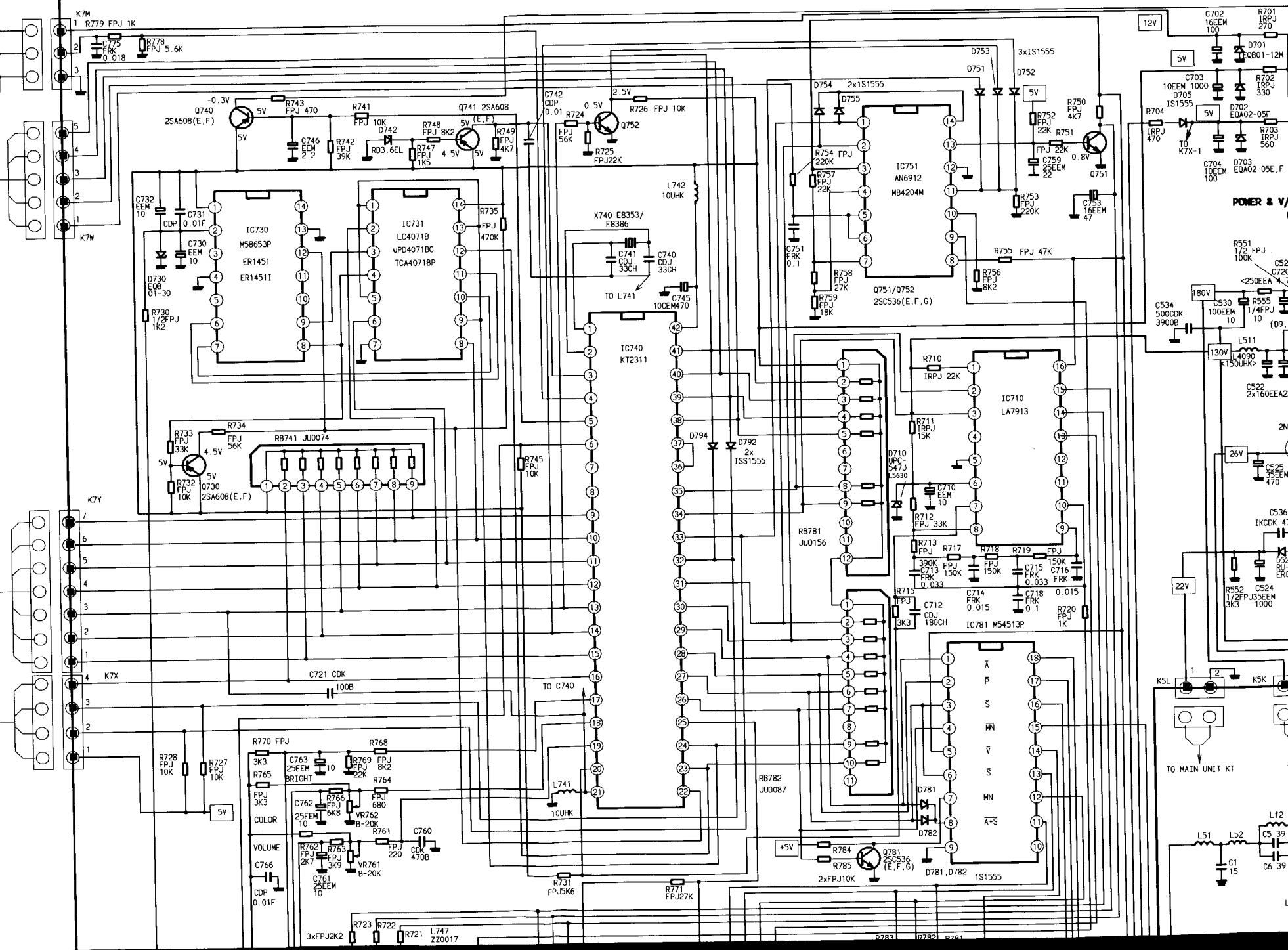
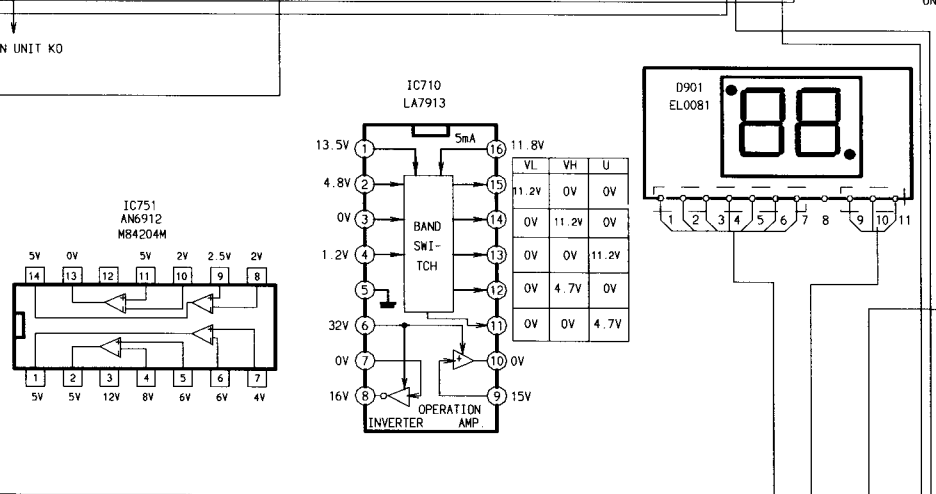
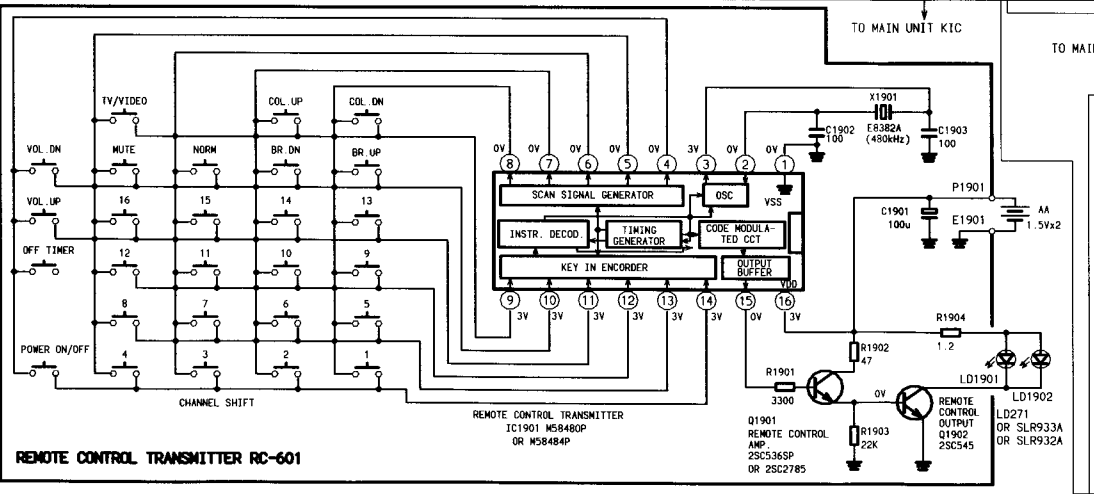
