website:http://biz.LGservice.com
e-mail:http://www.LGEservice.com/techsup.html

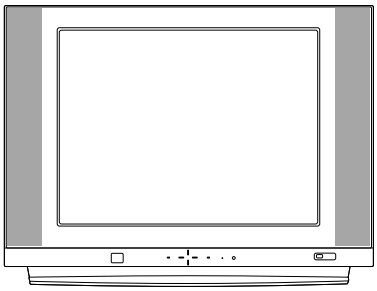
COLOR TV
SERVICE MANUAL

CHASSIS : MC-022A

MODEL:CT-25Q40RQ/VB/VE/VQ
CT-29Q40RE/RQ/VB/VE/VQ
CF-29F84V

CAUTION

BEFORE SERVICING THE CHASSIS,
READ THE SAFETY PRECAUTIONS IN THIS MANUAL.



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SAFETY PRECAUTIONS

IMPORTANT SAFETY NOTICE

Many electrical and mechanical parts in this chassis have special safety-related characteristics. These parts are identified by ⚠ in the Schematic Diagram and Replacement Parts List.
It is essential that these special safety parts should be replaced with the same components as recommended in this manual to prevent X-RADIATION, Shock, Fire, or other Hazards.
Do not modify the original design without permission of manufacturer.

General Guidance

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 and it's components from being damaged by accidental shorts of the circuitary that may be inadvertently introduced during the service operation.

If any fuse (or Fusible Resistor) in this TV receiver is blown, replace it with the specified.

When replacing a high wattage resistor (Oxide Metal Film Resistor, over 1W), keep the resistor 10mm away from PCB.

Keep wires away from high voltage or high temperature parts.

Due to high vacuum and large surface area of picture tube, extreme care should be used in **handling the Picture Tube**. Do not lift the Picture tube by it's Neck.

X-RAY Radiation

Warning:

The source of X-RAY RADIATION in this TV receiver is the High Voltage Section and the Picture Tube.
For continued X-RAY RADIATION protection, the replacement tube must be the same type tube as specified in the Replacement Parts List.

To determine the presence of high voltage, use an accurate high impedance HV meter.

Adjust brightness, color, contrast controls to minimum.
Measure the high voltage.
The meter reading should indicate
23.5 ¡ 1.5KV: 14-19 inch, 26 ¡ 1.5KV: 19-21 inch,
29.0 ¡ 1.5KV: 25-29 inch, 30.0 ¡ 1.5KV: 32 inch
If the meter indication is out of tolerance, immediate service and correction is required to prevent the possibility of premature component failure.

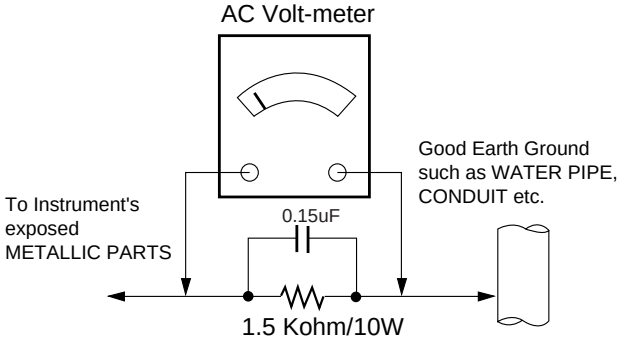
Before returning the receiver to the customer,

always perform an **AC leakage current check** on the exposed metallic parts of the cabinet, such as antennas, terminals, etc., to be sure the set is safe to operate without damage of electrical shock.

Leakage Current Cold Check(Antenna Cold Check)
With the instrument AC plug removed from AC source, connect an electrical jumper across the two AC plug prongs. Place the AC switch in the on positioin, connect one lead of ohm-meter to the AC plug prongs tied together and touch other ohm-meter lead in turn to each exposed metallic parts such as antenna terminals, phone jacks, etc.
If the exposed metallic part has a return path to the chassis, the measured resistance should be between 1MΩ and 5.2MΩ.
When the exposed metal has no return path to the chassis the reading must be infinite.
An other abnormality exists that must be corrected before the receiver is returned to the customer.

Leakage Current Hot Check (See below Figure)
Plug the AC cord directly into the AC outlet.
Do not use a line Isolation Transformer during this check.
Connect 1.5K/10watt resistor in parallel with a 0.15uF capacitor between a known good earth ground (Water Pipe, Conduit, etc.) and the exposed metallic parts.
Measure the AC voltage across the resistor using AC voltmeter with 1000 ohms/volt or more sensitivity.
Reverse plug the AC cord into the AC outlet and repeat AC voltage measurements for each esposed metallic part. Any voltage measured must not exceed 0.75 volt RMS which is corresponds to 0.5mA.
In case any measurement is out of the limits sepcified, there is possibility of shock hazard and the set must be checked and repaired before it is returned to the customer.

Leakage Current Hot Check circuit



SPECIFICATIONS

Note : Specification and others are subject to change without notice for improvement.

- **Video input system:**
  PAL-B/G, D/K, I/I
  SECAM-B/G, D/K/L/L'
  NTSC M
  NTSC 4.43(AV)
  NTSC- M/PAL M-N

- **Intermediate Frequency (Unit : MHz)**
  VISION IF : 38.9MHz,33.9MHz(SECAM-L')
  COLOR IF : 34.47MHz(4.43)
  35.32MHz(3.58) : NTSC-M
  (VIF-4.25000MHz / VIF-4.40625MHz): SECAM
  SOUND IF : 33.4MHz (B/G)
  32.9MHz (I/I)
  32.4MHz (D/K,L)
  34.4MHz (M)
  40.4MHz (L')

- **Power requirement :** 110~240V, 50/60Hz(NON-EU)
  230V, 50Hz(EU)

- **Power consumption :** 25":125W
  29":135W

- **Tuning range**

Band	For TV				For CATV
	B/G	D/K	I/I	NTSC	
VHF-Low	Ch2-4	Ch1-5		Ch2-13	S1'-S3', S1
VHF-High	Ch5-12	Ch6-12	Ch4-13		S2-S10, S11-S20
Hyper					S21-S41
UHF	Ch21-69			Ch14-69	

- **Tuning system :**
  FVS
  100 Programme memory
  200 Programme memory(W/O TXT Model)

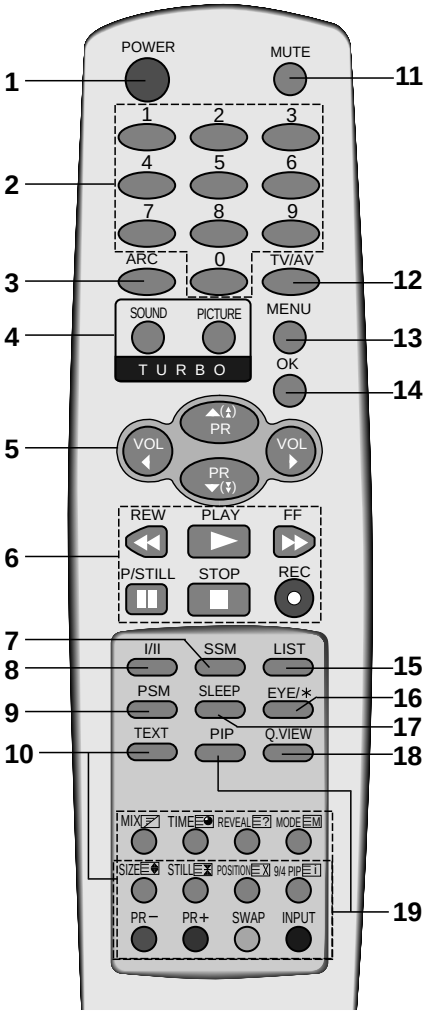
- **Antenna input impedance :** VHF/UHF 75 ohm, unbalanced

- **Voice coil impedance :** 8 ohm

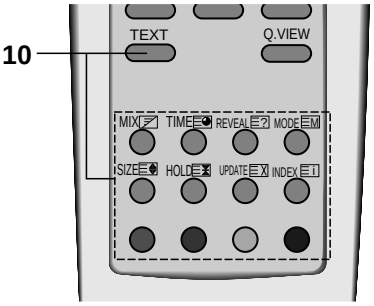
- **External In/Output**
  Audio-In:0.5Vrms ± 3db,over 10Kohm
  Audio-Out:0.5Vrms ± 3db,below 1Kohm
  Video-In/Out:1Vp-p ± 3db,75ohm
  R,G,B In:0.7Vp-p ± 3db

- **Feature & Funtion**
  Teletext(TOP/FLOF/LIST)
  AV Input : Side or Front(1),Rear(2)
  Component Input : Rear(Opt.)
  PERI TV Connector(AV Input,SCART Opt.)
  RGB INput
  2 Carrier Stereo : BG/DK
  NICAM Stereo : BG/I/L
  2 Carrier Dual : BG/DK
  NICAM Dual : BG/I/L
  SSC(Split Screen) Mode
  Multi Picture Display Mode(1:4:9 PIP)
  DBS

DESCRIPTION OF CONTROLS



(With TELETEXT / PIP)



(With TELETEXT / Without PIP)

All the functions can be controlled with the remote control handset. Some functions can also be adjusted with the buttons on the front panel of the set.

Remote control handset

Before you use the remote control handset, please install the batteries. See the next page.

1. **POWER**
   switches the set on from standby or off to standby.

2. **NUMBER BUTTONS**
   switches the set on from standby or directly select a number.

3. **ARC (Aspect Ratio Control)**
   changes the picture format.

4. **TURBO PICTURE / SOUND BUTTON**
   selects Turbo picture / sound.

5. **▲(‡) / ▼(‡) (Programme Up/Down)**
   selects a programme or a menu item.
   switches the set on from standby.
   scans programmes automatically.
   ◄ / ► (Volume Up/Down)
   adjusts the volume.
   adjusts menu settings.

6. **VCR BUTTONS (option)**
   control a LG video cassette recorder.

7. **SSM (Sound Status Memory)**
   recalls your preferred sound setting.

8. **I/II (option)**
   selects the language during dual language broadcast (option).
   selects the sound output.

9. **PSM (Picture Status Memory)**
   recalls your preferred picture setting.

10. **TELETEXT BUTTONS (option)**
    These buttons are used for teletext.
    For further details, see the ‘Teletext’ section.

11. **MUTE**
    switches the sound on or off.

12. **TV/AV**
    selects TV or AV mode.
    switches the set on from standby.

13. **MENU**
    selects a menu.

14. OK
accepts your selection or displays the current mode.

15. LIST
displays the programme table.

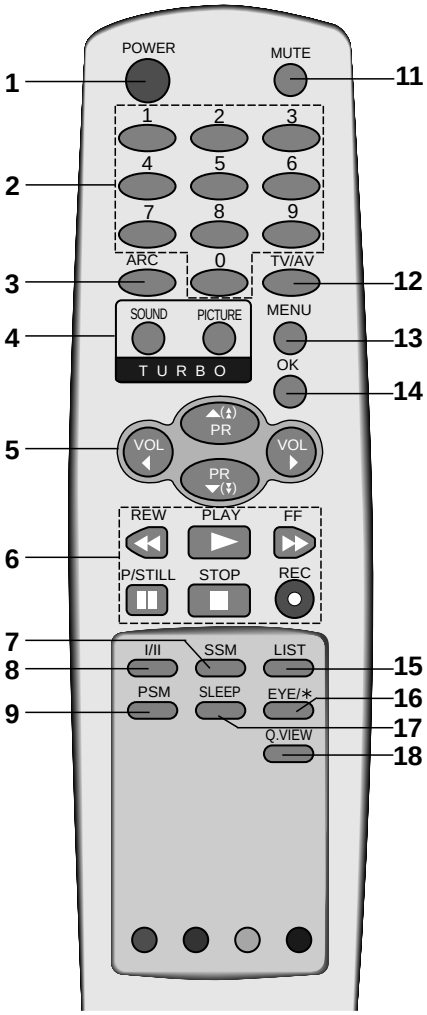
16. EYE/✱ (option)
switches the eye function on or off.

17. SLEEP
sets the sleep timer.

18. Q.VIEW
returns to the previously viewed programme.
selects a favorite programme.

19. PIP BUTTONS (option)
PIP
switches the sub picture on or off.
PR +/–
selects a programme for the sub picture.
SWAP
alternates between main and sub picture.
INPUT
selects the input mode for the sub picture.
SIZE
adjusts the sub picture size.
STILL
freezes motion of the sub picture.
POSITION
relocates the sub picture in clockwise direction.
9/4 PIP
switches on or off the 9 or 4 sub pictures.

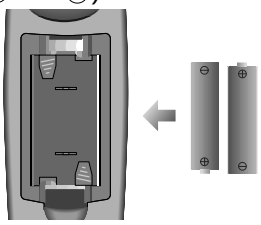
COLOURED BUTTONS
These buttons are used for teletext (only TELETEXT models) or programme edit.



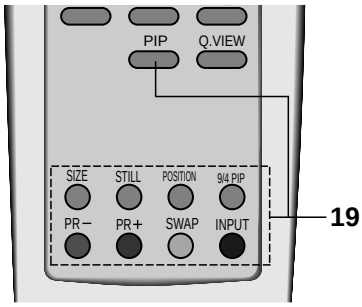
(Without TELETEXT / PIP)

Battery installation

The remote control handset is powered by two AA type batteries. To load the batteries, turn the remote control handset over and open the battery compartment. Install two batteries as indicated by the polarity symbols (⊕ and ⊖) marked inside the compartment.



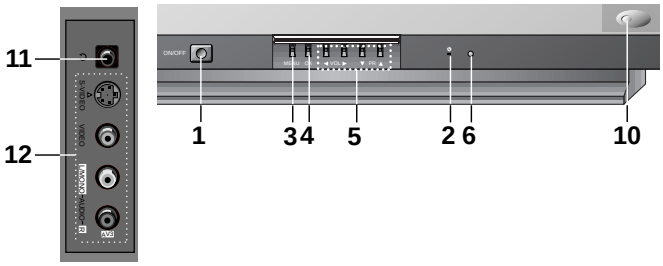
Note : *To avoid damage from possible battery leakage, remove the batteries if you do not plan to use the remote control handset for an extended period of time.*



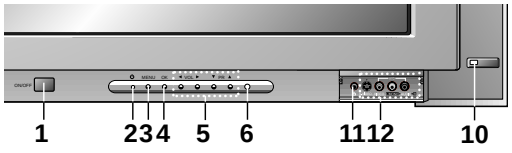
(Without TELETEXT / With PIP)

Front panel

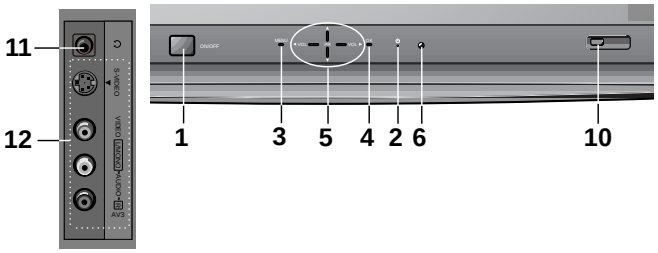
CT-25/29Q20 series



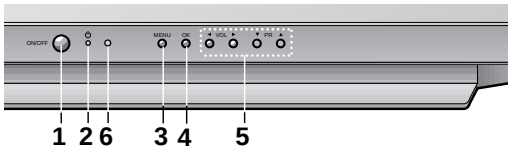
RT-29FA33 series



CT-25/29Q40 series



RT-28FZ10 series



1. **MAIN POWER**
   switches the set on or off.

2. **POWER/STANDBY INDICATOR**
   illuminates brightly when the set is in standby mode.
   dims when the set is switched on.

3. **MENU**
   selects a menu.

4. **OK**
   accepts your selection or displays the current mode.

5. **▲ / ▼ (Programme Up/Down)**
   selects a programme or a menu item.
   switches the set on from standby.
   ◄ / ► (Volume Down/Up)
   adjusts the volume.
   adjusts menu settings.

6. **REMOTE CONTROL SENSOR**
   Note : *Only use the supplied remote control handset. (When you use others, they'll be not able to function.)*

7. **TV/AV**
   selects TV or AV mode.
   clears the menu from the screen.
   switches the set on from standby.

8. **↻ (Function)**
   selects volume, EYE (option), picture items or brief auto programme while the menus not display.

9. **+/- (▲/▼)**
   adjusts the function or selects a programme.
   switches the set on from standby.

10. **EYE (option)**
    adjusts picture according to the surrounding conditions.

11. **HEADPHONE SOCKET (option)**
    Connect the headphone plug to this socket.

12. **AUDIO/VIDEO IN SOCKETS (AV3)**
    Connect the audio/video out sockets of external equipment to these sockets.
    S-VIDEO/AUDIO IN SOCKETS (S-AV) (option)
    Connect the video out socket of an S-VIDEO VCR to the **S-VIDEO** socket.
    Connect the audio out sockets of the S-VIDEO VCR to the audio sockets as in **AV3**.

