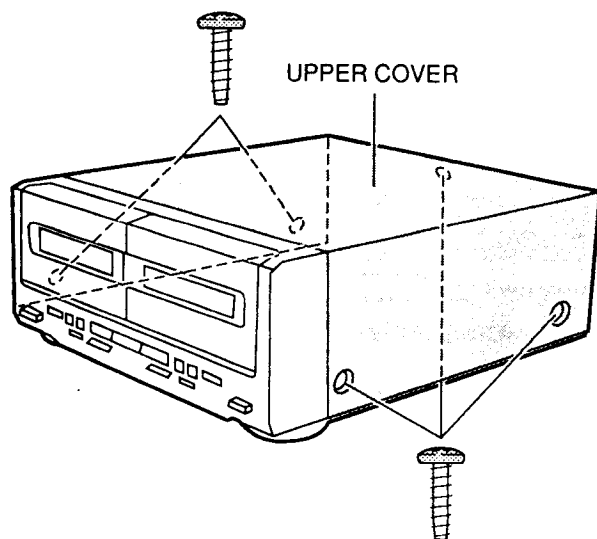
\* Noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.

"DOLBY" and  symbol are trademarks of Dolby Licensing Corporation.

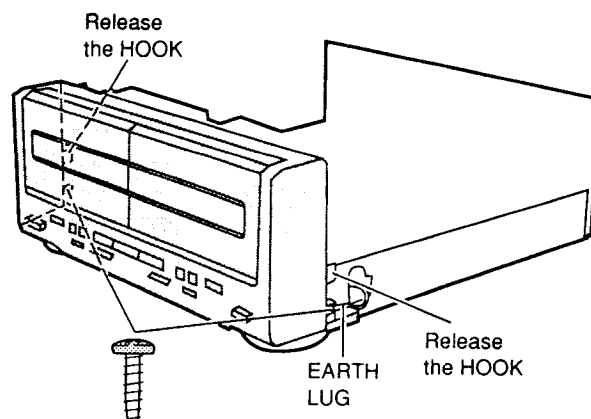
# I. DISASSEMBLY

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

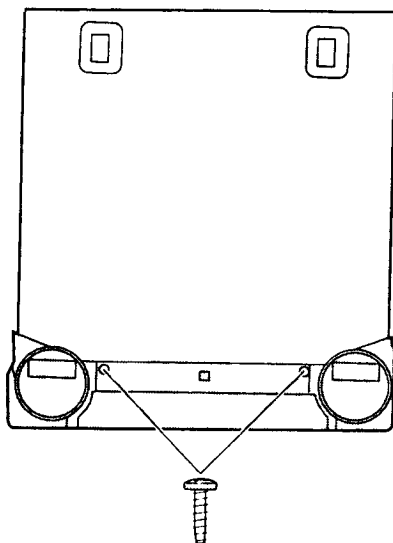
## 1. Removal of the UPPER COVER



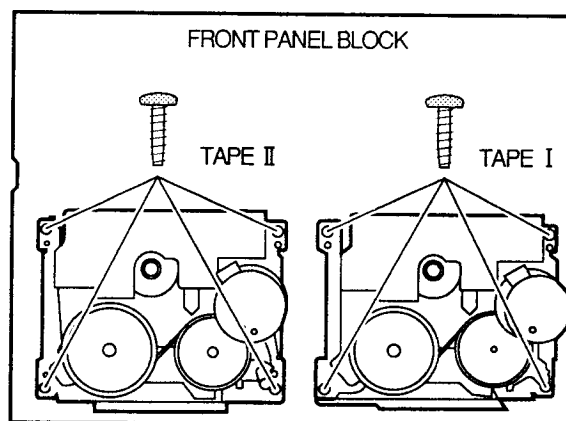
3.



## 2. Removal of the FRONT PANEL BLOCK



## 4. Removal of the MECHA. BLOCK



## II. PRINCIPAL PARTS LOCATION

### 2-1. MODEL HX-750

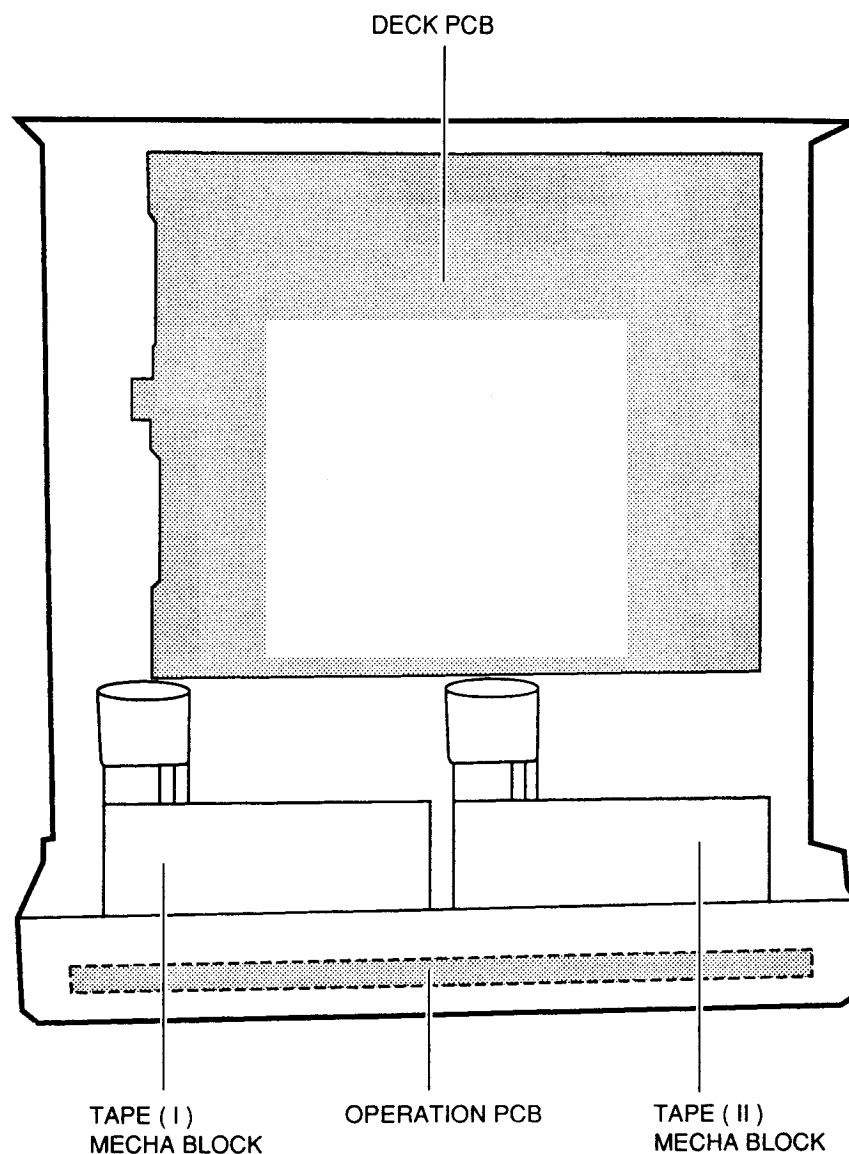


Fig.2-1 Top view

2-2. MODEL HX-950

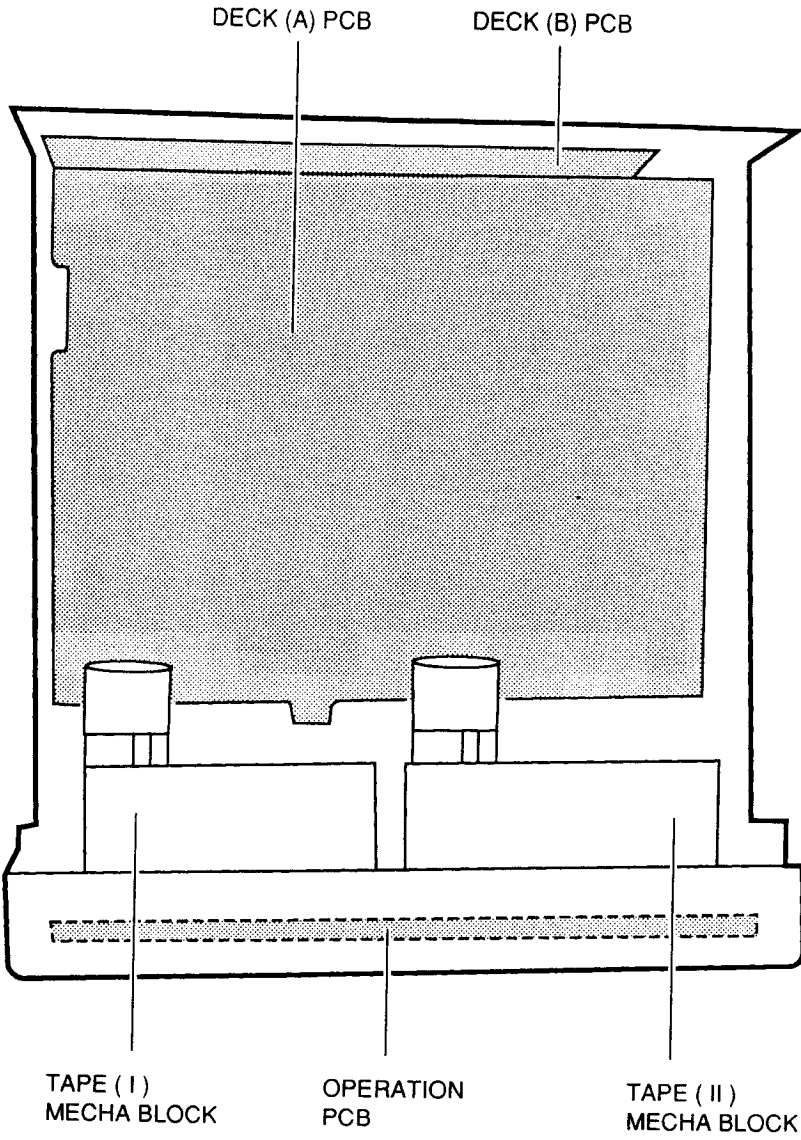


Fig.2-2 Top view

### 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.

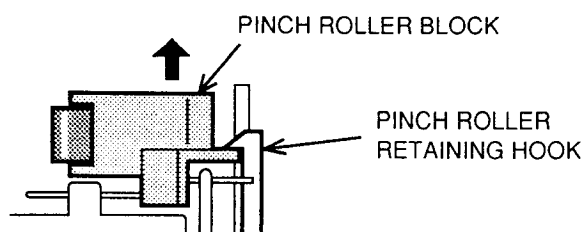


Fig.3-1

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

- 1) Remove the two HEAD RETAINING (A) 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.

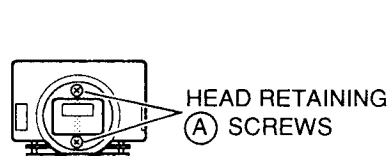


Fig.3-2

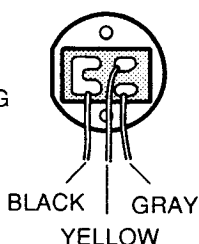
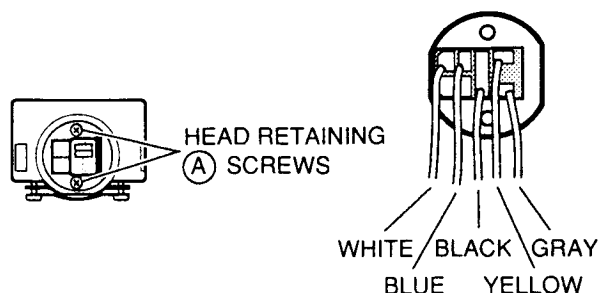


Fig.3-3

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

- 1) Remove the two HEAD RETAINING (A) 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 (B) 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.

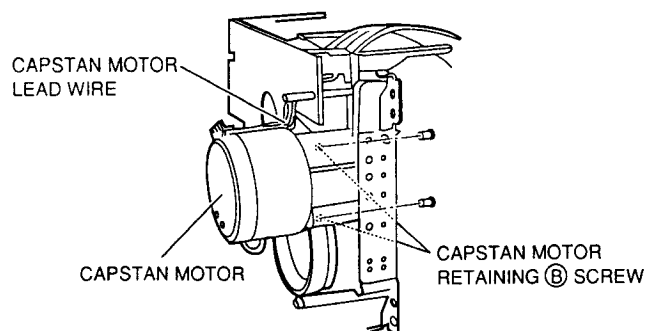
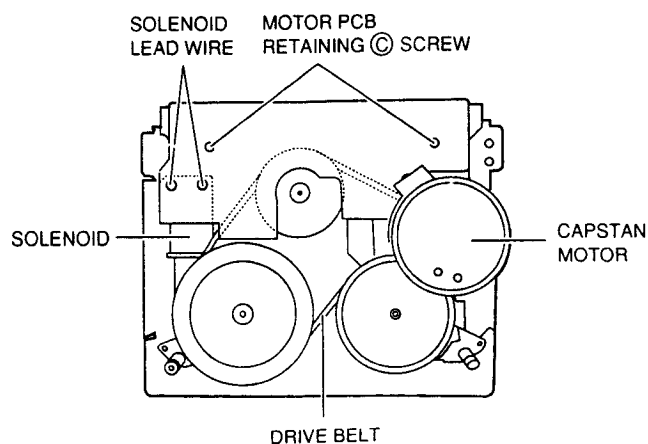


Fig.3-6

#### 3-5.REPLACEMENT OF THE DRIVE BELT

- 1) Remove the CAPSTAN MOTOR RETAINING (B) 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 (C) 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)

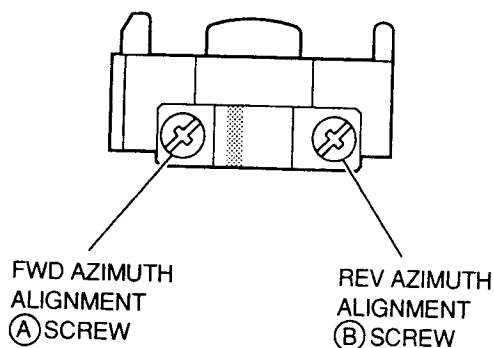


Fig.4-1

- 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 (A) (FWD PLAY) and (B) (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 (A) (FWD PLAY) and (B) (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.

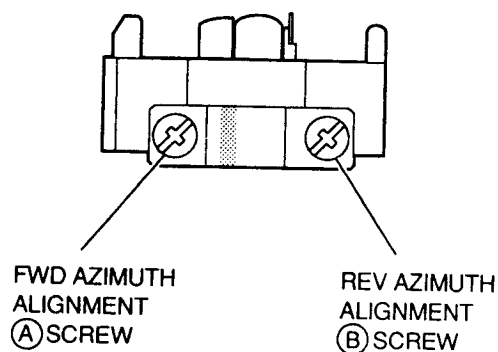


Fig.4-2

# ELECTRICAL ADJUSTMENT

MODEL HX-750

Following adjustment should be performed in test mode.

Engage the test mode, connect the AC power to the AC outlet while pressing the ►► and buttons together.

When the test mode is engaged, X1 dub lamp is

When performing the tape speed adjustment, observe the following notes.

Adjustment should be started more than 30 seconds after the power is ON.

Adjustment should be made on X2 speed mode when adjust normal speed mode.

Adjustment should be made in the forward direction.

## TAPE I (X2) TAPE SPEED

1 kHz test tape (TF-110CT)

Press the x 2 DUBBING START button) VCR REC OUT, VR651

Connect a frequency counter to the VCR REC OUT.

± 20 Hz

## TAPE I NORMAL TAPE SPEED

1 kHz test tape (TF-110CT)

VCR REC OUT, VR653

Connect a frequency counter to the VCR REC OUT.

± 10 Hz

## TAPE II (X2) TAPE SPEED

1 kHz test tape (TF-110CT)

Press the x 2 DUBBING START button) VCR REC OUT, VR654

Connect a frequency counter to the VCR REC OUT.

± 20 Hz

## TAPE II NORMAL TAPE SPEED

1 kHz test tape (TF-110CT)

VCR REC OUT, VR652

Connect a frequency counter to the VCR REC OUT.

± 10 Hz

### 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

### 9 RECORDING LEVEL

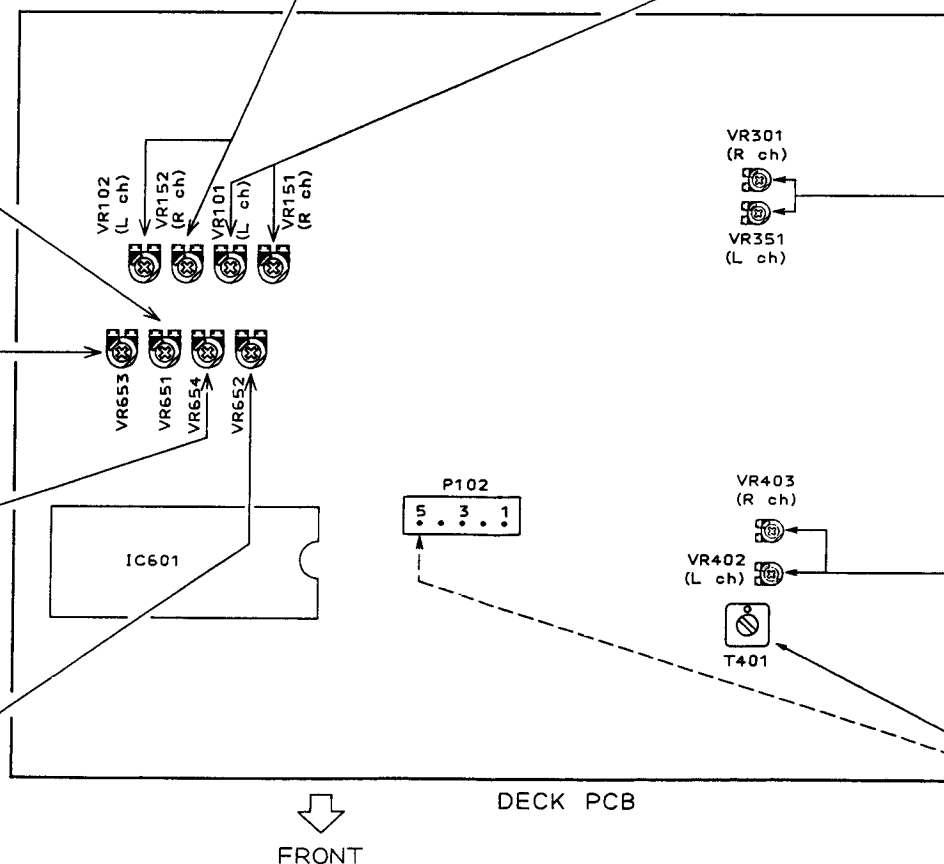
1. 1 kHz, -10 dBs (VCR REC OUT) / NORMAL recording test tape (UD-124)
2. REC → PLAY
3. VCR REC OUT, VR351 (L-ch) / VR301 (R-ch)
4. • Connect an AC Milli-voltmeter to the VCR REC OUT.  
• Connect an audio signal generator to the AUX INPUT and set the generator level so that the VCR REC OUT levels are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

### 8 NORMAL POSITION BIAS

1. 1 kHz and 10 kHz, -30 dBs (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 -30 dBs.  
\* Playback level difference between 1 kHz and 10 kHz after recording is within ± 0.2 dB.

### 7 BIAS OSC FREQUENCY

1. CrO<sub>2</sub> type blank tape
2. REC
3. TAPE II, T401 (P102)
4. • Connect a frequency counter between P102 ③ pin and GND.  
\* 100.0 ± 0.2 kHz



SERVICE MANUAL

HX-750, 950

Following adjustment should be performed in the order.

1. To enter the test mode, connect the AC power to the AC outlet while pressing the ►► and ►► buttons together.

2. When the test mode is engaged, X1 dub lamp is lit. While performing the tape speed adjustment, observe the following notes.

3. Adjustment should be started more than 30 seconds after the power is ON.

4. Adjustment should be made on X2 speed mode first and then on normal speed mode.

5. Adjustment should be made in the forward direction.

# ADJUSTMENT

## TAPE/INPUT SIGNAL

1. Test Point, ADJUSTMENT PART (see Fig. 1) and RESULT (\*)

(see Fig. 1)

## OSC. FREQUENCY

1. Recording test tape (AC-712)

2. Pin, T501 (TAPE I)

3. Pin, T551 (TAPE II)

4. Connect a frequency counter between P101 and GND, P102 ③pin and GND. Result is  $\pm 0.2\text{kHz}$

## TEST POINT

1. Recording test tape (AC-712)

2. Pin, T901, T902 (TAPE I)

3. Pin, T951, T952 (TAPE II)

4. Connect a digital voltmeter both end of the test point. Result is in the level of DC range.

## METAL POSITION BIAS

1. 1kHz and 10kHz, -30dBs (VCR REC OUT)

2. METAL recording test tape (UD-124).

3. PLAY

4. VCR REC OUT, VR901 (TAPE I L-ch) / VR951 (TAPE I R-ch) and VR951 (TAPE I L-ch) / VR952 (TAPE II R-ch)

5. Connect an AC Milli-voltmeter to the VCR REC OUT.

6. 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 is within  $\pm 0.2\text{dB}$ .

## 11. METAL POSITION BIAS

1. 1kHz and 10kHz, -30 dBs (VCR REC OUT)

2. METAL recording test tape (AC-712)

3. REC → PLAY

4. VCR REC OUT, VR502 (TAPE I) / VR552 (TAPE II)

5. •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

3. VCR REC OUT, VR701 (press the X2 DUBBING START button)

4. •Connect a frequency counter to the VCR REC OUT. \*6,300  $\pm$  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  $\pm$  10Hz

## 3. TAPE II (X2) TAPE SPEED

1. 3,150Hz test tape (TF-110CT)

2. PLAY

3. VCR REC OUT, VR703 (press the X2 DUBBING START button)

4. •Connect a frequency counter to the VCR REC OUT. \*6,300  $\pm$  20Hz

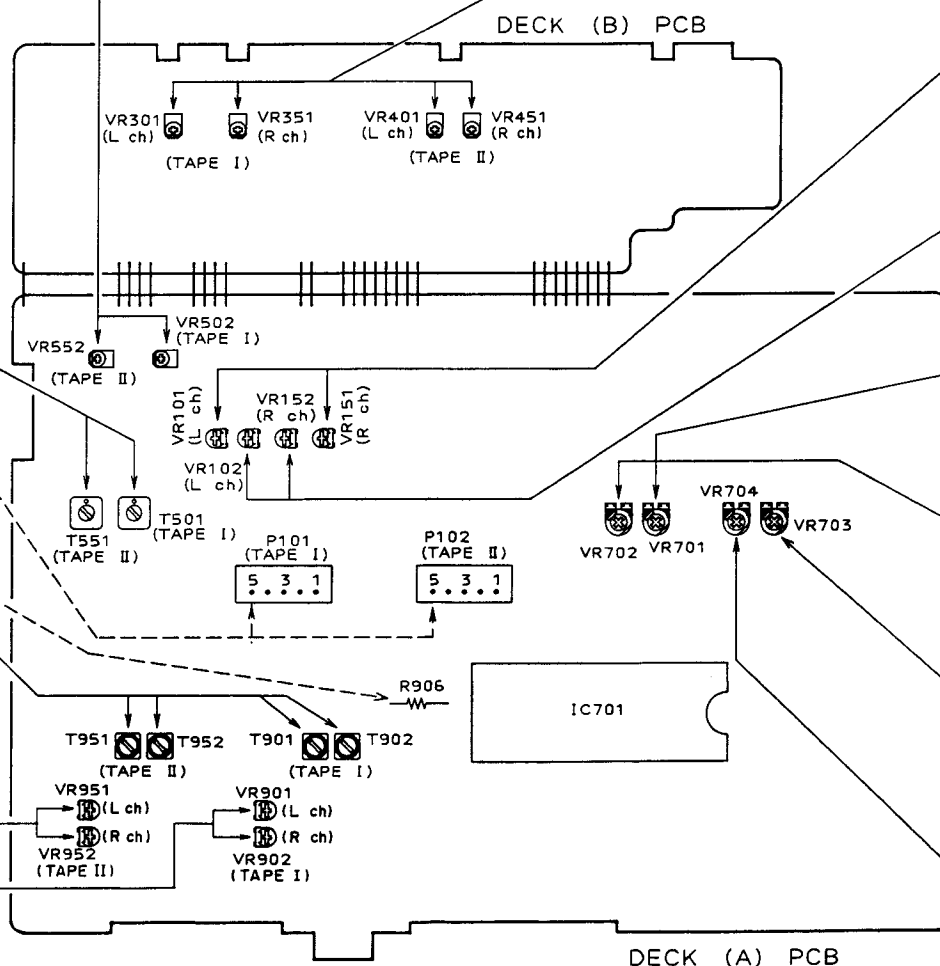
## 4. TAPE II NORMAL TAPE SPEED

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  $\pm$  10Hz



## VI. PARTS LIST

### ATTENTION

1. When placing an order for parts, be sure to list Part No., Model No. and the description of each part. 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 SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDÉES PAR LE 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<br>[750 TAPE-1]    |
| 2       | BB-408781M1 | MECHA GAK9602<br>[950 TAPE-2]    |
| 3       | BB-408783M1 | MECHA GAK9603<br>[950 TAPE-1]    |
| 4       | BB-410525M1 | MECHA GAK9604<br>[750 TAPE-2]    |
| 5       | BM-729992J  | MOTOR EG-530KD-2B<br>[OLD]       |
| 6       | BM-729993J  | MOTOR EG-530YD-2B<br>[NEW]       |
| 7       | ED-394509J  | D LED GL3HY43 ORANGE             |
| 8       | ED-394724J  | D LED GL3PR43 RED<br>[950]       |
| 9       | ED-408651J  | D LED SEL2913K ORANGE<br>[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                   |

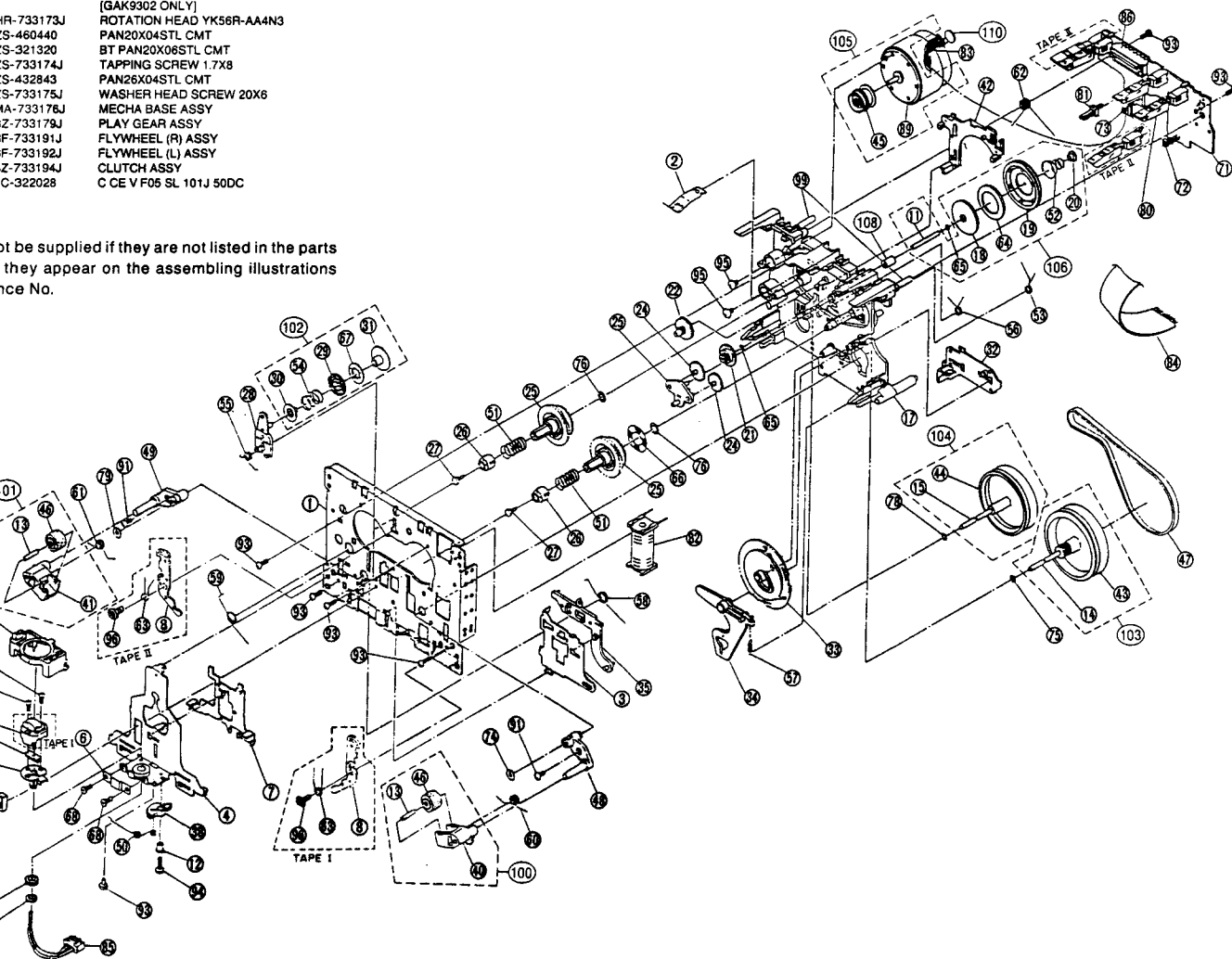
| Ref.No. | Part No.   | Description                     |
|---------|------------|---------------------------------|
| 67      | ET-396072J | TR 2SD2159 V,W                  |
| 68      | EV-330531  | R S-FIX H TM8KV2-1S 0.50W503    |
| 69      | EV-404299J | R S-FIX H T05 KVSF637T 0.1W332  |
| 70      | 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 | TRIGGER 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<br>[GAK9602][GAK9604] |
| 63B     | ZG-733147J | INTER LOCK LEVER (L) SPRING<br>[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                             |

| 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 |
| SS-460440  | PAN20X04STL CMT           |
| SS-321320  | BT PAN20X06STL CMT        |
| SS-733174J | TAPPING SCREW 1.7X8       |
| SS-432843  | PAN26X04STL CMT           |
| SS-733175J | WASHER HEAD SCREW 20X6    |
| MA-733176J | MECHA BASE ASSY           |
| Z-733179J  | PLAY GEAR ASSY            |
| FF-733191J | FLYWHEEL (R) ASSY         |
| FF-733192J | FLYWHEEL (L) ASSY         |
| Z-733194J  | CLUTCH ASSY               |
| C-322028   | C CE V F05 SL 101J 50DC   |

Not be supplied if they are not listed in the parts  
they appear on the assembling illustrations  
since 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 RGL10T 472J            |
| IB602   | EH-408713J  | COMP R RGL10T 332J            |
| IB603   | EH-408821J  | COMP R RGL12T 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          |

| Ref.No. | Part No.    | Description                     |
|---------|-------------|---------------------------------|
| 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 J1J2K                |
| 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-373465   | TR DTC123JS                     |
| TR602   | ET-369248   | TR DTA114YS                     |
| TR603   | ET-373362   | TR DTA143ZS                     |
| TR606   | ET-354365   | TR DTC114YS                     |
| TR607   | ET-354365   | TR DTC114YS                     |
| TR608   | ET-361736   | TR 2SC3576                      |
| TR609   | ET-361736   | TR 2SC3576                      |
| TR610   | ET-373465   | TR DTC123JS                     |
| TR611   | ET-373391   | TR DTC143ZS                     |
| TR612   | ET-361736   | TR 2SC3576                      |
| TR613   | ET-361736   | TR 2SC3576                      |
| TR614   | ET-373465   | 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-373392   | 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 J1J2K                |
| TR702   | *ET-397160J | TR 2SC3330 R.S.T.U.V            |
| TR703   | *ET-408772J | TR 2SC3330 R.S.T.U.V            |
| TR704   | *ET-353899  | TR 2SA1318 S.T.U T05            |
| TR721   | *ET-373025  | TR 2SD1944 J1J2K                |
| 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                     |
| TR781   | ET-373985   | TR DTA144TS                     |
| TR783   | ET-354414   | TR DTC144ES                     |
| TR784   | ET-397160J  | TR 2SC3330 R.S.T.U.V            |
| TR785   | 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      |

PARTS LIST

## 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 RGL14X 103J             |
| IB702   | EH-404318J | COMP R RGL5X 332J              |
| IB703   | EH-389421J | COMP R RGL7X 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                    |
| TR158   | 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      |

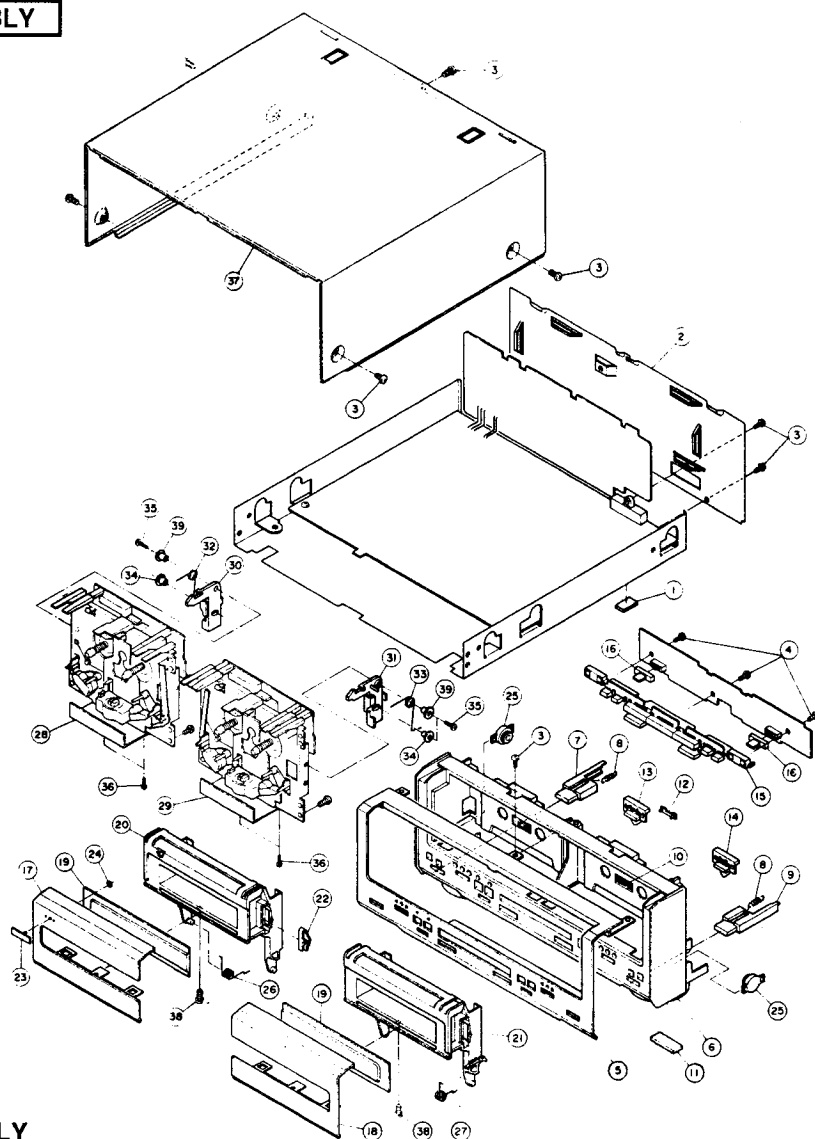
## 6. DECK (B) P.C BOARD (HX-950)

| 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<br>[750]        |
| D802B   | ED-394724J | D LED GL3PR43 RED<br>[950]           |
| D803    | ED-394509J | D LED GL3HY43 ORANGE                 |
| D804    | ED-394509J | D LED GL3HY43 ORANGE                 |
| D805A   | ED-394509J | D LED GL3HY43 ORANGE<br>[750]        |
| D805B   | ED-394724J | D LED GL3PR43 RED<br>[950]           |
| D806    | ED-394509J | D LED GL3HY43 ORANGE                 |
| D807A   | ED-408651J | D LED SEL2913K ORANGE<br>[750]       |
| D807B   | ED-394509J | D LED GL3HY43 ORANGE<br>[950]        |
| D808A   | ED-408651J | D LED SEL2913K ORANGE<br>[750]       |
| D808B   | ED-394509J | D LED GL3HY43 ORANGE<br>[950]        |
| D809A   | ED-394724J | D LED GL3PR43 RED<br>[750]           |
| D809B   | ED-408651J | D LED SEL2913K ORANGE<br>[950]       |
| D810    | ED-408651J | D LED SEL2913K ORANGE<br>[950]       |
| SW801   | ES-408708J | SW SLIDE SSSS91 L=2 1-01-03          |
| SW802   | ES-408708J | SW SLIDE SSSS91 L=2 1-01-03<br>[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                   | Ref.No. | Part No.    | Description                     |
|---------|------------|-------------------------------|---------|-------------|---------------------------------|
| 1       | SA-407840M | CUSHION FOOT REAR (SG)        | 22      | ZG-394158M  | SP PLATE CASSETTE HOLDER (SG)   |
| 2A      | SP-408144M | PANEL REAR HX-750 (U) (SG)    | 23      | SM-409218J  | NAME PLATE AKAI-S               |
| 2B      | SP-408145M | PANEL REAR HX-750 (E) (SG)    | 24      | ZW-408744J  | PUSH NUT SPN-2                  |
| 2C      | SP-408146M | PANEL REAR HX-950 (U) (SG)    | 25      | MZ-408740J  | DUMPER 2G50-C                   |
| 2D      | SP-408147M | PANEL REAR HX-950 (E) (SG)    | 26      | ZG-408124M1 | SP TORSION EJECT (L) (SG)       |
| 3       | ZS-394412M | BT BID30X08STL BZN PROJECTION | 27      | ZG-408125M1 | SP TORSION EJECT (R) (SG)       |
| 4       | ZS-331182  | BT BID30X08STL BNI            | 28A     | BB-408782M1 | MECHA GAK9302                   |
| 5A      | SP-408130J | PANEL FRONT 750               |         |             | [750 TAPE-1]                    |
| 5B      | SP-408149J | PANEL FRONT 950               | 28B     | BB-408783M1 | MECHA GAK9603                   |
| 6       | SE-408129M | ESCUTCHEON FRONT (SG)         |         |             | [950 TAPE-1]                    |
| 7       | SB-408140M | BUTTON EJECT (L) (SG)         | 29A     | BB-410525M1 | MECHA GAK9604                   |
| 8       | ZG-408164M | SP PULL EJECT BUTTON (SG)     |         |             | [750 TAPE-2]                    |
| 9       | SB-408141M | BUTTON EJECT (R) (SG)         | 29B     | BB-408781M1 | MECHA GAK9602                   |
| 10      | SE-394092M | REFLECTOR (SG)                |         |             | [950 TAPE-2]                    |
| 11      | SA-394136M | CUSHION FOOT (SG)             | 30      | ML-408121M  | LEVER EJECT (L) (SG)            |
| 12      | SE-408138M | LENS INDICATOR (SG)           | 31      | ML-408128M  | LEVER EJECT (R) (SG)            |
| 13A     | SB-409356M | BUTTON TAPE (3) (SG)          | 32      | ZG-408122M1 | SP TORSION LEVER EJECT (L) (SG) |
|         |            | [750]                         | 33      | ZG-408123M1 | SP TORSION LEVER EJECT (R) (SG) |
| 13B     | SB-408142M | BUTTON TAPE (1) (SG)          | 34      | MZ-408127M  | COLLAR (SG)                     |
|         |            | [950]                         | 35      | ZS-715857   | T2BID20X10STL CMT               |
| 14      | SB-408153M | BUTTON TAPE (2) (SG)          | 36      | ZS-357727   | ST PAN20X05STL CMT              |
| 15      | SB-408139M | BUTTON OP (SG)                | 37      | SP-408143M  | COVER UPPER (SG)                |
| 16      | SK-407866M | KNOB SLIDE (SG)               | 38      | ZS-404181M  | BT BID30X06STL BZN (SG)         |
| 17A     | SP-408133J | LID PANEL (L) 750             | 39      | MZ-411095J  | COLLAR EJECT                    |
| 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)           |         |             |                                 |
| 21      | MZ-408132M | HOLDER LID (R) (SG)           |         |             |                                 |

### NOTE:

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

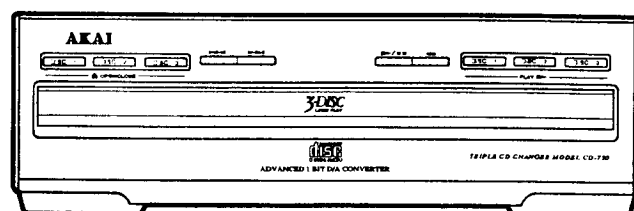
# INDEX

| 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          | CONTinuanance                       | 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           | FLuorescent 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                  |



## MULTI COMPACT DISC PLAYER

# MODEL CD-750

## SPECIFICATIONS

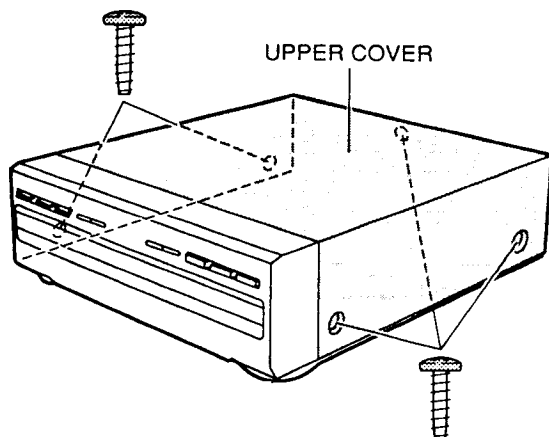
|                                 |                                                  |
|---------------------------------|--------------------------------------------------|
| Type .....                      | 3 discs auto changer                             |
| Pick up system .....            | 3 beam 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 $\pm 1$ dB                        |
| 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.

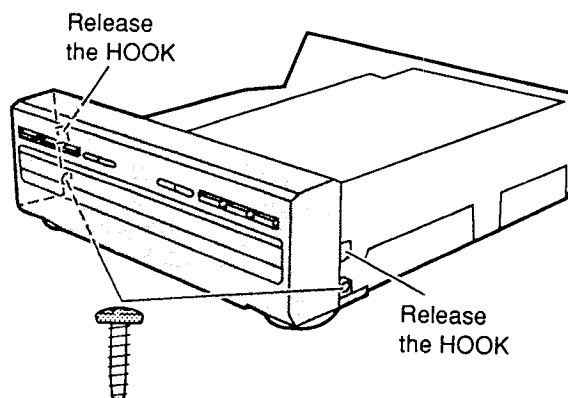
# I. DISASSEMBLY

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

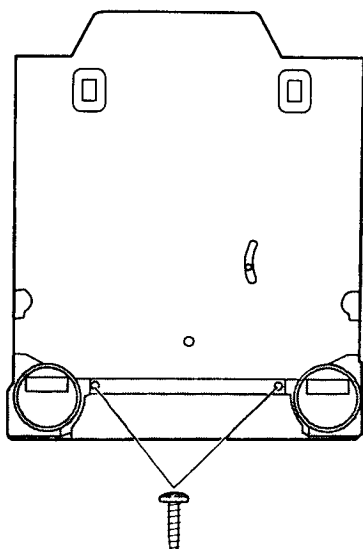
## 1. Removal of the UPPER COVER



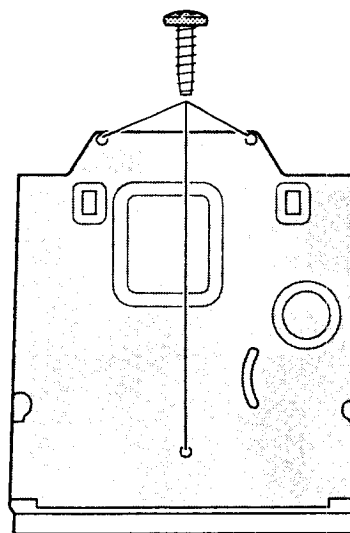
3.



## 2. Removal of the FRONT PANEL



## 4. Removal of the BOTTOM COVER



## II. PRINCIPAL PARTS LOCATION

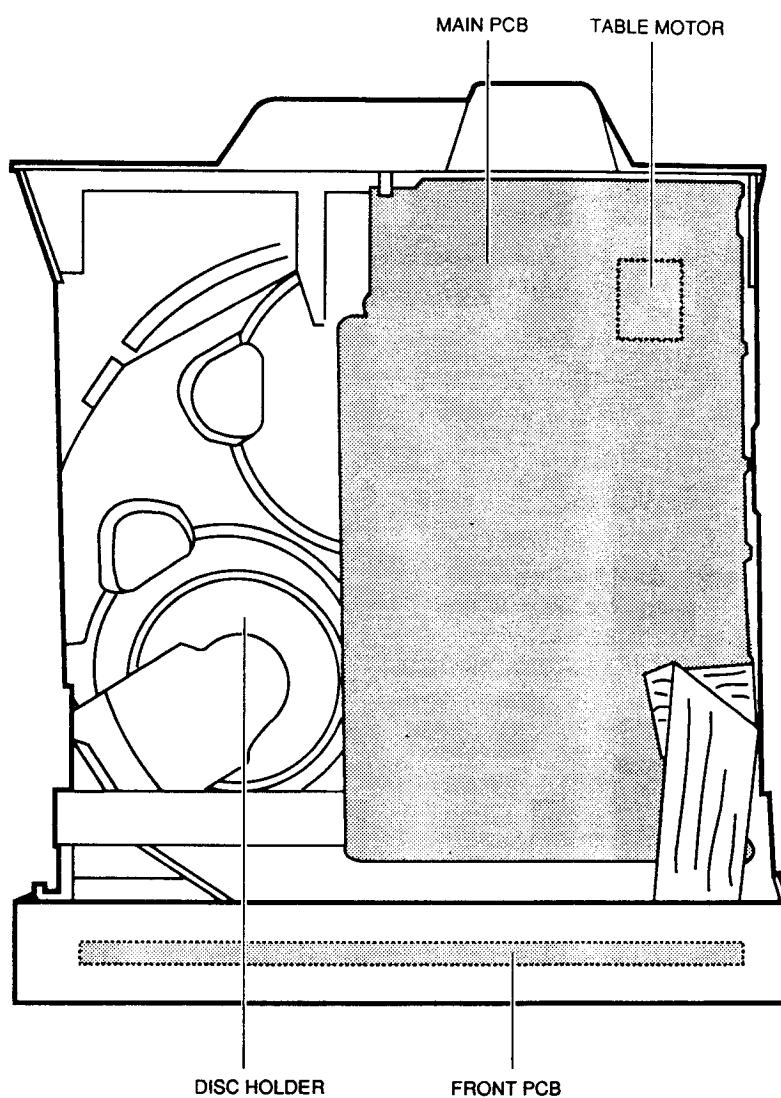


Fig.2-1 Top view

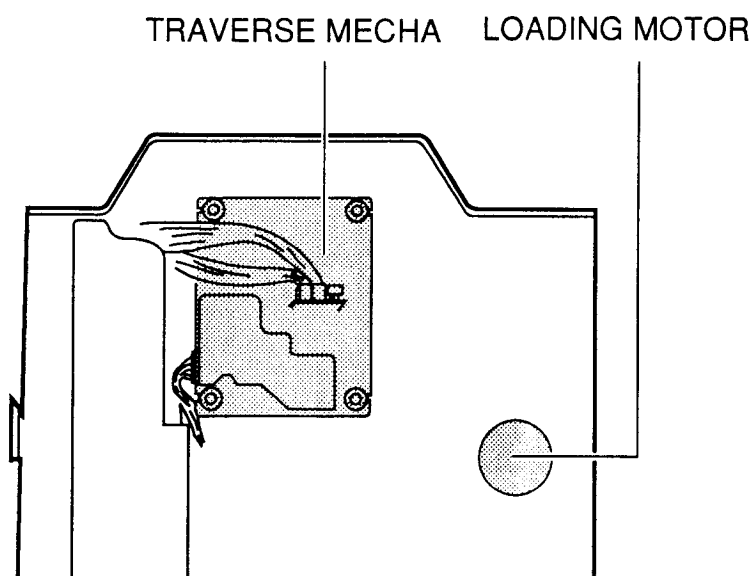


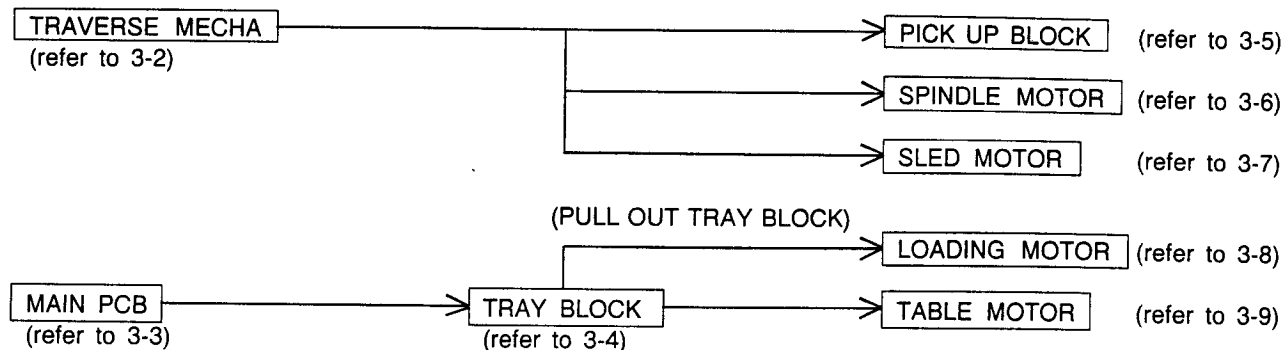
Fig 2-2 Bottom view



# 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.

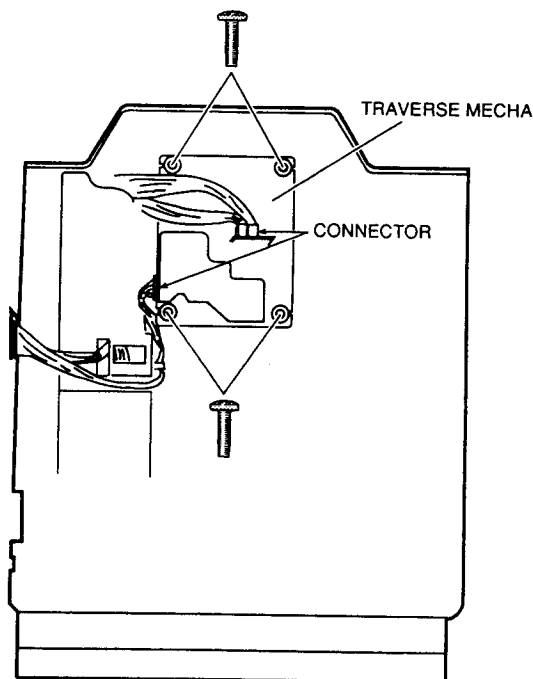


Fig.3-1

## 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.

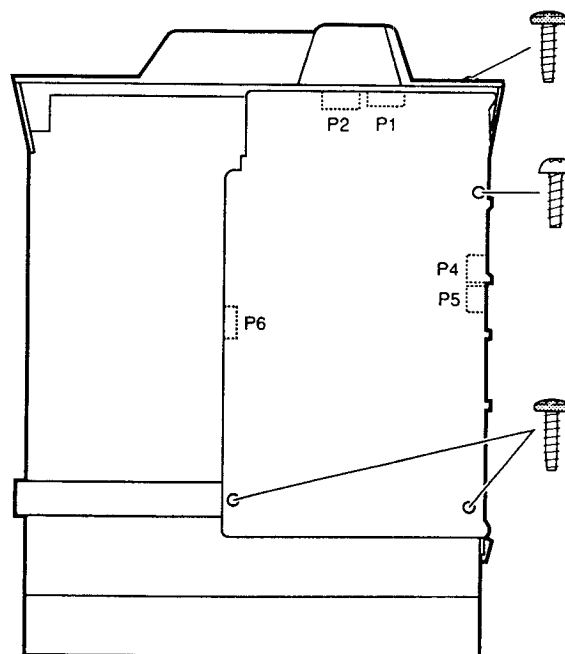


Fig.3-2

### 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.

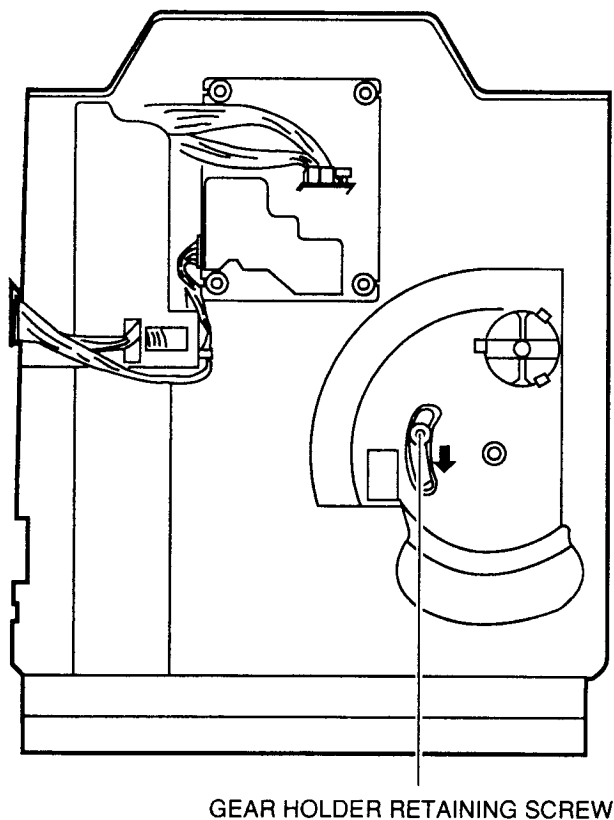


Fig.3-3

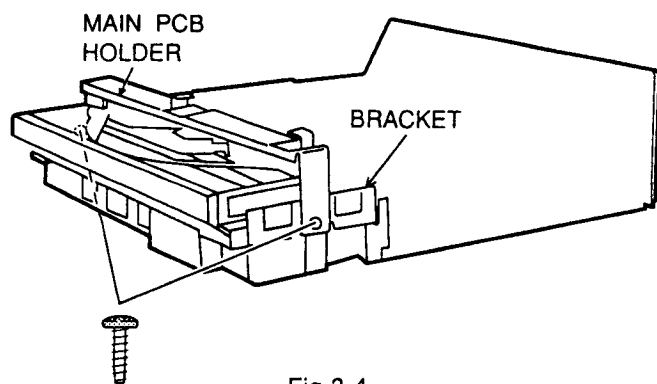


Fig.3-4

### 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.

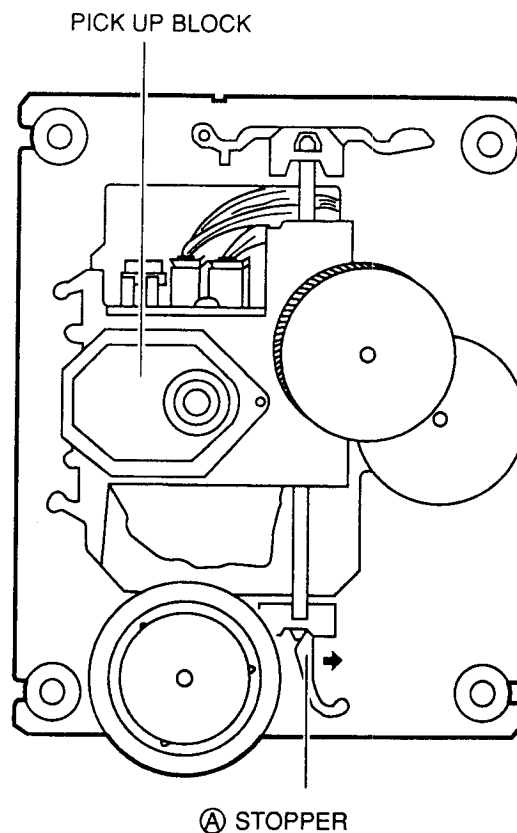


Fig.3-5

### 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 ⑥ SCREWS, then replace the SLED MOTOR.
- 4) Reassemble in the reverse order.

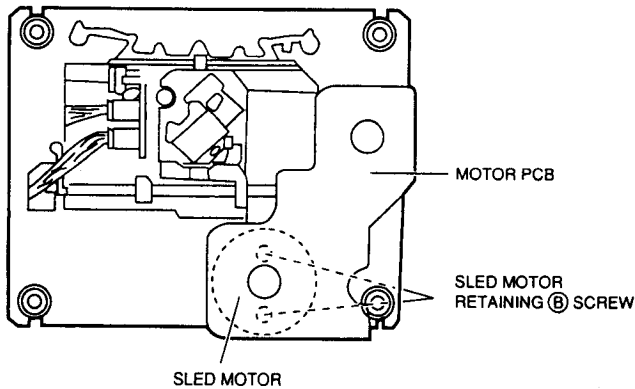
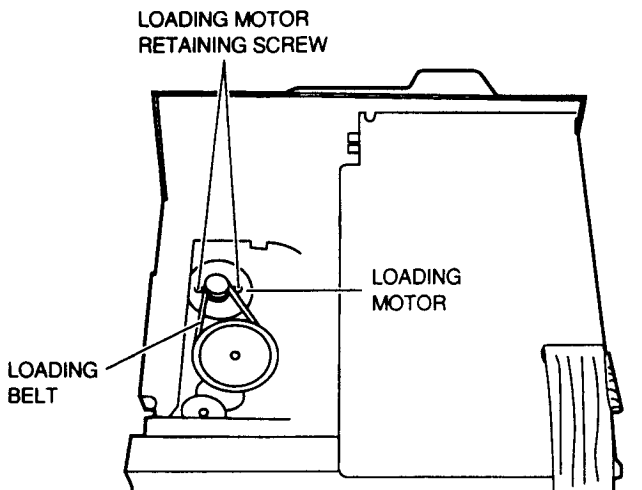


Fig.3-6

### 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).

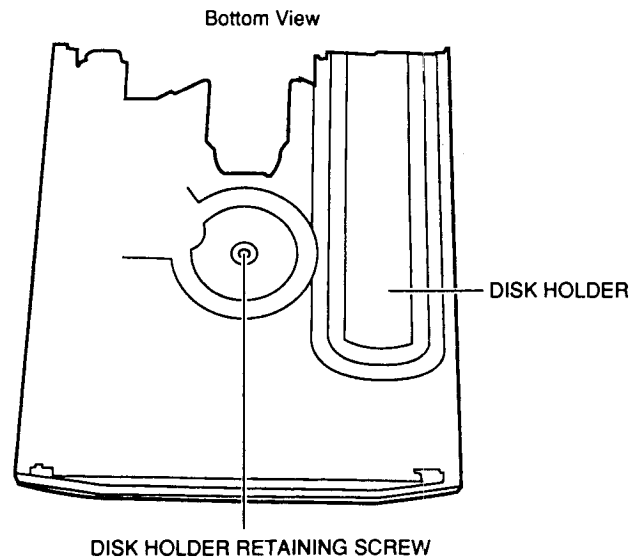
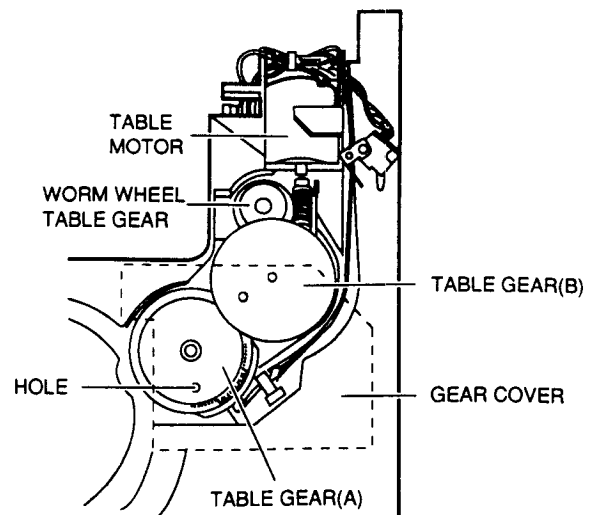


Fig.3-8



# ELECTRICAL ADJUSTMENT

When making adjustments 1 - 5, load a test disc as follows.

After first 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 the SC 1 holder. Press the ►/■ button again to close the tray. Adjustments can now be made.

## TEST POINT ADJUSTMENT

TEST DISC  
TEST MODE or TEST mode  
TEST POINT and ADJUSTMENT parts.  
REMARK (\*), RESULT (\*)

Test point

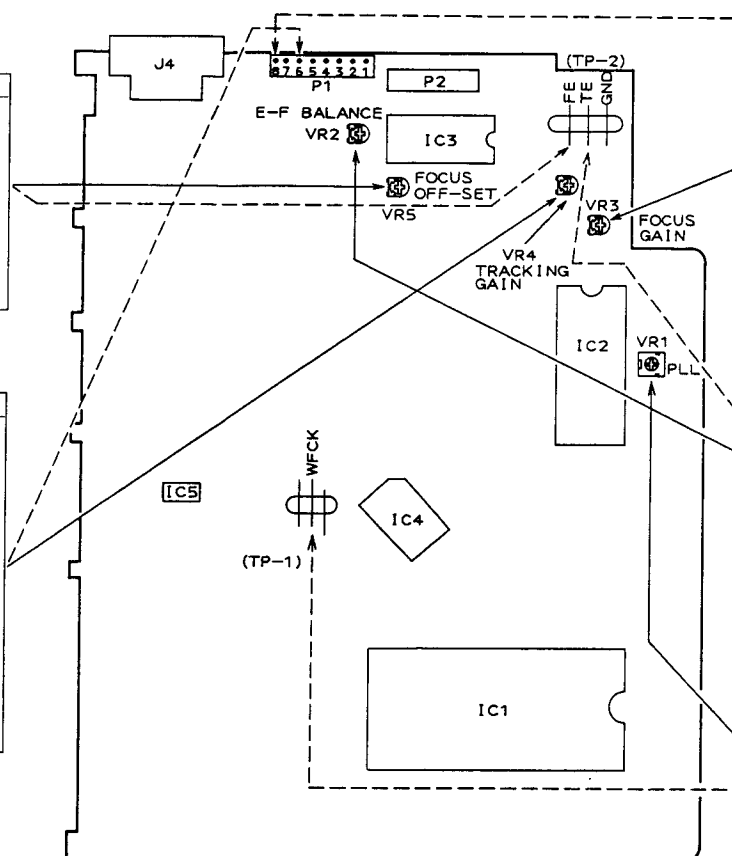
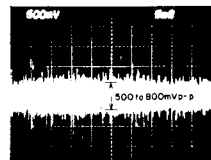
ADJ. part

### 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

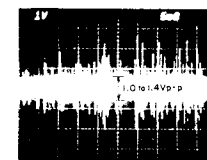
1. Test disc SONY TYPE 3 (AT-711881)
2. Test mode 5
3. P1 ⑥ pin / VR 4
4. • Connect an oscilloscope to the P1 connector ⑥ pin.  
\*500 to 800mVp-p



MAIN PCB  
FRONT

### 3 FOCUS SERVO GAIN

1. Test disc SONY TYPE 3 (AT-711881)
2. Test mode 5
3. P1 ⑥ pin / VR 3
4. • Connect an oscilloscope to the P1 connector ⑥ 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 ►/■ 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

When placing an order for parts, be sure to list Part No., Model No. and the description of each part. Otherwise, the non-delivery of the part or the delivery of a wrong part may result. Please make sure that Part No. is correct when ordering. Not, 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, please use this Parts List for all future reference.

## HOW TO USE THIS PARTS LIST

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. Recommended Spare Parts List shows those parts in the Parts List which are considered particularly important for service. Not shown in the Parts List and "Common List for Service Parts" will not in principle be supplied. Please read the Parts List.

Mechanism Block

## BASE BLOCK

| No.        | Description        |
|------------|--------------------|
| T2023A320A | HEAD BASE BLOCK    |
| H2206A010A | HEAD R/P PR4-8FU C |
| 777876     | PAN20X03STL CMT    |
| 336488     | BID20X08STL CMT    |
| 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 [CA]       |
| X1       | EI-318384 | OSC XTAL 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.

Available PC Board Blocks are listed separately.

Part No. is known, Parts Index at end of Parts List can be used to locate where that part is shown in Parts

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

INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDÉES PAR LE 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-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 RGL10T 223J            |
| 15      | EH-404307J   | COMP R RGL10T 223J            |
| 16      | EH-408656J   | COMP R RGL10T 223J            |
| 17      | EI-330352    | IC BA6109                     |
| 18      | EI-389264J   | IC BA6209N                    |
| 19      | EI-390112J   | IC CXA1081S                   |
| 20      | EI-390120J   | IC CXA1082BS                  |
| 21      | EI-403497J   | IC CXD11670                   |
| 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 XTAL 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)   |

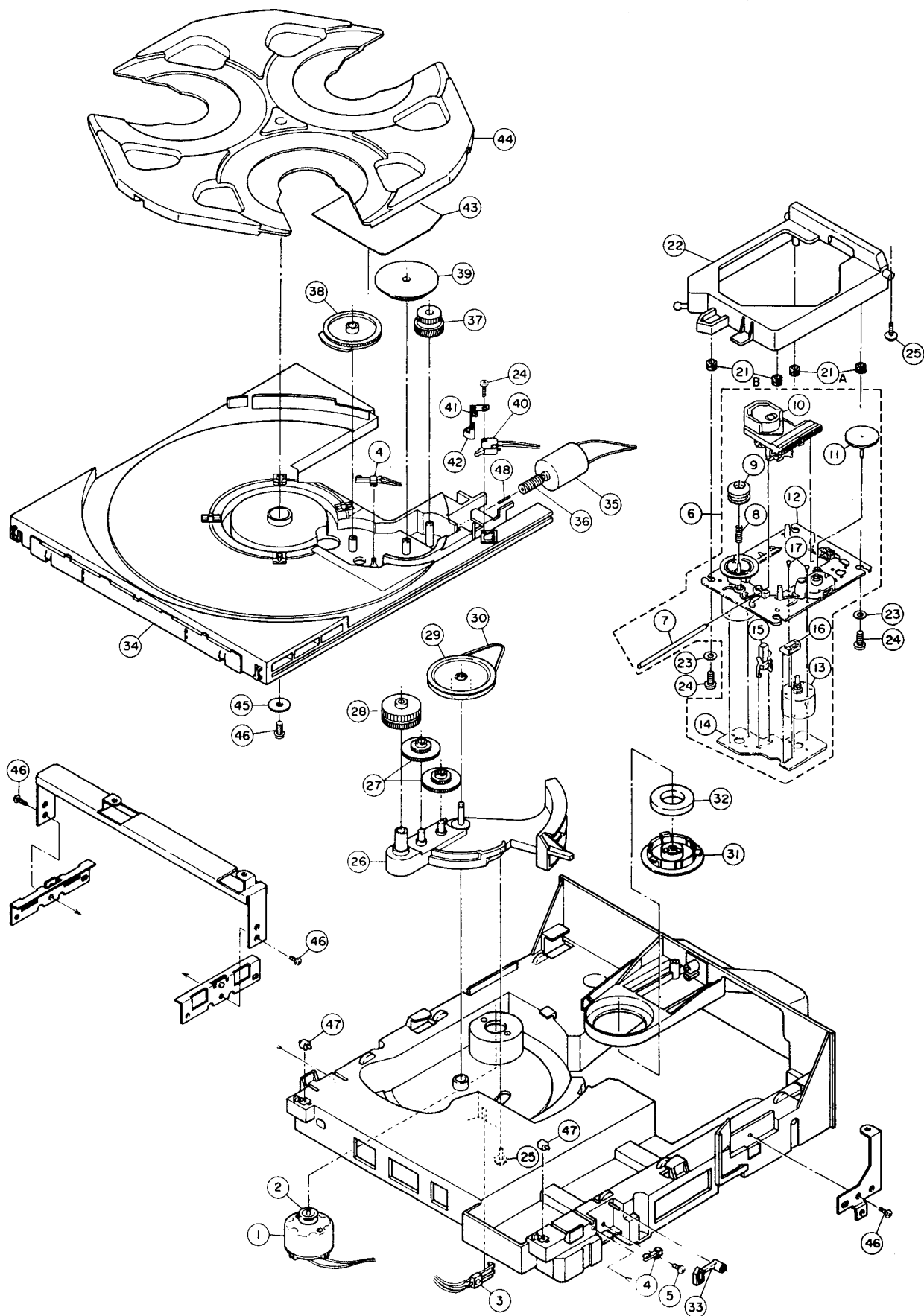
## 2. CD MECHANISM

| 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-411982M1  | 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 SSC1L-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 RGL13X 223J           |
| IB2     | EH-408654J  | COMP R RGL10T 223J           |
| IB3     | EH-408656J  | COMP R RGL6X 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-355829   | R S-FIX H RH0615C 0.10W 223  |

| Ref.No. | Part No.   | Description                    |
|---------|------------|--------------------------------|
| VR4     | EV-355829  | R S-FIX H RH0615C 0.10W 223    |
| VR5     | EV-355829  | 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 |

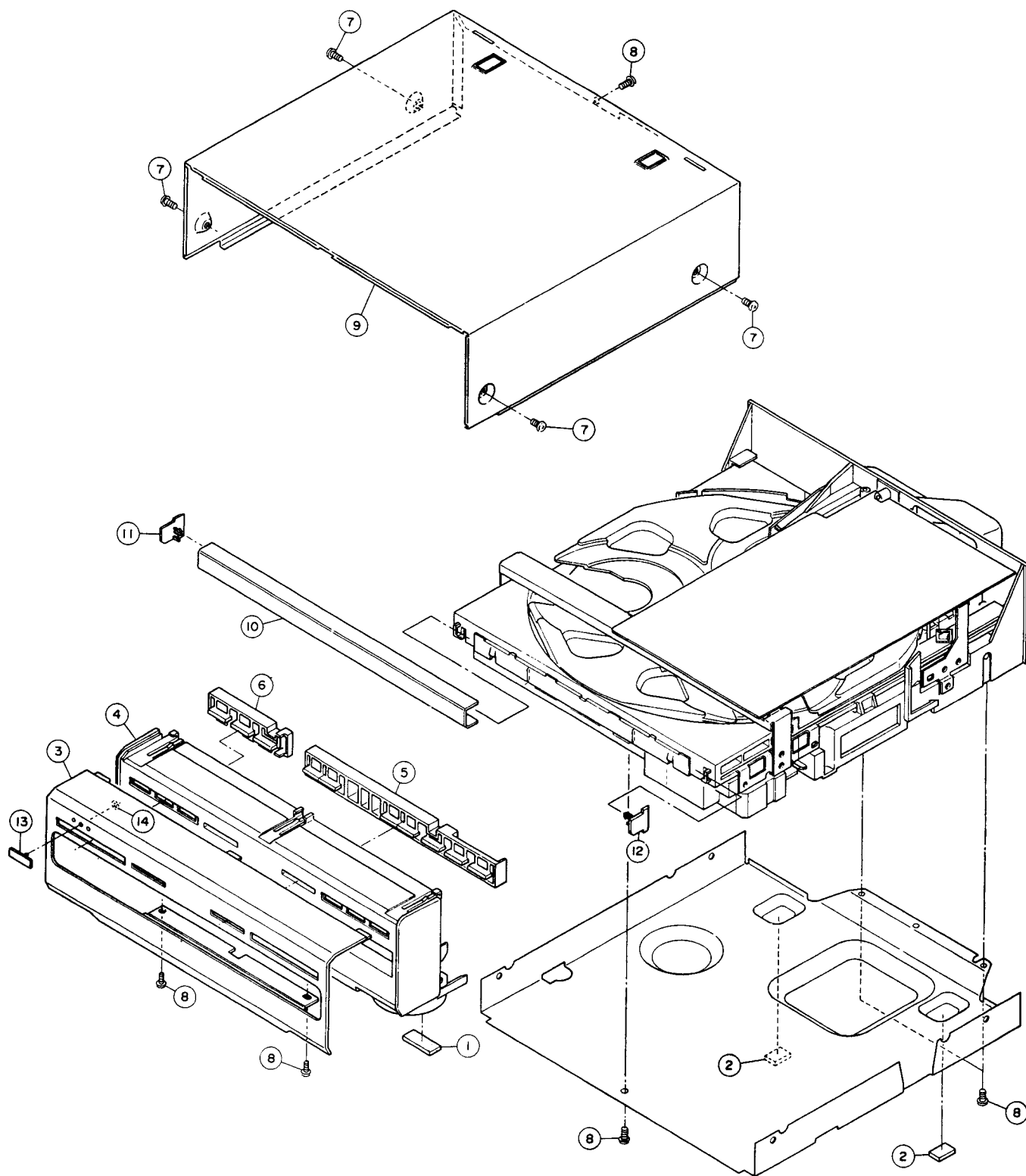
### 6. FINAL ASSEMBLY

| 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. | Part No.   | Ref. No. | Part No.  | Ref. No. | Part No. | Ref. No. |
|--------------|----------|------------|----------|-----------|----------|----------|----------|
| BAP2069T030B | 3-1      | ET354371   | 4-TR16   | ZS343082  | 2-5      |          |          |
| BB408757N1   | 2-6      | ET360399   | 4-TR9    | ZS390395J | 2-24     |          |          |
| BL409250M    | 2-26     | ET360399   | 4-TR14   | ZS394412M | 6-8      |          |          |
| BM374198     | 2-35     | ET360399   | 4-TR15   | ZS407886M | 2-25     |          |          |
| BM408752M    | 2-1      | ET369248   | 4-TR19   | ZS477876  | 2-17     |          |          |
| BM733203J    | 2-13     | ET379239   | 4-TR21   | ZW396336M | 2-45     |          |          |
| BO394728J    | 2-10     | ET379239   | 4-TR23   | ZW408744J | 6-14     |          |          |
| EA733204J    | 2-14     | ET388338J  | 4-TR6    | ZW409219M | 2-23     |          |          |
| ED307572     | 4-D11    | ET388338J  | 4-TR22   |           |          |          |          |
| ED307572     | 4-D12    | ET388338J  | 4-TR26   |           |          |          |          |
| ED307572     | 4-D13    | ET388338J  | 4-TR28   |           |          |          |          |
| ED307572     | 4-D19    | ET394919J  | 4-TR24   |           |          |          |          |
| ED307572     | 4-D20    | ET396072J  | 4-TR2    |           |          |          |          |
| ED400171J    | 4-D7     | ET396072J  | 4-TR3    |           |          |          |          |
| ED400171J    | 4-D9     | ET396072J  | 4-TR4    |           |          |          |          |
| ED400171J    | 4-D15    | ET396072J  | 4-TR25   |           |          |          |          |
| ED403743J    | 4-D14    | ET396072J  | 4-TR27   |           |          |          |          |
| ED408651J    | 5-D301   | ET397160J  | 4-TR1    |           |          |          |          |
| ED408651J    | 5-D302   | ET397160J  | 4-TR8    |           |          |          |          |
| ED408651J    | 5-D303   | ET397160J  | 4-TR11   |           |          |          |          |
| ED408719J    | 4-D18    | ET397160J  | 4-TR12   |           |          |          |          |
| ED408720J    | 4-D17    | ET397160J  | 4-TR13   |           |          |          |          |
| ED408721J    | 4-D16    | EV356576   | 4-VR5    |           |          |          |          |
| ED511907     | 4-D1     | EV358829   | 4-VR2    |           |          |          |          |
| ED511907     | 4-D2     | EV358829   | 4-VR3    |           |          |          |          |
| ED511907     | 4-D3     | EV358829   | 4-VR4    |           |          |          |          |
| ED511907     | 4-D4     | EV404260J  | 4-VR1    |           |          |          |          |
| ED511907     | 4-D5     | EW408749M  | 2-18     |           |          |          |          |
| ED511907     | 4-D6     | EW408750M  | 2-19     |           |          |          |          |
| EH404307J    | 4-IB1    | EW408751M  | 2-20     |           |          |          |          |
| EH408654J    | 4-IB2    | MA733202J  | 2-12     |           |          |          |          |
| EH408656J    | 4-IB3    | MB407746M  | 2-21A    |           |          |          |          |
| EI213390     | 4-IC7    | MB407767M  | 2-30     |           |          |          |          |
| EI330352     | 4-IC10   | MB411992M  | 2-21B    |           |          |          |          |
| EI381139J    | 4-X1     | ML407742M  | 2-42     |           |          |          |          |
| EI387938J    | 4-IC8    | ML407765J  | 2-33     |           |          |          |          |
| EI389264J    | 4-IC9    | MR407755M  | 2-47     |           |          |          |          |
| EI390112J    | 4-IC3    | MR407764M  | 2-2      |           |          |          |          |
| EI390120J    | 4-IC2    | MS411215J  | 2-48     |           |          |          |          |
| EI390149J    | 4-X2     | MS733198J  | 2-7      |           |          |          |          |
| EI393325J    | 4-IC6    | MZ407733M  | 2-28     |           |          |          |          |
| EI403497J    | 4-IC4    | MZ407734J1 | 2-27     |           |          |          |          |
| EI408657J1   | 4-IC1    | MZ407737M  | 2-38     |           |          |          |          |
| EI408658J    | 4-IC5    | MZ407738M  | 2-39     |           |          |          |          |
| EJ408660J    | 4-J4     | MZ407739M  | 2-37     |           |          |          |          |
| EJ733206J    | 2-16     | MZ407740J  | 2-36     |           |          |          |          |
| ER394882J    | 4-R50    | MZ407745M  | 2-22     |           |          |          |          |
| ER394882J    | 4-R53    | MZ407749M  | 2-44     |           |          |          |          |
| ES394427J    | 5-TS301  | MZ407763J1 | 2-29     |           |          |          |          |
| ES394427J    | 5-TS302  | MZ408753J  | 2-32     |           |          |          |          |
| ES394427J    | 5-TS303  | MZ410907J1 | 2-31     |           |          |          |          |
| ES394427J    | 5-TS304  | MZ733200J  | 2-9      |           |          |          |          |
| ES394427J    | 5-TS305  | MZ733201J  | 2-11     |           |          |          |          |
| ES394427J    | 5-TS306  | SA394136M  | 6-1      |           |          |          |          |
| ES394427J    | 5-TS307  | SA407840M  | 6-2      |           |          |          |          |
| ES394427J    | 5-TS308  | SB408027M  | 6-5      |           |          |          |          |
| ES394427J    | 5-TS309  | SB408028M  | 6-6      |           |          |          |          |
| ES394427J    | 5-TS310  | SC407748M  | 2-34     |           |          |          |          |
| ES408754M    | 2-4      | SC408030M  | 6-11     |           |          |          |          |
| ES408755M    | 2-3      | SC408031M  | 6-12     |           |          |          |          |
| ES408758M    | 2-40     | SE408024M  | 6-4      |           |          |          |          |
| ES733205J    | 2-15     | SM409218J  | 6-13     |           |          |          |          |
| ET353899     | 4-TR5    | SP408022M  | 6-9      |           |          |          |          |
| ET353899     | 4-TR7    | SP408026J  | 6-3      |           |          |          |          |
| ET354364     | 4-TR17   | SP408029J  | 6-10     |           |          |          |          |
| ET354364     | 4-TR18   | SZ407750M  | 2-43     |           |          |          |          |
| ET354365     | 4-TR10   | ZG407741M  | 2-41     |           |          |          |          |
| ET354365     | 4-TR29   | ZG733199J  | 2-8      |           |          |          |          |
| ET354365     | 4-TR30   | ZS331182   | 2-46     |           |          |          |          |
| ET354365     | 4-TR31   | ZS331182   | 6-7      |           |          |          |          |