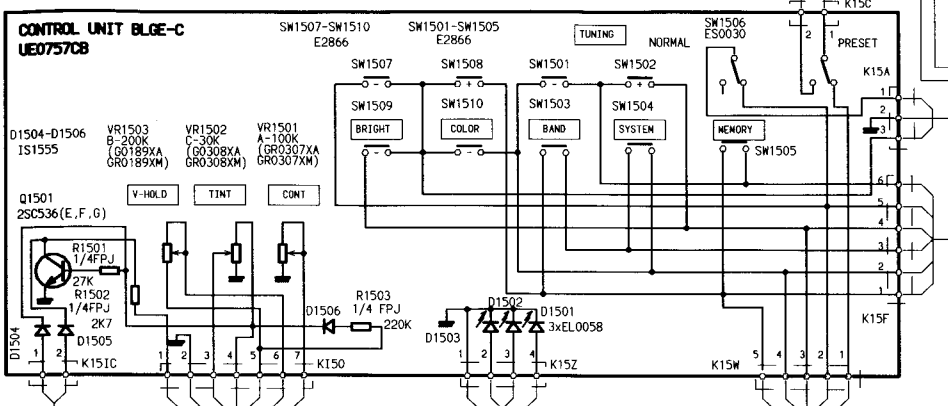
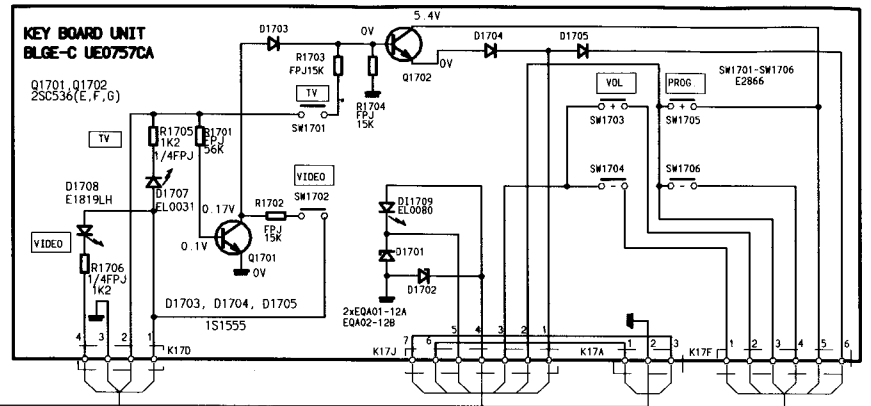
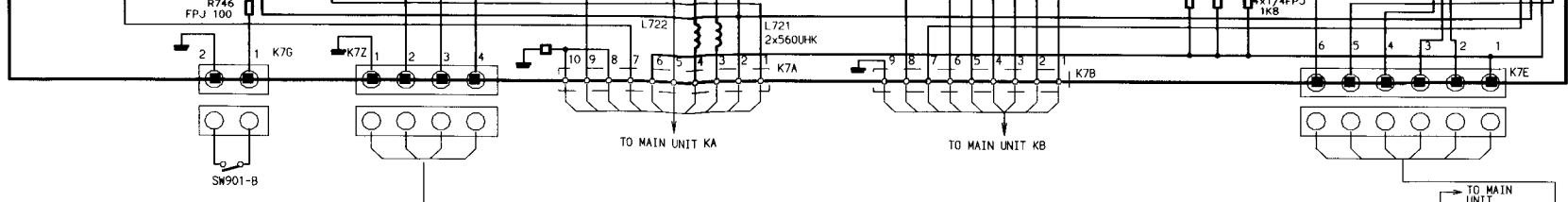


