



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

# COLOR TV SERVICE MANUAL

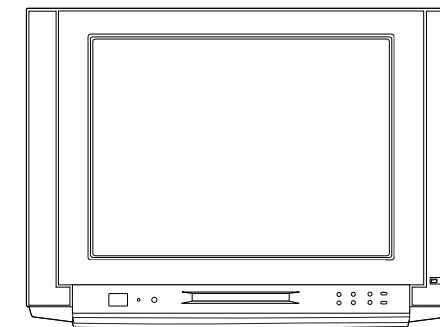
CHASSIS : MC-006A

**MODEL:CE-29Q90ID**



## CAUTION

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



P/NO : 3828VD0073F

July,2001  
Printed in Korea

# 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>Trouble Shooting .....</b>         | <b>19</b> |
| <b>Wiring Diagram .....</b>           | <b>25</b> |
| <b>Exploded View .....</b>            | <b>26</b> |
| <b>Exploded View Parts List.....</b>  | <b>27</b> |
| <b>Replacement Parts List .....</b>   | <b>28</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 ; 15KV: 14-19 inch, 26 ; 15KV: 19-21 inch,

29.0 ; 15KV: 25-29 inch, 30.0 ; 15KV: 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.**

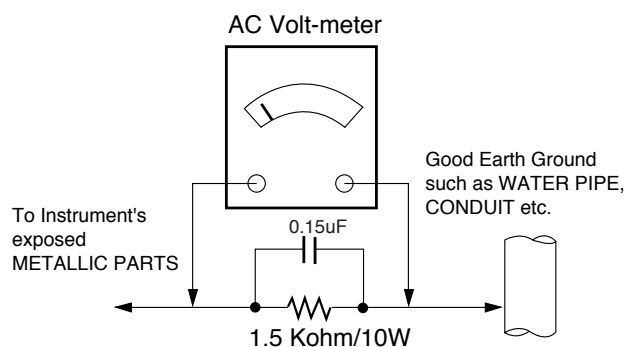
Connect 1.5K/10watt resistor in parallel with a 0.15uF capacitor between a known good earth ground (Water Pipe, Conduit, etc.) and the exposed metallic parts.

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.

**i 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')

**i 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

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

**i Power consumption :** 165W

**i CPT :** Flat CPT

**i 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,<br>S11-S20 |
| Hyper    |         |        |        |         | S21-S41            |
| UHF      | Ch21-69 |        |        | Ch14-69 |                    |

**i Tuning system :**

FVS  
100 Programme memory

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

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

**i Voice coil impedance :** 8 ohm

**i Sound output :** R,L Out : 7W+7W  
Center : 5W  
Woofer : 20W

**i External connection :**

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

**i External In/Output**

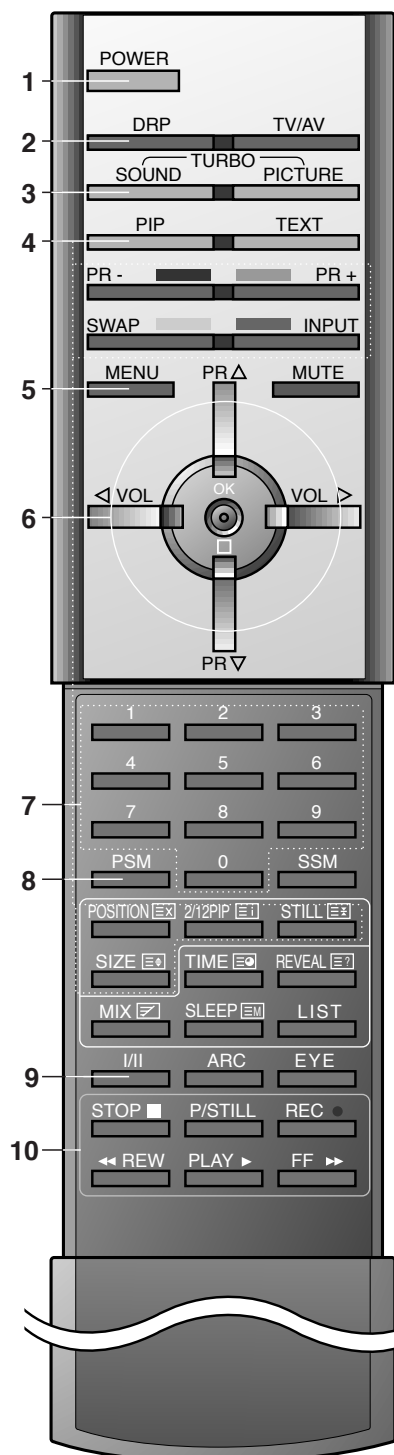
Audio-In: 0.5Vrms; 3db, over 10Kohm  
Audio-Out: 0.5Vrms; 3db, below 1Kohm  
Video-In/Out: 1Vp-p; 3db, 75ohm  
R,G,B In: 0.7Vp-p; 3db

**i Feature :** Auto programme/Manual programme  
SVM (Scanning Velocity Modulation)  
Digital Eye  
Digital Comb Filter  
Auto Sleep  
Dynamic Focus  
Programme Editing  
PSM (Picture Status Memory)  
SSM (Sound Status Memory)  
CTI  
Teletext (128 page)  
Turbo Search, Picture & Sound  
ACMS  
ARC (Zoom 1/ZOOM 2, 16:9; 4:3)  
2 TUNER PIP(Double Window PIP)  
MUP mode(Program Scan)  
VGA input

**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.

# 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.



## Remote control handset

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

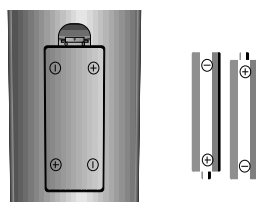
1. **POWER**  
switches the set on from standby or off to standby.
2. **DRP (Digital Reality Picture)**  
switches DRP 1250 or 100.
3. **TURBO SOUND BUTTON**  
selects Turbo sound.
4. **PIP BUTTONS**  
**PIP**  
switches the sub picture on or off.  
**PR +/-**  
selects a programme for the sub picture.  
**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.  
**2/12 PIP**  
switches on or off the programme scan mode through 12 sub pictures .
5. **MENU**  
selects a menu.
6. **▲ / ▼ (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.
7. **NUMBER BUTTONS**  
switches the set on from standby or directly select a number.
8. **PSM (Picture Status Memory)**  
recalls your preferred picture setting.
9. **I/II**  
selects the language during dual language broadcast.  
selects the sound output (option).
10. **VCR BUTTONS**  
control a LG video cassette recorder.

- 11. TV/AV**  
selects TV or AV mode.  
clears the menu / text from the screen.  
switches the set on from standby.
- 12. TURBO PICTURE BUTTON**  
selects Turbo picture.
- 13. TELETEXT BUTTONS**  
These buttons are used for teletext.  
For further details, see the 'Teletext' section.
- 14. SWAP**  
returns to the previously viewed programme.
- 15. MUTE**  
switches the sound on or off.
- 16. SSM (Sound Status Memory)**  
recalls your preferred sound setting.
- 17. LIST**  
displays the programme table.
- 18. SLEEP**  
sets the sleep timer.
- 19. EYE**  
switches the eye function on or off.
- 20. ARC (Aspect Ratio Control)**  
changes the picture format.

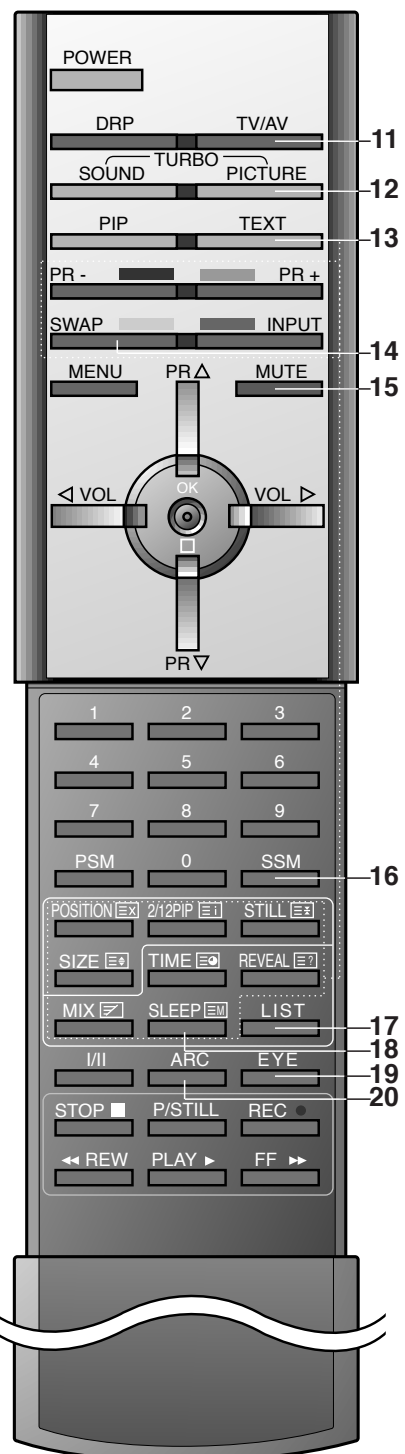
**Note :** In teletext mode, the **PR +/-**, **SWAP** and **INPUT** buttons are used for teletext function.

## Battery installation

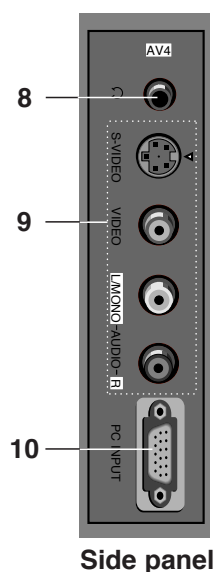
The remote control handset is powered by two AAA type batteries. To load the batteries, turn the remote control handset over and open the battery compartment. Install two batteries as indicated by the polarity symbols (+ and -) marked inside the compartment.



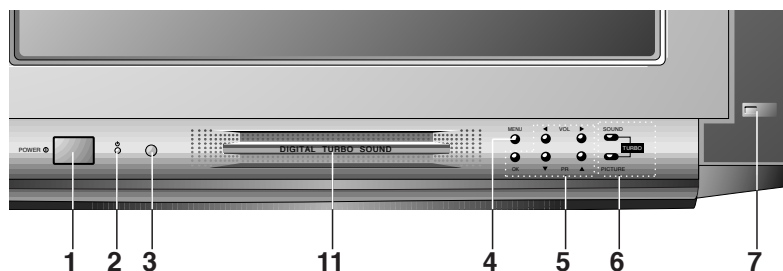
**Note :** To avoid damage from possible battery leakage, remove the batteries if you do not plan to use the remote control handset for an extended period of time.



## Front panel



Side panel



1. **MAIN POWER (POWER ①)**  
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. **OK**  
accepts your selection or displays the current mode.  
◀ / ▶ (Volume Up/Down)  
adjusts the volume.  
adjusts menu settings.  
▲ / ▼ (Programme Up/Down)  
selects a programme or a menu item.  
switches the set on from standby.
6. **TURBO SOUND / PICTURE**  
switches Turbo sound or Turbo picture function on or off.
7. **EYE (option)**  
adjusts picture according to the surrounding conditions.
8. **HEADPHONE SOCKET**  
Connect the headphone plug to this socket.
9. **AUDIO/VIDEO IN SOCKETS (AV4)**  
Connect the audio/video out sockets of external equipment to these sockets.  
**S-VIDEO/AUDIO IN SOCKETS (S-AV)**  
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 **AV4**.
10. **PC INPUT SOCKET**  
Connect the monitor output socket of the PERSONAL COMPUTER to this socket.  
**Note :** Set the resolution of PC to VGA 640x480 video mode to use this set as PC monitor.
11. **CENTRE SPEAKER**  
Shows up when the Turbo sound is on  
**Note :** To prevent fingers from getting jammed in, do not put them on this speaker.

# 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.

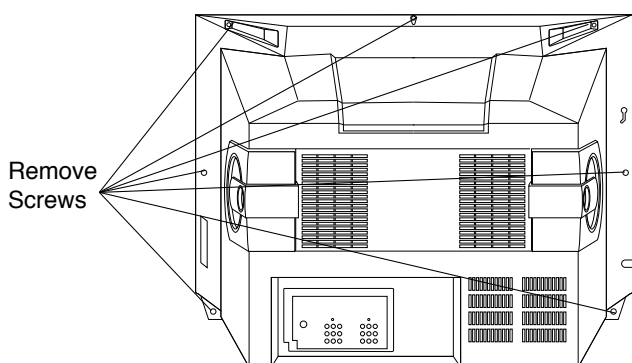


Fig. 2-1

## Chassis Assy Removal

Grasp both side of Frame and pull it backward smoothly.

## Speaker Assy Removal

1. Remove P1651 and P1652 connector from Main2 (Power/Def./ Sound-Amp) Board.
2. Remove respective 6 screws for speaker on the front cabinet. (Fig. 2-2).

## 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.

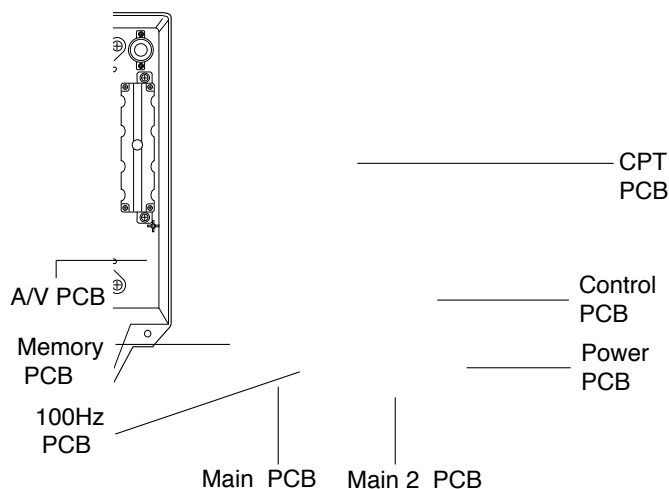


Fig. 2-2



# ADJUSTMENT INSTRUCTIONS

## i 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.

## i Test Equipment required

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

## i 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.

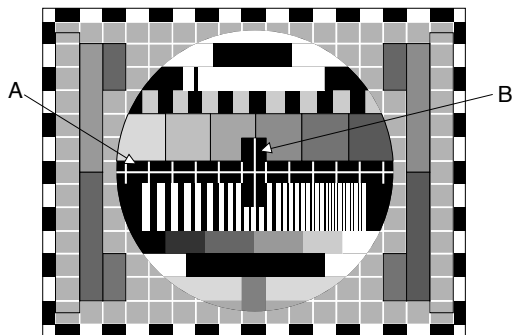


Fig. 1

## i Screen Voltage Adjustment

- 1) Turn the TV set on.
- 2) This adjustment should be performed after warming up for more than 15 minutes.
- 3) Enter the SVC mode by pressing the SVC button on remote controller and make a horizontal line by pressing the H-LINE button.
- 4) Finish adjusting at the point when the horizontal line appears again after adjusting screen volume until the horizontal line disappear.

## i White Balance Adjustment

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

- 1) Tune the TV set to receive an 100% white pattern.
- 2) Press Channel UP/DOWN button for desirous function Adjustment.
- 3) Press Volume UP/DOWN button to adjust the data.
- 4) Adjust until "CONTRAST" and "BRIGHT" become 3.5 Ft\_L
- 5) Enter the SVC mode by pressing the SVC button.
- 6) Adjust the Y value of High Light with G-DRIVE and adjust the X value with B-DRIVE until they have the color coordinate of High Light as below.
- 7) Adjust until "CONTRAST" and "BRIGHT" become 4.5 Ft\_L
- 8) Enter the adjustment mode by pressing the SVC button.
- 9) Adjust the Y value of Low Light with G-CUTOFF and adjust the X value with B-CUTOFF until they have the color coordinate of Low Light as below.
- 10) Repeat adjusting until the color coordinate of High and Low Light is satisfied.
- 11) Check the adjusted color coordinate with a white balance meter.

| Color Tem. | X           | Y           | Memo   |
|------------|-------------|-------------|--------|
| 13000K     | 266 $\pm$ 8 | 273 $\pm$ 8 | NON EU |
| 9000K      | 288 $\pm$ 8 | 295 $\pm$ 8 | EU     |

| Menu | LG 29" FLAT | LG 29" S/F | LG 32" FLAT |
|------|-------------|------------|-------------|
| RD   | 20          |            |             |
| GD   | 1E          |            |             |
| BD   | 20          |            |             |
| RC   | 1F          |            |             |
| GC   | 1F          |            |             |
| BC   | 1F          |            |             |

## i Deflection Data Adjustment

- 1) Deflection Data Adjustment should be performed with the remote controller for handset.
- 2) Enter the SVC mode by pressing the SVC button.
- 3) Enter the Deflection Adjustment mode by pressing the ADJUST button.
- 4) Press the Channel UP/DOWN button to select adjustment items.
- 5) Press the Volume UP/DOWN button to adjust the data.
- 6) The TV set receives PAL-B/G Digital pattern.

### 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.

**VA (Vertical Amplitude)**

Adjust so that the circle of a digital circle pattern may be located within the effective screen 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 so that a digital circle pattern looks like exact circle.

**A-BOW**

In line adjustment, not to change default value is basic.

**A-ANG**

In angle adjustment, adjust until inclination of left and right screen should be precise.

**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.

**UC**

Adjust until the vertical lines at upper left and right corner of the screen become straight after EP adjustment.

**LC**

Adjust until the vertical lines at lower left and right corner of the screen become straight after EP adjustment.

**SC (Vertical "S" Correction)**

Adjust so that all distance between each horizontal lines are to be the same.

**VL (Vertical Linearity)**

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

| Menu  | Range  | PAL | NTSC | VGA |
|-------|--------|-----|------|-----|
| VS    | 0-003F | 24  | 2A   | 20  |
| VA    | 0-003F | 22  | 1F   | 16  |
| HS    | 0-000F | 1E  | 2E   | 1F  |
| EW    | 0-000F | 1E  | 1D   | 17  |
| EP    | 0-003F | 0C  | 0E   | 06  |
| ET    | 0-003F | 06  | 08   | 07  |
| A-ANG | 0-000F | 07  | 07   | 07  |
| A-BOW | 0-000F | 07  | 07   | 05  |
| UC    | 0-000F | 1D  | 21   | 18  |
| LC    | 0-003F | 1D  | 1D   | 15  |
| U-VL  | 0-003F | 0B  | 0B   | 0D  |
| L-VL  | 0-003F | 0A  | 07   | 0B  |
| VL    | 0-000F | 06  | 06   | 06  |
| SC    | 0-000F | 00  | 00   | 00  |
| V-ASP | 0-003F | 2F  | 2F   | 2F  |

**i OPTION Adjustment (SVC MODE:OPTION-1, OPTION-2, OPTION-3,Teletext)**

- 1) Press YELLOW button or OP1,OP2,OP3,OP4 button on SVC Remote Controller .
- 2) Input data directly by the buttons corresponded with OPTION1 ???(0~127), OPTION2 ??(0~63), OPTION3 ???(0~127) and TELETEXT ???(6...131).
- 3) Select each OPTION function by the CH Up/Down button and then set up each OPTION by the VOL Up/Down button.

**Table 1. OPTION 1 Function**

| Option  | Code | Function                     | Remark                  |
|---------|------|------------------------------|-------------------------|
| 200 PR  | 0    | 100 PROGRAM                  |                         |
|         | 1    | 200 PROGRAM                  |                         |
| TSEAR   | 0    | Without TURBO SEARCH         | EU                      |
|         | 1    | With TURBO SEARCH            | NON-EU                  |
| I/II SV | 0    | NO SAVE DUAL/SOUND Condition | EU                      |
|         | 1    | SAVE DUAL/SOUND Condition    | NON-EU                  |
| TOP     | 0    | FLOP TEXT                    | WITHOUT TEXT<br>(TOP=0) |
|         | 1    | TOP TEXT                     |                         |
| EYE     | 0    | WITHOUT EYE                  |                         |
|         | 1    | WITH EYE                     |                         |
| A2 ST   | 0    | NICAM                        |                         |
|         | 1    | NICAM/FM STEREO/DUAL         |                         |
| SYS     | 0    | BG/I/DK                      |                         |
|         | 1    | BG/LL'                       |                         |
|         | 2    | BG/I/DK/M                    |                         |
|         | 3    | RESERVED                     |                         |

**Table 2. OPTION 1 CODE Data**

| OPTION Data | 200 PR | TSEAR | I/II SV | TOP | EYE | A2 ST | SYS |
|-------------|--------|-------|---------|-----|-----|-------|-----|
| 0           | 0      | 0     | 0       | 0   | 0   | 0     | 0   |
| 1           | 0      | 0     | 0       | 0   | 0   | 0     | 1   |
| 2           | 0      | 0     | 0       | 0   | 0   | 0     | 2   |
| 3           | 0      | 0     | 0       | 0   | 0   | 0     | 3   |
| 4           | 0      | 0     | 0       | 0   | 0   | 1     | 0   |
| 5           | 0      | 0     | 0       | 0   | 0   | 1     | 1   |
| 6           | 0      | 0     | 0       | 0   | 0   | 1     | 2   |
| 7           | 0      | 0     | 0       | 0   | 0   | 1     | 3   |
| 8           | 0      | 0     | 0       | 0   | 1   | 0     | 0   |
| 9           | 0      | 0     | 0       | 0   | 1   | 0     | 1   |
| 10          | 0      | 0     | 0       | 0   | 1   | 0     | 2   |
| 11          | 0      | 0     | 0       | 0   | 1   | 0     | 3   |
| 12          | 0      | 0     | 0       | 0   | 1   | 1     | 0   |
| 13          | 0      | 0     | 0       | 0   | 1   | 1     | 1   |
| 14          | 0      | 0     | 0       | 0   | 1   | 1     | 2   |
| 15          | 0      | 0     | 0       | 0   | 1   | 1     | 3   |
| 16          | 0      | 0     | 0       | 1   | 0   | 0     | 0   |

| OPTION<br>Data | 200 PR | TSEAR | /II SV | TOP | EYE | A2 ST | SYS |
|----------------|--------|-------|--------|-----|-----|-------|-----|
| 17             | 0      | 0     | 0      | 1   | 0   | 0     | 1   |
| 18             | 0      | 0     | 0      | 1   | 0   | 0     | 2   |
| 19             | 0      | 0     | 0      | 1   | 0   | 0     | 3   |
| 20             | 0      | 0     | 0      | 1   | 0   | 1     | 0   |
| 21             | 0      | 0     | 0      | 1   | 0   | 1     | 1   |
| 22             | 0      | 0     | 0      | 1   | 0   | 1     | 2   |
| 23             | 0      | 0     | 0      | 1   | 0   | 1     | 3   |
| 24             | 0      | 0     | 0      | 1   | 1   | 0     | 0   |
| 25             | 0      | 0     | 0      | 1   | 1   | 0     | 1   |
| 26             | 0      | 0     | 0      | 1   | 1   | 0     | 2   |
| 27             | 0      | 0     | 0      | 1   | 1   | 0     | 3   |
| 28             | 0      | 0     | 0      | 1   | 1   | 1     | 0   |
| 29             | 0      | 0     | 0      | 1   | 1   | 1     | 1   |
| 30             | 0      | 0     | 0      | 1   | 1   | 1     | 2   |
| 31             | 0      | 0     | 0      | 1   | 1   | 1     | 3   |
| 32             | 0      | 0     | 1      | 0   | 0   | 0     | 0   |
| 33             | 0      | 0     | 1      | 0   | 0   | 0     | 1   |
| 34             | 0      | 0     | 1      | 0   | 0   | 0     | 2   |
| 35             | 0      | 0     | 1      | 0   | 0   | 0     | 3   |
| 36             | 0      | 0     | 1      | 0   | 0   | 1     | 0   |
| 37             | 0      | 0     | 1      | 0   | 0   | 1     | 1   |
| 38             | 0      | 0     | 1      | 0   | 0   | 1     | 2   |
| 39             | 0      | 0     | 1      | 0   | 0   | 1     | 3   |
| 40             | 0      | 0     | 1      | 0   | 1   | 0     | 0   |
| 41             | 0      | 0     | 1      | 0   | 1   | 0     | 1   |
| 42             | 0      | 0     | 1      | 0   | 1   | 0     | 2   |
| 43             | 0      | 0     | 1      | 0   | 1   | 0     | 3   |
| 44             | 0      | 0     | 1      | 0   | 1   | 1     | 0   |
| 45             | 0      | 0     | 1      | 0   | 1   | 1     | 1   |
| 46             | 0      | 0     | 1      | 0   | 1   | 1     | 2   |
| 47             | 0      | 0     | 1      | 0   | 1   | 1     | 3   |
| 48             | 0      | 0     | 1      | 1   | 0   | 0     | 0   |
| 49             | 0      | 0     | 1      | 1   | 0   | 0     | 1   |
| 50             | 0      | 0     | 1      | 1   | 0   | 0     | 2   |
| 51             | 0      | 0     | 1      | 1   | 0   | 0     | 3   |
| 52             | 0      | 0     | 1      | 1   | 0   | 1     | 0   |
| 53             | 0      | 0     | 1      | 1   | 0   | 1     | 1   |
| 54             | 0      | 0     | 1      | 1   | 0   | 1     | 2   |
| 55             | 0      | 0     | 1      | 1   | 0   | 1     | 3   |
| 56             | 0      | 0     | 1      | 1   | 1   | 0     | 0   |
| 57             | 0      | 0     | 1      | 1   | 1   | 0     | 1   |
| 58             | 0      | 0     | 1      | 1   | 1   | 0     | 2   |
| 59             | 0      | 0     | 1      | 1   | 1   | 0     | 3   |
| 60             | 0      | 0     | 1      | 1   | 1   | 1     | 0   |
| 61             | 0      | 0     | 1      | 1   | 1   | 1     | 1   |
| 62             | 0      | 0     | 1      | 1   | 1   | 1     | 2   |

| OPTION<br>Data | 200 PR | TSEAR | /II SV | TOP | EYE | A2 ST | SYS |
|----------------|--------|-------|--------|-----|-----|-------|-----|
| 63             | 0      | 0     | 1      | 1   | 1   | 1     | 3   |
| 64             | 0      | 1     | 0      | 0   | 0   | 0     | 0   |
| 65             | 0      | 1     | 0      | 0   | 0   | 0     | 1   |
| 66             | 0      | 1     | 0      | 0   | 0   | 0     | 2   |
| 67             | 0      | 1     | 0      | 0   | 0   | 0     | 3   |
| 68             | 0      | 1     | 0      | 0   | 0   | 1     | 0   |
| 69             | 0      | 1     | 0      | 0   | 0   | 1     | 1   |
| 70             | 0      | 1     | 0      | 0   | 0   | 1     | 2   |
| 71             | 0      | 1     | 0      | 0   | 0   | 1     | 3   |
| 72             | 0      | 1     | 0      | 0   | 1   | 0     | 0   |
| 73             | 0      | 1     | 0      | 0   | 1   | 0     | 1   |
| 74             | 0      | 1     | 0      | 0   | 1   | 0     | 2   |
| 75             | 0      | 1     | 0      | 0   | 1   | 0     | 3   |
| 76             | 0      | 1     | 0      | 0   | 1   | 1     | 0   |
| 77             | 0      | 1     | 0      | 0   | 1   | 1     | 1   |
| 78             | 0      | 1     | 0      | 0   | 1   | 1     | 2   |
| 79             | 0      | 1     | 0      | 0   | 1   | 1     | 3   |
| 80             | 0      | 1     | 0      | 1   | 0   | 0     | 0   |
| 81             | 0      | 1     | 0      | 1   | 0   | 0     | 1   |
| 82             | 0      | 1     | 0      | 1   | 0   | 0     | 2   |
| 83             | 0      | 1     | 0      | 1   | 0   | 0     | 3   |
| 84             | 0      | 1     | 0      | 1   | 0   | 1     | 0   |
| 85             | 0      | 1     | 0      | 1   | 0   | 1     | 1   |
| 86             | 0      | 1     | 0      | 1   | 0   | 1     | 2   |
| 87             | 0      | 1     | 0      | 1   | 0   | 1     | 3   |
| 88             | 0      | 1     | 0      | 1   | 1   | 0     | 0   |
| 89             | 0      | 1     | 0      | 1   | 1   | 0     | 1   |
| 90             | 0      | 1     | 0      | 1   | 1   | 0     | 2   |
| 91             | 0      | 1     | 0      | 1   | 1   | 0     | 3   |
| 92             | 0      | 1     | 0      | 1   | 1   | 1     | 0   |
| 93             | 0      | 1     | 0      | 1   | 1   | 1     | 1   |
| 94             | 0      | 1     | 0      | 1   | 1   | 1     | 2   |
| 95             | 0      | 1     | 1      | 0   | 0   | 1     | 3   |
| 96             | 0      | 1     | 1      | 0   | 0   | 0     | 0   |
| 97             | 0      | 1     | 1      | 0   | 0   | 0     | 1   |
| 98             | 0      | 1     | 1      | 0   | 0   | 0     | 2   |
| 99             | 0      | 1     | 1      | 0   | 0   | 0     | 3   |
| 100            | 0      | 1     | 1      | 0   | 0   | 1     | 0   |
| 101            | 0      | 1     | 1      | 0   | 0   | 1     | 1   |
| 102            | 0      | 1     | 1      | 0   | 0   | 1     | 2   |
| 103            | 0      | 1     | 1      | 0   | 0   | 1     | 3   |
| 104            | 0      | 1     | 1      | 0   | 1   | 0     | 0   |
| 105            | 0      | 1     | 1      | 0   | 1   | 0     | 1   |
| 106            | 0      | 1     | 1      | 0   | 1   | 0     | 2   |
| 107            | 0      | 1     | 1      | 0   | 1   | 0     | 3   |
| 108            | 0      | 1     | 1      | 0   | 1   | 1     | 0   |

