Service Manual

Color Television

TC-29FJ30LA

GP3 Chassis

Specifications

TELEVISOR	TC-29FJ30LA
Power source	110V / 220V AC, 60Hz automatic switch
Consumption	129W
Antenna input jack	75Ω - VHF/UHF/CATV
Color systems	PAL-M / NTSC / PAL-N
Tuning system	F.S.T.
Channel capability	2 to 13 (VHF), 14 to 69 (UHF) and 1 to 125 (Cable)
Picture Tube (visual diagonal)	PANABLACK - 29” Flat CRT, 74 cm (NBR5258) - 68 cm diagonal visual
Potência de áudio	8 W + 8 W max (RMS)
Video input jack	1 (rear) + 1 (frontal)
Audio input jack	1 (rear) + 1 (frontal)
Video output jack	1 (rear)
Audio output jack	1 (rear) + 1 (headphone)
DVD input jack	1 (rear)
Dimension (width, height, depth)	786 x 578 x 508 mm
Weight	42,7 Kg

Specifications are subject to change without notice. Weight and dimensions shown are approximate.

REMOTE CONTROL TRANSMITER:
- Model: TNQ2B3302
- Power source: 3V (2 AA type batteries)
- Infrared Length: 9500 Å (angstron)

SUPPLIED ACCESSORIES:
- 1 Remote Control Transmitter
- 1 300Ω/75Ω Aerial Adaptor
- 2 “AA” type batteries

Panasonic®

Important Safety Notice

Special components are used in this television set which are important for safety. These parts are identified on the schematic diagram by the symbol ⚠ . It is essential that these critical parts are replaced with the manufacturer's specified replacement parts to prevent X-ray radiation, shock, fire or other hazards. Do not modify the original design without manufacturer's permission.

Contents

General Guidelines

An Isolation Transformer should always be used during the servicing of a receiver whose chassis is not isolated from the AC power line. Use a transformer of adequate power rating as this protects the technician from accidents resulting in personal injury from electrical shocks. It will also protect the Receiver from being damaged by accidental shorting that may occur during servicing.

When servicing, observe the original lead dress, especially in the high voltage circuit. Replace all damaged parts (also parts that show signs of overheating.)

Always Replace Protective Devices, such as fishpaper, isolation resistors and capacitors, and shields after servicing the Receiver. Use only manufacturer's recommended rating for fuses, circuit breakers, etc.

High potentials are present when this Receiver is operating. Operation of the Receiver without the rear cover introduces danger from electrical shock. Servicing should not be performed by anyone who is not thoroughly familiar with the necessary precautions when servicing high-voltage equipment.

Extreme care should be practiced when Handling the Picture Tube. Rough handling may cause it to implode due to atmospheric pressure (14.7 lbs per sq. in). Do not sick or scratch the glass or subject it to any undue pressure. When handling, use safety goggles and heavy gloves for protection. Discharge the picture tube by shorting the anode to chassis ground (not to the cabinet or to other mounting hardware). When discharging, connect cold ground (i.e. dag ground lead) to the anode with a well insulated wire or use a grounding probe.

Avoid prolonged exposure at close range to unshielded areas of the picture tube to prevent exposure to X-ray radiation.

The Test Picture Tube used for servicing the chassis at the bench should incorporate safety glass and magnetic shielding. The safety glass provides shielding for the tube viewing area against X-ray radiation as well as implosion. The magnetic shield limits X-ray radiation around the bell of the picture tube in addition to restricting magnetic effects. When using a picture tube test jig for service, ensure that the jig is capable of handling 31kV without causing X-ray radiation.

Before returning a serviced receiver to the owner, the service technician must thoroughly test the unit to ensure that is completely safe to operate. Do not use a line isolation transformer when testing.

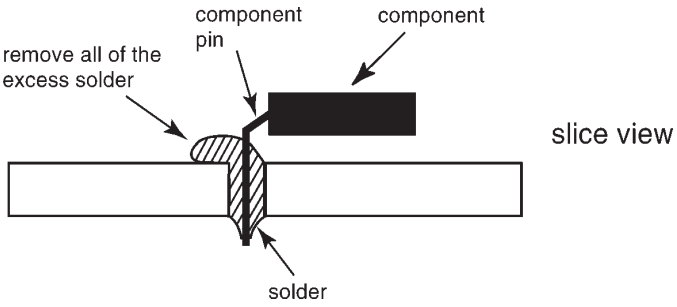
Warning !

It is essential that these critical parts are replaced with the manufacturer's specified replacement parts to prevent X-ray radiation, shock, fire or other hazards.

■ ABOUT LEAD FREE SOLDER (PbF)

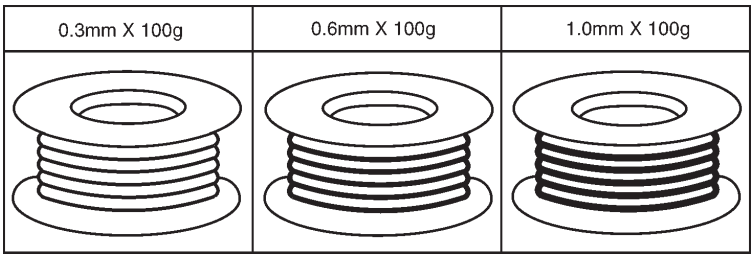
Note:
In the information below, Pb, the symbol for lead in the periodic table of elements, will refer to standard solder or solder that contains lead.
We will use PbF solder when discussing the lead free solder used in our manufacturing process which is made from Tin (Sn), Silver, (Ag), and Copper, (Cu).
This model, and others like it, manufactured using lead free solder will have PbF stamped on the PCB. For service and repair work we suggest using the same type of solder although, with some precautions, standard Pb solder can also be used.

Caution
- PbF solder has a melting point that is 50° ~ 70° F, (300° ~ 400°C) higher than Pb solder. Please use a soldering iron with temperature control and adjust it to 700° ± 20° F, (370° ± 10°C).In case of using high temperature soldering iron, please be careful not to heat too long.
- PbF solder will tend to splash if it is heated much higher than its melting point, approximately 1100°F, (600°C).
- If you must use Pb solder on a PCB manufactured using PbF solder, remove as much of the original PbF solder as possible and be sure that any remaining is melted prior to applying the Pb solder.
- When applying PbF solder to double layered boards, please check the component side for excess which may flow onto the opposite side (See figure, below).



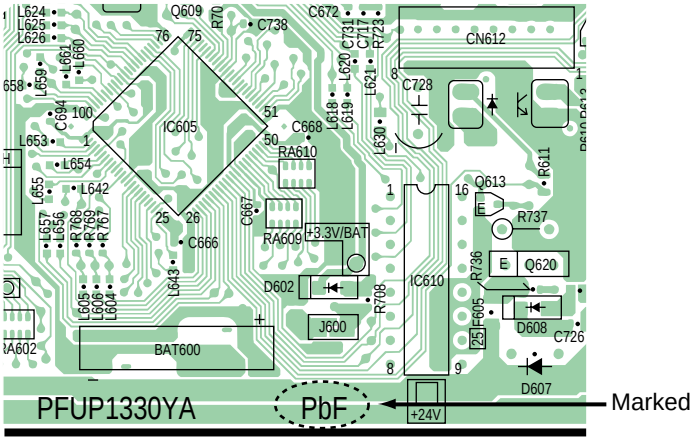
■ SUGGESTED PbF SOLDER

There are several types of PbF solder available commercially. While this product is manufactured using Tin, Silver, and Copper, (Sn+Ag+Cu), you can also use Tin and Copper, (Sn+Cu), or Tin, Zinc, and Bismuth, (Sn+Zn+Bi). Please check the manufac turer's specific instructions for the melting points of their products and any precautions for using their product with other materials.
The following lead free (PbF) solder wire sizes are recommended for service of this product: 0.3mm, 0.6mm and 1.0mm.



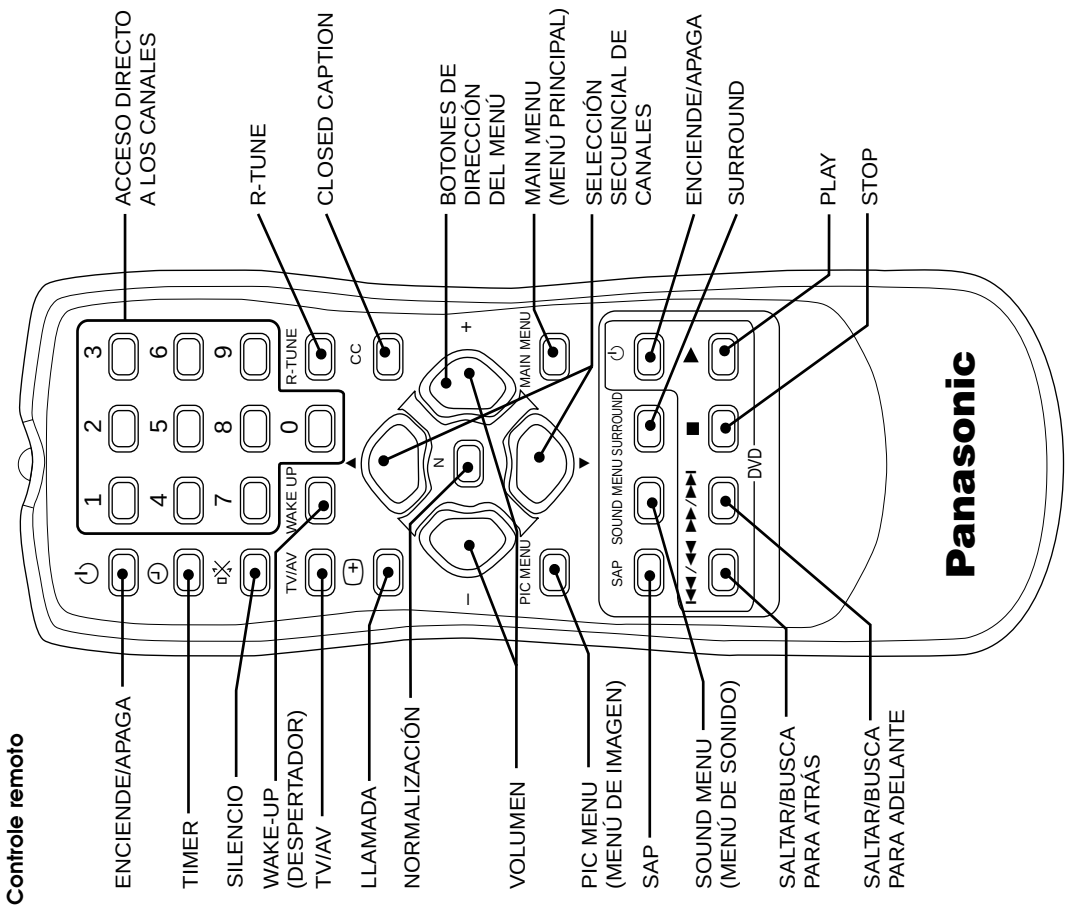
■ HOW TO RECOGNIZE THAT PB FREE SOLDER IS USED

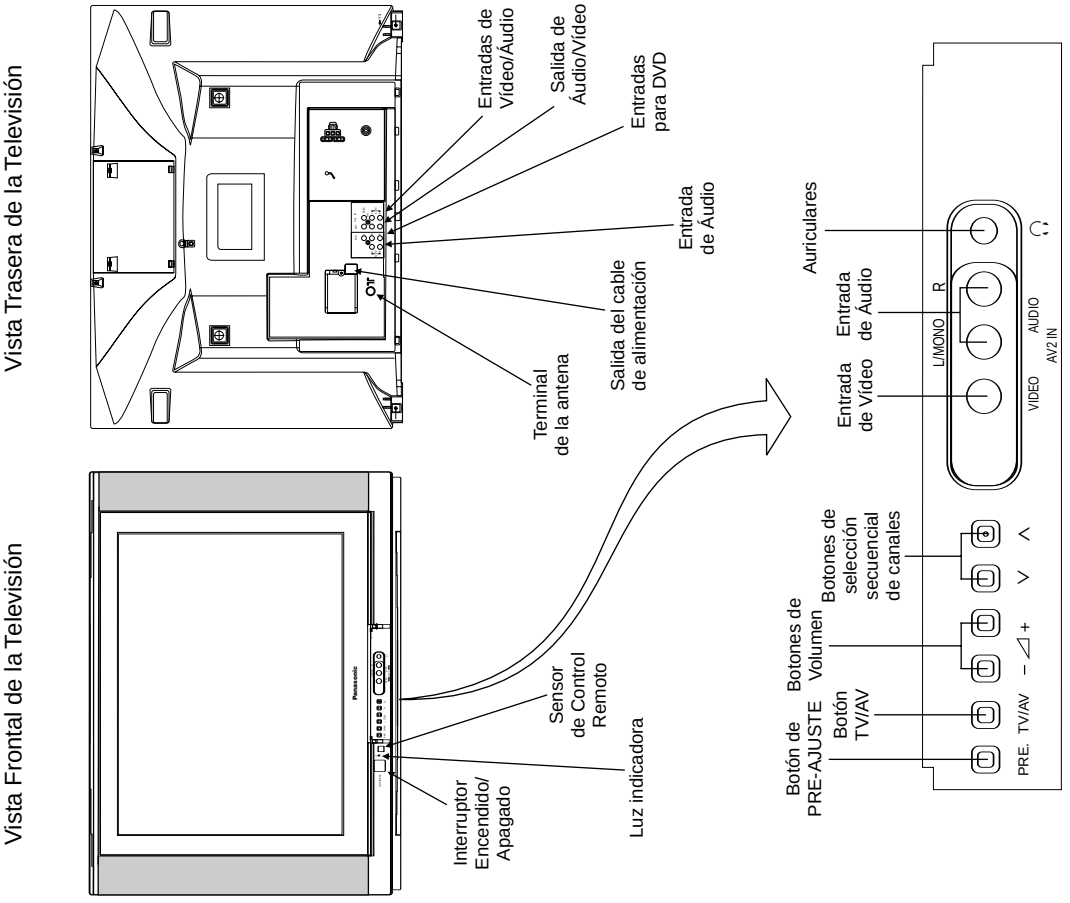
P.C.Boards marked as "PbF" use Pb Free solder. (See the figure below.) Pb Free is not used the Power Supply Board of this unit.
(Example : Digital Board)



DIGITAL BOARD COMPONENT VIEW

OPERATING INSTRUCTIONS





IC601 - PINOUT

Symbol	Pin	Description
P3.1/ADC1	1	port 3.1 or ADC1 input
P3.2/ADC2	2	port 3.2 or ADC2 input
P3.3/ADC3	3	port 3.3 or ADC3 input
VSSC/P	4	digital ground for m-Controller core and periphery
P0.5	5	port 0.5 (8 mA current sinking capability for direct drive of LEDs)
P0.6/CVBSTD	6	port 0.6 (8 mA current sinking capability for direct drive of LEDs) or Composite video input. A positive-going 1V (peak-to-peak) input is required
VSSA	7	digital ground of TV-processor
SECPLL	8	SECAM PLL decoupling
VP2	9	2nd supply voltage TV-processor (+8V)
DECDIG	10	supply voltage decoupling of digital circuit of TV-processor
PH2LF	11	phase-2 filter
PH1LF	12	phase-1 filter
GND3	13	ground 3 for TV-processor
DECBG	14	bandgap decoupling
EWD	15	East-West drive output
VDRB	16	vertical drive B output
VDRA	17	vertical drive A output
IFIN1	18	IF input 1
IFIN2	19	IF input 2
IREF	20	reference current input
VSC	21	vertical sawtooth capacitor
AGCOUT	22	tuner AGC output
SIFIN1	23	SIF input 1
SIFIN2	24	SIF input 2
GND2	25	ground 2 for TV processor
SNDPLL	26	narrow band PLL filter
AVL/REF0/SNDIF (1)	27	Automatic Volume Levelling / subcarrier reference output / sound IF input
AUDIO2	28	audio 2 input
AUDIO3	29	audio 3 input
HOUT	30	horizontal output
FBISO	31	flyback input/sandcastle output
DECSDEM	32	decoupling sound demodulator
QSSO/AMOUT/ AUDEEM (1)	33	QSS intercarrier output / AM output in stereo applications or deemphasis (front-end audio out) / AM output in mono applications
EHTO	34	EHT/overvoltage protection input
PLLIF	35	IF-PLL loop filter
SIFAGC	36	AGC sound IF
INTCO	37	intercarrier output (from QSS or vision IF amplifier)
IFVO/SVO (1)	38	IF video output / selected CVBS output
VP1	39	main supply voltage TV processor
CVBS1	40	internal CVBS input
GND	41	ground for TV processor
CVBS2	42	external CVBS2 input
GND	43	ground for TV-processor
CVBS3/Y	44	CVBS3/Y input
C	45	chroma input
WHSTR	46	white stretch capacitor
CVBSO	47	CVBS output
AUDOUT /AMOUT	48	audio output /AM audio output (volume controlled)
SVM	49	scan velocity modulation output
INSSW2	50	2nd RGB / YUV insertion input
R2/VIN	51	2nd R input / V (R-Y) input / PR input
G2/YIN	52	2nd G input / Y input
B2/UIN	53	2nd B input / U (B-Y) input / PB input
BCLIN	54	beam current limiter input
BLKIN	55	black current input / V-guard input
RO	56	Red output
GO	57	Green output

IC601 - PINOUT

Symbol	Pin	Pin
BO	58	Blue output
VDDA	59	analog supply of Teletext decoder and digital supply of TV-processor (3.3 V)
VPE	60	OTP Programming Voltage
VDDC	61	digital supply to core (3.3 V)
OSCGND	62	oscillator ground supply
XTALIN	63	crystal oscillator input
XTALOUT	64	crystal oscillator output
RESET	65	reset
VDDP	66	digital supply to periphery (+3.3 V)
P1.0/INT1	67	port 1.0 or external interrupt 1 input
P1.1/T0	68	port 1.1 or Counter/Timer 0 input
P1.2/INT0	69	port 1.2 or external interrupt 0 input
P1.3/T1	70	port 1.3 or Counter/Timer 1 input
P1.6/SCL	71	port 1.6 or I2C-bus clock line
P1.7/SDA	72	port 1.7 or I2C-bus data line
P2.0/TPWM	73	port 2.0 or Tuning PWM output
P2.1/PWM0	74	port 2.1
P2.2/PWM1	75	port 2.2
P2.3/PWM2	76	port 2.3
P2.4/PWM3	77	port 2.4
P2.5/PWM4	78	port 2.5
SYNC_FILTER	79	CVBS (i.e. P0.6/CVBS) Sync filter input: This pin should be connected to VSSA via a 100 nF capacitor.
P3.0/ADC0	80	port 3.0 or ADC0 input

IC VOLTAGE TABLES

IC601			
Pin	Voltage	Pin	Voltage
1	3,3	41	0
2	21.2mV	42	3,8
3	2	43	0
4	0	44	3,3
5	2,56	45	0
6	97.5mV	46	3,6
7	0	47	2,9
8	2,3	48	3,5
9	8	49	4,4
10	5	50	2,5
11	3,3	51	2,7
12	3,9	52	2,7
13	0	53	2,7
14	4	54	2
15	11.6mV	55	5,3
16	1,3	56	3
17	1,3	57	3
18	1,9	58	3
19	1,9	59	3,3
20	3,9	60	0
21	3,8	61	3,3
22	146.7mV	62	28.5mV
23	181.3mV	63	1,9
24	181.3mV	64	1,9
25	0	65	0
26	1,3	66	3,3
27	2,5	67	105mV
28	3,7	68	4,7
29	3,7	69	5
30	0,6	70	3,2
31	0,5	71	2,3
32	2,3	72	3
33	2,8	73	55.9mV
34	1,6	74	0
35	1,5	75	0
36	198mV	76	3,7
37	0,4	77	0
38	2,7	78	0
39	8	79	0
40	3,6	80	0

IC451	
Pin	Voltage
1	0,3V
2	15,6V
3	-14V
4	-15,6V
5	67mV
6	16,5V
7	0,3V

IC801	
Pin	Voltage
1	183V
2	0V
3	22,7V
4	22,3V
5	96mV
6	1,5V
7	0,52V

IC851	
Pin	Voltage
1	10,5V
2	10,5V
3	6,5V
4	4,3mV
5	6,3V
6	8V
7	5V

IC802	
Pin	Voltage
1	141V
2	8,5V
3	-8,7mV

IC881	
Pin	Voltage
1	10,4V
2	5V
3	-3,9mV

IC1103	
Pin	Voltage
1	7,3mV
2	7,3mV
3	7,3mV
4	7,3mV
5	3,8V
6	3,8V
7	0,2V
8	5V

IC1201	
Pin	Voltage
1	5V
2	6,4mV
3	1,27V
4	3,3V
5	6,4mV
6	5V

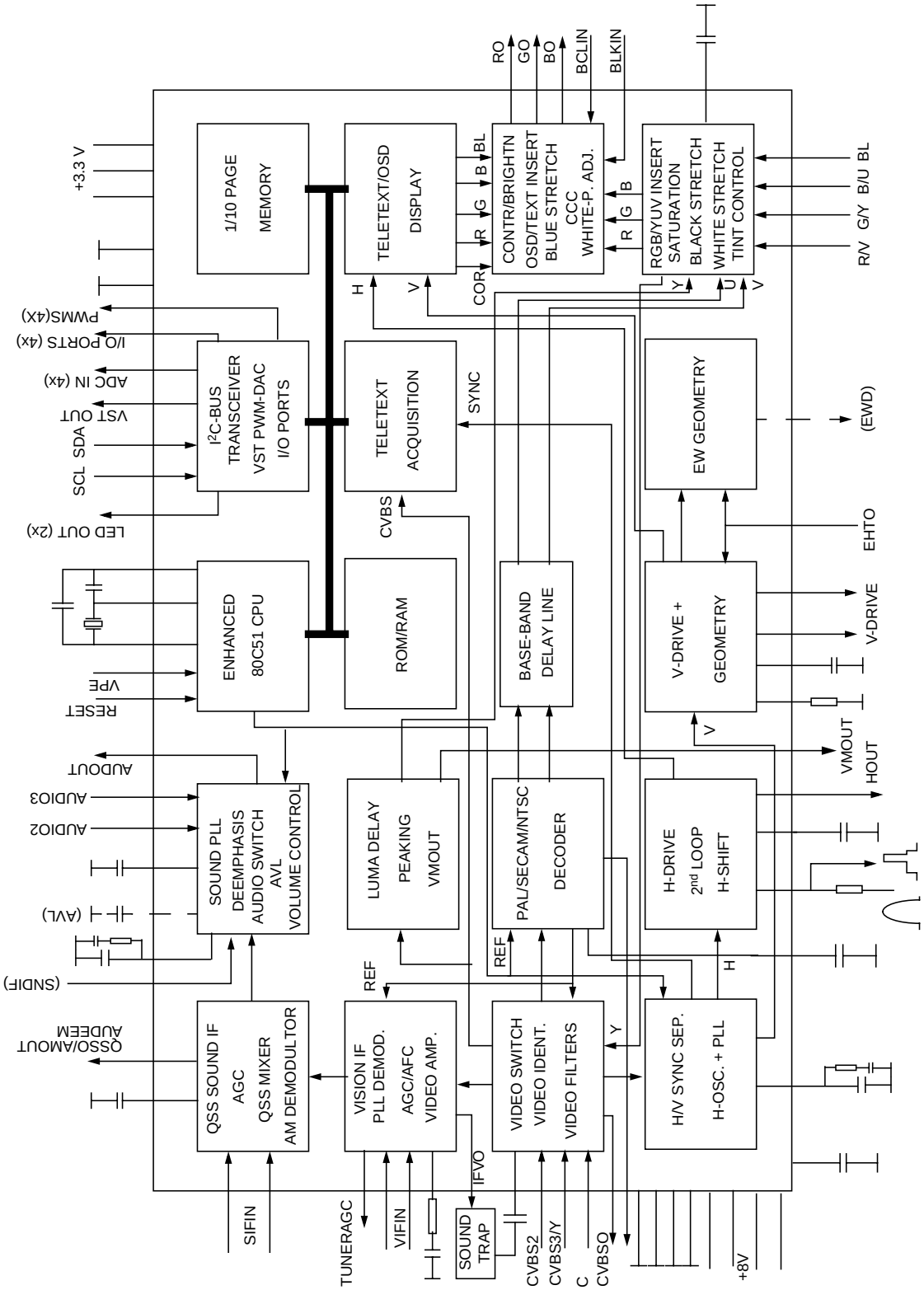
T801	
Pin	Voltage
(V2) 1	22,5mV
(V1) 2	23mV
(P2) 5	180V
(PT) 7	170V
(P1) 8	168V
(S6) 11	0,5V
(S1) 12	0,2V
(S2) 15	0,7V
(S3) 17	0,2V

TPA10	142V
TPA11	11,2V

X101	
Pin	Voltage
1	0,25V
2	0,25V
3	1,9V
4	1,9V

All voltage measurements were made in POWER ON mode, with 127V 60Hz power source and Color Bars Video Pattern.