## 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 <sup>2</sup> FM                         | 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 <sub>1</sub> , R <sub>2</sub> , etc. | Data for Right Channel                 |
| f                                         | Frequency of Sampling                    | RAM                                       | Random Access Memory                   |
| GF                                        | Galois Field                             | RPG                                       | Rear Pulse Gate                        |
| H & V (Parity)                            | Horizontal & 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 <sub>1</sub> , L <sub>2</sub> , 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)

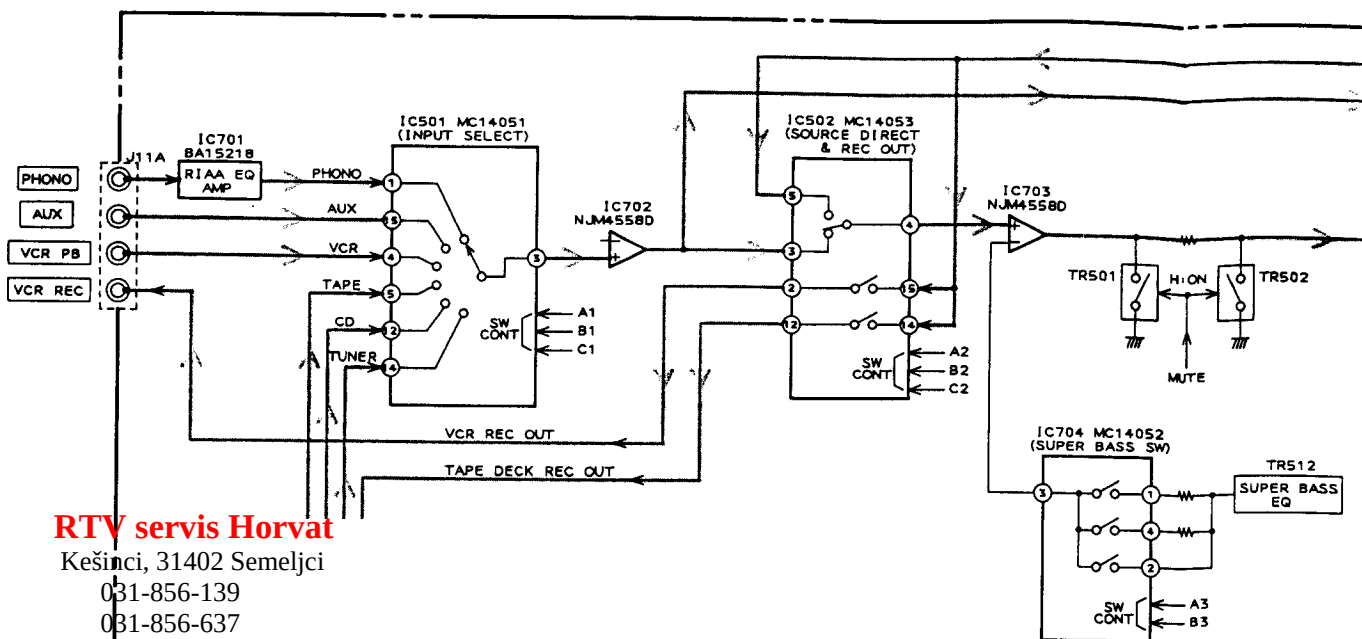
**MODEL MX-950**  
(TP-750, EA-750, PA-950, HX-950, CD-750)

## SCHEMATIC DIAGRAMS AND PC BOARDS

### TABLE OF CONTENTS

|                                              |           |
|----------------------------------------------|-----------|
| <b>I. BLOCK DIAGRAMS</b>                     |           |
| 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         |
| <b>II. SCHEMATIC DIAGRAMS AND PC BOARDS</b>  |           |
| 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        |
| <b>III. INFORMATION OF ICs .....</b>         | <b>24</b> |

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



**RTV servis Horvat**

Kešinci, 31402 Semeljci

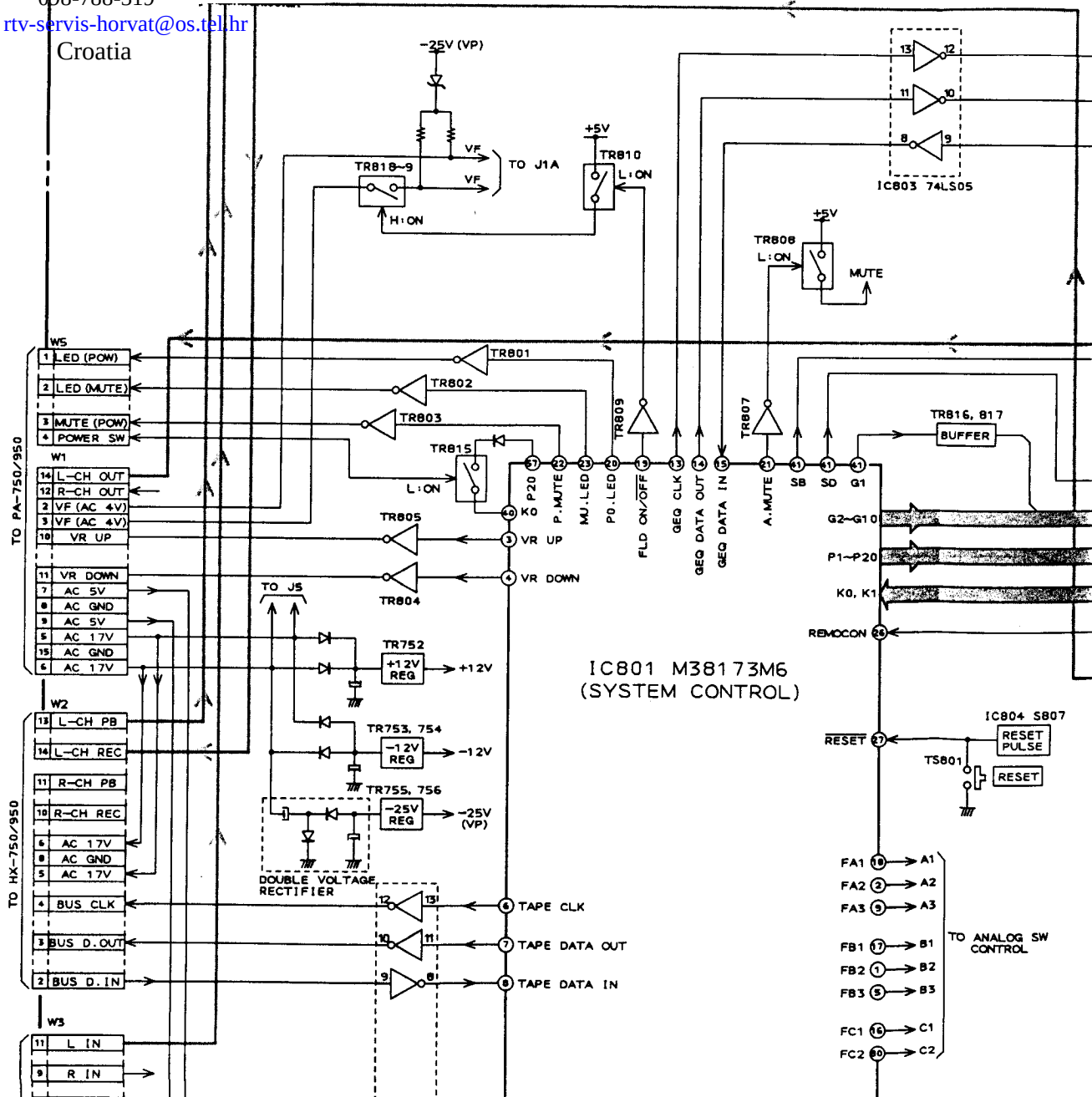
031-856-139

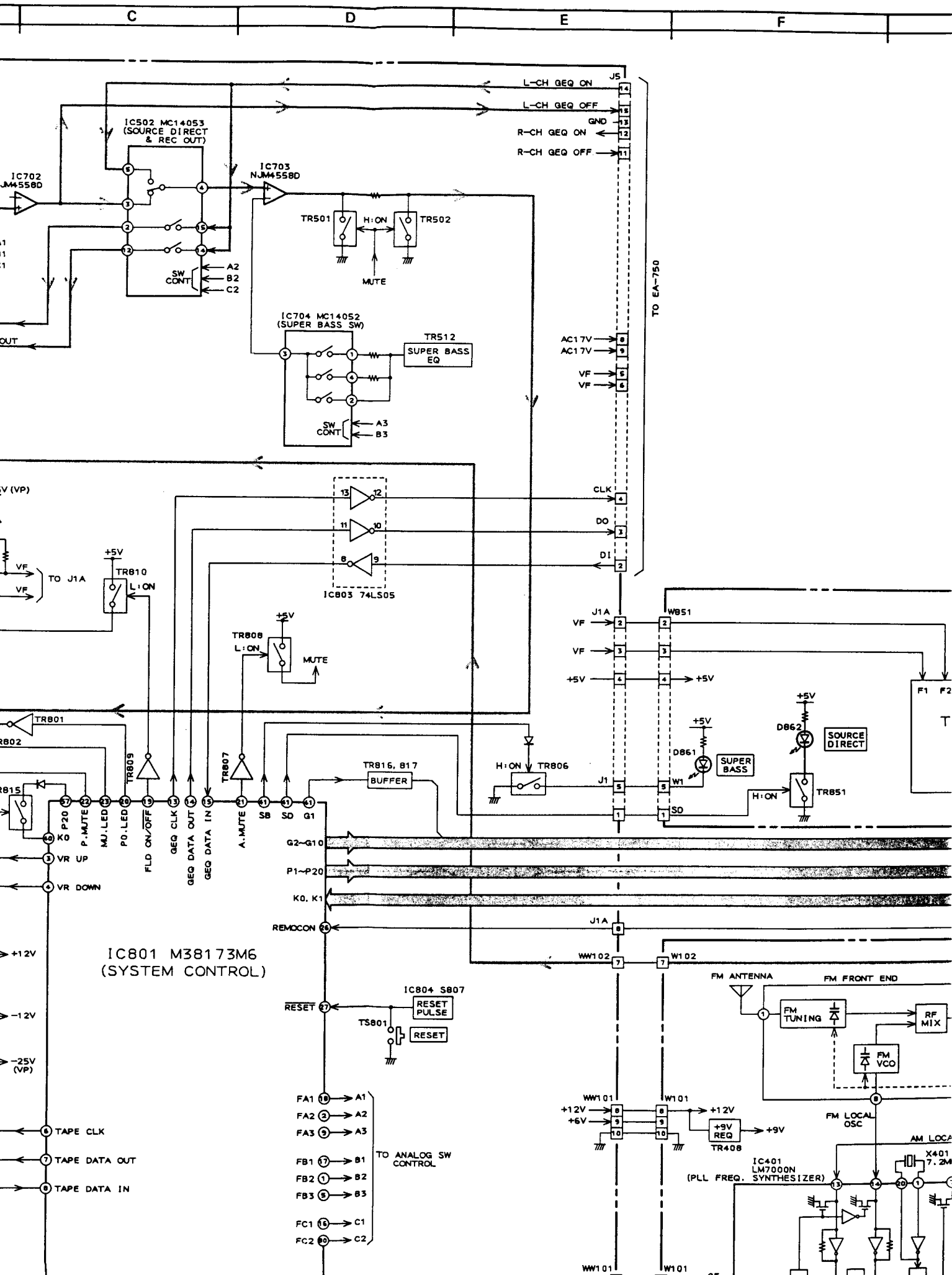
031-856-637

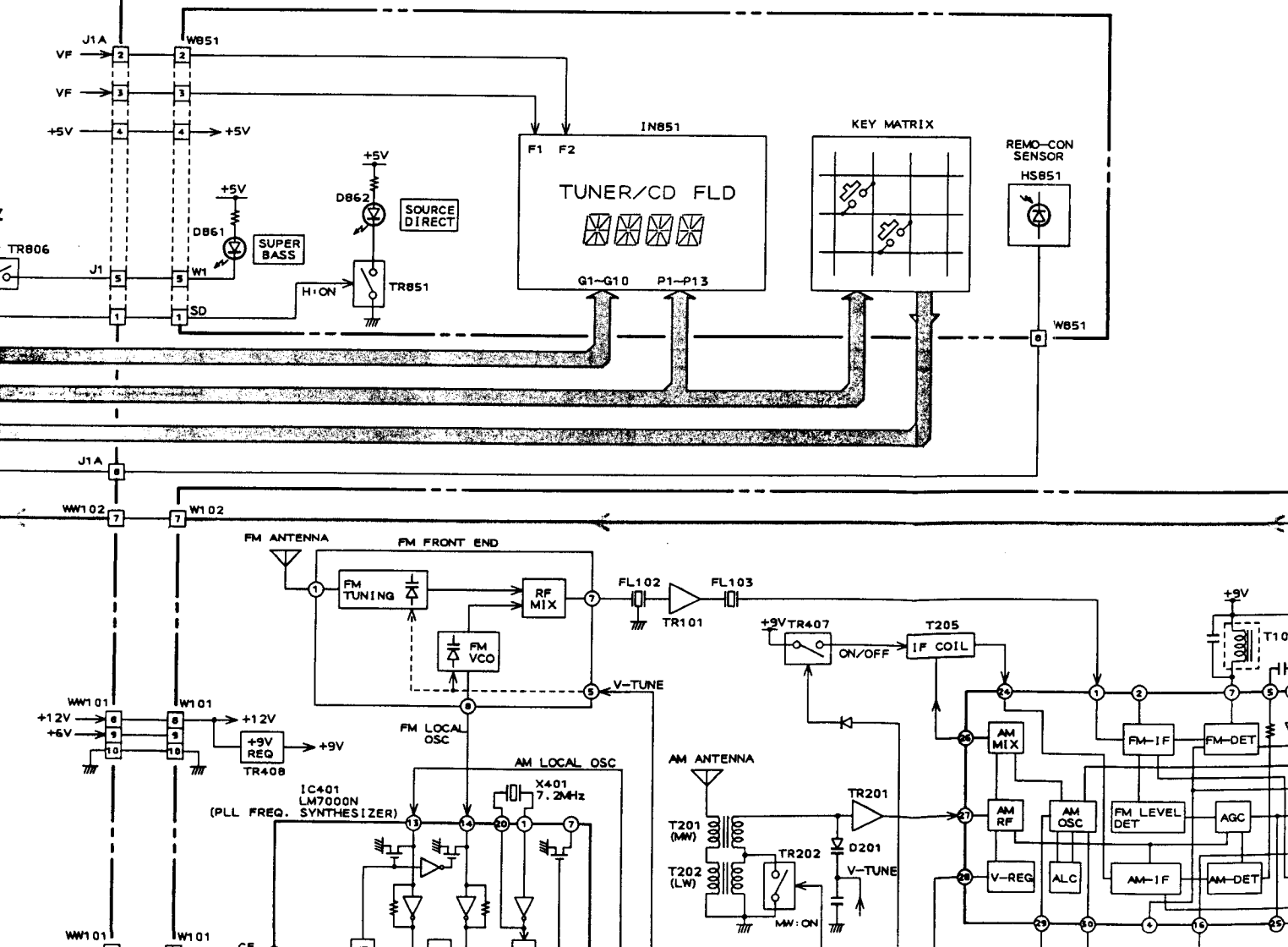
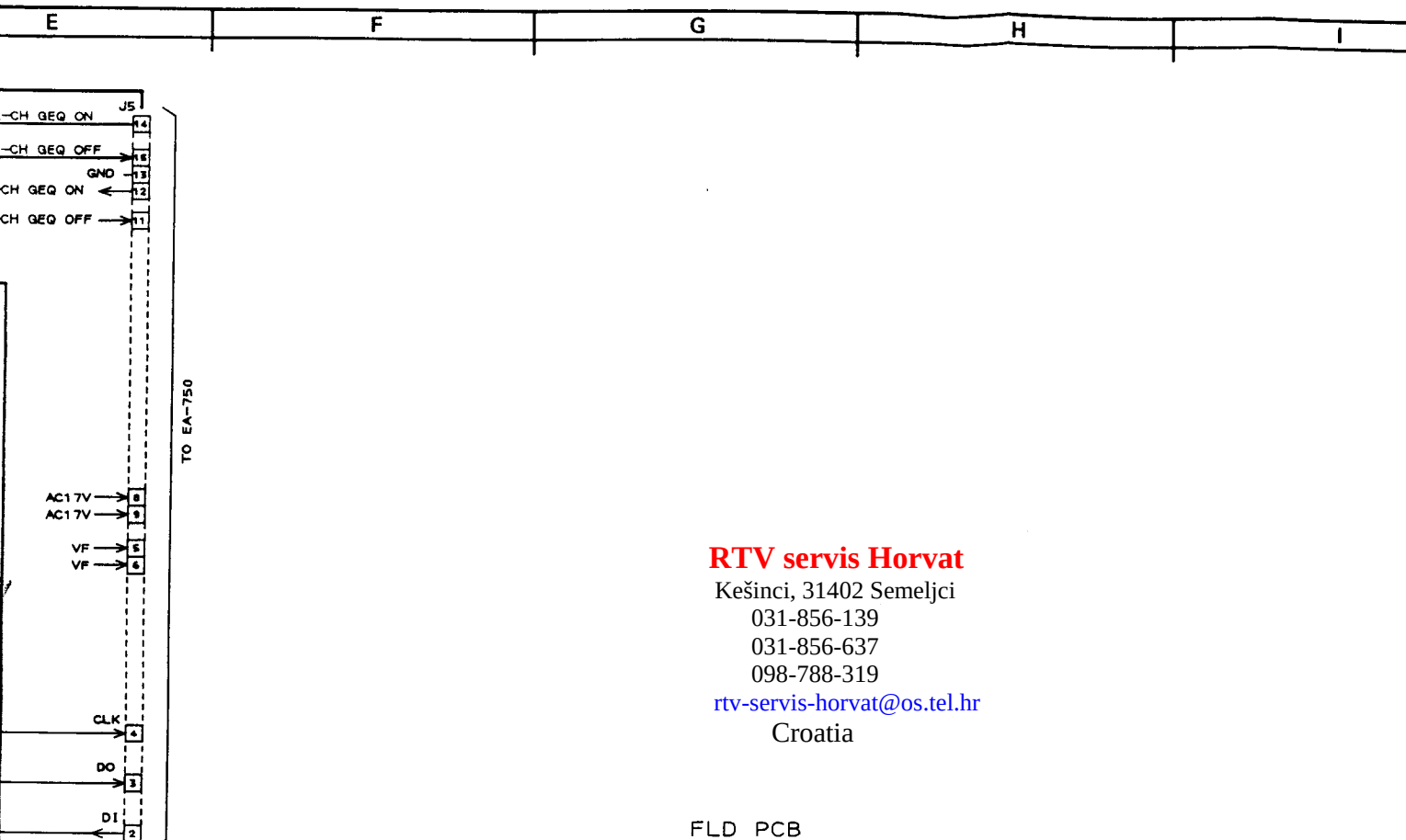
098-788-319

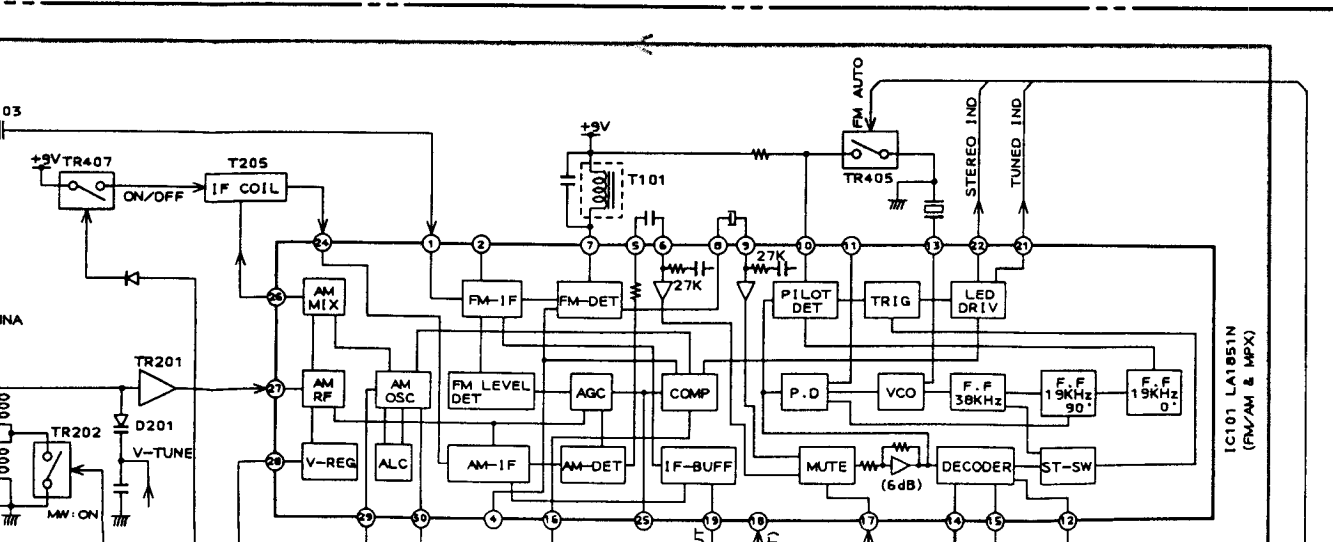
[rtv-servis-horvat@os.tel.hr](mailto:rtv-servis-horvat@os.tel.hr)

Croatia









3

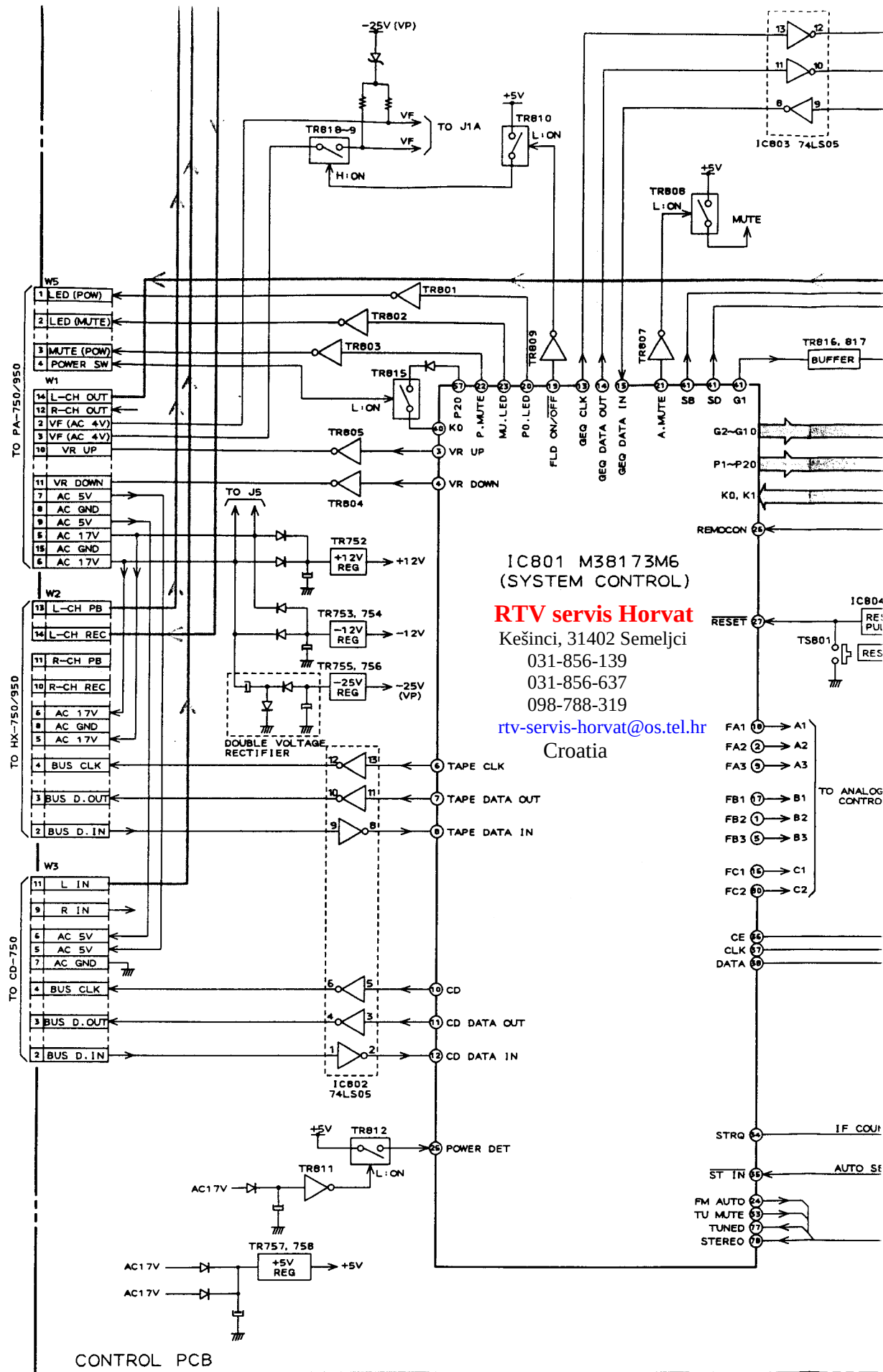
4

5

6

7

8







# RTV servis Horvat

Kešinci, 31402 Semeljci

031-856-139

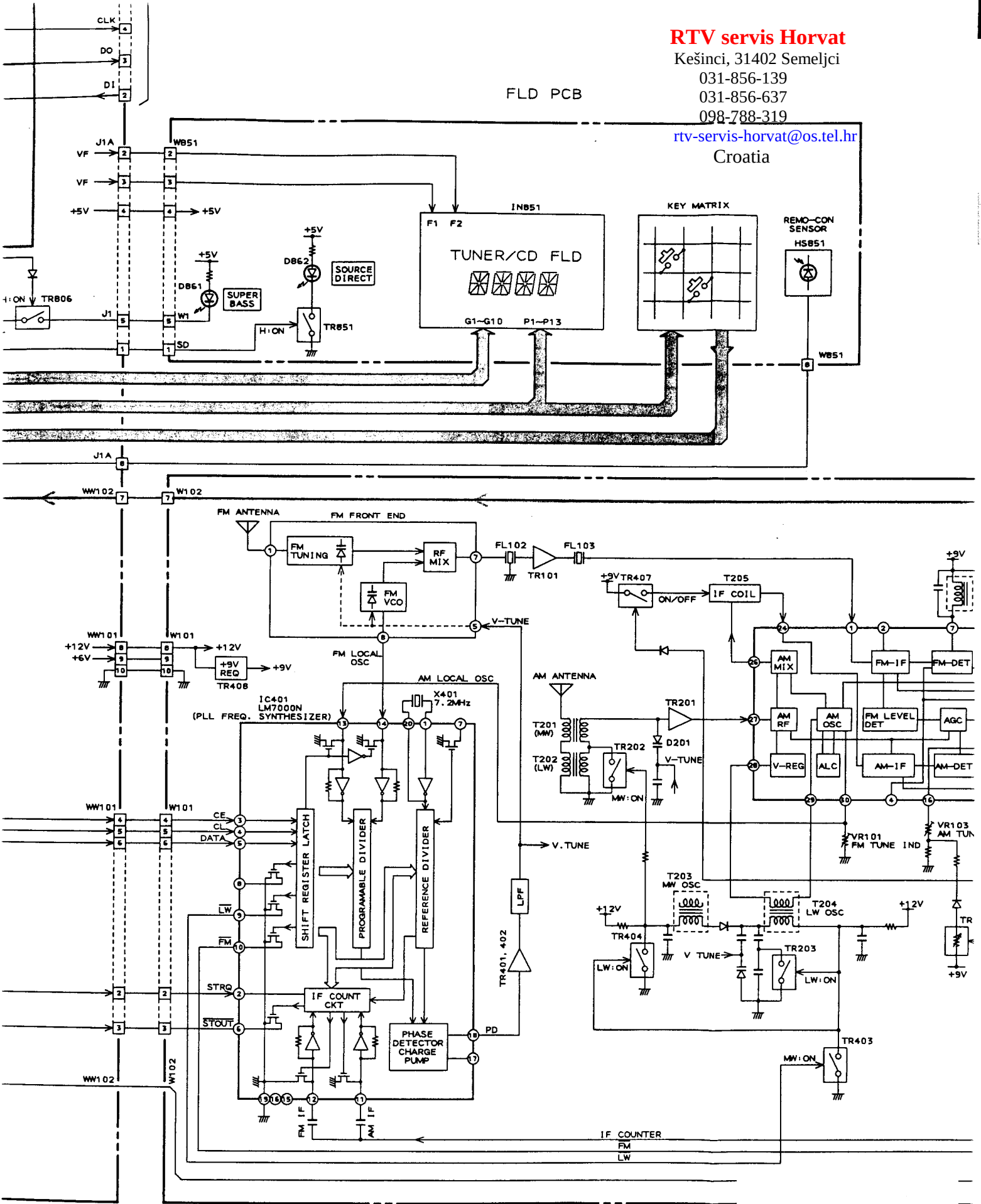
031-856-637

098-788-319

[rtv-servis-horvat@os.tel.hr](mailto:rtv-servis-horvat@os.tel.hr)

Croatia

FLD PCB

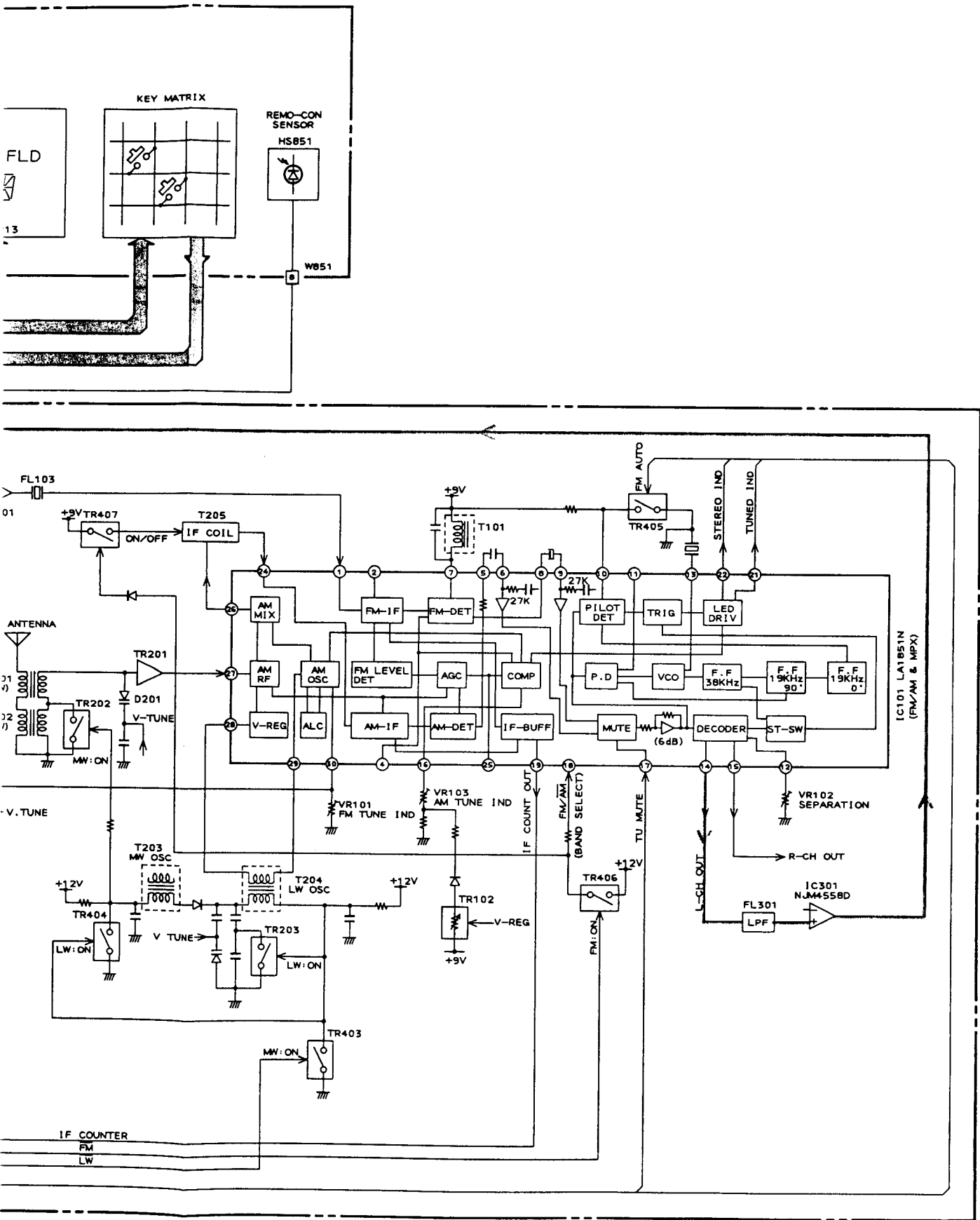


TUNER PCB

AUDIO SIGNAL LINE (L-CH)

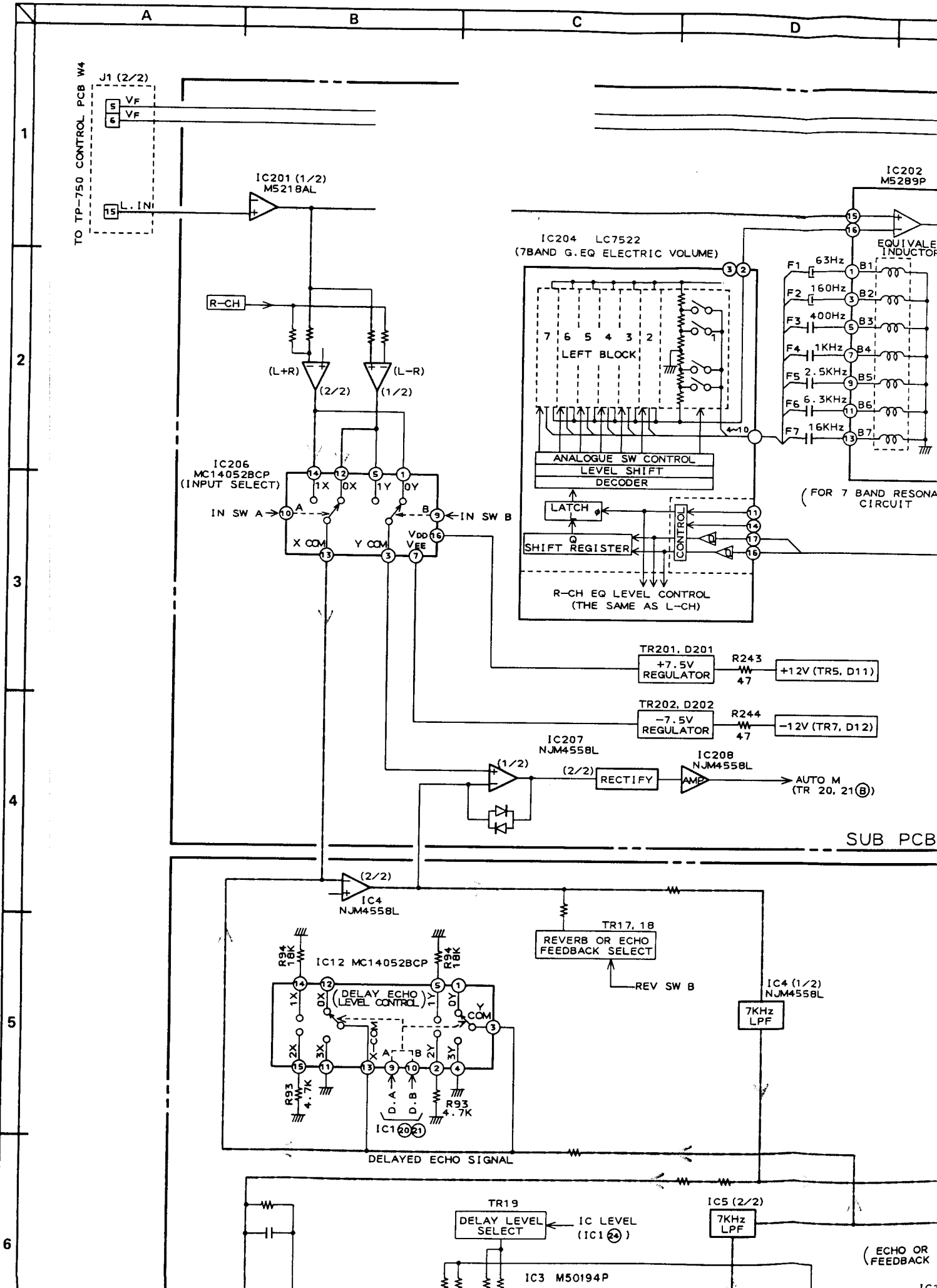
3  
4  
5  
6  
7  
8

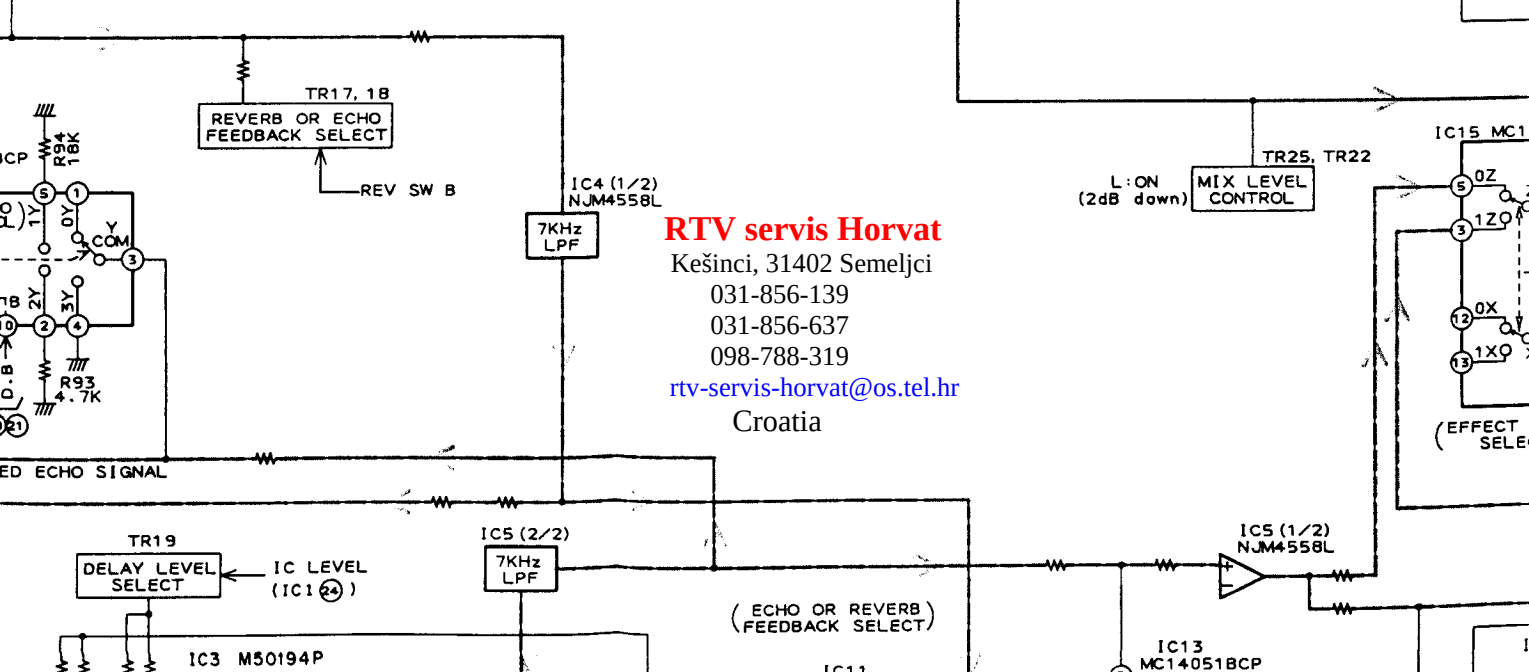
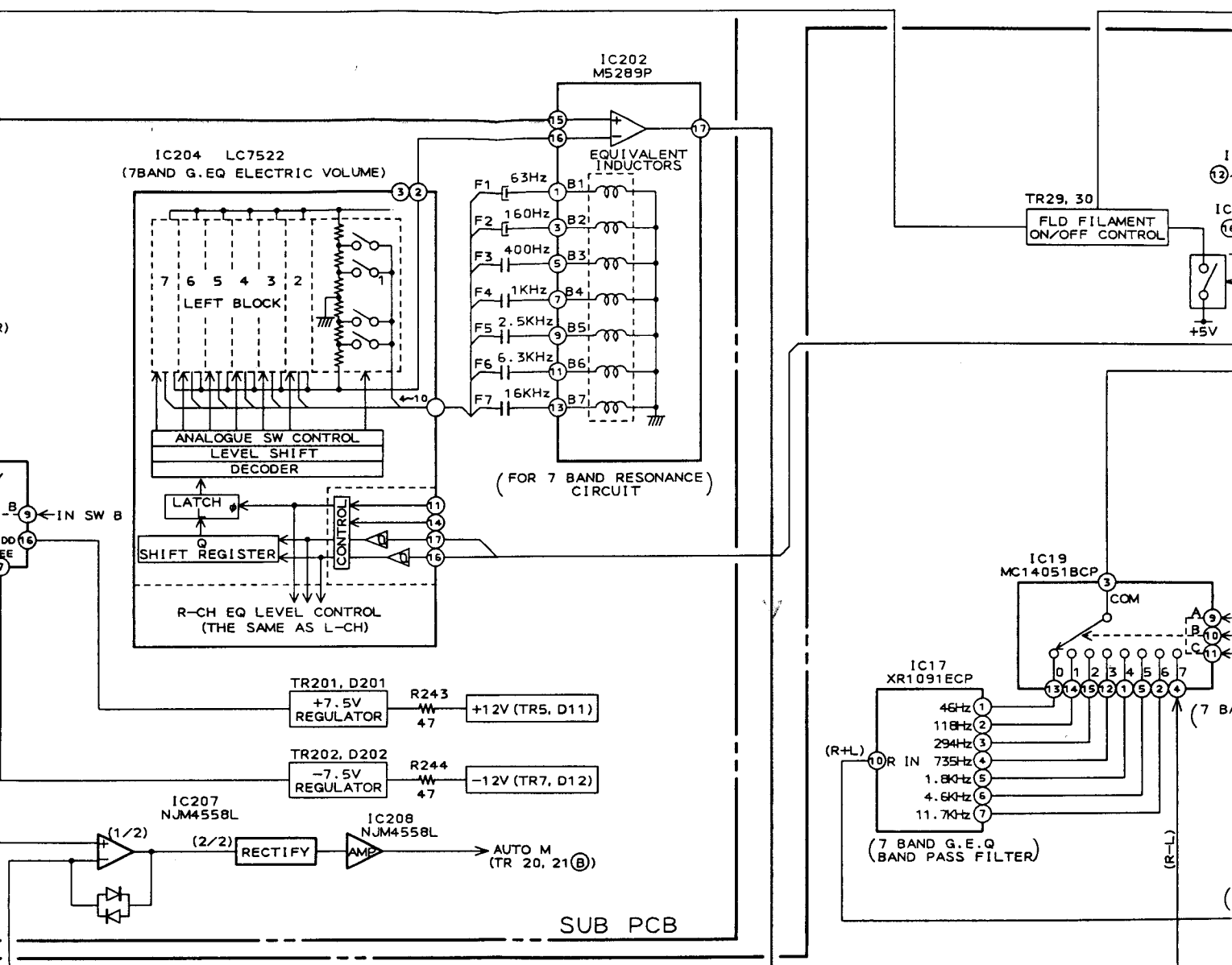
PCB



AUDIO SIGNAL LINE (L-CH)

TP-750  
BLOCK DIAGRAM  
No.5-1 A600951M





**RTV servis Horvat**

Kešinci, 31402 Semeljci

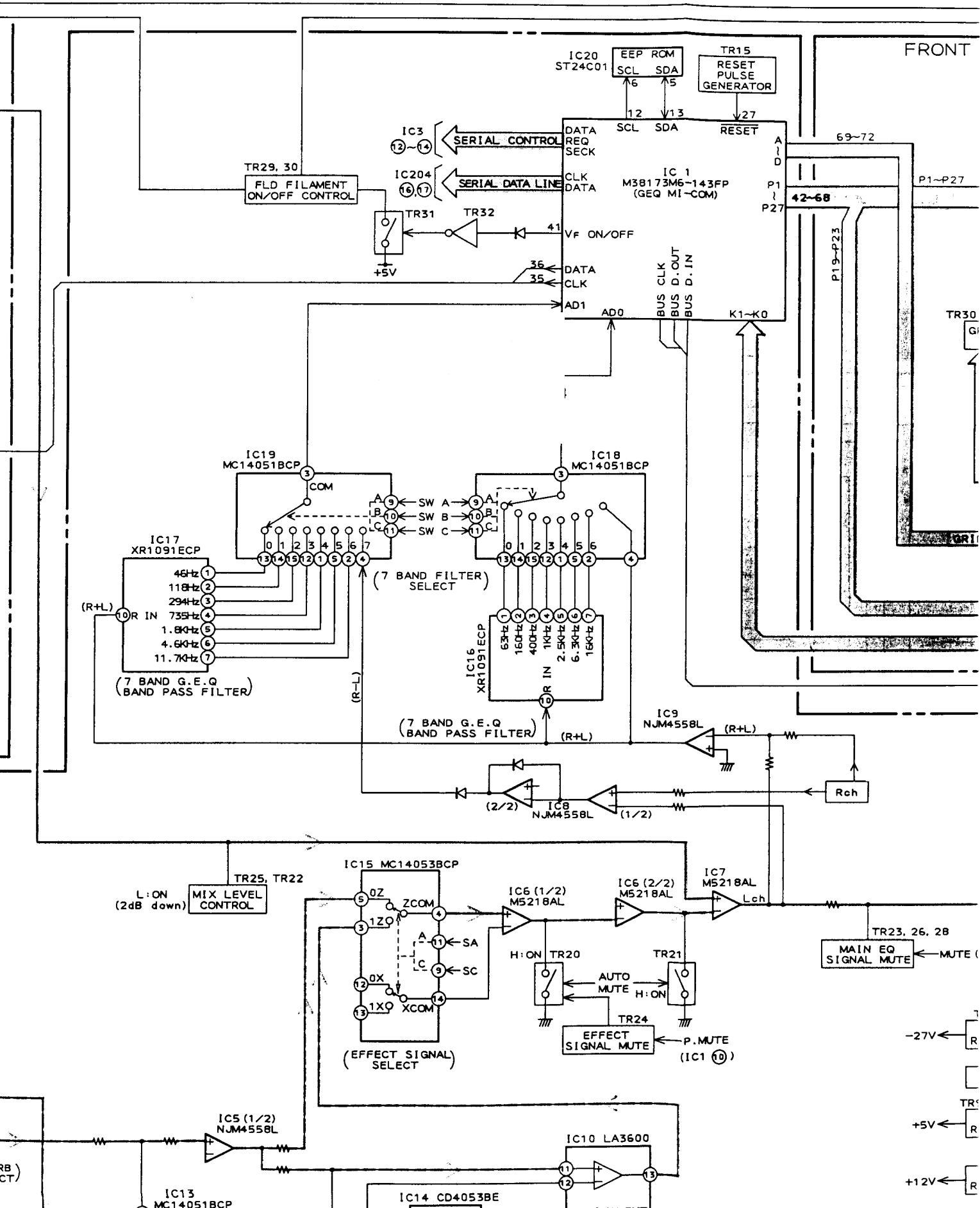
031-856-139

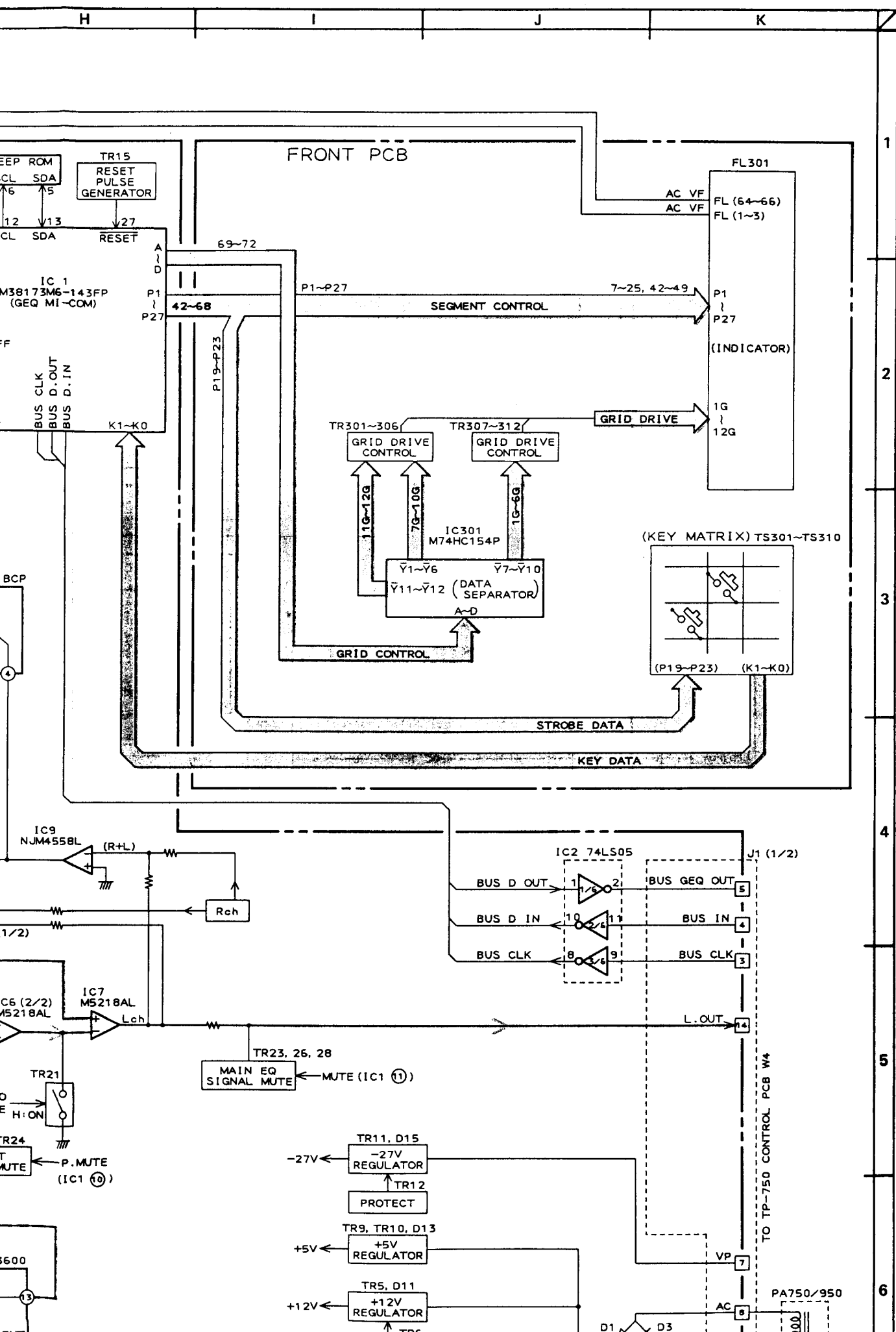
031-856-637

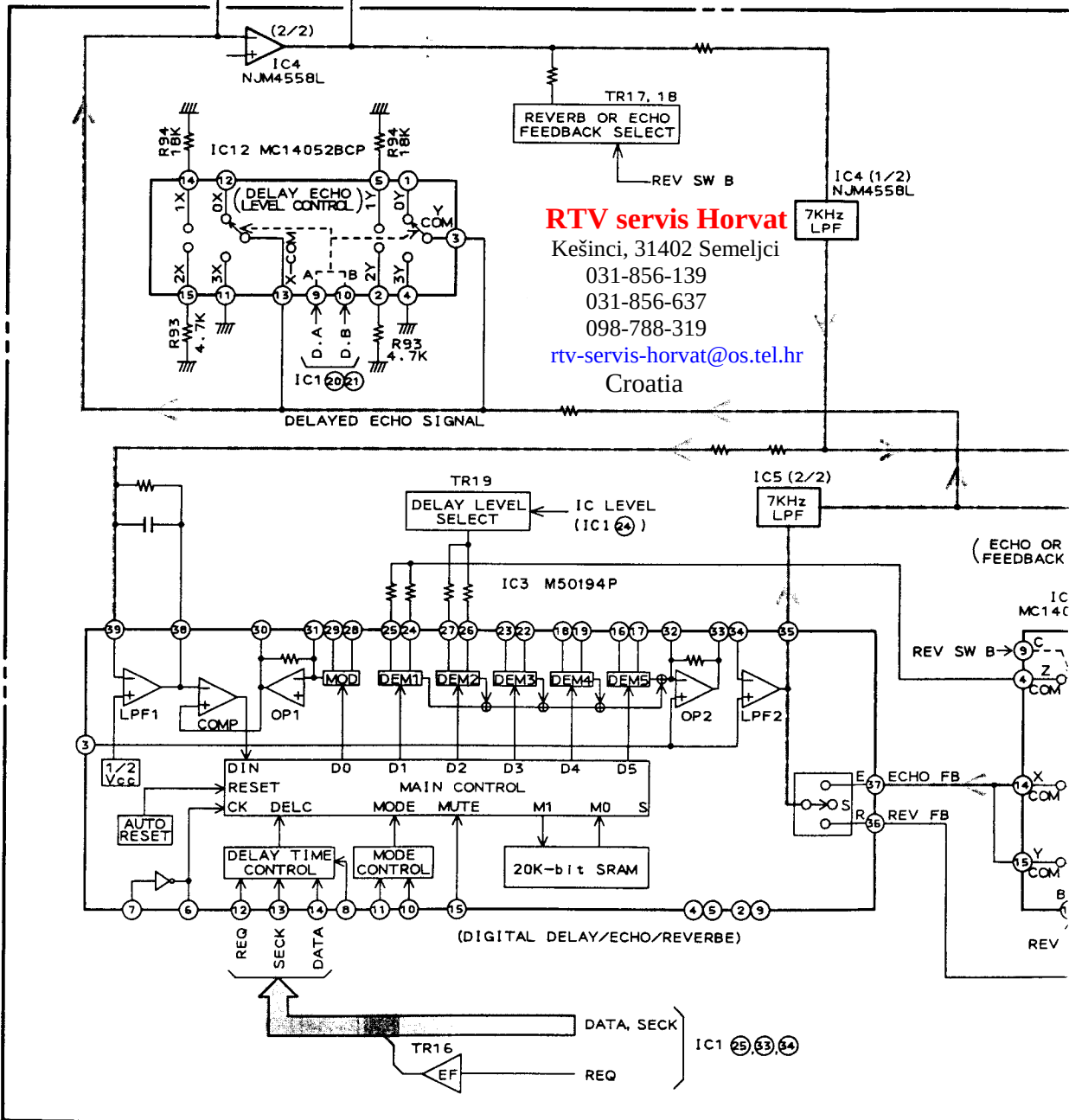
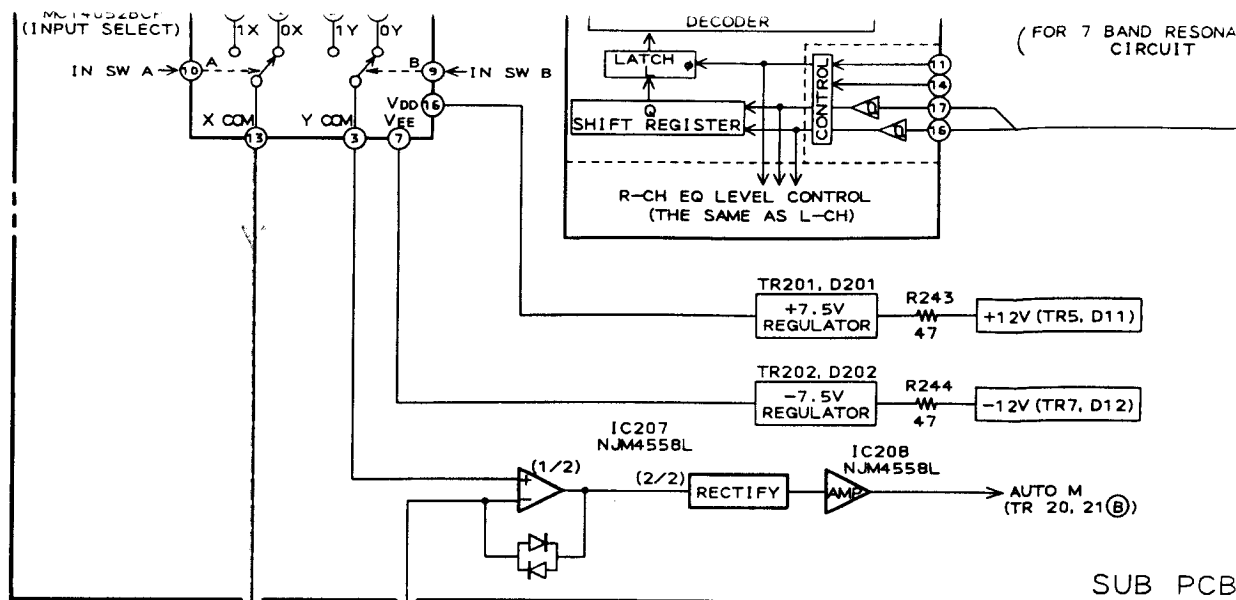
098-788-319

[rtv-servis-horvat@os.tel.hr](mailto:rtv-servis-horvat@os.tel.hr)

Croatia







**RTV servis Horvat**

Kešinci, 31402 Semeljci

031-856-139

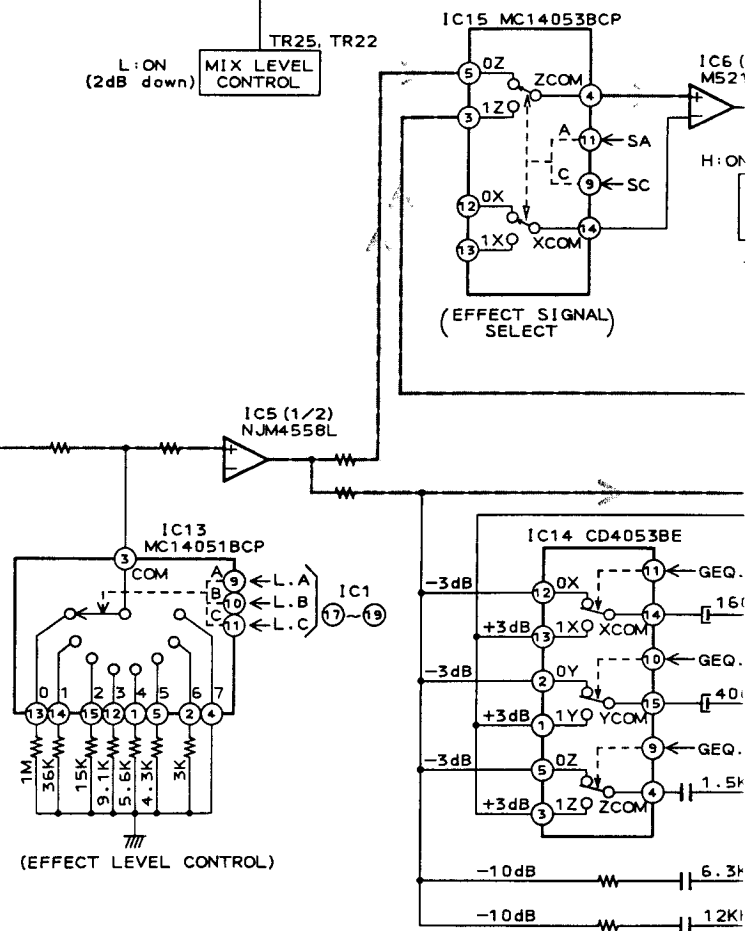
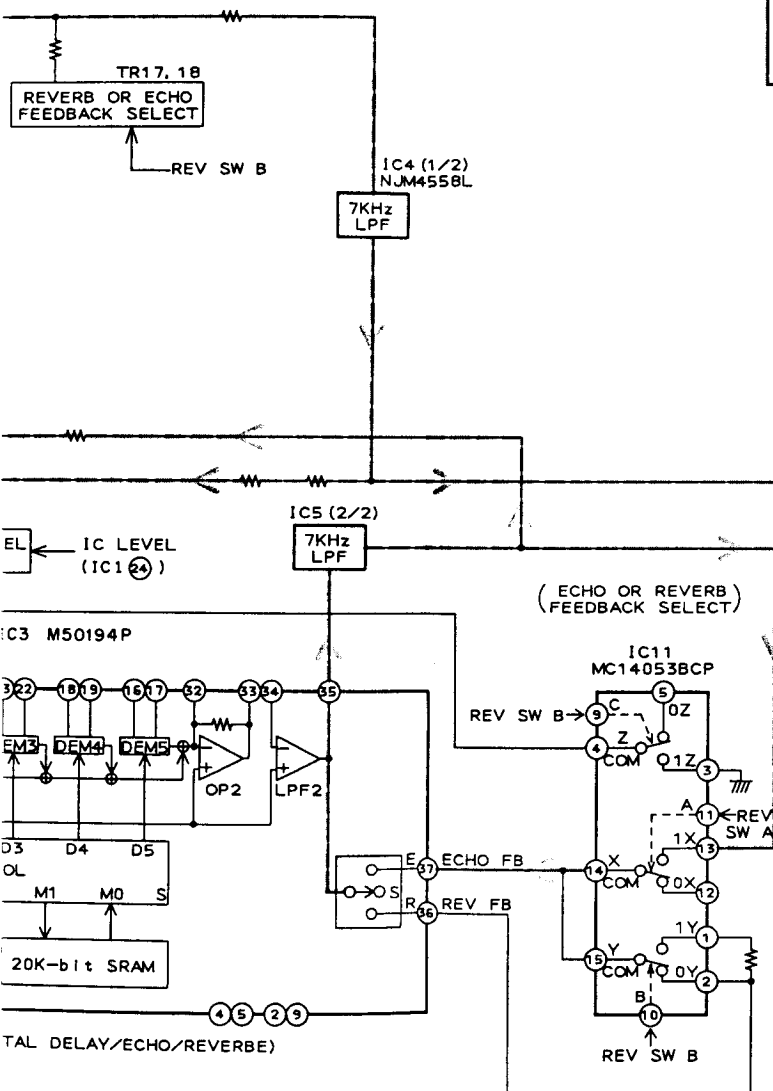
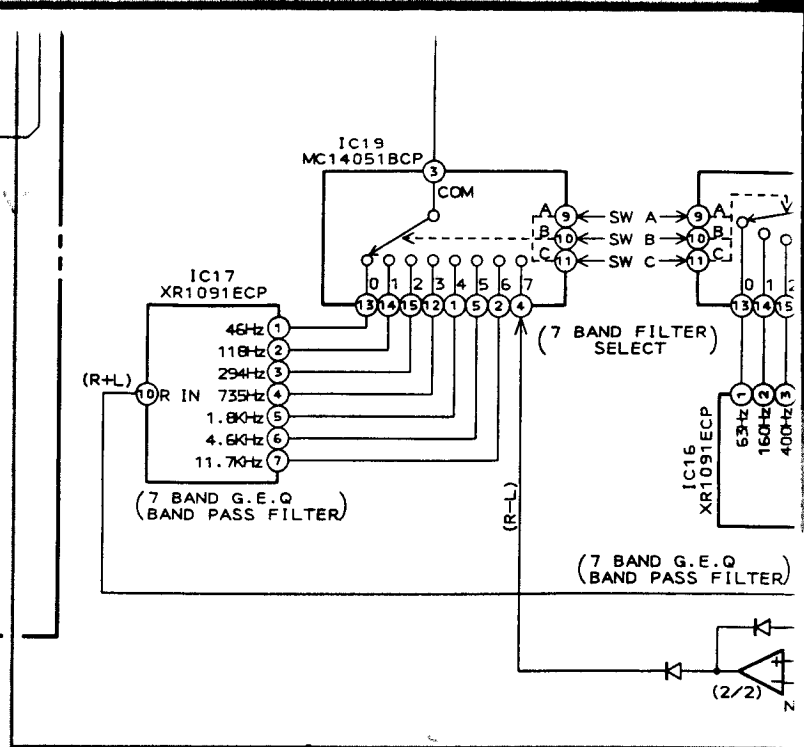
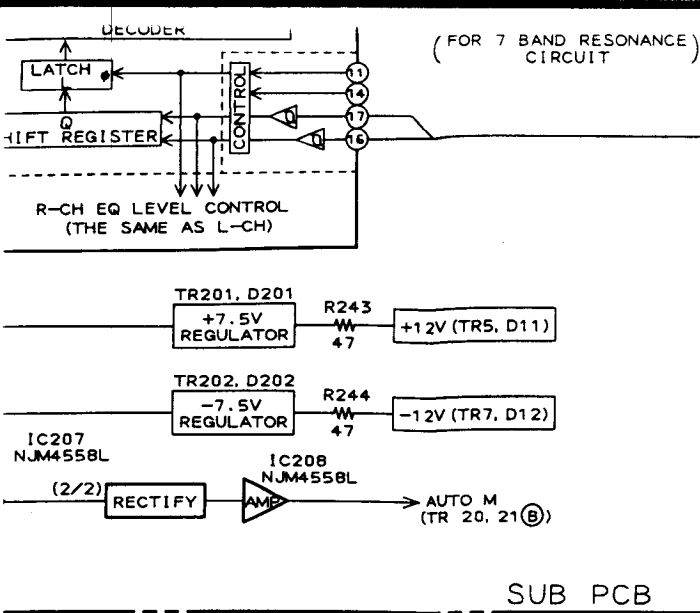
031-856-637

098-788-319

[rtv-servis-horvat@os.tel.hr](mailto:rtv-servis-horvat@os.tel.hr)