| OPTION Data | 200 PR | TSEAR | /II SV | TOP | EYE | A2 ST | SYS |
|-------------|--------|-------|--------|-----|-----|-------|-----|
| 109         | 0      | 1     | 1      | 0   | 1   | 1     | 1   |
| 110         | 0      | 1     | 1      | 0   | 1   | 1     | 2   |
| 111         | 0      | 1     | 1      | 0   | 1   | 1     | 3   |
| 112         | 0      | 1     | 1      | 1   | 0   | 0     | 0   |
| 113         | 0      | 1     | 1      | 1   | 0   | 0     | 1   |
| 114         | 0      | 1     | 1      | 1   | 0   | 0     | 2   |
| 115         | 0      | 1     | 1      | 1   | 0   | 0     | 3   |
| 116         | 0      | 1     | 1      | 1   | 0   | 1     | 0   |
| 117         | 0      | 1     | 1      | 1   | 0   | 1     | 1   |
| 118         | 0      | 1     | 1      | 1   | 0   | 1     | 2   |
| 119         | 0      | 1     | 1      | 1   | 0   | 1     | 3   |
| 120         | 0      | 1     | 1      | 1   | 1   | 0     | 0   |
| 121         | 0      | 1     | 1      | 1   | 1   | 0     | 1   |
| 122         | 0      | 1     | 1      | 1   | 1   | 0     | 2   |
| 123         | 0      | 1     | 1      | 1   | 1   | 0     | 3   |
| 124         | 0      | 1     | 1      | 1   | 1   | 1     | 0   |
| 125         | 0      | 1     | 1      | 1   | 1   | 1     | 1   |
| 126         | 0      | 1     | 1      | 1   | 1   | 1     | 2   |
| 127         | 0      | 1     | 1      | 1   | 1   | 1     | 3   |
| 128         | 1      | 0     | 0      | 0   | 0   | 0     | 0   |
| 129         | 1      | 0     | 0      | 0   | 0   | 0     | 1   |
| 130         | 1      | 0     | 0      | 0   | 0   | 0     | 2   |
| 131         | 1      | 0     | 0      | 0   | 0   | 0     | 3   |
| 132         | 1      | 0     | 0      | 0   | 0   | 1     | 0   |
| 133         | 1      | 0     | 0      | 0   | 0   | 1     | 1   |
| 134         | 1      | 0     | 0      | 0   | 0   | 1     | 2   |
| 135         | 1      | 0     | 0      | 0   | 0   | 1     | 3   |
| 136         | 1      | 0     | 0      | 0   | 1   | 0     | 0   |
| 137         | 1      | 0     | 0      | 0   | 1   | 0     | 1   |
| 138         | 1      | 0     | 0      | 0   | 1   | 0     | 2   |
| 139         | 1      | 0     | 0      | 0   | 1   | 0     | 3   |
| 140         | 1      | 0     | 0      | 0   | 1   | 1     | 0   |
| 141         | 1      | 0     | 0      | 0   | 1   | 1     | 1   |
| 142         | 1      | 0     | 0      | 0   | 1   | 1     | 2   |
| 143         | 1      | 0     | 0      | 0   | 1   | 1     | 3   |
| 144         | 1      | 0     | 0      | 1   | 0   | 0     | 0   |
| 145         | 1      | 0     | 0      | 1   | 0   | 0     | 1   |
| 146         | 1      | 0     | 0      | 1   | 0   | 0     | 2   |
| 147         | 1      | 0     | 0      | 1   | 0   | 0     | 3   |
| 148         | 1      | 0     | 0      | 1   | 0   | 1     | 0   |
| 149         | 1      | 0     | 0      | 1   | 0   | 1     | 1   |
| 150         | 1      | 0     | 0      | 1   | 0   | 1     | 2   |
| 151         | 1      | 0     | 0      | 1   | 0   | 1     | 3   |
| 152         | 1      | 0     | 0      | 1   | 1   | 0     | 0   |
| 153         | 1      | 0     | 0      | 1   | 1   | 0     | 1   |
| 154         | 1      | 0     | 0      | 1   | 1   | 0     | 2   |

| OPTION Data | 200 PR | TSEAR | /II SV | TOP | EYE | A2 ST | SYS |
|-------------|--------|-------|--------|-----|-----|-------|-----|
| 155         | 1      | 0     | 0      | 1   | 1   | 0     | 3   |
| 156         | 1      | 0     | 0      | 1   | 1   | 1     | 0   |
| 157         | 1      | 0     | 0      | 1   | 1   | 1     | 1   |
| 158         | 1      | 0     | 0      | 1   | 1   | 1     | 2   |
| 159         | 1      | 0     | 0      | 1   | 1   | 1     | 3   |
| 160         | 1      | 0     | 1      | 0   | 0   | 0     | 0   |
| 161         | 1      | 0     | 1      | 0   | 0   | 0     | 1   |
| 162         | 1      | 0     | 1      | 0   | 0   | 0     | 2   |
| 163         | 1      | 0     | 1      | 0   | 0   | 0     | 3   |
| 164         | 1      | 0     | 1      | 0   | 0   | 1     | 0   |
| 165         | 1      | 0     | 1      | 0   | 0   | 1     | 1   |
| 166         | 1      | 0     | 1      | 0   | 0   | 1     | 2   |
| 167         | 1      | 0     | 1      | 0   | 0   | 1     | 3   |
| 168         | 1      | 0     | 1      | 0   | 1   | 0     | 0   |
| 169         | 1      | 0     | 1      | 0   | 1   | 0     | 1   |
| 170         | 1      | 0     | 1      | 0   | 1   | 0     | 2   |
| 171         | 1      | 0     | 1      | 0   | 1   | 0     | 3   |
| 172         | 1      | 0     | 1      | 0   | 1   | 1     | 0   |
| 173         | 1      | 0     | 1      | 0   | 1   | 1     | 1   |
| 174         | 1      | 0     | 1      | 0   | 1   | 1     | 2   |
| 175         | 1      | 0     | 1      | 0   | 1   | 1     | 3   |
| 176         | 1      | 0     | 1      | 1   | 0   | 0     | 0   |
| 177         | 1      | 0     | 1      | 1   | 0   | 0     | 1   |
| 178         | 1      | 0     | 1      | 1   | 0   | 0     | 2   |
| 179         | 1      | 0     | 1      | 1   | 0   | 0     | 3   |
| 180         | 1      | 0     | 1      | 1   | 0   | 1     | 0   |
| 181         | 1      | 0     | 1      | 1   | 0   | 1     | 1   |
| 182         | 1      | 0     | 1      | 1   | 0   | 1     | 2   |
| 183         | 1      | 0     | 1      | 1   | 0   | 1     | 3   |
| 184         | 1      | 0     | 1      | 1   | 1   | 0     | 0   |
| 185         | 1      | 0     | 1      | 1   | 1   | 0     | 1   |
| 186         | 1      | 0     | 1      | 1   | 1   | 0     | 2   |
| 187         | 1      | 0     | 1      | 1   | 1   | 0     | 3   |
| 188         | 1      | 0     | 1      | 1   | 1   | 1     | 0   |
| 189         | 1      | 0     | 1      | 1   | 1   | 1     | 1   |
| 190         | 1      | 0     | 1      | 1   | 1   | 1     | 2   |
| 191         | 1      | 0     | 1      | 1   | 1   | 1     | 3   |
| 192         | 1      | 1     | 0      | 0   | 0   | 0     | 0   |
| 193         | 1      | 1     | 0      | 0   | 0   | 0     | 1   |
| 194         | 1      | 1     | 0      | 0   | 0   | 0     | 2   |
| 195         | 1      | 1     | 0      | 0   | 0   | 0     | 3   |
| 196         | 1      | 1     | 0      | 0   | 0   | 1     | 0   |
| 197         | 1      | 1     | 0      | 0   | 0   | 1     | 1   |
| 198         | 1      | 1     | 0      | 0   | 0   | 1     | 2   |
| 199         | 1      | 1     | 0      | 0   | 0   | 1     | 3   |
| 200         | 1      | 1     | 0      | 0   | 1   | 0     | 0   |

| OPTION Data | 200 PR | TSEAR | I/II SV | TOP | EYE | A2 ST | SYS |
|-------------|--------|-------|---------|-----|-----|-------|-----|
| 201         | 1      | 1     | 0       | 0   | 1   | 0     | 1   |
| 202         | 1      | 1     | 0       | 0   | 1   | 0     | 2   |
| 203         | 1      | 1     | 0       | 0   | 1   | 0     | 3   |
| 204         | 1      | 1     | 0       | 0   | 1   | 1     | 0   |
| 205         | 1      | 1     | 0       | 0   | 1   | 1     | 1   |
| 206         | 1      | 1     | 0       | 0   | 1   | 1     | 2   |
| 207         | 1      | 1     | 0       | 0   | 1   | 1     | 3   |
| 208         | 1      | 1     | 0       | 1   | 0   | 0     | 0   |
| 209         | 1      | 1     | 0       | 1   | 0   | 0     | 1   |
| 210         | 1      | 1     | 0       | 1   | 0   | 0     | 2   |
| 211         | 1      | 1     | 0       | 1   | 0   | 0     | 3   |
| 212         | 1      | 1     | 0       | 1   | 0   | 1     | 0   |
| 213         | 1      | 1     | 0       | 1   | 0   | 1     | 1   |
| 214         | 1      | 1     | 0       | 1   | 0   | 1     | 2   |
| 215         | 1      | 1     | 0       | 1   | 1   | 1     | 3   |
| 216         | 1      | 1     | 0       | 1   | 1   | 0     | 0   |
| 217         | 1      | 1     | 0       | 1   | 1   | 0     | 1   |
| 218         | 1      | 1     | 0       | 1   | 1   | 0     | 2   |
| 219         | 1      | 1     | 0       | 1   | 1   | 0     | 3   |
| 220         | 1      | 1     | 0       | 1   | 1   | 1     | 0   |
| 221         | 1      | 1     | 0       | 1   | 1   | 1     | 1   |
| 222         | 1      | 1     | 0       | 1   | 1   | 1     | 2   |
| 223         | 1      | 1     | 1       | 0   | 0   | 1     | 3   |
| 224         | 1      | 1     | 1       | 0   | 0   | 0     | 0   |
| 225         | 1      | 1     | 1       | 0   | 0   | 0     | 1   |
| 226         | 1      | 1     | 1       | 0   | 0   | 0     | 2   |
| 227         | 1      | 1     | 1       | 0   | 0   | 0     | 3   |
| 228         | 1      | 1     | 1       | 0   | 0   | 1     | 0   |
| 229         | 1      | 1     | 1       | 0   | 0   | 1     | 1   |
| 230         | 1      | 1     | 1       | 0   | 0   | 1     | 2   |
| 231         | 1      | 1     | 1       | 0   | 0   | 1     | 3   |
| 232         | 1      | 1     | 1       | 0   | 1   | 0     | 0   |
| 233         | 1      | 1     | 1       | 0   | 1   | 0     | 1   |
| 234         | 1      | 1     | 1       | 0   | 1   | 0     | 2   |
| 235         | 1      | 1     | 1       | 0   | 1   | 0     | 3   |
| 236         | 1      | 1     | 1       | 0   | 1   | 1     | 0   |
| 237         | 1      | 1     | 1       | 0   | 1   | 1     | 1   |
| 238         | 1      | 1     | 1       | 0   | 1   | 1     | 2   |
| 239         | 1      | 1     | 1       | 0   | 1   | 1     | 3   |
| 240         | 1      | 1     | 1       | 1   | 0   | 0     | 0   |
| 241         | 1      | 1     | 1       | 1   | 0   | 0     | 1   |
| 242         | 1      | 1     | 1       | 1   | 0   | 0     | 2   |
| 243         | 1      | 1     | 1       | 1   | 0   | 0     | 3   |
| 244         | 1      | 1     | 1       | 1   | 0   | 1     | 0   |
| 245         | 1      | 1     | 1       | 1   | 0   | 1     | 1   |
| 246         | 1      | 1     | 1       | 1   | 0   | 1     | 2   |

| OPTION Data | 200 PR | TSEAR | I/II SV | TOP | EYE | A2 ST | SYS |
|-------------|--------|-------|---------|-----|-----|-------|-----|
| 247         | 1      | 1     | 1       | 1   | 0   | 1     | 3   |
| 248         | 1      | 1     | 1       | 1   | 1   | 0     | 0   |
| 249         | 1      | 1     | 1       | 1   | 1   | 0     | 1   |
| 250         | 1      | 1     | 1       | 1   | 1   | 0     | 2   |
| 251         | 1      | 1     | 1       | 1   | 1   | 0     | 3   |
| 252         | 1      | 1     | 1       | 1   | 1   | 1     | 0   |
| 253         | 1      | 1     | 1       | 1   | 1   | 1     | 1   |
| 254         | 1      | 1     | 1       | 1   | 1   | 1     | 2   |
| 255         | 1      | 1     | 1       | 1   | 1   | 1     | 3   |

**Table 3. OPTION 2 Function**

| Option | Code | Function             | Remark                            |
|--------|------|----------------------|-----------------------------------|
| ACMS   | 0    | WITHOUT ACMS FUNTION |                                   |
|        | 1    | WITH ACMS FUNTION    |                                   |
| VOL    | 0    | STANDARD CURVE       | LOW STEP=>RUSH<br>HIGH STEP=>SLOW |
|        | 1    | RUSHED CURVE         |                                   |
| H/PHO  | 0    | WITHOUT H/PHONE JACK |                                   |
|        | 1    | WITH H/PHONE JACK    |                                   |
| DVD    | 0    | WITHOUT DVD(Y,Pb,Pr) |                                   |
|        | 1    | WITH DVD(Y,Pb,Pr)    |                                   |
| SAV    | 0    | AV2 Y&C              |                                   |
|        | 1    |                      |                                   |
| WOOF   | 0    | WITHOUT WOOFER       |                                   |
|        | 1    | WITH WOOFER          |                                   |
| VGA    | 0    | WITHOUT VGA MODE     |                                   |
|        | 1    | WITH VGA MODE        |                                   |
| Q30    | 0    | Q90 TOOL             |                                   |
|        | 1    | Q30 TOOL             |                                   |

**Table 4. OPTION 2 CODE Data**

| DATA | ACMS | VOL | H/PHO | DVD | SAV | WOOFER | VGA | Q30 |
|------|------|-----|-------|-----|-----|--------|-----|-----|
| 0    | 0    | 0   | 0     | 0   | 0   | 0      | 0   | 0   |
| 1    | 0    | 0   | 0     | 0   | 0   | 0      | 0   | 1   |
| 2    | 0    | 0   | 0     | 0   | 0   | 0      | 1   | 0   |
| 3    | 0    | 0   | 0     | 0   | 0   | 0      | 1   | 1   |
| 4    | 0    | 0   | 0     | 0   | 0   | 1      | 0   | 0   |
| 5    | 0    | 0   | 0     | 0   | 0   | 1      | 0   | 1   |
| 6    | 0    | 0   | 0     | 0   | 0   | 1      | 1   | 0   |
| 7    | 0    | 0   | 0     | 0   | 0   | 1      | 1   | 1   |
| 8    | 0    | 0   | 0     | 0   | 1   | 0      | 0   | 0   |
| 9    | 0    | 0   | 0     | 0   | 1   | 0      | 0   | 1   |
| 10   | 0    | 0   | 0     | 0   | 1   | 0      | 1   | 0   |
| 11   | 0    | 0   | 0     | 0   | 1   | 0      | 1   | 1   |
| 12   | 0    | 0   | 0     | 0   | 1   | 1      | 0   | 0   |
| 13   | 0    | 0   | 0     | 0   | 1   | 1      | 0   | 1   |
| 14   | 0    | 0   | 0     | 0   | 1   | 1      | 1   | 0   |
| 15   | 0    | 0   | 0     | 0   | 1   | 1      | 1   | 1   |
| 16   | 0    | 0   | 0     | 1   | 0   | 0      | 0   | 0   |
| 17   | 0    | 0   | 0     | 1   | 0   | 0      | 0   | 1   |
| 18   | 0    | 0   | 0     | 1   | 0   | 0      | 1   | 0   |
| 19   | 0    | 0   | 0     | 1   | 0   | 0      | 1   | 1   |
| 20   | 0    | 0   | 0     | 1   | 0   | 1      | 0   | 0   |
| 21   | 0    | 0   | 0     | 1   | 0   | 1      | 0   | 1   |
| 22   | 0    | 0   | 0     | 1   | 0   | 1      | 1   | 0   |
| 23   | 0    | 0   | 0     | 1   | 0   | 1      | 1   | 1   |
| 24   | 0    | 0   | 0     | 1   | 1   | 0      | 0   | 0   |
| 25   | 0    | 0   | 0     | 1   | 1   | 0      | 0   | 1   |
| 26   | 0    | 0   | 0     | 1   | 1   | 0      | 1   | 0   |
| 27   | 0    | 0   | 0     | 1   | 1   | 0      | 1   | 1   |
| 28   | 0    | 0   | 0     | 1   | 1   | 1      | 0   | 0   |
| 29   | 0    | 0   | 0     | 1   | 1   | 1      | 0   | 1   |
| 30   | 0    | 0   | 0     | 1   | 1   | 1      | 1   | 0   |
| 31   | 0    | 0   | 0     | 1   | 1   | 1      | 1   | 1   |
| 32   | 0    | 0   | 1     | 0   | 0   | 0      | 0   | 0   |
| 33   | 0    | 0   | 1     | 0   | 0   | 0      | 0   | 1   |
| 34   | 0    | 0   | 1     | 0   | 0   | 0      | 1   | 0   |
| 35   | 0    | 0   | 1     | 0   | 0   | 0      | 1   | 1   |
| 36   | 0    | 0   | 1     | 0   | 0   | 1      | 0   | 0   |
| 37   | 0    | 0   | 1     | 0   | 0   | 1      | 0   | 1   |
| 38   | 0    | 0   | 1     | 0   | 0   | 1      | 1   | 0   |
| 39   | 0    | 0   | 1     | 0   | 0   | 1      | 1   | 1   |
| 40   | 0    | 0   | 1     | 0   | 1   | 0      | 0   | 0   |
| 41   | 0    | 0   | 1     | 0   | 1   | 0      | 0   | 1   |
| 42   | 0    | 0   | 1     | 0   | 1   | 0      | 1   | 0   |
| 43   | 0    | 0   | 1     | 0   | 1   | 0      | 1   | 1   |
| 44   | 0    | 0   | 1     | 0   | 1   | 1      | 0   | 0   |

| DATA | ACMS | VOL | H/PHO | DVD | SAV | WOOFER | VGA | Q30 |
|------|------|-----|-------|-----|-----|--------|-----|-----|
| 45   | 0    | 0   | 1     | 0   | 1   | 1      | 0   | 1   |
| 46   | 0    | 0   | 1     | 0   | 1   | 1      | 1   | 0   |
| 47   | 0    | 0   | 1     | 0   | 1   | 1      | 1   | 1   |
| 48   | 0    | 0   | 1     | 1   | 0   | 0      | 0   | 0   |
| 49   | 0    | 0   | 1     | 1   | 0   | 0      | 0   | 1   |
| 50   | 0    | 0   | 1     | 1   | 0   | 0      | 1   | 0   |
| 51   | 0    | 0   | 1     | 1   | 0   | 0      | 1   | 1   |
| 52   | 0    | 0   | 1     | 1   | 0   | 1      | 0   | 0   |
| 53   | 0    | 0   | 1     | 1   | 0   | 1      | 0   | 1   |
| 54   | 0    | 0   | 1     | 1   | 0   | 1      | 1   | 0   |
| 55   | 0    | 0   | 1     | 1   | 0   | 1      | 1   | 1   |
| 56   | 0    | 0   | 1     | 1   | 1   | 0      | 0   | 0   |
| 57   | 0    | 0   | 1     | 1   | 1   | 0      | 0   | 1   |
| 58   | 0    | 0   | 1     | 1   | 1   | 0      | 1   | 0   |
| 59   | 0    | 0   | 1     | 1   | 1   | 0      | 1   | 1   |
| 60   | 0    | 0   | 1     | 1   | 1   | 1      | 0   | 0   |
| 61   | 0    | 0   | 1     | 1   | 1   | 1      | 0   | 1   |
| 62   | 0    | 0   | 1     | 1   | 1   | 1      | 1   | 0   |
| 63   | 0    | 0   | 1     | 1   | 1   | 1      | 1   | 1   |
| 64   | 0    | 1   | 0     | 0   | 0   | 0      | 0   | 0   |
| 65   | 0    | 1   | 0     | 0   | 0   | 0      | 0   | 1   |
| 66   | 0    | 1   | 0     | 0   | 0   | 0      | 1   | 0   |
| 67   | 0    | 1   | 0     | 0   | 0   | 0      | 1   | 1   |
| 68   | 0    | 1   | 0     | 0   | 0   | 1      | 0   | 0   |
| 69   | 0    | 1   | 0     | 0   | 0   | 1      | 0   | 1   |
| 70   | 0    | 1   | 0     | 0   | 0   | 1      | 1   | 0   |
| 71   | 0    | 1   | 0     | 0   | 0   | 1      | 1   | 1   |
| 72   | 0    | 1   | 0     | 0   | 1   | 0      | 0   | 0   |
| 73   | 0    | 1   | 0     | 0   | 1   | 0      | 0   | 1   |
| 74   | 0    | 1   | 0     | 0   | 1   | 0      | 1   | 0   |
| 75   | 0    | 1   | 0     | 0   | 1   | 0      | 1   | 1   |
| 76   | 0    | 1   | 0     | 0   | 1   | 1      | 0   | 0   |
| 77   | 0    | 1   | 0     | 0   | 1   | 1      | 0   | 1   |
| 78   | 0    | 1   | 0     | 0   | 1   | 1      | 1   | 0   |
| 79   | 0    | 1   | 0     | 0   | 1   | 1      | 1   | 1   |
| 80   | 0    | 1   | 0     | 1   | 0   | 0      | 0   | 0   |
| 81   | 0    | 1   | 0     | 1   | 0   | 0      | 0   | 1   |
| 82   | 0    | 1   | 0     | 1   | 0   | 0      | 1   | 0   |
| 83   | 0    | 1   | 0     | 1   | 0   | 0      | 1   | 1   |
| 84   | 0    | 1   | 0     | 1   | 0   | 1      | 0   | 0   |
| 85   | 0    | 1   | 0     | 1   | 0   | 1      | 0   | 1   |
| 86   | 0    | 1   | 0     | 1   | 0   | 1      | 1   | 0   |
| 87   | 0    | 1   | 0     | 1   | 0   | 1      | 1   | 1   |
| 88   | 0    | 1   | 0     | 1   | 1   | 0      | 0   | 0   |
| 89   | 0    | 1   | 0     | 1   | 1   | 0      | 0   | 1   |
| 90   | 0    | 1   | 0     | 1   | 1   | 0      | 1   | 0   |

| DATA | ACMS | VOL | H/PHO | DVD | SAV | WOOFER | VGA | Q30 |
|------|------|-----|-------|-----|-----|--------|-----|-----|
| 91   | 0    | 1   | 0     | 1   | 1   | 0      | 1   | 1   |
| 92   | 0    | 1   | 0     | 1   | 1   | 1      | 0   | 0   |
| 93   | 0    | 1   | 0     | 1   | 1   | 1      | 0   | 1   |
| 94   | 0    | 1   | 0     | 1   | 1   | 1      | 1   | 0   |
| 95   | 0    | 1   | 1     | 0   | 0   | 1      | 1   | 1   |
| 96   | 0    | 1   | 1     | 0   | 0   | 0      | 0   | 0   |
| 97   | 0    | 1   | 1     | 0   | 0   | 0      | 0   | 1   |
| 98   | 0    | 1   | 1     | 0   | 0   | 0      | 1   | 0   |
| 99   | 0    | 1   | 1     | 0   | 0   | 0      | 1   | 1   |
| 100  | 0    | 1   | 1     | 0   | 0   | 1      | 0   | 0   |
| 101  | 0    | 1   | 1     | 0   | 0   | 1      | 0   | 1   |
| 102  | 0    | 1   | 1     | 0   | 0   | 1      | 1   | 0   |
| 103  | 0    | 1   | 1     | 0   | 1   | 1      | 1   | 1   |
| 104  | 0    | 1   | 1     | 0   | 1   | 0      | 0   | 0   |
| 105  | 0    | 1   | 1     | 0   | 1   | 0      | 0   | 1   |
| 106  | 0    | 1   | 1     | 0   | 1   | 0      | 1   | 0   |
| 107  | 0    | 1   | 1     | 0   | 1   | 0      | 1   | 1   |
| 108  | 0    | 1   | 1     | 0   | 1   | 1      | 0   | 0   |
| 109  | 0    | 1   | 1     | 0   | 1   | 1      | 0   | 1   |
| 110  | 0    | 1   | 1     | 0   | 1   | 1      | 1   | 0   |
| 111  | 0    | 1   | 1     | 0   | 0   | 1      | 1   | 1   |
| 112  | 0    | 1   | 1     | 1   | 0   | 0      | 0   | 0   |
| 113  | 0    | 1   | 1     | 1   | 0   | 0      | 0   | 1   |
| 114  | 0    | 1   | 1     | 1   | 0   | 0      | 1   | 0   |
| 115  | 0    | 1   | 1     | 1   | 0   | 0      | 1   | 1   |
| 116  | 0    | 1   | 1     | 1   | 0   | 1      | 0   | 0   |
| 117  | 0    | 1   | 1     | 1   | 0   | 1      | 0   | 1   |
| 118  | 0    | 1   | 1     | 1   | 0   | 1      | 1   | 0   |
| 119  | 0    | 1   | 1     | 1   | 1   | 1      | 1   | 1   |
| 120  | 0    | 1   | 1     | 1   | 1   | 0      | 0   | 0   |
| 121  | 0    | 1   | 1     | 1   | 1   | 0      | 0   | 1   |
| 122  | 0    | 1   | 1     | 1   | 1   | 0      | 1   | 0   |
| 123  | 0    | 1   | 1     | 1   | 1   | 0      | 1   | 1   |
| 124  | 0    | 1   | 1     | 1   | 1   | 1      | 0   | 0   |
| 125  | 0    | 1   | 1     | 1   | 1   | 1      | 0   | 1   |
| 126  | 0    | 1   | 1     | 1   | 1   | 1      | 1   | 0   |
| 127  | 0    | 1   | 1     | 1   | 0   | 1      | 1   | 1   |
| 128  | 1    | 0   | 0     | 0   | 0   | 0      | 0   | 0   |
| 129  | 1    | 0   | 0     | 0   | 0   | 0      | 0   | 1   |
| 130  | 1    | 0   | 0     | 0   | 0   | 0      | 1   | 0   |
| 131  | 1    | 0   | 0     | 0   | 0   | 0      | 1   | 1   |
| 132  | 1    | 0   | 0     | 0   | 0   | 1      | 0   | 0   |
| 133  | 1    | 0   | 0     | 0   | 0   | 1      | 0   | 1   |
| 134  | 1    | 0   | 0     | 0   | 0   | 1      | 1   | 0   |
| 135  | 1    | 0   | 0     | 0   | 1   | 1      | 1   | 1   |
| 136  | 1    | 0   | 0     | 0   | 1   | 0      | 0   | 0   |