■ IC601 - BLOCK DIAGRAM



■ CHASSIS GP3 FEATURE SUMMARY

CHASSIS	: **GP3**
MODEL	: TC-29FJ30LA
SYSTEM	: (PAL-M/PAL-N/NTSC) (PAL-M 50Hz)
POWER SOURCE	: AC automatic power switching 110/220V, 50/60Hz
MEMORY	: 125 positions
TV TUNING RANGE	: 181 channels (TV / CATV)
OSD LANGUAGE	: Spanish , Portuguese and English
AUDIO SYSTEM	: Stereo
VERTICAL MAGNETIC FELD	: -0.15 ±0.03 (ARGENTINA)
COLOR TEMPERATURE	: (High Light) x= 0.275 ± 0.01, y=0.284 ± 0.01, Y=150 (nit))
	(Low Light) x= 0.273 ± 0.01, y=0.283 ± 0.01, Y=7.0 (nit)

REFERENCE VOLTAGE

CONTENTS	REFERENCE	TEST POINT	ADJUSTMENT POINTS	SPECIFICATIONS
+B VOLTAGE	002	TPA10		140 ± 1,5V
		TPA8		8 ±1V
		TPA9		5 ±1V
		TPA21		175 ±15V
Buzzing confirmation	007	A22-1 - A22-3 or A22-2 - A22-4		0.5 Vp-p
PAL color output	009	TPL2	D	2.45 ±0.1Vo-p
		TPL1	C	2.45 ±0.5Vo-p
NTSC color output	010	TPL1	C	1.2 ±0.5Vo-p
Anode (EHT) voltage	008	ANODO DO CRT		31+0.7 (Kv) 31 -1.5 (kV)
Memory Data	[A]=EA, [B]=00, [C]=0C, [D]=B3, [E]=A1, [F]=04, [G]=00, [H]=09			

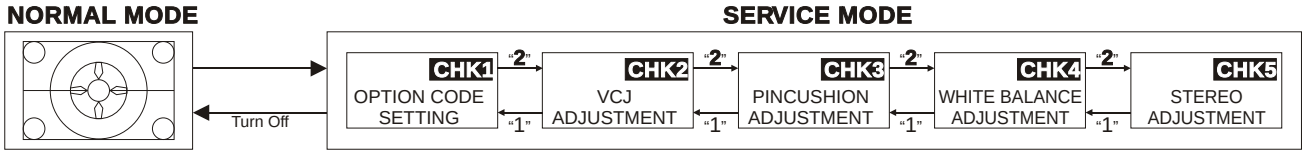
THE DAC CONTROL FOR GP3 CHASSIS FUNCTIONS AND ADJUSTMENTS

HOW TO ENTER IN THE SERVICE MODE:

1- Set the "**OFF TIMER**" to 30 minutes.
2- Press simultaneously "**RECALL**" key on the remote control and **VOL(-)** button on the unit.

After a couple of seconds, the expression "**CHK**" should appear on the right superior side of the screen. (To change the memory data, press **MUTE** and **VOLUME(–)** simultaneously while the OSD is still on CHK1 mode. Key "4" moves forward in the memory, and key "3" moves back in the memory

Note: To alter from CHK1 mode to CHK2, CHK3 or CHK4 modes, press key "2" to move forward and the key "1" to move back, as illustrated below.

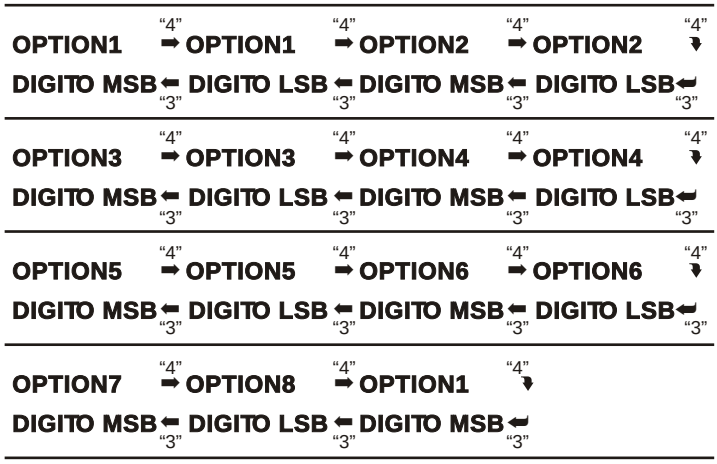


TO EXIT SERVICE MODE AND RETURN TO NORMAL MODE:

Press the **"NORMAL"** key on the remote control unit or turn off the TV.

CHK1 - OPTIONS

On CHK1 mode, it is possible to adjust the options below:



Note:
To select an option, type "4" to move forward and "3" to move back.
After having selected the desired option, adjust it by pressing the "**VOL(–)**" or "**VOL(+)**" keys.
Press "**0**" to memorize the adjustment.

CHK1 MODE - OPTIONS

On CHK1 mode it is possible to adjust the items of the table shown here.
Note:
To select an item, type "4" to move forward and "3" to move back.
After having selected the desired option, adjust it by pressing the "VOL(–)" or "VOL(+)" keys. The OSD color will change for red.
Press "0" To memorize the adjustment.

CHK1 MODE TABLE	
Standard values	
OPTION1	EA
OPTION2	00
OPTION3	0C
OPTION4	B3
OPTION5	A1
OPTION6	04
OPTION7	00
OPTION8	09

■ ADJUSTMENTS

CHK2 MODE - VCJ ADJUSTMENTS

On CHK2 mode it is possible to adjust the items of the table shown here.
Note:
To select an item, type “4” to move forward and “3” to move back.
After having selected the desired option, adjust it by pressing the “VOL(–)” or “VOL(+)” keys. The OSD color will change for red.
Press “0” To memorize the adjustment.

CHK2 MODE TABLE	
Standard values	
RF AGC	24
CONT	100
COL	55
S-COL	33
TINT	50
S-TINT	31
BRT	50

CHK3 MODE - PINCUSHION ADJUSTMENTS

On CHK3 mode it is possible to adjust the items of the table shown here.
Note:
To select an item, type “4” to move forward and “3” to move back.
After having selected the desired option, adjust it by pressing the “VOL(–)” or “VOL(+)” keys. The OSD color will change for red.
Press “0” To memorize the adjustment.

CHK3 MODE TABLE	
Standard values	
V-SLOPE	34
V-SHIFT	49
V-AMP	39
H-SHIFT	25
EW-WIDTH	33
EW-PARA	31
EW-UP COR	35
EW-LOW COR	33
EW-TRAPE	22
H-PARA	19
H-BOW	38

CHK4 MODE - WHITE BALANCE ADJUSTMENTS

On CHK4 mode it is possible to adjust the items of the table shown here.
Note:
To select an item, type “4” to move forward and “3” to move back.
After having selected the desired option, adjust it by pressing the “VOL(–)” or “VOL(+)” keys. The OSD color will change for red.
Press “0” To memorize the adjustment.

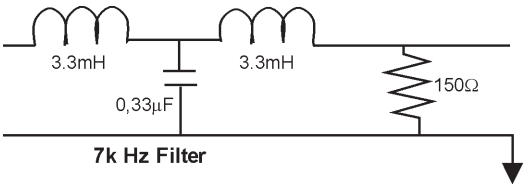
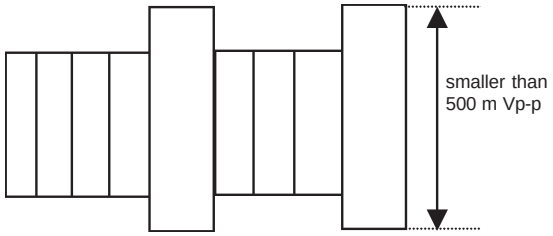
CHK4 MODE TABLE	
Standard values	
R-CUT	14
G-CUT	23
BRT	50
S-BRT	33
CONT	100
S-CONT	19
R-DRIVE	34
G-DRIVE	31
B-DRIVE	41
RGB CONTRASTE	3

■ TEST AND MEASUREMENT EQUIPMENTS

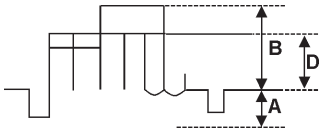
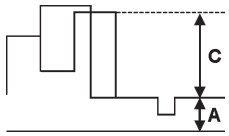
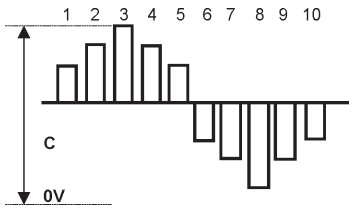
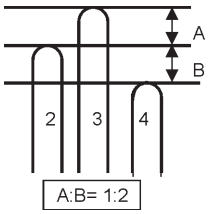
To execute all these electrical adjustments, the following equipment are required:

- Dual-Trace Oscilloscope
  Voltage Range: 0.001 V to 50 V/Div.
  Frequency Range: DC to 50 MHz
  Probes: 10:1, 1:1
- NTSC Video Pattern Generator
- DVM (Digital Volt Meter)
- MTS/SAP Signal Generator
- (TV Multi-Channel Sound Modulator (U.S.A.))
- Plastic Tip Driver and Non-Metal Driver
- Isolation Transformer (Variable)
- Degaussing Coil
- White Pattern Generator
- Audio Generator

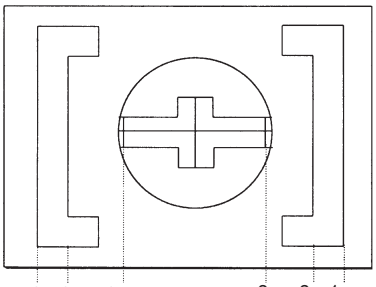
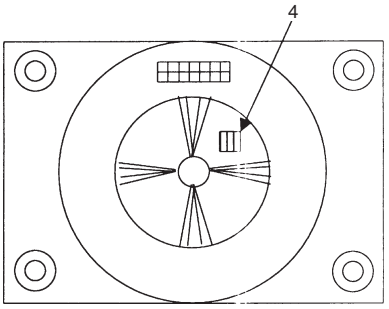
■ ADJUSTMENTS

ITEM / PREPARATION	PROCEDURE
1- RF AGC ADJUSTMENT 1. Supply a color bar pattern and adjust the RF input signal of 69 dB μV (75Ω opened channel 07 RF freq.: 175.25 MHz). 2. Connect the digital multimeter in TPA15.	**ADJUSTMENT:** 1. Select “RF AGC” on “CHK2” service mode. 2. Adjust "RF AGC" by pressing VOL(+) or (-) until obtaining 2.2±0.1V in TPA15. 3. Increase the input level by +2 dB and confirm that the voltage decreases in TPA15.
2- VIF DETECTOR OUTPUT LEVEL CONFIRMATION	**CONFIRMATION**: 1. Install the chassis in the VIF calibration JIG and tune in a 63 dBU colorbar pattern (75Ω opened). 2. Connect the oscilloscope in TPA31. 3. Confirm that the output video sign is 1.05 ± 0.15 Vp-p in TPA 31.
3- BUZZING CONFIRMATION (AUDIO CIRCUIT) 1. Connect the oscilloscope with a 7kHz filter between A22-2 and A22-3 speakers terminals . 2. Adjust the sound to maximum. 3. Adjust **AVL**: OFF  	**CONFIRMATION:** 1. Supply a colorbar signal with local frequency adjusted and the AFC ON (Channel with sound bearer and without modulation). 2. Assure that the width in the buzzing waveform is smaller than 500 m Vp-p. 
4- ANODE AND HEATER VOLTAGE CONFIRMATION 1. Supply a crosshatch signal. 2. Adjust the current beam to zero. (0 beam). 3. Adjust “SCREEN VR” and “CONTRAST” to minimum. **Nota**: (When using a high voltage meter resistive type, it is necessary to use an electrostatic meter type to verify the values)	**CONFIRMATION** 1. Connect a voltage meter between TPA10 and ground. Confirm that the voltage +B is within a range of 140.5V± 1.5V 2. Connect a high frequency voltage meter (VRMS) among the heater, and confirm that the voltage is 6,30±0,24Vrms 3. Connect the high voltage meter in the CRT anode pin, and confirm that the high voltage is within 30,5KV~27,6KV range.

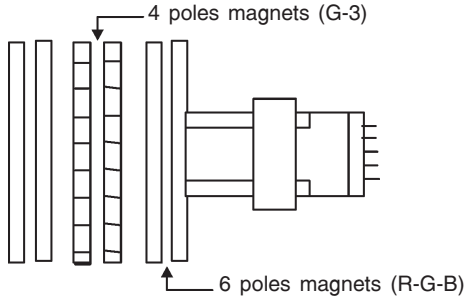
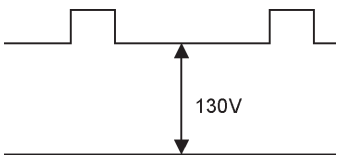
■ ADJUSTMENTS

ITEM / PREPARATION	PROCEDURE
5- PAL COLOR OUTPUT SIGNAL ADJUSTMENT 1. Supply a color bar signal and adjust the local frequency. 2. Adjust "IMAGE" to DYNAMIC NORMAL, "CONTRAST" to 63 and "SUB-CONTRAST" to 21. 3. Adjust the "CHANNEL COLOR" level to NORMAL. 4. Set to CHK2 service mode option, press "5" on the remote control unit and confirm that OSD becomes blue (AKB turned off). 5. Set ABL to OFF (in CHK2 mode, to access BRT, CONT, S-CONT or S-TINT). 6. Adjust [A] for 2.3 ± 0.2V through the BRIGHT control variation in the test point TPL2. 7. Confirm that the RGB Contrast is 11DAC and {352} = 1B 8. Fix G-DRIVE GAIN, R-DRIVE GAIN and B-DRIVE GAIN data in 1FH or 31 DAC. R-DRIVE GAIN: [SLV(8A), SUB (16)] G-DRIVE GAIN: [SLV(8A), SUB (17)] B-DRIVE GAIN: [SLV(8A), SUB (18)]	**CALIBRATION:** 1. Connect the oscilloscope in TPL2 (G-OUT) with a 10KΩ resistor and adjust "CONTRAST", so that the [**B**] waveform it is 2.3±0.1V with 14" CRT and 2.6±0.1V with 20" CRT. 2. Adjust "SUB-COLOR" to obtain 2,45±0.1V in [**D**] according to fig. 1. 3. Connect the oscilloscope in TPL1 (R-OUT) with a 10KΩ resistor and confirm that the [**C**] waveform it is 2.45±0.1V according to fig. 2. 4. Press the key "5" (AKB ON) and confirm that OSD becomes white.  **Fig. 1** **A** = 2.3 ±0.1Vo-p **B** = 2.4±0.1V **D** = 2.45±0.1V  **Fig. 2** **A** = 2.3 ±0.2Vo-p **C** = 2.45±0.1V
6- NTSC SUB-TINT CALIBRATION 1. Connect the oscilloscope in TPL1 (R-OUT) with a 10KΩ resistor. 2. Supply a Rainbow signal (NTSC 3.58 MHz) through VIDEO IN. 3. Select "IMAGE" to DYNAMIC NORMAL. 4. Select "COLOR FOR CHANNEL" to NORMAL. 5. On CHK2 service mode, press "5" (AKB OFF) and confirm that OSD becomes blue (AKB turned off). 6. Set ABL to OFF (on CHK2 mode, to access BRT, CONT, S-CONT or S-TINT).	**CALIBRATION:** 1. Adjust [C] for 5.0±0.2V through the BRIGHT control variation (CHK2) according to fig. 1. 2. Adjust SUB TINT-NTSC so that the levels of positions 2, 3 and 4 of Fig. 1 in accordance with the Fig. 2. 3. Set ABL to ON. 4. Press "5" and confirm that OSD becomes white (AKB turned on).  **Fig. 1**  **Fig. 2**
7- PROTECTION CIRCUIT (SHUTDOWN) CONFIRMATION OF OPERATION 1. Supply a crosshatch pattern signal and adjust the CONTRAST and BRIGHT DAC controls to minimum. (Ibeam=0 μA)	**CONFIRMATION:** 1. Connect the voltmeter in TPA22 and confirm that the voltage is smaller than 18,7 V. 2. Connect a DC source in TPA22 and confirm that the protection circuit doesn't act when the voltage is 19,5V. 3. Confirm that the protection circuit acts with smaller voltage than21,5V.

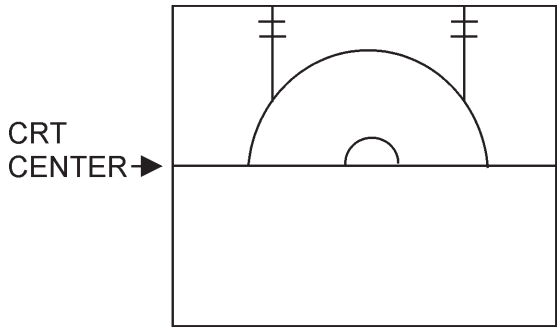
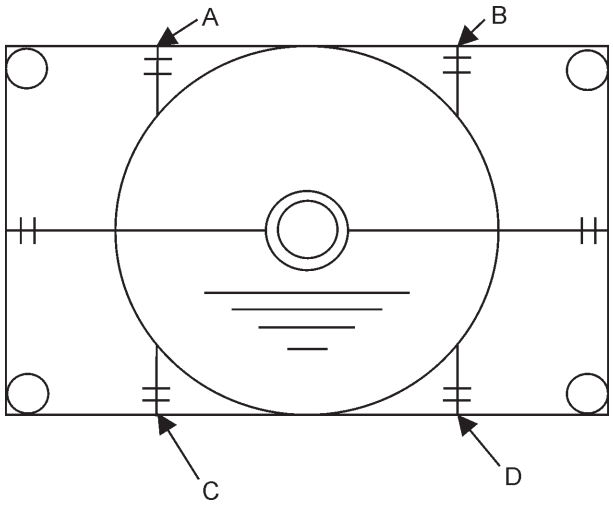
■ ADJUSTMENTS

ITEM / PREPARATION	PROCEDURE
8- SUB-BRIGHT AND SUB-CONTRAST CALIBRATION 1. Supply a WINDOW pattern signal. 2. Adjust IMAGE MENU to DYNAMIC NORMAL	**SUB-BRIGHT CALIBRATION** 1. Position the color analyzer in the LOW LIGHT image area. 2. Ajust S-BRT <CHK 4> control, so that it is Y=0,7±0.2. **SUB-CONTRAST CALIBRATION** 1. Position the color analyzer in the HIGH LIGHT image area. 2. Ajust S-CONT <CHK 4> DAC control, so that it is Y=230±20. 3. If impossible to obtain that adjustment, adjust SUB-CONT <CHK 4> again. 4. Check the SUB-BRIGHT adjust.
9- FOCUS CALIBRATION • Assure that the SUB-BRIGHTNESS adjustment has been done. 1. Supply a Philips or monoscope pattern signal. 2. Adjust IMAGE MENU to DYNAMIC NORMAL.  Fig. 1	**CALIBRATION**: 1. Adjust the FOCUS variable resistor for the point of better adjustment. • **with PHILIPS signal** .... take as reference for adjustment the third vertical line (fig. 1). • **with MONOSCOPE signal** in the number 4 (fig.2).  Fig. 2
10- PURITY CALIBRATION 1. Adjust the HELMHOLTZ device for the local magnetic field (HORIZONTAL: 0 ± 0.03 X 10-4T) 2. Let the set warm up (aging time) for a minimum of 60 minutes. 3. Supply a purity pattern (white pattern). 4. Adjust CONTRAST and BRIGHT to MAXIMUM. 5. The static convergence adjustment must have been made preliminarily. 6. Connect a DC ampere meter between FBT pin11 (-) and FBT pin3 (+), and adjust to 1200mA±10%, varying the S-BRT DAC control.	**CALIBRATION**: 1. Position the “ears” of the purity magnets both upward. 2. Adjust the purity until the markers in the purity jig monitorscope becomes symmetrical in the horizontal direction. 3. The vertical centralization correction is made through the purity magnets for stripe CRT type only. 4. Slide the yoke forward by 10 mm±5 in the monitor. Then, tighten the deflection yoke. 5. Repeat the procedures 2 ~ 4. 6. Press the belt of deflection yoke. 7. Adjust “beam landing” using a microscope. (for model change or instrument check only)

■ ADJUSTMENTS

ITEM / PREPARATION	PROCEDURE
11- WHITE QUALITY CALIBRATION **PREPARATION:** 1. Adjust the HELMHOLTZ device to local magnetic field. Horizontal: 0 ± 0.003 x 10^{-4}T 2. Receive a white purity pattern. 3. Adjust CONTRAST and BRIGHT controls to maximum. 4. Previously adjust the CONVERGENCE. 5. Fully degauss the CRT by using an external degaussing coil.	**CALIBRATION:** 1. Adjust the magnetic field in 0.4x10-4T (400 mG), and check the white quality with the CRT turned to EAST and to WEST. 2. Receive a red pattern, adjust the COLOR control to maximum and confirm the purity adjustment. 3. If purity error is found at the CRT corners, apply magnetic tapes to correct it, fully degauss the CRT again and repeat the steps 1 and 2. Don't use this magnetic tapes on the internal side of the yoke. 4. Receive a white purity pattern, adjust the COLOR control to minimum and confirm the purity adjustment.
12- CONVERGENCE CALIBRATION 1. Adjust the HELMHOLTZ device to local magnetic field. 2. Receive a crosshatch pattern. 3. Adjust IMAGE menu to DINÂMIC NORMAL and the DAC BRIGHT control for the crosshatch pattern to be gray. 4. Remove the DY wedges and slightly tilt the deflection yoke to the vertically and horizontally to obtain the good overall convergence. 5. If purity error is found, repeat “Color Purity” adjustment  	**CALIBRATION** Static convergence calibration I) Assure that the magnets are positioned according to illustration 1. II) Adjust the 4 poles magnets to align the R and B CENTRAL DOTS and adjust the 6 poles magnets to align both DOTS with G. III) After adjustment above, assure that the magnets are sealed, through the application of white glue. **Note**: The electron beams are moved rotationally when the static convergence magnets are rotated. The reduction of rotational beams differ depending of the two magnets angle. Therefore, it is necessary to repeat the magnets calibrations sometimes, until obtaining a good alignment.
13- CRT CUT OFF CALIBRATION 1. Supply a WINDOWS signal. 2. Position DACs with the data below: **BRT** —> 50H **S-BRT** —> 31H **RGB CONTRAST** —> 11DAC **SUB-CONTRAST** —> 21H **R,G,B DRIVE** —> 31H **R,G CUT** —> 31H	**CALIBRATION:** 1. Press “5” (AKB OFF) and confirm that OSD becomes blue. 2. Connect the oscilloscope in TPL5 and adjust BRT to obtain 130V as in the Fig. 1 below. 3. Adjust the SCREEN to obtain a horizontal fine line in the screen center. Y = 1.0 +1.0 -0.5 4. Press “5” (AKB ON) and confirm that OSD becomes white.  Fig. 1

■ ADJUSTMENTS

ITEM / PREPARATION	PROCEDURE
14- VERTICAL DEFLECTION CALIBRATION AND CONFIRMATION 1. Adjust IMAGE to DYNAMIC NORMAL  Fig. 1  Fig. 2	**S-CORR CONFIRMATION AND CALIBRATION** **1) Confirmation in 50Hz** 1. Supply a PHILIPS PAL-N signal. 2. Confirm that S-CORR 50Hz is in 33 DAC . **2) Confirmation in 60Hz** 1. Supply a MONOSCOPE signal. 2. Confirm that S-CORR 60Hz is in 33 DAC. **3) V-SLOPE calibration** 1. Supply a MONOSCOPE signal. 2. Adjust V_SLOPE (CHK3) so that the beginning of the black part of the image is aligned with the center of the CRT as Fig. 1. **4) VERTICAL CENTRALIZATION 50 HZ CALIBRATION** 1. Supply a PAL-N Philips signal. 2. Adjust V-SHIFT 50Hz (CHK3) so that the Philips pattern's center it is in the center of the CRT. **5) VERTICAL CENTRALIZATION 60 HZ CALIBRATION** 1. Supply a MONOSCOPE signal. 2. Adjust V-SHIFT 60Hz (CHK3) so that the monoscope pattern´s center it is in the center of the CRT. **6) VERTICAL HEIGHT (V-AMP 50HZ) CALIBRATION** 1. Supply a PHILIPS PAL-N signal. 2. Adjust V-AMP-50Hz (CHK3) so that the Philips pattern's circle height be the same dimension of the width. **7) VERTICAL HEIGHT (V-AMP 60HZ) CALIBRATION** 1. Supply a MONOSCOPE signal. 2. Adjust V-AMP-60Hz (CHK3) according to box. 3. MEMORIZE in EEPROM. **C,D** 1.5 ~ 2.0 **A,B** 1.5 ~ 1.6
15- WHITE BALANCE CALIBRATION 1. Adjust the HELMHOLTZ device to local magnetic field. 2. Let the set warm up for a minimum of 30 minutes. 3. Receive a white balance. (This sign should contain burst sign). 4. Adjust the IMAGE menu to DINÂMIC NORMAL. 5. Fully degauss the CRT by using an external degaussing coil. 6. Position the color analyzer in contact with the CRT face.	**CALIBRATION:** **[1] LOW LIGHT CALIBRATION** 1. Adjust S-BRT, so that Y = 7 2. Adjust R-CUT OFF, so that x = 0.273 ±0.01 3. Adjust G-CUT OFF, so that y = 0,283 ±0.01 **[2] HIGH LIGHT CALIBRATION** (Confirm that G-DRIVE is 31 DAC) 1. Adjust S-BRT, so that Y = 150 2. Adjust R-DRIVE, so that x = 0,275 ±0.01 3. Adjust B-DRIVE, so that y = 0,284 ±0.01 **[3] Repeat the procedures [1] and [2].**

Assure that not entering light for the meter borders and that the CUT OFF voltage calibration has been done. If the value in the color analyzer is below 150, adjust CONTRAST to 50 and press "8" in CHK2 mode.