Note : *Do not place any heavy objects (over 4Kg) on the RT-29FA33 series models..*

DISASSEMBLY INSTRUCTIONS

Important note
This set is disconnected from the power supply through the converter transformer. An isolating transformer is necessary for service operations on the primary side of the converter transformer.

Back Cabinet Removal
Remove the screws residing on the back cabinet and carefully separate the back cabinet from the front cabinet. (Fig. 2-1).

CPT Removal
1. Pull out the CPT board from the CPT neck.
2. Place the front cabinet on soft material not to mar the front surface or damage control knobs.
3. Remove 4 screws securing the picture tube mounting brackets to the front cabinet.
4. Carefully separate CPT from the front cabinet.

Chassis Assy Removal
Grasp both side of Frame and pull it backward smoothly.

PICTURE TUBE HANDLING CAUTION
Due to high vacuum and large surface area of picture tube, great care must be exercised when handling picture tube. Always lift picture tube by grasping it firmly around faceplate.
NEVER LIFT TUBE BY ITS NECK! The picture tube must not be scratched or subjected to excessive pressure as fracture of glass may result in an implosion of considerable violence which can cause personal injury or property damage.

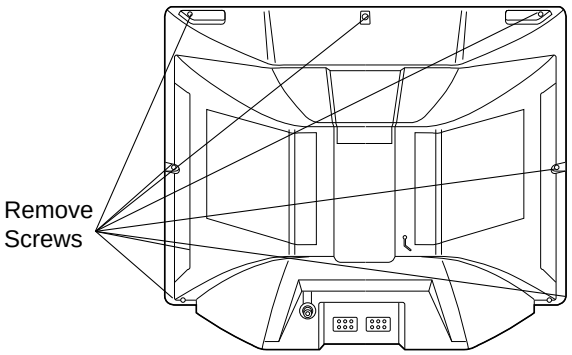


Fig. 2-1

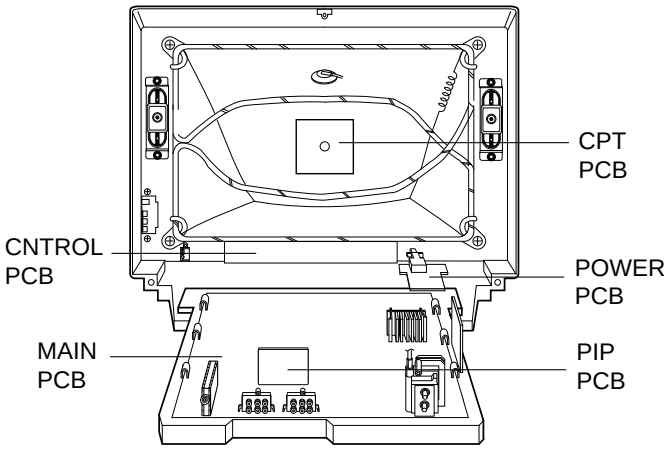


Fig. 2-2

ADJUSTMENT INSTRUCTIONS

1. Safety Precautions

1. It is safe to adjust after using insulating transformer between the power supply line and chassis input to prevent the risk of electric shock and protect the instrument.
2. Never disconnect leads while the TV receiver is on.
3. Don't short any portion of circuits while power is on.
4. The adjustment must be done by the correct appliances.
5. Unless otherwise noted, set the line voltage to 230Vac±10%, 50Hz.
6. The adjustment of TVshould be performed after warming up for 15 minutes.

2. Test Equipment required

1. RF signal generator (with pattern generator)
2. DC Power Supply
3. Multimeter (volt meter)
4. Oscilloscope
5. Color analyzer

3.DVCO Adjustment

1) This is for adjustment of VCT38XX,crystal oscillator frequency after receiving a company Digital pattern.(PAL:EU05CH,NTSC:13CH)
2) When entering adjustment mode by pressing IN-START button,DVCO adjustment is operating automatically.
(T/X doesn't operating occassionally during DVCO adjustment.)

4. Focus Adjustment

4-1. Preparation for Adjustment

Tune the TV set to receive a digital pattern.

4-2. Adjustment Method

1) Single Focus CPT

Adjust the upper Focus volume of FBT for the best focus of horizontal line A,vertical line B.

2) Double Focus CPT

1) Adjust the lower Focus volume of FBT for the best focus of vertical line B.
2) Adjust the upper Focus volume of FBT for the best focus of area A.
3) Repeat above step 1) and 2) for the best overall focus.

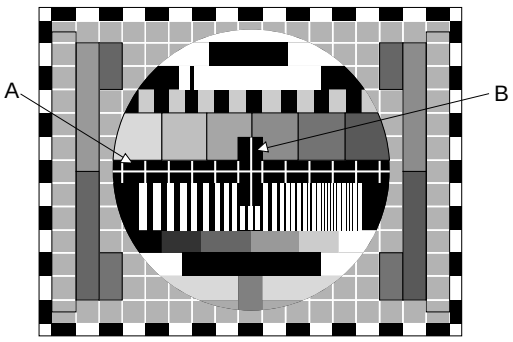


Fig. 1

5. Screen Voltage & White Balance Adjustment

5-1. Adjustment of screen manually (Using ADJ.Remote Control)

1) Receive the PAL or SECAM(NTSC) signal into RF mode regardless of channel.
2) If you press the "ADJ"button in LINE SVC mode(IN-START button),the LINE SVC mode changes to screen adjustment mode.
3) Turn the Sreen Volume of FBT to change luminance of White signal center as shown below.(Deviation ± 1FL)
4) Press the EXIT button (Like TV/AV) to exit SVC mode.

CPT & INCH	Luminance(Manual)	Note
29" FLAT	6±1FL	Single Focus
25" FLAT	8±1FL	
29" NORMAL	5±1FL	
25" NORMAL	6±1FL	
28" NORMAL	8±1FL	

5-2. Adjustment of white balance manually(LIne-SVC 1)

1) Tune the TV set to receive an 100% white pattern.
2) Adjust LOW LIght status of CUT R,CUT B at CUT G:50.
3) Adjust HIGH LIght status of WDR R,WDR B at WDR G:380.
4) Repeat above step 2) and 3) for the best condition each status of High Light and Low Light.

White Balance Color analyzer

Menu	EU	N-EU
X	288	268
Y	295	273
Color Temperature	9000°K	13000°K

White Balance Initial Data

Menu	Range	DATA
CUR R	0 ~ 511	50
CUR G	0 ~ 511	50
CUR B	0 ~ 511	50
WDR R	0 ~ 511	380
WDR G	0 ~ 511	380
WDR B	0 ~ 511	380

NOTE : When adjusting white balance automatically,connect the adjustment JIG in SVC mode.(When pressing IN-START,MUTE button on remote control for adjustment orderly,it changes to SVC mode and screen displays SVC.)

6. Deflection Data Adjustment (Line SVC-2)

NOTE : How to enter into the Line Service Mode with a remocon.

1.Power off.
2.Press the Red button.
3.Press the Green button.
4.Press the Yellow button.
5.Press the Cyan button.
6.Press the OK button.
7.Power On.

6-1. Preparation for Deflection Adjustment

1) At adjustment mode(IN-START button on remote control of adjustment),changed to LINE SVC 2 mode to adjust the deflection.
2) Press Channel UP/DOWN button for desirous function Adjustment.
3) Press Volume UP/DOWN button to adjust the data.
4) Tune the TV set to receive a Digital pattern.(PAL:05CH)

NOTE : If production line doesn't the production line of LG TV,receive available deflection adjustment pattern.

6-2. Adjustment Method

NOTE : First,adjust deflection at N50Hz,W50Hz,Z50Hz of PAL signal.Then adjust deflection at N60Hz,W60Hz,Z60Hz of NTSC signal.
In case of NTSC only model,adjust deflection of N60Hz,W60Hz,Z60Hz of NTSC signal.

Store the deflection adjustment data in EEPROM by using ENTER button before adjusting PIP position.

1) When adjusting a deflection,adjust N50Hz of PAL signal first and adjust a deflection at W50Hz,Z50Hz,N60Hz,W60Hz,Z60Hz of PAL signal.
2) Adjust a deflection as shown below
PAL 4:3=> PAL 16:9=>PAL ZOOM=>NTSC 4:3=>NTSC 16:9=>NTSC ZOOM.
3) After finishing deflection adjustment,press the ENTER button to enter or exit in SVC mode.

VL (Vertical Linearity)
Adjust so that the boundary line between upper and lower half is in accord with geometric horizontal center of the CPT.

VA (Vertical Amplitude)
Adjust so that the circle of a digital circle pattern may be located within the effective screen of the CPT.

SC (Vertical "S" Correction)
Adjust so that all distance between each horizontal lines are to be the same.

VS (Vertical Shift)
Adjust so that the horizontal center line of a digital circle pattern is in accord with geometric horizontal center of the CPT.

HS (Horizontal Shift)
Adjust so that the vertical center line of a digital circle pattern is in accord with geometric vertical center of the CPT.

EW (Horizontal Width)
Adjust to that a digital circle pattern looks like exact circle.

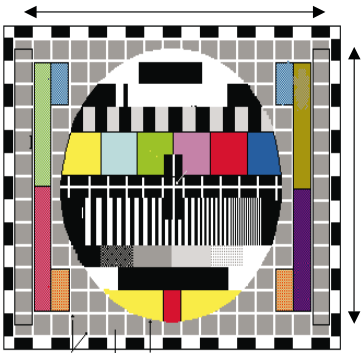


Fig. 2

EP (East-west Parabolar)
Adjust so that middle portion of the outermost left and right vertical line looks like parallel with vertical lines of the CPT.

EC (East-west Coner)
Adjust so that the vertical line at every 4 corners of the screen looks like parallel with the vertical lines of the CPT.

ET (East-west Trapezium)
Adjust to make the length of top horizontal line same with it of the bottom horizontal line.

PIP (PIP Position)
Adjust until the distance between PIP and main picture becomes about 1~2mm.

25/29″ LG FLAT CPT(CT-25Q20RB)

ITEM	RANGE	N50Hz	W50Hz	Z50Hz
VA	0050~00CF	009A	22	11
VL	0025~00BF	00F3	3	0
SC	0000~009F	00D0	0	0
VS	0600~0900	0774	0	0
HS	0000~003F	0019	0	0
EW	0400~0EFF	0B96	22	0
ET	0700~08FF	07DE	0	0
EP	06E0~0840	07BF	19	-14
ES	06A0~0AFF	085C	0	0
EC	0790~08E0	082B	0	0
PIP P	0790~08E0	0007	0	0

29″ S/S SEB FLAT CPT

ITEM	RANGE	N50Hz	W50Hz	Z50Hz
VA	0050~00CF	00A3	-22	11
VL	0025~00BF	00F5	0	0
SC	0000~009F	00D0	0	0
VS	0600~0900	0744	0	0
HS	0000~003F	0016	0	0
EW	0400~0EFF	0E40	0	0
ET	0700~08FF	07E9	0	0
EP	06E0~0840	07B4	22	-14
ES	06A0~0AFF	0840	0	0
EC	0790~08E0	0840	0	0
PIP P	0790~08E0	0000B	0	0

25/29″ FST CPT

ITEM	RANGE	N50Hz		W50Hz		Z50Hz		N60Hz		W60Hz		Z60Hz	
		25”	29”	25”	29”	25”	29”	25”	29”	25”	29”	25”	29”
VA	0050~00CF	0092	008A	-22	-22	14	14	0	0	-22	-22	-5	-5
VL	0025~00BF	00FF	00F8	0	0	0	0	-5	-5	-5	-5	0	0
SC	0000~009F	00E1	00E1	0	0	0	0	0	0	0	0	0	0
VS	0600~0900	07FF	0733	0	0	0	0	43	43	43	43	43	43
HS	0000~003F	0016	001C	0	0	0	0	4	4	4	4	4	4
EW	0400~0EFF	0C36	0C59	0	0	0	0	15	15	15	15	15	15
ET	0700~08FF	07FC	07F3	0	0	0	0	-6	-6	-6	-6	-16	-16
EP	06E0~0840	07B3	07BF	25	25	-16	-16	-2	-2	15	15	-16	-16
ES	06A0~0AFF	0864	085F	29	29	29	29	0	0	44	44	44	44
EC	0790~08E0	083F	073E	0	0	0	0	12	12	12	12	12	12
PIP P	0790~08E0	0009	0009	0	0	0	0	0	0	0	0	0	0

28″ LGPD FLAT CPT

ITEM	RANGE	16: 9		14: 9		ZOOM		STANDARD	
		50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz
VA	0050~00CF	0083	0083	008F	008E	00A7	00A7	0083	0084
VL	0025~00BF	00FD	00FA	00FD	00A	00FD	00F8	00FD	00F9
SC	0000~009F	00F0	00F0	00F0	00F0	00F0	00F0	00F0	00F0
VS	0600~0900	0729	0753	0732	0756	073B	075D	0741	0753
HS	0000~003F	0016	0014	0016	0014	0016	0014	0016	0014
EW	0400~0EFF	0A6E	0A62	0A6E	0A68	0A6E	0A68	0A6E	0A68
ET	0700~08FF	07FF	07FD	07FF	07E8	07FF	07EA	07FD	07EA
EP	06E0~0840	07B7	07B6	07A9	07AB	078E	078B	07B3	07B6

ITEM	RANGE	16: 9		14: 9		ZOOM		STANDARD	
		50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz
VA	0050~00CF	0083	0083	008F	008E	00A7	00A7	0083	0084
VL	0025~00BF	00FD	00FA	00FD	00A	00FD	00F8	00FD	00F9

7. SVC Data & PSM,SSM Data.

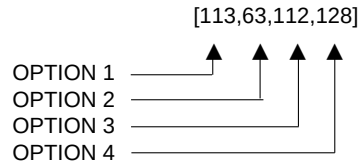
PICTURE SETTING DATA (LINE SVC-3)

Menu	Range	25/29" LG Flat	29" S/S-Flat	25" FST	28" FST	29" FST	28" FLAT
DVCO(Digital VCO)							
IBRM(BLACK CURRENT)	0~1FFH	00C8	00C8	00C8	00C8	00C8	00C8
WDRM(WHITE CURRENT)	0~3FFH	0190	0190	0190	0190	0190	0190
BCLT(BCL THERSHOLD	0~7FFH	0055	0055	0050	0050	0050	0050
BCLTM(BCL TIME)	0~1FFH	0007	0007	0007	0007	0007	0007
BCLGA(BCL GAIN)	0~1FFH	0007	0007	0007	0007	0007	0007
SVGA(SVM GAIN)		000D	000D	000D	000D	000D	000D
SVDEL(SVM DELAY)		0007	0007	0007	0007	0007	0007
SVD1(SVM DELAY1)		0003	0003	0003	0003	0003	0003
LDLY(L DELAY)		FFFC	FFFE	FFFE	FFFE	FFFE	
DSCC(Discharge Sample)	0~01FF	000D	000D	0009		0007	0008
DSCV(Vertical Discharge)	0~01FF	FB80	FB80	FDC0		FD80	FB80

8. OPTION Adjustment (OPTION-1,2, 3,Teletext)

8-1. Preparation for Adjustment

1) This decides funtion in accordance with model.
   Press the SVC TX adjustment button(IN-START button) at SVC mode,then adjust the option at OPTION 1,2,3,4 mode.
2) Mark the option adjustment data like [111,11,111,11] in BOM.



● Mark of BOM

LEVEL	PART NO.	SPECIFICATION	DESCRIPTION	JOB EXP.
1.	3141VMN382A	MAIN[MC-022A]	CHASSIS ASSY	OP[113,63,112,128]

The OPTION 1 data is 113,OPTION 2 data is 63,the oOPTION 3 data is 112,the OPTION 4 data is 128 in this model.

8-2. Adjustment Method

1) Input data directly by the buttons corresponded with OPTION1 ??(0~255), OPTION2 ??(0~255), OPTION3 ???(0~127),OPTION 4 ???(0 ~255).
2) Select each OPTION function by the CH Up/Down button and then set up each OPTION by the VOL Up/Down button.