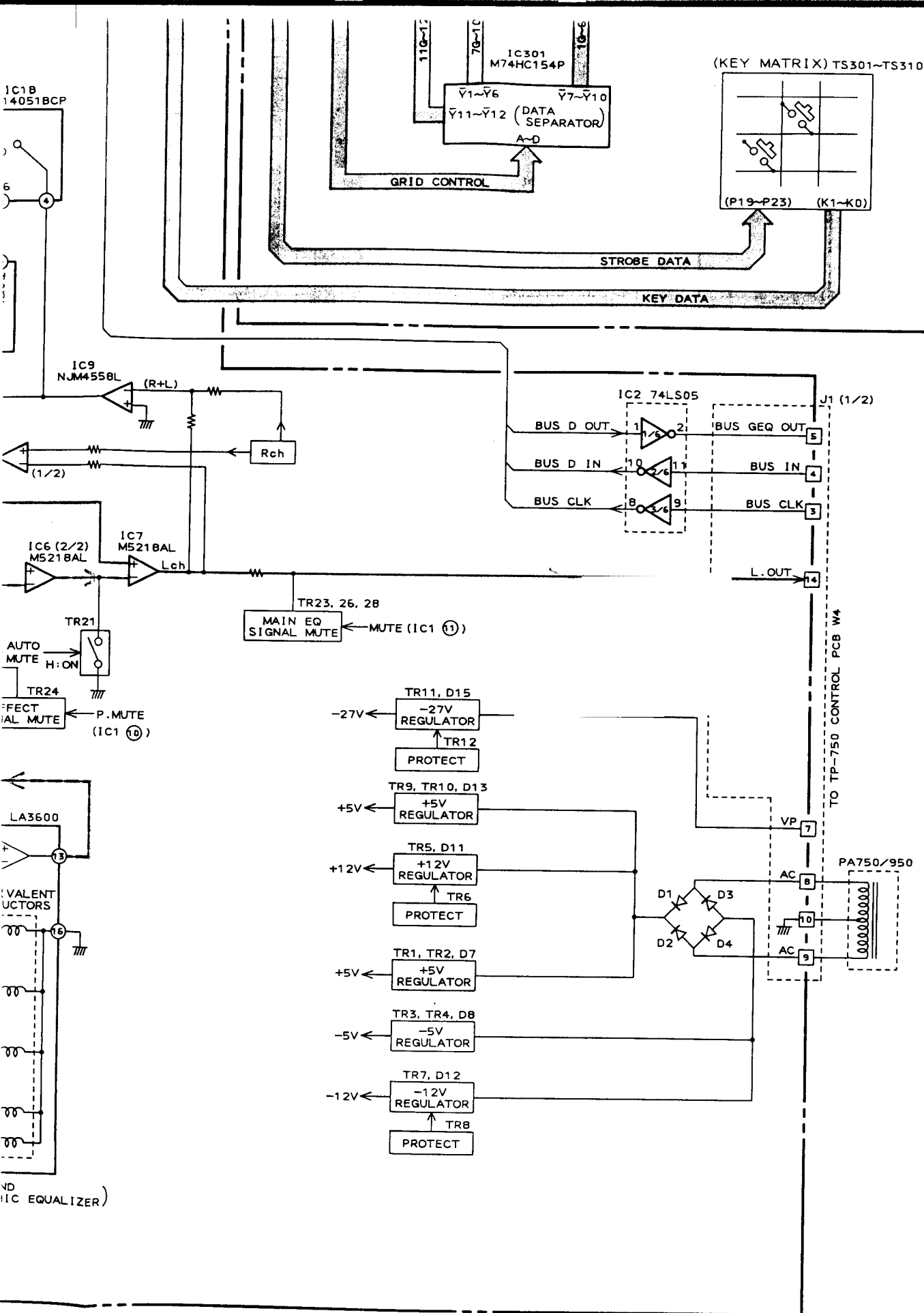
Croatia





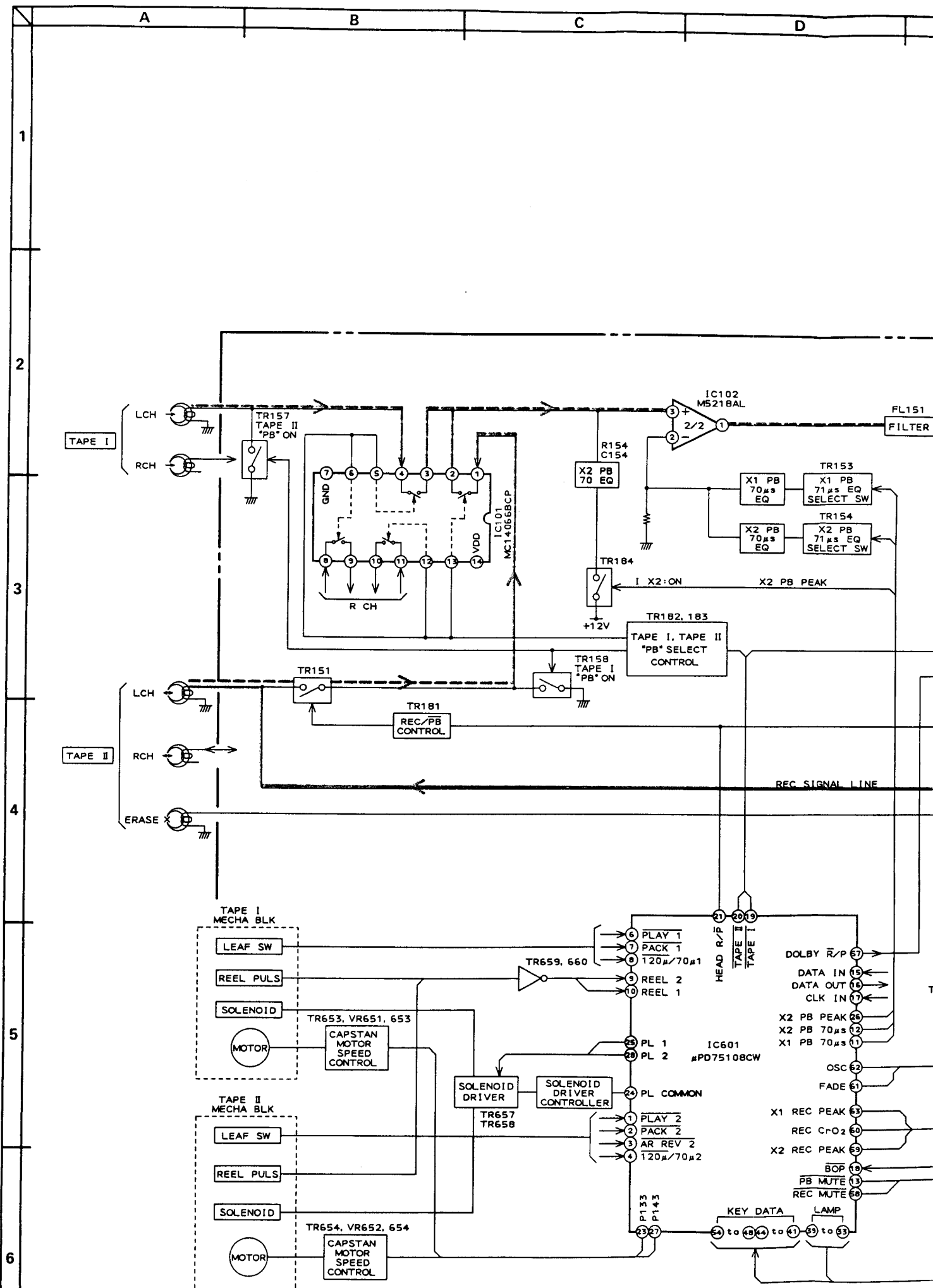
MAIN PCB

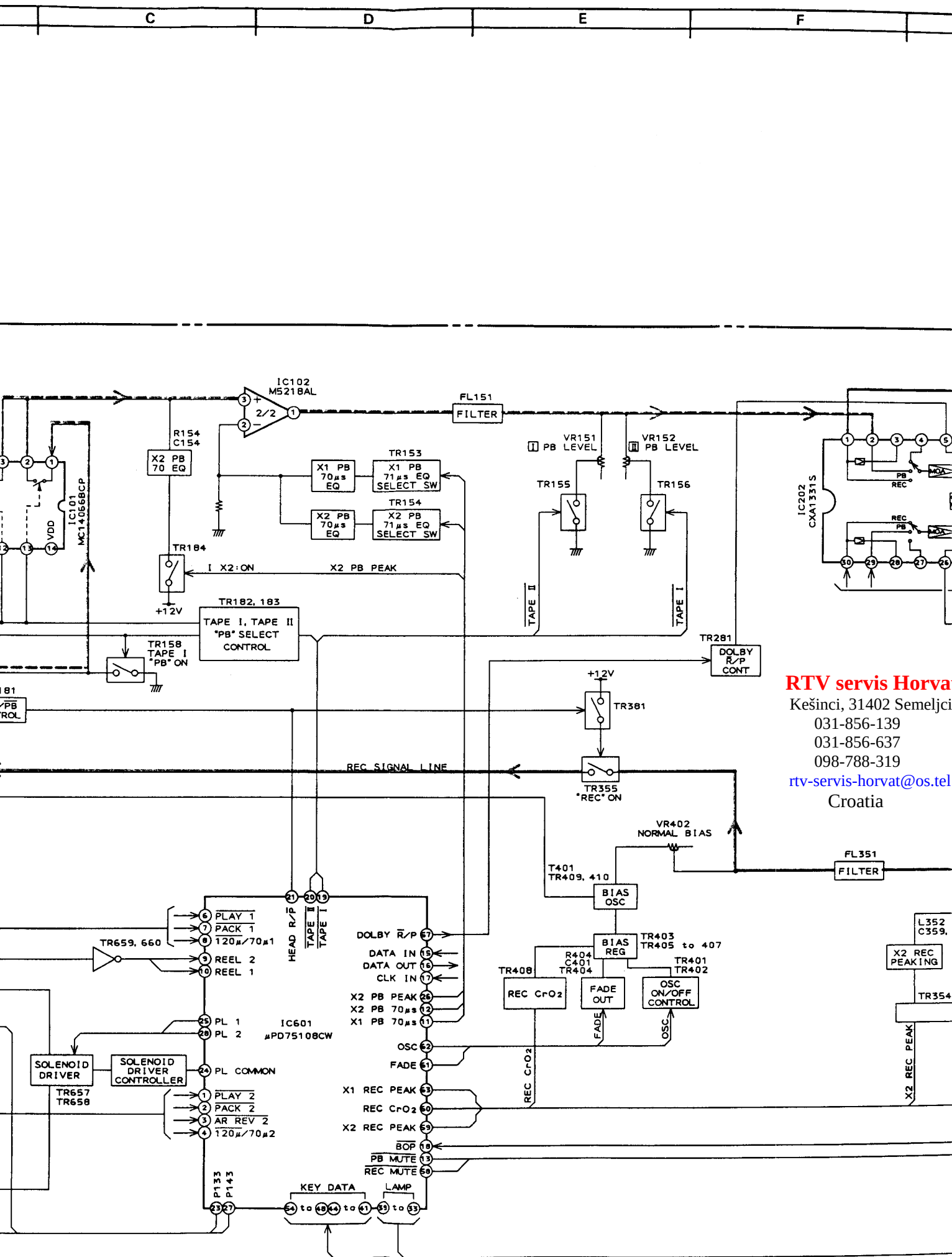




— AUDIO SIGNAL LINE (Lch)  
- - - EFFECT SIGNAL LINE

EA-750  
BLOCK DIAGRAM  
No.5-2 D301651M  
A1





**RTV servis Horvat**

Kešinci, 31402 Semeljci

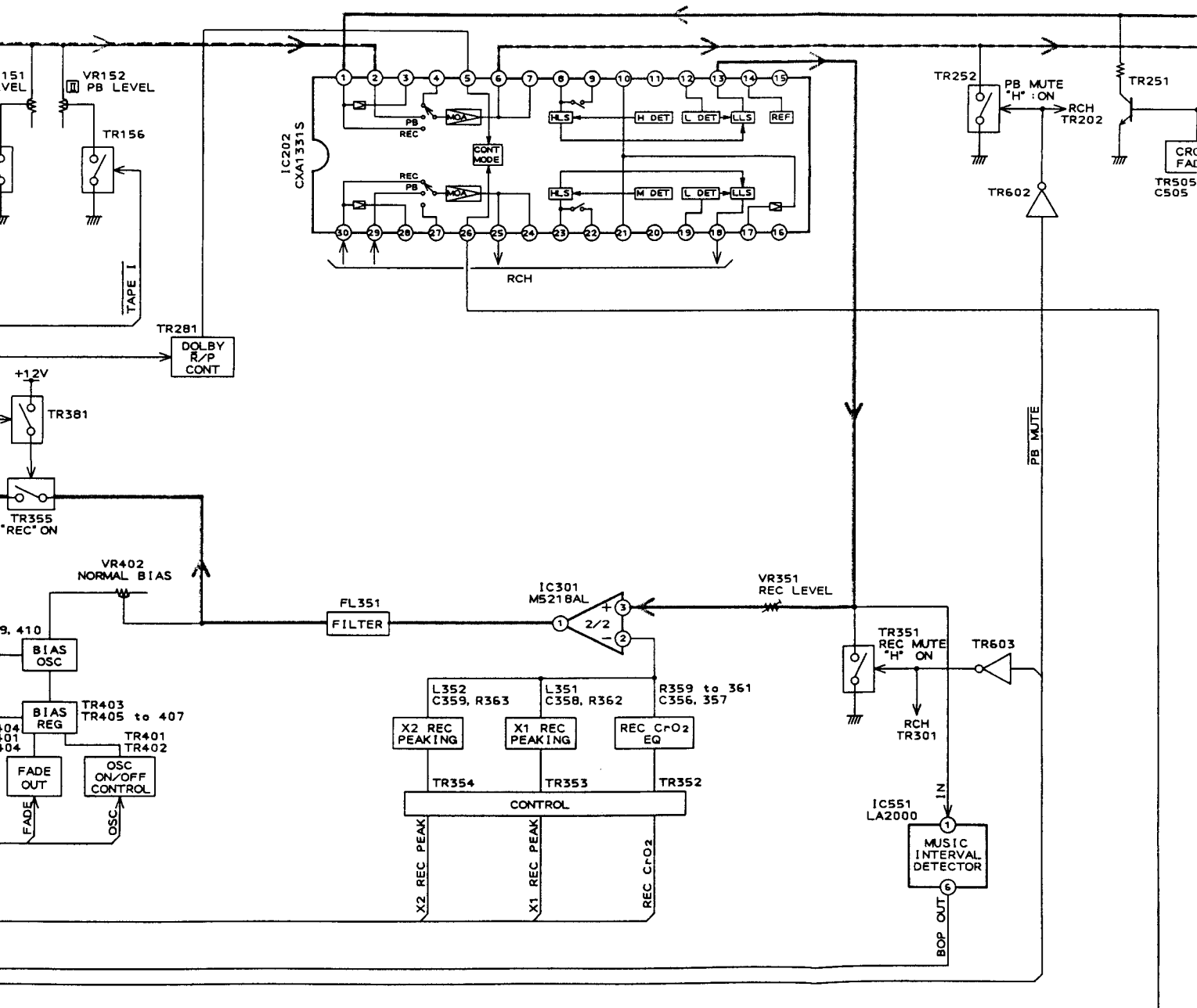
031-856-139

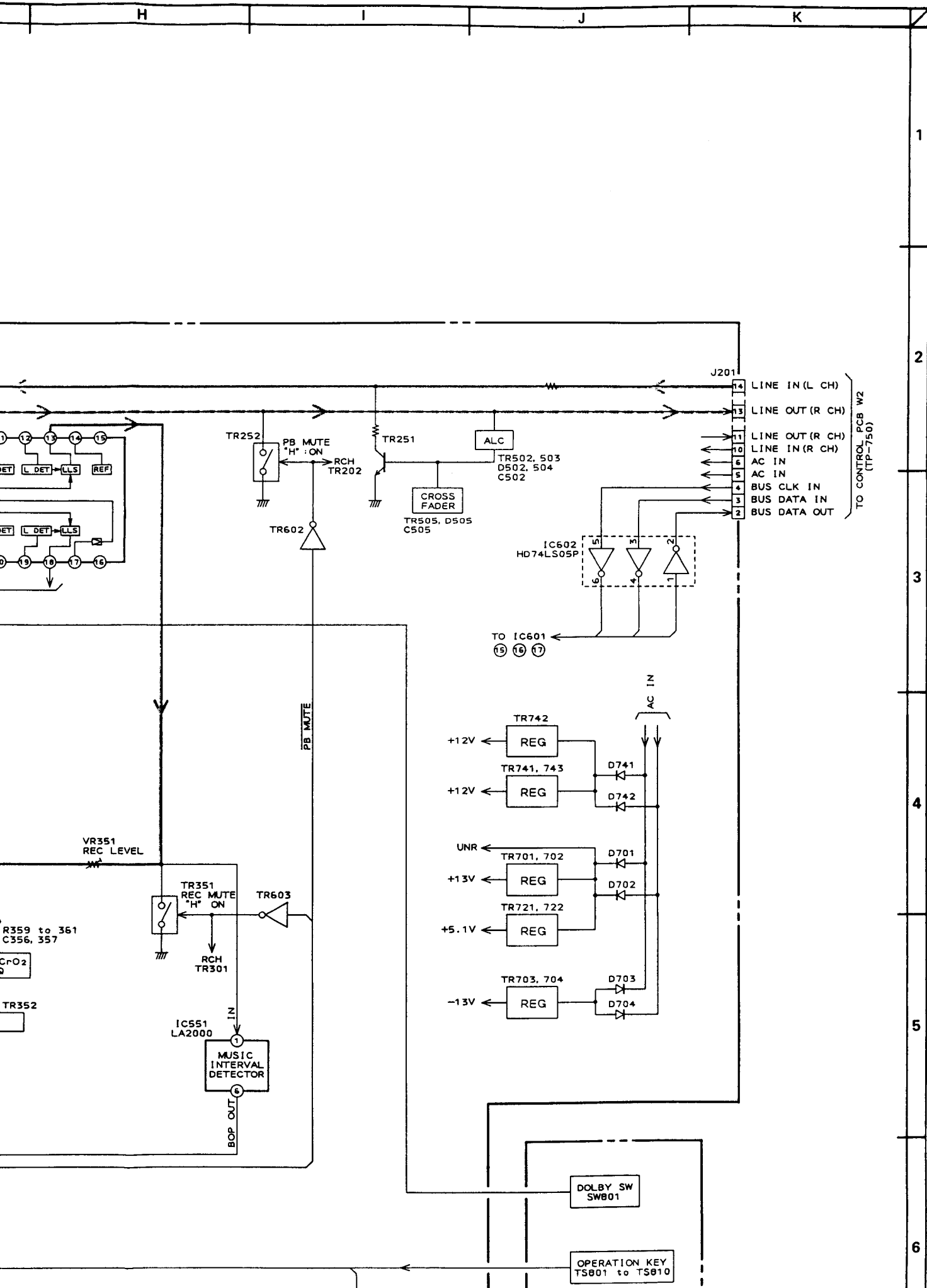
031-856-637

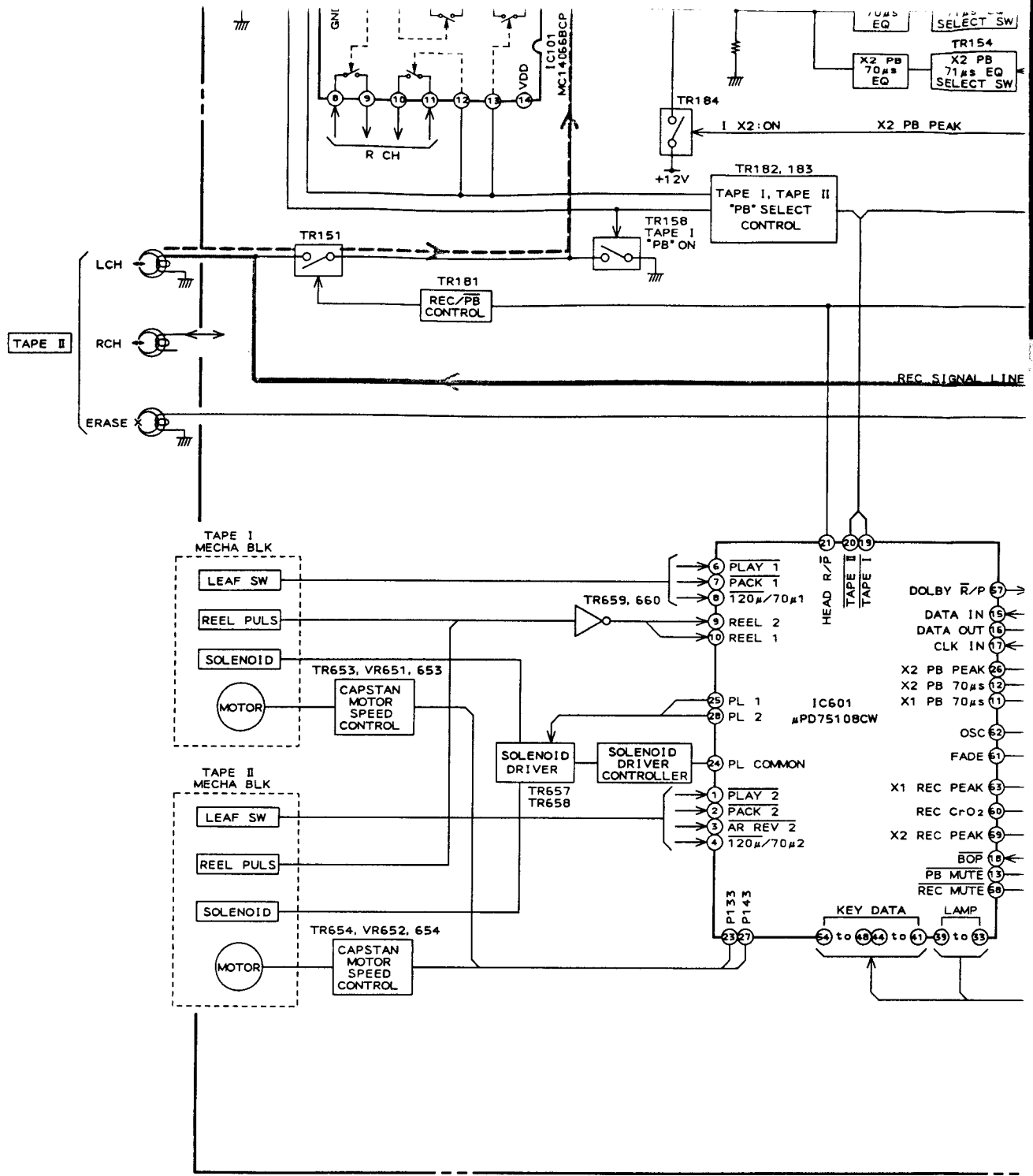
098-788-319

[rtv-servis-horvat@os.tel.hr](mailto:rtv-servis-horvat@os.tel.hr)

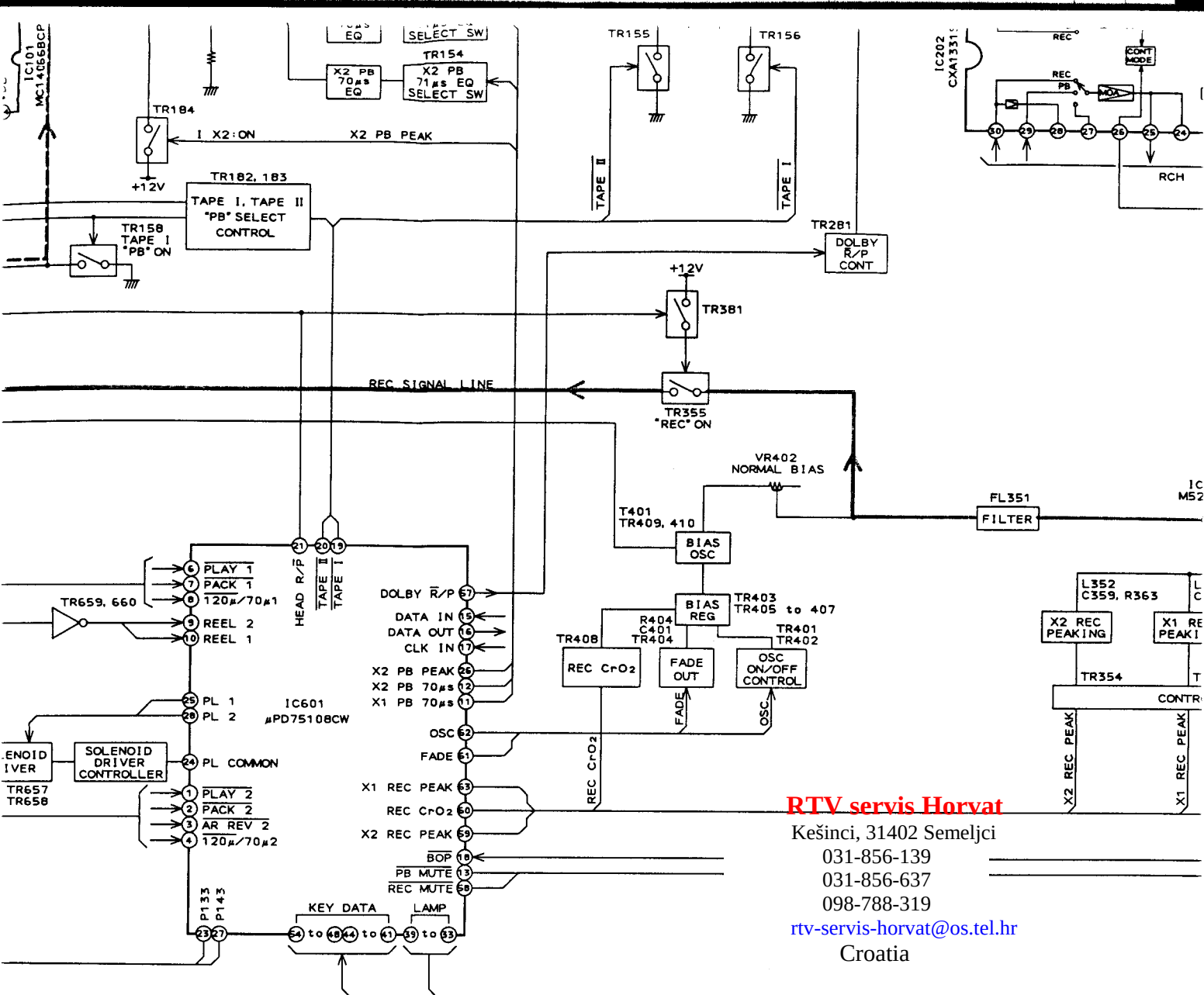
Croatia











DECK PCB

**RTV servis Horvat**

Kešinci, 31402 Semeljci

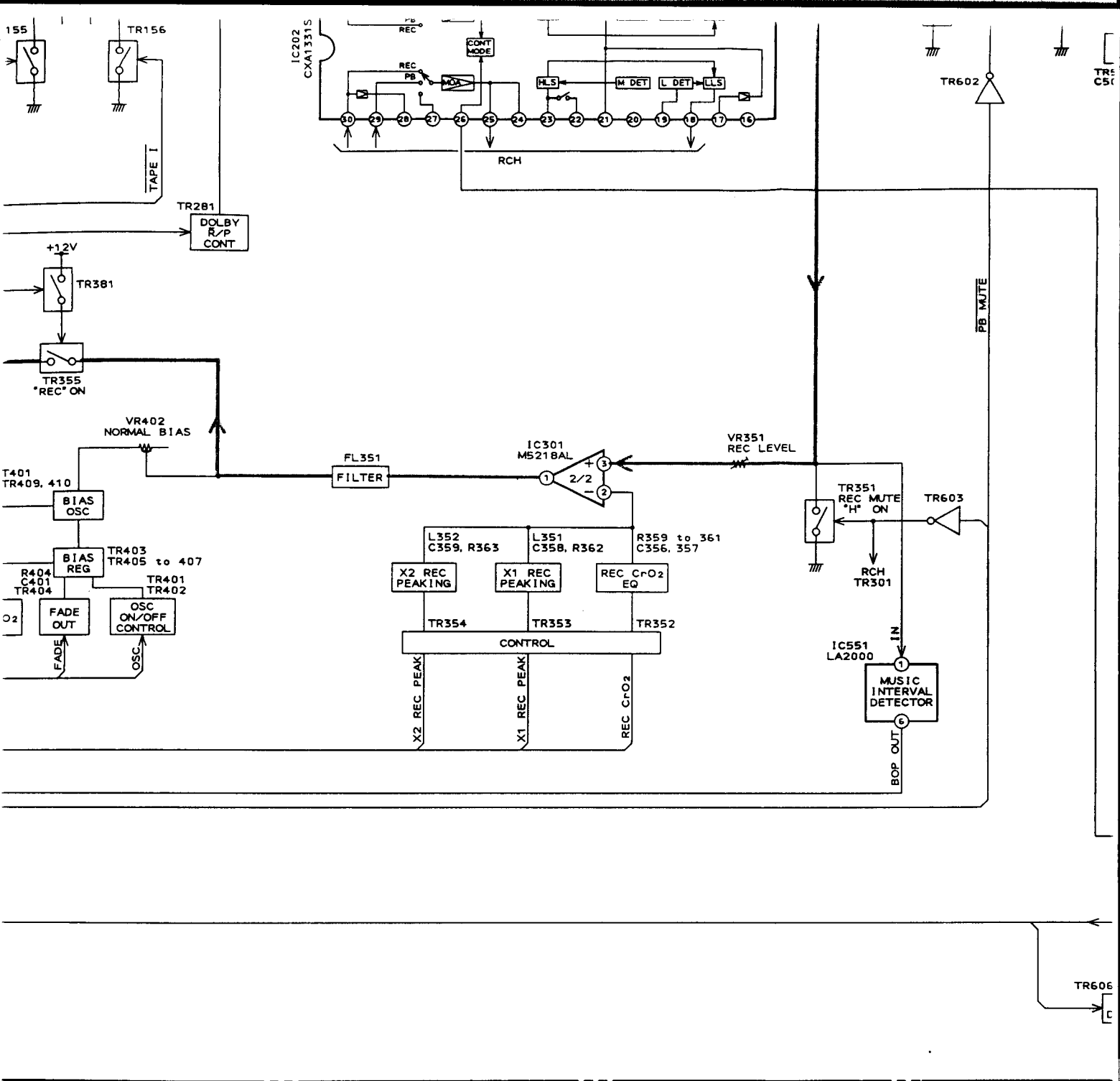
031-856-139

031-856-637

098-788-319

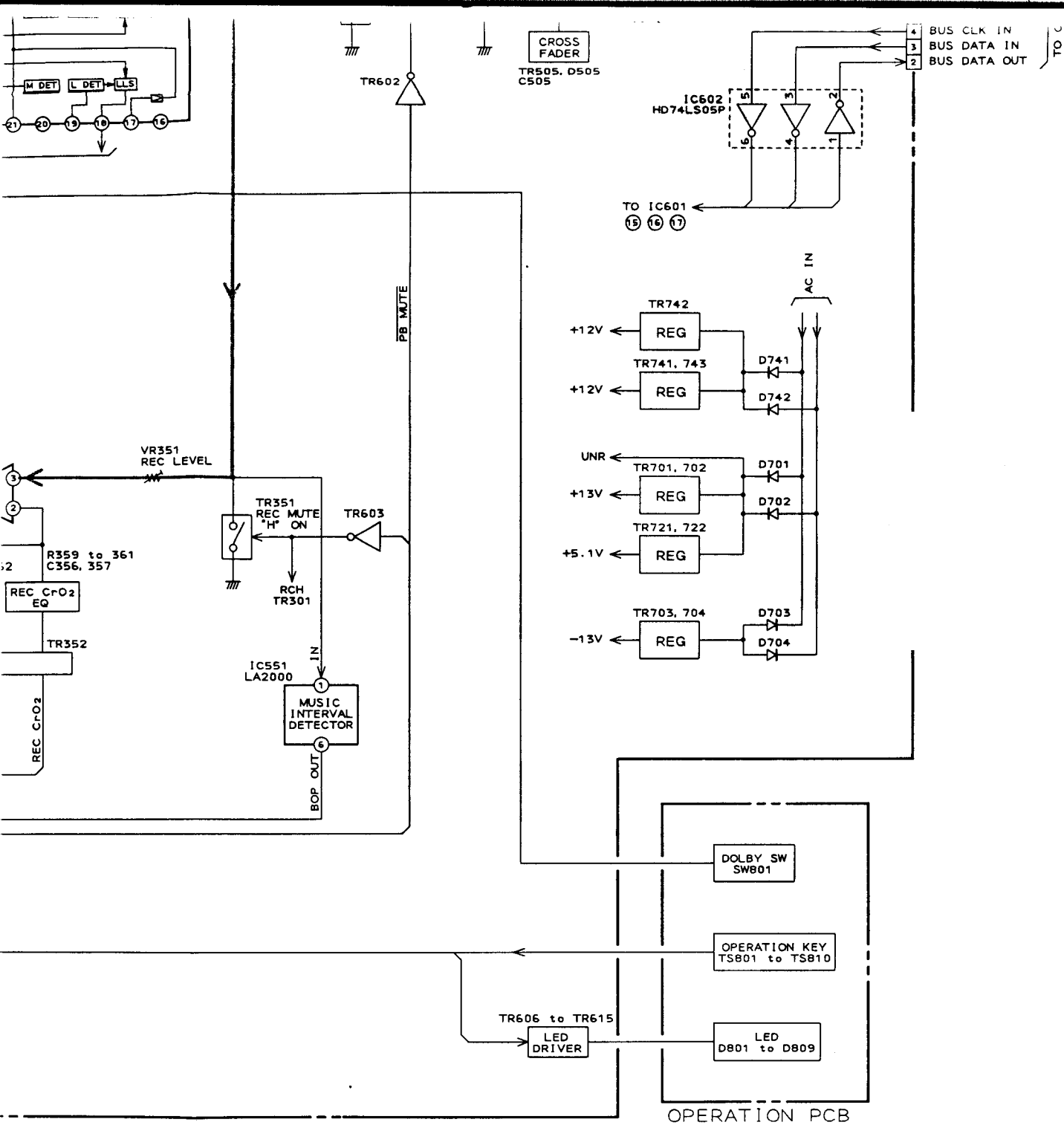
[rtv-servis-horvat@os.tel.hr](mailto:rtv-servis-horvat@os.tel.hr)

Croatia

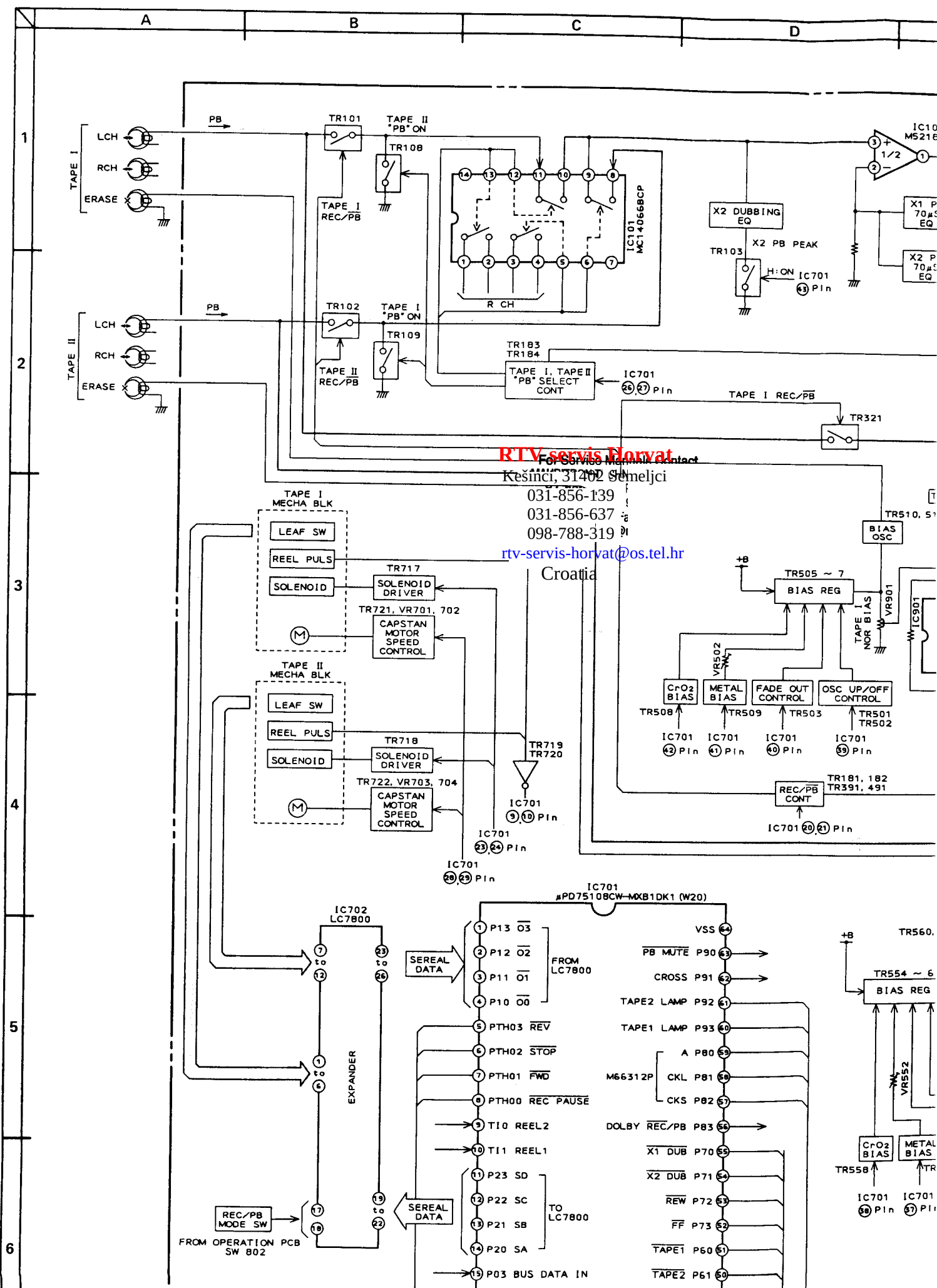


DECK PCB

----- : PB SIGNAL LINE  
 ————— : REC SIGNAL LINE



HX-750  
DECK & OPERATION  
BLOCK DIAGRAM  
No.5-3 T213451M  
A1



RTV servis Horvat

Kesinci, 31402 Sameljci

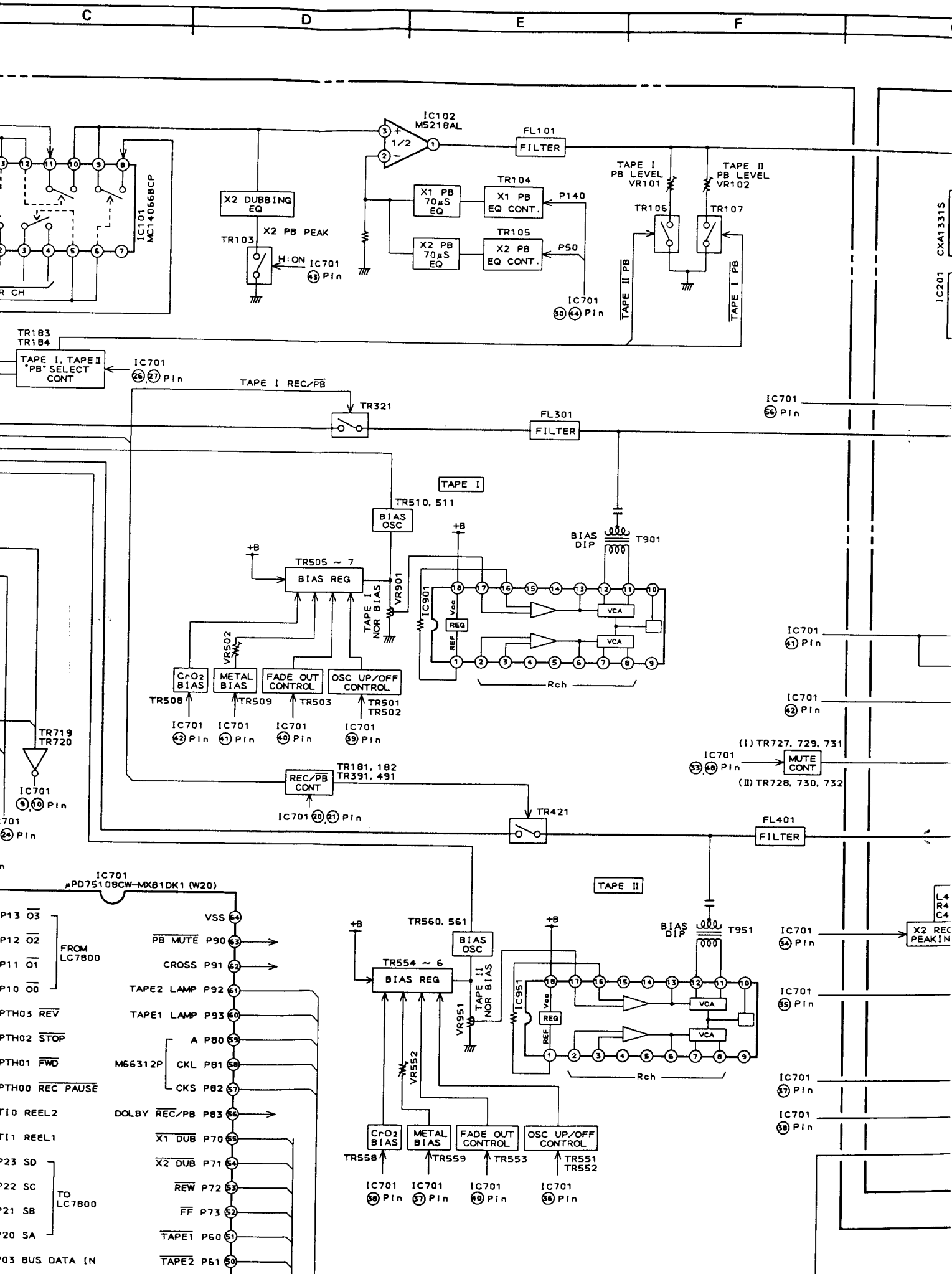
031-856-139

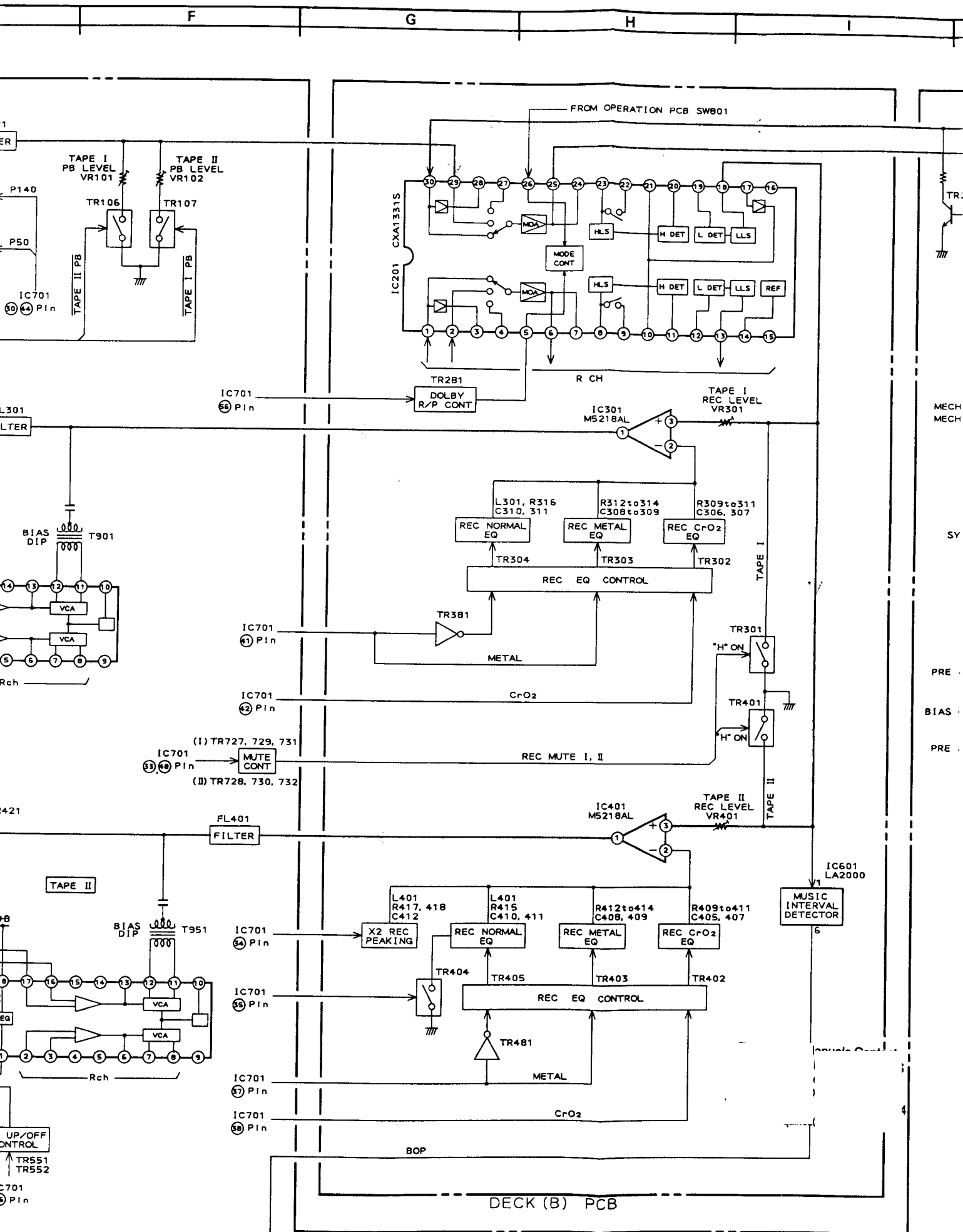
031-856-637

098-788-319

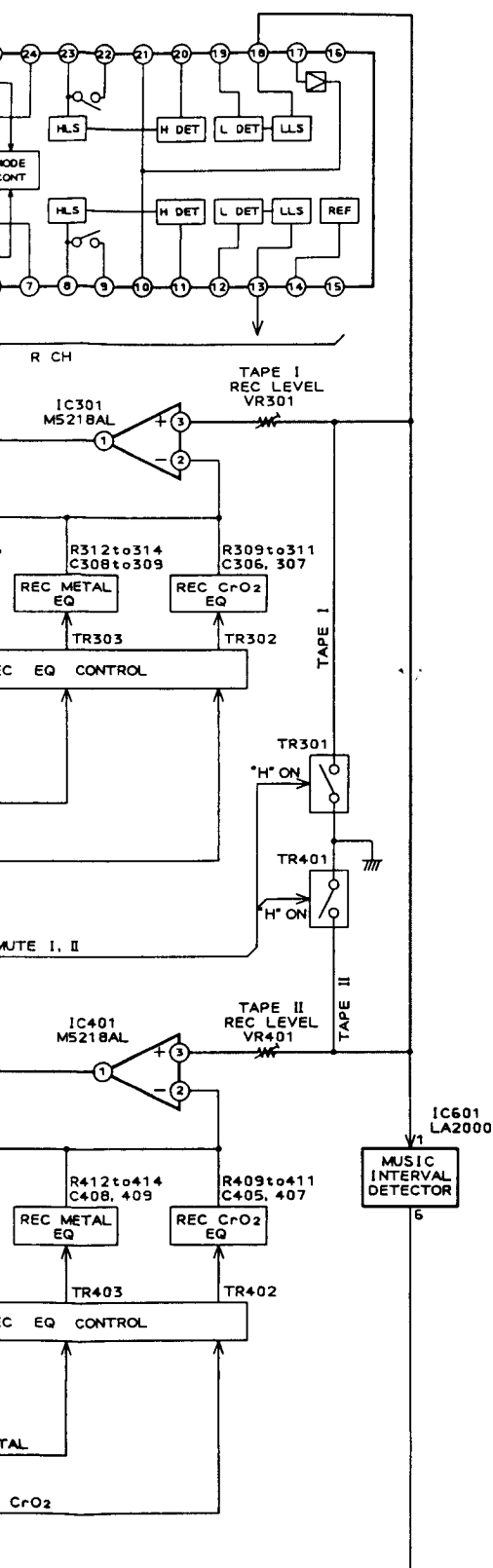
rtv-servis-horvat@os.tel.hr

Croatia

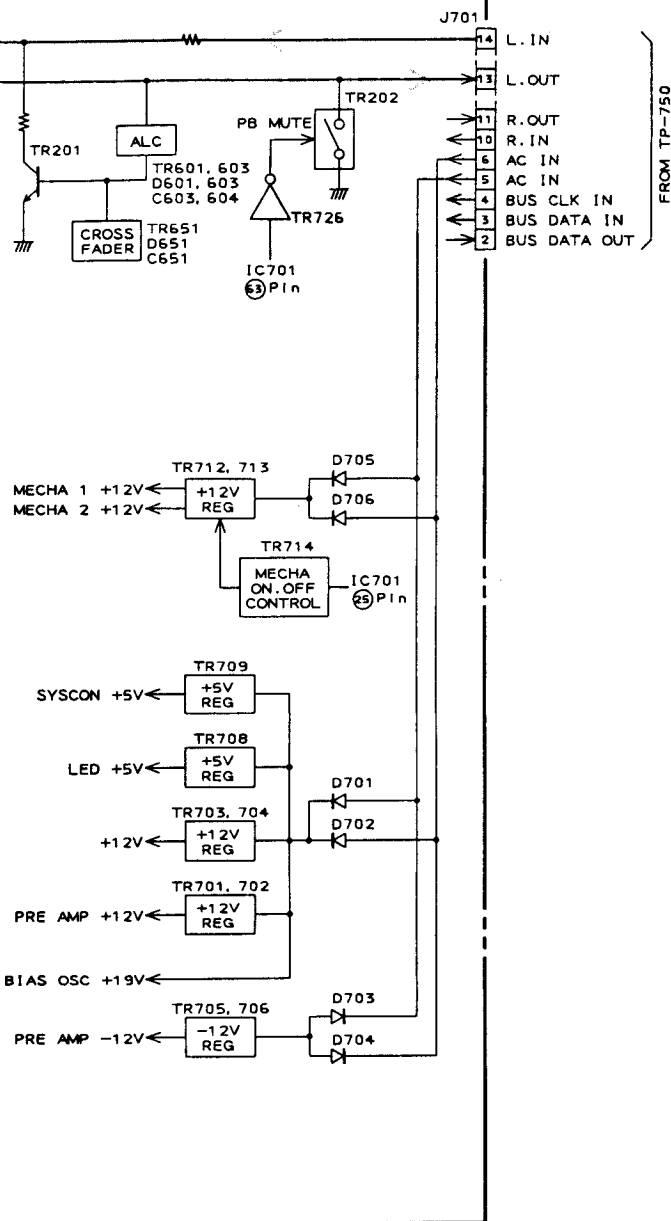




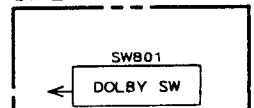
FROM OPERATION PCB SWB01



B) PCB



OPERATION PCB



**RTV servis Horvat**

Kešinci, 31402 Semeljci

031-856-139

031-856-637

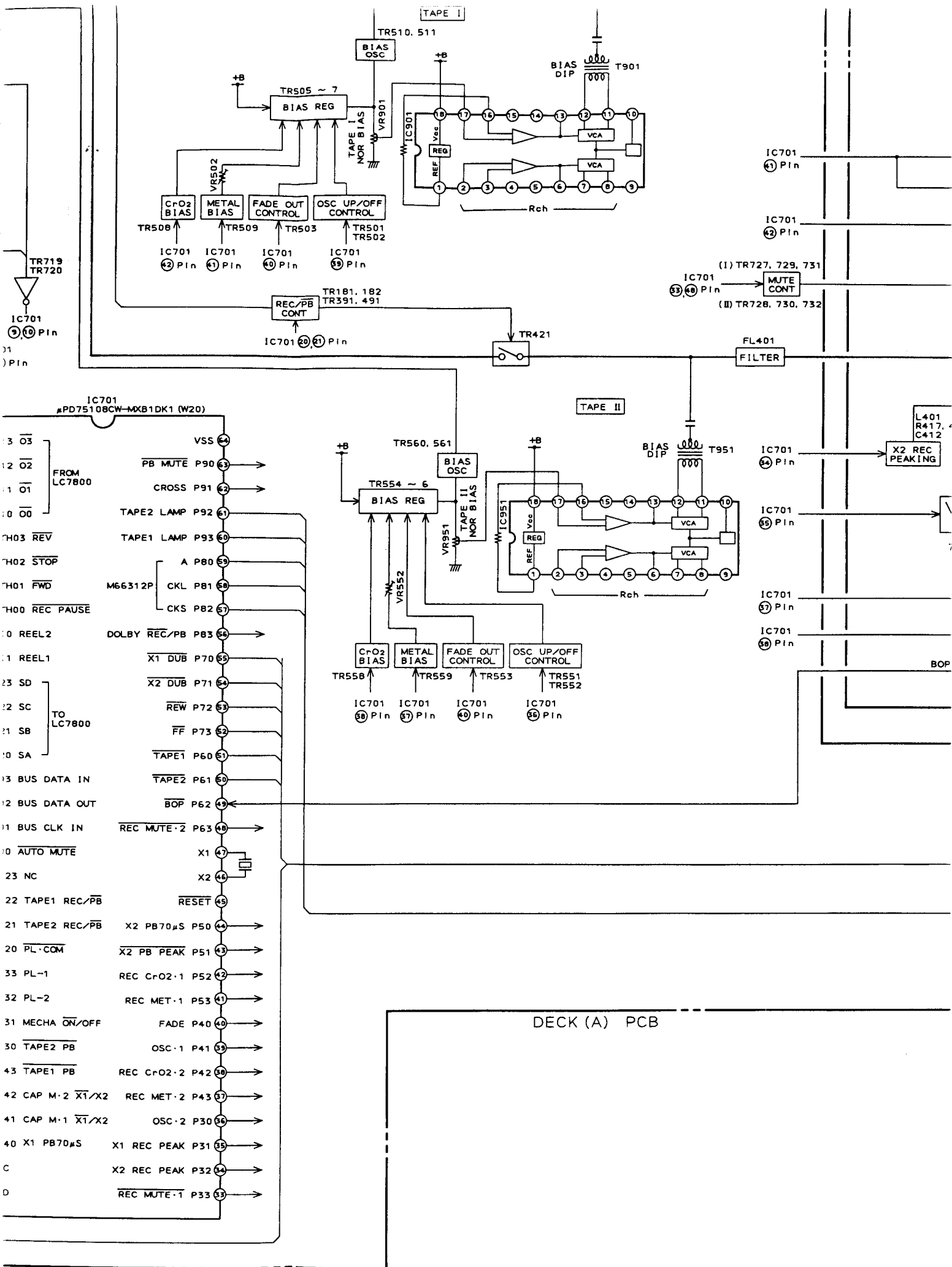
098-788-319

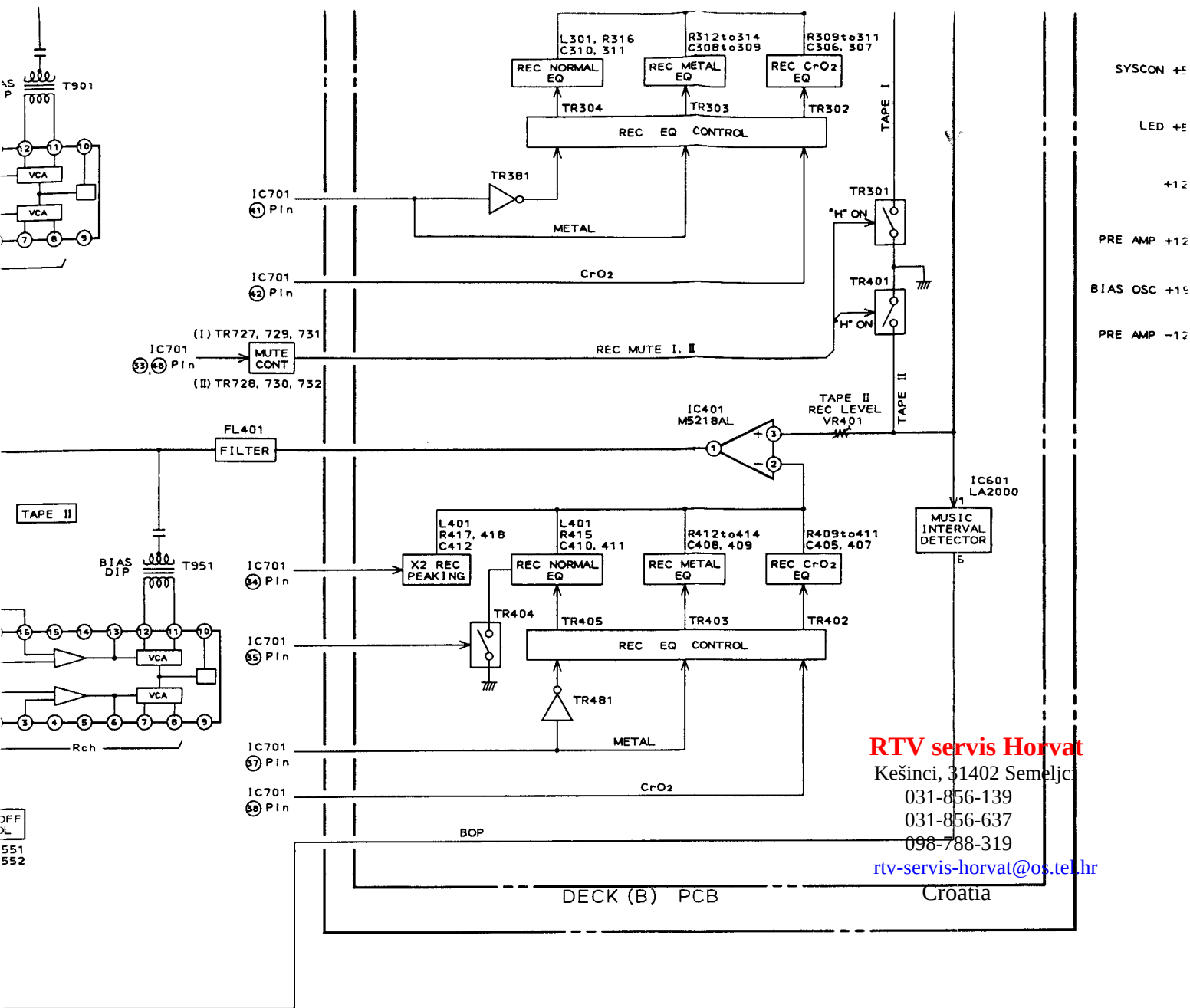
[rtv-servis-horvat@os.tel.hr](mailto:rtv-servis-horvat@os.tel.hr)

Croatia

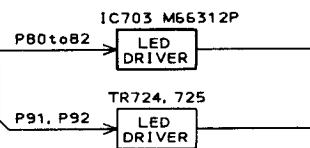








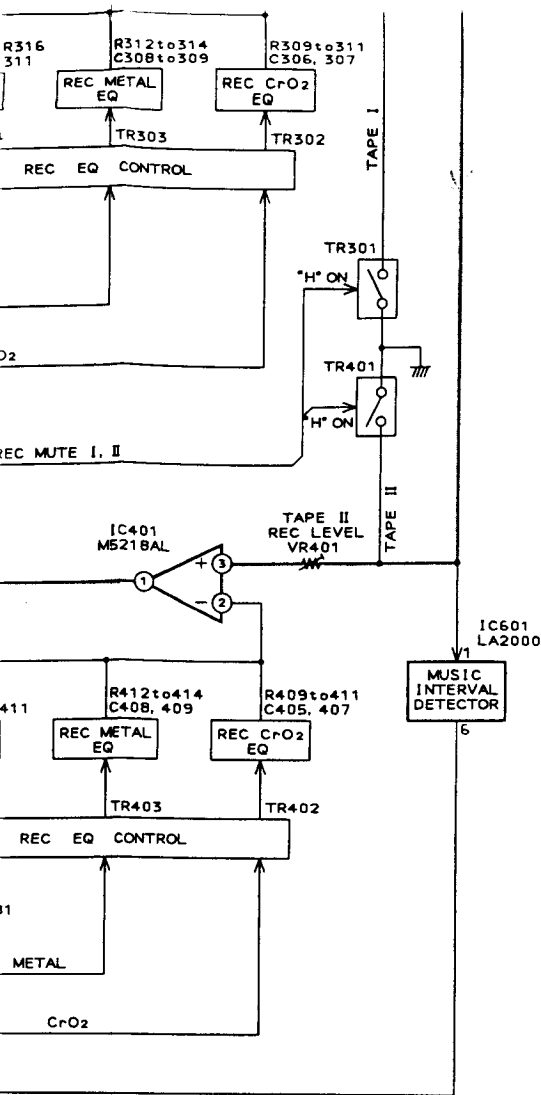
CK (A) PCB



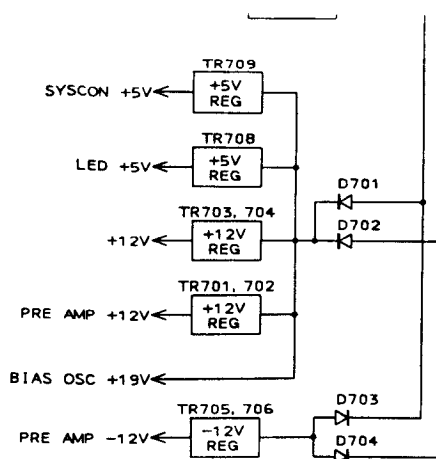
:PB SIGNAL LINE

:REC SIGNAL LINE

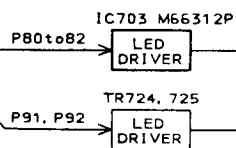
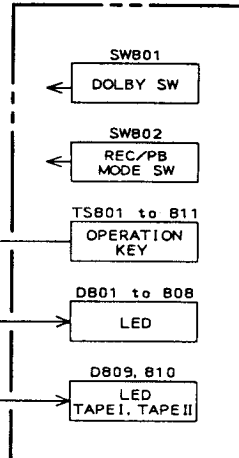
H  
D  
B



K (B) PCB



OPERATION PCB

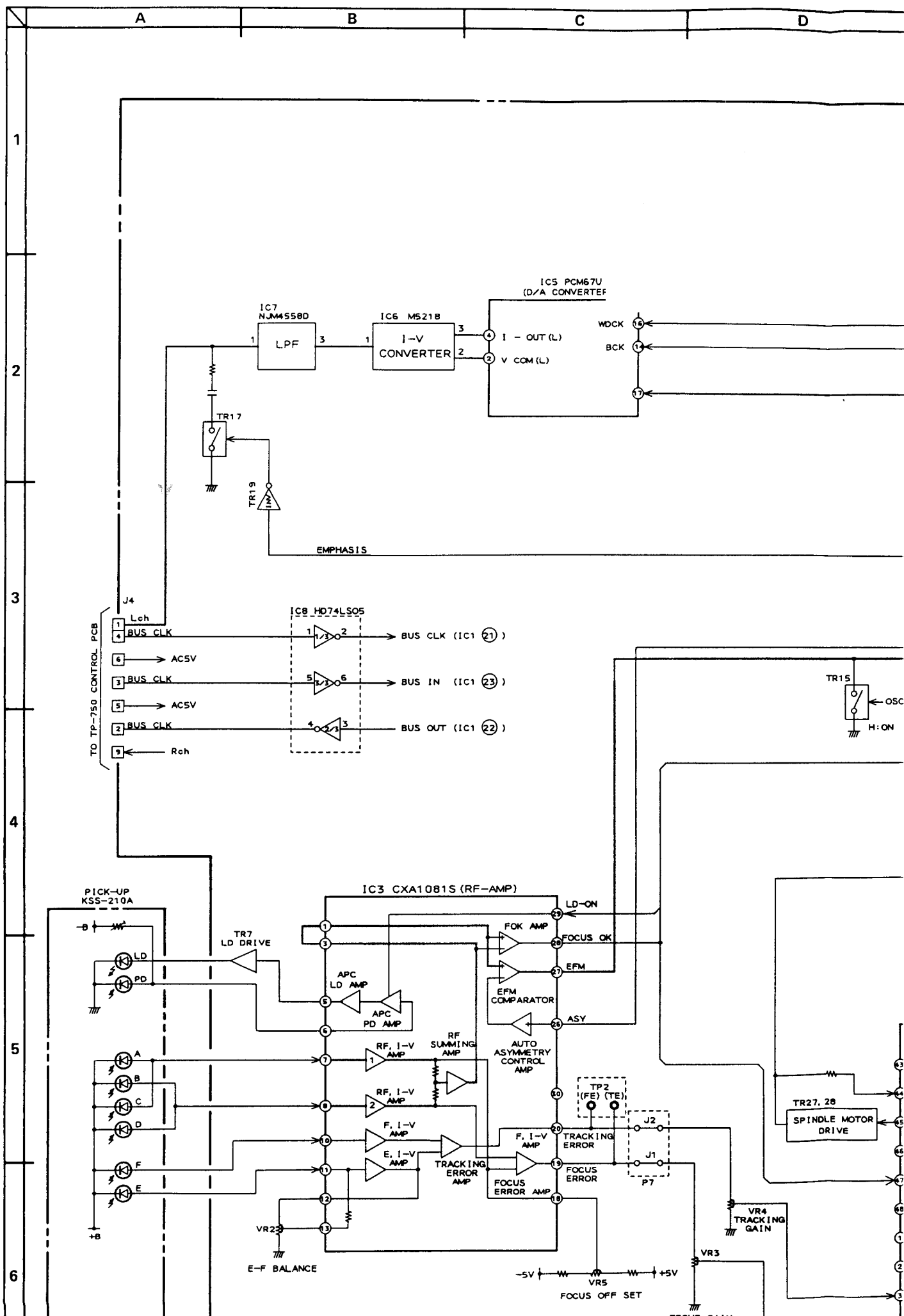


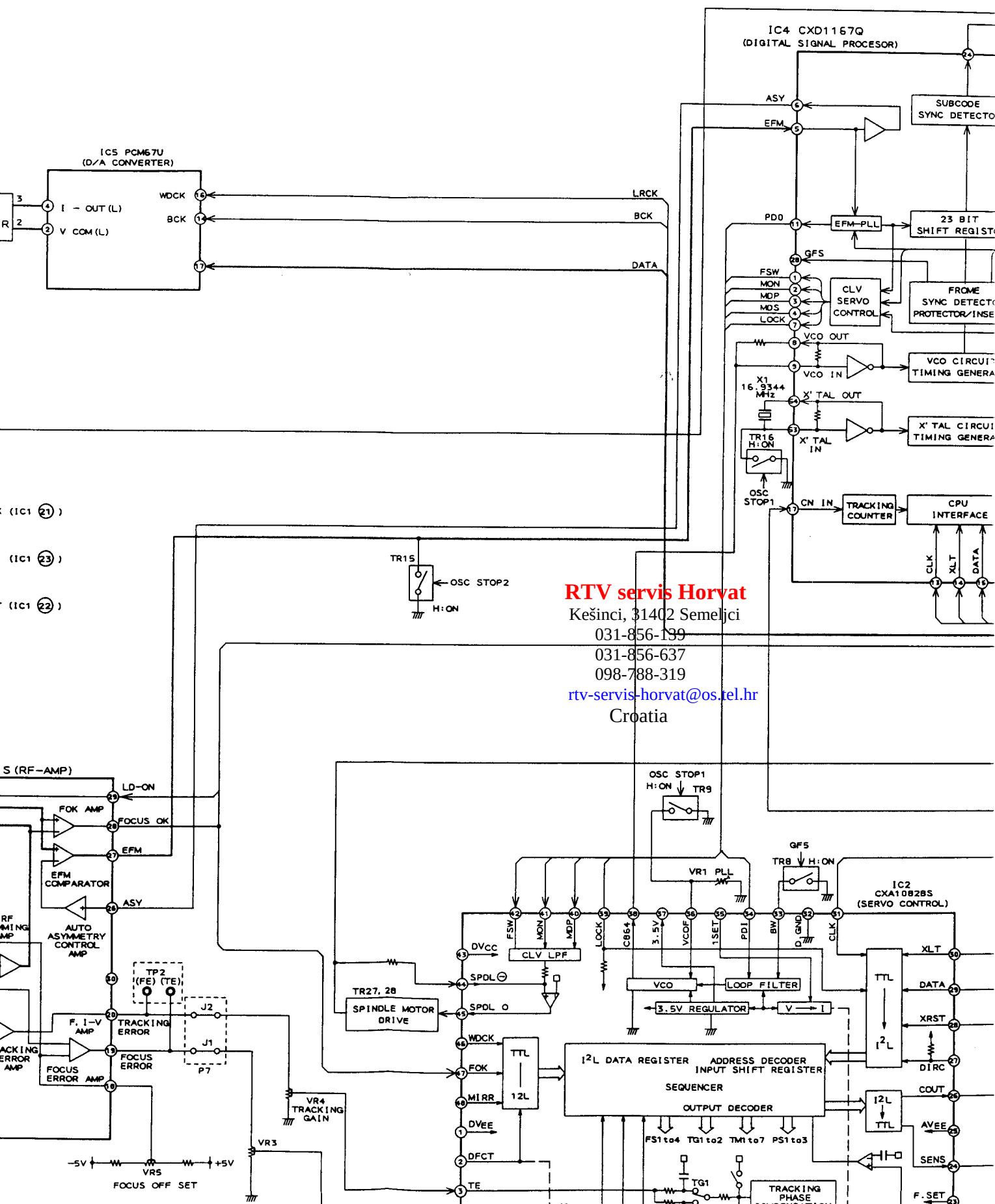
--- :PB SIGNAL LINE  
 --- :REC SIGNAL LINE

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

No.5-4 T213551M  
 A1

3  
 4  
 5  
 6  
 7  
 8





**RTV servis Horvat**

Kešinci, 31402 Semeljci

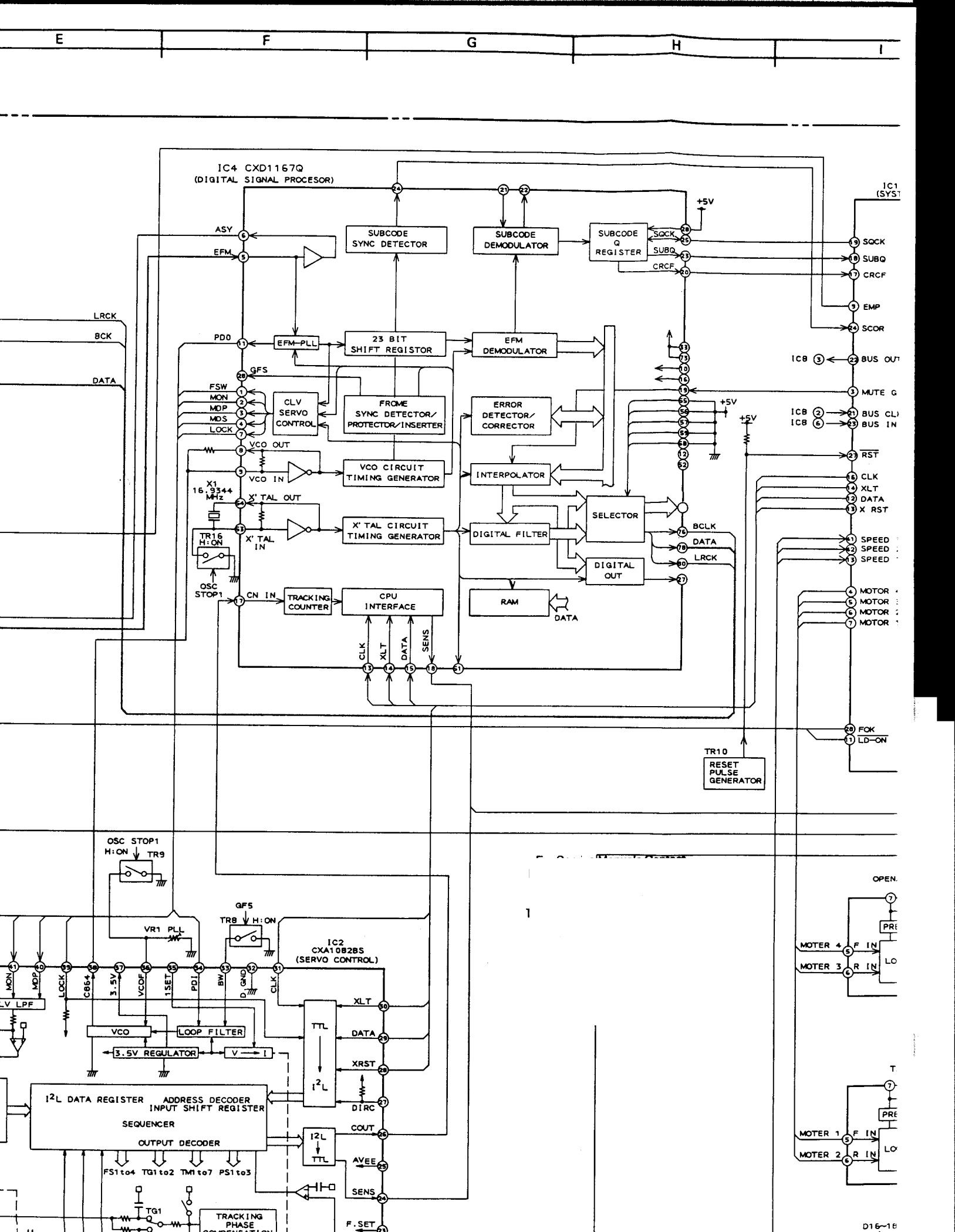
031-856-199

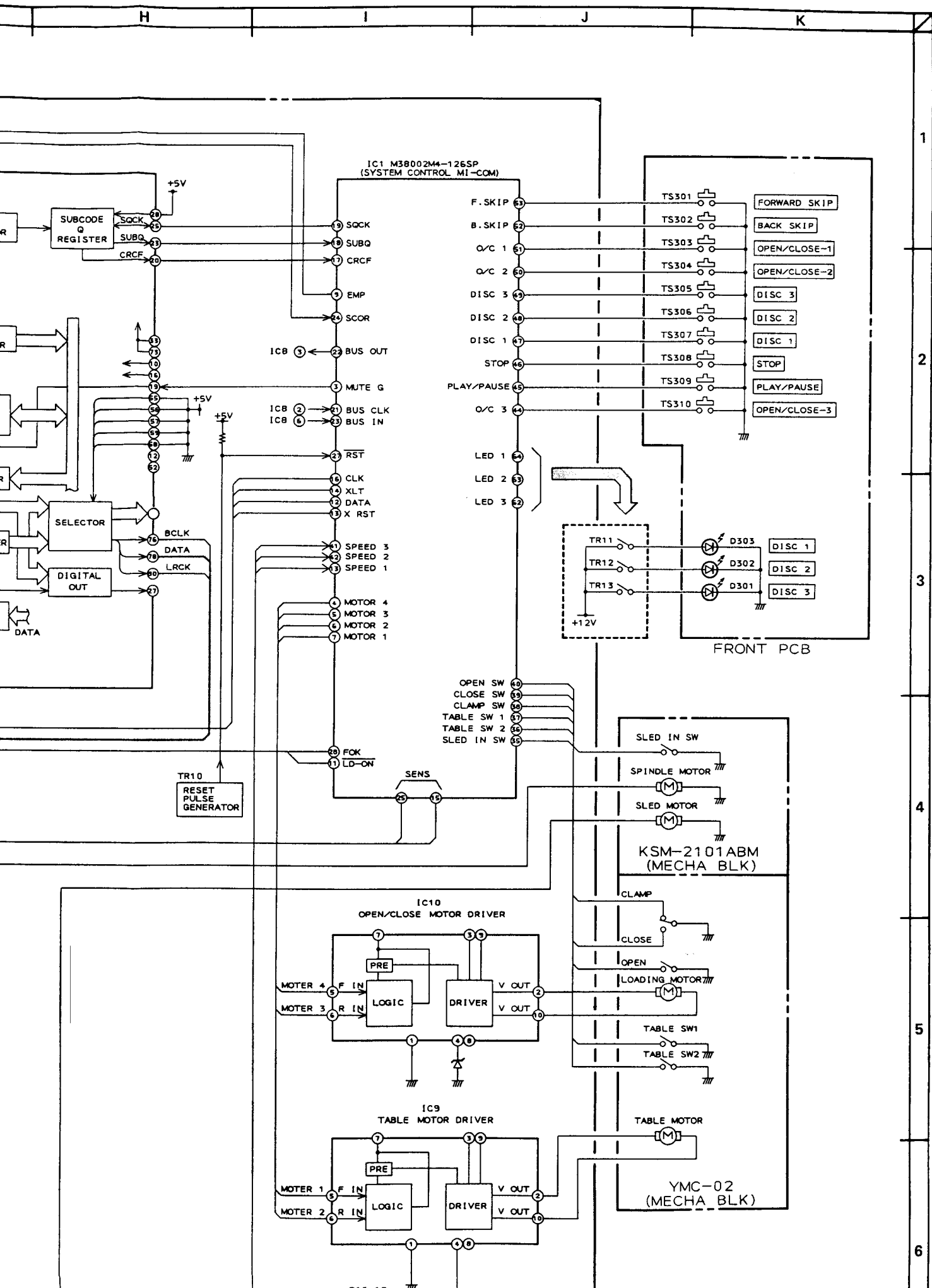
031-856-637

098-788-319

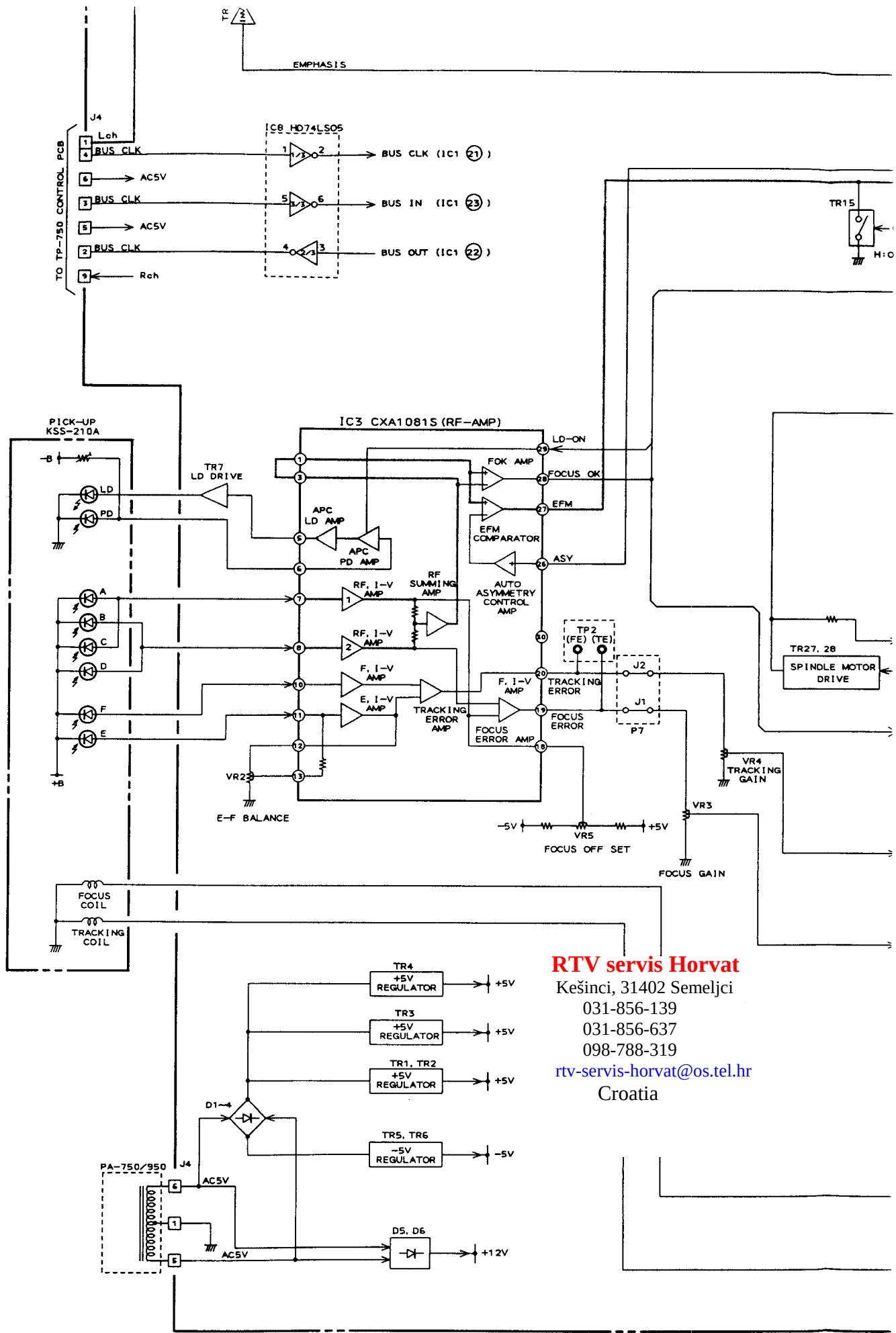
[rtv-servis-horvat@os.tel.hr](mailto:rtv-servis-horvat@os.tel.hr)