■ EEPROM MEMORY MAPS

TABLE 0

	COLUMN 0	COLUMN 1	COLUMN 2	COLUMN 3	COLUMN 4	COLUMN 5	COLUMN 6	COLUMN 7	COLUMN 8	COLUMN 9	COLUMN A	COLUMN B	COLUMN C	COLUMN D	COLUMN E	COLUMN F
LINE 0	02	00	06	01	00	06	02	00	06	03	00	06	04	00	06	05
LINE 1	00	06	06	00	06	07	00	06	08	00	06	09	00	06	0A	00
LINE 2	06	0B	00	06	0C	00	06	0D	00	06	0E	00	06	0F	00	06
LINE 3	10	00	06	11	00	06	12	00	06	13	00	06	14	00	06	15
LINE 4	00	06	16	00	06	17	00	06	18	00	06	19	00	06	1A	00
LINE 5	06	1B	00	06	1C	00	06	1D	00	06	1E	00	06	1F	00	06
LINE 6	20	00	06	21	00	06	22	00	06	23	00	06	24	00	06	25
LINE 7	00	06	26	00	06	27	00	06	28	00	06	29	00	06	2A	00
LINE 8	06	2B	00	06	2C	00	06	2D	00	06	2E	00	06	2F	00	06
LINE 9	30	00	06	31	00	06	32	00	06	33	00	06	34	00	06	35
LINE A	00	06	36	00	06	37	00	06	38	00	06	39	00	06	3A	00
LINE B	06	3B	00	06	3C	00	06	3D	00	06	3E	00	06	3F	00	06
LINE C	40	00	06	41	00	06	42	00	06	43	00	06	44	00	06	45
LINE D	00	06	46	00	06	47	00	06	48	00	06	49	00	06	4A	00
LINE E	06	4B	00	06	4C	00	06	4D	00	06	4E	00	06	4F	00	06
LINE F	50	00	06	51	00	06	52	00	06	53	00	06	54	00	06	55

TABLE 1

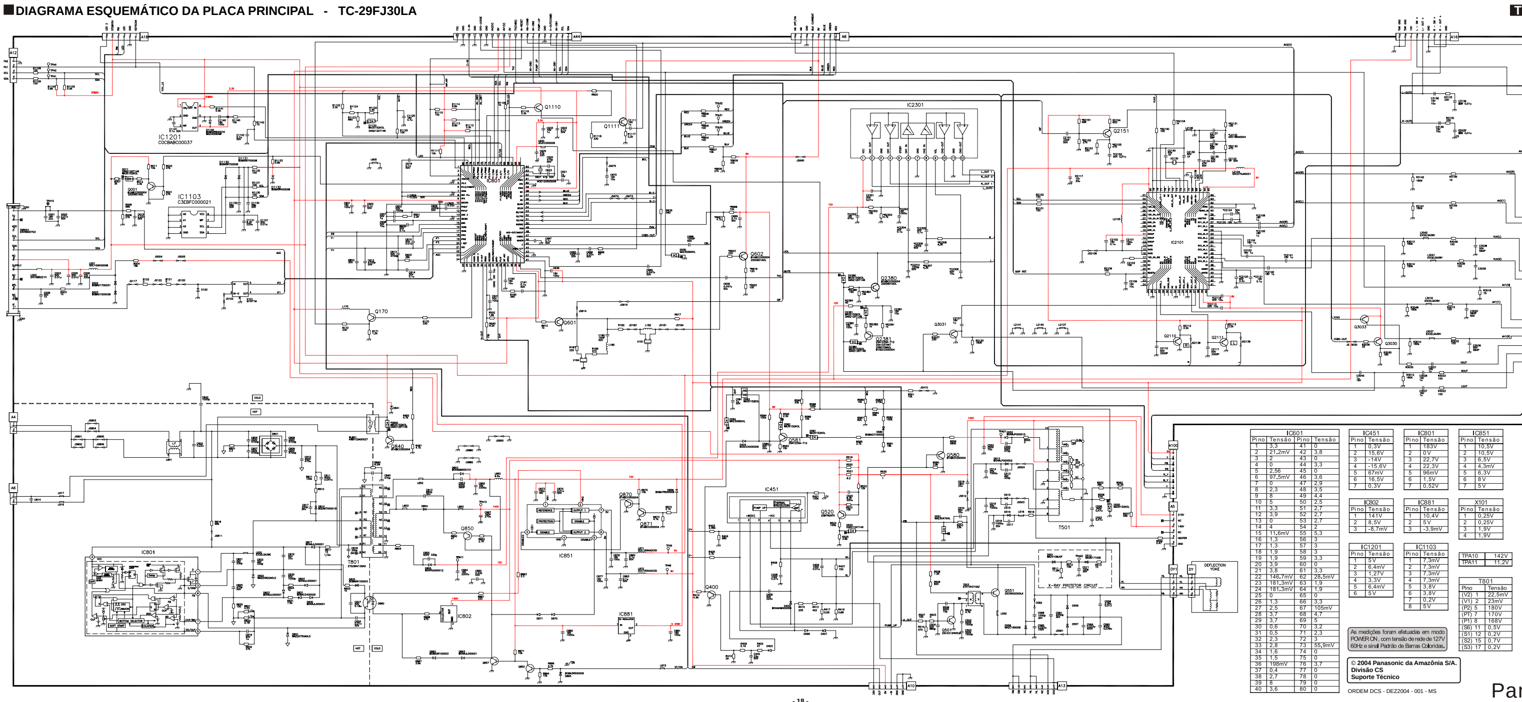
	COLUMN 0	COLUMN 1	COLUMN 2	COLUMN 3	COLUMN 4	COLUMN 5	COLUMN 6	COLUMN 7	COLUMN 8	COLUMN 9	COLUMN A	COLUMN B	COLUMN C	COLUMN D	COLUMN E	COLUMN F
LINE 0	00	06	56	00	06	57	00	06	58	00	06	59	00	06	5A	00
LINE 1	06	5B	00	06	5C	00	06	5D	00	06	5E	00	06	5F	00	06
LINE 2	60	00	06	61	00	06	62	00	06	63	00	06	64	00	06	65
LINE 3	00	06	66	00	06	67	00	06	68	00	06	69	00	06	6A	00
LINE 4	06	6B	00	06	6C	00	06	6D	00	06	6E	00	06	6F	00	06
LINE 5	70	00	06	71	00	06	72	00	06	73	00	06	74	00	06	75
LINE 6	00	06	76	00	06	77	00	06	78	00	06	79	00	06	7A	00
LINE 7	06	7B	00	06	7C	00	06	7D	00	06	0F	00	00	FF	01	0E
LINE 8	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
LINE 9	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
LINE A	06	00	00	00	00	00	00	00	00	00	01	02	01	02	03	04
LINE B	01	86	04	C4	00	00	37	8F	9F	8F	02	02	02	02	02	02
LINE C	02	02	5E	5E	60	40	D0	C0	A0	0A	08	18	1D	04	00	00
LINE D	C8	C8	C8	C2	C2	C2	40	40	00	00	00	00	00	00	00	00
LINE E	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
LINE F	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00

TABLE 2

	COLUMN 0	COLUMN 1	COLUMN 2	COLUMN 3	COLUMN 4	COLUMN 5	COLUMN 6	COLUMN 7	COLUMN 8	COLUMN 9	COLUMN A	COLUMN B	COLUMN C	COLUMN D	COLUMN E	COLUMN F
LINE 0	02	00	A5	5A	00	01	01	00	00	08	00	03	09	09	03	00
LINE 1	02	00	00	00	00	00	10	0C	0B	10	18	0B	0C	0C	0C	0B
LINE 2	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
LINE 3	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
LINE 4	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
LINE 5	32	32	32	64	4B	32	32	32	4B	44	2D	32	32	41	32	32
LINE 6	18	0B	09	0D	14	3C	D0	0D	00	0C	04	04	16	32	FC	0E
LINE 7	00	00	2B	00	00	00	00	00	00	00	00	00	03	02	78	BB
LINE 8	32	32	32	64	4B	32	32	32	4B	44	2D	32	32	41	32	10
LINE 9	0C	0B	10	18	0B	0C	0C	0C	0B	18	0B	09	0D	14	00	00
LINE A	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	03
LINE B	03	19	15	0C	00	1B	0C	08	1C	40	40	40	00	00	00	00
LINE C	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
LINE D	0C	10	15	04	06	06	00	04	00	00	00	00	00	00	00	00
LINE E	00	00	00	00	00	00	00	00	EA	00	00	B3	A1	04	00	09
LINE F	00	00	18	20	15	1A	00	00	00	00	00	00	00	A5	3F	A5

TABLE 3

	COLUMN 0	COLUMN 1	COLUMN 2	COLUMN 3	COLUMN 4	COLUMN 5	COLUMN 6	COLUMN 7	COLUMN 8	COLUMN 9	COLUMN A	COLUMN B	COLUMN C	COLUMN D	COLUMN E	COLUMN F
LINE 0	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
LINE 1	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
LINE 2	00	00	00	00	00	30	30	C0	A4	94	22	88	28	20	31	24
LINE 3	00	00	25	1D	21	16	1E	33	21	25	19	19	1F	1F	1F	1F
LINE 4	1F	00	06	00	FD	00	1B	29	80	00	2A	00	34	20	30	21
LINE 5	02	48	12	44	00	80	34	03	F4	FD	00	00	00	00	03	08
LINE 6	04	FE	32	21	20	19	00	00	00	00	00	00	00	00	00	00
LINE 7	00	00	00	00	00	00	00	00	00	10	00	00	00	00	00	00
LINE 8	00	00	00	00	00	00	00	00	0E	11	0D	06	0C	0C	07	02
LINE 9	09	00	00	FA	00	00	00	0A	F8	00	00	00	00	00	00	03
LINE A	01	03	02	03	03	00	34	28	28	28	20	63	03	10	03	00
LINE B	CA	49	4B	02	31	00	00	FF	FD	04	05	FF	03	F5	FE	04
LINE C	20	07	4F	40	40	00	00	00	00	00	00	00	00	00	00	00
LINE D	05	0A	05	F7	FE	FE	00	00	00	F7	00	F0	01	00	00	00
LINE E	10	04	2F	71	75	3B	3A	02	02	0E	3A	37	00	11	0B	05
LINE F	33	30	2A	27	26	25	24	00	00	00	00	00	00	00	00	11



IC601			
Pino	Tensão	Pino	Tensão
1	3,3	41	0
2	21.2mV	42	3,8
3	2	43	0
4	0	44	3,3
5	2,56	45	0
6	97.5mV	46	3,6
7	0	47	2,9
8	2,3	48	3,5
9	8	49	4,4
10	5	50	2,5
11	3,3	51	2,7
12	3,9	52	2,7
13	0	53	2,7
14	4	54	2
15	11.6mV	55	5,3
16	1,3	56	3
17	1,3	57	3
18	1,9	58	3
19	1,9	59	3,3
20	3,9	60	0
21	3,8	61	3,3
22	146.7mV	62	28.5mV
23	181.3mV	63	1,9
24	181.3mV	64	1,9
25	0	65	0
26	1,3	66	3,3
27	2,5	67	105mV
28	3,7	68	4,7
29	3,7	69	5
30	0,6	70	3,2
31	0,5	71	2,3
32	2,3	72	3
33	2,8	73	55.9mV
34	1,6	74	0
35	1,5	75	0
36	198mV	76	3,7
37	0,4	77	0
38	2,7	78	0
39	8	79	0
40	3,6	80	0

IC451	
Pino	Tensão
1	0,3V
2	15,6V
3	-14V
4	-15,6V
5	67mV
6	16,5V
7	0,3V

IC801	
Pino	Tensão
1	183V
2	0V
3	22,7V
4	22,3V
5	96mV
6	1,5V
7	0,52V

IC851	
Pino	Tensão
1	10,5V
2	10,5V
3	6,5V
4	4,3mV
5	6,3V
6	8V
7	5V

IC802	
Pino	Tensão
1	141V
2	8,5V
3	-8,7mV

IC881	
Pino	Tensão
1	10,4V
2	5V
3	-3,9mV

X101	
Pino	Tensão
1	0,25V
2	0,25V
3	1,9V
4	1,9V

IC1201	
Pino	Tensão
1	5V
2	6,4mV
3	1,27V
4	3,3V
5	6,4mV
6	5V

IC1103	
Pino	Tensão
1	7,3mV
2	7,3mV
3	7,3mV
4	7,3mV
5	3,8V
6	3,8V
7	0,2V
8	5V

TPA10	142V
TPA11	11,2V

T801	
Pino	Tensão
(V2) 1	22,5mV
(V1) 2	23mV
(P2) 5	180V
(PT) 7	170V
(P1) 8	168V
(S6) 11	0,5V
(S1) 12	0,2V
(S2) 15	0,7V
(S3) 17	0,2V

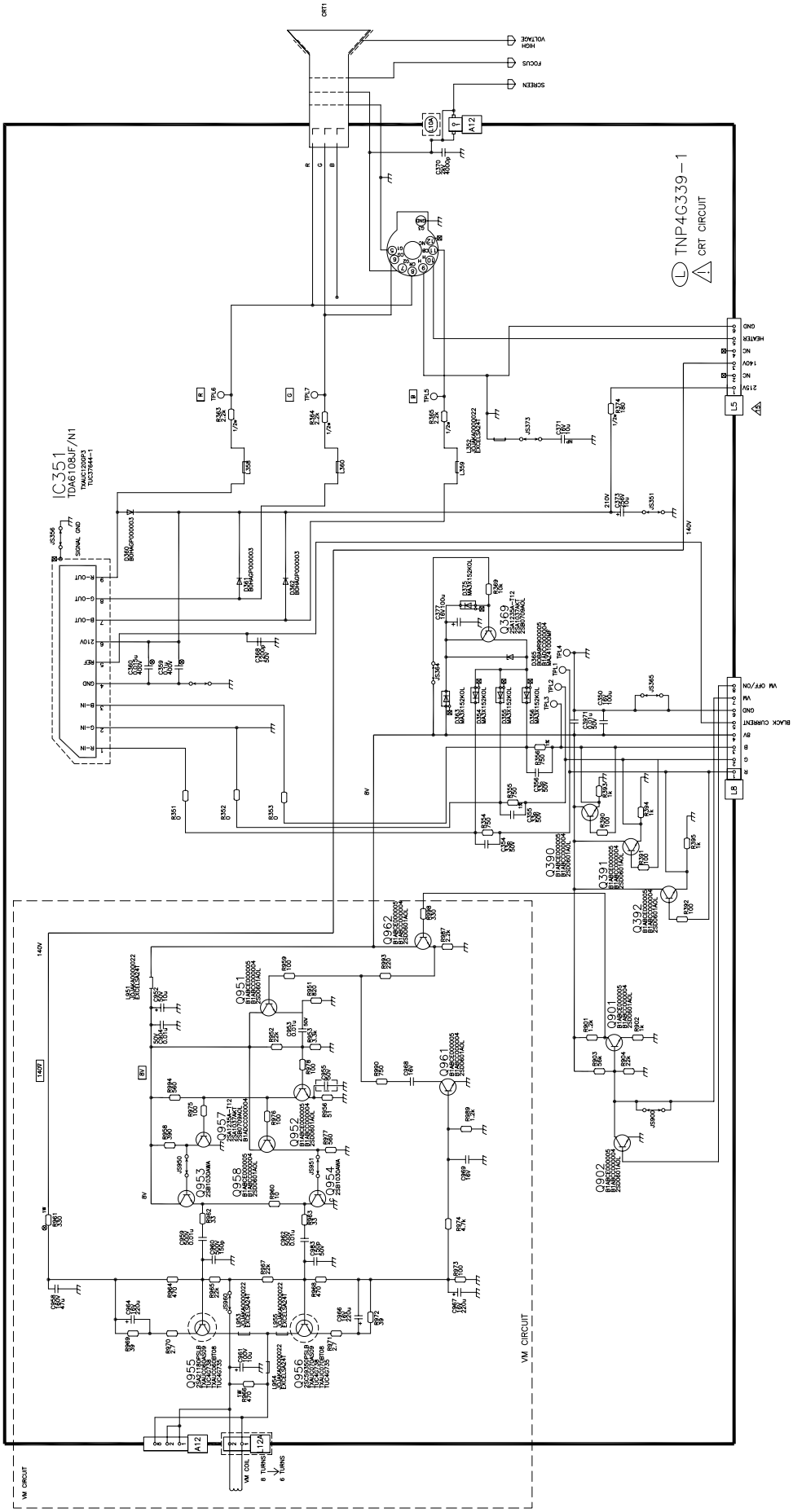
As medições foram efetuadas em modo POWER ON, com tensão de rede de 127V 60Hz e sinal Padrão de Barras Coloridas.

