



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

# COLOR TV

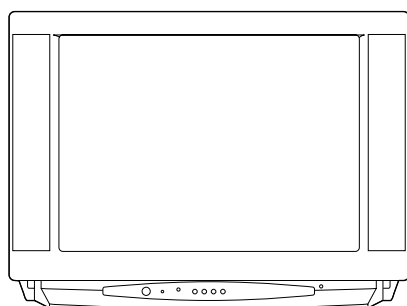
# SERVICE MANUAL

CHASSIS : MC-007A

**MODEL:CT-29M30N/X/PT**  
**CT-29M32**

## CAUTION

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



# CONTENTS

<b>Contents .....</b>	<b>2</b>
<b>Safety Precautions .....</b>	<b>3</b>
<b>Specifications .....</b>	<b>4</b>
<b>Control Descriptions .....</b>	<b>5</b>
<b>Disassembly Instructions .....</b>	<b>8</b>
<b>Adjustment Instructions .....</b>	<b>9</b>
<b>Exploded View .....</b>	<b>14</b>
<b>Exploded View Parts List .....</b>	<b>15</b>
<b>Replacement Parts List .....</b>	<b>16</b>
<b>SVC. Sheet .....</b>	

# SAFETY PRECAUTIONS

## IMPORTANT SAFETY NOTICE

Many electrical and mechanical parts in this chassis have special safety-related characteristics. These parts are identified by  $\Delta$  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 its components from being damaged by accidental shorts of the circuitry 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 its 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  $\pm$  1.5KV: 14-19 inch, 26  $\pm$  1.5KV: 19-21 inch,

29.0  $\pm$  1.5KV: 25-29 inch, 30.0  $\pm$  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 position, 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 1M $\Omega$  and 5.2M $\Omega$ .

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.

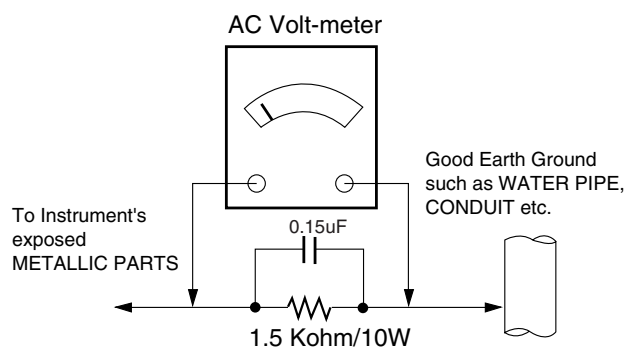
Connect 1.5K/10watt resistor in parallel with a 0.15uF capacitor between a known good earth ground (Water Pipe, Conduit, etc.) and the exposed metallic parts.

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 exposed metallic part. Any voltage measured must not exceed 0.75 volt RMS which corresponds to 0.5mA.

In case any measurement is out of the limits specified, 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)

SOUND IF : 33.4MHz (B/G)  
32.9MHz (I/I)  
32.4MHz (D/K,L)  
34.4MHz (M)  
40.4MHz (L')

## 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 ) : SECAM  
VIF-4.40625MHz

**Power requirement :** 110~240V, 50/60Hz

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

**CPT :** True Flat CPT(Flatron)

## 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(For CHINA)

**Feature :** Auto programme/Manual programme  
SVM (Scanning Velocity Modulation)  
Digital Eye  
Digital Comb Filter  
Auto Sleep  
Dynamic Focus  
Programme Editing  
PSM (Picture Status Memory)  
CTI  
Double Window Teletext (TOP/FLOF)  
Turbo Search, Picture & Sound  
ACMS  
ARC (Zoom 1/ZOOM 2, 16:9 4:3)  
1 TUNER PIP(Double Window PIP)

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

**OSD (On Screen Display) :** MENU Type

**Voice coil impedance :** 8 ohm

**Sound output :** 12W+12W  
Dual/Stereo : A2/NICAM(Optional)

## External connection :

Front or Side — Head Phone Jack  
S-VIDEO in  
A/V in :1 pair  
Back — Scart 1(Full)  
A/V in/out  
Scart 2(Half)+Audio out  
A/V in/out

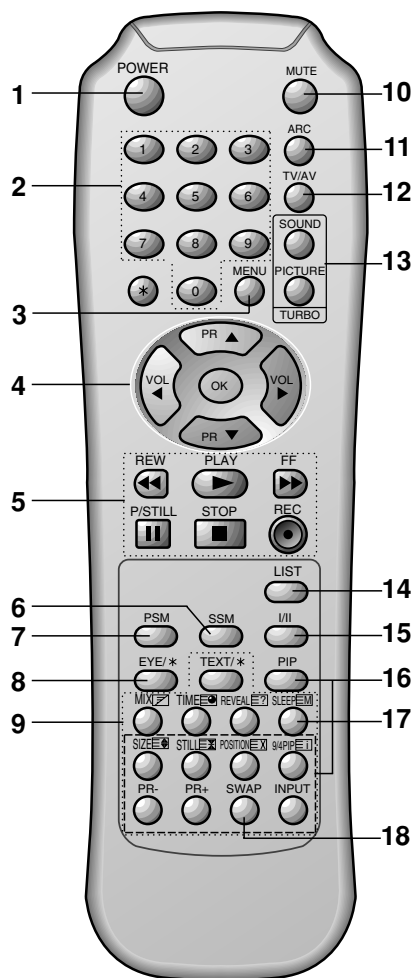
**Child Lock :** In the Lock On state the TV can only be operated by the Remote Controller.  
If any button on the front panel is pressed, "Child Lock" is displayed on the screen but the button's function is not performed.  
To cancel of this mode, select lock off with menu button on remote controller only.

## External In/Output

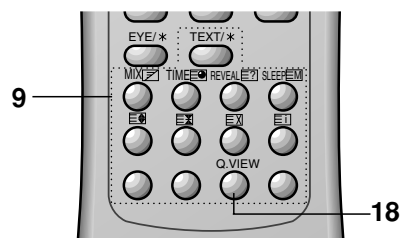
Audio-In:0.5Vrms ± 3db, over 10Kohm  
Audio-Out:0.5Vrms ± 3db, below 1Kohm  
Video-In/Out:1Vp-p ± 3db, 75ohm  
R,G,B In:0.7Vp-p ± 3db

## DESCRIPTION OF CONTROLS

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.



(With teletext / PIP)



(With teletext / Without PIP)

### 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. **MENU**  
selects a menu.
4. **▲ / ▼ (Programme Up/Down)**  
selects a programme or a menu item.  
switches the set on from standby.  
**◀ / ▶ (Volume Up/Down)**  
adjusts the volume.  
adjusts menu settings.  
**OK**  
accepts your selection or displays the current mode.
5. **VCR BUTTONS (option)**  
control a LG video cassette recorder.
6. **SSM (Sound Status Memory)**  
recalls your preferred sound setting.
7. **PSM (Picture Status Memory)**  
recalls your preferred picture setting.
8. **EYE/\* (option)**  
switches the eye function on or off.
9. **TELETEXT BUTTONS (option)**  
These buttons are used for teletext.  
For further details, see the 'Teletext' section.
10. **MUTE**  
switches the sound on or off.
11. **ARC (Aspect Ratio Control)**  
changes the picture format.
12. **TV/AV**  
selects TV or AV mode.  
clears the menu / text from the screen.  
switches the set on from standby.
13. **TURBO PICTURE / SOUND BUTTON**  
selects Turbo picture / sound.

**14. LIST**

displays the programme table.

**15. I/II**

selects the language during dual language broadcast (option).  
selects the sound output.

**16. 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.

**17. SLEEP**

sets the sleep timer.

**18. SWAP or Q.VIEW**

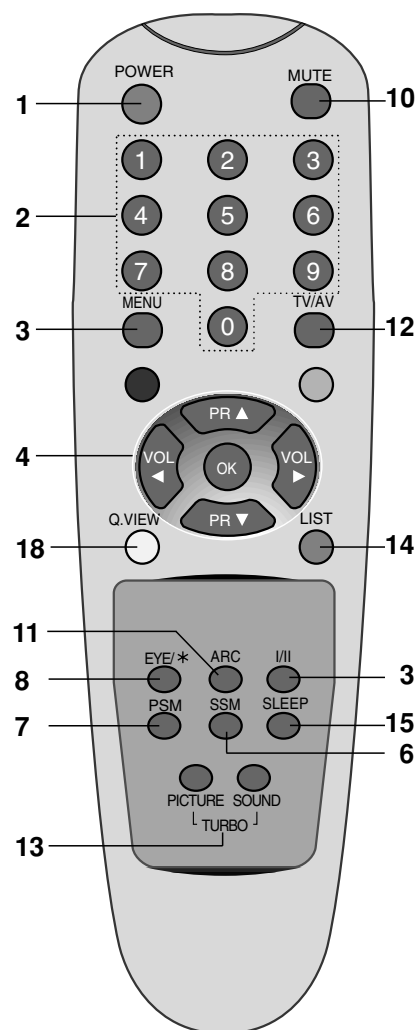
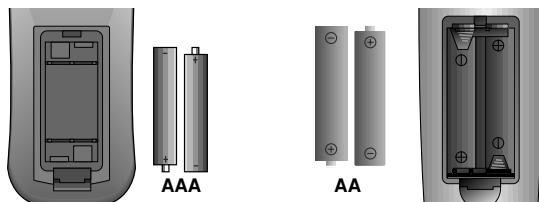
returns to the previously viewed programme.

**COLOURED BUTTONS**

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

**Battery installation**

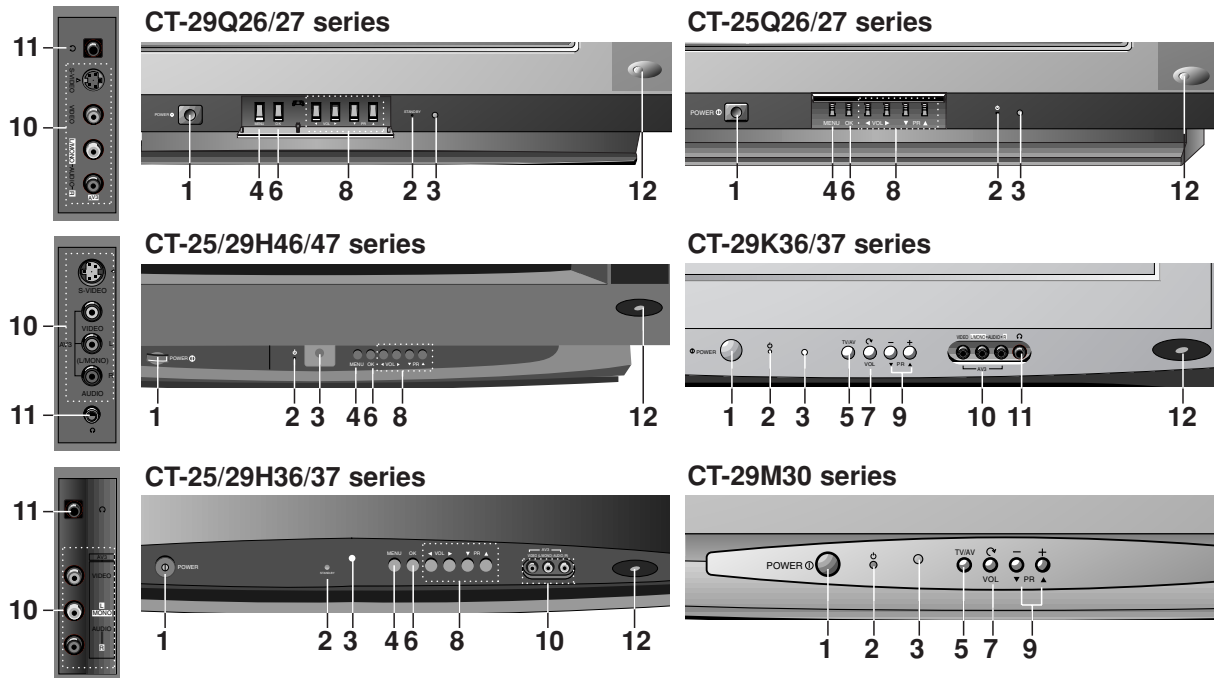
The remote control handset is powered by two AAA or AA type batteries. To load the batteries, turn the remote control handset over and open the battery compartment. Install two batteries as indicated by the polarity symbols (⊕ and ⊖) marked inside the compartment.



(Without teletext / PIP)

**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.

## Front panel



## Side Panel

- 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. REMOTE CONTROL SENSOR**
- 4. MENU**  
selects a menu.
- 5. TV/AV**  
selects TV or AV mode.  
clears the menu from the screen.  
switches the set on from standby.
- 6. OK**  
accepts your selection or displays the current mode.
- 7. ⌂ (Function)**  
selects volume, EYE (option), picture items or brief auto programme while the menus not display.
- 8. ▲ / ▼ (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.
- 9. +/- (▲/▼)**  
adjusts the function or selects a programme.  
switches the set on from standby.
- 10. 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**.
- 11. HEADPHONE SOCKET (option)**  
Connect the headphone plug to this socket.
- 12. EYE (option)**  
adjusts picture according to the surrounding conditions.

# 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.

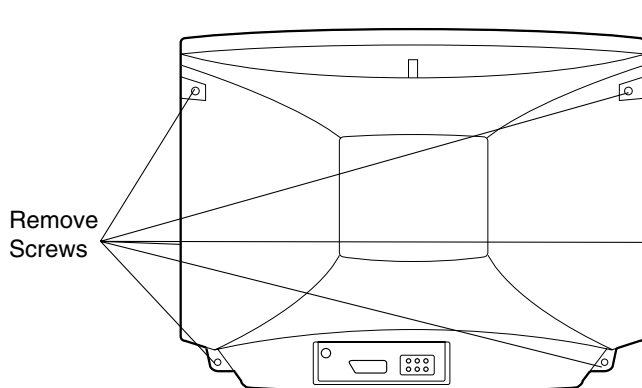


Fig. 2-1

## 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.

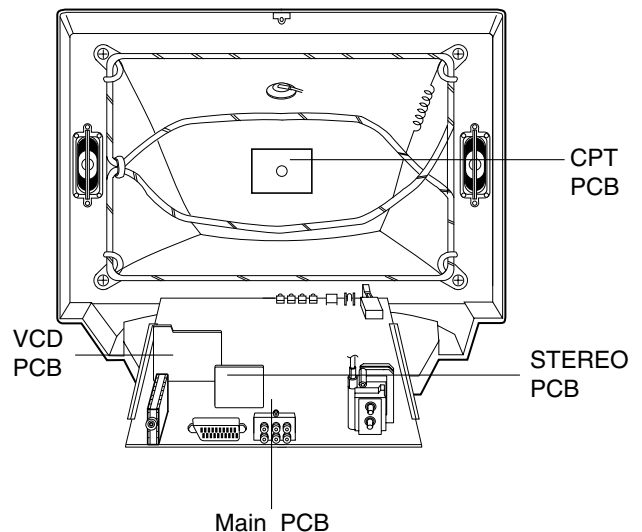


Fig. 2-2



# ADJUSTMENT INSTRUCTIONS

## 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  $\pm$  10%, 50Hz.
5. The adjustment of TV should be performed after warming up for 15 minutes.