Croatia



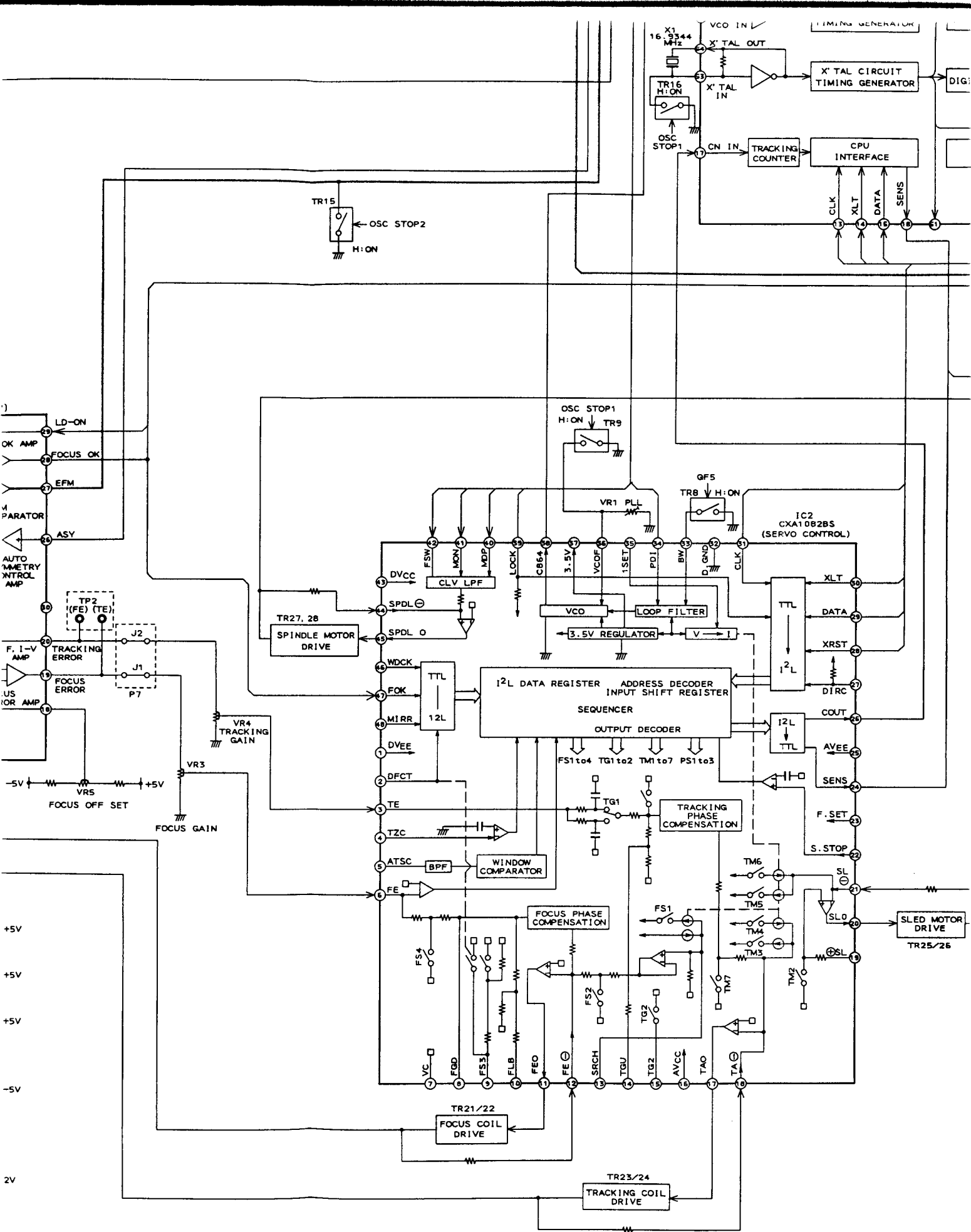


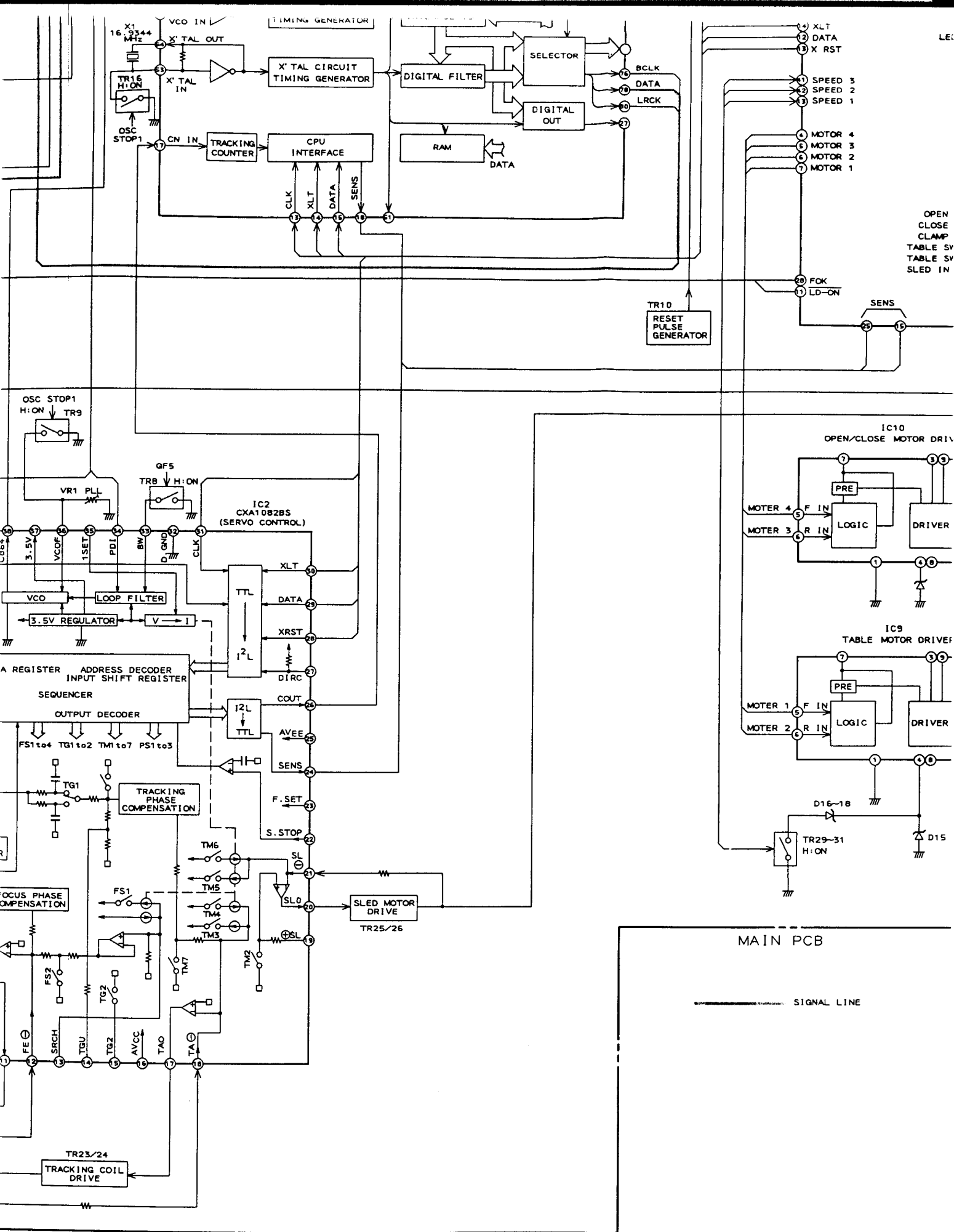
3  
4  
5  
6  
7  
8

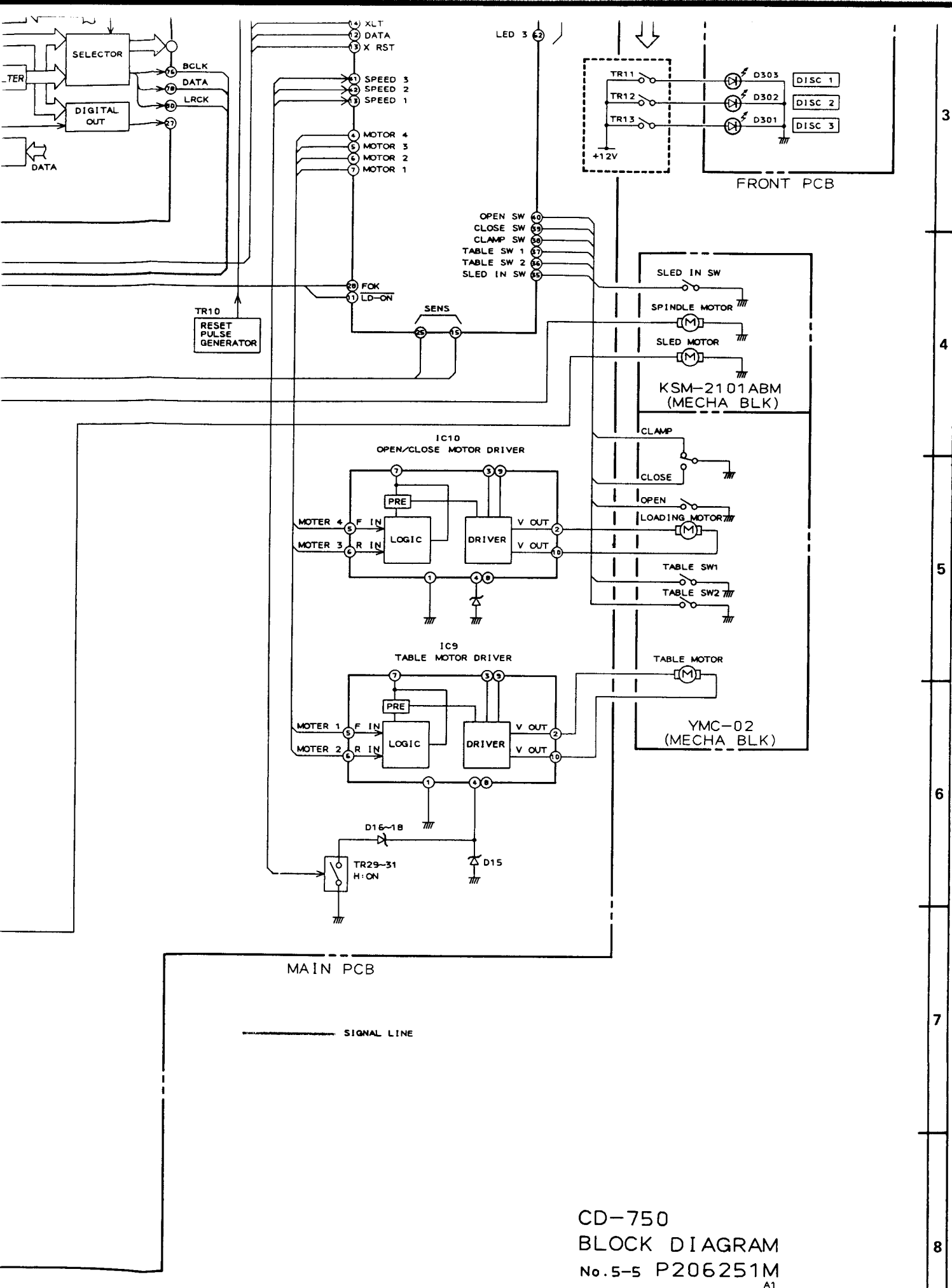


**RTV servis Horvat**  
 Kešinci, 31402 Semeljci  
 031-856-139  
 031-856-637  
 098-788-319  
[rtv-servis-horvat@os.tel.hr](mailto:rtv-servis-horvat@os.tel.hr)  
 Croatia

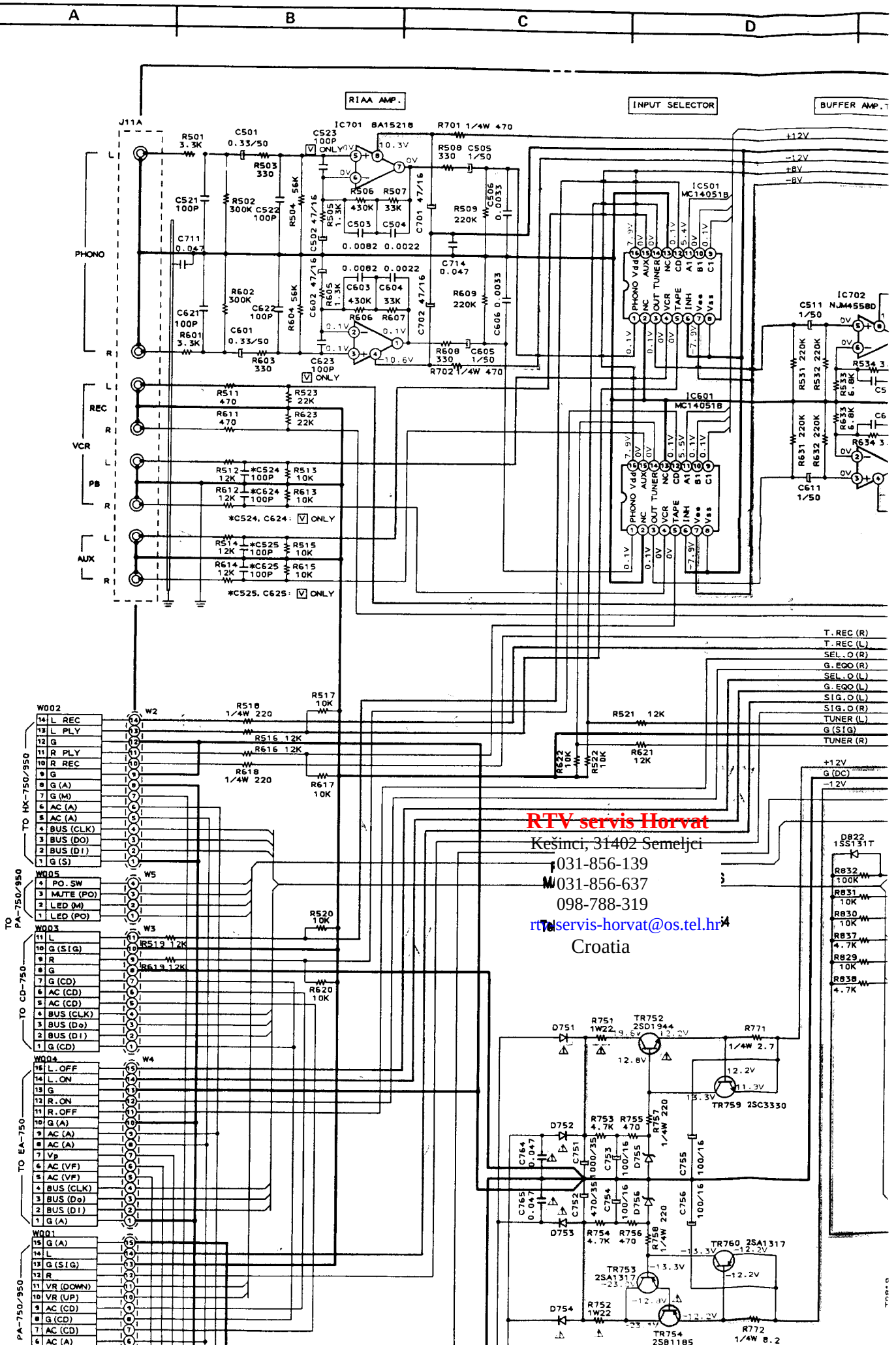


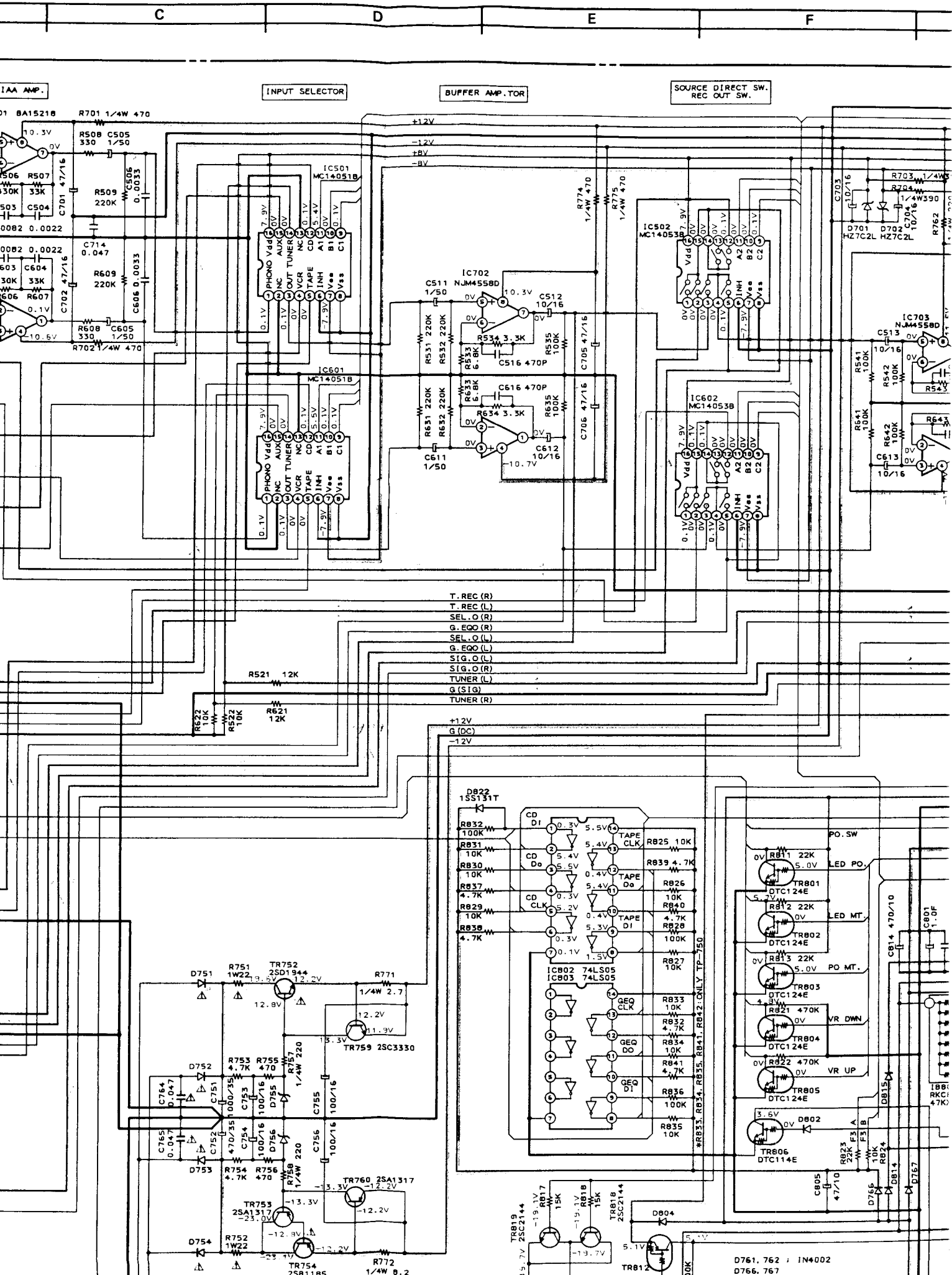






CD-750  
BLOCK DIAGRAM  
No.5-5 P206251M  
A1

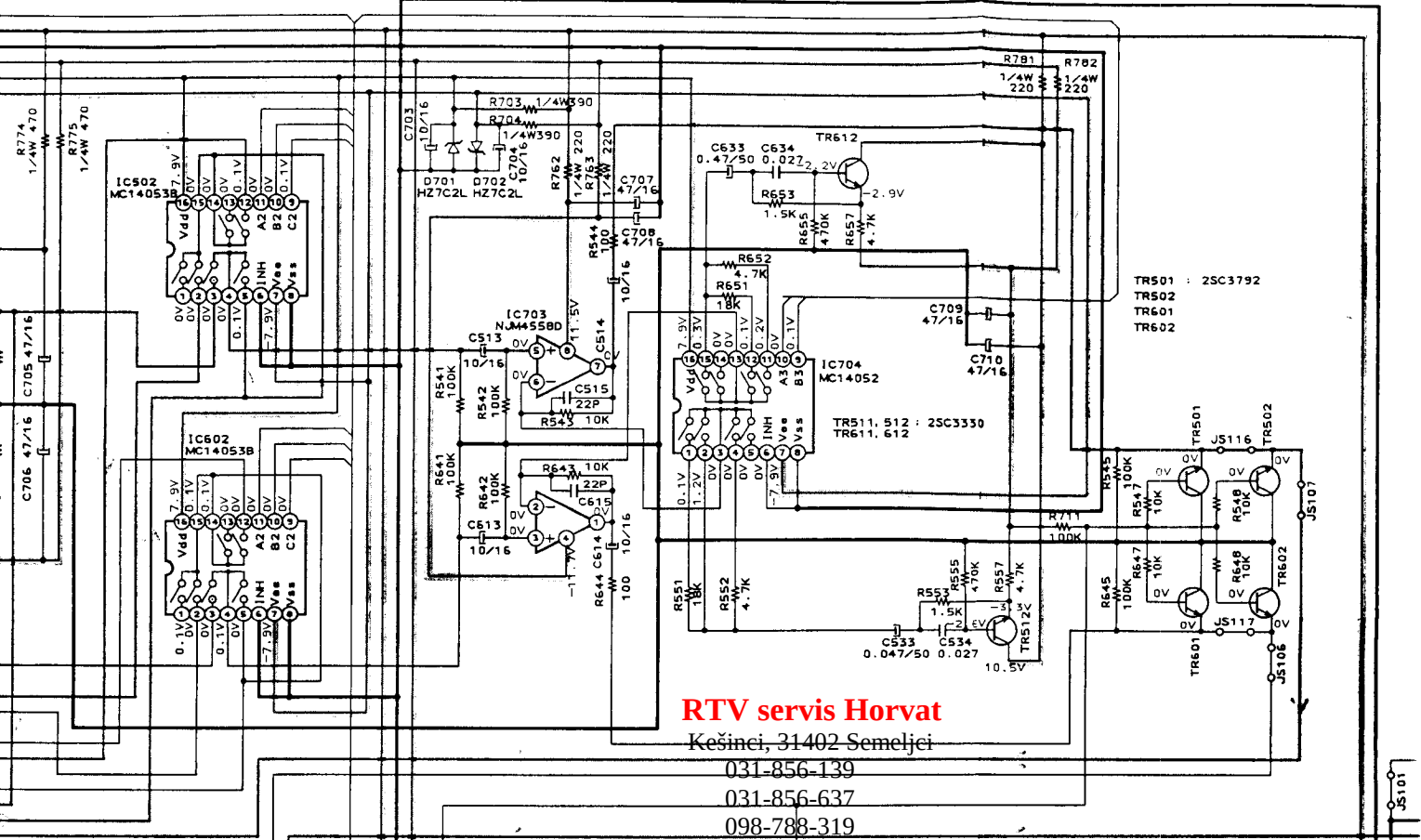




SOURCE DIRECT SW.  
REC OUT SW.

SUPER BASS

MUTE



**RTV servis Horvat**

Kešinci, 31402 Semeljci

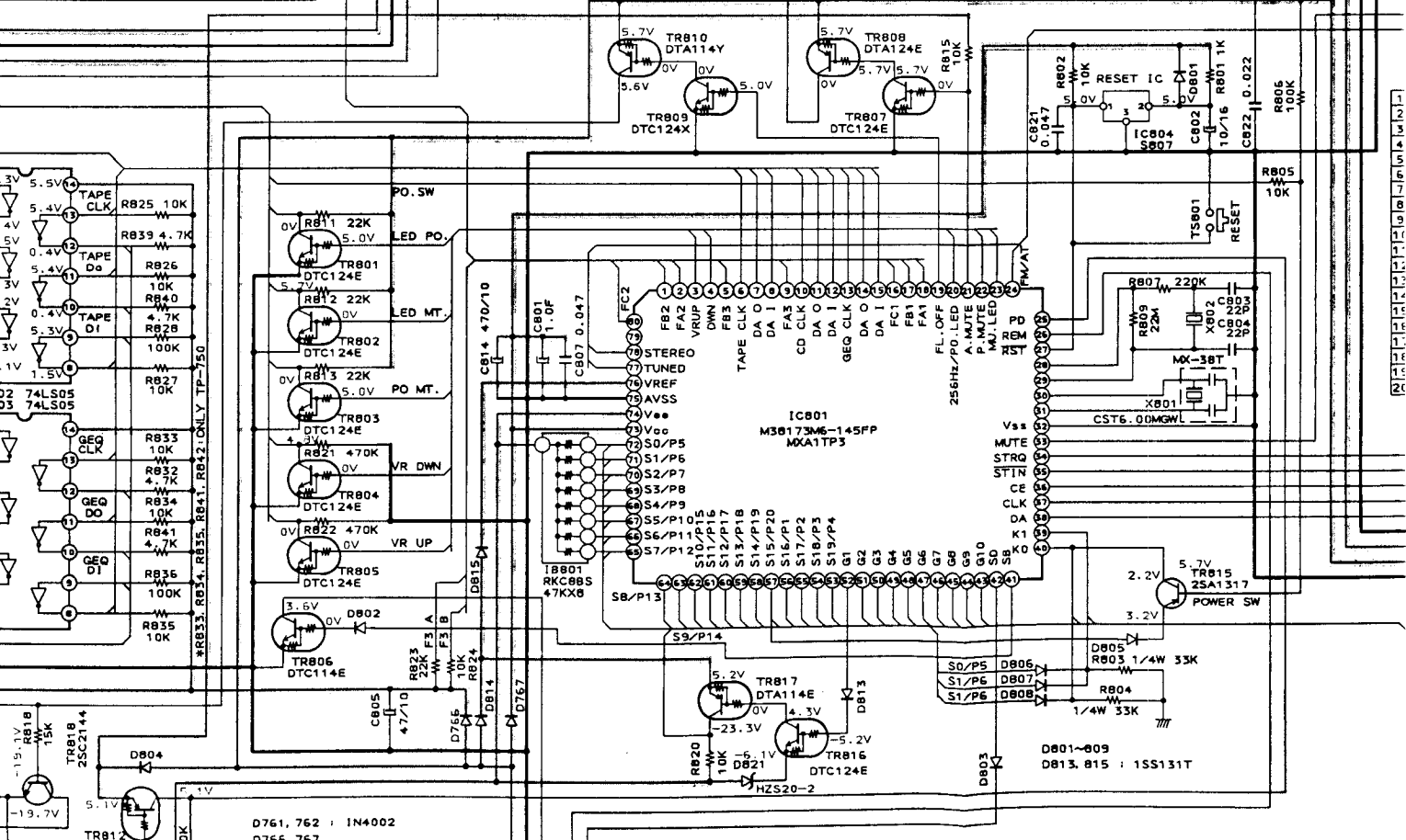
031-856-139

031-856-637

098-788-319

[rtv-servis-horvat@os.tel.hr](mailto:rtv-servis-horvat@os.tel.hr)

Croatia









**RTV servis Horvat**

Kešinci, 31402 Samelji

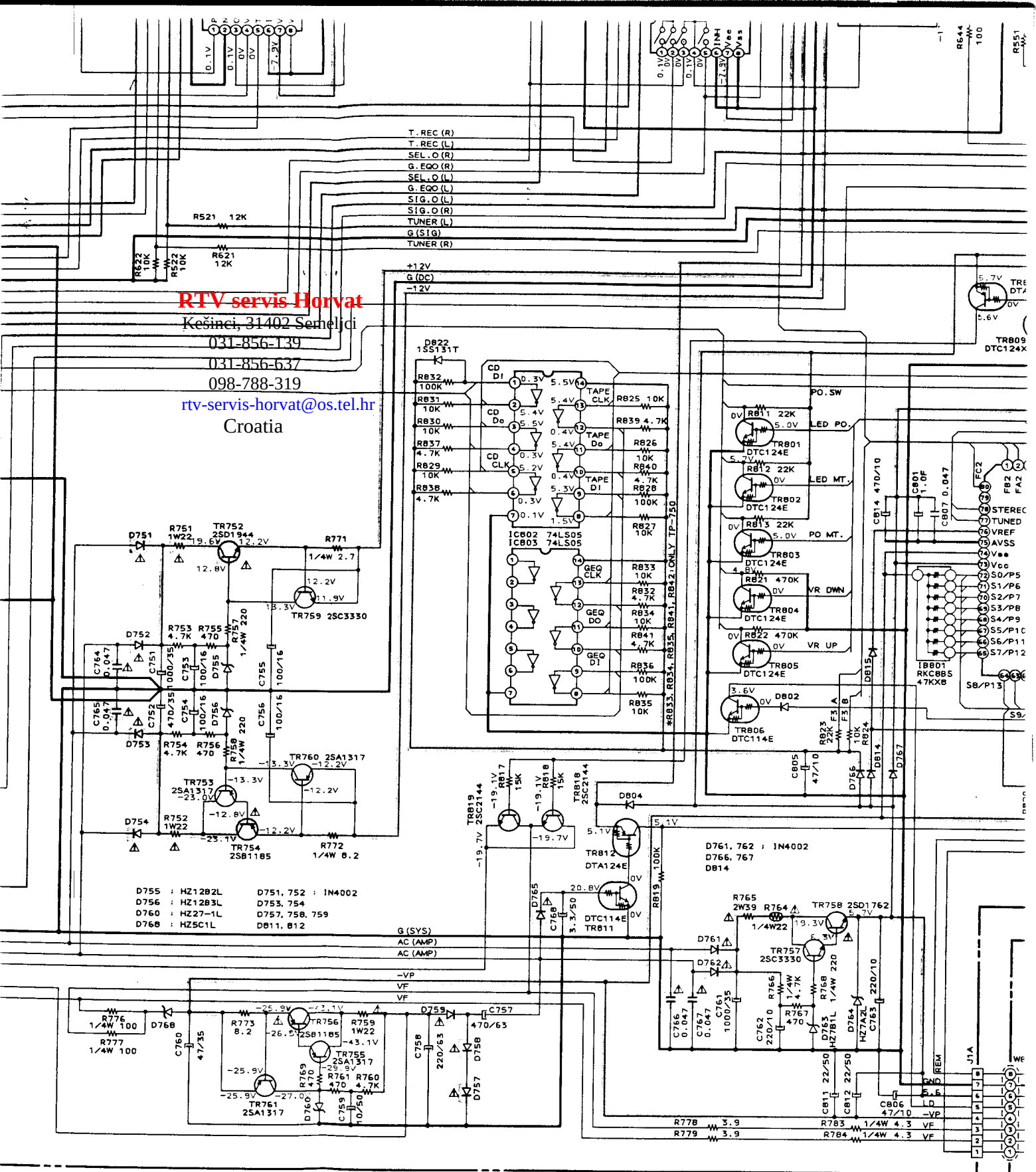
031-856-139

031-856-637

098-788-319

rtv-servis-horvat@os.tel.hr

Croatia



6007A502B

INDICATED VOLTAGES WERE MEASURED DURING FM STEREO MODE.

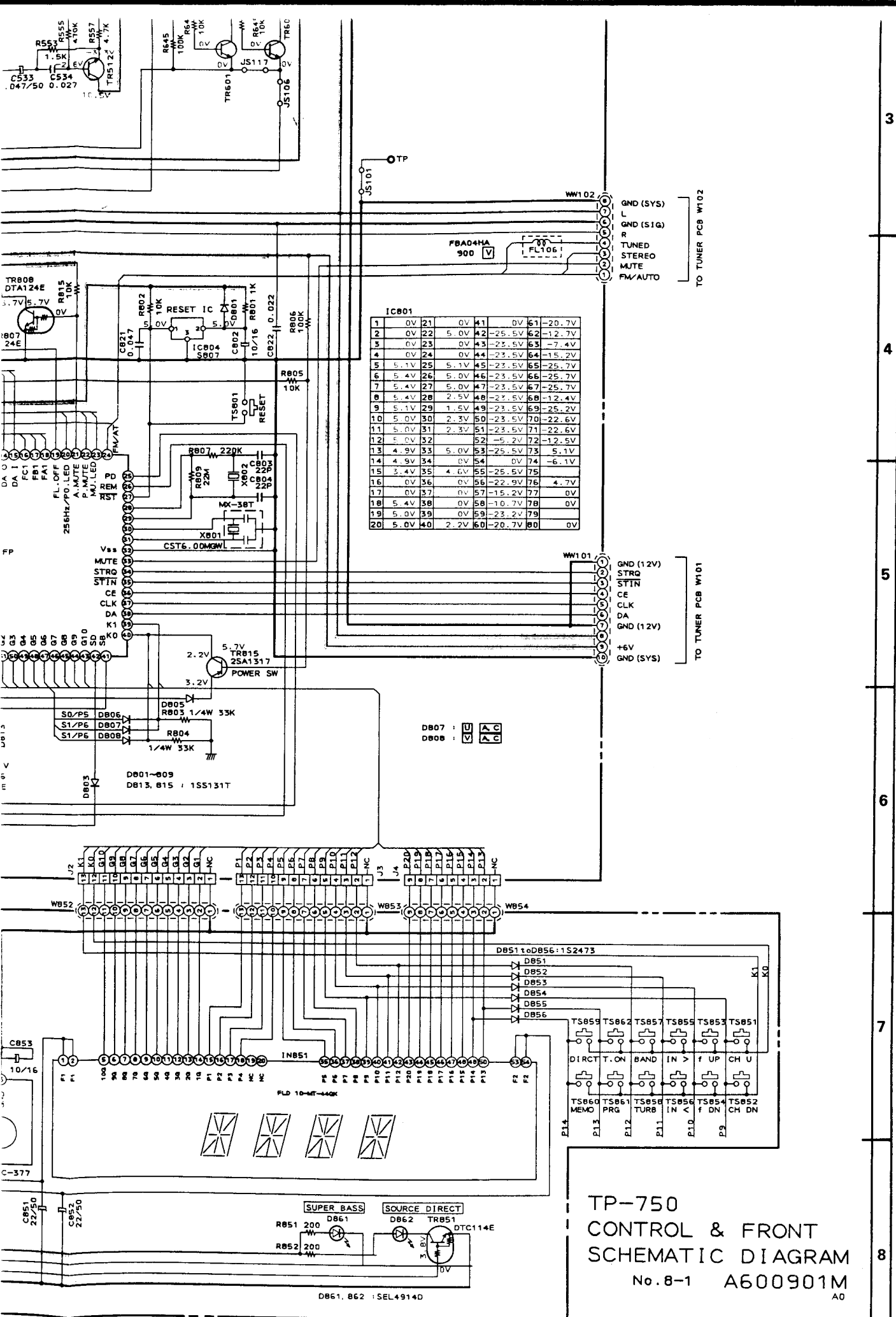
NOTE  
UNLESS OTHERWISE SPECIFIED  
ALL RESISTORS IN OHMS 1/6W(J)  
ALL CAPACITORS IN  $\mu$ F

B (POWER SUPPLY) LINE  
AUDIO SIGNAL LINE (L-CH)

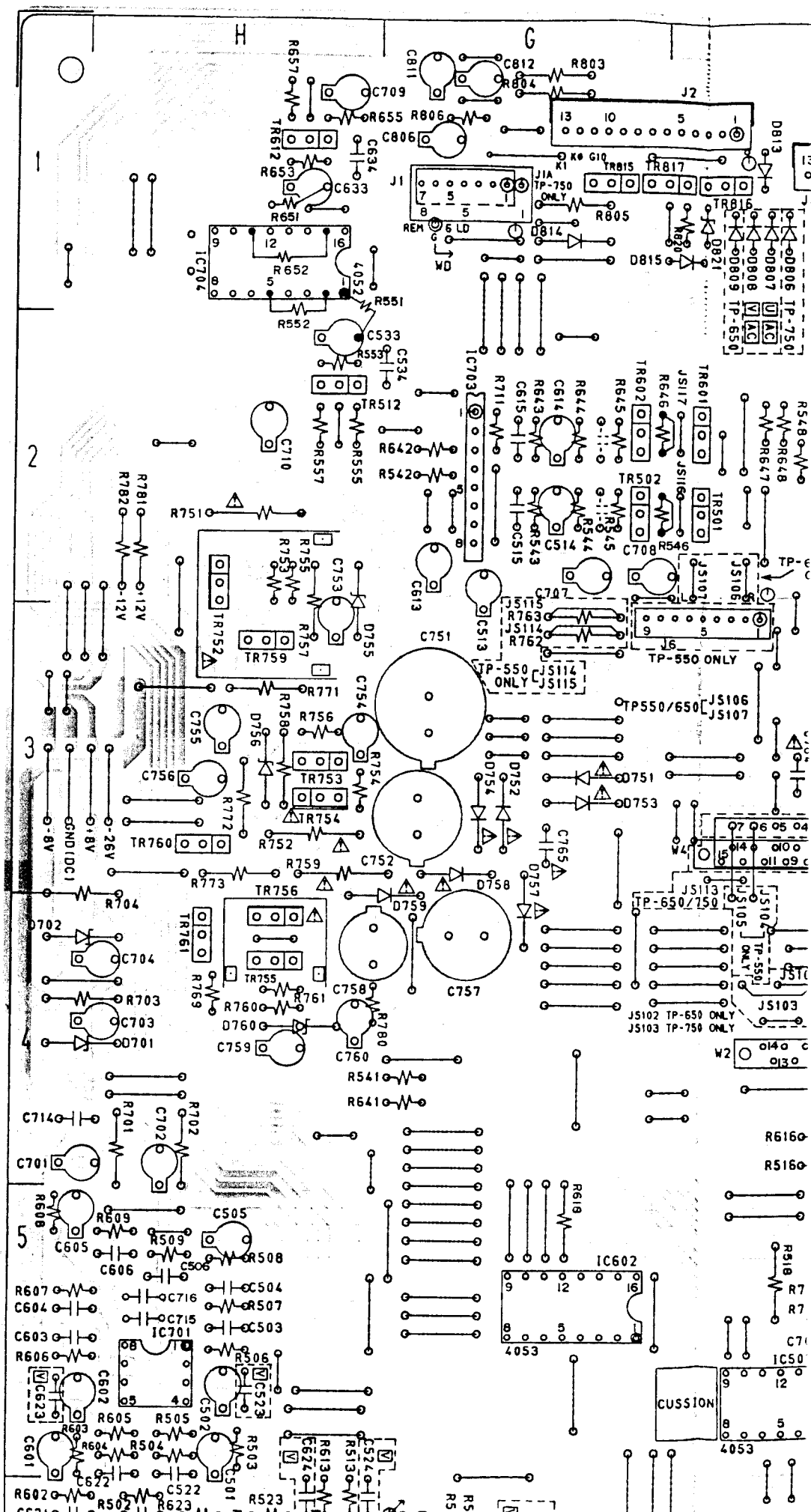
WARNING:  $\Delta$  AND  $\Delta$  INDICATE SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY. REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

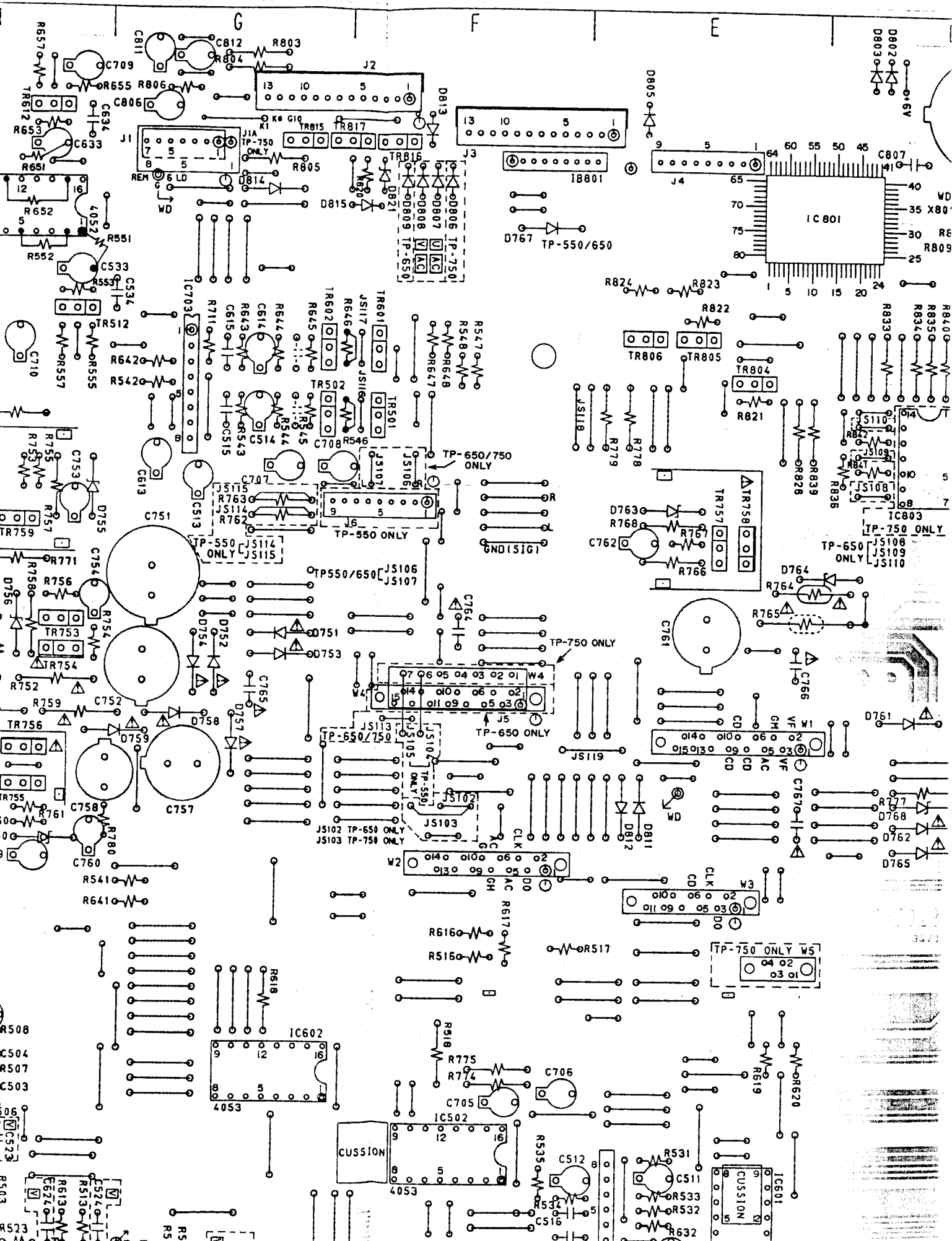
AVERTISSEMENT:  $\Delta$  ET  $\Delta$  ILS INDIQUENT LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDÉES PAR LE FABRICANT



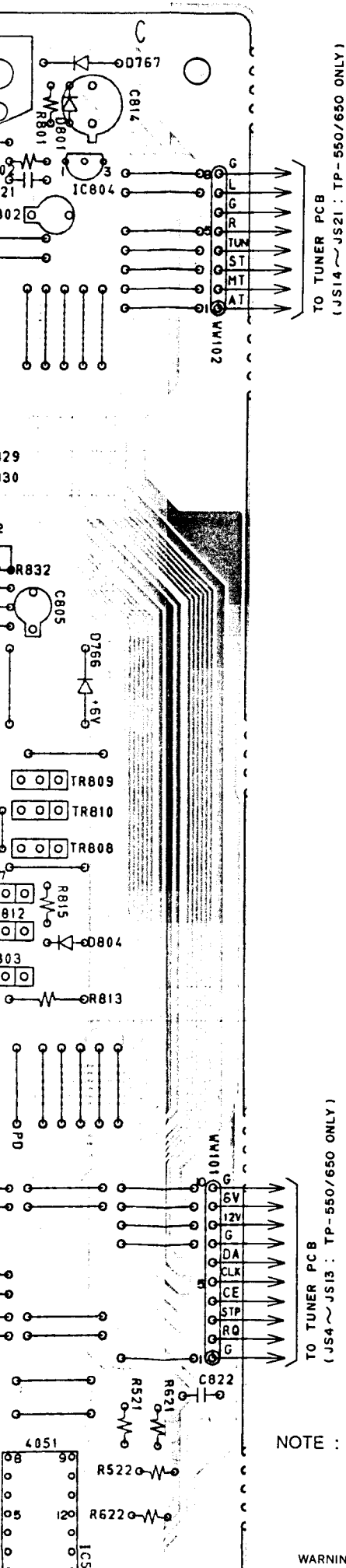


TP-750  
CONTROL & FRONT  
SCHEMATIC DIAGRAM  
No. 8-1 A600901M  
A0









## 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

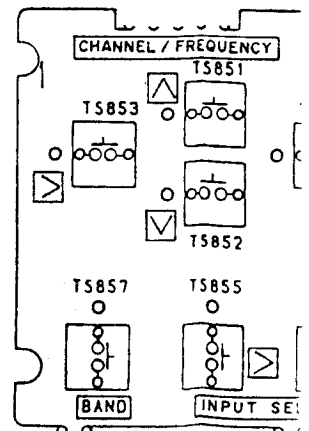
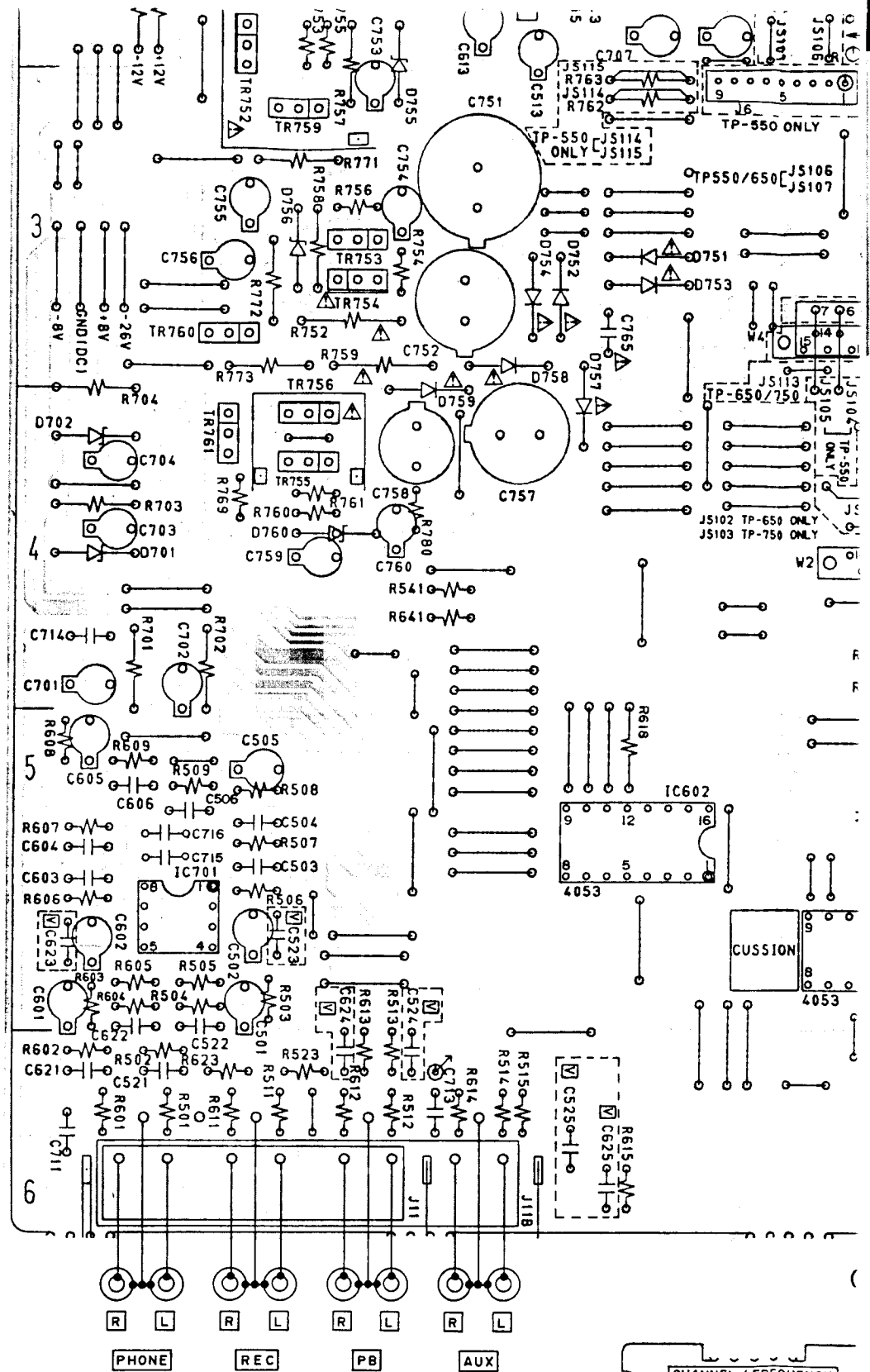
|       |       |      |
|-------|-------|------|
| TR101 | ..... | B3   |
| TR201 | ..... | A3   |
| TR202 | ..... | A4   |
| TR203 | ..... | A3   |
| TR401 | ..... | B5   |
| TR402 | ..... | B5,6 |
| TR403 | ..... | B4   |
| TR404 | ..... | B4   |
| TR405 | ..... | B2   |
| TR406 | ..... | A4   |
| 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 |

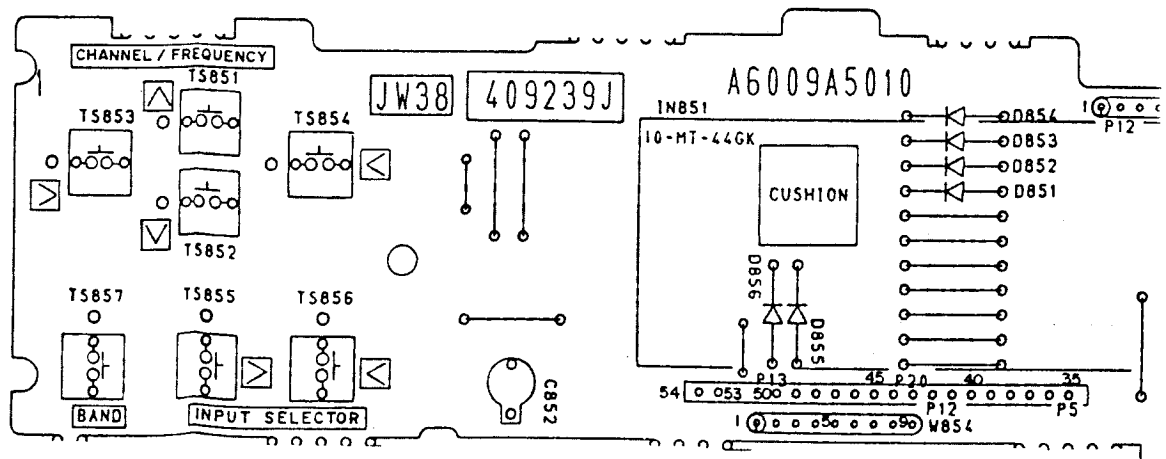
### CONNECTORS

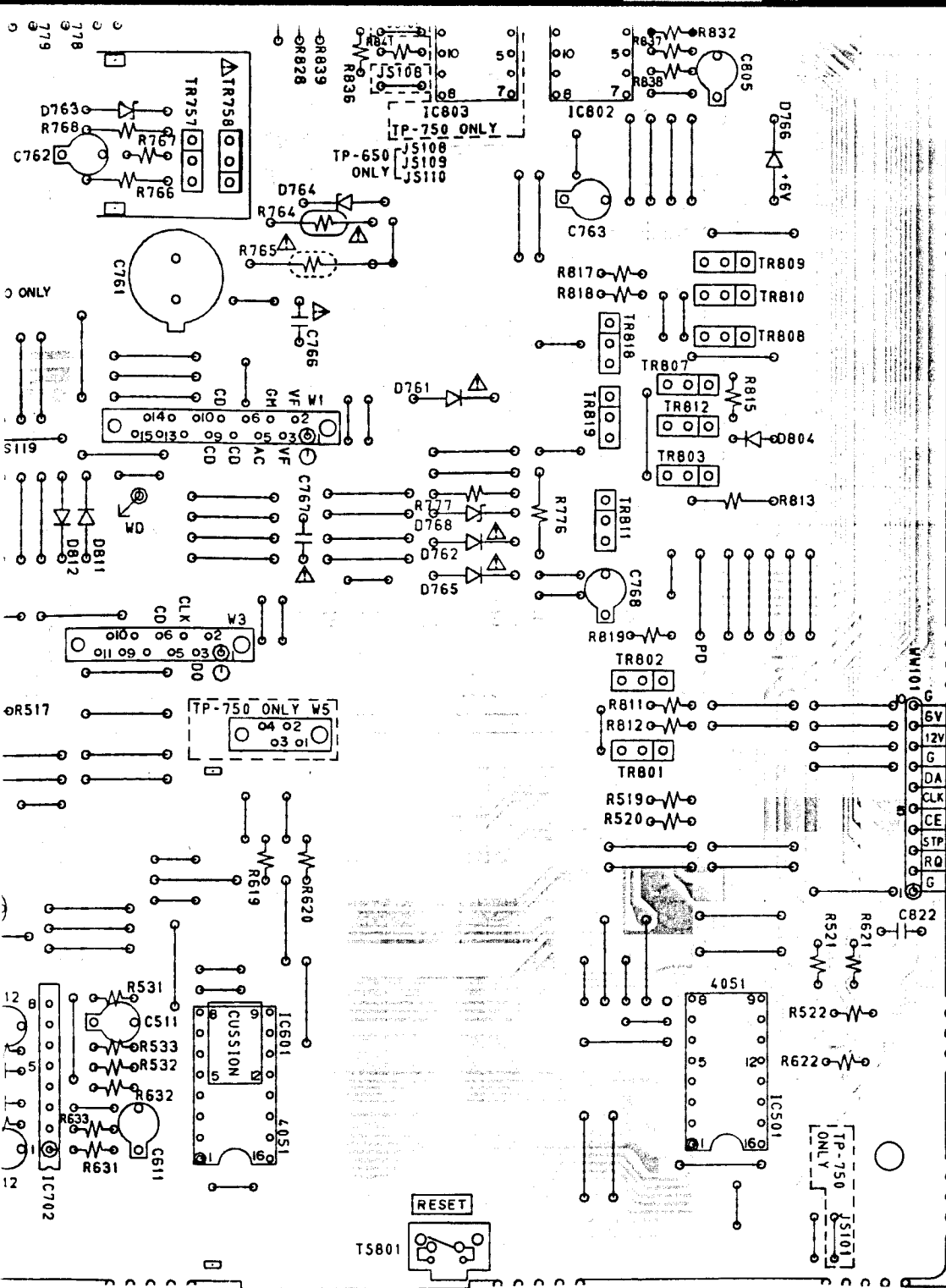
|             |       |      |
|-------------|-------|------|
| J1,J1A      | ..... | G1   |
| J2          | ..... | F,G1 |
| J3          | ..... | E,F1 |
| J4          | ..... | E1   |
| J5          | ..... | F3   |
| J6          | ..... | F,G3 |
| J11,11A,B,C | ..... | G,H6 |
| J101        | .....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

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









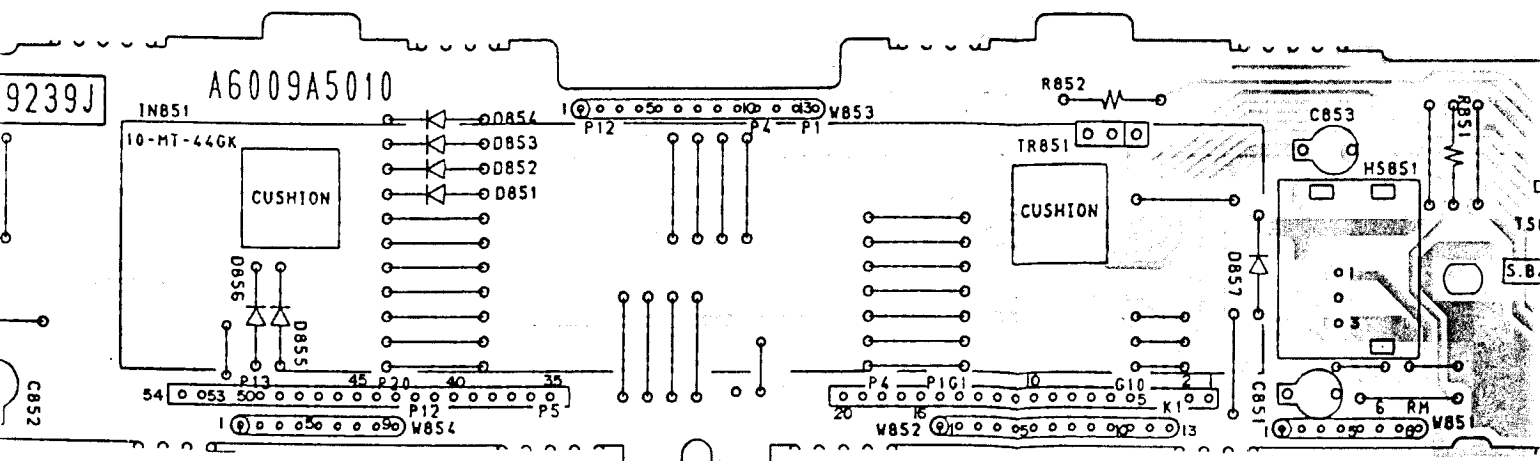
|       |      |
|-------|------|
| TR201 | A3   |
| TR202 | A4   |
| TR203 | A3   |
| TR401 | B5   |
| TR402 | B5,6 |
| TR403 | B4   |
| TR404 | B4   |
| TR405 | B2   |
| TR406 | A4   |
| TR407 | A4   |
| TR408 | B4   |
| TR501 | F2   |
| TR502 | G2   |
| TR512 | H2   |
| TR601 | F2   |
| TR602 | G2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

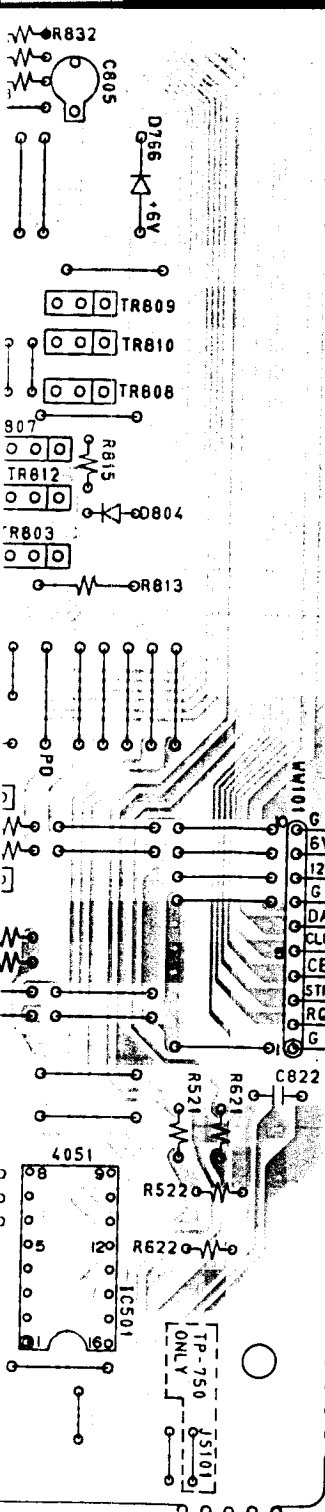
TO TUNER PCB  
(JS4~JS13 : TP-550/550 ONLY)

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

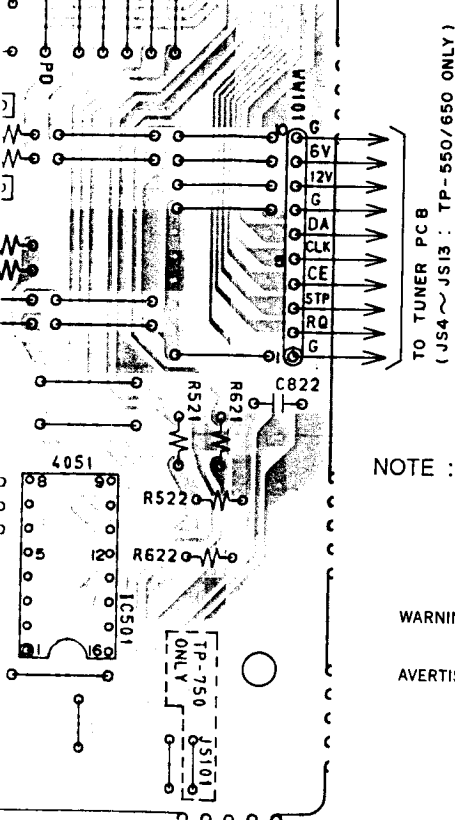
WARNING: ⚠ INDICATES SAFETY CRITICAL CO  
REPLACE SAFETY CRITICAL COMPO  
RECOMMENDED PARTS  
AVERTISSEMENT: ⚠ IL INDIQUE LES COMPOS  
POUR MAINTENIR LE DEGRÉ DE SÉ  
NE REMPLACER QUE DES PIÈCES F

A6007A502B



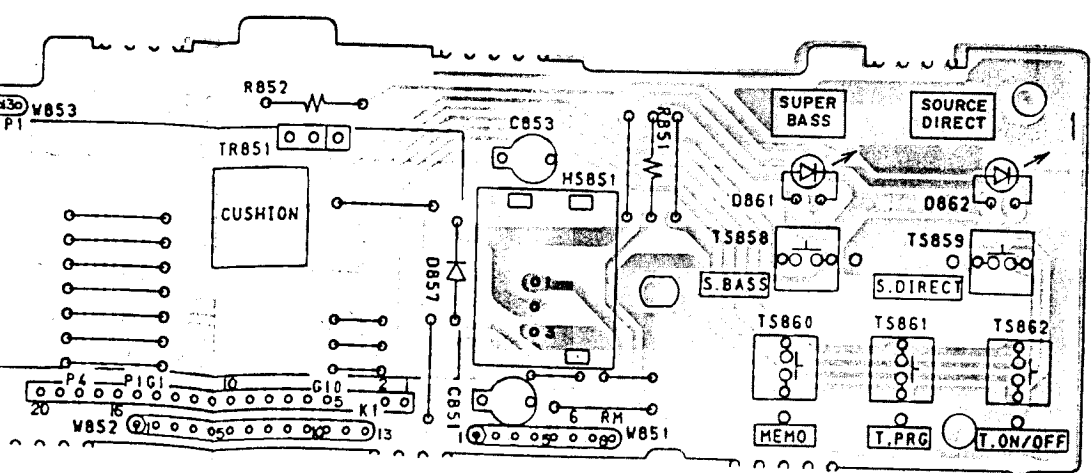


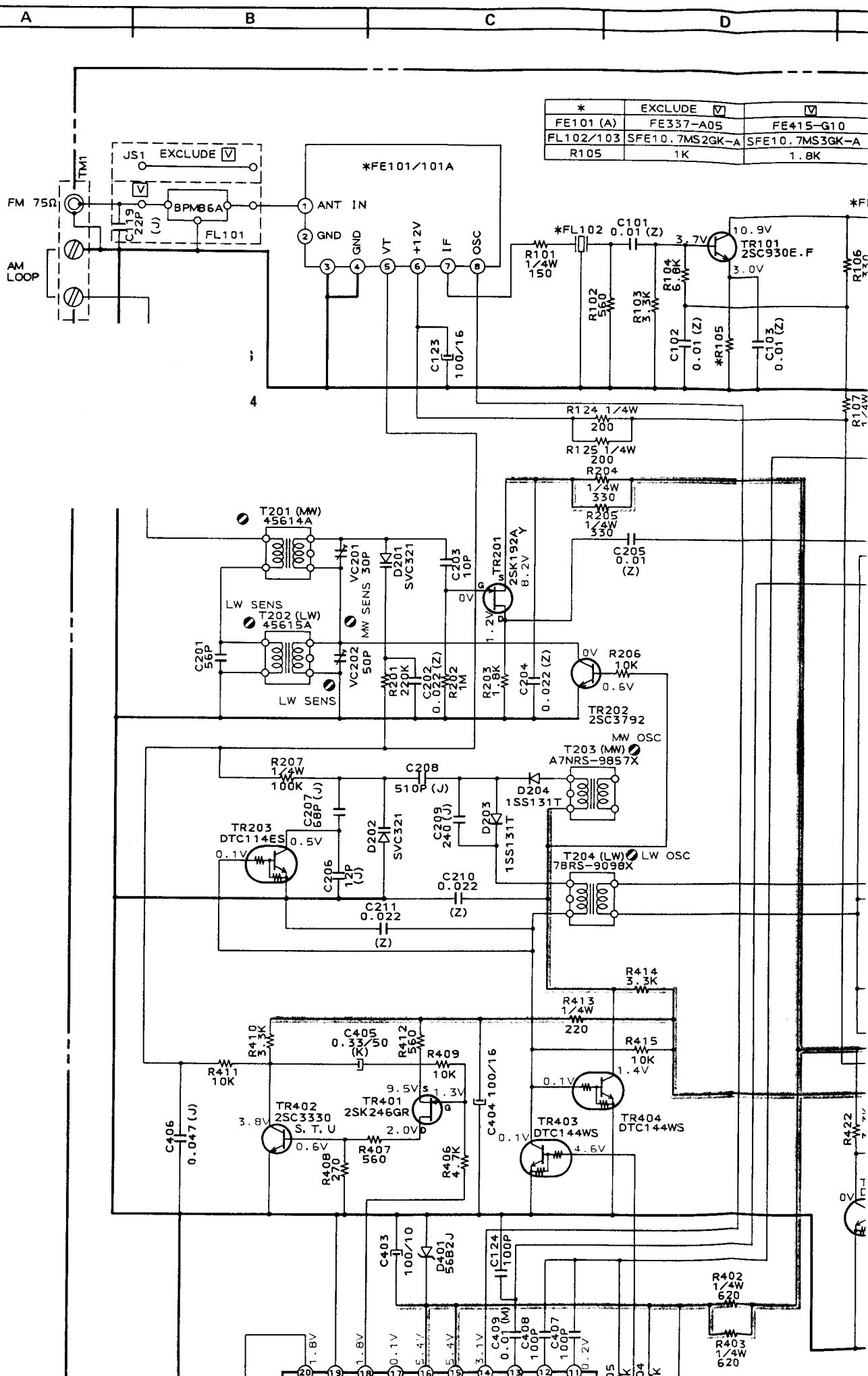
|             |      |                   |      |
|-------------|------|-------------------|------|
| TR201 ..... | A3   | TR811 .....       | D4   |
| TR202 ..... | A4   | TR812 .....       | C4   |
| TR203 ..... | A3   | TR815 .....       | G1   |
| TR401 ..... | B5   | TR816 .....       | F1   |
| TR402 ..... | B5,6 | TR817 .....       | F,G1 |
| TR403 ..... | B4   | TR818 .....       | D3   |
| TR404 ..... | B4   | TR819 .....       | D3,4 |
| TR405 ..... | B2   |                   |      |
| TR406 ..... | A4   | <b>CONNECTORS</b> |      |
| 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.

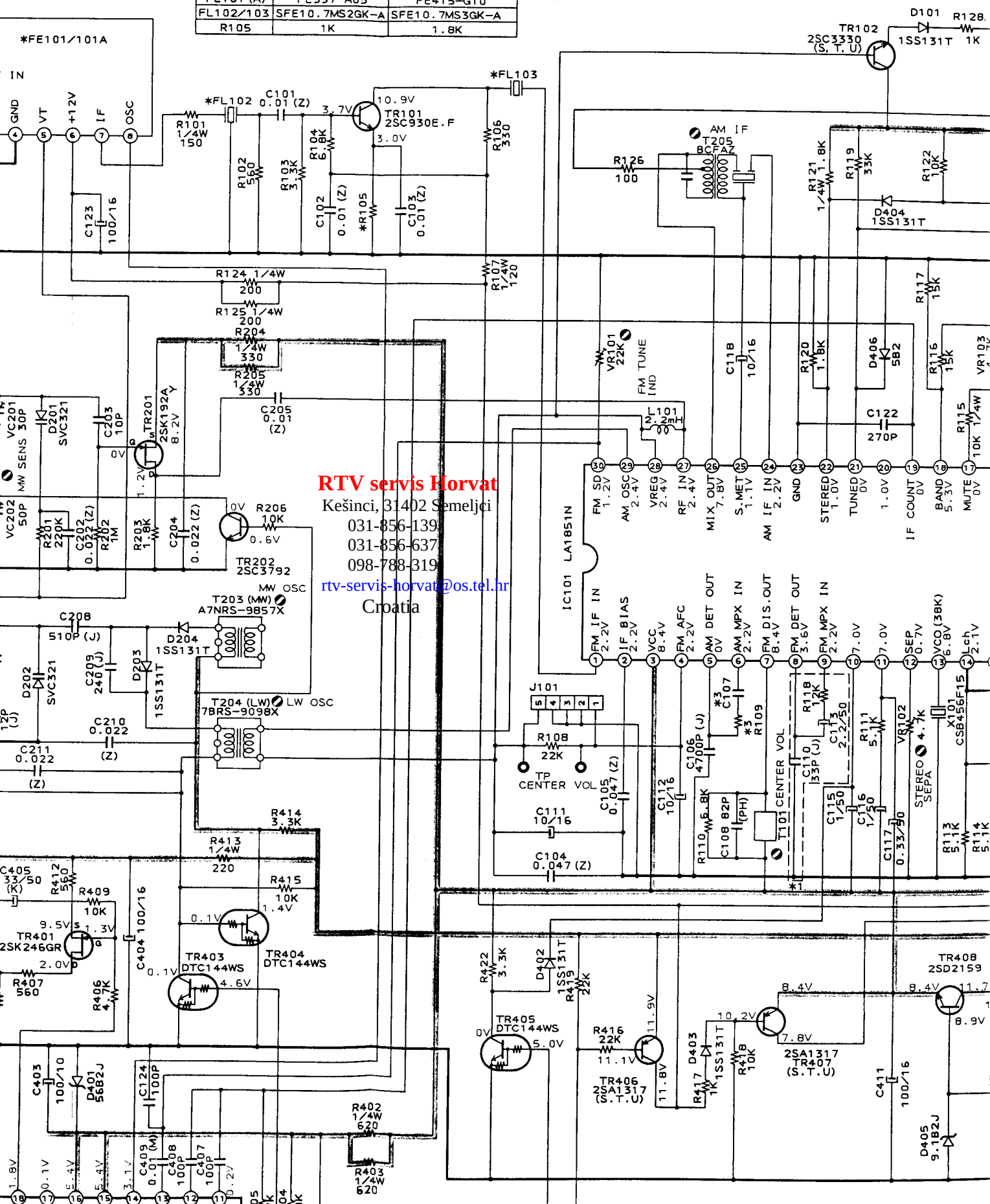
WARNING:  $\Delta$  INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY,  
REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S  
RECOMMENDED PARTS.  
AVERTISSEMENT:  $\Delta$  IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ.  
POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL,  
NE REMPLACER QUE DES PIÈCES RECOMMANDÉES PAR LE FABRICANT





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

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



RTV servis Horvat

Kešinci, 31402 Semeljci

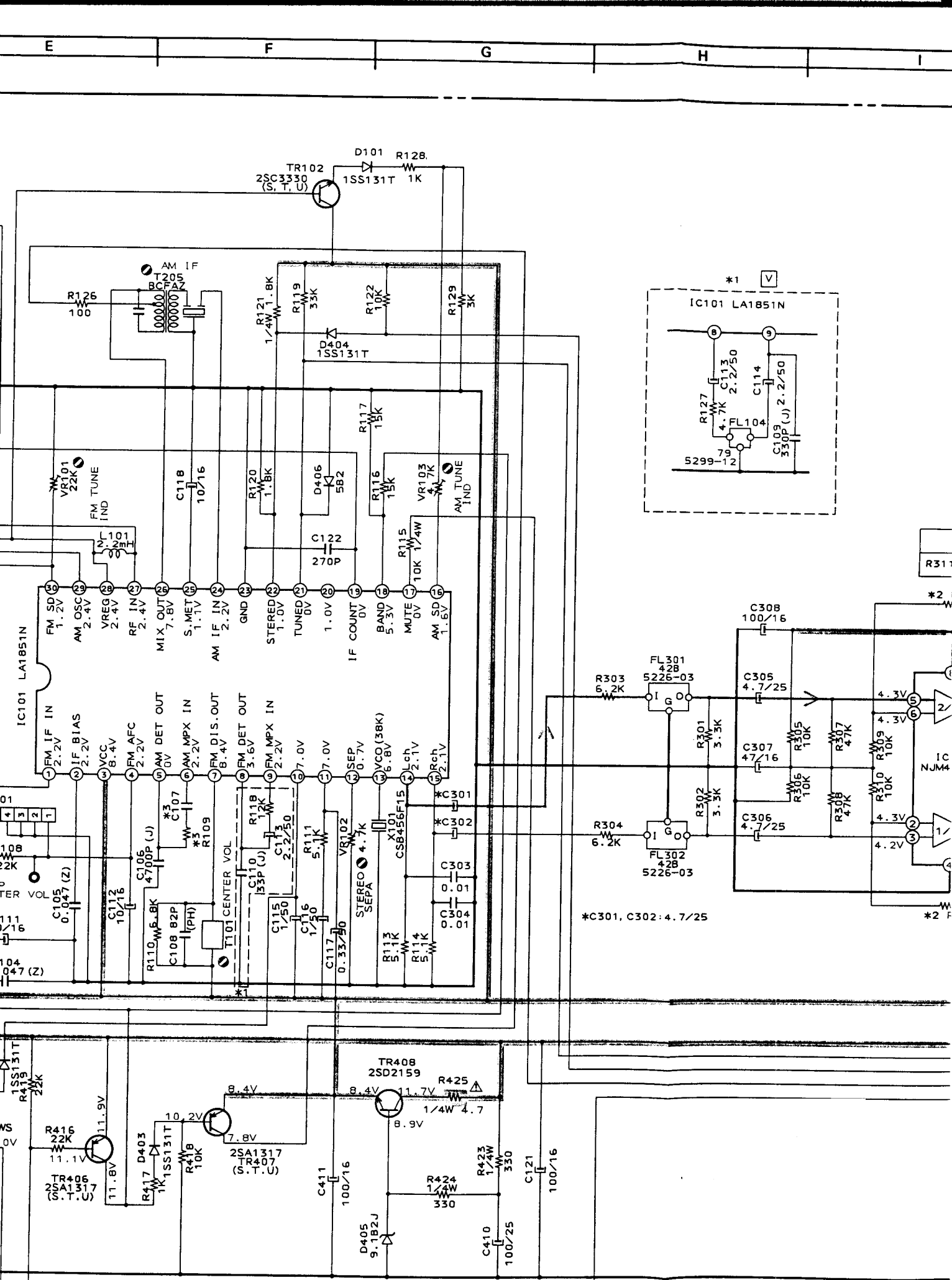
031-856-139

031-856-637

098-788-319

rtv-servis-horvat@os.tel.hr

Croatia





3

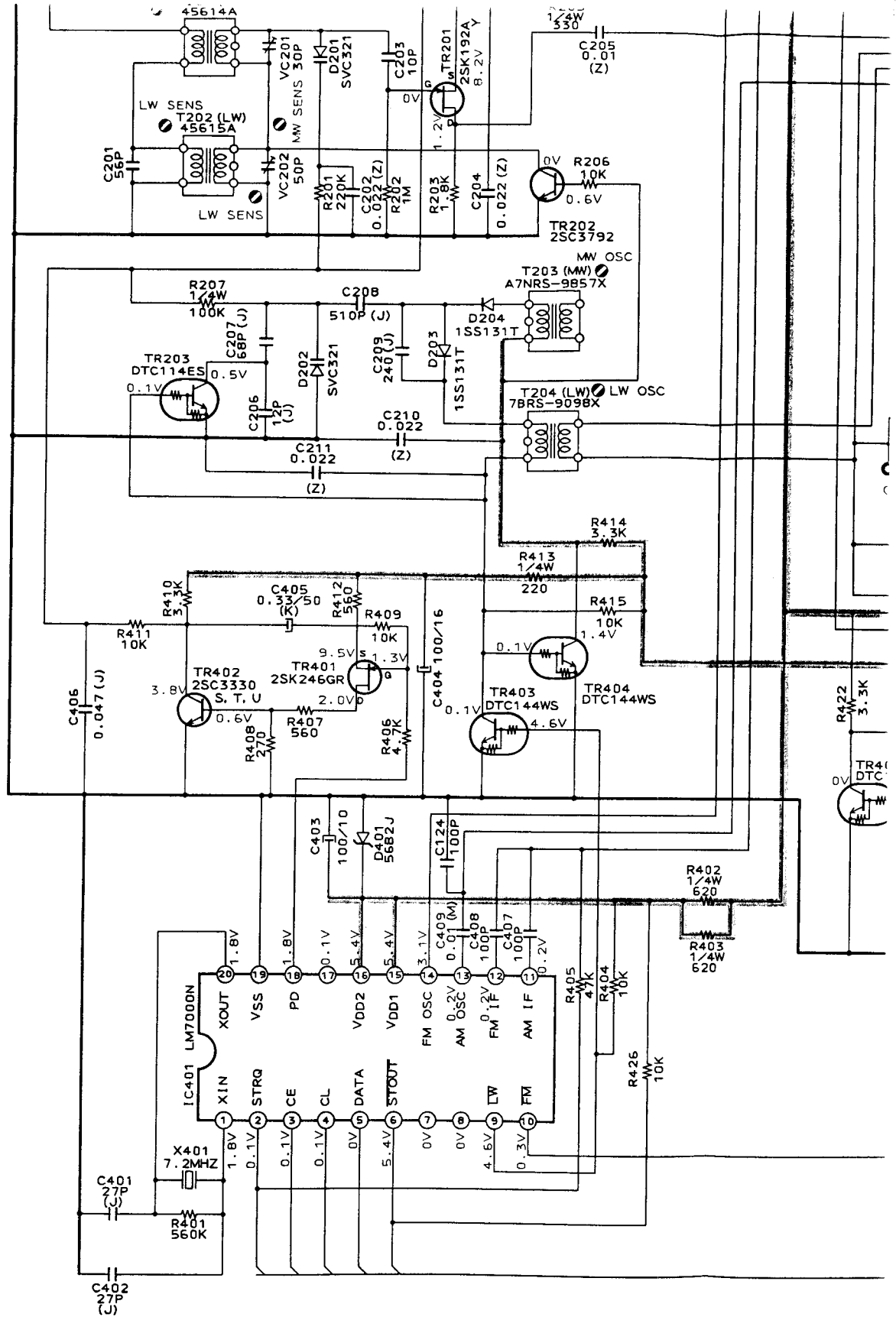
4

5

6

7

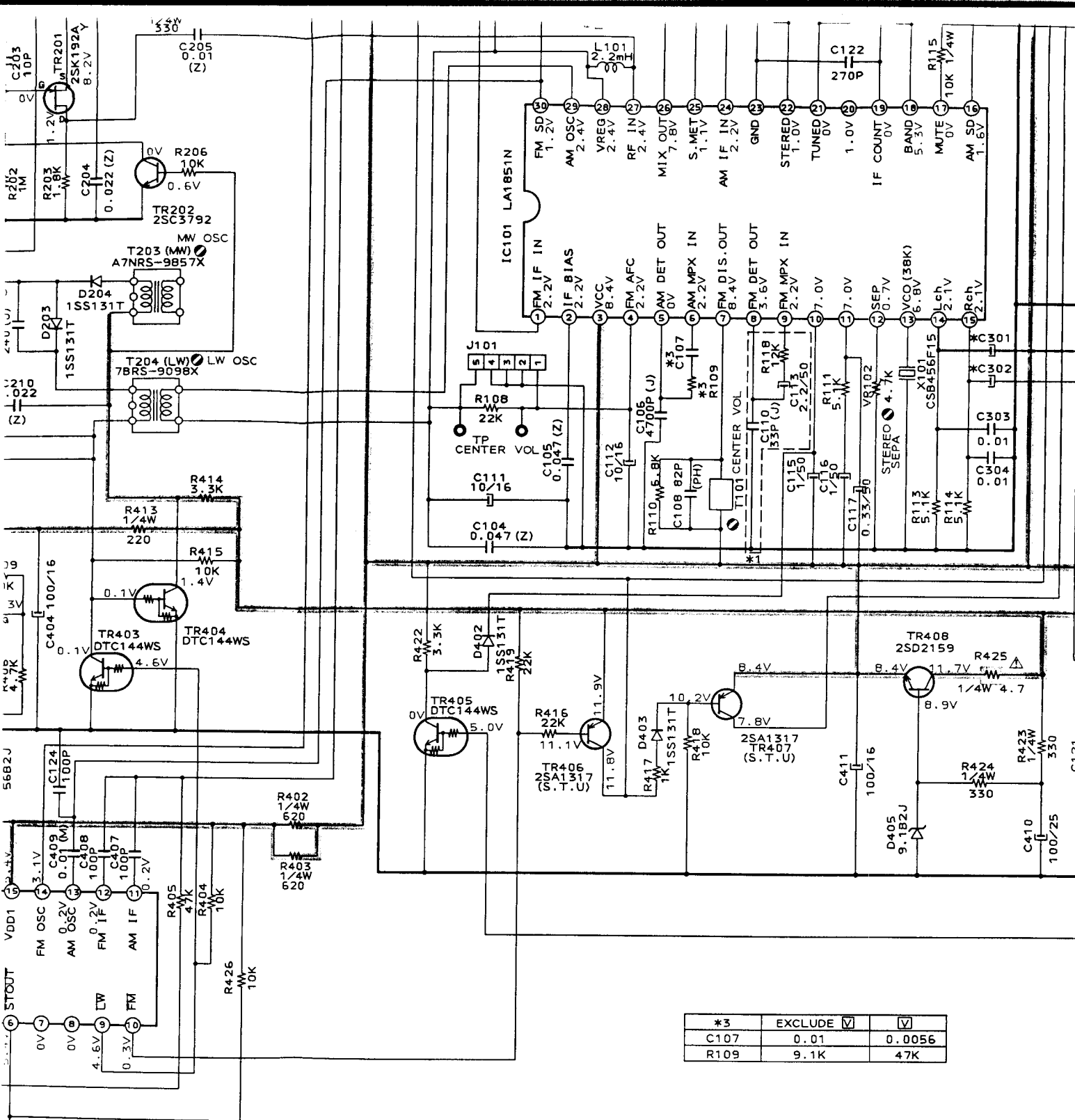
8



TUNER PCB A6007A502A

 B (POWER SUPPLY) L  
 AUDIO SIGNAL LIN





| *3   | EXCLUDE | ✓ | ✓      |
|------|---------|---|--------|
| C107 | 0.01    |   | 0.0056 |
| R109 | 9.1K    |   | 47K    |

5007A502A

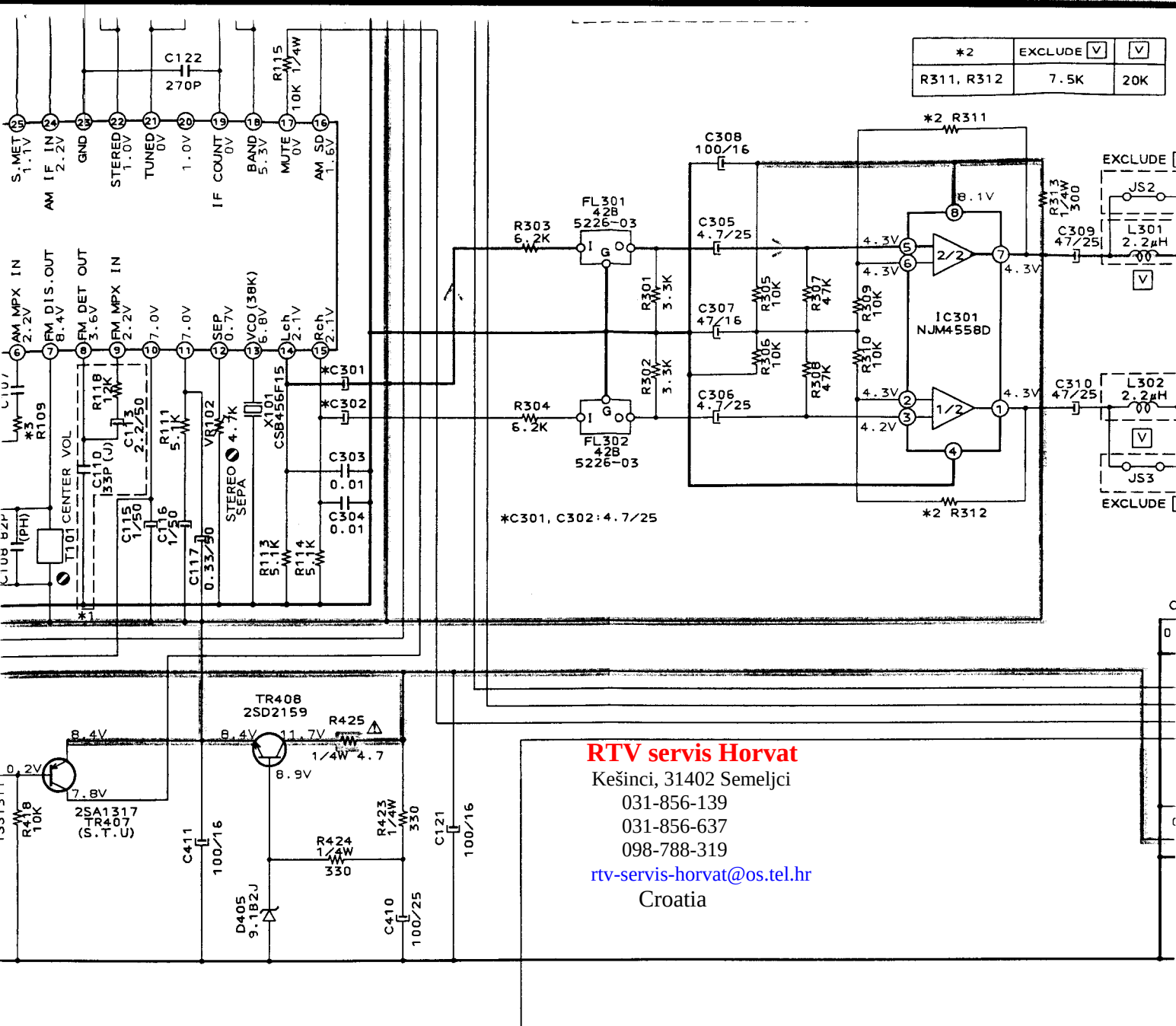
— B (POWER SUPPLY) LINE  
— AUDIO SIGNAL LINE (L-CH)

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

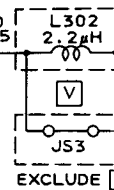
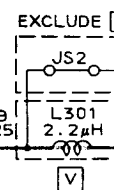
AVERTISSEMENT: ⚠ ET ■ ILS INDIQUENT LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDÉES PAR LE FABRICANT

NOTE: UNLESS ALL RE: ALL CAI ALL ELI

INDICA DURING



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



## RTV servis Horvat

Kešinci, 31402 Semeljci

031-856-139

031-856-637

098-788-319

[rtv-servis-horvat@os.tel.hr](mailto:rtv-servis-horvat@os.tel.hr)

Croatia

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

INDICATE SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY. REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED TYPES.