ORDEM DCS - DEZ2004 - 001 - MS

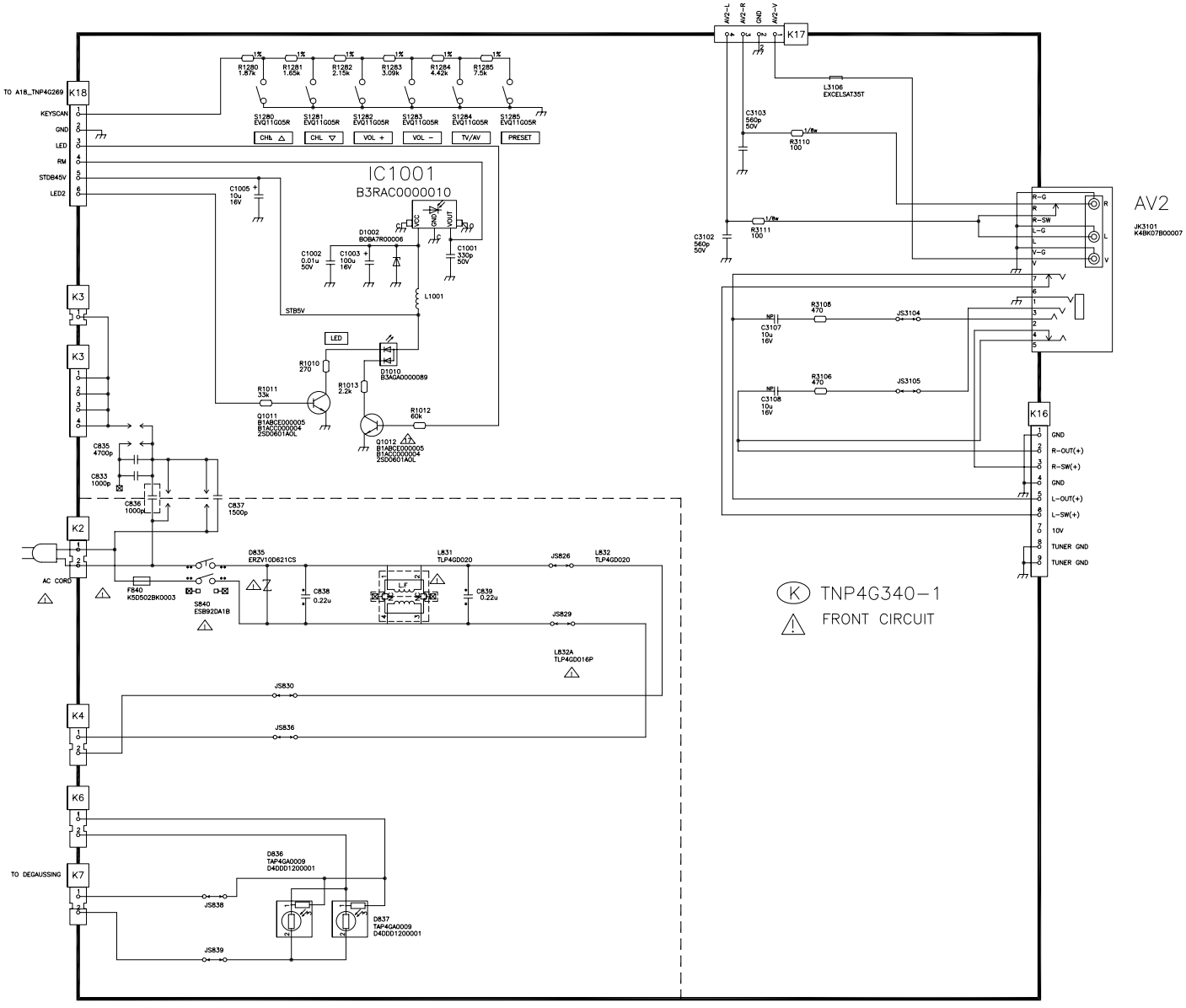
Panasonic

■ SCHEMATICS DIAGRAMS

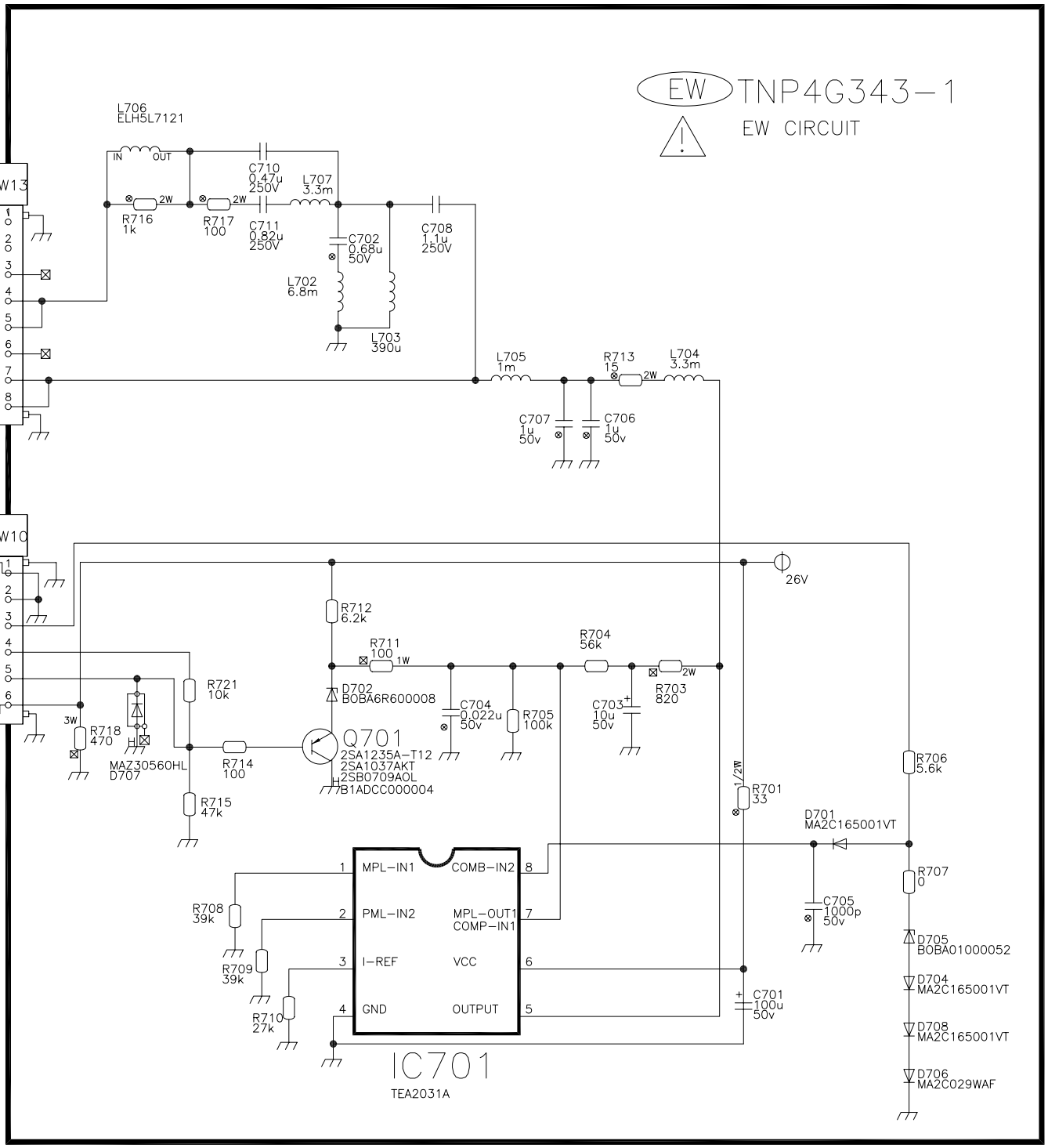
■ "L" P.C.B. SCHEMATIC DIAGRAM



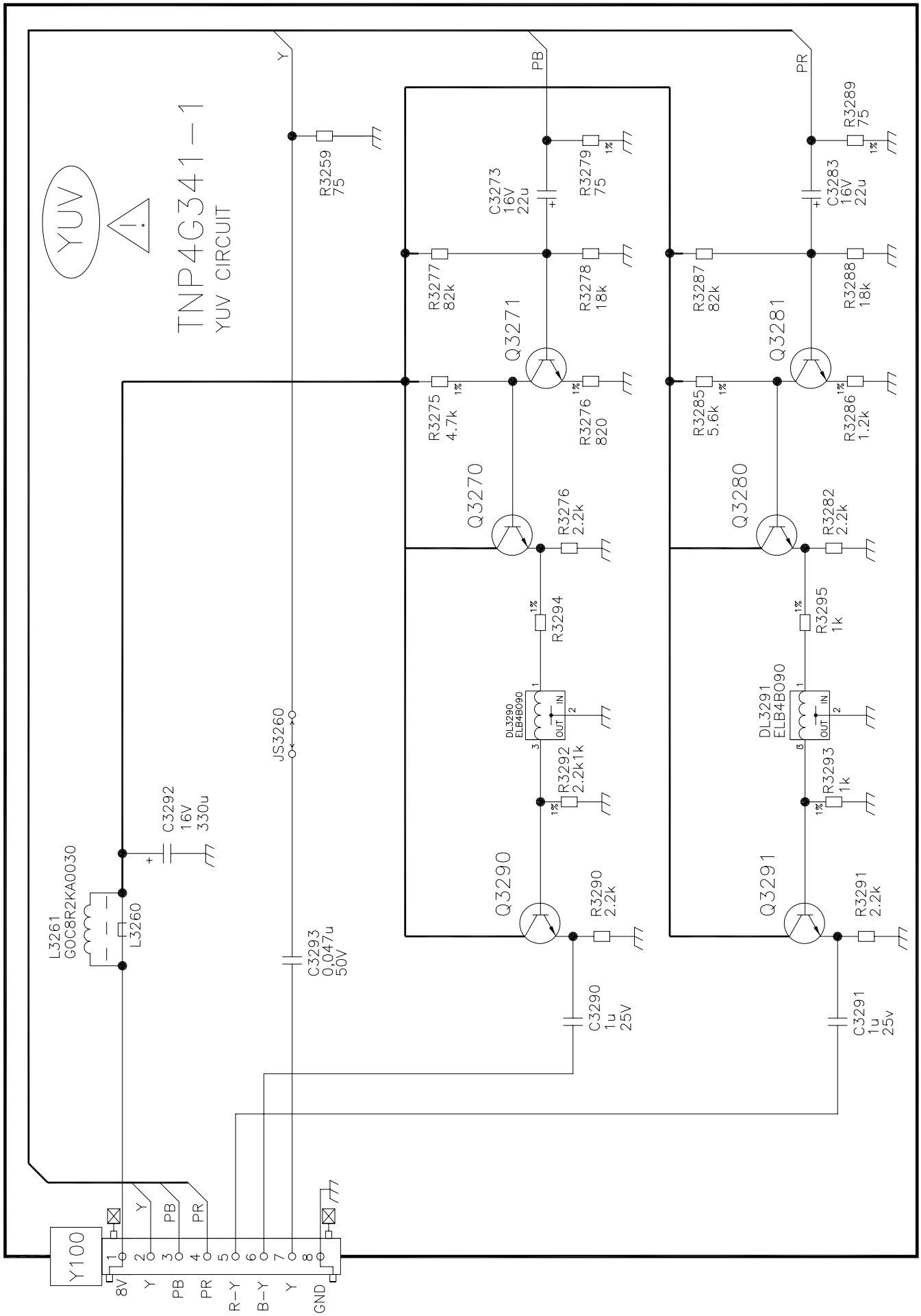
■ “K” P.C.B. SCHEMATIC DIAGRAM



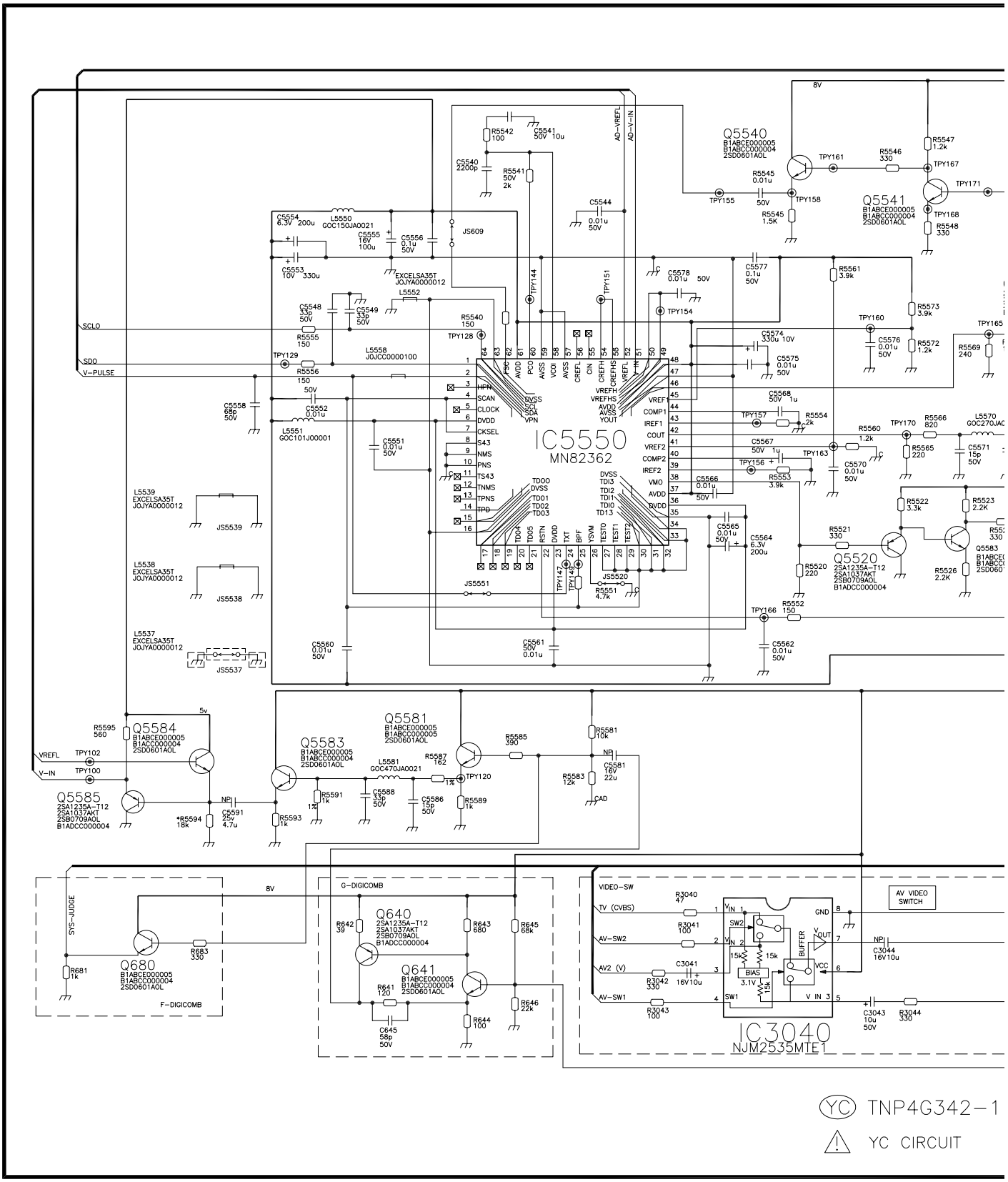
■ “EW” P.C.B. SCHEMATIC DIAGRAM



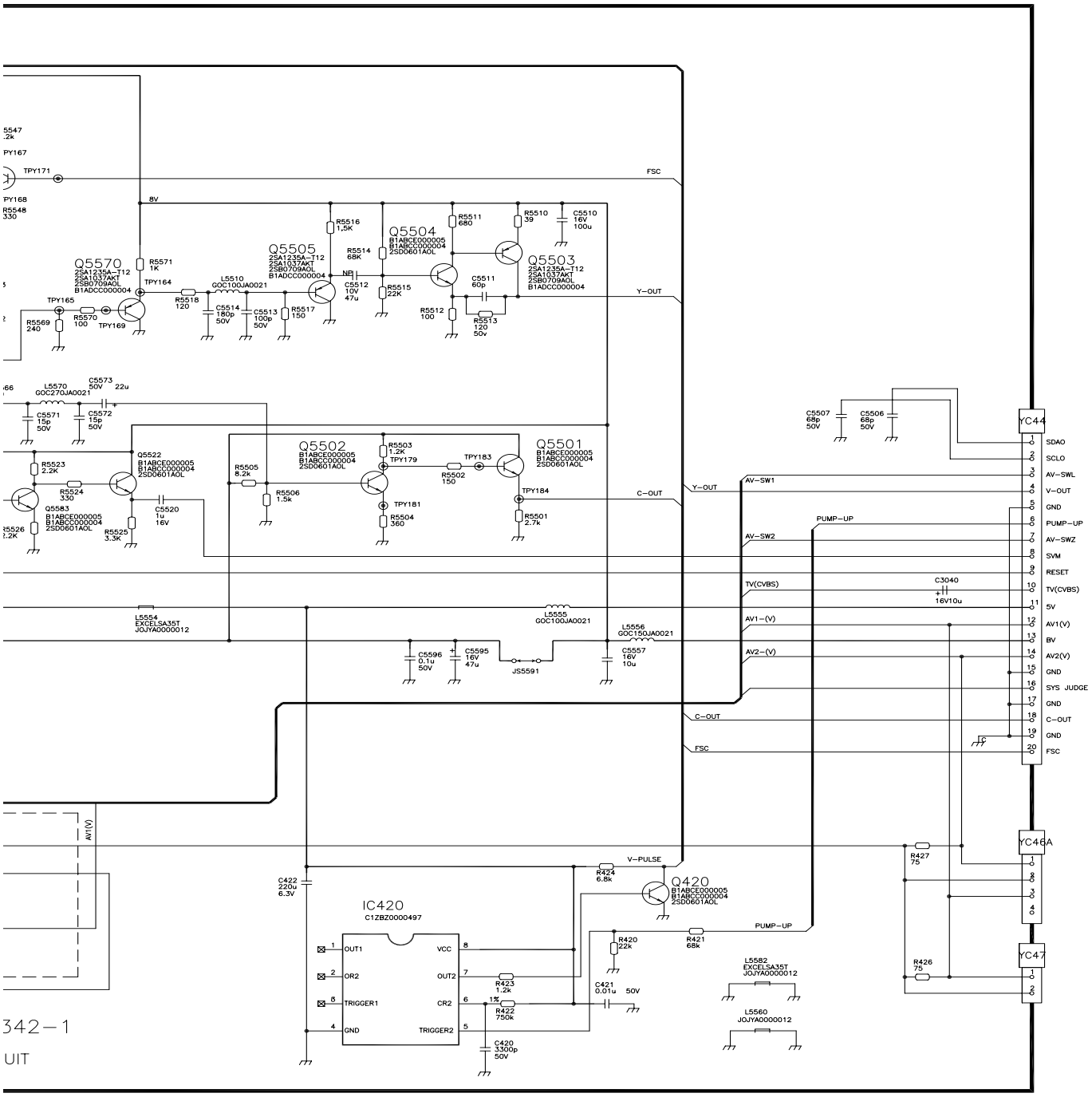
■ “YUV” P.C.B. SCHEMATIC DIAGRAM



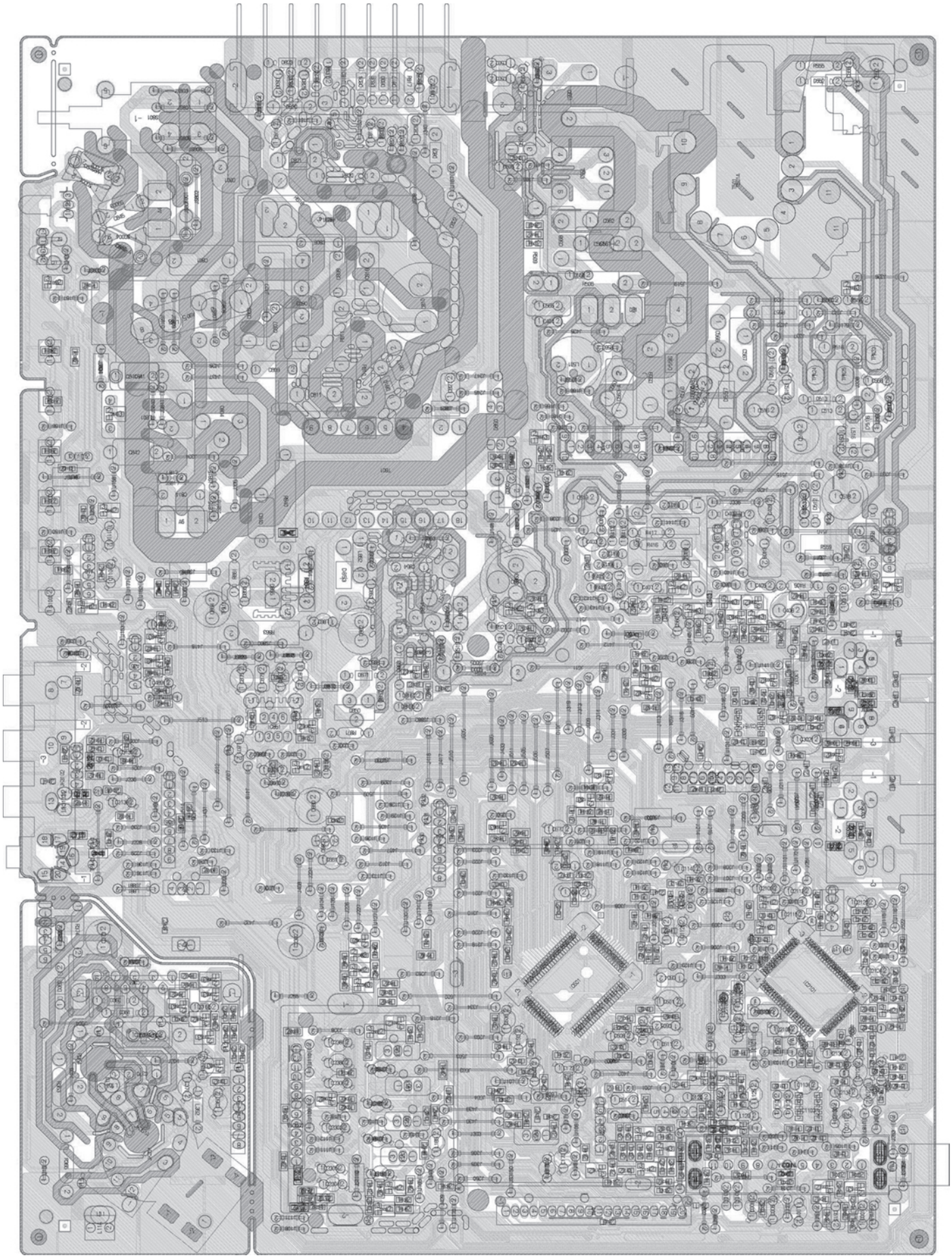
■ “YC” P.C.B. SCHEMATIC DIAGRAM - (COMB FILTER) 1/2



■ “YC” P.C.B. SCHEMATIC DIAGRAM - (COMB FILTER) 2/2



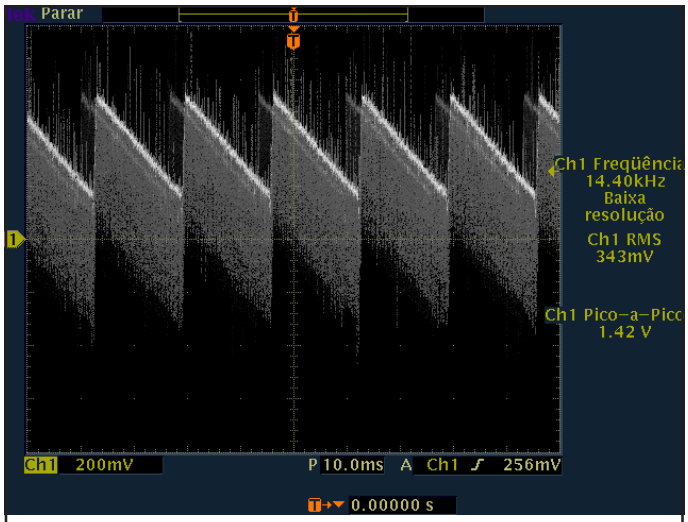
■ MAIN BOARD CIRCUIT LAYOUT



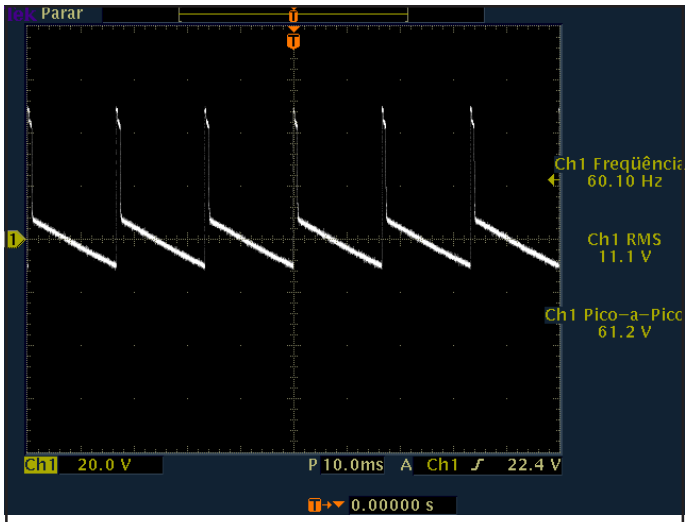
■ SIGNAL WAVEFORM

• All waveforms were obtained using 127V 60Hz power source and Color Bars Pattern (Model: TC-20KL04)