| DATA | ACMS | VOL | H/PHO | DVD | SAV | WOOFER | VGA | Q30 |
|------|------|-----|-------|-----|-----|--------|-----|-----|
| 137  | 1    | 0   | 0     | 0   | 1   | 0      | 0   | 1   |
| 138  | 1    | 0   | 0     | 0   | 1   | 0      | 1   | 0   |
| 139  | 1    | 0   | 0     | 0   | 1   | 0      | 1   | 1   |
| 140  | 1    | 0   | 0     | 0   | 1   | 1      | 0   | 0   |
| 141  | 1    | 0   | 0     | 0   | 1   | 1      | 0   | 1   |
| 142  | 1    | 0   | 0     | 0   | 1   | 1      | 1   | 0   |
| 143  | 1    | 0   | 0     | 0   | 1   | 1      | 1   | 1   |
| 144  | 1    | 0   | 0     | 1   | 0   | 0      | 0   | 0   |
| 145  | 1    | 0   | 0     | 1   | 0   | 0      | 0   | 1   |
| 146  | 1    | 0   | 0     | 1   | 0   | 0      | 1   | 0   |
| 147  | 1    | 0   | 0     | 1   | 0   | 0      | 1   | 1   |
| 148  | 1    | 0   | 0     | 1   | 0   | 1      | 0   | 0   |
| 149  | 1    | 0   | 0     | 1   | 0   | 1      | 0   | 1   |
| 150  | 1    | 0   | 0     | 1   | 0   | 1      | 1   | 0   |
| 151  | 1    | 0   | 0     | 1   | 0   | 1      | 1   | 1   |
| 152  | 1    | 0   | 0     | 1   | 1   | 0      | 0   | 0   |
| 153  | 1    | 0   | 0     | 1   | 1   | 0      | 0   | 1   |
| 154  | 1    | 0   | 0     | 1   | 1   | 0      | 1   | 0   |
| 155  | 1    | 0   | 0     | 1   | 1   | 0      | 1   | 1   |
| 156  | 1    | 0   | 0     | 1   | 1   | 1      | 0   | 0   |
| 157  | 1    | 0   | 0     | 1   | 1   | 1      | 0   | 1   |
| 158  | 1    | 0   | 0     | 1   | 1   | 1      | 1   | 0   |
| 159  | 1    | 0   | 0     | 1   | 1   | 1      | 1   | 1   |
| 160  | 1    | 0   | 1     | 0   | 0   | 0      | 0   | 0   |
| 161  | 1    | 0   | 1     | 0   | 0   | 0      | 0   | 1   |
| 162  | 1    | 0   | 1     | 0   | 0   | 0      | 1   | 0   |
| 163  | 1    | 0   | 1     | 0   | 0   | 0      | 1   | 1   |
| 164  | 1    | 0   | 1     | 0   | 0   | 1      | 0   | 0   |
| 165  | 1    | 0   | 1     | 0   | 0   | 1      | 0   | 1   |
| 166  | 1    | 0   | 1     | 0   | 0   | 1      | 1   | 0   |
| 167  | 1    | 0   | 1     | 0   | 0   | 1      | 1   | 1   |
| 168  | 1    | 0   | 1     | 0   | 1   | 0      | 0   | 0   |
| 169  | 1    | 0   | 1     | 0   | 1   | 0      | 0   | 1   |
| 170  | 1    | 0   | 1     | 0   | 1   | 0      | 1   | 0   |
| 171  | 1    | 0   | 1     | 0   | 1   | 0      | 1   | 1   |
| 172  | 1    | 0   | 1     | 0   | 1   | 1      | 0   | 0   |
| 173  | 1    | 0   | 1     | 0   | 1   | 1      | 0   | 1   |
| 174  | 1    | 0   | 1     | 0   | 1   | 1      | 1   | 0   |
| 175  | 1    | 0   | 1     | 0   | 1   | 1      | 1   | 1   |
| 176  | 1    | 0   | 1     | 1   | 0   | 0      | 0   | 0   |
| 177  | 1    | 0   | 1     | 1   | 0   | 0      | 0   | 1   |
| 178  | 1    | 0   | 1     | 1   | 0   | 0      | 1   | 0   |
| 179  | 1    | 0   | 1     | 1   | 0   | 0      | 1   | 1   |
| 180  | 1    | 0   | 1     | 1   | 0   | 1      | 0   | 0   |
| 181  | 1    | 0   | 1     | 1   | 0   | 1      | 0   | 1   |
| 182  | 1    | 0   | 1     | 1   | 0   | 1      | 1   | 0   |

| DATA | ACMS | VOL | H/PHO | DVD | SAV | WOOFER | VGA | Q30 |
|------|------|-----|-------|-----|-----|--------|-----|-----|
| 183  | 1    | 0   | 1     | 1   | 0   | 1      | 1   | 1   |
| 184  | 1    | 0   | 1     | 1   | 1   | 0      | 0   | 0   |
| 185  | 1    | 0   | 1     | 1   | 1   | 0      | 0   | 1   |
| 186  | 1    | 0   | 1     | 1   | 1   | 0      | 1   | 0   |
| 187  | 1    | 0   | 1     | 1   | 1   | 0      | 1   | 1   |
| 188  | 1    | 0   | 1     | 1   | 1   | 1      | 0   | 0   |
| 189  | 1    | 0   | 1     | 1   | 1   | 1      | 0   | 1   |
| 190  | 1    | 0   | 1     | 1   | 1   | 1      | 1   | 0   |
| 191  | 1    | 0   | 1     | 1   | 1   | 1      | 1   | 1   |
| 192  | 1    | 1   | 0     | 0   | 0   | 0      | 0   | 0   |
| 193  | 1    | 1   | 0     | 0   | 0   | 0      | 0   | 1   |
| 194  | 1    | 1   | 0     | 0   | 0   | 0      | 1   | 0   |
| 195  | 1    | 1   | 0     | 0   | 0   | 0      | 1   | 1   |
| 196  | 1    | 1   | 0     | 0   | 0   | 1      | 0   | 0   |
| 197  | 1    | 1   | 0     | 0   | 0   | 1      | 0   | 1   |
| 198  | 1    | 1   | 0     | 0   | 0   | 1      | 1   | 0   |
| 199  | 1    | 1   | 0     | 0   | 0   | 1      | 1   | 1   |
| 200  | 1    | 1   | 0     | 0   | 1   | 0      | 0   | 0   |
| 201  | 1    | 1   | 0     | 0   | 1   | 0      | 0   | 1   |
| 202  | 1    | 1   | 0     | 0   | 1   | 0      | 1   | 0   |
| 203  | 1    | 1   | 0     | 0   | 1   | 0      | 1   | 1   |
| 204  | 1    | 1   | 0     | 0   | 1   | 1      | 0   | 0   |
| 205  | 1    | 1   | 0     | 0   | 1   | 1      | 0   | 1   |
| 206  | 1    | 1   | 0     | 0   | 1   | 1      | 1   | 0   |
| 207  | 1    | 1   | 0     | 0   | 1   | 1      | 1   | 1   |
| 208  | 1    | 1   | 0     | 1   | 0   | 0      | 0   | 0   |
| 209  | 1    | 1   | 0     | 1   | 0   | 0      | 0   | 1   |
| 210  | 1    | 1   | 0     | 1   | 0   | 0      | 1   | 0   |
| 211  | 1    | 1   | 0     | 1   | 0   | 0      | 1   | 1   |
| 212  | 1    | 1   | 0     | 1   | 0   | 1      | 0   | 0   |
| 213  | 1    | 1   | 0     | 1   | 0   | 1      | 0   | 1   |
| 214  | 1    | 1   | 0     | 1   | 0   | 1      | 1   | 0   |
| 215  | 1    | 1   | 0     | 1   | 1   | 1      | 1   | 1   |
| 216  | 1    | 1   | 0     | 1   | 1   | 0      | 0   | 0   |
| 217  | 1    | 1   | 0     | 1   | 1   | 0      | 0   | 1   |
| 218  | 1    | 1   | 0     | 1   | 1   | 0      | 1   | 0   |
| 219  | 1    | 1   | 0     | 1   | 1   | 0      | 1   | 1   |
| 220  | 1    | 1   | 0     | 1   | 1   | 1      | 0   | 0   |
| 221  | 1    | 1   | 0     | 1   | 1   | 1      | 0   | 1   |
| 222  | 1    | 1   | 0     | 1   | 1   | 1      | 1   | 0   |
| 223  | 1    | 1   | 1     | 0   | 0   | 1      | 1   | 1   |
| 224  | 1    | 1   | 1     | 0   | 0   | 0      | 0   | 0   |
| 225  | 1    | 1   | 1     | 0   | 0   | 0      | 0   | 1   |
| 226  | 1    | 1   | 1     | 0   | 0   | 0      | 1   | 0   |
| 227  | 1    | 1   | 1     | 0   | 0   | 0      | 1   | 1   |
| 228  | 1    | 1   | 1     | 0   | 0   | 1      | 0   | 0   |

| DATA | ACMS | VOL | H/PHO | DVD | SAV | WOOFER | VGA | Q30 |
|------|------|-----|-------|-----|-----|--------|-----|-----|
| 229  | 1    | 1   | 1     | 0   | 0   | 1      | 0   | 1   |
| 230  | 1    | 1   | 1     | 0   | 0   | 1      | 1   | 0   |
| 231  | 1    | 1   | 1     | 0   | 0   | 1      | 1   | 1   |
| 232  | 1    | 1   | 1     | 0   | 1   | 0      | 0   | 0   |
| 233  | 1    | 1   | 1     | 0   | 1   | 0      | 0   | 1   |
| 234  | 1    | 1   | 1     | 0   | 1   | 0      | 1   | 0   |
| 235  | 1    | 1   | 1     | 0   | 1   | 0      | 1   | 1   |
| 236  | 1    | 1   | 1     | 0   | 1   | 1      | 0   | 0   |
| 237  | 1    | 1   | 1     | 0   | 1   | 1      | 0   | 1   |
| 238  | 1    | 1   | 1     | 0   | 1   | 1      | 1   | 0   |
| 239  | 1    | 1   | 1     | 0   | 1   | 1      | 1   | 1   |
| 240  | 1    | 1   | 1     | 1   | 0   | 0      | 0   | 0   |
| 241  | 1    | 1   | 1     | 1   | 0   | 0      | 0   | 1   |
| 242  | 1    | 1   | 1     | 1   | 0   | 0      | 1   | 0   |
| 243  | 1    | 1   | 1     | 1   | 0   | 0      | 1   | 1   |
| 244  | 1    | 1   | 1     | 1   | 0   | 1      | 0   | 0   |
| 245  | 1    | 1   | 1     | 1   | 0   | 1      | 0   | 1   |
| 246  | 1    | 1   | 1     | 1   | 0   | 1      | 1   | 0   |
| 247  | 1    | 1   | 1     | 1   | 0   | 1      | 1   | 1   |
| 248  | 1    | 1   | 1     | 1   | 1   | 0      | 0   | 0   |
| 249  | 1    | 1   | 1     | 1   | 1   | 0      | 0   | 1   |
| 250  | 1    | 1   | 1     | 1   | 1   | 0      | 1   | 0   |
| 251  | 1    | 1   | 1     | 1   | 1   | 0      | 1   | 1   |
| 252  | 1    | 1   | 1     | 1   | 1   | 1      | 0   | 0   |
| 253  | 1    | 1   | 1     | 1   | 1   | 1      | 0   | 1   |
| 254  | 1    | 1   | 1     | 1   | 1   | 1      | 1   | 0   |
| 255  | 1    | 1   | 1     | 1   | 1   | 1      | 1   | 1   |

**Table 5. OPTION 3 Function**

| Option | Code | Function                | Remark |
|--------|------|-------------------------|--------|
| WIDE   | 0    | 4:3 TV                  |        |
|        | 1    | 16:9 TV                 |        |
| EU     | 0    | NON EU                  |        |
|        | 1    | EU                      |        |
| CH+AU  | 0    | Without D/K CHINA or BB |        |
|        | 1    | With D/K CHINA or BB    |        |

**Table 6. OPTION 3 CODE Data**

| DATA | WIDE | EU | CH+AU | DATA | WIDE | EU | CH+AU |
|------|------|----|-------|------|------|----|-------|
| 0    | 0    | 0  | 0     | 192  | 1    | 1  | 0     |
| 32   | 0    | 0  | 1     | 224  | 1    | 1  | 1     |
| 64   | 0    | 1  | 0     |      |      |    |       |
| 96   | 0    | 1  | 1     |      |      |    |       |
| 128  | 1    | 0  | 0     |      |      |    |       |
| 160  | 1    | 0  | 1     |      |      |    |       |



**Table 7. OPTION 4 Funtion**

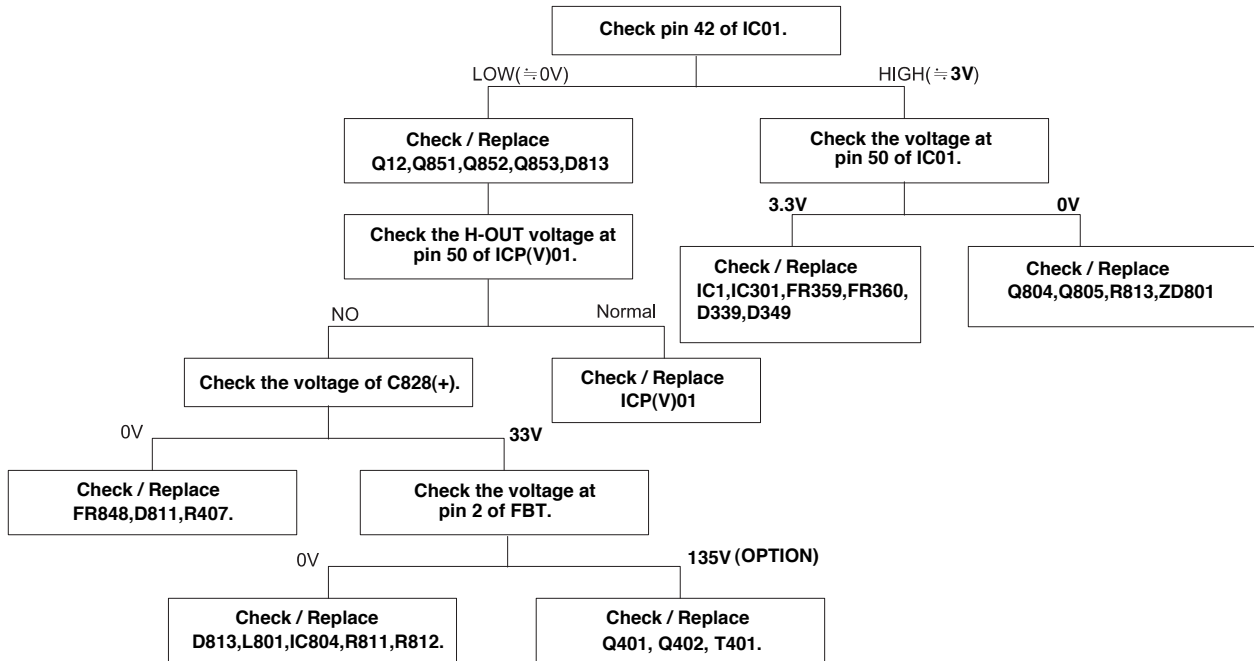
| OPTION | CODE | Language                | Funciton                                                                                        |
|--------|------|-------------------------|-------------------------------------------------------------------------------------------------|
| LANG   | 0    | E Only                  | English                                                                                         |
|        | 1    | English+EU 4            | English/German/French/Italian/Spanish                                                           |
|        | 2    | English+Other EU        | English/Dutch/Swedish/Norwegian/Danish/Swiss/Portuguess/Romanian/Polish/Hungarian/Czech/Russian |
|        | 3    | English+FARSI           | English/Farsi                                                                                   |
|        | 4    | English+Arab+URDU       | English/French/Arab+Urdu                                                                        |
|        | 5    | English+India           | English/Swedish/Norwegian/Danish/Finish                                                         |
|        | 6    | English+East-South Asia | English/Indonesian/Malaysian/Vietnamese                                                         |
|        | 7    | English+THAI            | English/Thai                                                                                    |
|        | 8    | English+China           | English/China                                                                                   |
| T LAN  | 0    | West Europe             | English/French/Swedish/Czech/German/Spanish/Itallian                                            |
|        | 1    | East Europe             | Polish/Fench/Swedish/Czech/German/Slovenian/Italian/Romanian                                    |
|        | 2    | Turkey                  | English/French/Swedish/Turkish/German/Spanish/Itallian                                          |
|        | 3    | Czecho/Hungary          | English/Hungarian/Serbian/Czech/German/Polish/Spanish/Itallian/Romanian                         |
|        | 4    | Cyrillic 1              |                                                                                                 |
|        | 5    | Cyrillic 2              |                                                                                                 |
|        | 6    | Cyrillic 3              |                                                                                                 |
|        | 7    | Turkey/Greek 1          |                                                                                                 |
|        | 8    | Turkey/Greek 2          |                                                                                                 |
|        | 9    | Turkey/Greek 3          |                                                                                                 |
|        | 10   | Arab/France             |                                                                                                 |
|        | 11   | Arab/English            |                                                                                                 |
|        | 12   | Arab/Hebrew 1           |                                                                                                 |
|        | 13   | Arab/Hebrew 2           |                                                                                                 |
|        | 14   | Farsi/English           |                                                                                                 |
|        | 15   | Farsi/France            |                                                                                                 |
|        | 16   | Farsi all               |                                                                                                 |

**Table 8. OPTION 4 Code Data**

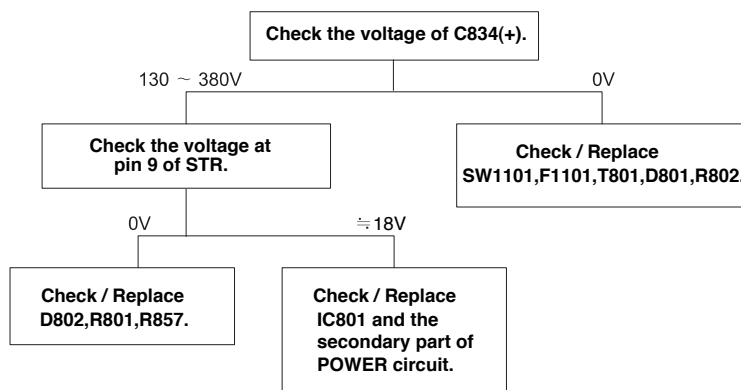
|      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| DATA | LANG | TLAN | DATA | LANG | TLAN | DATA | LANG | TLAN | DATA | LANG | TLAN | DATA | LANG | TLAN |
| 000  | 0    | 0    | 203  | 2    | 3    | 406  | 4    | 6    | 609  | 6    | 9    | 812  | 8    | 12   |
| 001  | 0    | 1    | 204  | 2    | 4    | 407  | 4    | 7    | 610  | 6    | 10   | 813  | 8    | 13   |
| 002  | 0    | 2    | 205  | 2    | 5    | 408  | 4    | 8    | 611  | 6    | 11   | 814  | 8    | 14   |
| 003  | 0    | 3    | 206  | 2    | 6    | 409  | 4    | 9    | 612  | 6    | 12   | 815  | 8    | 15   |
| 004  | 0    | 4    | 207  | 2    | 7    | 410  | 4    | 10   | 613  | 6    | 13   | 816  | 8    | 16   |
| 005  | 0    | 5    | 208  | 2    | 8    | 411  | 4    | 11   | 614  | 6    | 14   |      |      |      |
| 006  | 0    | 6    | 209  | 2    | 9    | 412  | 4    | 12   | 615  | 6    | 15   |      |      |      |
| 007  | 0    | 7    | 210  | 2    | 10   | 413  | 4    | 13   | 616  | 6    | 16   |      |      |      |
| 008  | 0    | 8    | 211  | 2    | 11   | 414  | 4    | 14   | 700  | 7    | 0    |      |      |      |
| 009  | 0    | 9    | 212  | 2    | 12   | 415  | 4    | 15   | 701  | 7    | 1    |      |      |      |
| 010  | 0    | 10   | 213  | 2    | 13   | 416  | 4    | 16   | 702  | 7    | 2    |      |      |      |
| 011  | 0    | 11   | 214  | 2    | 14   | 500  | 5    | 0    | 703  | 7    | 3    |      |      |      |
| 012  | 0    | 12   | 215  | 2    | 15   | 501  | 5    | 1    | 704  | 7    | 4    |      |      |      |
| 013  | 0    | 13   | 216  | 2    | 16   | 502  | 5    | 2    | 705  | 7    | 5    |      |      |      |
| 014  | 0    | 14   | 300  | 3    | 0    | 503  | 5    | 3    | 706  | 7    | 6    |      |      |      |
| 015  | 0    | 15   | 301  | 3    | 1    | 504  | 5    | 4    | 707  | 7    | 7    |      |      |      |
| 016  | 0    | 16   | 302  | 3    | 2    | 505  | 5    | 5    | 708  | 7    | 8    |      |      |      |
| 100  | 1    | 0    | 303  | 3    | 3    | 506  | 5    | 6    | 709  | 7    | 9    |      |      |      |
| 101  | 1    | 1    | 304  | 3    | 4    | 507  | 5    | 7    | 710  | 7    | 10   |      |      |      |
| 102  | 1    | 2    | 305  | 3    | 5    | 508  | 5    | 8    | 711  | 7    | 11   |      |      |      |
| 103  | 1    | 3    | 306  | 3    | 6    | 509  | 5    | 9    | 712  | 7    | 12   |      |      |      |
| 104  | 1    | 4    | 307  | 3    | 7    | 510  | 5    | 10   | 713  | 7    | 13   |      |      |      |
| 105  | 1    | 5    | 308  | 3    | 8    | 511  | 5    | 11   | 714  | 7    | 14   |      |      |      |
| 106  | 1    | 6    | 309  | 3    | 9    | 512  | 5    | 12   | 715  | 7    | 15   |      |      |      |
| 107  | 1    | 7    | 310  | 3    | 10   | 513  | 5    | 13   | 716  | 7    | 16   |      |      |      |
| 108  | 1    | 8    | 311  | 3    | 11   | 514  | 5    | 14   | 800  | 8    | 0    |      |      |      |
| 109  | 1    | 9    | 312  | 3    | 12   | 515  | 5    | 15   | 801  | 8    | 1    |      |      |      |
| 110  | 1    | 10   | 313  | 3    | 13   | 516  | 5    | 16   | 802  | 8    | 2    |      |      |      |
| 111  | 1    | 11   | 314  | 3    | 14   | 600  | 6    | 0    | 803  | 8    | 3    |      |      |      |
| 112  | 1    | 12   | 315  | 3    | 15   | 601  | 6    | 1    | 804  | 8    | 4    |      |      |      |
| 113  | 1    | 13   | 316  | 3    | 16   | 602  | 6    | 2    | 805  | 8    | 5    |      |      |      |
| 114  | 1    | 14   | 400  | 4    | 0    | 603  | 6    | 3    | 806  | 8    | 6    |      |      |      |
| 115  | 1    | 15   | 401  | 4    | 1    | 604  | 6    | 4    | 807  | 8    | 7    |      |      |      |
| 116  | 1    | 16   | 402  | 4    | 2    | 605  | 6    | 5    | 808  | 8    | 8    |      |      |      |
| 200  | 2    | 0    | 403  | 4    | 3    | 606  | 6    | 6    | 809  | 8    | 9    |      |      |      |
| 201  | 2    | 1    | 404  | 4    | 4    | 607  | 6    | 7    | 810  | 8    | 10   |      |      |      |
| 202  | 2    | 2    | 405  | 4    | 5    | 608  | 6    | 8    | 811  | 8    | 11   |      |      |      |

# Trouble Shooting

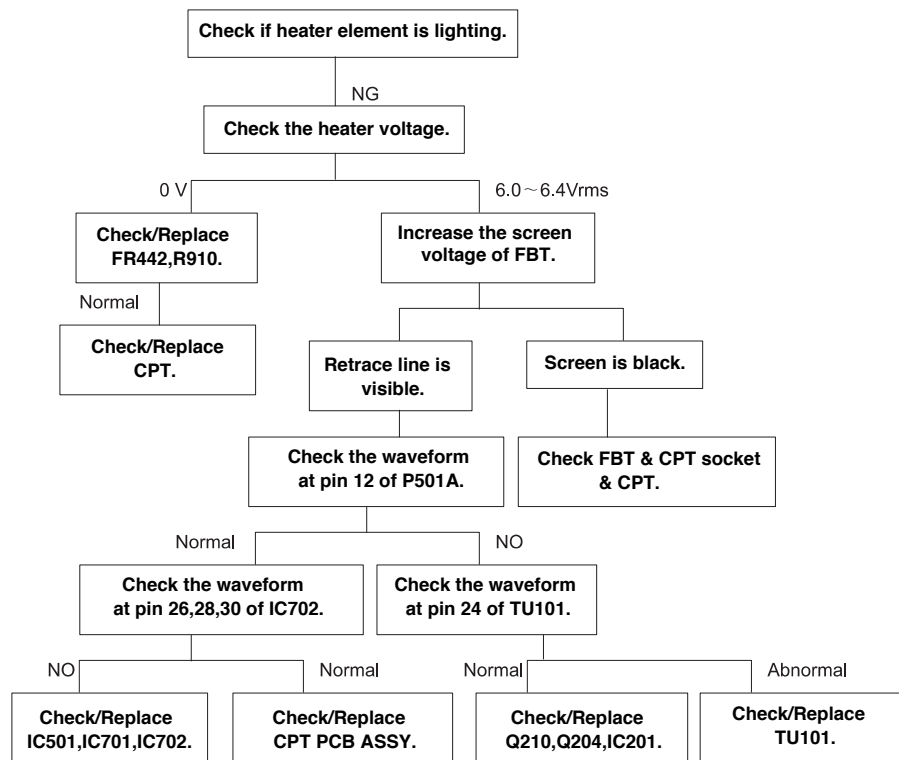
## NO POWER ON BUT SMPS WORKING



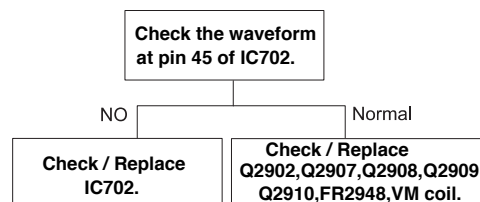
## NO POWER (NOT WORKING SMPS)