## Test Equipment required

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

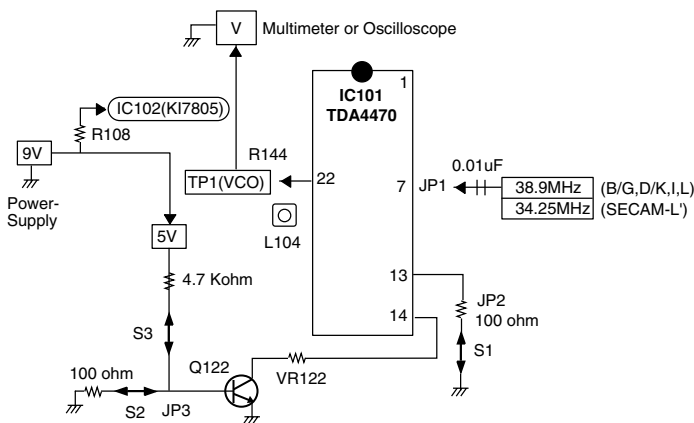


Fig. 1 : Connection Diagram of Equipment for PIF Adjustment

## PIF (Picture Intermediate Frequency) Adjustment

**Test Point** : TP1  
**Adjust** : L104

- 1) Connect the measuring equipment to the Main Board as shown in Fig.1.
- 2) Set RF frequency and output level of RF SIGNAL GENERATOR as shown Table 1.
- 3) Turn off S1 and S3 and on S2.
- 4) Adjust L104 so that the DC voltage may be  $2.4 \pm 0.05$ Vdc.

System	Frequency	Modulation	Output level	Adjust
B/G,D/K/I,SECAM-L	38.9MHz	OFF	10mVp-p	L104
SECAM-L'	34.25MHz	OFF	10mVp-p	VR122

(Table 1)

## L' VCO Adjustment (For SECAM-L' MODEL)

**Test Point** : TP1  
**Adjust** : VR122

- 1) Connect the measuring equipment to the Main Board as shown in Fig.1.
- 2) Set RF frequency and output level of RF SIGNAL GENERATOR as shown Table 1.
- 3) Turn on S1,S3 and off S2.
- 2) Adjust VR122 so that the DC Voltage may be  $2.4 \pm 0.05$ Vdc.

## RF AGC (Automatic Gain Control) Adjustment

**Test Point** : TP 2(J15)  
**Adjust** : VR121

- 1) Input PAL-B/G 05 CH.
- 2) Connect Multimeter to TP2(J15),AGC adjustment point.
- 3) Adjust VR121 until the voltage of Multimeter becomes  $2.5 \pm 0.1$ V.

## Screen Voltage Adjustment

**Test Point** : CPT Face  
**Adjust** : Screen Control of FBT

- 1) Tune the RF Modulator to receive a PAL or SECAM signal.
- 2) Press MIX button on remote controller for Service to get into the Screen Adjust Mode.
- 3) Adhere the Color Analyzer on the White window of CPT face.
- 4) Adjust Screen Volume of FBT so that the luminance of White window is  $12 \pm 1$  FL.

## Focus Adjustment

**Test Point** : Observing Display  
**Adjust** : Focus control of FBT

- 1) Tune the TV set to receive a digital pattern.
- 2) Adjust the upper Focus volume of FBT for the best focus of vertical line B.
- 3) Adjust the lower Focus volume of FBT for the best focus of area A.
- 4) Repeat above step 2) and 3) for the best overall focus.

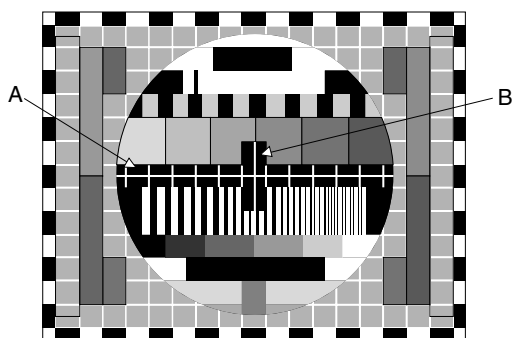


Fig. 2

## 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.

### 1. Preparation for Deflection Adjustment

- 1) At SVC mode, press the Yellow colored button the SVC remocon.  
And then, deflection data adjustment OSD(SVC2 mode) will be displayed.
- 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 PAL B/G Digital pattern.

#### 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.

#### 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.

#### POP (POP Position)

Adjust until the distance between POP and main picture becomes about 1mm.

Menu	Range	29" Flat	29" S-Flat
VS	0600H~0900H	07D2	
VA	0050H~00CFH	0095	
VL	0025H~00BFH	0001	
SC	0000H~009FH	00D9	
HS	0000H~003FH	001E	
EW	0400H~0EFFH	0A9D	
ET	0700H~08FFH	07FF	
EP	06E0H~0840H	0787	
ES	06A0H~0AFFH	0815	
EC	0790H~08E0H	0850	
POP P	0790H~08E0H	000B	

(Table 2)

## White Balance Adjustment.(LINE SVC 1)

**NOTE :** This adjustment should be performed after screen voltage adjustment.

- 1) Tune the TV set to receive an 100% white pattern.
- 2) Press the Yellow button on remote controller in the SVC Mode.
- 3) Press PSM (RED) button on remote controller. (Standard picture)
- 4) Press PR+ or PR- button for desirous function adjustment.
- 5) Adjust Low Light status of CR and CB with VOL+ or VOL- at CG:50 until  $X=268 \pm 8, Y=273 \pm 8$ .
- 6) Adjust High Light status of RG and BGB with VOL+ or VOL- at CG:370 until  $X=268 \pm 8, Y=273 \pm 8$ .
- 7) Repeat above step 5) and 6) until each status of High Light and Low Light for  $X=288 \pm 8, Y=295 \pm 8$  with color analyzer(color temperature 9000°K).

Menu	Range	DATA
CR	0 ~ 511	50
CG	0 ~ 511	50
CB	0 ~ 511	50
RG	0 ~ 511	370
GG	0 ~ 511	370
BG	0 ~ 511	370

(Table 3)

## SVC Data & PSM,SSM Data.

**Table 1. ABL Data (LINE SVC-3)**

Menu	Range	29" Flat	29" S-Flat
DVCO			
IBRM	0~1FFH	00C8	
WDRM	0~3FFH	0190	
BCLTH	0~7FFH	0065	
BCLTM	0~1FFH	000B	
BCLGA	0~1FFH	0007	
SVGA		0008	
SVDEL		0005	
SVD1		0003	
LDLY		0001	
HBST	0~01FF	00F0	
HBSO	0~01FF	0158	

**Table 2. SOUND PRE-SCALER (LINE SVC-4)**

Menu	Range	DATA
FP	0~127	0011
NP	0~127	0045
SP	0~127	001E
S1 VOL	0~127	0042
S2 VOL	0~127	0042

**Table 3. PSM Data**

Mode	STANDARD	DYNAMIC	MILD	GAME
CONTRAST	90	100	60	50
BRIGHT	50	55	60	60
COLOR	50	60	40	40
SHARPNESS	50	60	40	30

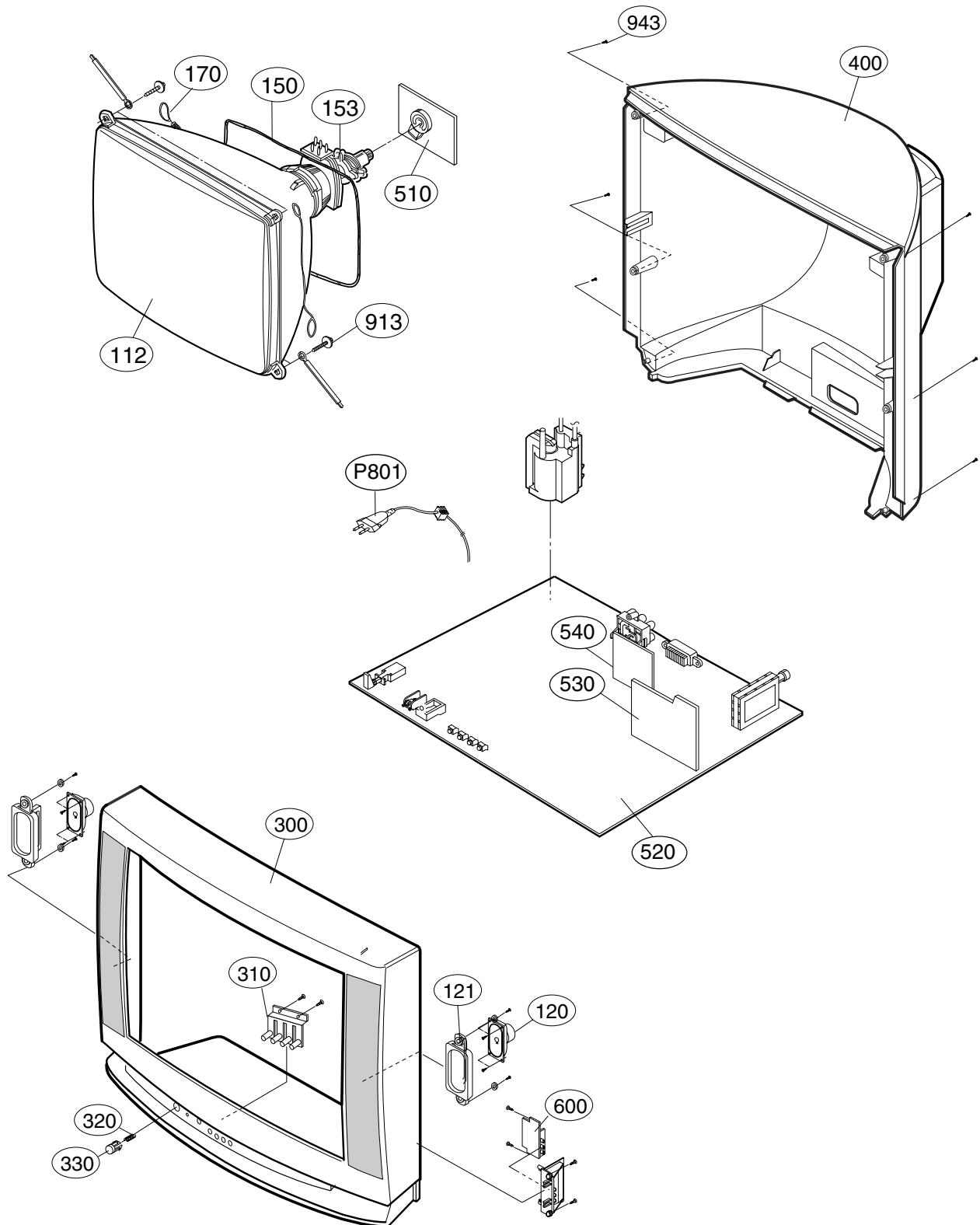
## OPTION Adjustment (LINE-SERVICE OPTION)

**Table 4. OPTION Function**

Menu	OPTION	1	0
Option 1	GAME	GAME	X
	TEXT	TEXT	X
	TOP	TOP	X
	ACMS		Australia Only
	CH+AU	China,Australia	
	EYE	EYE	X
	TURBO	Turbo Search	X
	SCART	SCART	X
Option 2	A2 ST	STEREO	X
	I II SV	I/II	X
	MONO	MONO	X
	VOL	Middle East Africa,India VOL.	Normal VOL.
	H-PH	H/Phone	
	DGS	Degaussing	X
	TILT	TILT	
	200PRO	China Only	X
Option 3	AV2	Back:JACK(2EA)	Back:JACK(1EA)
	HOTEL	HOTEL	X
	KEY		
	SYS		
	M-VOL		
Option 4	OSD		
	T-LAN		

## MEMO

# EXPLODED VIEW



# EXPLODED VIEW PARTS LIST

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

LOCA. NO	PART NO	DESCRIPTIONS
$\Delta$ 112	6341V29002G	CPT ASSY,29",PAII+S/CHAN
	6341V29002B	CPT ASSY,29",PA2,D/TINT,SOUTH
	2426GF120EA	CPT SET LGEMT
120	120-C77G	SPEAKER,GENERAL
121	4810V00121A	BRACKET,SPEAKER PS
$\Delta$ 150	6140VC2001B	COIL,DEGAUSSING CU 29" 60TURN 8.7 OHM
	150-201T	COIL,DEGAUSSING CU 29" 440TURN 102 OHM
$\Delta$ 153	6150Z-1043M	DY,DC29SPPA2
	6150V-5008A	DY
$\Delta$ 170	170-844J	CPT EARTH,29" 96T 2LUG 2P HUG
300	3091V00298D	CABINET ASSY
	3091V00298W	CABINET ASSY MT ONLY CKD
310	5020V00440A	BUTTON,CONTROL 4KEY
320	320-062E	SPRING,KNOB
330	5020V00442A	BUTTON,POWER
400	3809V00221D	BACK COVER ASSY(1SCART/1PHONE)
	3809V00221F	BACK COVER ASSY(2 PHONE)
510	6871VSM728A	PWB ASSY,CPT 007A W/O SVM, STV5109 SET
	6871VSM820C	PWB ASSY,CPT 007A MT
520	6871VMM618V	PWB ASSY,MAIN CT-29M30PT
	6871VMM618U	PWB ASSY,MAIN CT-29M30N
	6871VMM612P	PWB ASSY,MAIN CT-29M30N LGAP
	6871VMM736A	PWB ASSY,MAIN CT-29M30X RANKINE
	6871VMM612R	PWB ASSY,MAIN CT-29M32 NAGHI
	6871VMM736P	PWB ASSY,MAIN CT-29M30N LGEMT
530	6871VSM588C	PWB ASSY,W/PIP,SCART OPT.
	6871VSM819B	PWB ASSY,W/O PIP VCD
540	6871VSM589A	PWB ASSY,RF ST. W/ H_PHONE
	6871VSM589B	PWB ASSY,RF ST
600	6871VSM873B	PWB ASSY,M30 SIDE AV 6P SET
	6871VSM880C	PWB ASSY,M30 SIDE AV MT
913	332-229A	SCREW ASSY,HEXAGON HEAD SPECIAL
943	1PTF0403116	SCREW,TAP TITE(P) D4.0 L16.0
$\Delta$ P801	174-225H	CORD,POWER(L4=350MM)
	174-009Q	CORD,POWER
	174-222Q	POWER CORD ASSY L=2200MM
	6410VEH001H	POWER CORD

The components identified by mark  $\Delta$  are critical for safety.  
Replace only with part number specified.