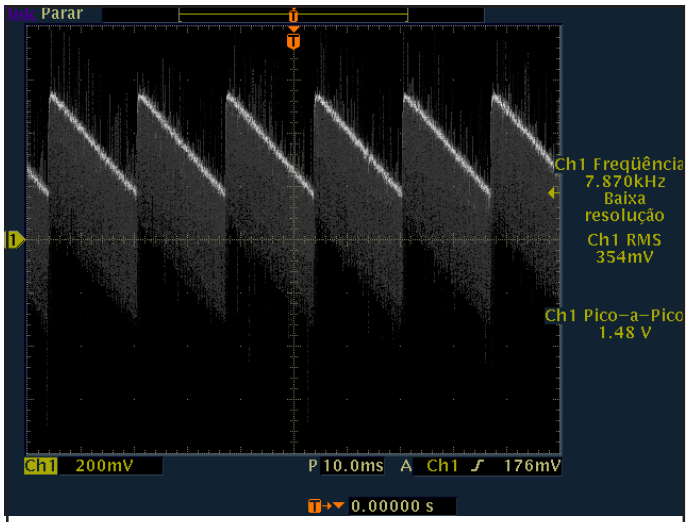
IC451



Pino 1

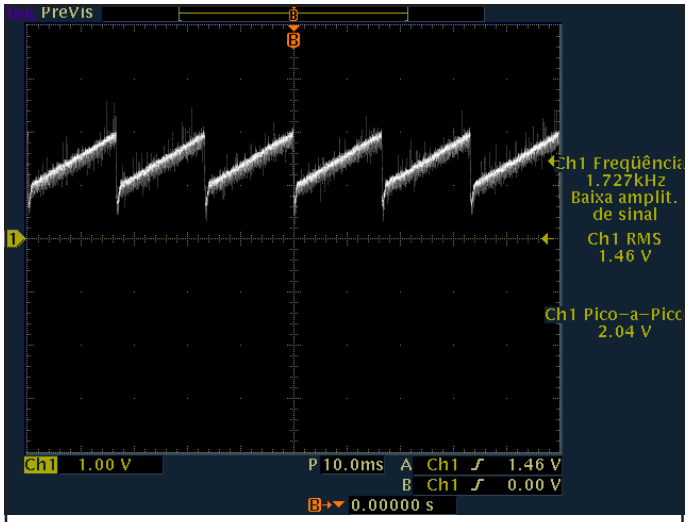


Pino 5

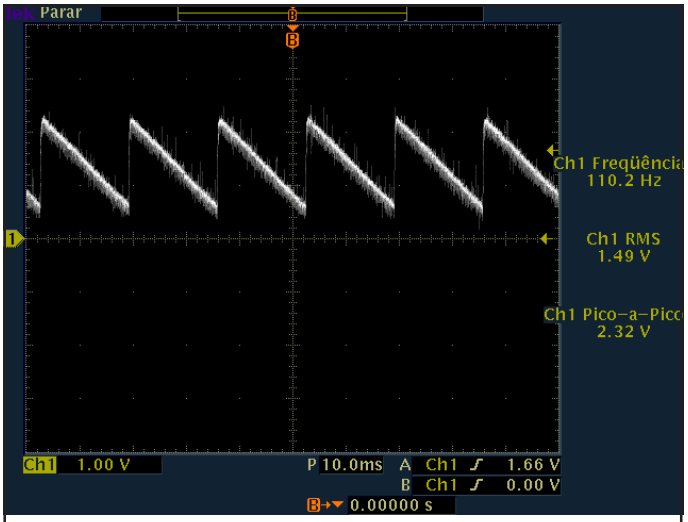


Pino 7

IC601

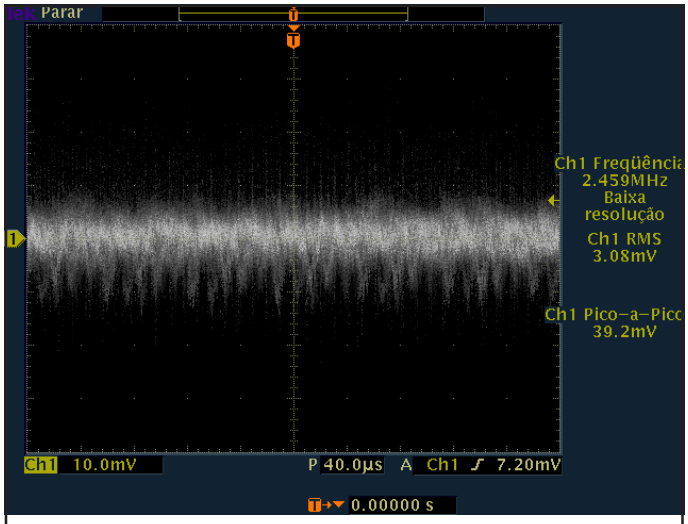


Pino 16

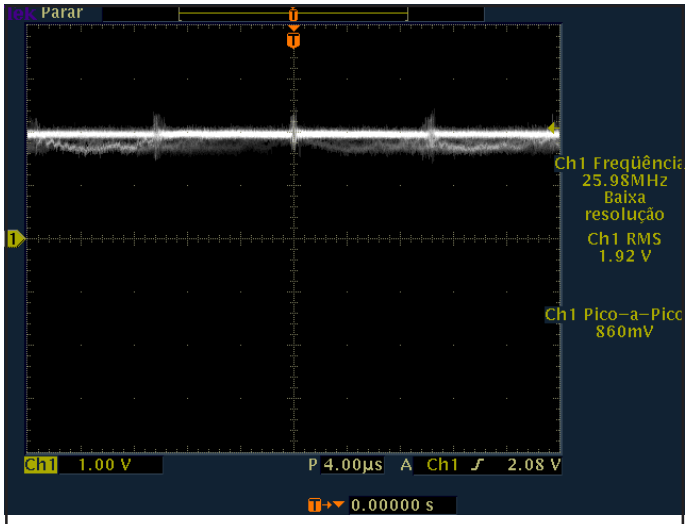


Pino 17

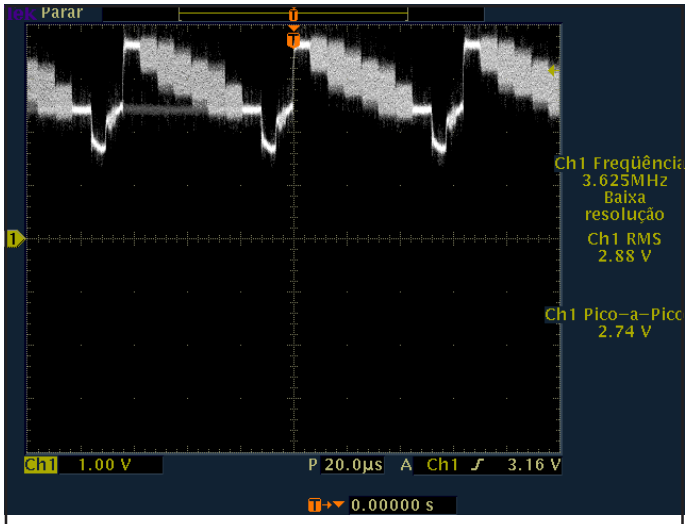
IC601



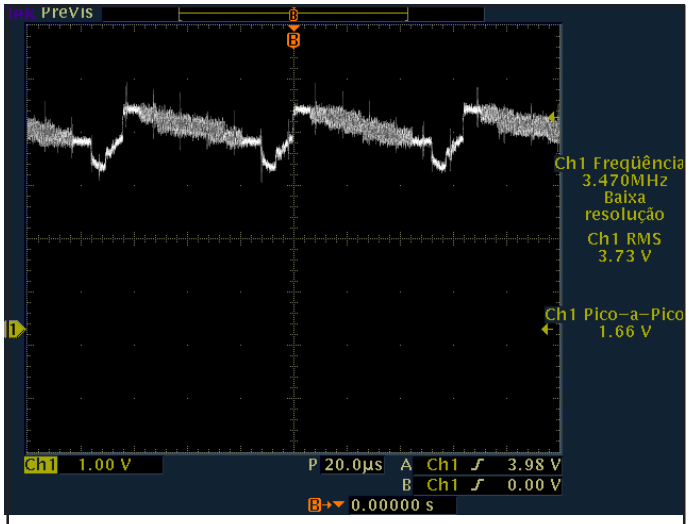
Pino 18



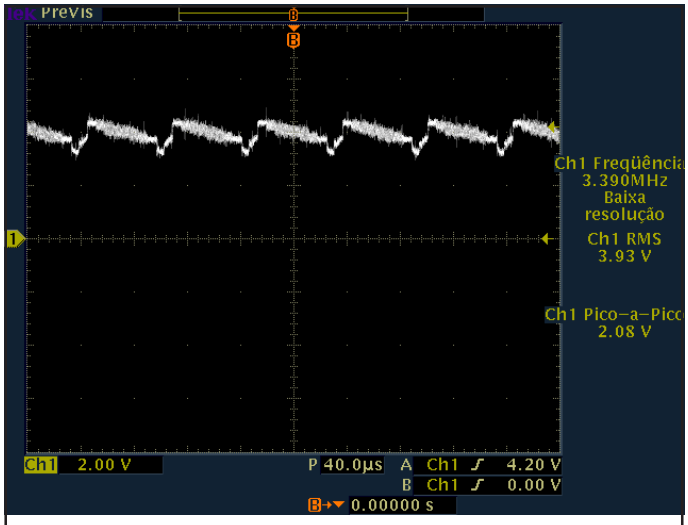
Pino 19



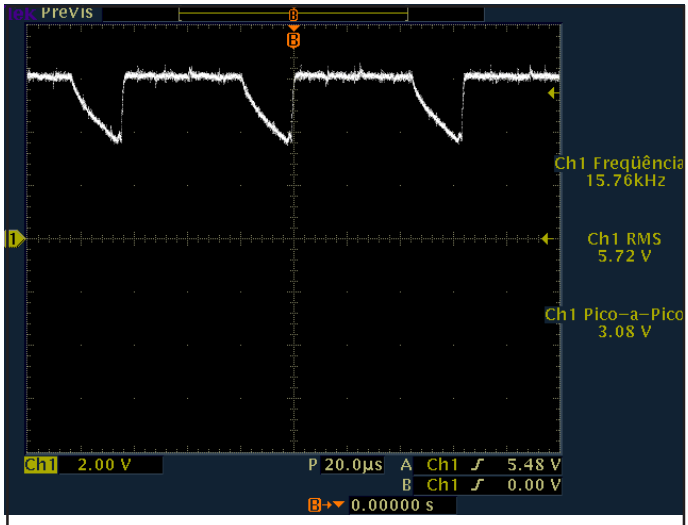
Pino 38



Pino 40

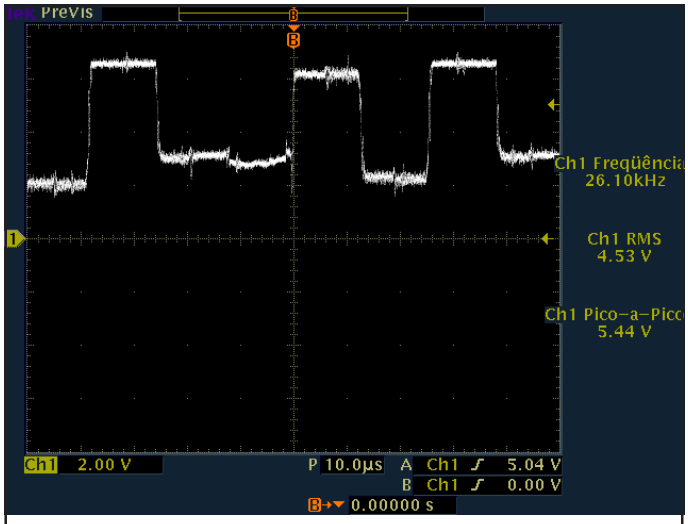


Pino 42

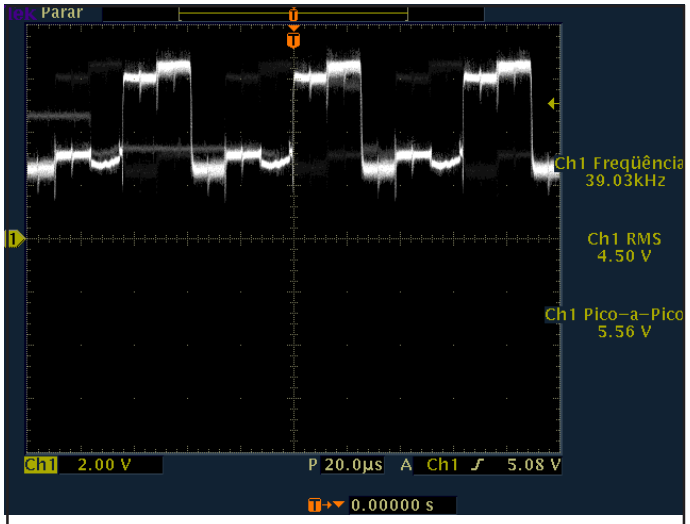


Pino 55

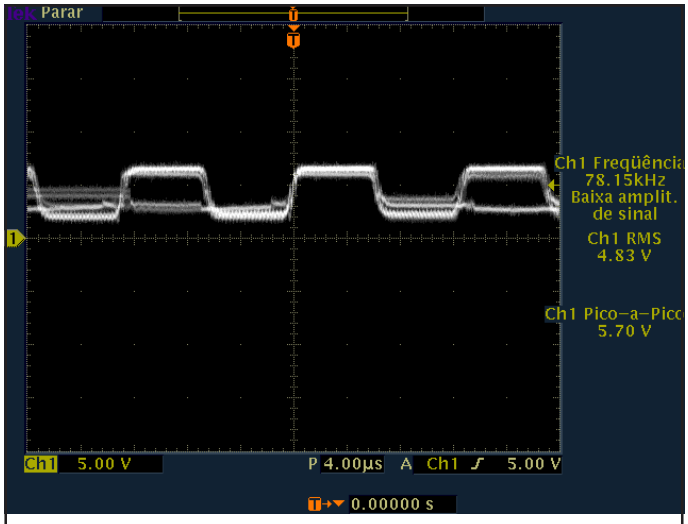
IC601



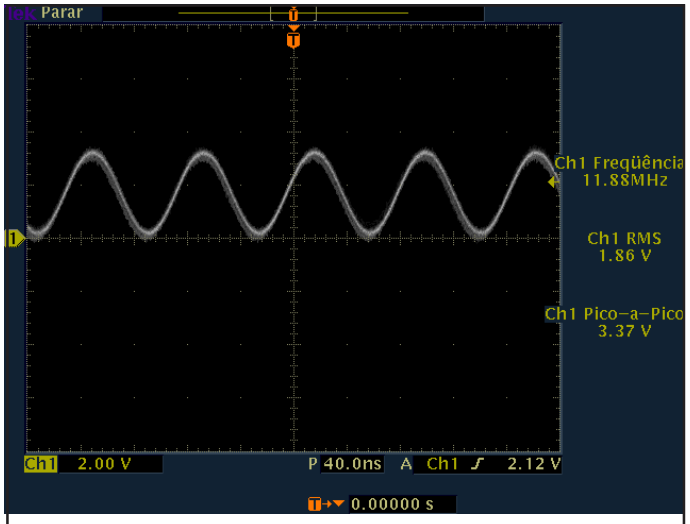
Pino 56



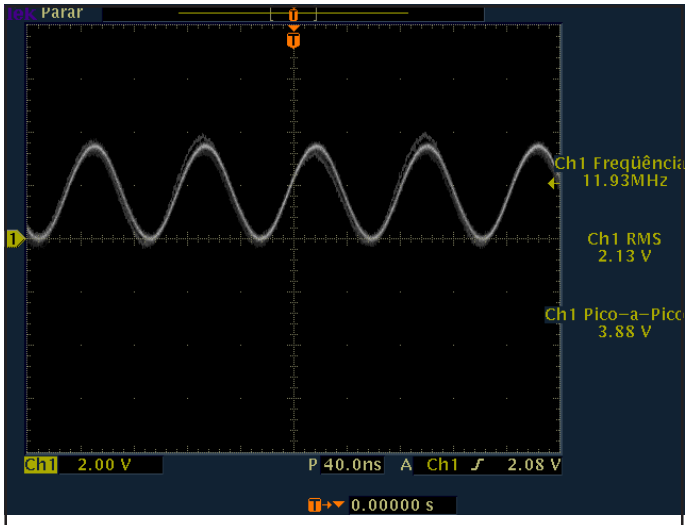
Pino 57



Pino 58

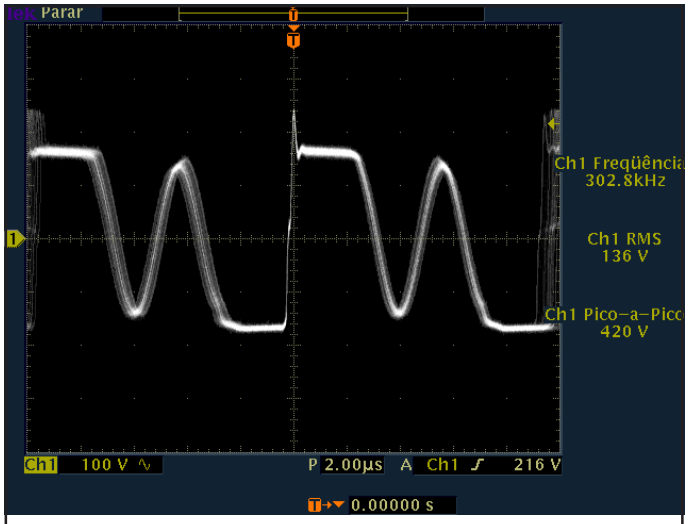


Pino 63



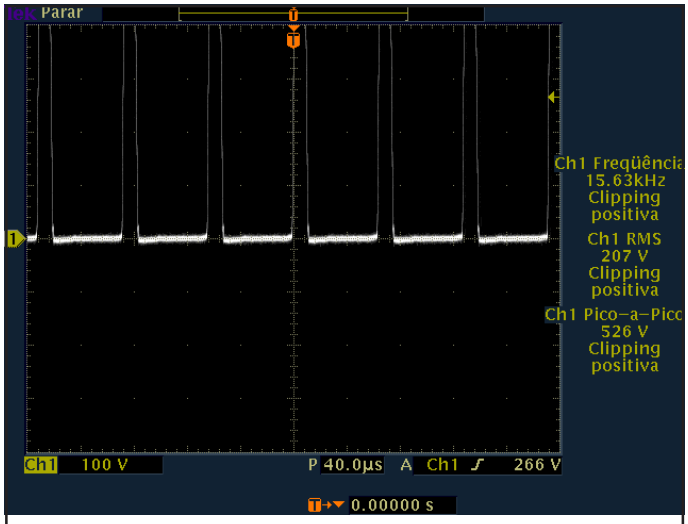
Pino 64

IC801



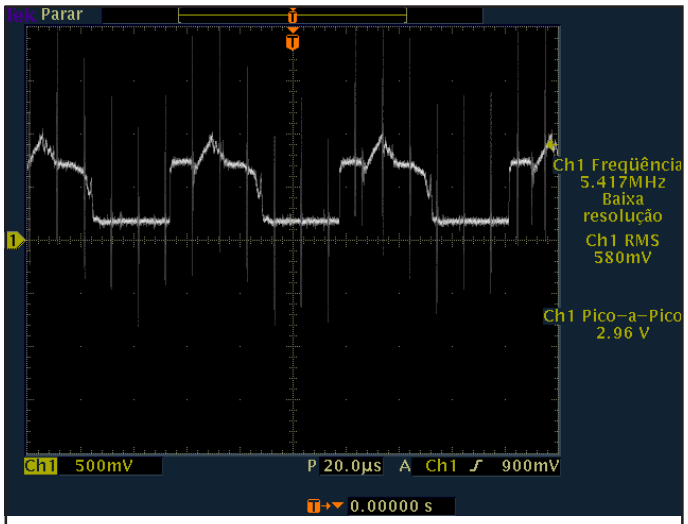
Pino 1

Q551

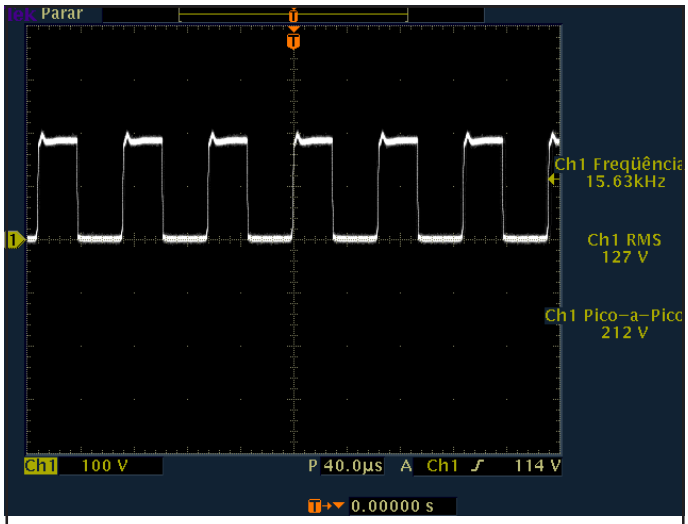


Coletor

Q501

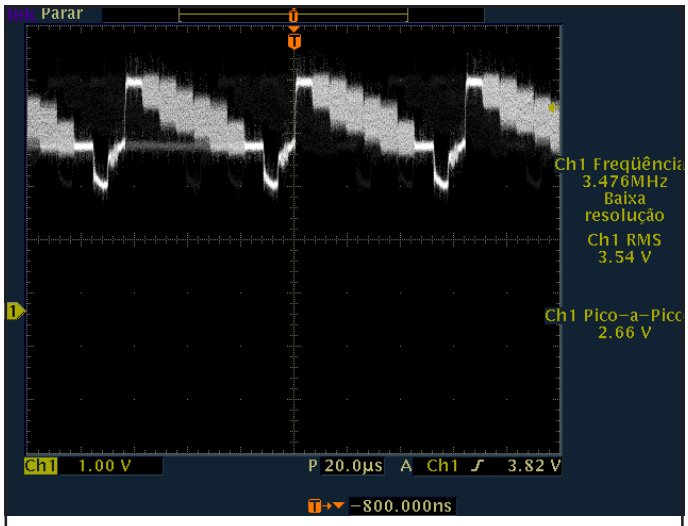


Base



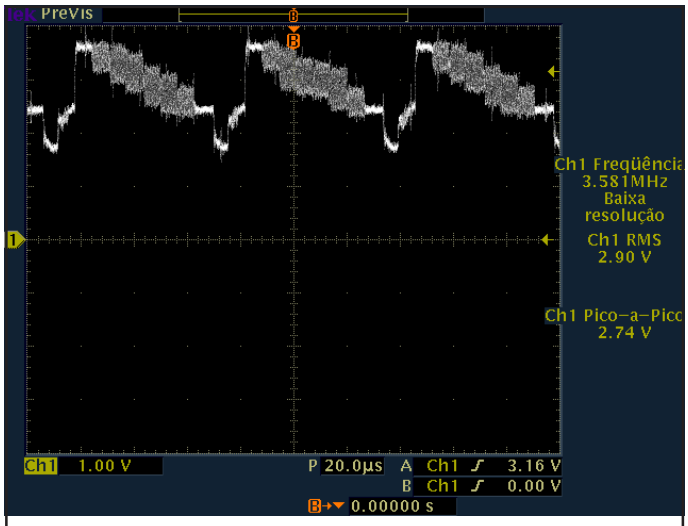
Coletor

Q601



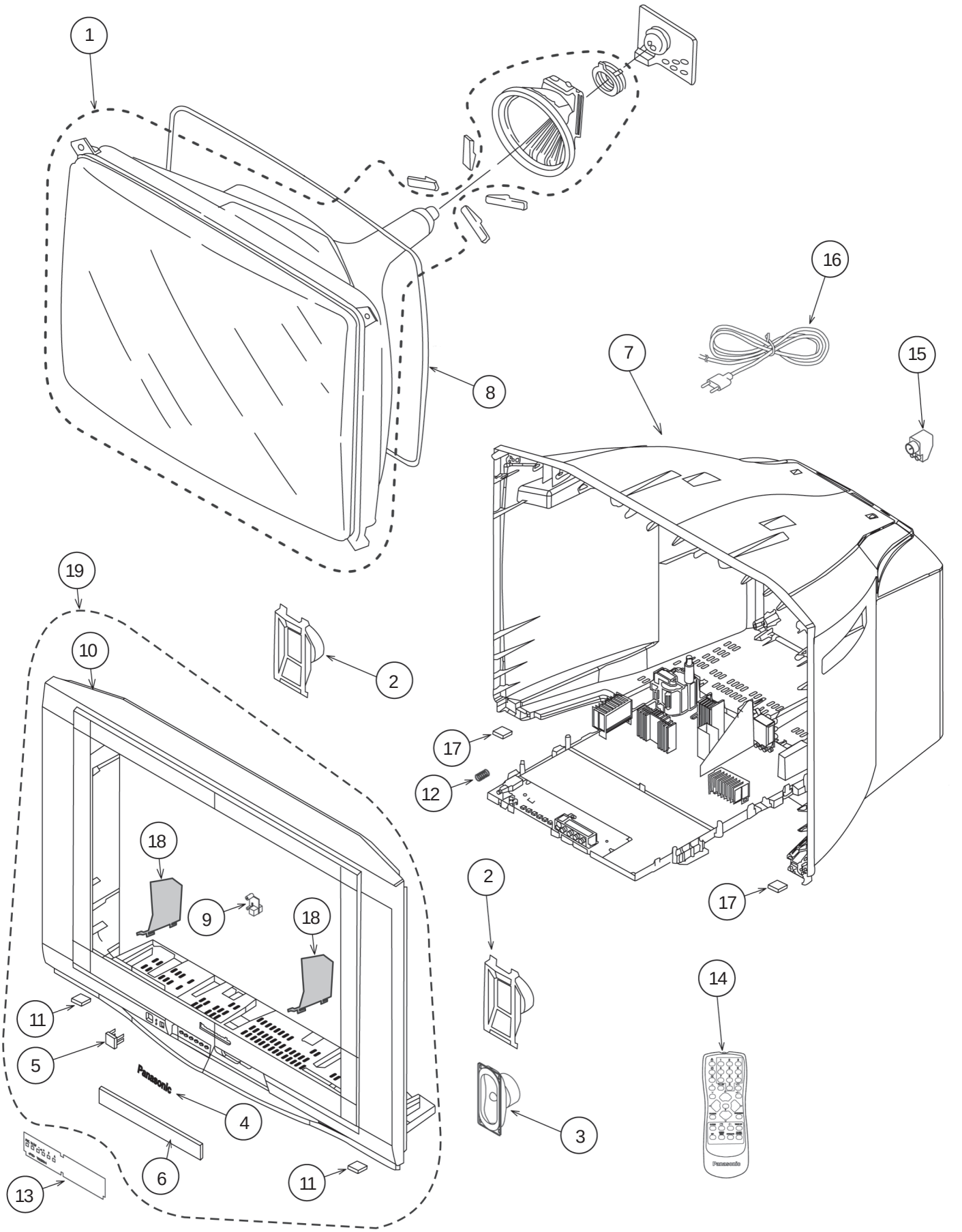
Emissor

Q602



Coletor

■ EXPLODED VIEW



■ REPLACEMENT MECHANICAL PARTS LIST

Ref. No.	Part No.	Part Name & Description
1	A68QCP693X001	PICTURE TUBE 29" (FLAT MSAMSUNG)
2	TKK4G8597	SPEAKER SUPPORT
3	EASG15S02H2	SPEAKER
4	TBM4G3013	PANASONIC LOGO
5	TBX4G90100	POWER BUTTON
6	TKP4G13030	CONTROL PANEL DOOR
7	TKU2B22802	REAR COVER
8	TLK4G9081X	DEGAUSSING COIL
9	TKP4G13062	LED GUIDE
10	TKY2B2301-1	FRONTAL CABINET
11	TBL4G3403	LEG CUSHION
12	TES4G214	POWER BUTTON SPRING
13	TBM2B052-1	CONTROL PANEL
14	TNQ2B3302	REMOTE CONTROL
15	S-U5012	ADAPTOR BALLUM 300Ω
16	TSX2BA02A	AC CABLE
17	TBL4G3401	LEG CUSHION (REAR COVER)
18	TKX4G2302	CRT SUPPORT
19	TXPTKY2B2301-1	FRONTAL CABINET ASS´Y

■ REPLACEMENT ELECTRICAL PARTS LIST

Ref. No.	Part No.	Part Name & Description
FULLY ASSEMBLED BOARDS		
“A”+“L”	PA29FJ30LAMON	“A”+“L” P.C.B. ASS´Y
“YUV”	PYUV20KM04MON	“YUC” P.C.B. ASS´Y
“K”	PK29FJ30LMON	“K” P.C.B. ASS´Y
“EW”	PEW29FJ30LMON	“EW” P.C.B. ASS´Y
“YC”	PYC29FJ30LMON	“YC” P.C.B. ASS´Y
CAPACITORS		
C001	ECEA1CKA220B	ELECTROLYTICAL CAP. 22,00 µF 16,0 V
C002	ECJ2VF1H103Z	CERAMIC CAP. 10,00 nF 50,0 V
C003	ECJ2VF1H103Z	CERAMIC CAP. 10,00 nF 50,0 V
C005	ECJ2VF1H104Z	CERAMIC CAP. 100,00 nF 50,0 V
C006	F2A1A331A161	ELECTROLYTICAL CAP. 330,00 µF 10,0 V
C008	ECEA1HKA010B	ELECTROLYTICAL CAP. 1,00 µF 50,0 V
C170	F2A1C101A180	ELECTROLYTICAL CAP. 100,00 µF 16,0 V
C180	ECJ2VC1H151J	CERAMIC CAP. 150,00 PF 50,0 V
C191	ECJ2YB1H104K	CERAMIC CAP. 100,00 nF 50,0 V
C193	F2A1C100A180	ELECTROLYTICAL CAP. 10,00 µF 16,0 V
C350	F2A1C101A180	ELECTROLYTICAL CAP. 100,00 µF 16,0 V
C354	ECJ2VC1H330J	CERAMIC CAP. 33,00 PF 50,0 V
C355	ECJ2VC1H330J	CERAMIC CAP. 33,00 PF 50,0 V
C356	ECJ2VC1H330J	CERAMIC CAP. 33,00 PF 50,0 V
C359	ECQM4104KZB	POLYESTER CAP. 100,00 nF 400,0 V
C360	ECQM4153JZW	POLYESTER CAP. 15,00 nF 400,0 V
C368	F1B1H122A131	CERAMIC CAP. 1.200,00 PF 50,0 V
C370	ECKW3D102KBP	CERAMIC CAP. 1,00 nF 2.000,0 V
C371	ECEA1CN100UB	ELECTROLYTICAL CAP. 10,00 µF 16,0 V
C373	F2A2E1000011	ELECTROLYTICAL CAP. 10,00 µF 250,0 V
C377	F2A1C101A180	ELECTROLYTICAL CAP. 100,00 µF 16,0 V
C402	F2A1H330A182	ELECTROLYTICAL CAP. 33,00 µF 50,0 V
C404	ECQB1103JF3	POLYESTER CAP. 0,01 µF 100,0 V
C406	ECA1HHG221B	ELECTROLYTICAL CAP. 220,00 µF 50,0 V
C408	ECQB1274JF3	POLYESTER CAP. 270,00 nF 100,0 V
C420	ECJ2VB1H332K	CERAMIC CAP. 3,30 nF 50,0 V
C421	ECJ2VF1H103Z	CERAMIC CAP. 10,00 nF 50,0 V
C422	ECEA0JKA221B	ELECTROLYTICAL CAP. 220,00 µF 6,3 V
C502	F1B2H152A023	CERAMIC CAP. 1.500,00 PF 500,0 V
C503	F1B2H152A023	CERAMIC CAP. 1.500,00 PF 500,0 V
C504	ECJ2VB1H681K	CERAMIC CAP. 680,00 PF 50,0 V
C506	F1A2H1000002	CERAMIC CAP. 10,00 PF 500,0 V 0,50 PF
C511	F2A1V1010038	ELECTROLYTICAL CAP. 100,00 µF 35,0 V
C513	ECKW3D331JBP	CERAMIC CAP. 330,00 PF 2.000,0 V
C514	F2A1E102A151	ELECTROLYTICAL CAP. 1.000,00 µF 25,0 V
C515	F1B2H331A025	CERAMIC CAP. 330,00 PF 500,0 V
C516	F2A1E102A151	ELECTROLYTICAL CAP. 1.000,00 µF 25,0 V
C517	F1B2H471A025	CERAMIC CAP. 470,00 PF 500,0 V
C518	F2A1V102A188	ELECTROLYTICAL CAP. 1.000,00 µF 35,0 V
C519	F2A2C330A020	ELECTROLYTICAL CAP. 33,00 µF 160,0 V
C520	F2A0J470A181	ELECTROLYTICAL CAP. 47,00 µF 6,3 V
C552	F2A2E1000011	ELECTROLYTICAL CAP. 10,00 µF 250,0 V
C553	ECEA2CNR47SB	ELECTROLYTICAL CAP. 0,47 µF 160,0 V
C555	F1B2H471A025	CERAMIC CAP. 470,00 PF 500,0 V
C558	ECEA2CNR47SB	ELECTROLYTICAL CAP. 0,47 µF 160,0 V
C560	ECQM4393JZW	POLYESTER CAP. 39,00 nF 400,0 V
C561	ECWH20202JVY	CAP. POLIPROPILENO 2.000,00 PF 2.000,0 V
C562	ERD25T0V	JUMPER 0,00 Ohm
C564	ECQM4333JZ	POLYESTER CAP. 33,00 nF 400,0 V
C565	ECQP1223JZ3	CAP. POLIPROPILENO 22,00 nF 100,0 V
C568	ECKW3D102JBR	CERAMIC CAP. 1.000,00 PF 2.000,0 V
C570	ECJ2VC1H560J	CERAMIC CAP. 56,00 PF 50,0 V
C580	F2A1H220A182	ELECTROLYTICAL CAP. 22,00 µF 50,0 V
C581	ECQV1H105JL3	POLYESTER CAP. 1,00 µF 50,0 V
C601	ECEA1CKA101B	ELECTROLYTICAL CAP. 100,00 µF 16,0 V
C602	ECJ2YB1H104K	CERAMIC CAP. 100,00 nF 50,0 V
C603	ECJ2VC1H152J	CERAMIC CAP. 1,50 nF 50,0 V
C604	ECQV1H224JL3	POLYESTER CAP. 220,00 nF 50,0 V
C605	ECQV1H224JL3	POLYESTER CAP. 220,00 nF 50,0 V
C606	ECJ2VB1H332K	CERAMIC CAP. 3,30 nF 50,0 V
C607	ECEA1HKA010B	ELECTROLYTICAL CAP. 1,00 µF 50,0 V
C608	ECEA1HKA100B	ELECTROLYTICAL CAP. 10,00 µF 50,0 V
C609	ECJ2YB1H104K	CERAMIC CAP. 100,00 nF 50,0 V
C610	ECJ2VB1H103J	CERAMIC CAP. 10,00 nF 50,0 V
C611	ECQV1H683JL3	POLYESTER CAP. 68,00 nF 50,0 V
C612	ECJ2VB1H472K	CERAMIC CAP. 4.700,00 PF 50,0 V
C613	ECJ2VB1H472K	CERAMIC CAP. 4.700,00 PF 50,0 V
C614	ECQV1H104JL3	POLYESTER CAP. 100,00 nF 50,0 V
C615	ECQV1H224JL3	POLYESTER CAP. 220,00 nF 50,0 V
C619	ECQV1H104JL3	POLYESTER CAP. 100,00 nF 50,0 V
C620	ECJ2VC1H470J	CERAMIC CAP. 47,00 PF 50,0 V
C621	ECJ2ZF1C105Z	CERAMIC CAP. 1,00 µF 16,0 V
C622	ECJ2VF1H104Z	CERAMIC CAP. 100,00 nF 50,0 V
C623	ECJ2VC1H470J	CERAMIC CAP. 47,00 PF 50,0 V
C625	ECEA0JN221UB	ELECTROLYTICAL CAP. 220,00 µF 6,3 V
C628	ECJ2YB1H473K	CERAMIC CAP. 47,00 nF 50,0 V
C633	ECJ2VF1C105Z	CERAMIC CAP. 1,00 µF 16,0 V
C636	F2A1A471A161	ELECTROLYTICAL CAP. 470,00 µF 10,0 V
C640	F2A1C100A180	ELECTROLYTICAL CAP. 10,00 µF 16,0 V
C641	ECJ2VC1H100C	CERAMIC CAP. 10,00 PF 50,0 V
C645	ECJ2VC1H680J	CERAMIC CAP. 68,00 PF 50,0 V
C670	F2A1C100A180	ELECTROLYTICAL CAP. 10,00 µF 16,0 V
C680	ECJ2YB1H473K	CERAMIC CAP. 47,00 nF 50,0 V
C685	ECJ2VC1H101K	CERAMIC CAP. 100,00 PF 50,0 V
C686	ECJ2VF1H224Z	CERAMIC CAP. 220,00 nF 50,0 V
C687	ECJ2VF1H104Z	CERAMIC CAP. 100,00 nF 50,0 V
C688	ECJ2VF1H102Z	CERAMIC CAP. 1.000,00 PF 50,0 V
C689	ECJ2VF1H104Z	CERAMIC CAP. 100,00 nF 50,0 V
C701	ECA1HHG101B	ELECTROLYTICAL CAP. 100,00 µF 50,0 V
C702	ECQV1H684JL3	POLYESTER CAP. 680,00 nF 50,0 V
C703	ECEA1HGE100B	ELECTROLYTICAL CAP. 10,00 µF 50,0 V
C704	ECQB1H223JF3	POLYESTER CAP. 22,00 nF 50,0 V
C705	ECQB1H102KF3	POLYESTER CAP. 1,00 nF 50,0 V
C706	ECQV1H105JL3	POLYESTER CAP. 1,00 µF 50,0 V
C707	ECQV1H105JL3	POLYESTER CAP. 1,00 µF 50,0 V
C708	F0C2E115A041	POLYPROPILENE CAP. 1,10 µF 250,0 V
C710	F0C2E4740001	POLYPROPILENE CAP. 470,00 nF 250,0 V
C711	ECQE2824KFB	POLYESTER CAP. 820,00 nF 250,0 V
C802	ECQU2A224BN9	POLYPROPILENE CAP. 220,00 nF 100,0 V
C806	ECKWAE472ZED	CERAMIC CAP. 4,70 nF 250,0 V
C807	ECKWAE472ZED	CERAMIC CAP. 4,70 nF 250,0 V
C808	ECKWAE472ZED	CERAMIC CAP. 4,70 nF 250,0 V
C809	ECKWAE472ZED	CERAMIC CAP. 4,70 nF 250,0 V
C810	F2B2G4710006	ELECTROLYTICAL CAP. 470,00 µF 400,0 V
C811	ECQM4473JZW	POLYESTER CAP. 47,00 nF 400,0 V
C813	ECKW3D681KBP	CERAMIC CAP. 680,00 PF 2.000,0 V
C816	F2A1H330A115	ELECTROLYTICAL CAP. 33,00 µF 50,0 V
C817	ECKW3D221JBR	CERAMIC CAP. 220,00 PF 2.000,0 V
C818	ECKW3D331JBP	CERAMIC CAP. 330,00 PF 2.000,0 V
C819	ECEA1HKA010B	ELECTROLYTICAL CAP. 1,00 µF 50,0 V
C821	ECKW3D331JBR	CERAMIC CAP. 330,00 PF 2.000,0 V
C822	ECKW3D331JBR	CERAMIC CAP. 330,00 PF 2.000,0 V
C825	ECQB1H471JF3	POLYESTER CAP. 470,00 PF 50,0 V
C826	F0A1H103A039	CAP. POLIPROPILENO 0,01 µF 50,0 V
C827	ECQB1H683JF3	POLYESTER CAP. 68,00 PF 50,0 V
C830	ECQB1H182JF3	POLYESTER CAP. 1,80 nF 50,0 V
C833	ECKCNA102MB7	CERAMIC CAP. 1,00 nF 4.000,0 V
C835	ECKCNA472ME7	CERAMIC CAP. 4,70 nF 4.000,0 V
C837	ECKCNA152ME7	CERAMIC CAP. 1,50 nF 4.000,0 V
C838	ECQU2A224BN9	POLYPROPILENE CAP. 220,00 nF 100,0 V
C839	ECQU2A224BN9	POLYPROPILENE CAP. 220,00 nF 100,0 V
C840	ECKCNA471MB7	CERAMIC CAP. 470,00 PF 440,0 V
C841	ECKCNA471MB7	CERAMIC CAP. 470,00 PF 440,0 V
C842	ECKCNA102MB7	CERAMIC CAP. 1,00 nF 4.000,0 V
C850	ECJ2VF1H224Z	CERAMIC CAP. 220,00 nF 50,0 V
C853	F1B2H561A025	CERAMIC CAP. 560,00 PF 500,0 V
C855	F1B2H331A025	CERAMIC CAP. 330,00 PF 500,0 V
C862	ECA1CHG332E	ELECTROLYTICAL CAP. 3.300,00 µF 16,0 V
C864	F2A1C222A117	ELECTROLYTICAL CAP. 2.200,00 µF 16,0 V
C867	F2B2C2710002	ELECTROLYTICAL CAP. 270,00 µF 160,0 V
C873	F2A1C101A244	ELECTROLYTICAL CAP. 100,00 µF 16,0 V
C874	ECJ2VF1H104Z	CERAMIC CAP. 100,00 nF 50,0 V
C876	F2A1C101A180	ELECTROLYTICAL CAP. 100,00 µF 16,0 V
C877	F2A1C471A245	ELECTROLYTICAL CAP. 470,00 µF 16,0 V
C880	F2A1C1020049	ELECTROLYTICAL CAP. 1.000,00 µF 16,0 V
C881	F2A1C101A180	ELECTROLYTICAL CAP. 100,00 µF 16,0 V
C882	ECJ2VF1H104Z	CERAMIC CAP. 100,00 nF 50,0 V
C883	ECJ2VF1H104Z	CERAMIC CAP. 100,00 nF 50,0 V
C884	F2A1A471A161	ELECTROLYTICAL CAP. 470,00 µF 10,0 V