8-3. OPTION 1 Function

Option	Code	Function	Remark
WIDE	0	4:3 NORMAL MODEL	
	1	WIDE FLAT MODEL	
TOP	0	W/O TOP(FLOP BASIC)	
	1	WITH TOP	
ACMS	0	Without ACMS funtion	Only Austrailia
	1	With ACMS funtion	
CH+AU	0	ALL NATION	
	1	Frequency Table	
EYE	0	WITHOUT EYE	
	1	WITH EYE	
DEG	0	Without DEGAUSSING	
	1	With DEGAUSSING	
TILT	0	WITHOUT TILT	
	1	WITH TILT	
KEY	0	6 KEY	
	1	4KEY(H80,K90,K30)	

8-4. OPTION 2 Function

Option	Code	Function	Remark
TURBO	0	Without TURBO search	EU
	1	With TURBO search	
C MUTE	0	Not CARRIER MUTE	MONO MODEL
	1	CARRIER MUTE	DEFAULT
A2 ST	0	NICAM	
	1	NICAM & FM STEREO	
DUAL	0	NO SAVE DUAL/SOUND Condition	EU(CE,CL Model)
	1	SAVE DUAL SOUND Condition	NON EU(CT Model)
SCART	0	PHONE JACK	
	1	SCART JACK	
V-CUR	0	NORMAL VOLUME CURVE	
	1	RUSHED VOLUME CURVE	
DVD	0	Without DVD INPUT	
	1	With DVD INPUT	
HOTEL	0	Without HOTEL OPTION	
	1	With HOTEL OPTION	
M-VOL	0~100	MAX VOLUME	With HOTEL mode

8-5. OPTION 3 Function

Option	Code	Function	Remark
GAME	0	W/O GAME	TXT Model
	1	GAME PACK GAME(HINDI MICOM)	W/O TXT Model
MONO	0	FORCED MONO NOT SETTING	
	1	FORCED MONO SETTING	
AV2	0	WITH 1 AV JACK(BACK)	
	1	WITH 2 AV JACK(BACK)	PAL model ALL
TBS	0	BOOSTER CONTROL disable	1 TUNER Model
	1	BOOSTER CONTROL enable	2 PIP only
WOOF	0	W/O WOOFER	
	1	WITH WOOFER	
PIP	0	1 TUNER PIP or W/O PIP	1 PIP or W/O PIP
	1	2 TUNER PIP	2 PIP
SYS	0	B/G,I,D/K	CE/RE-MODEL
	1	B/G,I,D/K,L/L'	CL/RL-MODEL
	2	B/G,I,D/K,M	CT/RT-MODEL
	3	RESERVED	

8-6. SOUND PRE-SCALER

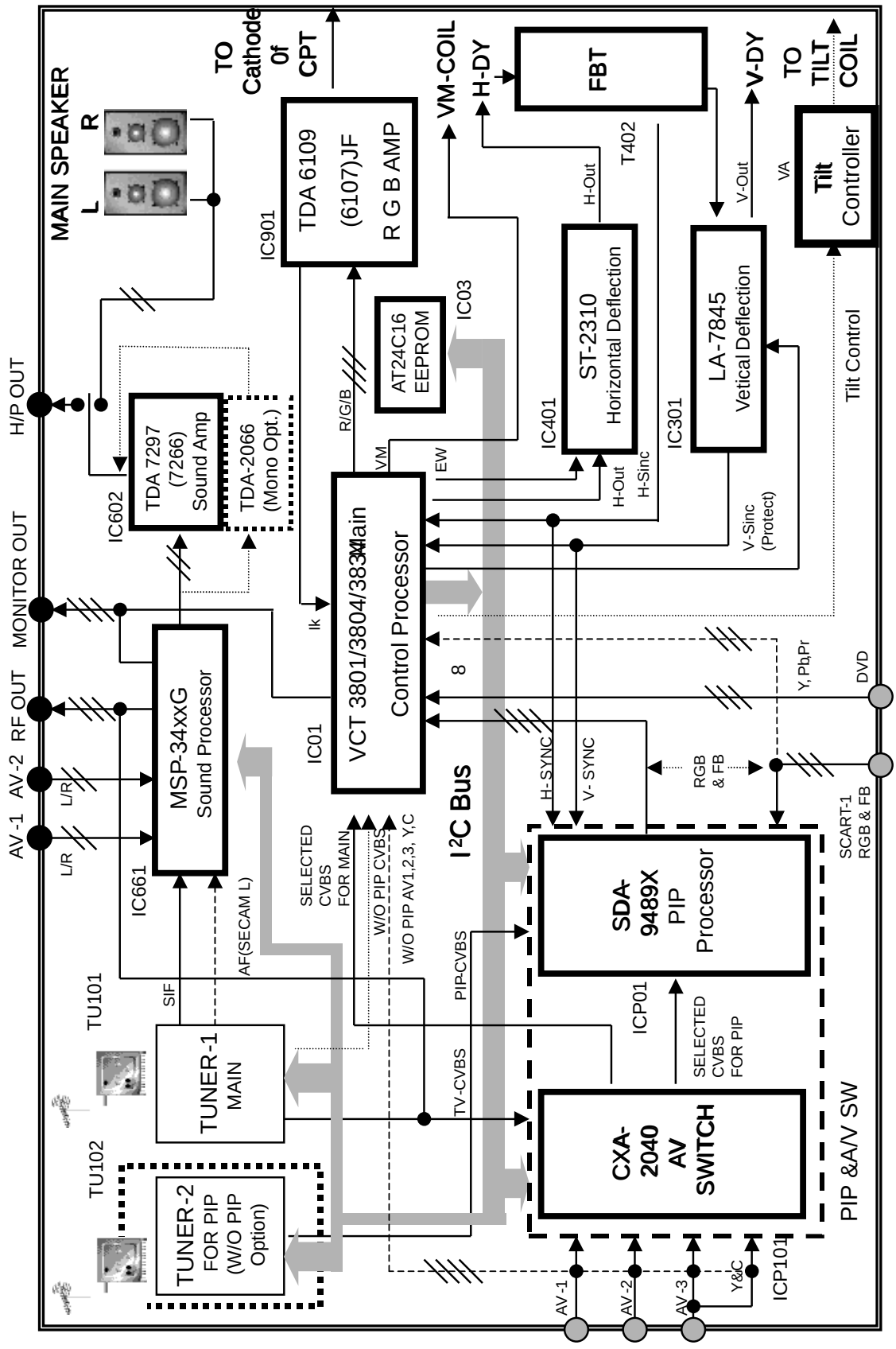
Menu	DATA
FP(FM PRE-SCALER)	0016
NP(NICAM PRE-SCALER)	0056
SP(SCART PRE-SCALER)	0013
S1 VOL(SCART1 PRE-SCALER)	0064
S2 VOL(SCART2 PRE-SCALER)	0064
AGC-L(AUTO GAIN CONT.LIMIT)	00C5

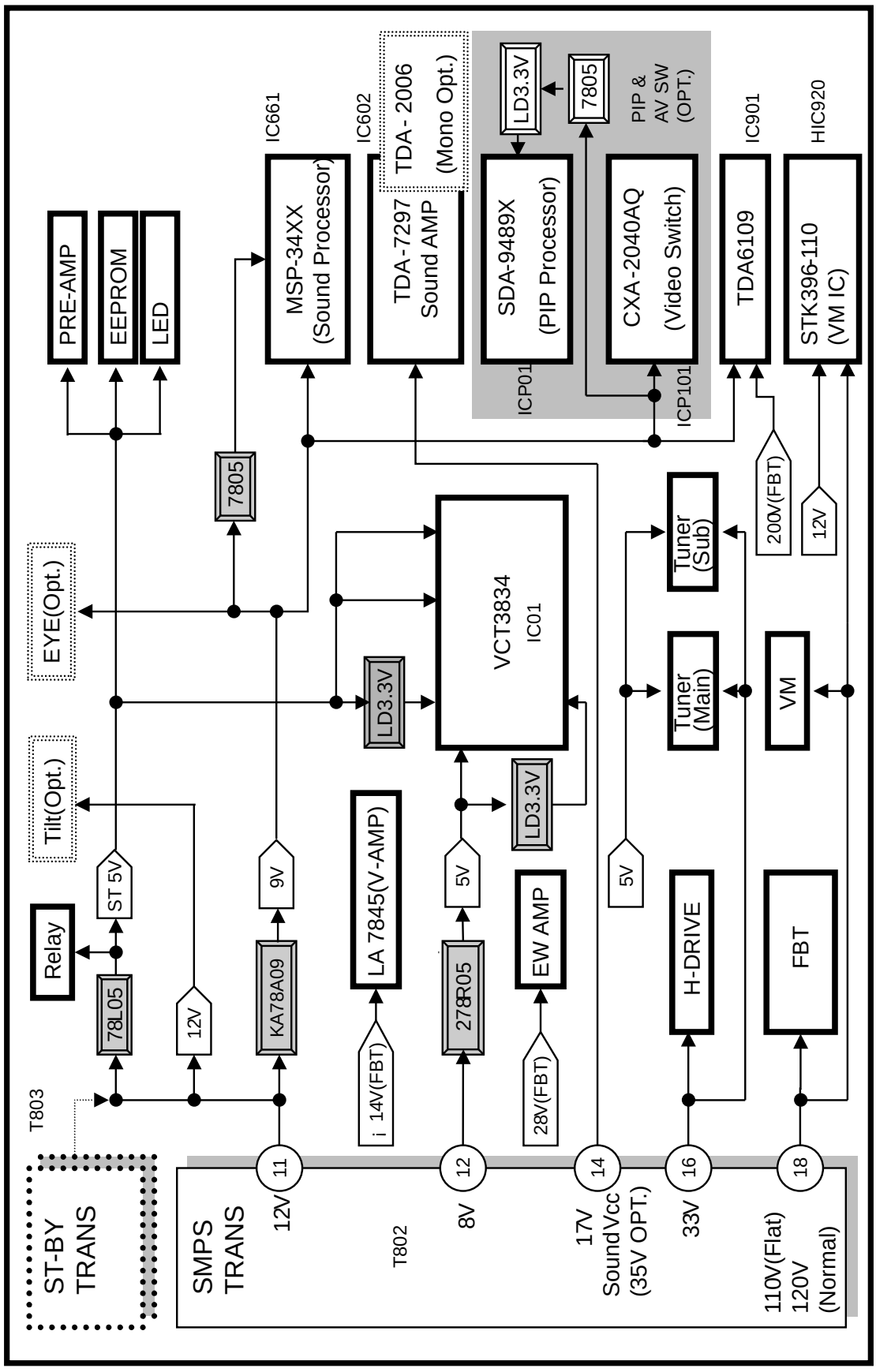
8-7. OPTION 4 Function

OPTION	CODE	FUNTION	
OSD LANG.	0	English Only(Eng.)	Arab.Asia 3834
	1	Arab(Eng/Fr/Arab)	
	2	Urdu(Eng/Fr/Arab/Urdu)	
	3	Asia(Eng/Fr/Indonesia)	
	0	English Only(Eng.)	Farsi 3834
	1	Arab(Eng/Fr/Arab)	
	2	Farsi(Eng/Fr/Arab/Farsi)	
	0	English Only(Eng.)	Arab-Asia 3804
	1	Arab(Eng/Fr/Arab)	
	2	Urdu(Eng/Fr/Arab/Urdu)	
	3	Arab all(Eng/Fr/Arab/Urdu/Farsi)	
	4	Farsi ONly(Eng/Farsi)	
	5	Asia(Eng/Fr/Indonesia/Malay)	
	0	English Only(Eng.)	WEST-EU 3834 Only(W/TXT)
	1	EU-7(E.Ger/Fr/Ita/Spain/Holand/Port)	
	2	EU-NORTH(E-Ger/Fr/Holand/Swe/Nor/Den/Fin)	
	0	English Only(Eng.)	EAST-EU 3834 Only(W/TXT)
	1	Cyrilic(E.Russia)	
	2	EU-EAST(E.Ger/Rum/Pin/Hung/Chez)	
	3	EU-EAST All(E-Ger/Rum/Pol/Hung/Chez/Russia)	
	0	English Only(Eng.)	EU-ALL 3804 Only(W/O TXT)
	1	EU-7(E.Ger/Fr/Ita/Spain/Holand/Port)	
	2	EU-NORTH(E-Ger/Fr/Holand/Swe/Nor/Den/Fin)	
	3	Cyrilic(E.Russia)	
	4	EU-EAST(E.Ger/Rum/Pin/Hung/Chez)	
	5	EU-EAST All(E-Ger/Rum/Pol/Hung/Chez/Russia)	
	0	English Only(Eng.)	28” Wide Flat 3834 Only(W/TXT)
	1	EU-5(E.Ger/Fr/Ita/Spain)	
	0	English Only(Eng.)	Hindi-China-Viet. 3804 Only(W/O TXT)
	1	Vietnam(E.Vietnam)	
	2	Hindi(E.Hindi)	
	3	China(E.China)	
	0	Eng/Spain/Port	
	1	Spain/Port/Eng	
	2	Port/Spain/Eng	
	3	Eng/Fr	
	0	KOrean Only	Korea Version

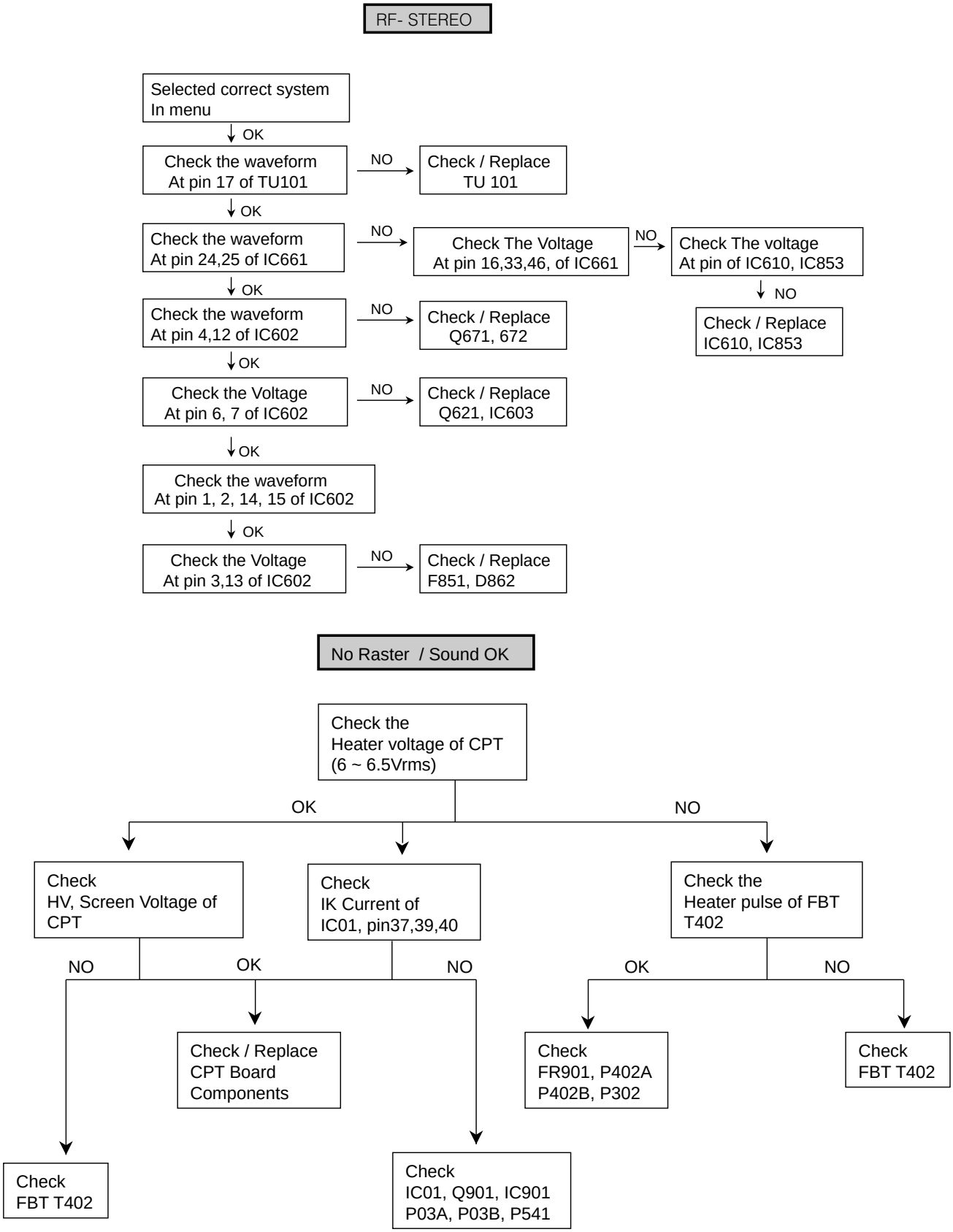
OPTION	CODE	FUNTION	
TXT-L	0	WEST-EU	Farsi only 3834 only(W/TXT)
	1	EAST-EU	
	2	Turkey	
	3	Cyrillic3	
	5	Arab/English	
	8	Farsi/English	
	0	WEST-EU	Arab-Asia 3834 only(W/TXT)
	1	EAST-EU	
	2	Turkey	
	3	Cyrillic3	
	5	Arab/English	
	0	WEST-EU	WEST EU 3834 only(W/TXT)
	1	EAST-EU	
	2	Turkey	
	6	Cyrillic3	
	0	WEST-EU	EAST EU 3834 only(W/TXT)
	1	EAST-EU	
	2	Turkey	
	6	Cyrillic3	
	0	WEST-EU	28” WIDE FLAT 3834 only(W/TXT)
	1	EAST-EU	
	2	Turkey	
	4	Cyrillic3	
	5	Arab/English	
	6	Farsi/English	