R/C  
PRE AMP  
UG0007



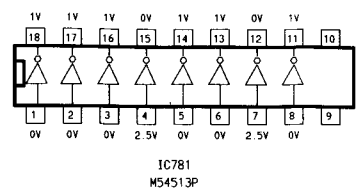
POWER & V/S  
U

TO MAIN UNIT KT



**SERVICE PRECAUTION**

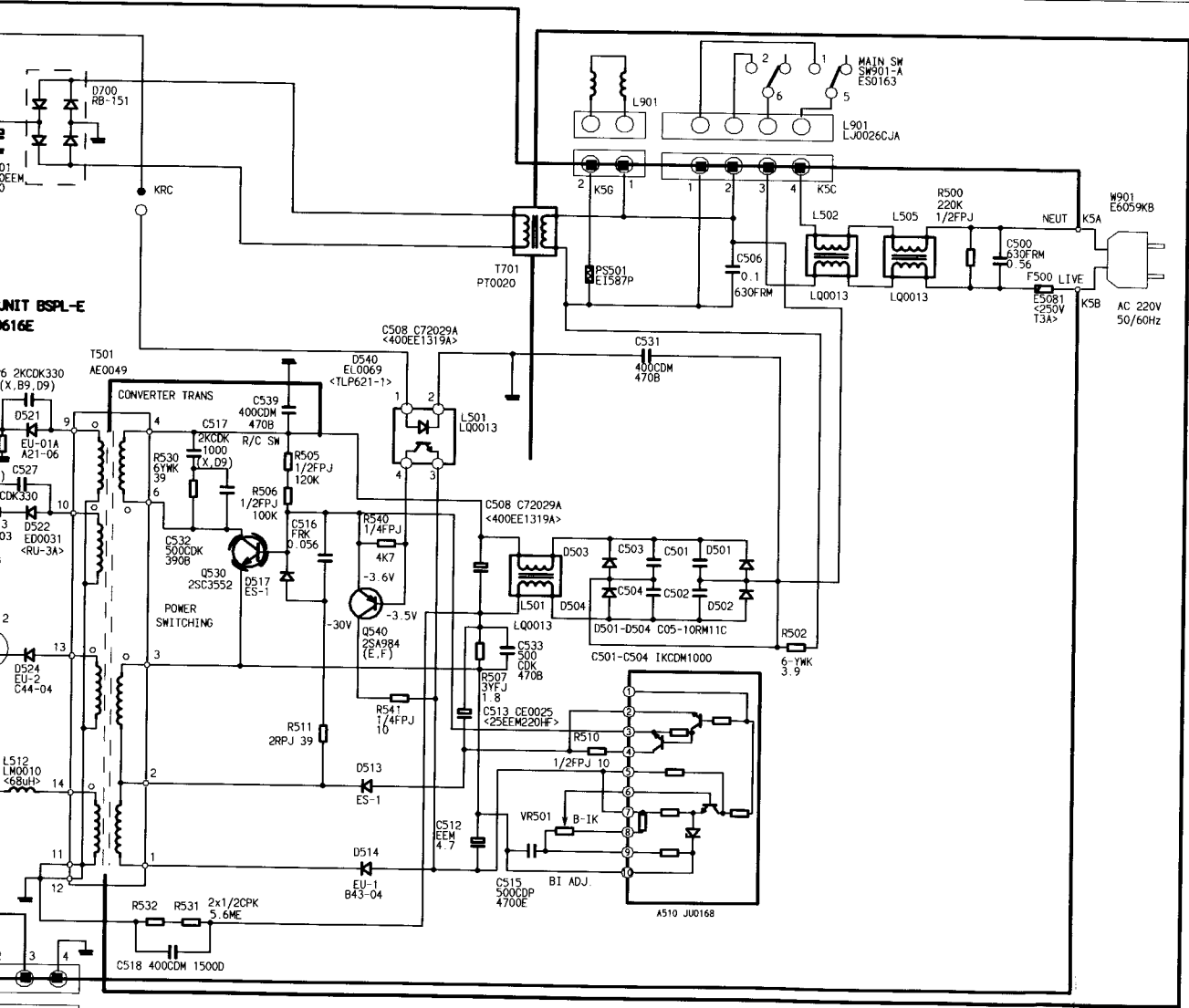
THE AREA ENCLOSED BY THIS LINE IS DIRECTLY CONNECTED WITH AC MAINS VOLTAGE, WHEN SERVICING THE AREA, CONNECT AN ISOLATING TRANSFORMER BETWEEN TV RECEIVER AND AC LINE TO ELIMINATE HAZARD OF ELECTRIC SHOCK.