Ref. No.	Part No.	Part Name & Description
C890	ECQB1H223JF3	POLYESTER CAP. 22,00 nF 50,0 V
C892	ECQB1H473JF3	POLYESTER CAP. 47,00 nF 50,0 V
C904	ECJ2VB1H103J	CERAMIC CAP. 10,00 nF 50,0 V
C952	ECA1HMH100B	ELECTROLYTICAL CAP. 10,00 µF 50,0 V
C953	ECJ2VF1H103Z	CERAMIC CAP. 10,00 nF 50,0 V
C958	F2A2C470A030	ELECTROLYTICAL CAP. 47,00 µF 160,0 V
C959	F1B2H1030013	CERAMIC CAP. 10,00 nF 500,0 V
C960	F1A2H151A035	CERAMIC CAP. 150,00 PF 500,0 V
C961	F2A2A1000016	ELECTROLYTICAL CAP. 10,00 µF 100,0 V
C962	F1B2H1030013	CERAMIC CAP. 10,00 nF 500,0 V
C963	F1A1H151A054	CERAMIC CAP. 150,00 PF 50,0 V
C964	ECA1CMH221B	ELECTROLYTICAL CAP. 220,00 µF 16,0 V
C966	ECA1CMH221B	ELECTROLYTICAL CAP. 220,00 µF 16,0 V
C967	F2A1C2210044	ELECTROLYTICAL CAP. 220,00 µF 16,0 V
C968	ECJ2VF1C105Z	CERAMIC CAP. 1,00 µF 16,0 V
C969	ECJ2VF1C105Z	CERAMIC CAP. 1,00 µF 16,0 V
C971	ECJ2VF1H103Z	CERAMIC CAP. 10,00 nF 50,0 V
C1001	ECJ2VC1H331J	CERAMIC CAP. 330,00 PF 50,0 V
C1002	ECJ2VF1H103Z	CERAMIC CAP. 10,00 nF 50,0 V
C1003	F2A1C101A180	ELECTROLYTICAL CAP. 100,00 µF 16,0 V
C1005	F2A1C100A180	ELECTROLYTICAL CAP. 10,00 µF 16,0 V
C1101	ECJ2VF1H103Z	CERAMIC CAP. 10,00 nF 50,0 V
C1111	ECJ2VF1C105Z	CERAMIC CAP. 1,00 µF 16,0 V
C1125	ECEA1EKS4R7B	ELECTROLYTICAL CAP. 4,70 µF 25,0 V
C1130	ECJ2VC1H560J	CERAMIC CAP. 56,00 PF 50,0 V
C1131	F2A0J221A181	ELECTROLYTICAL CAP. 220,00 µF 6,3 V
C1132	ECJ2VC1H560J	CERAMIC CAP. 56,00 PF 50,0 V
C1140	ECEA1CKA101B	ELECTROLYTICAL CAP. 100,00 µF 16,0 V
C1141	ECJ2VF1H104Z	CERAMIC CAP. 100,00 nF 50,0 V
C1142	ECJ2VF1H104Z	CERAMIC CAP. 100,00 nF 50,0 V
C2101	F2A1C101A180	ELECTROLYTICAL CAP. 100,00 µF 16,0 V
C2102	ECJ2VF1C104Z	CERAMIC CAP. 100,00 nF 16,0 V
C2103	ECJ2VF1C105Z	CERAMIC CAP. 1,00 µF 16,0 V
C2104	ECJ2VF1C105Z	CERAMIC CAP. 1,00 µF 16,0 V
C2105	ECJ2VF1C105Z	CERAMIC CAP. 1,00 µF 16,0 V
C2106	ECJ2VF1C105Z	CERAMIC CAP. 1,00 µF 16,0 V
C2109	F2A1C100A180	ELECTROLYTICAL CAP. 10,00 µF 16,0 V
C2110	ECJ2VB1H332K	CERAMIC CAP. 3,30 nF 50,0 V
C2111	ECJ2VB1H332K	CERAMIC CAP. 3,30 nF 50,0 V
C2113	F2A1H100A182	ELECTROLYTICAL CAP. 10,00 µF 50,0 V
C2115	F2A1H100A182	ELECTROLYTICAL CAP. 10,00 µF 50,0 V
C2118	ECQV1H104JL3	POLYESTER CAP. 100,00 nF 50,0 V
C2120	ECEA1HKS3R3B	ELECTROLYTICAL CAP. 3,30 µF 50,0 V
C2121	ECJ2VF1C104Z	CERAMIC CAP. 100,00 nF 16,0 V
C2124	F2A1H100A182	ELECTROLYTICAL CAP. 10,00 µF 50,0 V
C2125	ECJ2VF1C105Z	CERAMIC CAP. 1,00 µF 16,0 V
C2133	ECJ2VC1H070D	CERAMIC CAP. 7,00 PF 50,0 V 0,50 PF
C2134	ECJ2VC1H470J	CERAMIC CAP. 47,00 PF 50,0 V
C2135	ECJ2VC1H560J	CERAMIC CAP. 56,00 PF 50,0 V
C2136	ECJ2VC1H560J	CERAMIC CAP. 56,00 PF 50,0 V
C2137	ECJ2VC1H560J	CERAMIC CAP. 56,00 PF 50,0 V
C2138	ECJ2VC1H470J	CERAMIC CAP. 47,00 PF 50,0 V
C2139	ECJ2VC1H010C	CERAMIC CAP. 1,00 PF 50,0 V 0,25 PF
C2140	ECJ2VC1H010C	CERAMIC CAP. 1,00 PF 50,0 V 0,25 PF
C2141	ECJ2VF1C105Z	CERAMIC CAP. 1,00 µF 16,0 V
C2142	ECJ2VF1C105Z	CERAMIC CAP. 1,00 µF 16,0 V
C2151	ECJ2VC1H331J	CERAMIC CAP. 330,00 PF 50,0 V
C2152	ECJ2VF1H103Z	CERAMIC CAP. 10,00 nF 50,0 V
C2302	F2A1C4710045	ELECTROLYTICAL CAP. 470,00 µF 16,0 V
C2303	ECA1CM101B	ELECTROLYTICAL CAP. 100,00 µF 16,0 V
C2304	ECEA1HKN0R1B	ELECTROLYTICAL CAP. 0,10 µF 50,0 V
C2305	ECEA1HKN0R1B	ELECTROLYTICAL CAP. 0,10 µF 50,0 V
C2306	F2A1H100A182	ELECTROLYTICAL CAP. 10,00 µF 50,0 V
C2309	ECJ2VC1H122J	CERAMIC CAP. 1,20 nF 50,0 V
C2310	ECJ2VC1H122J	CERAMIC CAP. 1,20 nF 50,0 V
C2380	F2A1C101A180	ELECTROLYTICAL CAP. 100,00 µF 16,0 V
C2381	F2A1C100A180	ELECTROLYTICAL CAP. 10,00 µF 16,0 V
C3020	ECJ2VC1H561K	CERAMIC CAP. 560,00 PF 50,0 V
C3021	F2A1C4710045	ELECTROLYTICAL CAP. 470,00 µF 16,0 V
C3028	ECJ2VF1C105Z	CERAMIC CAP. 1,00 µF 16,0 V
C3036	ECJ2VC1H561K	CERAMIC CAP. 560,00 PF 50,0 V
C3037	ECJ2VF1C105Z	CERAMIC CAP. 1,00 µF 16,0 V
C3038	ECJ2VC1H561K	CERAMIC CAP. 560,00 PF 50,0 V
C3039	ECJ2VC1H561K	CERAMIC CAP. 560,00 PF 50,0 V

Ref. No.	Part No.	Part Name & Description
C3040	ECEA1CKA100B	ELECTROLYTICAL CAP. 10,00 µF 16,0 V
C3041	ECEA1CKA100B	ELECTROLYTICAL CAP. 10,00 µF 16,0 V
C3043	F2A1H100A182	ELECTROLYTICAL CAP. 10,00 µF 50,0 V
C3044	ECEA1CN100UB	ELECTROLYTICAL CAP. 10,00 µF 16,0 V
C3045	ECJ2VF1C105Z	CERAMIC CAP. 1,00 µF 16,0 V
C3102	ECJ2VC1H561K	CERAMIC CAP. 560,00 PF 50,0 V
C3103	ECJ2VC1H561K	CERAMIC CAP. 560,00 PF 50,0 V
C3107	ECEA1CN100UB	ELECTROLYTICAL CAP. 10,00 µF 16,0 V
C3108	ECEA1CN100UB	ELECTROLYTICAL CAP. 10,00 µF 16,0 V
C3110	ECJ2VC1H561K	CERAMIC CAP. 560,00 PF 50,0 V
C3136	ECJ2VB1H103J	CERAMIC CAP. 10,00 nF 50,0 V
C3137	ECJ2VB1H103J	CERAMIC CAP. 10,00 nF 50,0 V
C3138	F2A1C100A180	ELECTROLYTICAL CAP. 10,00 µF 16,0 V
C3139	F2A1C100A180	ELECTROLYTICAL CAP. 10,00 µF 16,0 V
C3157	ECJ2VF1C105Z	CERAMIC CAP. 1,00 µF 16,0 V
C3273	F2A1C220A180	ELECTROLYTICAL CAP. 22,00 µF 16,0 V
C3283	F2A1C220A180	ELECTROLYTICAL CAP. 22,00 µF 16,0 V
C3290	ECJ2FB1E105K	CERAMIC CAP. 1,00 µF 25,0 V
C3291	ECJ2FB1E105K	CERAMIC CAP. 1,00 µF 25,0 V
C3292	F2A1C3310039	ELECTROLYTICAL CAP. 330,00 µF 16,0 V
C3293	ECJ2YB1H473K	CERAMIC CAP. 47,00 nF 50,0 V
C4043	ECJ2VC1H101J	CERAMIC CAP. 100,00 PF 50,0 V
C5506	ECJ2VC1H680J	CERAMIC CAP. 68,00 PF 50,0 V
C5507	ECJ2VC1H680J	CERAMIC CAP. 68,00 PF 50,0 V
C5510	F2A1C101A180	ELECTROLYTICAL CAP. 100,00 µF 16,0 V
C5511	ECJ2VC1H680J	CERAMIC CAP. 68,00 PF 50,0 V
C5512	ECEA1AKN470B	ELECTROLYTICAL CAP. 47,00 µF 10,0 V
C5513	ECJ2VC1H101J	CERAMIC CAP. 100,00 PF 50,0 V
C5514	ECJ2VC1H181J	CERAMIC CAP. 180,00 PF 50,0 V
C5520	ECJ2VF1C105Z	CERAMIC CAP. 1,00 µF 16,0 V
C5540	ECJ2VB1H222K	CERAMIC CAP. 2.200,00 PF 50,0 V
C5541	ECEA1HKA100B	ELECTROLYTICAL CAP. 10,00 µF 50,0 V
C5544	ECJ2VF1H103Z	CERAMIC CAP. 10,00 nF 50,0 V
C5545	ECJ2VB1H103K	CERAMIC CAP. 10,00 nF 50,0 V
C5548	ECJ2VC1H330J	CERAMIC CAP. 33,00 PF 50,0 V
C5549	ECJ2VC1H330J	CERAMIC CAP. 33,00 PF 50,0 V
C5551	ECJ2VB1H103K	CERAMIC CAP. 10,00 nF 50,0 V
C5552	ECJ2VF1H103Z	CERAMIC CAP. 10,00 nF 50,0 V
C5553	F2A1A331A161	ELECTROLYTICAL CAP. 330,00 µF 10,0 V
C5554	ECEA0JKA221B	ELECTROLYTICAL CAP. 220,00 µF 6,3 V
C5555	ECEA1CKA101B	ELECTROLYTICAL CAP. 100,00 µF 16,0 V
C5556	ECJ2VF1H104Z	CERAMIC CAP. 100,00 nF 50,0 V
C5557	F2A1C100A180	ELECTROLYTICAL CAP. 10,00 µF 16,0 V
C5558	ECJ2VC1H680J	CERAMIC CAP. 68,00 PF 50,0 V
C5560	ECJ2VF1H103Z	CERAMIC CAP. 10,00 nF 50,0 V
C5561	ECJ2VB1H103K	CERAMIC CAP. 10,00 nF 50,0 V
C5562	ECJ2VF1H103Z	CERAMIC CAP. 10,00 nF 50,0 V
C5564	ECEA0JKA221B	ELECTROLYTICAL CAP. 220,00 µF 6,3 V
C5565	ECJ2VB1H103K	CERAMIC CAP. 10,00 nF 50,0 V
C5566	ECJ2VF1H104Z	CERAMIC CAP. 100,00 nF 50,0 V
C5567	F2A1H1R00053	ELECTROLYTICAL CAP. 1,00 µF 50,0 V
C5568	F2A1H1R00053	ELECTROLYTICAL CAP. 1,00 µF 50,0 V
C5570	ECJ2VF1H103Z	CERAMIC CAP. 10,00 nF 50,0 V
C5571	ECJ2VC1H150J	CERAMIC CAP. 15,00 PF 50,0 V
C5572	ECJ2VC1H150J	CERAMIC CAP. 15,00 PF 50,0 V
C5573	F2A1H220A182	ELECTROLYTICAL CAP. 22,00 µF 50,0 V
C5574	F2A1A331A161	ELECTROLYTICAL CAP. 330,00 µF 10,0 V
C5575	ECJ2VB1H103K	CERAMIC CAP. 10,00 nF 50,0 V
C5576	ECJ2VF1H103Z	CERAMIC CAP. 10,00 nF 50,0 V
C5577	ECJ2VF1H104Z	CERAMIC CAP. 100,00 nF 50,0 V
C5578	ECJ2VF1H103Z	CERAMIC CAP. 10,00 nF 50,0 V
C5581	ECEA1CKN220B	ELECTROLYTICAL CAP. 22,00 µF 16,0 V
C5586	ECJ2VC1H150J	CERAMIC CAP. 15,00 PF 50,0 V
C5588	ECJ2VC1H330J	CERAMIC CAP. 33,00 PF 50,0 V
C559	ECWH20133JVB	POLYPROPILENE CAP. 13,00 nF 2.000,0 V
C5591	ECEA1EKN4R7B	ELECTROLYTICAL CAP. 4,70 µF 25,0 V
C5595	F2A1C470A180	ELECTROLYTICAL CAP. 47,00 µF 16,0 V
C5596	ECJ2VF1H104Z	CERAMIC CAP. 100,00 nF 50,0 V
CONNECTORS		
A3	BJP11V04-AP	CONNECTOR
A5	BJP11V06-AP	CONNECTOR
A8	BJP11V08-AP	CONNECTOR
A10	K1KB06A00053	CONNECTOR
A12	BJP11V04-AP	CONNECTOR

Ref. No.	Part No.	Part Name & Description
A13	K1KB08A00054	CONNECTOR
A16	BJP11V09-AP	CONNECTOR
A17	BJP11V04-AP	CONNECTOR
A18	BJP11V06-AP	CONNECTOR
A22	BJP11V04-AP	CONNECTOR
A44	TJS4G8090	CONNECTOR
A47	BJP11V02-AP	CONNECTOR
A100	K1KB08A00054	CONNECTOR
EW10	K1KA06B00090	CONNECTOR
EW13	K1KA08B00121	CONNECTOR
JK3002	K4BK09B00006	TERMINAL AV (STEREO)
JK3003	K4BK07B00008	TERMINAL AV (YPbPr)
JK3101	K4BK07B00007	TERMINAL AV (YPbPr)
JK351	K3B095A00001	CRT SOCKET
L12	BJP11V03-AP	CONNECTOR
Y100	K1KA08B00121	CONNECTOR
YC44	TJS4G8080	CONNECTOR
YC46	BJP11V02-AP	CONNECTOR
DIODES		
D002	B0BA01700031	ZENER DIODE 17,0 V 0,5 W 5,0 mA
D003	B0BA01500036	ZENER DIODE 15,0 V 0,5 W 5,0 mA
D006	B0BA5R200014	ZENER DIODE 5,1 V 0,5 W 5,0 mA
D011	MA3X152K0L	SWITCHING DIODE 80,0 V 100,0 mA
D354	MA3X152K0L	SWITCHING DIODE 80,0 V 100,0 mA
D355	MA3X152K0L	SWITCHING DIODE 80,0 V 100,0 mA
D356	MA3X152K0L	SWITCHING DIODE 80,0 V 100,0 mA
D360	B0HAGP000003	RECTIFIER DIODE 400,0 V 0,5 A
D361	B0HAGP000003	RECTIFIER DIODE 400,0 V 0,5 A
D362	B0HAGP000003	RECTIFIER DIODE 400,0 V 0,5 A
D363	MA3X152K0L	SWITCHING DIODE 80,0 V 100,0 mA
D365	B0BA9R900005	ZENER DIODE 9,9 V 0,5 W 5,0 mA
D375	MA3X152K0L	SWITCHING DIODE 80,0 V 100,0 mA
D402	B0HAHM000008	RECTIFIER DIODE 200,0 V 0,6 A
D403	B0ACCK000005	SWITCHING DIODE 90,0 V 100,0 mA
D404	B0ACCK000005	SWITCHING DIODE 90,0 V 100,0 mA
D407	B0BA01900005	ZENER DIODE 20,0 V 0,5 W 5,0 mA
D511	MAZ4108J0F	ZENER DIODE 10,8 V 0,37 W 250,0 mA
D512	MA2B17100E	SWITCHING DIODE 200,0 mA
D513	B0HAJP000015	RECTIFIER DIODE 400,0 V 0,7 A
D515	B0HAJP000015	RECTIFIER DIODE 400,0 V 0,7 A
D516	B0HAMP000054	RECTIFIER DIODE 400,0 V 1,0 A
D520	MA3X152K0L	SWITCHING DIODE 80,0 V 100,0 mA
D551	MAZ30470HL	ZENER DIODE 4,9 V 0,2 W 5,0 mA
D552	B0HAJP000015	RECTIFIER DIODE 400,0 V 0,7 A
D555	MA3X152K0L	SWITCHING DIODE 80,0 V 100,0 mA
D556	B0HAMV000027	RECTIFIER DIODE 1,2 V 1,0 A
D557	B0HAMR000053	RECTIFIER DIODE 1,0 V 1,0 A
D558	MA2C18500E	SWITCHING DIODE 200,0 V 200,0 mA
D580	B0BA03100002	ZENER DIODE 31,0 V 0,5 W 5,0 mA
D581	MA3X152K0L	SWITCHING DIODE 80,0 V 100,0 mA
D582	MA3X152K0L	SWITCHING DIODE 80,0 V 100,0 mA
D583	MA3X152E0L	SWITCHING DIODE 80,0 V 100,0 mA
D584	MAZ30560HL	ZENER DIODE 5,8 V 0,2 W 5,0 mA
D586	B0ACCK000005	SWITCHING DIODE 90,0 V 100,0 mA
D630	MAZ30560HL	ZENER DIODE 5,8 V 0,2 W 5,0 mA
D701	MA2C165001VT	SWITCHING DIODE 35,0 V 100,0 Ma
D702	B0BA6R600008	ZENER DIODE 6,8 V 0,5W 5,0 mA
D703	MAZ30560HL	ZENER DIODE 5,8 V 0,2 W 5,0 mA
D704	MA2C165001VT	SWITCHING DIODE 35,0 V 100,0 Ma
D705	B0BA01000052	ZENER DIODE 10,0 V 0,5 W 5,0 mA
D706	MA2C029WAF	ZENER DIODE 6,0 V 0,150 150,0 mA
D708	MA2C165001VT	SWITCHING DIODE 35,0 V 100,0 Ma
D803	B0EBNT000002	RECTIFIER DIODE 800,0 V 4,0 A D4SB80
D803	TUC4G709-1	HEAT SINK
D810	B0EAKT000019	RECTIFIER DIODE 800,0 V 1,0 A
D817	B0HAJL000001	RECTIFIER DIODE 100,0 V 0,7 A
D820	MAZ20820A0LS	ZENER DIODE 8,0 V 1/2 W
D821	MAZ20750A0LS	ZENER DIODE 7,2 V 1/2 W
D823	B0HAJL000001	RECTIFIER DIODE 100,0 V 0,7 A
D824	B0HAJL000001	RECTIFIER DIODE 100,0 V 0,7 A
D825	B0BA6R100003	ZENER DIODE 6,1 V 0,5 W 5,0 mA
D830	B0HAJL000001	RECTIFIER DIODE 100,0 V 0,7 A
D831	B0BA02400029	ZENER DIODE 24,0 V 0,5 W 5,0 mA
D835	ERZV10V621CS	VARISTOR