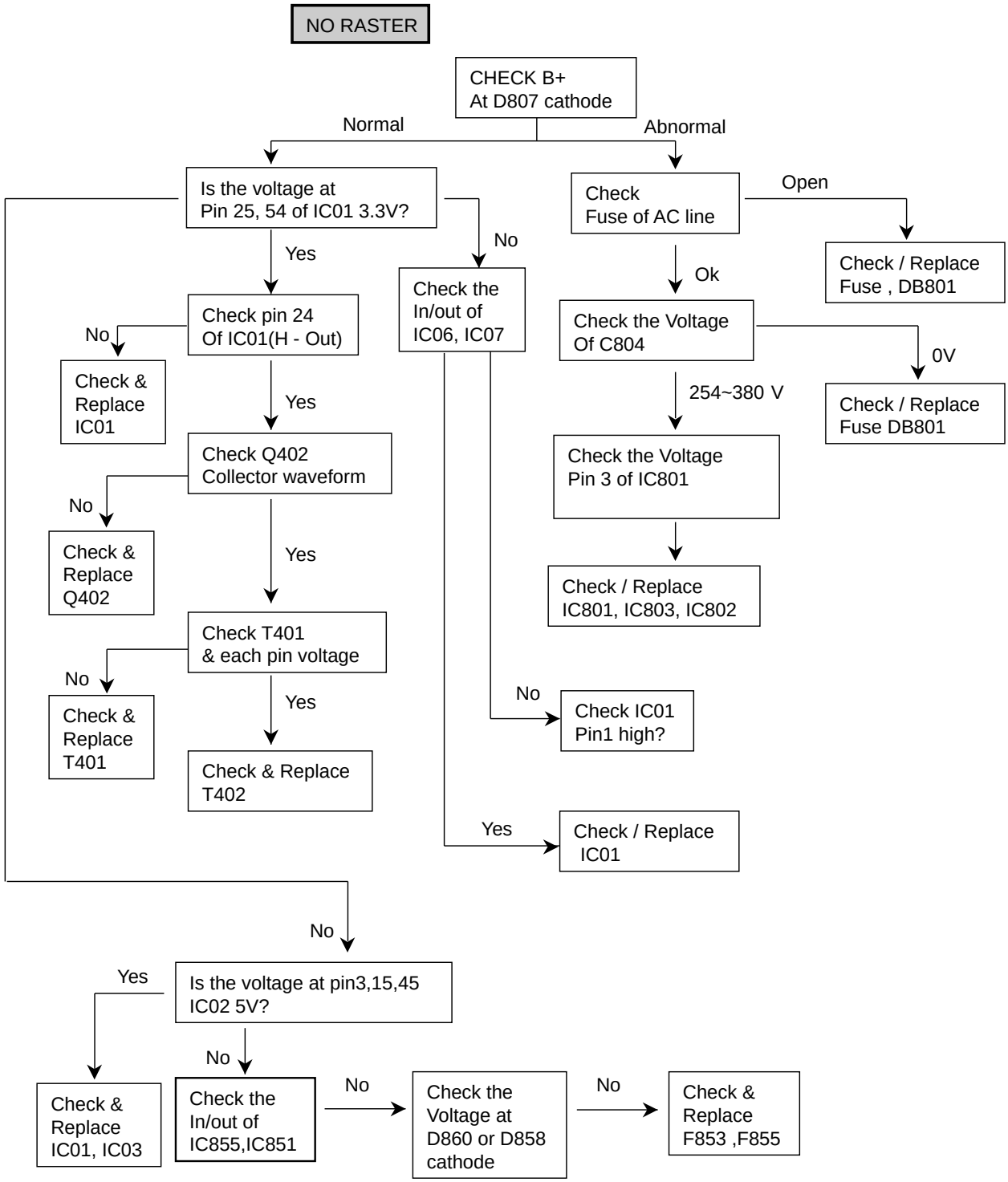
BLOCK DIAGRAM

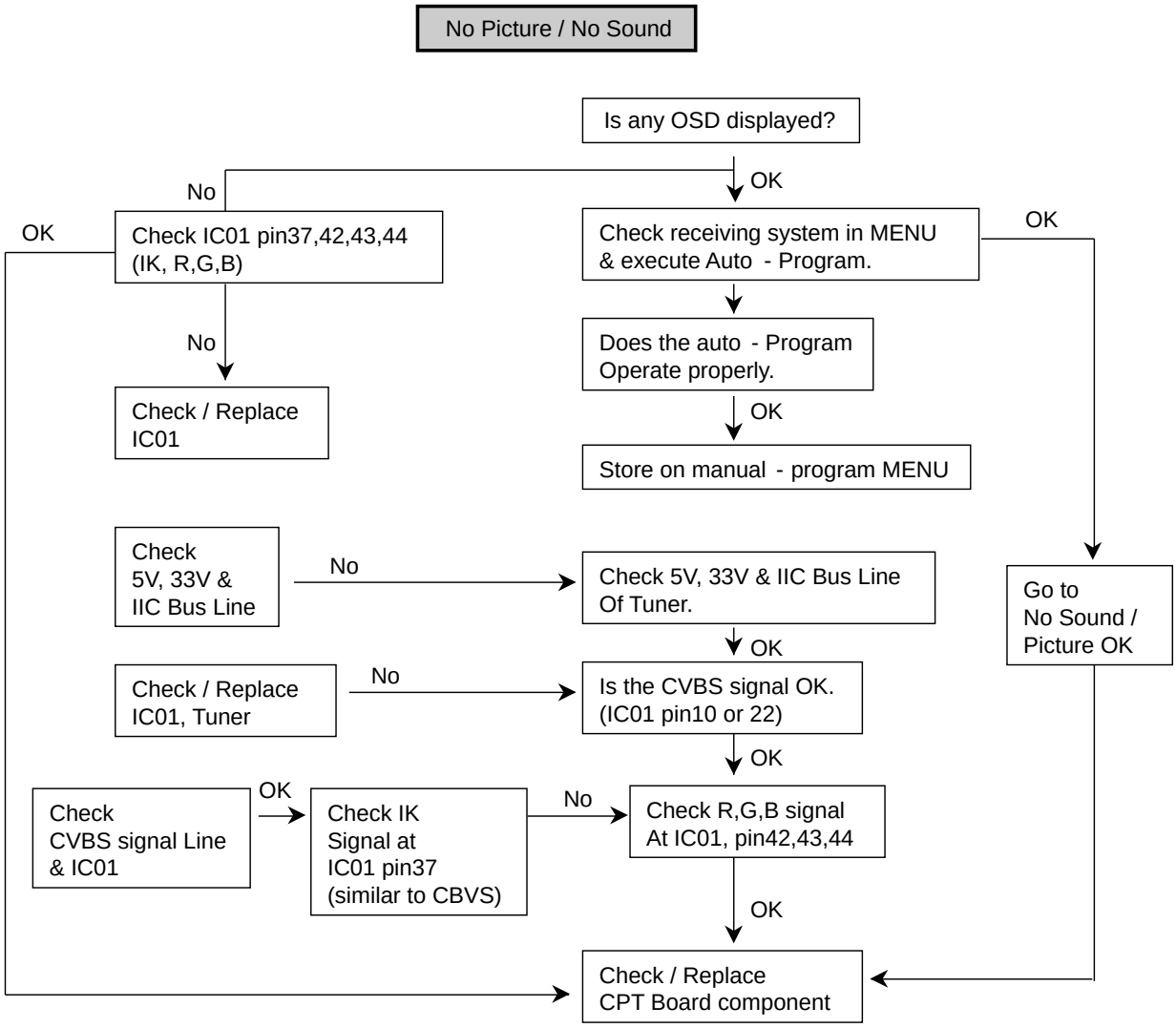


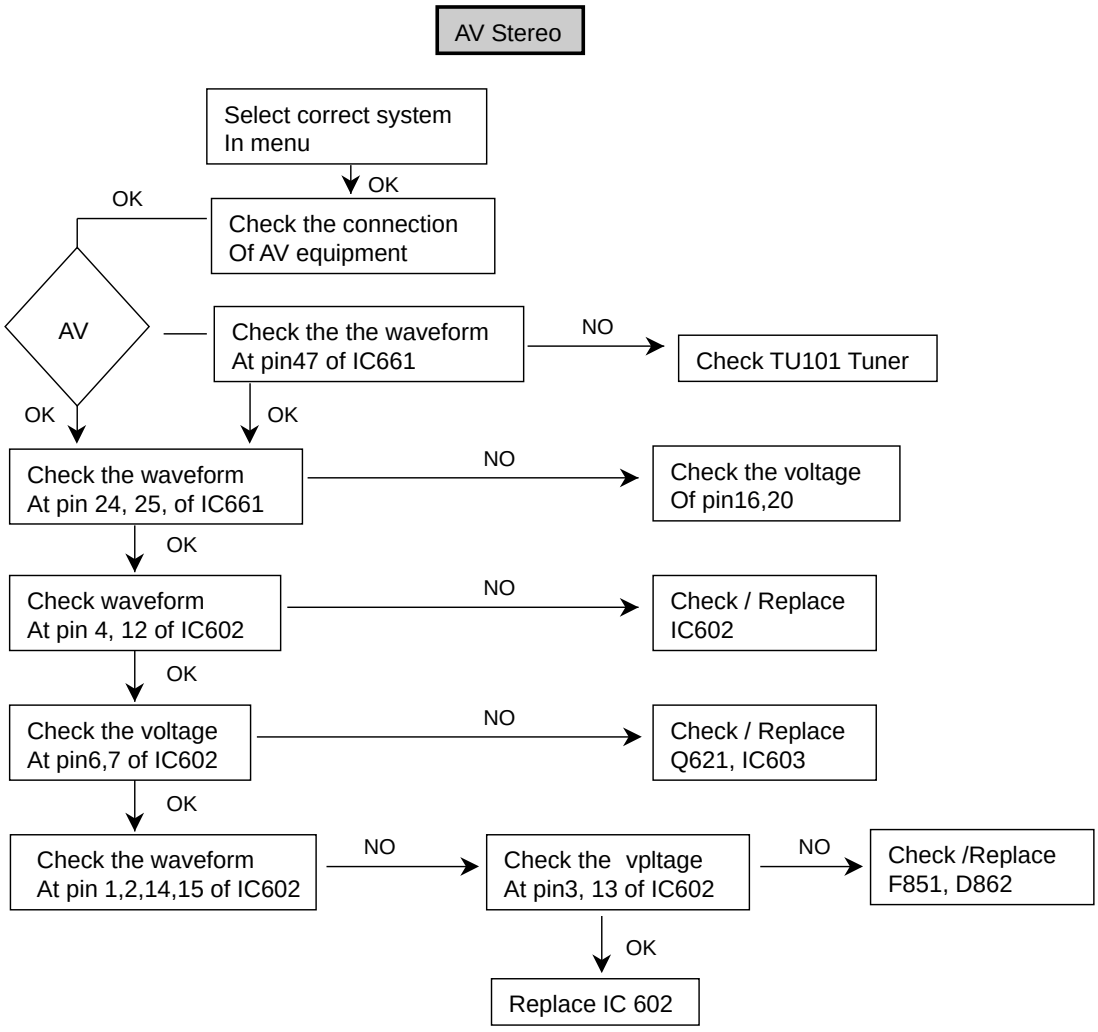

ST-BY TRANS
SMPS TRANS
T803
T802
12V
8V
17V SoundVcc (35V OPT.)
33V
110V(Flat) 120V (Normal)
11
12
14
16
18
Relay
78L05
ST 5V
12V
KA78A09
9V
LA 7845(V-AMP)
14V(FBT)
278R05
5V
EW AMP
28V(FBT)
LD3.3V
VCT3834
IC01
LD3.3V
7805
MSP-34XX (Sound Processor)
IC661
TDA-7297 Sound AMP
IC602
TDA- 2006 (Mono Opt.)
SDA-9489X (PIP Processor)
ICP01
LD3.3V
7805
CXA-2040AQ (Video Switch)
ICP101
PIP & AV SW (OPT.)
TDA6109
IC901
STK396-110 (VM IC)
HIC920
200V(FBT)
12V
PRE-AMP
EEPROM
LED
EYE(Opt.)
Tilt(Opt.)
Tuner (Sub)
Tuner (Main)
VM
5V
H-DRIVE
FBT

TROUBLE SHOOTING

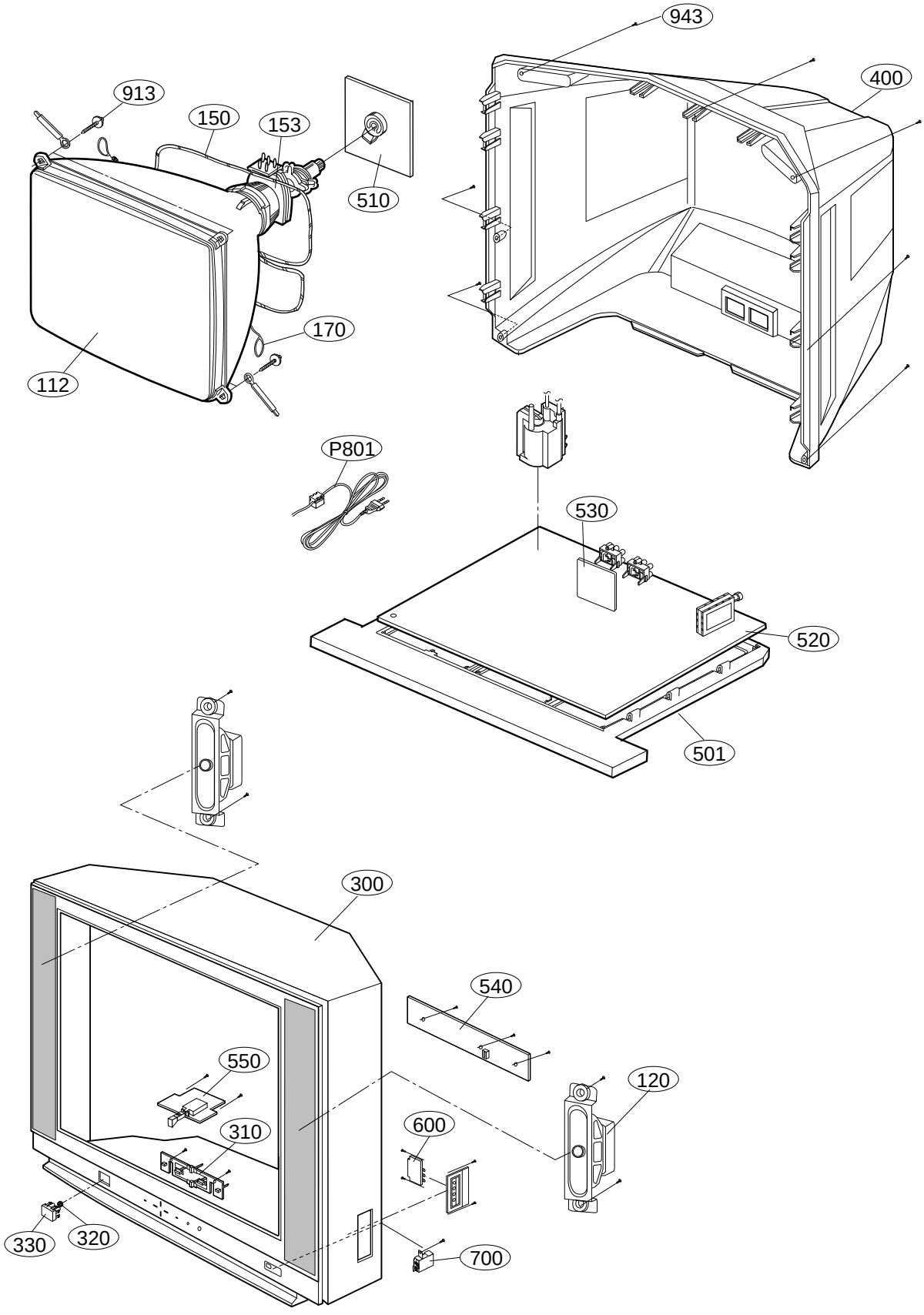



NO RASTER
CHECK B+
At D807 cathode
Normal
Abnormal
Is the voltage at
Pin 25, 54 of IC01 3.3V?
Yes
No
Check pin 24
Of IC01(H - Out)
No
Check &
Replace
IC01
Yes
Check Q402
Collector waveform
No
Check &
Replace
Q402
Yes
Check T401
& each pin voltage
No
Check &
Replace
T401
Yes
Check & Replace
T402
Check the
In/out of
IC06, IC07
No
Check IC01
Pin1 high?
Yes
Check / Replace
IC01
Check
Fuse of AC line
Open
Check / Replace
Fuse , DB801
Ok
Check the Voltage
Of C804
0V
Check / Replace
Fuse DB801
254~380 V
Check the Voltage
Pin 3 of IC801
Check / Replace
IC801, IC803, IC802
No
Yes
Is the voltage at pin3,15,45
IC02 5V?
Yes
Check &
Replace
IC01, IC03
No
Check the
In/out of
IC855,IC851
No
Check the
Voltage at
D860 or D858
cathode
No
Check &
Replace
F853 ,F855


No Picture / No Sound
Is any OSD displayed?
OK
No
OK
Check IC01 pin37,42,43,44
(IK, R,G,B)
Check receiving system in MENU
& execute Auto - Program.
OK
No
Check / Replace
IC01
Does the auto - Program
Operate properly.
OK
Store on manual - program MENU
Check
5V, 33V &
IIC Bus Line
No
Check 5V, 33V & IIC Bus Line
Of Tuner.
Go to
No Sound /
Picture OK
OK
Check / Replace
IC01, Tuner
No
Is the CVBS signal OK.
(IC01 pin10 or 22)
OK
Check
CVBS signal Line
& IC01
OK
Check IK
Signal at
IC01 pin37
(similar to CBVS)
No
Check R,G,B signal
At IC01, pin42,43,44
OK
Check / Replace
CPT Board component


AV Stereo
Select correct system
In menu
OK
OK
Check the connection
Of AV equipment
AV
Check the the waveform
At pin47 of IC661
NO
Check TU101 Tuner
OK
OK
Check the waveform
At pin 24, 25, of IC661
NO
Check the voltage
Of pin16,20
OK
Check waveform
At pin 4, 12 of IC602
NO
Check / Replace
IC602
OK
Check the voltage
At pin6,7 of IC602
NO
Check / Replace
Q621, IC603
OK
Check the waveform
At pin 1,2,14,15 of IC602
NO
Check the vpltage
At pin3, 13 of IC602
NO
Check /Replace
F851, D862
OK
Replace IC 602

EXPLODED VIEW



EXPLODED VIEW PARTS LIST

The components identified by mark ⚠ is critical for safety.
Replace only with part number specified.