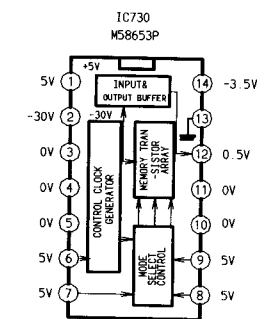
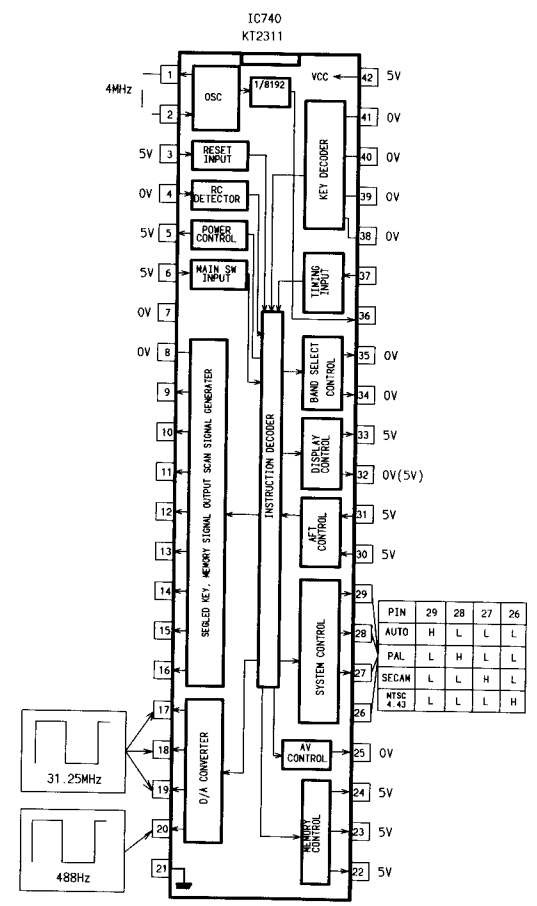
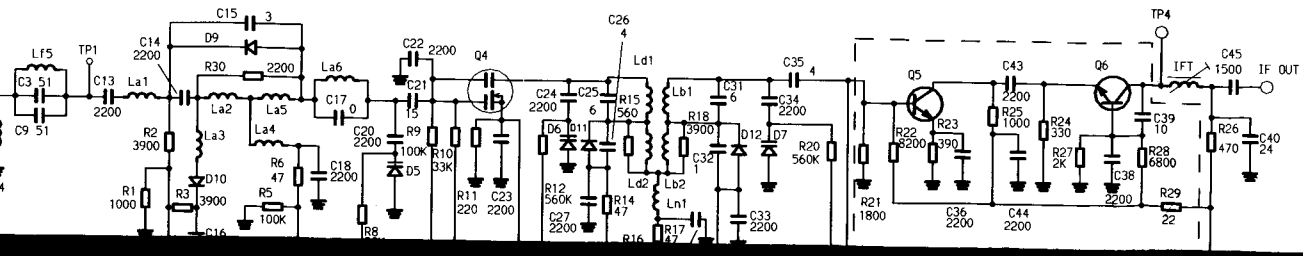
Q530	
VOLT.	WAVEFORM
B	-3.6V
C	115V (VTVM)
E	0V