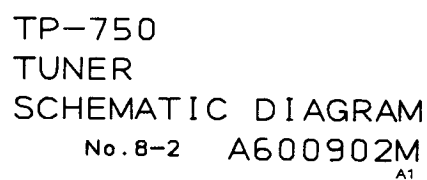
ET ILS INDICENT LES POSTANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDÉES PAR LE FABRICANT.

NOTE:  
UNLESS OTHERWISE SPECIFIED  
ALL RESISTORS IN OHMS  
ALL CAPACITORS IN  $\mu F$  (P=PF)  
ALL ELECTROLYTIC CAPACITORS IN  $\mu F/WV$

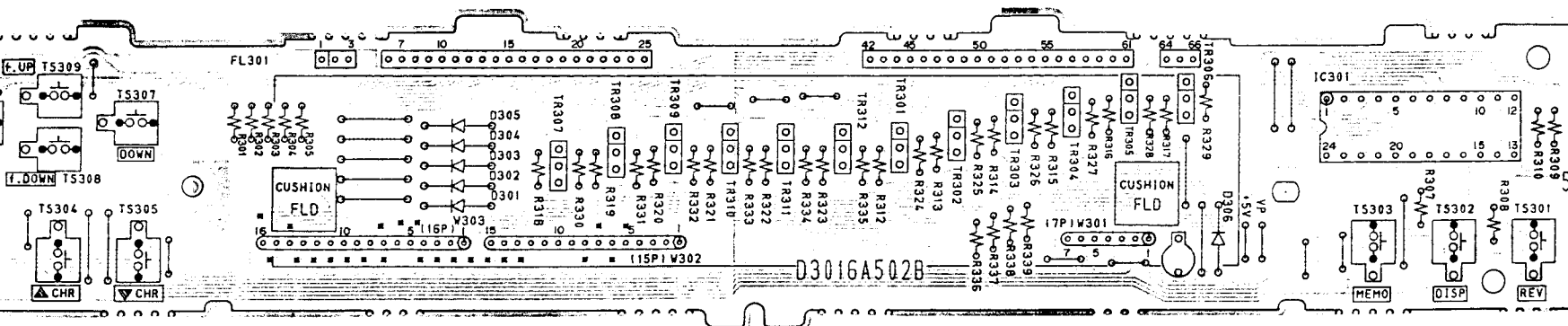
INDICATED VOLTAGES WERE MEASURED DURING FM STEREO MODE.

TP-7  
TUNE  
SCHE  
N

|   |
|---|
| 3 |
| 4 |
| 5 |
| 6 |
| 7 |
| 8 |







FRONT PCB D3016A502B

A B C D

1

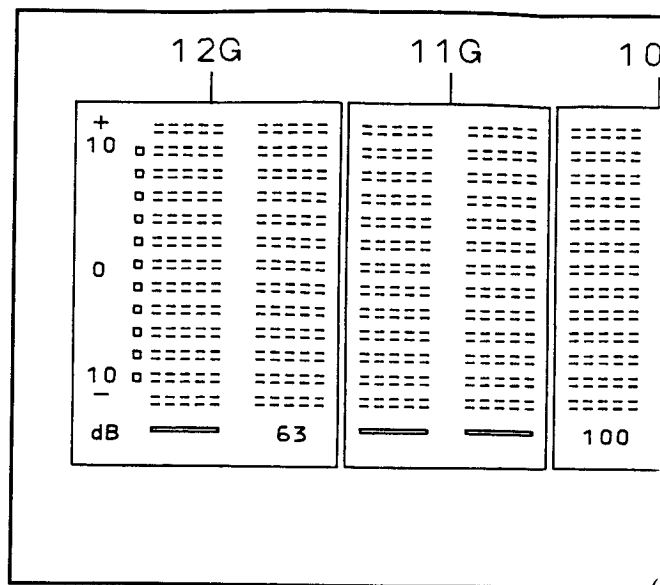
2

3

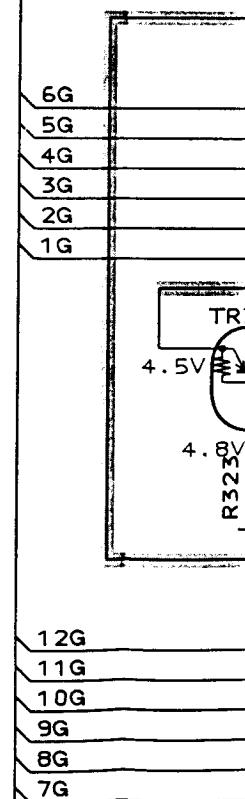
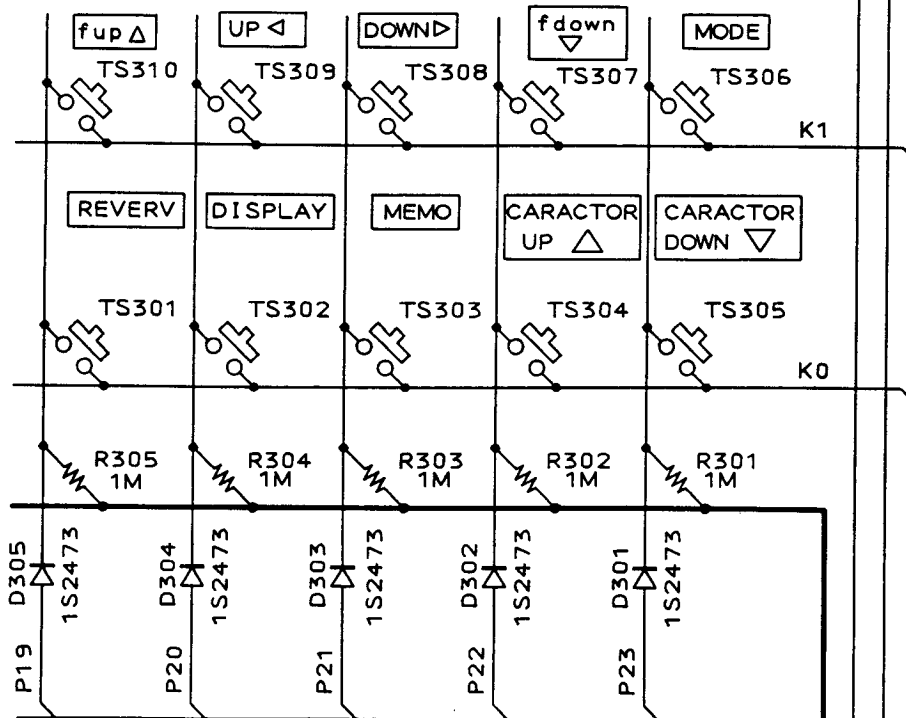
4

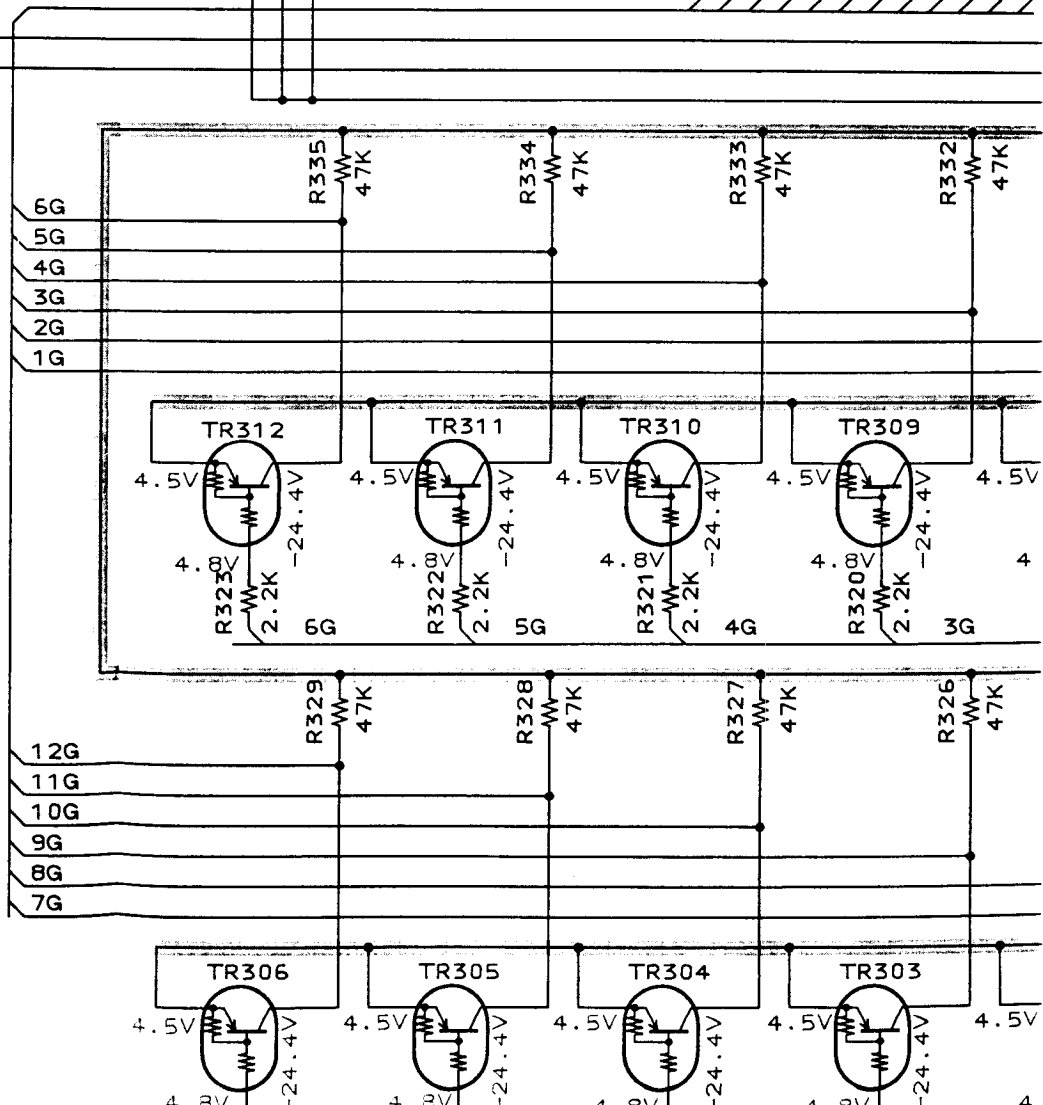
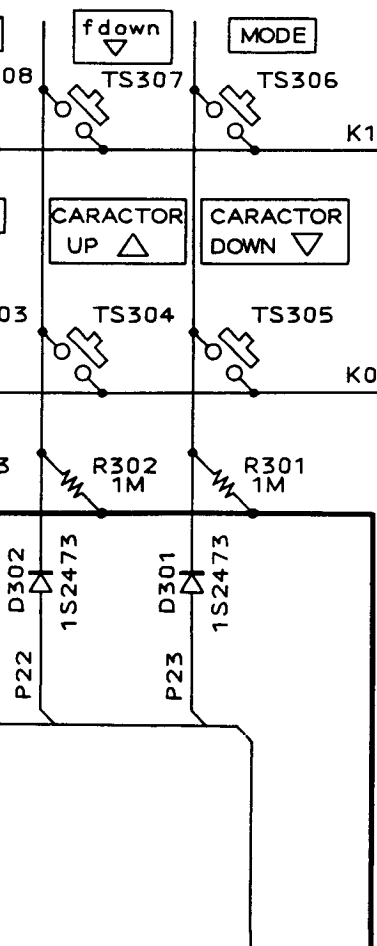
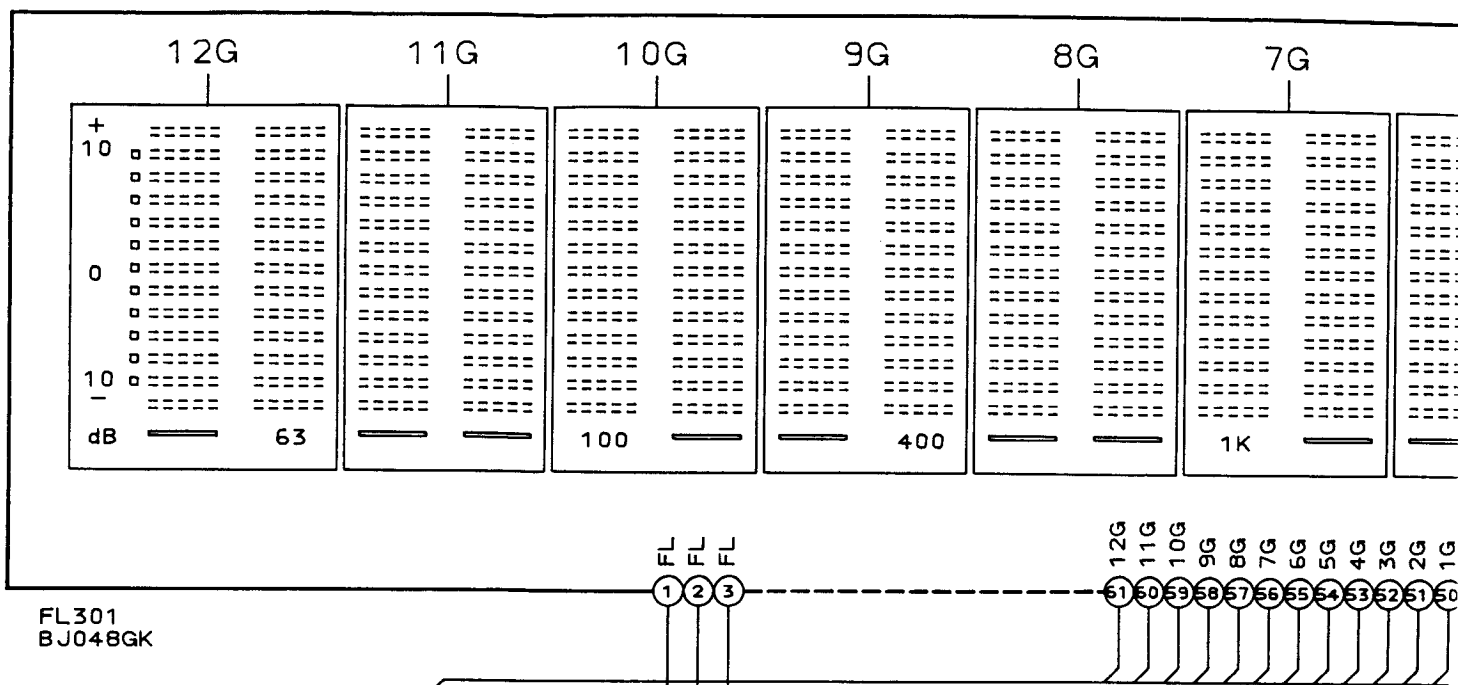
5

6

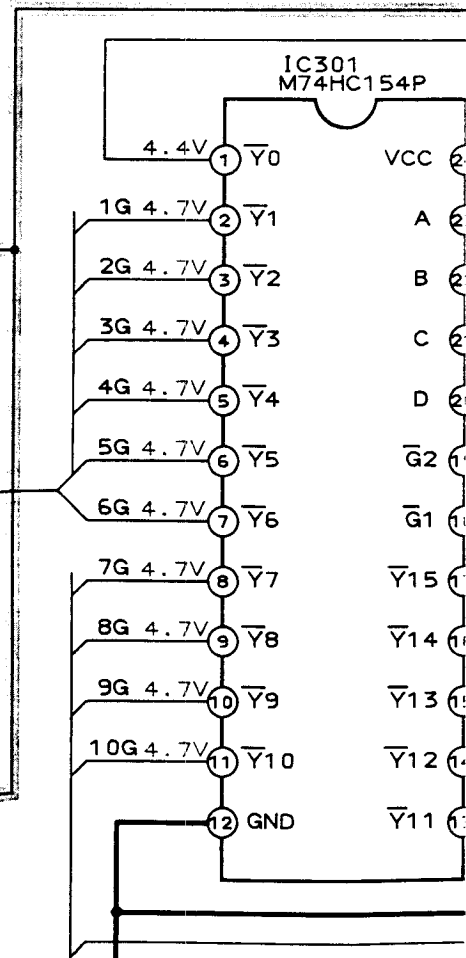
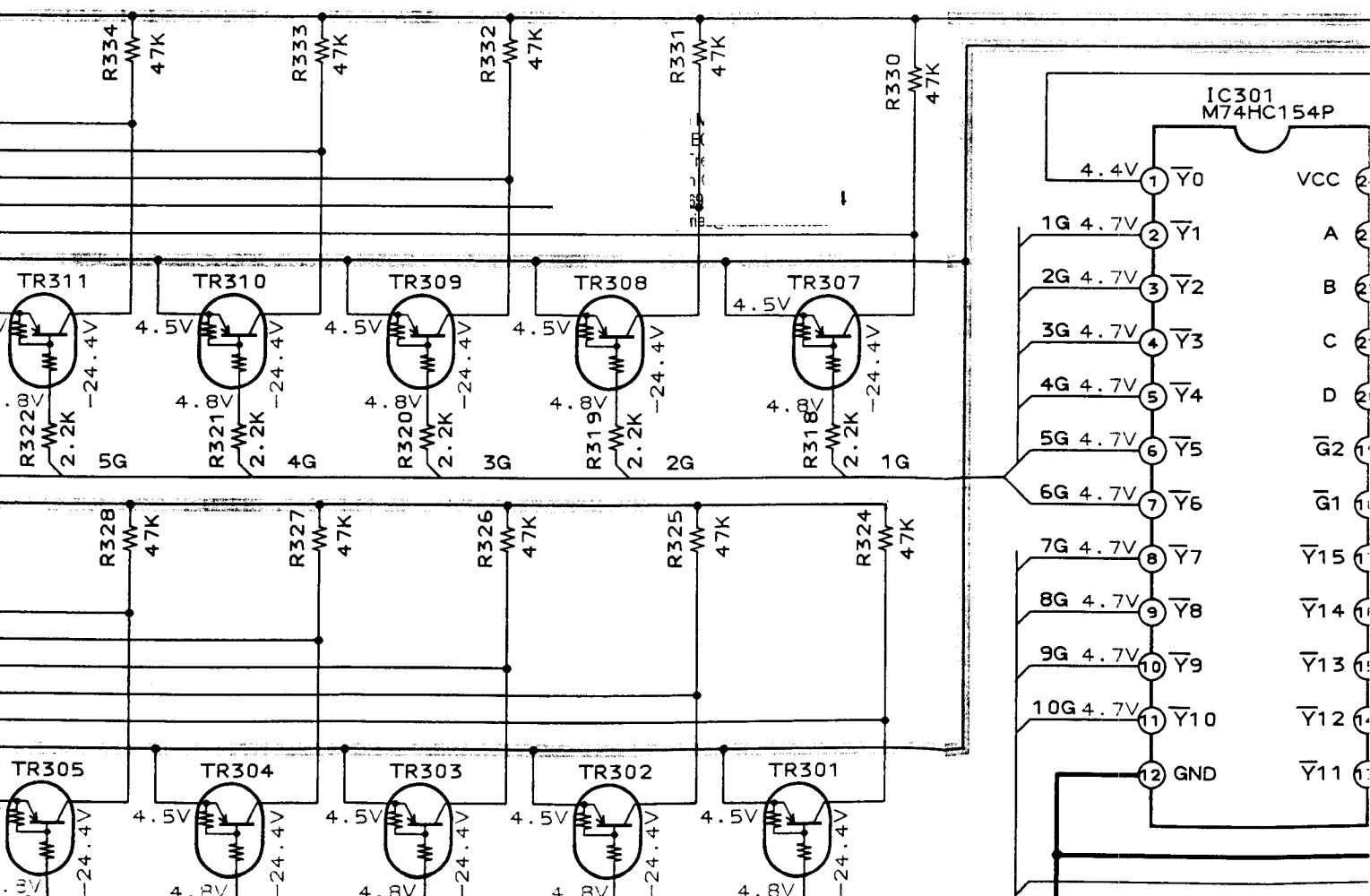
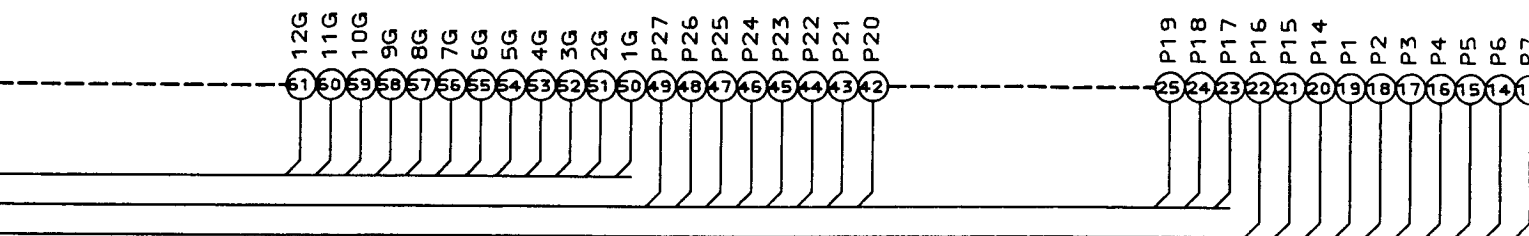
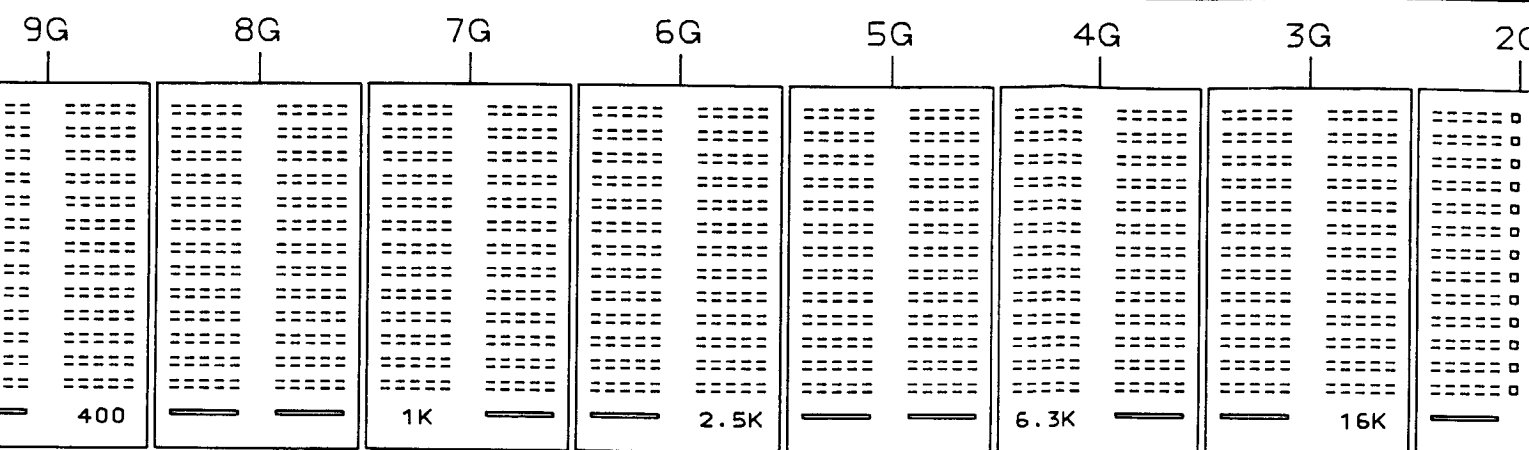


FL301  
BJ048GK

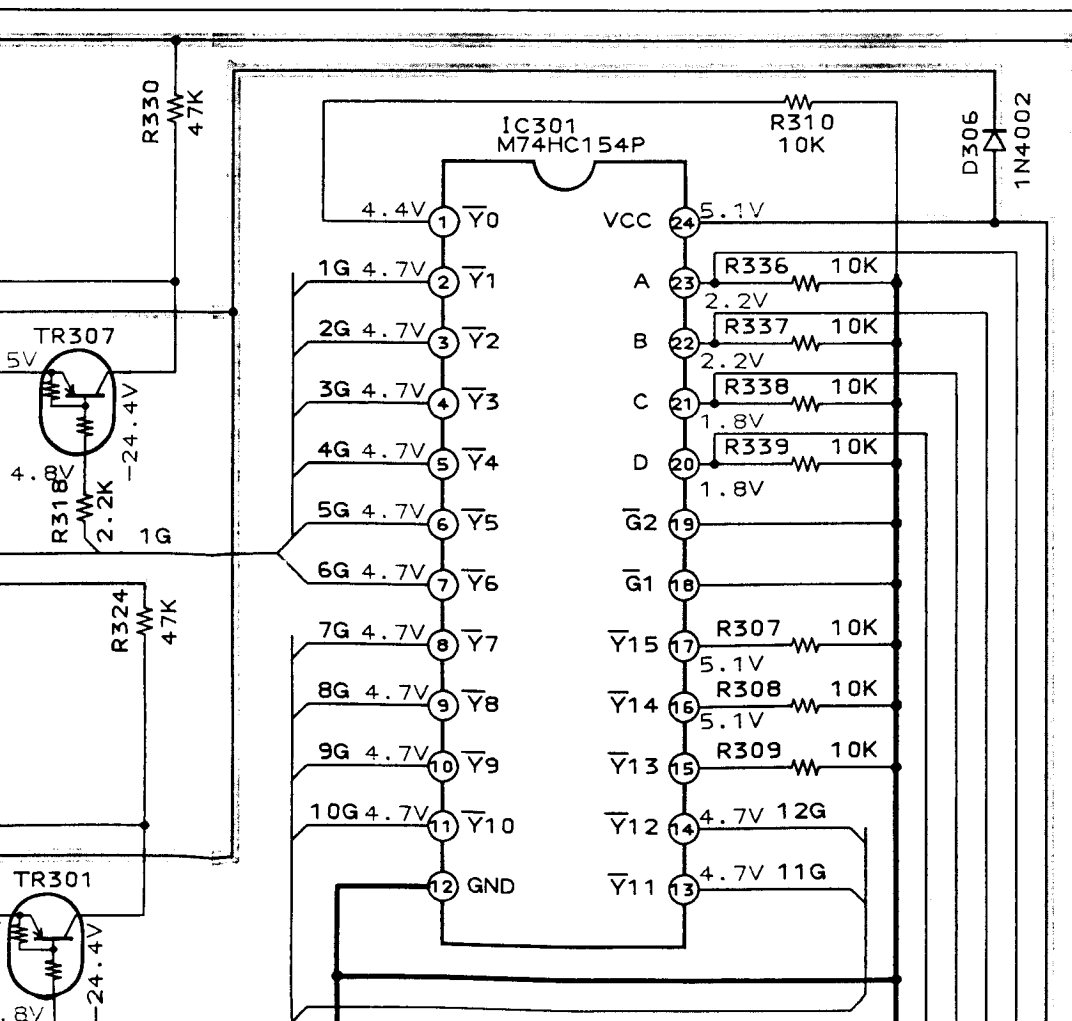
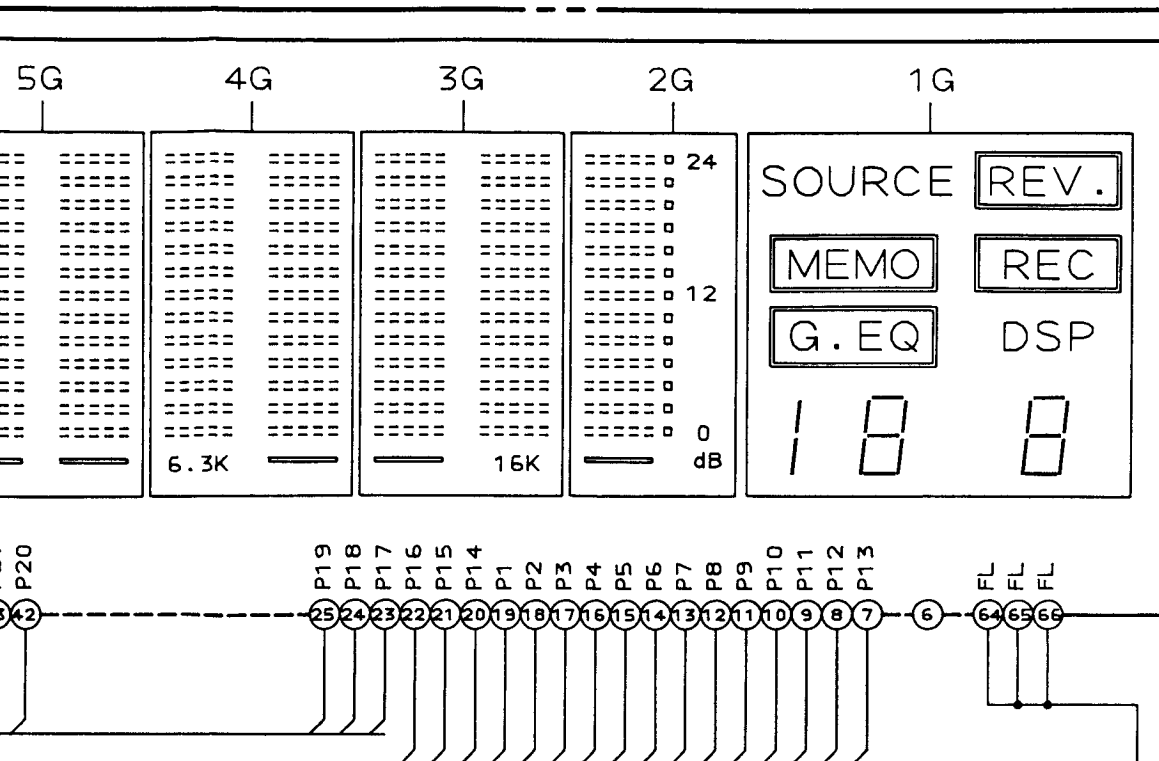




E F G H I







1

2

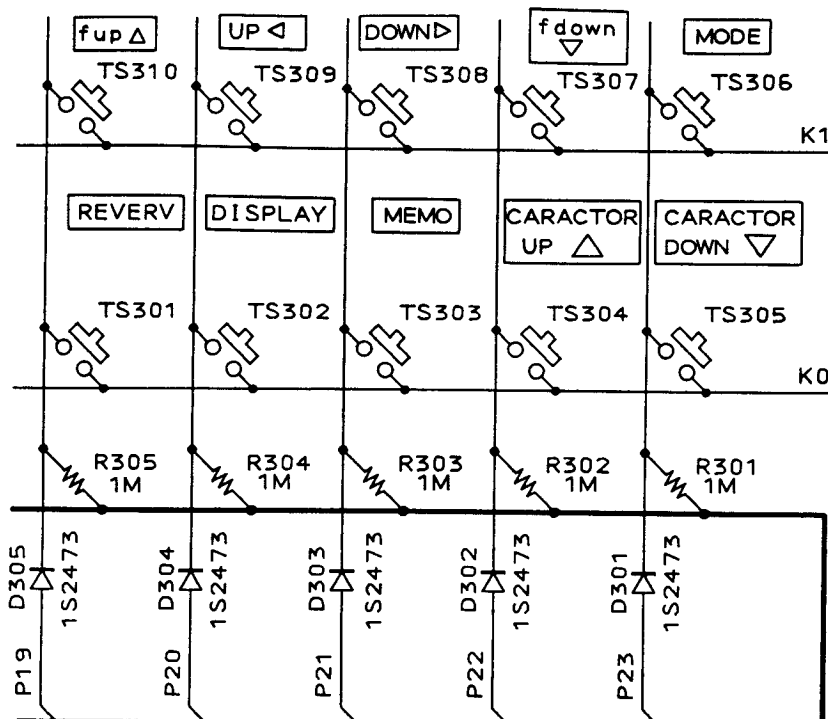
3

4

5

6

FL301  
BJ048GK



**RTV servis Horvat**

Kešinci, 31402 Semeljci

031-856-139

031-856-637

098-788-319

[rtv-servis-horvat@os.tel.hr](mailto:rtv-servis-horvat@os.tel.hr)

Croatia

TR301~312: DTA124XL

TS301~310: SOR-123HS

FRONT PCB D3016A502B

**NOTE:**

UNLESS OTHERWISE SPECIFIED

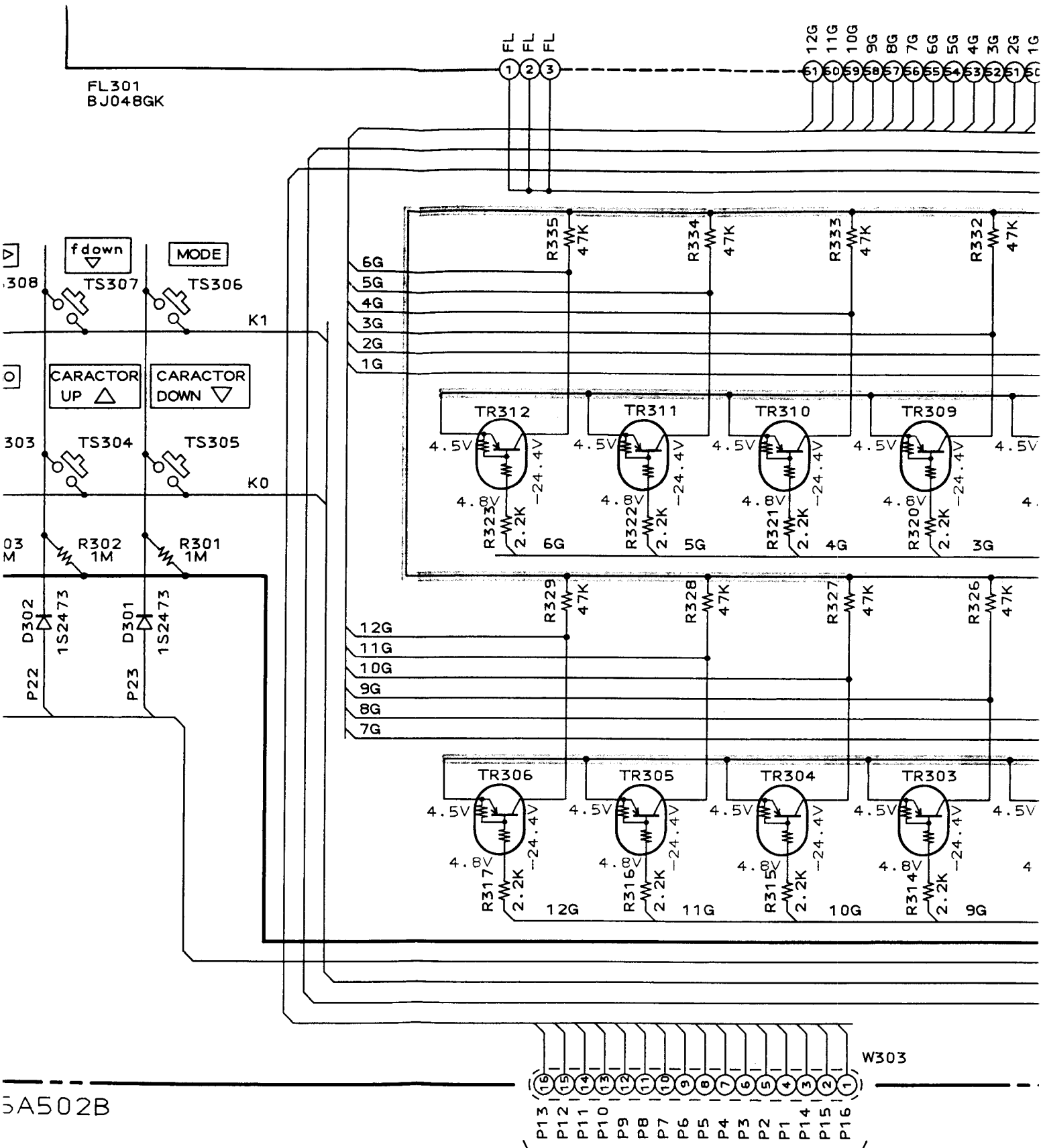
ALL RESISTORS IN OHMS

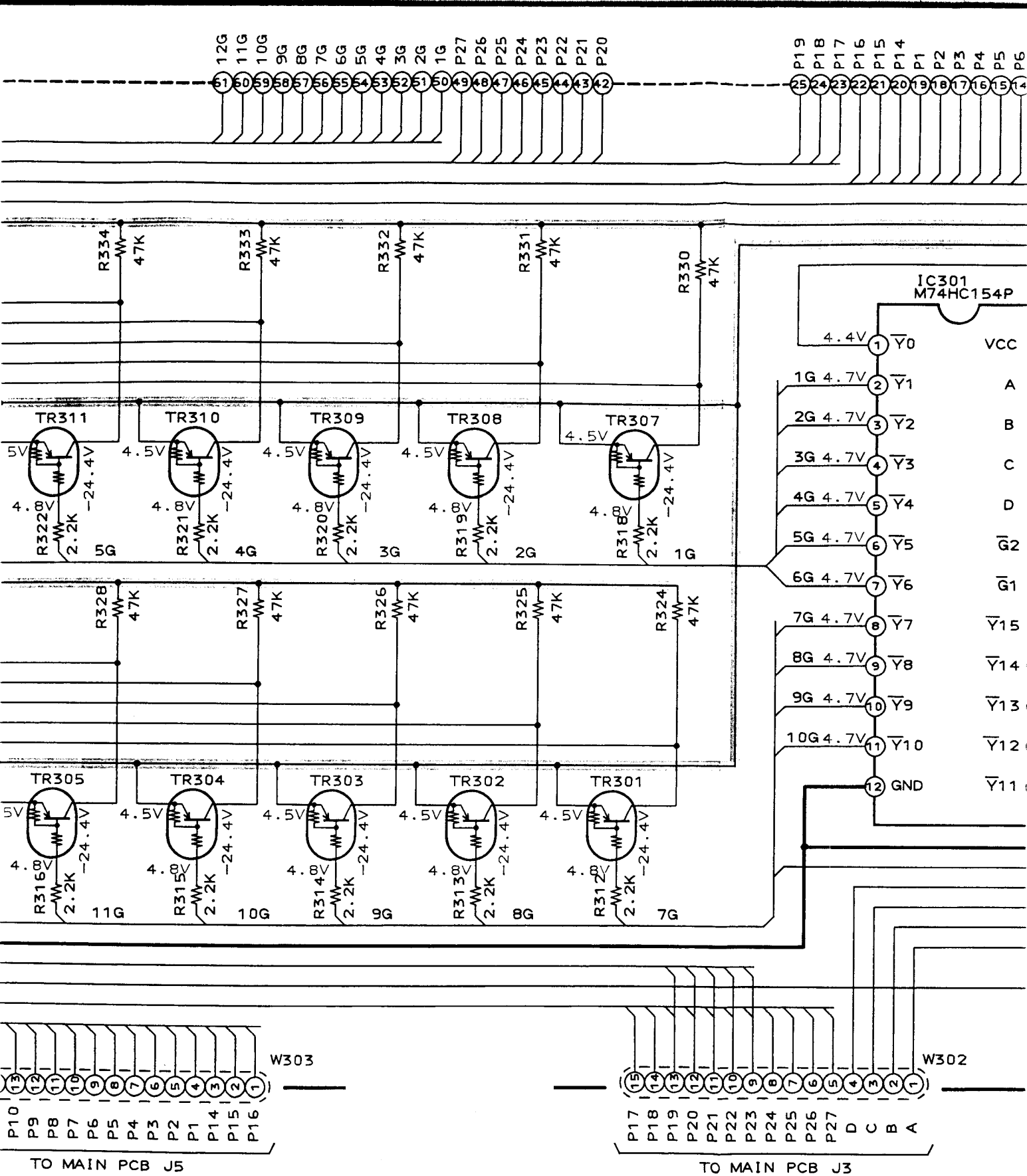
ALL CAPACITORS IN  $\mu\text{F}$  (P=PF)

ALL ELECTROLYTIC CAPACITORS IN  $\mu\text{F}/\text{WV}$

INDICATED VOLTAGES WERE MEASURED

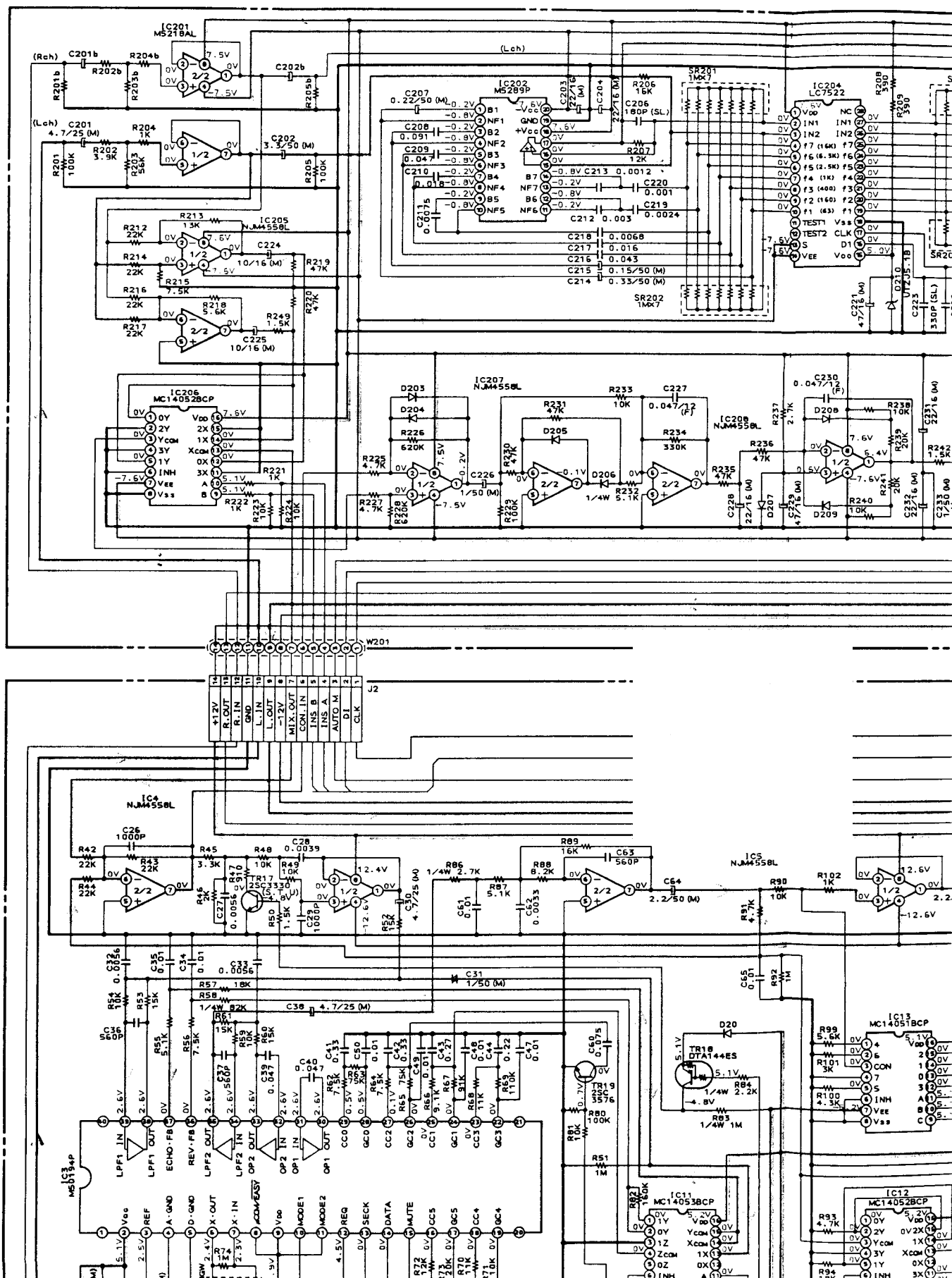
DURING THE EQUALIZER'S FLAT MODE.

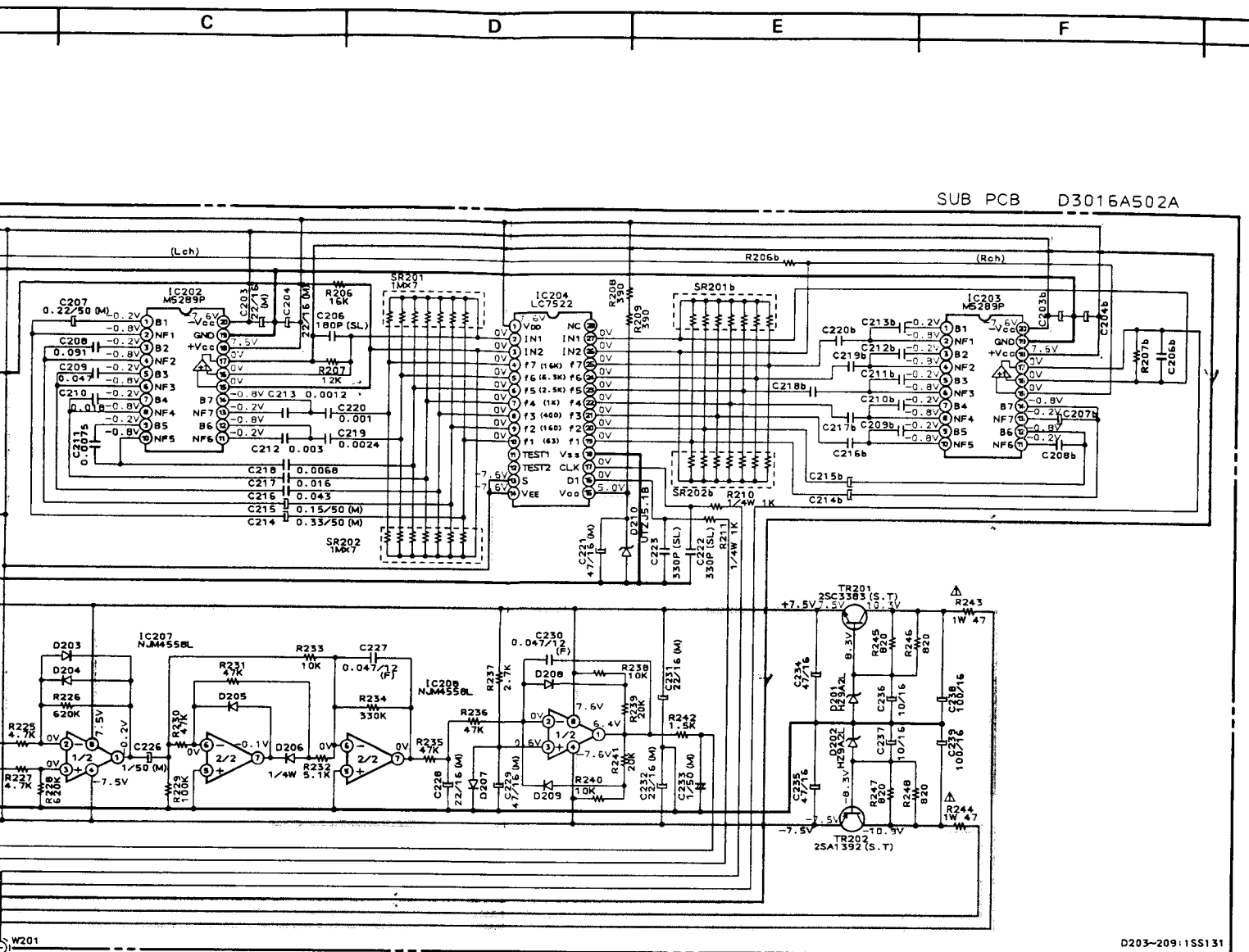




(POWER SUPPLY) LINE







## RTV servis Horvat

~~Kešinci, 31402 Semeljei~~

031-856-139

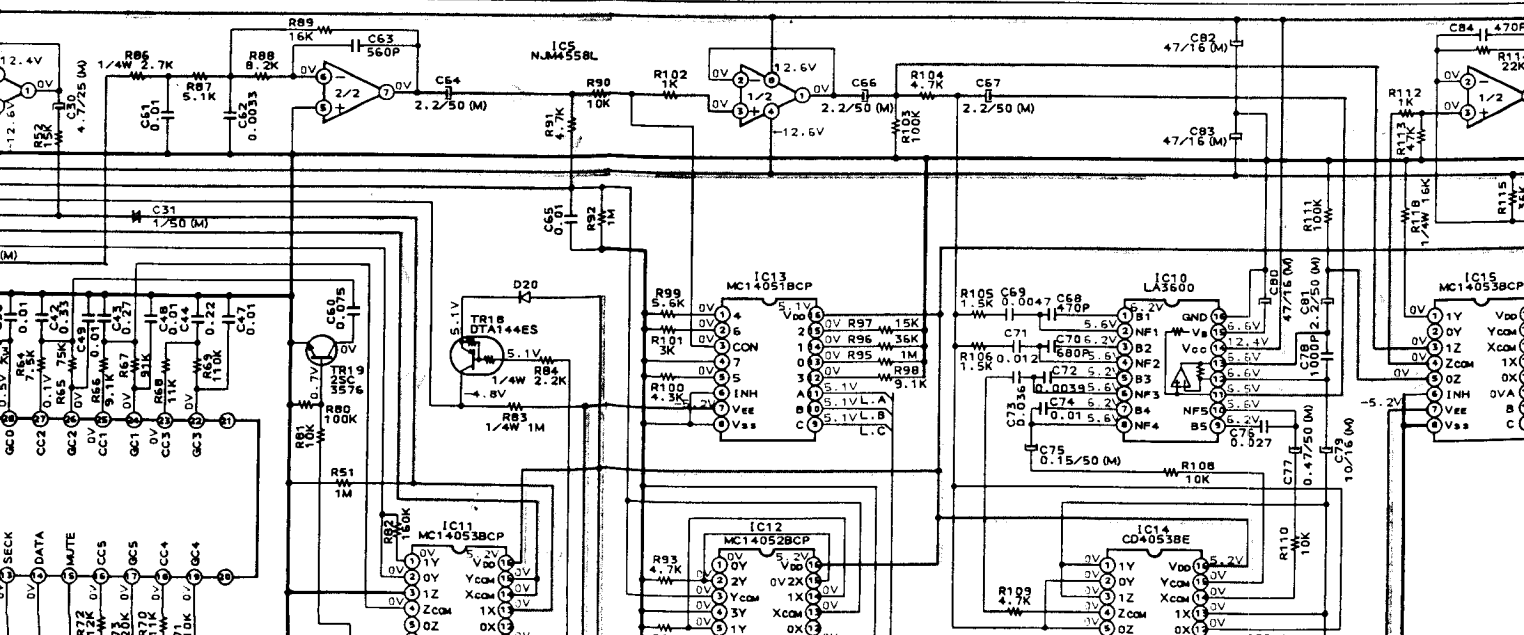
031-856-637

098-788-319

---

rtv-servis-horvat@os.tel.hr

Croatia

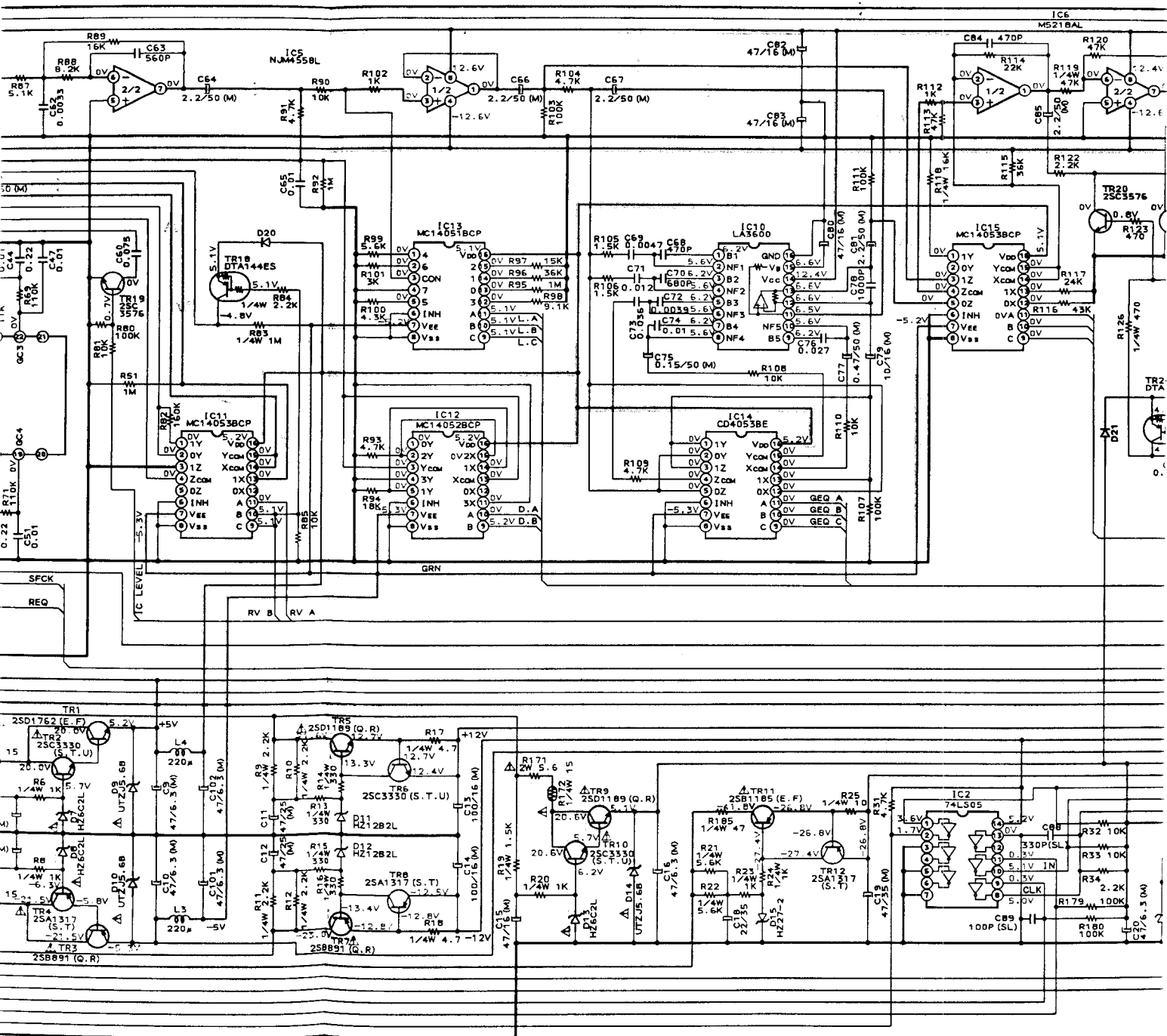


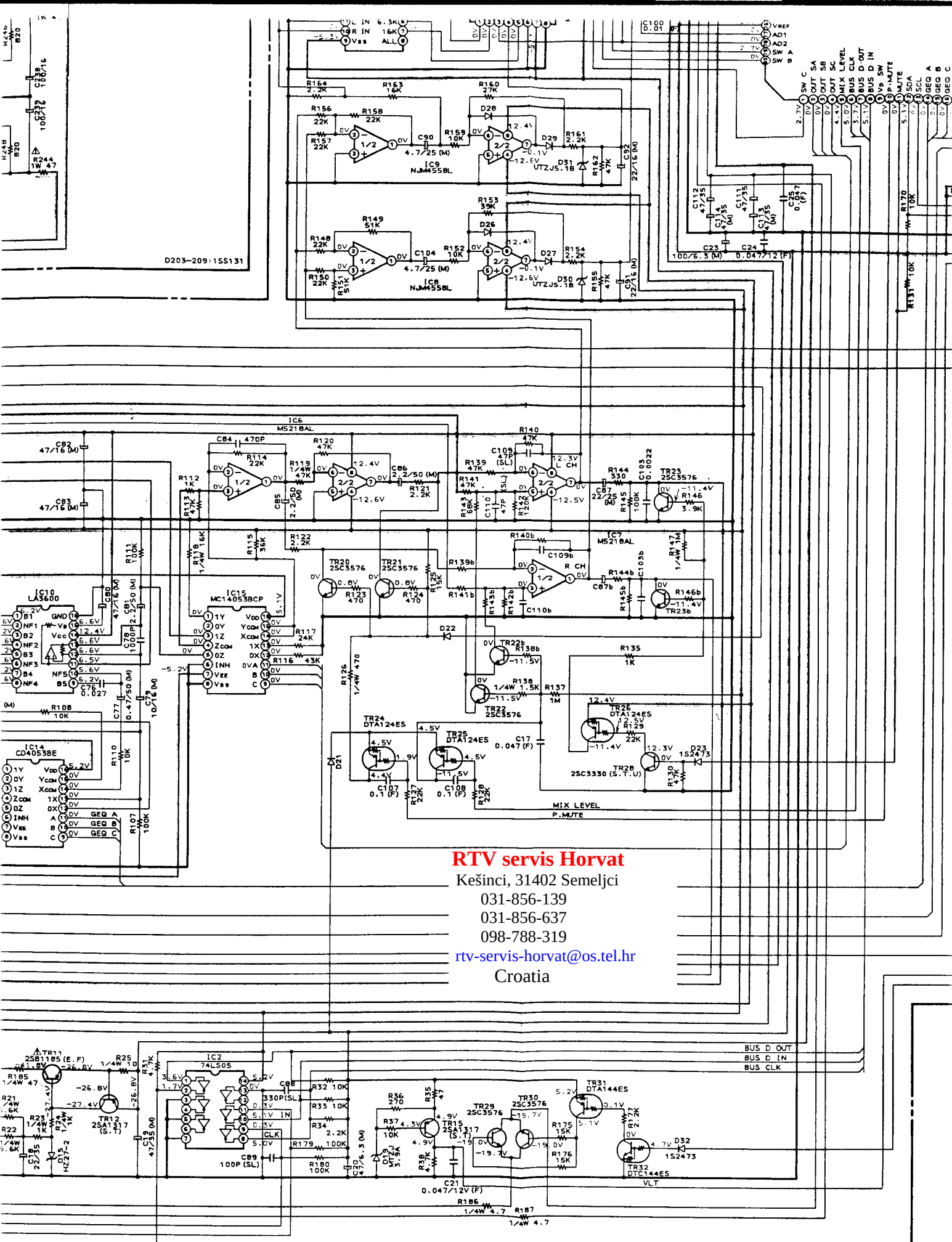












**RTV servis Horvat**  
 Kešinci, 31402 Semeljci  
 031-856-139  
 031-856-637  
 098-788-319  
[rtv-servis-horvat@os.tel.hr](mailto:rtv-servis-horvat@os.tel.hr)  
 Croatia



# PRINCIPAL PARTS LOCATION

## ICs

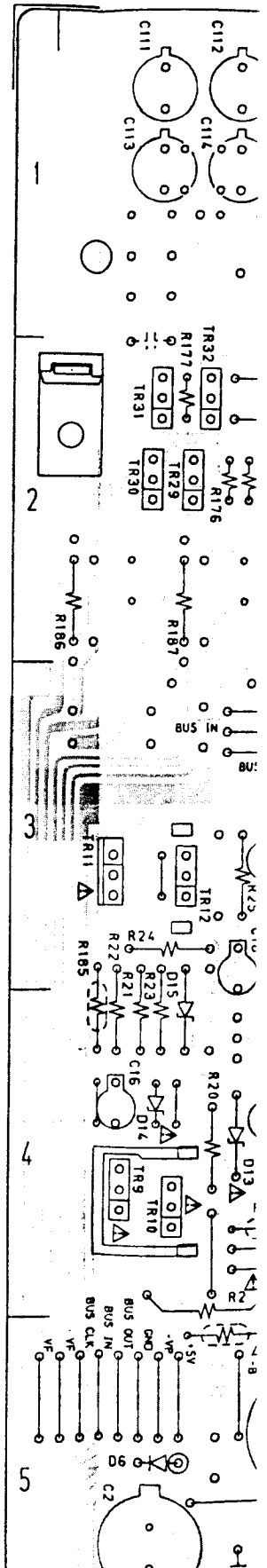
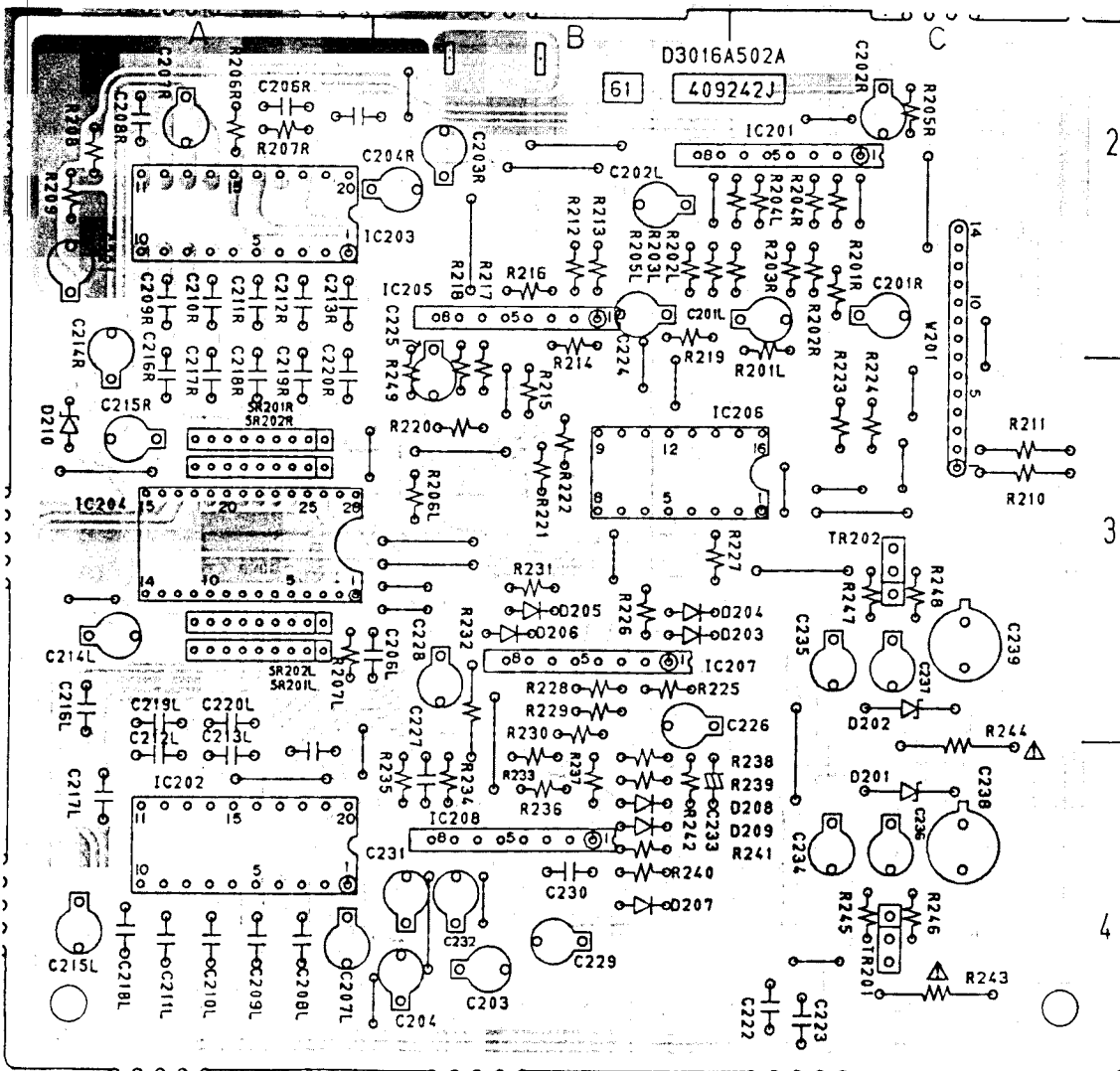
|       |       |    |
|-------|-------|----|
| IC201 | ..... | C2 |
| IC202 | ..... | A4 |
| IC203 | ..... | A2 |
| IC204 | ..... | A3 |
| IC205 | ..... | B2 |
| IC206 | ..... | B3 |
| IC207 | ..... | B3 |
| IC208 | ..... | B4 |

## WIRE

|      |       |      |
|------|-------|------|
| W201 | ..... | C2,3 |
|------|-------|------|

## TRANSISTORS

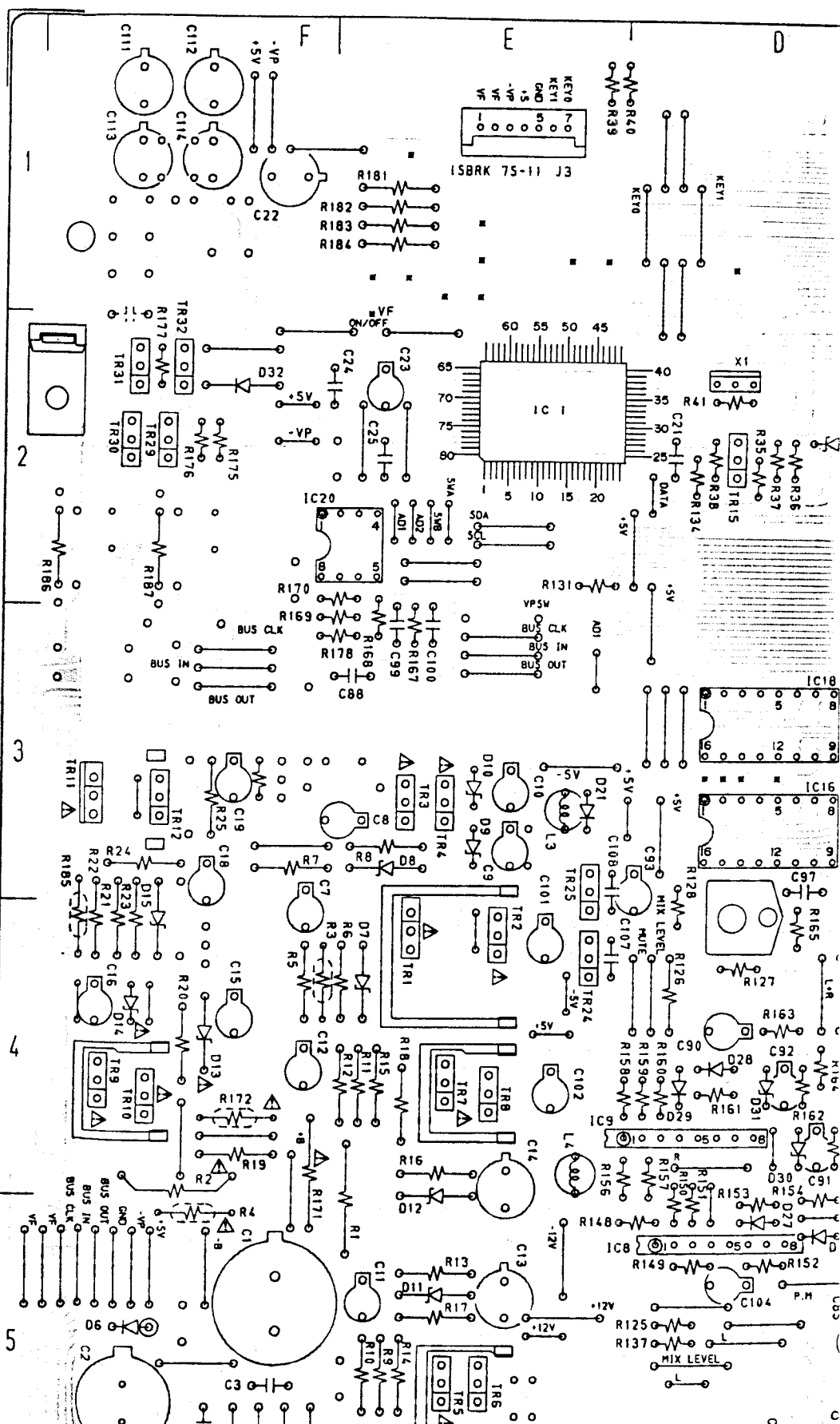
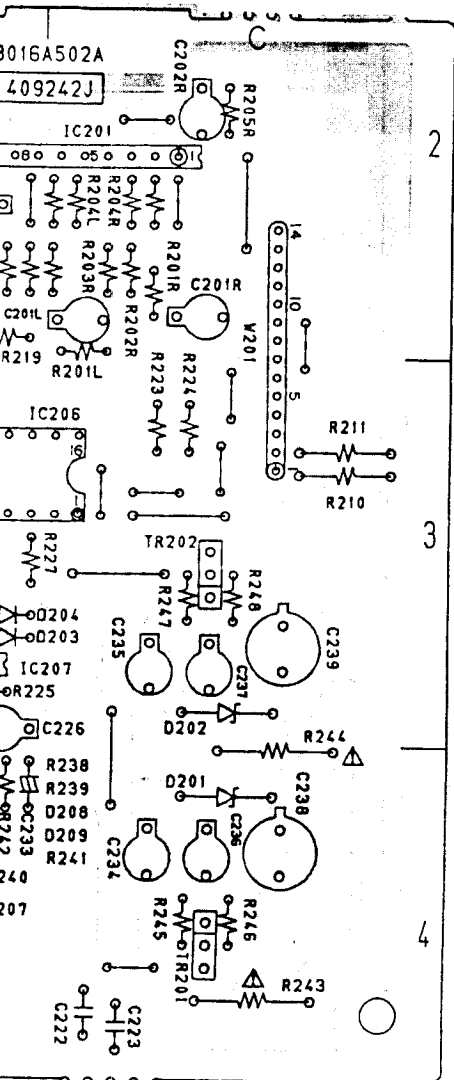
|       |       |    |
|-------|-------|----|
| TR201 | ..... | C4 |
| TR202 | ..... | C3 |