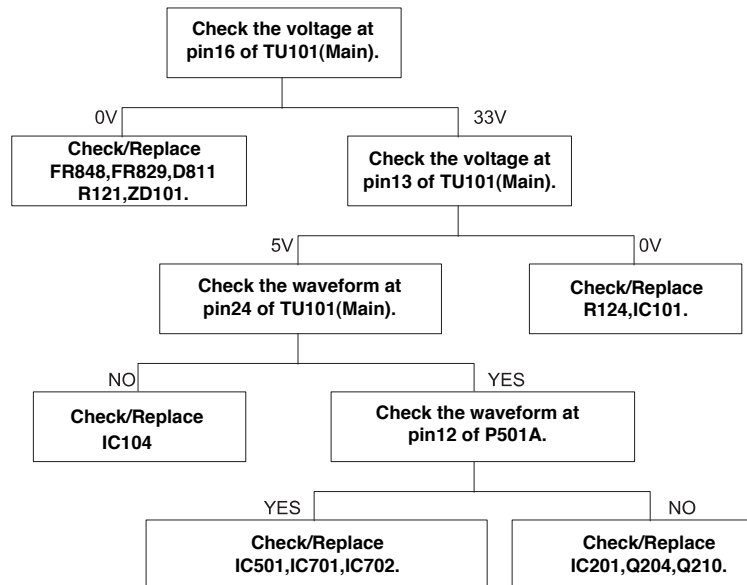
## NO RASTER & PICTURE ( H-OUT OK)



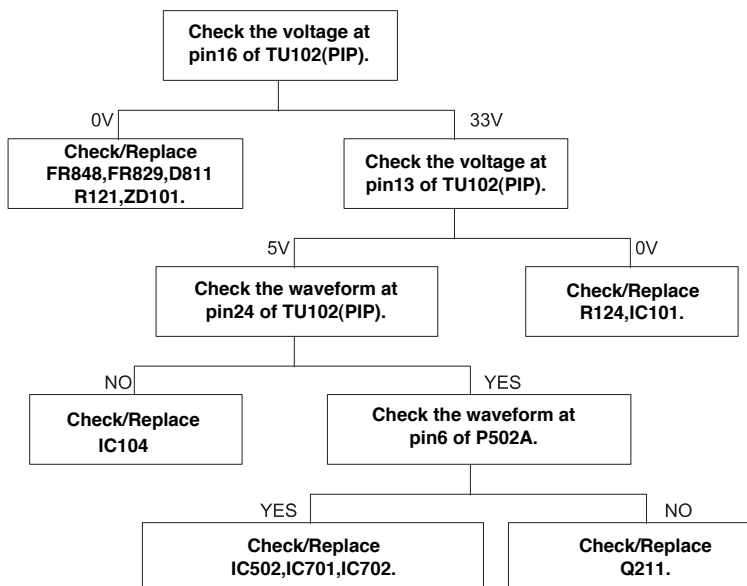
## VM DON'T WORKING



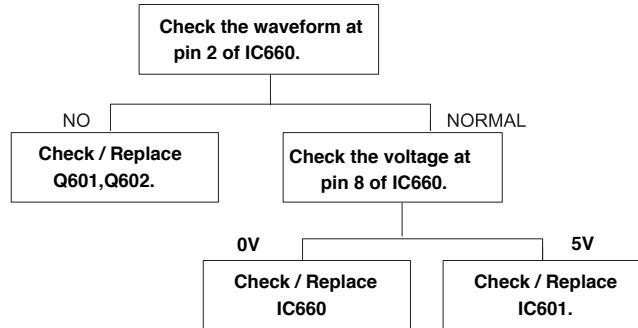
## DON'T CATCH CHANNEL(MAIN)



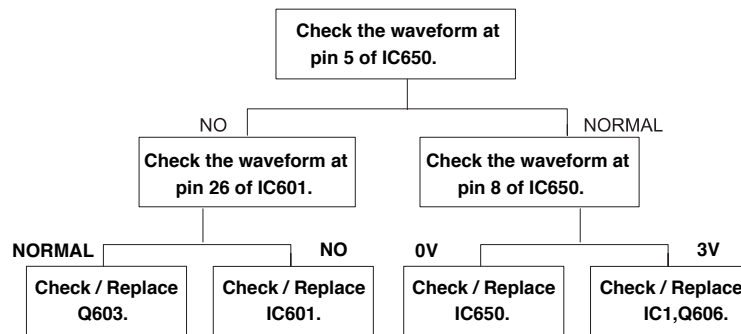
## NO PIP / NO DOUBLE WINDOW



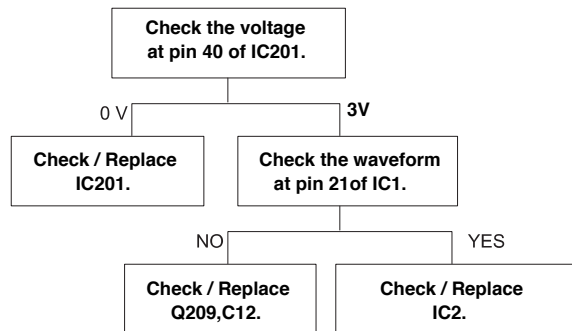
## NO CENTER SPEAKER SOUND (BUT MAIN SOUND OK)



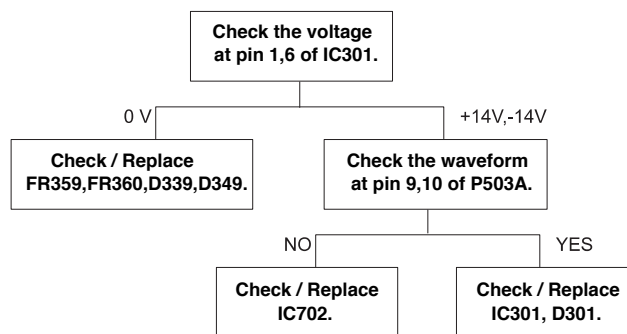
## NO WOOFER SPEAKER SOUND (BUT MAIN SOUND OK)



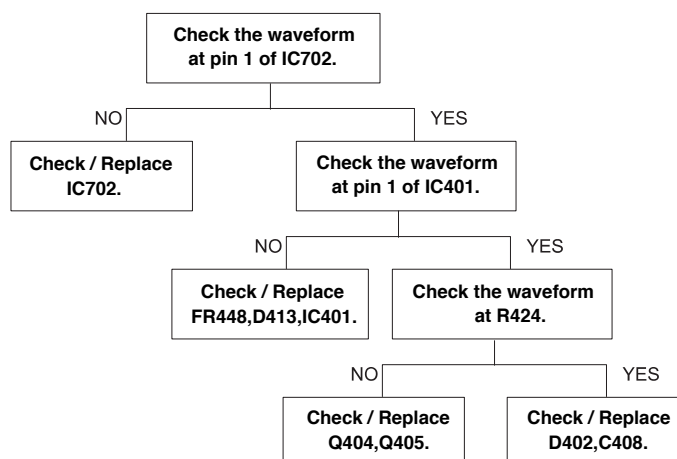
## NO TELETEXT



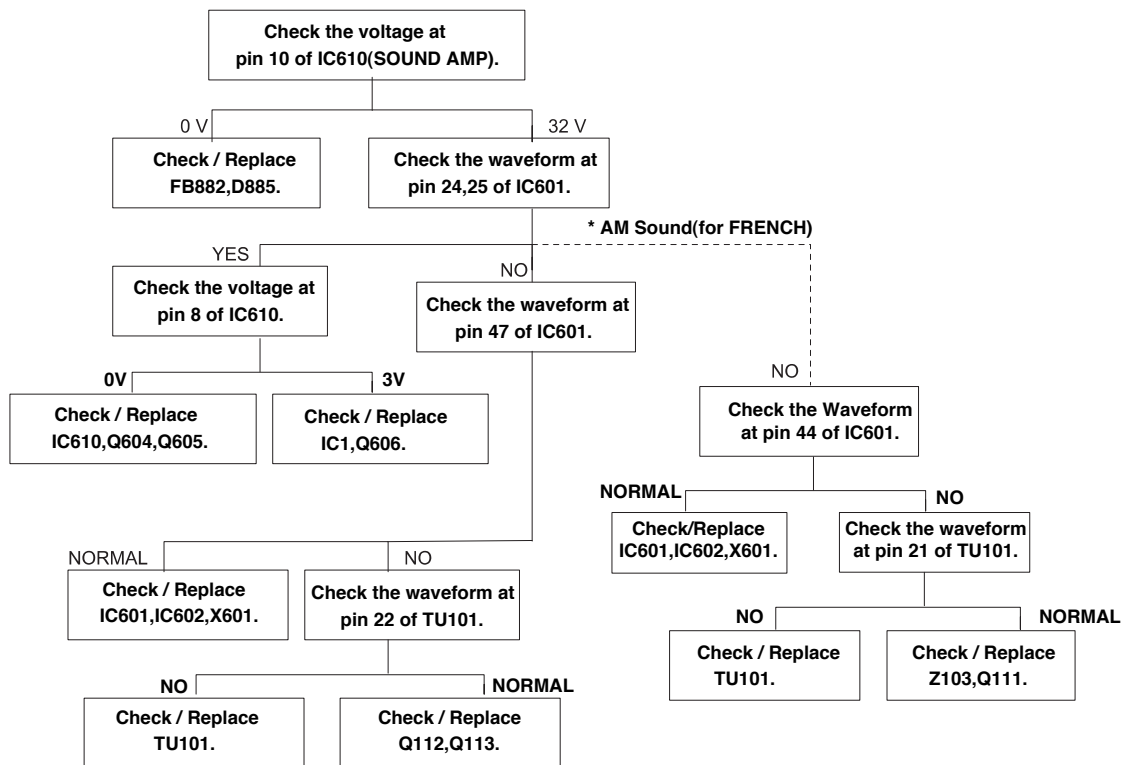
## NO VERTICAL DEFLECTION



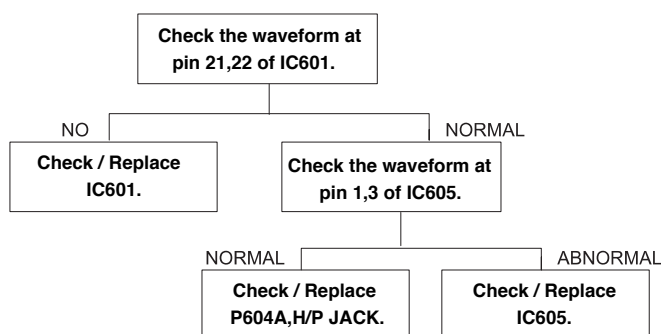
## BARREL DISTORTION



## NO FRONT L,R SPEAKER SOUND(PICTURE OK)

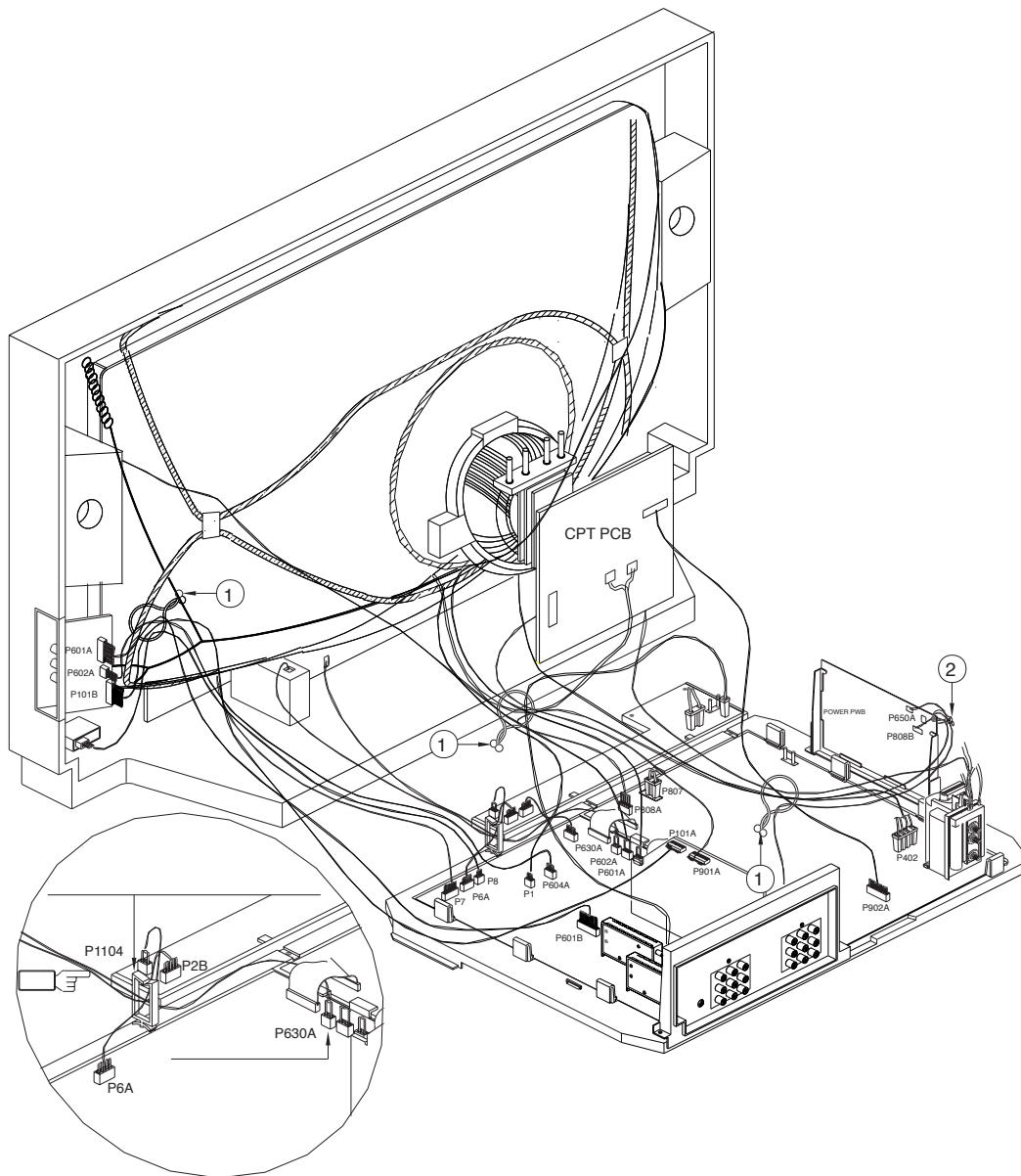


## NO SOUND FROM H/P jack(OPTION) (but Main Sound OK)

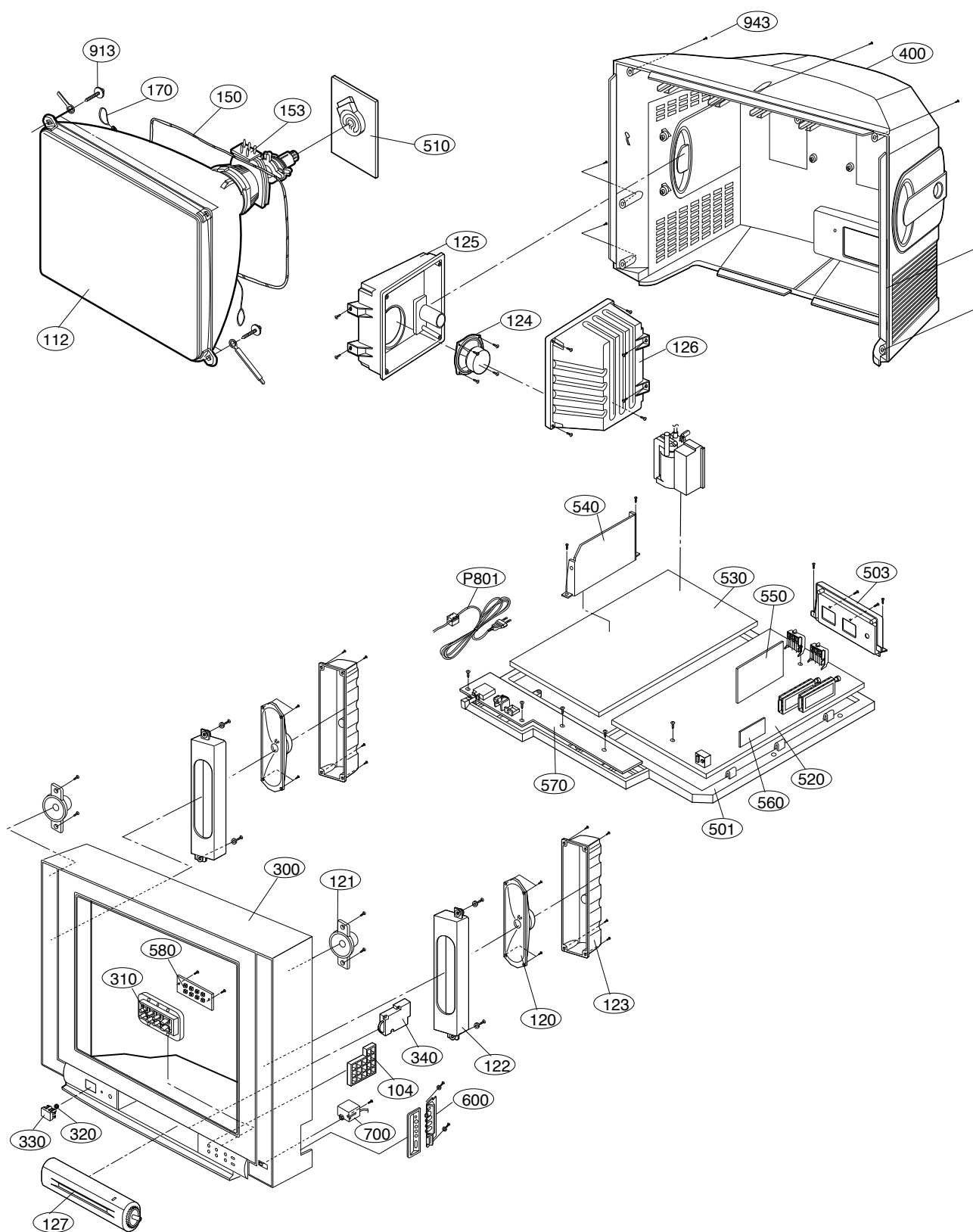




## Wiring Diagram



# 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  | 6341V29005A | BARE CPT ASSY,2426GF239AT 100HZ DY      |
| 120           | 6400VA0025A | SPEAKER,GENERAL 8 OHM 15/25             |
| 121           | 6400VG0002A | SPEAKER,TWEETER 8 OHM 10                |
| 122           | 3110V00084A | CASE,MIDDLE SPEAKER                     |
| 123           | 3550V00117A | COVER,MIDDLE SPEAKER                    |
| 124           | 120-C78G    | SPEAKER,WOOFER C130R06K1457 8 OHM 10W/  |
| 125           | 3110V00080C | CASE,SPK WOOFER                         |
| 126           | 3550V00103C | COVER,WOOFER                            |
| 127           | 6401VF0035B | SPEAKER ASSY,DOME CENTER                |
| $\Delta$ 150  | 150-201S    | COIL,DEGAUSSING CU 29" 440TURN 102 OHM  |
| $\Delta$ 153  | 6150Z-1340F | DY DC29SLFL2                            |
| $\Delta$ 170  | 170-844K    | CPT EARTH 29" 98T 4LUG                  |
| 300           | 3091V00281B | CABINET ASSY                            |
| 310           | 5020V00427A | BUTTON,CONTROL 8KEY                     |
| 320           | 320-070G    | SPRING,COIL                             |
| 330           | 5020V00426A | BUTTON,POWER                            |
| 340           | 4470V00019A | GEAR ASSY, MOVING CTR SPK               |
| 400           | 3809V00207M | BACK COVER ASSY                         |
| 501           | 4810V00259A | BRACKET,MAIN MC-006A                    |
| 503           | 4810V00261B | BRACKET,REAR A/V HIPS 2 SCART,1 SCART   |
| 510           | 6871VSM738A | PWB ASSY,CPT MC006A CPT&VM              |
| 520           | 6871VMM637H | PWB ASSY,MAIN 006A                      |
| 530           | 6871VDM113G | PWB ASSY,MAIN2 006A LG29Q90ID,W/ST-BY,N |
| 540           | 6871VSM815C | PWB ASSY,006A 29"N-RANGE                |
| 550           | 6871VSM617A | PWB ASSY,DIGIT MC006A 100HZ BOD.        |
| 560           | 6871VSM694A | PWB ASSY,MEMORY                         |
| 570           | 6871VSM685A | PWB ASSY,MC006A CONTROL                 |
| 580           | 6871VSM686A | PWB ASSY,TACT-SWITCH                    |
| 600           | 6871VSM620C | PWB ASSY,006A CE29Q90 SIDE-AV           |
| 700           | 0IGL120104A | IC,CDS SENSOR MODULE(P1201-04)          |
| 913           | 332-229N    | SCREW,DRAWING D7.0 L45.0 MSWR3          |
| 943           | 1PTF0403116 | SCREW,TAP TITE(P)D4.0 L16.0             |
| $\Delta$ P801 | 174-322D    | POWER CORD W/FILTER L=300(179B)VDE      |

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

## REPLACEMENT PARTS LIST

| LOCA. NO       | PART NO     | DESCRIPTION                        | LOCA. NO | PART NO     | DESCRIPTION                            |
|----------------|-------------|------------------------------------|----------|-------------|----------------------------------------|
| <b>IC</b>      |             |                                    |          |             |                                        |
| D813           | 0ISK100300A | IC,SLA1003 SIP12 BK DIODE MODULE(  | D308     | 0DD100009AQ | DIODE,RP1HV(1) TP SANKEN TP SANKEN     |
| IC1            | 0ISM555000A | IC,SDA5550 MQFP100 BK MICOM TXT M  | D339     | 0DD200009AF | DIODE,RECTIFIER RU2M V(1) TP SANKEN    |
| IC2            | 0ISS610082A | IC,K6T1008V2E-TB(F)70 [K6T1008BLT  | D349     | 0DD200009AF | DIODE,RECTIFIER RU2M V(1) TP SANKEN    |
| IC3            | 0IZZVC0010A | IC,M27W201(006A) . ST EPROM+LABEL  | D402     | 0DD300000AD | DIODE,RECTIFIER FMS-3FU SANKEN         |
| IC04           | 0IAL241610B | IC,AT24C16-10PC-2.7 8PIN DIP ST E  | D410     | 0DD150009CA | DIODE,RECTIFIER RGP15J,TP(52MM),GI     |
| IC05           | 0IFA752700A | IC,KA75270Z 3 TP RE-SET IC MC-007  | D411     | 0DD060009AC | DIODE,TVR06J 0.6A/600V 250NS TP G.I    |
| IC6            | 0IFA754207A | IC,KA75420ZTA(KA7542ZTA) 3P,TO-92  | D413     | 0DD150009CC | DIODE,RECTIFIER RGP15G,TP(52MM),GI     |
| IC7            | 0ISA164500B | IC,LB1645N 10SIP BK MOTOR DRIVE I  | D414     | 0DD100009AE | DIODE,RECTIFIER RU1A V(1) TP SANKEN    |
| IC8            | 0ISG111725B | IC,LD1117V25 3 SIP ST REGULATOR M  | D425     | 0DS113379BA | DIODE,SWITCHING 1SS133 T-72 TP         |
| IC9            | 0ISG111733B | IC,LD1117V33C 3SIP ST REGULATOR    | D601     | 0DS113379BA | DIODE,SWITCHING 1SS133 T-72 TP         |
| IC101          | 0IKE780500Q | IC,KIA7805API 3P TO-220 ST REGULA  | D602     | 0DS113379BA | DIODE,SWITCHING 1SS133 T-72 TP         |
| IC301          | 0ISA784500A | IC,LA7845 7SIP V/OUT(1.5A)         | D603     | 0DS113379BA | DIODE,SWITCHING 1SS133 T-72 TP         |
| IC104          | 0IMI623200B | IC,M62320FP,I/O EXPANDER 16P SOP   | D604     | 0DS113379BA | DIODE,SWITCHING 1SS133 T-72 TP         |
| IC201          | 0ISO208900A | IC,CXA2089Q 48QFP BK A/V SWITCH    | D606     | 0DS113379BA | DIODE,SWITCHING 1SS133 T-72 TP         |
| IC302          | 0IKE455800E | IC,KIA4558 8DIP DUAL OP AMP        | D607     | 0DD226239AA | DIODE,SWITCHING CHIP KDS226 SOT-23     |
| IC401          | 0IKE455800E | IC,KIA4558 8DIP DUAL OP AMP        | D608     | 0DD226239AA | DIODE,SWITCHING CHIP KDS226 SOT-23     |
| IC501          | 0IIT323000C | IC,VPC3230D-QA-B3 80P PQFP BK COM  | D609     | 0DD226239AA | DIODE,SWITCHING CHIP KDS226 SOT-23     |
| IC502          | 0IIT323000C | IC,VPC3230D-QA-B3 80P PQFP BK COM  | D610     | 0DD226239AA | DIODE,SWITCHING CHIP KDS226 SOT-23     |
| IC504          | 0ISH323422A | IC,PQ3RF23 4P(TO-220) 3.3V REGUL   | D630     | 0DS113379BA | DIODE,SWITCHING 1SS133 T-72 TP         |
| IC601          | 0IIT341120A | IC,MSP3411G-PO-A2 52DIP ST SOUND   | D650     | 0DS113379BA | DIODE,SWITCHING 1SS133 T-72 TP         |
| IC602          | 0IKE780800B | IC,KIA78L08BP(TA) TO-92 8V,150MA   | D701     | 0DD184009AA | DIODE,SWITCHING KDS184S CHIP 85V 300MA |
| IC605          | 0ISG282200A | IC,TDA2822M 8D DUAL AUDIO AMP(1W)  | D702     | 0DD226239AA | DIODE,SWITCHING CHIP KDS226 SOT-23     |
| IC610          | 0ISA428200A | IC,LA4282 12S 2CHX10W AUDIO AMP    | D703     | 0DD226239AA | DIODE,SWITCHING CHIP KDS226 SOT-23     |
| IC650          | 0ISA428200A | IC,LA4282 12S 2CHX10W AUDIO AMP    | D704     | 0DD184009AA | DIODE,SWITCHING KDS184S CHIP 85V 300MA |
| IC701          | 0ISM941000A | IC,SDA9410 100QFP BK SCAN CONVERT  | D705     | 0DD414809ED | DIODE,1N4148 TA                        |
| IC702          | 0ISO210000A | IC,CXA2100AQ 64P QFP BK DEFLECTIO  | D706     | 0DD414809ED | DIODE,1N4148 TA                        |
| IC703          | 0IKE780900M | IC,KIA7809API TO220 ST 3P 9V REGU  | D709     | 0DD226239AA | DIODE,SWITCHING CHIP KDS226 SOT-23     |
| IC704          | 0IMO741570H | IC,SN74LS157D 16P,SOP TP QUAD 2IN  | D710     | 0DD226239AA | DIODE,SWITCHING CHIP KDS226 SOT-23     |
| IC801          | 0ISK670900A | IC,STR/S6709 9S SMPS-CNTR          | D711     | 0DD226239AA | DIODE,SWITCHING CHIP KDS226 SOT-23     |
| $\Delta$ IC802 | 0ILI817000G | IC,LTV817M-VB 4P,DIP BK PHOTO COU  | D712     | 0DD414809ED | DIODE,1N4148 TA                        |
| IC804          | 0ISK130000A | IC,SE130N 3P 130V ERROR AMP - - -  | D713     | 0DD414809ED | DIODE,1N4148 TA                        |
| IC831          | 0ISH052100C | IC,PQ05RD21 4SIP ST REGULATOR      | D801     | 0DD560000AA | DIODE,RECTIFIER D5SB60 BRIDGE(5A/600V) |
| IC832          | 0ISH122100A | IC,PQ12RF21 4P(TO-220) 12V S/W RE  | D803     | 0DD100009AM | DIODE,RECTIFIER EU1ZV(1) TP SANKEN     |
| IC833          | 0IKE780900M | IC,KIA7809API TO220 ST 3P 9V REGU  | D805     | 0DD060009AC | DIODE,TVR06J 0.6A/600V 250NS TP G.I    |
| IC901          | 0IPH611190A | IC,TDA6111Q 9SIP RGB AMP           | D806     | 0DD100009AM | DIODE,RECTIFIER EU1ZV(1) TP SANKEN     |
| IC902          | 0IPH611190A | IC,TDA6111Q 9SIP RGB AMP           | D807     | 0DD100009AM | DIODE,RECTIFIER EU1ZV(1) TP SANKEN     |
| IC903          | 0IPH611190A | IC,TDA6111Q 9SIP RGB AMP           | D808     | 0DD100009AL | DIODE,EH-1ZV(1)                        |
| IC1101         | 0IMO156216A | IC,JLC1562BN 16D I,C BUS EXPANDER  | D809     | 0DD414809ED | DIODE,1N4148 TA                        |
| IC1102         | 0ISA164500B | IC,LB1645N 10SIP BK MOTOR DRIVE I  | D811     | 0DD060009AC | DIODE, TVR06J 0.6A/600V 250NS TP G.I   |
| IC1251         | 0IRH707800A | IC,BA7078S 18P,SDIP BK SYNC DISCR  | D825     | 0DD414809ED | DIODE,1N4148 TA                        |
| Q109           | 0IFA270000A | IC,2N7000TA TO-92, 3P TP LEVEL SH  | D826     | 0DD060009AC | DIODE,TVR06J 0.6A/600V 250NS TP G.I    |
| Q110           | 0IFA270000A | IC,2N7000TA TO-92, 3P TP LEVEL SH  | D827     | 0DD060009AC | DIODE,TVR06J 0.6A/600V 250NS TP G.I    |
| Q114           | 0IFA270000A | IC,2N7000TA TO-92, 3P TP LEVEL SH  | D828     | 0DD060009AC | DIODE,TVR06J 0.6A/600V 250NS TP G.I    |
| Q115           | 0IFA270000A | IC,2N7000TA TO-92, 3P TP LEVEL SH  | D829     | 0DD060009AC | DIODE,TVR06J 0.6A/600V 250NS TP G.I    |
| <b>DIODE</b>   |             |                                    | D851     | 0DD060009AC | DIODE,TVR06J 0.6A/600V 250NS TP G.I    |
| D6             | 0DS113379BA | DIODE,SWITCHING 1SS133 T-72        | D885     | 0DD420000BB | DIODE,D4L20U SHINDENGEN                |
| D7             | 0DS113379BA | DIODE,SWITCHING 1SS133 T-72        | D900     | 0DR060009AA | DIODE,RECTIFIER TVR06J                 |
| D8             | 0DS113379BA | DIODE,SWITCHING 1SS133 T-72        | D901     | 0DR060009AA | DIODE,RECTIFIER TVR06J                 |
| D101           | 0DS113379BA | DIODE,SWITCHING 1SS133 T-72        | D902     | 0DR060009AA | DIODE,RECTIFIER TVR06J                 |
| D301           | 0DD150009CA | DIODE,RECTIFIER RGP15J,TP(52MM),GI | D903     | 0DR060009AA | DIODE,RECTIFIER TVR06J                 |
|                |             |                                    | D904     | 0DR060009AA | DIODE,RECTIFIER TVR06J                 |
|                |             |                                    | D908     | 0DR060009AA | DIODE,RECTIFIER TVR06J                 |
|                |             |                                    | D909     | 0DR060009AA | DIODE,RECTIFIER TVR06J                 |