T501	
PIN	OHM
4-6	0.2
3-1	0.1
11-9	0.4
11-10	0.2
11-13	0
11-14	0.1

A510		PIN	1	2	3	4	5	6	7	8	9	10
VOLT.		-11.5	-10.5	-3.5	-9.5	-30	-7.9 (VTVM)	-30	-8.5 (VTVM)	-7.5 (VTVM)	0.0	

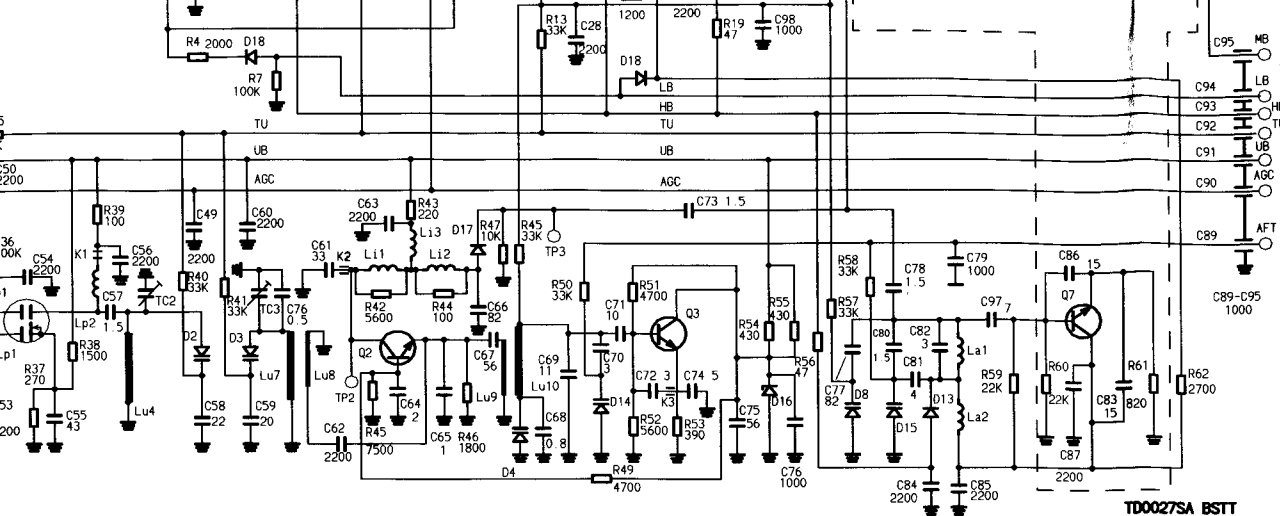


TUNER CIRCUIT DIAGRAM

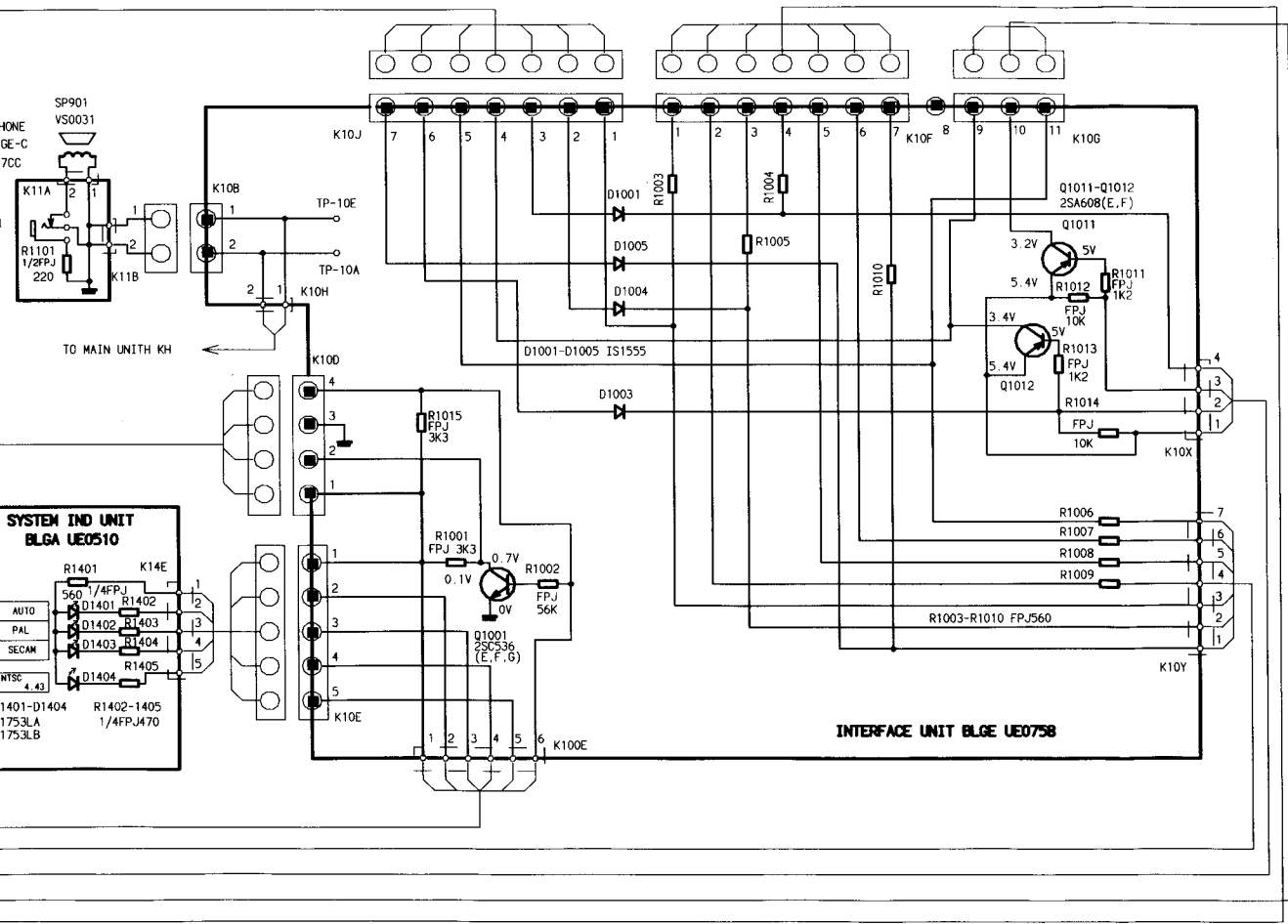
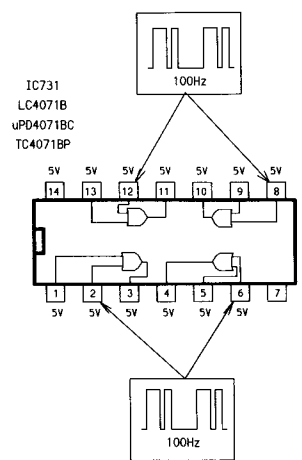