No.	Part No.		Description
	25"	29"	
⚠ 112	2426GE259AJ	6334V29003A	CPT SET
	2426GE259AJ	6334V29003B	CPT SET
120	6400VA0027A	6400VA0027A	SPEAKER,GENERAL H165/051800A 8 OHM 10/1
⚠ 150	150-D05Z	6140VC2005F	COIL,DEGAUSSING
⚠ 153	6150Z-1230F	6150V-5006C	DY
	-	6150V-5006D	DY
⚠ 170	170-844G	170-844K	CPT EARTH
300	3091V00278R	3091V00255Y	CABINET ASSEMBLY GOLD
	3091V00278Q	-	CABINET ASSEMBLY SILVER
	3091V00278V	3091V00255Z	CABINET ASSEMBLY #76
	3091V00278T	3091V00255S	CABINET ASSEMBLY LGEAP,40AF
310	5020V00459A	5020V00459A	BUTTON,CONTROL 6KEY
320	320-062E	320-062E	SPRING,KNOB
330	5020V00391A	5020V00391A	BUTTON,POWER 1KEY
400	3809V00203J	-	BACK COVER ASSY(2-PHONE)
	3809V00203A	3809V00188A	BACK COVER ASSY
	3809V00203C	3809V00188E	BACK COVER ASSY LGEAP
	3809V00203G	3809V00188M	BACK COVER ASSY(1 SC,1 PH)
501	3210V00043E	3210V00043E	FRAME,MAIN V2 LGESY
510	6871VSMD76A	6871VSMD76B	PWB ASSY,CPT/VM SY CKD 25” LG
520	6871VMMC19B	-	PWB ASSY,MAIN -Q40RQ
	-	6871VMMD19F	PWB ASSY,MAIN -Q40VE
	-	6871VMMC19N	PWB ASSY,MAIN -Q40VE LGEIN
	6871VMMD19B	6871VMMD19Z	PWB ASSY,MAIN -Q40VE
	6871VMMD19B	6871VMMD19A	PWB ASSY,MAIN -Q40VE
	6871VMMC19M	6871VMMC19L	PWB ASSY,MAIN -Q40VB
	-	6871VMMC19T	PWB ASSY,MAIN -Q40RE
	6871VMMC19Z	6871VMMC19Y	PWB ASSY,MAIN -Q40VQ
530	6871VSMN37A	6871VSMN37A	PWB ASSY,PIP
540	6871VSMD77G	6871VSMD77A	PWB ASSY,CONT 022A (CTL SY-CKD)Q40
550	6871VSMD80A	6871VSMD80A	PWB ASSY,POWER 022A 29Q40 SY-MOS CKD
600	6871VSMD78K	6871VSMD78G	PWB ASSY,A/V 022A (SY-CKD)SIDE Q40
	6871VSMD78H	6871VSMD78A	PWB ASSY,A/V 022A
700	0IGL120104A	0IGL120104A	IC,CDS SENSOR MODULE(P1201-04)
913	332-229H	332-229H	SCREW ASSY HEXAGON HEAD (L:40,D:18)
943	1PTF0403116	1PTF0403116	SCREW,TAP TITE(P) D4.0 L16.0
⚠ P801	6411VCH001A	6411VCH001A	POWER CORD ASSY

REPLACEMENT PARTS LIST

LOCA. NO	PART NO	DESCRIPTION
	IC	
HIC920	0IZZVF0018A	IC,STK396-110 11P ST SCAN VELOCIT
IC01	0ICTMMN004B	IC,VCT3834B LG24 W/EU 64P ST TXT
"	0ICTMMN005B	IC,VCT3834B LG23 E/EU 64P ST TXT
"	0ICTMMN015A	IC,VCT3804B LG15 64P
IC03	0IMCRAL010A	IC,AT24C16-10PI-2.7 ATMEL 8PIN
IC06	0ISG111733B	IC,LD1117V33C 3SIP ST REGULATOR
IC07	0ISG111733B	IC,LD1117V33C 3SIP ST REGULATOR
IC09	0IFA752700A	IC,KA75270Z 3 TP RE-SET IC MC-007
IC301	0ISA784500A	IC,LA7845 7SIP V/OUT(1.5A)
IC302	0IKE455800E	IC,KIA4558 8DIP DUAL OP AMP
IC602	0ISG729700A	IC,TDA7297 15P SIP BK
IC603	0IFA754207A	IC,KA75420ZTA(KA7542ZTA) 3P,TO-92
IC610	0IKE780500Q	IC,KIA7805API 3P TO-220 ST REGULA
IC661	0IMCRMN011C	IC,MSP3410G B8 V3 MICRONAS 52P DI
"	0IIT346000B	IC,MSP3460G V3 52P DIP
IC662	0IFA753307A	IC,KA75330ZTA(KA7533ZTA) 3P,TO-92
IC801	0IMCRSK001A	IC,STR-F6456R SANKEN 5PIN(LF1352)
IC802	0ILI817000G	IC,LTV817M-VB 4P,DIP BK PHOTO COU
IC803	0ILI817000G	IC,LTV817M-VB 4P,DIP BK PHOTO COU
IC853	0IMCRKE002A	IC,KIA78R09PI KEC 4PIN,TO220IS-4
IC855	0IMCRKE006A	IC,KIA278R05PI KEC TO220IS,4P ST
IC856	0ISK110000A	IC,SE110N(LF12) 3P 110V ERROR AMP
IC901	0IMCRPH009A	IC,TDA6109JF PHILIPS 9SIP ST RGB
ICP01	0ISM948900A	IC,SDA9489 28PIN SOP
ICP02	0ISG111733B	IC,LD1117V33C 3SIP ST
ICP03	0IKE780500Q	IC,KIA7805API 3P
	DIODE	
D110	0DS141489AB	DIODE,SWITCHING 1N4148 TP GRANDE 20V
D180	0DS141489AB	DIODE,SWITCHING 1N4148 TP GRANDE 20V
D181	0DS141489AB	DIODE,SWITCHING 1N4148 TP GRANDE 20V
D301	0DR150009EA	DIODE,RECTIFIERS RGP15J TP
D302	0DS113379BA	DIODE,SWITCHING 1SS133 T-72 TP ROHM
D401	0DD410000AG	DIODE,RECTIFIERS RS4FS BK R4 1500V 2.5A
D402	0DR400009AB	DIODE,RECTIFIERS RU4JGF TP
D403	0DR150009EA	DIODE,RECTIFIERS RGP15J TP
D404	0DR150009EA	DIODE,RECTIFIERS RGP15J TP
D405	0DR150009AB	DIODE,RECTIFIERS RGP15G TP
D406	0DR150009AB	DIODE,RECTIFIERS RGP15G TP
D408	0DR060009AA	DIODE,RECTIFIERS TVR06J TP
D505	0DS141489AB	DIODE,SWITCHING 1N4148 TP GRANDE 20V
D506	0DS141489AB	DIODE,SWITCHING 1N4148 TP GRANDE 20V
D802	0DR100009FA	DIODE,RECTIFIERS EU1DGR TP
D803	0DR100009FA	DIODE,RECTIFIERS EU1DGR TP
D804	0DS141489AB	DIODE,SWITCHING 1N4148 TP GRANDE 20V
D815	0DR060009AA	DIODE,RECTIFIERS TVR06J TP
D857	0DS141489AB	DIODE,SWITCHING 1N4148 TP GRANDE 20V
D858	0DR200009DA	DIODE,RECTIFIERS RU2JGF
"	0DD420000BB	DIODE,D4L20U SHINDENGEN
D860	0DD420000BB	DIODE,D4L20U SHINDENGEN
D861	0DR060009AA	DIODE,RECTIFIERS TVR06J TP
D862	0DD420000BB	DIODE,D4L20U SHINDENGEN

LOCA. NO	PART NO	DESCRIPTION
D863	0DS141489AB	DIODE,SWITCHING 1N4148 TP GRANDE 20V
D864	0DS141489AB	DIODE,SWITCHING 1N4148 TP GRANDE 20V
D866	0DR400009AB	DIODE,RECTIFIERS RU4JGF
D867	0DS141489AB	DIODE,SWITCHING 1N4148 TP GRANDE 20V
D901	0DR210009AC	DIODE,RECTIFIERS BAV21 TP DO35 200V 0.2
D902	0DR210009AC	DIODE,RECTIFIERS BAV21 TP DO35 200V 0.2
D903	0DR210009AC	DIODE,RECTIFIERS BAV21 TP DO35 200V 0.2
D904	0DR140049AC	DIODE,RECTIFIERS 1N4004A T-81 TP
D920	0DR060009AA	DIODE,RECTIFIERS TVR06J TP
DB801	0DD560000AA	DIODE,RECTIFIER D5SB60 BRIDGE (5A/600V)
LD1101	0DL310800AA	LED,HTR3108BDA BK
ZD101	0DZ330009DG	DIODE,ZENERS GDZJ33B TP GRANDE DO34 0.5W
ZD102	0DZ620009AK	DIODE,ZENERS GDZJ6.2B TP GRANDE DO34 0.5W
ZD121	0DZ330009DG	DIODE,ZENERS GDZJ33B TP GRANDE DO34 0.5W
ZD302	0DZ510009BF	DIODE,ZENERS GDZ5.1B TP GRANDE DO34 0.5W
ZD303	0DZ180009BE	DIODE,ZENERS GDZJ18B TP GRANDE DO34 0.5W
ZD401	0DZ510009BF	DIODE,ZENERS GDZ5.1B TP GRANDE DO34 0.5W
ZD402	0DZ110009CF	DIODE,ZENERS GDZJ11B TP GRANDE DO34 0.5W
ZD501	0DZ510009BF	DIODE,ZENERS GDZ5.1B TP GRANDE DO34 0.5W
ZD601	0DZ510009BF	DIODE,ZENERS GDZ5.1B TP GRANDE DO34 0.5W
ZD610	0DZ910009BD	DIODE,ZENERS GDZJ9.1B TP GRANDE DO34 0.5W
ZD910	0DZ470009EF	DIODE,ZENERS GDZJ4.7B GRANDE TP DO34 0.5W
ZD911	0DZ470009EF	DIODE,ZENERS GDZJ4.7B GRANDE TP DO34 0.5W
ZD912	0DZ470009EF	DIODE,ZENERS GDZJ4.7B GRANDE TP DO34 0.5W
	TRANSISTOR	
Q103	0TR534309AA	TR,2SC5343Y TP AUK - -
Q108	0TR534309AA	TR,2SC5343Y TP AUK - -
Q110	0TR127009AA	TR,KTA1270-TP-Y
Q111	0TR534309AA	TR,2SC5343Y TP AUK - -
Q180	0TR534309AA	TR,2SC5343Y TP AUK - -
Q181	0TR198009BA	TR,2SA1980Y TP AUK - -
Q182	0TR198009BA	TR,2SA1980Y TP AUK - -
Q183	0TR534309AA	TR,2SC5343Y TP AUK - -
Q184	0TR534309AA	TR,2SC5343Y TP AUK - -
Q185	0TR198009BA	TR,2SA1980Y TP AUK - -
Q186	0TR198009BA	TR,2SA1980Y TP AUK - -
Q187	0TR534309AA	TR,2SC5343Y TP AUK - -
Q201	0TR198009BA	TR,2SA1980Y TP AUK - -
Q202	0TR198009BA	TR,2SA1980Y TP AUK - -
Q301	0TR534309AA	TR,2SC5343Y TP AUK - -
Q302	0TR205900AB	TR,KTD2059-Y TO-220IS KEC
Q303	0TR127409AB	TR,KTA1274-Y TO-92L TP KEC
Q401	0TRSG10001A	TR,SGS-T(STM) ST2310HI ST TO220 1
Q402	0TR223800AA	TR,KTC2238A-Y
Q505	0TR534309AA	TR,2SC5343Y TP AUK - -
Q506	0TR198009BA	TR,2SA1980Y TP AUK - -
Q507	0TR198009BA	TR,2SA1980Y TP AUK - -
Q508	0TR198009BA	TR,2SA1980Y TP AUK - -
Q509	0TR534309AA	TR,2SC5343Y TP AUK - -
Q621	0TR534309AA	TR,2SC5343Y TP AUK - -
Q671	0TR198009BA	TR,2SA1980Y TP AUK - -
Q672	0TR198009BA	TR,2SA1980Y TP AUK - -

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LOCA. NO	PART NO	DESCRIPTION
Q806	0TR102009AB	TR,KRC102M,TP(KRC1202),KEC
Q807	0TR102009AB	TR,KRC102M,TP(KRC1202),KEC
Q853	0TR127009AA	TR,KTA1270-TP-Y (KTA562TM)KEC
Q901	0TR198009BA	TR,2SA1980Y TP AUK - -
Q1106	0TR733009AA	TR,KSA733C-Y TP SAMSUNG TO-92
QP01	0TR387500AA	TR,2SC3875S(ALY)
QP02	0TR387500AA	TR,2SC3875S(ALY)
QP03	0TR387500AA	TR,2SC3875S(ALY)
QP04	0TR387500AA	TR,2SC3875S(ALY)
QP05	0TR387500AA	TR,2SC3875S(ALY)
CAPACITOR		
C01	0CC0500K115	5P 50V D NP0 TS
C02	0CC0500K115	5P 50V D NP0 TS
C03	0CE335DK618	3.3UF STD 50V 20% FL TP 5
C04	0CN1020K519	1000P 50V K B TA52
C07	0CN1030F679	10000P 16V M Y TA52
C08	0CN1030F679	10000P 16V M Y TA52
C10	0CN8200K519	82P 50V K B TA52
"	0CX4700K409	47P 50V J SL TA52
C11	0CE107DD618	100UF STD 10V M FL TP5
C14	0CE476DF618	47UF STD 16V M FL TP5
C16	0CN4720F569	4700P 16V K X TA52
C17	0CE106DK618	10UF STD 50V M FL TP5
C22	0CE107DD618	100UF STD 10V M FL TP5
C23	0CE107DD618	100UF STD 10V M FL TP5
C24	0CE475DK618	4.7UF STD 50V 20% FL TP 5
C25	0CN1040K949	0.1M 50V Z F TA52
C27	0CE476DF618	47UF STD 16V M FL TP5
C28	0CN1030F679	10000P 16V M Y TA52
C29	0CE107DD618	100UF STD 10V M FL TP5
C30	0CE226DF618	22UF STD 16V M FL TP5
C102	0CX4700K409	47P 50V J SL TA52
C103	0CX4700K409	47P 50V J SL TA52
C104	0CN1030F679	10000P 16V M Y TA52
C105	0CN1030F679	10000P 16V M Y TA52
C106	0CN1030F679	10000P 16V M Y TA52
C107	0CN1030F679	10000P 16V M Y TA52
C108	0CE476DD618	47UF STD 10V 20% FL TP 5
C109	0CE475DK618	4.7UF STD 50V 20%
C110	0CE476DK618	47UF STD 50V M FL TP5
C111	0CN1030F679	10000P 16V M Y TA52
C114	0CE476DD618	47UF STD 10V 20% FL TP 5
C120	0CN1030F679	10000P 16V M Y TA52
C121	0CE474DK618	0.4700UF STD 50V M FL TP5
C125	0CN1040K949	0.1M 50V Z F TA52
C127	0CN1030F679	10000P 16V M Y TA52
C130	0CN1030F679	10000P 16V M Y TA52
C180	0CN1020K519	1000P 50V K B TA52
C181	0CN2210K519	220P 50V K B TA52
C183	0CN1040K949	0.1M 50V Z F TA52
C184	0CE105DK618	1UF STD 50V M FL TP5