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                                 |
|----------|-------------|---------------------------------------------|
| D910     | ODR140059AC | DIODE,RECTIFIER 1N4005GP TP                 |
| D1101    | 0DS113379BA | DIODE,SWITCHING 1SS133 T-72                 |
| D2901    | 0DS113379BA | DIODE,SWITCHING 1SS133 T-72                 |
| D2902    | 0DS113379BA | DIODE,SWITCHING 1SS133 T-72                 |
| D2903    | 0DS113379BA | DIODE,SWITCHING 1SS133 T-72                 |
| D2906    | 0DS113379BA | DIODE,SWITCHING 1SS133 T-72                 |
| D2907    | 0DS113379BA | DIODE,SWITCHING 1SS133 T-72                 |
| D2909    | 0DD150009CA | DIODE,RECTIFIER RGP15J,TP(52MM),GI          |
| D2910    | 0DD150009CA | DIODE,RECTIFIER RGP15J,TP(52MM),GI          |
| D2911    | 0DS113379BA | DIODE,SWITCHING 1SS133 T-72                 |
| LD1101   | 162-002B    | DIODE LED ASSY                              |
| ZD2      | 0DZ330009CC | DIODE,ZENER MTZJ3.3B TP ROHM-K DO34 500MW   |
| ZD3      | 0DZ910009AJ | DIODE,ZENERS MTZJ9.1B TP ROHM-K DO34 0.5W   |
| ZD101    | 0DZ330009BA | DIODE,ZENER HZT33(TP) HITACHI               |
| ZD102    | 0DZ330009BA | DIODE,ZENER HZT33(TP) HITACHI               |
| ZD350    | 0DZ240009CG | DIODE,ZENERS MTZJ24B TP ROHM-K DO34 - 24V 5 |
| ZD351    | 0DZ750009AG | DIODE,ZENERS MTZJ7.5B TP ROHM-K DO34 0.5W 7 |
| ZD403    | 0DZ910009AJ | DIODE,ZENERS MTZJ9.1B TP ROHM-K DO34 0.5W 9 |
| ZD801    | 0DZ510009DB | DIODE,ZENERS MTZJ5.1B TP ROHM-K DO34 - 5.1  |
| ZD804    | 0DZ750009AG | DIODE,ZENERS MTZJ7.5B TP ROHM-K DO34 0.5W 7 |
| ZD901    | 0DZ910009AJ | DIODE,ZENERS MTZJ9.1B TP ROHM-K DO34 0.5W 9 |
| ZD930    | 0DZ120009AF | DIODE,ZENERS MTZJ12B TP ROHM-K DO34 - 12V 5 |
| ZD1101   | 0DZ910009AJ | DIODE,ZENERS MTZJ9.1B TP ROHM-K DO34 0.5W 9 |
| ZD1201   | 0DZ620009BB | DIODE,ZENERS MTZJ6.2B TP ROHM-K DO34 0.5W 6 |
| ZD1202   | 0DZ620009BB | DIODE,ZENERS MTZJ6.2B TP ROHM-K DO34 0.5W 6 |
| ZD1205   | 0DZ620009BB | DIODE,ZENERS MTZJ6.2B TP ROHM-K DO34 0.5W 6 |
| ZD1206   | 0DZ620009BB | DIODE,ZENERS MTZJ6.2B TP ROHM-K DO34 0.5W 6 |
| ZD1251   | 0DZ510009DB | DIODE,ZENERS MTZJ5.1B TP ROHM-K DO34 - 5.1  |
| ZD1252   | 0DZ510009DB | DIODE,ZENERS MTZJ5.1B TP ROHM-K DO34 - 5.1  |

### TRANSISTOR

|      |             |                                   |
|------|-------------|-----------------------------------|
| Q6   | OTR387500AA | TR,CHIP 2SC3875S(ALY) KEC         |
| Q7   | OTR387500AA | TR,CHIP 2SC3875S(ALY) KEC         |
| Q8   | OTR387500AA | TR,CHIP 2SC3875S(ALY) KEC         |
| Q9   | OTR387500AA | TR,CHIP 2SC3875S(ALY) KEC         |
| Q10  | OTR387500AA | TR,CHIP 2SC3875S(ALY) KEC         |
| Q11  | OTR387500AA | TR,CHIP 2SC3875S(ALY) KEC         |
| Q12  | OTR387500AA | TR,CHIP 2SC3875S(ALY) KEC         |
| Q13  | OTR102009AG | TR,CHIP KRC102S SOT-23 TP KEC     |
| Q14  | OTR387500AA | TR,CHIP 2SC3875S(ALY) KEC         |
| Q15  | OTR150400BA | TR,CHIP 2SA1504S(ASY) KEC         |
| Q16  | OTR150400BA | TR,CHIP 2SA1504S(ASY) KEC         |
| Q17  | OTR150400BA | TR,CHIP 2SA1504S(ASY) KEC         |
| Q101 | OTR127009AA | TR,KTA1270-TP-Y (KTA562TM)KEC     |
| Q102 | OTR387500AA | TR,CHIP 2SC3875S(ALY) KEC         |
| Q112 | OTR387500AA | TR,CHIP 2SC3875S(ALY) KEC         |
| Q113 | OTR150400BA | TR,CHIP 2SA1504S(ASY) KEC         |
| Q204 | OTR319809AA | TR,KTC3198 TP KEC - - -Y (KTC1815 |
| Q205 | OTR319809AA | TR,KTC3198 TP KEC - - -Y (KTC1815 |
| Q206 | OTR319809AA | TR,KTC3198 TP KEC - - -Y (KTC1815 |
| Q207 | OTR319809AA | TR,KTC3198 TP KEC - - -Y (KTC1815 |
| Q208 | OTR387500AA | TR,CHIP 2SC3875S(ALY) KEC         |

| LOCA. NO | PART NO     | DESCRIPTION                       |
|----------|-------------|-----------------------------------|
| Q209     | OTR319809AA | TR,KTC3198 TP KEC - - -Y (KTC1815 |
| Q210     | OTR319809AA | TR,KTC3198 TP KEC - - -Y (KTC1815 |
| Q211     | OTR319809AA | TR,KTC3198 TP KEC - - -Y (KTC1815 |
| Q212     | OTR126609AA | TR,KTA1266-TP-Y (KTA1015) KEC     |
| Q308     | OTR319809AA | TR,KTC3198 TP KEC - - -Y (KTC1815 |
| Q310     | OTR127509AC | TR,KTA1275-Y TP(KTA1013),KEC      |
| Q311     | OTR471000AA | TR,2SC4710 SANYO OTOROLA IBA      |
| Q401     | OTF200000AA | TR,IRFIBC20G BK I.R 600V - -      |
| Q402     | OTR544600AA | TR,2SC5446(AS) BK TOSHIBA TO3P 17 |
| Q404     | OTR127509AC | TR,KTA1275-Y TP(KTA1013),KEC      |
| Q405     | OTR205900AB | TR,KTD2059-Y TO-220IS KEC         |
| Q501     | OTR387500AA | TR,CHIP 2SC3875S(ALY) KEC         |
| Q503     | OTR387500AA | TR,CHIP 2SC3875S(ALY) KEC         |
| Q601     | OTR150400BA | TR,CHIP 2SA1504S(ASY) KEC         |
| Q602     | OTR150400BA | TR,CHIP 2SA1504S(ASY) KEC         |
| Q603     | OTR126609AA | TR,KTA1266-TP-Y (KTA1015) KEC     |
| Q604     | OTR126609AA | TR,KTA1266-TP-Y (KTA1015) KEC     |
| Q605     | OTR126609AA | TR,KTA1266-TP-Y (KTA1015) KEC     |
| Q606     | OTR126609AA | TR,KTA1266-TP-Y (KTA1015) KEC     |
| Q607     | OTR102009AG | TR,CHIP KRC102S SOT-23 TP KEC     |
| Q701     | OTR150400BA | TR,CHIP 2SA1504S(ASY) KEC         |
| Q702     | OTR150400BA | TR,CHIP 2SA1504S(ASY) KEC         |
| Q703     | OTR150400BA | TR,CHIP 2SA1504S(ASY) KEC         |
| Q704     | OTR150400BA | TR,CHIP 2SA1504S(ASY) KEC         |
| Q705     | OTR150400BA | TR,CHIP 2SA1504S(ASY) KEC         |
| Q706     | OTR150400BA | TR,CHIP 2SA1504S(ASY) KEC         |
| Q707     | OTR387500AA | TR,CHIP 2SC3875S(ALY) KEC         |
| Q708     | OTR387500AA | TR,CHIP 2SC3875S(ALY) KEC         |
| Q709     | OTR387500AA | TR,CHIP 2SC3875S(ALY) KEC         |
| Q710     | OTR387500AA | TR,CHIP 2SC3875S(ALY) KEC         |
| Q711     | OTR150400BA | TR,CHIP 2SA1504S(ASY) KEC         |
| Q713     | OTR387500AA | TR,CHIP 2SC3875S(ALY) KEC         |
| Q714     | OTR387500AA | TR,CHIP 2SC3875S(ALY) KEC         |
| Q715     | OTR387500AA | TR,CHIP 2SC3875S(ALY) KEC         |
| Q801     | OTR385200AA | TR,2SC3852A SANKEN                |
| Q802     | OTR322709AA | TR,KTC3227-Y,TP(KTC1627A),KEC     |
| Q803     | OTR319809AA | TR,KTC3198 TP KEC - - -Y (KTC1815 |
| Q804     | OTR968000AA | TR,KTA968A-Y KEC                  |
| Q805     | OTR319809AA | TR,KTC3198 TP KEC - - -Y (KTC1815 |
| Q811     | OTR319809AA | TR,KTC3198 TP KEC - - -Y (KTC1815 |
| Q812     | OTR322709AA | TR,KTC3227-Y,TP(KTC1627A),KEC     |
| Q900     | OTR127109AA | TR,KTA1271-TP-Y (KTA950)KEC       |
| Q1101    | OTR319809AA | TR,KTC3198 TP KEC - - -Y (KTC1815 |
| Q1102    | OTR126609AA | TR,KTA1266-TP-Y (KTA1015) KEC     |
| Q1103    | OTR319809AA | TR,KTC3198 TP KEC - - -Y (KTC1815 |
| Q2902    | OTR319809AA | TR,KTC3198 TP KEC - - -Y (KTC1815 |
| Q2907    | OTR126609AA | TR,KTA1266-TP-Y (KTA1015) KEC     |
| Q2908    | OTR319809AA | TR,KTC3198 TP KEC - - -Y (KTC1815 |
| Q2909    | OTR165900AC | TR,KTA1659A-Y TO-220IS BK KEC - - |
| Q2910    | OTR437000BA | TR,KTC4370A-Y TO-220IS KEC        |

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                    |
|------------------|-------------|--------------------------------|
| <b>CAPACITOR</b> |             |                                |
| C4               | 0CE476DD618 | 47UF STD 10V 20% FL TP 5       |
| C6               | 0CE107DD618 | 100UF STD 10V M FL TP5         |
| C8               | 0CE476DD618 | 47UF STD 10V 20% FL TP 5       |
| C9               | 0CN1030F679 | 10000P 16V M Y TA52            |
| C10              | 0CE476DD618 | 47UF STD 10V 20% FL TP 5       |
| C11              | 0CE476DD618 | 47UF STD 10V 20% FL TP 5       |
| C12              | 181-007C    | MPE ECQ-V1H104JL3(TR), 50V 0.1 |
| C14              | 0CE107DD618 | 100UF STD 10V M FL TP5         |
| C16              | 0CE476DD618 | 47UF STD 10V 20% FL TP 5       |
| C17              | 0CE107DD618 | 100UF STD 10V M FL TP5         |
| C24              | 0CE476DD618 | 47UF STD 10V 20% FL TP 5       |
| C25              | 0CE106DF618 | 10UF STD 16V M FL TP5          |
| C27              | 0CQ1531N509 | 0.015U 100V K POLY TP          |
| C30              | 0CE226DF618 | 22UF STD 16V M FL TP5          |
| C32              | 0CQ1031N509 | 0.01U 100V K POLY TP           |
| C33              | 0CQ1031N509 | 0.01U 100V K POLY TP           |
| C34              | 0CE227DH618 | 220UF STD 25V M FL TP5         |
| C37              | 0CE107DD618 | 100UF STD 10V M FL TP5         |
| C38              | 0CE107DD618 | 100UF STD 10V M FL TP5         |
| C118             | 0CE475DK618 | 4.7UF STD 50V 20% FL TP 5      |
| C119             | 0CE475DK618 | 4.7UF STD 50V 20% FL TP 5      |
| C120             | 0CE477DF618 | 470UF STD 16V 20% FL TP 5      |
| C124             | 0CE106DF618 | 10UF STD 16V M FL TP5          |
| C125             | 0CE106DF618 | 10UF STD 16V M FL TP5          |
| C131             | 0CE476DF618 | 47UF STD 16V M FL TP5          |
| C132             | 0CE476DD618 | 47UF STD 10V 20% FL TP 5       |
| C133             | 0CE476DD618 | 47UF STD 10V 20% FL TP 5       |
| C134             | 0CE106DK618 | 10UF STD 50V M FL TP5          |
| C135             | 0CE106DK618 | 10UF STD 50V M FL TP5          |
| C136             | 0CE477DF618 | 470UF STD 16V 20% FL TP 5      |
| C137             | 0CE227DF618 | 220UF STD 16V M FL TP5         |
| C150             | 0CE477DD618 | 470UF STD 10V M FL TP5         |
| C151             | 0CE477DF618 | 470UF STD 16V 20% FL TP 5      |
| C152             | 0CE477DF618 | 470UF STD 16V 20% FL TP 5      |
| C153             | 0CE225DK618 | 2.2UF STD 50V 20% FL TP 5      |
| C207             | 0CN4710K519 | 470P 50V K B TA52              |
| C229             | 0CE476DF618 | 47UF STD 16V M FL TP5          |
| C230             | 0CE227DF618 | 220UF STD 16V M FL TP5         |
| C231             | 0CE225DK618 | 2.2UF STD 50V 20% FL TP 5      |
| C232             | 0CE225DK618 | 2.2UF STD 50V 20% FL TP 5      |
| C233             | 0CE105DK618 | 1UF STD 50V M FL TP5           |
| C234             | 0CE105DK618 | 1UF STD 50V M FL TP5           |
| C235             | 0CE105DK618 | 1UF STD 50V M FL TP5           |
| C236             | 0CE105DK618 | 1UF STD 50V M FL TP5           |
| C238             | 0CE225DK618 | 2.2UF STD 50V 20% FL TP 5      |
| C241             | 0CE105DK618 | 1UF STD 50V M FL TP5           |
| C243             | 0CE105DK618 | 1UF STD 50V M FL TP5           |
| C244             | 181-064P    | 10UF 0 16V K                   |
| C245             | 0CE225DK618 | 2.2UF STD 50V 20% FL TP 5      |
| C246             | 181-064P    | 10UF 0 16V K                   |

| LOCA. NO | PART NO     | DESCRIPTION                     |
|----------|-------------|---------------------------------|
| C247     | 0CE227DF618 | 220UF STD 16V M FL TP5          |
| C249     | 0CN4710K519 | 470P 50V K B TA52               |
| C266     | 0CE226DF618 | 22UF STD 16V M FL TP5           |
| C267     | 0CE107DF618 | 100UF STD 16V M FL TP5          |
| C268     | 0CE225DK618 | 2.2UF STD 50V 20% FL TP 5       |
| C269     | 0CE106DF618 | 10UF STD 16V M FL TP5           |
| C270     | 0CE106DF618 | 10UF STD 16V M FL TP5           |
| C303     | 0CE477DH618 | 470UF STD 25V M FL TP5          |
| C305     | 0CE477DH618 | 470UF STD 25V M FL TP5          |
| C306     | 0CN1030F679 | 10000P 16V M Y TA52             |
| C307     | 0CN1030F679 | 10000P 16V M Y TA52             |
| C308     | 0CQ3341N401 | 0.33U 100V J POLY F5            |
| C310     | 0CE107BJ618 | 100UF KME 35V M FL TP5          |
| C312     | 0CN1030F679 | 10000P 16V M Y TA52             |
| C313     | 0CQ3331N509 | 0.033U 100V K POLY TP           |
| C314     | 0CE107DF618 | 100UF STD 16V M FL TP5          |
| C316     | 0CE228DJ650 | 2200UF STD 35V M FM7.5 BULK     |
| C320     | 181-014N    | MPP 1600V 0.01UF J              |
| C324     | 0CQ1531N509 | 0.015U 100V K POLY TP           |
| C330     | 0CE227DH618 | 220UF STD 25V M FL TP5          |
| C331     | 181-007H    | MPE ECQ-V1H474JL3(TR), 50V 0.4  |
| C332     | 0CQ1021N509 | 0.001U 100V K POLY TP           |
| C333     | 0CN1030F679 | 10000P 16V M Y TA52             |
| C334     | 0CE107DF618 | 100UF STD 16V M FL TP5          |
| C335     | 0CE107DF618 | 100UF STD 16V M FL TP5          |
| C336     | 0CE107DF618 | 100UF STD 16V M FL TP5          |
| C338     | 0CE108DH618 | 1000UF STD 25V M FL TP5         |
| C340     | 181-014F    | MPP 1600V 0.0068UF J            |
| C348     | 0CE108DH618 | 1000UF STD 25V M FL TP5         |
| C403     | 0CK2210W515 | 220P 500V K B TS                |
| C404     | 181-009V    | PP 200V 0.047UF K               |
| C405     | 181-014Y    | MPP 1.6KV 0.0015UF J            |
| C406     | 0CK10201515 | 1000P 1KV K B TS                |
| C408     | 181-015L    | MPP 1600V 0.0095UF H            |
| C409     | 181-010T    | PP 630V 0.015UF J               |
| C413     | 181-038D    | MPP 400V 0.24MF J               |
| C414     | 181-013U    | MPP 630V 0.1UF J                |
| C415     | 181-010E    | PP 400V 0.12UF J                |
| C416     | 0CE107DK618 | 100UF STD 50V M FL TP5          |
| C417     | 0CK1030K945 | 0.01UF 50V Z F TR               |
| C418     | 0CN6810K519 | 680P 50V K B TA52               |
| C419     | 0CN1030F679 | 10000P 16V M Y TA52             |
| C422     | 0CE5651K652 | 5.6UF SM,SA 50V 20% FM7.5 BP(S) |
| C423     | 0CE5651K652 | 5.6UF SM,SA 50V 20% FM7.5 BP(S) |
| C426     | 0CQ3331N509 | 0.033U 100V K POLY TP           |
| C428     | 0CQ1031N509 | 0.01U 100V K POLY TP            |
| C430     | 0CK22202510 | 2200P 2KV K B S                 |
| C435     | 181-009V    | PP 200V 0.047UF K               |
| C438     | 0CE107DK618 | 100UF STD 50V M FL TP5          |
| C446     | 0CK56102515 | 560P 2KV K B TS                 |
| C447     | 0CE476DR618 | 47UF STD 250V 20% FL TP 5       |
| C481     | 181-010G    | PP 400V 0.01UF K                |



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                    |
|----------|-------------|--------------------------------|
| C482     | 181-091G    | DEHR33D471KN3A DE0907-486 R 4  |
| C488     | 0CE106BR618 | 10UF KME 250V M FL TP5         |
| C501     | 0CK224DF56A | 220000PF 2012 16V 10% R/TP X7R |
| C502     | 0CK224DF56A | 220000PF 2012 16V 10% R/TP X7R |
| C503     | 0CK224DF56A | 220000PF 2012 16V 10% R/TP X7R |
| C504     | 0CK224DF56A | 220000PF 2012 16V 10% R/TP X7R |
| C505     | 0CK224DF56A | 220000PF 2012 16V 10% R/TP X7R |
| C506     | 0CK224DF56A | 220000PF 2012 16V 10% R/TP X7R |
| C507     | 0CK224DF56A | 220000PF 2012 16V 10% R/TP X7R |
| C519     | 0CE106DF618 | 10UF STD 16V M FL TP5          |
| C523     | 0CE106DF618 | 10UF STD 16V M FL TP5          |
| C527     | 0CK224DF56A | 220000PF 2012 16V 10% R/TP X7R |
| C528     | 0CE107DD618 | 100UF STD 10V M FL TP5         |
| C529     | 0CK224DF56A | 220000PF 2012 16V 10% R/TP X7R |
| C532     | 0CE106DF618 | 10UF STD 16V M FL TP5          |
| C535     | 0CE106DF618 | 10UF STD 16V M FL TP5          |
| C540     | 0CE474CK636 | 0.47UF SHL,SD 50V M FM5 BP(D)  |
| C541     | 0CE474CK636 | 0.47UF SHL,SD 50V M FM5 BP(D)  |
| C542     | 0CE474CK636 | 0.47UF SHL,SD 50V M FM5 BP(D)  |
| C544     | 0CE107DD618 | 100UF STD 10V M FL TP5         |
| C547     | 0CK224DF56A | 220000PF 2012 16V 10% R/TP X7R |
| C548     | 0CK224DF56A | 220000PF 2012 16V 10% R/TP X7R |
| C549     | 0CK224DF56A | 220000PF 2012 16V 10% R/TP X7R |
| C550     | 0CK224DF56A | 220000PF 2012 16V 10% R/TP X7R |
| C551     | 0CK224DF56A | 220000PF 2012 16V 10% R/TP X7R |
| C552     | 0CK224DF56A | 220000PF 2012 16V 10% R/TP X7R |
| C555     | 0CK224DF56A | 220000PF 2012 16V 10% R/TP X7R |
| C565     | 0CE106DF618 | 10UF STD 16V M FL TP5          |
| C569     | 0CE106DF618 | 10UF STD 16V M FL TP5          |
| C574     | 0CE107DD618 | 100UF STD 10V M FL TP5         |
| C575     | 0CK224DF56A | 220000PF 2012 16V 10% R/TP X7R |
| C577     | 0CK224DF56A | 220000PF 2012 16V 10% R/TP X7R |
| C578     | 0CE106DF618 | 10UF STD 16V M FL TP5          |
| C581     | 0CE106DF618 | 10UF STD 16V M FL TP5          |
| C587     | 0CE474CK636 | 0.47UF SHL,SD 50V M FM5 BP(D)  |
| C588     | 0CE474CK636 | 0.47UF SHL,SD 50V M FM5 BP(D)  |
| C589     | 0CE474CK636 | 0.47UF SHL,SD 50V M FM5 BP(D)  |
| C590     | 0CE474CK636 | 0.47UF SHL,SD 50V M FM5 BP(D)  |
| C592     | 0CE107DD618 | 100UF STD 10V M FL TP5         |
| C595     | 0CE227DD618 | 220UF STD 10V M FL TP5         |
| C597     | 0CE227DD618 | 220UF STD 10V M FL TP5         |
| C600     | 0CE107DD618 | 100UF STD 10V M FL TP5         |
| C607     | 0CE476DD618 | 47UF STD 10V 20% FL TP 5       |
| C610     | 0CX5600K409 | 56P 50V J SL TA52              |
| C611     | 0CE106DF618 | 10UF STD 16V M FL TP5          |
| C616     | 0CE106DF618 | 10UF STD 16V M FL TP5          |
| C617     | 0CE106DF618 | 10UF STD 16V M FL TP5          |
| C619     | 0CE107DD618 | 100UF STD 10V M FL TP5         |
| C621     | 0CE106DF618 | 10UF STD 16V M FL TP5          |
| C622     | 0CE227DF618 | 220UF STD 16V M FL TP5         |
| C623     | 0CE107BJ618 | 100UF KME 35V M FL TP5         |
| C627     | 181-007H    | MPE ECQ-V1H474JL3(TR), 50V 0.4 |