NOTE:

- ALL RESISTANCE VALUES IN OHMS (K=1000 M=1000000)
  - ALL RESIST. 1/8W AND +-5% UNLESS OTHERWISE NOTED.
  - ALL CAPACITANCE VALUES IN P FARAD.
- Q1: 3SK88, 3SK87, 3SK103, 3SK102, 3SK123, 3SK115  
 Q2, Q3: 2SC2736, 2SC2734, 2SC2759, 2SC2351, 2SC2350, 2SC3547, 2SC3356.  
 Q4: 3SK81, 3SK87, 3SK74, 3SK83, 3SK85, 3SK101, 3SK114.

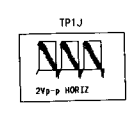
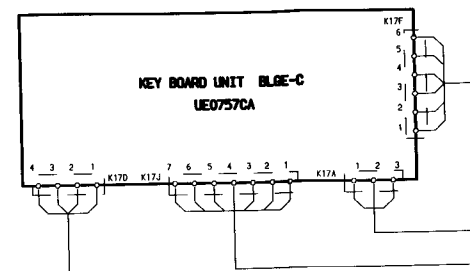
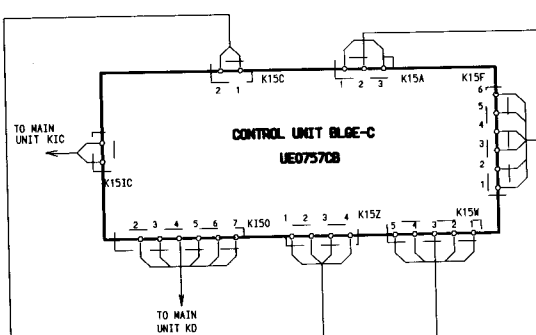


- Q5: 2SC2735, 2SC2756, 2SC2350, 2SC2733, 2SC3123
- Q6, Q7: 2SC2735, 2SC2756, 2SC3124, 2SC3125, 2SC2350, 2SC2733, 2SC3547, 2SC3123.
- D1-D4: 1T25, 1S2208, 1SV70, 1T32, 1SV153, 1SV136, MA325
- D5-D8: 1SV113, 1SV133, 1SV97, 1T33, 1T31
- D9-D13: 1SS110, 1SS103, 1S2222, 1S3135, 1S3155
- D14-D15: 1SV89, 1S2339, 1SV146
- D16: HZ9A, RD8, 2EB, OSZ8.2, HZ9AL, RD8 2JB, TZ8.2
- D17: 1S2837, HSM2837, DAN202, 1SS133, DAN202K, 1SS184, MA151MK.
- D18: 1S2835, HSM2835, DAP202, DAP202K, 1SS181, MA151WA.

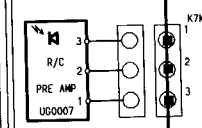
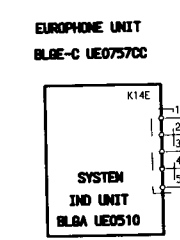
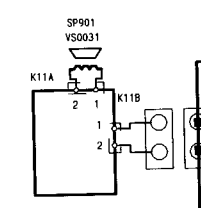


81

DW 81a.



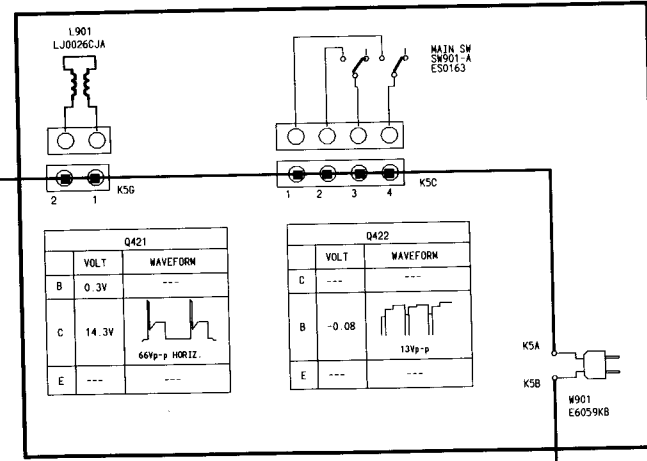
Q201		
VOLT	WAVEFORM	WAVEFORM
B 2.5V	---	---
C 11.5V		
E 1.6V	---	---