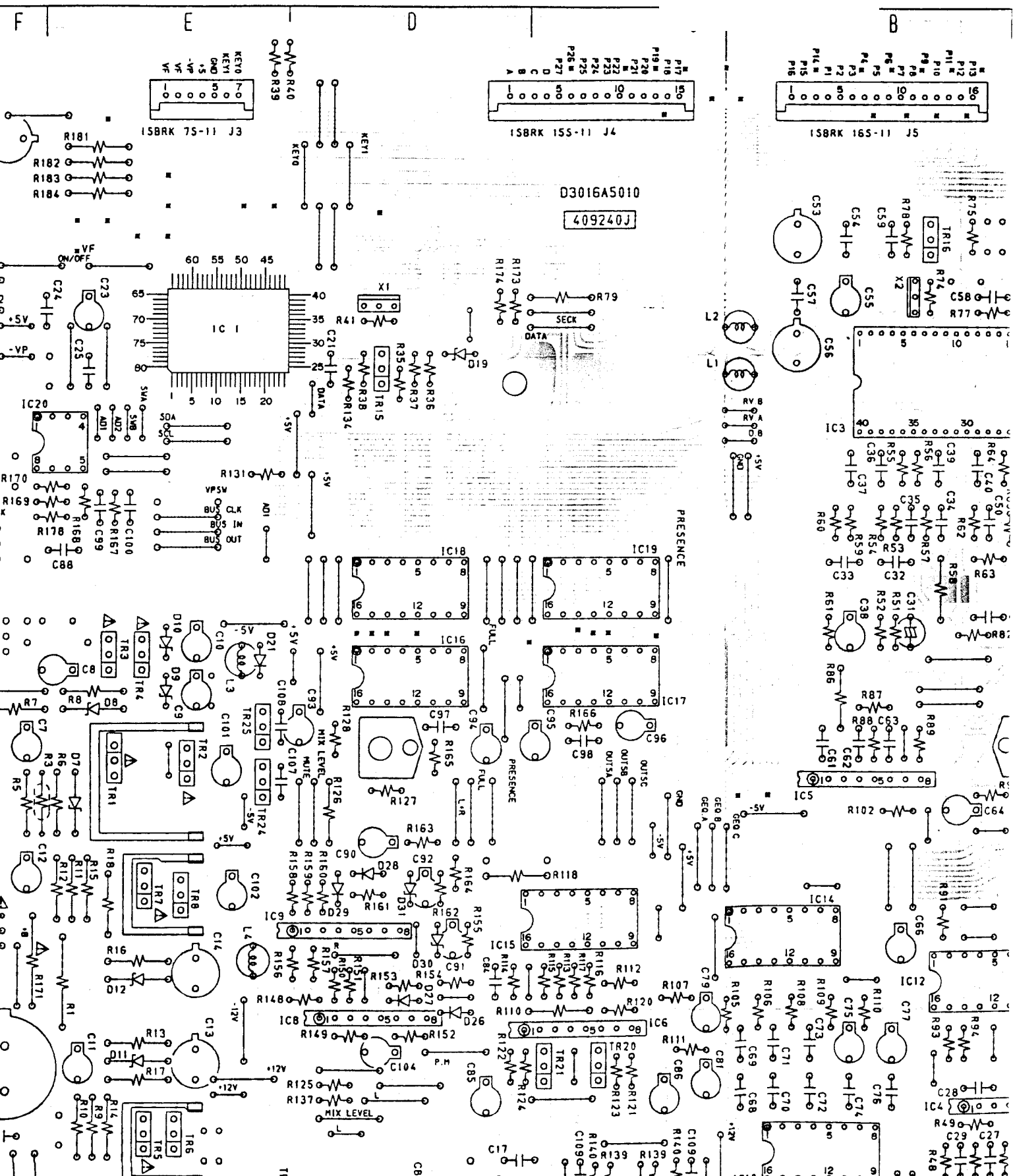
|          |    |
|----------|----|
| 01 ..... | C2 |
| 02 ..... | A4 |
| 03 ..... | A2 |
| 04 ..... | A3 |
| 05 ..... | B2 |
| 06 ..... | B3 |
| 07 ..... | B3 |
| 08 ..... | B4 |

TRANSISTORS

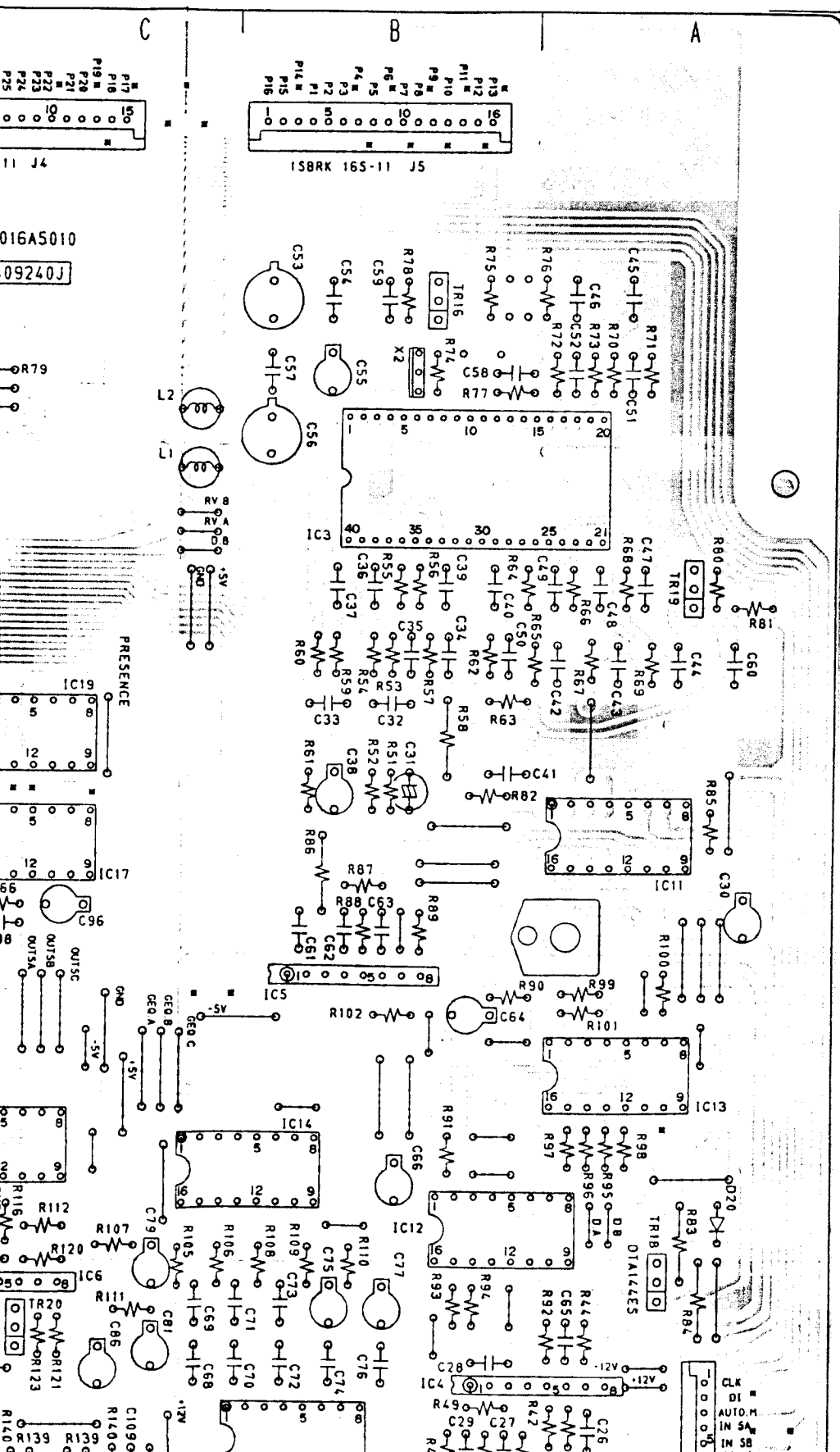
|          |    |
|----------|----|
| 01 ..... | C4 |
| 02 ..... | C3 |











# 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

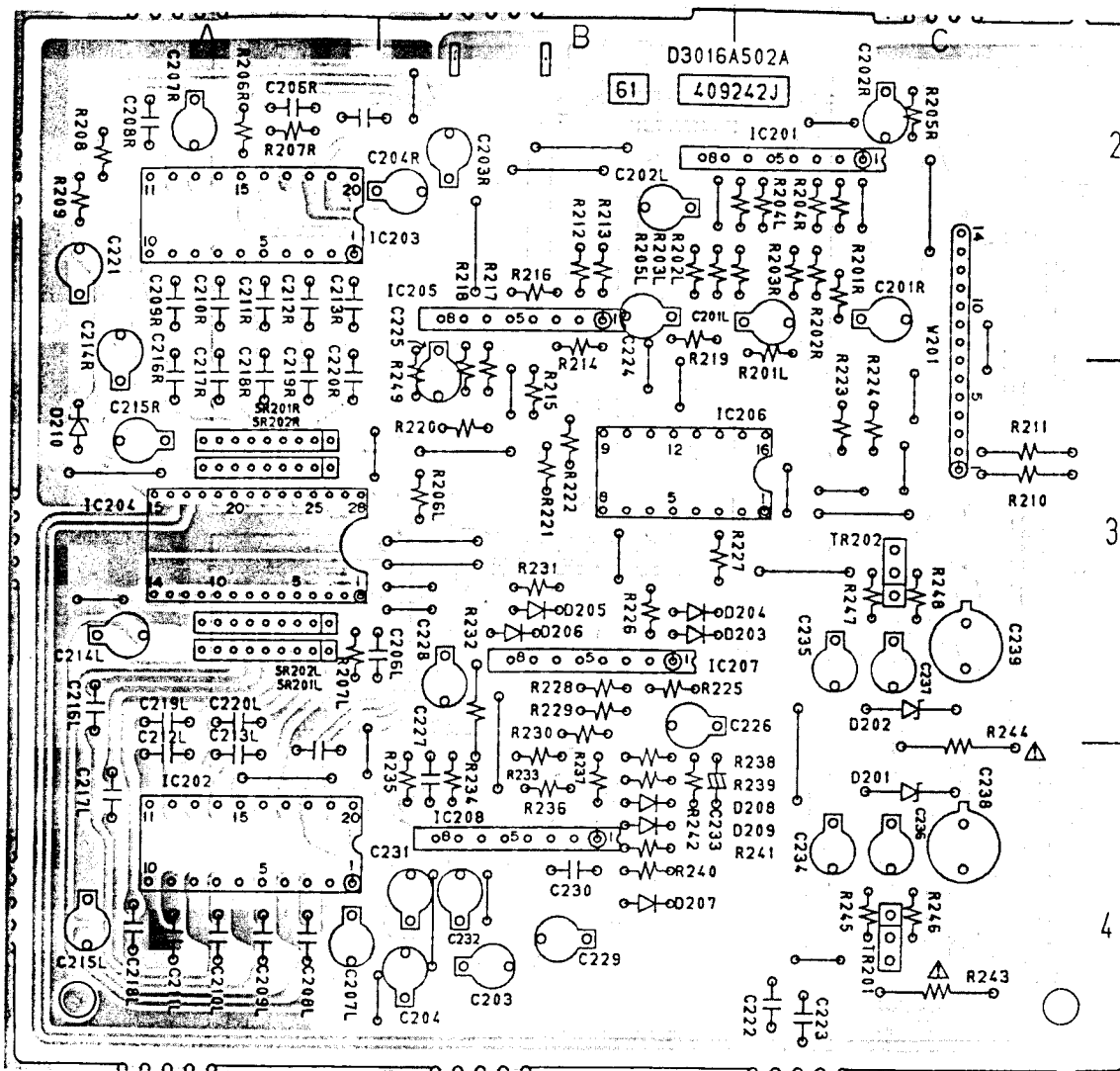
|            |      |
|------------|------|
| TR1 .....  | E4   |
| TR2 .....  | E4   |
| TR3 .....  | E3   |
| TR4 .....  | E3   |
| TR5 .....  | E5   |
| TR6 .....  | E5   |
| TR7 .....  | E4   |
| TR8 .....  | E4   |
| TR9 .....  | F4   |
| TR10 ..... | F4   |
| TR11 ..... | F3   |
| TR12 ..... | 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

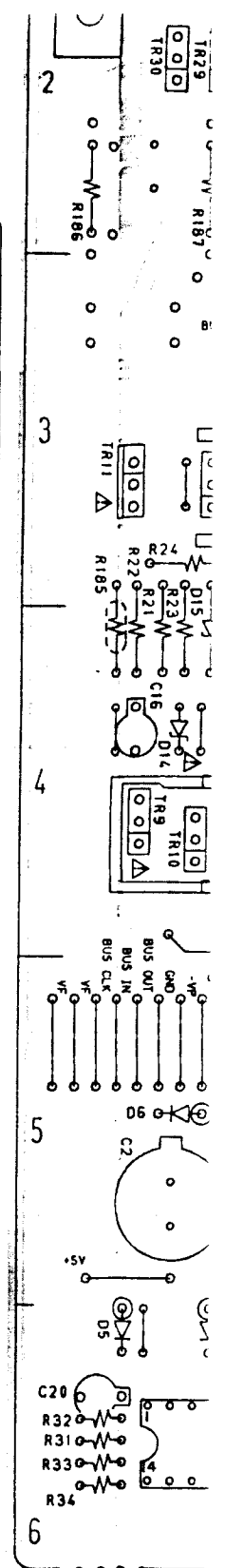


SUB PCB D3016A502A

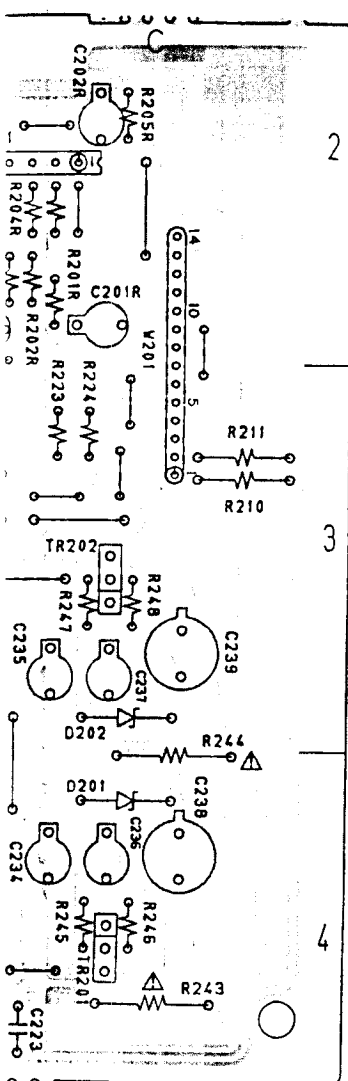
NOTE : PARTS DIFFER DEPENDING ON MODEL NUMBER.  
REFER TO SCHEMATIC DIAGRAMS FOR PERTAINING  
PARTS INFORMATION.

WARNING:  $\Delta$  INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY,  
REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S  
RECOMMENDED PARTS

AVERTISSEMENT:  $\Delta$  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



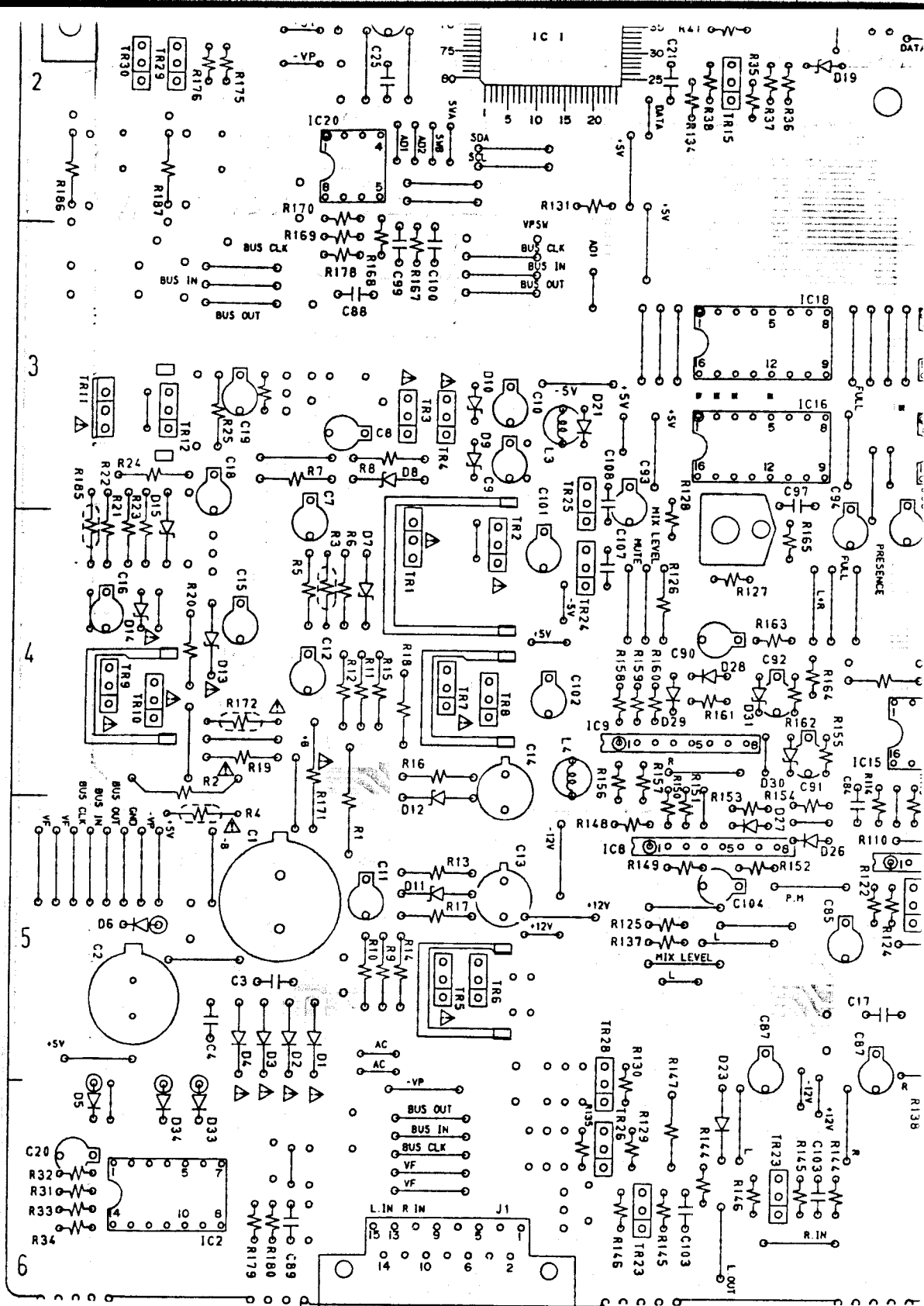
.... C4  
.... C3



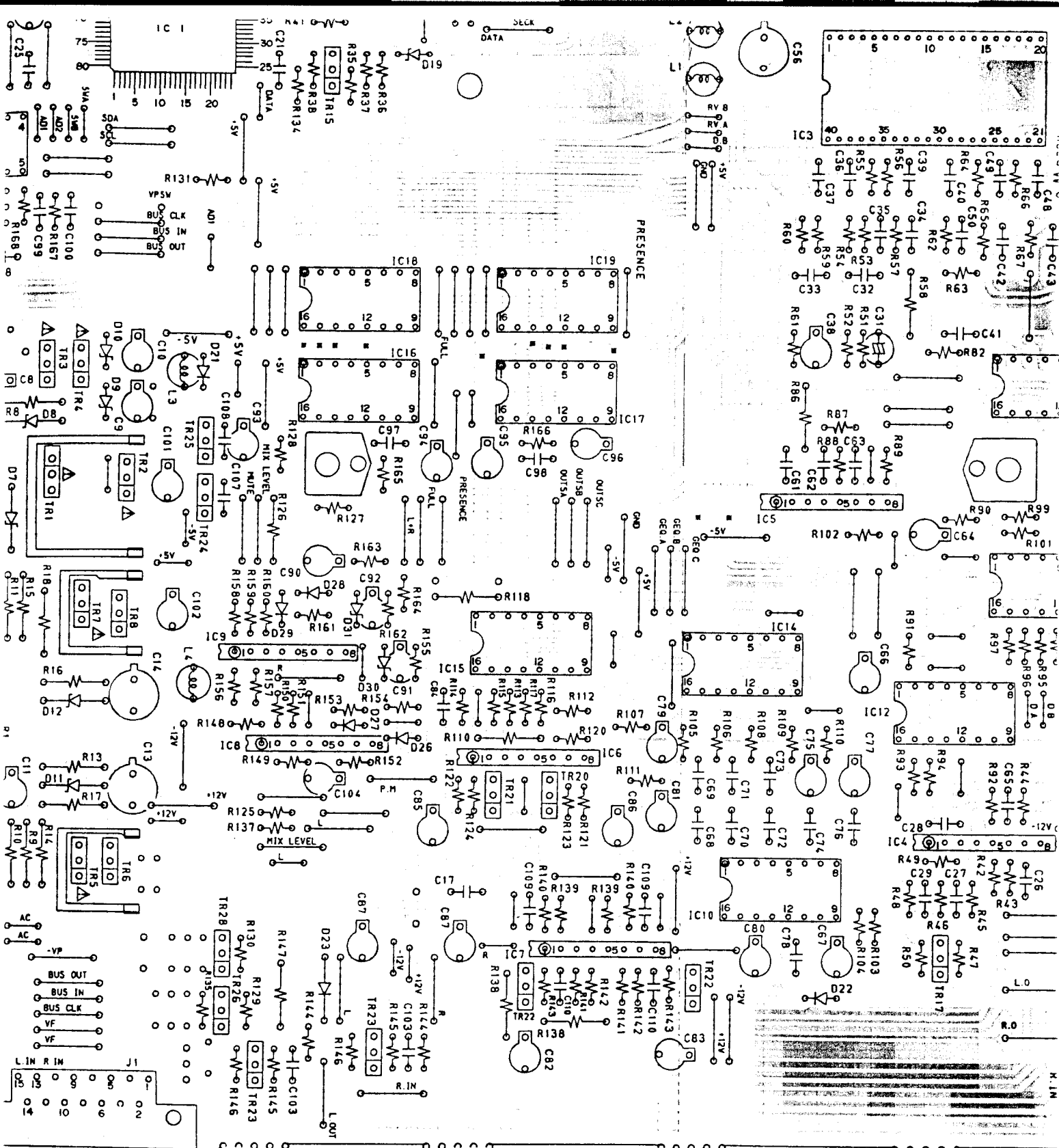
ENDING ON MODEL NUMBER.  
DIAGRAMS FOR PERTAINING

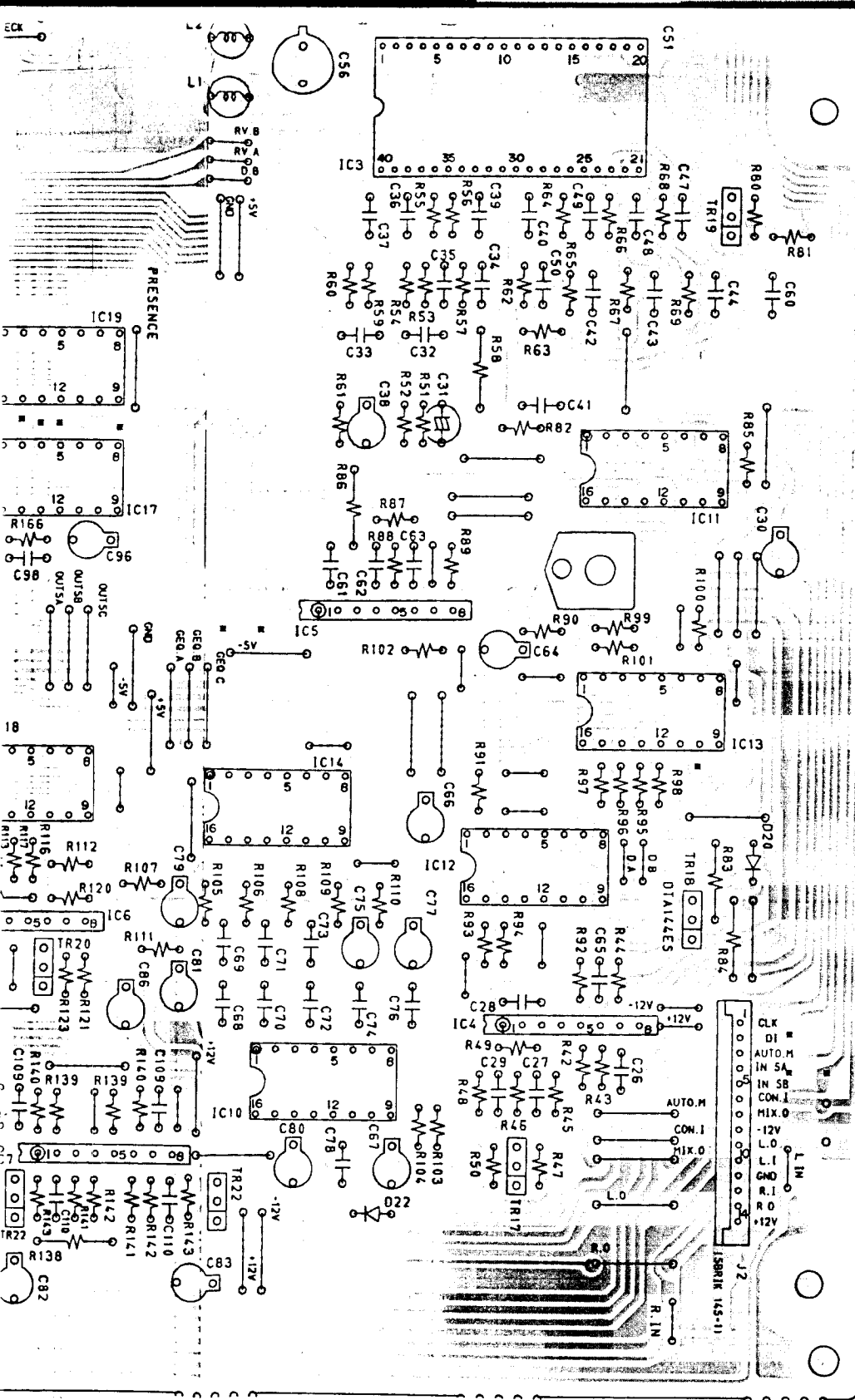
AL COMPONENTS FOR CONTINUED SAFETY,  
COMPONENTS ONLY WITH MANUFACTURER'S

POSANTS CRITIQUES DE SÉCURITÉ.  
DE SÉCURITÉ DE L'APPAREIL.  
DES RECOMMANDEES PAR LE FABRICANT



MAIN PCB D30





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

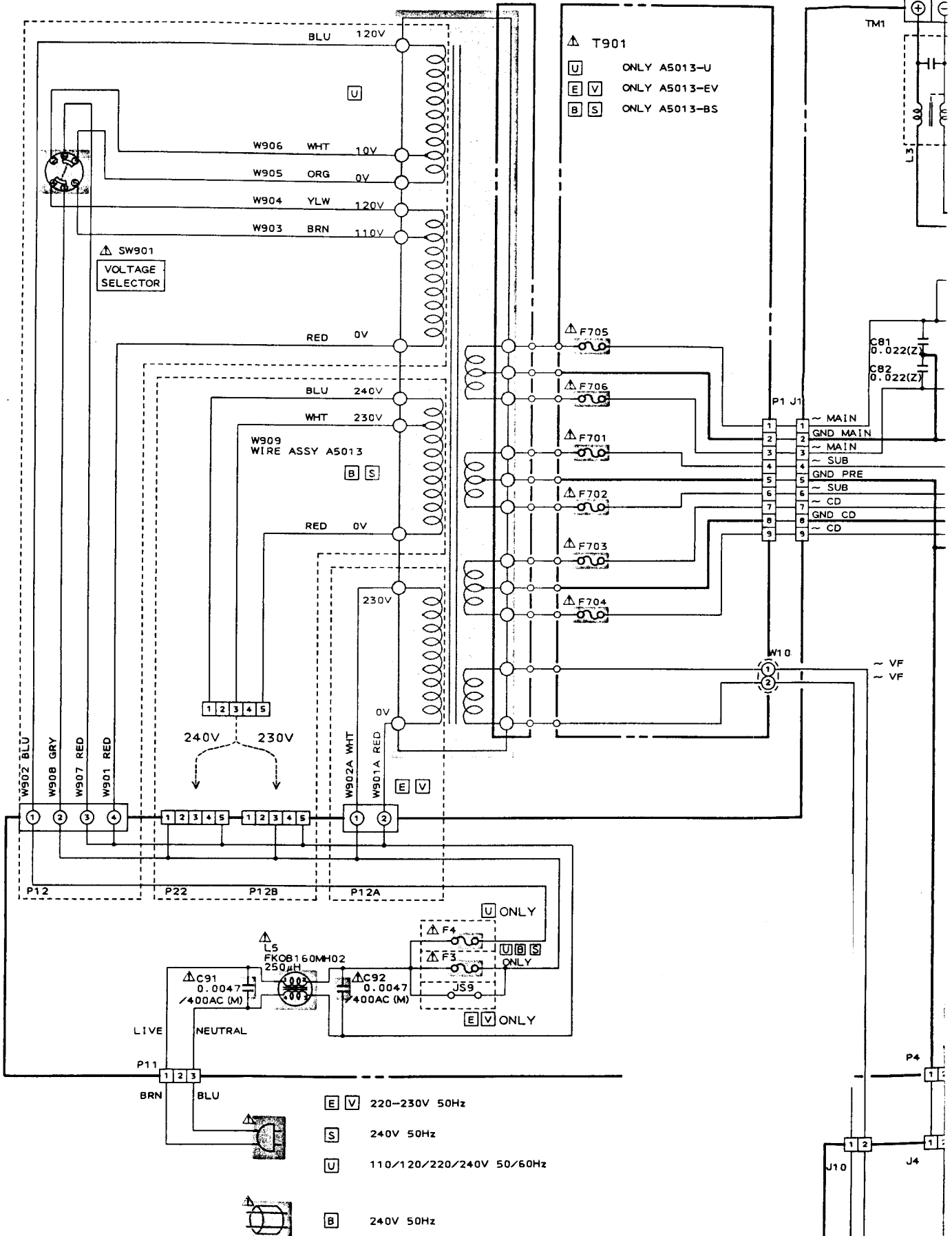
#### CONNECTORS

|    |       |      |
|----|-------|------|
| 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   |

MAIN POWER PCB A5013A501H FUSE PCB A5013A501G



△ T901  
 [U] ONLY A5013-U  
 [E V] ONLY A5013-EV  
 [B S] ONLY A5013-BS

W909 WIRE ASSY A5013  
 [B S]

W902A WHT  
 W901A RED  
 [E V]

[U] ONLY  
 △ F4  
 △ F3  
 JS5  
 [E V] ONLY

[E V] 220-230V 50Hz  
 [S] 240V 50Hz  
 [U] 110/120/220/240V 50/60Hz  
 [B] 240V 50Hz

C81 0.022(Z)  
 C82 0.022(Z)

P1 J1  
 1 ~ MAIN  
 2 GND MAIN  
 3 ~ MAIN  
 4 ~ SUB  
 5 GND PRE  
 6 ~ SUB  
 7 ~ CD  
 8 GND CD  
 9 ~ CD

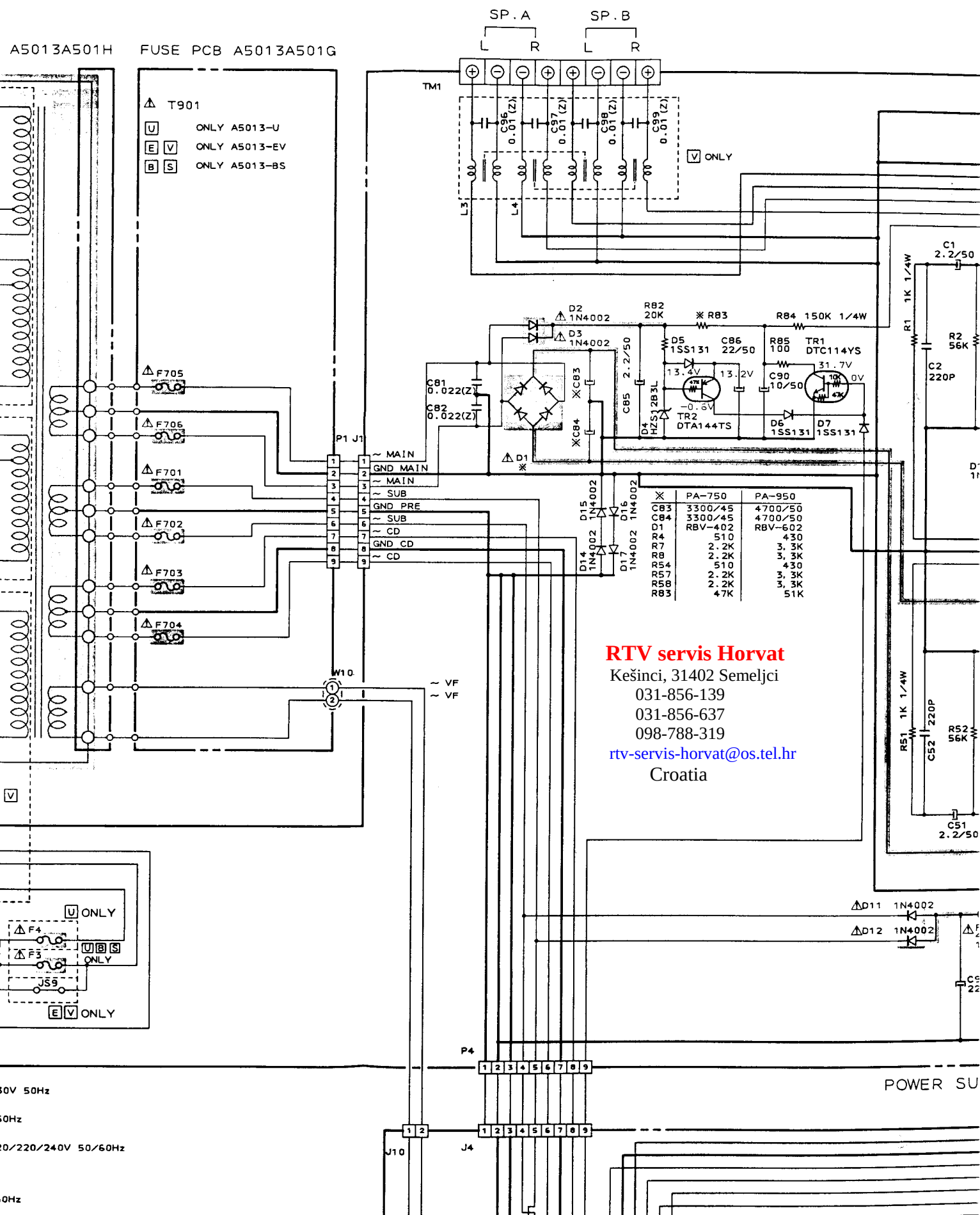
~ VF  
 ~ VF

P11  
 LIVE  
 NEUTRAL  
 BRN  
 BLU

P4

J10 J4

FUSE PCB A5013A501G



Kešinci, 31402 Semeljci

Kešinci, 31402 Semeljci

031-856-139

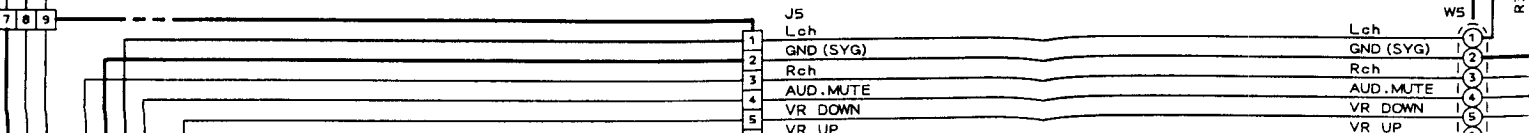
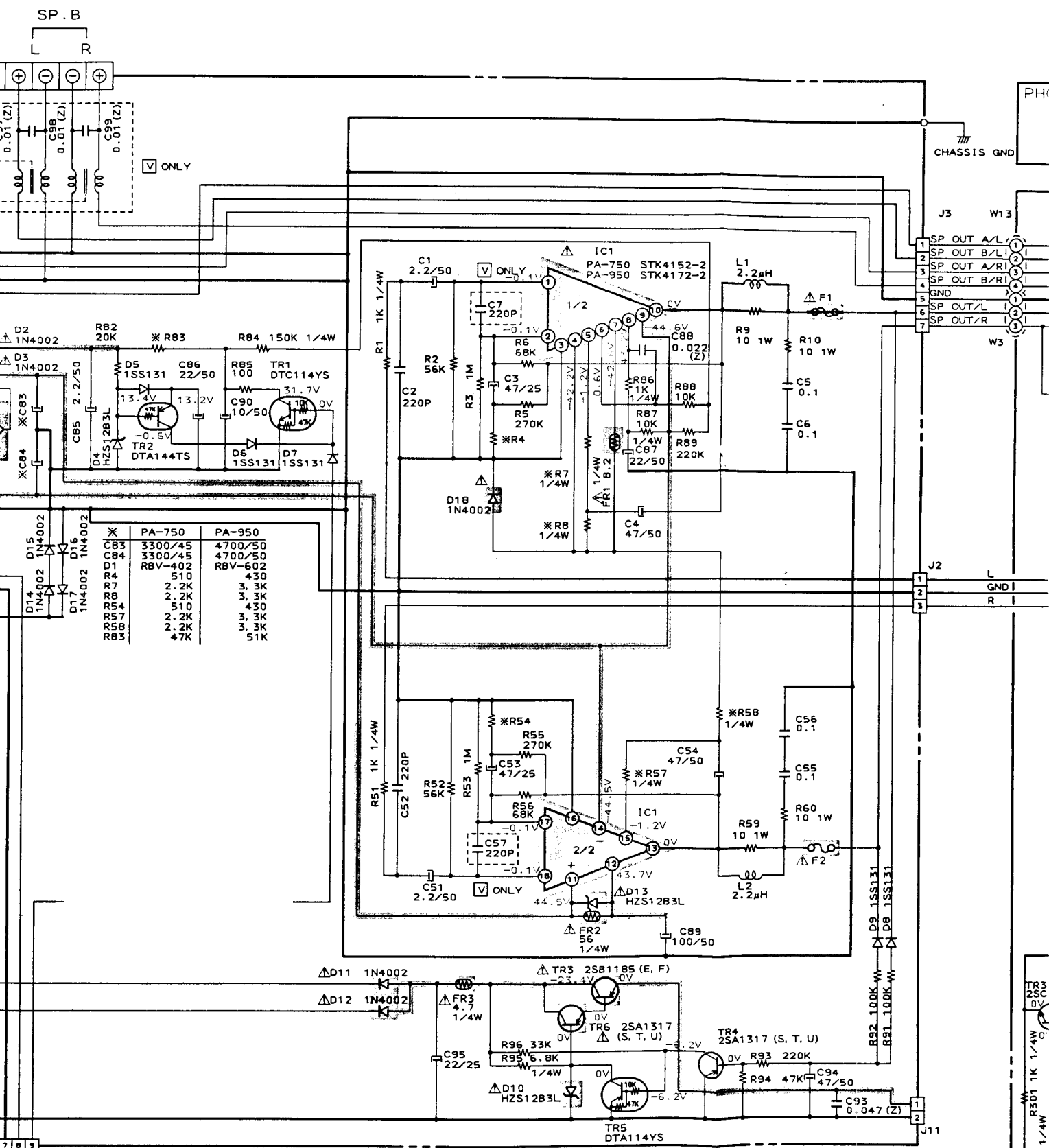
031-856-637

098-788-319

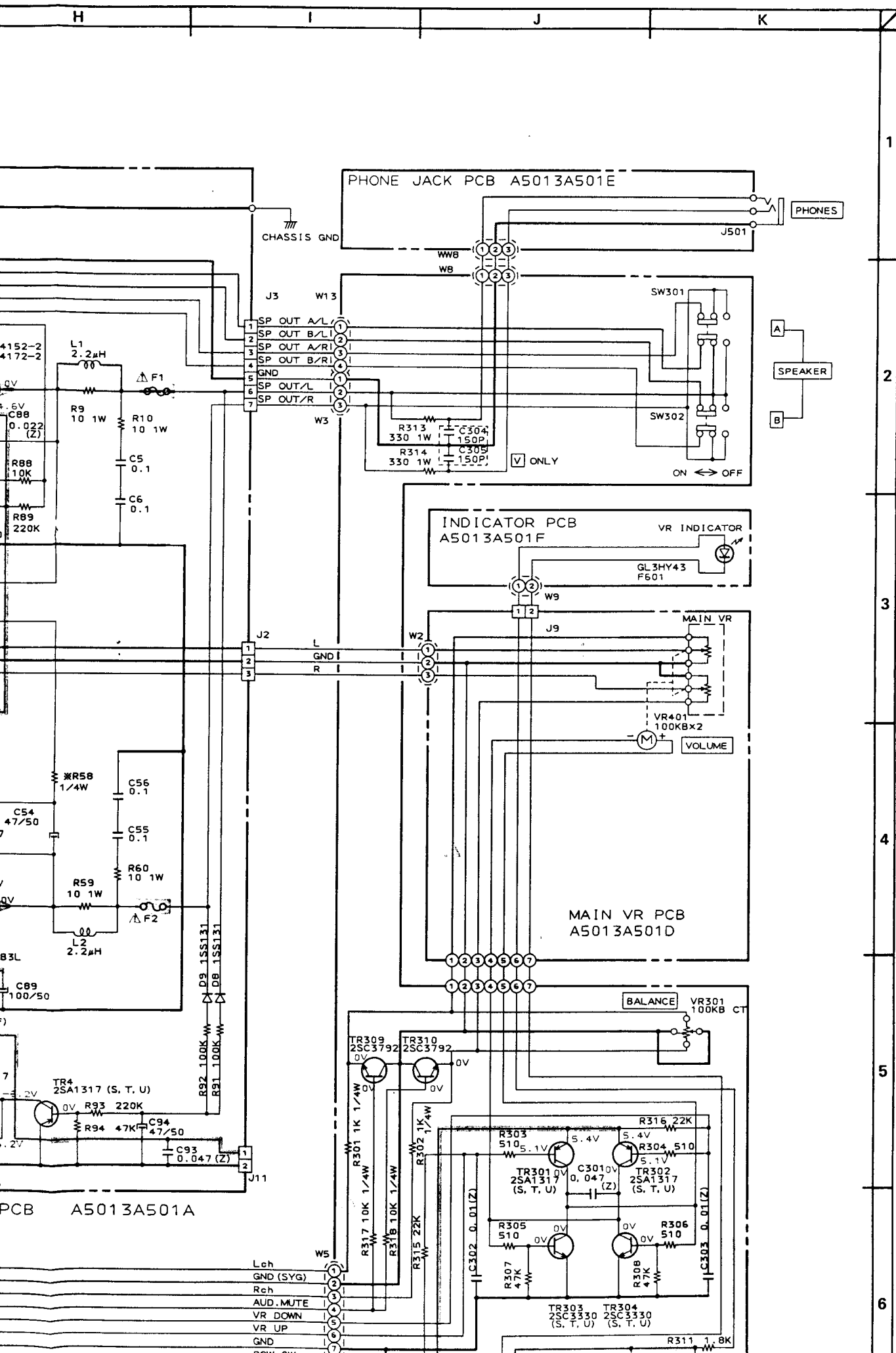
rtv-servis-horvat@os.tel.hr

Croatia

POWER SU







3

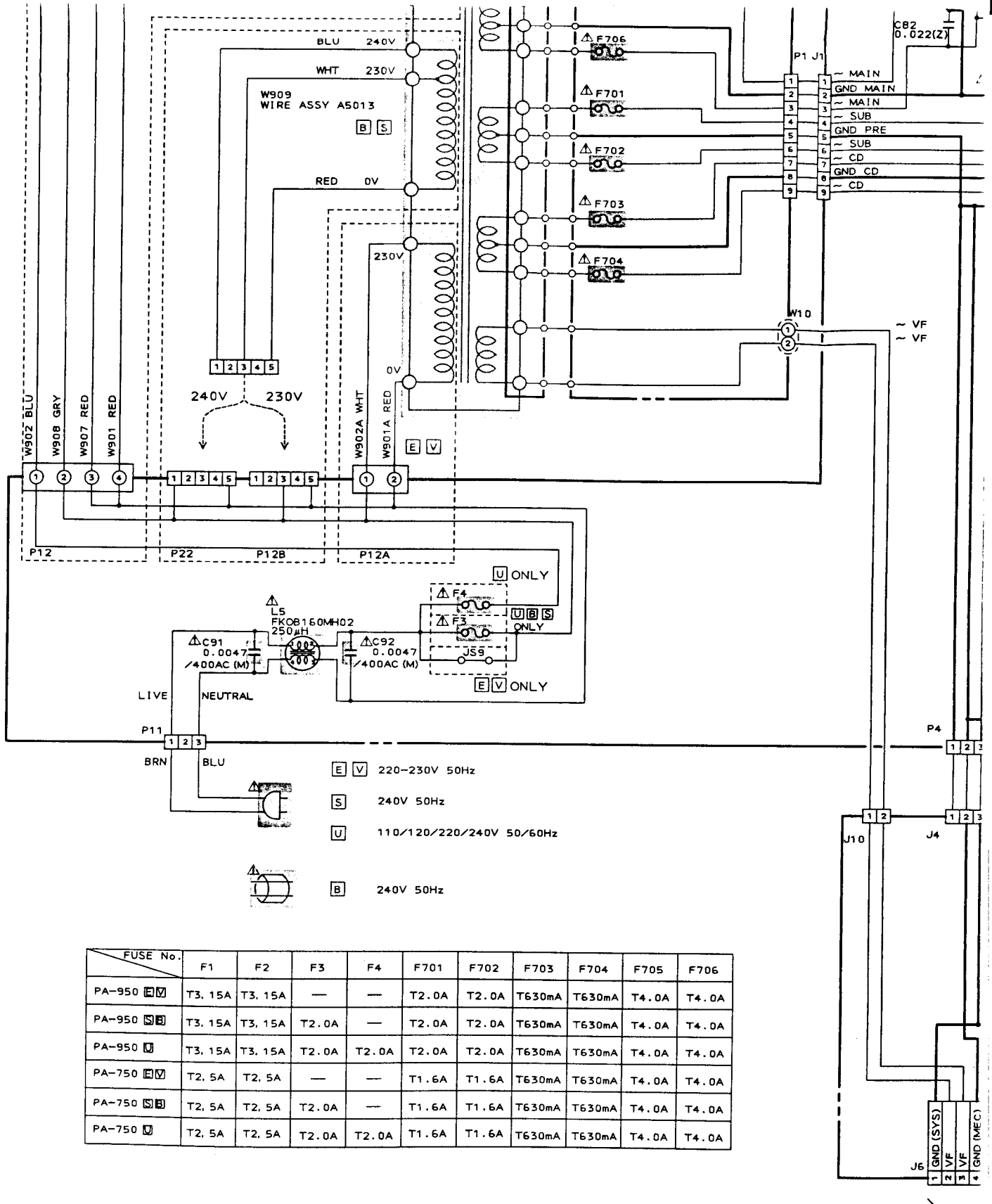
4

5

6

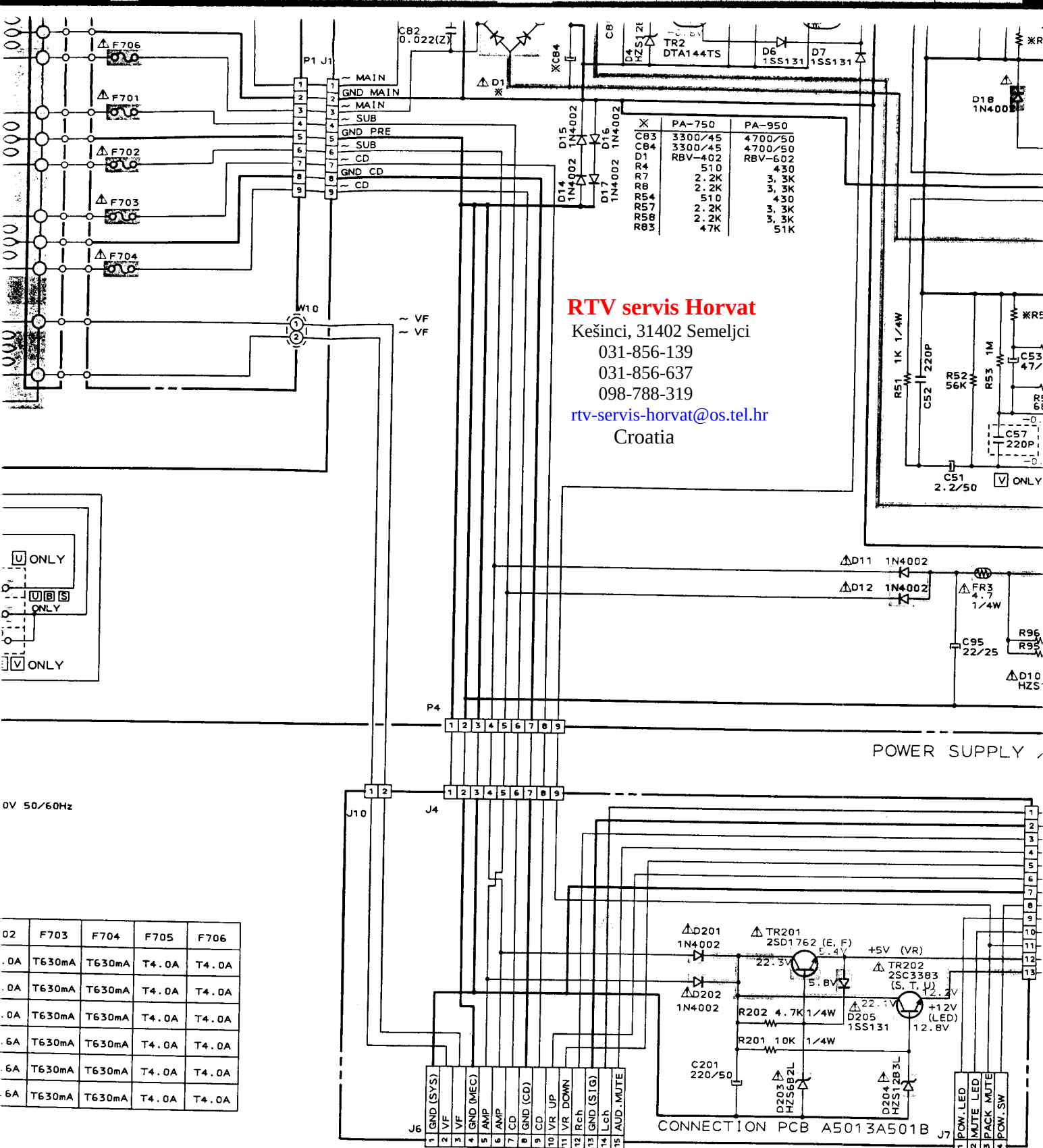
7

8



B (POWER SUPPLY) LINE

AUDIO SIGNAL LINE (L-CH)



# RTV servis Horvat

Kešinci, 31402 Semeljci

031-856-139

031-856-637

098-788-319

[rtv-servis-horvat@os.tel.hr](mailto:rtv-servis-horvat@os.tel.hr)

Croatia

0V 50/60Hz

|     | F703   | F704   | F705  | F706  |
|-----|--------|--------|-------|-------|
| 0.2 | T630mA | T630mA | T4.0A | T4.0A |
| 0.4 | T630mA | T630mA | T4.0A | T4.0A |
| 0.6 | T630mA | T630mA | T4.0A | T4.0A |
| 0.8 | T630mA | T630mA | T4.0A | T4.0A |
| 1.0 | T630mA | T630mA | T4.0A | T4.0A |
| 1.2 | T630mA | T630mA | T4.0A | T4.0A |
| 1.4 | T630mA | T630mA | T4.0A | T4.0A |
| 1.6 | T630mA | T630mA | T4.0A | T4.0A |
| 1.8 | T630mA | T630mA | T4.0A | T4.0A |
| 2.0 | T630mA | T630mA | T4.0A | T4.0A |

B (POWER SUPPLY) LINE

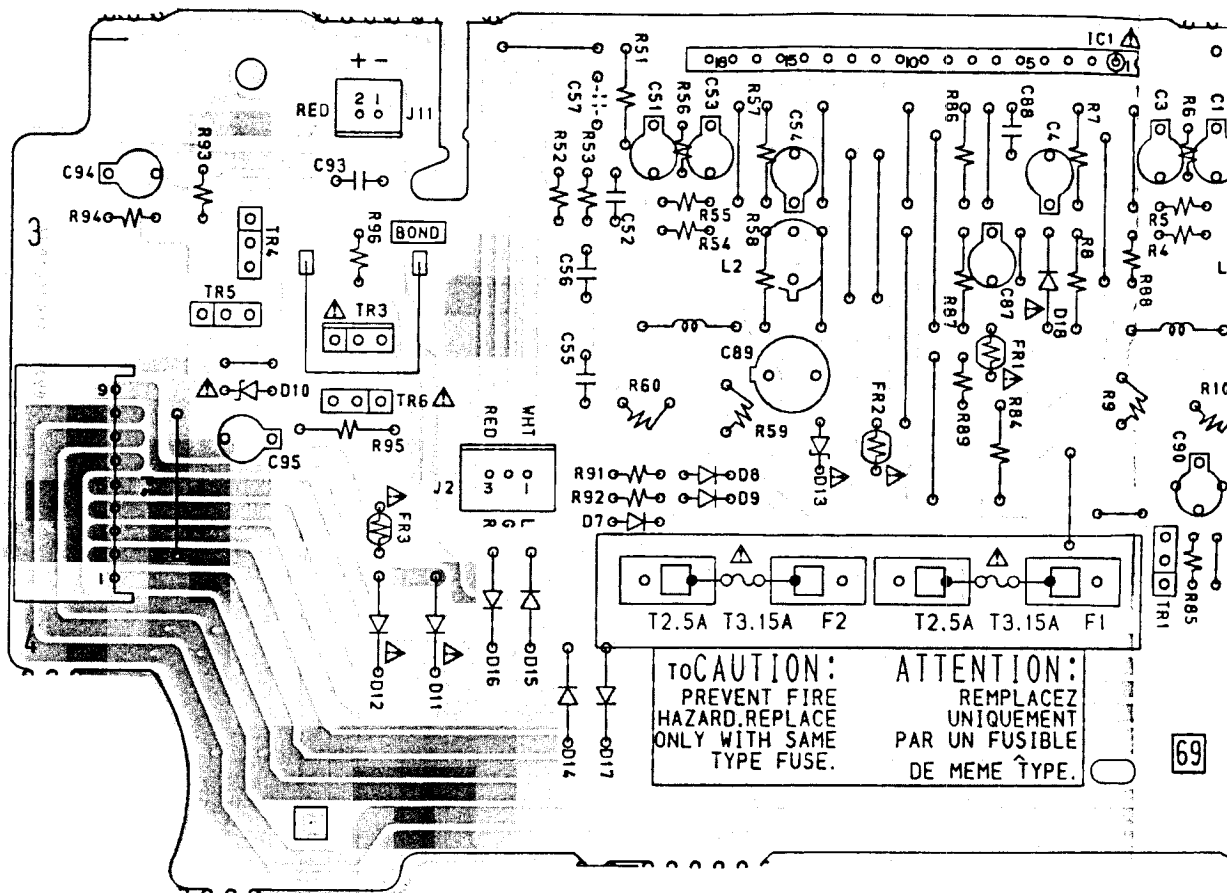
AUDIO SIGNAL LINE (L-CH)

WARNING:  $\Delta$  AND  $\Delta$  IN: COMPONENTS FOR REPLACE SAFELY ONLY WITH MANUFACTURER'S PARTS

AVERTISSEMENT:  $\Delta$  ET  $\Delta$  IN: COMPOSANTS À REMPLACER SEULEMENT PAR DES PIÈCES RECOMMANDÉES

PA-750,  
POWER S  
SCHEMA



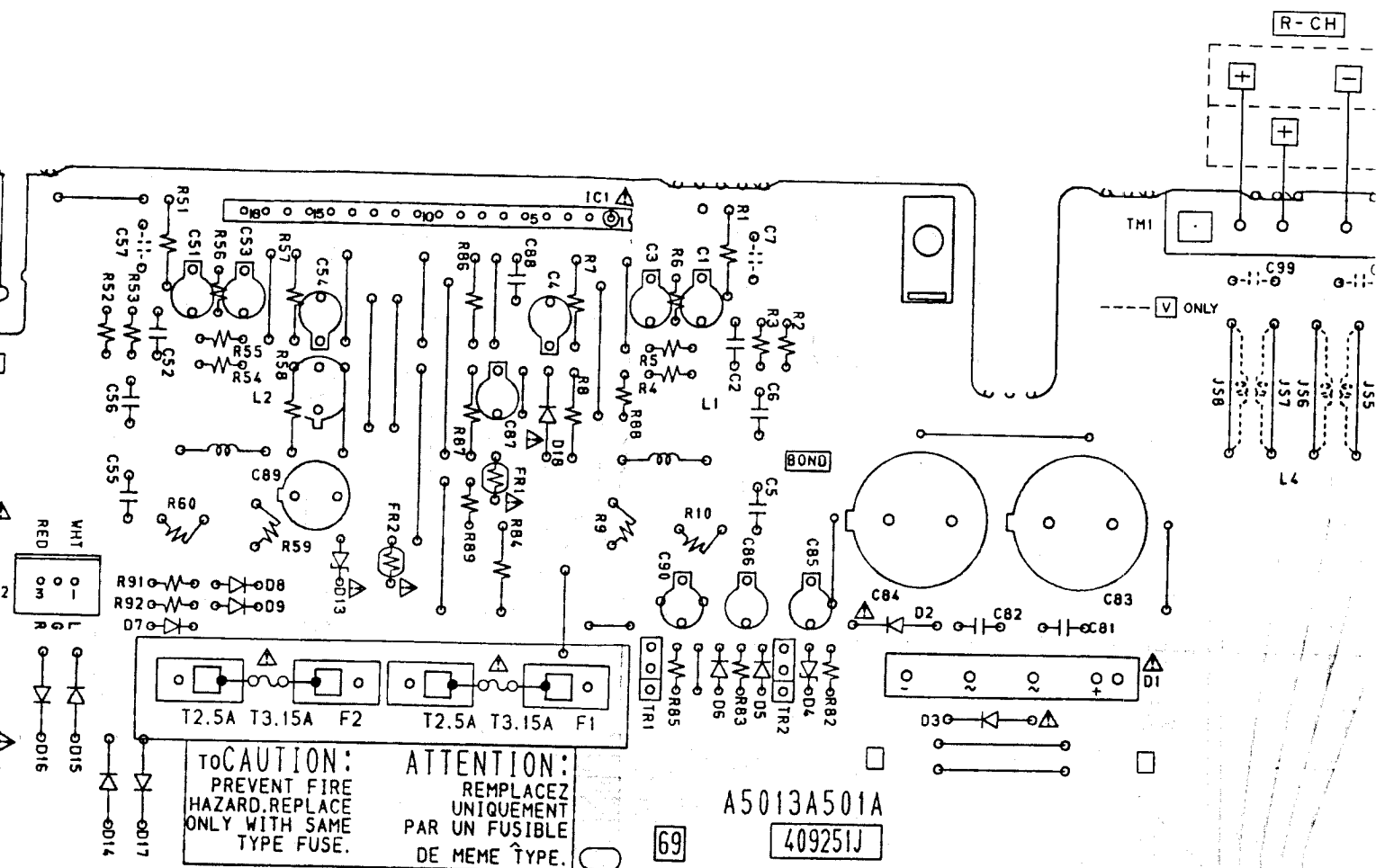


POWER SUPPLY / MAIN AMP PCB A5013A501

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

WARNING:  $\Delta$  INDICATES SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFET  
REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTUREF  
RECOMMENDED PARTS

AVERTISSEMENT:  $\Delta$  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



# POWER SUPPLY / MAIN AMP PCB A5013A501A

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

WARNING:  $\Delta$  INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS.

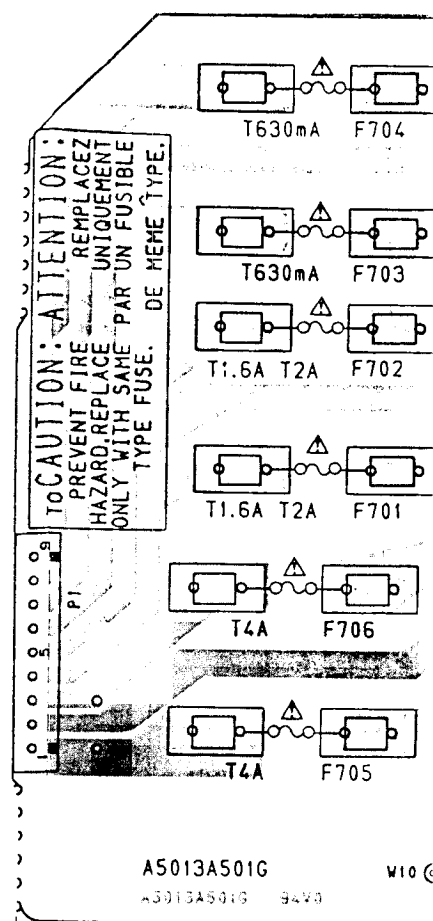
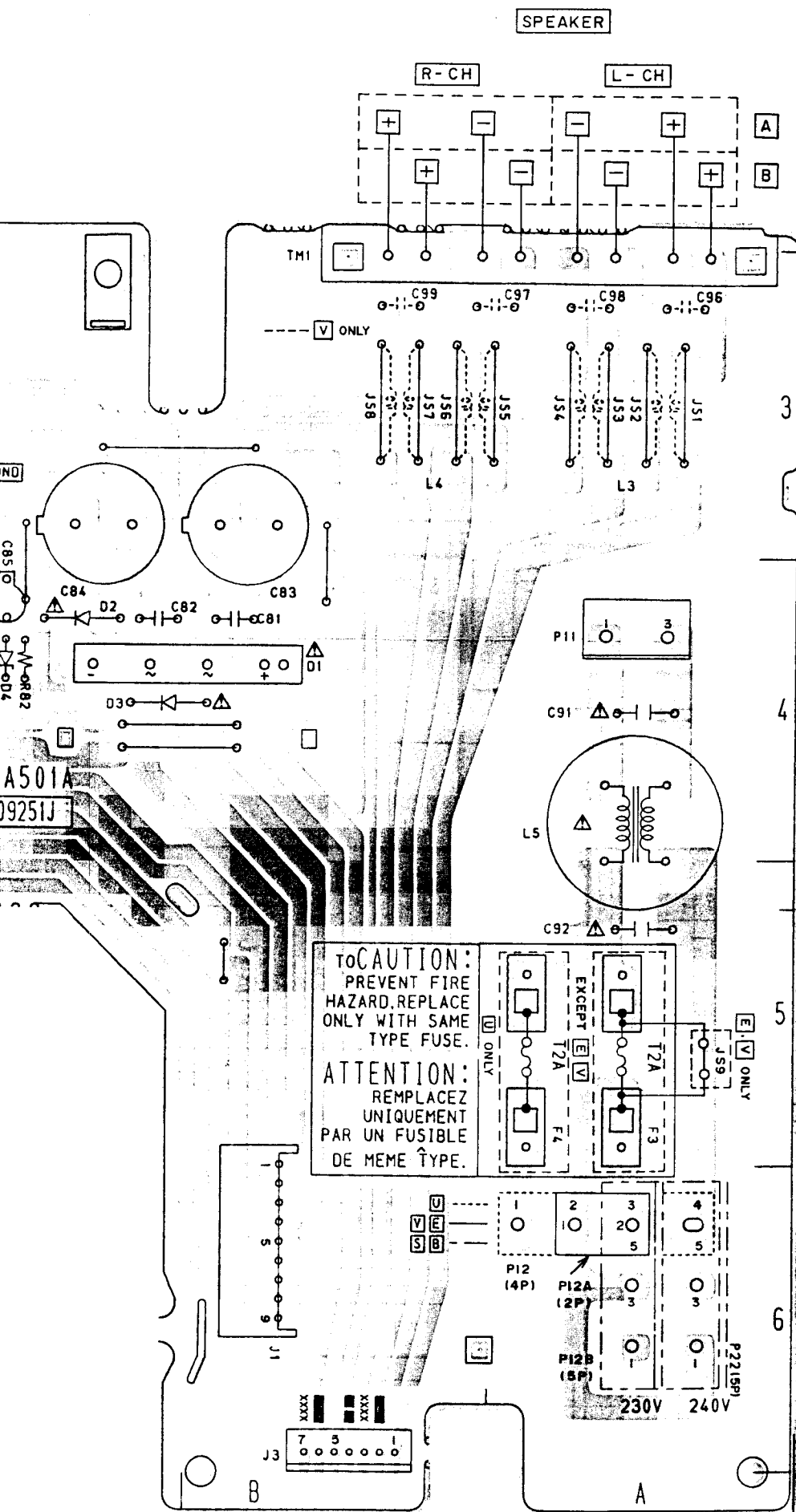
AVERTISSEMENT:  $\Delta$  IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDÉES PAR LE FABRICANT.

TO CAUTION: PREVENT FIRE HAZARD. REPLACE ONLY WITH SAME TYPE FUSE.

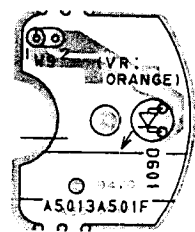
ATTENTION: REMPLACEZ UNIQUEMENT PAR UN FUSIBLE DE MEME TYPE.