| LOCA. NO | PART NO     | DESCRIPTION                    |
|----------|-------------|--------------------------------|
| C630     | 181-007H    | MPE ECQ-V1H474JL3(TR), 50V 0.4 |
| C631     | 181-442Z    | PE,ECQ-B1H104KF3(TR)           |
| C632     | 0CE107BJ618 | 100UF KME 35V M FL TP5         |
| C633     | 0CE107BJ618 | 100UF KME 35V M FL TP5         |
| C634     | 0CE106DF618 | 10UF STD 16V M FL TP5          |
| C635     | 0CE106DF618 | 10UF STD 16V M FL TP5          |
| C636     | 0CE108DJ618 | 1000UF STD 35V M FL TP5        |
| C637     | 0CE108DJ618 | 1000UF STD 35V M FL TP5        |
| C638     | 0CK1030K945 | 0.01UF 50V Z F TR              |
| C639     | 0CE108DK61A | 1000UF STD 50V M FL TP7.5      |
| C640     | 0CQ6821N509 | 0.0068U 100V K POLY TP         |
| C642     | 0CE107DD618 | 100UF STD 10V M FL TP5         |
| C644     | 181-442Z    | PE,ECQ-B1H104KF3(TR)           |
| C645     | 181-442Z    | PE,ECQ-B1H104KF3(TR)           |
| C646     | 0CQ6821N509 | 0.0068U 100V K POLY TP         |
| C647     | 181-007G    | MPE ECQ-V1H334JL3(TR), 50V 0.3 |
| C648     | 181-064P    | 10UF 0 16V K                   |
| C649     | 181-064P    | 10UF 0 16V K                   |
| C658     | 181-007G    | MPE ECQ-V1H334JL3(TR), 50V 0.3 |
| C660     | 181-442Z    | PE,ECQ-B1H104KF3(TR)           |
| C661     | 181-442Z    | PE,ECQ-B1H104KF3(TR)           |
| C663     | 0CE107DH618 | 100UF STD 25V M FL TP5         |
| C664     | 0CE107DH618 | 100UF STD 25V M FL TP5         |
| C665     | 0CE107DH618 | 100UF STD 25V M FL TP5         |
| C666     | 0CQ4721N509 | 0.0047U 100V K POLY TP         |
| C668     | 0CE477DJ618 | 470UF STD 35V 20% FL TP 5      |
| C670     | 0CK1030K945 | 0.01UF 50V Z F TR              |
| C671     | 0CE108DK61A | 1000UF STD 50V M FL TP7.5      |
| C674     | 0CE107DF618 | 100UF STD 16V M FL TP5         |
| C677     | 0CE107DF618 | 100UF STD 16V M FL TP5         |
| C680     | 181-442Z    | PE,ECQ-B1H104KF3(TR)           |
| C681     | 181-442Z    | PE,ECQ-B1H104KF3(TR)           |
| C682     | 0CE107DH618 | 100UF STD 25V M FL TP5         |
| C683     | 0CE107DH618 | 100UF STD 25V M FL TP5         |
| C685     | 0CE107DH618 | 100UF STD 25V M FL TP5         |
| C686     | 0CE106DK618 | 10UF STD 50V M FL TP5          |
| C687     | 0CE106DF618 | 10UF STD 16V M FL TP5          |
| C688     | 0CE108DK61A | 1000UF STD 50V M FL TP7.5      |
| C689     | 0CE228DJ650 | 2200UF STD 35V M FM7.5 BULK    |
| C690     | 0CK1030K945 | 0.01UF 50V Z F TR              |
| C691     | 0CE107DF618 | 100UF STD 16V M FL TP5         |
| C692     | 0CE228DJ650 | 2200UF STD 35V M FM7.5 BULK    |
| C693     | 0CE107DH618 | 100UF STD 25V M FL TP5         |
| C694     | 0CE106DF618 | 10UF STD 16V M FL TP5          |
| C695     | 0CE107DF618 | 100UF STD 16V M FL TP5         |
| C697     | 0CE107DD618 | 100UF STD 10V M FL TP5         |
| C699     | 0CQ1031N509 | 0.01U 100V K POLY TP           |
| C701     | 0CE476DD618 | 47UF STD 10V 20% FL TP 5       |
| C708     | 0CE106DF618 | 10UF STD 16V M FL TP5          |
| C714     | 0CQ1041N455 | 0.1000UF 100V J PP NI FM7.5    |
| C715     | 181-442Z    | PE,ECQ-B1H104KF3(TR)           |
| C716     | 0CE106DF618 | 10UF 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                    |
|---------------|-------------|--------------------------------|
| C718          | 0CE107DF618 | 100UF STD 16V M FL TP5         |
| C720          | 0CE476DF618 | 47UF STD 16V M FL TP5          |
| C724          | 0CQ1031N509 | 0.01U 100V K POLY TP           |
| C725          | 181-007F    | MPE ECQ-V1H224JL3(TR), 50V 0.2 |
| C729          | 0CE475DK618 | 4.7UF STD 50V 20% FL TP 5      |
| C730          | 0CE106DF618 | 10UF STD 16V M FL TP5          |
| C738          | 0CK224DF56A | 220000PF 2012 16V 10% R/TP X7R |
| C741          | 0CE476DF618 | 47UF STD 16V M FL TP5          |
| C746          | 0CE476DF618 | 47UF STD 16V M FL TP5          |
| C749          | 0CE475DK618 | 4.7UF STD 50V 20% FL TP 5      |
| C753          | 0CE476DF618 | 47UF STD 16V M FL TP5          |
| C755          | 0CK224DF56A | 220000PF 2012 16V 10% R/TP X7R |
| C758          | 0CE476DF618 | 47UF STD 16V M FL TP5          |
| C761          | 0CE476DK618 | 47UF STD 50V M FL TP5          |
| C764          | 0CE227DF618 | 220UF STD 16V M FL TP5         |
| C767          | 0CE107DF618 | 100UF STD 16V M FL TP5         |
| C771          | 0CE107DD618 | 100UF STD 10V M FL TP5         |
| $\Delta$ C801 | 0CQZVBK002B | A.C 275V 0.15UF K (S=22.5)     |
| $\Delta$ C802 | 181-091K    | DEHR33D561KN3A DE0907-486 R 56 |
| C804          | 0CE227BJ618 | 220U KME 35V M FL TP5          |
| C806          | 181-091D    | DEHR33A102KN2A DE0905-979 R 1  |
| $\Delta$ C807 | 181-091D    | DEHR33A102KN2A DE0905-979 R 1  |
| C808          | 0CN1020K519 | 1000P 50V K B TA52             |
| C809          | 0CE106BN618 | 10UF KME 100V M FL TP5         |
| C810          | 0CE477BH618 | 470UF KME TYPE 25V 20% FL TP 5 |
| C811          | 0CK1020K515 | 1000P 50V K B TS               |
| C812          | 181-011D    | PP 1600V 0.0022UF J            |
| C813          | 181-091C    | DEHR33A471KN2A DE0705-979 R 4  |
| C814          | 181-091C    | DEHR33A471KN2A DE0705-979 R 4  |
| C815          | 181-091C    | DEHR33A471KN2A DE0705-979 R 4  |
| C816          | 0CE2276Q650 | 220UF SMS 200V M FM7.5 BULK    |
| C817          | 181-001A    | CE 200V 470UF M LUG (85)       |
| C818          | 181-091C    | DEHR33A471KN2A DE0705-979 R 4  |
| C819          | 0CK1020W515 | 1000P 500V K B TS              |
| C820          | 0CK1020W515 | 1000P 500V K B TS              |
| C821          | 0CK1020W515 | 1000P 500V K B TS              |
| C822          | 0CK1020W515 | 1000P 500V K B TS              |
| C826          | 181-120N    | 1000PF 4KV M E FMTW LEAD4.5    |
| C827          | 0CQ1041N509 | 0.1U 100V K POLY TP            |
| C828          | 0CE476DN618 | 47UF STD 100V 20% FL TP 5      |
| C829          | 181-091C    | DEHR33A471KN2A DE0705-979 R 4  |
| C830          | 0CE107DF618 | 100UF STD 16V M FL TP5         |
| $\Delta$ C833 | 181-120N    | 1000PF 4KV M E FMTW LEAD4.5    |
| $\Delta$ C834 | 181-001U    | CE 450V 470UF M LUG(85)        |
| C841          | 0CE228DK650 | 2200UF STD 50V M FM7.5 BULK    |
| C842          | 0CE477DK618 | 470UF STD 50V 20% FL TP 5      |
| C844          | 0CE477DD618 | 470UF STD 10V M FL TP5         |
| C845          | 0CE337DH618 | 330UF STD 25V M FL TP5         |
| C852          | 0CE108DF618 | 1000UF STD 16V M FL TP5        |
| C853          | 0CE108DF618 | 1000UF STD 16V M FL TP5        |
| C870          | 0CE108DH618 | 1000UF STD 25V M FL TP5        |
| $\Delta$ C888 | 0CQZVBK002D | A.C 275V 0.47UF K (S=22.5)     |

| LOCA. NO      | PART NO     | DESCRIPTION                   |
|---------------|-------------|-------------------------------|
| $\Delta$ C889 | 0CQZVBK002A | A.C 275V 0.1UF M (S=15)       |
| C900          | 0CE475BR618 | 4.7UF KME TYPE 250V 20% FL TP |
| C901          | 0CE475BR618 | 4.7UF KME TYPE 250V 20% FL TP |
| C902          | 0CE475DR618 | 4.7UF STD 250V 20% FL TP 5    |
| C903          | 0CC0500K115 | 5P 50V D NP0 TS               |
| C904          | 0CE475BR618 | 4.7UF KME TYPE 250V 20% FL TP |
| C905          | 0CK5610W515 | 560P 500V K B TS              |
| C906          | 0CN1040K949 | 0.1M 50V Z F TA52             |
| C907          | 0CN1040K949 | 0.1M 50V Z F TA52             |
| C908          | 0CE475DR618 | 4.7UF STD 250V 20% FL TP 5    |
| C910          | 0CE225DK618 | 2.2UF STD 50V 20% FL TP 5     |
| C911          | 0CN1040K949 | 0.1M 50V Z F TA52             |
| C912          | 0CN1040K949 | 0.1M 50V Z F TA52             |
| C914          | 0CE228DF618 | 2200UF STD 16V M FL TP5       |
| C915          | 0CK5610W515 | 560P 500V K B TS              |
| C916          | 165-004A    | AG20PT 152F-L3N/S-23          |
| C917          | 0CN1040K949 | 0.1M 50V Z F TA52             |
| C918          | 0CC0500K115 | 5P 50V D NP0 TS               |
| C919          | 0CK5610W515 | 560P 500V K B TS              |
| C925          | 0CN1040K949 | 0.1M 50V Z F TA52             |
| C926          | 0CK1030W510 | 0.01U 500V K B S              |
| C1101         | 0CE475DK618 | 4.7UF STD 50V 20% FL TP 5     |
| C1103         | 0CE107DD618 | 100UF STD 10V M FL TP5        |
| C1105         | 0CE226DF618 | 22UF STD 16V M FL TP5         |
| C1106         | 0CN1030F679 | 10000P 16V M Y TA52           |
| C1110         | 0CE476DF618 | 47UF STD 16V M FL TP5         |
| C1112         | 181-442Z    | PE,ECQ-B1H104KF3(TR)          |
| C1114         | 0CE107DD618 | 100UF STD 10V M FL TP5        |
| C1203         | 0CN2210K519 | 220P 50V K B TA52             |
| C1204         | 0CN1040K949 | 0.1M 50V Z F TA52             |
| C1205         | 0CN2210K519 | 220P 50V K B TA52             |
| C1206         | 0CN4710K519 | 470P 50V K B TA52             |
| C1207         | 0CN4710K519 | 470P 50V K B TA52             |
| C1208         | 0CN2210K519 | 220P 50V K B TA52             |
| C1209         | 0CE475DK618 | 4.7UF STD 50V 20% FL TP 5     |
| C1210         | 0CE475DK618 | 4.7UF STD 50V 20% FL TP 5     |
| C1211         | 0CN2210K519 | 220P 50V K B TA52             |
| C1212         | 0CE475DK618 | 4.7UF STD 50V 20% FL TP 5     |
| C1213         | 0CE475DK618 | 4.7UF STD 50V 20% FL TP 5     |
| C1251         | 0CE105DK618 | 1UF STD 50V M FL TP5          |
| C1252         | 0CE105DK618 | 1UF STD 50V M FL TP5          |
| C1253         | 0CE684DK618 | 0.68UF STD 50V 20% FL TP 5    |
| C1254         | 0CE225DK618 | 2.2UF STD 50V 20% FL TP 5     |
| C1255         | 0CE105DK618 | 1UF STD 50V M FL TP5          |
| C1256         | 0CN1010K519 | 100P 50V K B TA52             |
| C1257         | 0CN1030F679 | 10000P 16V M Y TA52           |
| C1258         | 0CE476DD618 | 47UF STD 10V 20% FL TP 5      |
| C2903         | 0CE106DH618 | 10UF STD 25V M FL TP5         |
| C2909         | 0CE106DH618 | 10UF STD 25V M FL TP5         |
| C2910         | 0CN1010K519 | 100P 50V K B TA52             |
| C2911         | 0CN1010K519 | 100P 50V K B TA52             |
| C2912         | 0CK4720W510 | 4700P 500V K B S              |



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                        |
|-------------------------------|-------------|------------------------------------|
| C2913                         | 0CK4720W510 | 4700P 500V K B S                   |
| C2914                         | 0CE106DP618 | 10UF STD 160V M FL TP5             |
| C2915                         | 0CE107DK618 | 100UF STD 50V M FL TP5             |
| C2917                         | 0CE107DF618 | 100UF STD 16V M FL TP5             |
| C2918                         | 0CE107DF618 | 100UF STD 16V M FL TP5             |
| C2919                         | 0CE106DP618 | 10UF STD 160V M FL TP5             |
| C2922                         | 0CE106DH618 | 10UF STD 25V M FL TP5              |
| C2933                         | 0CK1010W515 | 100P 500V K B TS                   |
| SG904                         | 181-033T    | 2KV B 222K TP7.5                   |
| <b>FUSE</b>                   |             |                                    |
| $\Delta$ F1101                | 131-098B    | FUSE,SLOW BLOW 4000MA 250V 5.2X20  |
| $\Delta$ FR849                | 0FF4001A234 | FUSE,FAST BLOE 4000MA 125V 2.5X7.6 |
| $\Delta$ FR851                | 0FF4001A234 | FUSE,FAST BLOE 4000MA 125V 2.5X7.6 |
| $\Delta$ FR852                | 0FF4001A234 | FUSE,FAST BLOE 4000MA 125V 2.5X7.6 |
| <b>COIL &amp; TRANSFORMER</b> |             |                                    |
| J22                           | 0LA0102K119 | INDUCTOR,10UH K                    |
| J25                           | 0LA0102K119 | INDUCTOR,10UH K                    |
| J35                           | 0LA0102K119 | INDUCTOR,10UH K                    |
| J40                           | 0LA0102K119 | INDUCTOR,10UH K                    |
| J43                           | 0LA0102K119 | INDUCTOR,10UH K                    |
| J55                           | 0LA0102K119 | INDUCTOR,10UH K                    |
| J117                          | 0LA0102K119 | INDUCTOR,10UH K                    |
| L12                           | 0LA0102K139 | INDUCTOR,10UH K                    |
| L13                           | 0LA0102K119 | INDUCTOR,10UH K                    |
| L032                          | 0LA0102K119 | INDUCTOR,10UH K                    |
| L101                          | 0LA0102K119 | INDUCTOR,10UH K                    |
| L102                          | 0LA0102K119 | INDUCTOR,10UH K                    |
| L201                          | 0LA0102K119 | INDUCTOR,10UH K                    |
| L202                          | 0LA0102K119 | INDUCTOR,10UH K                    |
| L203                          | 0LA0102K119 | INDUCTOR,10UH K                    |
| L204                          | 0LA0102K119 | INDUCTOR,10UH K                    |
| L205                          | 0LA0102K119 | INDUCTOR,10UH K                    |
| L206                          | 0LA0102K119 | INDUCTOR,10UH K                    |
| L207                          | 0LA0102K119 | INDUCTOR,10UH K                    |
| L208                          | 0LA0102K119 | INDUCTOR,10UH K                    |
| L209                          | 0LA0102K119 | INDUCTOR,10UH K                    |
| L210                          | 0LA0102K119 | INDUCTOR,10UH K                    |
| L211                          | 0LA0102K119 | INDUCTOR,10UH K                    |
| L212                          | 0LA0102K119 | INDUCTOR,10UH K                    |
| L217                          | 0LA0102K119 | INDUCTOR,10UH K                    |
| L218                          | 0LA0102K119 | INDUCTOR,10UH K                    |
| L219                          | 0LA0102K119 | INDUCTOR,10UH K                    |
| L220                          | 0LA0102K119 | INDUCTOR,10UH K                    |
| L221                          | 0LA0102K119 | INDUCTOR,10UH K                    |
| L222                          | 0LA0102K119 | INDUCTOR,10UH K                    |
| L224                          | 0LA0331K119 | INDUCTOR,3.3UH K                   |
| L225                          | 0LA0331K119 | INDUCTOR,3.3UH K                   |
| L226                          | 0LA0331K119 | INDUCTOR,3.3UH K                   |
| L227                          | 0LA0331K119 | INDUCTOR,3.3UH K                   |
| L401                          | 150-L02Q    | COIL,LINEARITY 10UH                |

| LOCA. NO         | PART NO     | DESCRIPTION                           |
|------------------|-------------|---------------------------------------|
| L402             | 150-W01A    | COIL,CHOKE WIDTH 24UH                 |
| L403             | 150-C13B    | COIL,CHOKE 52UH                       |
| L404             | 150-C13B    | COIL,CHOKE 52UH                       |
| L407             | 150-717K    | COIL,CHOKE 1.1UH                      |
| L410             | 0LA1001K130 | INDUCTOR,1000M K                      |
| L501             | 0LA0102K119 | INDUCTOR,10UH K                       |
| L502             | 0LA0102K119 | INDUCTOR,10UH K                       |
| L601             | 0LA0102K119 | INDUCTOR,10UH K                       |
| L606             | 0LA0102K119 | INDUCTOR,10UH K                       |
| L608             | 0LA0102K119 | INDUCTOR,10UH K                       |
| L610             | 0LA0102K119 | INDUCTOR,10UH K                       |
| L701             | 0LA0102K119 | INDUCTOR,10UH K                       |
| L702             | 0LA0102K119 | INDUCTOR,10UH K                       |
| L703             | 0LA0102K119 | INDUCTOR,10UH K                       |
| L704             | 0LA0102K119 | INDUCTOR,10UH K                       |
| L705             | 0LA0102K119 | INDUCTOR,10UH K                       |
| L801             | 150-C02F    | COIL,CHOKE 82UH R1217                 |
| L802             | 150-C02F    | COIL,CHOKE 82UH R1217                 |
| L901             | 0LA0272K139 | INDUCTOR,27UH K                       |
| L1101            | 0LA0102K119 | INDUCTOR,10UH K                       |
| L1201            | 0LA0472K119 | INDUCTOR,47UH K                       |
| L1202            | 0LA0472K119 | INDUCTOR,47UH K                       |
| L1203            | 0LA0472K119 | INDUCTOR,47UH K                       |
| L1204            | 0LA0472K119 | INDUCTOR,47UH K                       |
| L1251            | 0LA0102K119 | INDUCTOR,10UH K                       |
| R273             | 0LA0102K119 | INDUCTOR,10UH K                       |
| $\Delta$ T401    | 6170VC0002A | TRANSFORMER,H-DRIVE EER-2619          |
| $\Delta$ T402    | 6174Z-6005S | FBT,FTMPC31 -T6005S                   |
| T403             | 151-E06A    | TRANSFORMER,EER2834 0UH               |
| $\Delta$ T803    | 6170VMCA01Y | TRANSFORMER,SMPS EER5345 400UH        |
| $\Delta$ T804    | 151-D02G    | TRANSFORMER,STAND-BY EER3541 0UH      |
| T890             | 6170VZ0008A | TRANSFORMER,TS4841 30500UH            |
| <b>CONNECTOR</b> |             |                                       |
| P001             | 366-173G    | CONNECTOR (CIRC),2.5MM 8*2P AEPH-254  |
| P1               | 366-932B    | CONNECTOR (CIRC),2.5MM 3P             |
| P002             | 366-173J    | CONNECTOR (CIRC),2.5MM 10*2P AEPH-254 |
| P4A              | 366-932D    | CONNECTOR (CIRC),2.5MM 5P             |
| P4B              | 387-A05A    | CONNECTOR ASSY,5P (L=100)             |
| P6A              | 366-932D    | CONNECTOR (CIRC),2.5MM 5P             |
| P6B              | 387-A05C    | CONNECTOR ASSY,5P (L=200)             |
| P7               | 366-921F    | CONNECTOR (CIRC),2.5MM 7P             |
| P101             | 366-009D    | CONNECTOR (CIRC),2.36PAI 1P           |
| P101B            | 387-B10J    | CONNECTOR ASSY,10P(L=500) SHIELD      |
| P401B            | 366-942L    | CONNECTOR (CIRC),2.5MM 12P BW250      |
| P401A            | 387-812L    | CONNECTOR ASSY,YJN250 12P             |
| P402             | 366-043K    | CONNECTOR (CIRC),PLUG(4P)             |
| P601B            | 366-921L    | CONNECTOR (CIRC),2.5MM 12P            |
| P601A            | 366-932B    | CONNECTOR (CIRC),2.5MM 3P             |
| P601A            | 387-J12J    | CONNECTOR ASSY,12P SHIELD(500)        |
| P602A            | 366-932C    | CONNECTOR (CIRC),2.5MM 4P             |
| P602A            | 387-B04J    | CONNECTOR ASSY,4P SHIELD WIRE (L=500) |

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                           |
|-----------------|-------------|---------------------------------------|
| P604A           | 366-932C    | CONNECTOR (CIRC),2.5MM 4P             |
| P801B           | 366-942L    | CONNECTOR (CIRC),2.5MM 12P BW250      |
| P801A           | 387-812L    | CONNECTOR ASSY,YJN250 12P             |
| P901B           | 366-921L    | CONNECTOR (CIRC),2.5MM 12P            |
| P902A           | 366-921J    | CONNECTOR (CIRC),2.5MM 10P            |
| P902B           | 387-A10G    | CONNECTOR ASSY,10P (L=400)            |
| P1005           | 366-932E    | CONNECTOR (CIRC),2.5MM 6P             |
| P1101           | 366-009D    | CONNECTOR (CIRC),2.36PAI 1P           |
| P1102A          | 366-009D    | CONNECTOR (CIRC),2.36PAI 1P           |
| P1102B          | 366-009D    | CONNECTOR (CIRC),2.36PAI 1P           |
| P1103A          | 366-009D    | CONNECTOR (CIRC),2.36PAI 1P           |
| P1103B          | 366-009D    | CONNECTOR (CIRC),2.36PAI 1P           |
| P1103           | 6631V23001J | CONNECTOR ASSY,2P 250MM 10MM          |
| P1104           | 366-932B    | CONNECTOR,2.5MM 3P                    |
| P1151           | 387-G07D    | CONNECTOR ASSY,7P GIL-G TO GIL-G(250) |
| VGA01           | 6630VGA001B | CONNECTOR,D-SUB 68114-1522 15PIN 2.2  |
| <b>RESISTOR</b> |             |                                       |
| FR359           | 0RF0680K607 | 0.68 OHM 2 W 5.00% TA62               |
| FR360           | 0RF0680K607 | 0.68 OHM 2 W 5.00% TA62               |
| FR442           | 0RF0331K607 | 3.3 OHM 2 W 5.00% TA62                |
| FR443           | 0RF0101K607 | 1 OHM 2 W 5.00% TA62                  |
| FR448           | 0RF0470K607 | 0.47 OHM 2 W 5.00% TA62               |
| FR829           | 0RS6801K607 | 6.8K OHM 2 W 5.00% TA62               |
| $\Delta$ FR848  | 0RF0470H609 | 0.47 OHM 1/2 W 5.00% TA52             |
| FR2948          | 0RF1000H609 | 100 OHM 1/2 W 5.00% TA52              |
| J27             | 0RD3300F609 | 330 OHM 1/6 W 5.00% TA52              |
| J46             | 0RD1000F609 | 100 OHM 1/6 W 5.00% TA52              |
| J47             | 0RD1000F609 | 100 OHM 1/6 W 5.00% TA52              |
| J62             | 0RD1001F609 | 1K OHM 1/6 W 5.00% TA52               |
| J133            | 0RD1000F609 | 100 OHM 1/6 W 5.00% TA52              |
| J209            | 0RD4701F609 | 4.7K OHM 1/6 W 5.00% TA52             |
| J215            | 0RD1000F609 | 100 OHM 1/6 W 5.00% TA52              |
| J223            | 0RD1000F609 | 100 OHM 1/6 W 5.00% TA52              |
| J429            | 0RD1501F609 | 1.5K OHM 1/6 W 5.00% TA52             |
| J453            | 0RD0222F609 | 22 OHM 1/6 W 5.00% TA52               |
| L301            | 0RD1000F609 | 100 OHM 1/6 W 5.00% TA52              |
| L302            | 0RD1000F609 | 100 OHM 1/6 W 5.00% TA52              |
| R1              | 0RD1000F609 | 100 OHM 1/6 W 5.00% TA52              |
| R3              | 0RD1000F609 | 100 OHM 1/6 W 5.00% TA52              |
| R4              | 0RD1000F609 | 100 OHM 1/6 W 5.00% TA52              |
| R5              | 0RD1000F609 | 100 OHM 1/6 W 5.00% TA52              |
| R6              | 0RD1000F609 | 100 OHM 1/6 W 5.00% TA52              |
| R7              | 0RD1000F609 | 100 OHM 1/6 W 5.00% TA52              |
| R8              | 0RD1000F609 | 100 OHM 1/6 W 5.00% TA52              |
| R9              | 0RD1000F609 | 100 OHM 1/6 W 5.00% TA52              |
| R10             | 0RD1000F609 | 100 OHM 1/6 W 5.00% TA52              |
| R13             | 0RD1000F609 | 100 OHM 1/6 W 5.00% TA52              |
| R14             | 0RD1000F609 | 100 OHM 1/6 W 5.00% TA52              |
| R16             | 0RD1000F609 | 100 OHM 1/6 W 5.00% TA52              |
| R17             | 0RD1000F609 | 100 OHM 1/6 W 5.00% TA52              |
| R19             | 0RD1000F609 | 100 OHM 1/6 W 5.00% TA52              |