**POWER & V/S UNIT BSPL-E UE0616E**

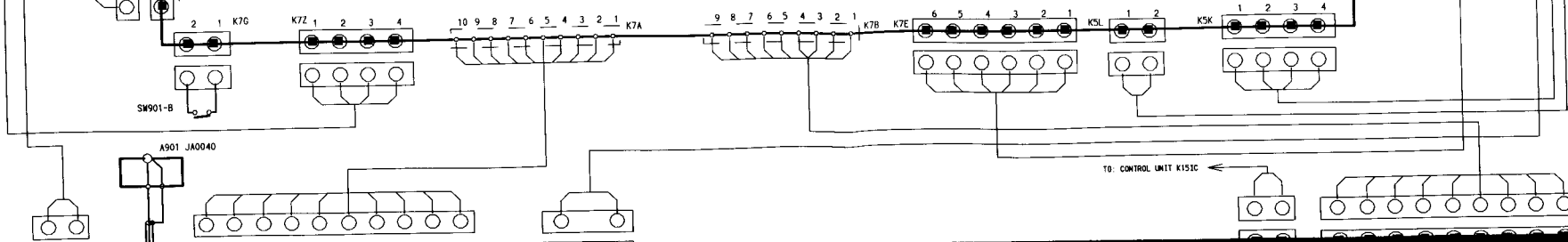
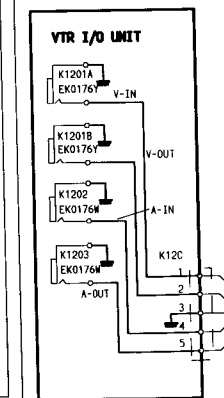
Q1314 VOLT B 8.5V C 12V E 8V	Q331 VOLT B 6.3V C 0.5V E 6.8V	Q1313 VOLT B 3V C 8.5V E 2.5V	Q1334 VOLT B 4.5V C 12V E 4V	Q1312 VOLT B 7.5V C 8.2V E 3V	Q1302 VOLT B 5.5V C --- E 5.5V	Q1351 VOLT B 0V C 11.5V E ---
Q1332 VOLT B 2.5V C 11.5V E 1.6V	Q261 VOLT B 0V C 7.5V E ---	Q291 VOLT B 0V C 11.5V E ---	Q292 VOLT B 0V C 12.3V E ---	Q221 VOLT B 0V C --- E ---	Q211 VOLT B 3.1V C 12V E 2.5V	Q220 VOLT B 0.65V(S) C 0.15V(S) E ---
Q202 VOLT B 6.6V C 0V E ---	Q191 VOLT B 0V C 9.4V E ---	Q101 VOLT B 1V C 3.4V E 0.2V	Q122 VOLT B 4V C --- E 4.2V	Q142 VOLT B 4.5V C 12V E 4V	Q162 VOLT B 0V C 0V E 0V	Q163 VOLT B 3.5V C 8V E 2.8V

IC351												KA			
PIN	1	2	3	4	5	6	7	8	9	10	11	12	1	VOL.	
VOLT	13V	25V	22V	20V	14V	1.4V	13V	13V	13V	---	1.2V	---	2	MB(+12V)	
T421		L902		T480		TURNS		TURNS		TURNS		TURNS		TURNS	
PRT	SEC	PIN	OHM	PIN	OHM	PIN	OHM	PIN	OHM	PIN	OHM	PIN	OHM	PIN	OHM
0.2 OHM	7.3 OHM	1-2	1.8 OHM	9-10	0 OHM	5-6	0.2 OHM	1-7	0.6 OHM	7-8	0.2 OHM	1-7	0.6 OHM	7-8	0.2 OHM