## REPLACEMENT PARTS LIST

LOCA. NO	PART NO	DESCRIPTION
<b>IC</b>		
D850	0ISK100300A	IC,SLA1003 SIP12 BK DIODE MODULE(
ICP01	0IIT312000A	IC,VDP3120B 64P SDIP BK VCD IC (5
ICN01	0IIT341000J	IC,MSP3410D-C5 52P SDIP BK MULTI
"	0IIT340050A	IC,MSP3400D-P0-C5
ICV01	0IIT312000A	IC,VDP3120B 64P SDIP BK VCD IC (5
IC01	0ICTMIH002B	IC,SDA5525-A012 W/O TXT
"	0ICTMIH001A	IC,SDA5555-A006 W/ TXT
IC02	0IAL241610B	IC,AT24C16-10PC-2.7 8PIN DIP ST E
ICP02	0IFA754207A	IC,KA75420ZTA(KA7542ZTA) 3P,TO-92
ICN02	0ISG282200A	IC,TDA2822M 8D DUAL AUDIO AMP(1W)
ICV02	0IFA754207A	IC,KA75420ZTA(KA7542ZTA) 3P,TO-92
IC03	0IFA752700A	IC,KA75270Z 3 TP RE-SET IC MC-007
ICN03	0IKE780500Q	IC,KIA7805API 3P TO-220 ST REGULA
IC04	0ISG111733B	IC,LD1117V33C 3SIP ST REGULATOR
ICN05	0IFA753307A	IC,KA75330ZTA(KA7533ZTA) 3P,TO-92
ICP101	0ISO204000A	IC,CXA2040AQ 32P,QFP BK IIC BUS V
IC101	0ITF447000A	IC,TDA4470M 28P,SDIP BK VIF+SIF
IC102	0IKE780500Q	IC,KIA7805API 3P TO-220 ST REGULA
HIC181	0IZZVF0016A	IC,TILT 7P SIP BK
ICP102	0ISM948900A	IC,SDA9489 28PIN SOP TP PIP
ICP103	0ISG111733B	IC,LD1117V33C 3SIP ST REGULATOR
IC301	0ISA784070A	IC,LA7840 7S VERTICAL
IC302	0IKE455800E	IC,KIA4558 8DIP DUAL OP AMP
IC601	0ISA428200A	IC,LA4282 12S 2CHX10W AUDIO AMP
IC801	0ISK665613B	IC,STR-F6656(LF1352) 5P,SIP BK ST
$\Delta$ IC802	0ILI817000G	IC,LTV817M-VB 4P,DIP BK PHOTO COU
IC803	0ILI817000G	IC,LTV817M-VB 4P,DIP BK PHOTO COU
IC851	0IKE780500Q	IC,KIA7805API 3P TO-220 ST REGULA
IC853	0ISH092100B	IC,PQ09RD21 4SIP ST REGULATOR
IC855	0ISS278050A	IC,KA278R05 4P,TO-220F BK LOW DRO
IC856	0ISK125120A	IC,SE125N(LF12) 125V ERROR AMP -
IC901	0ISG510900A	IC,STV5109 15SIP ST RGB DRIVE
Q07	0IFA270000A	IC,2N7000TA TO-92, 3P TP LEVEL SH
Q08	0IFA270000A	IC,2N7000TA TO-92, 3P TP LEVEL SH
<b>DIODE</b>		
D01	0DD414809ED	DIODE,1N4148 TA
D02	0DD414809ED	DIODE,1N4148 TA
D03	0DD414809ED	DIODE,1N4148 TA
D04	0DD414809ED	DIODE,1N4148 TA
D101	0DD414809ED	DIODE,1N4148 TA
D121	0DSVH00019A	DIODE,SWITCHING BA282
D122	0DSVH00019A	DIODE,SWITCHING BA282
D301	0DD150009CE	DIODE,RECTIFIER GP15J TP(1.5A/600V)
D302	0DS113379BA	DIODE,SWITCHING 1SS133
D401	0DD410000AC	DIODE,RECTIFIER RU4DS,LF-L1
D402	0DD410000AD	DIODE,RECTIFIER RU4AM,LF-L1
D403	0DD150009CA	DIODE,RECTIFIER RGP15J,TP(52MM)
D404	0DR150009AB	DIODE,RECTIFIER RGP15G TP
D405	0DR150009AB	DIODE,RECTIFIER RGP15G TP
D406	0DR150009AB	DIODE,RECTIFIER RGP15G TP

LOCA. NO	PART NO	DESCRIPTION
D407	0DD414809ED	DIODE,1N4148 TA
D408	0DD100009AE	DIODE,RECTIFIER RU1A V(1) TP
D412	0DD414809ED	DIODE,1N4148 TA
D601	0DD414809ED	DIODE,1N4148 TA
D602	0DD414809ED	DIODE,1N4148 TA
D802	0DR060009AA	DIODE,RECTIFIER TVR06J TP
D803	0DD100009AM	DIODE,RECTIFIER EU1ZV(1) TP
D804	0DD414809ED	DIODE,1N4148 TA
D857	0DD414809ED	DIODE,1N4148 TA
D859	0DD420000BB	DIODE,D4L20U SHINDENGEN
D861	0DR060009AA	DIODE,RECTIFIER TVR06J TP
D863	0DD414809ED	DIODE,1N4148 TA
D864	0DD414809ED	DIODE,1N4148 TA
D865	0DD414809ED	DIODE,1N4148 TA
D901	0DD414809ED	DIODE,1N4148 TA
D902	0DD414809ED	DIODE,1N4148 TA
D903	0DD414809ED	DIODE,1N4148 TA
D904	0DR140049AC	DIODE,RECTIFIERS IN4004A
D905	0DD414809ED	DIODE,1N4148 TA
D906	0DD414809ED	DIODE,1N4148 TA
D907	0DD414809ED	DIODE,1N4148 TA
DB801	0DD560000AA	DIODE,RECTIFIER D5SB60 BRIDGE(5A/600V)
DV01	0DD414809ED	DIODE,1N4148 TA
DV02	0DD414809ED	DIODE,1N4148 TA
DV03	0DD414809ED	DIODE,1N4148 TA
DP01	0DD414809ED	DIODE,1N4148 TA
DP02	0DD414809ED	DIODE,1N4148 TA
DP03	0DD414809ED	DIODE,1N4148 TA
LD01	4930V00048A	HOLDER DIODE,LED ASSY
ZD01	0DZ360009BC	DIODE,ZENER MTZJ3.6B
ZDN01	0DZ820009AH	DIODE,ZENER MTZJ8.2B TP ROHM-K DO34
ZD101	0DZ330009BA	DIODE,ZENER HZT33(TP) HITACHI
ZD201	0DZ330009CC	DIODE,ZENER MTZJ3.3B TP ROHM-K DO34
ZD202	0DZ680009BB	DIODE,ZENER MTZJ6.8B TP ROHM-K DO34
ZD203	0DZ680009BB	DIODE,ZENER MTZJ6.8B TP ROHM-K DO34
ZD301	0DZ180009BE	DIODE,ZENER GDZJ18B TP GRANDE DO34
ZD302	0DZ560009AH	DIODE,ZENER GDZJ5.6B TP GRANDE DO34
ZD303	0DZ180009BE	DIODE,ZENER GDZJ18B TP GRANDE DO34
ZD401	0DZ510009BF	DIODE,ZENER GDZ5.1B,TP(52MM),ROHM
ZD402	0DZ510009BF	DIODE,ZENER GDZ5.1B,TP(52MM),ROHM
ZD851	0DZ510009BF	DIODE,ZENER GDZ5.1B,TP(52MM),ROHM
ZD901	0DZ180009BE	DIODE,ZENER GDZJ18B TP GRANDE DO34
<b>TRANSISTOR</b>		
Q02	0TR945009AA	TR,KSC945C-Y TP SAMSUNG
Q03	0TR102009AB	TR,KRC102M,TP(KRC1202),KEC
Q04	0TR945009AA	TR,KSC945C-Y TP SAMSUNG
Q05	0TR102009AB	TR,KRC102M,TP(KRC1202),KEC
Q06	0TR126609AA	TR,KTA1266-TP-Y (KTA1015) KEC
Q121	0TR945009AA	TR,KSC945C-Y TP SAMSUNG
Q122	0TR945009AA	TR,KSC945C-Y TP SAMSUNG
Q123	0TR733009AA	TR,KA733C-Y TP SAMSUNG TO-92
Q124	0TR945009AA	TR,KSC945C-Y TP SAMSUNG



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

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

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

The components identified by mark  $\Delta$  are  
critical for safety.  
Replace only with part number specified.

LOCA. NO	PART NO	DESCRIPTION
Q125	0TR319709AB	TR,KTC3197,TP(KTC388A),KEC
Q126	0TR945009AA	TR,KSC945C-Y TP SAMSUNG
Q201	0TR733009AA	TR,KSA733C-Y TP SAMSUNG TO-92
Q221	0TR733009AA	TR,KSA733C-Y TP SAMSUNG TO-92
Q301	0TR945009AA	TR,KSC945C-Y TP SAMSUNG
Q303	0TR127409AB	TR,KTA1274-Y TO-92L TP KEC
Q331	0TR205900AB	TR,KTD2059-Y TO-220IS KEC
Q401	0TR258100AA	TR,2SD2581 BK SANYO TO3P -
Q402	0TR223800AA	TR,KTC2238A-Y
Q601	0TR733009AA	TR,KSA733C-Y TP SAMSUNG TO-92
Q853	0TR945009AA	TR,KSC945C-Y TP SAMSUNG
Q854	0TR102009AB	TR,KRC102M,TP(KRC1202),KEC
Q855	0TR102409AB	TR,KTA1024-Y
Q856	0TR945009AA	TR,KSC945C-Y TP SAMSUNG
Q857	0TR320209AA	TR,KTC3202-TP-Y (KTC1959)KEC
Q901	0TR126609AA	TR,KTA1266-TP-Y (KTA1015) KEC
QN01	0TR150400BA	TR,CHIP 2SA1504S(ASY) KEC
QN02	0TR150400BA	TR,CHIP 2SA1504S(ASY) KEC
QP01	0TR387500AA	TR,CHIP 2SC3875S(ALY) KEC
QP02	0TR387500AA	TR,CHIP 2SC3875S(ALY) KEC
QP03	0TR387500AA	TR,CHIP 2SC3875S(ALY) KEC
QP04	0TR387500AA	TR,CHIP 2SC3875S(ALY) KEC
QP05	0TR387500AA	TR,CHIP 2SC3875S(ALY) KEC
QP06	0TR150400BA	TR,CHIP 2SA1504S(ASY) KEC
QP07	0TR387500AA	TR,CHIP 2SC3875S(ALY) KEC
QP08	0TR387500AA	TR,CHIP 2SC3875S(ALY) KEC
QP09	0TR150400BA	TR,CHIP 2SA1504S(ASY) KEC
QP10	0TR387500AA	TR,CHIP 2SC3875S(ALY) KEC
QP11	0TR387500AA	TR,CHIP 2SC3875S(ALY) KEC
QP12	0TR150400BA	TR,CHIP 2SA1504S(ASY) KEC
QP13	0TR387500AA	TR,CHIP 2SC3875S(ALY) KEC
QP14	0TR387500AA	TR,CHIP 2SC3875S(ALY) KEC
QP15	0TR150400BA	TR,CHIP 2SA1504S(ASY) KEC
QP104	0TR387500AA	TR,CHIP 2SC3875S(ALY) KEC
QP105	0TR387500AA	TR,CHIP 2SC3875S(ALY) KEC
QP106	0TR387500AA	TR,CHIP 2SC3875S(ALY) KEC
QV01	0TR387500AA	TR,CHIP 2SC3875S(ALY) KEC
QV02	0TR387500AA	TR,CHIP 2SC3875S(ALY) KEC
QV03	0TR387500AA	TR,CHIP 2SC3875S(ALY) KEC
QV07	0TR387500AA	TR,CHIP 2SC3875S(ALY) KEC
QV08	0TR387500AA	TR,CHIP 2SC3875S(ALY) KEC
QV09	0TR150400BA	TR,CHIP 2SA1504S(ASY) KEC
QV10	0TR387500AA	TR,CHIP 2SC3875S(ALY) KEC
QV11	0TR387500AA	TR,CHIP 2SC3875S(ALY) KEC
QV12	0TR150400BA	TR,CHIP 2SA1504S(ASY) KEC
QV13	0TR387500AA	TR,CHIP 2SC3875S(ALY) KEC
QV14	0TR387500AA	TR,CHIP 2SC3875S(ALY) KEC
QV15	0TR150400BA	TR,CHIP 2SA1504S(ASY) KEC
<b>CAPACITOR</b>		
C01	0CE476DD618	47UF STD 10V 20% FL TP 5
C02	0CN1030F679	10000P 16V M Y TA52