LOCA. NO	PART NO	DESCRIPTION
C201	0CE227DF618	220UF STD 16V M FL
C209	0CN1050K949	1UF D 50V 80%,-20% F(Y5V) TA52
C210	0CE227DF618	220UF STD 16V M FL TP5
C211	0CN4710K519	470P 50V K B TA52
C213	0CN4710K519	470P 50V K B TA52
C215	0CN4710K519	470P 50V K B TA52
C216	0CN4710K519	470P 50V K B TA52
C227	0CE226DF618	22UF STD 16V M FL TP5
C228	0CE226DF618	22UF STD 16V M FL TP5
C229	0CE226DF618	22UF STD 16V M FL TP5
C230	0CE226DF618	22UF STD 16V M FL TP5
C245	0CN4710K519	470P 50V K B TA52
C246	0CN4710K519	470P 50V K B TA52
C248	0CN4710K519	470P 50V K B TA52
C249	0CN4710K519	470P 50V K B TA52
C301	0CQ1031N509	0.01U 100V K POLY TP
C302	0CQ3341N401	0.33U 100V J POLY F5
C303	0CE107BK618	100UF KME 50V M FL TP5
C304	0CQ6821N509	0.0068U 100V K POLY TP
C305	0CQ1021N509	0.001U 100V K POLY TP
C306	0CQ3331N509	0.033U 100V K POLY TP
C308	0CE476DK618	47UF STD 50V M FL TP5
C309	0CN4710K519	470P 50V K B TA52
C310	0CQ1031N509	0.01U 100V K POLY TP
C311	0CQ1031N509	0.01U 100V K POLY TP
C401	0CE105DK618	1UF STD 50V M FL TP5
C402	0CE475DK618	4.7UF STD 50V 20% FL TP 5
C403	0CQ1521N509	0.0015U 100V K POLY TP
C405	181-015R	0.022UF 1.6KV H M/PP NI FM20
"(29")	181-015Q	0.02UF 1.6KV H M/PP
C406	181-091Y	R 680PF 2KV 10%,-10% R/TP TP7.
C407	181-010A	PP 400V 0.022UF J
C408	0CE6851K652	6.8UF SM,SA 50V 20% FM7.5 BP(S
C409	0CK2220W515	2200P 500V K B TS
C410	0CE105CR636	1UF SHL,SD 250V 20% BP(D) TP F
C411	181-038K	0.56UF D 250V J M/PP FM20
"(29")	0CF5641U470	0.56UF D 400V 5%
C413	0CE107DJ618	100UF STD 35V M FL TP5
C415	0CE108DH618	1000UF STD 25V M FL TP5
C416	181-009R	PP 200V 0.022UF K
C419	0CE108DH618	1000UF STD 25V M FL TP5
C420	181-010B	PP 400V 0.056UF J
C422	0CE475DR618	4.7UF STD 250V 20% FL TP 5
C501	0CE107DD618	100UF STD 10V M FL TP5
C502	0CN1040K949	0.1M 50V Z F TA52
C503	0CN1050K949	1UF D 50V 80%,-20% F(Y5V) TA52
C504	0CN1050K949	1UF D 50V 80%,-20% F(Y5V) TA52
C505	0CN1040K949	0.1M 50V Z F TA52
C506	0CN1040K949	0.1M 50V Z F TA52
C508	0CN1050K949	1UF D 50V 80%,-20% F(Y5V) TA52
C509	0CN1050K949	1UF D 50V 80%,-20% F(Y5V) TA52
C510	0CN1010K519	100P 50V K B TA52

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LOCA. NO	PART NO	DESCRIPTION
C511	0CN1050K949	1UF D 50V 80%,-20% F(Y5V) TA52
C512	0CN1010K519	100P 50V K B TA52
C513	0CN1050K949	1UF D 50V 80%,-20% F(Y5V) TA52
C514	0CN1050K949	1UF D 50V 80%,-20% F(Y5V) TA52
C515	0CN1050K949	1UF D 50V 80%,-20% F(Y5V) TA52
C516	0CN1030F679	10000P 16V M Y TA52
C517	0CQ6831N509	0.068U 100V K POLY TP
C518	0CQ6831N509	0.068U 100V K POLY TP
C520	0CN1020K519	1000P 50V K B TA52
C521	0CN1010K519	100P 50V K B TA52
C522	0CN1010K519	100P 50V K B TA52
C523	0CN1010K519	100P 50V K B TA52
C559	0CQ6831N509	0.068U 100V K POLY TP
C561	0CQ2242K439	0.22UF S 50V 5% M/PE NI TP5
C562	0CN2210K519	220P 50V K B TA52
C563	0CN2210K519	220P 50V K B TA52
C564	0CN2210K519	220P 50V K B TA52
C565	0CN2210K519	220P 50V K B TA52
C568	0CE107DF618	100UF STD 16V M FL TP5
C601	0CE226DF618	22UF STD 16V M FL TP5
C604	0CE475DK618	4.7UF STD 50V 20% FL TP 5
C605	0CQ3321N509	0.0033U 100V K POLY TP
C606	0CF2241L438	0.22UF D 63V 5% TP 5 M/PE NI
C612	0CE477DH618	470UF STD 25V M FL TP5
C621	0CQ3321N509	0.0033U 100V K POLY TP
C622	0CF2241L438	0.22UF D 63V 5% TP 5 M/PE NI
C650	0CN1030F679	10000P 16V M Y TA52
C651	0CN1030F679	10000P 16V M Y TA52
C663	0CE107DD618	100UF STD 10V M FL TP5
C666	0CE335DK618	3.3UF STD 50V 20% FL TP 5
C667	0CN3320F569	3300P 16V K X TA52
C668	0CN3320F569	3300P 16V K X TA52
C670	0CE105DK618	1UF STD 50V M FL TP5
C671	0CE107DD618	100UF STD 10V M FL TP5
C672	0CE105DK618	1UF STD 50V M FL TP5
C673	0CF3341L438	0.33UF D 63V 5% TP 5 M/PE NI
C674	0CF3341L438	0.33UF D 63V 5% TP 5 M/PE NI
C675	0CE106DF618	10UF STD 16V M FL TP5
C676	0CF3341L438	0.33UF D 63V 5% TP 5 M/PE NI
C677	0CF3341L438	0.33UF D 63V 5% TP 5 M/PE NI
C678	0CF3341L438	0.33UF D 63V 5% TP 5 M/PE NI
C679	0CF3341L438	0.33UF D 63V 5% TP 5 M/PE NI
C681	0CE106DF618	10UF STD 16V M FL TP5
C685	0CE106DF618	10UF STD 16V M FL TP5
C686	0CX5600K409	56P 50V J SL TA52
C687	0CX5600K409	56P 50V J SL TA52
C688	0CX5600K409	56P 50V J SL TA52
C689	0CC0200K115	2P 50V D NP0 TS
C690	0CC0200K115	2P 50V D NP0 TS
C803	181-091U	R 220PF 2KV 10%,-10% R/TP TP7.
C804	0CE337KV6A0	330UF SLT 450V M VNSN BULK
C806	181-014Y	MPP 1.6KV 0.0015UF J

LOCA. NO	PART NO	DESCRIPTION
C807	0CK4710K515	470PF 50V K B TR
C808	0CE107BJ618	100UF KME 35V M FL TP5
C809	181-091D	DEHR33A102KN2A 1000PF 1KV 10%,
C813	0CK10201515	1000P 1KV K B TS
C814	181-506K	ECQ-U2A104MVA 0.10UF D 250V M
C815	181-091C	DEHR33A471KN2A 470PF 1KV 10%,-
C816	0CK10201515	1000P 1KV K B TS
C818	181-120K	2200PF 4KV M E FMTW LEAD 4.5
C820	0CK2220W515	2200P 500V K B TS
C822	0CE226DD618	22UF STD 10V 20% FL TP 5
C840	0CN1010K519	100P 50V K B TA52
C854	0CE107DF618	100UF STD 16V M FL TP5
C855	0CE107DD618	100UF STD 10V M FL TP5
C857	0CE108BF618	1000UF KME 16V M FL TP5
C858	0CE108BF618	1000UF KME 16V M FL TP5
C860	0CE108BF618	1000UF KME 16V M FL TP5
C861	0CE108DF618	1000UF STD 16V M FL TP5
C862	0CE335CK636	3.3UF SHL,SD 50V 20% FM5
C864	0CE108BJ618	1000UF KME 35V M FL TP5
C865	181-091Q	R 470PF 1KV 10%,-10% R/TP TP5
C867	0CE227DK618	220UF STD 50V M FL TP5
C871	0CE227DP61A	220UF STD 160V 20% FL TP 7.5
C872	0CE107CP618	100U SHL 160V M FL TP5
C873	0CQ1041N509	0.1U 100V K POLY TP
C874	181-091Y	R 680PF 2KV 10%,-10% R/TP TP7.
C901	0CE475DR618	4.7UF STD 250V 20% FL TP 5
C902	0CQ1044R539	0.1UF TE 250V K M/PE NI TP5
C903	181-033S	2KV B 122K TP7.5
C904	0CE475DR618	4.7UF STD 250V 20% FL TP 5
C920	0CN1030F679	10000P 16V M Y TA52
C921	0CE107DF618	100UF STD 16V M FL TP5
C922	0CN1510K519	150P 50V K B TA52
C923	0CE107DJ618	100UF STD 35V M FL TP5
C924	0CE107DF618	100UF STD 16V M FL TP5
C925	0CK1030W510	0.01U 500V K B S
C926	0CE106DP618	10UF STD 160V M FL TP5
C927	0CK1010W515	100P 500V K B TS
C928	0CE107DF618	100UF STD 16V M FL TP5
C929	0CK1030W510	0.01U 500V K B S
C930	0CE106DP618	10UF STD 160V M FL TP5
C1103	0CE107DD618	100UF STD 10V M FL TP5
C1206	0CN1040K949	0.1M 50V Z F TA52
C1207	0CN3310K519	330P 50V K B TA52
C1208	0CE476DF618	47UF STD 16V M FL TP5
C1240	0CN2210K519	220P 50V K B TA52
C1241	0CN2210K519	220P 50V K B TA52
C1242	0CE106DF618	10UF STD 16V M FL TP5
CP08	0CE476DF618	47UF STD 16V M FL
CP09	0CE107DD618	100UF STD 10V M FL
CP10	0CE337DD618	330UF STD 10V M FL
CP11	0CN1030F679	10000P 16V M Y
CP12	0CN1030F679	10000P 16V M Y

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LOCA. NO	PART NO	DESCRIPTION
CP13	0CN1030F679	10000P 16V M Y
CP21	0CE476DF618	47UF STD 16V M FL
CP22	0CE476DF618	47UF STD 16V M FL
CP25	0CE476DF618	47UF STD 16V M FL
CP26	0CE105DK618	1UF STD 50V M FL
CP27	0CE105DK618	1UF STD 50V M FL
CP29	181-442Z	ECQ-B1H104KF3
CP30	181-442Z	ECQ-B1H104KF3
CP32	0CE226DF618	22UF STD 16V M FL TP5
CP33	0CE226DF618	22UF STD 16V M FL TP5
CP101	0CE106DF618	10UF STD 16V M FL TP5
CP104	0CE106DF618	10UF STD 16V M FL TP5
CP105	0CE106DF618	10UF STD 16V M FL TP5
CP106	0CE107DF618	100UF STD 16V M FL TP5
CP108	0CE106DF618	10UF STD 16V M FL TP5
CP109	0CE106DF618	10UF STD 16V M FL TP5
CP112	0CE106DF618	10UF STD 16V M FL TP5
CP801	181-506J	ECQ-U 2A224KVA 0.22UF 250V 10%
R1204	0CN4710K519	470P 50V K B TA52
R1205	0CN4710K519	470P 50V K B TA52

COIL & TRANSFORMER

J125	0LA0101K119	INDUCTOR,1UH K 2.3*3.4 TP
J134	0LA0102K139	INDUCTOR,10UH K 4*10.5 TP
J219	0LA0680K119	INDUCTOR,0.68UH K 2.3*3.4 TP
J1203	0LA0391K119	INDUCTOR,3.9UH K 2.3*3.4 TP
L01	0LA0102K119	INDUCTOR,10UH K 2.3*3.4 TP
L04	0LA0102K119	INDUCTOR,10UH K 2.3*3.4 TP
L05	0LA0102K139	INDUCTOR,10UH K 4*10.5 TP
L08	0LA0102K119	INDUCTOR,10UH K 2.3*3.4 TP
L101	0LA0102K139	INDUCTOR,10UH K 4*10.5 TP
L102	0LA0102K139	INDUCTOR,10UH K 4*10.5 TP
L103	0LA0102K139	INDUCTOR,10UH K 4*10.5 TP
L121	0LA0102K139	INDUCTOR,10UH K 4*10.5 TP
L210	0LA0102K119	INDUCTOR,10UH K 2.3*3.4 TP
L211	0LA0102K119	INDUCTOR,10UH K 2.3*3.4 TP
L212	0LA0102K049	INDUCTOR,10UH 10% TP 5.0X14 TA52
L213	0LA0102K119	INDUCTOR,10UH K 2.3*3.4 TP
L214	0LA0102K119	INDUCTOR,10UH K 2.3*3.4 TP
L218	0LA0102K119	INDUCTOR,10UH K 2.3*3.4 TP
L219	0LA0102K119	INDUCTOR,10UH K 2.3*3.4 TP
L241	0LA0102K119	INDUCTOR,10UH K 2.3*3.4 TP
L242	0LA0102K119	INDUCTOR,10UH K 2.3*3.4 TP
L401	150-717K	COIL,CHOKE 1.1UH PHY TURN
L402	150-L01D	COIL,LINEARITY 20UH 1PHY 1TURN
“(29”)	6140VE0001W	COIL,LINEARITY 20UH
L509	0LA0102K119	INDUCTOR,10UH K 2.3*3.4 TP
L510	0LA0102K119	INDUCTOR,10UH K 2.3*3.4 TP
L512	0LA0102K139	INDUCTOR,10UH K 4*10.5 TP
L663	0LA0102K119	INDUCTOR,10UH K 2.3*3.4 TP
L810	0LA0102K119	INDUCTOR,10UH K 2.3*3.4 TP
L853	150-C02F	COIL,CHOKE 82UH PHY TURN

LOCA. NO	PART NO	DESCRIPTION
L1203	0LA0102K119	INDUCTOR,10UH K 2.3*3.4 TP
L1204	0LA0102K119	INDUCTOR,10UH K 2.3*3.4 TP
L1207	0LA0331K119	INDUCTOR,3.3UH K 2.3*3.4 TP
L1243	0LA0472K119	INDUCTOR,47UH K 2.3*3.4 TP
L1244	0LA0472K119	INDUCTOR,47UH K 2.3*3.4 TP
LP01	0LA0472K119	INDUCTOR,47UH K 2.3*3.4 TP
LP12	0LA0102K119	INDUCTOR,10UH K 2.3*3.4 TP
LP13	0LA0102K119	INDUCTOR,10UH K 2.3*3.4 TP
LP14	0LA0102K119	INDUCTOR,10UH K 2.3*3.4 TP
T401	151-C02F	TRANSFORMER,H-DRIVE,EI-19,BULK
T402	6174V-5003A	FBT BSC28-N2325 29” YINYANG 6003LB
T802	6170VMCB01R	TRANSFORMER,SMPS EER5345 340UH 115V

CONNECTOR

P03A	366-921J	CONNECTOR (CIRC),2.5MM 10P GIL-G
P03B	387-A10J	CONNECTOR ASSY,10P 500MM H-B UL 1007
P06A	366-932F	CONNECTOR (CIRC),IL-G LGC 7 2.5S STICK
P07A	366-932D	CONNECTOR (CIRC),2.5MM 5P GIL-G
P07B	387-A05J	CONNECTOR ASSY,5P (L=500)
P08A	366-932E	CONNECTOR (CIRC),2.5MM 6P GIL-G
P08B	387-A06J	CONNECTOR ASSY,6P (L=500)
P101A	387-B04K	CONNECTOR ASSY,4P 600MM H-B
P102	366-009D	CONNECTOR (CIRC),2.36PAI 1P
P402A	366-921G	CONNECTOR (CIRC),2.5MM 8P
P402B	387-A08H	CONNECTOR ASSY,8P (L=450)
P601	366-932B	CONNECTOR (CIRC),2.5MM 3P
P602	366-932C	CONNECTOR (CIRC),2.5MM 4P
P801A	366-009D	CONNECTOR (CIRC),2.36PAI 1P
P801B	366-009D	CONNECTOR (CIRC),2.36PAI 1P
P802A	366-009D	CONNECTOR (CIRC),2.36PAI 1P
P802B	366-009D	CONNECTOR (CIRC),2.36PAI 1P
P901	366-009D	CONNECTOR (CIRC),2.36PAI 1P
P903	366-009D	CONNECTOR (CIRC),2.36PAI 1P
P920	366-932B	CONNECTOR (CIRC),2.5MM 3P G
PP801A	366-009D	CONNECTOR (CIRC),2.36PAI 1P
PP801B	366-009D	CONNECTOR (CIRC),2.36PAI 1P
PP802A	366-009D	CONNECTOR (CIRC),2.36PAI 1P
PP802B	366-009D	CONNECTOR (CIRC),2.36PAI 1P
PP802	6631V23001L	CONNECTOR ASSY,2P 300MM NYLON 10 UL
PP803	366-009D	CONNECTOR (CIRC),2.36PAI 1P