U  
V E  
S B  
P  
14

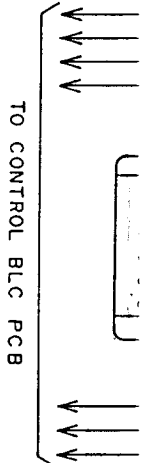
7 5 1  
0 0 0 0 0 0



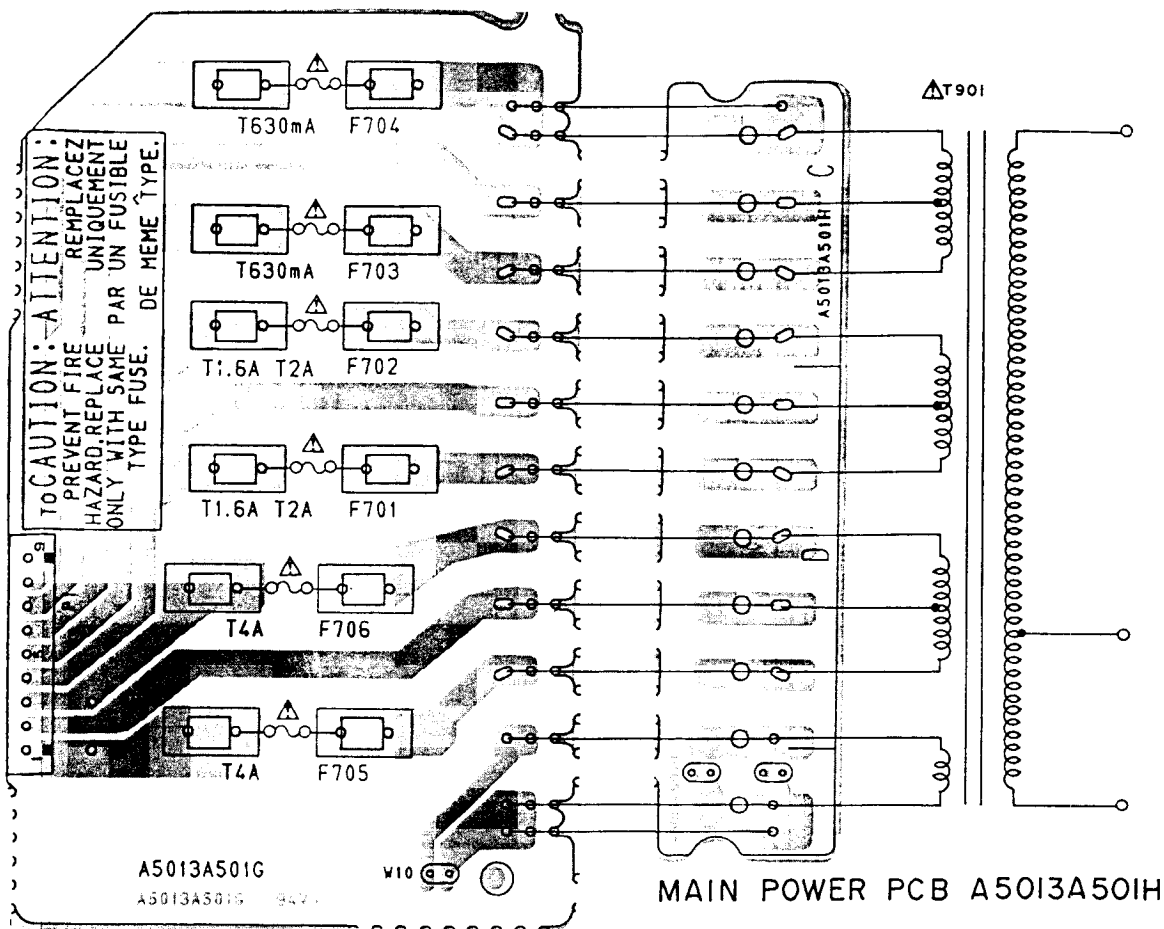
FUSE PCB A5013A501G



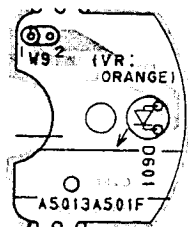
INDICATOR PCB A5013A501F



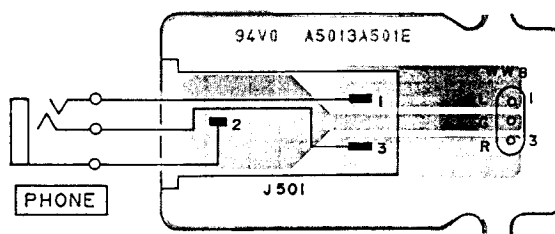




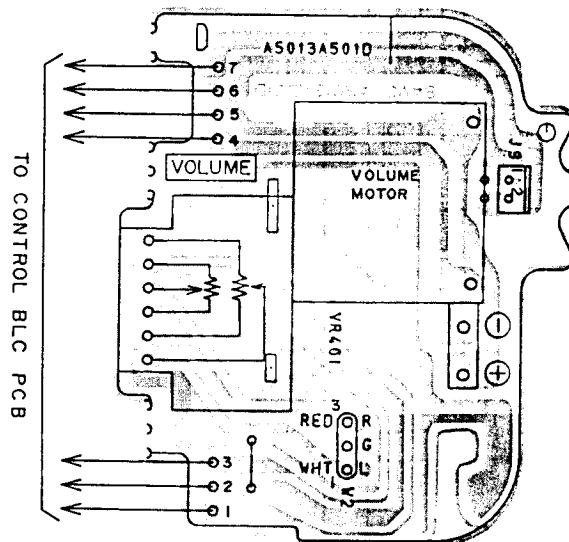
FUSE PCB A5013A50IG



INDICATOR PCB  
A5013A50IF



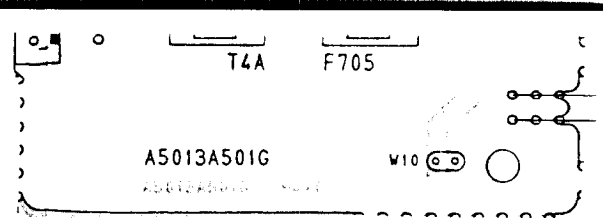
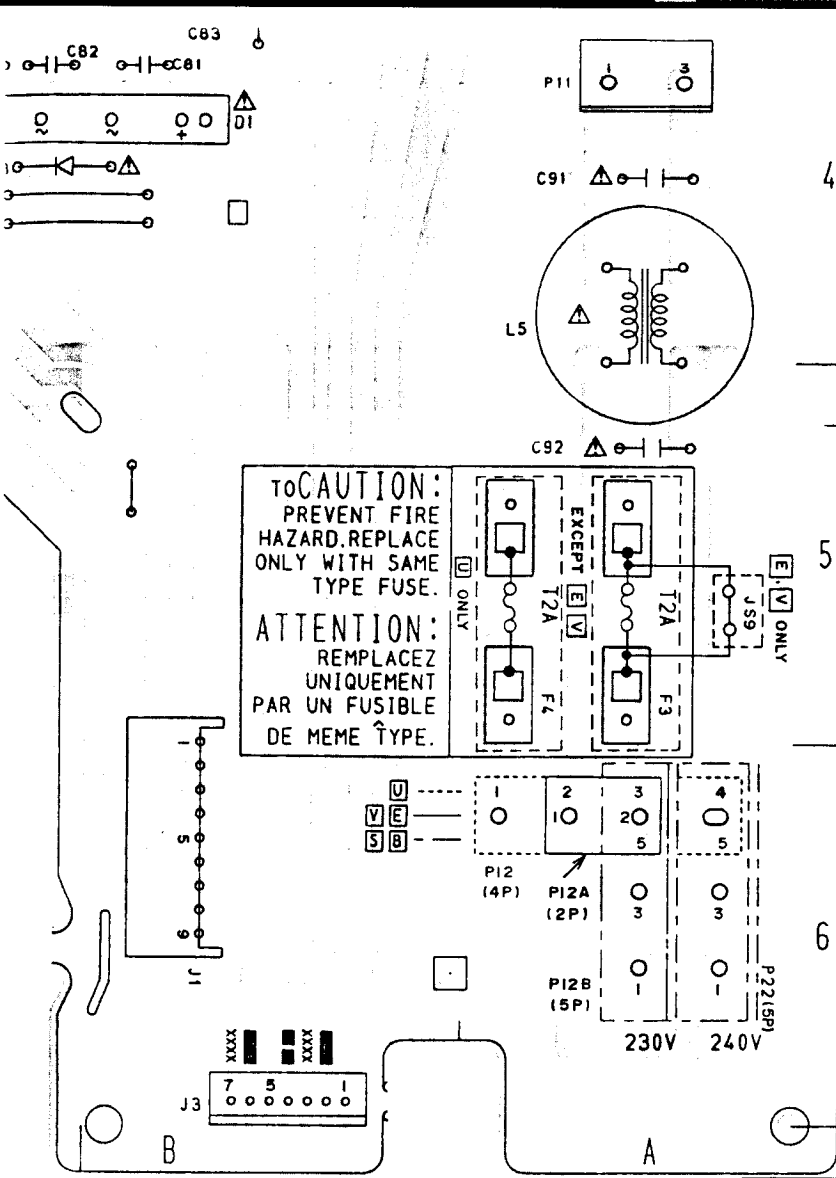
PHONE JACK PCB A5013A50IE



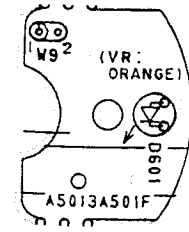
MAIN VR PCB A5013A50ID



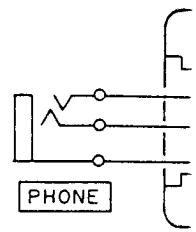




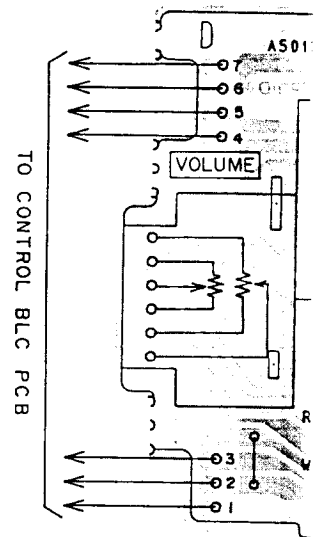
FUSE PCB A5013A501G



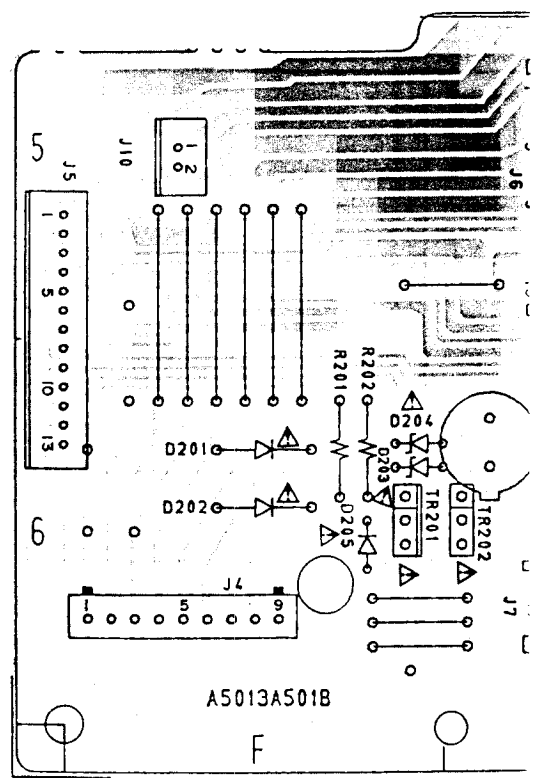
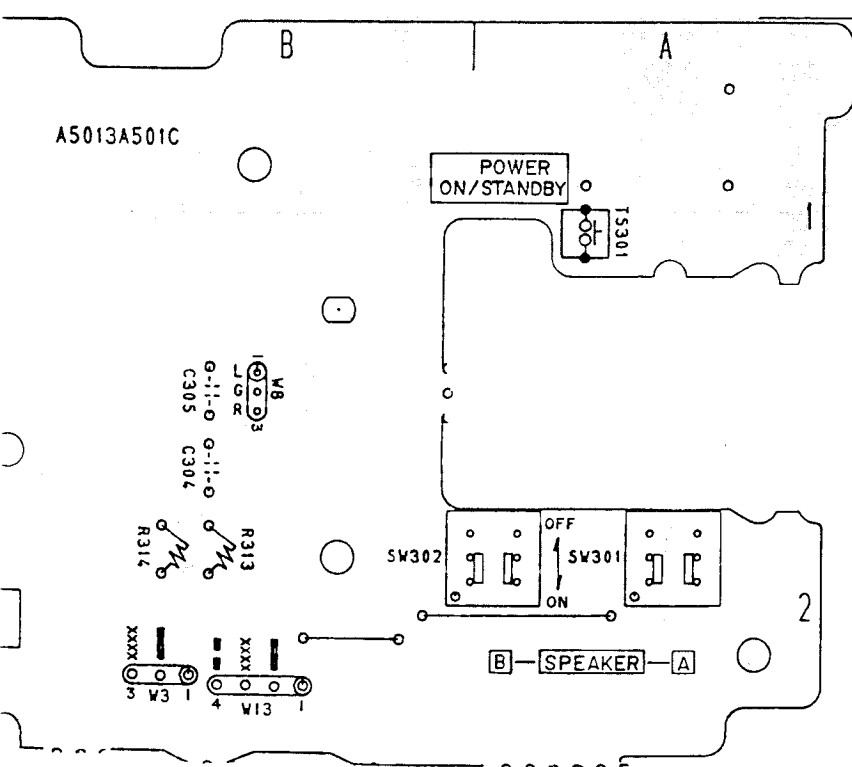
INDICATOR PCB A5013A501F

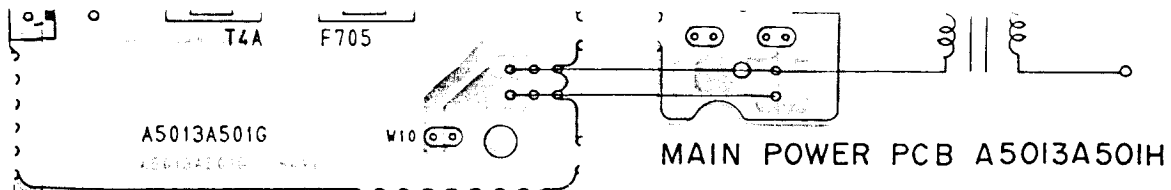


PHONE PCB

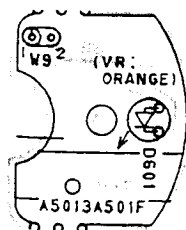


MAIN VR PCB

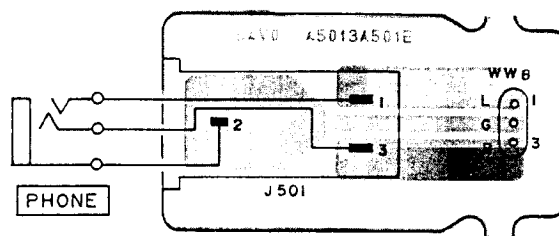




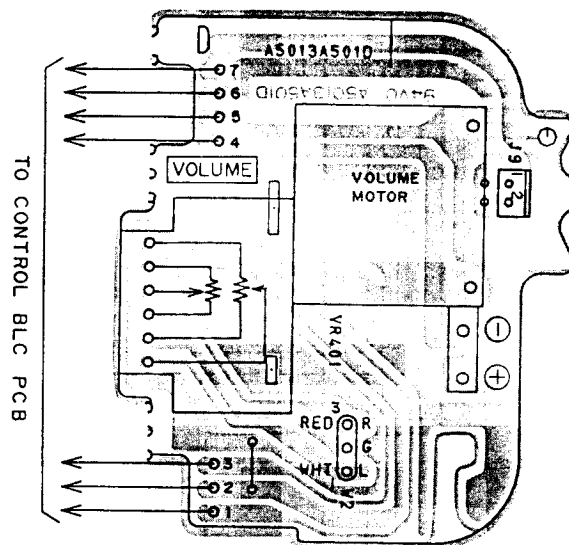
FUSE PCB A5013A501G



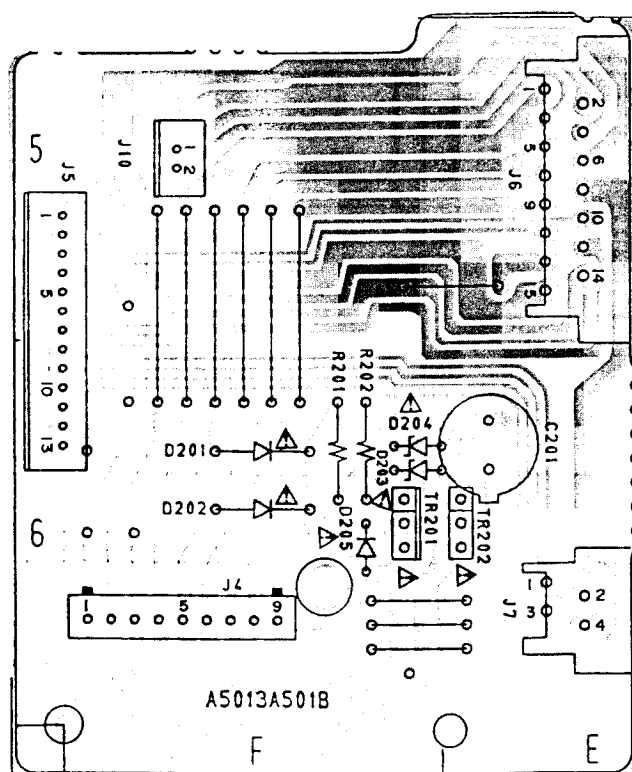
INDICATOR PCB A5013A501F

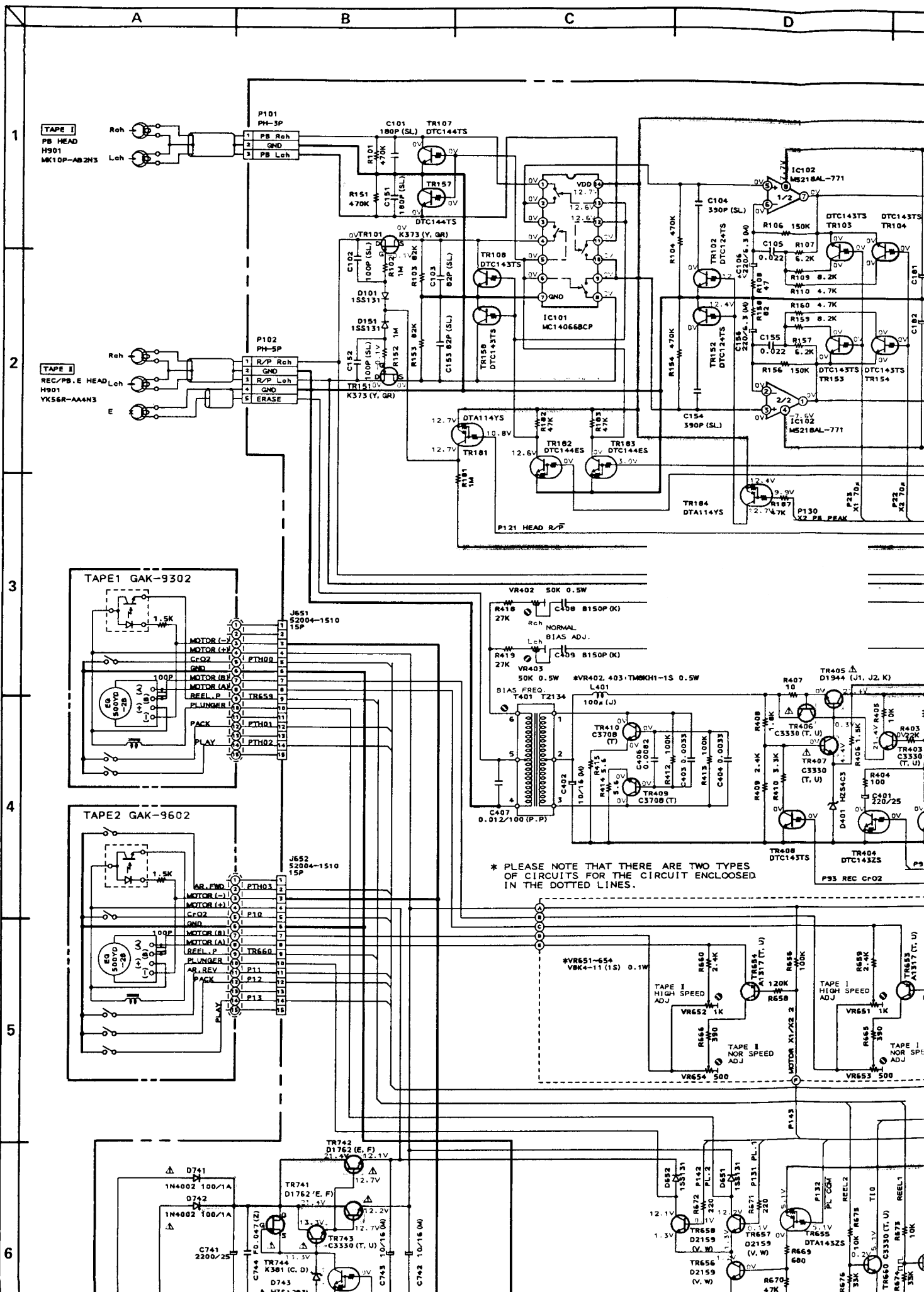


PHONE JACK PCB A5013A501E

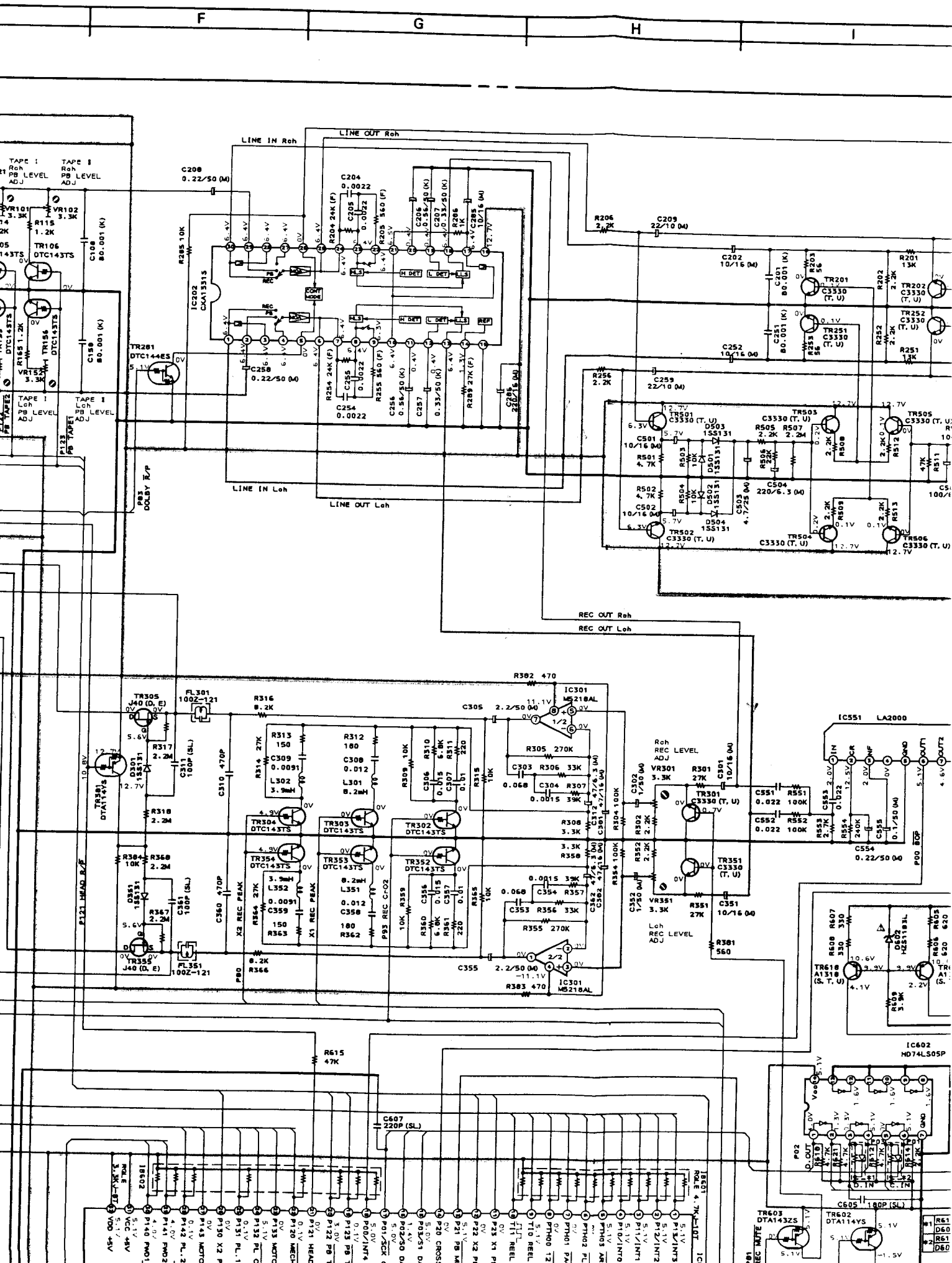


MAIN VR PCB A5013A501D

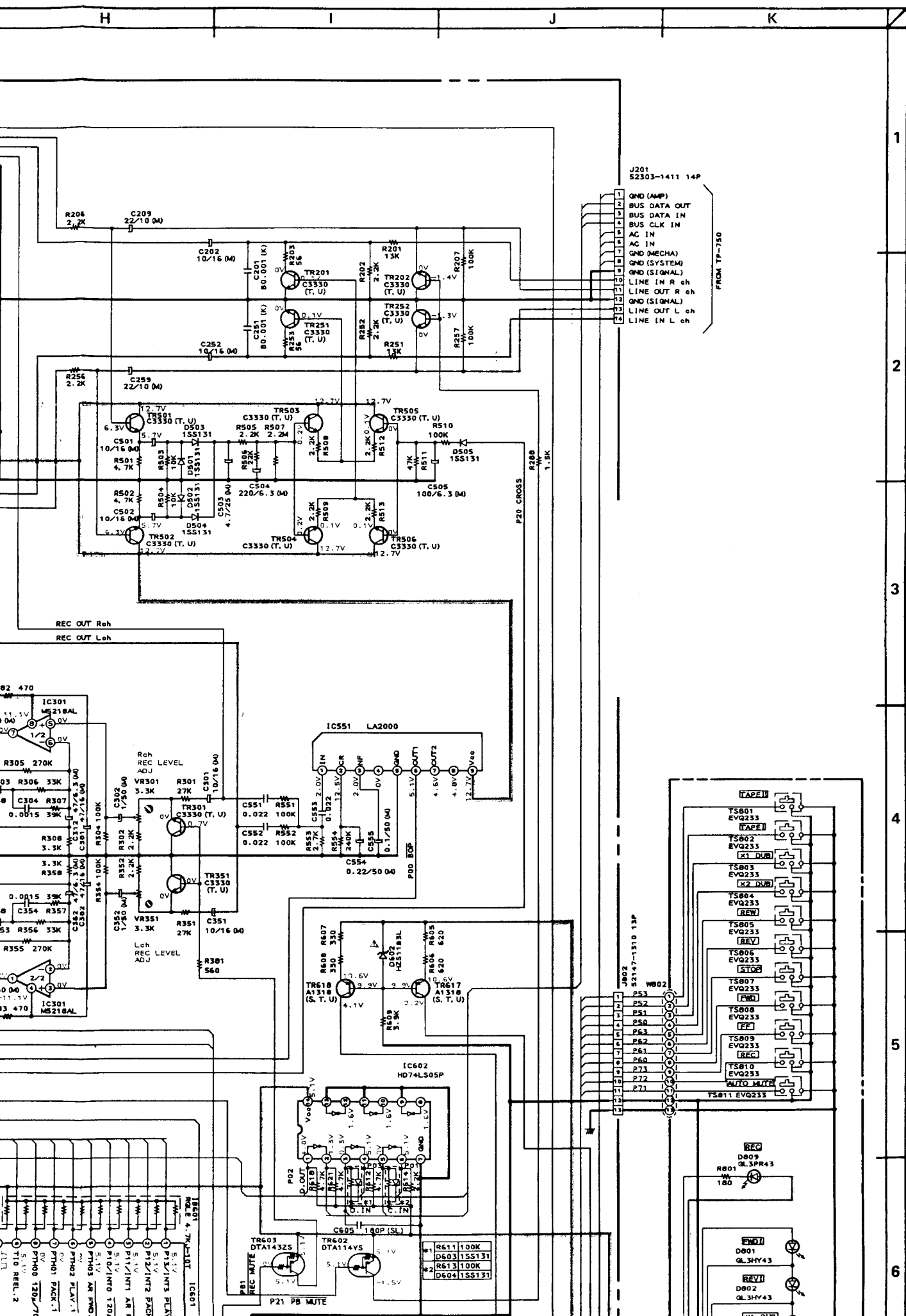




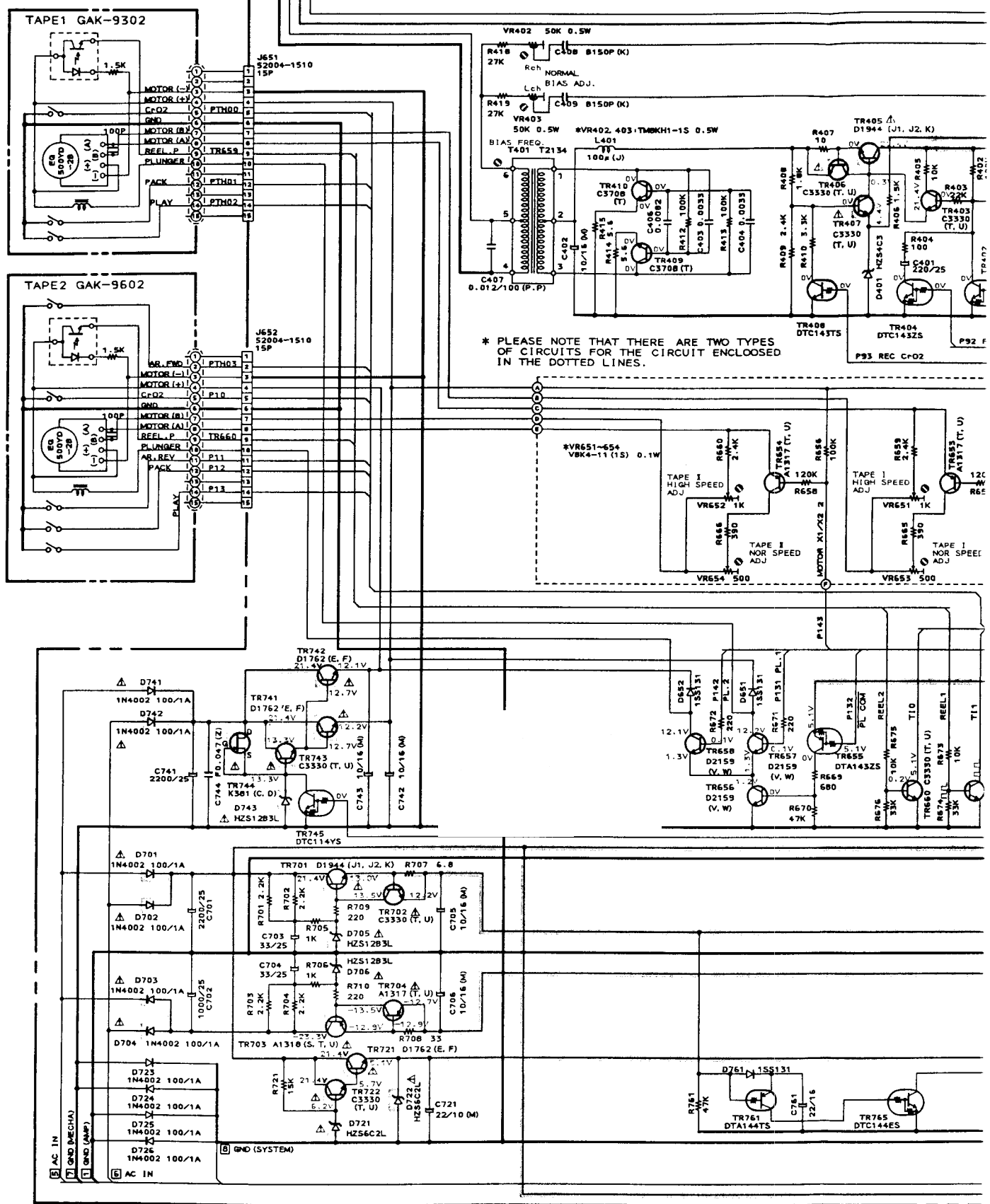








3  
4  
5  
6  
7  
8



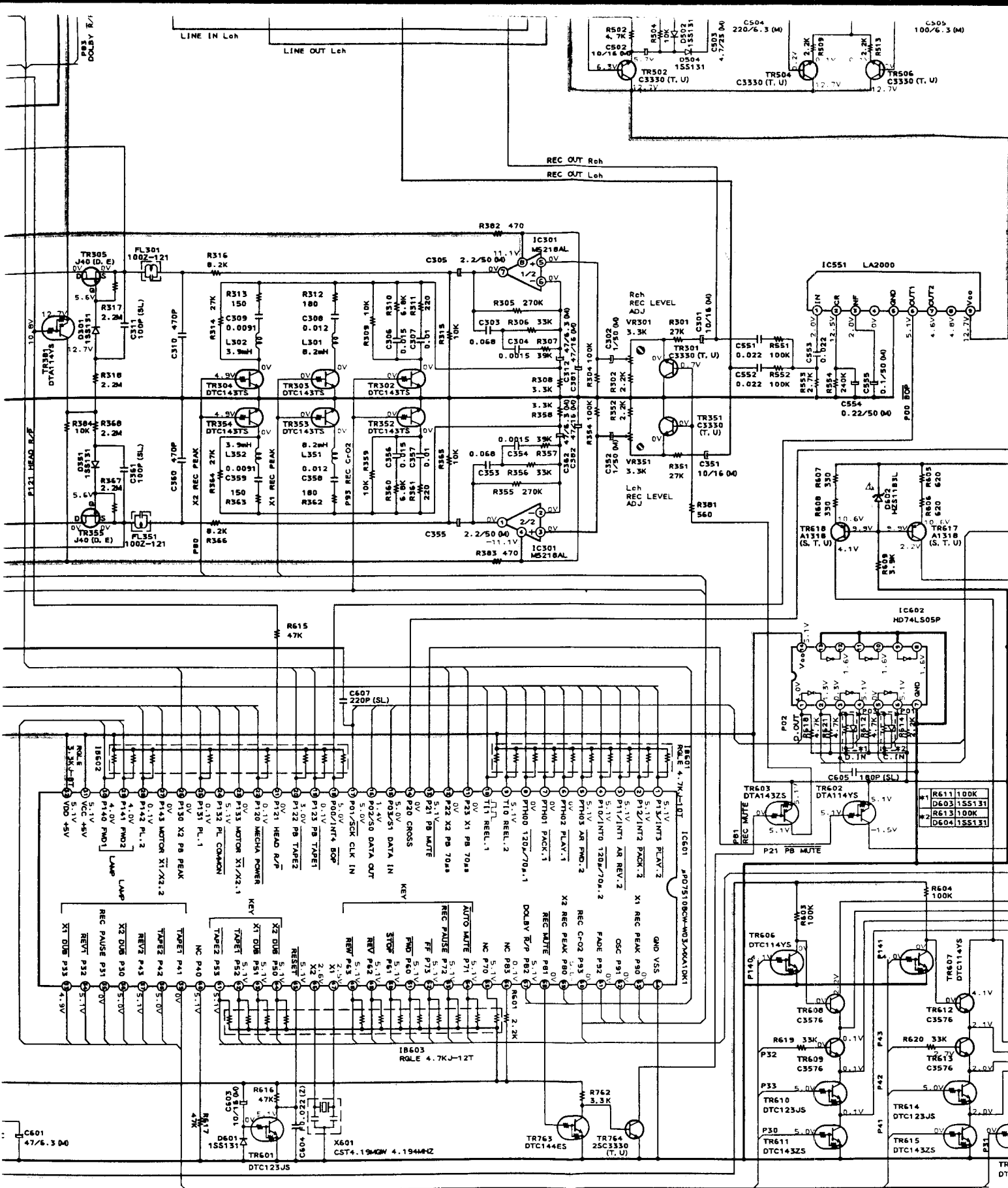
DECK PCB T2134A501A

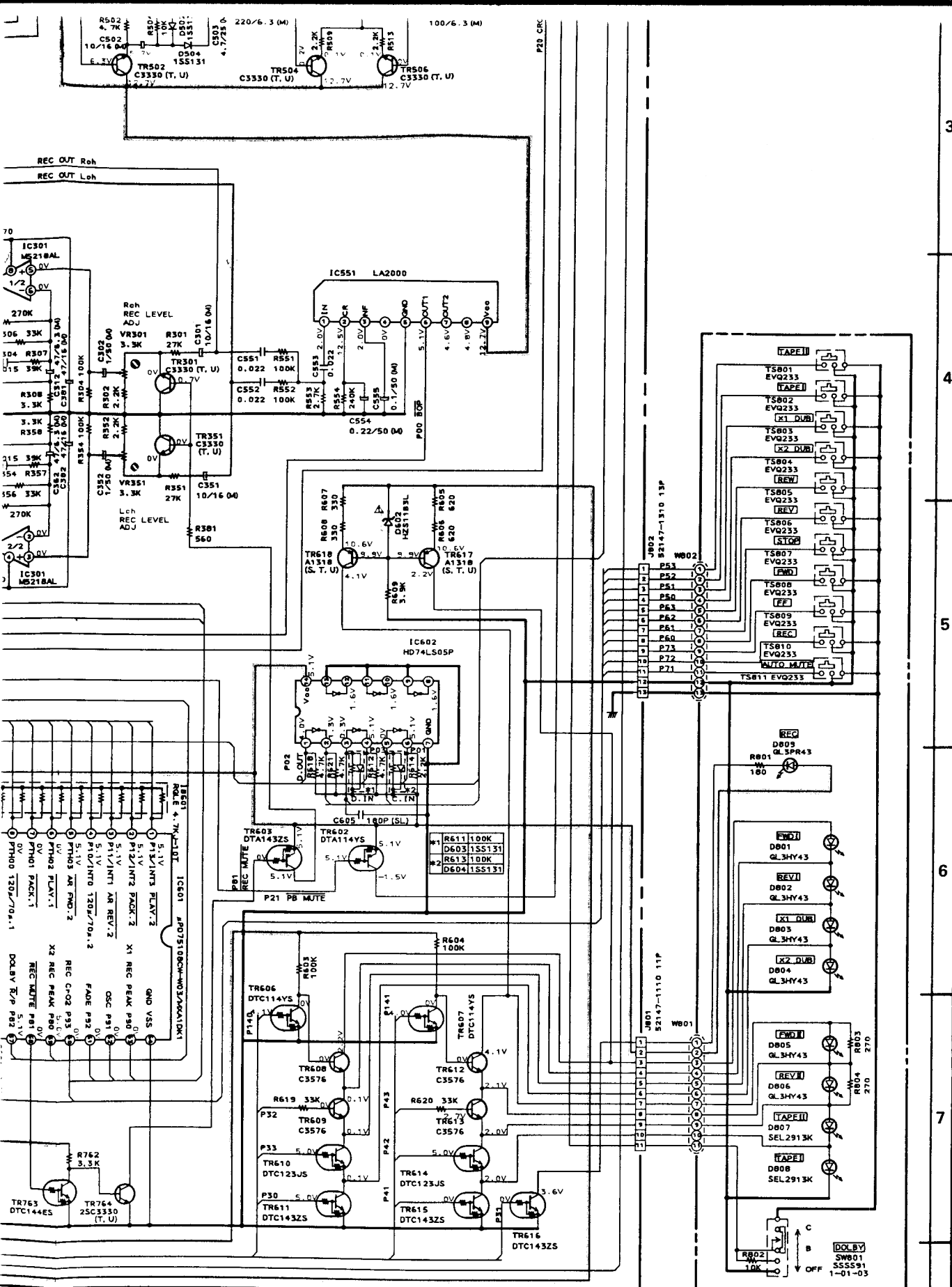
INDICATED VOLTAGES WERE MEASURED DURING PB MODE  
(CONDITION: TAPE 1, FWD PLAY, NORMAL TAPE, DOLBY OFF)

PB (POWER SUP)  
PB (POWER SUP)  
PB (POWER SUP)  
PB (POWER SUP)



WARNING:  AND  
COMPONENT  
REPLACE S.  
ONLY WITH  
PARTS  
AVERTISSEMENT:  ET  
COMPOSANT  
POUR MAIN  
DE L'APPA  
PIÈCES RE:



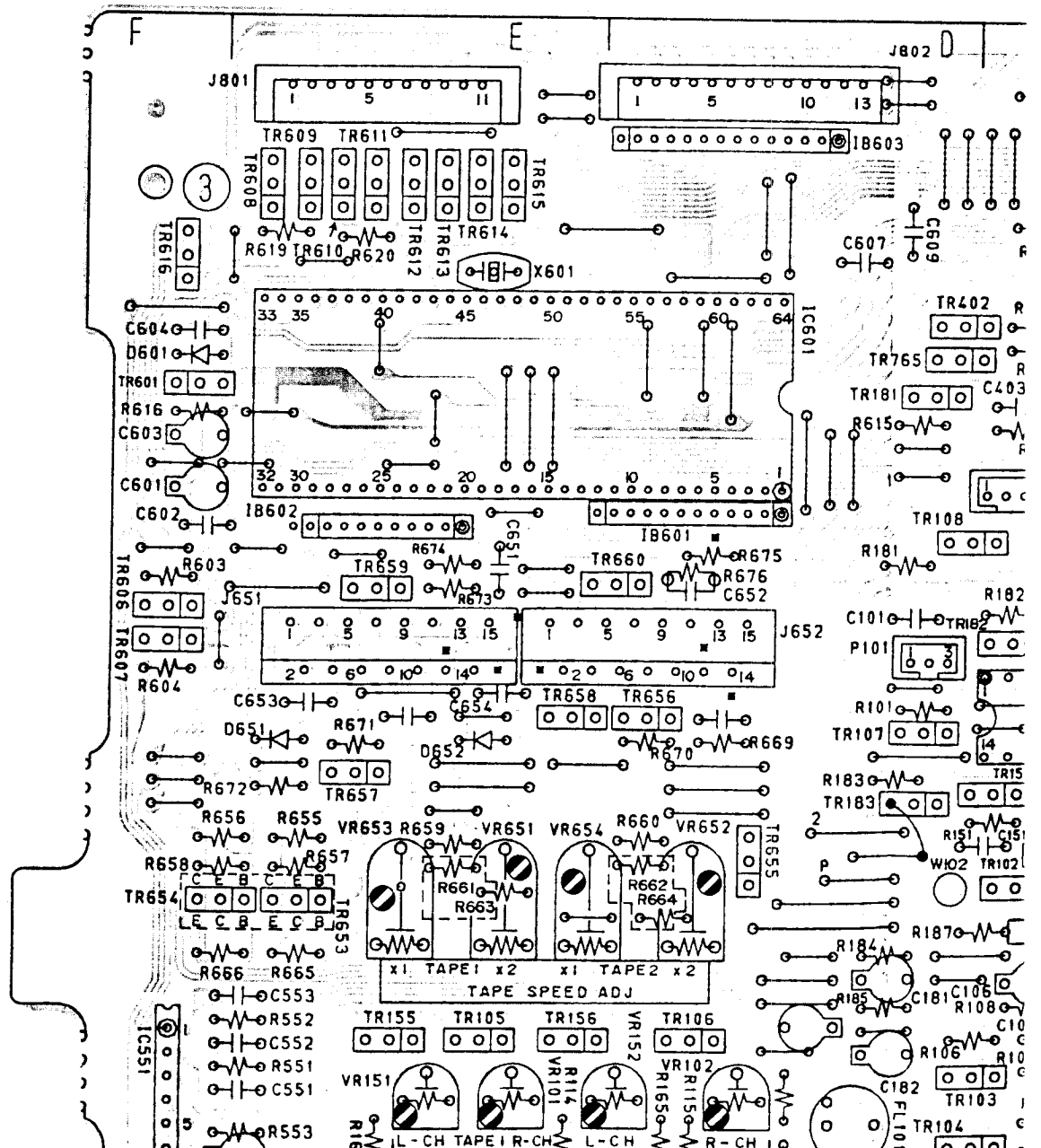
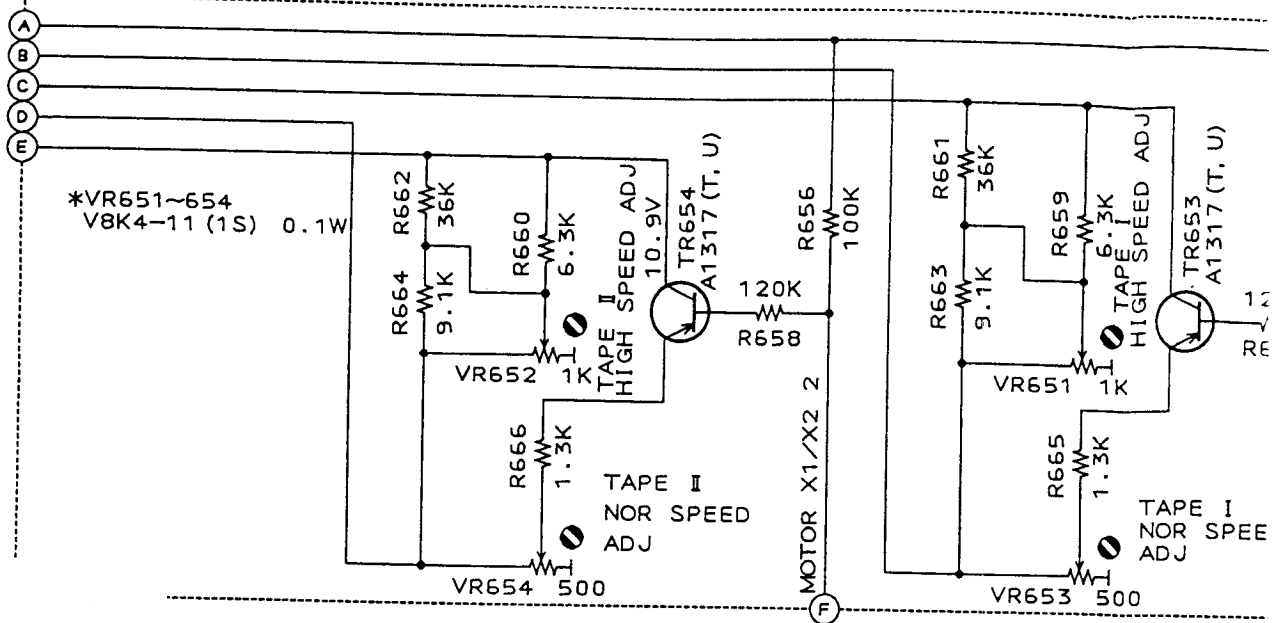


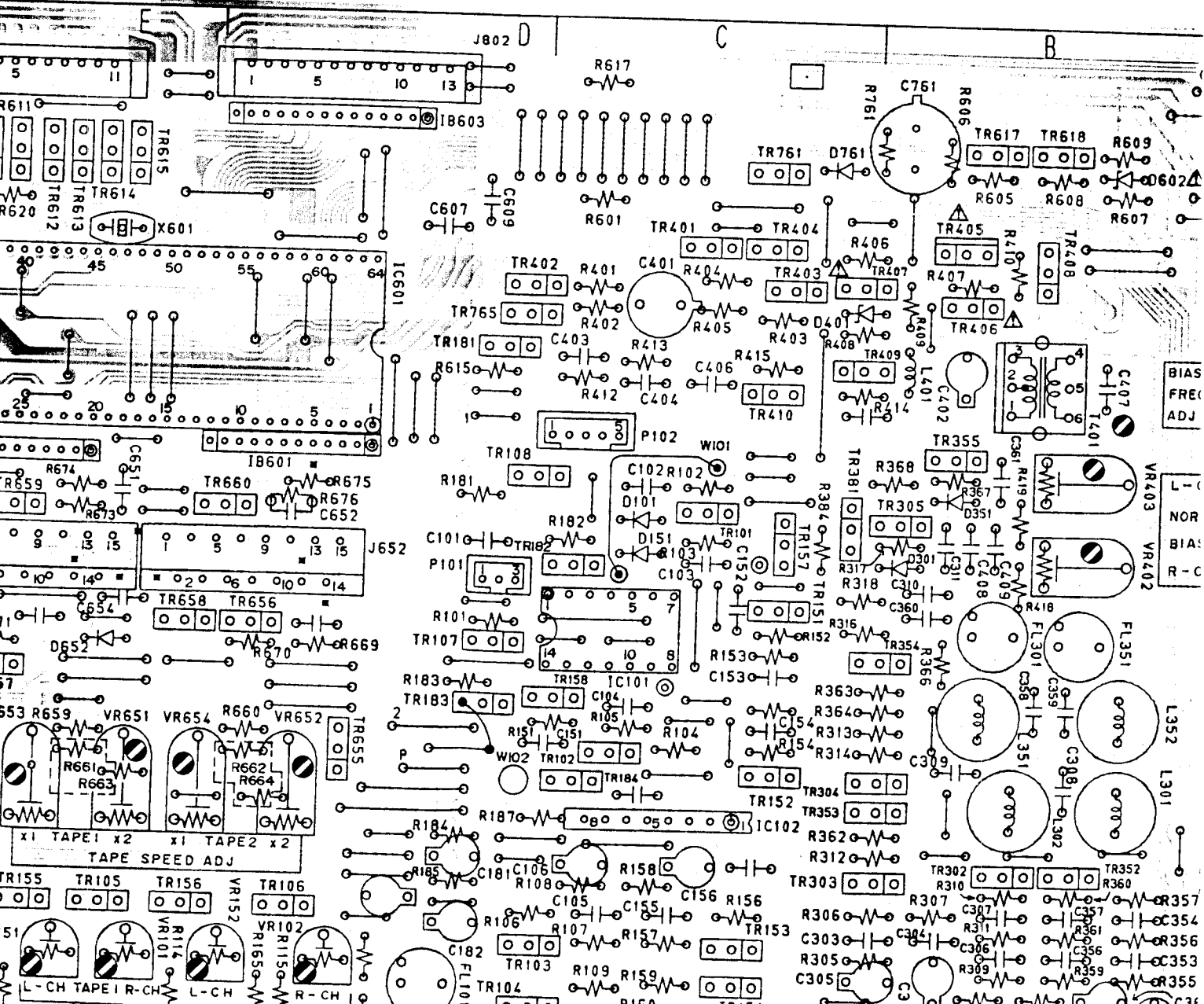
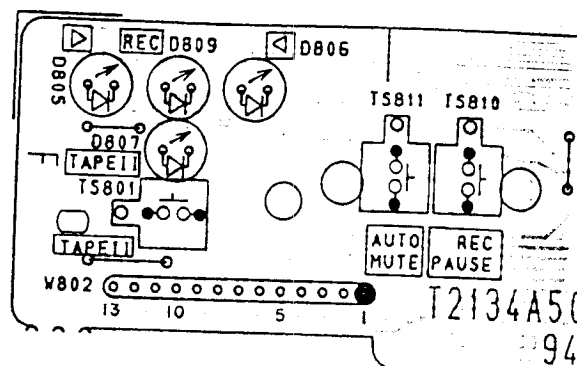
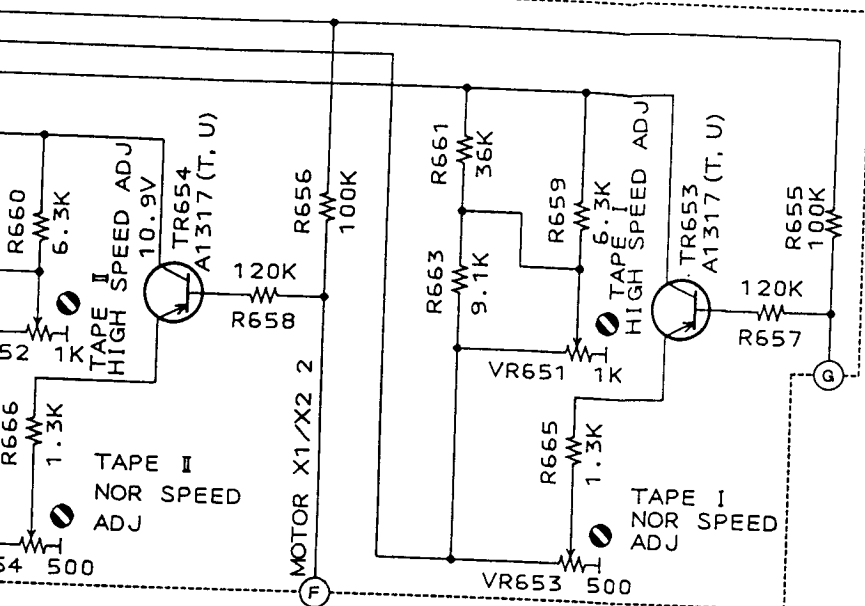
OPERATION PCB T2134A501B

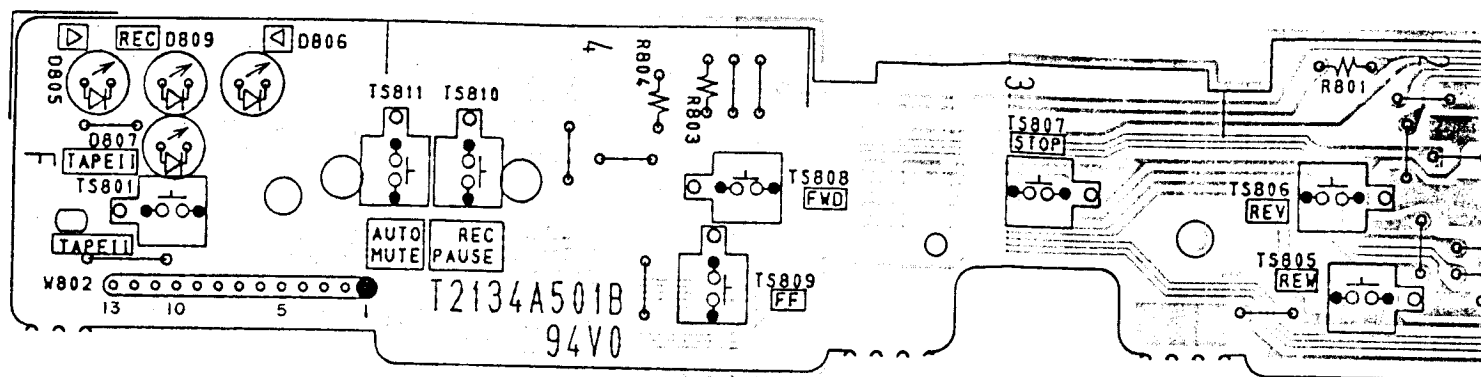
NOTE  
UNLESS OTHERWISE SPECIFIED  
ALL RESISTORS IN OHMS  
ALL CAPACITORS IN  $\mu$ F

HX-750  
SCHEMATIC DIAGRAM  
No. 8-6 T213401M

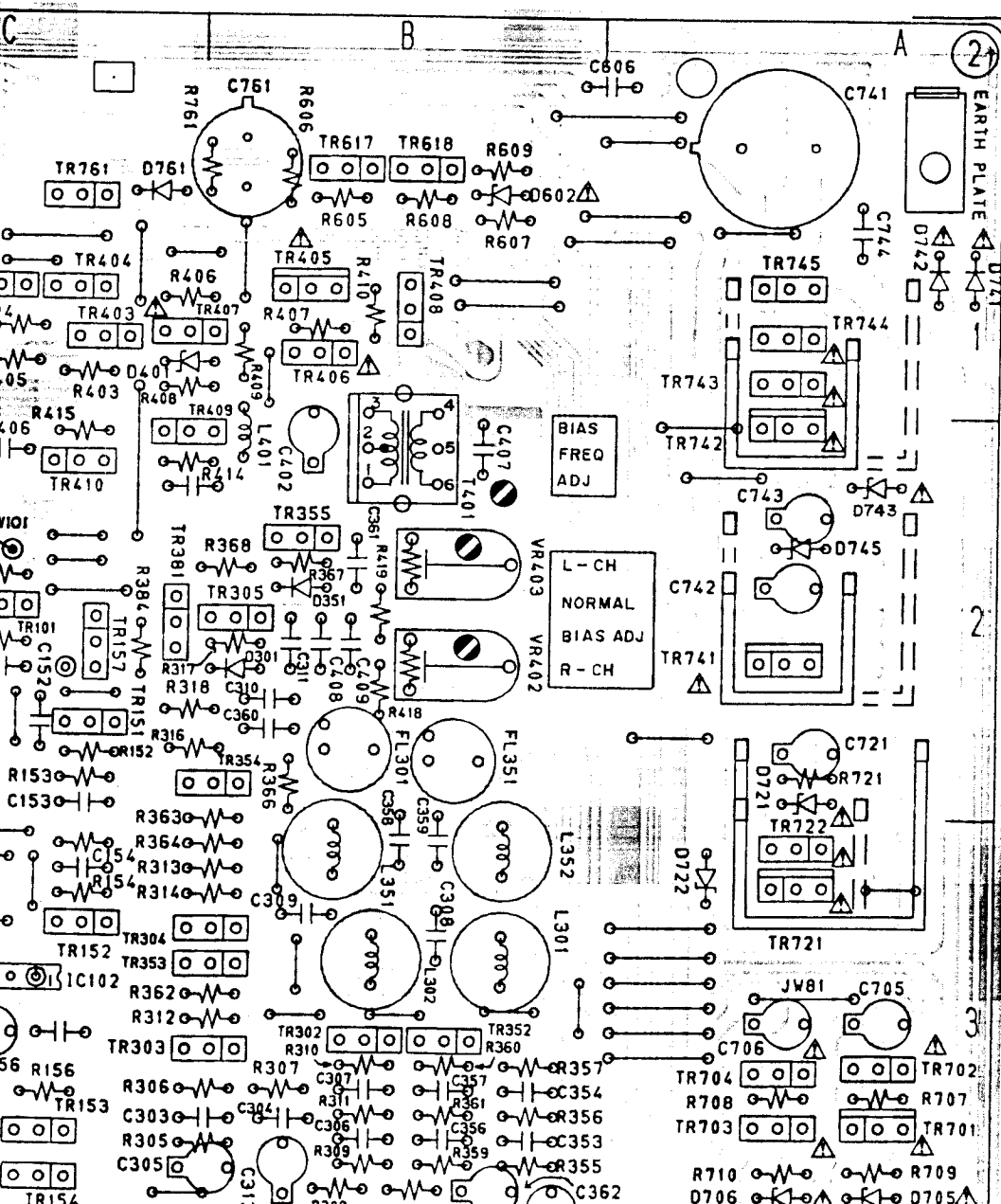
\* ANOTHER TYPE







OPERATION PCB T2134A501B



# PRINCIPAL PARTS LOCATION

## ICs

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

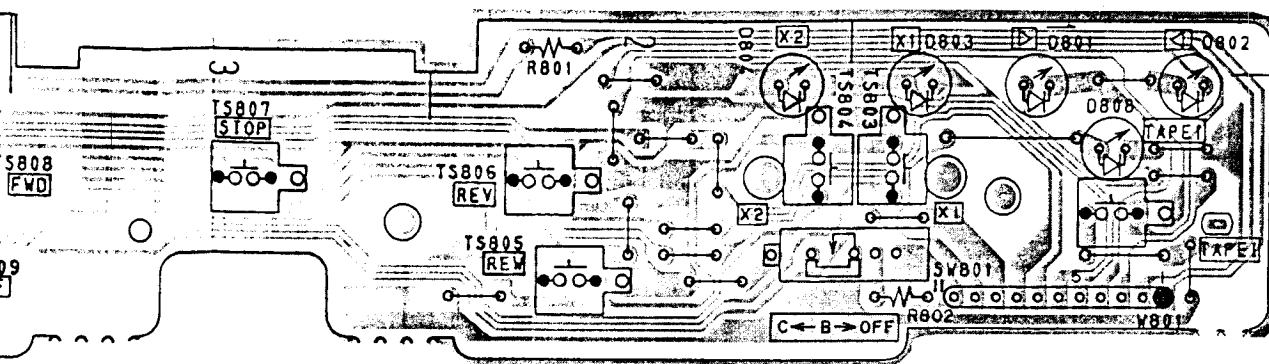
## CONNECTORS

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

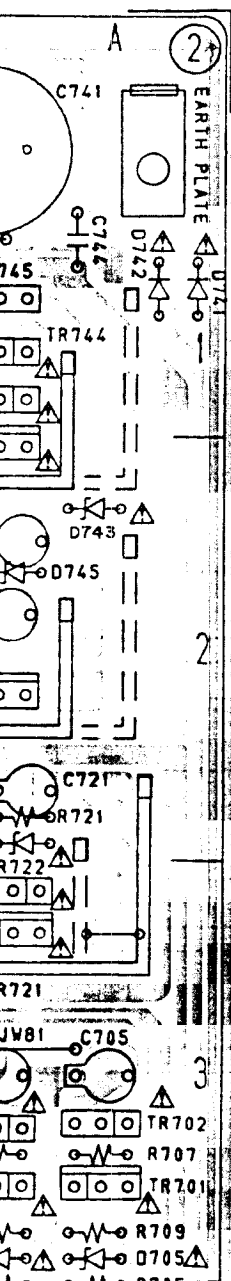
## TRANSISTORS

|       |      |    |
|-------|------|----|
| 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 | TR |
| TR151 | C2   | TR |
| TR152 | C3   | TR |
| TR153 | C3   | TR |
| TR154 | C3   | TR |
| TR155 | E3   | TR |
| TR156 | D,E3 | TR |
| TR157 | C2   | TR |
| TR158 | C3   | TR |
| TR181 | D1   | TR |
| TR182 | C2   | TR |
| TR183 | D2   | TR |





OPERATION PCB T2I34A501B



# PRINCIPAL PARTS LOCATION

## ICs

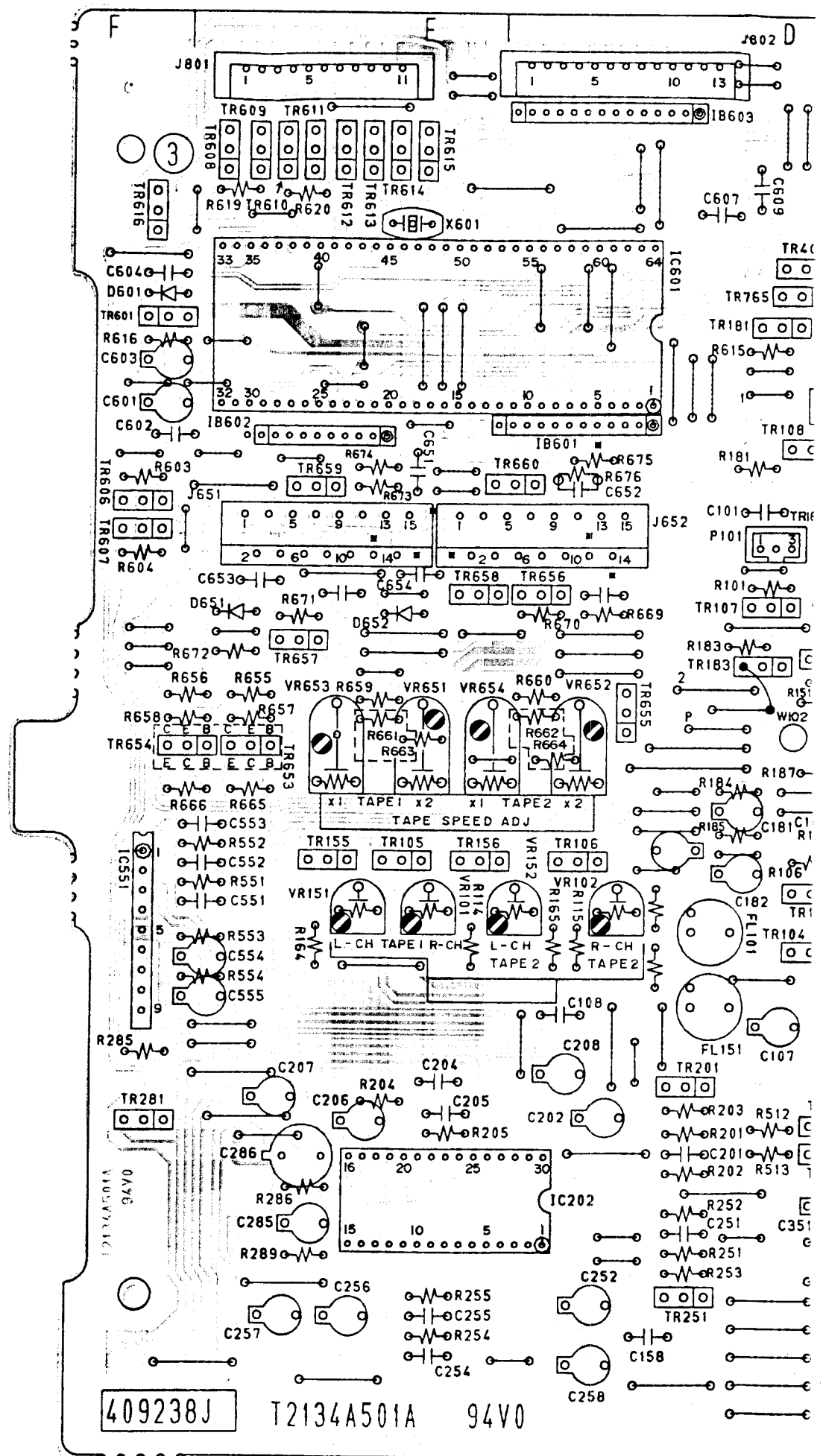
|             |      |             |      |
|-------------|------|-------------|------|
| IC101 ..... | C2   | TR402 ..... | C,D1 |
| IC102 ..... | C3   | TR403 ..... | C1   |
| IC202 ..... | D,E4 | TR404 ..... | C1   |
| IC301 ..... | B4   | TR405 ..... | B1   |
| IC551 ..... | F3,4 | TR406 ..... | B1   |
| IC601 ..... | D,E1 | TR407 ..... | B,C1 |
| IC602 ..... | B4   | TR408 ..... | B1   |

## CONNECTORS

|            |      |             |      |
|------------|------|-------------|------|
| P101 ..... | D2   | TR409 ..... | B,C2 |
| P102 ..... | C2   | TR410 ..... | C2   |
| J201 ..... | B5   | TR501 ..... | B,C5 |
| J651 ..... | E2   | TR502 ..... | B,C5 |
| J652 ..... | D,E2 | TR503 ..... | C5   |
| J801 ..... | E1   | TR504 ..... | C5   |
| J802 ..... | D1   | TR505 ..... | C4   |
|            |      | TR506 ..... | C4   |

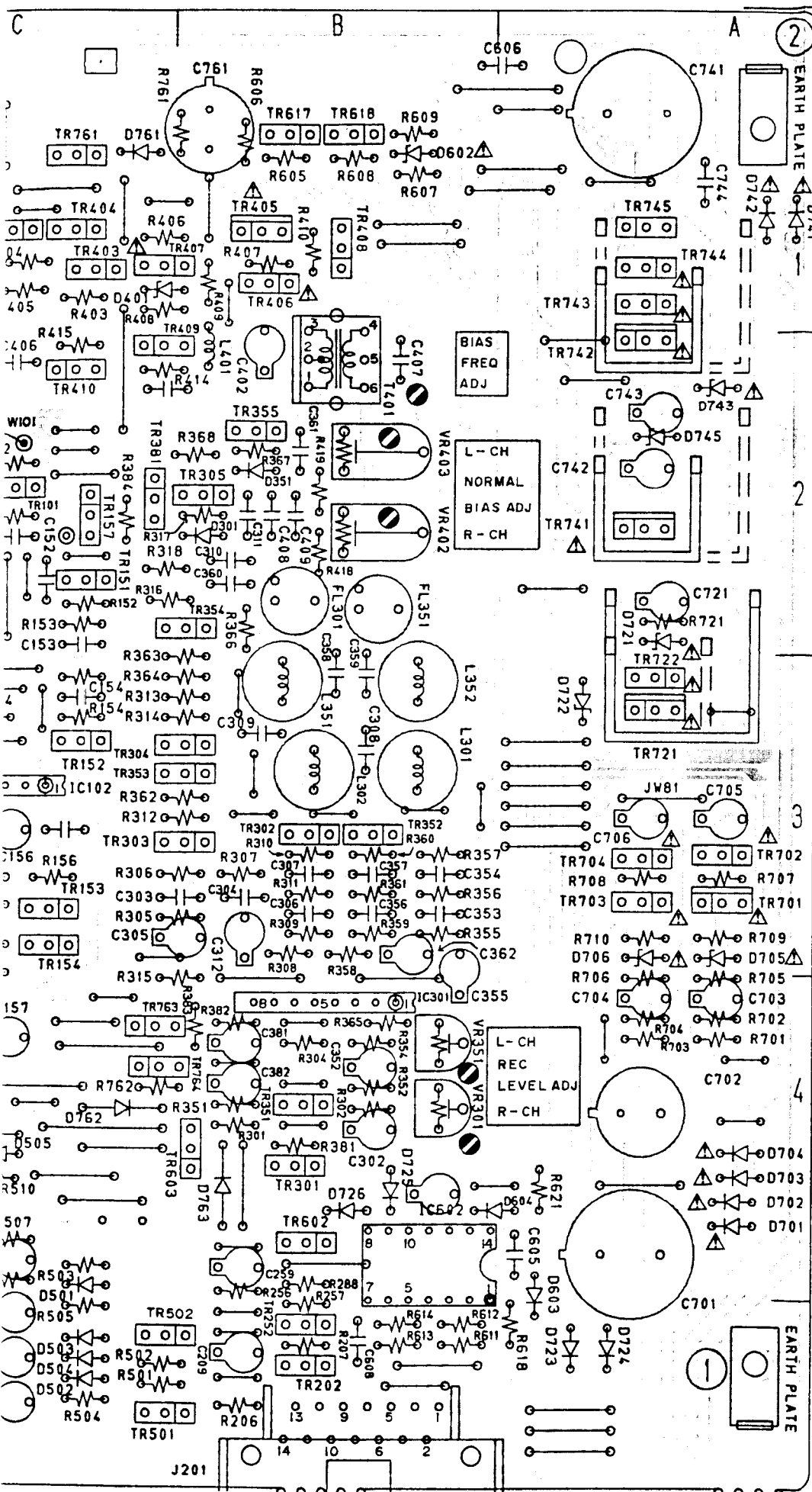
## TRANSISTORS

|             |      |             |      |
|-------------|------|-------------|------|
| TR101 ..... | C2   | TR601 ..... | F1   |
| TR102 ..... | C3   | TR602 ..... | B4   |
| TR103 ..... | C,D3 | TR603 ..... | B4   |
| TR104 ..... | C,D3 | TR606 ..... | F2   |
| TR105 ..... | E3   | TR607 ..... | F2   |
| TR106 ..... | D3   | TR608 ..... | E1   |
| TR107 ..... | D2   | TR609 ..... | E1   |
| TR108 ..... | C,D2 | TR610 ..... | E1   |
| TR151 ..... | C2   | TR611 ..... | E1   |
| TR152 ..... | C3   | TR612 ..... | E1   |
| TR153 ..... | C3   | TR613 ..... | E1   |
| TR154 ..... | C3   | TR614 ..... | E1   |
| TR155 ..... | E3   | TR615 ..... | E1   |
| TR156 ..... | D,E3 | TR616 ..... | F1   |
| TR157 ..... | C2   | TR617 ..... | B1   |
| TR158 ..... | C3   | TR618 ..... | B1   |
| TR181 ..... | D1   | TR653 ..... | E3   |
| TR182 ..... | C2   | TR654 ..... | E,F3 |
| TR183 ..... | D3   | 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.





## PRINCIPAL PARTS LOCATION

### ICs

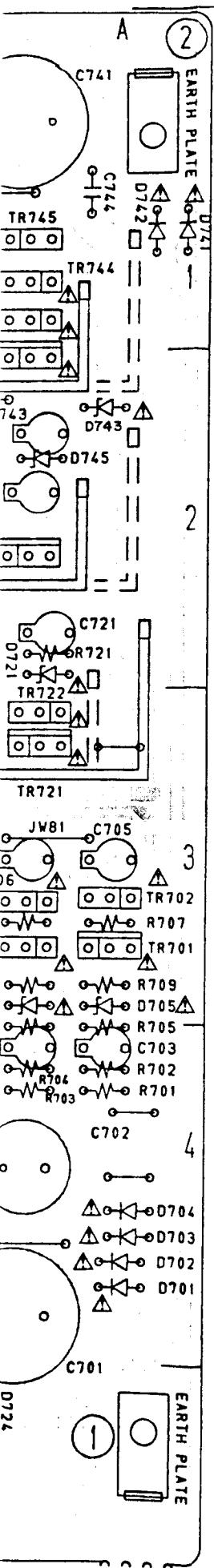
|       |      |    |
|-------|------|----|
| IC101 | C2   | TF |
| IC102 | C3   | TF |
| IC202 | D,E4 | TF |
| IC301 | B4   | TF |
| IC551 | F3,4 | TF |
| IC601 | D,E1 | TF |
| IC602 | B4   | TF |

### CONNECTORS

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



## PRINCIPAL PARTS LOCATION

### ICs

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

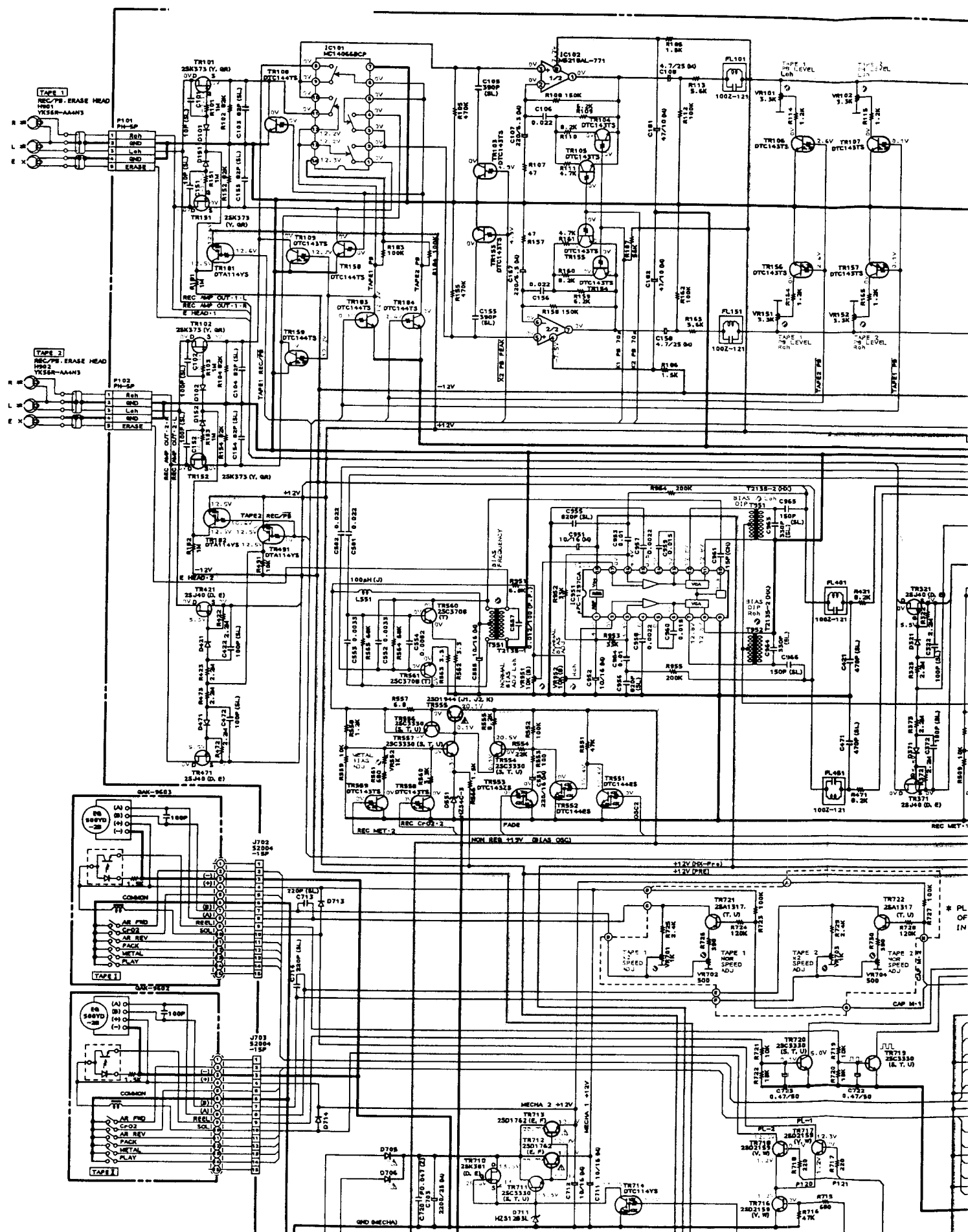
### CONNECTORs

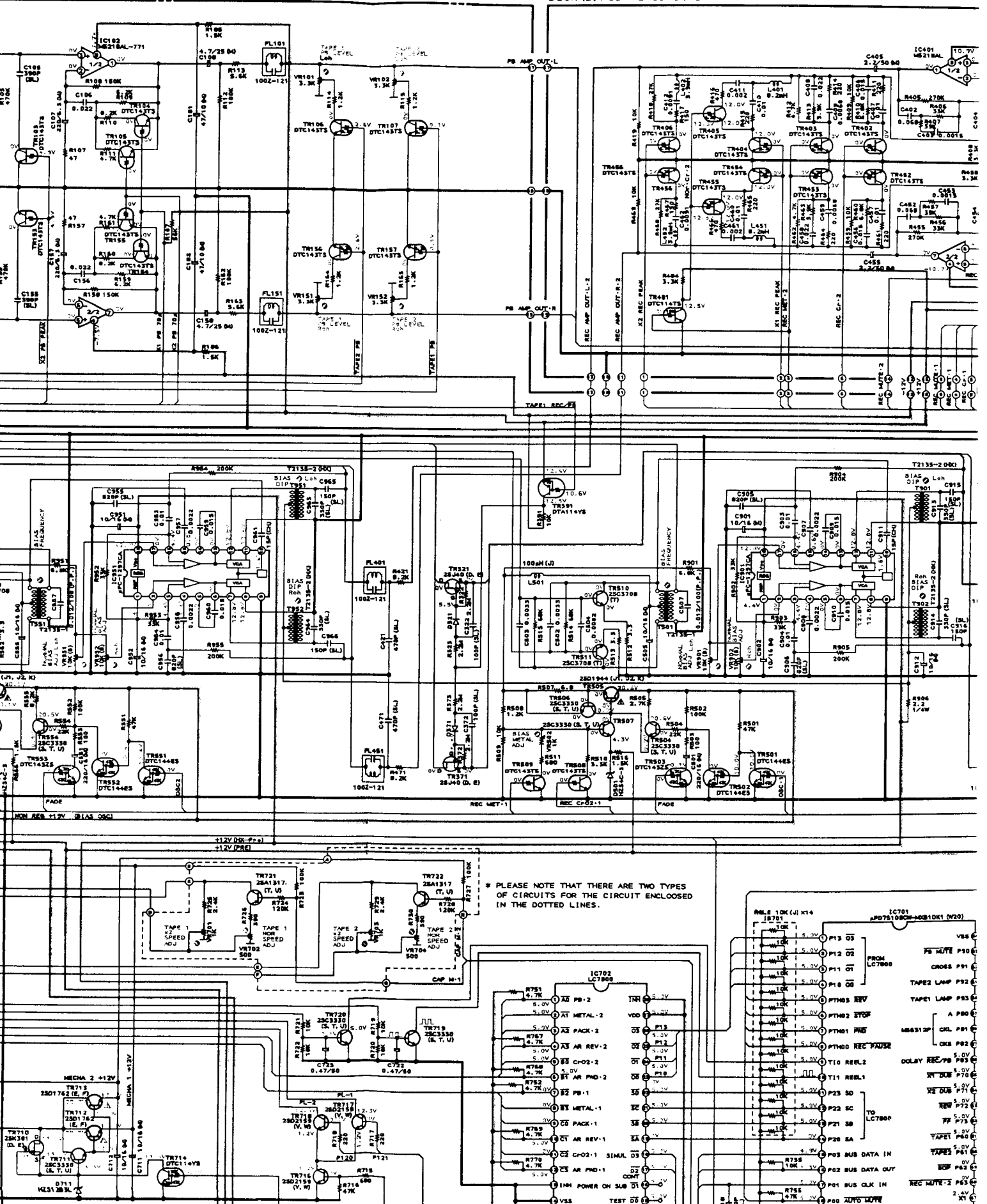
|            |      |
|------------|------|
| P101 ..... | D2   |
| P102 ..... | C2   |
| J201 ..... | B5   |
| J651 ..... | E2   |
| J652 ..... | D,E2 |
| J801 ..... | E1   |
| J802 ..... | D1   |