LOCA. NO	PART NO	DESCRIPTION
C03	0CX6200K409	62P 50V J SL TA52
C04	0CX6200K409	62P 50V J SL TA52
C05	0CN1030F679	10000P 16V M Y TA52
C06	0CE107DD618	100UF STD 10V M FL TP5
C08	0CN1030F679	10000P 16V M Y TA52
C09	0CN1030F679	10000P 16V M Y TA52
C10	0CE106DK618	10UF STD 50V M FL TP5
C11	0CE106DK618	10UF STD 50V M FL TP5
C14	0CN1040K949	0.1M 50V Z F TA52
C17	0CN1010K519	100P 50V K B TA52
C18	0CE476DF618	47UF STD 16V M FL TP5
C19	0CE475DK618	4.7UF STD 50V 20% FL TP 5
C20	0CE476DD618	47UF STD 10V 20% FL TP 5
C21	0CE107DD618	100UF STD 10V M FL TP5
C22	0CN1030F679	10000P 16V M Y TA52
C24	0CE225DK618	2.2UF STD 50V 20% FL TP 5
C25	0CN1020K519	1000P 50V K B TA52
C26	0CC3300K415	33P 50V J NP0 TP
C27	0CC3300K415	33P 50V J NP0 TP
C29	0CN1030F679	10000P 16V M Y TA52
C30	0CE106DK618	10UF STD 50V M FL TP5
C31	0CE106DK618	10UF STD 50V M FL TP5
C32	0CN1030F679	10000P 16V M Y TA52
C33	0CN1030F679	10000P 16V M Y TA52
C34	0CN1030F679	10000P 16V M Y TA52
C101	0CE476DK618	47UF STD 50V M FL TP5
C103	0CN1030F679	10000P 16V M Y TA52
C104	0CE227DD618	220UF STD 10V M FL TP5
C105	0CX3300K409	33P 50V J SL TA52
C106	0CX3300K409	33P 50V J SL TA52
C108	0CE106DF618	10UF STD 16V M FL TP5
C109	0CE335DK618	3.3UF STD 50V 20% FL TP 5
C110	0CN1040K949	0.1M 50V Z F TA52
C112	0CN1020K519	1000P 50V K B TA52
C113	0CE476DD618	47UF STD 10V 20% FL TP 5
C114	0CN1030F679	10000P 16V M Y TA52
C115	0CN1030F679	10000P 16V M Y TA52
C121	0CN1030F679	10000P 16V M Y TA52
C122	0CN1030F679	10000P 16V M Y TA52
C123	0CN1030F679	10000P 16V M Y TA52
C124	0CN1030F679	10000P 16V M Y TA52
C125	0CN1040K949	0.1M 50V Z F TA52
C126	0CN1030F679	10000P 16V M Y TA52
C127	181-007H	MPE ECQ-V1H474JL3(TR)50V 0.4
C128	0CE106DF618	10UF STD 16V M FL TP5
C129	0CN1030F679	10000P 16V M Y TA52
C130	0CSZVTA001F	TAP684K035BRS(AMMO)35V 0.68UFK
C131	0CN1030F679	10000P 16V M Y TA52
C132	0CN1030F679	10000P 16V M Y TA52
C134	0CE476DD618	47UF STD 10V 20% FL TP 5
C135	0CN1040K949	0.1M 50V Z F TA52
C136	0CE226DF618	22UF STD 16V M FL TP5

The components identified by mark  $\Delta$  are critical for safety.  
Replace only with part number specified.

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

LOCA. NO	PART NO	DESCRIPTION
C137	181-007H	MPE ECQ-V1H474JL3(TR)50V 0.4
C138	0CN1040K949	0.1M 50V Z F TA52
C139	0CE104DK618	0.1000UF STD 50V M FL TP5
C140	0CN1030F679	10000P 16V M Y TA52
C141	0CE107DD618	100UF STD 10V M FL TP5
C147	0CX4700K409	47P 50V J SL TA52
C148	0CX4700K409	47P 50V J SL TA52
C149	0CE106DF618	10UF STD 16V M FL TP5
C181	0CN1030F679	10000P 16V M FL TP5
C182	0CE476DF618	47UF STD 16V M FL TP5
C183	0CE108DF618	1000UF STD 16V M FL TP5
C184	0CQ1041N509	0.1U 100V K
C185	0CC3900K415	39P 50V J
C186	0CC3900K415	39P 50V J
C201	0CE227DF618	220UF STD 16V M FL TP5
C208	0CE226DF618	22UF STD 16V M FL TP5
C209	0CE226DF618	22UF STD 16V M FL TP5
C221	0CE476DF618	47UF STD 16V M FL TP5
C222	0CE227DF618	220UF STD 16V M FL TP5
C229	0CE226DF618	22UF STD 16V M FL TP5
C230	0CE226DF618	22UF STD 16V M FL TP5
C244	0CN1010K519	100P 50V K B TA52
C245	0CN1010K519	100P 50V K B TA52
C302	0CQ3341N401	0.33U 100V J POLY
C303	0CE107BK618	100UF KME 50V M FL TP5
C304	0CQ6821N509	0.0068U 100V K POLY
C305	0CQ1021N509	0.001U 100V K POLY
C306	0CQ3931N509	0.0390UF 100V K PE TP
C307	0CQ1031N509	0.01U 100V K POLY
C308	0CE476DJ618	47UF STD 35V M FL TP5
C309	0CN4710K519	470P 50V K B TA52
C310	0CQ1031N509	0.01U 100V K POLY
C311	0CQ1031N509	0.01U 100V K POLY
C401	0CE474DK618	0.4700UF STD 50V M FL TP5
C402	0CE475DK618	4.7UF STD 50V 20% FL TP 5
C403	0CK2220W515	2200P 500V K B TS
C405	181-834B	MPP 1600V 0.018UF J
C406	181-091G	DE0907-486 R 471K 2KV TP7.5
C407	0CQZVBK004B	0.027UF D 630V J PP NI FM7.5
C408	0CE5651K652	5.6UF SM,SA 50V 20% FM7.5
"	0CE685BK652	6.8UF KME 50V
C409	0CK2220W515	2200P 500V K B TS
C410	0CE106BR618	10UF KME 250V M FL TP5
C411	181-013G	MPP 200V 0.5UF J
C412	0CK6810W515	680P 500V K B
C413	0CE107DJ618	100UF STD 35V M FL TP5
C414	181-091P	1KV SL 271J TP5
C415	0CE108BH618	1000UF KME 25V M FL TP5
"	0CE228DF618	2200UF STD 16V M
C416	181-009R	PP 200V 0.022UF K
C417	0CK2710W515	270P 500V K B
C419	0CE108BH618	1000UF KME 25V M FL TP5

LOCA. NO	PART NO	DESCRIPTION
"	0CE228DF618	2200UF STD 16V M
C420	181-010B	PP 400V 0.056UF J
C421	0CK2710W515	270P 500V K B
C422	0CE106DR618	10UF STD 250V M FL TP5
C517	0CQ1531N509	0.015U 100V K POLY
C518	0CQ1531N509	0.015U 100V K POLY
C519	0CQ1531N509	0.015U 100V K POLY
C520	0CN1030F679	10000P 16V M Y TA52
C601	0CE107DH618	100UF STD 25V M FL TP5
C602	0CE684DK618	0.68UF STD 50V 20% FL TP
C603	0CQ5621N509	0.0056U 100V K POLY
C604	0CE107DH618	100UF STD 25V M FL TP5
C605	0CE684DK618	0.68UF STD 50V 20% FL TP
C606	0CQ5621N509	0.0056U 100V K POLY
C607	0CE107DH618	100UF STD 25V M FL TP5
C608	0CQ1041N509	0.1U 100V K POLY
C609	0CE477DJ618	470UF STD 35V 20% FL TP
C610	0CQ1041N509	0.1U 100V K POLY
C611	0CE477DJ618	470UF STD 35V 20% FL TP
C612	0CN1040K949	0.1M 50V Z F TA52
C613	0CE477DK618	470UF STD 50V 20% FL TP
C614	0CE477DH618	470UF STD 25V M FL TP5
C802	0CQZVBK002C	A.C 275V 0.22UF K (S=22.5)
C803	181-091U	2KV R 221K TP7.5
C804	0CE337KV6A0	330UF SLT 450V M VNSN BULK
C806	181-011C	PP 1600V 0.0015UF J
C807	181-091G	DE0907-486 R 471K 2KV TP7.5
C808	0CE107BJ618	100UF KME 35V M FL TP5
C809	0CK1020K515	1000P 50V K B TS
$\Delta$ C811	181-120K	2200PF 4KV M E FMTW LEAD 4.5
C813	0CK10201515	1000P 1KV K B TS
C814	0CQZVBK002A	A.C 275V 0.1UF M (S=15)
C815	181-091Q	1KV R 471K TP5
C817	0CK22201510	2200P 1KV K B S
C854	0CE107DF618	100UF STD 16V M FL TP5
C855	0CE107DD618	100UF STD 10V M FL TP5
C856	0CK47101515	470P 1KV K B TS
C857	0CE228DF618	2200UF STD 16V M FL TP5
C858	0CE477DF618	470UF STD 16V 20% FL TP 5
C859	0CK47101515	470P 1KV K B TS
C860	0CE108BF618	1000UF KME 16V M FL TP5
C861	0CE108BF618	1000UF KME 16V M FL TP5
C862	0CE475CK636	4.7UF SHL,SD 50V 20% FM5 BP(D)
C863	181-091Q	1KV R 471K TP5
C864	0CE108DK61A	1000UF STD 50V M FL TP7.5
C866	0CK4710W515	470PF 500V K B TR
C867	0CE227DK618	220UF STD 50V M FL TP5
C870	181-091C	DE0705-979 R 471K 1KV TP5
C871	0CE227DP650	220UF STD 160V M FM7.5 BULK
C872	0CE107CP618	100U SHL 160V M FL TP5
C873	0CQ1041N509	0.1U 100V K POLY
C901	0CX1500K409	15P 50V J SL TA52

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

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

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

The components identified by mark  $\Delta$  are  
critical for safety.  
Replace only with part number specified.

LOCA. NO	PART NO	DESCRIPTION
C902	0CX5R60K509	5.6P 50V K SL TA52
C903	0CX2200K409	22P 50V J SL TA52
"	0CX3900K409	39P 50V J SL TA52
C904	0CE107DF618	100UF STD 16V M FL TP5
C905	0CN2230H949	22000P 25V Z FTA52
C906	0CE106DR618	10UF STD 250V M FL TP5
C907	0CQZVBK002A	A.C 275V 0.1UF M (S=15)
C908	0CE475DR618	4.7UF STD 250V 20% FL TP 5
C909	0CK1020W515	1000P 500V K B TS
"	0CK4710W515	470PF 500V K B TS
C910	0CK1020W515	1000P 500V K B TS
"	0CK4710W515	470PF 500V K B TS
C911	0CK1020W515	1000P 500V K B TS
"	0CK4710W515	470PF 500V K B TS
C912	0CE476DF618	47UF STD 16V M FL TP5
C913	0CK22202515	2200PF 2KV K B TR
C1201	0CN2210K519	220P 50V K B TA52
C1203	0CN2210K519	220P 50V K B TA52
C1210	0CN2210K519	220P 50V K B TA52
C1211	0CN2210K519	220P 50V K B TA52
CN05	0CE107DF618	100UF STD 16V M FL TP5
CN07	0CE335DK618	3.3UF STD 50V 20% FL TP 5
CN10	0CK224DF56A	220000PF 2012 16V 10% R/TP
CN11	0CK224DF56A	220000PF 2012 16V 10% R/TP
CN12	0CK224DF56A	220000PF 2012 16V 10% R/TP
CN13	0CK224DF56A	220000PF 2012 16V 10% R/TP
CN16	0CE106DF618	10UF STD 16V M FL TP5
CN19	0CE107DF618	100UF STD 16V M FL TP5
CN20	0CE107DF618	100UF STD 16V M FL TP5
CN21	0CE107DF618	100UF STD 16V M FL TP5
CN23	0CE107DF618	100UF STD 16V M FL TP5
CN24	0CE476DF618	47UF STD 16V M FL TP5
CN29	0CE106DF618	10UF STD 16V M FL TP5
CN30	0CE106DF618	10UF STD 16V M FL TP5
CN32	0CE107DF618	100UF STD 16V M FL TP5
CN34	0CE106DF618	10UF STD 16V M FL TP5
CN35	0CK224DF56A	220000PF 2012 16V 10%
CN36	0CK224DF56A	220000PF 2012 16V 10%
CN37	0CK224DF56A	220000PF 2012 16V 10%
CN38	0CK224DF56A	220000PF 2012 16V 10%
CN39	0CK224DF56A	220000PF 2012 16V 10%
CN40	0CK224DF56A	220000PF 2012 16V 10%
CN41	0CK224DF56A	220000PF 2012 16V 10%
CN42	0CK224DF56A	220000PF 2012 16V 10%
CN43	0CK224DF56A	220000PF 2012 16V 10%
CN44	0CK224DF56A	220000PF 2012 16V 10%
CN45	0CK224DF56A	220000PF 2012 16V 10%
CN46	0CK224DF56A	220000PF 2012 16V 10%
CN47	0CE106DF618	10UF STD 16V M FL TP5
CN49	0CK224DF56A	220000PF 2012 16V 10%
CN50	0CK224DF56A	220000PF 2012 16V 10%
CN53	0CE106DF618	10UF STD 16V M FL TP5