RESISTOR

FR402	0RF0101K607	1 OHM 2 W 5.00% TA62
FR403	0RP0050H709	0.05 OHM 1/2 W 10% TA52
FR406	0RF0121K607	1.2 OHM 2 W 5.00% TA62
FR413	0RP0050H709	0.05 OHM 1/2 W 10% TA52
FR901	0RF0470K607	0.47 OHM 2 W 5.00% TA62
“(29”)	0RF0121K607	1.2 OHM 2 W 5.00% TA62
J128	0RD1002F609	10K OHM 1/6 W 5.00% TA52
J130	0RD1002F609	10K OHM 1/6 W 5.00% TA52
J137	0RD1000F609	100 OHM 1/6 W 5.00% TA52
J148	0RD3900F609	390 OHM 1/6 W 5.00% TA52

For Capacitor & Resistors, the charactors at 2nd and 3rd digit in the P/No. means as follows;

CC, CX, CK, CN : Ceramic
CQ : Polyestor
CE : Electrolytic

RD : Carbon Film
RS : Metal Oxide Film
RN : Metal Film
RF : Fusible

LOCA. NO	PART NO	DESCRIPTION
J149	0RD1000F609	100 OHM 1/6 W 5.00% TA52
J151	0RD1800F609	180 OHM 1/6 W 5.00% TA52
J163	0RD1000F609	100 OHM 1/6 W 5.00% TA52
J165	0RD1000F609	100 OHM 1/6 W 5.00% TA52
J167	0RD1000F609	100 OHM 1/6 W 5.00% TA52
J170	0RD1000F609	100 OHM 1/6 W 5.00% TA52
J175	0RD1000F609	100 OHM 1/6 W 5.00% TA52
J192	0RD1000F609	100 OHM 1/6 W 5.00% TA52
J207	0RD1000F609	100 OHM 1/6 W 5.00% TA52
J210	0RD4702F609	47KOHM 1/6 W 5.00% TA52
J215	0RD1001F609	1K OHM 1/6 W 5.00% TA52
J216	0RD1001F609	1K OHM 1/6 W 5.00% TA52
J318	0RD1000F609	100 OHM 1/6 W 5.00% TA52
L1102	0RD0472F609	47 OHM 1/6 W 5.00% TA52
R01	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R02	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R06	0RD3001F609	3K OHM 1/6 W 5.00% TA52
R07	0RD1002F609	10K OHM 1/6 W 5.00% TA52
R08	0RD2001F609	2K OHM 1/6 W 5.00% TA52
R09	0RD2001F609	2K OHM 1/6 W 5.00% TA52
R10	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R11	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R12	0RD1001F609	1K OHM 1/6 W 5.00% TA52
R18	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R24	0RD1002F609	10K OHM 1/6 W 5.00% TA52
R42	0RD0101F609	1 OHM 1/6 W 5.00% TA52
R51	0RD3301F609	3.3K OHM 1/6 W 5.00% TA52
R80	0RD3301F609	3.3K OHM 1/6 W 5.00% TA52
R90	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R91	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R94	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R95	0RD1001F609	1K OHM 1/6 W 5.00% TA52
R102	0RD5100F609	510 OHM 1/6 W 5.00% TA52
R104	0RD5600H609	560 OHM 1/2W 5
R110	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R111	0RD1002F609	10K OHM 1/6 W 5.00% TA52
R116	0RD4701F609	4.7K OHM 1/6W 5
R119	0RD0102F609	10 OHM 1/6 W 5.00% TA52
R123	0RD2201F609	2.2K OHM 1/6W 5
R126	0RD1001F609	1K OHM 1/6 W 5.00% TA52
R127	0RD1001F609	1K OHM 1/6 W 5.00% TA52
R128	0RD0222F609	22 OHM 1/6 W 5.00% TA52
R129	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R130	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R131	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R132	0RD4700F609	470 OHM 1/6 W 5.00% TA52
R133	0RD4700F609	470 OHM 1/6 W 5.00% TA52
R135	0RD5600H609	560 OHM 1/2 W 5.00% TA52
R136	0RD1002F609	10K OHM 1/6 W 5.00% TA52
R137	0RD1002F609	10K OHM 1/6 W 5.00% TA52
R140	0RD0102F609	10 OHM 1/6W 5
R180	0RD1001F609	1K OHM 1/6 W 5.00% TA52

LOCA. NO	PART NO	DESCRIPTION
R181	0RD3002F609	30K OHM 1/6 W 5.00% TA52
R183	0RD1003F609	100K OHM 1/6 W 5.00% TA52
R184	0RD1801F609	1.8K OHM 1/6 W 5.00% TA52
R185	0RD1801F609	1.8K OHM 1/6 W 5.00% TA52
R186	0RD4701F609	4.7K OHM 1/6 W 5.00% TA52
R187	0RD1801F609	1.8K OHM 1/6 W 5.00% TA52
R188	0RD2202F609	22K OHM 1/6 W 5.00% TA52
R189	0RD5602F609	56K OHM 1/6 W 5.00% TA52
R190	0RD5103F609	510K OHM 1/6 W 5.00% TA52
R191	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R192	0RD4701F609	4.7K OHM 1/6 W 5.00% TA52
R193	0RD4701F609	4.7K OHM 1/6 W 5.00% TA52
R201	0RD0682F609	68 OHM 1/6 W 5.00% TA52
R202	0RD2200H609	220 OHM 1/2 W 5.00% TA52
R205	0RD3302F609	33K OHM 1/6 W 5.00% TA52
R206	0RD0752F609	75 OHM 1/6 W 5.00% TA52
R207	0RD0752F609	75 OHM 1/6 W 5.00% TA52
R208	0RD0752F609	75 OHM 1/6 W 5.00% TA52
R209	0RD0752F609	75 OHM 1/6 W 5.00% TA52
R210	0RD0682F609	68 OHM 1/6 W 5.00% TA52
R211	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R212	0RD3901F609	3.9K OHM 1/6 W 5.00% TA52
R213	0RD1001F609	1K OHM 1/6 W 5.00% TA52
R214	0RD0752F609	75 OHM 1/6 W 5.00% TA52
R215	0RD2200F609	220 OHM 1/6 W 5.00% TA52
R216	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R218	0RD0752F609	75 OHM 1/6 W 5.00% TA52
R219	0RD0752F609	75 OHM 1/6 W 5.00% TA52
R220	0RD0752F609	75 OHM 1/6 W 5.00% TA52
R301	0RD2201F609	2.2K OHM 1/6 W 5.00% TA52
R302	0RD0101H609	1 OHM 1/2 W 5.00% TA52
R305	0RN4700F409	470 OHM 1/6 W 1.00% TA52
R306	0RD1002F609	10K OHM 1/6 W 5.00% TA52
R307	0RD2202F609	22K OHM 1/6 W 5.00% TA52
R309	0RD4701F609	4.7K OHM 1/6 W 5.00% TA52
R310	0RD0392F609	39 OHM 1/6 W 5.00% TA52
R311	0RN0151H609	1.5 OHM 1/2 W 5.00% TA52
R312	0RN0471H609	4.7 OHM 1/2 W 5.00% TA52
R313	0RS3900J607	390 OHM 1 W 5.00% TA62
R315	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R316	0RD2702F609	27K OHM 1/6 W 5.00% TA52
R317	0RD2001F609	2K OHM 1/6 W 5.00% TA52
R319	0RN8202F409	82K OHM 1/6 W 1.00% TA52
R320	0RD1001F609	1K OHM 1/6 W 5.00% TA52
R321	0RS0561K619	5.6 OHM 2 W 5% TR
R322	0RD1501F609	1.5K OHM 1/6 W 5.00% TA52
R323	0RD2702F609	27K OHM 1/6 W 5.00% TA52
R324	0RD4700F609	470 OHM 1/6 W 5.00% TA52
R325	0RS2701H609	2.7K OHM 1/2 W 5.00% TA52
R326	0RS1501H609	1.5K OHM 1/2 W 5.00% TA52
R327	0RS1501H609	1.5K OHM 1/2 W 5.00% TA52
R328	0RN8201F609	8.2K OHM 1/6 W 5.00% TA52

For Capacitor & Resistors, the charactors at 2nd and 3rd digit in the P/No. means as follows;	CC, CX, CK, CN : Ceramic CQ : Polyestor CE : Electrolytic	RD : Carbon Film RS : Metal Oxide Film RN : Metal Film RF : Fusible

LOCA. NO	PART NO	DESCRIPTION
R330	0RD3001F609	3K OHM 1/6 W 5.00% TA52
R331	0RD2401F609	2.4K OHM 1/6 W 5.00% TA52
R402	0RD1001F609	1K OHM 1/6 W 5.00% TA52
R403	0RD5600H609	560 OHM 1/2 W 5.00% TA52
R404	0RD0332H609	33 OHM 1/2 W 5.00% TA52
R405	0RS1000K619	100 OHM 2 W 5% TR
R408	0RS0221K607	2.2 OHM 2 W 5.00% TA62
R409	0RS1801H609	1.8K OHM 1/2 W 5.00% TA52
R410	0RMZVBK002C	6.8K OHM 5W +/-5% RSR V-TYPE
“(29”)	0RMZVBK002D	15K OHM 5W +/-5% RSR V-TYPE
R411	0RS5102H609	51K OHM 1/2 W 5.00% TA52
R413	0RS2202H609	22K OHM 1/2 W 5.00% TA52
R414	0RS1001H609	1K OHM 1/2 W 5.00% TA52
R415	0RD1002F609	10K OHM 1/6 W 5.00% TA52
R416	0RD1001F609	1K OHM 1/6 W 5.00% TA52
R417	0RD8203F609	820K OHM 1/6 W 5.00% TA52
R419	0RD7501H609	7.5K OHM 1/2 W 5.00% TA52
R420	0RS0472K607	47 OHM 2 W 5.00% TA62
R509	0RD0752F609	75 OHM 1/6 W 5.00% TA52
R512	0RD0752F609	75 OHM 1/6 W 5.00% TA52
R513	0RD0752F609	75 OHM 1/6 W 5.00% TA52
R517	0RD3000F609	300 OHM 1/6 W 5.00% TA52
R519	0RD1001F609	1K OHM 1/6 W 5.00% TA52
R523	0RD1002F609	10K OHM 1/6 W 5.00% TA52
R525	0RD6801F609	6.8K OHM 1/6 W 5.00% TA52
R526	0RD2702F609	27K OHM 1/6 W 5.00% TA52
R528	0RD6801F609	6.8K OHM 1/6 W 5.00% TA52
R531	0RD1201F609	1.2K OHM 1/6 W 5.00% TA52
R532	0RD1200F609	120 OHM 1/6 W 5.00% TA52
R533	0RD2201F609	2.2K OHM 1/6 W 5.00% TA52
R534	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R537	0RD2202F609	22K OHM 1/6 W 5.00% TA52
R541	0RD2700F609	270 OHM 1/6 W 5.00% TA52
R542	0RD2200F609	220 OHM 1/6 W 5.00% TA52
R543	0RD2202F609	22K OHM 1/6 W 5.00% TA52
R544	0RD0332F609	33 OHM 1/6 W 5.00% TA52
R545	0RD1800F609	180 OHM 1/6 W 5.00% TA52
R546	0RD0472F609	47 OHM 1/6 W 5.00% TA52
R548	0RD4300F609	430 OHM 1/6 W 5.00% TA52
R549	0RD1800F609	180 OHM 1/6 W 5.00% TA52
R550	0RD0472F609	47 OHM 1/6 W 5.00% TA52
R552	0RD4300F609	430 OHM 1/6 W 5.00% TA52
R553	0RD1800F609	180 OHM 1/6 W 5.00% TA52
R554	0RD0472F609	47 OHM 1/6 W 5.00% TA52
R556	0RD4300F609	430 OHM 1/6 W 5.00% TA52
R557	0RD2701F609	2.7K OHM 1/6 W 5.00% TA52
R558	0RD0222F609	22 OHM 1/6 W 5.00% TA52
R559	0RD1001F609	1K OHM 1/6 W 5.00% TA52
R560	0RD4301F609	4.3K OHM 1/6 W 5.00% TA52
R570	0RD1800F609	180 OHM 1/6 W 5.00% TA52
R571	0RD3901F609	3.9K OHM 1/6 W 5.00% TA52
R572	0RD0822F609	82 OHM 1/6W 5

LOCA. NO	PART NO	DESCRIPTION
R601	0RD1001F609	1K OHM 1/6 W 5.00% TA52
R602	0RD1002F609	10K OHM 1/6 W 5.00% TA52
R603	0RD1001F609	1K OHM 1/6 W 5.00% TA52
R604	0RD3301F609	3.3K OHM 1/6 W 5.00% TA52
R607	0RS0681H609	6.8 OHM 1/2 W 5.00% TA52
R608	0RD3301F609	3.3K OHM 1/6 W 5.00% TA52
R609	0RD6201F609	6.2K OHM 1/6 W 5.00% TA52
R610	0RD4702F609	47K OHM 1/6 W 5.00% TA52
R611	0RD4702F609	47K OHM 1/6 W 5.00% TA52
R624	0RD6201F609	6.2K OHM 1/6 W 5.00% TA52
R629	0RD0912F609	91 OHM 1/6 W 5.00% TA52
R662	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R663	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R664	0RD1002F609	10K OHM 1/6 W 5.00% TA52
R680	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R681	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R801	0RKZVTA001K	0.47M OHM 1/2 W 5% TA52 PILKOR
R802	180-822M	RWR 15W 1.0 OHM J PD
R803	0RD0102H609	10 OHM 1/2 W 5.00% TA52
R804	0RD4701F609	4.7K OHM 1/6 W 5.00% TA52
R805	0RD1001F609	1K OHM 1/6 W 5.00% TA52
R806	180-A01C	2 W RWR G 2W 0.12 J TA31(63)
R807	0RKZVTA001C	8.2M OHM 1/2 W 5% TA52 UL PILK
R808	0RD3301F609	3.3K OHM 1/6 W 5.00% TA52
R809	0RS2402K619	24K OHM 2 W 5% TR
R811	0RS2402K619	24K OHM 2 W 5% TR
R813	0RD1002F609	10K OHM 1/6 W 5.00% TA52
R821	0RD3601F609	3.6K OHM 1/6 W 5.00% TA52
R822	0RD3301F609	3.3K OHM 1/6 W 5.00% TA52
R830	0RP0050H709	0.05 OHM 1/2 W 10% TA52
R831	0RP0050H709	0.05 OHM 1/2 W 10% TA52
R832	0RP0020J809	0.02 OHM 1 W 20% TA52
R833	0RP0050H709	0.05 OHM 1/2 W 10% TA52
R850	0RD0471F609	4.7 OHM 1/6 W 5.00% TA52
R852	0RS0102K619	10 OHM 2 W 5% TR
R858	0RD0471F609	4.7 OHM 1/6 W 5.00% TA52
R862	0RD5601F609	5.6K OHM 1/6 W 5.00% TA52
R863	0RD2001F609	2K OHM 1/6 W 5.00% TA52
R869	0RD4701F609	4.7K OHM 1/6 W 5.00% TA52
R901	0RD2200F609	220 OHM 1/6 W 5.00% TA52
R902	0RD2200F609	220 OHM 1/6 W 5.00% TA52
R903	0RD2200F609	220 OHM 1/6 W 5.00% TA52
R904	0RD4700F609	470 OHM 1/6 W 5.00% TA52
R905	0RD7501F609	7.5K OHM 1/6 W 5.00% TA52
R906	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R907	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R908	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R909	0RCZVTA002D	1/2 W 1.5K,10%,PLIKOR(HIGH SUR
R910	0RCZVTA002D	1/2 W 1.5K,10%,PLIKOR(HIGH SUR
R911	0RCZVTA002D	1/2 W 1.5K,10%,PLIKOR(HIGH SUR
R912	0RD2204H609	2.2M OHM 1/2 W 5.00% TA52
R913	0RD4701F609	4.7K OHM 1/6 W 5.00% TA52