Ref. No.	Part No.	Part Name & Description
D836	TAP4GA0009	POSISTOR 12,0 OHM
D837	TAP4GA0009	POSISTOR 12,0 OHM
D840	MA3X152K0L	SWITCHING DIODE 80,0 V 100,0 mA
D841	B0BA5R200014	ZENER DIODE 5,1 V 0,5 W 5,0 mA
D853	FMLG12SLF116	RECTIFIER DIODE 200,0 V 5,0 A
D854	B0HAPV000009	RECTIFIER DIODE 1.000,0 V 3,0 A
D855	B0HFRJ000012	RECTIFIER DIODE 80,0 V 5,0 A
D856	B0BA7R500006	ZENER DIODE 7,5 V 1/2 W 5,0 mA
D860	B3PAA0000135	FOTO ACOPLADOR
D862	B0BA2R100003	ZENER DIODE 2,1 V 0,5 W 5,0 mA
D863	B0HAJL000001	RECTIFIER DIODE 100,0 V 0,7 A
D865	B0BA3R500006	ZENER DIODE 3,5 V 0,5 W 5,0 mA
D870	B0HAJL000001	RECTIFIER DIODE 100,0 V 0,7 A
D871	B0HAJL000001	RECTIFIER DIODE 100,0 V 0,7 A
D872	B0BA5R200014	ZENER DIODE 5,1 V 0,5 W 5,0 mA
D1002	B0BA7R500006	ZENER DIODE 7,5 V 1/2 W 5,0 Ma
D1010	EL333ID/S928	DIODO LED
D1120	MA3X152K0L	SWITCHING DIODE 80,0 V 100,0 mA
D1130	B0BA5R700008	ZENER DIODE 5,7 V 0,5 W 5,0 mA
D1131	B0BA5R700008	ZENER DIODE 5,7 V 0,5 W 5,0 mA
D1132	B0BA5R400008	ZENER DIODE 5,4 V 1/2 W 5,0 mA
D1140	B0BA5R600016	ZENER DIODE 5,6 V 0,5 W 5,0 Ma
D2380	MA3X152K0L	SWITCHING DIODE 80,0 V 100,0 mA
D2381	MA3X152K0L	SWITCHING DIODE 80,0 V 100,0 mA
D2382	MA3X152K0L	SWITCHING DIODE 80,0 V 100,0 mA
FILTERS		
DL3290	ELB4B090	LC FILTER
DL3291	ELB4B090	LC FILTER
FUSE		
F840	K5D502BK0003	FUSE
INTEGRATED CIRCUITS		
IC351	TDA6108JF/N1	ANALOGIC IC
IC420	C1ZBZ0000497	ANALOGIC IC
IC451	AN15526A	INTEGRATED CIRCUIT
IC601	TDA9592N64BT	INTEGRATED CIRCUIT
IC701	TEA2031A	ANALOGIC IC
IC801	C5HABZZ00120	INTEGRATED CIRCUIT
IC802	C0EAS0000026	VOLTAGE DETECTOR IC
IC851	C0DAAHF00005	VOLTAGE REGULATOR IC
IC881	AN7805	ANALOGIC IC
IC1001	B3RAC0000010	REMOTE CONTROL RECPTOR IC
IC1103	C3EBGZ000001	EEPROM MEMORY IC
IC1201	C0CBABC00037	VOLTAGE REGULATOR IC
IC2101	C1AB00001960	AUDIO PROCESSOR IC
IC2301	AN17820B	INTEGRATED CIRCUIT
IC3040	NJM2535MTE1	VIDEO SWITCH IC
IC5550	MN82362	MICROPROCESSOR IC
COILS		
JS815	EXCELDR35C	BEAD CORE Z= 80 OHMS
JS816	EXCELDR35C	BEAD CORE Z= 80 OHMS
JS882	EXCELSA35T	FERRITE
JS2301	J0JKB0000034	PIC COIL I = 6 A / Z=100 OHMS
L001	G0C100K00008	PIC COIL 10,00 µH I=0,4A
L002	EXC3BB221H	BEAD CORE Z=200OHMS
L182	G0C100K00008	PIC COIL 10,00 µH I=0,4A
L185	G0C100K00008	PIC COIL 10,00 µH I=0,4A
L170	G0C100K00008	PIC COIL 10,00 µH I=0,4A
L352	J0JKA0000022	BEAD CORE I=6 A / Z= 60 OHMS
L358	J0JKB0000038	BEAD CORE I=6 A / Z= 100 OHMS
L359	J0JKB0000038	BEAD CORE I=6 A / Z= 100 OHMS
L360	J0JKB0000038	BEAD CORE I=6 A / Z= 100 OHMS
L510	EXCELSA35T	FERRITE
L511	EXCELSA35T	FERRITE
L516	EXCELSA35T	FERRITE
L550	J0JKB0000038	BEAD CORE I=6 A / Z= 100 OHMS
L603	J0JKA0000024	BEAD CORE AXIAL I=6 A / Z= 100 OHMS
L605	EXCELSA35T	FERRITE
L606	EXCELSA35T	FERRITE
L607	J0JKB0000034	PIC COIL I = 6 A / Z=100 OHMS
L620	J0JCC0000009	BEAD CORE 200MA 2,25KOHM
L702	G0A682AA0006	PIC COIL 6,80 mH
L703	G0A391G00001	PIC COIL 390,00 µH
L704	G0A332C00003	PIC COIL 3.300,00 µH
L705	G0A102F00002	PIC COIL 1.000,00 µH

Ref. No.	Part No.	Part Name & Description
L706	ELH5L7121	LINEARITY COIL
L707	G0A332BA0007	PIC COIL 3.300,00 µH
L801	G0B123H00002	LINE FILTER
L816	EXCELDR35V	BEAD CORE Z=80 OHMS
L817	EXCELDR35V	BEAD CORE Z=80 OHMS
L820	J0JKA0000025	BEAD CORE Z=80 OHMS
L831	G0B123H00002	LINE FILTER
L852	J0JKA0000023	BEAD CORE Z=80 OHMS
L853	J0JKA0000025	BEAD CORE Z=80 OHMS
L862	G0A6R8HA0011	PIC COIL 6,80 µH
L863	EXCELDR35C	BEAD CORE Z= 80 OHMS
L871	G0C1R5KA0030	PIC COIL 1,50 µH
L872	G0C100K00008	PIC COIL 10,00 µH I=0,4A
L873	J0JKA0000024	BEAD CORE AXIAL I=6 A / Z= 100 OHMS
L951	J0JKA0000022	BEAD CORE I=6 A / Z= 60 OHMS
L953	J0JKA0000022	BEAD CORE I=6 A / Z= 60 OHMS
L954	J0JKA0000022	BEAD CORE I=6 A / Z= 60 OHMS
L955	J0JKA0000022	BEAD CORE I=6 A / Z= 60 OHMS
L1001	TALV35VB331K	PIC COIL 330,00 µH I=0,4A
L1051	J0JKA0000022	BEAD CORE AXIAL I=6 A / Z= 60 OHMS
L1110	EXCELSA35T	FERRITE
L2104	G0C330JA0021	PIC COIL 33,00 µH
L2108	J0JKB0000034	PIC COIL I = 6 A / Z=100 OHMS
L2132	G0C180KA0004	PIC COIL 18,00 µH
L2134	G0C270JA0021	PIC COIL 27,00 µH
L2136	EXCELDR25V	FERRITE
L2137	J0JKB0000034	PIC COIL I = 6 A / Z=100 OHMS
L2141	EXC3BB221H	BEAD CORE Z=200OHMS
L2143	EXCELSA35T	FERRITE
L2150	EXC3BB221H	BEAD CORE Z=200OHMS
L2151	EXC3BB221H	BEAD CORE Z=200OHMS
L3016	J0JKA0000024	BEAD CORE AXIAL I=6 A / Z= 100 OHMS
L3037	J0JKA0000024	BEAD CORE AXIAL I=6 A / Z= 100 OHMS
L3041	J0JKA0000024	BEAD CORE AXIAL I=6 A / Z= 100 OHMS
L3042	J0JKA0000024	BEAD CORE AXIAL I=6 A / Z= 100 OHMS
L3106	EXCELSA35T	BEAD CORE
L3261	G0C8R2KA0030	PIC COIL 8,20 µH
L5510	G0C100JA0021	PIC COIL 10,00 µH
L5538	EXCELSA35T	BEAD CORE
L5539	EXCELSA35T	BEAD CORE
L5550	G0C150JA0021	PIC COIL 15,00 µH
L5551	G0C101J00001	PIC COIL 100,00 µH
L5552	EXCELSA35T	BEAD CORE
L5554	EXCELSA35T	BEAD CORE
L5555	G0C100JA0021	PIC COIL 10,00 µH
L5556	G0C150JA0021	PIC COIL 15,00 µH
L5558	J0JCC0000100	BEAD CORE 200MA
L5560	EXCELSA35T	BEAD CORE
L5570	G0C270JA0021	PIC COIL 27,00 µH
L5581	G0C470JA0021	PIC COIL 47,00 µH
L5582	EXCELSA35T	BEAD CORE
TRANSISTORS		
Q001	B1ABCE000005	TRANSISTOR NPN 0,2W 200,0 Ma
Q170	B1ABCE000005	TRANSISTOR NPN 0,2W 200,0 Ma
Q369	B1ADDF000003	TRANSISTOR PNP 0,2 W 50,0 V 200,0 mA
Q390	B1ABCE000005	TRANSISTOR NPN 0,2W 200,0 mA
Q391	B1ABCE000005	TRANSISTOR NPN 0,2W 200,0 mA
Q392	B1ABCE000005	TRANSISTOR NPN 0,2W 200,0 mA
Q400	B1ABCE000005	TRANSISTOR NPN 0,2W 200,0 Ma
Q420	B1ABCE000005	TRANSISTOR NPN 0,2W 200,0 mA
Q501	2SC4212H00LB	TRANSISTOR NPN 1 W 300,0 V
Q520	2SB792ATX	TRANSISTOR PNP 0,2 W 185,0 V 50,0 Ma
Q551	2SC5902000LK	TRANSISTOR NPN 1.000,0 V 8,0 A
Q580	B1ABCE000005	TRANSISTOR NPN 0,2W 200,0 Ma
Q581	B1ADDF000003	TRANSISTOR PNP 0,2 W 50,0 V 200,0 mA
Q601	B1ADDF000003	TRANSISTOR PNP 0,2 W 50,0 V 200,0 mA
Q602	B1ABCE000005	TRANSISTOR NPN 0,2W 200,0 Ma
Q640	B1ADDF000003	TRANSISTOR PNP 0,2 W 50,0 V 200,0 mA
Q641	B1ABCE000005	TRANSISTOR NPN 0,2W 200,0 mA
Q680	B1ABCE000005	TRANSISTOR NPN 0,2W 200,0 mA
Q701	B1ADDF000003	TRANSISTOR PNP 0,2 W 50,0 V 200,0 mA
Q840	B1ABCE000005	TRANSISTOR NPN 0,2W 200,0 Ma
Q850	B1BCCM000002	TRANSISTOR PNP 200,0 V 2,0 A
Q852	B1ABCE000005	TRANSISTOR NPN 0,2W 200,0 Ma

Ref. No.	Part No.	Part Name & Description
Q857	2SC54190RA	TRANSISTOR NPN 1 W 187,0 V 70,0 mA
Q870	B1ABCE000005	TRANSISTOR NPN 0,2W 200,0 Ma
Q871	B1ABCE000005	TRANSISTOR NPN 0,2W 200,0 Ma
Q901	B1ABCE000005	TRANSISTOR NPN 0,2W 200,0 mA
Q902	B1ABCE000005	TRANSISTOR NPN 0,2W 200,0 mA
Q951	B1ABCE000005	TRANSISTOR NPN 0,2W 200,0 mA
Q952	B1ABCE000005	TRANSISTOR NPN 0,2W 200,0 mA
Q953	2SC13180WA	TRANSISTOR NPN 5/8 W 50,0 V 500,0 mA
Q954	2SB1030AWA	TRANSISTOR NPN 0,2 W 50,0 V 500,0 mA
Q955	2SA21180PSLB	TRANSISTOR PNP 20 W 100,0 V 1,0 A
Q956	2SC59350PSLB	TRANSISTOR NPN 1 W 100,0 V 1,0 A
Q957	B1ADDF000003	TRANSISTOR PNP 0,2 W 50,0 V 200,0 mA
Q958	B1ABCE000005	TRANSISTOR NPN 0,2W 200,0 mA
Q961	B1ABCE000005	TRANSISTOR NPN 0,2W 200,0 mA
Q962	B1ABCE000005	TRANSISTOR NPN 0,2W 200,0 mA
Q1011	B1ABCE000005	TRANSISTOR NPN 0,2W 200,0 mA
Q1012	B1ABCE000005	TRANSISTOR NPN 0,2W 200,0 mA
Q1110	B1ADDF000003	TRANSISTOR PNP 0,2 W 50,0 V 200,0 mA
Q1111	B1ABCE000005	TRANSISTOR NPN 0,2W 200,0 Ma
Q2110	B1ADDF000003	TRANSISTOR PNP 0,2 W 50,0 V 200,0 mA
Q2111	B1ADDF000003	TRANSISTOR PNP 0,2 W 50,0 V 200,0 mA
Q2151	B1ABCE000005	TRANSISTOR NPN 0,2W 200,0 Ma
Q2380	B1ABCE000005	TRANSISTOR NPN 0,2W 200,0 Ma
Q2381	B1ADDF000003	TRANSISTOR PNP 0,2 W 50,0 V 200,0 mA
Q3030	B1ABCE000005	TRANSISTOR NPN 0,2W 200,0 Ma
Q3031	B1ABCE000005	TRANSISTOR NPN 0,2W 200,0 Ma
Q3032	B1ABCE000005	TRANSISTOR NPN 0,2W 200,0 Ma
Q3033	B1ABCE000005	TRANSISTOR NPN 0,2W 200,0 Ma
Q3270	B1ABCE000005	TRANSISTOR NPN 0,2W 200,0 mA
Q3271	B1ABCE000005	TRANSISTOR NPN 0,2W 200,0 mA
Q3280	B1ABCE000005	TRANSISTOR NPN 0,2W 200,0 mA
Q3281	B1ABCE000005	TRANSISTOR NPN 0,2W 200,0 mA
Q3290	B1ABCE000005	TRANSISTOR NPN 0,2W 200,0 mA
Q3291	B1ABCE000005	TRANSISTOR NPN 0,2W 200,0 mA
Q5501	B1ABCE000005	TRANSISTOR NPN 0,2W 200,0 mA
Q5502	B1ABCE000005	TRANSISTOR NPN 0,2W 200,0 mA
Q5503	B1ADDF000003	TRANSISTOR PNP 0,2 W 50,0 V 200,0 mA
Q5504	B1ABCE000005	TRANSISTOR NPN 0,2W 200,0 mA
Q5505	B1ADDF000003	TRANSISTOR PNP 0,2 W 50,0 V 200,0 mA
Q5520	B1ADDF000003	TRANSISTOR PNP 0,2 W 50,0 V 200,0 mA
Q5521	B1ABCE000005	TRANSISTOR NPN 0,2W 200,0 mA
Q5522	B1ABCE000005	TRANSISTOR NPN 0,2W 200,0 mA
Q5540	B1ABCE000005	TRANSISTOR NPN 0,2W 200,0 mA
Q5541	B1ABCE000005	TRANSISTOR NPN 0,2W 200,0 mA
Q5570	B1ADDF000003	TRANSISTOR PNP 0,2 W 50,0 V 200,0 mA
Q5581	B1ABCE000005	TRANSISTOR NPN 0,2W 200,0 mA
Q5583	B1ABCE000005	TRANSISTOR NPN 0,2W 200,0 mA
Q5584	B1ABCE000005	TRANSISTOR NPN 0,2W 200,0 mA
Q5585	B1ADDF000003	TRANSISTOR PNP 0,2 W 50,0 V 200,0 mA
RESISTORS		
R003	ERJ6GEYJ100V	FILM RESISTOR 10,00 Ohm 1/8 W
R004	ERG3FJ183H	FILM RESISTOR 18,00 kOhm 3 W
R006	ERJ6GEYJ273V	FILM RESISTOR 27,00 kOhm 1/8 W
R007	ERJ6GEYJ302V	FILM RESISTOR 3,00 kOhm 1/8 W
R008	ERJ6GEYJ681V	FILM RESISTOR 680,00 Ohm 1/8 W
R011	ERJ6GEYJ103V	FILM RESISTOR 10,00 kOhm 1/8 W
R012	ERJ6GEYJ332V	FILM RESISTOR 3,30 kOhm 1/8 W
R021	ERJ6GEYJ273V	FILM RESISTOR 27,00 kOhm 1/8 W
R022	ERJ6GEYJ473V	FILM RESISTOR 47,00 kOhm 1/8 W
R170	ERJ6GEYJ331V	FILM RESISTOR 330,00 Ohm 1/8 W
R171	ERJ6GEYJ122V	FILM RESISTOR 1,20 kOhm 1/8 W
R172	ERJ6GEYJ331V	FILM RESISTOR 330,00 Ohm 1/8 W
R182	ERJ6GEYJ221V	FILM RESISTOR 220,00 Ohm 1/8 W
R182	ERJ6GEYJ221V	FILM RESISTOR 220,00 Ohm 1/8 W
R186	ERJ6GEYJ471V	FILM RESISTOR 470,00 Ohm 1/8 W
R187	ERJ6GEYJ221V	FILM RESISTOR 220,00 Ohm 1/8 W
R187	D0AE221JA046	CARBON RESISTOR 220,00 Ohm 1/4 W
R190	ERJ6GEYJ391V	FILM RESISTOR 390,00 Ohm 1/8 W
R351	ERDS2T0T	CARBON RESISTOR 0,00 Ohm 1/4 W
R352	ERDS2T0T	CARBON RESISTOR 0,00 Ohm 1/4 W
R353	ERDS2T0T	CARBON RESISTOR 0,00 Ohm 1/4 W
R354	ERJ6ENF7500V	PRECISE RESISTOR 750,00 Ohm 0,1 W
R355	ERJ6ENF7500V	PRECISE RESISTOR 750,00 Ohm 0,1 W
R356	ERJ6ENF7500V	PRECISE RESISTOR 750,00 Ohm 0,1 W

Ref. No.	Part No.	Part Name & Description
R363	ERC12GK222V	CARBON RESISTOR 2,20 kOhm 1/2 W
R364	ERC12GK222V	CARBON RESISTOR 2,20 kOhm 1/2 W
R365	ERC12GK222V	CARBON RESISTOR 2,20 kOhm 1/2 W
R369	ERJ6GEYJ103V	FILM RESISTOR 10,00 kOhm 1/8 W
R374	ERQ12AJ181E	FUSISTOR 180,00 Ohm 1/2 W
R390	ERJ6GEYJ101V	PRECISE RESISTOR 100,00 Ohm 1/8 W
R391	ERJ6GEYJ101V	PRECISE RESISTOR 100,00 Ohm 1/8 W
R392	ERJ6GEYJ101V	PRECISE RESISTOR 100,00 Ohm 1/8 W
R393	ERJ6GEYJ102V	PRECISE RESISTOR 1,00 kOhm 1/8 W
R394	ERJ6GEYJ102V	PRECISE RESISTOR 1,00 kOhm 1/8 W
R395	ERJ6GEYJ102V	PRECISE RESISTOR 1,00 kOhm 1/8 W
R401	D0AE104JA046	CARBON RESISTOR 100,00 kOhm 1/4 W
R402	ERJ6GEYJ470V	FILM RESISTOR 47,00 Ohm 1/8 W
R403	EROS2THF2491	PRECISE RESISTOR 2,49 kOhm
R404	D0AE681JA046	CARBON RESISTOR 680,00 Ohm 1/4W
R405	EROS2THF2701	FILM RESISTOR 2,70 kOhm 0,25 W
R406	ERDS1FJ1R0T	CARBON RESISTOR 1,00 Ohm 1/2 W
R407	ERG2FJ151H	FILM RESISTOR 150,00 Ohm
R409	ERJ6GEYJ512V	PRECISE RESISTOR 5,10 kOhm 1/8 W
R410	ERJ6GEYJ202V	FILM RESISTOR 2,00 kOhm 1/8 W
R413	EROS2THF4220	PRECISE RESISTOR 422,00 Ohm 0,25 W
R414	ERJ6GEYJ432V	FILM RESISTOR 4,30 kOhm 1/10 W
R415	EROS2THF2050	PRECISE RESISTOR 205,00 Ohm
R416	ERX12SJR68V	FILM RESISTOR 0,68 Ohm 1/2 W
R417	ERX12SJR56V	FILM RESISTOR 0,56 Ohm 1/2 W
R420	ERJ6GEYJ223V	FILM RESISTOR 22,00 kOhm 1/8 W
R421	ERJ6GEYJ683V	FILM RESISTOR 68,00 kOhm 1/8 W
R422	ERJ6ENF7503V	PRECISE RESISTOR 750,00 kOhm 1/10 W
R423	ERJ6GEYJ122V	FILM RESISTOR 1,20 kOhm 1/8 W
R424	ERJ6GEYJ682V	FILM RESISTOR 6,80 kOhm 1/8 W
R426	ERJ6GEYJ750V	FILM RESISTOR 75,00 Ohm 1/8 W
R427	ERJ6GEYJ750V	FILM RESISTOR 75,00 Ohm 1/8 W
R502	ERJ6GEYJ182V	FILM RESISTOR 1,80 kOhm 1/8 W
R504	ERG2SJ472E	FILM RESISTOR 4,70 kOhm
R507	ERJ6GEYJ101V	FILM RESISTOR 100,00 Ohm 1/8 W
R508	ERG3FJ122H	FILM RESISTOR 1,20 kOhm 3 W
R509	ERG3FJ821H	FILM RESISTOR 820,00 Ohm 3 W
R510	ERJ6GEYJ471V	FILM RESISTOR 470,00 Ohm 1/8 W
R511	ERJ6ENF1182V	PRECISE RESISTOR 11,80 kOhm 1/10 W
R512	ERJ6ENF1002V	FILM RESISTOR 10,00 kOhm 1/10 W
R513	ERQ14AJ100E	FUSISTOR 10,00 Ohm 1/4 W
R516	ERQ1RJW1R0E	FUSISTOR 1,00 Ohm 1W
R519	ERX2SJS6R2H	FILM RESISTOR 6,20 Ohm 2
R520	ERX2SJ6R2E	FILM RESISTOR 6,20 Ohm 2
R521	ERX2SJ6R2E	FILM RESISTOR 6,20 Ohm 2
R522	ERJ6GEYJ273V	FILM RESISTOR 27,00 kOhm 1/8 W
R523	ERJ6GEYJ103V	FILM RESISTOR 10,00 kOhm 1/8 W
R524	ERJ6GEYJ104V	FILM RESISTOR 100,00 kOhm 1/8 W
R525	ERJ6GEYJ392V	FILM RESISTOR 3,90 kOhm 1/8 W
R530	ERQ1RJW1R0E	FUSISTOR 1,00 Ohm 1W
R552	D0AE393JA046	CARBON RESISTOR 39,00 kOhm 1/4 W
R553	ERJ6GEYJ223V	FILM RESISTOR 22,00 kOhm 1/8 W
R555	ERQ14AJ2R0P	FUSISTOR 2,00 Ohm 1/4 W
R556	ERO50PKF5603	FILM RESISTOR 560,00 kOhm 1/2 W
R557	ERO50PKF5902	PRECISE RESISTOR 59,00 kOhm
R558	D0AE513JA046	CARBON RESISTOR 51,00 kOhm 0,25 W
R559	ERQ1CJPR47S	FUSISTOR 0,47 Ohm 1 W
R563	ERJ6ENF1622V	PRECISE RESISTOR 16,20 kOhm 1/10 W
R580	ERJ6GEYJ392V	FILM RESISTOR 3,90 kOhm 1/8 W
R581	ERJ6GEYJ183V	FILM RESISTOR 18,00 kOhm 1/8 W
R582	ERJ6GEYJ154V	FILM RESISTOR 150,00 kOhm 1/8 W
R584	ERJ6GEYJ563V	FILM RESISTOR 56,00 kOhm 1/8 W
R585	ERJ6GEYJ272V	FILM RESISTOR 2,70 kOhm 1/8 W
R586	ERJ6GEYJ103V	FILM RESISTOR 10,00 kOhm 1/8 W
R587	ERJ6GEYJ823V	FILM RESISTOR 82,00 kOhm 1/8 W
R588	ERJ6GEYJ104V	FILM RESISTOR 100,00 kOhm 1/8 W
R589	ERJ6GEYJ103V	FILM RESISTOR 10,00 kOhm 1/8 W
R590	ERJ6GEYJ333V	FILM RESISTOR 33,00 kOhm 1/8 W
R591	ERJ6GEYJ103V	FILM RESISTOR 10,00 kOhm 1/8 W
R592	ERJ6GEYJ222V	FILM RESISTOR 2,20 kOhm 1/8 W
R593	ERJ6GEYJ103V	FILM RESISTOR 10,00 kOhm 1/8 W
R594	ERJ6GEYJ104V	FILM RESISTOR 100,00 kOhm 1/8 W
R601	ERJ6GEYJ223V	FILM RESISTOR 22,00 kOhm 1/8 W
R603	ERJ6ENF3902V	PRECISE RESISTOR 39,00 kOhm 1/10 W