LOCA. NO	PART NO	DESCRIPTION
CN54	0CX5600K409	56P 50V J SL TA52
CN59	0CE107DF618	100UF STD 16V M FL TP5
CP06	0CE106DF618	10UF STD 16V M FL TP5
CP10	0CE335DK618	3.3UF STD 50V 20% FL TP 5
CP11	0CQ3321N509	0.0033U 100V K POLY
CP12	0CQ3331N509	0.033U 100V K POLY
CP14	0CE106DF618	10UF STD 16V M FL TP5
CP16	0CE335DK618	3.3UF STD 50V 20% FL TP
CP17	0CN2230H949	22000P 25V Z FTA52
CP18	0CN2230H949	22000P 25V Z FTA52
CP19	0CN2230H949	22000P 25V Z FTA52
CP20	0CE106DF618	10UF STD 16V M FL TP5
CP22	0CE226DD618	22UF STD 10V 20% FL TP
CP29	0CE476DF618	47UF STD 16V M FL TP5
CP31	0CE106DF618	10UF STD 16V M FL TP5
CP32	0CE106DF618	10UF STD 16V M FL TP5
CP36	0CE476DF618	47UF STD 16V M FL TP5
CP38	0CE226DF618	22UF STD 16V M FL TP5
CP40	0CK224DF56A	220000PF 2012 16V 10%
CP41	0CK224DF56A	220000PF 2012 16V 10%
CP44	0CK224DF56A	220000PF 2012 16V 10%
CP45	0CK224DF56A	220000PF 2012 16V 10%
CP108	0CE476DF618	47UF STD 16V M FL TP5
CP109	0CE477DD618	470UF STD 10V M FL TP5
CP110	181-442Z	PE,ECQ-B1H104KF3(TR)
CP111	181-442Z	PE,ECQ-B1H104KF3(TR)
CP112	181-442Z	PE,ECQ-B1H104KF3(TR)
CP121	0CE476DF618	47UF STD 16V M FL TP5
CP123	0CE476DF618	47UF STD 16V M FL TP5
CP125	0CE476DF618	47UF STD 16V M FL TP5
CP128	0CE105DK618	1UF STD 50V M FL TP5
CP130	0CE105DK618	1UF STD 50V M FL TP5
CP131	181-442Z	PE,ECQ-B1H104KF3(TR)
CP139	0CE476DF618	47UF STD 16V M FL TP5
CP140	0CE225DK618	2.2UF STD 50V 20% FL TP 5
CP142	0CE225DK618	2.2UF STD 50V 20% FL TP 5
CP143	0CE107DF618	100UF STD 16V M FL TP5
CP145	0CE225DK618	2.2UF STD 50V 20% FL TP 5
CP146	0CE225DK618	2.2UF STD 50V 20% FL TP 5
CP148	0CE106DF618	10UF STD 16V M FL TP5
CV06	0CE106DF618	10UF STD 16V M FL TP5
CV10	0CE335DK618	3.3UF STD 50V J
CV11	0CE335DK618	3.3UF STD 50V J
CV12	0CQ3331N509	0.033U 100V K
CV14	0CE106DF618	10UF STD 16V M FL TP5
CV16	0CE335DK618	3.3UF STD 50V J
CV20	0CE106DF618	10UF STD 16V M FL TP5
CV29	0CE476DF618	47UF STD 16V M FL TP5
CV31	0CE106DF618	10UF STD 16V M FL TP5
CV36	0CE106DF618	10UF STD 16V M FL TP5
CV38	0CE106DF618	10UF STD 16V M FL TP5
CV40	181-007H	MPE ECQ-V1H474JL3

The components identified by mark  $\Delta$  are critical for safety.  
Replace only with part number specified.

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

LOCA. NO	PART NO	DESCRIPTION
CV41	0CK224DF56A	220000PF 2012 16V
CV42	0CK224DF56A	220000PF 2012 16V
CV43	0CK224DF56A	220000PF 2012 16V
CV44	0CK224DF56A	220000PF 2012 16V
CV45	0CK224DF56A	220000PF 2012 16V
CV46	0CK224DF56A	220000PF 2012 16V
CV63	0CE226DF618	22UF STD 16V M FL TP5
<b>CORE</b>		
FB01	125-022K	CORE (CIRC),FERRITE 1UH TAPING
FB201	125-022K	CORE (CIRC),FERRITE 1UH TAPING
FB202	125-123A	CORE (CIRC),FERRITE BFD3565R2F
FB222	125-123A	CORE (CIRC),FERRITE BFD3565R2F
FB241	125-123A	CORE (CIRC),FERRITE BFD3565R2F
FB401	125-022K	CORE (CIRC),FERRITE 1UH TAPING
FB801	125-022K	CORE (CIRC),FERRITE 1UH TAPING
FB802	125-022K	CORE (CIRC),FERRITE 1UH TAPING
FB803	125-022K	CORE (CIRC),FERRITE 1UH TAPING
FB852	125-022K	CORE (CIRC),FERRITE 1UH TAPING
FB853	125-022K	CORE (CIRC),FERRITE 1UH TAPING
FB902	125-022K	CORE (CIRC),FERRITE 1UH TAPING
FB903	125-022K	CORE (CIRC),FERRITE 1UH TAPING
<b>COIL &amp; TRANSFORMER</b>		
J29	0LA0102K119	INDUCTOR,10UH K
J51	0LA0182K119	INDUCTOR,18UH K
J122	0LA1000K119	INDUCTOR,100UH K
L01	0LA1000K119	INDUCTOR,100UH K
L02	0LA0102K119	INDUCTOR,10UH K
L101	150-C01G	COIL,CHOKE 1.0UH
L102	0LA1000K139	INDUCTOR,100UH K
L103	0LA0102K119	INDUCTOR,10UH K
L104	150-E11G	COIL,IFT 38.9MHZ 1PF
L121	0LA0102K119	INDUCTOR,10UH K
L122	0LA0681K119	INDUCTOR,6.8UH K
L123	150-C01C	COIL,CHOKE 0.48UH
L126	0LA0102K119	INDUCTOR,10UH K
L181	0LA0102K119	INDUCTOR,10UH K
L202	0LA0102K119	INDUCTOR,10UH K
L204	0LA0102K119	INDUCTOR,10UH K
L222	0LA0102K119	INDUCTOR,10UH K
L224	0LA0102K119	INDUCTOR,10UH K
L241	0LA0102K119	INDUCTOR,10UH K
L242	0LA0102K119	INDUCTOR,10UH K
L245	0LA0102K119	INDUCTOR,10UH K
L246	0LA0102K119	INDUCTOR,10UH K
L401	150-717K	COIL,CHOKE 1.1UH
L402	150-L01D	COIL,LINEARITY 20UH 1PHY 1TURN
L851	0LA1000K139	INDUCTOR,100UH K
L853	150-C02F	COIL,CHOKE 82UH R1217
L901	0LA0102K139	INDUCTOR,10UH K
L1201	0LA0472K119	INDUCTOR,47UH K

LOCA. NO	PART NO	DESCRIPTION
L1202	0LA0472K119	INDUCTOR,47UH K
L1203	0LA0472K119	INDUCTOR,47UH K
L1204	0LA0472K119	INDUCTOR,47UH K
LN01	0LA0102K119	INDUCTOR,10UH K
LN03	0LA1000K119	INDUCTOR,100UH K
LN05	0LA1000K119	INDUCTOR,100UH K
LN06	0LA0102K119	INDUCTOR,10UH K
LN07	0LA0102K119	INDUCTOR,10UH K
LN08	0LA0102K119	INDUCTOR,10UH K
LP01	0LA0102K119	INDUCTOR,10UH K
LP02	0LA0102K119	INDUCTOR,10UH K
LP03	0LA0471K119	INDUCTOR,4.7UH K
LP04	0LA0102K119	INDUCTOR,10UH K
LP05	0LA0471K119	INDUCTOR,4.7UH K
LP102	0LA0472K119	INDUCTOR,47UH K
LP104	0LA0102K119	INDUCTOR,10UH K
LP105	0LA0102K119	INDUCTOR,10UH K
LP106	0LA0102K119	INDUCTOR,10UH K
LP107	0LA0102K119	INDUCTOR,10UH K
LV01	0LA0102K119	INDUCTOR,10UH K
LV02	0LA0102K119	INDUCTOR,10UH K
LV03	0LA0471K119	INDUCTOR,4.7UH K
LV05	0LA0471K119	INDUCTOR,4.7UH K
$\Delta$ T401	151-C02F	TRANSFORMER,H-DRIVE,EI-19,BULK
$\Delta$ T402	6174Z-6003L	FBT,BSC28-N2312
$\Delta$ T802	6170VMCB01E	TRANSFORMER,SMPS EER5345 290UH 130V
<b>CONNECTOR</b>		
P605B	387-B08E	CONNECTOR ASSY,8P SHIELD(300)
P901	387-B08J	CONNECTOR ASSY,8P SHIELD(500)
P902	387-A07G	CONNECTOR ASSY,7P (L=400)
P1203	387-A09H	CONNECTOR ASSY,9P (L=450)
<b>RESISTOR</b>		
F851	180-D02Y	0.045 OHM 1/2 W 10% TA52
F854	180-D02Y	0.045 OHM 1/2 W 10% TA52
F855	180-D02Y	0.045 OHM 1/2 W 10% TA52
FR401	0RF0680K607	0.68 OHM 2 W 5.00% TA62
$\Delta$ FR402	0RF0101K607	1 OHM 2 W 5.00% TA62
$\Delta$ FR403	0RF0101K607	1 OHM 2 W 5.00% TA62
FR406	0RF0101K607	1 OHM 2 W 5.00% TA62
$\Delta$ FR413	0RF0141K607	1.4 OHM 2 W 5.00% TA62
J70	0RS0681H609	6.8 OHM 1/2 W 5.00% TA52
R01	0RD3301F609	3.3K OHM 1/6 W 5.00% TA52
R02	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R03	0RD3301F609	3.3K OHM 1/6 W 5.00% TA52
R04	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R05	0RD4701F609	4.7K OHM 1/6 W 5.00% TA52
R06	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R07	0RD4701F609	4.7K OHM 1/6 W 5.00% TA52
R08	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R09	0RD4701F609	4.7K OHM 1/6 W 5.00% TA52

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

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

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

The components identified by mark  $\Delta$  are  
critical for safety.  
Replace only with part number specified.

LOCA. NO	PART NO	DESCRIPTION
R10	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R11	0RD4701F609	4.7K OHM 1/6 W 5.00% TA52
R12	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R17	0RD0752F609	75 OHM 1/6 W 5.00% TA52
R18	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R19	0RD2001F609	2K OHM 1/6 W 5.00% TA52
R20	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R22	0RD3902F609	39K OHM 1/6 W 5.00% TA52
R23	0RD1603F609	160K OHM 1/6 W 5.00% TA52
R25	0RD1001F609	1K OHM 1/6 W 5.00% TA52
R26	0RD4702F609	47K OHM 1/6 W 5.00% TA52
R27	0RD1002F609	10K OHM 1/6 W 5.00% TA52
R28	0RD4701F609	4.7K OHM 1/6 W 5.00% TA52
R29	0RD0101F609	1 OHM 1/6W 5
R30	0RD4701F609	4.7K OHM 1/6 W 5.00% TA52
R31	0RD4701F609	4.7K OHM 1/6 W 5.00% TA52
R32	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R33	0RD1002F609	10K OHM 1/6 W 5.00% TA52
R34	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R35	0RD1001F609	1K OHM 1/6 W 5.00% TA52
R36	0RD1001F609	1K OHM 1/6 W 5.00% TA52
R37	0RD1001F609	1K OHM 1/6 W 5.00% TA52
R38	0RD4302F609	43K OHM 1/6 W 5.00% TA52
R39	0RD5101F609	5.1K OHM 1/6 W 5.00% TA52
R40	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R41	0RD2701F609	2.7K OHM 1/6 W 5.00% TA52
R42	0RD4701F609	4.7K OHM 1/6 W 5.00% TA52
R43	0RD3300F609	330 OHM 1/6 W 5.00% TA52
R44	0RD1301F609	1.3K OHM 1/6 W 5.00% TA52
R46	0RD8201F609	8.2K OHM 1/6 W 5.00% TA52
R48	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R49	0RD5601F609	5.6K OHM 1/6 W 5.00% TA52
R50	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R51	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R52	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R53	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R55	0RD5600F609	560 OHM 1/6 W 5.00% TA52
R56	0RD1001F609	1K OHM 1/6 W 5.00% TA52
R57	0RD0332F609	33 OHM 1/6 W 5.00% TA52
R58	0RD0332F609	33 OHM 1/6 W 5.00% TA52
R59	0RD5601F609	5.6K OHM 1/6 W 5.00% TA52
R60	0RD5601F609	5.6K OHM 1/6 W 5.00% TA52
R61	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R62	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R63	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R64	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R65	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R66	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R67	0RD4701F609	4.7K OHM 1/6 W 5.00% TA52
R69	0RD4701F609	4.7K OHM 1/6 W 5.00% TA52
R70	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R71	0RD1000F609	100 OHM 1/6 W 5.00% TA52

LOCA. NO	PART NO	DESCRIPTION
R101	0RD0332F609	33 OHM 1/6 W 5.00% TA52
R102	0RD0512F609	51 OHM 1/6 W 5.00% TA52
R103	0RD0512F609	51 OHM 1/6 W 5.00% TA52
R104	0RS5600H609	560 OHM 1/2 W 5.00% TA52
R105	0RD2202F609	22K OHM 1/6 W 5.00% TA52
R106	0RD1002F609	10K OHM 1/6 W 5.00% TA52
R108	0RS0102J607	10 OHM 1 W 5.00% TA62
R121	0RD2201F609	2.2K OHM 1/6 W 5.00% TA52
R122	0RD4702F609	47K OHM 1/6 W 5.00% TA52
R123	0RD5601F609	5.6K OHM 1/6 W 5.00% TA52
R124	0RD5601F609	5.6K OHM 1/6 W 5.00% TA52
R125	0RD1001F609	1K OHM 1/6 W 5.00% TA52
R126	0RD5601F609	5.6K OHM 1/6 W 5.00% TA52
R127	0RD5601F609	5.6K OHM 1/6 W 5.00% TA52
R128	0RD4702F609	47K OHM 1/6 W 5.00% TA52
R129	0RD3302F609	33K OHM 1/6 W 5.00% TA52
R130	0RD1502F609	15K OHM 1/6 W 5.00% TA52
R131	0RD1802F609	18K OHM 1/6 W 5.00% TA52
R132	0RD2001F609	2K OHM 1/6 W 5.00% TA52
R133	0RD1500F609	150 OHM 1/6 W 5.00% TA52
R135	0RD1001F609	1K OHM 1/6 W 5.00% TA52
R136	0RD2000F609	200 OHM 1/6 W 5.00% TA52
R137	0RD0102F609	10 OHM 1/6 W 5.00% TA52
R138	0RD3601F609	3.6K OHM 1/6 W 5.00% TA52
R139	0RD6800F609	680 OHM 1/6 W 5.00% TA52
R140	0RD0102F609	10 OHM 1/6 W 5.00% TA52
R141	0RD4700F609	470 OHM 1/6 W 5.00% TA52
R142	0RD1500F609	150 OHM 1/6 W 5.00% TA52
R143	0RD1802F609	18K OHM 1/6 W 5.00% TA52
R144	0RD1001F609	1K OHM 1/6 W 5.00% TA52
R145	0RD1802F609	18K OHM 1/6 W 5.00% TA52
R146	0RD1001F609	1K OHM 1/6 W 5.00% TA52
R148	0RD3901F609	3.9K OHM 1/6 W 5.00% TA52
R153	0RD0511F609	5.1 OHM 1/6 W 5.00% TA52
R156	0RD1201F609	1.2K OHM 1/6 W 5.00% TA52
R157	0RD0222F609	22 OHM 1/6 W 5.00% TA52
R181	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R201	0RD0622F609	62 OHM 1/6 W 5.00% TA52
R202	0RD4700F609	470 OHM 1/6 W 5.00% TA52
R203	0RD1800F609	180 OHM 1/6 W 5.00% TA52
R204	0RD0752F609	75 OHM 1/6 W 5.00% TA52
R205	0RD0822F609	82 OHM 1/6 W 5.00% TA52
R207	0RD0822F609	82 OHM 1/6 W 5.00% TA52
R209	0RD0822F609	82 OHM 1/6 W 5.00% TA52
R210	0RD5101F609	5.1K OHM 1/6 W 5.00% TA52
R211	0RD5101F609	5.1K OHM 1/6 W 5.00% TA52
R223	0RD4700F609	470 OHM 1/6 W 5.00% TA52
R224	0RD0682F609	68 OHM 1/6 W 5.00% TA52
R226	0RD5101F609	5.1K OHM 1/6 W 5.00% TA52
R227	0RD5101F609	5.1K OHM 1/6 W 5.00% TA52
R301	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R302	0RD0101H609	1 OHM 1/2 W 5.00% TA52

The components identified by mark  $\Delta$  are critical for safety.  
Replace only with part number specified.