LOCA. NO	PART NO	DESCRIPTION
R921	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R922	0RD0622F609	62 OHM 1/6 W 5.00% TA52
R923	0RS0102J607	10 OHM 1 W 5.00% TA62
R924	0RS3300J607	330 OHM 1 W 5.00% TA62
R925	0RS4300J607	430 OHM 1 W 5.00% TA62
R926	0RS3900K607	390 OHM 2 W 5.00% TA62
“(29”)	0RS6800K607	680 OHM 2 W 5.00% TA62
R1101	0RD1301F609	1.3K OHM 1/6 W 5.00% TA52
R1136	0RD4701F609	4.7K OHM 1/6 W 5.00% TA52
R1143	0RD3300F609	330 OHM 1/6 W 5.00% TA52
R1146	0RD8200F609	820 OHM 1/6 W 5.00% TA52
R1147	0RD3600F609	360 OHM 1/6 W 5.00% TA52
R1148	0RD4300F609	430 OHM 1/6 W 5.00% TA52
R1149	0RD5600F609	560 OHM 1/6 W 5.00% TA52
R1150	0RD1001F609	1K OHM 1/6 W 5.00% TA52
R1202	0RD0752F609	75 OHM 1/6 W 5.00% TA52
R1207	0RD0752F609	75 OHM 1/6 W 5.00% TA52
R1230	0RD2200H609	220 OHM 1/2 W 5.00% TA52
R1231	0RD2200H609	220 OHM 1/2 W 5.00% TA52
RP01	0RD2200F609	220 OHM 1/6 W 5.00% TA52
RP02	0RD2200F609	220 OHM 1/6 W 5.00% TA52
RP03	0RD1000F609	100 OHM 1/6 W 5.00% TA52
RP04	0RD1000F609	100 OHM 1/6 W 5.00% TA52
RP07	0RD2202F609	22K OHM 1/6 W 5.00% TA52
RP08	0RD2202F609	22K OHM 1/6 W 5.00% TA52
RP11	0RD3300F609	330 OHM 1/6 W 5.00% TA52
RP12	0RD0102F609	10 OHM 1/6 W 5.00% TA52
RP13	0RD0102F609	10 OHM 1/6 W 5.00% TA52
RP14	0RD0102F609	10 OHM 1/6 W 5.00% TA52
RP32	0RS0222K619	22 OHM 2W 5
RP33	0RS0222K619	22 OHM 2W 5
RP110	0RD1000F609	100 OHM 1/6 W 5.00% TA52
RP111	0RD1000F609	100 OHM 1/6 W 5.00% TA52
RP113	0RD2200F609	220 OHM 1/6 W 5.00% TA52
RP114	0RD2200F609	220 OHM 1/6 W 5.00% TA52
RP116	0RD2200F609	220 OHM 1/6 W 5.00% TA52
RP122	0RD1000F609	100 OHM 1/6 W 5.00% TA52
SWITCH		
SWP801	6600VM2002A	SWITCH,PUSH SDKEA3 IEC 250V 8A HORIZO
SW1101	140-313A	SWITCH,TACT 2LEAD 100G(TA) LG C&D NON
SW1102	140-313A	SWITCH,TACT 2LEAD 100G(TA) LG C&D NON
SW1103	140-313A	SWITCH,TACT 2LEAD 100G(TA) LG C&D NON
SW1104	140-313A	SWITCH,TACT 2LEAD 100G(TA) LG C&D NON
SW1105	140-313A	SWITCH,TACT 2LEAD 100G(TA) LG C&D NON
SW1106	140-313A	SWITCH,TACT 2LEAD 100G(TA) LG C&D NON
FILTER & CRYSTAL		
FB202	125-123A	FILTER(CIRC),EMC FERRITE BFD3565R2F
FB220	125-123A	FILTER(CIRC),EMC FERRITE BFD3565R2F
FB401	125-022K	FILTER(CIRC),EMC FERRITE 1UH TAPING
FB801	125-022K	FILTER(CIRC),EMC FERRITE 1UH TAPING

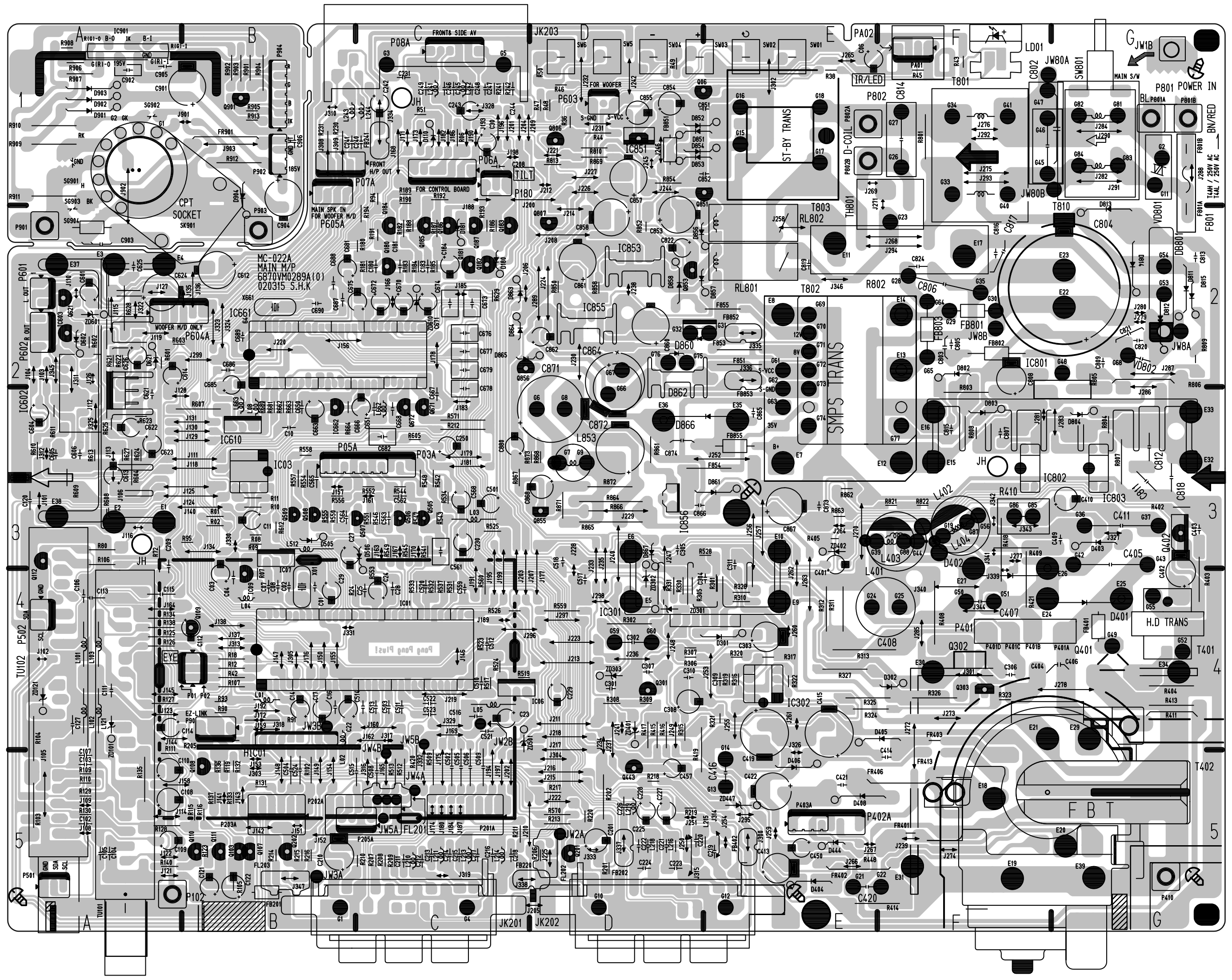
LOCA. NO	PART NO	DESCRIPTION
FB802	125-022K	FILTER(CIRC),EMC FERRITE 1UH TAPING
FB803	125-022K	FILTER(CIRC),EMC FERRITE 1UH TAPING
FB1241	125-123A	FILTER(CIRC),EMC FERRITE BFD3565R2F
L920	125-022K	FILTER(CIRC),EMC FERRITE 1UH TAPING
LP801	150-F06P	FILTER(CIRC),EMC SQE2930 10MH PHY
T810	150-F06P	FILTER(CIRC),EMC SQE2930 10MH PHY
X01	6202VDB007B	RESONATOR,CRYSTAL SUNNY RADIAL 20.250MHZ
X661	156-A02M	RESONATOR,CRYSTAL KJE RADIAL 18.432MHZ
XP01	6202VDB007B	RESONATOR,CRYSTAL SUNNY RADIAL 20.250MHZ
ACCESSORIES		
A1	3828VA0325F	MANUAL,OWNERS NEU LG AR/EN 077V/Z
A1	3828VA0325G	MANUAL,OWNERS IN/REG NO LG IN/EN
A1	3828VA0325H	MANUAL,OWNERS RUS/BZ03 LG RU/EN 077V/
A1	3828VA0325N	MANUAL,OWNERS NEU LG FR/EN 077V/Z
A2	6710V00088B	REMOTE CONTROLLER WITH TEXT 48K
A2	6710V00077Z	REMOTE CONTROLLER W/O TEXT,W/O PIP
A2	6710V00077V	REMOTE CONTROLLER W/TEXT
A4	450-018C	ADAPTER,RF UGCOM 1.5KV 5mA .
MISCELLANEOUS		
FP801	0FT4001B51C	FUSE,SLOW BLOW 4000MA 250 V 5.2X20
JK201	6612VJH011K	JACK,RCA PPJ109K A/V I/O 6P
“	6612VMH001A	JACK,SCART UPJ-R1-018
JK202	6612VJH011L	JACK,RCA PPJ109L A/V I/O 6P
“	6612VJH011C	JACK,RCA PPJ109C A/V I/O
JK1203	6613V00008A	JACK ASSY,PMJ014A E/P(ST
PA1101	6726VH0001A	REMOTE CONTROLLER RECEIVER 38KHZ .
RL801	6920VB1001E	RELAY,SDT-S-105LMR OEG 5V 0.05A 250V
SK901	6620VBC003A	SOCKET (CIRC),CPT PCS030A 8PIN 14/360
TH801	163-058D	THERMISTOR,03-07MX 7 OHM 20% 80/60
TU101	6700MF0001E	TUNER,TAFD-Z242D LG MULTI FS 4SYS,DI
“	6700MF0001C	TUNER,TUAD-Z240D LG MULTI
TU102	6700MF0001D	TUNER,TAFD-Z241P
VDP801	164-003K	VARISTOR,SVC621D-14A 620V 0% UL/C

SVC. SHEET : 3854VA0098A-S

PRINTED CIRCUIT BOARD

P/N: 3854VA0098A-S(2/2)
DATE: 2002.03.25

MAIN



COMPONENT LOCATION GUIDE

C01 ......B4	C402 ......G4	C806 ......F2	F854 ......E3	G70 ......E2	J160 ......C4	J251 ......D5	J345 ......A3	Q110 ......B5	R140 ......A5	R526 ......C4	R908 ......A1
C02 ......B4	C403 ......G3	C807 ......F3	F855 ......D2	G71 ......E2	J161 ......C3	J252 ......D3	J346 ......E2	Q111 ......B5	R180 ......C2	R528 ......D3	R909 ......A1
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C06 ......E1	C406 ......F4	C811 ......G3	FB201 ......B5	G74 ......E3	J164 ......A4	J255 ......E4	J902 ......A2	Q181 ......C2	R183 ......C2	R533 ......C4	R912 ......B1
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C17 ......B4	C414 ......F5	C818 ......G3	FB802 ......F2	G84 ......G1	J171 ......C1	J262 ......E4	JW80A F1	Q201 ......D5	R190 ......C2	R545 ......C4	SG904 ......A2
C22 ......B4	C415 ......E4	C819 ......E2	FB803 ......F2	G85 ......F3	J172 ......B4	J263 ......E3	JW80B G1	Q202 ......B5	R191 ......C2	R546 ......C3	SK901 ......A1
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C222 ......D5	C622 ......A3	D506 ......C4	G34 ......F1	J124 ......A3	J217 ......D5	J310 ......B1	P603 ......D1	R80 ......A3	R324 ......F4	R804 ......G3	VD802 ......G2
C223 ......D5	C623 ......A3	D602 ......A2	G35 ......F2	J125 ......A3	J218 ......D4	J311 ......A3	P901 ......A2	R90 ......B4	R325 ......F4	R805 ......G2	X01 ......B4
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C303 ......E4	C685 ......B3	D865 ......D2	G60 ......D4	J150 ......B4	J240 ......D4	J335 ......E2	P801B G1	R129 ......A5	R421 ......F4	R871 ......D3	
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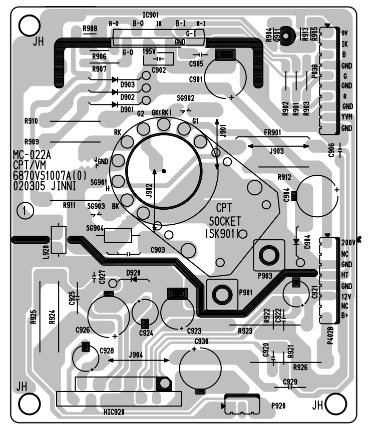
CPT



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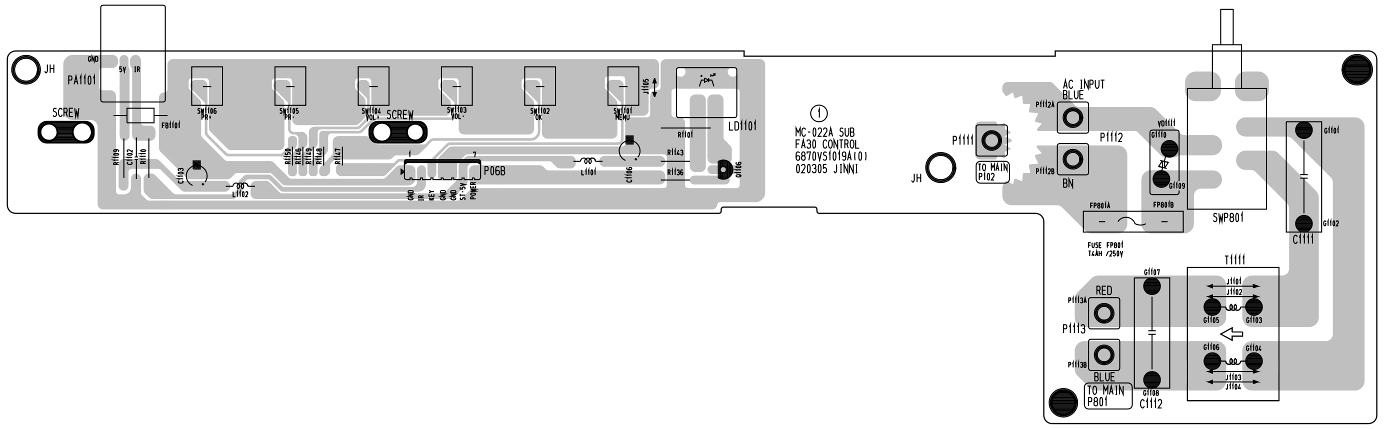
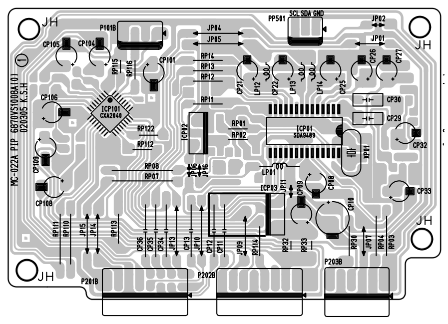


PIP



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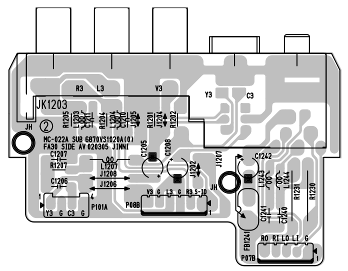

SCHEMATIC DIAGRAM OF MC-022A [PANG PANG +]

<Q20 CONTROL PWB ASSY>

SIDE A/V BOARD

<PIP PWB ASSY>

CPT/VM

NOTICE

Since this is basic circuit diagram, the value of components and some partial connection are subject to be changed for improvement without notice.

The components marked ⚠ conform to VDE or IEC guidelines and are essential for safe operation of the TV receiver.

While those marked ⚠ are required for correct operation.

Use specified parts only when replacing.

Value of resistor, capacitor and inductor

1. Resistances are shown in ohm. K=1,000. M=1,000,000.
2. Unless otherwise noted in schematic: all capacitor values less than 1 are expressed in uF and the values more than 1 in pF.
3. Unless otherwise noted in schematic: all inductor values more than 1 are expressed in uH and the values less than 1 in mH(mH).

Observation of voltages and waveforms

1. Voltages read with VTVM from point to chassis ground. Line voltage is 250V/60Hz voltage. signal pattern is colour-bar.
2. The schematic shown is representative only.
3. All waveforms are taken using a wide band oscilloscope and a low capacity probe.
4. Check FINE TUNING, AGC, CONTRAST, BRIGHTNESS and COLOUR controls for best picture. make sure that, COLOUR and BRIGHTNESS are in mid-point and CONTRAST is in 75%.
5. Waveforms are taken using a standard colour signal.

<OPTION>

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