| LOCA. NO | PART NO     | DESCRIPTION               |
|----------|-------------|---------------------------|
| R20      | 0RD1000F609 | 100 OHM 1/6 W 5.00% TA52  |
| R21      | 0RD1000F609 | 100 OHM 1/6 W 5.00% TA52  |
| R22      | 0RD1000F609 | 100 OHM 1/6 W 5.00% TA52  |
| R27      | 0RD1000F609 | 100 OHM 1/6 W 5.00% TA52  |
| R28      | 0RD1000F609 | 100 OHM 1/6 W 5.00% TA52  |
| R30      | 0RD2701F609 | 2.7K OHM 1/6 W 5.00% TA52 |
| R32      | 0RD1000F609 | 100 OHM 1/6 W 5.00% TA52  |
| R34      | 0RD1000F609 | 100 OHM 1/6 W 5.00% TA52  |
| R36      | 0RD4701F609 | 4.7K OHM 1/6 W 5.00% TA52 |
| R40      | 0RD2701F609 | 2.7K OHM 1/6 W 5.00% TA52 |
| R94      | 0RD1000F609 | 100 OHM 1/6 W 5.00% TA52  |
| R97      | 0RD1202F609 | 12K OHM 1/6 W 5.00% TA52  |
| R99      | 0RD1000F609 | 100 OHM 1/6 W 5.00% TA52  |
| R100     | 0RD1000F609 | 100 OHM 1/6 W 5.00% TA52  |
| R104     | 0RD1000F609 | 100 OHM 1/6 W 5.00% TA52  |
| R105     | 0RD1000F609 | 100 OHM 1/6 W 5.00% TA52  |
| R107     | 0RD4701F609 | 4.7K OHM 1/6 W 5.00% TA52 |
| R121     | 0RD1001H609 | 1K OHM 1/2 W 5.00% TA52   |
| R122     | 0RD1001H609 | 1K OHM 1/2 W 5.00% TA52   |
| R124     | 0RS0121K607 | 1.2 OHM 2 W 5.00% TA62    |
| R125     | 0RD4701F609 | 4.7K OHM 1/6 W 5.00% TA52 |
| R127     | 0RD1000F609 | 100 OHM 1/6 W 5.00% TA52  |
| R128     | 0RD2201F609 | 2.2K OHM 1/6 W 5.00% TA52 |
| R129     | 0RD2201F609 | 2.2K OHM 1/6 W 5.00% TA52 |
| R132     | 0RD1000F609 | 100 OHM 1/6 W 5.00% TA52  |
| R133     | 0RD1000F609 | 100 OHM 1/6 W 5.00% TA52  |
| R142     | 0RD3901F609 | 3.9K OHM 1/6 W 5.00% TA52 |
| R151     | 0RD4701F609 | 4.7K OHM 1/6 W 5.00% TA52 |
| R162     | 0RD4701F609 | 4.7K OHM 1/6 W 5.00% TA52 |
| R172     | 0RD3301F609 | 3.3K OHM 1/6 W 5.00% TA52 |
| R173     | 0RD3301F609 | 3.3K OHM 1/6 W 5.00% TA52 |
| R193     | 0RD1001F609 | 1K OHM 1/6 W 5.00% TA52   |
| R197     | 0RD0472H609 | 47 OHM 1/2 W 5.00% TA52   |
| R229     | 0RD1000F609 | 100 OHM 1/6 W 5.00% TA52  |
| R230     | 0RD0682F609 | 68 OHM 1/6 W 5.00% TA52   |
| R231     | 0RD2200F609 | 220 OHM 1/6 W 5.00% TA52  |
| R232     | 0RD2200F609 | 220 OHM 1/6 W 5.00% TA52  |
| R233     | 0RD2200F609 | 220 OHM 1/6 W 5.00% TA52  |
| R234     | 0RD2200F609 | 220 OHM 1/6 W 5.00% TA52  |
| R235     | 0RD2200F609 | 220 OHM 1/6 W 5.00% TA52  |
| R236     | 0RD2200F609 | 220 OHM 1/6 W 5.00% TA52  |
| R237     | 0RD2200F609 | 220 OHM 1/6 W 5.00% TA52  |
| R238     | 0RD2200F609 | 220 OHM 1/6 W 5.00% TA52  |
| R239     | 0RD2200F609 | 220 OHM 1/6 W 5.00% TA52  |
| R240     | 0RD1000F609 | 100 OHM 1/6 W 5.00% TA52  |
| R241     | 0RD0682F609 | 68 OHM 1/6 W 5.00% TA52   |
| R242     | 0RD0752F609 | 75 OHM 1/6 W 5.00% TA52   |
| R243     | 0RD0752F609 | 75 OHM 1/6 W 5.00% TA52   |
| R244     | 0RD0752F609 | 75 OHM 1/6 W 5.00% TA52   |
| R245     | 0RD0752F609 | 75 OHM 1/6 W 5.00% TA52   |
| R248     | 0RD1000F609 | 100 OHM 1/6 W 5.00% TA52  |
| R249     | 0RD1000F609 | 100 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                   |
|----------|-------------|-------------------------------|
| R250     | 0RD2200F609 | 220 OHM 1/6 W 5.00% TA52      |
| R253     | 0RD3301F609 | 3.3K OHM 1/6 W 5.00% TA52     |
| R255     | 0RD3301F609 | 3.3K OHM 1/6 W 5.00% TA52     |
| R256     | 0RD5602F609 | 56K OHM 1/6 W 5.00% TA52      |
| R261     | 0RD2200F609 | 220 OHM 1/6 W 5.00% TA52      |
| R262     | 0RD1001F609 | 1K OHM 1/6 W 5.00% TA52       |
| R263     | 0RD2200F609 | 220 OHM 1/6 W 5.00% TA52      |
| R264     | 0RD2200F609 | 220 OHM 1/6 W 5.00% TA52      |
| R265     | 0RD2200F609 | 220 OHM 1/6 W 5.00% TA52      |
| R266     | 0RD5100F609 | 510 OHM 1/6 W 5.00% TA52      |
| R267     | 0RD5100F609 | 510 OHM 1/6 W 5.00% TA52      |
| R268     | 0RD5100F609 | 510 OHM 1/6 W 5.00% TA52      |
| R269     | 0RD5100F609 | 510 OHM 1/6 W 5.00% TA52      |
| R270     | 0RD5100F609 | 510 OHM 1/6 W 5.00% TA52      |
| R279     | 0RD5100F609 | 510 OHM 1/6 W 5.00% TA52      |
| R288     | 0RD1000F609 | 100 OHM 1/6 W 5.00% TA52      |
| R292     | 0RD4701F609 | 4.7K OHM 1/6 W 5.00% TA52     |
| R311     | 0RD1002F609 | 10K OHM 1/6 W 5.00% TA52      |
| R312     | 0RD8202F609 | 82K OHM 1/6 W 5.00% TA52      |
| R313     | 0RD1802F609 | 18K OHM 1/6 W 5.00% TA52      |
| R314     | 0RD4701F609 | 4.7K OHM 1/6 W 5.00% TA52     |
| R318     | 0RS0101H609 | 1 OHM 1/2 W 5.00% TA52        |
| R324     | 0RD5100F609 | 510 OHM 1/6 W 5.00% TA52      |
| R325     | 0RN3301F409 | 3.3K OHM 1/6 W 1.00% TA52     |
| R326     | 0RN5601F409 | 5.6K OHM 1/6 W 1.00% TA52     |
| R327     | 0RN5601F409 | 5.6K OHM 1/6 W 1.00% TA52     |
| R328     | 0RS2200K607 | 220 OHM 2 W 5.00% TA62        |
| R329     | 0RN0301J607 | 3 OHM 1 W 5.00% TA62          |
| R330     | 0RN0301J607 | 3 OHM 1 W 5.00% TA62          |
| R332     | 0RN3301F409 | 3.3K OHM 1/6 W 1.00% TA52     |
| R340     | 0RD1002F609 | 10K OHM 1/6 W 5.00% TA52      |
| R341     | 0RD1002F609 | 10K OHM 1/6 W 5.00% TA52      |
| R342     | 0RD1002F609 | 10K OHM 1/6 W 5.00% TA52      |
| R343     | 0RD2702F609 | 27K OHM 1/6 W 5.00% TA52      |
| R345     | 0RD2200F609 | 220 OHM 1/6 W 5.00% TA52      |
| R346     | 0RD1002F609 | 10K OHM 1/6 W 5.00% TA52      |
| R347     | 0RD1002F609 | 10K OHM 1/6 W 5.00% TA52      |
| R348     | 0RD3301F609 | 3.3K OHM 1/6 W 5.00% TA52     |
| R349     | 0RD2701F609 | 2.7K OHM 1/6 W 5.00% TA52     |
| R350     | 0RD6801H609 | 6.8K OHM 1/2 W 5.00% TA52     |
| R351     | 0RD1502H609 | 15K OHM 1/2 W 5.00% TA52      |
| R352     | 0RD6200H609 | 620 OHM 1/2 W 5.00% TA52      |
| R353     | 0RD5100H609 | 510 OHM 1/2 W 5.00% TA52      |
| R355     | 0RF0561H609 | 5.6 OHM 1/2 W 5.00% TA52      |
| R356     | 0RD1501H609 | 1.5K OHM 1/2 W 5.00% TA52     |
| R358     | 0RS2202K607 | 22K OHM 2 W 5.00% TA62        |
| R359     | 0RS2202K607 | 22K OHM 2 W 5.00% TA62        |
| R368     | 0RS2202K607 | 22K OHM 2 W 5.00% TA62        |
| R401     | 0RD1002F609 | 10K OHM 1/6 W 5.00% TA52      |
| R404     | 0RS4701K607 | 4.7K OHM 2 W 5.00% TA62       |
| R405     | 180-A01B    | RW ROUND G 2W 0.11 K TA31(63) |
| R406     | 0RS0561K607 | 5.6 OHM 2 W 5.00% TA62        |

| LOCA. NO | PART NO     | DESCRIPTION                    |
|----------|-------------|--------------------------------|
| R407     | 0RS1001J607 | 1K OHM 1 W 5.00% TA62          |
| R408     | 0RD1501F609 | 1.5K OHM 1/6 W 5.00% TA52      |
| R410     | 0RD3301F609 | 3.3K OHM 1/6 W 5.00% TA52      |
| R413     | 0RD4701F609 | 4.7K OHM 1/6 W 5.00% TA52      |
| R414     | 0RD3602F609 | 36K OHM 1/6 W 5.00% TA52       |
| R415     | 0RD3301F609 | 3.3K OHM 1/6 W 5.00% TA52      |
| R416     | 0RD4702F609 | 47K OHM 1/6 W 5.00% TA52       |
| R417     | 0RD4700F609 | 470 OHM 1/6 W 5.00% TA52       |
| R418     | 0RD2701H609 | 2.7K OHM 1/2 W 5.00% TA52      |
| R419     | 0RD1501F609 | 1.5K OHM 1/6 W 5.00% TA52      |
| R420     | 0RD1001F609 | 1K OHM 1/6 W 5.00% TA52        |
| R421     | 0RD0221F609 | 2.2 OHM 1/6 W 5.00% TA52       |
| R422     | 0RD1001H609 | 1K OHM 1/2 W 5.00% TA52        |
| R423     | 0RD2001H609 | 2K OHM 1/2 W 5.00% TA52        |
| R424     | 0RS0561K607 | 5.6 OHM 2 W 5.00% TA62         |
| R426     | 0RD2400H609 | 240 OHM 1/2 W 5.00% TA52       |
| R429     | 0RS4701H609 | 4.7K OHM 1/2 W 5.00% TA52      |
| R431     | 0RS1500H609 | 150 OHM 1/2 W 5.00% TA52       |
| R438     | 0RS3302H609 | 33K OHM 1/2 W 5.00% TA52       |
| R439     | 0RS3901H609 | 3.9K OHM 1/2 W 5.00% TA52      |
| R445     | 0RF0222H609 | 22 OHM 1/2 W 5.00% TA52        |
| R446     | 0RS3302H609 | 33K OHM 1/2 W 5.00% TA52       |
| R447     | 0RD3003F609 | 300K OHM 1/6 W 5.00% TA52      |
| R450     | 0RS0221H609 | 2.2 OHM 1/2 W 5.00% TA52       |
| R451     | 180-C02M    | 5.6K OHM 1/2 W 10% TA52 ERC12G |
| R490     | 180-B01M    | RS RECT S 5W 7.5K J DOUBLE     |
| R601     | 0RD3901F609 | 3.9K OHM 1/6 W 5.00% TA52      |
| R602     | 0RD3901F609 | 3.9K OHM 1/6 W 5.00% TA52      |
| R604     | 0RD3901F609 | 3.9K OHM 1/6 W 5.00% TA52      |
| R607     | 0RD1001F609 | 1K OHM 1/6 W 5.00% TA52        |
| R608     | 0RD1001F609 | 1K OHM 1/6 W 5.00% TA52        |
| R611     | 0RD3901F609 | 3.9K OHM 1/6 W 5.00% TA52      |
| R612     | 0RD3901F609 | 3.9K OHM 1/6 W 5.00% TA52      |
| R616     | 0RD0102F609 | 10 OHM 1/6 W 5.00% TA52        |
| R622     | 0RD0331F609 | 3.3 OHM 1/6 W 5.00% TA52       |
| R623     | 0RD0331F609 | 3.3 OHM 1/6 W 5.00% TA52       |
| R630     | 0RD5600F609 | 560 OHM 1/6 W 5.00% TA52       |
| R631     | 0RD3301F609 | 3.3K OHM 1/6 W 5.00% TA52      |
| R633     | 0RD0331F609 | 3.3 OHM 1/6 W 5.00% TA52       |
| R650     | 0RD0331F609 | 3.3 OHM 1/6 W 5.00% TA52       |
| R651     | 0RD0331F609 | 3.3 OHM 1/6 W 5.00% TA52       |
| R654     | 0RD4701F609 | 4.7K OHM 1/6 W 5.00% TA52      |
| R655     | 0RD4700H609 | 470 OHM 1/2 W 5.00% TA52       |
| R656     | 0RD4700H609 | 470 OHM 1/2 W 5.00% TA52       |
| R657     | 0RD3000F609 | 300 OHM 1/6 W 5.00% TA52       |
| R658     | 0RD3000F609 | 300 OHM 1/6 W 5.00% TA52       |
| R659     | 0RD2002F609 | 20K OHM 1/6 W 5.00% TA52       |
| R660     | 0RD2002F609 | 20K OHM 1/6 W 5.00% TA52       |
| R662     | 0RD1601F609 | 1.6K OHM 1/6 W 5.00% TA52      |
| R663     | 0RD3301F609 | 3.3K OHM 1/6 W 5.00% TA52      |
| R674     | 0RD3900F609 | 390 OHM 1/6 W 5.00% TA52       |
| R675     | 0RD3900F609 | 390 OHM 1/6 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                    |
|---------------|-------------|--------------------------------|
| R676          | 0RD3302F609 | 33K OHM 1/6 W 5.00% TA52       |
| R677          | 0RD0102F609 | 10 OHM 1/6 W 5.00% TA52        |
| R678          | 0RD0271F609 | 2.7 OHM 1/6 W 5.00% TA52       |
| R680          | 0RD0271F609 | 2.7 OHM 1/6 W 5.00% TA52       |
| R701          | 0RN5602F409 | 56K OHM 1/6 W 1.00% TA52       |
| R702          | 0RN1802F409 | 18K OHM 1/6 W 1.00% TA52       |
| R716          | 0RD1000F609 | 100 OHM 1/6 W 5.00% TA52       |
| R717          | 0RD1000F609 | 100 OHM 1/6 W 5.00% TA52       |
| R742          | 0RN2202F409 | 22K OHM 1/6 W 1.00% TA52       |
| R756          | 0RN1002F409 | 10K OHM 1/6 W 1.00% TA52       |
| R801          | 0RS2002K607 | 20K OHM 2 W 5.00% TA62         |
| $\Delta$ R802 | 180-822M    | RWR 15W 1.0 OHM J PD           |
| R803          | 0RD1802H609 | 18K OHM 1/2 W 5.00% TA52       |
| R804          | 0RS0152K607 | 15 OHM 2 W 5.00% TA62          |
| R805          | 0RD5100F609 | 510 OHM 1/6 W 5.00% TA52       |
| R806          | 0RD2001F609 | 2K OHM 1/6 W 5.00% TA52        |
| R807          | 0RD1001F609 | 1K OHM 1/6 W 5.00% TA52        |
| R808          | 180-A01D    | RW ROUND G 2W 0.16 J TA31(63)  |
| $\Delta$ R809 | 0RKZVTA001K | 0.47M OHM 1/2 W 5% TA52 PILKOR |
| R810          | 0RD7501F609 | 7.5K OHM 1/6 W 5.00% TA52      |
| R811          | 180-A01R    | RW ROUND G 2W 0.39 J TA31(63)  |
| R813          | 0RS1002K607 | 10K OHM 2 W 5.00% TA62         |
| R814          | 0RD3002H609 | 30K OHM 1/2 W 5.00% TA52       |
| R815          | 0RD1202F609 | 12K OHM 1/6 W 5.00% TA52       |
| R816          | 0RS0102K607 | 10 OHM 2 W 5.00% TA62          |
| $\Delta$ R824 | 0RKZVTA001C | 8.2M OHM 1/2 W 5% TA52 UL PILK |
| R825          | 0RD4701F609 | 4.7K OHM 1/6 W 5.00% TA52      |
| R831          | 0RD2001F609 | 2K OHM 1/6 W 5.00% TA52        |
| R835          | 0RD5100F609 | 510 OHM 1/6 W 5.00% TA52       |
| R838          | 0RD2001F609 | 2K OHM 1/6 W 5.00% TA52        |
| R840          | 0RD0680H609 | 0.68 OHM 1/2 W 5.00% TA52      |
| R841          | 0RD0680H609 | 0.68 OHM 1/2 W 5.00% TA52      |
| R842          | 0RD4701H609 | 4.7K OHM 1/2 W 5.00% TA52      |
| R843          | 0RD1000H609 | 100 OHM 1/2 W 5.00% TA52       |
| R844          | 0RD1001F609 | 1K OHM 1/6 W 5.00% TA52        |
| R845          | 0RD1502H609 | 15K OHM 1/2 W 5.00% TA52       |
| R849          | 0RS0182K607 | 18 OHM 2 W 5.00% TA62          |
| R856          | 0RD1502F609 | 15K OHM 1/6 W 5.00% TA52       |
| R857          | 0RS2002K607 | 20K OHM 2 W 5.00% TA62         |
| R860          | 0RD4701F609 | 4.7K OHM 1/6 W 5.00% TA52      |
| R861          | 0RD2201F609 | 2.2K OHM 1/6 W 5.00% TA52      |
| R862          | 0RD2201F609 | 2.2K OHM 1/6 W 5.00% TA52      |
| R902          | 0RD4702F609 | 47K OHM 1/6 W 5.00% TA52       |
| R903          | 0RS4702K607 | 47K OHM 2 W 5.00% TA62         |
| R905          | 0RD1001F609 | 1K OHM 1/6 W 5.00% TA52        |
| R906          | 0RD1001F609 | 1K OHM 1/6 W 5.00% TA52        |
| R907          | 0RS4702K607 | 47K OHM 2 W 5.00% TA62         |
| R908          | 0RS4700H609 | 470 OHM 1/2 W 5.00% TA52       |
| R909          | 0RN3302F409 | 33K OHM 1/6 W 1.00% TA52       |
| R910          | 0RF0101K607 | 1 OHM 2 W 5.00% TA62           |
| R911          | 0RD1001F609 | 1K OHM 1/6 W 5.00% TA52        |
| R912          | 0RN5601F409 | 5.6K OHM 1/6 W 1.00% TA52      |

| LOCA. NO | PART NO     | DESCRIPTION                    |
|----------|-------------|--------------------------------|
| R914     | 0RD3001F609 | 3K OHM 1/6 W 5.00% TA52        |
| R915     | 0RD1001F609 | 1K OHM 1/6 W 5.00% TA52        |
| R916     | 0RKZVTA001L | 1.0M OHM 1/2 W 5% TA52 UL PILK |
| R917     | 0RD1803H609 | 180K OHM 1/2 W 5.00% TA52      |
| R918     | 0RS4702K607 | 47K OHM 2 W 5.00% TA62         |
| R921     | 0RN3001F409 | 3K OHM 1/6 W 1.00% TA52        |
| R929     | 0RD3001F609 | 3K OHM 1/6 W 5.00% TA52        |
| R930     | 0RS4700H609 | 470 OHM 1/2 W 5.00% TA52       |
| R938     | 0RS4700H609 | 470 OHM 1/2 W 5.00% TA52       |
| R946     | 0RD1001F609 | 1K OHM 1/6 W 5.00% TA52        |
| R947     | 0RD3001F609 | 3K OHM 1/6 W 5.00% TA52        |
| R1101    | 0RD1501F609 | 1.5K OHM 1/6 W 5.00% TA52      |
| R1102    | 0RD4702F609 | 47K OHM 1/6 W 5.00% TA52       |
| R1103    | 0RD3300F609 | 330 OHM 1/6 W 5.00% TA52       |
| R1104    | 0RD0102F609 | 10 OHM 1/6 W 5.00% TA52        |
| R1105    | 0RD1000F609 | 100 OHM 1/6 W 5.00% TA52       |
| R1106    | 0RD1000F609 | 100 OHM 1/6 W 5.00% TA52       |
| R1107    | 0RS0182H609 | 18 OHM 1/2 W 5.00% TA52        |
| R1108    | 0RD2002F609 | 20K OHM 1/6 W 5.00% TA52       |
| R1109    | 0RD1003F609 | 100K OHM 1/6 W 5.00% TA52      |
| R1110    | 0RD1000F609 | 100 OHM 1/6 W 5.00% TA52       |
| R1111    | 0RD4701F609 | 4.7K OHM 1/6 W 5.00% TA52      |
| R1112    | 0RD1000F609 | 100 OHM 1/6 W 5.00% TA52       |
| R1113    | 0RD1000F609 | 100 OHM 1/6 W 5.00% TA52       |
| R1114    | 0RD3003F609 | 300K OHM 1/6 W 5.00% TA52      |
| R1115    | 0RS0122H609 | 12 OHM 1/2 W 5.00% TA52        |
| R1116    | 0RD4701F609 | 4.7K OHM 1/6 W 5.00% TA52      |
| R1117    | 0RD4701F609 | 4.7K OHM 1/6 W 5.00% TA52      |
| R1118    | 0RD3900F609 | 390 OHM 1/6 W 5.00% TA52       |
| R1151    | 0RD1000F609 | 100 OHM 1/6 W 5.00% TA52       |
| R1152    | 0RD1000F609 | 100 OHM 1/6 W 5.00% TA52       |
| R1153    | 0RD1000F609 | 100 OHM 1/6 W 5.00% TA52       |
| R1154    | 0RD1000F609 | 100 OHM 1/6 W 5.00% TA52       |
| R1155    | 0RD1000F609 | 100 OHM 1/6 W 5.00% TA52       |
| R1156    | 0RD1000F609 | 100 OHM 1/6 W 5.00% TA52       |
| R1204    | 0RD2403F609 | 240K OHM 1/6 W 5.00% TA52      |
| R1206    | 0RD0752F609 | 75 OHM 1/6 W 5.00% TA52        |
| R1208    | 0RD2403F609 | 240K OHM 1/6 W 5.00% TA52      |
| R1212    | 0RD0752F609 | 75 OHM 1/6 W 5.00% TA52        |
| R1251    | 0RD0752F609 | 75 OHM 1/6 W 5.00% TA52        |
| R1252    | 0RD0752F609 | 75 OHM 1/6 W 5.00% TA52        |
| R1253    | 0RD0752F609 | 75 OHM 1/6 W 5.00% TA52        |
| R1254    | 0RD1001F609 | 1K OHM 1/6 W 5.00% TA52        |
| R1255    | 0RD1001F609 | 1K OHM 1/6 W 5.00% TA52        |
| R1292    | 0RD0752F609 | 75 OHM 1/6 W 5.00% TA52        |
| R2906    | 0RD1500F609 | 150 OHM 1/6 W 5.00% TA52       |
| R2907    | 0RD1600F609 | 160 OHM 1/6 W 5.00% TA52       |
| R2908    | 0RD3001F609 | 3K OHM 1/6 W 5.00% TA52        |
| R2909    | 0RD1500F609 | 150 OHM 1/6 W 5.00% TA52       |
| R2910    | 0RD3001F609 | 3K OHM 1/6 W 5.00% TA52        |
| R2911    | 0RD5601F609 | 5.6K OHM 1/6 W 5.00% TA52      |
| R2912    | 0RD3001F609 | 3K 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                           |
|-----------------------------|-------------|---------------------------------------|
| R2921                       | 0RD3000H609 | 300 OHM 1/2 W 5.00% TA52              |
| R2922                       | 0RD3000H609 | 300 OHM 1/2 W 5.00% TA52              |
| R2928                       | 0RD0102F609 | 10 OHM 1/6 W 5.00% TA52               |
| R2929                       | 0RD1000F609 | 100 OHM 1/6 W 5.00% TA52              |
| R2930                       | 0RD0102F609 | 10 OHM 1/6 W 5.00% TA52               |
| R2931                       | 0RD1000F609 | 100 OHM 1/6 W 5.00% TA52              |
| R2932                       | 0RD0822F609 | 82 OHM 1/6 W 5.00% TA52               |
| R2933                       | 0RD0822F609 | 82 OHM 1/6 W 5.00% TA52               |
| R2934                       | 0RF0102J607 | 10 OHM 1 W 5.00% TA62                 |
| R2935                       | 0RD1202H609 | 12K OHM 1/2 W 5.00% TA52              |
| R2936                       | 0RD2001H609 | 2K OHM 1/2 W 5.00% TA52               |
| R2937                       | 0RD5602H609 | 56K OHM 1/2 W 5.00% TA52              |
| R2938                       | 0RD5602H609 | 56K OHM 1/2 W 5.00% TA52              |
| R2939                       | 0RD1201H609 | 1.2K OHM 1/2 W 5.00% TA52             |
| R2940                       | 0RD1501H609 | 1.5K OHM 1/2 W 5.00% TA52             |
| R2941                       | 0RD1501H609 | 1.5K OHM 1/2 W 5.00% TA52             |
| R2942                       | 0RD0391H609 | 3.9 OHM 1/2 W 5.00% TA52              |
| R2943                       | 0RD0472H609 | 47 OHM 1/2 W 5.00% TA52               |
| R2944                       | 0RD0391H609 | 3.9 OHM 1/2 W 5.00% TA52              |
| R2945                       | 0RD0472H609 | 47 OHM 1/2 W 5.00% TA52               |
| R2946                       | 0RS8200J607 | 820 OHM 1 W 5.00% TA62                |
| R2947                       | 0RS8200J607 | 820 OHM 1 W 5.00% TA62                |
| R2955                       | 0RD2202H609 | 22K OHM 1/2 W 5.00% TA52              |
| R2959                       | 0RD5101F609 | 5.1K OHM 1/6 W 5.00% TA52             |
| R2990                       | 0RD0222F609 | 22 OHM 1/6 W 5.00% TA52               |
| <b>SPARK GAP</b>            |             |                                       |
| FB901                       | 6918VAX002A | SPARK GAP,SSA-351N-A1 350V 30% 5MM    |
| SG401                       | 165-004A    | SPARK GAP,AG20PT 152F-L3N/S-23        |
| 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        |
| <b>SWITCH</b>               |             |                                       |
| $\Delta$ SW1101             | 140-289A    | SWITCH,PUSH POWER SDDF3PASP013        |
| SW1151                      | 140-313B    | SWITCH,TACT 2LEAD 160G(TA) LG C&D NON |
| SW1152                      | 140-313B    | SWITCH,TACT 2LEAD 160G(TA) LG C&D NON |
| SW1153                      | 140-313B    | SWITCH,TACT 2LEAD 160G(TA) LG C&D NON |
| SW1154                      | 140-313B    | SWITCH,TACT 2LEAD 160G(TA) LG C&D NON |
| SW1155                      | 140-313B    | SWITCH,TACT 2LEAD 160G(TA) LG C&D NON |
| SW1156                      | 140-313B    | SWITCH,TACT 2LEAD 160G(TA) LG C&D NON |
| SW1157                      | 140-313B    | SWITCH,TACT 2LEAD 160G(TA) LG C&D NON |
| SW1158                      | 140-313B    | SWITCH,TACT 2LEAD 160G(TA) LG C&D NON |
| <b>FILTER &amp; CRYSTAL</b> |             |                                       |
| F501                        | 166-F01G    | FILTER,EMC DSS6NZ82A103Q93A           |
| F503                        | 166-F01G    | FILTER,EMC DSS6NZ82A103Q93A           |
| F506                        | 166-F01G    | FILTER,EMC DSS6NZ82A103Q93A           |
| F701                        | 166-F01G    | FILTER,EMC DSS6NZ82A103Q93A           |
| F704                        | 166-F01G    | FILTER,EMC DSS6NZ82A103Q93A           |
| FB301                       | 125-022K    | FILTER,EMC FERRITE 1UH TAPING         |
| FB403                       | 125-022K    | FILTER,EMC FERRITE 1UH TAPING         |

| LOCA. NO             | PART NO     | DESCRIPTION                                    |
|----------------------|-------------|------------------------------------------------|
| FB802                | 125-123A    | FILTER,EMC FERRITE BFD3565R2F                  |
| FB803                | 125-022K    | FILTER,EMC FERRITE 1UH TAPING                  |
| FB804                | 125-022K    | FILTER,EMC FERRITE 1UH TAPING                  |
| FB805                | 125-022K    | FILTER,EMC FERRITE 1UH TAPING                  |
| FB806                | 125-022K    | FILTER,EMC FERRITE 1UH TAPING                  |
| FB902                | 125-022K    | FILTER,EMC FERRITE 1UH TAPING                  |
| FB2901               | 125-123A    | FILTER,EMC FERRITE BFD3565R2F                  |
| FL501                | 6200VKR001C | FILTER,BAND PASS LPF 2EA                       |
| FL701                | 6200VKR001B | FILTER,BAND PASS LPF 2EA SMD                   |
| FL702                | 6200VKR001A | FILTER,BAND PASS LPF 1EA SMD                   |
| FL703                | 6200VKR001A | FILTER,BAND PASS LPF 1EA SMD                   |
| J42                  | 125-022K    | FILTER,EMC FERRITE 1UH                         |
| L11                  | 125-022K    | FILTER,EMC FERRITE 1UH                         |
| L033                 | 125-022K    | FILTER,EMC FERRITE 1UH                         |
| L213                 | 125-123A    | FILTER,EMC FERRITE BFD3565R2F                  |
| L602                 | 125-022K    | FILTER,EMC FERRITE 1UH                         |
| L603                 | 125-022K    | FILTER,EMC FERRITE 1UH                         |
| L650                 | 125-022K    | FILTER,EMC FERRITE 1UH                         |
| T801                 | 150-F06U    | FILTER,EMC SQE3535 27.5MH 0.6PHY 70TURN        |
| X01                  | 156-A01L    | RESONATOR,CRYSTAL HC49U SUNNY RADIAL 6.000MHZ  |
| X501                 | 6202VDB007B | RESONATOR,CRYSTAL HC49U SUNNY RADIAL 20.250MHZ |
| X601                 | 156-A02M    | RESONATOR,CRYSTAL HC49U KJE RADIAL 18.432MHZ   |
| X701                 | 156-A02U    | RESONATOR,CRYSTAL HC49U KJE RADIAL 27.000MHZ   |
| X702                 | 166-E02E    | RESONATOR,CRYSTAL CSBLA500KECF02-B0 CSB500F2   |
| Z101                 | 166-F01G    | FILTER,DSS6NZ82A103Q93A DSS306-93FZ10          |
| Z102                 | 166-F01G    | FILTER,DSS6NZ82A103Q93A DSS306-93FZ10          |
| Z104                 | 166-F01G    | FILTER,DSS6NZ82A103Q93A DSS306-93FZ10          |
| Z105                 | 166-F01G    | FILTER,DSS6NZ82A103Q93A DSS306-93FZ10          |
| Z106                 | 166-C06B    | FILTER,MKTGA41M4AAHP00A03 MKT41.4MA11          |
| Z107                 | 166-F01G    | FILTER,DSS6NZ82A103Q93A DSS306-93FZ10          |
| <b>ACCESSORIES</b>   |             |                                                |
| A1                   | 3828VA0231T | MANUAL,OWNERS ES LG SP/PO 049G TX 016          |
| A2                   | 6710V00049G | REMOTE CONTROLLER MC006A                       |
| A2                   | 6710V00067F | REMOTE CONTROLLER MC006A,W/EYE ITALY           |
| <b>MISCELLANEOUS</b> |             |                                                |
| JA1                  | 6613V00004A | JACK ASSY,PJ6054A EARPHONE+S-VHS+3P            |
| $\Delta$ RL801       | 6920VB1001B | RELAY,LK1AF-12V MATSUSHITA 12V 4.41E           |
| RL802                | 141-018F    | RELAY,DG5D1-0-2 DAIICHI 5V 0.000106A           |
| $\Delta$ SK900       | 6620VBD002A | SOCKET,CPT PCS029A 9PIN 14/360                 |
| PA1101               | 6726VV0006J | REMOTE CONTROLLER RECEIVER 38KHZ               |
| PJ201                | 6612VMH002A | JACK,SCART PMJ020A 2X21 PIN ABO                |
| PJ202                | 6613V00011A | JACK ASSY PMJ018A 21P SCART+A/                 |
| $\Delta$ TH801       | 163-054F    | THERMISTOR,PTC J502P84D140M290Q                |
| TU101                | 6700VPF012A | TUNER,TAUC-M130D                               |
| TU102                | 6700VPF012B | TUNER,TAFC-M130P                               |
| VA802                | 164-003K    | VARISTOR,SVC621D-14A 620V 0% UL/C              |
| ZN1101               | 164-003K    | VARISTOR,SVC621D-14A 620V 0% UL/C              |