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

LOCA. NO	PART NO	DESCRIPTION
R303	0RD4700F609	470 OHM 1/6 W 5.00% TA52
R304	0RN2701F409	2.7K OHM 1/6 W 1.00% TA52
R305	0RD2401F609	2.4K OHM 1/6 W 5.00% TA52
R306	0RD1002F609	10K OHM 1/6 W 5.00% TA52
R307	0RD2202F609	22K OHM 1/6 W 5.00% TA52
R308	0RD2000F609	200 OHM 1/6 W 5.00% TA52
R309	0RD4701F609	4.7K OHM 1/6 W 5.00% TA52
R310	0RN8201F409	8.2K OHM 1/6 W 1.00% TA52
R311	0RN0221H609	2.2 OHM 1/2 W 5.00% TA52
R312	0RN0221H609	2.2 OHM 1/2 W 5.00% TA52
R313	0RS6800H609	680 OHM 1/2 W 5.00% TA52
R314	0RS6800H609	680 OHM 1/2 W 5.00% TA52
R315	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R316	0RD2702F609	27K OHM 1/6 W 5.00% TA52
R317	0RD1801F609	1.8K OHM 1/6 W 5.00% TA52
R319	0RN6202F409	62K OHM 1/6 W 1.00% TA52
R320	0RN1001F409	1K OHM 1/6 W 1.00% TA52
R321	0RS0561J607	5.6 OHM 1 W 5.00% TA62
R322	0RD1501F609	1.5K OHM 1/6 W 5.00% TA52
R323	0RD3301F609	3.3K 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	0RD0392F609	39 OHM 1/6 W 5.00% TA52
R401	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R402	0RD1001F609	1K OHM 1/6 W 5.00% TA52
R403	0RD1801H609	1.8K OHM 1/2 W 5.00% TA52
R404	0RD0332H609	33 OHM 1/2 W 5.00% TA52
R405	0RS2200K607	220 OHM 2 W 5.00% TA62
R408	0RS0221K607	2.2 OHM 2 W 5.00% TA62
R409	0RS1801H609	1.8K OHM 1/2 W 5.00% TA52
R410	0RMZVBK002D	15K OHM 5W +/-5% RSR V-TYPE
R411	0RS4702H609	47K OHM 1/2 W 5.00% TA52
R413	0RS2002H609	20K 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	0RD6203F609	620K OHM 1/6 W 5.00% TA52
R419	0RD7501H609	7.5K OHM 1/2 W 5.00% TA52
R421	0RS1803J607	180K 1W 5% TA62
R422	0RD3601F609	3.6K OHM 1/6 W 5.00% TA52
R539	0RD5100F609	510 OHM 1/6 W 5.00% TA52
R540	0RD5100F609	510 OHM 1/6 W 5.00% TA52
R541	0RD5100F609	510 OHM 1/6 W 5.00% TA52
R601	0RD0472F609	47 OHM 1/6 W 5.00% TA52
R602	0RD2701F609	2.7K OHM 1/6 W 5.00% TA52
R603	0RD4701F609	4.7K OHM 1/6 W 5.00% TA52
R604	0RD2701F609	2.7K OHM 1/6 W 5.00% TA52
R605	0RD4701F609	4.7K OHM 1/6 W 5.00% TA52
R606	0RD0472F609	47 OHM 1/6 W 5.00% TA52
R607	0RF0331H609	3.3 OHM 1/2 W 5.00% TA52

LOCA. NO	PART NO	DESCRIPTION
R608	0RD1001F609	1K OHM 1/6 W 5.00% TA52
R609	0RF0331H609	3.3 OHM 1/2 W 5.00% TA52
R610	0RD6802F609	68K OHM 1/6 W 5.00% TA52
R611	0RD1500F609	150 OHM 1/6 W 5.00% TA52
R612	0RD1001F609	1K 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	0RD0561H609	5.6 OHM 1/2 W 5.00% TA52
$\Delta$ R804	0RD4701F609	4.7K OHM 1/6 W 5.00% TA52
R805	0RD1001F609	1K OHM 1/6 W 5.00% TA52
R806	180-A01B	RW ROUND G 2W 0.11 K TA31(63)
$\Delta$ R807	0RK8204H609	8.2M OHM 1/2 W 5% TA52 UL PILK
"	0RKZVTA001C	8.2M OHM 1/2 W 5%
R808	0RD3001F609	3K OHM 1/6 W 5.00% TA52
R809	0RS4702K607	47K OHM 2 W 5.00% TA62
R821	0RD3601F609	3.6K OHM 1/6 W 5.00% TA52
R822	0RD3301F609	3.3K OHM 1/6 W 5.00% TA52
R852	0RS0332K607	33 OHM 2 W 5.00% TA62
R858	0RD4701F609	4.7K OHM 1/6 W 5.00% TA52
R860	0RD4701F609	4.7K 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
R864	0RS0121J607	1.2 OHM 1W 5.00% TA52
R865	0RS0680J607	0.68 OHM 1W 5.00% TA52
R866	0RS1002H609	10K OHM 1/2 W 5.00% TA52
R867	0RD3002H609	30K OHM 1/2 W 5.00% TA52
R868	0RD1202F609	12K OHM 1/6 W 5.00% TA52
R869	0RD4701F609	4.7K OHM 1/6 W 5.00% TA52
R870	0RD4702F609	47K OHM 1/6 W 5.00% TA52
R901	0RD9100F609	910 OHM 1/6 W 5.00% TA52
R902	0RD2401F609	2.4K OHM 1/6 W 5.00% TA52
R903	0RD9100F609	910 OHM 1/6 W 5.00% TA52
R904	0RD2401F609	2.4K OHM 1/6 W 5.00% TA52
R905	0RD9100F609	910 OHM 1/6 W 5.00% TA52
R906	0RD2401F609	2.4K OHM 1/6 W 5.00% TA52
R907	0RD1803H609	180K OHM 1/2 W 5.00% TA52
R908	0RKZVTA001A	2.2M OHM 1/2 W 5% TA52 UL PILK
R912	0RD0562F609	56 OHM 1/6 W 5.00% TA52
"	0RD2200F609	220 OHM 1/6 W 5.00% TA52
R913	0RD0562F609	56 OHM 1/6 W 5.00% TA52
"	0RD1000F609	100 OHM 1/6W 5
R914	0RD0562F609	56 OHM 1/6 W 5.00% TA52
"	0RD1000F609	100 OHM 1/6W 5
R915	0RD4701F609	4.7K OHM 1/6 W 5.00% TA52
R916	0RD4701F609	4.7K OHM 1/6 W 5.00% TA52
R917	0RD4701F609	4.7K OHM 1/6 W 5.00% TA52
R918	0RCZVTA002B	1.0K OHM 1/2W 10% TA52 PILKOR(
R919	0RCZVTA002B	1.0K OHM 1/2W 10% TA52 PILKOR(
R920	0RCZVTA002B	1.0K OHM 1/2W 10% TA52 PILKOR(
R921	0RD3001F609	3K OHM 1/6 W 5.00% TA52
R922	0RD3301F609	3.3K OHM 1/6 W 5.00% TA52
R924	0RD8200F609	820 OHM 1/6 W 5.00% TA52

The components identified by mark  $\Delta$  are critical for safety.  
Replace only with part number specified.

LOCA. NO	PART NO	DESCRIPTION
R925	0RD5100F609	510 OHM 1/6 W 5.00% TA52
R930	0RS6802K607	68K OHM 2 W 5.00% TA62
R931	0RS6802K607	68K OHM 2 W 5.00% TA62
R932	0RS6802K607	68K OHM 2 W 5.00% TA62
R1204	0RD2403F609	240K OHM 1/6 W 5.00% TA52
R1205	0RD2403F609	240K OHM 1/6 W 5.00% TA52
RN01	0RD1000F609	100 OHM 1/6 W 5.00% TA52
RN02	0RD1000F609	100 OHM 1/6 W 5.00% TA52
RN03	0RD1002F609	10K OHM 1/6 W 5.00% TA52
RN11	0RD0271H609	2.7 OHM 1/2 W 5.00% TA52
RN14	0RD0271H609	2.7 OHM 1/2 W 5.00% TA52
RN17	0RD0912F609	91 OHM 1/6 W 5.00% TA52
RN18	0RD1001F609	1K OHM 1/6 W 5.00% TA52
RN19	0RD1001F609	1K OHM 1/6 W 5.00% TA52
RN20	0RD1001F609	1K OHM 1/6 W 5.00% TA52
RN21	0RD1001F609	1K OHM 1/6 W 5.00% TA52
RN22	0RD1001F609	1K OHM 1/6 W 5.00% TA52
RN23	0RD1001F609	1K OHM 1/6 W 5.00% TA52
RP01	0RD1002F609	10K OHM 1/6 W 5.00% TA52
RP101	0RD2200F609	220 OHM 1/6 W 5.00% TA52
RP102	0RD2200F609	220 OHM 1/6 W 5.00% TA52
RP103	0RD1000F609	100 OHM 1/6 W 5.00% TA52
RP104	0RD1000F609	100 OHM 1/6 W 5.00% TA52
RP108	0RD3900F609	390 OHM 1/6 W 5.00% TA52
RP129	0RD2200F609	220 OHM 1/6 W 5.00% TA52
RV02	0RD1000F609	100 OHM 1/6 W 5.00% TA52
RV03	0RD1000F609	100 OHM 1/6 W 5.00% TA52
RV06	0RD1002F609	10K OHM 1/6 W 5.00% TA52
RV07	0RD1002F609	10K OHM 1/6 W 5.00% TA52
RV15	0RD2201F609	2.2K OHM 1/6 W 5.00% TA52
RV16	0RD1001F609	1K OHM 1/6 W 5.00% TA52
RV34	0RD3300F609	330 OHM 1/6 W 5.00% TA52
VR121	180-F03H	EVN-DJAA03 B103 SEMI-FIX(H) TA
<b>SPARK GAP</b>		
SG901	165-004A	SPARK GAP,AG20PT 152F-L3N/S-23
SG902	165-004A	SPARK GAP,AG20PT 152F-L3N/S-23
SG903	165-004A	SPARK GAP,AG20PT 152F-L3N/S-23
SG904	165-004A	SPARK GAP,AG20PT 152F-L3N/S-23
<b>SWITCH</b>		
SW01	140-315A	SWITCH,TACT SKHV17910B NON 12V
SW02	140-315A	SWITCH,TACT SKHV17910B NON 12V
SW03	140-315A	SWITCH,TACT SKHV17910B NON 12V
SW04	140-315A	SWITCH,TACT SKHV17910B NON 12V
$\Delta$ SW801	6600VM2002A	SWITCH,PUSH SDKEA3 IEC 250V 8A HORIZO
<b>FILTER &amp; CRYSTAL</b>		
T104	6200VST001H	FILTER(CIRC),XT565M
T801	150-F06T	FILTER(CIRC),LINE SQE3535 20MH
X01	156-A01L	CRYSTAL,HC49U SUNNY RADIAL 6.000MHZ
XN01	156-A02R	CRYSTAL,HC49U KJE RADIAL 18.432MHZ

LOCA. NO	PART NO	DESCRIPTION
XP01	6202VDB007B	CRYSTAL,HC49U SUNNY RADIAL 20.250MHZ
XV01	6202VDB007B	CRYSTAL,HC49U SUNNY RADIAL 20.250MHZ
XP101	6202VDB007B	CRYSTAL,HC49U SUNNY RADIAL 20.250MHZ
Z101	6200VQS003A	FILTER,SAW OFWK6263K 38.9MHZ
Z102	6200VQS001P	FILTER,SAW OFWK9253M 38.9MHZ
<b>ACCESSORIES</b>		
A1	3828VA0240F	MANUAL,OWNERS, LG AR/EN 026C/F/H/J/O
A2	6710V00083A	REMOTE CONTROLLER(W PIP,TXT)
A2	6710V00061Z	REMOTE CONTROLLER(W/O PIP)
A4	450-018C	ADAPTER,ANT.(300 TO 75) PAL
<b>MISCELLANEOUS</b>		
$\Delta$	0FT4001B53C	FUSE,TIME LAG 4000MA 250V 5.2X20
$\Delta$ F853	131-096D	FUSE,FAST BLOE 3000MA 125V 2.5X7.6
JK201	6612VMH001A	JACK,SCART UPJ-R1-018 RGB 21 PI
"	6612VJH011C	JACK,RCA PPJ109C PARK ELEC A/V IN/OUT
JK202	6612VJH011C	JACK,RCA PPJ109C PARK ELEC A/V IN/OUT
JK203	6613V00006A	JACK ASSY,3P+EAR(PJ6062A)
PA02	6726VV0006H	PRE-AMP,TOP2238NN1 VISHAY 38KHZ
$\Delta$ RL801	6920VB1001E	RELAY,SDT-S-105LMR OEG 5V 0.05A 250V
$\Delta$ SK901	6620VBC001A	SOCKET,CPT 29.1 PHI SINGLE(PCS629-03A)
$\Delta$ TH801	163-058D	THERMISTOR,03-07MX 7 OHM
TU101	6700VPF005D	TUNER,TAEC-G023D
VD801	164-003K	VARISTOR,SVC621D-14A 620V 0% UL/C