### 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 |







# RTV servis Horvat

Kešinci, 31402 Semeljci

031-856-139

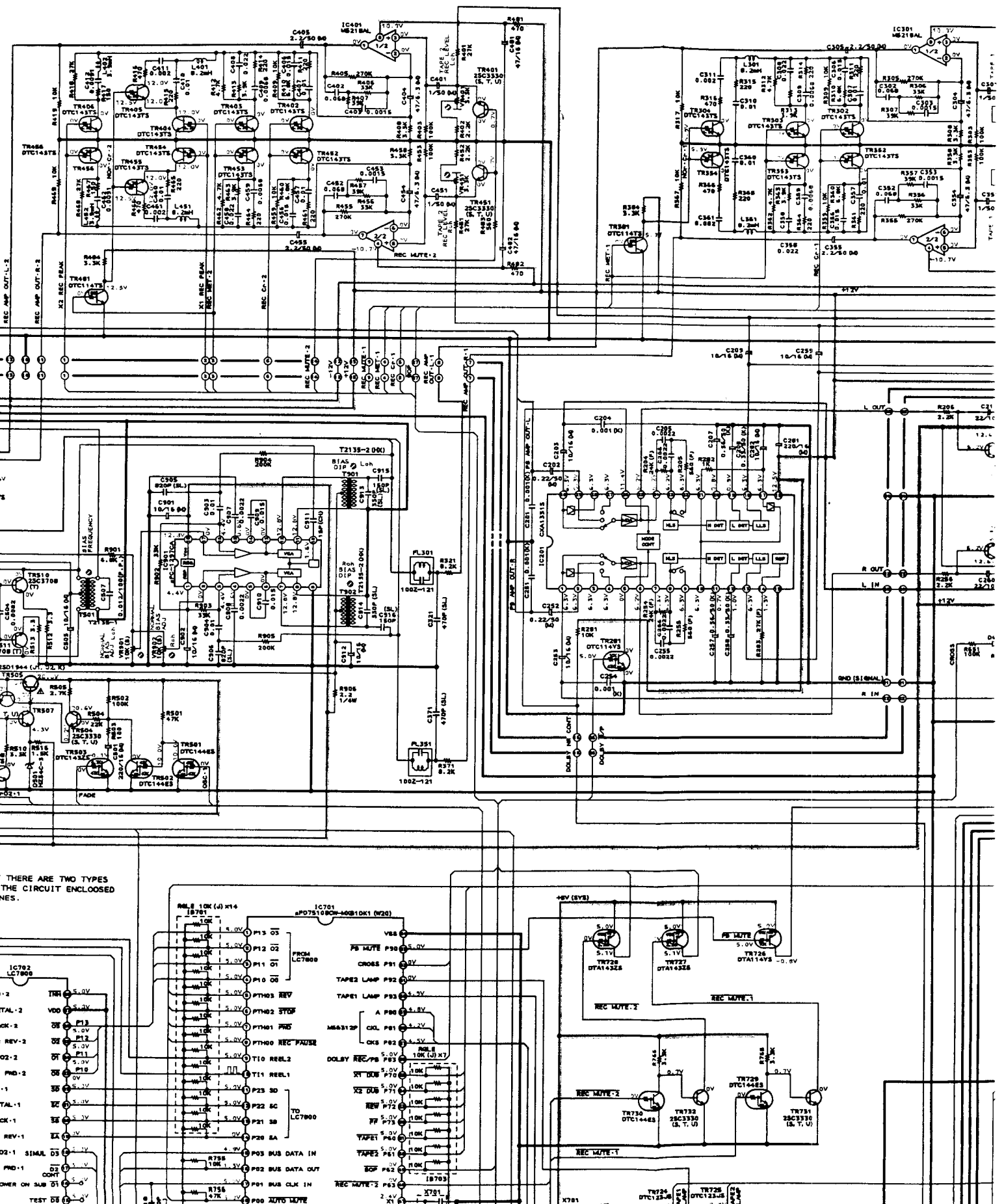
031-856-637

098-788-319

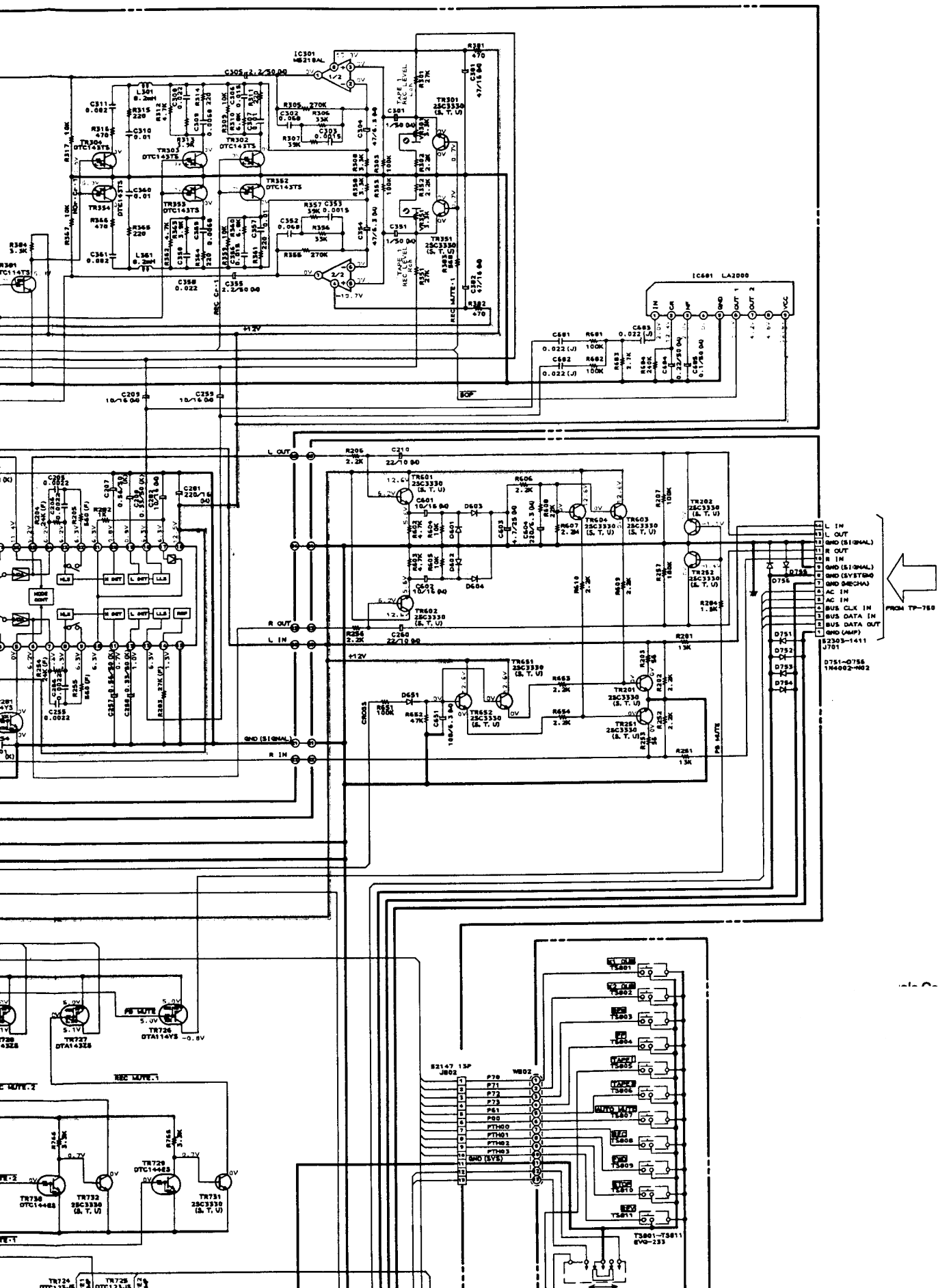
rtv-servis-horvat@os.tel.hr

Croatia

(B) PCB T21 35A501B

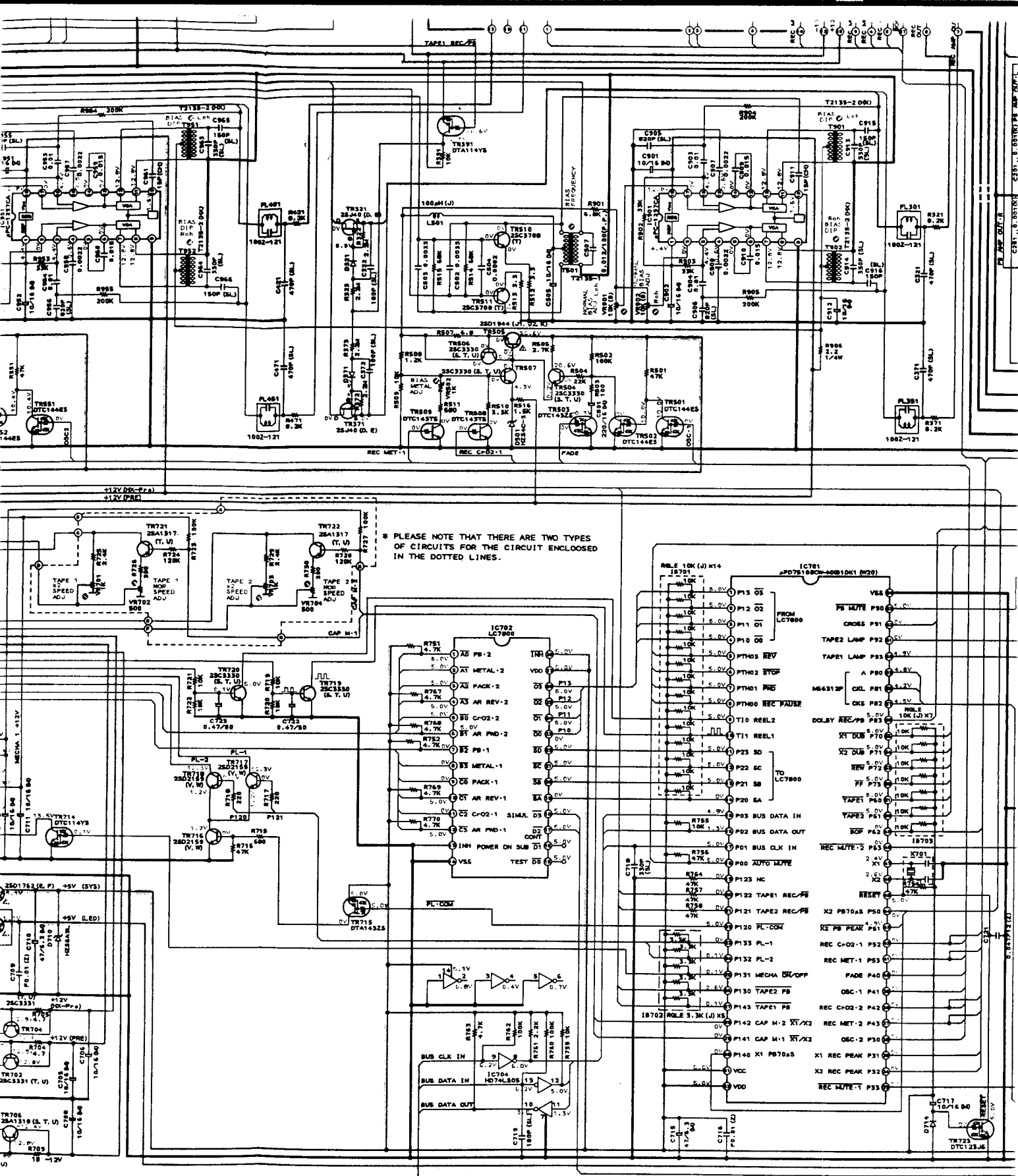




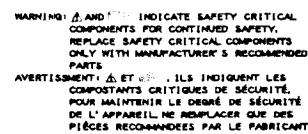


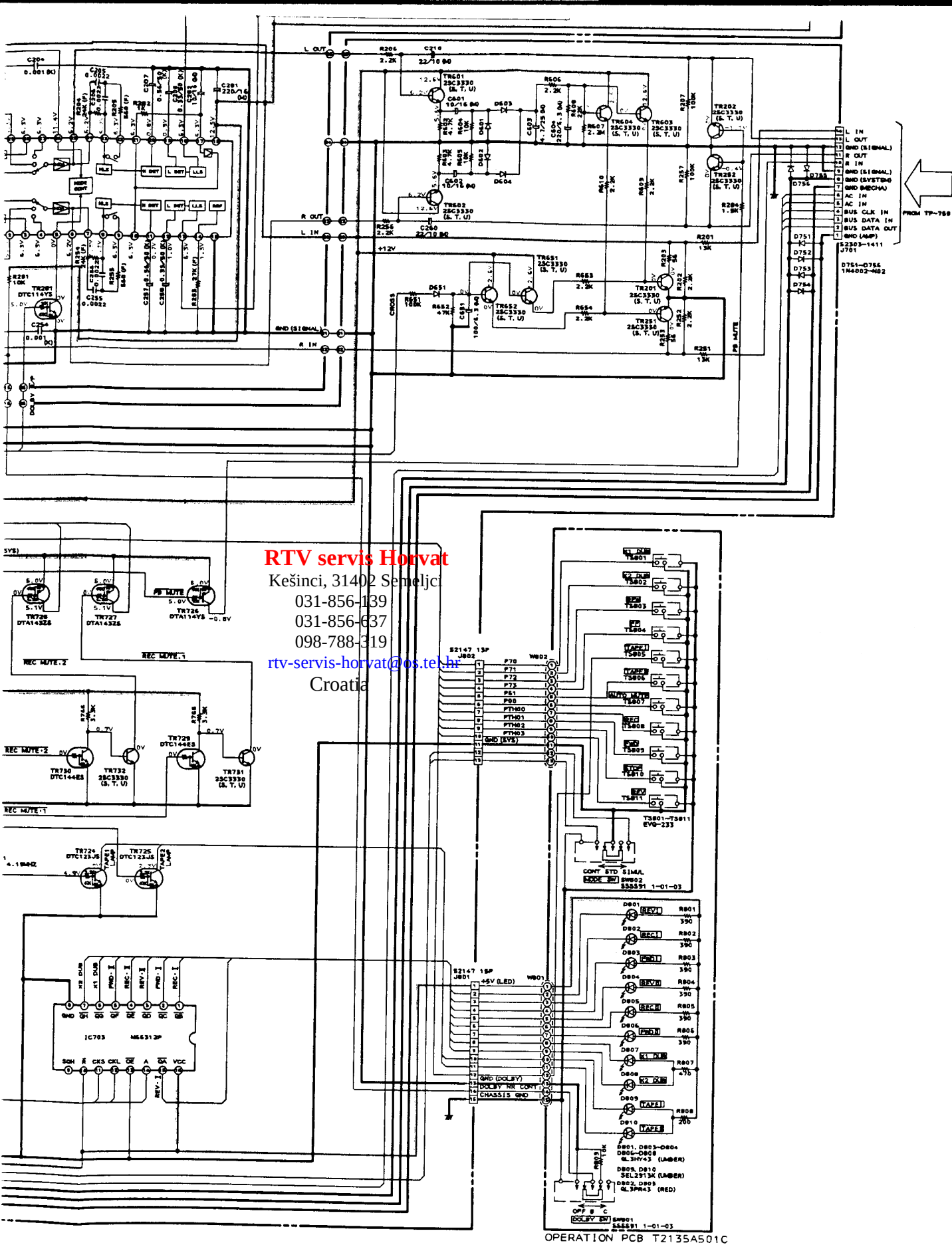


**RTV servis Horvat**  
Kešinci, 31402 Semeljci  
031-856-139  
031-856-637  
098-788-319  
[rtv-servis-horvat@os.tel.hr](mailto:rtv-servis-horvat@os.tel.hr)  
Croatia



P13 (POWER SUPPLY) LINE  
 P12 (POWER SUPPLY) LINE  
 P10 (POWER SUPPLY) LINE



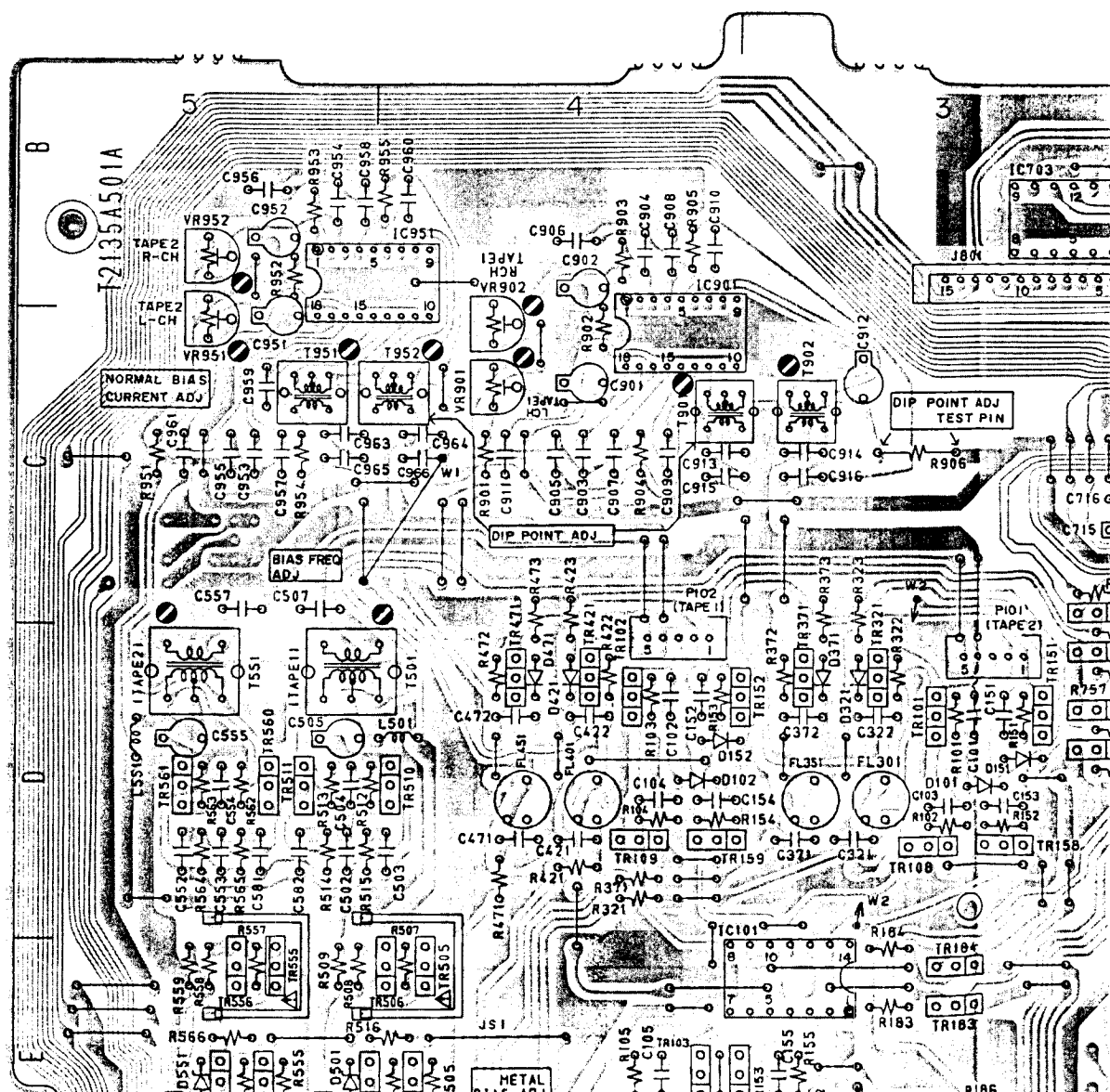


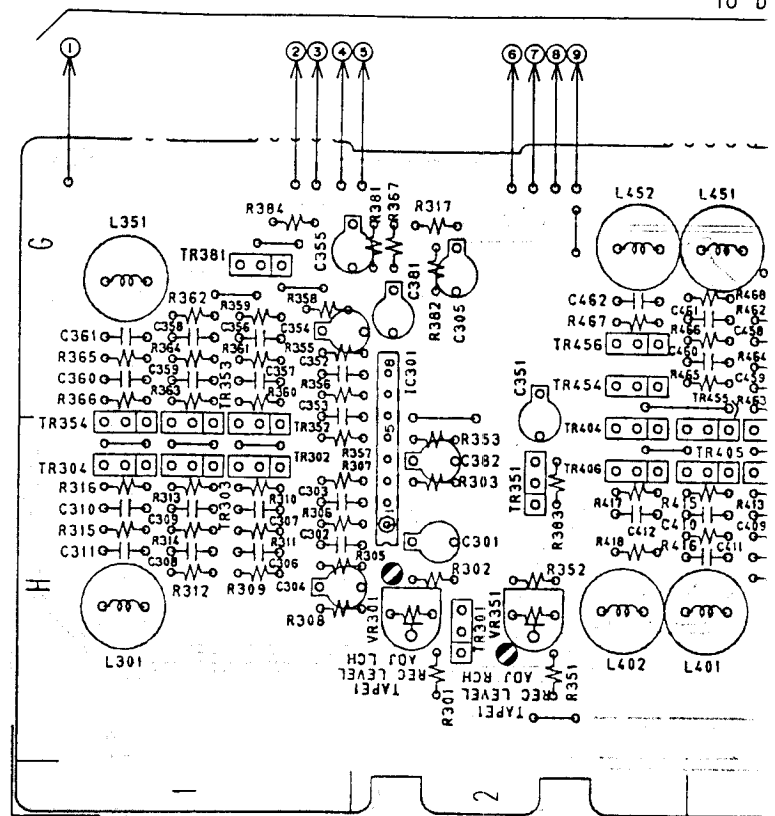
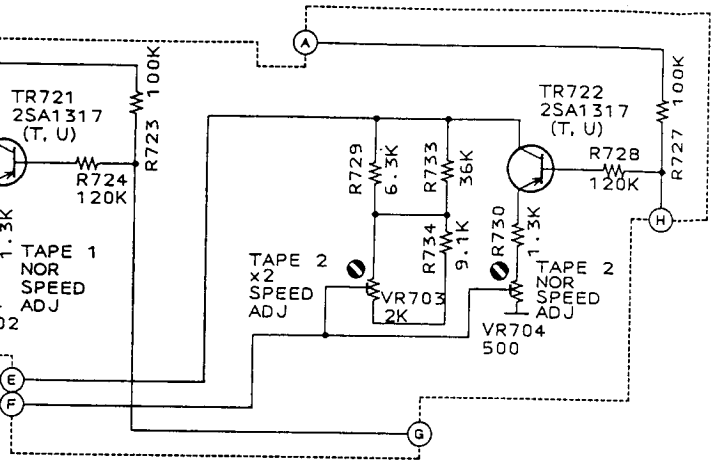
HX-950

SCHEMATIC DIAGRAM

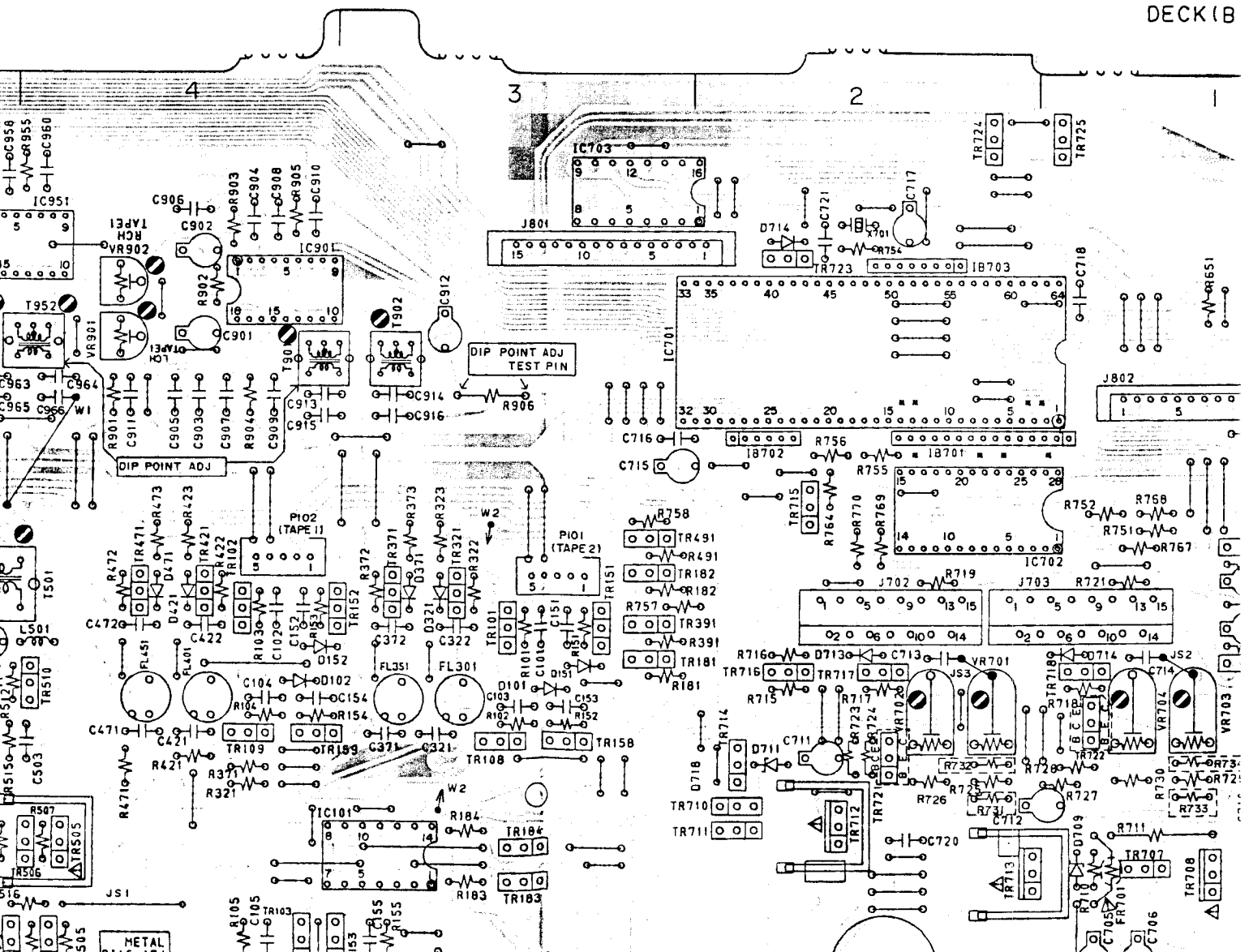
No.8-7 T213501M

A0

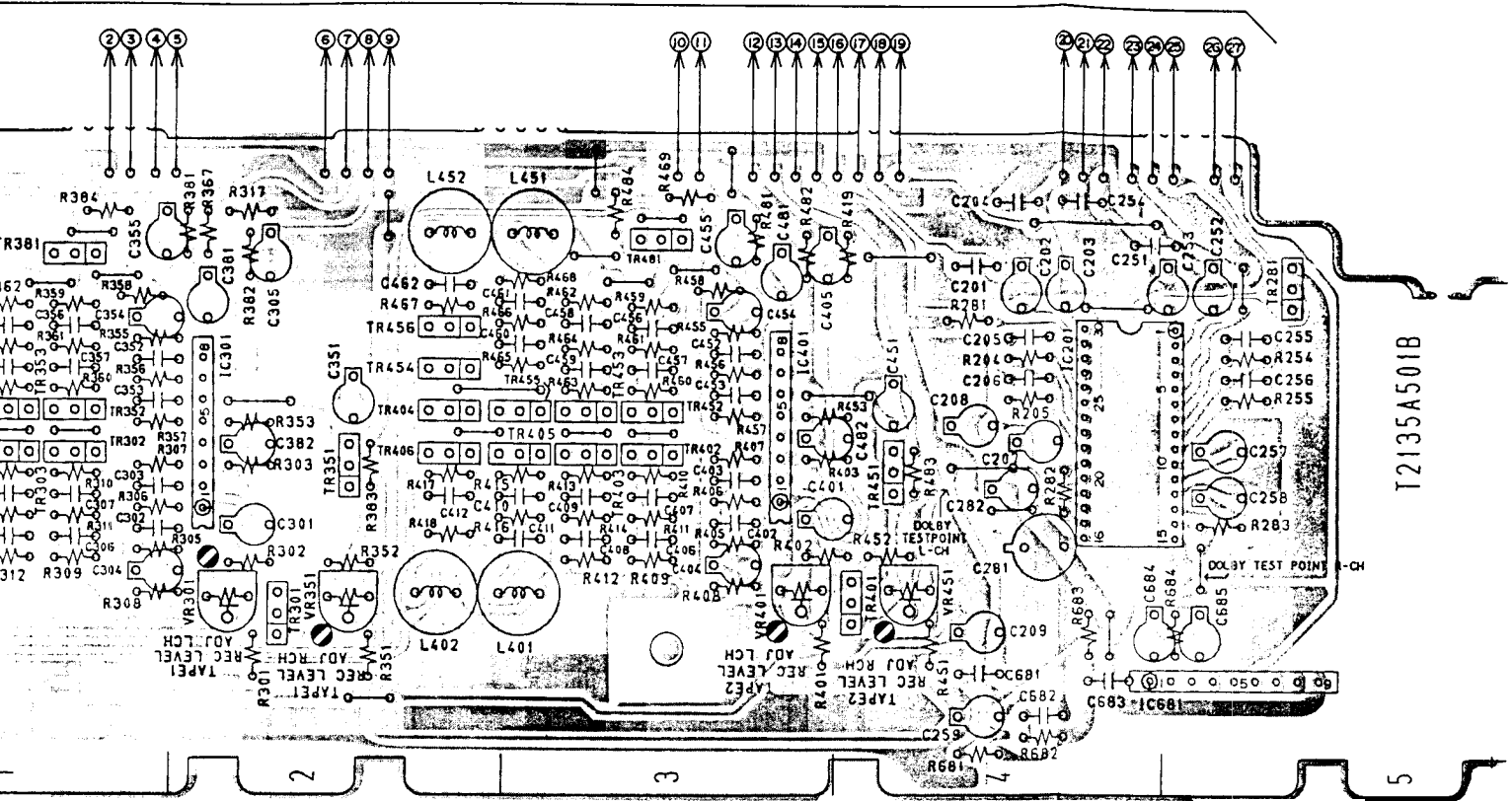




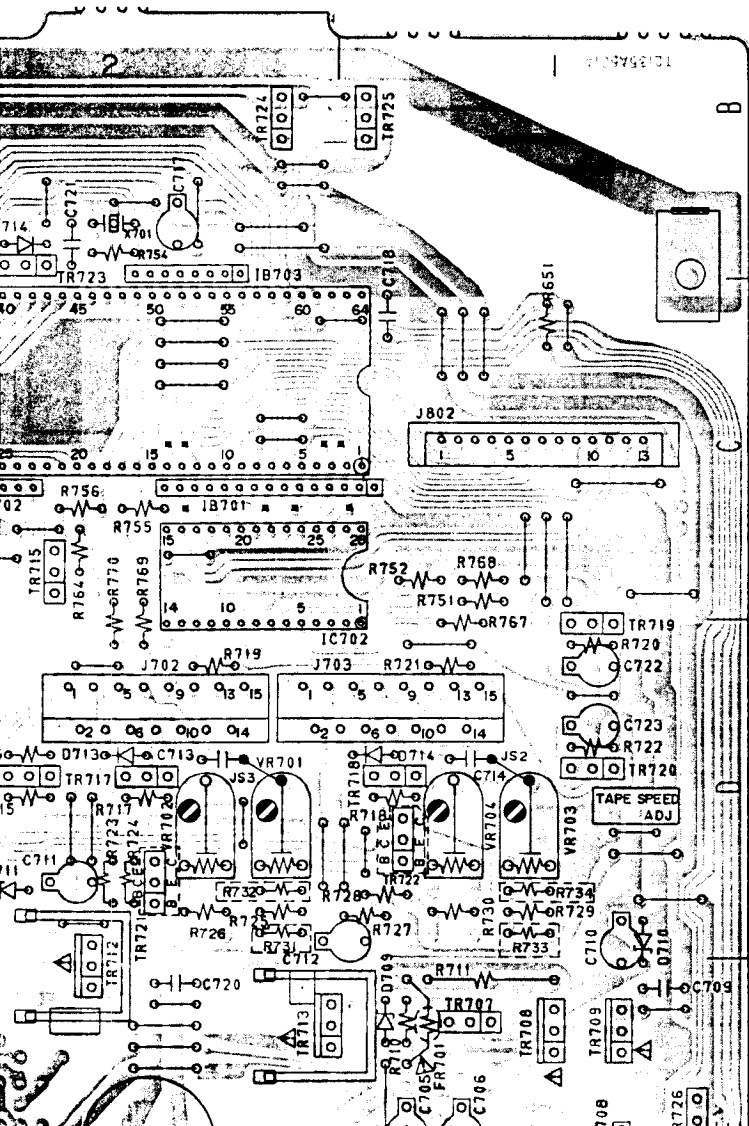
DECK 1B







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 |

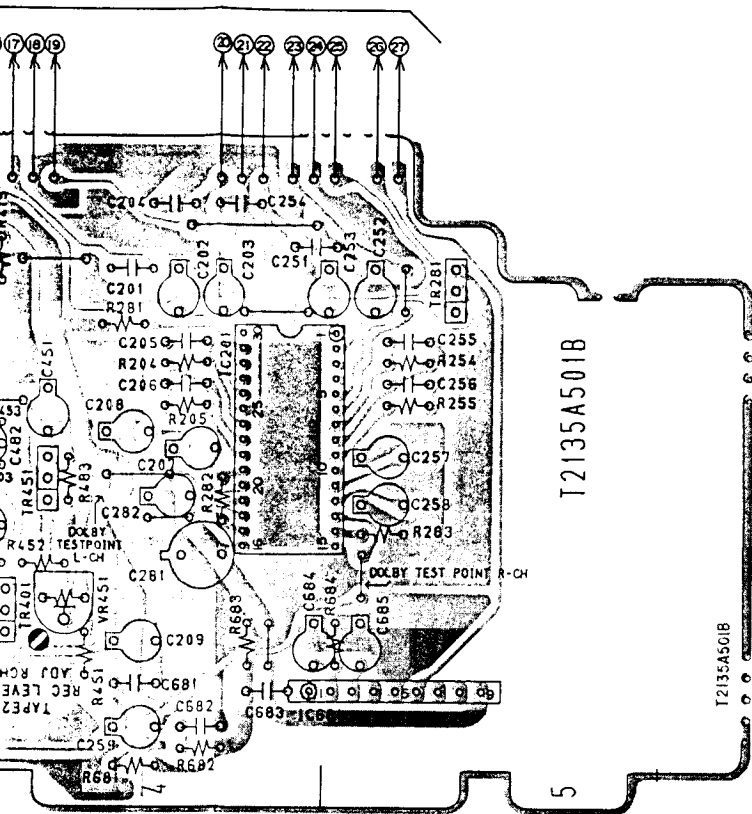
## CONNECTORS

|      |      |
|------|------|
| 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   |
| TR717 | D2   |





# PRINCIPAL PARTS LOCATION

## ICs

|             |      |
|-------------|------|
| IC201 ..... | G,H4 |
| IC301 ..... | G,H2 |
| IC401 ..... | G,H3 |
| IC681 ..... | H4,5 |

|             |      |
|-------------|------|
| 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   |

## TRANSISTORS

|             |      |
|-------------|------|
| TR281 ..... | G5   |
| TR301 ..... | H2   |
| TR302 ..... | H1   |
| TR303 ..... | H1   |
| TR304 ..... | H1   |
| TR351 ..... | H2   |
| TR352 ..... | G,H1 |
| TR353 ..... | G,H1 |
| TR354 ..... | G,H1 |

IB

# PRINCIPAL PARTS LOCATION

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

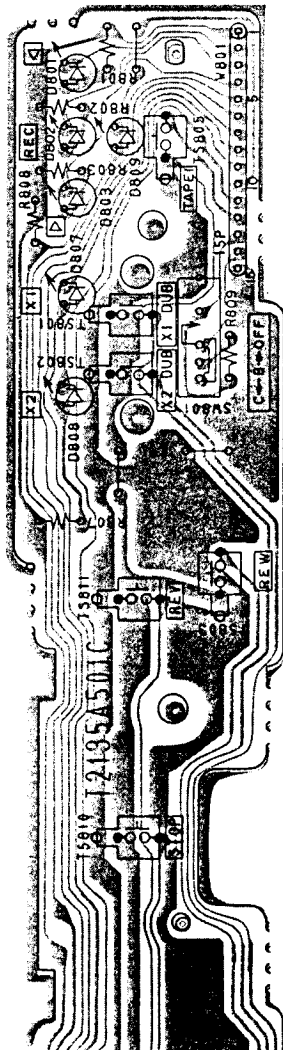
## NECTORs

|       |      |
|-------|------|
| ..... | F1,2 |
| ..... | D2   |
| ..... | D1,2 |
| ..... | B3   |
| ..... | C1   |
| ..... | D3   |
| ..... | D4   |

## NSISTORs

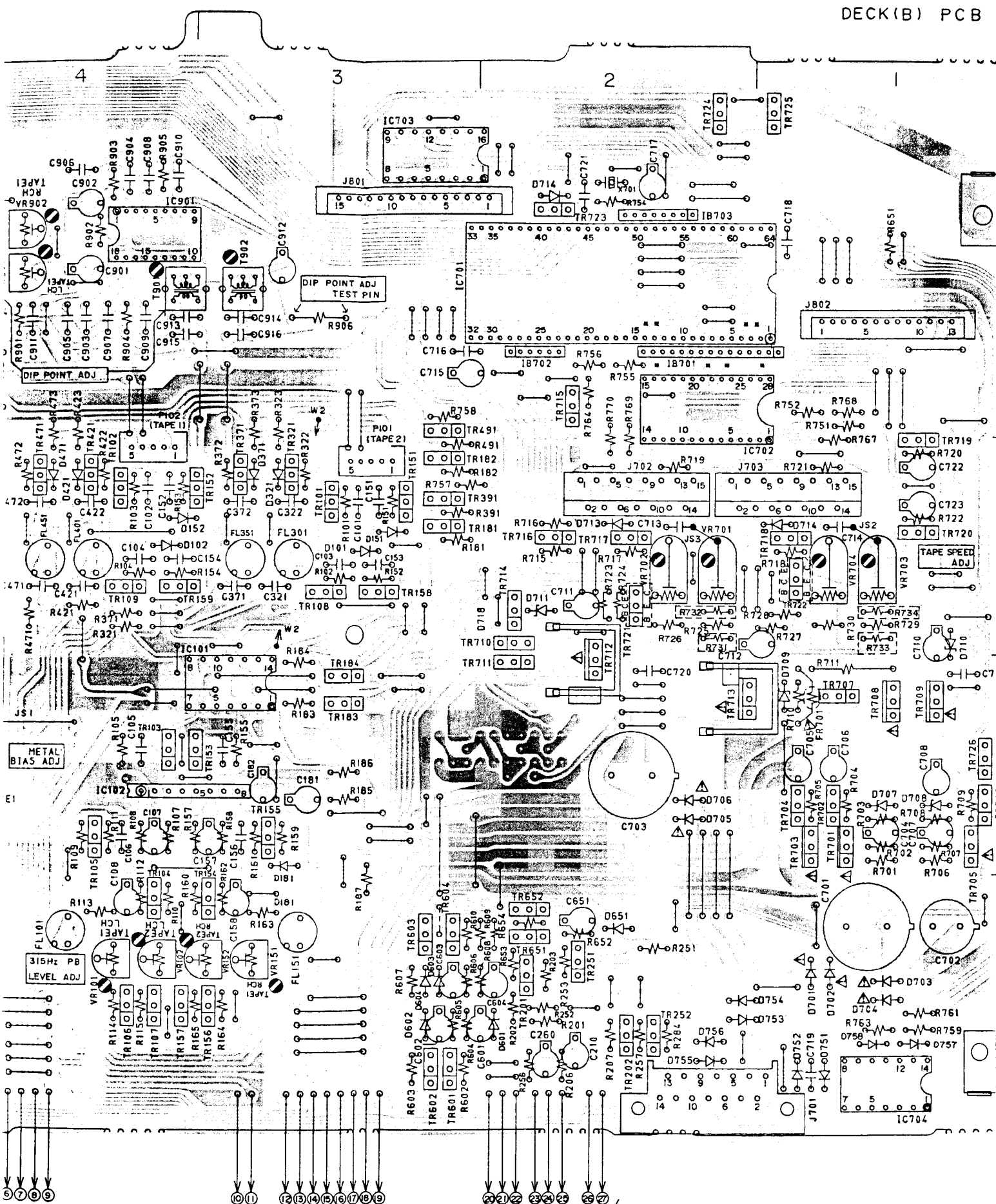
|           |    |
|-----------|----|
| 01 .....  | D3 |
| 02 .....  | D4 |
| 03 .....  | E4 |
| 04 .....  | F4 |
| 05 .....  | E4 |
| 06 .....  | F4 |
| 07 .....  | F4 |
| 08 .....  | D3 |
| 09 .....  | D4 |
| 10 .....  | D3 |
| 11 .....  | D3 |
| 12 .....  | D3 |
| 13 .....  | E3 |
| 14 .....  | F3 |
| 15 .....  | E3 |
| 16 .....  | F3 |
| 17 .....  | F4 |
| 18 .....  | D3 |
| 19 .....  | D4 |
| 20 .....  | D3 |
| 21 .....  | D3 |
| 22 .....  | D3 |
| 23 .....  | D3 |
| 24 .....  | D3 |
| 25 .....  | D3 |
| 26 .....  | D3 |
| 27 .....  | D3 |
| 28 .....  | D3 |
| 29 .....  | D3 |
| 30 .....  | D3 |
| 31 .....  | D3 |
| 32 .....  | D3 |
| 33 .....  | D3 |
| 34 .....  | D3 |
| 35 .....  | D3 |
| 36 .....  | D3 |
| 37 .....  | D3 |
| 38 .....  | D3 |
| 39 .....  | D3 |
| 40 .....  | D3 |
| 41 .....  | D3 |
| 42 .....  | D3 |
| 43 .....  | D3 |
| 44 .....  | D3 |
| 45 .....  | D3 |
| 46 .....  | D3 |
| 47 .....  | D3 |
| 48 .....  | D3 |
| 49 .....  | D3 |
| 50 .....  | D3 |
| 51 .....  | D3 |
| 52 .....  | D3 |
| 53 .....  | D3 |
| 54 .....  | D3 |
| 55 .....  | D3 |
| 56 .....  | D3 |
| 57 .....  | D3 |
| 58 .....  | D3 |
| 59 .....  | D3 |
| 60 .....  | D3 |
| 61 .....  | D3 |
| 62 .....  | D3 |
| 63 .....  | D3 |
| 64 .....  | D3 |
| 65 .....  | D3 |
| 66 .....  | D3 |
| 67 .....  | D3 |
| 68 .....  | D3 |
| 69 .....  | D3 |
| 70 .....  | D3 |
| 71 .....  | D3 |
| 72 .....  | D3 |
| 73 .....  | D3 |
| 74 .....  | D3 |
| 75 .....  | D3 |
| 76 .....  | D3 |
| 77 .....  | D3 |
| 78 .....  | D3 |
| 79 .....  | D3 |
| 80 .....  | D3 |
| 81 .....  | D3 |
| 82 .....  | D3 |
| 83 .....  | D3 |
| 84 .....  | D3 |
| 85 .....  | D3 |
| 86 .....  | D3 |
| 87 .....  | D3 |
| 88 .....  | D3 |
| 89 .....  | D3 |
| 90 .....  | D3 |
| 91 .....  | D3 |
| 92 .....  | D3 |
| 93 .....  | D3 |
| 94 .....  | D3 |
| 95 .....  | D3 |
| 96 .....  | D3 |
| 97 .....  | D3 |
| 98 .....  | D3 |
| 99 .....  | D3 |
| 100 ..... | 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   |
| TR717 ..... | D2   |



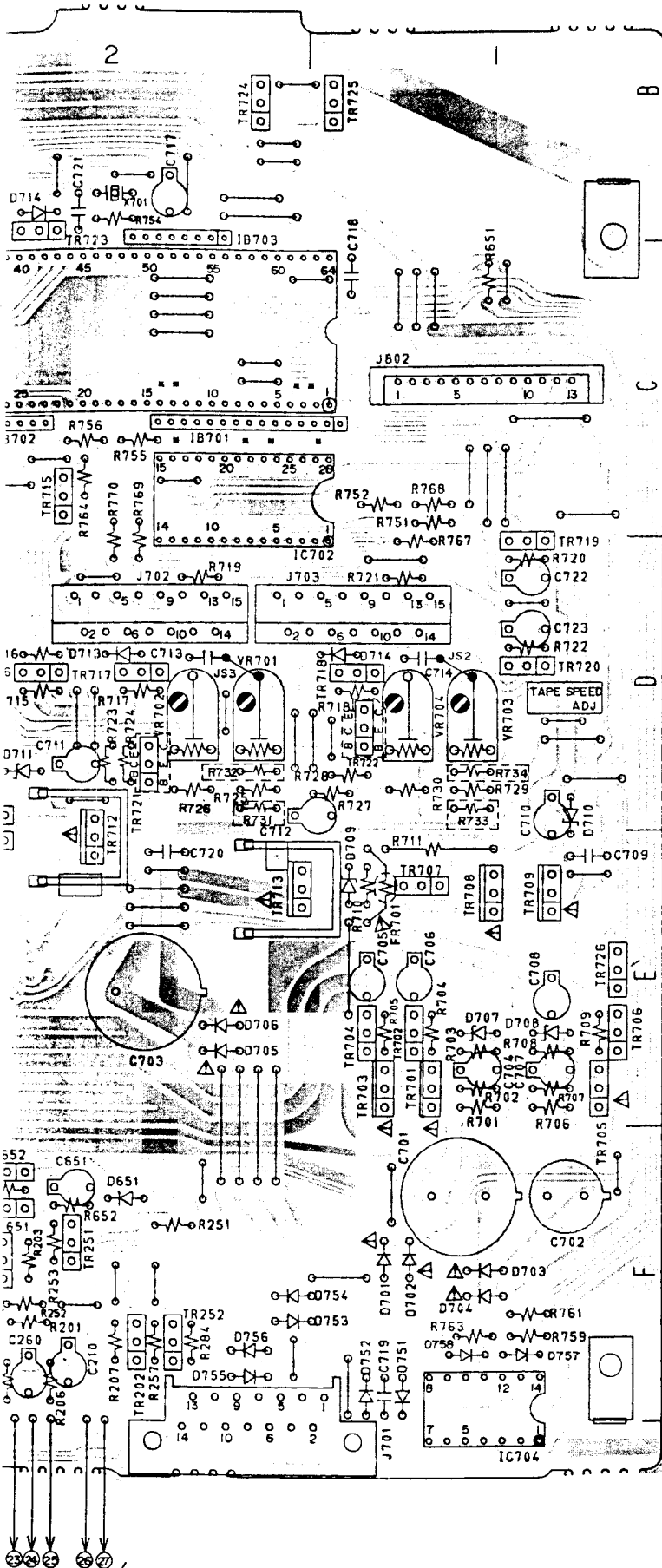
OPERATION PCB T2135A501C





NOTE : REFER TO SCHEMATIC DIAGRAMS FOR  
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 |

|       |      |
|-------|------|
| 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   |

### 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   |

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   | TR506..... | E4 |
| IC102 ..... | E3,4 | TR507..... | E5 |
| IC701 ..... | C2   | TR508..... | E5 |
| IC702 ..... | C1,2 | TR509..... | E5 |
| IC703 ..... | B3   | TR510..... | D5 |
| IC704 ..... | F1   | TR511..... | D5 |
| IC901 ..... | C4   | TR551..... | F5 |
| IC951 ..... | B4,5 | TR552..... | F5 |

## CONNECTORS

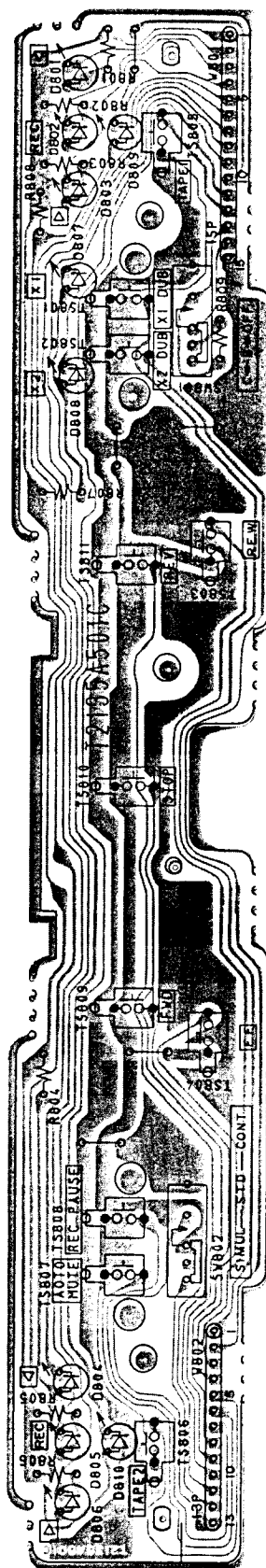
|            |      |            |    |
|------------|------|------------|----|
| J701 ..... | F1,2 | TR553..... | E5 |
| J702 ..... | D2   | TR554..... | E5 |
| J703 ..... | D1,2 | TR555..... | E5 |
| J801 ..... | B3   | TR556..... | E5 |
| J802 ..... | C1   | TR557..... | E5 |
| P101 ..... | D3   | TR558..... | F5 |
| P102 ..... | D4   | TR559..... | F5 |

## TRANSISTORS

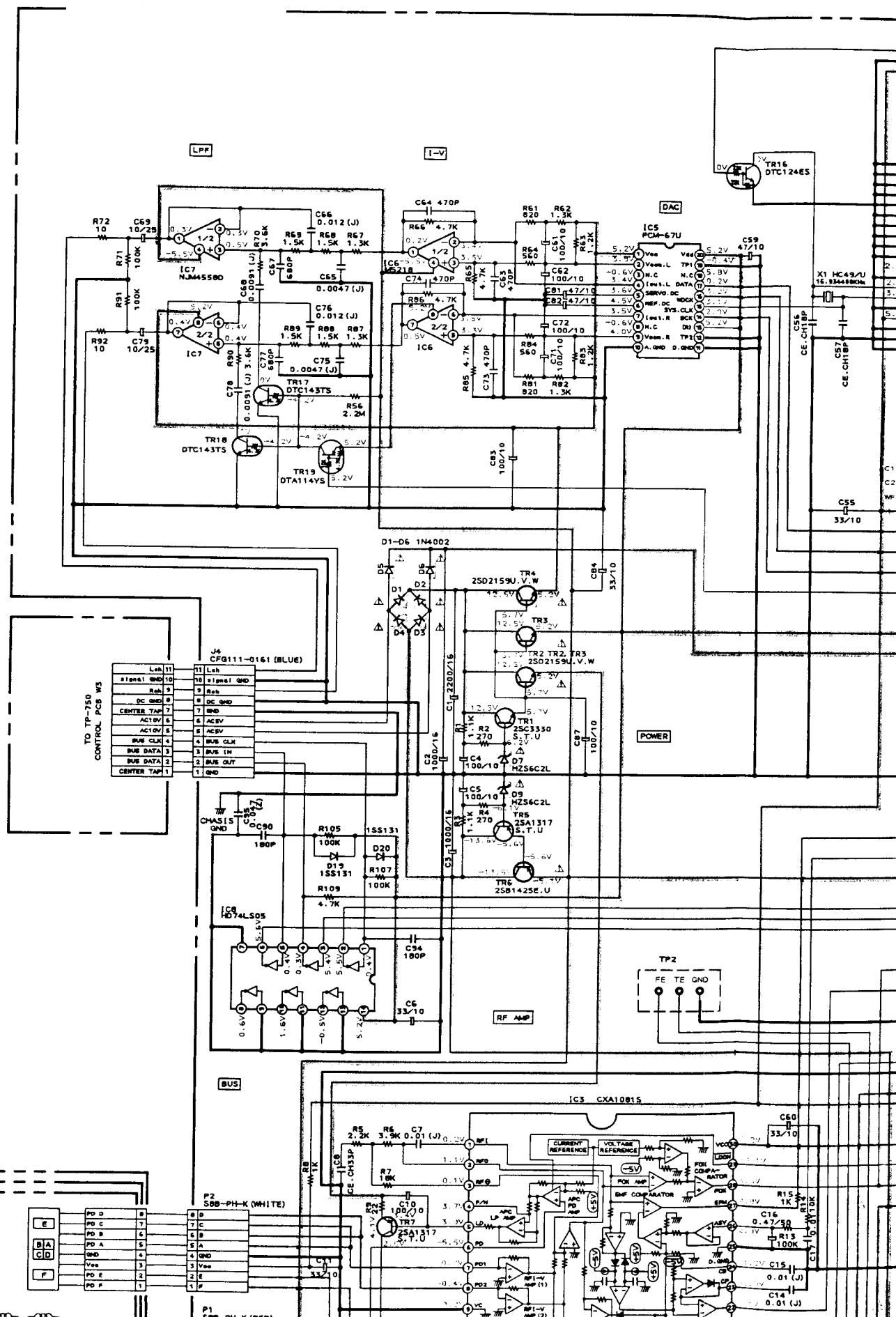
|             |      |            |      |
|-------------|------|------------|------|
| TR101 ..... | D3   | TR601..... | F3   |
| TR102 ..... | D4   | TR602..... | F3   |
| TR103 ..... | E4   | TR603..... | F3   |
| TR104 ..... | F4   | TR604..... | F3   |
| TR105 ..... | E4   | TR651..... | F2   |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

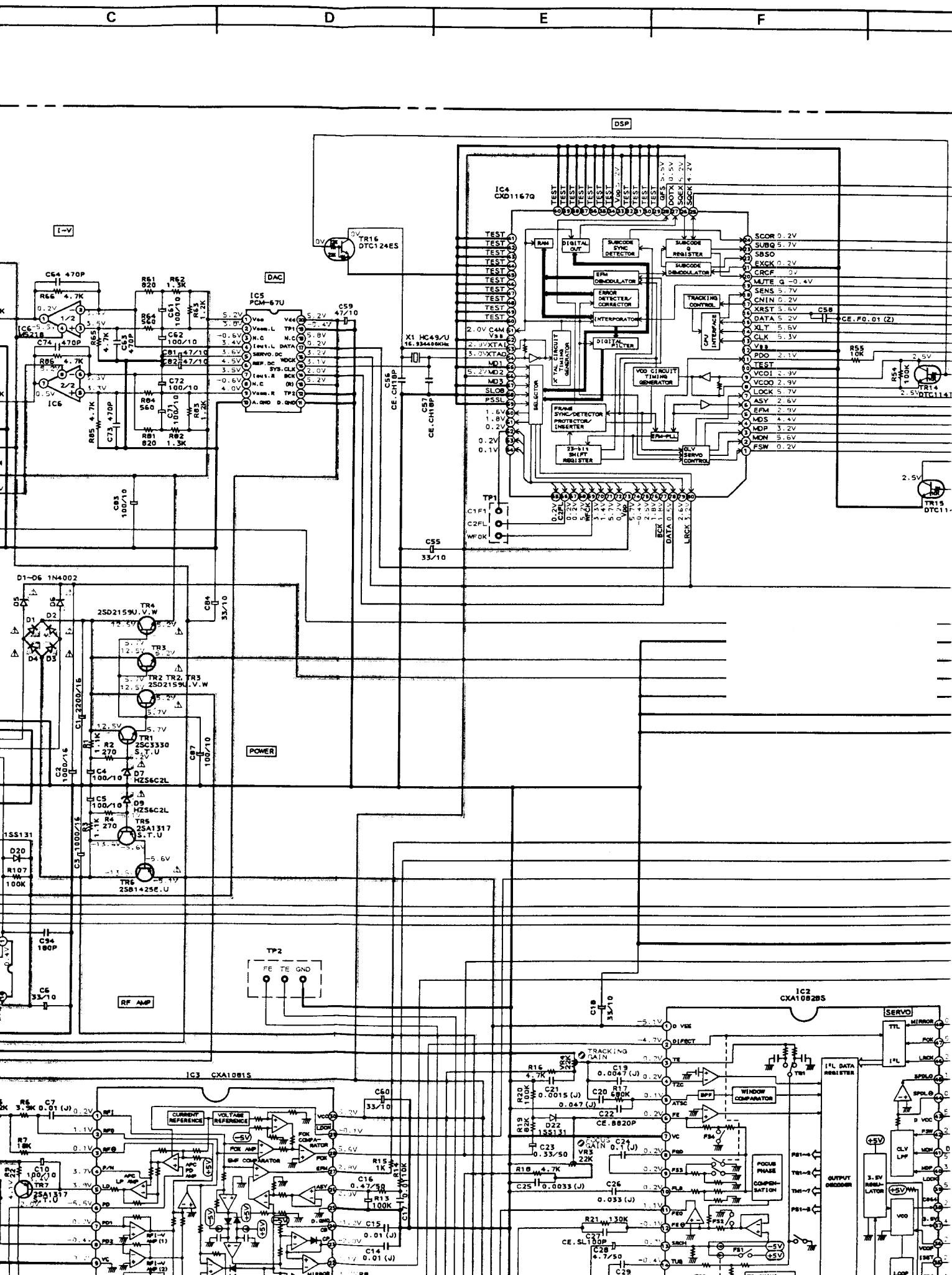
WARNING:  $\Delta$  INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS.

ATTENTION:  $\Delta$  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.



OPERATION PCB T2135A501C







## RTV servis Horvat

Kešinci, 31402 Semeljci

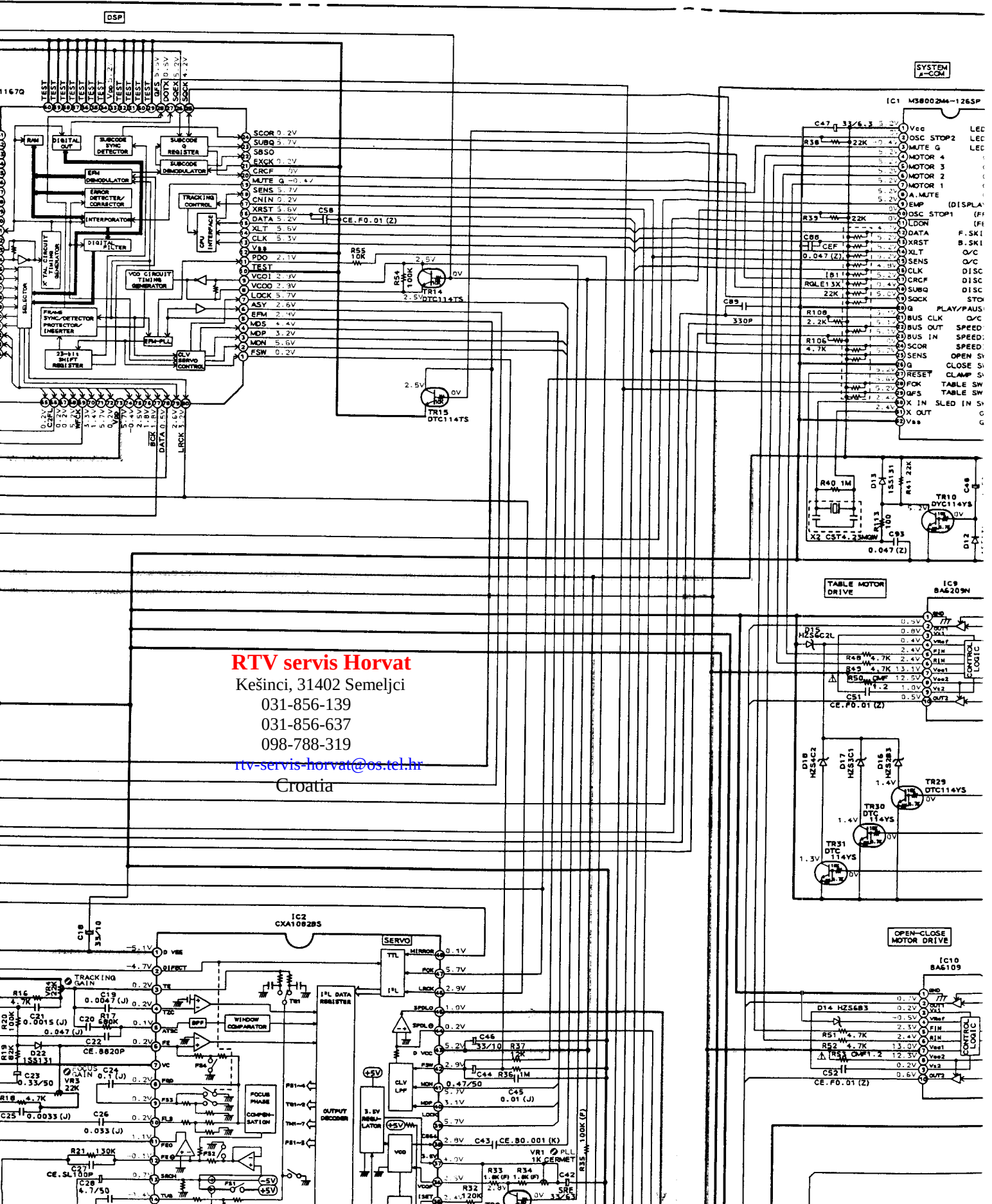
031-856-139

031-856-637

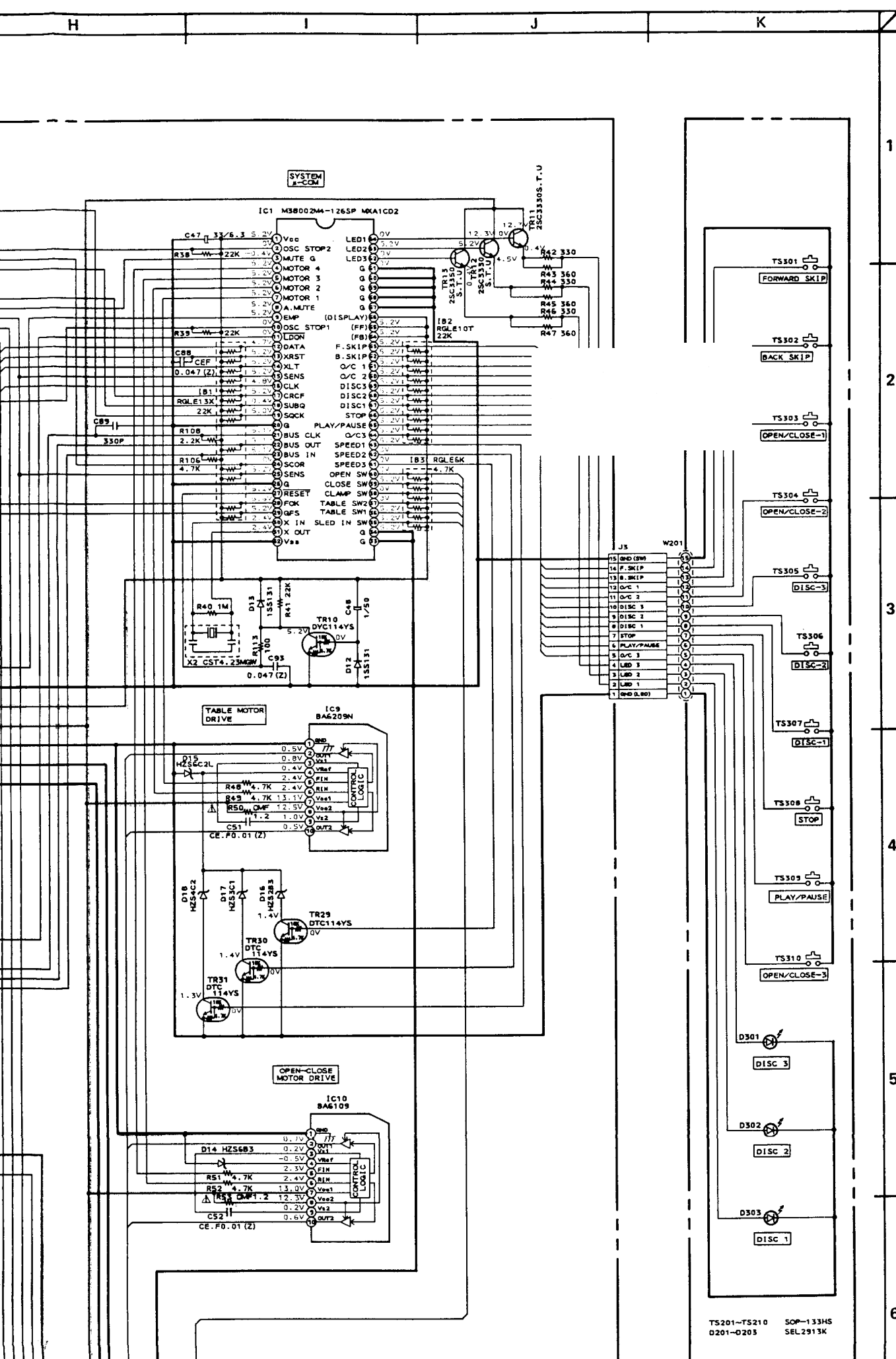
098-788-319

[rtv-servis-horvat@os.tel.hr](mailto:rtv-servis-horvat@os.tel.hr)

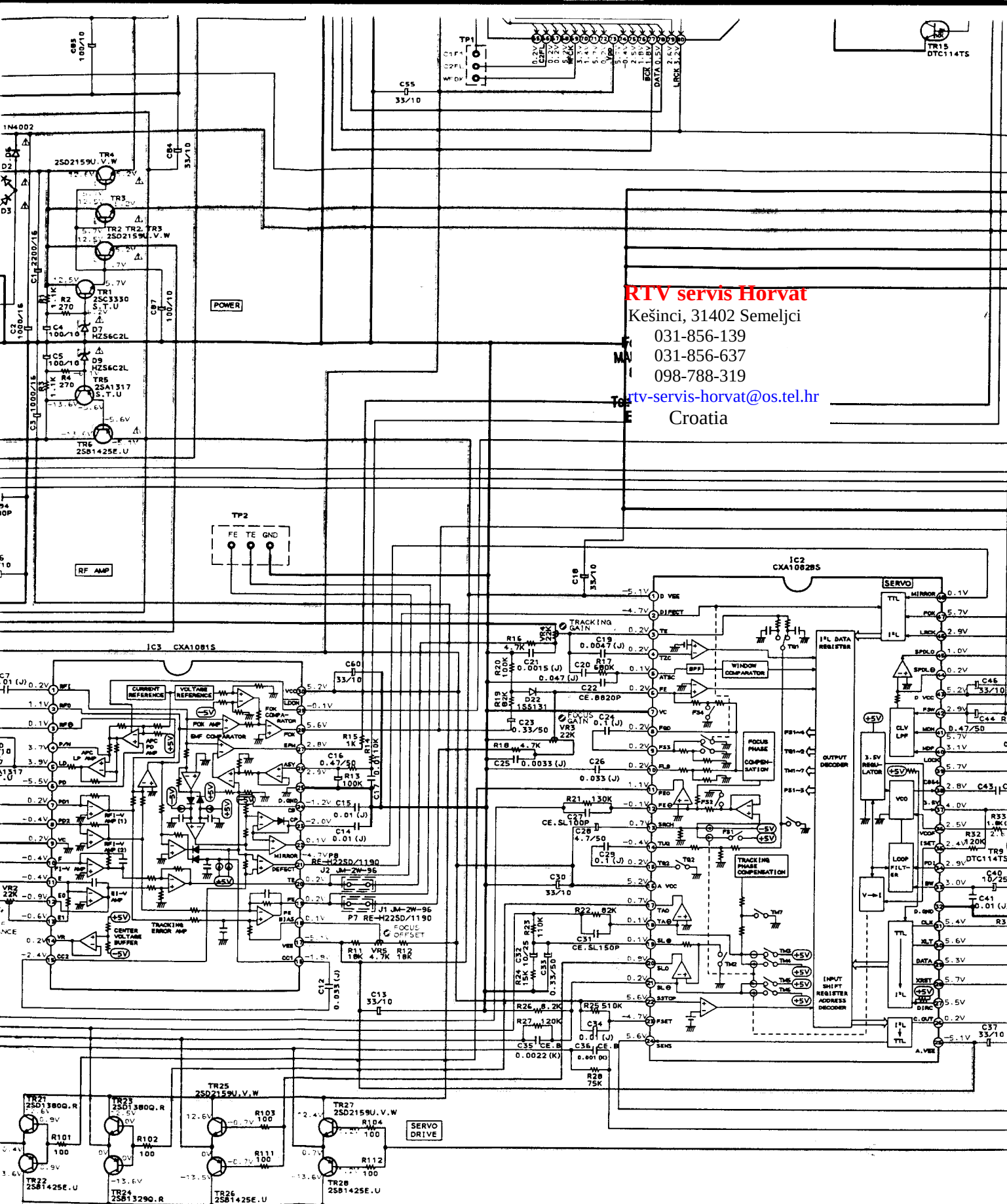
Croatia











**RTV servis Horvat**

Kešinci, 31402 Semeljci

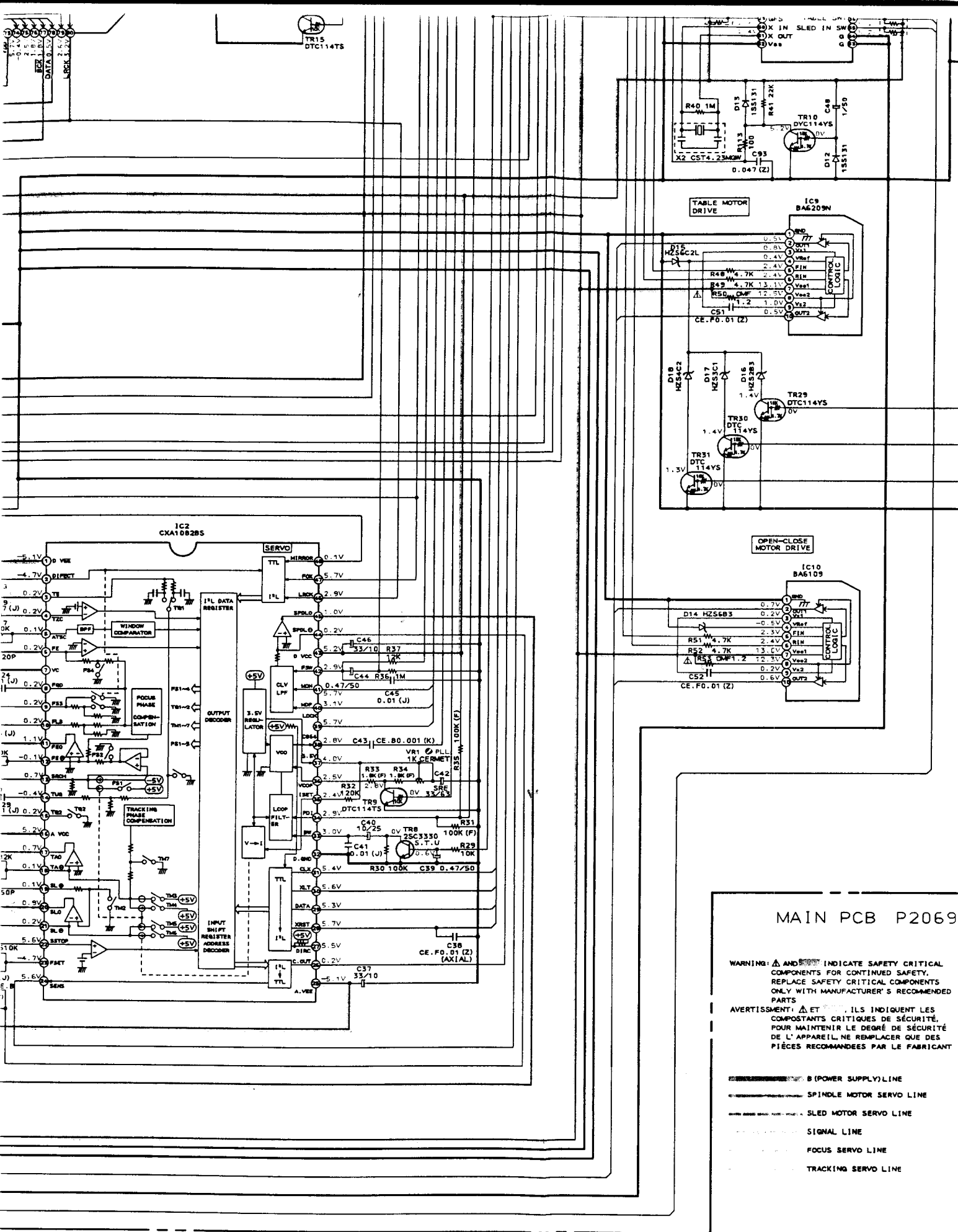
031-856-139

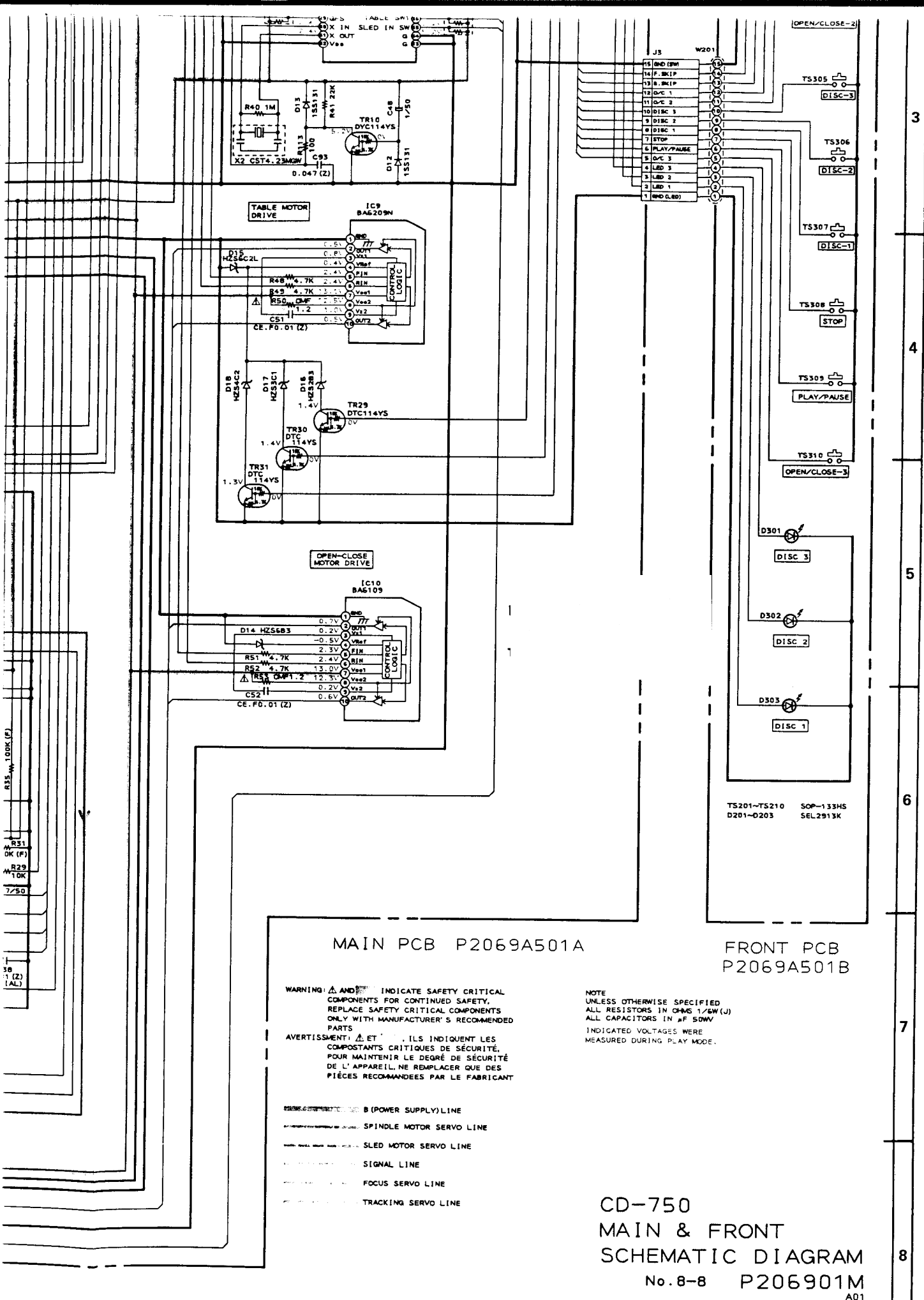
031-856-637

098-788-319

[rtv-servis-horvat@os.tel.hr](mailto:rtv-servis-horvat@os.tel.hr)

Croatia



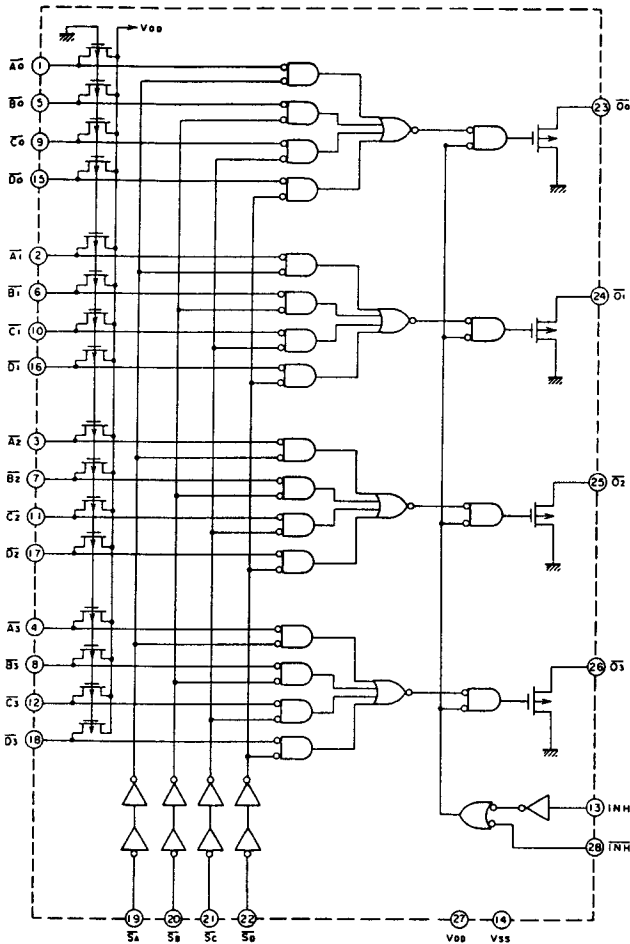




## M38002M4-126SP MXA1CD2 (CD-750 SYSTEM CONTROL MI-COM)

| Pin No. | PORT NAME    | I/O | DESCRIPTION                                                       |
|---------|--------------|-----|-------------------------------------------------------------------|
| 1       | VCC          |     | +5V power supply                                                  |
| 2       | OSC STOP 2   | O   | Oscillator 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   | Oscillator 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      | SOCK         | 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 direct input                                    |
| 25      | SENS         | I   | Auto sequence end detection 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                                                |

## LC7800 (Input Port Expander)



| 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 detection input                 |
| REMOCON       | I   | REMOCON signal detection 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       | O3                     | I   | Input IC702 (LC7800) P13 output pulse                    |
| 2       | O2                     | I   | Input IC702 (LC7800) P12 output pulse                    |
| 3       | O1                     | I   | Input IC702 (LC7800) P11 output pulse                    |
| 4       | O0                     | I   | Input IC702 (LC7800) P10 output pulse                    |
| 5       | REV                    | I   | Command reverse tape play L: ON                          |
| 6       | STOP                   | I   | Command stop mechanism movement L: ON                    |
| 7       | FWD                    | I   | Command forward tape play L: ON                          |
| 8       | 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      | AUTO MUTE              | I   | AUTO MUTE command input L: ON                            |
| 19      | NC                     | -   | Not used                                                 |
| 20      | TAPE I REC/PB          | O   | Head recording/playback control output H: playback       |
| 21      | TAPE II REC/PB         | O   |                                                          |
| 22      | PL-COM                 | O   | Plunger ON/OFF control output                            |
| 23      | PL-1                   | O   |                                                          |
| 24      | PL-2                   | O   |                                                          |
| 25      | MECHA ON/OFF           | O   | Stop power supply for mecha.                             |
| 26      | TAPE II PB             | O   | TAPE II playback switching control output                |
| 27      | TAPE I PB              | O   | TAPE I playback switching control output                 |
| 28      | CAP M2 X1/X2           | O   | Capstan motor X1/X2 speed switching output L: 1 H: 2     |
| 29      | CAP M1 X1/X2           | O   |                                                          |
| 30      | X1 PB 70μS             | O   | X1/X2 speed playback EQ switching output                 |
| 31      | VCC                    | -   | +5V                                                      |
| 32      | VDD                    | -   | +5V                                                      |
| 33      | 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 <sub>2</sub> 2 | O   | CrO <sub>2</sub> 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      | REC CrO <sub>2</sub> 1 | O   | CrO <sub>2</sub> tape recording EQ output                |
| 43      | X2 PB PEAK             | O   | X1/X2 PB peaking frequency output                        |
| 44      | X2 PB 70μS             | O   | X2 speed playback EQ switching output                    |
| 45      | RESET                  | I   | Reset signal input                                       |
| 46      | X2                     | O   | Main clock output                                        |
| 47      | X1                     | I   | Main clock input                                         |
| 48      | REC MUTE 2             | O   | Rec mute control output L: ON                            |
| 49      | 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      | FF                     | I   | Command fast forward tape play L: ON                     |
| 53      | 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 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      | 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 mechanism 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 output                                                    |
| 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 <sub>2</sub> | O   | CrO <sub>2</sub> tape recording EQ switching output H:CrO <sub>2</sub> 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                                                                         |

**RTV servis Horvat**

Kešinci, 31402 Semeljci

031-856-139

031-856-637

098-788-319

[rtv-servis-horvat@os.tel.hr](mailto:rtv-servis-horvat@os.tel.hr)

Croatia