Q421		Q422	
VOLT	WAVEFORM	VOLT	WAVEFORM
B 0.3V	---	C ---	---
C 14.3V		B -0.08	
E ---	---	E ---	---

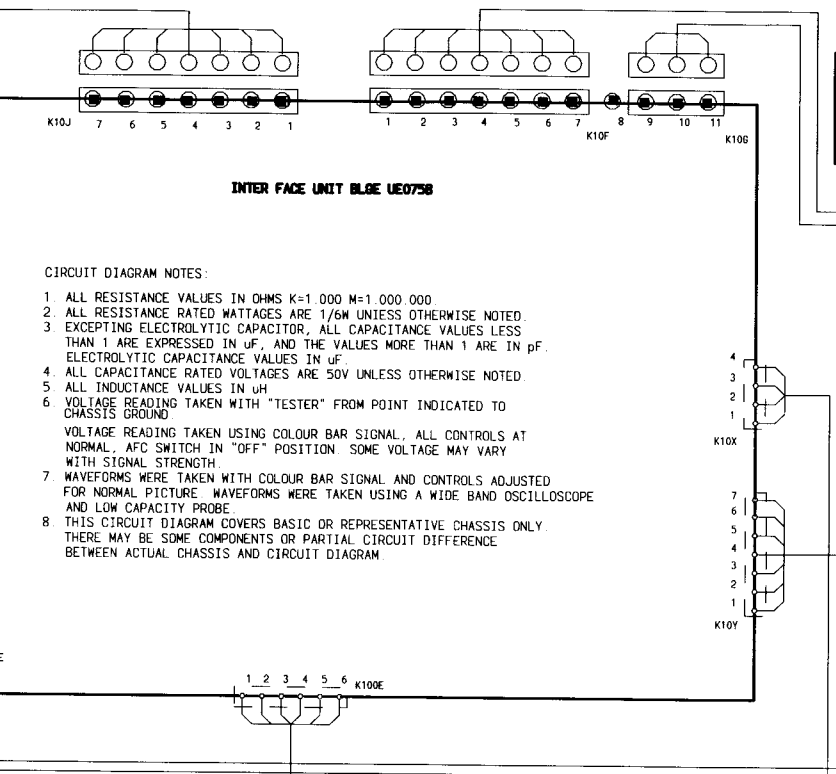
**PRODUCT SAFETY NOTICE**  
 PRODUCT SAFETY SHOULD BE CONSIDERED WHEN A COMPONENT REPLACEMENT IS MADE IN ANY AREA OF A RECEIVER. COMPONENTS INDICATED BY A MARK Δ IN THIS CIRCUIT DISGRAM SHOW COMPONENTS WHOSE VALUE HAVE SPECIAL SIGNIFICANCE TO PRODUCT SAFETY. IT IS PARTICULARLY RECOMMENDED THAT ONLY PARTS SPECIFIED ON THE PARTS LIST OF SERVICE MANUAL BE USED FOR COMPONENTS REPLACEMENT POINTED OUT BY THE MARK.



TO: CONTROL UNIT K150

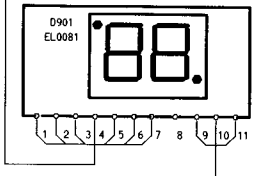
TO: CONTROL UNIT K151C



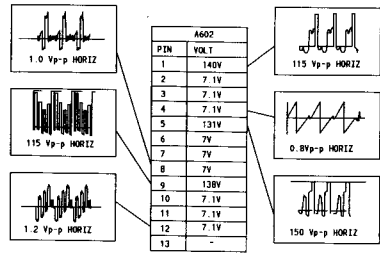
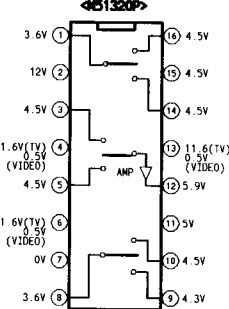


**CIRCUIT DIAGRAM NOTES:**

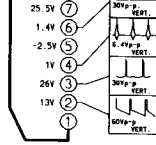
1. ALL RESISTANCE VALUES IN OHMS K=1.000 M=1.000.000.
  2. ALL RESISTANCE RATED WATTAGES ARE 1/6W UNLESS OTHERWISE NOTED.
  3. EXCEPTING ELECTROLYTIC CAPACITOR, ALL CAPACITANCE VALUES LESS THAN 1 ARE EXPRESSED IN  $\mu$ F, AND THE VALUES MORE THAN 1 ARE IN pF. ELECTROLYTIC CAPACITANCE VALUES IN  $\mu$ F.
  4. ALL CAPACITANCE RATED VOLTAGES ARE 50V UNLESS OTHERWISE NOTED.
  5. ALL INDUCTANCE VALUES IN  $\mu$ H.
  6. VOLTAGE READING TAKEN WITH "TESTER" FROM POINT INDICATED TO CHASSIS GROUND.
- VOLTAGE READING TAKEN USING COLOUR BAR SIGNAL, ALL CONTROLS AT NORMAL. AFC SWITCH IN "OFF" POSITION. SOME VOLTAGE MAY VARY WITH SIGNAL STRENGTH.
7. WAVEFORMS WERE TAKEN WITH COLOUR BAR SIGNAL AND CONTROLS ADJUSTED FOR NORMAL PICTURE. WAVEFORMS WERE TAKEN USING A WIDE BAND OSCILLOSCOPE AND LOW CAPACITY PROBE.
  8. THIS CIRCUIT DIAGRAM COVERS BASIC DR REPRESENTATIVE CHASSIS ONLY. THERE MAY BE SOME COMPONENTS OR PARTIAL CIRCUIT DIFFERENCE BETWEEN ACTUAL CHASSIS AND CIRCUIT DIAGRAM.



**IC1301 Q00010**



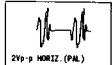
**IC461**



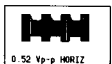
**IC201 n. 16**



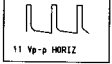
**IC201 n. 17**



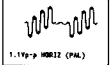
**IC201 n. 25**



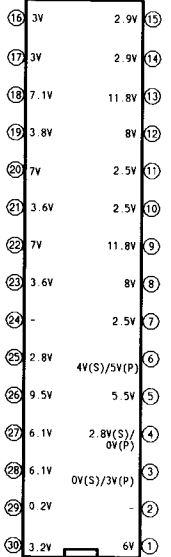
**IC201 n. 30**



**IC201 n. 15**



**IC201**



**CRT UNIT BSPA-A UE0265A**