The diagram illustrates the internal components and wiring of a VCD player. Key sections include:

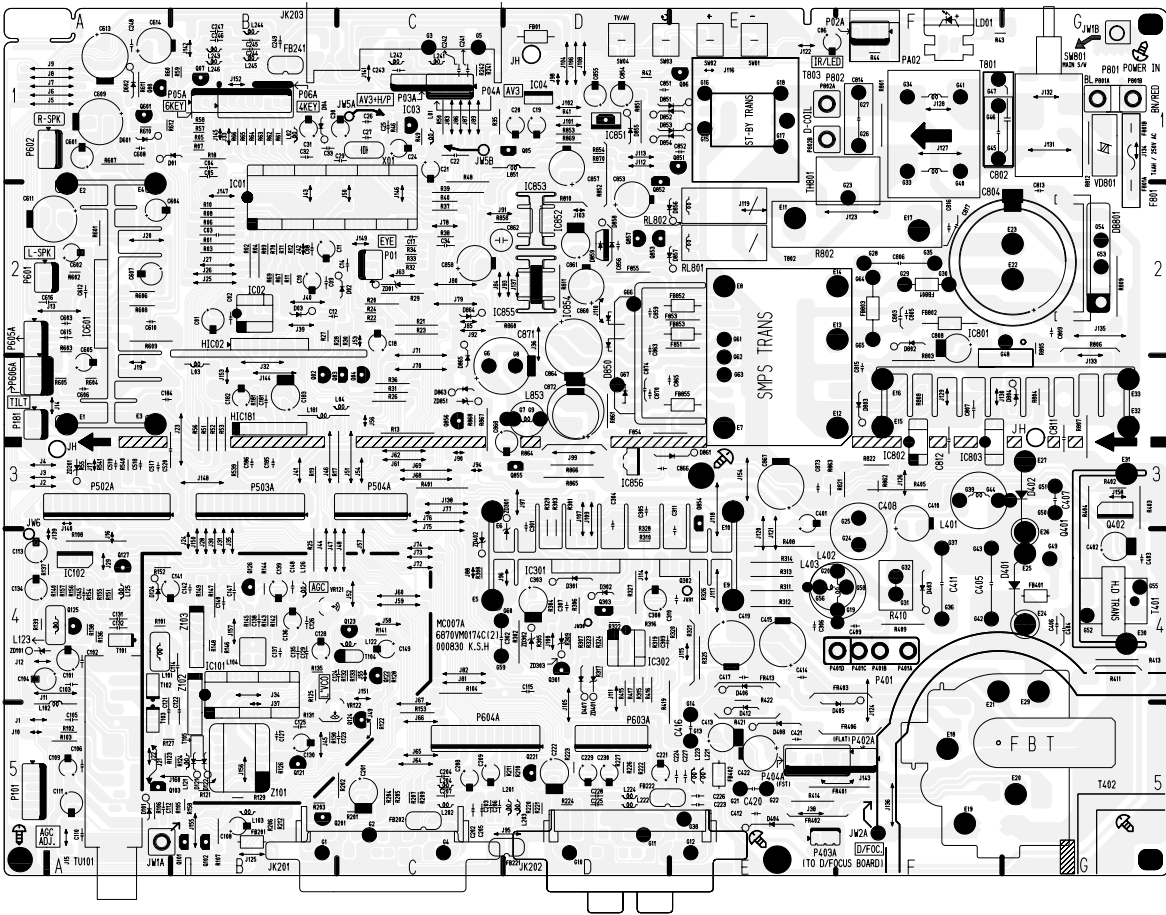
- SOUND AMP:** Features IC604 (LA4282) and IC601 (LA4282) for audio processing.
- TILT COIL:** Includes HIC181 and P602/P601 for tilt control.
- VCD & W/O PiP BOARD:** Contains IC01 (SDA 5555/5521), IC02 (EEPROM 24C16), and IC101 (TDA4470-M).
- SOUND PROC. BOARD:** Includes IC301 (LA7845) and IC302 (KT4999) for sound processing.
- SECONDARY & PRIMARY:** Power supply sections with transformers T8031, T801, and T402, and various capacitors and diodes.
- Connectors:** SCART1 FULL SCART or PHONO(option), SCART2 HALF SCART or PHONO(option), and various control signal connectors.

**P/No : 3854VA0071A-S1**  
**2000.06.15**

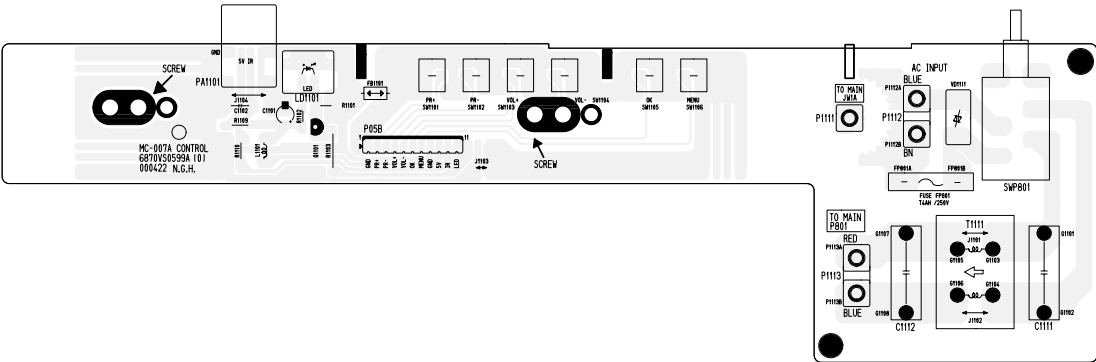


## PRINTED CIRCUIT BOARD

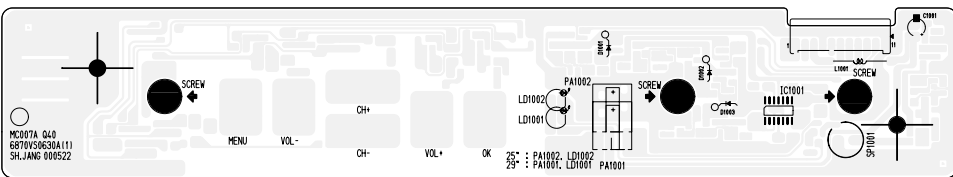
### MAIN



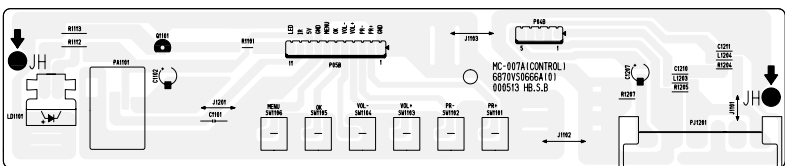
### CONTROL(Q26)



### SOFT-TOUCH(29Q40)



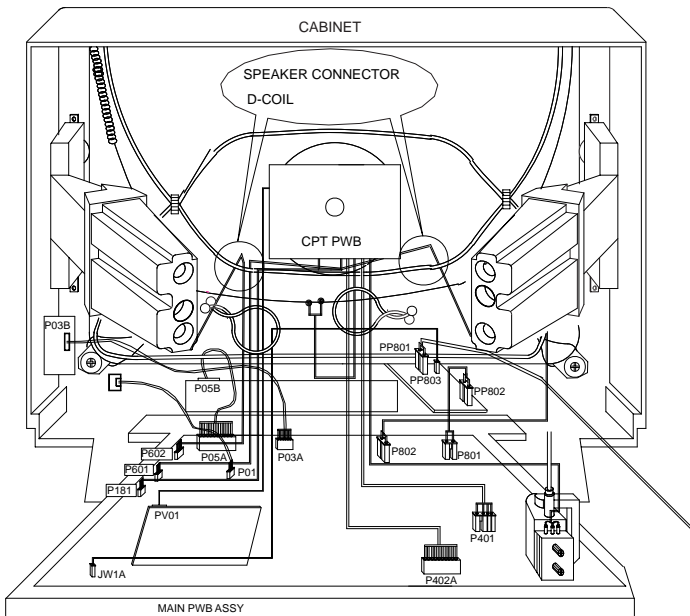
### CONTROL(25H36)