Ref. No.	Part No.	Part Name & Description
R604	ERJ6GEYJ101V	FILM RESISTOR 100,00 Ohm 1/8 W
R605	ERJ6GEYJ101V	FILM RESISTOR 100,00 Ohm 1/8 W
R606	ERJ6GEYJ101V	FILM RESISTOR 100,00 Ohm 1/8 W
R607	ERJ6GEYJ102V	FILM RESISTOR 1,00 kOhm 1/8 W
R608	ERJ6GEYJ103V	FILM RESISTOR 10,00 kOhm 1/8 W
R609	ERJ6GEYJ153V	FILM RESISTOR 15,00 kOhm 1/8 W
R612	ERJ6GEYJ102V	FILM RESISTOR 1,00 kOhm 1/8 W
R617	ERJ6GEYJ391V	FILM RESISTOR 390,00 Ohm 1/8 W
R619	ERJ6GEYJ121V	FILM RESISTOR 120,00 Ohm 1/8 W
R620	ERJ6GEYJ101V	FILM RESISTOR 100,00 Ohm 1/8 W
R623	ERJ6GEYJ331V	FILM RESISTOR 330,00 Ohm 1/8 W
R636	ERJ6GEYJ561V	FILM RESISTOR 560,00 Ohm 1/8 W
R637	ERJ6GEYJ561V	FILM RESISTOR 560,00 Ohm 1/8 W
R640	ERJ6GEYJ822V	FILM RESISTOR 8,20 kOhm 1/8 W
R641	ERJ6GEYJ121V	FILM RESISTOR 120,00 Ohm 1/8 W
R642	ERJ6GEYJ390V	FILM RESISTOR 39,00 Ohm 1/10 W
R643	ERJ6GEYJ681V	FILM RESISTOR 680,00 Ohm 1/8 W
R644	ERJ6GEYJ101V	PRECISE RESISTOR 100,00 Ohm 1/8 W
R645	ERJ6GEYJ683V	FILM RESISTOR 68,00 kOhm 1/8 W
R646	ERJ6GEYJ223V	FILM RESISTOR 22,00 kOhm 1/8 W
R681	ERJ6GEYJ102V	PRECISE RESISTOR 1,00 kOhm 1/8 W
R683	ERJ6GEYJ331V	FILM RESISTOR 330,00 Ohm 1/8 W
R686	ERJ6GEYJ470V	FILM RESISTOR 47,00 Ohm 1/8 W
R687	ERJ6GEYJ472V	FILM RESISTOR 4,70 kOhm 1/8 W
R688	ERJ6GEYJ103V	FILM RESISTOR 10,00 kOhm 1/8 W
R701	ERQ12HJ330P	FUSISTOR 33,00 Ohm 1/2 W
R703	ERG2SJ821E	FILM RESISTOR 820,00 Ohm 2 W
R704	ERJ6GEYJ563V	FILM RESISTOR 56,00 kOhm 1/8 W
R705	ERJ6GEYJ104V	FILM RESISTOR 100,00 kOhm 1/8 W
R706	ERJ6GEYJ562V	FILM RESISTOR 5,60 kOhm 1/8 W
R708	ERJ6GEYJ393V	FILM RESISTOR 39,00 kOhm 1/8 W
R709	ERJ6GEYJ393V	FILM RESISTOR 39,00 kOhm 1/8 W
R710	ERJ6GEYJ273V	FILM RESISTOR 27,00 kOhm 1/8 W
R711	ERG1SJ101E	FILM RESISTOR 100,00 Ohm 1 W
R712	D0AE622JA046	CARBON RESISTOR 6,20 kOhm 0,25 W
R713	ERQ2CJP150S	FUSISTOR 15,00 Ohm 2 W
R714	ERJ6GEYJ101V	PRECISE RESISTOR 100,00 Ohm 1/8 W
R715	ERJ6GEYJ473V	FILM RESISTOR 47,00 kOhm 1/8 W
R716	ERQ2CJP102S	FUSISTOR 1,00 kOhm 2 W
R717	ERQ2CJP101S	FUSISTOR 100,00 Ohm 2 W
R718	ERG3FJ471H	RESISTRO DE FILME 470,00 Ohm 3 W
R721	ERJ6GEYJ103V	FILM RESISTOR 10,00 kOhm 1/8 W
R801	D0DM2R2KA001	WIRE RESISTOR 2,20 Ohm 15 W
R810	ERG2FJ470	FILM RESISTOR 47,00 Ohm 2 W
R811	ERG2FJ104H	FILM RESISTOR 100,00 kOhm 2 W
R817	ERDS1TJ100T	CARBON RESISTOR 10,00 Ohm 1/2 W
R818	ERG2FJ683H	FILM RESISTOR 68,00 kOhm 2 W
R820	ERX1SZJR18E	FILM RESISTOR 0,18 Ohm 1 W
R821	ERX1SJR22E	FILM RESISTOR 0,22 Ohm 1 W
R824	D0AE102JA046	CARBON RESISTOR 1,00 kOhm 1/4W
R825	D0AE102JA046	CARBON RESISTOR 1,00 kOhm 1/4W
R830	D0AE151JA046	CARBON RESISTOR 150,00 Ohm 1/4 W
R831	D0AE752JA046	CARBON RESISTOR 7,50 kOhm 0,25 W
R832	D0AE473JA046	CARBON RESISTOR 47,00 kOhm 0,25 W
R840	ERD75TAJ825	CARBON RESISTOR 8,20 MOhm 3/4 W
R841	ERJ6GEYJ472V	FILM RESISTOR 4,70 kOhm 1/8 W
R842	ERJ6GEYJ472V	FILM RESISTOR 4,70 kOhm 1/8 W
R850	ERG3FJ470H	RESISTRO DE FILME 47,00 Ohm 3 W
R852	D0AE272JA046	CARBON RESISTOR 2,70 kOhm 0,25 W
R854	K5Y402Z00001	FUSE 4A
R861	ERDS1TJ221T	CARBON RESISTOR 220,00 Ohm 1/2 W
R863	D0D53R3J0001	WIRE RESISTOR 3,30 Ohm 5 W
R864	ERJ6GEYJ103V	FILM RESISTOR 10,00 kOhm 1/8 W
R866	ERJ6GEYJ472V	FILM RESISTOR 4,70 kOhm 1/8 W
R867	D0AE362JA046	CARBON RESISTOR 3,60 kOhm 0,25 W
R868	ERDS1TJ471T	CARBON RESISTOR 470,00 Ohm 1/2 W
R871	ERDS1TJ103T	CARBON RESISTOR 10,00 kOhm 1/2 W
R872	ERJ6GEYJ272V	FILM RESISTOR 2,70 kOhm 1/8 W
R873	ERJ6GEYJ472V	FILM RESISTOR 4,70 kOhm 1/8 W
R875	ERJ6GEYJ103V	FILM RESISTOR 10,00 kOhm 1/8 W
R885	ERQ14AJ2R2P	FUSISTOR 2,20 Ohm 1/4 W
R901	ERJ6GEYJ122V	FILM RESISTOR 1,20 kOhm 1/8 W
R902	ERJ6GEYJ102V	PRECISE RESISTOR 1,00 kOhm 1/8 W
R903	ERJ6GEYJ563V	FILM RESISTOR 56,00 kOhm 1/8 W

Ref. No.	Part No.	Part Name & Description
R904	ERJ6GEYJ223V	FILM RESISTOR 22,00 kOhm 1/8 W
R951	ERJ6GEYJ821V	FILM RESISTOR 820,00 Ohm 1/8 W
R952	ERJ6GEYJ223V	FILM RESISTOR 22,00 kOhm 1/8 W
R953	ERJ6GEYJ332V	FILM RESISTOR 3,30 kOhm 1/8 W
R954	ERJ6GEYJ561V	FILM RESISTOR 560,00 Ohm 1/8 W
R956	ERJ6GEYJ510V	PRECISE RESISTOR 51,00 Ohm 0,125W
R958	ERJ6GEYJ391V	FILM RESISTOR 390,00 Ohm 1/8 W
R959	ERJ6GEYJ101V	PRECISE RESISTOR 100,00 Ohm 1/8 W
R960	ERQ14AJ100E	FUSISTOR 10,00 Ohm 1/4 W
R961	ERQ1CJP331S	FUSISTOR 330,00 Ohm 1 W
R962	D0AE330JA046	CARBON RESISTOR 33,00 Ohm 1/4 W
R963	D0AE330JA046	CARBON RESISTOR 33,00 Ohm 1/4 W
R964	ERQ14AJ471E	FUSISTOR 470,00 Ohm 1/4 W
R965	D0AE223JA046	CARBON RESISTOR 22,00 kOhm 0,25 W
R966	ERG1SJ471E	METAL OXIDE RESISTOR
R967	D0AE223JA046	CARBON RESISTOR 22,00 kOhm 0,25 W
R968	D0AE471JA046	CARBON RESISTOR 470,00 Ohm 1/4 W
R969	D0AE390JA046	CARBON RESISTOR 39,00 Ohm 1/4 W
R970	ERDS2TJ2R7T	CARBON RESISTOR 2,70 Ohm 1/4 W
R971	ERDS2TJ2R7T	CARBON RESISTOR 2,70 Ohm 1/4 W
R972	D0AE390JA046	CARBON RESISTOR 39,00 Ohm 1/4 W
R973	D0AE101JA046	CARBON RESISTOR 100,00 Ohm 1/4 W
R974	ERJ6GEYJ472V	FILM RESISTOR 4,70 kOhm 1/8 W
R975	ERJ6GEYJ101V	PRECISE RESISTOR 100,00 Ohm 1/8 W
R976	ERJ6GEYJ101V	PRECISE RESISTOR 100,00 Ohm 1/8 W
R977	ERJ6GEYJ561V	FILM RESISTOR 560,00 Ohm 1/8 W
R978	ERJ6GEYJ101V	PRECISE RESISTOR 100,00 Ohm 1/8 W
R987	ERJ6GEYJ222V	FILM RESISTOR 2,20 kOhm 1/8 W
R988	ERJ6GEYJ331V	FILM RESISTOR 330,00 Ohm 1/8 W
R989	ERJ6GEYJ122V	FILM RESISTOR 1,20 kOhm 1/8 W
R990	ERJ6GEYJ751V	PRECISE RESISTOR 0,75 kOhm 1/8 W
R993	ERJ6GEYJ221V	FILM RESISTOR 220,00 Ohm 1/8 W
R1010	ERJ6GEYJ271V	FILM RESISTOR 270,00 Ohm 1/8 W
R1011	ERJ6GEYJ333V	FILM RESISTOR 33,00 kOhm 1/8 W
R1012	ERJ6GEYJ683V	FILM RESISTOR 68,00 kOhm 1/8 W
R1013	ERJ6GEYJ222V	FILM RESISTOR 2,20 kOhm 1/8 W
R1104	ERJ6GEYJ562V	FILM RESISTOR 5,60 kOhm 1/8 W
R1105	ERJ6GEYJ562V	FILM RESISTOR 5,60 kOhm 1/8 W
R1106	ERJ6GEYJ102V	FILM RESISTOR 1,00 kOhm 1/8 W
R1108	ERJ6GEYJ101V	FILM RESISTOR 100,00 Ohm 1/8 W
R1109	ERJ6GEYJ101V	FILM RESISTOR 100,00 Ohm 1/8 W
R1111	ERJ6GEYJ103V	FILM RESISTOR 10,00 kOhm 1/8 W
R1112	ERJ6GEYJ332V	FILM RESISTOR 3,30 kOhm 1/8 W
R1113	ERJ6GEYJ682V	FILM RESISTOR 6,80 kOhm 1/8 W
R1114	ERJ6GEYJ682V	FILM RESISTOR 6,80 kOhm 1/8 W
R1115	ERJ6GEYJ103V	FILM RESISTOR 10,00 kOhm 1/8 W
R1116	ERJ6GEYJ332V	FILM RESISTOR 3,30 kOhm 1/8 W
R1117	ERJ6GEYJ222V	FILM RESISTOR 2,20 kOhm 1/8 W
R1118	ERJ6GEYJ331V	FILM RESISTOR 330,00 Ohm 1/8 W
R1120	ERJ6GEYJ432V	FILM RESISTOR 4,30 kOhm 1/10 W
R1122	ERJ6GEYJ332V	FILM RESISTOR 3,30 kOhm 1/8 W
R1123	ERJ6GEYJ681V	FILM RESISTOR 680,00 Ohm 1/8 W
R1125	ERJ6GEYJ103V	FILM RESISTOR 10,00 kOhm 1/8 W
R1130	ERJ6GEYJ101V	FILM RESISTOR 100,00 Ohm 1/8 W
R1131	ERJ6GEYJ101V	FILM RESISTOR 100,00 Ohm 1/8 W
R1132	ERJ6GEYJ101V	FILM RESISTOR 100,00 Ohm 1/8 W
R1133	ERJ6GEYJ562V	FILM RESISTOR 5,60 kOhm 1/8 W
R1140	ERJ6ENF1002V	FILM RESISTOR 10,00 kOhm 1/10 W
R1141	ERJ6GEYJ562V	FILM RESISTOR 5,60 kOhm 1/8 W
R1142	ERJ6GEYJ100V	FILM RESISTOR 10,00 Ohm 1/8 W
R1280	ERJ6ENF1871V	PRECISE RESISTOR 1,87 kOhm 1/10 W
R1281	ERJ6ENF1651V	PRECISE RESISTOR 1,65 kOhm 1/10 W
R1282	ERJ6ENF2151V	PRECISE RESISTOR 2,15 kOhm 1/10 W
R1283	ERJ6ENF3091V	PRECISE RESISTOR 3,09 kOhm 1/10 W
R1284	ERJ6ENF4421V	PRECISE RESISTOR 4,42 kOhm 1/10 W
R1285	ERJ6ENF7501V	PRECISE RESISTOR 7,50 kOhm 1/10 W
R2101	ERJ6GEYJ101V	FILM RESISTOR 100,00 Ohm 1/8 W
R2102	ERJ6GEYJ101V	FILM RESISTOR 100,00 Ohm 1/8 W
R2104	ERJ6GEYJ102V	FILM RESISTOR 1,00 kOhm 1/8 W
R2109	ERJ6GEYJ101V	FILM RESISTOR 100,00 Ohm 1/8 W
R2112	ERJ6GEYJ222V	FILM RESISTOR 2,20 kOhm 1/8 W
R2113	ERJ6GEYJ222V	FILM RESISTOR 2,20 kOhm 1/8 W
R2120	ERJ6GEYJ184V	FILM RESISTOR 180,00 kOhm 1/8 W
R2130	ERJ6GEYJ471V	FILM RESISTOR 470,00 Ohm 1/8 W

Ref. No.	Part No.	Part Name & Description
R2131	ERJ6GEYJ101V	FILM RESISTOR 100,00 Ohm 1/8 W
R2140	ERJ6GEYJ101V	FILM RESISTOR 100,00 Ohm 1/8 W
R2151	ERJ6GEYJ563V	FILM RESISTOR 56,00 kOhm 1/8 W
R2152	ERJ6GEYJ273V	FILM RESISTOR 27,00 kOhm 1/8 W
R2153	ERJ6GEYJ221V	FILM RESISTOR 220,00 Ohm 1/8 W
R2153	ERJ6GEYJ221V	FILM RESISTOR 220,00 Ohm 1/8 W
R2154	ERJ6GEYJ621V	PRECISE RESISTOR 620,00 Ohm 1/8 W
R2155	ERJ6GEYJ471V	FILM RESISTOR 470,00 Ohm 1/8 W
R2302	ERJ6GEYJ153V	FILM RESISTOR 15,00 kOhm 1/8 W
R2303	ERJ6GEYJ472V	FILM RESISTOR 4,70 kOhm 1/8 W
R2307	ERJ6GEYJ432V	FILM RESISTOR 4,30 kOhm 1/10 W
R2308	ERJ6GEYJ432V	FILM RESISTOR 4,30 kOhm 1/10 W
R2380	ERJ6GEYJ151V	FILM RESISTOR 150,00 Ohm 1/8 W
R2381	ERJ6GEYJ102V	FILM RESISTOR 1,00 kOhm 1/8 W
R2382	ERJ6GEYJ102V	FILM RESISTOR 1,00 kOhm 1/8 W
R2383	ERJ6GEYJ103V	FILM RESISTOR 10,00 kOhm 1/8 W
R2384	ERJ6GEYJ100V	FILM RESISTOR 10,00 Ohm 1/8 W
R3010	ERJ6GEYJ184V	FILM RESISTOR 180,00 kOhm 1/8 W
R3012	ERJ6GEYJ184V	FILM RESISTOR 180,00 kOhm 1/8 W
R3013	ERJ6GEYJ184V	FILM RESISTOR 180,00 kOhm 1/8 W
R3014	ERJ6GEYJ184V	FILM RESISTOR 180,00 kOhm 1/8 W
R3015	ERJ6GEYJ101V	FILM RESISTOR 100,00 Ohm 1/8 W
R3022	ERJ6GEYJ101V	FILM RESISTOR 100,00 Ohm 1/8 W
R3030	ERJ6GEYJ181V	FILM RESISTOR 180,00 Ohm 1/8 W
R3032	ERJ6GEYJ101V	FILM RESISTOR 100,00 Ohm 1/8 W
R3033	ERJ6GEYJ101V	FILM RESISTOR 100,00 Ohm 1/8 W
R3035	ERJ6GEYJ750V	FILM RESISTOR 75,00 Ohm 1/8 W
R3036	ERJ6GEYJ330V	FILM RESISTOR 33,00 Ohm 1/10 W
R3037	ERJ6GEYJ331V	FILM RESISTOR 330,00 Ohm 1/8 W
R3038	ERJ6GEYJ101V	FILM RESISTOR 100,00 Ohm 1/8 W
R3039	ERJ6GEYJ101V	FILM RESISTOR 100,00 Ohm 1/8 W
R3040	ERJ6GEYJ470V	FILM RESISTOR 47,00 Ohm 1/8 W
R3041	ERJ6GEYJ101V	PRECISE RESISTOR 100,00 Ohm 1/8 W
R3042	ERJ6GEYJ331V	FILM RESISTOR 330,00 Ohm 1/8 W
R3043	ERJ6GEYJ101V	PRECISE RESISTOR 100,00 Ohm 1/8 W
R3044	ERJ6GEYJ331V	FILM RESISTOR 330,00 Ohm 1/8 W
R3048	ERJ6GEYJ184V	FILM RESISTOR 180,00 kOhm 1/8 W
R3049	ERJ6GEYJ331V	FILM RESISTOR 330,00 Ohm 1/8 W
R3105	ERJ6GEYJ471V	FILM RESISTOR 470,00 Ohm 1/8 W
R3106	ERJ6GEYJ471V	FILM RESISTOR 470,00 Ohm 1/8 W
R3110	ERJ6GEYJ101V	PRECISE RESISTOR 100,00 Ohm 1/8 W
R3111	ERJ6GEYJ101V	PRECISE RESISTOR 100,00 Ohm 1/8 W
R3132	ERJ6GEYJ331V	FILM RESISTOR 330,00 Ohm 1/8 W
R3133	ERJ6GEYJ331V	FILM RESISTOR 330,00 Ohm 1/8 W
R3141	ERJ6GEYJ184V	FILM RESISTOR 180,00 kOhm 1/8 W
R3142	ERJ6GEYJ184V	FILM RESISTOR 180,00 kOhm 1/8 W
R3144	ERJ6GEYJ102V	FILM RESISTOR 1,00 kOhm 1/8 W
R3145	ERJ6GEYJ102V	FILM RESISTOR 1,00 kOhm 1/8 W
R3259	ERJ6GEYJ750V	FILM RESISTOR 75,00 Ohm 1/8 W
R3272	ERJ6GEYJ222V	FILM RESISTOR 2,20 kOhm 1/8 W
R3275	ERJ6ENF4701V	FILM RESISTOR 4,70 kOhm 1/10 W
R3276	ERJ6ENF8200V	PRECISE RESISTOR 820,00 Ohm 1/10 W
R3277	ERJ6GEYJ823V	FILM RESISTOR 82,00 kOhm 1/8 W
R3278	ERJ6GEYJ183V	FILM RESISTOR 18,00 kOhm 1/8 W
R3279	ERJ6ENF75R0V	PRECISE RESISTOR 75,00 Ohm 1/10 W
R3282	ERJ6GEYJ222V	FILM RESISTOR 2,20 kOhm 1/8 W
R3285	ERJ6ENF5601V	PRECISE RESISTOR 5,60 kOhm 1/10 W
R3286	ERJ6ENF1201V	FILM RESISTOR 1,20 kOhm 1/10 W
R3287	ERJ6GEYJ823V	FILM RESISTOR 82,00 kOhm 1/8 W
R3288	ERJ6GEYJ183V	FILM RESISTOR 18,00 kOhm 1/8 W
R3289	ERJ6ENF75R0V	PRECISE RESISTOR 75,00 Ohm 1/10 W
R3290	ERJ6GEYJ222V	FILM RESISTOR 2,20 kOhm 1/8 W
R3291	ERJ6GEYJ222V	FILM RESISTOR 2,20 kOhm 1/8 W
R3292	ERJ6ENF1001V	FILM RESISTOR 1,00 kOhm 1/10 W
R3293	ERJ6ENF1001V	FILM RESISTOR 1,00 kOhm 1/10 W
R3294	ERJ6ENF1001V	FILM RESISTOR 1,00 kOhm 1/10 W
R3295	ERJ6ENF1001V	FILM RESISTOR 1,00 kOhm 1/10 W
R4890	ERJ6GEYJ821V	FILM RESISTOR 820,00 Ohm 1/8 W
R5501	ERJ6GEYJ272V	FILM RESISTOR 2,70 kOhm 1/8 W
R5502	ERJ6GEYJ151V	FILM RESISTOR 150,00 Ohm 1/8 W
R5503	ERJ6GEYJ122V	FILM RESISTOR 1,20 kOhm 1/8 W
R5504	ERJ6GEYJ301V	PRECISE RESISTOR 300,00 Ohm 0,125W
R5505	ERJ6GEYJ822V	FILM RESISTOR 8,20 kOhm 1/8 W
R5506	ERJ6GEYJ152V	FILM RESISTOR 1,50 kOhm 1/8 W

Ref. No.	Part No.	Part Name & Description
R5510	ERJ6GEYJ390V	FILM RESISTOR 39,00 Ohm 1/10 W
R5511	ERJ6GEYJ681V	FILM RESISTOR 680,00 Ohm 1/8 W
R5512	ERJ6GEYJ101V	PRECISE RESISTOR 100,00 Ohm 1/8 W
R5513	ERJ6GEYJ121V	FILM RESISTOR 120,00 Ohm 1/8 W
R5514	ERJ6GEYJ683V	FILM RESISTOR 68,00 kOhm 1/8 W
R5515	ERJ6GEYJ223V	FILM RESISTOR 22,00 kOhm 1/8 W
R5516	ERJ6GEYJ152V	FILM RESISTOR 1,50 kOhm 1/8 W
R5517	ERJ6GEYJ151V	FILM RESISTOR 150,00 Ohm 1/8 W
R5518	ERJ6GEYJ121V	FILM RESISTOR 120,00 Ohm 1/8 W
R5520	ERJ6GEYJ221V	FILM RESISTOR 220,00 Ohm 1/8 W
R5521	ERJ6GEYJ331V	FILM RESISTOR 330,00 Ohm 1/8 W
R5522	ERJ6GEYJ332V	FILM RESISTOR 3,30 kOhm 1/8 W
R5523	ERJ6GEYJ222V	FILM RESISTOR 2,20 kOhm 1/8 W
R5524	ERJ6GEYJ331V	FILM RESISTOR 330,00 Ohm 1/8 W
R5525	ERJ6GEYJ332V	FILM RESISTOR 3,30 kOhm 1/8 W
R5526	ERJ6GEYJ222V	FILM RESISTOR 2,20 kOhm 1/8 W
R5540	ERJ6GEYJ151V	FILM RESISTOR 150,00 Ohm 1/8 W
R5541	ERJ6GEYJ202V	FILM RESISTOR 2,00 kOhm 1/8 W
R5542	ERJ6GEYJ101V	PRECISE RESISTOR 100,00 Ohm 1/8 W
R5545	ERJ6GEYJ152V	FILM RESISTOR 1,50 kOhm 1/8 W
R5546	ERJ6GEYJ331V	FILM RESISTOR 330,00 Ohm 1/8 W
R5547	ERJ6GEYJ122V	FILM RESISTOR 1,20 kOhm 1/8 W
R5548	ERJ6GEYJ331V	FILM RESISTOR 330,00 Ohm 1/8 W
R5551	ERJ6GEYJ472V	FILM RESISTOR 4,70 kOhm 1/8 W
R5552	ERJ6GEYJ151V	FILM RESISTOR 150,00 Ohm 1/8 W
R5553	ERJ6GEYJ392V	FILM RESISTOR 3,90 kOhm 1/8 W
R5554	ERJ6GEYJ202V	FILM RESISTOR 2,00 kOhm 1/8 W
R5555	ERJ6GEYJ151V	FILM RESISTOR 150,00 Ohm 1/8 W
R5556	ERJ6GEYJ151V	FILM RESISTOR 150,00 Ohm 1/8 W
R5560	ERJ6GEYJ122V	FILM RESISTOR 1,20 kOhm 1/8 W
R5561	ERJ6GEYJ392V	FILM RESISTOR 3,90 kOhm 1/8 W
R5565	ERJ6GEYJ221V	FILM RESISTOR 220,00 Ohm 1/8 W
R5566	ERJ6GEYJ821V	FILM RESISTOR 820,00 Ohm 1/8 W
R5569	ERJ6GEYJ241V	FILM RESISTOR 240,00 Ohm 1/8 W
R5570	ERJ6GEYJ101V	PRECISE RESISTOR 100,00 Ohm 1/8 W
R5571	ERJ6GEYJ102V	PRECISE RESISTOR 1,00 kOhm 1/8 W
R5572	ERJ6GEYJ122V	FILM RESISTOR 1,20 kOhm 1/8 W
R5573	ERD25VJ392T	RADIAL CARBON 3,90 kOhm 0,25 W
R5581	ERJ6GEYJ103V	FILM RESISTOR 10,00 kOhm 1/8 W
R5583	ERJ6GEYJ123V	FILM RESISTOR 12,00 kOhm 1/8 W
R5585	ERJ6GEYJ391V	FILM RESISTOR 390,00 Ohm 1/8 W
R5587	ERJ6ENF1620V	PRECISE RESISTOR 162,00 Ohm 0,1 W
R5589	ERJ6GEYJ102V	PRECISE RESISTOR 1,00 kOhm 1/8 W
R5591	ERJ6ENF1001V	FILM RESISTOR 1,00 kOhm 1/10 W
R5593	ERJ6GEYJ102V	PRECISE RESISTOR 1,00 kOhm 1/8 W
R5594	ERJ6GEYJ183V	FILM RESISTOR 18,00 kOhm 1/8 W
R5595	ERJ6GEYJ561V	FILM RESISTOR 560,00 Ohm 1/8 W
RELAY		
RL801	K6B1CDA00027	RELAY 30 VDC 250 VAC
SWITCHES		
S1280	EVQ11G05R	SWITCH
S1281	EVQ11G05R	SWITCH
S1282	EVQ11G05R	SWITCH
S1283	EVQ11G05R	SWITCH
S1284	EVQ11G05R	SWITCH
S1285	EVQ11G05R	SWITCH
S840	ESB92DA1B	POWER SWITCH
TRANSFORMERS		
T501	ZTFN35007A	FLY BACK
T553	ETH19Y210AZZ	HORIZONTAL DRIVER TRANSFORMER
T801	G4D3Z0000003	CHOPPER TRANSFORMER
TUNER		
TNR001	ENV56K05G3	TUNER
OSCILLATORS		
X101	M1971M	SAW FILTER 45,75 MHZ
X181	EFCS4R5MW5	CERAMIC FILTER 4,5 MHZ
X184	EFCT4R5MS5W	CERAMIC FILTER 4,5 MHZ
X2130	H0D184500008	CRYSTAL 18,4 MHZ
X601	H0D120500006	CRYSTAL 12,00 MHz

Panasonic da Amazônia S.A.

CS DIVISION - TECHNICAL SUPPORT

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