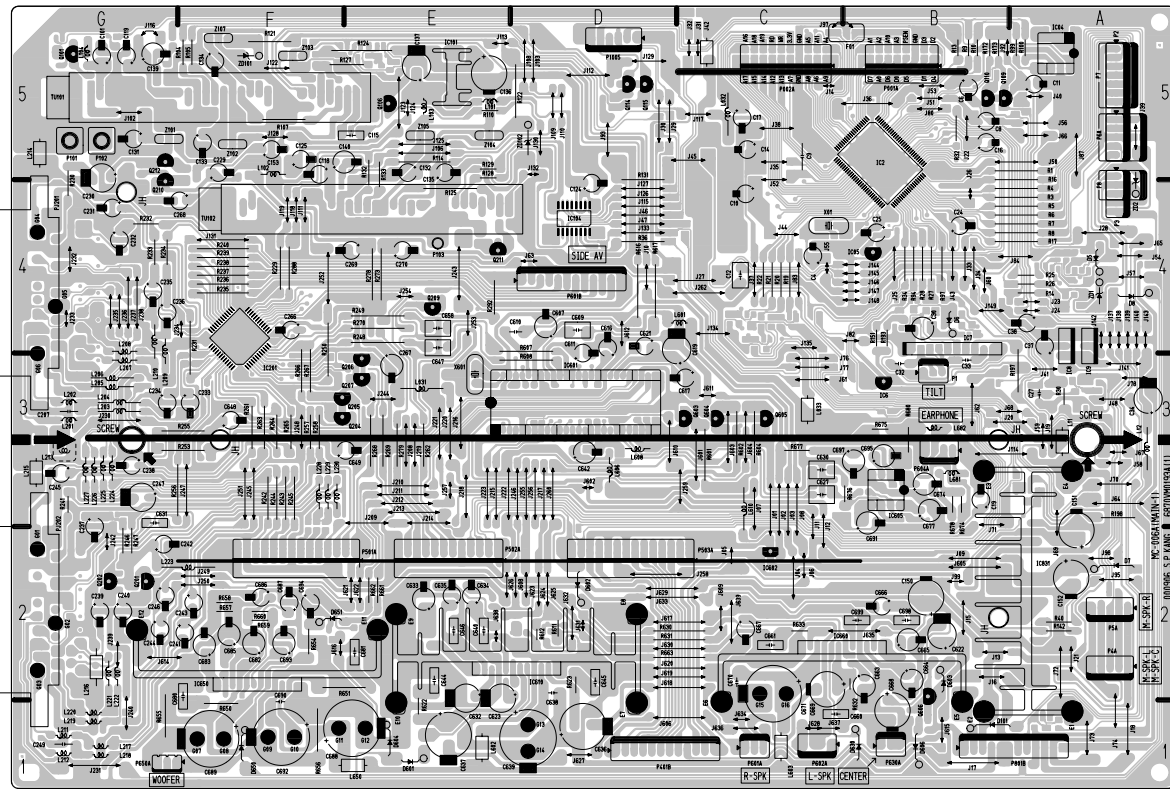




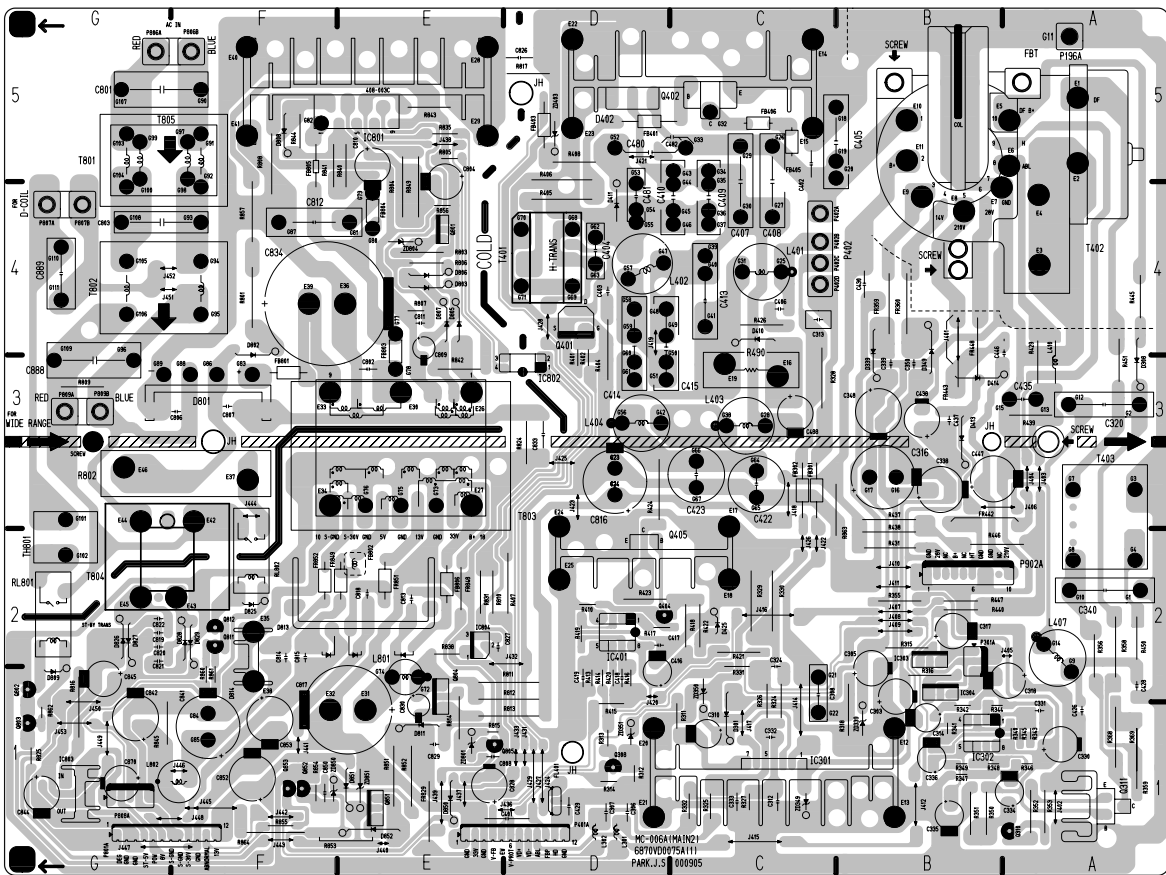


## PRINTED CIRCUIT BOARD

### MAIN



### MAIN 2



## COMPONENT LOCATION GUIDE

|             |             |             |              |              |             |             |             |             |               |              |               |
|-------------|-------------|-------------|--------------|--------------|-------------|-------------|-------------|-------------|---------------|--------------|---------------|
| C1.....B4   | C205.....G3 | C607.....D4 | C688.....E1  | L220.....G2  | Q112.....E5 | R104.....F5 | R202.....G4 | R272.....F4 | R663.....D2   | TP90.....G1  | TP167.....A5  |
| C2.....B4   | C206.....G3 | C608.....D3 | C689.....F1  | L221.....G2  | Q113.....E5 | R105.....F5 | R203.....G4 | R273.....F4 | R664.....E2   | TP91.....F2  | TP168.....B4  |
| C3.....C4   | C207.....G3 | C609.....D4 | C690.....F2  | L222.....G2  | Q114.....E5 | R106.....F5 | R204.....G4 | R274.....E3 | R665.....B3   | TP92.....E1  | TP169.....B5  |
| C4.....C4   | C208.....G3 | C610.....E4 | C691.....B3  | L223.....G2  | Q115.....D5 | R107.....F5 | R205.....G4 | R275.....E3 | R666.....B3   | TP93.....D2  | TP170.....B4  |
| C5.....B5   | C209.....G3 | C611.....D4 | C692.....B1  | L224.....G3  | Q201.....G2 | R108.....G5 | R206.....G4 | R276.....E3 | R667.....B3   | TP94.....B2  | TP171.....B5  |
| C6.....B5   | C210.....F3 | C612.....D3 | C693.....F2  | L225.....G3  | Q202.....G2 | R109.....G5 | R207.....G4 | R277.....E3 | R668.....B3   | TP95.....A2  | TP172.....B5  |
| C7.....A5   | C211.....G3 | C613.....D4 | C694.....F2  | L226.....G3  | Q203.....G3 | R113.....F5 | R208.....F4 | R278.....E4 | R674.....B3   | TP96.....F3  | TP173.....B5  |
| C8.....B5   | C212.....G4 | C614.....D3 | C695.....B3  | L227.....G3  | Q204.....E3 | R114.....E5 | R209.....G4 | R279.....E3 | R676.....B3   | TP97.....F3  | TP174.....B5  |
| C9.....C5   | C213.....G3 | C615.....D3 | C696.....B3  | L228.....F3  | Q205.....E3 | R115.....G5 | R210.....G3 | R280.....F5 | R677.....C3   | TP98.....F3  | TP175.....B5  |
| C10.....C4  | C214.....G3 | C616.....D4 | C697.....B3  | L229.....F3  | Q206.....E3 | R116.....G5 | R211.....F4 | R281.....G4 | R678.....B3   | TP99.....C3  | TP176.....B5  |
| C11.....A5  | C215.....G3 | C617.....D3 | C698.....B2  | L230.....F3  | Q207.....E3 | R117.....G5 | R212.....G3 | R282.....G4 | R679.....B3   | TP100.....C3 | TP177.....B5  |
| C12.....C4  | C216.....G2 | C618.....D4 | C699.....B2  | L601.....C4  | Q208.....E4 | R121.....F5 | R213.....G2 | R283.....G4 | R680.....B3   | TP101.....A3 | TP178.....B5  |
| C13.....C5  | C217.....G1 | C619.....D4 | D5.....A4    | L602.....E1  | Q209.....E4 | R122.....D5 | R214.....G2 | R284.....E4 | SM1A.....B5   | TP102.....A3 | TP179.....B5  |
| C14.....C4  | C218.....G1 | C620.....D3 | D6.....B4    | L603.....C1  | Q210.....G5 | R123.....A1 | R215.....G2 | R285.....E4 | SM1B.....B4   | TP103.....A3 | TP180.....B5  |
| C15.....B5  | C219.....G4 | C621.....D4 | D7.....A2    | L604.....D3  | Q211.....G4 | R124.....F4 | R216.....G2 | R286.....E4 | SM1A/F.....F4 | TP104.....A4 | TP181.....B5  |
| C16.....B5  | C220.....G4 | C622.....B2 | D8.....A4    | L608.....D3  | Q212.....G5 | R125.....E4 | R217.....G2 | R287.....G5 | SM20B.F3      | TP105.....A4 | TP182.....C5  |
| C17.....C5  | C221.....G4 | C623.....E2 | D101.....B1  | L610.....C3  | Q211.....D2 | R127.....E5 | R218.....G2 | R288.....F4 | SM1A.....B5   | TP106.....A4 | TP183.....C5  |
| C18.....B3  | C222.....G4 | C624.....D3 | D601.....E1  | L650.....F1  | Q602.....D2 | R128.....E5 | R219.....G2 | R289.....E4 | SMB.....G1    | TP107.....A4 | TP184.....C5  |
| C19.....B3  | C223.....G4 | C625.....D3 | D602.....D2  | L611.....B3  | Q603.....C3 | R129.....E5 | R220.....G2 | R290.....E4 | TP1.....D5    | TP108.....A4 | TP185.....F5  |
| C20.....B3  | C224.....G3 | C626.....D3 | D603.....B2  | L682.....C3  | Q604.....C2 | R130.....G5 | R221.....G2 | R291.....F5 | TP2.....D5    | TP109.....A4 | TP186.....G5  |
| C21.....B4  | C225.....F3 | C627.....C3 | D604.....E1  | P1.....B3    | Q605.....C3 | R132.....E5 | R222.....G2 | R292.....E4 | TP20.....B5   | TP110.....B4 | TP187.....C4  |
| C22.....B4  | C226.....F2 | C628.....B3 | D606.....B1  | P2.....A5    | Q606.....B2 | R133.....E5 | R223.....F3 | R293.....F5 | TP21.....B4   | TP111.....B4 | TP188.....C4  |
| C23.....A3  | C227.....F2 | C629.....D3 | D630.....B1  | P3.....A5    | Q607.....F2 | R140.....A3 | R224.....G3 | R301.....C3 | TP22.....B4   | TP112.....B4 | TP189.....C4  |
| C24.....A3  | C228.....F2 | C630.....D3 | D631.....F1  | P7.....A5    | Q608.....F2 | R141.....G5 | R225.....G3 | R302.....F5 | TP23.....B4   | TP113.....B4 | TP190.....C4  |
| C25.....A3  | C229.....G5 | C331.....G5 | F651.....F2  | P8.....A5    | R3.....A4   | R142.....A2 | R226.....F3 | R304.....C3 | TP24.....C4   | TP114.....B3 | TP191.....C4  |
| C26.....A3  | C230.....G4 | C632.....E2 | IC1.....B5   | P101.....G5  | R4.....A4   | R143.....A3 | R227.....F3 | R306.....C3 | TP26.....C4   | TP115.....B4 | TP192.....C4  |
| C27.....C4  | C231.....G4 | C633.....E2 | IC04.....A5  | P102.....G5  | R5.....A4   | R144.....A3 | R228.....F3 | R307.....E4 | TP28.....C5   | TP116.....B3 | TP193.....C4  |
| C28.....B3  | C233.....F3 | C635.....E2 | IC05.....B4  | P1005.....D5 | R4.....A4   | R145.....A3 | R229.....F4 | R308.....E3 | TP30.....C5   | TP117.....A4 | TP194.....D4  |
| C29.....B3  | C234.....G3 | C636.....E2 | IC06.....B4  | P1006.....D5 | R5.....A4   | R146.....A3 | R230.....F4 | R309.....F5 | TP31.....C5   | TP118.....E3 | TP195.....D4  |
| C30.....A3  | C235.....G4 | C636.....D1 | IC7.....B4   | P002A.....C5 | R8.....A4   | R147.....A5 | R231.....F4 | R310.....E2 | TP33.....F4   | TP119.....G4 | TP196.....D4  |
| C31.....B5  | C236.....G4 | C637.....E1 | IC8.....A4   | P401B.....D1 | R9.....B5   | R149.....A1 | R232.....G4 | R311.....D2 | TP34.....E4   | TP120.....F4 | X01.....C4    |
| C32.....D5  | C237.....G3 | C638.....D2 | IC9.....A4   | P404.....A2  | R10.....B5  | R150.....A1 | R233.....G4 | R312.....D2 | TP36.....F4   | TP121.....D4 | X601.....E3   |
| C37.....A4  | C238.....G3 | C639.....D1 | IC101.....E5 | P501A.....E2 | R11.....B5  | R151.....B4 | R234.....G4 | R313.....E2 | TP37.....C4   | TP122.....B5 | Z101.....G5   |
| C38.....A4  | C239.....G3 | C640.....D2 | IC104.....D4 | P502A.....E2 | R12.....B5  | R152.....B4 | R235.....G4 | R314.....E2 | TP38.....C4   | TP123.....B5 | Z102.....F5   |
| C101.....G5 | C240.....G2 | C641.....D3 | IC201.....F4 | P503A.....C2 | R13.....B5  | R153.....F5 | R236.....F4 | R315.....D2 | TP40.....F4   | TP124.....B5 | Z103.....F5   |
| C102.....F5 | C241.....F2 | C642.....D3 | IC601.....E3 | P5A.....A2   | R14.....A4  | R154.....F5 | R237.....F4 | R316.....D4 | TP43.....G4   | TP125.....B5 | Z104.....E5   |
| C103.....F5 | C242.....G2 | C643.....D3 | IC602.....C2 | P601A.....C1 | R15.....B5  | R155.....E5 | R238.....F4 | R317.....D4 | TP44.....E4   | TP126.....B5 | Z105.....E5   |
| C104.....F5 | C243.....F2 | C644.....D2 | IC605.....B3 | P601B.....D4 | R16.....A5  | R156.....E5 | R239.....F4 | R318.....E2 | TP45.....F4   | TP127.....B4 | Z107.....F5   |
| C105.....F5 | C244.....G2 | C645.....D2 | IC606.....B3 | P602A.....B1 | R17.....A4  | R157.....E4 | R240.....F4 | R319.....E2 | TP46.....F4   | TP128.....B4 | Z108.....F5   |
| C106.....F5 | C245.....G3 | C646.....E2 | IC608.....F2 | P604A.....B3 | R18.....B4  | R158.....D4 | R241.....G3 | R320.....E2 | TP54.....F4   | TP129.....B4 | Z02.....A4    |
| C107.....F5 | C246.....G2 | C647.....E4 | IC680.....B2 | P630A.....B1 | R19.....C4  | R159.....D4 | R242.....F3 | R321.....E2 | TP56.....F4   | TP130.....B4 | Z0101.....F5  |
| C108.....E5 | C247.....G3 | C648.....F3 | IC831.....A2 | P650A.....G1 | R20.....C4  | R170.....B5 | R243.....F3 | R322.....E2 | TP59.....F4   | TP131.....C4 | Z02102.....F5 |
| C109.....E4 | C248.....G1 | C649.....E1 | L11.....A3   | P651.....A2  | R21.....B5  | R171.....B5 | R244.....F3 | R323.....D2 | TP60.....D4   | TP132.....C4 | Z03.....F5    |
| C110.....E4 | C249.....G1 | C650.....E1 | L12.....A3   | P670A.....B1 | R22.....C4  | R172.....B5 | R245.....F3 | R324.....B1 | TP62.....D4   | TP133.....D4 | Z04.....F5    |
| C112.....E4 | C250.....G1 | C660.....C1 | Q131.....G3  | PJ201.....G4 | R25.....A4  | R173.....B5 | R246.....G2 | R325.....B1 | TP62.....F3   | TP136.....E4 | Z05.....F5    |
| C113.....E4 | C251.....G1 | C661.....C2 | Q132.....C5  | PJ202.....G2 | R26.....A4  | R174.....B5 | R247.....G2 | R326.....E1 | TP66.....F4   | TP137.....E4 | Z06.....F5    |
| C114.....F4 | C252.....G2 | C663.....B2 | Q133.....C3  | Q2.....A2    | R27.....B4  | R175.....B4 | R248.....E4 | R327.....B2 | TP64.....D3   | TP138.....E4 | Z07.....F5    |
| C115.....F5 | C253.....G3 | C664.....B2 | Q134.....E5  | A4.....A4    | R28.....B4  | R176.....B4 | R249.....G3 | R328.....B2 | TP65.....D3   | TP139.....E4 | Z08.....F5    |
| C116.....F5 | C254.....G2 | C665.....B2 | Q135.....E5  | Q5.....A4    | R30.....A3  | R177.....B3 | R250.....F3 | R329.....B1 | TP66.....D3   | TP140.....E4 | Z09.....F5    |
| C118.....F5 | C255.....G2 | C666.....B2 | Q136.....E5  | Q5.....A4    | R31.....A3  | R178.....B3 | R251.....G2 | R330.....D2 | TP67.....F3   | TP141.....F4 | Z10.....F5    |
| C119.....G5 | C256.....G1 | C667.....C2 | Q137.....E5  | Q6.....B4    | R32.....B5  | R180.....A4 | R252.....G1 | R331.....D2 | TP68.....F3   | TP142.....F4 | Z11.....F5    |
| C124.....D4 | C257.....G2 | C668.....B1 | Q120.....G3  | Q7.....B4    | R33.....B4  | R181.....A4 | R253.....G3 | R332.....B2 | TP69.....F3   | TP143.....G5 | Z12.....F5    |
| C125.....F5 | C258.....F4 | C669.....B1 | Q121.....G3  | Q8.....B4    | R34.....B3  | R182.....A4 | R254.....G3 | R333.....B2 | TP70.....F3   | TP144.....G5 | Z13.....F5    |
| C131.....G5 | C259.....F3 | C670.....C2 | Q123.....G3  | Q9.....B3    | R35.....A3  | R183.....A3 | R255.....G3 | R334.....B2 | TP72.....F3   | TP147.....F5 | Z14.....F5    |
| C132.....E5 | C260.....F2 | C671.....C2 | Q124.....G4  | Q10.....A3   | R36.....D4  | R184.....A4 | R256.....G3 | R335.....C2 | TP73.....D3   | TP148.....F5 | Z15.....F5    |
| C133.....F5 | C261.....F2 | C672.....B3 | Q125.....G3  | Q11.....A3   | R37.....B4  | R185.....A4 | R257.....F3 | R336.....B2 | TP74.....D3   | TP149.....E5 | Z16.....F5    |
| C134.....F5 | C262.....F2 | C674.....B3 | Q126.....G3  | Q12.....A1   | R40.....A2  | R186.....A4 | R258.....F3 | R337.....B2 | TP75.....D3   | TP150.....E5 | Z17.....F5    |
| C135.....F5 | C263.....F2 | C675.....B3 | Q127.....G4  | Q13.....A1   | R41.....A2  | R187.....A4 | R259.....F3 | R338.....B2 | TP76.....D3   | TP151.....E5 | Z18.....F5    |
| C136.....E5 | C264.....F2 | C676.....C3 | Q128.....G4  | Q14.....B4   | R53.....C4  | R188.....B3 | R260.....E3 | R351.....F2 | TP77.....D3   | TP155.....C5 | Z19.....F5    |
| C137.....E5 | C265.....F2 | C677.....B3 | Q129.....G4  | Q15.....C4   | R54.....C4  | R190.....B4 | R261.....F3 | R352.....F2 | TP78.....D3   | TP156.....C5 | Z20.....F5    |
| C139.....G5 | C266.....F4 | C678.....C3 | Q1210.....G4 | Q16.....C4   | R55.....C4  | R191.....B4 | R262.....E3 | R353.....F2 | TP79.....E3   | TP157.....C5 | Z21.....F5    |
| C140.....E5 | C267.....E3 | C679.....B3 | Q1211.....G1 | Q17.....C4   | R56.....C4  | R192.....B4 | R263.....F3 | R354.....F2 | TP80.....D3   | TP158.....C5 | Z22.....F5    |
| C141.....E5 | C268.....F4 | C680.....F4 | Q1212.....G1 | Q18.....C4   | R57.....C4  | R193.....B4 | R264.....F3 | R355.....F2 | TP81.....D3   | TP159.....C5 | Z23.....F5    |
| C151.....A3 | C269.....F4 | C681.....E2 | Q1213.....G3 | Q102.....G5  | R94.....B4  | R194.....B4 | R265.....F3 | R356.....F2 | TP82.....D3   | TP160.....C5 | Z24.....F5    |
| C152.....A2 | C270.....E4 | C682.....F2 | Q1214.....G5 | Q103.....G5  | R97.....B4  | R195.....B4 | R266.....F4 | R357.....F2 | TP83.....D3   | TP161.....C5 | Z25.....F5    |
| C153.....F5 | C601.....E3 | C683.....F2 | Q1215.....G3 | Q106.....E5  | R99.....A5  | R196.....A4 | R267.....F4 | R358.....F2 | TP84.....B3   | TP162.....C5 | Z26.....F5    |
| C201.....G4 | C602.....E3 | C684.....F2 | Q1216.....G2 | Q108.....E5  | R100.....A5 | R197.....A4 | R268.....E3 | R359.....F2 | TP85.....D3   | TP163.....C5 | Z27.....F5    |
| C202.....G4 | C603.....E3 | C685.....F2 | Q1217.....G2 | Q109.....E5  | R101.....A5 | R198.....A4 | R269.....E3 | R360.....F2 | TP86.....D3   | TP164.....C5 | Z28.....F5    |
| C203.....G3 | C604.....D3 | C686.....F2 | Q1218.....G1 | Q110.....B5  | R102.....D5 | R199.....A3 | R270.....E4 | R361.....E2 | TP88.....F5   | TP165.....C5 | Z29.....F5    |
| C204.....G3 | C606.....D3 | C687.....F2 | Q1219.....G1 | Q111.....F5  | R103.....D5 | R201.....G4 | R271.....E3 | R362.....E2 | TP89.....F5   | TP166.....C5 | Z30.....F5    |



**SVC. SHEET : 3854VA0075A-S1**  
**3854VA0075A-S2**