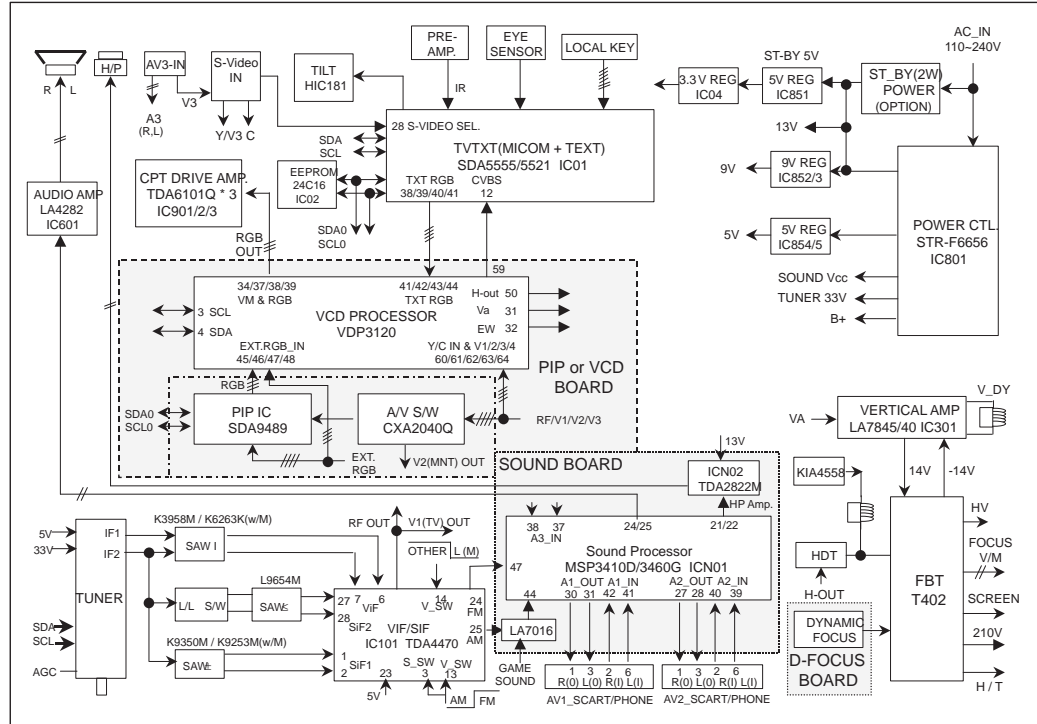
## COMPONENT LOCATION GUIDE

C01.....B2	C184.....A3	C604.....A2	D601.....A1	JW1A.....A5	Q07.....B1	R51.....B3	R207.....C5	R609.....B2	Z101.....B5
C02.....B2	C185.....B3	C605.....A3	D602.....A1	JW2A.....F5	Q08.....A1	R52.....B3	R209.....C5	R610.....A1	Z103.....B4
C03.....B2	C186.....B3	C606.....A3	D602.....F3	L01.....C1	Q101.....B5	R53.....B3	R210.....D5	R611.....A1	Z103.....B4
C04.....B1	C201.....C5	C607.....A2	D803.....F3	L02.....B1	Q102.....B5	R55.....A3	R211.....D5	R612.....A1	ZD01.....C2
C05.....B2	C202.....C5	C608.....A1	D804.....G3	L03.....B3	Q103.....A5	R56.....B3	R212.....B5	R801.....F1	ZD101.....A4
C06.....E1	C203.....C5	C609.....A1	D850.....D3	L04.....B3	Q121.....B5	R57.....B1	R220.....D5	R802.....F2	ZD201.....A3
C08.....B2	C204.....C5	C610.....A2	D851.....E1	L101.....A4	Q122.....C4	R58.....B1	R221.....D5	R803.....F3	ZD301.....D3
C09.....B2	C205.....C5	C611.....A2	D852.....D1	L102.....A5	Q123.....C4	R59.....B1	R222.....D5	R804.....G3	ZD302.....D4
C10.....B2	C206.....C5	C612.....A2	D853.....E1	L103.....B5	Q124.....C5	R60.....B1	R223.....D5	R805.....G2	ZD303.....D4
C11.....B2	C207.....C5	C613.....A1	D854.....D1	L104.....B4	Q125.....A4	R61.....B1	R224.....D5	R806.....G3	ZD401.....D4
C12.....B2	C208.....C5	C614.....A1	D855.....D1	L121.....B5	Q126.....B4	R62.....B1	R226.....D5	R807.....G3	ZD402.....C4
C14.....C2	C209.....C5	C615.....A2	D856.....E2	L122.....B4	Q127.....A4	R63.....B1	R227.....D5	R808.....F3	ZD851.....C3
C17.....C2	C221.....D6	C616.....A2	D857.....E2	L123.....A4	Q201.....B5	R64.....B1	R241.....C1	R809.....G2	
C18.....C2	C222.....D6	C802.....F1	D858.....D2	L125.....A4	Q221.....D5	R65.....B1	R242.....C1	R810.....D2	
C19.....D1	C223.....E5	C803.....F2	D859.....D2	L126.....B4	Q301.....D4	R67.....B1	R301.....D4	R811.....D2	
C20.....D1	C224.....E5	C804.....G2	D861.....E3	L181.....B3	Q303.....D4	R68.....B2	R302.....D4	R812.....G2	
C21.....C2	C225.....D5	C805.....F2	D863.....C3	L201.....D5	Q402.....G3	R69.....B2	R303.....D4	R821.....F3	
C22.....C1	C226.....E5	C806.....F2	D864.....C2	L202.....C5	Q601.....A1	R70.....B2	R304.....D4	R822.....F3	
C24.....C1	C227.....E5	C807.....F3	D865.....C2	L203.....D5	Q851.....E1	R71.....B2	R305.....D4	R851.....D1	
C25.....C1	C228.....D5	C808.....F3	D8901.....G2	L204.....C5	Q852.....D2	R101.....B4	R306.....D4	R852.....D1	
C26.....C1	C229.....D5	C809.....G2	F801.....D3	L221.....E5	Q853.....D2	R102.....A5	R307.....D4	R853.....D1	
C27.....C1	C230.....D5	C811.....G3	F853.....D2	L222.....D5	Q854.....E4	R103.....A5	R308.....D4	R854.....D1	
C29.....B1	C241.....C1	C812.....F3	F854.....E3	L223.....E5	Q855.....D3	R104.....C4	R309.....D4	R858.....C2	
C30.....C1	C242.....C1	C813.....G2	F855.....D2	L224.....D5	Q856.....C3	R105.....B5	R310.....D4	R860.....C2	
C31.....B1	C243.....C1	C814.....F1	F856.....D2	L241.....C1	Q857.....D2	R106.....A5	R311.....D4	R861.....C3	
C32.....B1	C244.....B1	C815.....F3	F801B.....G1	L242.....C1	R01.....B2	R107.....B5	R312.....E4	R862.....F3	
C33.....C1	C245.....B1	C816.....F2	F801.....D1	L243.....B1	R02.....B2	R108.....A4	R313.....E4	R863.....E3	
C34.....C2	C246.....B1	C817.....F2	F8201.....B5	L244.....B1	R03.....B2	R121.....B5	R314.....E4	R864.....D3	
C101.....A4	C247.....B1	C851.....D1	F8202.....C5	L245.....B1	R04.....B2	R122.....C5	R315.....D5	R865.....D3	
C102.....A4	C248.....A1	C852.....E1	F8221.....C5	L246.....B1	R05.....B1	R123.....A5	R316.....D5	R866.....D3	
C103.....A4	C249.....B1	C853.....D2	F8222.....D5	L401.....F3	R06.....B2	R124.....B5	R317.....D5	R867.....C3	
C104.....A4	C301.....D4	C854.....D1	F8241.....B1	L402.....F4	R07.....B1	R125.....B5	R319.....D4	R868.....C3	
C105.....A5	C302.....C4	C855.....D1	F8401.....G4	L403.....E4	R08.....B2	R126.....B5	R320.....E4	R869.....D1	
C106.....A5	C303.....D4	C856.....D2	F8402.....E5	L851.....D1	R09.....B2	R127.....A5	R321.....E4	R870.....D1	
C108.....B5	C304.....D4	C857.....D1	F8801.....F2	L853.....D3	R10.....B2	R128.....C4	R322.....D4	RL801.....E2	
C109.....A5	C305.....D3	C858.....C2	F8802.....F2	LD01.....F1	R11.....B2	R129.....B5	R323.....D4	RL802.....E2	
C110.....A5	C306.....E4	C859.....D2	F8803.....F2	P01.....C2	R12.....B2	R130.....B5	R324.....D4	SW01.....E1	
C111.....A5	C307.....D4	C860.....D2	F8852.....D2	P101.....A5	R13.....C3	R131.....C5	R325.....E4	SW02.....E1	
C112.....A5	C308.....D4	C861.....D2	F8853.....D2	P181.....A3	R17.....C3	R132.....C4	R326.....E4	SW03.....D1	
C113.....A4	C309.....D4	C862.....C2	F8855.....D3	P601.....A2	R18.....B1	R133.....C4	R327.....D4	SW04.....D1	
C114.....B4	C310.....E4	C863.....D3	FR401.....E5	P602.....A1	R19.....B3	R135.....B4	R328.....D4	SW801.....G1	
C115.....D4	C311.....E4	C864.....D3	FR402.....E5	P02A.....F1	R20.....C2	R136.....A4	R329.....D4	T101.....A4	
C121.....A4	C401.....E4	C865.....E3	FR403.....E5	P03A.....C1	R21.....C2	R137.....A4	R401.....C3	T102.....A4	
C122.....B4	C402.....G4	C866.....E3	FR406.....E5	P04A.....C1	R22.....C2	R138.....A4	R402.....G3	T103.....A5	
C123.....C5	C403.....G4	C867.....E3	FR413.....E4	P05A.....B1	R23.....C2	R139.....A4	R403.....G4	T104.....C4	
C124.....C4	C404.....G4	C868.....D3	HIC02.....B2	P06A.....B1	R24.....C2	R140.....A4	R404.....G3	T105.....B5	
C125.....B5	C405.....F4	C870.....D3	HIC181.....B3	P401A.....F4	R25.....B4	R141.....C4	R405.....F3	T401.....G4	
C126.....B4	C406.....G4	C871.....D3	IC01.....B2	P401B.....F4	R26.....C3	R142.....B4	R406.....E4	T402.....F5	
C127.....B5	C407.....G3	C872.....D3	IC02.....B2	P401C.....F4	R27.....B3	R143.....B4	R409.....F4	T801.....F1	
C128.....B4	C408.....F3	IC03.....E3	IC03.....C1	P401D.....F4	R28.....C3	R144.....B4	R410.....F4	T802.....E2	
C129.....B4	C409.....F4	IC04.....D1	IC04.....D1	P402A.....F5	R29.....C2	R145.....B4	R411.....G4	T803.....E1	
C130.....B5	C410.....F4	D01.....A1	IC101.....B5	P403A.....E5	R30.....C3	R146.....B4	R413.....G4	TH801.....F2	
C131.....A4	C411.....C2	D02.....C2	IC102.....A4	P403B.....F5	R31.....C3	R147.....B4	R414.....E5	TP1.....A5	
C132.....A4	C412.....E5	D03.....B2	IC301.....D4	P502A.....A3	R32.....C2	R148.....B4	R415.....D5	TP2.....A5	
C134.....A4	C413.....E5	D04.....B1	IC302.....D4	P503A.....B3	R33.....C2	R149.....B4	R416.....D4	TP3.....B4	
C135.....B4	C414.....E4	D101.....A5	IC601.....A2	P504A.....C3	R34.....C2	R151.....A4	R417.....D4	TP4.....B4	
C136.....B4	C415.....E4	D121.....B5	IC801.....G2	P603A.....D5	R35.....C1	R152.....A4	R419.....E4	TP5.....B5	
C137.....B4	C416.....E5	D122.....B5	IC802.....F3	P604A.....D5	R36.....C3	R153.....C5	R421.....E5	TP6.....B5	
C138.....B4	C417.....E4	D124.....A4	IC803.....F3	P605A.....D5	R37.....C3	R154.....A4	R422.....E5	TP7.....B5	
C139.....B4	C419.....E4	D301.....D4	IC851.....D1	P606A.....A3	R38.....C2	R155.....A4	R539.....B3	TP8.....B5	
C140.....B4	C420.....E5	D302.....D4	IC852.....D2	P801A.....G1	R39.....C2	R156.....A4	R540.....A3	TP9.....B4	
C141.....B4	C421.....E5	D401.....G4	IC853.....D2	P801B.....G1	R40.....C2	R157.....A4	R541.....A3	TP10.....B5	
C142.....B4	C422.....E5	D402.....G4	IC854.....D2	P802A.....E1	R41.....D1	R158.....B5	R601.....A2	TP11.....B5	
C145.....A4	C517.....A3	D403.....F4	IC855.....D2	P802B.....E1	R42.....D1	R181.....B3	R602.....A2	TP12.....B4	
C147.....B4	C518.....A3	D404.....E5	IC856.....D3	PA02.....F1	R43.....G1	R201.....C5	R603.....A3	TP13.....B4	
C148.....B4	C519.....A3	D405.....F5	JK201.....C5	Q02.....B3	R44.....F1	R202.....C5	R604.....A3	TP101.....B4	
C149.....C4	C520.....B3	D406.....E4	JK202.....D5	Q03.....C3	R46.....C1	R203.....B5	R605.....A3	TP102.....B4	
C181.....B3	C601.....A1	D407.....D4	JK203.....C1	Q04.....C3	R48.....C2	R204.....C5	R606.....A3	VP121.....B4	
C182.....B3	C602.....A2	D408.....E5	JP1.....A3	Q05.....D1	R49.....C1	R205.....C5	R607.....A1	VR122.....B5	
C183.....B3	C603.....A2	D412.....E5	JP2.....A2	Q06.....E1	R50.....C1	R206.....B5	R608.....A2	X01.....C1	

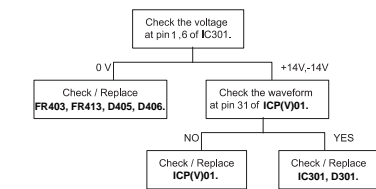
## WIRING DIAGRAM



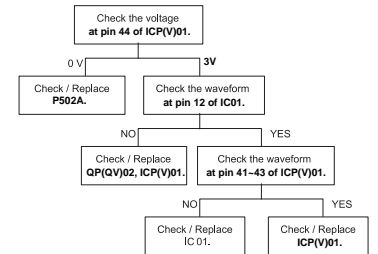
### BLOCK DIAGRAM



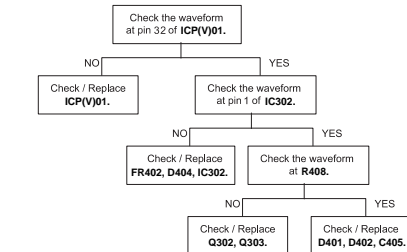
NO VERTICAL DEFLECTION



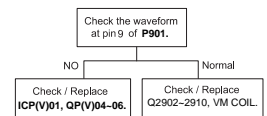
NO TELETEXT



## BARREL DISTORTION

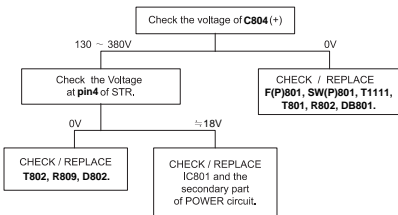


## VM DON'T WORKING

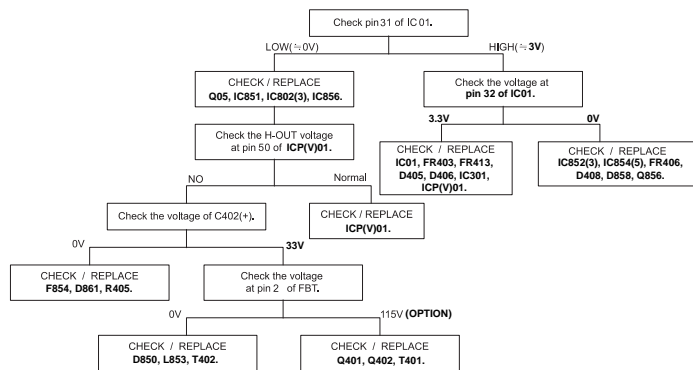


## TROUBLESHOOTING GUIDE

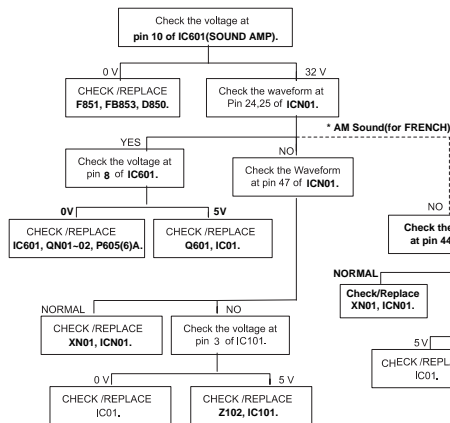
NO POWER (NOT WORKING SMPS)



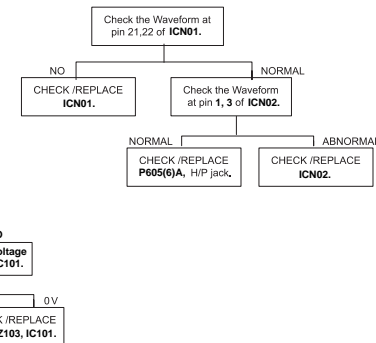
## NO POWER ON BUT SMPS WORKING



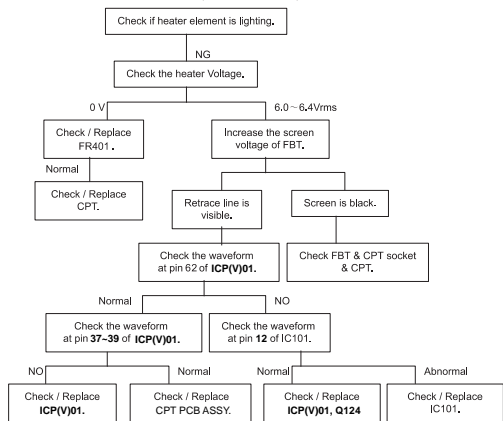
NO SOUND(PICTURE OK)



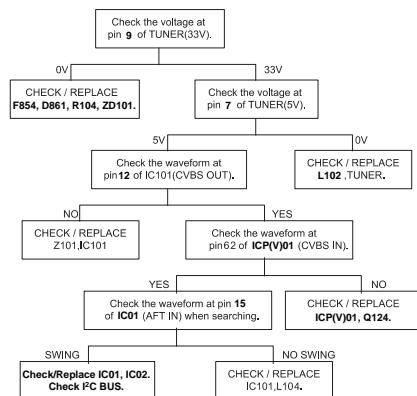
NO SOUND FROM H/P jack(OPTION)  
(but Main Sound OK)



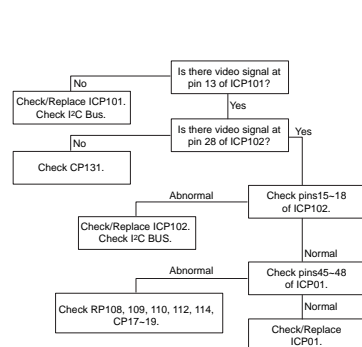
NO RASTER & PICTURE ( H-OUT OK)



DON'T CATCH CHANNEL



**NO PIP**



**Service Sheet of MC-007A**  
**P/N: 3854VA0071A-S2**  
**2000.06.15**

**SVC. SHEET : 3854VA0071A-S1**  
**3854VA0071A-S2**



P/NO : 3828VD0077Q

Apr.,2001  
Printed in Korea